



Analytical Resources, LLC
Analytical Chemists and Consultants

09 August 2023

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

RE: AOC5 MR Phase 1

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

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

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

Associated Work Order(s)
23A0326

Associated SDG ID(s)
N/A

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

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

Analytical Resources, LLC

Susan Dunninghoo, Director, Client Services

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



23A0326

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

No 3977

Project/Client Name: AOC5 MR Phase1
 Project Number: 210075.01.02
 Contact Name: Amara Vandervort
 Sampled By: Windward

Ship to: ARL
~~Site Dunnington Co~~
 Attn: Sue Dunnington
 Shipper: courier
 Form filled out by: AV /
 Shipping Date: 11/17/23
 Airbill Number:
 Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)							Comments / Instructions (Jar tag number(s))
					PCBS	SMS SVOCs	TOC/TS	SMS Metals	D/F	Atrazine	Arsenic		CPAHs
11/16/23	1517	LDW23-SC1028	3	Sediment	X	X	X	X	X	X		
11/16/23	1532	LDW23-SC1032	4		X	X	X	X	NA	X		
11/17/23	0836	LDW23-SC1128	3		X	X	X	X	NA	X		
	1033	LDW23-SC1170A	3		X	X	X	X	NA	X		
	1108	LDW23-SC1169C	3		X	X	X	X	NA	X		
	1151	LDW23-SC1168	3		X	X	X	X	NA	X		
	1211	LDW23-SC1176	3		X	X	X	X	NA	X		
	1231	LDW23-IT1181	4		X	X	X	X	NA	X	X	
	1332	LDW23-IT1127	4		X	X	X	X	NA	X	X	
	1418	LDW23-SC1161	4		X	X	X	X	NA	X	X	
	1406	LDW23-SC1155	4		X	X	X	X	NA	X	X	
11/17/23	1437	LDW23-SC1162B	4		X	X	X	X	X	X	X	
Total Number of Containers			42	Purchase Order / Statement of Work # APJ - 110222 - AOC5 - ARL								

1) Released by: Print name: <u>Amara Vandervort</u> Signature: <u>[Signature]</u> Company: <u>Windward</u> Date/Time: <u>11/17/23 16:46</u>	1) Rec'd by: <u>[Signature]</u> Company: <u>ARL</u> Date/Time: <u>11/17/23 16:46</u>	2) Released by: Print name: Signature: Company: Date/Time:	2) Rec'd by: Company: Date/Time:
---	---	--	--

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



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

To be completed by Laboratory upon sample receipt:

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



Cooler Receipt Form

ARI Client: Anchord QEA/windwater
 COC No(s): 3972 NA
 Assigned ARI Job No: 23A0326

Project Name: Low AOC9 MR Phase 1
 Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____
 Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO
 Were custody papers included with the cooler? YES NO
 Were custody papers properly filled out (ink, signed, etc.) YES NO
 Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)
 Time 17:10 5.0 4.1 3.9 5.1 5.2
 If cooler temperature is out of compliance fill out form 00070F
1/17/23 Temp Gun ID#: J009908
 Cooler Accepted by: PIA Date: 1/17/23 PIA Time: 16:46

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO
 What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____
 Was sufficient ice used (if appropriate)? NA YES NO
 How were bottles sealed in plastic bags? Individually Grouped Not
 Did all bottles arrive in good condition (unbroken)? YES NO
 Were all bottle labels complete and legible? YES NO
 Did the number of containers listed on COC match with the number of containers received? 7-5 YES NO
 Did all bottle labels and tags agree with custody papers? YES NO
 Were all bottles used correct for the requested analyses? YES NO
 Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO
 Were all VOC vials free of air bubbles? NA YES NO
 Was sufficient amount of sample sent in each bottle? YES NO
 Date VOC Trip Blank was made at ARI NA
 Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: Quinn Date: 01/17/23 Time: 8:18 Labels checked by: JCS

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

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

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Anchor QEA, LLC

1201 3rd Ave, Suite 2600

Seattle, WA 98101

Project: AOC5 MR Phase 1

Project Number: 210075-01.02

Project Manager: Ali Judkins

Reported:

08/09/2023 17:38

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23A0326-01	LDW23-SC1028	Solid	01/16/23 15:17	01/17/23 16:46
23A0326-02	LDW23-SC1032	Solid	01/16/23 15:32	01/17/23 16:46
23A0326-03	LDW23-SC1128	Solid	01/17/23 08:36	01/17/23 16:46
23A0326-04	LDW23-SC1170A	Solid	01/17/23 10:33	01/17/23 16:46
23A0326-05	LDW23-SC1169C	Solid	01/17/23 11:08	01/17/23 16:46
23A0326-06	LDW23-SC1168	Solid	01/17/23 11:51	01/17/23 16:46
23A0326-07	LDW23-SC1176	Solid	01/17/23 12:11	01/17/23 16:46
23A0326-08	LDW23-IT1181	Solid	01/17/23 12:31	01/17/23 16:46
23A0326-09	LDW23-IT1127	Solid	01/17/23 13:32	01/17/23 16:46
23A0326-10	LDW23-SC1161	Solid	01/17/23 14:18	01/17/23 16:46
23A0326-11	LDW23-SC1155	Solid	01/17/23 14:06	01/17/23 16:46
23A0326-12	LDW23-SC1162B	Solid	01/17/23 14:37	01/17/23 16:46



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

Project: AOC5 MR Phase 1
Project Number: 210075-01.02
Project Manager: Ali Judkins

Reported:
09-Aug-2023 17:38

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23A0326

Sample receipt

Samples as listed on the preceding page were received 17-Jan-2023 16:46 under ARI work order 23A0326. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

Semivolatiles - EPA Method SW8270E

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

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

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

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

The batch BLA0685 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0313.

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

Semivolatiles - EPA Method SW8270E-SIM

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries outside control limits are flagged on the summary sheet. Outliers are attributed to the high concentrations of sulfur affecting analysis of the extract and instrument performance, and no additional analyses were performed for failing surrogates.

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

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

The batch BLA0685 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0313.

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



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

Project: AOC5 MR Phase 1
Project Number: 210075-01.02
Project Manager: Ali Judkins

Reported:
09-Aug-2023 17:38

Case Narrative

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

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

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

The batch BLA0683 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0207.

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

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

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

The internal standard areas were outside control limits in SLB0237-PEM2 and SLB0237-PEM4. As these standards are not used for quantitation, no corrective action was required.

Hexabromobiphenyl was outside limits for several analyses. As the target compound is not associated with this internal standard and outliers are known to be caused by the matrix, no corrective action was required.

The surrogate percent recoveries were within control limits.

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

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

The batch BLA0684 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0313.

PCB Aroclors - EPA Method SW8082A

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

In the initial calibration, decachlorobiphenyl (DCBP) was high on both columns for SKL0048-SCV6.

Calibration standards SLB0168-ICV2, SLB0168-CCV2 and SLB0168-CCVC failed low on the ZB5 column for aroclor 1260. SLB0168-CCV5 failed low for aroclor 1254 on the ZB5 column. SLB0168-CCV8 failed low for aroclor 1016 and 1260 on the ZB5 column. All associated data is reported from the ZB35 column as primary.

The internal standard area for hexabromobiphenyl (HBB) was outside of control limits on the ZB5 column for several samples and standards, and associated results are reported from the ZB35 column.

The surrogate percent recoveries were within control limits.



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

Project: AOC5 MR Phase 1
Project Number: 210075-01.02
Project Manager: Ali Judkins

Reported:
09-Aug-2023 17:38

Case Narrative

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

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

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

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

Results with greater than 40% difference between the results on the two analytical columns have been "P1"-flagged, attributed to interference from the matrix.

Total Metals - EPA Method 6020B

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

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits, with low level response for copper. Associated results have been "B"-flagged.

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

The duplicate (DUP) relative percent difference (RPD) were within advisory control limits.

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

Total Mercury - EPA Method 7471B

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

Initial and continuing calibrations were within method requirements.

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

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

The duplicate (DUP) relative percent difference (RPD) were within advisory control limits.

The matrix spike duplicate (MSD) percent recovery and relative percent difference (RPD) were high of advisory control limits.

Wet Chemistry (Total Organic Carbon and Total Solids)

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

Initial and continuing calibrations were within method requirements.

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

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



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

Project: AOC5 MR Phase 1
Project Number: 210075-01.02
Project Manager: Ali Judkins

Reported:
09-Aug-2023 17:38

Case Narrative

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

The batch BLA0432 matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits, reported under work order 23A0295.

The batch BLA0442 matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits.

Dioxin/Furans - EPA Method 1613

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

The response for 13C12-1,2,3,6,7,8-HxCDD was low of control limits in SLC0081-CCV2 and SLC0081-CCV3. No sample extracts were reanalyzed due to the effect of the matrix on the instrument.

The cleanup surrogate percent recoveries were within control limits.

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

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

The batch BLA0398 duplicate (DUP) relative percent differences (RPD) were high of advisory control limits for 2,3,7,8-TCDF and flagged on the summary sheet, reported under work order 23A0099.

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

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

Revised 07/03/2023 to correct PCB calibration reference

Revised 07/18/2023 to include tune summary for GC00032 and correct date for GC00032.

Revised 08/09/2023 to report pentachlorophenol in LDS23-SC1028 from the full-scan analysis.



QUALIFIERS AND NOTES

<u>Qualifier</u>	<u>Definition</u>
X	Indicates possible CDPE interference.
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
P1	The reported value is greater than 40% difference between the concentrations determined on two GC columns where applicable.
J	Estimated concentration value detected below the reporting limit.
EMPC	Estimated Maximum Possible Concentration qualifier for HRGCMS Dioxin
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
D	The reported value is from a dilution
B	This analyte was detected in the method blank.
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-01 A

SDG: 23A0326

Sampled: 01/16/23 15:17

Prepared: 02/02/23 13:06

File ID: NT1003052323.D

% Solids: 58.96

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 03:17

Batch: BLA0685

Sequence: SLC0415

Initial/Final: 17.67 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	52.4		4.2	19.2
106-44-5	4-Methylphenol	1	19.2	U	7.1	19.2
91-20-3	Naphthalene	1	13.3	J	4.1	19.2
91-57-6	2-Methylnaphthalene	1	11.4	J	4.3	19.2
208-96-8	Acenaphthylene	1	13.0	J	6.0	19.2
131-11-3	Dimethylphthalate	1	7.9	J	4.2	19.2
83-32-9	Acenaphthene	1	7.3	J	5.0	19.2
132-64-9	Dibenzofuran	1	19.2	U	13.6	19.2
86-73-7	Fluorene	1	19.2	U	14.0	19.2
87-86-5	Pentachlorophenol	1	39.5	J	30.0	19.2
85-01-8	Phenanthrene	1	62.6		8.4	19.2
120-12-7	Anthracene	1	29.3		6.9	19.2
206-44-0	Fluoranthene	1	98.1		5.8	19.2
129-00-0	Pyrene	1	222		5.5	19.2
85-68-7	Butylbenzylphthalate	1	13.2	J	9.0	19.2
56-55-3	Benzo(a)anthracene	1	71.6		5.7	19.2
218-01-9	Chrysene	1	133		5.8	19.2
117-81-7	bis(2-Ethylhexyl)phthalate	1	161		5.2	48.0
	Benzo(a)fluoranthene, Total	1	282		9.6	38.4
50-32-8	Benzo(a)pyrene	1	90.0		4.1	19.2
193-39-5	Indeno(1,2,3-cd)pyrene	1	70.2		14.1	19.2
53-70-3	Dibenzo(a,h)anthracene	1	23.7		16.5	19.2
191-24-2	Benzo(g,h,i)perylene	1	86.8		13.0	19.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	719.89	45.2	6.27	27 - 120	*
Phenol-d5	719.89	220	30.6	29 - 120	
2-Chlorophenol-d4	719.89	281	39.0	31 - 120	
1,2-Dichlorobenzene-d4	479.93	331	69.1	32 - 120	
Nitrobenzene-d5	479.93	397	82.6	30 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-01 A

SDG: 23A0326

Sampled: 01/16/23 15:17

Prepared: 02/02/23 13:06

File ID: NT1003052323.D

% Solids: 58.96

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 03:17

Batch: BLA0685

Sequence: SLC0415

Initial/Final: 17.67 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	479.93	450	93.7	35 - 120	
2,4,6-Tribromophenol	719.89	64.7	8.99	24 - 134	*
p-Terphenyl-d14	479.93	385	80.3	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305A.B\NT1003052323.D

Date: 06-HRR-2023 03:17

Client ID:

Sample Info: 23A0326-01

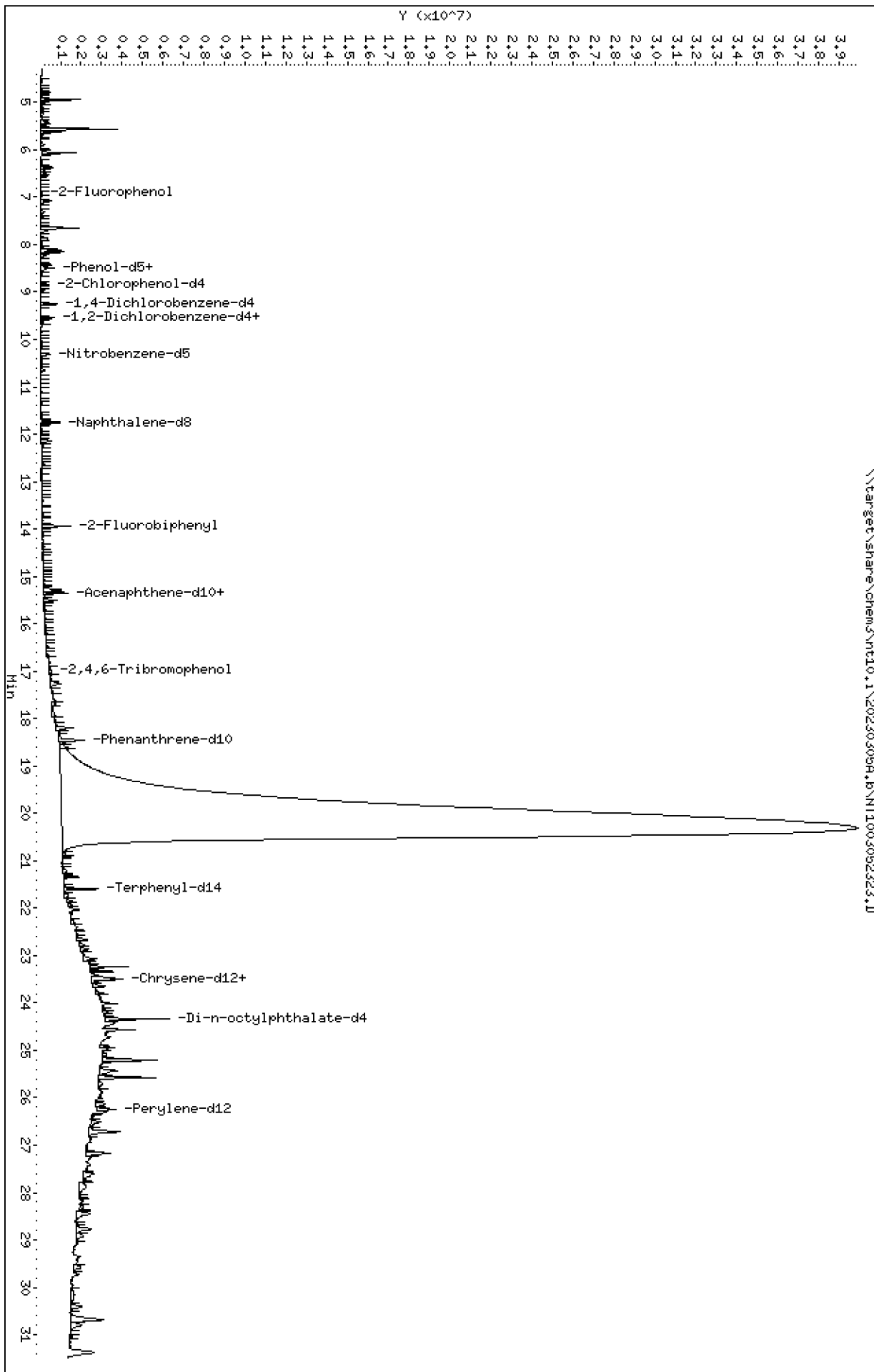
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

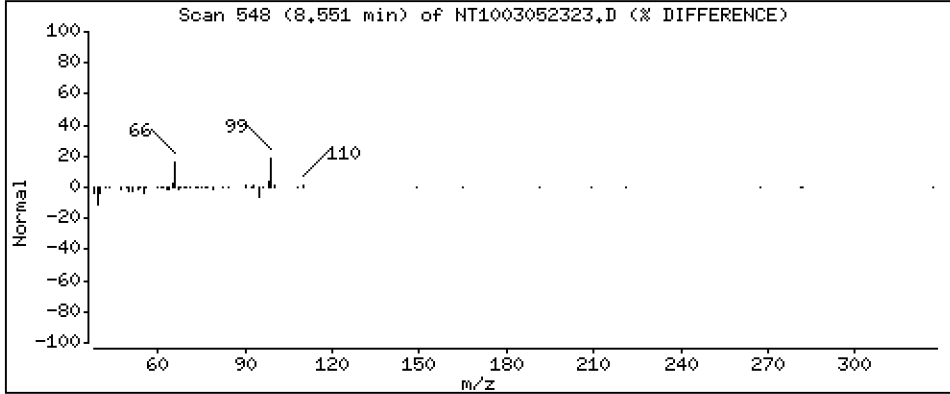
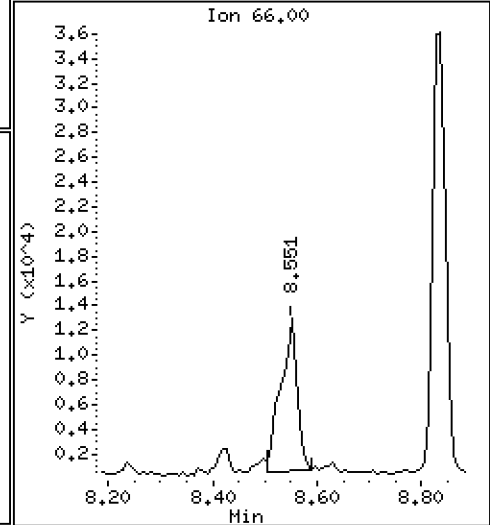
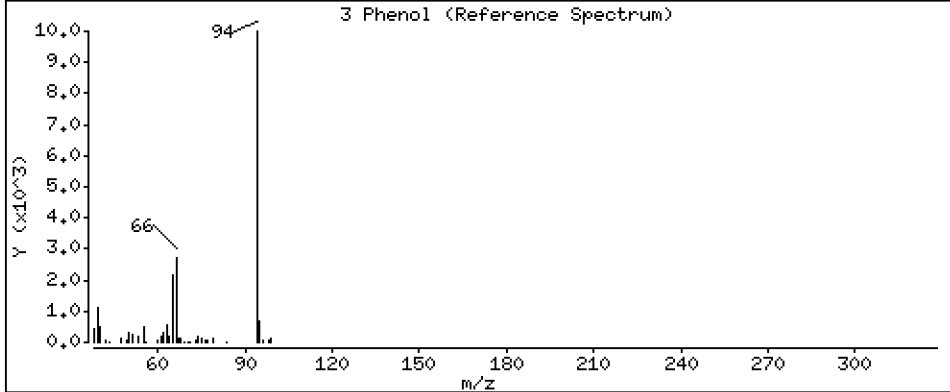
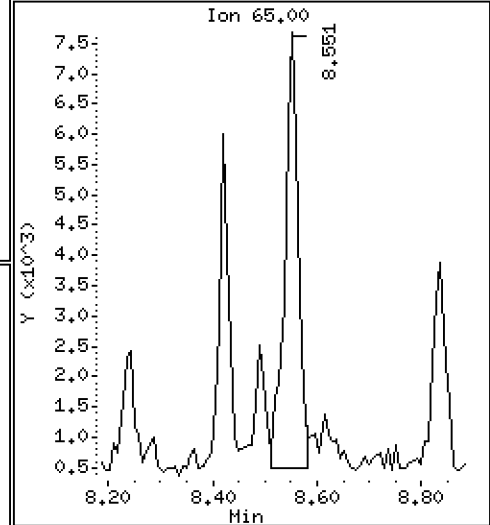
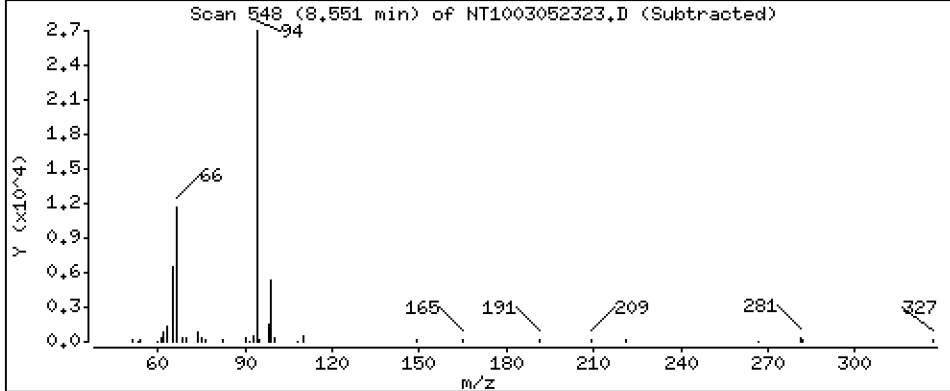
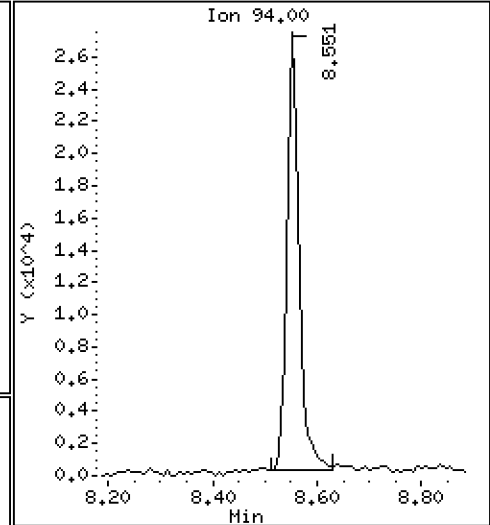
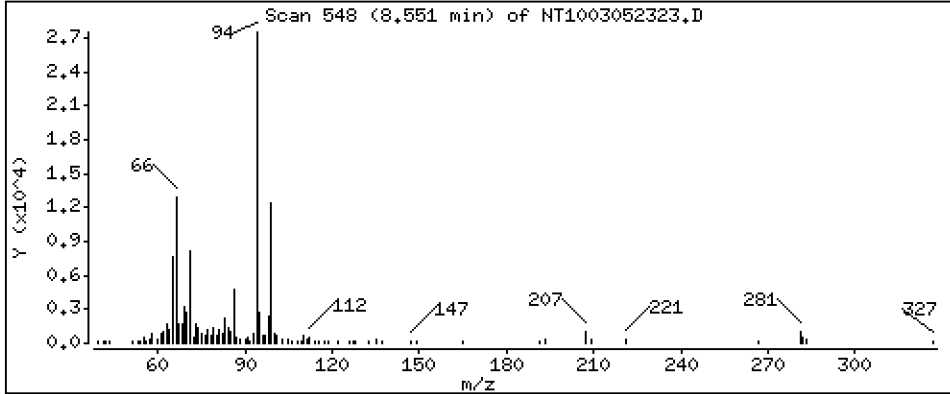
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,5463 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

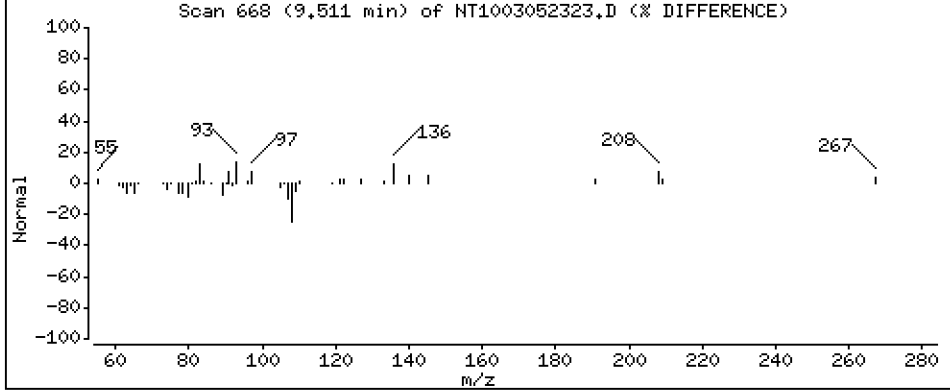
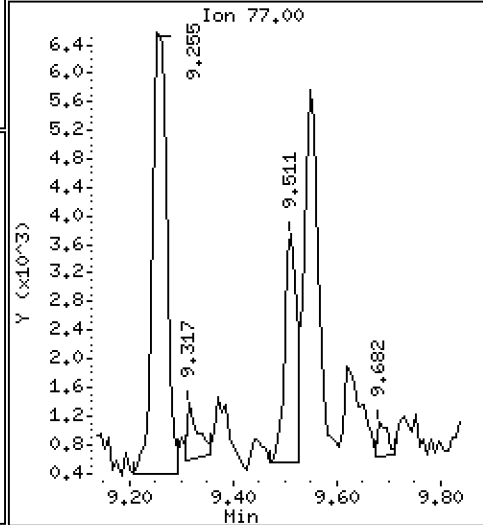
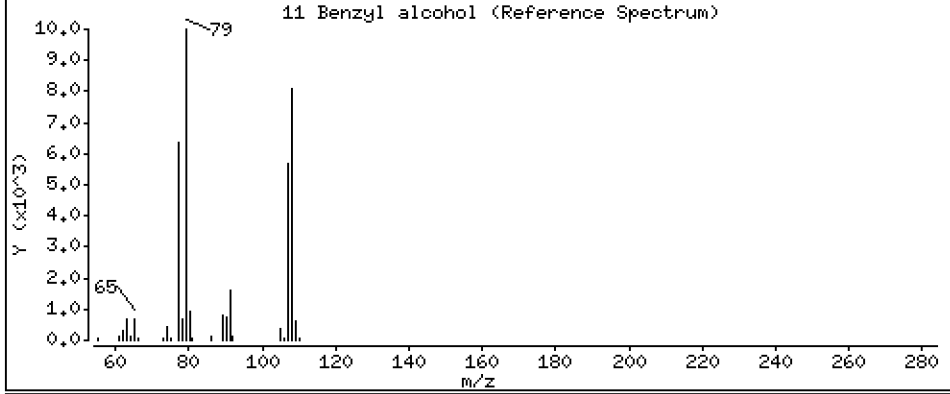
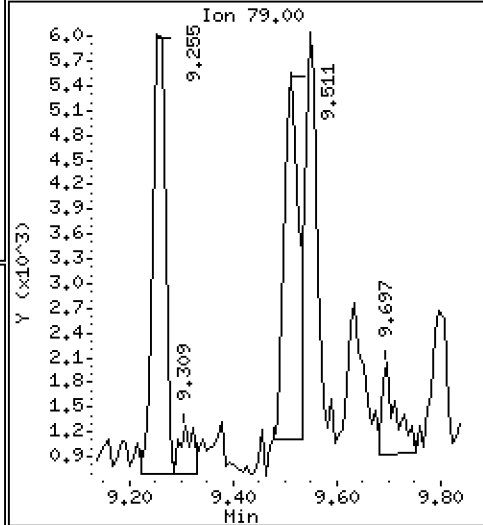
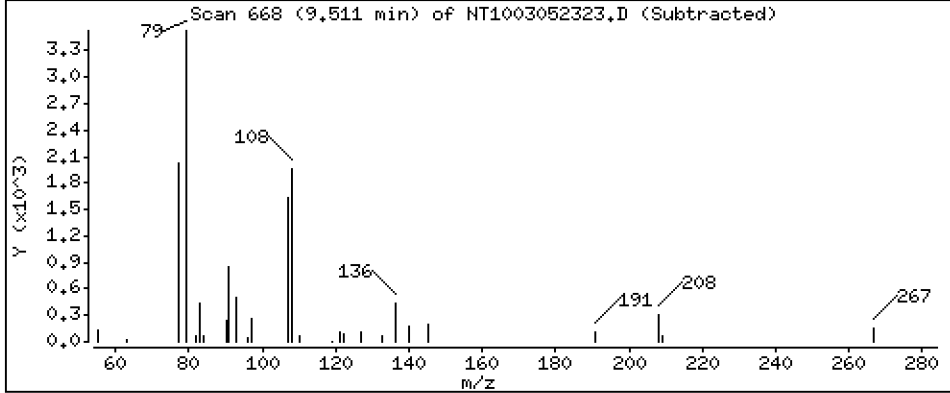
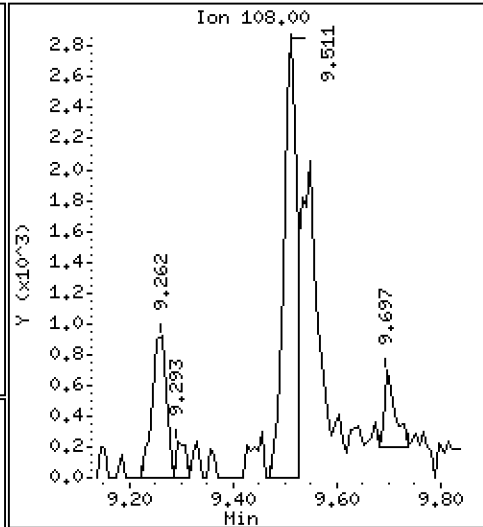
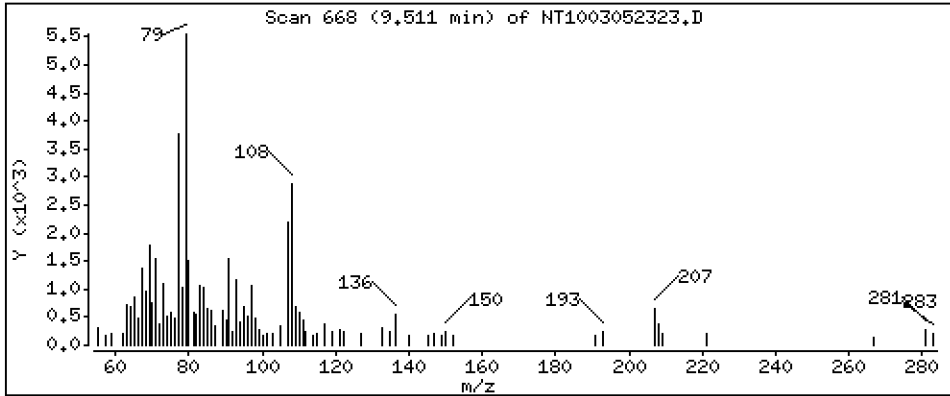
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1208 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

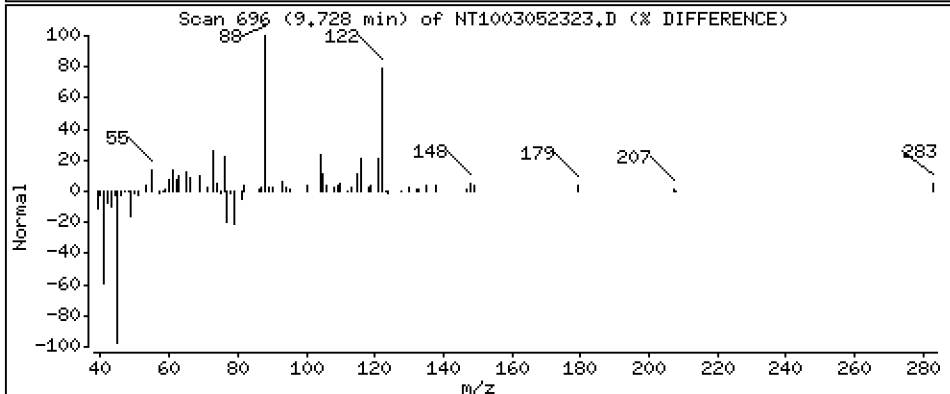
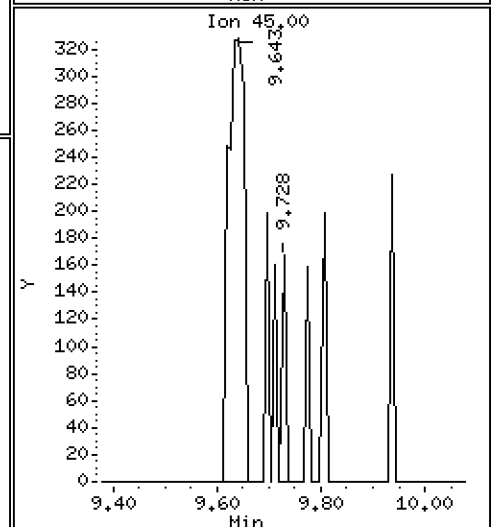
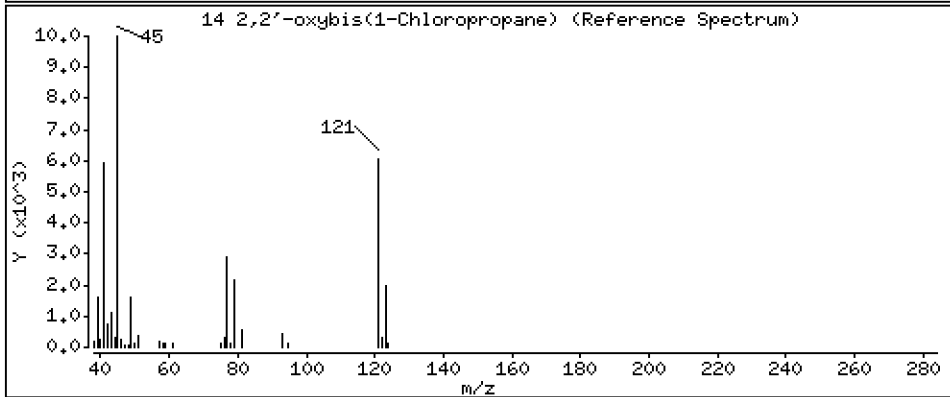
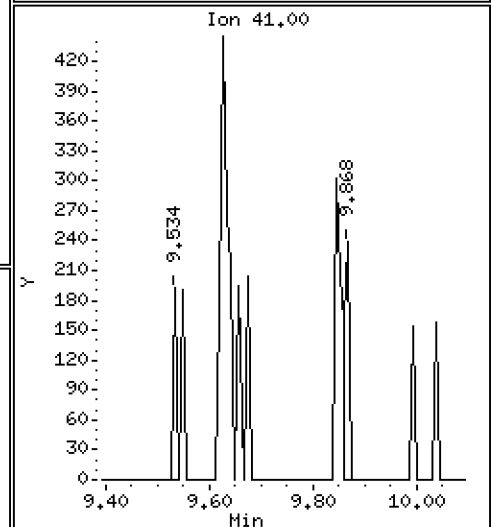
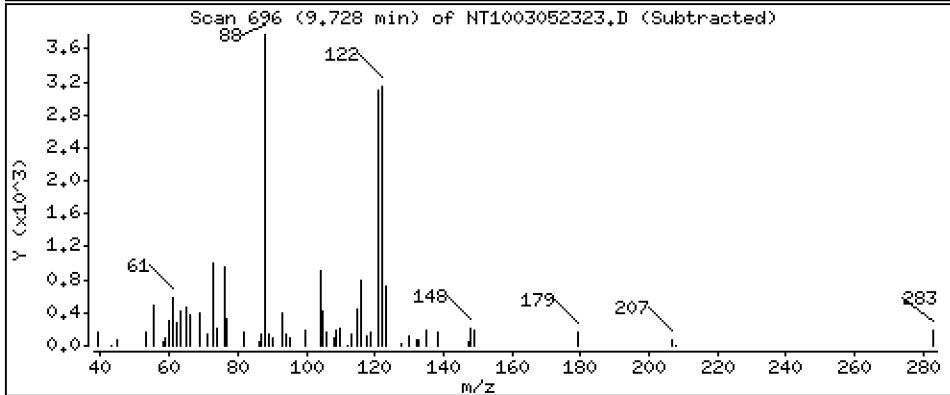
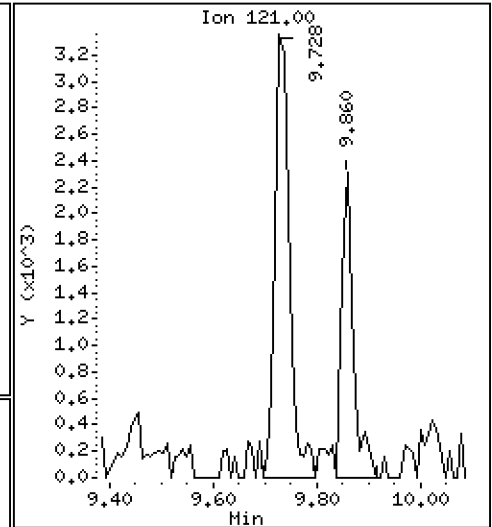
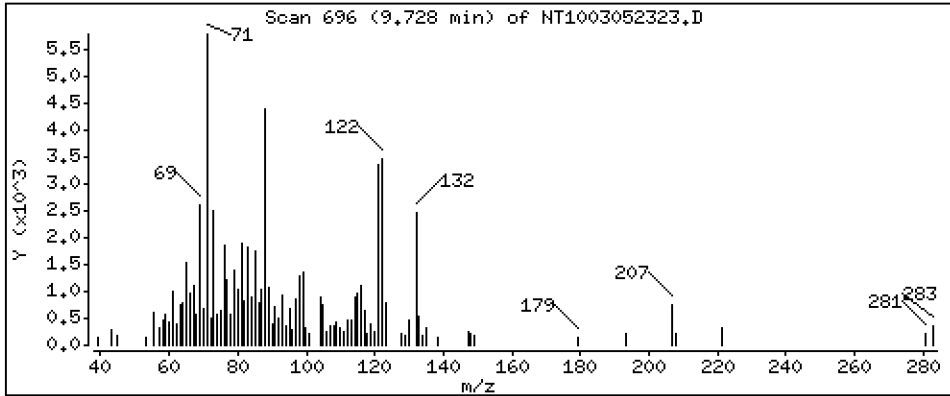
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2966 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

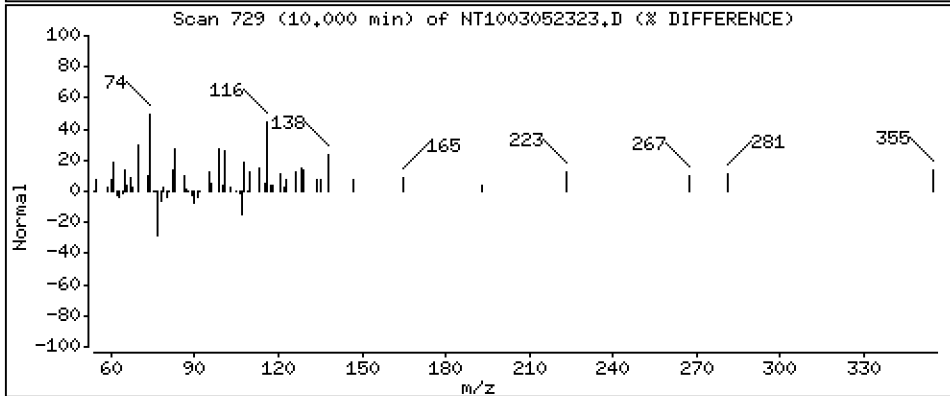
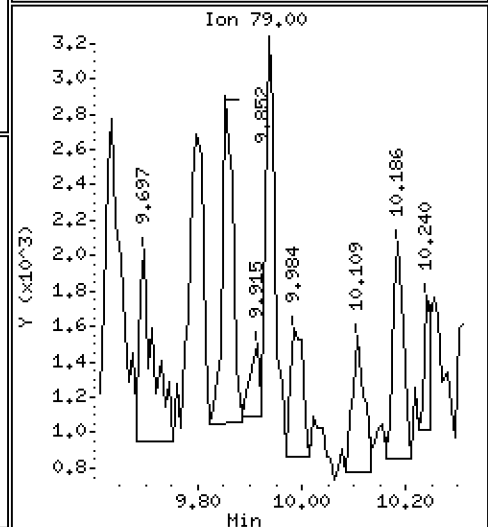
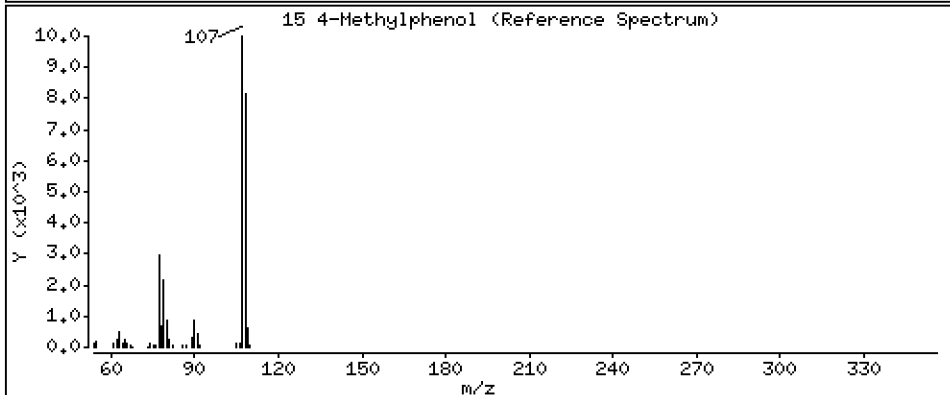
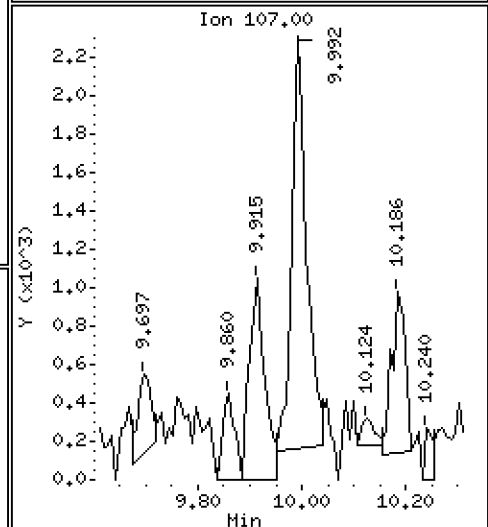
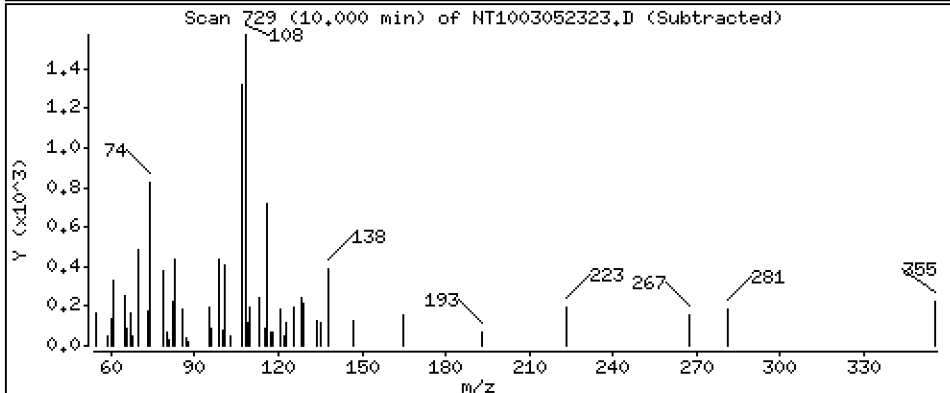
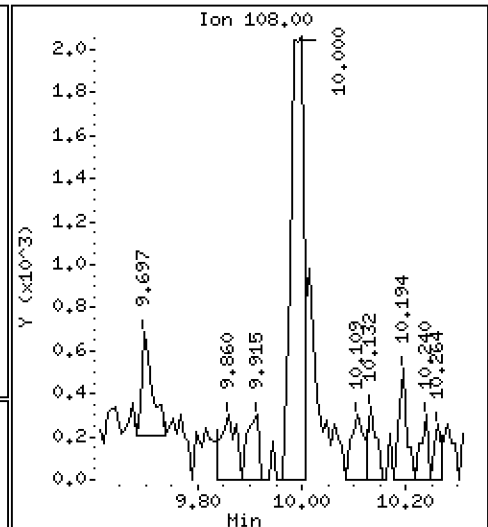
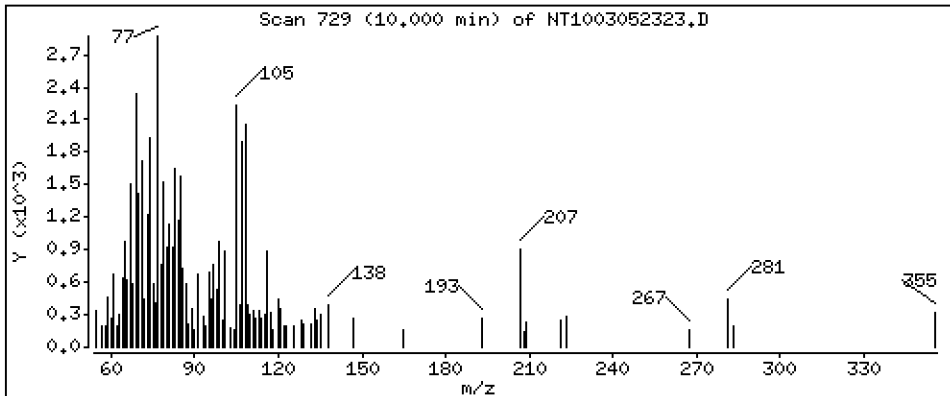
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.04833 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

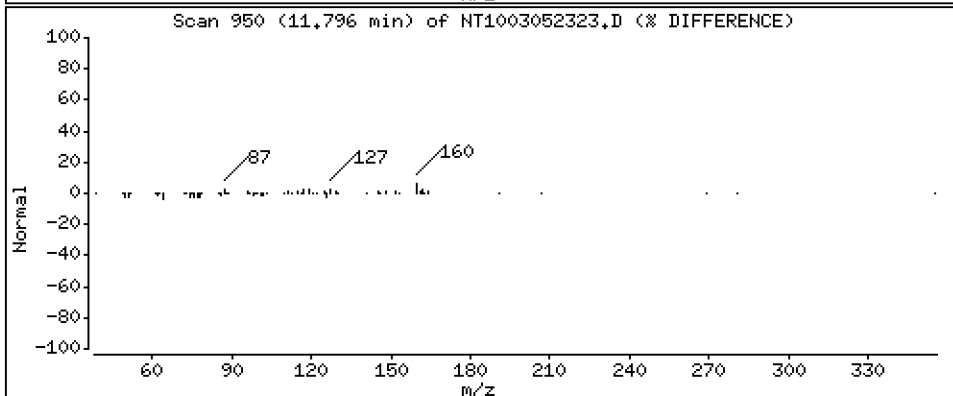
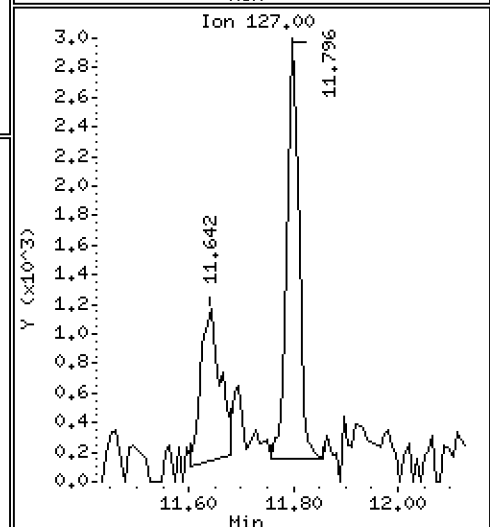
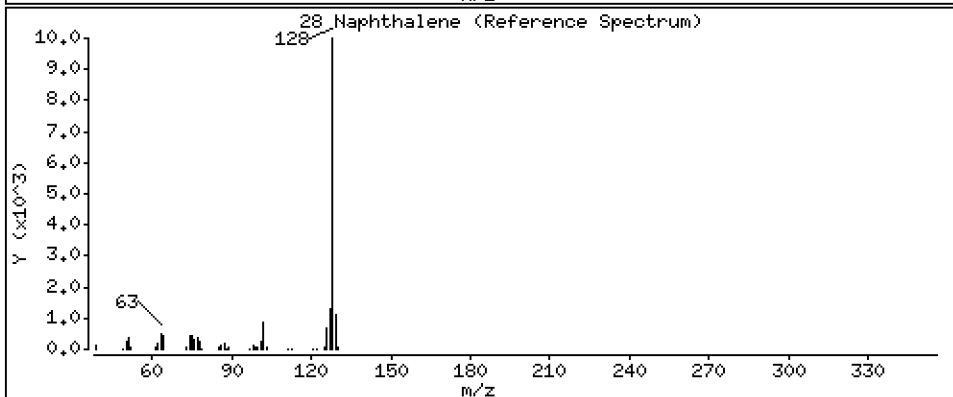
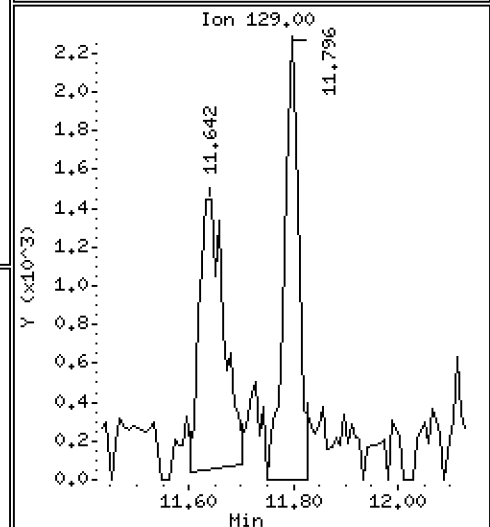
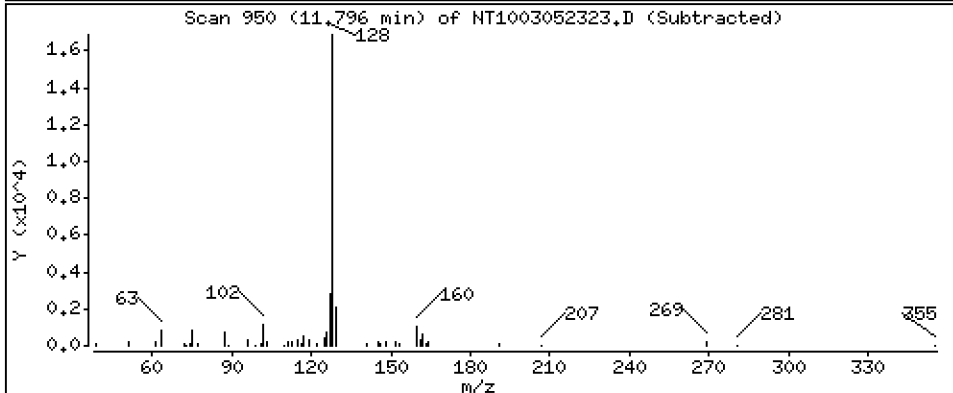
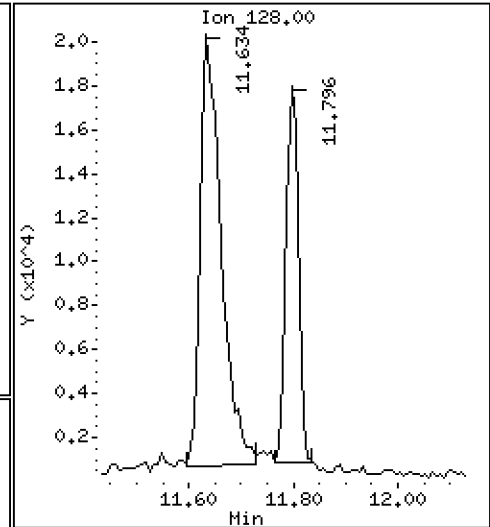
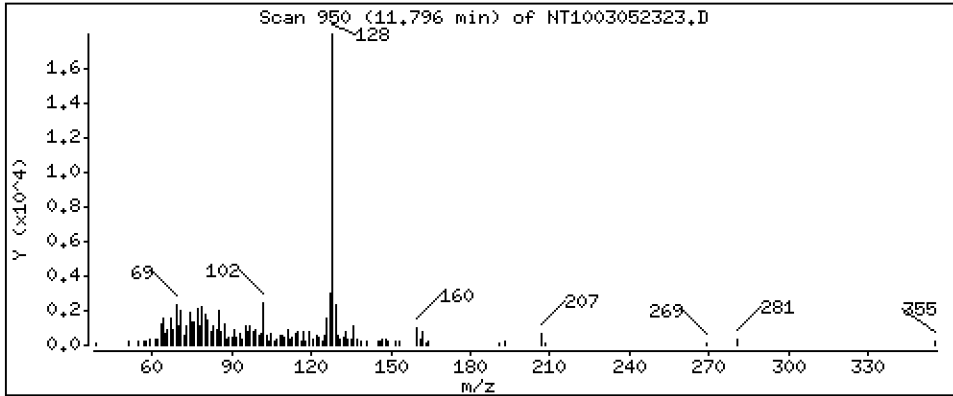
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,1385 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

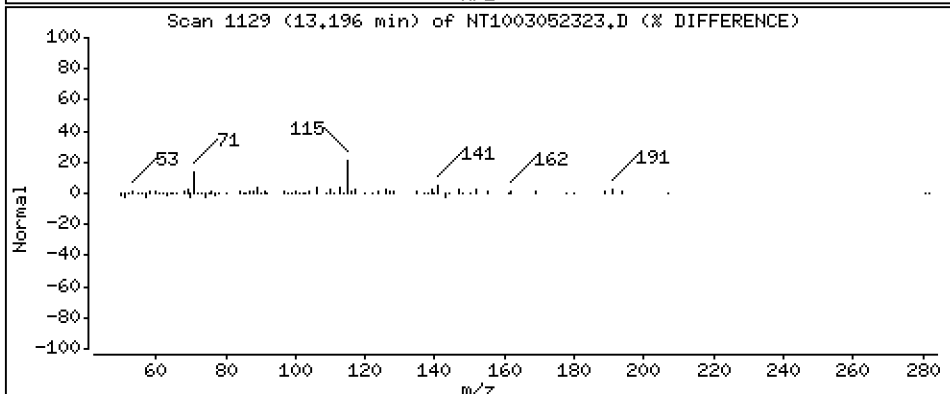
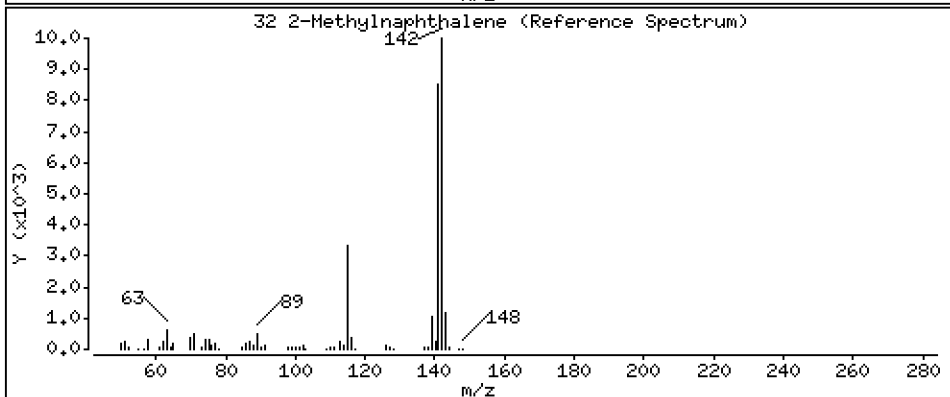
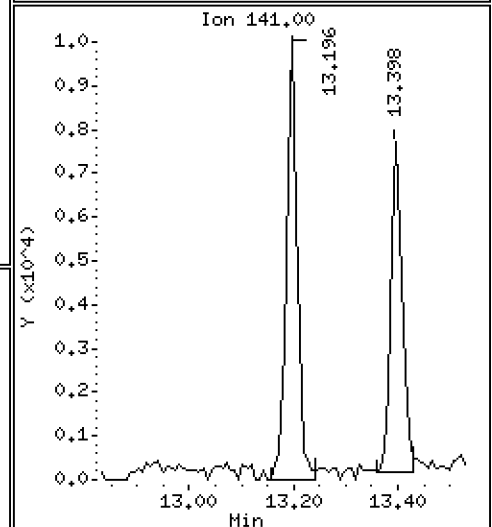
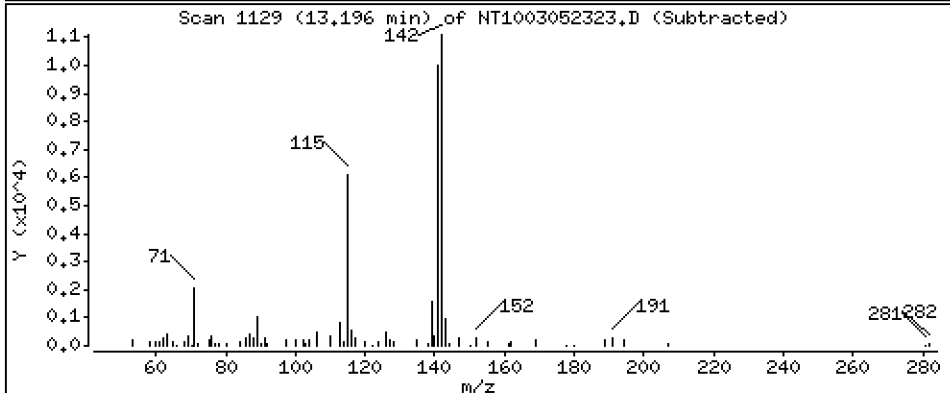
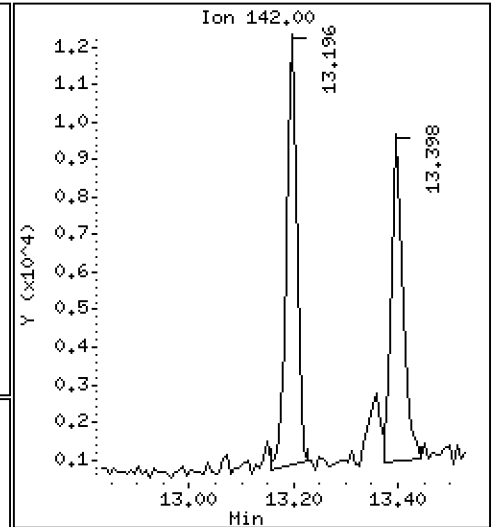
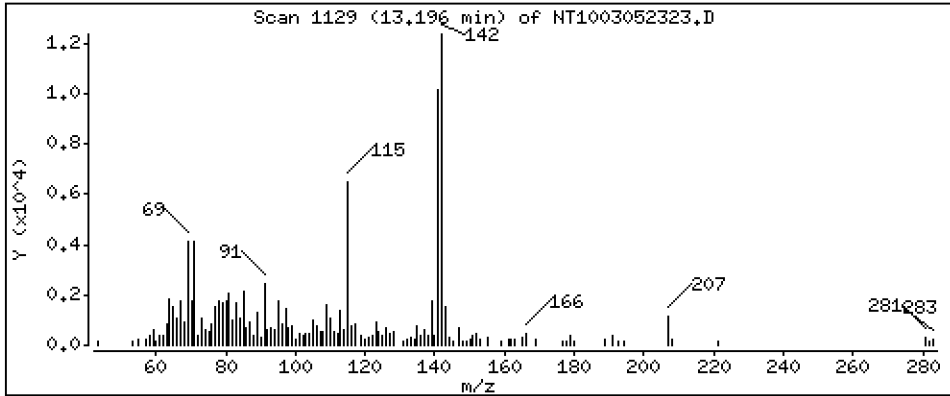
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 0.1191 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

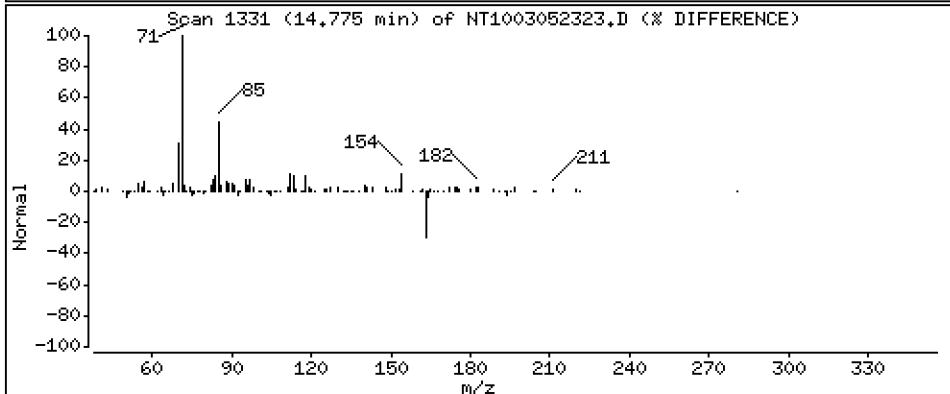
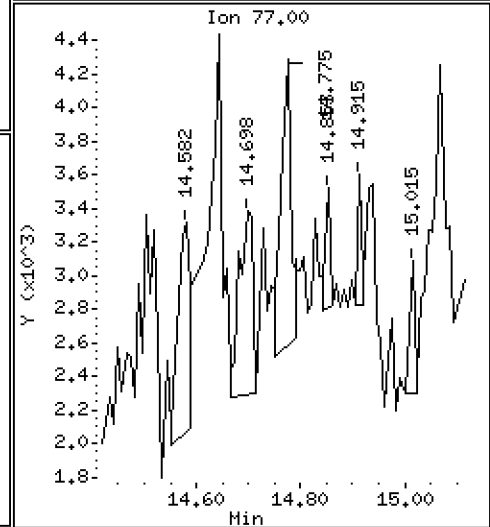
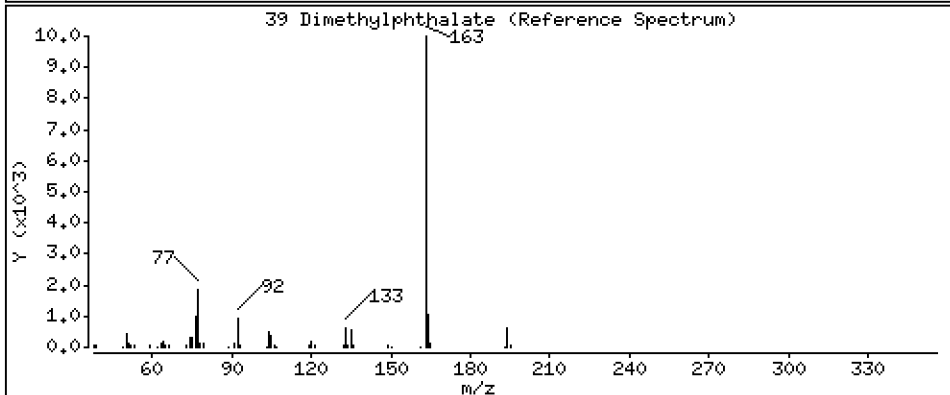
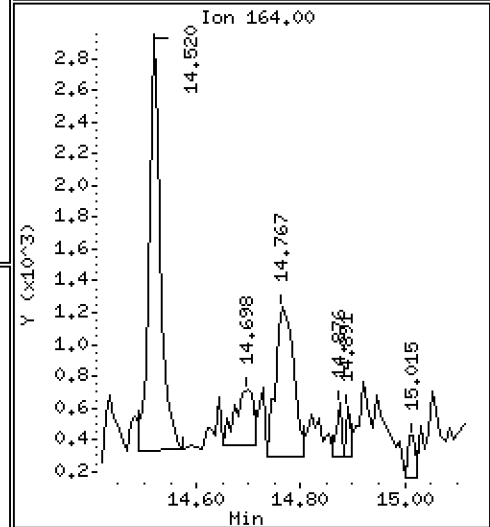
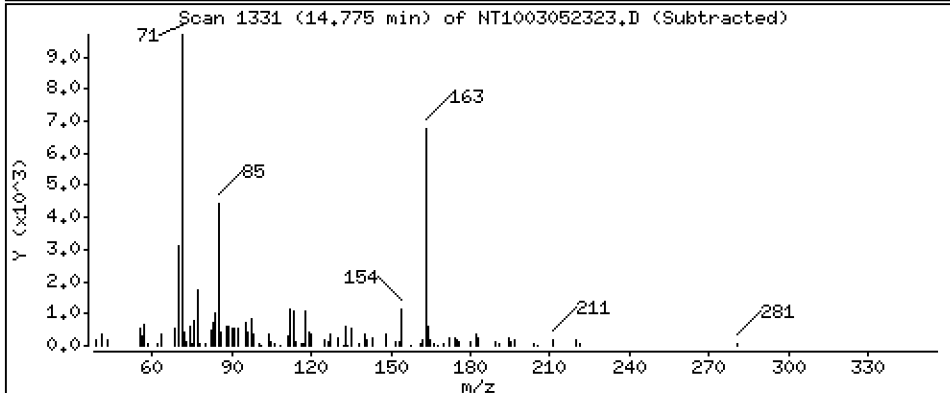
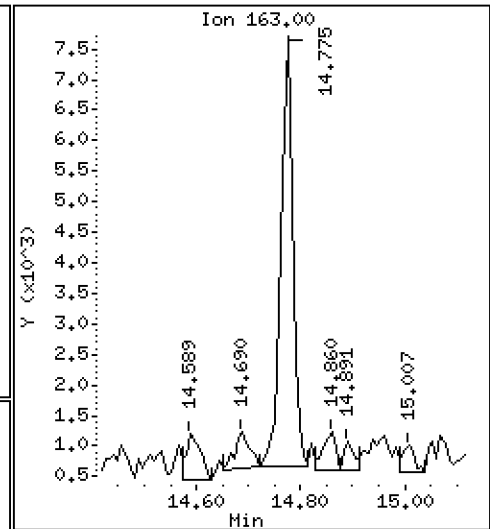
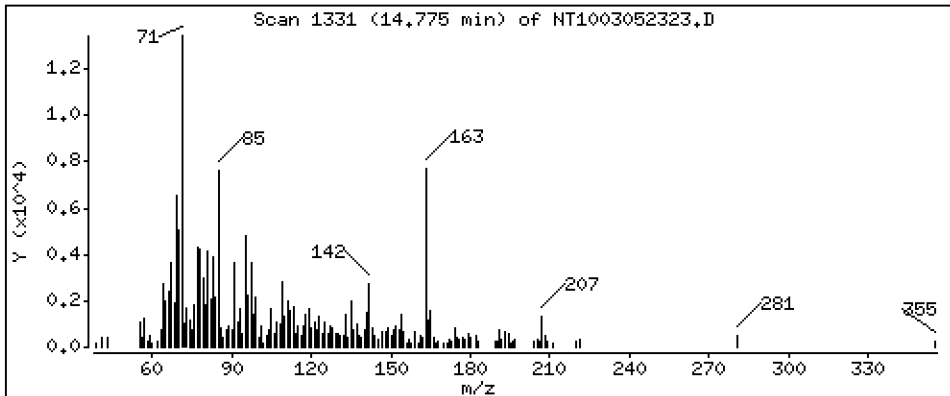
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,08213 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

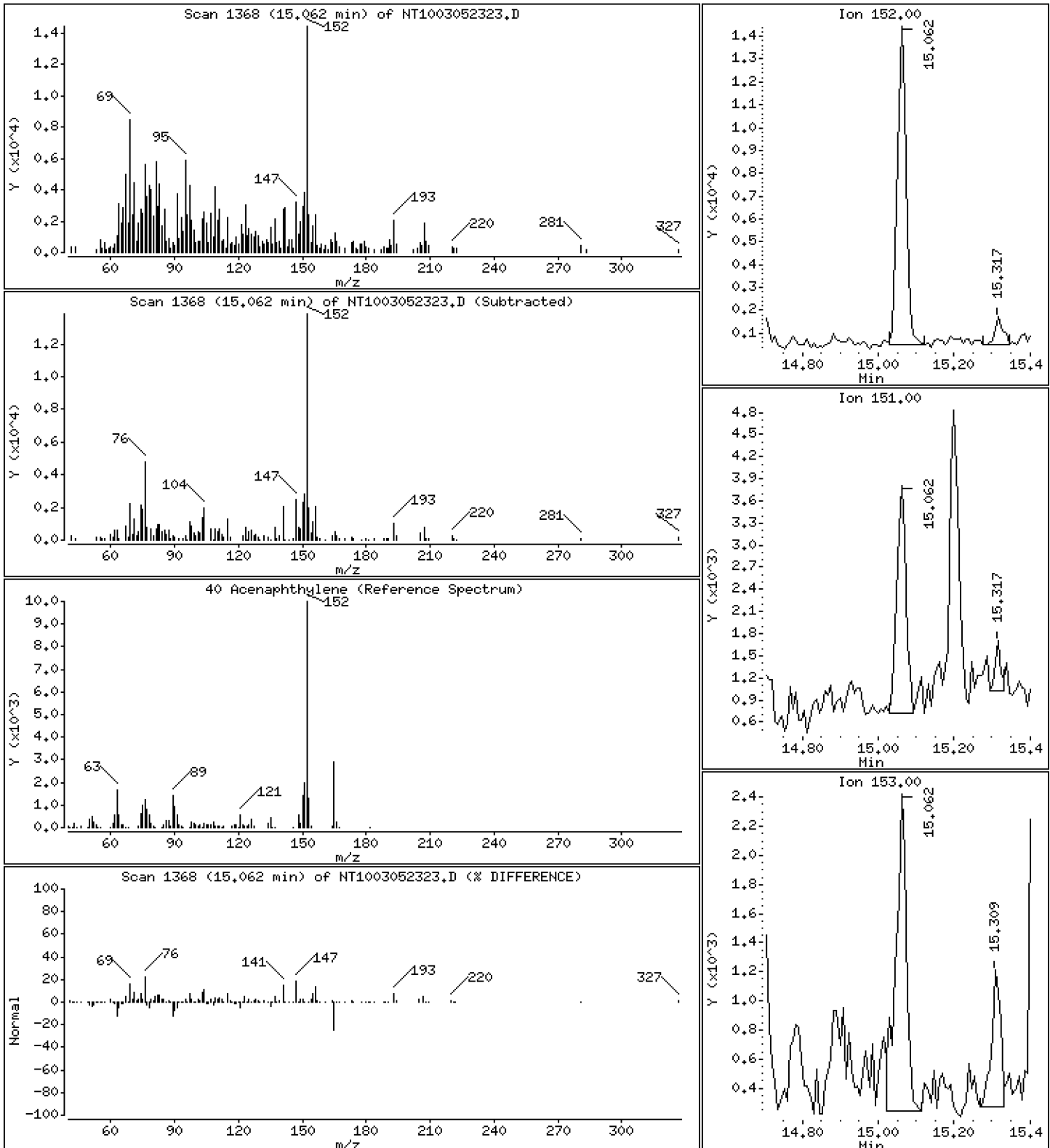
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1357 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

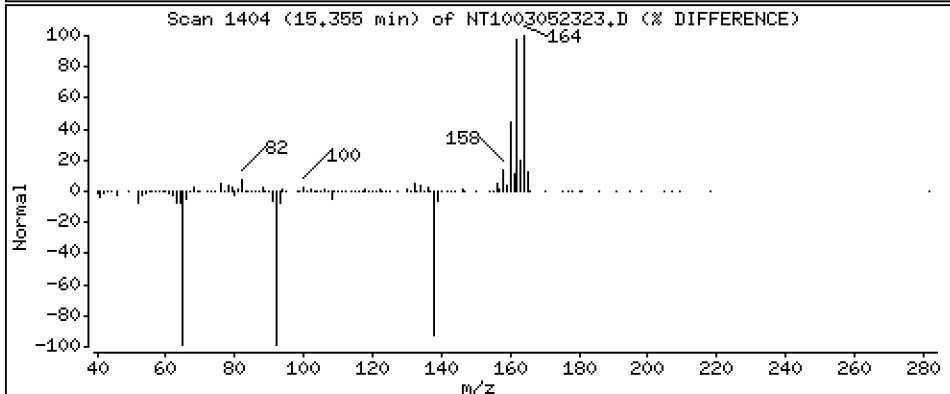
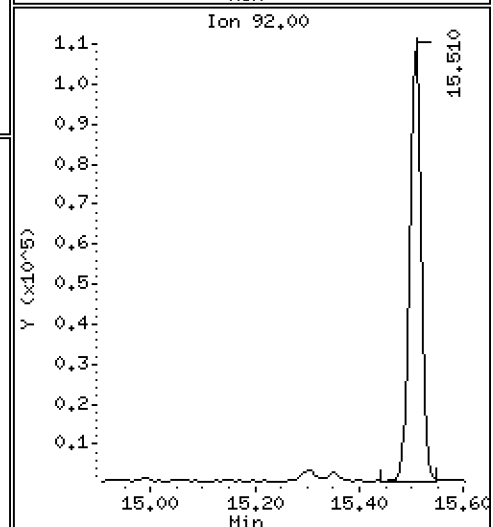
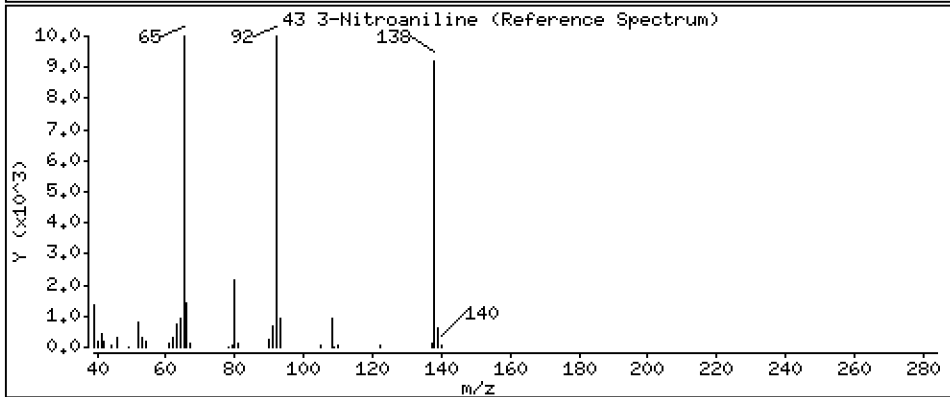
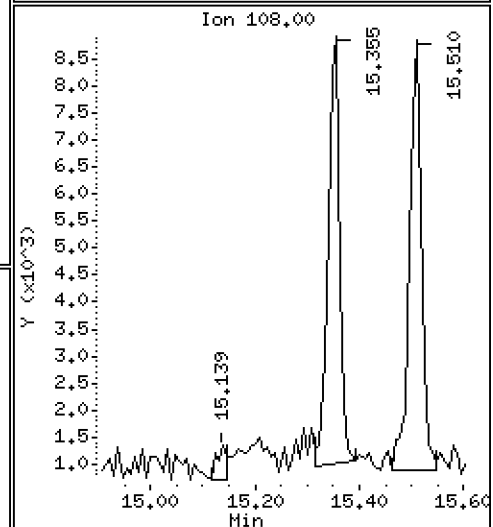
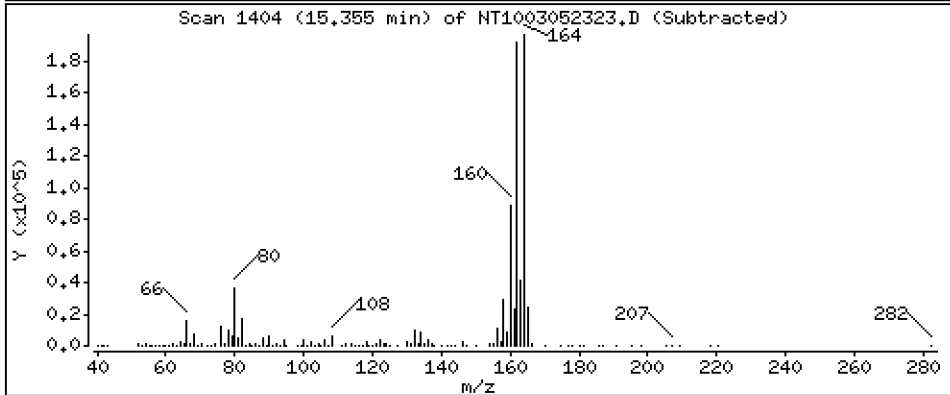
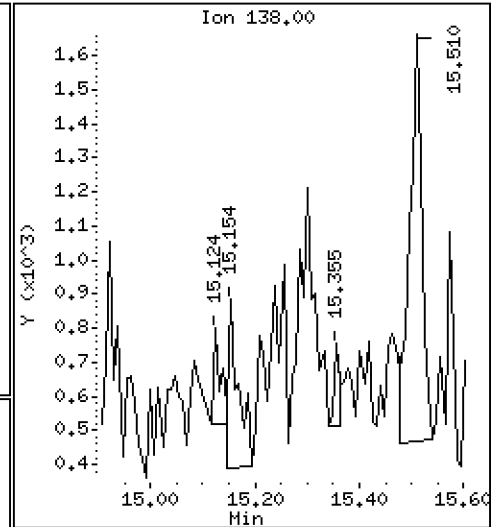
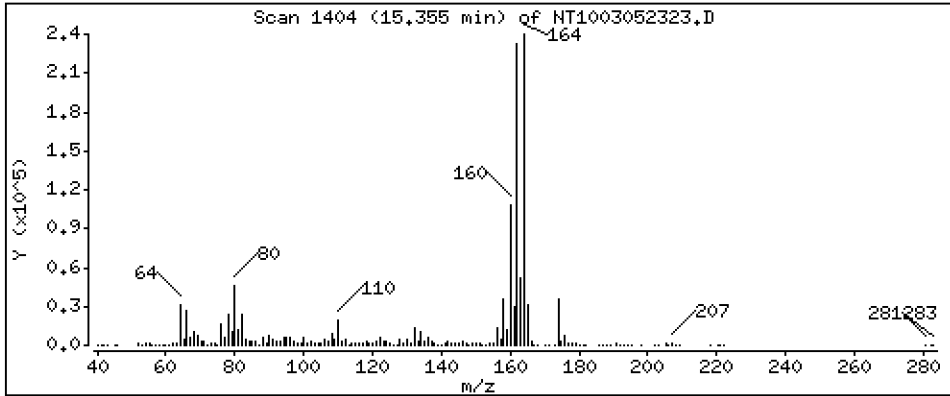
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,005533 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

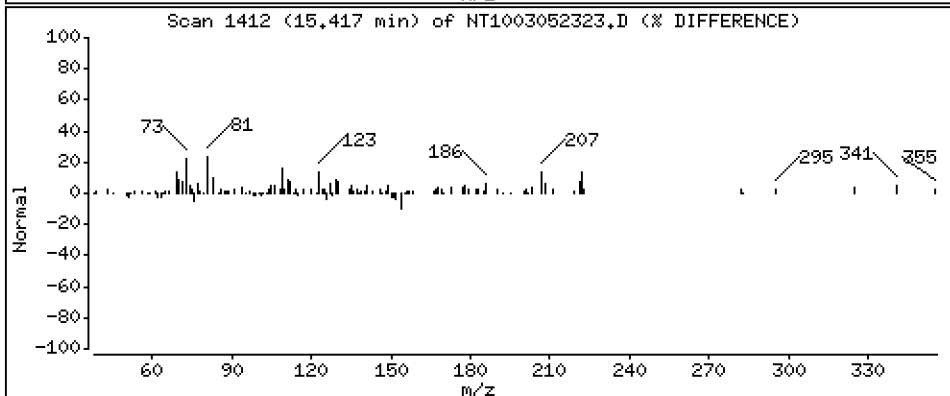
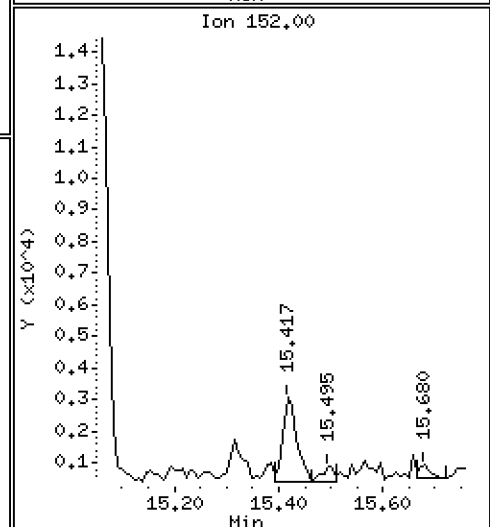
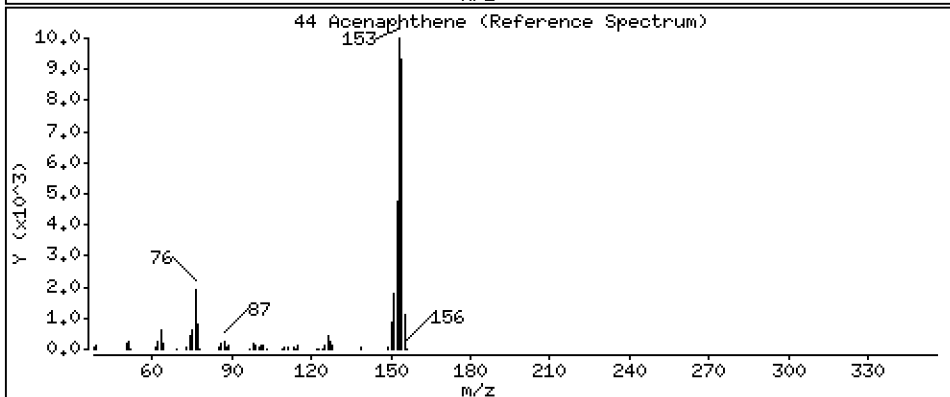
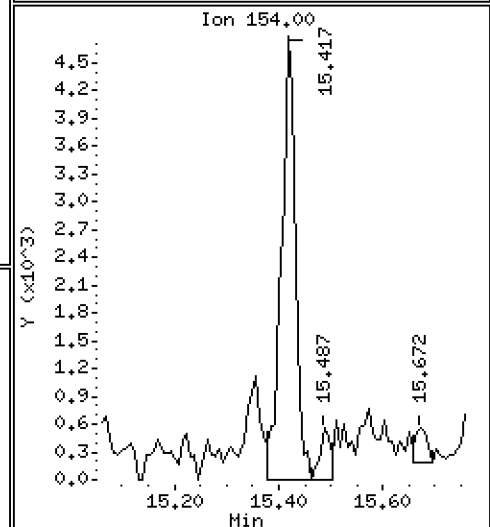
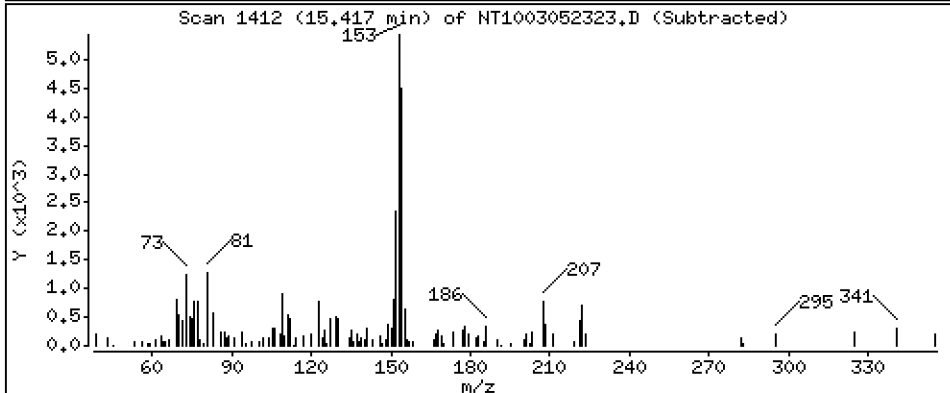
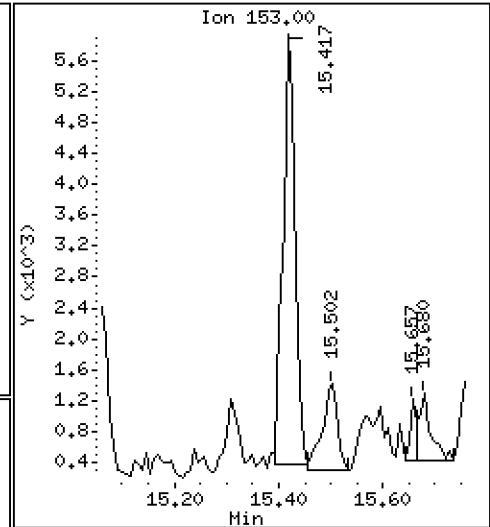
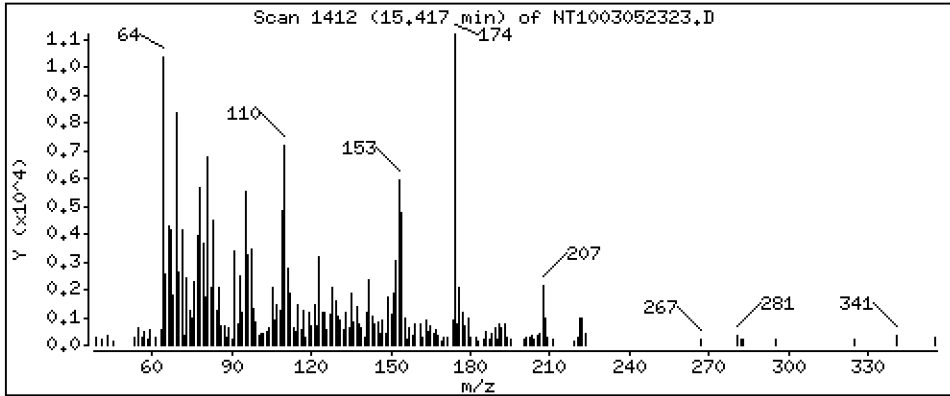
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,07555 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

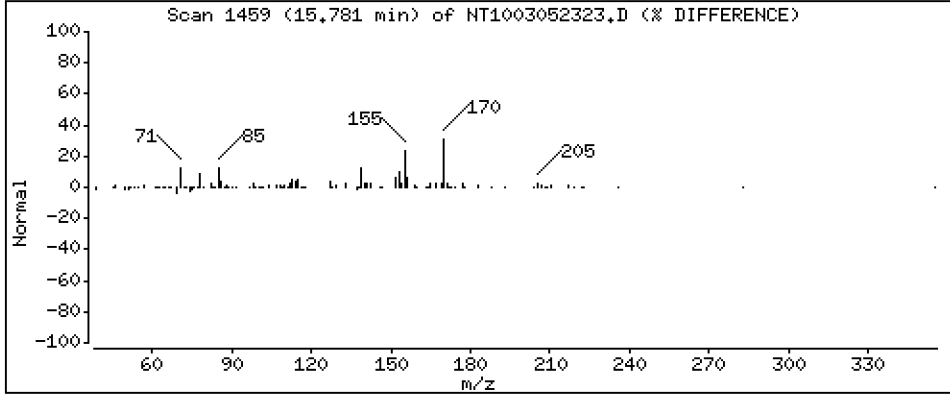
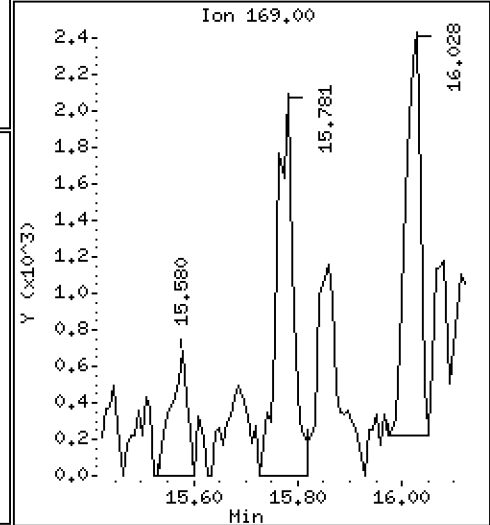
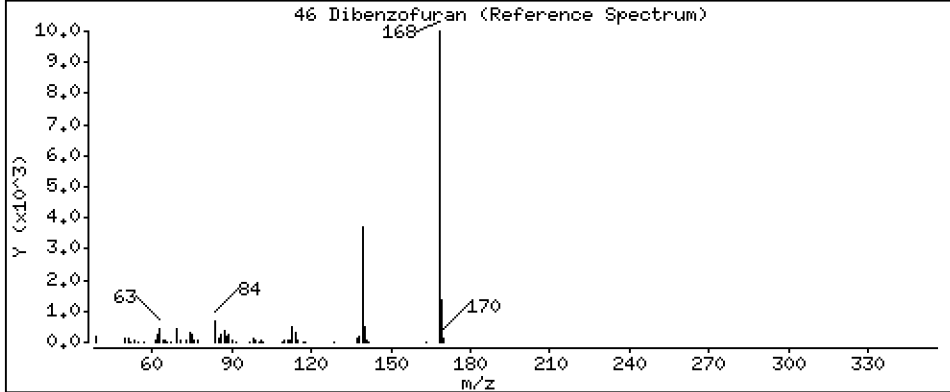
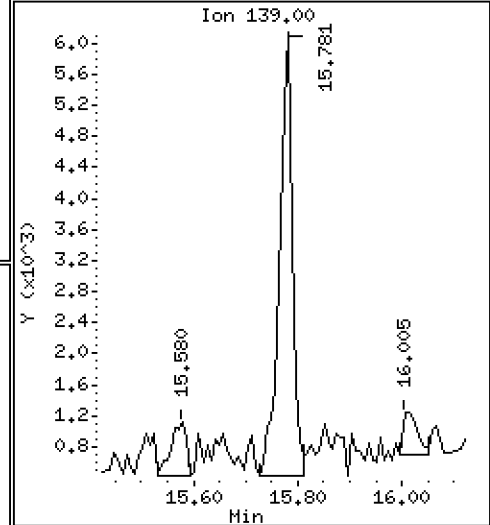
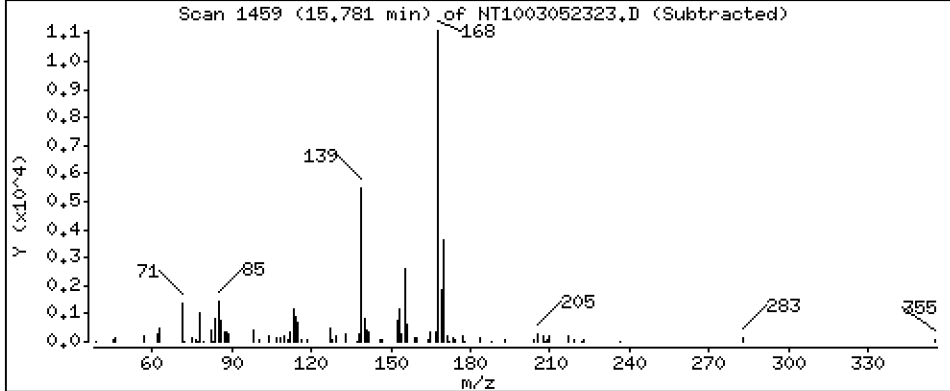
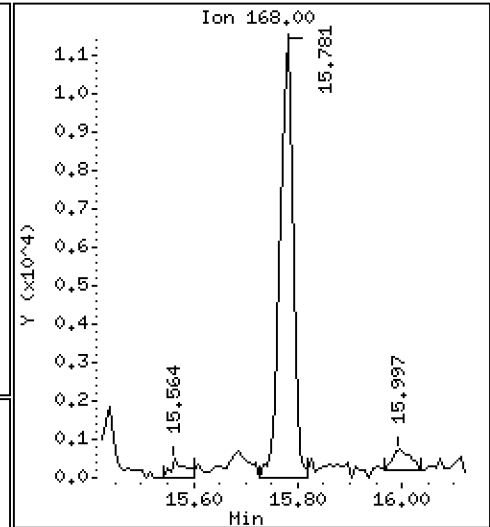
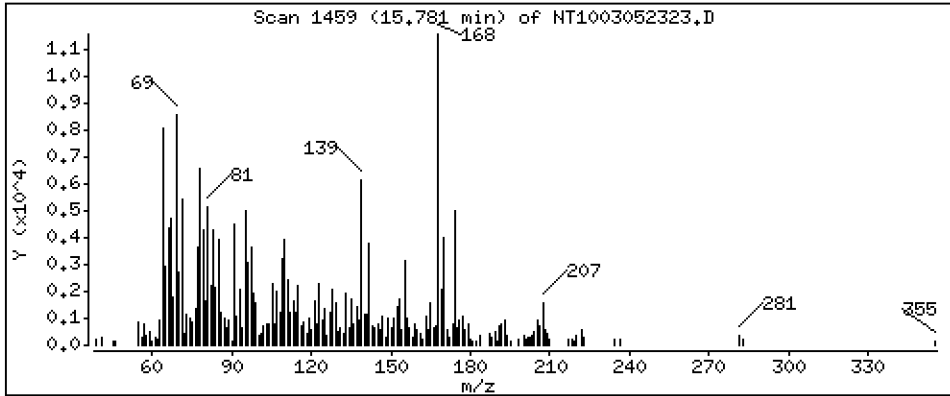
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

46 Dibenzofuran

Concentration: 0.1125 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

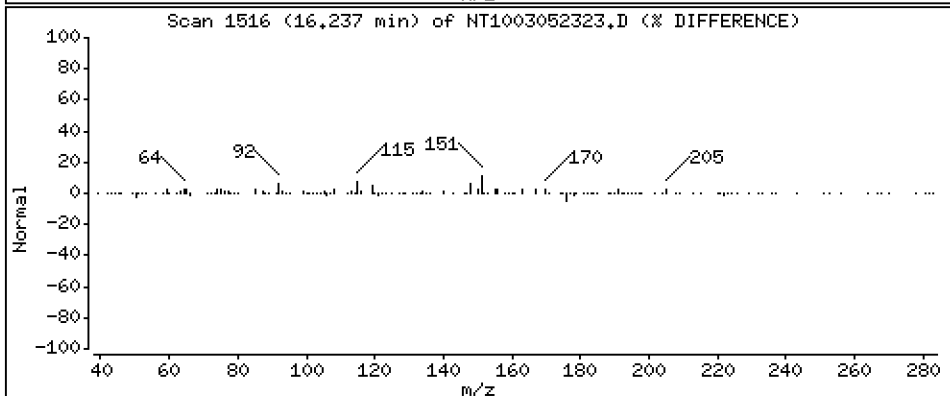
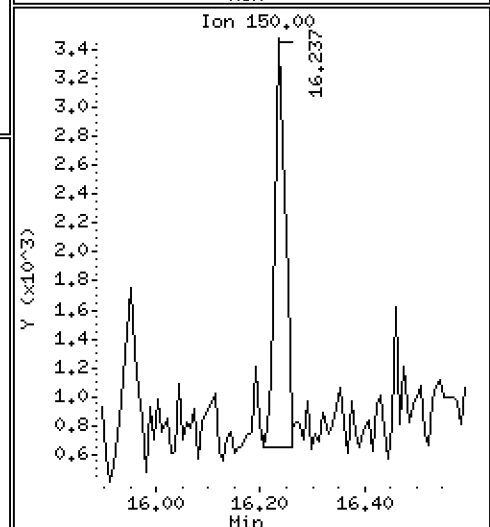
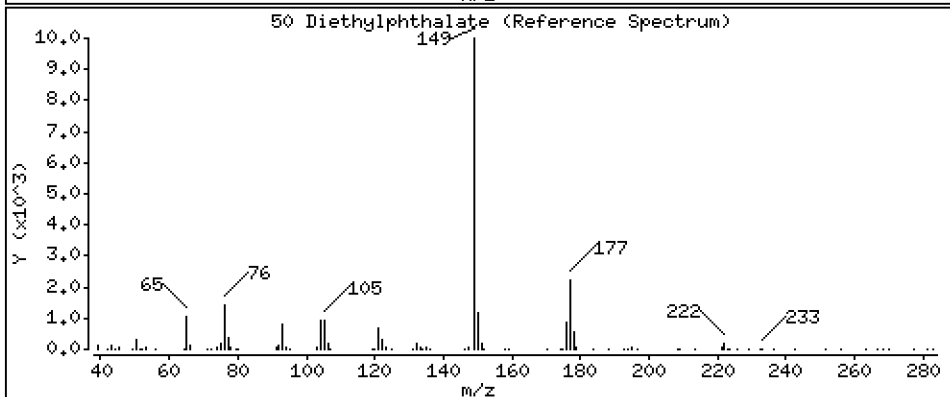
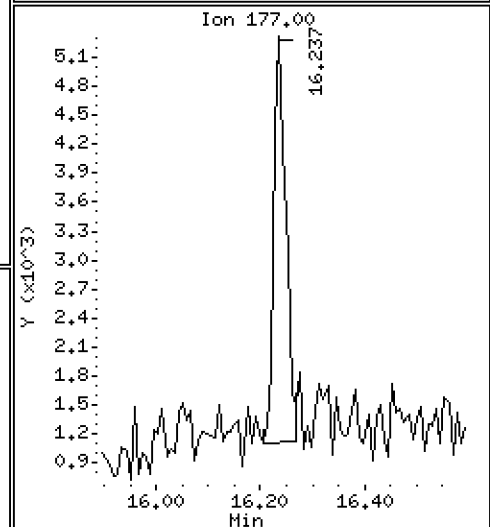
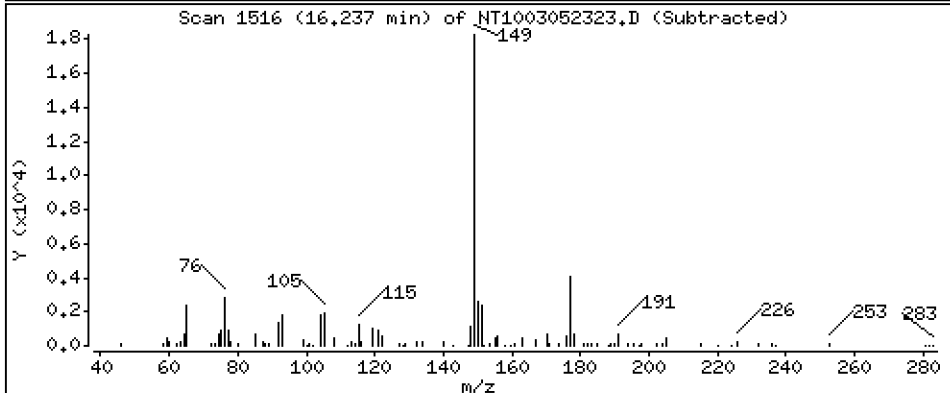
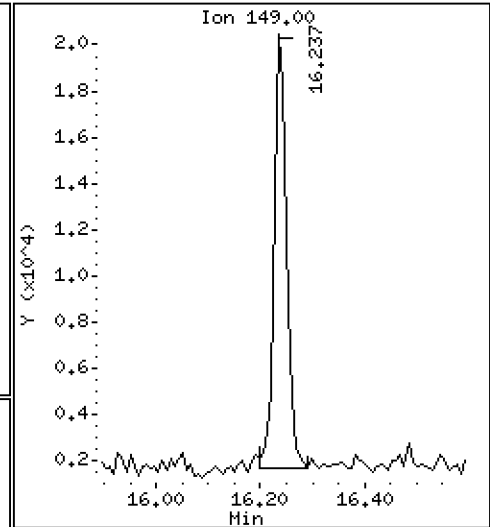
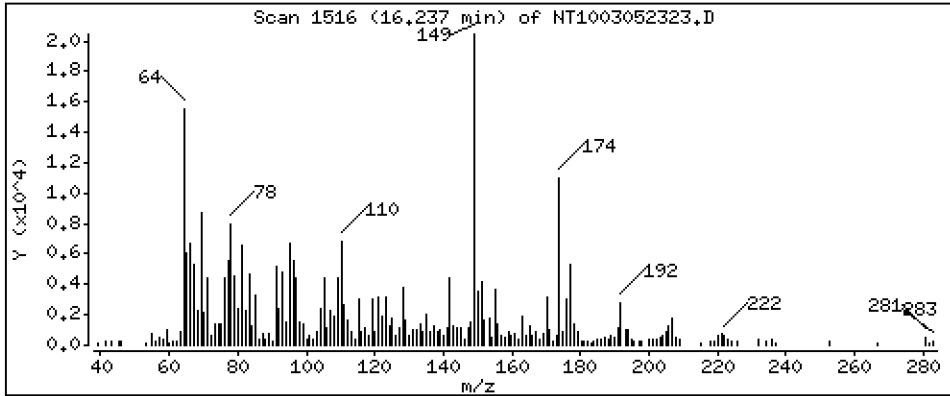
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2192 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

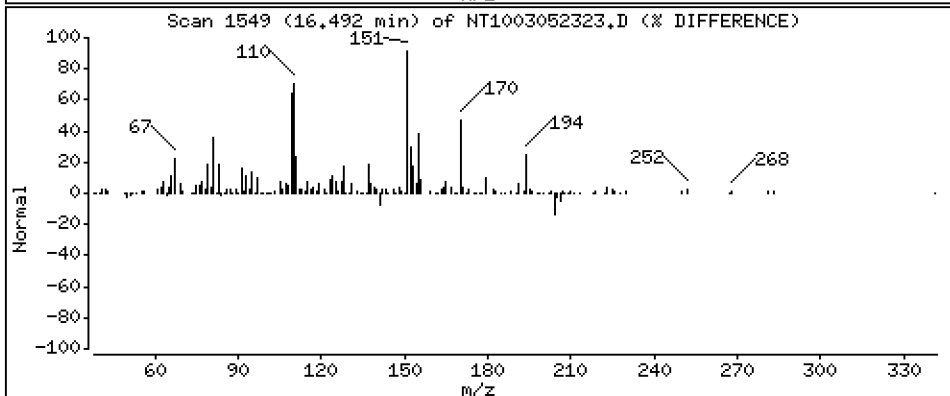
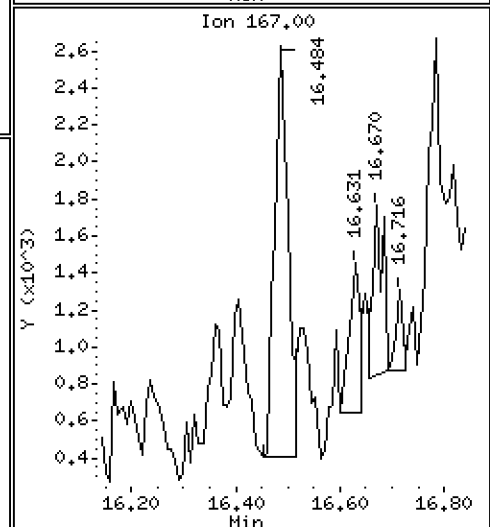
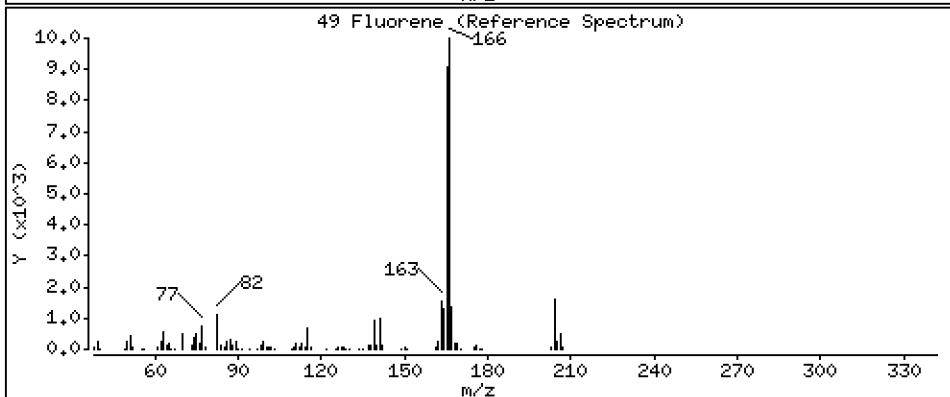
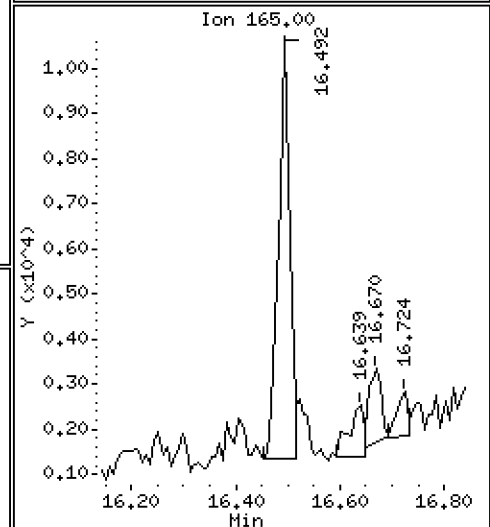
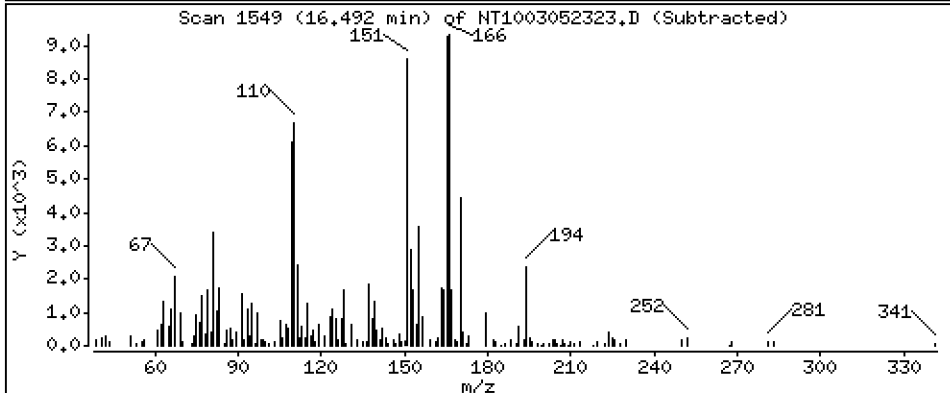
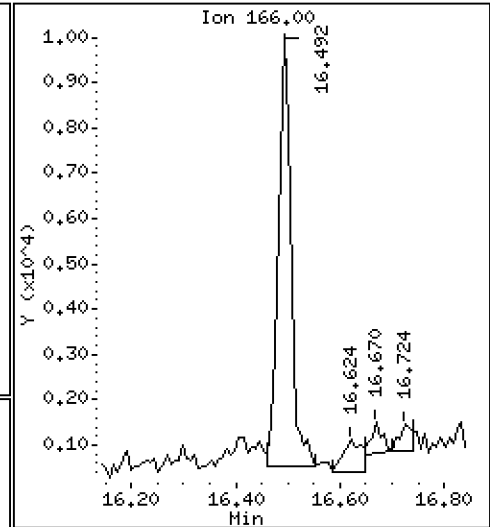
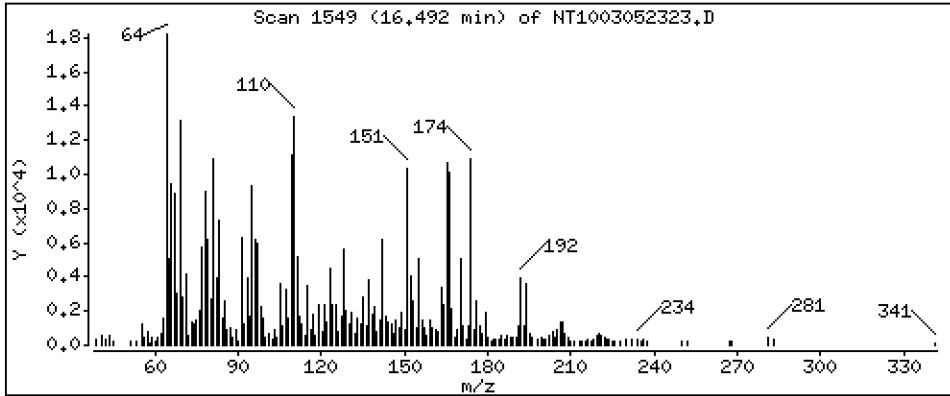
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1115 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

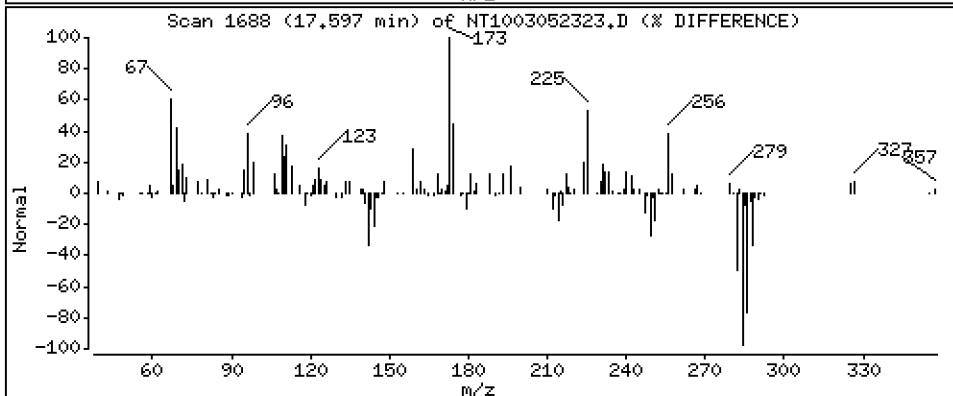
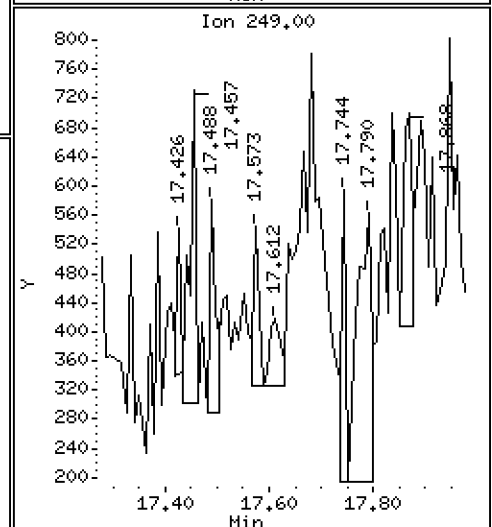
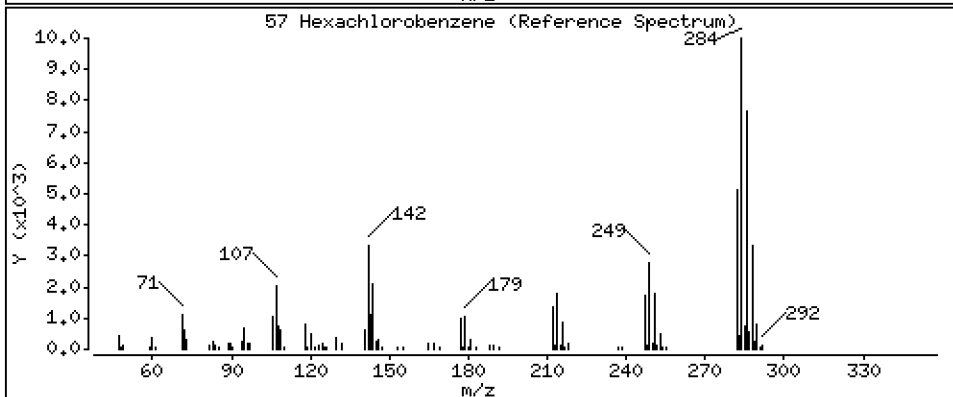
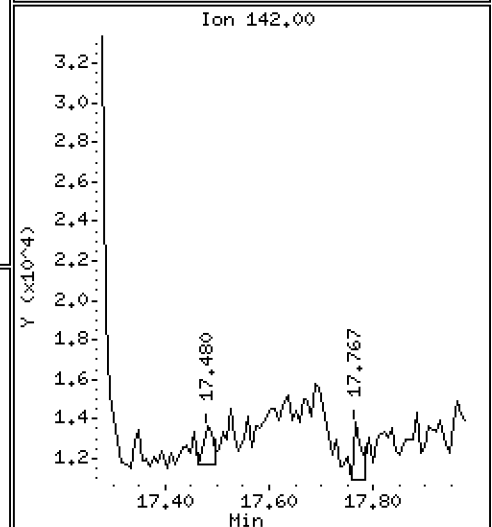
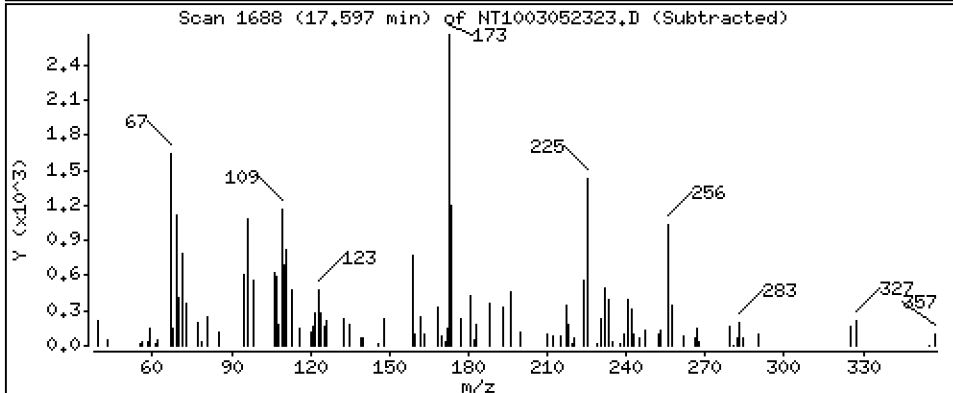
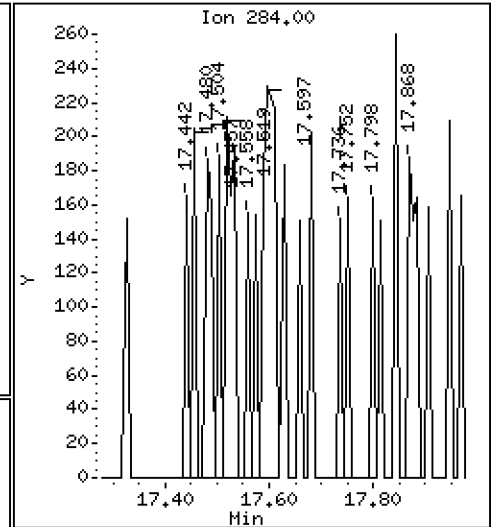
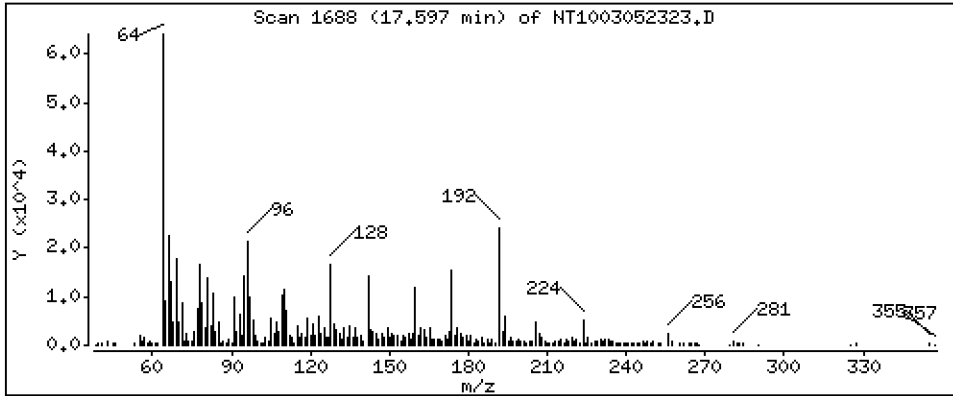
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.007828 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

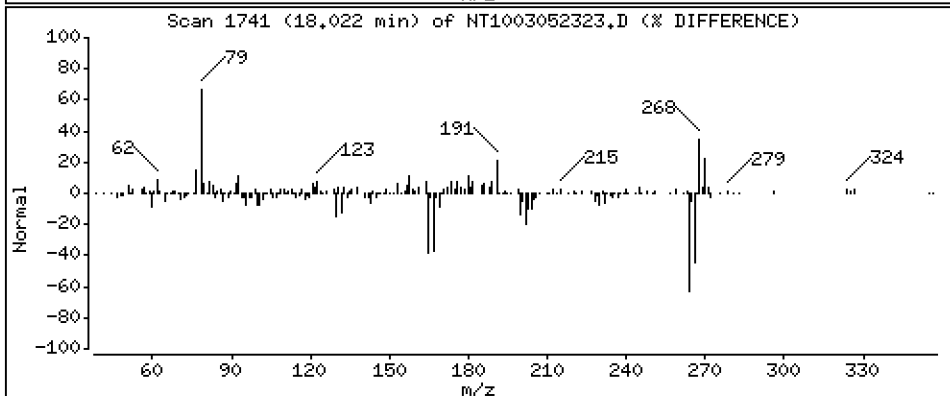
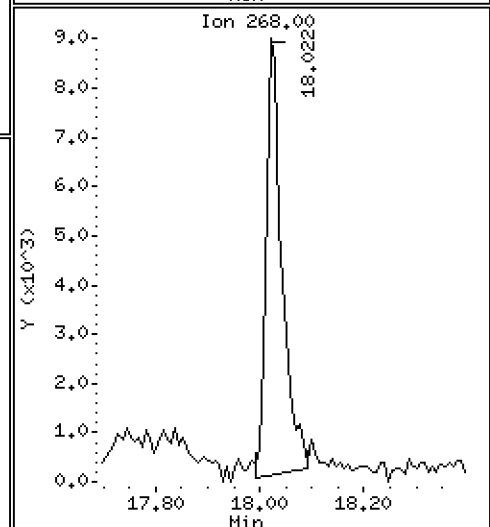
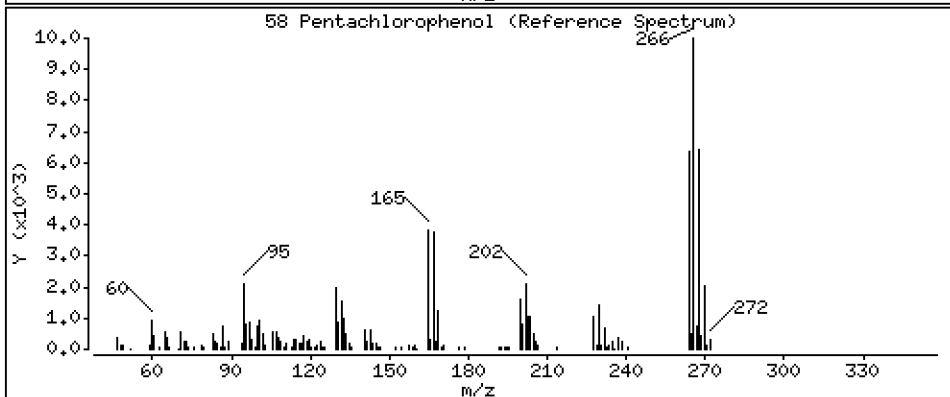
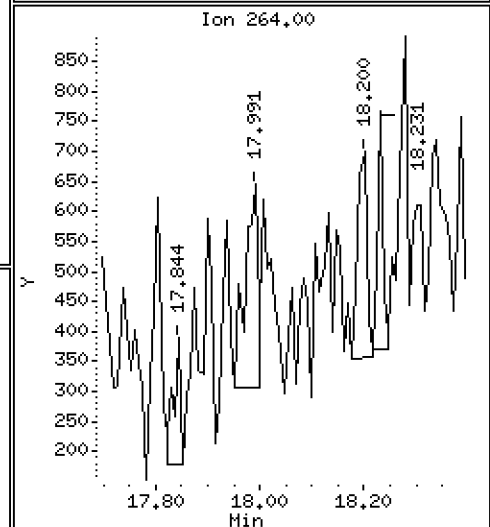
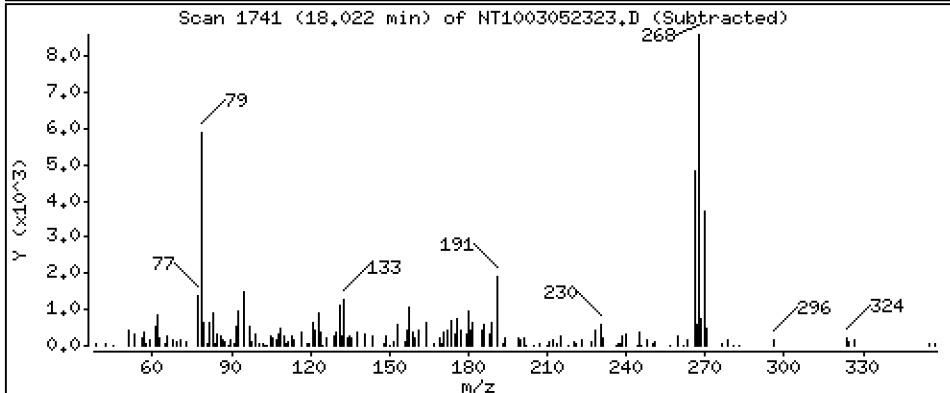
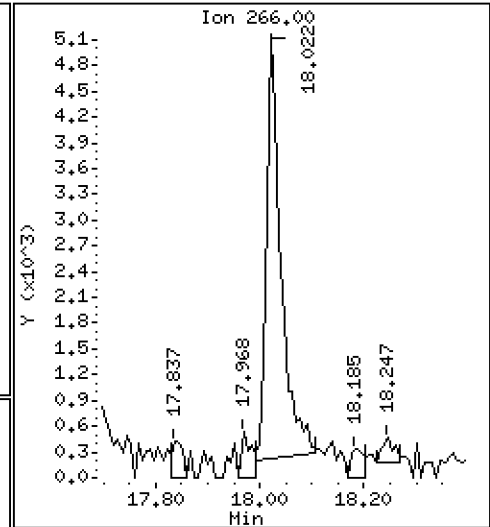
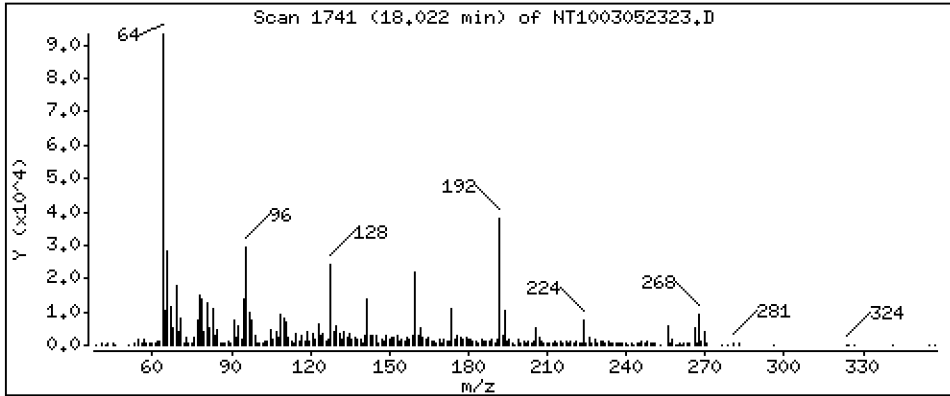
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

58 Pentachlorophenol

Concentration: 0.4111 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

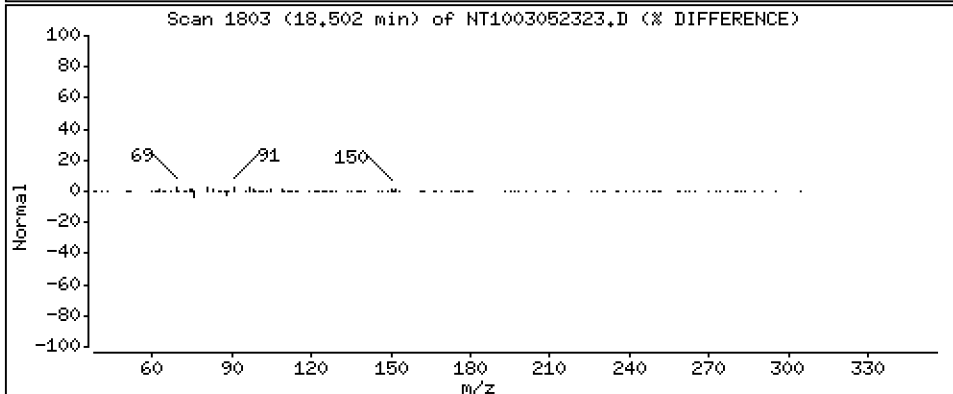
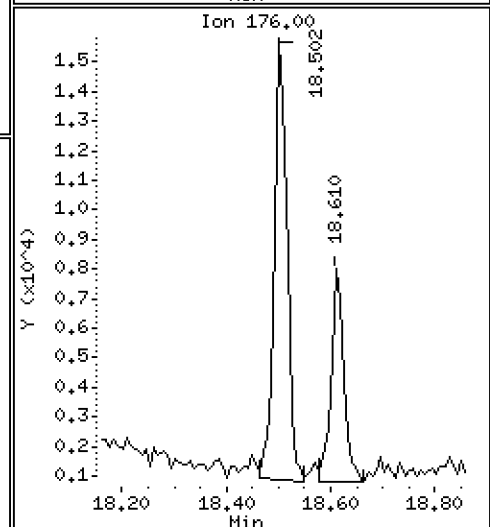
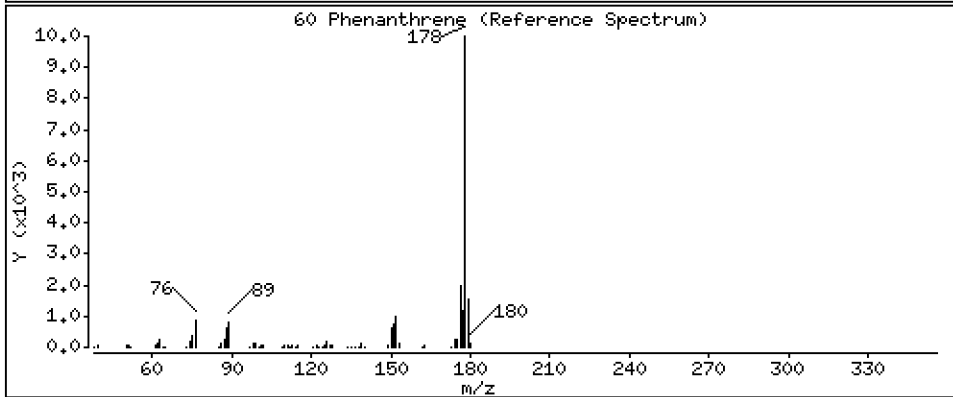
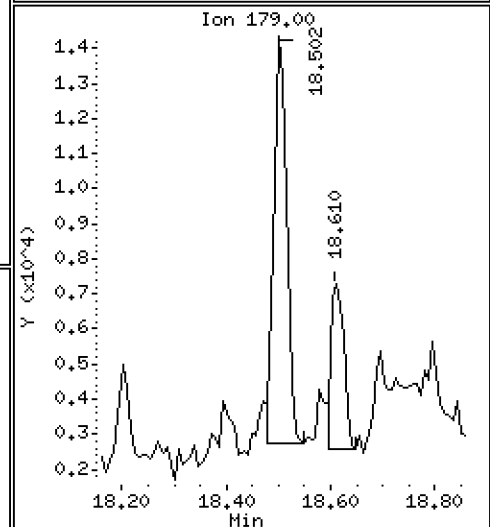
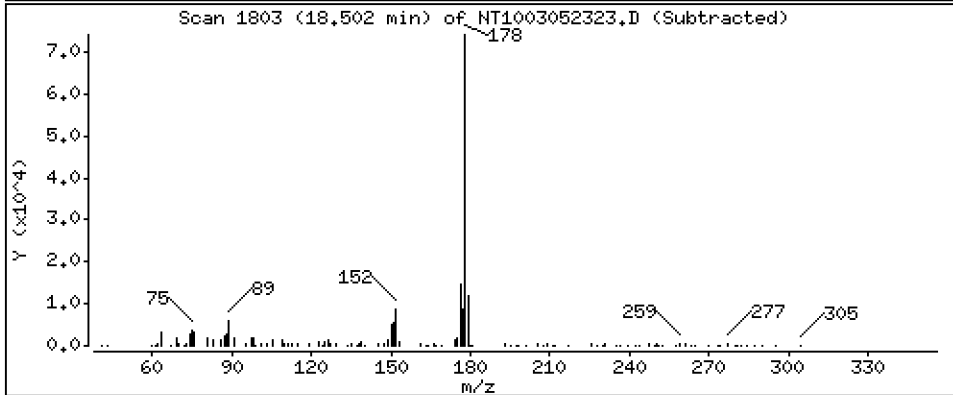
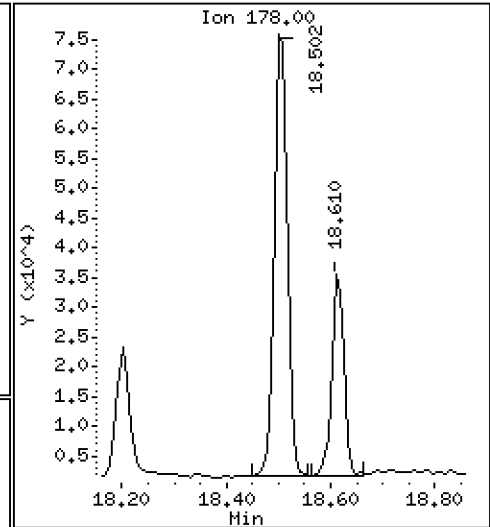
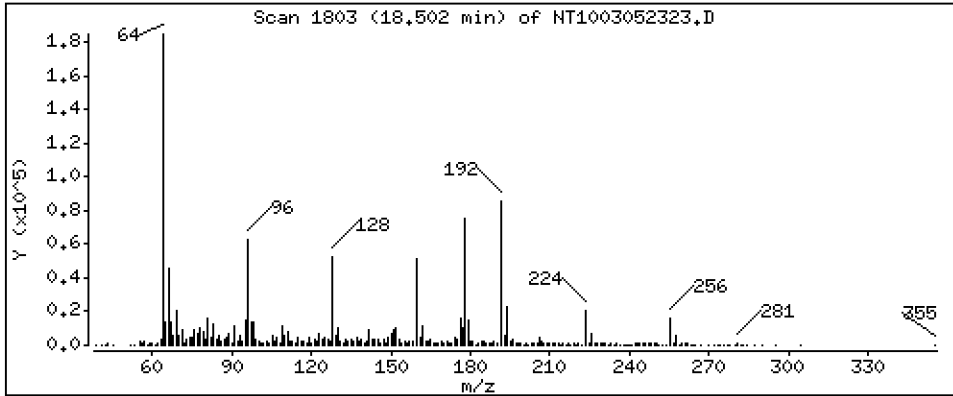
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.6525 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

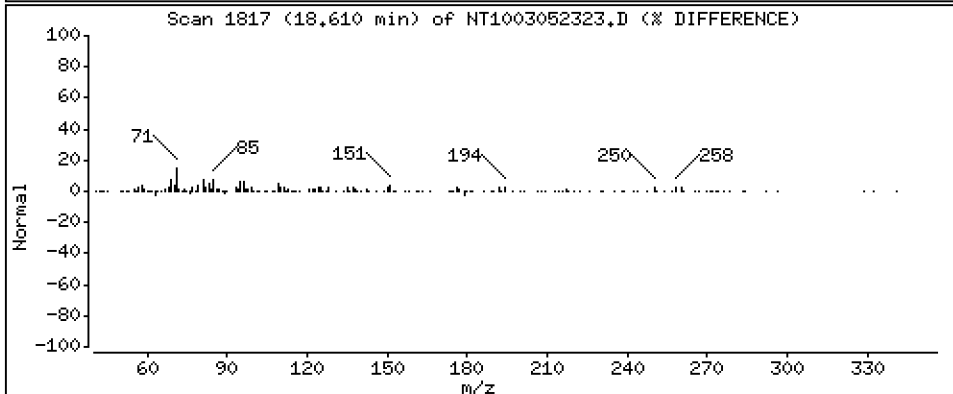
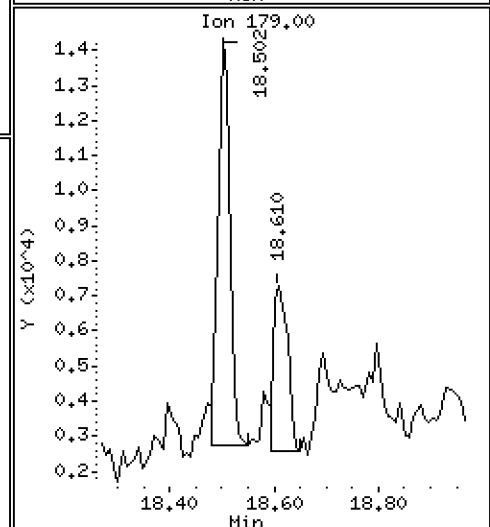
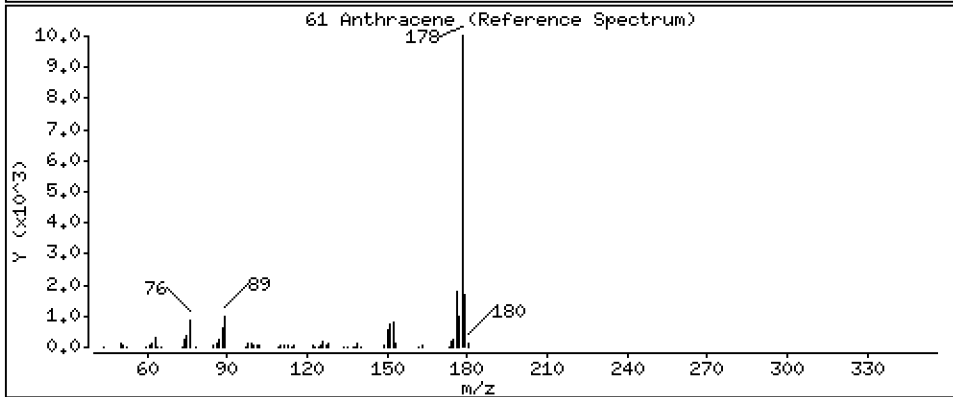
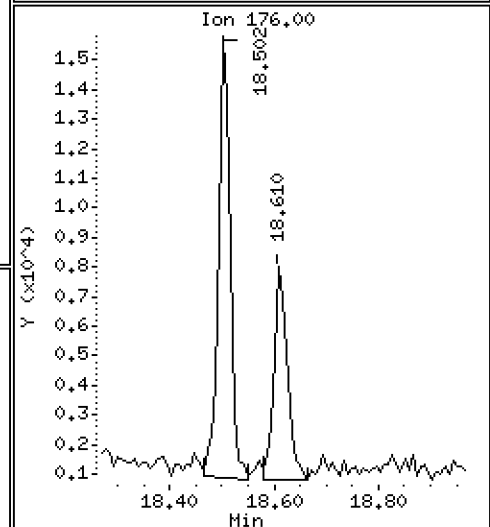
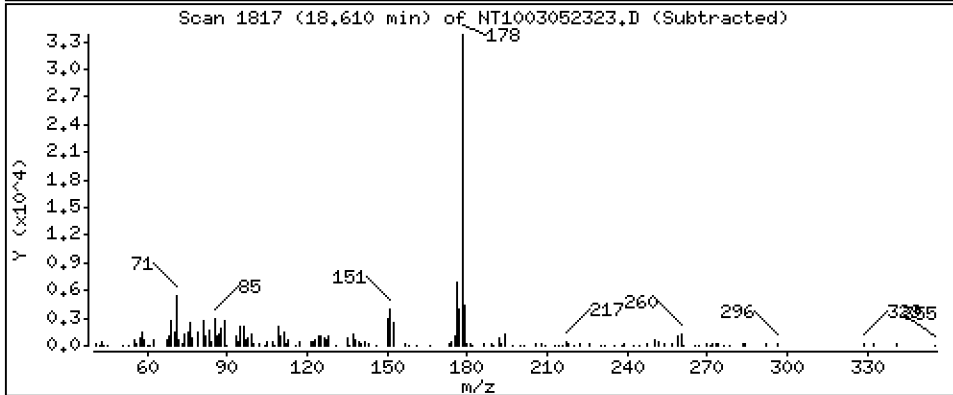
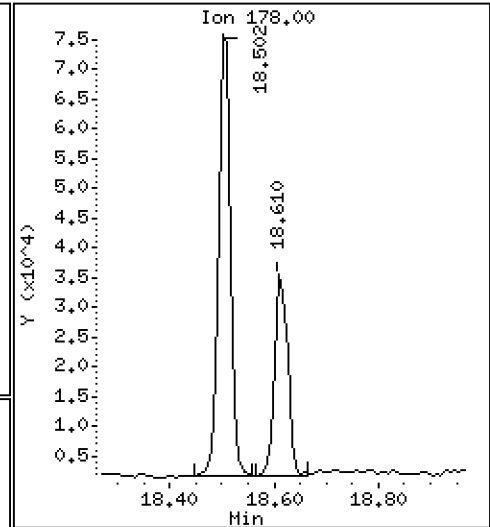
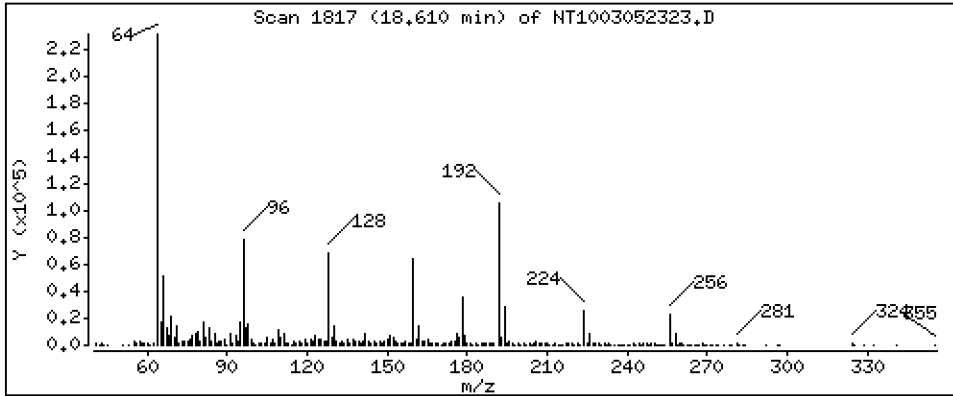
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,3049 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

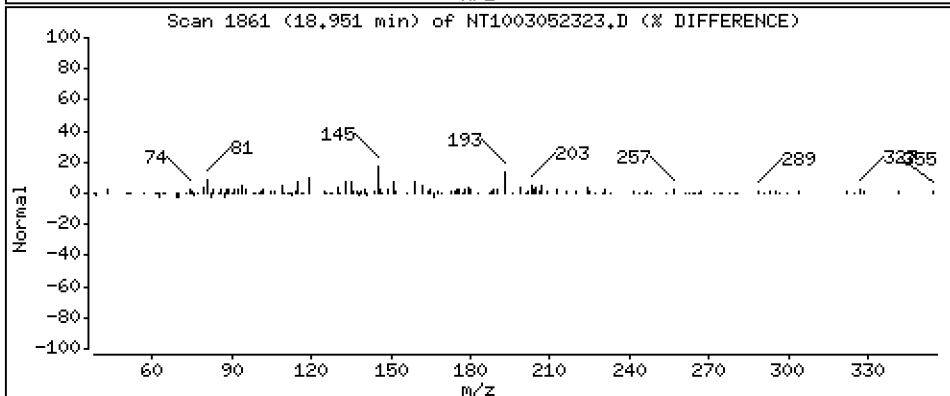
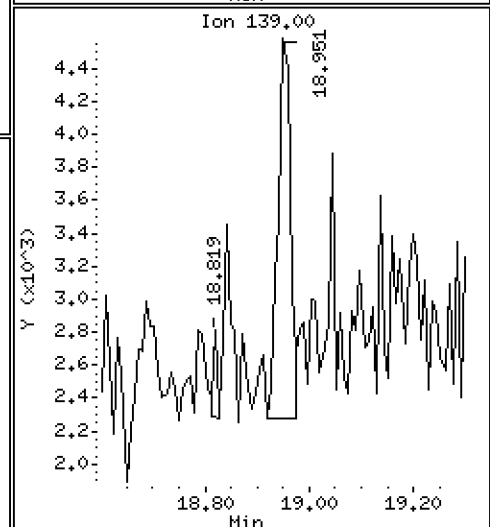
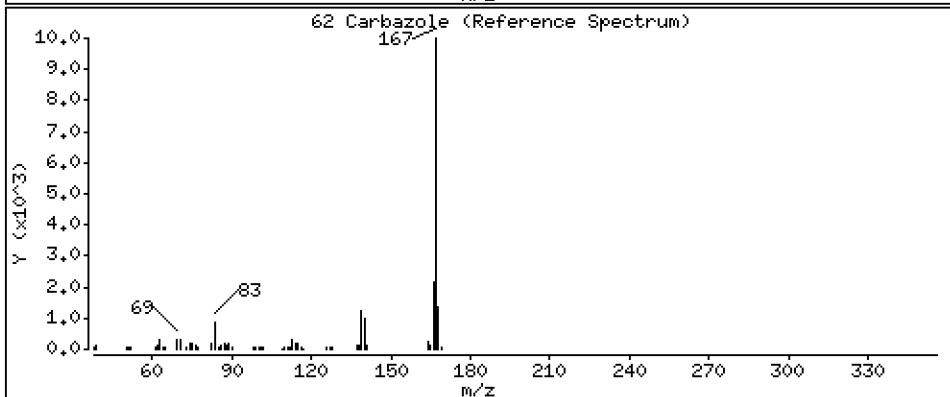
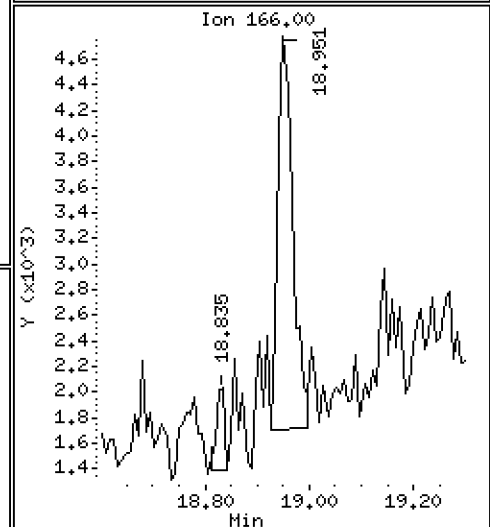
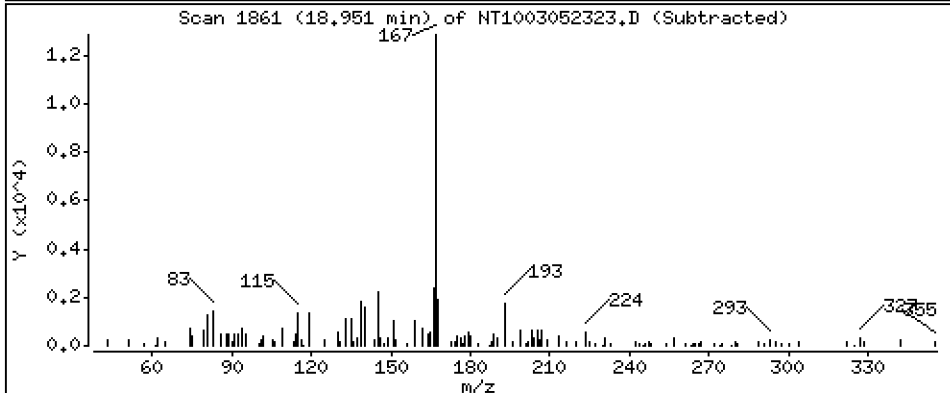
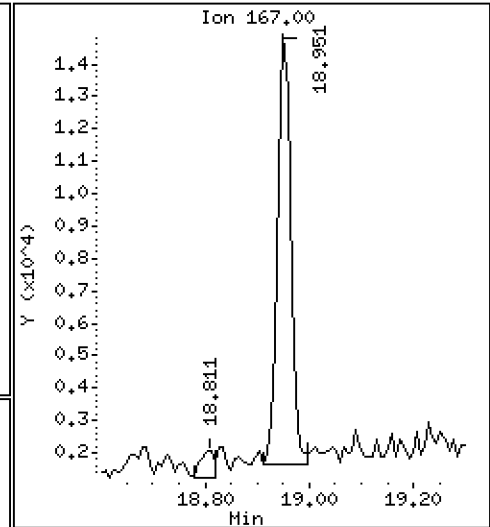
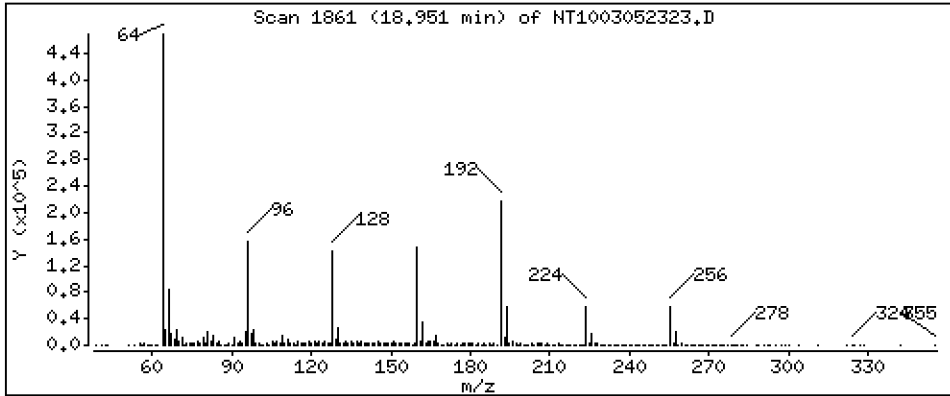
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.1308 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

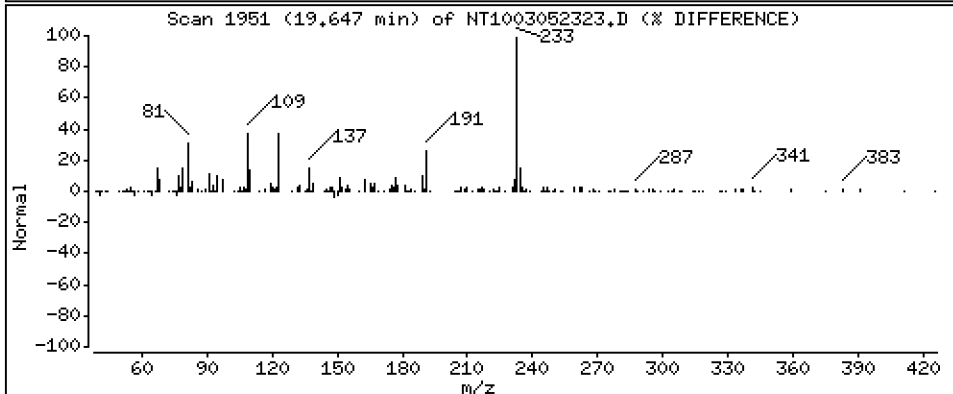
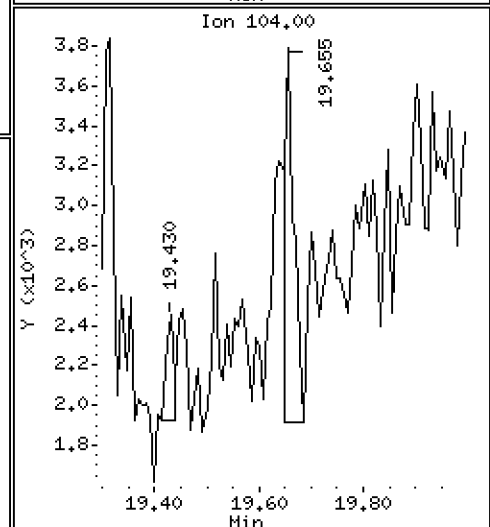
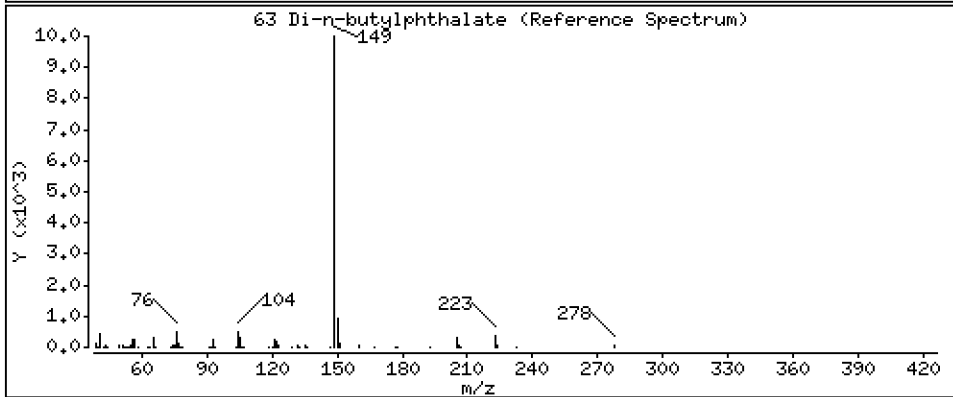
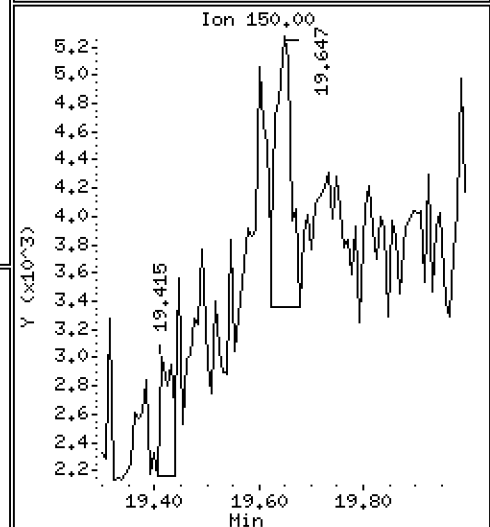
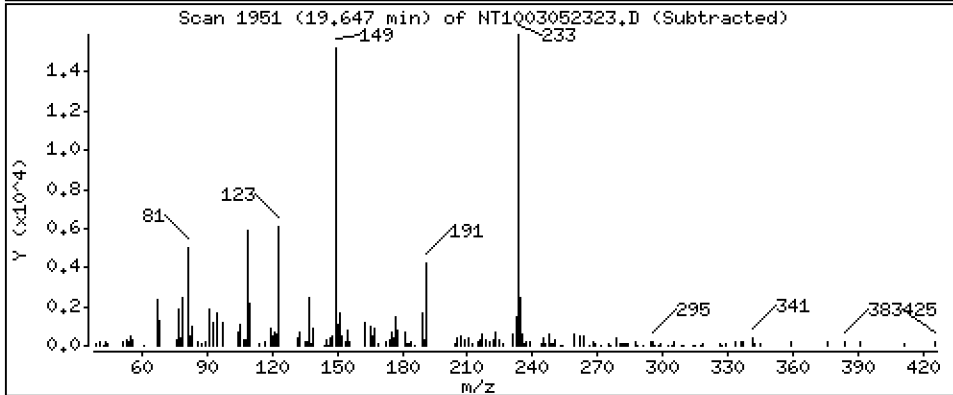
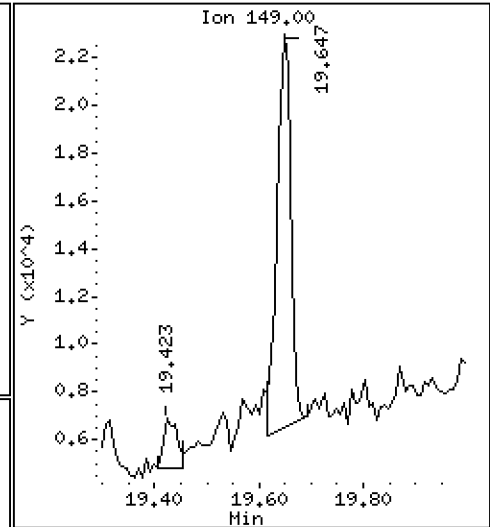
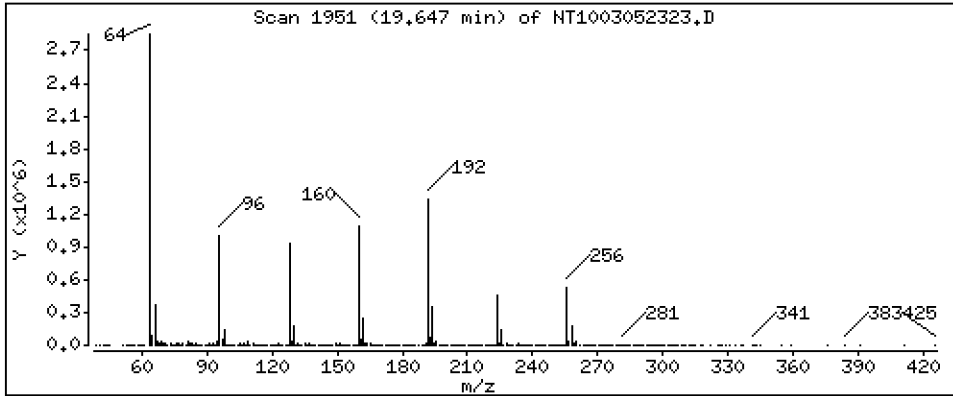
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1270 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

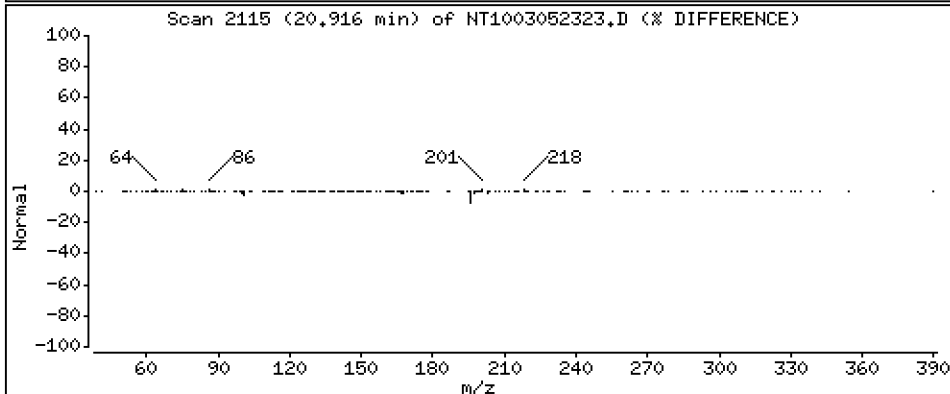
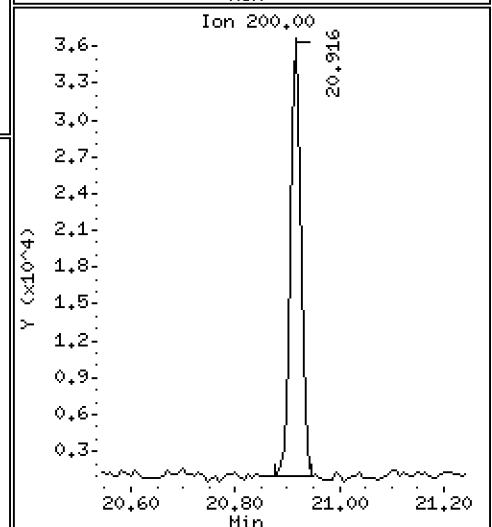
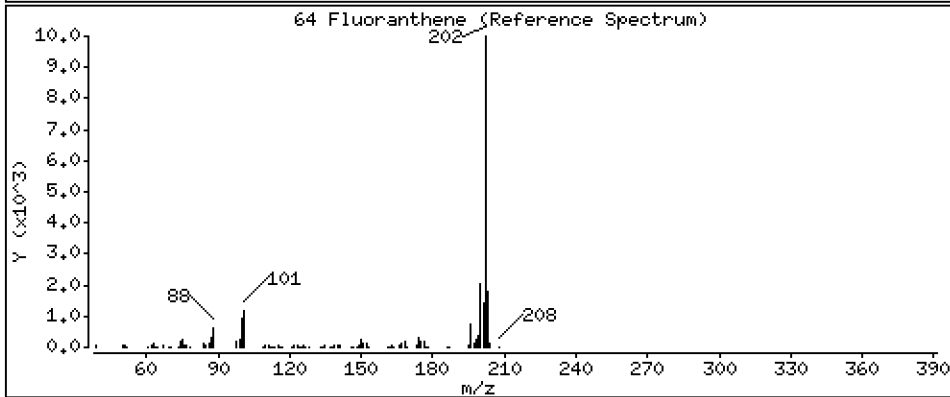
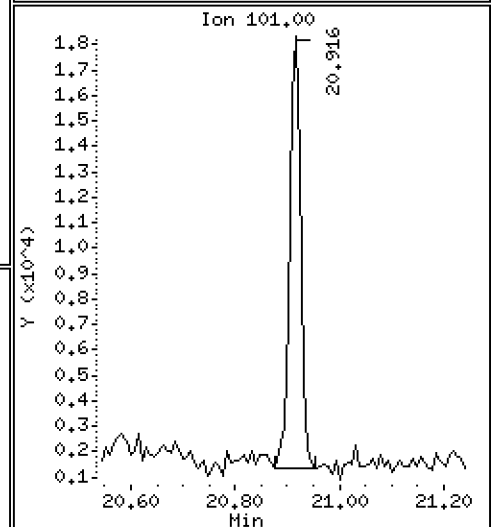
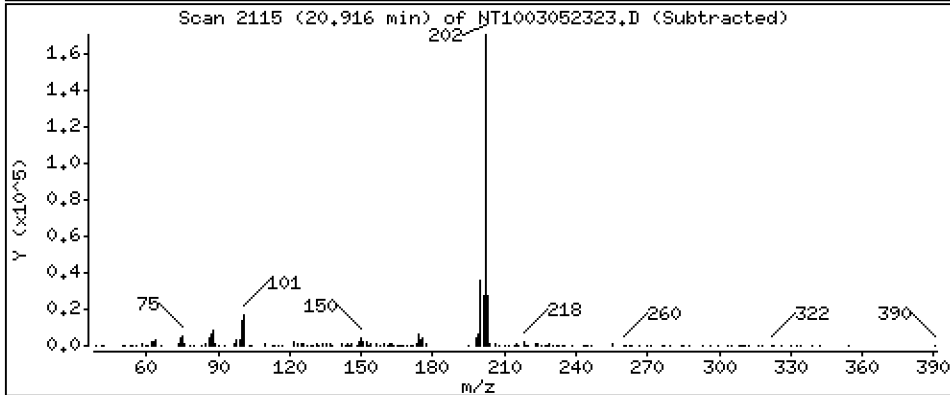
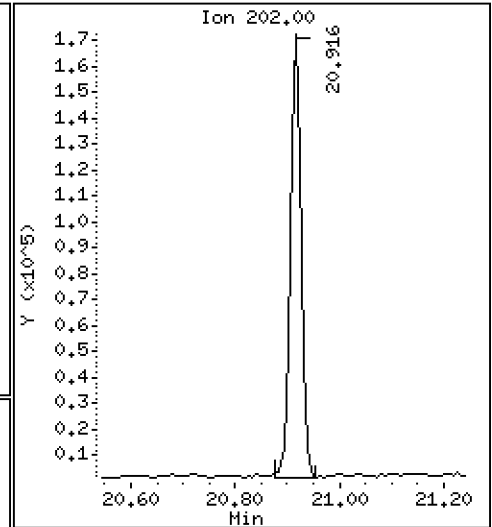
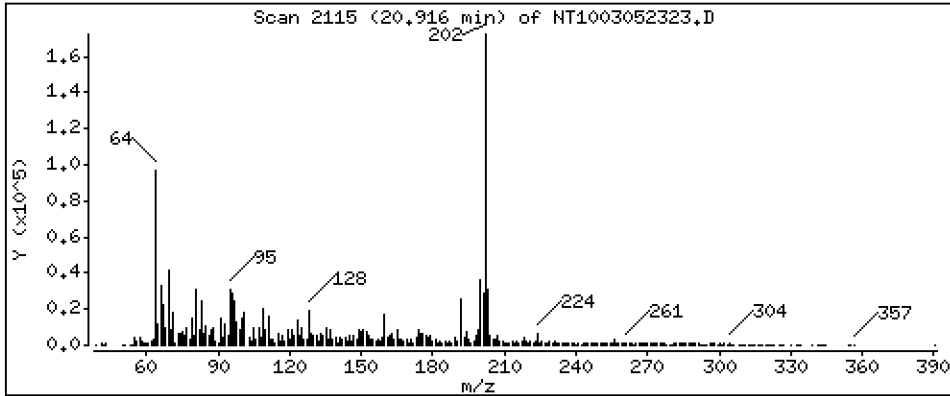
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 1,022 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

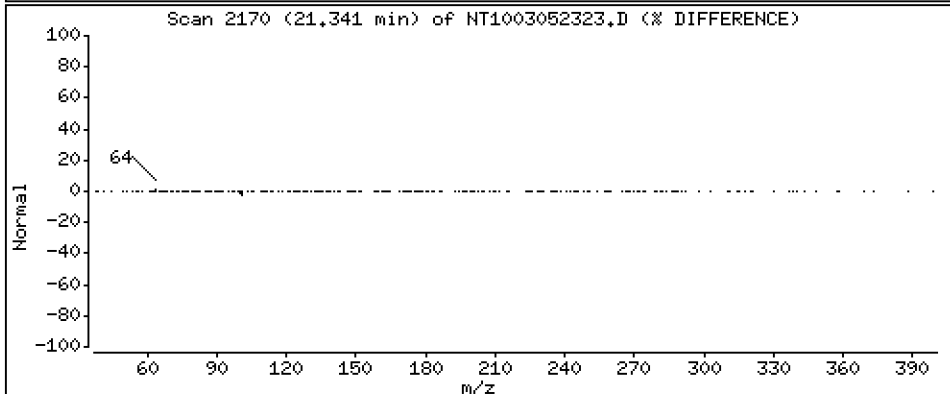
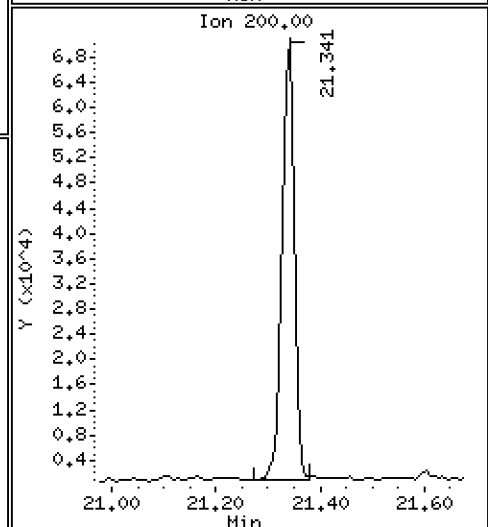
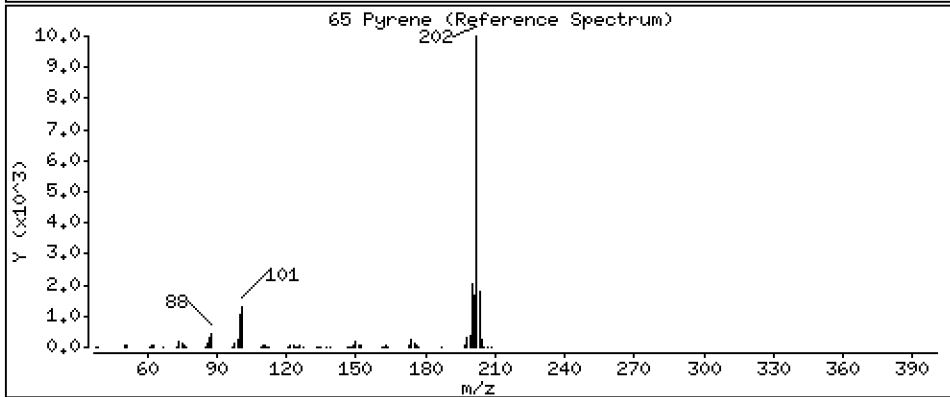
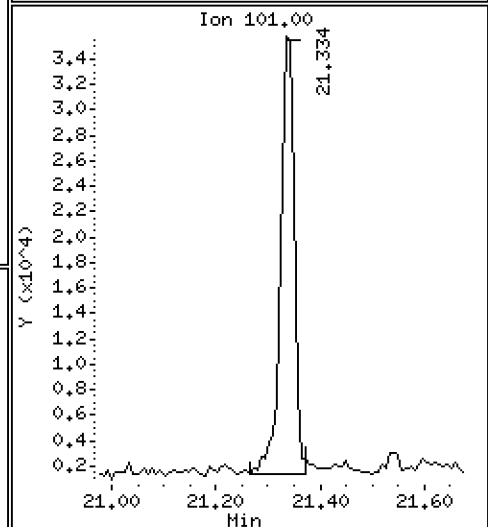
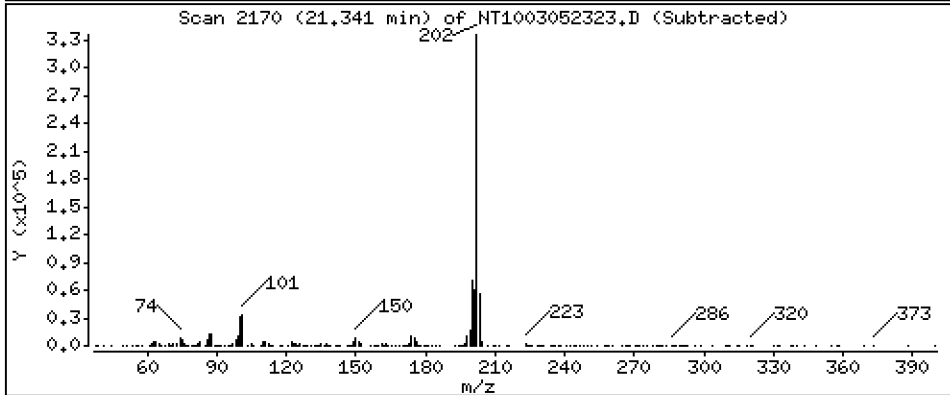
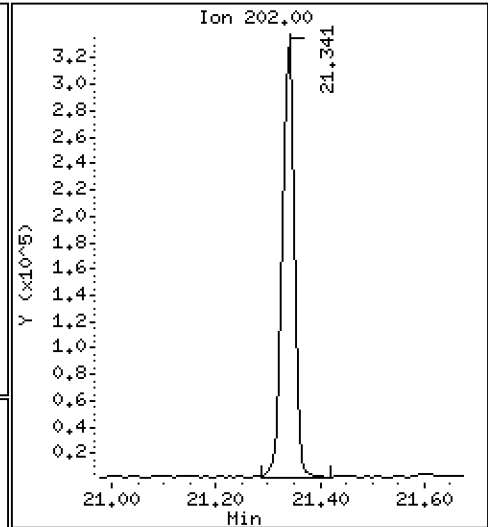
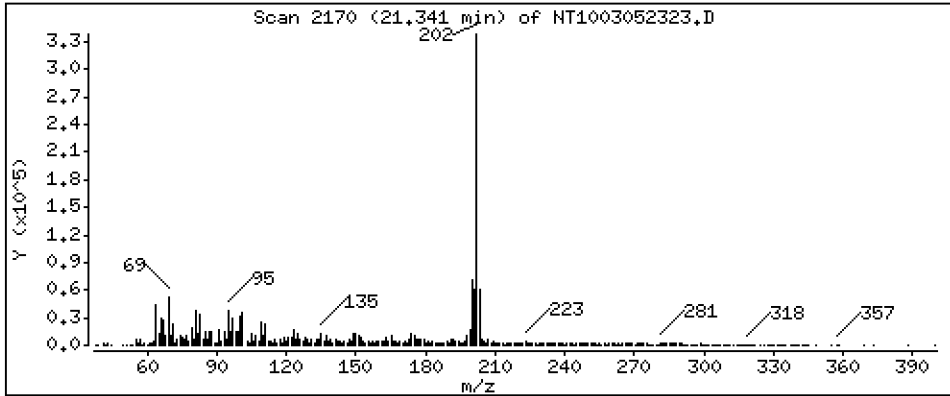
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,316 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

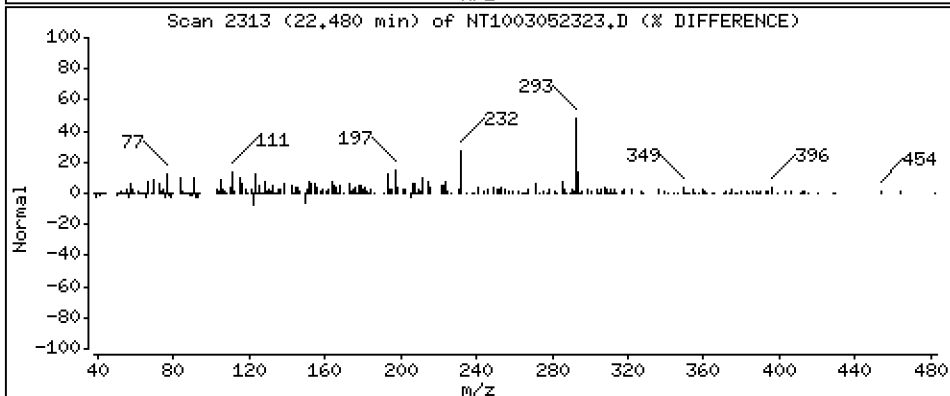
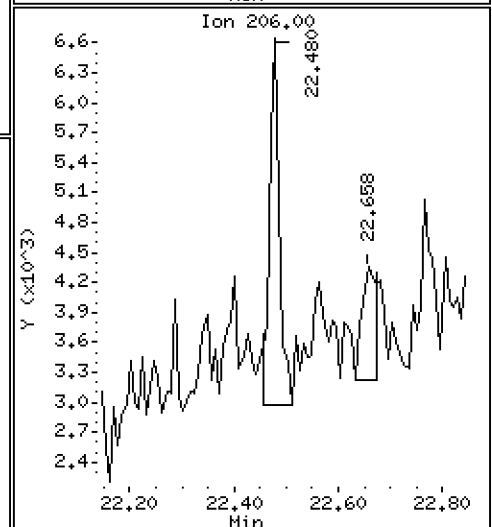
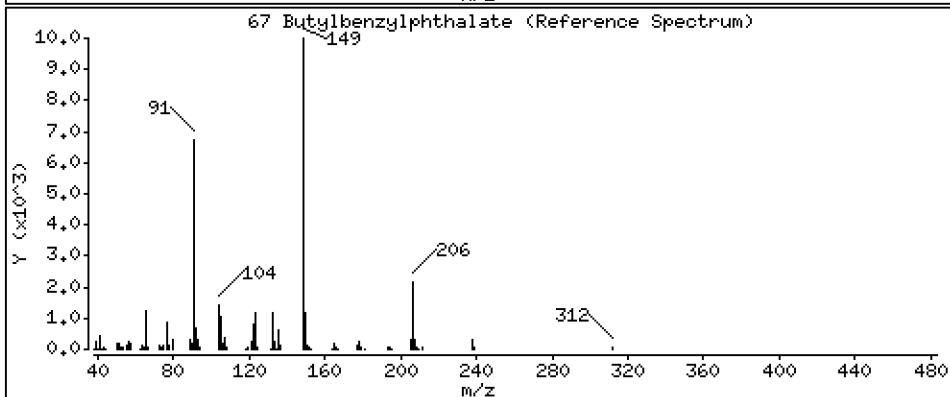
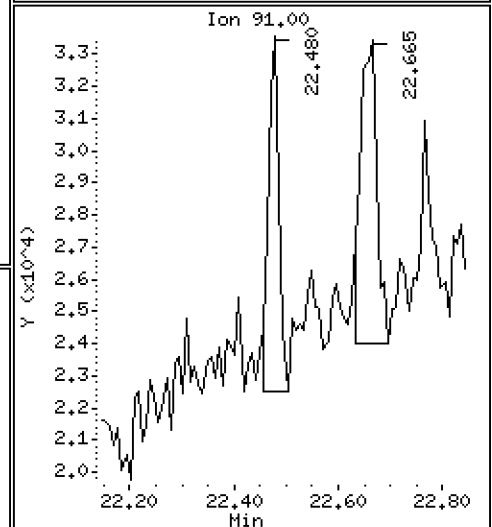
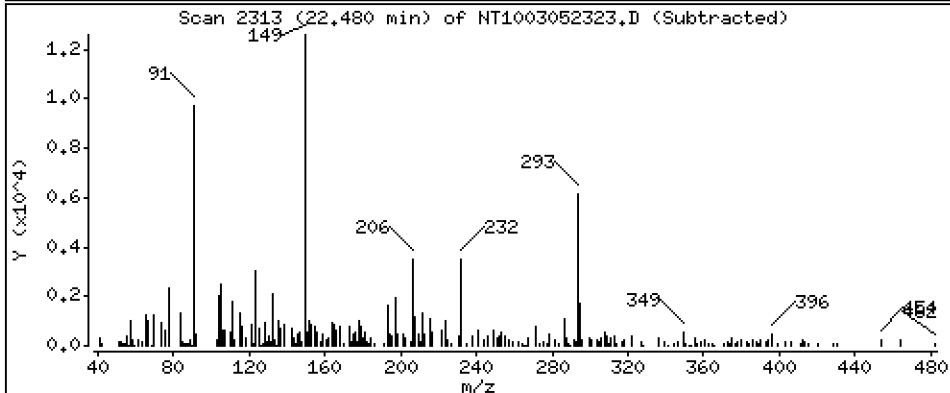
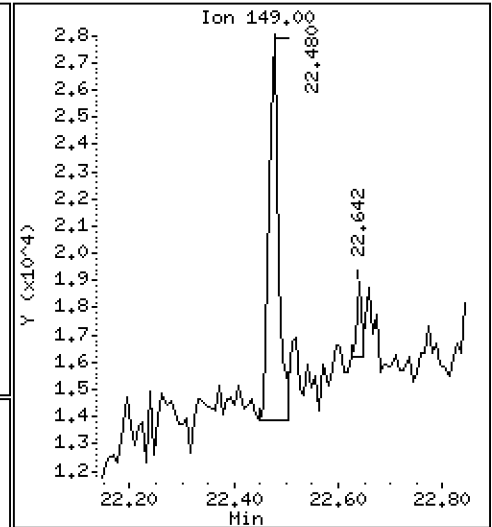
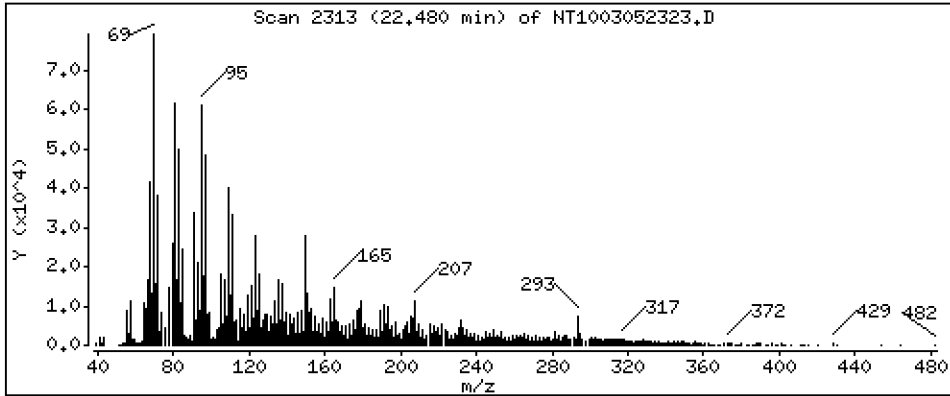
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1371 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

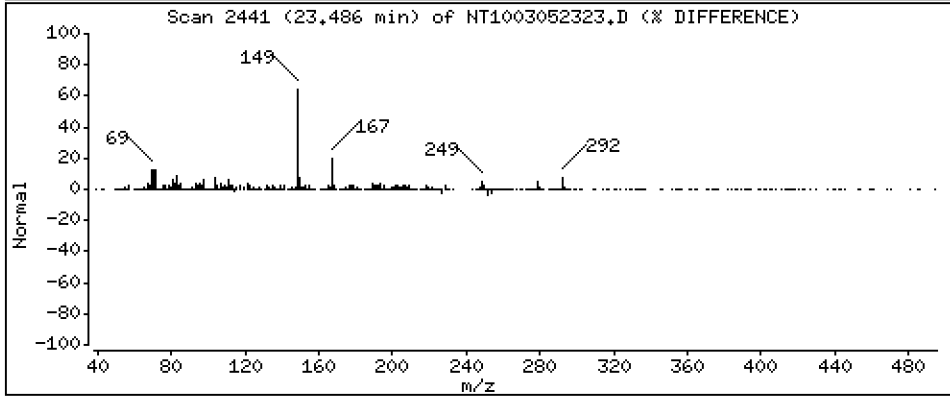
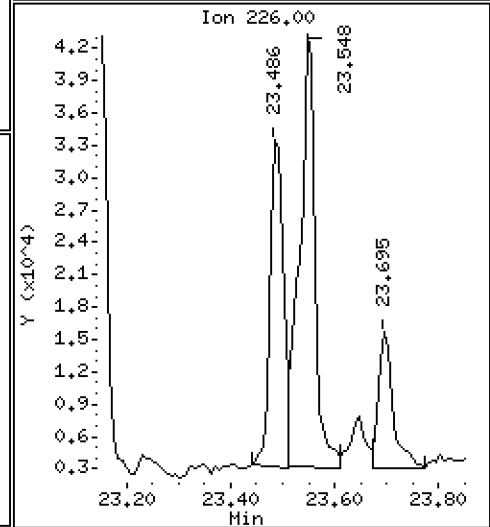
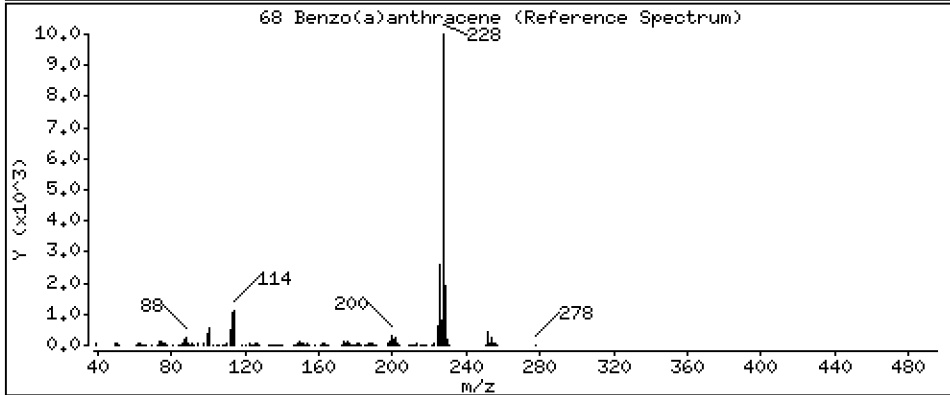
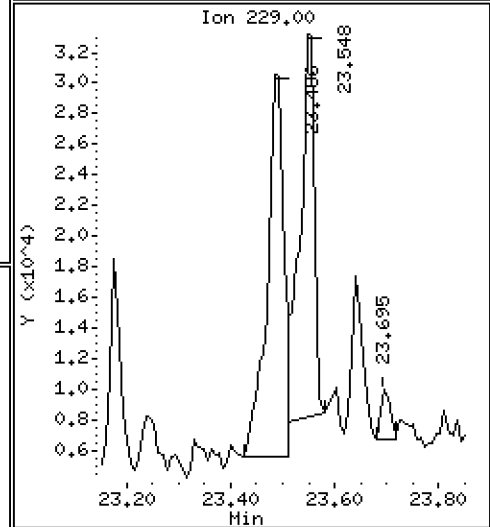
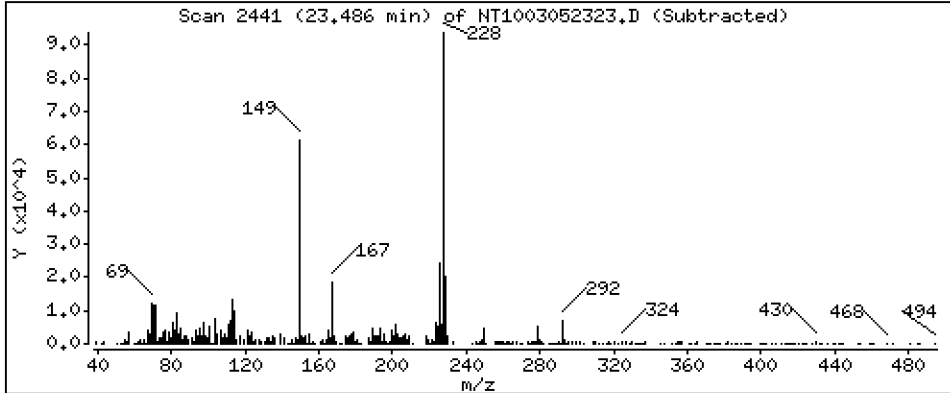
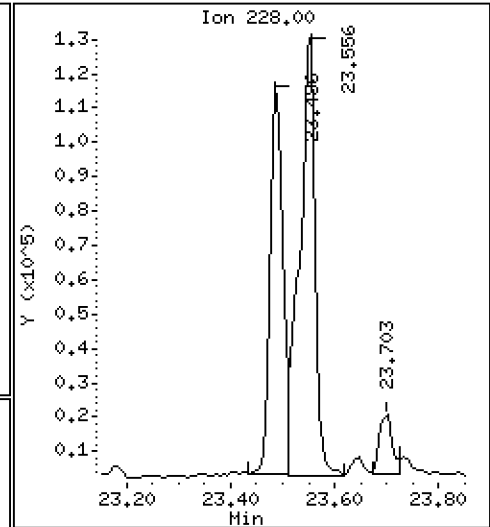
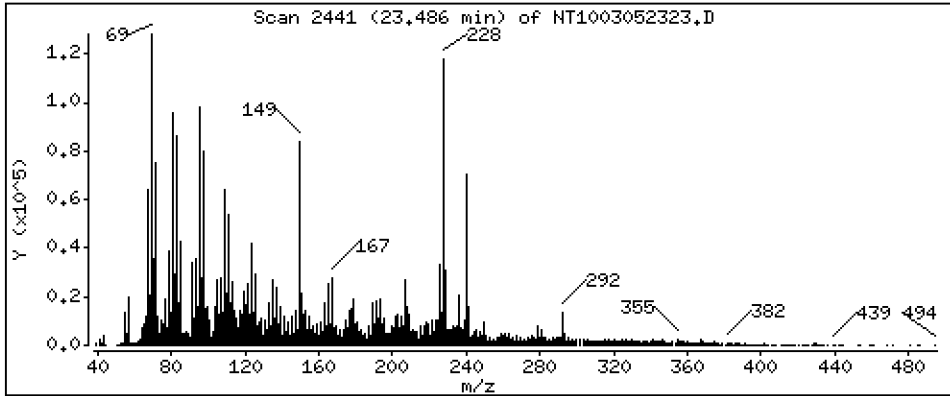
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,7460 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

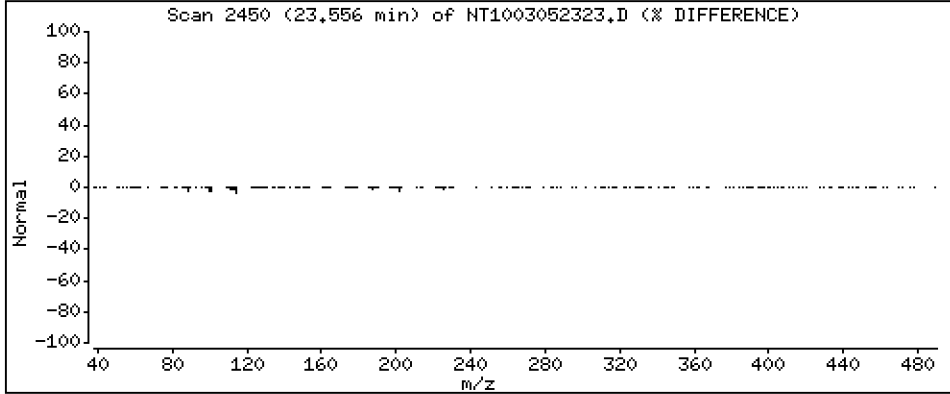
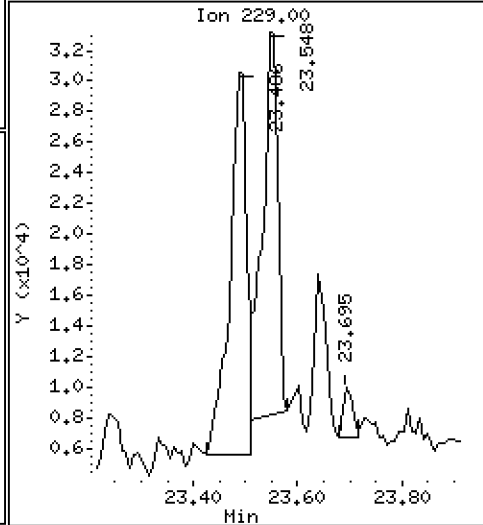
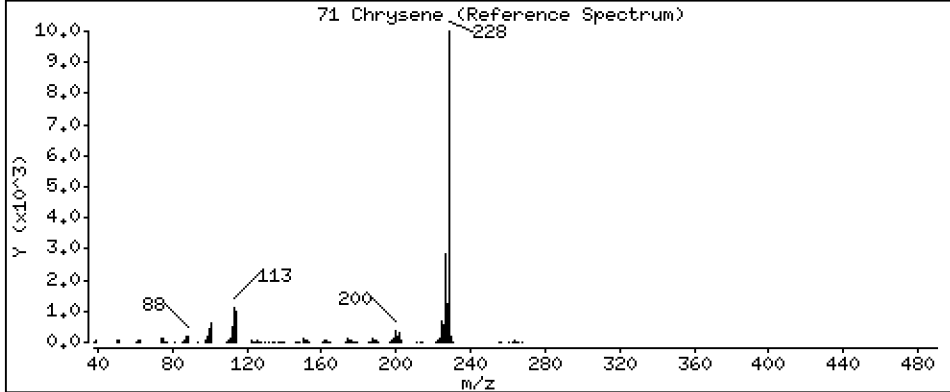
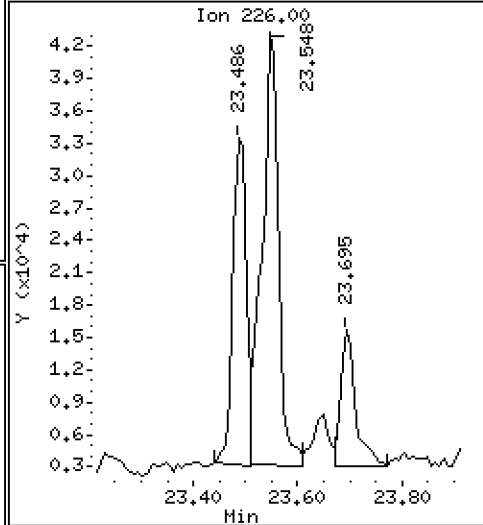
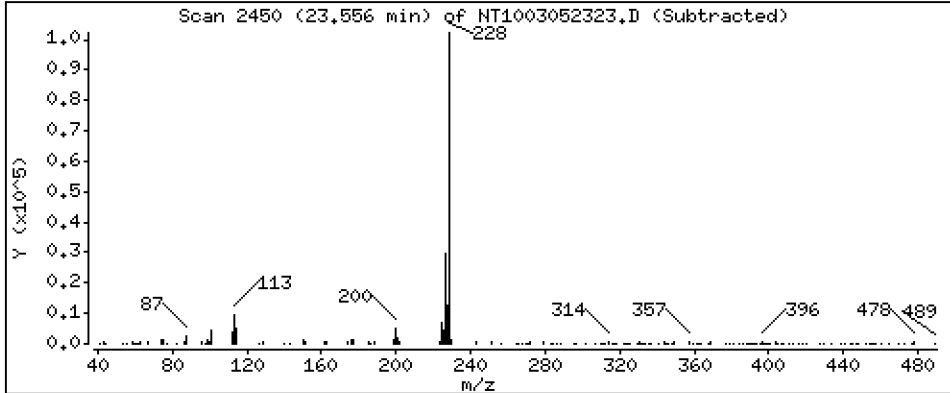
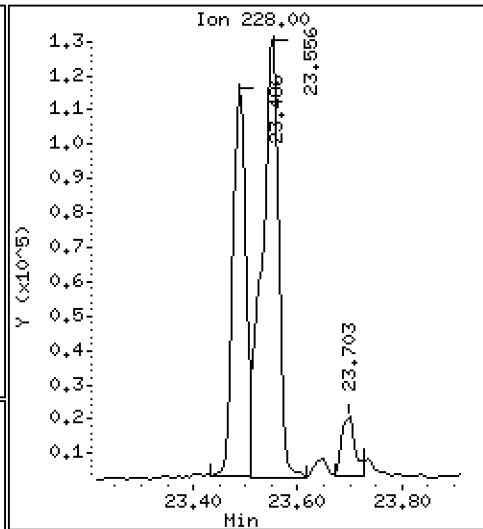
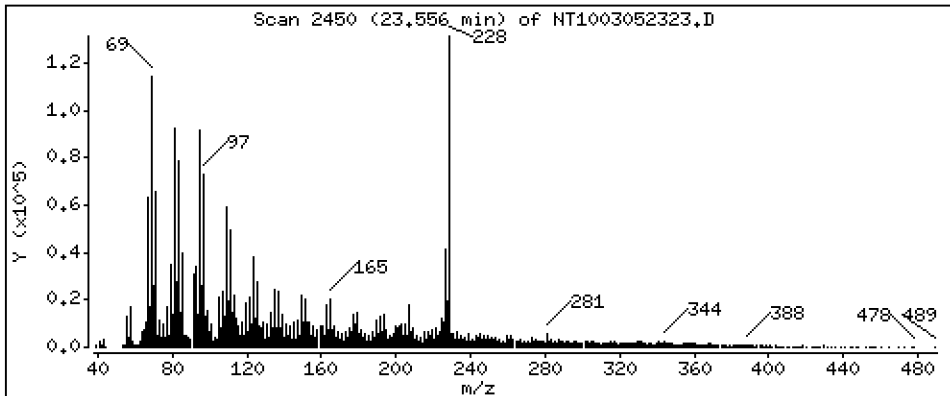
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,385 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

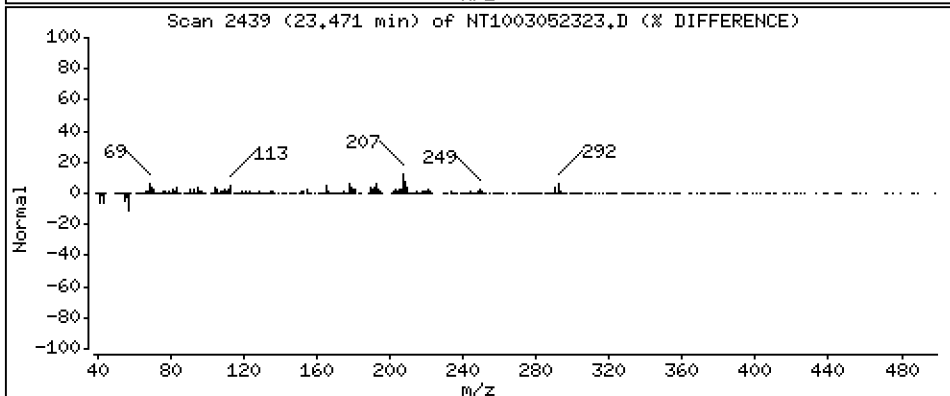
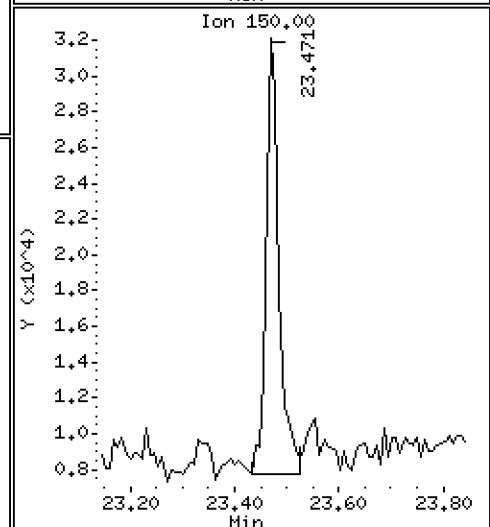
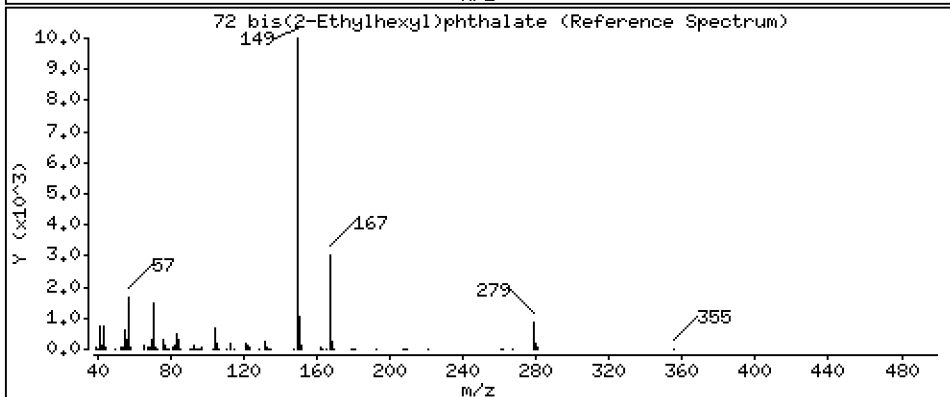
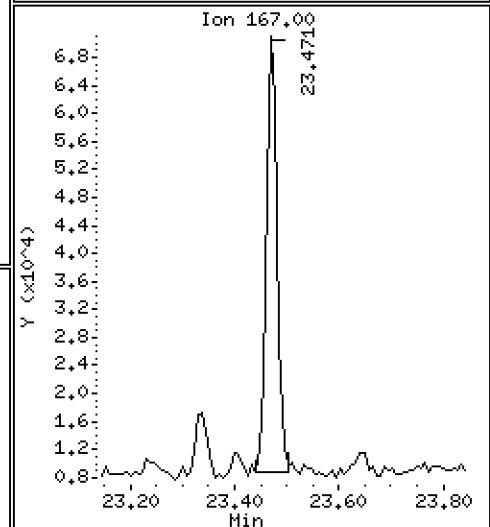
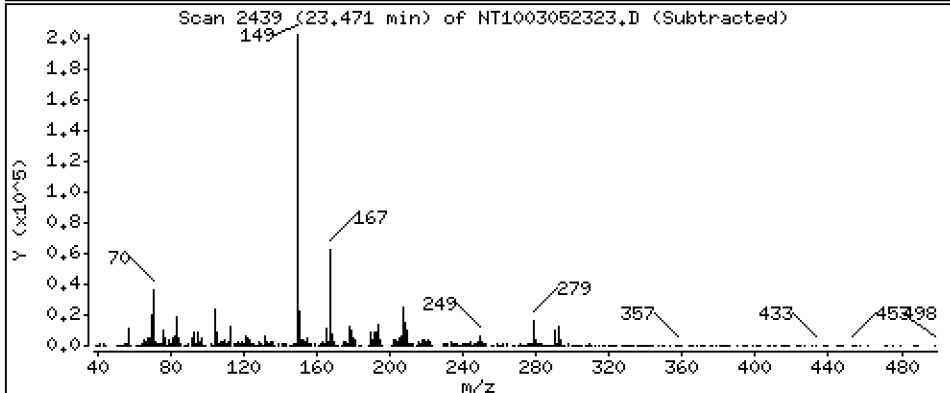
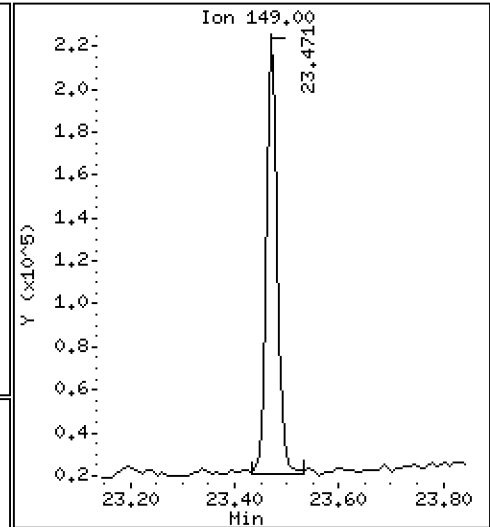
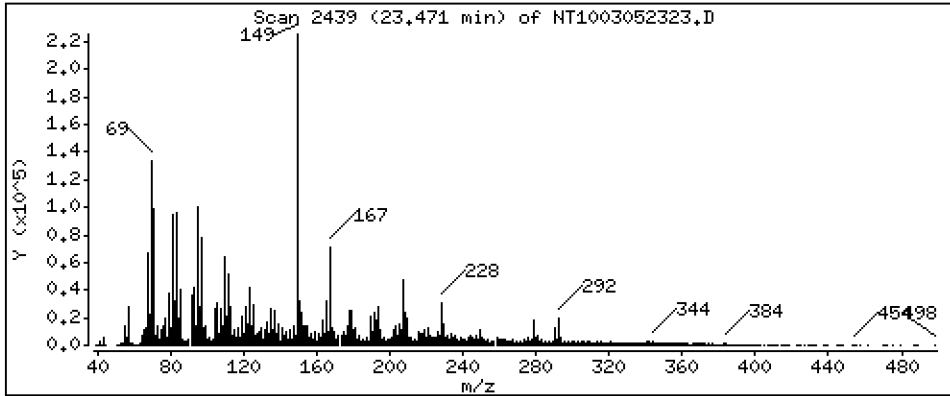
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,674 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

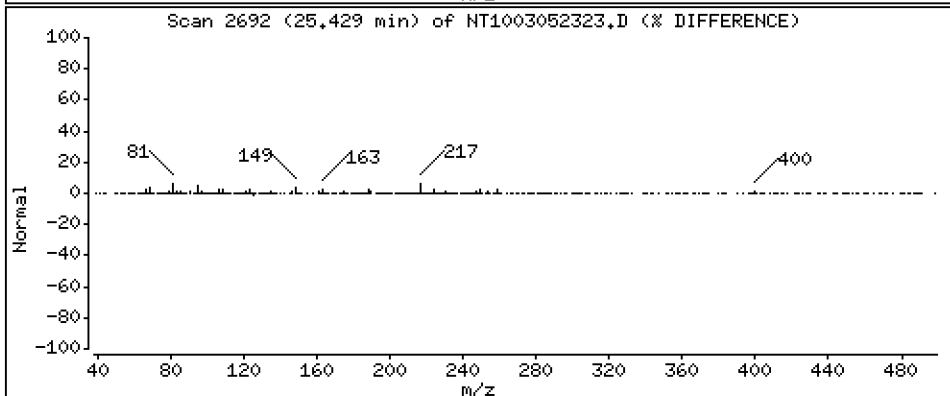
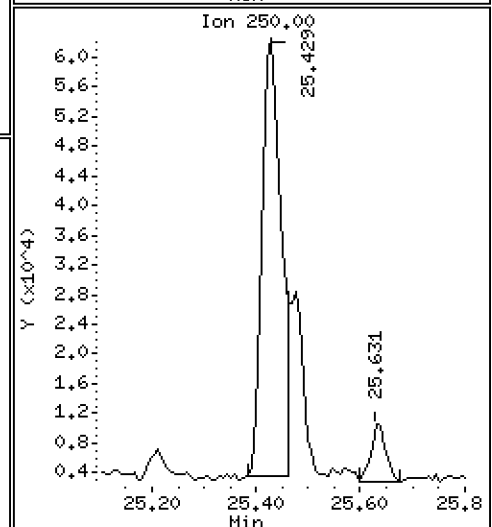
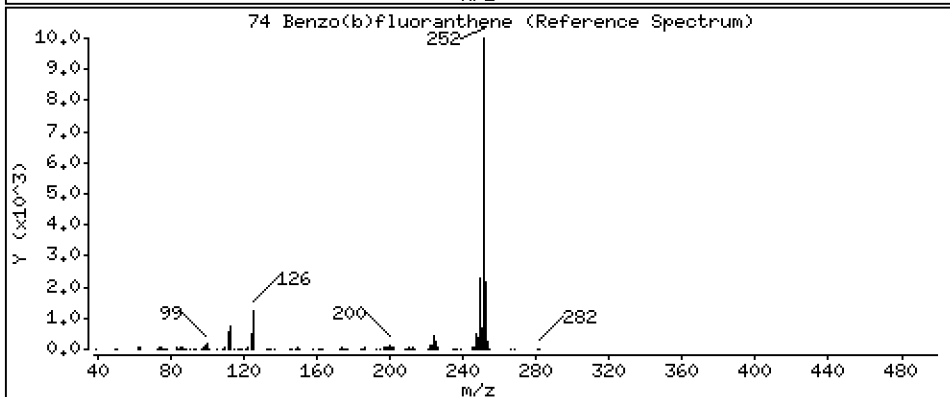
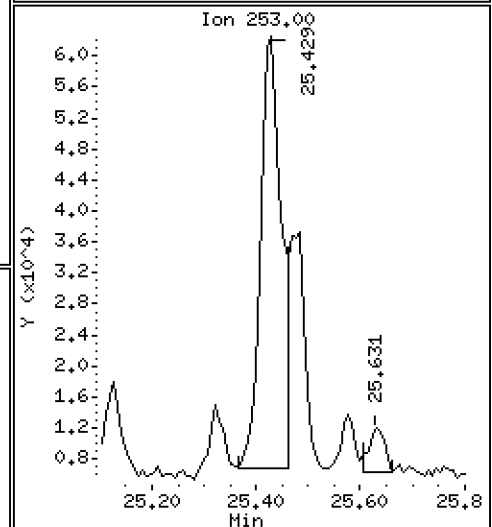
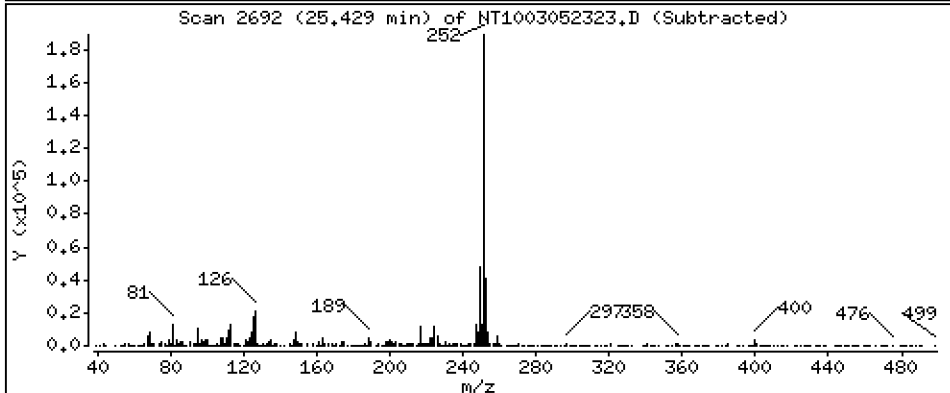
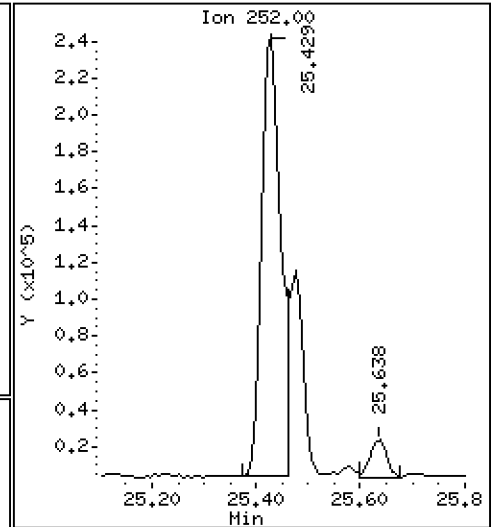
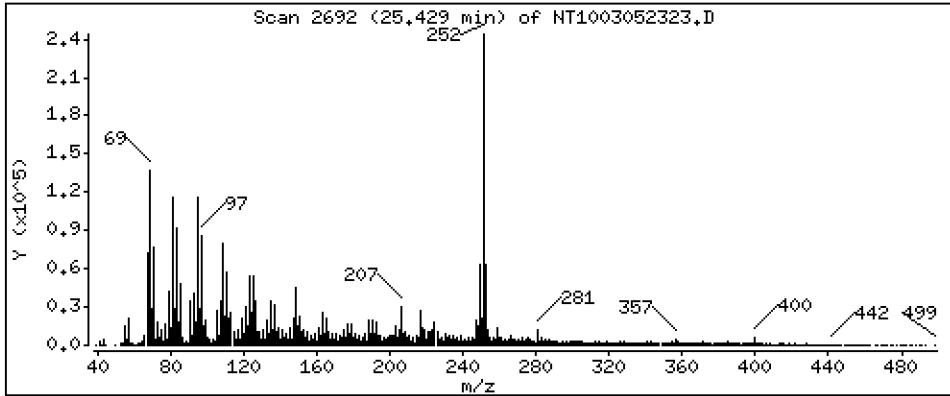
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,134 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

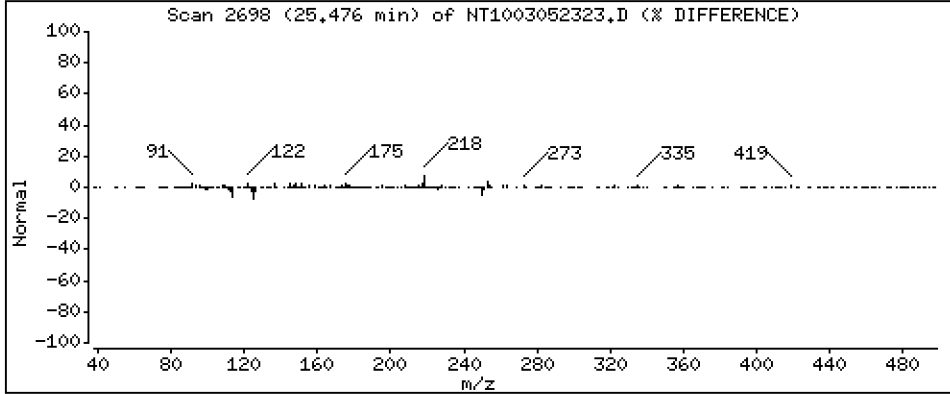
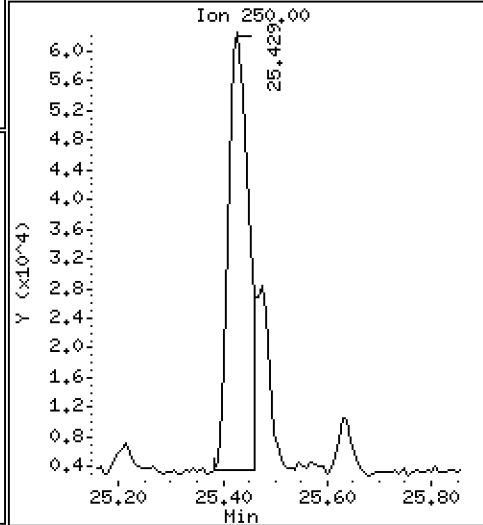
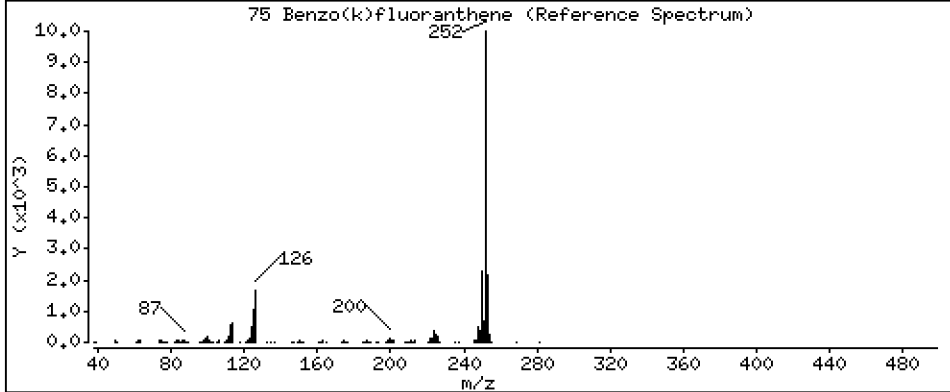
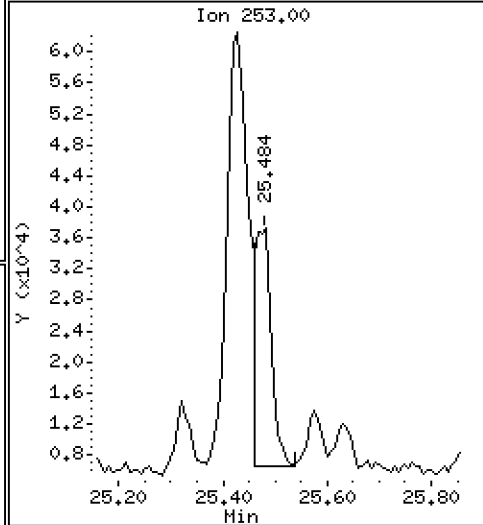
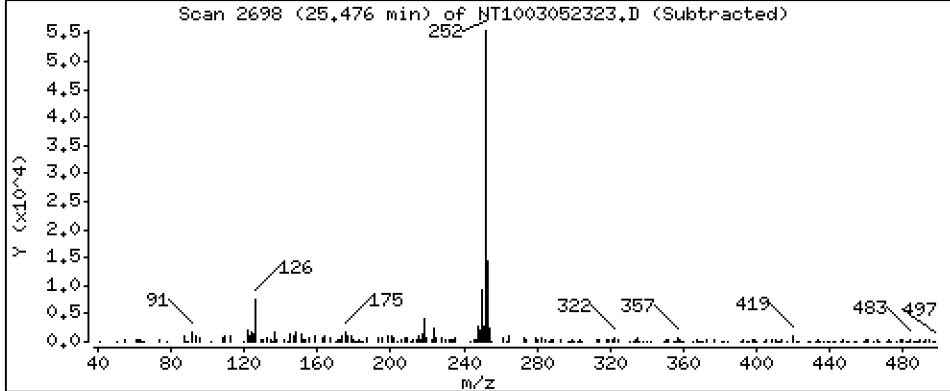
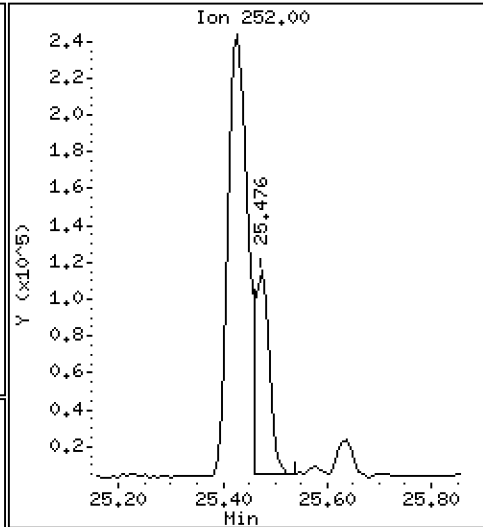
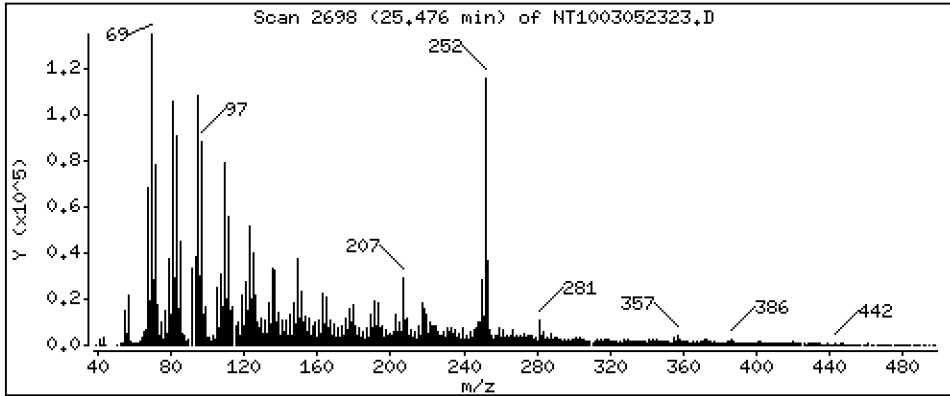
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,8288 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

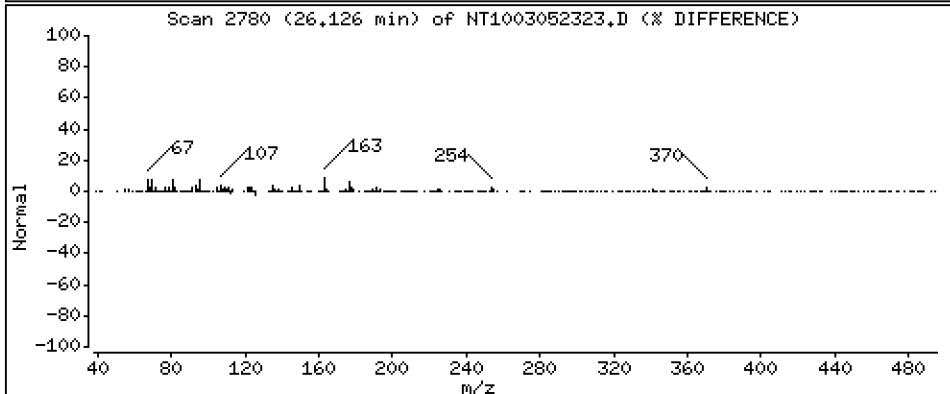
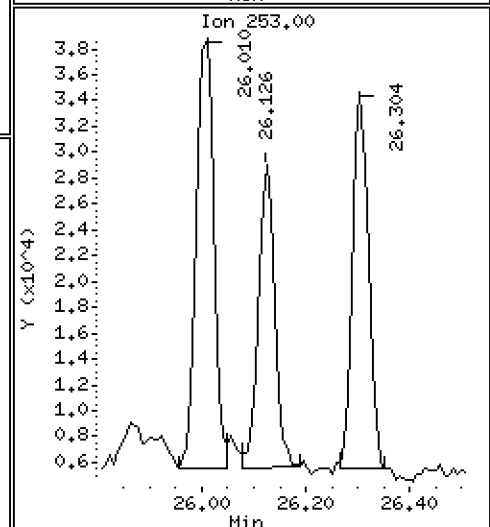
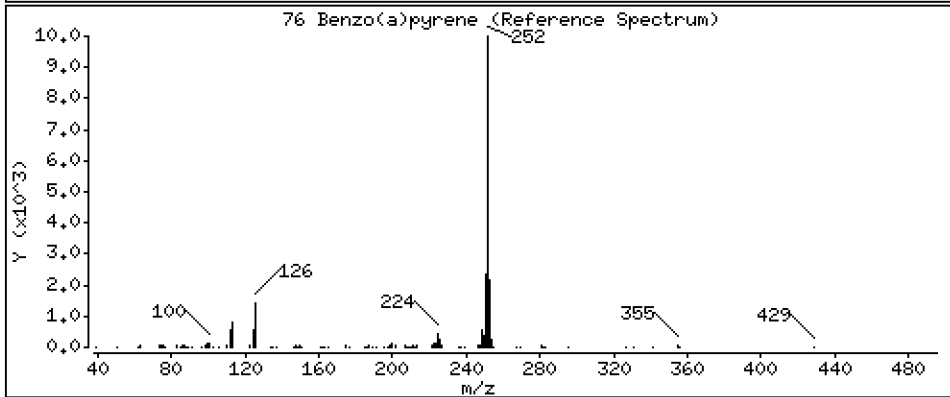
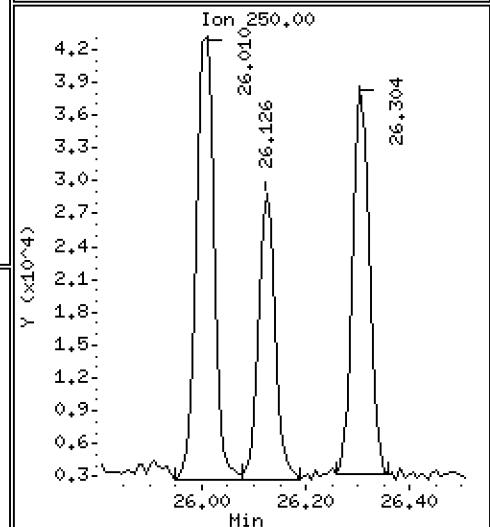
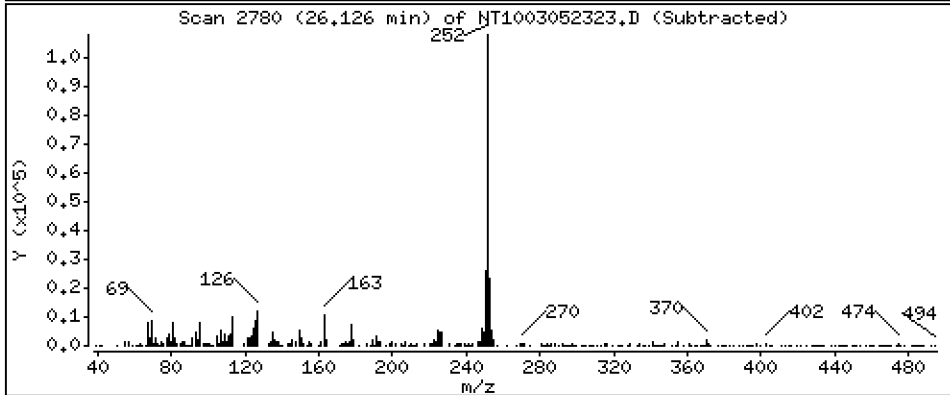
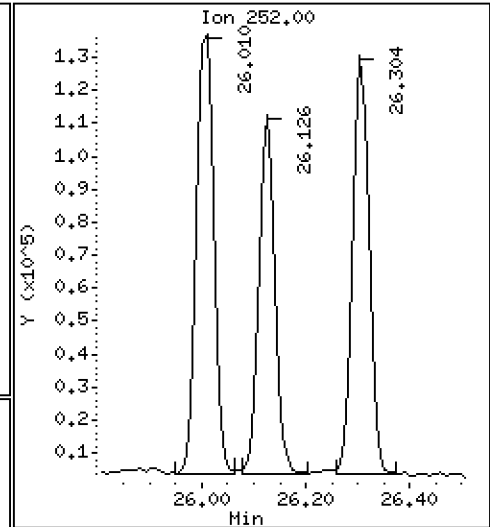
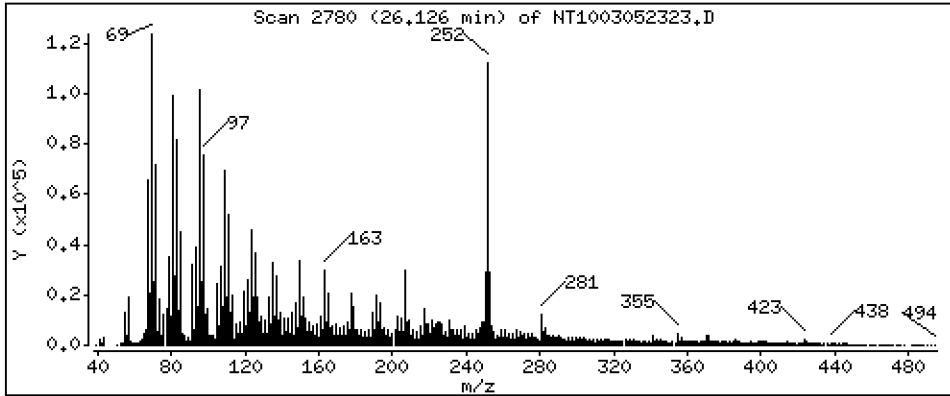
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,9380 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

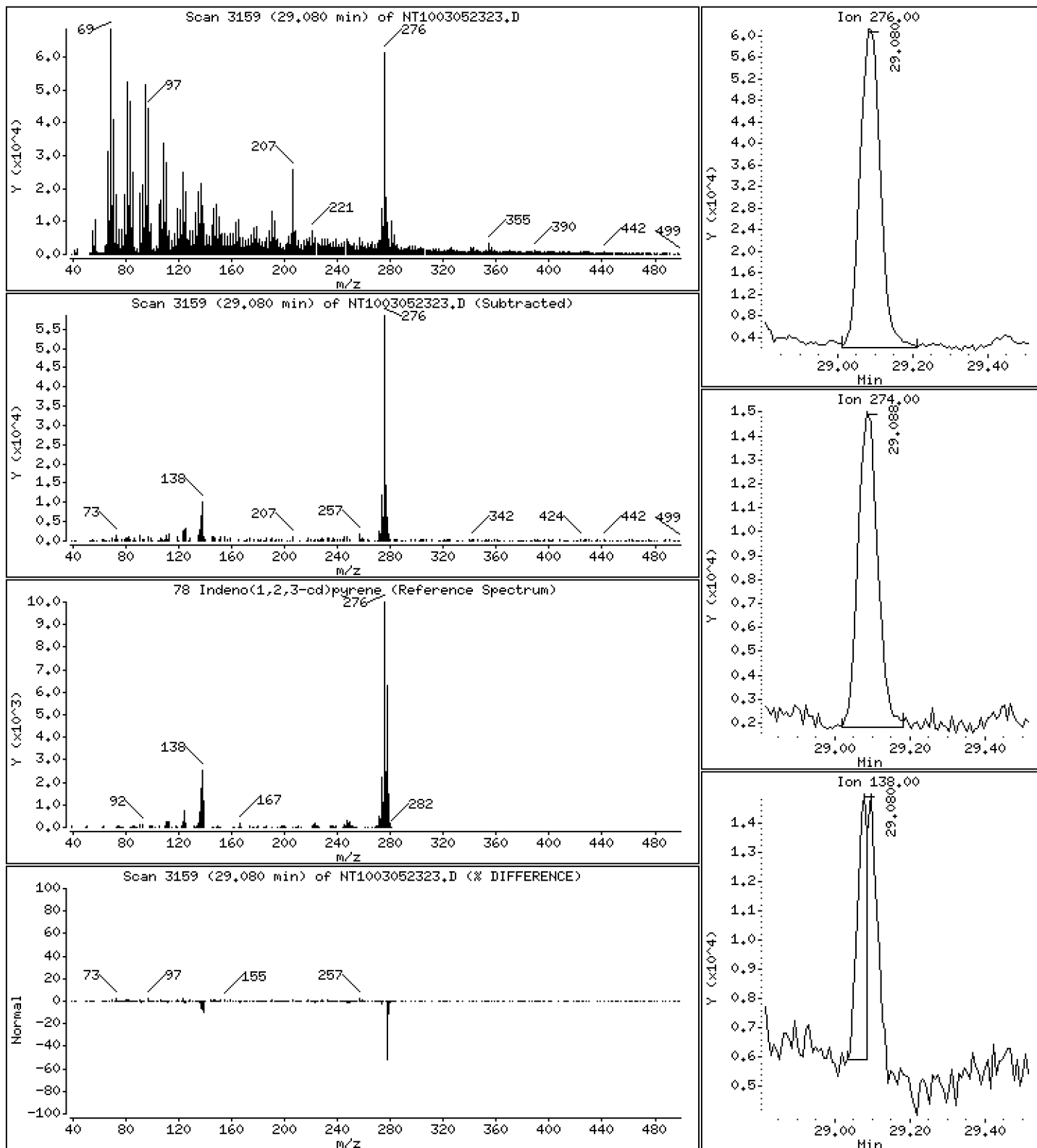
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,7317 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

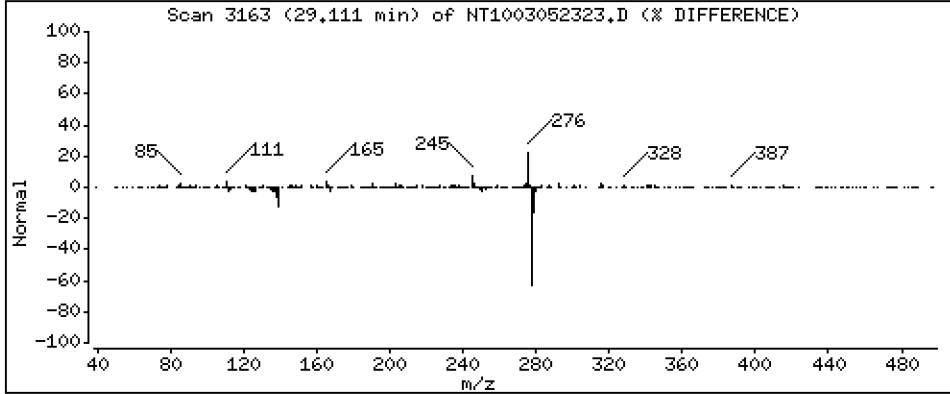
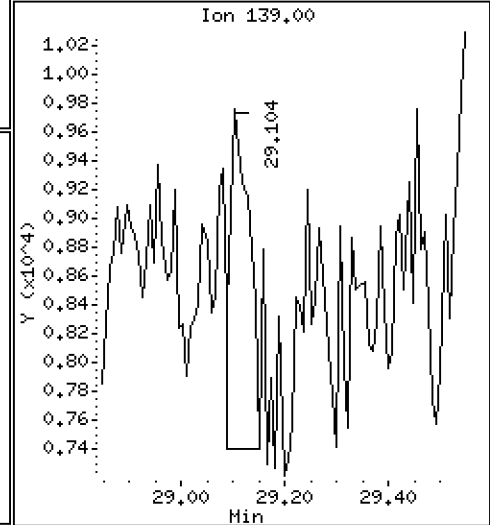
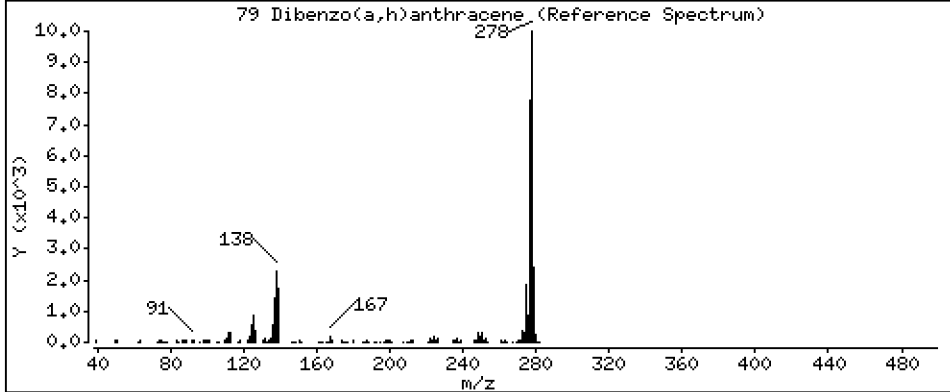
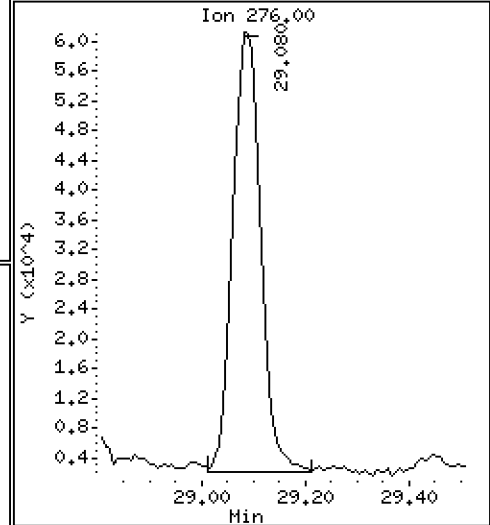
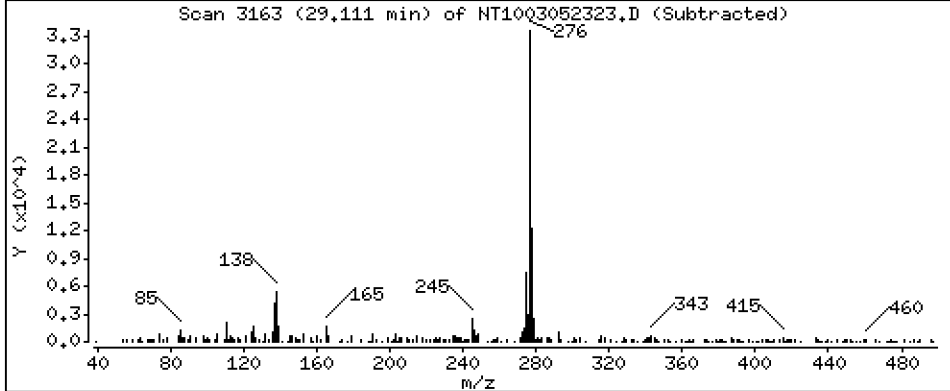
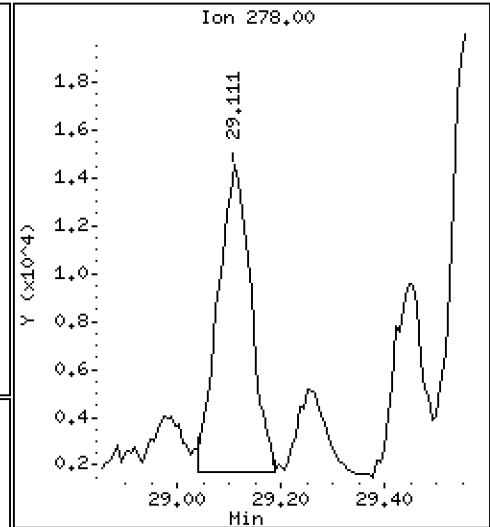
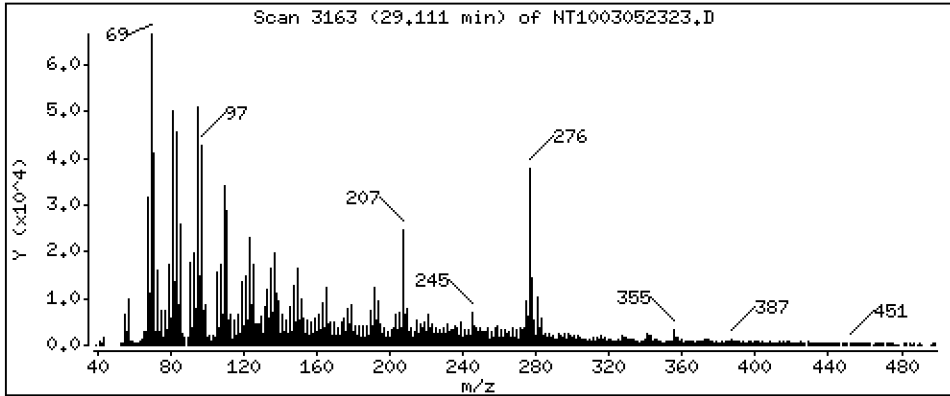
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2469 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

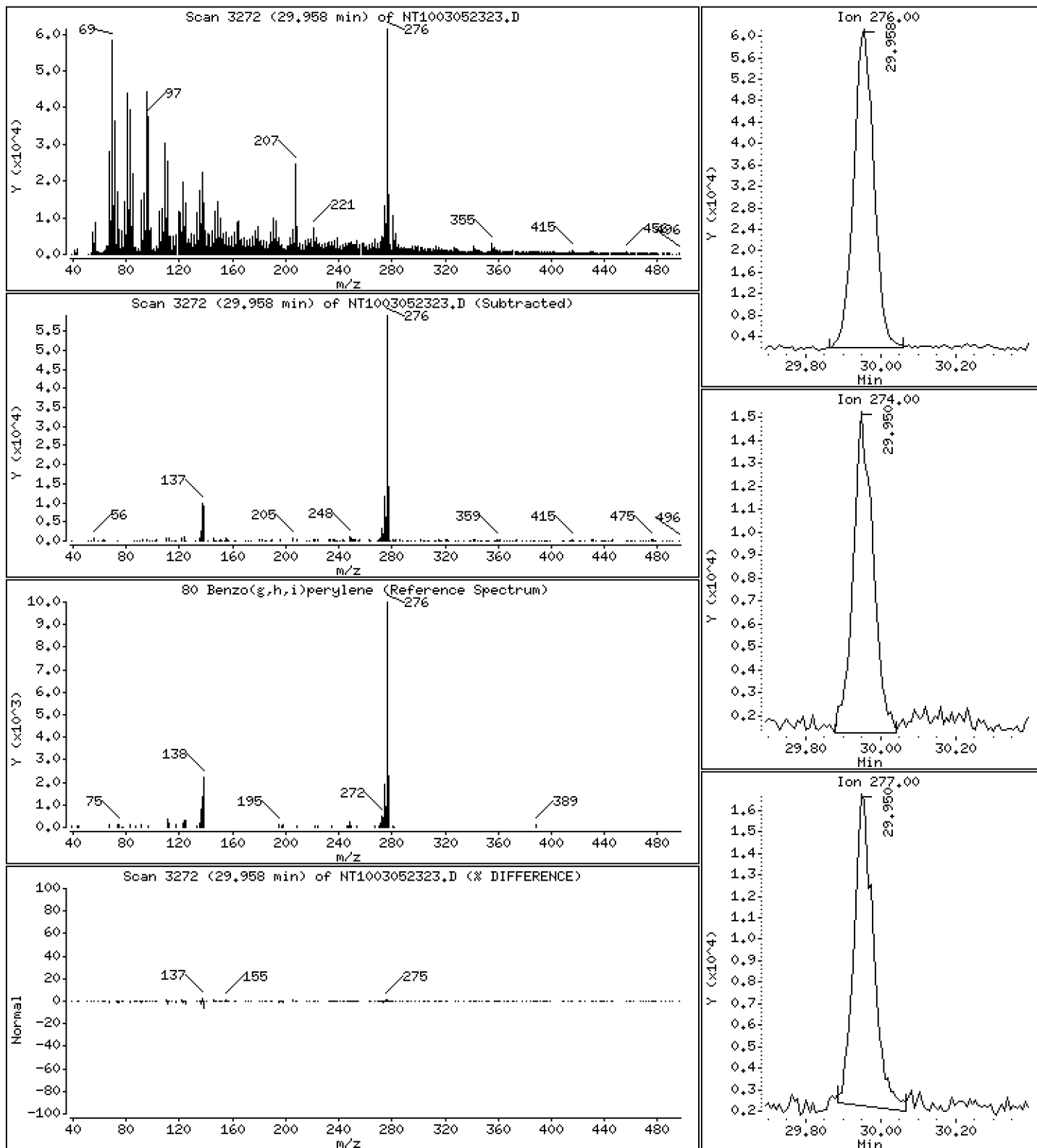
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,9044 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

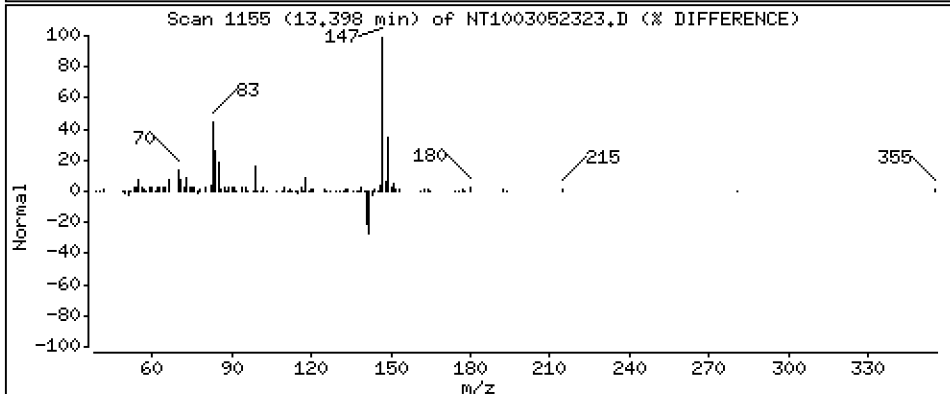
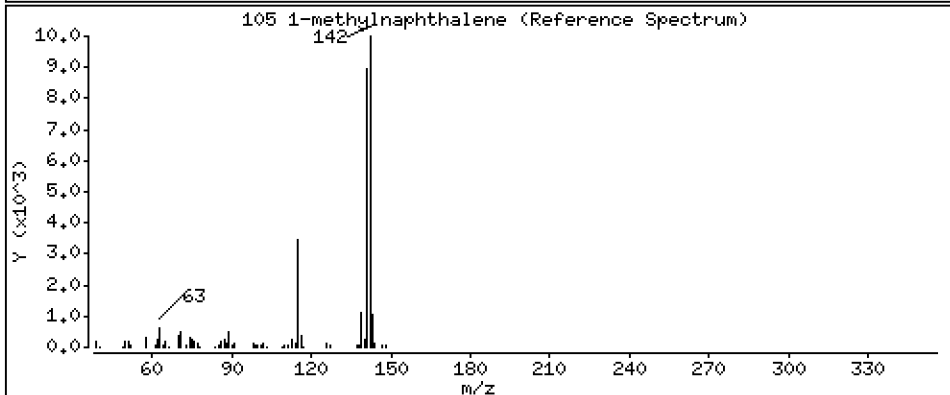
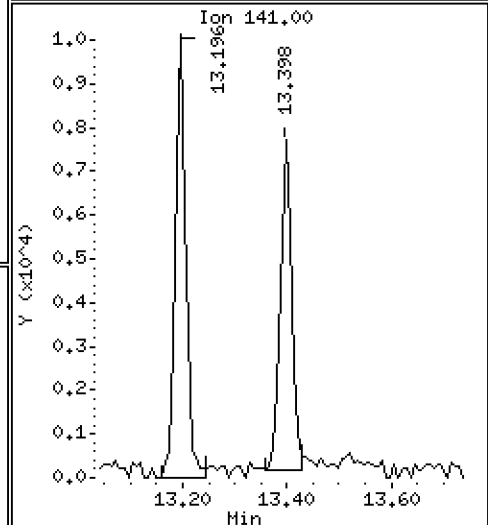
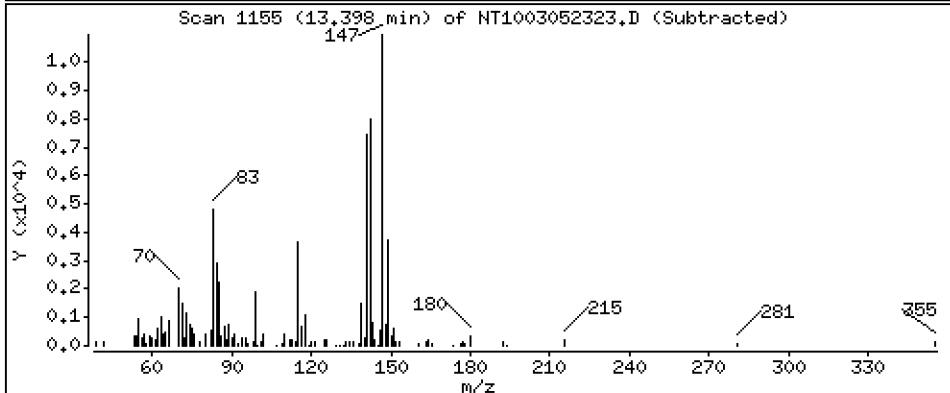
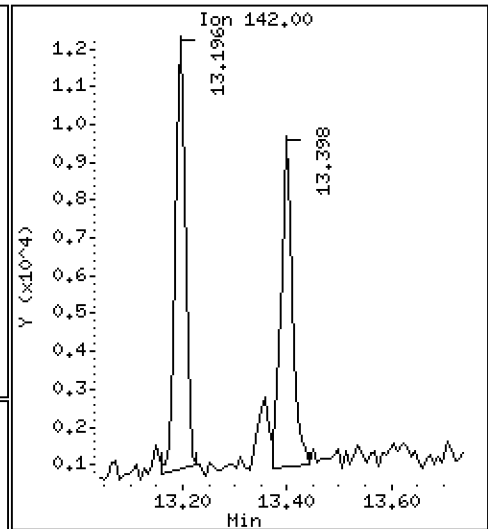
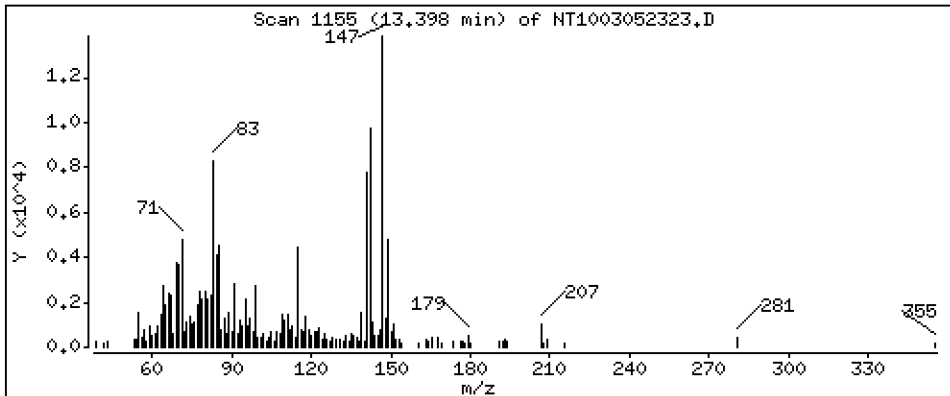
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

105 1-methylnaphthalene

Concentration: 0.1065 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

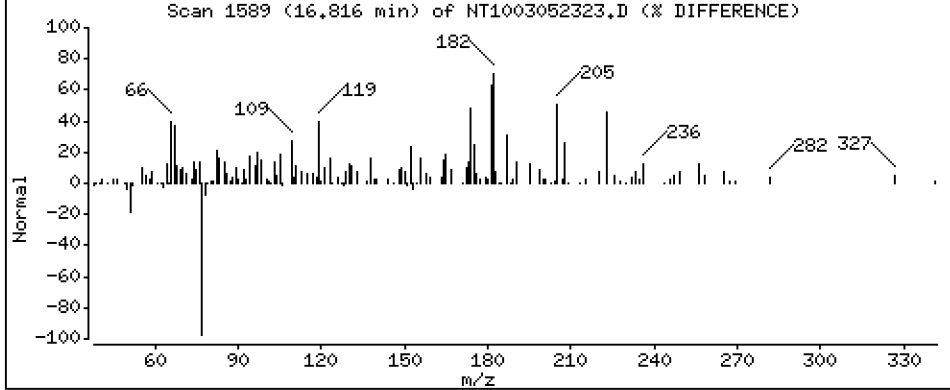
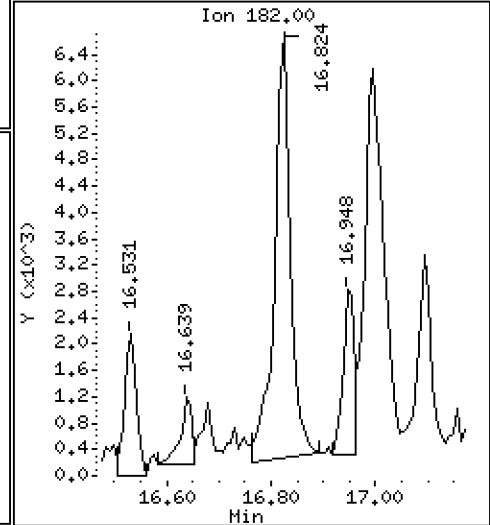
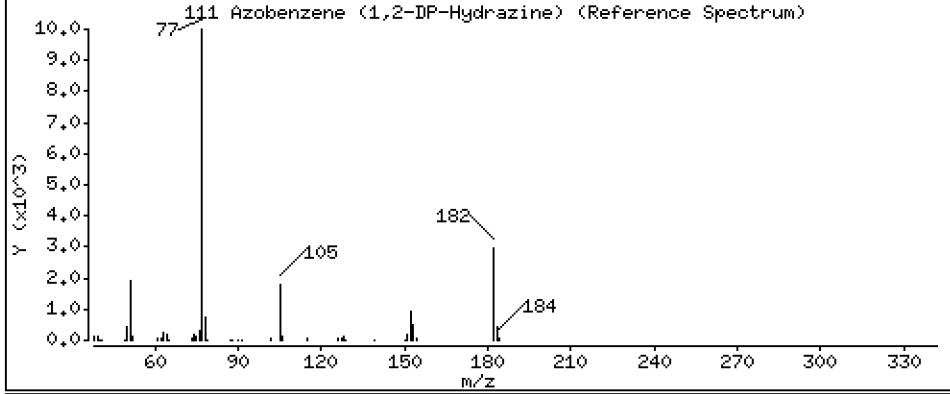
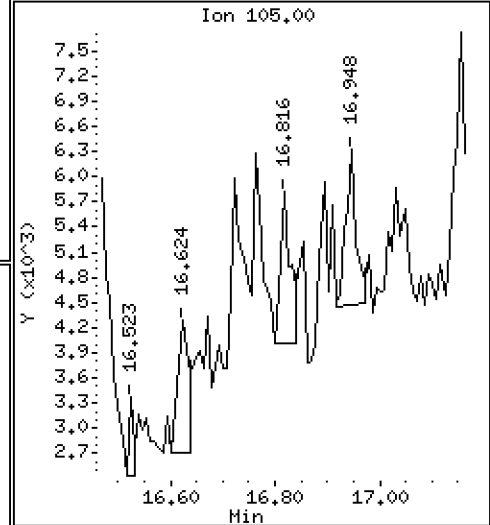
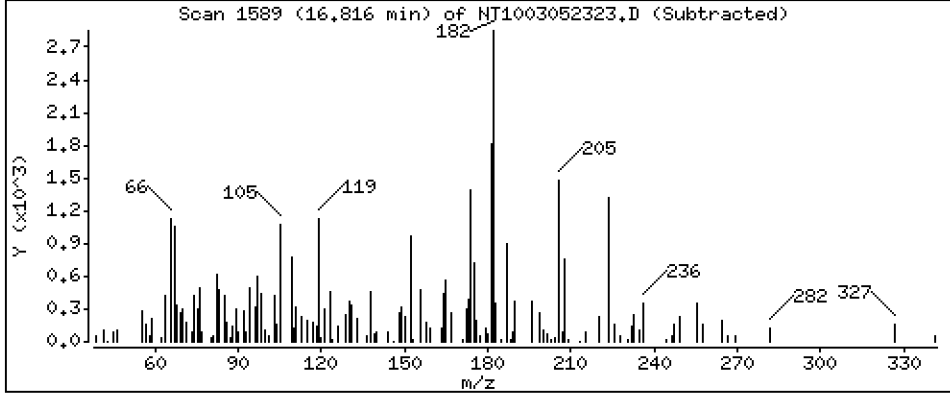
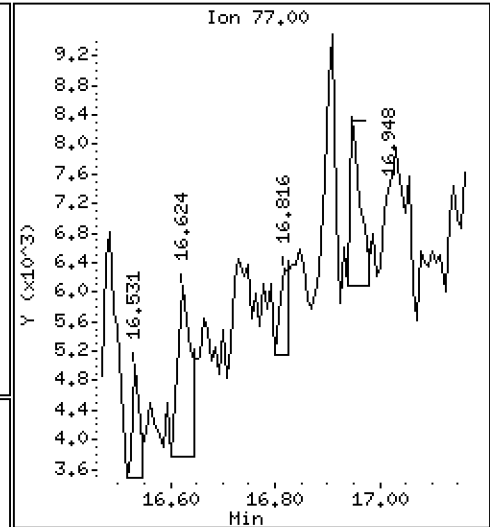
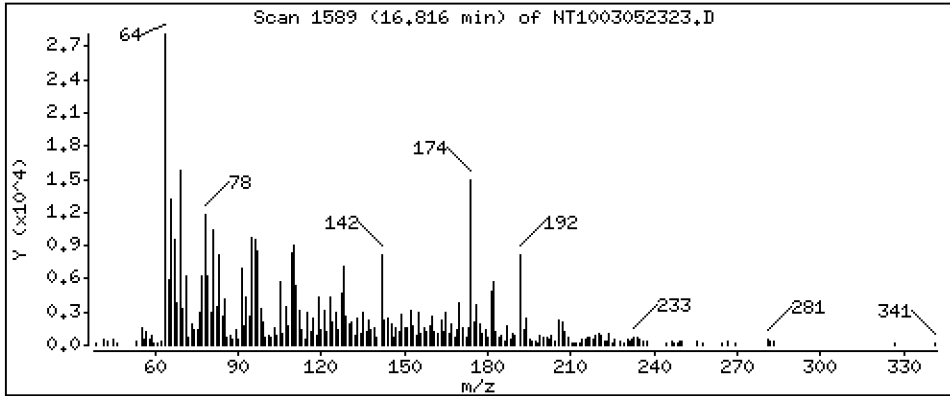
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,006413 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

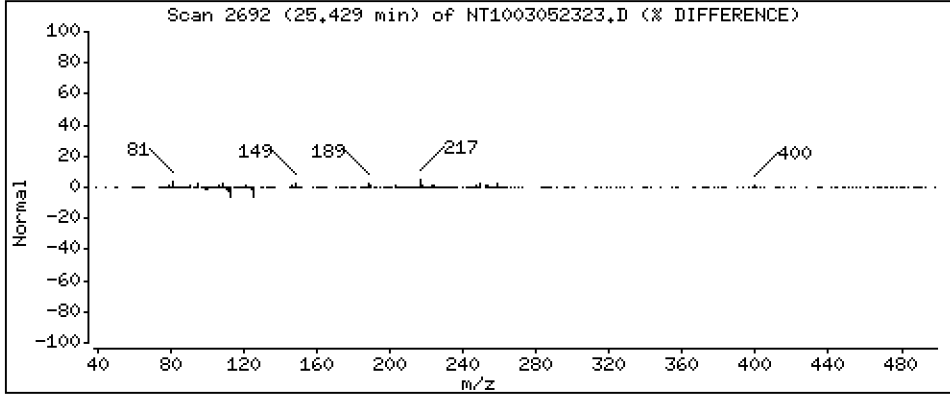
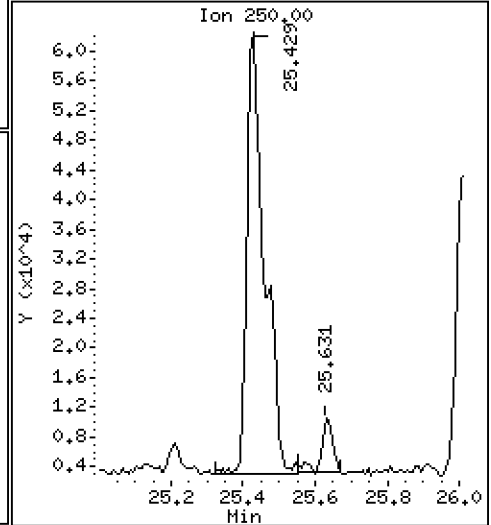
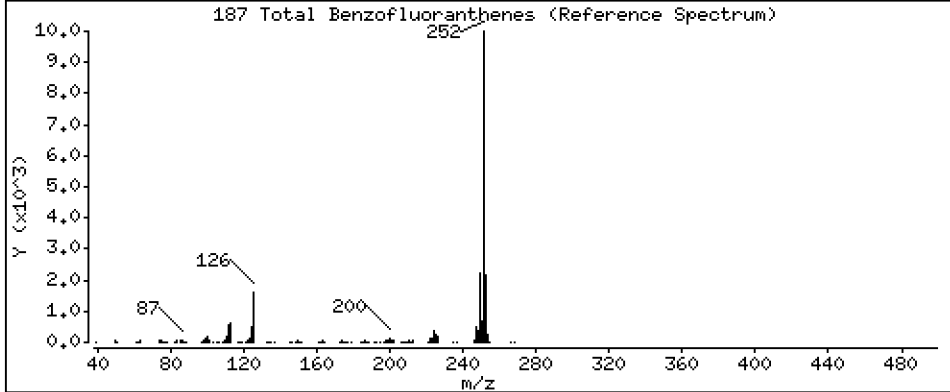
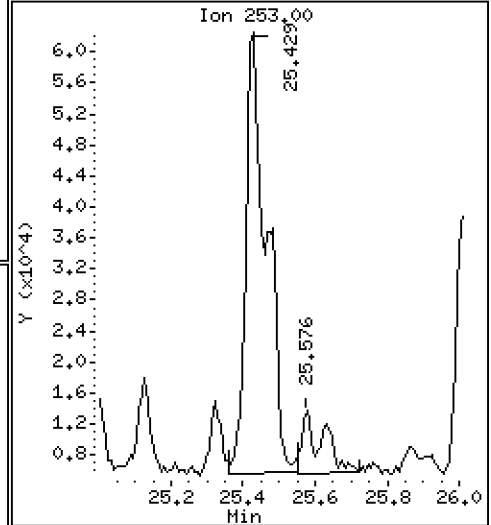
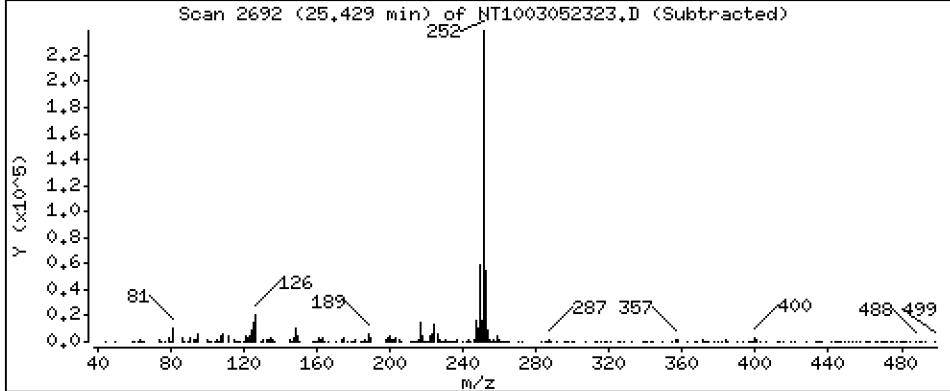
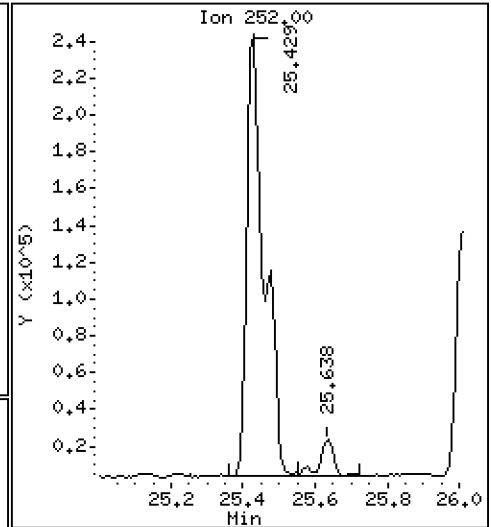
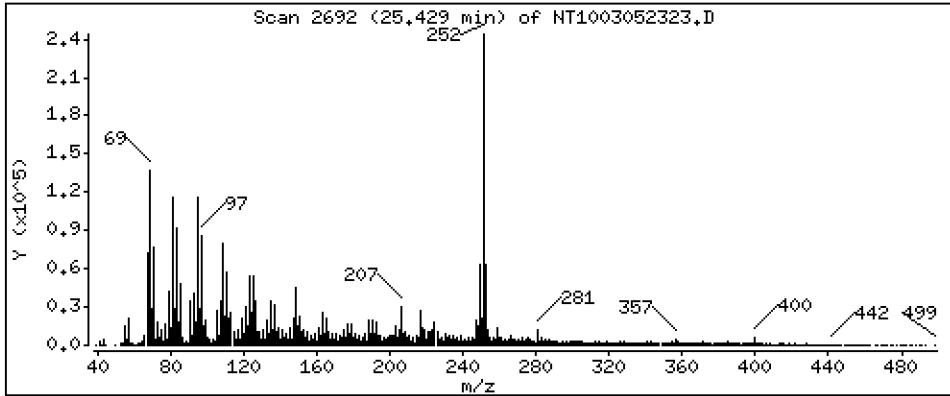
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,940 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305A.b\NT1003052323.D

Lab Smp Id: 23A0326-01

Inj Date : 06-MAR-2023 03:17

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-01

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305A.b\ABN.m

Meth Date : 27-Mar-2023 13:49 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D

Als bottle: 18

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
1 2-Fluorophenol	112		6.905	6.905	(0.746)	31505	0.47056	0.4706
2 Phenol-d5	99		8.527	8.512	(0.921)	178468	2.29595	2.296 (M)
3 Phenol	94		8.550	8.535	(0.924)	45147	0.54628	0.5463
5 2-Chlorophenol-d4	132		8.836	8.821	(0.955)	193830	2.92271	2.923
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.254	9.247	(1.000)	212800	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.542	(1.032)	171072	3.45265	3.453
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.510	9.487	(1.028)	5120	0.12084	0.1208
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.736	(1.031)	6244	0.29656	0.2966 (MH)
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.999	9.961	(1.081)	3882	0.04833	0.04833
\$ 18 Nitrobenzene-d5	82		10.318	10.302	(0.878)	342951	4.13110	4.131
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.757	11.734	(1.000)	756268	4.00000	
28 Naphthalene	128		11.795	11.780	(1.003)	26882	0.13849	0.1385
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.181	(1.122)	16327	0.11906	0.1191
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.939	13.931	(0.908)	671286	4.68561	4.686
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.775	14.767	(0.963)	10653	0.08213	0.08213
40 Acenaphthylene	152		15.061	15.054	(0.981)	26309	0.13569	0.1357
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.347	15.340	(1.000)	401662	4.00000	
43 3-Nitroaniline	138		15.355	15.255	(1.000)	181	0.00553	0.005533
44 Acenaphthene	153		15.417	15.409	(1.005)	8835	0.07555	0.07555
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.780	15.773	(1.028)	19531	0.11254	0.1125
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.236	16.244	(1.058)	30116	0.21916	0.2192
49 Fluorene	166		16.492	16.492	(1.075)	16104	0.11153	0.1115
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.993	16.994	(1.107)	16683	0.67407	0.6741
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284		17.596	17.627	(0.953)	393	0.00783	0.007828
58 Pentachlorophenol	266		18.022	18.045	(0.977)	9521	0.41115	0.4111
* 59 Phenanthrene-d10	188		18.455	18.455	(1.000)	743666	4.00000	
60 Phenanthrene	178		18.501	18.509	(1.002)	124188	0.65253	0.6525
61 Anthracene	178		18.610	18.618	(1.008)	56276	0.30494	0.3049
62 Carbazole	167		18.950	18.950	(1.027)	22118	0.13083	0.1308
63 Di-n-butylphthalate	149		19.647	19.647	(1.065)	29120	0.12696	0.1270
64 Fluoranthene	202		20.915	20.892	(0.890)	253181	1.02189	1.022
65 Pyrene	202		21.341	21.326	(0.908)	584267	2.31593	2.316
\$ 66 Terphenyl-d14	244		21.596	21.604	(0.919)	819288	4.01353	4.014
67 Butylbenzylphthalate	149		22.479	22.495	(0.956)	18624	0.13709	0.1371
68 Benzo(a)anthracene	228		23.486	23.501	(0.999)	189448	0.74601	0.7460
* 69 Chrysene-d12	240		23.509	23.517	(1.000)	720209	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.555	23.563	(1.002)	285902	1.38529	1.385
72 bis(2-Ethylhexyl)phthalate	149		23.470	23.494	(0.956)	298943	1.67436	1.674
* 134 Di-n-octylphthalate-d4	153		24.562	24.593	(1.000)	1261487	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.429	25.452	(0.969)	625740	2.13358	2.134
75 Benzo(k)fluoranthene	252		25.475	25.507	(0.971)	230751	0.82877	0.8288 (M)
76 Benzo(a)pyrene	252		26.126	26.157	(0.996)	242700	0.93798	0.9380
* 77 Perylene-d12	264		26.242	26.289	(1.000)	842018	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.080	29.158	(1.108)	220907	0.73170	0.7317
79 Dibenzo(a,h)anthracene	278		29.111	29.204	(1.109)	56244	0.24689	0.2469
80 Benzo(g,h,i)perylene	276		29.957	30.043	(1.142)	217678	0.90443	0.9044
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.397	13.390	(1.139)	13213	0.10646	0.1065
111 Azobenzene (1,2-DP-Hydrazine)	77		16.816	16.816	(1.096)	1316	0.00641	0.006413

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/mL)	
187 Total Benzofluoranthenes	252	25.429	25.507	(0.969)	822546	2.94030	2.940	
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.						

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052323.D Calibration Time: 21:38
 Lab Smp Id: 23A0326-01
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	264922	132461	529844	212800	-19.67
27 Naphthalene-d8	947542	473771	1895084	756268	-20.19
42 Acenaphthene-d10	505666	252833	1011332	401662	-20.57
59 Phenanthrene-d10	940283	470142	1880566	743666	-20.91
69 Chrysene-d12	987952	493976	1975904	720209	-27.10
134 Di-n-octylphthala	1625017	812509	3250034	1261487	-22.37
77 Perylene-d12	1073798	536899	2147596	842018	-21.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.76	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.52	23.02	24.02	23.51	-0.03
134 Di-n-octylphthala	24.59	24.09	25.09	24.56	-0.13
77 Perylene-d12	26.29	25.79	26.79	26.24	-0.18

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

REVIEW SUMMARY FOR FILE - NT1003052323.D

Lab ID: 23A0326-01
nt10.i, 20230305A.b\ABN.m, 06-MAR-2023 03:17

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.031	1.053	-0.0218	2,2'-oxybis(1-Chloropropane)
1.000	0.994	0.0060	3-Nitroaniline

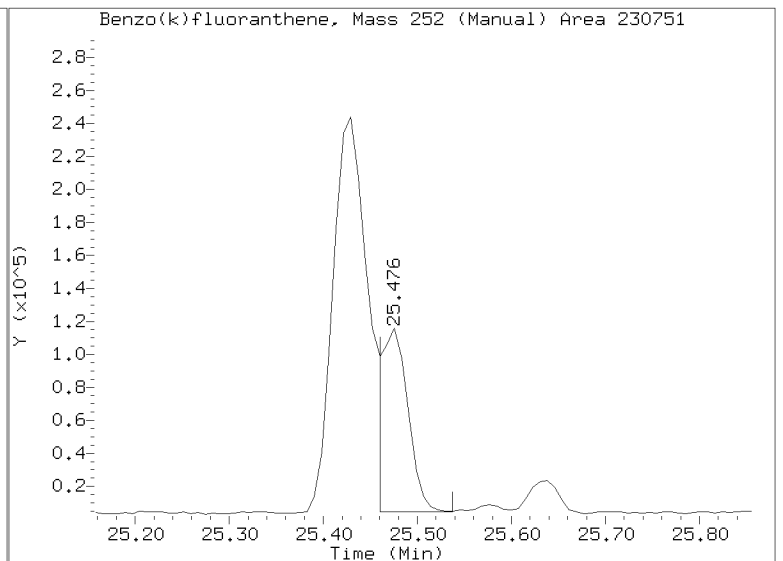
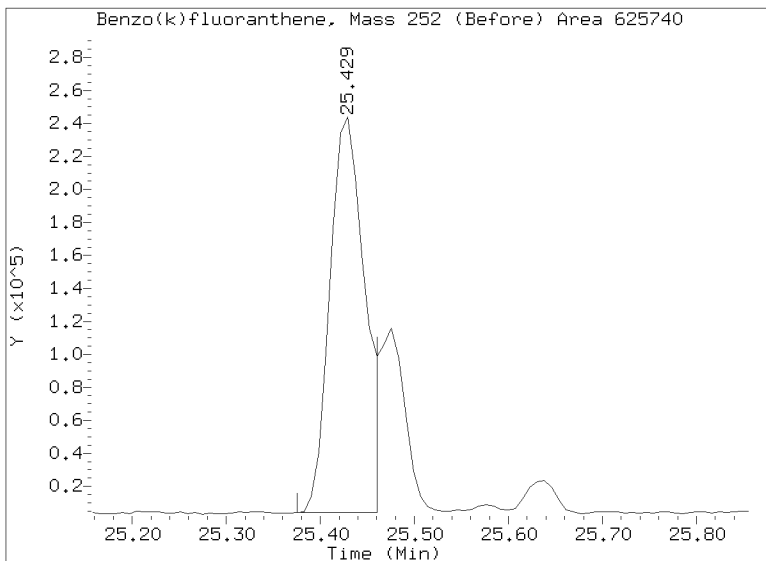
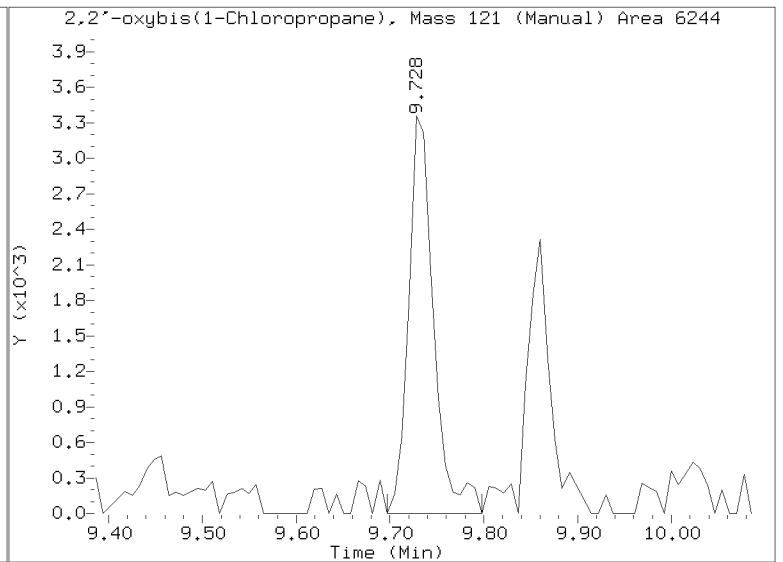
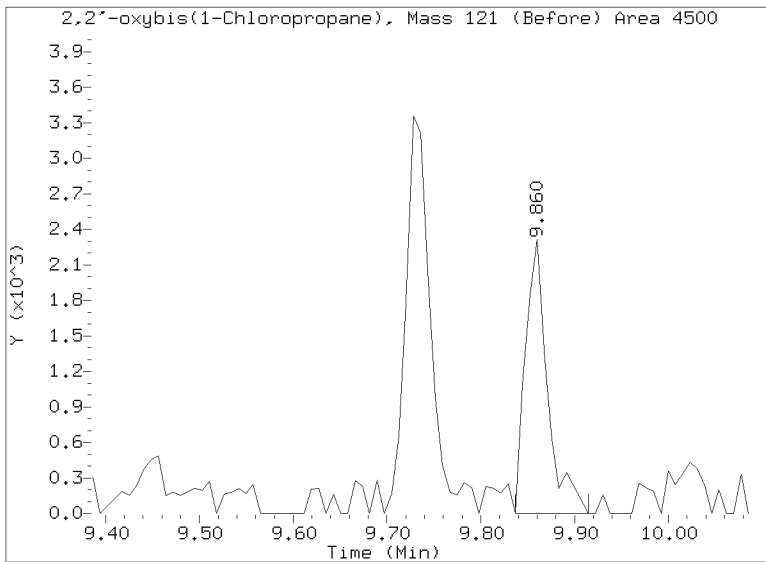
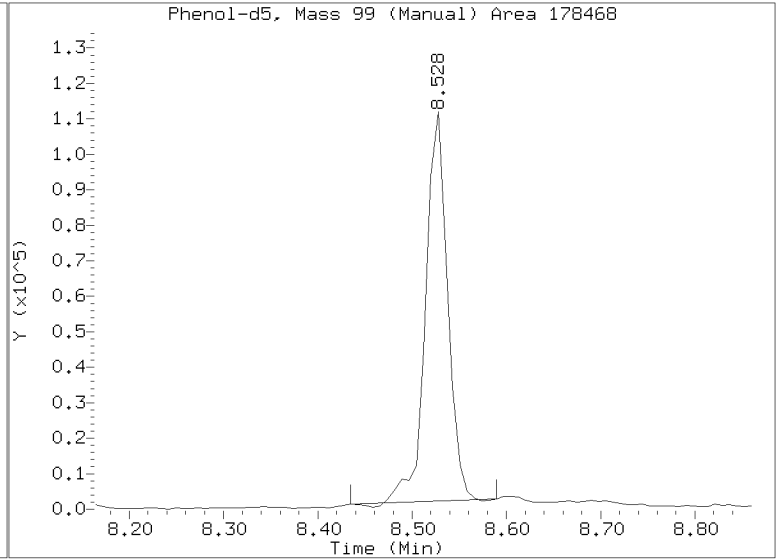
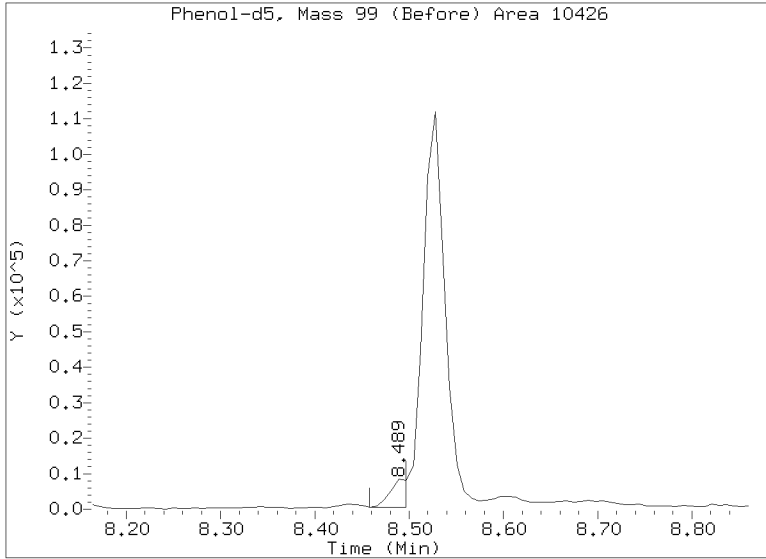
RRT check based on Ccal File: NT1003052314.D

On Column LOD for nt10.i, 20230305A.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052323.D
Injection Date: 06-MAR-2023 03:17
Lab ID:23A0326-01 Client ID:
Report Date: 03/27/2023 13:57



APPROVED

By Deenay Dunmore at 2:08 pm, Mar 27, 2023



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-02 A

SDG: 23A0326

Sampled: 01/16/23 15:32

Prepared: 02/02/23 13:06

File ID: NT1003052324.D

% Solids: 57.28

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 03:55

Batch: BLA0685

Sequence: SLC0415

Initial/Final: 17.56 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	88.3		4.4	19.9
106-44-5	4-Methylphenol	1	19.9	U	7.3	19.9
91-20-3	Naphthalene	1	17.1	J	4.2	19.9
91-57-6	2-Methylnaphthalene	1	11.4	J	4.5	19.9
208-96-8	Acenaphthylene	1	10.8	J	6.2	19.9
131-11-3	Dimethylphthalate	1	19.9	U	4.4	19.9
83-32-9	Acenaphthene	1	8.1	J	5.2	19.9
132-64-9	Dibenzofuran	1	19.9	U	14.0	19.9
86-73-7	Fluorene	1	19.9	U	14.5	19.9
85-01-8	Phenanthrene	1	62.2		8.7	19.9
120-12-7	Anthracene	1	30.5		7.1	19.9
206-44-0	Fluoranthene	1	120		6.1	19.9
129-00-0	Pyrene	1	220		5.6	19.9
85-68-7	Butylbenzylphthalate	1	19.9	U	9.4	19.9
56-55-3	Benzo(a)anthracene	1	72.9		5.9	19.9
218-01-9	Chrysene	1	127		6.0	19.9
117-81-7	bis(2-Ethylhexyl)phthalate	1	150		5.4	49.7
	Benzo(a)fluoranthene, Total	1	257		9.9	39.8
50-32-8	Benzo(a)pyrene	1	76.8		4.2	19.9
193-39-5	Indeno(1,2,3-cd)pyrene	1	61.7		14.6	19.9
53-70-3	Dibenzo(a,h)anthracene	1	20.2		17.1	19.9
191-24-2	Benzo(g,h,i)perylene	1	75.2		13.5	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	745.65	278	37.3	27 - 120	
Phenol-d5	745.65	498	66.8	29 - 120	
2-Chlorophenol-d4	745.65	446	59.8	31 - 120	
1,2-Dichlorobenzene-d4	497.10	352	70.9	32 - 120	
Nitrobenzene-d5	497.10	409	82.2	30 - 120	
2-Fluorobiphenyl	497.10	414	83.3	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-02 A

SDG: 23A0326

Sampled: 01/16/23 15:32

Prepared: 02/02/23 13:06

File ID: NT1003052324.D

% Solids: 57.28

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 03:55

Batch: BLA0685

Sequence: SLC0415

Initial/Final: 17.56 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	745.65	194	26.1	24 - 134	
p-Terphenyl-d14	497.10	370	74.4	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305A.B\NT1003052324.D

Date: 06-HRR-2023 03:55

Client ID:

Sample Info: 23A0326-02

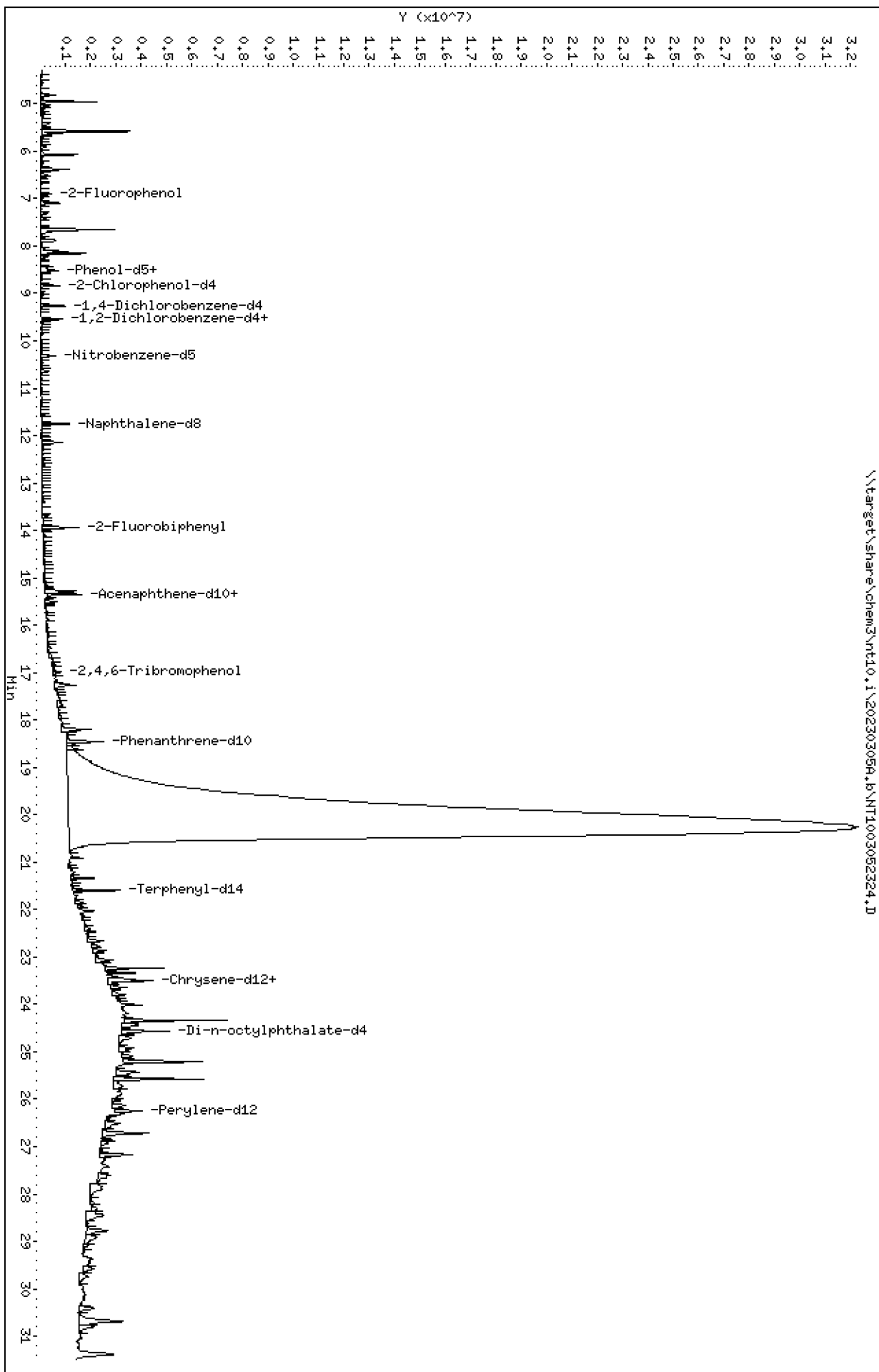
Page 1

Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

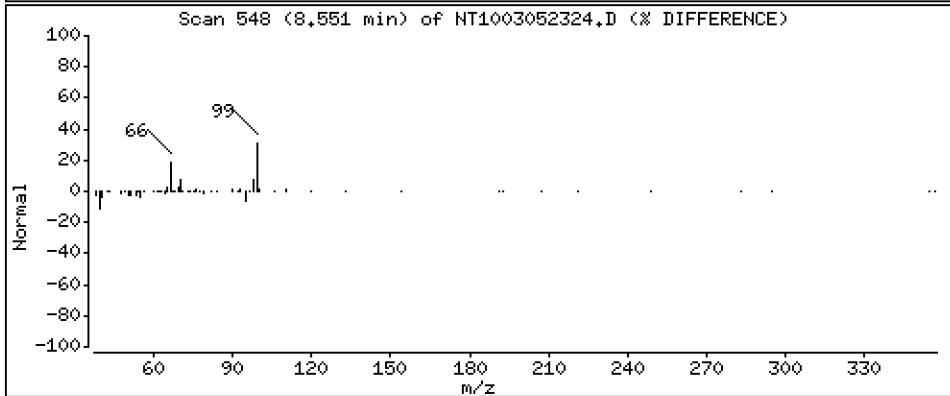
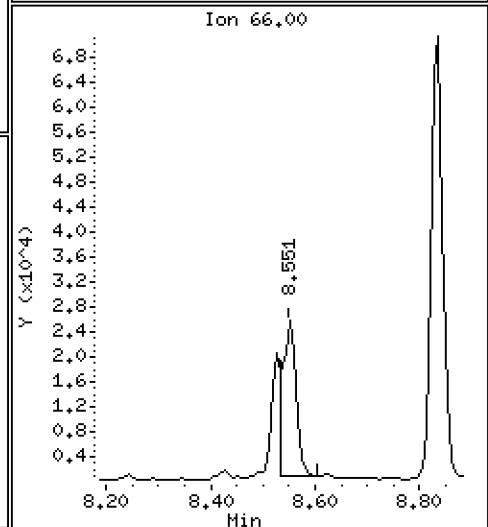
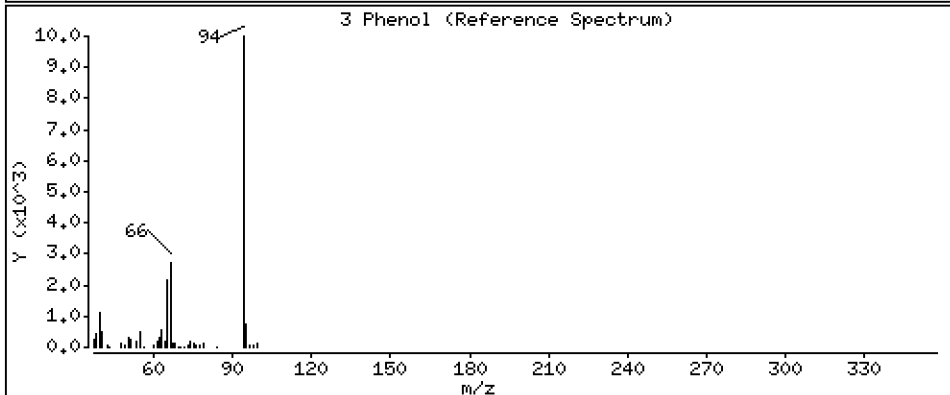
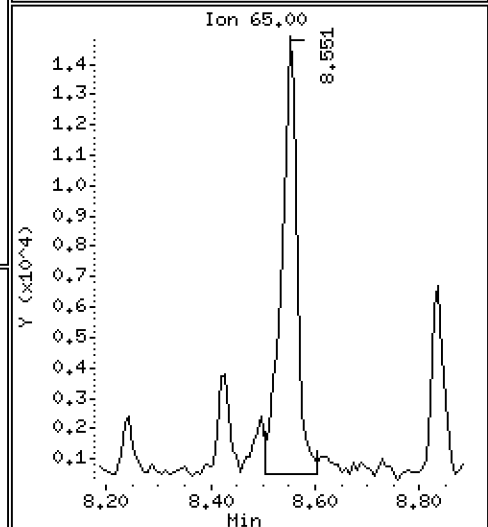
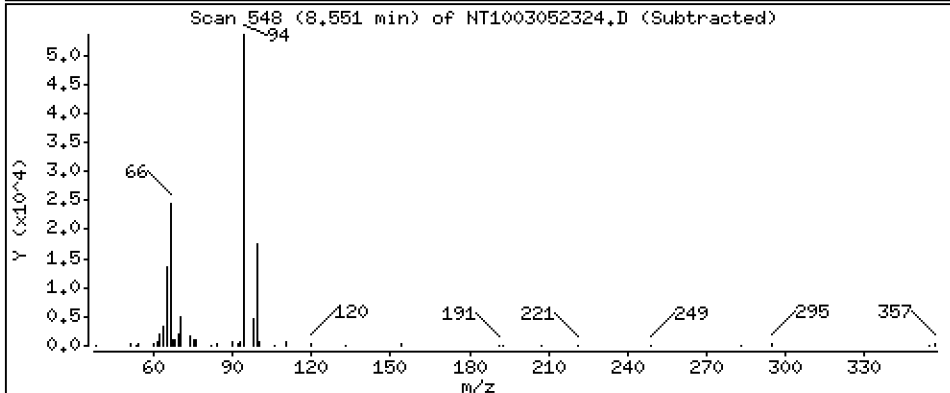
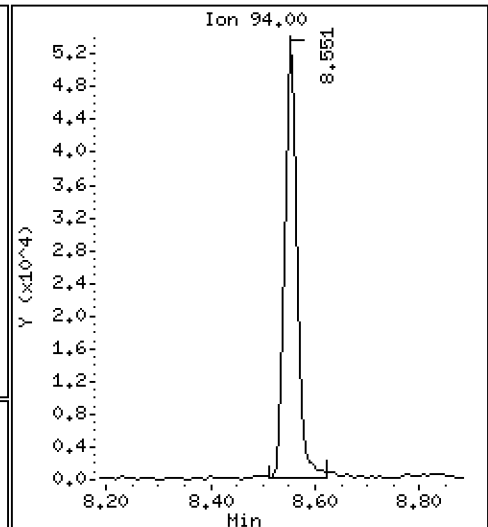
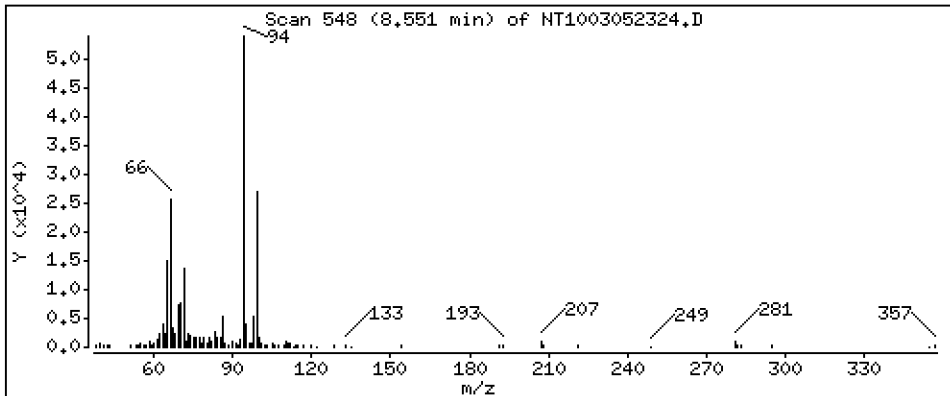
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.8885 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

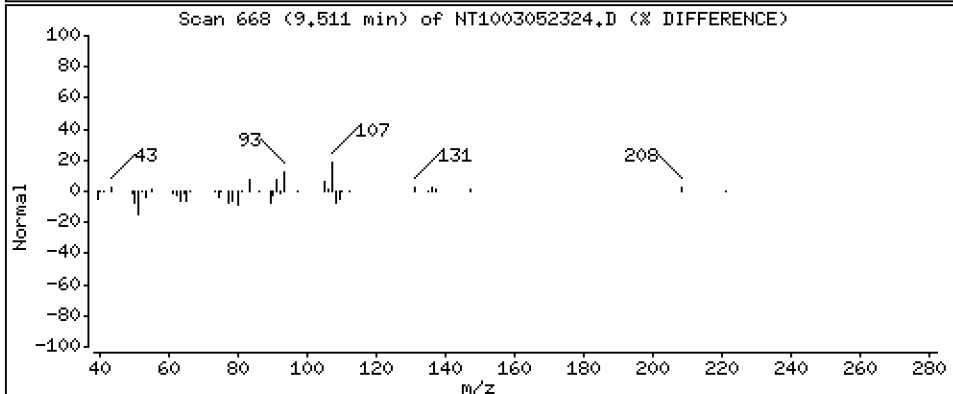
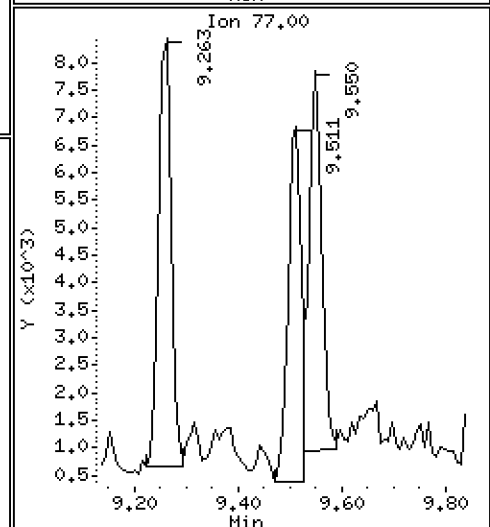
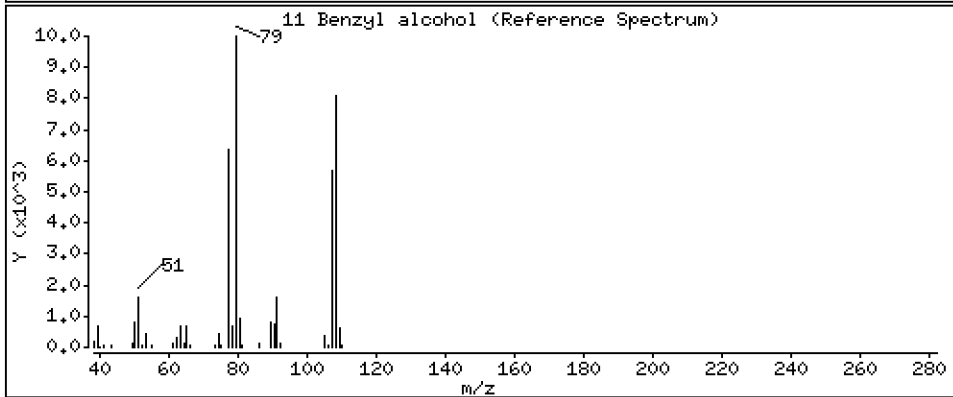
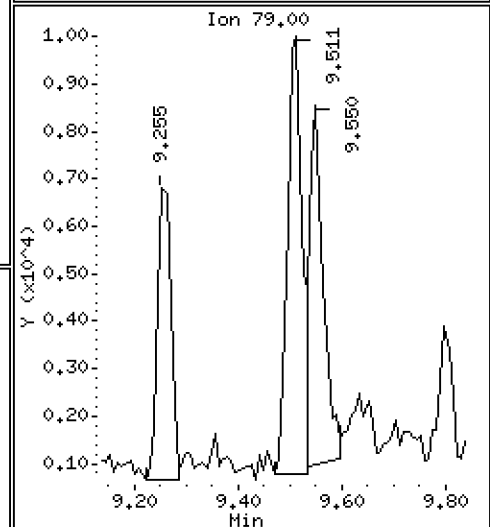
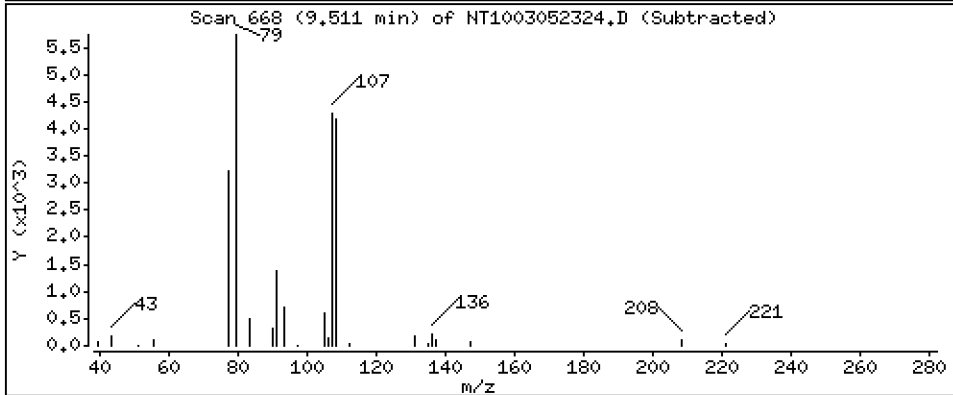
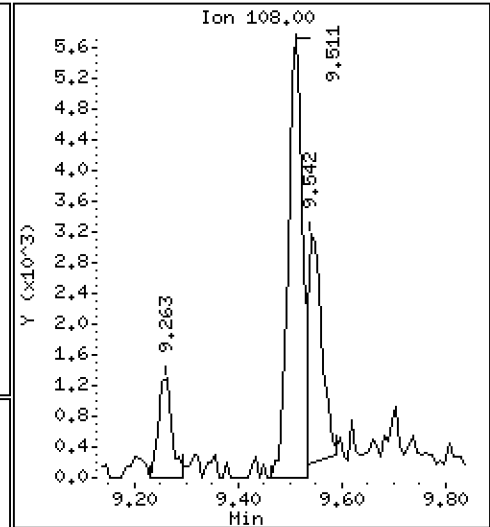
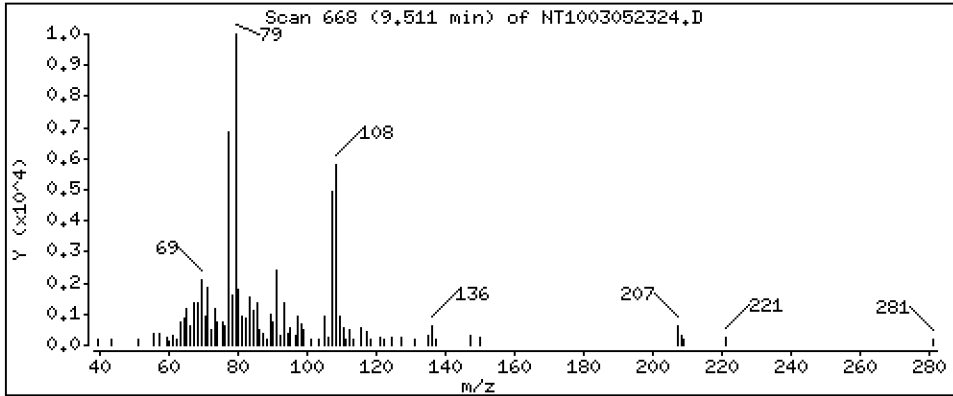
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.2291 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

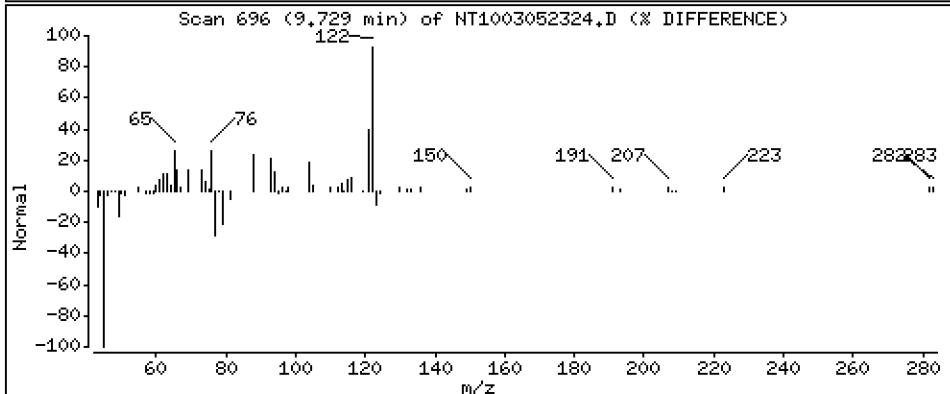
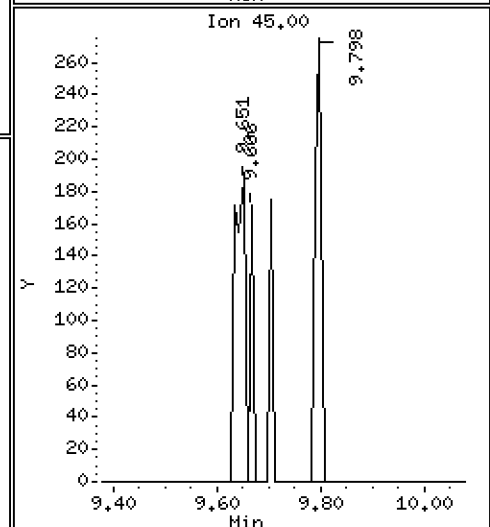
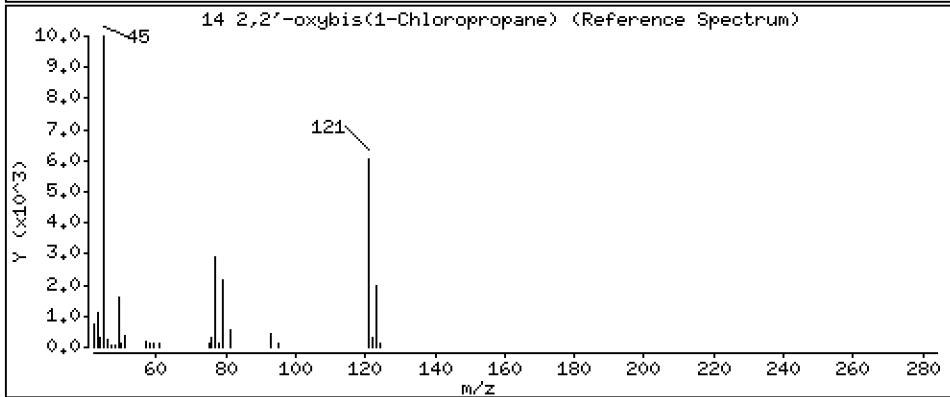
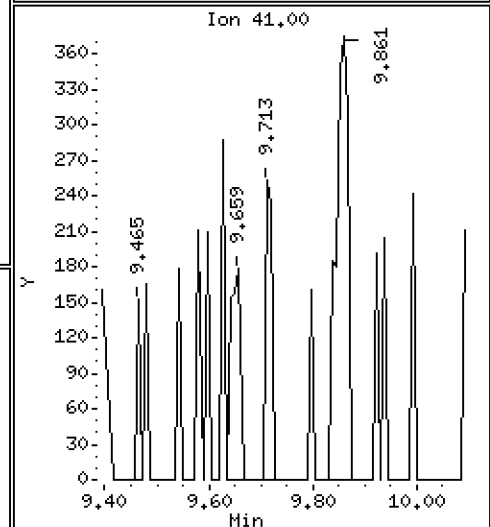
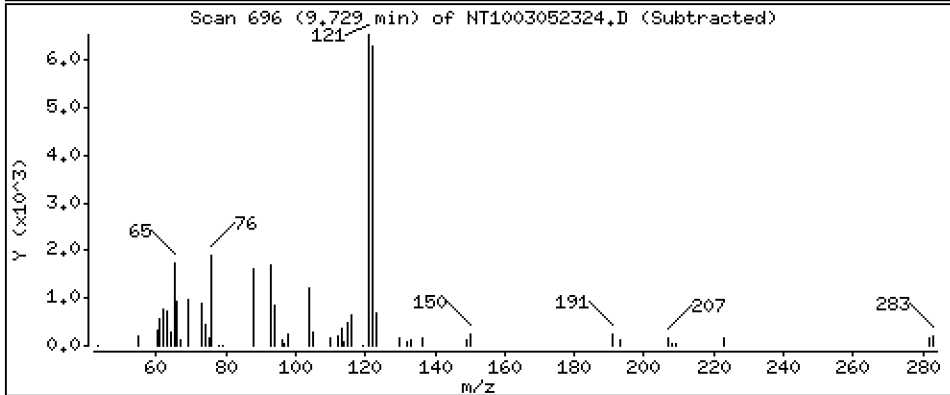
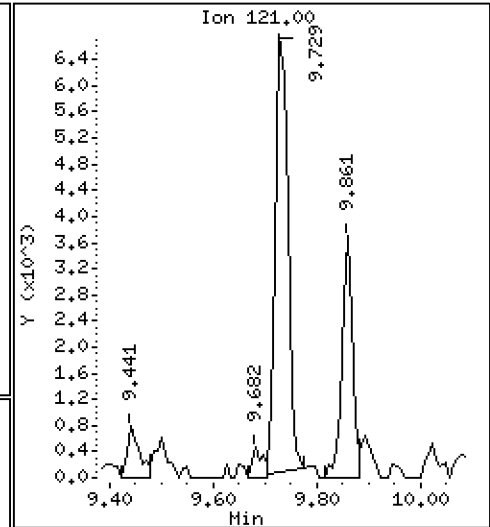
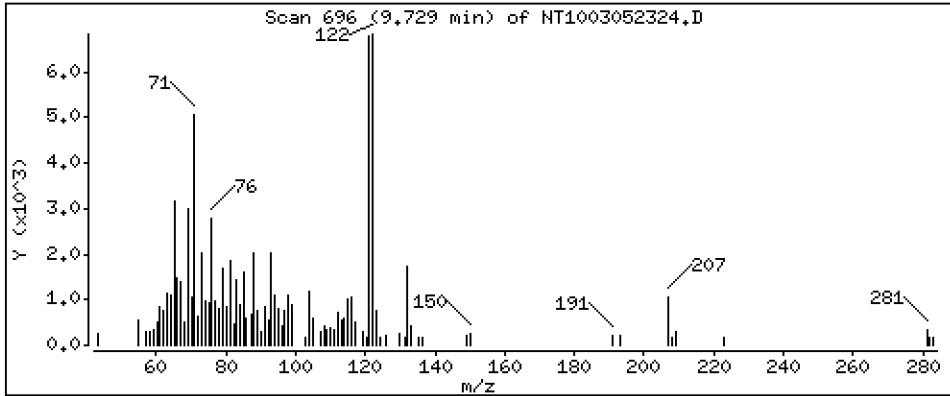
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,4230 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

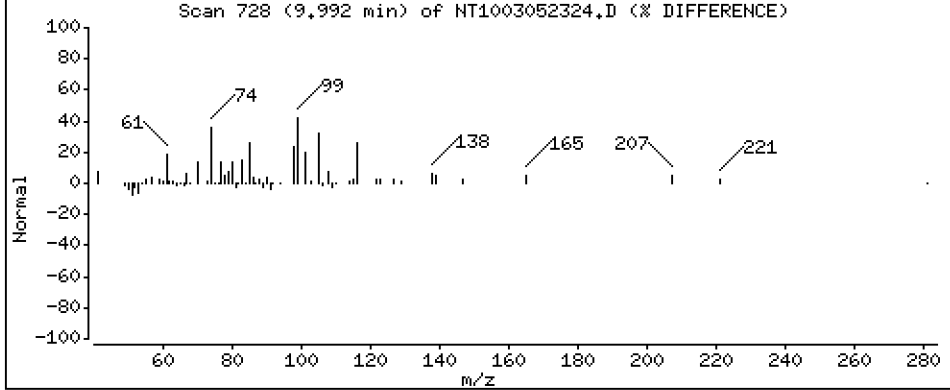
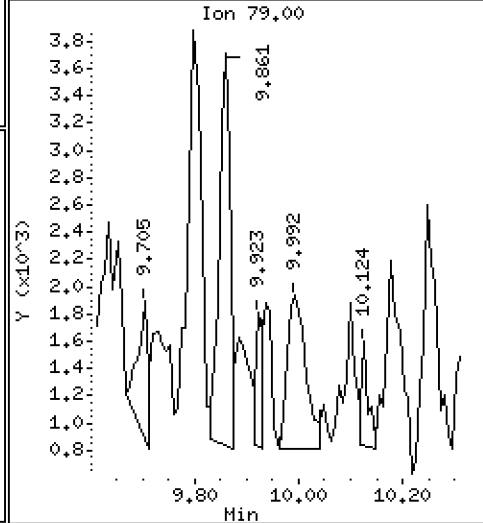
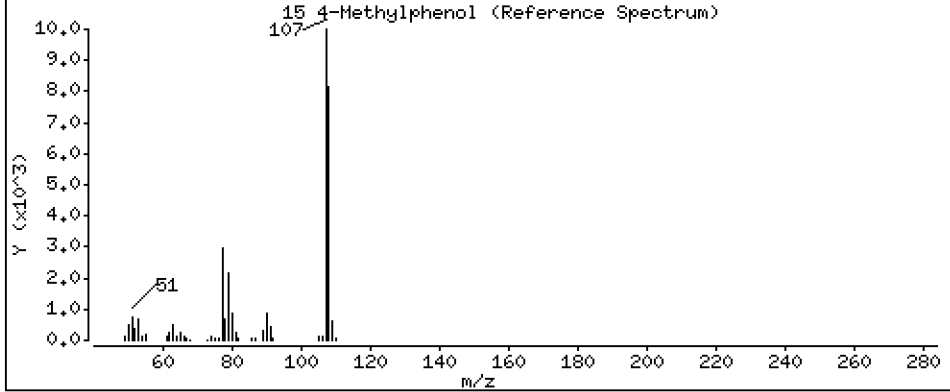
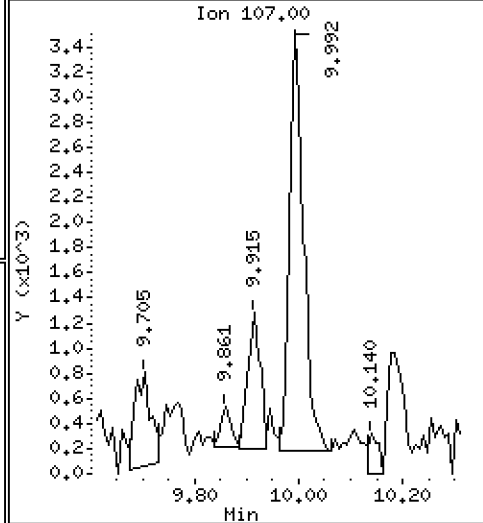
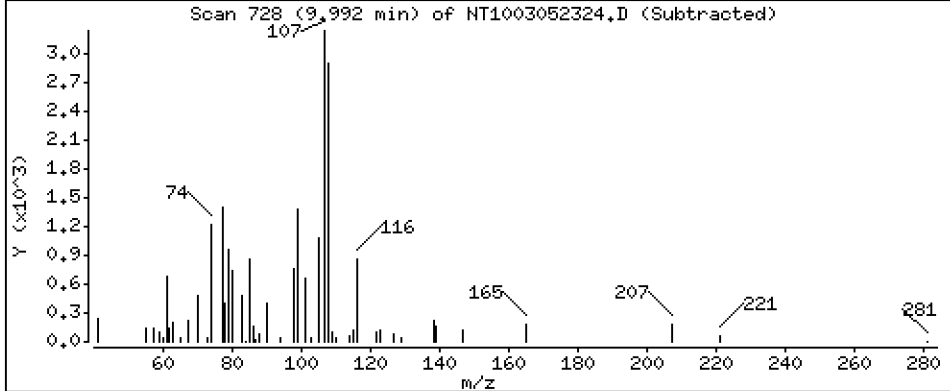
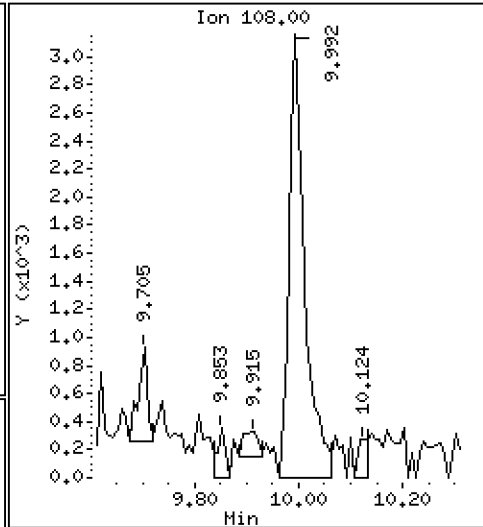
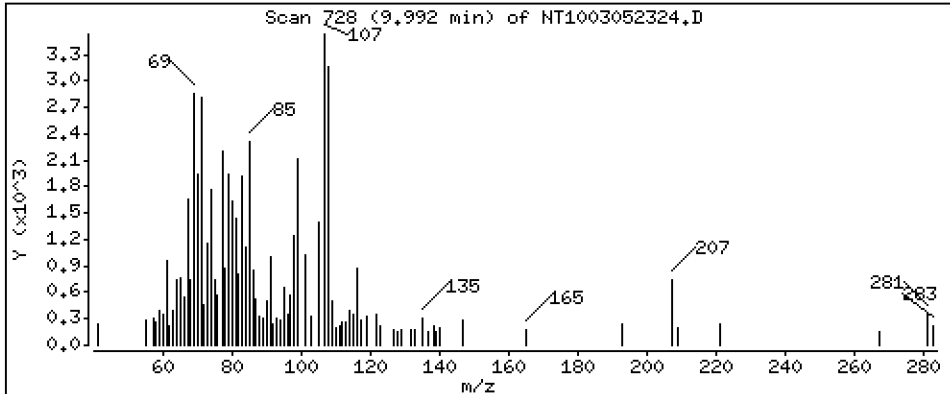
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.07123 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

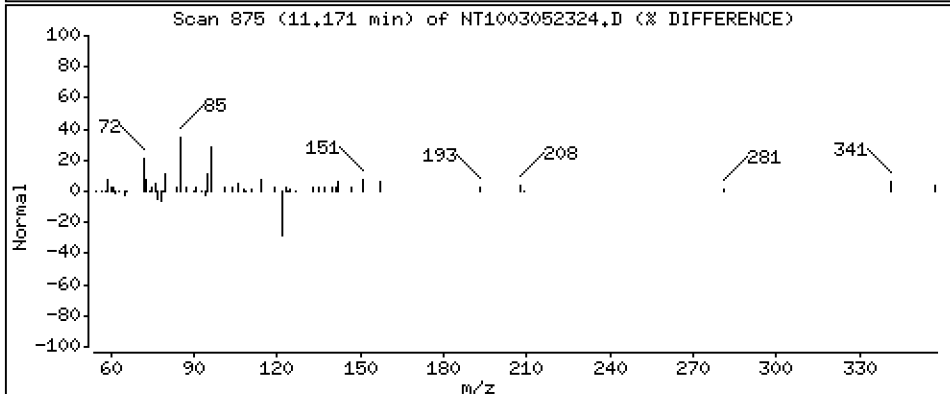
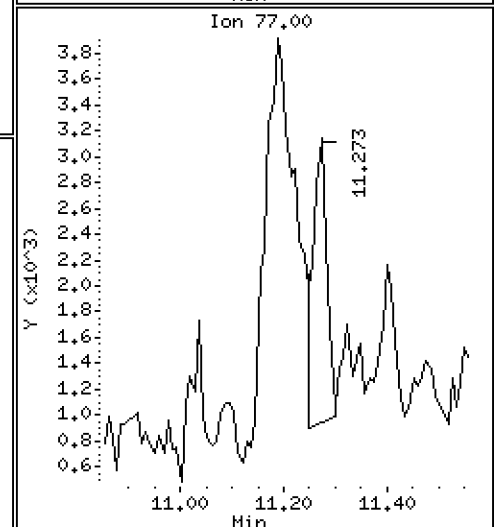
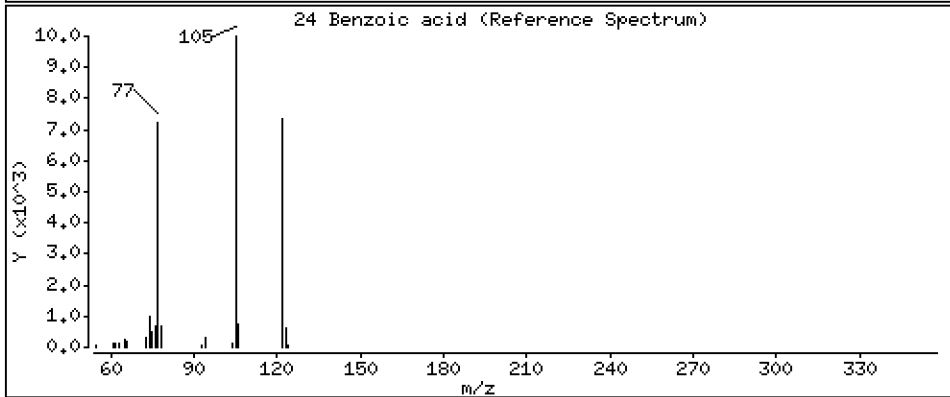
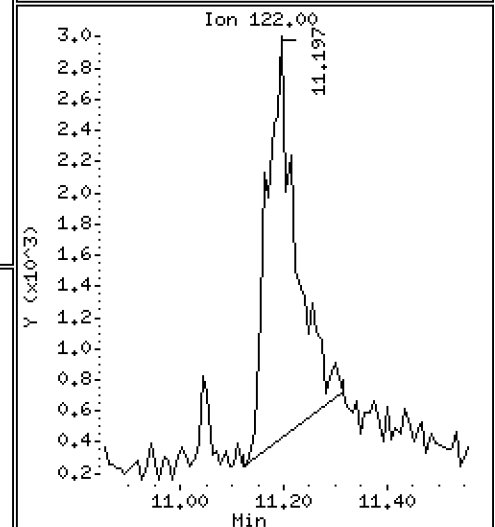
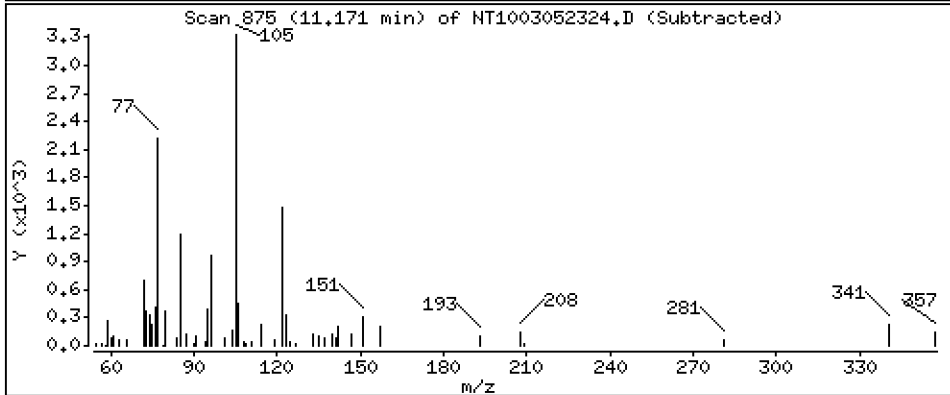
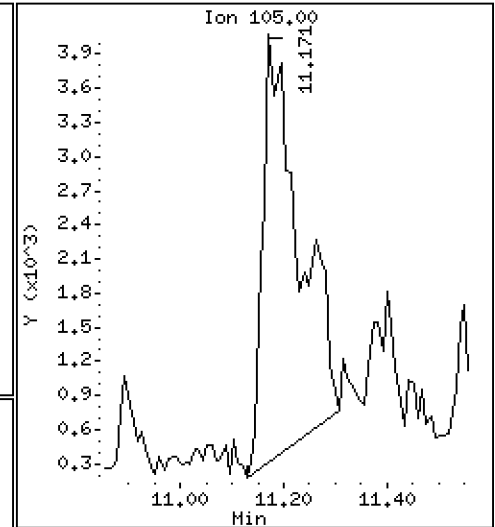
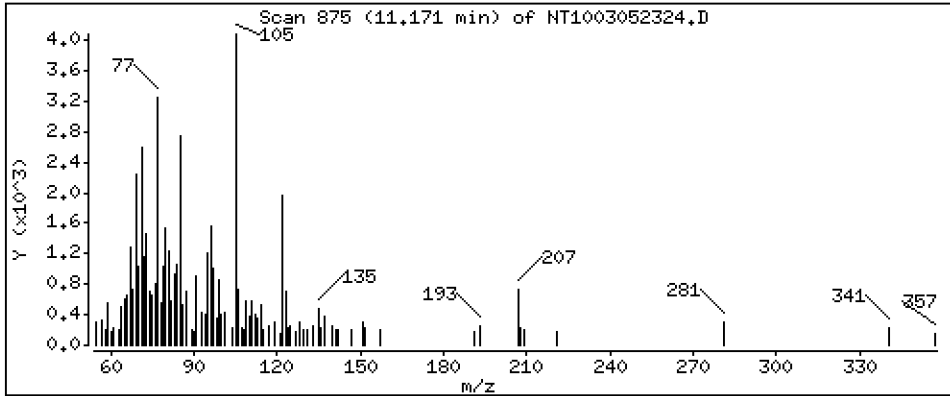
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.3360 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

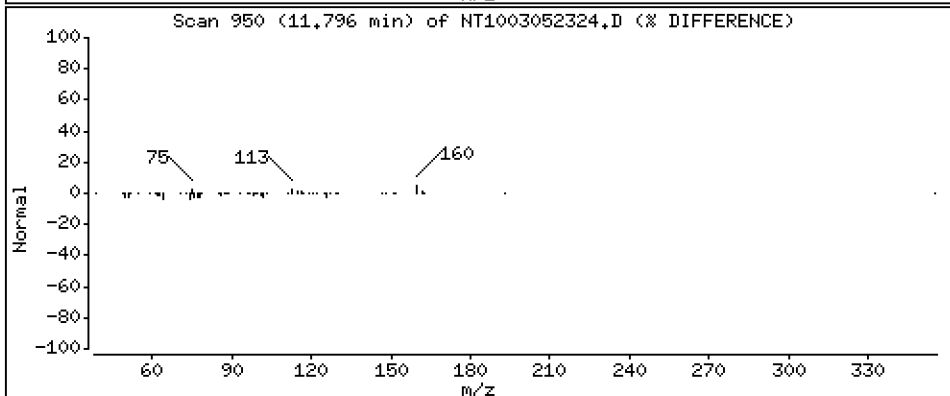
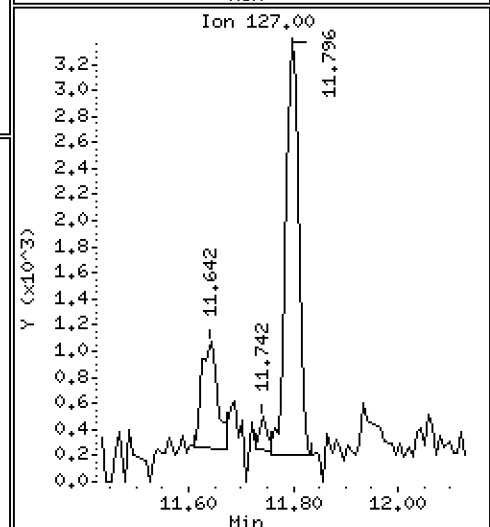
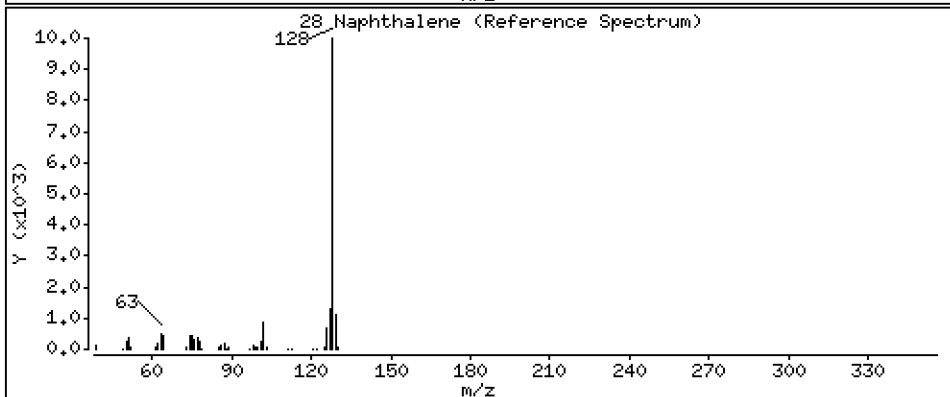
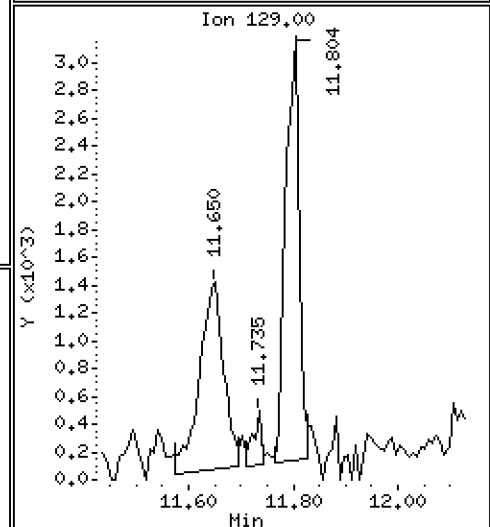
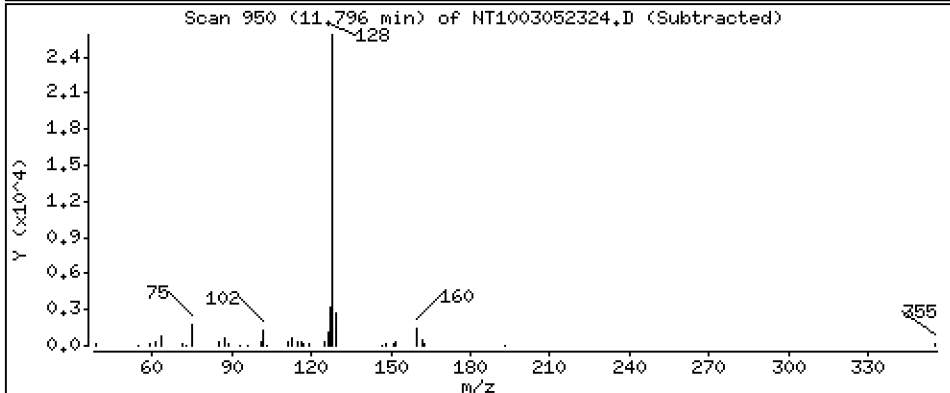
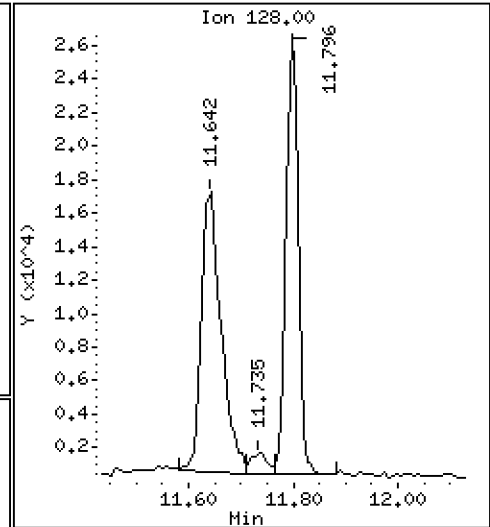
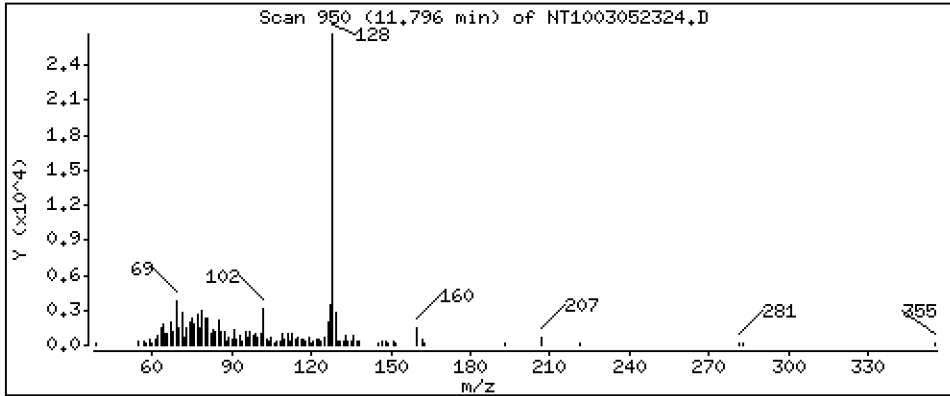
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1723 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

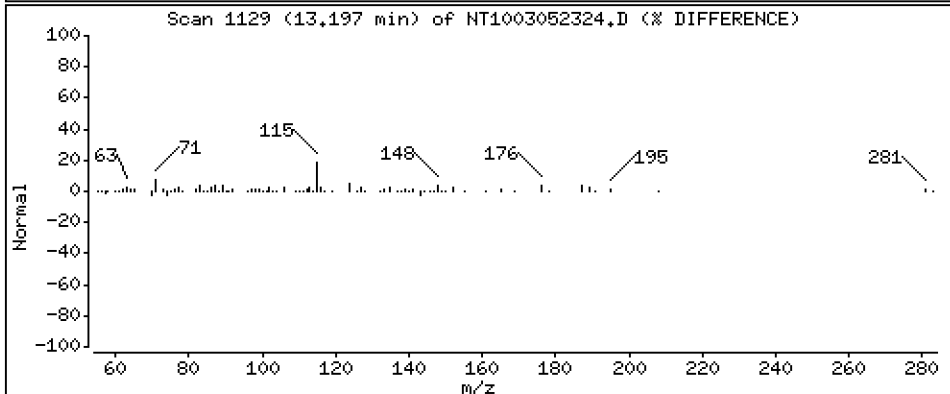
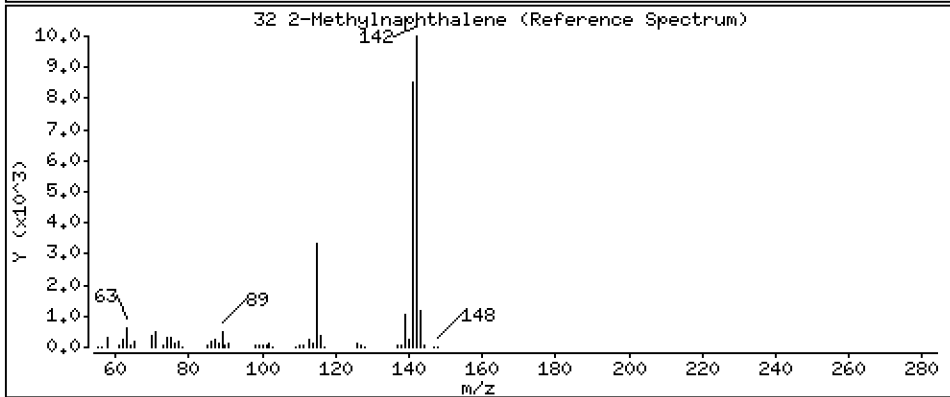
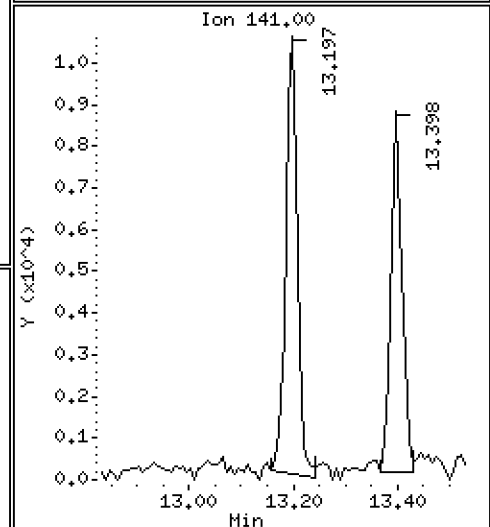
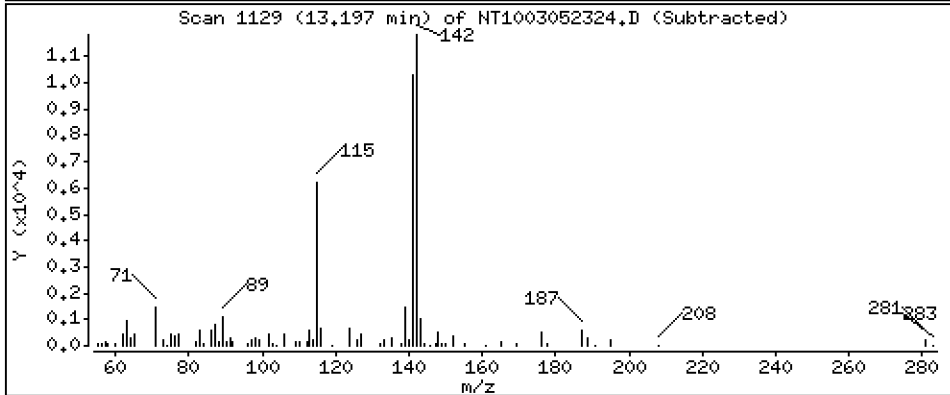
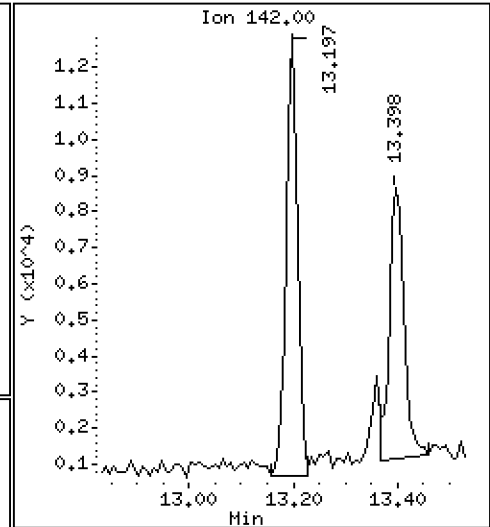
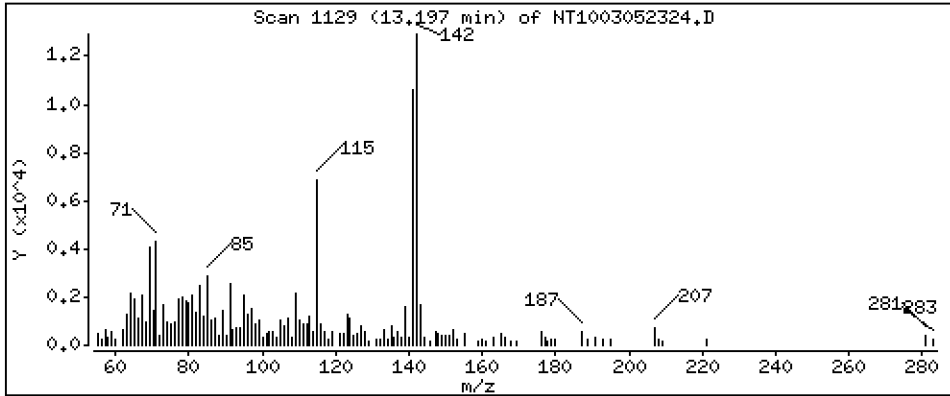
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1150 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

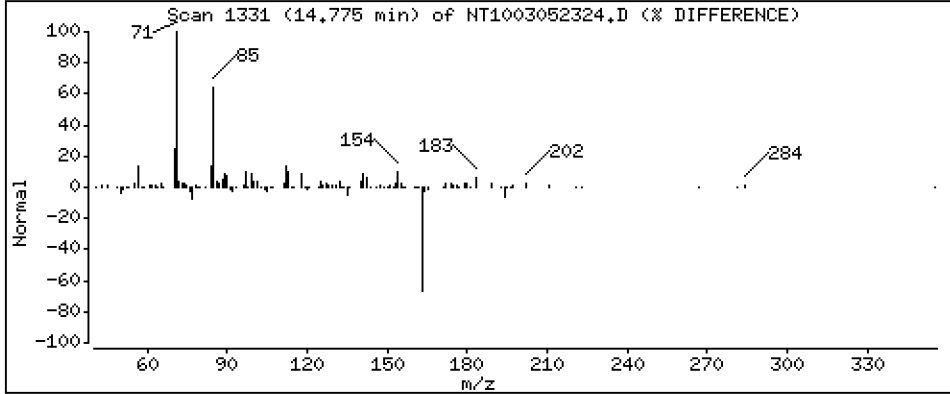
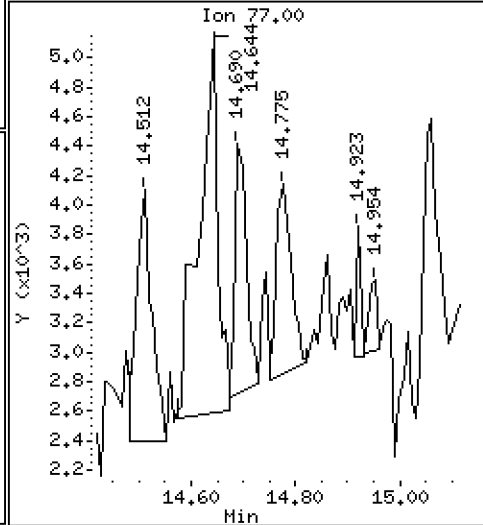
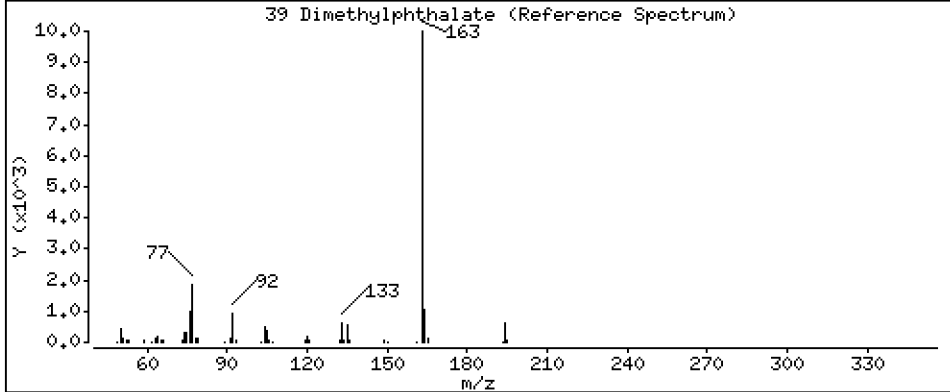
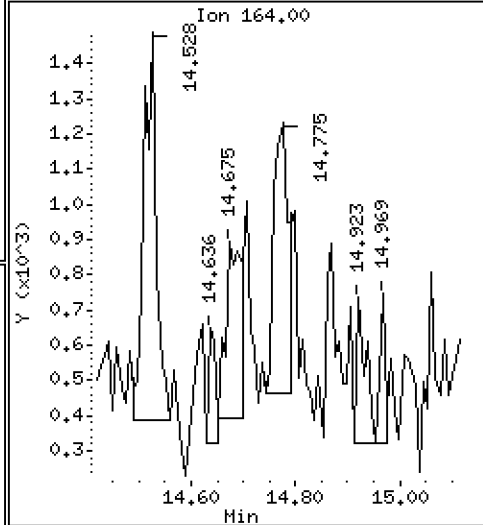
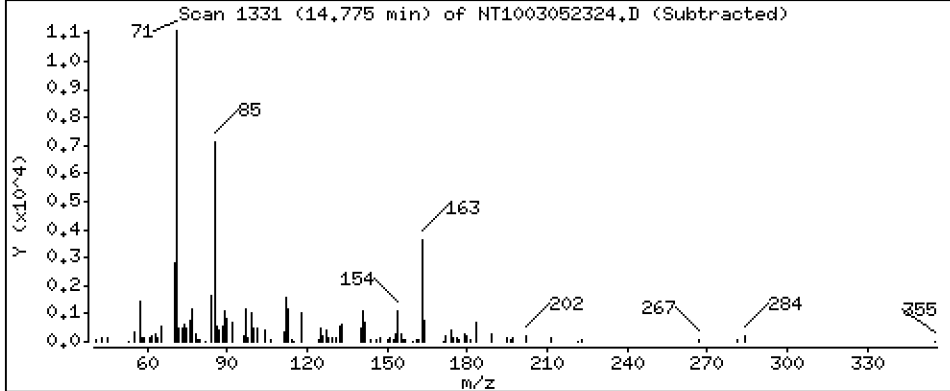
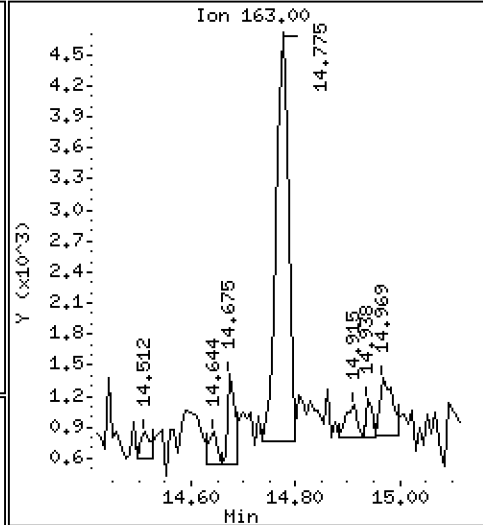
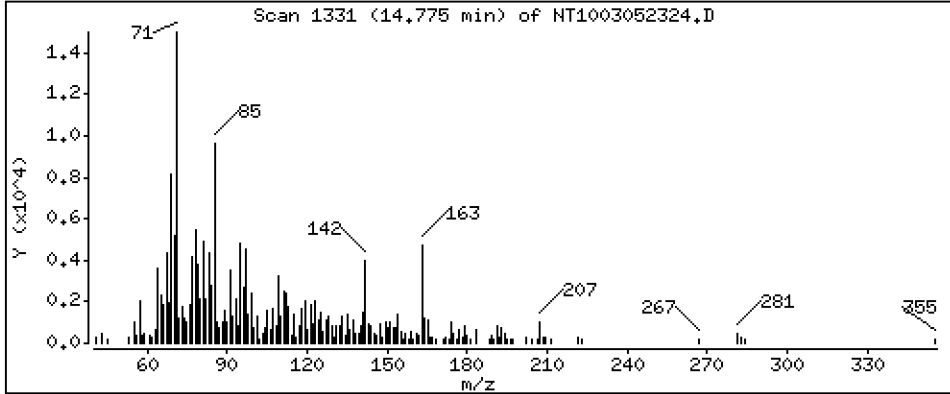
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.03788 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

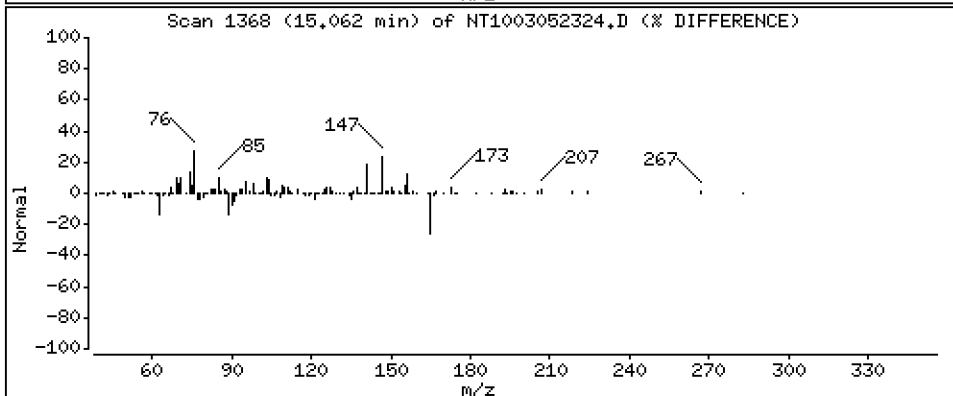
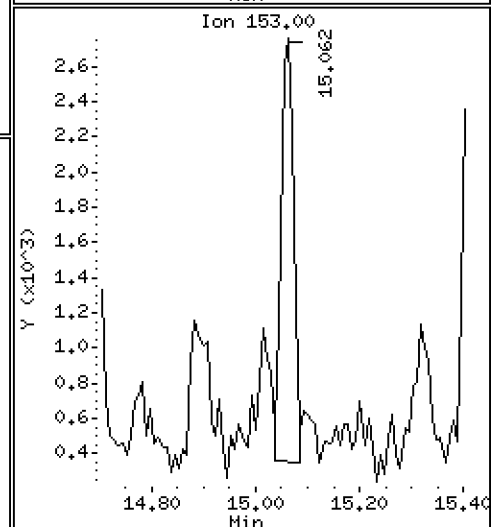
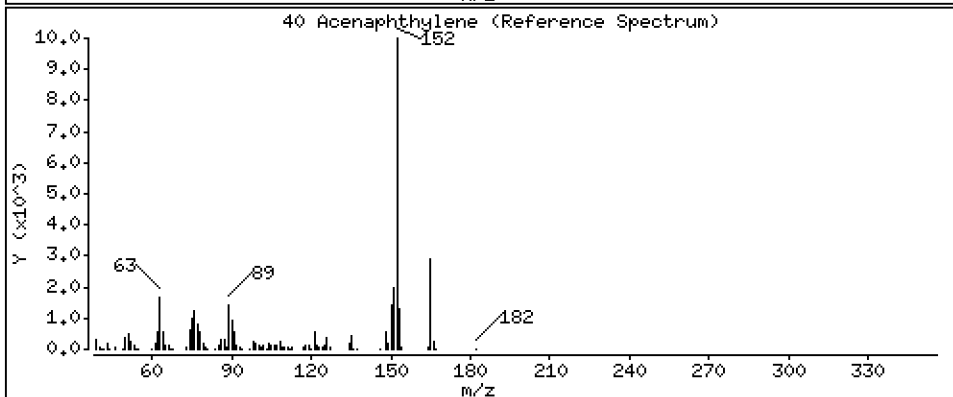
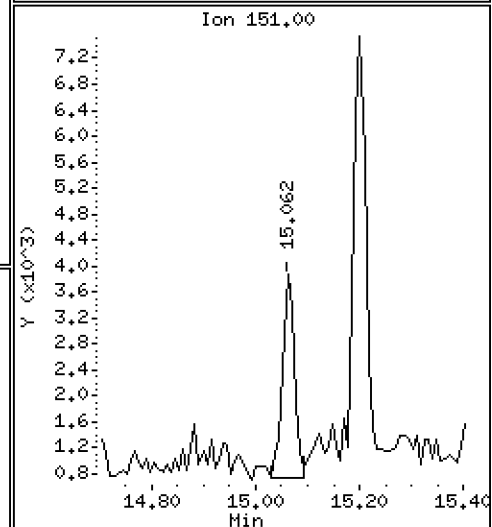
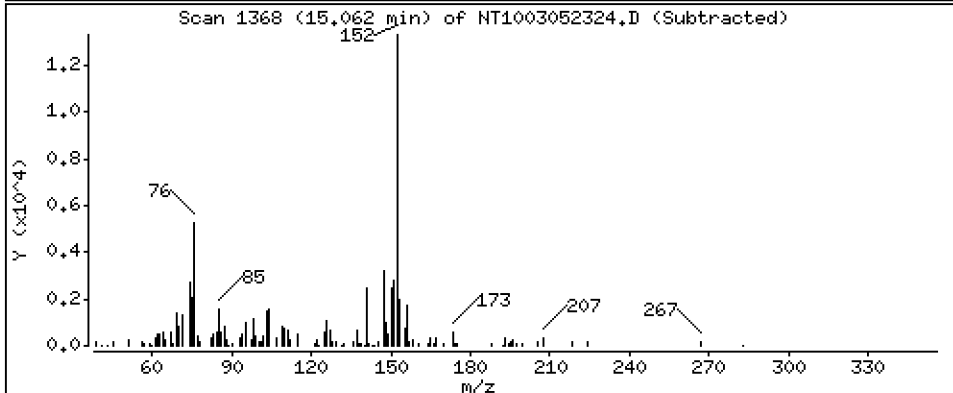
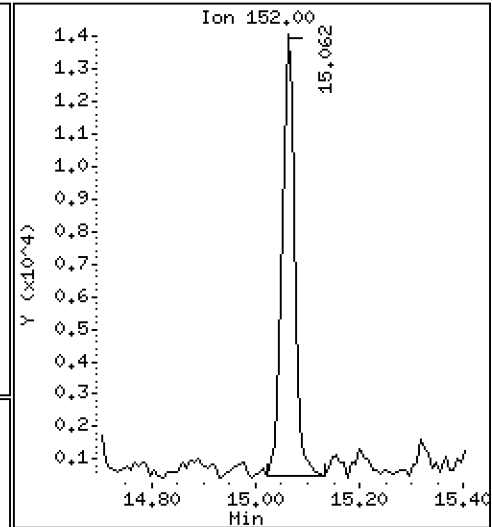
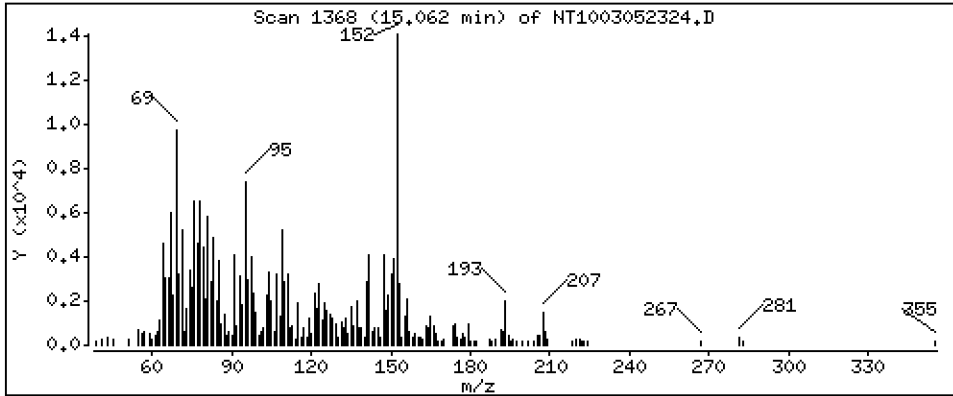
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1084 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

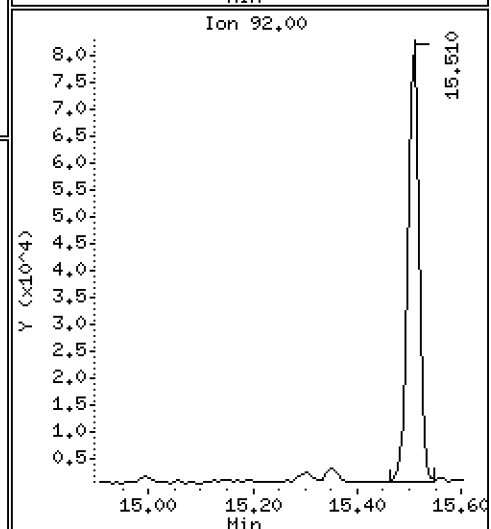
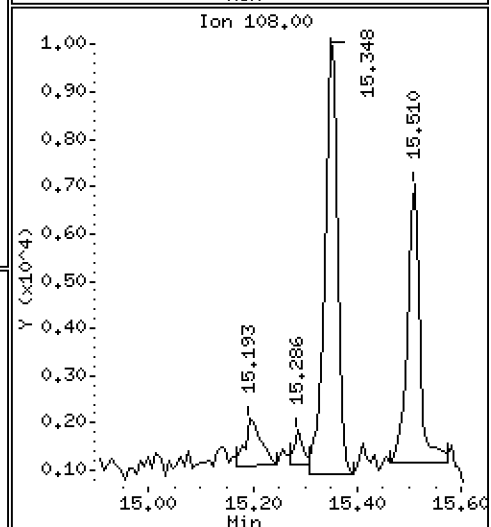
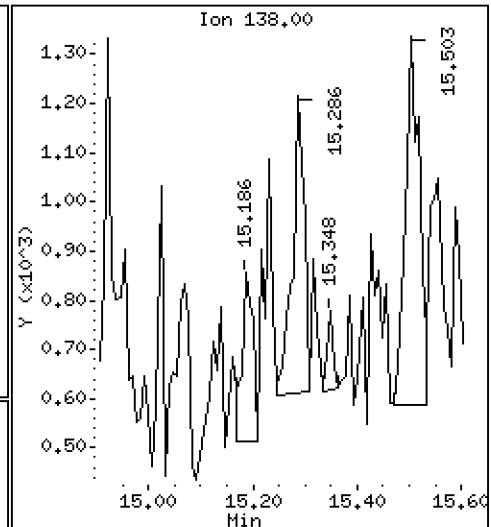
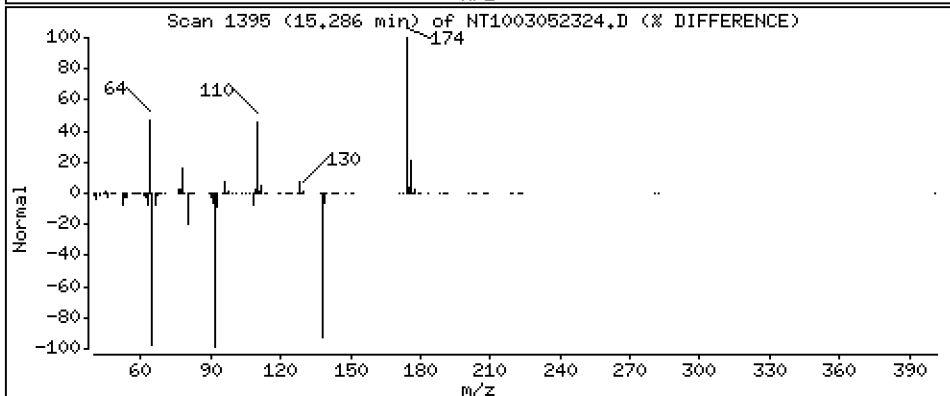
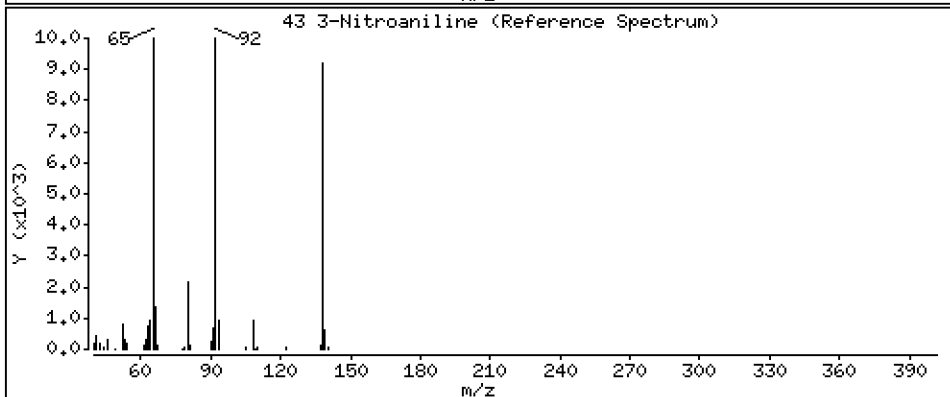
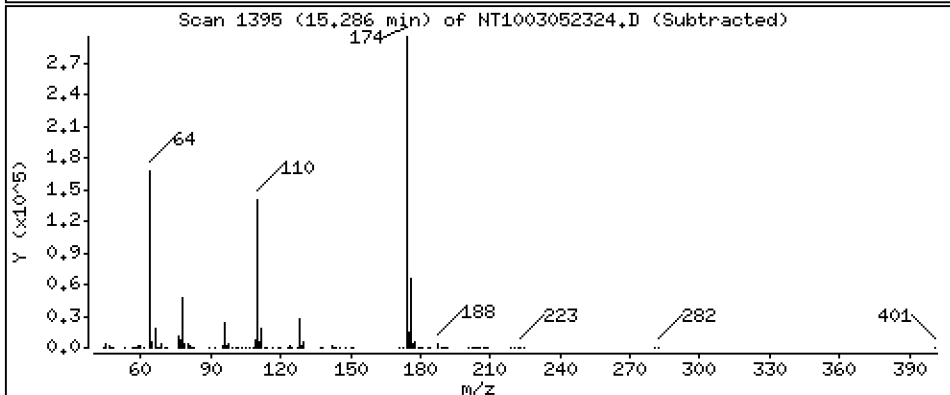
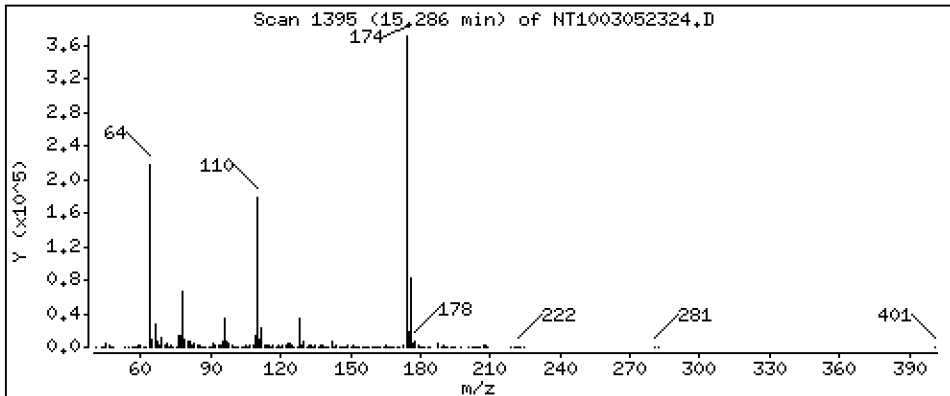
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

43 3-Nitroaniline

Concentration: 0.02433 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

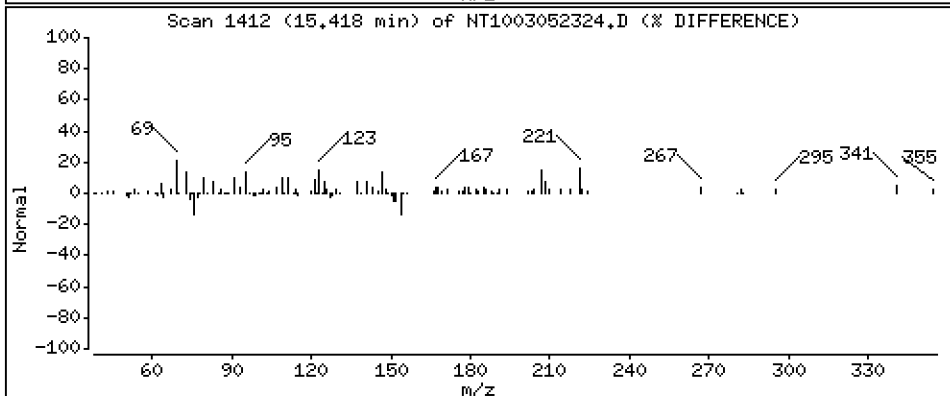
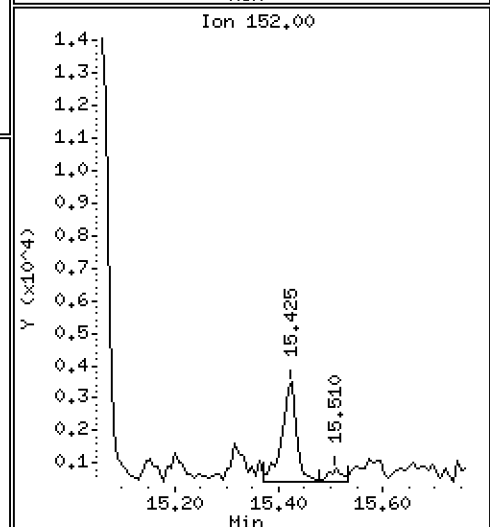
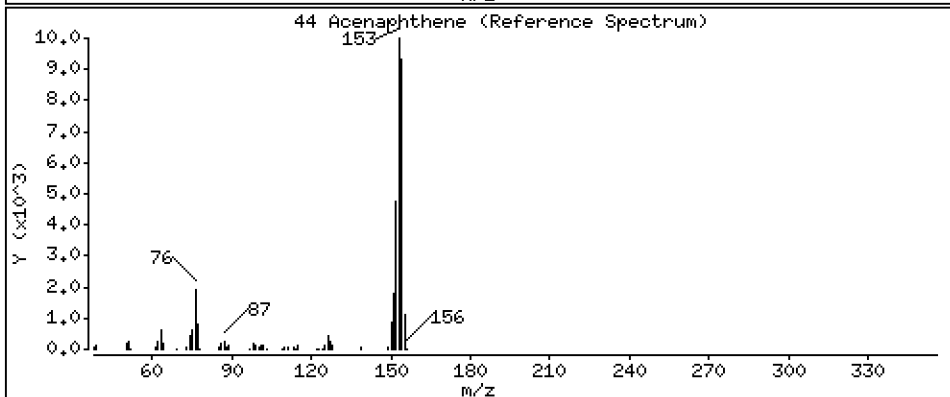
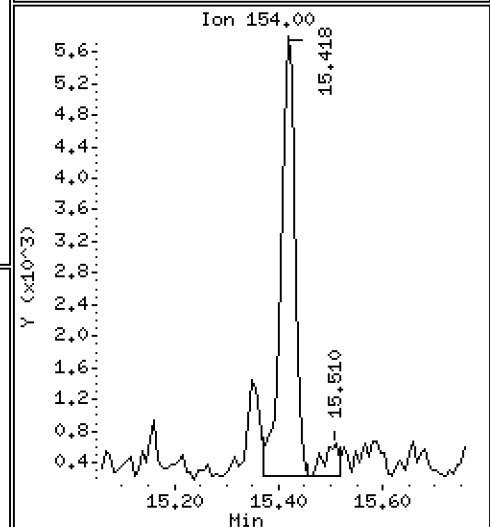
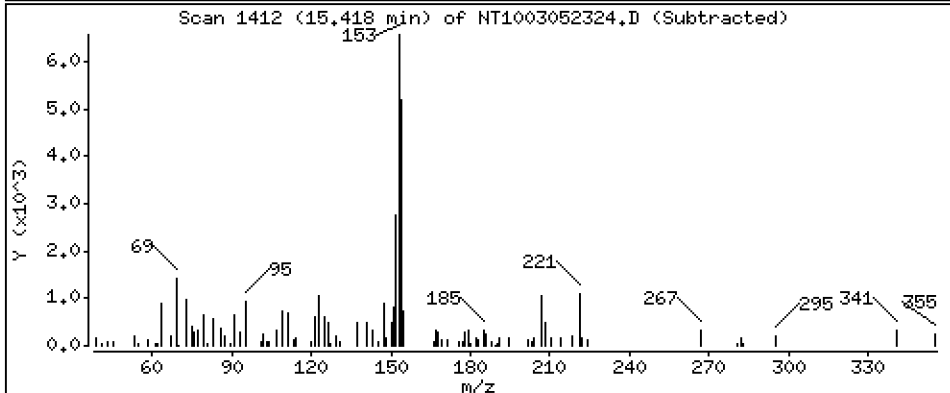
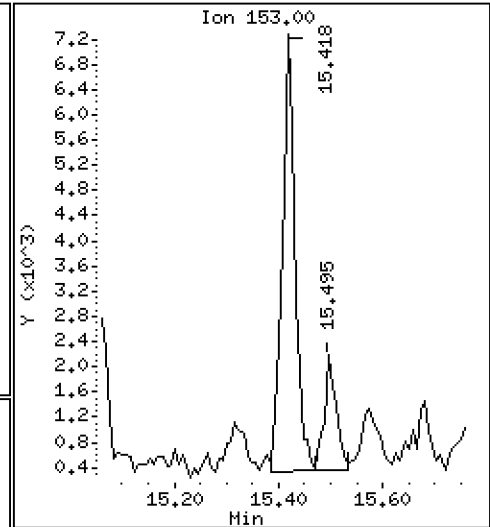
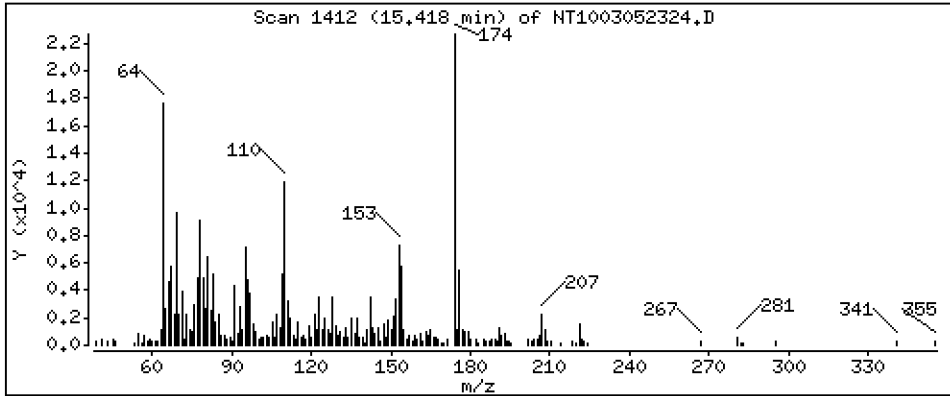
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.08117 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

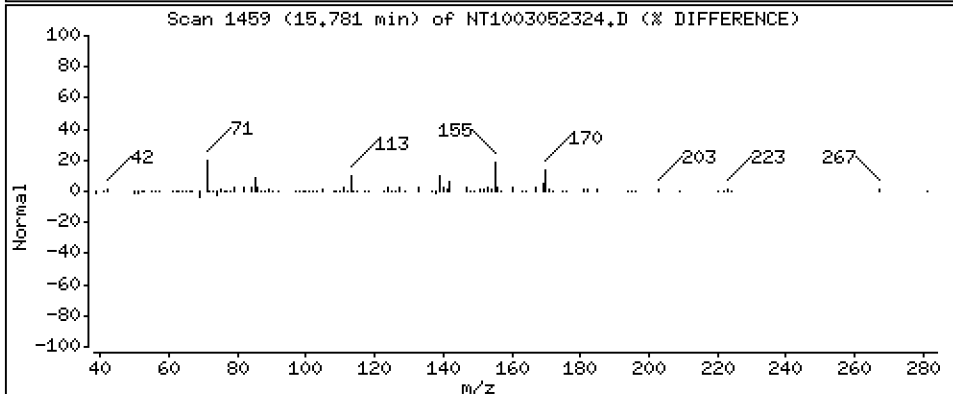
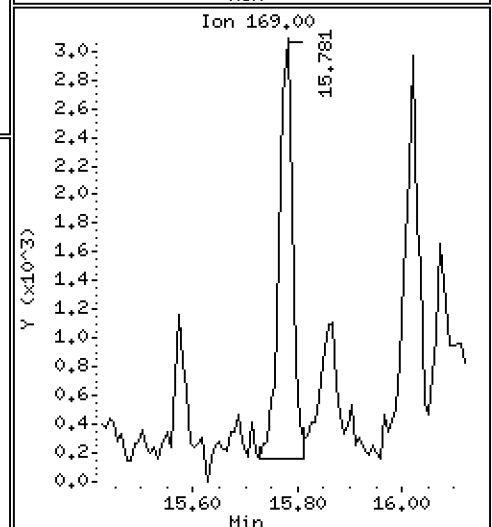
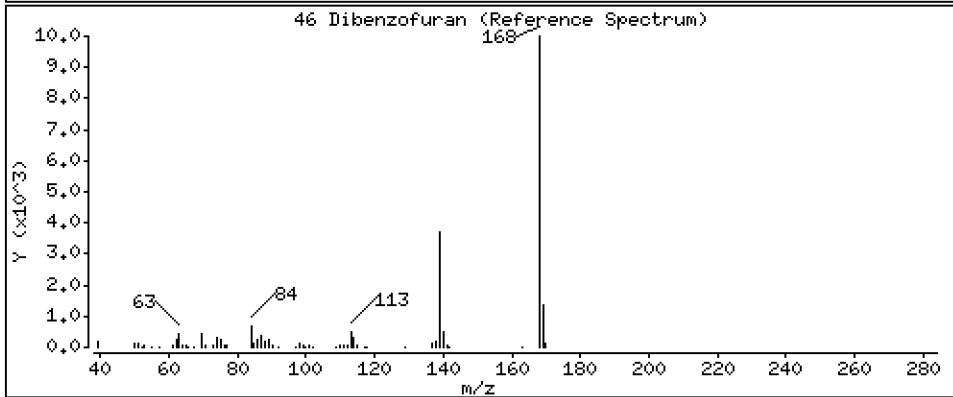
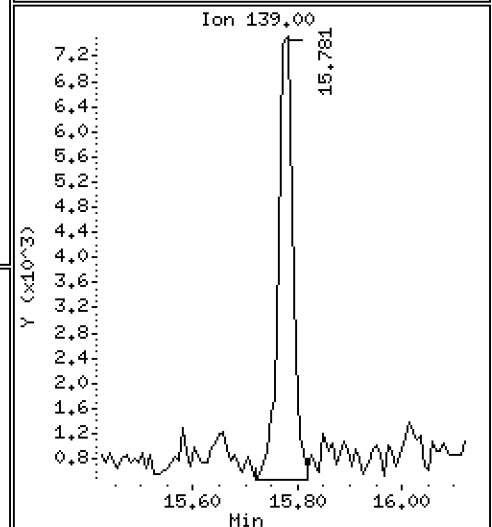
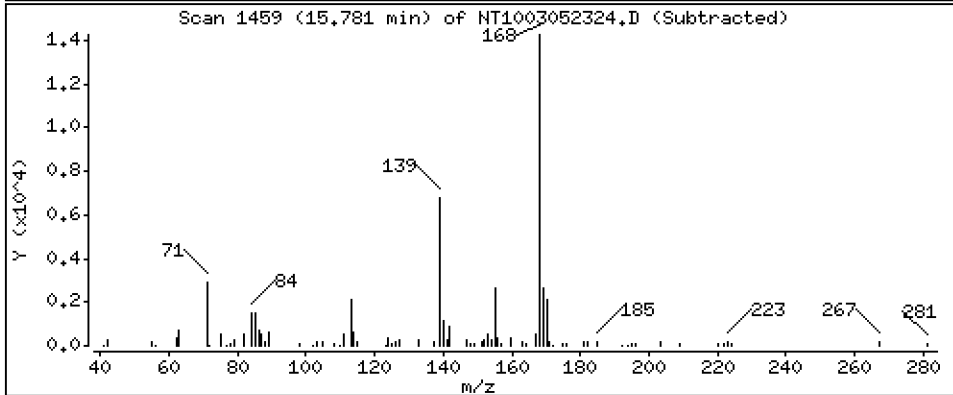
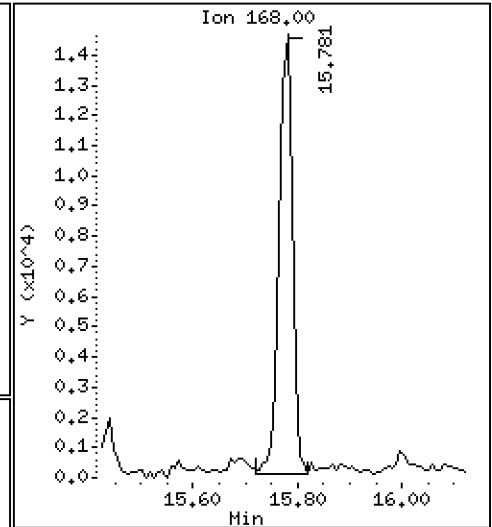
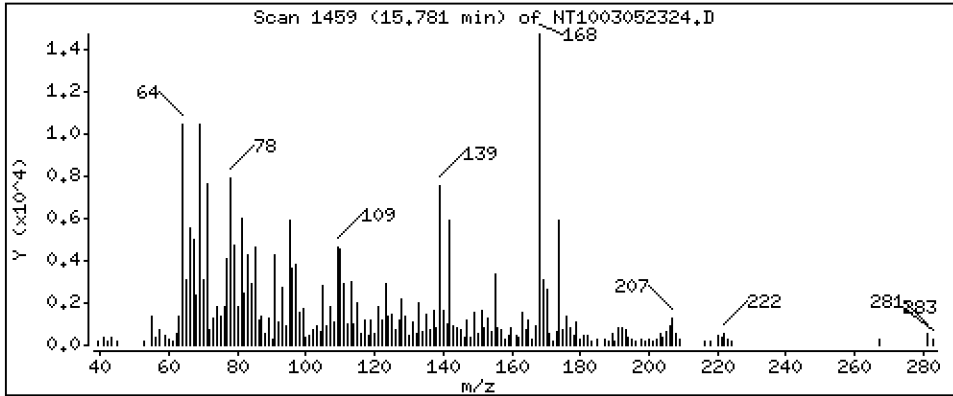
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1157 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

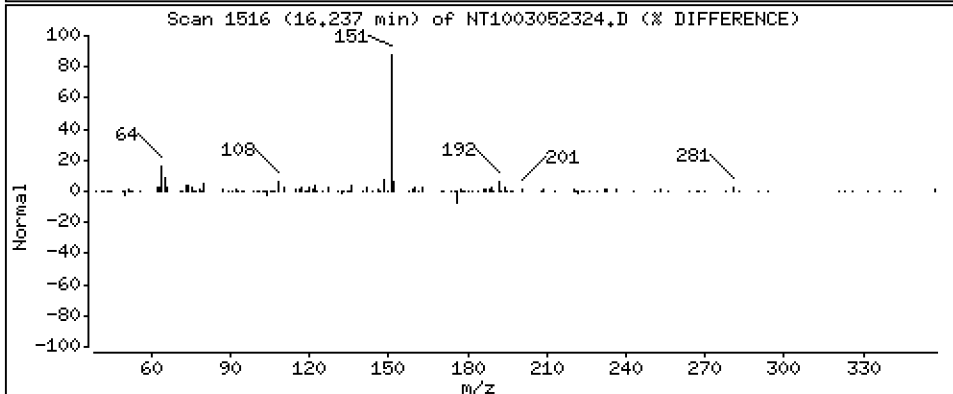
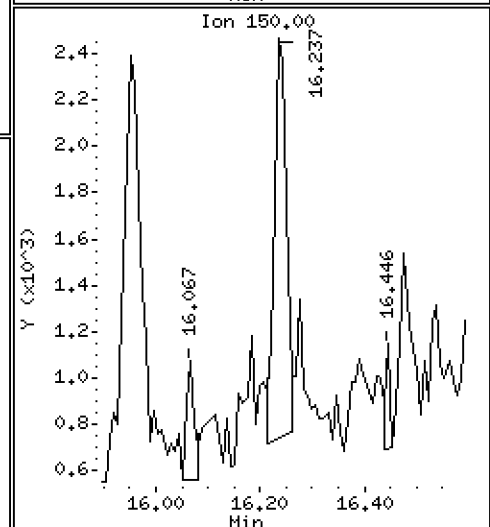
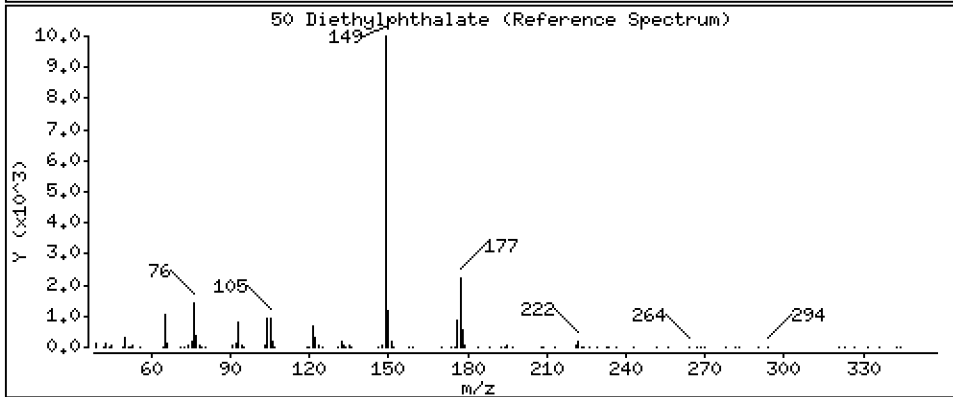
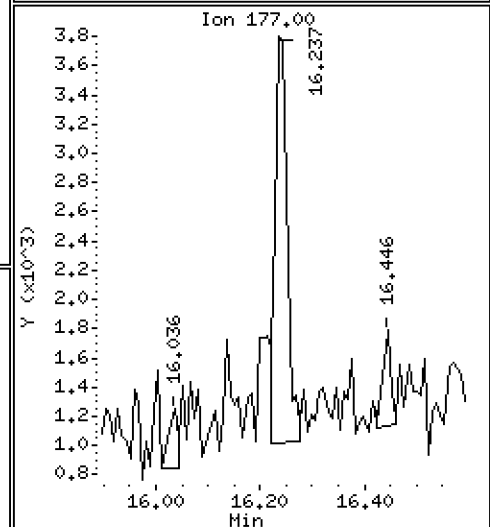
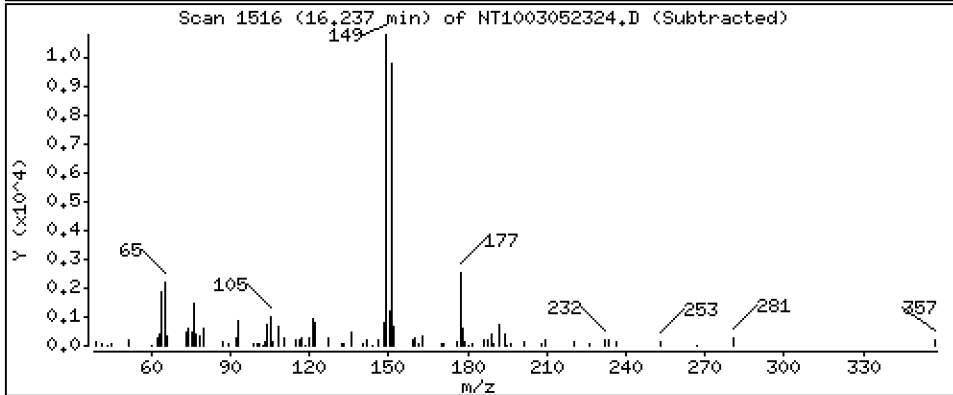
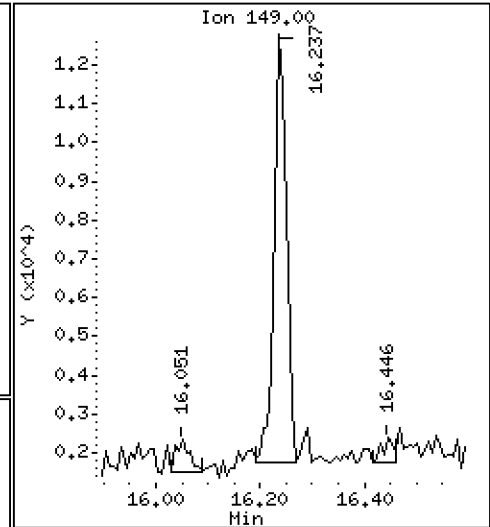
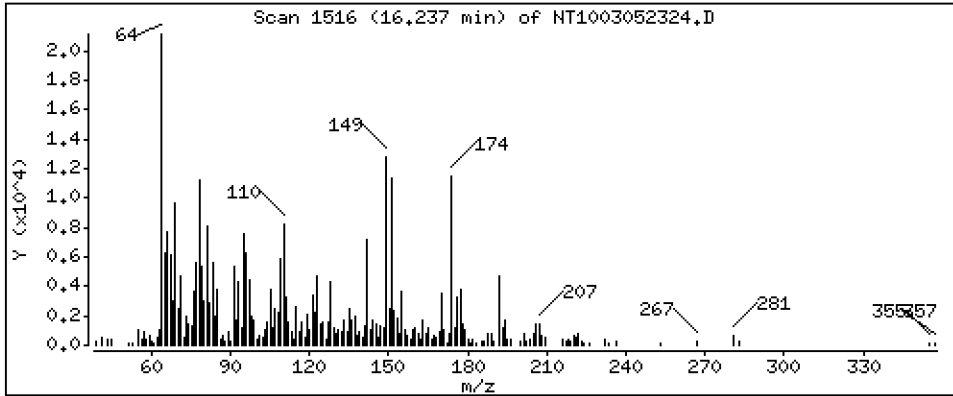
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1040 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

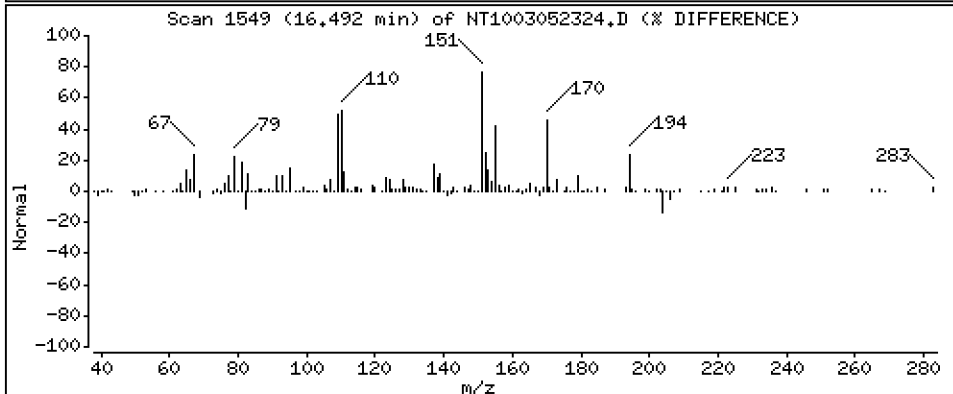
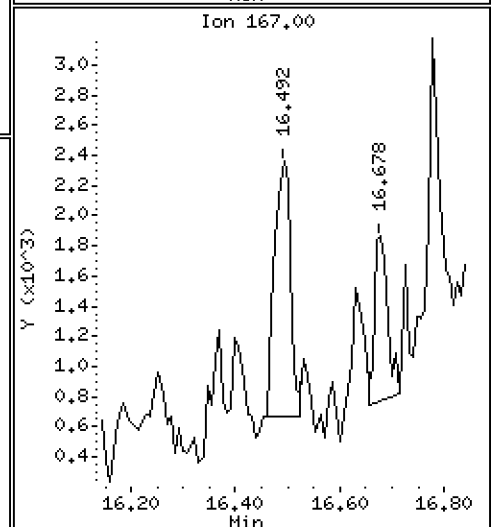
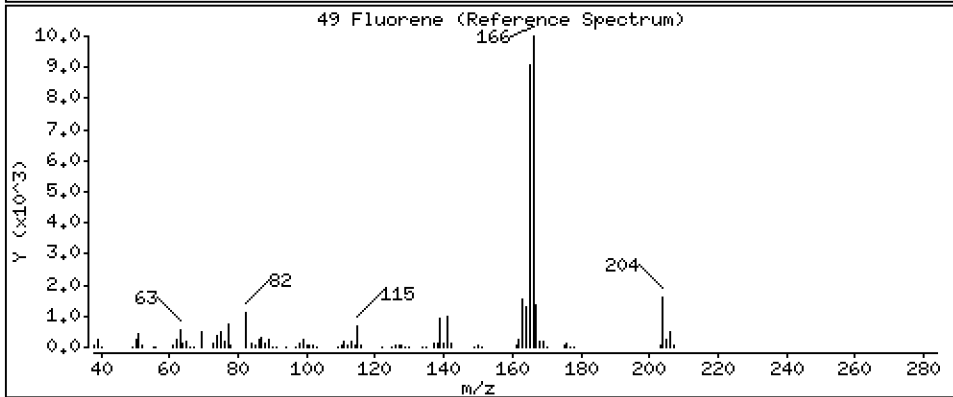
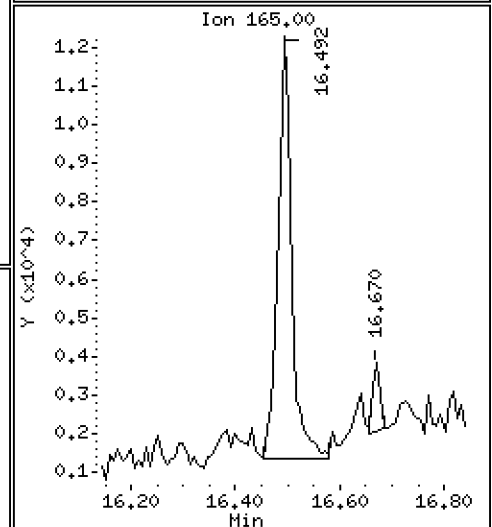
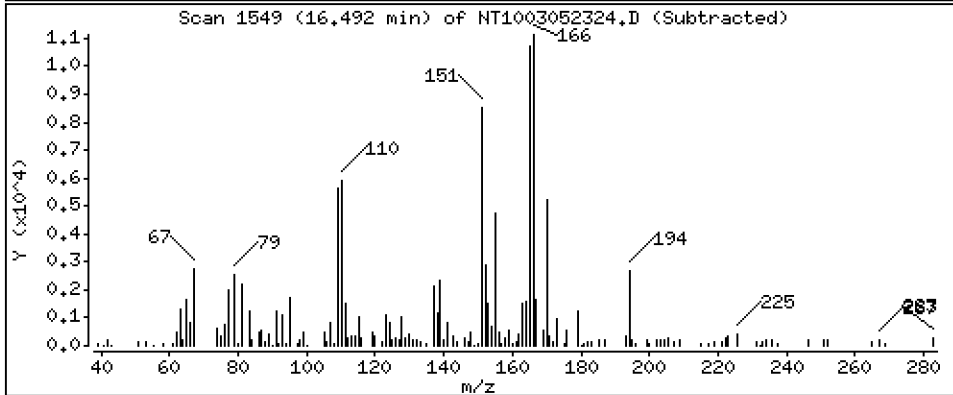
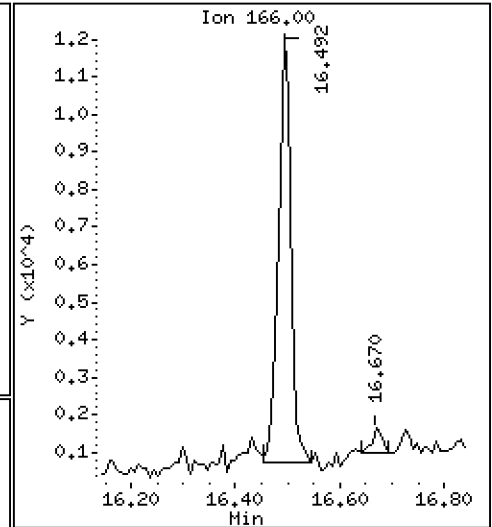
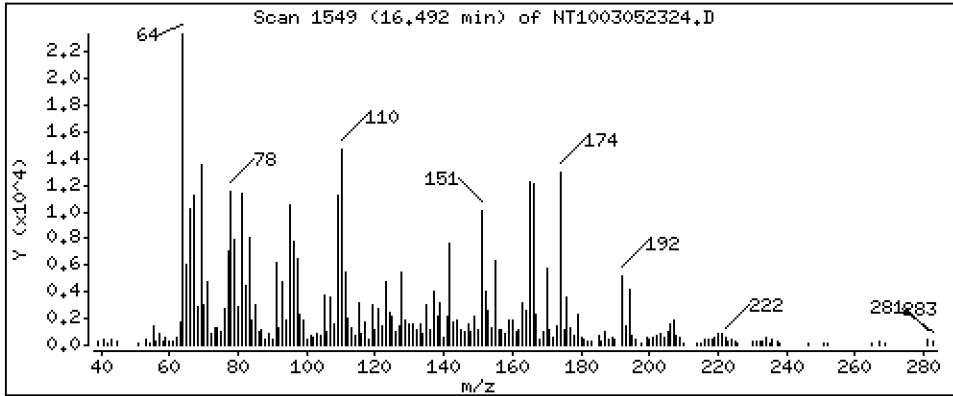
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1057 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

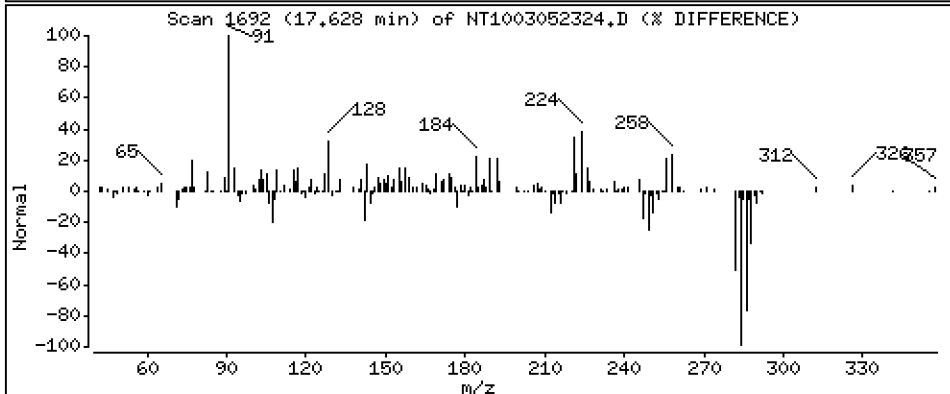
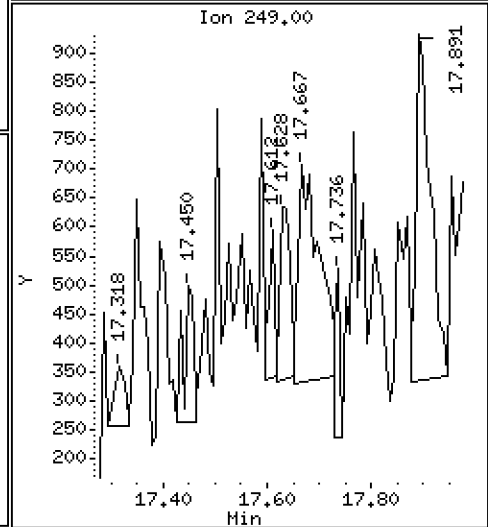
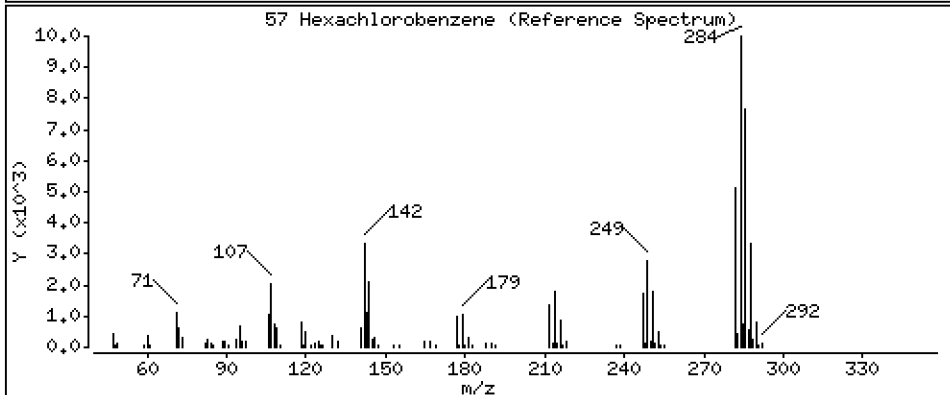
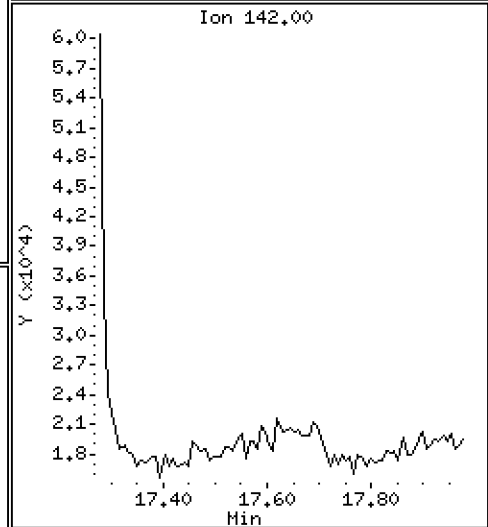
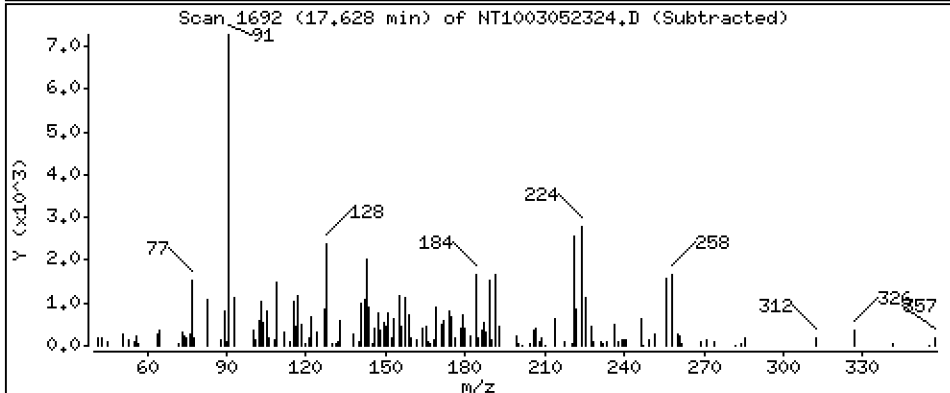
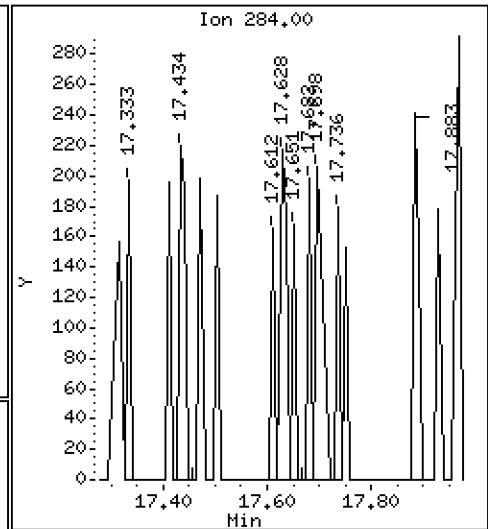
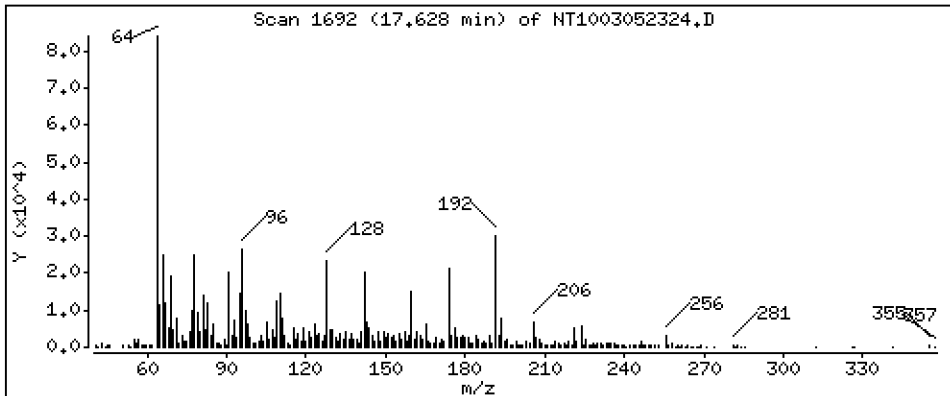
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.003004 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

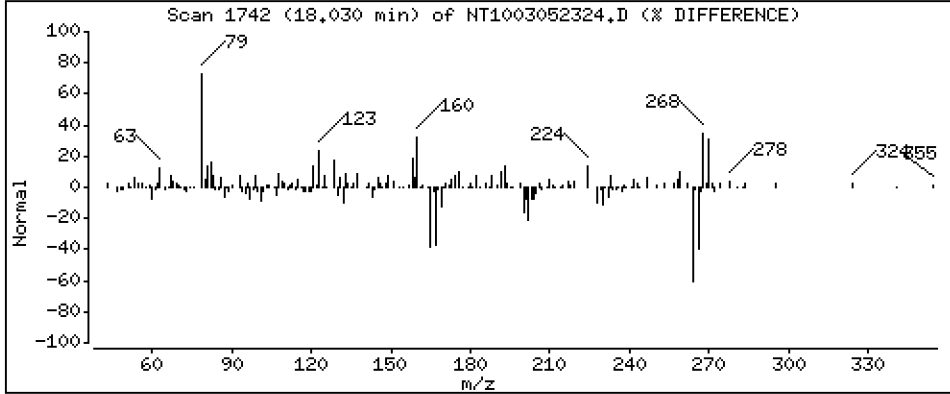
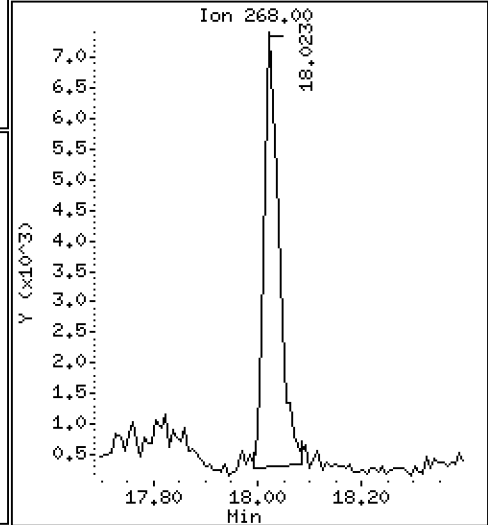
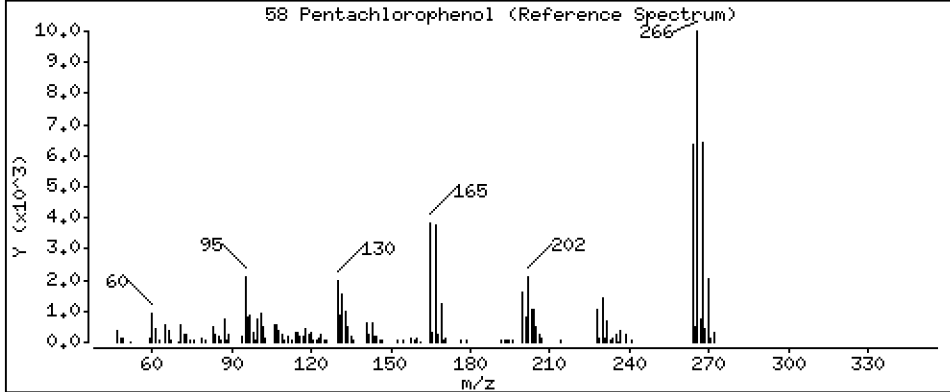
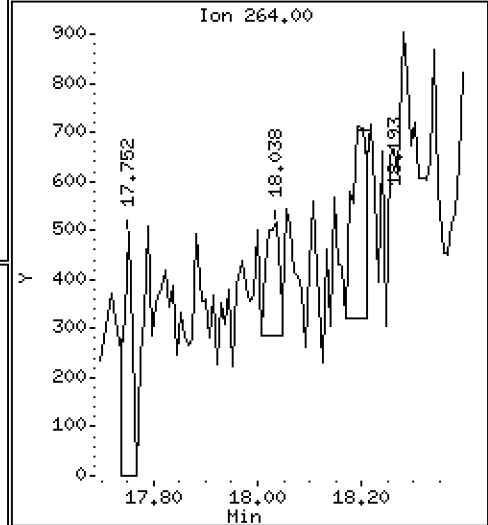
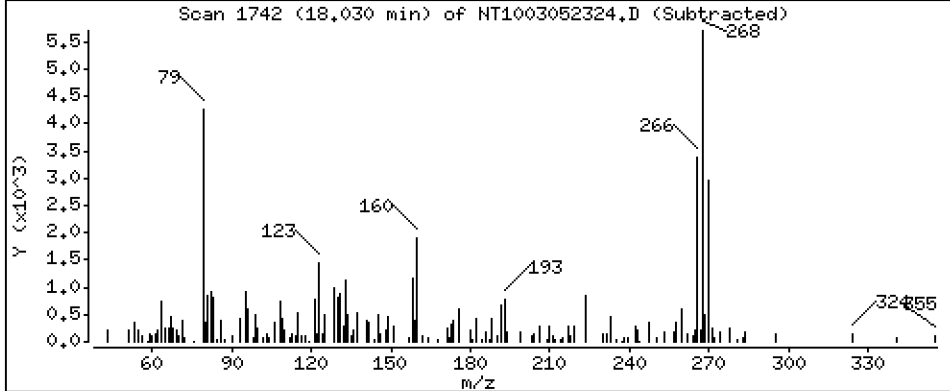
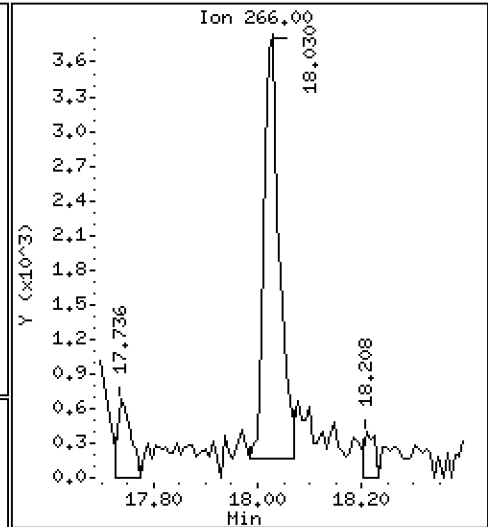
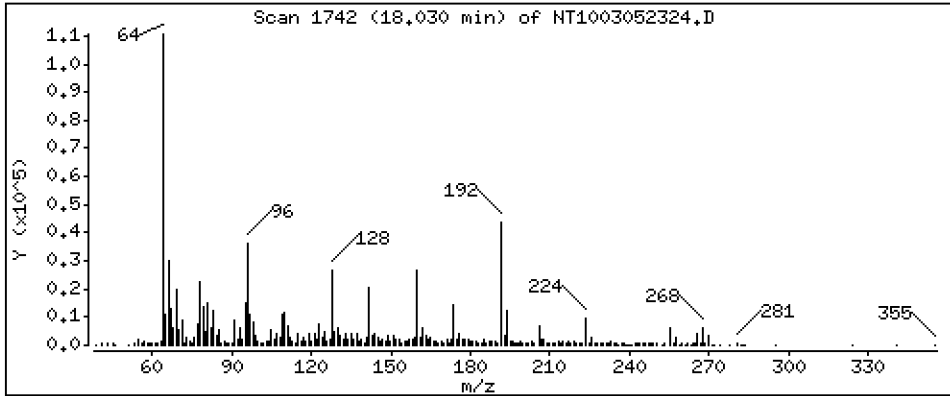
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,2724 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

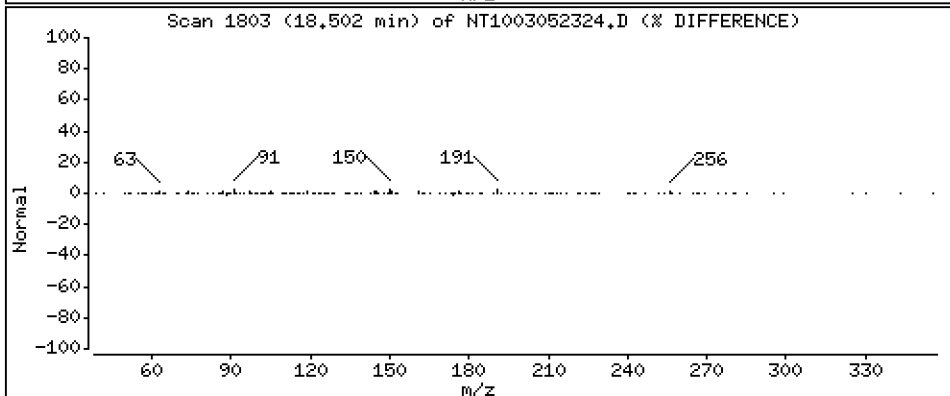
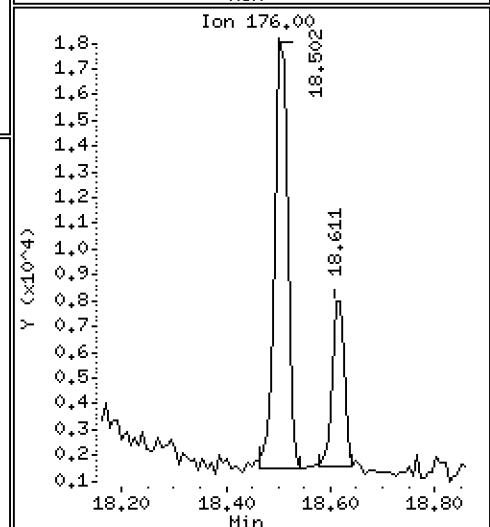
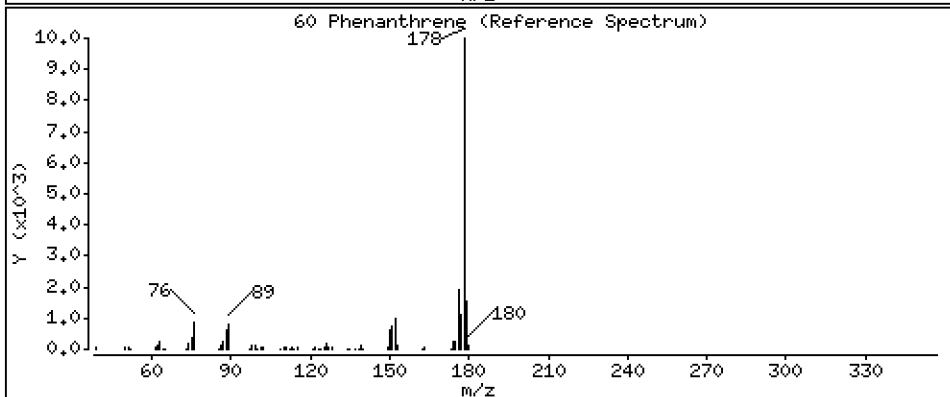
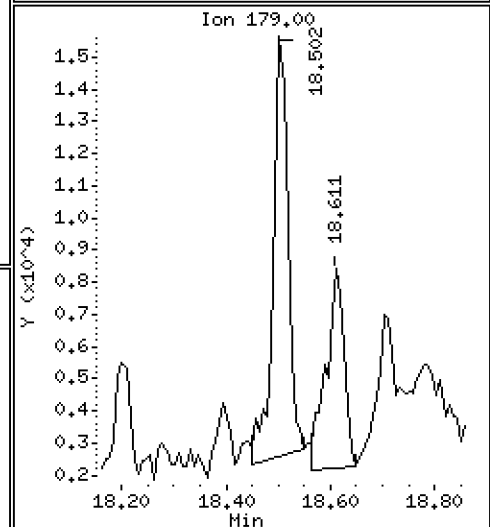
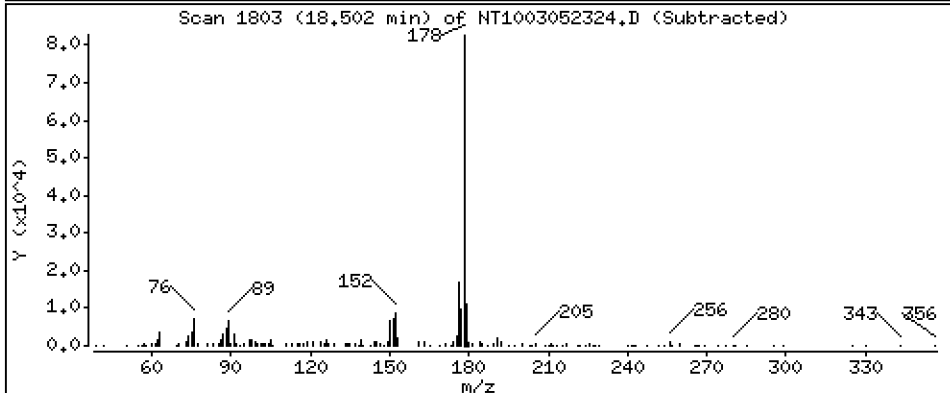
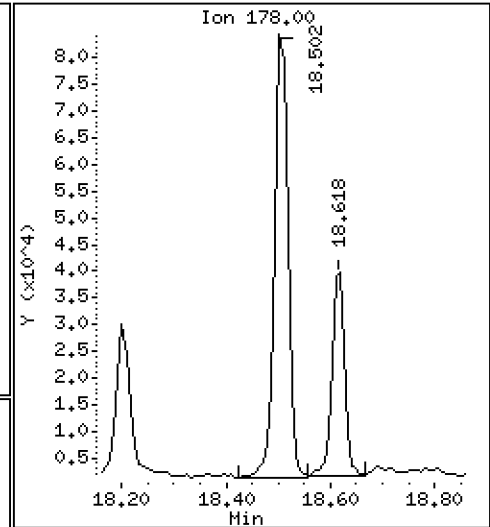
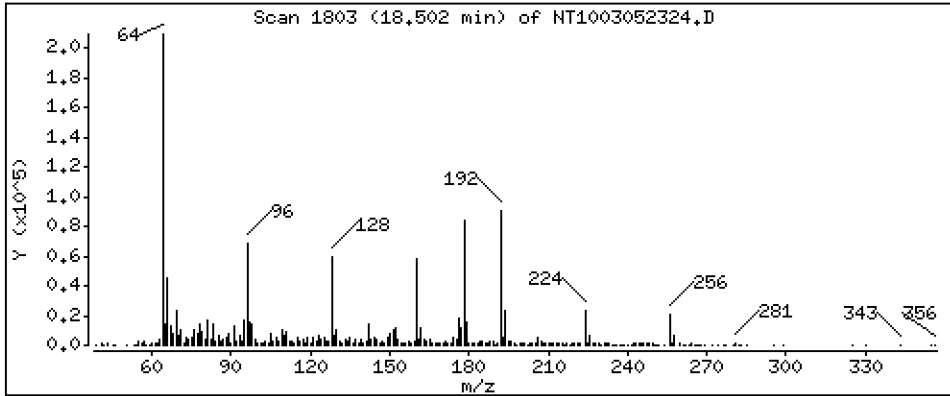
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,6261 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

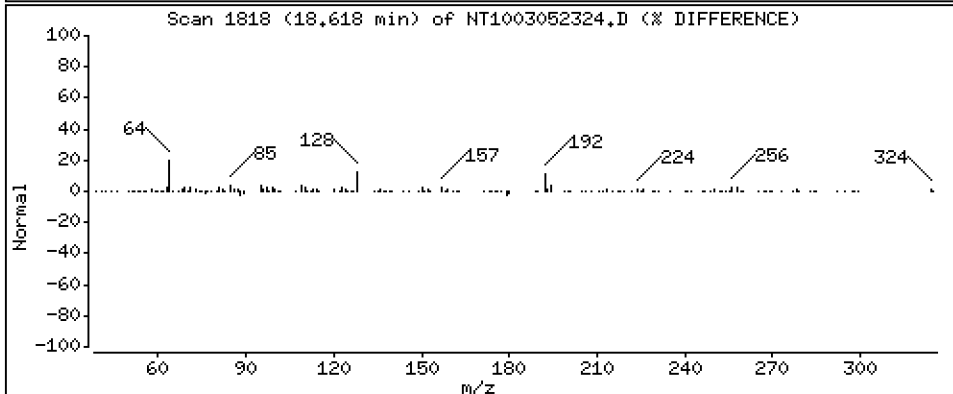
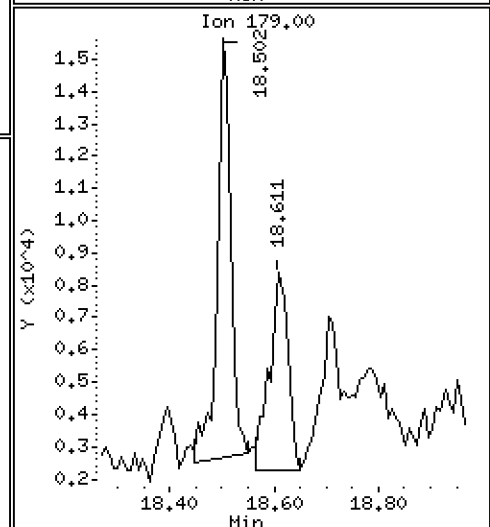
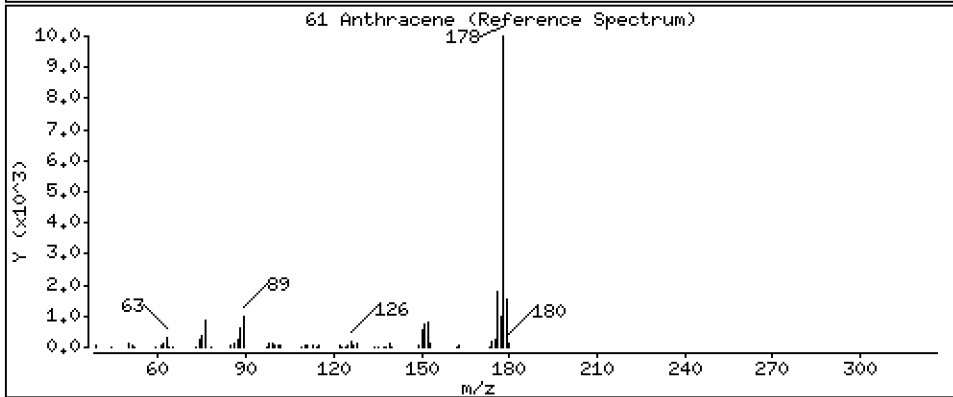
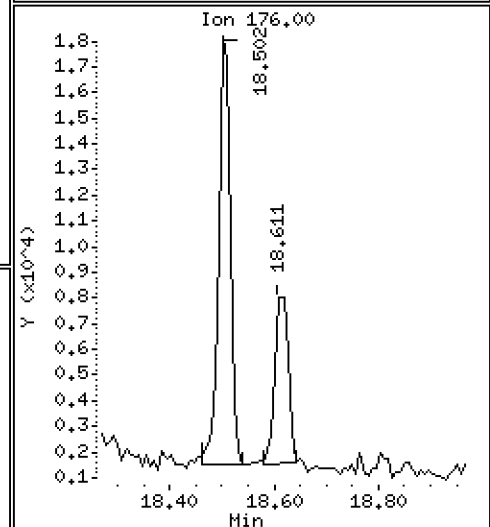
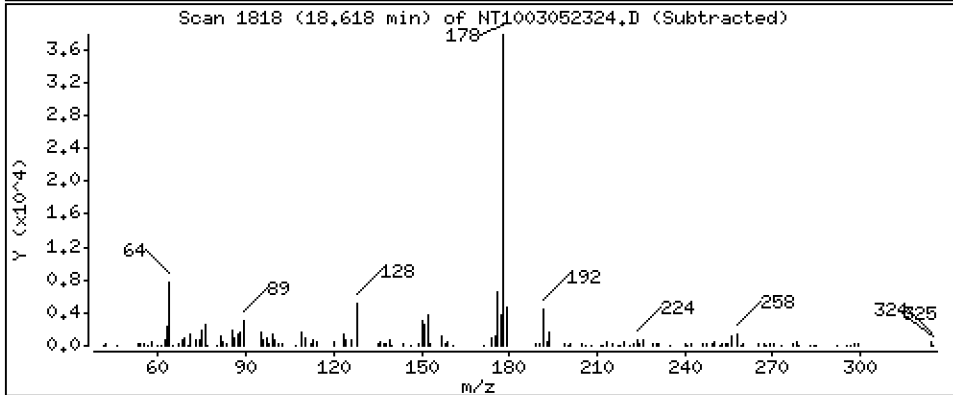
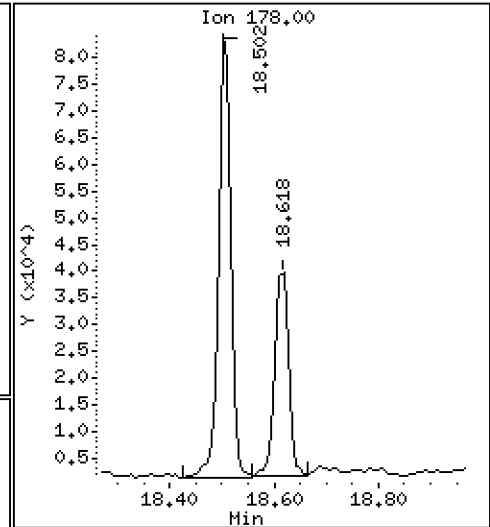
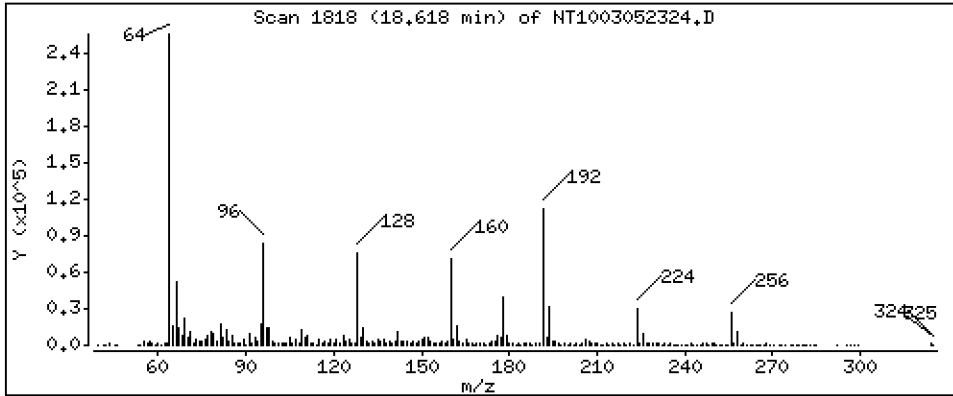
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

61 Anthracene

Concentration: 0.3071 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

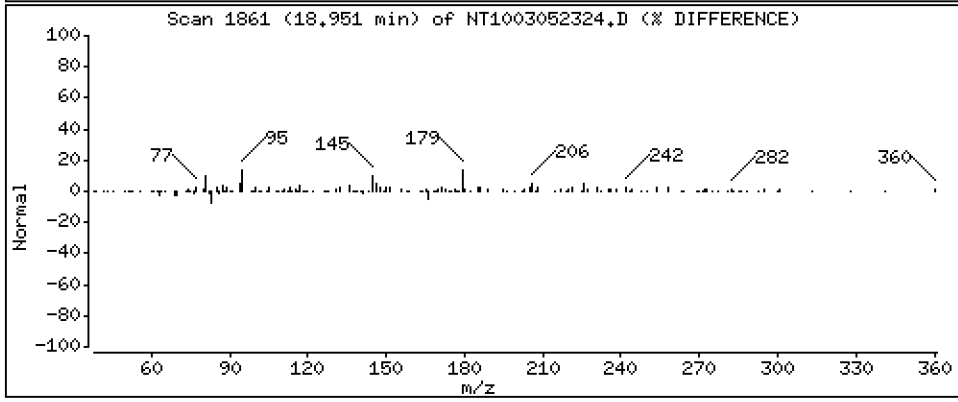
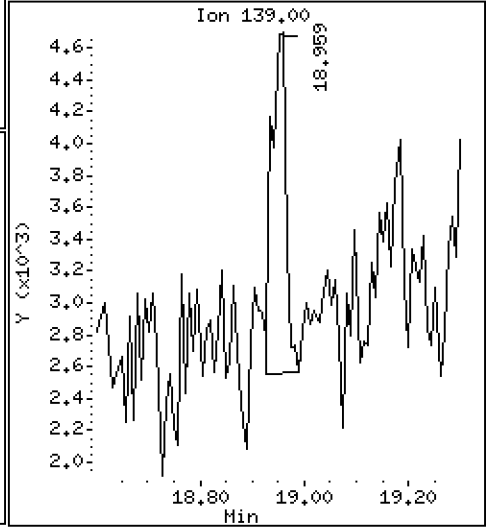
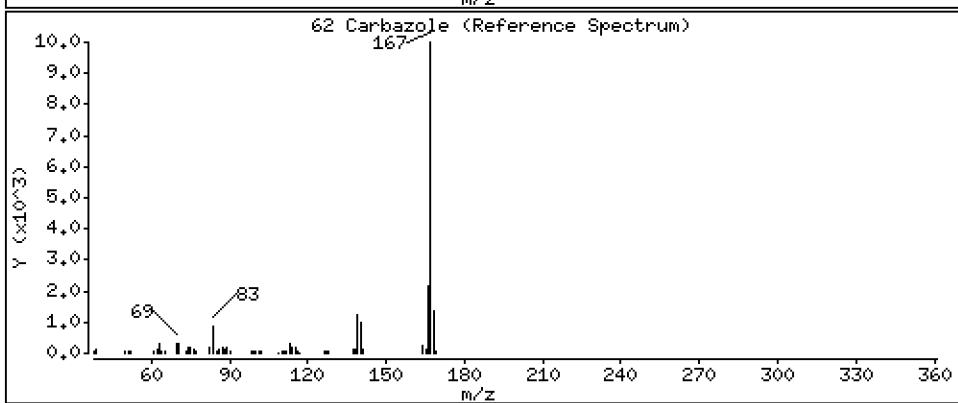
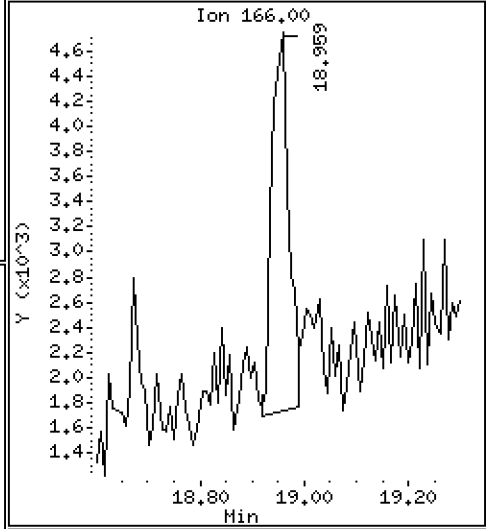
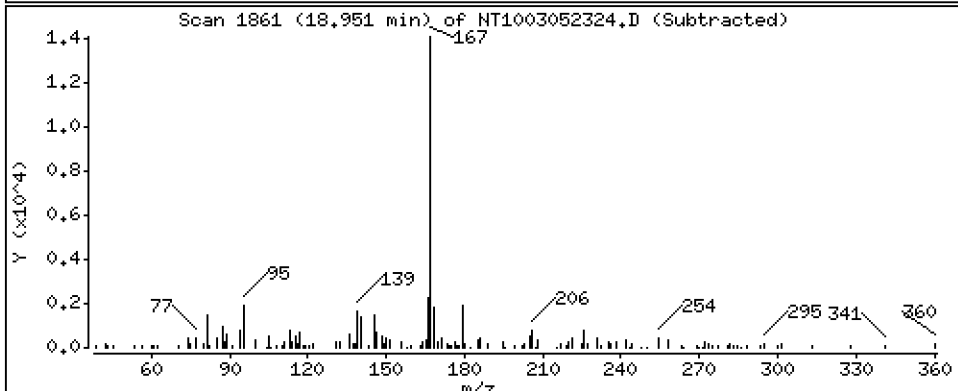
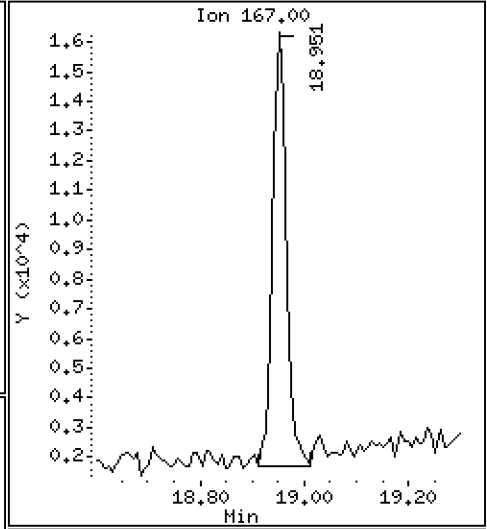
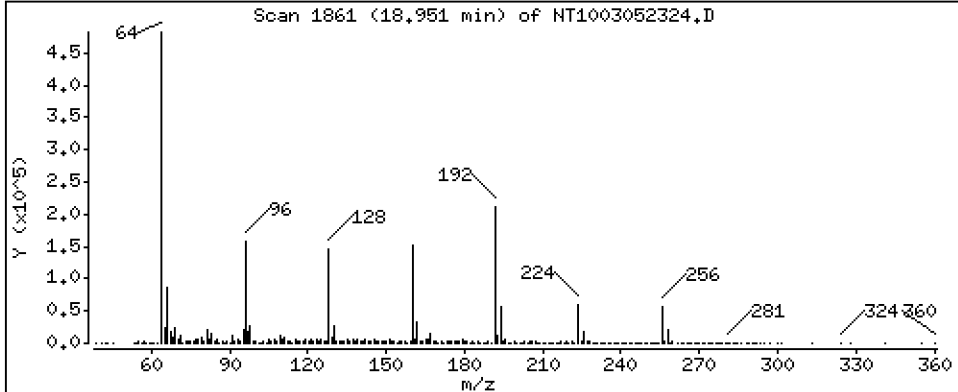
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.1268 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

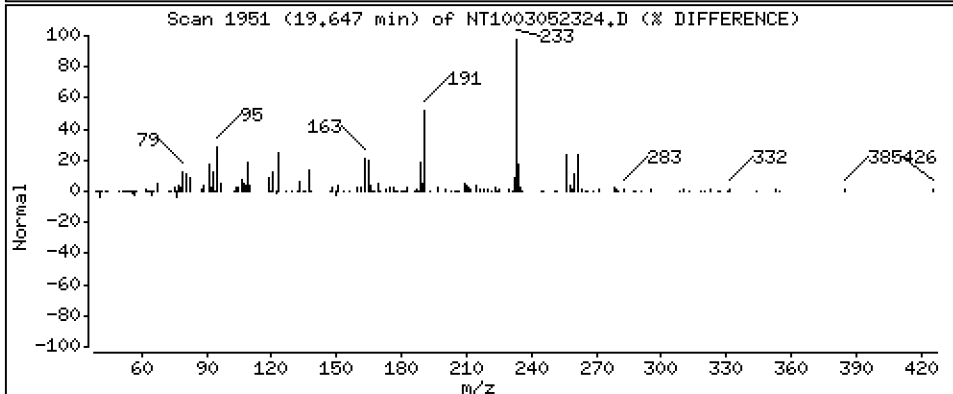
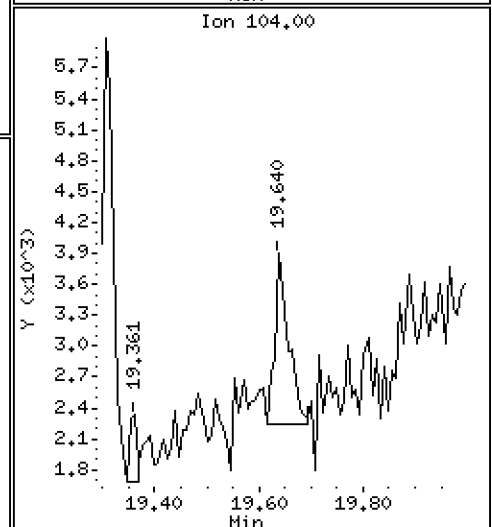
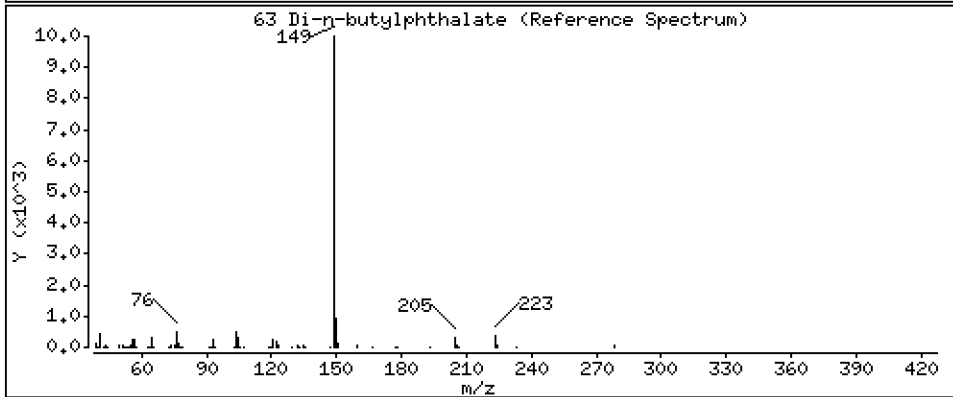
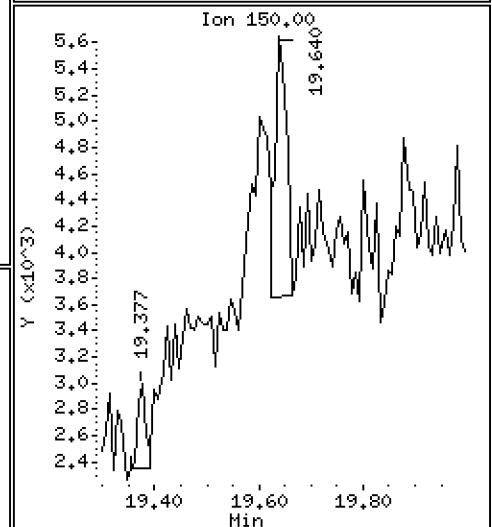
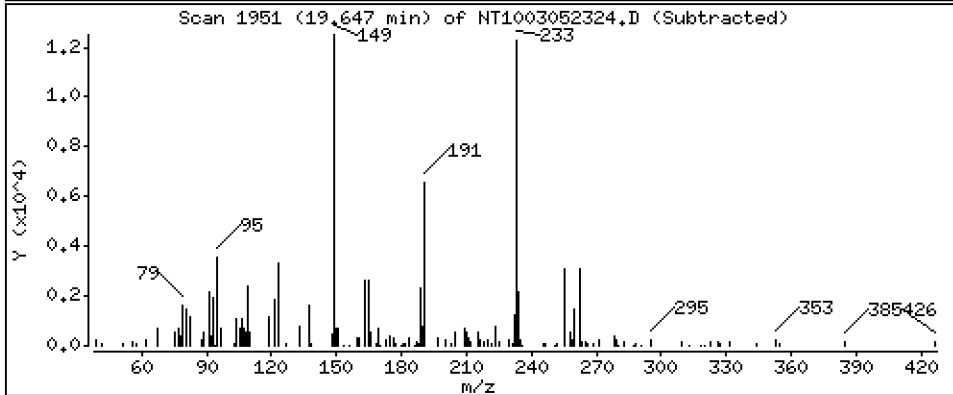
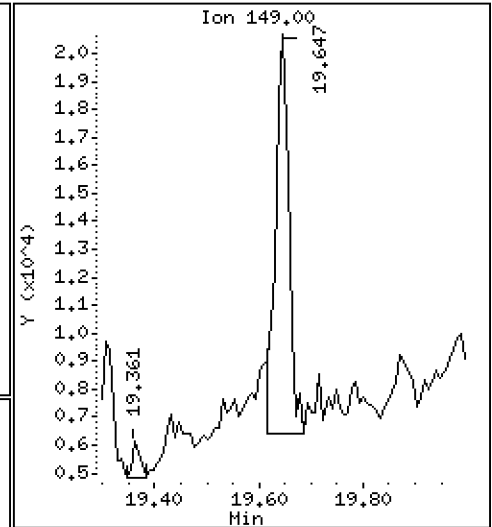
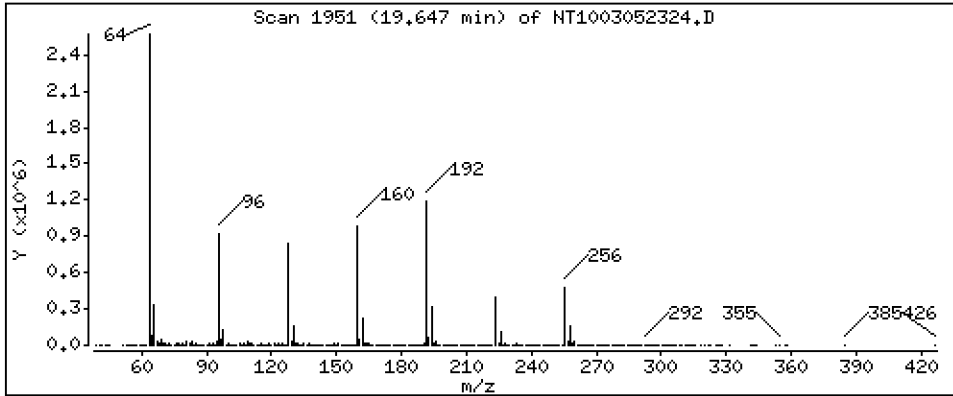
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.09096 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

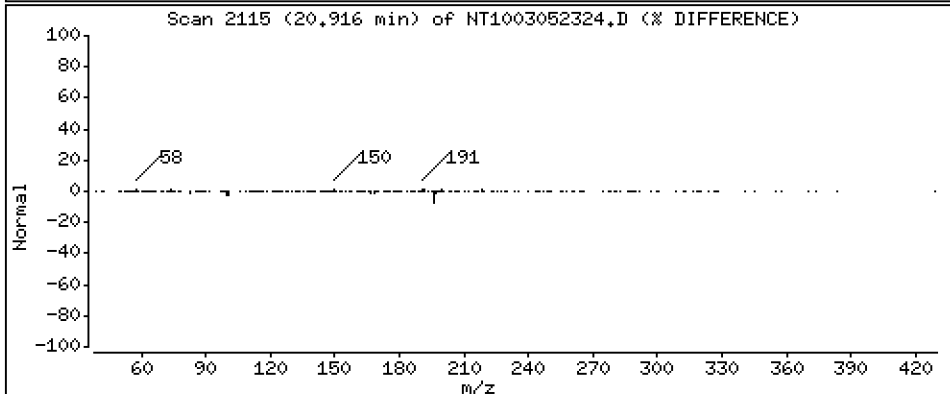
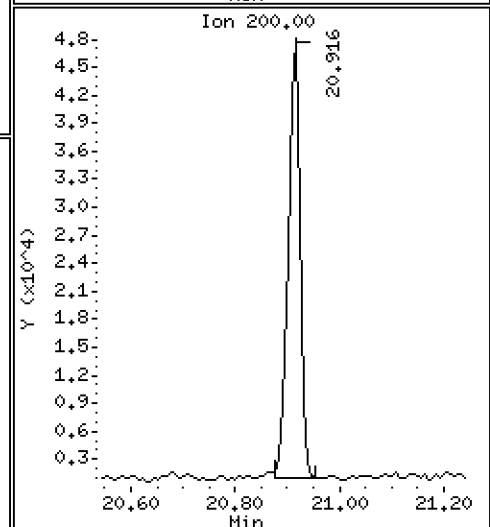
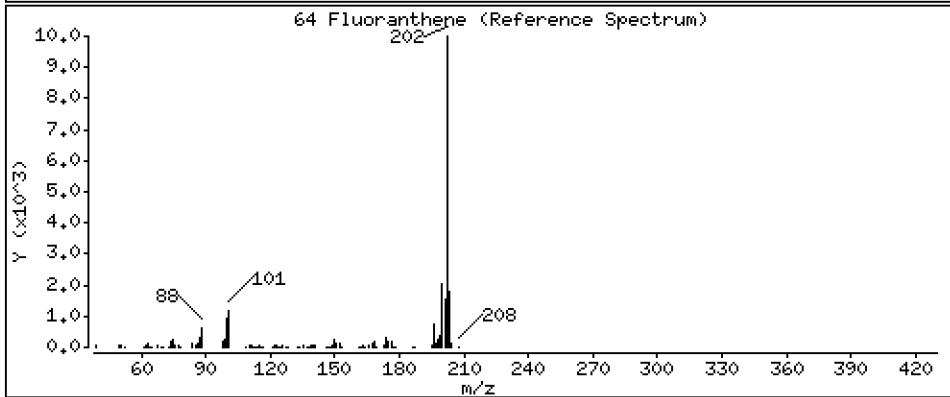
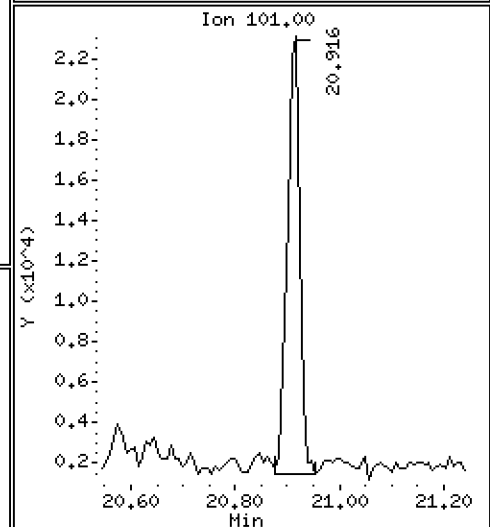
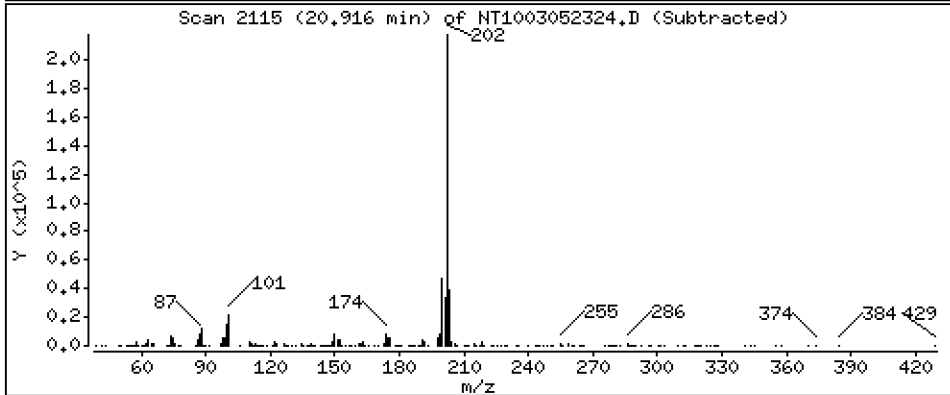
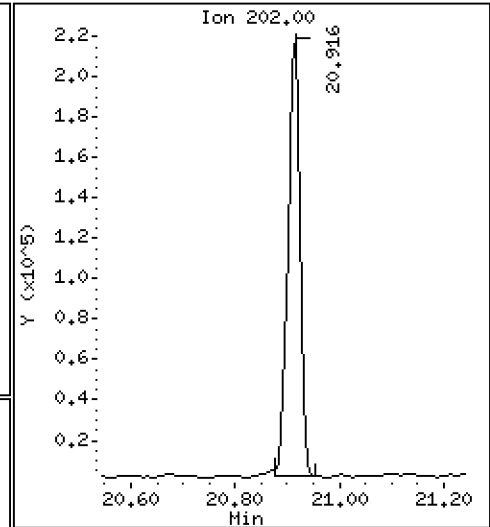
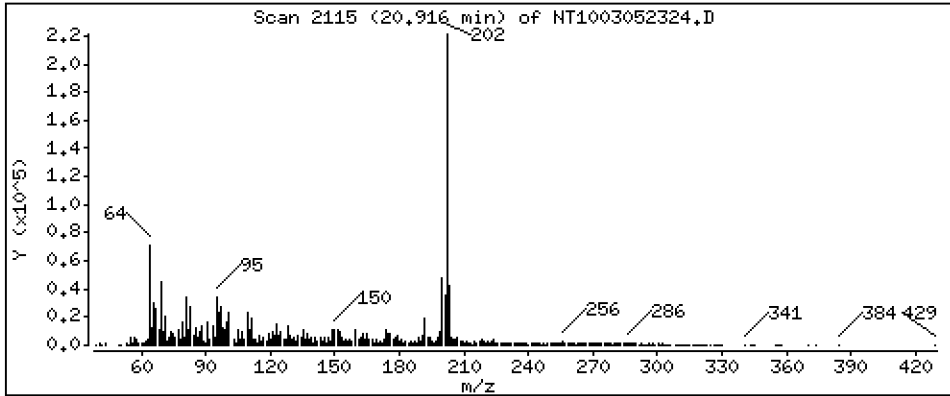
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 1,203 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

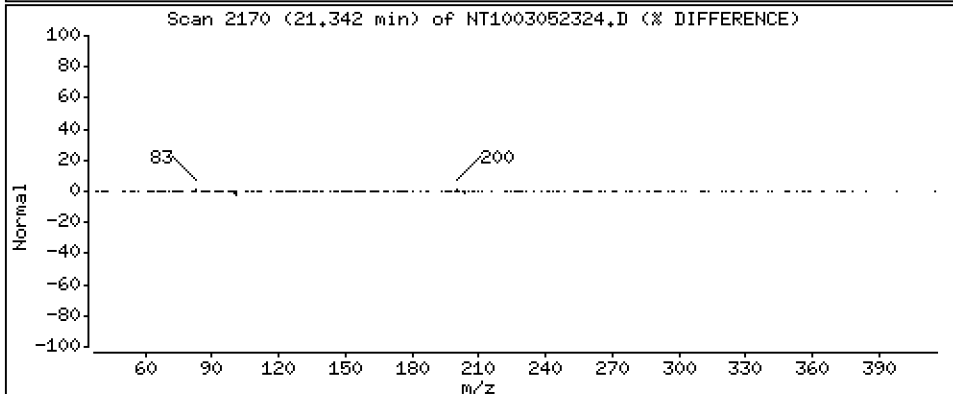
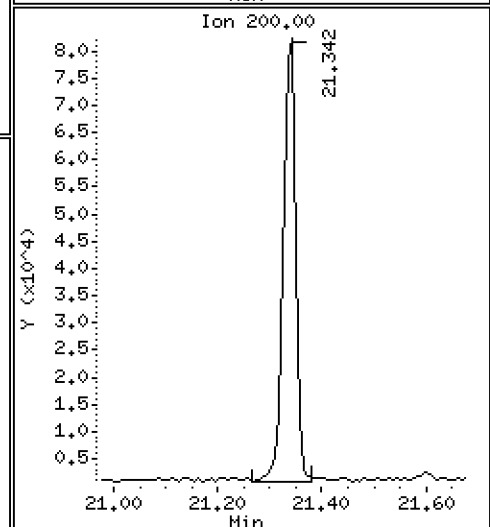
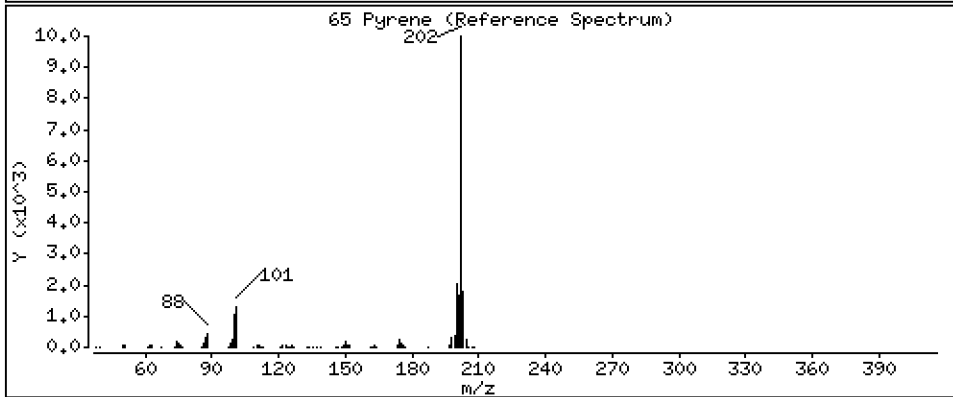
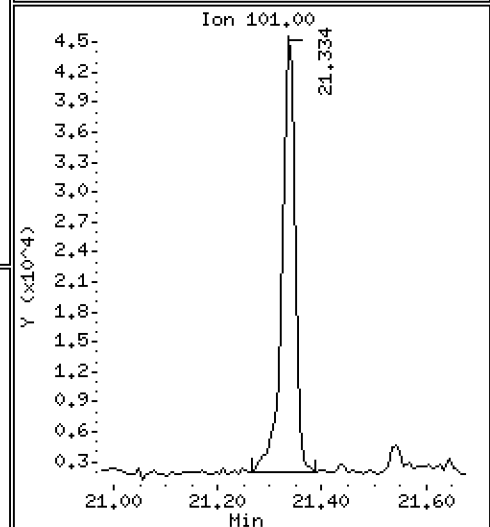
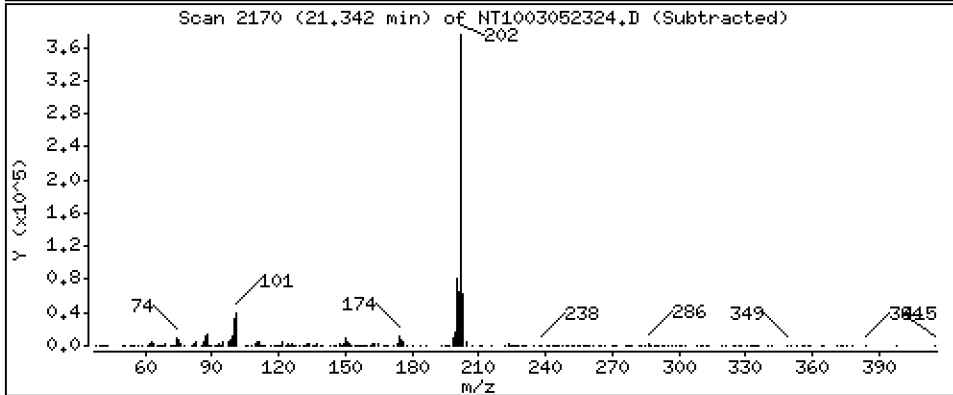
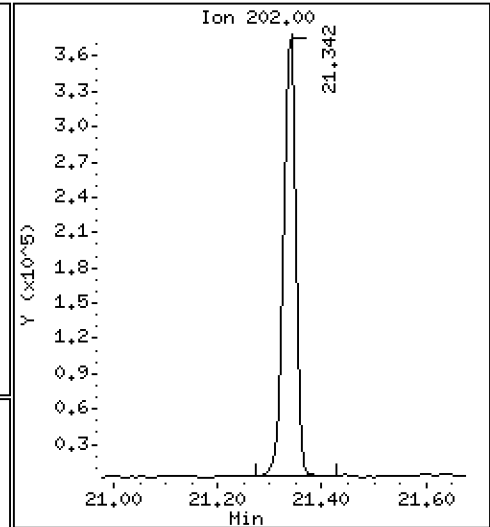
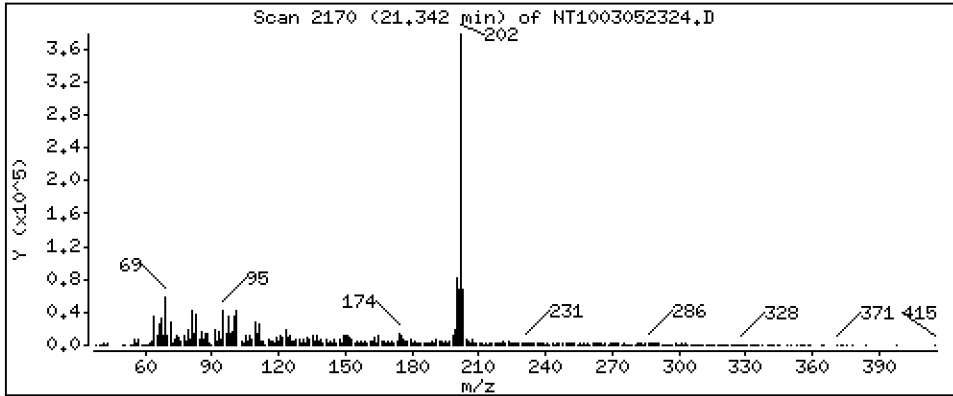
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,208 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

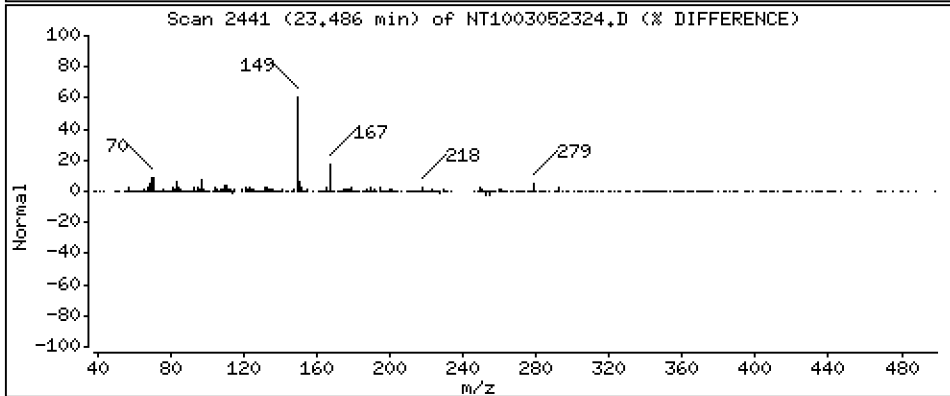
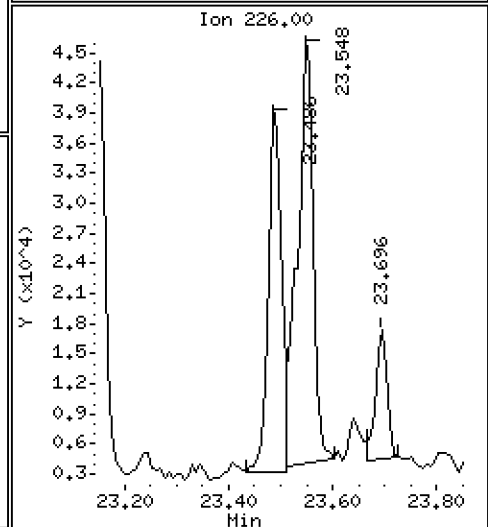
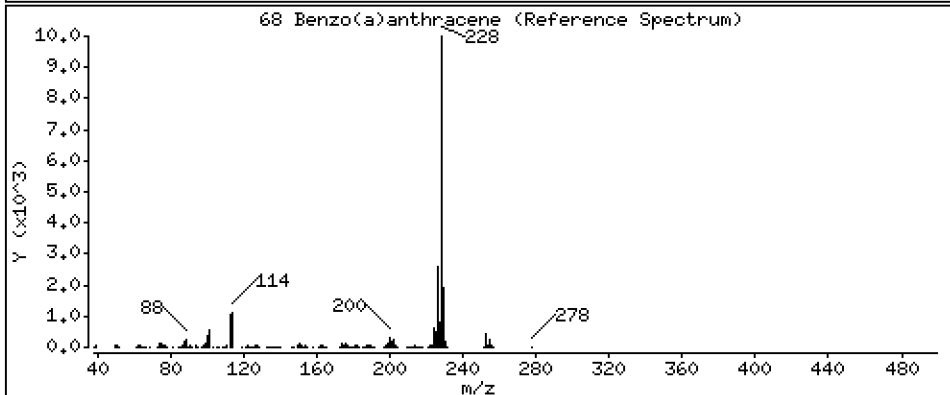
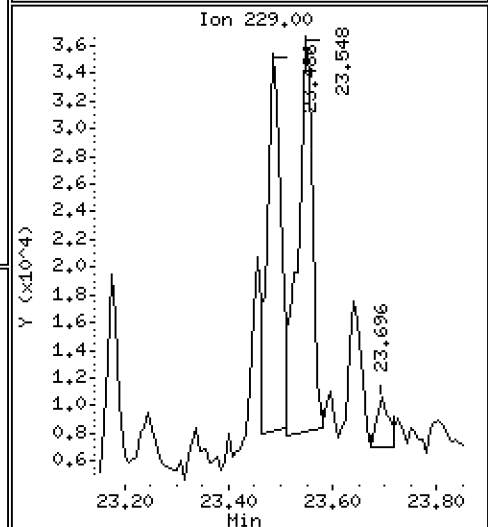
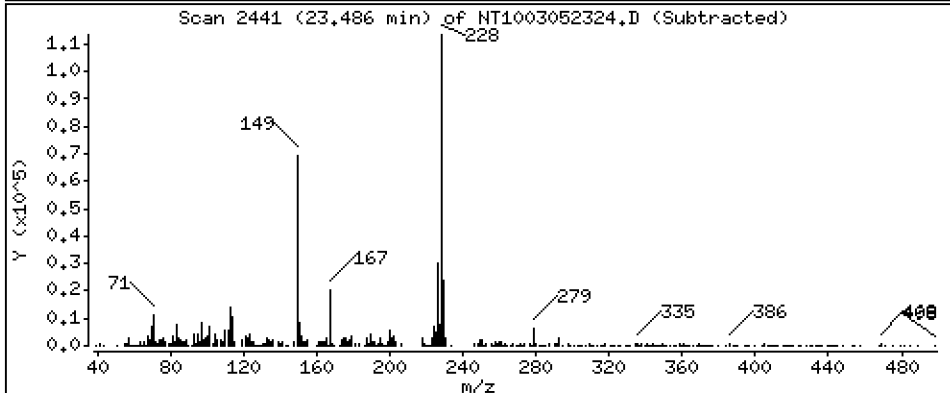
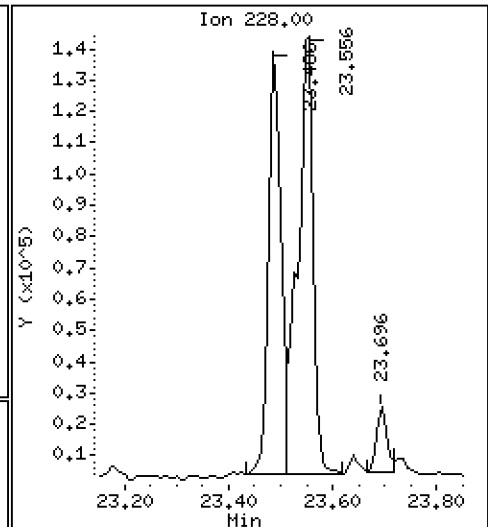
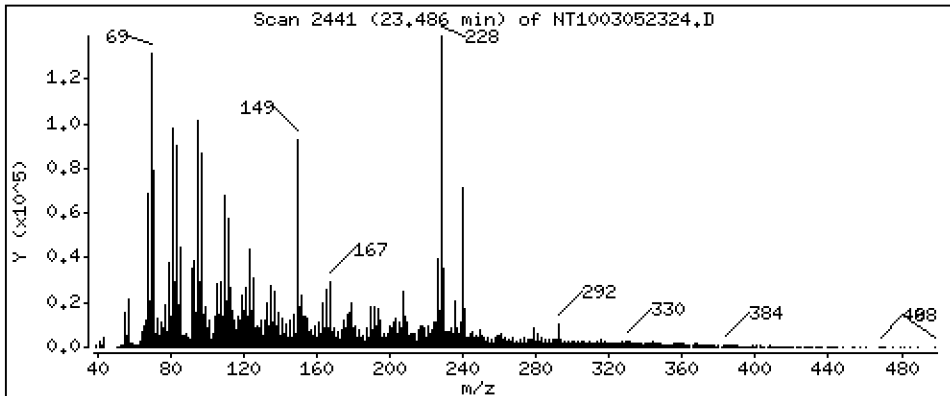
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

68 Benzo(a)anthracene

Concentration: 0.7331 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

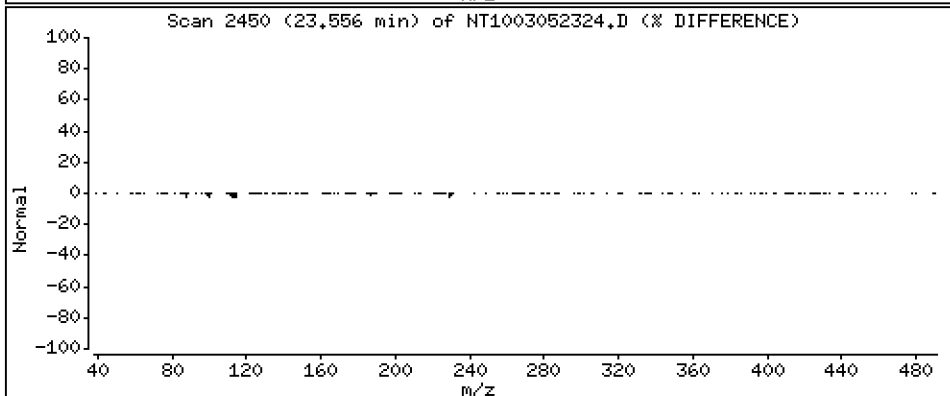
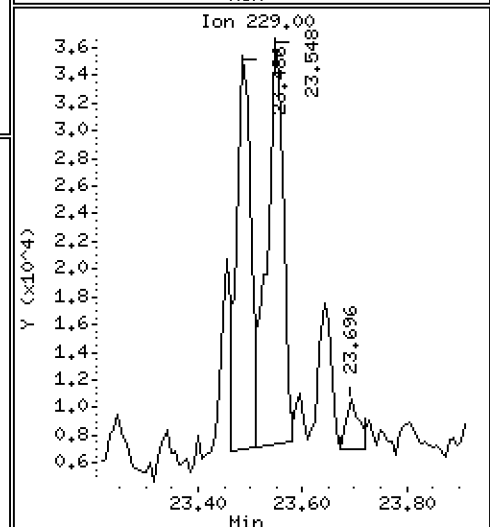
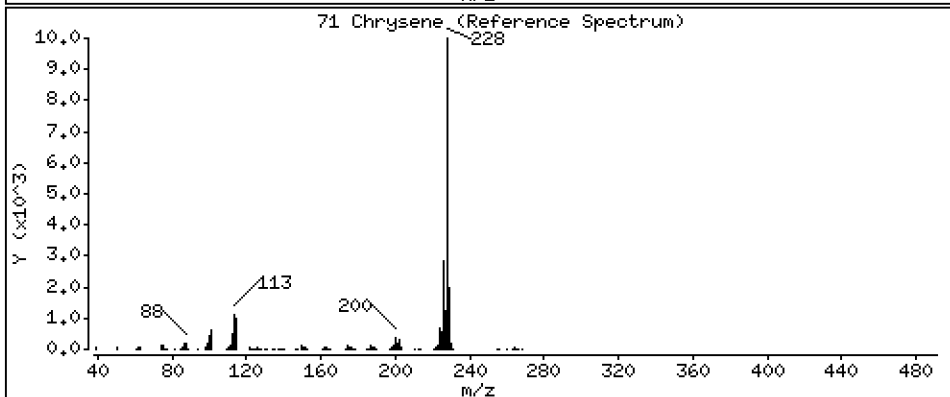
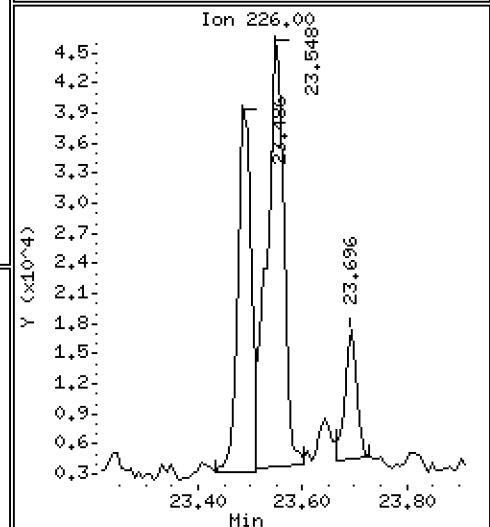
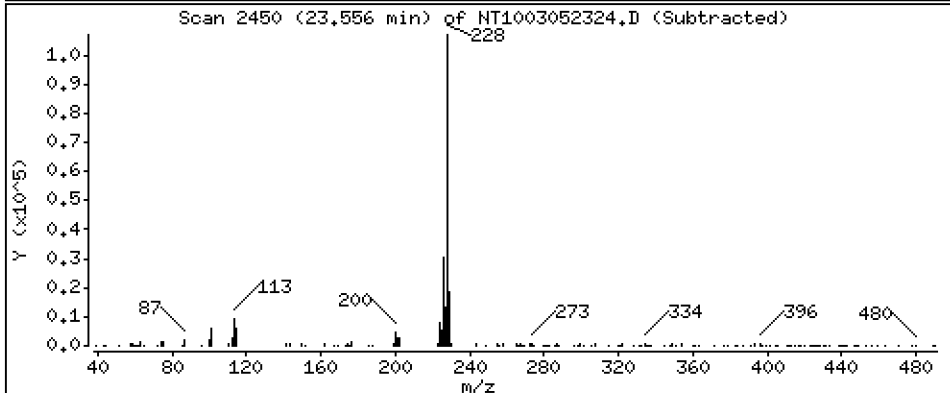
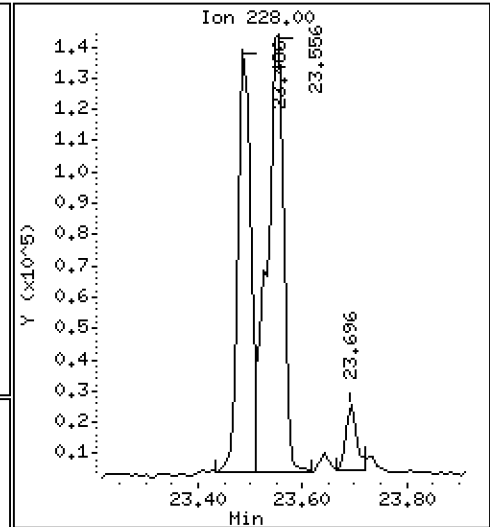
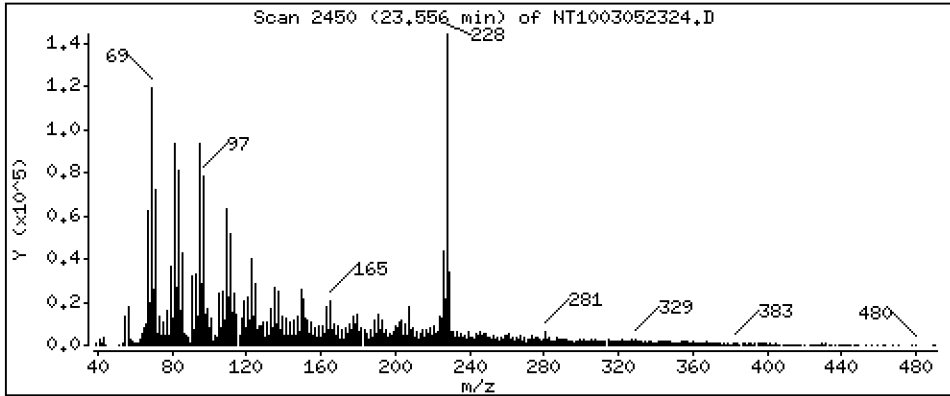
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

71 Chrysene

Concentration: 1.275 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

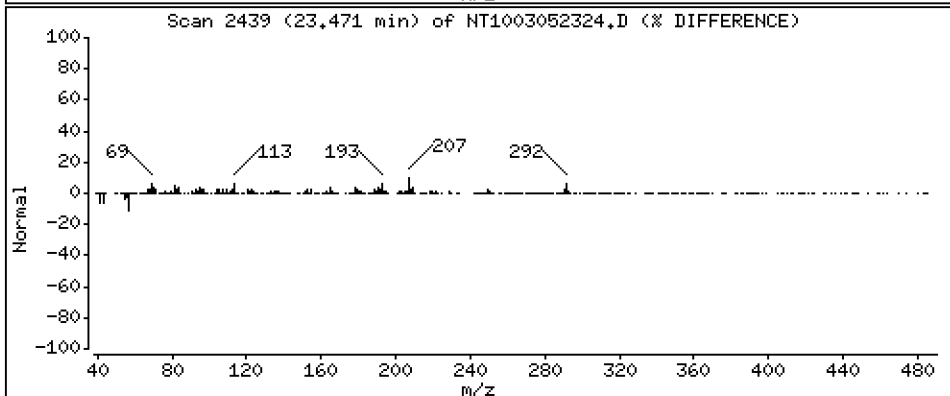
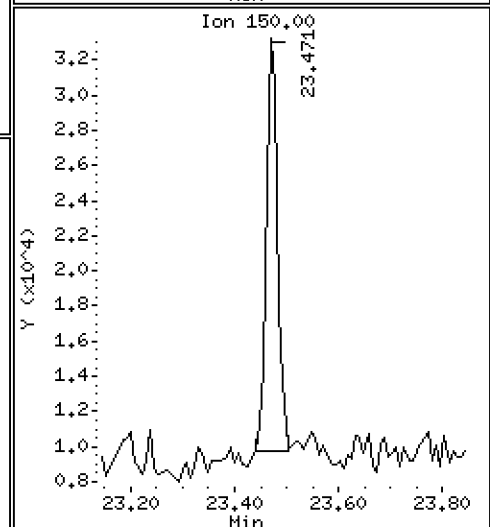
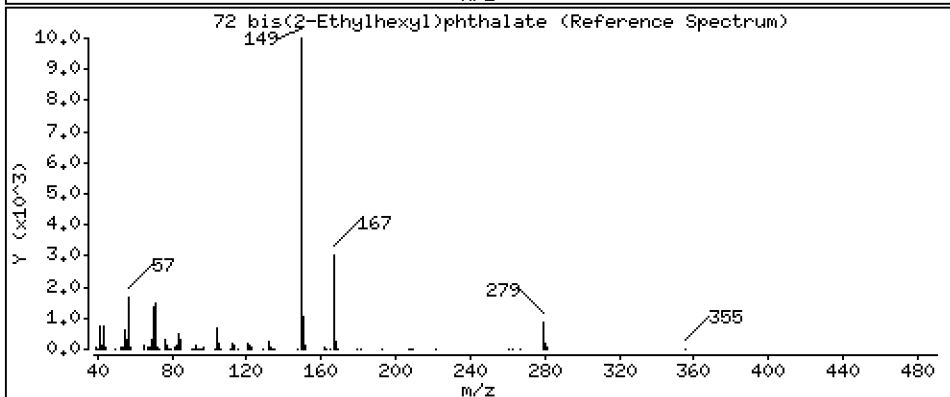
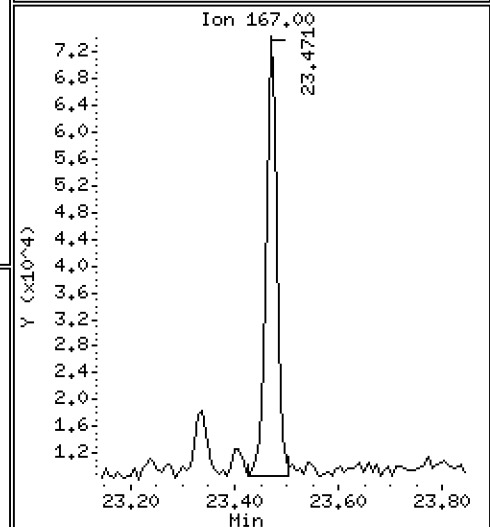
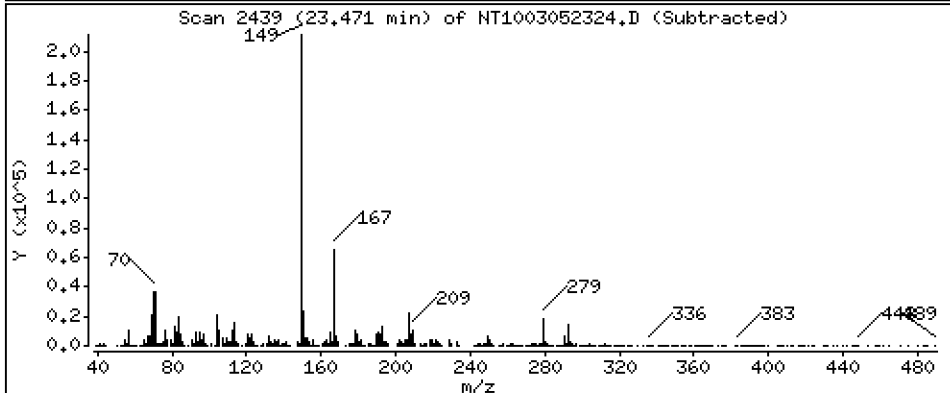
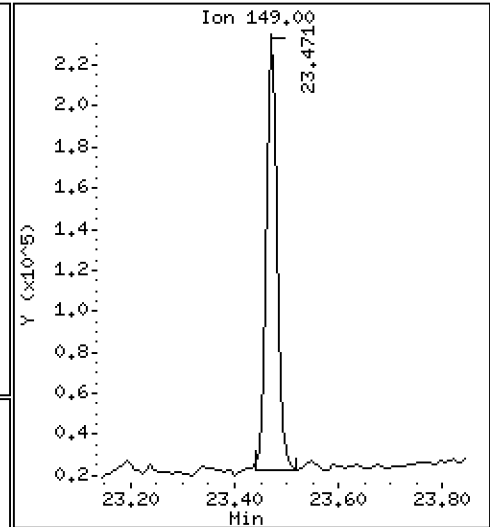
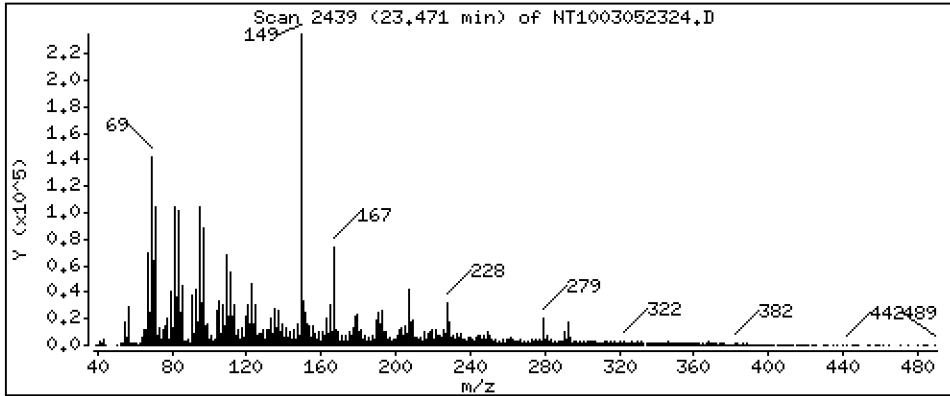
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,508 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

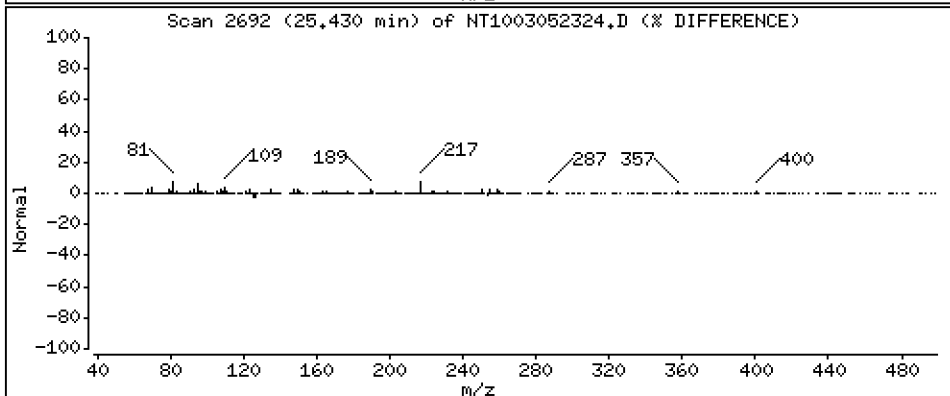
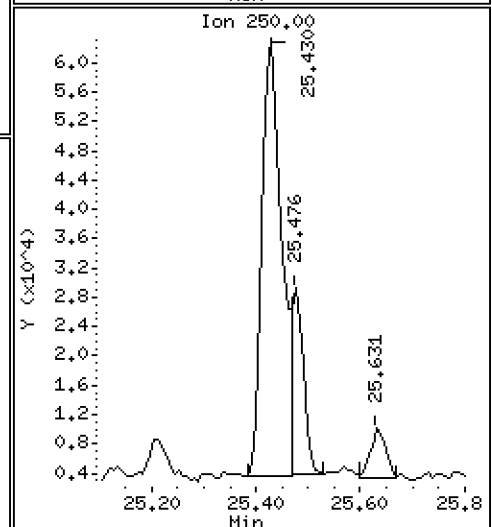
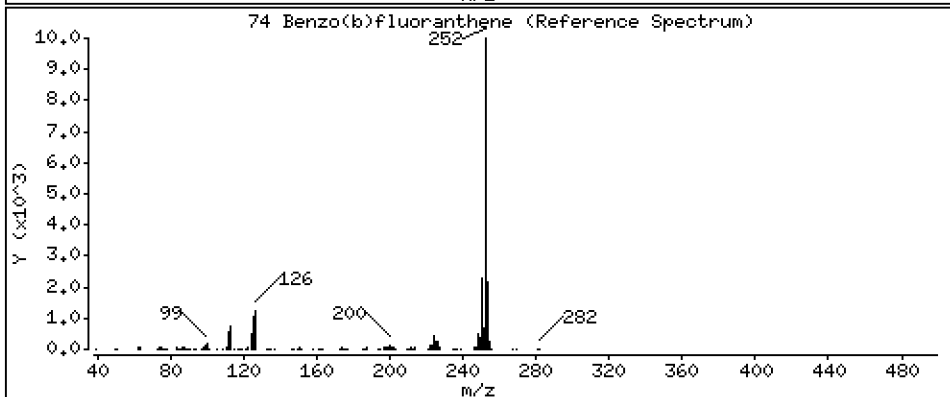
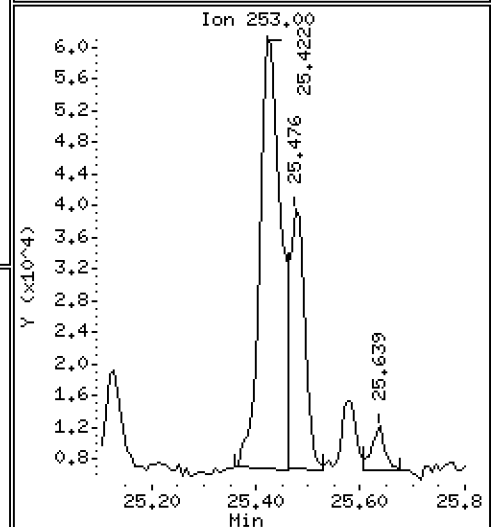
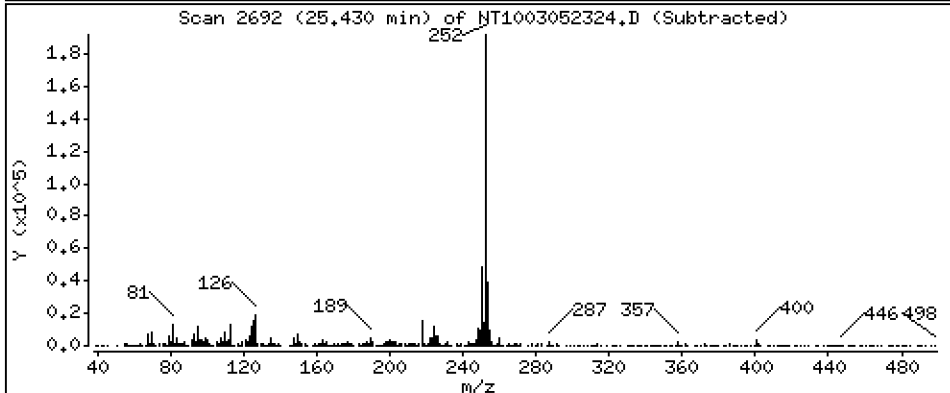
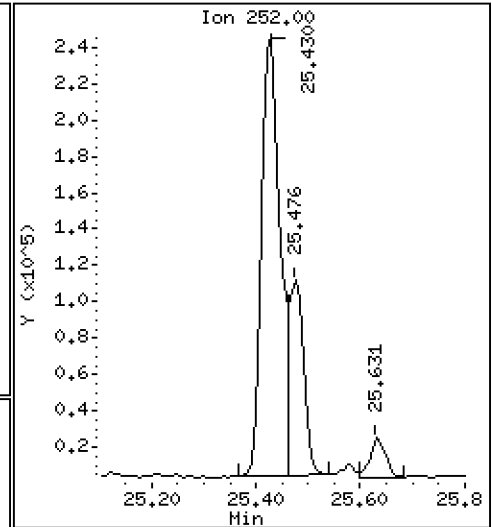
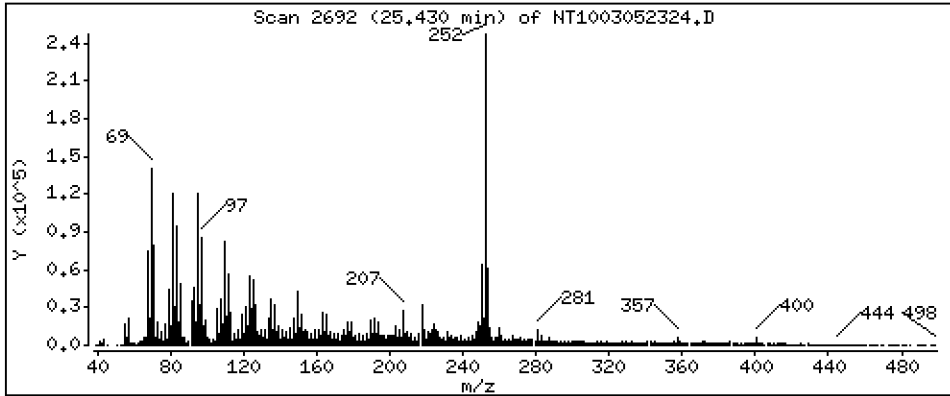
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,863 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

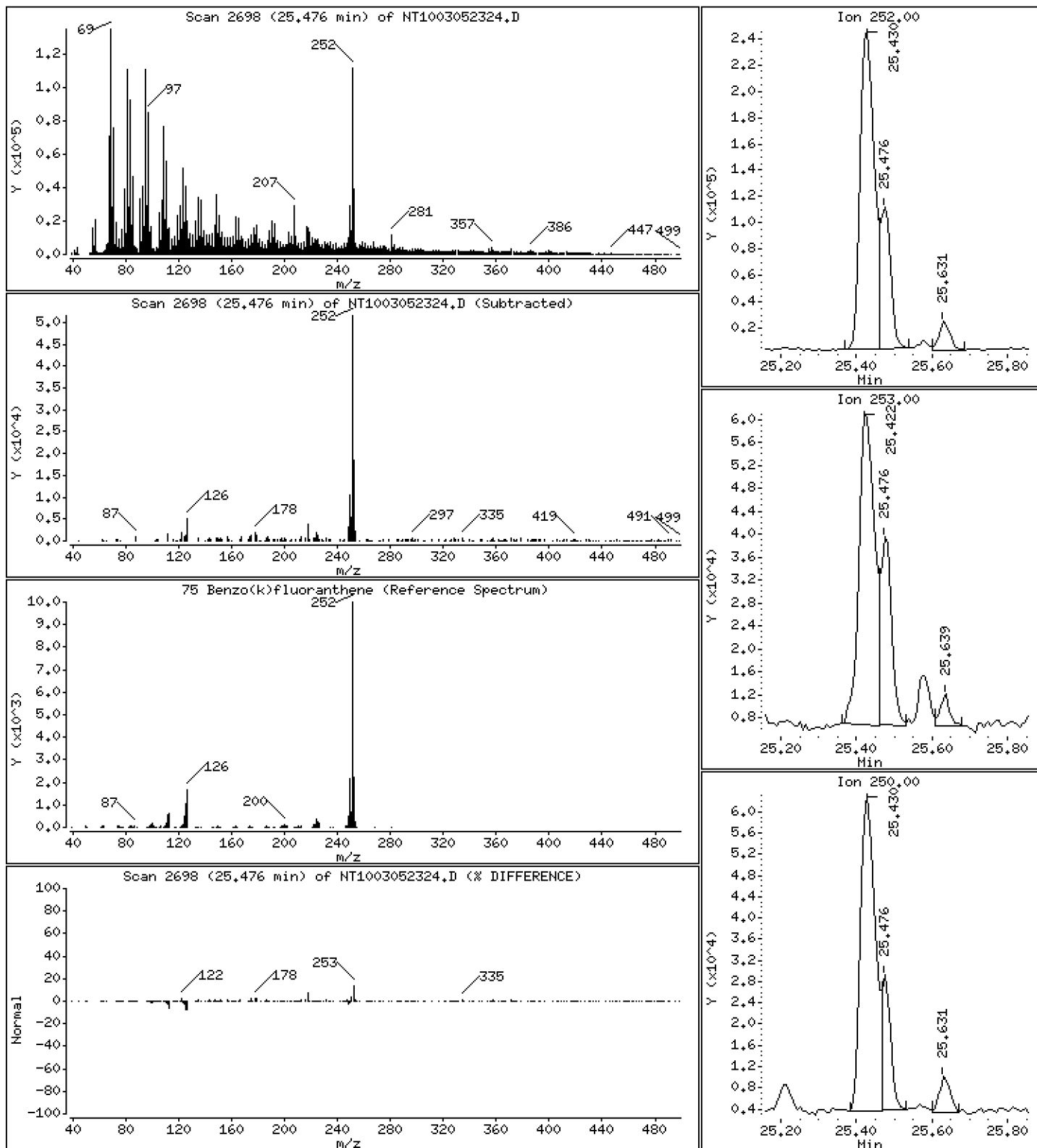
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,7374 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

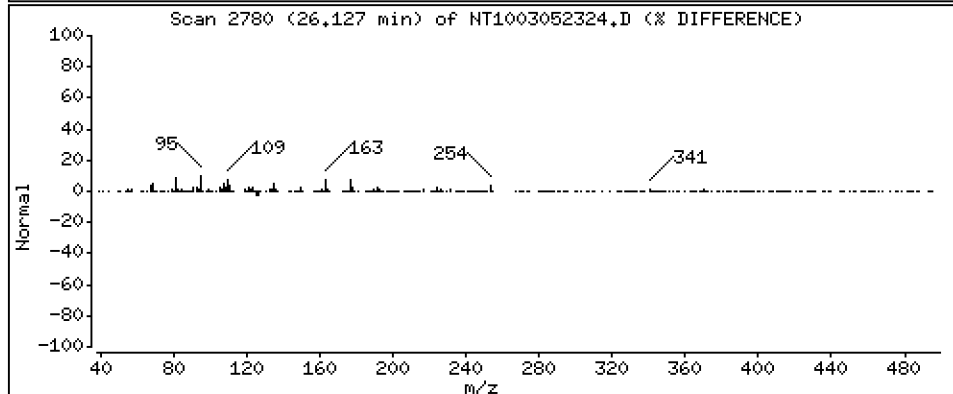
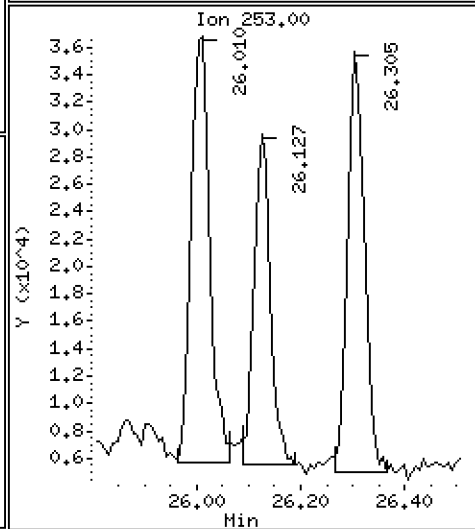
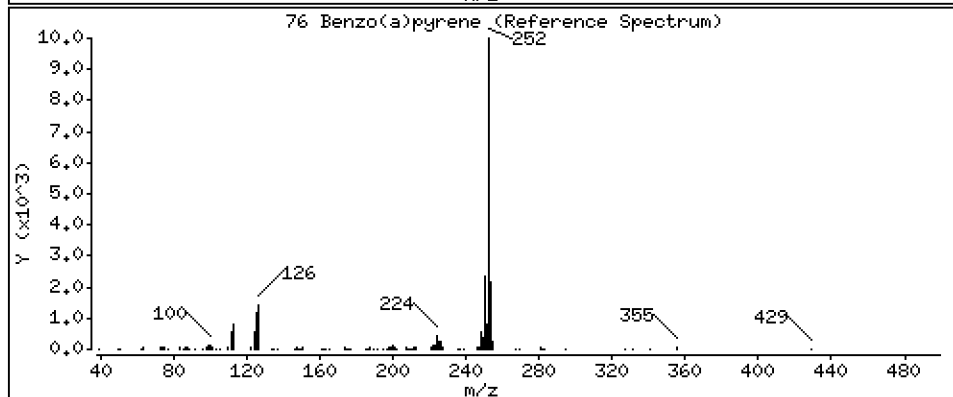
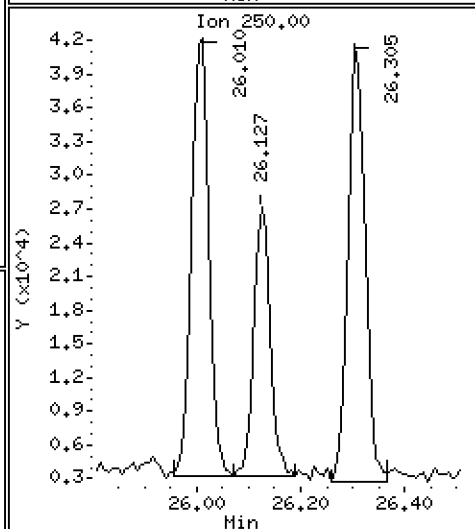
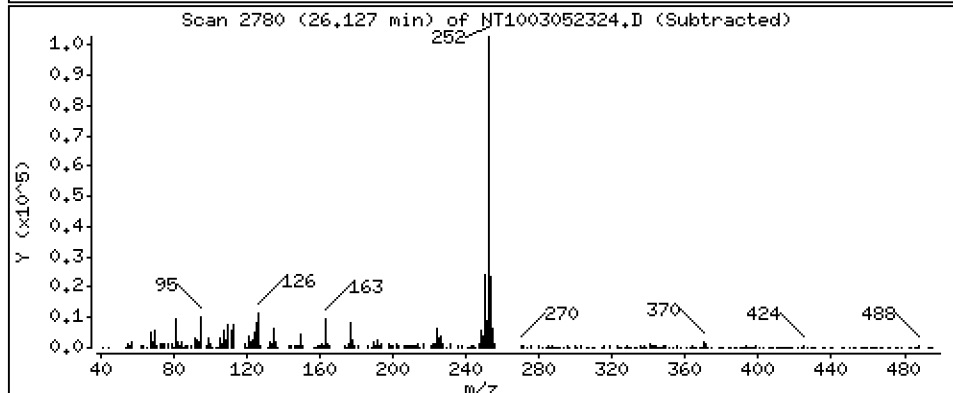
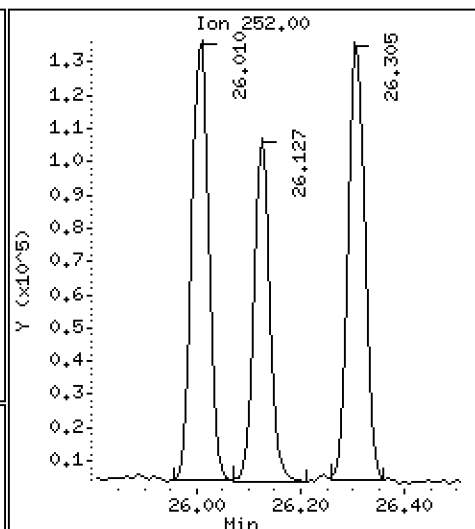
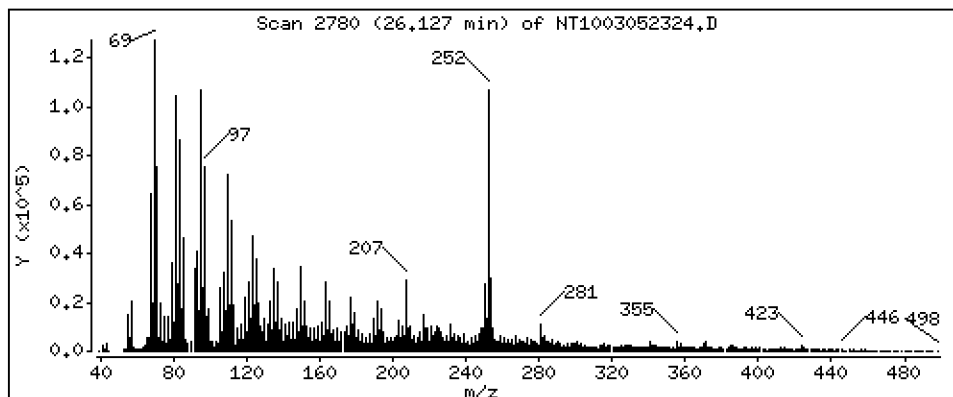
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,7722 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

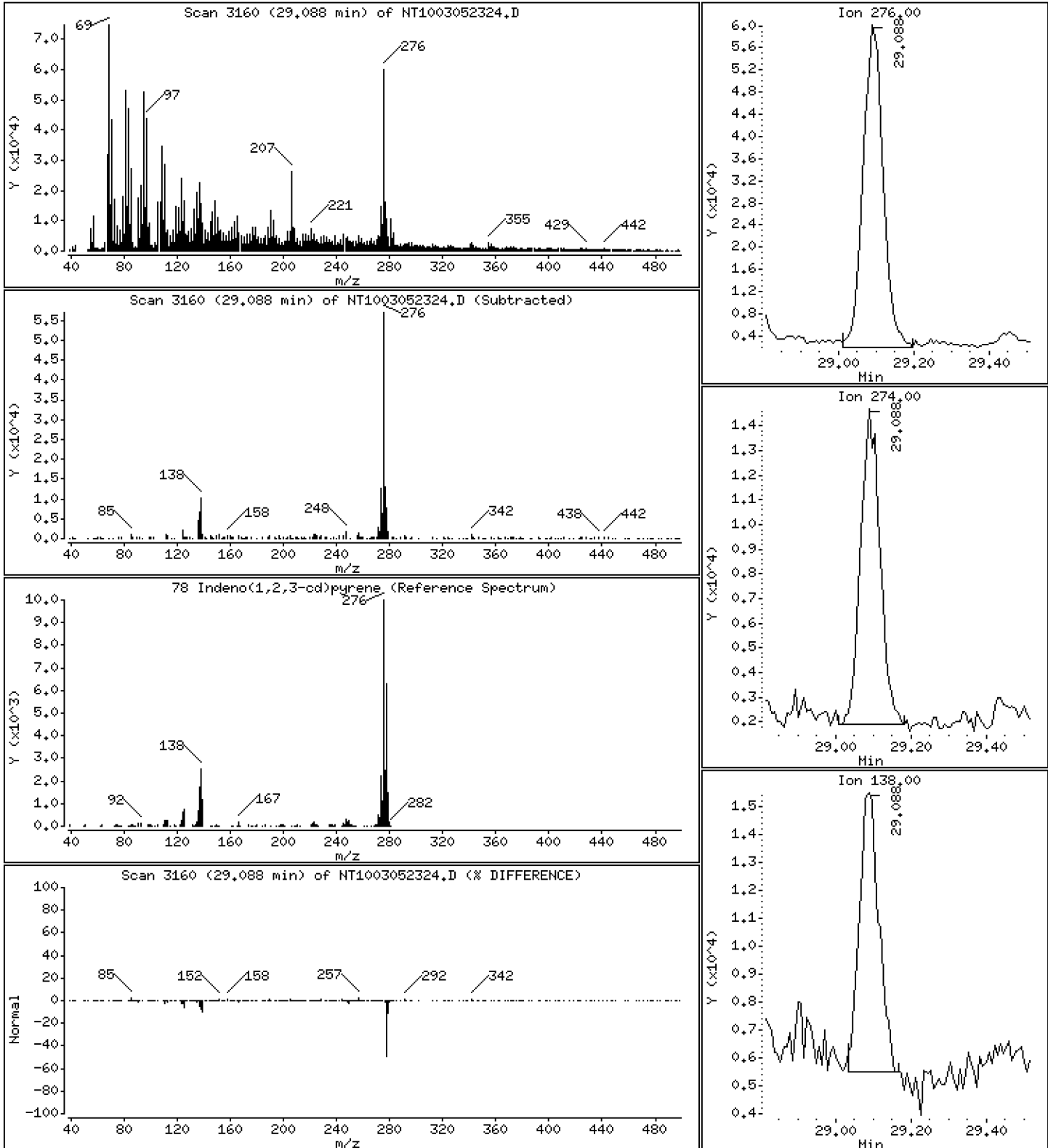
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,6202 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

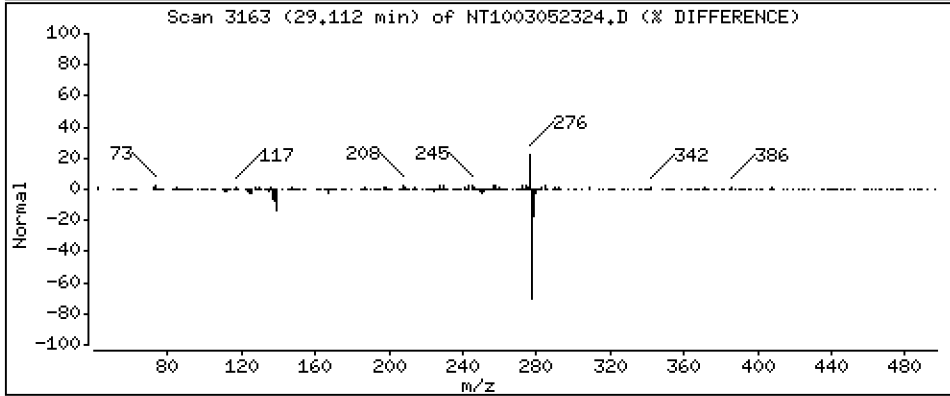
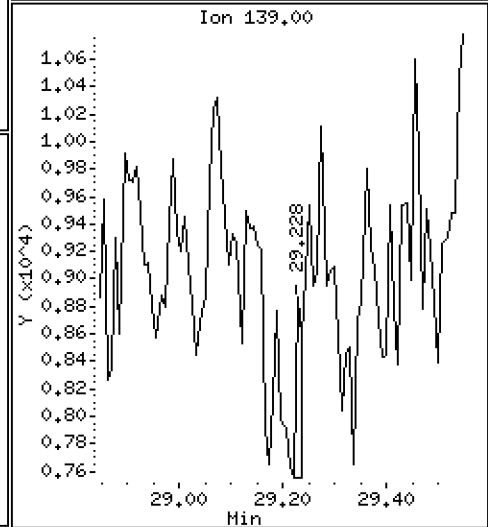
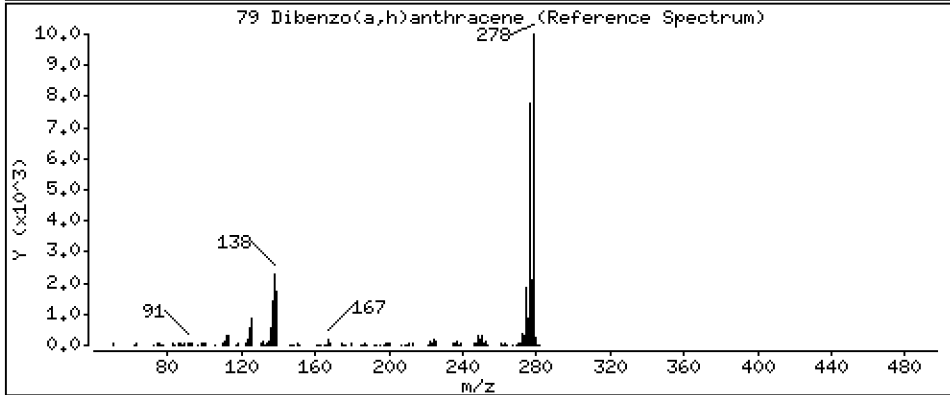
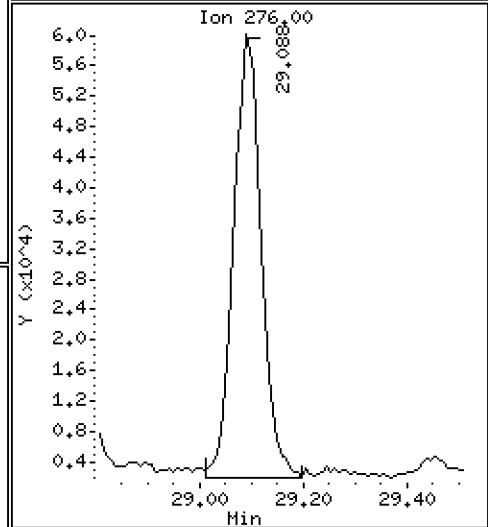
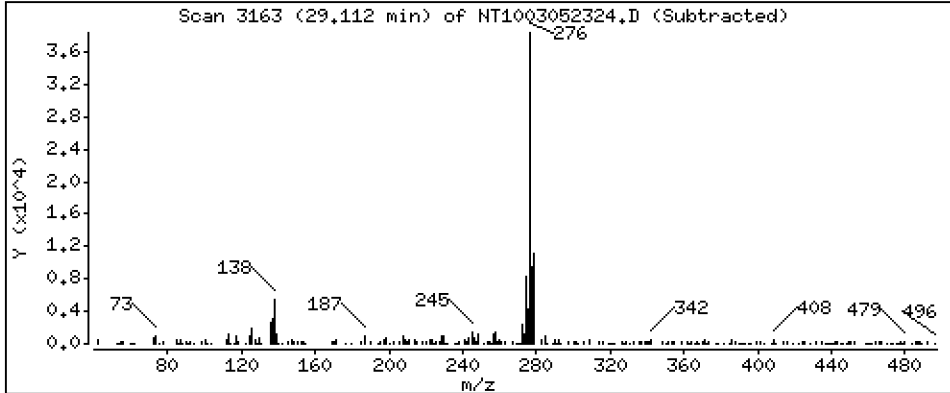
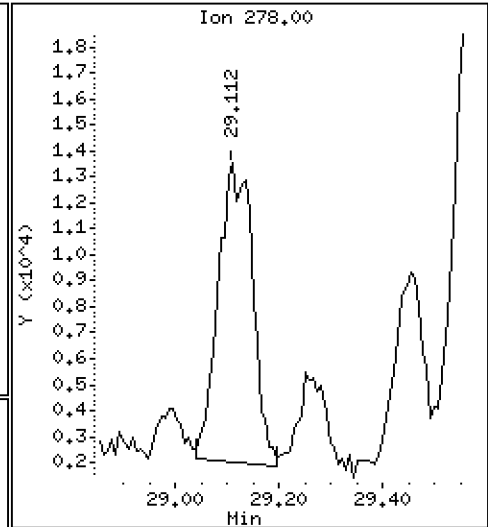
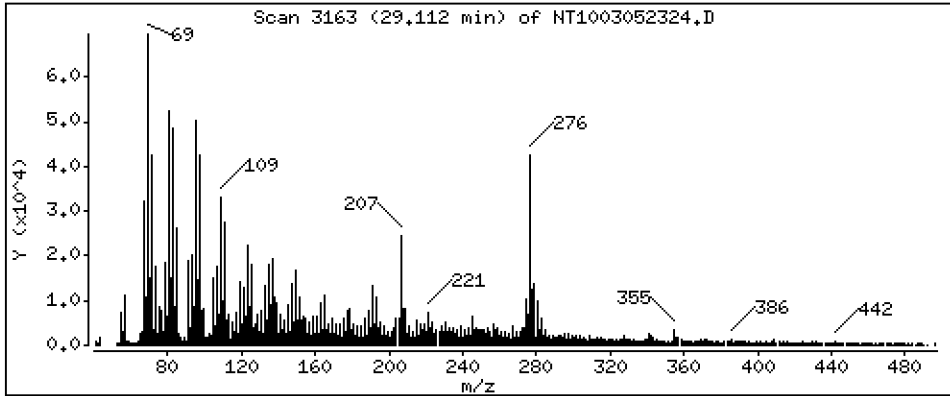
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2032 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

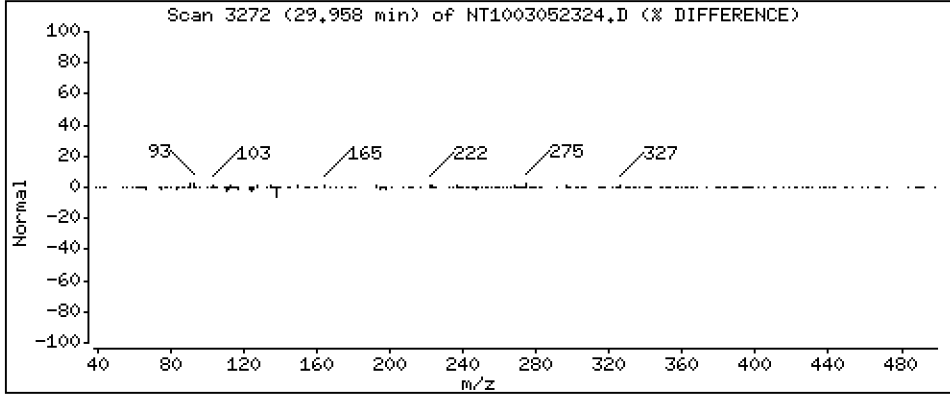
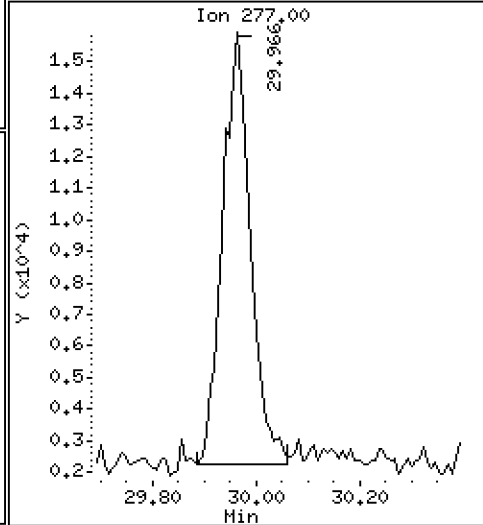
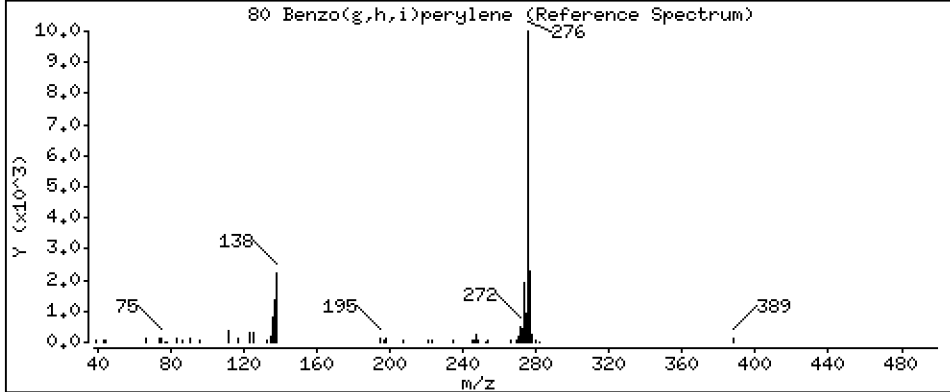
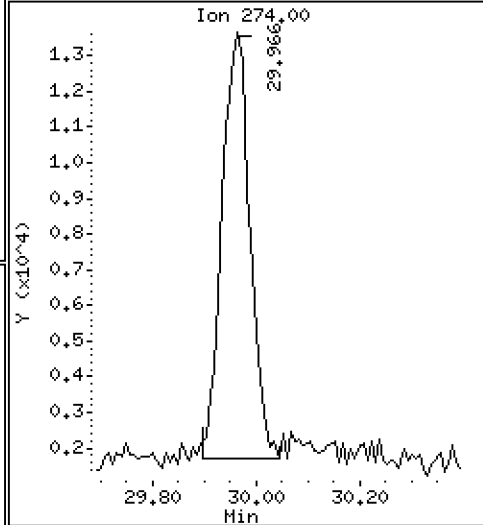
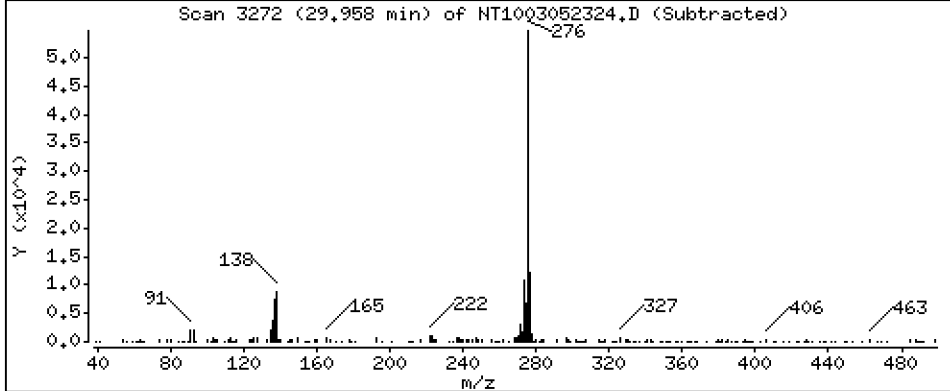
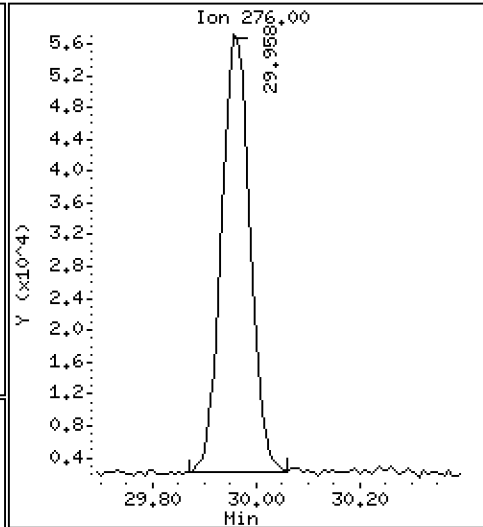
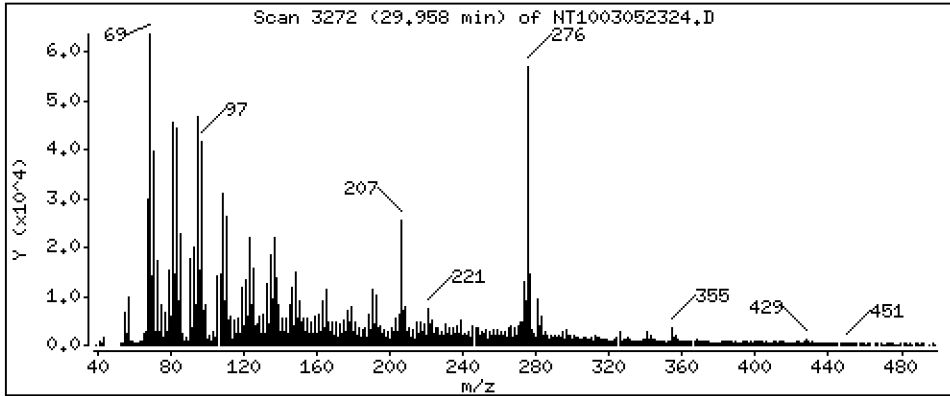
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,7560 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

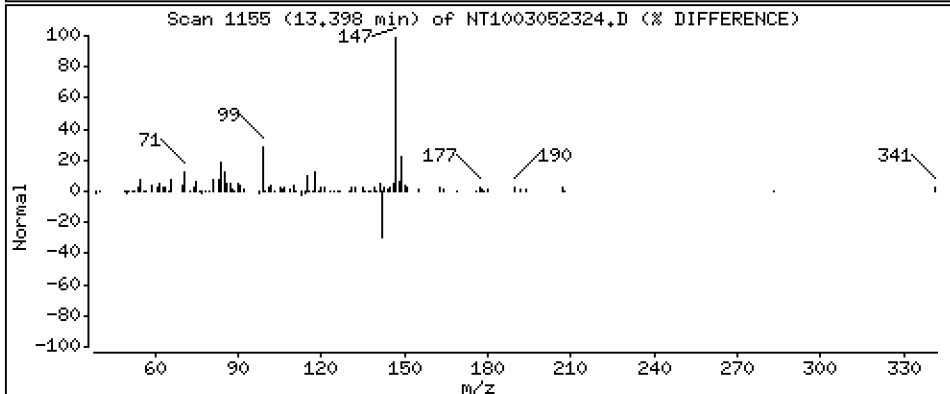
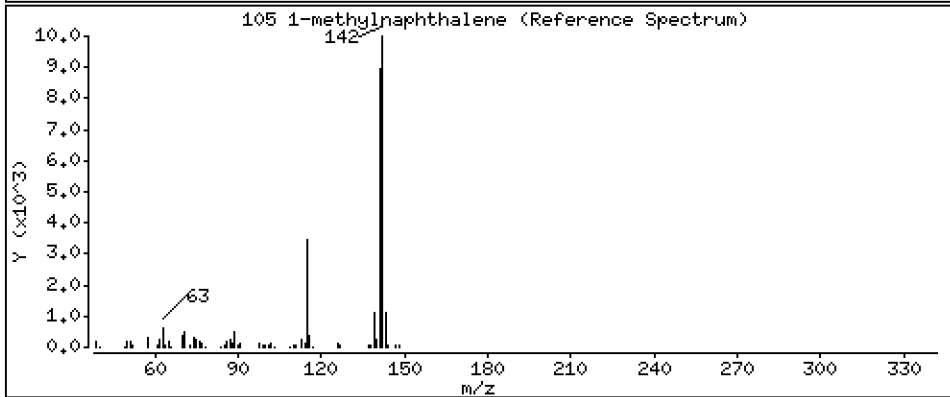
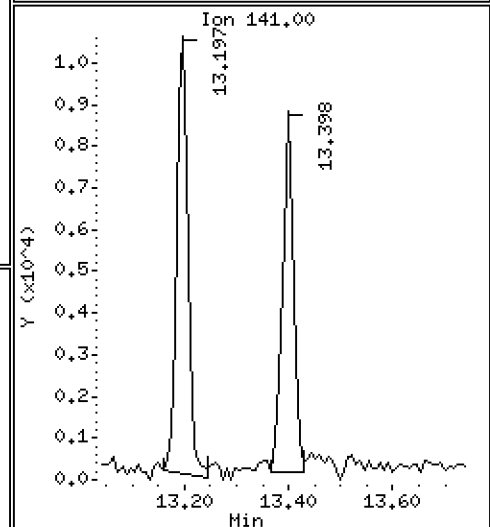
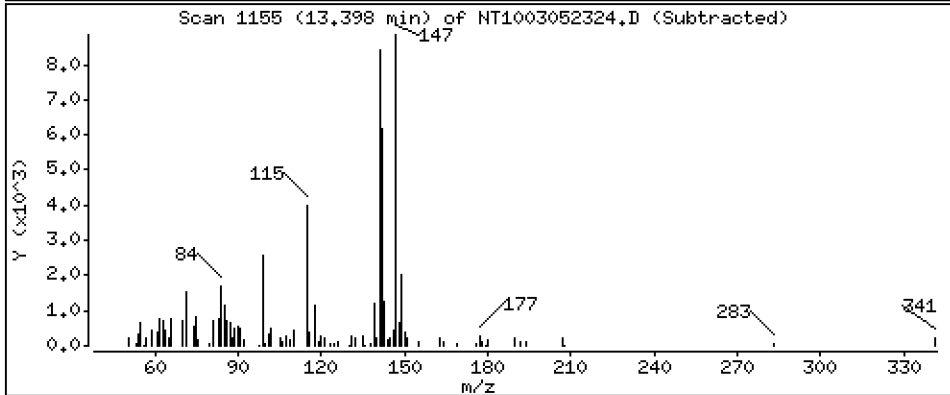
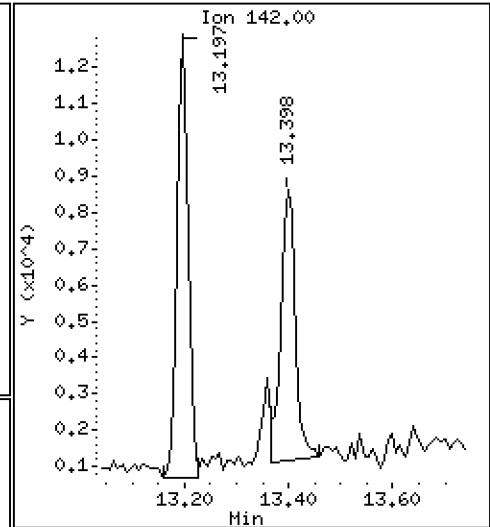
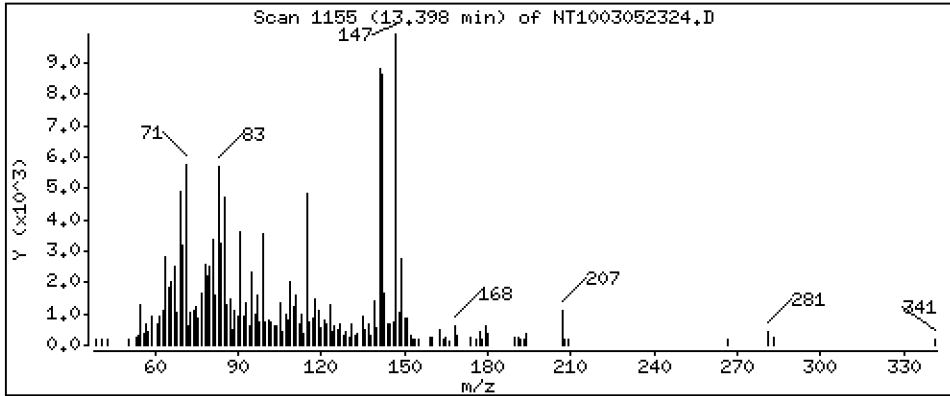
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

105 1-methylnaphthalene

Concentration: 0.09602 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

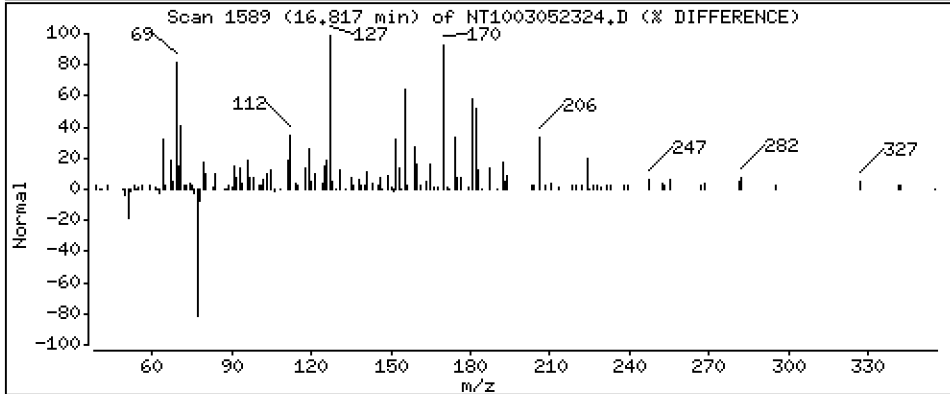
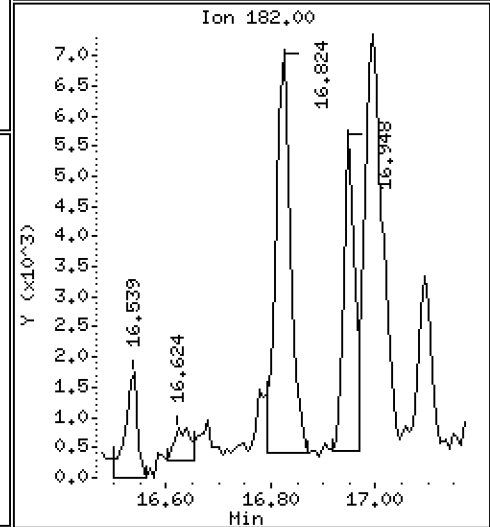
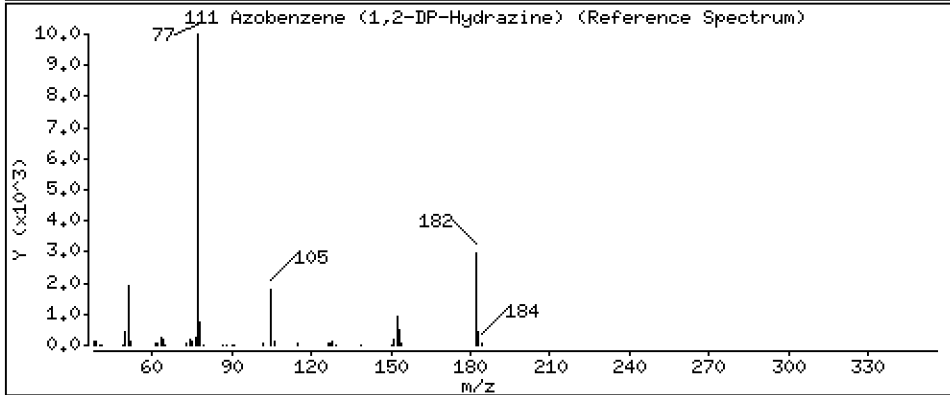
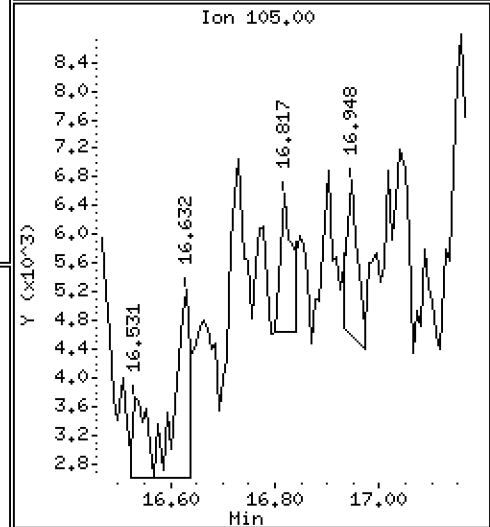
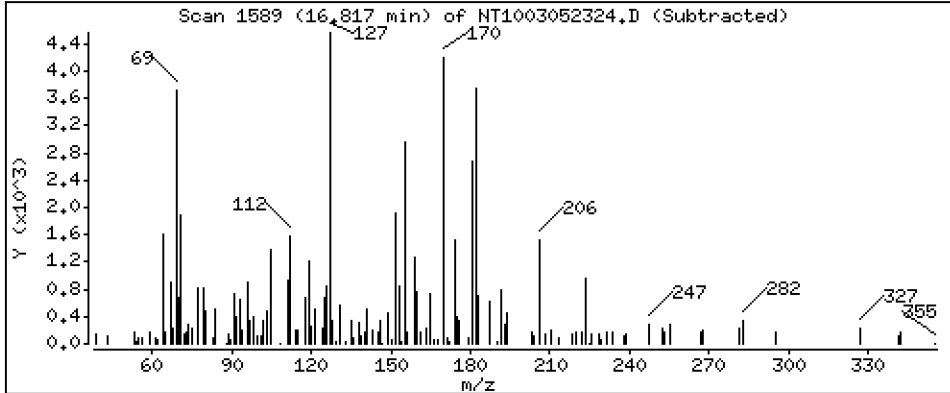
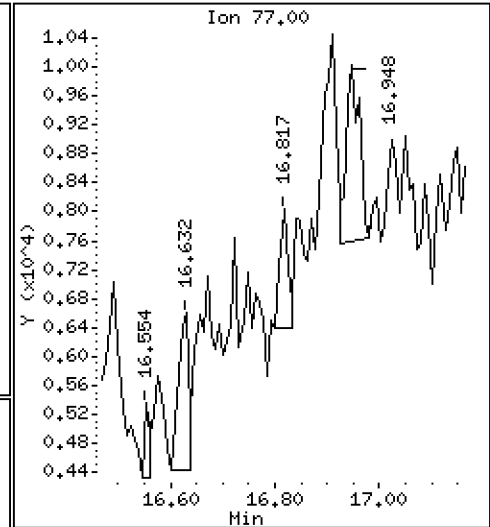
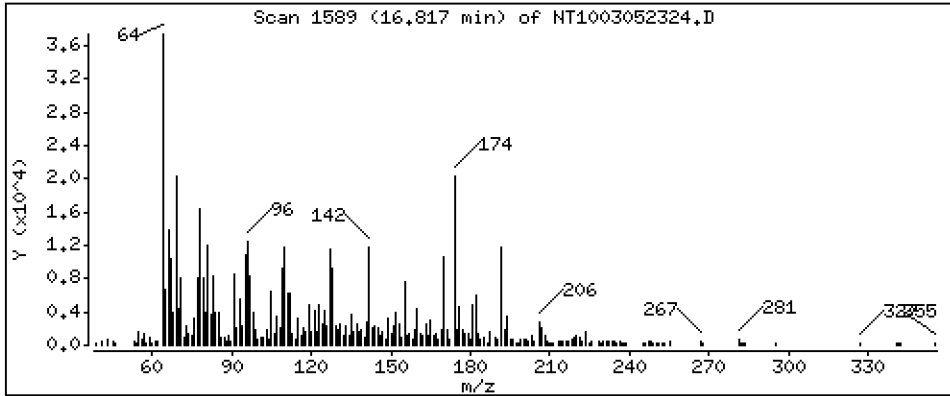
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0.006630 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

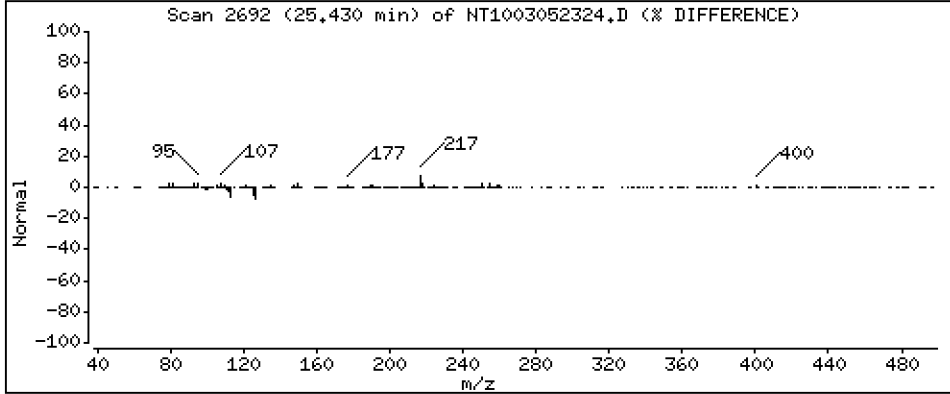
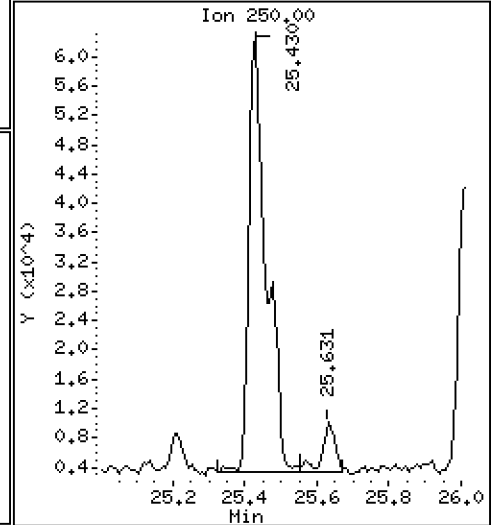
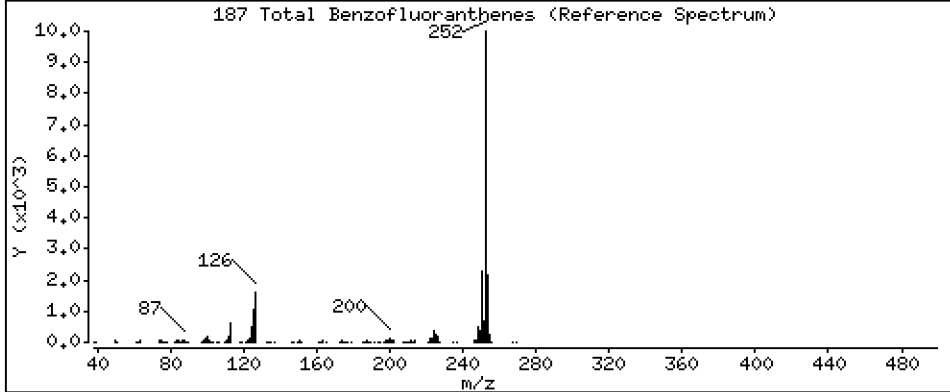
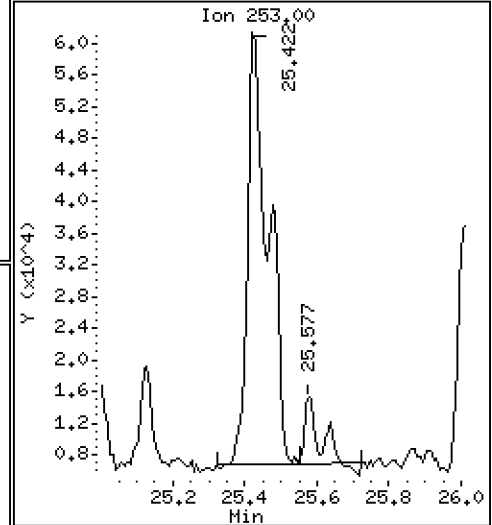
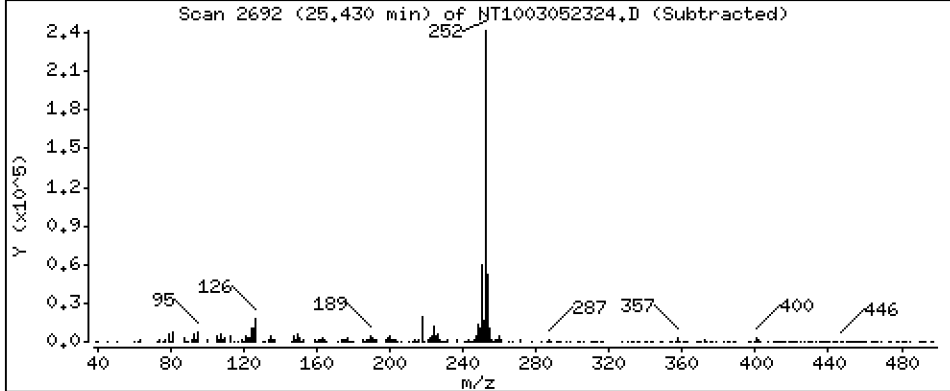
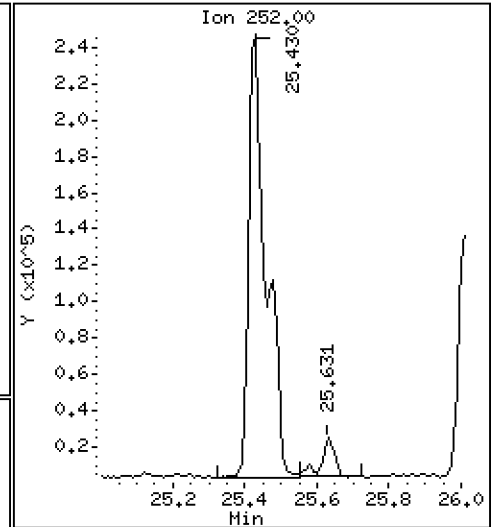
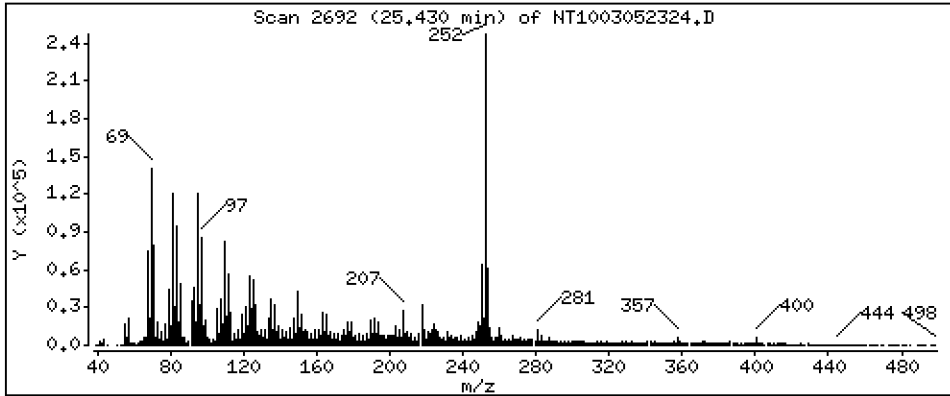
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,590 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305A.b\NT1003052324.D

Lab Smp Id: 23A0326-02

Inj Date : 06-MAR-2023 03:55

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-02

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305A.b\ABN.m

Meth Date : 27-Mar-2023 13:49 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D

Als bottle: 19

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112		6.913	6.905	(0.746)	222477	2.79430	2.794
\$ 2 Phenol-d5	99		8.528	8.512	(0.921)	463228	5.01134	5.011
3 Phenol	94		8.551	8.535	(0.923)	87319	0.88849	0.8885
\$ 5 2-Chlorophenol-d4	132		8.836	8.821	(0.954)	353589	4.48354	4.484
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.247	(1.000)	253055	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.542	(1.031)	208729	3.54252	3.543
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.511	9.487	(1.027)	11551	0.22913	0.2291
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.736	(1.050)	10592	0.42304	0.4230
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.961	(1.079)	6803	0.07123	0.07123
\$ 18 Nitrobenzene-d5	82		10.318	10.302	(0.878)	413130	4.11005	4.110
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.171	11.205	(0.950)	17953	0.33600	0.3360 (M)
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.757	11.734	(1.000)	915691	4.00000	
28 Naphthalene	128		11.796	11.780	(1.003)	40494	0.17230	0.1723
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.181	(1.122)	19101	0.11504	0.1150
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.939	13.931	(0.908)	733456	4.16593	4.166
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163		14.775	14.767	(0.963)	6038	0.03788	0.03788
40 Acenaphthylene	152		15.061	15.054	(0.981)	25841	0.10845	0.1084
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.348	15.340	(1.000)	493607	4.00000	
43 3-Nitroaniline	138		15.286	15.255	(0.996)	978	0.02433	0.02433
44 Acenaphthene	153		15.417	15.409	(1.005)	11665	0.08117	0.08117
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168		15.780	15.773	(1.028)	24685	0.11574	0.1157
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.237	16.244	(1.058)	17558	0.10397	0.1040
49 Fluorene	166		16.492	16.492	(1.075)	18754	0.10569	0.1057
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.994	16.994	(1.107)	60025	1.95614	1.956
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284		17.627	17.627	(0.955)	180	0.00300	0.003004
58 Pentachlorophenol	266		18.030	18.045	(0.977)	7523	0.27243	0.2724
* 59 Phenanthrene-d10	188		18.455	18.455	(1.000)	887512	4.00000	
60 Phenanthrene	178		18.502	18.509	(1.002)	142205	0.62609	0.6261
61 Anthracene	178		18.618	18.618	(1.009)	67642	0.30713	0.3071
62 Carbazole	167		18.951	18.950	(1.027)	25591	0.12683	0.1268
63 Di-n-butylphthalate	149		19.647	19.647	(1.065)	24891	0.09096	0.09096
64 Fluoranthene	202		20.916	20.892	(0.890)	352968	1.20347	1.203
65 Pyrene	202		21.341	21.326	(0.908)	659418	2.20802	2.208
\$ 66 Terphenyl-d14	244		21.597	21.604	(0.919)	898721	3.71913	3.719
67 Butylbenzylphthalate	149							
68 Benzo(a)anthracene	228		23.486	23.501	(0.999)	220397	0.73314	0.7331
* 69 Chrysene-d12	240		23.509	23.517	(1.000)	852573	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228		23.556	23.563	(1.002)	311567	1.27527	1.275
72 bis(2-Ethylhexyl)phthalate	149		23.471	23.494	(0.956)	315284	1.50757	1.508
* 134 Di-n-octylphthalate-d4	153		24.562	24.593	(1.000)	1479196	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252		25.429	25.452	(0.969)	624190	1.86296	1.863
75 Benzo(k)fluoranthene	252		25.476	25.507	(0.970)	235030	0.73743	0.7374
76 Benzo(a)pyrene	252		26.126	26.157	(0.995)	228556	0.77224	0.7722
* 77 Perylene-d12	264		26.250	26.289	(1.000)	964821	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.088	29.158	(1.108)	214295	0.62017	0.6202
79 Dibenzo(a,h)anthracene	278		29.111	29.204	(1.109)	53021	0.20322	0.2032 (M)
80 Benzo(g,h,i)perylene	276		29.958	30.043	(1.141)	208219	0.75598	0.7560
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.397	13.390	(1.139)	14429	0.09602	0.09602
111 Azobenzene (1,2-DP-Hydrazine)	77		16.816	16.816	(1.096)	1672	0.00663	0.006630

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.429	25.507	(0.969)	828583	2.58989	2.590
120 2,3,4,6-Tetrachlorophenol	232		Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052324.D Calibration Time: 21:38
 Lab Smp Id: 23A0326-02
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	264922	132461	529844	253055	-4.48
27 Naphthalene-d8	947542	473771	1895084	915691	-3.36
42 Acenaphthene-d10	505666	252833	1011332	493607	-2.38
59 Phenanthrene-d10	940283	470142	1880566	887512	-5.61
69 Chrysene-d12	987952	493976	1975904	852573	-13.70
134 Di-n-octylphthala	1625017	812509	3250034	1479196	-8.97
77 Perylene-d12	1073798	536899	2147596	964821	-10.15

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.17
27 Naphthalene-d8	11.73	11.23	12.23	11.76	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.52	23.02	24.02	23.51	-0.03
134 Di-n-octylphthala	24.59	24.09	25.09	24.56	-0.13
77 Perylene-d12	26.29	25.79	26.79	26.25	-0.15

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

REVIEW SUMMARY FOR FILE - NT1003052324.D

Lab ID: 23A0326-02

nt10.i, 20230305A.b\ABN.m, 06-MAR-2023 03:55

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

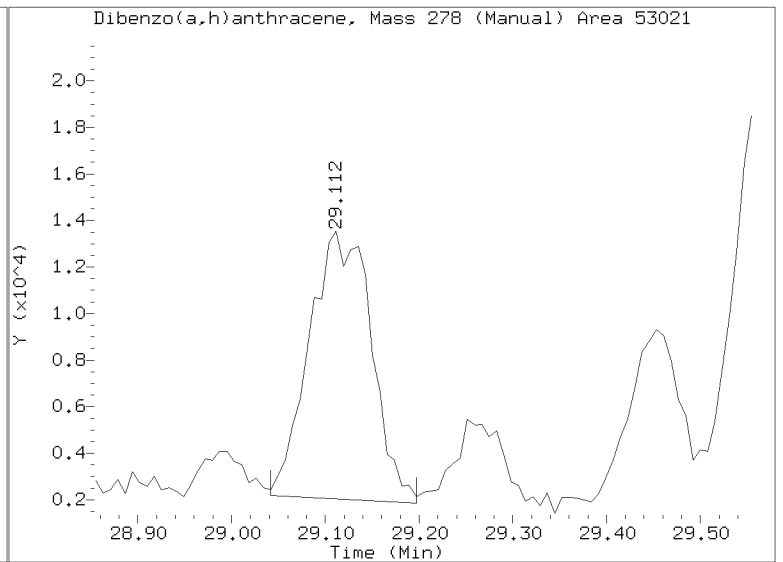
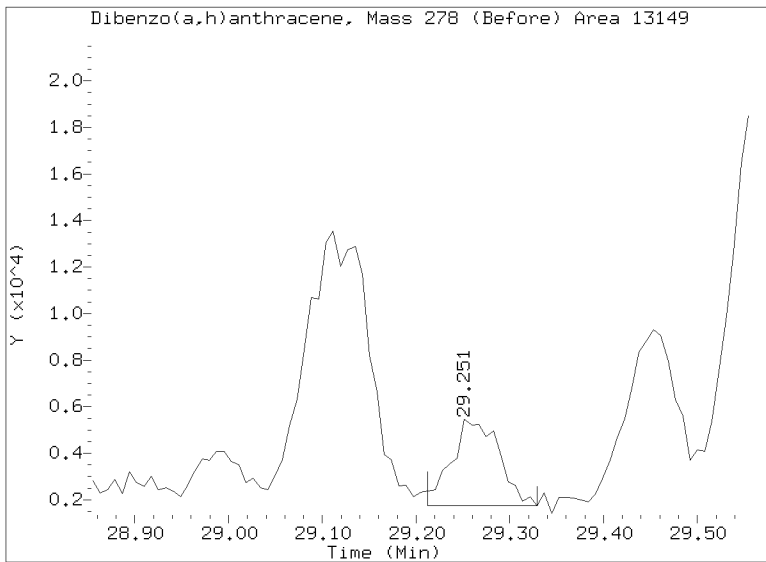
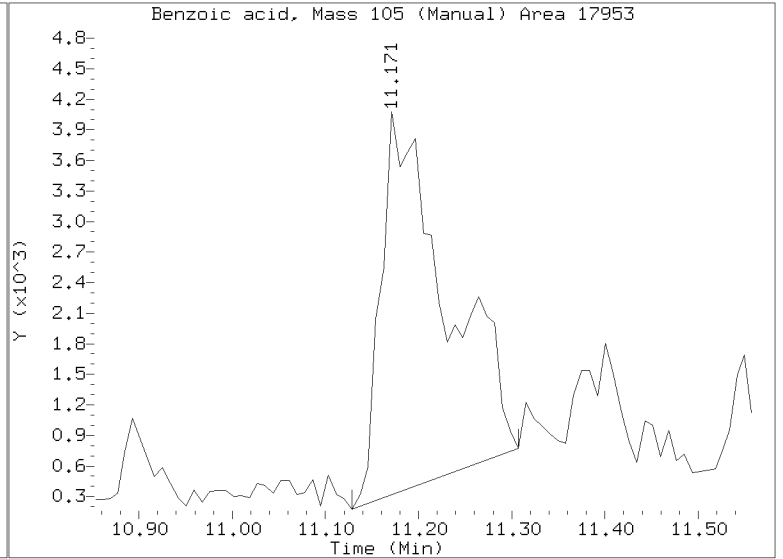
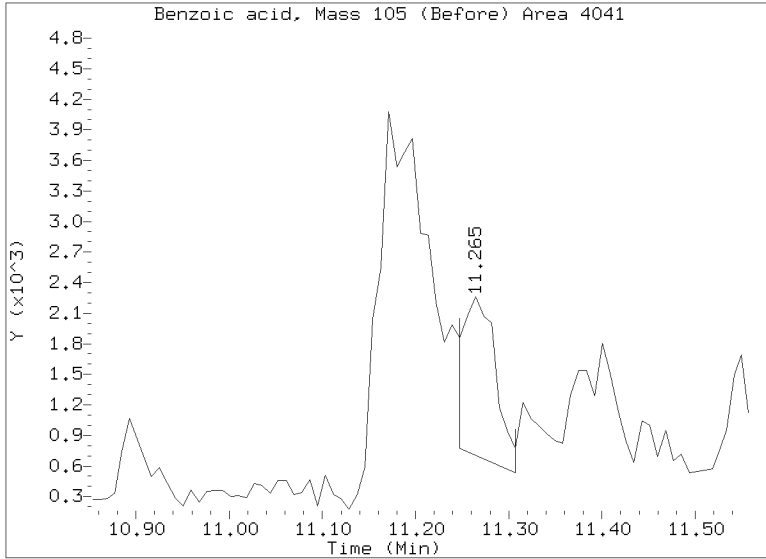
RRT check based on Ccal File: NT1003052314.D

On Column LOD for nt10.i, 20230305A.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052324.D
Injection Date: 06-MAR-2023 03:55
Lab ID:23A0326-02 Client ID:
Report Date: 03/27/2023 13:58



APPROVED
By Deenay Dunmore at 2:09 pm, Mar 27, 2023



Form I
ORGANIC ANALYSIS DATA SHEET

EPA 8270E
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-04 A

SDG: 23A0326

Sampled: 01/17/23 10:33

Prepared: 02/02/23 13:06

File ID: NT1003052330.D

% Solids: 51.64

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 07:41

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 19.39 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	189		4.4	20.0
106-44-5	4-Methylphenol	1	21.7		7.4	20.0
91-20-3	Naphthalene	1	12.5	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	12.6	J	4.5	20.0
208-96-8	Acenaphthylene	1	6.8	J	6.2	20.0
131-11-3	Dimethylphthalate	1	5.4	J	4.4	20.0
83-32-9	Acenaphthene	1	8.4	J	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	56.3		8.7	20.0
120-12-7	Anthracene	1	24.0		7.2	20.0
206-44-0	Fluoranthene	1	118		6.1	20.0
129-00-0	Pyrene	1	128		5.7	20.0
85-68-7	Butylbenzylphthalate	1	9.8	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	61.0		6.0	20.0
218-01-9	Chrysene	1	92.7		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	137		5.5	49.9
	Benzo(a)fluoranthene, Total	1	153		10.0	39.9
50-32-8	Benzo(a)pyrene	1	67.3		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	42.8		14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	58.0		13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.03	541	72.2	27 - 120	
Phenol-d5	749.03	607	81.0	29 - 120	
2-Chlorophenol-d4	749.03	619	82.7	31 - 120	
1,2-Dichlorobenzene-d4	499.35	358	71.8	32 - 120	
Nitrobenzene-d5	499.35	418	83.8	30 - 120	
2-Fluorobiphenyl	499.35	433	86.6	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-04 A

SDG: 23A0326

Sampled: 01/17/23 10:33

Prepared: 02/02/23 13:06

File ID: NT1003052330.D

% Solids: 51.64

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 07:41

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 19.39 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	749.03	713	95.2	24 - 134	
p-Terphenyl-d14	499.35	381	76.2	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052330.D

Date: 06-HRR-2023 07:41

Client ID:

Sample Info: 23A0326-04

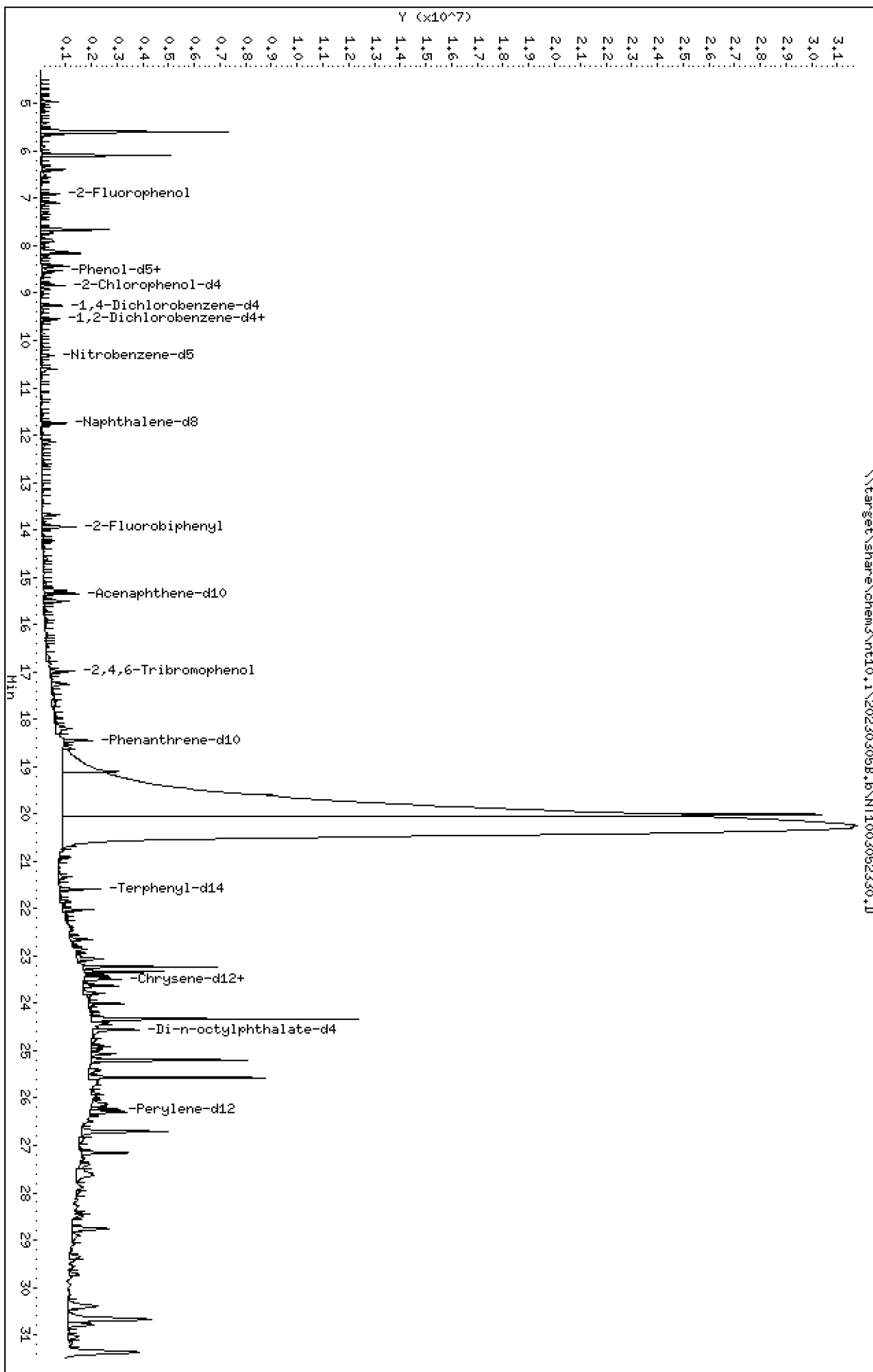
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

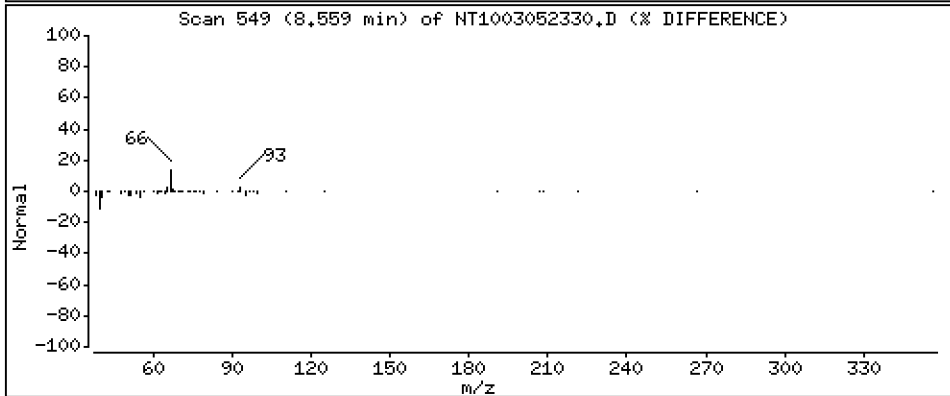
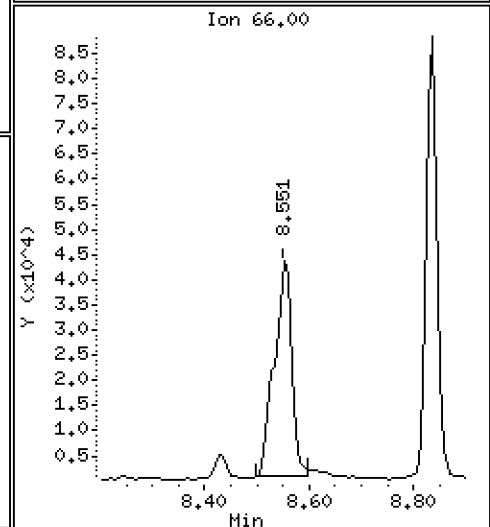
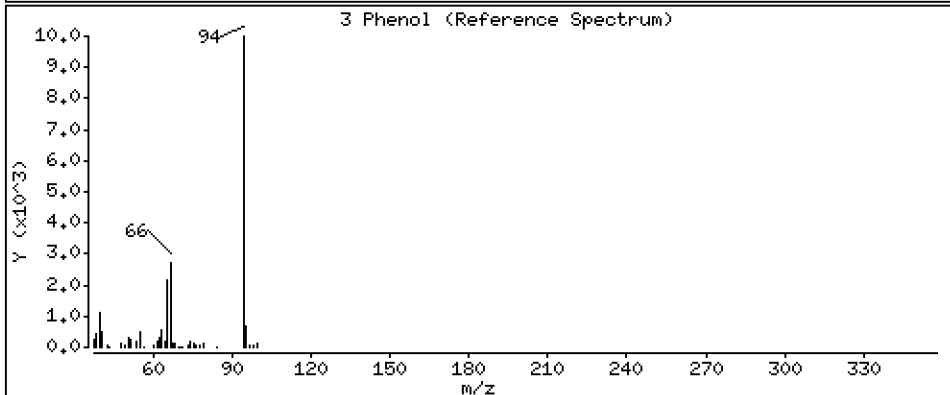
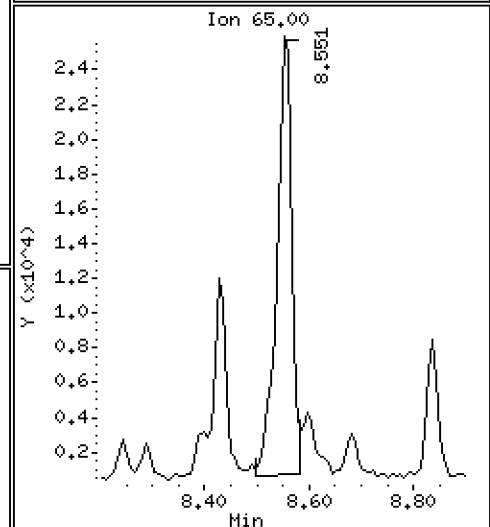
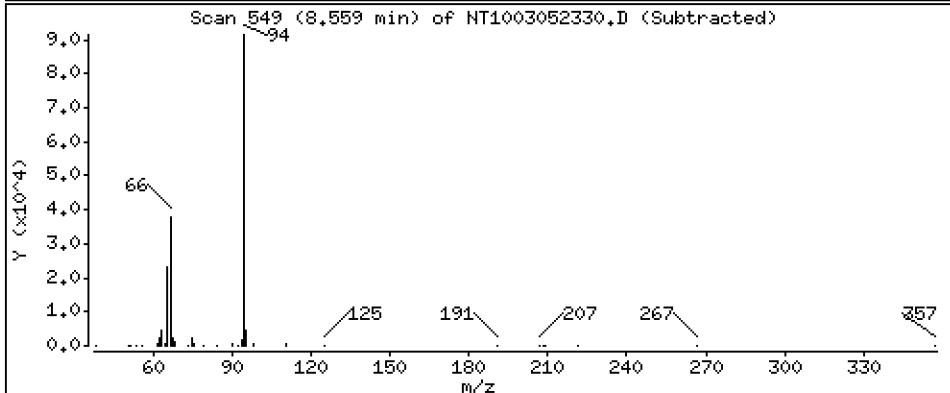
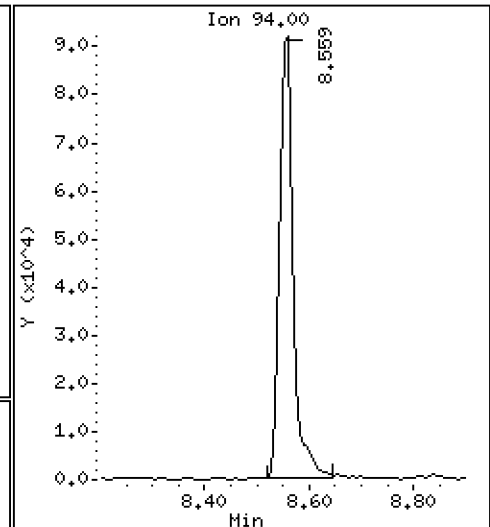
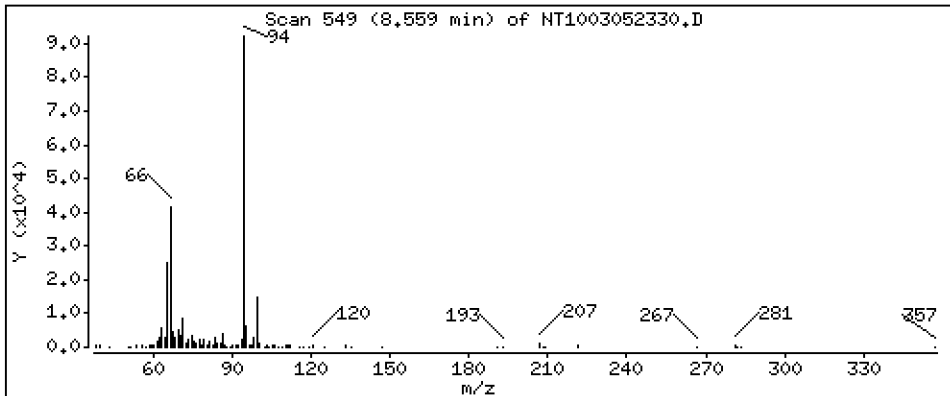
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 1,889 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

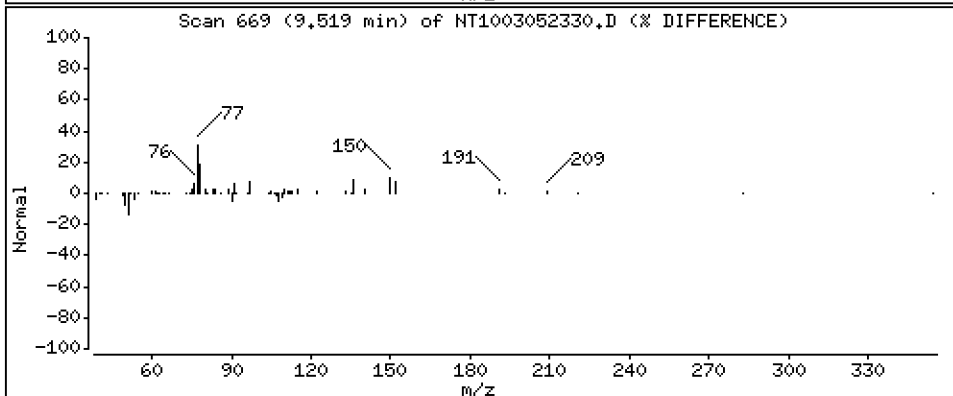
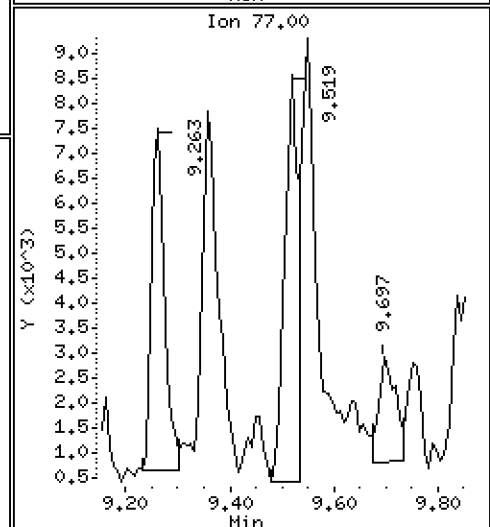
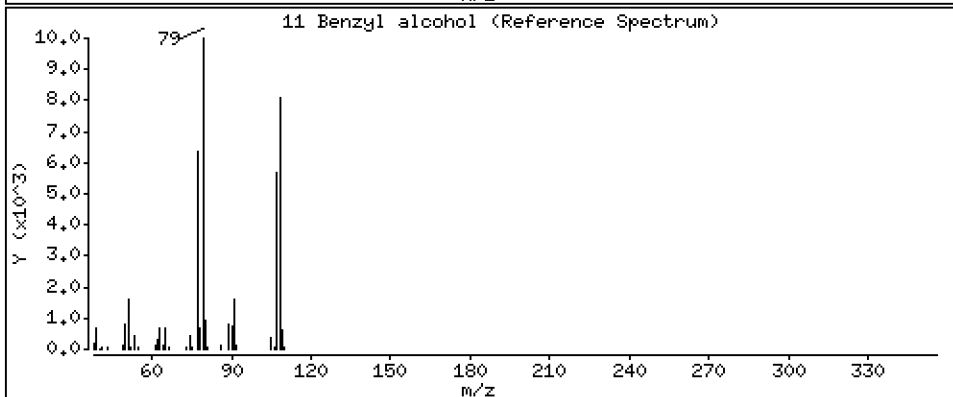
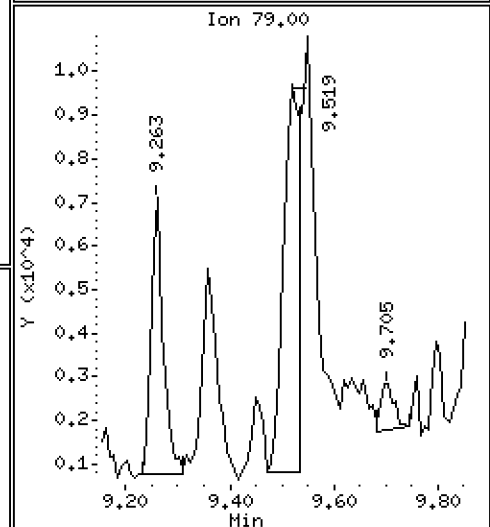
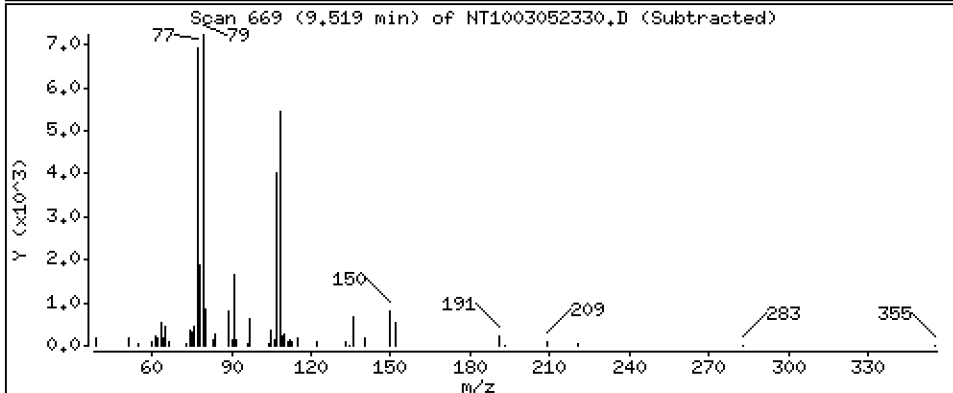
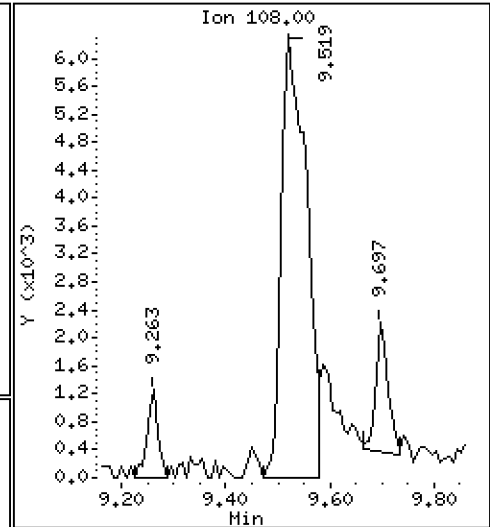
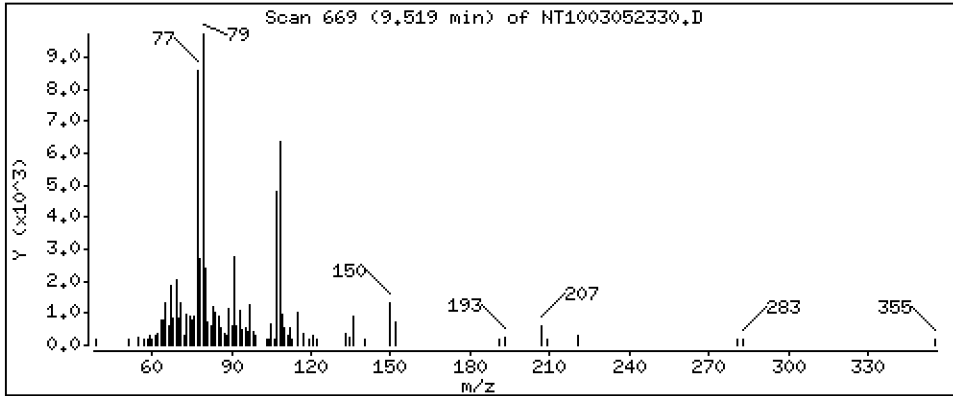
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,4923 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

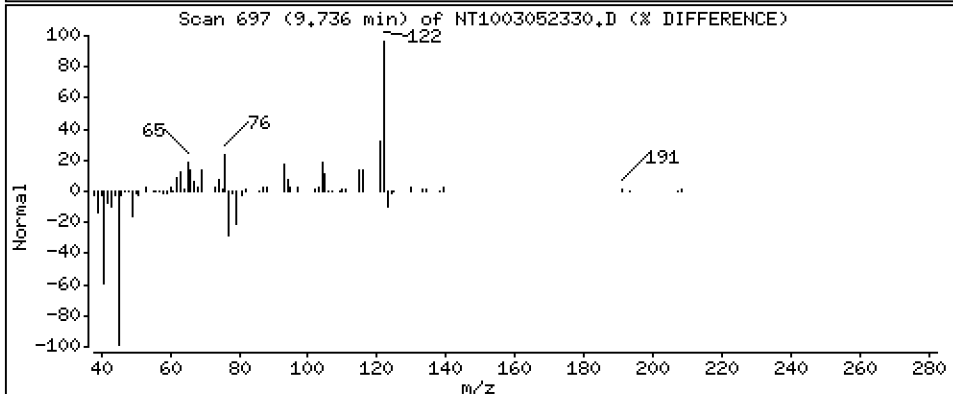
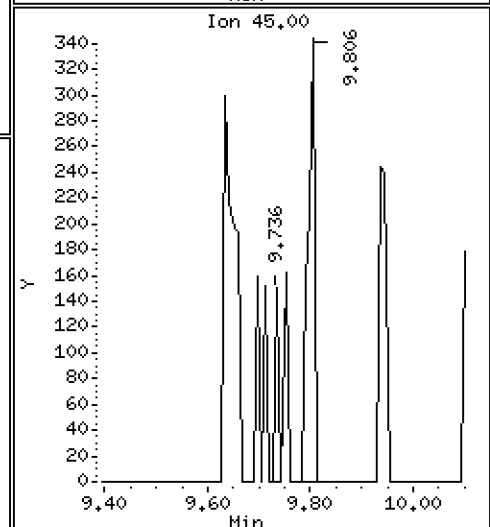
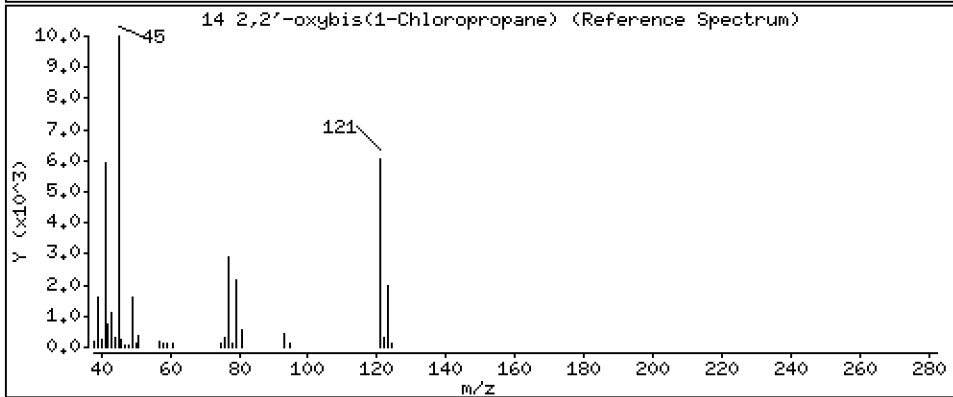
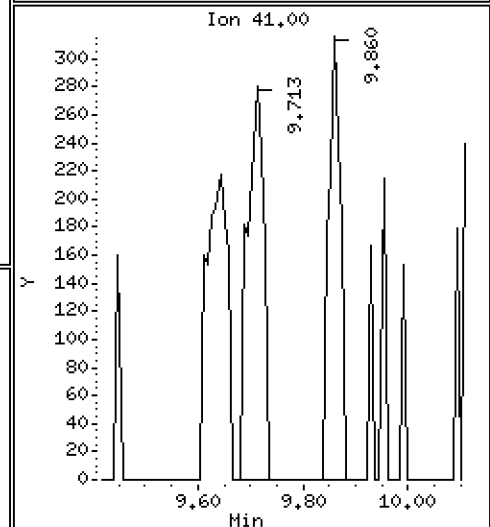
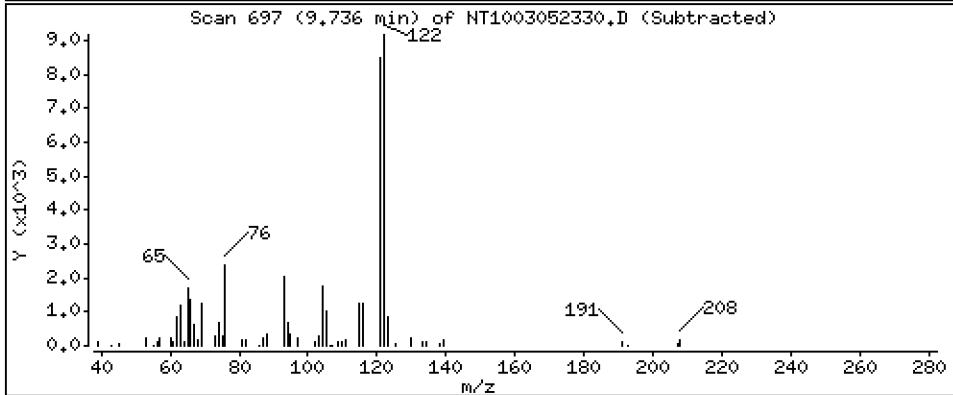
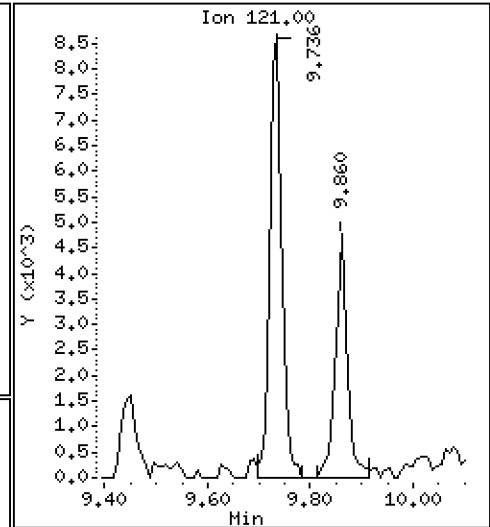
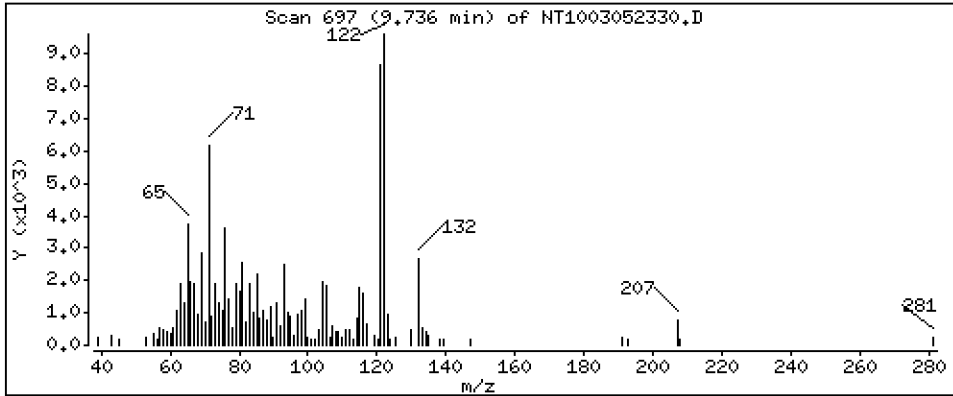
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 0.6495 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

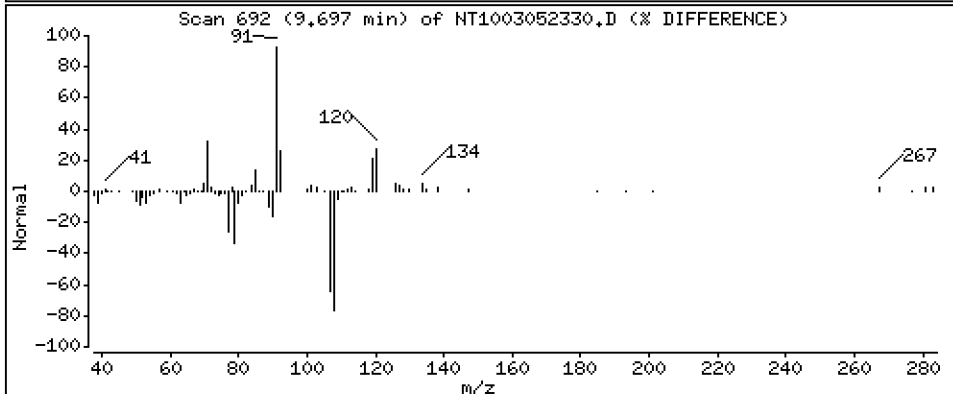
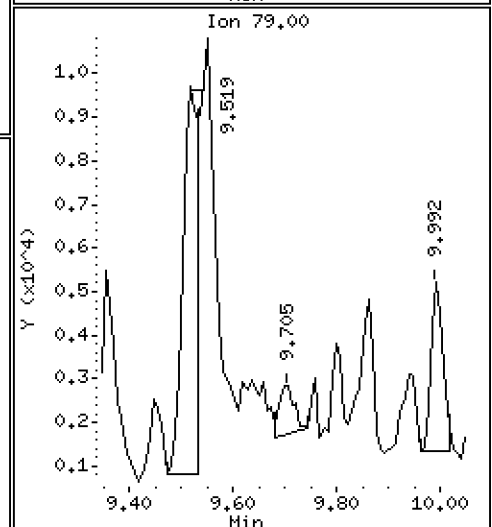
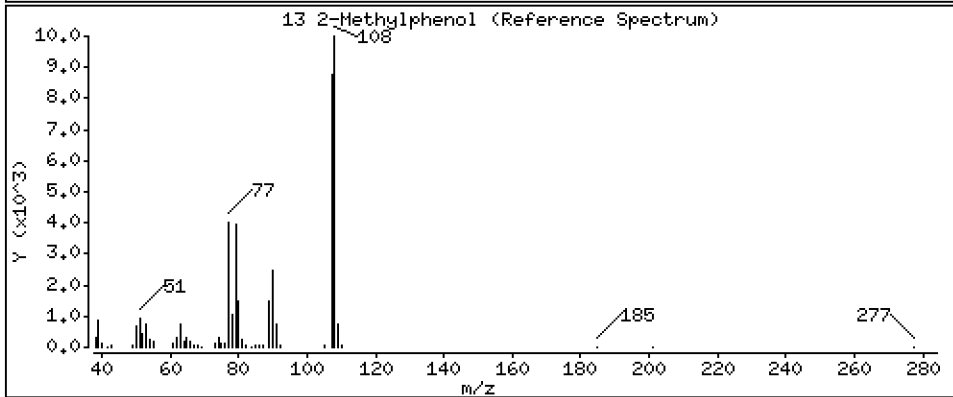
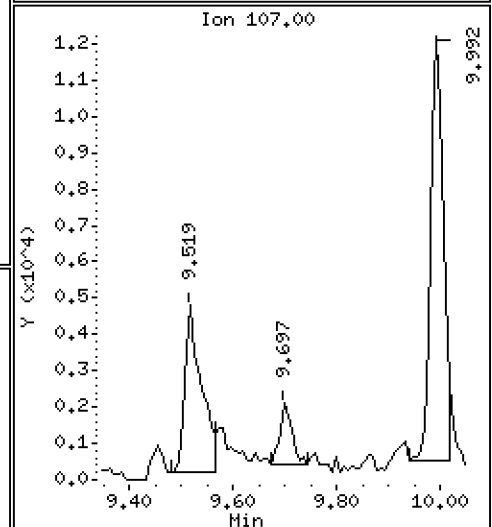
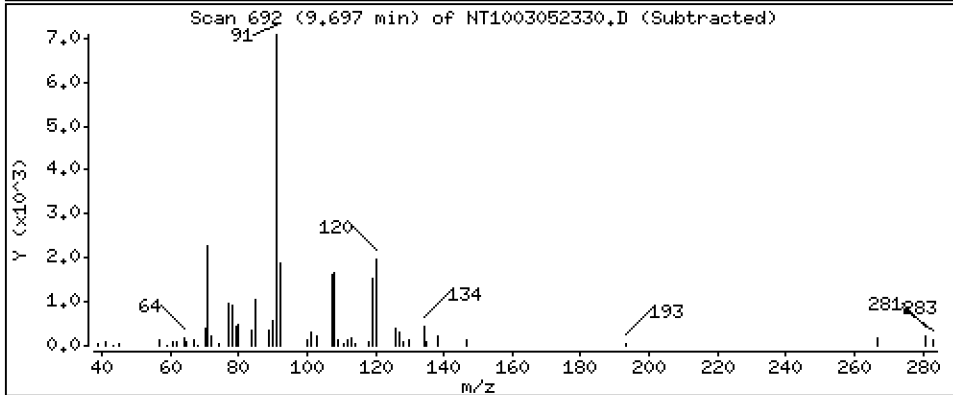
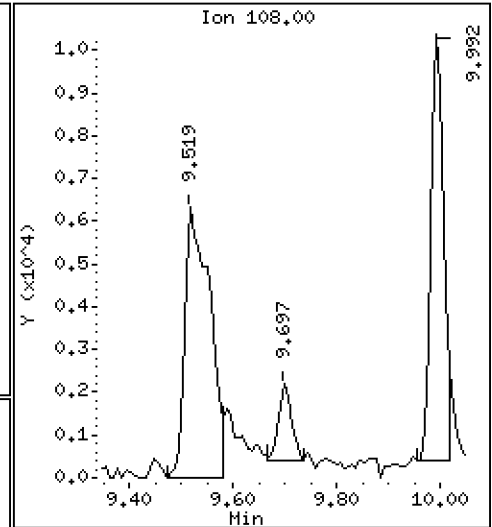
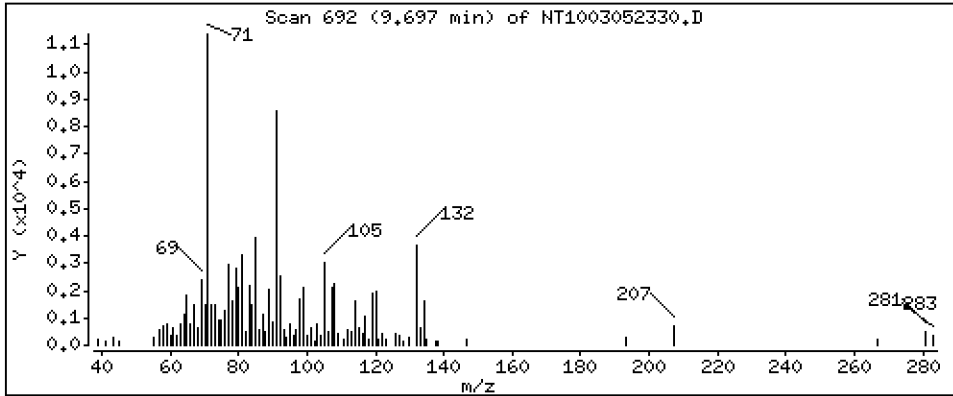
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.04636 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

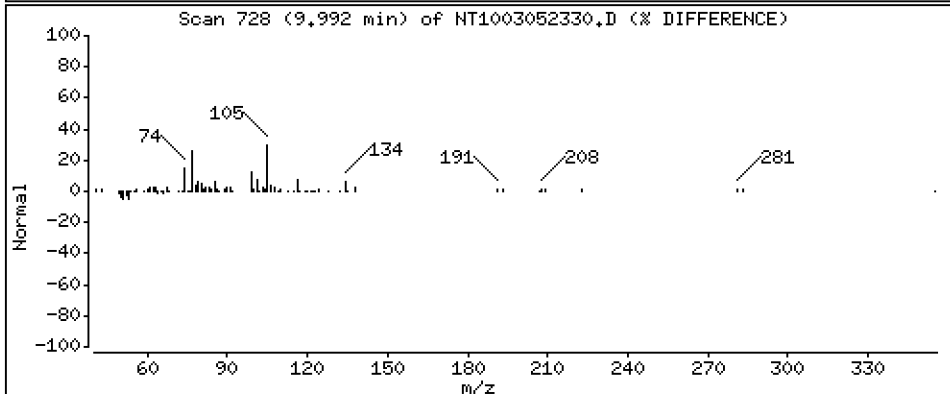
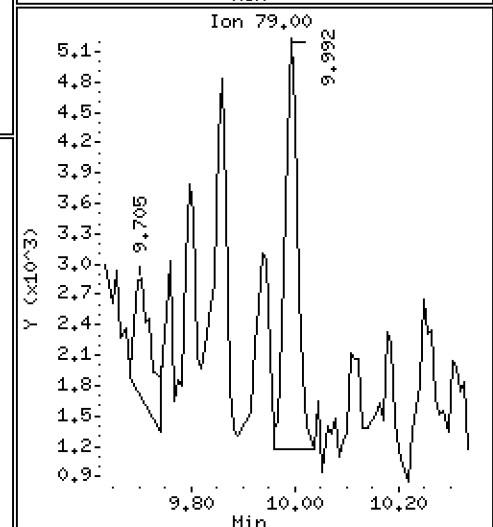
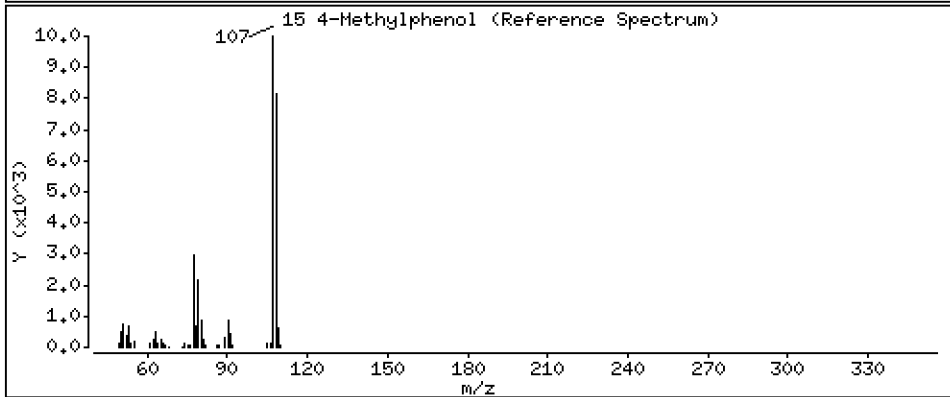
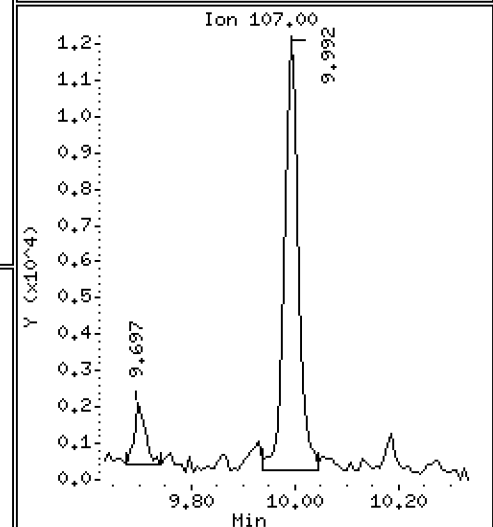
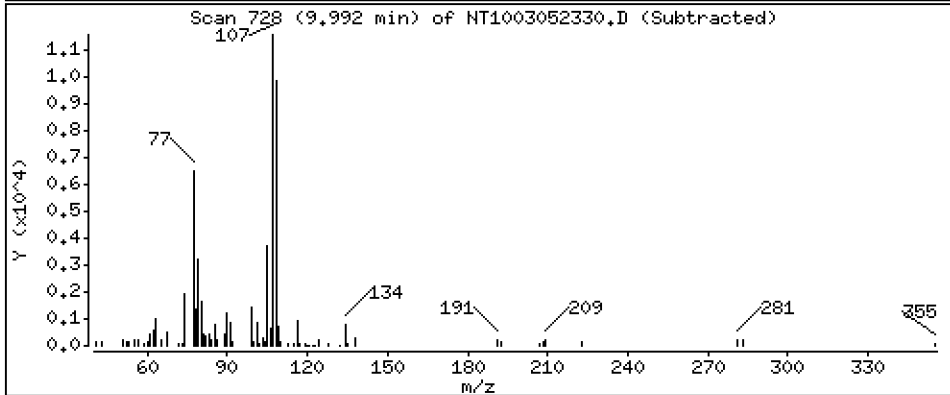
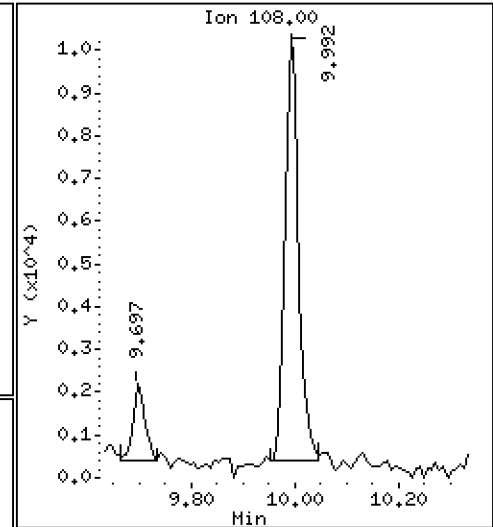
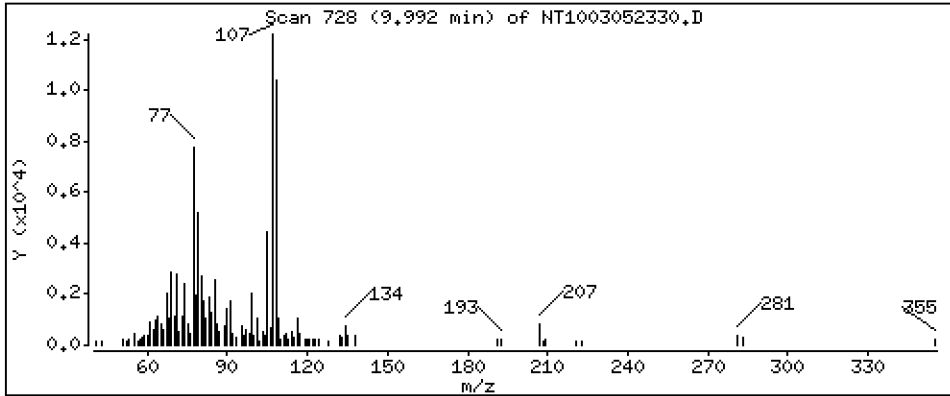
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.2175 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

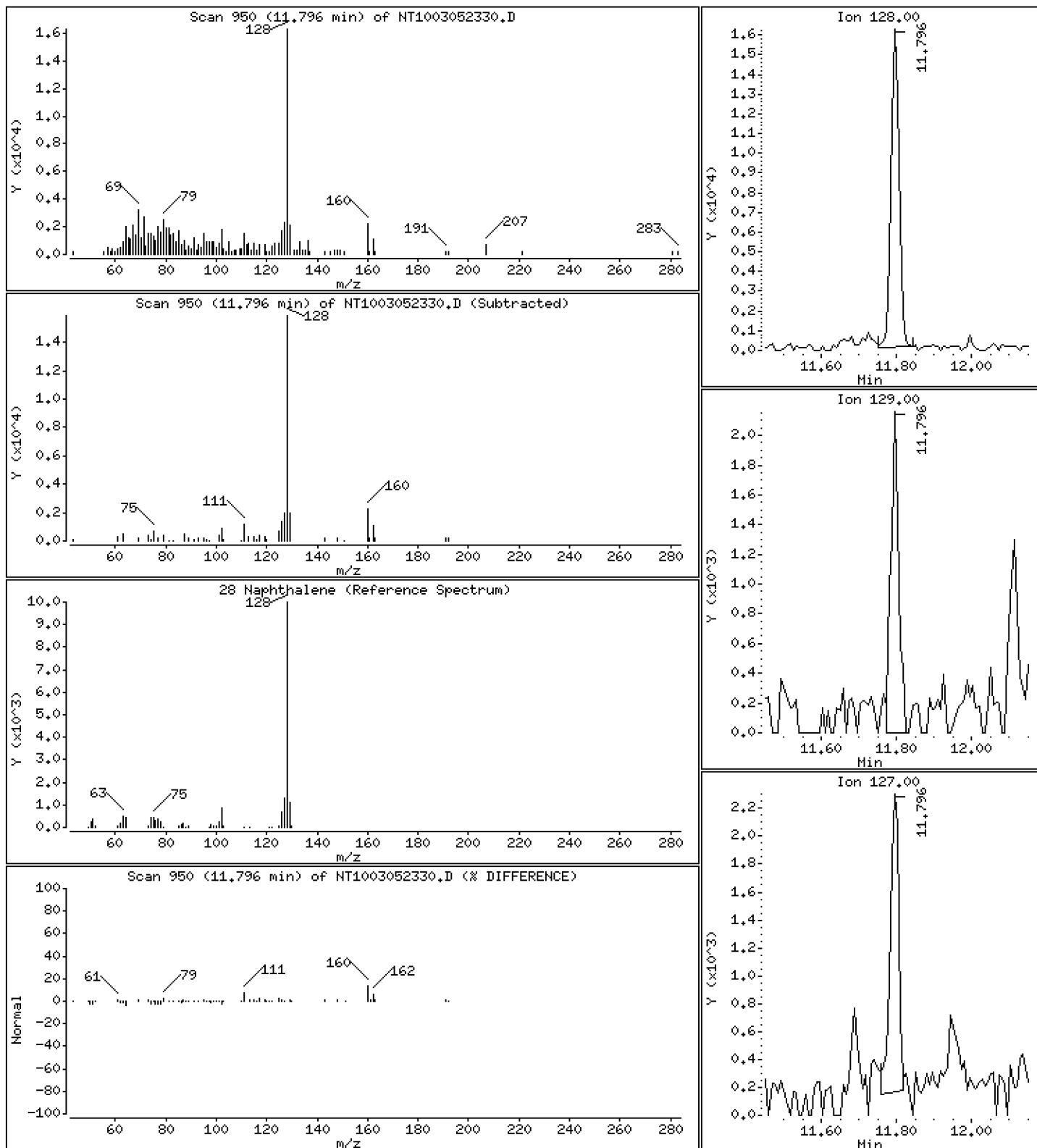
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1251 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

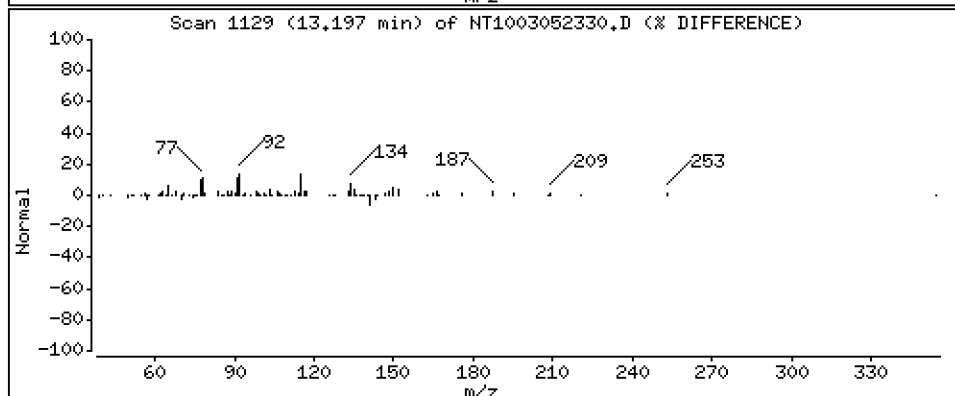
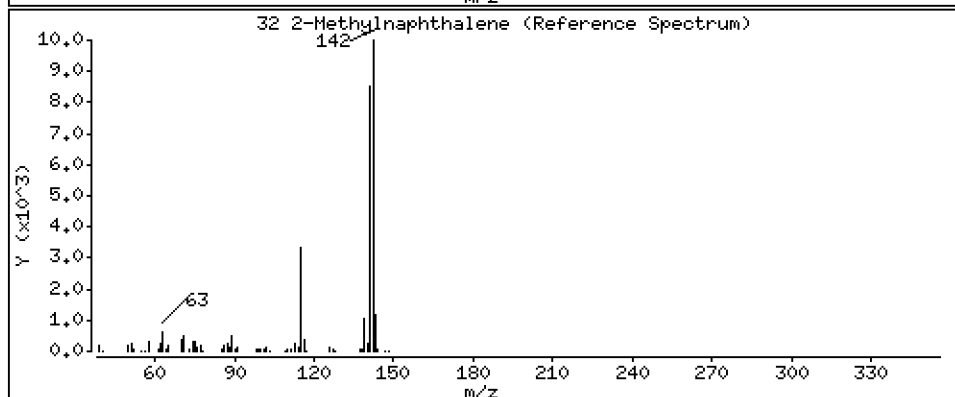
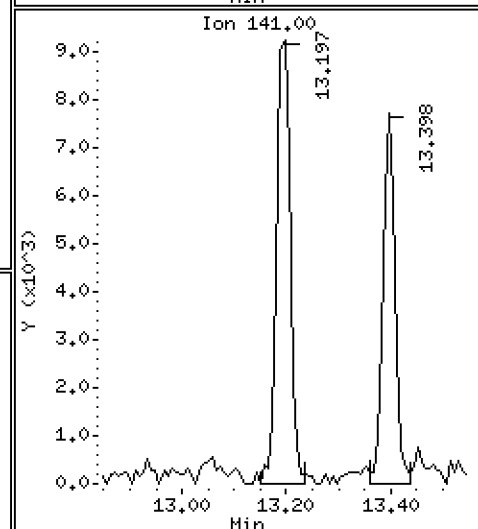
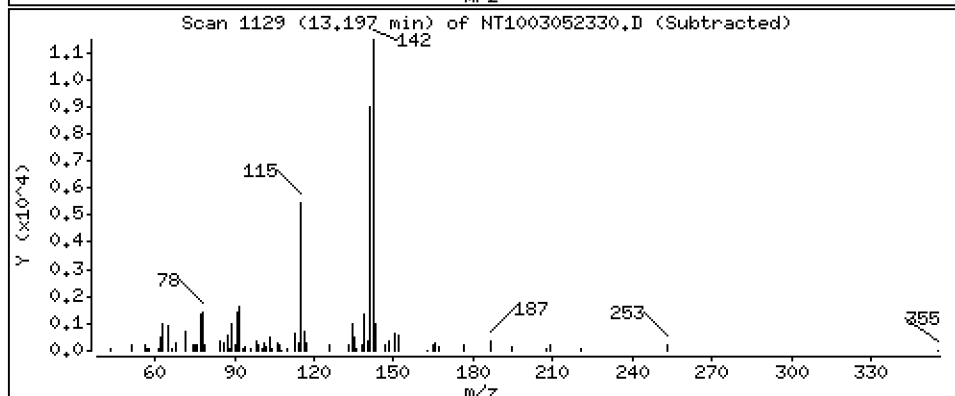
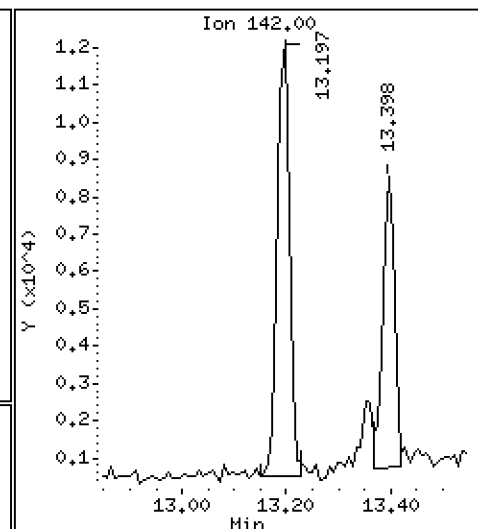
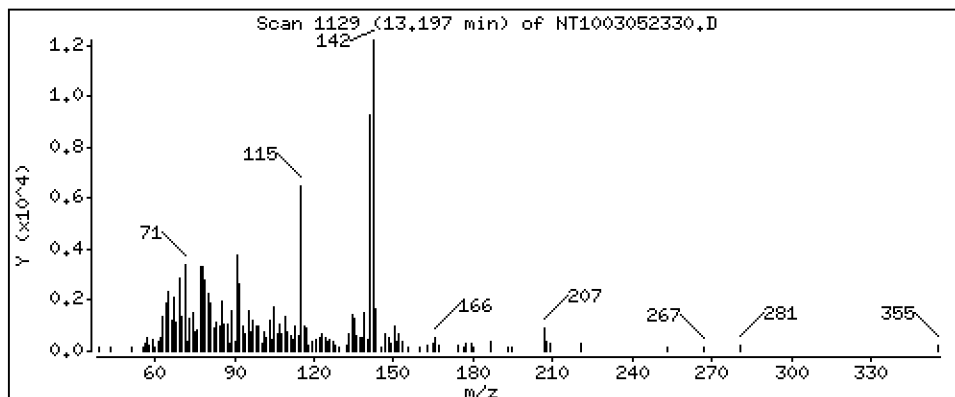
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1266 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

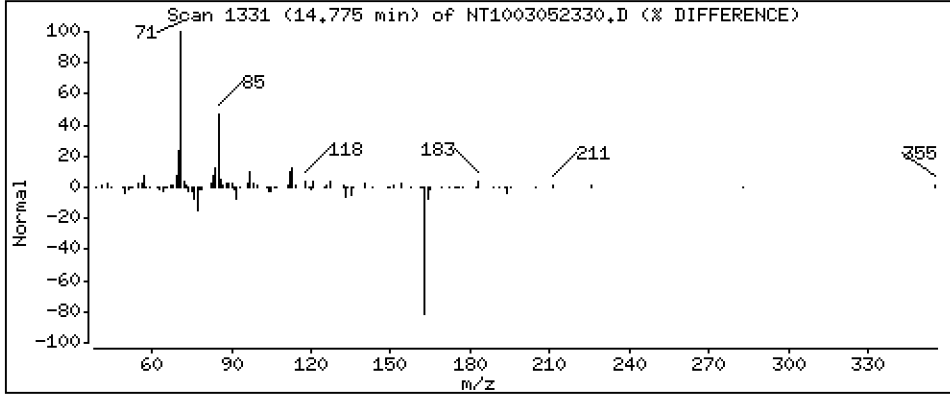
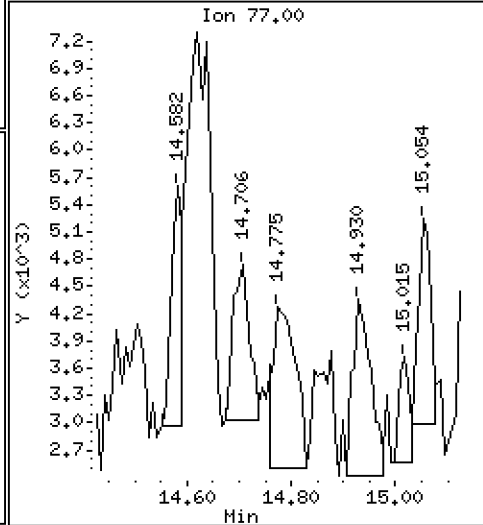
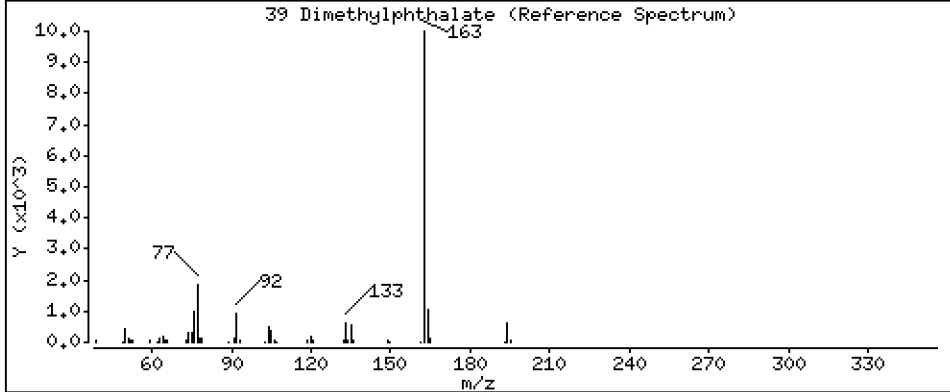
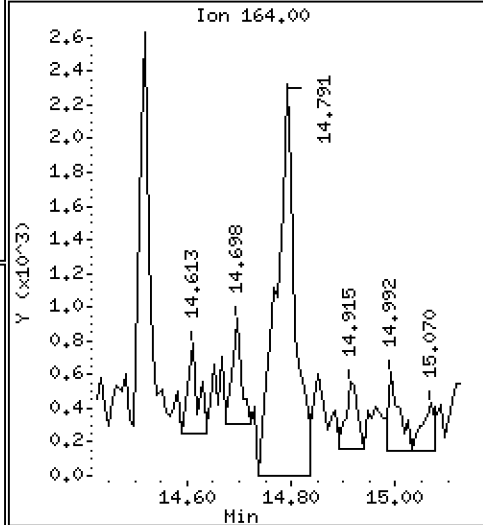
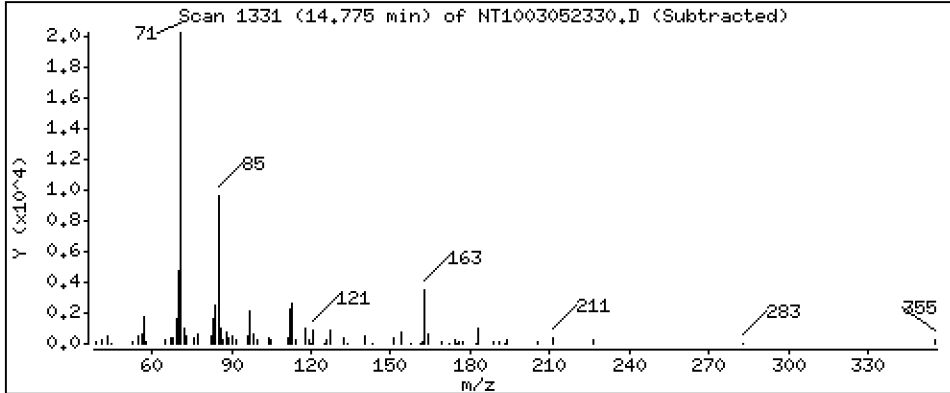
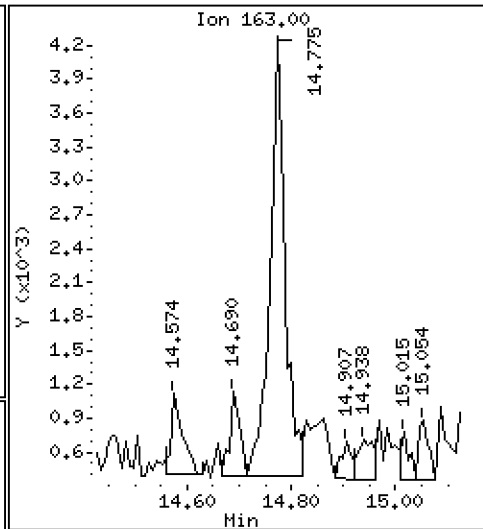
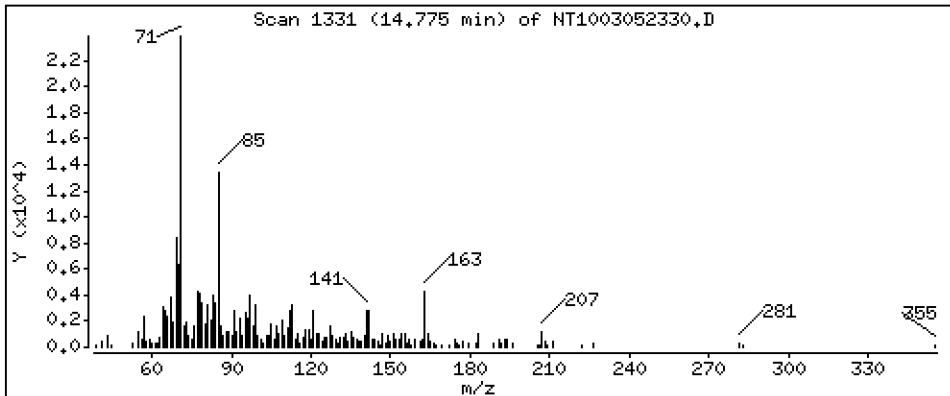
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.05439 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

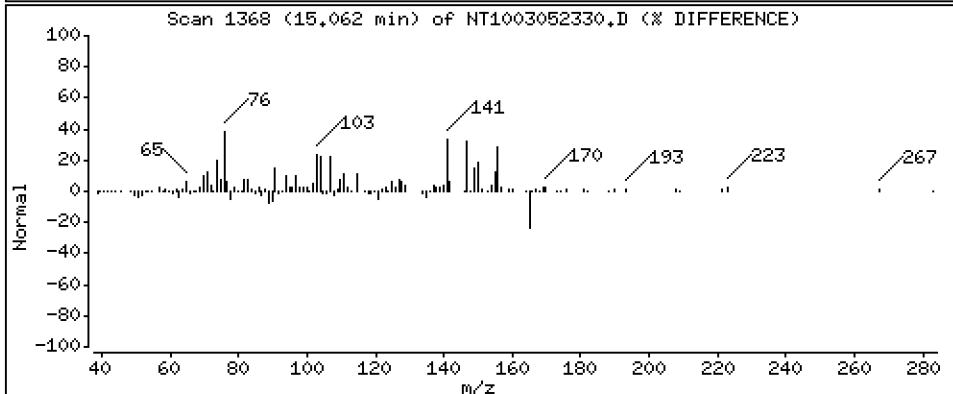
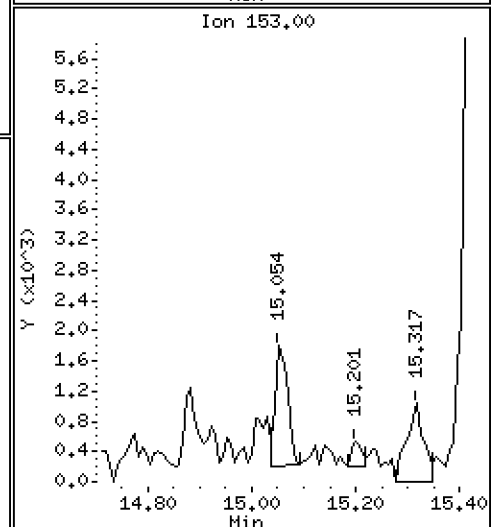
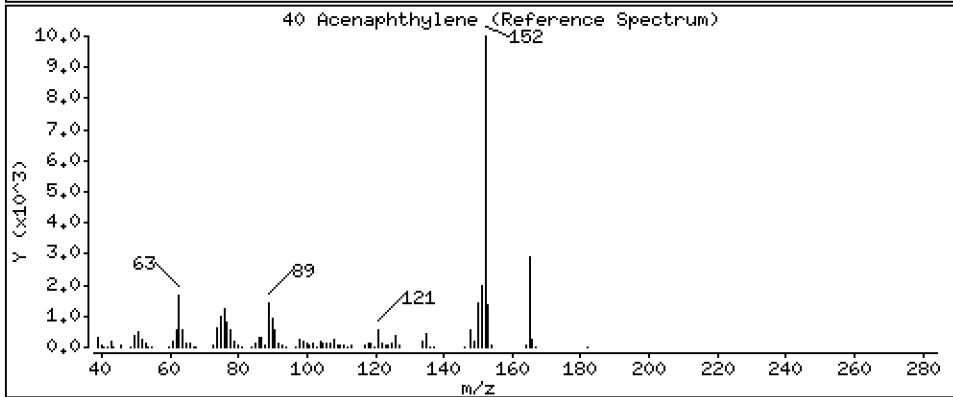
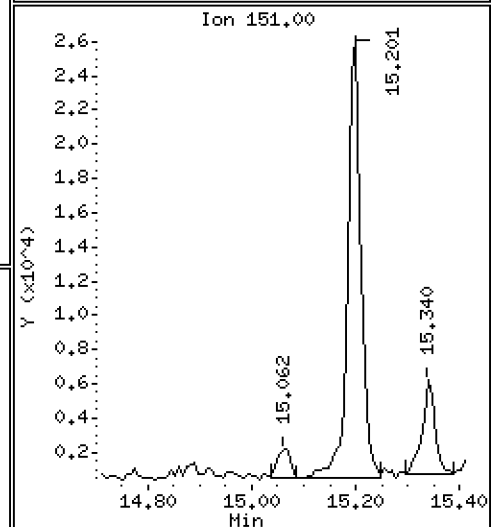
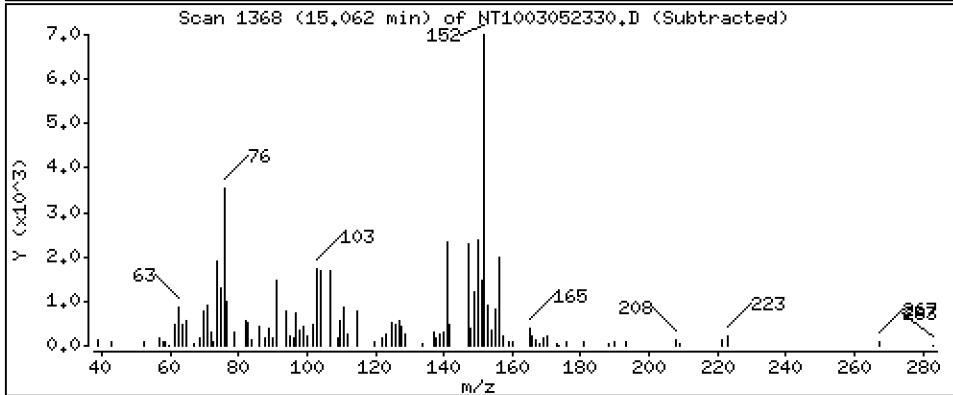
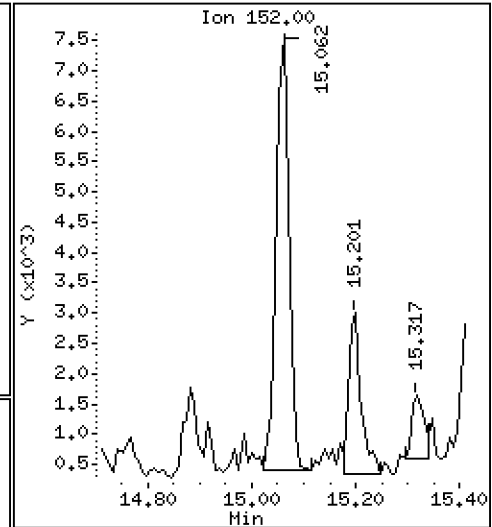
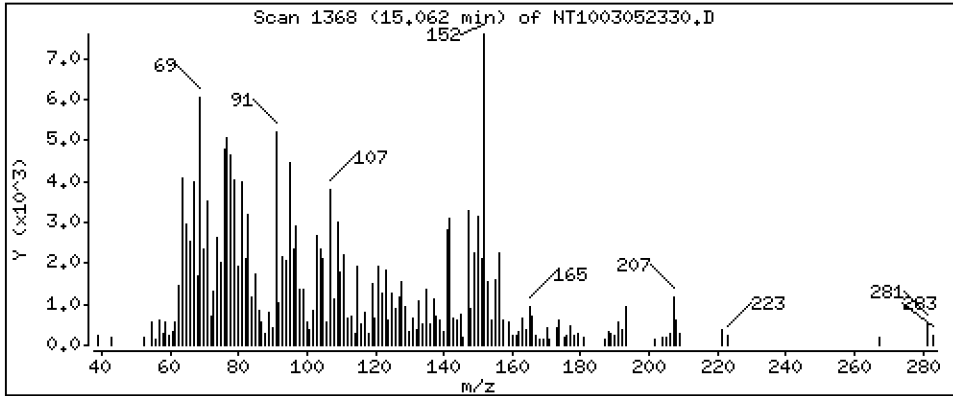
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.06834 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

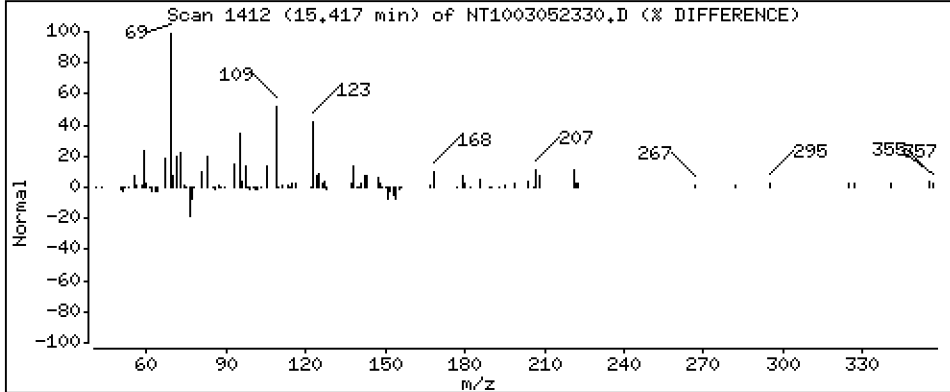
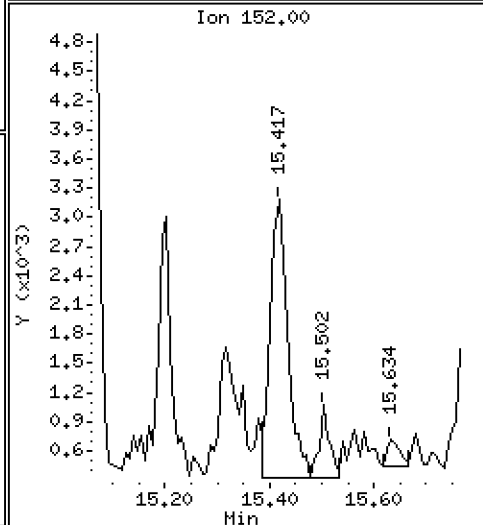
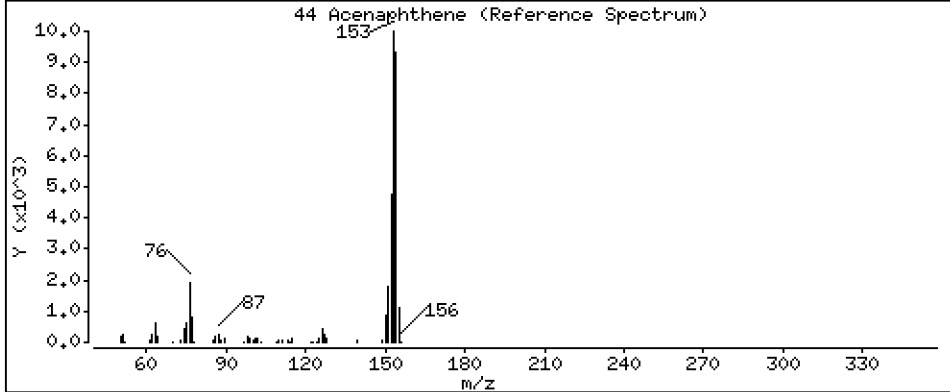
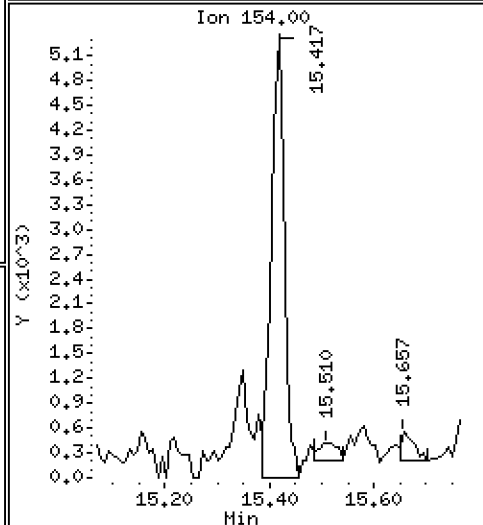
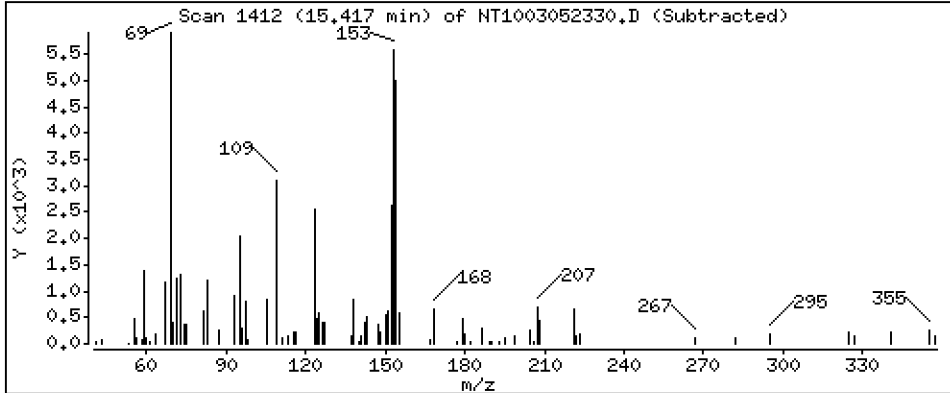
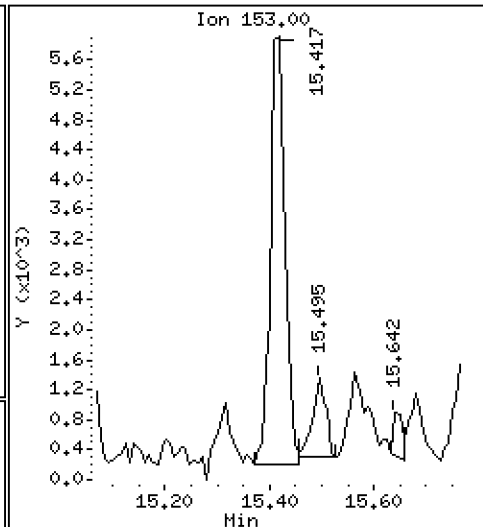
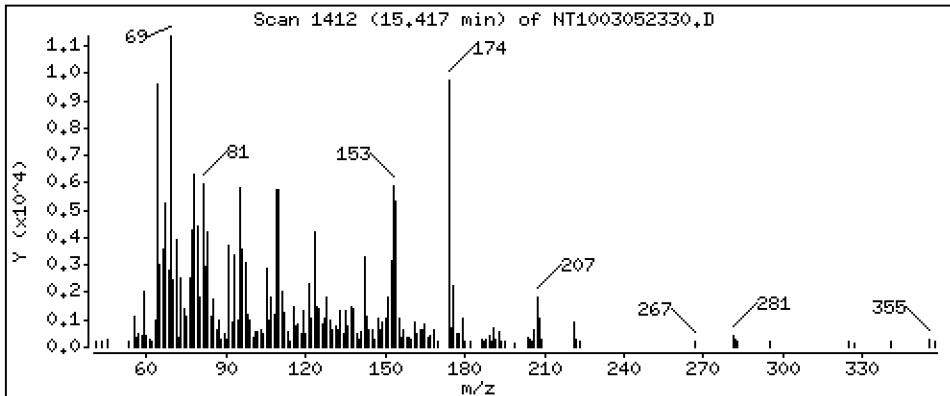
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,08406 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

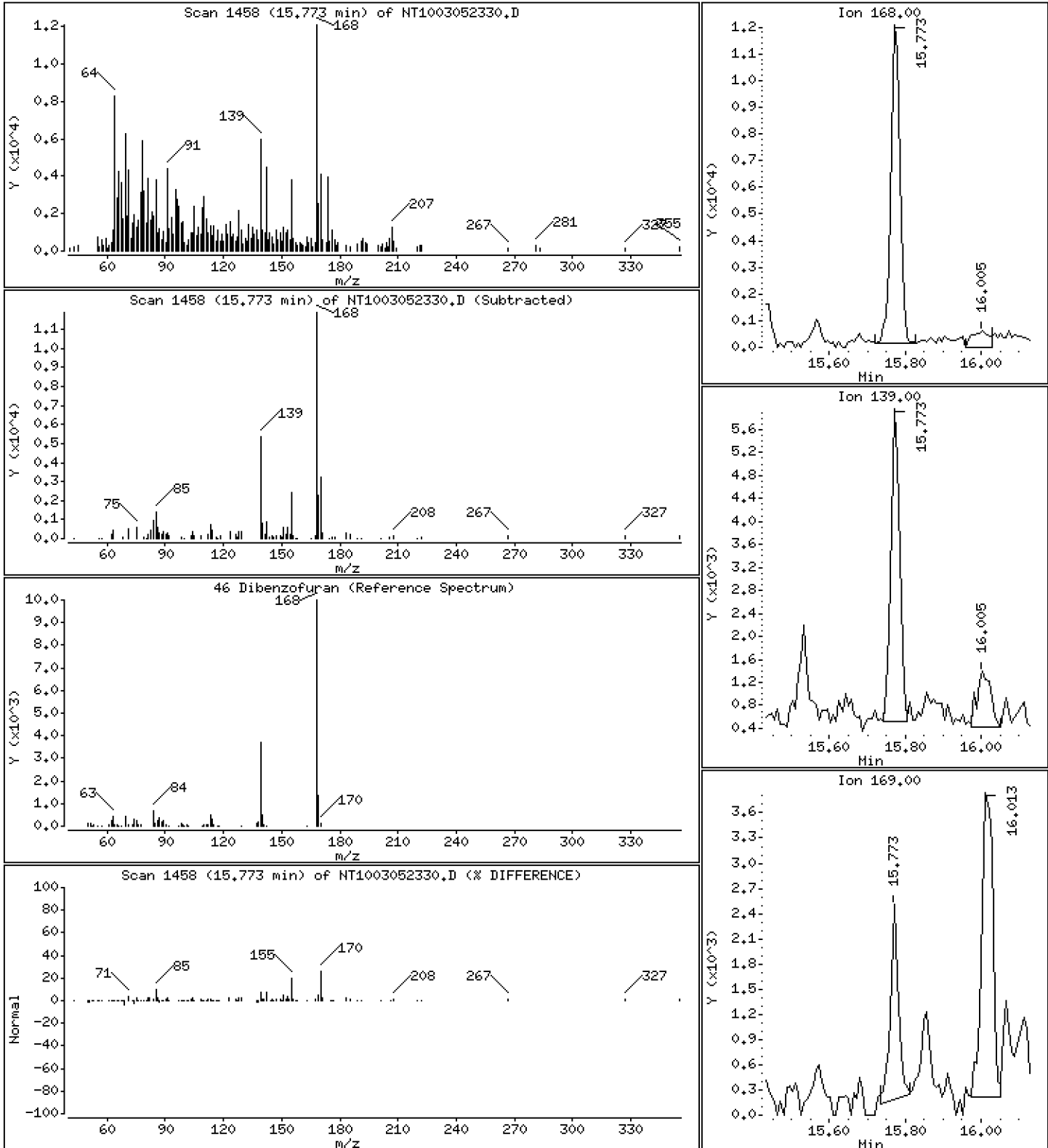
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1040 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

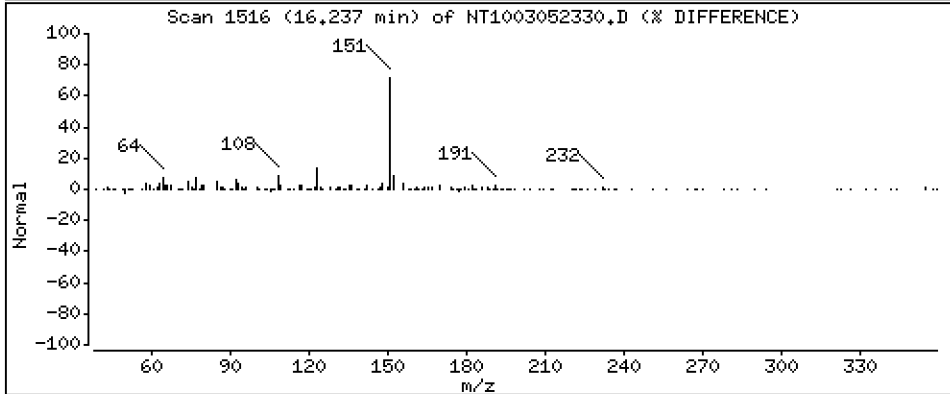
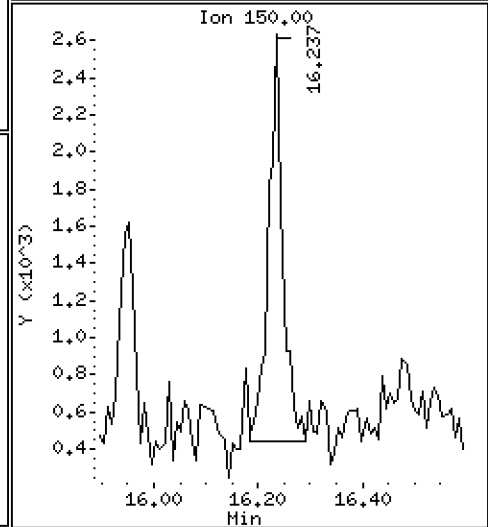
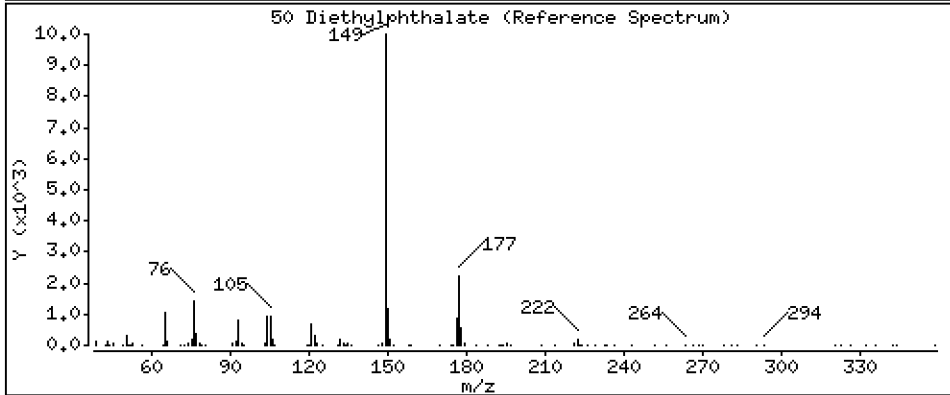
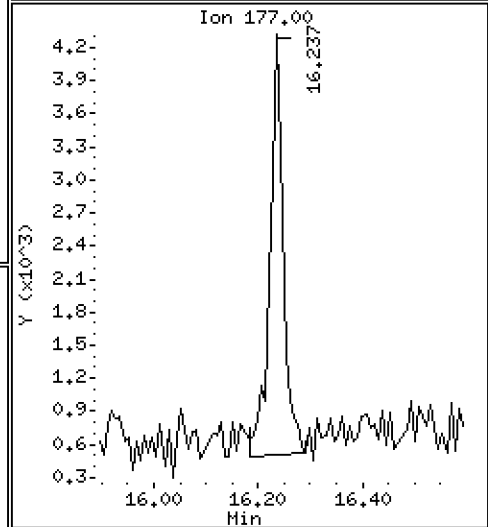
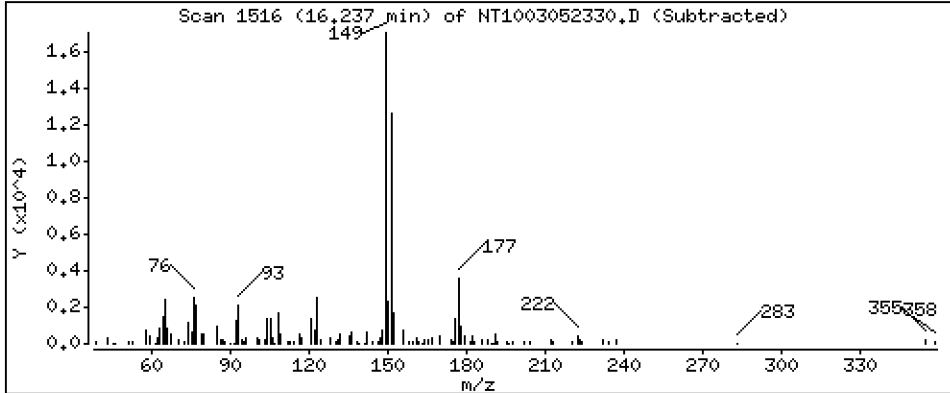
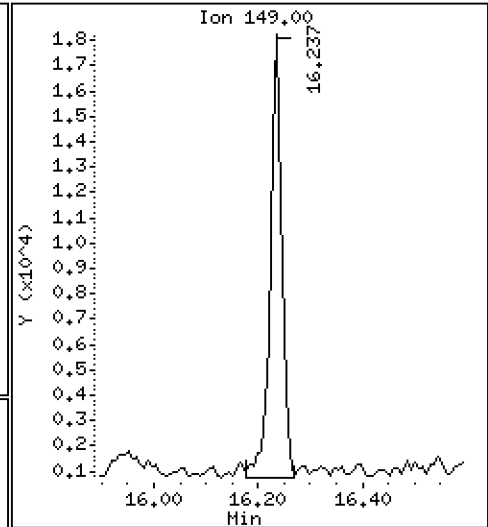
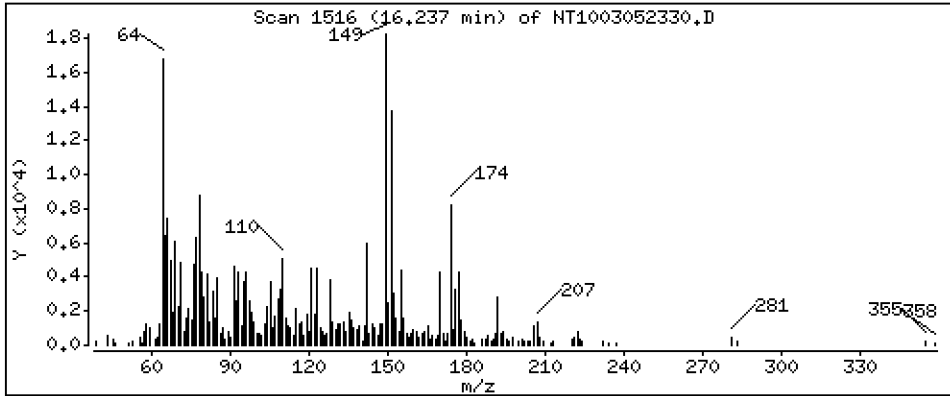
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1829 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

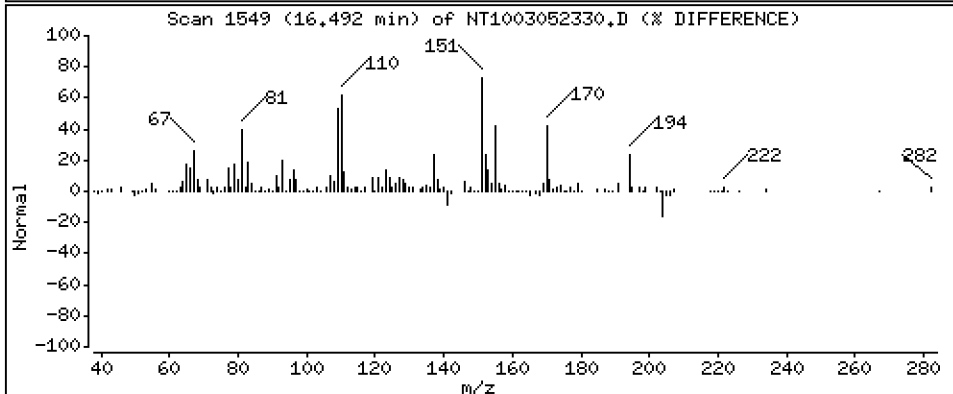
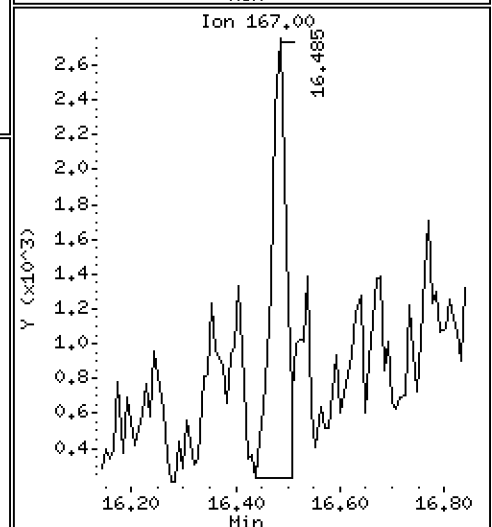
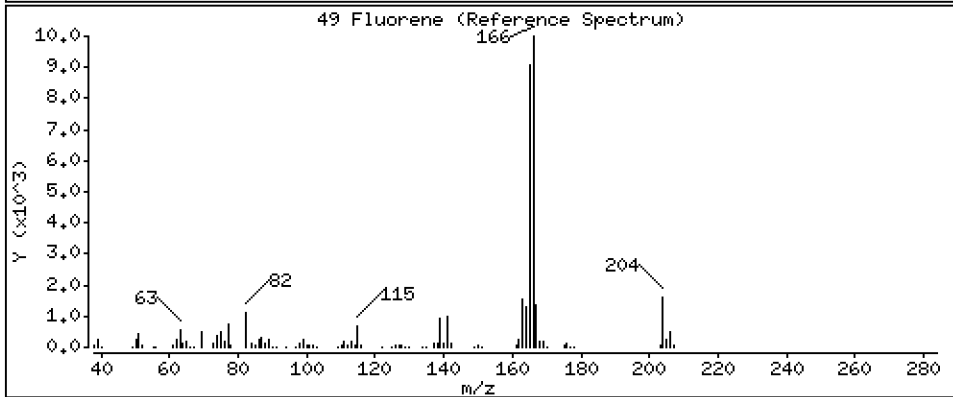
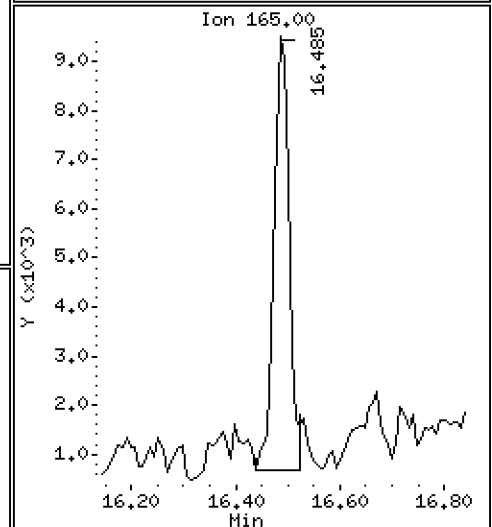
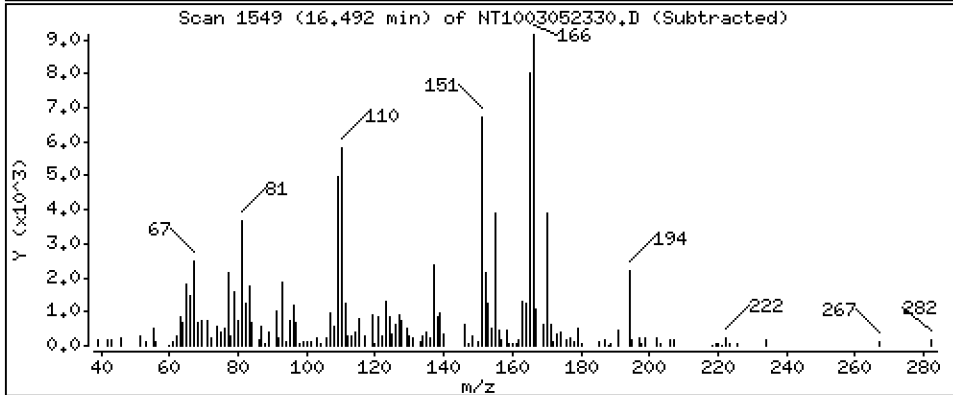
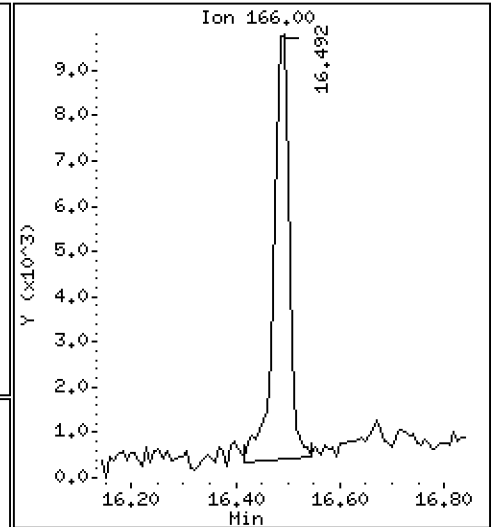
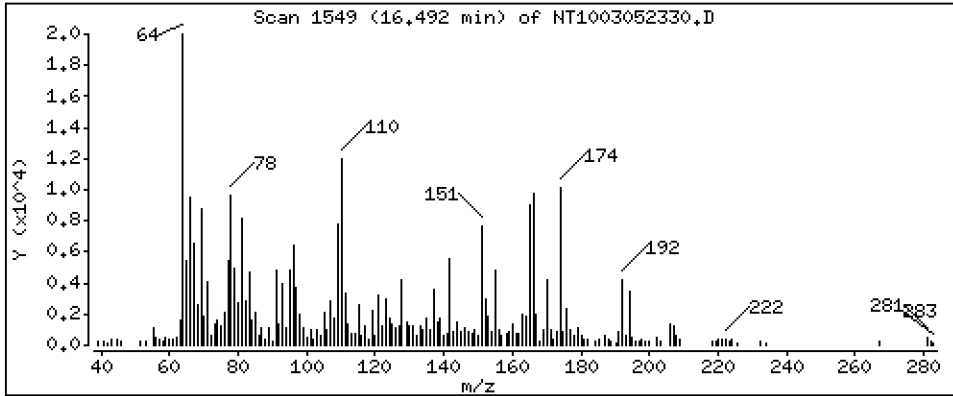
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1235 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

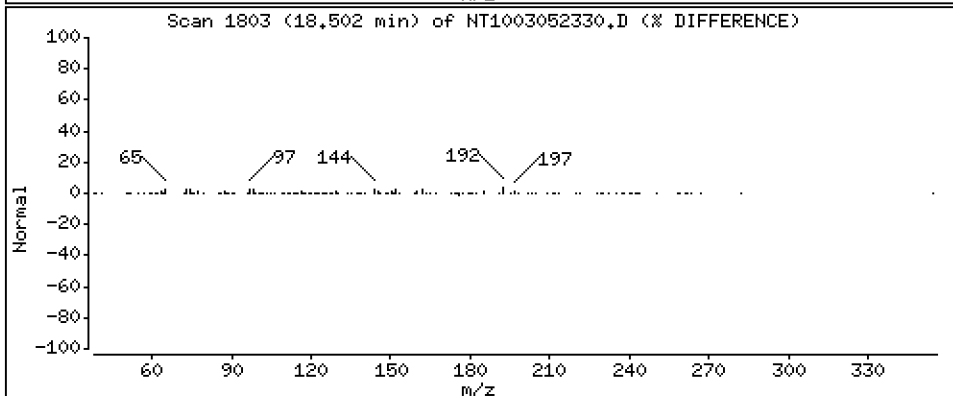
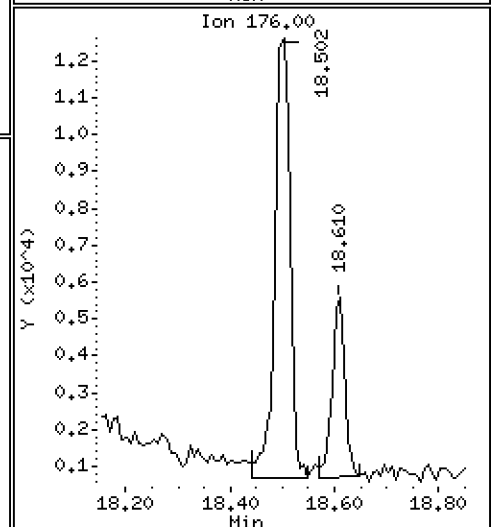
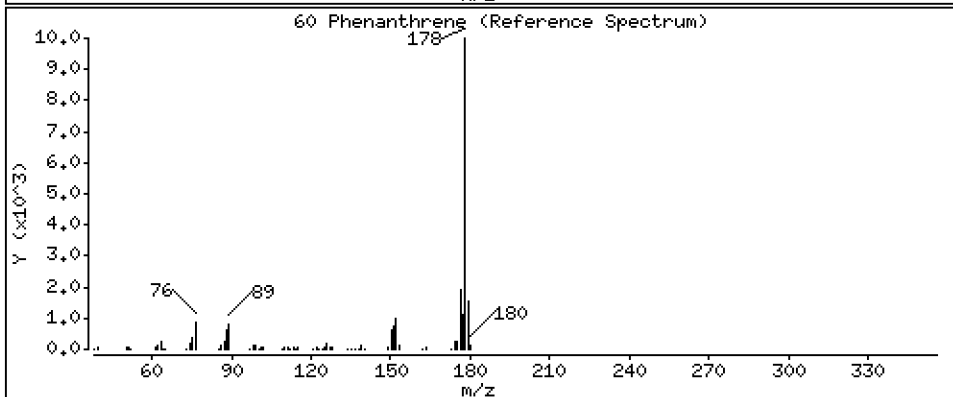
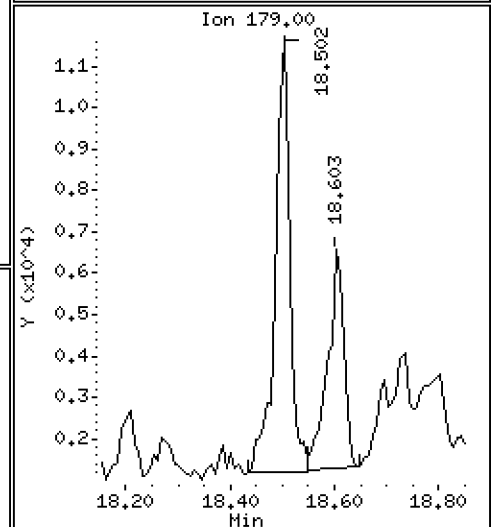
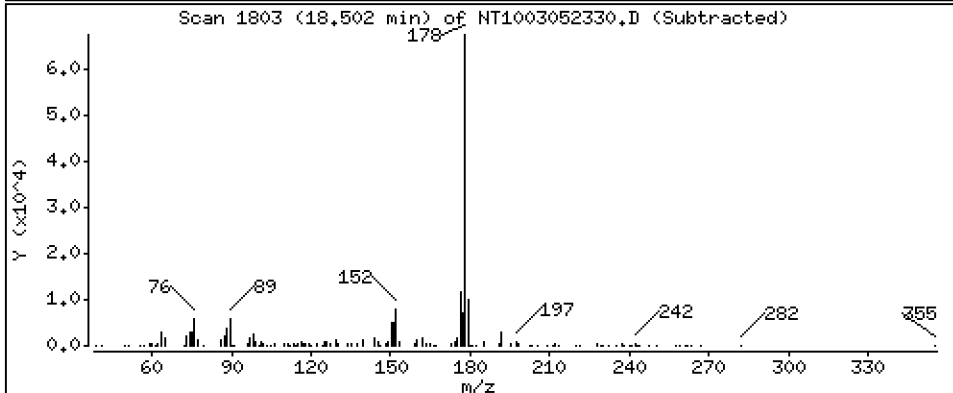
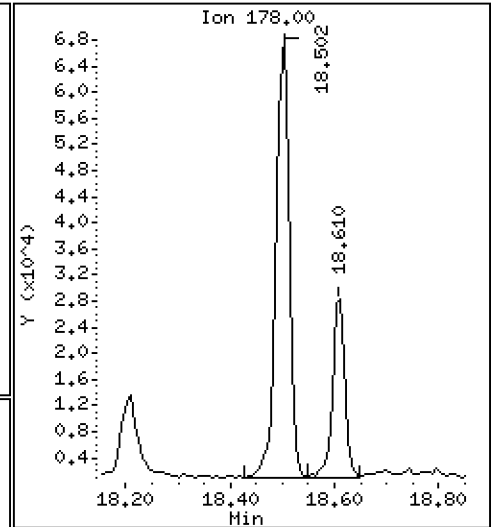
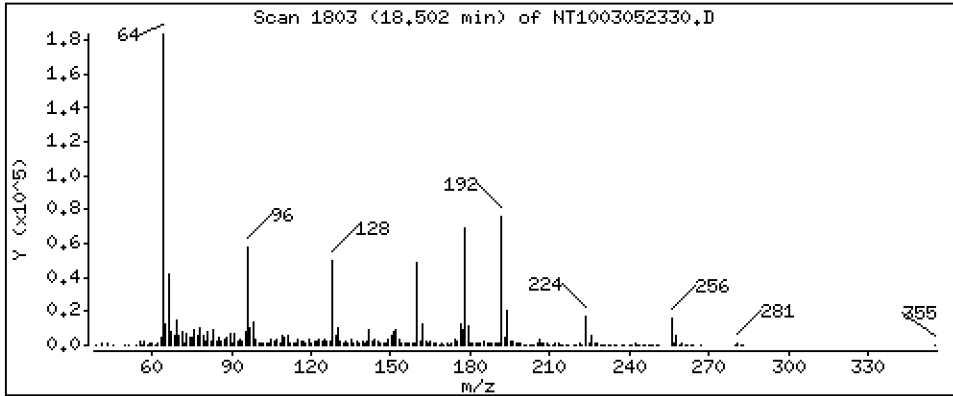
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,5634 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

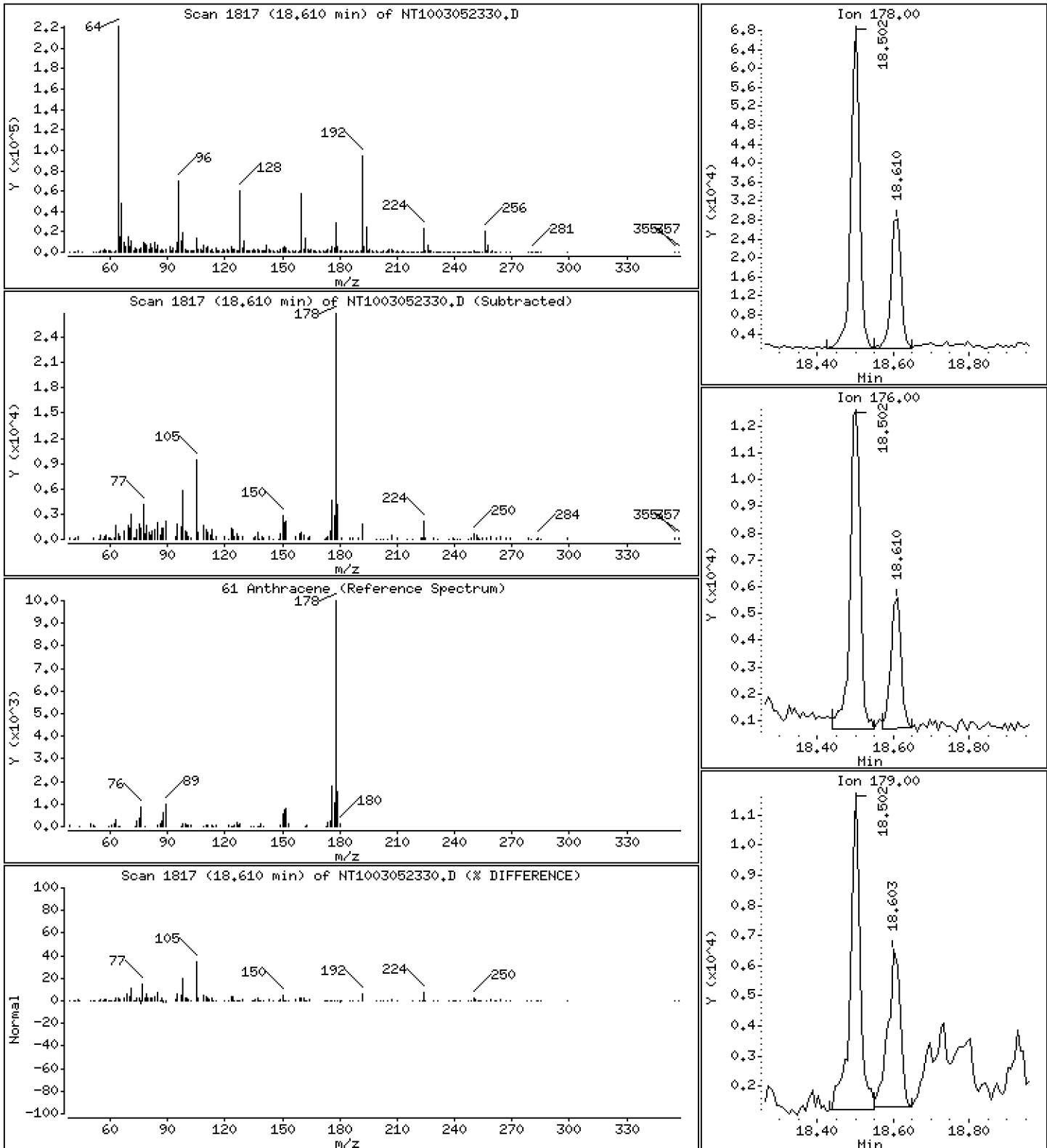
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,2405 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

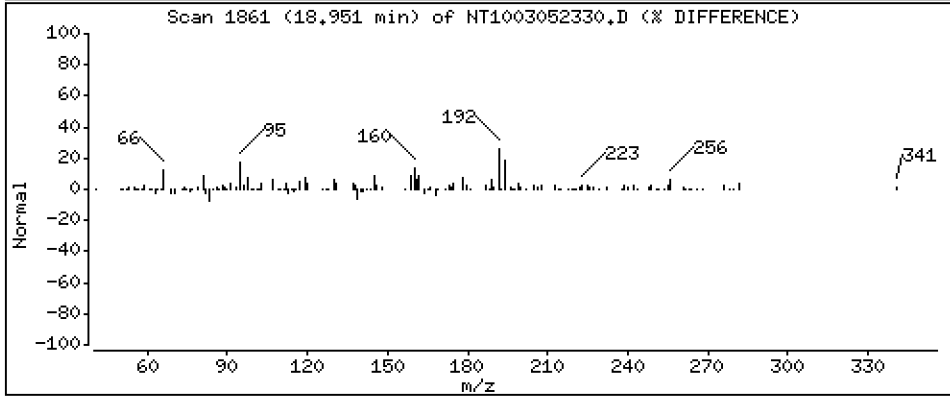
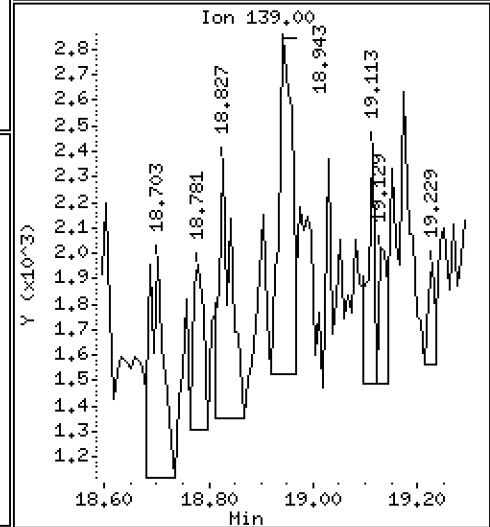
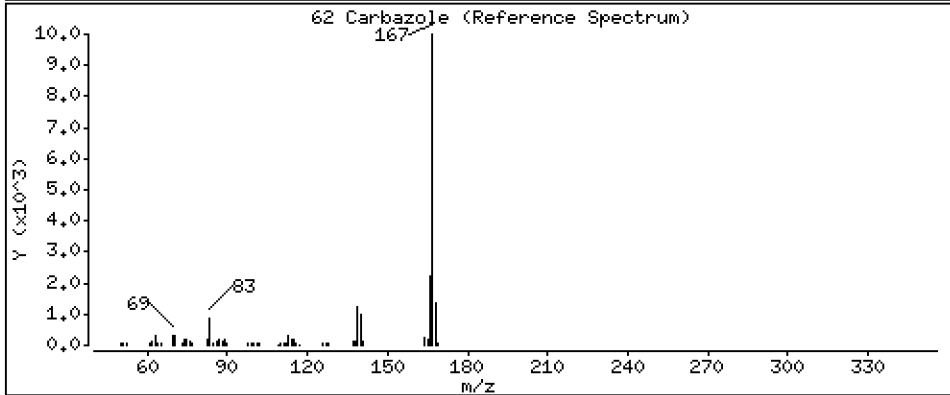
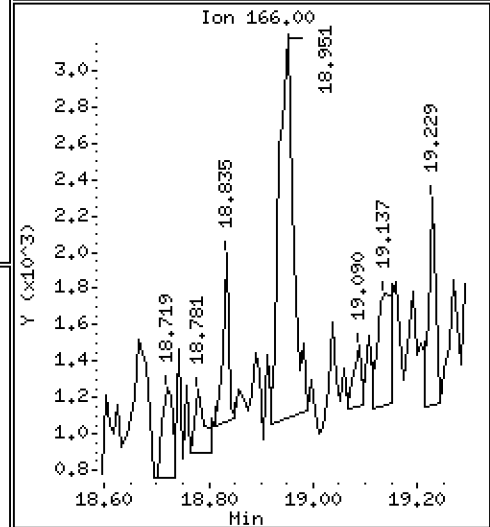
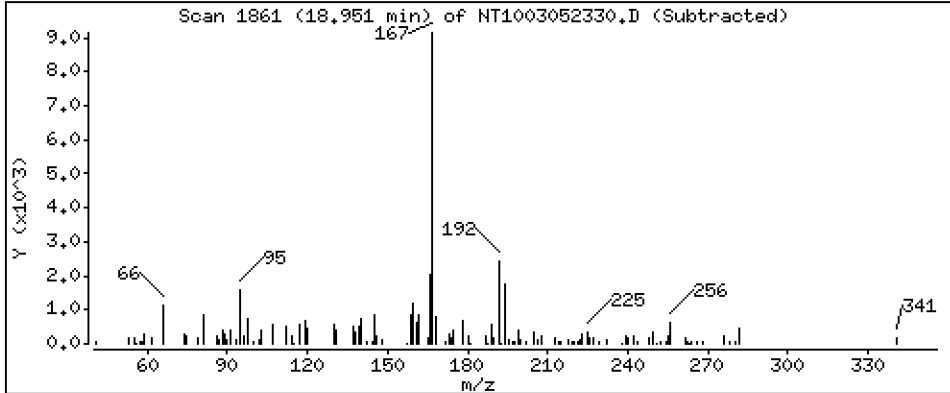
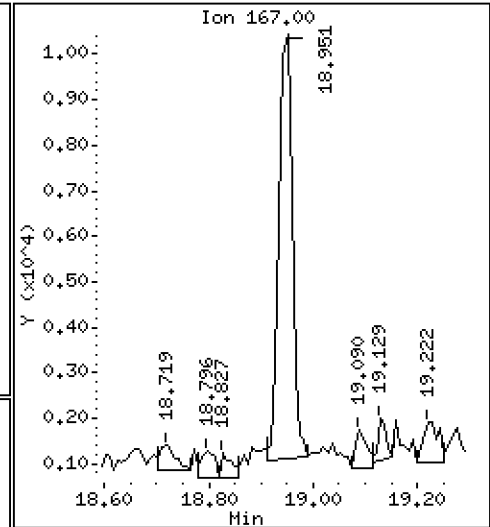
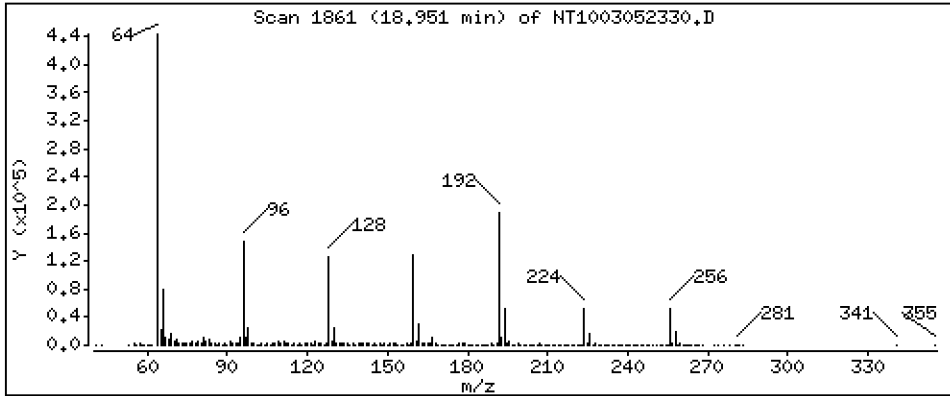
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.09043 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

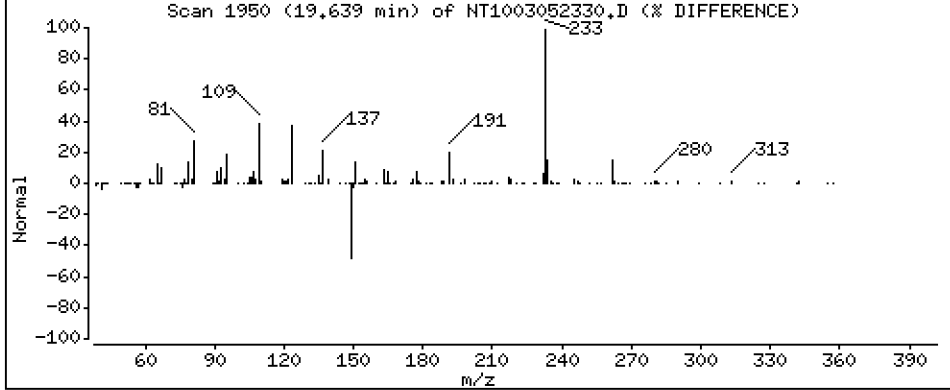
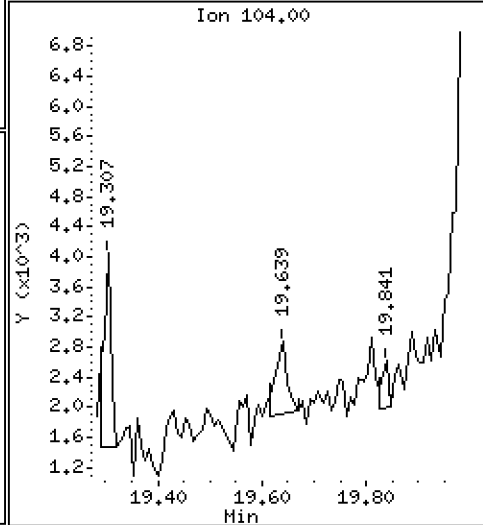
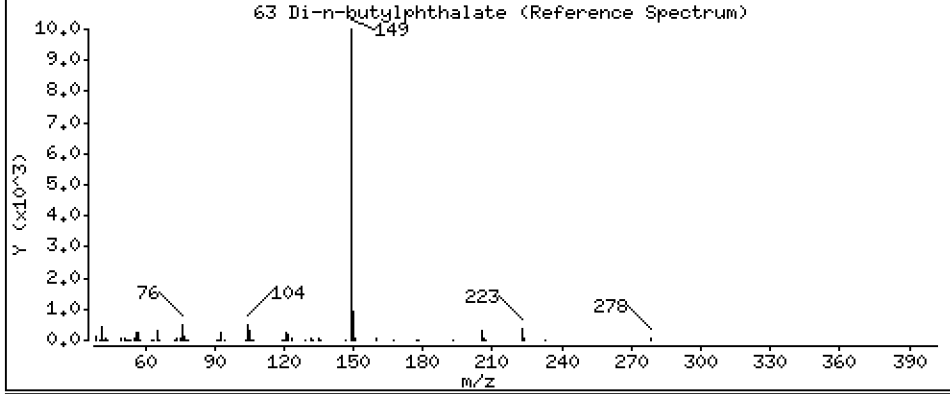
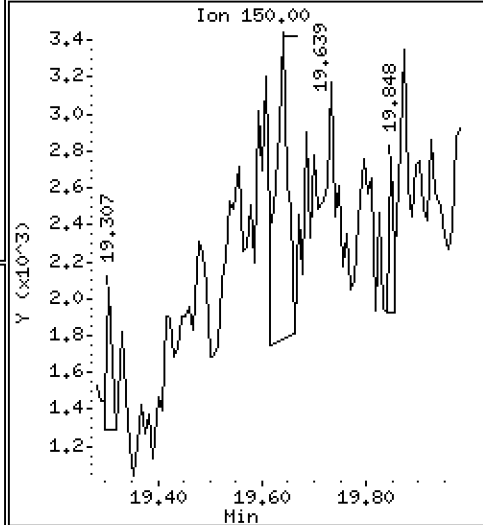
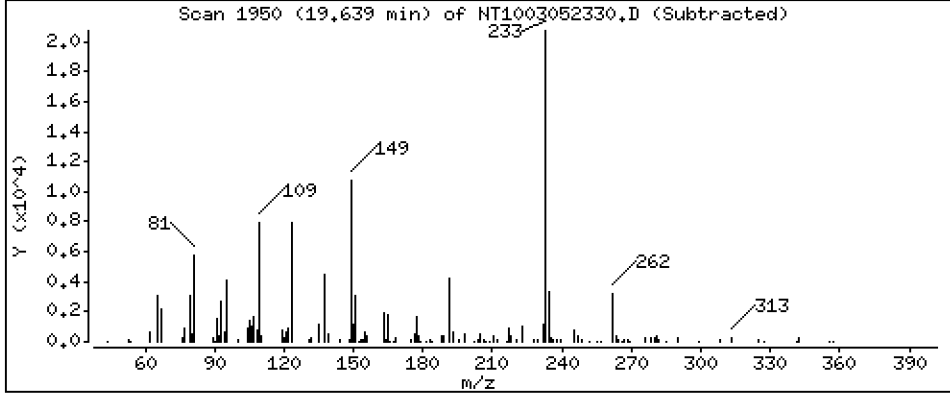
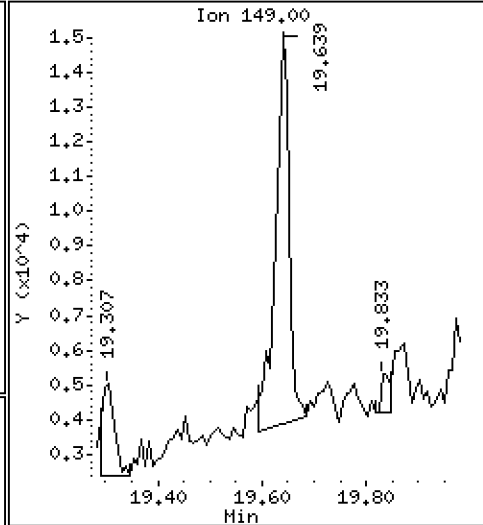
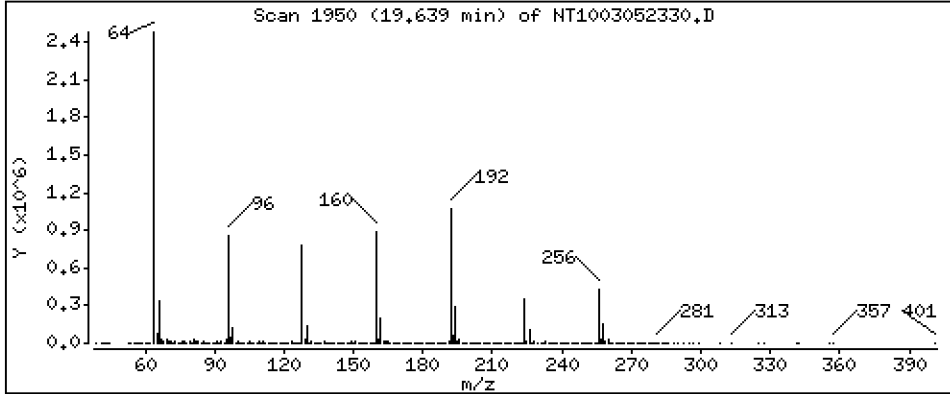
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.08503 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

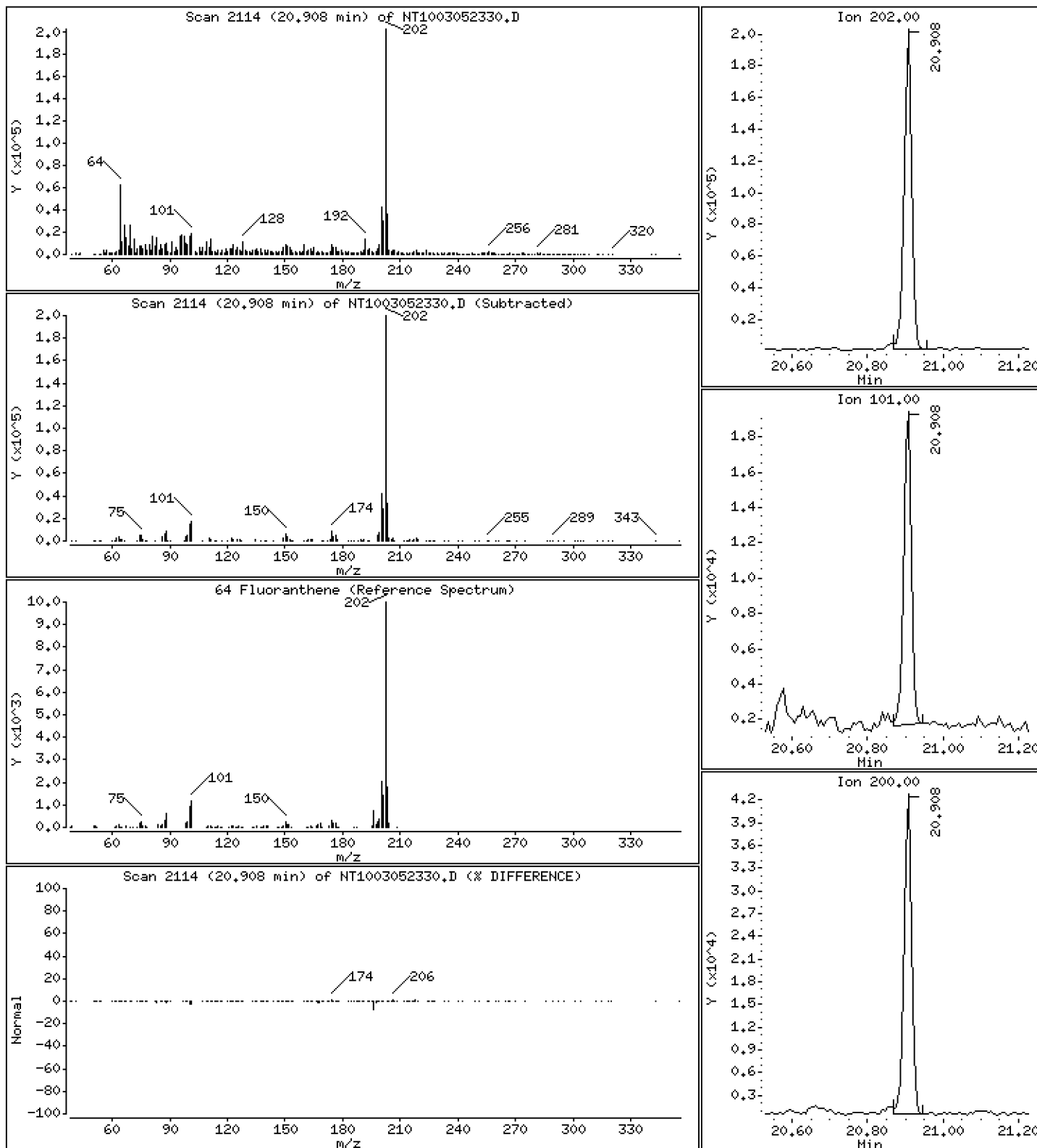
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 1,185 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

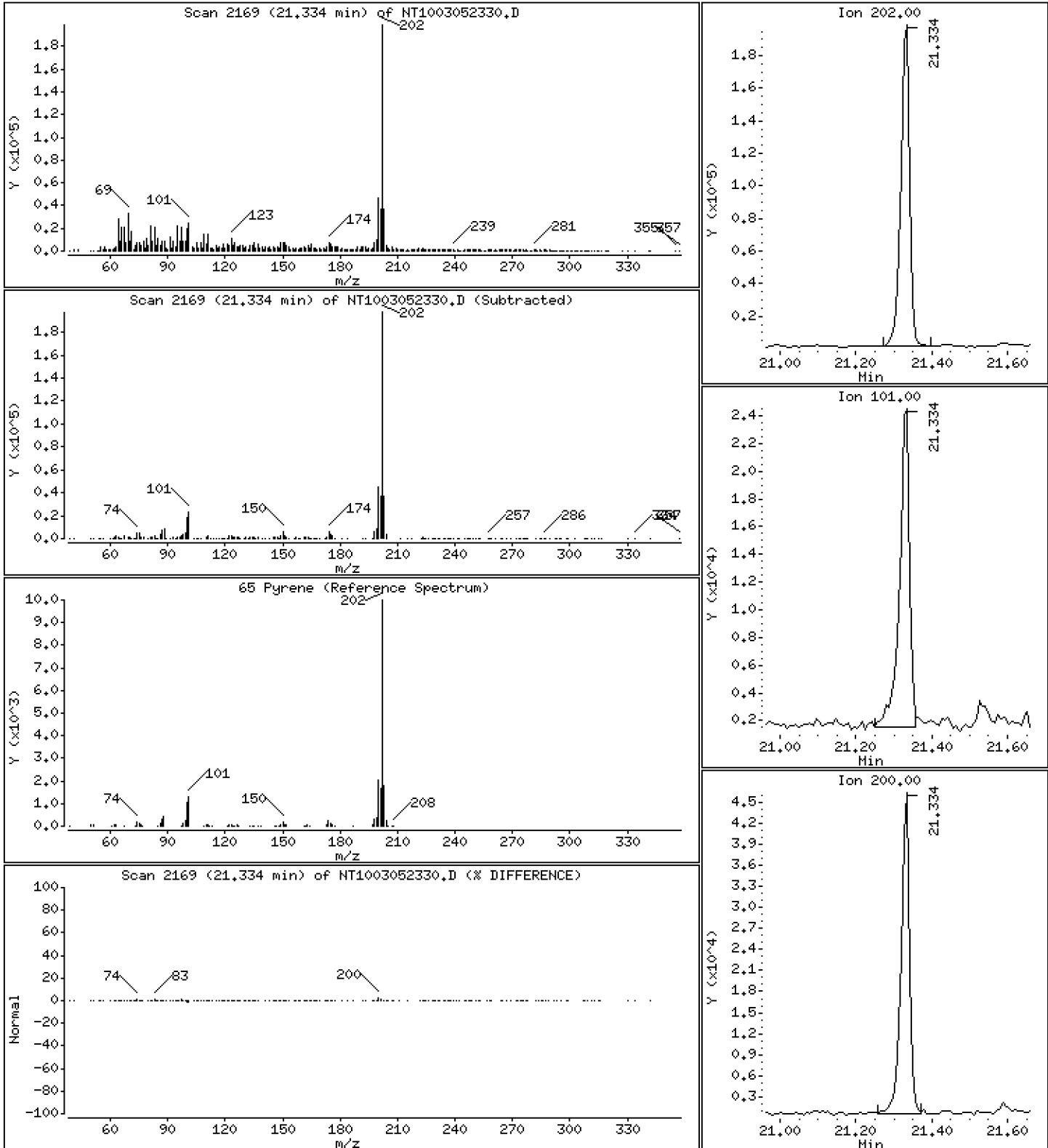
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 1,277 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

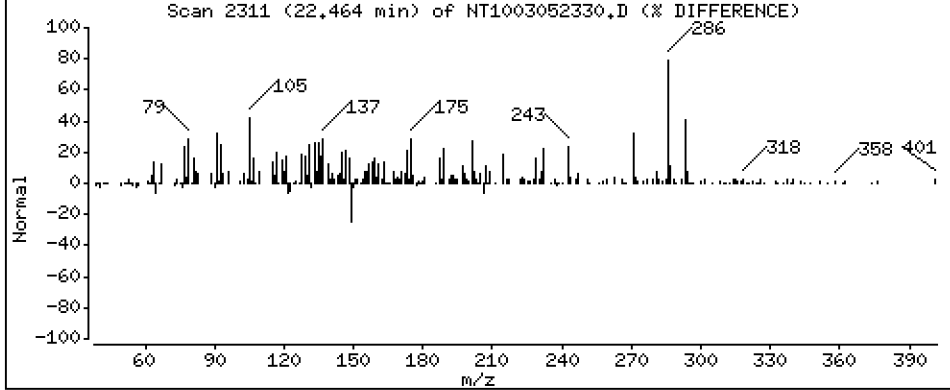
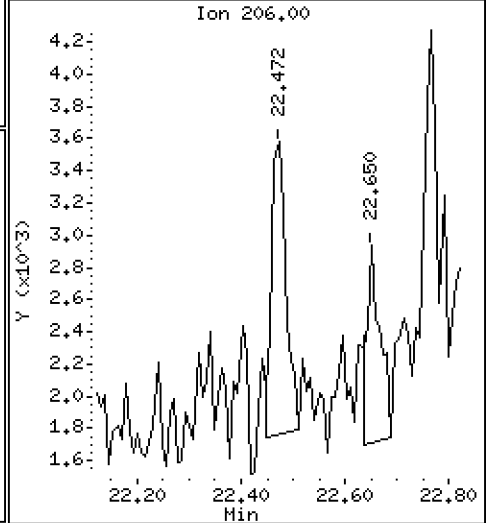
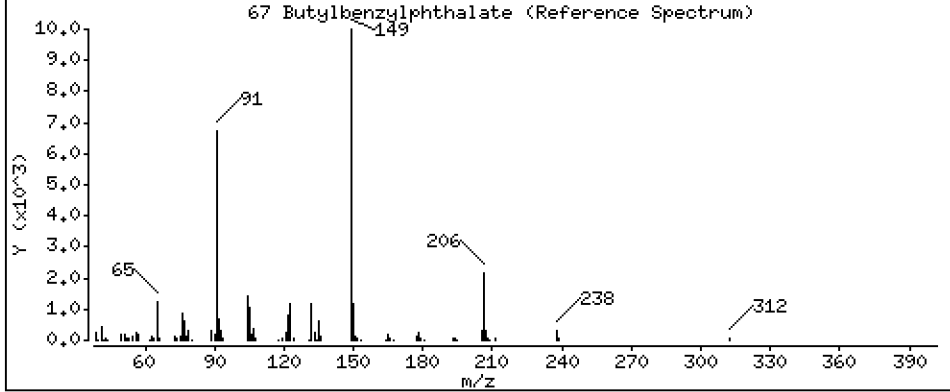
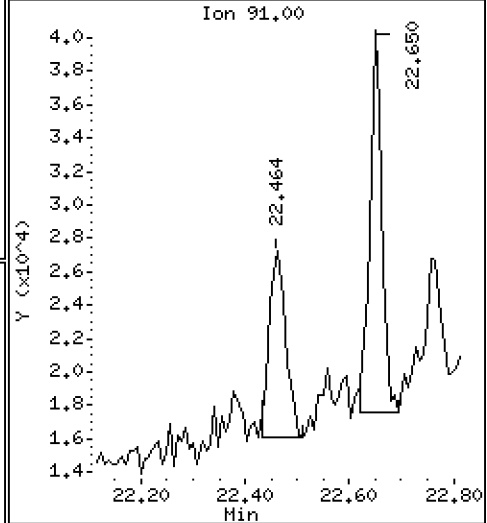
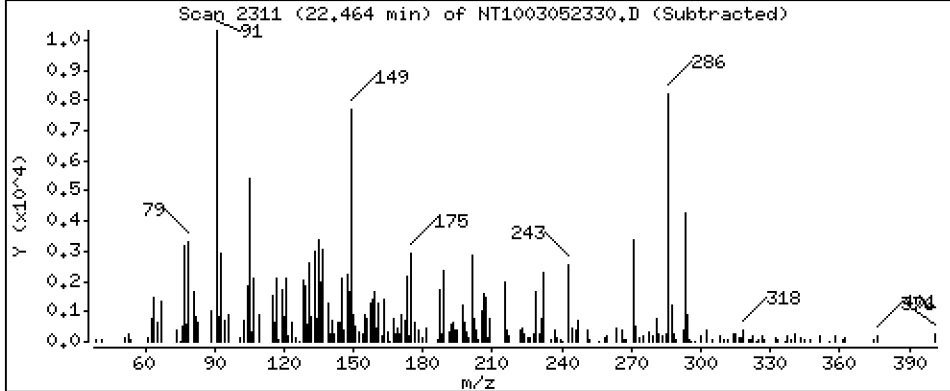
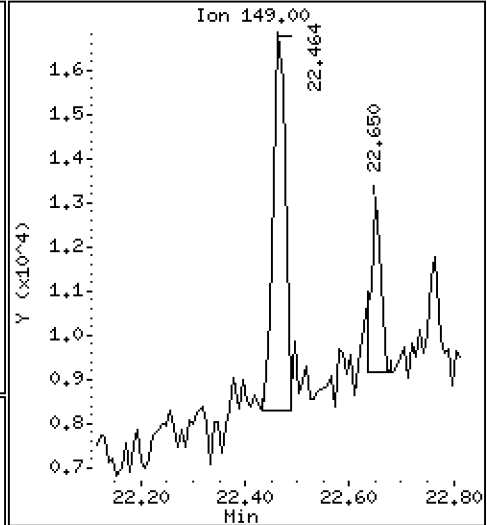
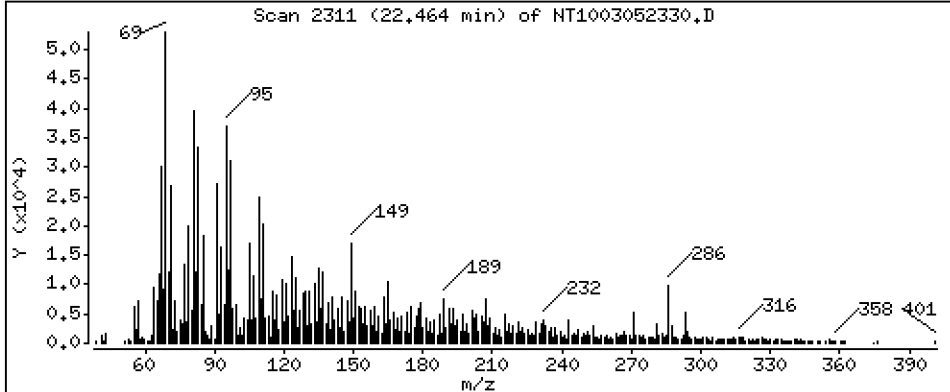
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.09763 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

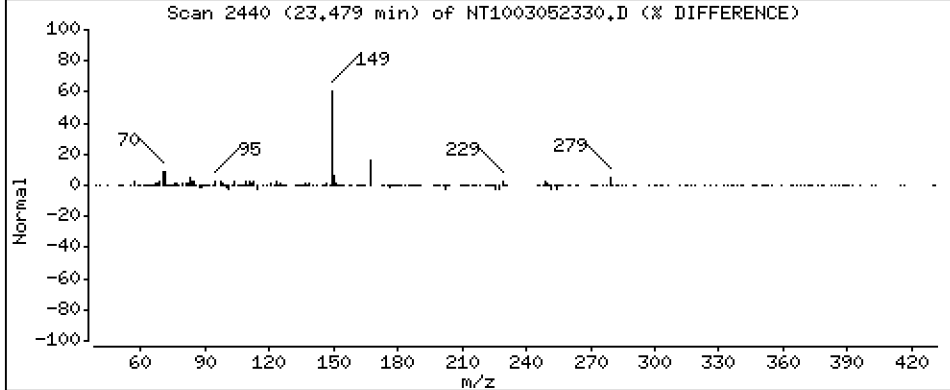
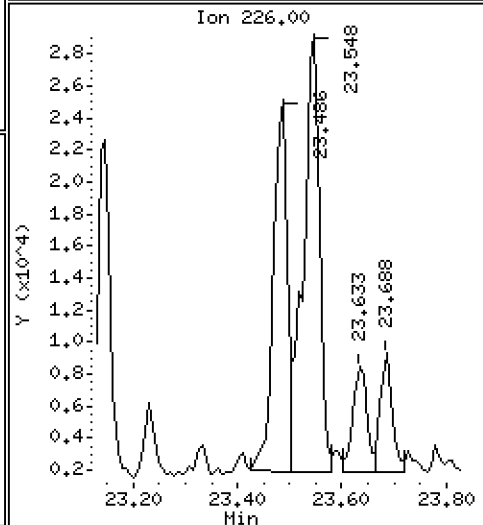
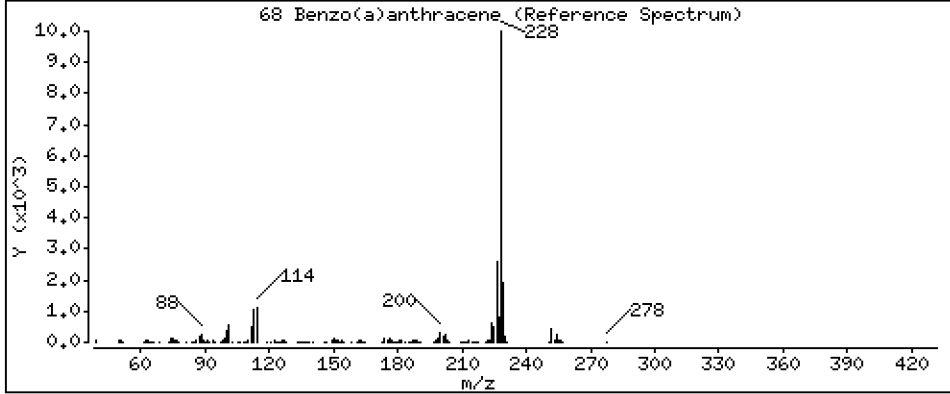
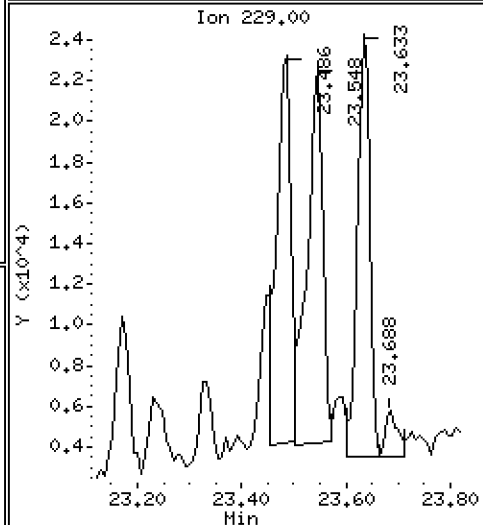
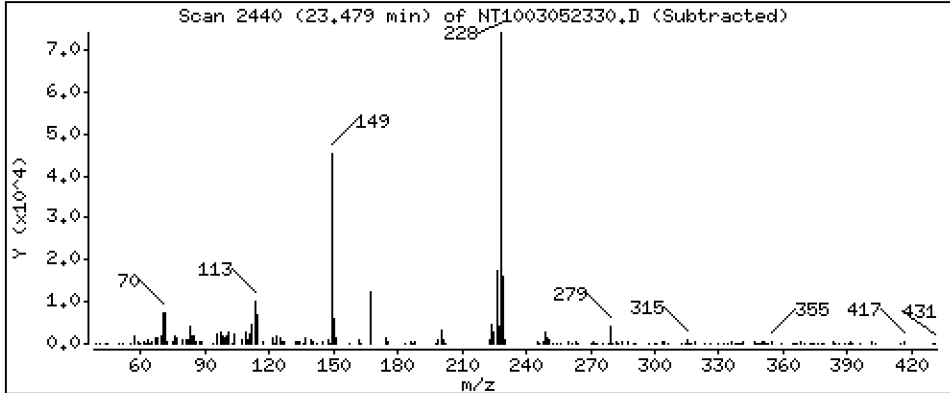
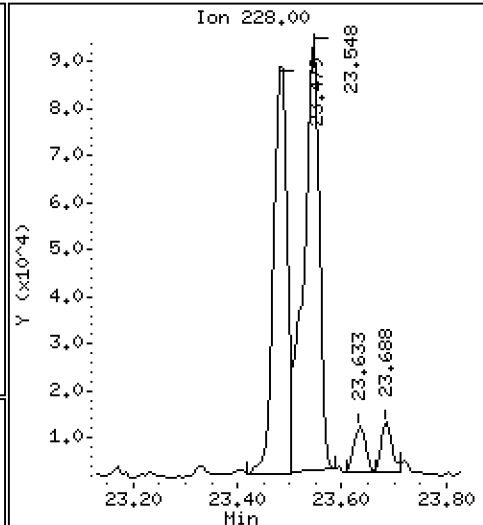
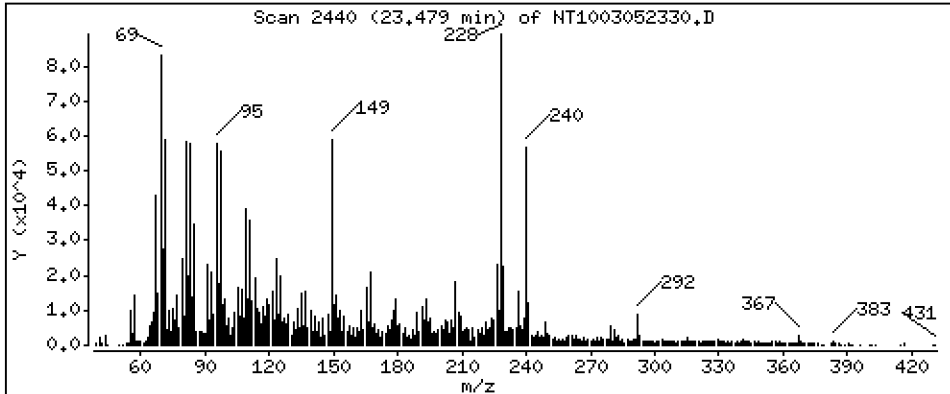
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,6109 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

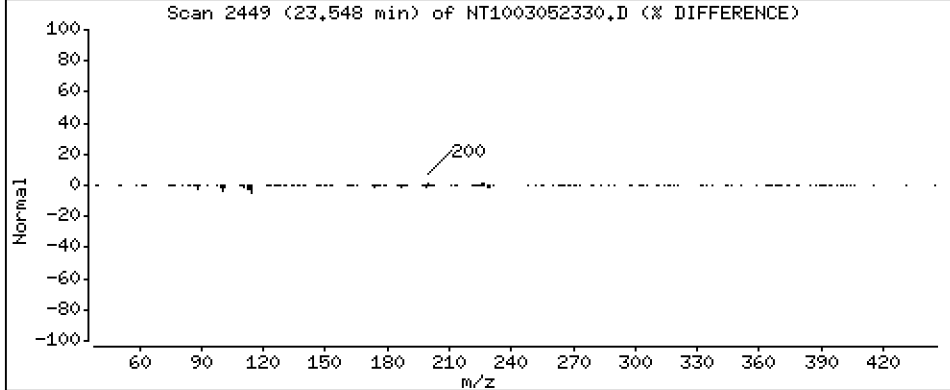
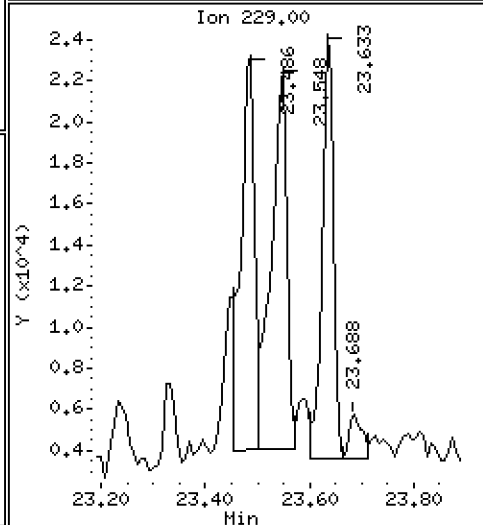
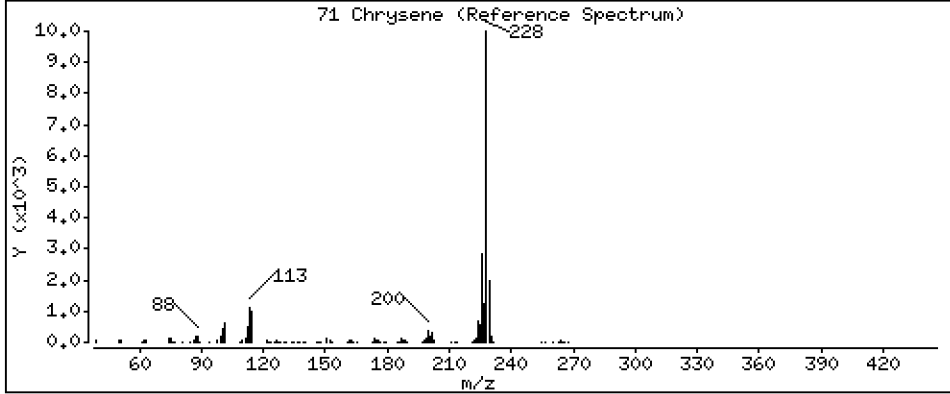
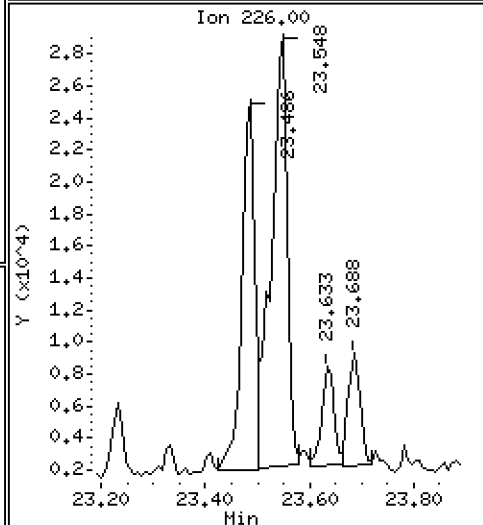
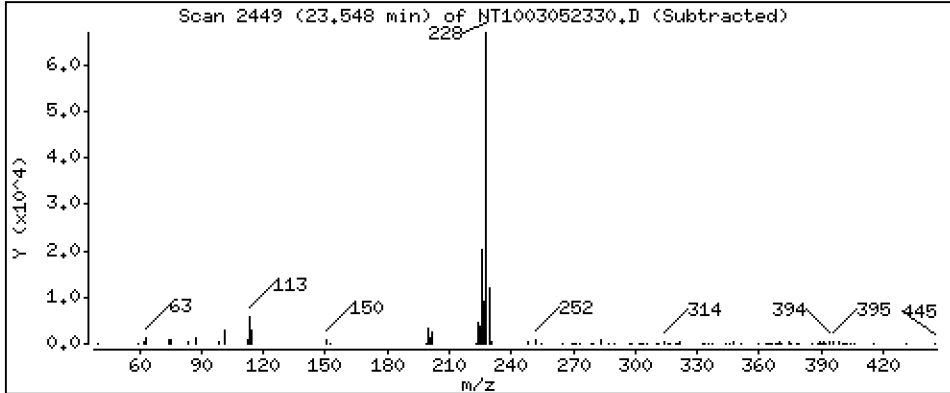
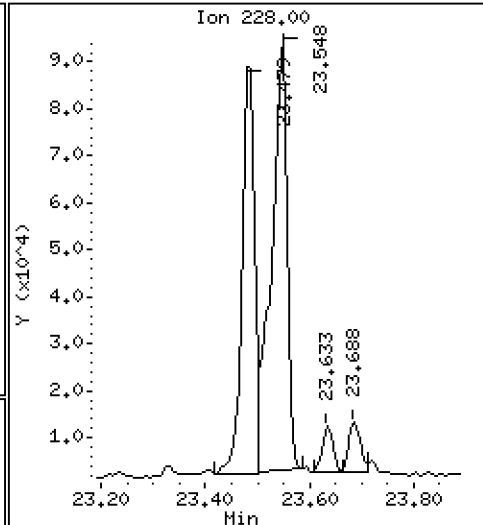
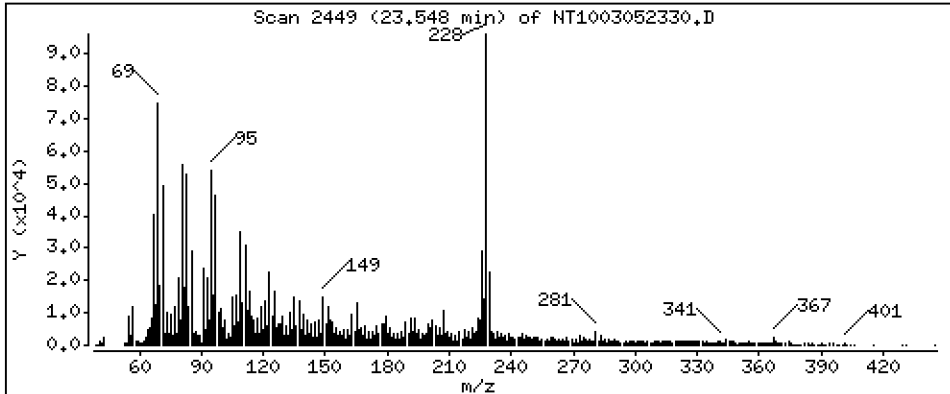
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,9283 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

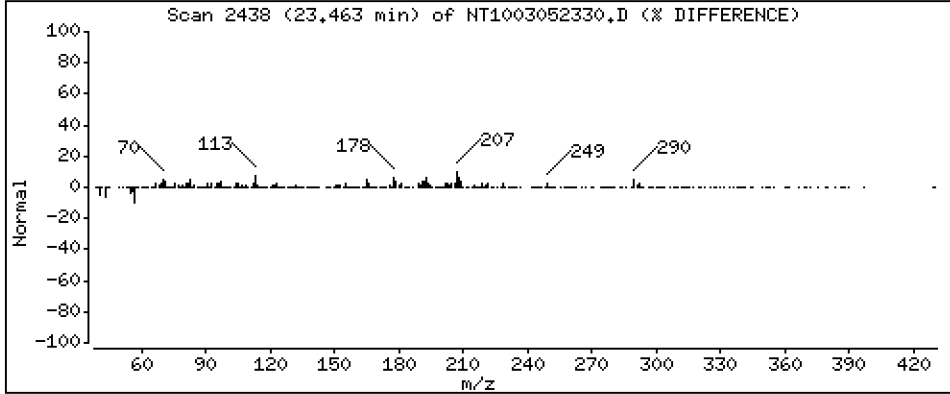
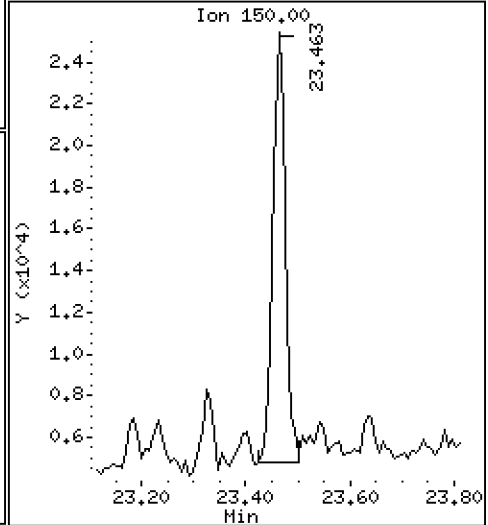
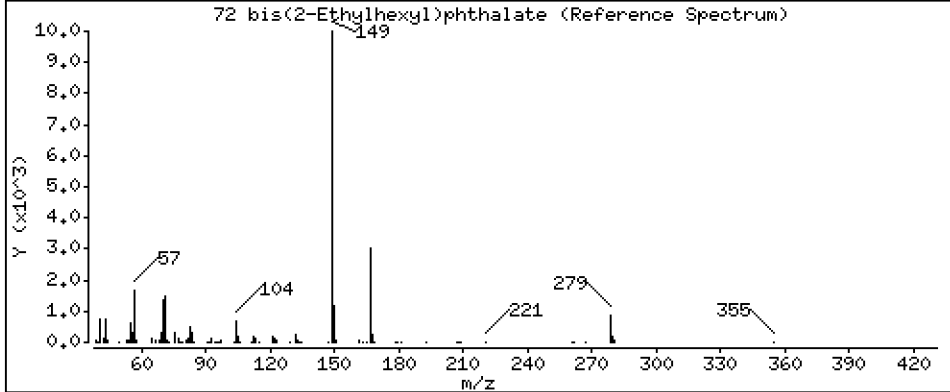
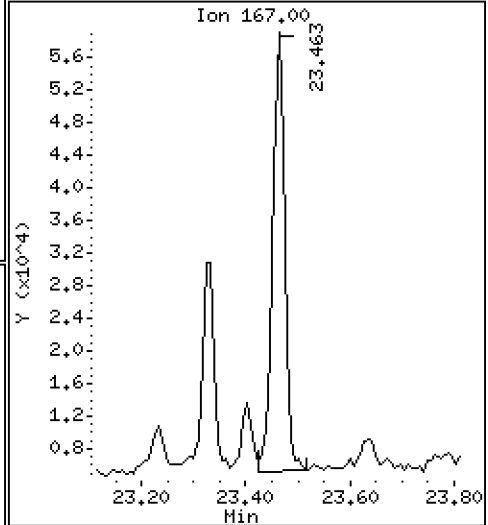
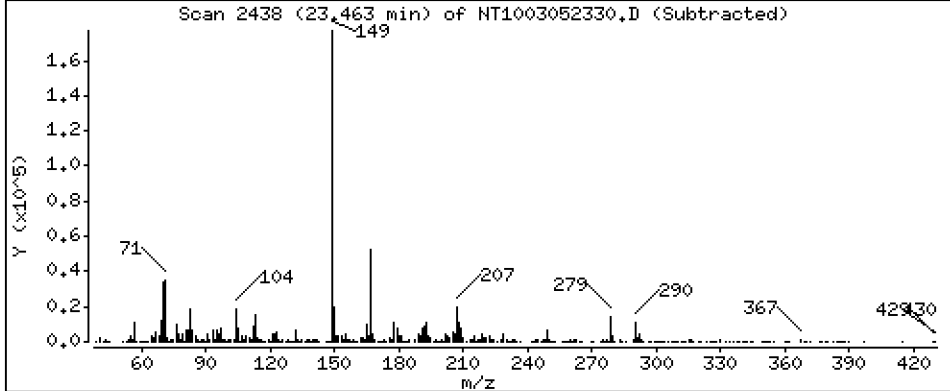
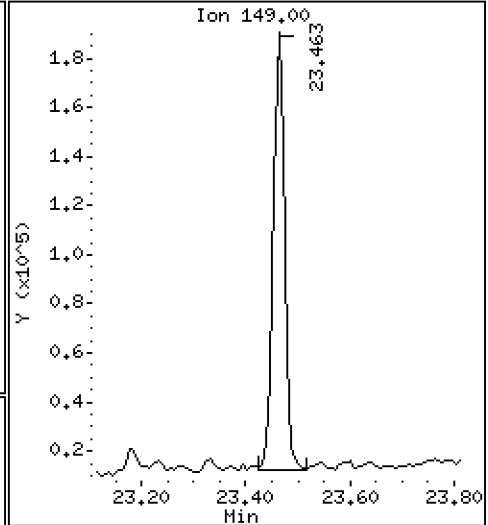
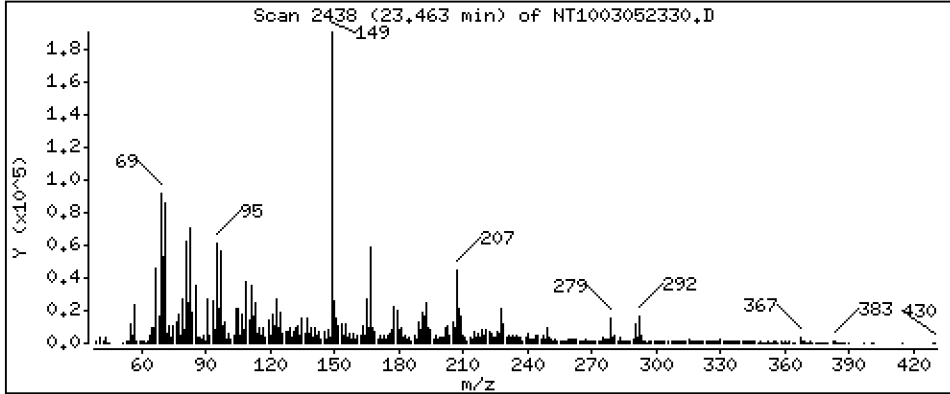
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,369 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

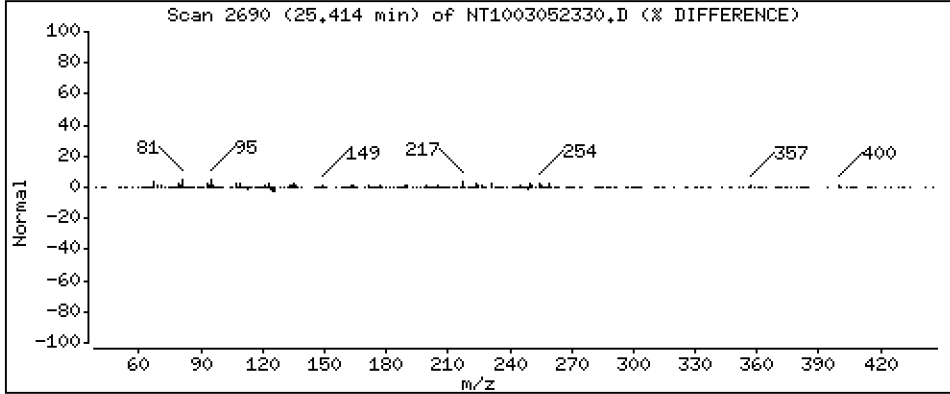
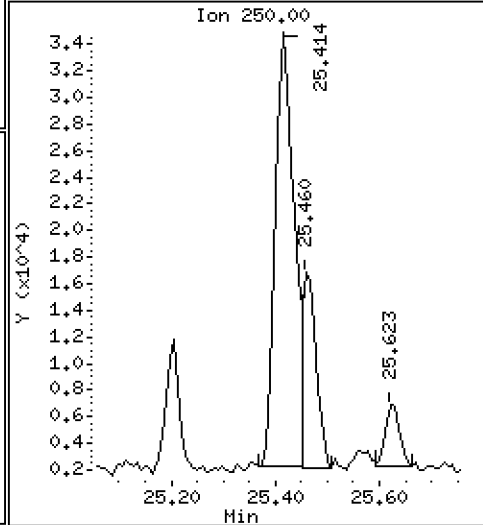
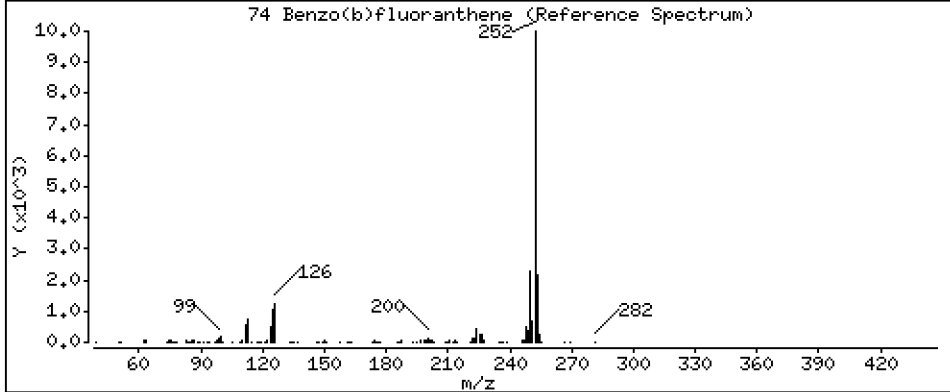
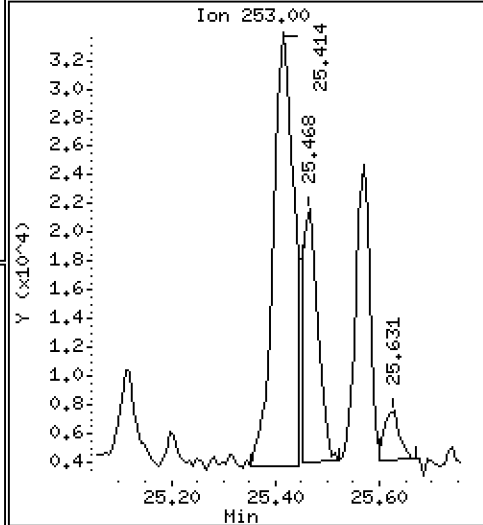
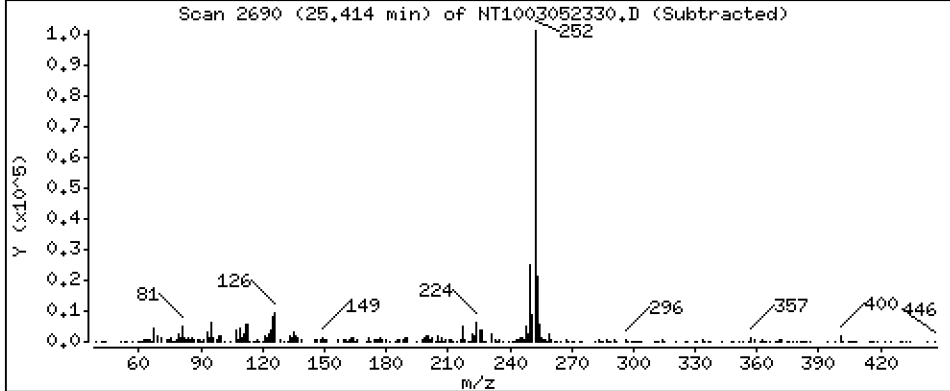
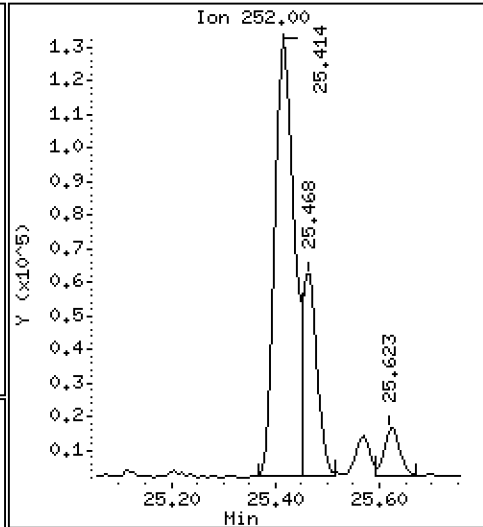
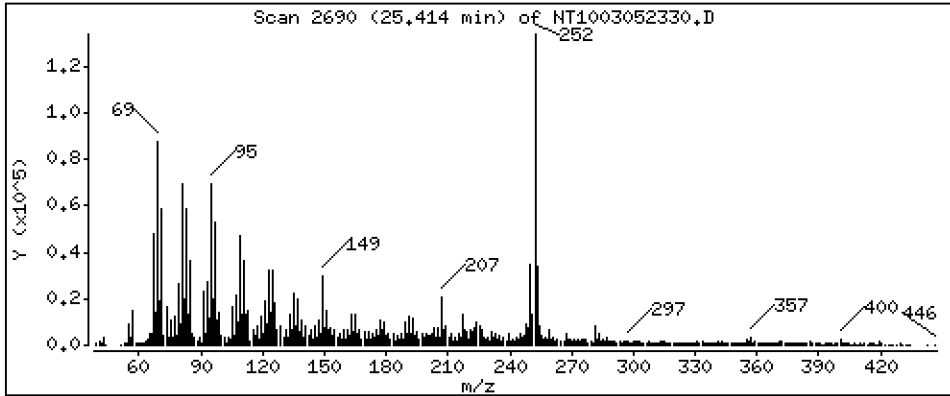
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,124 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

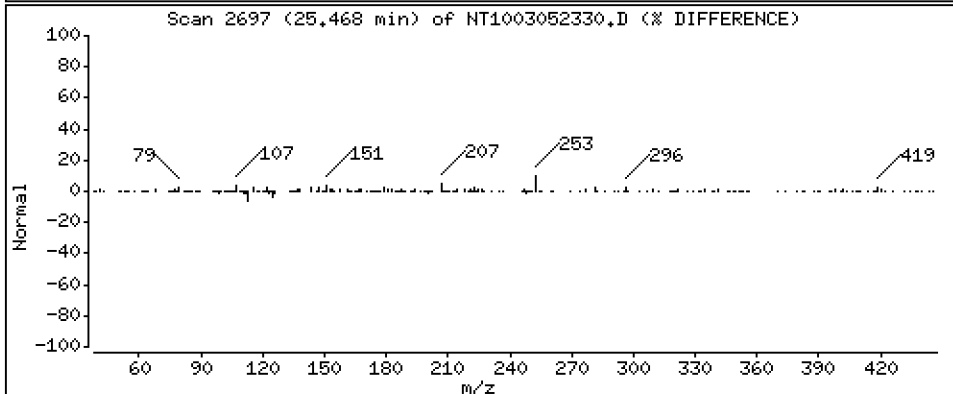
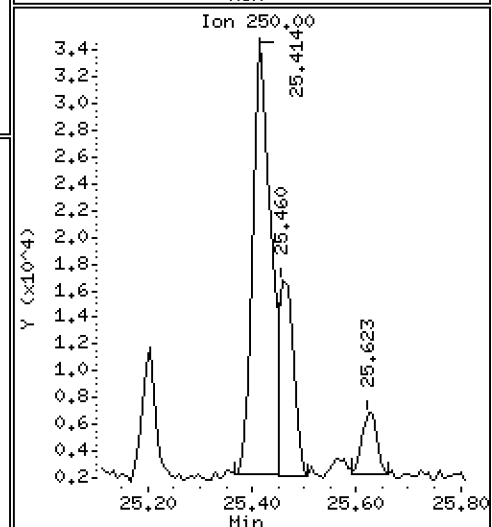
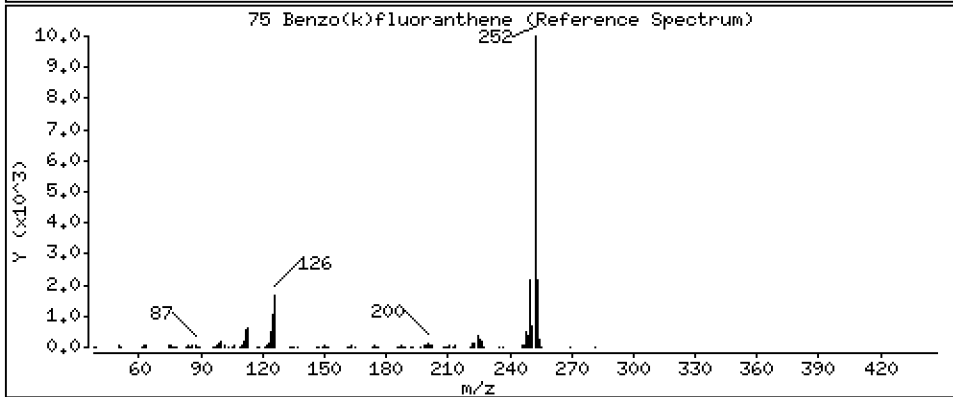
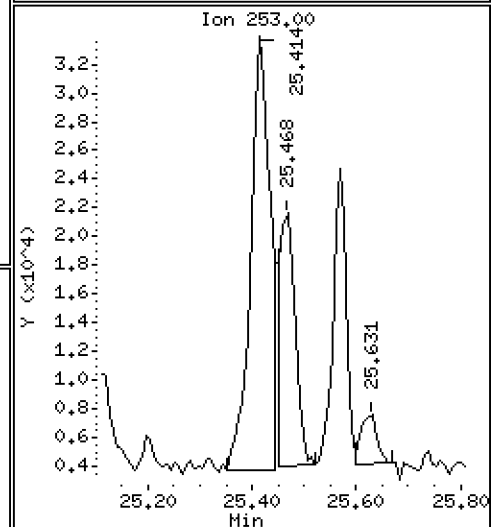
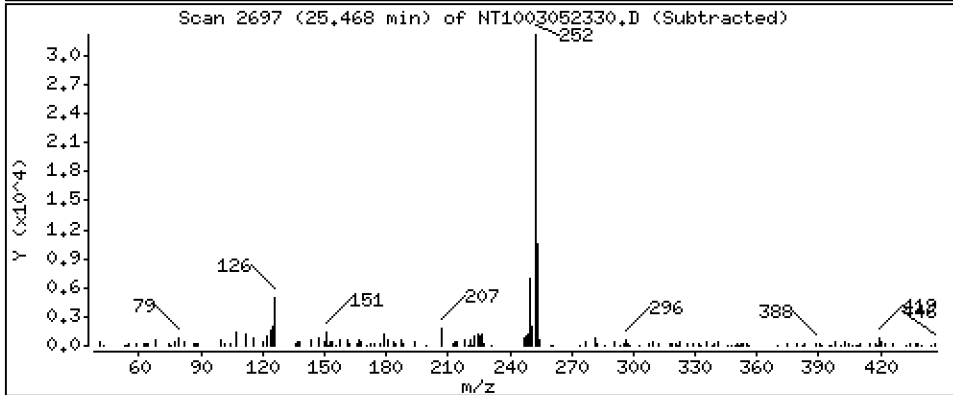
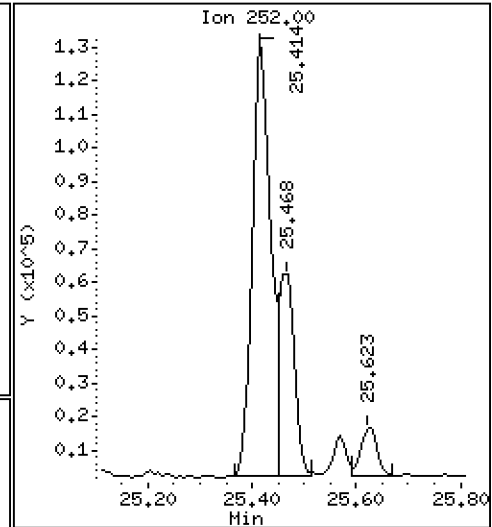
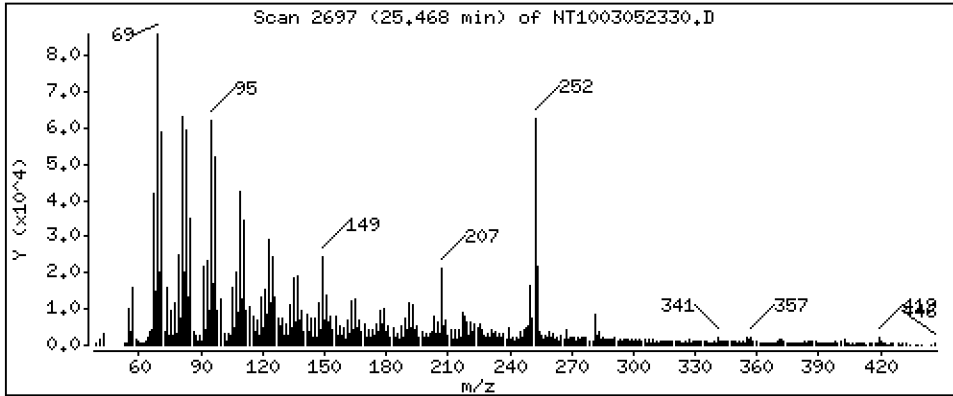
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,4225 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

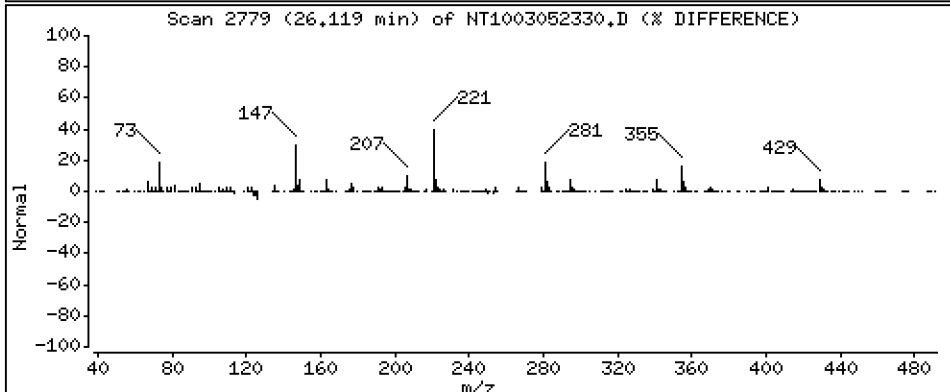
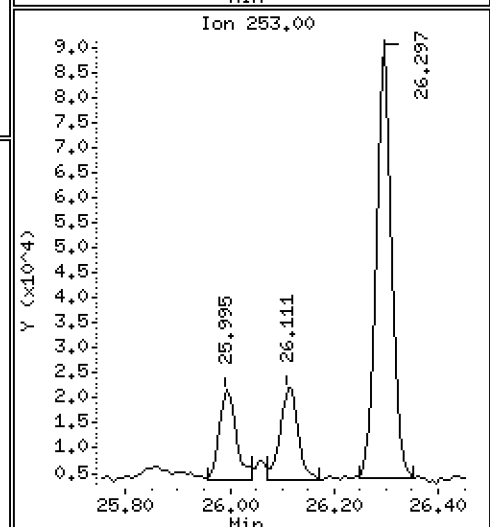
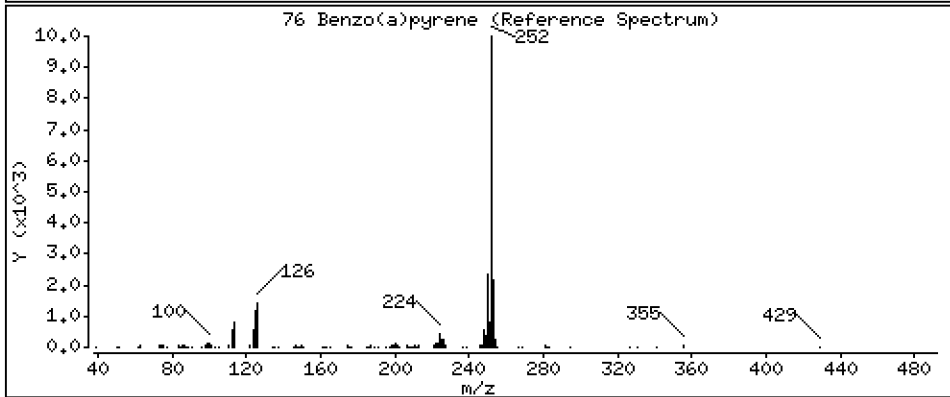
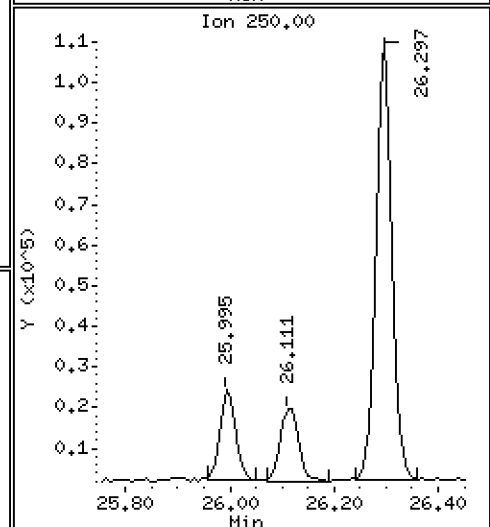
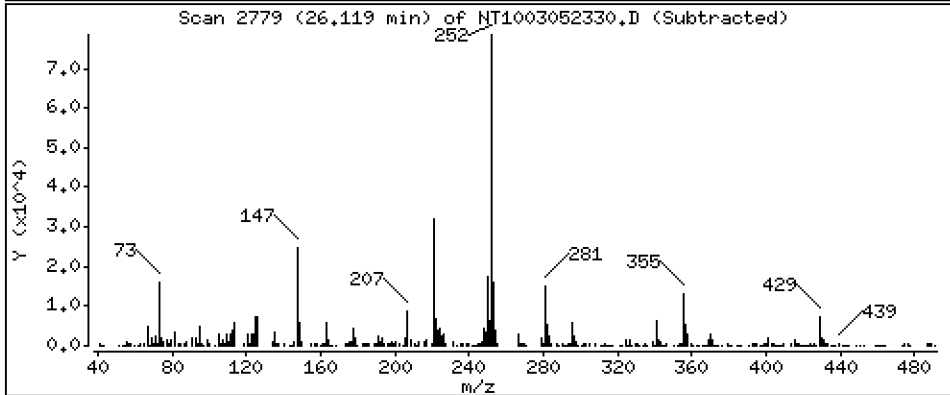
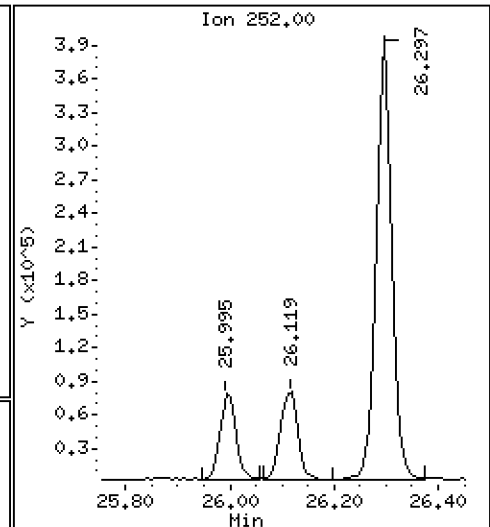
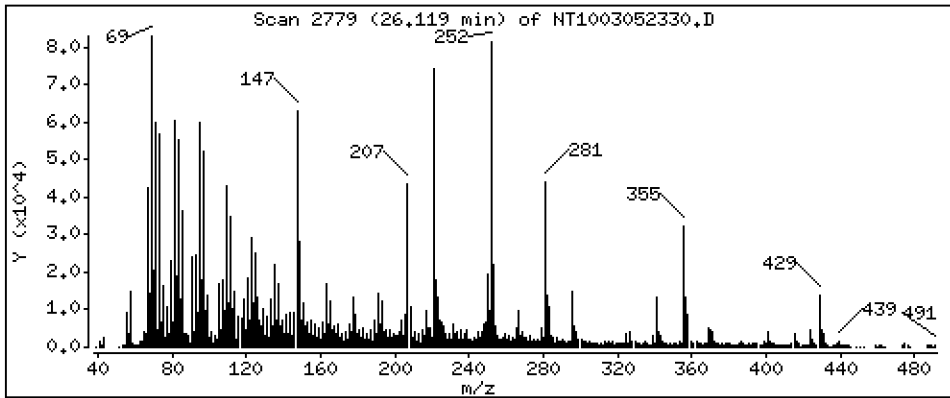
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,6734 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

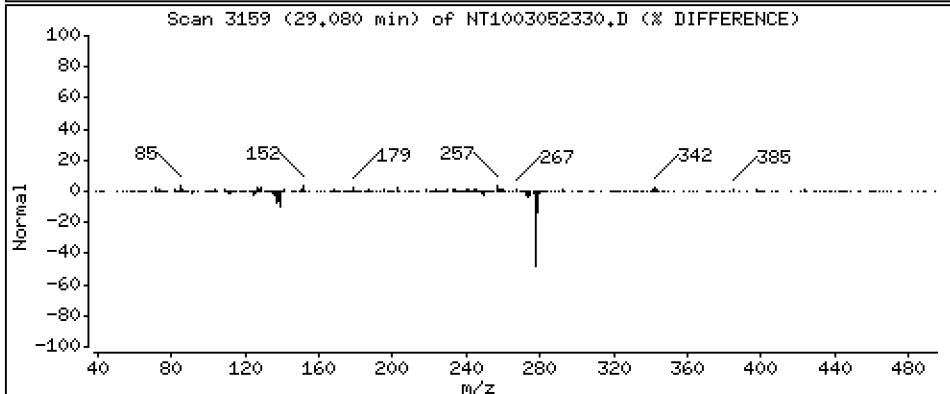
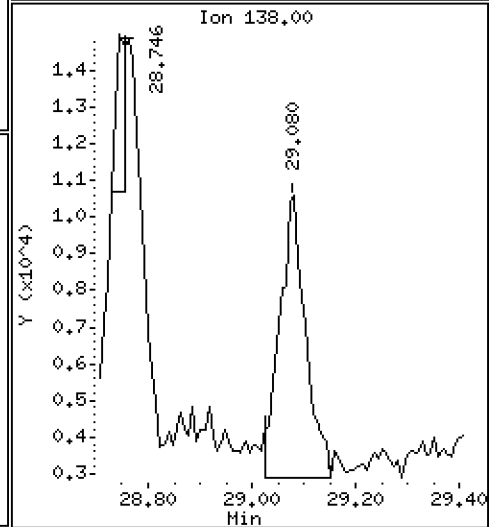
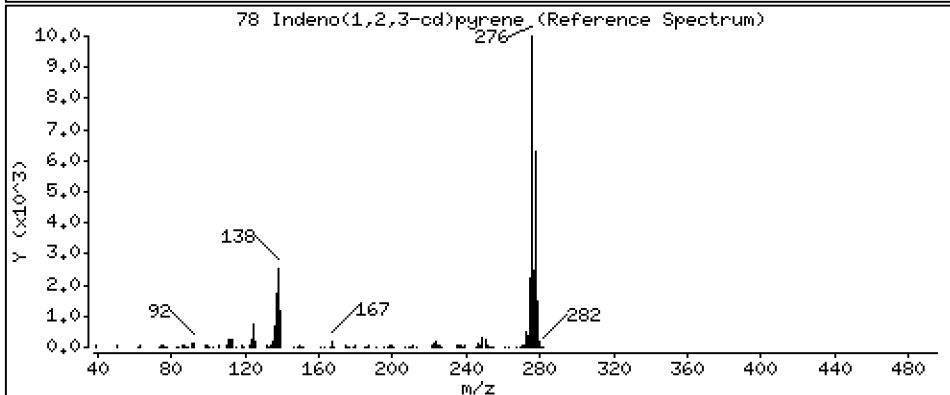
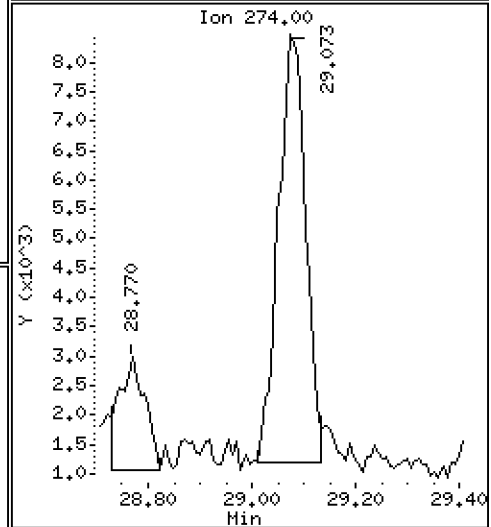
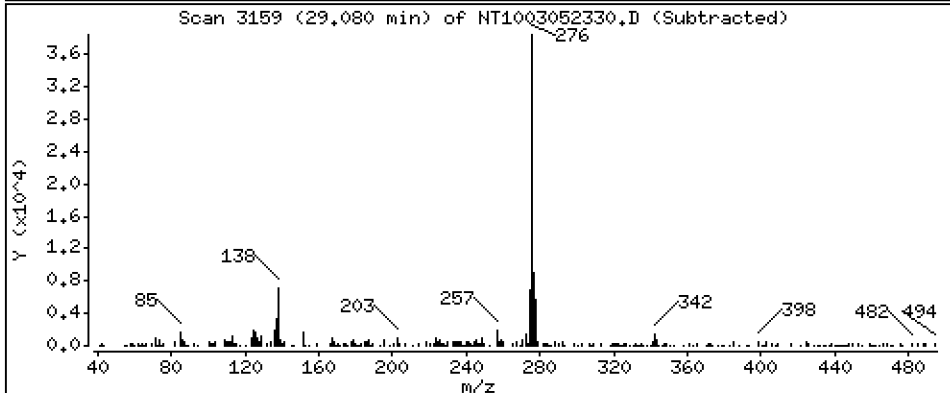
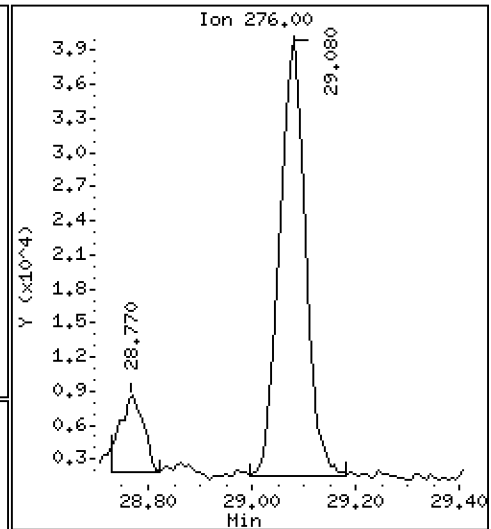
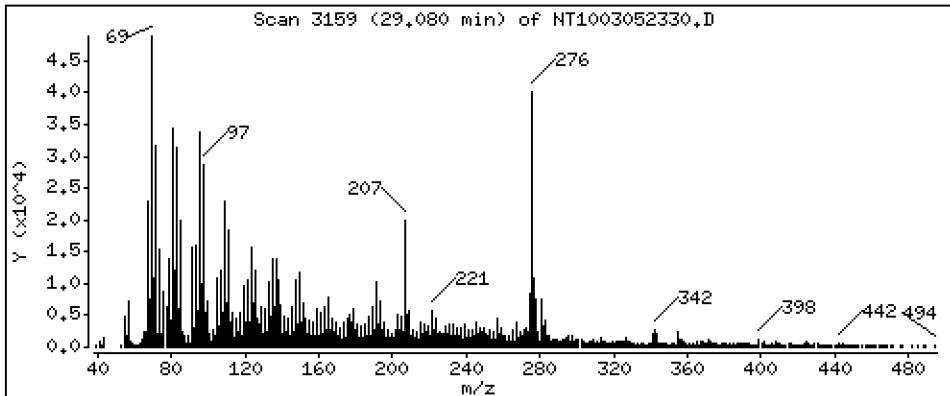
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,4286 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

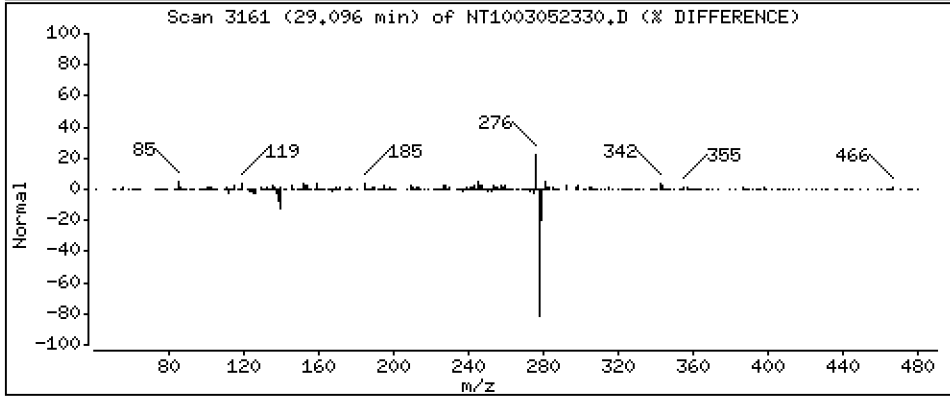
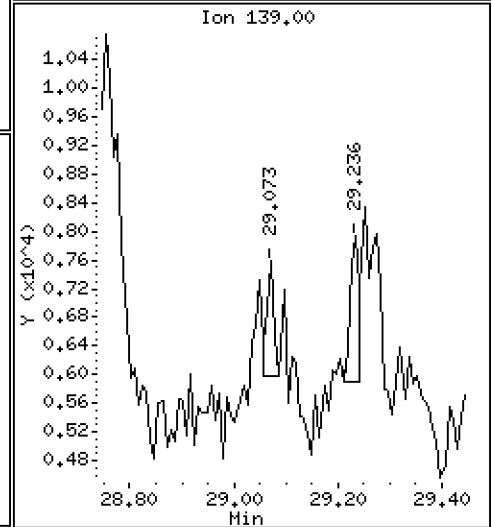
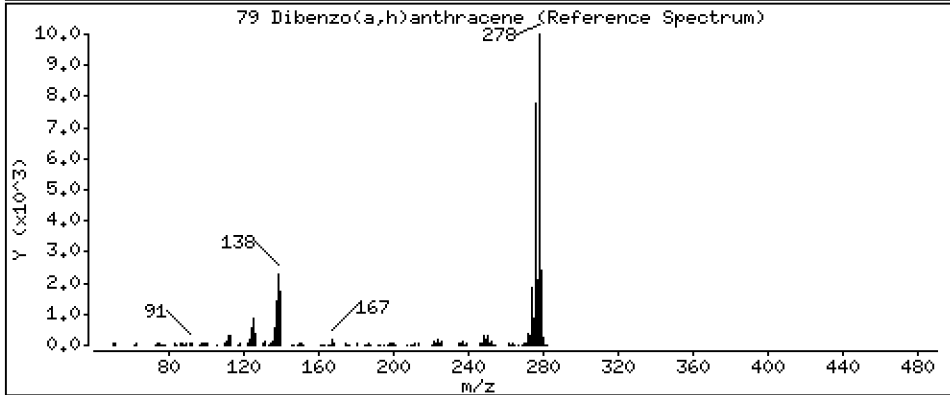
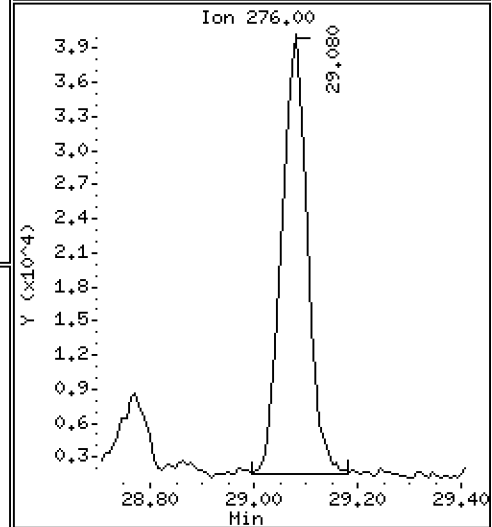
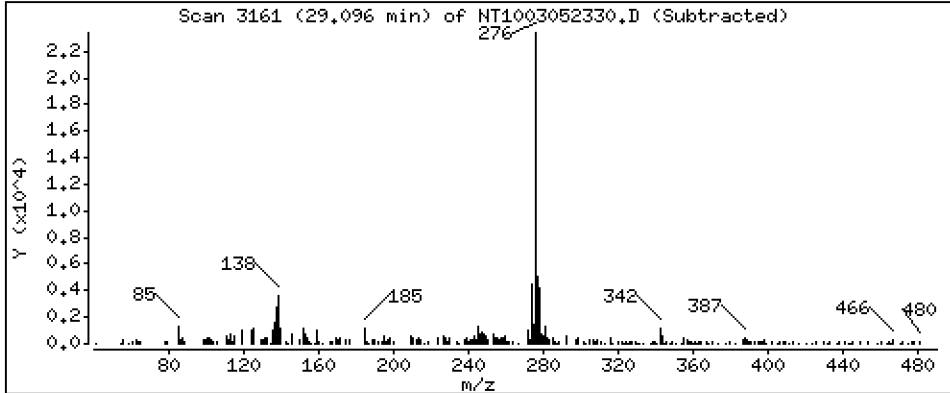
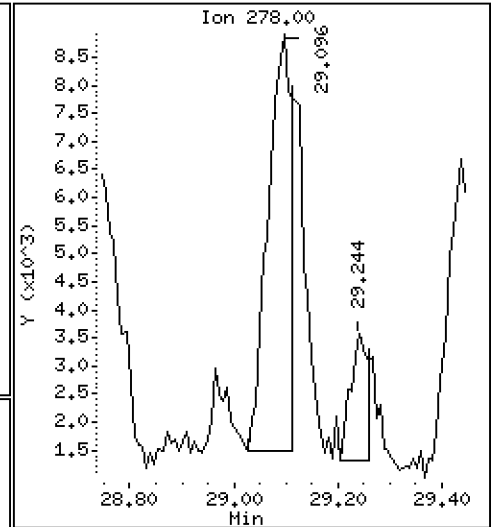
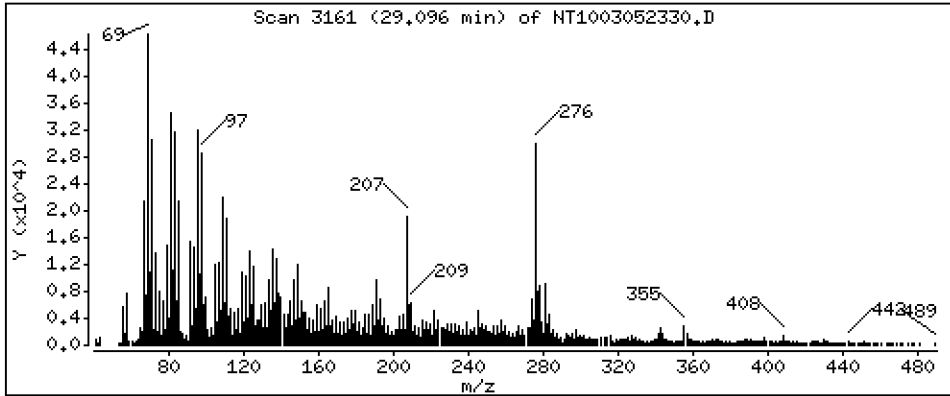
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

79 Dibenzo(a,h)anthracene

Concentration: 0.09579 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

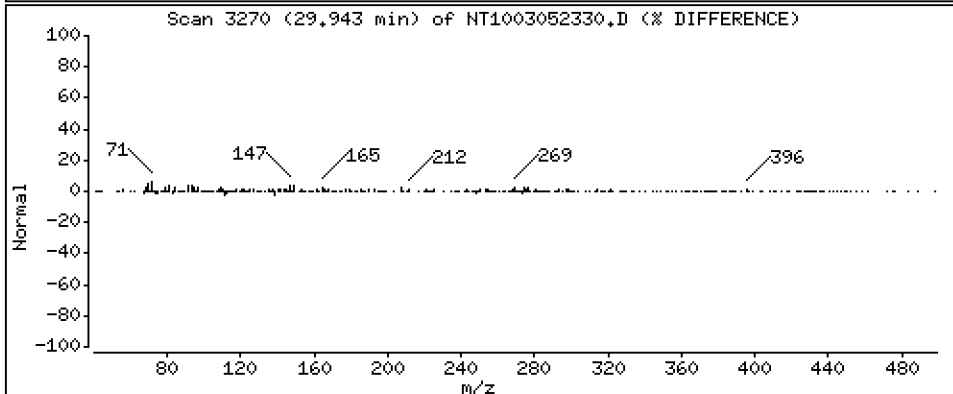
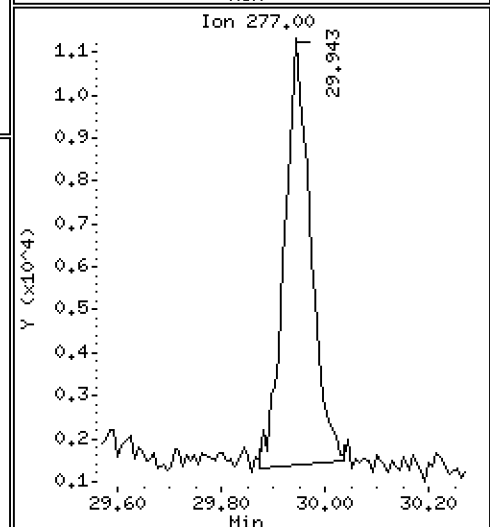
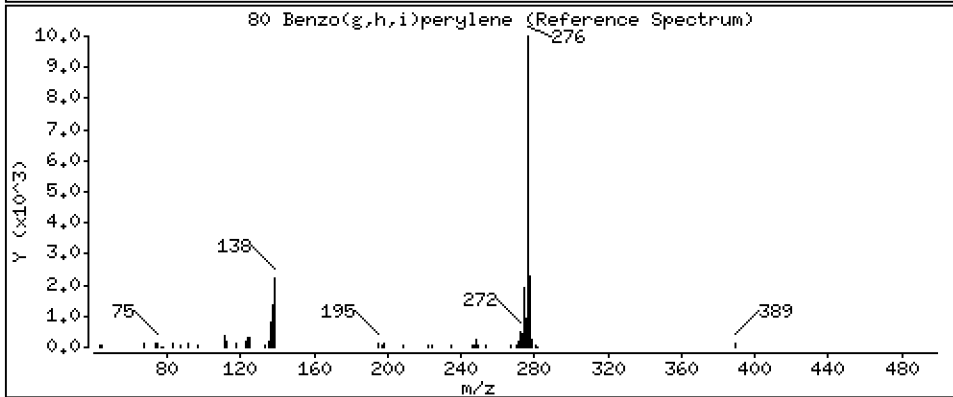
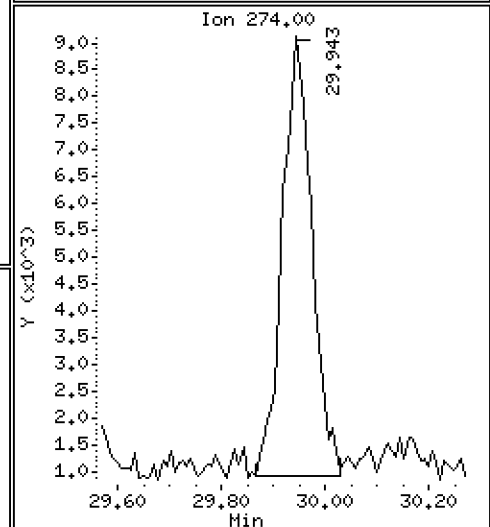
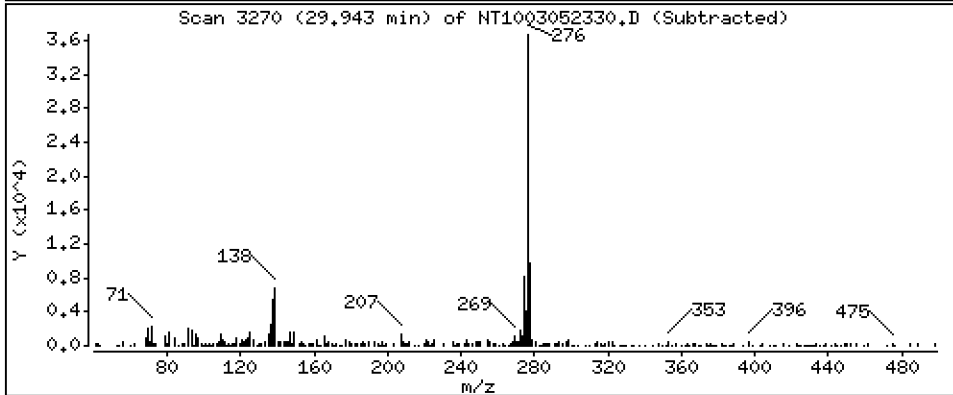
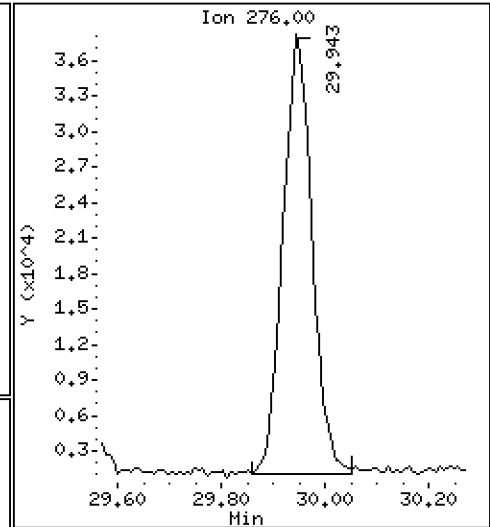
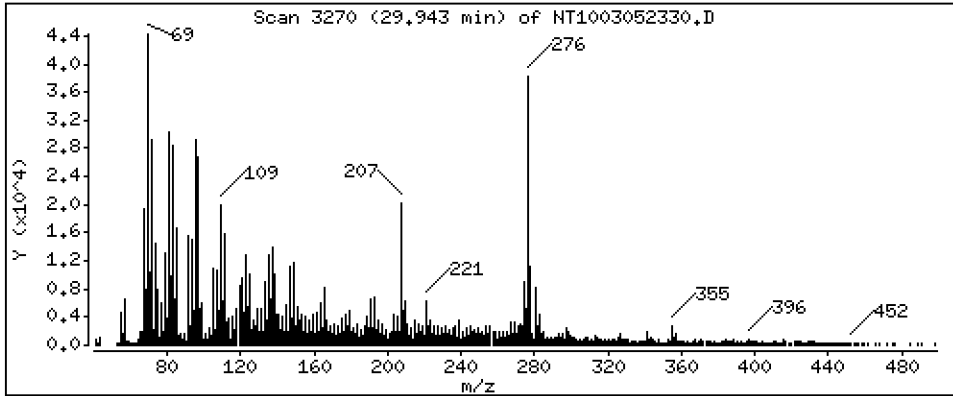
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,5812 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

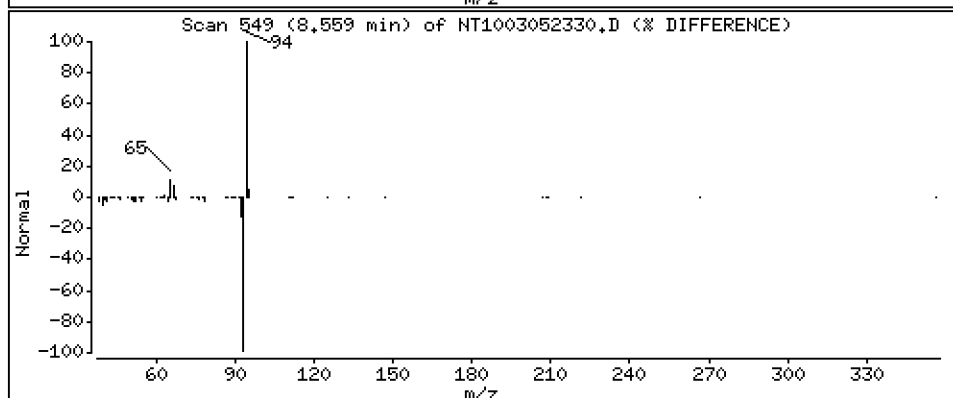
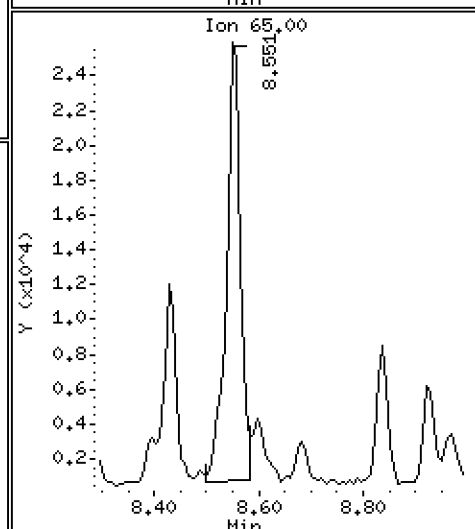
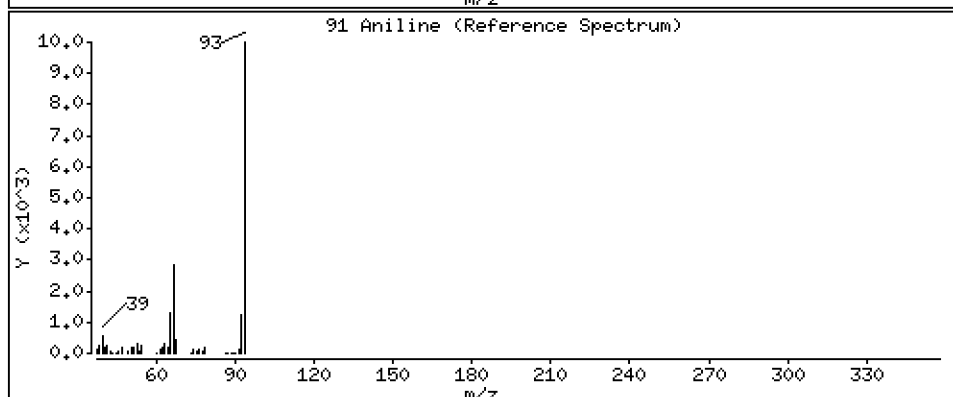
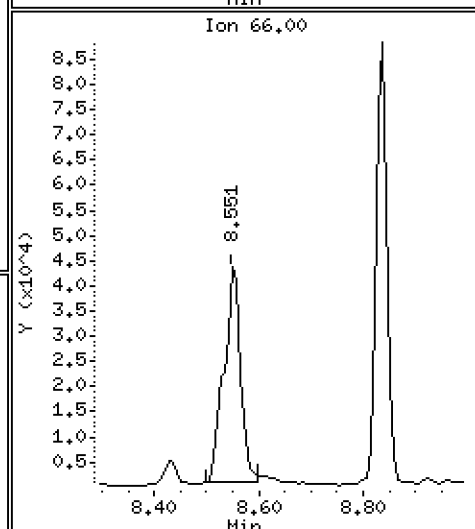
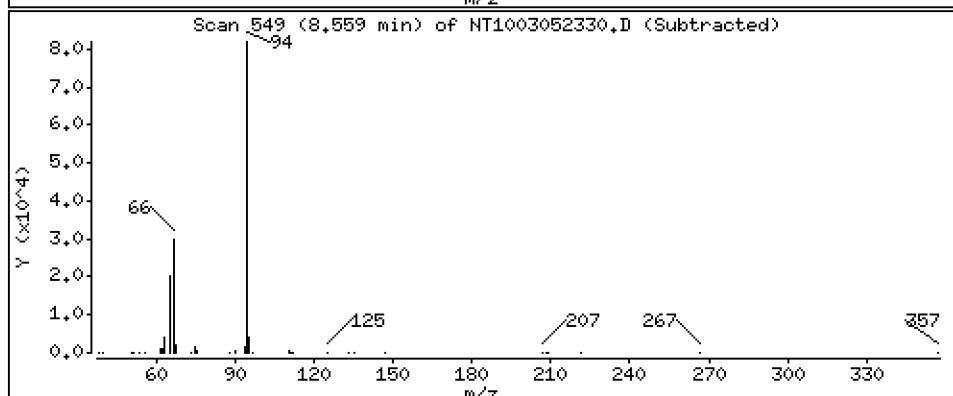
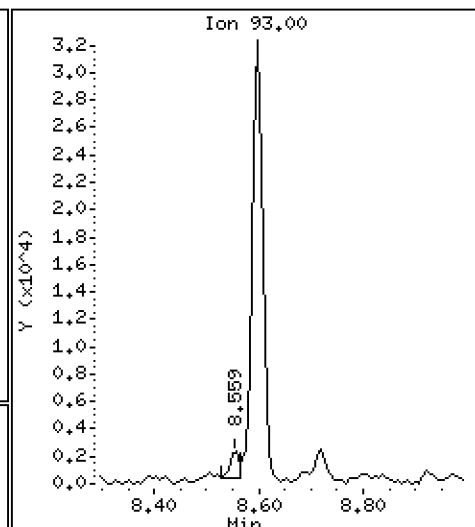
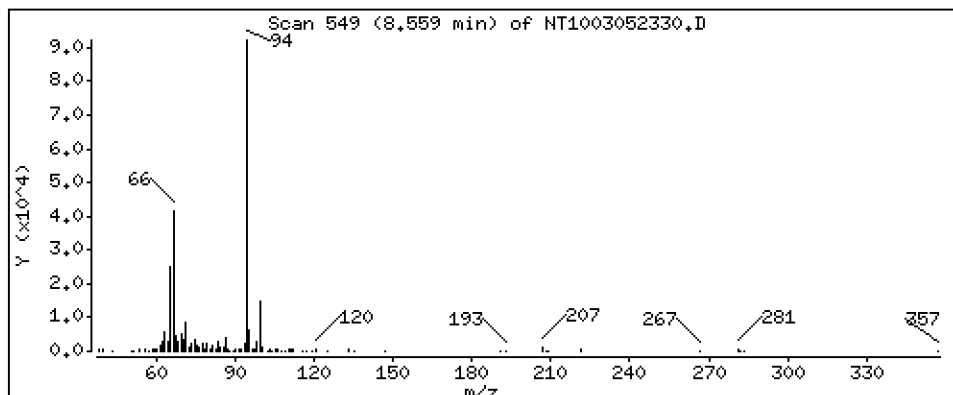
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 0.02669 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

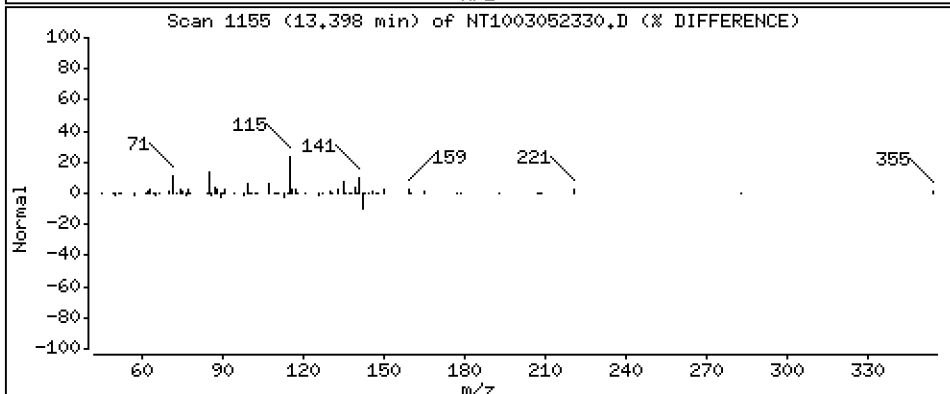
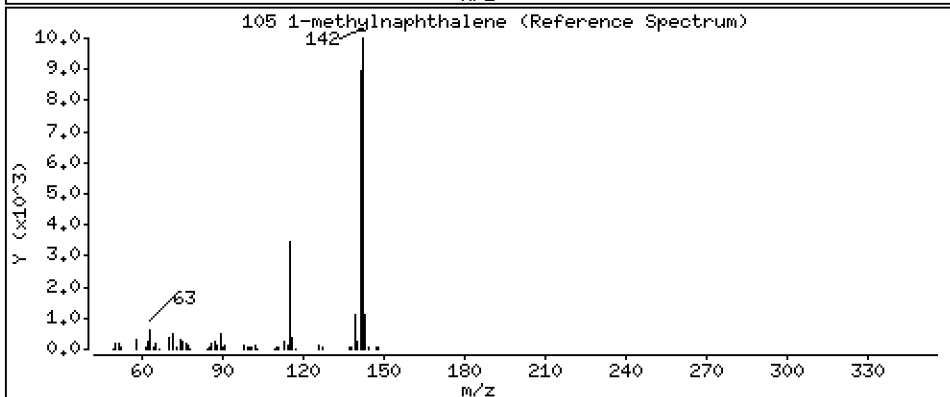
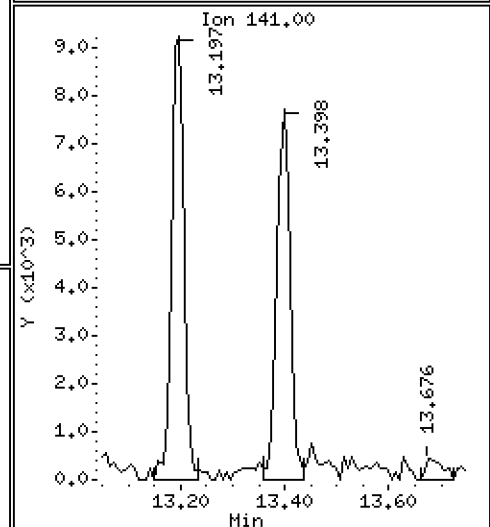
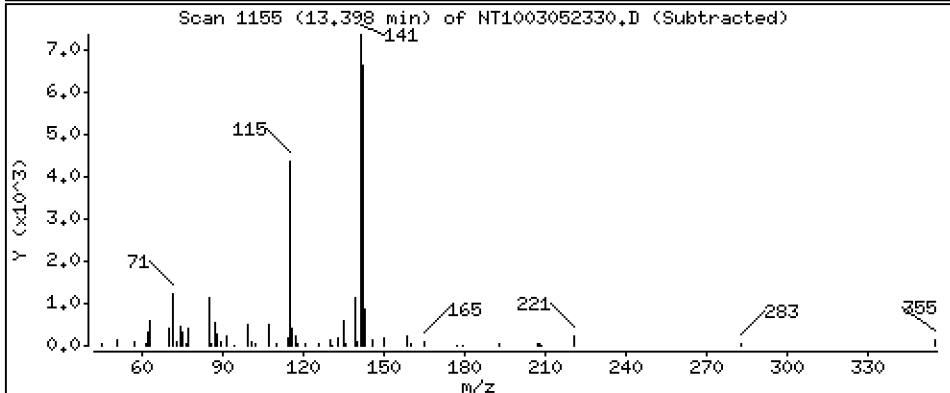
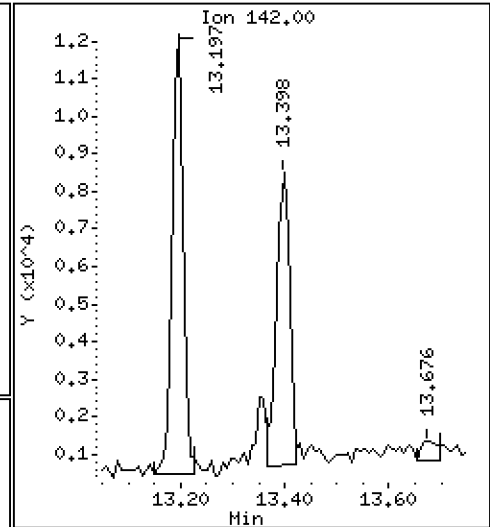
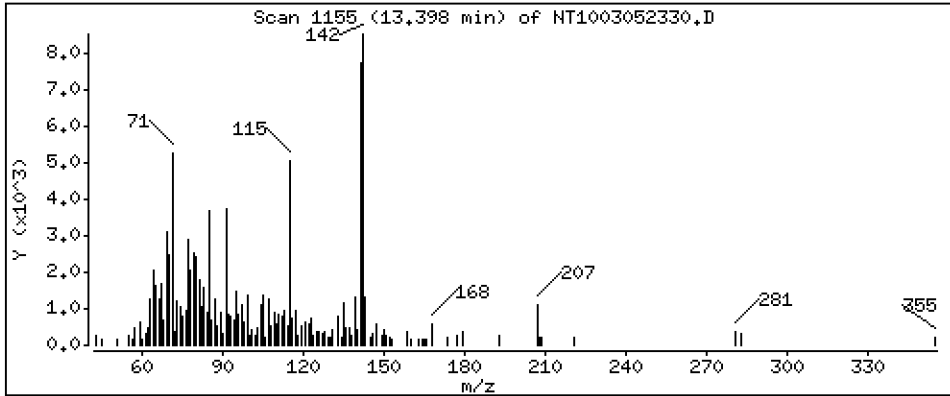
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1024 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

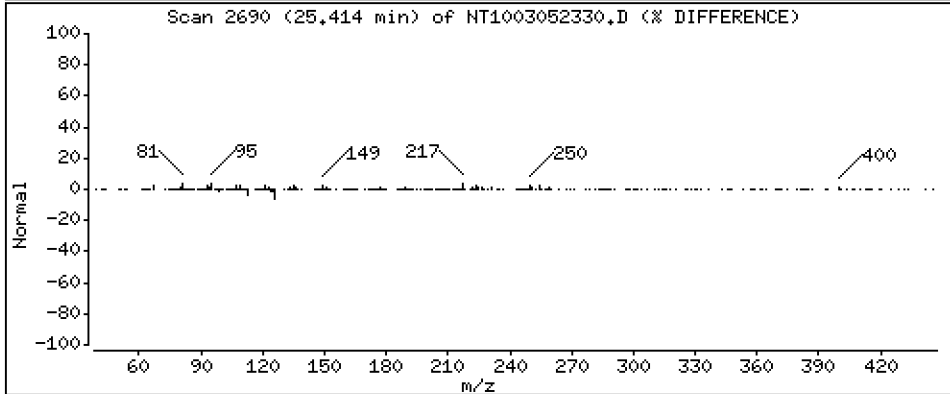
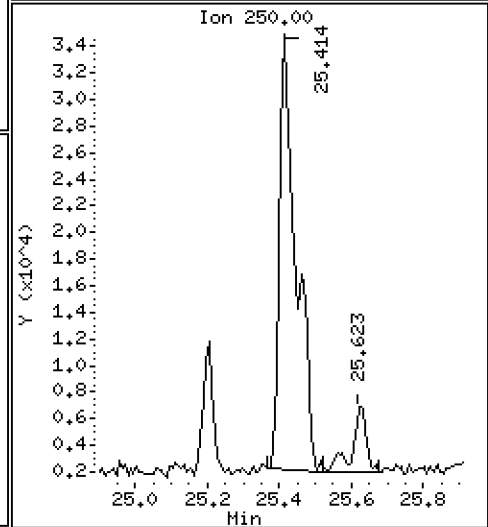
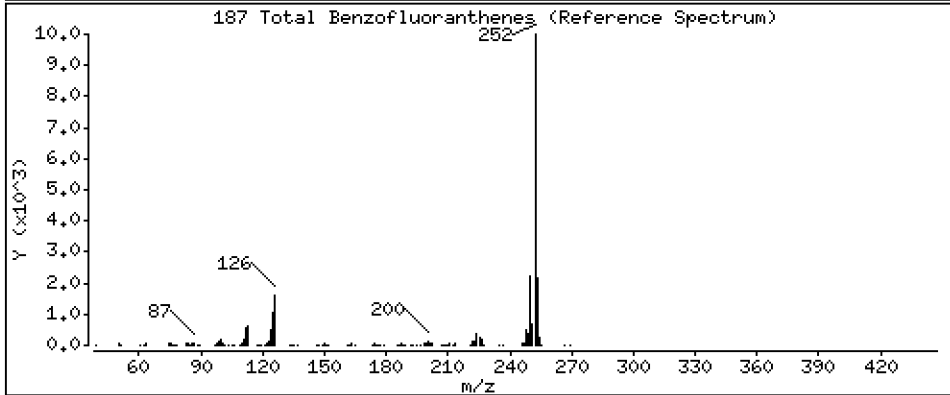
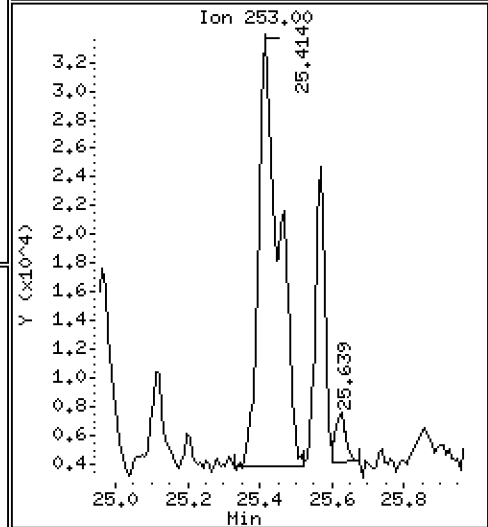
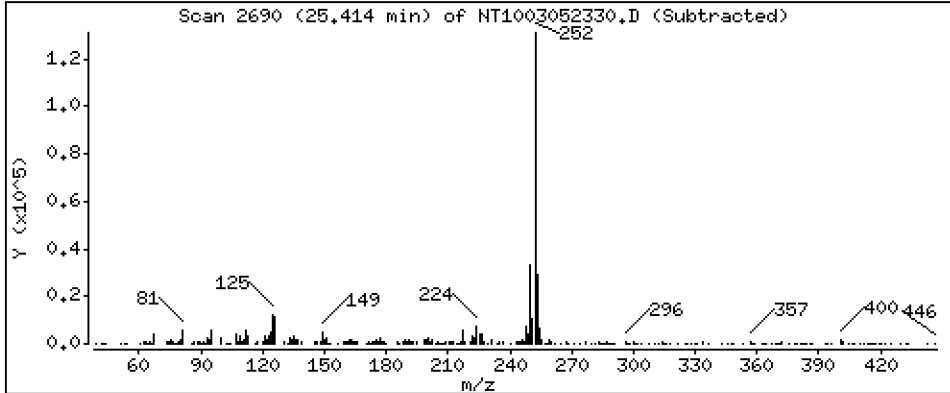
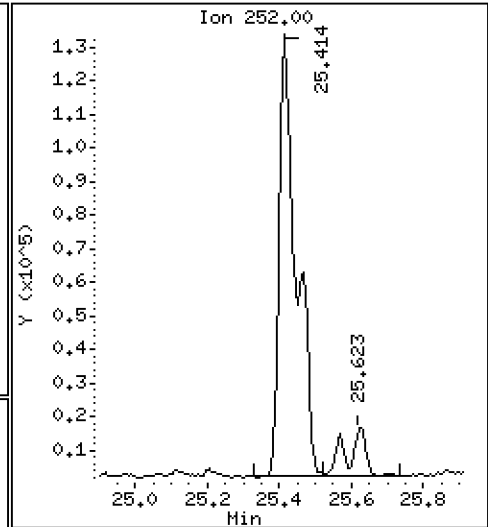
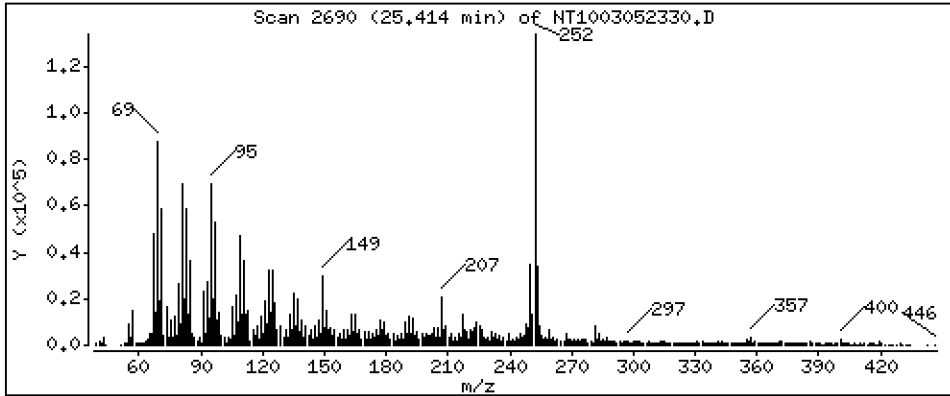
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 1,527 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052330.D

Lab Smp Id: 23A0326-04

Inj Date : 06-MAR-2023 07:41

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-04

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m

Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D

Als bottle: 20

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112		6.912	6.905	(0.746)	368816	5.41448	5.414
\$ 2 Phenol-d5	99		8.527	8.527	(0.921)	480510	6.07604	6.076
3 Phenol	94		8.558	8.550	(0.924)	158868	1.88947	1.889
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.954)	418252	6.19896	6.199
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	216499	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.031)	180892	3.58846	3.588
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		9.518	9.510	(1.028)	21262	0.49231	0.4923
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.751	(1.051)	13913	0.64951	0.6495
13 2-Methylphenol	108		9.697	9.697	(1.047)	3018	0.04636	0.04636
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.079)	17768	0.21754	0.2175
\$ 18 Nitrobenzene-d5	82		10.318	10.325	(0.878)	364791	4.18908	4.189
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.757	11.757	(1.000)	793296	4.00000	
28 Naphthalene	128		11.796	11.803	(1.003)	25473	0.12511	0.1251
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.196	(1.122)	18207	0.12658	0.1266
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	659712	4.33196	4.332
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.775	14.775	(0.963)	7500	0.05439	0.05439
40 Acenaphthylene	152		15.061	15.061	(0.981)	14086	0.06834	0.06834
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.347	15.347	(1.000)	426962	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.417	15.417	(1.005)	10449	0.08406	0.08406
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.773	15.780	(1.028)	19187	0.10400	0.1040
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.236	16.244	(1.058)	26718	0.18291	0.1829
49 Fluorene	166		16.492	16.492	(1.075)	18957	0.12351	0.1235
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.993	16.993	(1.107)	197034	7.14311	7.143
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.448	18.455	(1.000)	778727	4.00000	
60 Phenanthrene	178		18.502	18.502	(1.003)	112282	0.56341	0.5634
61 Anthracene	178		18.610	18.610	(1.009)	46475	0.24050	0.2405
62 Carbazole	167		18.950	18.943	(1.027)	16010	0.09043	0.09043
63 Di-n-butylphthalate	149		19.639	19.631	(1.065)	20416	0.08503	0.08503
64 Fluoranthene	202		20.908	20.877	(0.890)	291233	1.18456	1.185
65 Pyrene	202		21.333	21.310	(0.908)	319670	1.27691	1.277
\$ 66 Terphenyl-d14	244		21.589	21.581	(0.919)	772175	3.81196	3.812
67 Butylbenzylphthalate	149		22.464	22.464	(0.956)	13164	0.09763	0.09763
68 Benzo(a)anthracene	228		23.478	23.478	(0.999)	153945	0.61089	0.6109
* 69 Chrysene-d12	240		23.501	23.494	(1.000)	714687	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.548	23.540	(1.002)	190123	0.92832	0.9283
72 bis(2-Ethylhexyl)phthalate	149		23.463	23.463	(0.956)	250171	1.36935	1.369
* 134 Di-n-octylphthalate-d4	153		24.554	24.554	(1.000)	1293300	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.414	25.406	(0.969)	340181	1.12430	1.124
75 Benzo(k)fluoranthene	252		25.468	25.460	(0.971)	122156	0.42247	0.4225
76 Benzo(a)pyrene	252		26.118	26.103	(0.996)	181253	0.67344	0.6734
* 77 Perylene-d12	264		26.234	26.227	(1.000)	878303	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.080	29.057	(1.108)	134561	0.42862	0.4286
79 Dibenzo(a,h)anthracene	278		29.095	29.095	(1.109)	22724	0.09579	0.09579
80 Benzo(g,h,i)perylene	276		29.942	29.919	(1.141)	145508	0.58120	0.5812
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93		8.558	8.643	(0.924)	2602	0.02669	0.02669
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.397	13.397	(1.139)	13327	0.10237	0.1024
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/mL)	
187 Total Benzofluoranthenes	252	25.414	25.406	(0.969)	442244	1.52730	1.527	
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.						

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052330.D Calibration Time: 04:32
 Lab Smp Id: 23A0326-04
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	216499	1.25
27 Naphthalene-d8	756023	378012	1512046	793296	4.93
42 Acenaphthene-d10	411497	205749	822994	426962	3.76
59 Phenanthrene-d10	744396	372198	1488792	778727	4.61
69 Chrysene-d12	823005	411503	1646010	714687	-13.16
134 Di-n-octylphthala	1350476	675238	2700952	1293300	-4.23
77 Perylene-d12	894064	447032	1788128	878303	-1.76

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.45	-0.04
69 Chrysene-d12	23.49	22.99	23.99	23.50	0.03
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	0.00
77 Perylene-d12	26.23	25.73	26.73	26.23	0.03

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

REVIEW SUMMARY FOR FILE - NT1003052330.D

Lab ID: 23A0326-04
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 07:41

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.924	0.933	-0.0092	Aniline

RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-05 A

SDG: 23A0326

Sampled: 01/17/23 11:08

Prepared: 02/02/23 13:06

File ID: NT1003052331.D

% Solids: 54.64

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 08:18

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 18.67 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	36.6		4.3	19.6
106-44-5	4-Methylphenol	1	65.0		7.2	19.6
91-20-3	Naphthalene	1	13.9	J	4.2	19.6
91-57-6	2-Methylnaphthalene	1	14.5	J	4.4	19.6
208-96-8	Acenaphthylene	1	11.7	J	6.1	19.6
131-11-3	Dimethylphthalate	1	11.3	J	4.3	19.6
83-32-9	Acenaphthene	1	11.2	J	5.1	19.6
132-64-9	Dibenzofuran	1	19.6	U	13.8	19.6
86-73-7	Fluorene	1	19.6	U	14.3	19.6
85-01-8	Phenanthrene	1	98.9		8.5	19.6
120-12-7	Anthracene	1	39.5		7.0	19.6
206-44-0	Fluoranthene	1	179		6.0	19.6
129-00-0	Pyrene	1	447		5.6	19.6
85-68-7	Butylbenzylphthalate	1	23.8	Q	9.2	19.6
56-55-3	Benzo(a)anthracene	1	123		5.8	19.6
218-01-9	Chrysene	1	192		5.9	19.6
117-81-7	bis(2-Ethylhexyl)phthalate	1	385		5.4	49.0
	Benzo(a)fluoranthene, Total	1	431		9.8	39.2
50-32-8	Benzo(a)pyrene	1	177		4.1	19.6
193-39-5	Indeno(1,2,3-cd)pyrene	1	106		14.4	19.6
53-70-3	Dibenzo(a,h)anthracene	1	35.0		16.9	19.6
191-24-2	Benzo(g,h,i)perylene	1	129		13.3	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.20	543	73.9	27 - 120	
Phenol-d5	735.20	598	81.3	29 - 120	
2-Chlorophenol-d4	735.20	621	84.4	31 - 120	
1,2-Dichlorobenzene-d4	490.13	369	75.4	32 - 120	
Nitrobenzene-d5	490.13	416	84.8	30 - 120	
2-Fluorobiphenyl	490.13	431	87.9	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-05 A

SDG: 23A0326

Sampled: 01/17/23 11:08

Prepared: 02/02/23 13:06

File ID: NT1003052331.D

% Solids: 54.64

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 08:18

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 18.67 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	735.20	692	94.1	24 - 134	
p-Terphenyl-d14	490.13	356	72.7	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052331.D

Date: 06-HRR-2023 08:18

Client ID:

Sample Info: 23A0326-05

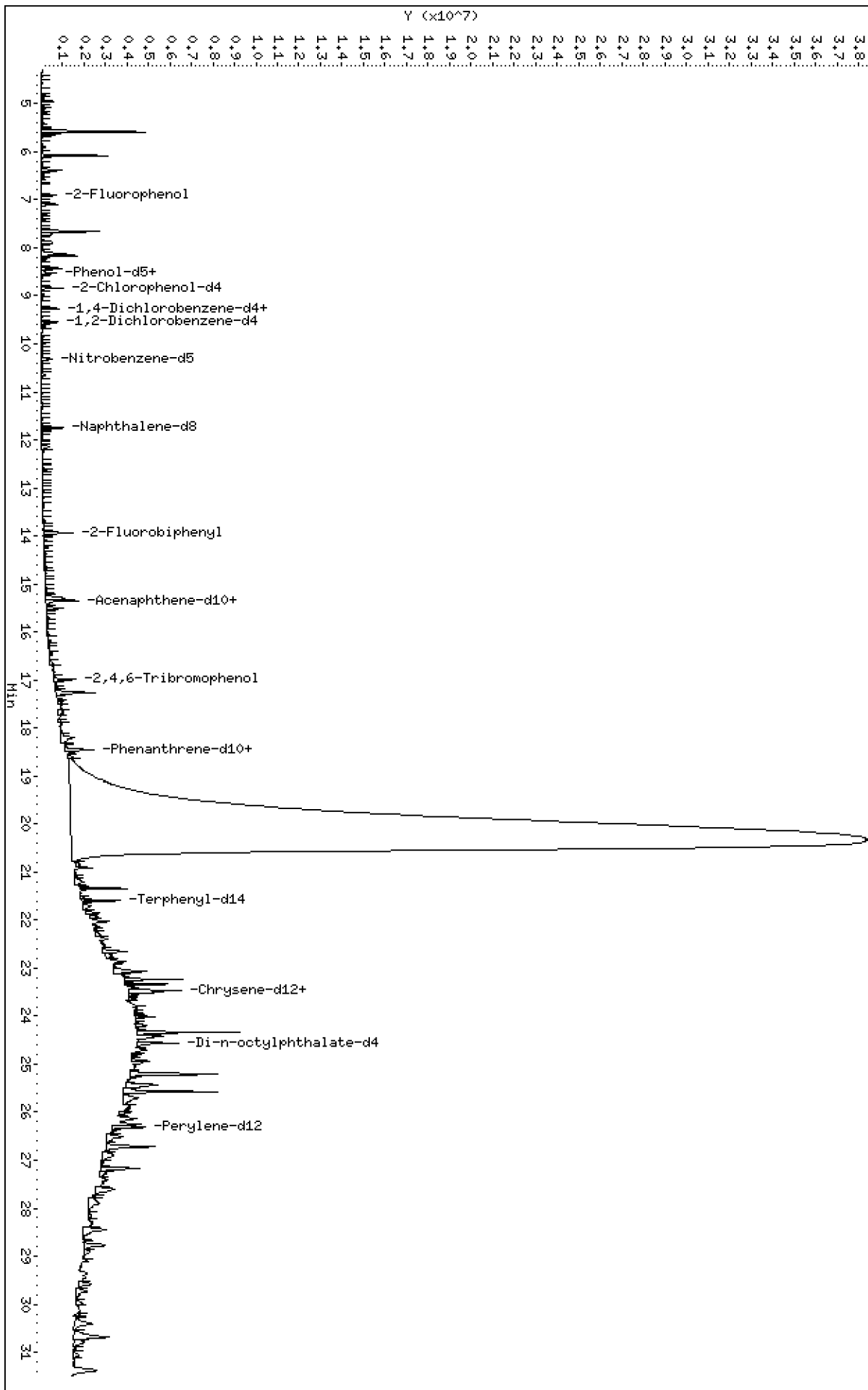
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\NT1003052331.D



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

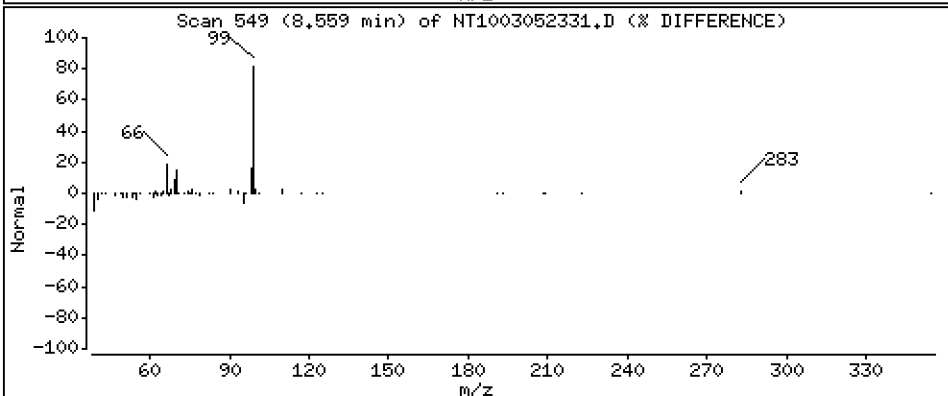
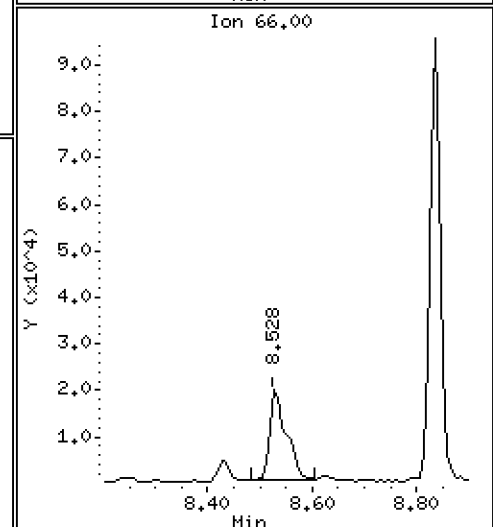
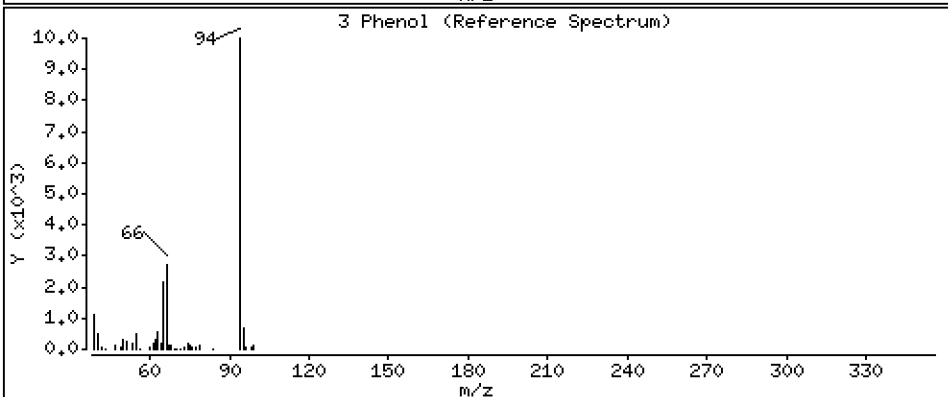
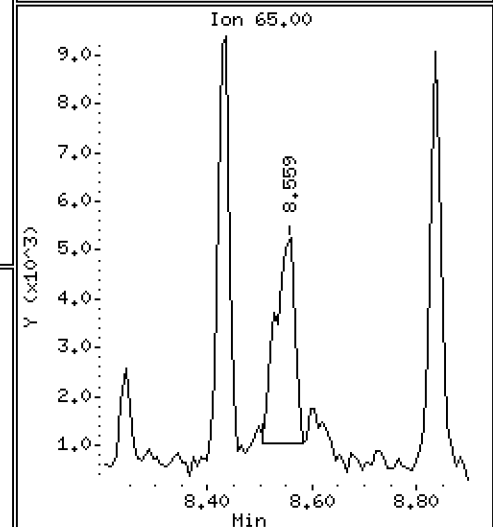
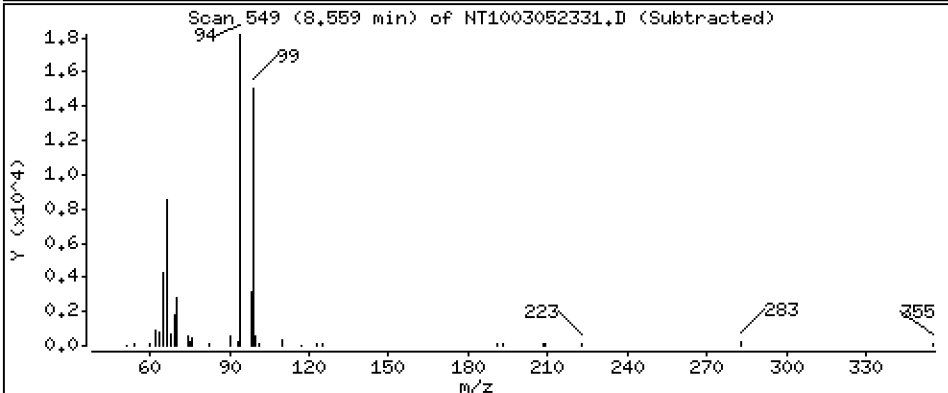
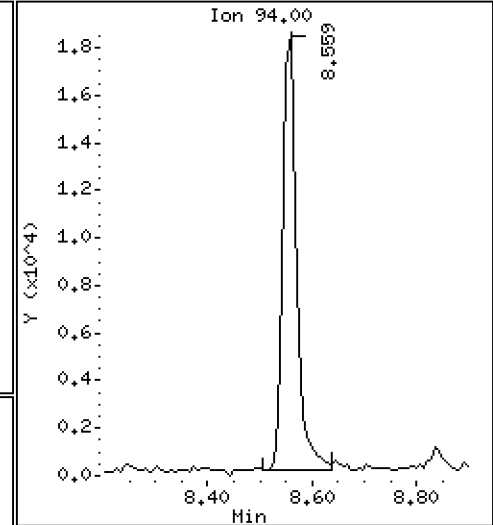
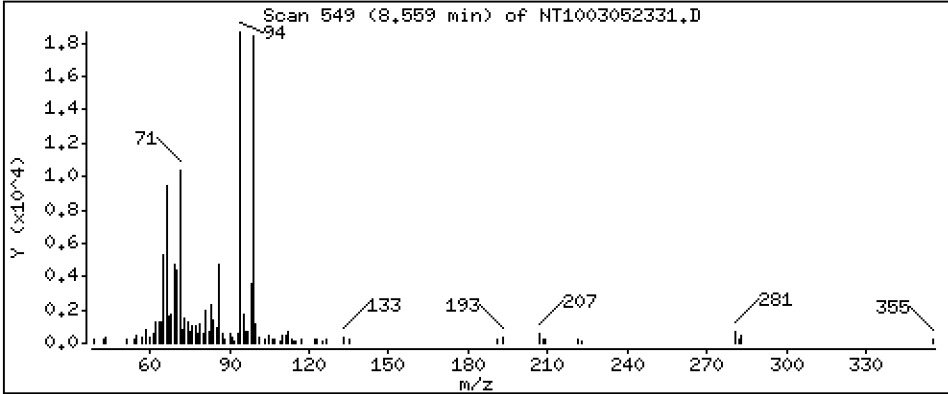
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,3732 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

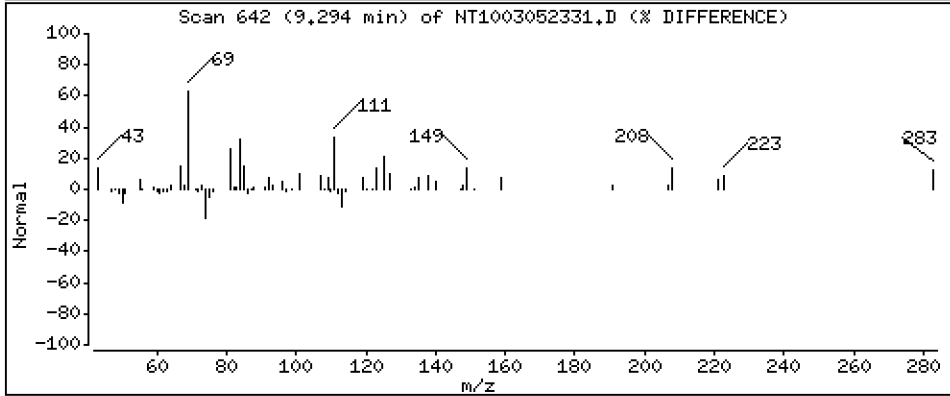
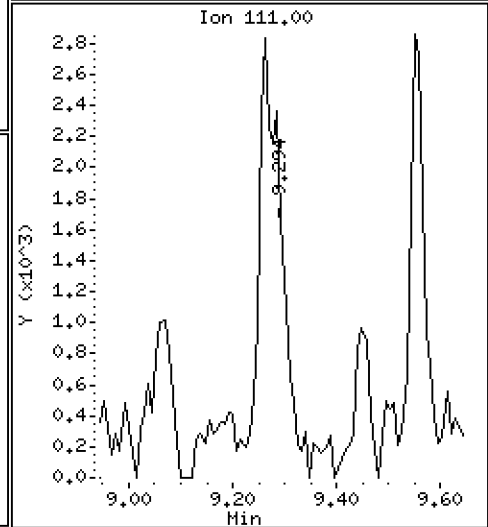
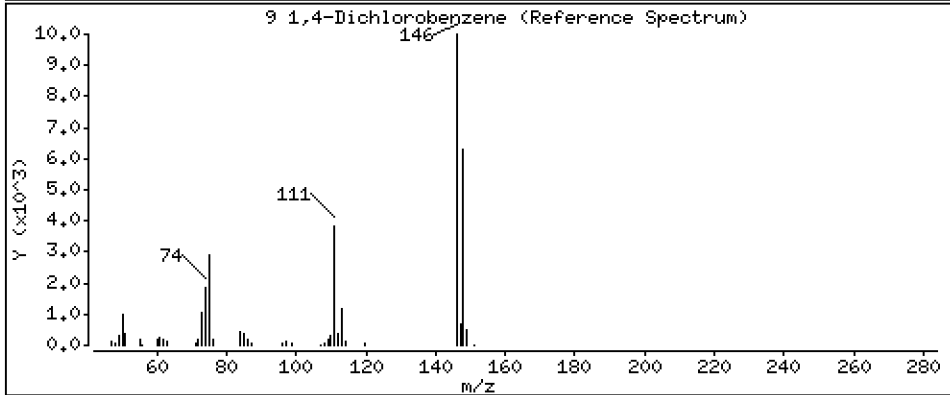
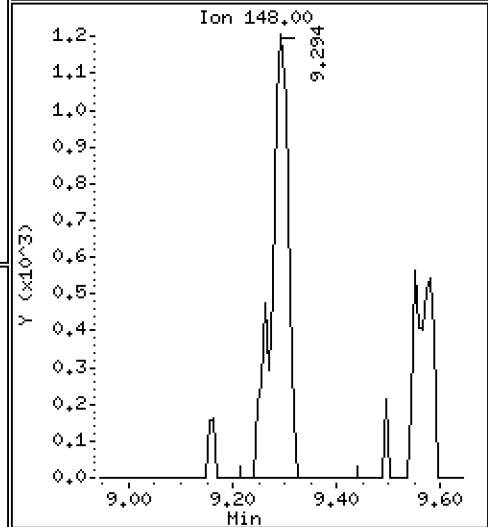
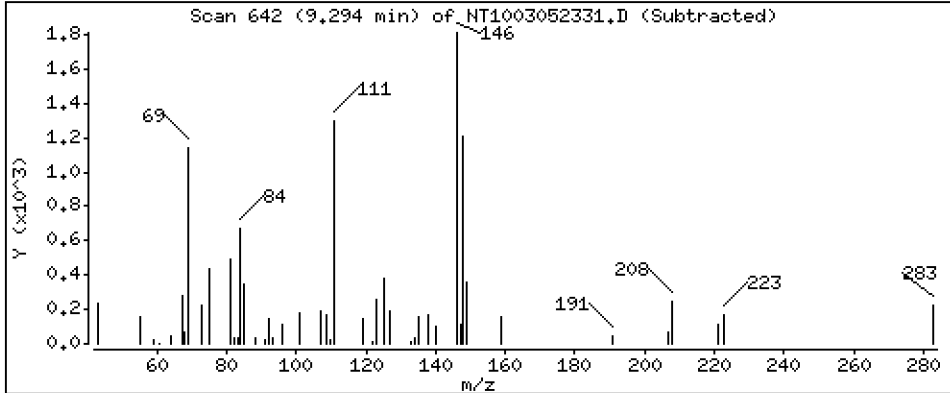
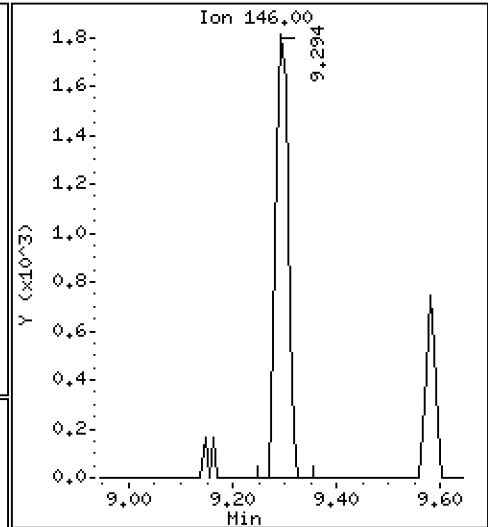
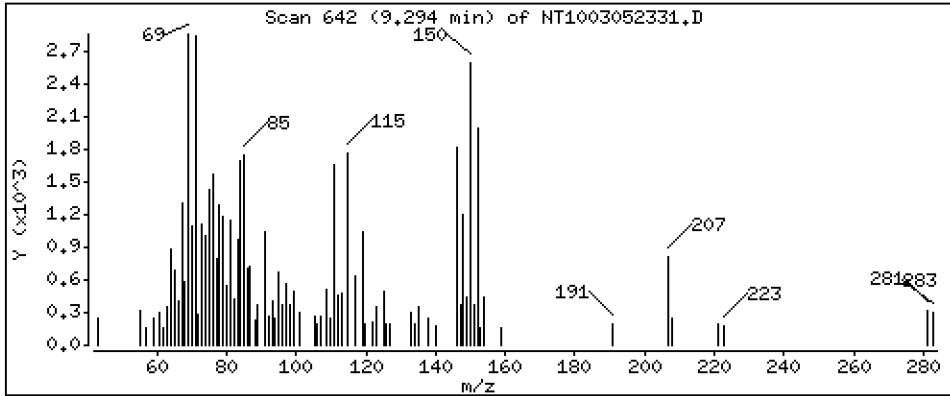
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.03635 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

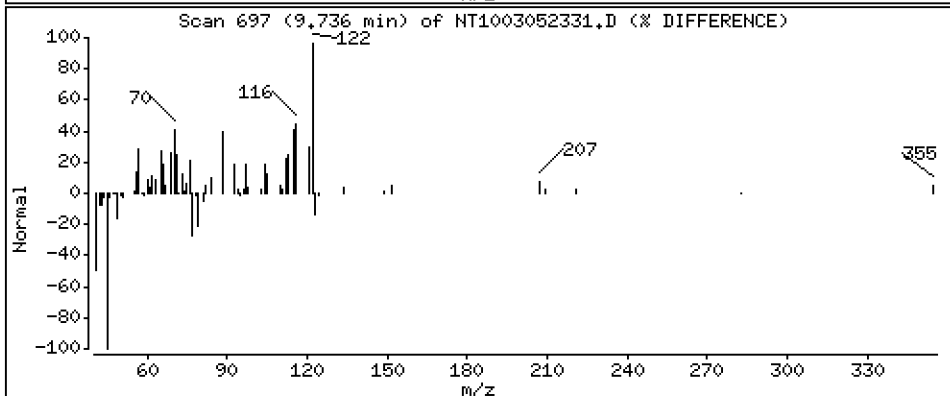
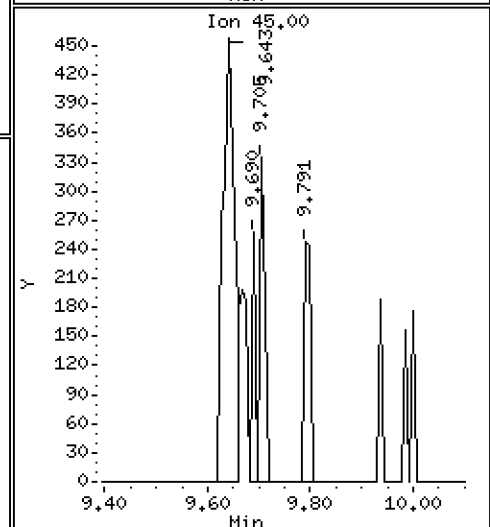
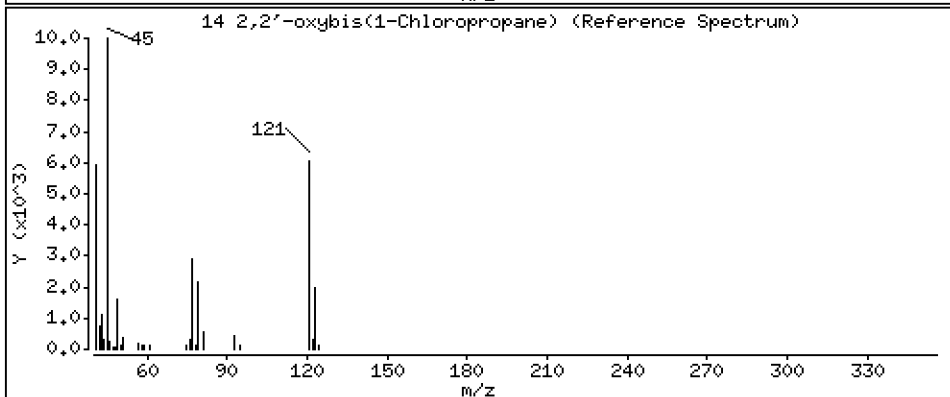
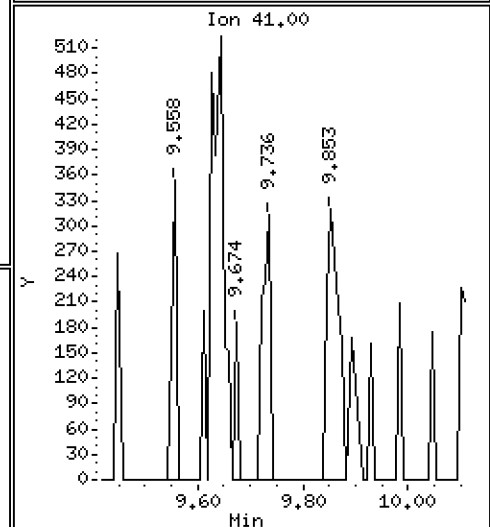
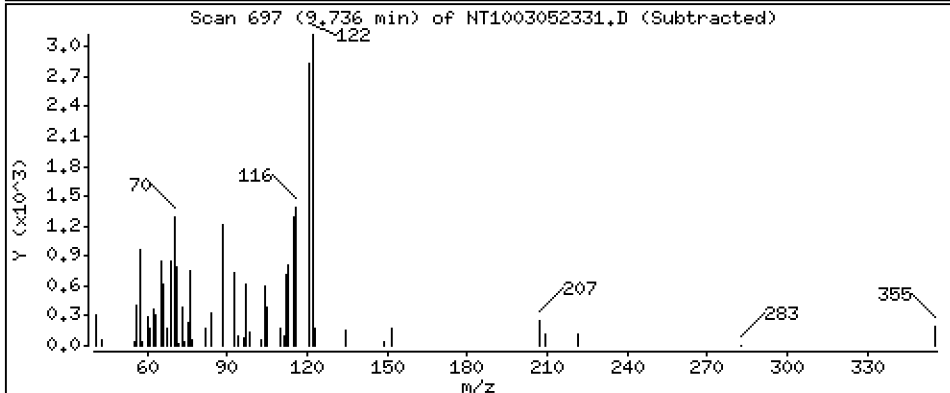
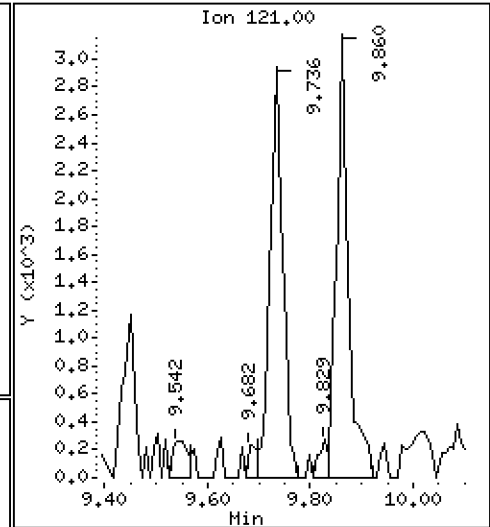
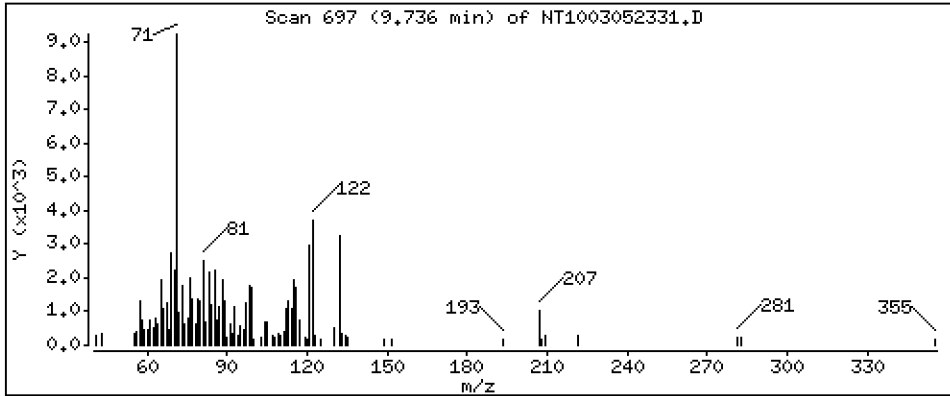
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 0.2311 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

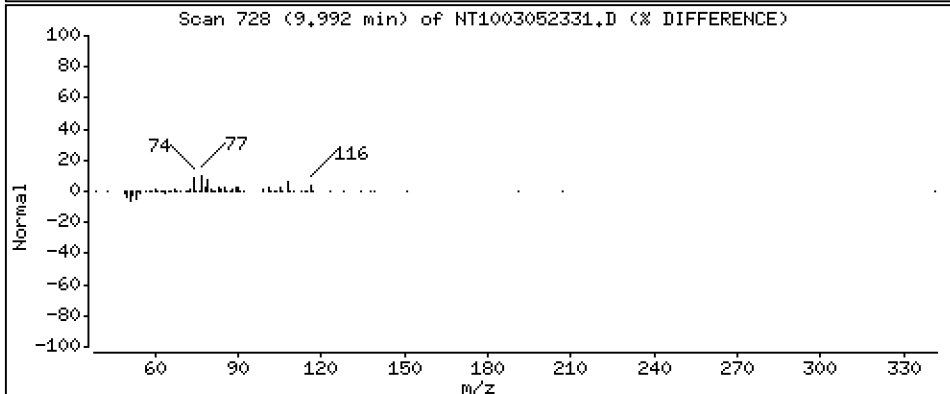
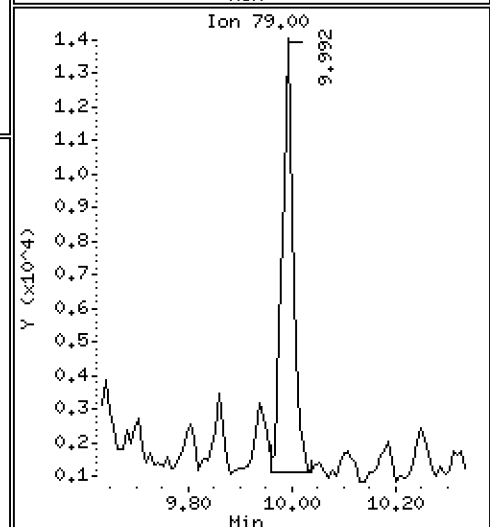
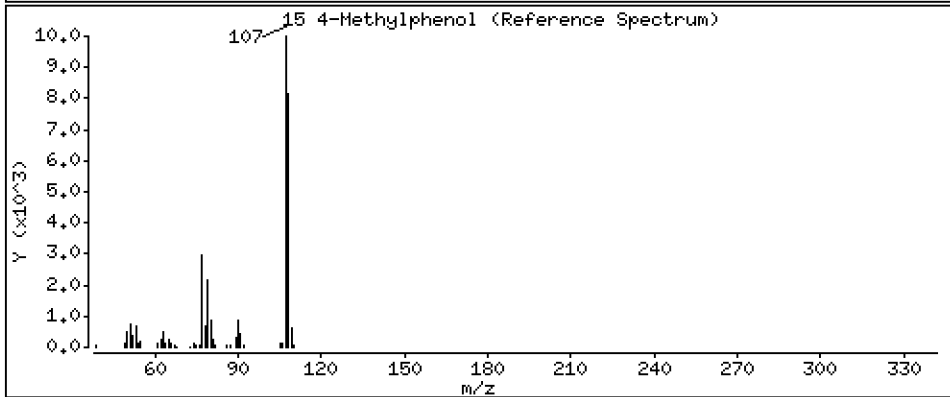
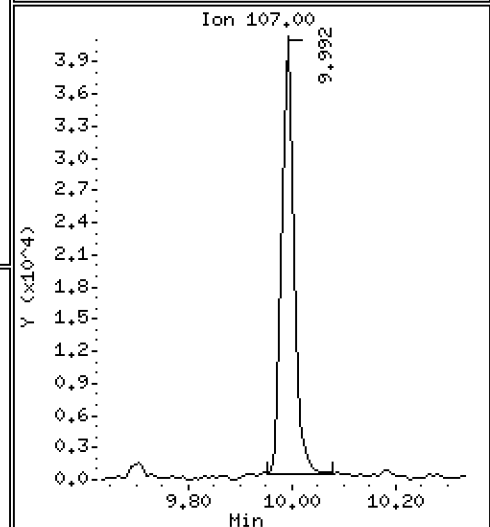
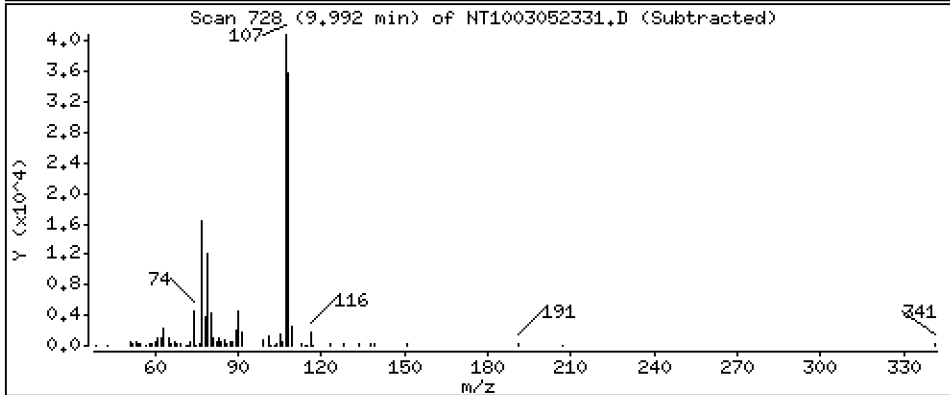
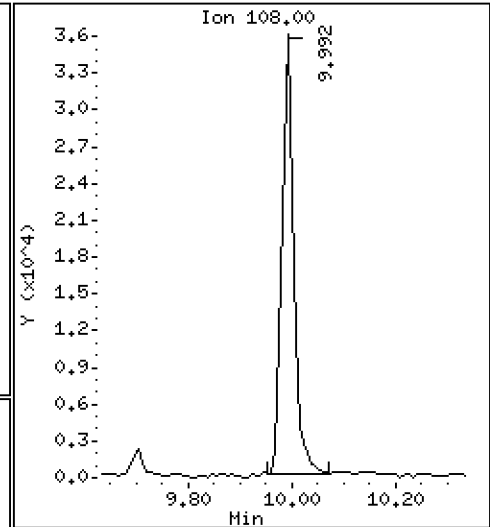
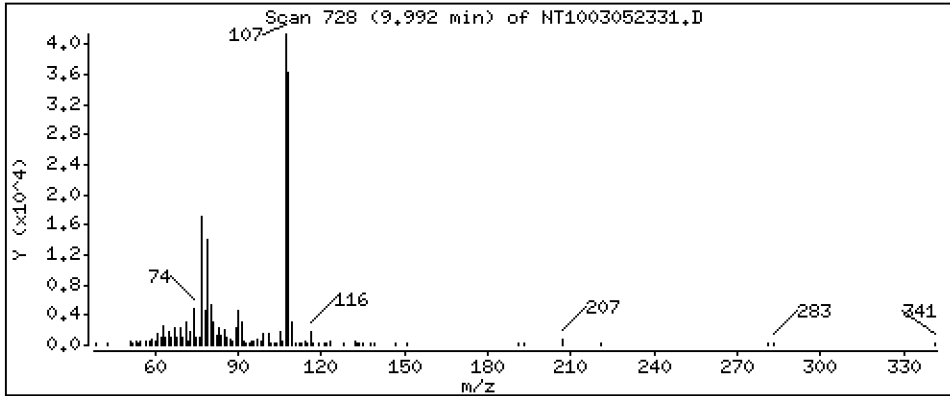
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,6632 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

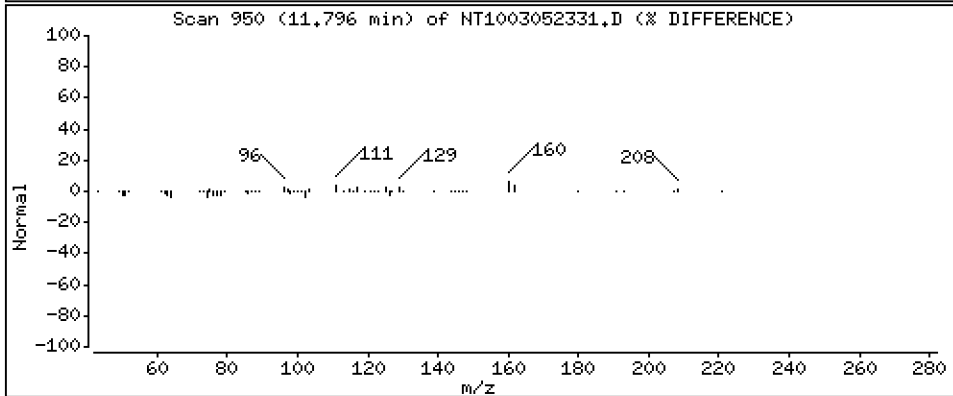
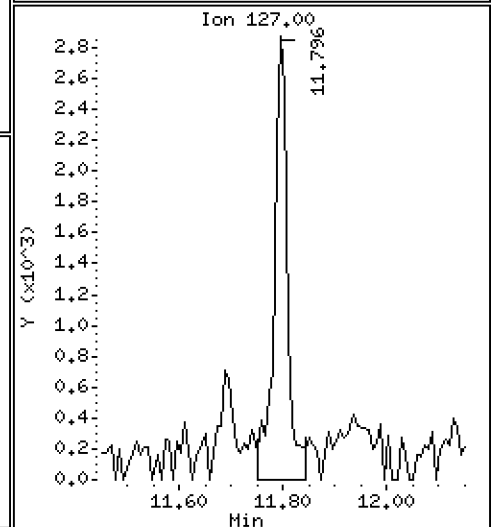
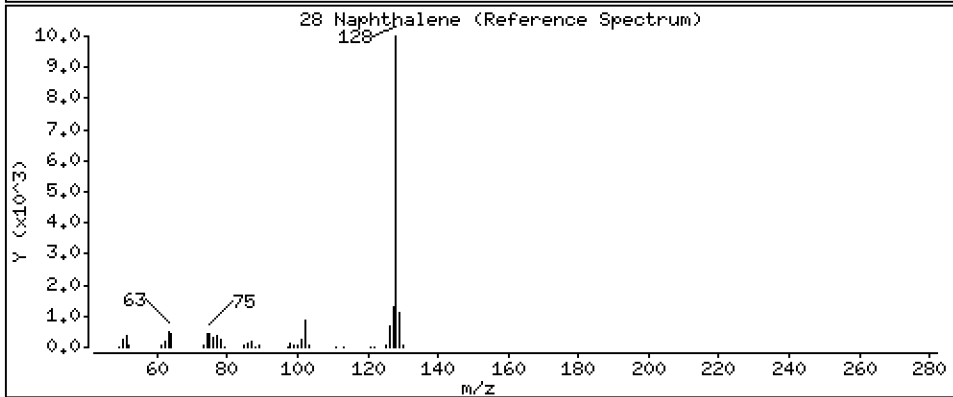
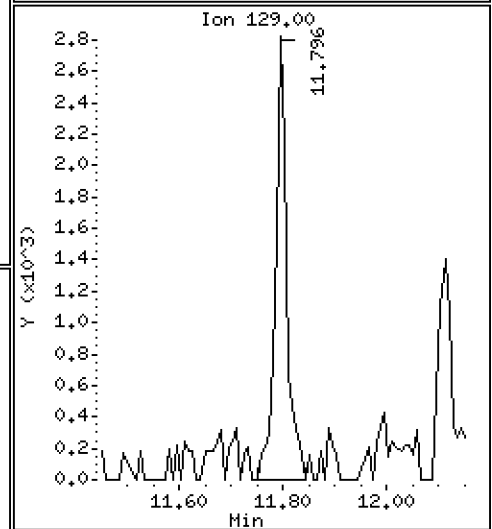
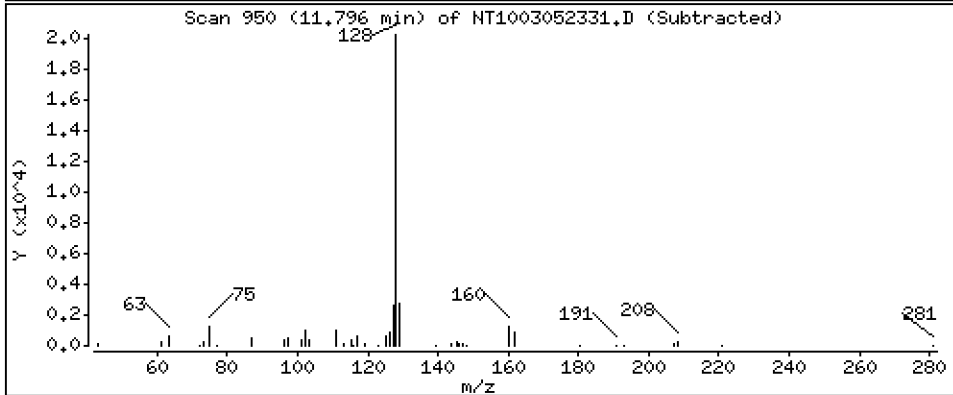
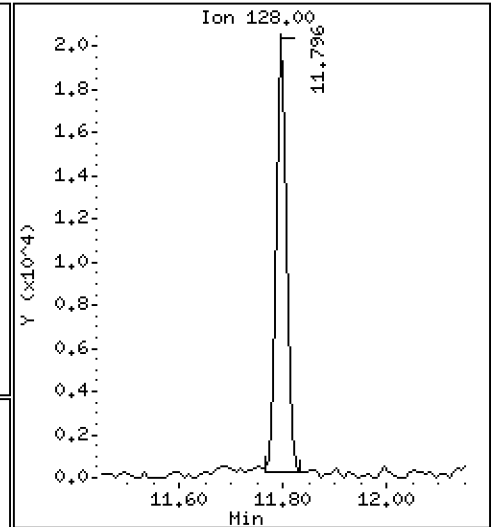
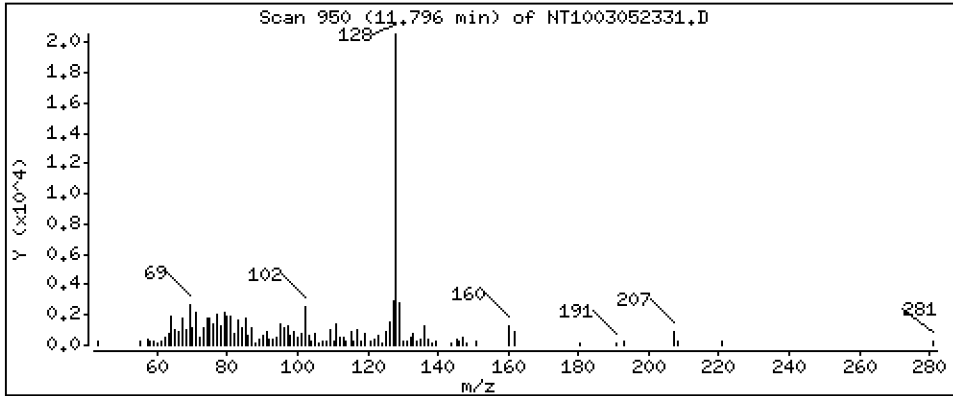
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,1423 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

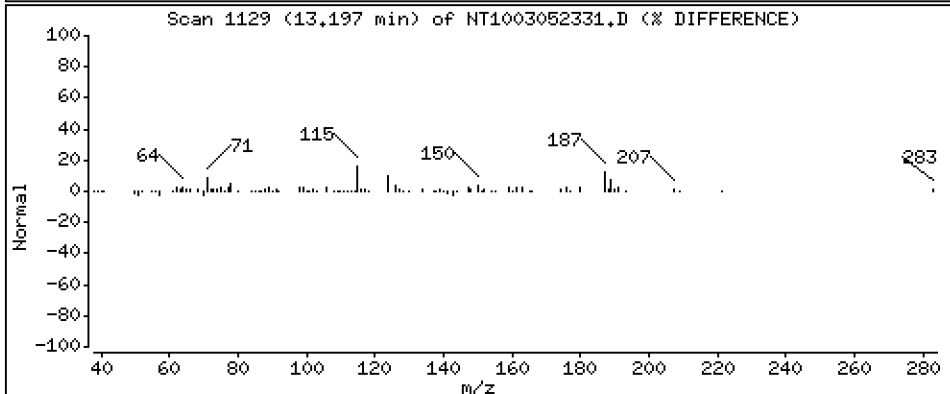
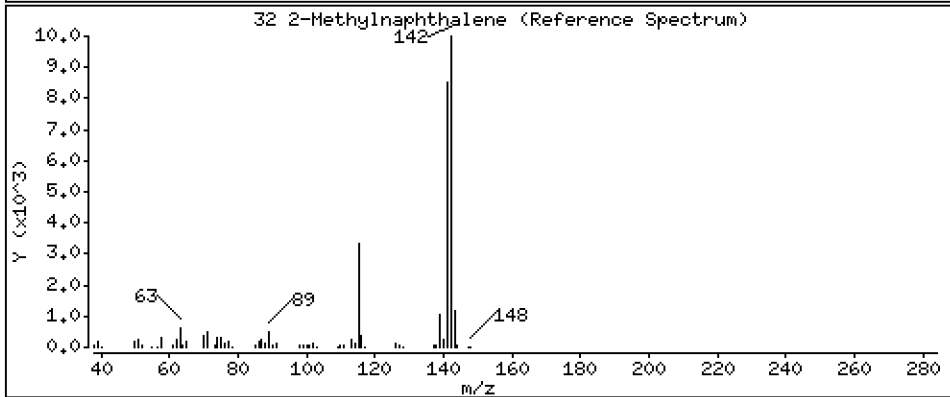
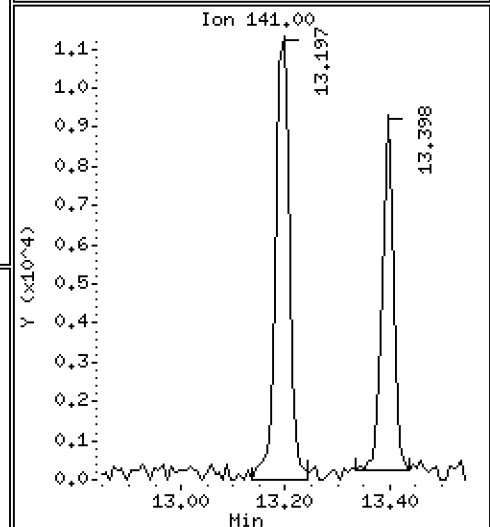
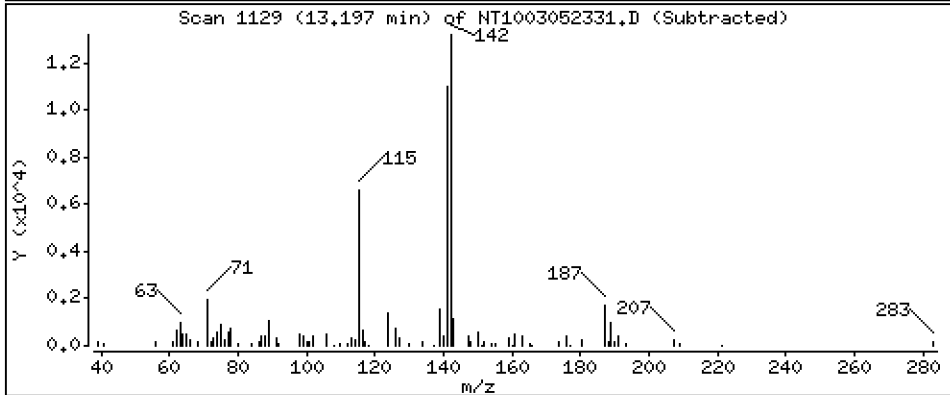
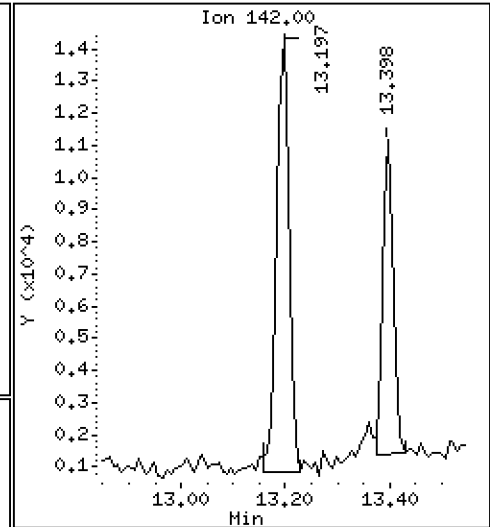
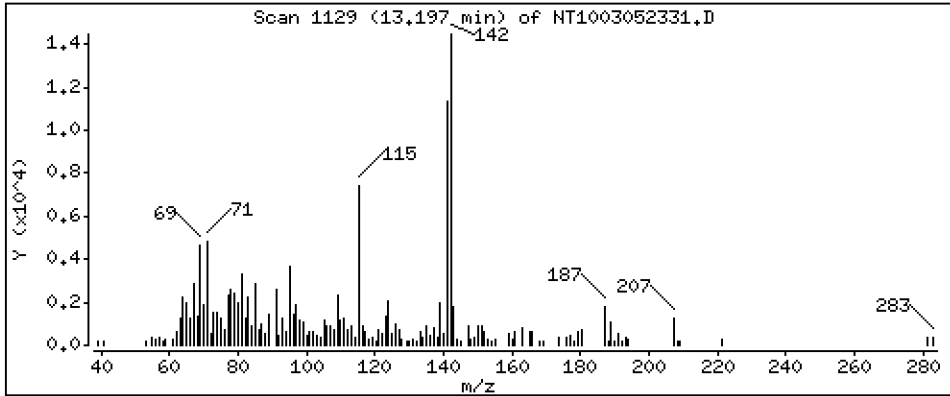
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1478 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

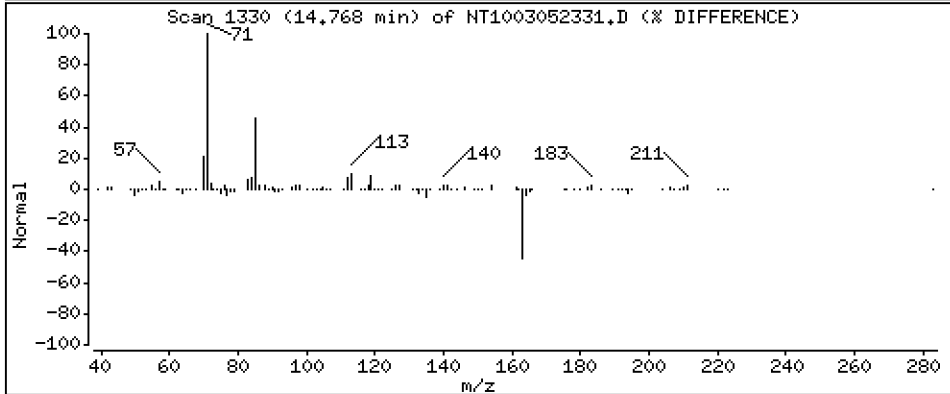
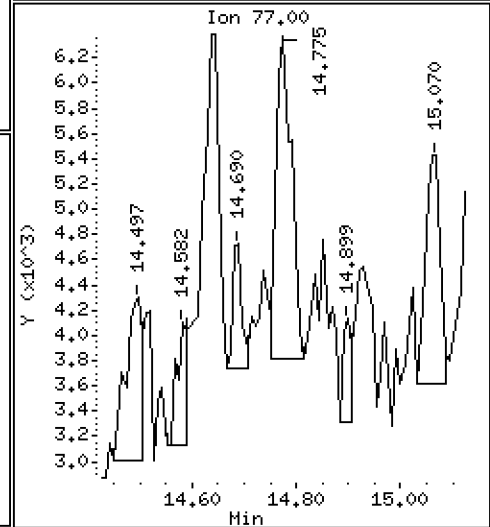
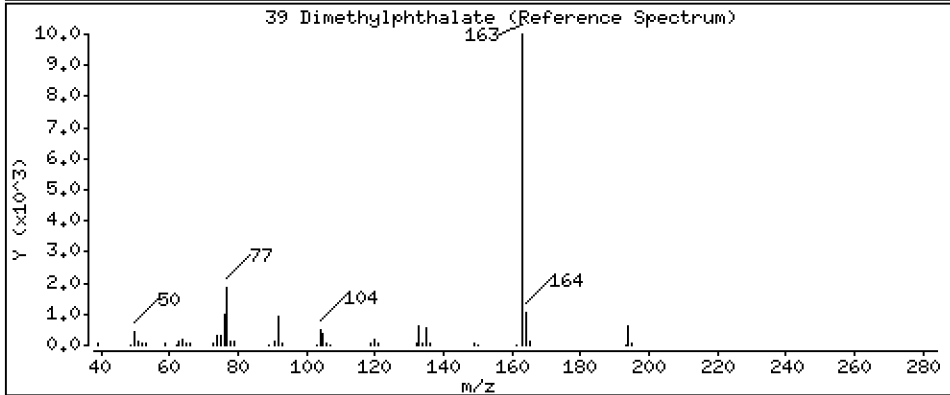
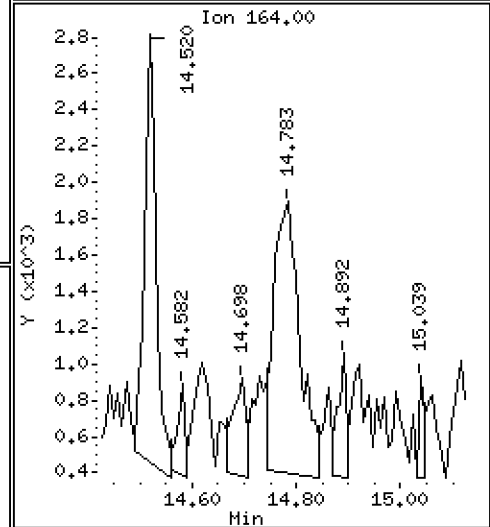
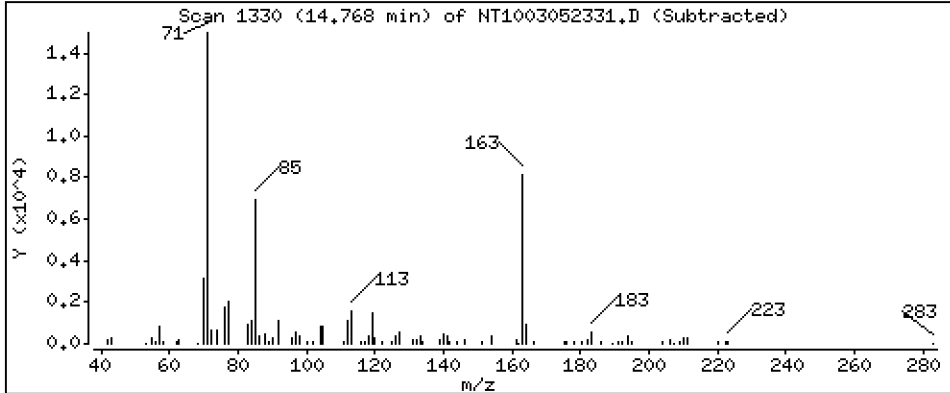
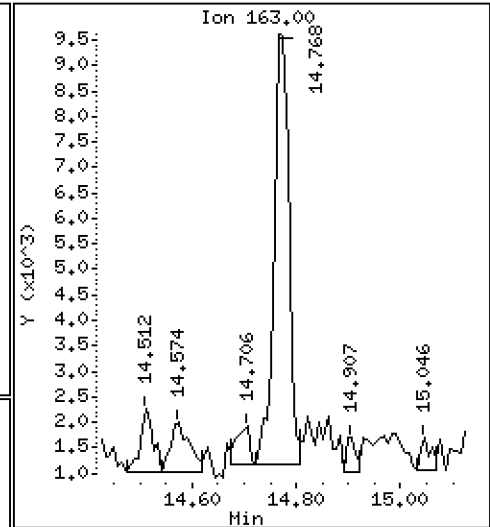
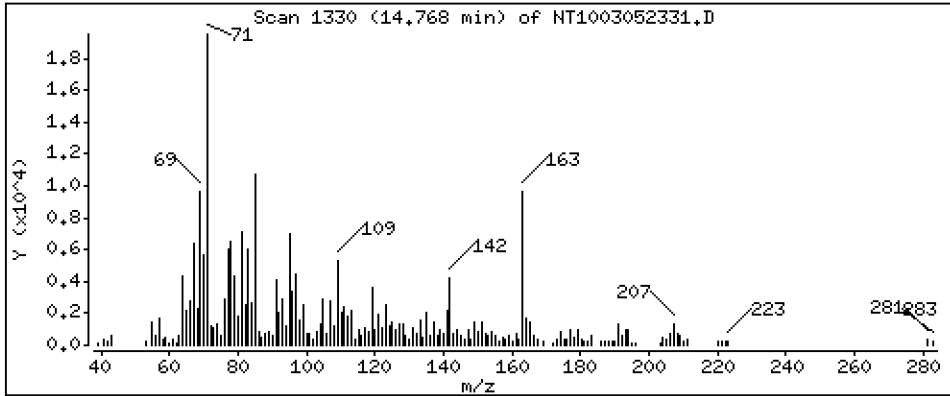
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1149 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

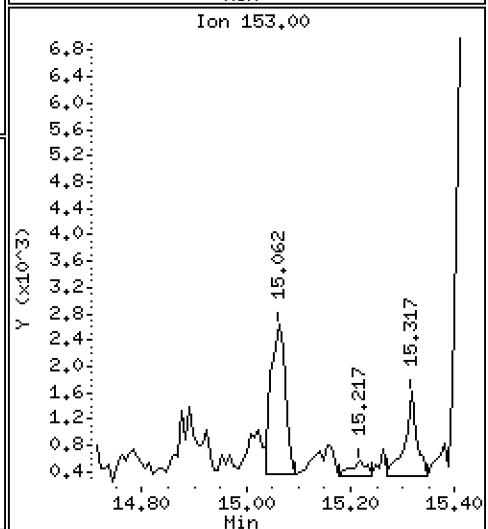
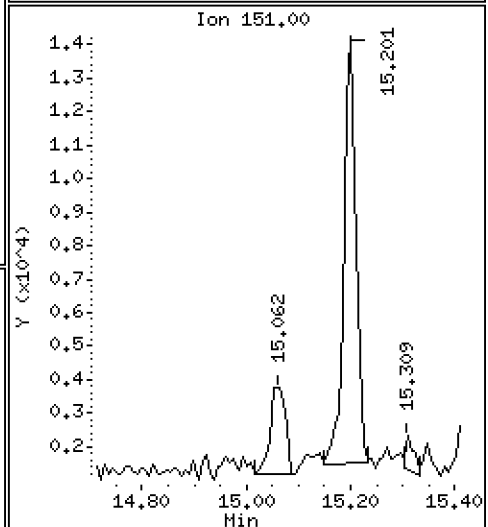
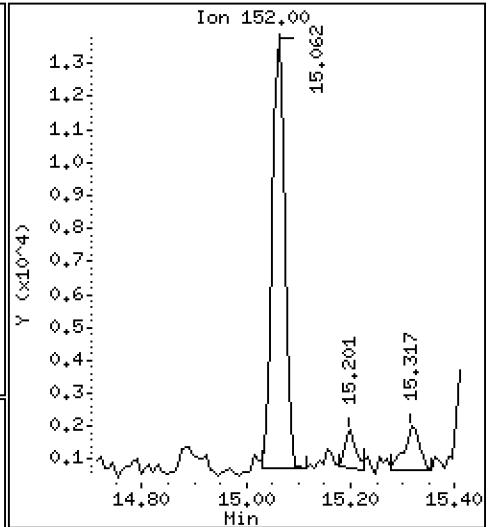
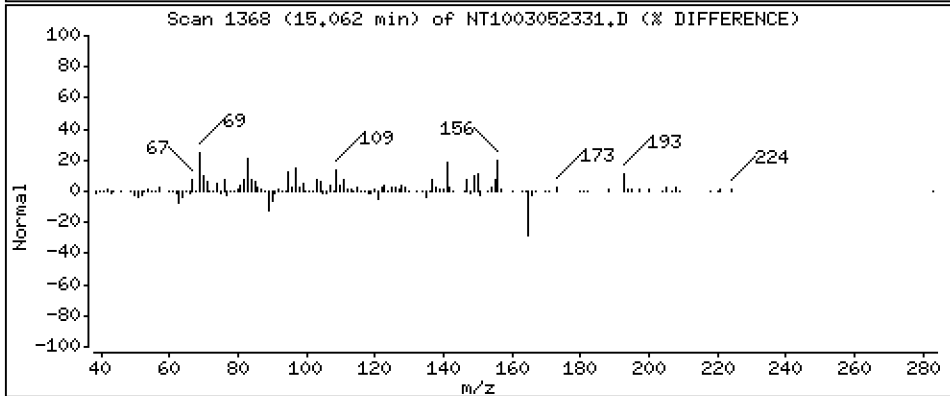
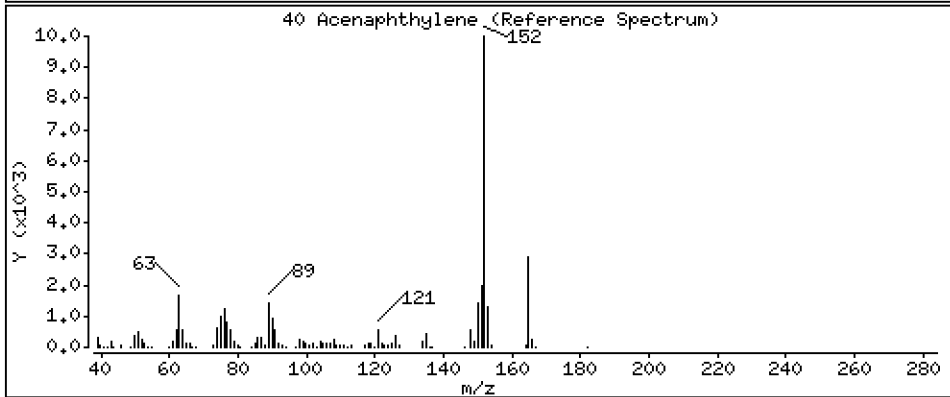
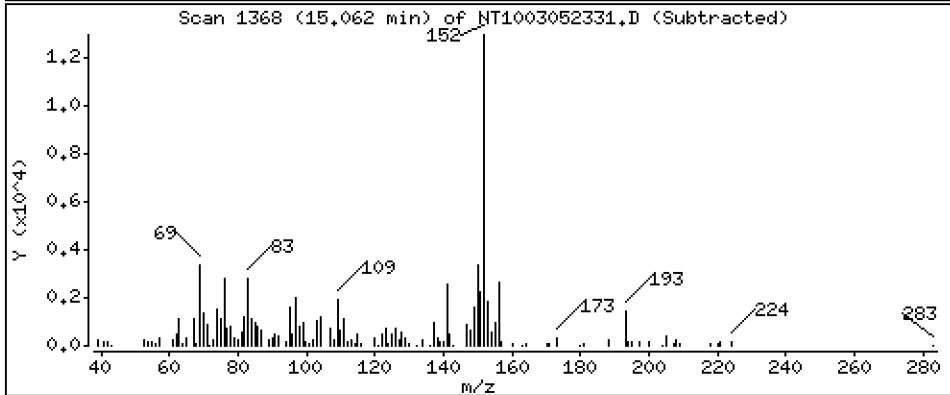
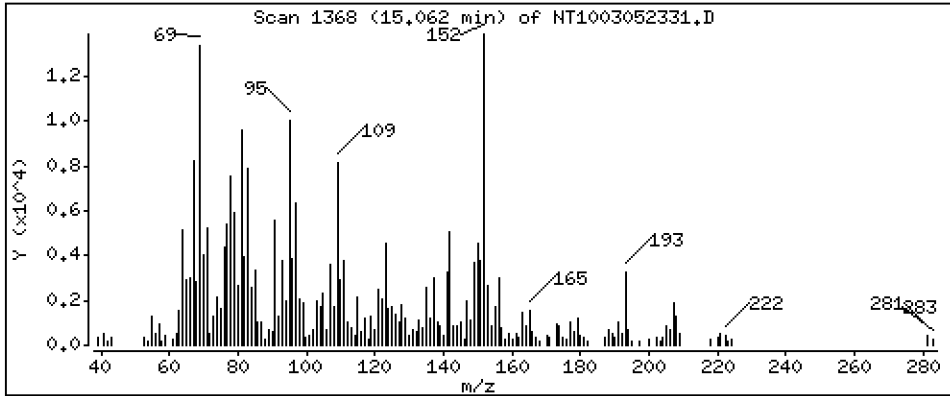
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

40 Acenaphthylene

Concentration: 0.1194 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

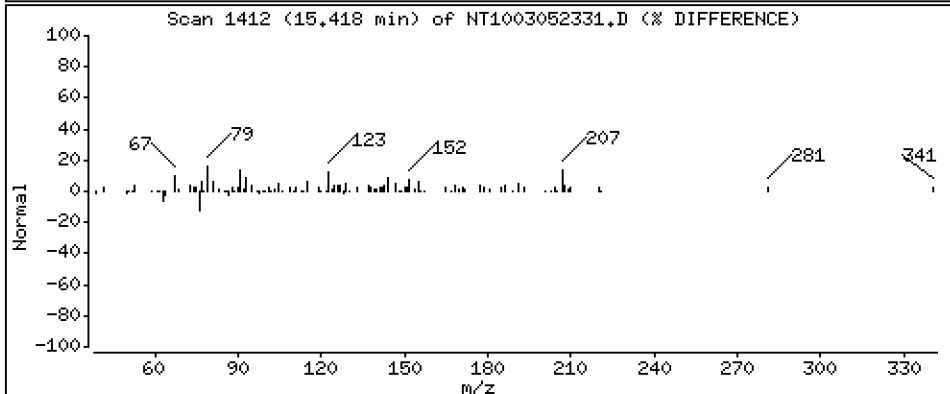
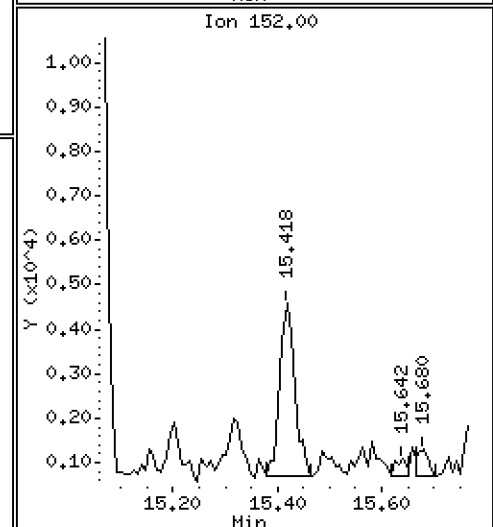
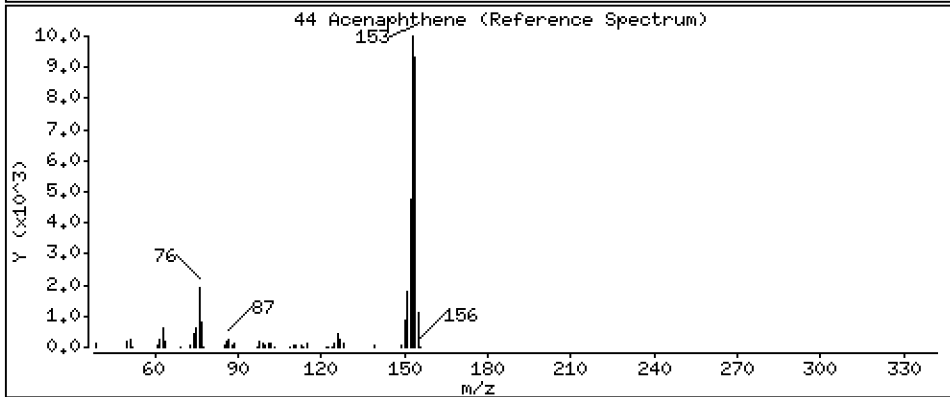
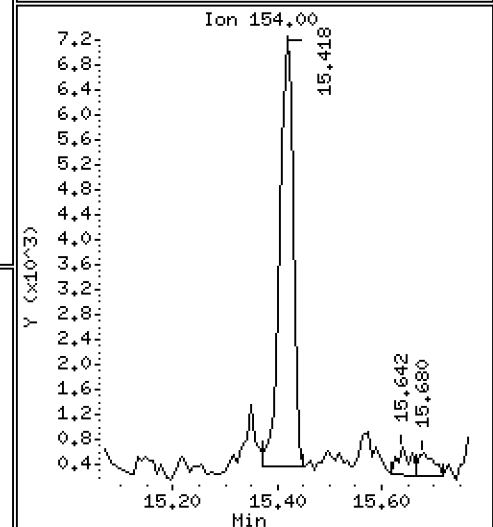
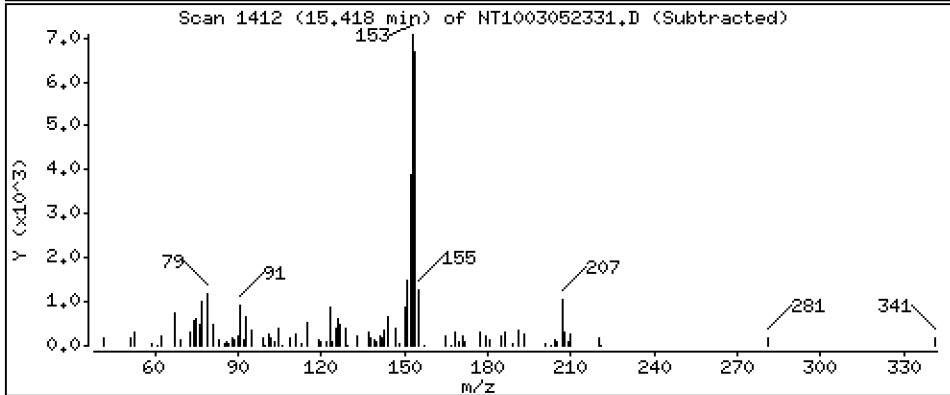
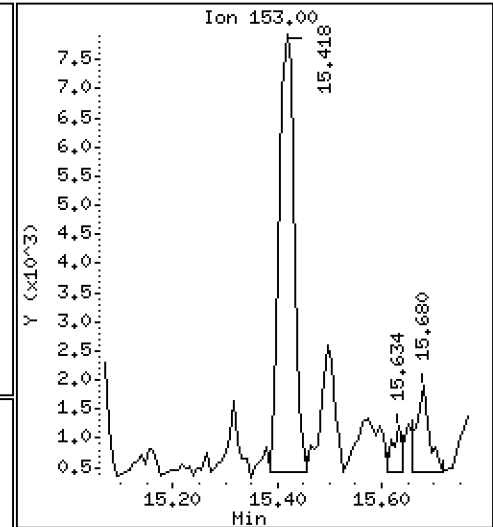
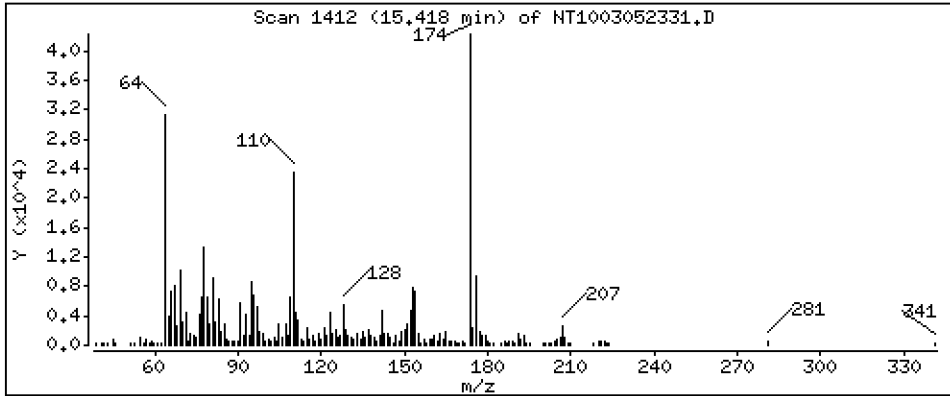
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1142 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

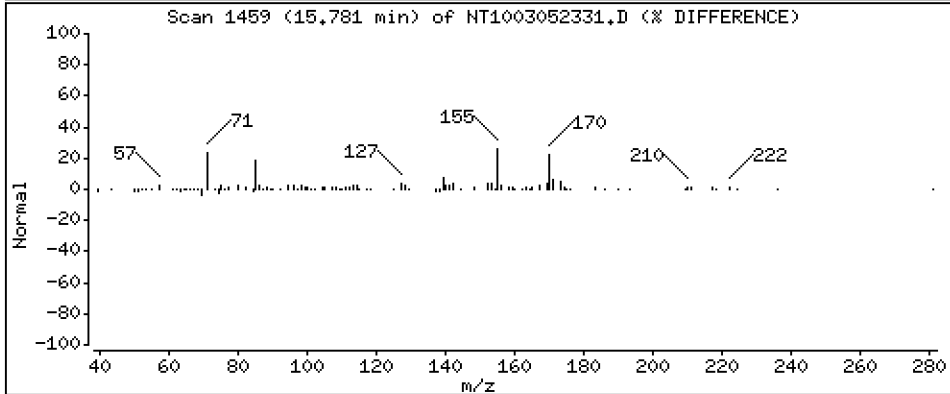
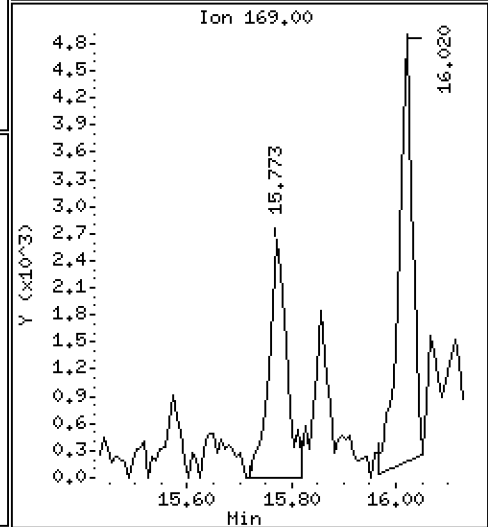
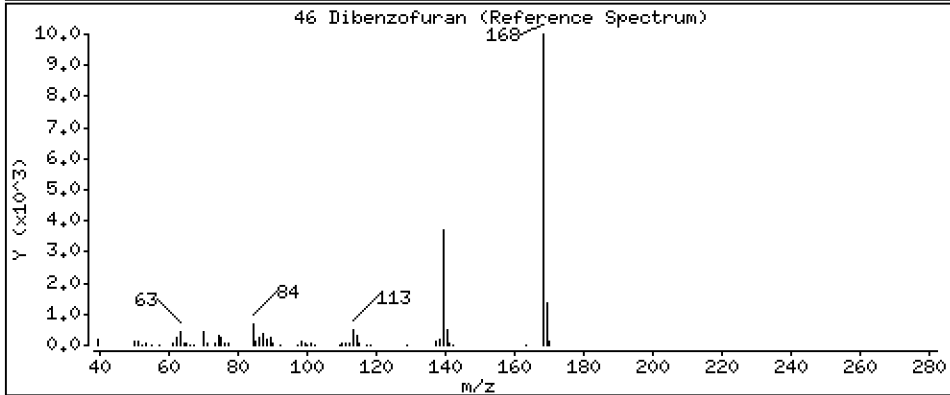
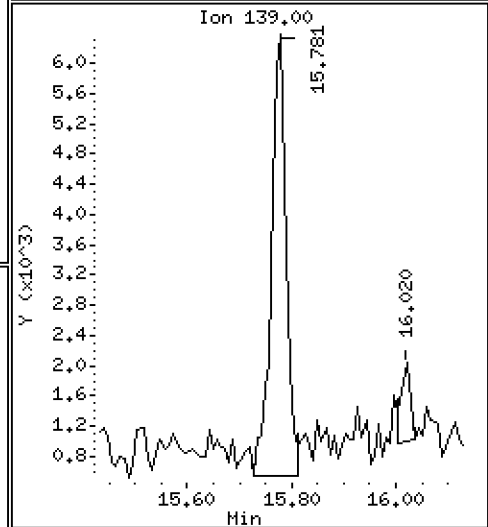
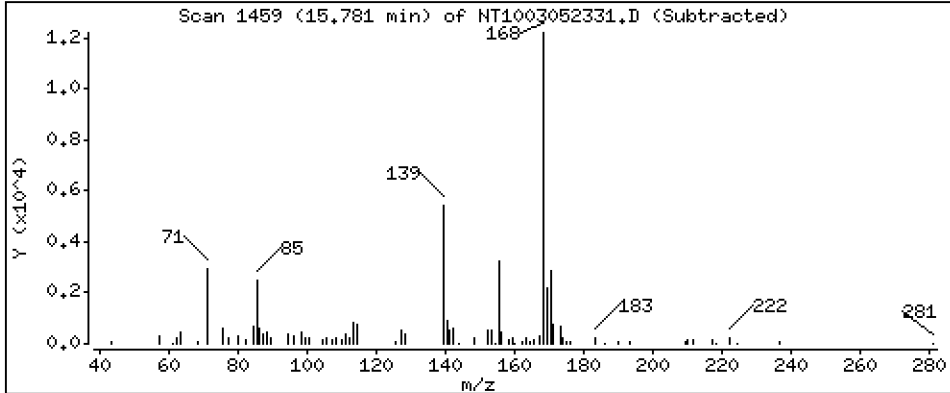
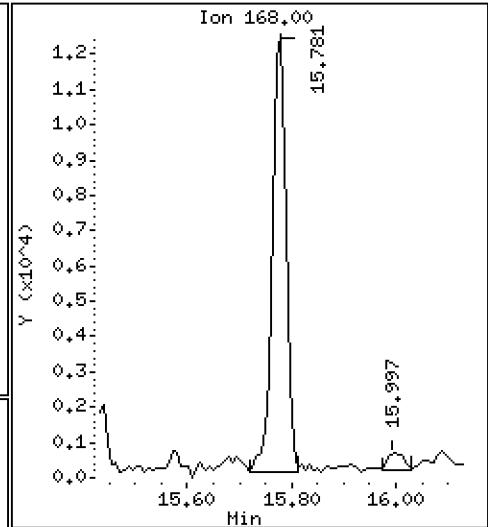
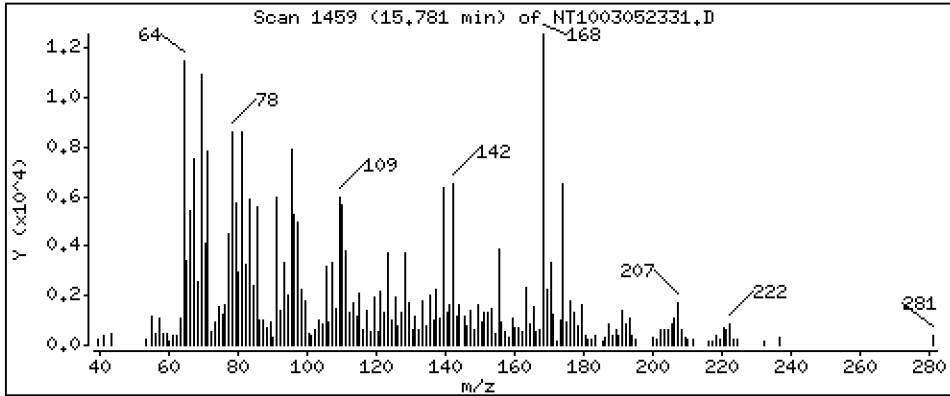
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1170 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

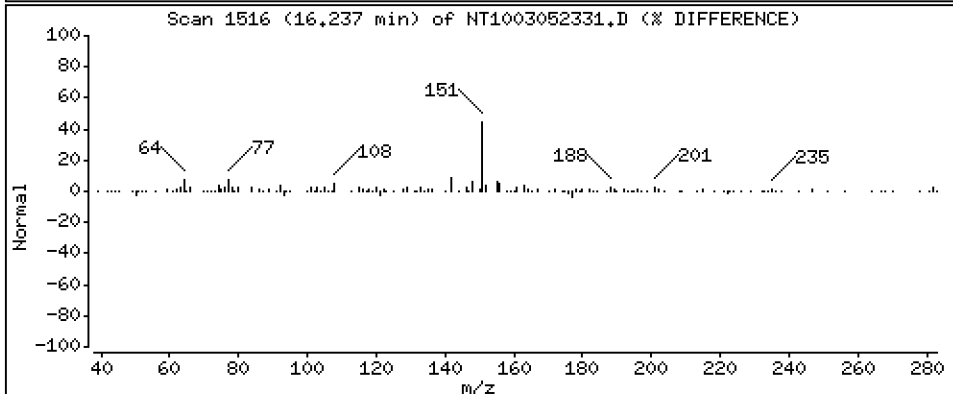
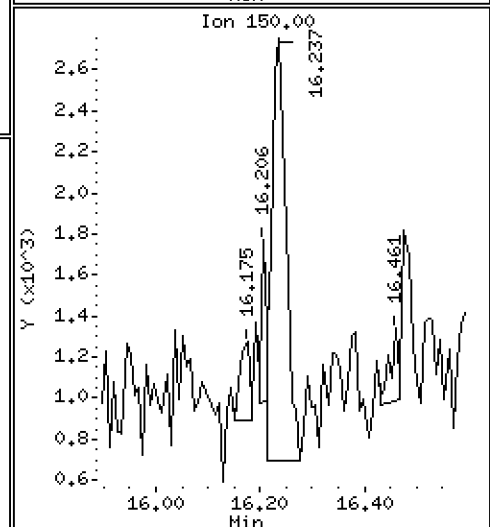
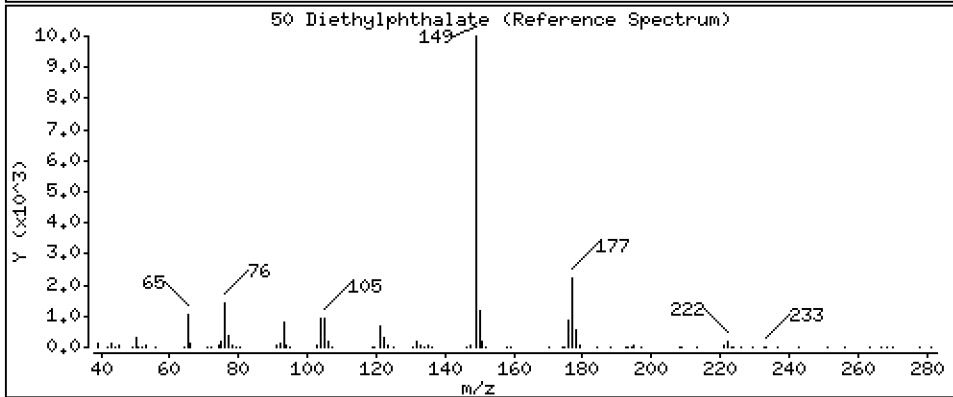
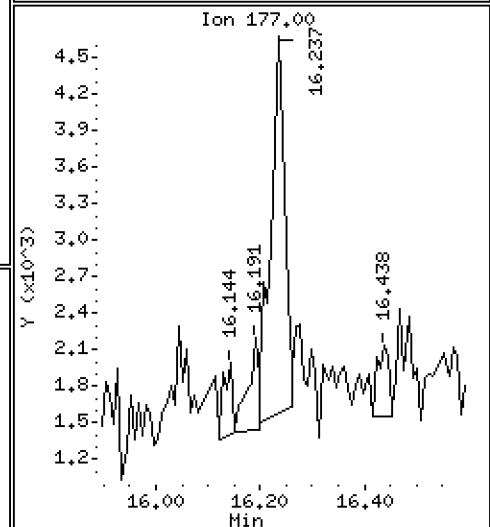
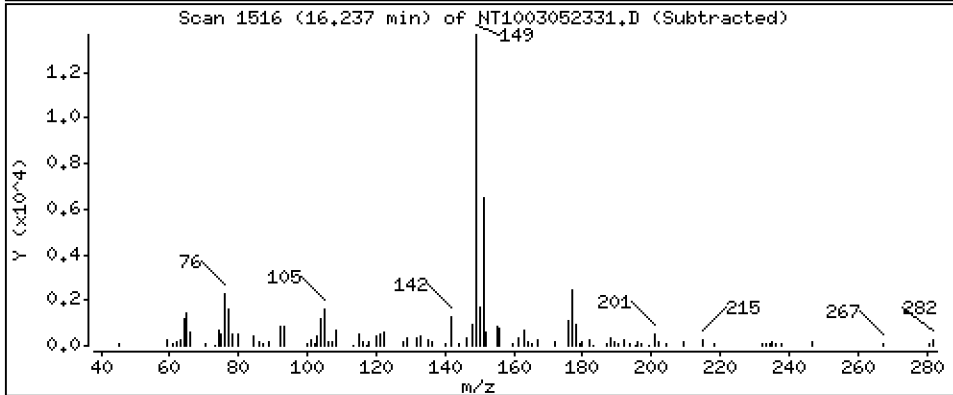
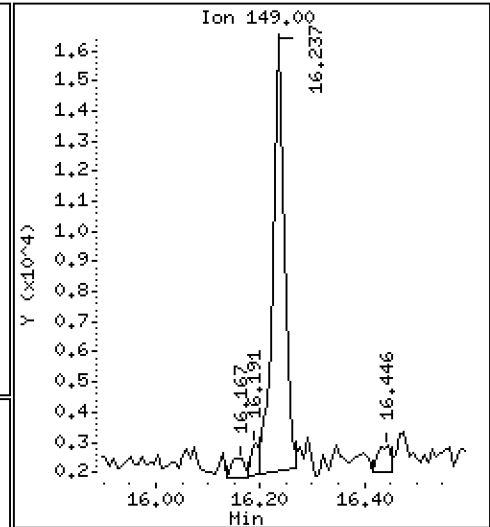
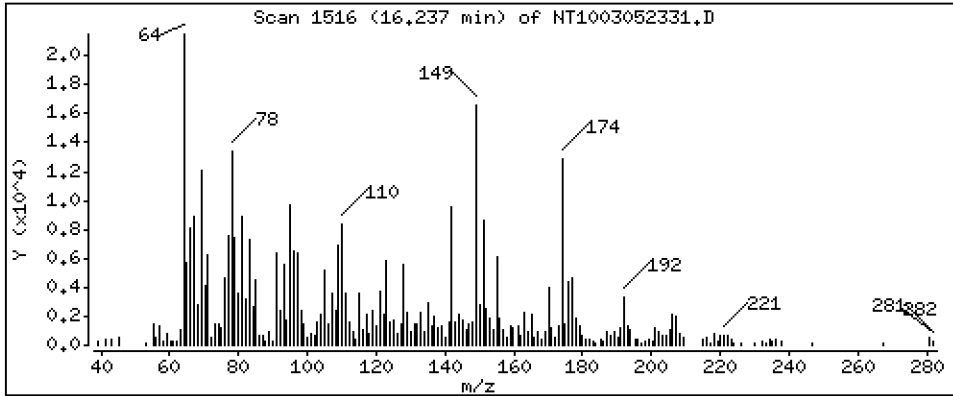
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1498 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

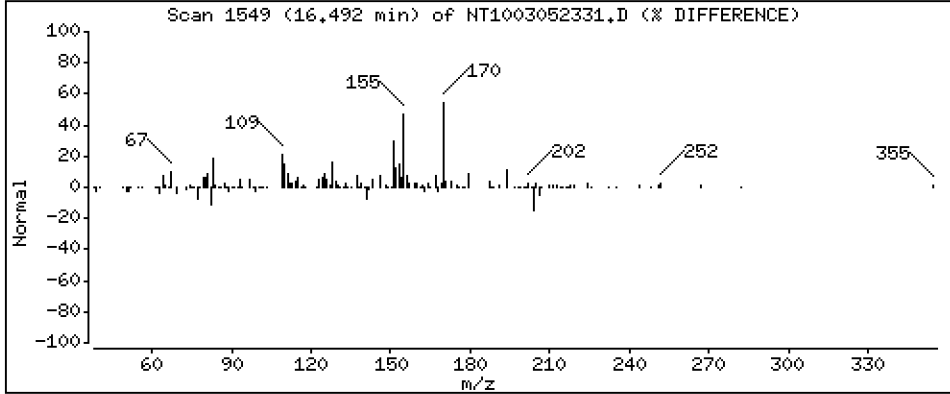
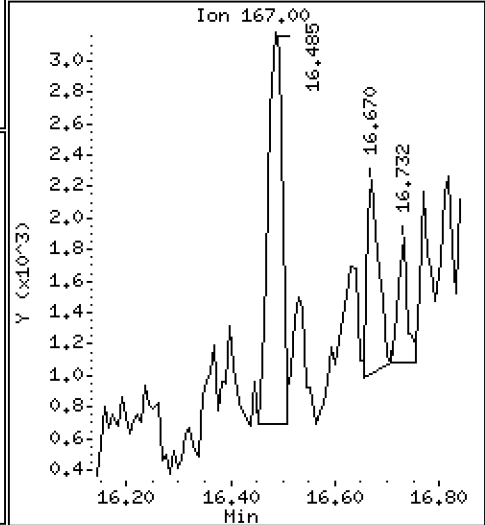
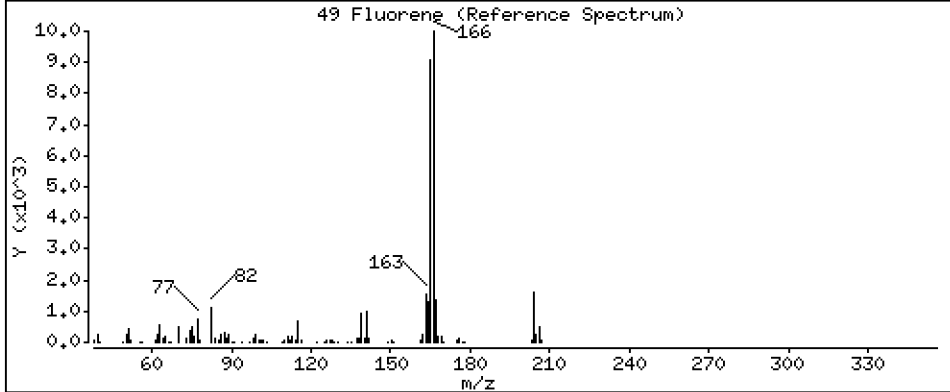
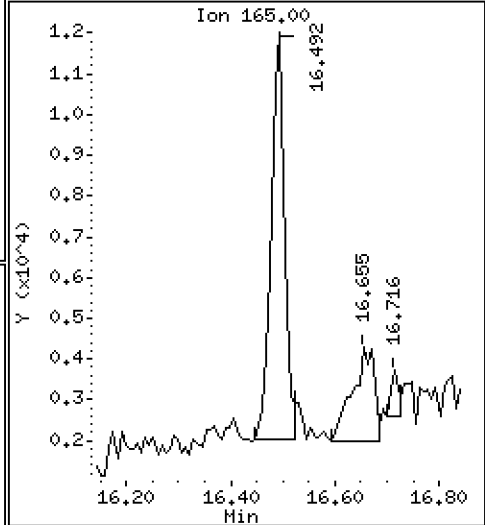
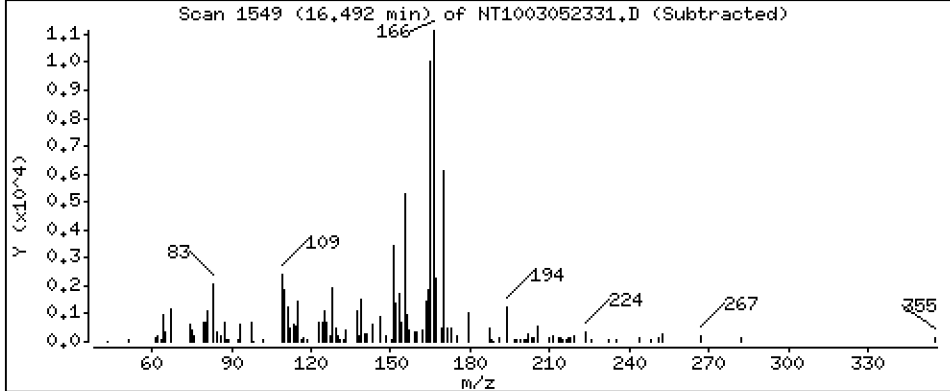
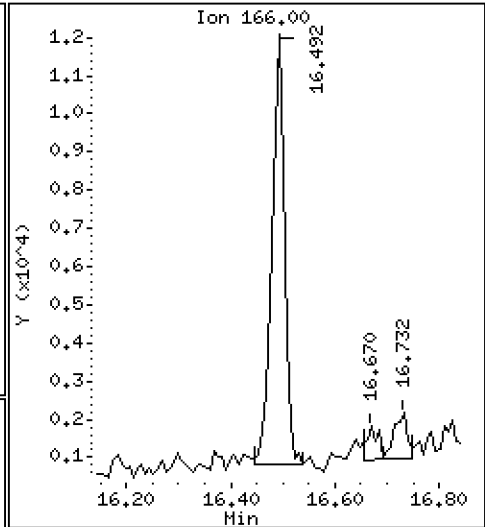
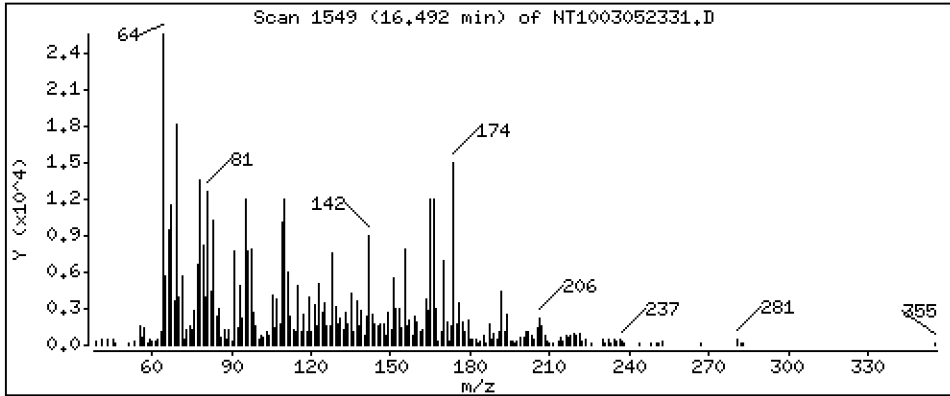
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1182 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

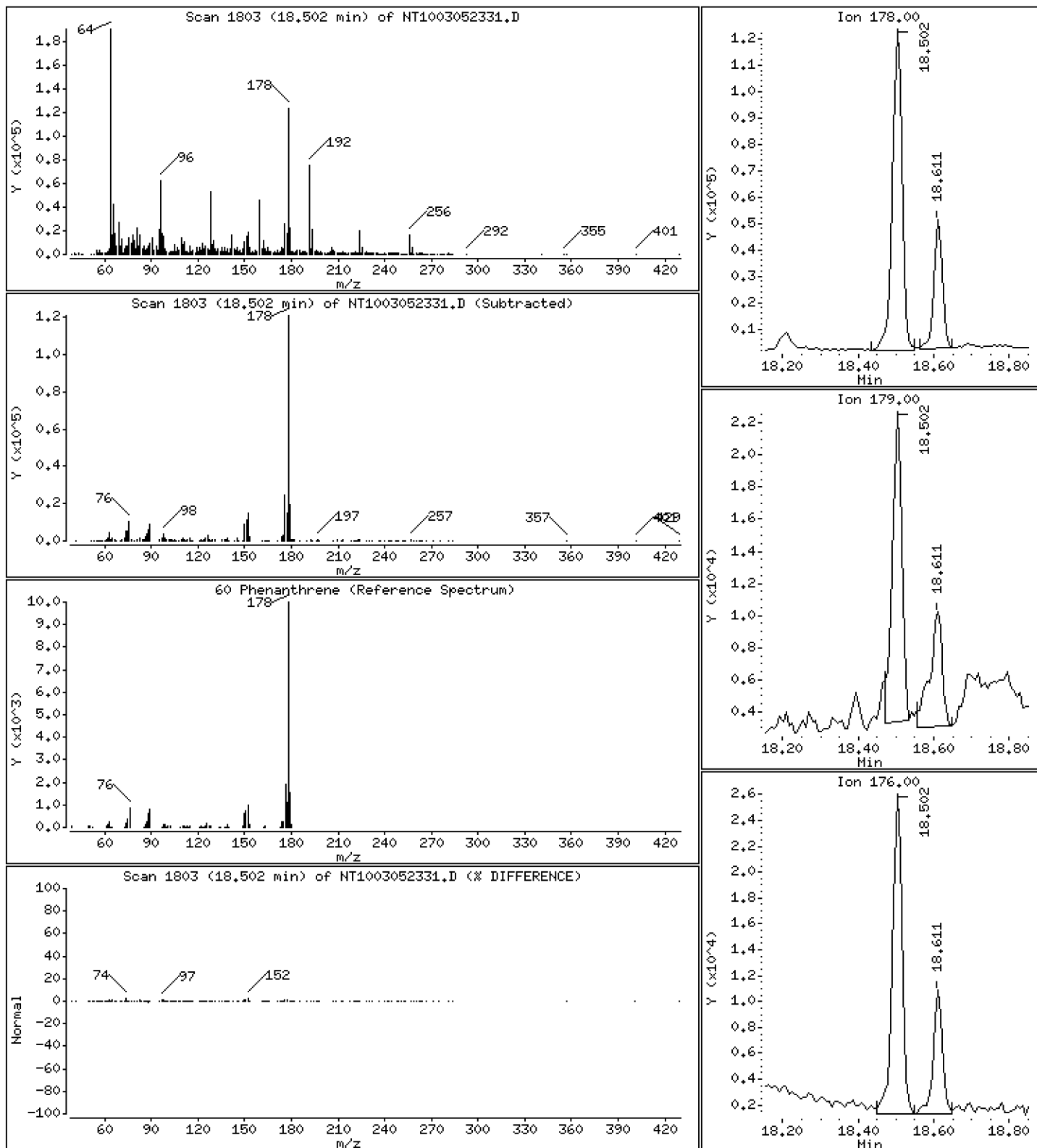
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 1,009 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

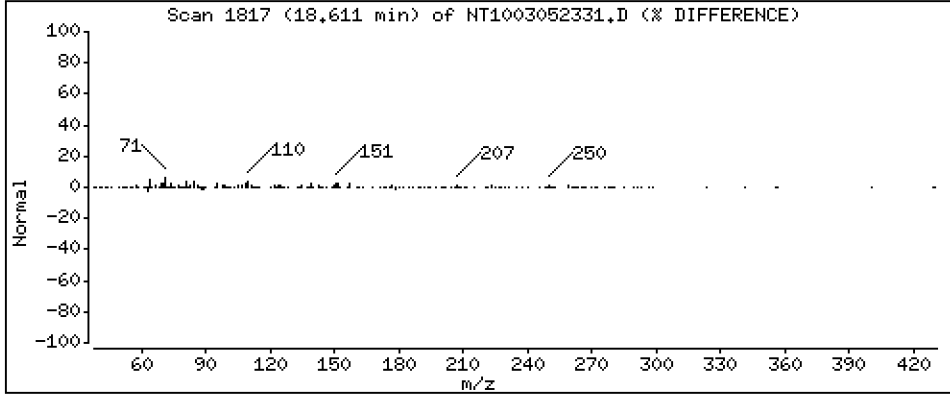
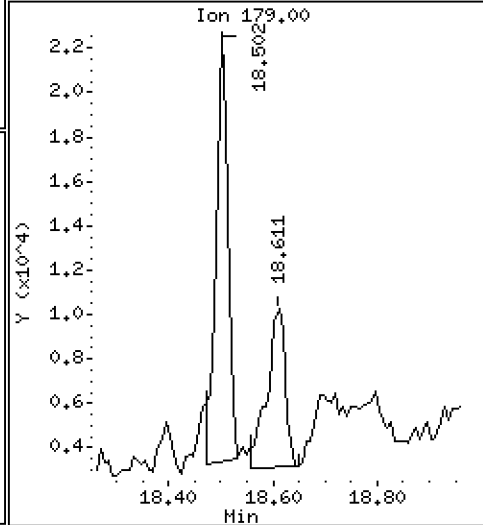
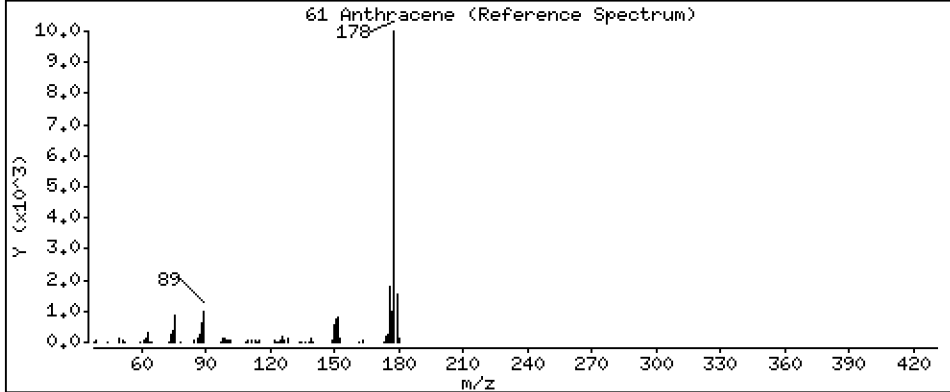
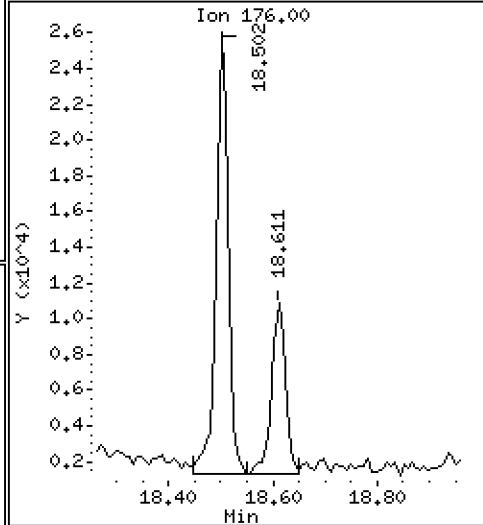
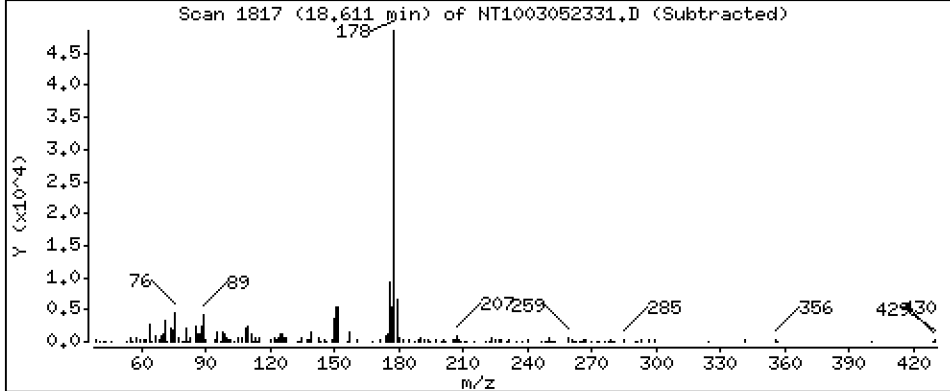
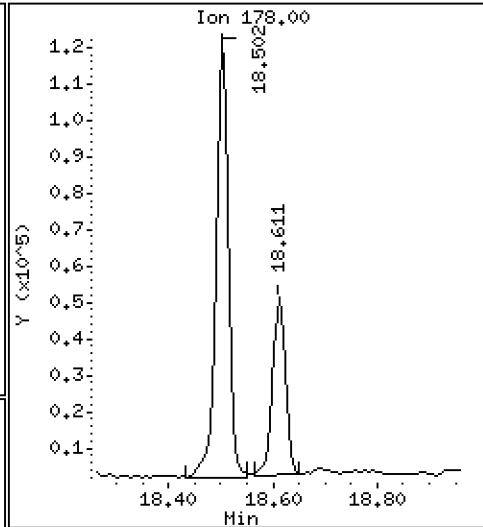
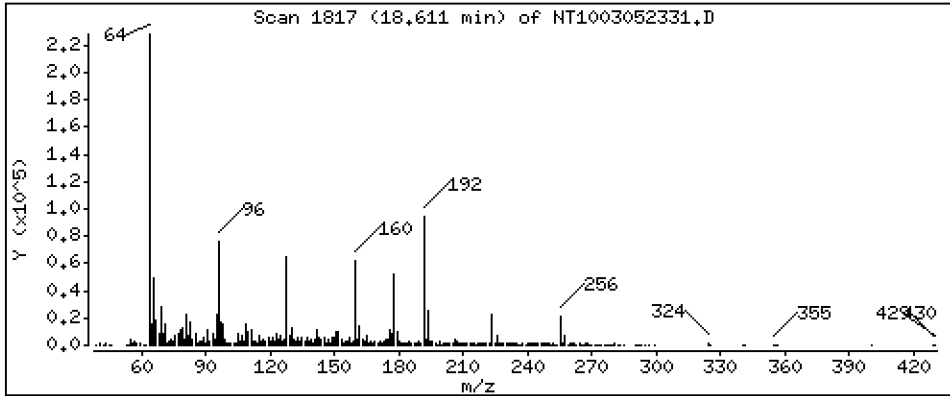
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,4031 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

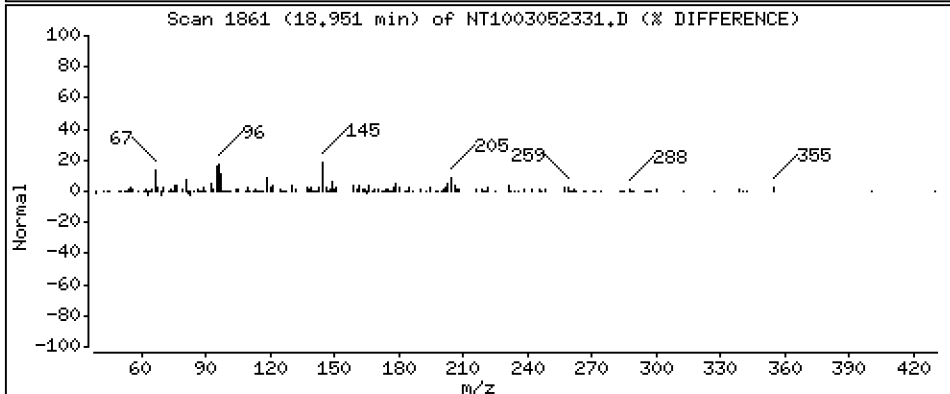
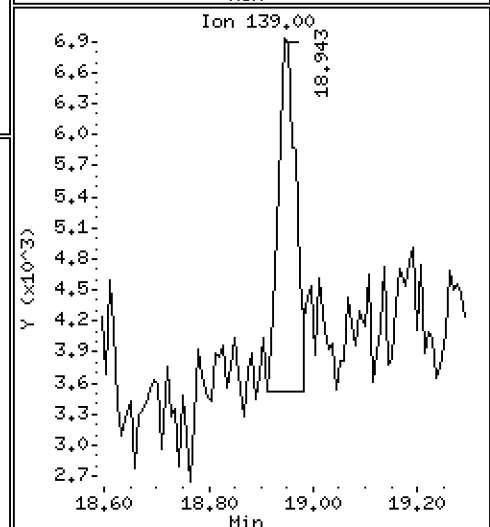
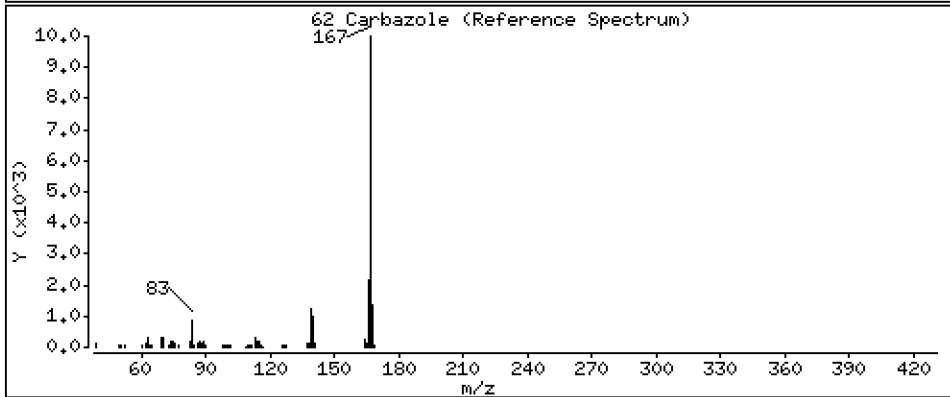
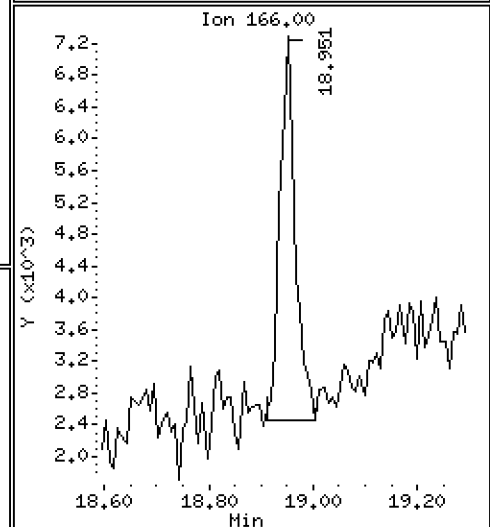
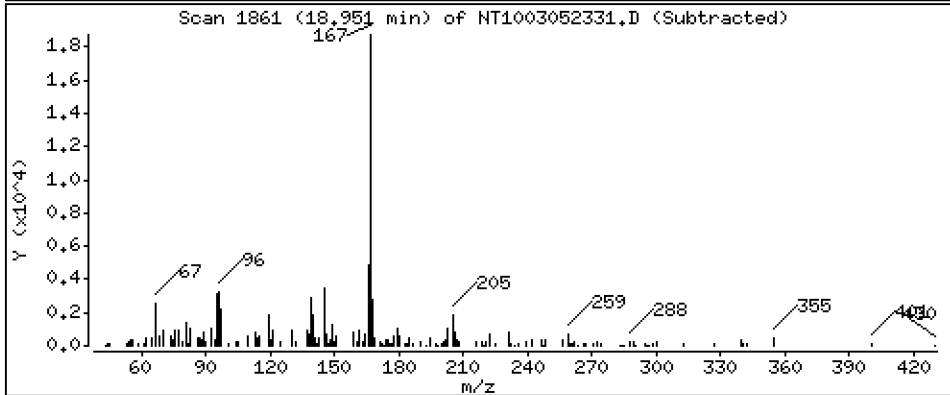
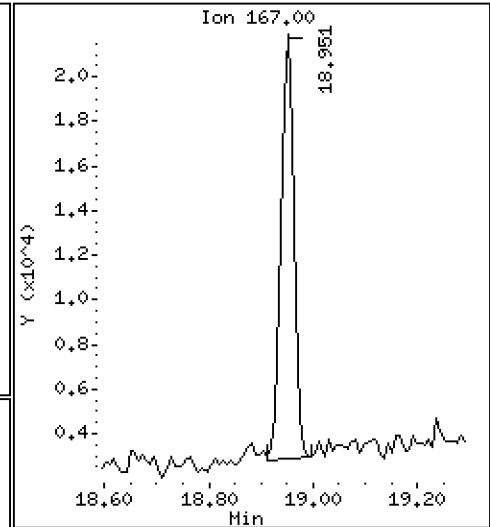
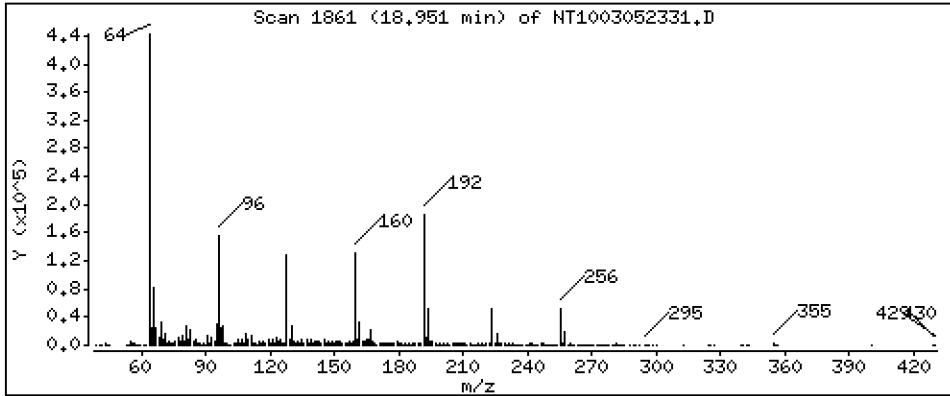
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.1766 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

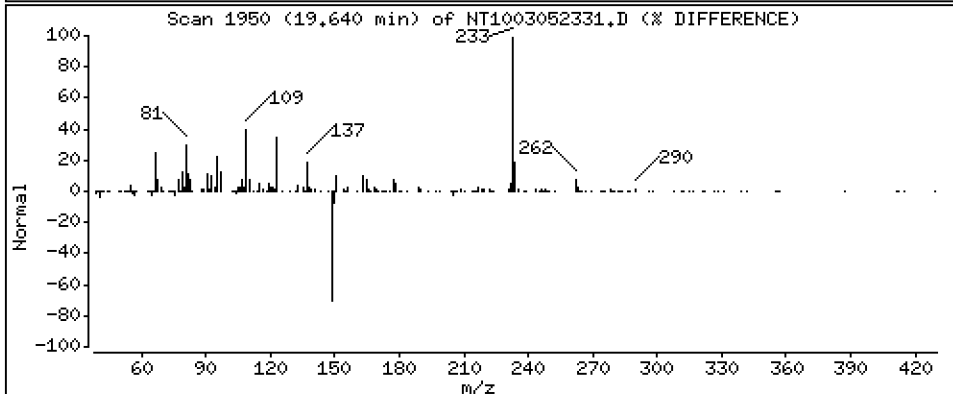
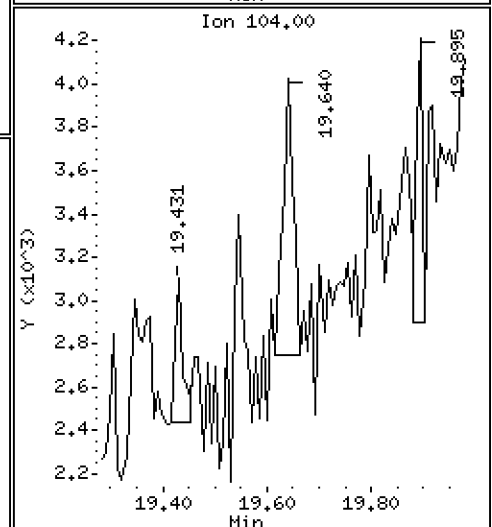
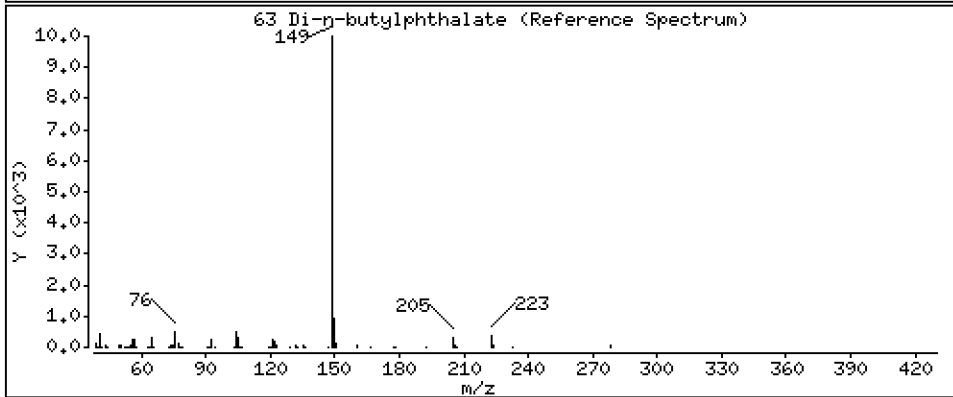
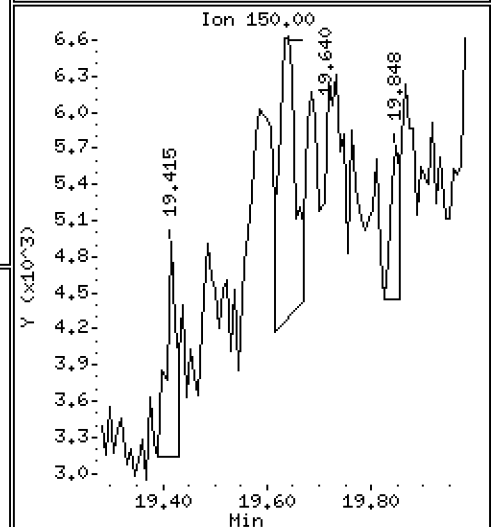
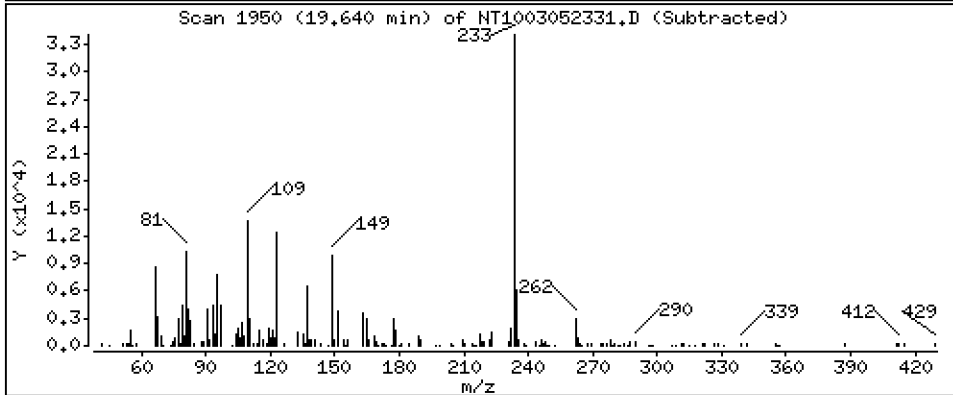
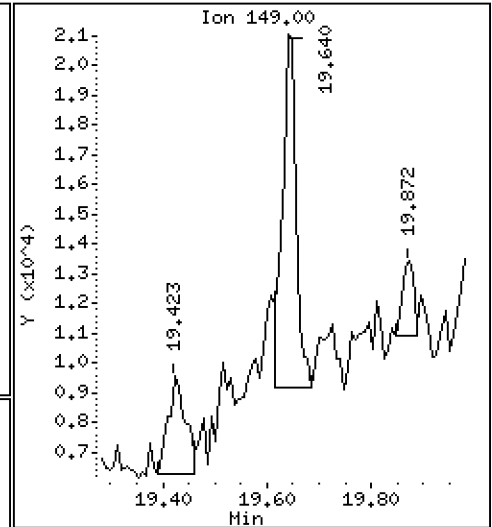
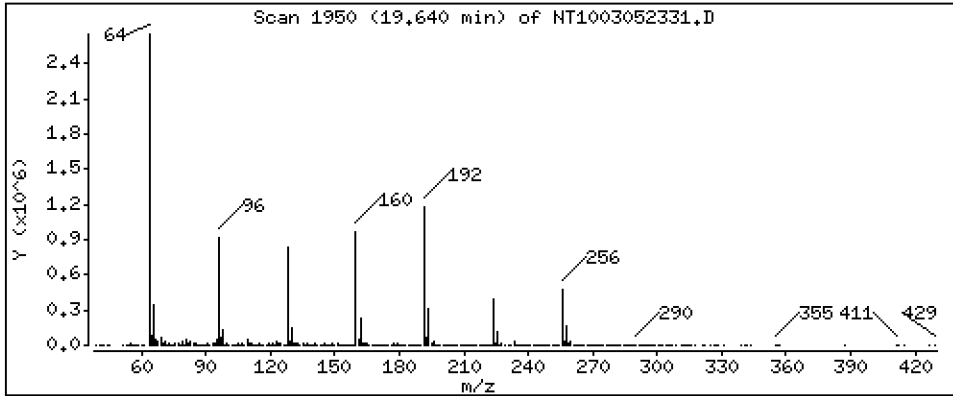
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.09100 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

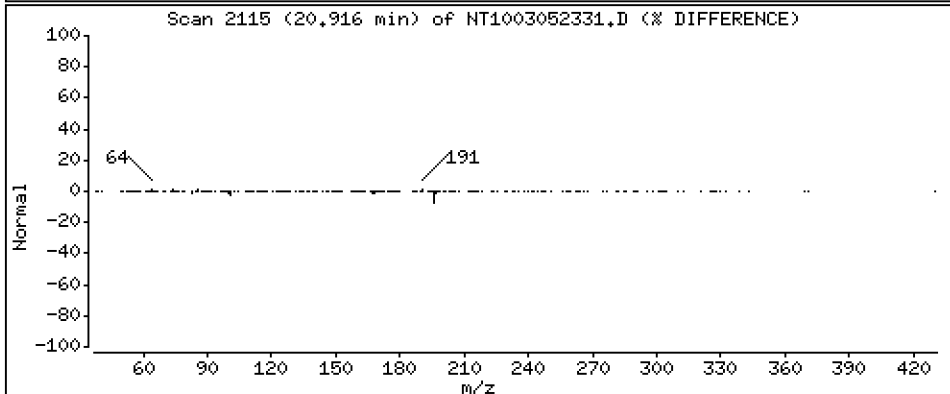
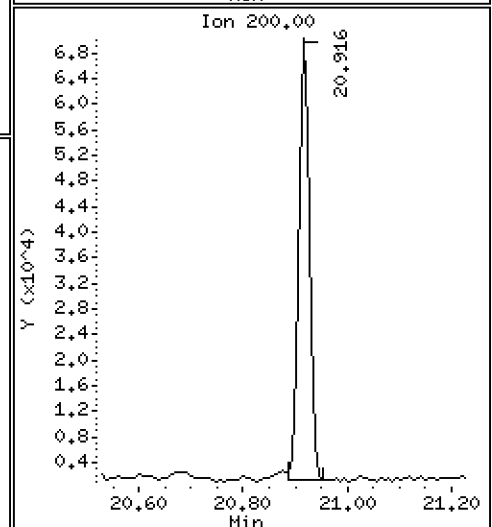
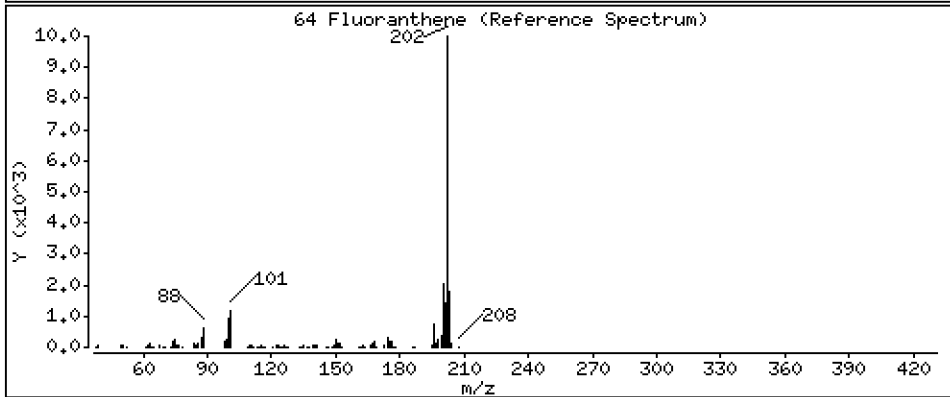
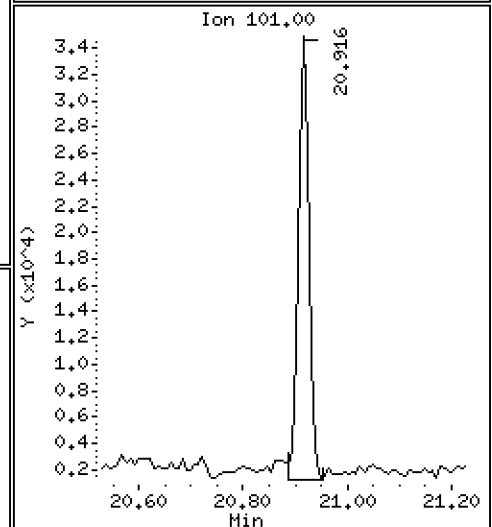
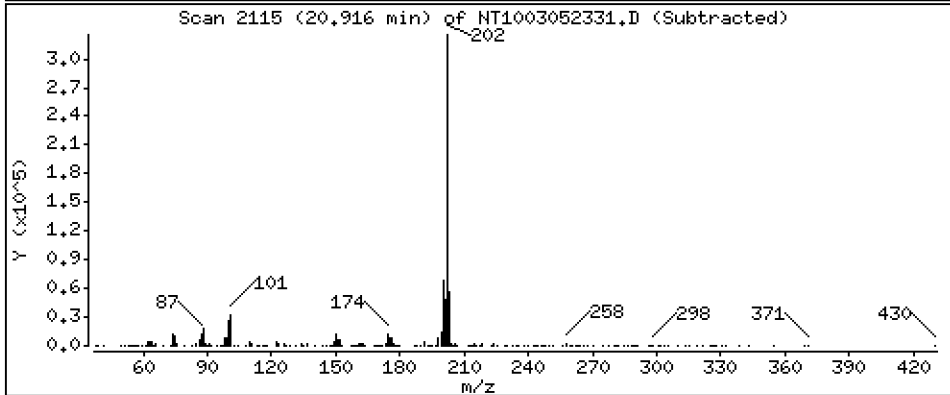
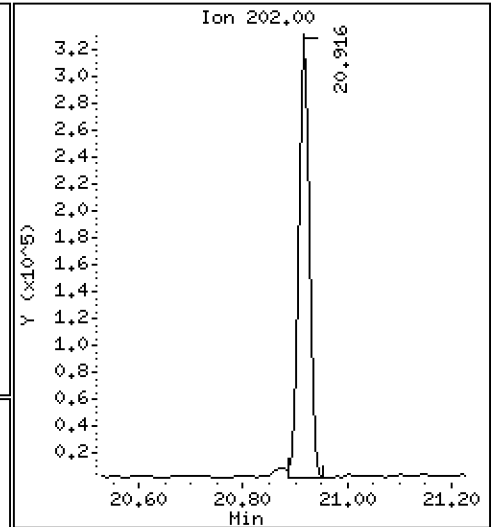
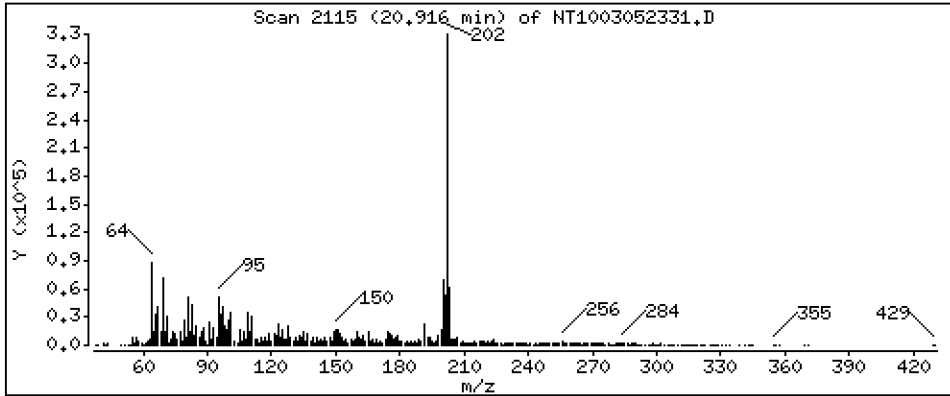
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 1,831 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

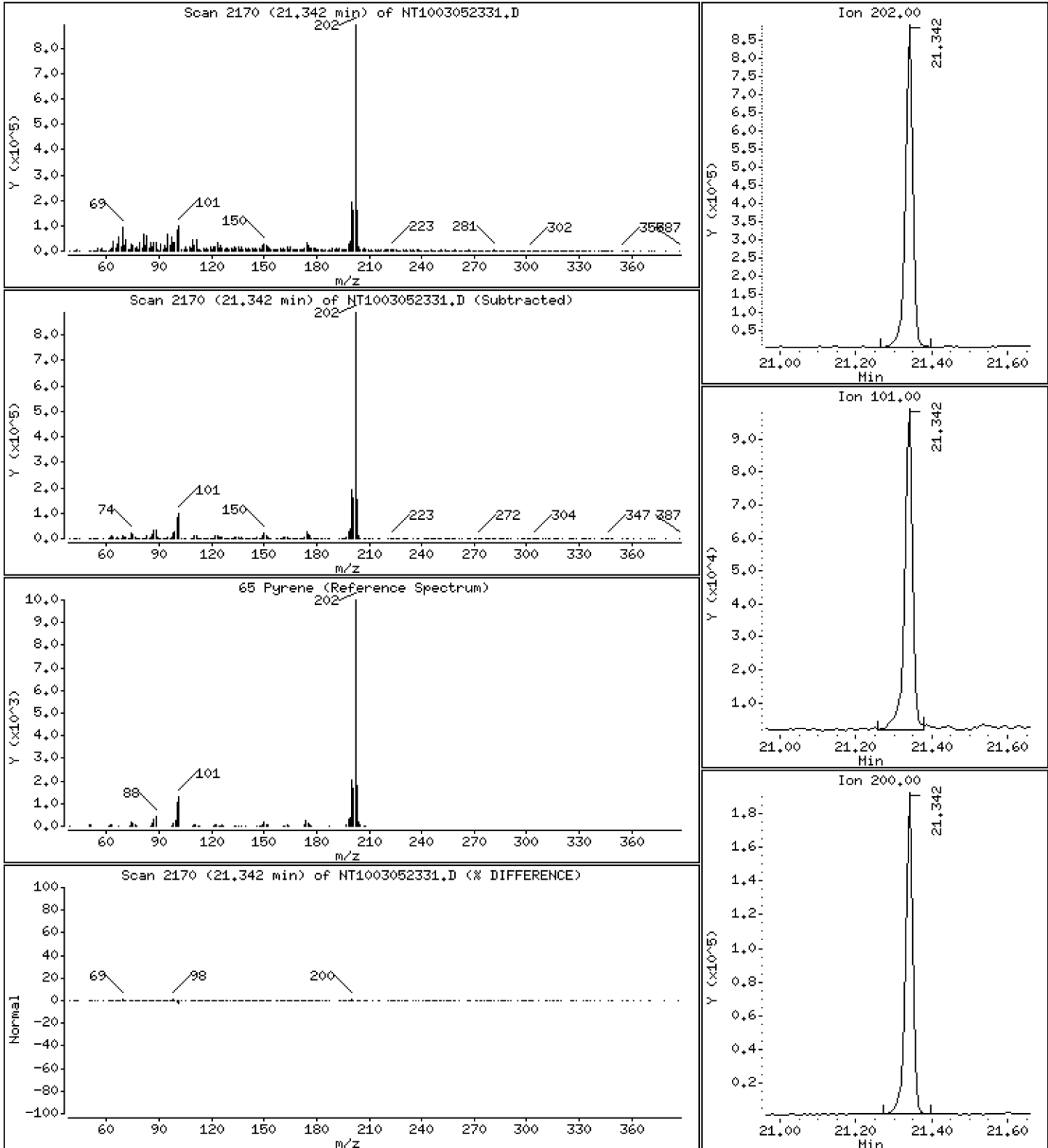
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,562 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

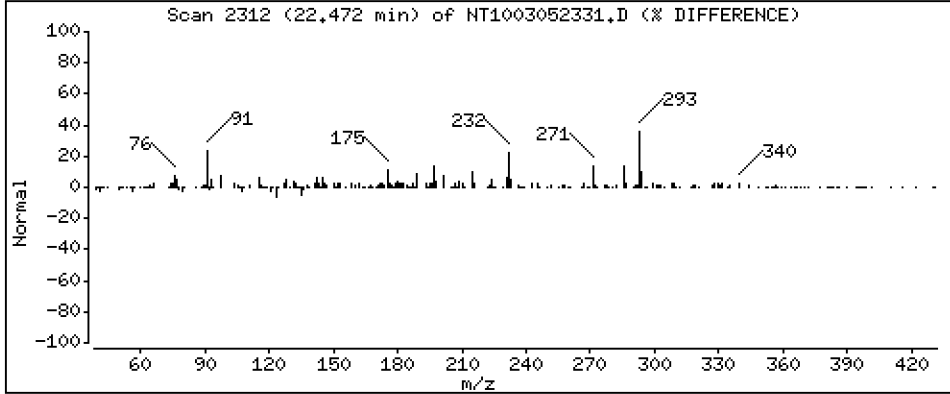
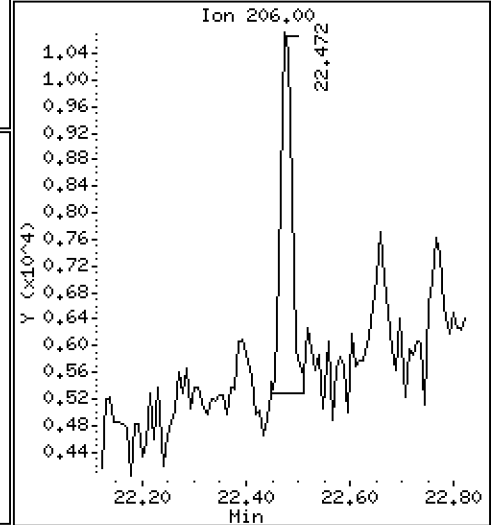
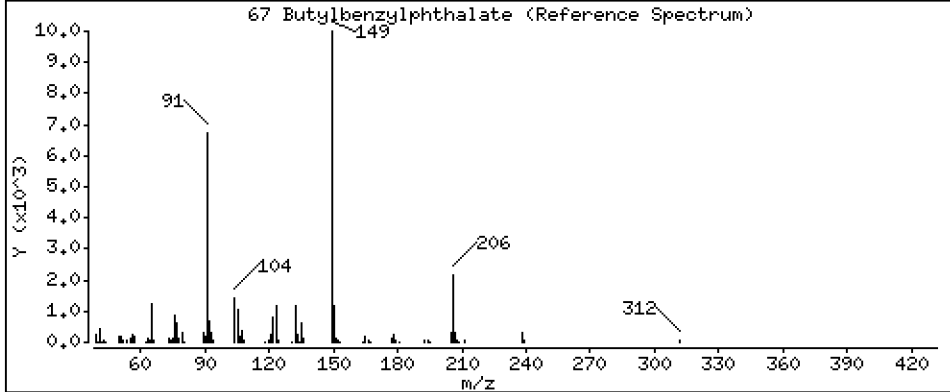
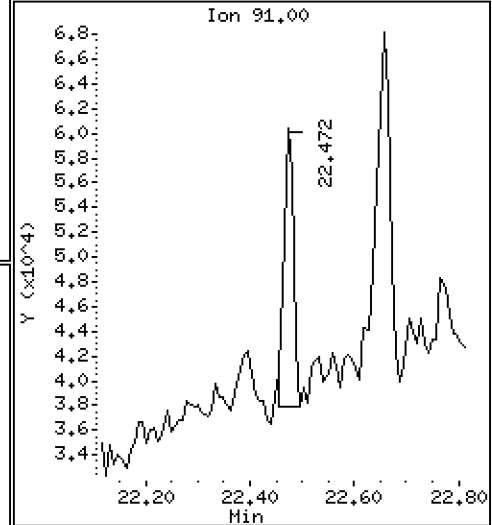
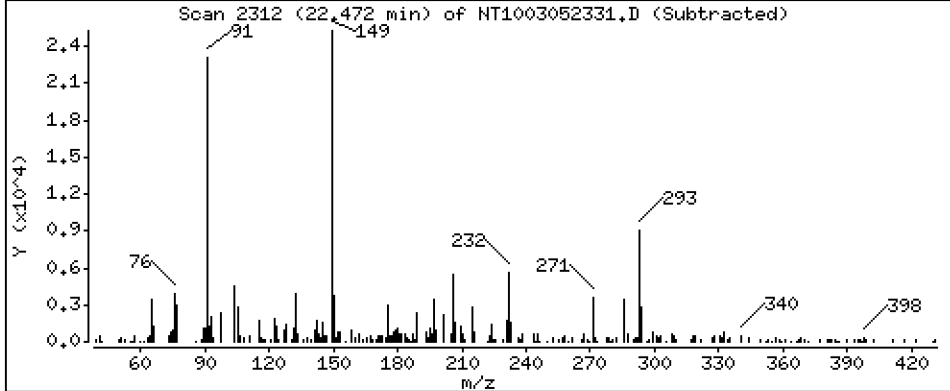
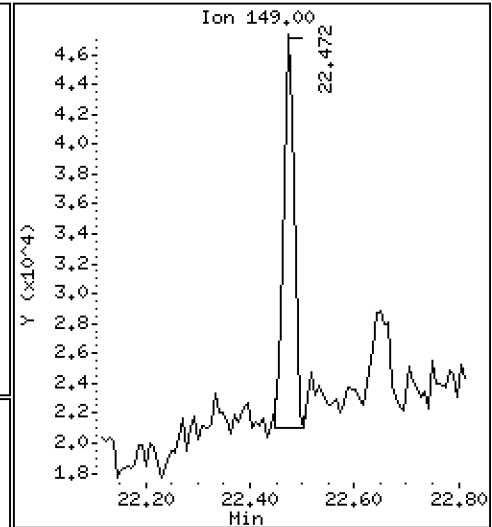
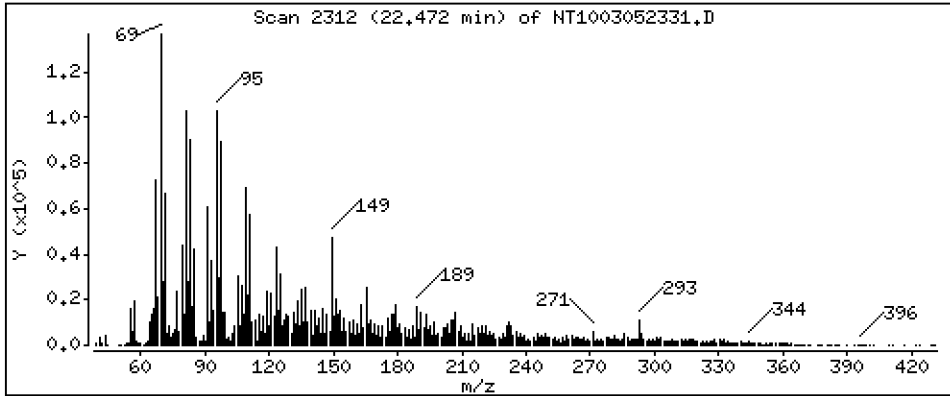
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2425 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

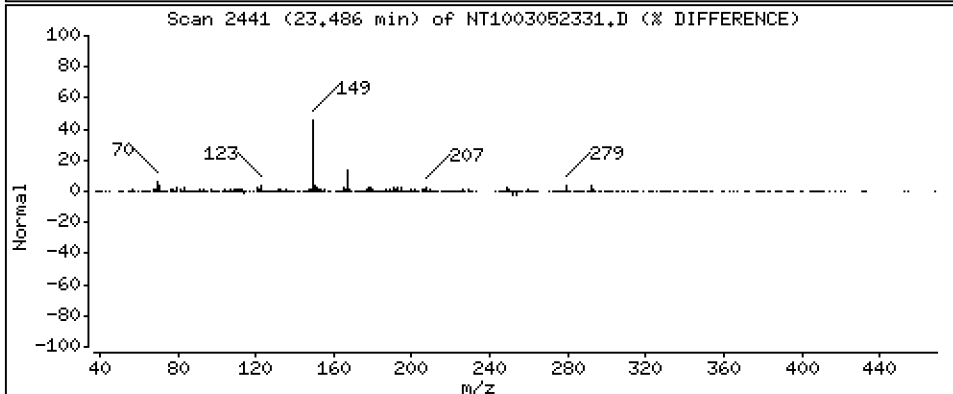
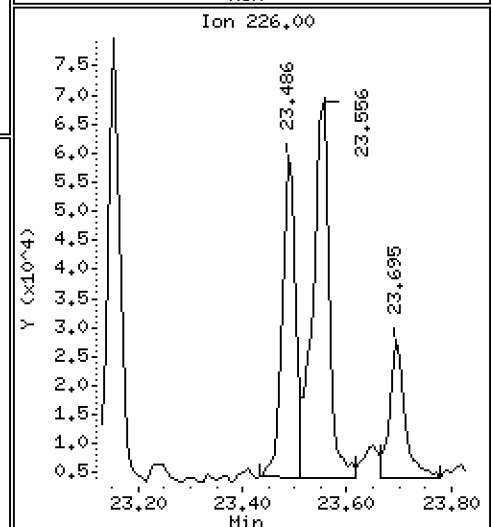
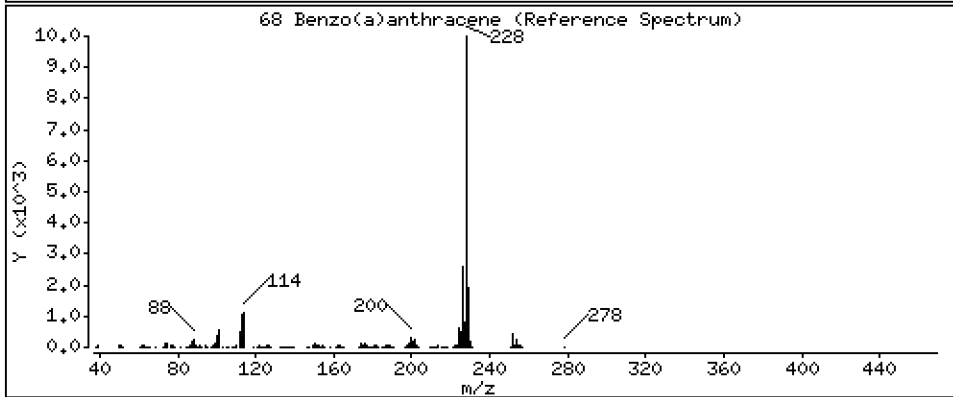
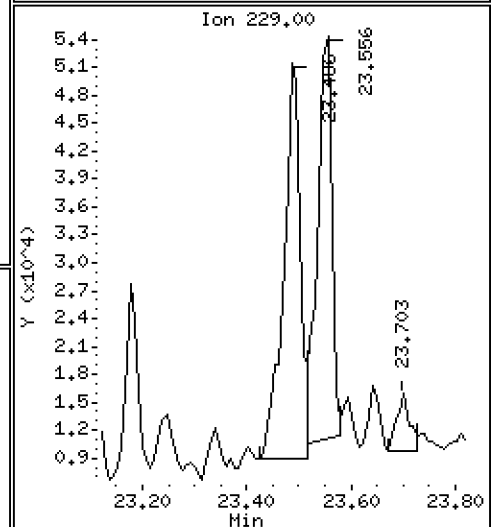
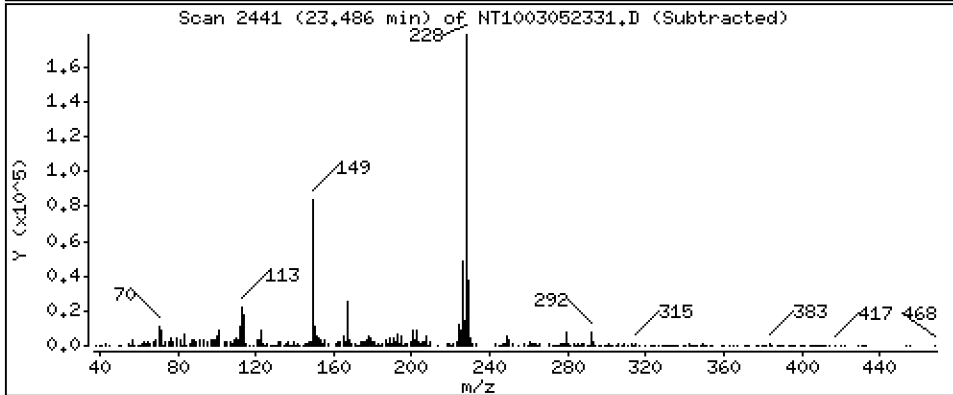
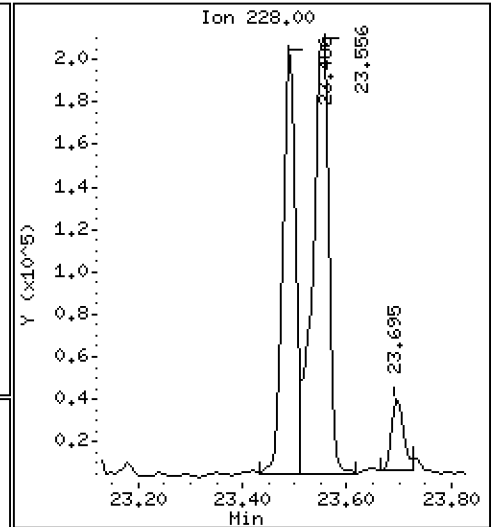
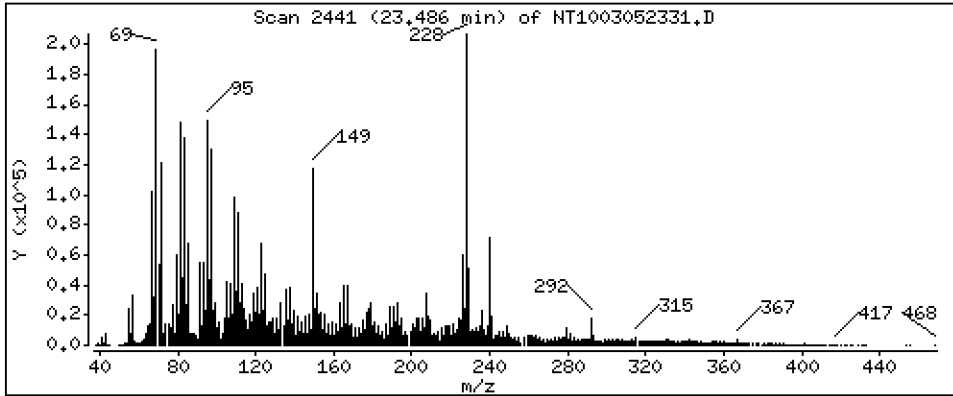
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 1,256 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

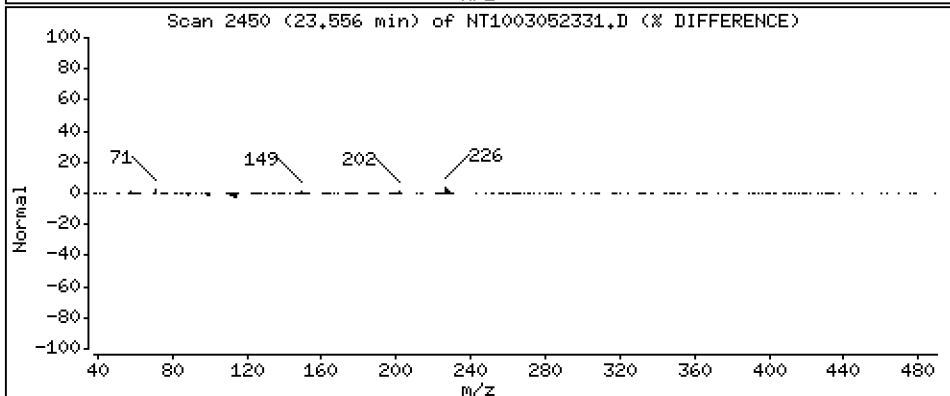
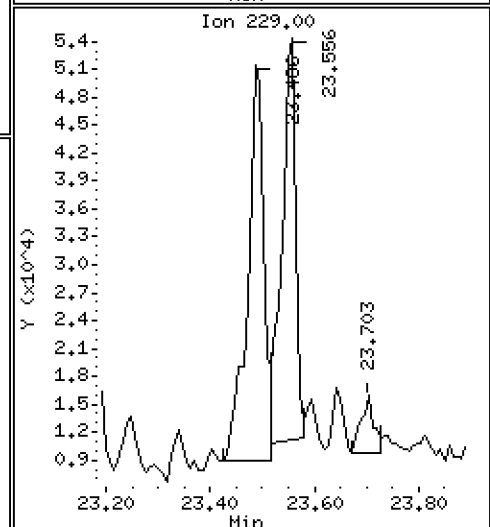
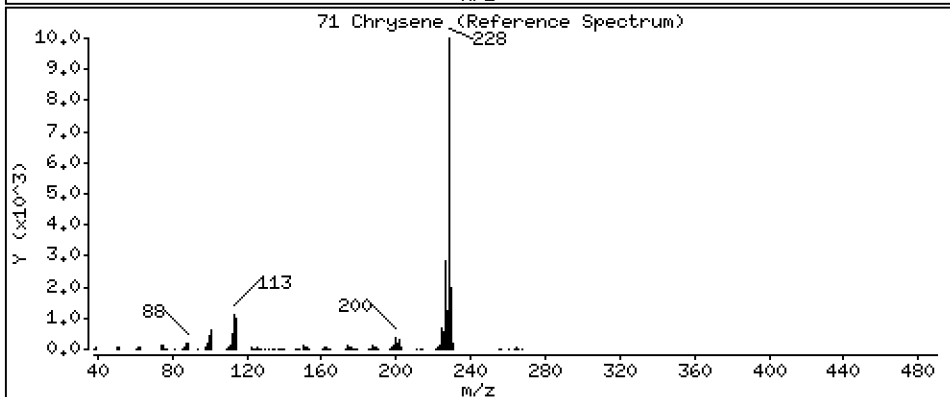
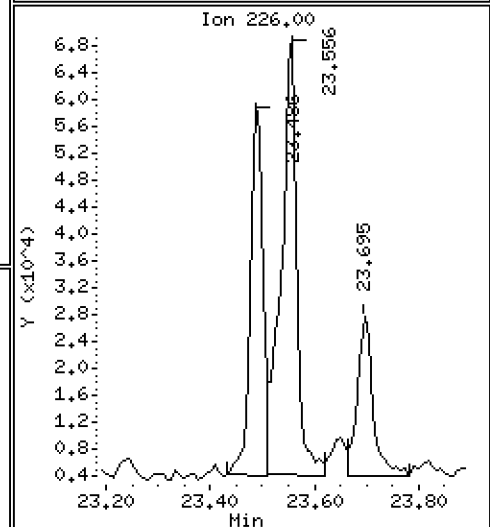
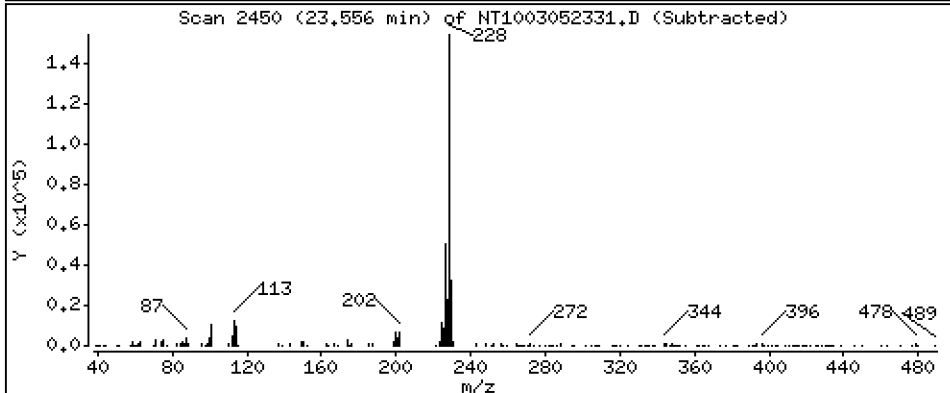
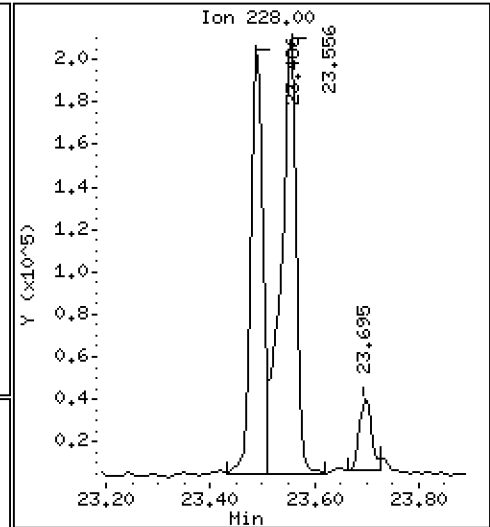
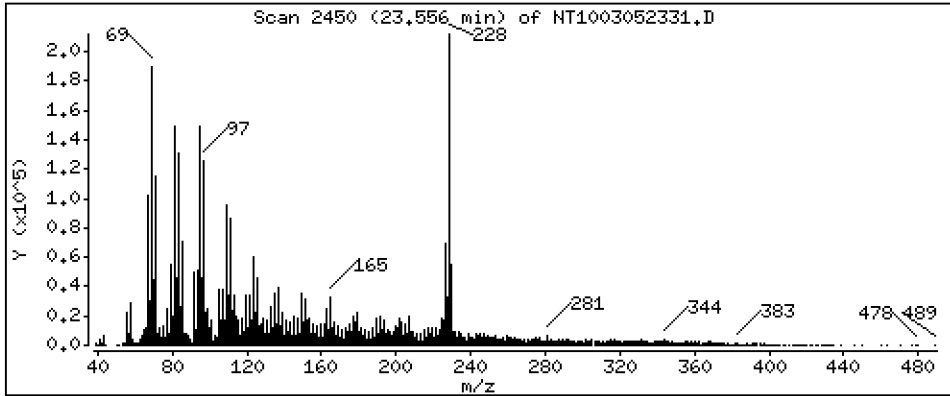
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,959 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

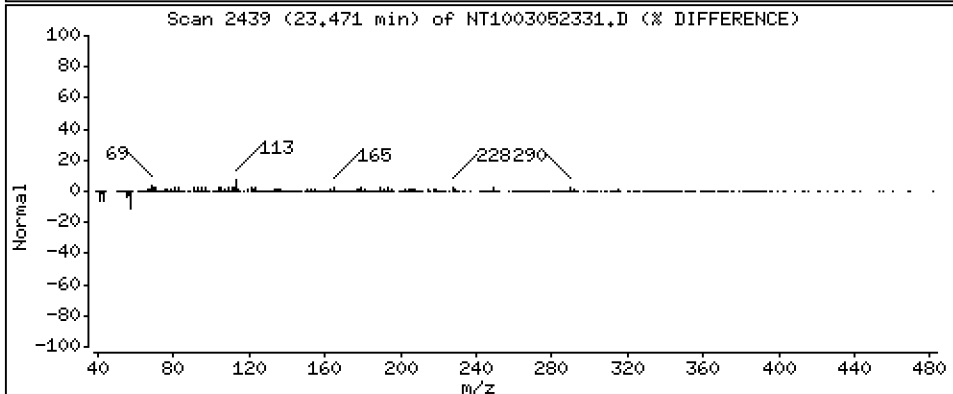
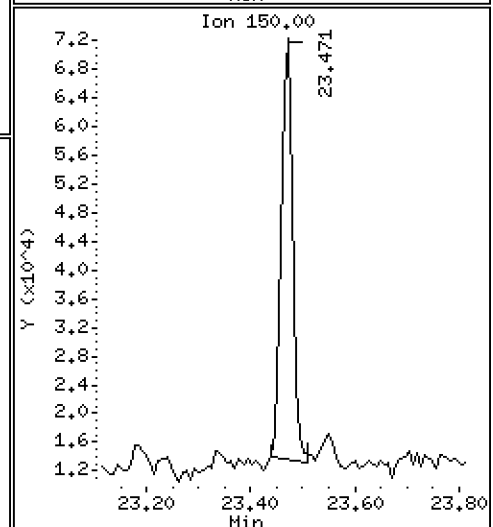
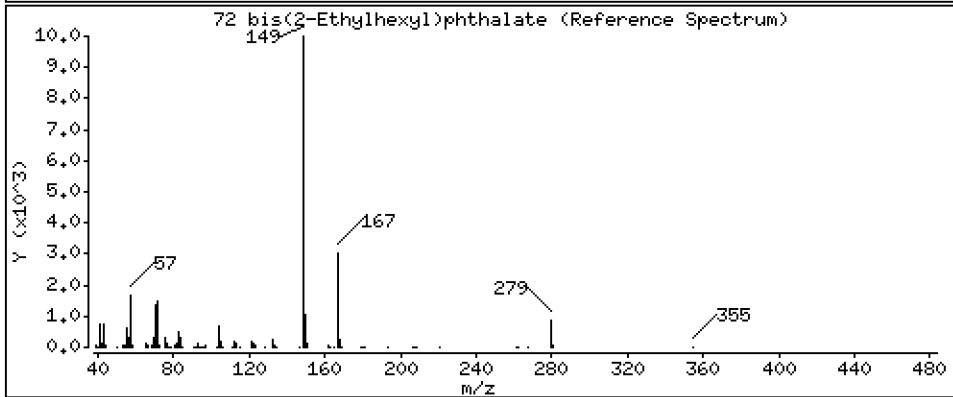
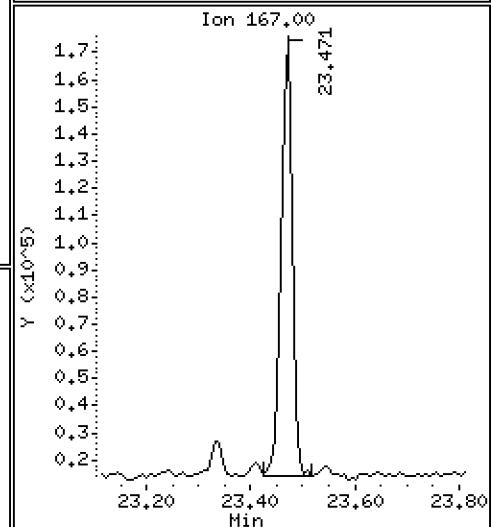
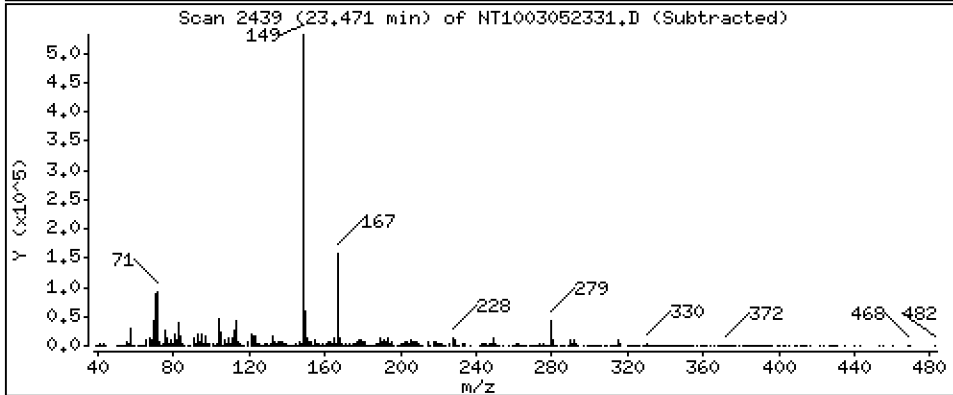
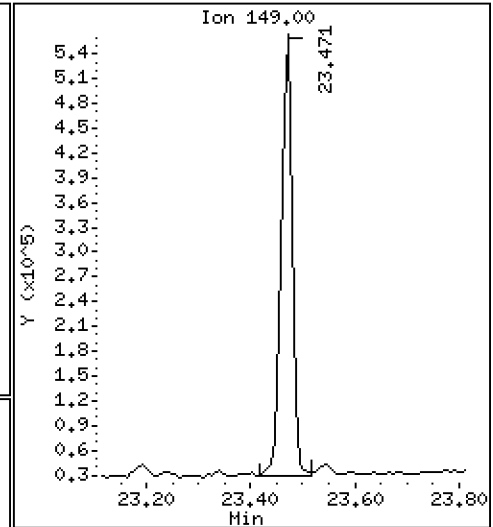
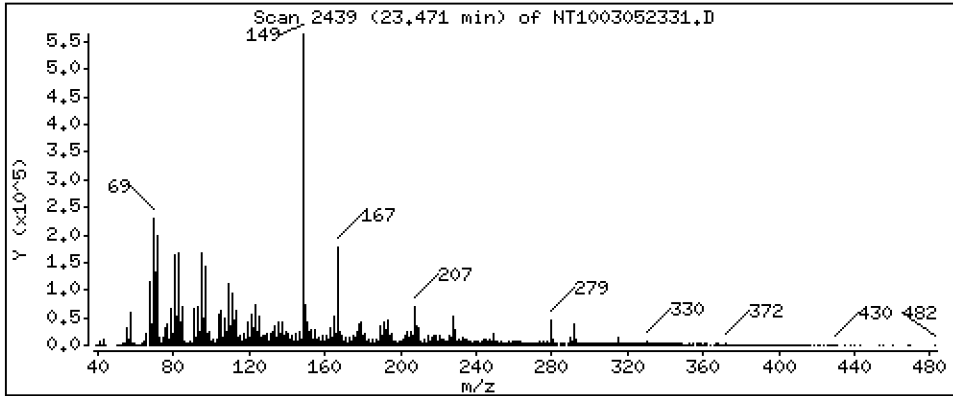
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 3,927 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

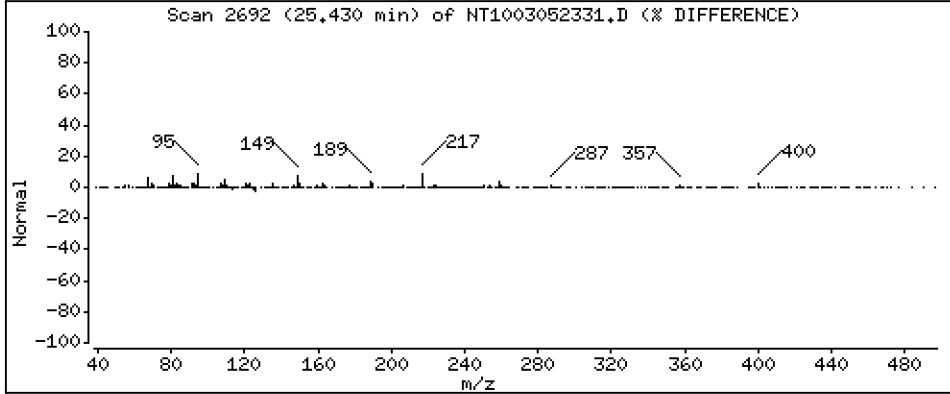
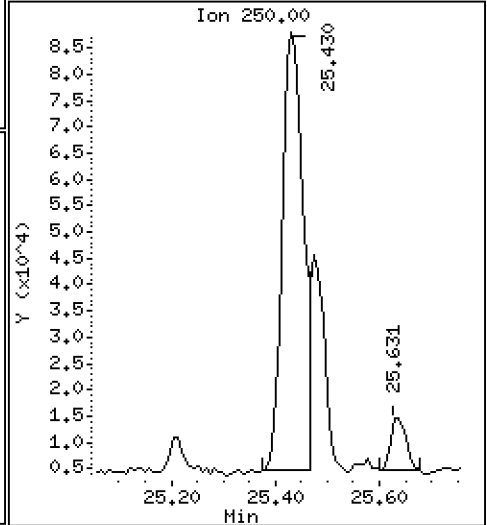
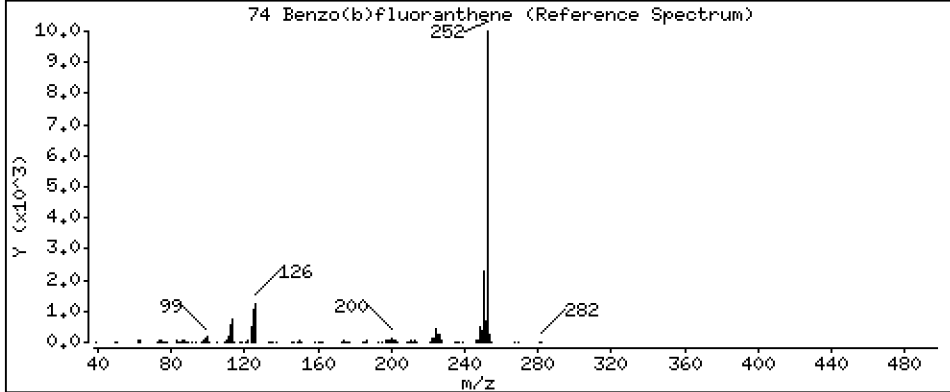
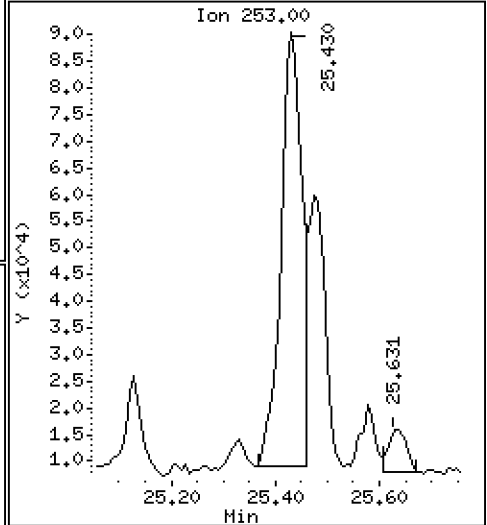
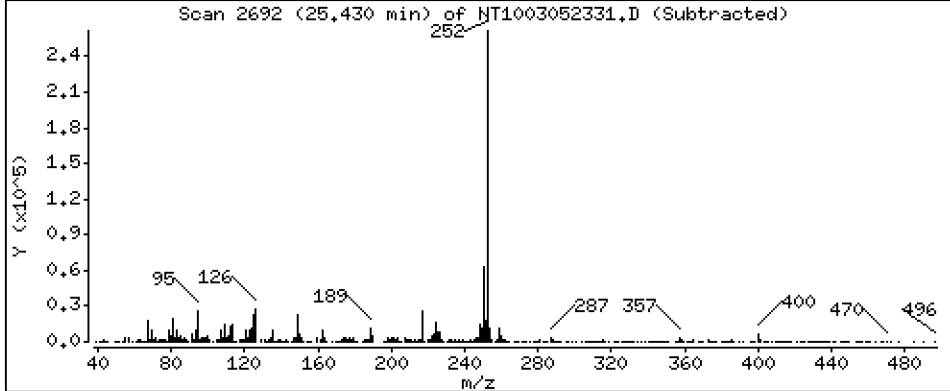
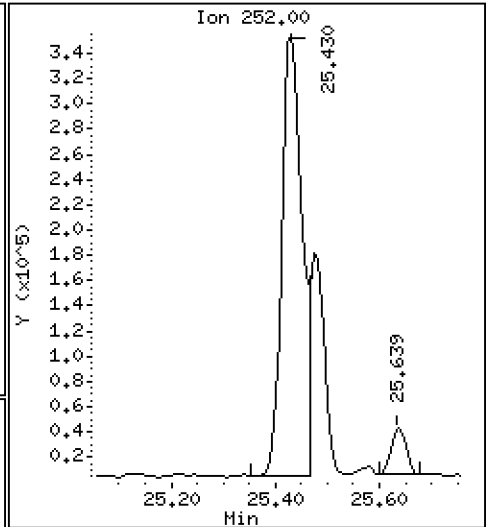
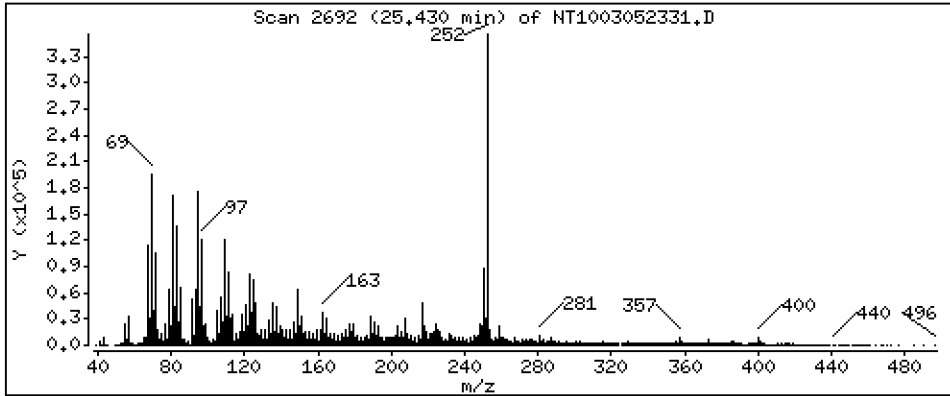
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 3,341 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

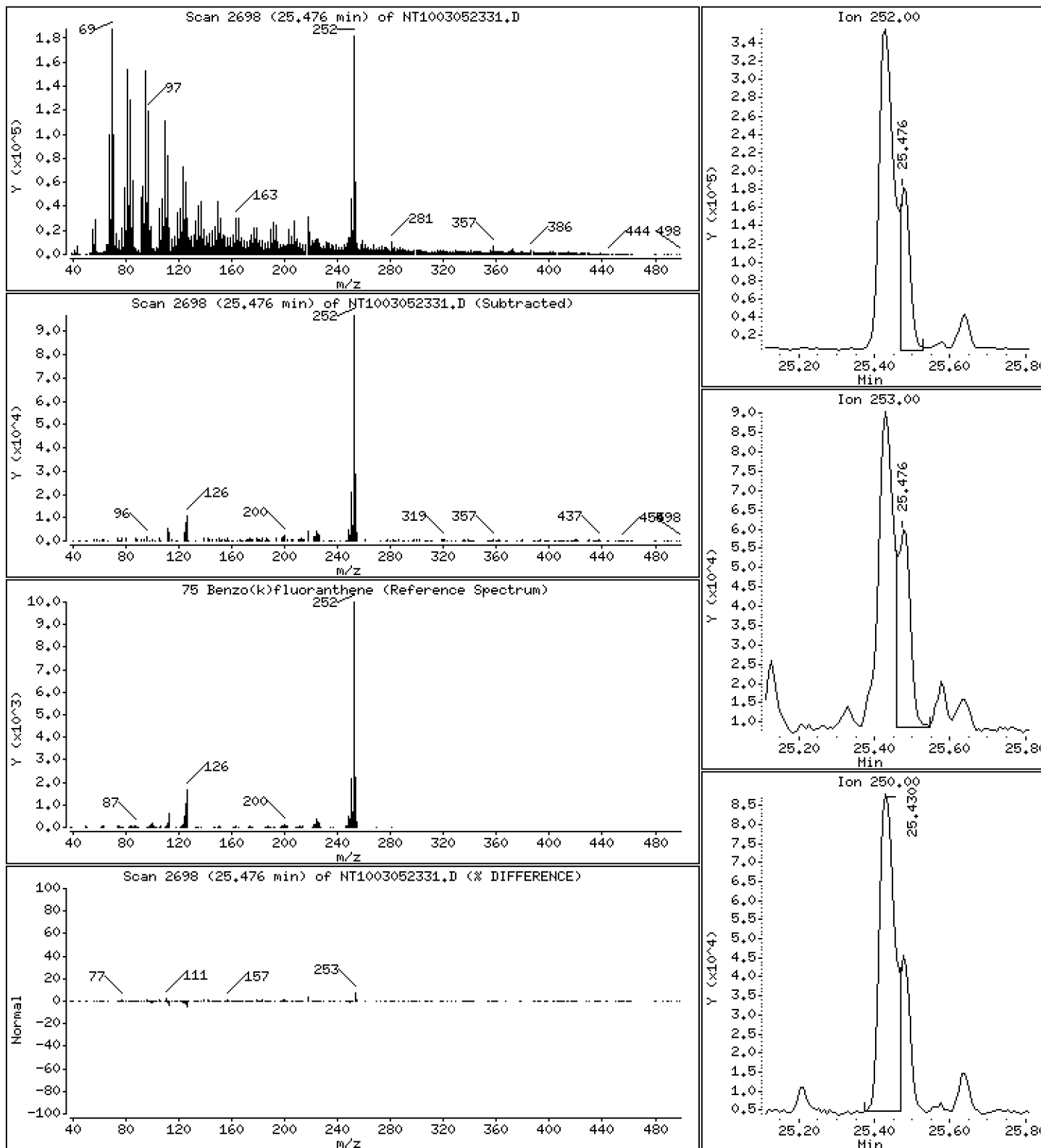
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,178 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

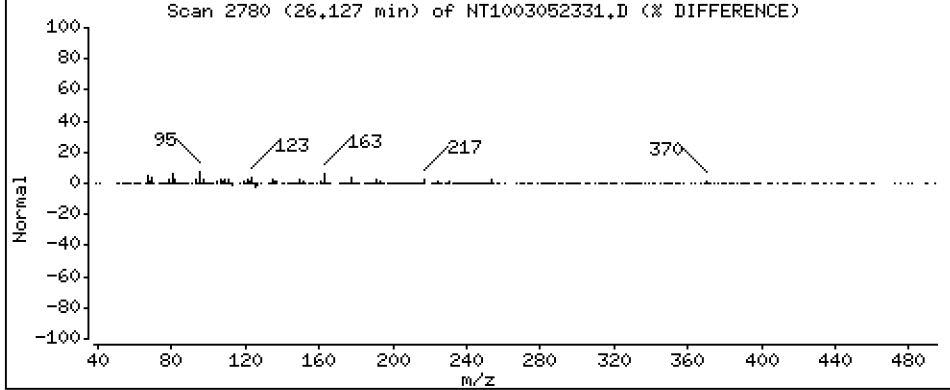
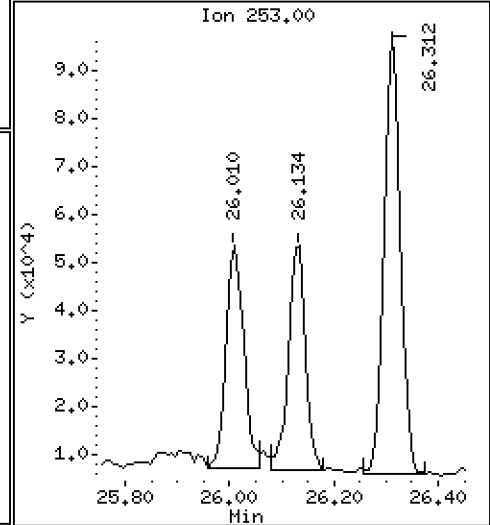
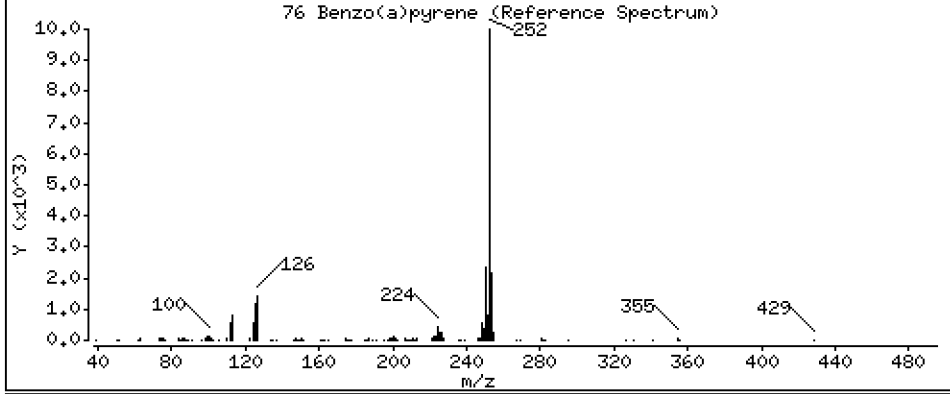
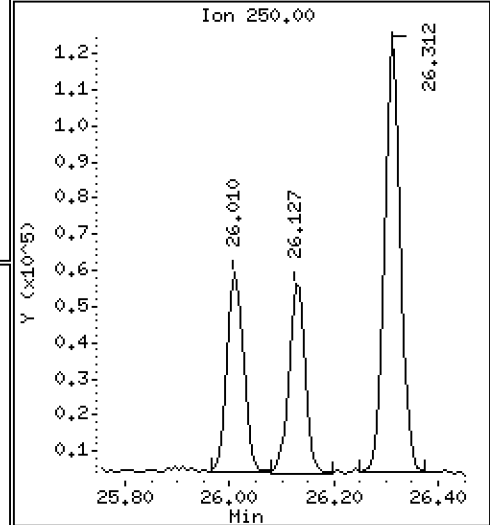
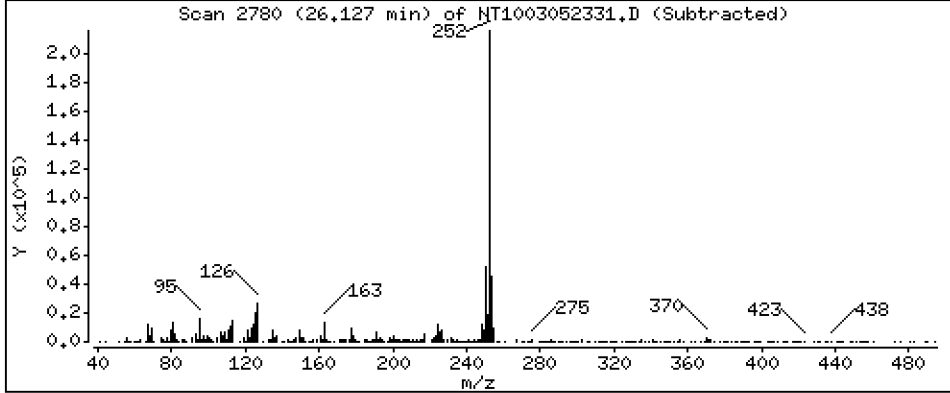
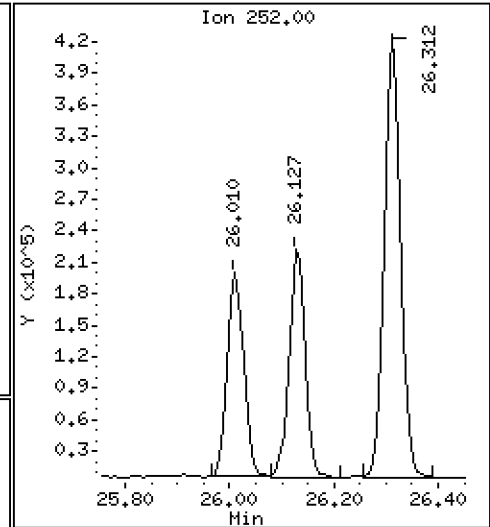
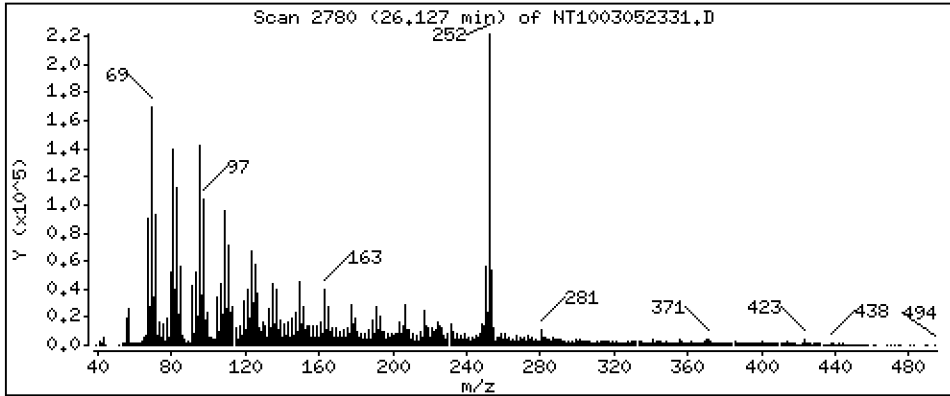
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,806 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

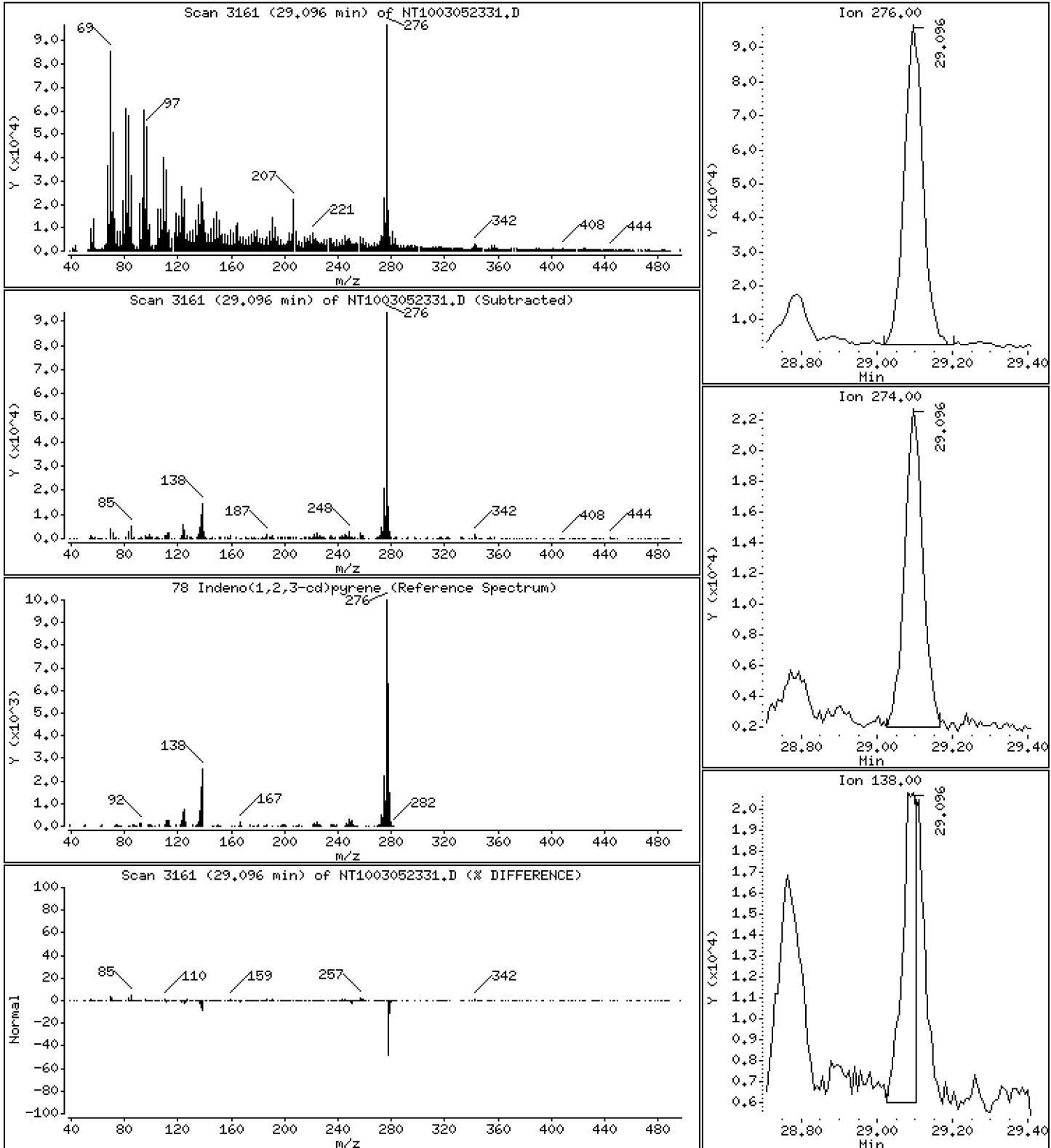
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 1,081 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

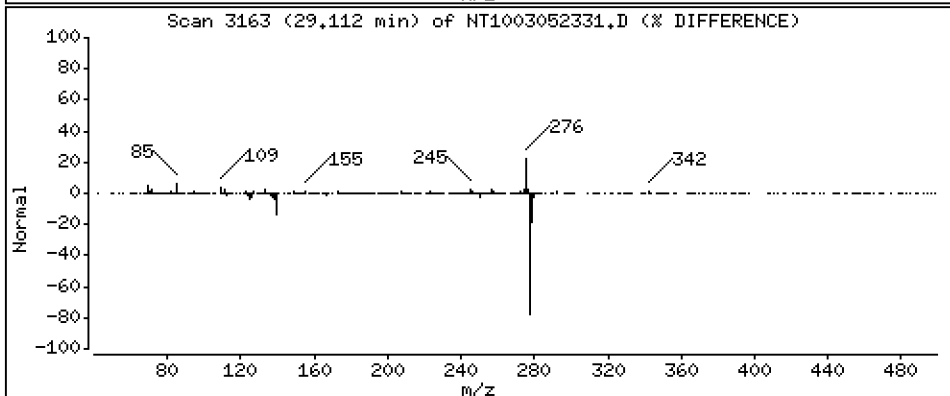
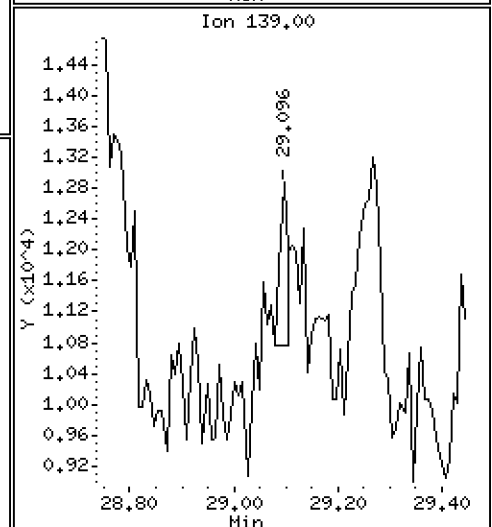
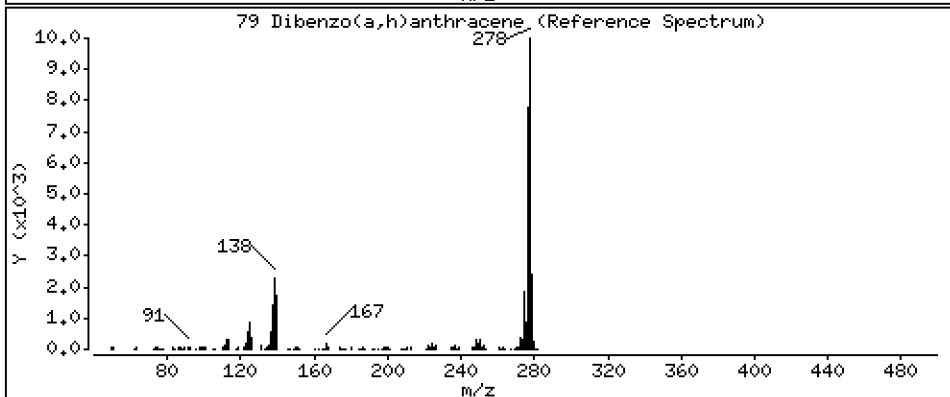
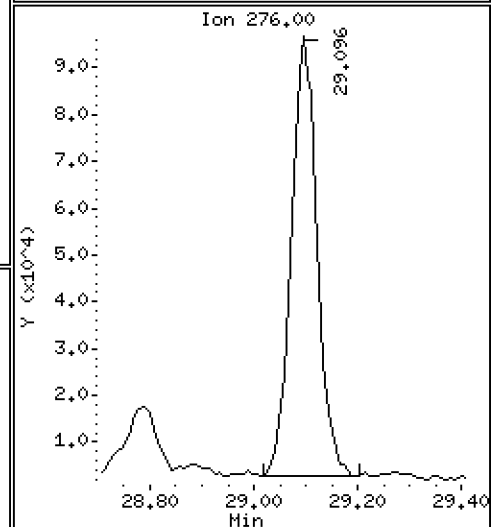
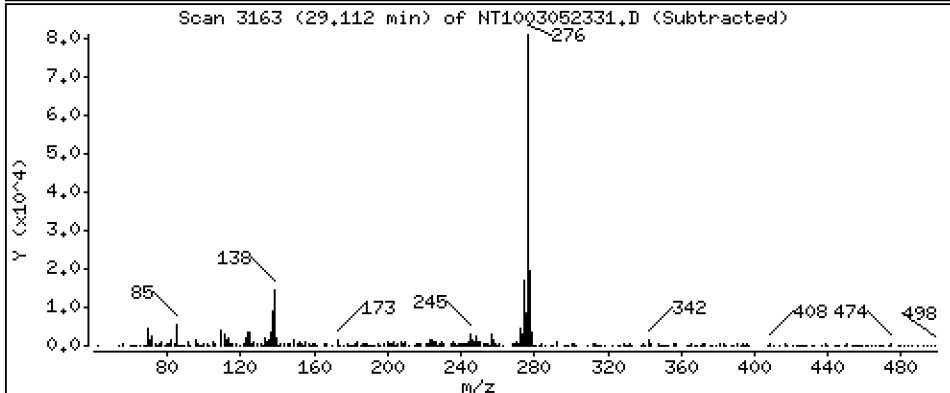
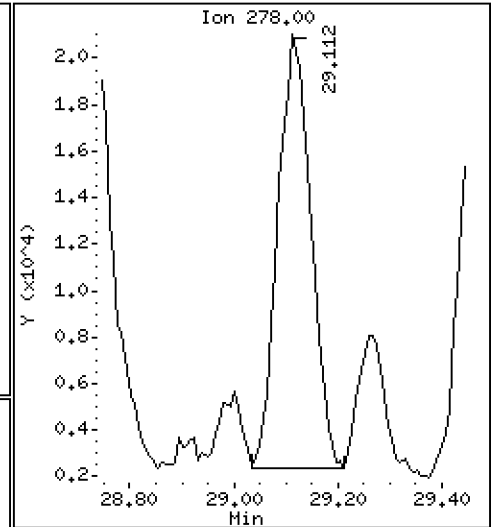
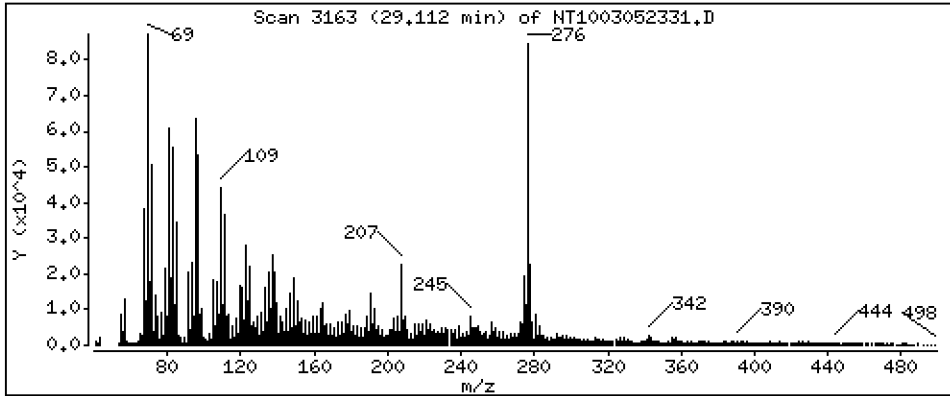
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,3571 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

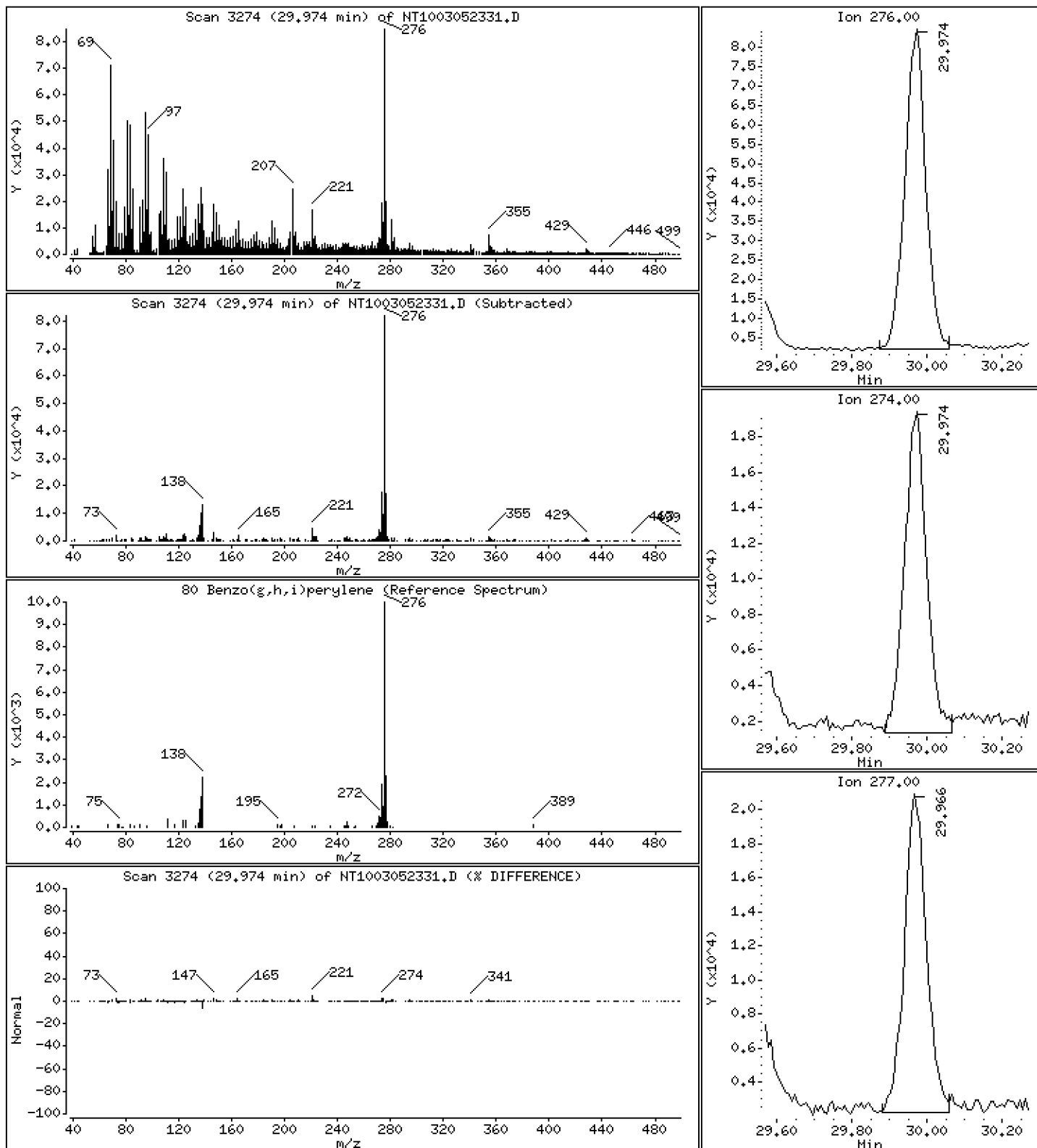
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 1,314 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

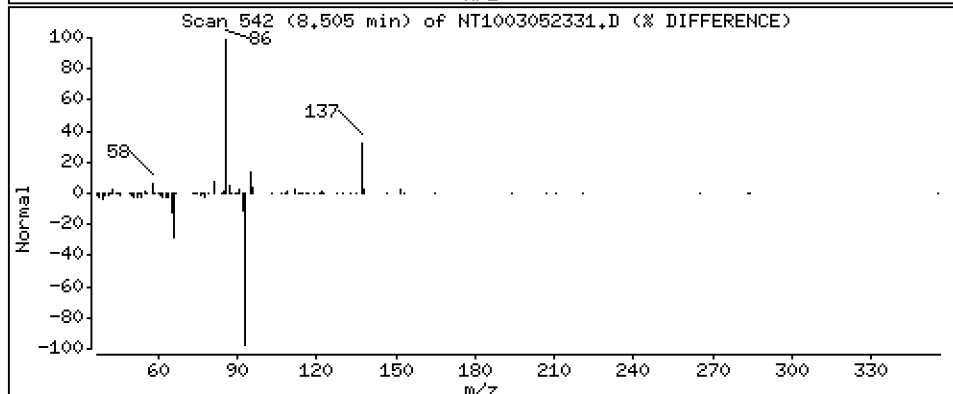
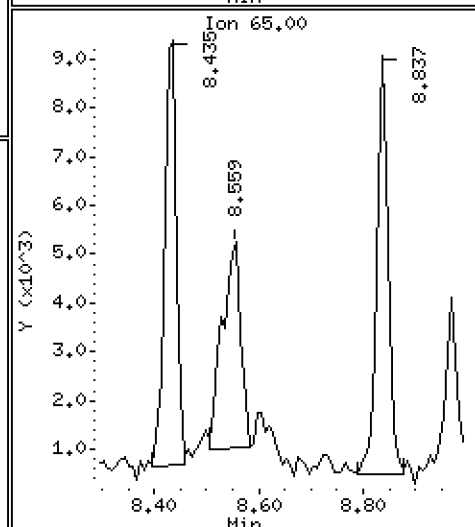
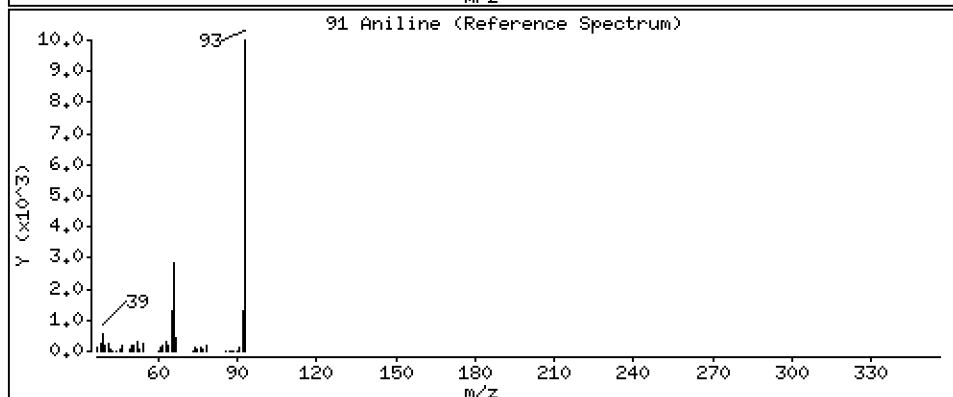
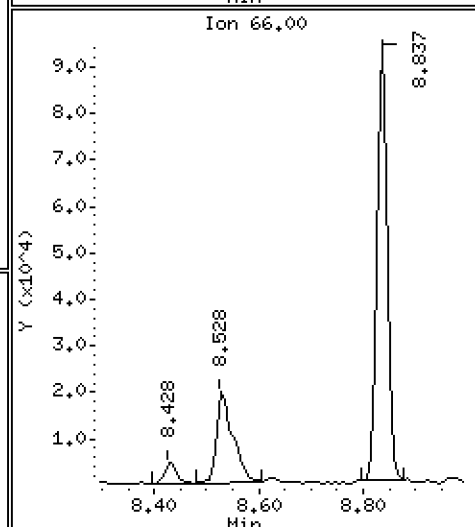
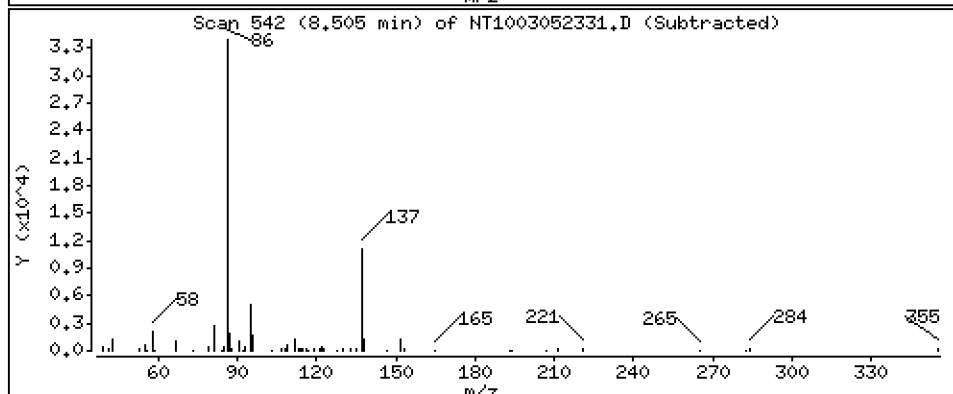
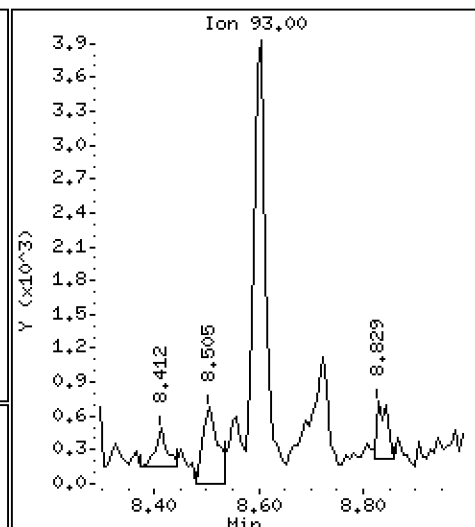
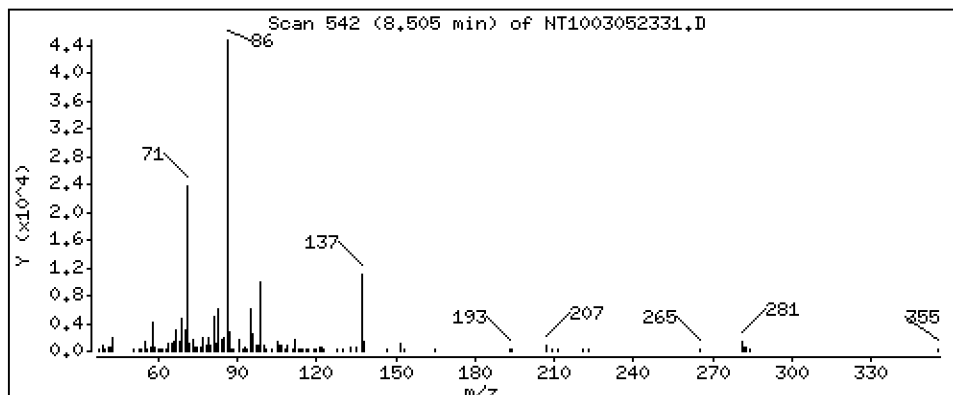
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,01421 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

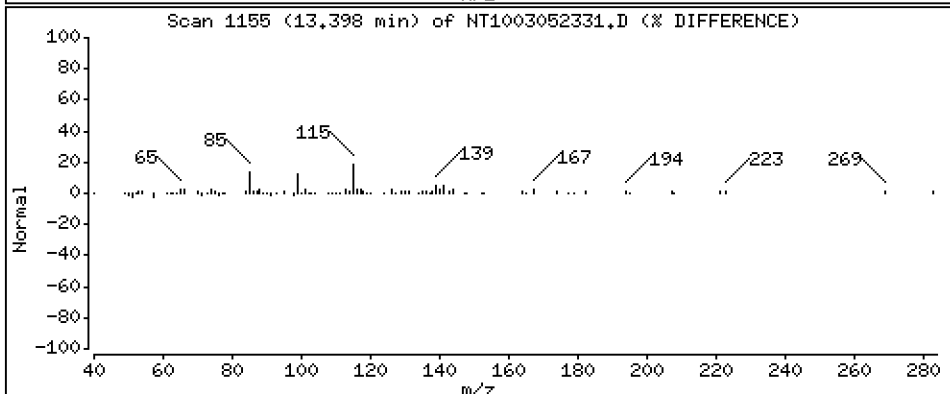
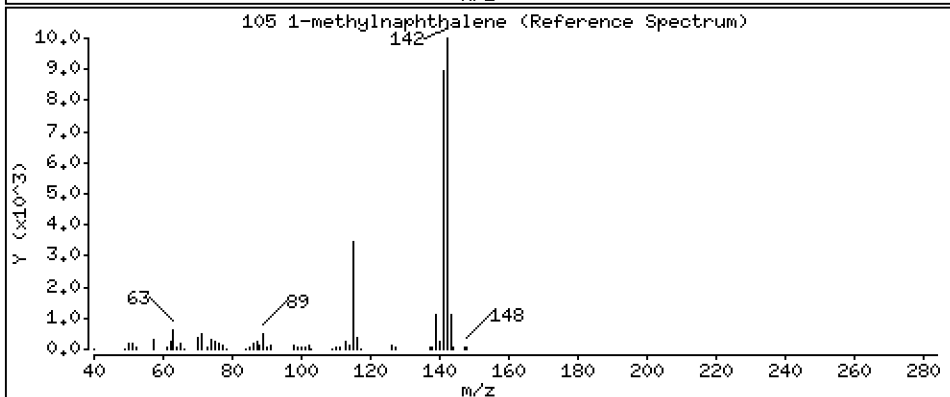
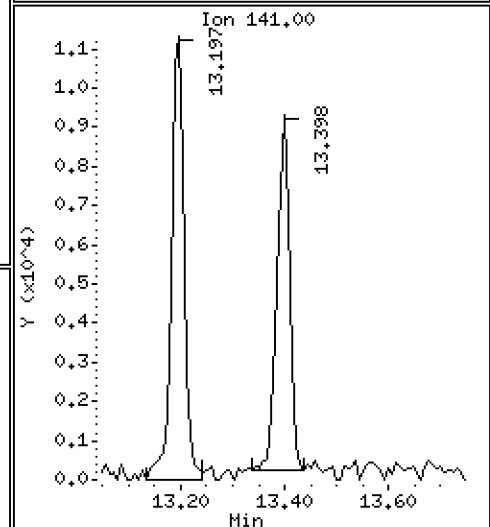
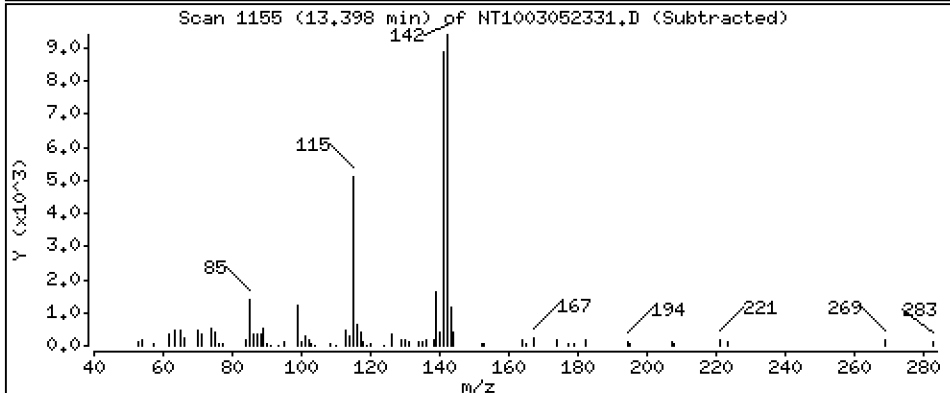
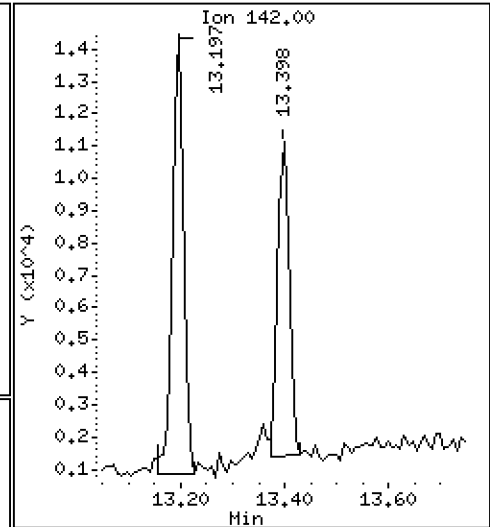
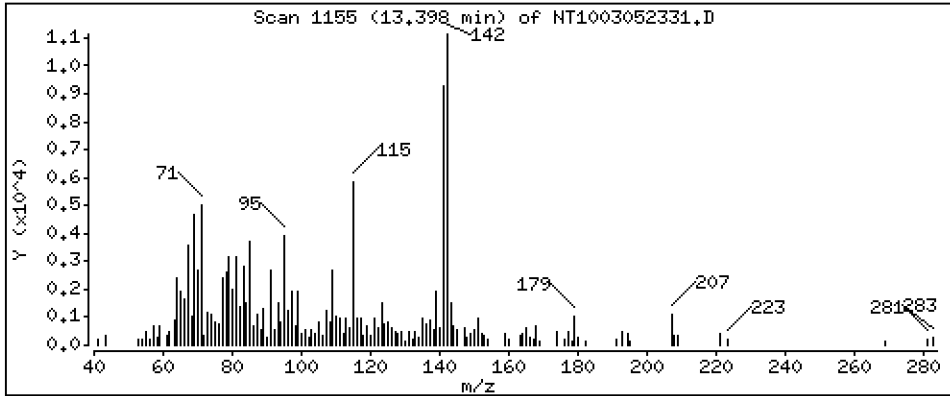
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1101 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

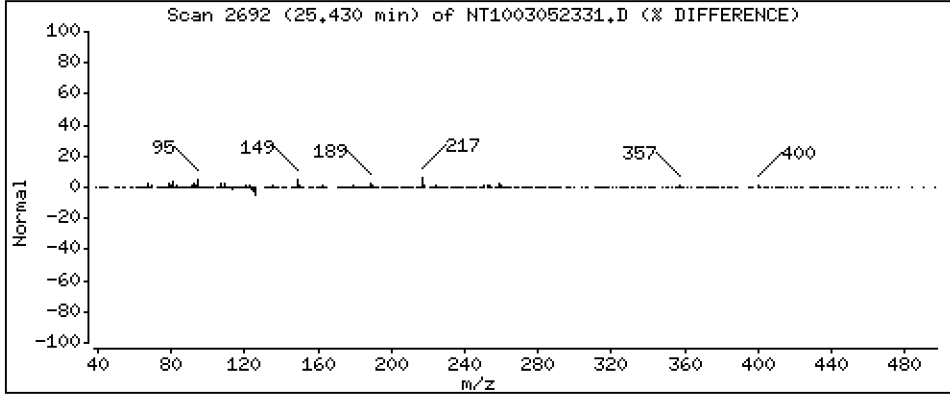
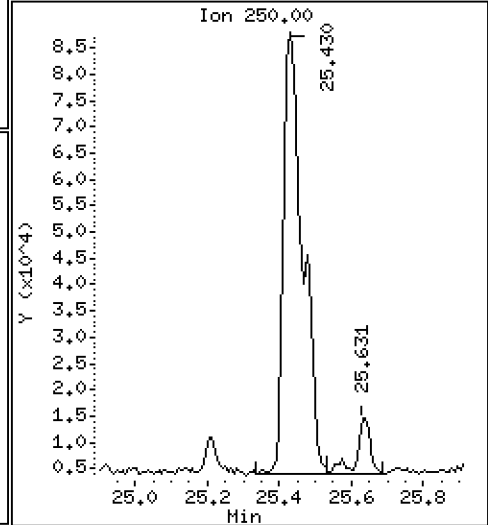
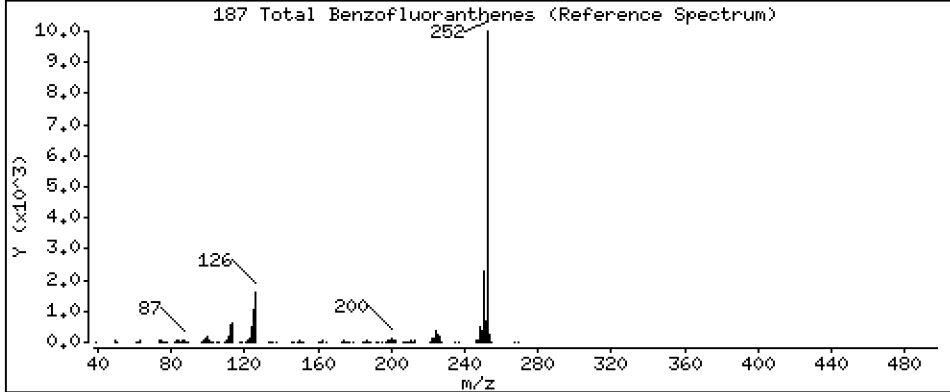
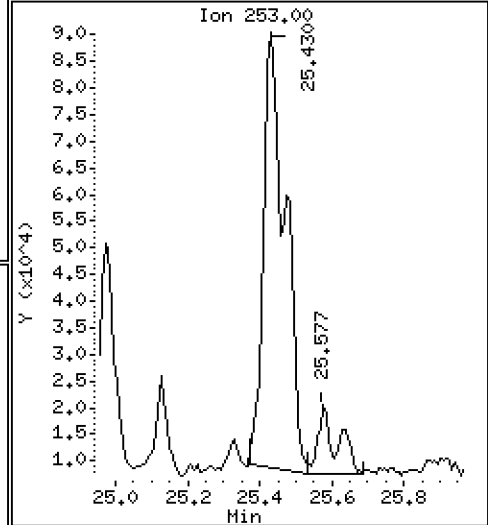
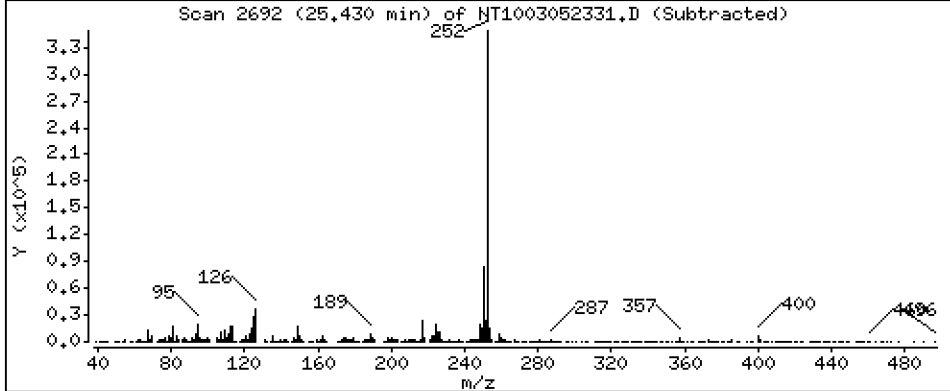
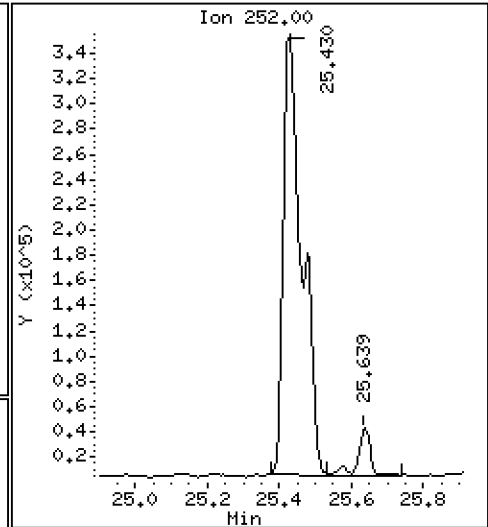
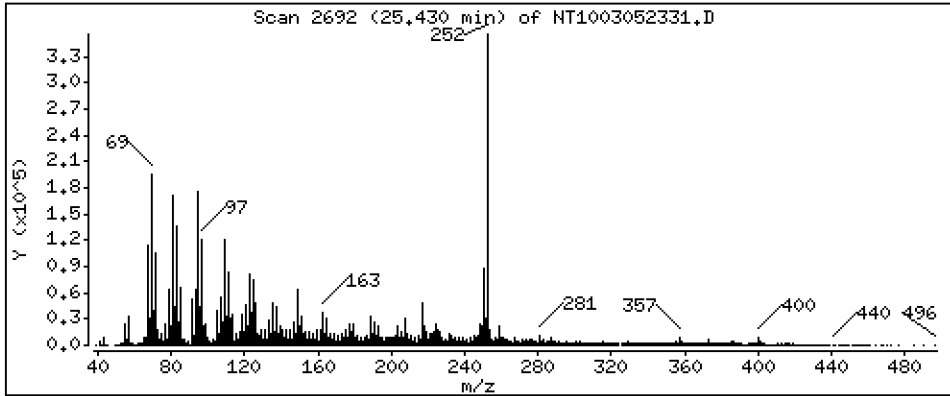
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 4,398 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

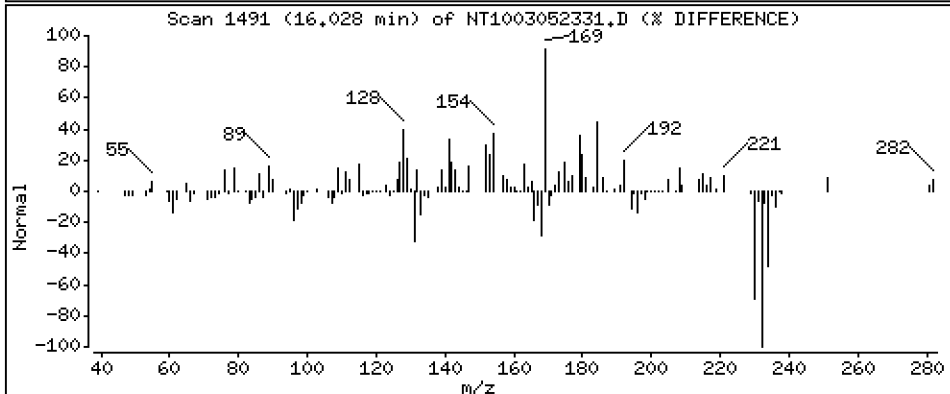
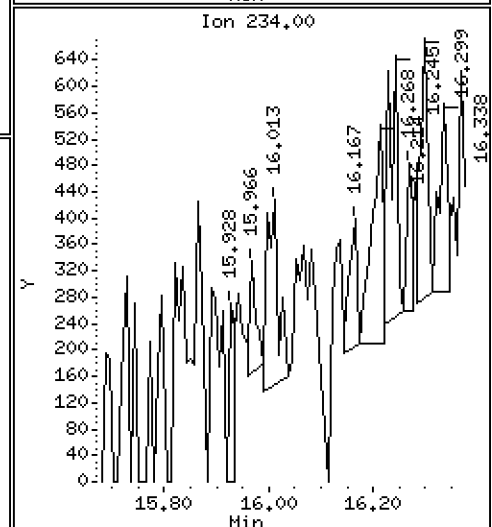
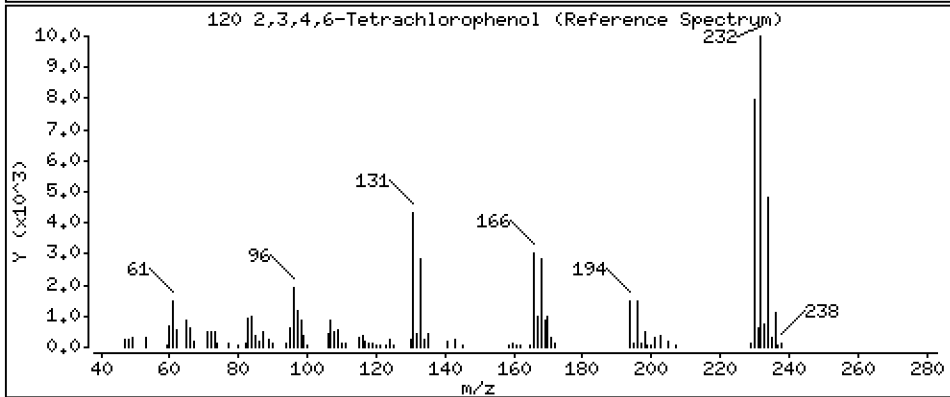
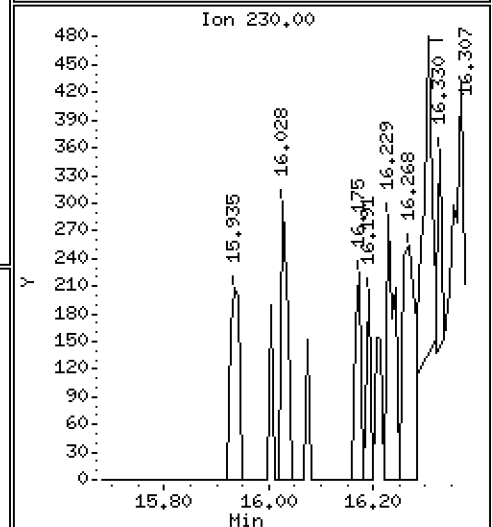
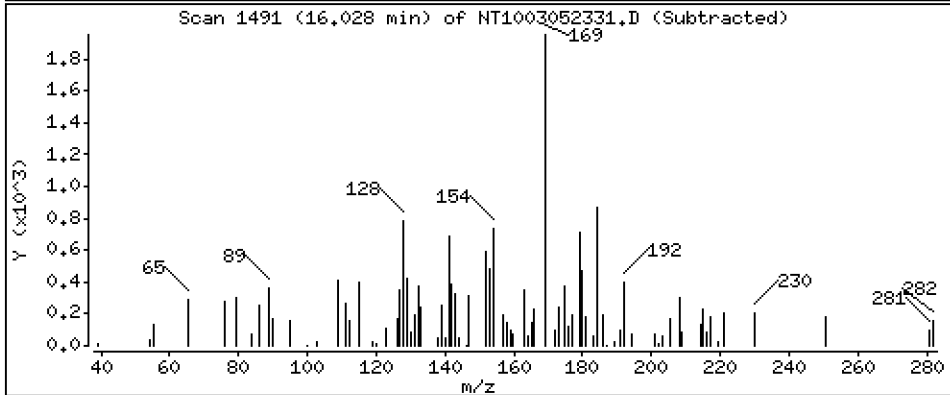
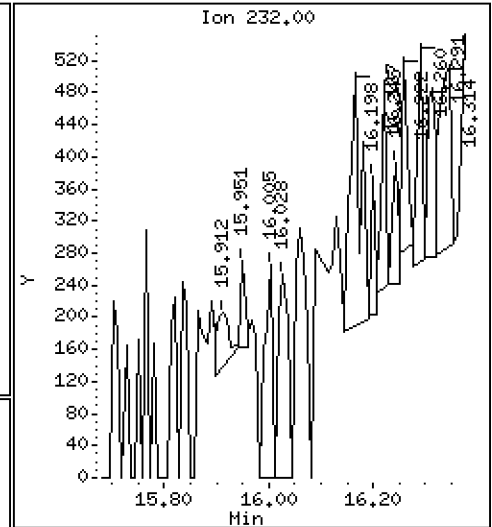
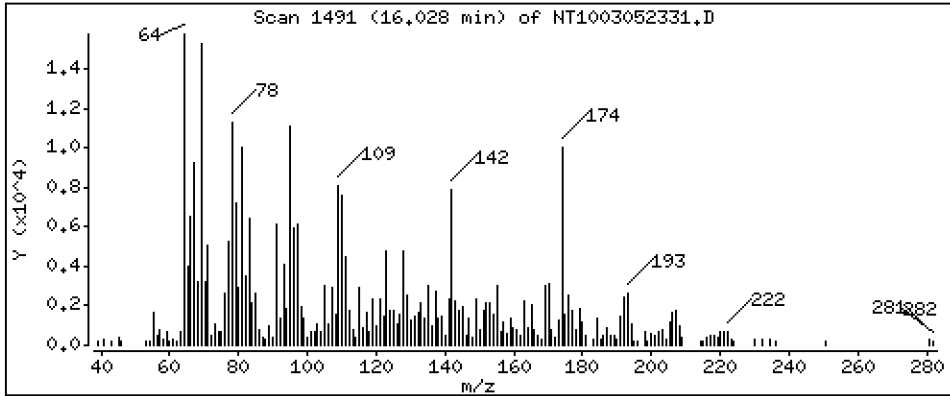
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,007418 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052331.D

Lab Smp Id: 23A0326-05

Inj Date : 06-MAR-2023 08:18

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-05

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m

Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15

Cal File: NT1003012307.D

Als bottle: 21

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.913	6.905	(0.746)	385341	5.54235	5.542
\$ 2 Phenol-d5	99		8.527	8.527	(0.921)	492167	6.09722	6.097
3 Phenol	94		8.558	8.550	(0.924)	32031	0.37323	0.3732
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.954)	436155	6.33319	6.333
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	220981	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.293	(1.003)	2848	0.03635	0.03635 (M)
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.031)	193914	3.76877	3.769
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.751	(1.051)	5053	0.23111	0.2311
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.079)	55224	0.66317	0.6632
\$ 18 Nitrobenzene-d5	82		10.318	10.325	(0.878)	371088	4.24203	4.242
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.749	11.757	(1.000)	796916	4.00000	
28 Naphthalene	128		11.796	11.803	(1.004)	29106	0.14230	0.1423
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.196	(1.123)	21351	0.14776	0.1478
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	679709	4.39295	4.393
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.767	14.775	(0.962)	16103	0.11494	0.1149
40 Acenaphthylene	152		15.061	15.061	(0.981)	25004	0.11940	0.1194
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.347	15.347	(1.000)	433796	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.417	15.417	(1.005)	14420	0.11418	0.1142
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.780	15.780	(1.028)	21935	0.11703	0.1170
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.237	16.244	(1.058)	22231	0.14979	0.1498
49 Fluorene	166		16.492	16.492	(1.075)	18431	0.11819	0.1182
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.994	16.993	(1.107)	197595	7.05546	7.055
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.455	18.455	(1.000)	794593	4.00000	
60 Phenanthrene	178		18.502	18.502	(1.002)	205126	1.00873	1.009
61 Anthracene	178		18.610	18.610	(1.008)	79494	0.40315	0.4031
62 Carbazole	167		18.951	18.943	(1.027)	31904	0.17661	0.1766
63 Di-n-butylphthalate	149		19.639	19.631	(1.064)	22296	0.09100	0.09100
64 Fluoranthene	202		20.916	20.877	(0.890)	486516	1.83073	1.831
65 Pyrene	202		21.341	21.310	(0.908)	1234519	4.56213	4.562
\$ 66 Terphenyl-d14	244		21.597	21.581	(0.919)	795670	3.63394	3.634
67 Butylbenzylphthalate	149		22.472	22.464	(0.956)	35318	0.24248	0.2425
68 Benzo(a)anthracene	228		23.486	23.478	(0.999)	342226	1.25639	1.256
* 69 Chrysene-d12	240		23.509	23.494	(1.000)	772509	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.556	23.540	(1.002)	433742	1.95934	1.959
72 bis(2-Ethylhexyl)phthalate	149		23.470	23.463	(0.956)	766067	3.92660	3.927
* 134 Di-n-octylphthalate-d4	153		24.562	24.554	(1.000)	1358595	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.429	25.406	(0.969)	1010695	3.34107	3.341
75 Benzo(k)fluoranthene	252		25.476	25.460	(0.970)	335014	1.17809	1.178 (M)
76 Benzo(a)pyrene	252		26.126	26.103	(0.995)	479839	1.80573	1.806
* 77 Perylene-d12	264		26.250	26.227	(1.000)	856703	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.096	29.057	(1.108)	333125	1.08055	1.081
79 Dibenzo(a,h)anthracene	278		29.111	29.095	(1.109)	82868	0.35707	0.3571
80 Benzo(g,h,i)perylene	276		29.973	29.919	(1.142)	323004	1.31438	1.314
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93		8.504	8.643	(0.918)	1414	0.01421	0.01421
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.397	13.397	(1.140)	14404	0.11014	0.1101
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.429	25.406	(0.969)	1262001	4.39785	4.398
120 2,3,4,6-Tetrachlorophenol	232	16.028	16.028	(1.044)	301	0.00742	0.007418

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052331.D Calibration Time: 04:32
 Lab Smp Id: 23A0326-05
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	220981	3.35
27 Naphthalene-d8	756023	378012	1512046	796916	5.41
42 Acenaphthene-d10	411497	205749	822994	433796	5.42
59 Phenanthrene-d10	744396	372198	1488792	794593	6.74
69 Chrysene-d12	823005	411503	1646010	772509	-6.14
134 Di-n-octylphthala	1350476	675238	2700952	1358595	0.60
77 Perylene-d12	894064	447032	1788128	856703	-4.18

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.51	0.07
134 Di-n-octylphthala	24.55	24.05	25.05	24.56	0.03
77 Perylene-d12	26.23	25.73	26.73	26.25	0.09

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

REVIEW SUMMARY FOR FILE - NT1003052331.D

Lab ID: 23A0326-05
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 08:18

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.918	0.933	-0.0150	Aniline

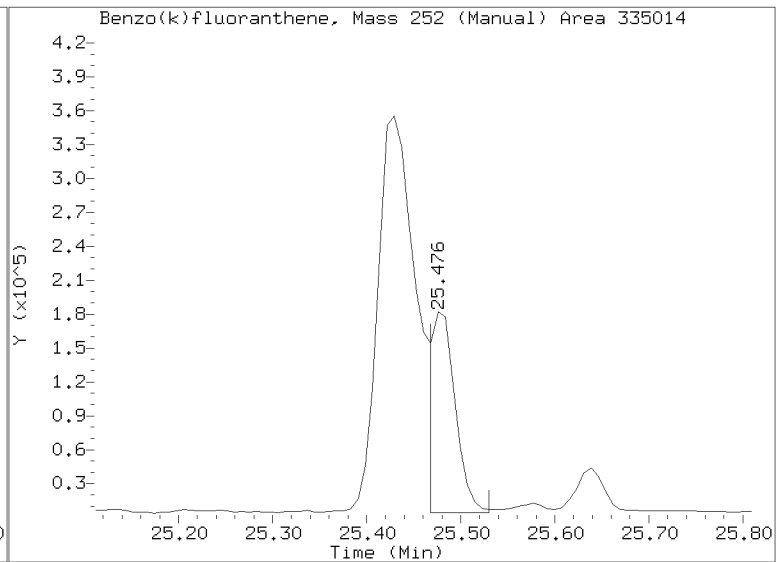
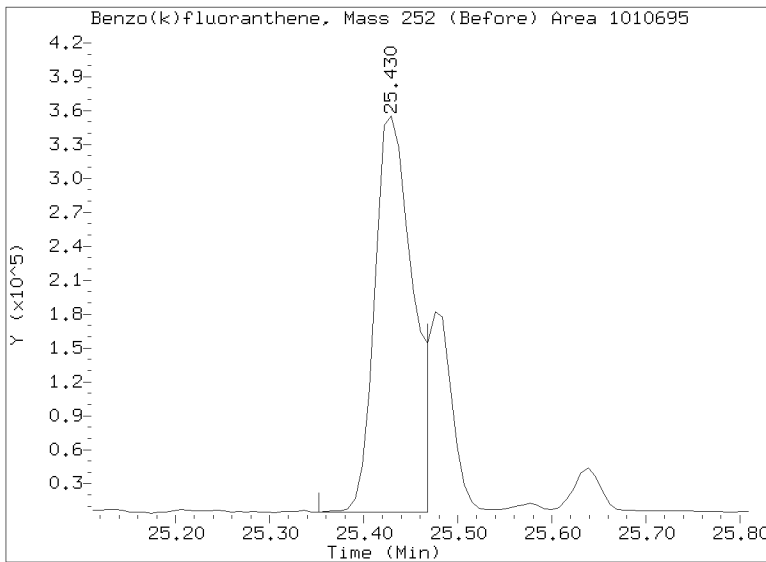
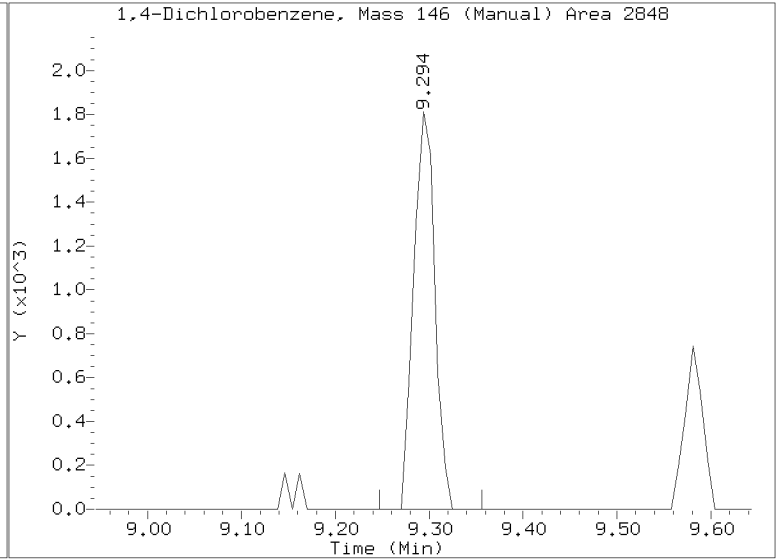
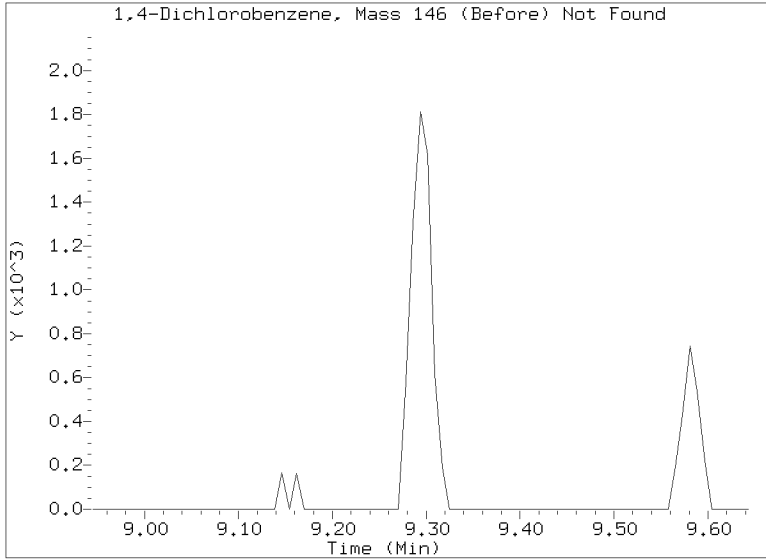
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052331.D
Injection Date: 06-MAR-2023 08:18
Lab ID:23A0326-05 Client ID:
Report Date: 03/27/2023 16:55



APPROVED
By Deenay Dunmore at 5:18 pm, Mar 27, 2023



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-10 A

SDG: 23A0326

Sampled: 01/17/23 14:18

Prepared: 02/02/23 13:06

File ID: NT1003052332.D

% Solids: 54.63

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 08:56

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 18.88 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	54.4		4.3	19.4
106-44-5	4-Methylphenol	1	20.3		7.2	19.4
91-20-3	Naphthalene	1	36.6		4.1	19.4
91-57-6	2-Methylnaphthalene	1	13.8	J	4.4	19.4
208-96-8	Acenaphthylene	1	12.9	J	6.0	19.4
131-11-3	Dimethylphthalate	1	5.7	J	4.3	19.4
83-32-9	Acenaphthene	1	21.0		5.1	19.4
132-64-9	Dibenzofuran	1	21.4		13.7	19.4
86-73-7	Fluorene	1	20.6		14.1	19.4
85-01-8	Phenanthrene	1	166		8.5	19.4
120-12-7	Anthracene	1	48.6		7.0	19.4
206-44-0	Fluoranthene	1	222		5.9	19.4
129-00-0	Pyrene	1	358		5.5	19.4
85-68-7	Butylbenzylphthalate	1	11.6	J	9.1	19.4
56-55-3	Benzo(a)anthracene	1	130		5.8	19.4
218-01-9	Chrysene	1	193		5.9	19.4
117-81-7	bis(2-Ethylhexyl)phthalate	1	148		5.3	48.5
	Benzo(a)fluoranthene, Total	1	338		9.7	38.8
50-32-8	Benzo(a)pyrene	1	140		4.1	19.4
193-39-5	Indeno(1,2,3-cd)pyrene	1	80.7		14.2	19.4
53-70-3	Dibenzo(a,h)anthracene	1	28.2		16.7	19.4
191-24-2	Benzo(g,h,i)perylene	1	98.2		13.2	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	727.16	476	65.5	27 - 120	
Phenol-d5	727.16	507	69.7	29 - 120	
2-Chlorophenol-d4	727.16	541	74.4	31 - 120	
1,2-Dichlorobenzene-d4	484.77	325	67.1	32 - 120	
Nitrobenzene-d5	484.77	382	78.8	30 - 120	
2-Fluorobiphenyl	484.77	399	82.4	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-10 A

SDG: 23A0326

Sampled: 01/17/23 14:18

Prepared: 02/02/23 13:06

File ID: NT1003052332.D

% Solids: 54.63

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 08:56

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 18.88 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	727.16	572	78.6	24 - 134	
p-Terphenyl-d14	484.77	343	70.8	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052332.D

Date: 06-HRR-2023 08:56

Client ID:

Sample Info: 23A0326-10

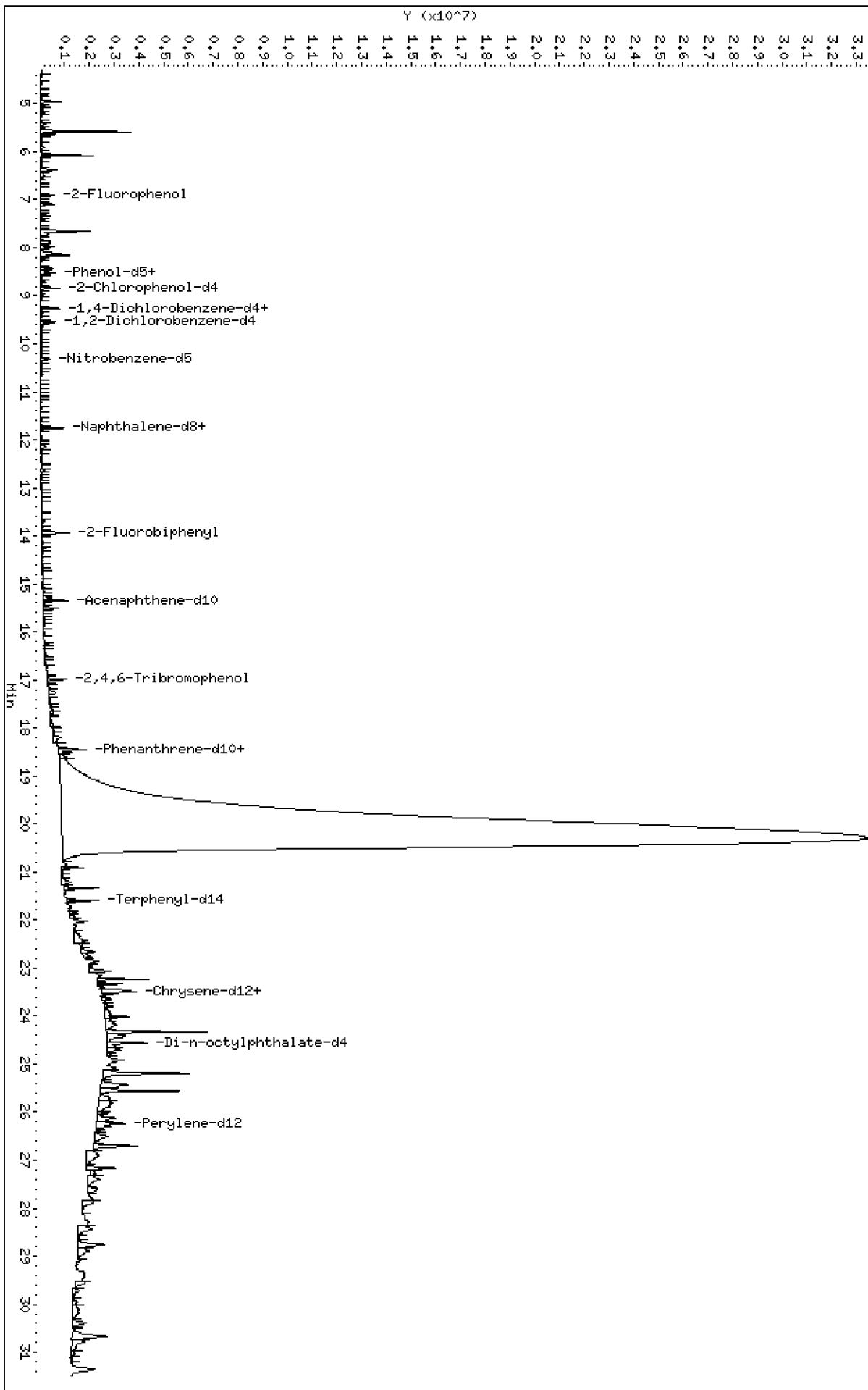
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\NT1003052332.D



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

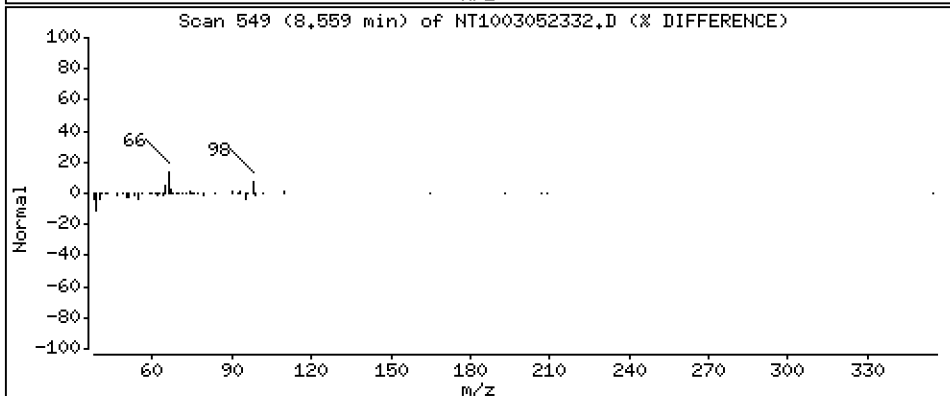
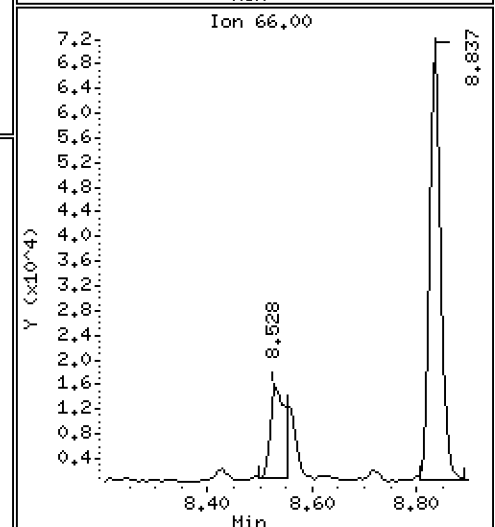
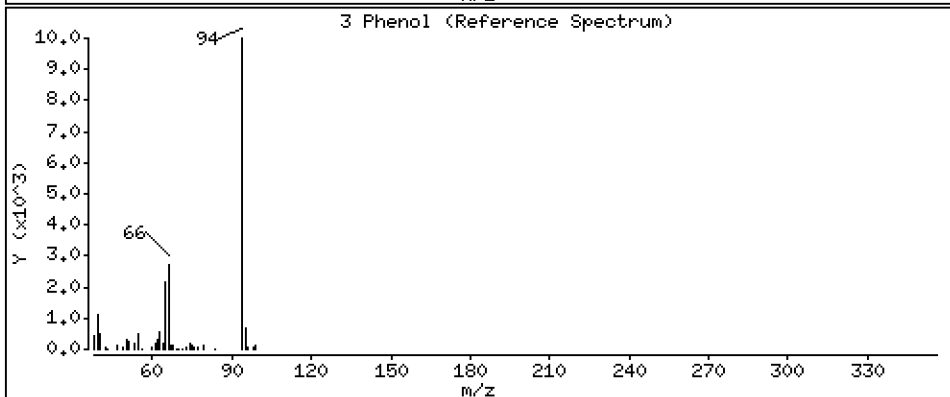
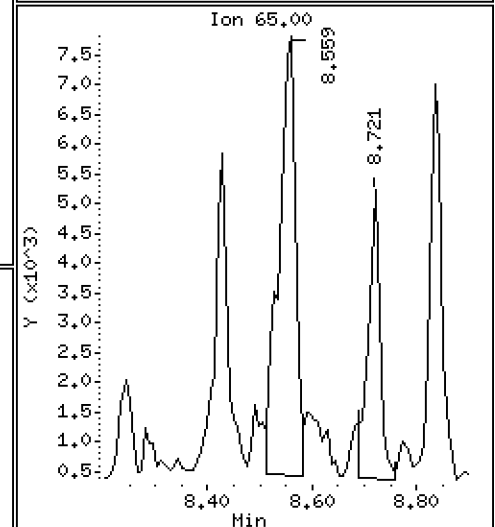
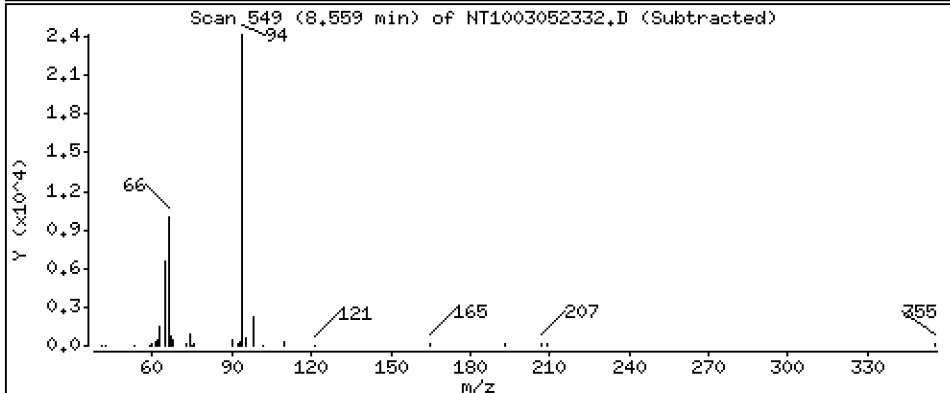
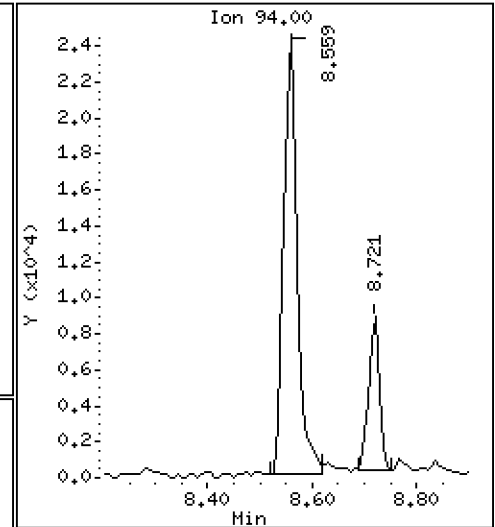
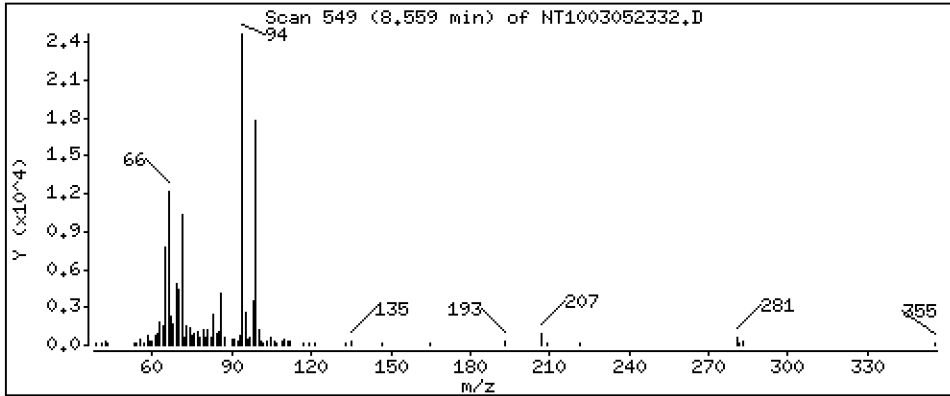
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.5612 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

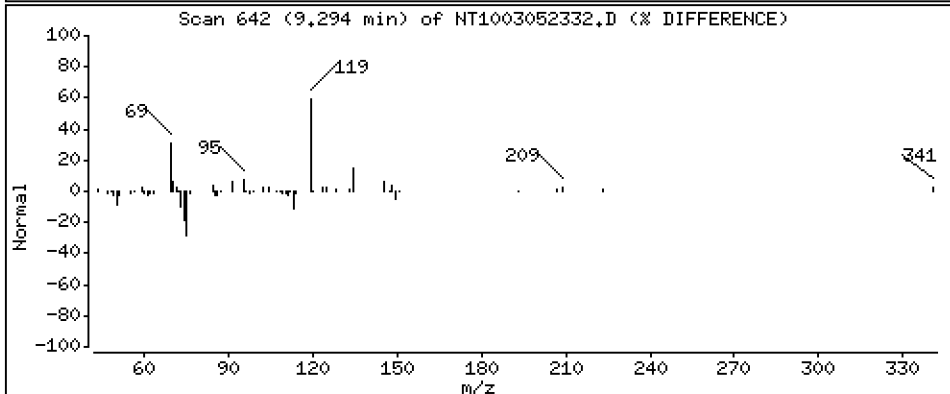
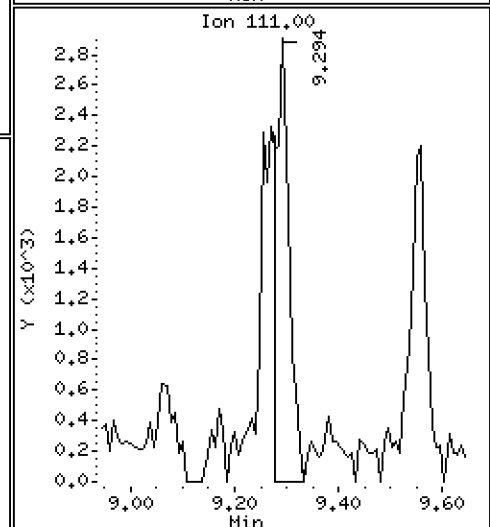
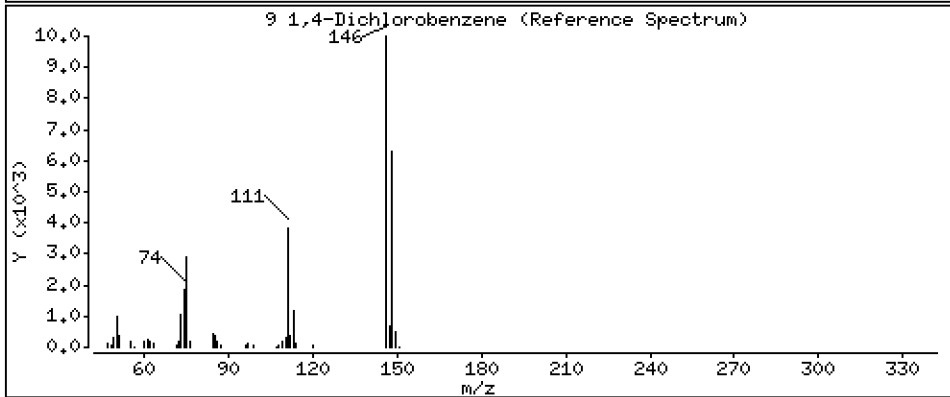
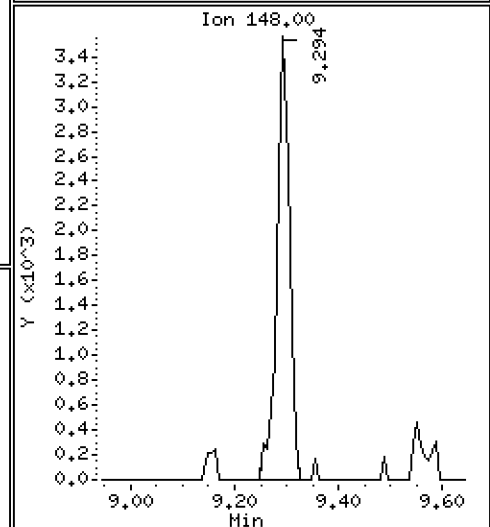
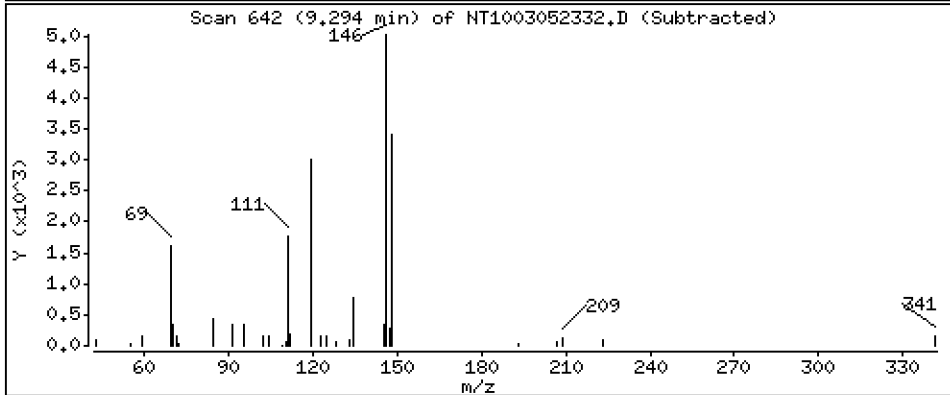
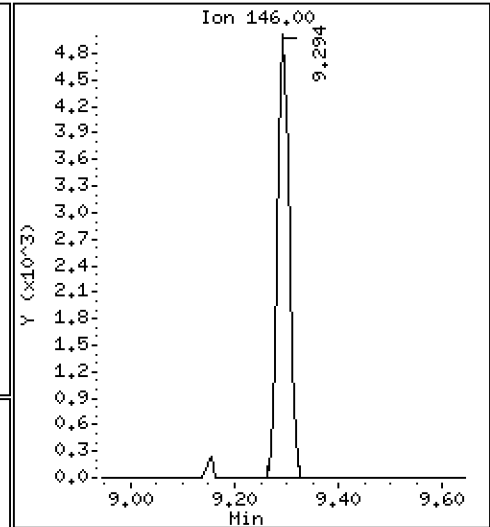
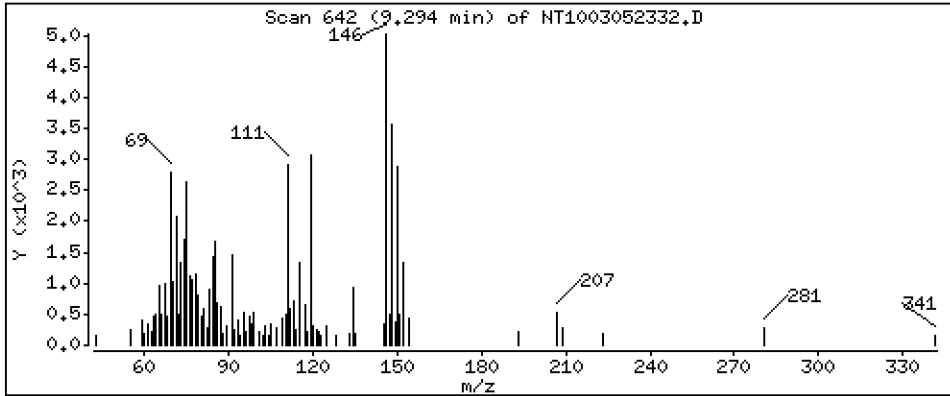
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.1054 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

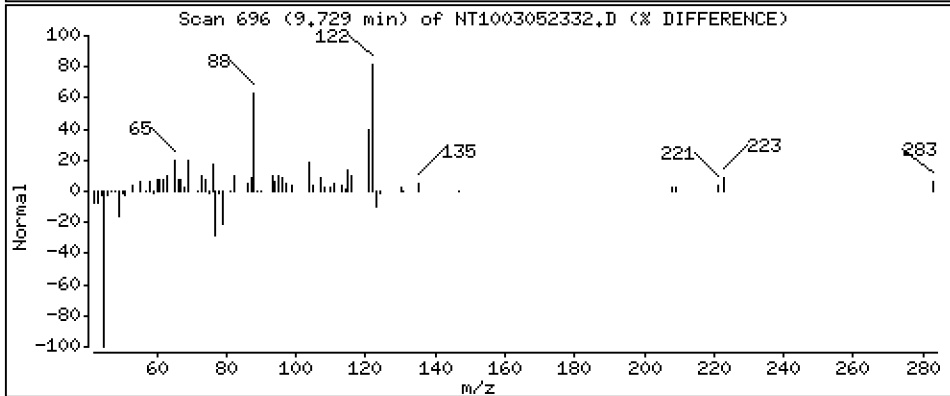
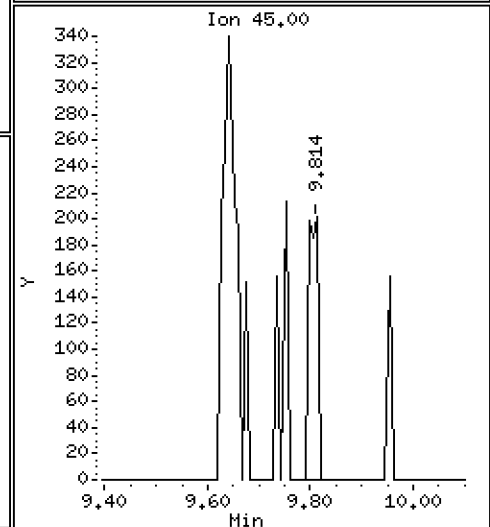
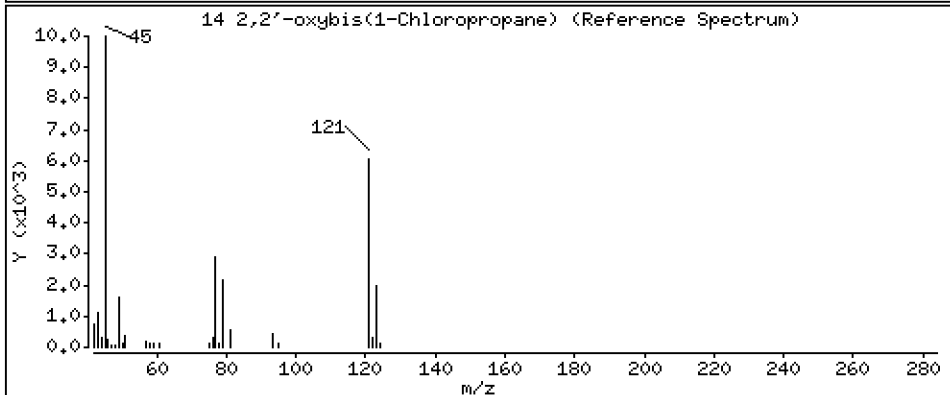
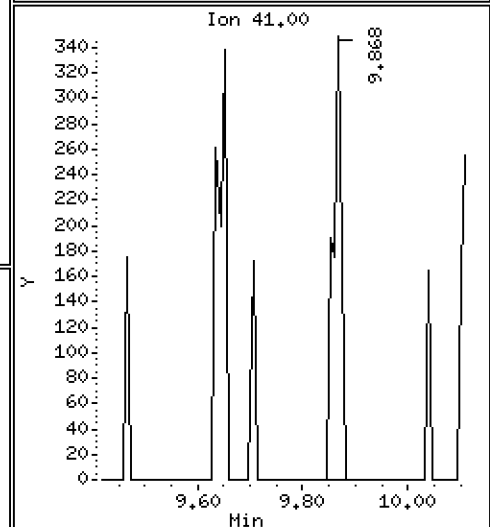
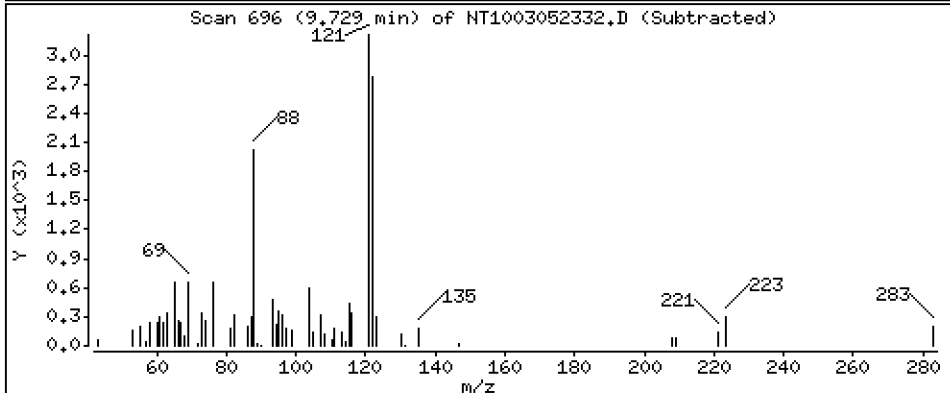
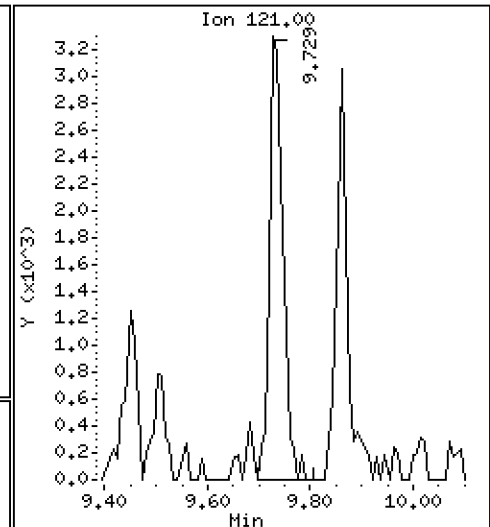
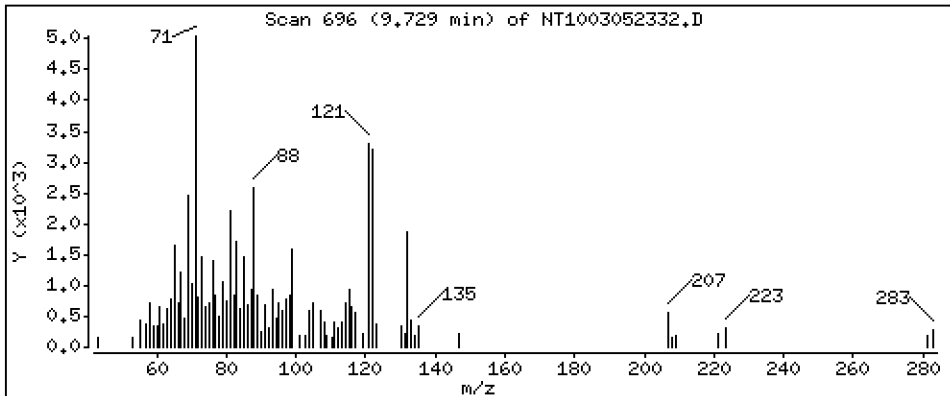
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 0.3036 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

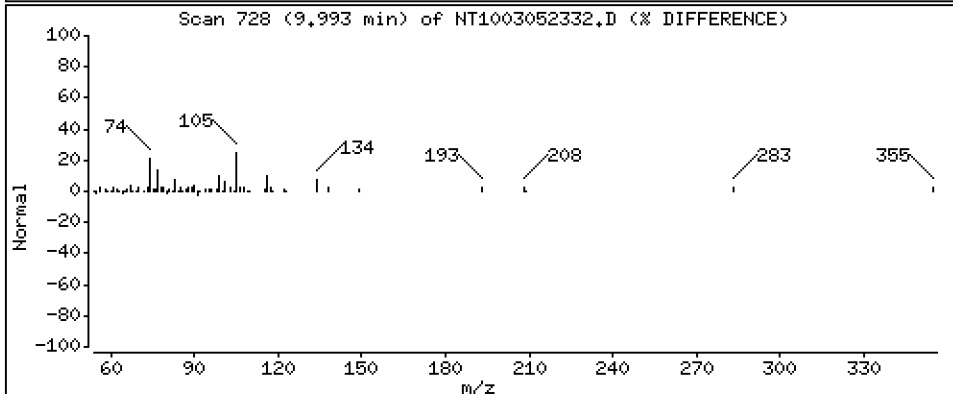
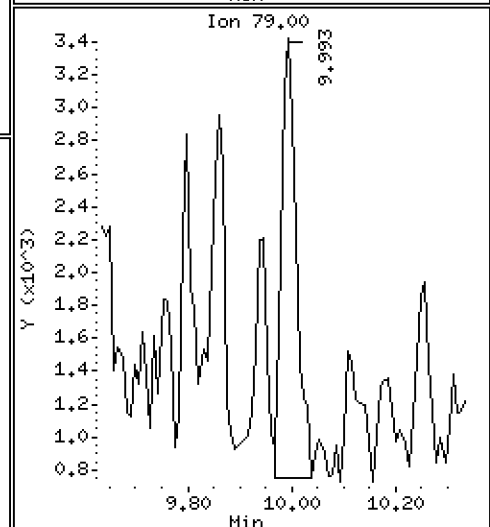
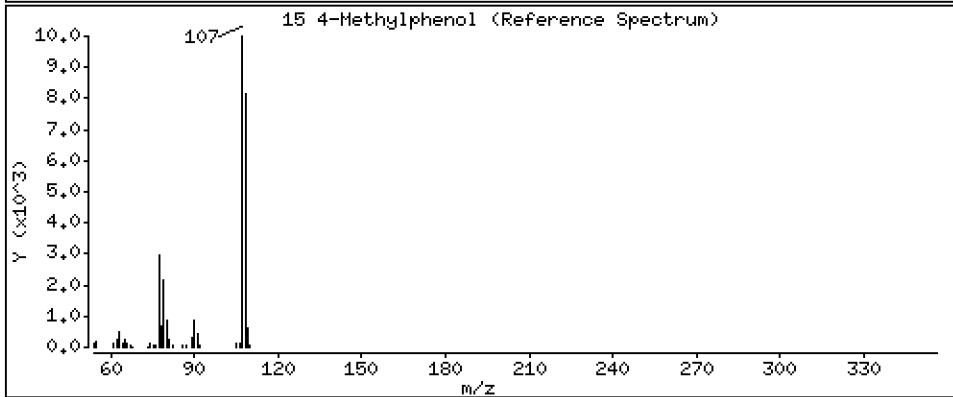
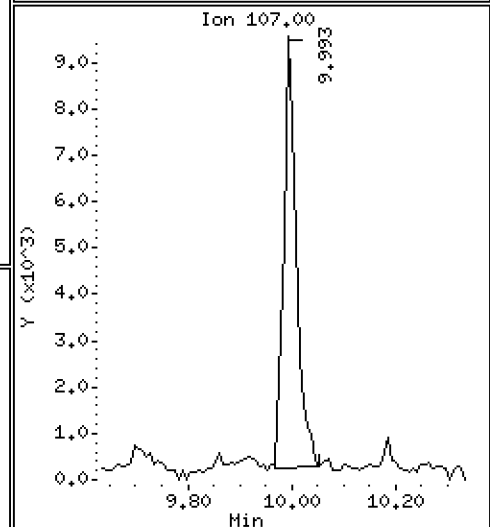
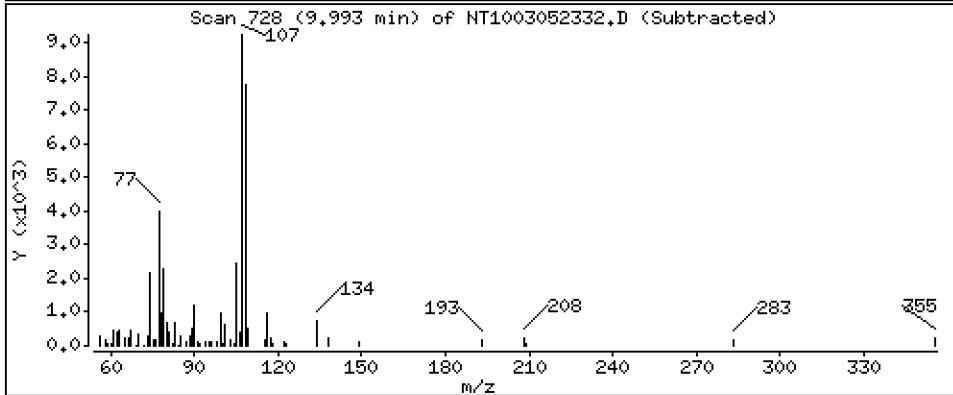
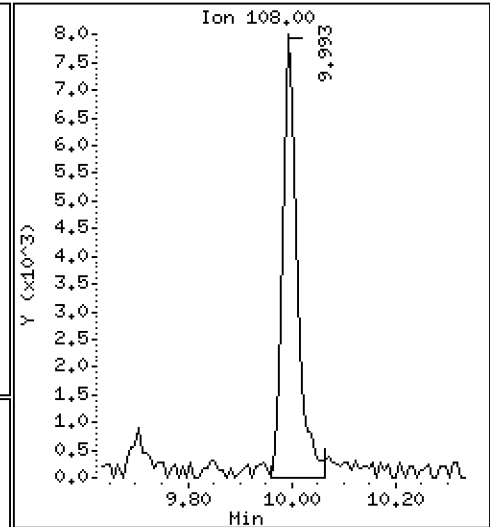
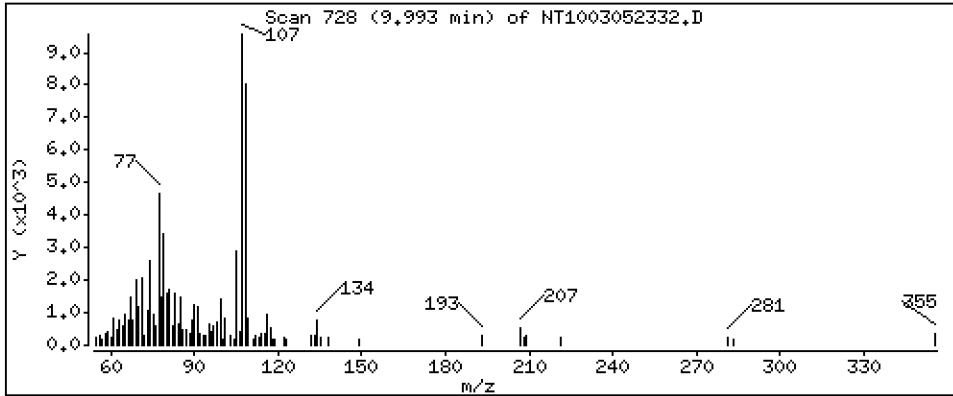
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,2090 ug/mL

15 4-Methylphenol



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

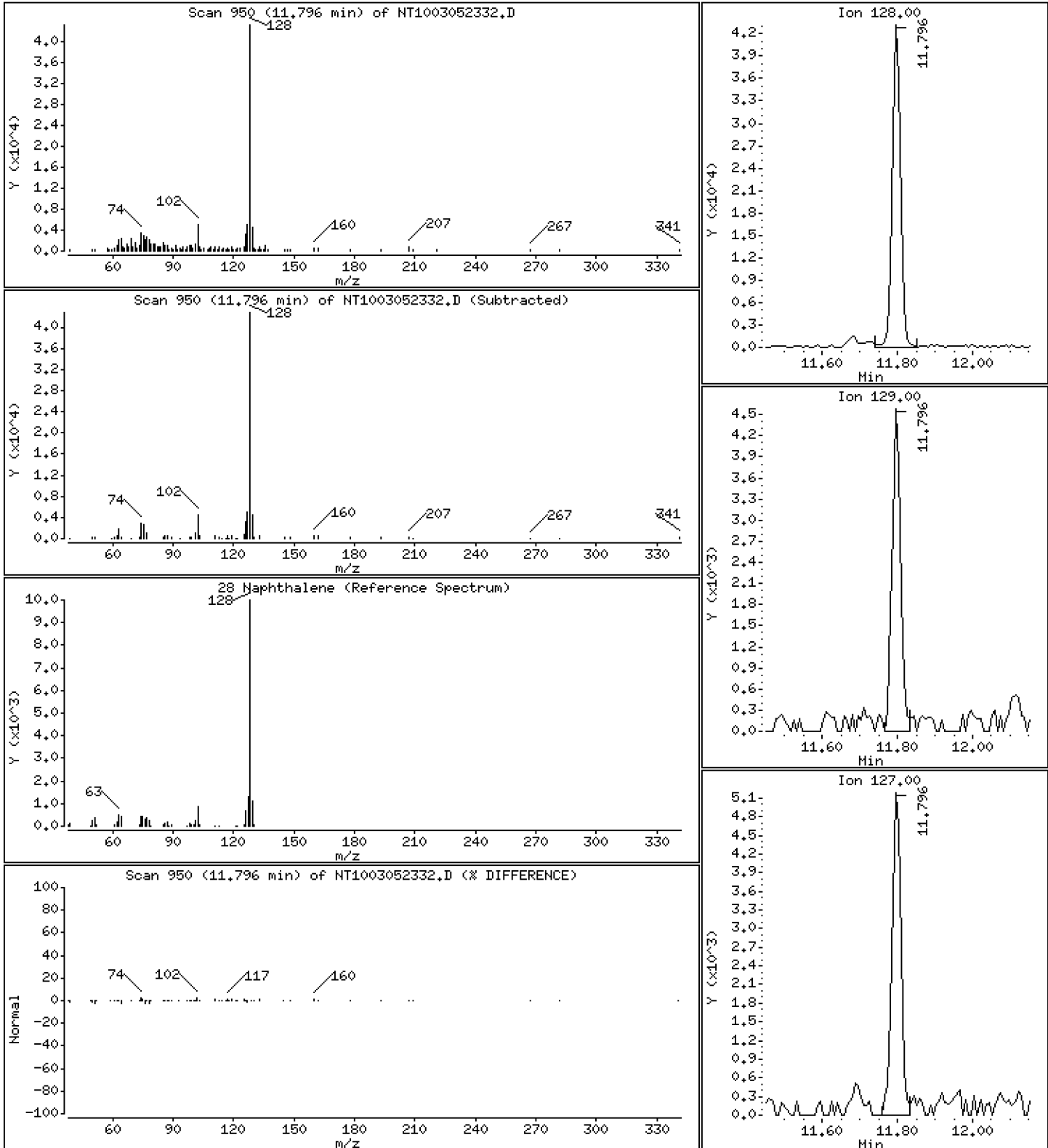
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.3778 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

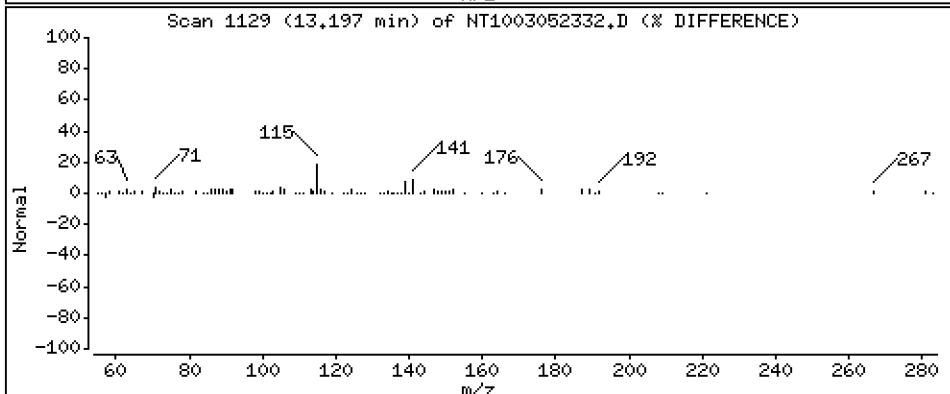
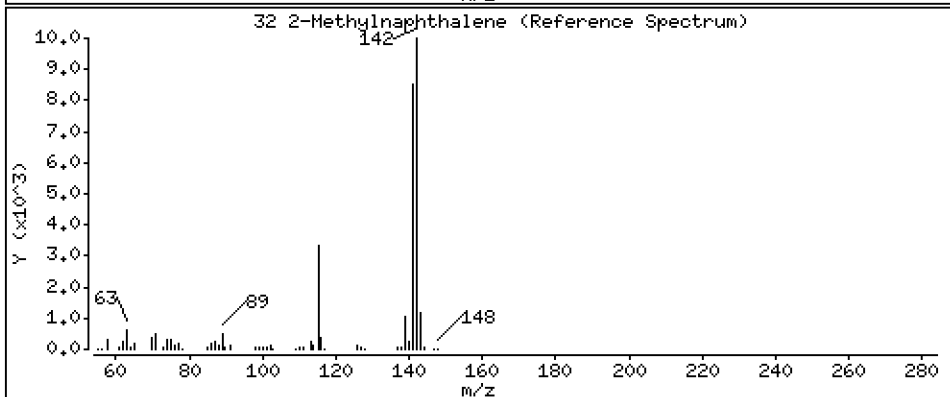
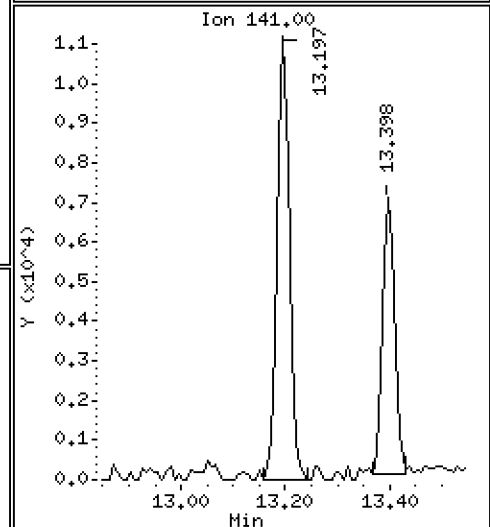
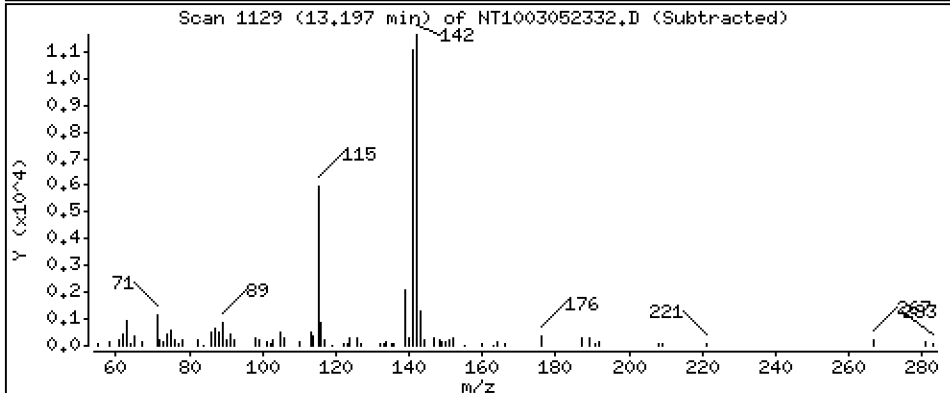
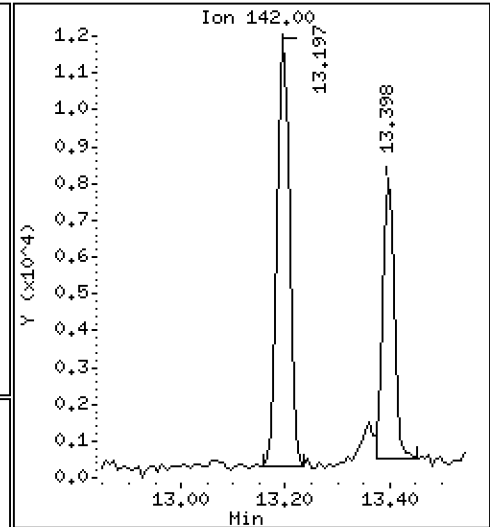
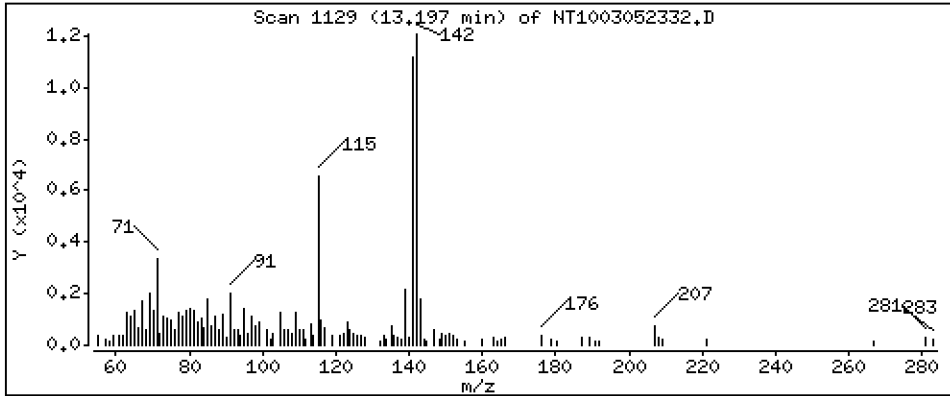
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1421 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

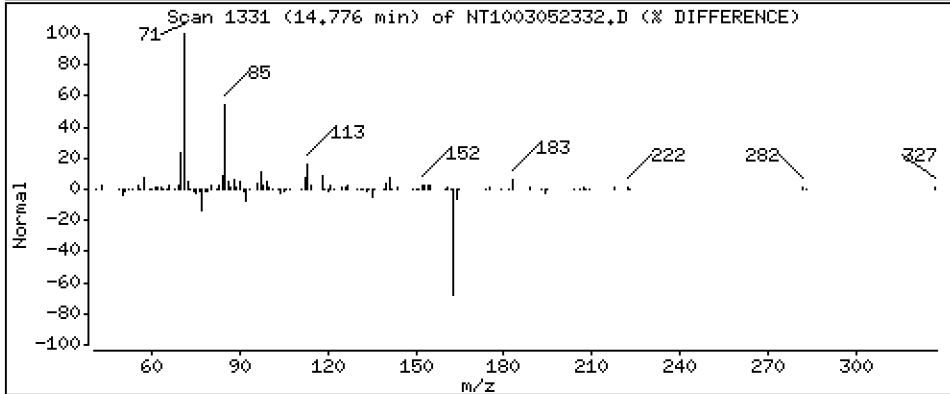
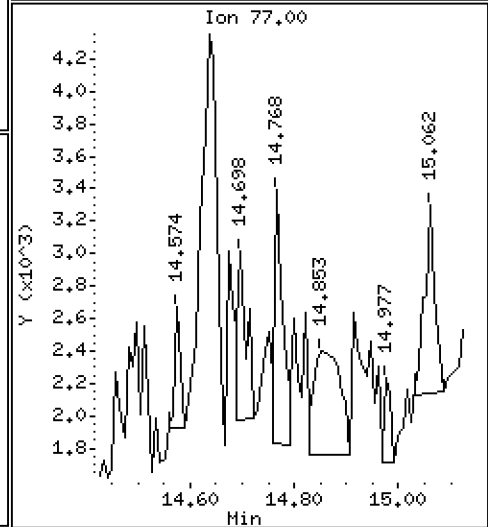
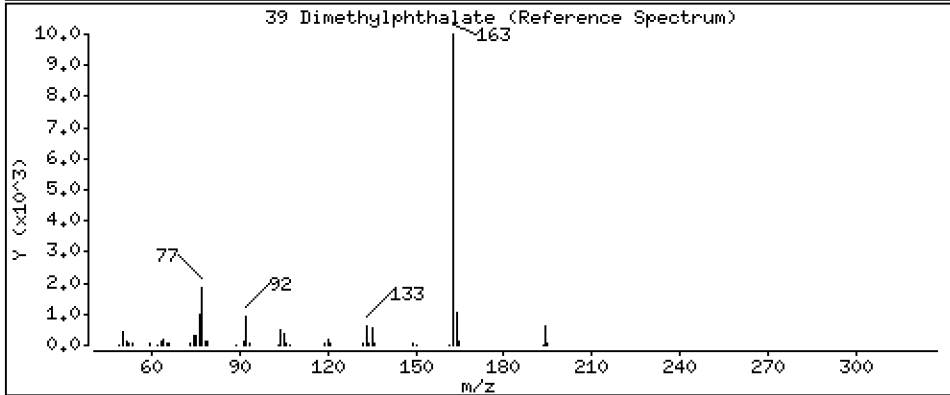
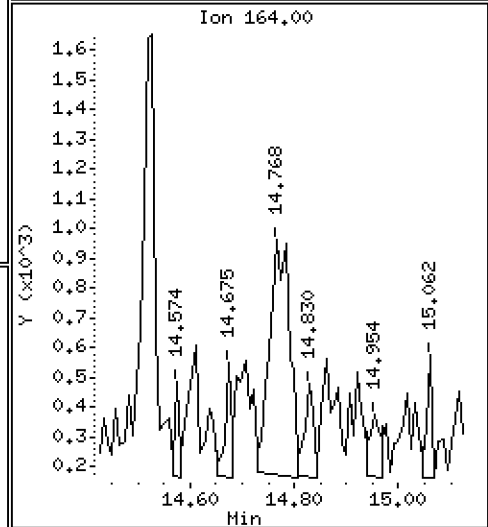
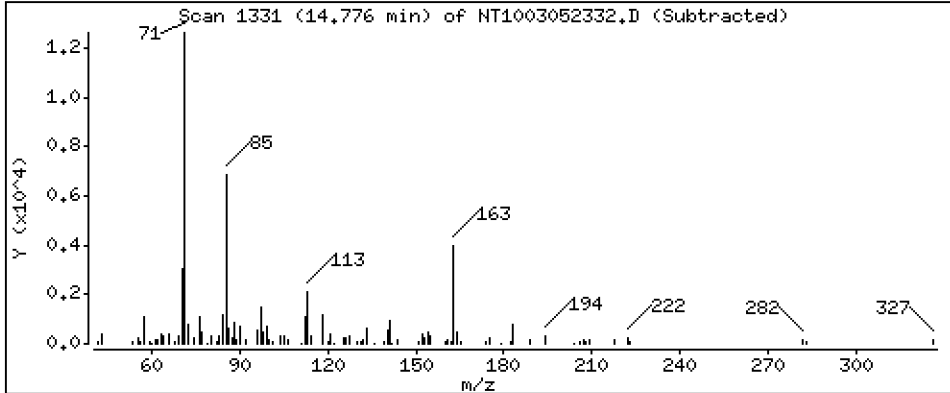
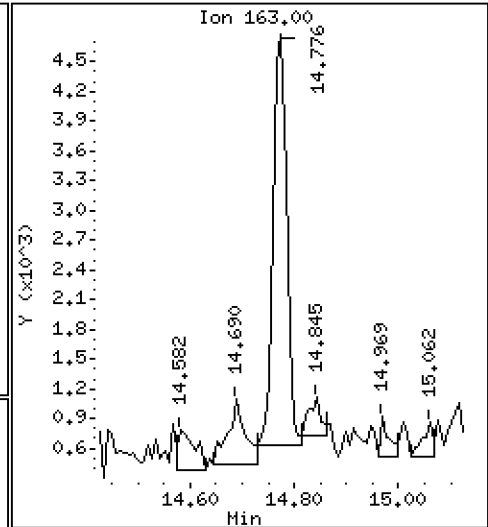
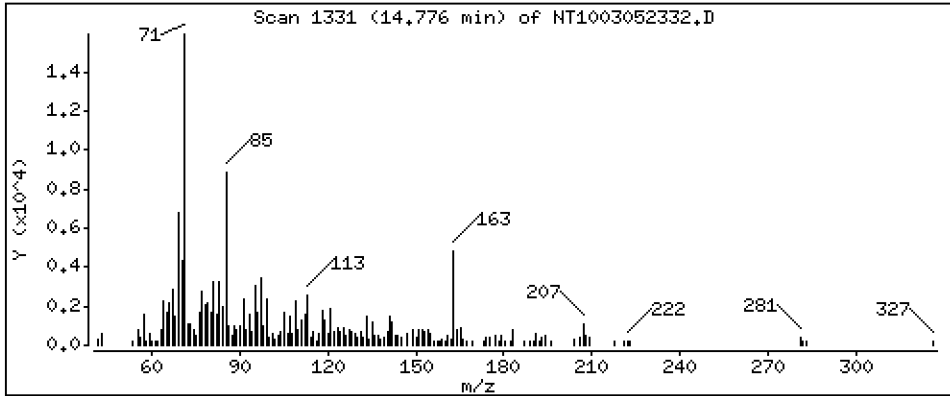
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.05891 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

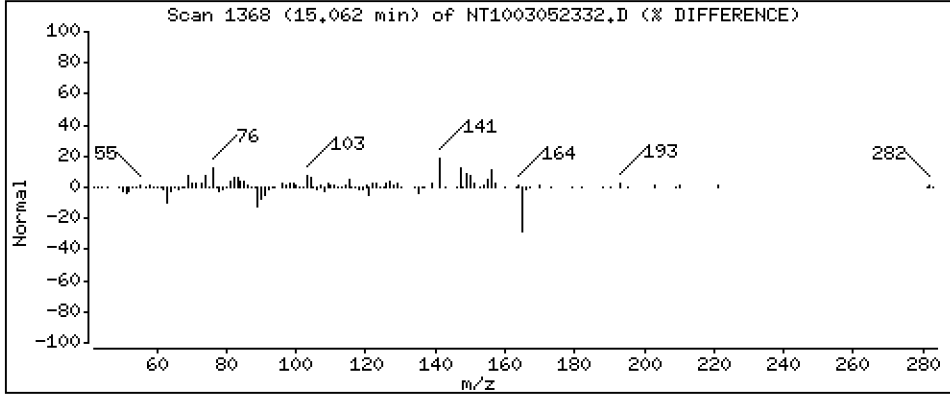
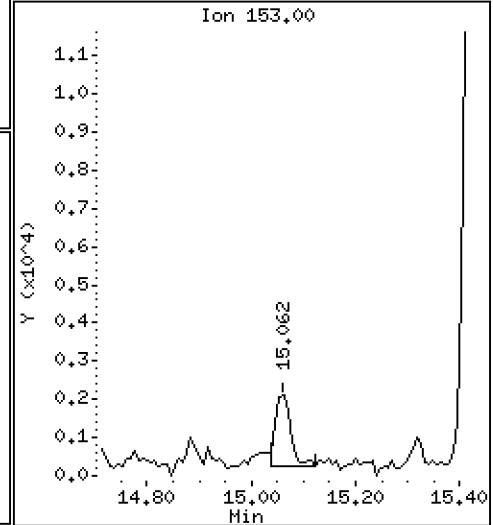
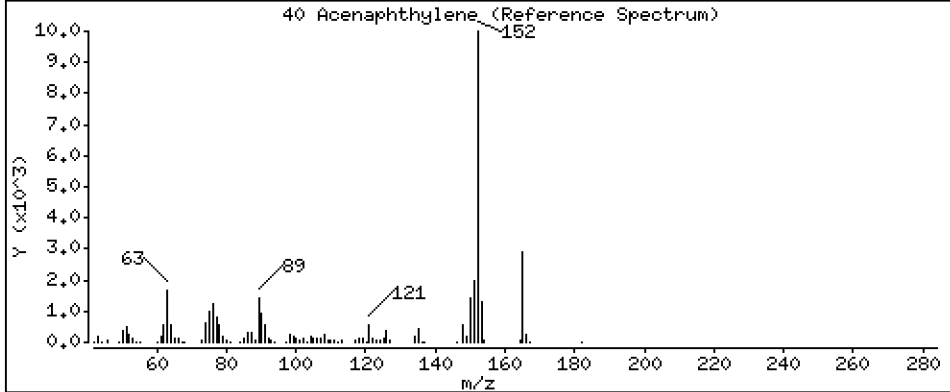
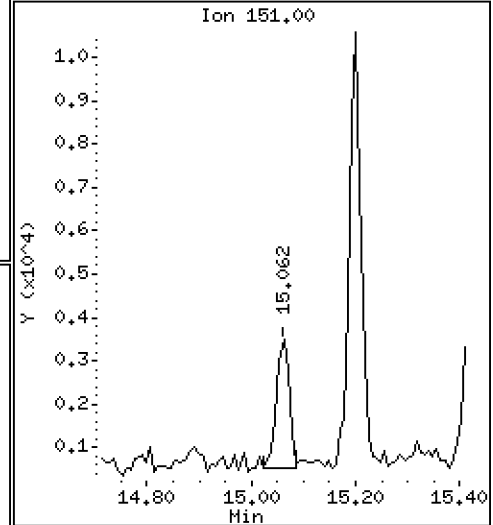
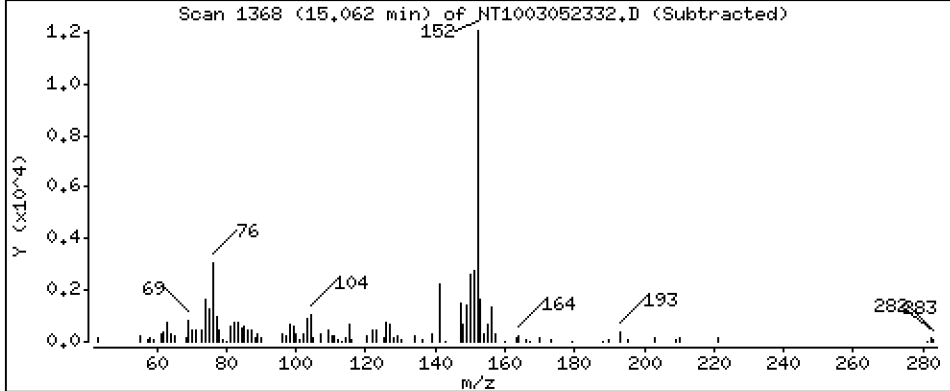
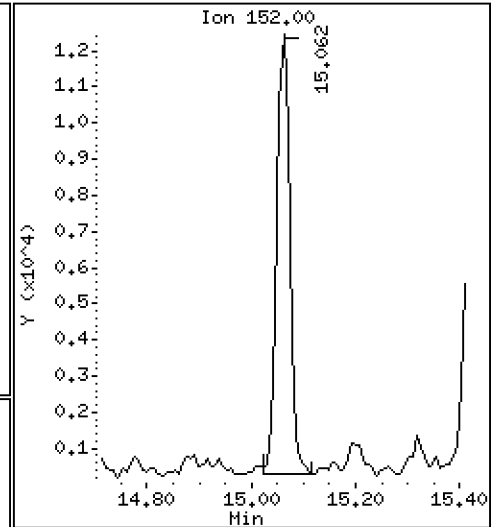
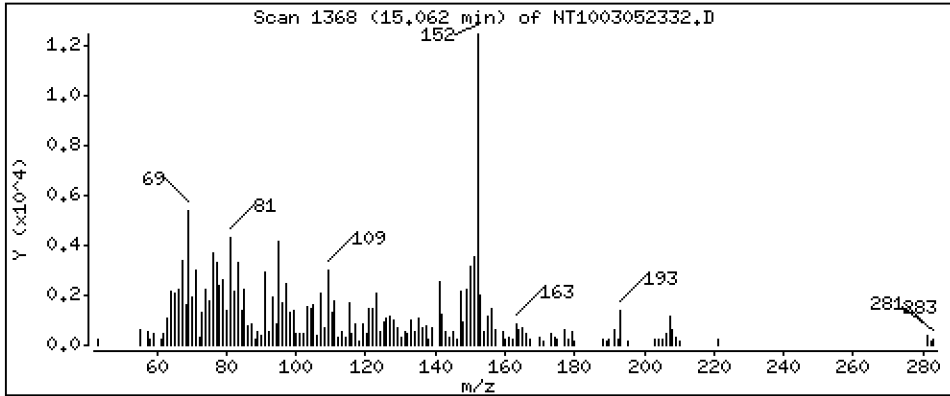
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1329 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

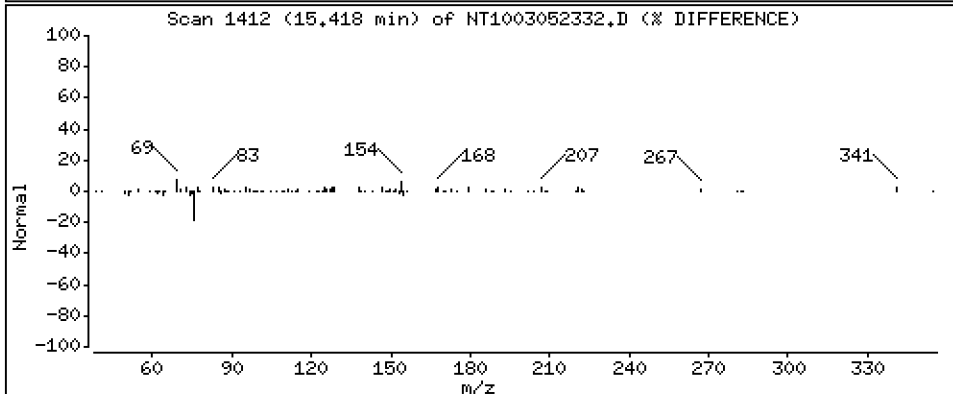
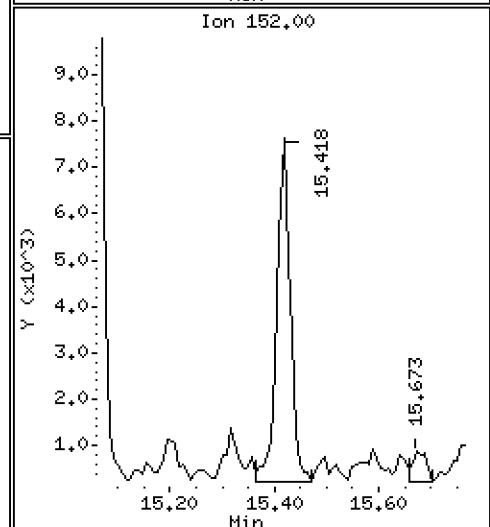
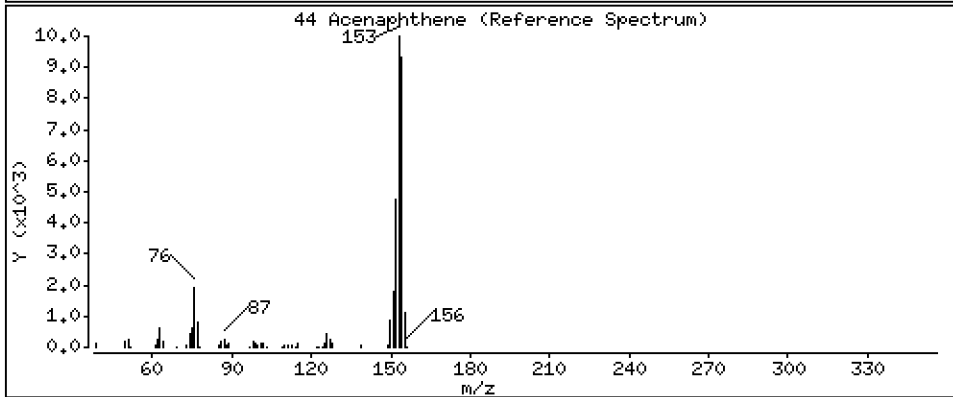
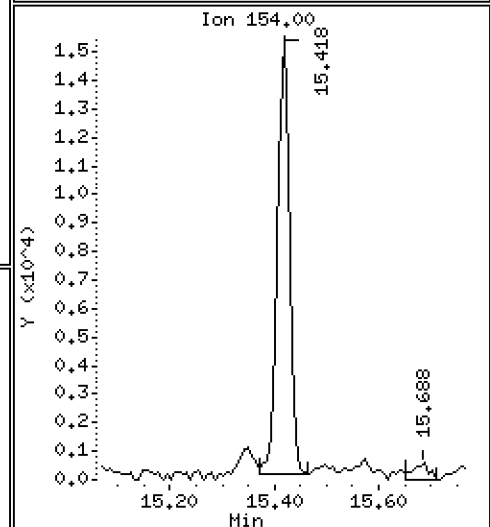
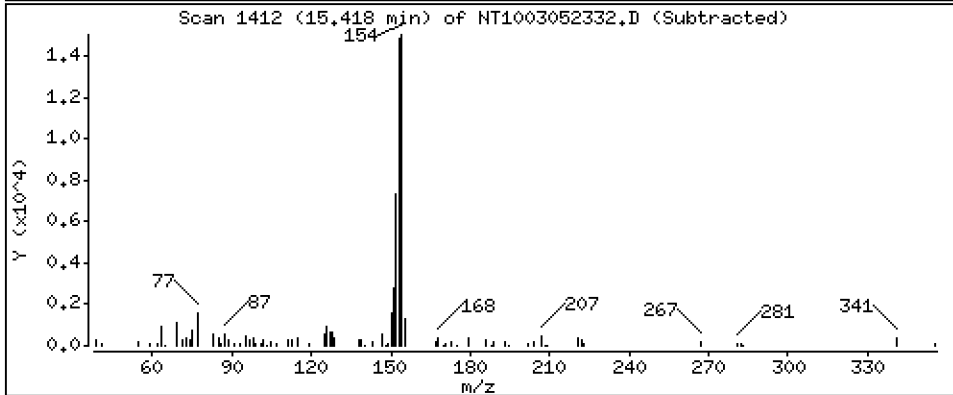
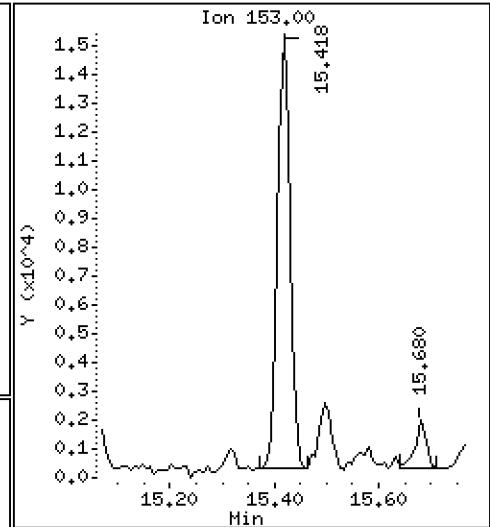
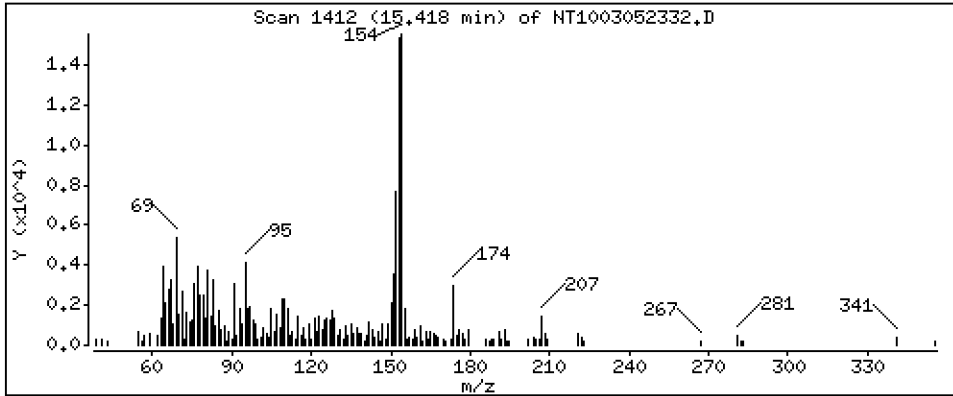
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.2169 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

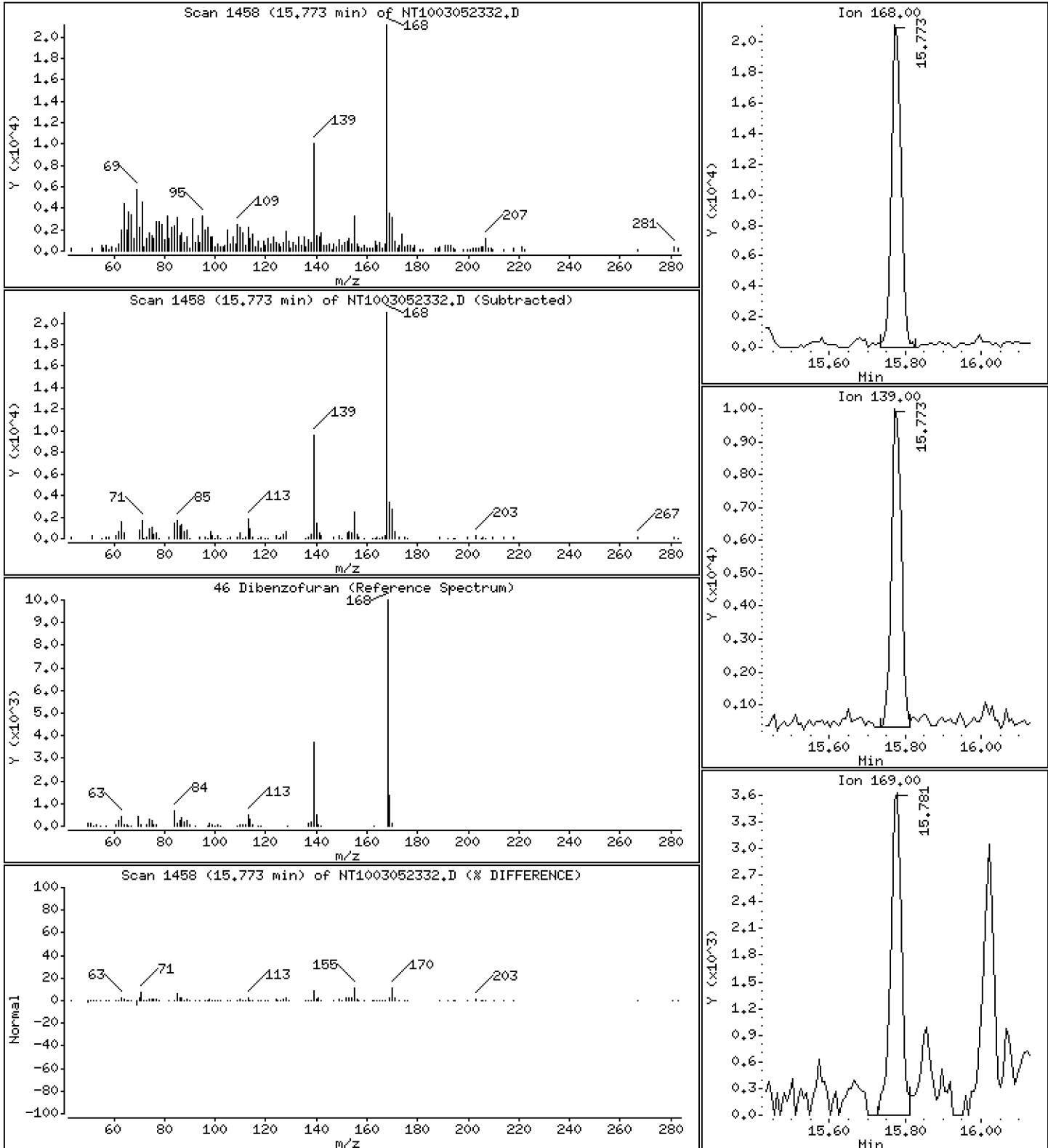
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2202 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

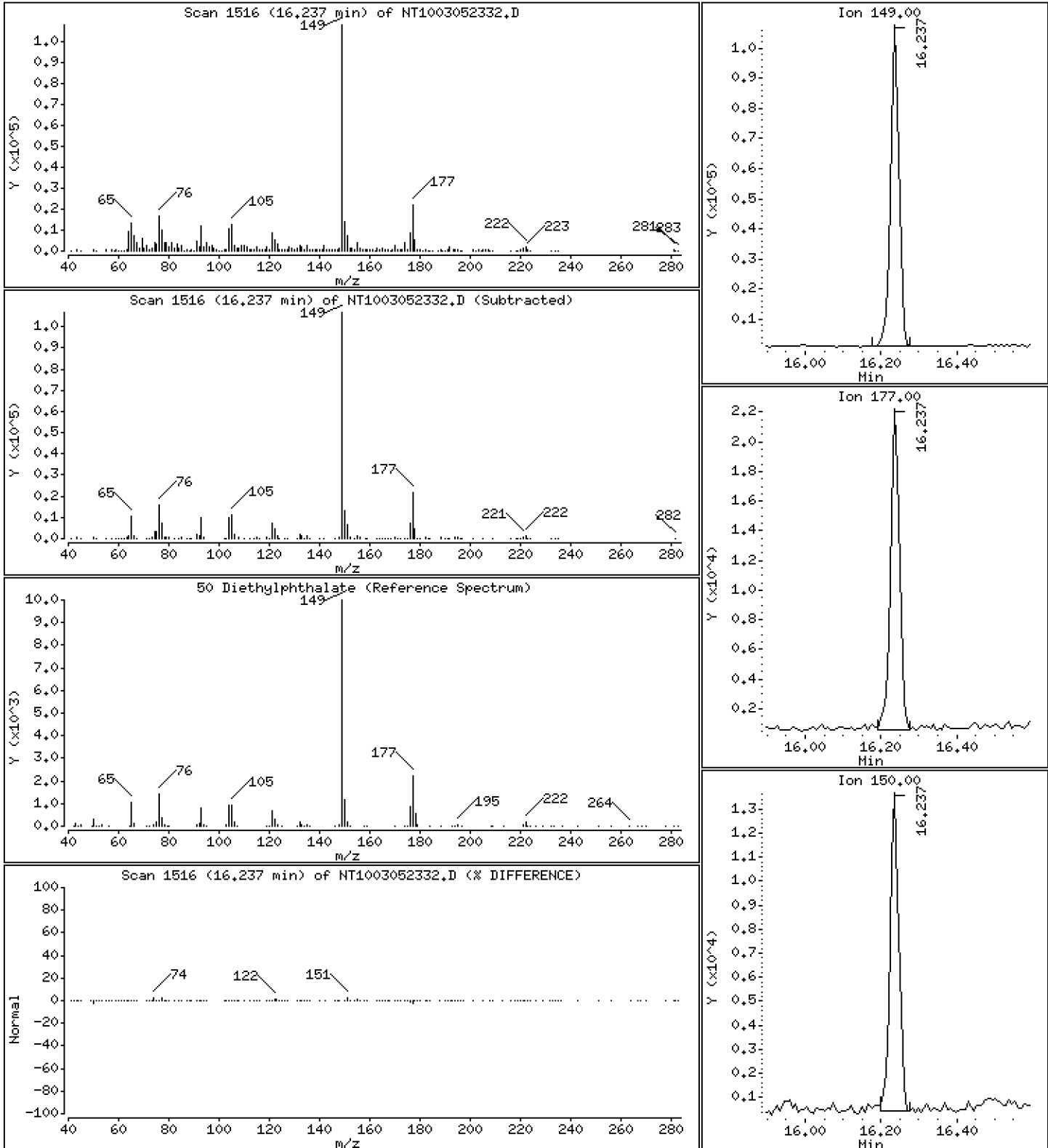
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 1,247 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

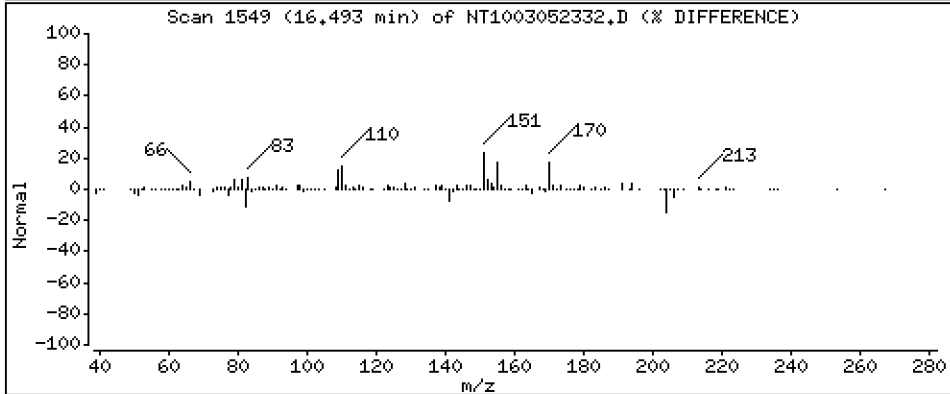
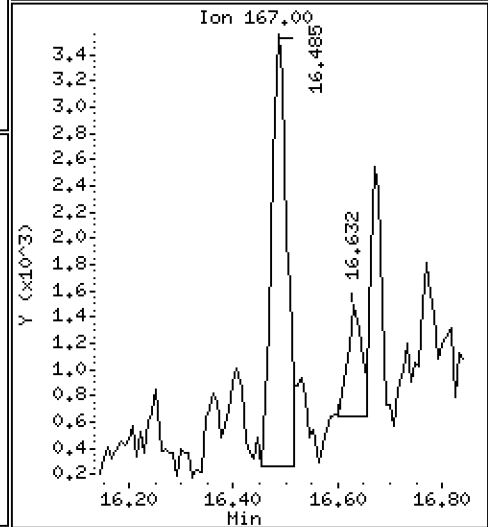
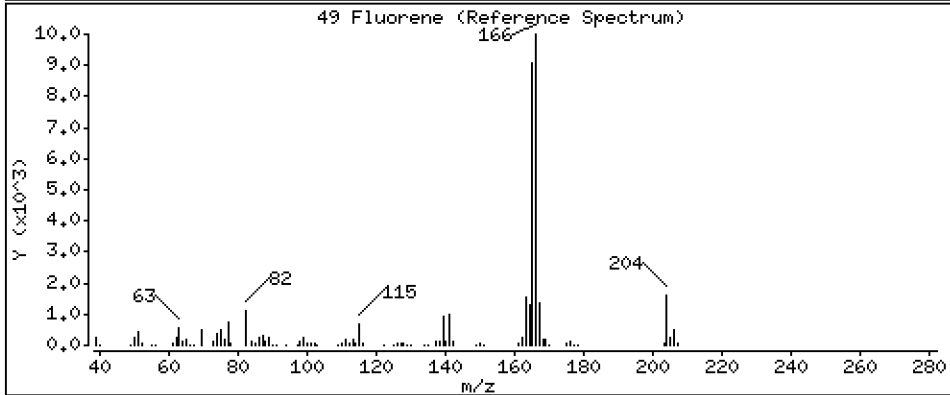
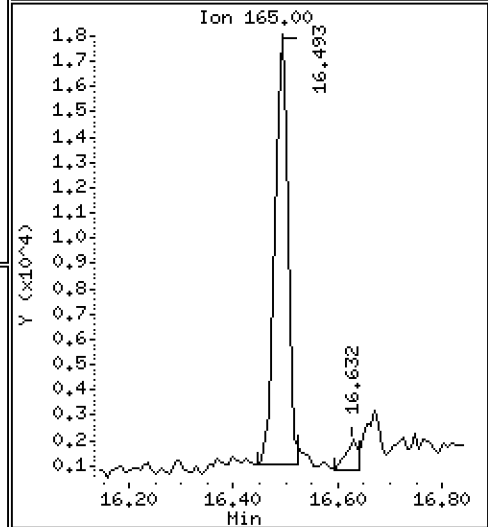
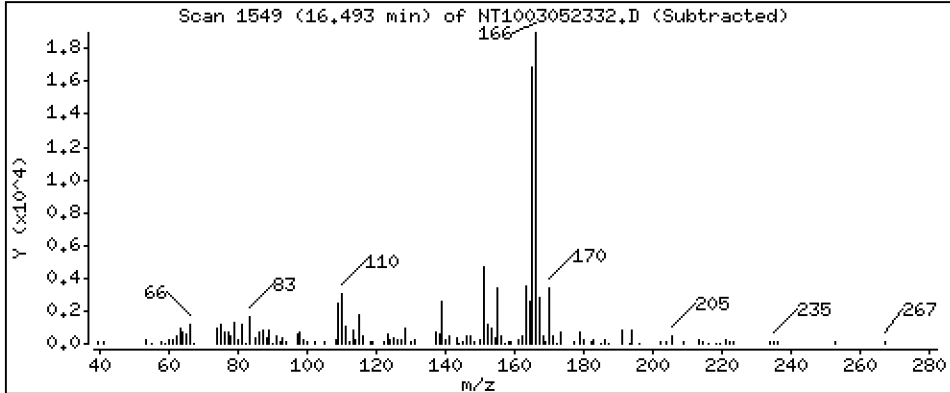
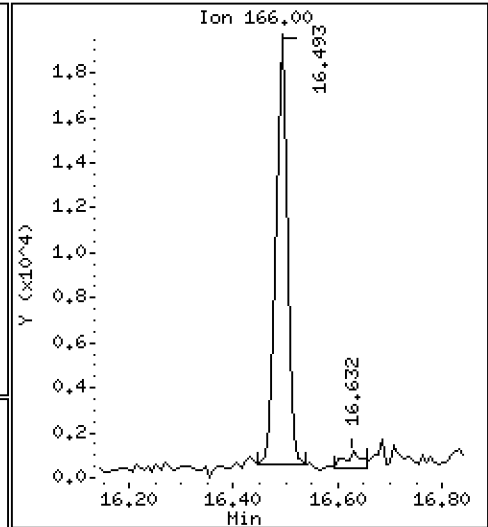
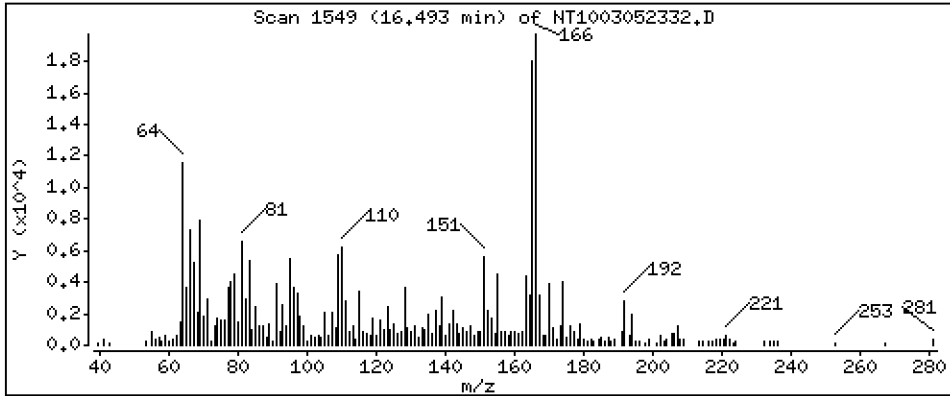
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.2124 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

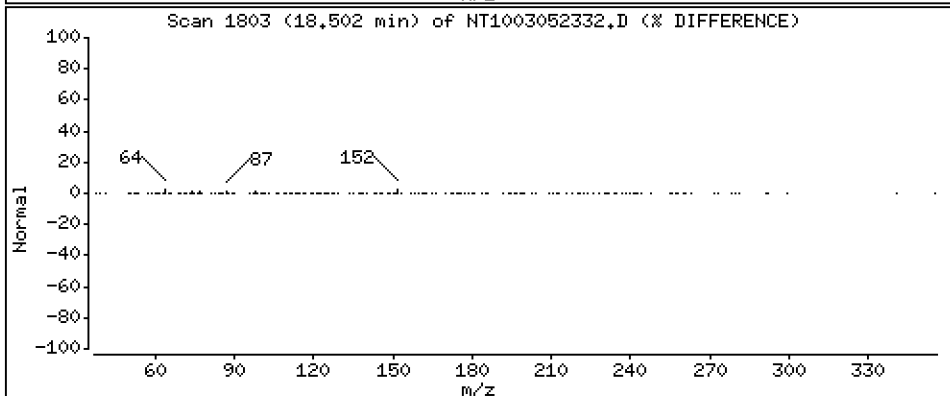
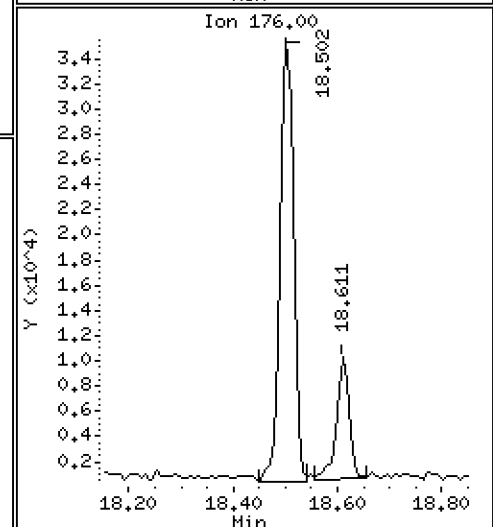
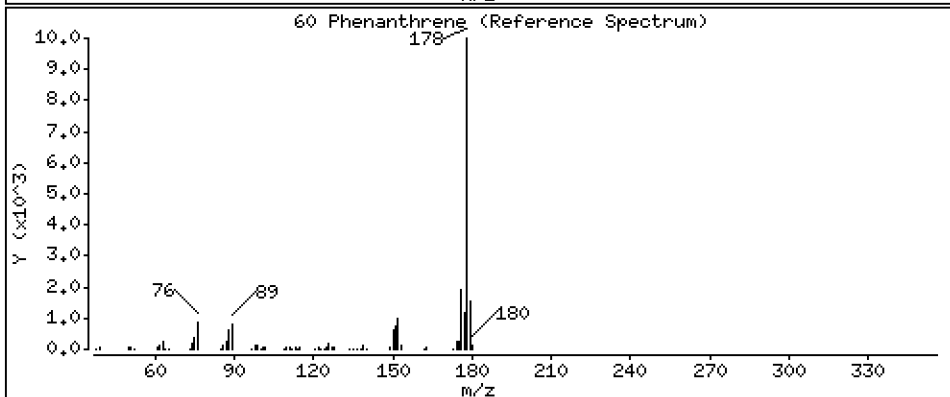
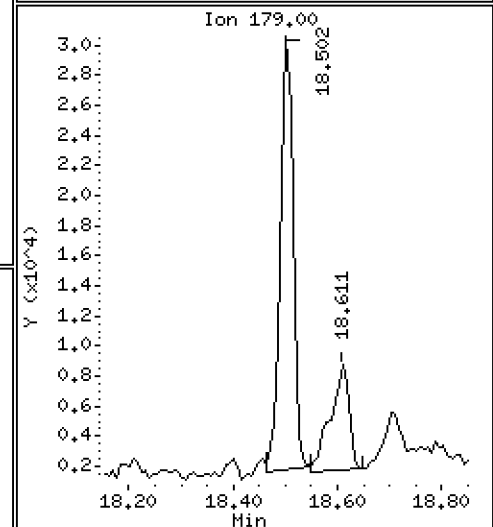
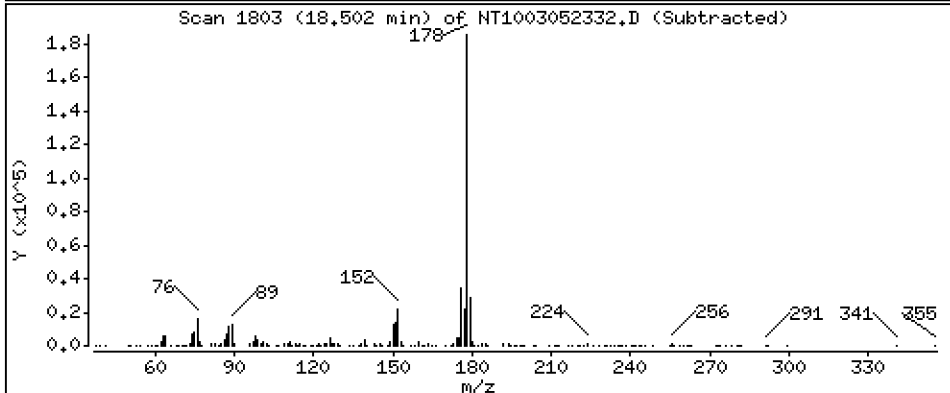
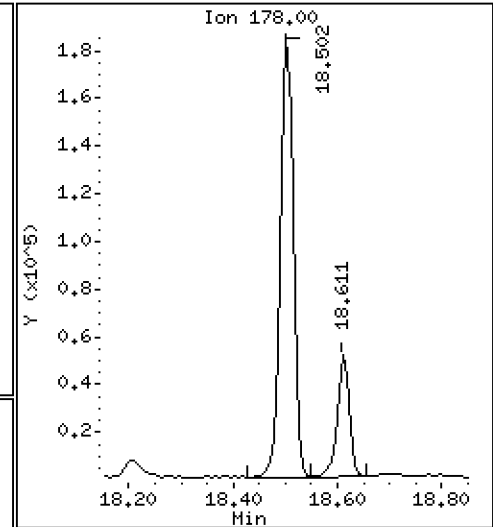
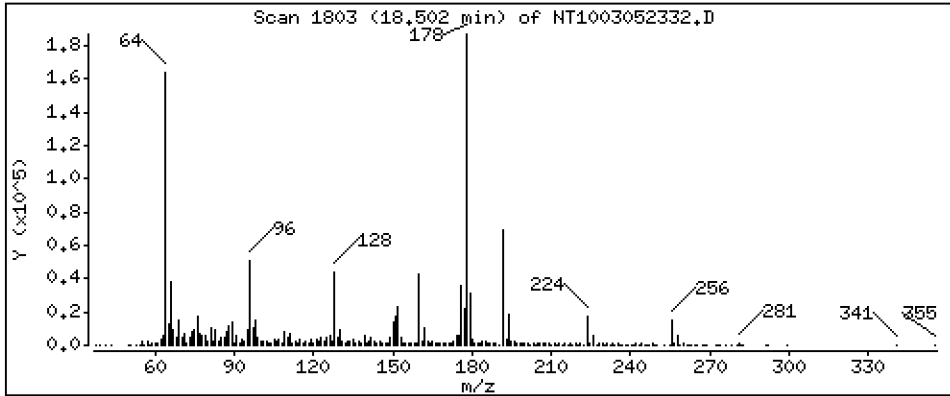
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 1,712 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

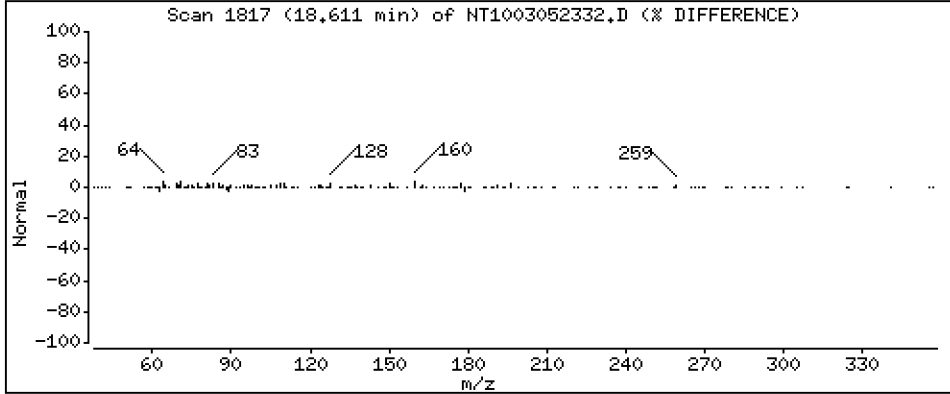
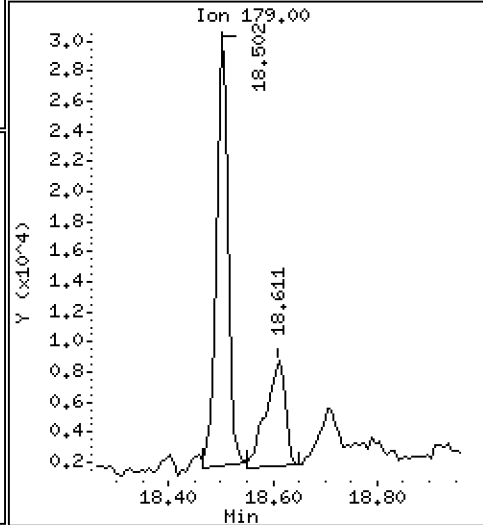
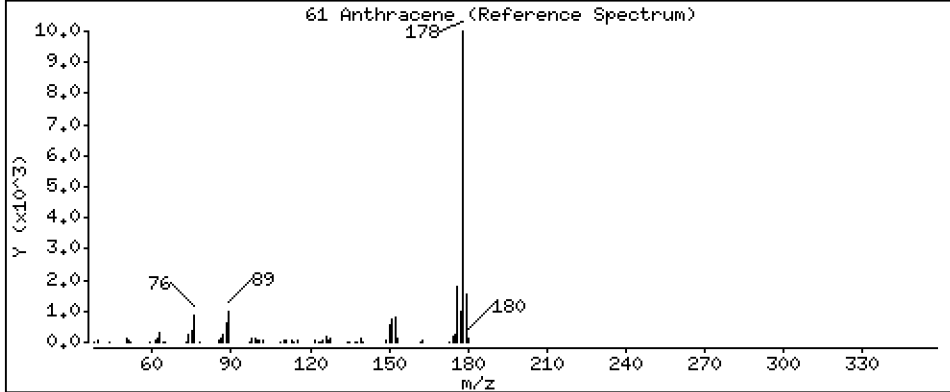
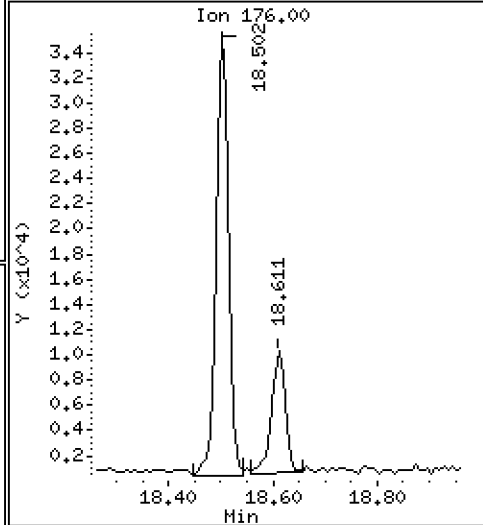
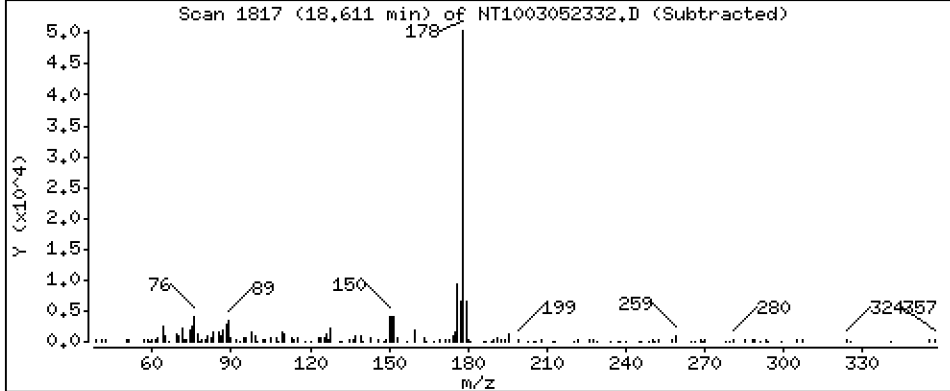
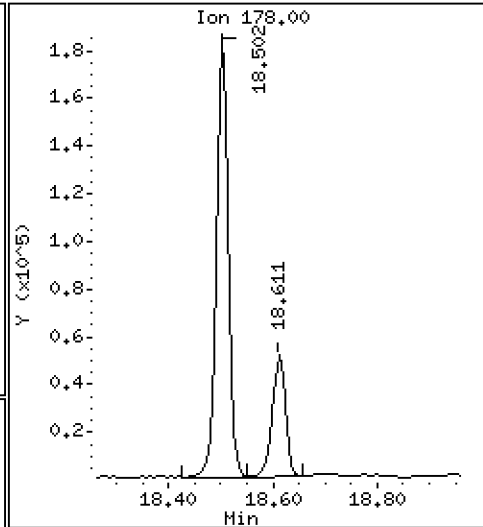
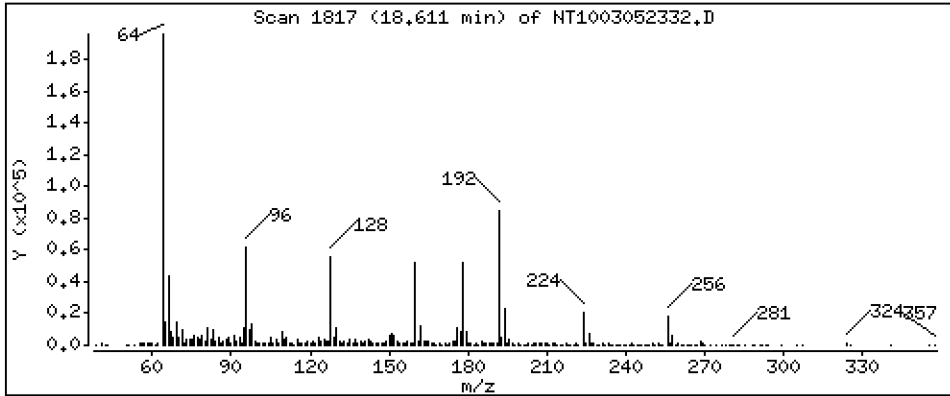
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,5013 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

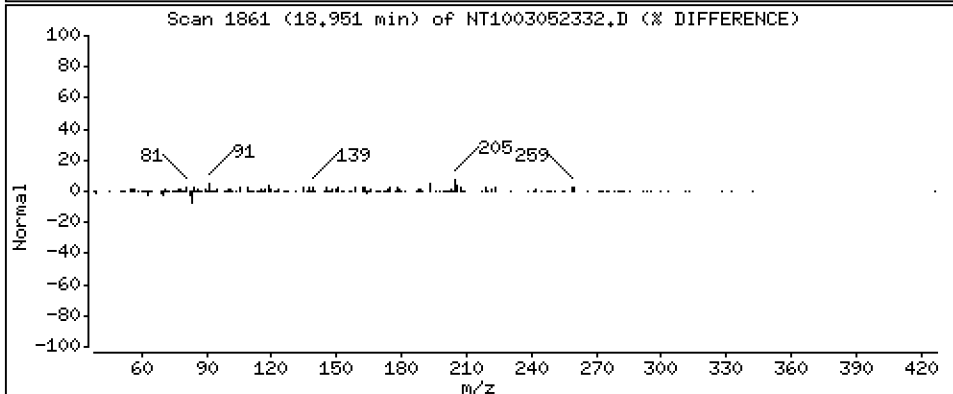
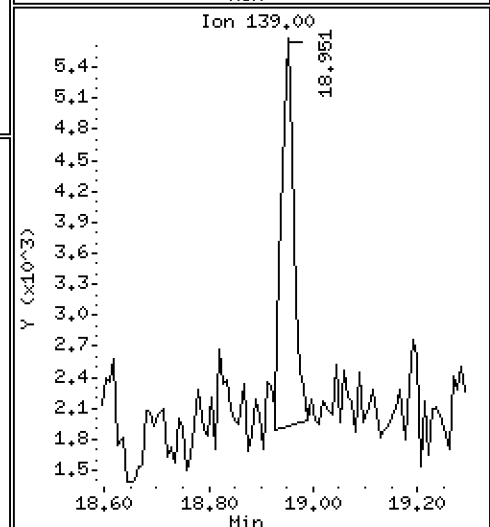
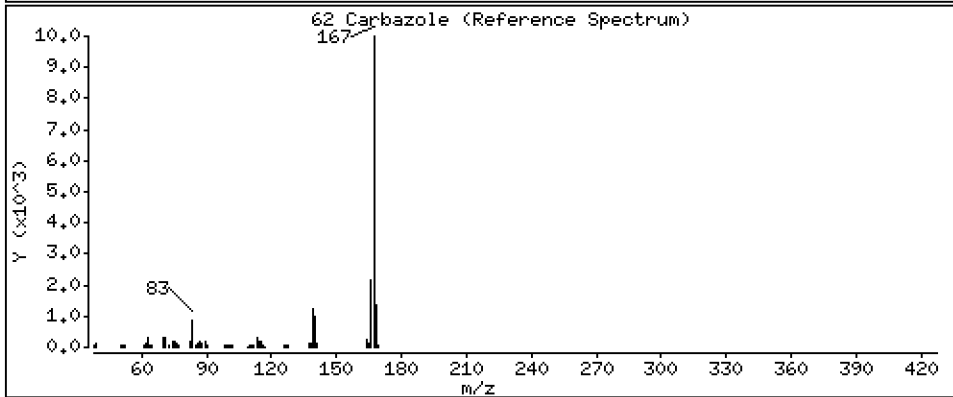
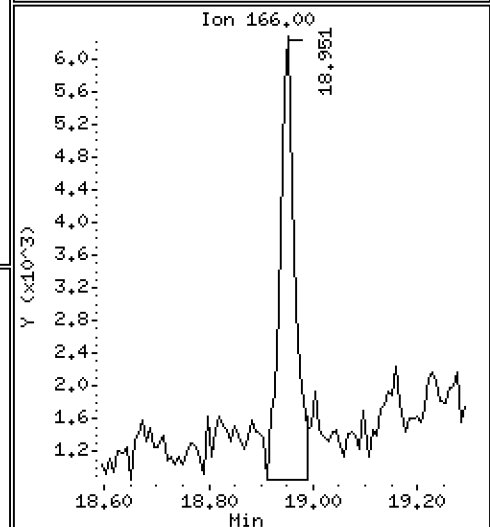
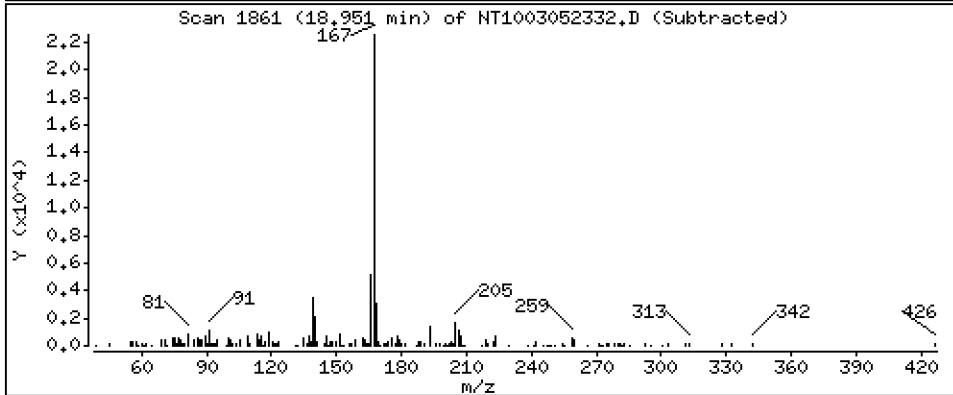
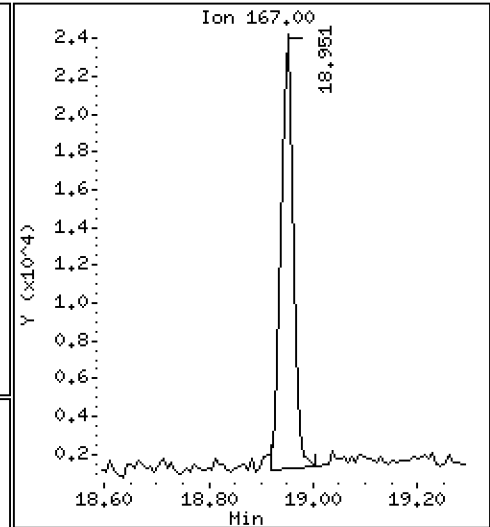
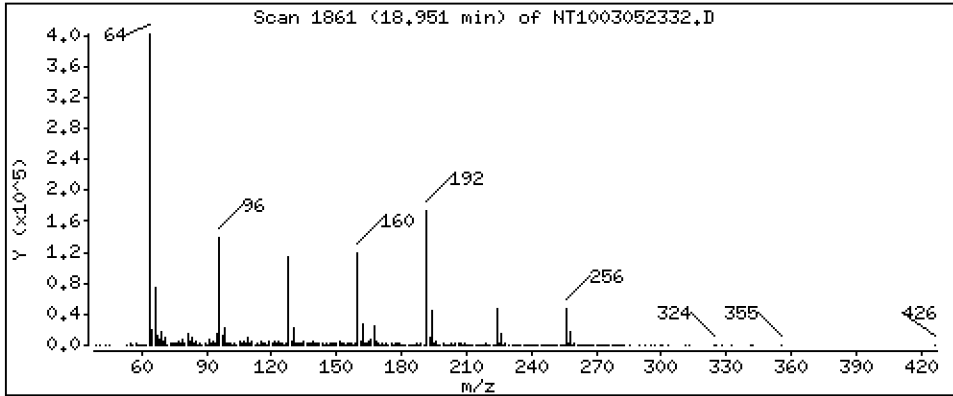
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,2359 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

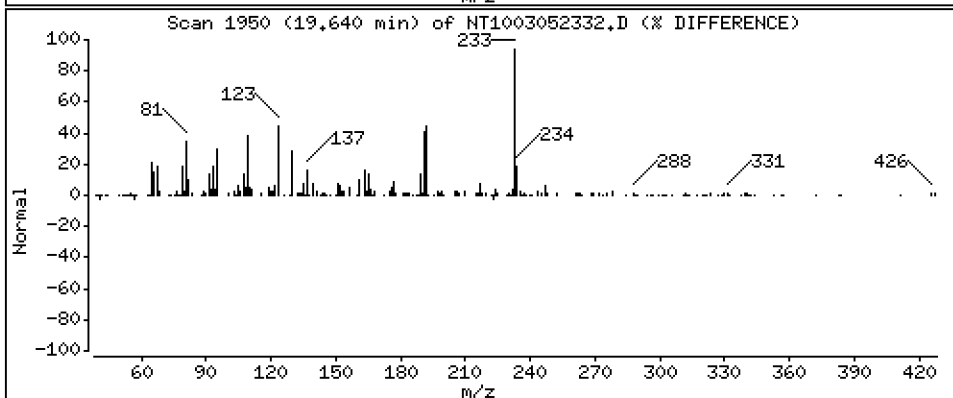
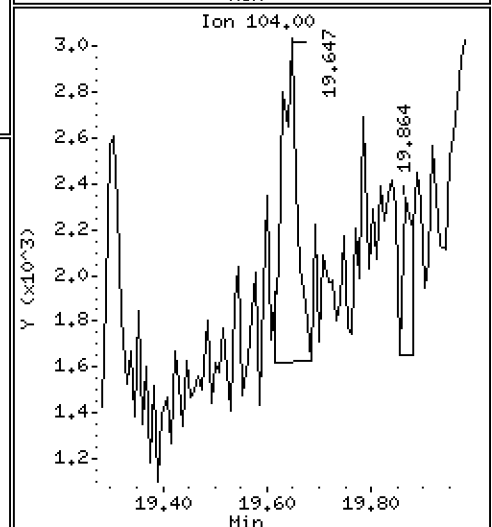
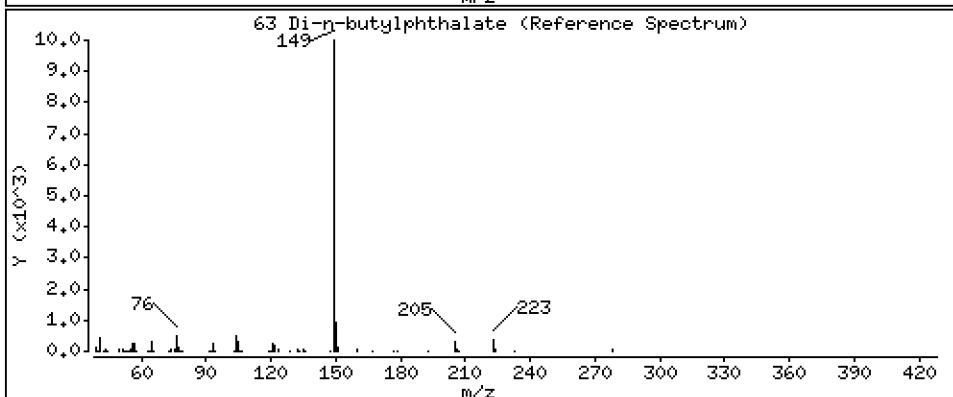
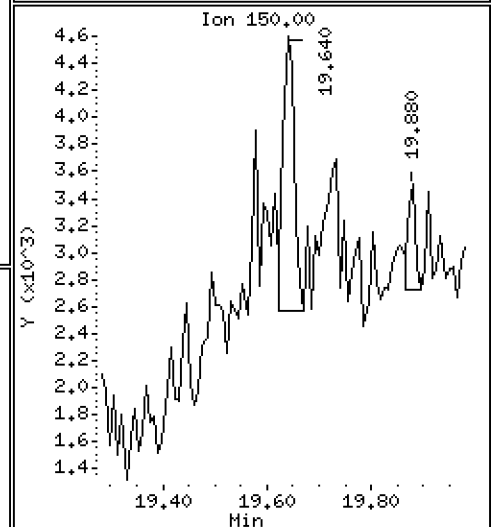
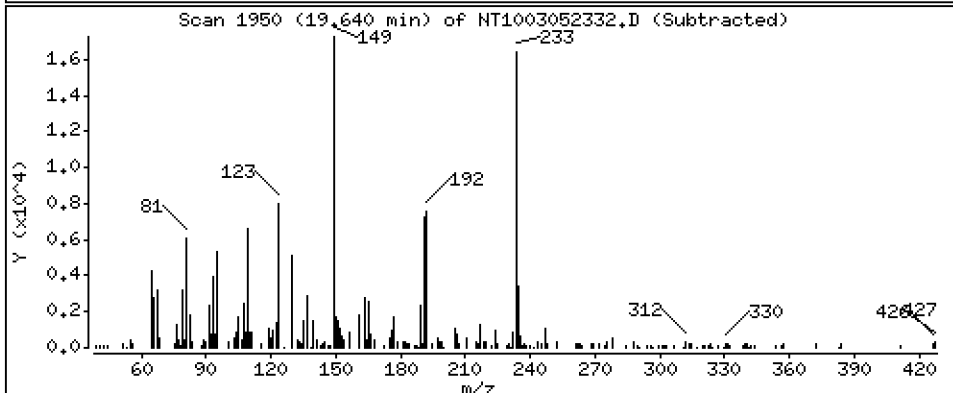
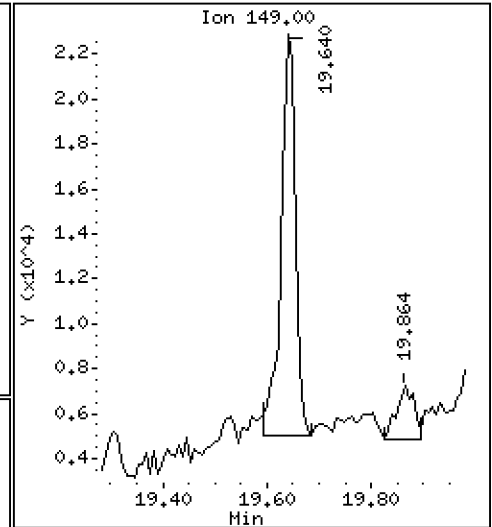
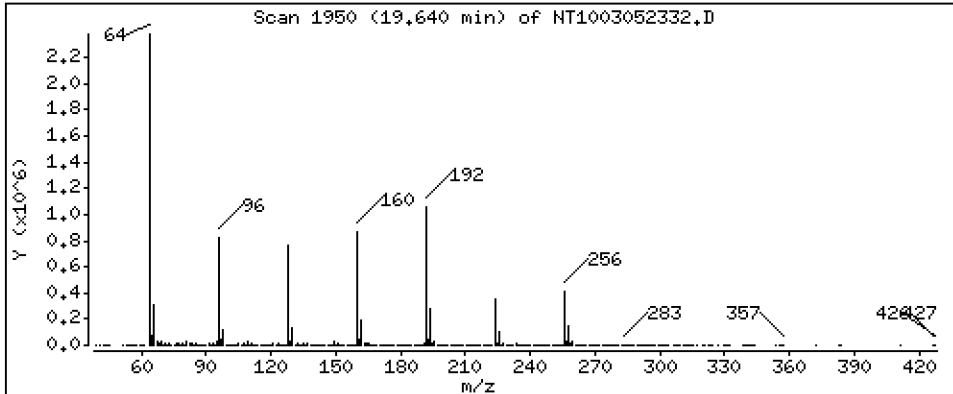
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1546 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

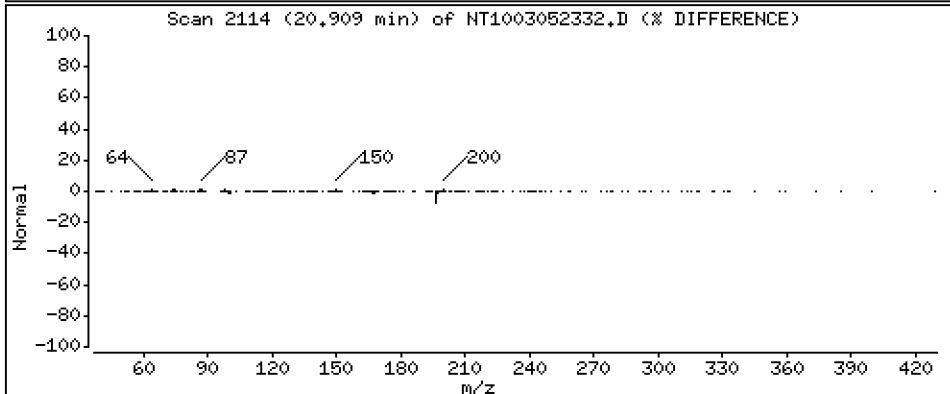
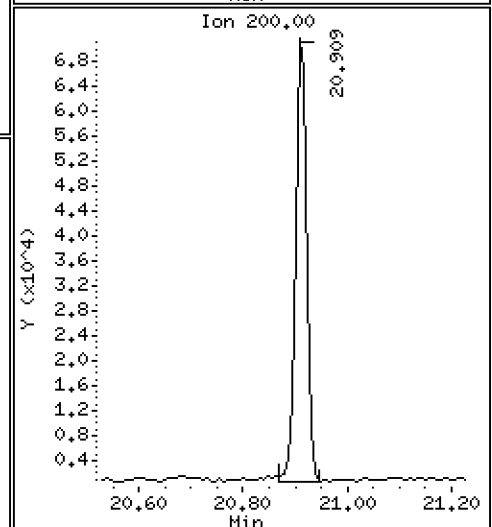
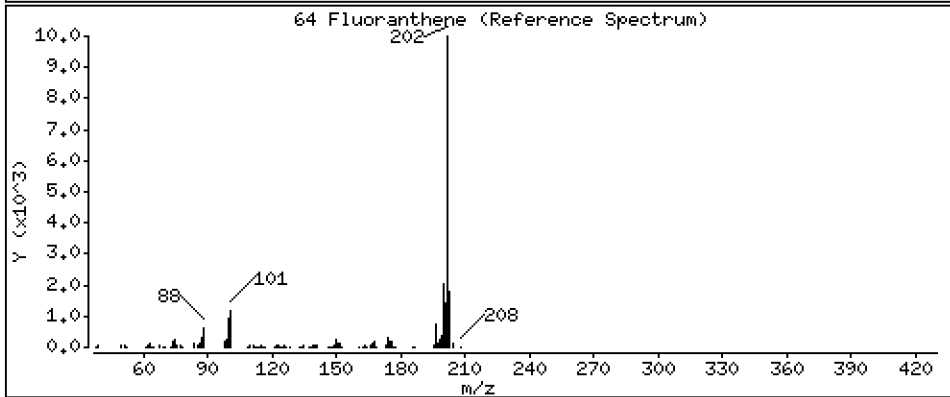
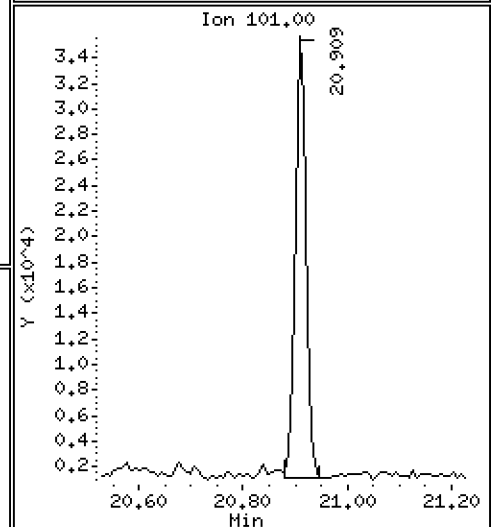
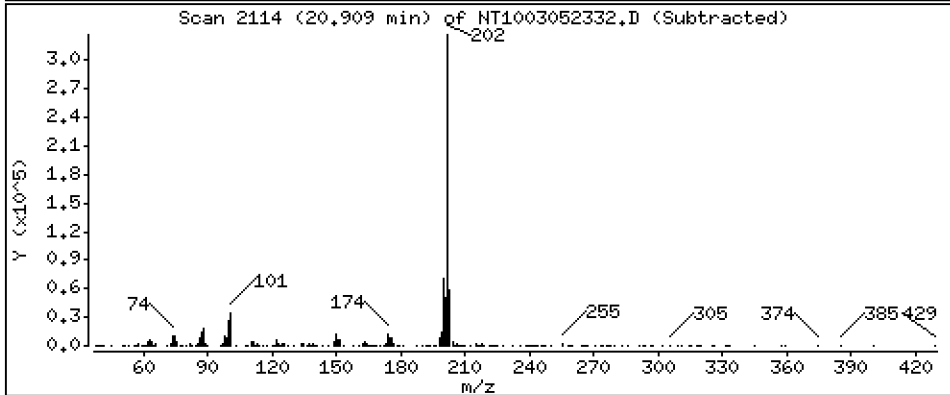
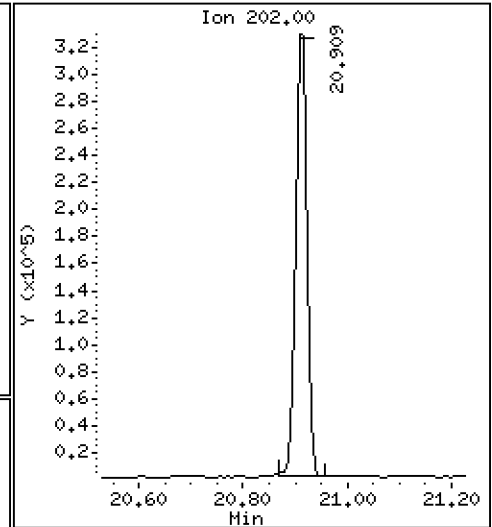
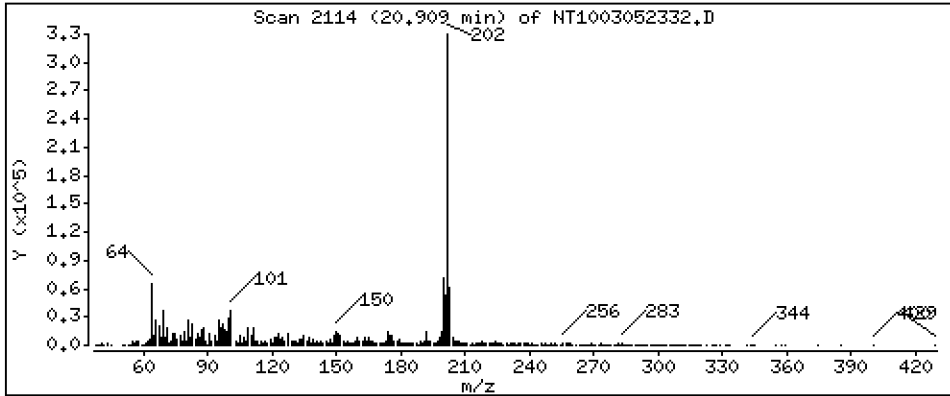
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 2,285 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

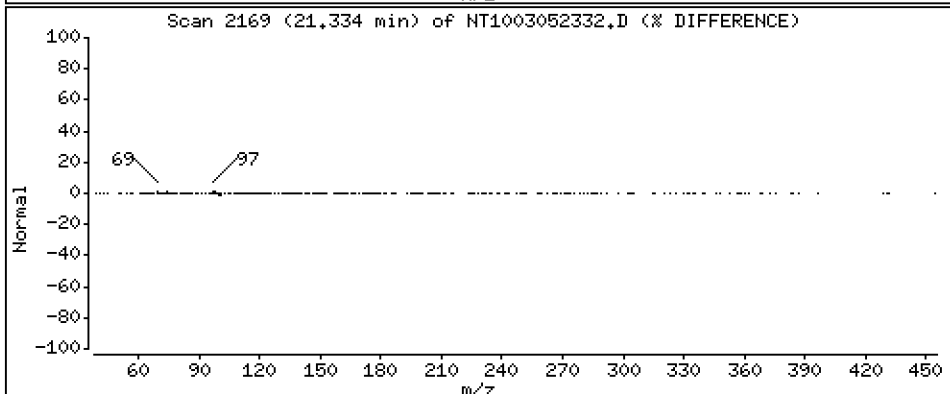
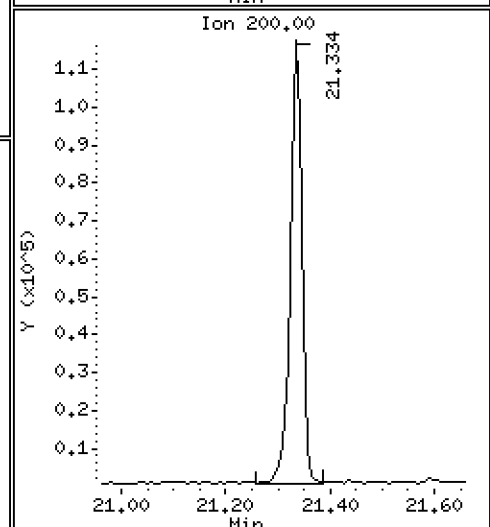
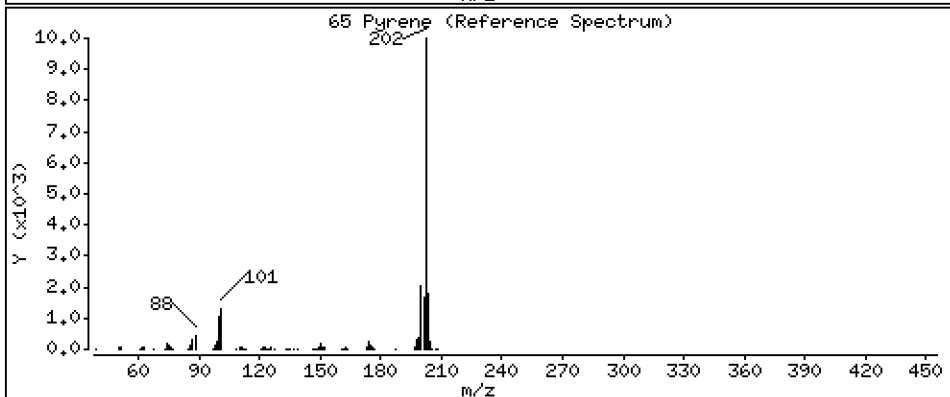
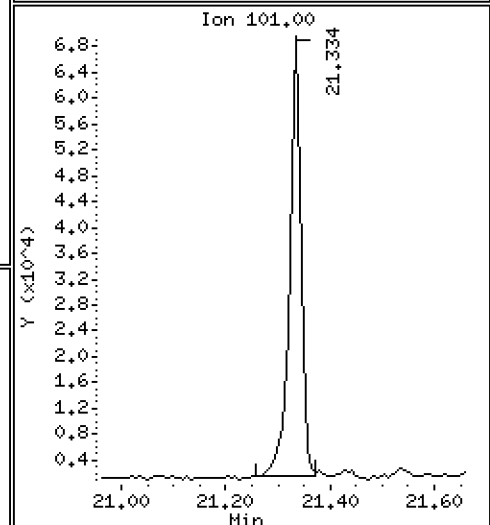
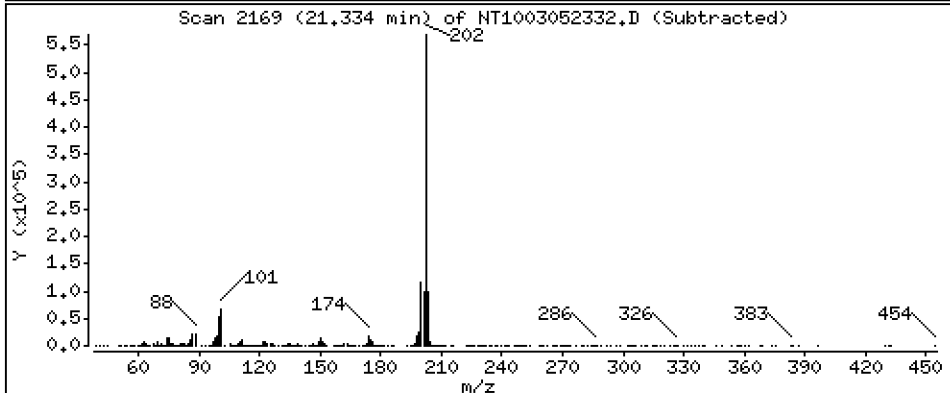
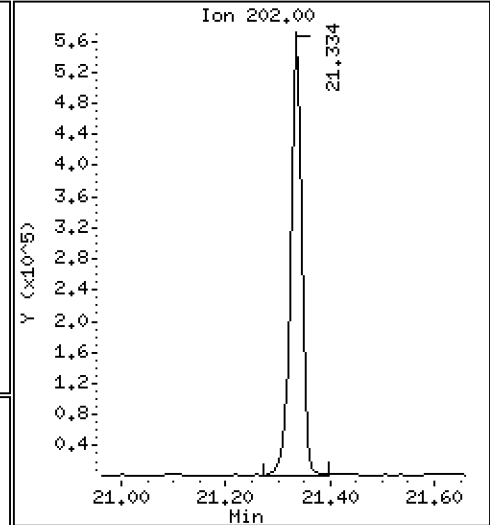
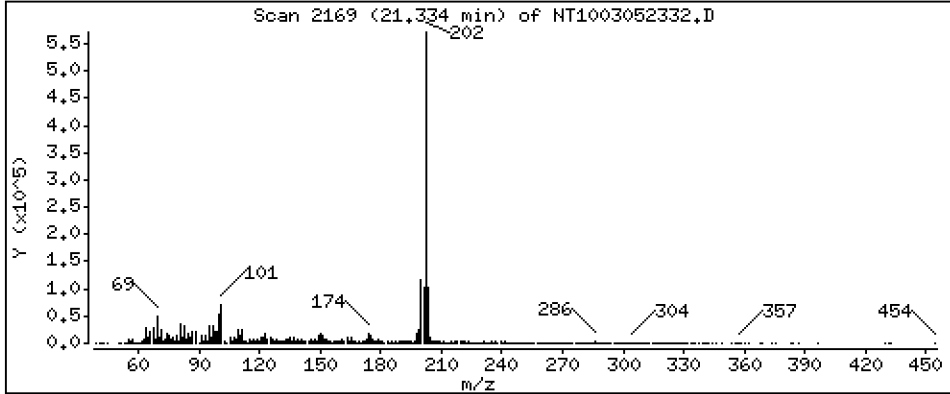
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 3,689 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

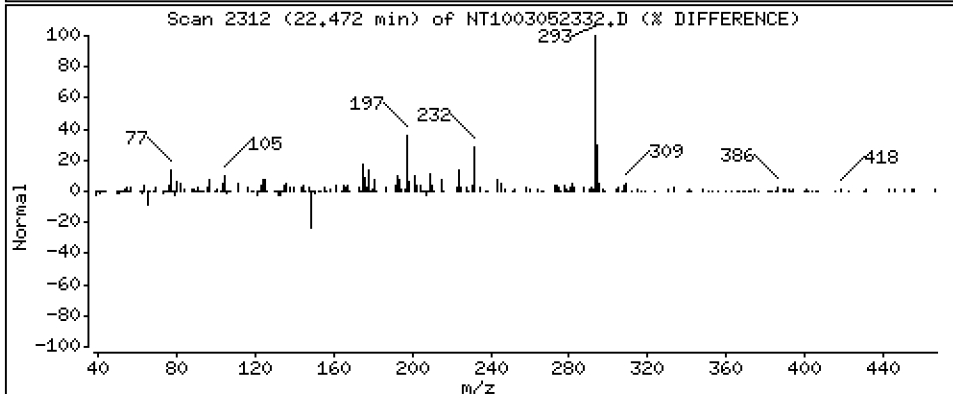
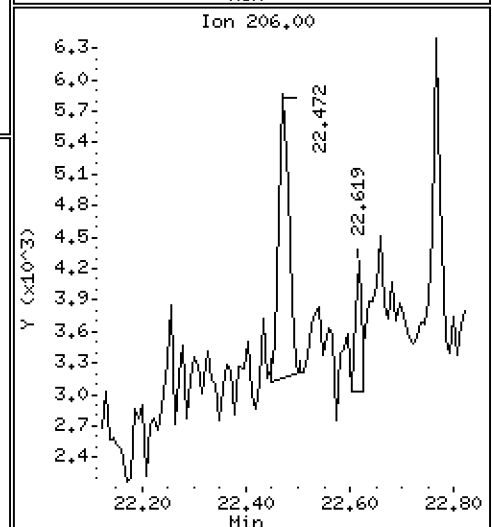
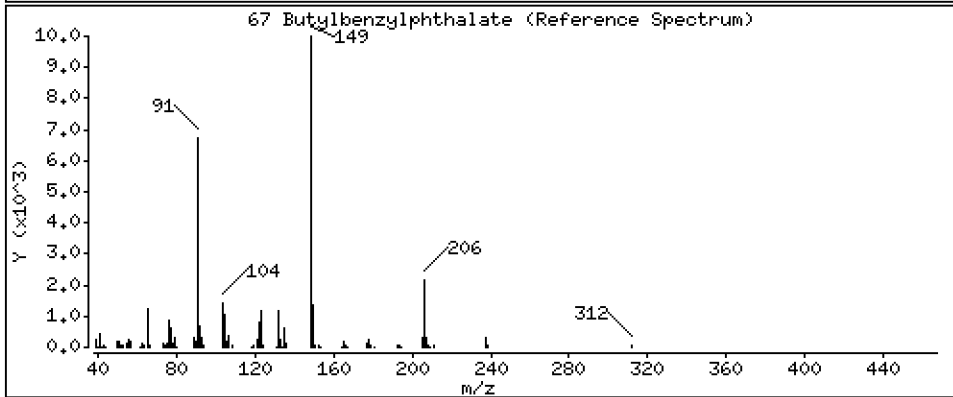
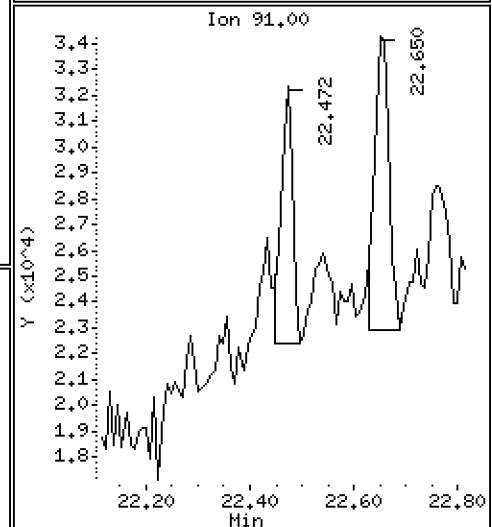
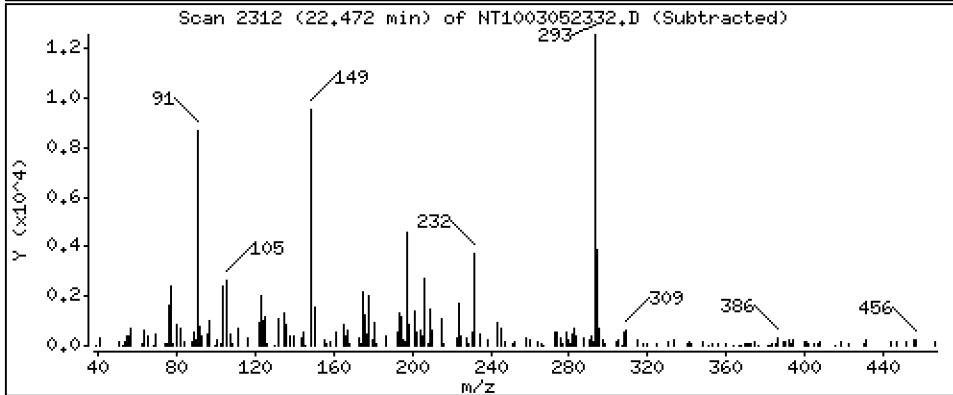
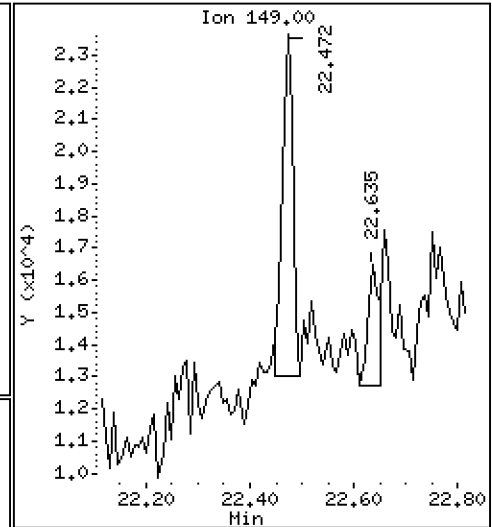
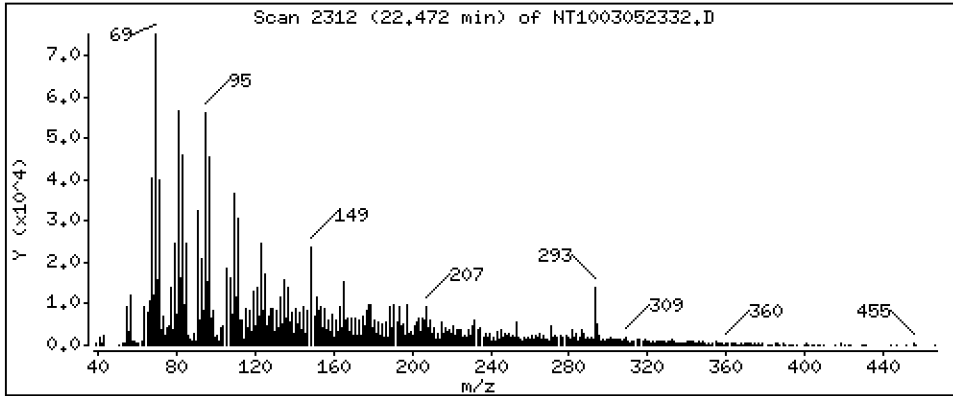
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1195 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

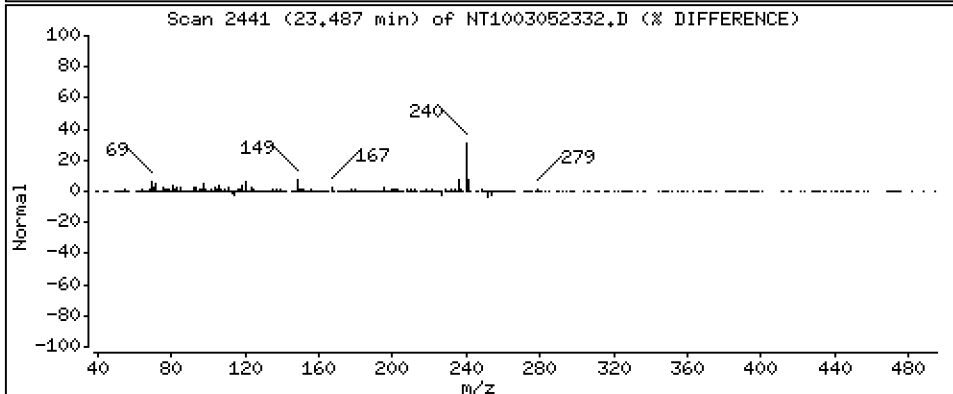
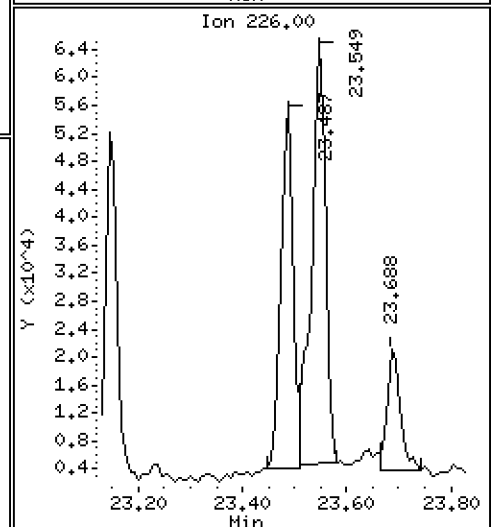
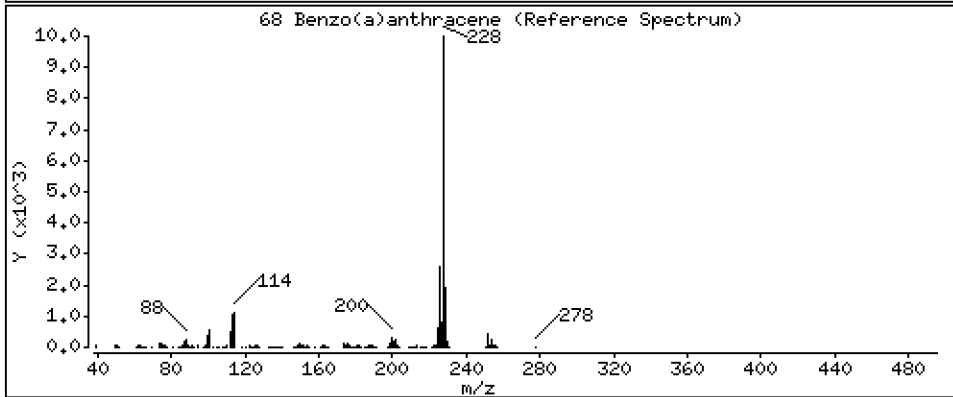
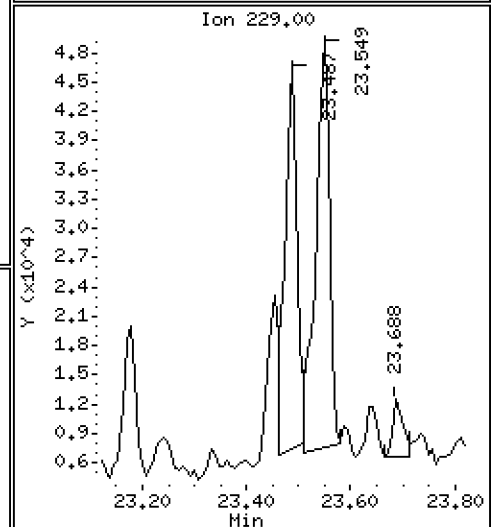
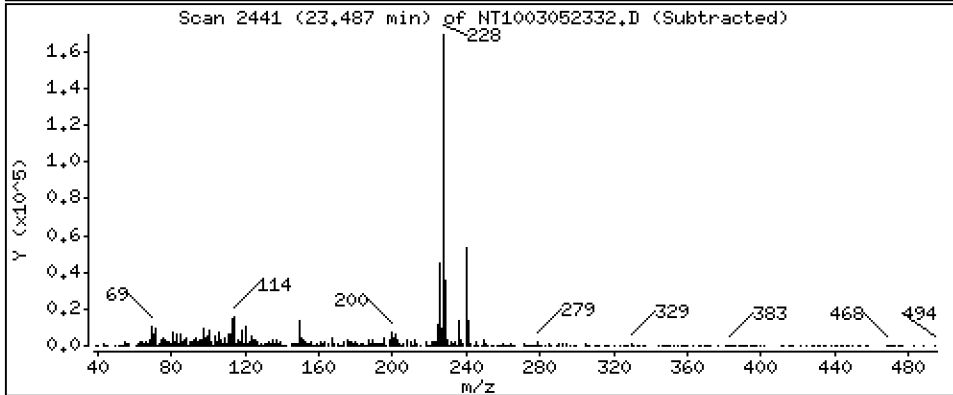
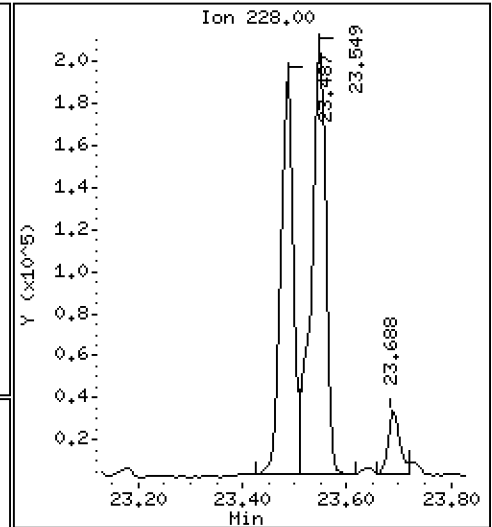
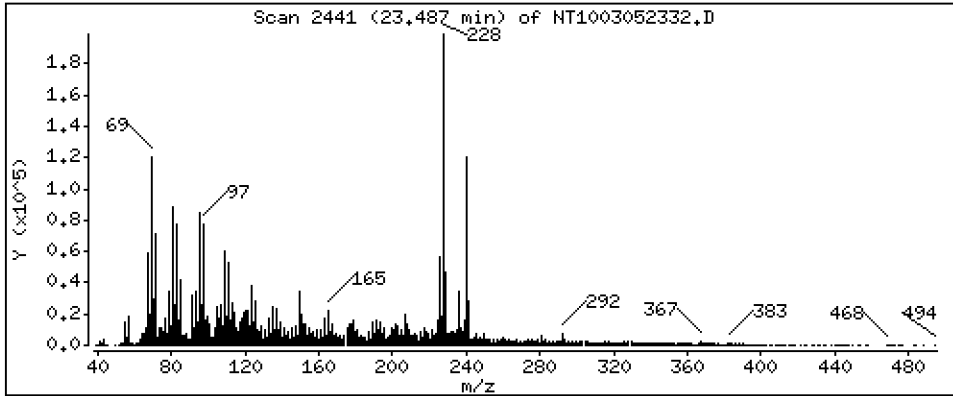
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 1,339 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

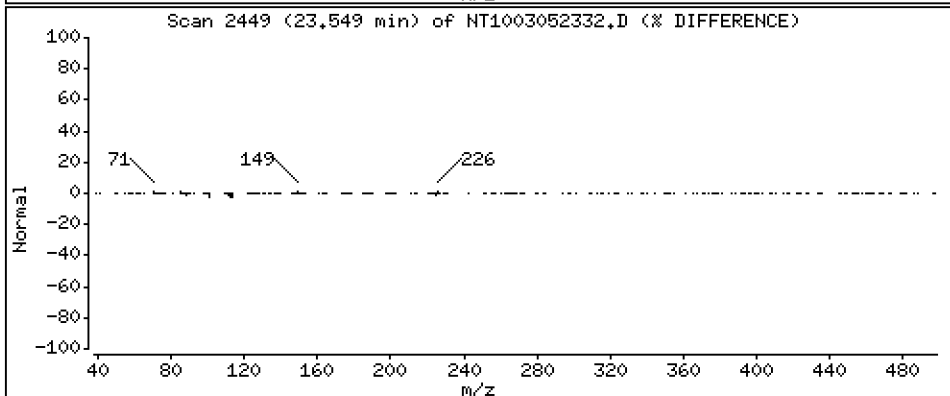
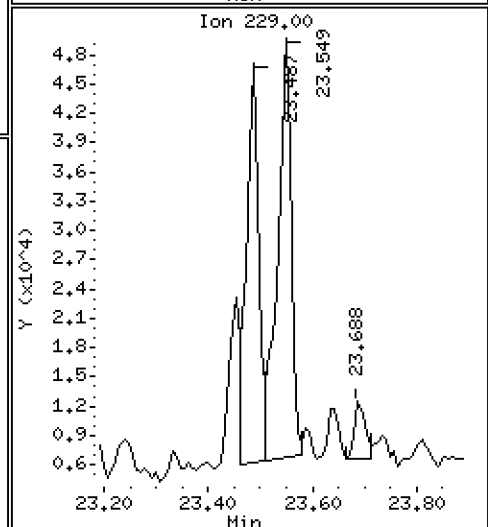
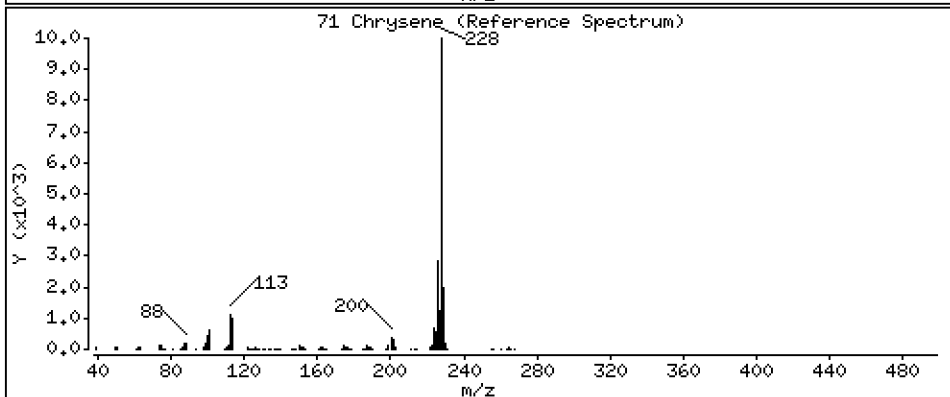
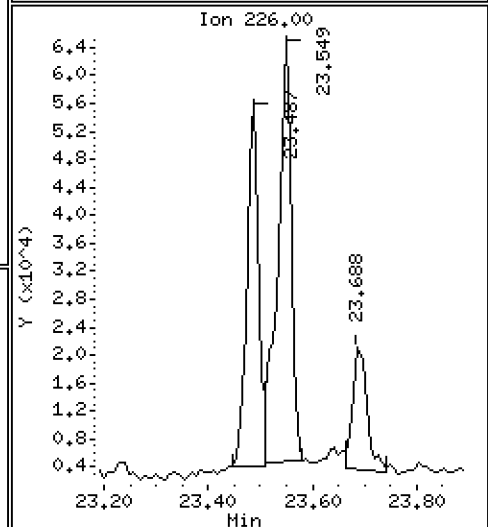
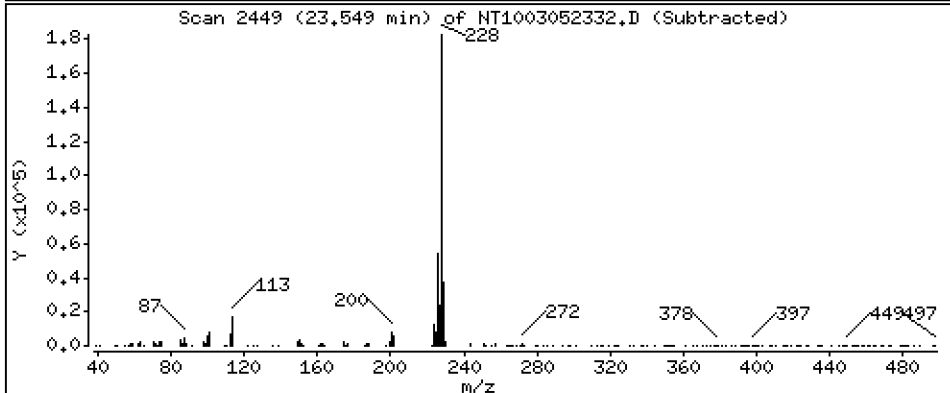
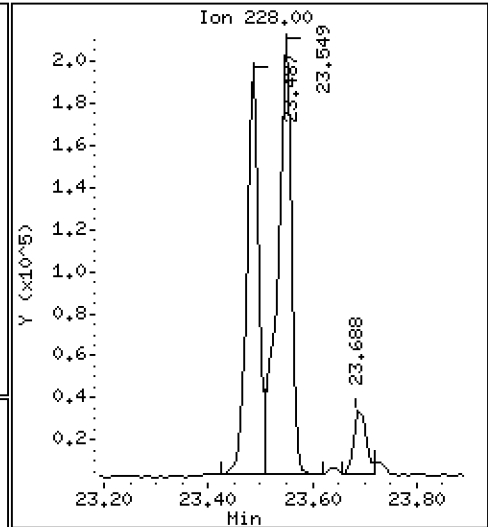
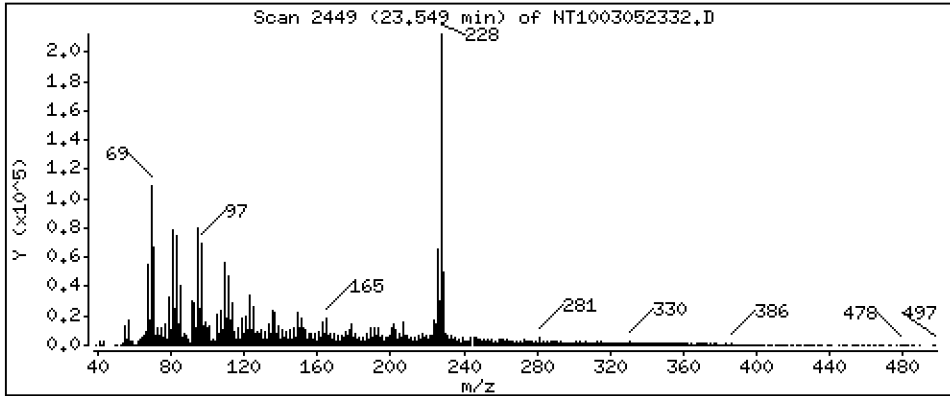
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,993 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

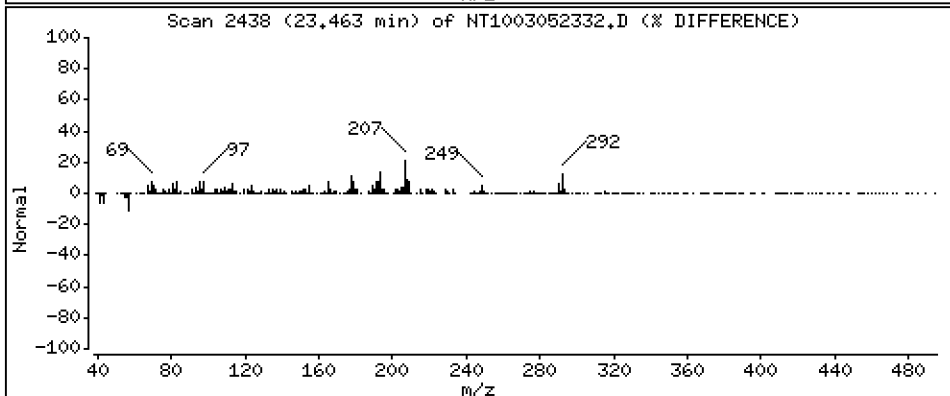
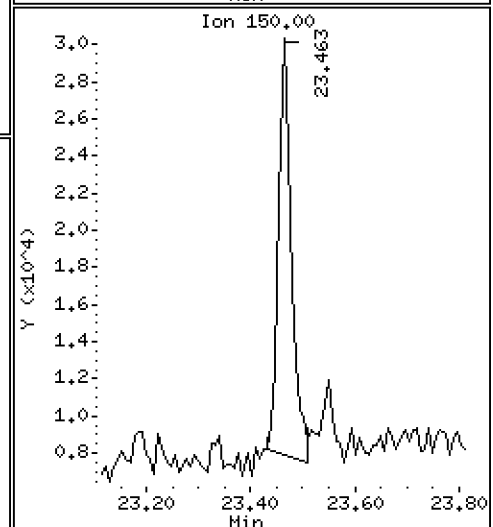
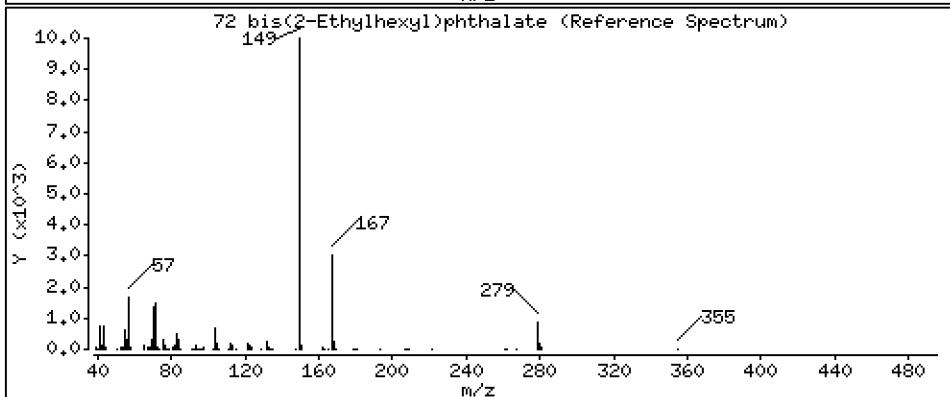
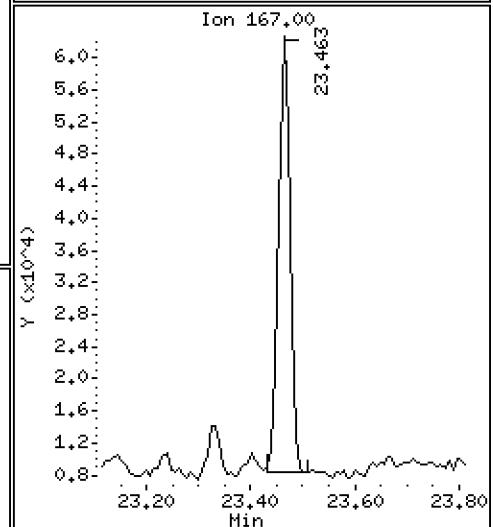
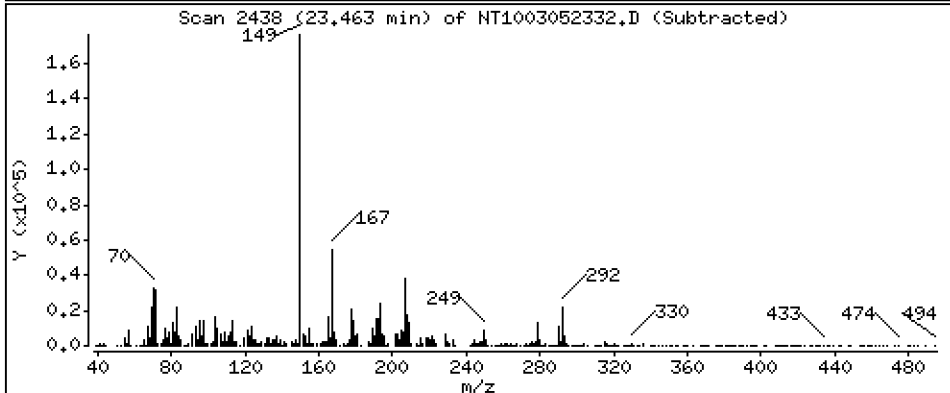
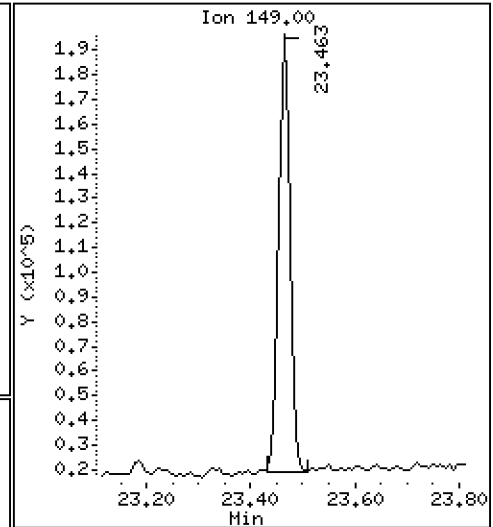
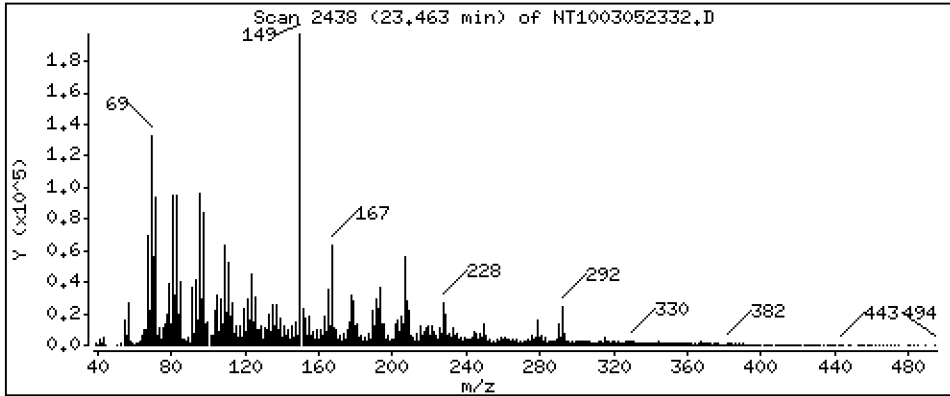
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,525 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

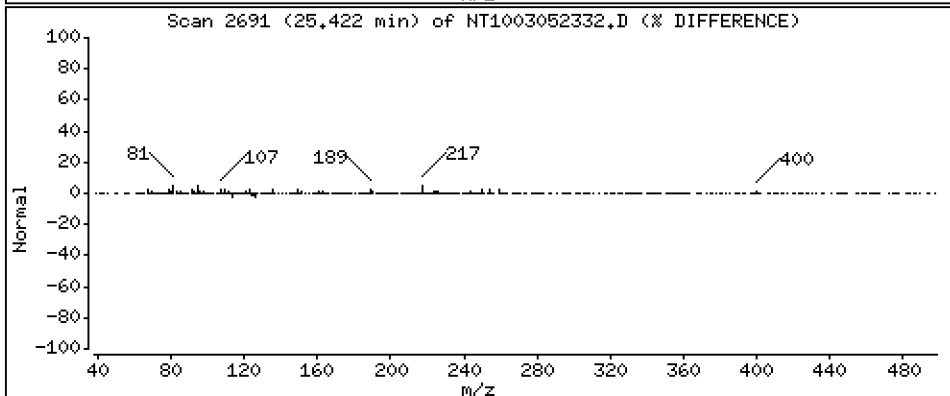
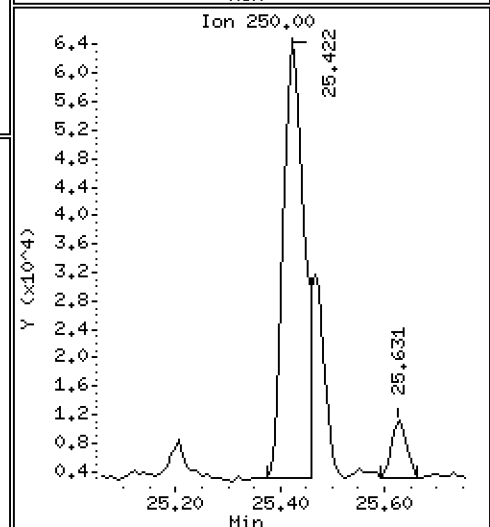
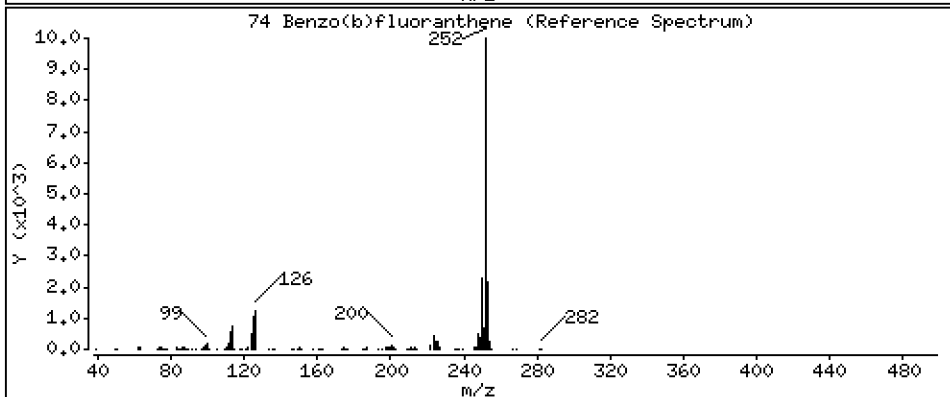
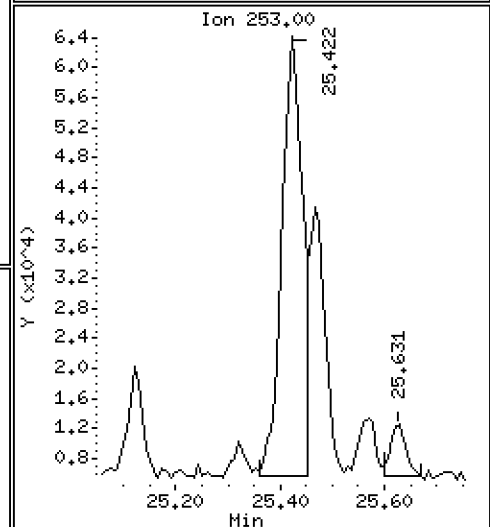
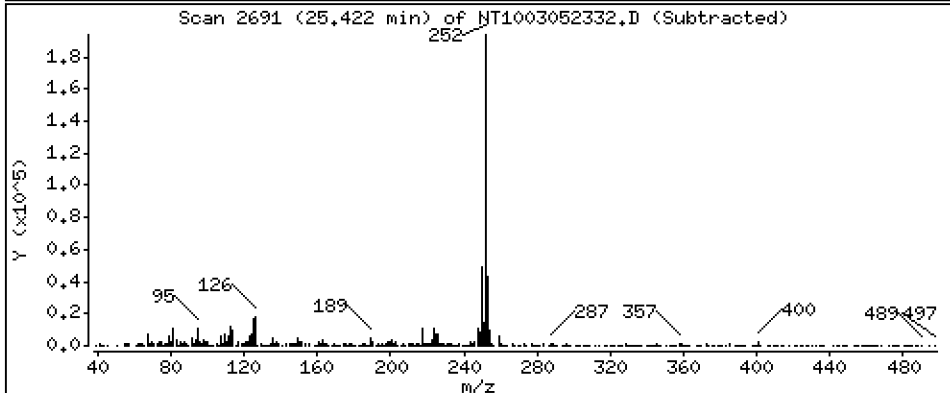
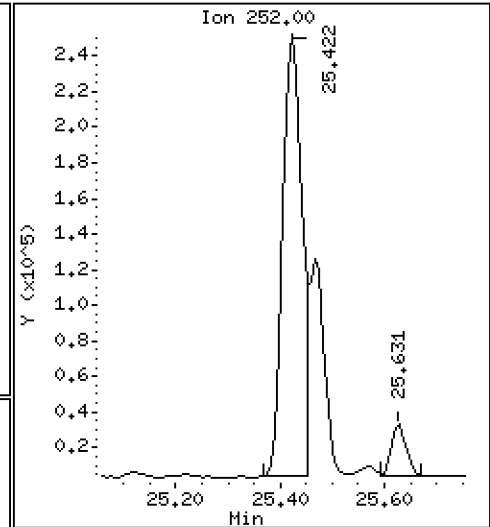
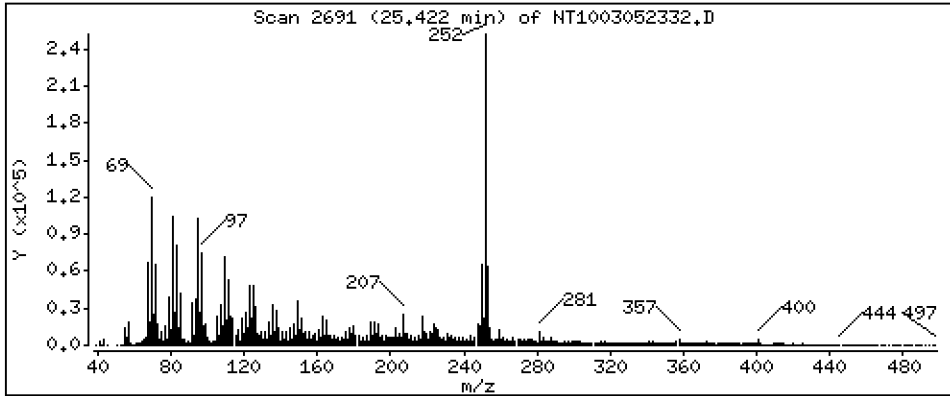
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,436 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

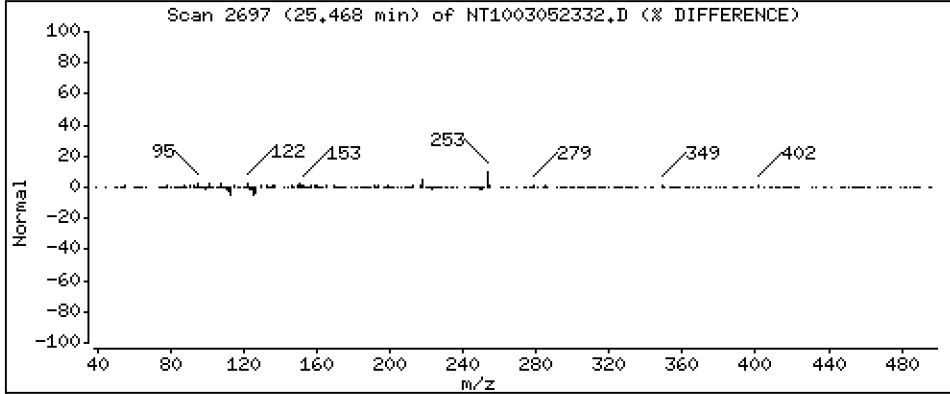
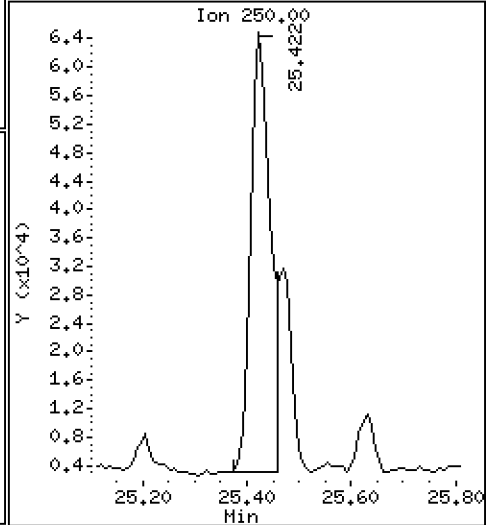
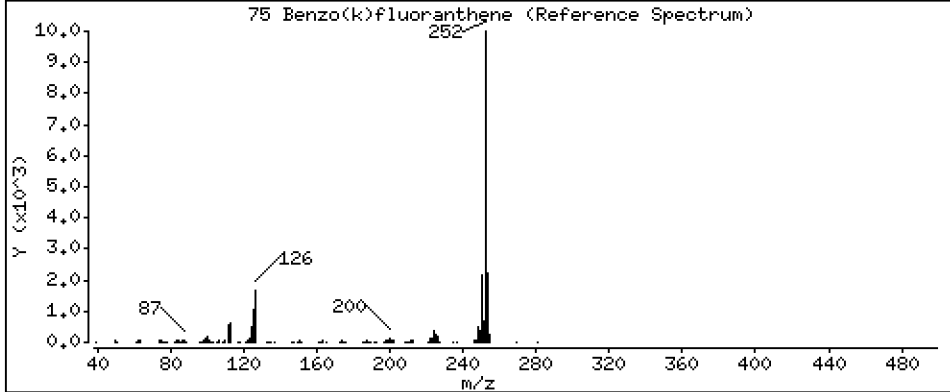
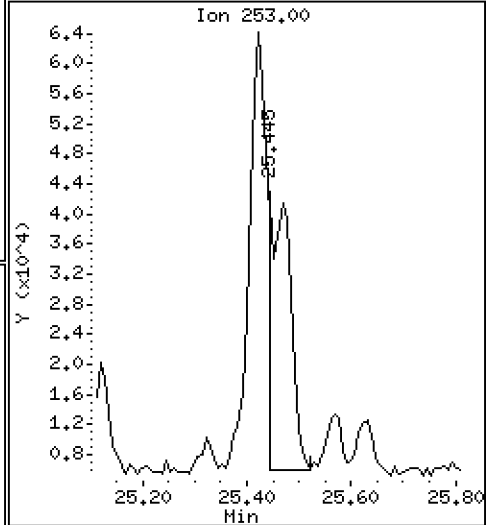
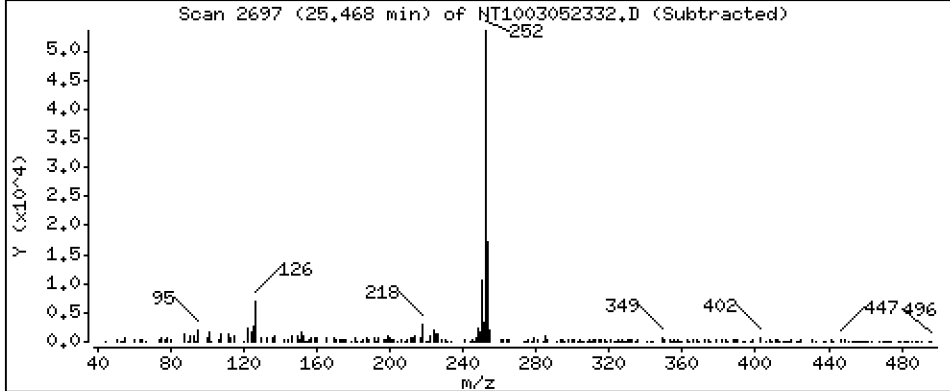
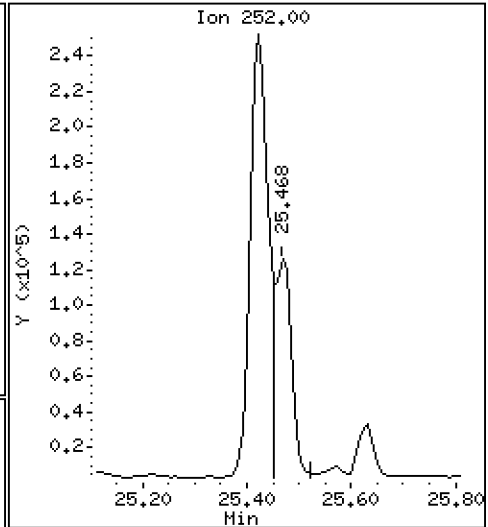
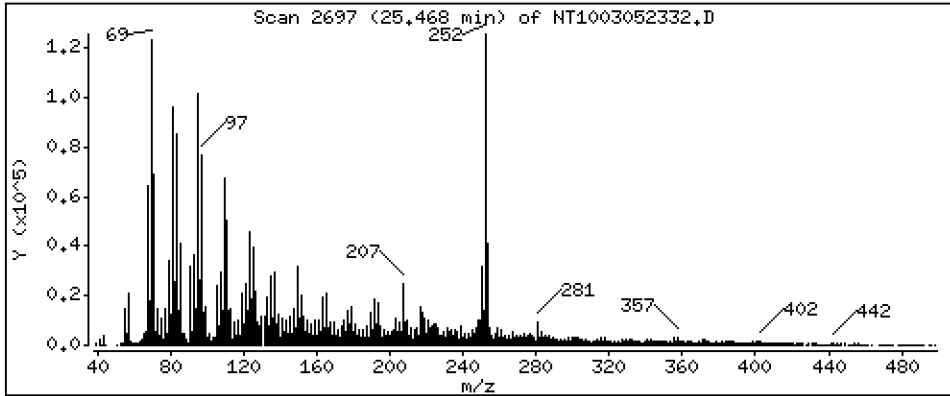
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 1,138 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

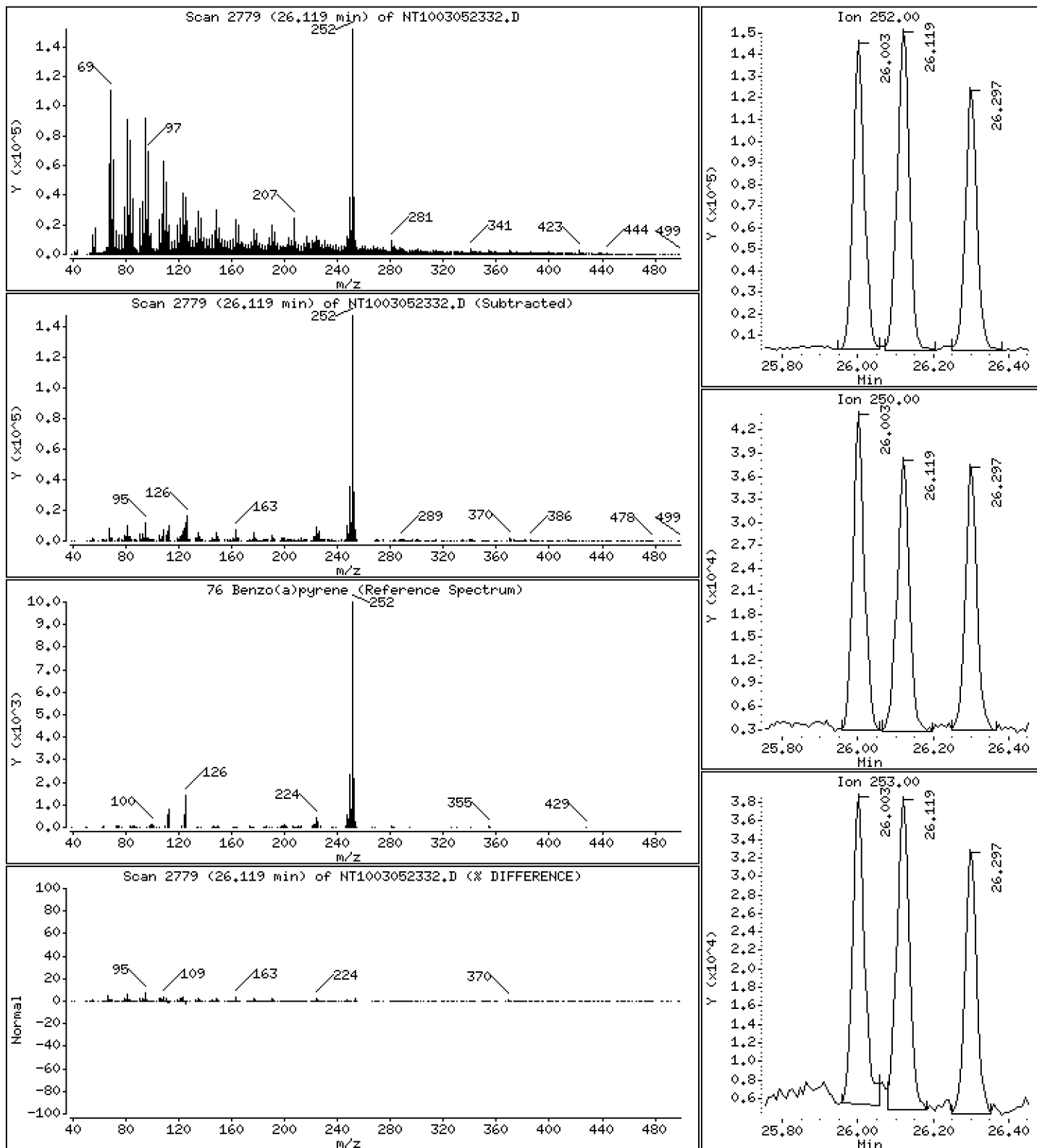
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 1,449 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

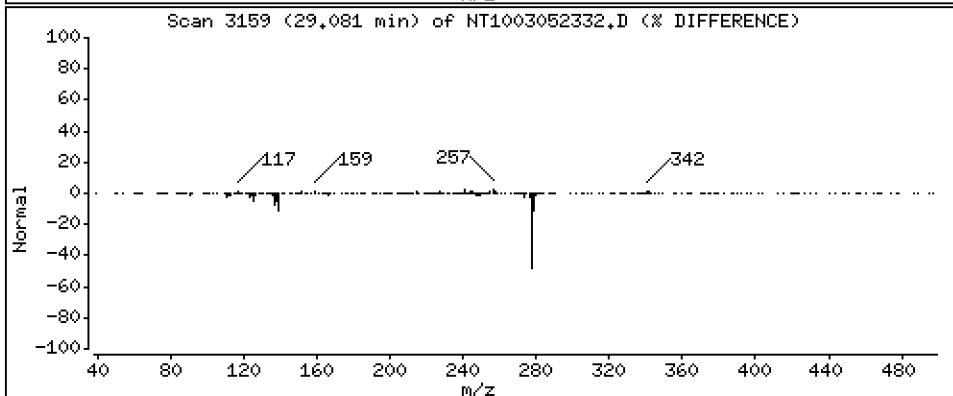
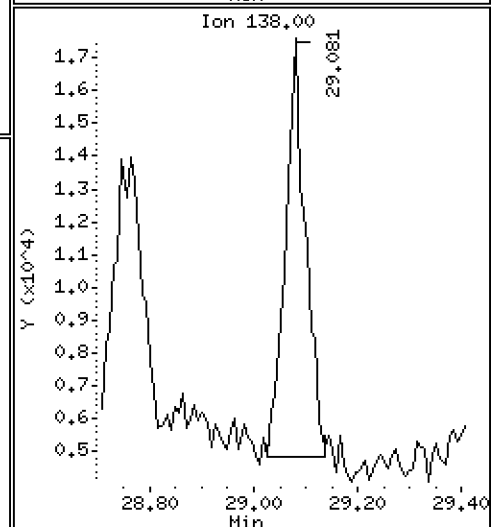
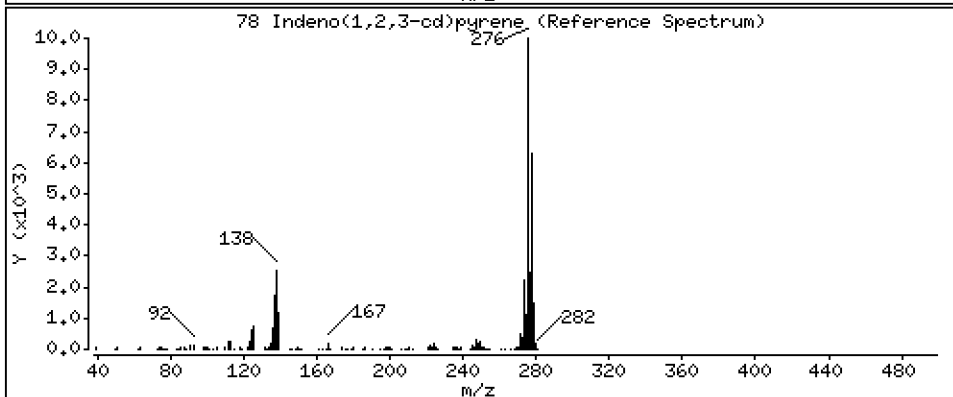
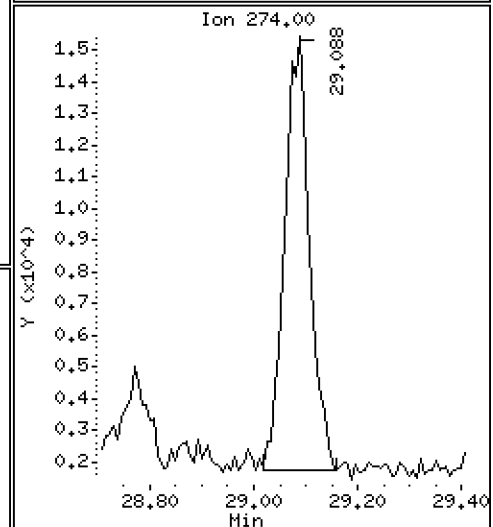
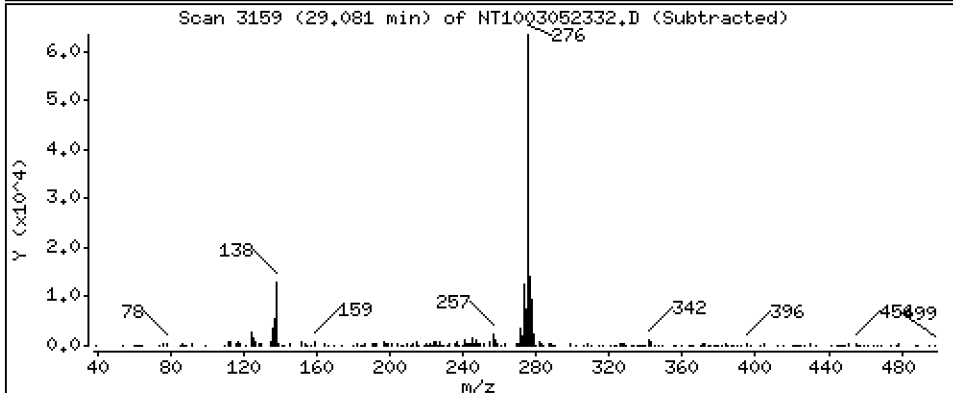
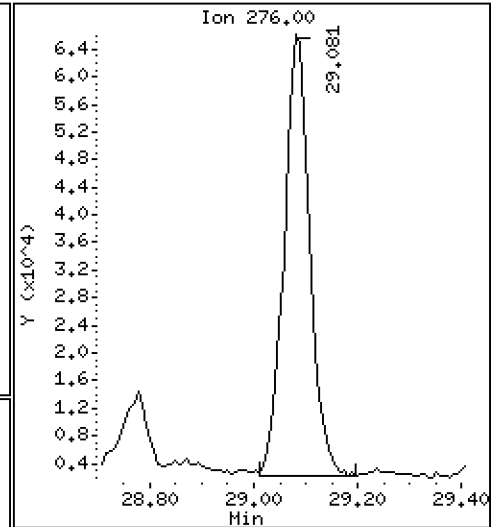
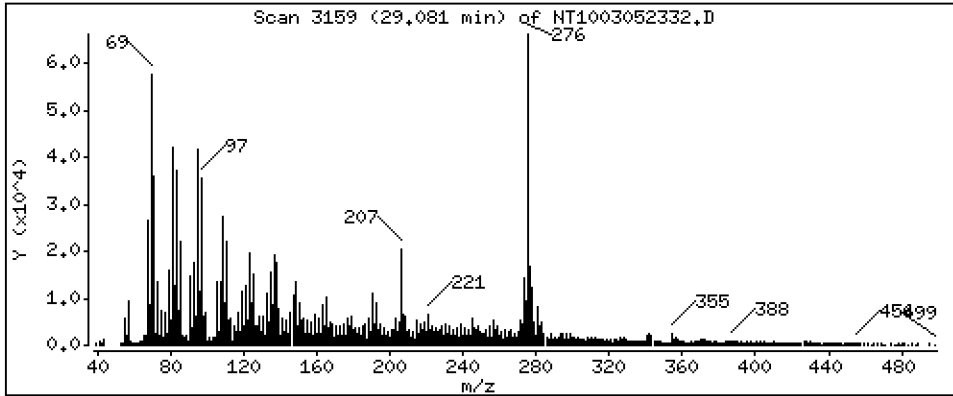
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,8322 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

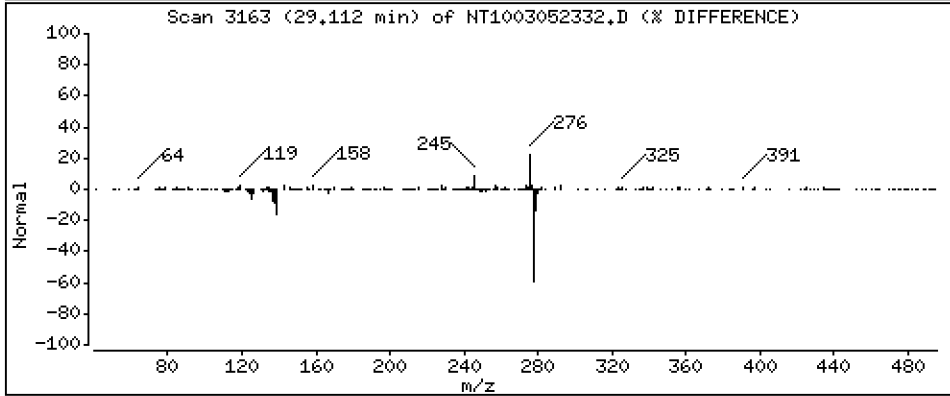
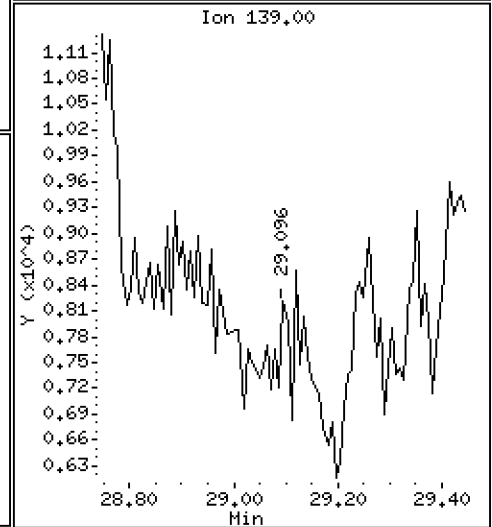
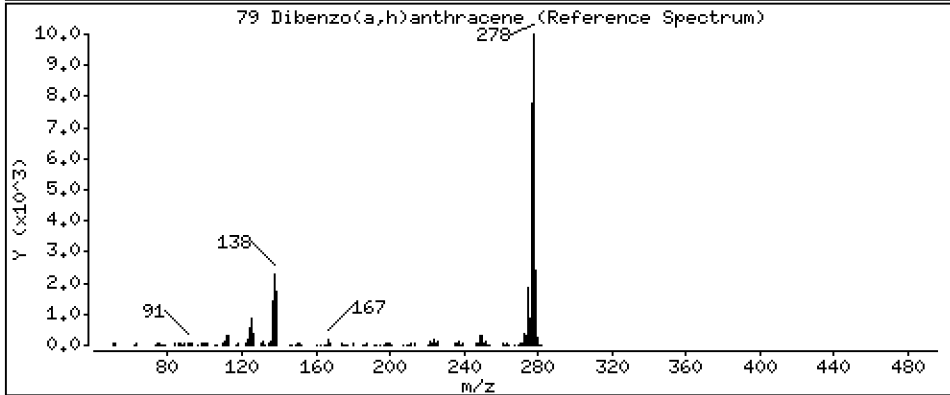
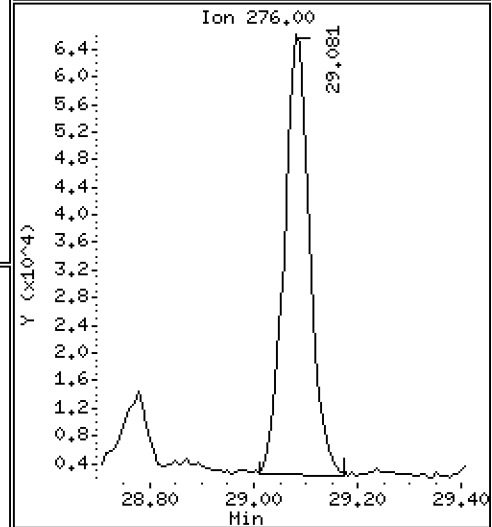
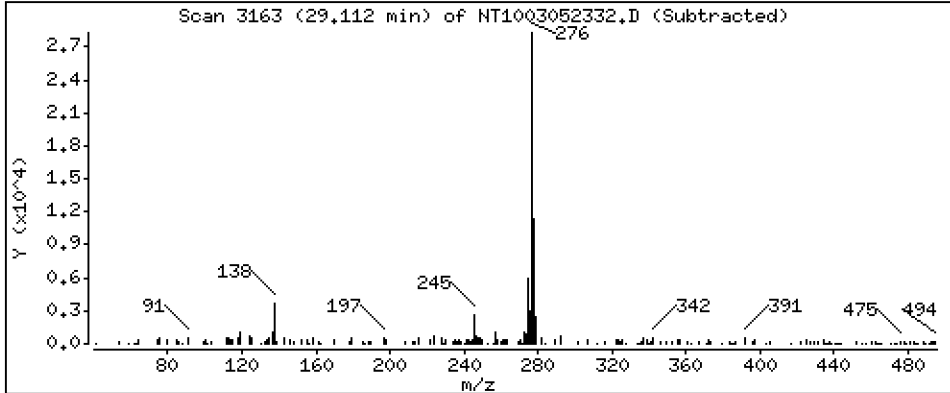
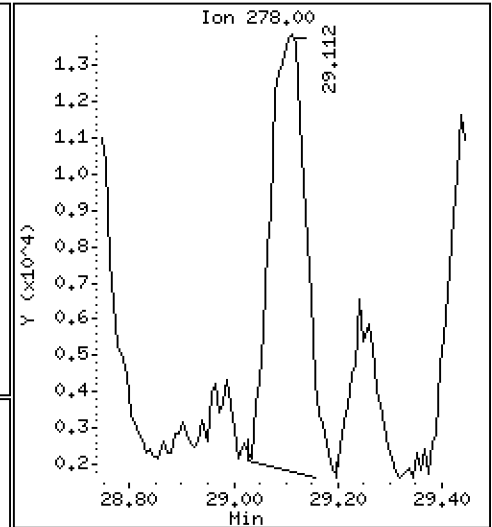
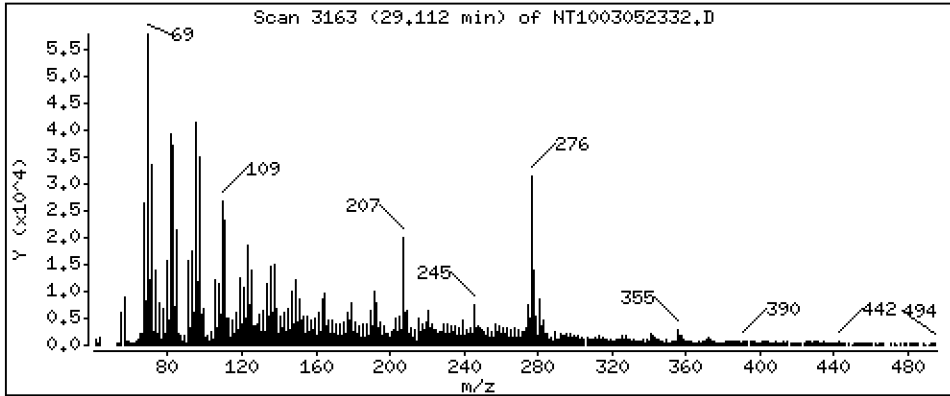
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2904 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

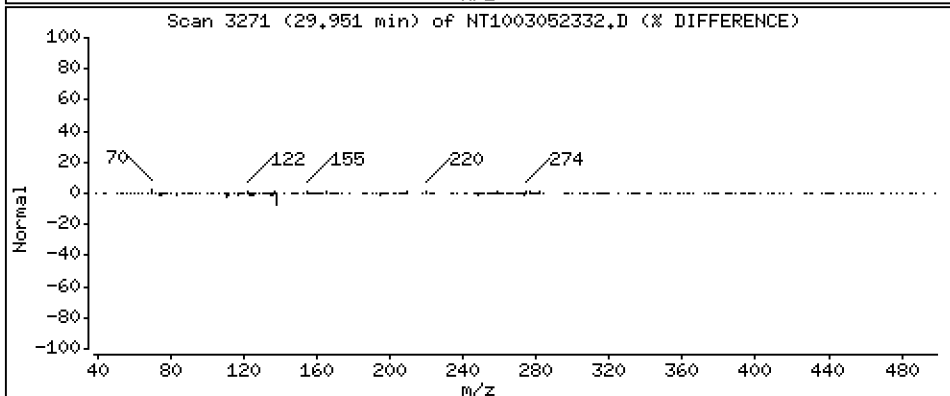
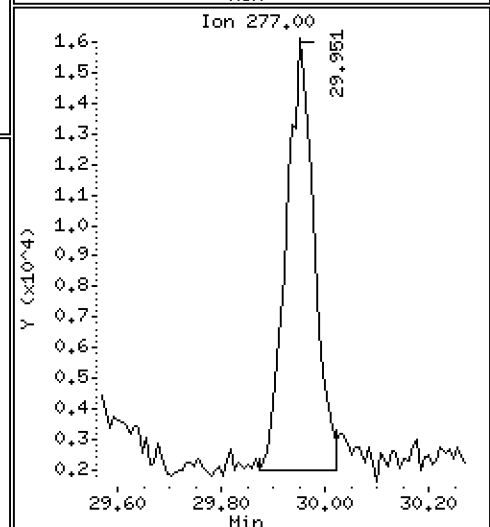
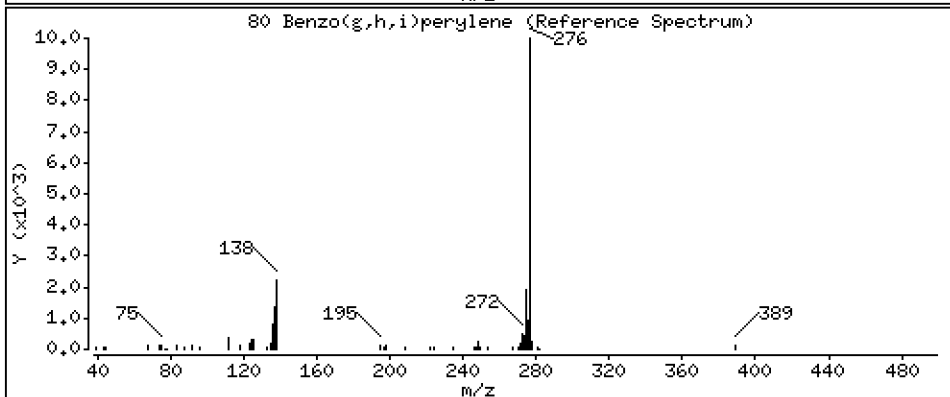
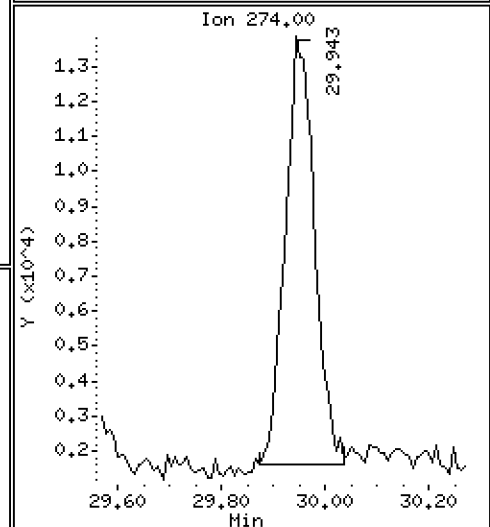
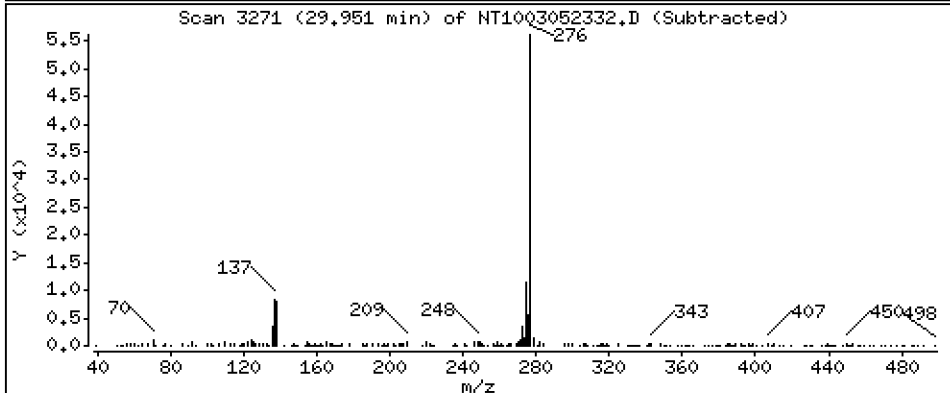
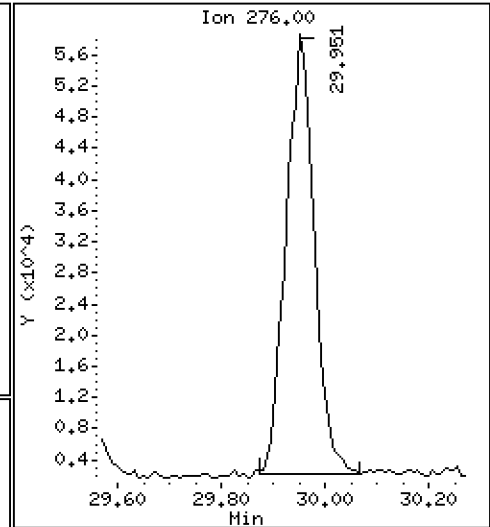
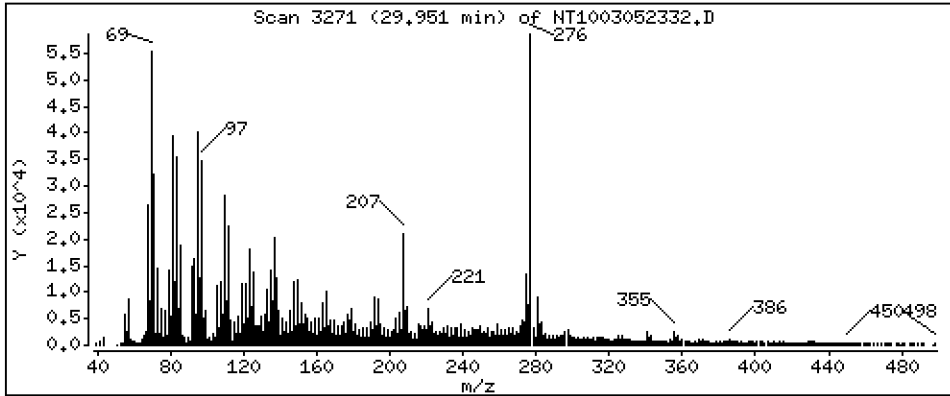
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 1,013 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

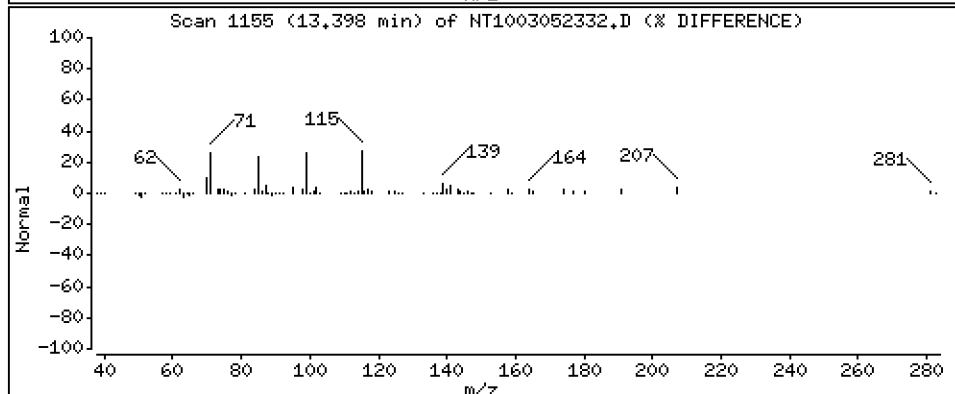
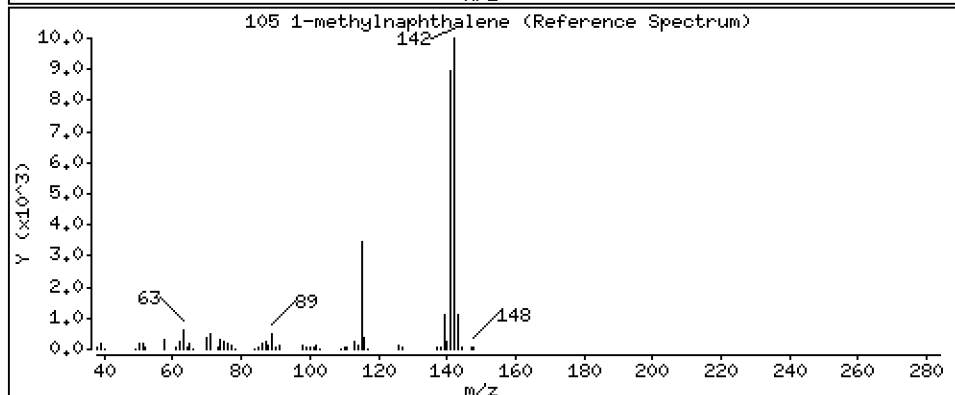
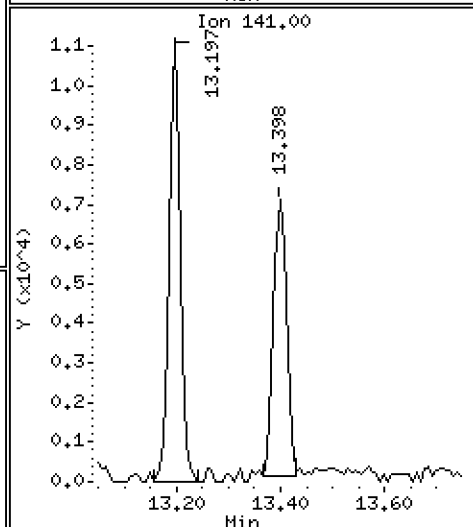
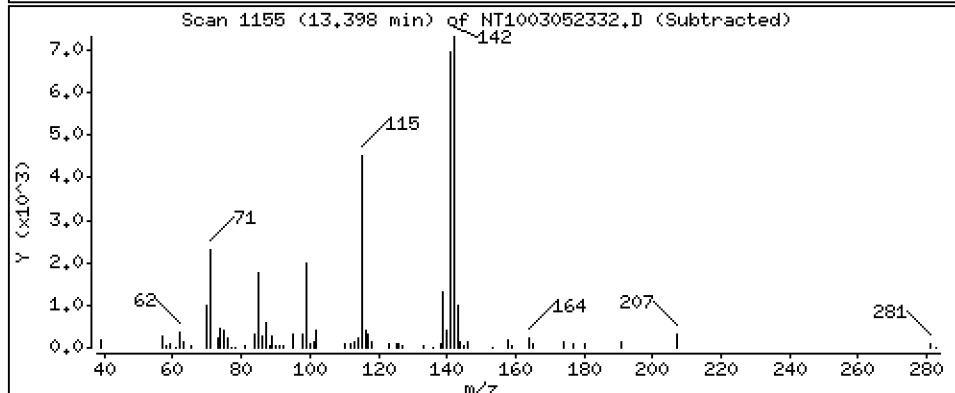
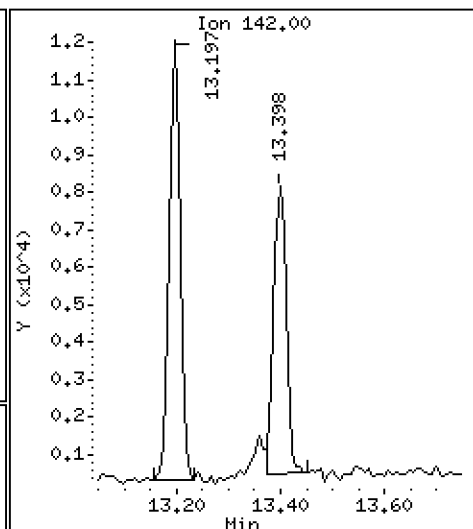
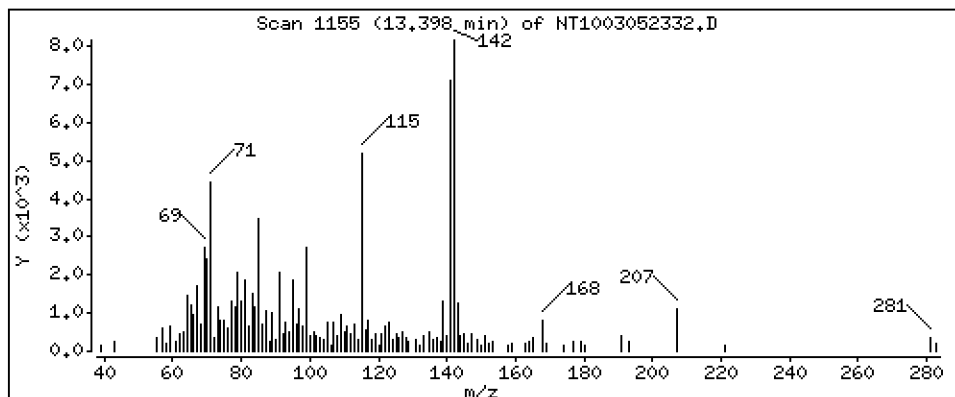
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,1071 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

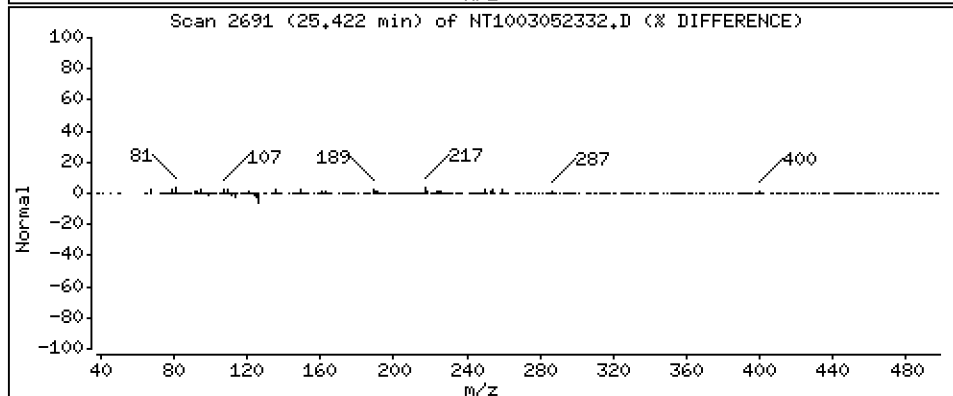
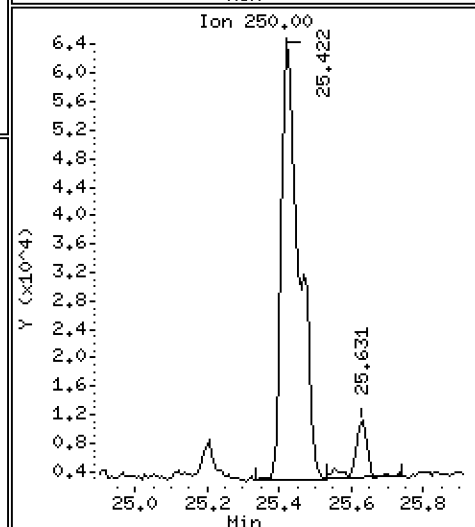
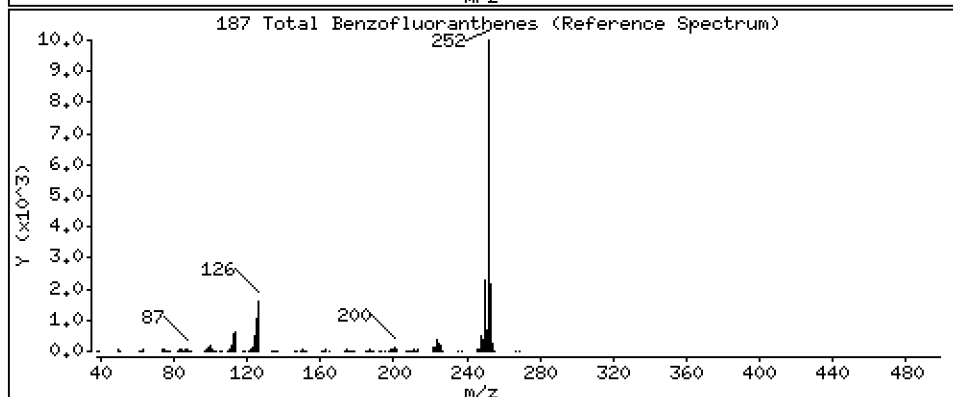
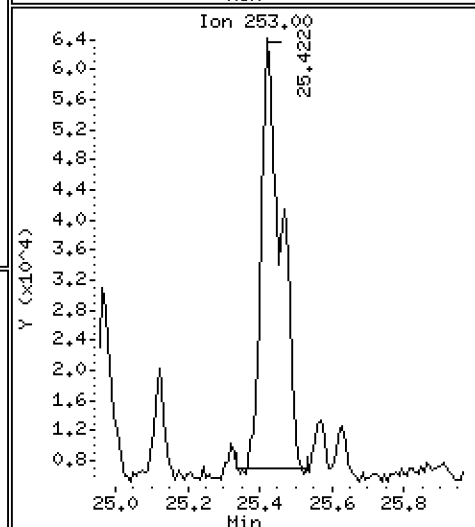
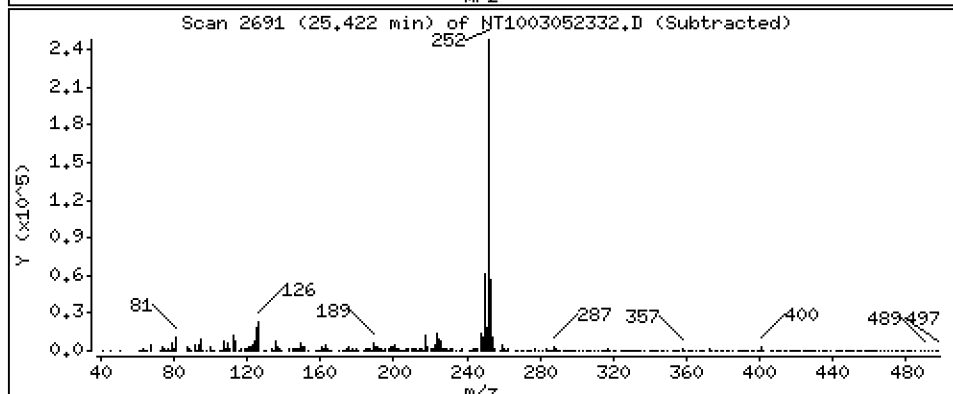
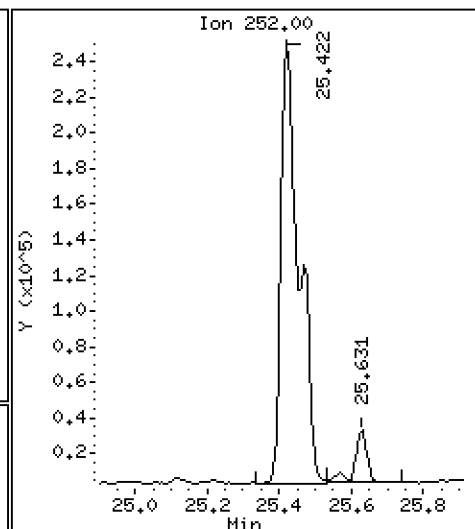
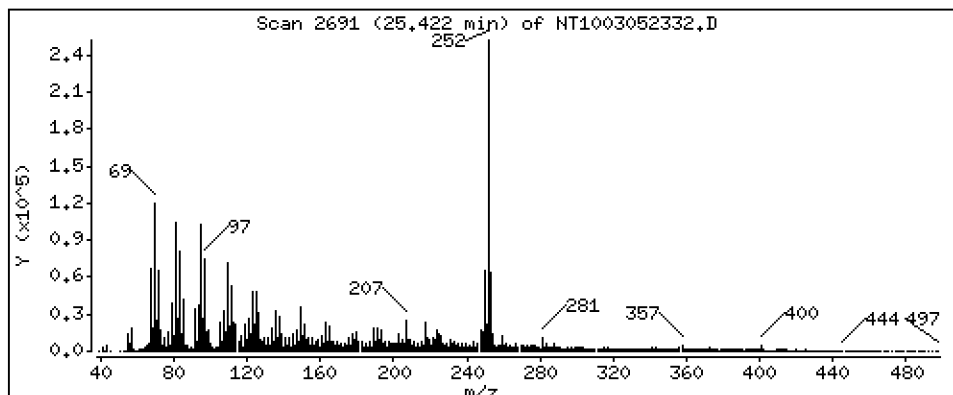
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 3,485 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

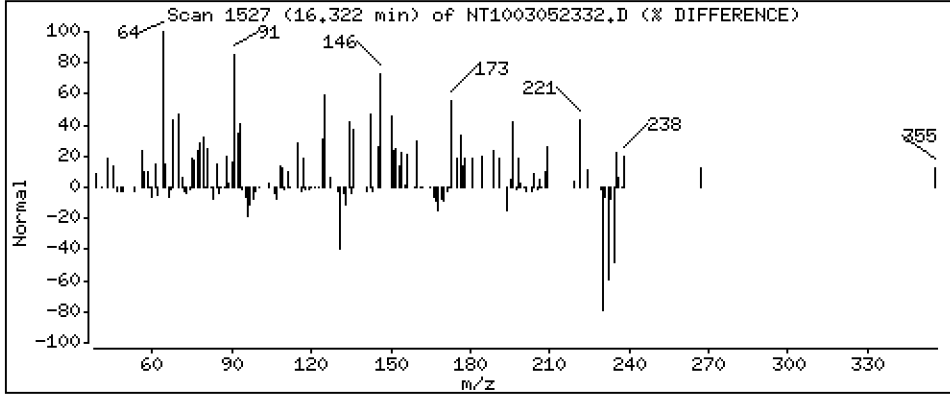
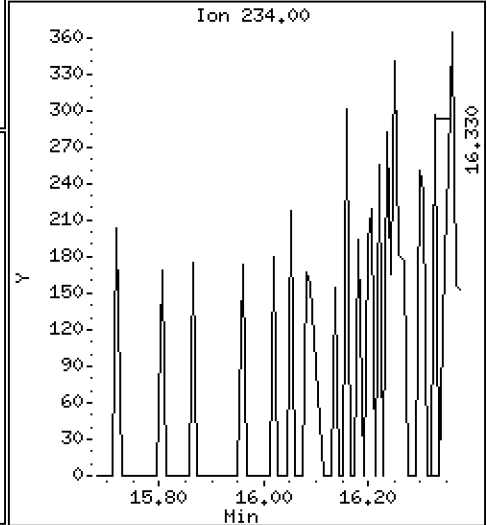
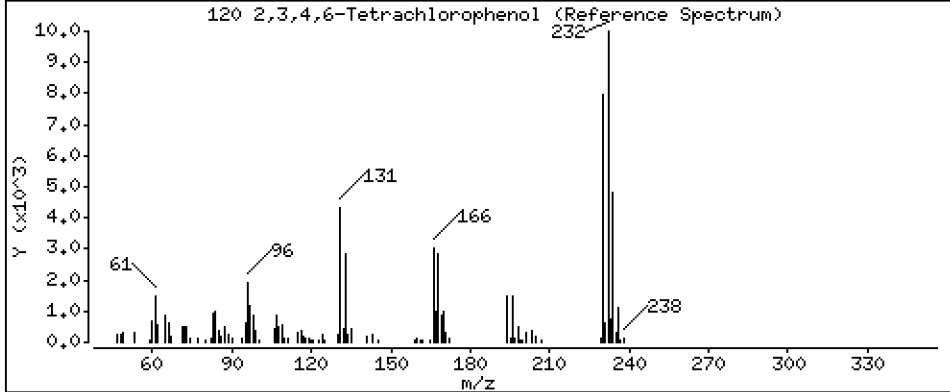
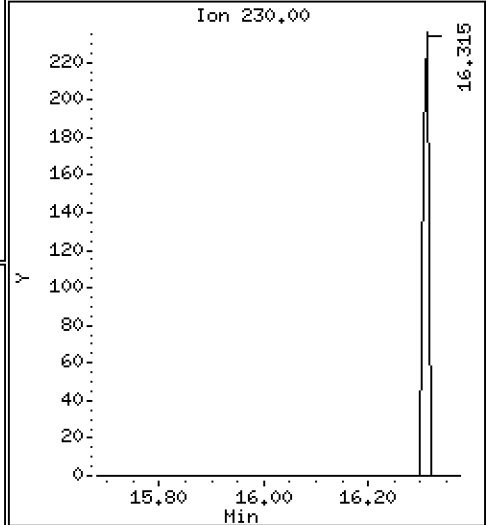
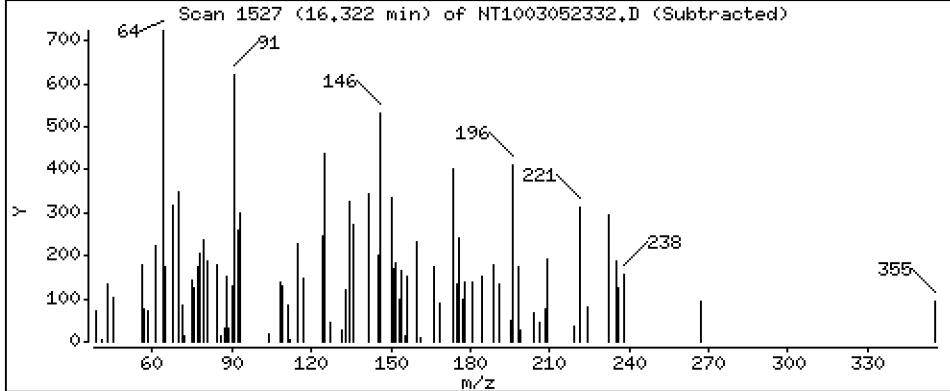
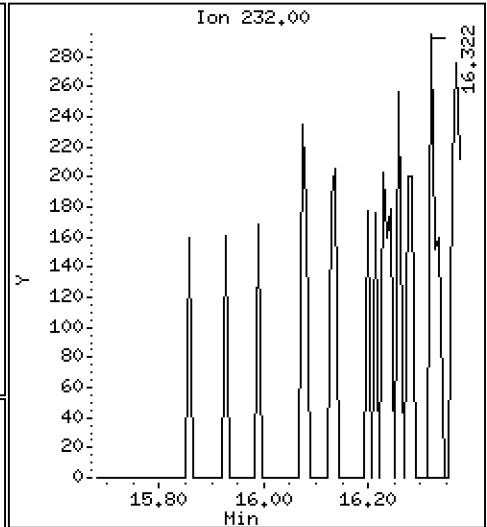
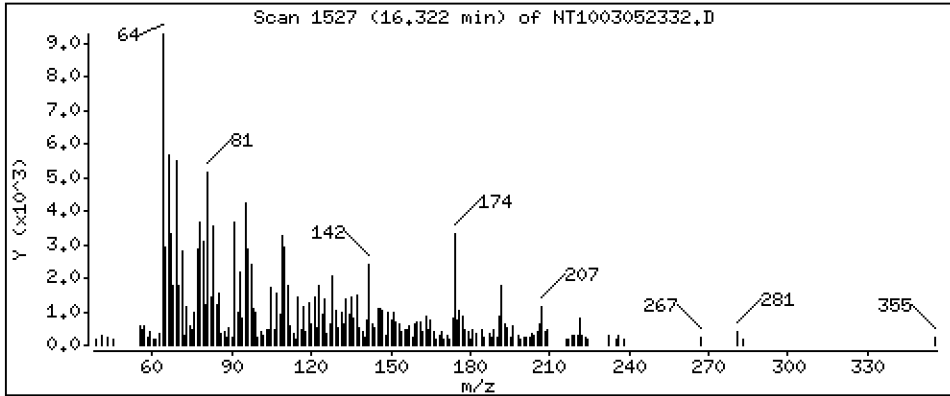
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,008002 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052332.D

Lab Smp Id: 23A0326-10

Inj Date : 06-MAR-2023 08:56

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-10

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m

Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D

Als bottle: 22

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.913	6.905	(0.746)	304497	4.91307	4.913
\$ 2 Phenol-d5	99		8.528	8.527	(0.921)	376275	5.22934	5.229
3 Phenol	94		8.558	8.550	(0.924)	42933	0.56120	0.5612
\$ 5 2-Chlorophenol-d4	132		8.837	8.836	(0.954)	342386	5.57725	5.577
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	196985	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.293	(1.003)	7365	0.10545	0.1054
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.031)	153770	3.35261	3.353
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.751	(1.065)	5917	0.30359	0.3036 (MH)
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.079)	15530	0.20897	0.2090
\$ 18 Nitrobenzene-d5	82		10.318	10.325	(0.878)	305475	3.93838	3.938
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.750	11.757	(1.000)	706589	4.00000	
28 Naphthalene	128		11.796	11.803	(1.004)	68520	0.37782	0.3778
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.196	(1.123)	18210	0.14213	0.1421
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	551704	4.11967	4.120
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.775	14.775	(0.963)	7143	0.05891	0.05891
40 Acenaphthylene	152		15.062	15.061	(0.981)	24080	0.13286	0.1329
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.348	15.347	(1.000)	375459	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.417	15.417	(1.005)	23710	0.21691	0.2169
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.773	15.780	(1.028)	35725	0.22021	0.2202
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.237	16.244	(1.058)	160170	1.24692	1.247
49 Fluorene	166		16.492	16.492	(1.075)	28667	0.21239	0.2124
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.994	16.993	(1.107)	141701	5.89848	5.898
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.455	18.455	(1.000)	688650	4.00000	
60 Phenanthrene	178		18.502	18.502	(1.002)	301780	1.71234	1.712
61 Anthracene	178		18.610	18.610	(1.008)	85660	0.50125	0.5013
62 Carbazole	167		18.951	18.943	(1.027)	36931	0.23589	0.2359
63 Di-n-butylphthalate	149		19.639	19.631	(1.064)	32841	0.15459	0.1546
64 Fluoranthene	202		20.908	20.877	(0.890)	522512	2.28466	2.285
65 Pyrene	202		21.334	21.310	(0.908)	859113	3.68908	3.689
\$ 66 Terphenyl-d14	244		21.597	21.581	(0.919)	666924	3.53931	3.539
67 Butylbenzylphthalate	149		22.472	22.464	(0.956)	14992	0.11954	0.1195
68 Benzo(a)anthracene	228		23.486	23.478	(0.999)	313931	1.33919	1.339
* 69 Chrysene-d12	240		23.502	23.494	(1.000)	664823	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.548	23.540	(1.002)	379677	1.99292	1.993
72 bis(2-Ethylhexyl)phthalate	149		23.463	23.463	(0.956)	251424	1.52531	1.525
* 134 Di-n-octylphthalate-d4	153		24.554	24.554	(1.000)	1165735	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.421	25.406	(0.969)	638290	2.43612	2.436
75 Benzo(k)fluoranthene	252		25.468	25.460	(0.970)	283076	1.13803	1.138 (M)
76 Benzo(a)pyrene	252		26.118	26.103	(0.995)	335578	1.44869	1.449
* 77 Perylene-d12	264		26.242	26.227	(1.000)	749703	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.080	29.057	(1.108)	223928	0.83217	0.8322
79 Dibenzo(a,h)anthracene	278		29.111	29.095	(1.109)	58927	0.29037	0.2904 (M)
80 Benzo(g,h,i)perylene	276		29.950	29.919	(1.141)	217310	1.01313	1.013
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93					Compound Not Detected.		
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.397	13.397	(1.140)	12425	0.10715	0.1071
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.421	25.406	(0.969)	870665	3.48499	3.485
120 2,3,4,6-Tetrachlorophenol	232		16.322	16.028	(1.063)	281	0.00800	0.00802

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052332.D Calibration Time: 04:32
 Lab Smp Id: 23A0326-10
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	196985	-7.87
27 Naphthalene-d8	756023	378012	1512046	706589	-6.54
42 Acenaphthene-d10	411497	205749	822994	375459	-8.76
59 Phenanthrene-d10	744396	372198	1488792	688650	-7.49
69 Chrysene-d12	823005	411503	1646010	664823	-19.22
134 Di-n-octylphthala	1350476	675238	2700952	1165735	-13.68
77 Perylene-d12	894064	447032	1788128	749703	-16.15

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.50	0.03
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	0.00
77 Perylene-d12	26.23	25.73	26.73	26.24	0.06

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

REVIEW SUMMARY FOR FILE - NT1003052332.D

Lab ID: 23A0326-10

nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 08:56

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.065	1.053	0.0117	2,2'-oxybis(1-Chloropropane)
1.063	1.044	0.0192	2,3,4,6-Tetrachlorophenol

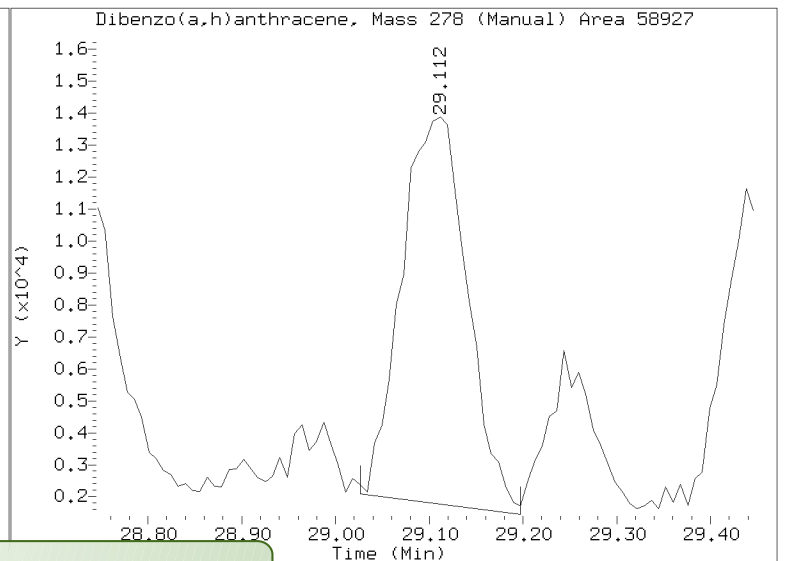
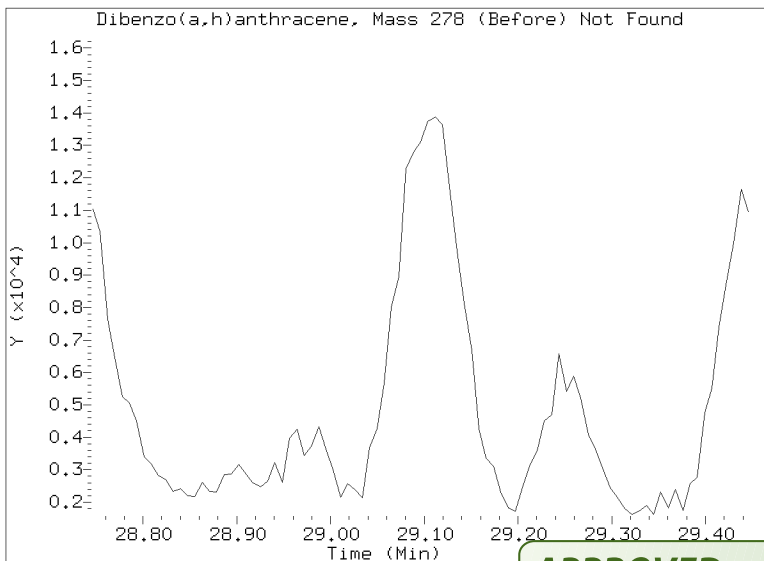
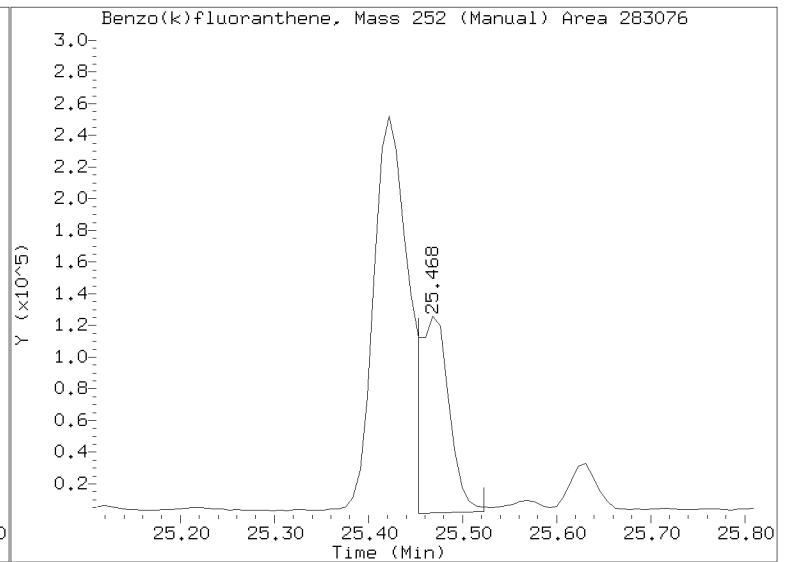
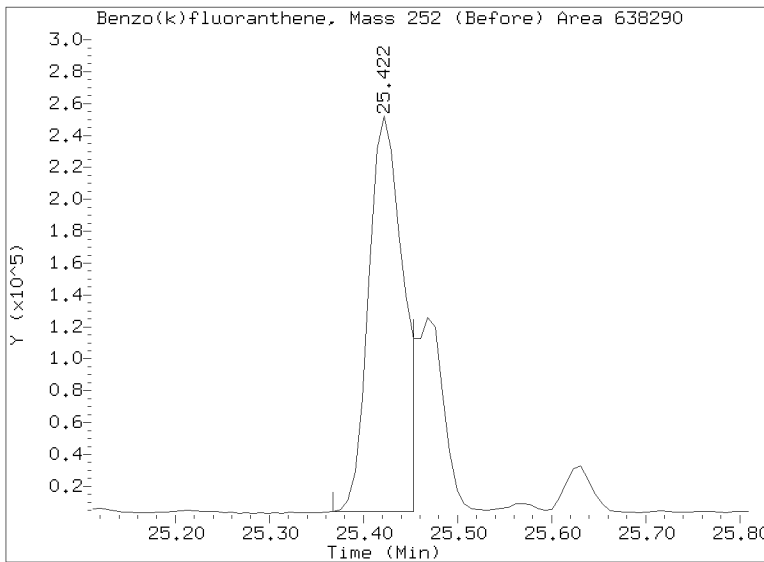
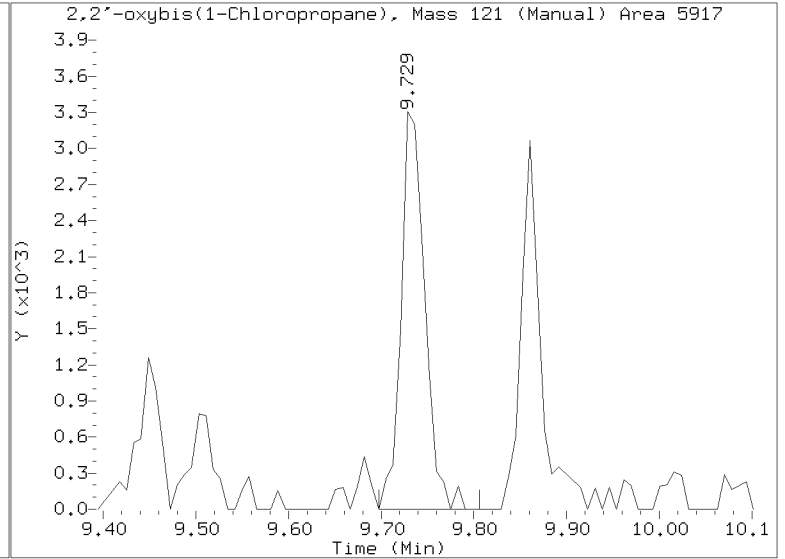
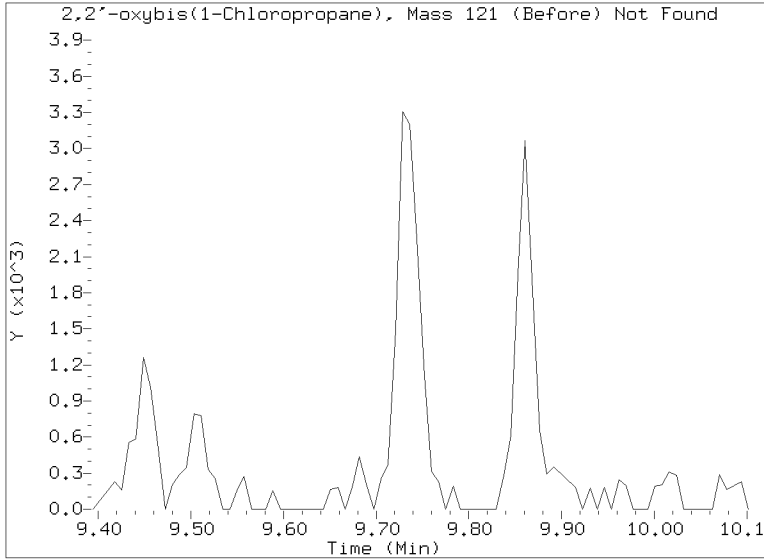
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052332.D
Injection Date: 06-MAR-2023 08:56
Lab ID:23A0326-10 Client ID:
Report Date: 03/27/2023 16:55



APPROVED
By Deenay Dunmore at 5:19 pm, Mar 27, 2023



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-11 A

SDG: 23A0326

Sampled: 01/17/23 14:06

Prepared: 02/02/23 13:06

File ID: NT1003052333.D

% Solids: 52.57

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 09:34

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 19.8 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	123		4.2	19.2
106-44-5	4-Methylphenol	1	21.8		7.1	19.2
91-20-3	Naphthalene	1	11.6	J	4.1	19.2
91-57-6	2-Methylnaphthalene	1	11.7	J	4.3	19.2
208-96-8	Acenaphthylene	1	10.6	J	6.0	19.2
131-11-3	Dimethylphthalate	1	4.4	J	4.2	19.2
83-32-9	Acenaphthene	1	11.0	J	5.0	19.2
132-64-9	Dibenzofuran	1	19.2	U	13.6	19.2
86-73-7	Fluorene	1	19.2	U	14.0	19.2
85-01-8	Phenanthrene	1	77.3		8.4	19.2
120-12-7	Anthracene	1	32.9		6.9	19.2
206-44-0	Fluoranthene	1	131		5.9	19.2
129-00-0	Pyrene	1	479		5.5	19.2
85-68-7	Butylbenzylphthalate	1	11.1	J	9.0	19.2
56-55-3	Benzo(a)anthracene	1	86.3		5.7	19.2
218-01-9	Chrysene	1	140		5.8	19.2
117-81-7	bis(2-Ethylhexyl)phthalate	1	144		5.2	48.0
	Benzo(a)fluoranthene, Total	1	259		9.6	38.4
50-32-8	Benzo(a)pyrene	1	94.4		4.1	19.2
193-39-5	Indeno(1,2,3-cd)pyrene	1	56.1		14.1	19.2
53-70-3	Dibenzo(a,h)anthracene	1	19.3		16.6	19.2
191-24-2	Benzo(g,h,i)perylene	1	69.5		13.1	19.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	720.54	516	71.6	27 - 120	
Phenol-d5	720.54	567	78.7	29 - 120	
2-Chlorophenol-d4	720.54	599	83.2	31 - 120	
1,2-Dichlorobenzene-d4	480.36	354	73.7	32 - 120	
Nitrobenzene-d5	480.36	423	88.1	30 - 120	
2-Fluorobiphenyl	480.36	422	87.8	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-11 A

SDG: 23A0326

Sampled: 01/17/23 14:06

Prepared: 02/02/23 13:06

File ID: NT1003052333.D

% Solids: 52.57

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 09:34

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 19.8 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	720.54	630	87.5	24 - 134	
p-Terphenyl-d14	480.36	375	78.1	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052333.D

Date: 06-HRR-2023 09:34

Client ID:

Sample Info: 23A0326-11

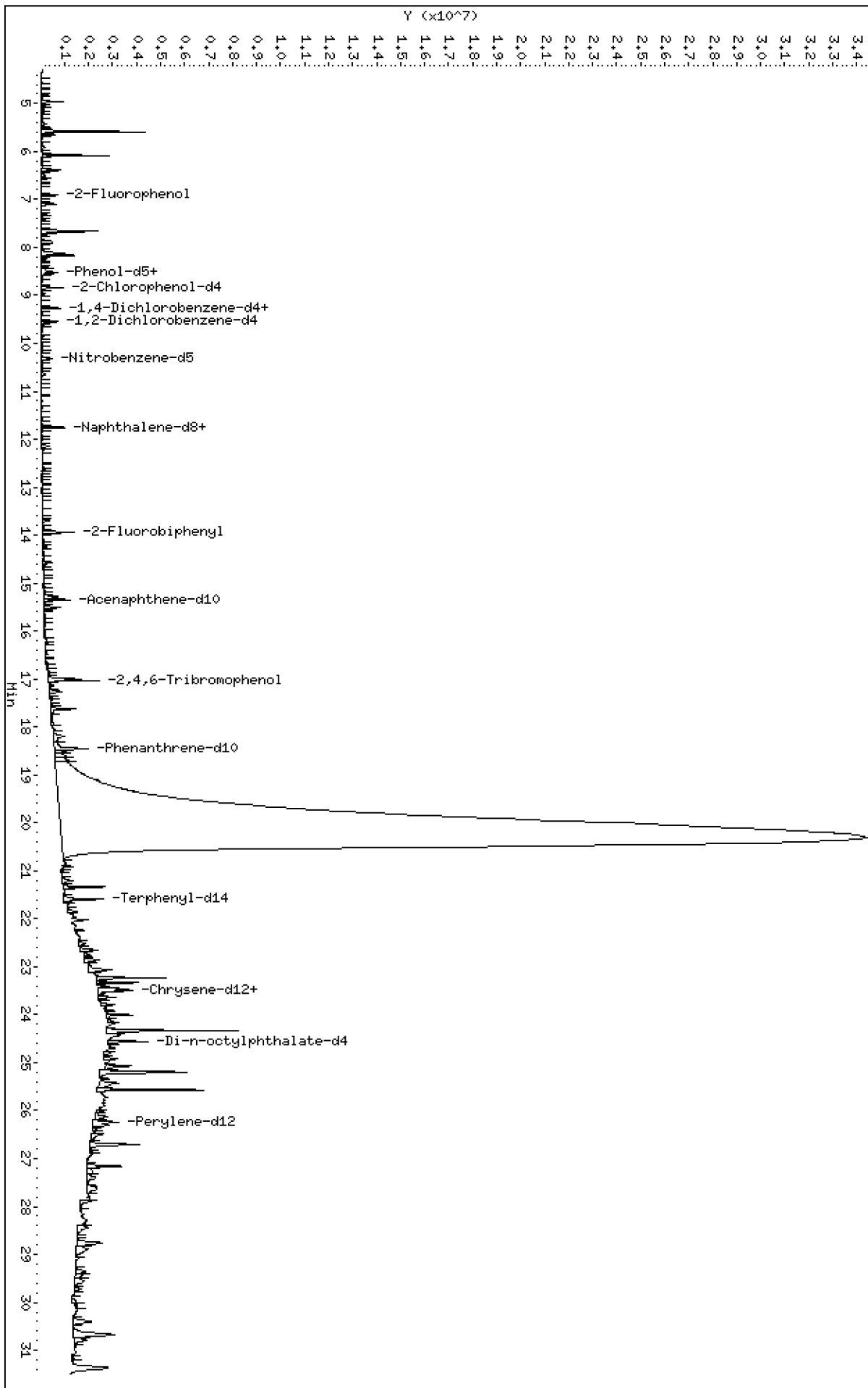
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\NT1003052333.D



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

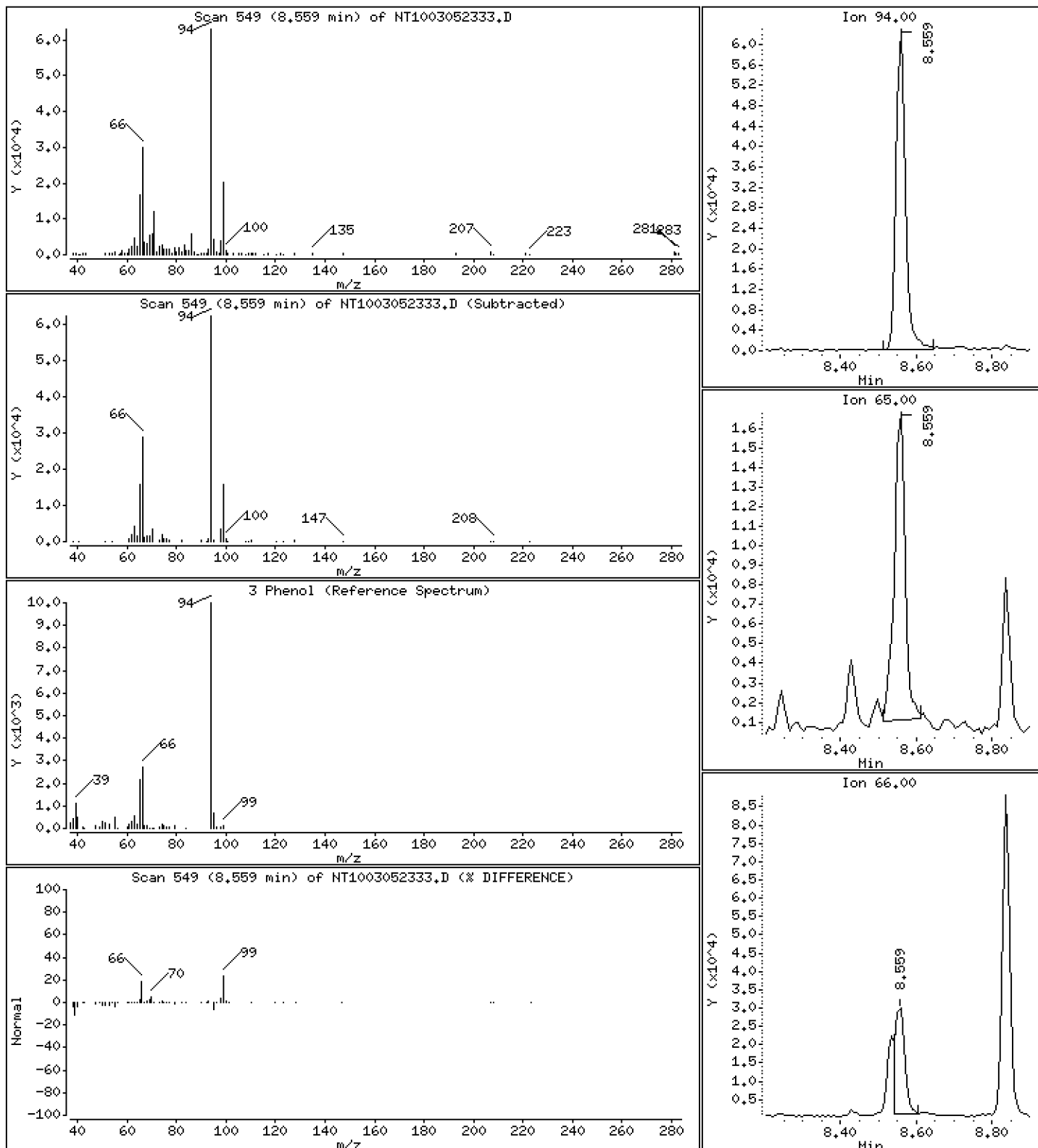
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 1.284 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

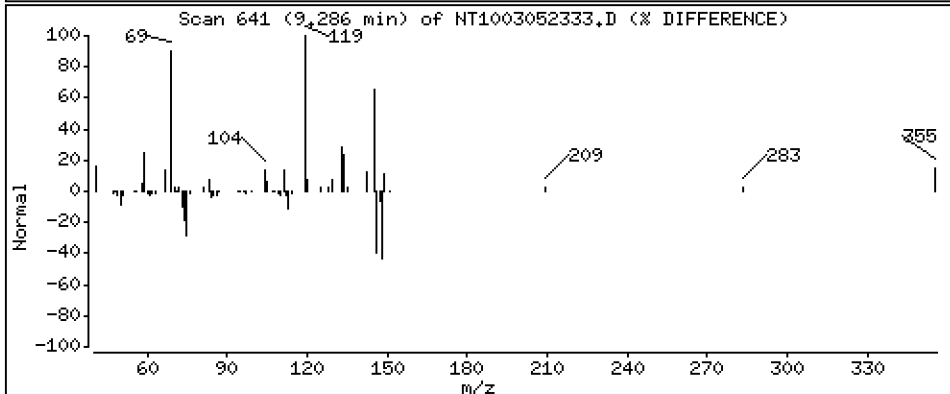
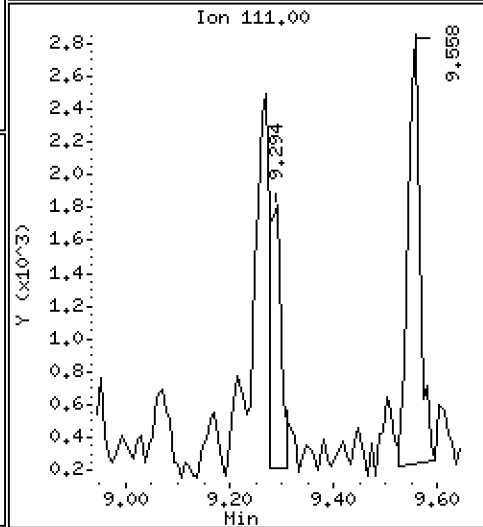
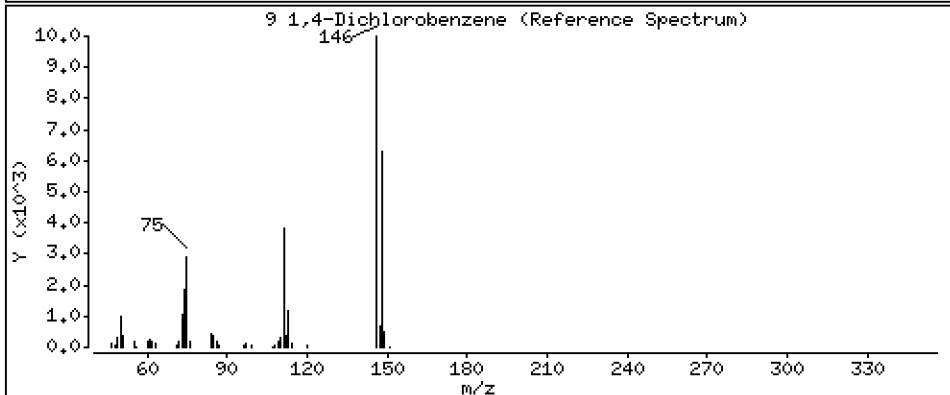
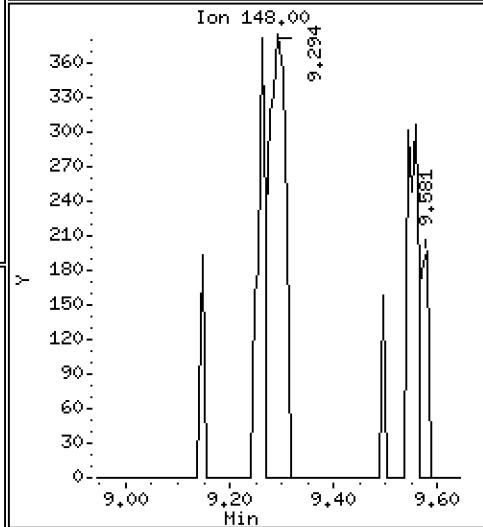
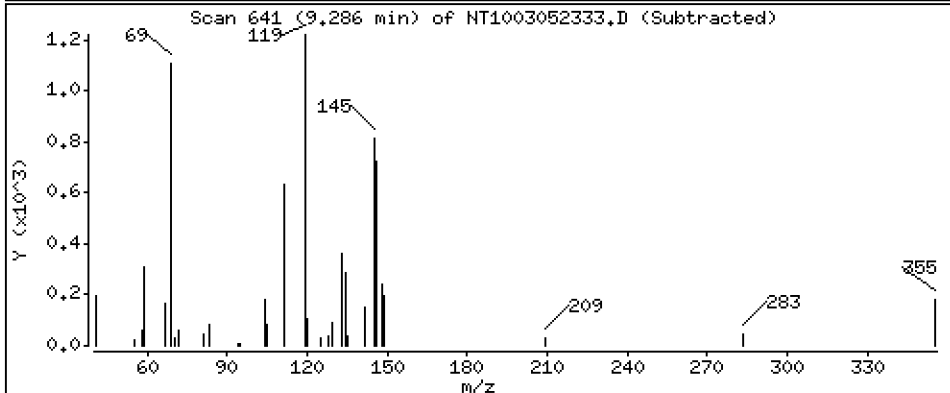
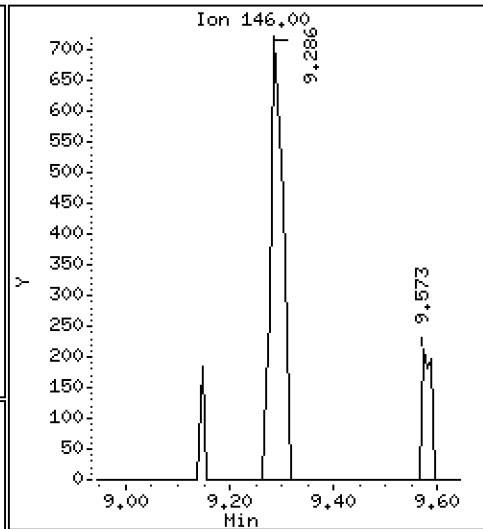
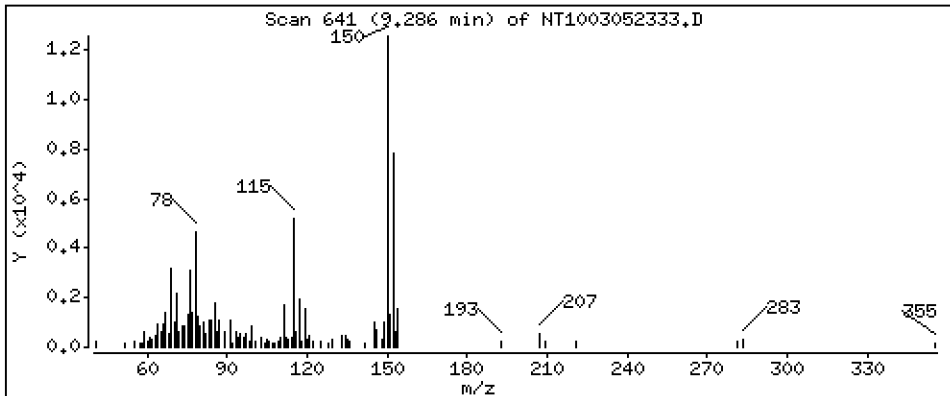
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.01580 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

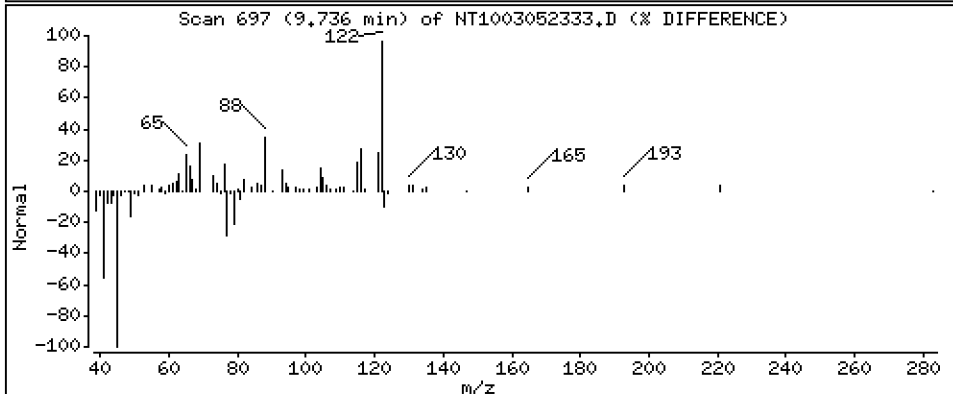
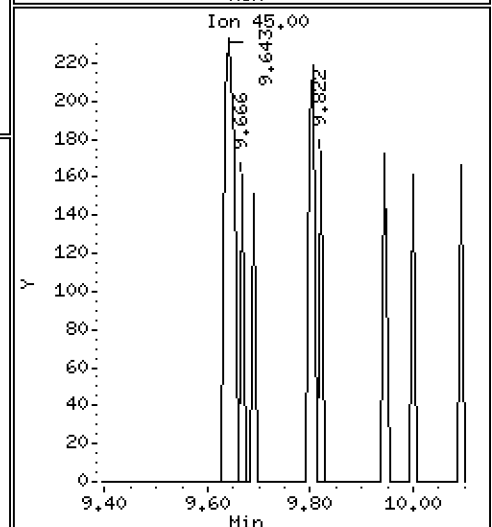
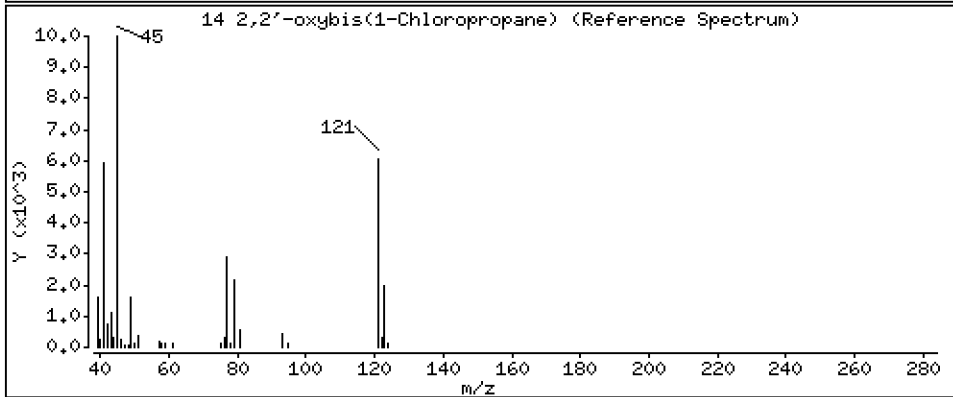
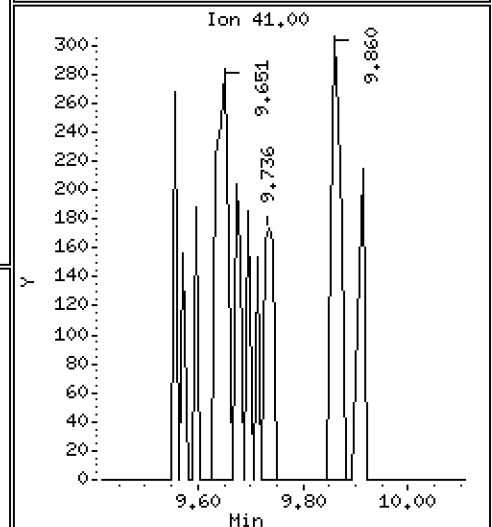
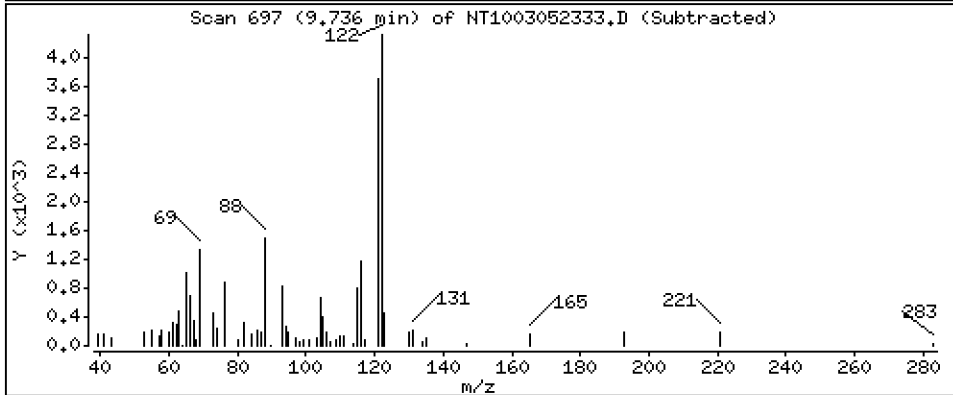
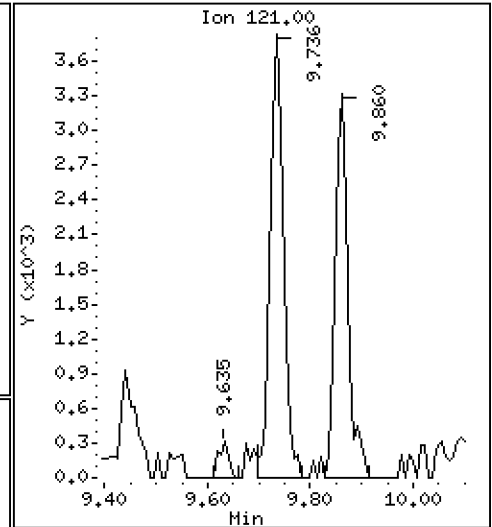
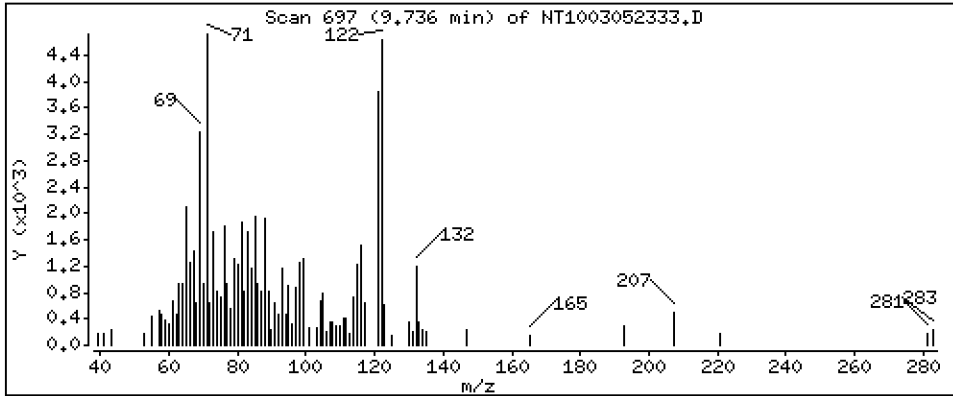
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,3366 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

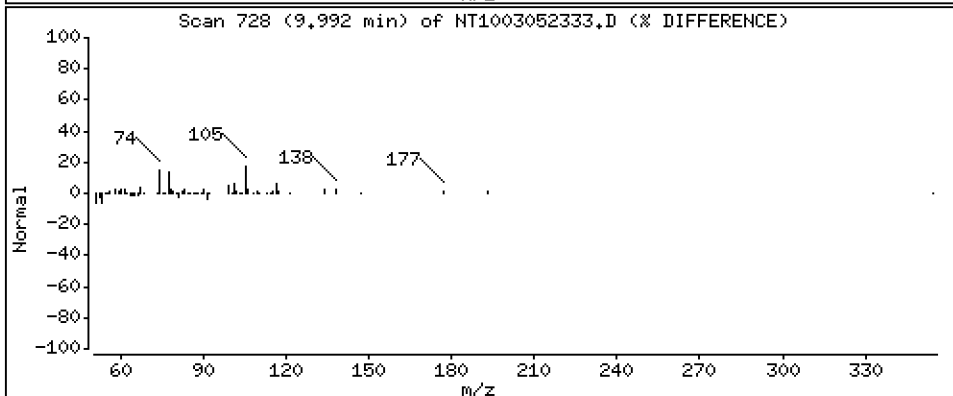
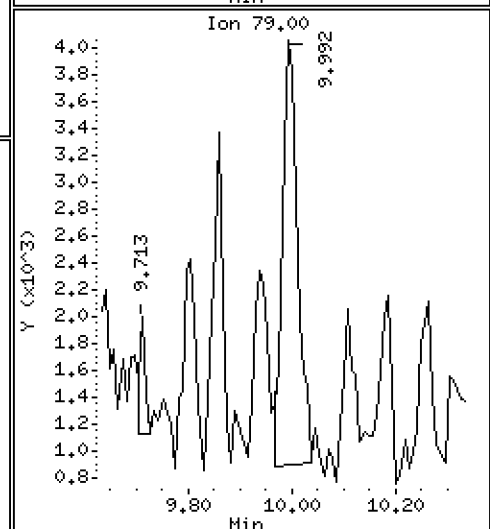
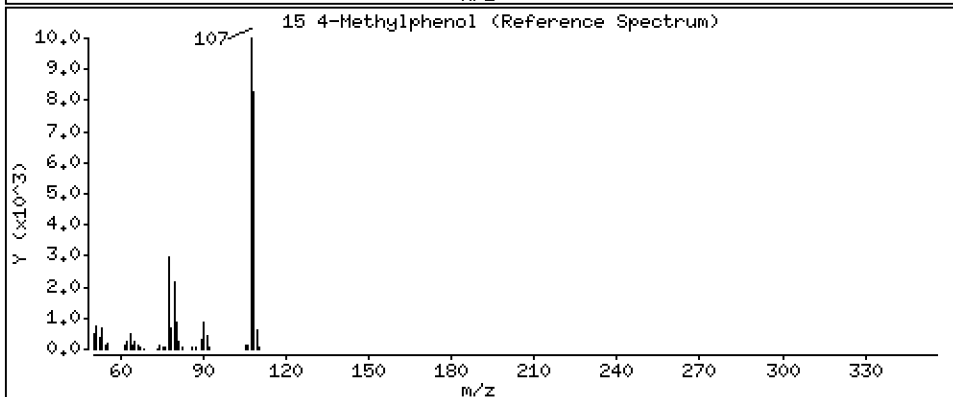
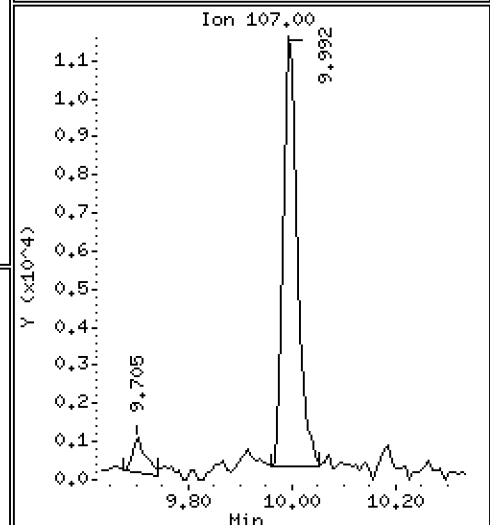
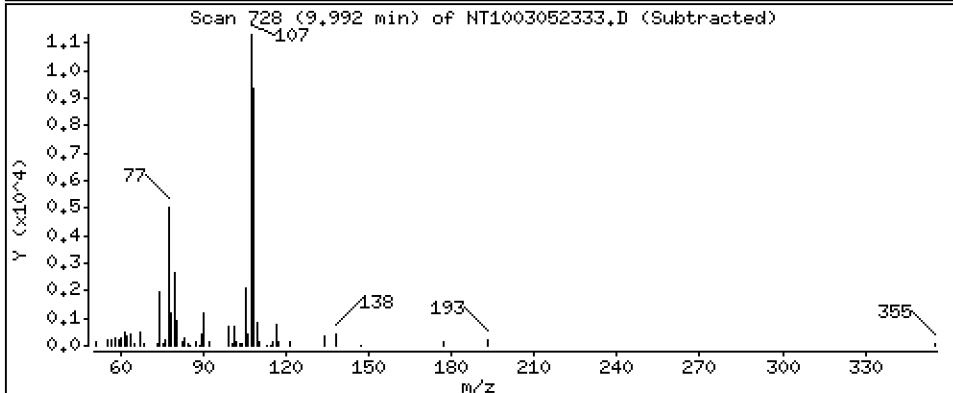
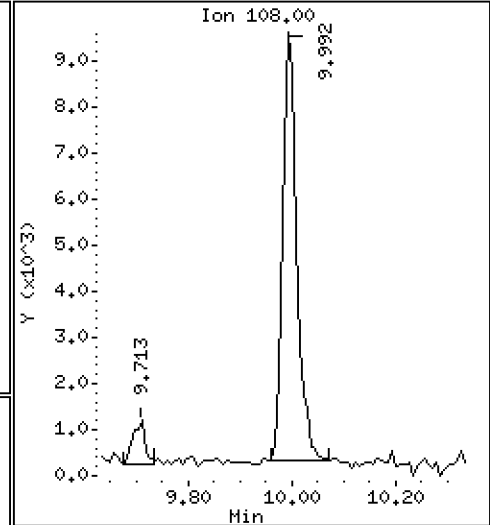
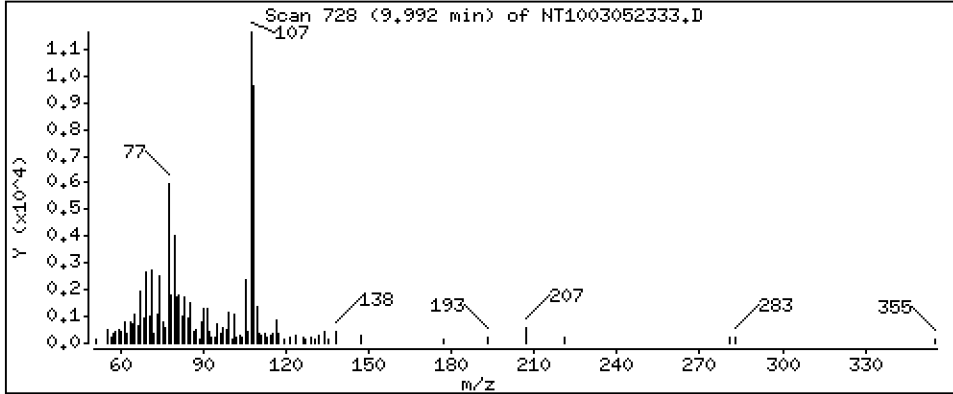
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,2267 ug/mL

15 4-Methylphenol



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

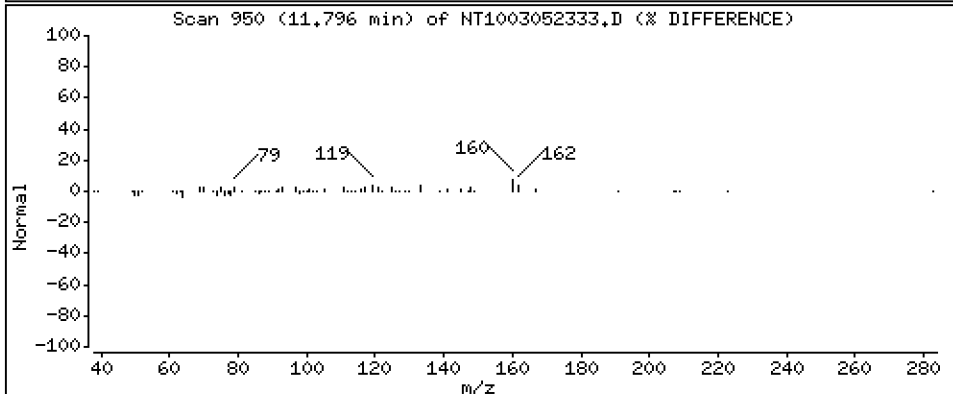
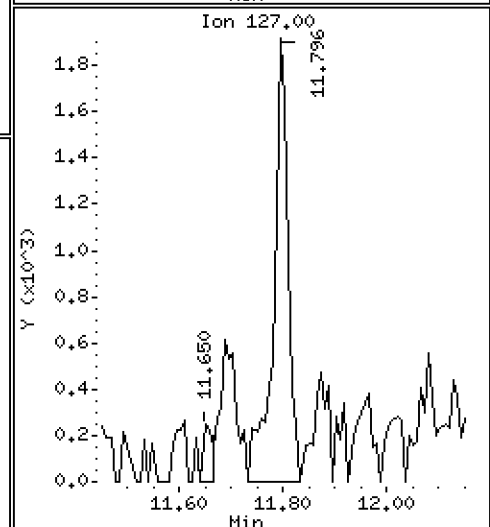
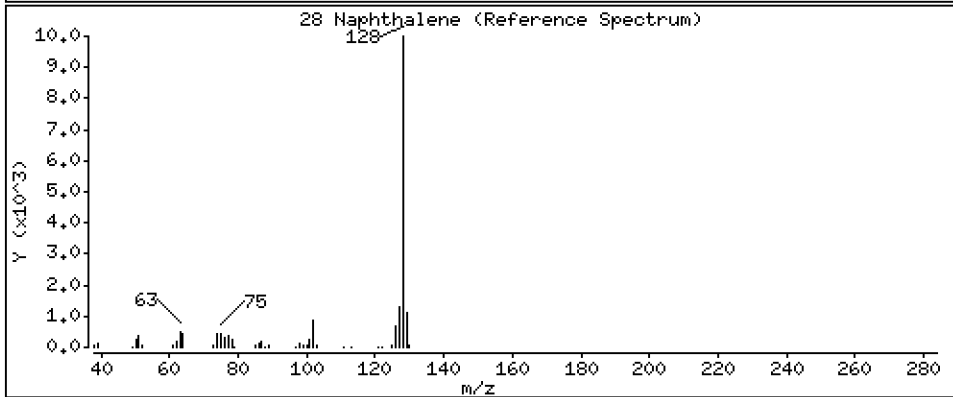
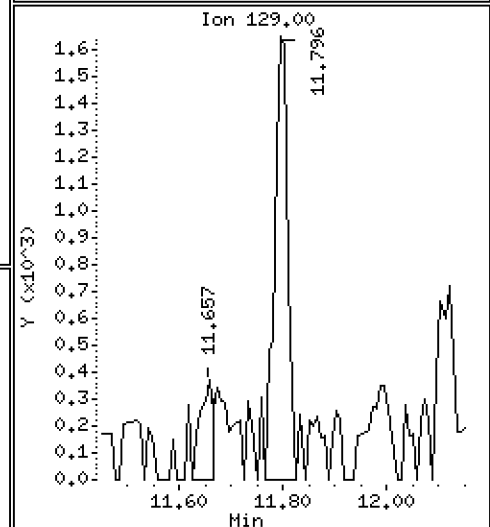
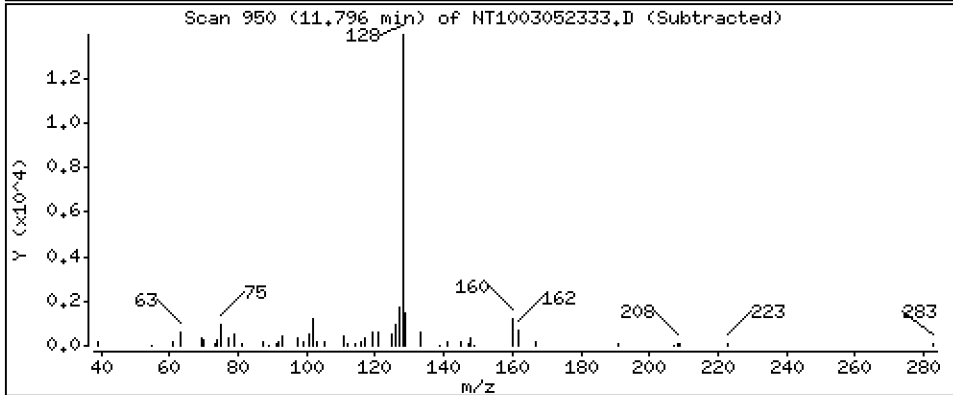
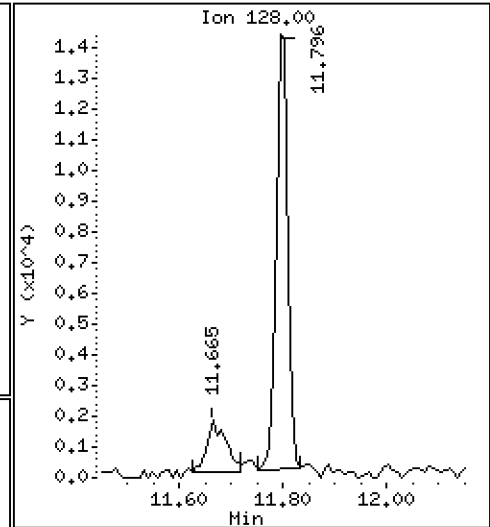
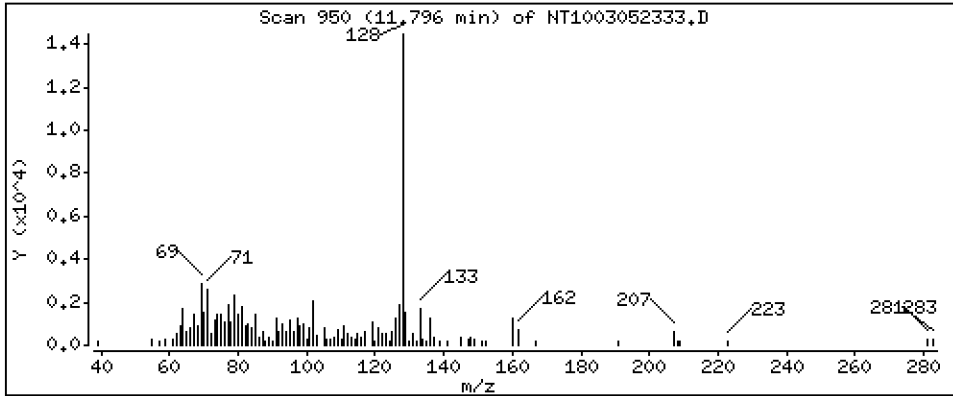
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1209 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

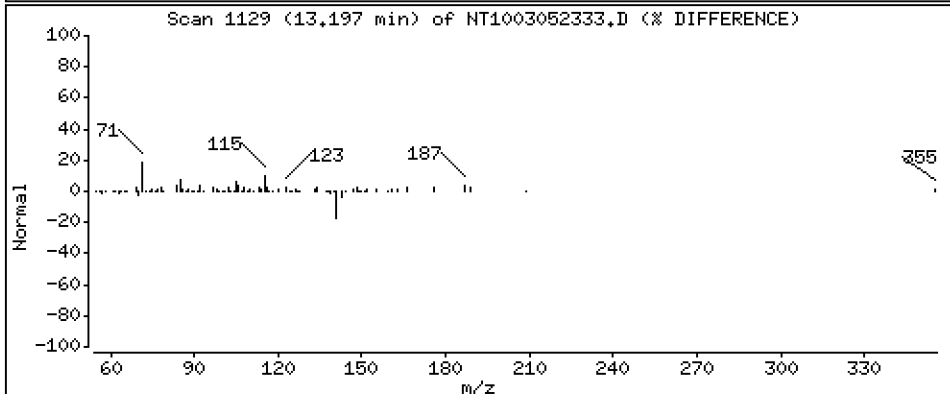
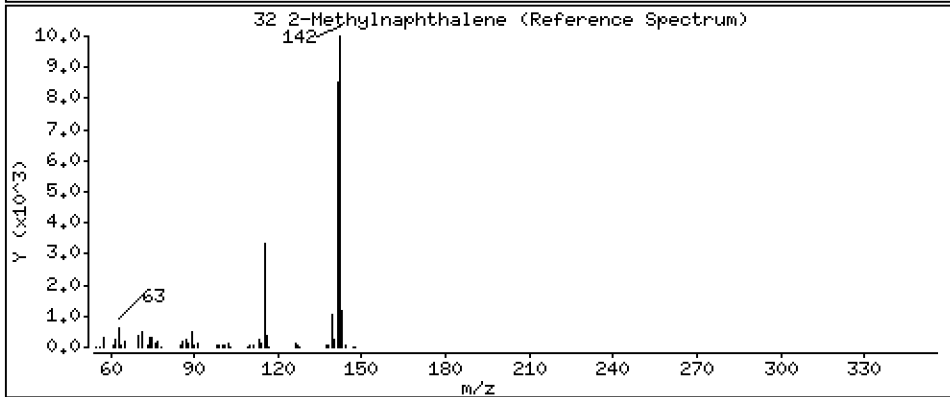
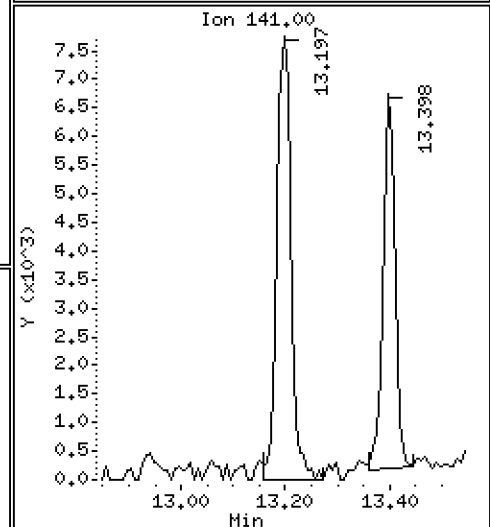
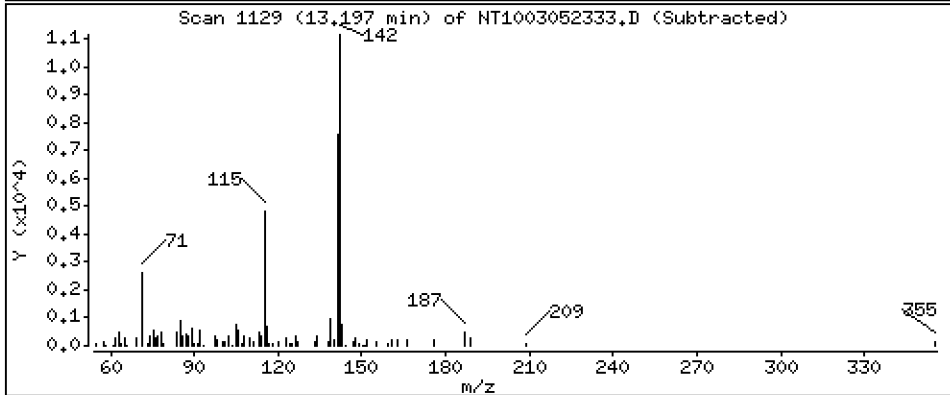
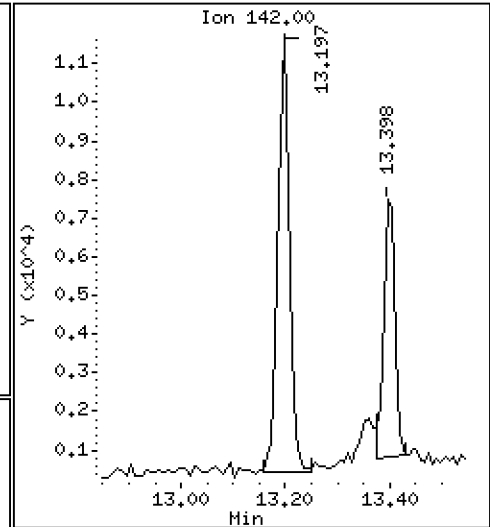
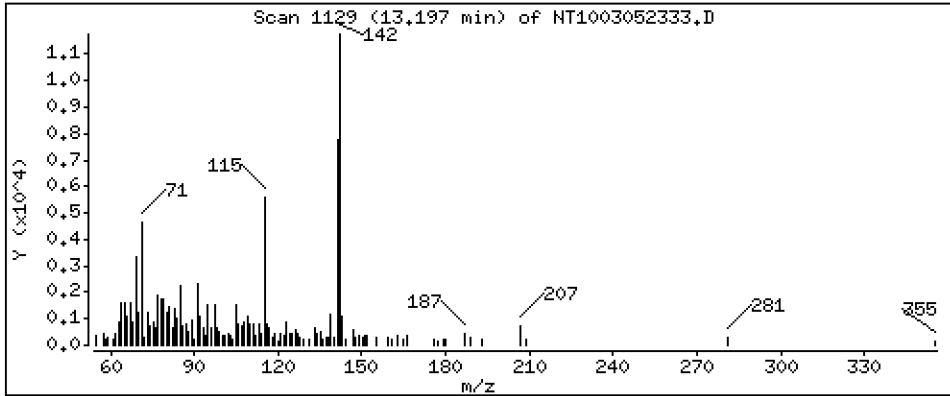
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1215 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

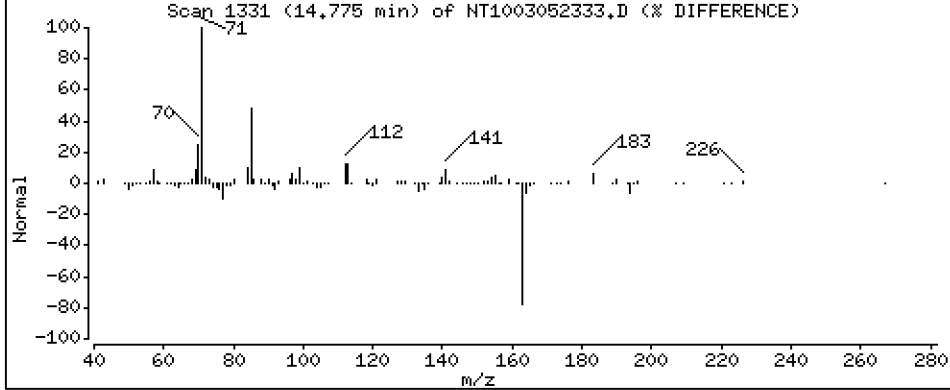
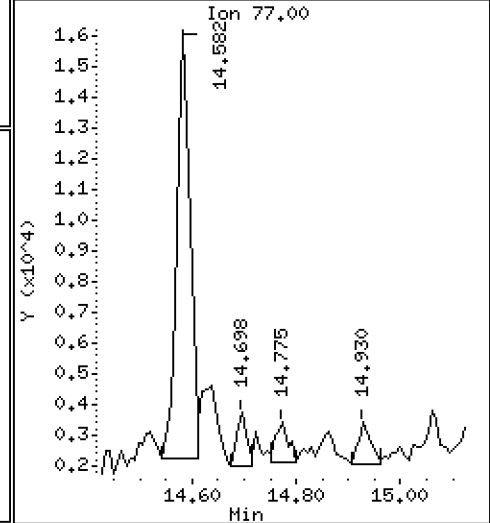
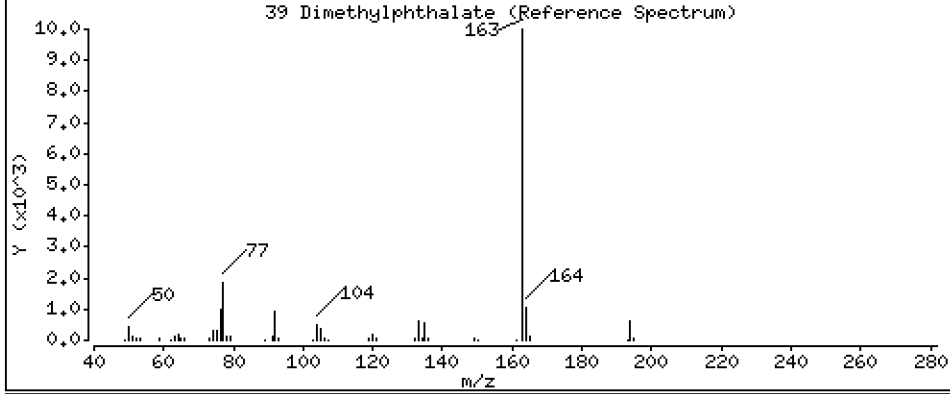
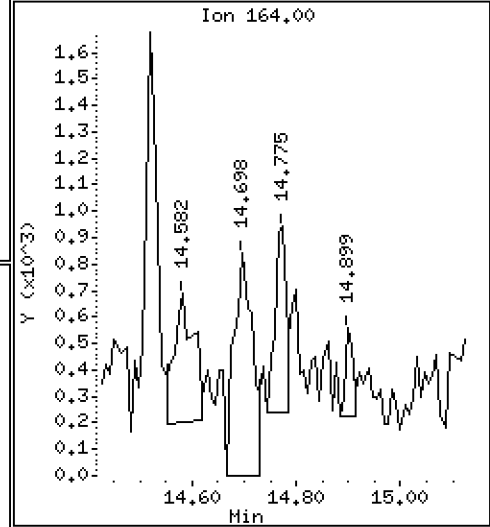
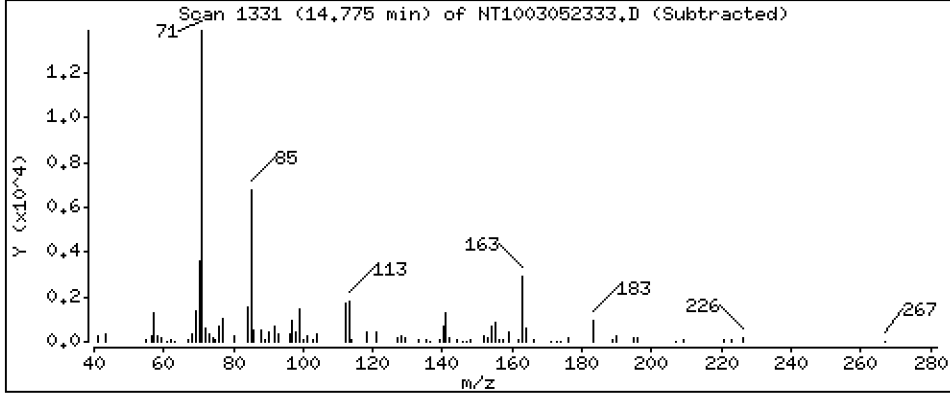
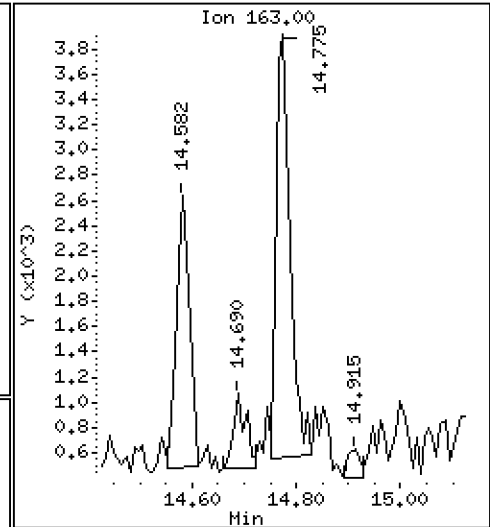
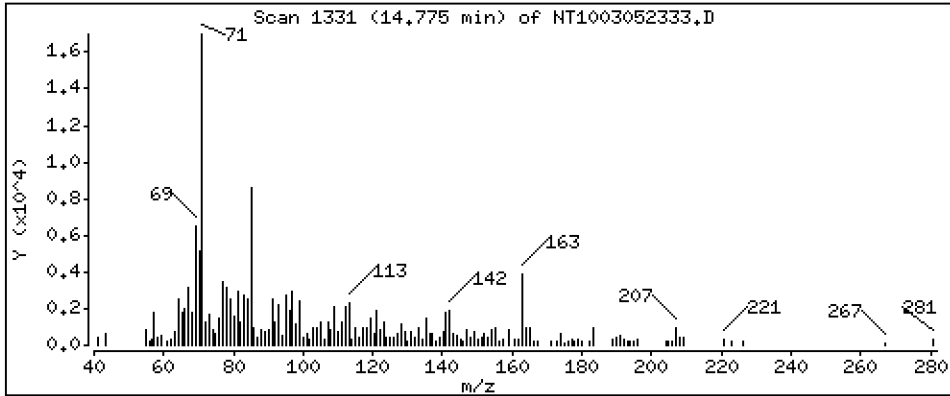
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.04540 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

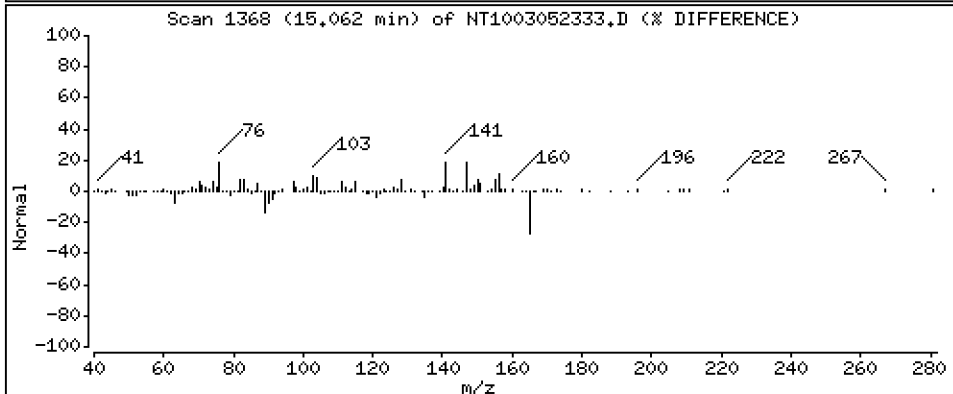
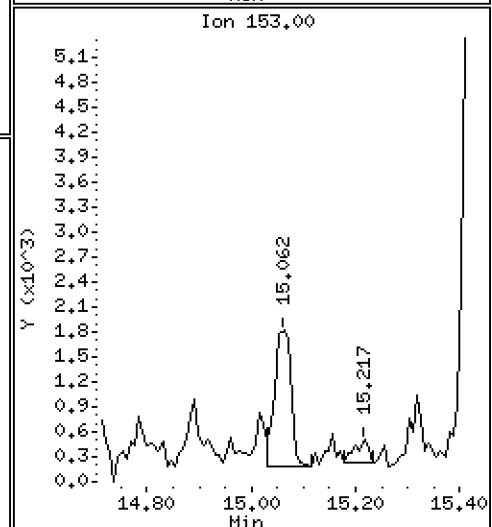
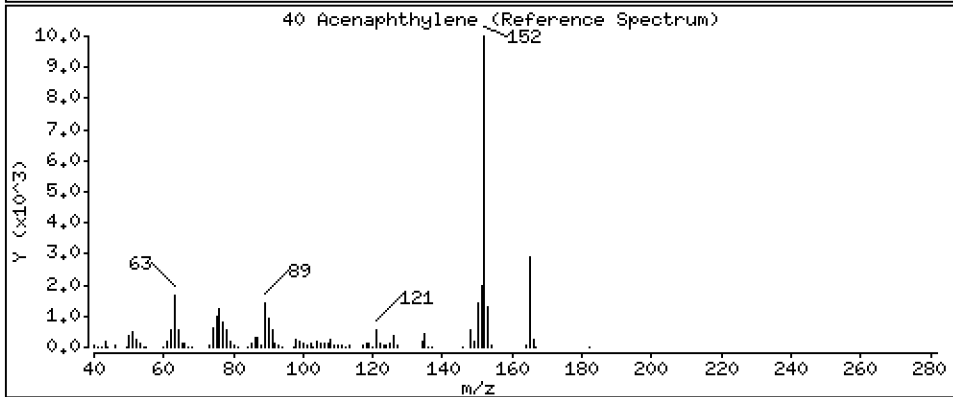
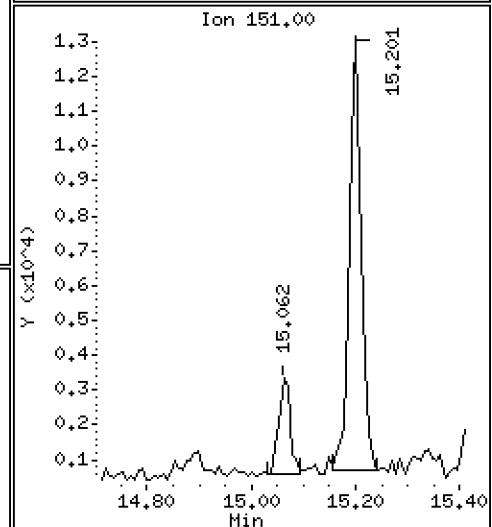
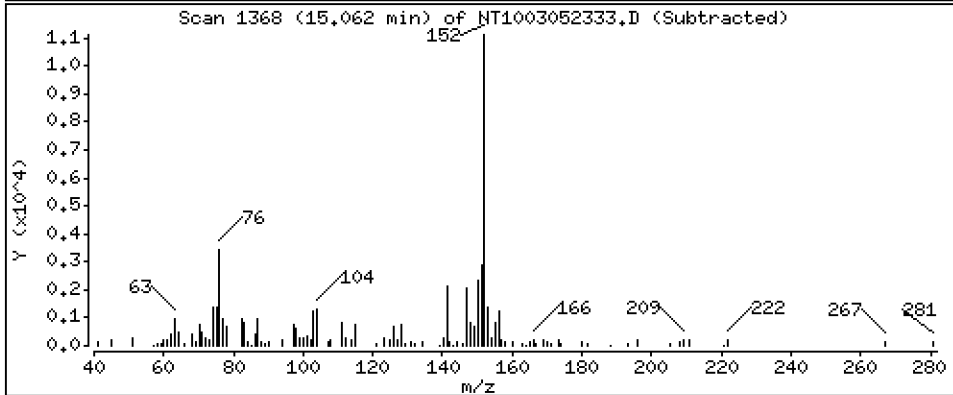
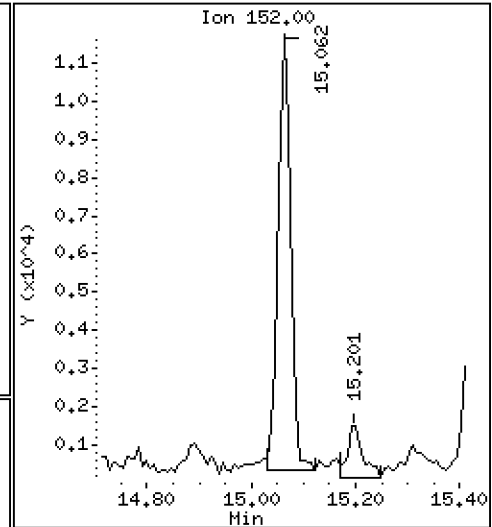
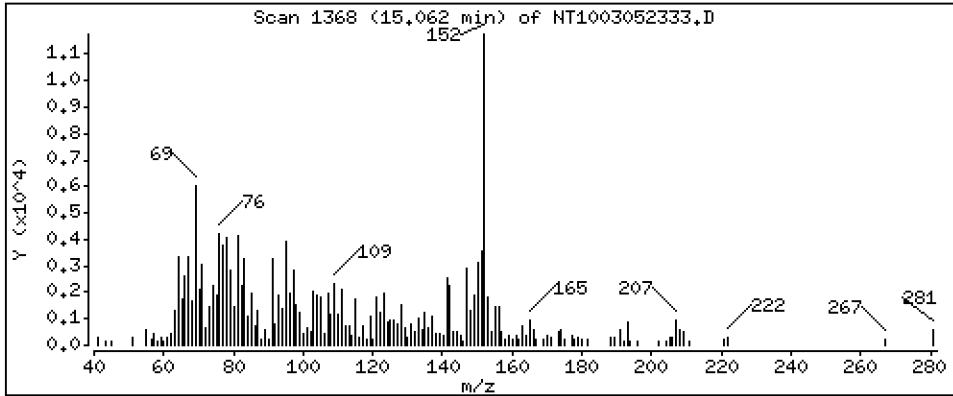
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1108 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

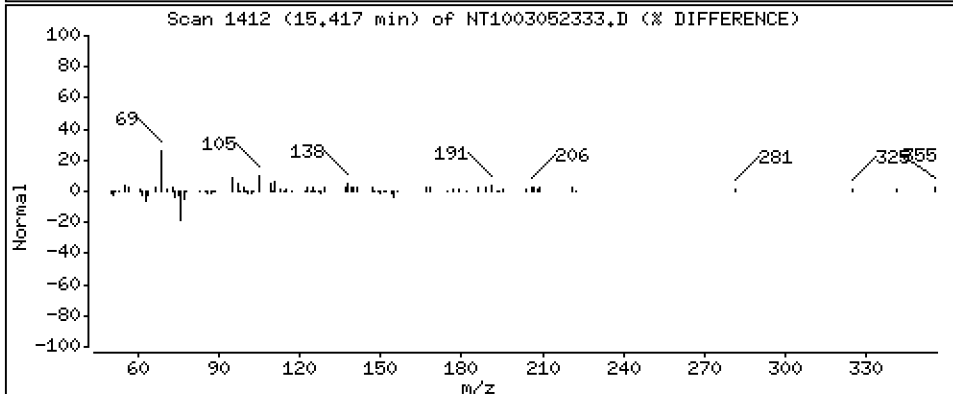
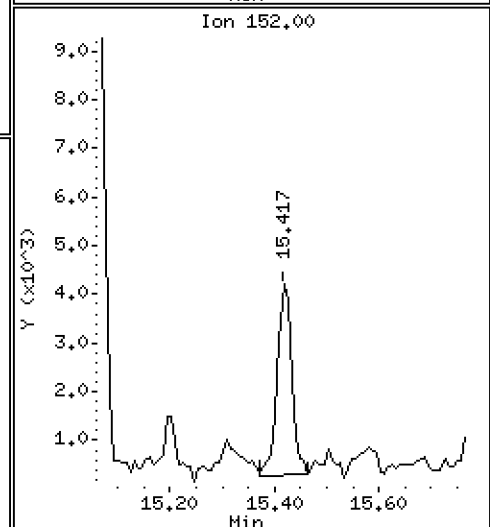
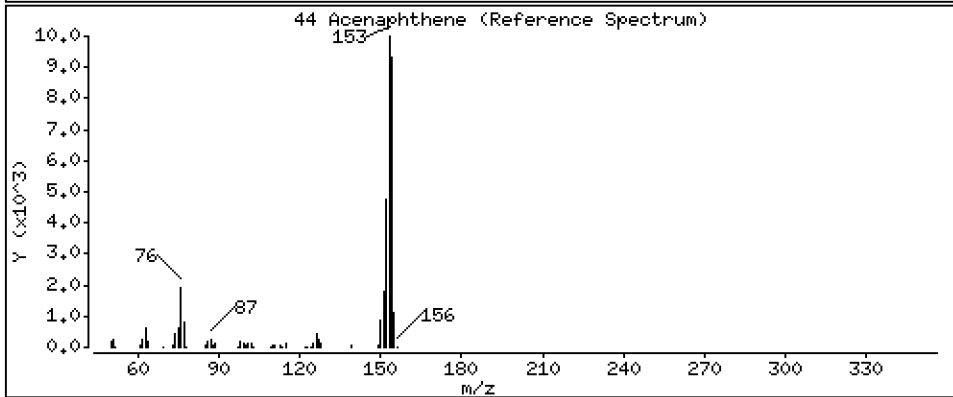
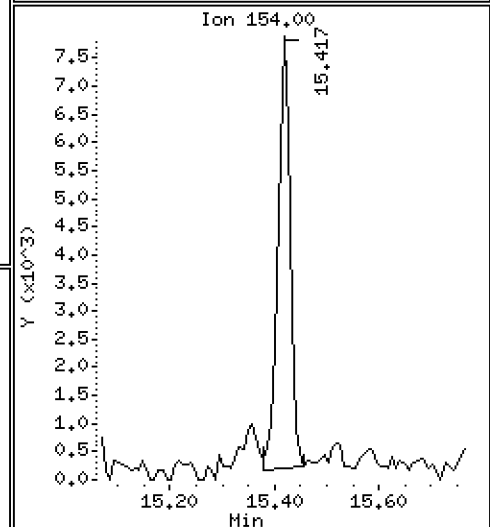
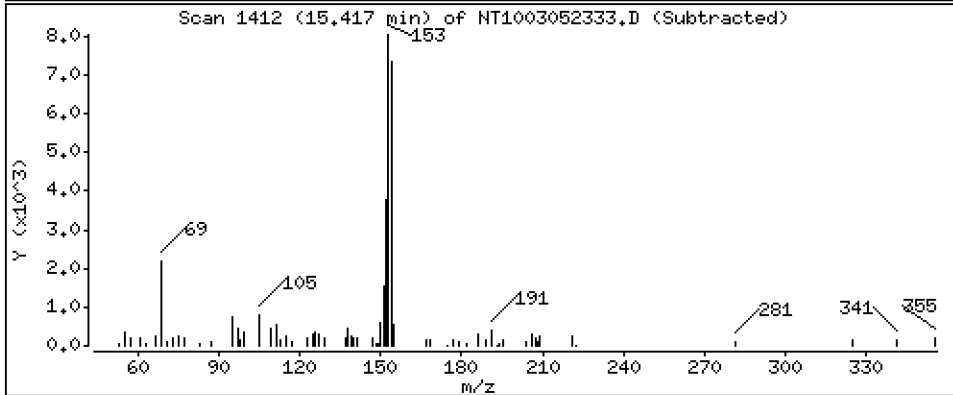
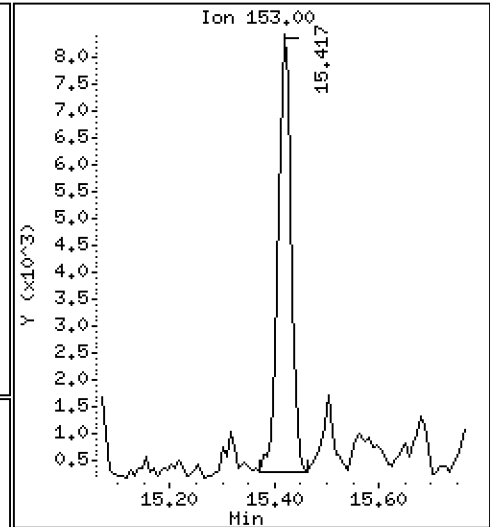
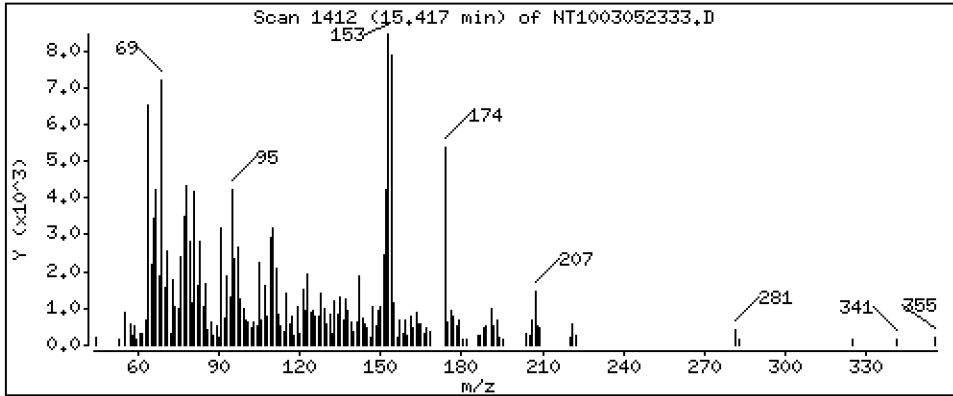
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1142 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

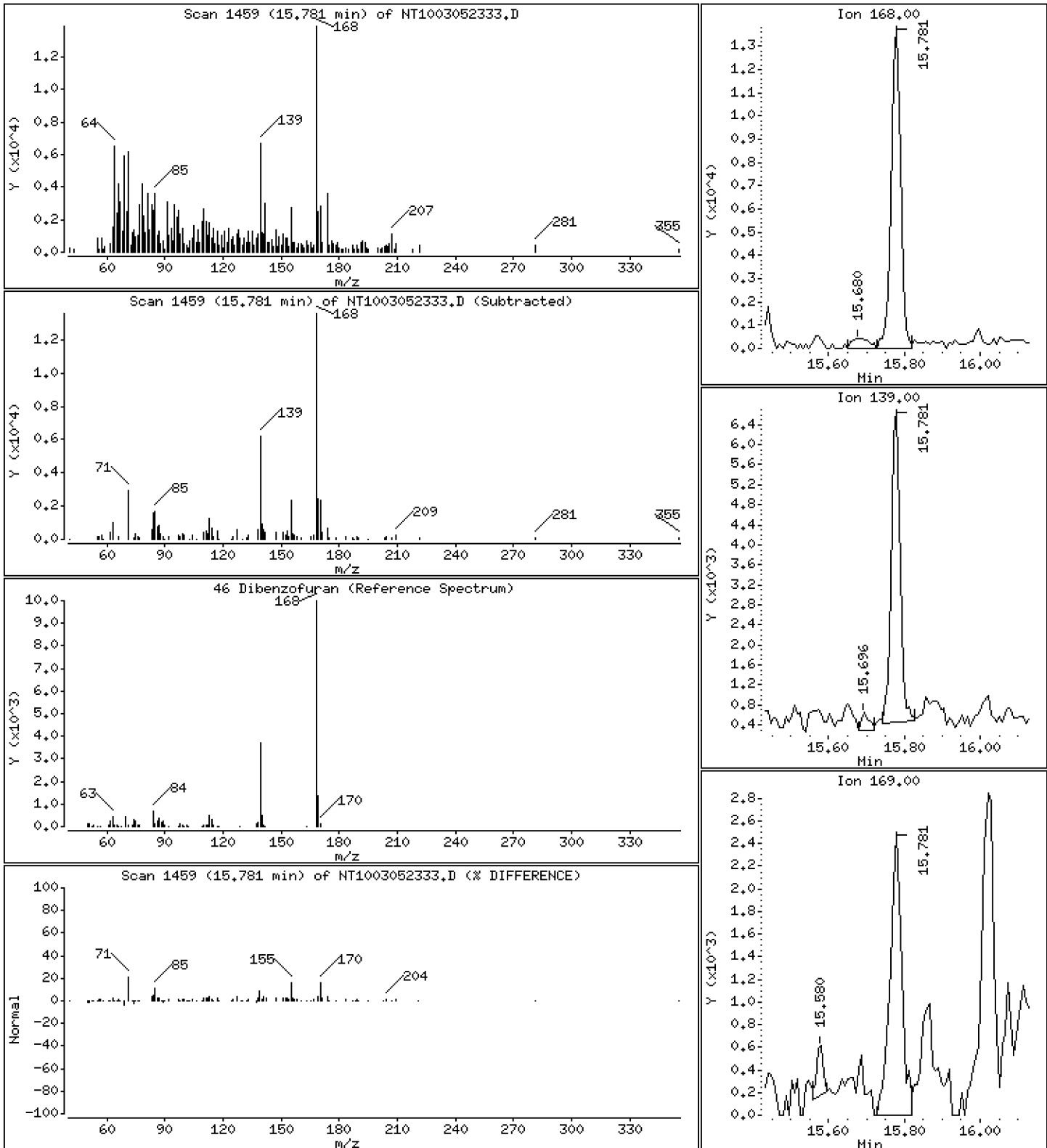
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,1302 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

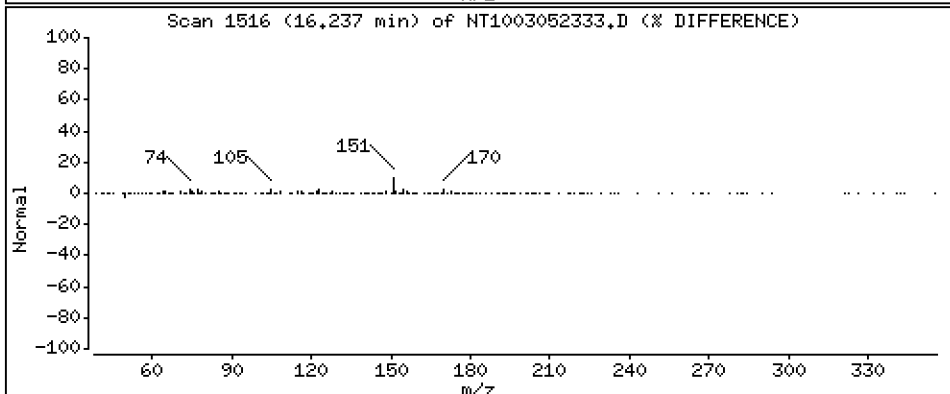
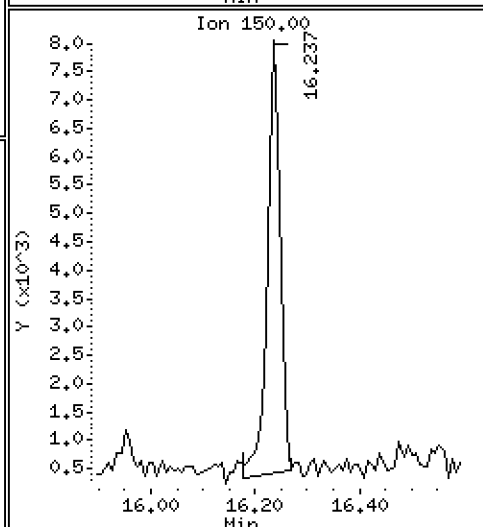
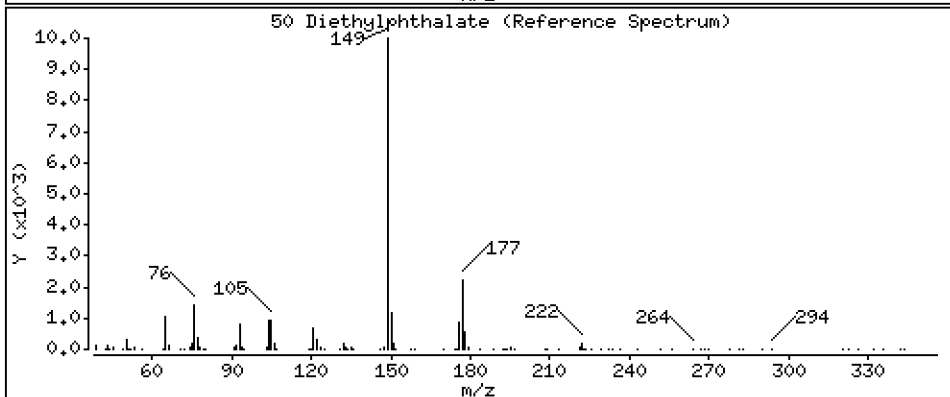
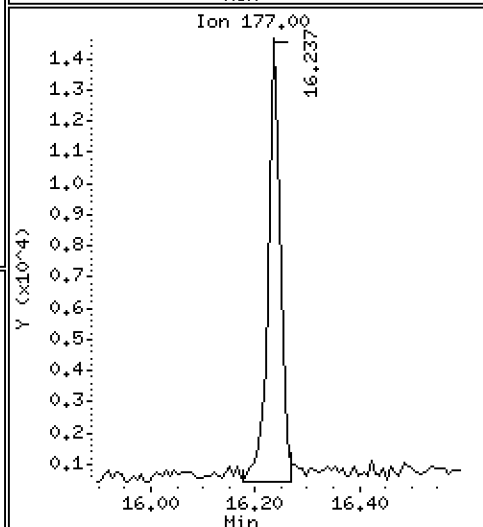
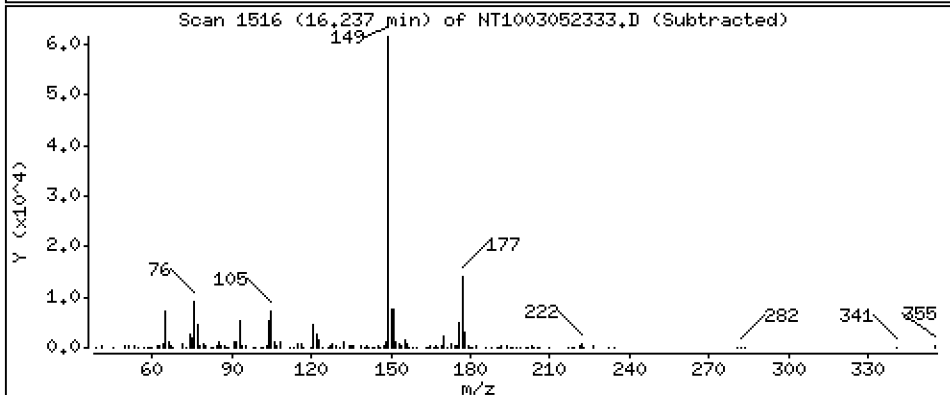
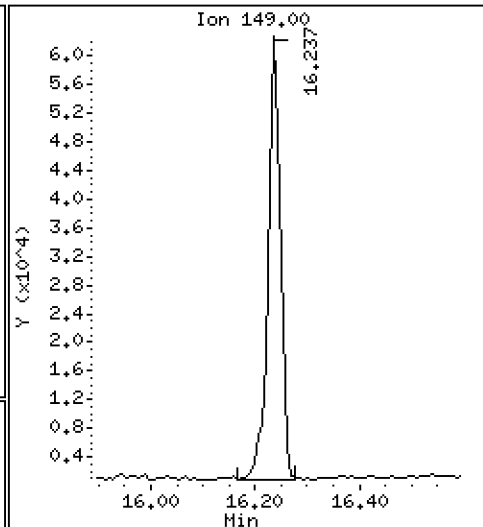
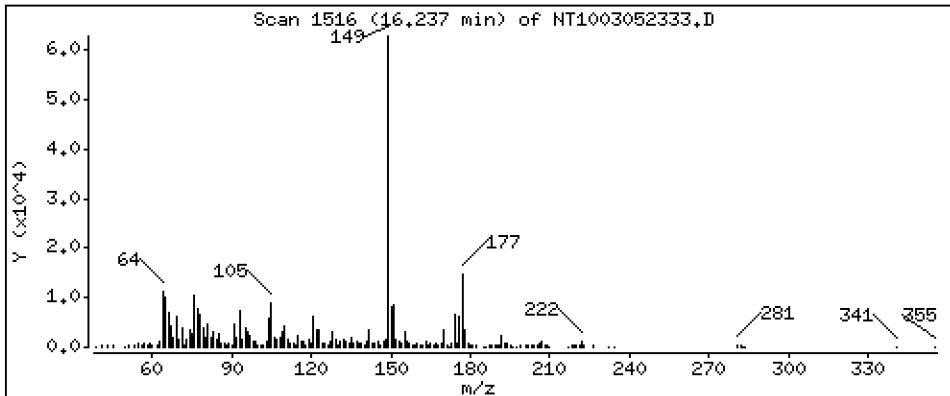
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,7205 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

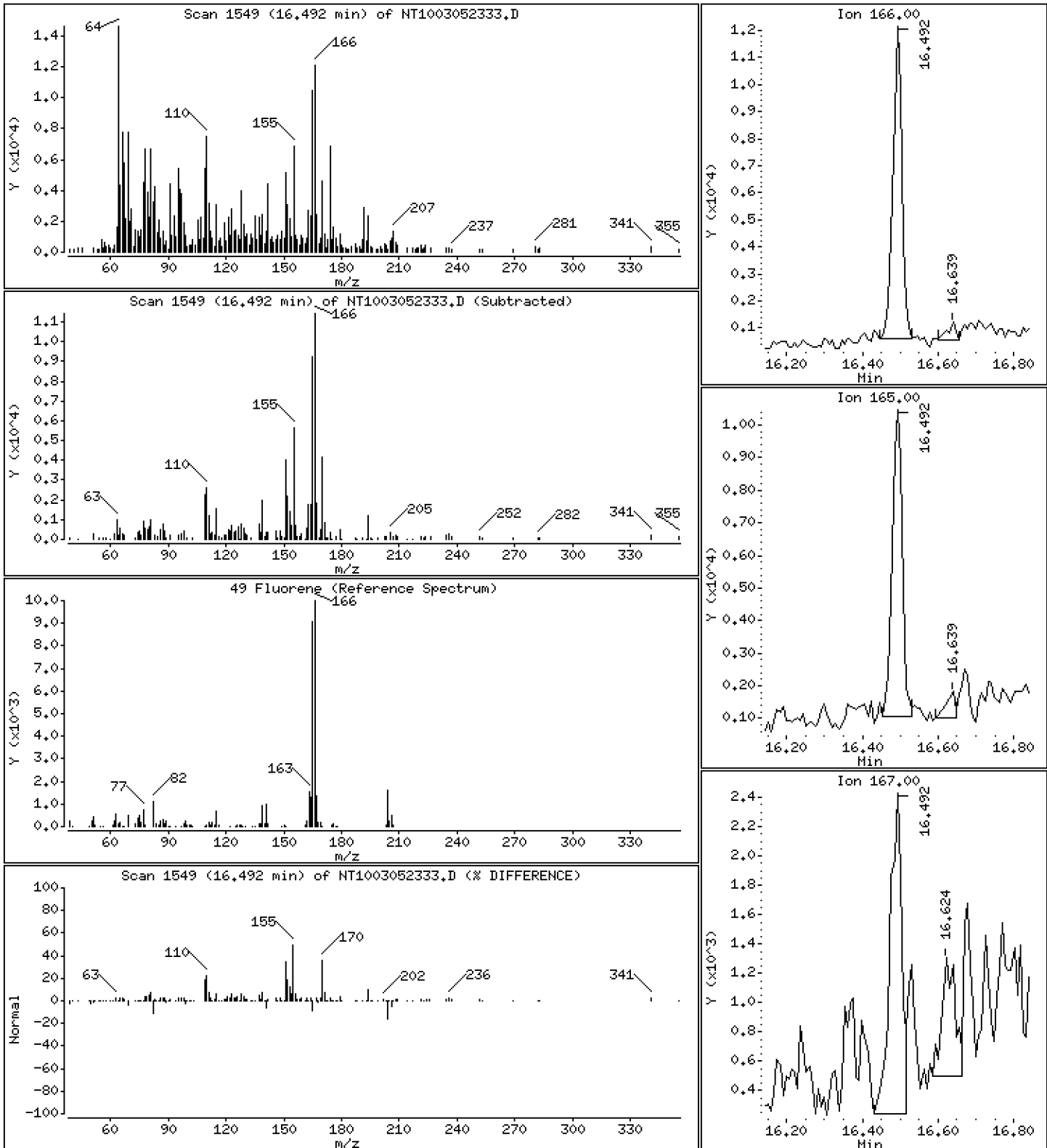
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1277 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

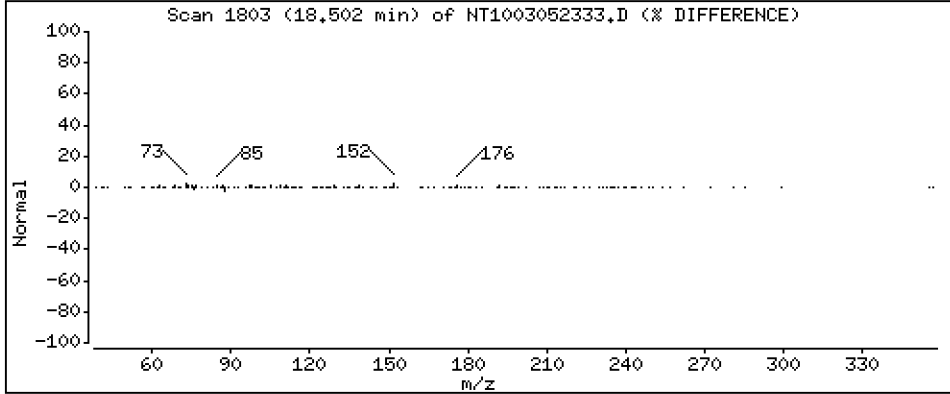
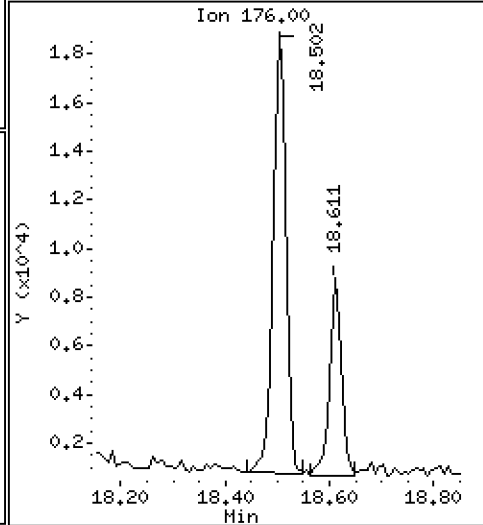
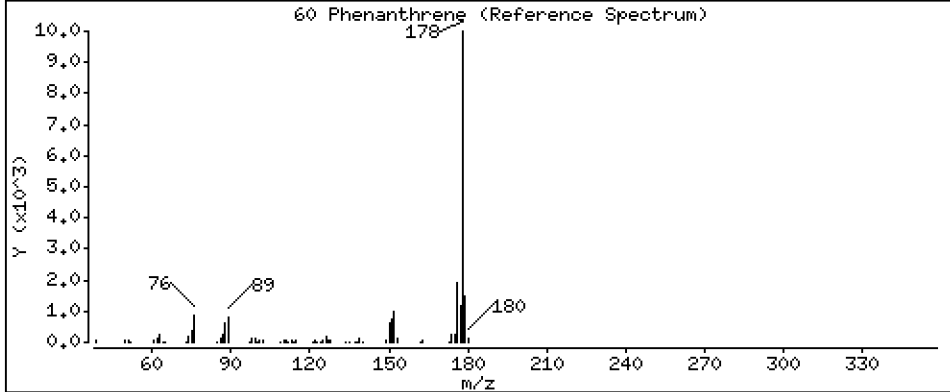
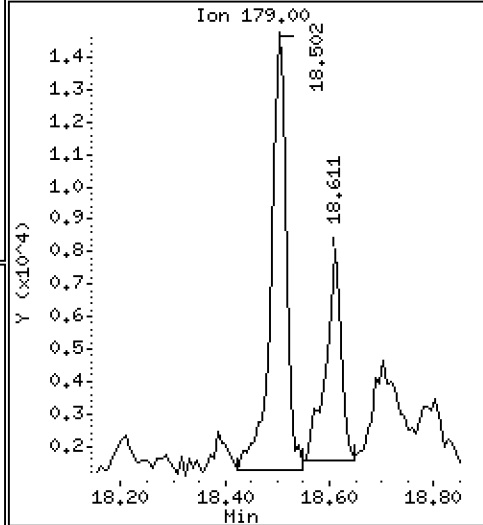
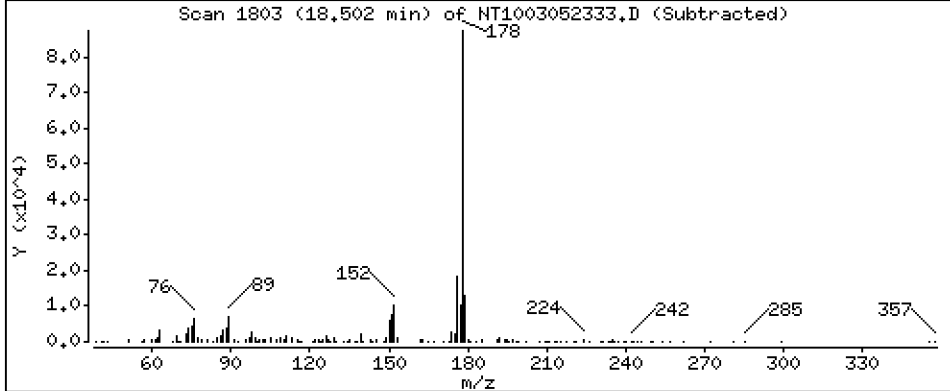
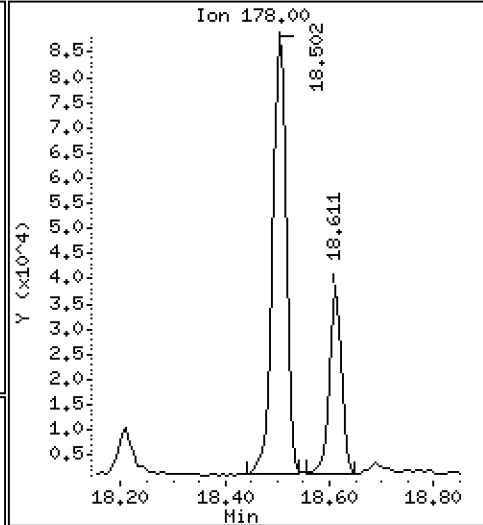
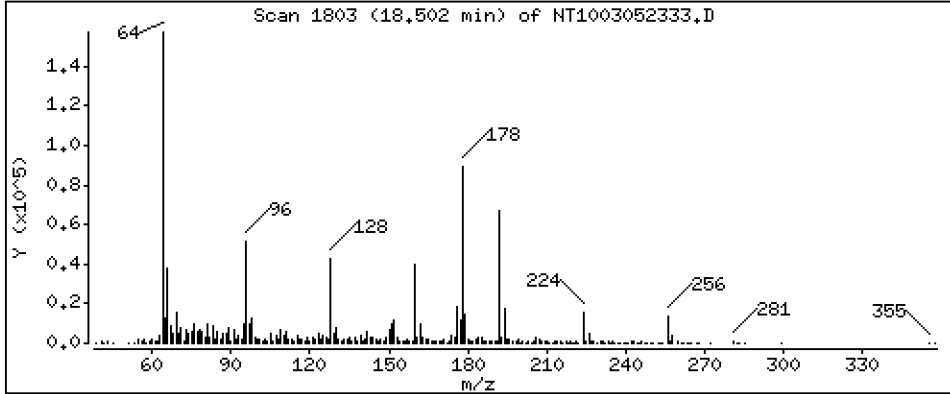
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,8049 ug/mL

60 Phenanthrene



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

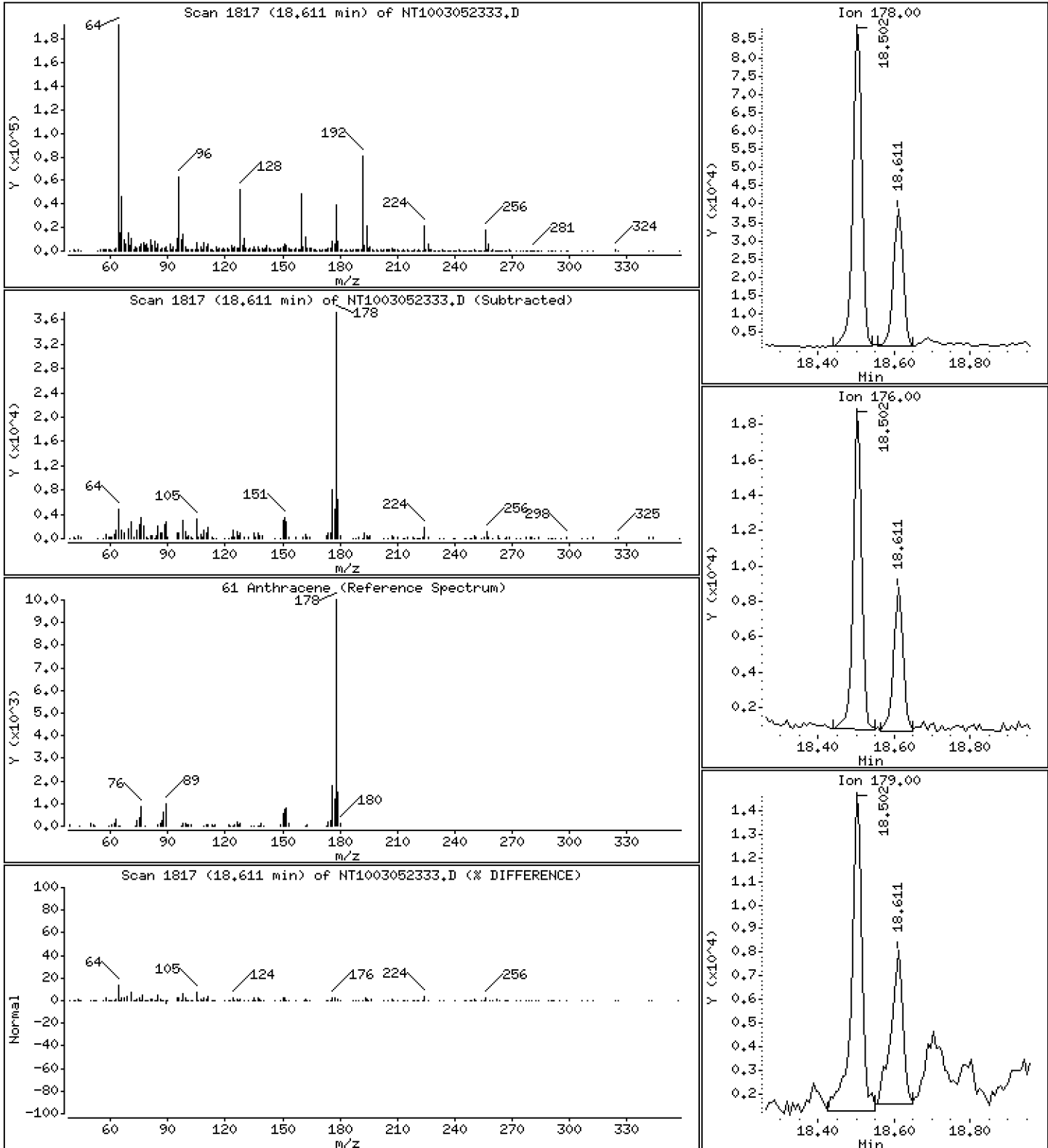
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,3422 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

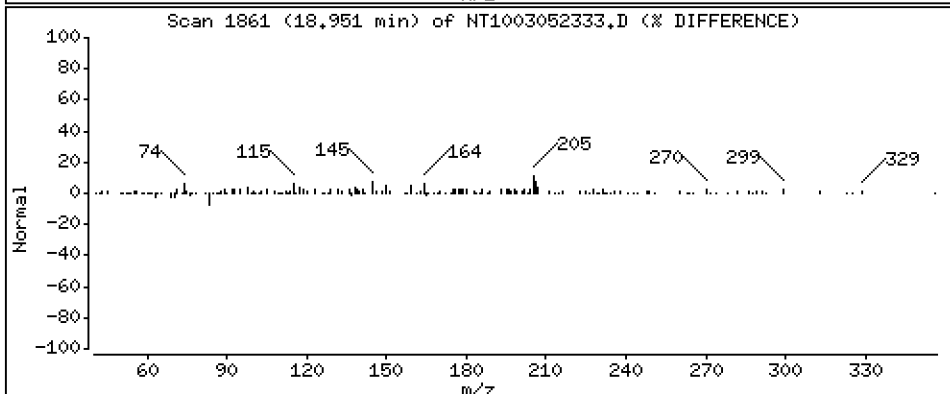
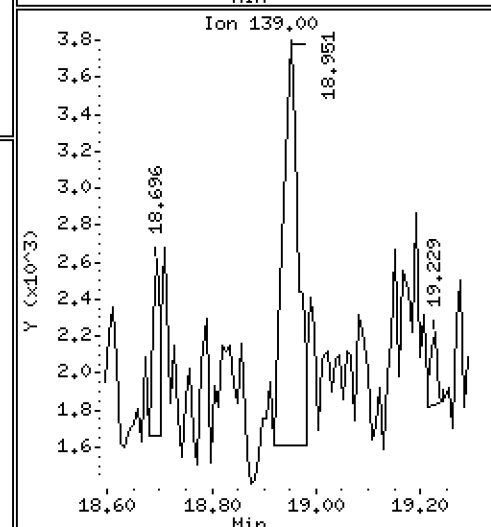
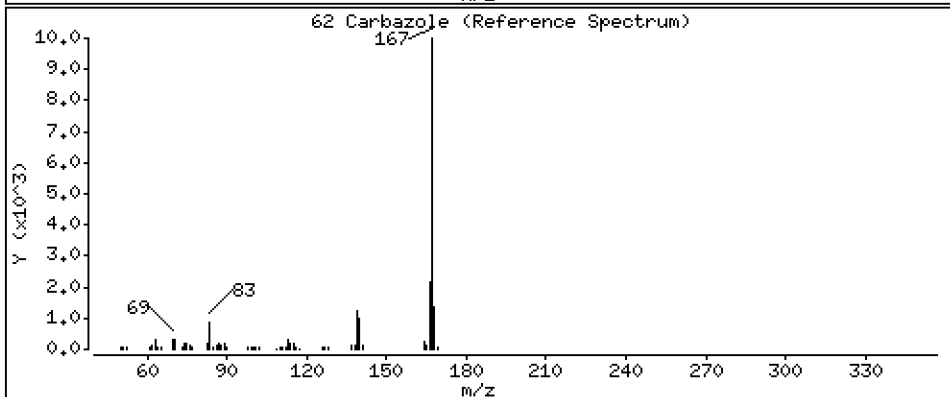
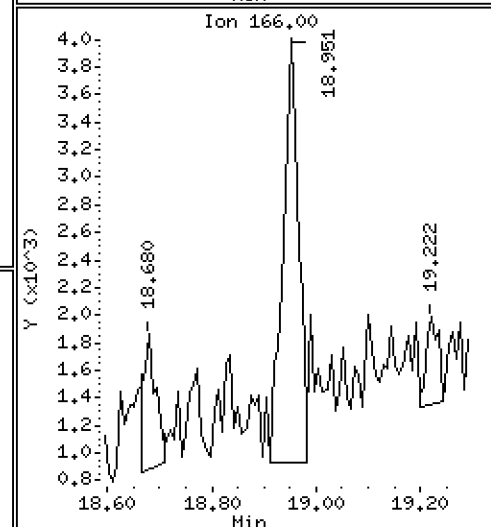
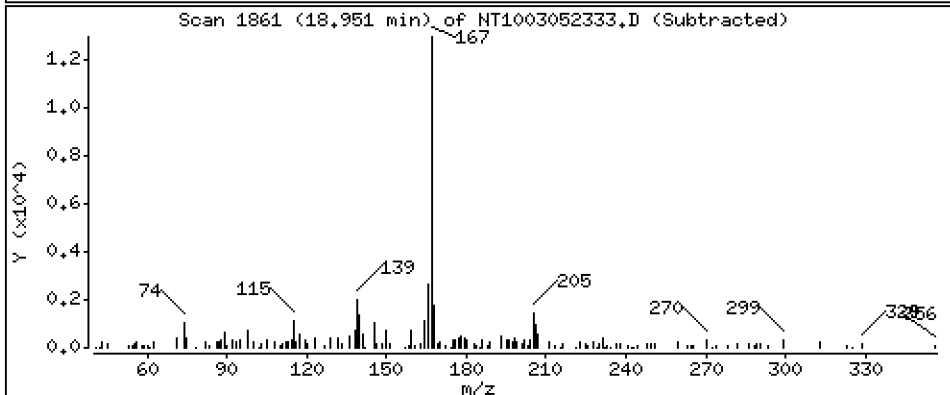
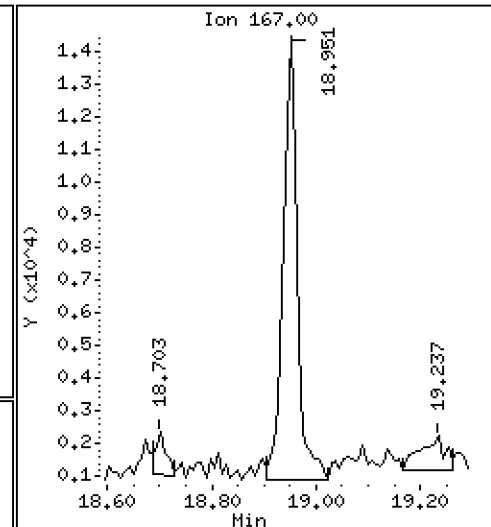
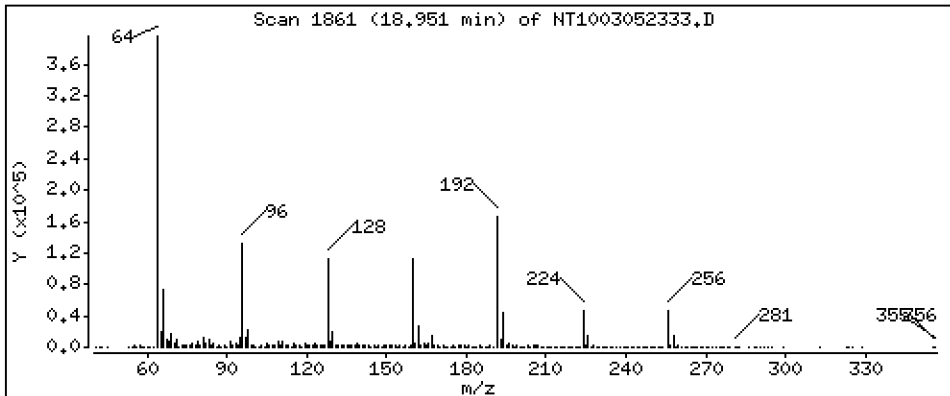
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.1472 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

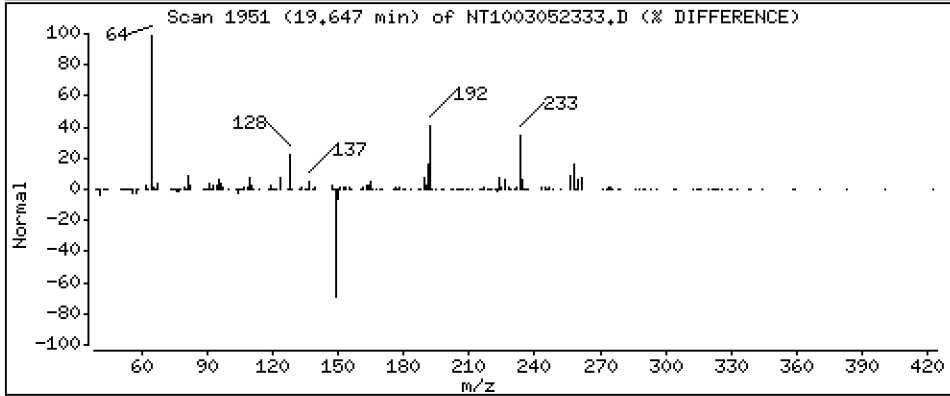
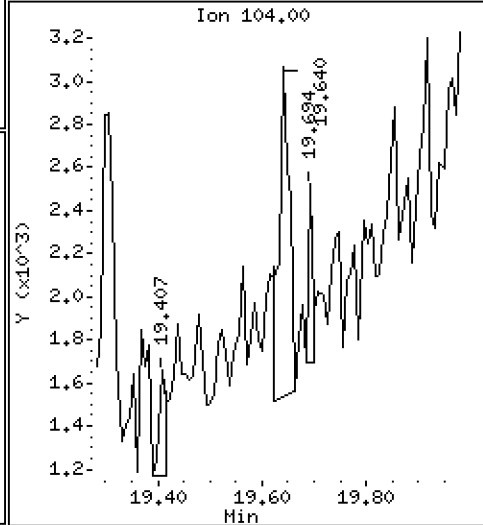
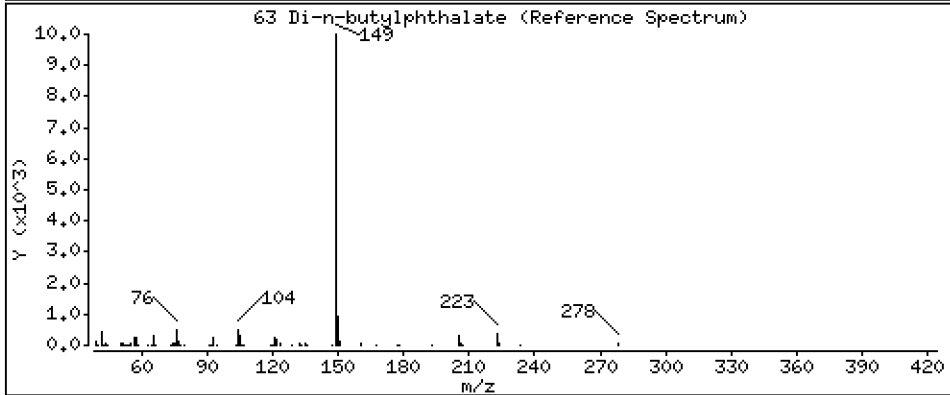
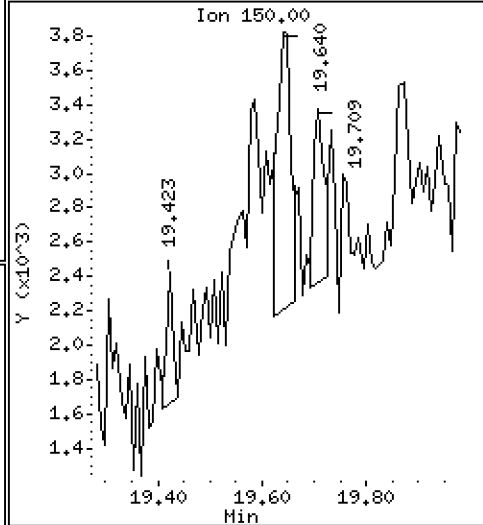
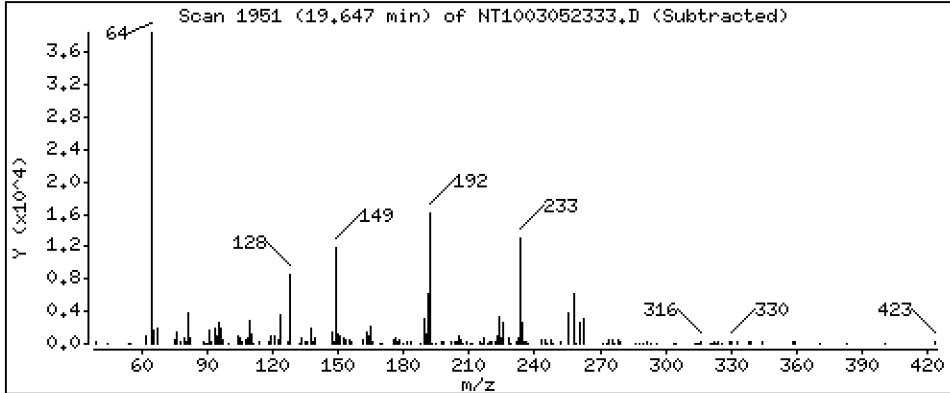
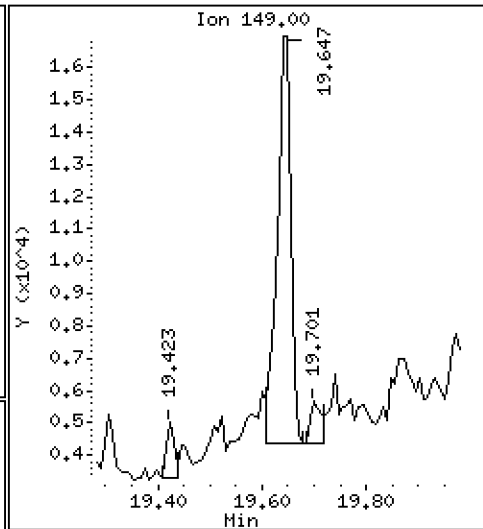
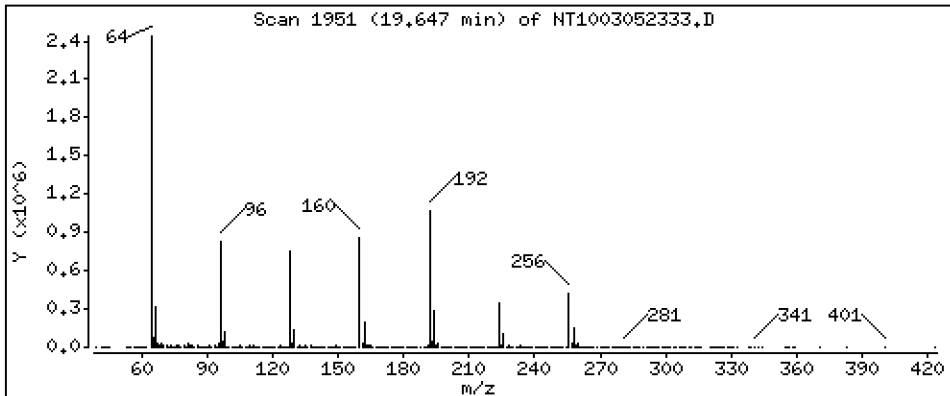
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1023 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

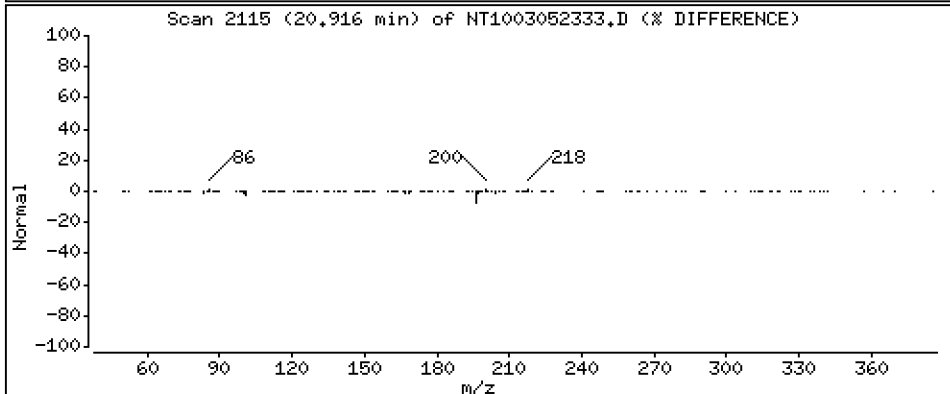
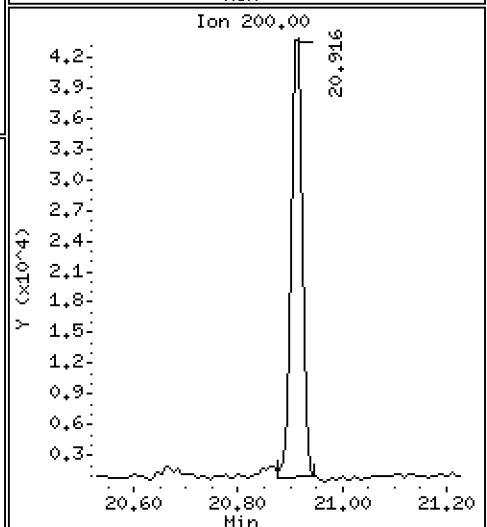
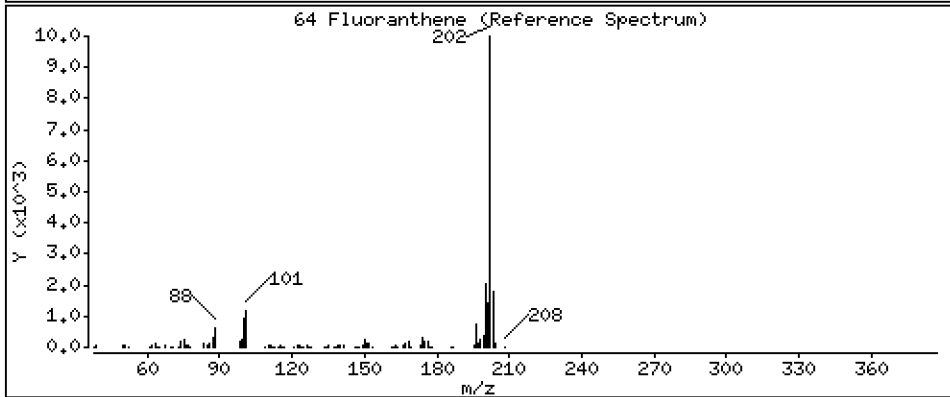
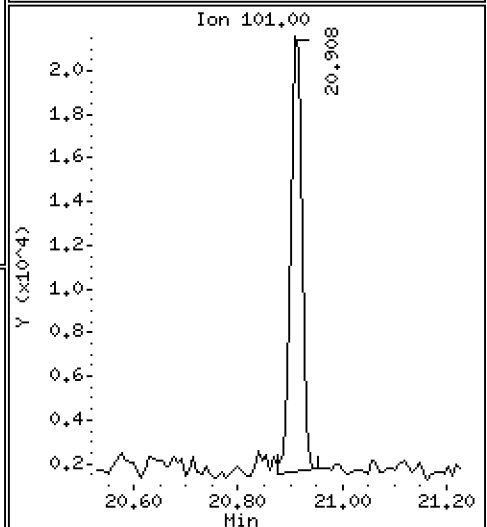
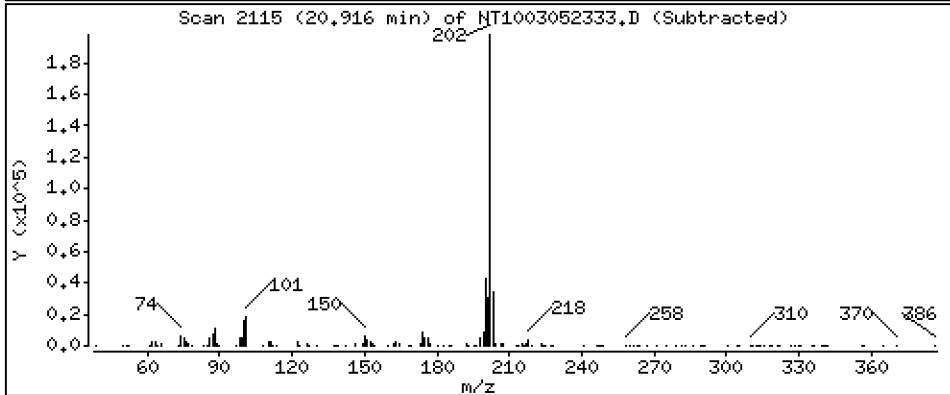
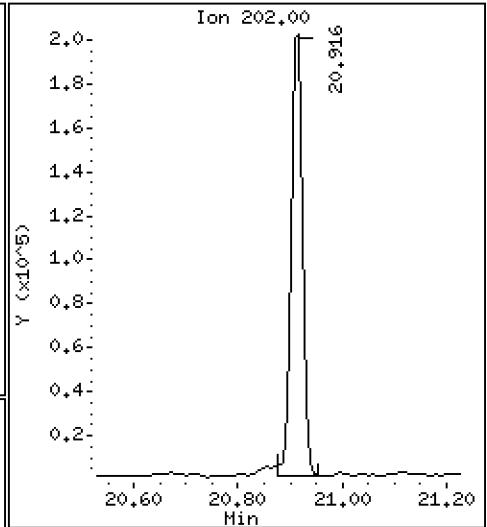
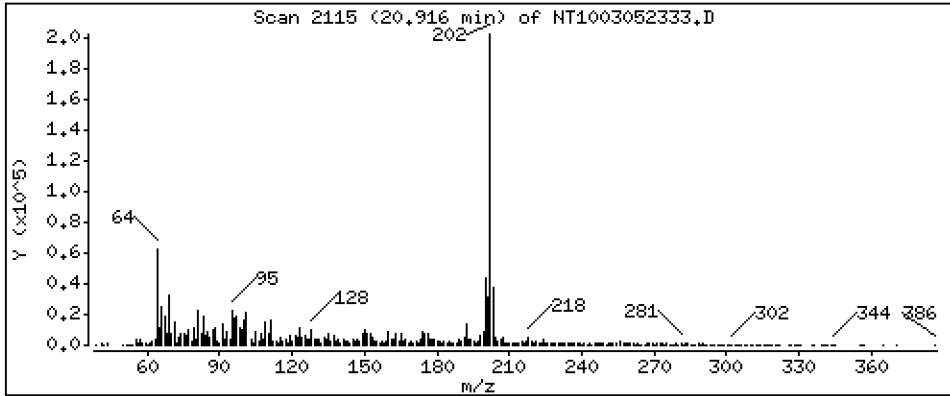
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 1,362 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

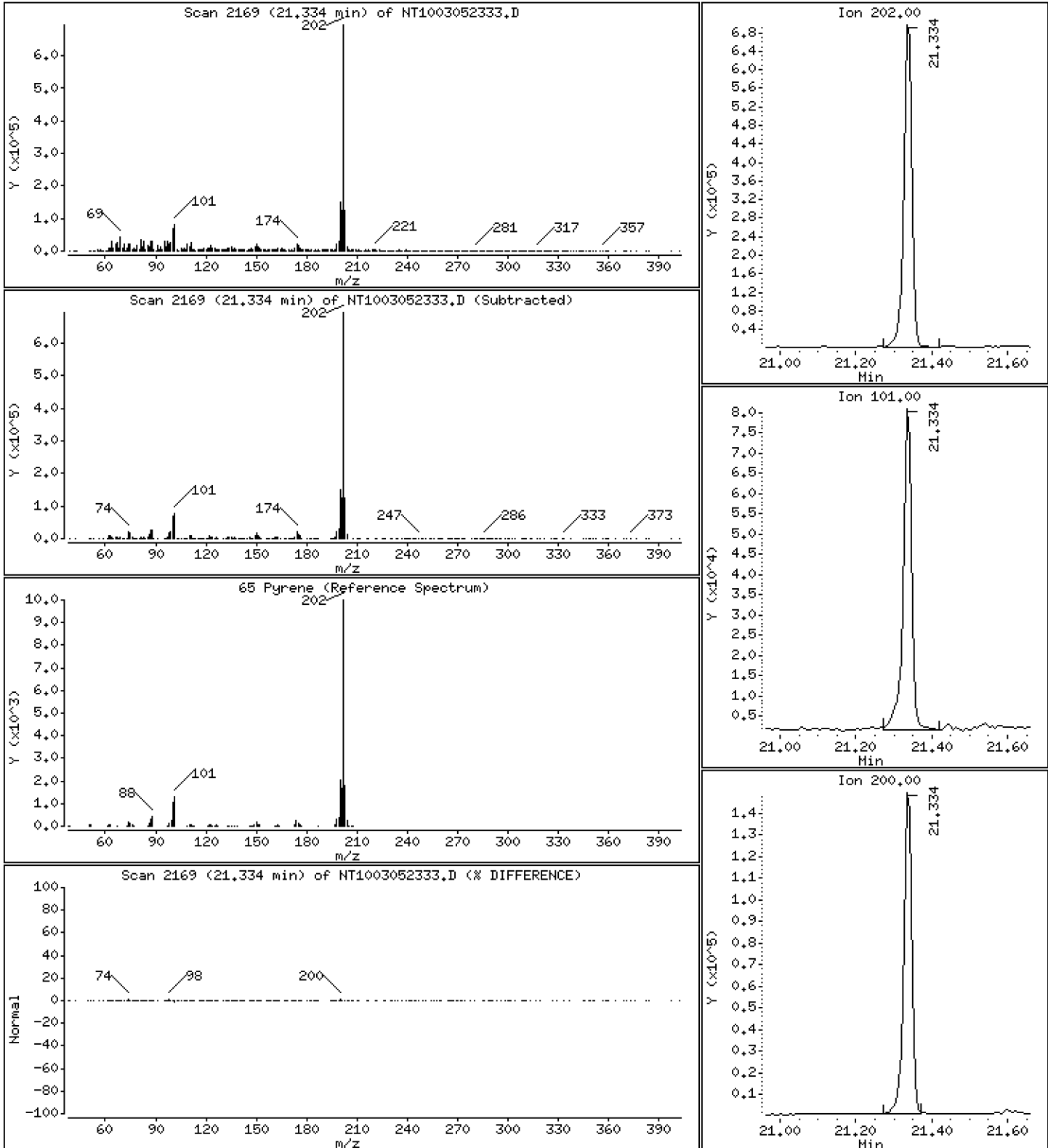
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,986 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

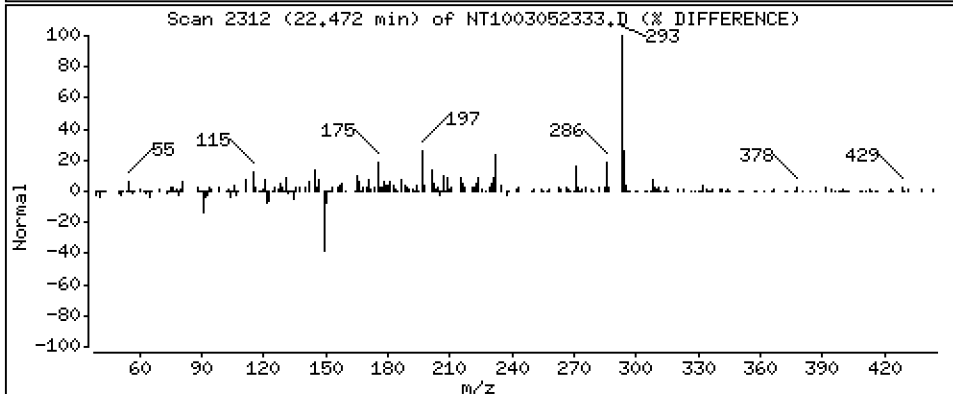
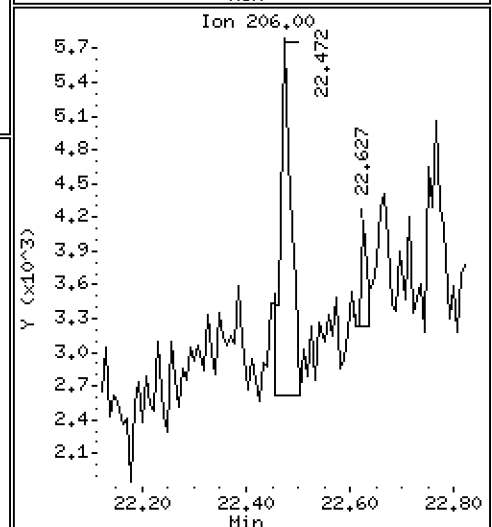
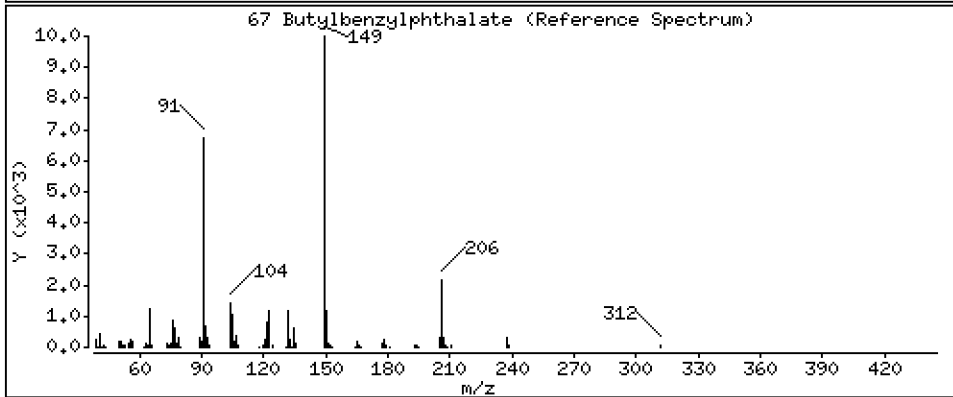
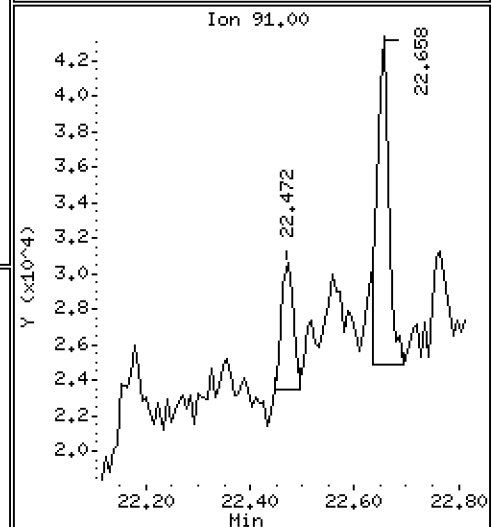
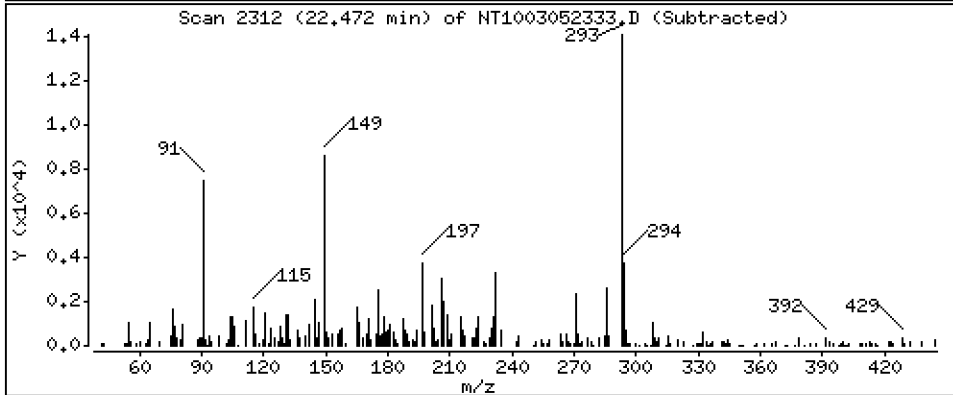
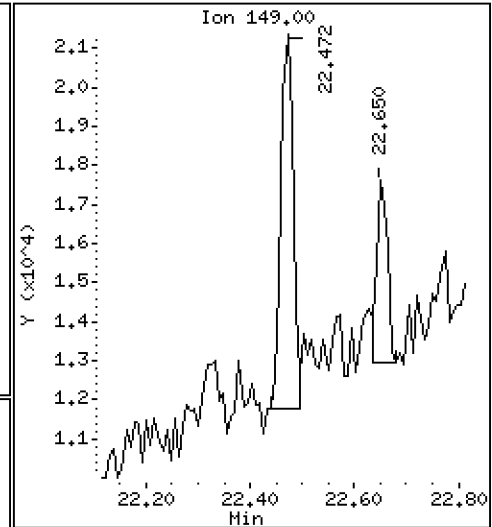
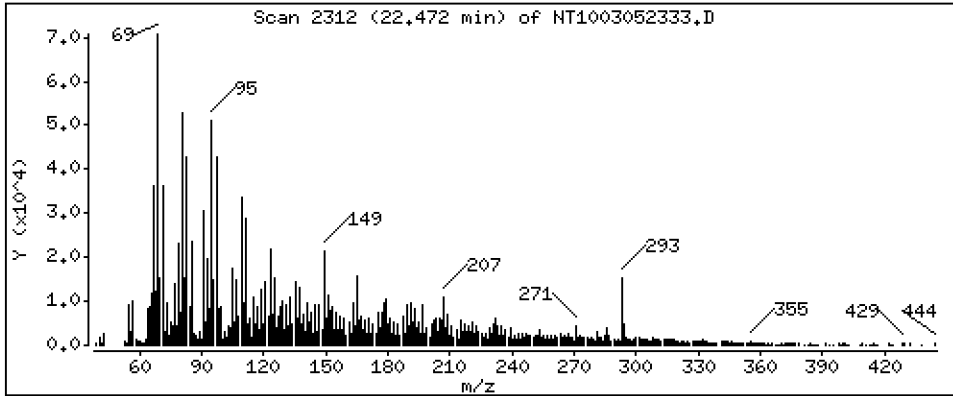
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1159 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

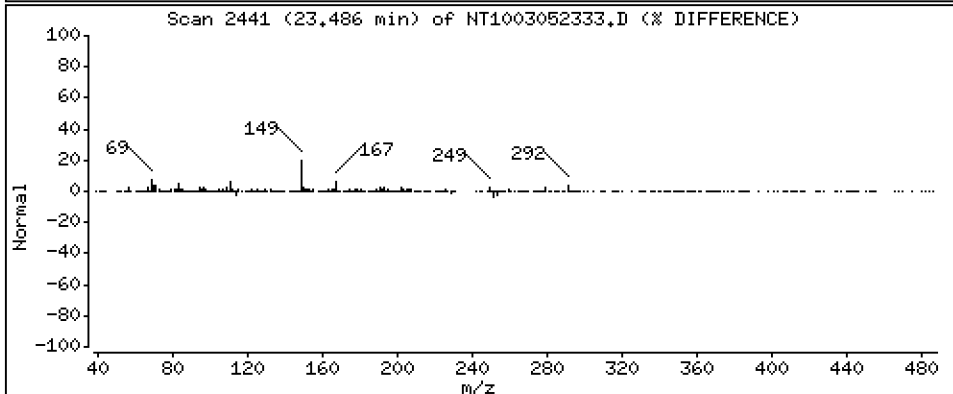
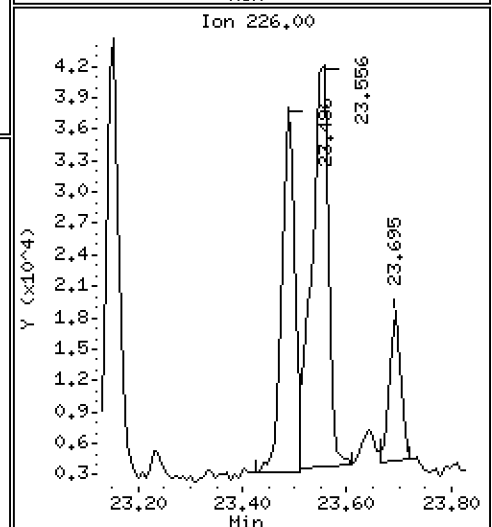
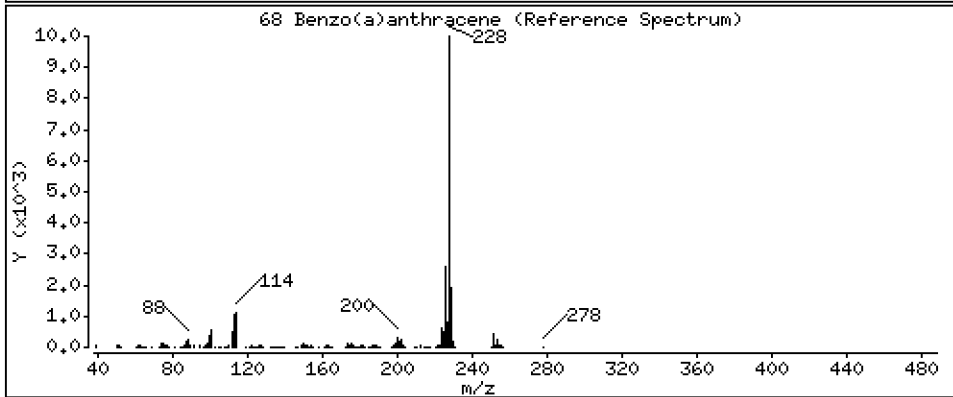
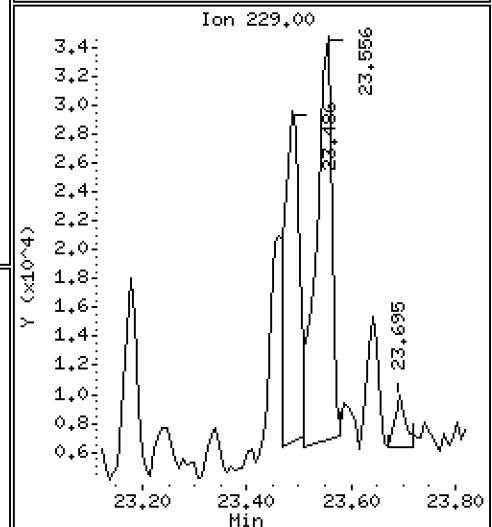
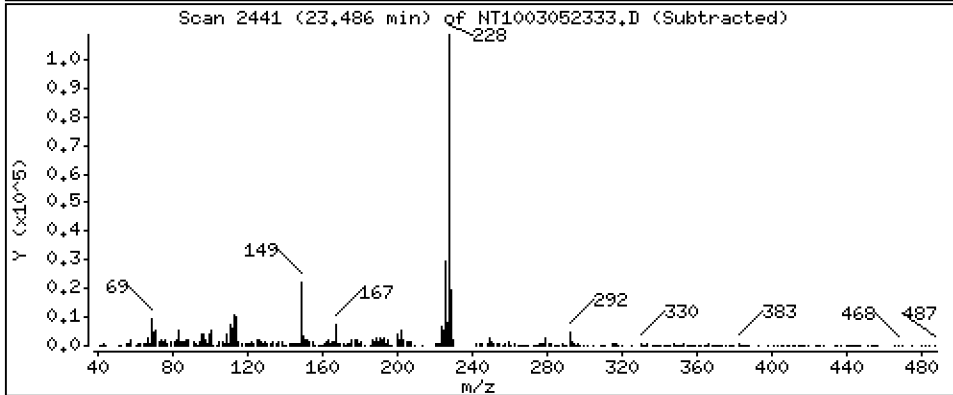
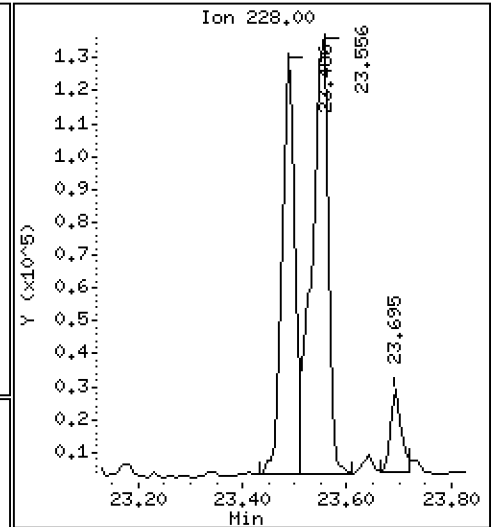
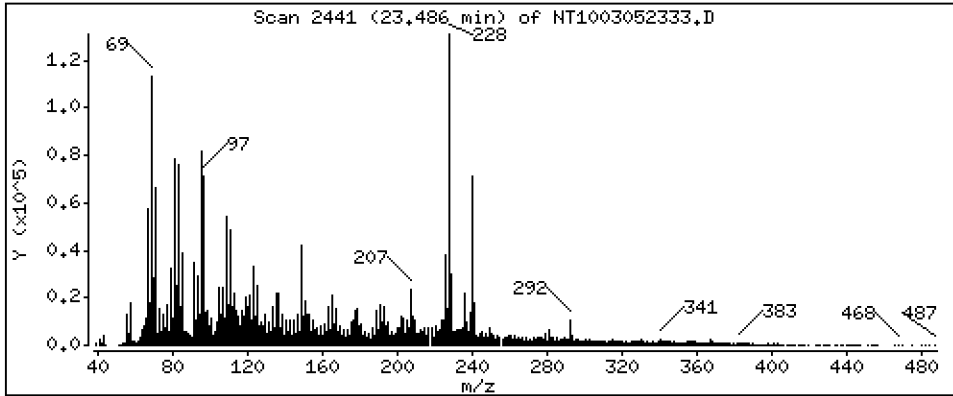
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,8979 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

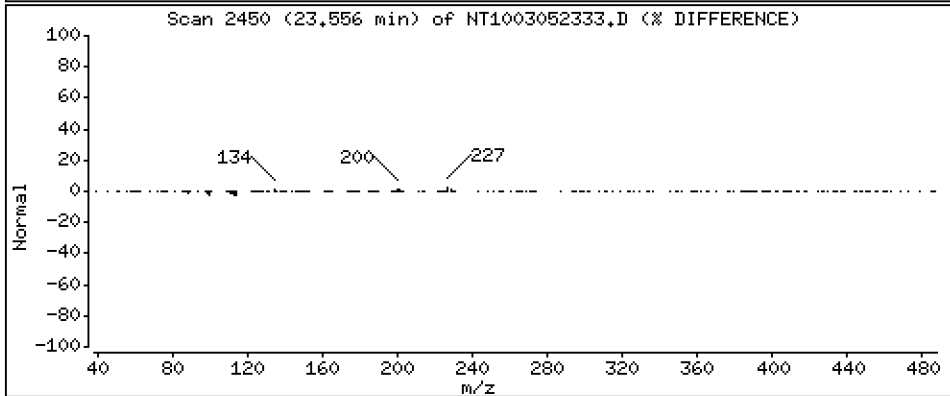
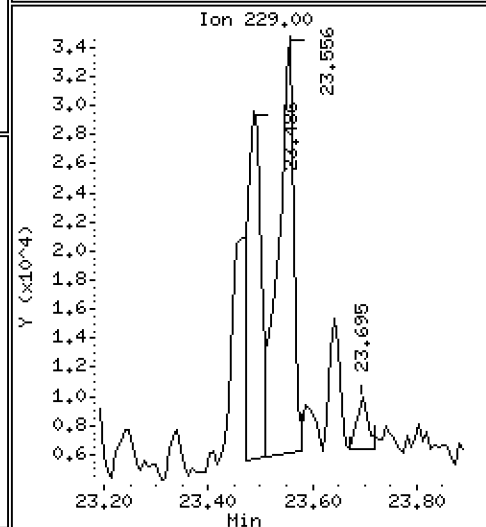
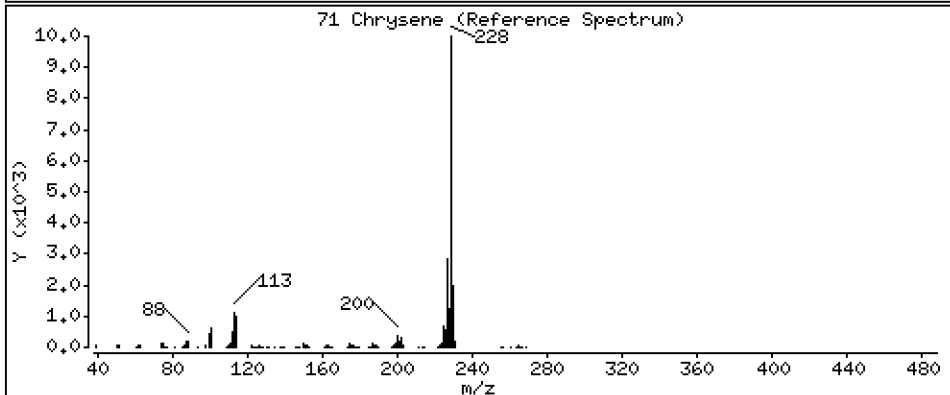
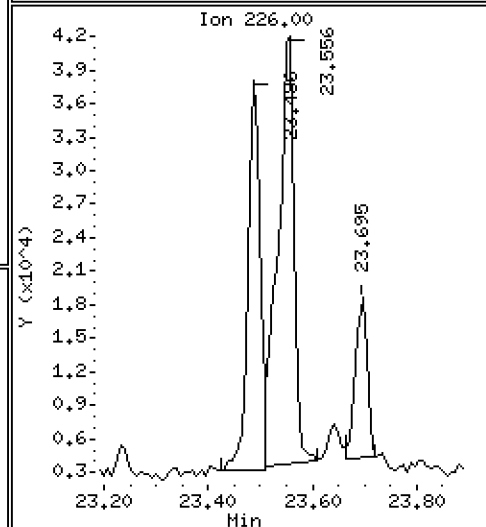
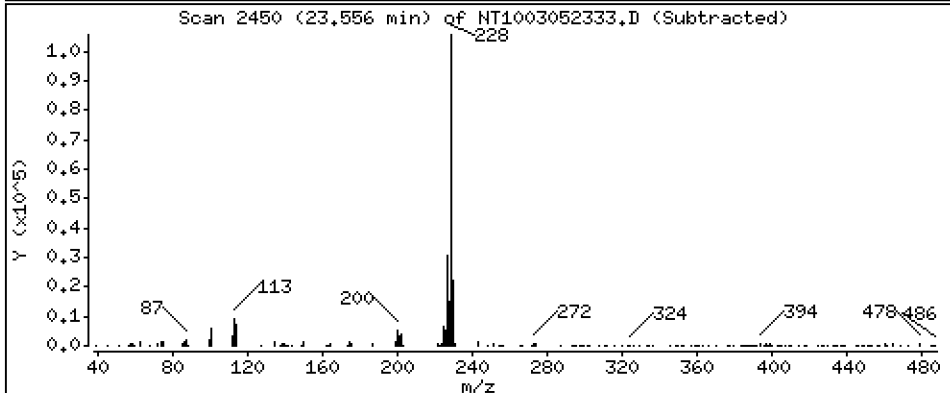
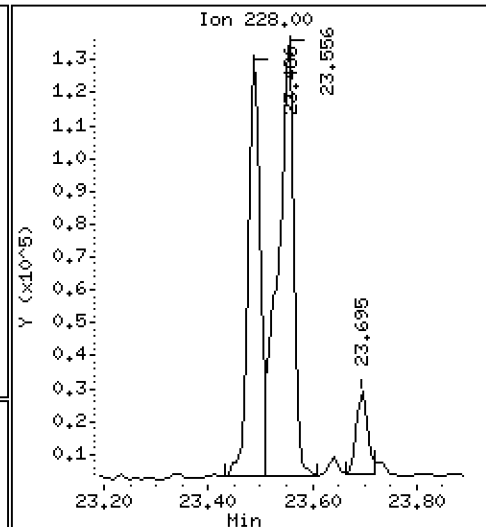
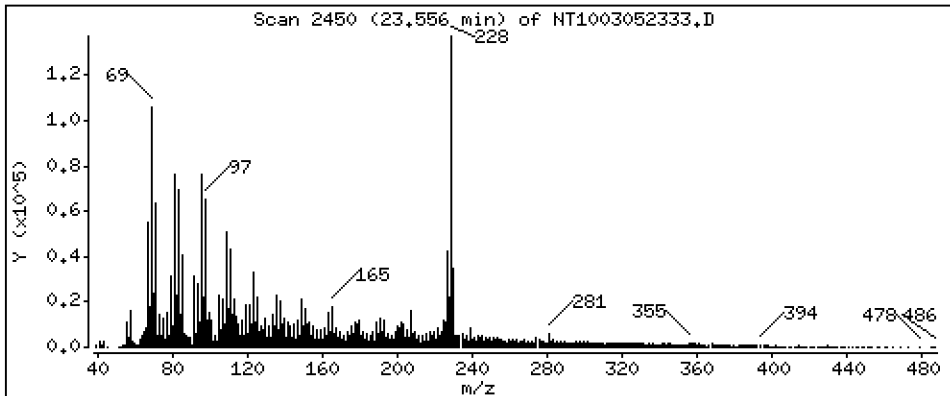
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,455 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

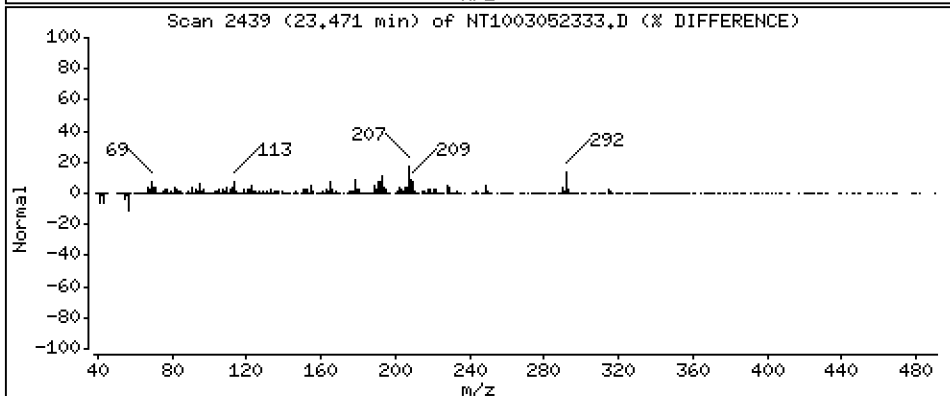
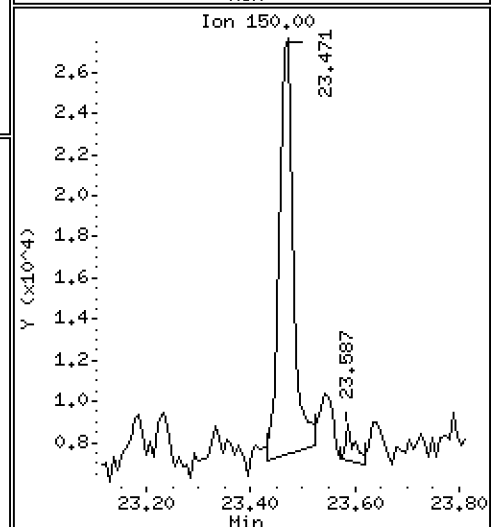
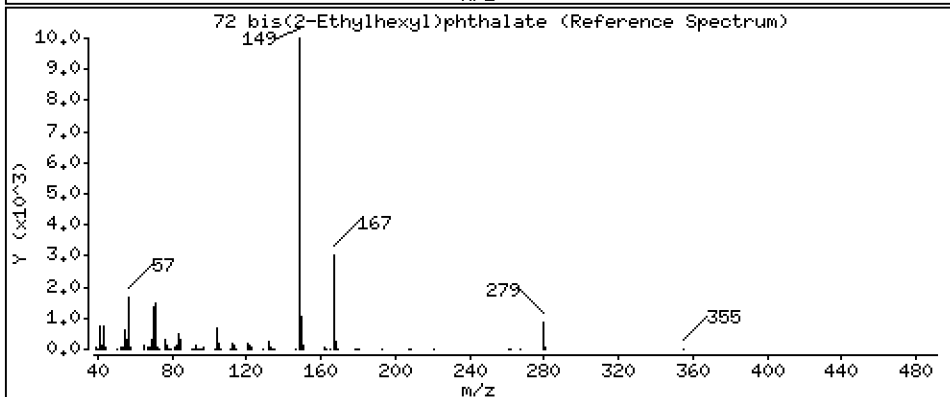
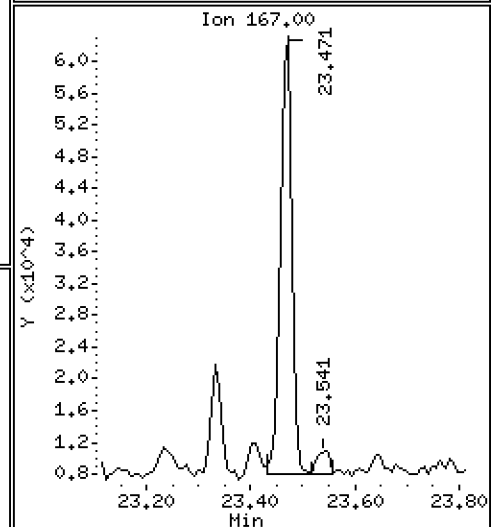
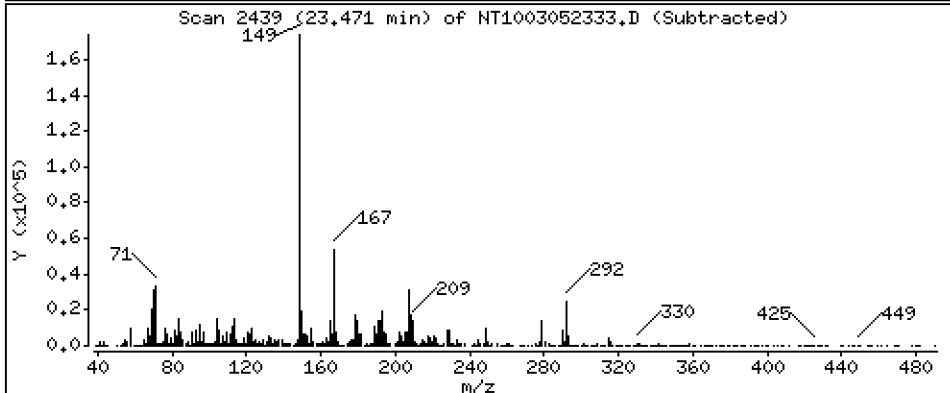
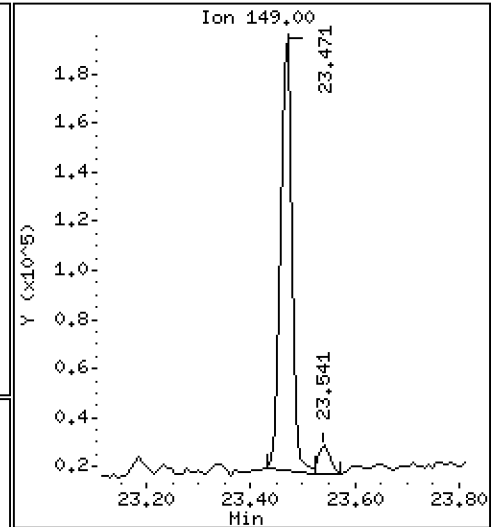
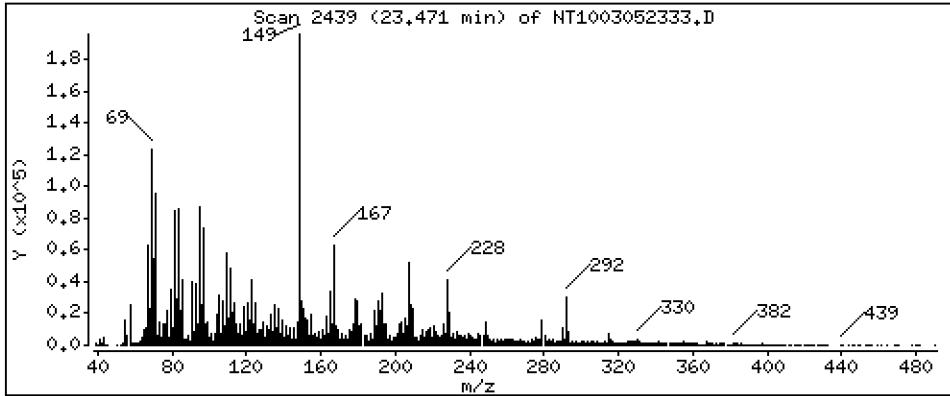
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,500 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

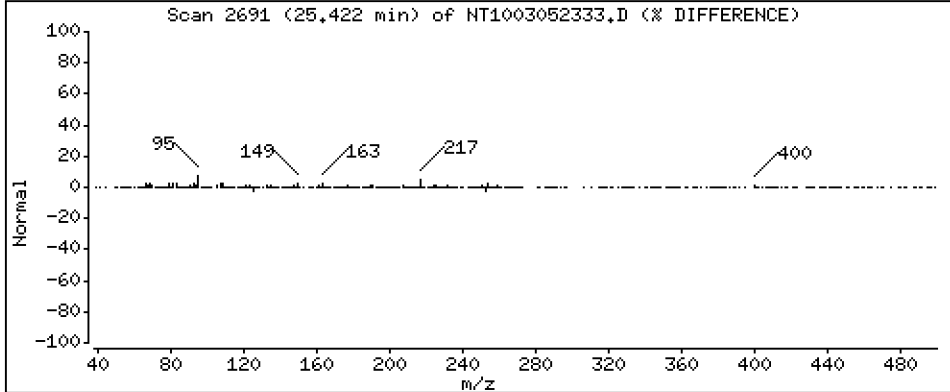
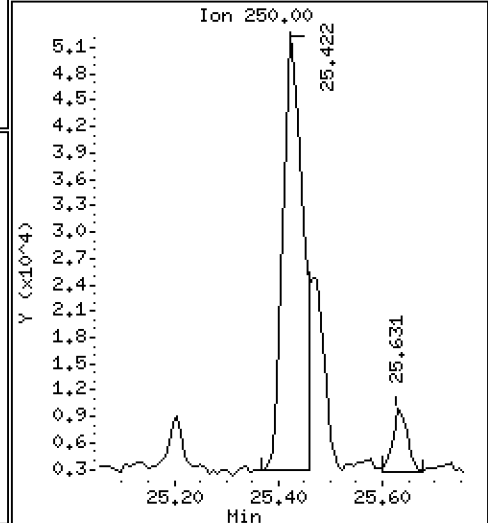
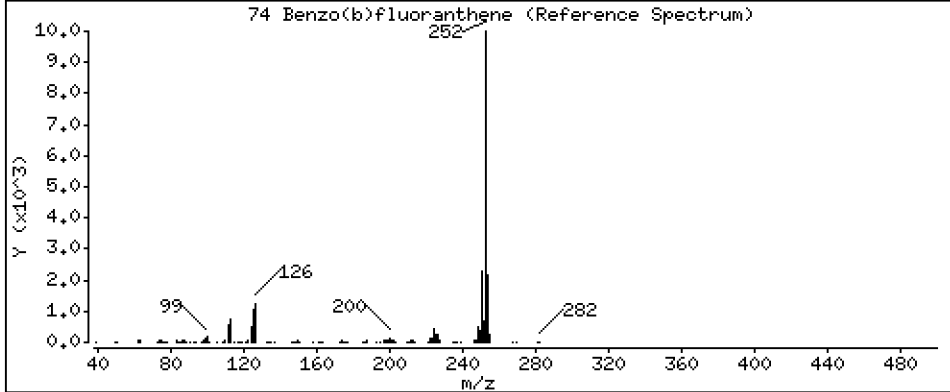
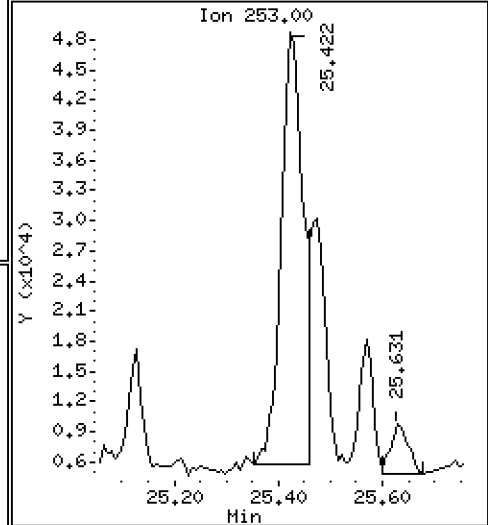
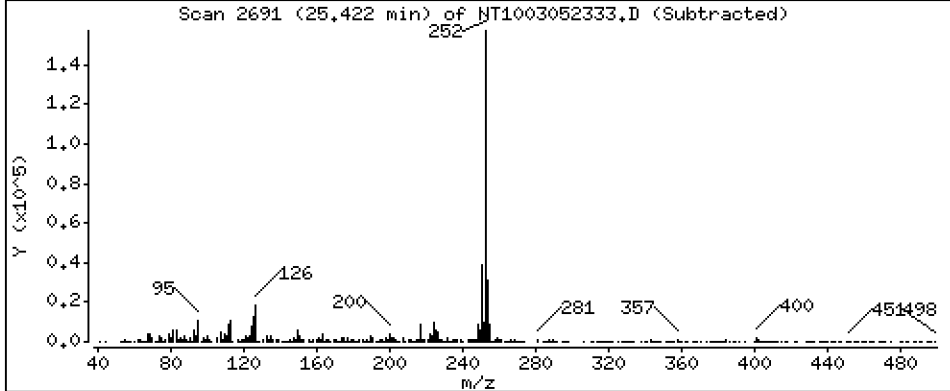
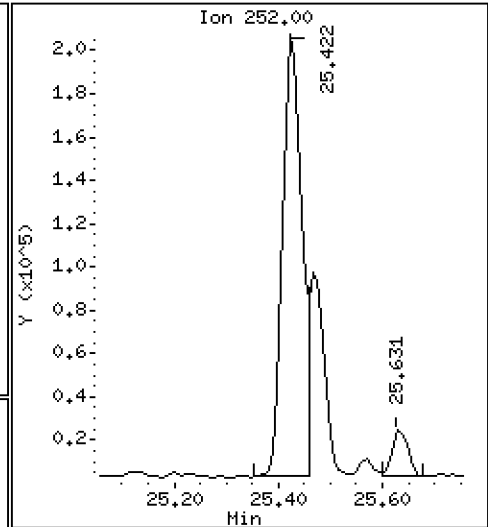
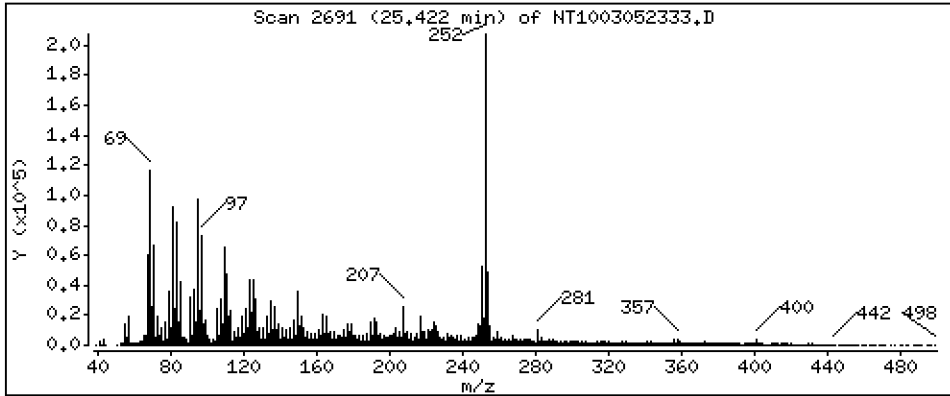
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,004 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

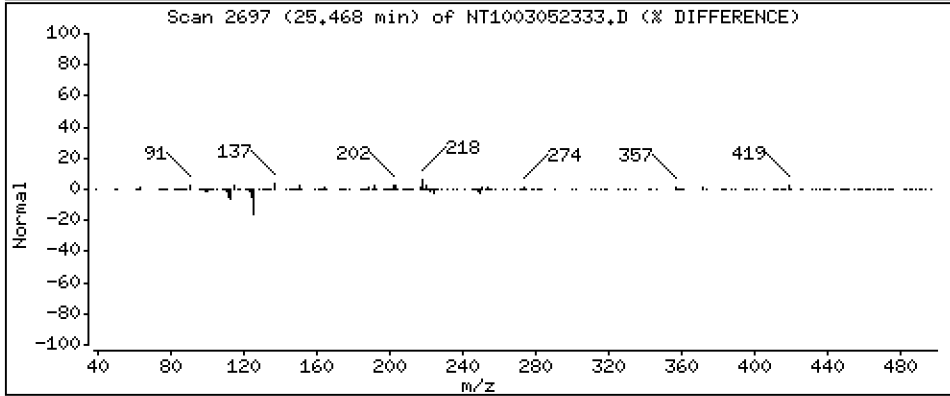
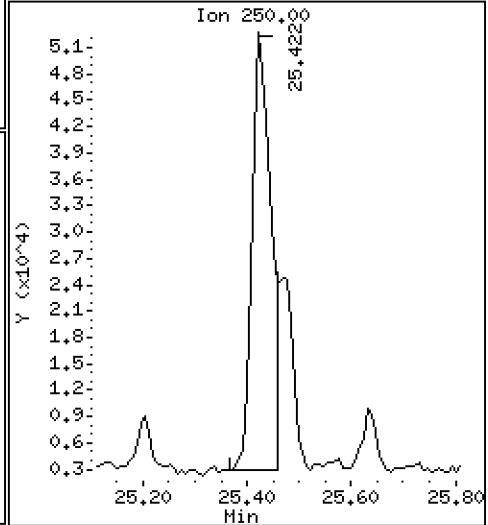
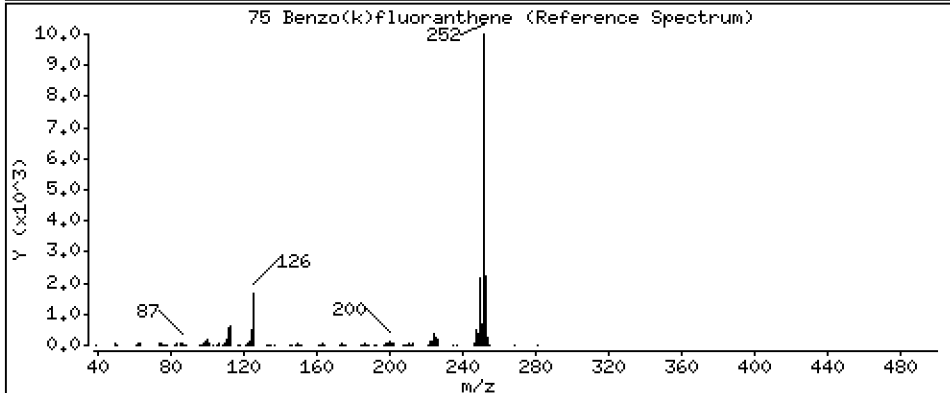
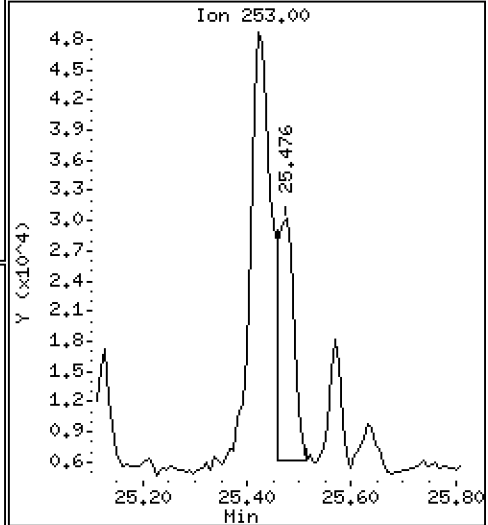
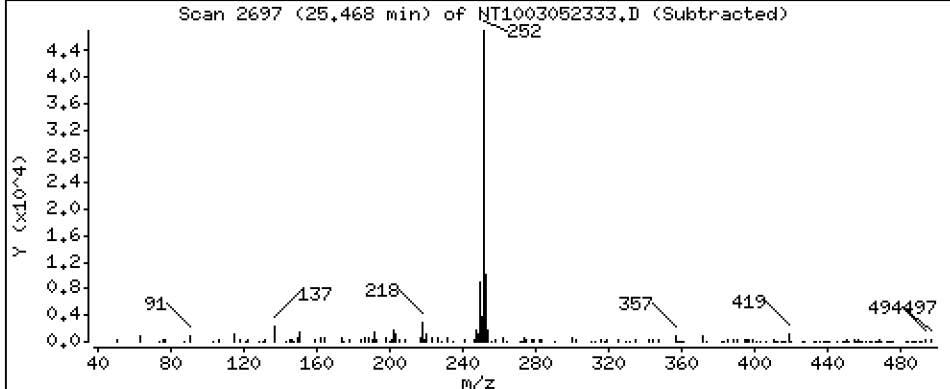
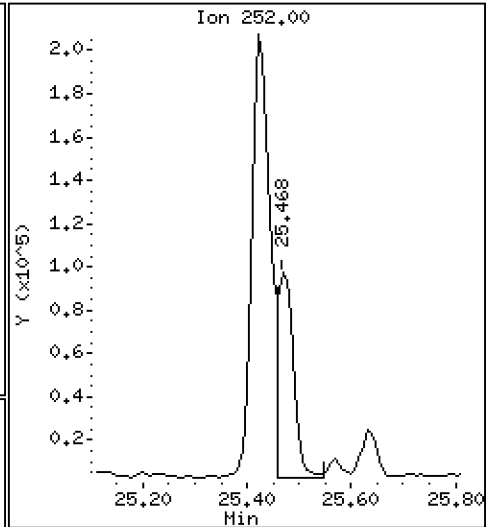
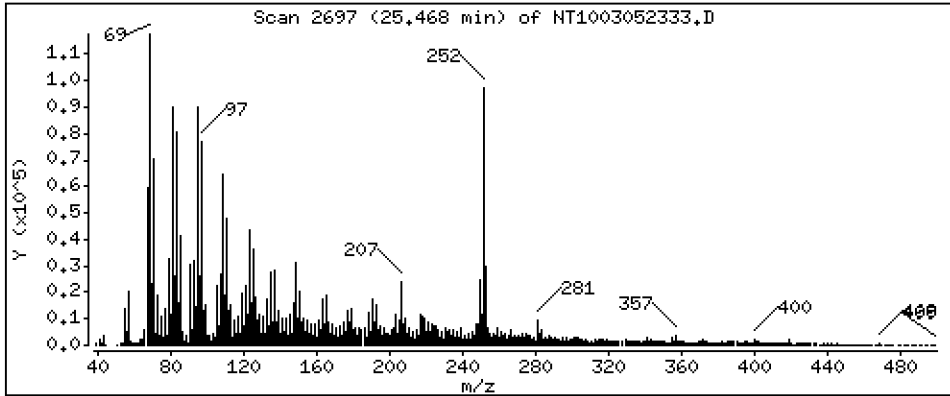
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,7650 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

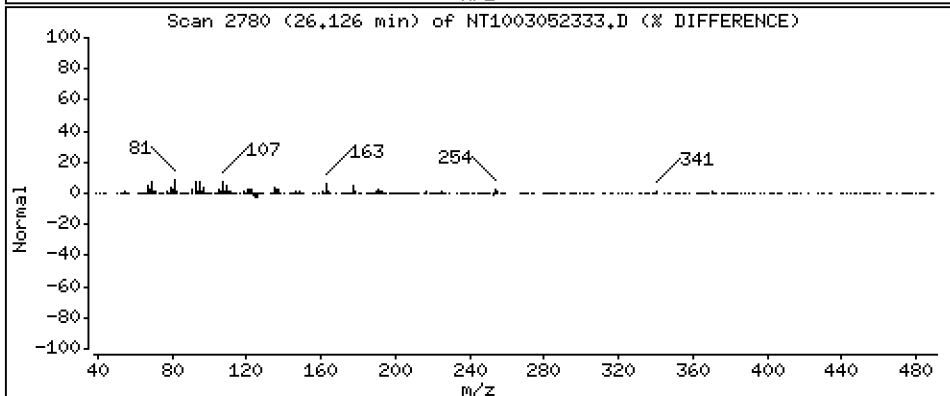
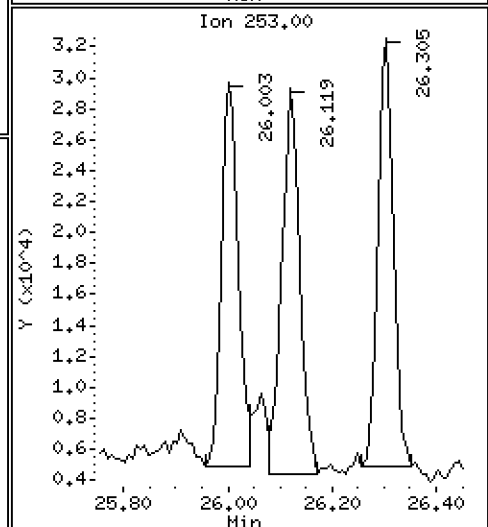
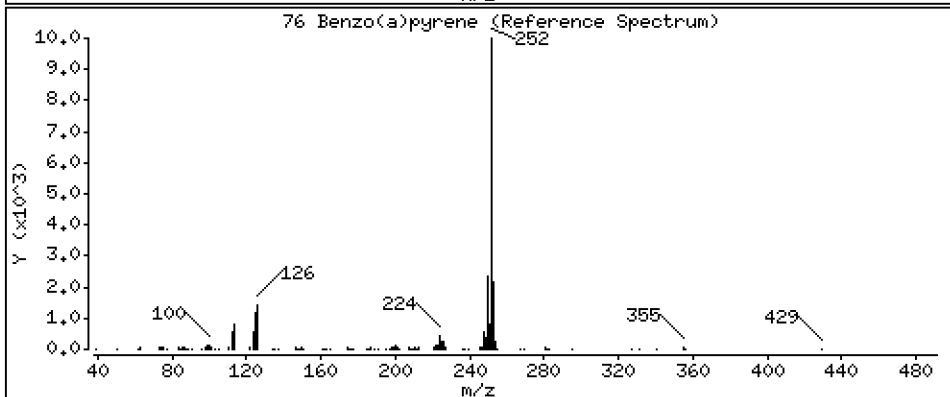
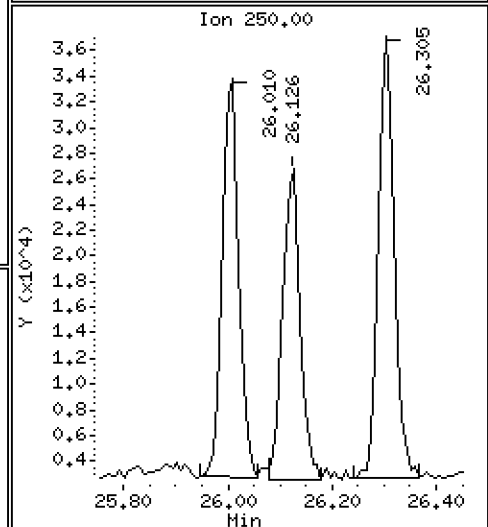
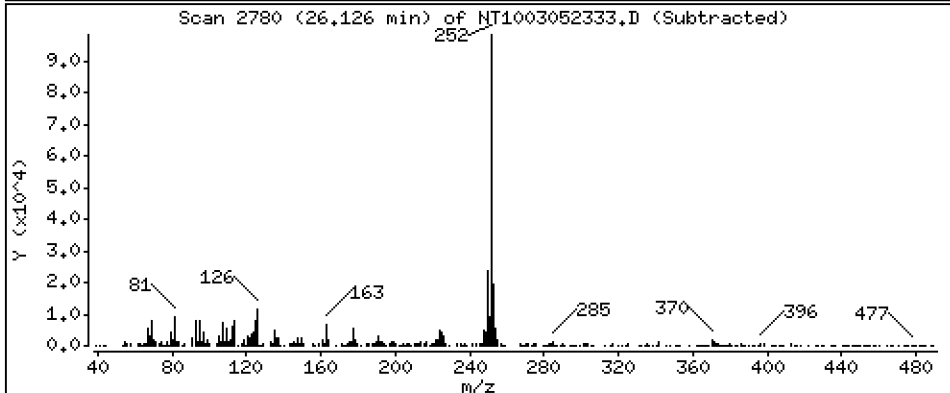
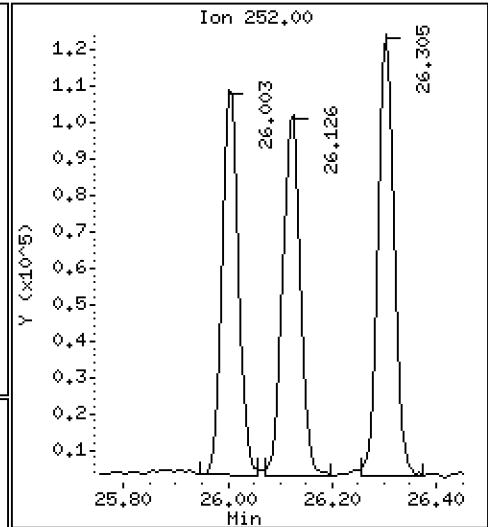
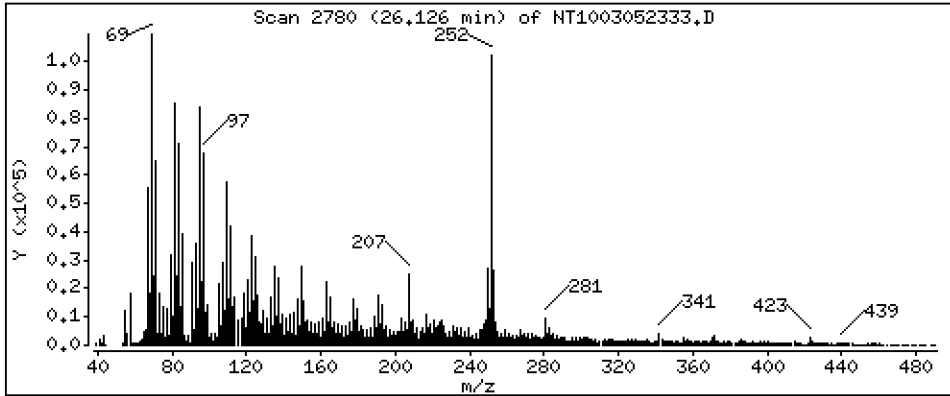
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,9830 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

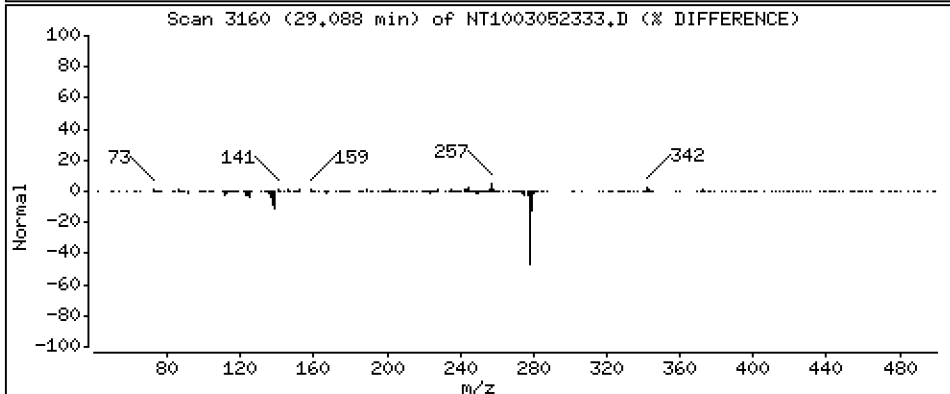
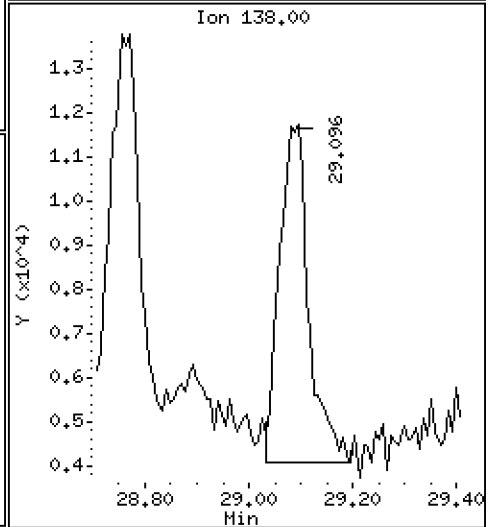
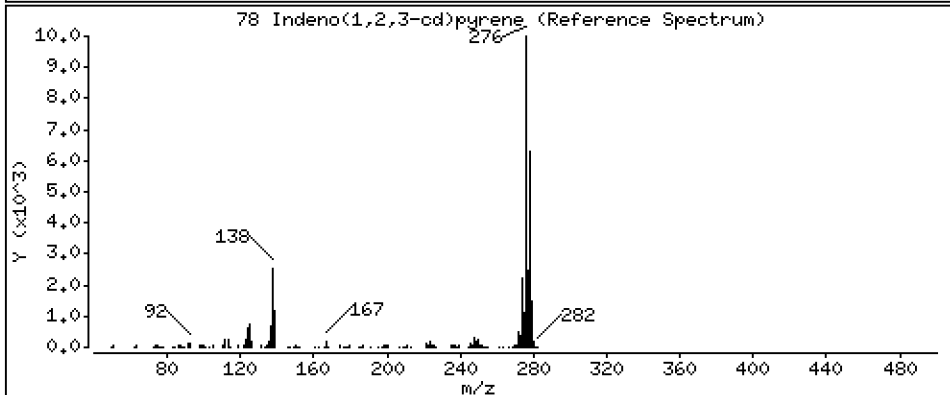
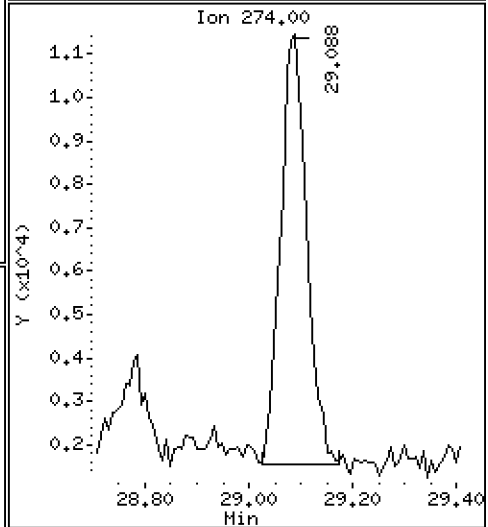
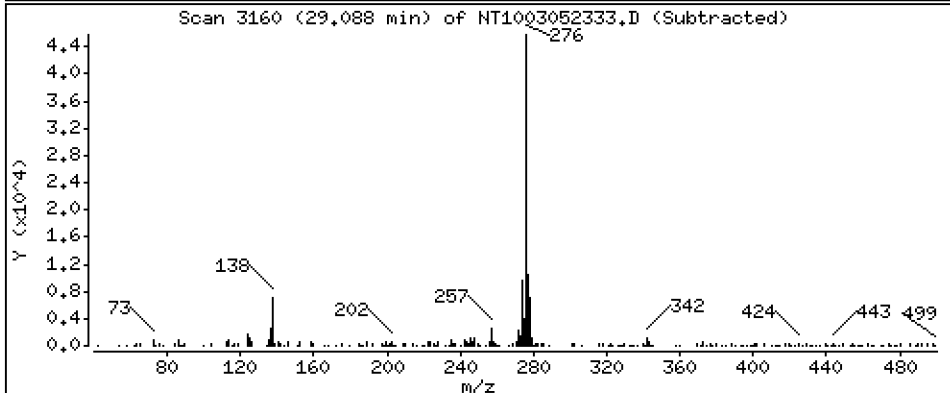
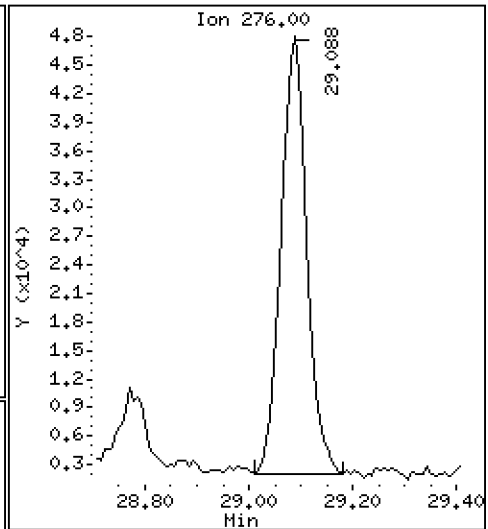
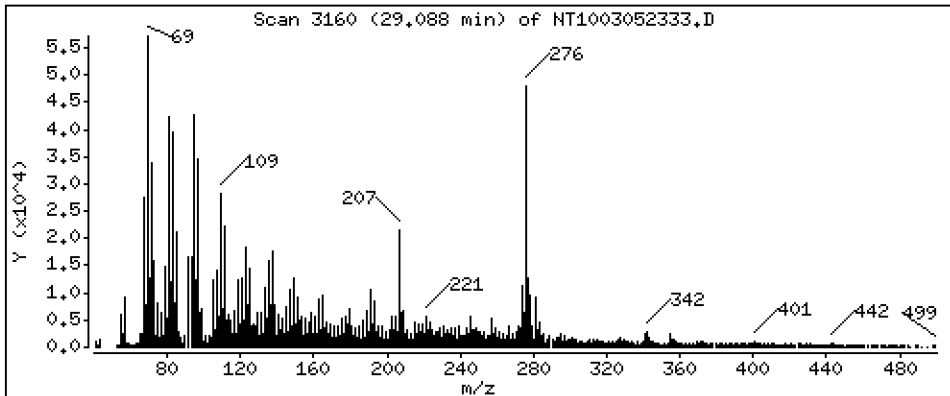
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,5836 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

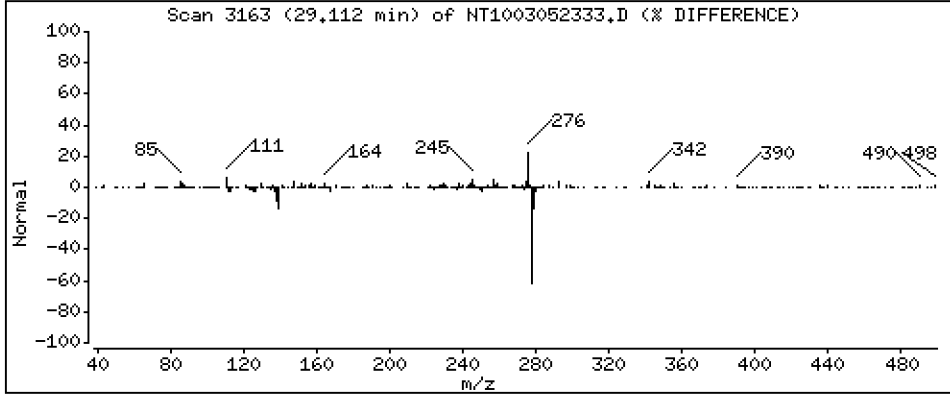
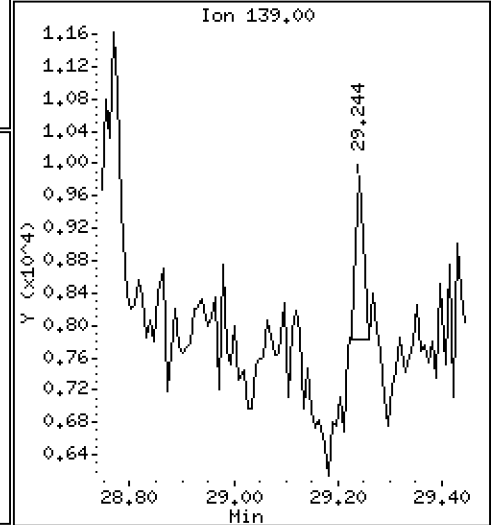
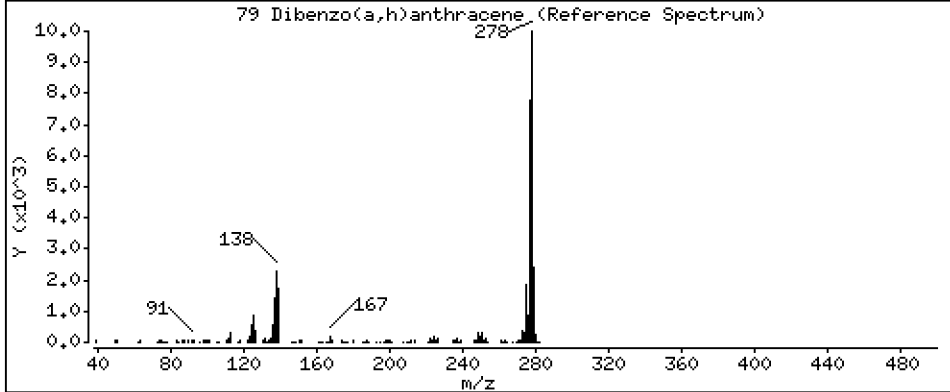
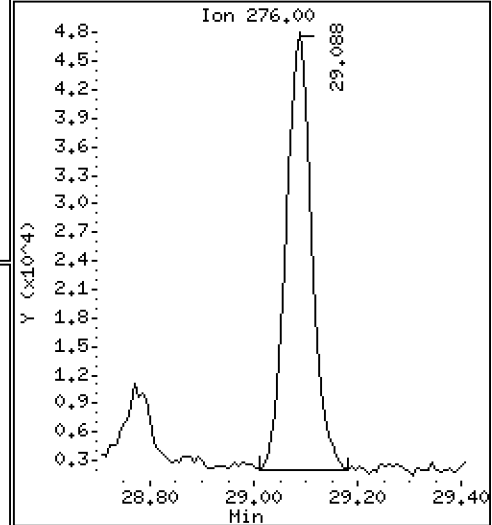
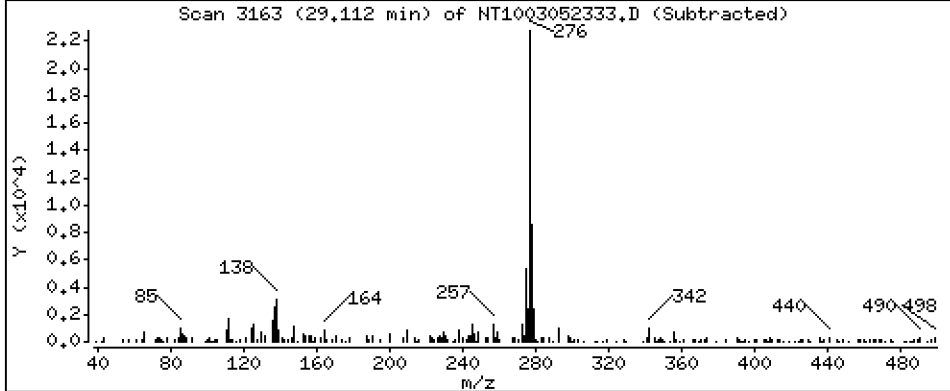
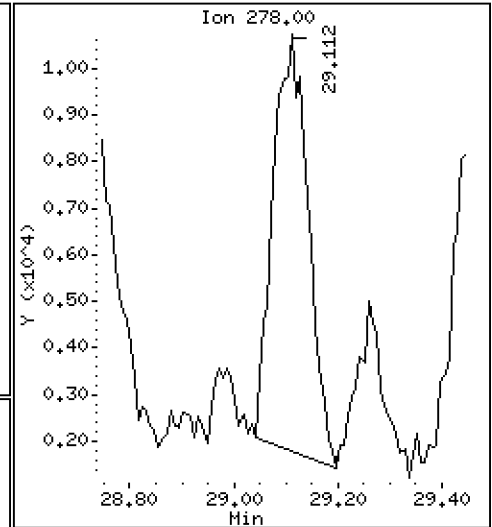
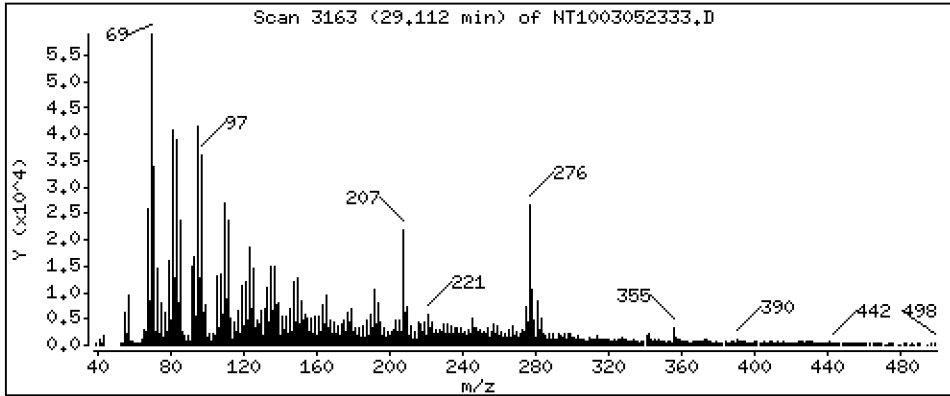
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2012 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

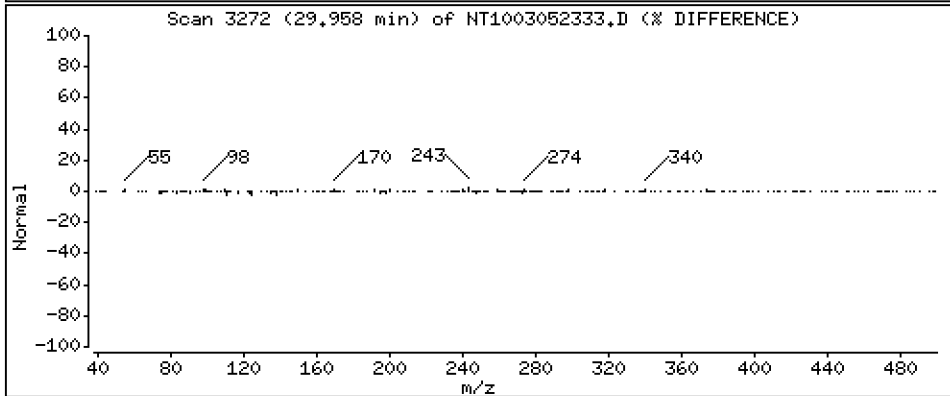
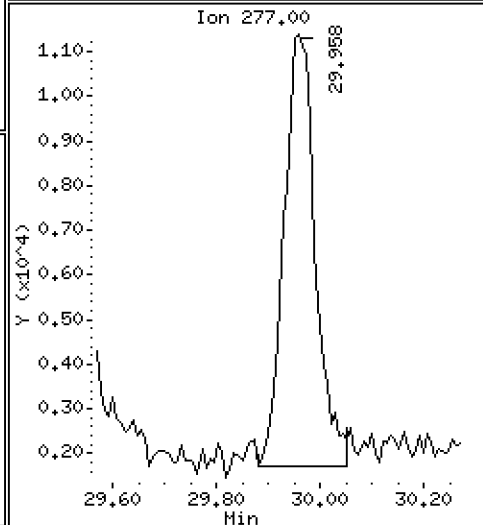
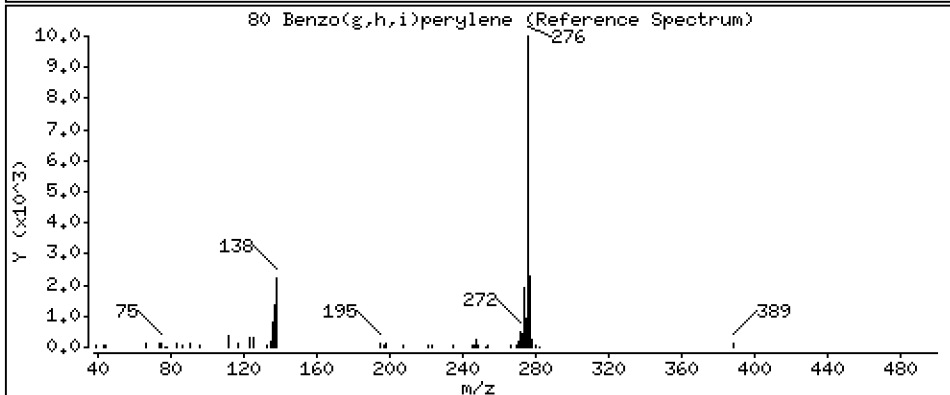
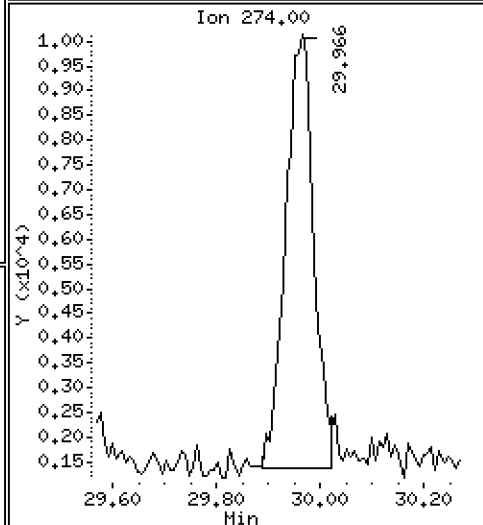
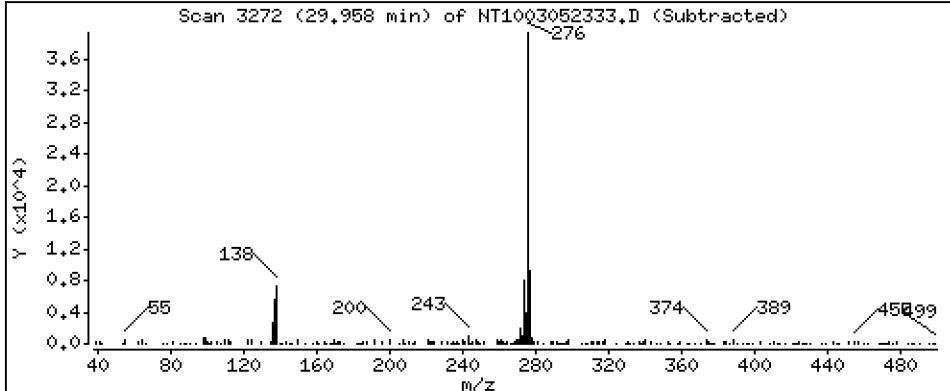
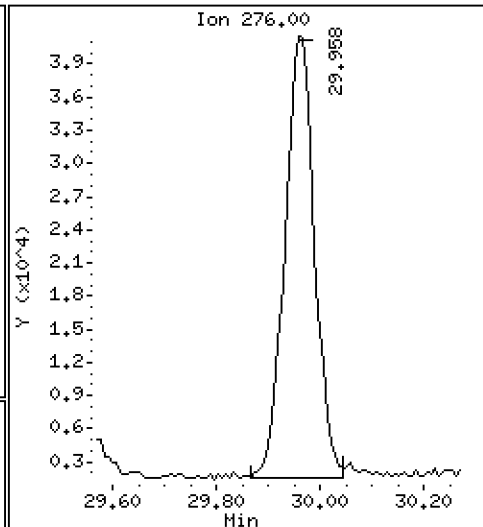
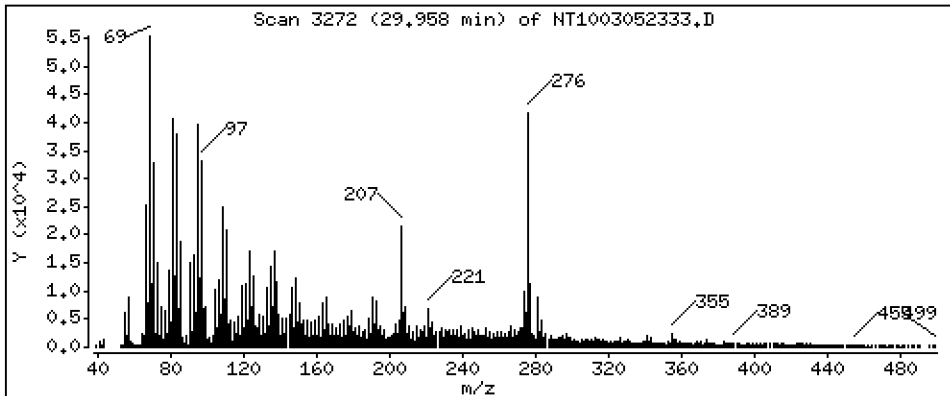
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,7233 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

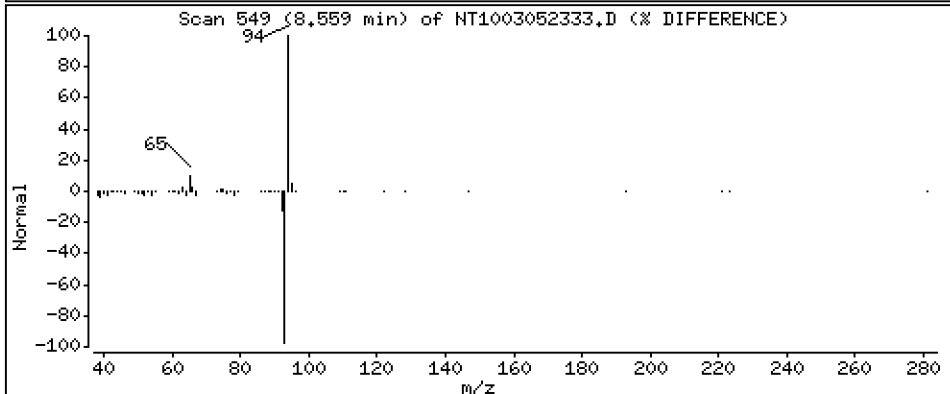
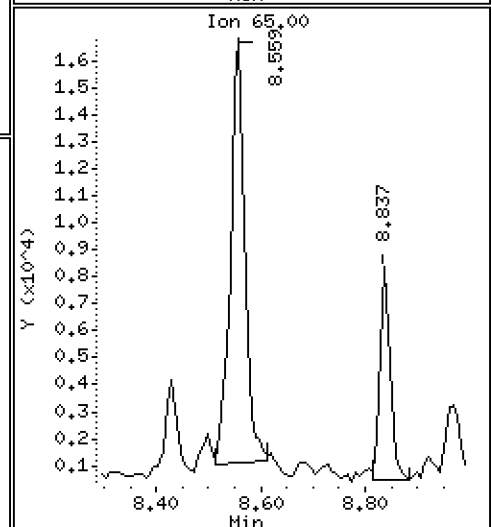
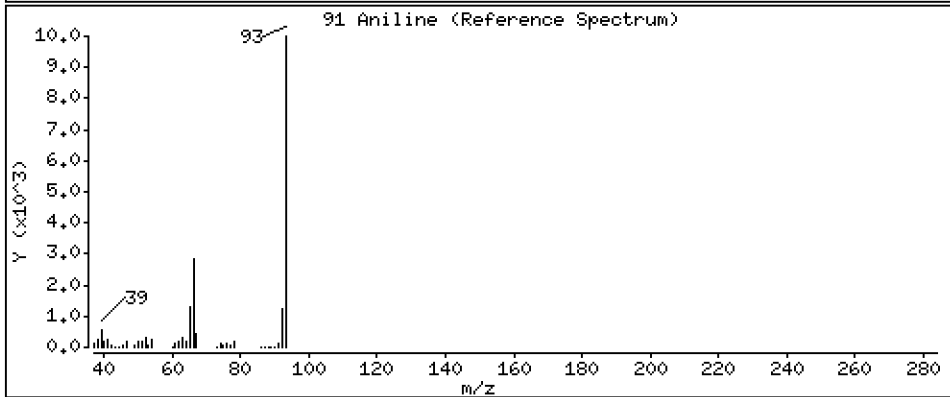
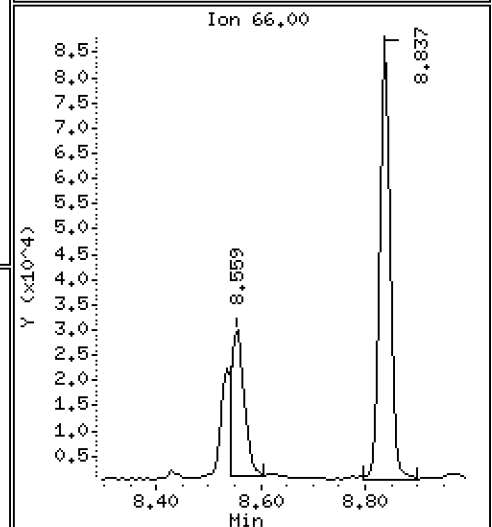
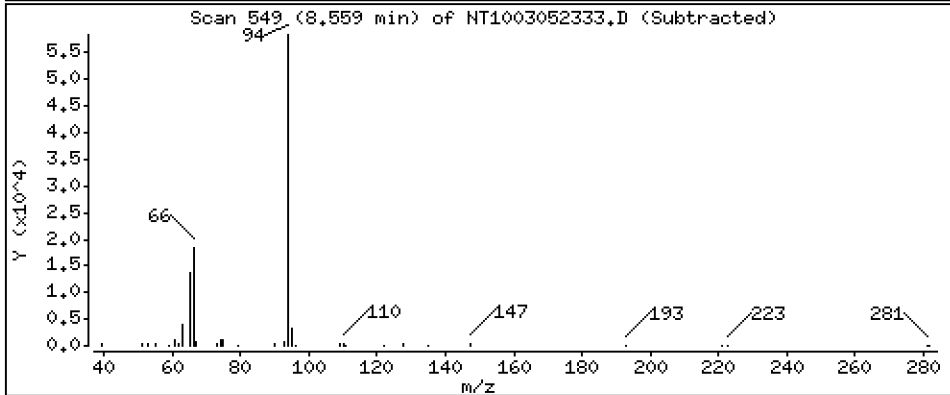
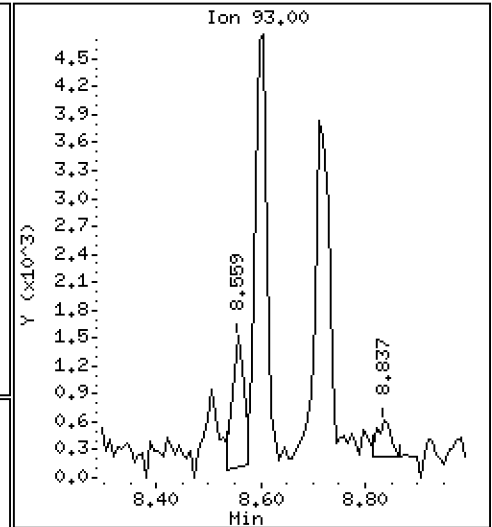
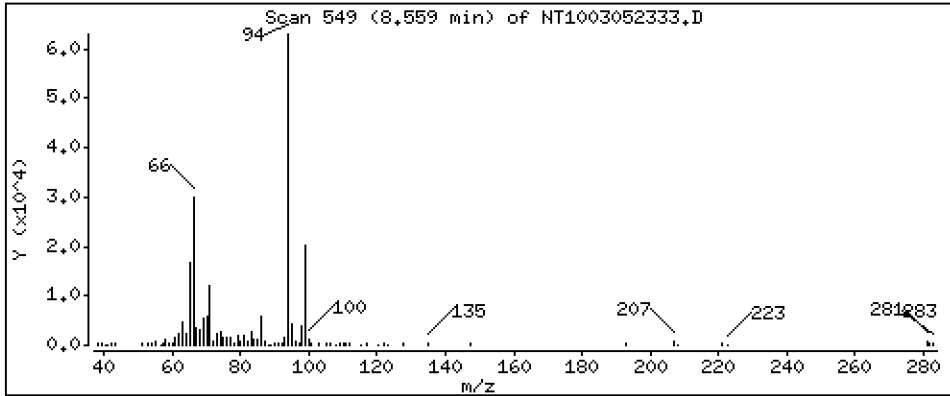
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 0.02398 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

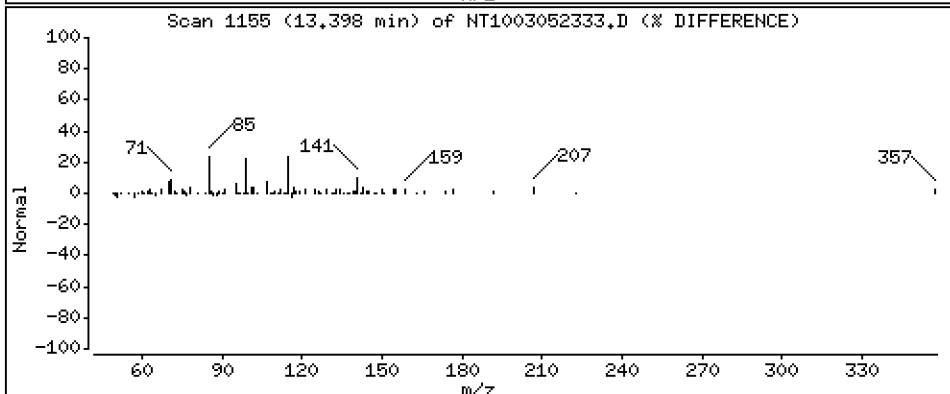
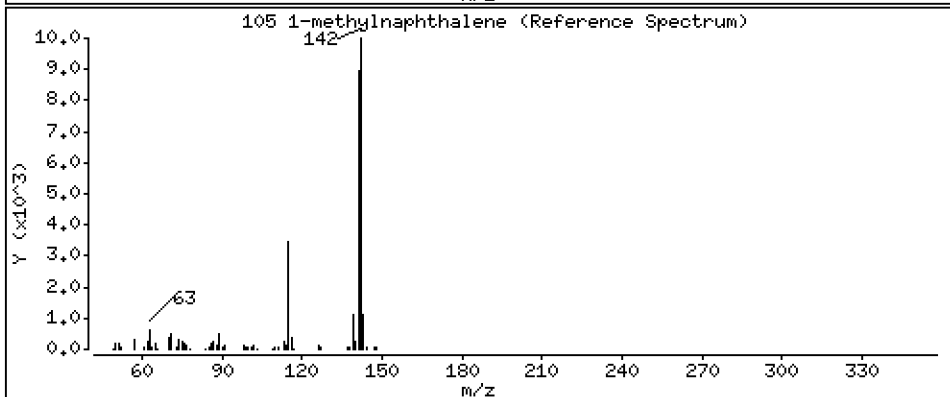
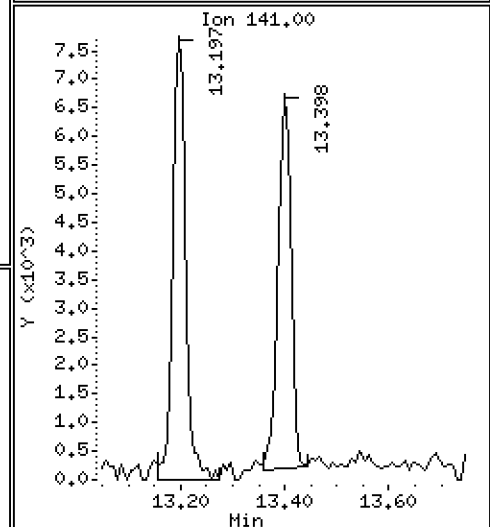
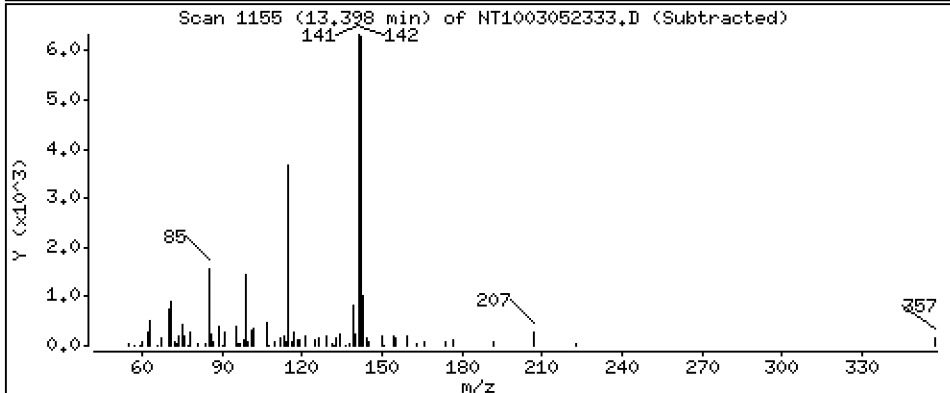
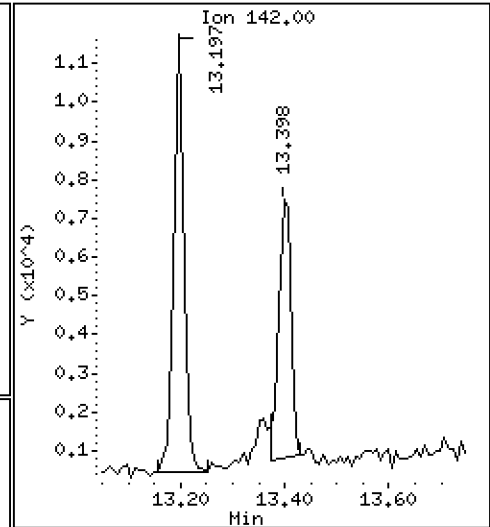
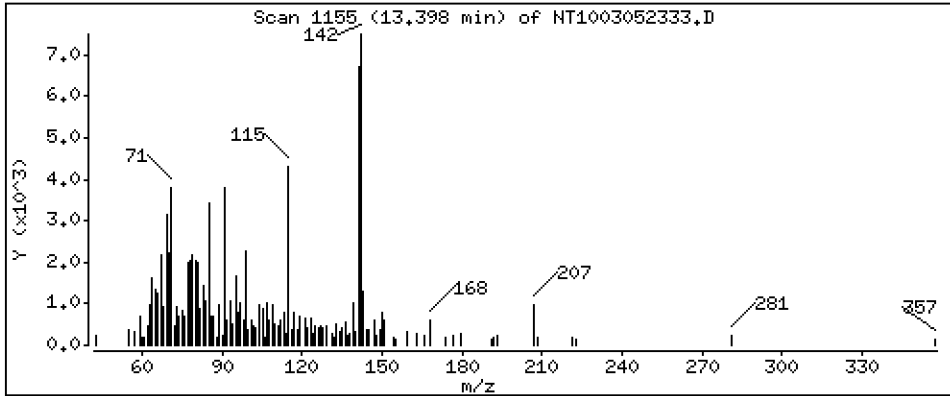
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,08701 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

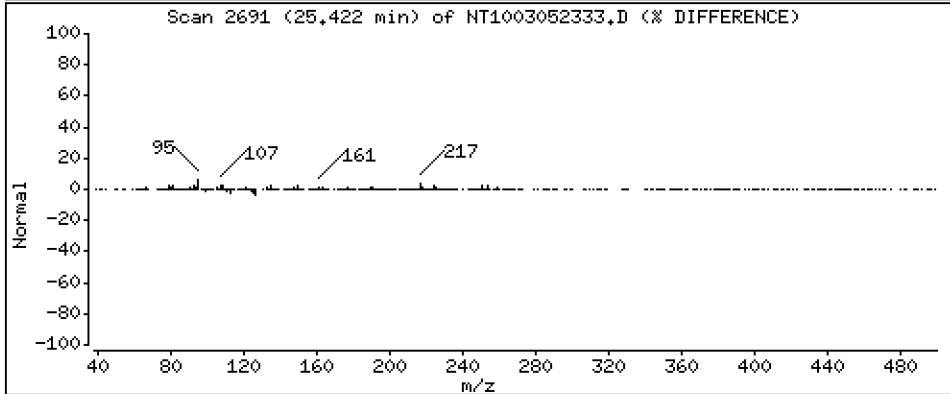
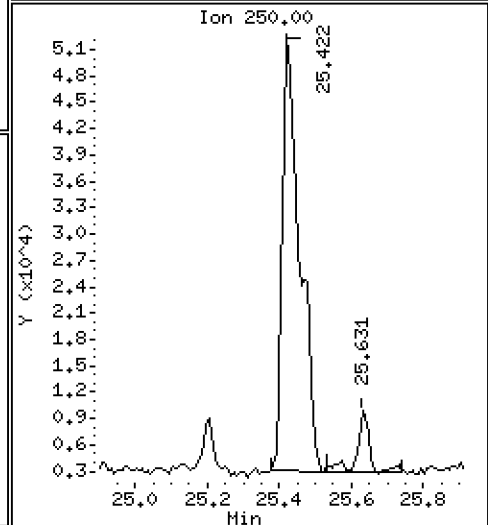
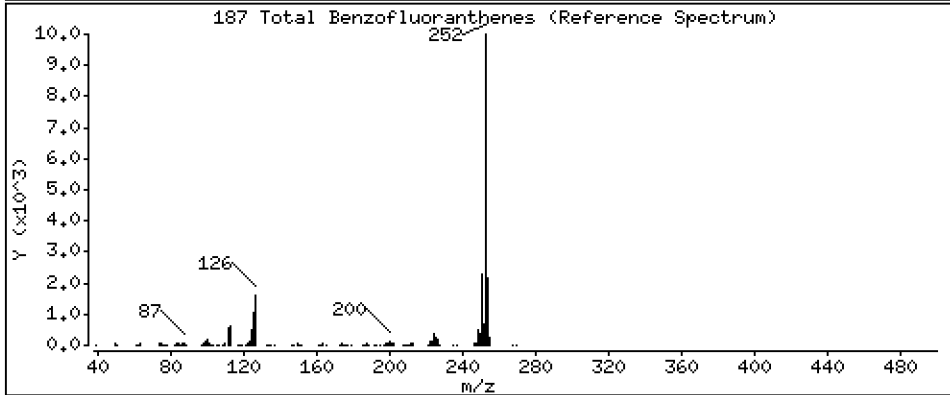
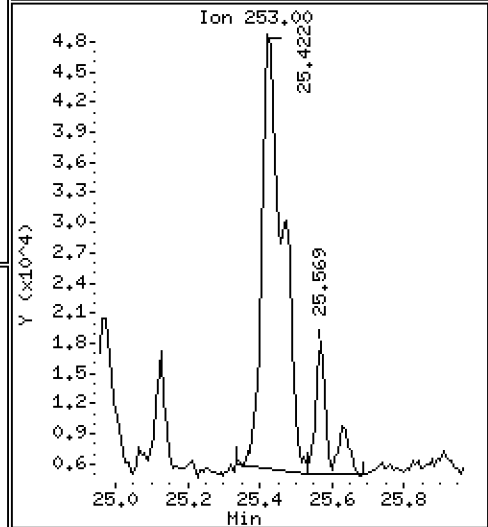
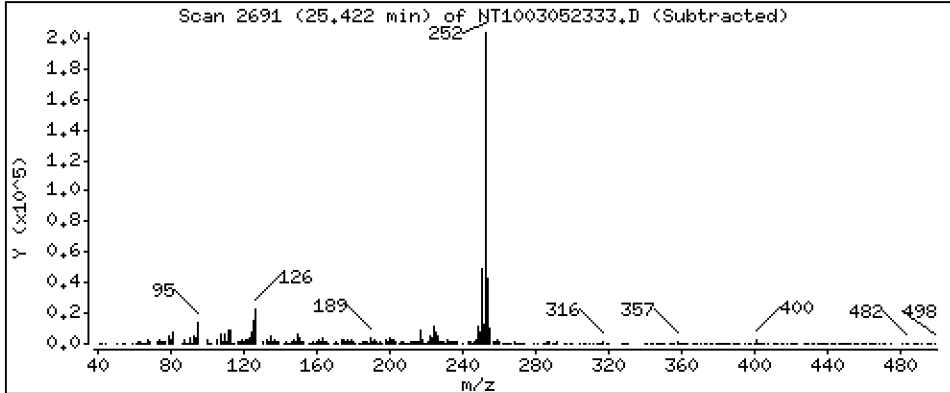
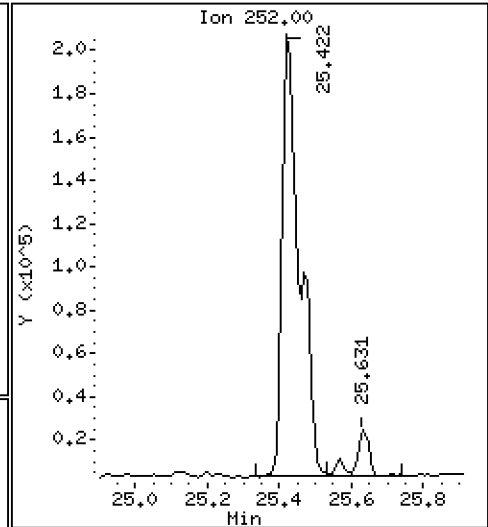
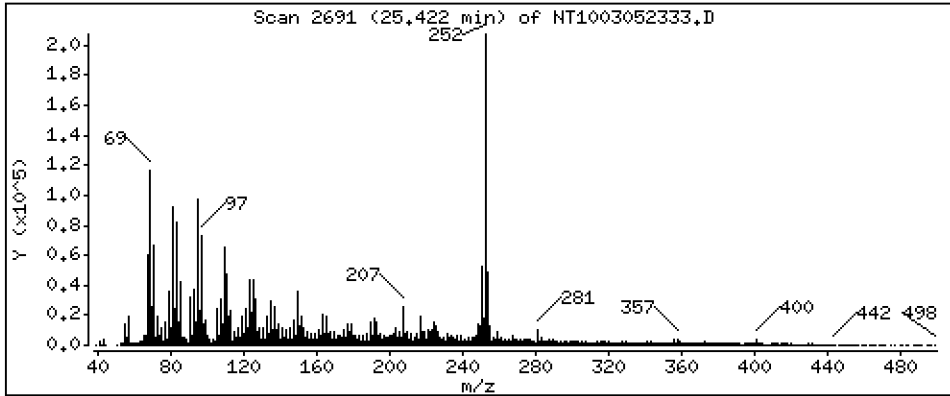
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,692 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052333.D

Lab Smp Id: 23A0326-11

Inj Date : 06-MAR-2023 09:34

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-11

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m

Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15

Cal File: NT1003012307.D

Als bottle: 23

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
\$ 1 2-Fluorophenol	112		6.912	6.905	(0.746)	344666	5.36765	5.368
\$ 2 Phenol-d5	99		8.535	8.527	(0.922)	440257	5.90559	5.906
3 Phenol	94		8.558	8.550	(0.924)	101805	1.28443	1.284
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.954)	396730	6.23756	6.238
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	204088	4.00000	
9 1,4-Dichlorobenzene	146		9.285	9.293	(1.002)	1143	0.01580	0.01580
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.031)	175079	3.68436	3.684
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.751	(1.051)	6797	0.33660	0.3366
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.079)	17455	0.22671	0.2267
\$ 18 Nitrobenzene-d5	82		10.318	10.325	(0.878)	356262	4.40307	4.403
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.757	11.757	(1.000)	737094	4.00000	
28 Naphthalene	128		11.796	11.803	(1.003)	22877	0.12092	0.1209
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.196	(1.122)	16241	0.12152	0.1215
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	630918	4.39011	4.390
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.775	14.775	(0.963)	5907	0.04540	0.04540
40 Acenaphthylene	152		15.061	15.061	(0.981)	21544	0.11077	0.1108
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.347	15.347	(1.000)	402918	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.417	15.417	(1.005)	13395	0.11419	0.1142
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.780	15.780	(1.028)	22664	0.13018	0.1302
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.237	16.244	(1.058)	99317	0.72049	0.7205
49 Fluorene	166		16.492	16.492	(1.075)	18492	0.12767	0.1277
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.994	16.993	(1.107)	169986	6.56013	6.560
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.455	18.455	(1.000)	738789	4.00000	
60 Phenanthrene	178		18.502	18.502	(1.002)	152175	0.80486	0.8049
61 Anthracene	178		18.610	18.610	(1.008)	62739	0.34221	0.3422
62 Carbazole	167		18.950	18.943	(1.027)	24727	0.14722	0.1472
63 Di-n-butylphthalate	149		19.647	19.631	(1.065)	23302	0.10228	0.1023
64 Fluoranthene	202		20.916	20.877	(0.890)	321458	1.36215	1.362
65 Pyrene	202		21.333	21.310	(0.907)	1198226	4.98633	4.986
\$ 66 Terphenyl-d14	244		21.597	21.581	(0.919)	759619	3.90673	3.907
67 Butylbenzylphthalate	149		22.472	22.464	(0.956)	15004	0.11594	0.1159
68 Benzo(a)anthracene	228		23.486	23.478	(0.999)	217190	0.89789	0.8979
* 69 Chrysene-d12	240		23.509	23.494	(1.000)	686011	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.556	23.540	(1.002)	285946	1.45457	1.455
72 bis(2-Ethylhexyl)phthalate	149		23.470	23.463	(0.956)	259367	1.49962	1.500
* 134 Di-n-octylphthalate-d4	153		24.562	24.554	(1.000)	1223360	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.421	25.406	(0.968)	539473	2.00410	2.004
75 Benzo(k)fluoranthene	252		25.468	25.460	(0.970)	195645	0.76502	0.7650 (M)
76 Benzo(a)pyrene	252		26.126	26.103	(0.995)	233891	0.98298	0.9830
* 77 Perylene-d12	264		26.250	26.227	(1.000)	773941	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.088	29.057	(1.108)	161703	0.58361	0.5836
79 Dibenzo(a,h)anthracene	278		29.111	29.095	(1.109)	42099	0.20115	0.2012 (M)
80 Benzo(g,h,i)perylene	276		29.958	29.919	(1.141)	159761	0.72330	0.7233
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93		8.558	8.643	(0.924)	2204	0.02398	0.02398
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.397	13.397	(1.139)	10525	0.08701	0.08701
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.421	25.406	(0.968)	691274	2.69209	2.692
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052333.D Calibration Time: 04:32
 Lab Smp Id: 23A0326-11
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	204088	-4.55
27 Naphthalene-d8	756023	378012	1512046	737094	-2.50
42 Acenaphthene-d10	411497	205749	822994	402918	-2.08
59 Phenanthrene-d10	744396	372198	1488792	738789	-0.75
69 Chrysene-d12	823005	411503	1646010	686011	-16.65
134 Di-n-octylphthala	1350476	675238	2700952	1223360	-9.41
77 Perylene-d12	894064	447032	1788128	773941	-13.44

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.51	0.07
134 Di-n-octylphthala	24.55	24.05	25.05	24.56	0.03
77 Perylene-d12	26.23	25.73	26.73	26.25	0.09

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

REVIEW SUMMARY FOR FILE - NT1003052333.D

Lab ID: 23A0326-11
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 09:34

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.924	0.933	-0.0092	Aniline

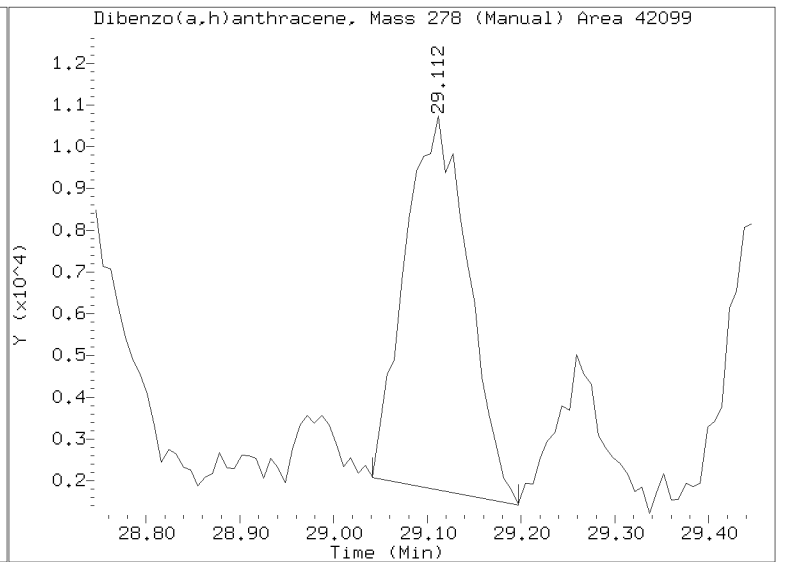
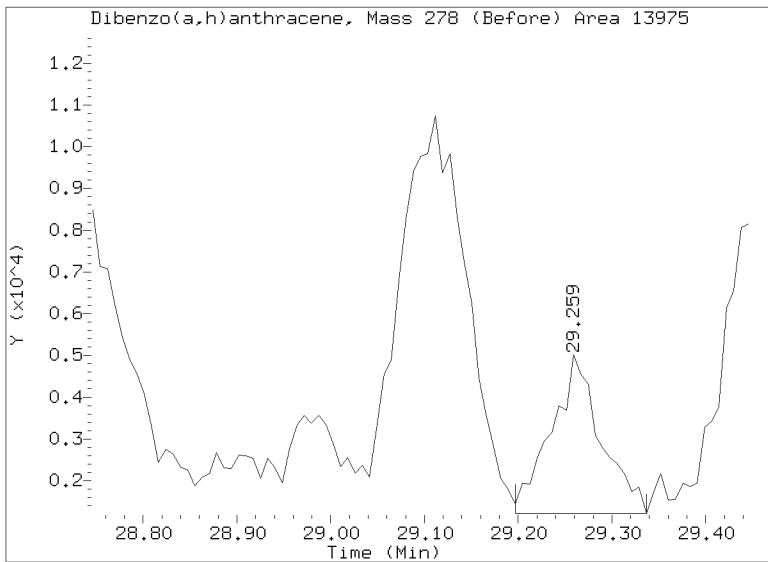
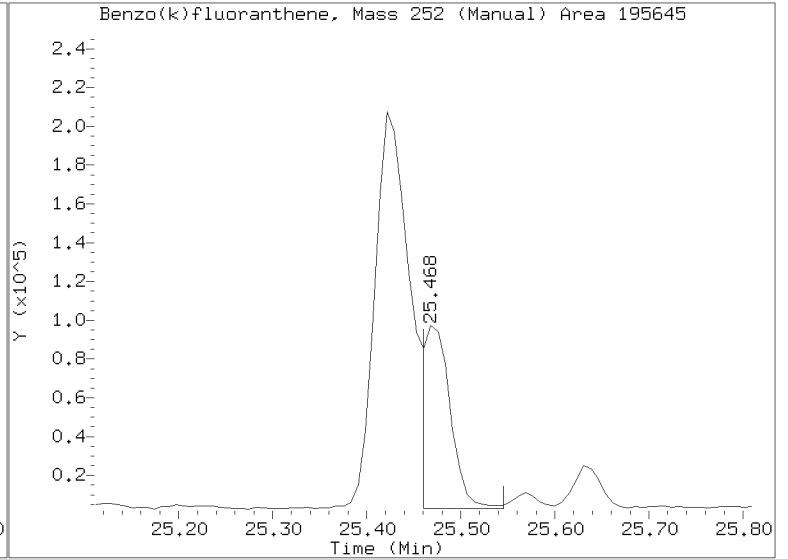
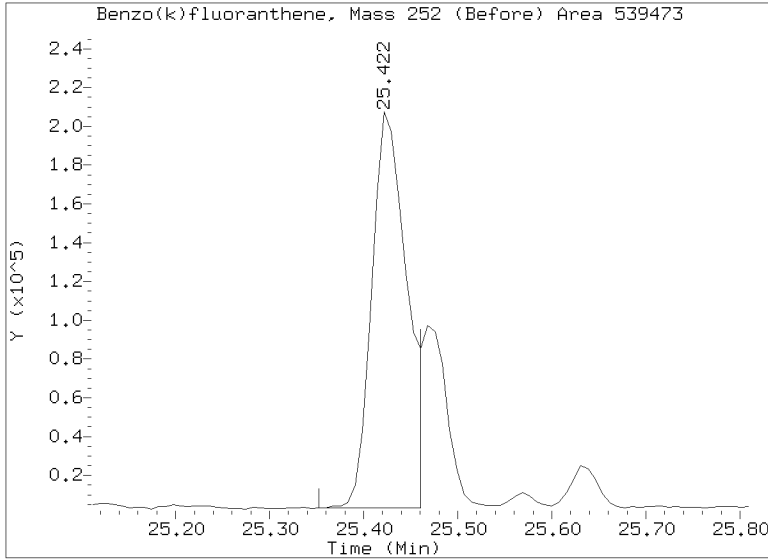
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052333.D
Injection Date: 06-MAR-2023 09:34
Lab ID:23A0326-11 Client ID:
Report Date: 03/27/2023 16:55



APPROVED

By Deenay Dunmore at 5:19 pm, Mar 27, 2023



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-12 A

SDG: 23A0326

Sampled: 01/17/23 14:37

Prepared: 02/02/23 13:06

File ID: NT1003052334.D

% Solids: 51.42

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 10:11

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 20.14 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	40.8		4.2	19.3
106-44-5	4-Methylphenol	1	37.0		7.1	19.3
91-20-3	Naphthalene	1	11.7	J	4.1	19.3
91-57-6	2-Methylnaphthalene	1	8.8	J	4.4	19.3
208-96-8	Acenaphthylene	1	8.6	J	6.0	19.3
131-11-3	Dimethylphthalate	1	4.7	J	4.2	19.3
83-32-9	Acenaphthene	1	9.4	J	5.0	19.3
132-64-9	Dibenzofuran	1	19.3	U	13.6	19.3
86-73-7	Fluorene	1	19.3	U	14.1	19.3
85-01-8	Phenanthrene	1	87.9		8.4	19.3
120-12-7	Anthracene	1	34.2		6.9	19.3
206-44-0	Fluoranthene	1	165		5.9	19.3
129-00-0	Pyrene	1	216		5.5	19.3
85-68-7	Butylbenzylphthalate	1	19.3	U	9.1	19.3
56-55-3	Benzo(a)anthracene	1	91.0		5.8	19.3
218-01-9	Chrysene	1	129		5.9	19.3
117-81-7	bis(2-Ethylhexyl)phthalate	1	112		5.3	48.3
	Benzo(a)fluoranthene, Total	1	224		9.7	38.6
50-32-8	Benzo(a)pyrene	1	91.7		4.1	19.3
193-39-5	Indeno(1,2,3-cd)pyrene	1	58.1		14.1	19.3
53-70-3	Dibenzo(a,h)anthracene	1	20.5		16.6	19.3
191-24-2	Benzo(g,h,i)perylene	1	71.2		13.1	19.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	724.22	514	70.9	27 - 120	
Phenol-d5	724.22	542	74.8	29 - 120	
2-Chlorophenol-d4	724.22	603	83.3	31 - 120	
1,2-Dichlorobenzene-d4	482.81	354	73.3	32 - 120	
Nitrobenzene-d5	482.81	412	85.4	30 - 120	
2-Fluorobiphenyl	482.81	425	88.0	35 - 120	



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

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-12 A

SDG: 23A0326

Sampled: 01/17/23 14:37

Prepared: 02/02/23 13:06

File ID: NT1003052334.D

% Solids: 51.42

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 10:11

Batch: BLA0685

Sequence: SLC0425

Initial/Final: 20.14 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00019

Cleanups: GPC

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	724.22	690	95.3	24 - 134	
p-Terphenyl-d14	482.81	348	72.1	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052334.D

Date: 06-HRR-2023 10:11

Client ID:

Sample Info: 23A0326-12

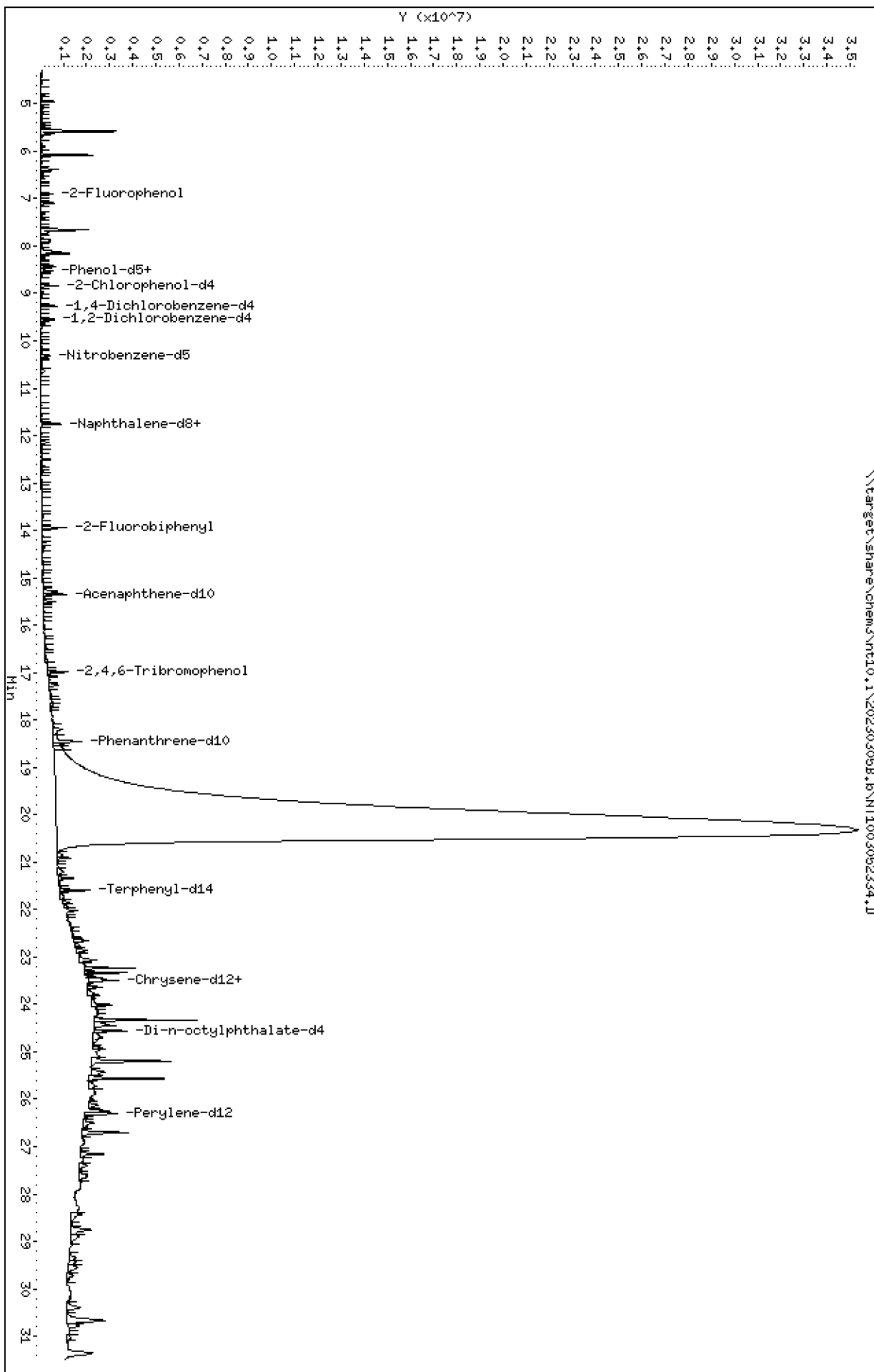
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

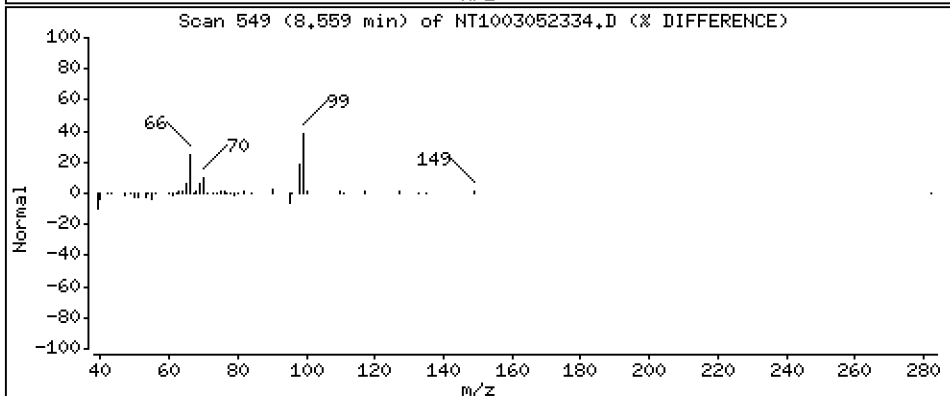
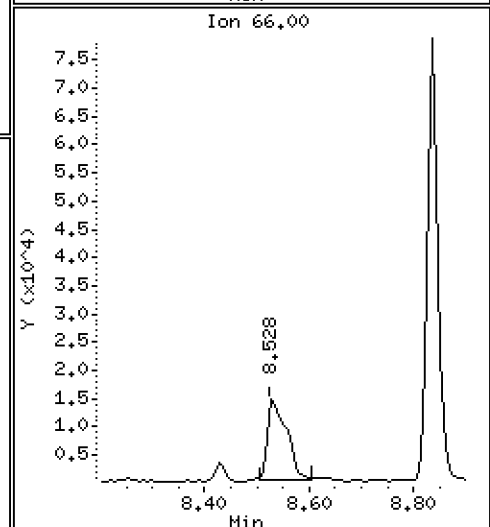
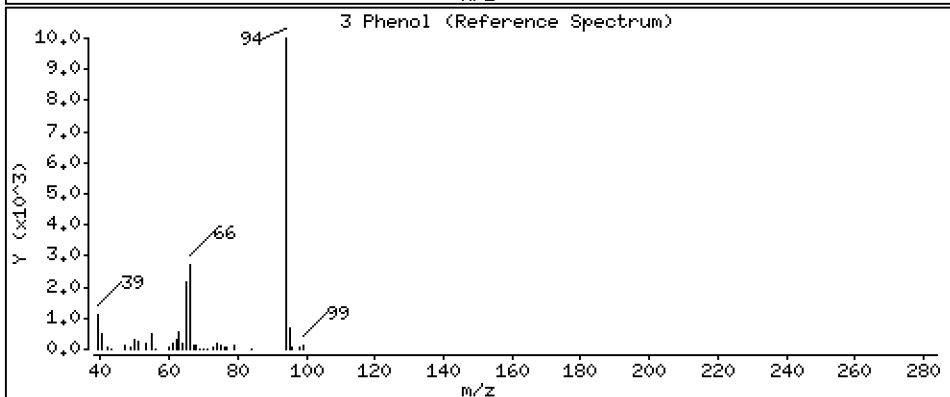
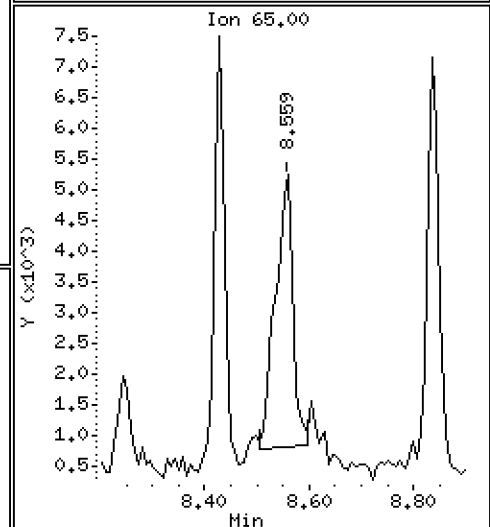
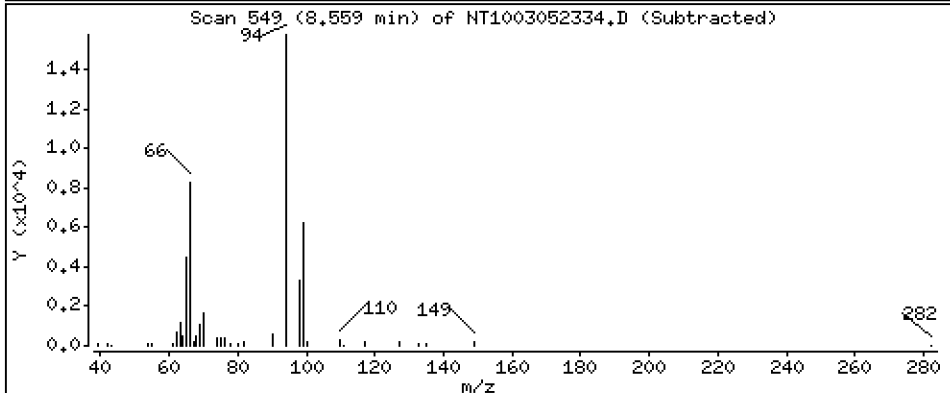
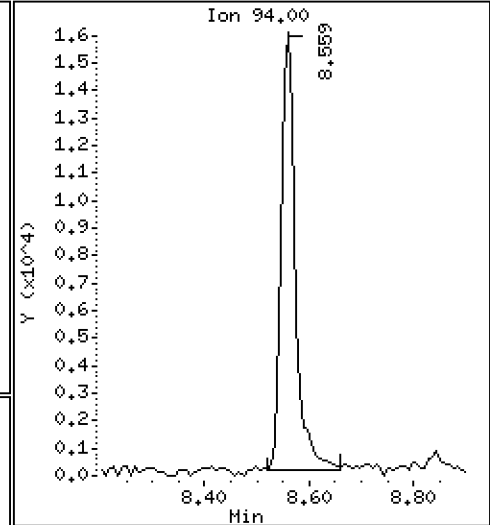
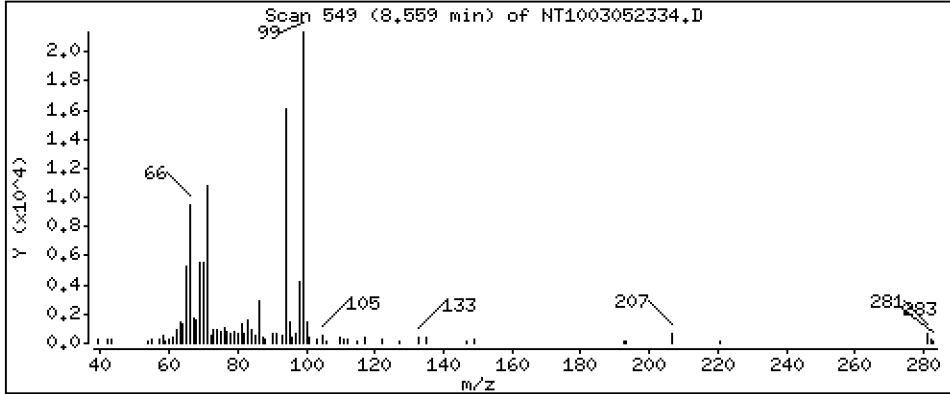
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,4229 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

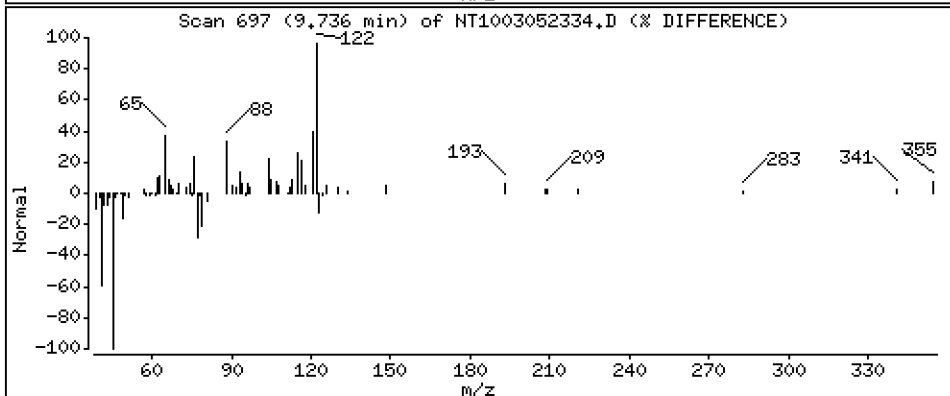
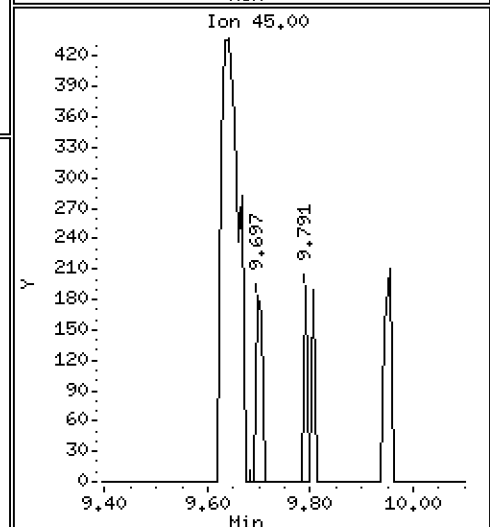
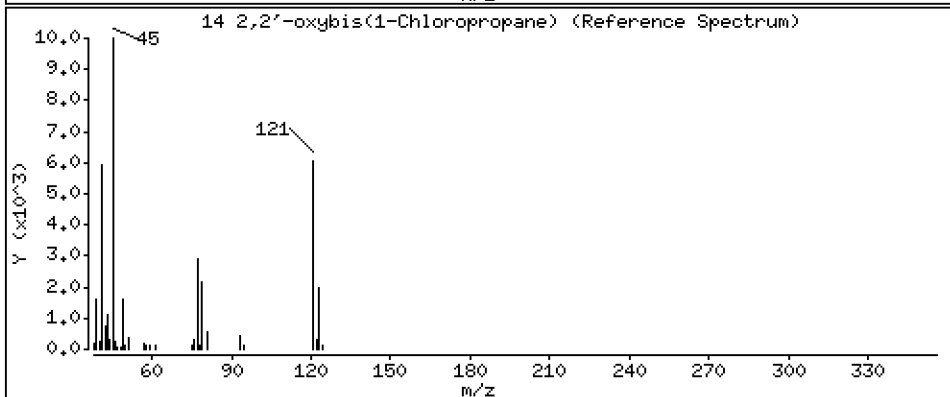
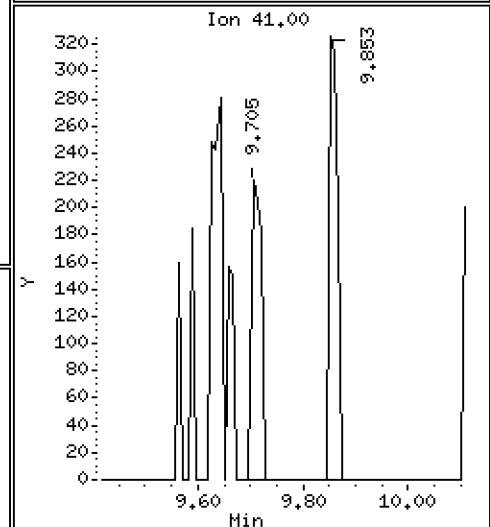
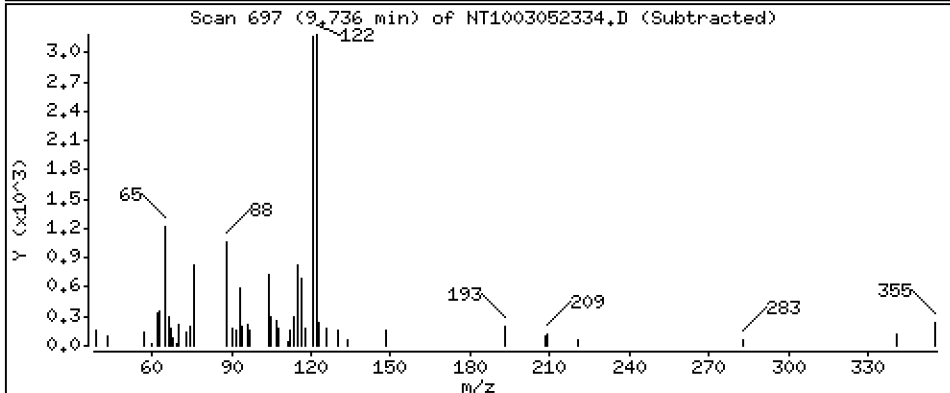
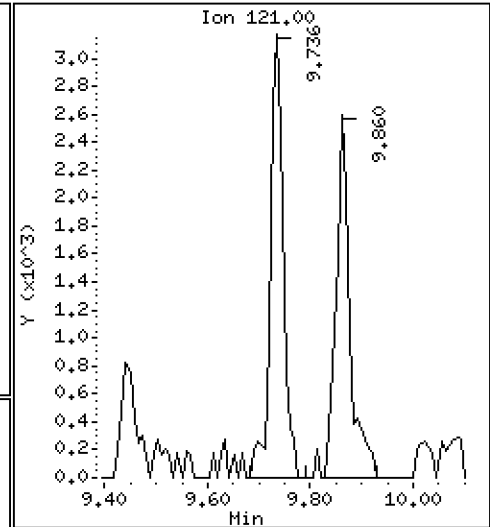
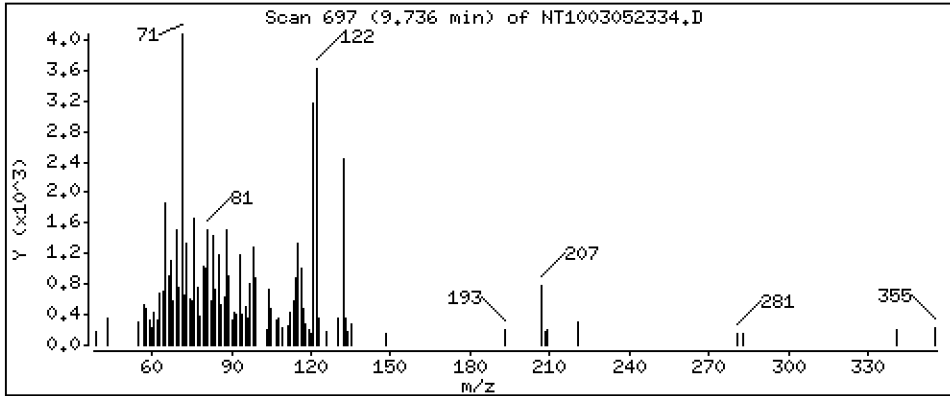
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,3041 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

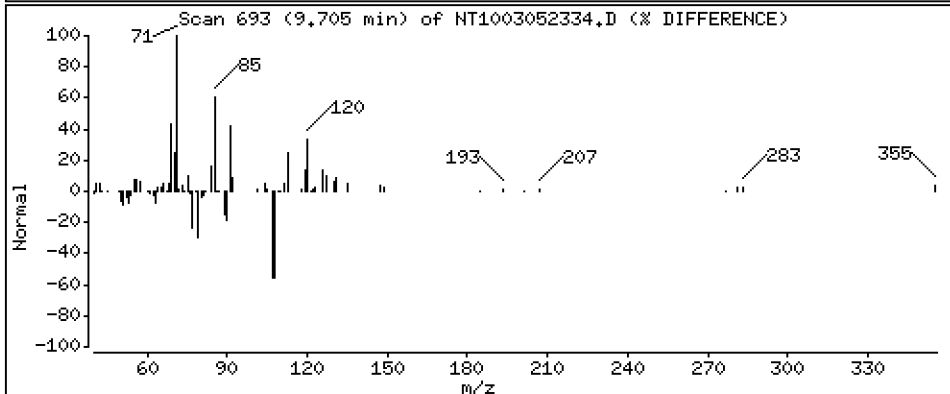
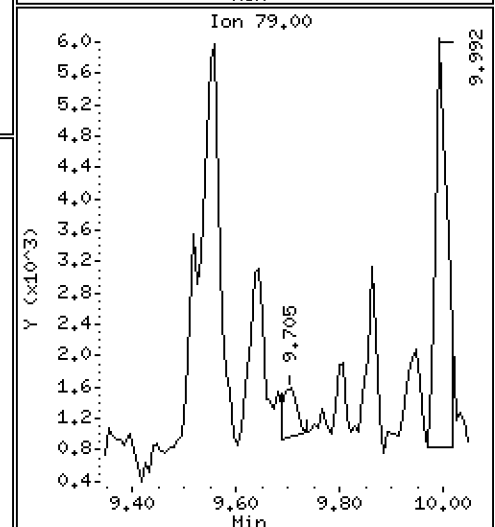
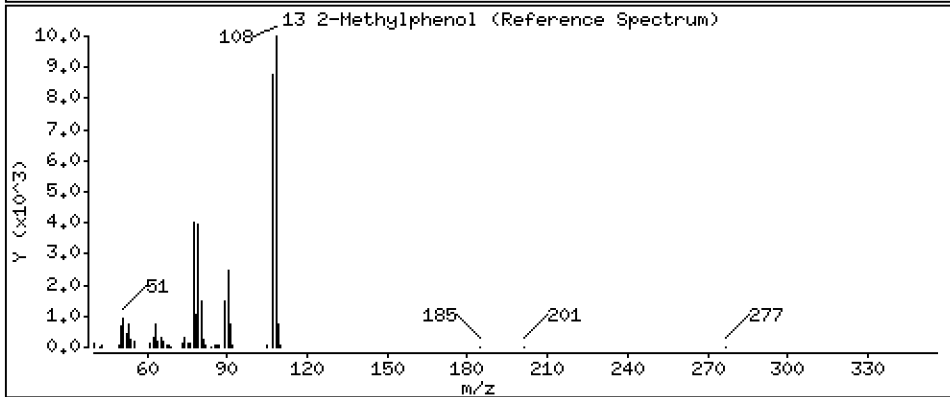
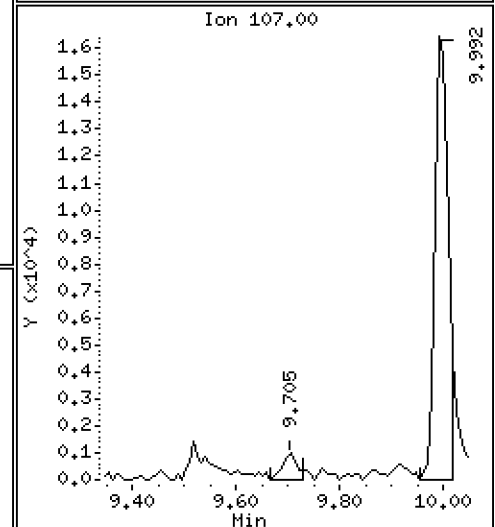
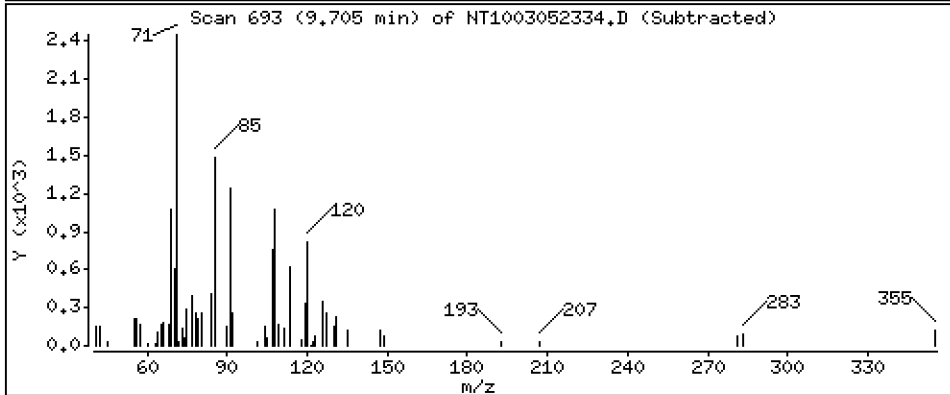
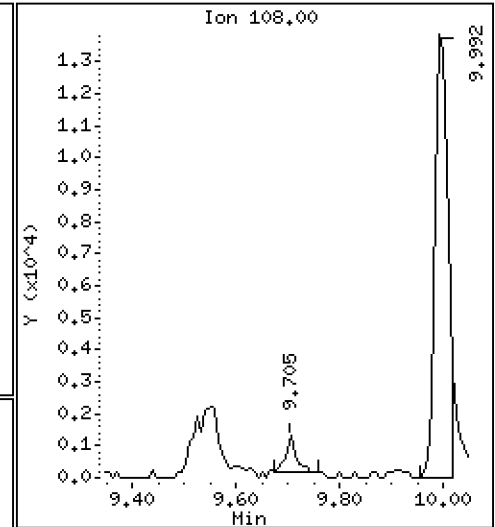
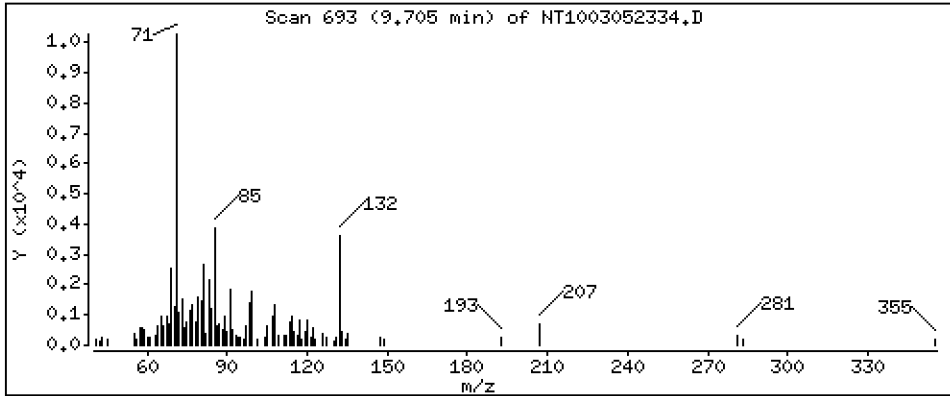
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.02958 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

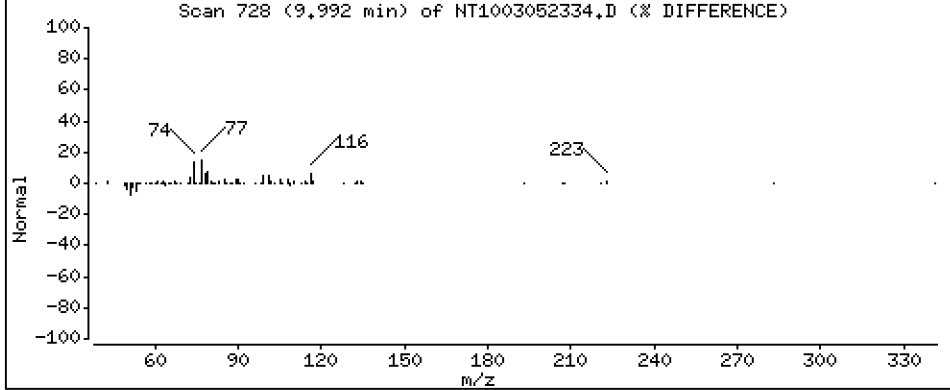
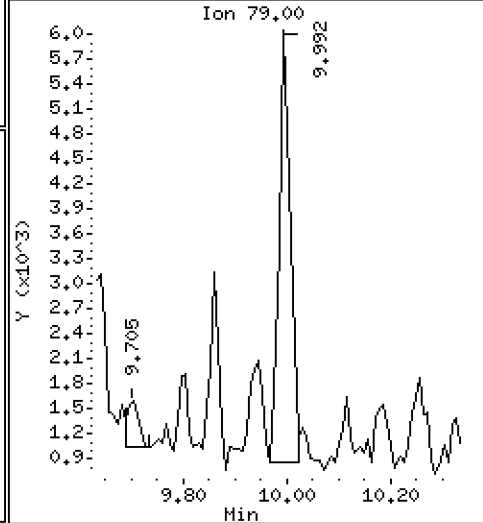
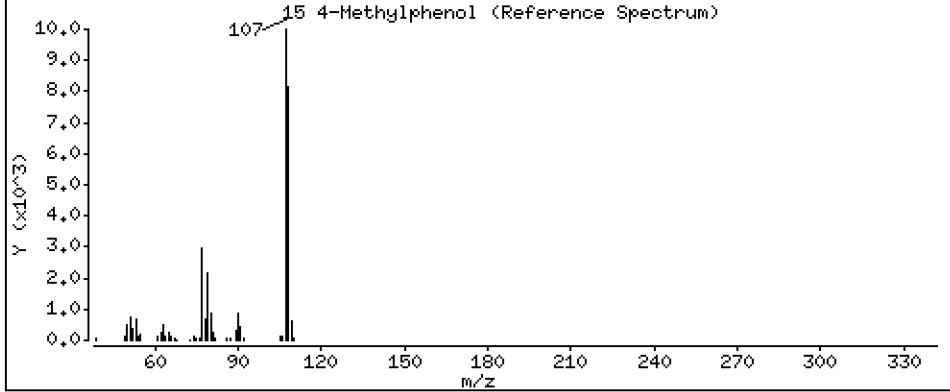
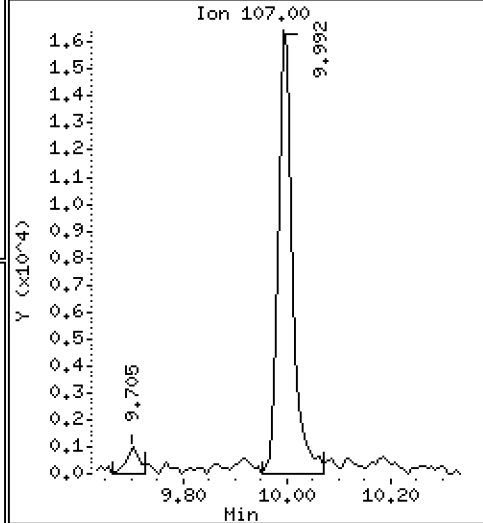
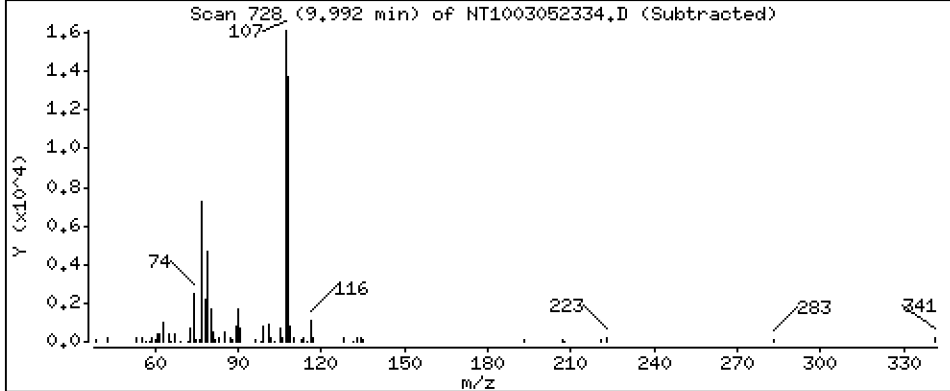
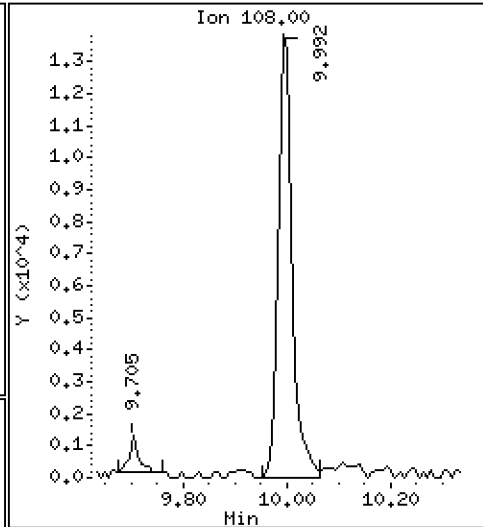
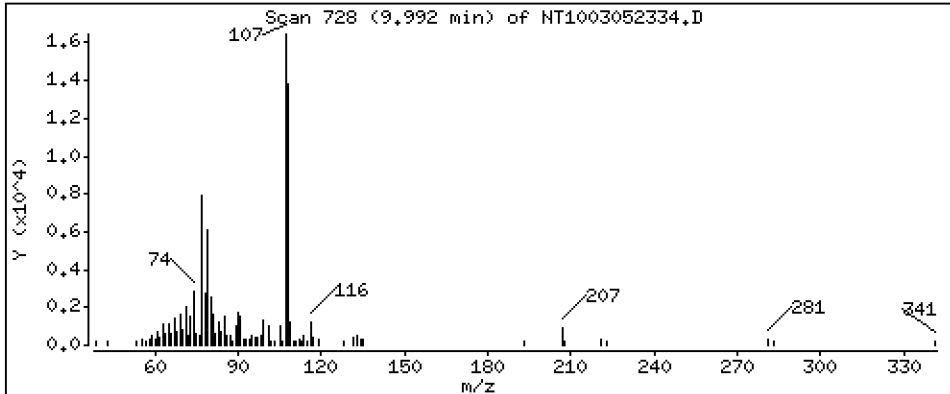
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.3830 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

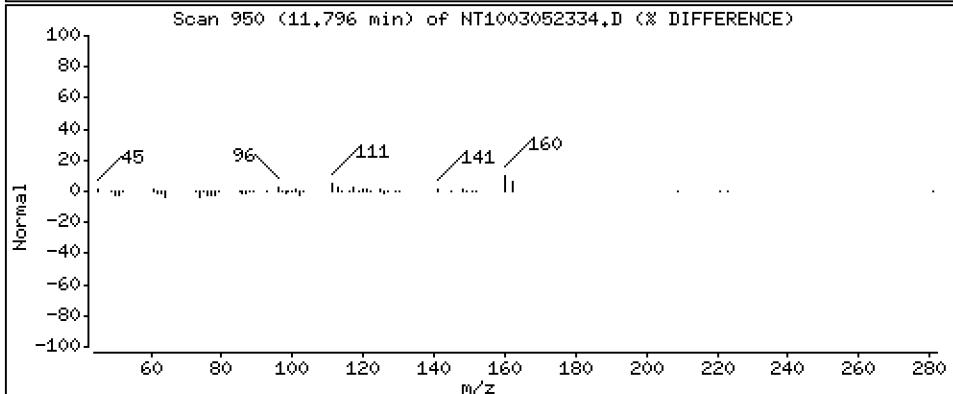
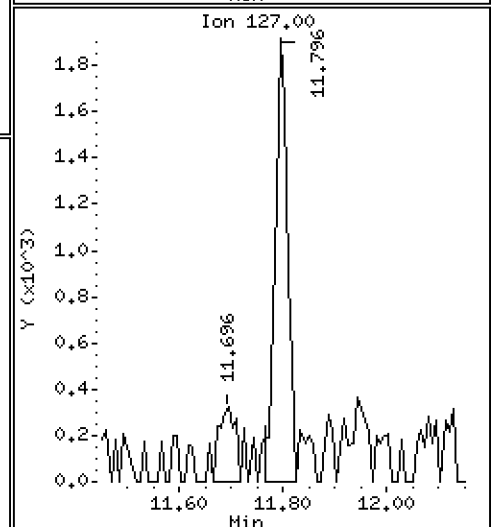
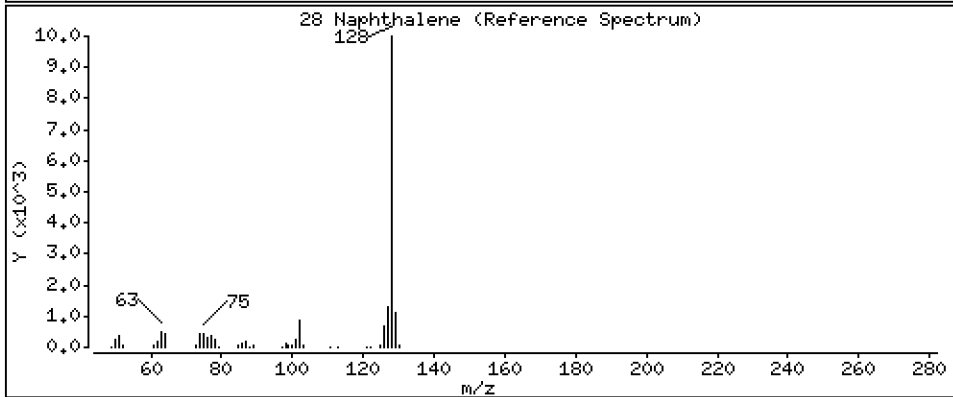
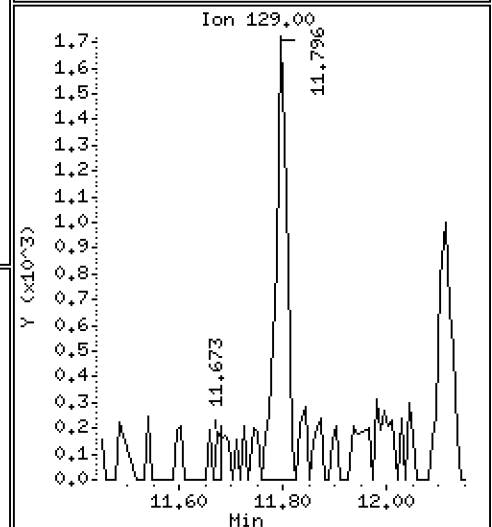
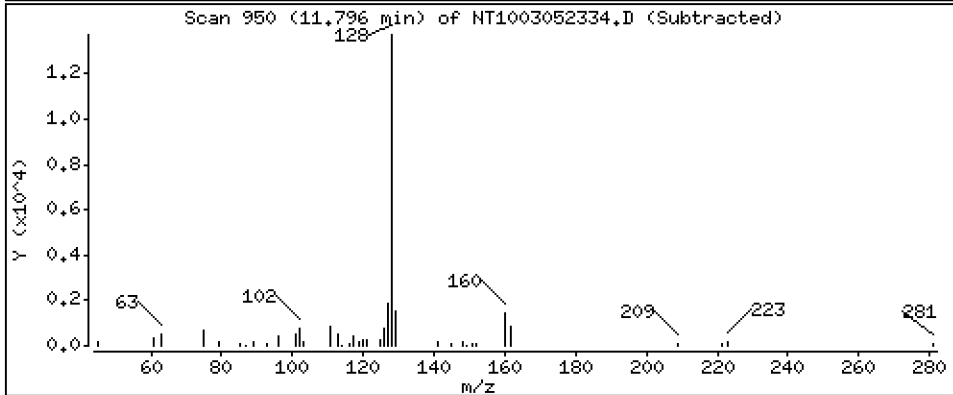
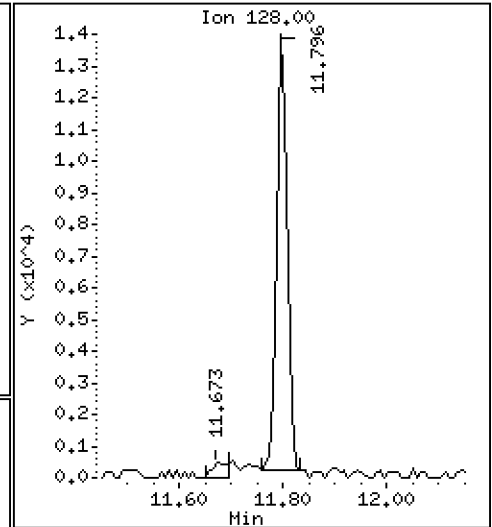
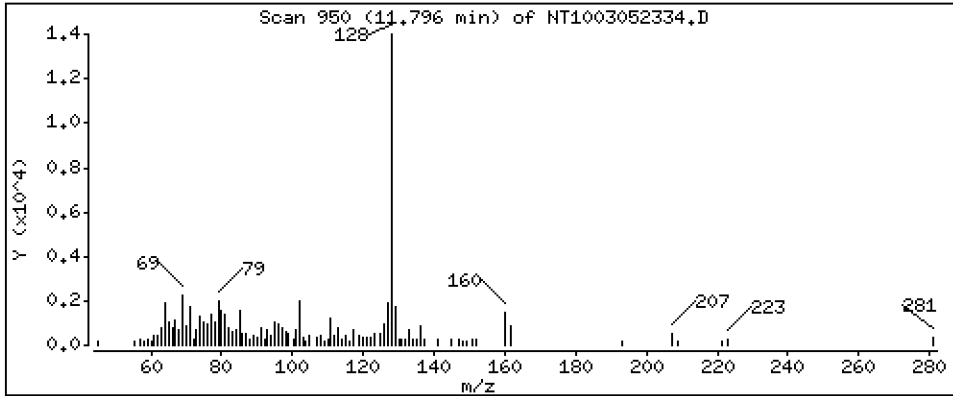
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 0.1209 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

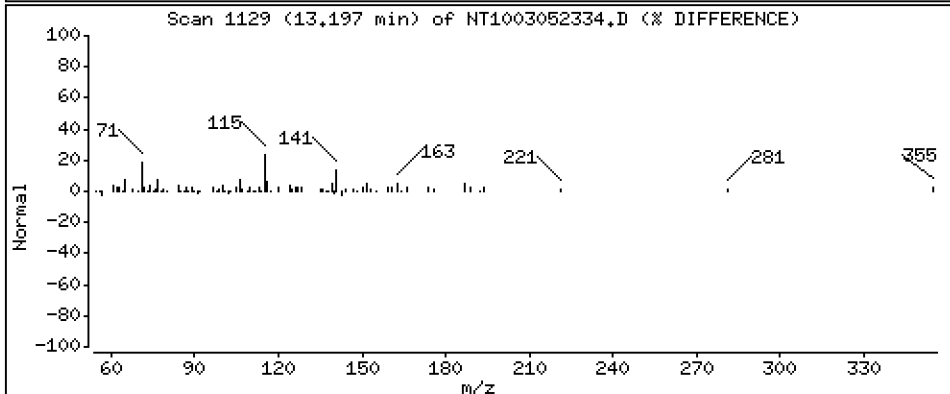
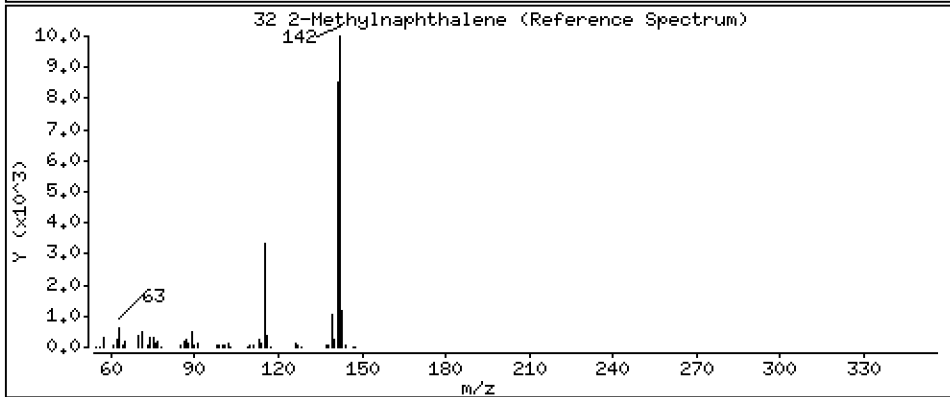
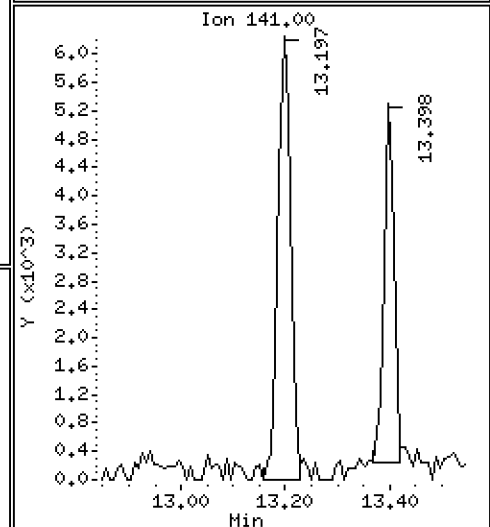
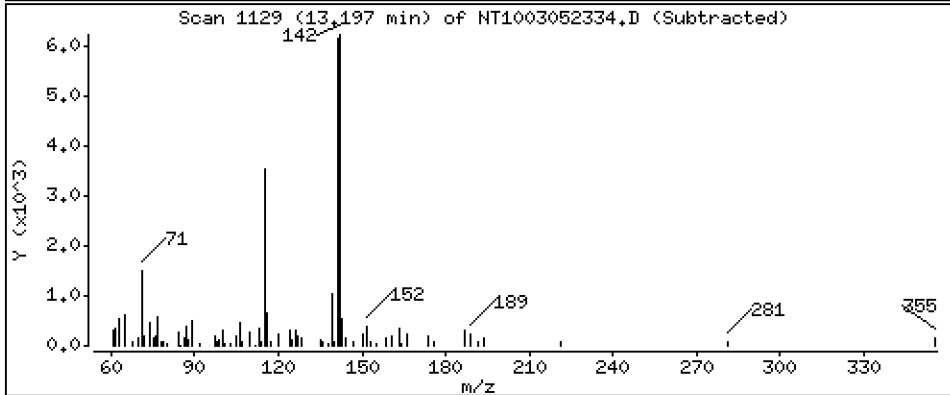
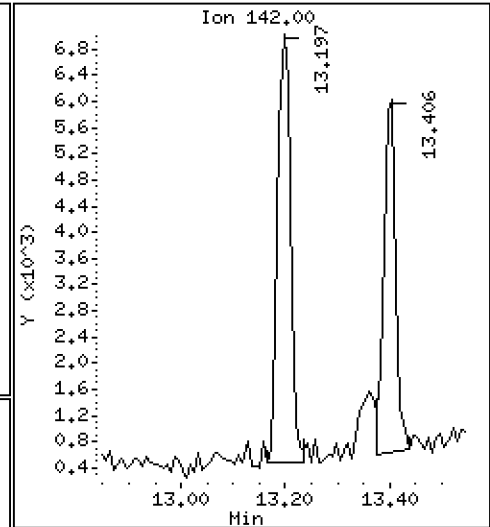
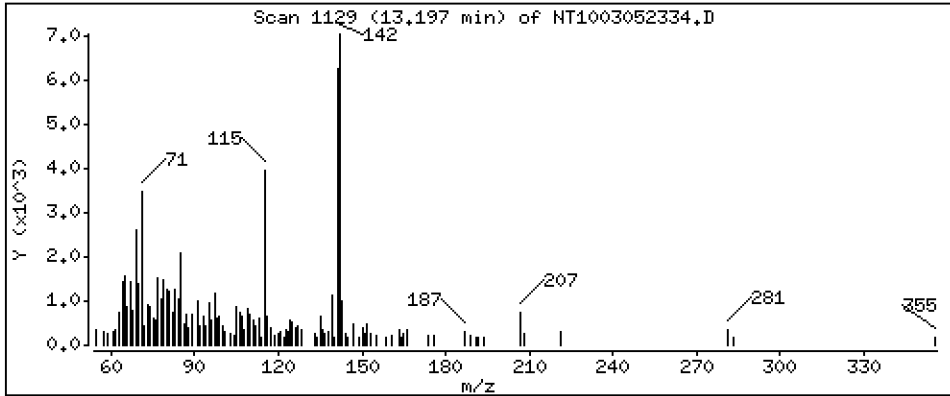
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

32 2-Methylnaphthalene

Concentration: 0.09072 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

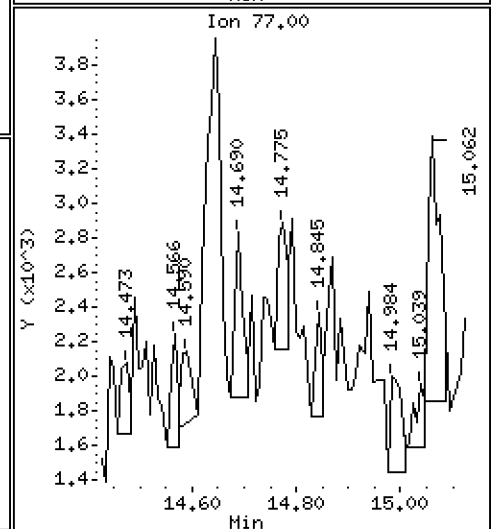
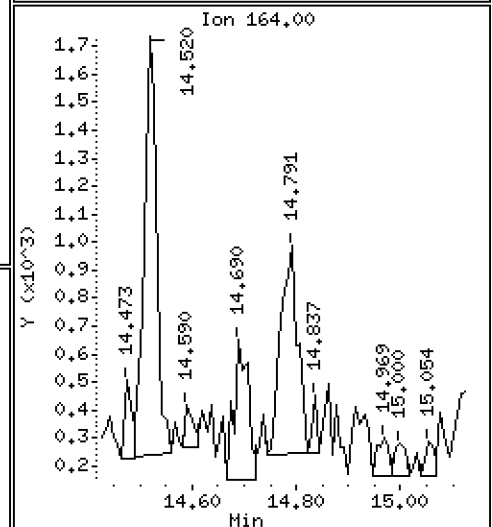
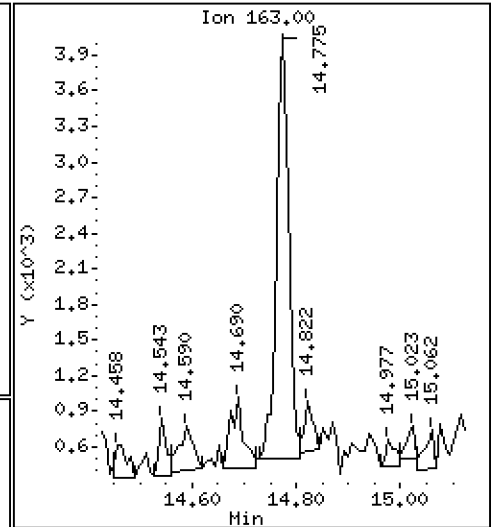
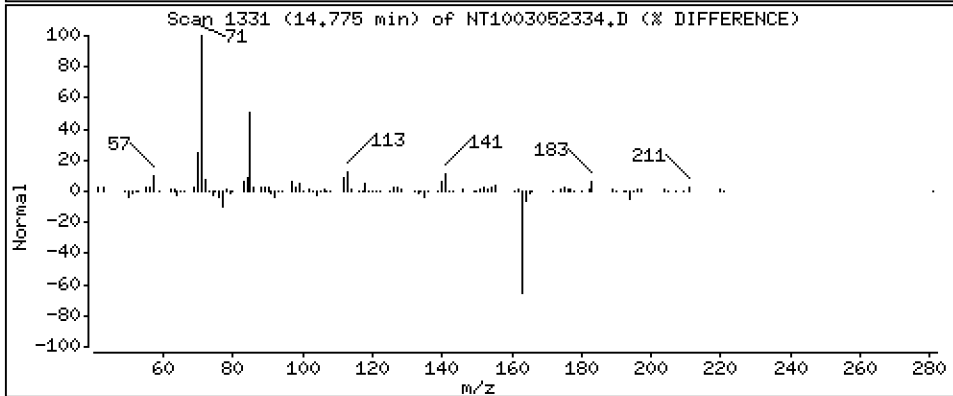
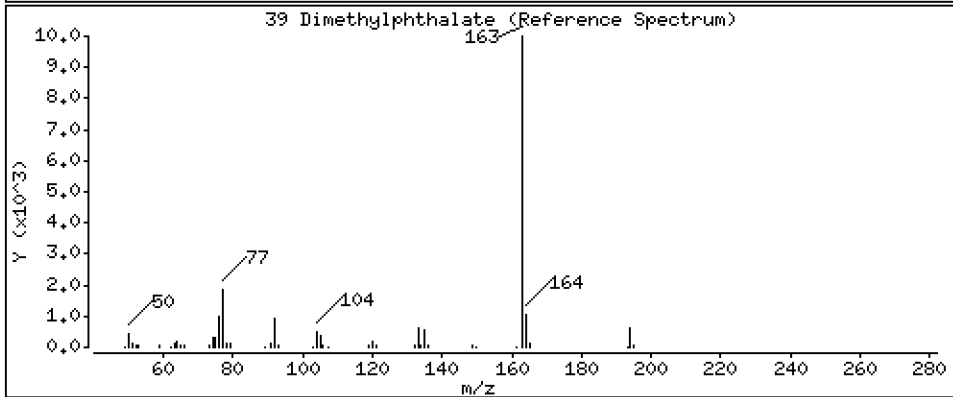
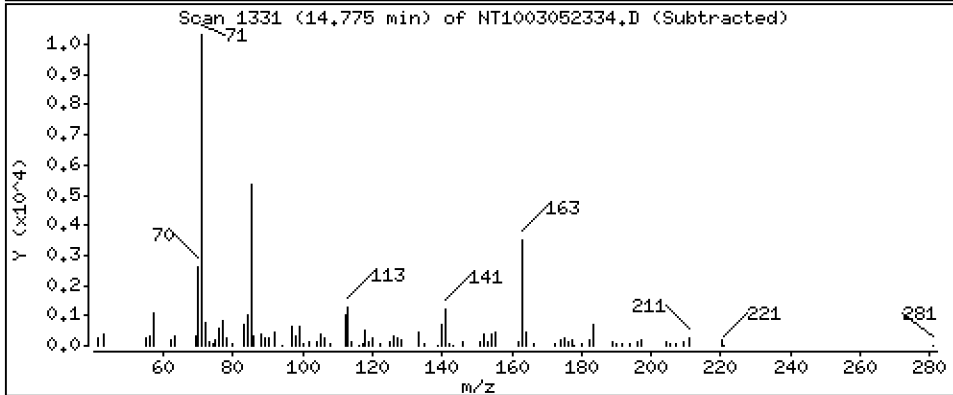
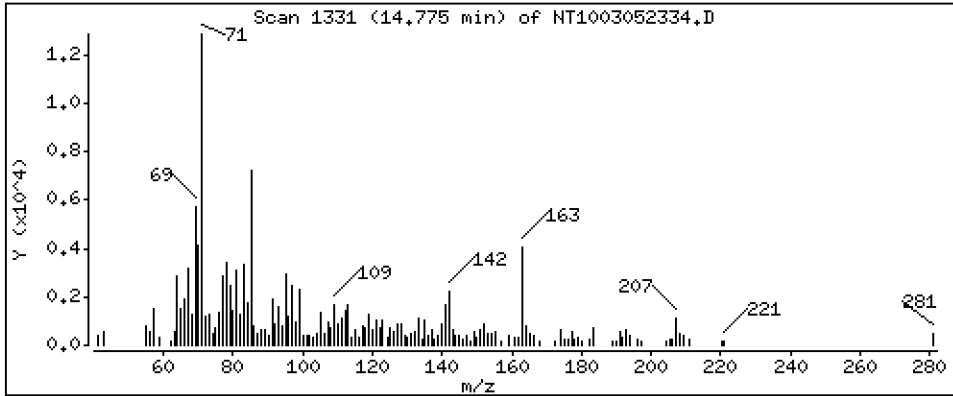
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.04845 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

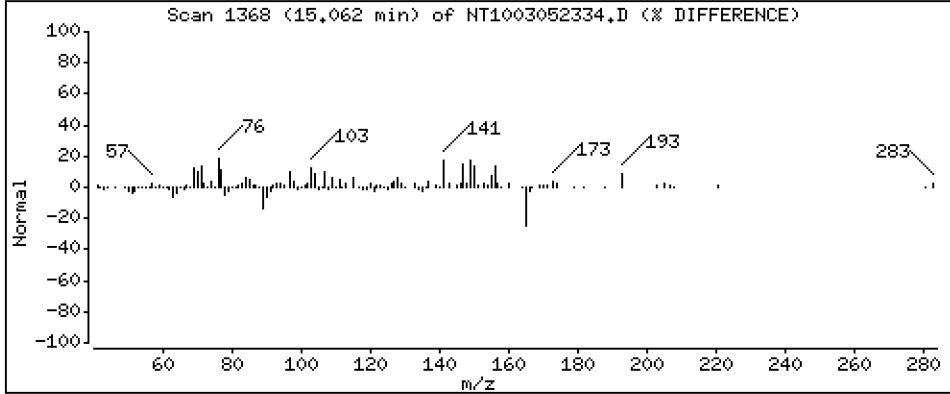
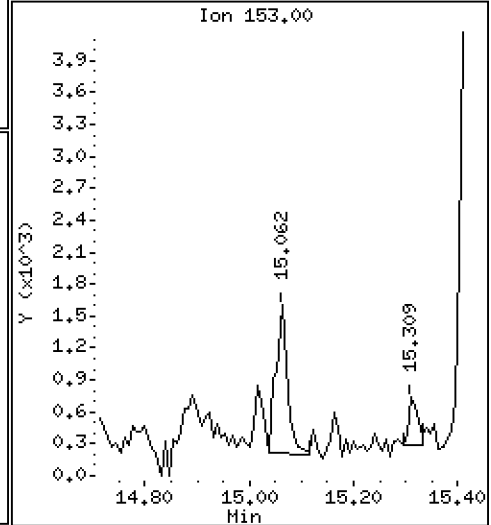
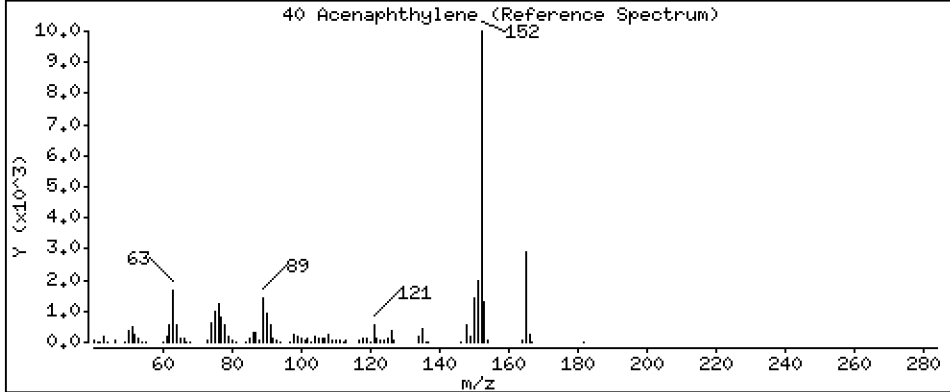
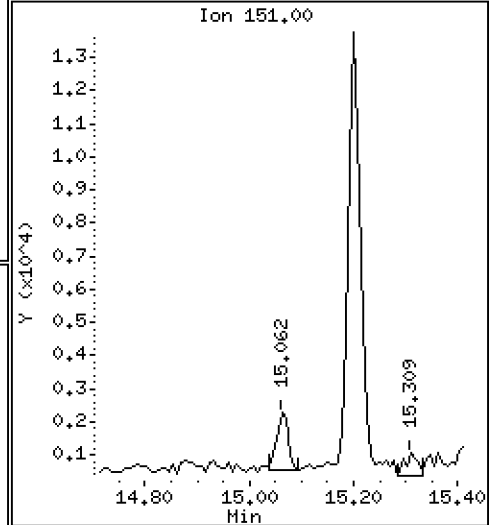
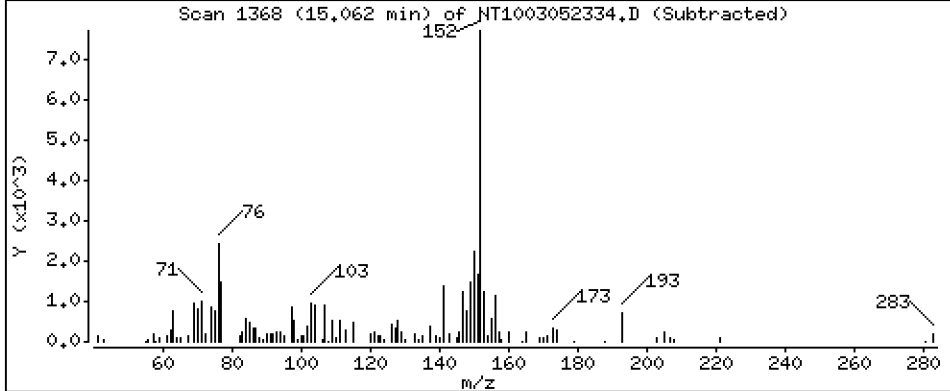
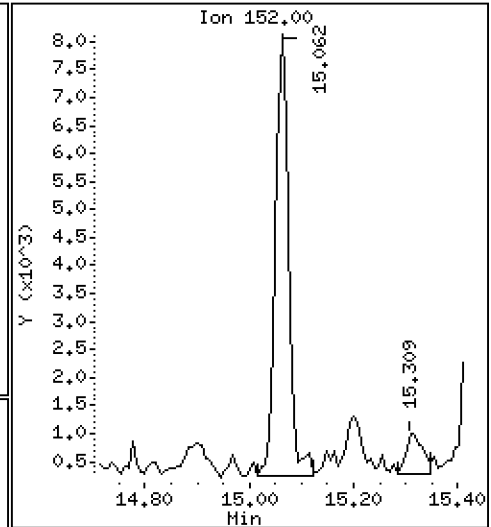
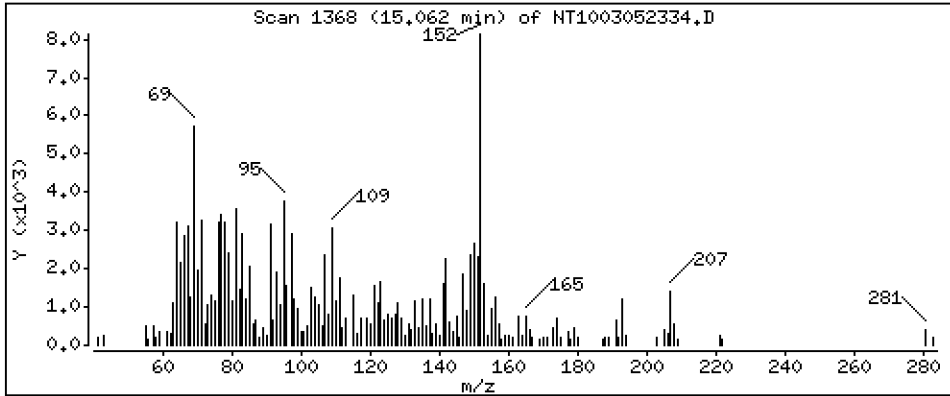
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,08919 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

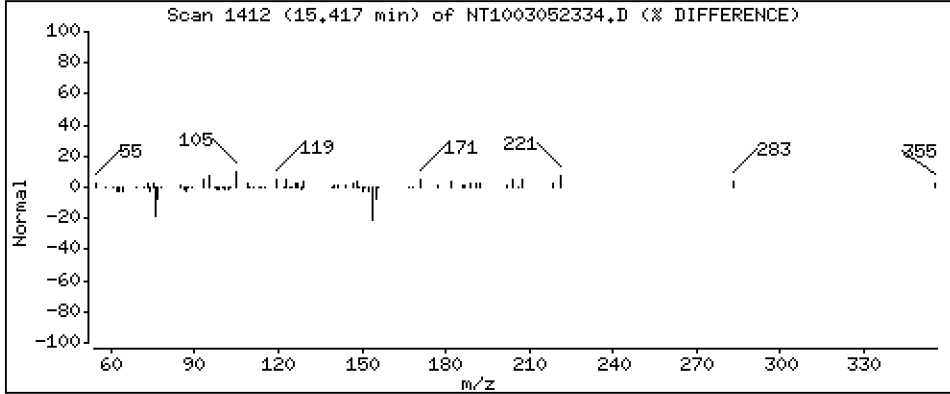
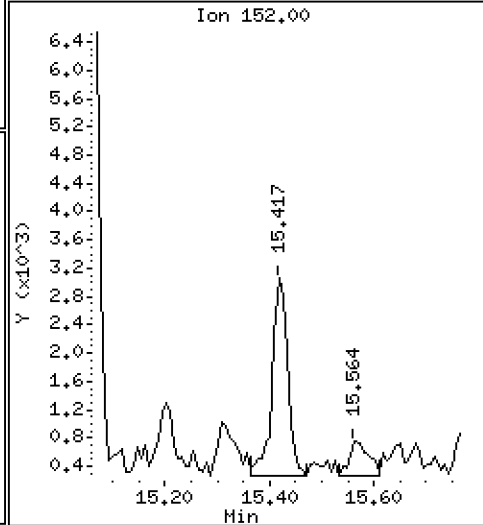
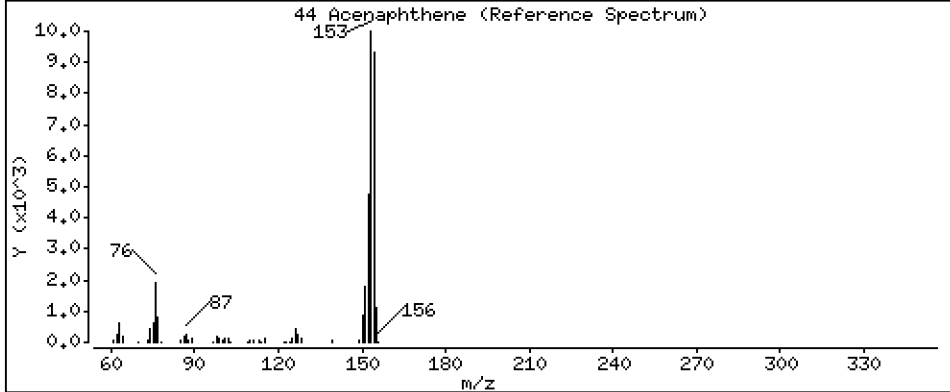
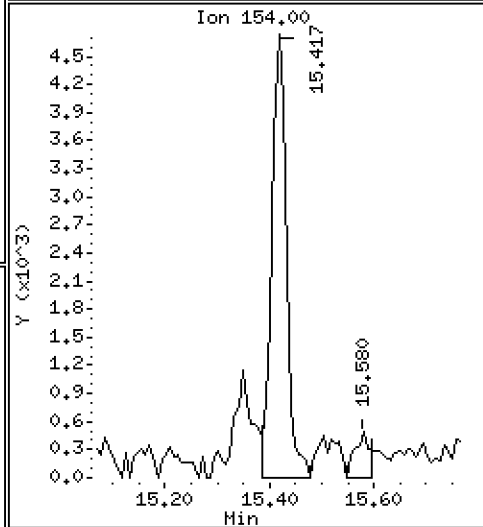
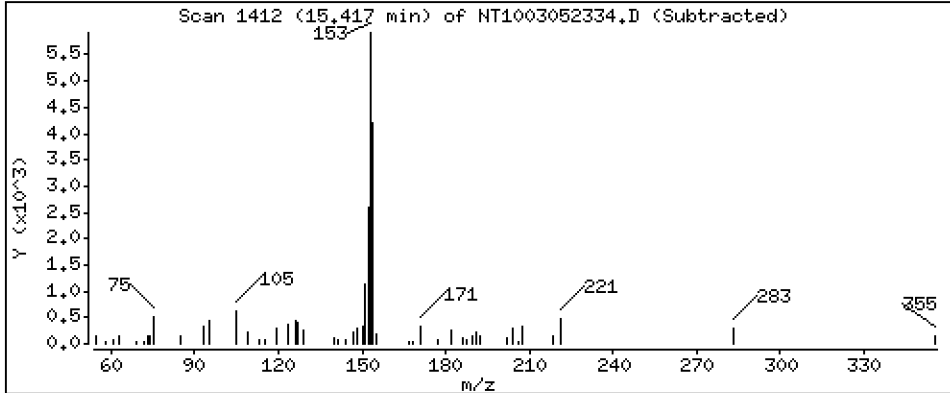
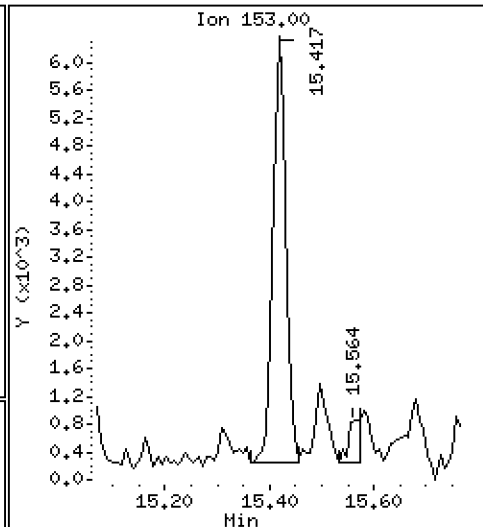
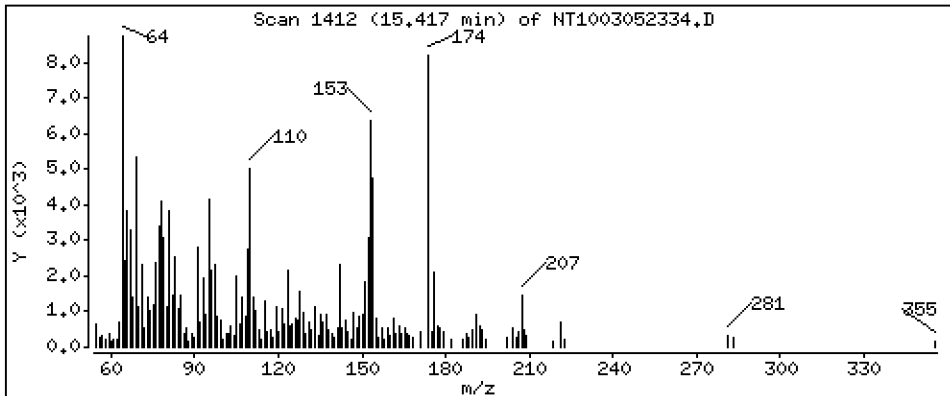
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,09729 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

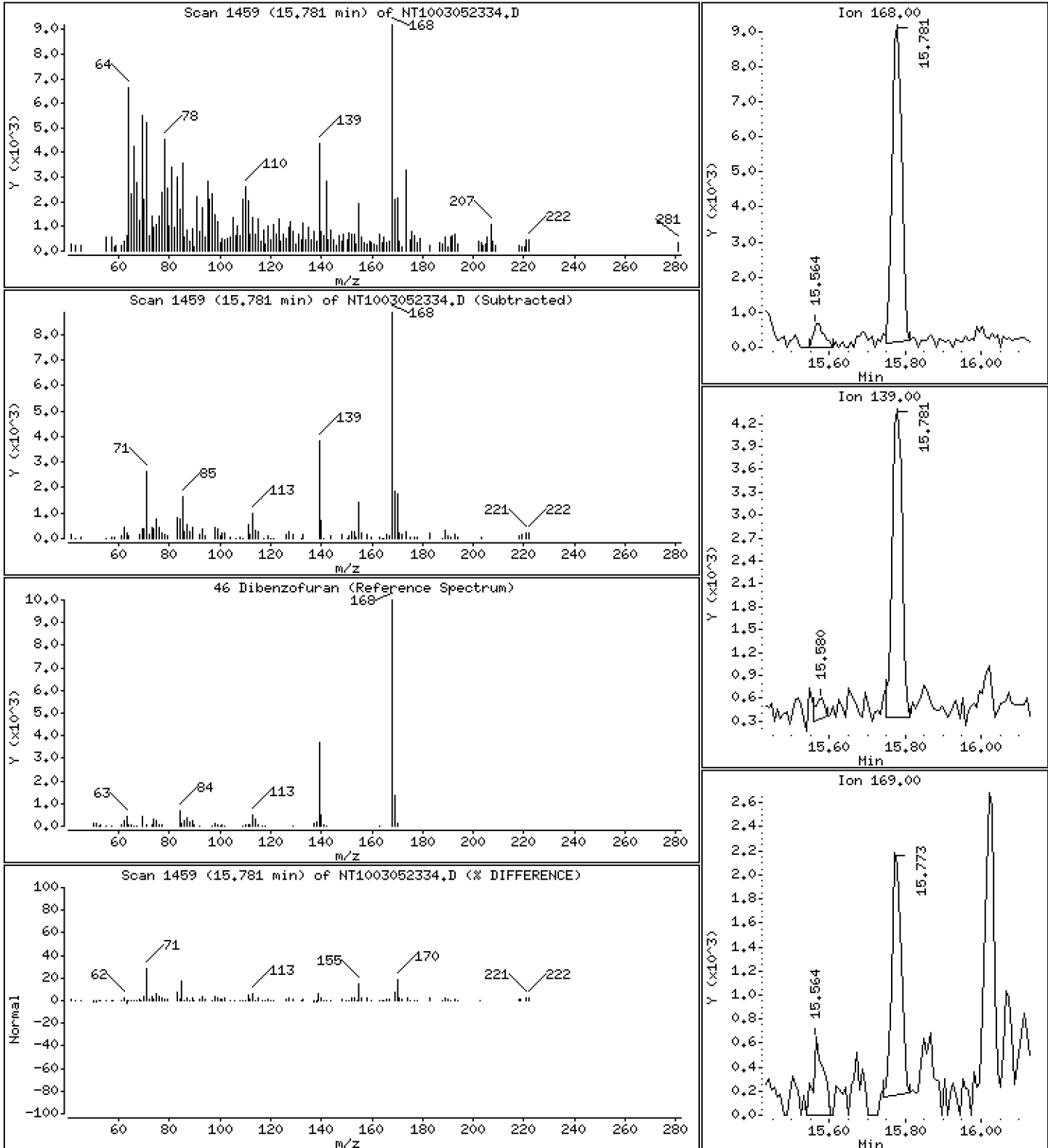
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,09854 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

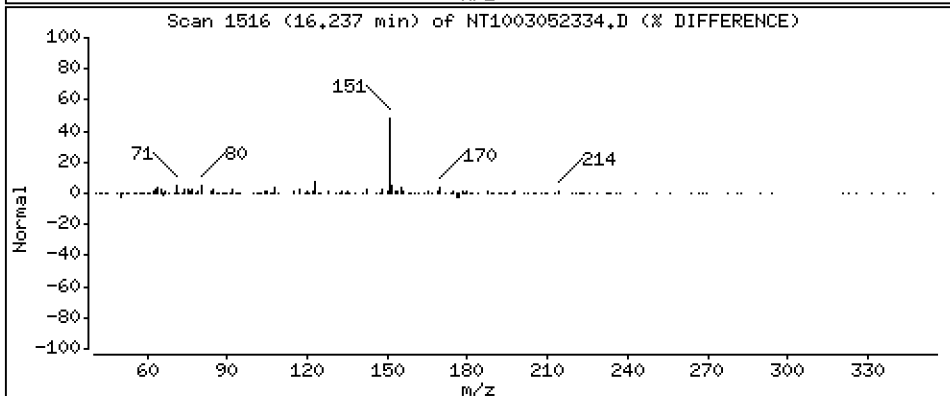
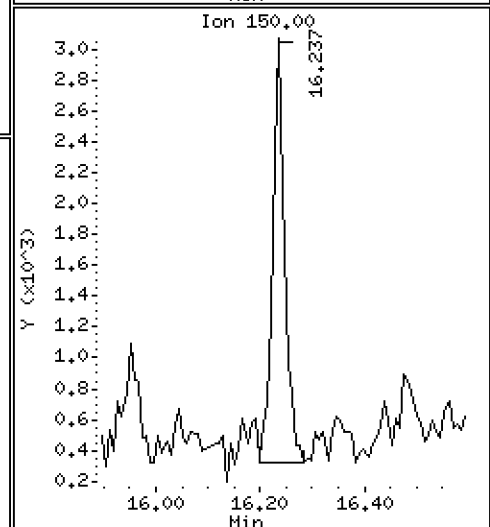
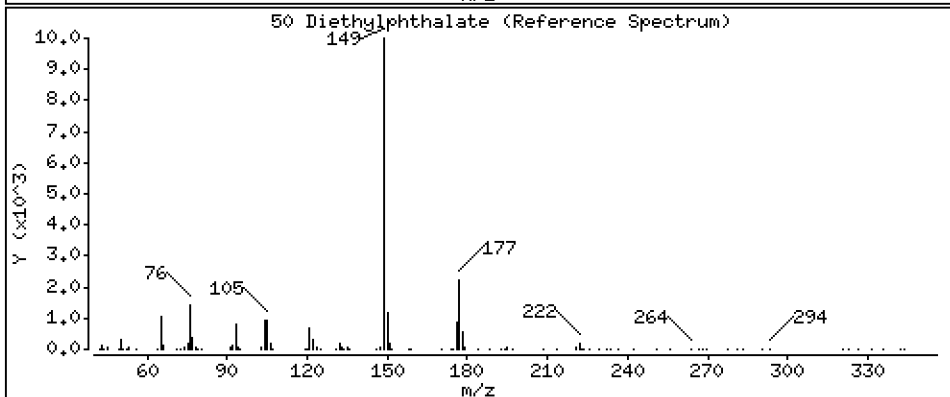
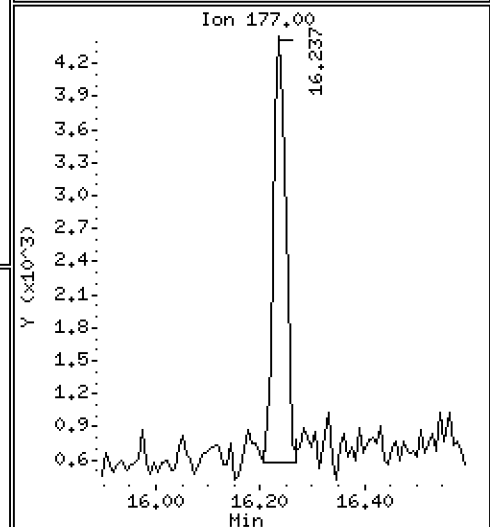
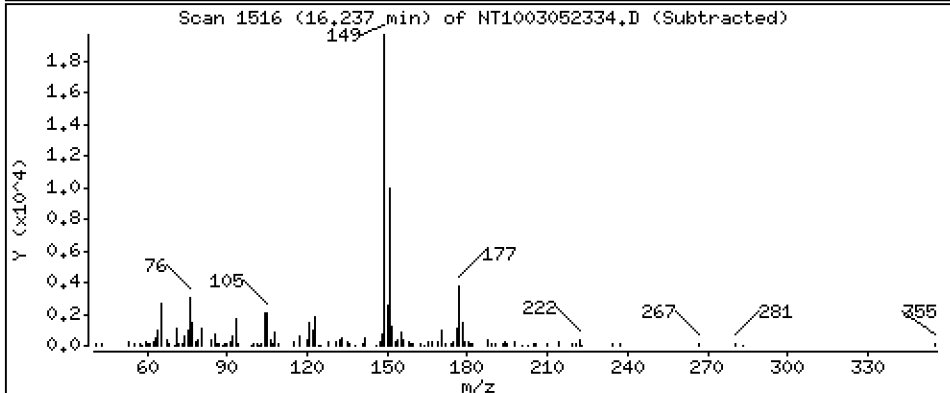
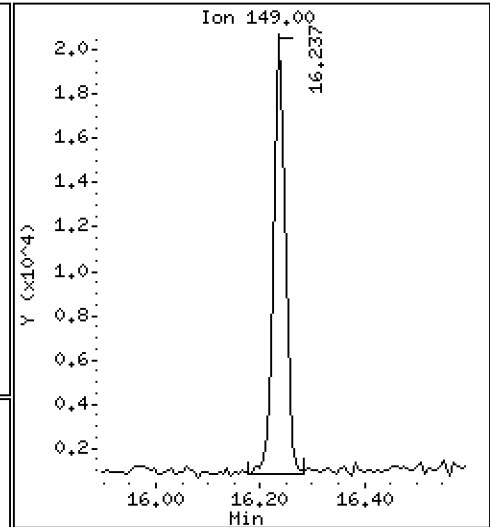
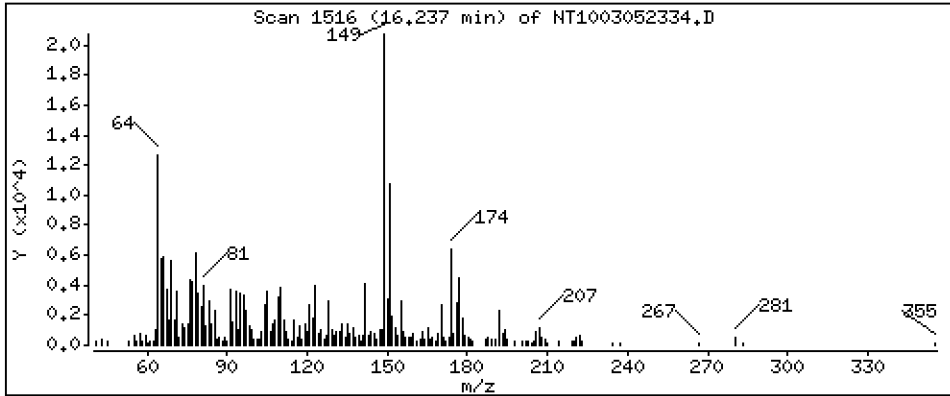
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.2561 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

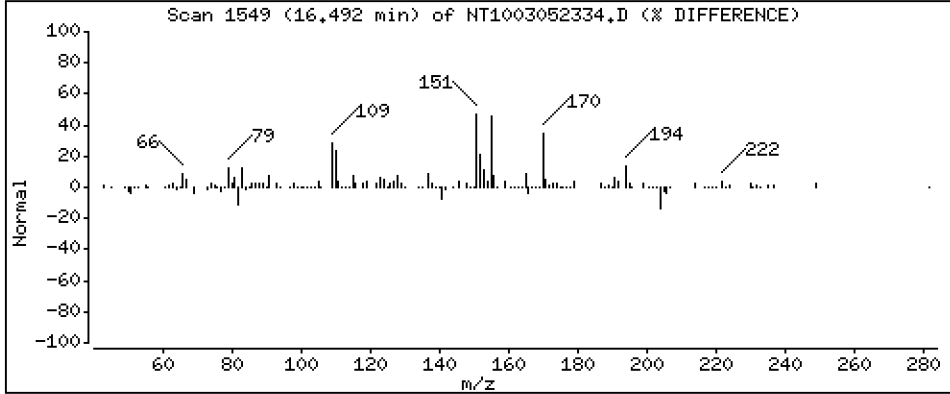
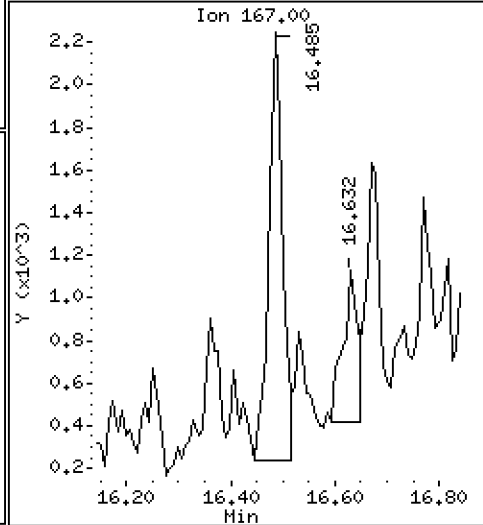
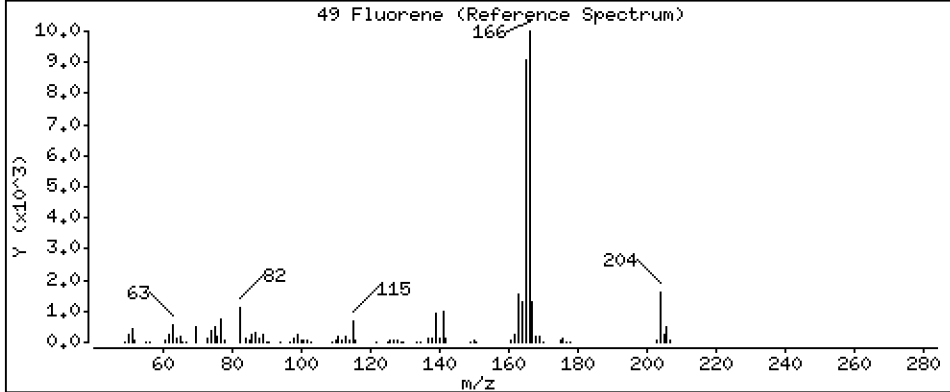
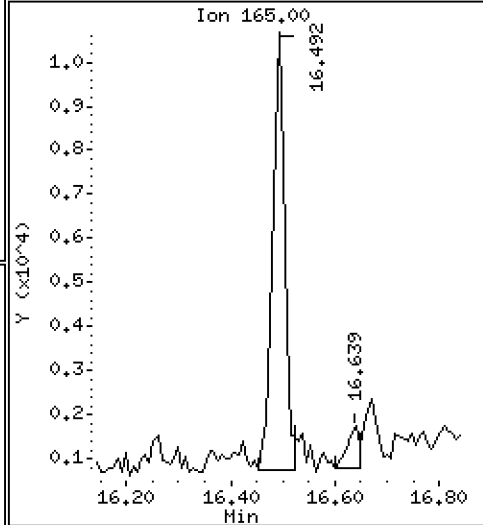
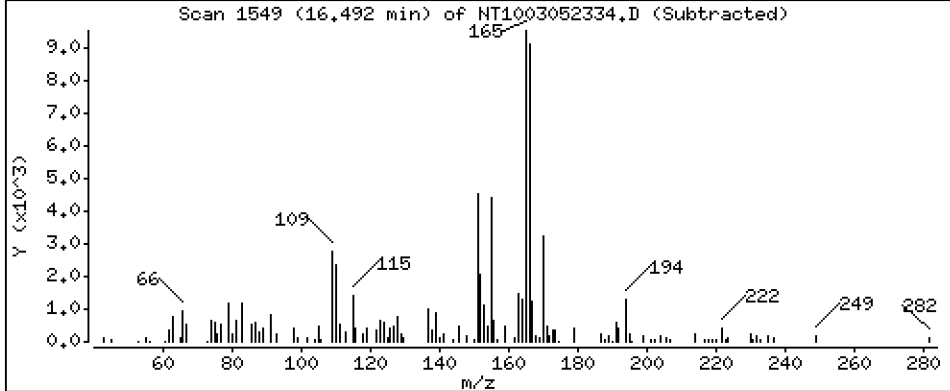
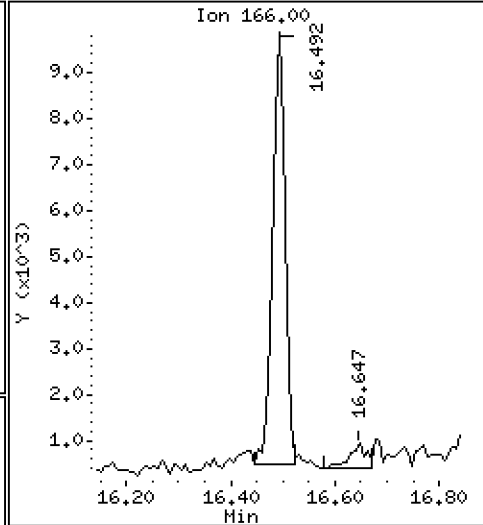
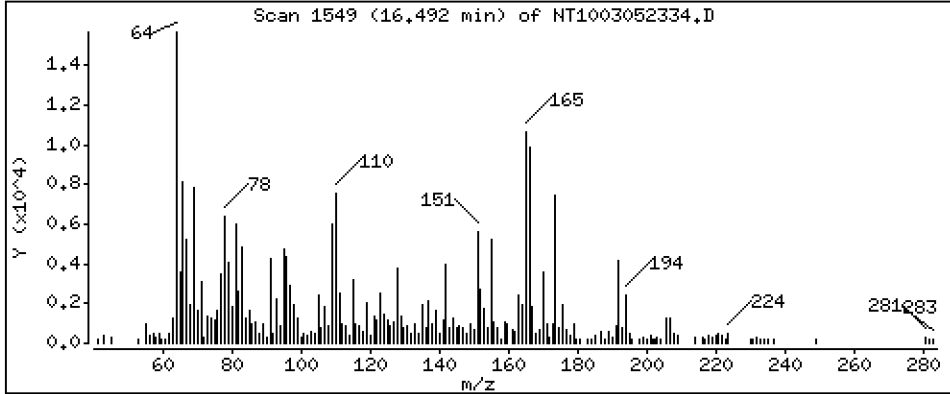
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1219 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

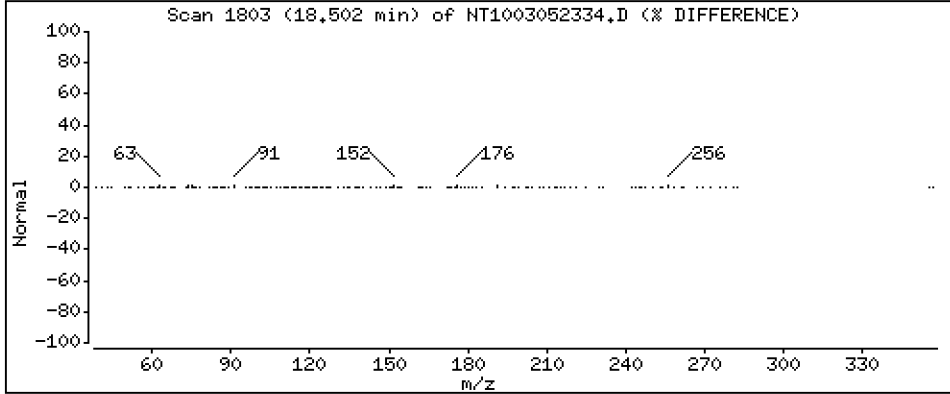
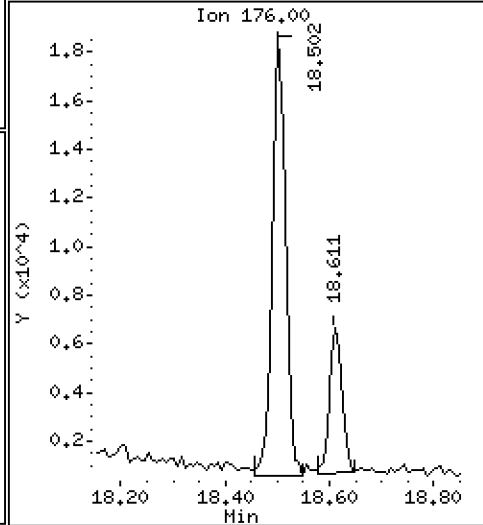
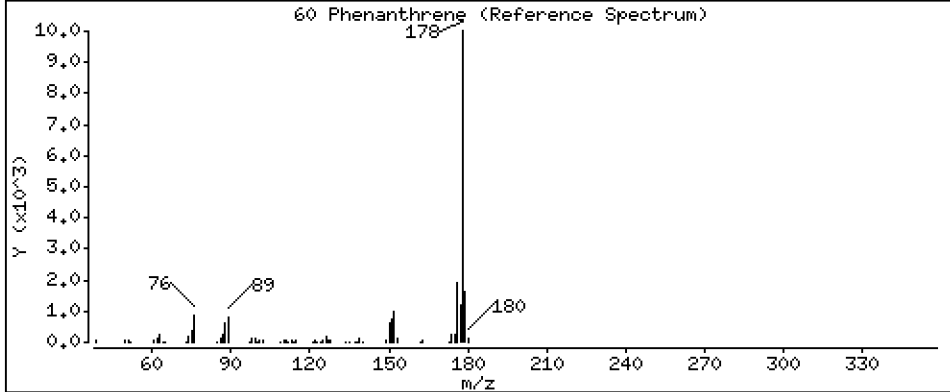
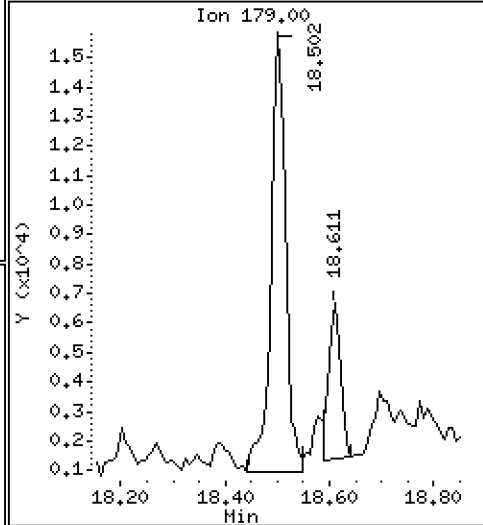
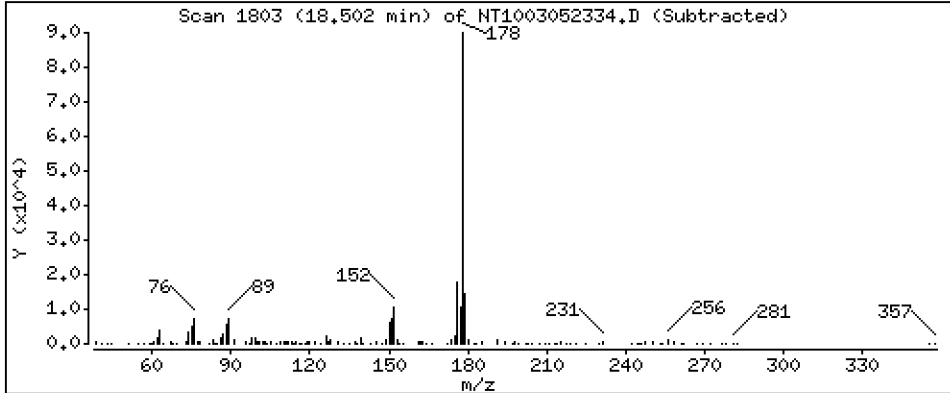
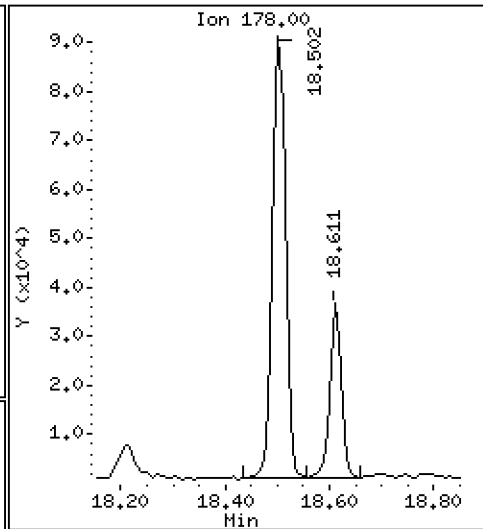
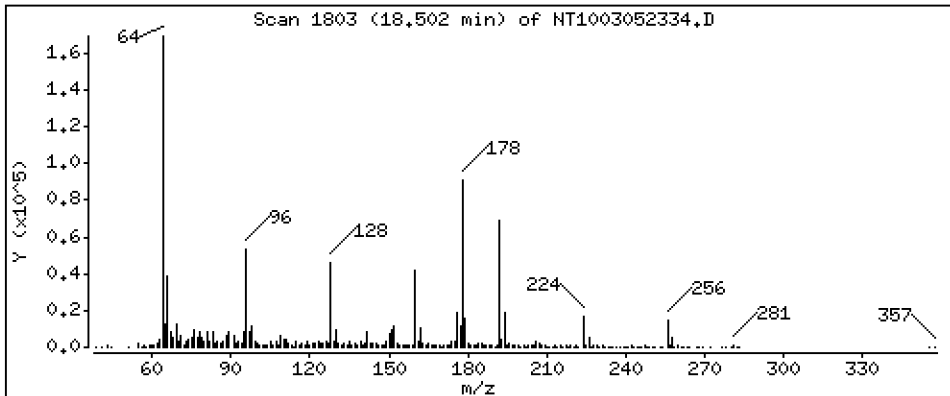
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.9101 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

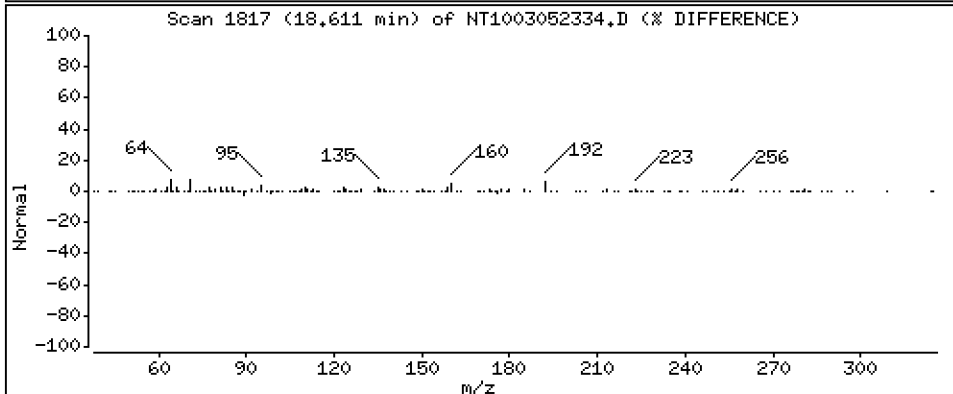
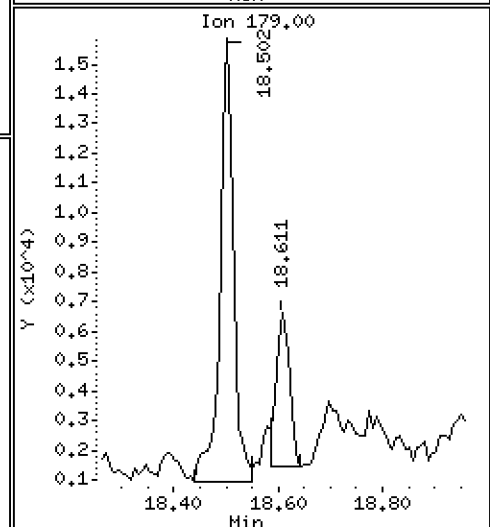
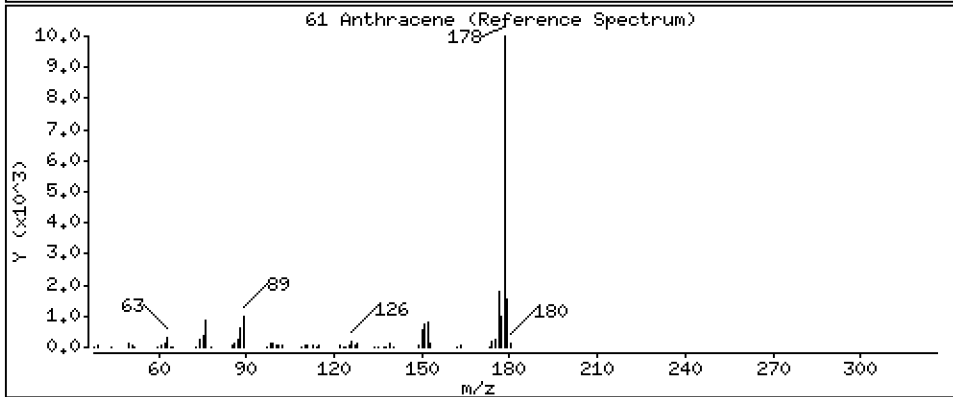
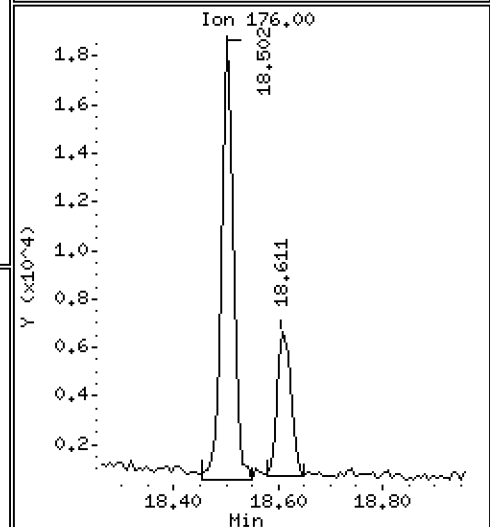
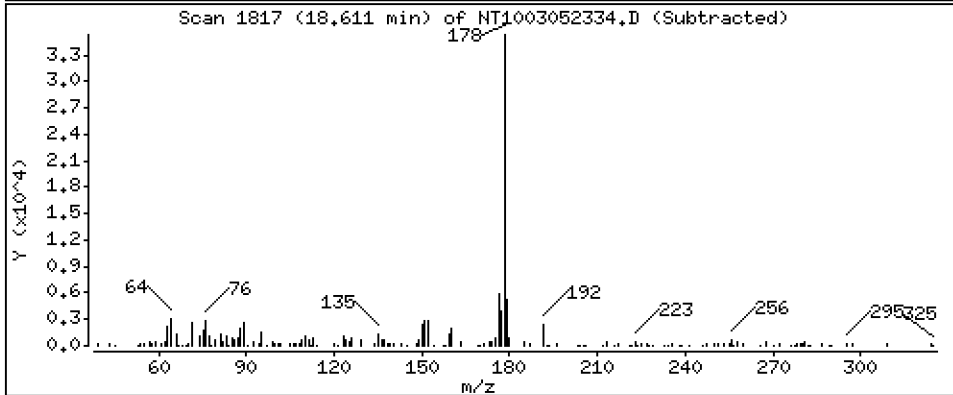
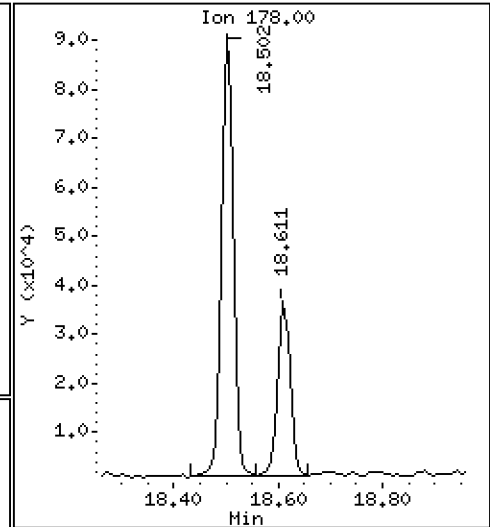
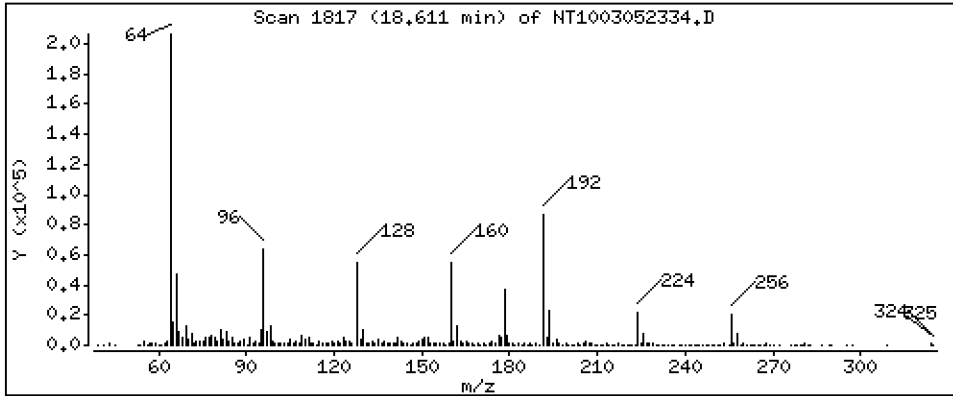
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,3538 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

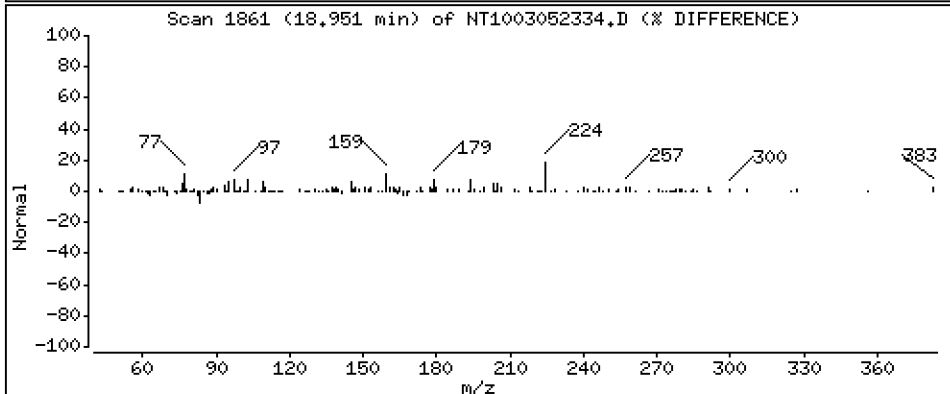
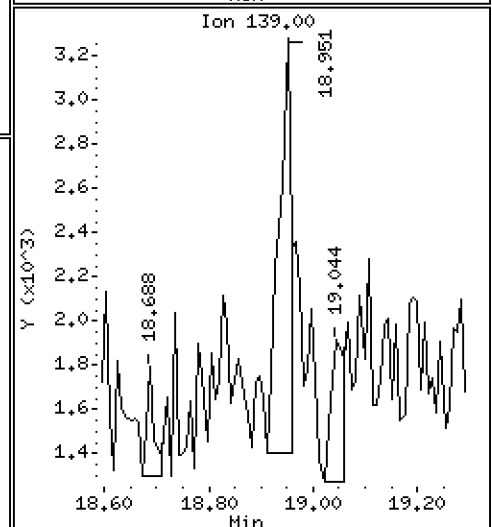
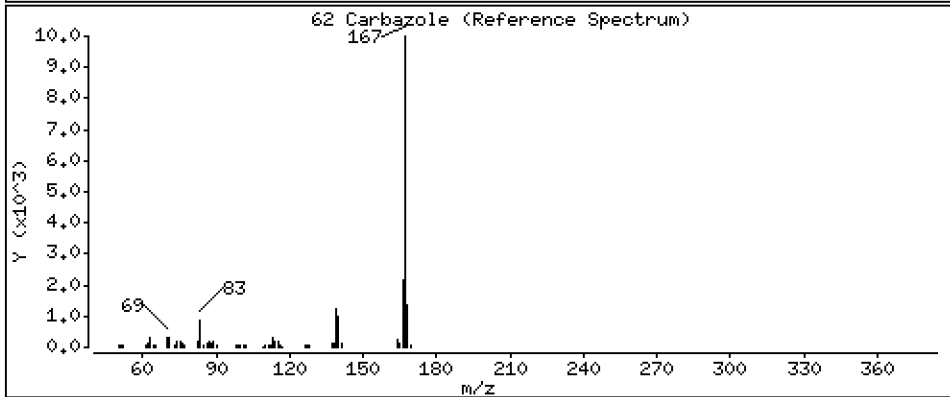
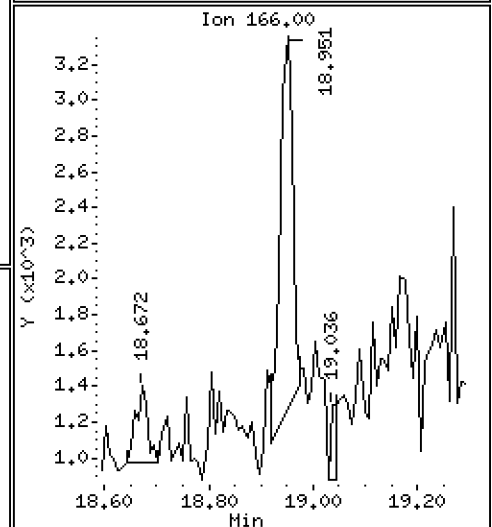
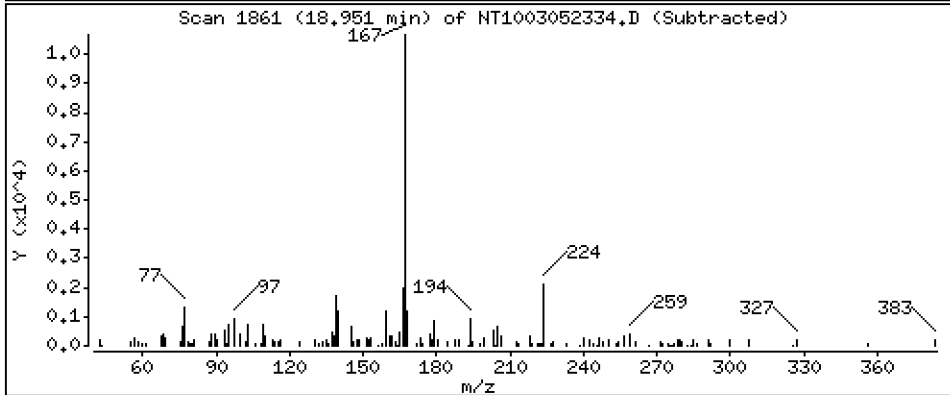
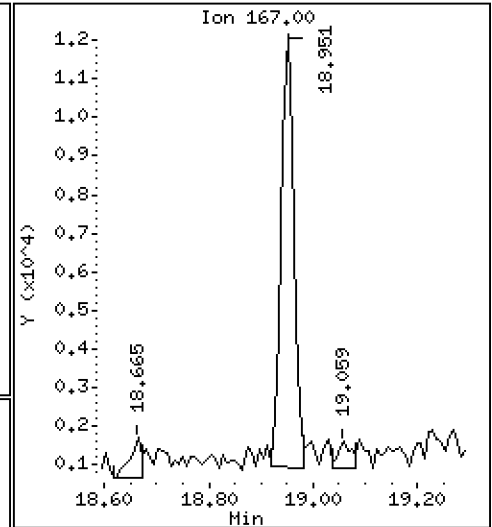
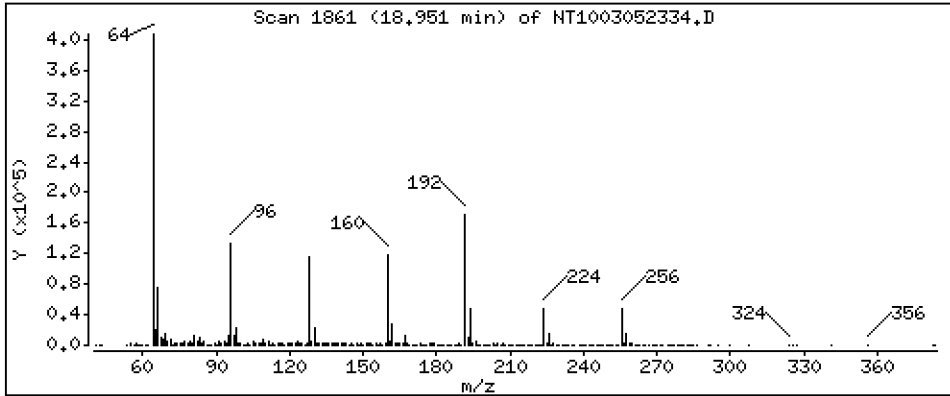
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1228 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

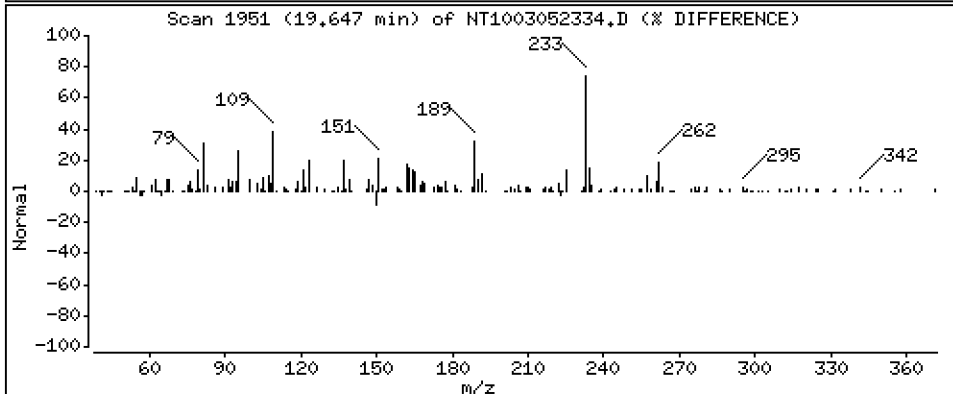
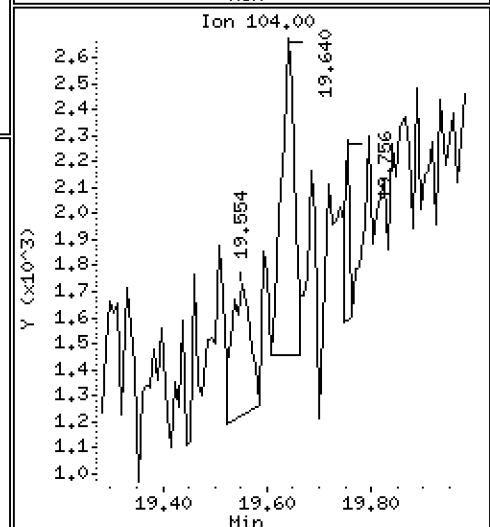
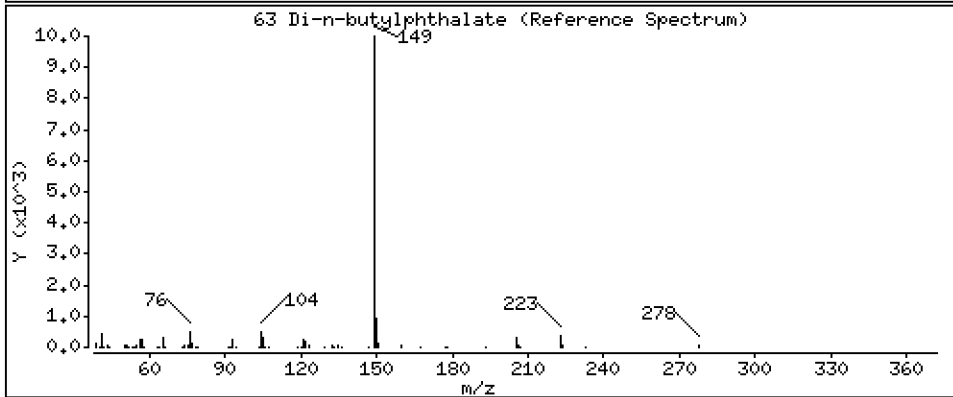
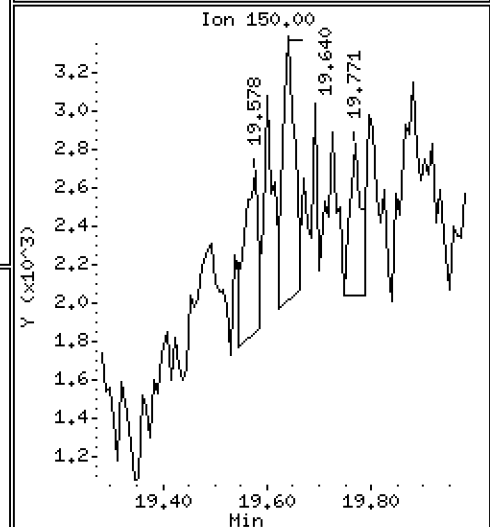
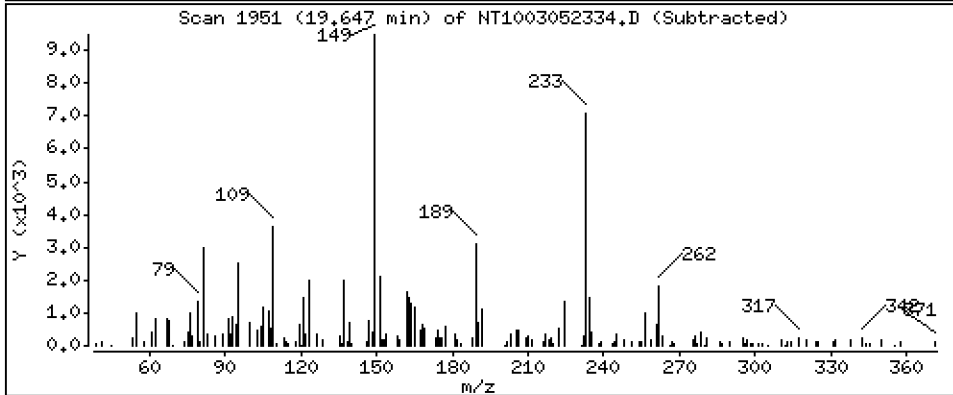
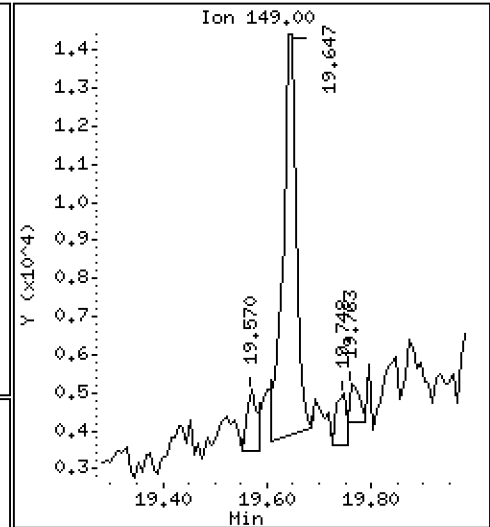
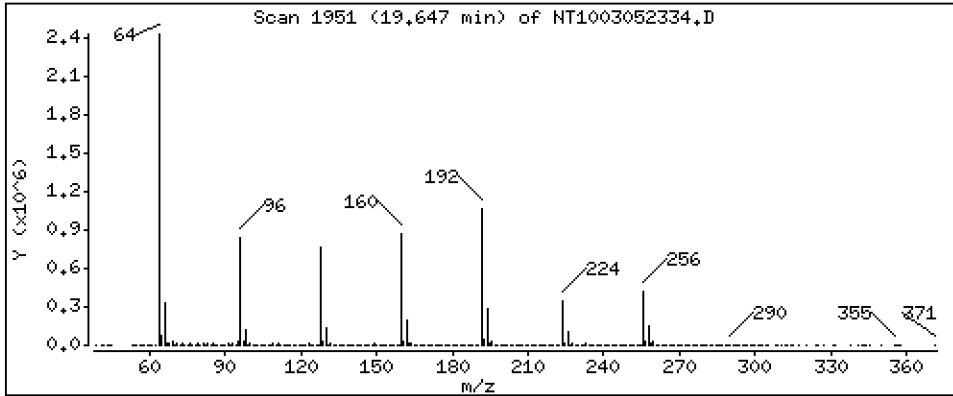
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.09574 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

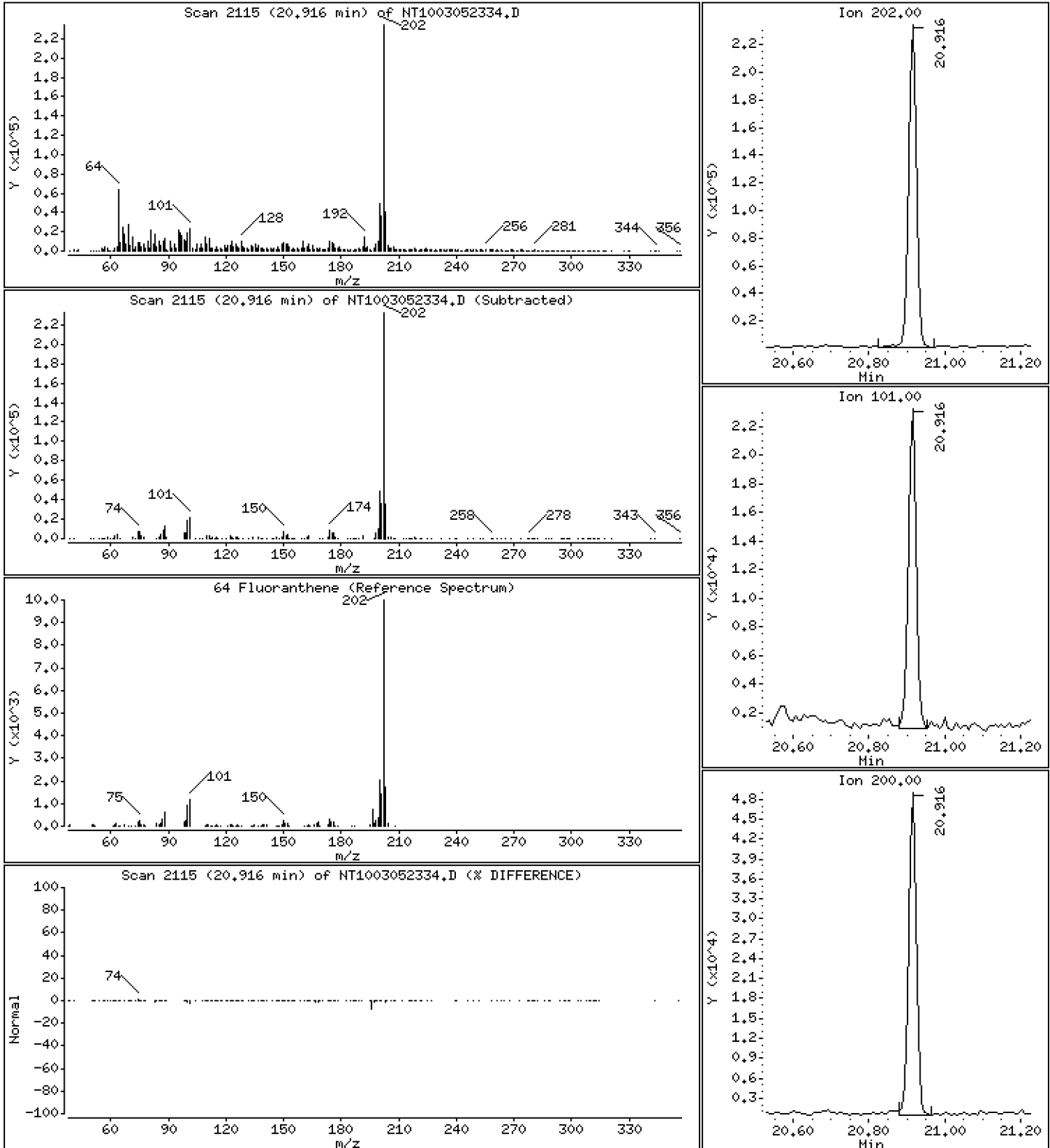
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 1,705 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

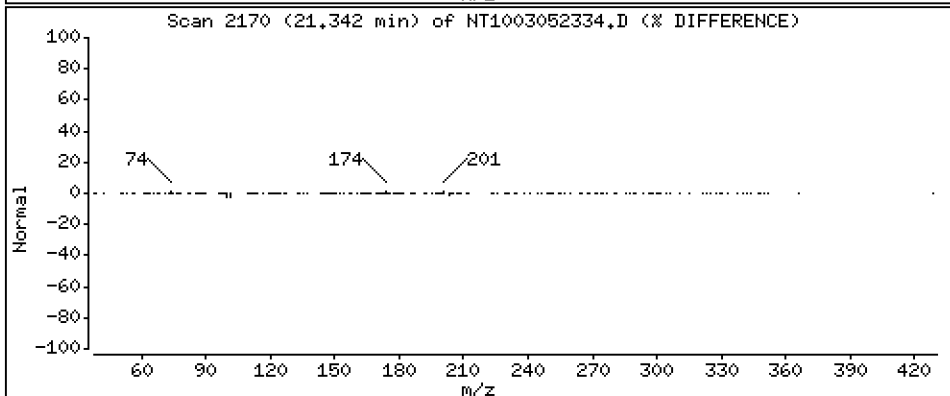
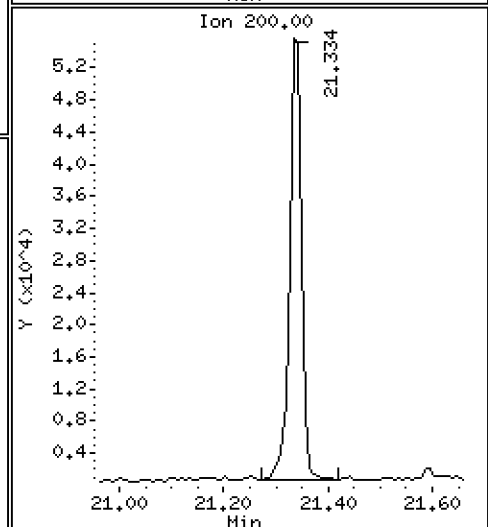
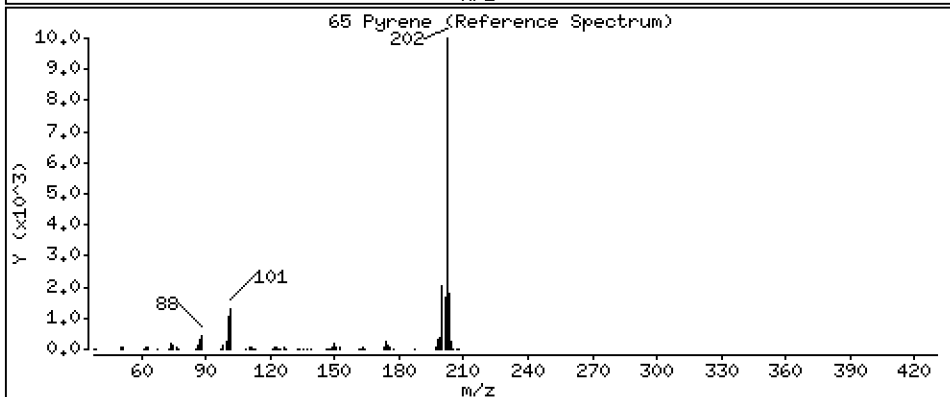
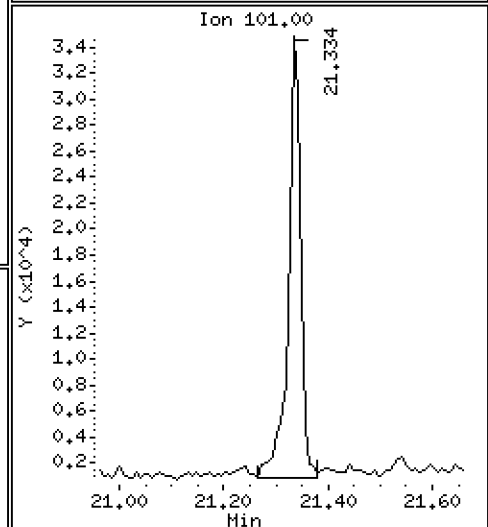
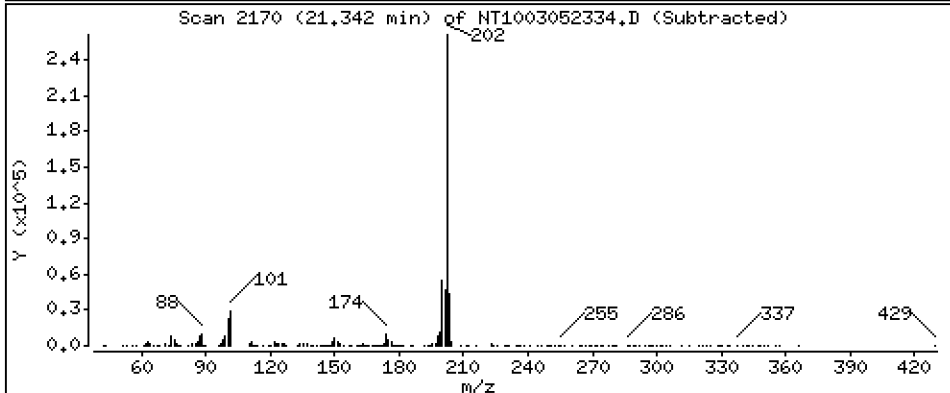
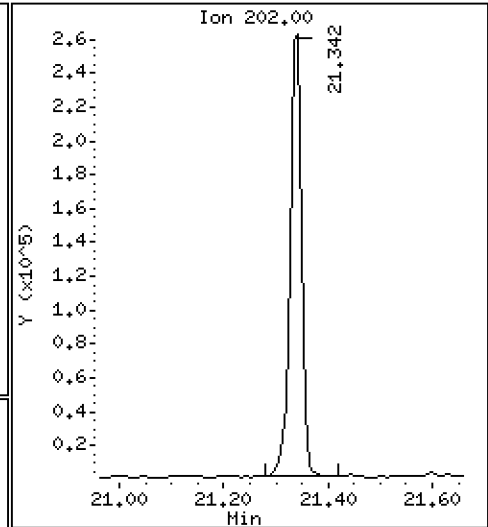
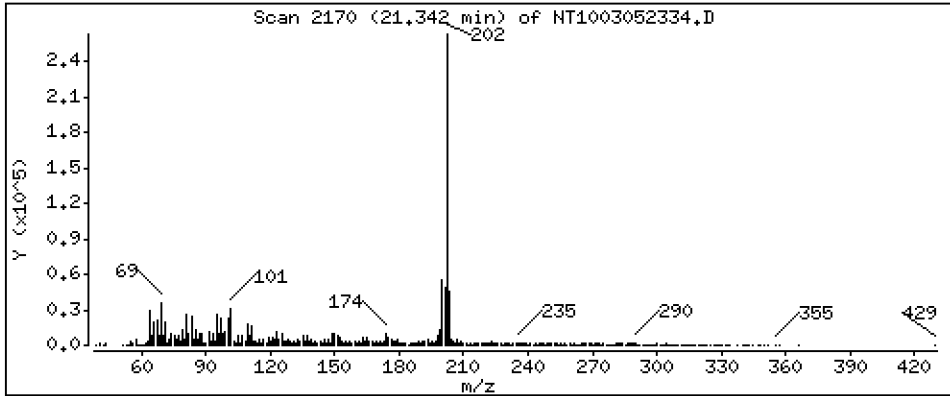
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 2,236 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

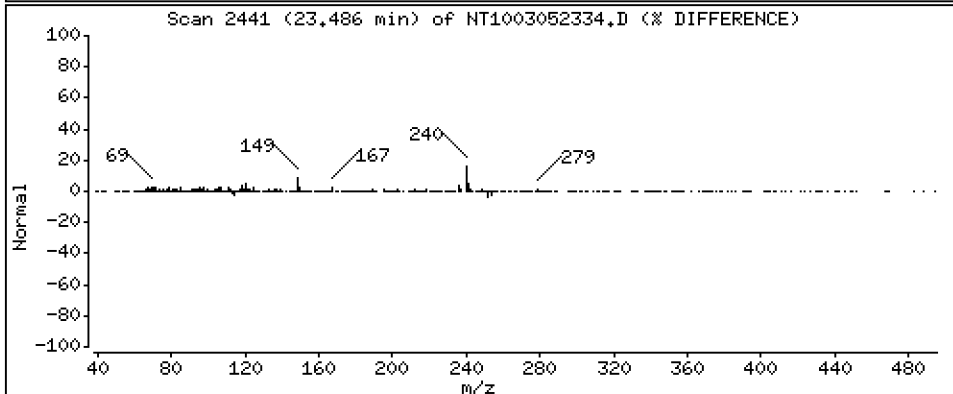
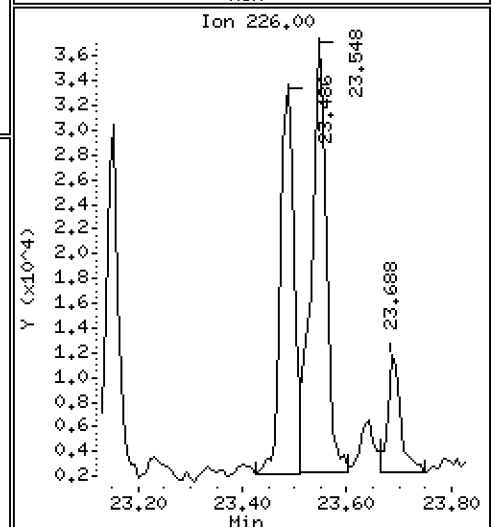
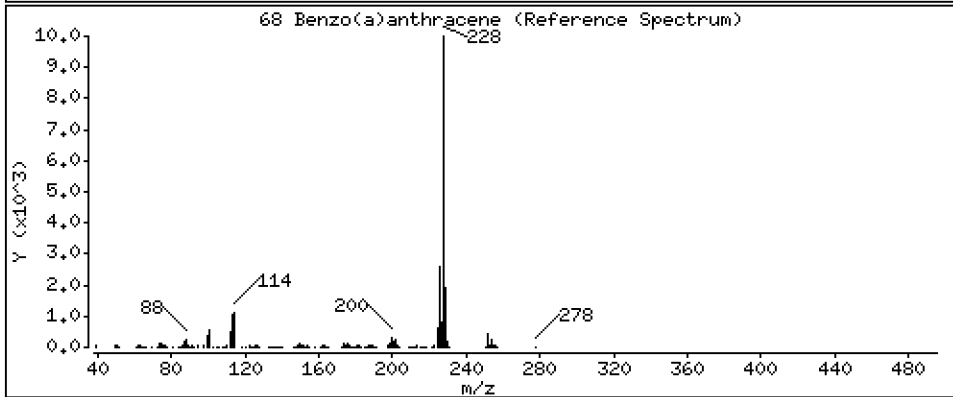
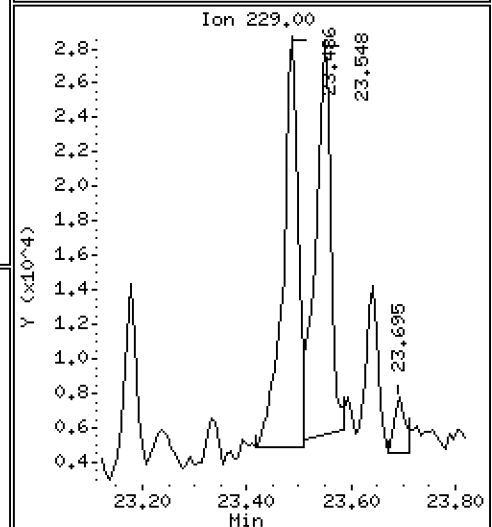
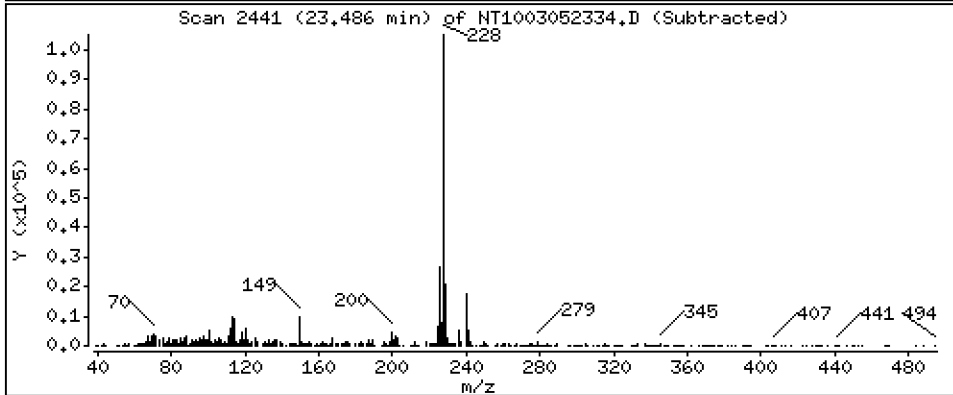
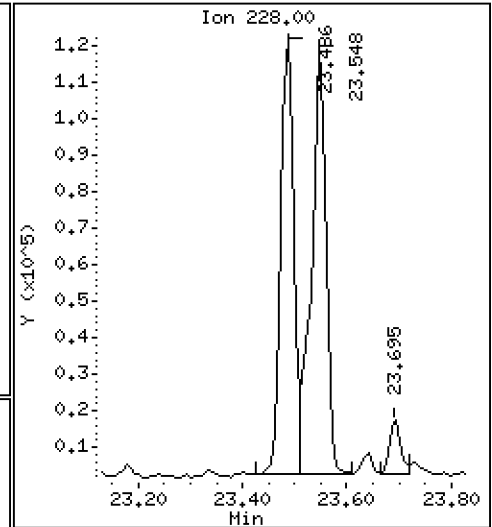
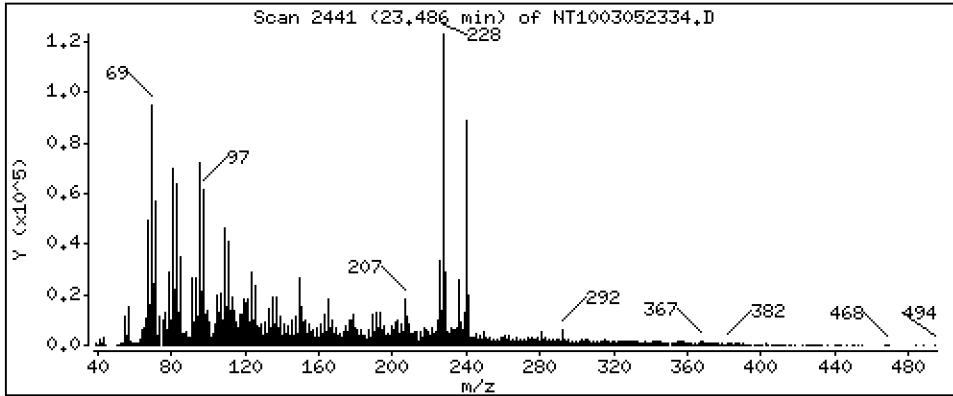
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,9427 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

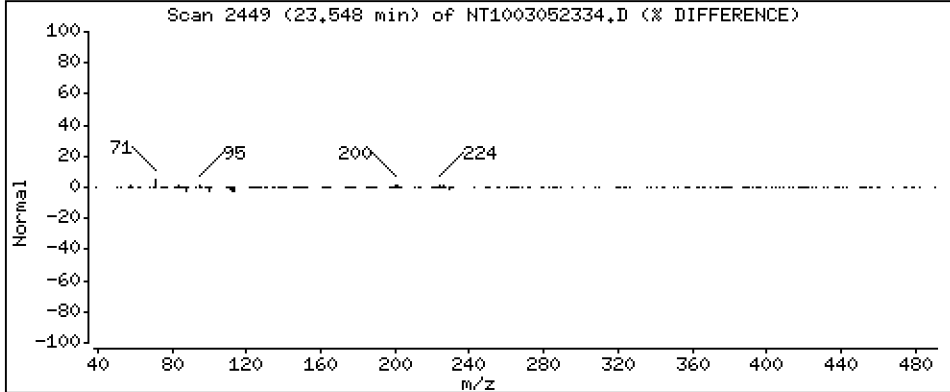
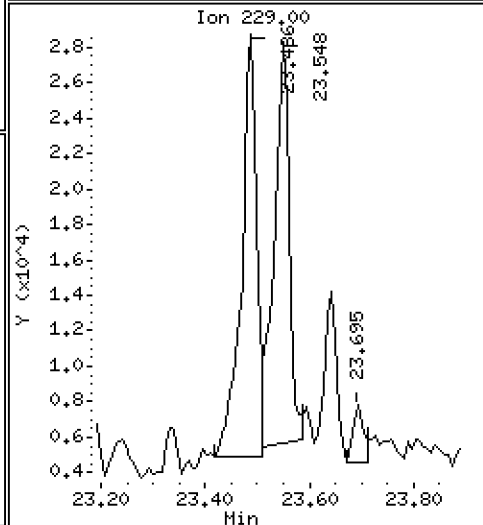
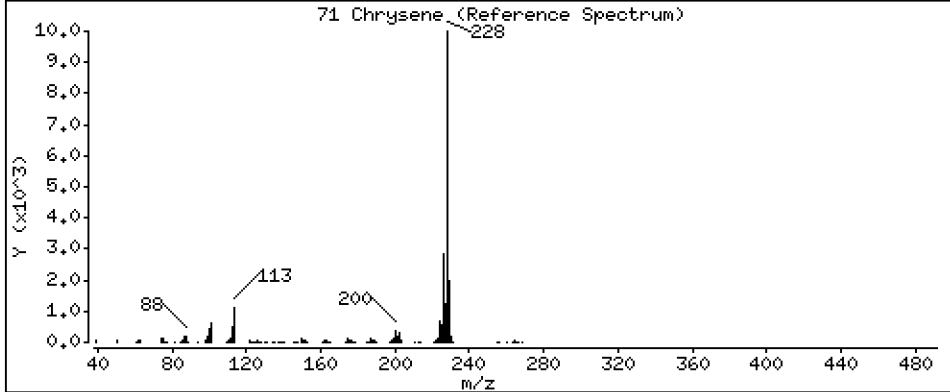
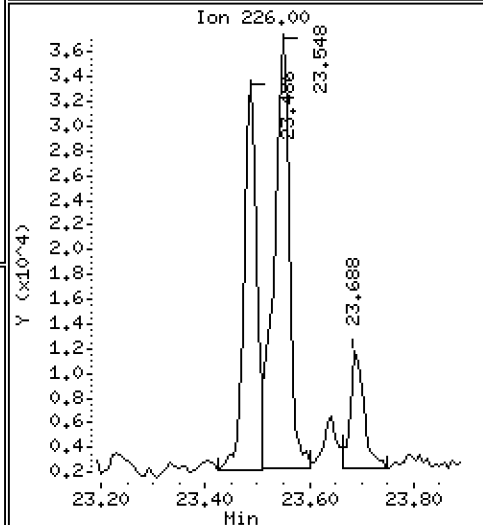
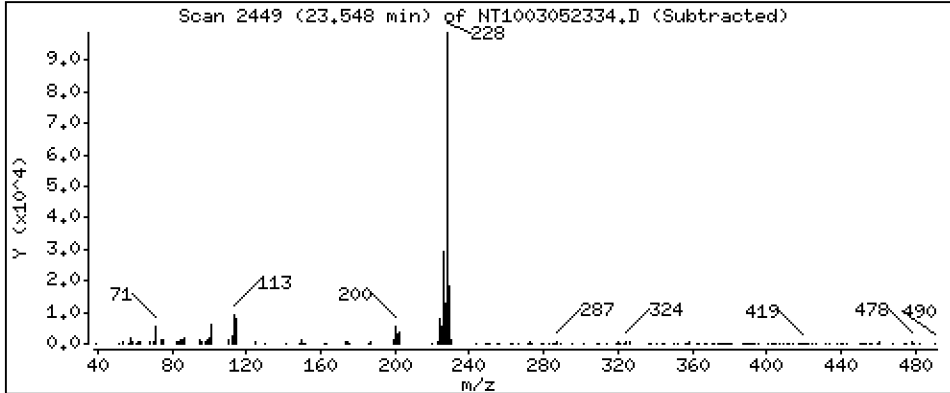
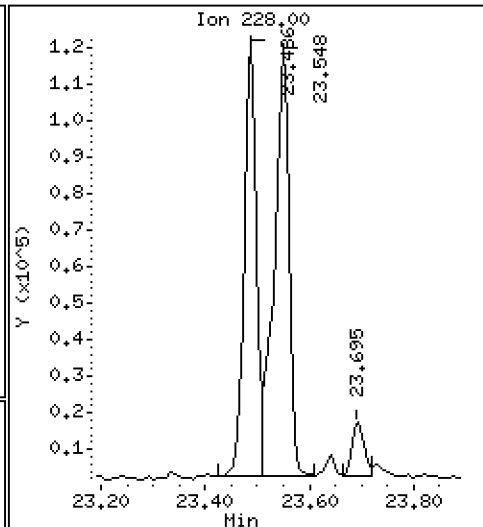
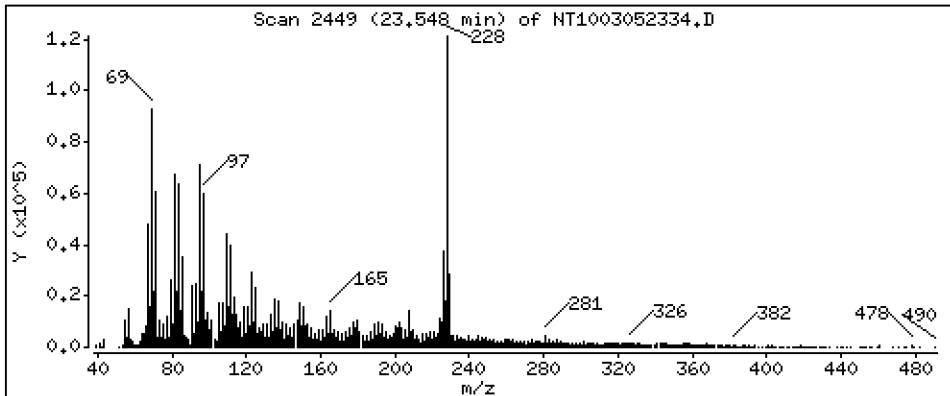
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

71 Chrysene

Concentration: 1,332 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

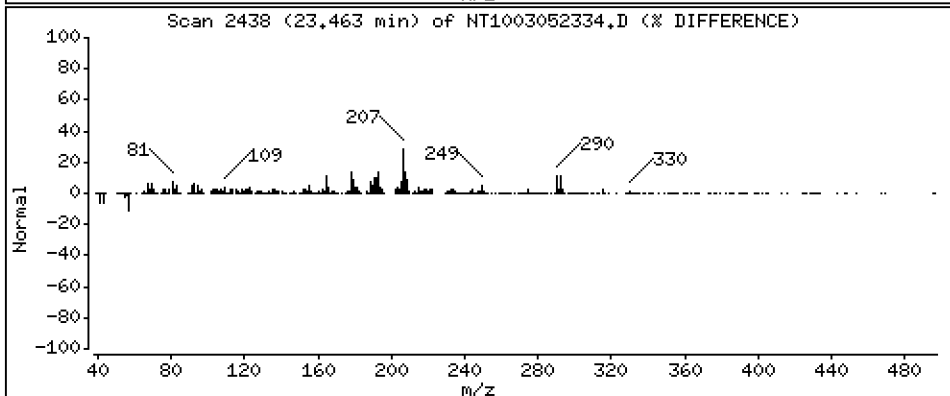
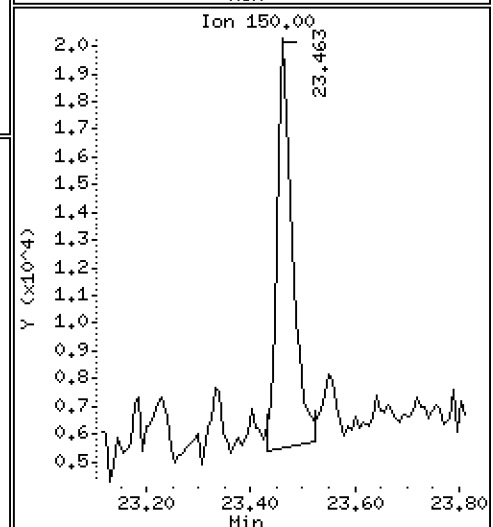
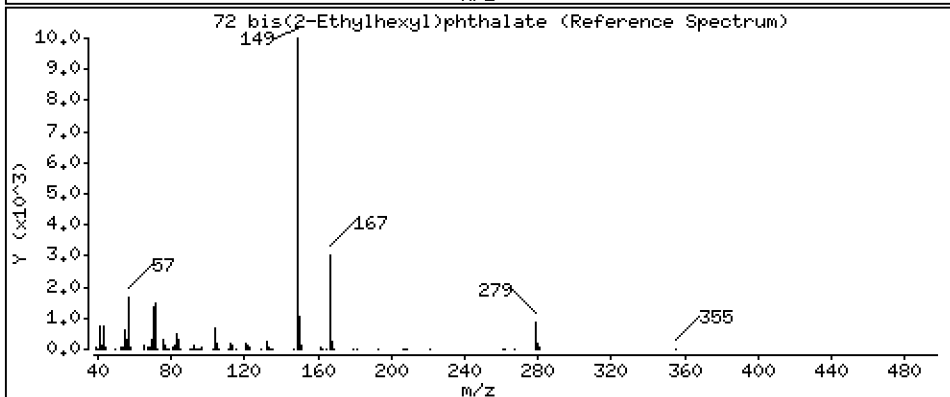
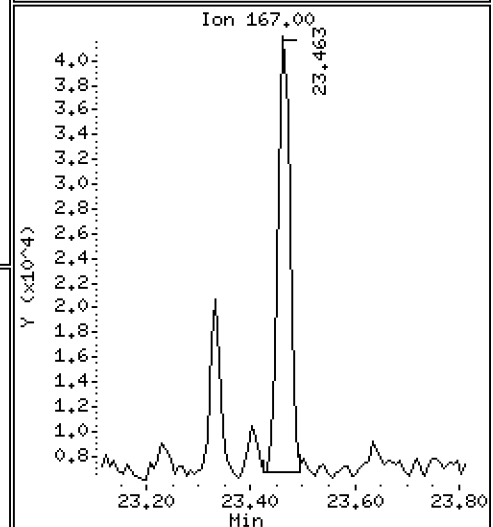
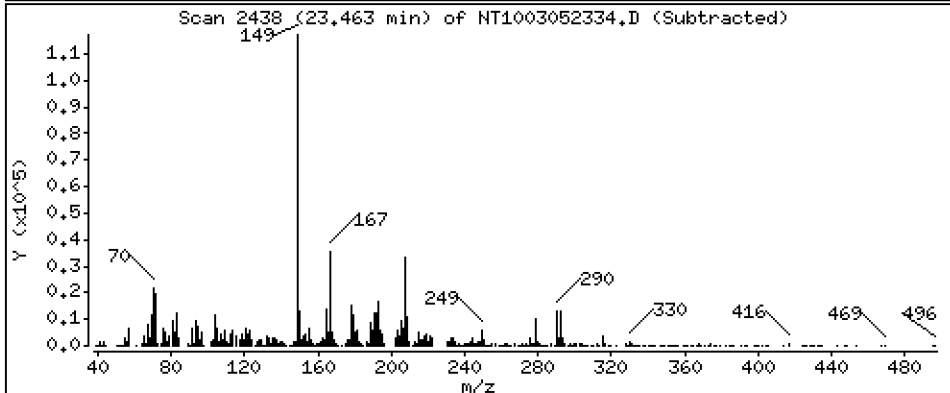
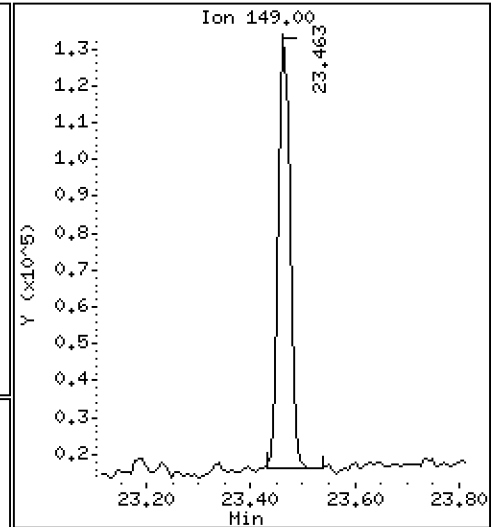
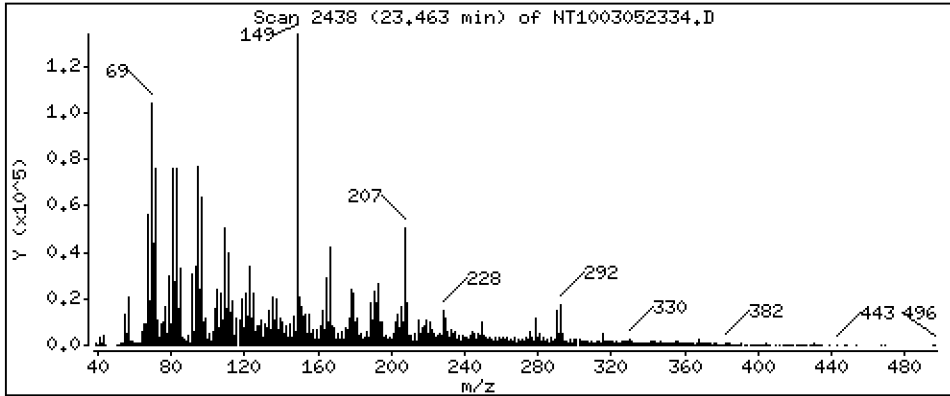
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 1,155 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

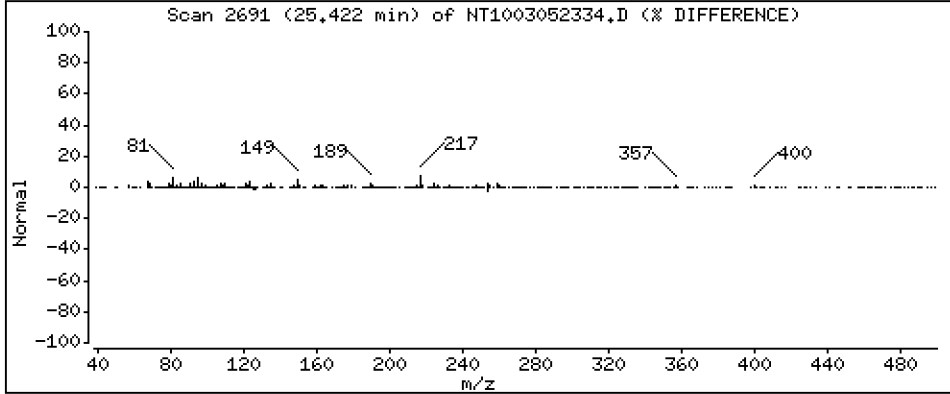
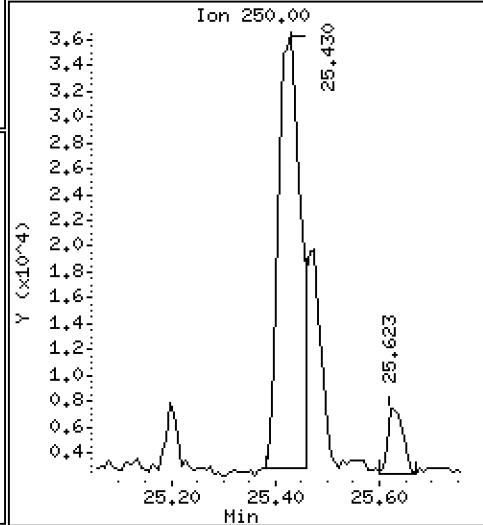
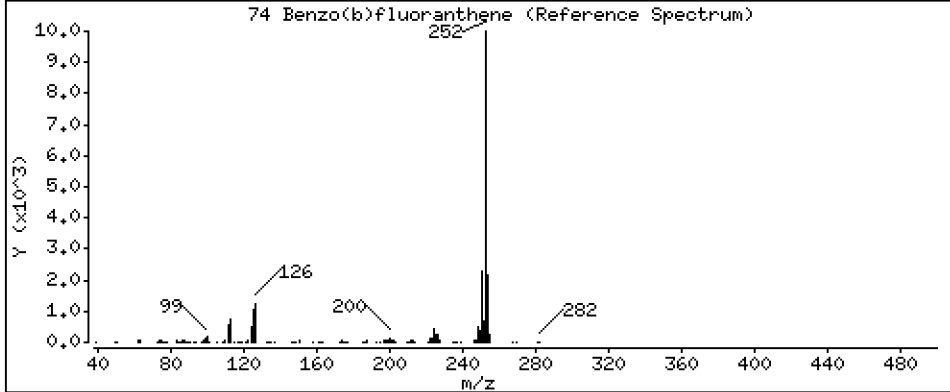
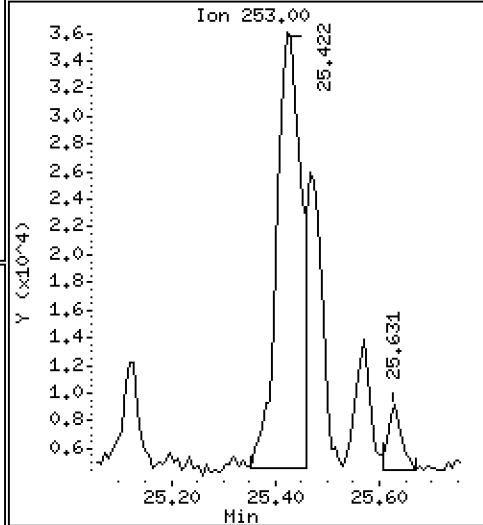
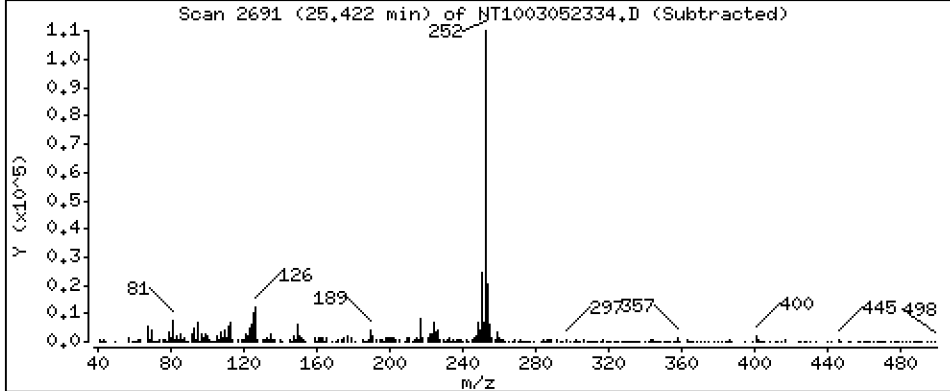
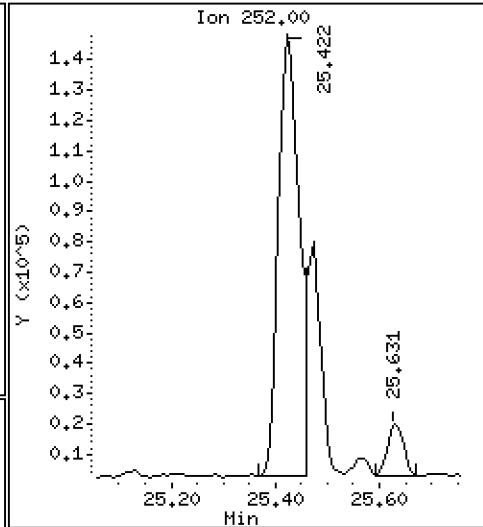
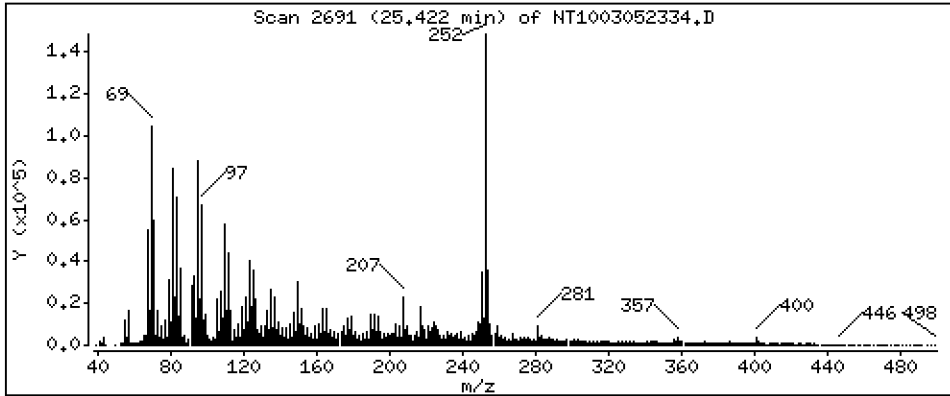
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 1,719 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

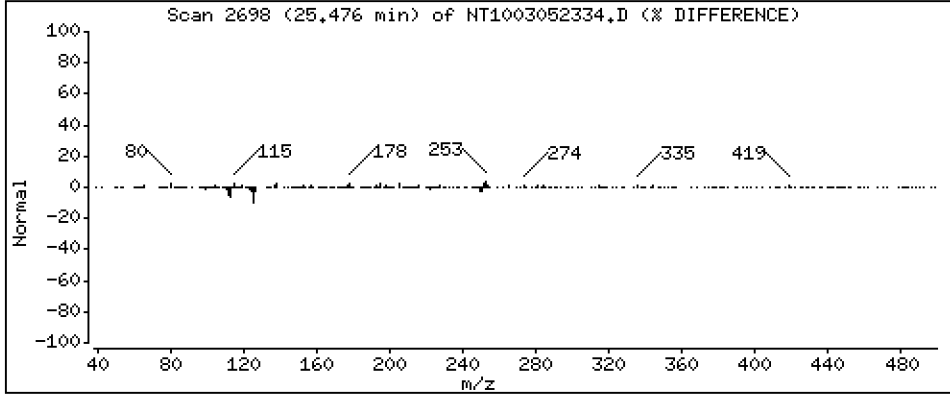
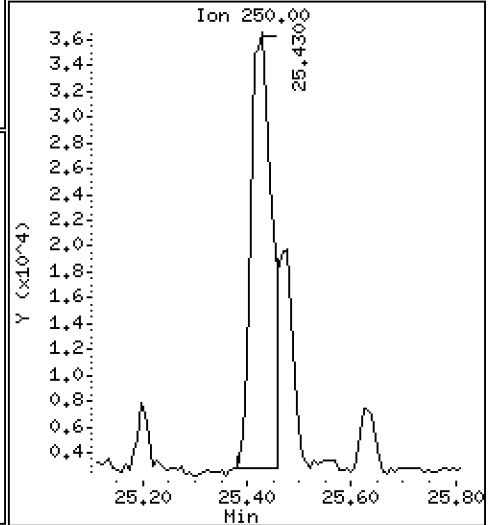
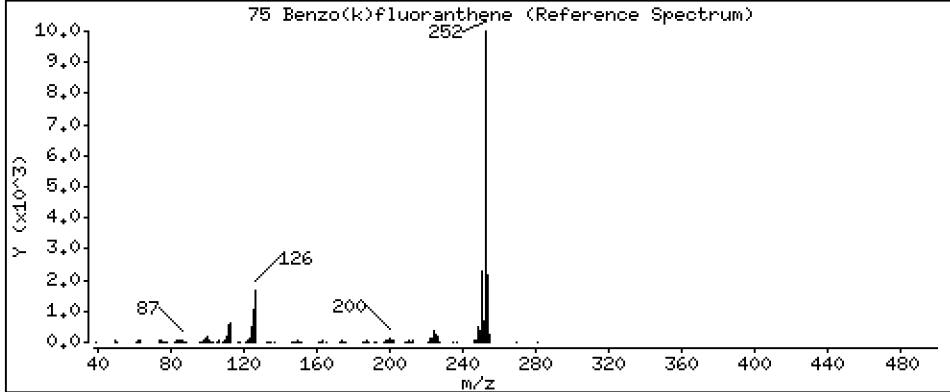
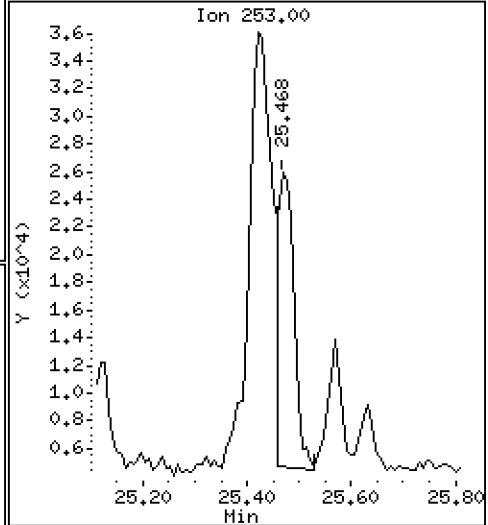
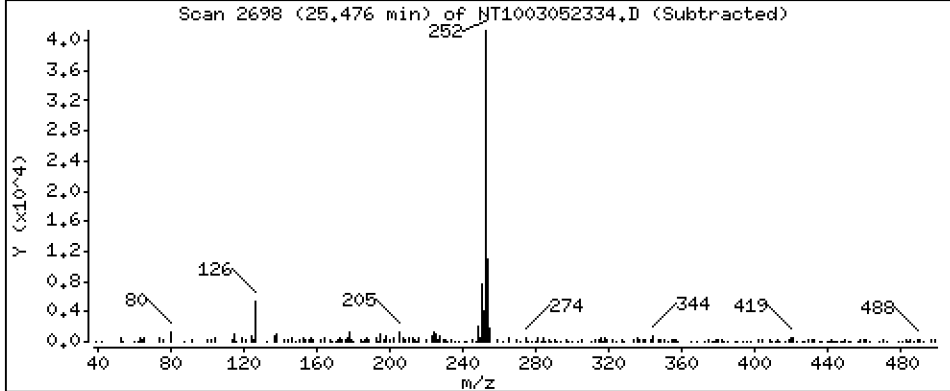
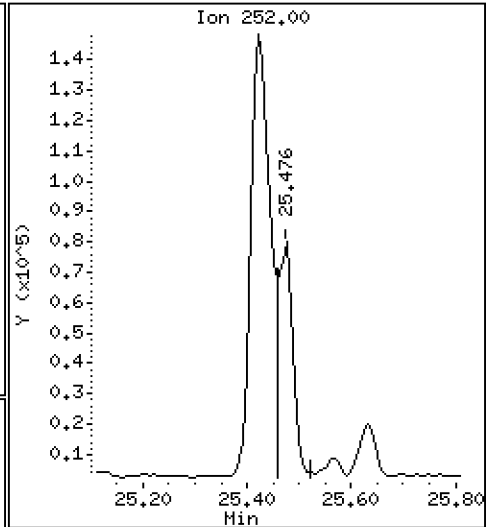
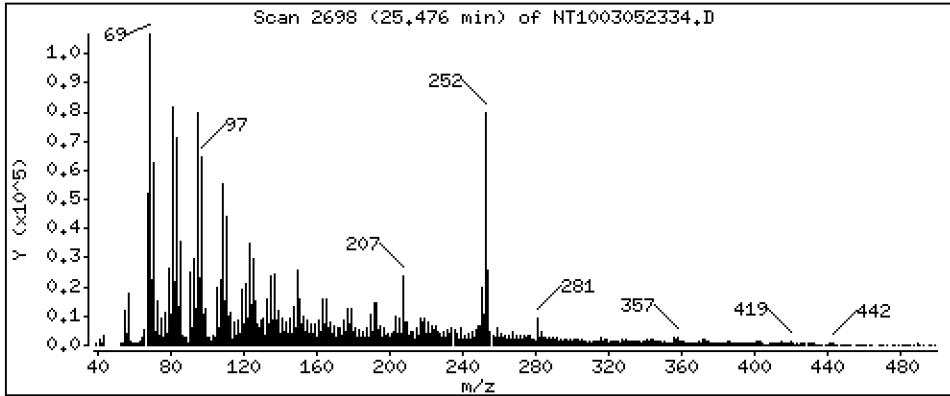
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,6658 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

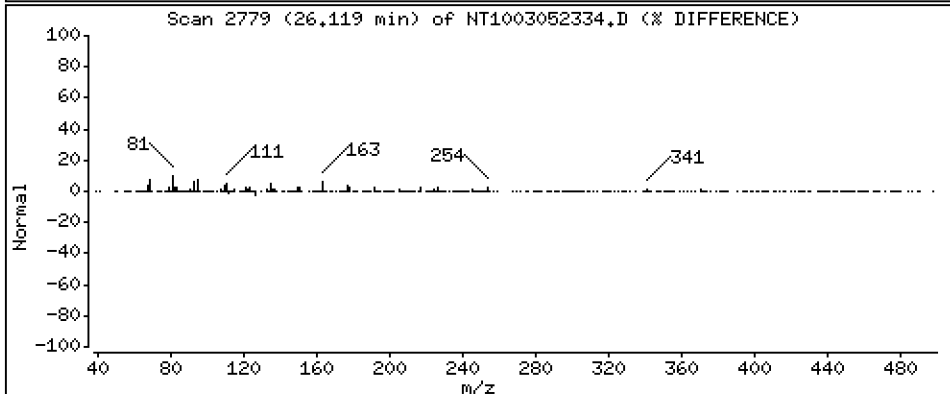
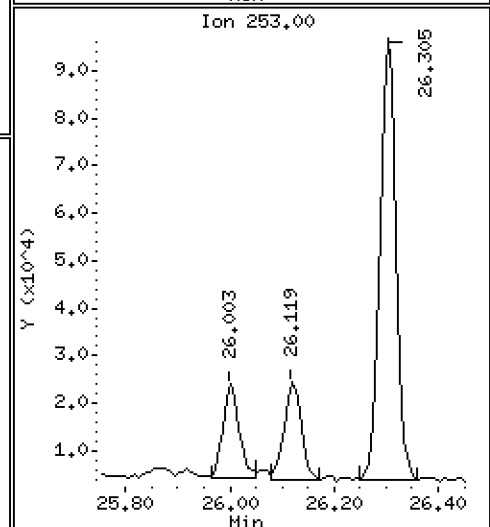
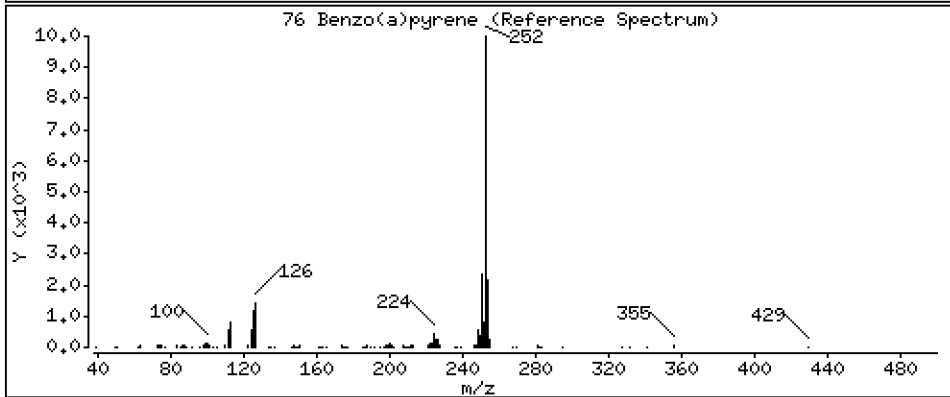
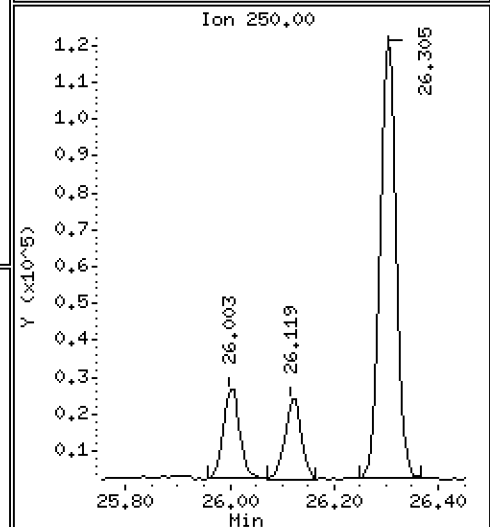
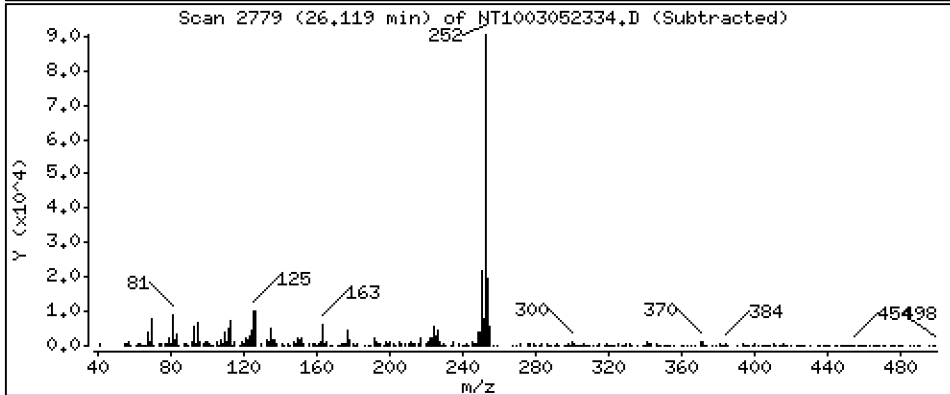
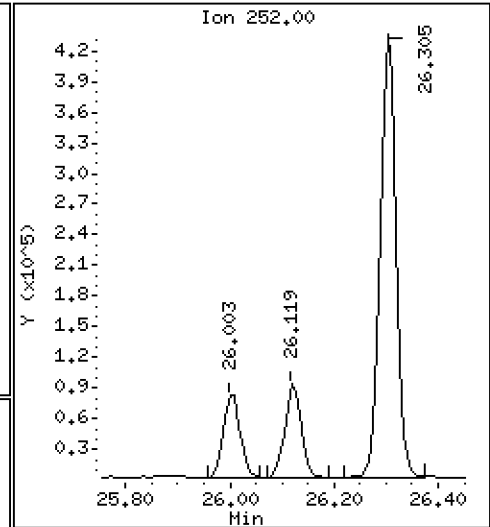
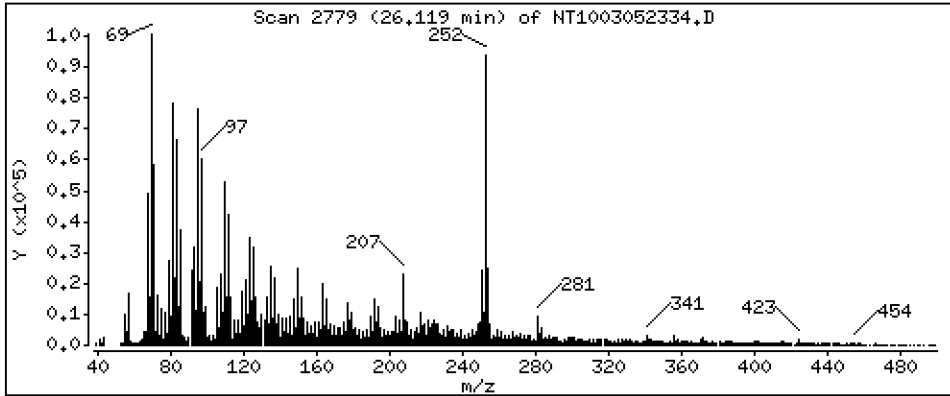
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,9496 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

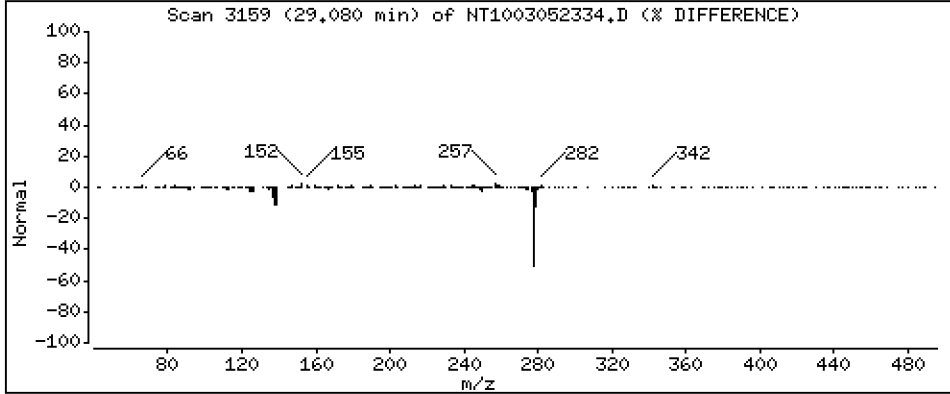
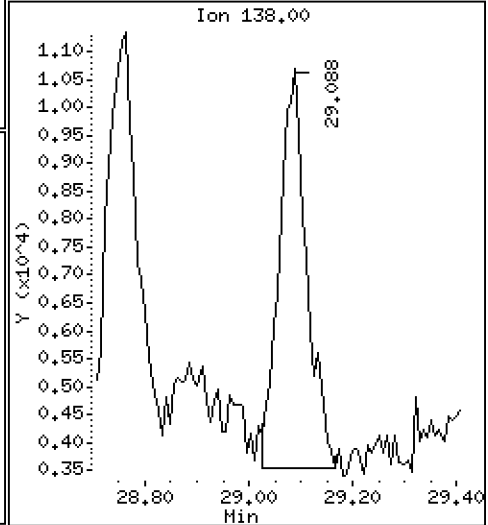
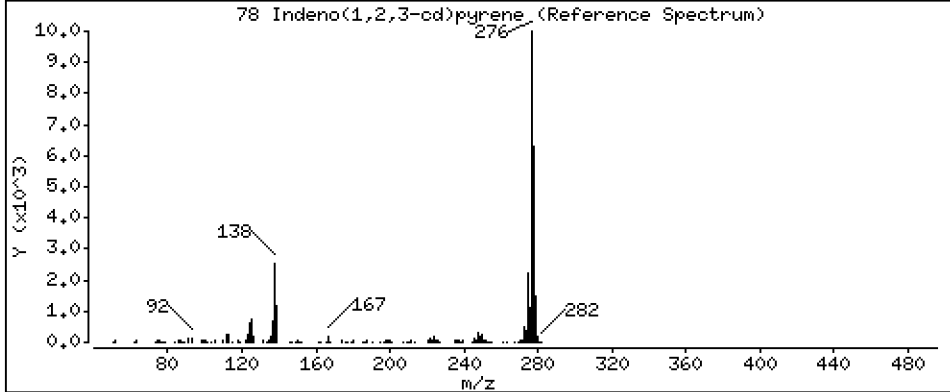
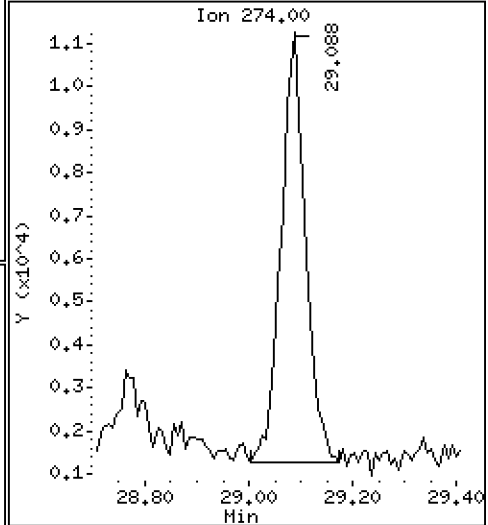
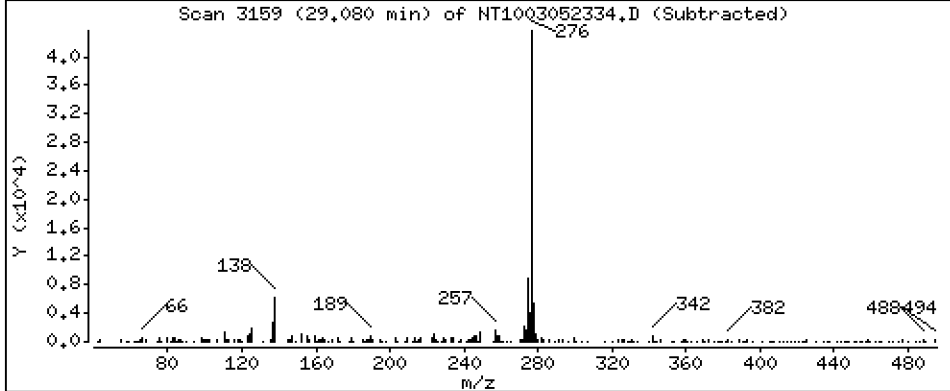
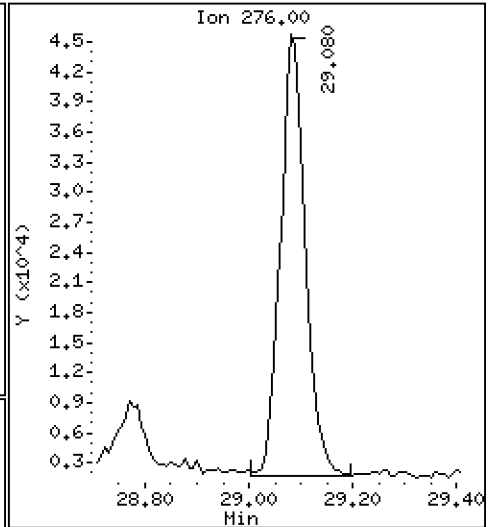
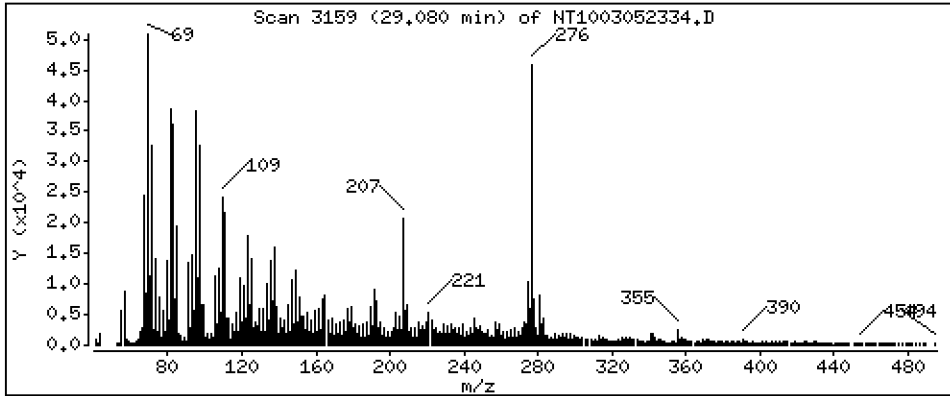
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,6017 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

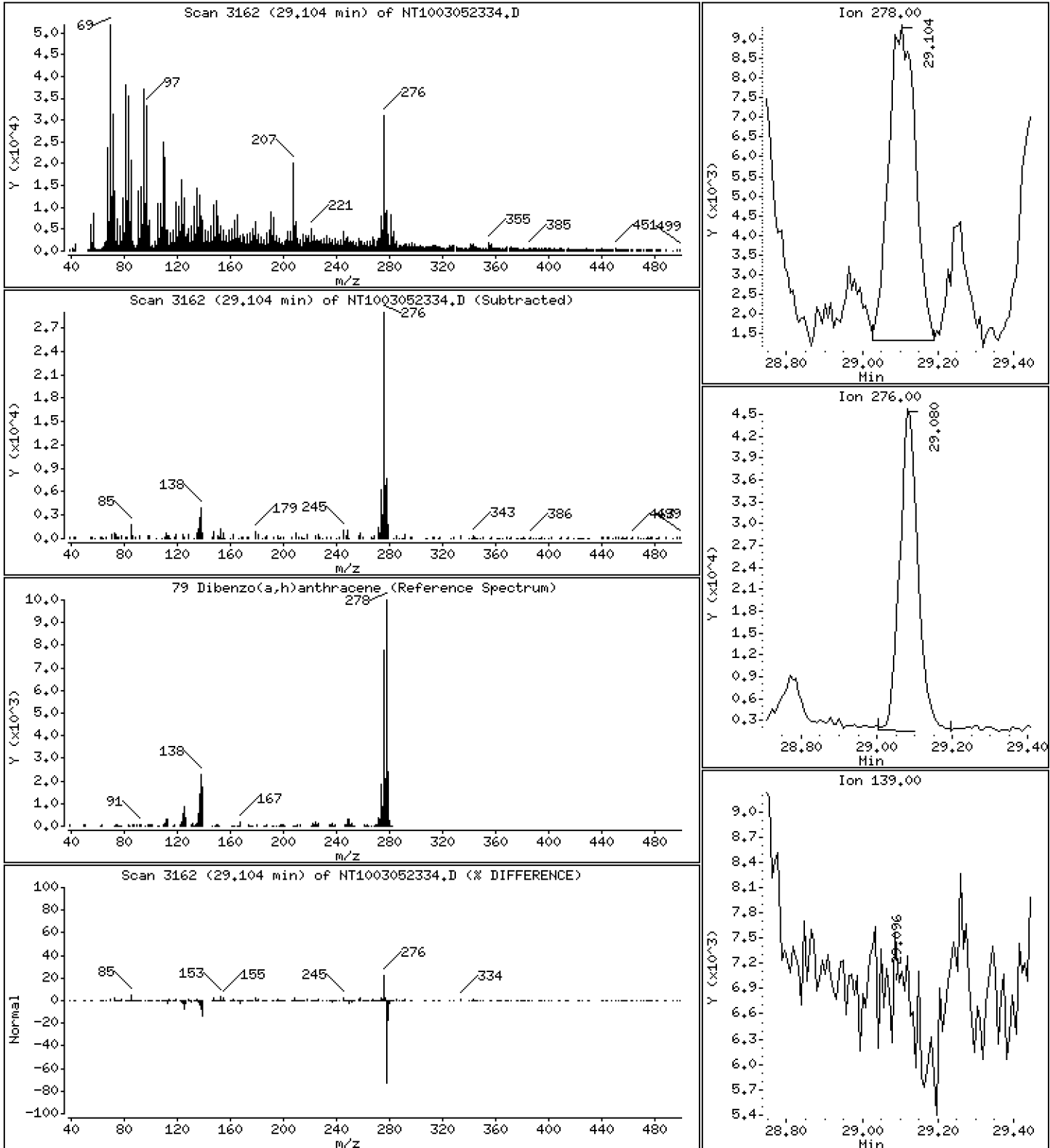
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2125 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

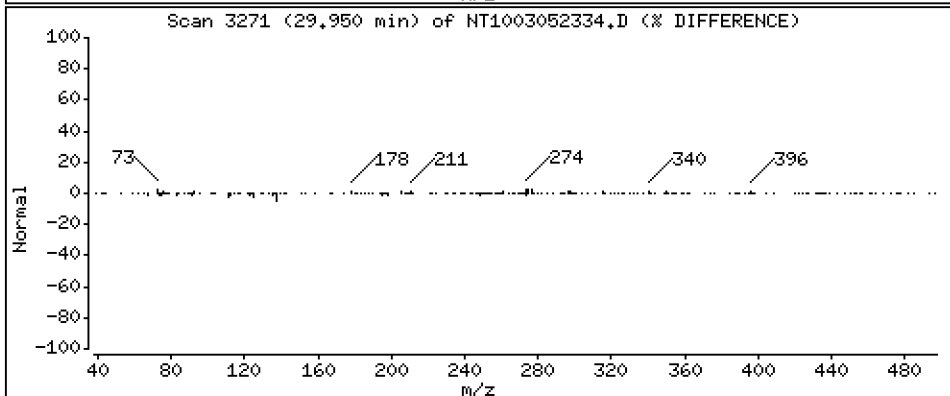
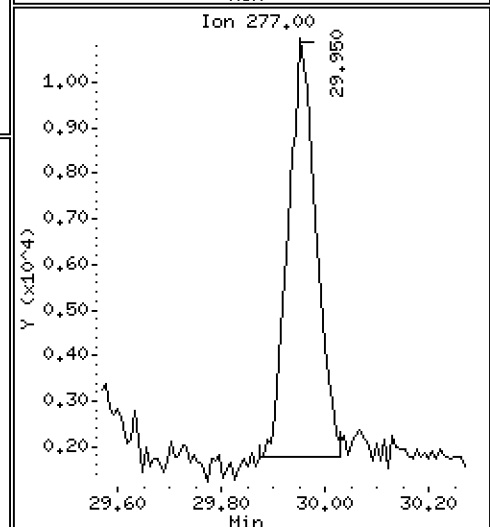
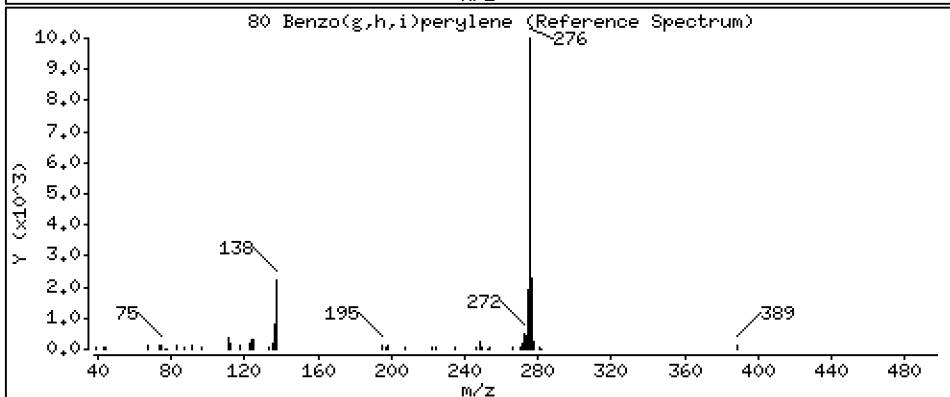
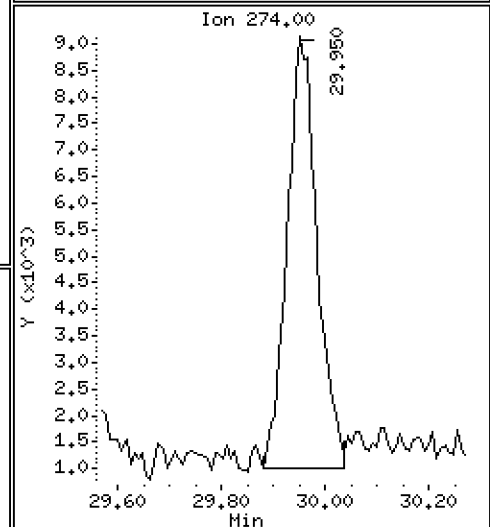
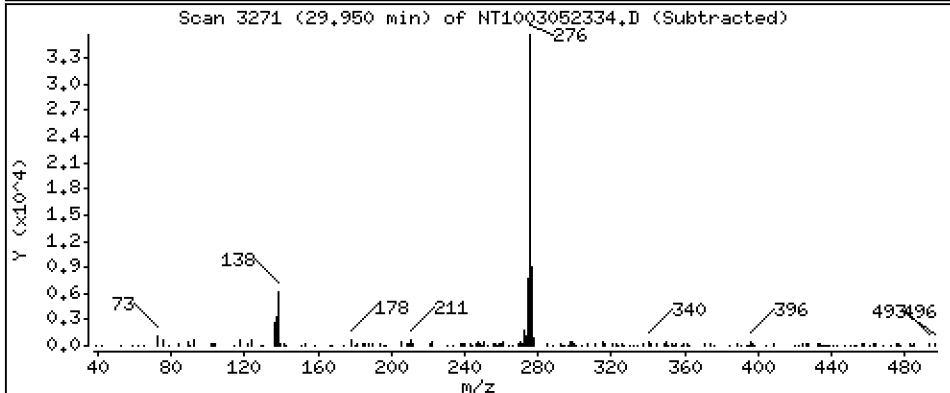
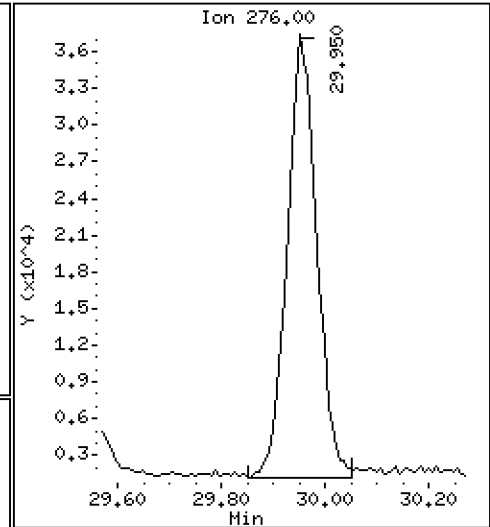
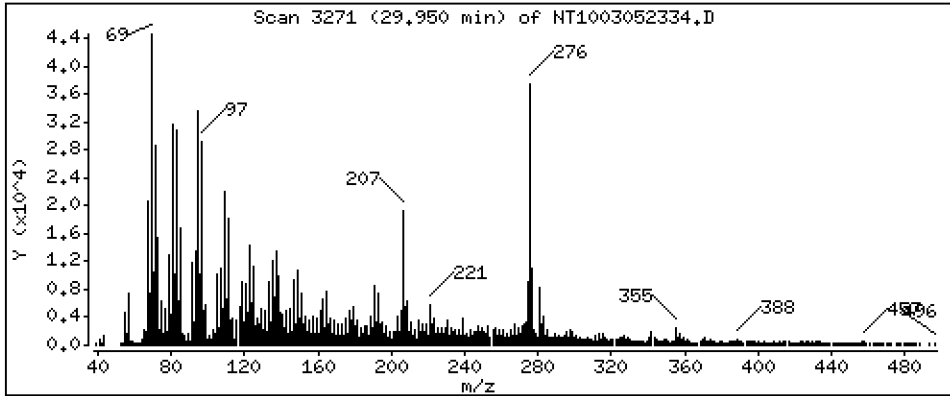
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,7378 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

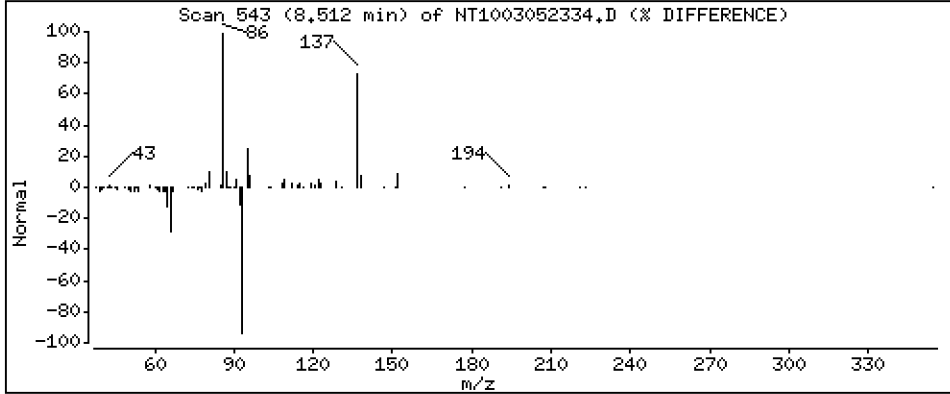
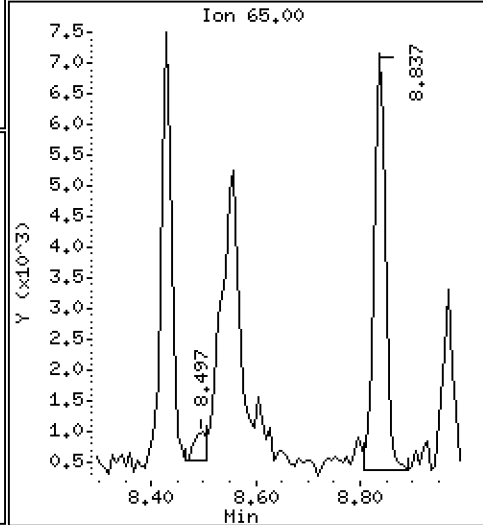
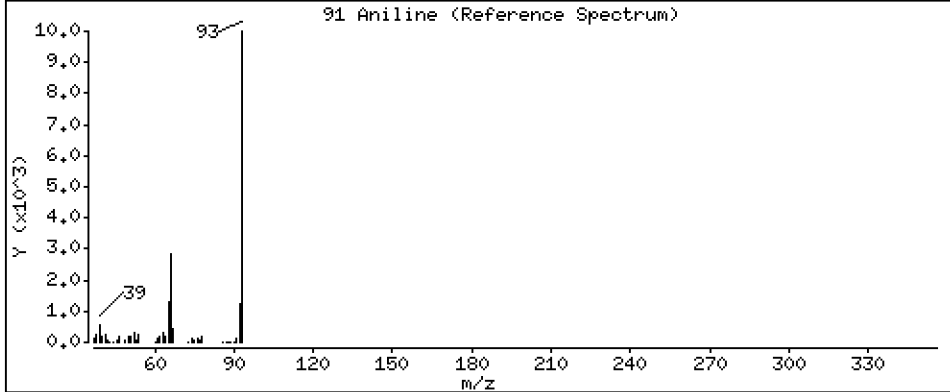
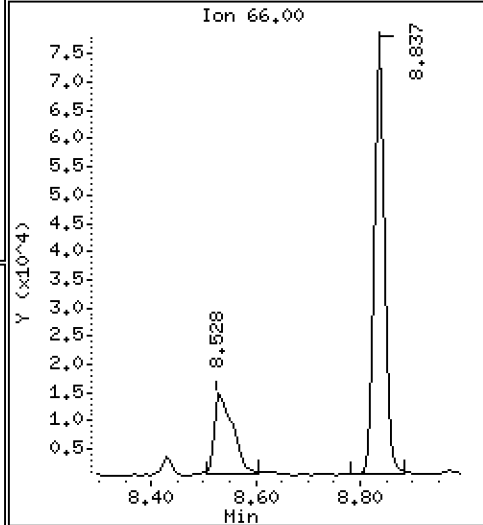
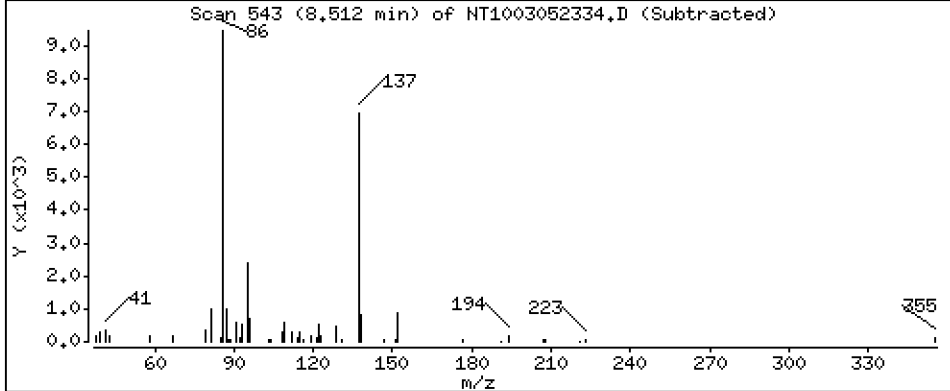
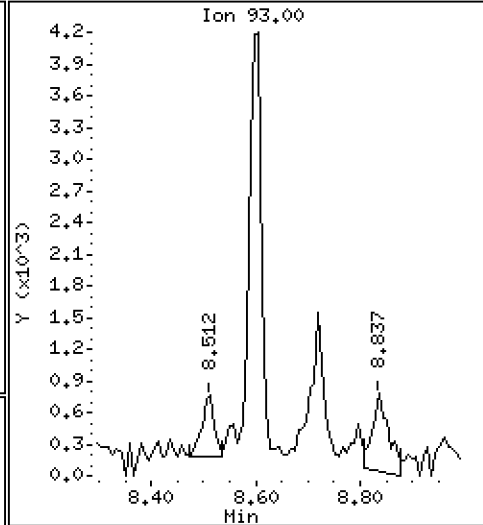
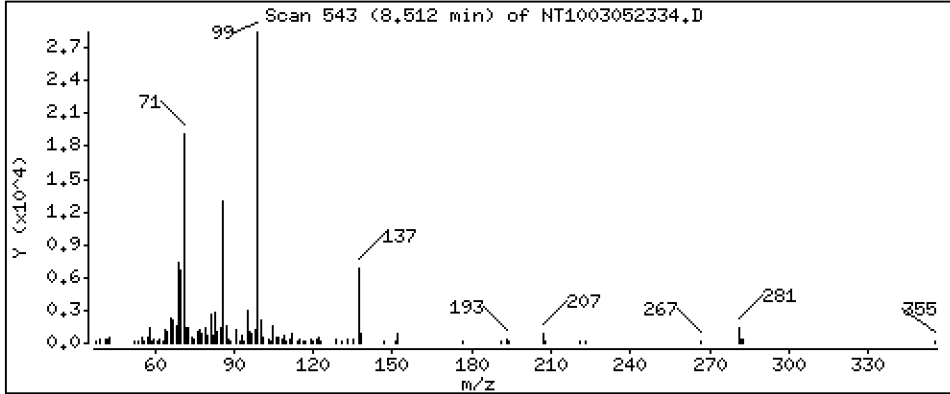
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

91 Aniline

Concentration: 0.01191 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

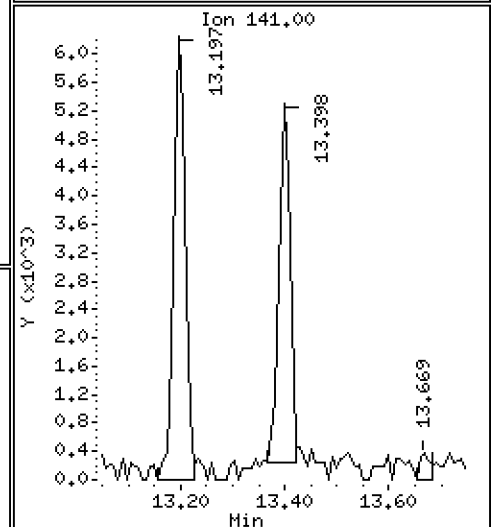
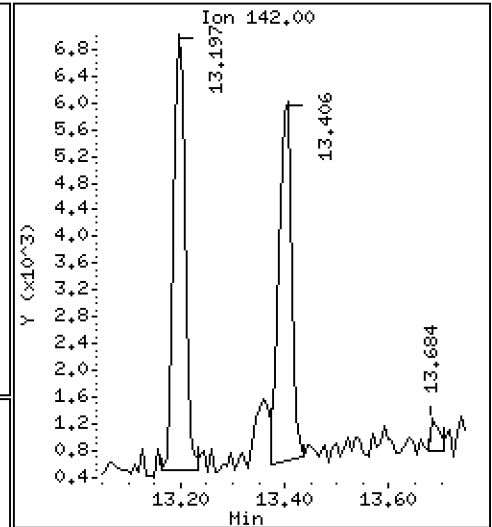
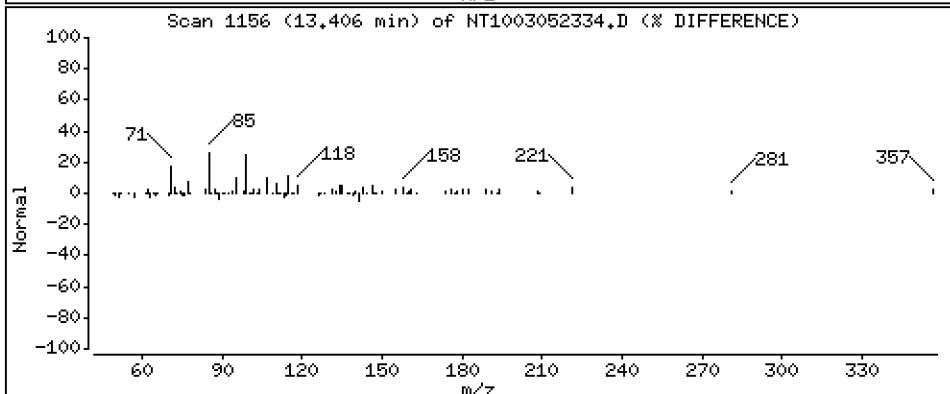
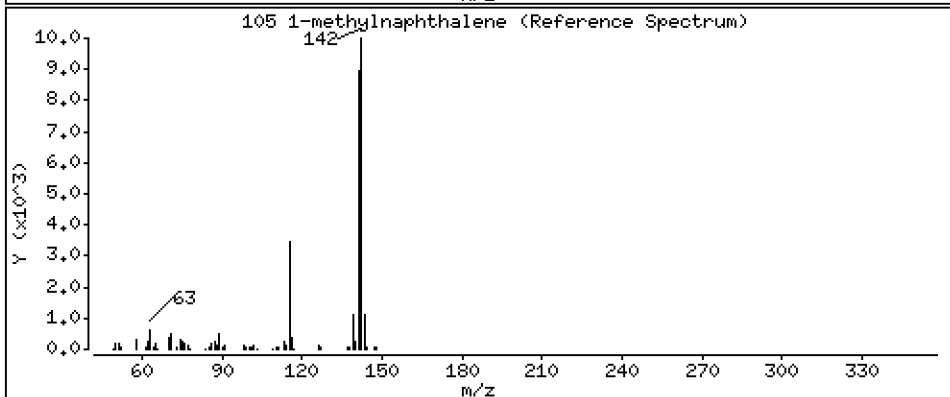
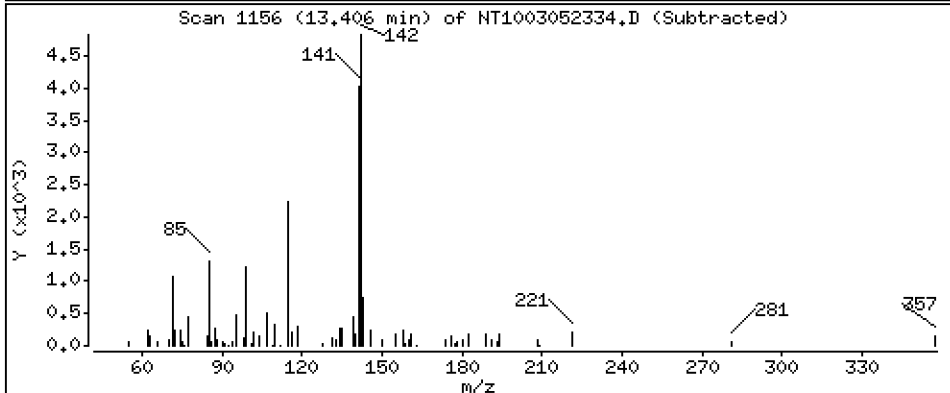
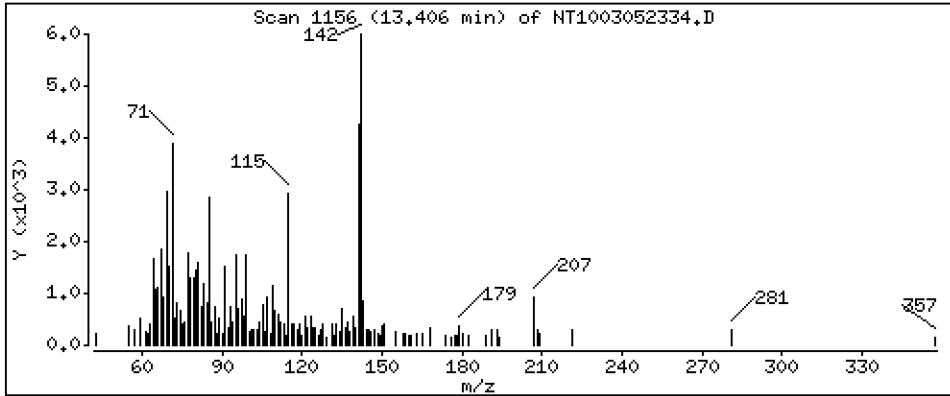
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,08276 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

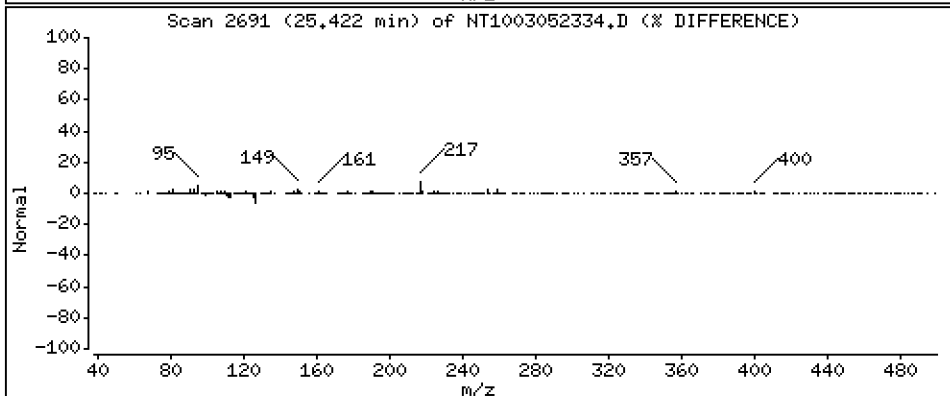
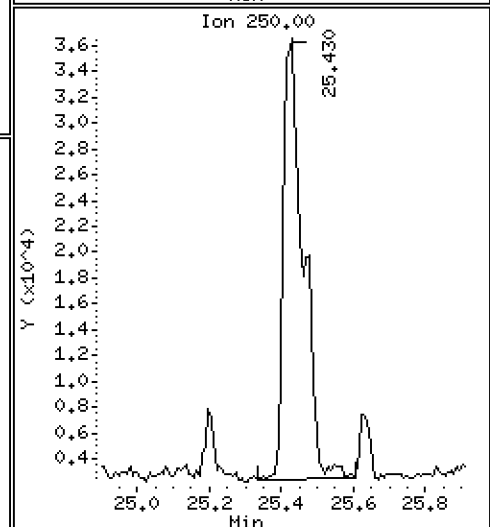
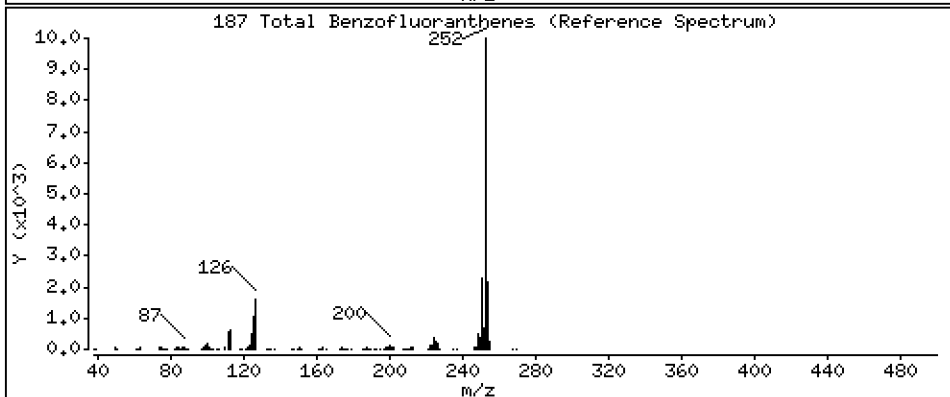
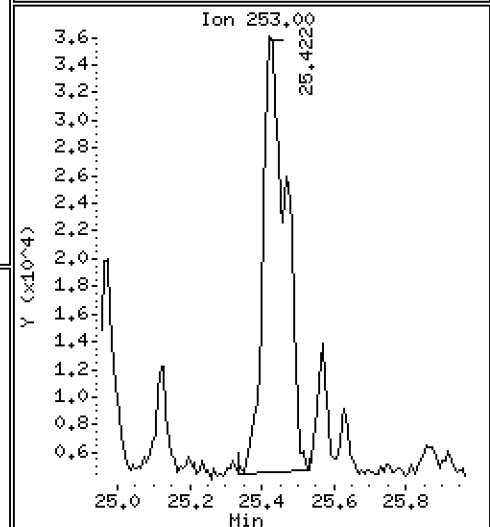
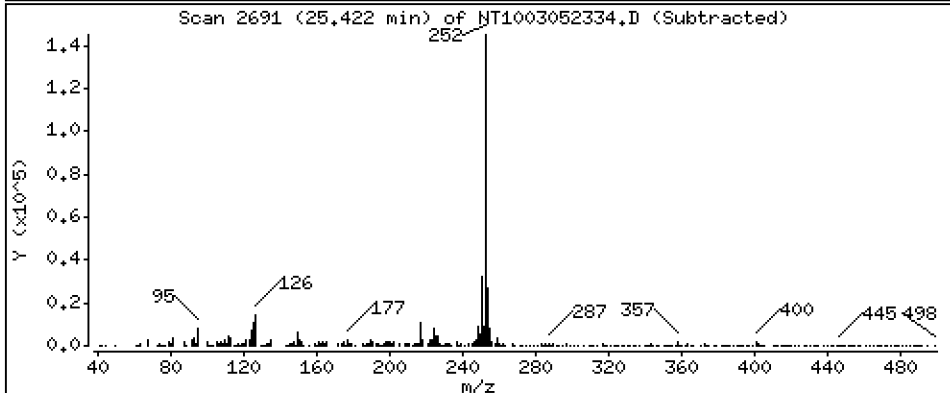
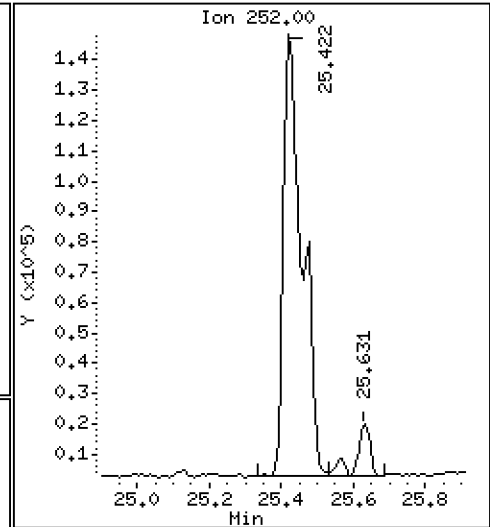
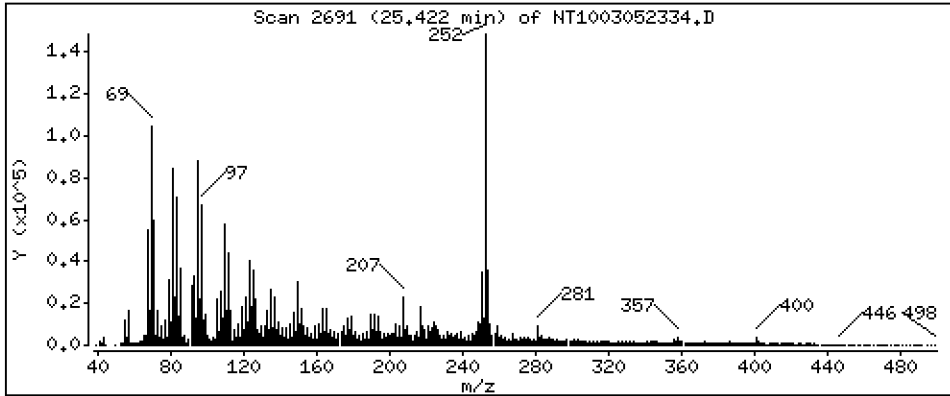
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 2,315 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

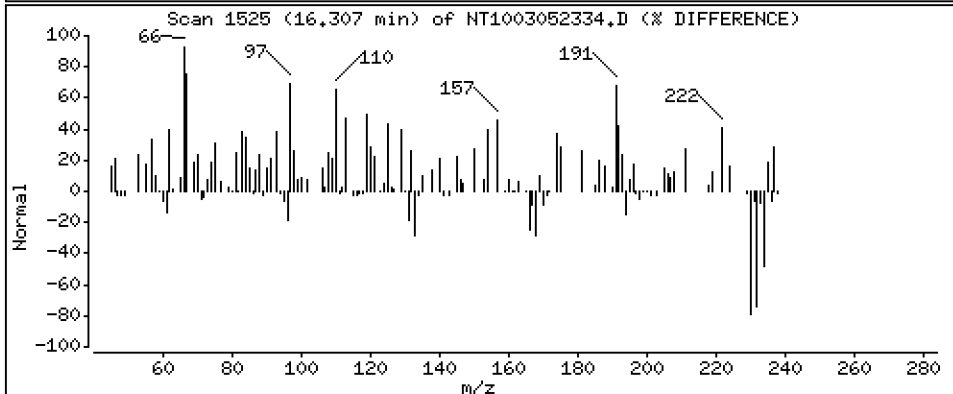
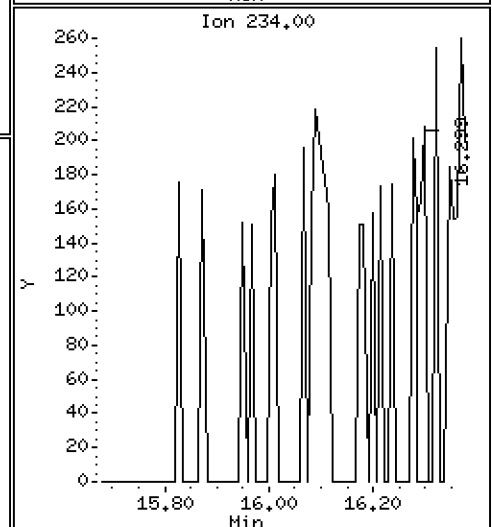
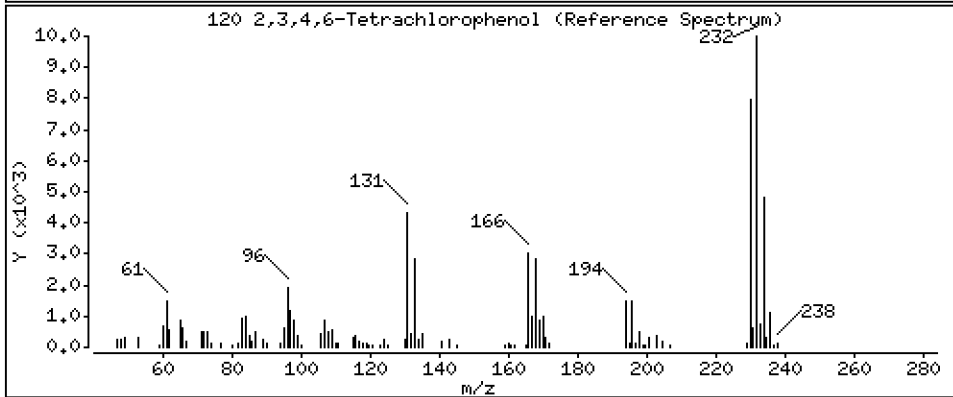
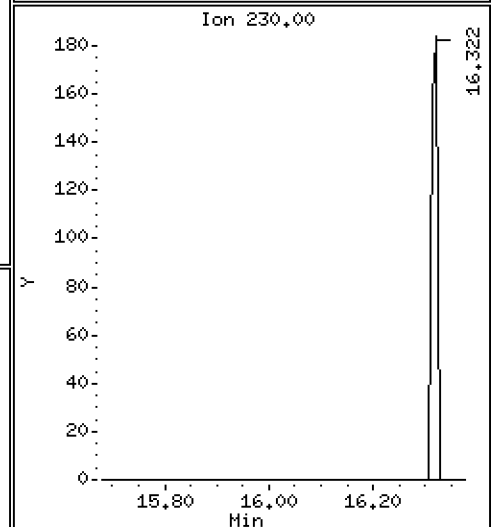
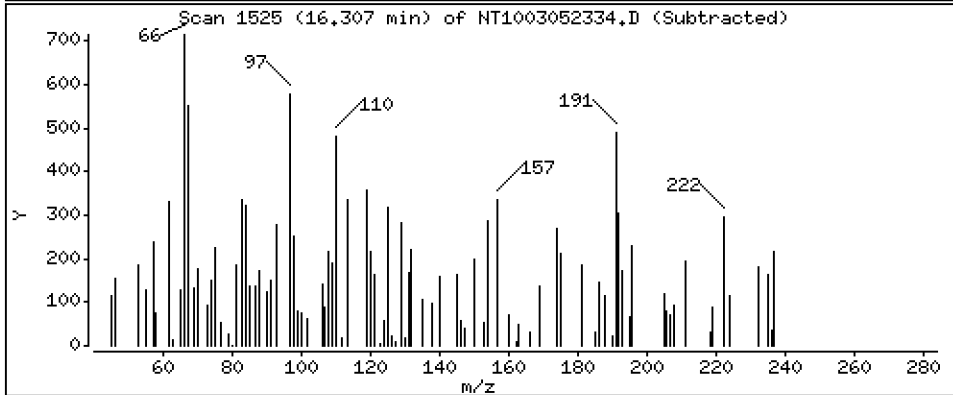
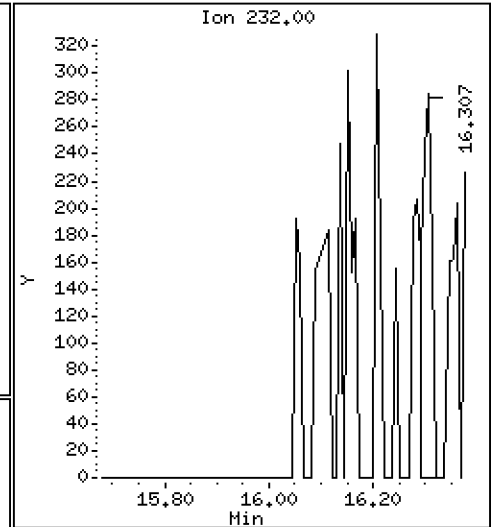
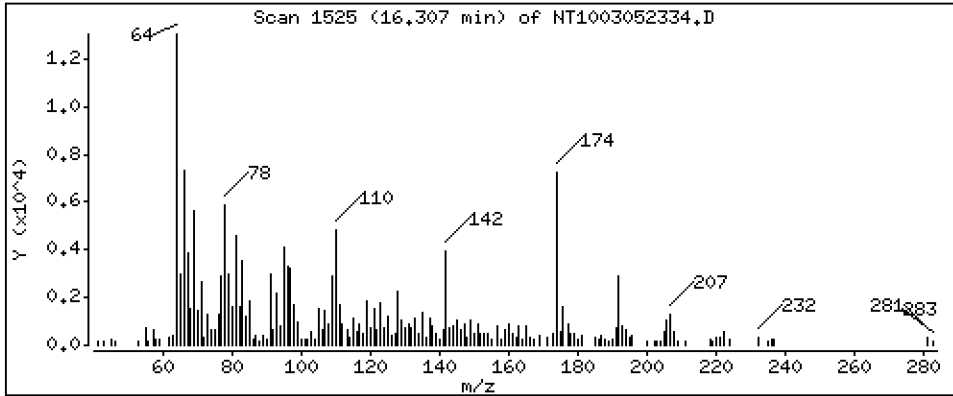
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,01215 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052334.D

Lab Smp Id: 23A0326-12

Inj Date : 06-MAR-2023 10:11

Operator : VTS

Inst ID: nt10.i

Smp Info : 23A0326-12

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m

Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15

Cal File: NT1003012307.D

Als bottle: 24

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
1 2-Fluorophenol	112		6.912	6.905	(0.746)	300313	5.31932	5.319
2 Phenol-d5	99		8.535	8.527	(0.922)	367590	5.60811	5.608
3 Phenol	94		8.558	8.550	(0.924)	29470	0.42288	0.4229
5 2-Chlorophenol-d4	132		8.836	8.836	(0.954)	349326	6.24664	6.247
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	179441	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.031)	153025	3.66257	3.663
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.751	(1.047)	5399	0.30410	0.3041 (MH)
13 2-Methylphenol	108		9.705	9.697	(1.048)	1596	0.02958	0.02958
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.079)	25915	0.38297	0.3830
\$ 18 Nitrobenzene-d5	82		10.326	10.325	(0.878)	305928	4.26838	4.268
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.757	11.757	(1.000)	652929	4.00000	
28 Naphthalene	128		11.796	11.803	(1.003)	20257	0.12088	0.1209
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		13.196	13.196	(1.122)	10740	0.09072	0.09072
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196					Compound Not Detected.		
35 2,4,5-Trichlorophenol	196					Compound Not Detected.		
\$ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	550781	4.39848	4.398
37 2-Chloronaphthalene	162					Compound Not Detected.		
38 2-Nitroaniline	65					Compound Not Detected.		
39 Dimethylphthalate	163		14.775	14.775	(0.963)	5493	0.04845	0.04845
40 Acenaphthylene	152		15.061	15.061	(0.981)	15115	0.08919	0.08919
41 2,6-Dinitrotoluene	165					Compound Not Detected.		
* 42 Acenaphthene-d10	164		15.347	15.347	(1.000)	351071	4.00000	
43 3-Nitroaniline	138					Compound Not Detected.		
44 Acenaphthene	153		15.417	15.417	(1.005)	9944	0.09729	0.09729
45 2,4-Dinitrophenol	184					Compound Not Detected.		
46 Dibenzofuran	168		15.780	15.780	(1.028)	14948	0.09854	0.09854
47 4-Nitrophenol	109					Compound Not Detected.		
48 2,4-Dinitrotoluene	165					Compound Not Detected.		
50 Diethylphthalate	149		16.236	16.244	(1.058)	30762	0.25612	0.2561
49 Fluorene	166		16.492	16.492	(1.075)	15385	0.12190	0.1219
51 4-Chlorophenyl-phenylether	204					Compound Not Detected.		
52 4-Nitroaniline	138					Compound Not Detected.		
53 4,6-Dinitro-2-methylphenol	198					Compound Not Detected.		
54 N-Nitrosodiphenylamine	169					Compound Not Detected.		
\$ 55 2,4,6-Tribromophenol	330		16.994	16.993	(1.107)	162131	7.14808	7.148
56 4-Bromophenyl-phenylether	248					Compound Not Detected.		
57 Hexachlorobenzene	284					Compound Not Detected.		
58 Pentachlorophenol	266					Compound Not Detected.		
* 59 Phenanthrene-d10	188		18.455	18.455	(1.000)	646598	4.00000	
60 Phenanthrene	178		18.502	18.502	(1.002)	150599	0.91009	0.9101
61 Anthracene	178		18.610	18.610	(1.008)	56774	0.35383	0.3538
62 Carbazole	167		18.950	18.943	(1.027)	18053	0.12281	0.1228
63 Di-n-butylphthalate	149		19.647	19.631	(1.065)	19089	0.09574	0.09574
64 Fluoranthene	202		20.916	20.877	(0.890)	352708	1.70491	1.705
65 Pyrene	202		21.341	21.310	(0.908)	471089	2.23631	2.236
\$ 66 Terphenyl-d14	244		21.597	21.581	(0.919)	614222	3.60353	3.604
67 Butylbenzylphthalate	149					Compound Not Detected.		
68 Benzo(a)anthracene	228		23.486	23.478	(0.999)	199890	0.94267	0.9427
* 69 Chrysene-d12	240		23.501	23.494	(1.000)	601375	4.00000	
70 3,3'-Dichlorobenzidine	252					Compound Not Detected.		
71 Chrysene	228		23.548	23.540	(1.002)	229629	1.33248	1.332
72 bis(2-Ethylhexyl)phthalate	149		23.463	23.463	(0.956)	173329	1.15525	1.155
* 134 Di-n-octylphthalate-d4	153		24.554	24.554	(1.000)	1063538	4.00000	
73 Di-n-octylphthalate	149					Compound Not Detected.		
74 Benzo(b)fluoranthene	252		25.421	25.406	(0.969)	410454	1.71886	1.719
75 Benzo(k)fluoranthene	252		25.475	25.460	(0.971)	151363	0.66582	0.6658 (M)
76 Benzo(a)pyrene	252		26.118	26.103	(0.995)	200991	0.94956	0.9496
* 77 Perylene-d12	264		26.242	26.227	(1.000)	688721	4.00000	
78 Indeno(1,2,3-cd)pyrene	276		29.080	29.057	(1.108)	148387	0.60170	0.6017
79 Dibenzo(a,h)anthracene	278		29.103	29.095	(1.109)	39580	0.21249	0.2125 (M)
80 Benzo(g,h,i)perylene	276		29.950	29.919	(1.141)	145040	0.73782	0.7378
90 N-Nitrosodimethylamine	74					Compound Not Detected.		
91 Aniline	93		8.512	8.643	(0.919)	962	0.01191	0.01191
93 Benzidine	184					Compound Not Detected.		
103 Pyridine	79					Compound Not Detected.		
105 1-methylnaphthalene	142		13.405	13.397	(1.140)	8868	0.08276	0.08276
111 Azobenzene (1,2-DP-Hydrazine)	77					Compound Not Detected.		

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
187 Total Benzofluoranthenes	252		25.421	25.406	(0.969)	527847	2.31479	2.315	
120 2,3,4,6-Tetrachlorophenol	232		16.306	16.028	(1.062)	399	0.01215	0.01215	

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052334.D Calibration Time: 04:32
 Lab Smp Id: 23A0326-12
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	179441	-16.08
27 Naphthalene-d8	756023	378012	1512046	652929	-13.64
42 Acenaphthene-d10	411497	205749	822994	351071	-14.68
59 Phenanthrene-d10	744396	372198	1488792	646598	-13.14
69 Chrysene-d12	823005	411503	1646010	601375	-26.93
134 Di-n-octylphthala	1350476	675238	2700952	1063538	-21.25
77 Perylene-d12	894064	447032	1788128	688721	-22.97

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.50	0.03
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	0.00
77 Perylene-d12	26.23	25.73	26.73	26.24	0.06

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

REVIEW SUMMARY FOR FILE - NT1003052334.D

Lab ID: 23A0326-12
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 10:11

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.047	1.053	-0.0059	2,2'-oxybis(1-Chloropropane)
0.919	0.933	-0.0142	Aniline
1.062	1.044	0.0182	2,3,4,6-Tetrachlorophenol

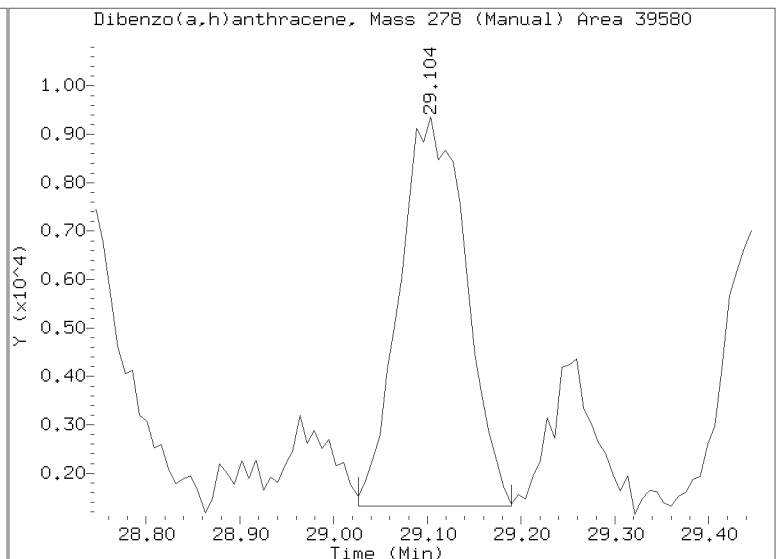
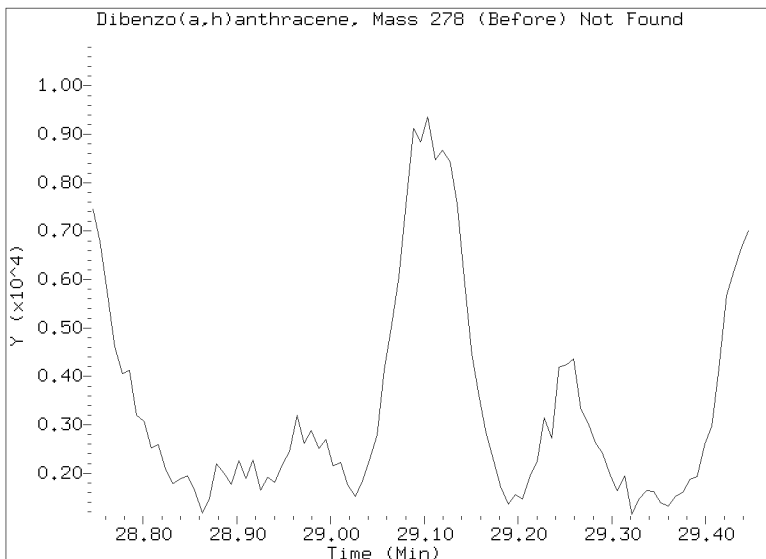
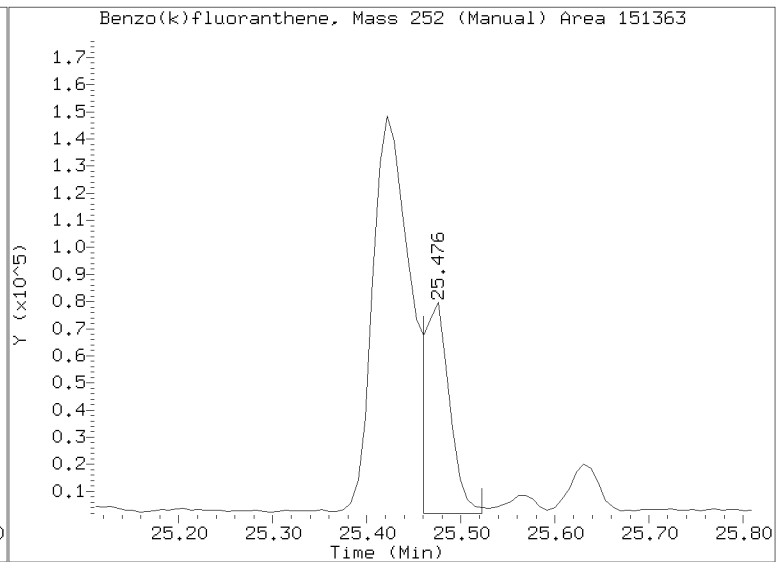
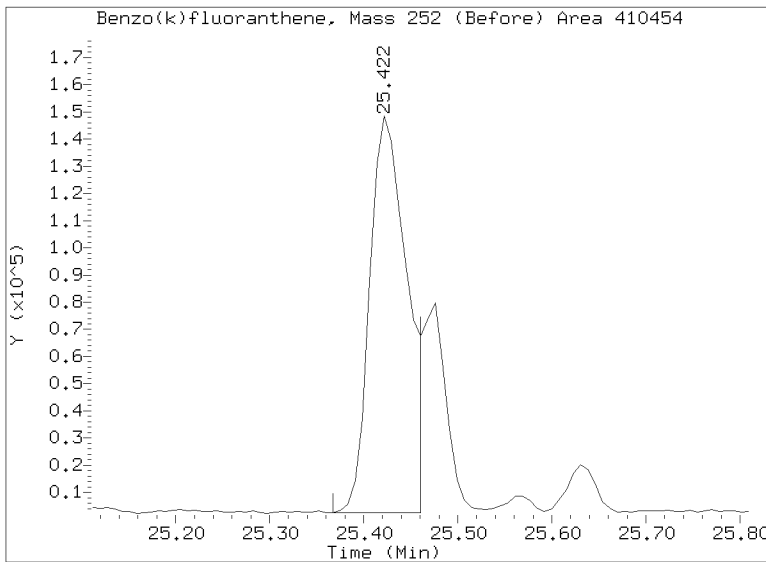
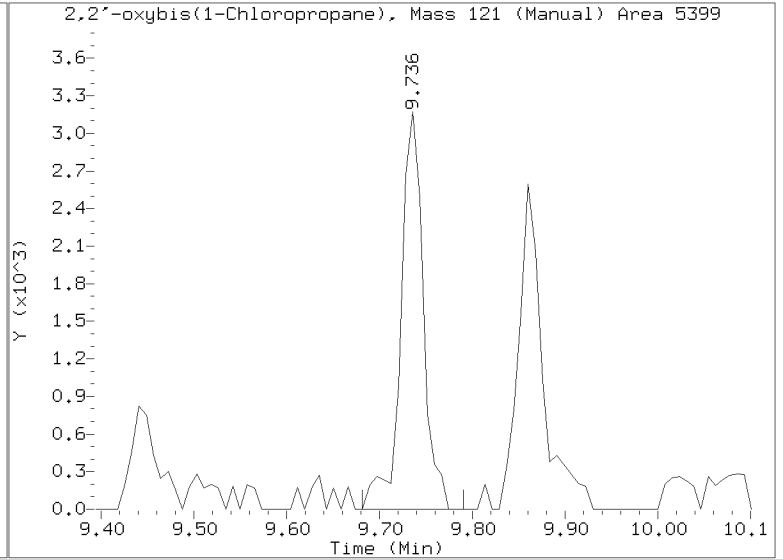
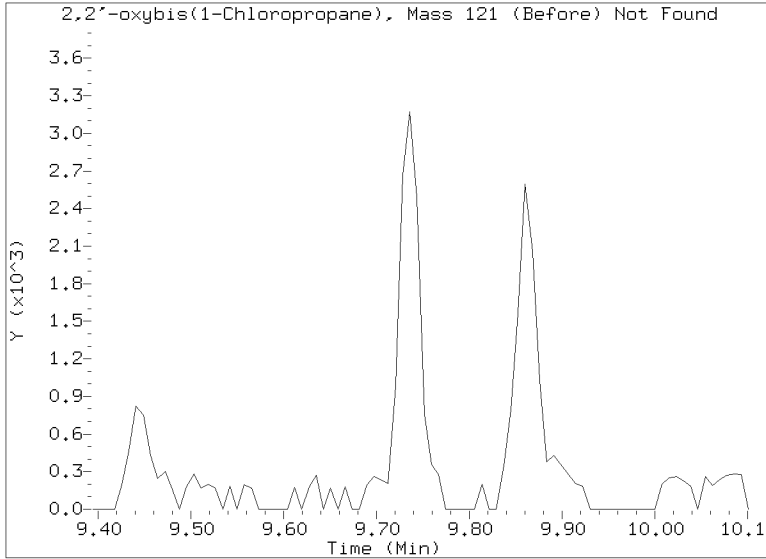
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052334.D
Injection Date: 06-MAR-2023 10:11
Lab ID:23A0326-12 Client ID:
Report Date: 03/27/2023 16:55



APPROVED

By Deenay Dunmore at 5:18 pm, Mar 27, 2023



PREPARATION BATCH SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0685 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	NT1003052323.D	02/02/23 13:06	
LDW23-SC1032	23A0326-02	NT1003052324.D	02/02/23 13:06	
LDW23-SC1170A	23A0326-04	NT1003052330.D	02/02/23 13:06	
LDW23-SC1169C	23A0326-05	NT1003052331.D	02/02/23 13:06	
LDW23-SC1161	23A0326-10	NT1003052332.D	02/02/23 13:06	
LDW23-SC1155	23A0326-11	NT1003052333.D	02/02/23 13:06	
LDW23-SC1162B	23A0326-12	NT1003052334.D	02/02/23 13:06	
Blank	BLA0685-BLK1	NT1003052307.D	02/02/23 13:06	
LCS	BLA0685-BS1	NT1003052308.D	02/02/23 13:06	
LCS Dup	BLA0685-BSD1	NT1003052309.D	02/02/23 13:06	
Reference	BLA0685-SRM1	NT1003052312.D	02/02/23 13:06	



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0685

Prepared using: EPA 3546 (MicroWave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOCC4 List)

Matrix: Solid

Date Prepared: 2/2/23

Balance ID: B13929802

Set Up By: CRO 1/28/23

WO Comments
23A0313: <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0313-08 A	56.1	(17.84) 17.95	(1:1)	1mL	1	0.5	
23A0313-09 A	52.3	(19.11) 19.42	(1:1)	1mL	1	0.5	
23A0313-10 A	54.1	(18.48) 18.53	(1:1)	1mL	1	0.5	
23A0313-11 A	58.7	(17.05) 17.95	(1:1)	1mL	1	0.5	
23A0313-13 A	84.7	(11.80) 11.80	(1:1)	1mL	1	0.5	
23A0326-01 A	59.0	(16.96) 17.67	(1:1)	1mL	1	0.5	
23A0326-02 A	57.3	(17.46) 17.56	(1:1)	1mL	1	0.5	
23A0326-04 A	51.6	(19.37) 19.34	(1:1)	1mL	1	0.5	
23A0326-05 A	54.6	(18.30) 18.67	(1:1)	1mL	1	0.5	
23A0326-10 A	54.6	(18.31) 18.88	(1:1)	1mL	1	0.5	
23A0326-11 A	52.6	(19.02) 19.88	(1:1)	1mL	1	0.5	
23A0326-12 A	51.4	(19.45) 20.14	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0685-BLKI	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0685-BSI	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0685-BSDI	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0685-MSI	84.7	(11.80) 11.80	(1:1)	1mL	1	0.5	Use 23A0313-13
BLA0685-MSDI	84.7	(11.80) 11.80	(1:1)	1mL	1	0.5	Use 23A0313-13
BLA0685-SRMI	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use K003477

+1g DI WATER

Client ID verified By: R

2/2/23

Date

Preparation Reviewed By: LS

2/15/23

Date

Extraction Date and Time

2/10/23

13:46



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0685

Prepared using: EPA 3546 (Microwave)

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

WQ Comments

23A0313: <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

Prep Steps

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: <i>OR</i> Date: <i>2/22/23</i>	
Anhydrous Sodium Sulfate	<i>L0000759</i>
1:1 Methylene Chloride/Acetone	<i>L0000291</i>
Methylene Chloride	<i>L0000908</i>
Pre-Deactivated Glass Wool	<i>L0000257</i>
Pre GPC KD Analyst: <i>WJ</i> Date: <i>2-10-23</i>	
Pre-Deactivated Glass Wool	
Anhydrous Sodium Sulfate	
Methylene Chloride	<i>L0000000</i>
Hexane	<i>W011277</i>
GPC Filter Prep Analyst: <i>WKS</i> Date: <i>2/12/23</i>	
Methylene Chloride	<i>L0000808</i>
Post GPC KD 80-85°C Analyst/Date: <i>W</i> <i>2-15</i>	
Turbo Vap Analyst/Date: <i>W</i> <i>2/15/23</i>	
Water Wash Analyst/Date: <i>W</i> <i>2/15/23</i>	

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150ug/mL Exp Date: <i>5/9/23</i>	A K010466	50µL	<i>OR</i>	<i>W</i>
Full List Spike (Freezer) 100µg/mL Exp Date: <i>8/31/23</i>	7 K011369 (V) K011247	50µL	<i>OR</i>	<i>W</i>
Base Spike 200µg/mL Exp Date: <i>4/19/23</i>	56 K011369 (V) K003759	50µL	<i>OR</i>	<i>W</i>
Acid Spike 100/200µg/mL Exp Date: <i>4/19/23</i>	38 K011369 (V) K003760	50µL	<i>OR</i>	<i>W</i>

MANUALLY ENTER EXPIRATION DATES!

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

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

W
2-15

GPC Calibration File	<i>CLA0166</i>
Post GPC KD Analyst: <i>W</i> Date: <i>2-15-23</i>	
Methylene Chloride	<i>L0000800</i>
Vialing Analyst: <i>W</i> Date: <i>2/15/23</i>	
Methylene Chloride	<i>L0000808</i>



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0685

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0313: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

Prep Instructions

SPECIAL INSTRUCTIONS:

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

- A. Need Total Solids Y N
- B. Archive/Freeze Y N



Extraction Parameter: SWA Extraction Batch BLA0685

Total Solids Batch: BLA0919 Work Order(s): 23A0312

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel) = <u>12.11</u>	<u>NP 4/1/27/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared) = <u>41, 42, 45 = 41, 13</u>	<u>NP 4/1/27/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples) = <u>12/12/23</u>	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize) =	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass) =	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors = <u>sulfur odor = 41, 42, 45 - 11, 13, 43, 44</u>	<u>NP 4/1/27/23</u>
<input type="checkbox"/> Received in 32oz jar(s) = Homogenized in Pyrex dish =	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details) =	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color =	
<input type="checkbox"/> Particulates (%) = (Note: >5% = Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%) =	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors =	
<input type="checkbox"/> Other (Details) =	
<input type="checkbox"/> Received in 1.0L Bottle(s) = No Bottle Rinse =	
<input checked="" type="checkbox"/> Other Notes/Comments = (Note problems, concerns, corrective actions).	
<u>- 313 on stored on GPC over night lost 25 mL of the total</u>	
<u>25 mL (Carbunk)</u>	
<u>NRB 9/11/23</u>	
<input checked="" type="checkbox"/> Share Samples Y/N <u>N</u>	
<input checked="" type="checkbox"/> Multiple Jars Y/N <u>N</u>	
<input type="checkbox"/> Sample Pre-Screens Indicate analyte activity =	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen =	



Extraction Parameter: SWA Extraction Batch BA0685

Total Solids Batch: BA0378 Work Order(s): 23A0521

Screens:	Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)=	<u>φ7, φ8.</u>	<u>M φ1/27/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)=	<u>φ1-12</u>	<u>M φ1/27/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=		
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=		
<input type="checkbox"/> Rocks (%+size)?		
<input type="checkbox"/> Organics (Leaves/sticks/grass)=		
<input checked="" type="checkbox"/> Oily, obvious fuel(<u>sulfur odors</u>)=	<u>φ1-φ6, φ9-12.</u>	<u>M φ1/27/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=		
<input type="checkbox"/> Previously Frozen =		
<input type="checkbox"/> Other (Details)=		
AQUEOUS:		
<input checked="" type="checkbox"/> No Anomalies		
<input type="checkbox"/> Turbid/Color=		
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)		
<input type="checkbox"/> Emulsions (%)=		
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=		
<input type="checkbox"/> Other (Details)=		
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=		
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).		
<input checked="" type="checkbox"/> Share Samples Y/N		<u>M φ1/27/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y/N		<u>M φ1/27/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=		
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=		



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0136

Cleanup Type: GPC

Cleanup Method: EPA 3640A GPC Cleanup 1:1

Analysis: EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1170A	23A0326-04	NT1003052330.D	02/15/2023	
LDW23-SC1028	23A0326-01	NT1003052323.D	02/15/2023	
LDW23-SC1032	23A0326-02	NT1003052324.D	02/15/2023	
LDW23-SC1155	23A0326-11	NT1003052333.D	02/15/2023	
LDW23-SC1161	23A0326-10	NT1003052332.D	02/15/2023	
LDW23-SC1162B	23A0326-12	NT1003052334.D	02/15/2023	
Reference	BLA0685-SRM1	NT1003052312.D	02/15/2023	
LDW23-SC1169C	23A0326-05	NT1003052331.D	02/15/2023	
Blank	BLA0685-BLK1	NT1003052307.D	02/15/2023	
LCS Dup	BLA0685-BSD1	NT1003052309.D	02/15/2023	
LCS	BLA0685-BS1	NT1003052308.D	02/15/2023	



CLEANUP BENCH SHEET

CLB0136

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLA0166-GPC1 Printed: 2/15/2023 2:29:55PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0313-08	A	LDW23-SC1016A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-08	A	LDW23-SC1016A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-09	A	LDW23-SC1011A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-09	A	LDW23-SC1011A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-10	A	LDW23-SC1006A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-10	A	LDW23-SC1006A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-11	A	LDW23-SC1012B	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-11	A	LDW23-SC1012B	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-13	A	LDW23-SC1159	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-13	A	LDW23-SC1159	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-01	A	LDW23-SC1028	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-01	A	LDW23-SC1028	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-02	A	LDW23-SC1032	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-02	A	LDW23-SC1032	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-04	A	LDW23-SC1170A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-04	A	LDW23-SC1170A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-05	A	LDW23-SC1169C	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-05	A	LDW23-SC1169C	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-10	A	LDW23-SC1161	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-10	A	LDW23-SC1161	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-11	A	LDW23-SC1155	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-11	A	LDW23-SC1155	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	



CLEANUP BENCH SHEET

CLB0136

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLA0166-GPC1 Printed: 2/15/2023 2:29:55PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0326-12	A	LDW23-SC1162B	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-12	A	LDW23-SC1162B	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
BLA0685-BLK1	-	Blank	-	1	1	-	2/15/2023	LMJ	
BLA0685-BLK2	-	Blank	-	1	1	-	2/15/2023	LMJ	
BLA0685-BS1	-	LCS	-	1	1	-	2/15/2023	LMJ	
BLA0685-BS2	-	LCS	-	1	1	-	2/15/2023	LMJ	
BLA0685-BSD1	-	LCS Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-BSD2	-	LCS Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-MS1	-	Matrix Spike	-	1	1	-	2/15/2023	LMJ	
BLA0685-MS2	-	Matrix Spike	-	1	1	-	2/15/2023	LMJ	
BLA0685-MSD1	-	Matrix Spike Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-MSD2	-	Matrix Spike Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-SRM1	-	Reference	-	1	1	-	2/15/2023	LMJ	
BLA0685-SRM2	-	Reference	-	1	1	-	2/15/2023	LMJ	



Form I
METHOD BLANK DATA SHEET
EPA 8270E

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLA0685-BLK1</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/02/23 13:06</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLA0685</u>	Sequence:	<u>SLC0401</u>
Instrument:	<u>NT10</u>	Column:	<u>ZB-5MSi</u>
		File ID:	<u>NT1003052307.D</u>
		Analyzed:	<u>03/05/23 17:12</u>
		Initial/Final:	<u>10 g / 1 mL</u>
		Calibration:	<u>GC00019</u>
		Cleanups:	<u>GPC</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
108-95-2	Phenol	1	20.0	U	4.4	20.0
106-44-5	4-Methylphenol	1	20.0	U	7.4	20.0
91-20-3	Naphthalene	1	20.0	U	4.2	20.0
91-57-6	2-Methylnaphthalene	1	20.0	U	4.5	20.0
208-96-8	Acenaphthylene	1	20.0	U	6.2	20.0
131-11-3	Dimethylphthalate	1	20.0	U	4.4	20.0
83-32-9	Acenaphthene	1	20.0	U	5.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
87-86-5	Pentachlorophenol	1	100	U	31.3	100
85-01-8	Phenanthrene	1	20.0	U	8.7	20.0
120-12-7	Anthracene	1	20.0	U	7.2	20.0
206-44-0	Fluoranthene	1	20.0	U	6.1	20.0
129-00-0	Pyrene	1	20.0	U	5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	20.0	U	6.0	20.0
218-01-9	Chrysene	1	20.0	U	6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	50.0	U	5.5	50.0
	Benzo(a)anthracene, Total	1	40.0	U	10.0	40.0
50-32-8	Benzo(a)pyrene	1	20.0	U	4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.0	U	14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	20.0	U	13.6	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	436	58.1	27 - 120	
Phenol-d5	750.00	507	67.6	29 - 120	
2-Chlorophenol-d4	750.00	549	73.2	31 - 120	
1,2-Dichlorobenzene-d4	500.00	363	72.5	32 - 120	
Nitrobenzene-d5	500.00	387	77.4	30 - 120	
2-Fluorobiphenyl	500.00	404	80.7	35 - 120	
2,4,6-Tribromophenol	750.00	356	47.4	24 - 134	
p-Terphenyl-d14	500.00	485	96.9	37 - 120	

Data File: \\target\share\chem3\nt10.1\20230305.6\NT1003052307.D

Date: 05-HR-2023 17:12

Client ID:

Sample Info: BLR0685-BLK1

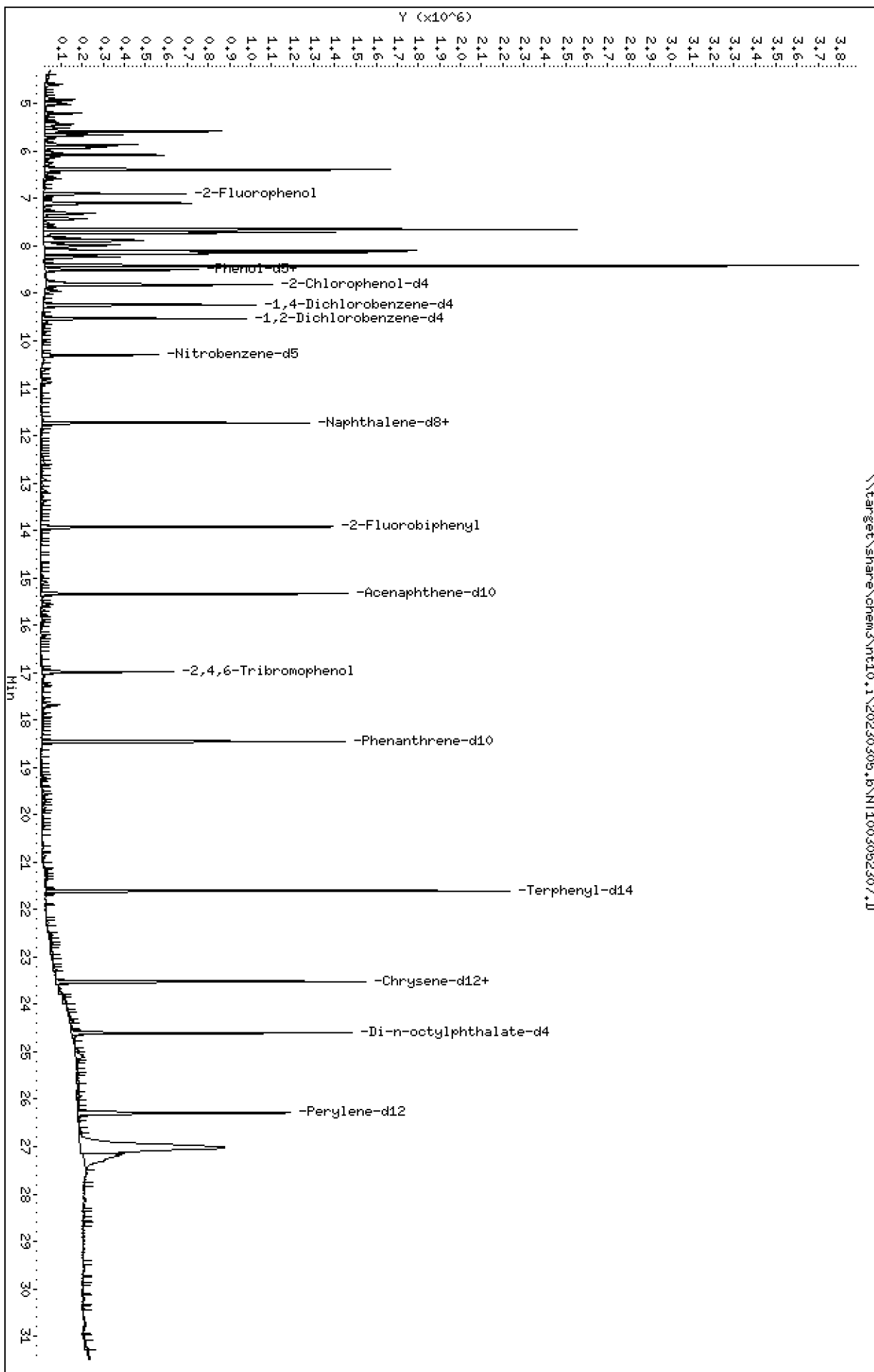
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.6\NT1003052307.D



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK1

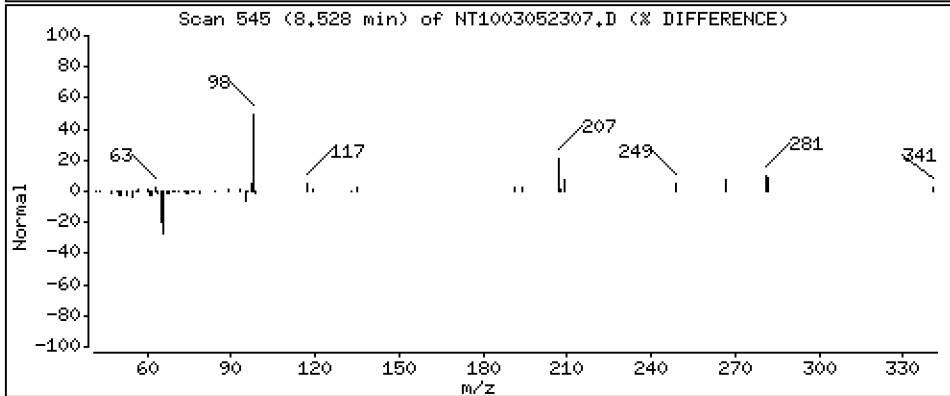
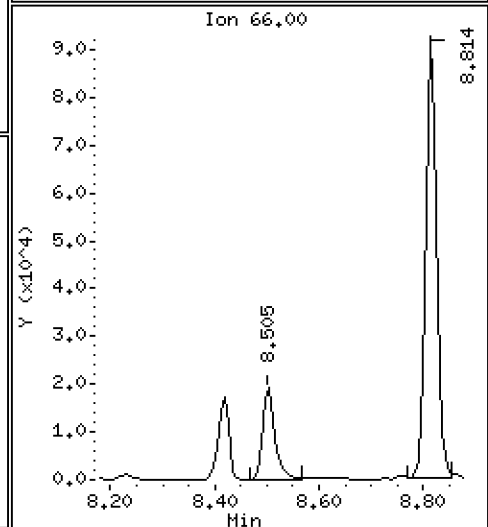
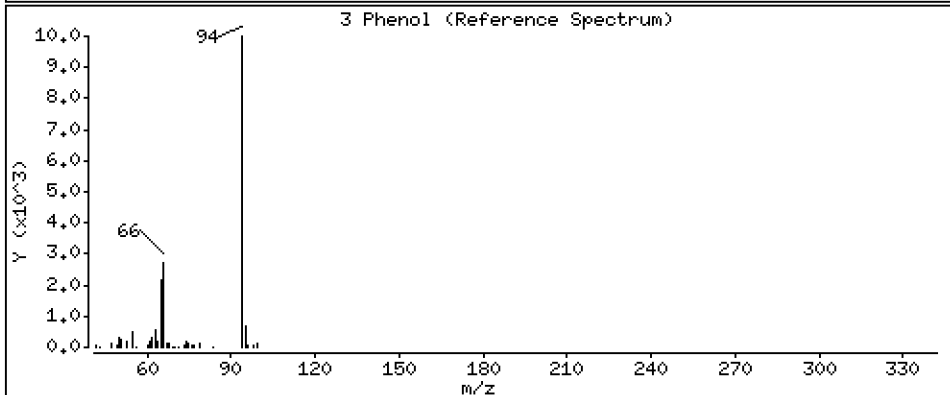
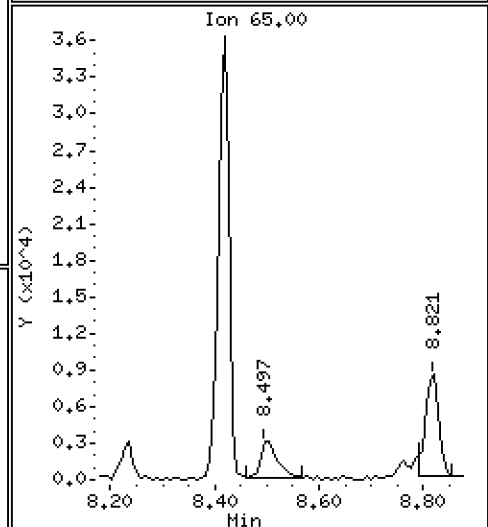
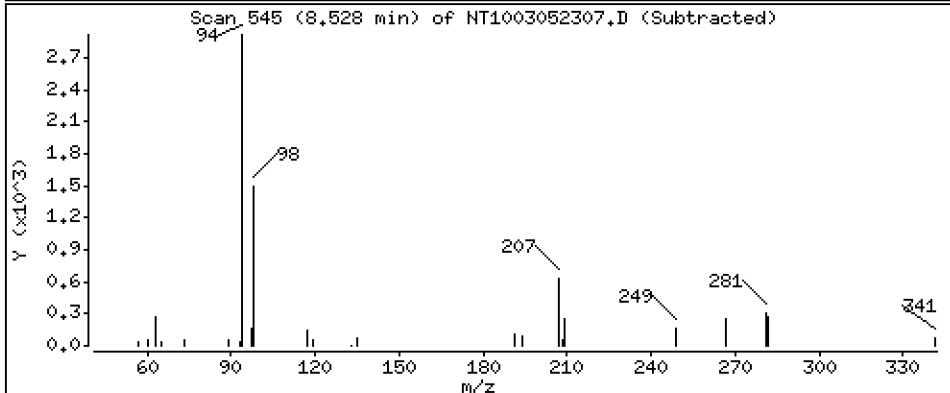
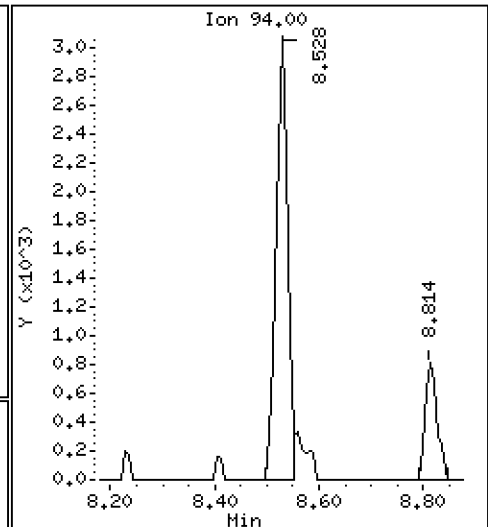
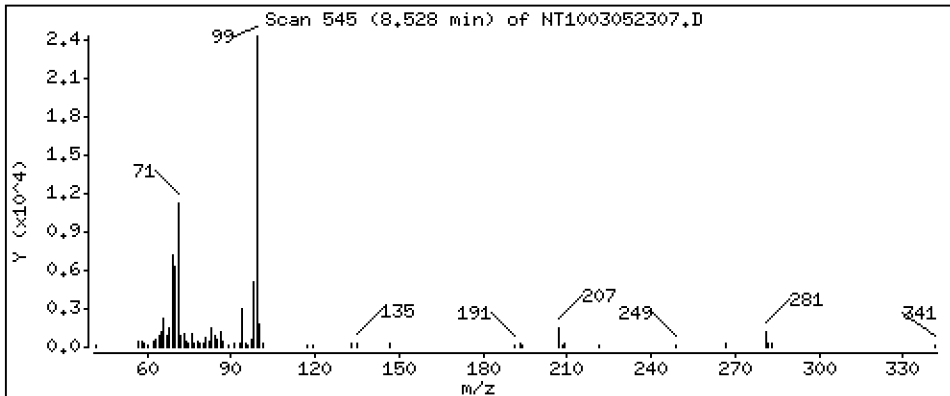
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,04247 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK1

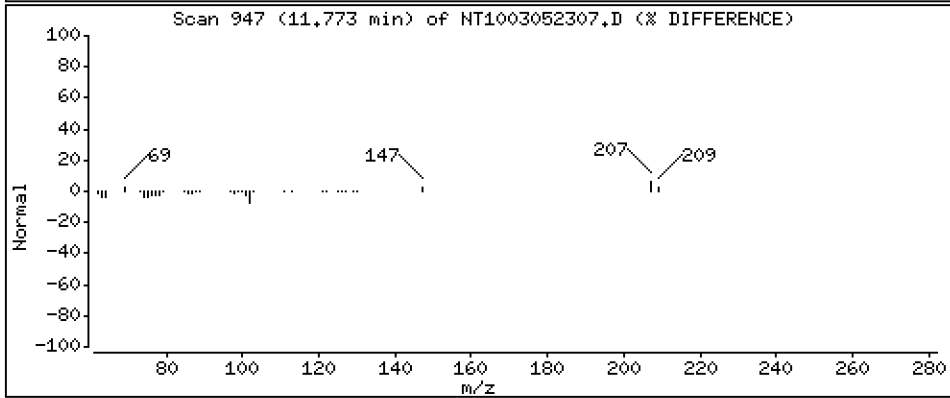
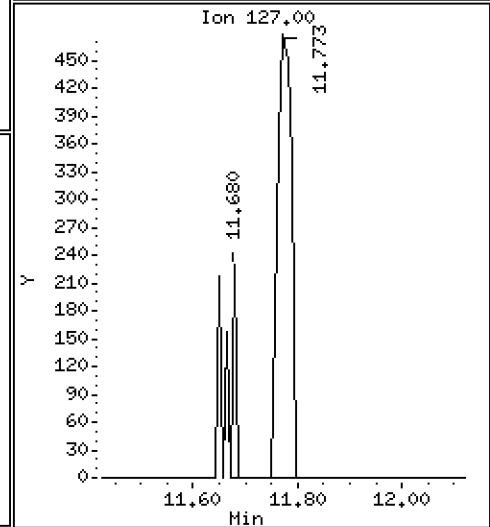
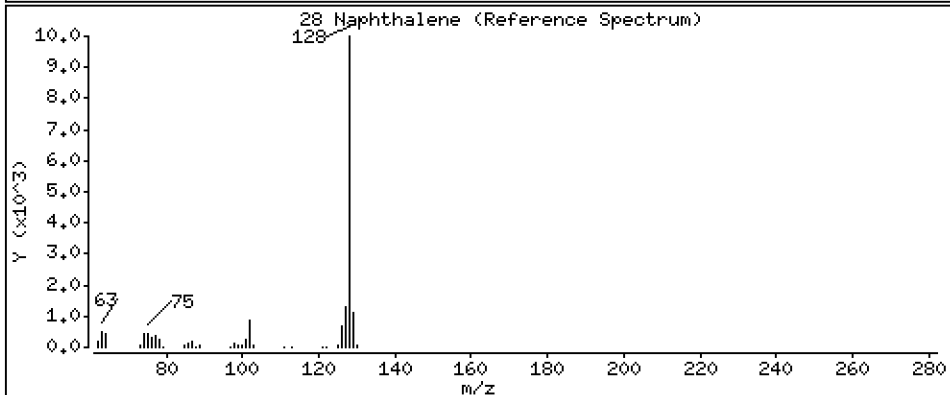
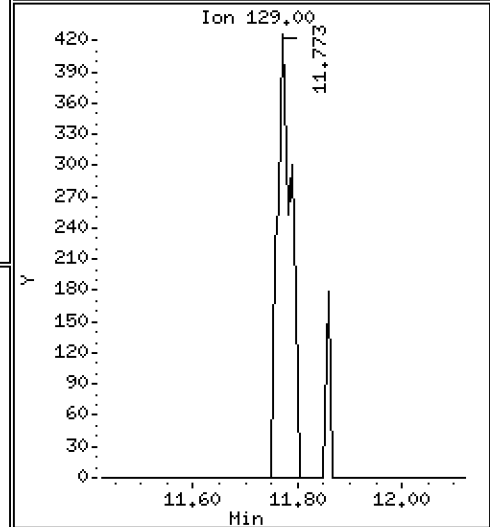
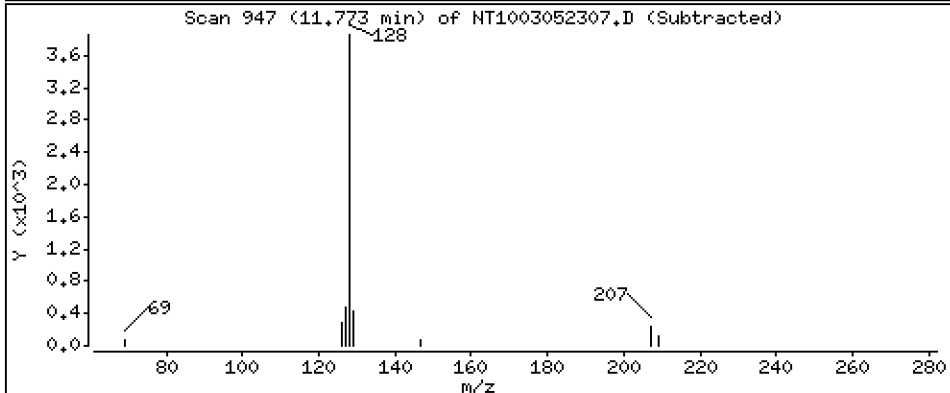
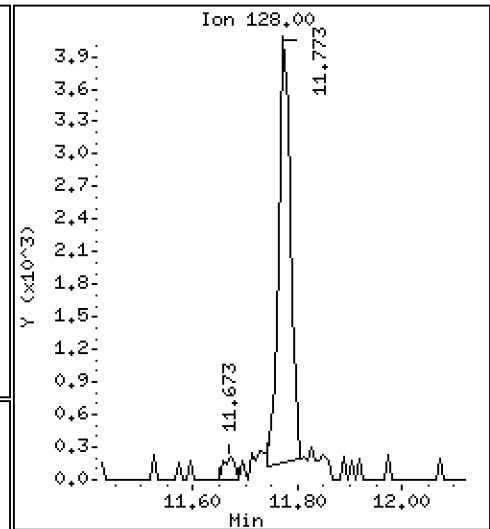
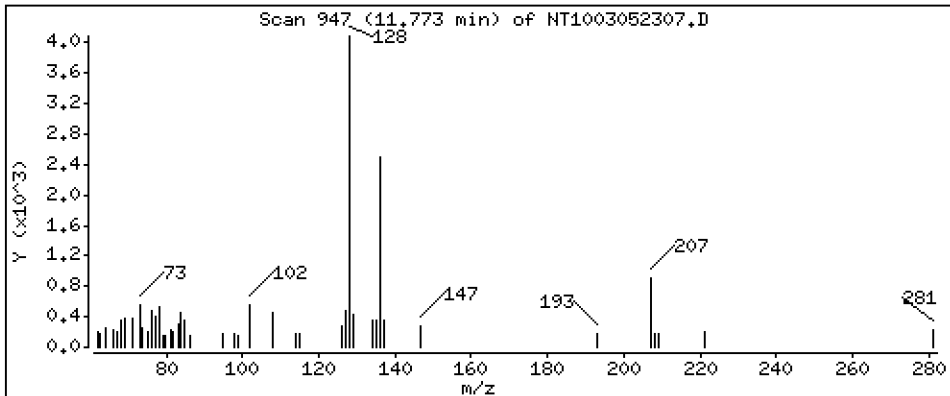
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,02300 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK1

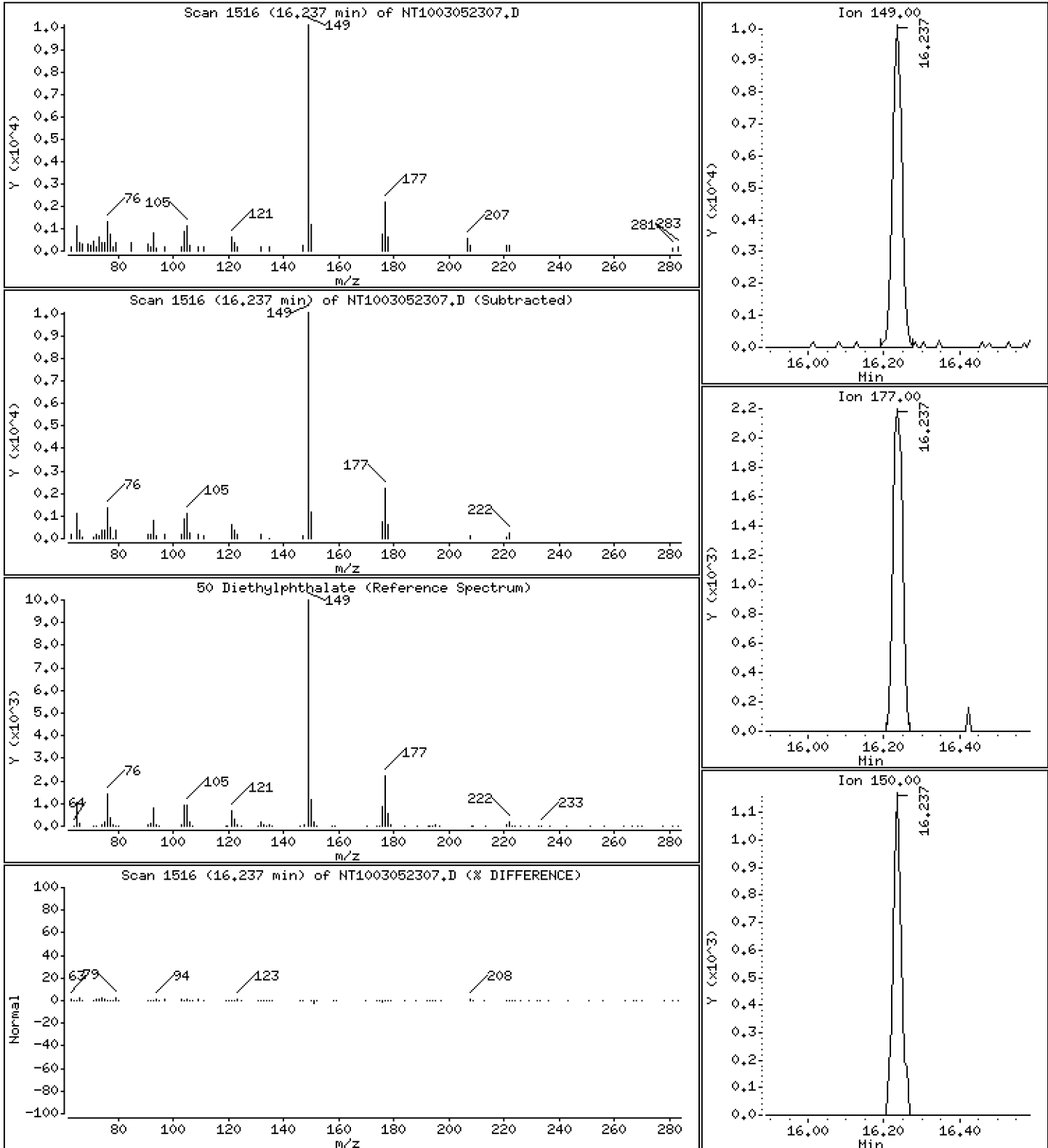
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.09163 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK1

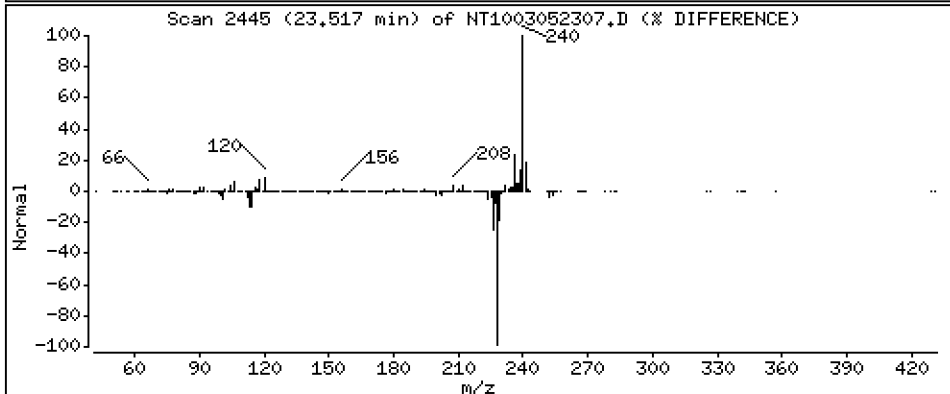
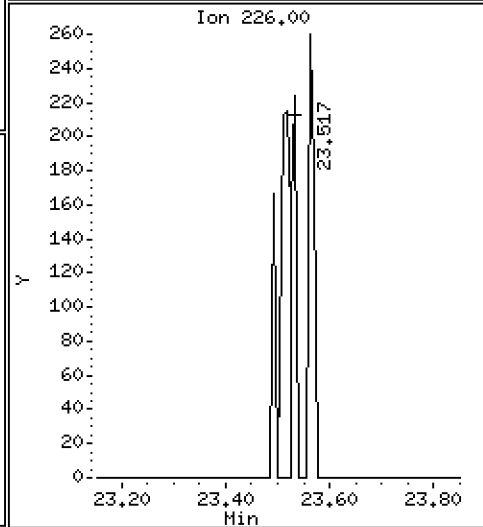
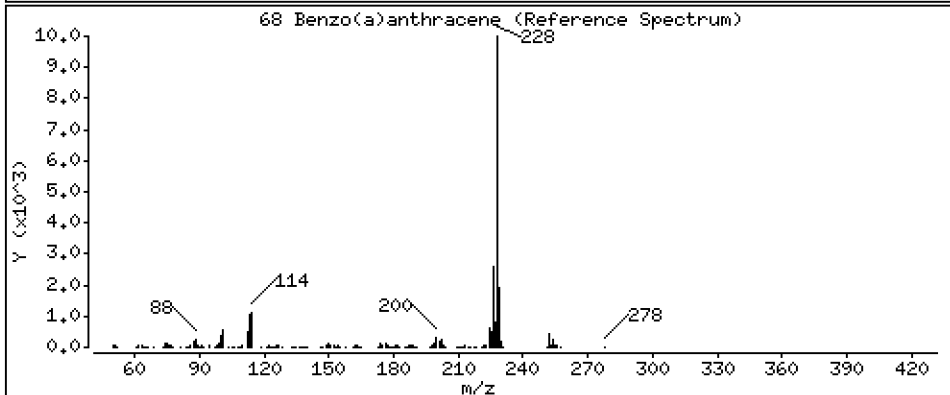
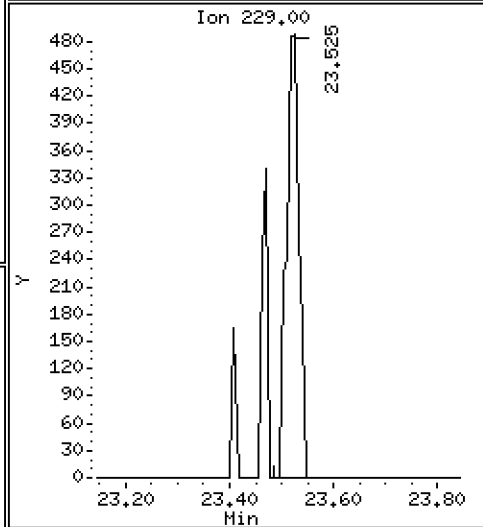
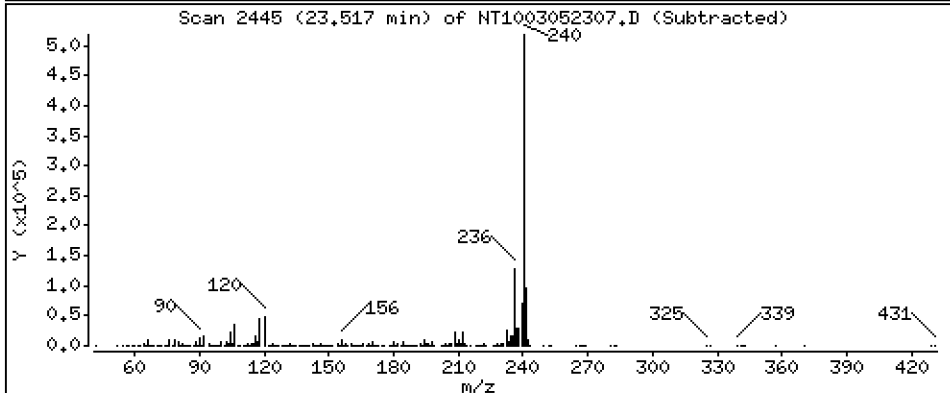
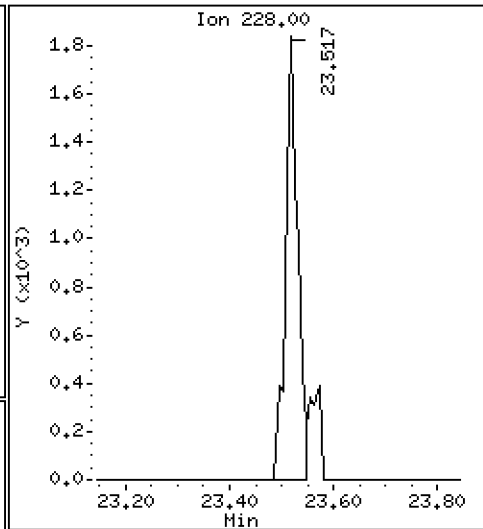
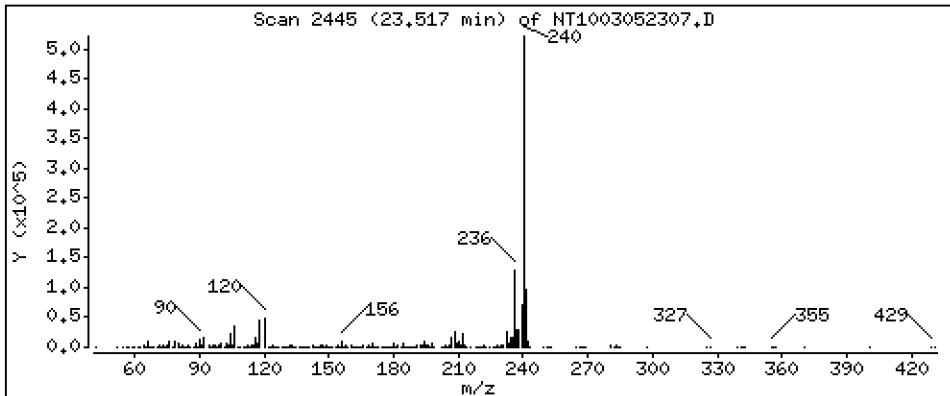
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,01071 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK1

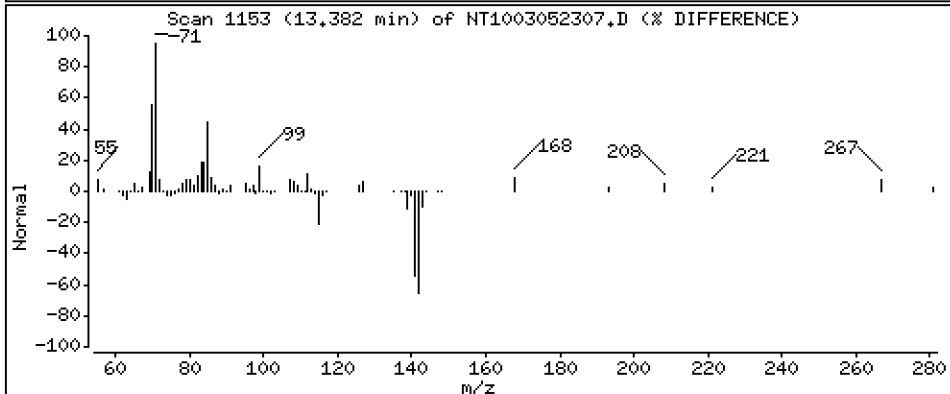
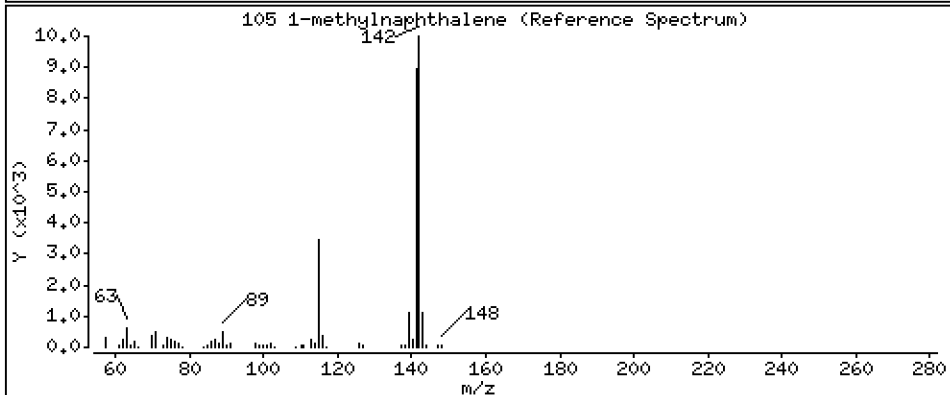
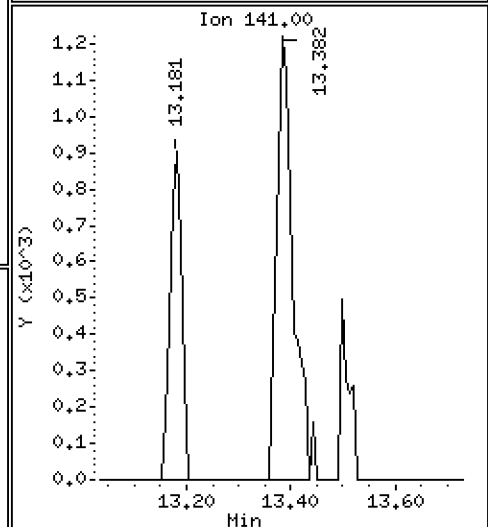
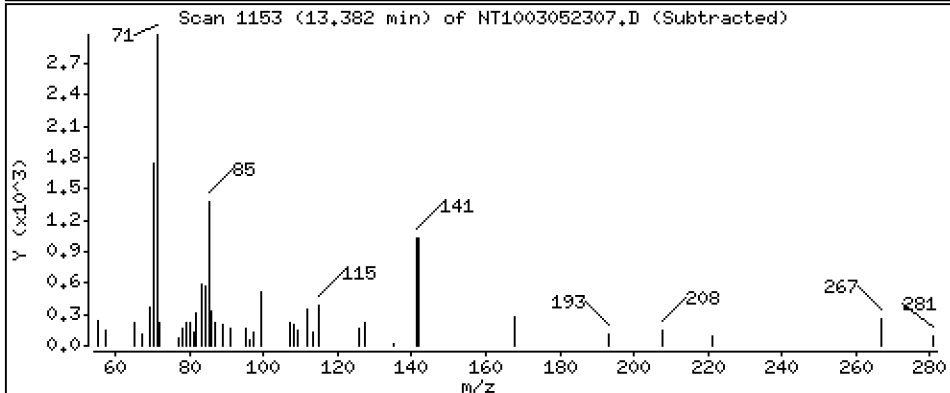
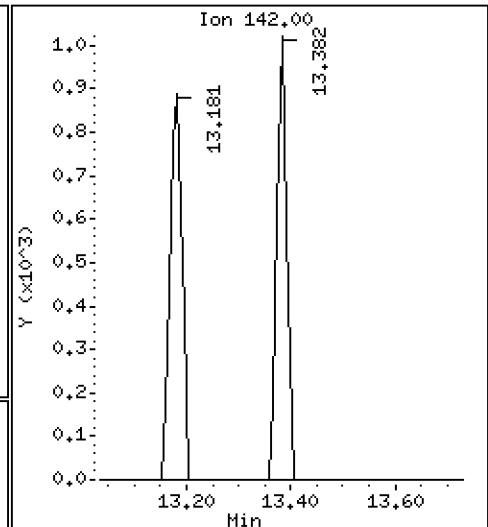
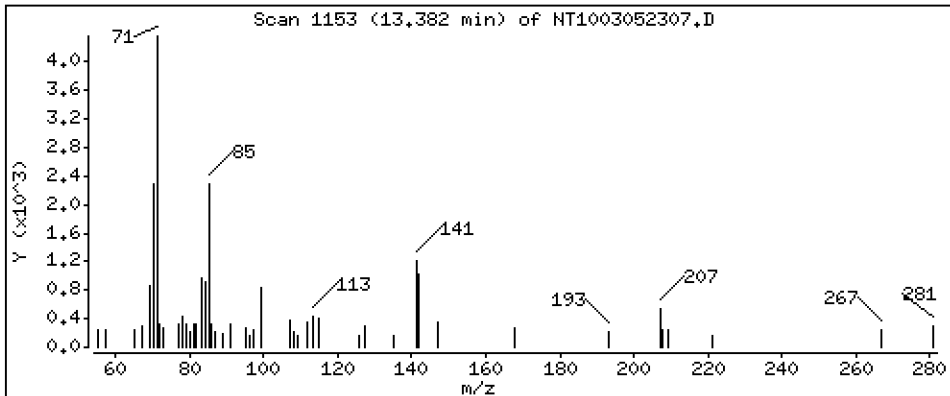
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,007726 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052307.D
 Lab Smp Id: BLA0685-BLK1
 Inj Date : 05-MAR-2023 17:12
 Operator : VTS
 Smp Info : BLA0685-BLK1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.897	(0.746)	370282	4.35864	4.359
\$ 2 Phenol-d5	99		8.504	8.504	(0.920)	500322	5.07270	5.073
3 Phenol	94		8.527	8.528	(0.922)	4454	0.04247	0.04247
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	462048	5.49085	5.491
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.239	(1.000)	270013	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.031)	228058	3.62749	3.627
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.878)	414266	3.86841	3.868
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.734	11.726	(1.000)	975565	4.00000	
28 Naphthalene	128		11.773	11.773	(1.003)	5758	0.02300	0.02300
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.931	13.924	(0.908)	744632	4.03608	4.036
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163							
40 Acenaphthylene	152							
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.340	15.340	(1.000)	517251	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153							
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168							
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149		16.237	16.237	(1.058)	16215	0.09163	0.09163
49 Fluorene	166							
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.986	16.986	(1.107)	115629	3.55524	3.555
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.455	18.448	(1.000)	919568	4.00000	
60 Phenanthrene	178							
61 Anthracene	178							
62 Carbazole	167							
63 Di-n-butylphthalate	149							
64 Fluoranthene	202							
65 Pyrene	202							
\$ 66 Terphenyl-d14	244		21.604	21.597	(0.919)	1132297	4.84730	4.847
67 Butylbenzylphthalate	149							
68 Benzo(a)anthracene	228		23.517	23.494	(1.000)	3111	0.01071	0.01071
* 69 Chrysene-d12	240		23.517	23.517	(1.000)	824155	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228							
72 bis(2-Ethylhexyl)phthalate	149							
* 134 Di-n-octylphthalate-d4	153		24.601	24.593	(1.000)	1193964	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252							
75 Benzo(k)fluoranthene	252							
76 Benzo(a)pyrene	252							
* 77 Perylene-d12	264		26.289	26.281	(1.000)	859021	4.00000	
78 Indeno(1,2,3-cd)pyrene	276							
79 Dibenzo(a,h)anthracene	278							
80 Benzo(g,h,i)perylene	276							
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142		13.382	13.382	(1.140)	1237	0.00773	0.007726
111 Azobenzene (1,2-DP-Hydrazine)	77							

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052307.D Calibration Time: 14:03
 Lab Smp Id: BLA0685-BLK1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	270013	-9.17
27 Naphthalene-d8	1085336	542668	2170672	975565	-10.11
42 Acenaphthene-d10	563464	281732	1126928	517251	-8.20
59 Phenanthrene-d10	1038318	519159	2076636	919568	-11.44
69 Chrysene-d12	1012751	506376	2025502	824155	-18.62
134 Di-n-octylphthala	1628890	814445	3257780	1193964	-26.70
77 Perylene-d12	1152264	576132	2304528	859021	-25.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.06
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.52	23.02	24.02	23.52	-0.00
134 Di-n-octylphthala	24.59	24.09	25.09	24.60	0.03
77 Perylene-d12	26.28	25.78	26.78	26.29	0.03

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

REVIEW SUMMARY FOR FILE - NT1003052307.D

Lab ID: BLA0685-BLK1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 17:12

RT CO-ELUTION COMPOUNDS

23.517 Chrysene-d12 and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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



LCS / LCS DUPLICATE RECOVERY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/05/23 17:50

Batch: BLA0685

Laboratory ID: BLA0685-BS1

Preparation: EPA 3546 (Microwave)

Sequence Name: LCS

Initial/Final: 10 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	480		96.0	34 - 120
4-Methylphenol	500	297		59.4	29 - 120
Naphthalene	500	403		80.5	43 - 120
2-Methylnaphthalene	500	395		78.9	43 - 120
Acenaphthylene	500	443		88.6	42 - 120
Dimethylphthalate	500	493		98.6	43 - 120
Acenaphthene	500	437		87.5	45 - 120
Dibenzofuran	500	447		89.3	43 - 120
Fluorene	500	451		90.2	45 - 120
Pentachlorophenol	1300	1090	Q	83.9	16 - 120
Phenanthrene	500	469		93.8	49 - 120
Anthracene	500	388		77.6	45 - 120
Fluoranthene	500	481		96.1	53 - 145
Pyrene	500	518		104	52 - 134
Butylbenzylphthalate	500	401	Q	80.3	45 - 132
Benzo(a)anthracene	500	467		93.4	49 - 120
Chrysene	500	511		102	47 - 120
bis(2-Ethylhexyl)phthalate	500	480		95.9	34 - 130
Benzofluoranthenes, Total	1000	952		95.2	30 - 160
Benzo(a)pyrene	500	405		81.1	42 - 120
Indeno(1,2,3-cd)pyrene	500	495		99.0	42 - 163
Dibenzo(a,h)anthracene	500	549		110	30 - 133
Benzo(g,h,i)perylene	500	518		104	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Phenol	500	461		92.2	3.97	30	34 - 120
4-Methylphenol	500	331		66.2	10.9	30	29 - 120
Naphthalene	500	444		88.7	9.69	30	43 - 120
2-Methylnaphthalene	500	433		86.7	9.42	30	43 - 120
Acenaphthylene	500	488		97.7	9.73	30	42 - 120
Dimethylphthalate	500	513		103	4.01	30	43 - 120

* Indicates values outside of QC limits



LCS / LCS DUPLICATE RECOVERY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/05/23 18:28

Batch: BLA0685

Laboratory ID: BLA0685-BSD1

Preparation: EPA 3546 (Microwave)

Sequence Name: LCS Dup

Initial/Final: 10 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Acenaphthene	500	465		93.1	6.16	30	45 - 120
Dibenzofuran	500	472		94.5	5.58	30	43 - 120
Fluorene	500	475		95.0	5.16	30	45 - 120
Pentachlorophenol	1300	1130	Q	87.1	3.78	30	16 - 120
Phenanthrene	500	485		96.9	3.23	30	49 - 120
Anthracene	500	414		82.7	6.38	30	45 - 120
Fluoranthene	500	484		96.9	0.784	30	53 - 145
Pyrene	500	465		92.9	10.9	30	52 - 134
Butylbenzylphthalate	500	385	Q	77.0	4.14	30	45 - 132
Benzo(a)anthracene	500	460		92.0	1.48	30	49 - 120
Chrysene	500	489		97.8	4.49	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	512		102	6.45	30	34 - 130
Benzo(a)fluoranthene, Total	1000	921		92.1	3.28	30	30 - 160
Benzo(a)pyrene	500	414		82.8	2.08	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	488		97.6	1.47	30	42 - 163
Dibenzo(a,h)anthracene	500	540		108	1.53	30	30 - 133
Benzo(g,h,i)perylene	500	515		103	0.542	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.1\NT1003052308.D

Date: 05-HR-2023 17:50

Client ID:

Sample Info: BLR0685-BS1

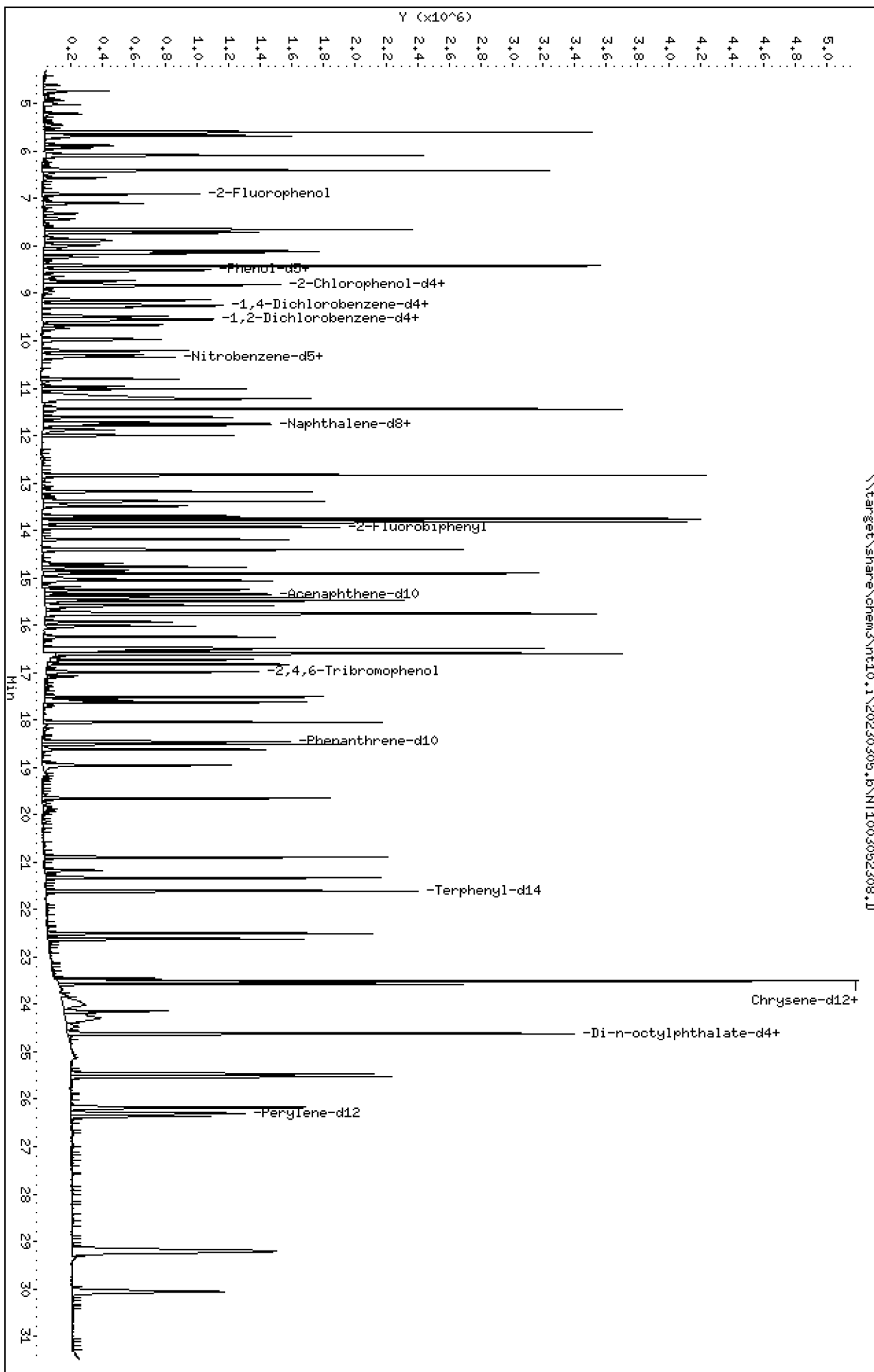
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.1\NT1003052308.D



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

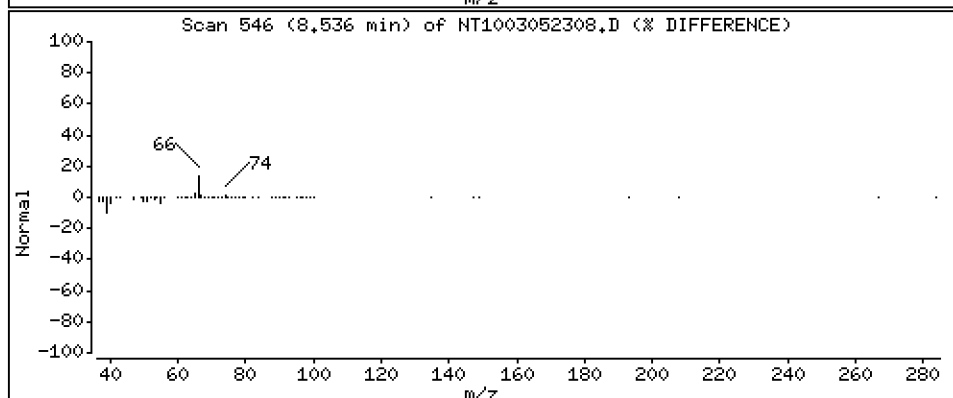
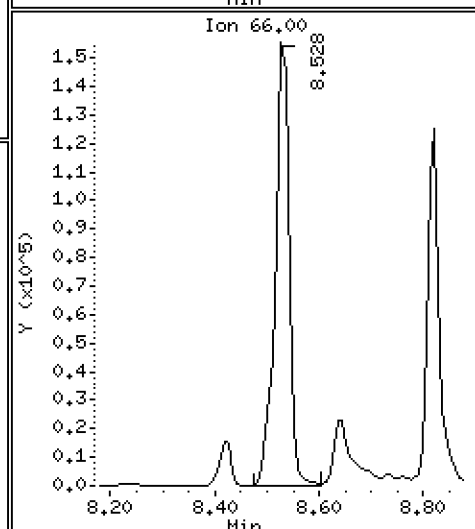
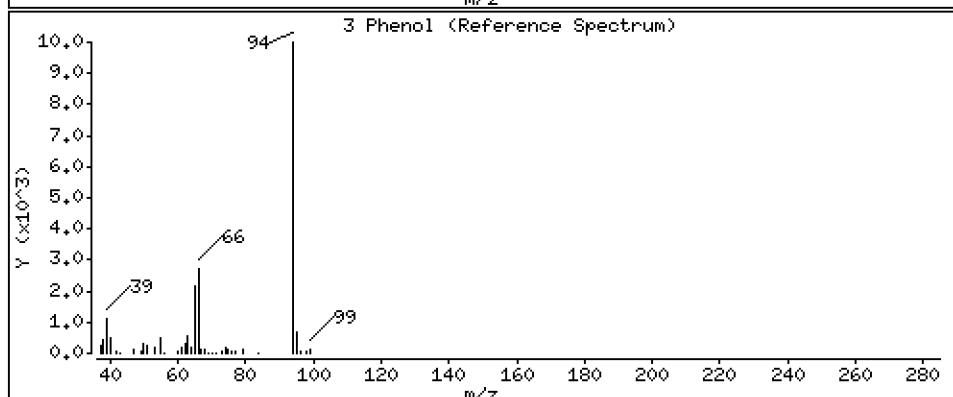
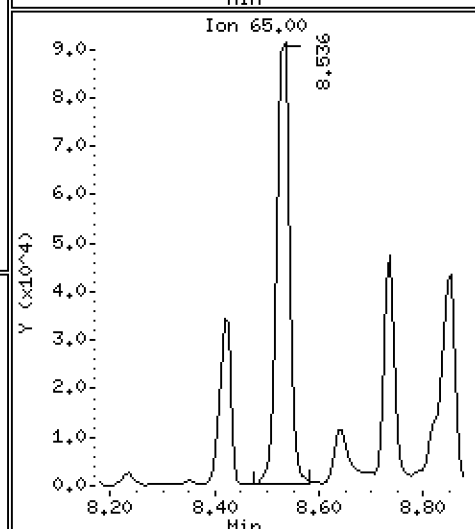
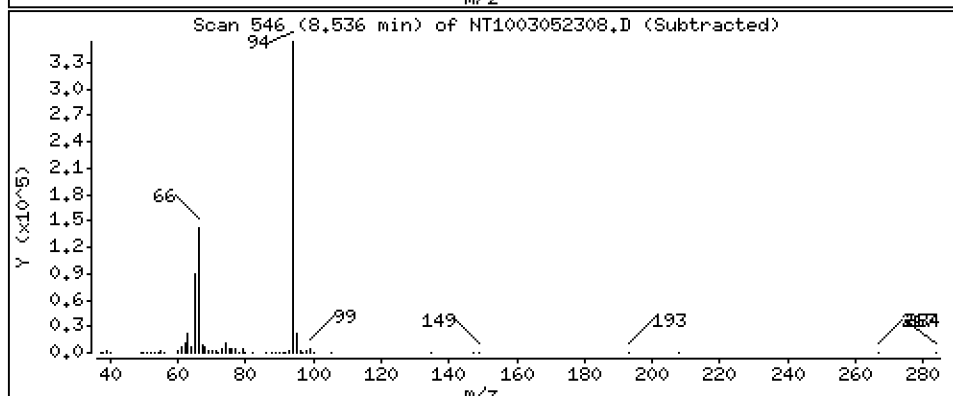
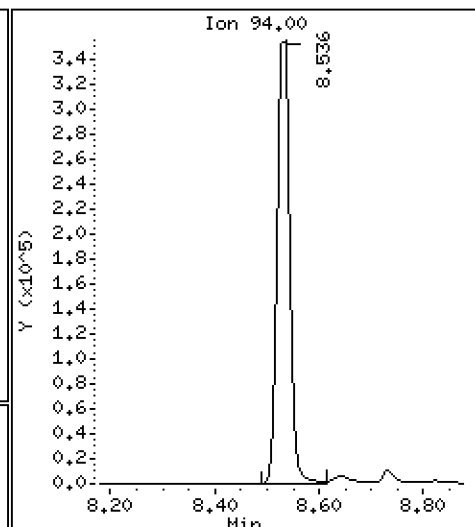
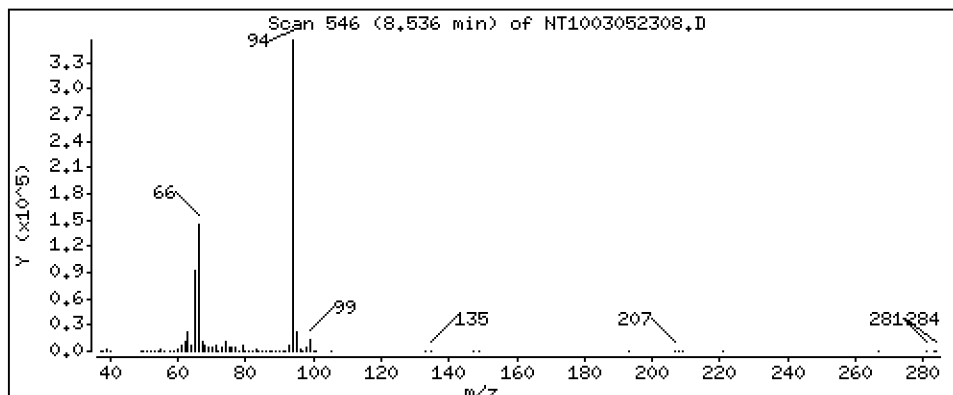
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,798 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

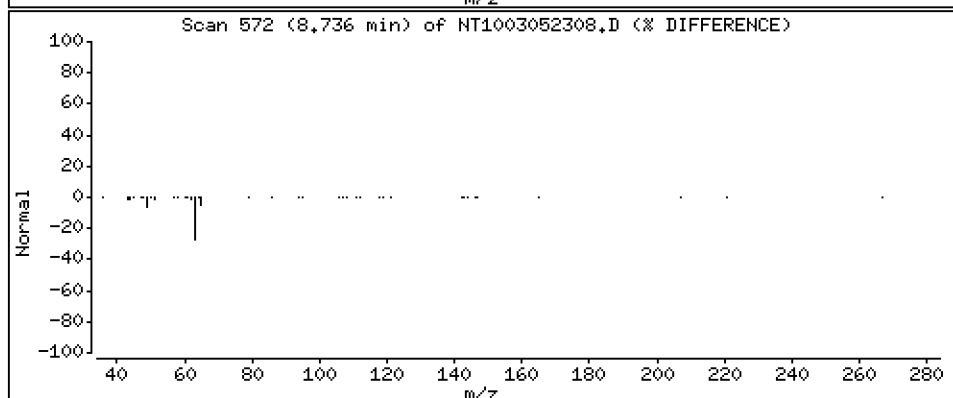
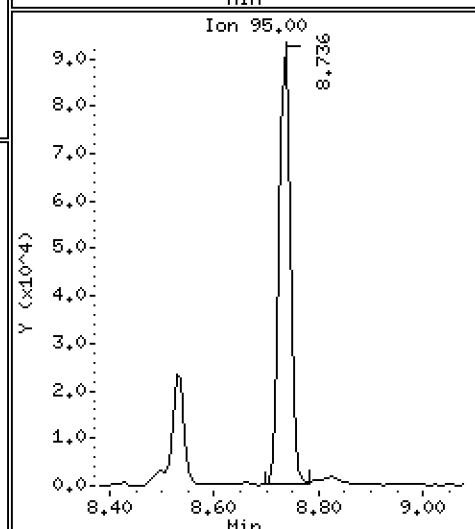
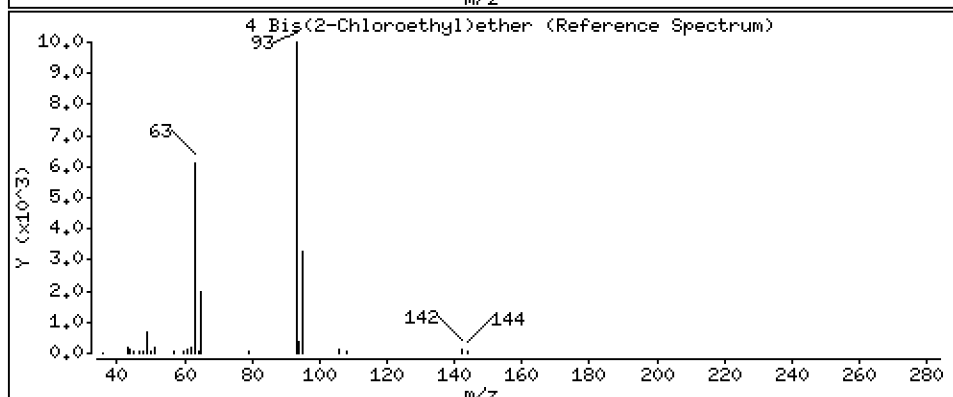
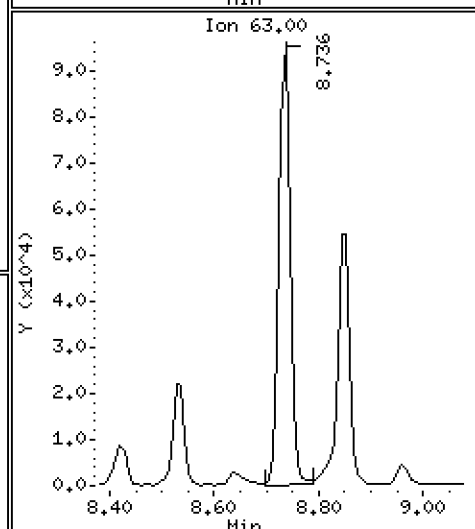
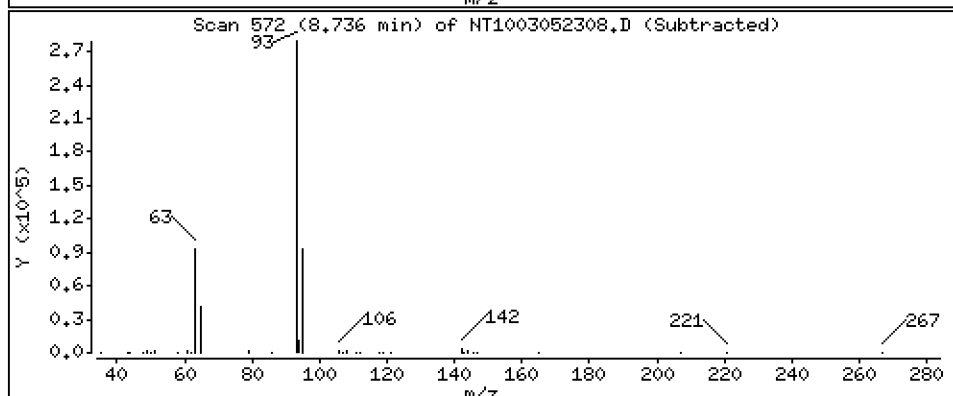
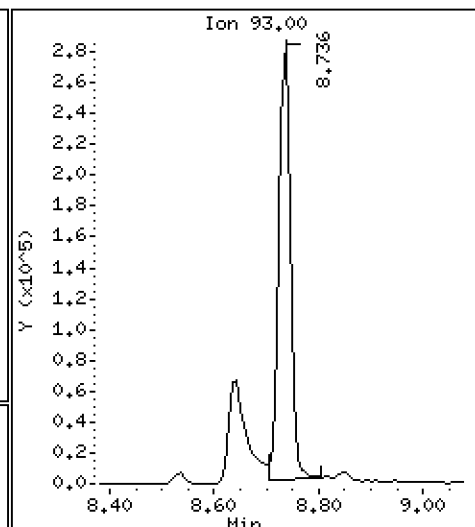
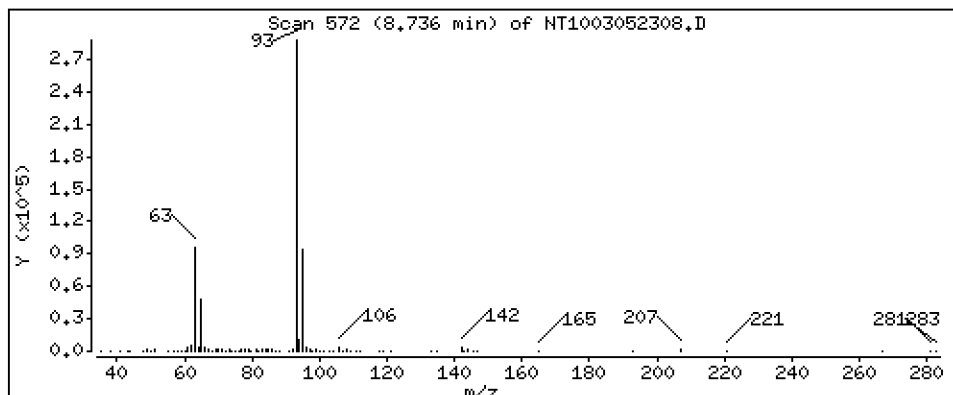
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 4,656 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

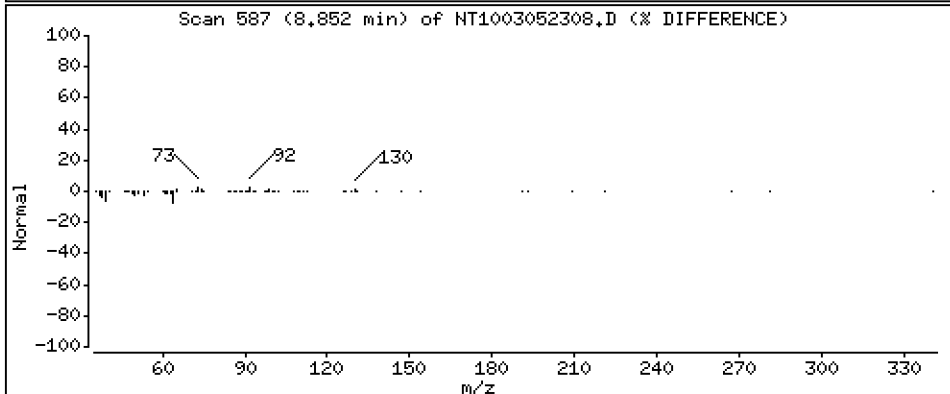
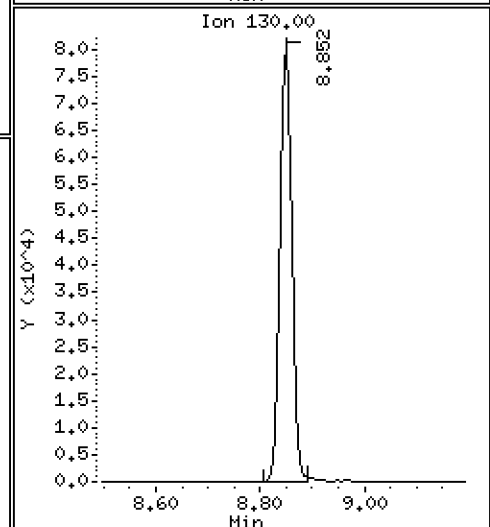
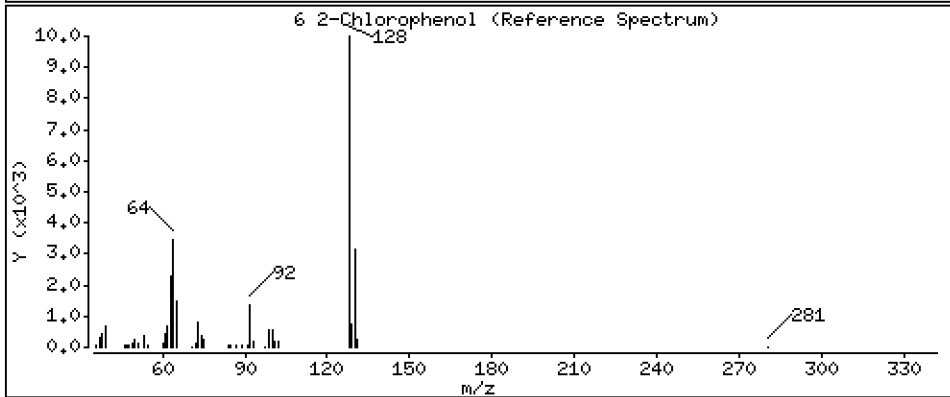
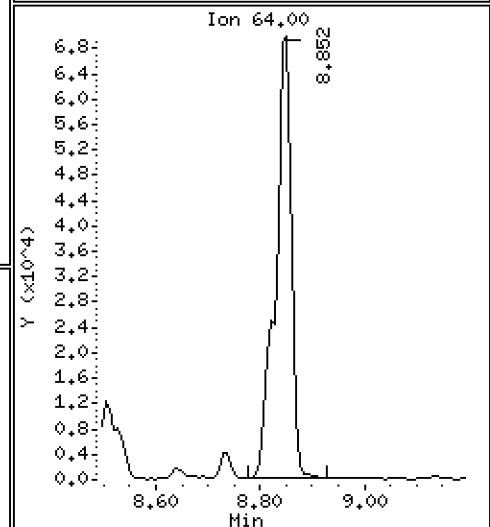
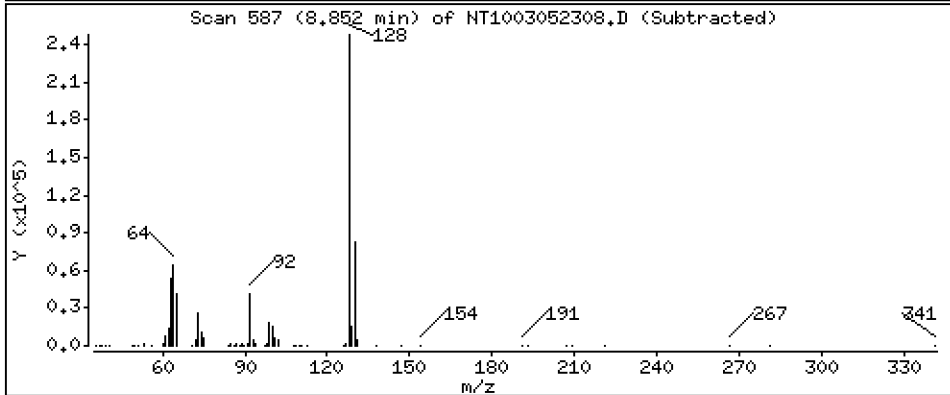
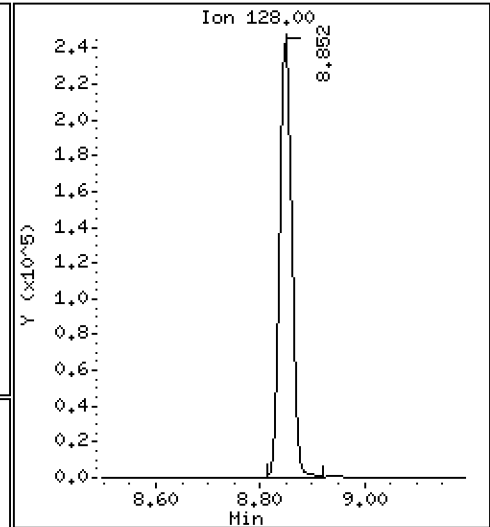
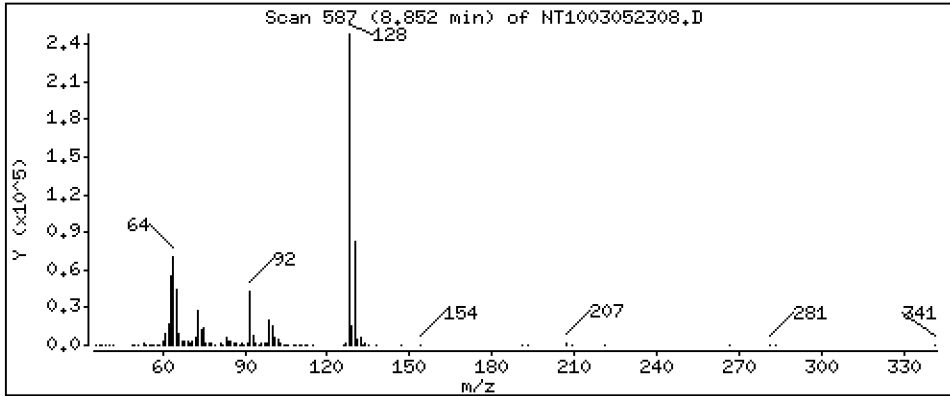
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 3,866 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

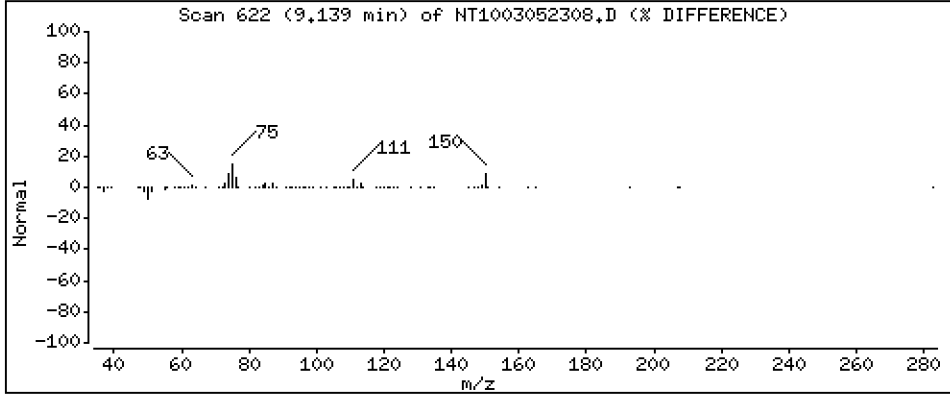
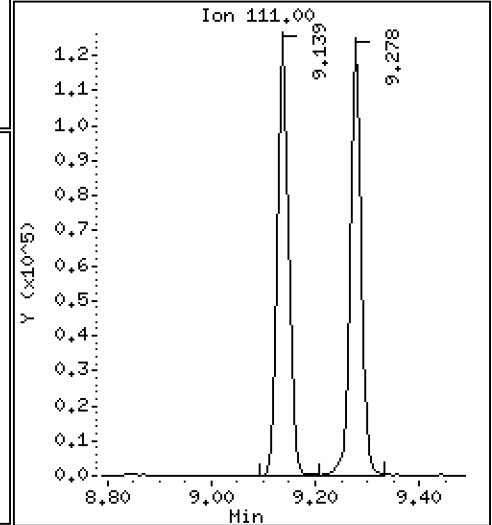
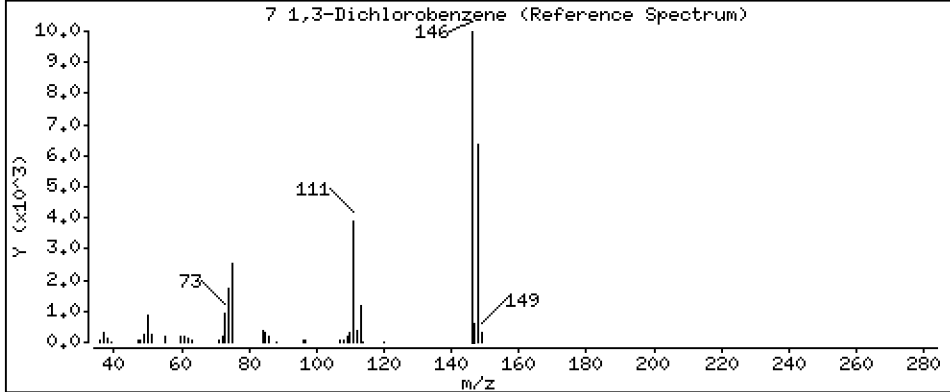
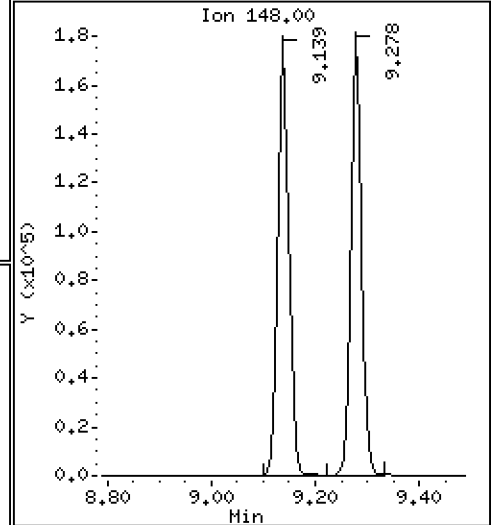
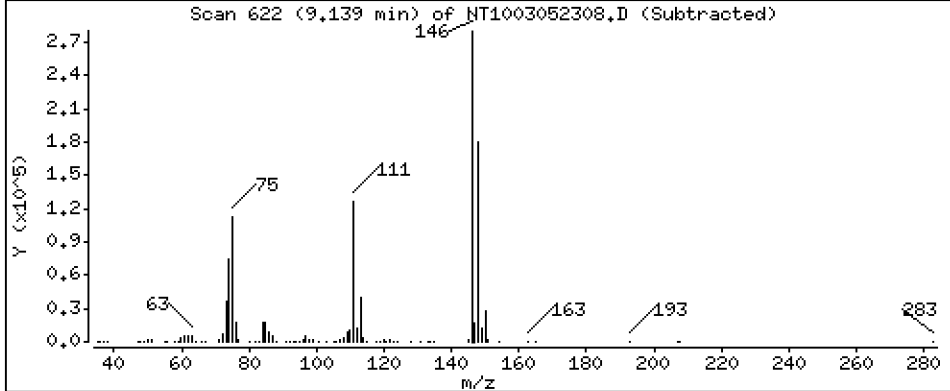
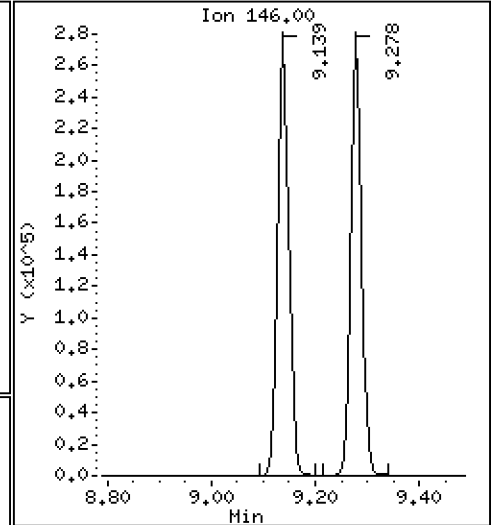
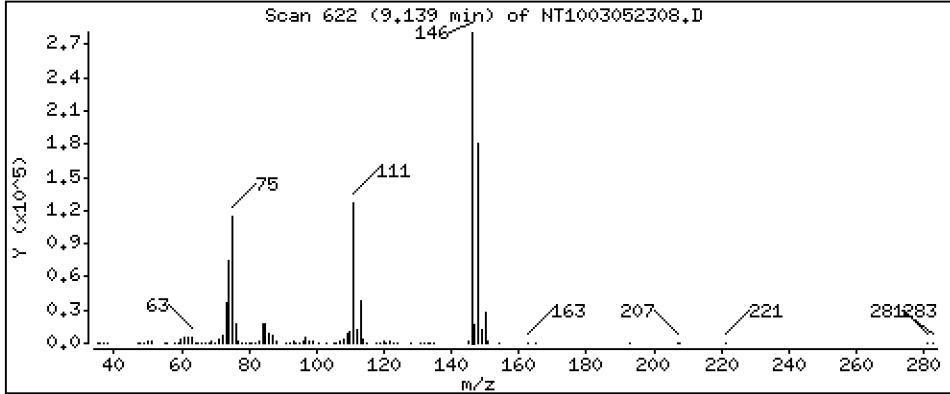
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 3,812 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

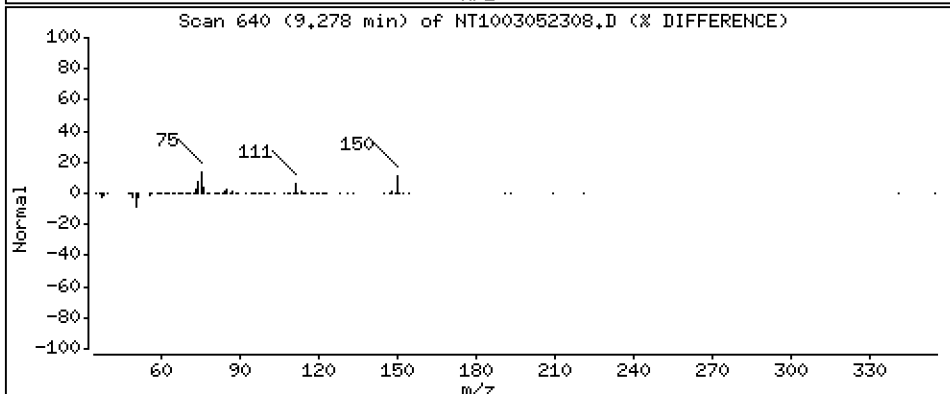
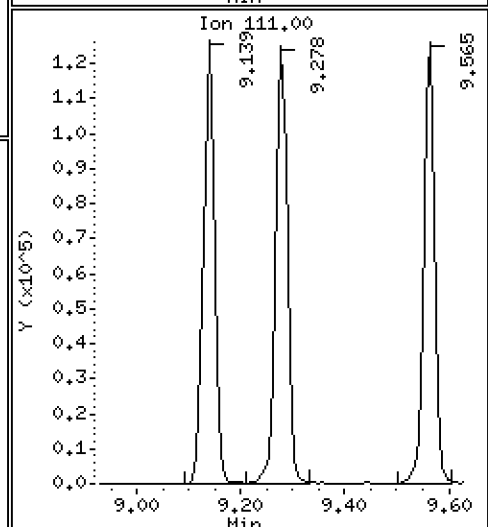
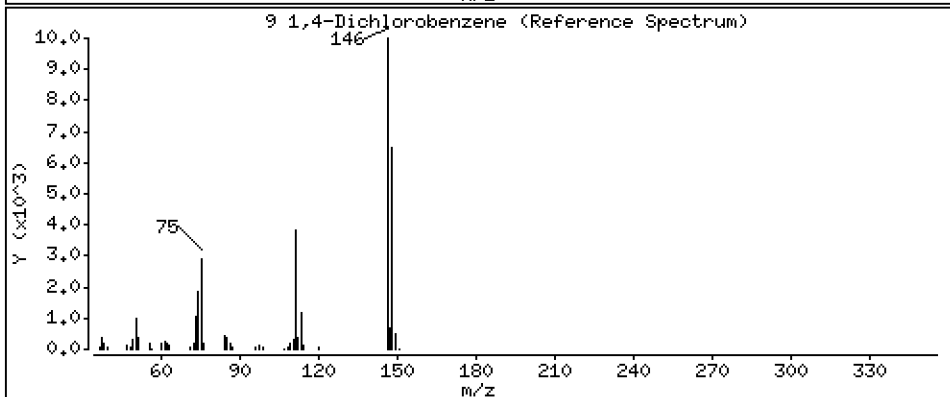
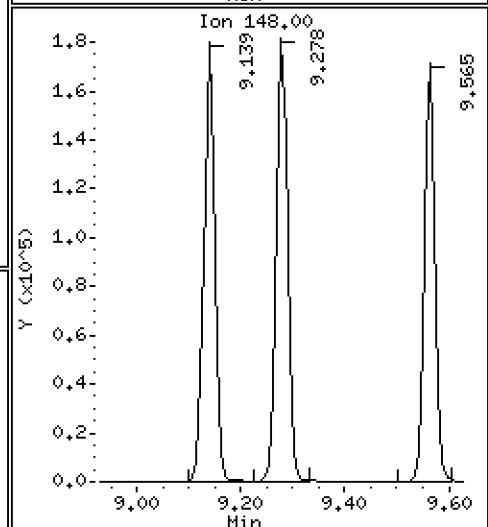
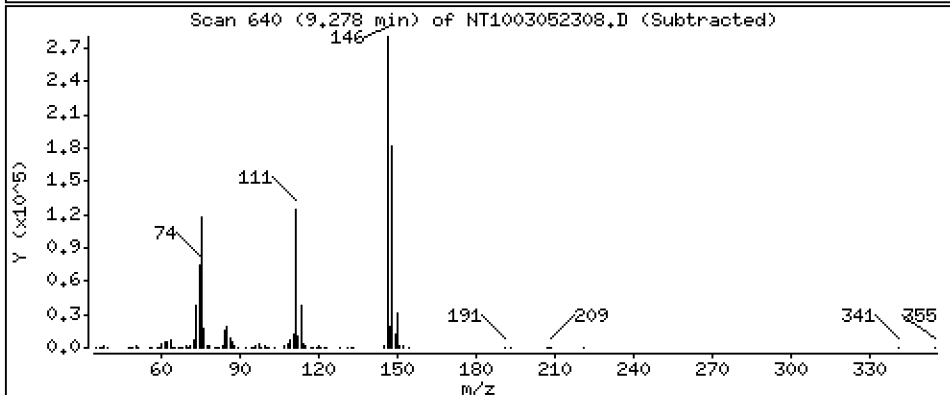
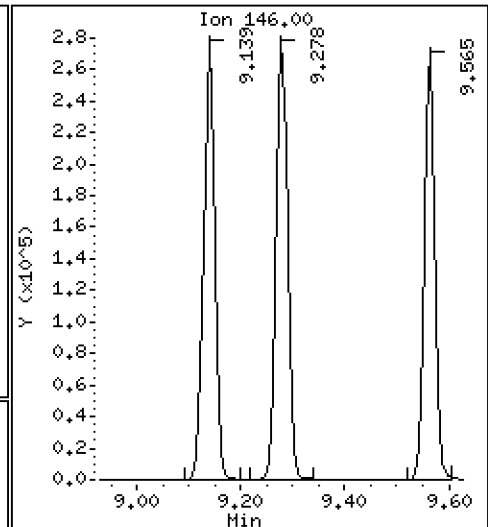
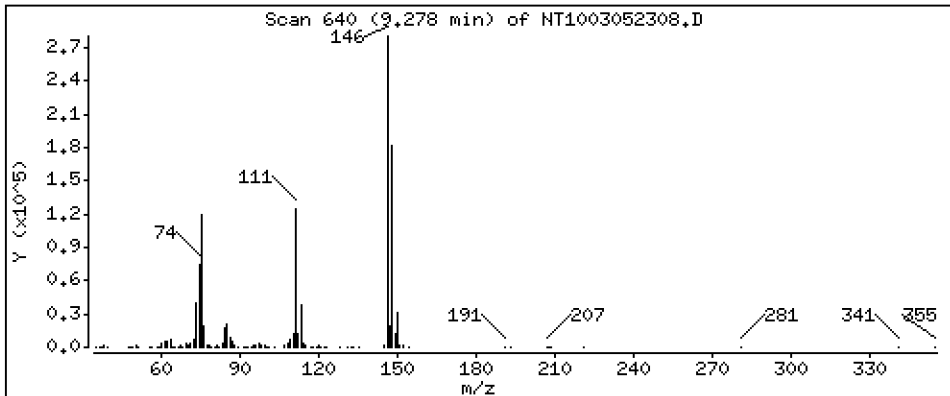
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 3,814 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

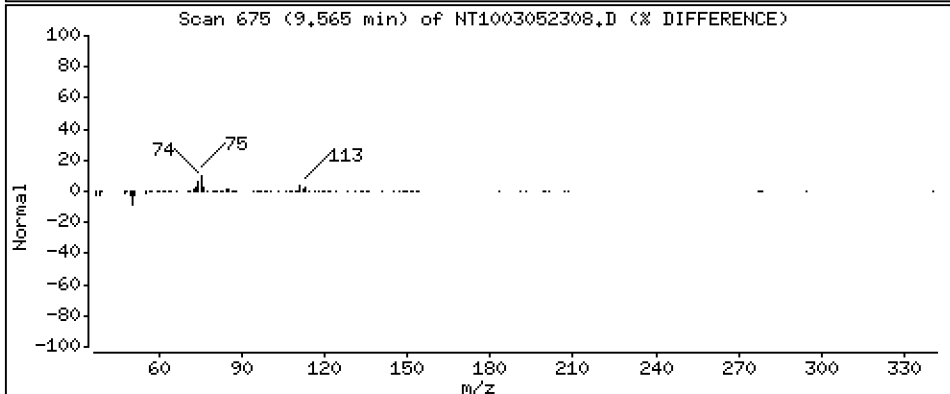
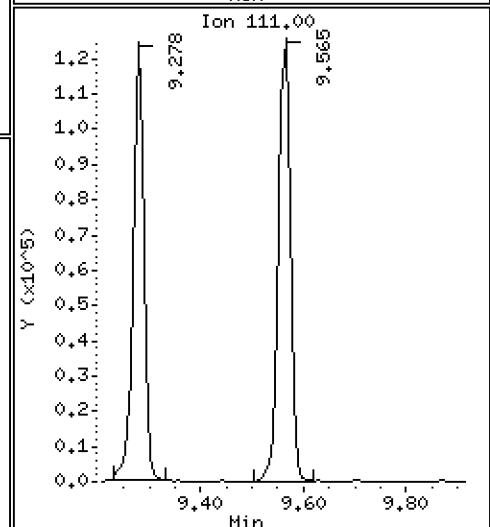
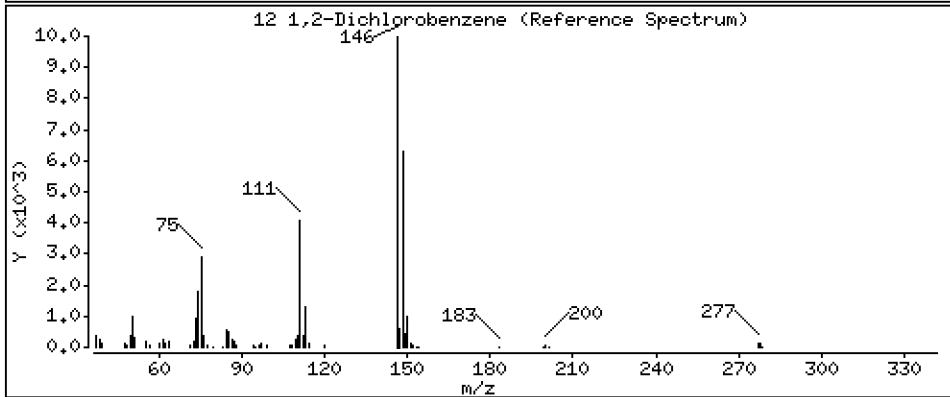
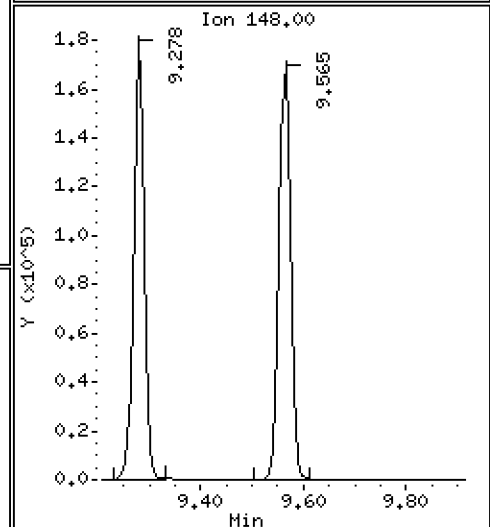
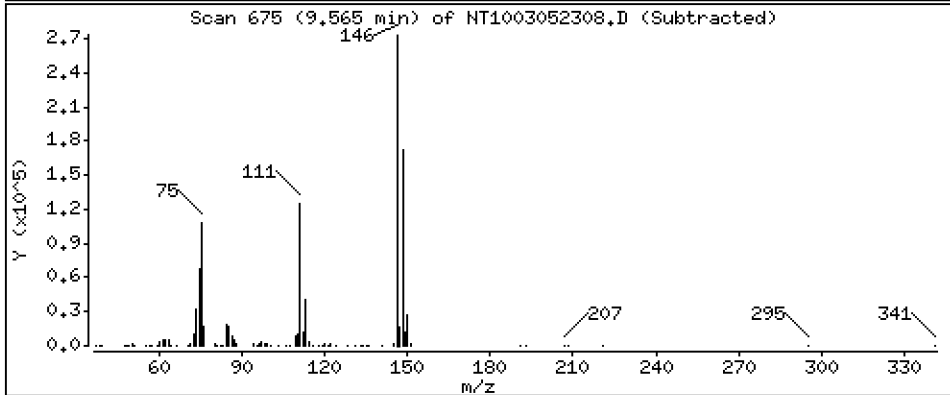
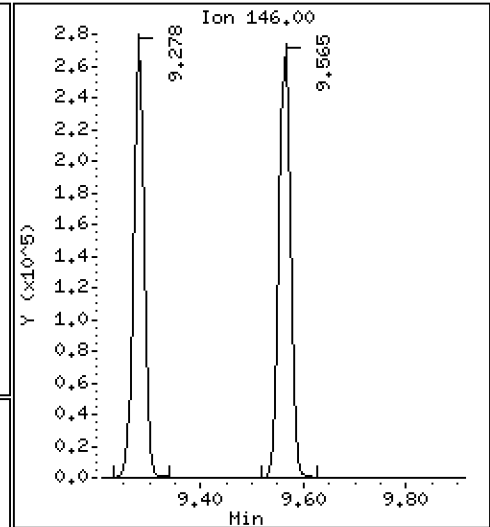
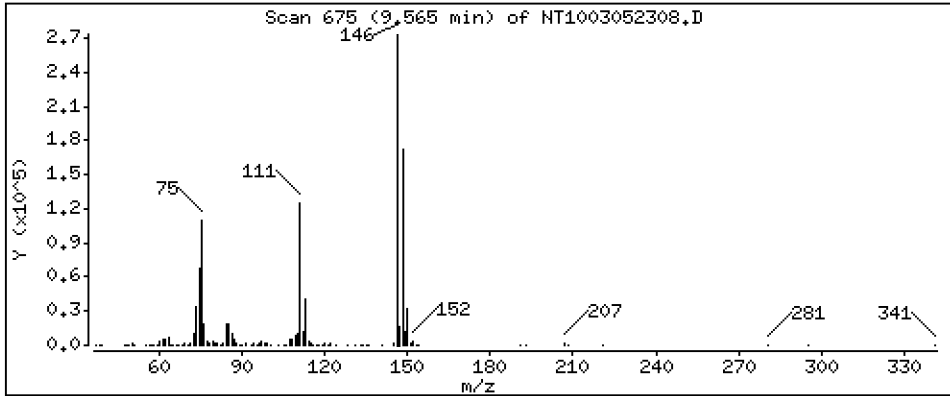
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 3,861 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

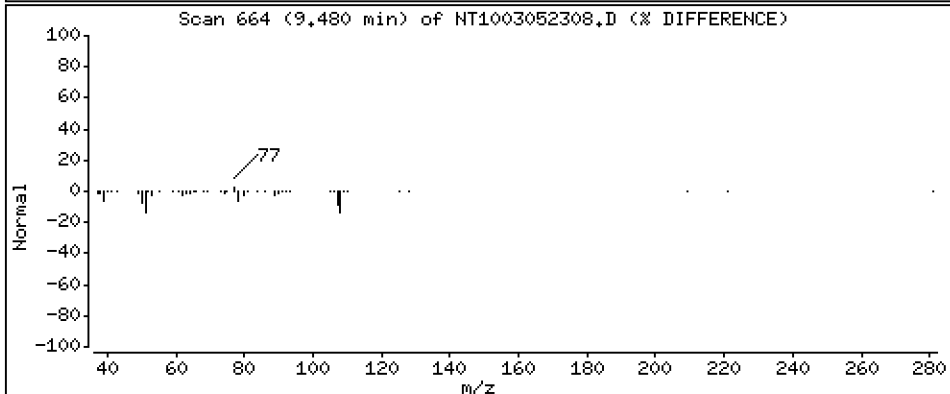
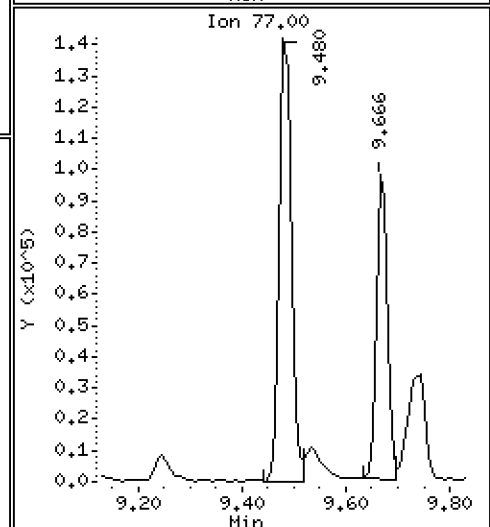
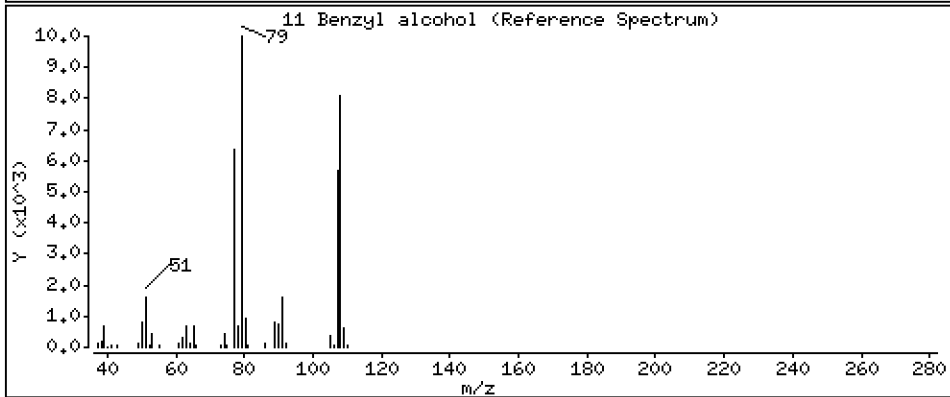
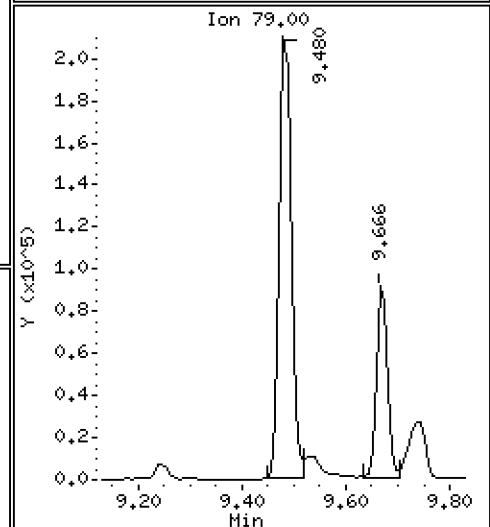
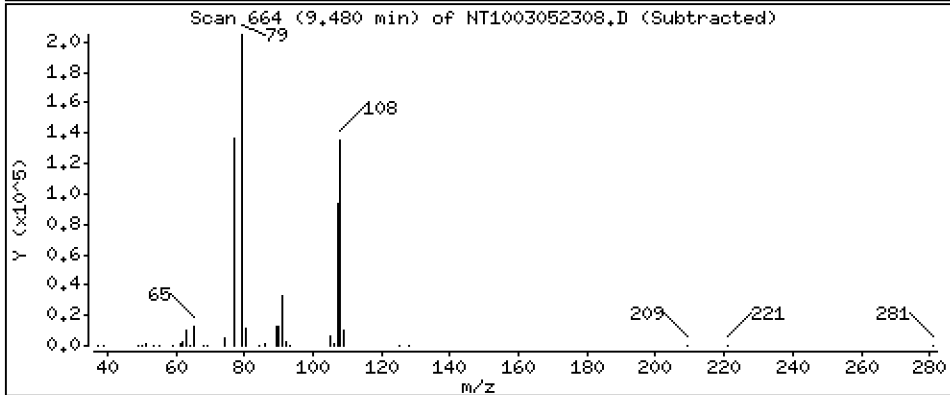
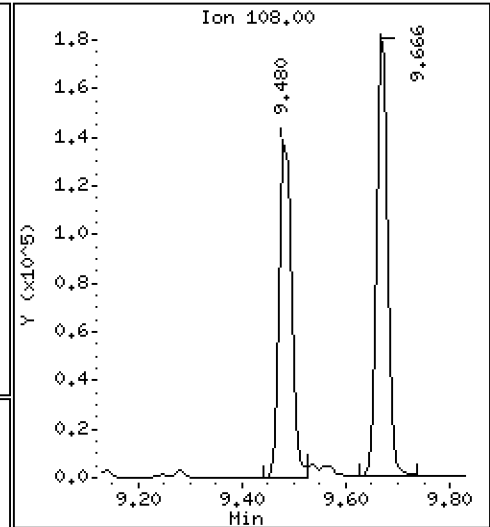
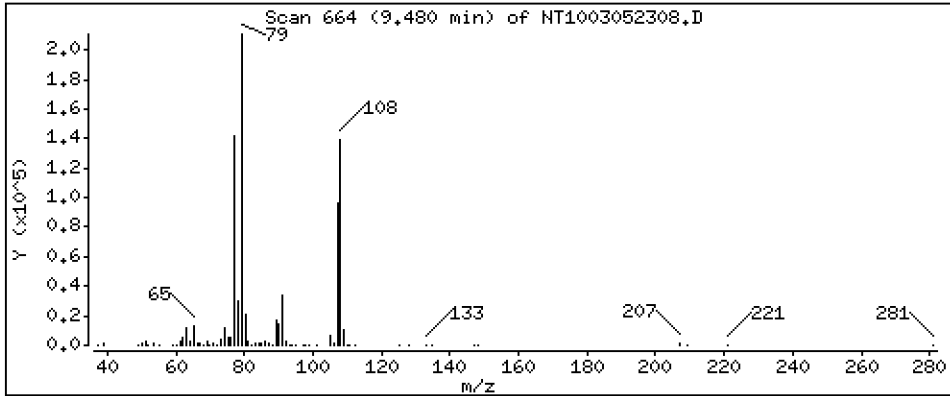
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 3,605 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

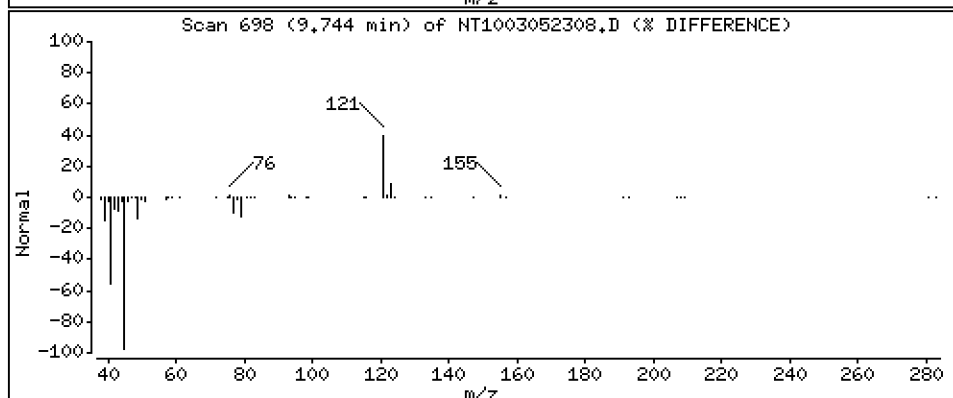
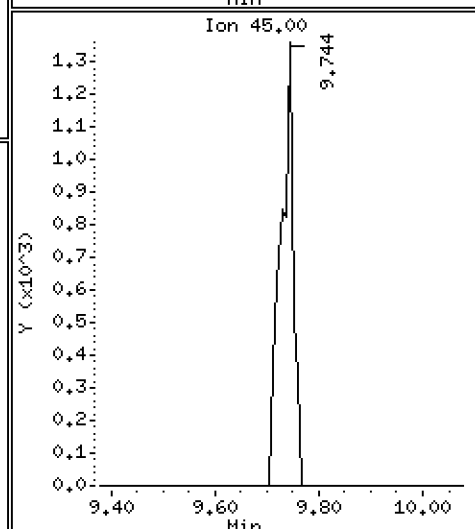
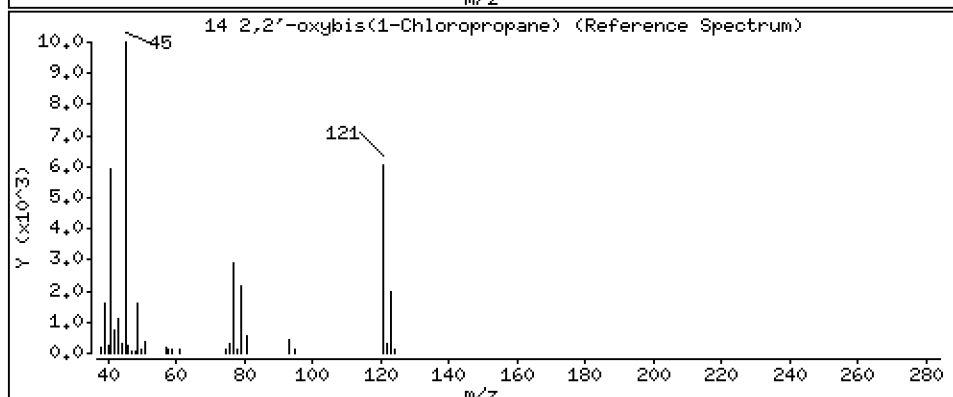
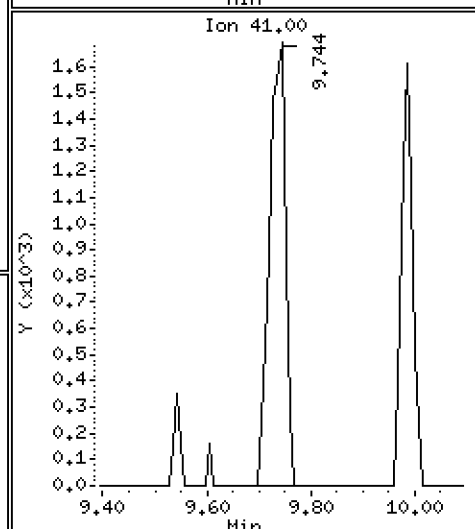
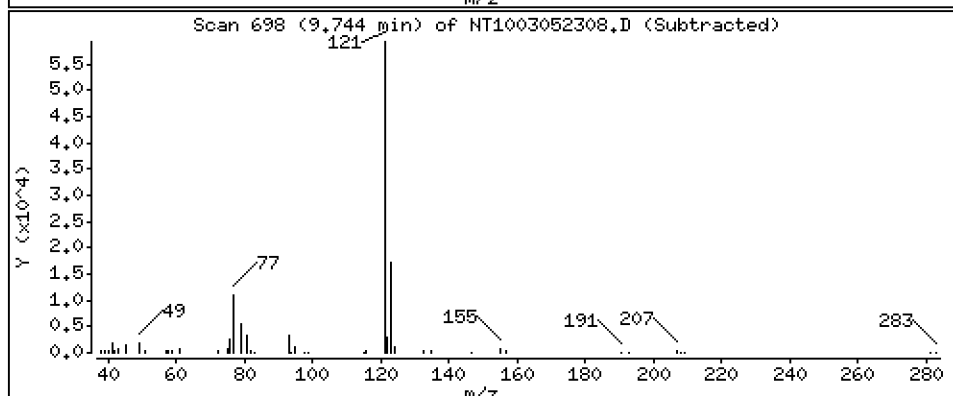
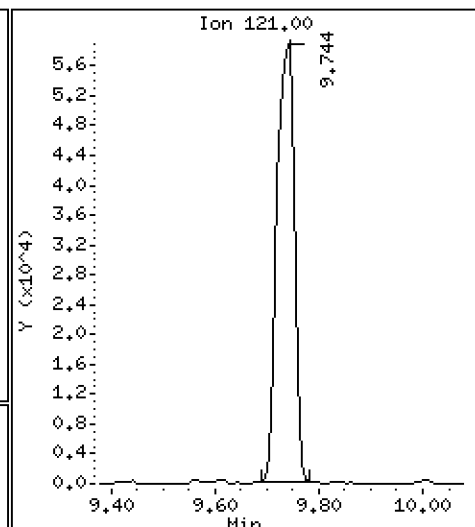
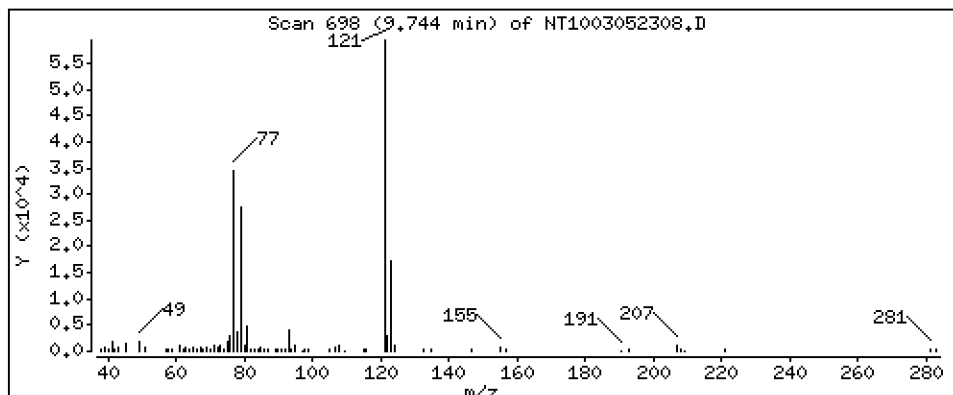
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,575 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

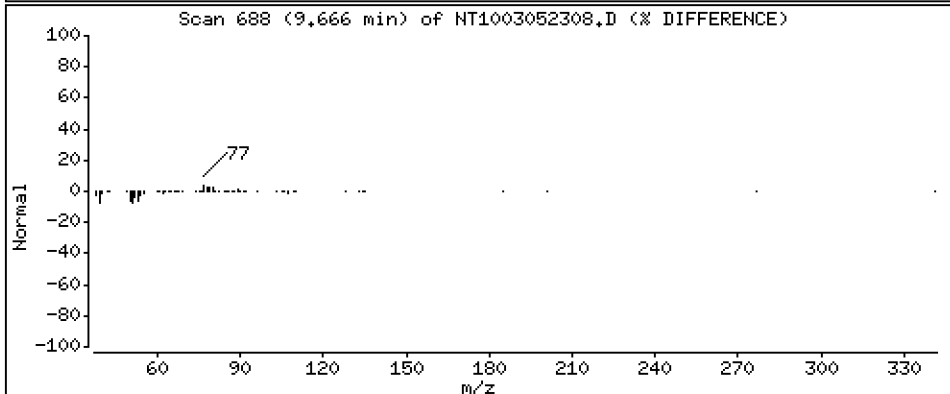
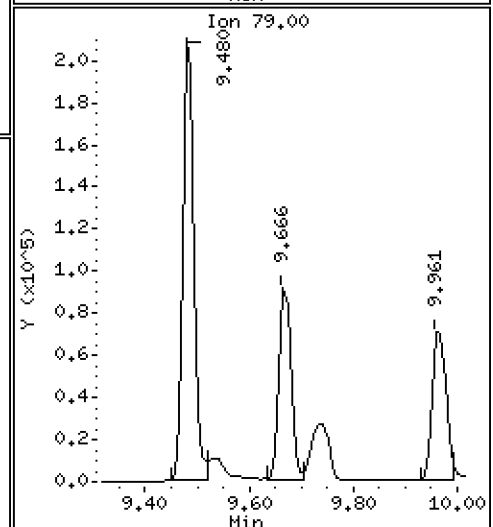
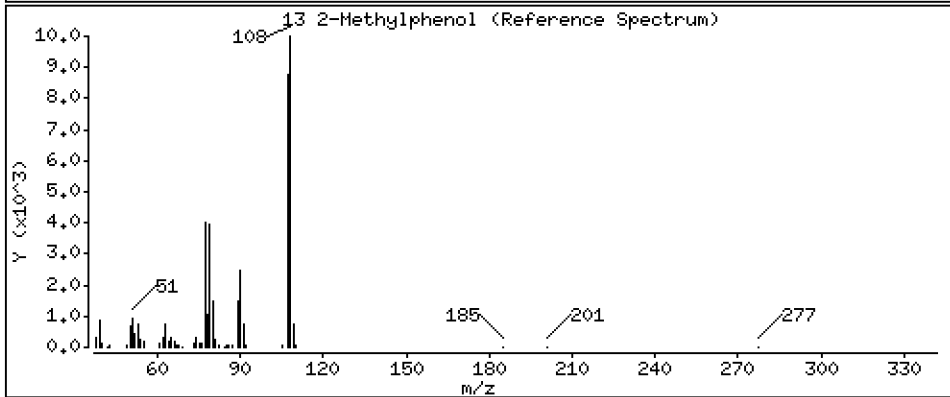
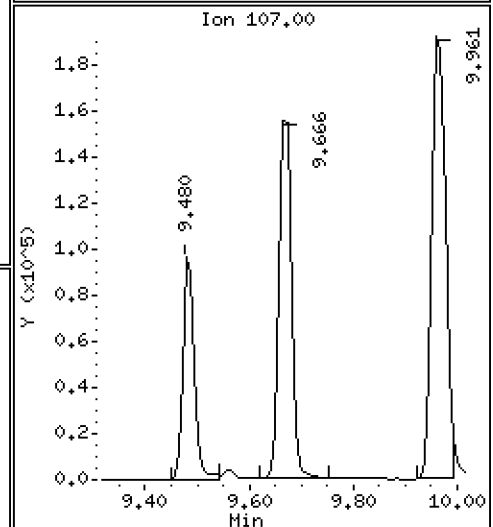
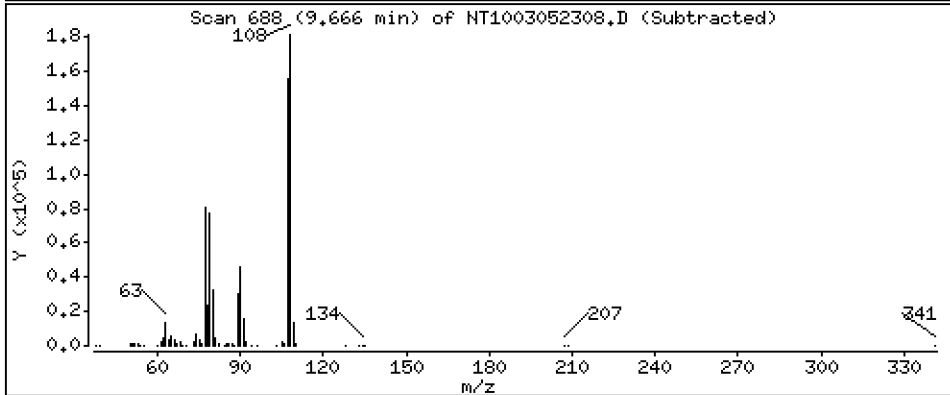
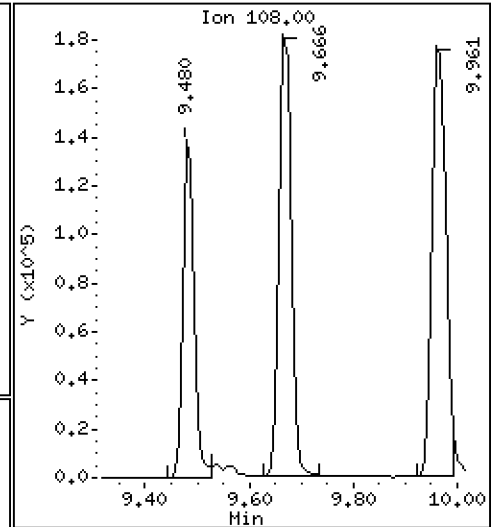
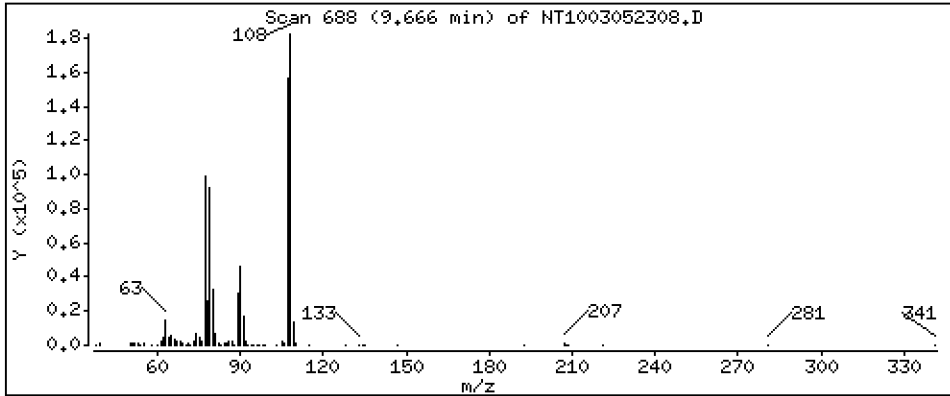
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 3,106 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

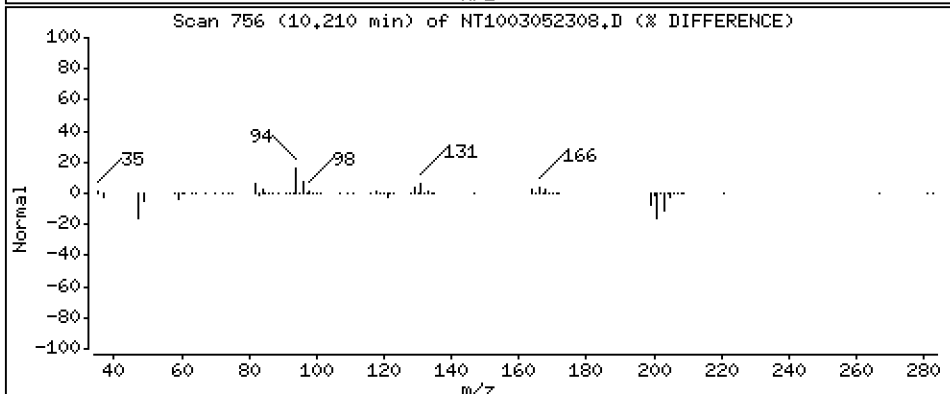
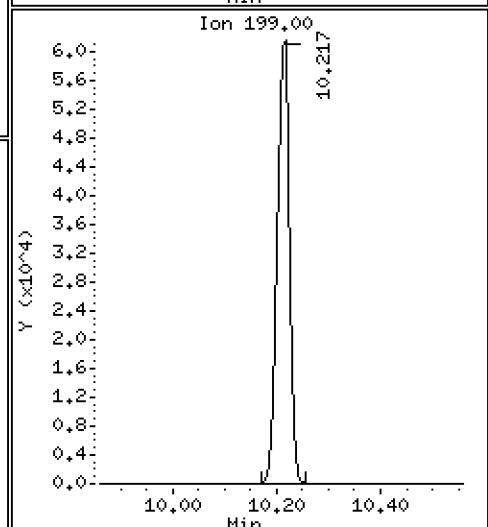
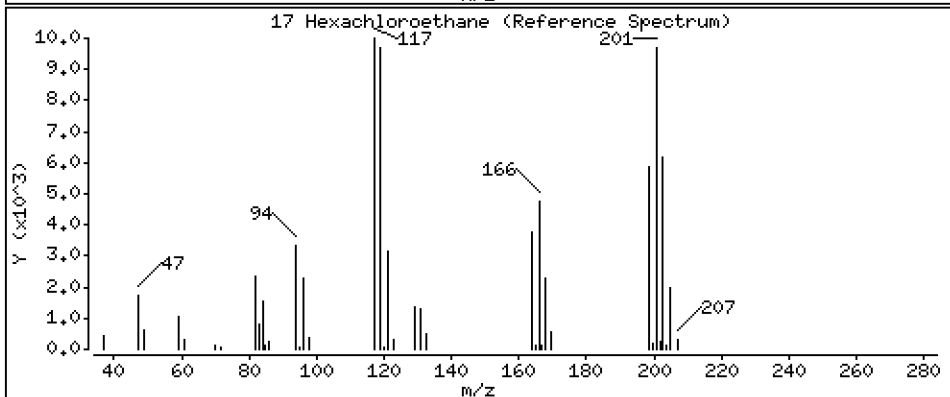
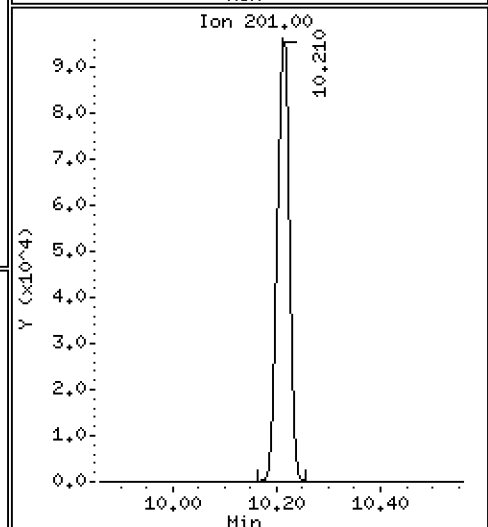
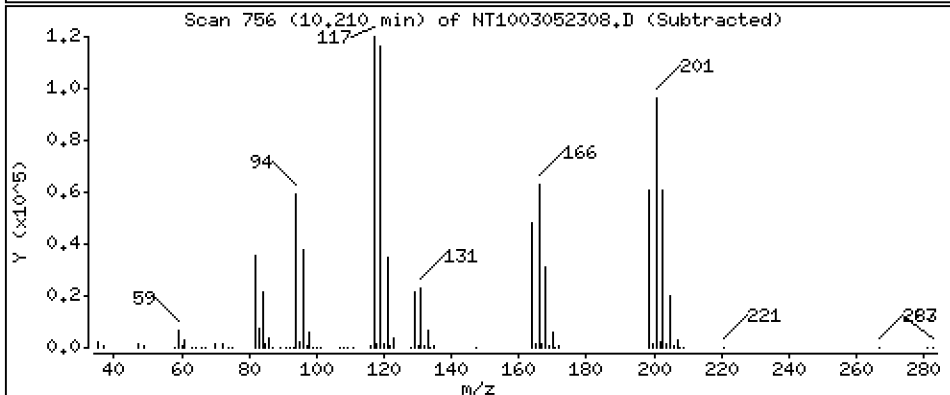
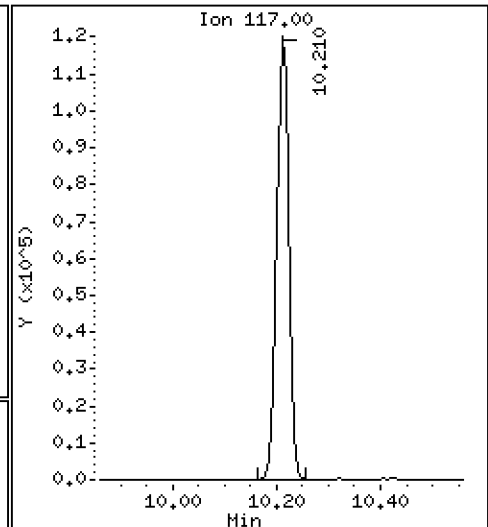
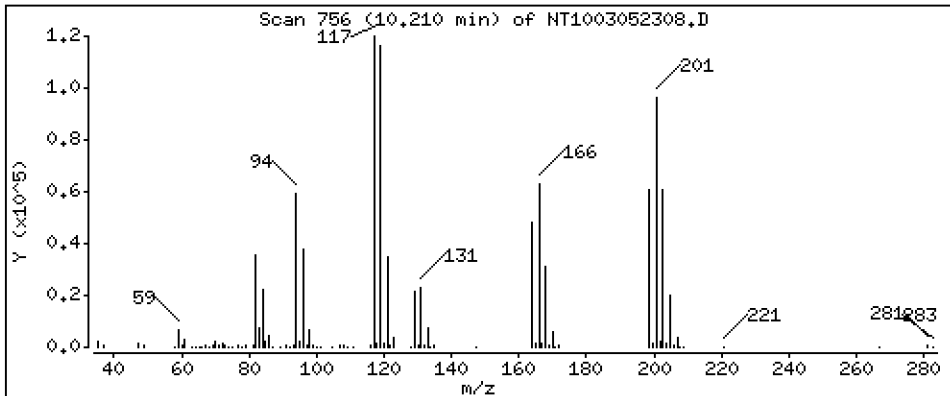
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,237 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

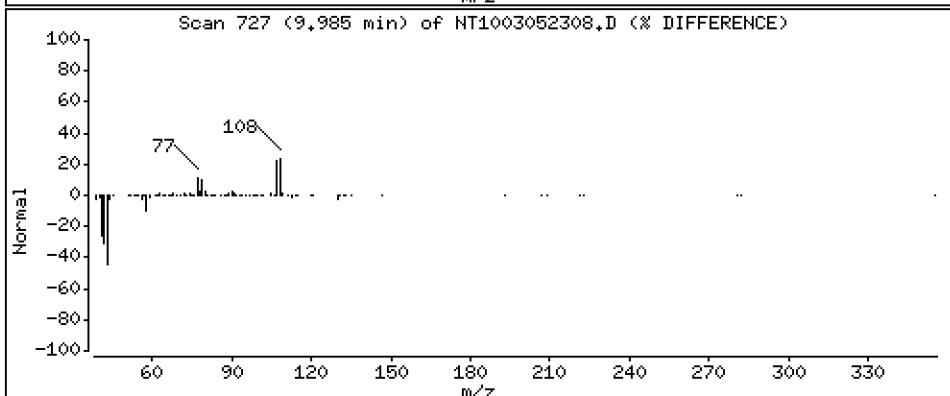
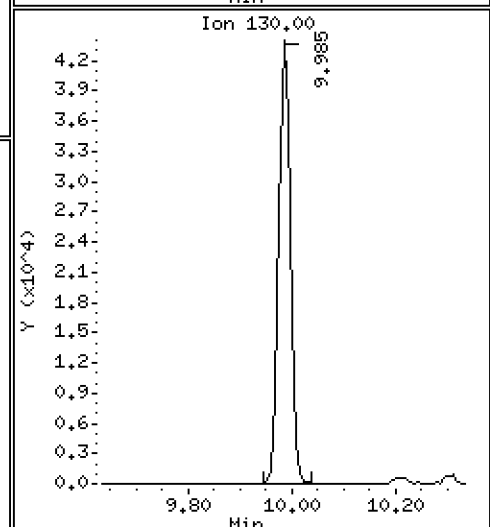
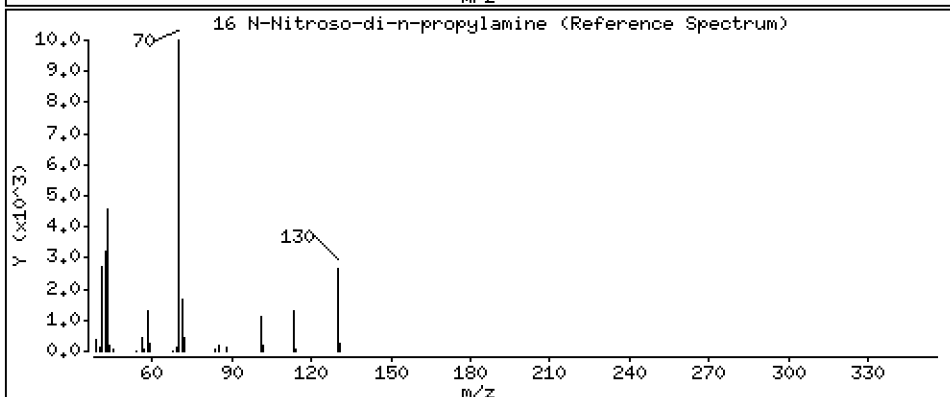
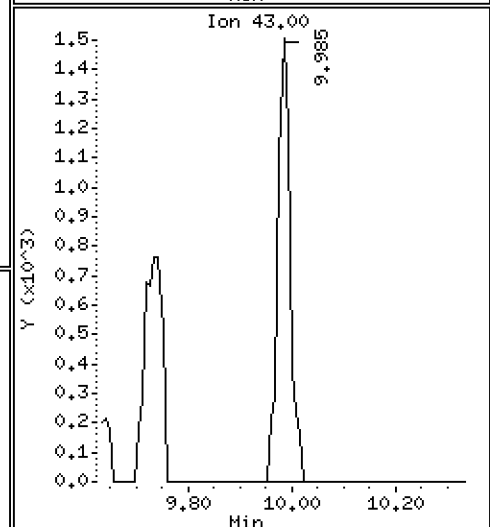
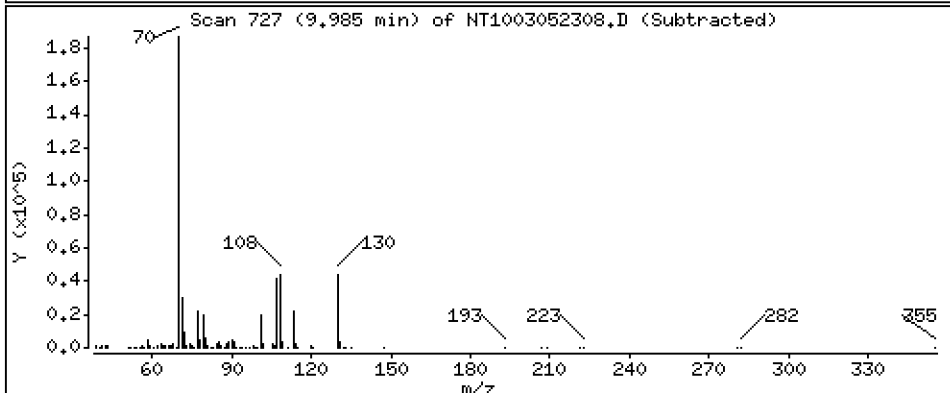
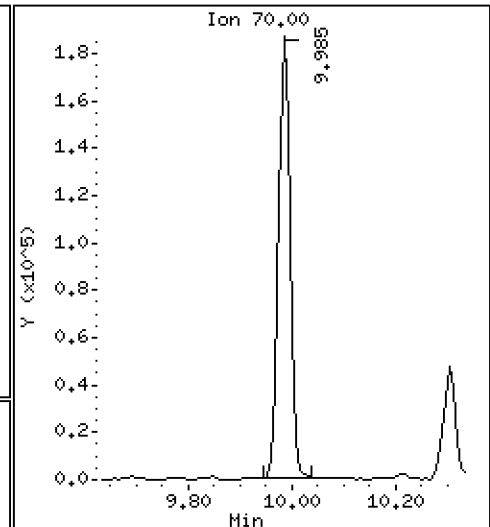
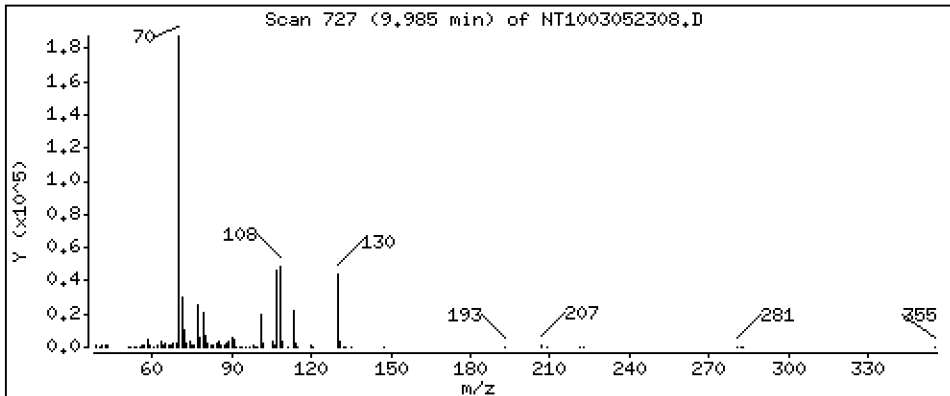
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 3,918 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

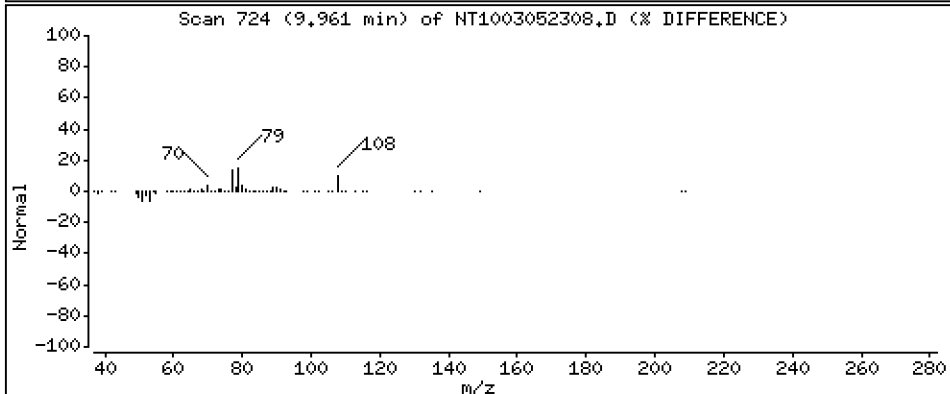
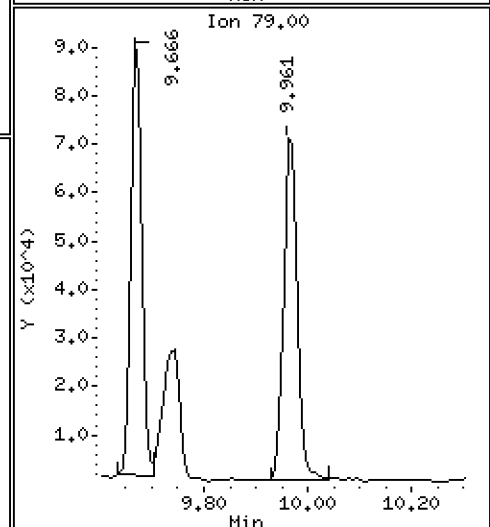
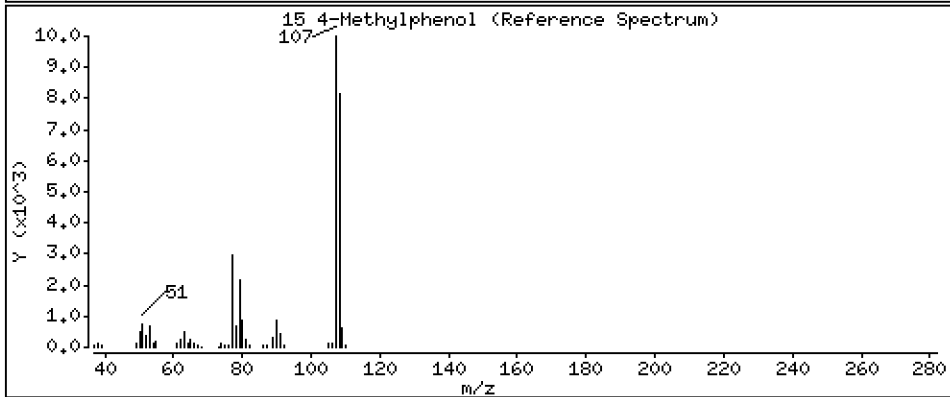
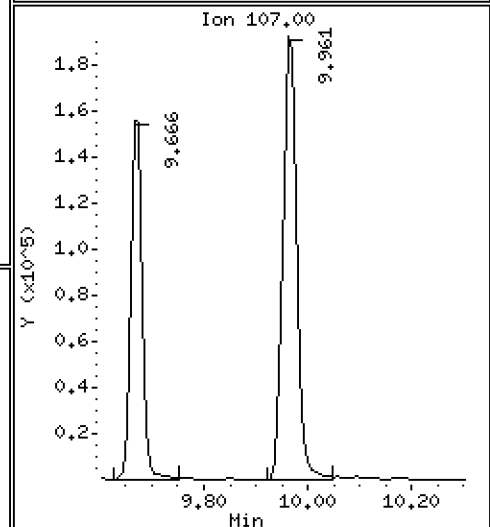
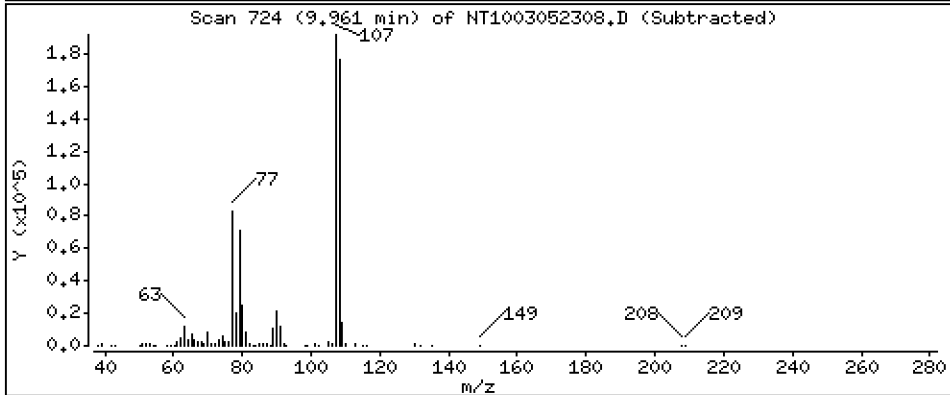
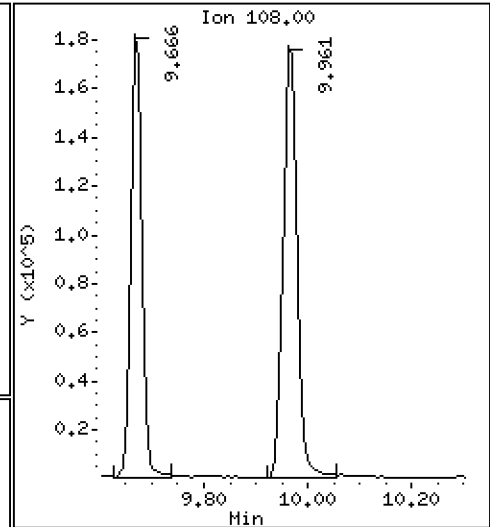
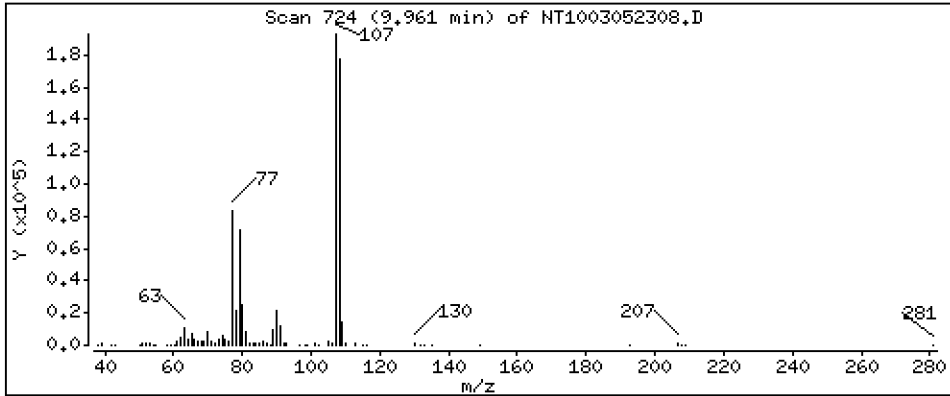
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 2,968 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

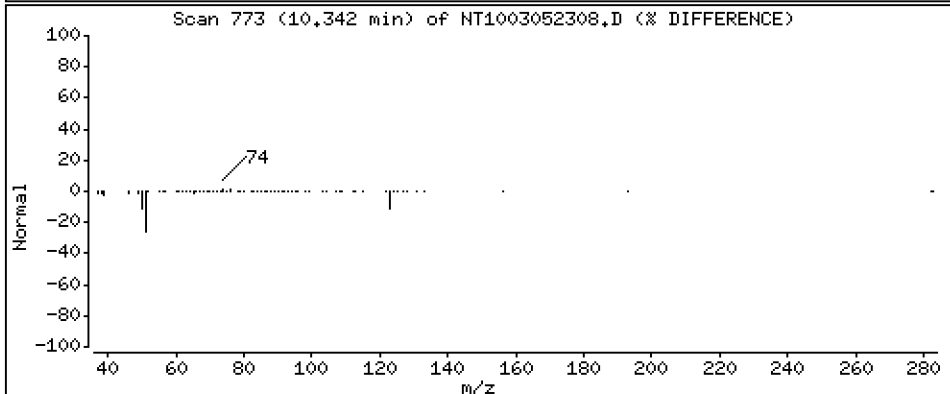
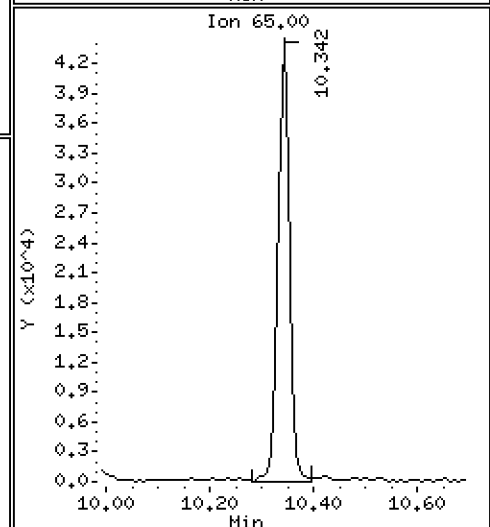
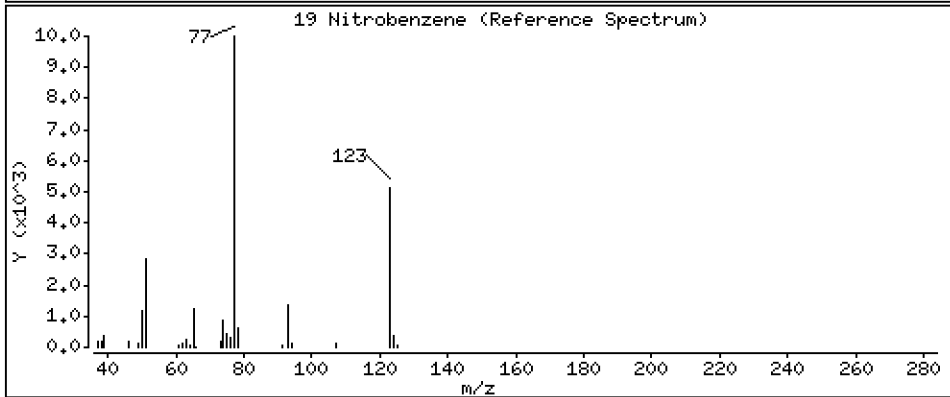
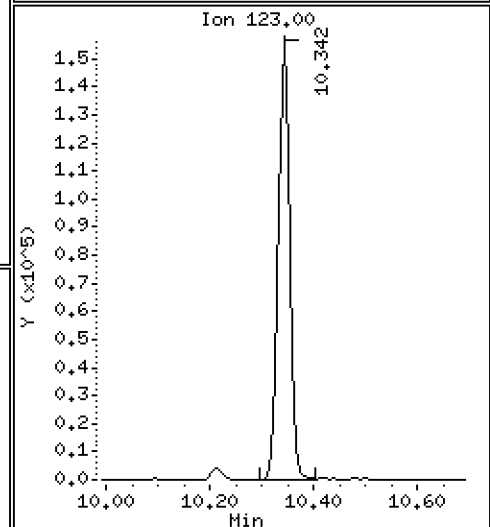
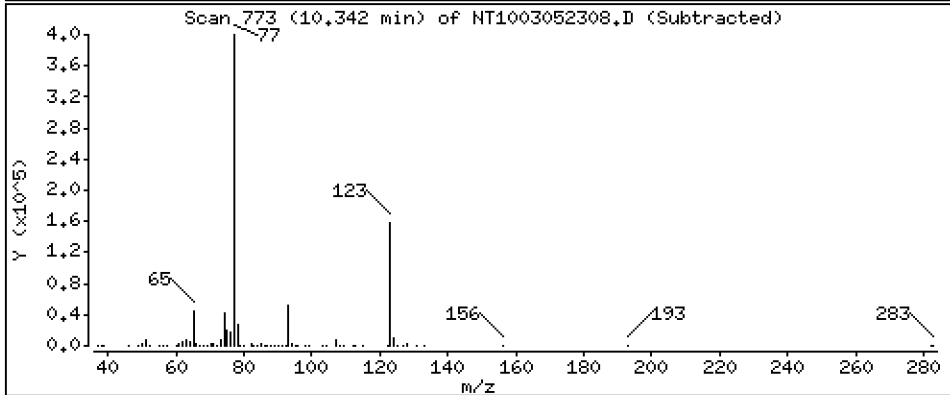
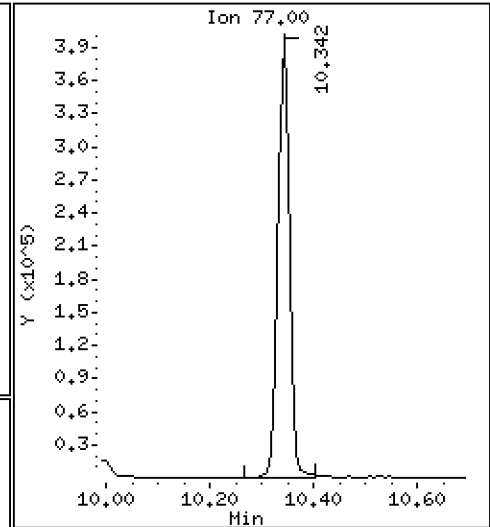
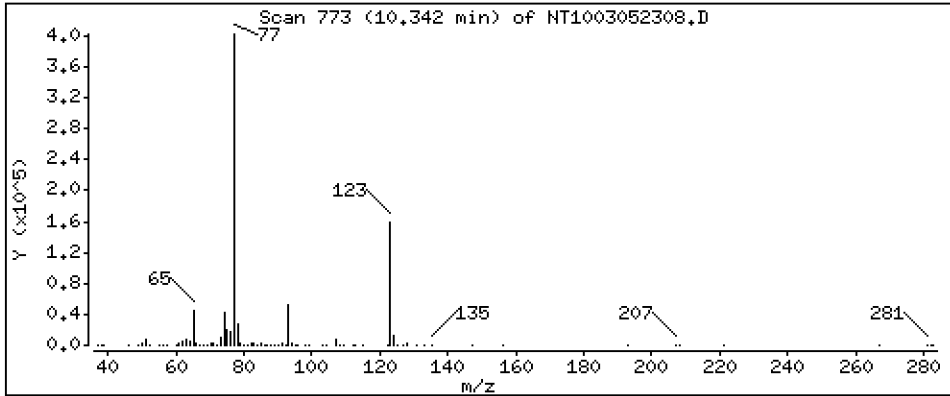
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,219 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

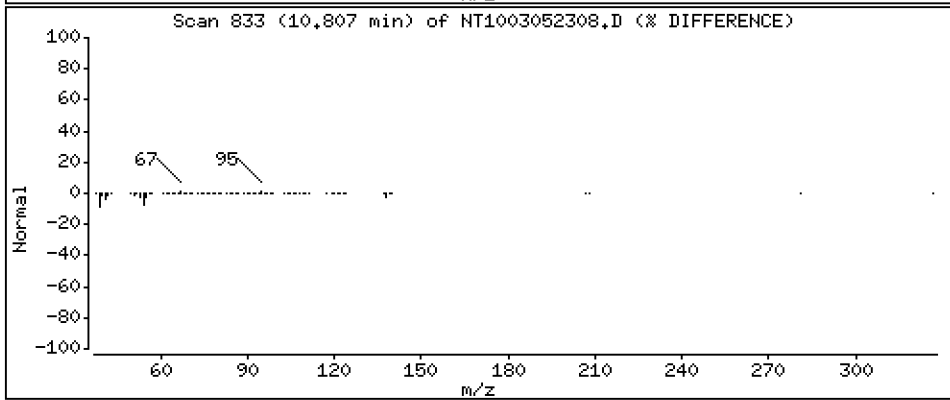
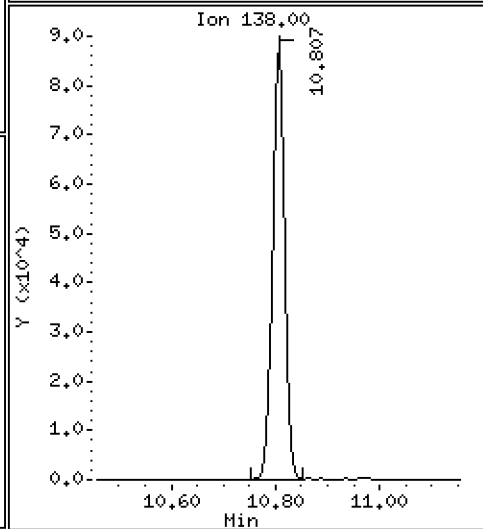
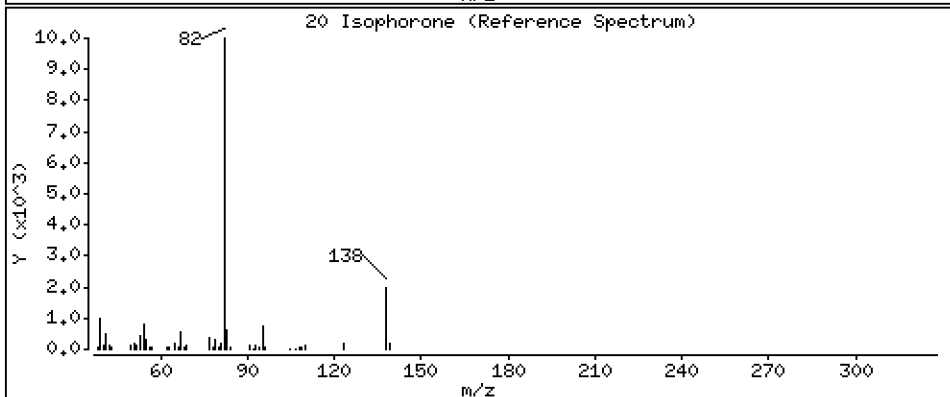
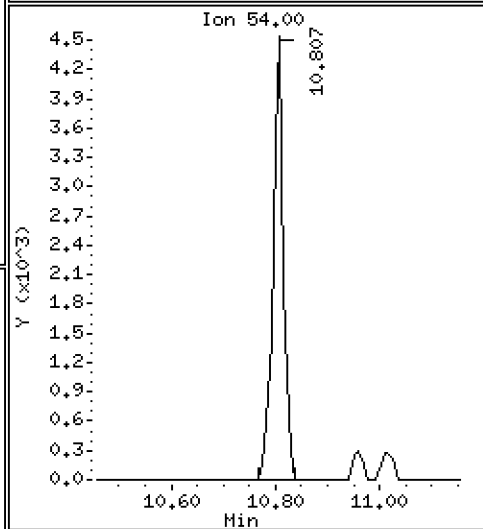
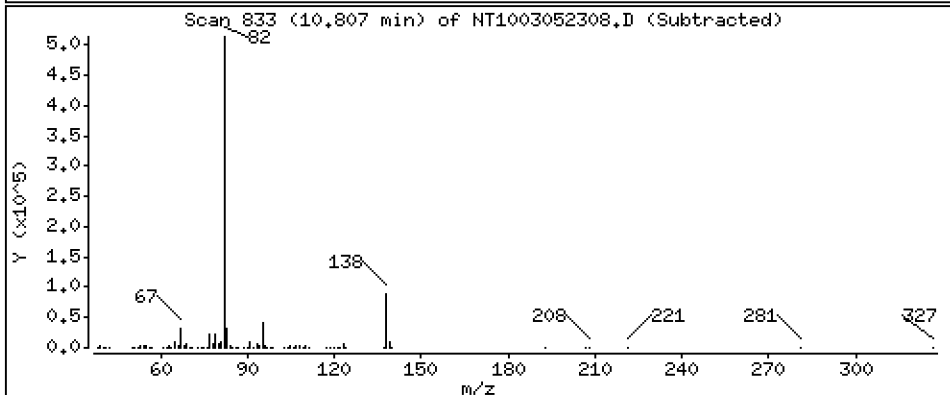
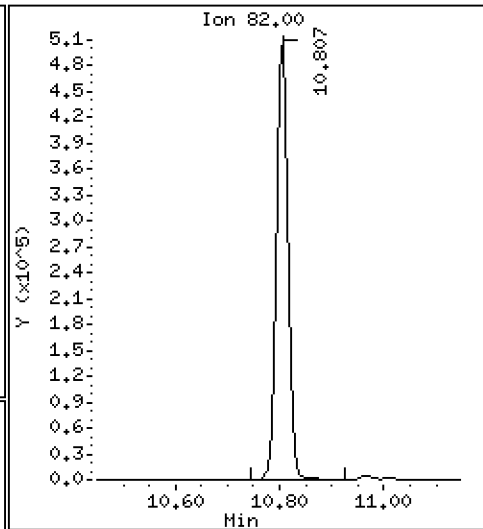
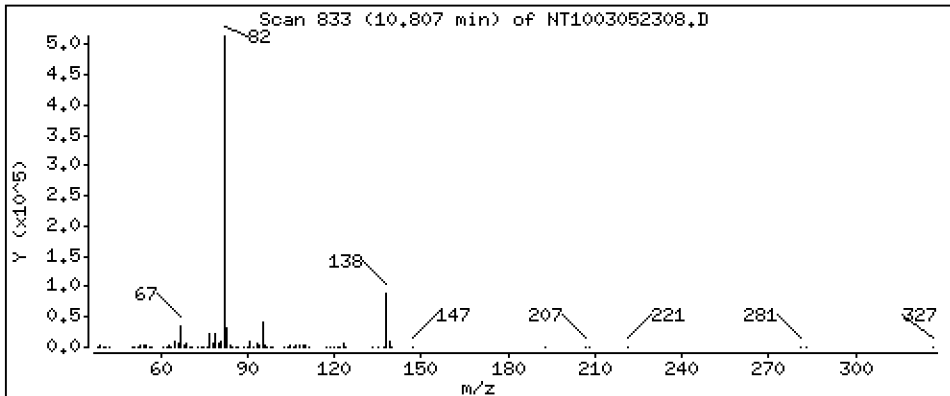
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 6,469 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

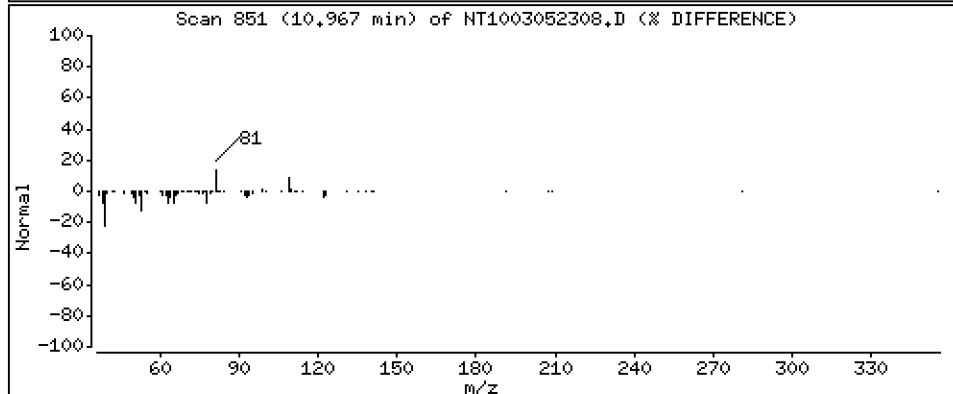
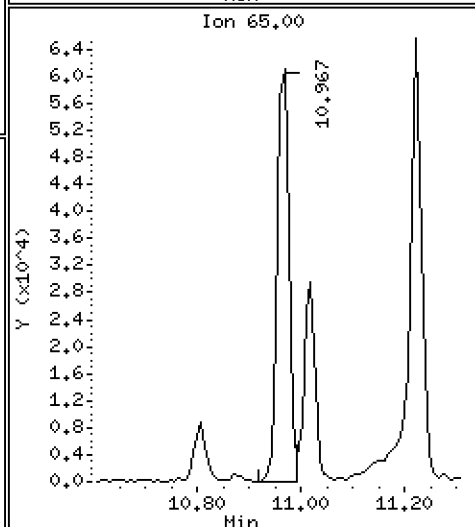
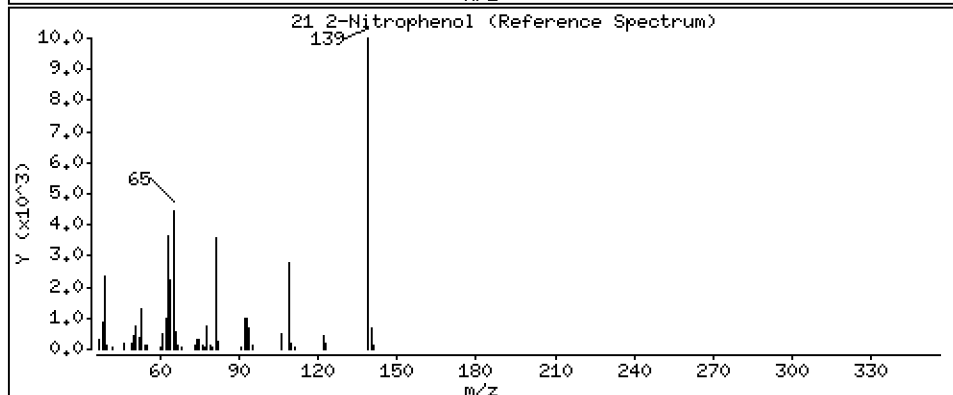
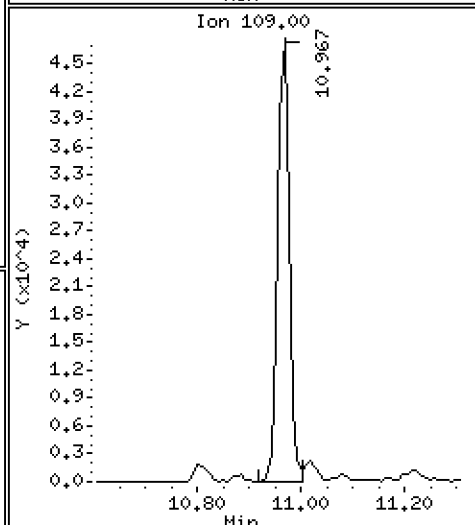
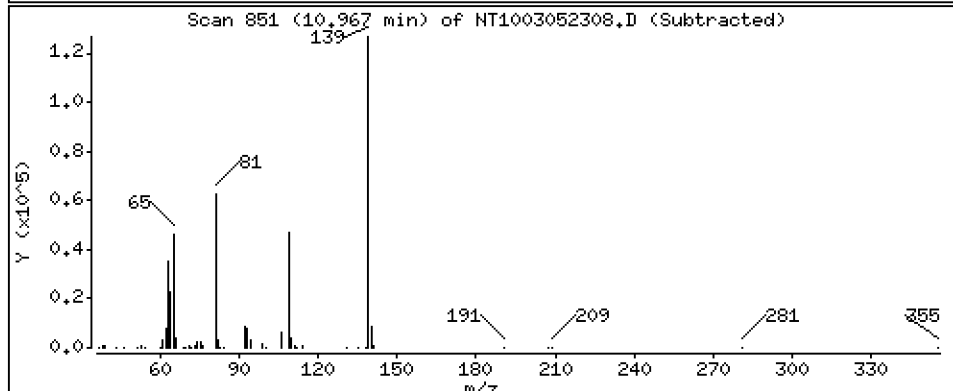
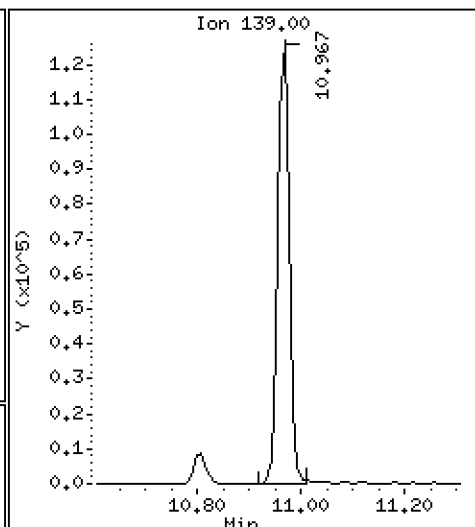
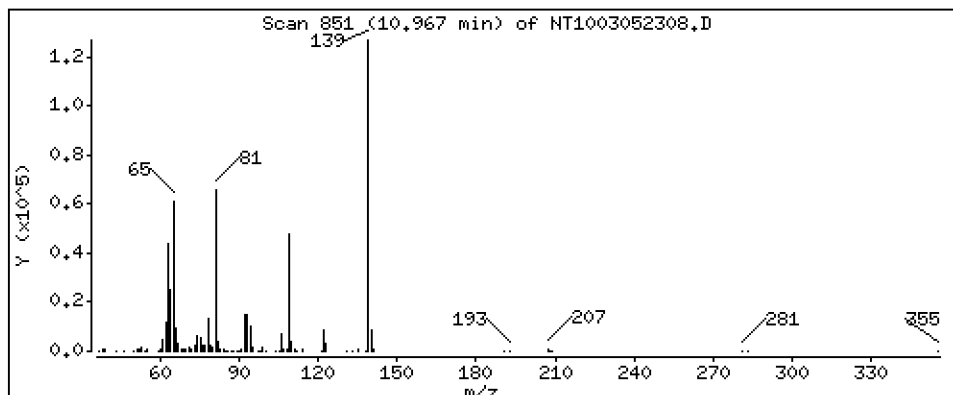
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,260 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

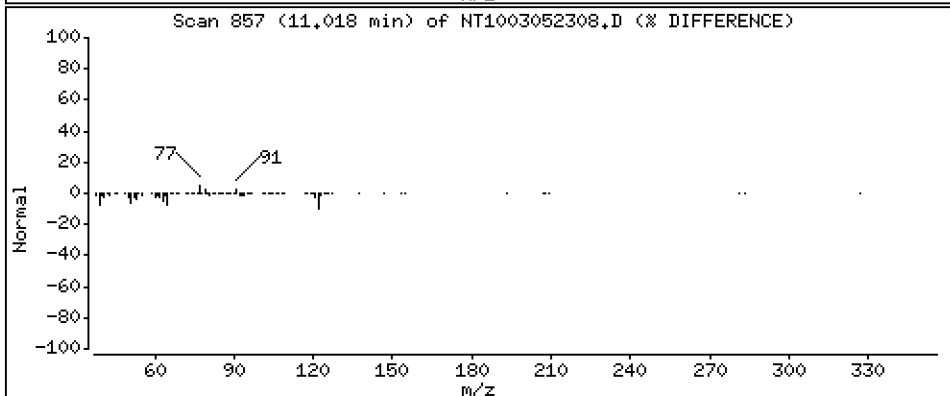
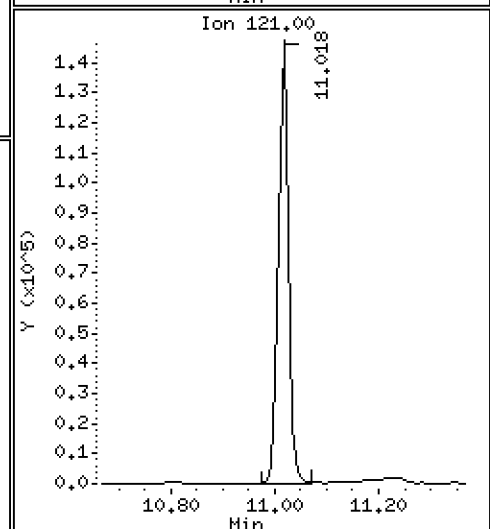
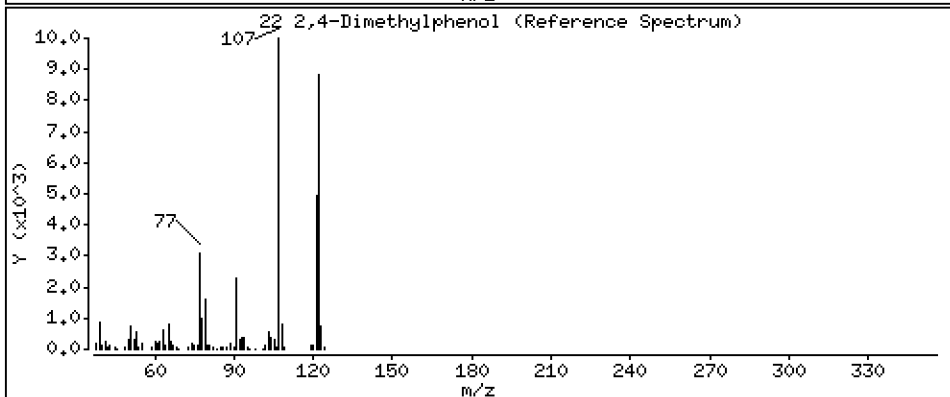
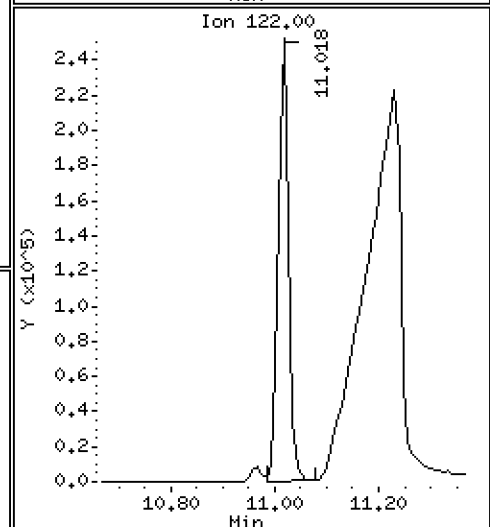
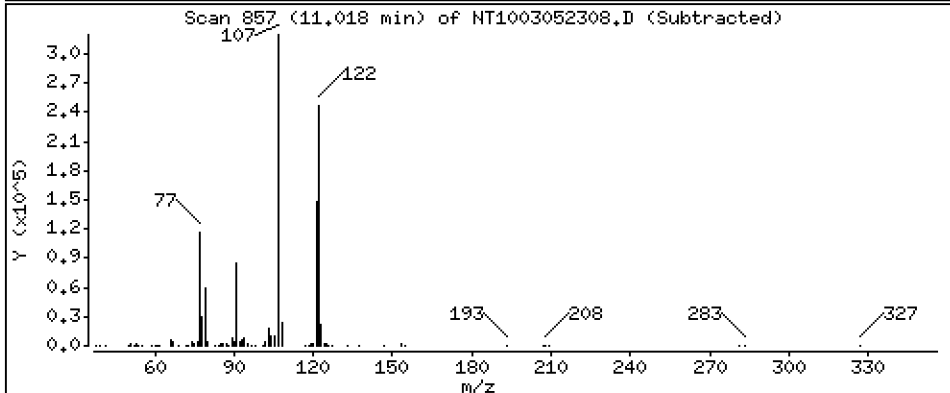
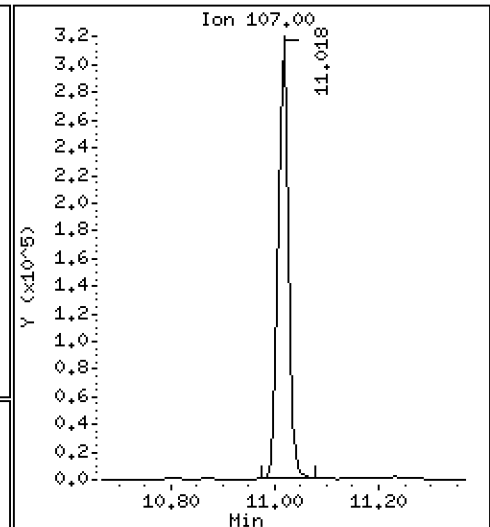
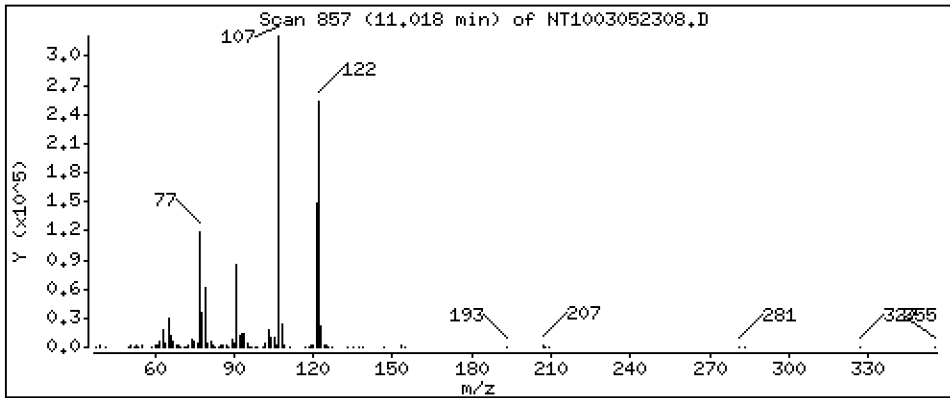
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 4,275 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

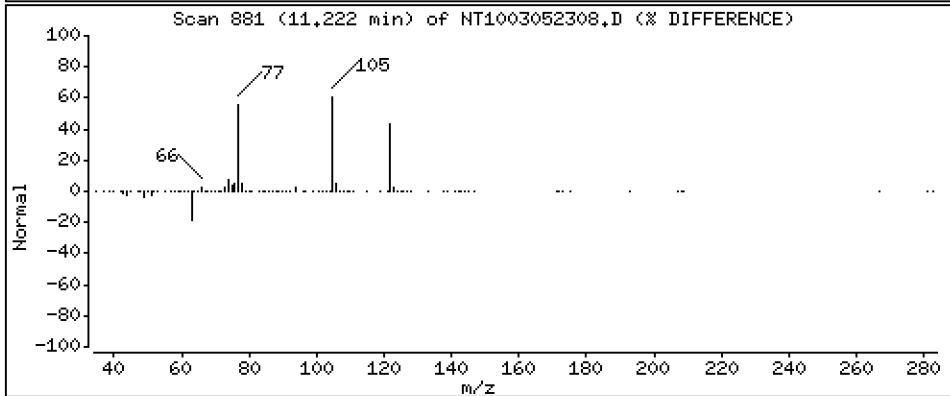
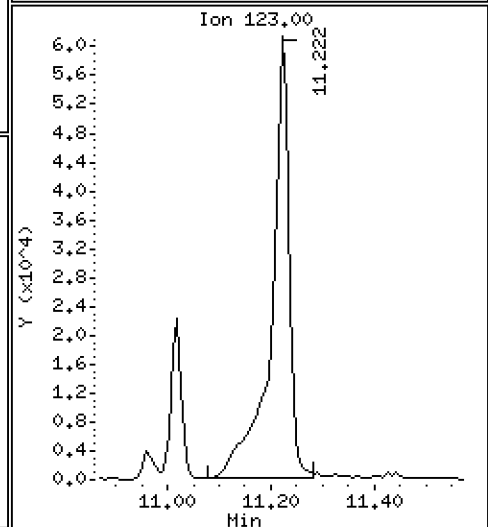
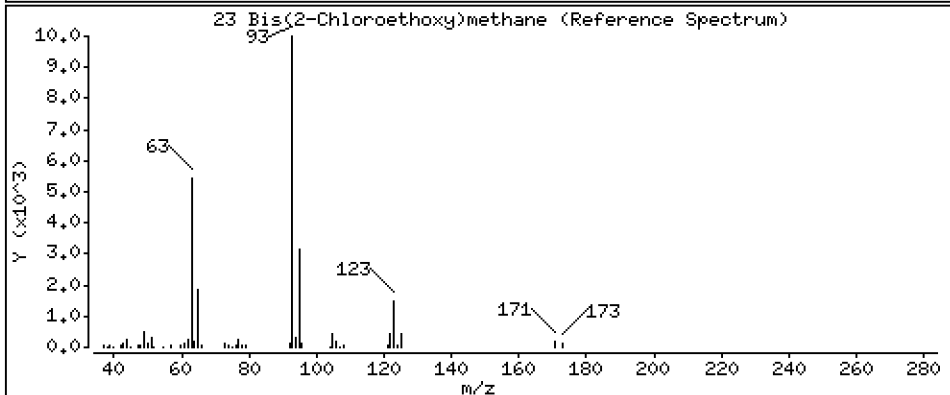
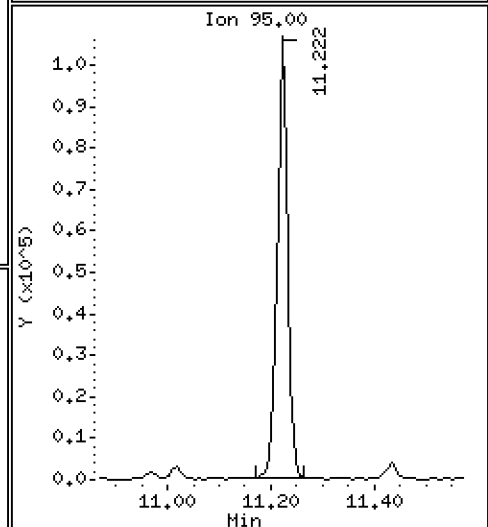
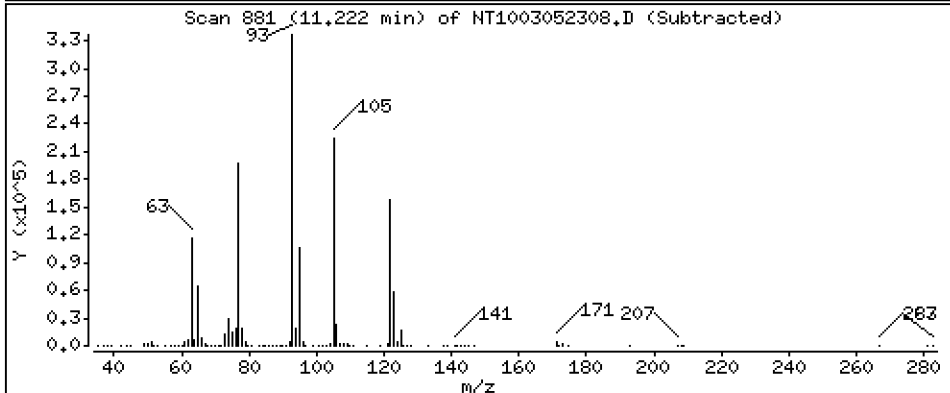
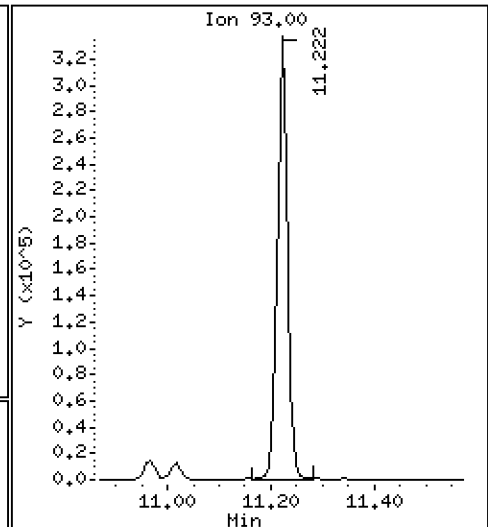
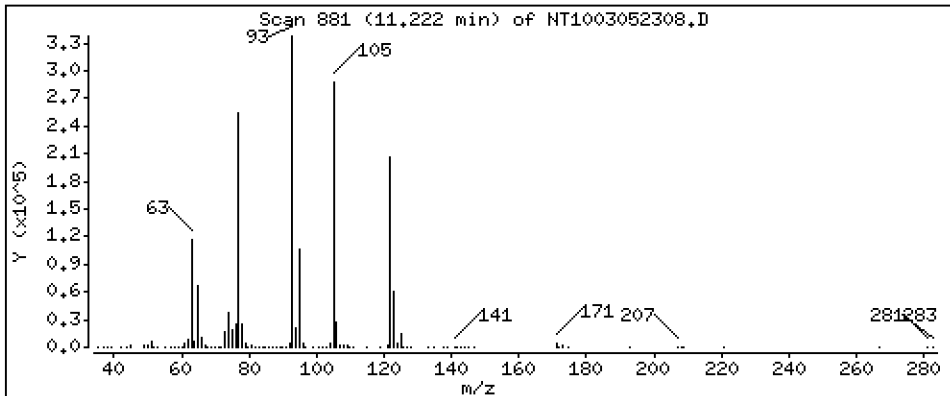
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,441 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

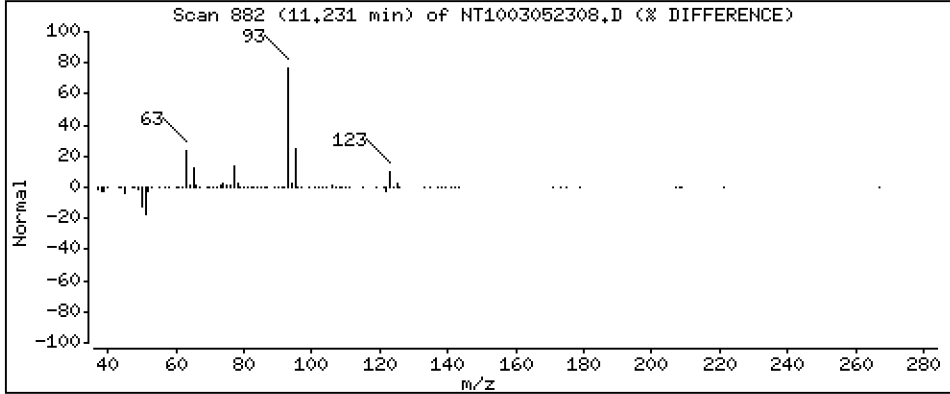
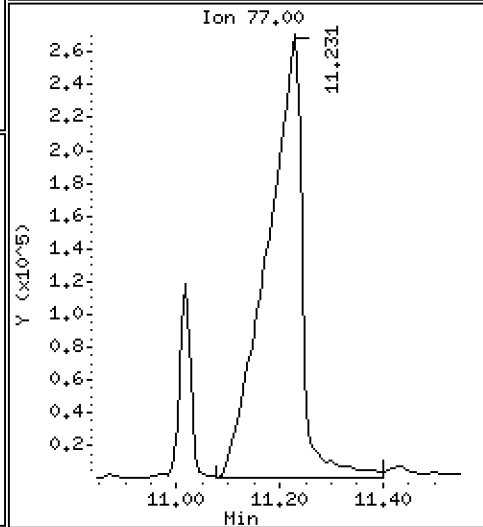
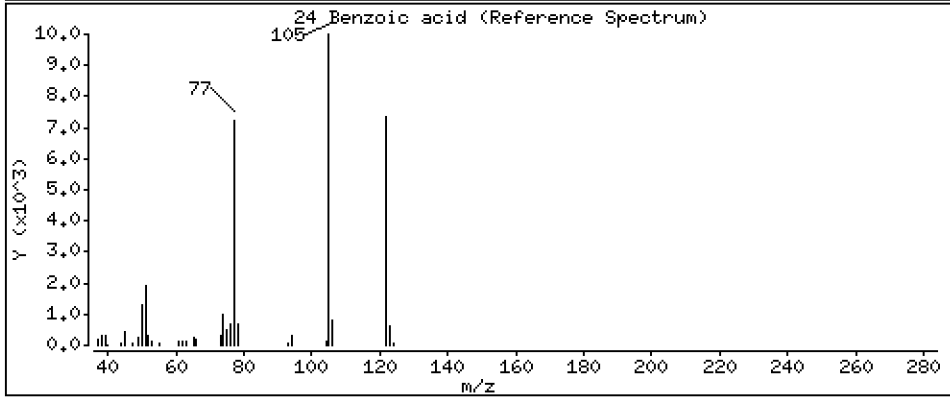
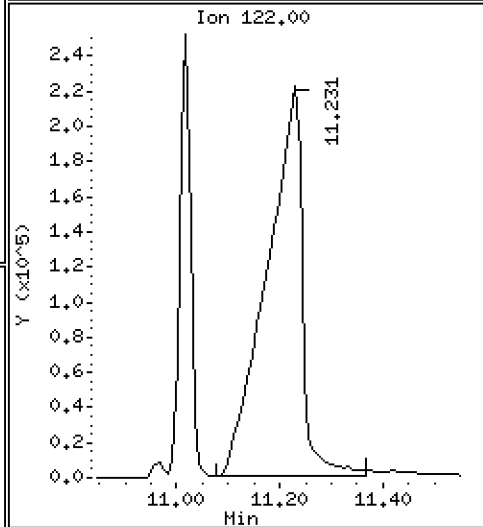
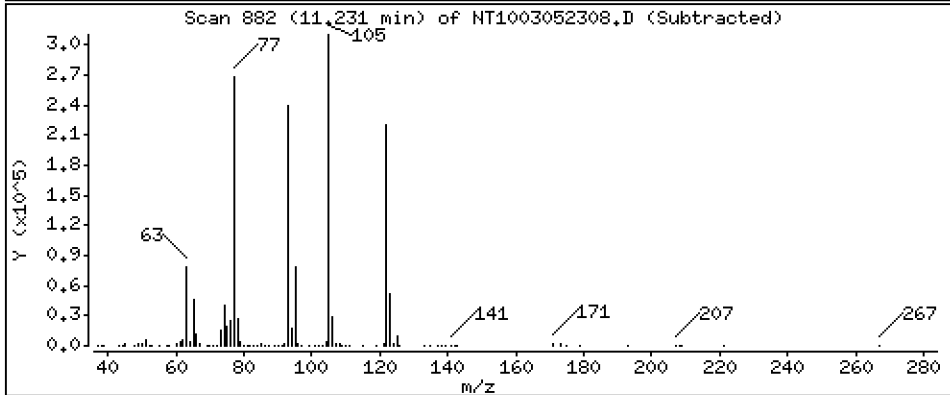
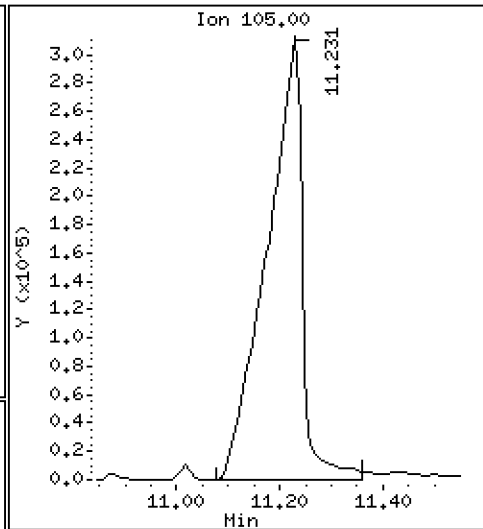
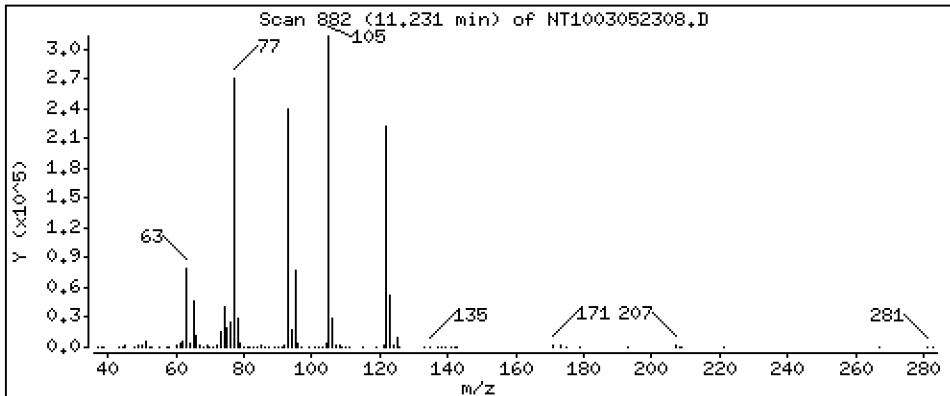
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 22,53 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

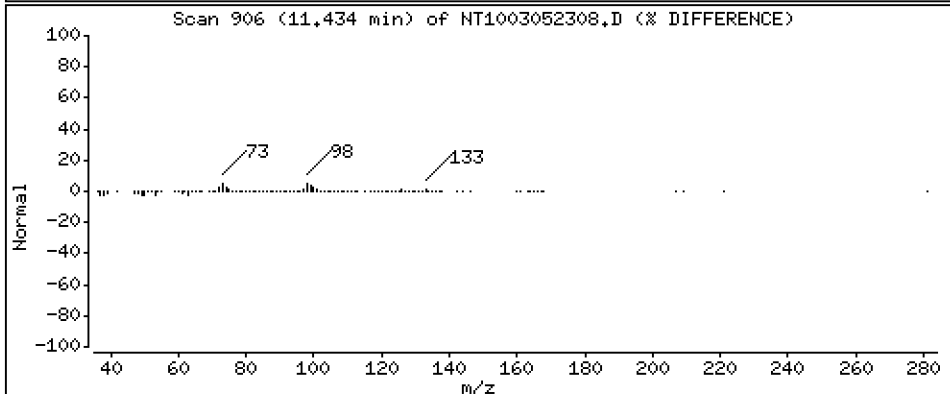
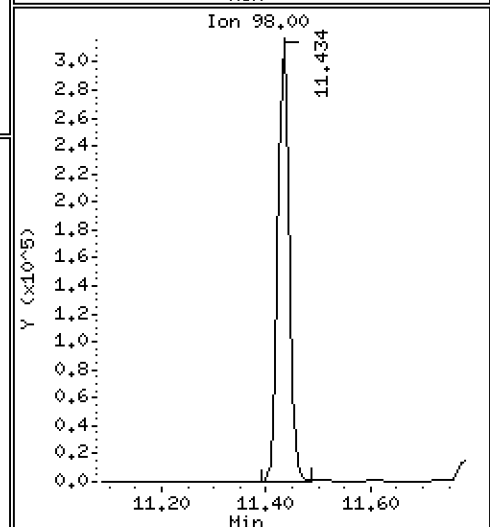
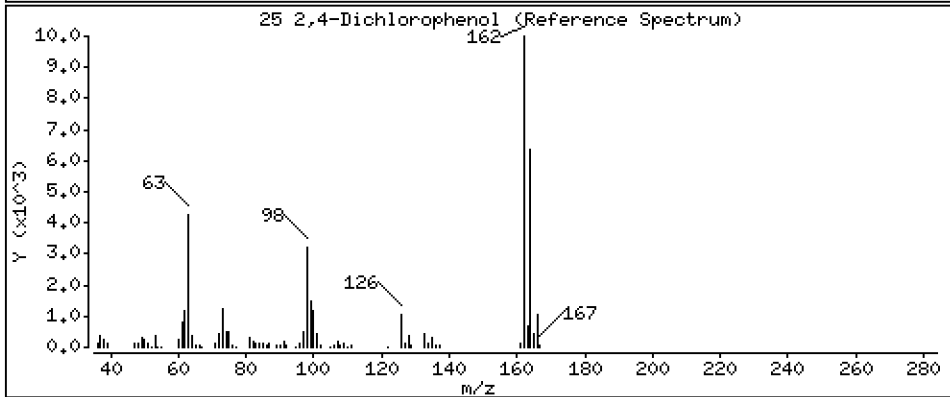
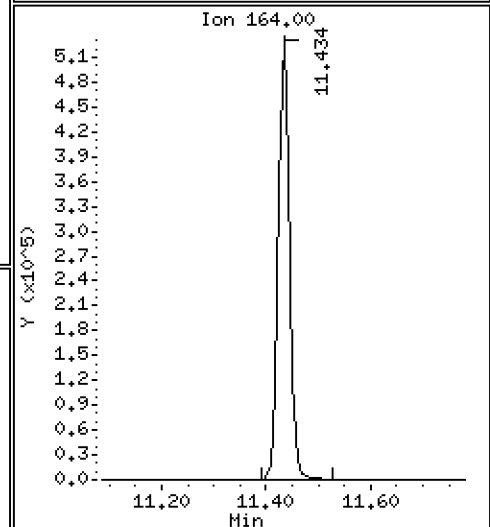
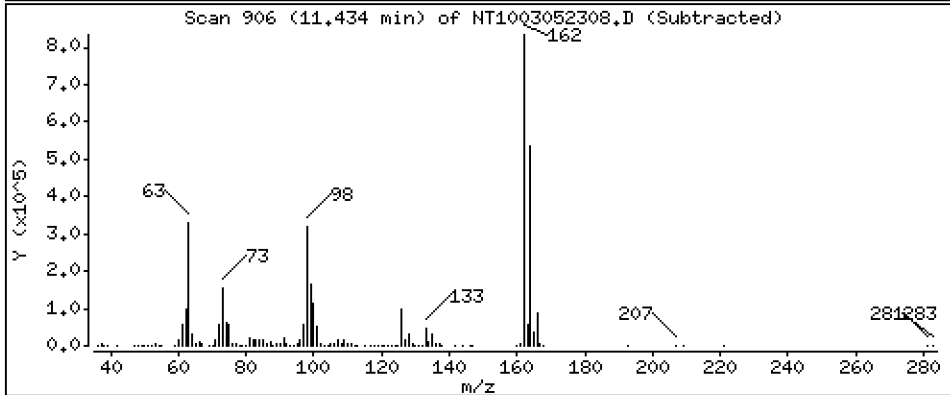
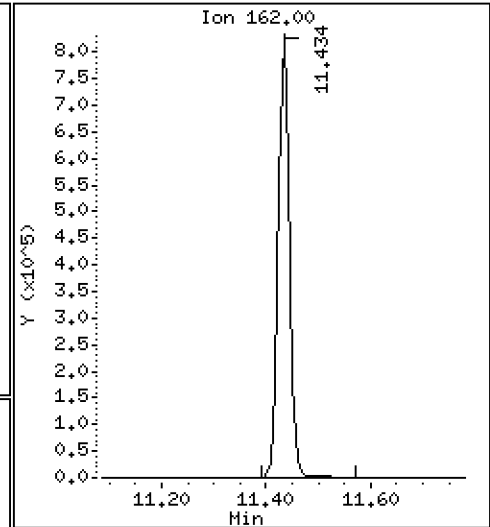
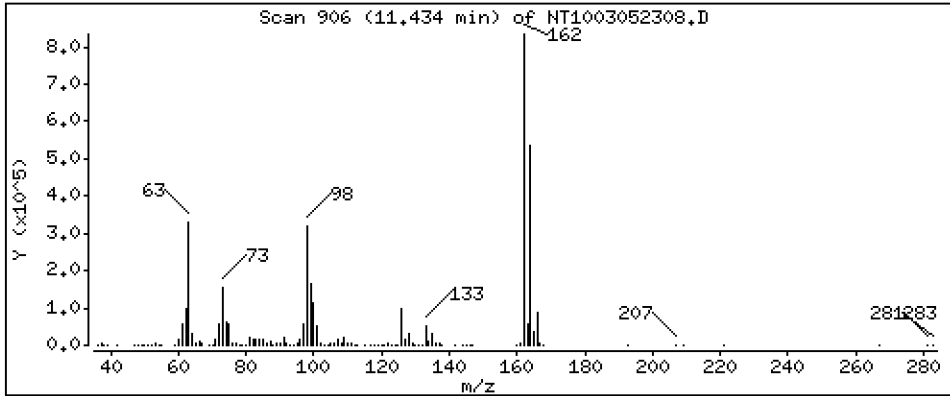
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 14,98 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

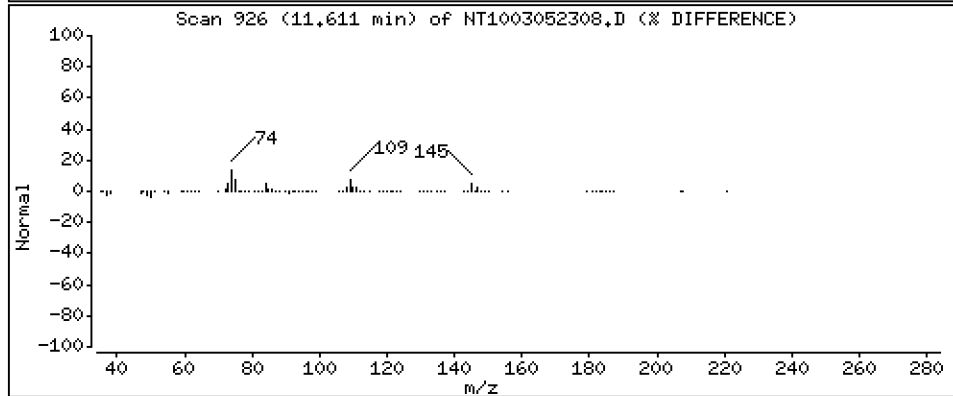
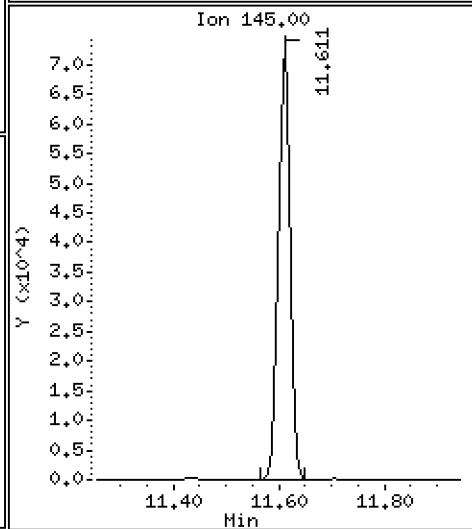
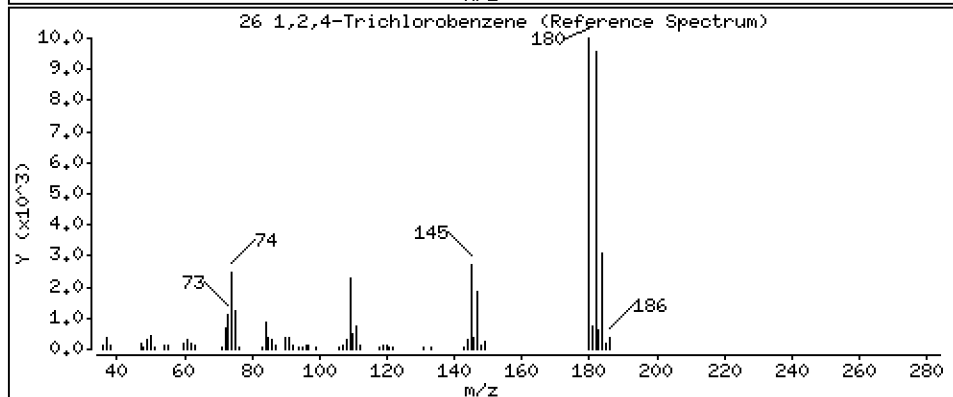
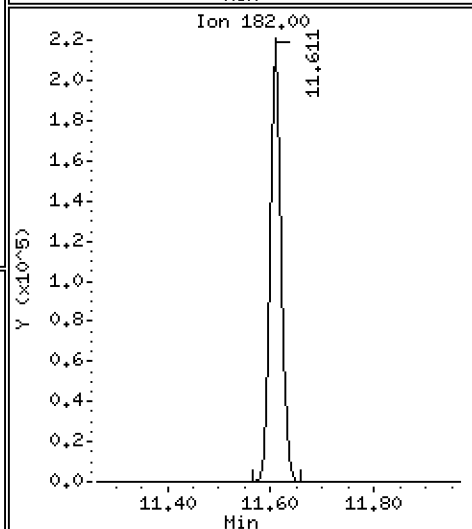
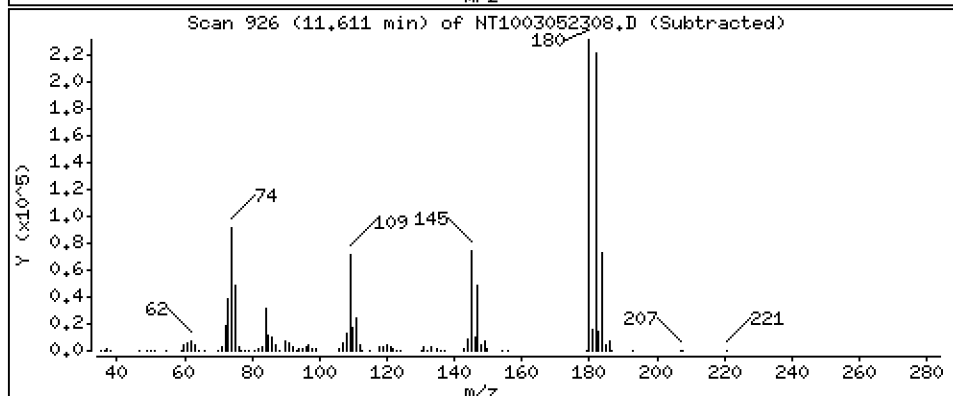
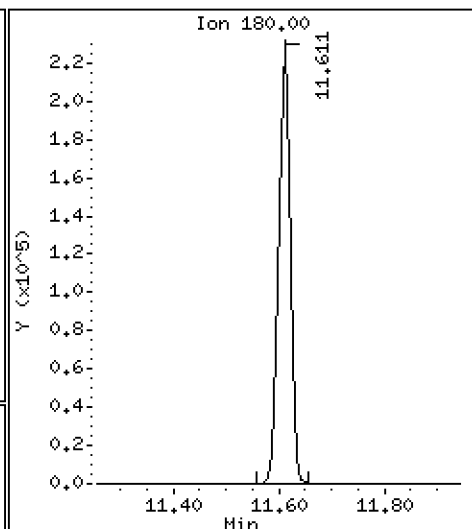
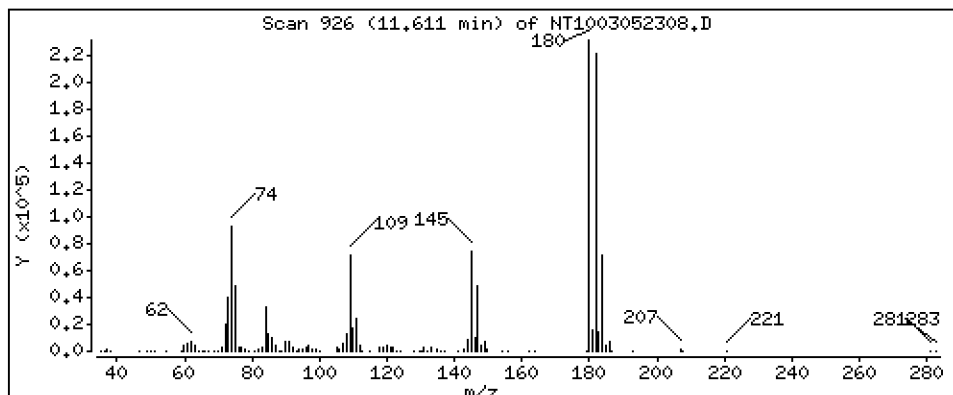
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,149 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

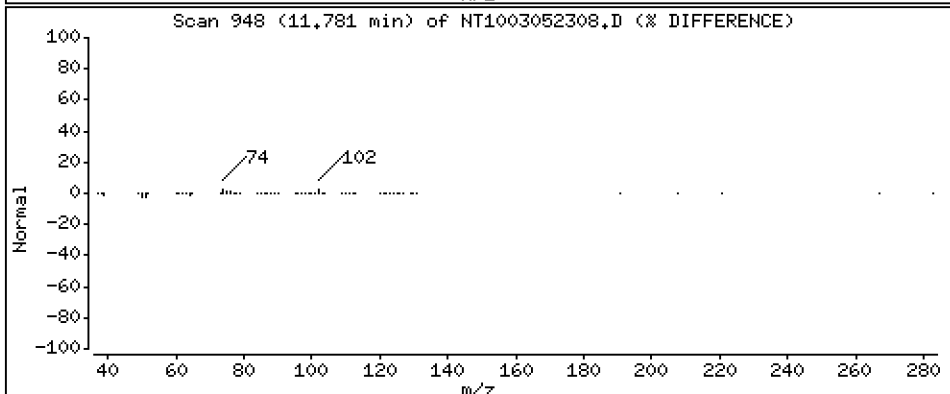
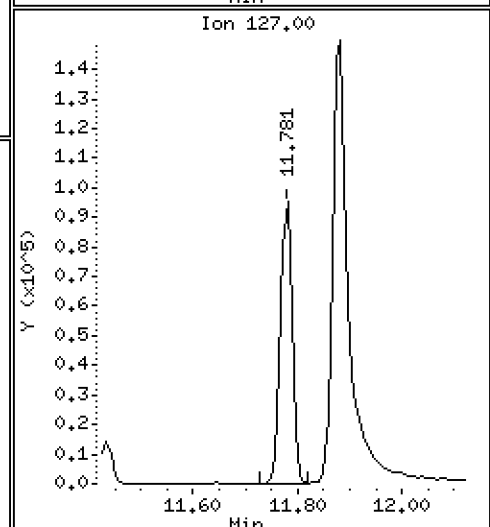
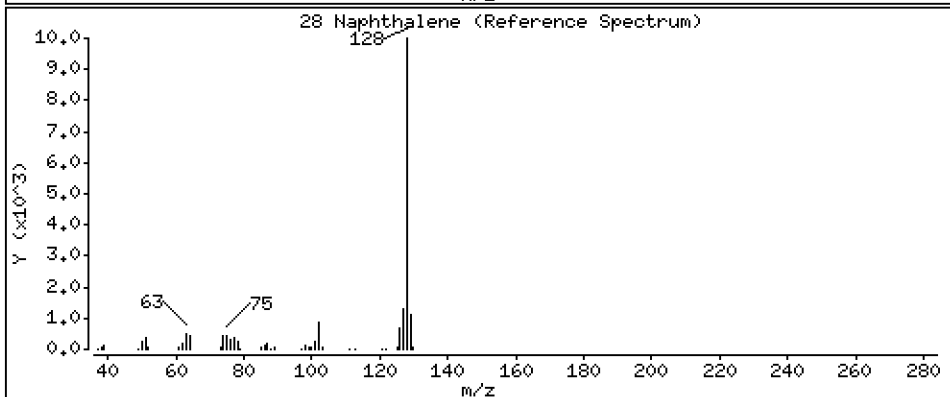
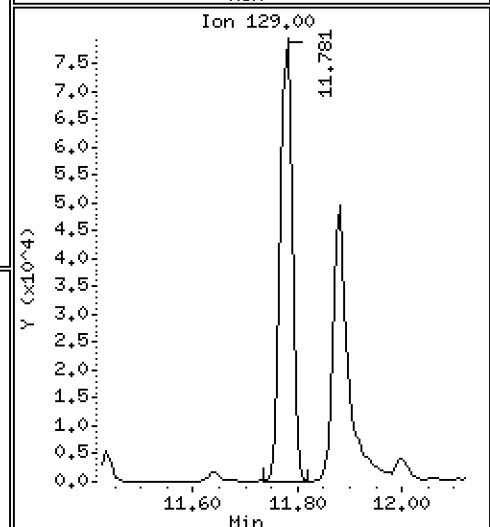
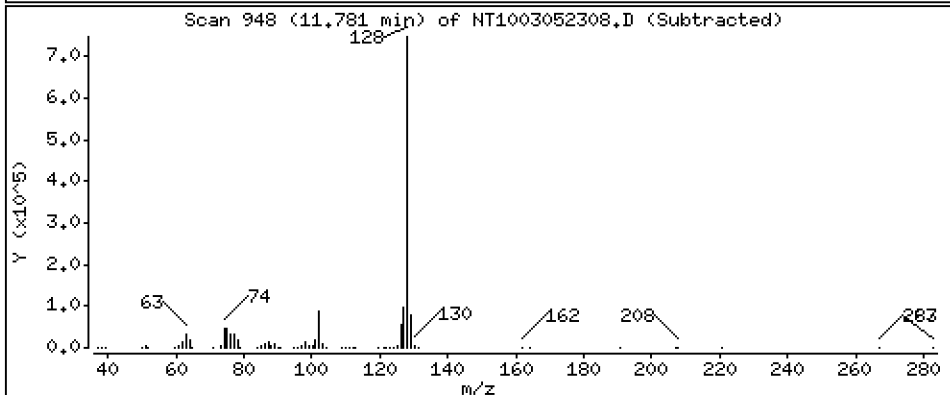
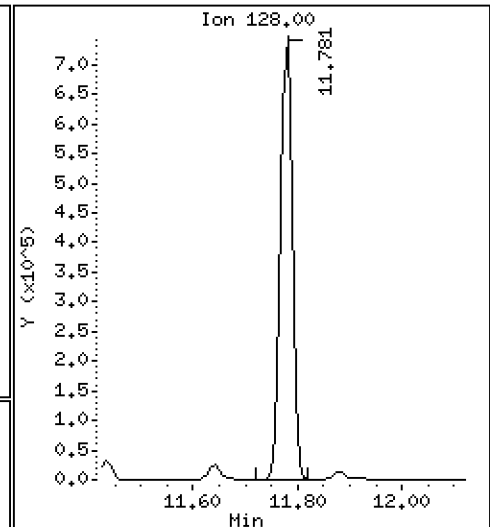
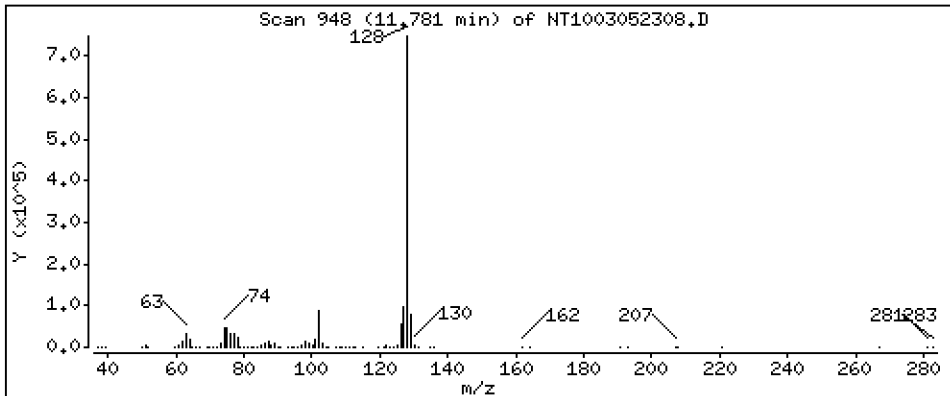
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,027 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

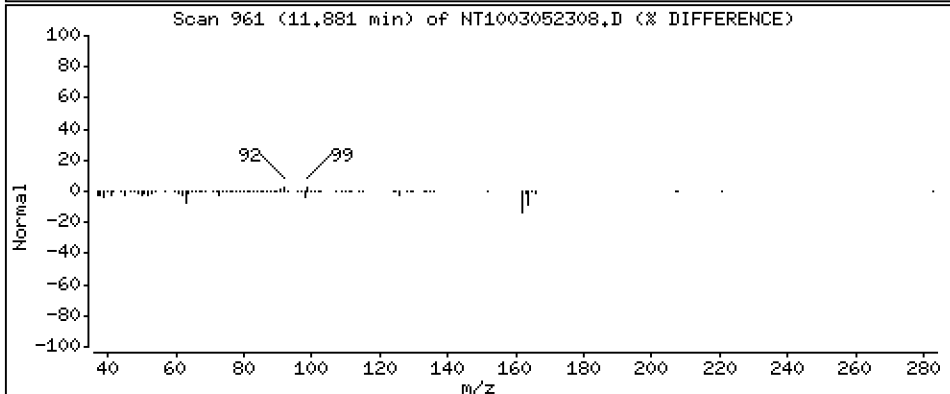
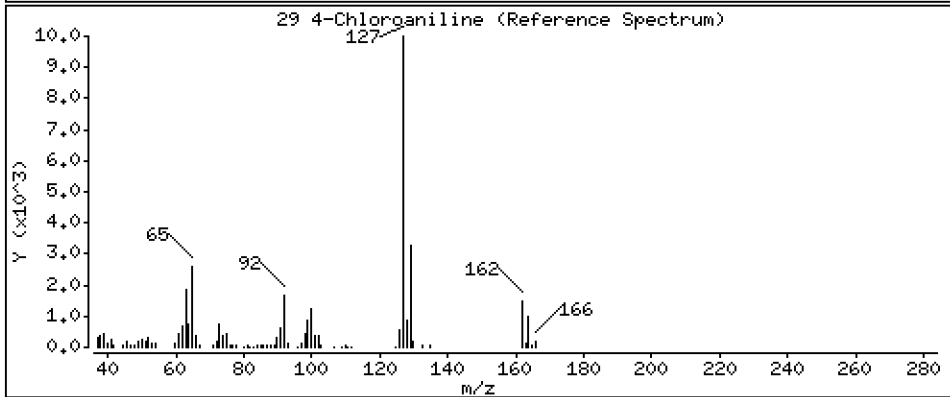
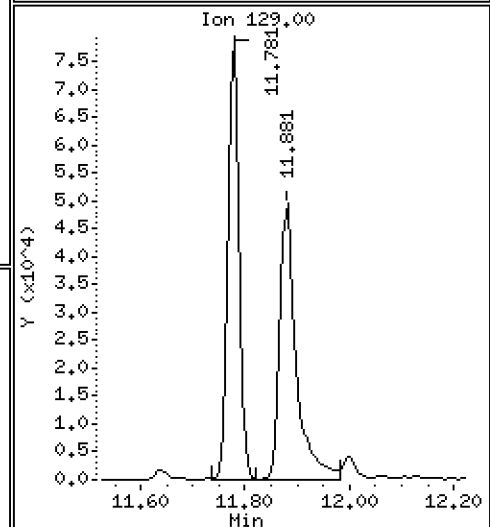
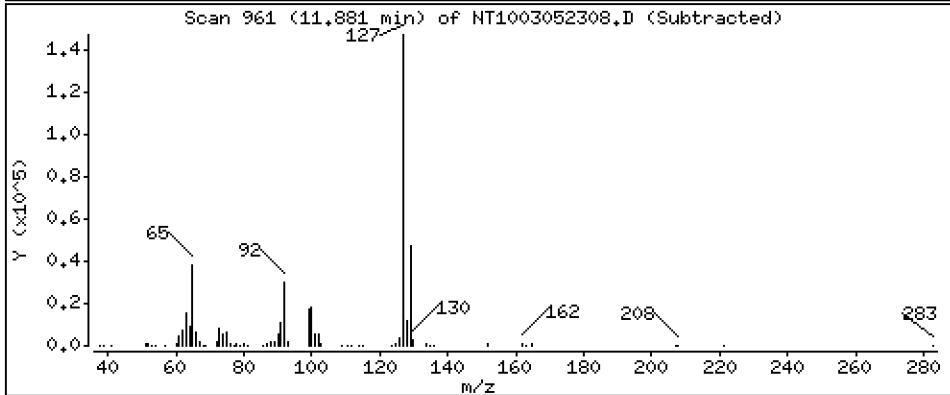
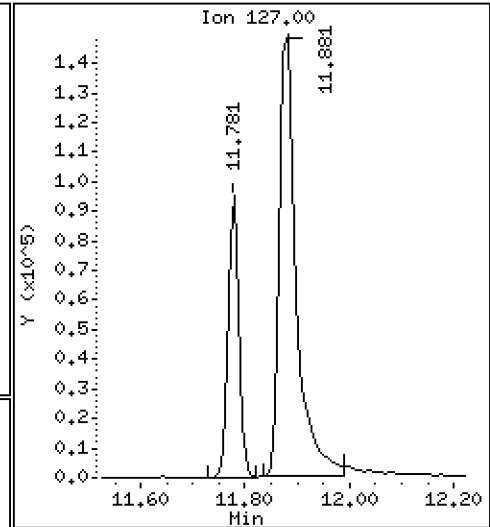
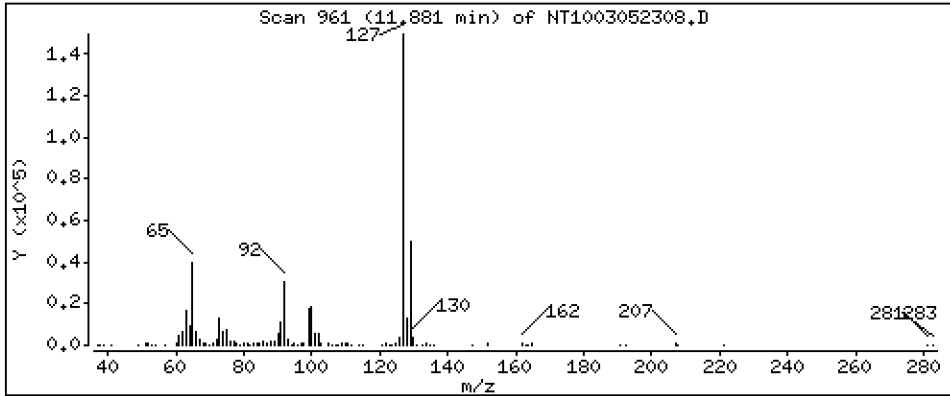
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 2,929 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

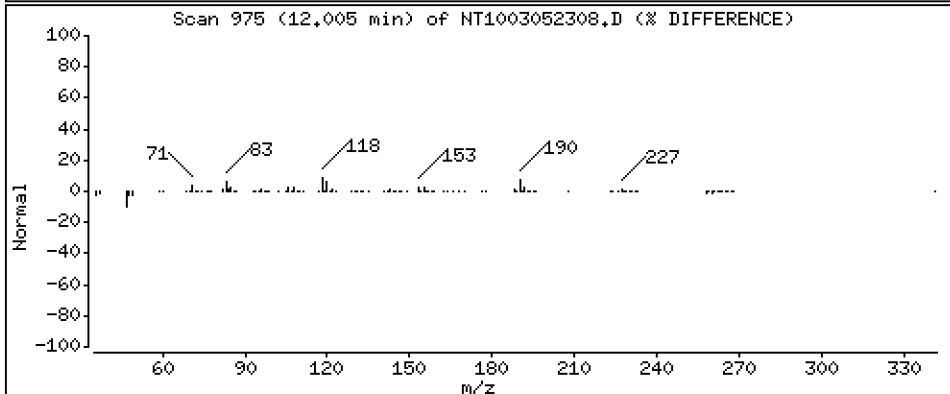
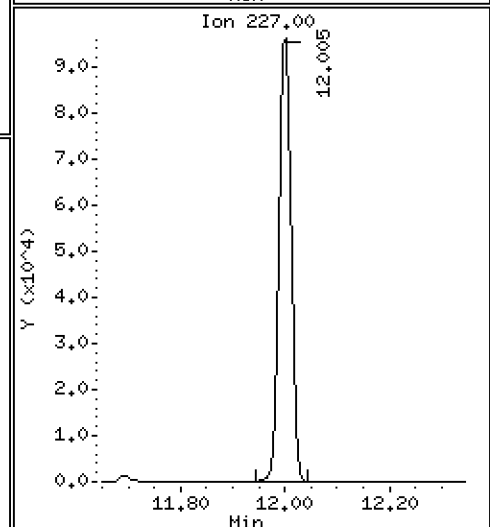
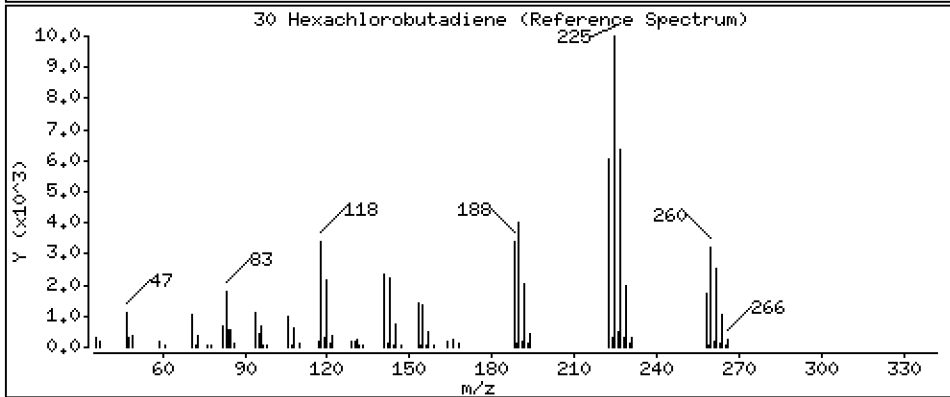
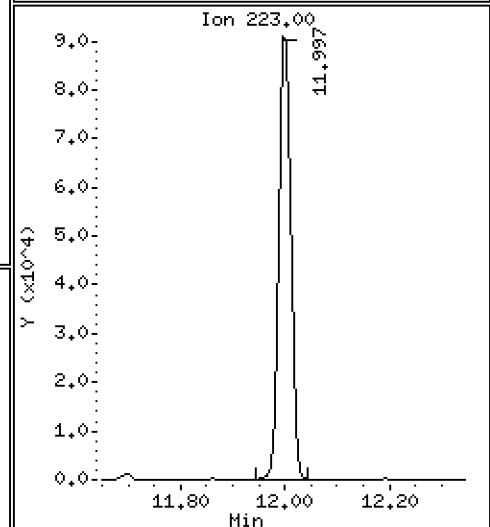
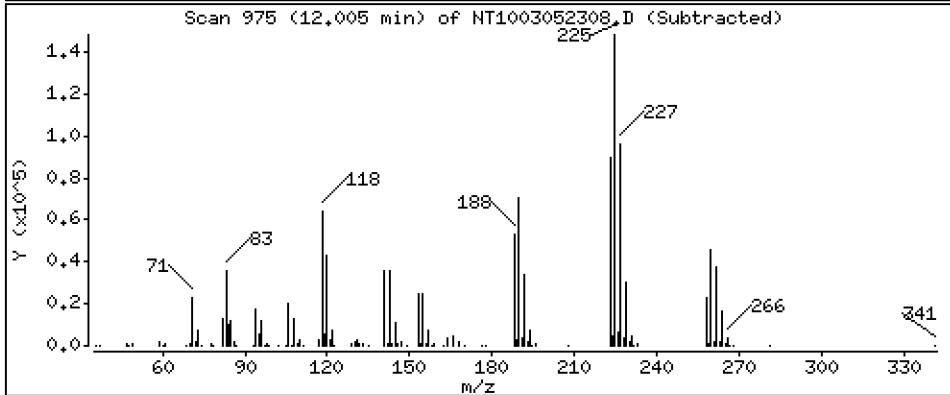
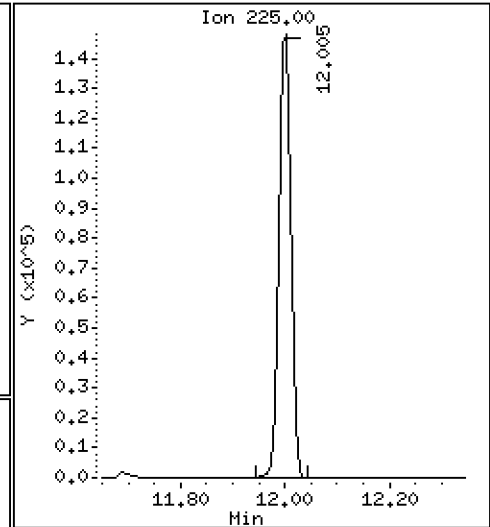
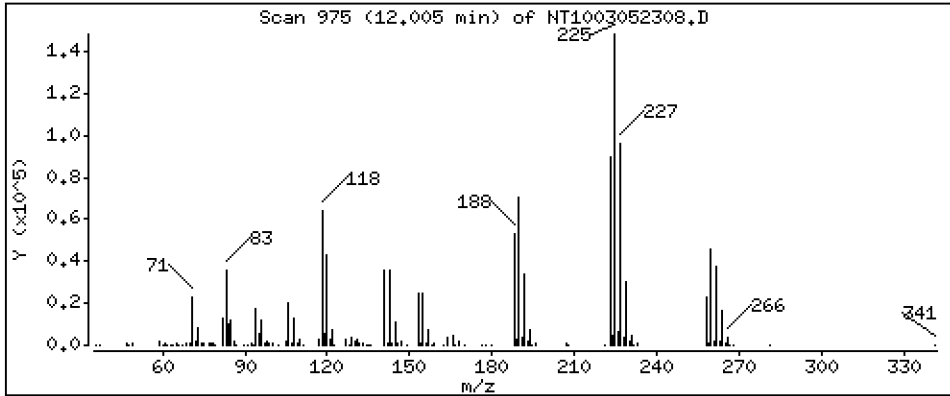
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,417 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

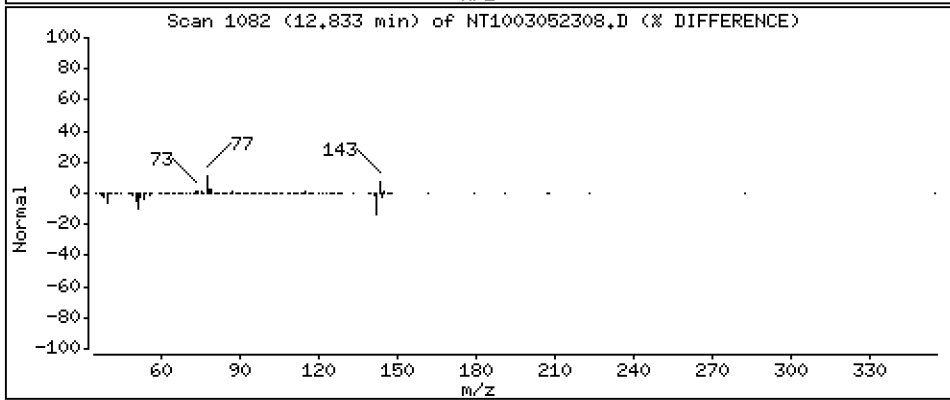
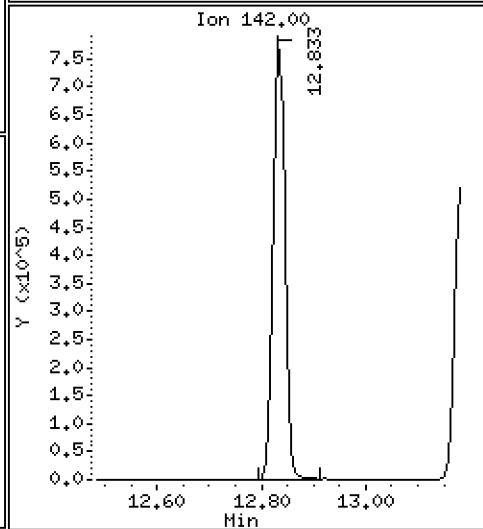
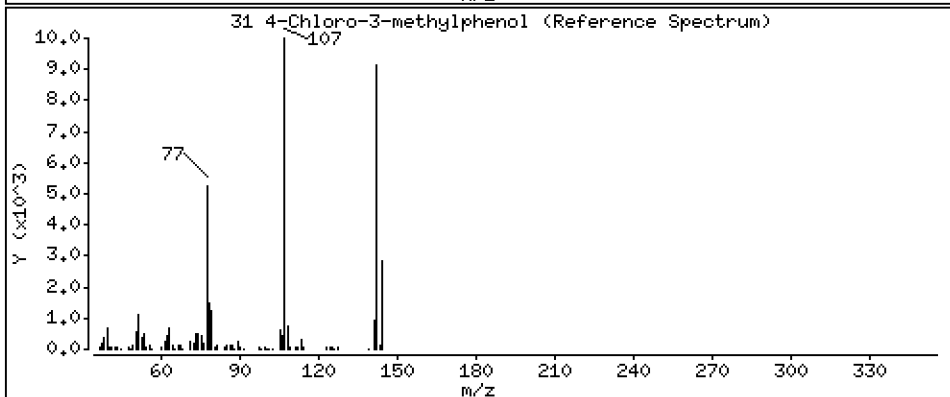
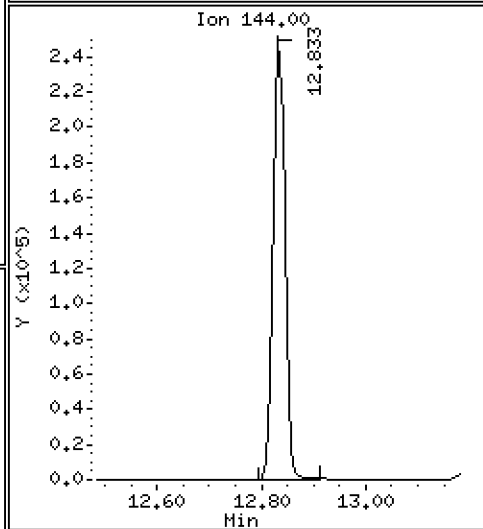
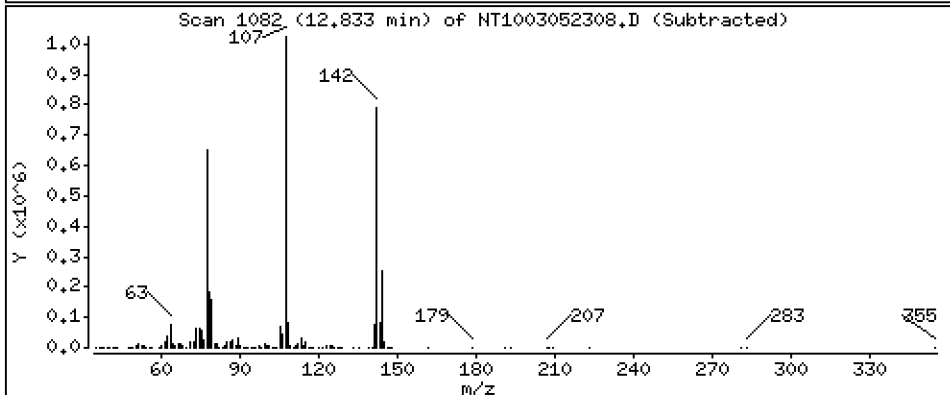
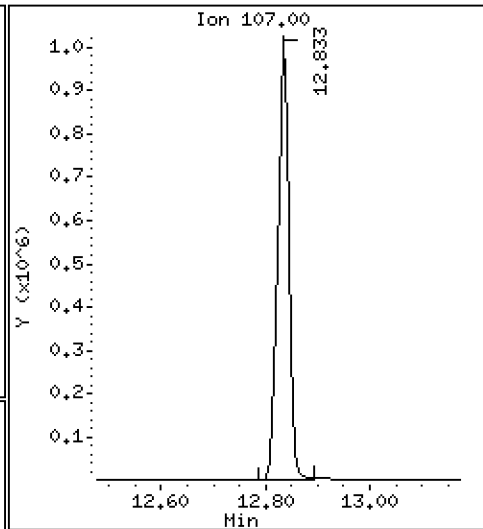
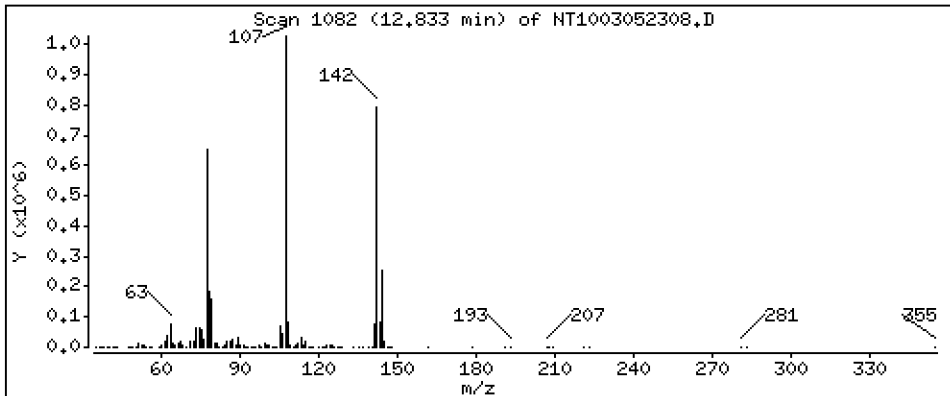
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 15,78 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

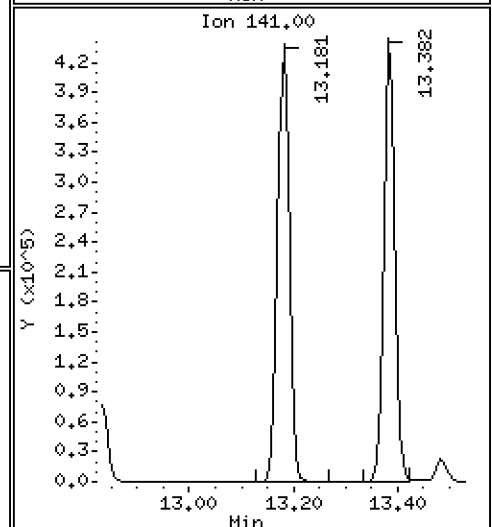
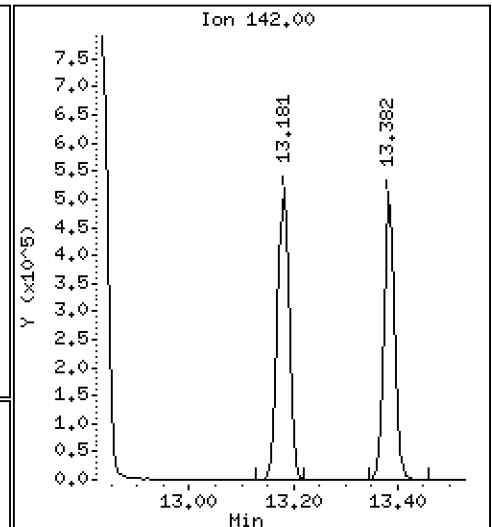
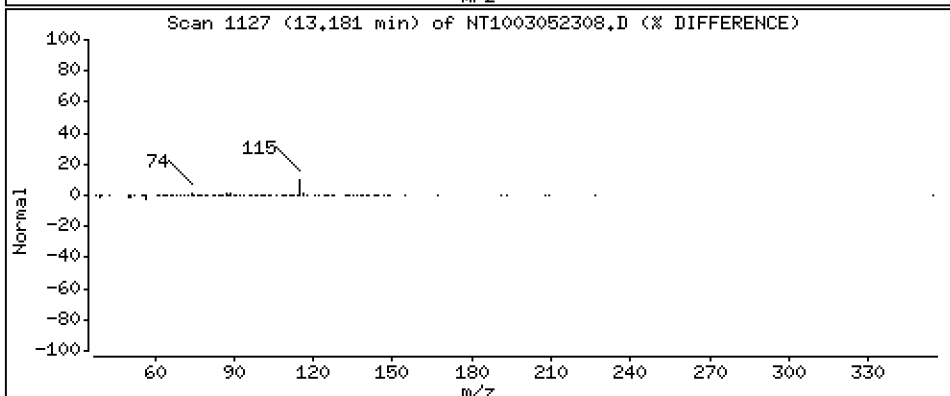
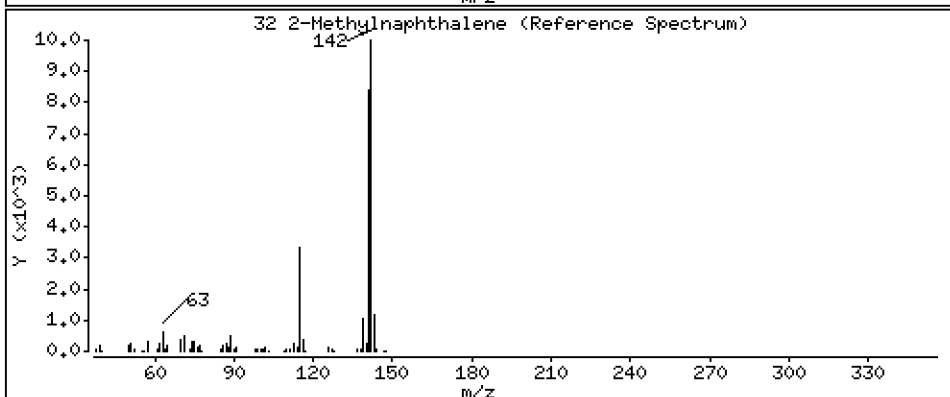
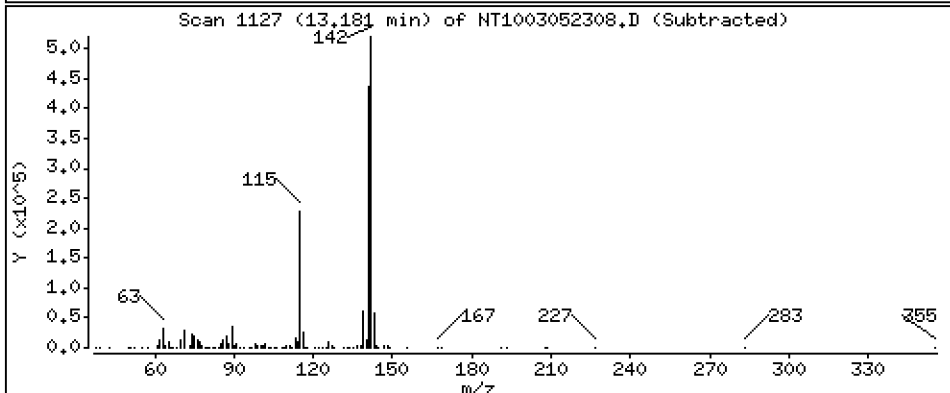
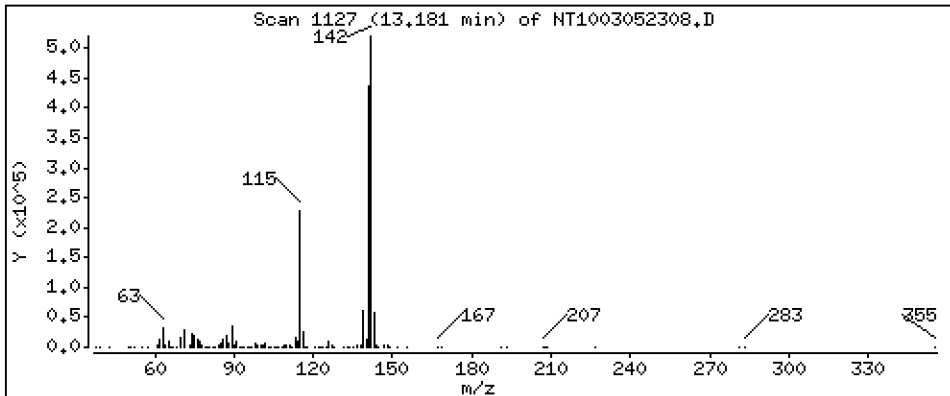
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 3,945 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

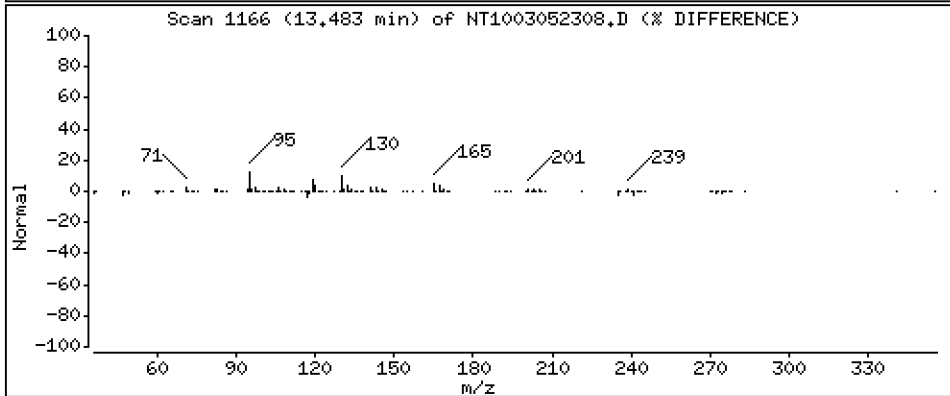
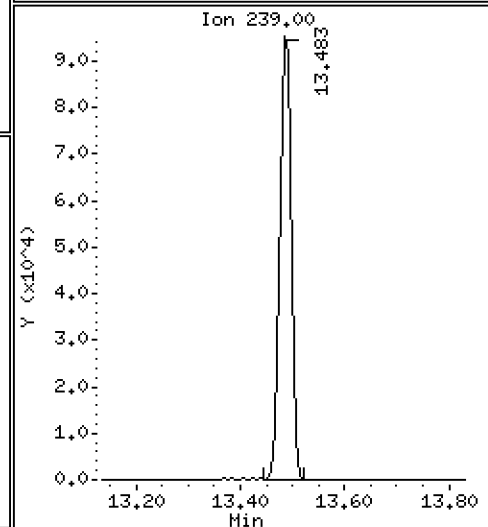
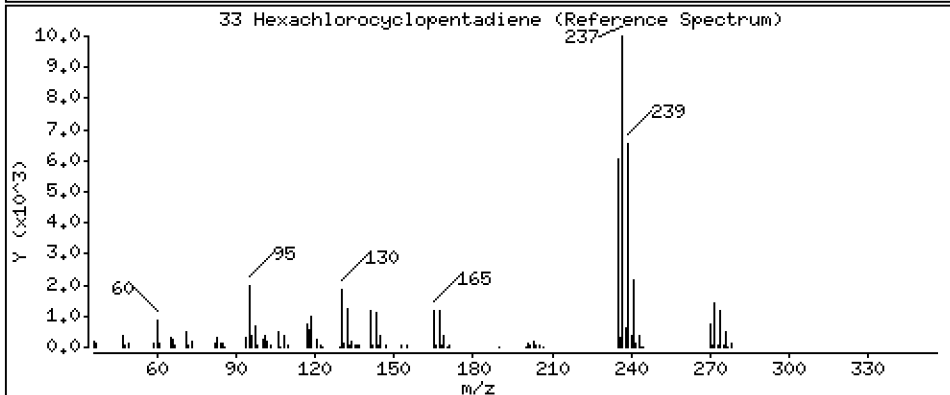
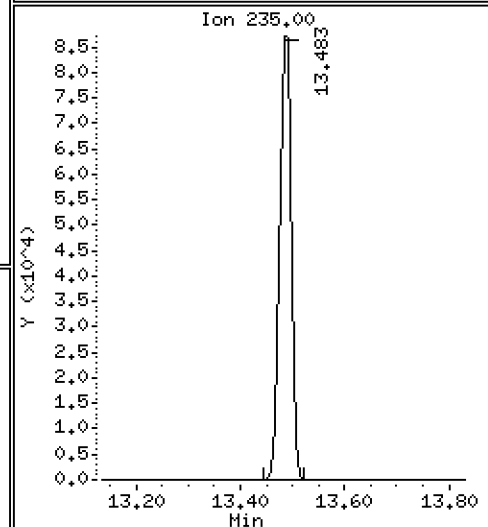
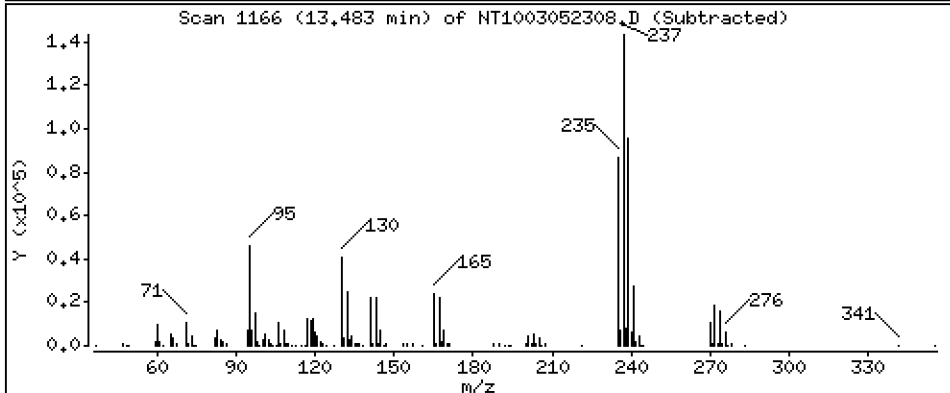
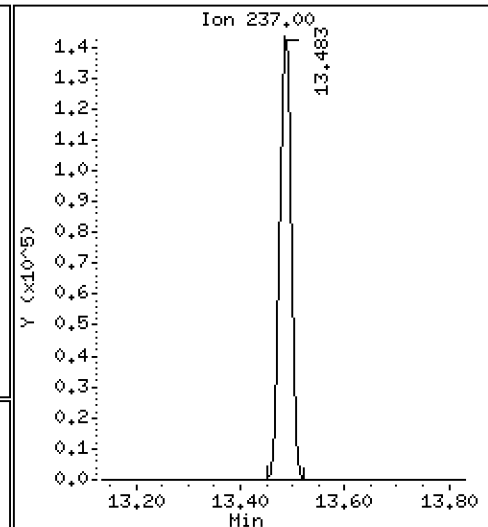
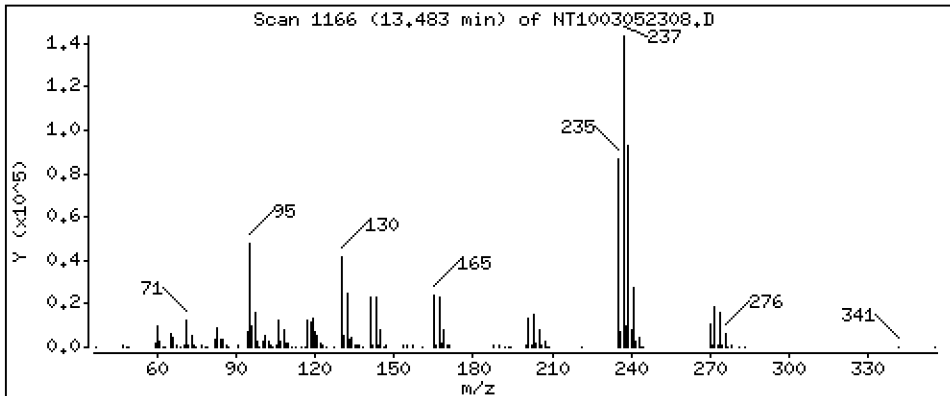
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 10,58 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

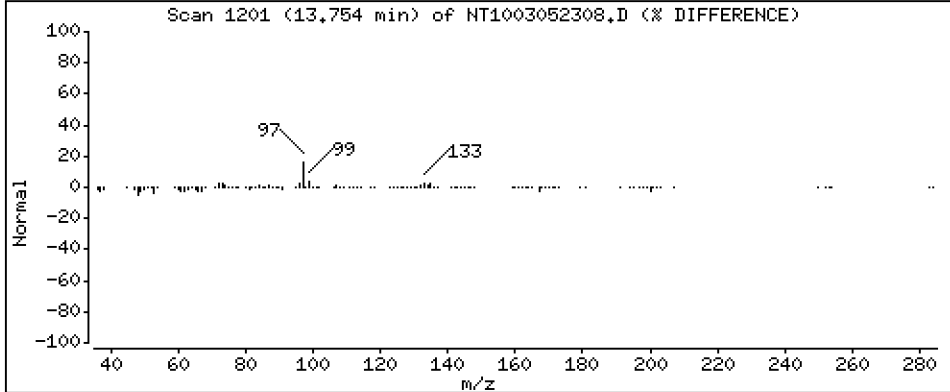
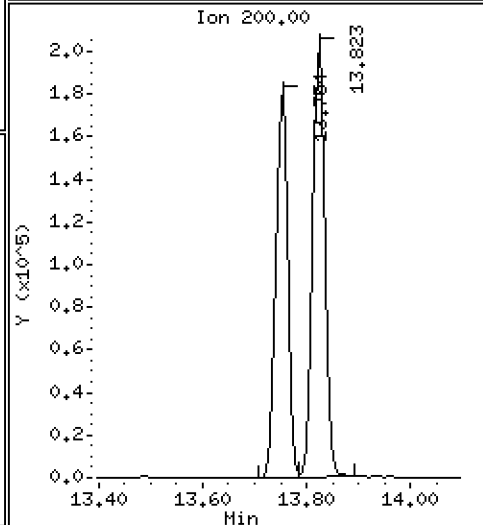
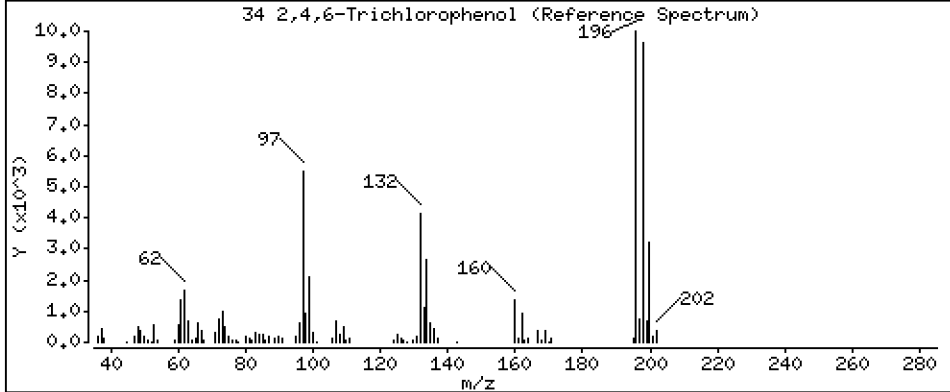
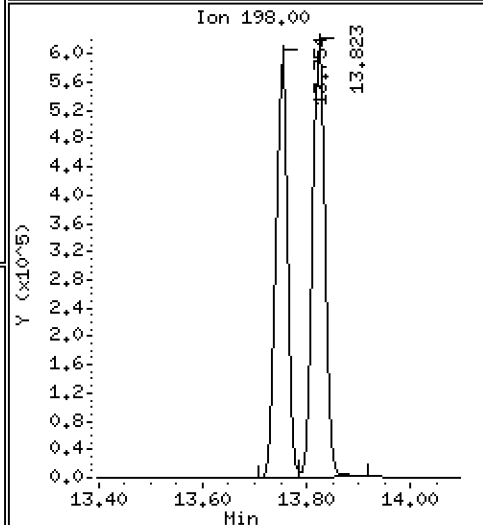
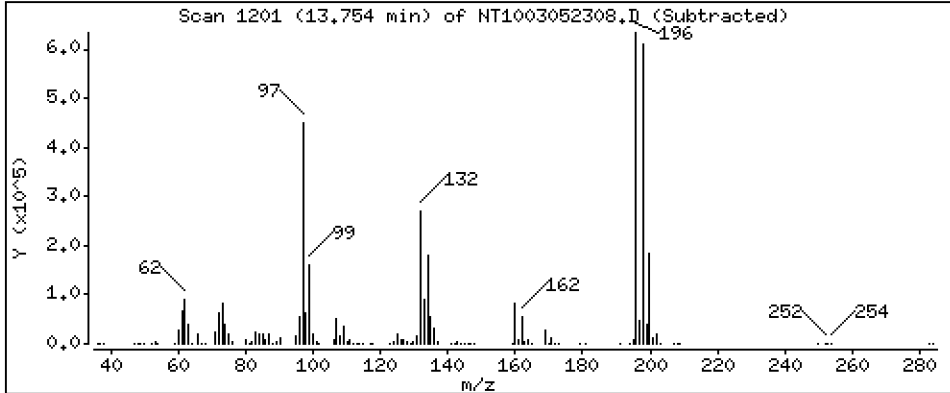
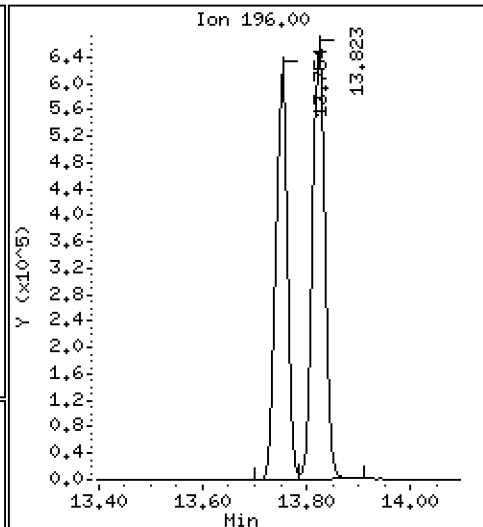
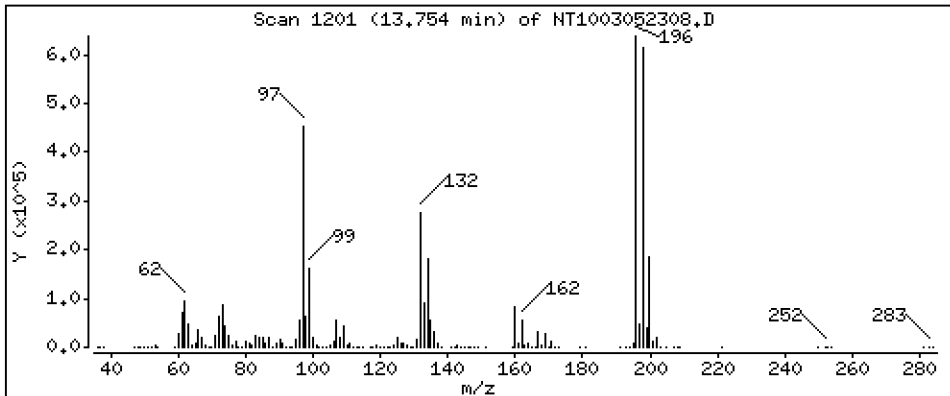
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 16,25 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

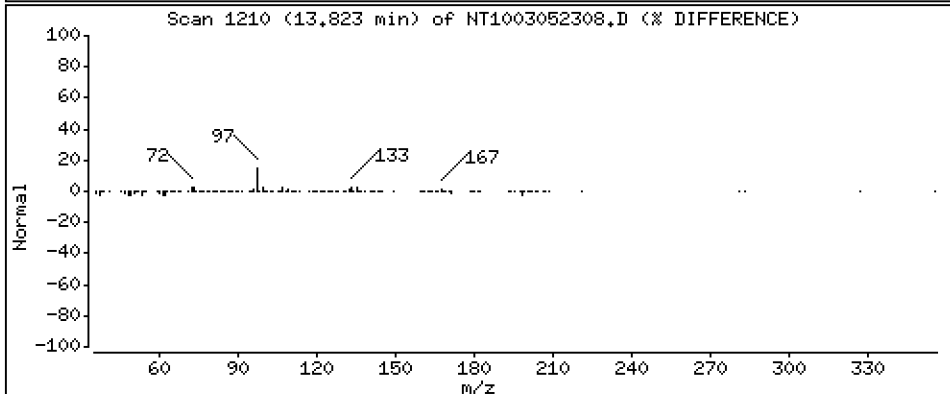
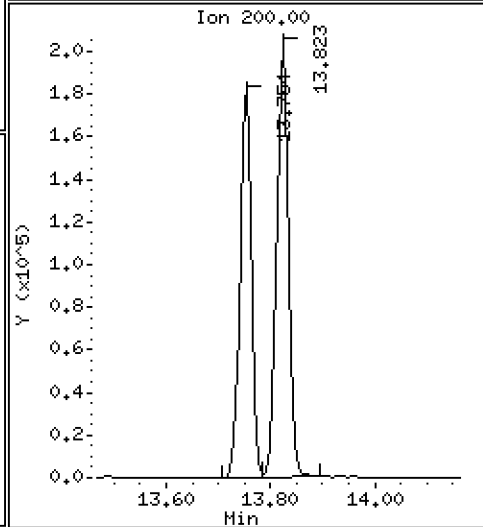
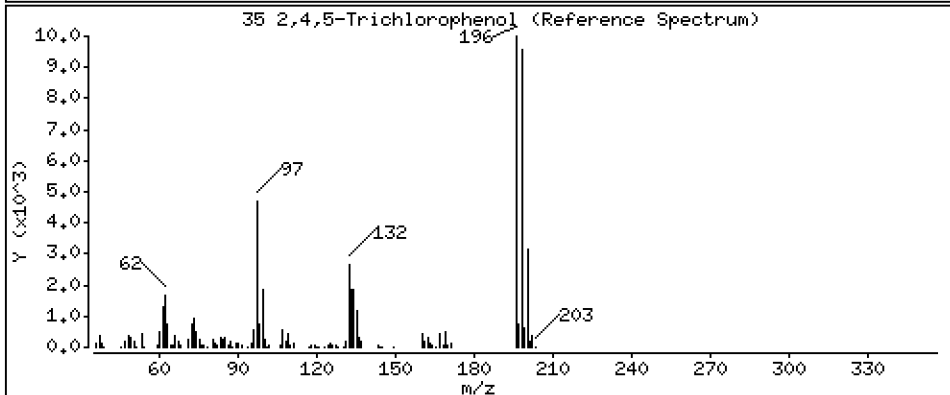
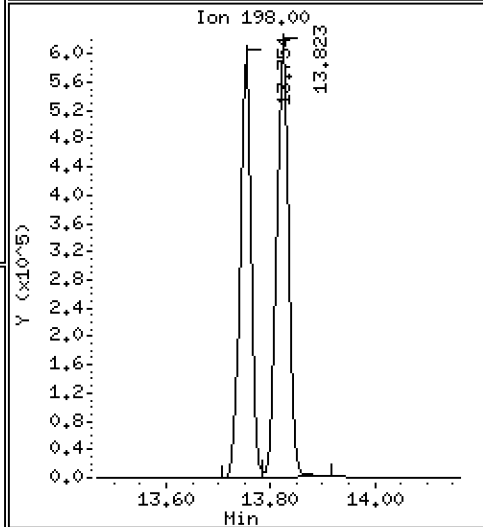
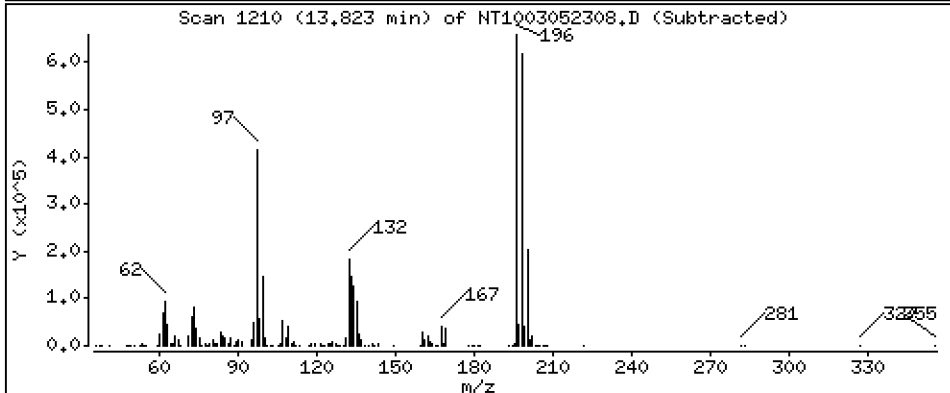
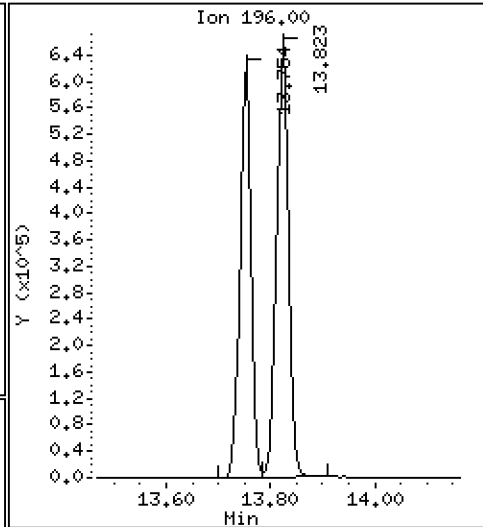
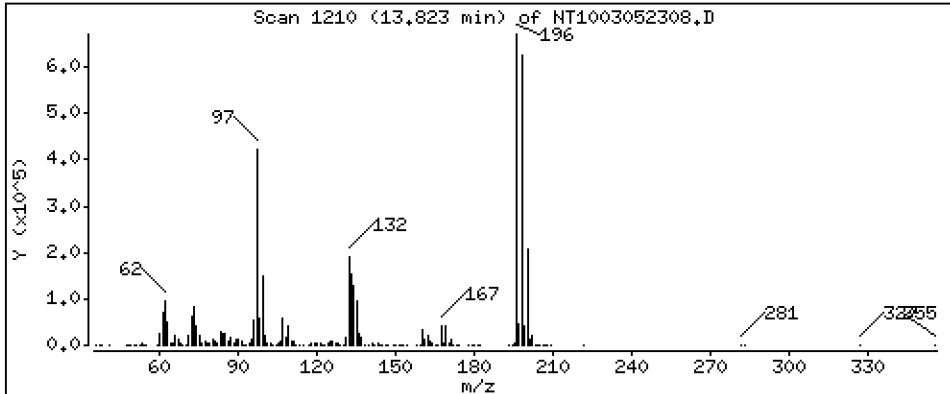
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 16,66 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

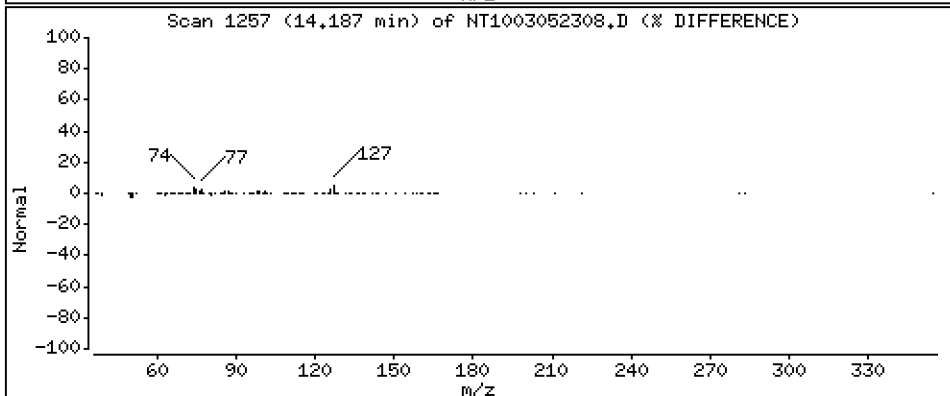
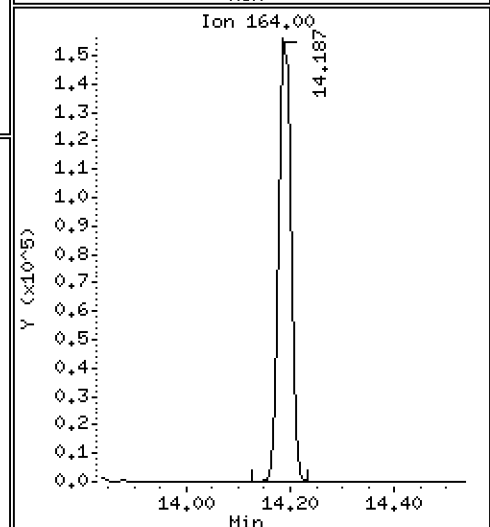
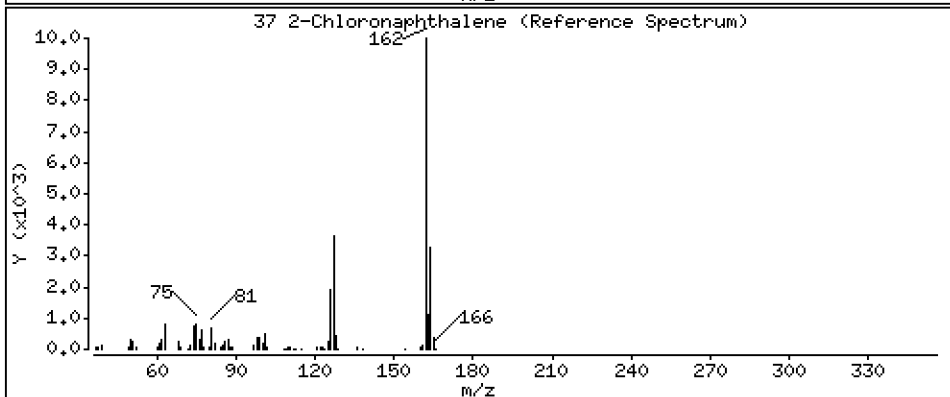
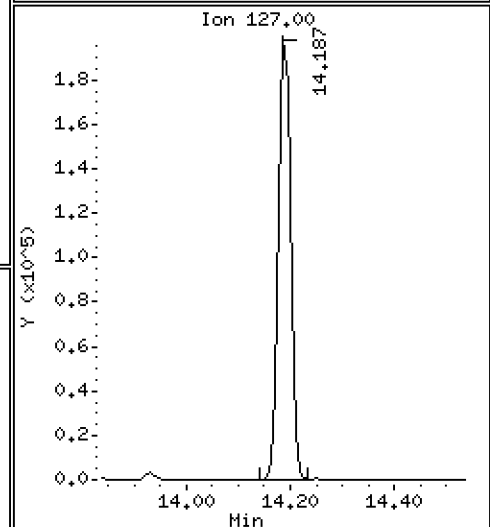
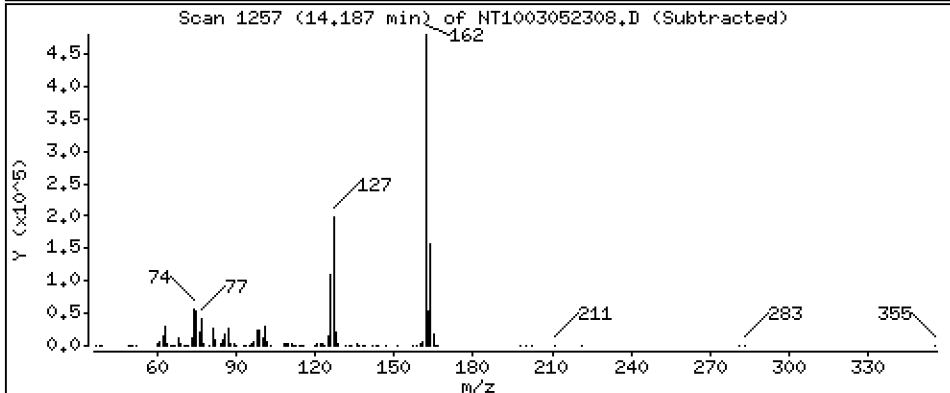
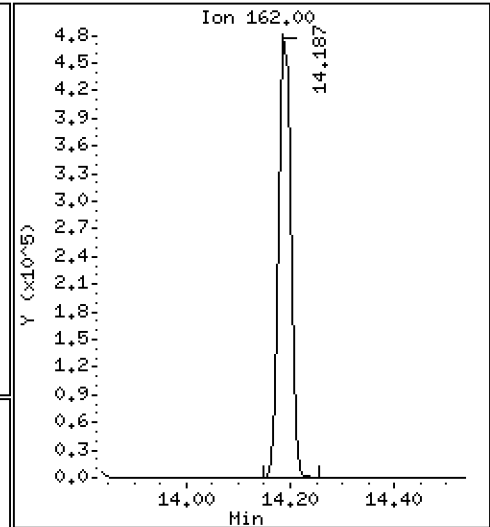
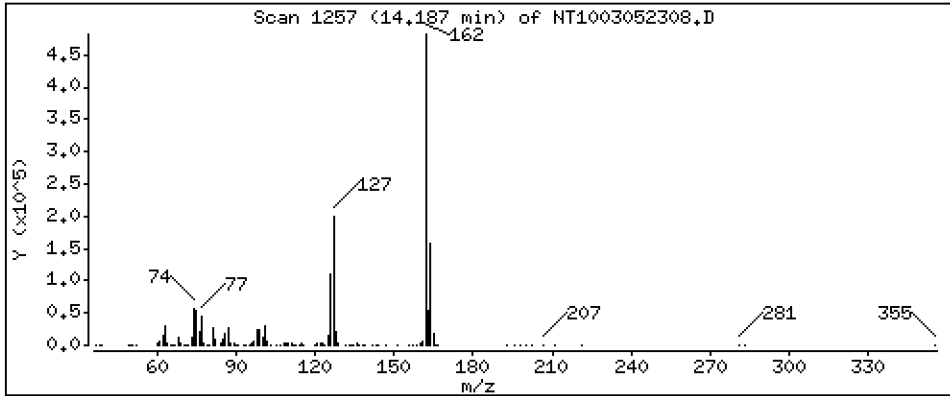
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 4,691 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

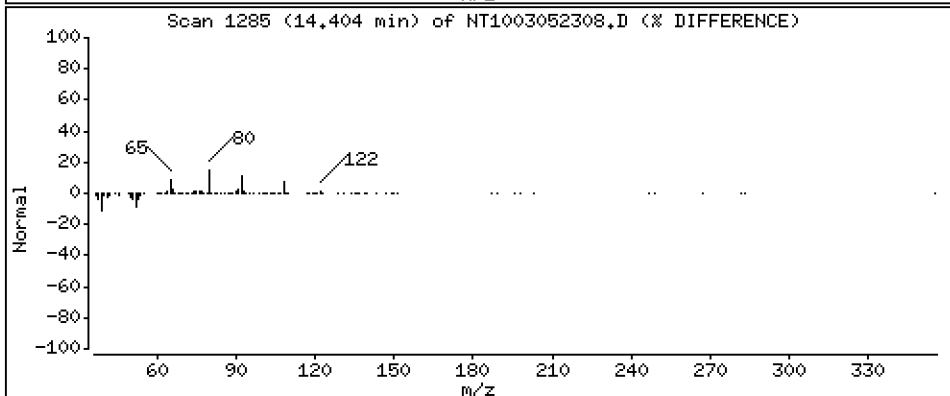
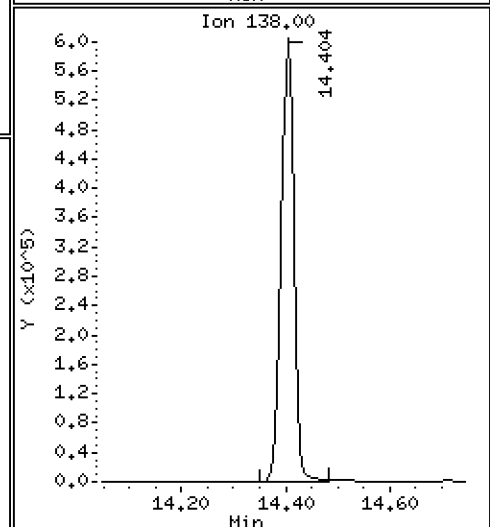
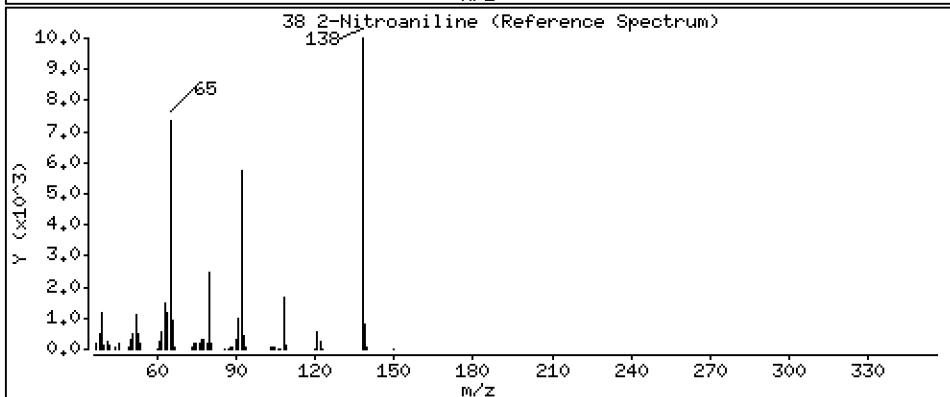
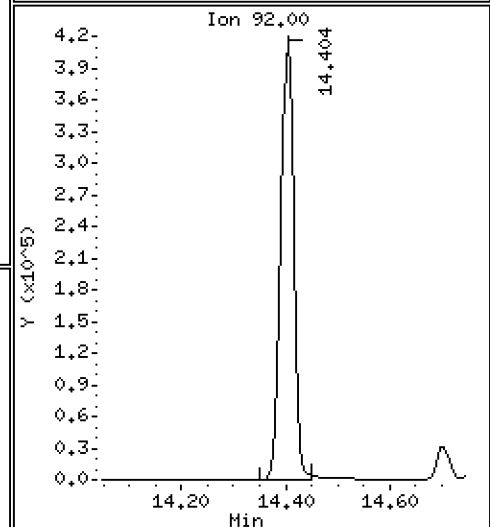
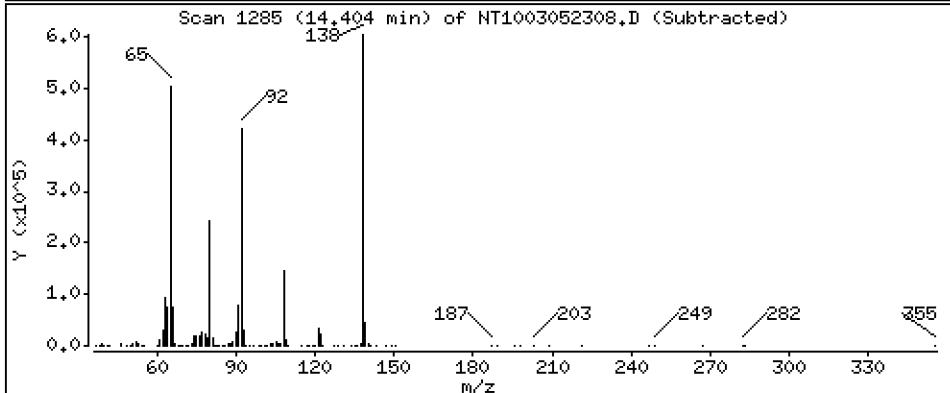
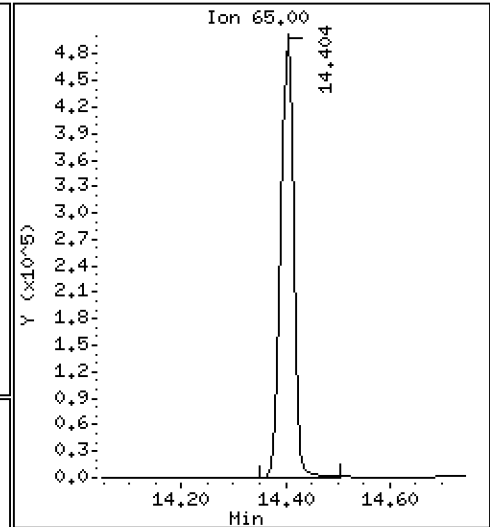
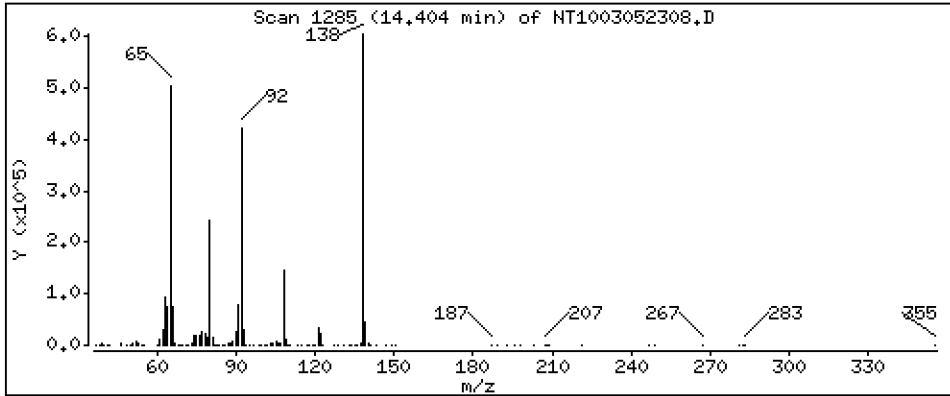
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 17,98 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

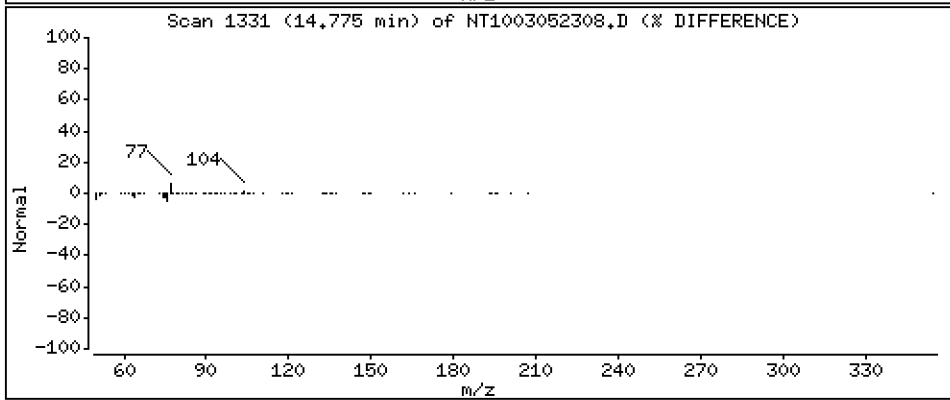
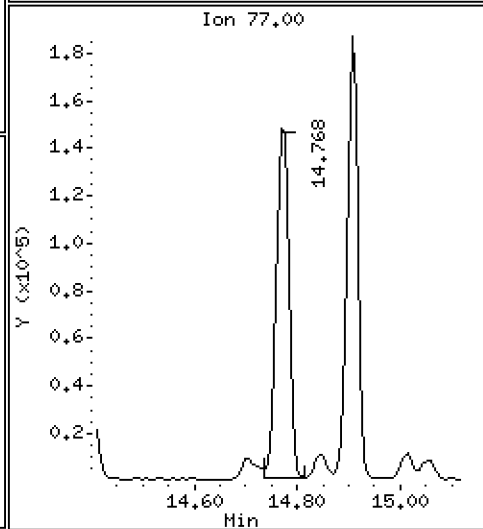
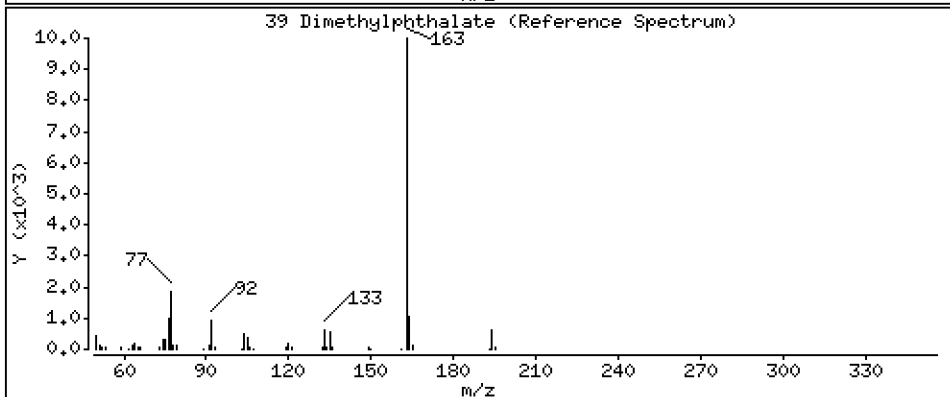
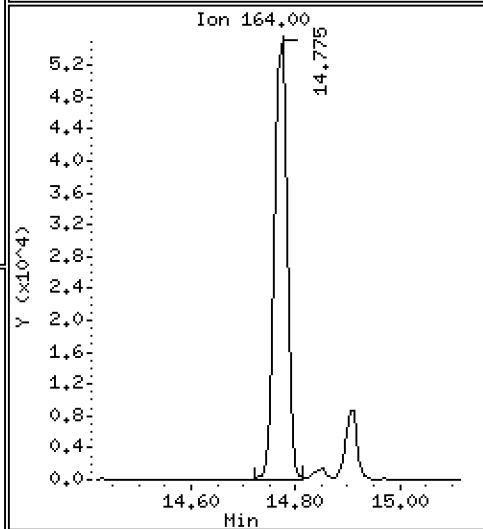
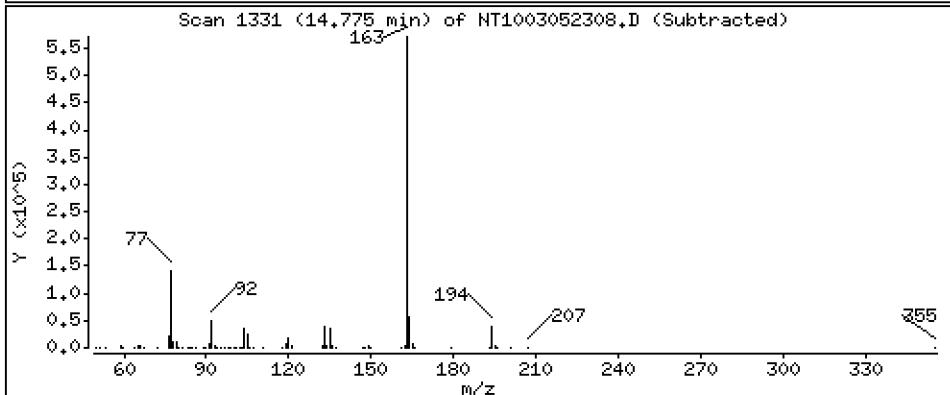
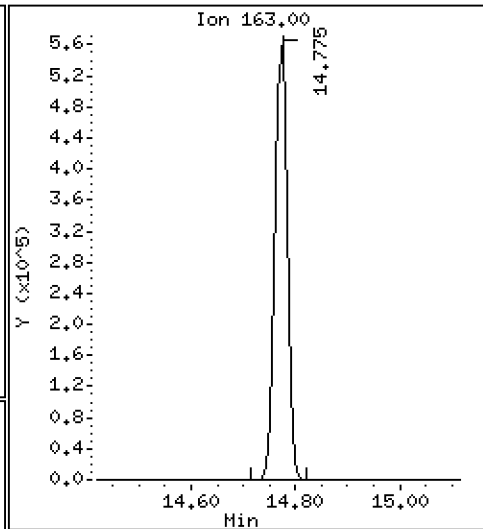
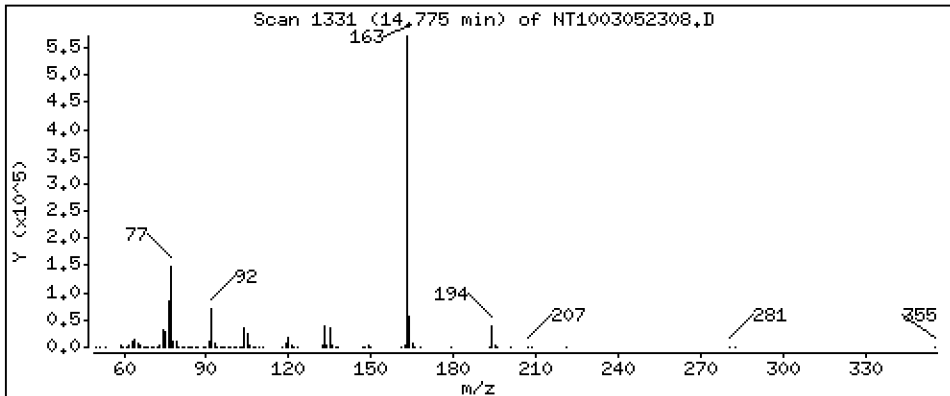
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,929 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

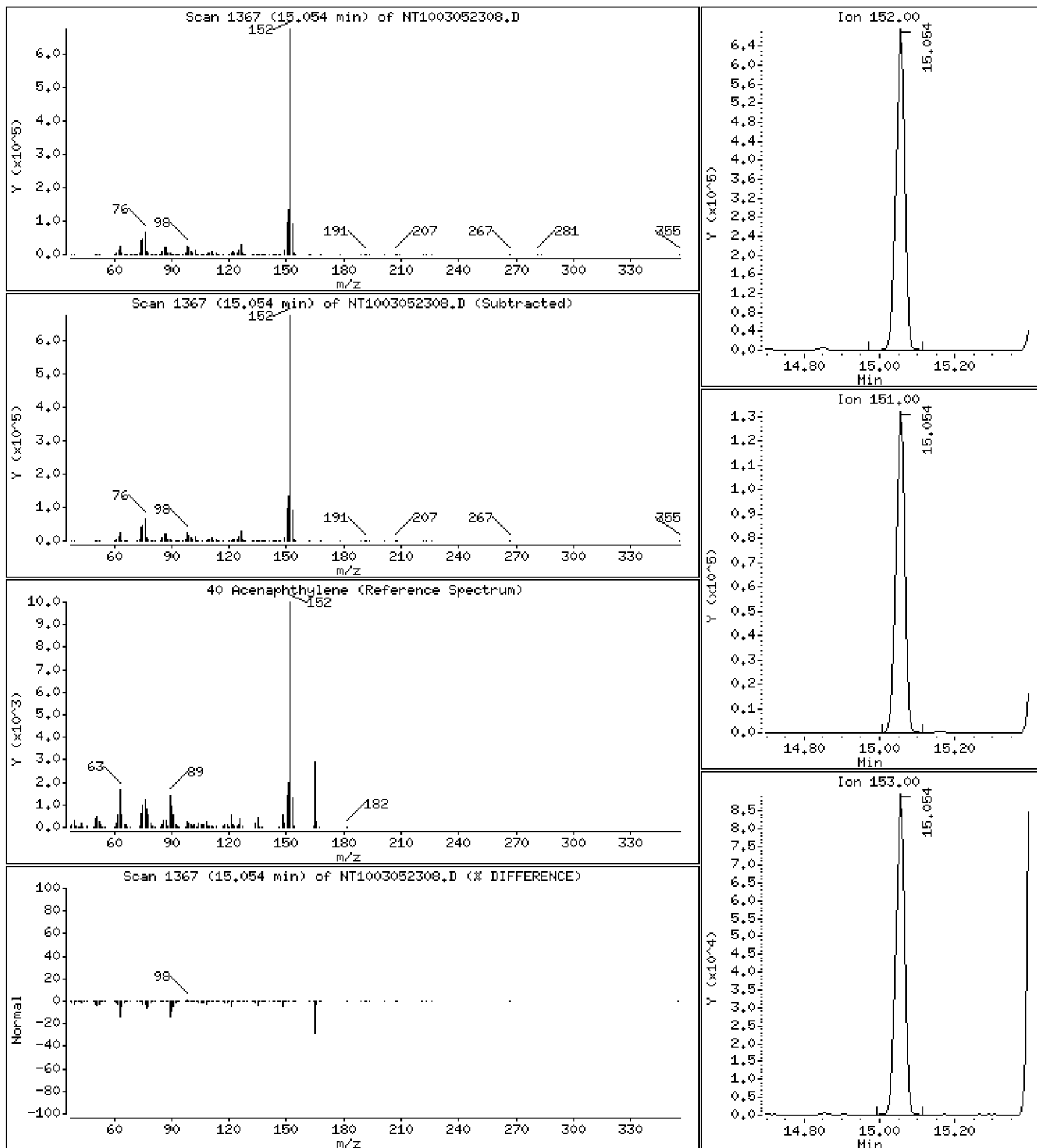
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,431 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

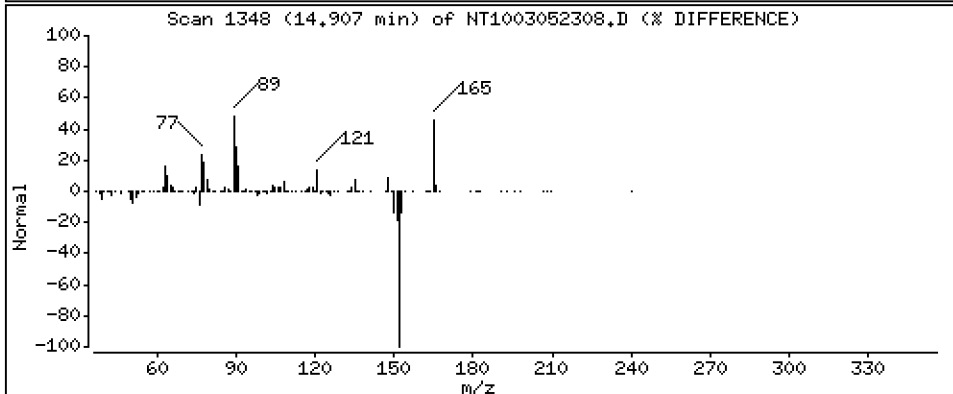
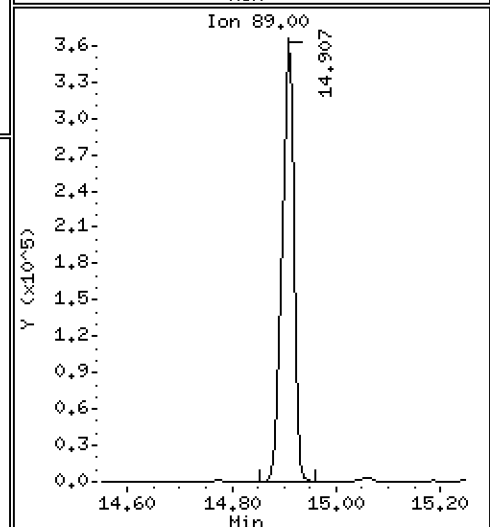
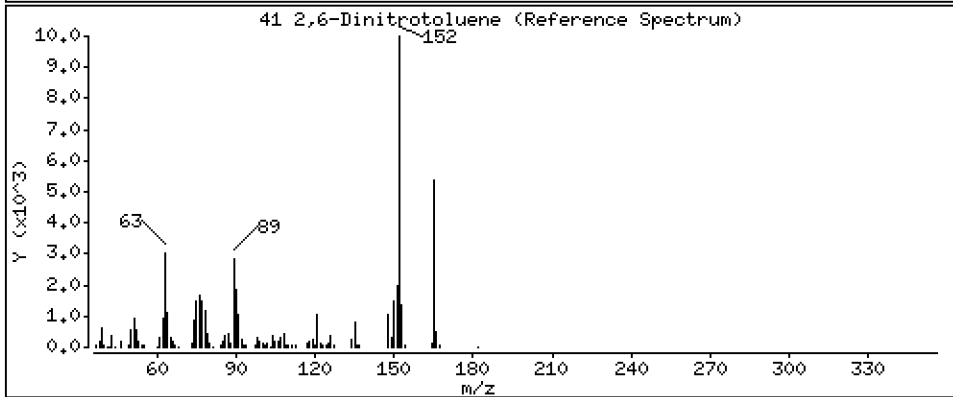
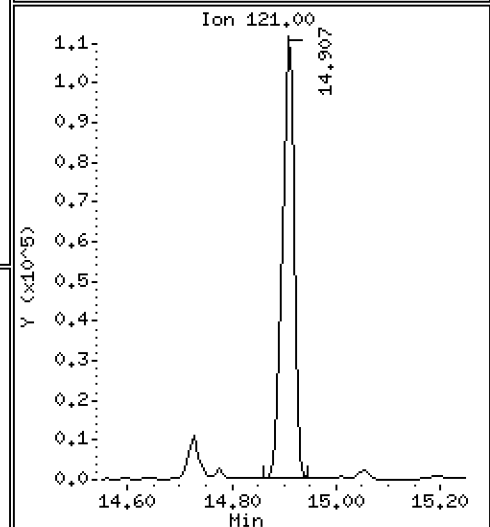
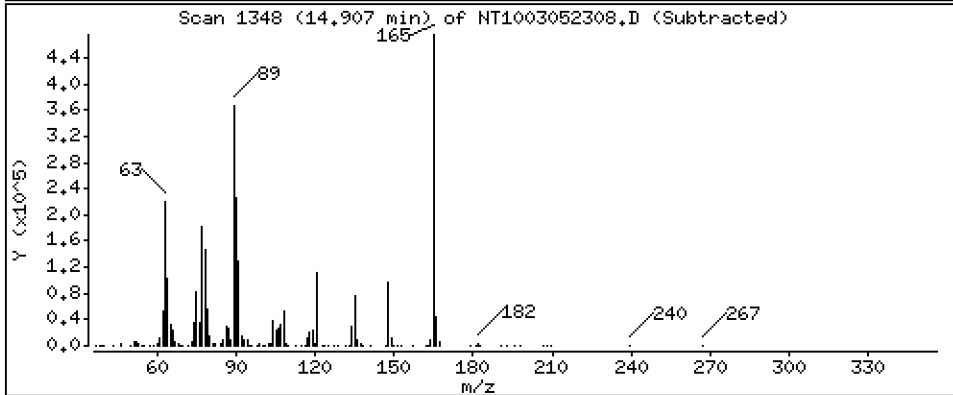
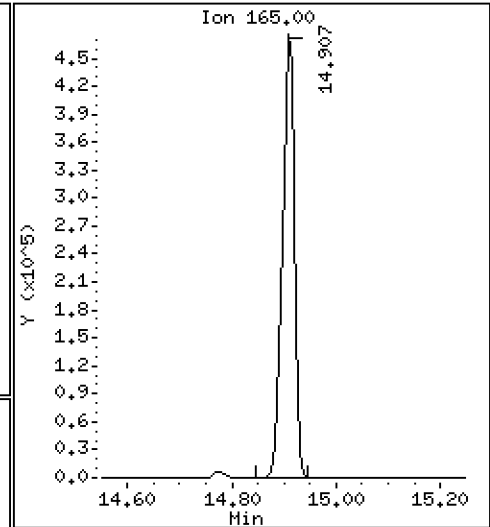
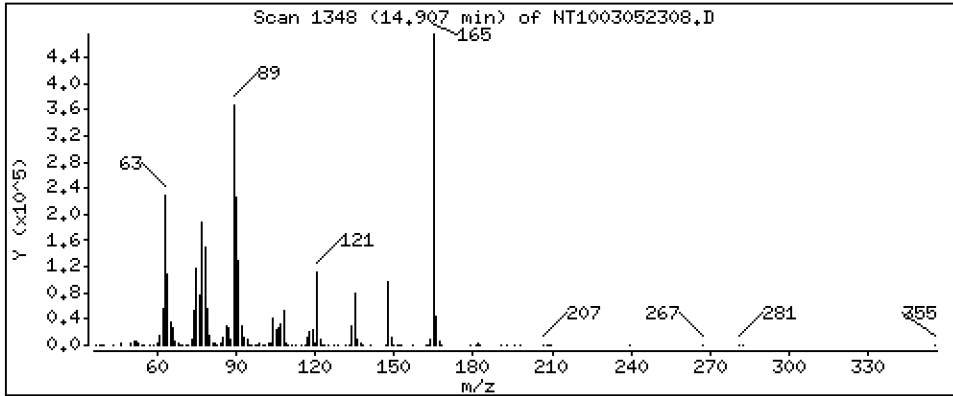
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 17,71 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

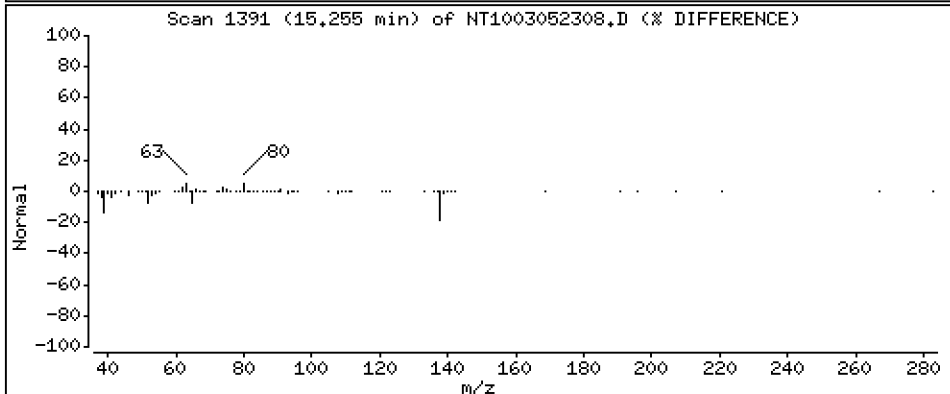
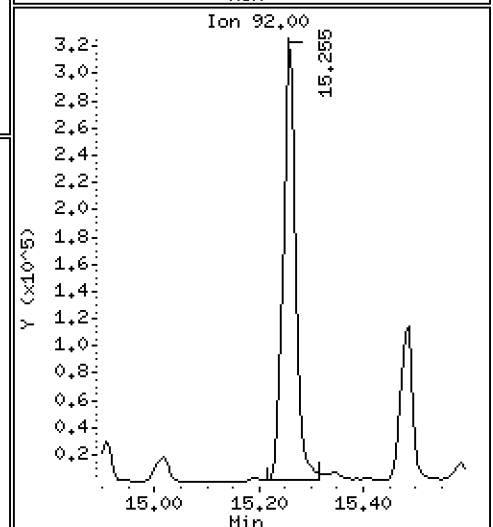
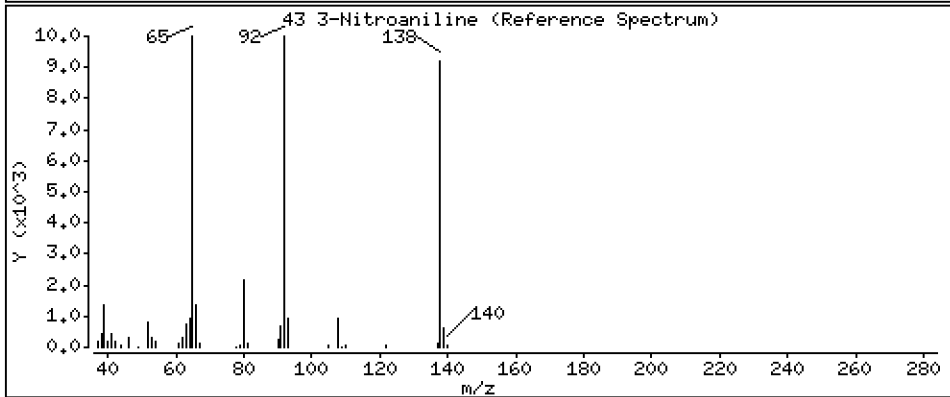
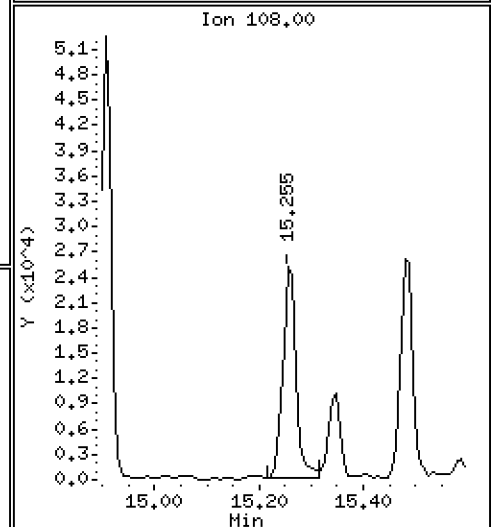
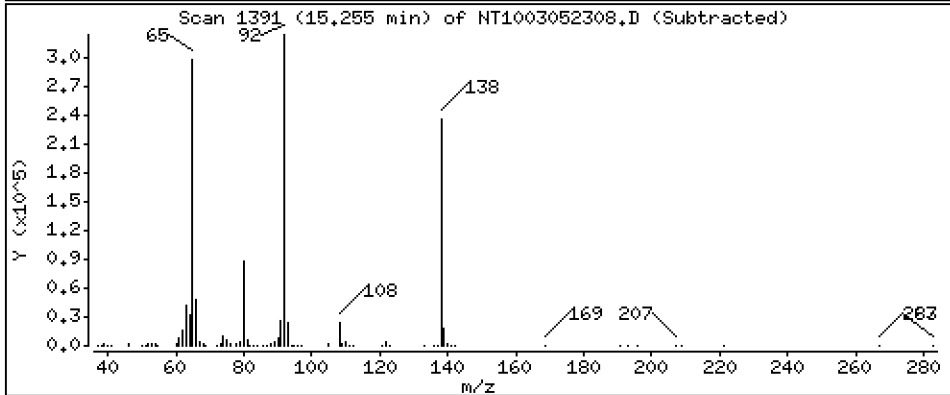
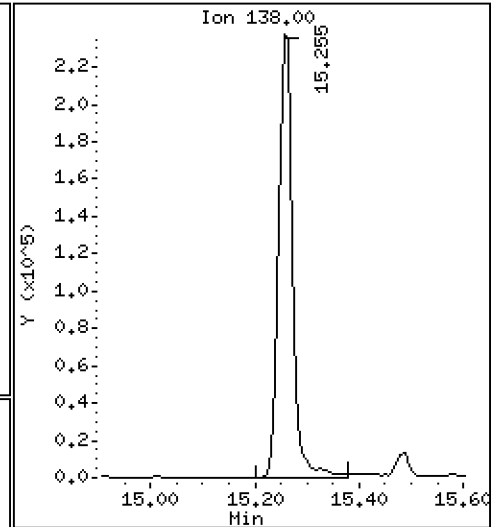
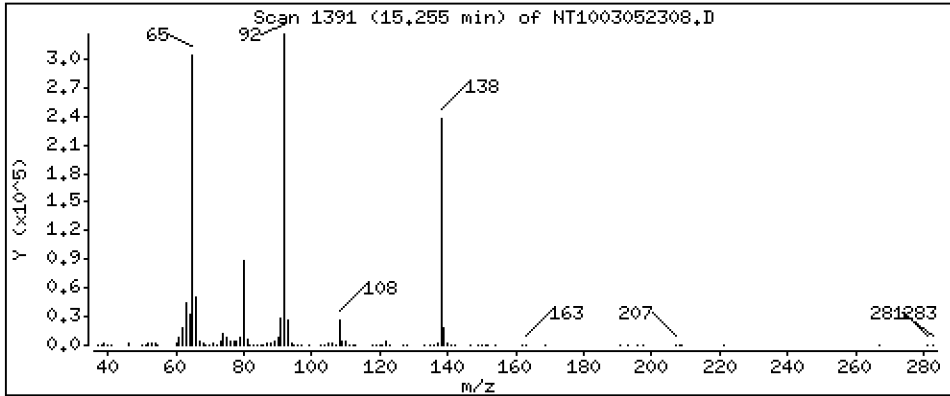
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 9,425 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

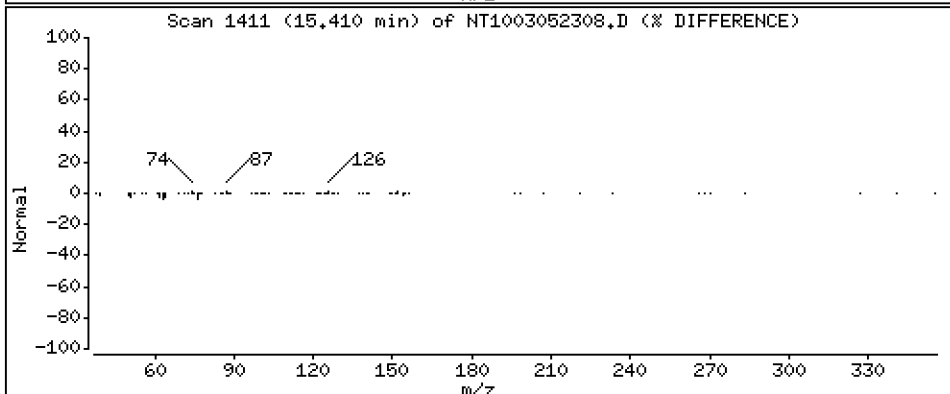
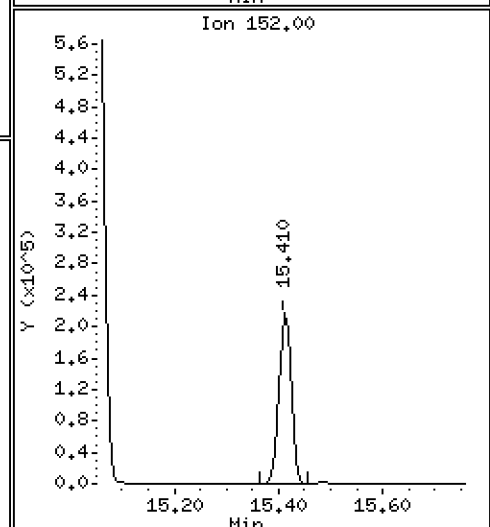
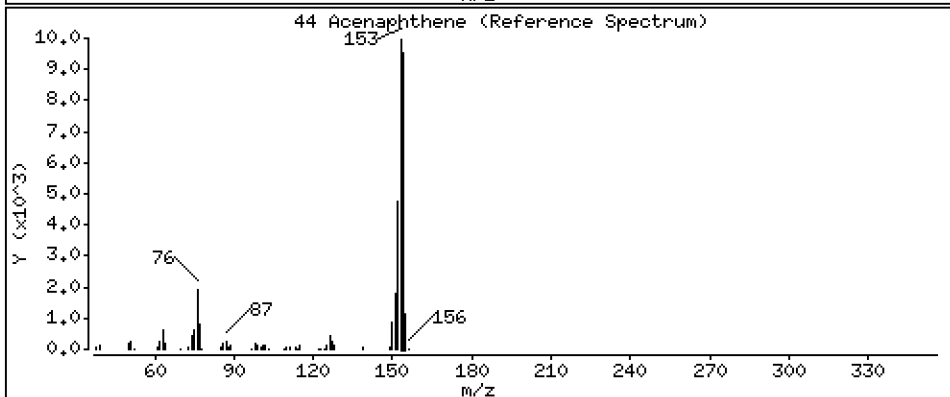
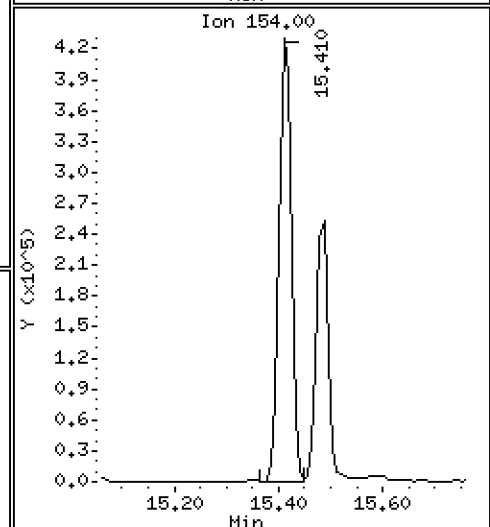
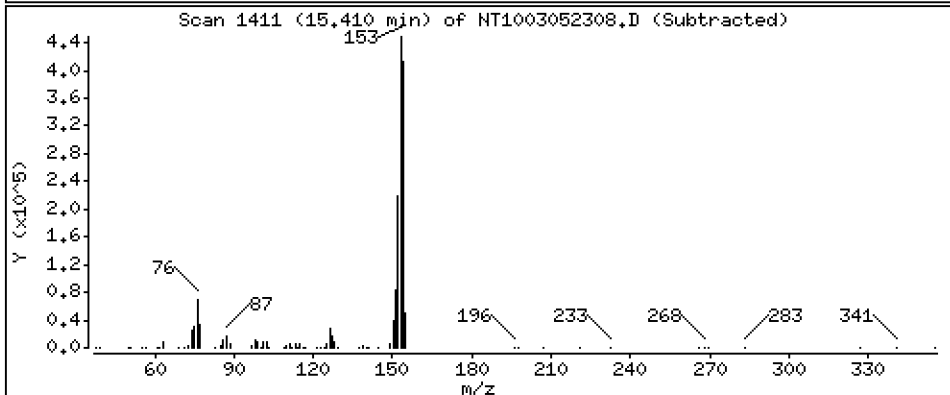
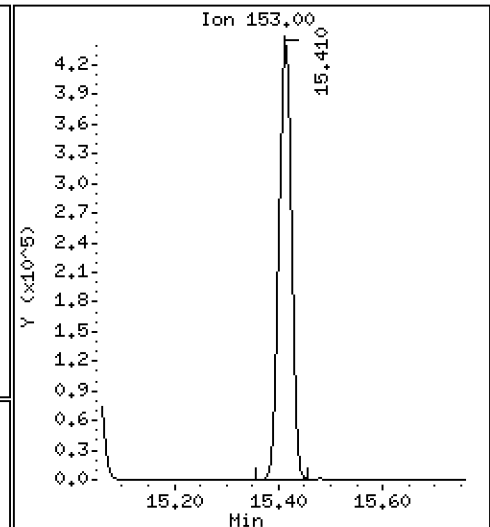
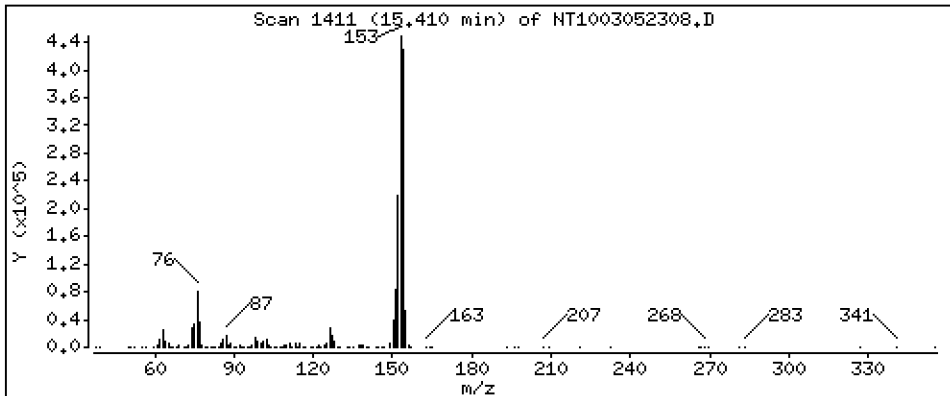
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,375 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

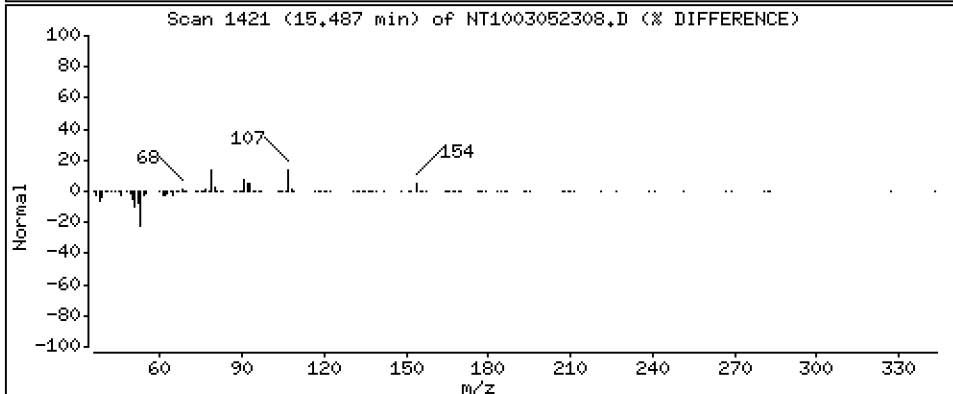
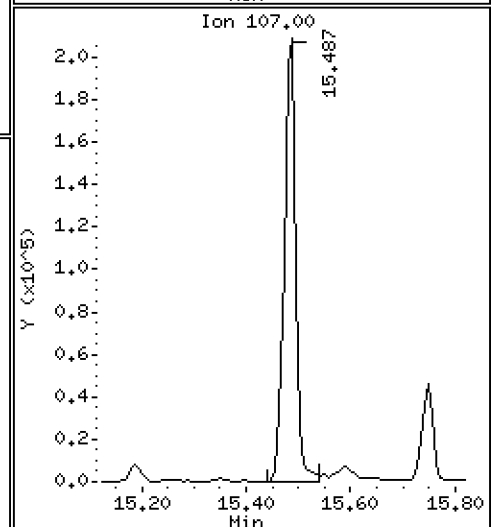
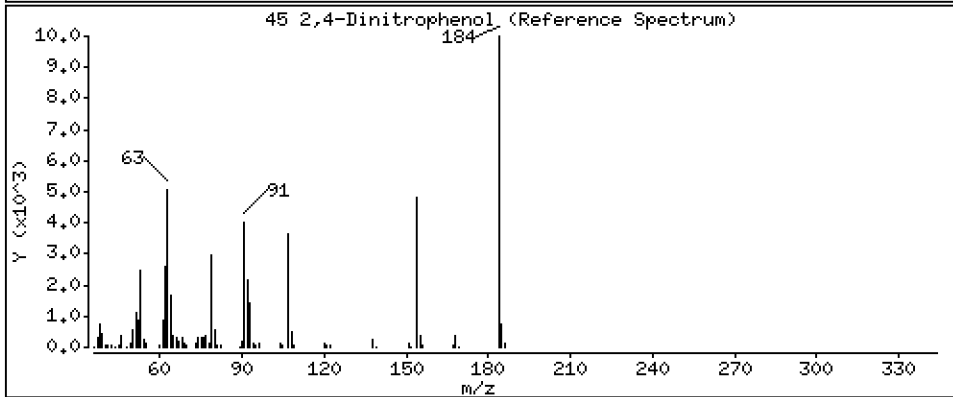
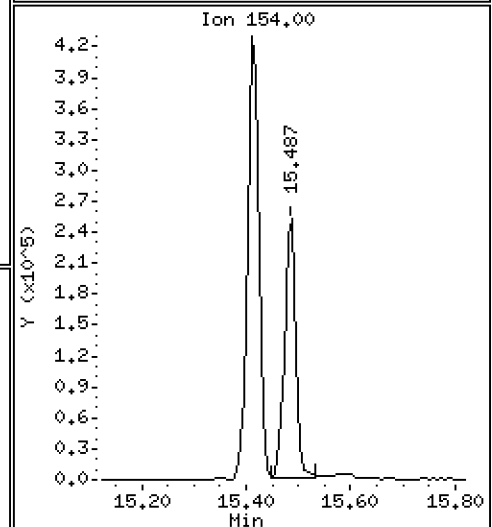
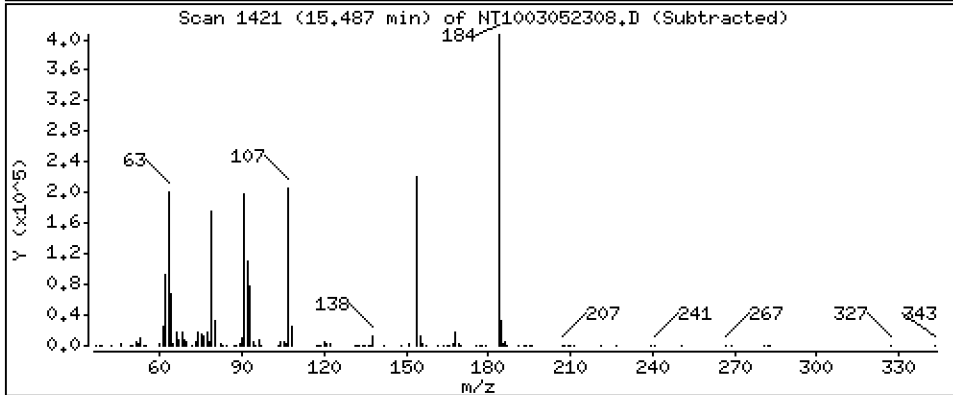
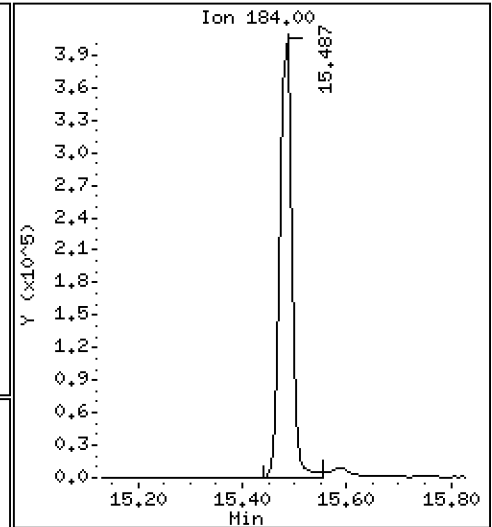
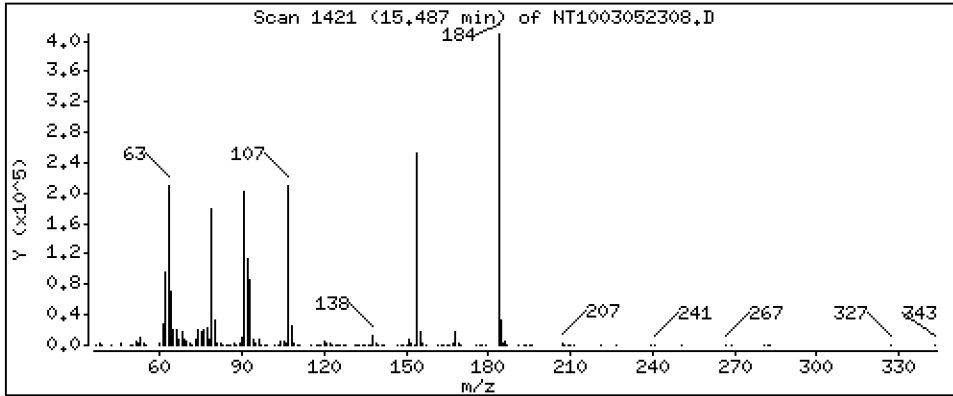
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 48,10 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

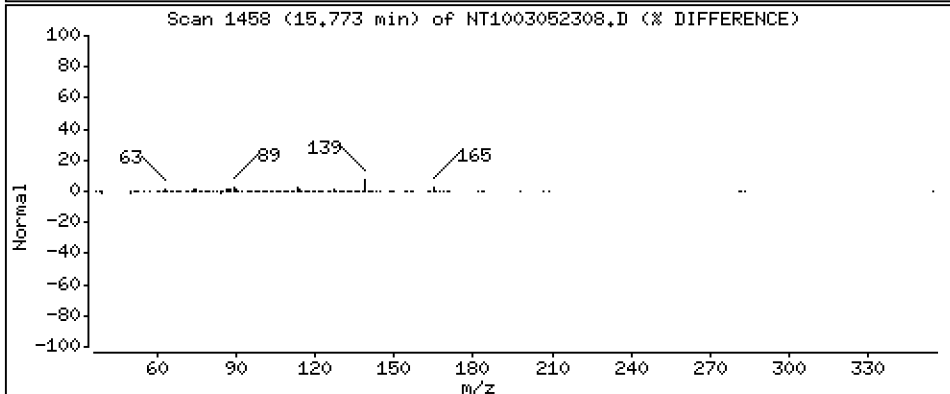
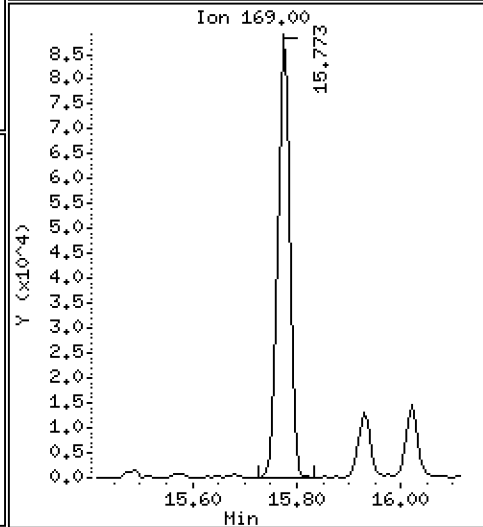
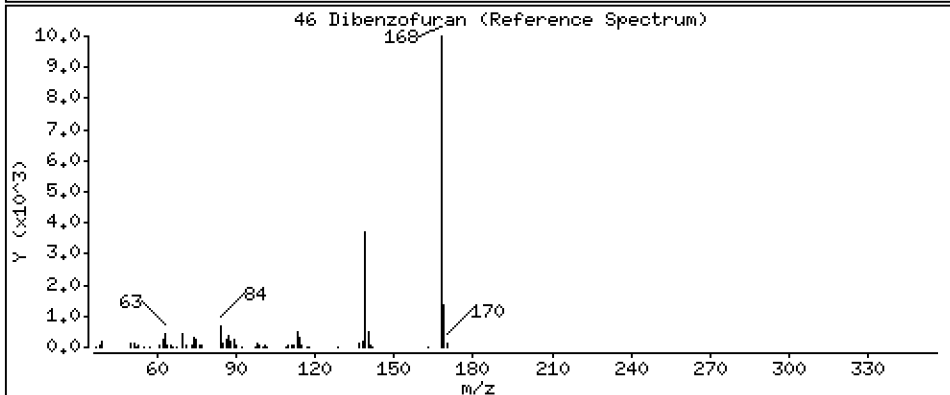
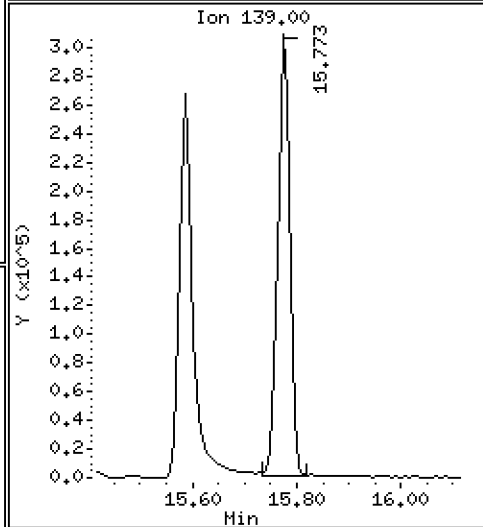
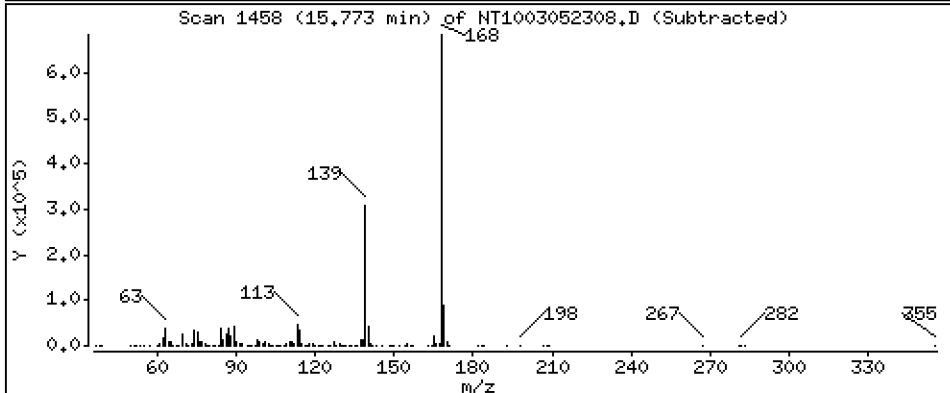
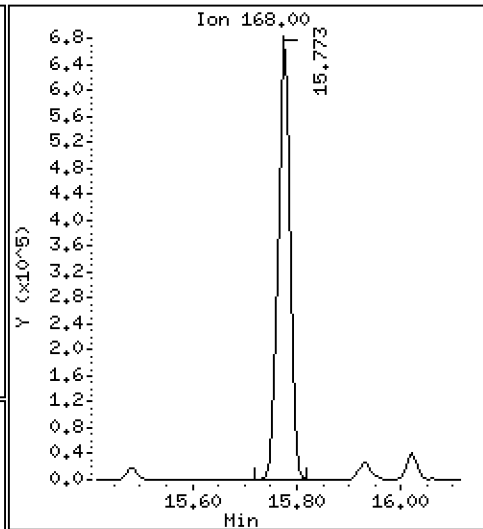
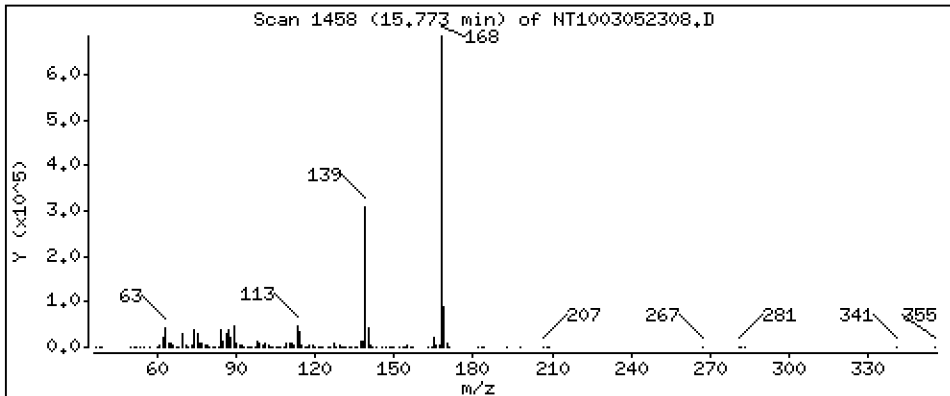
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,466 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

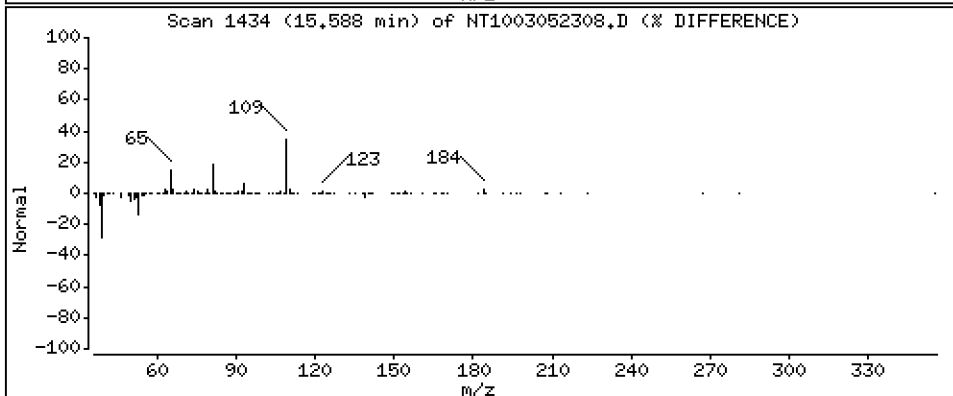
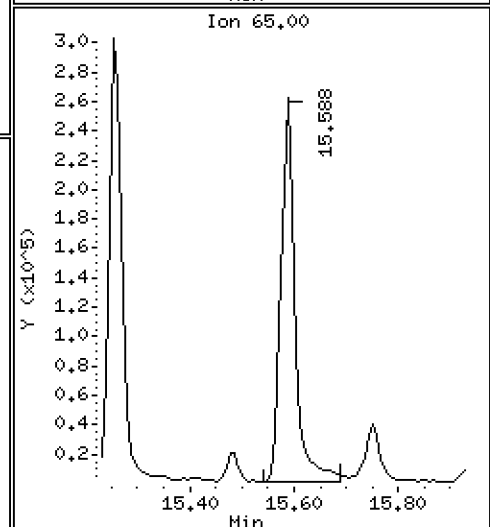
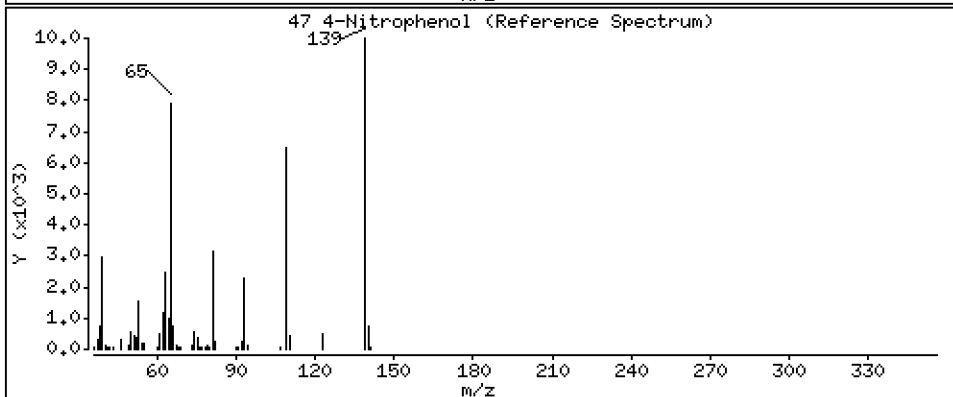
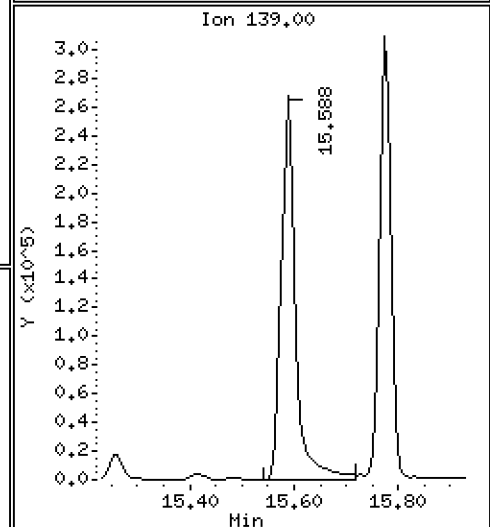
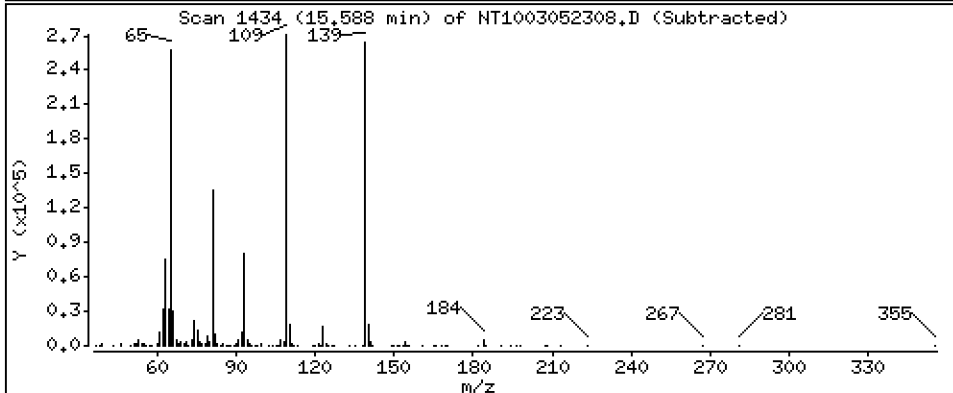
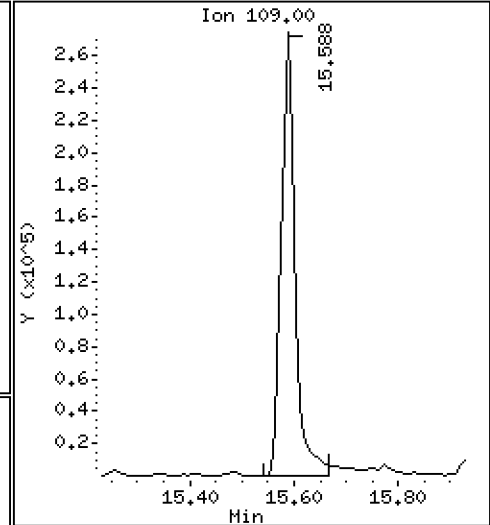
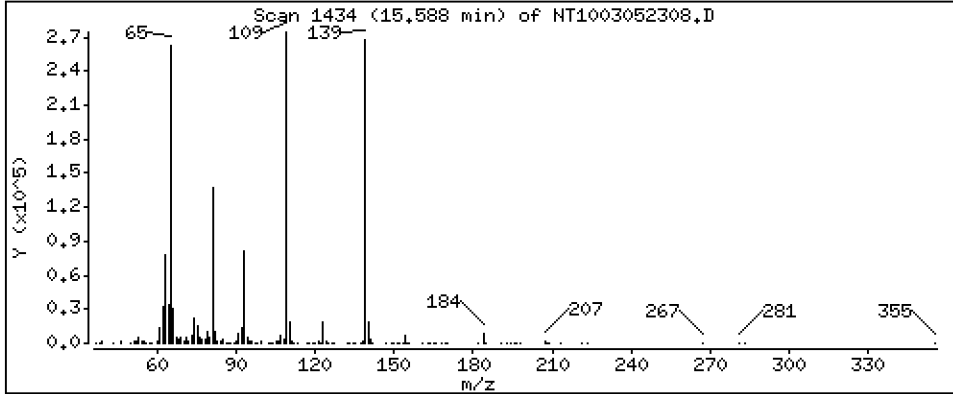
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 14,54 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

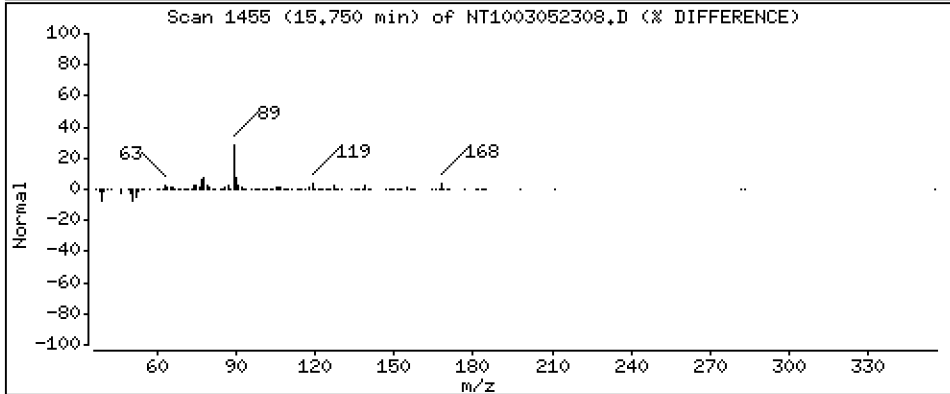
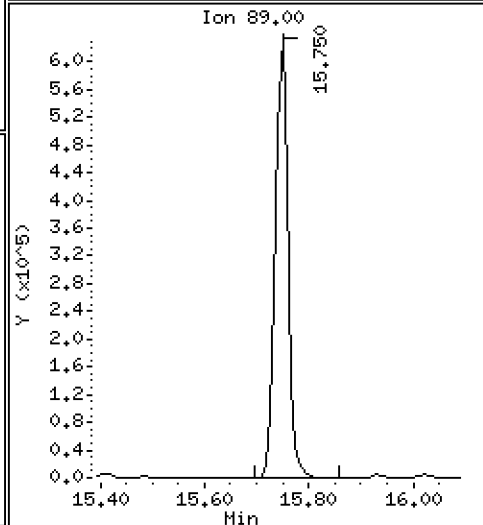
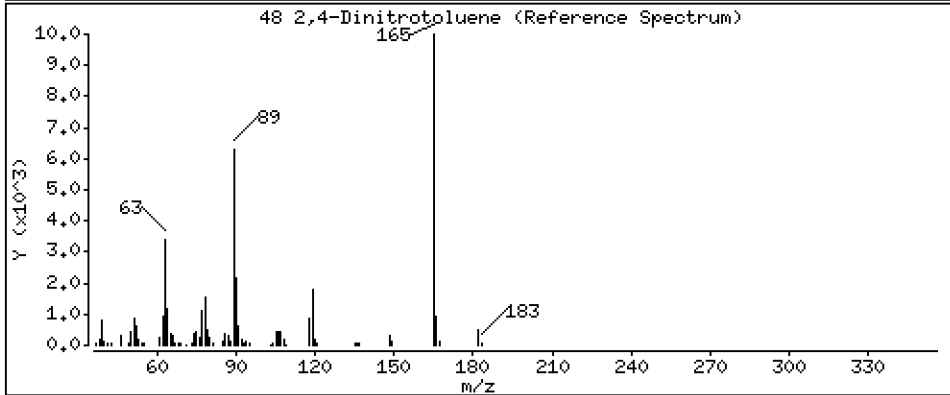
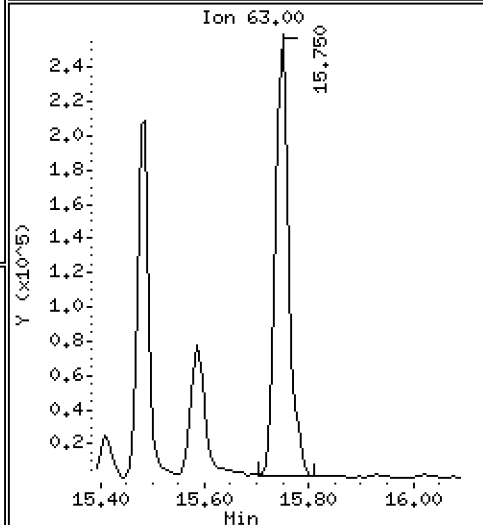
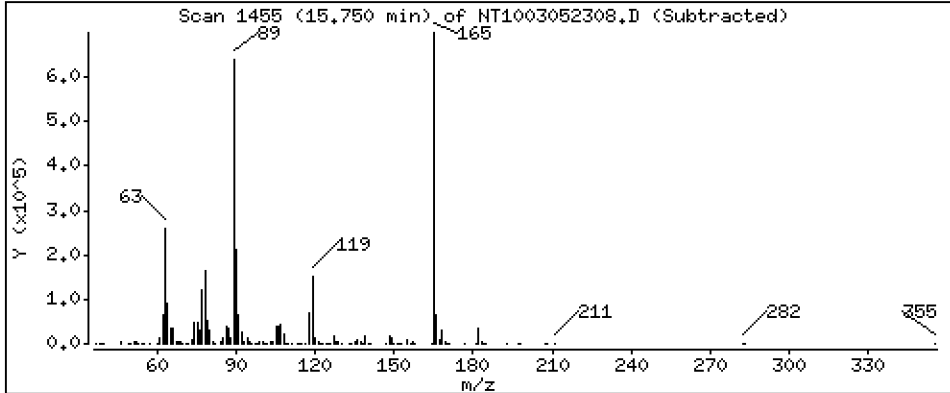
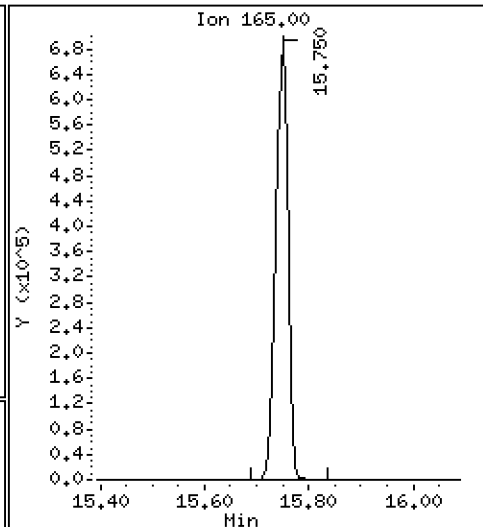
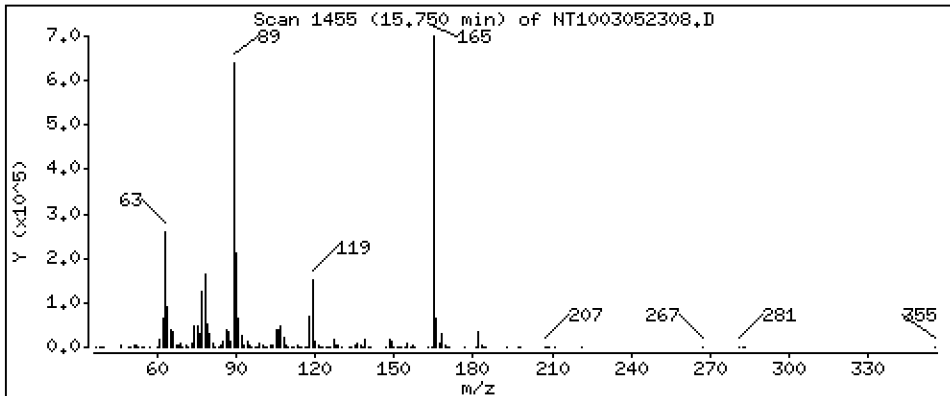
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 17,29 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

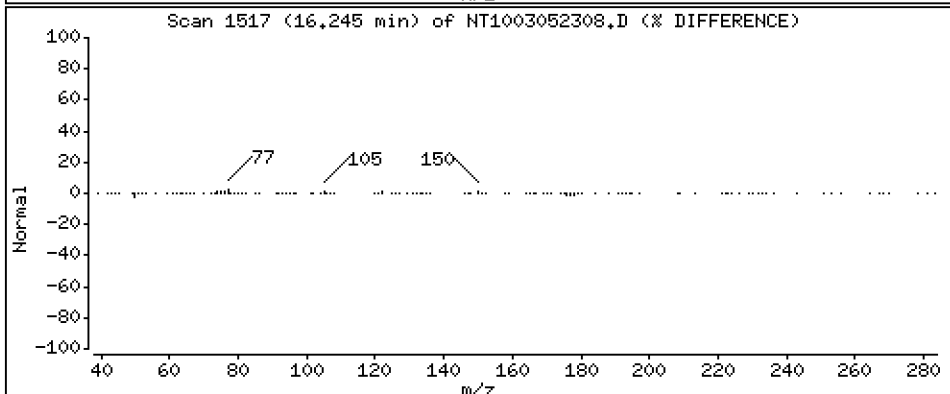
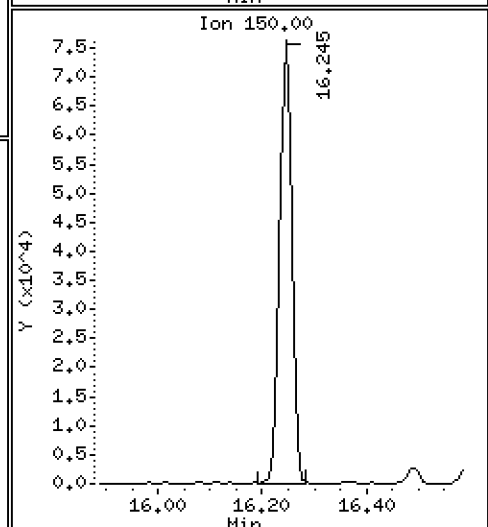
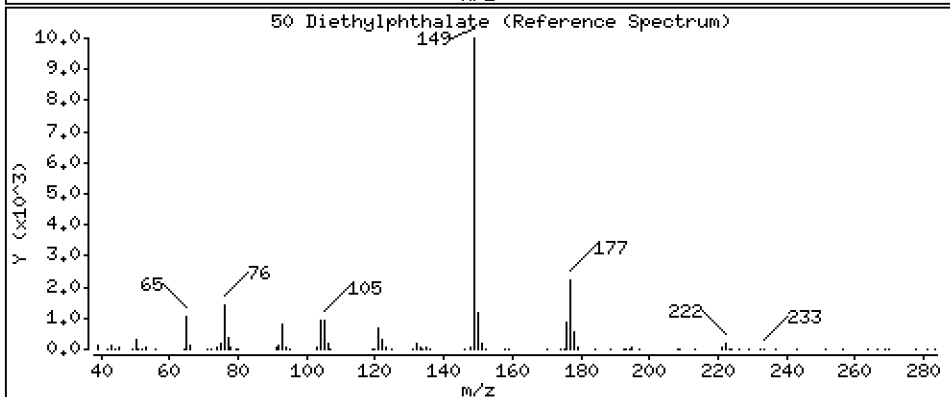
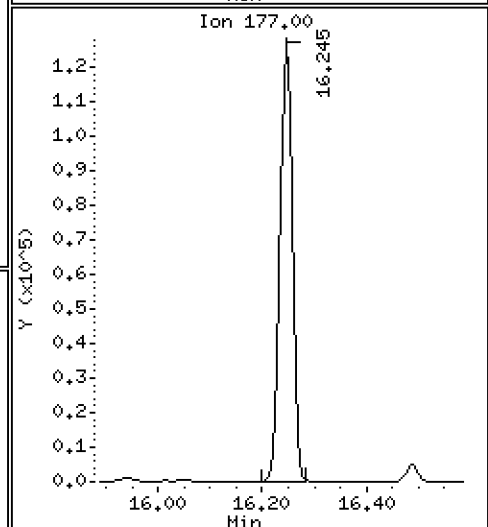
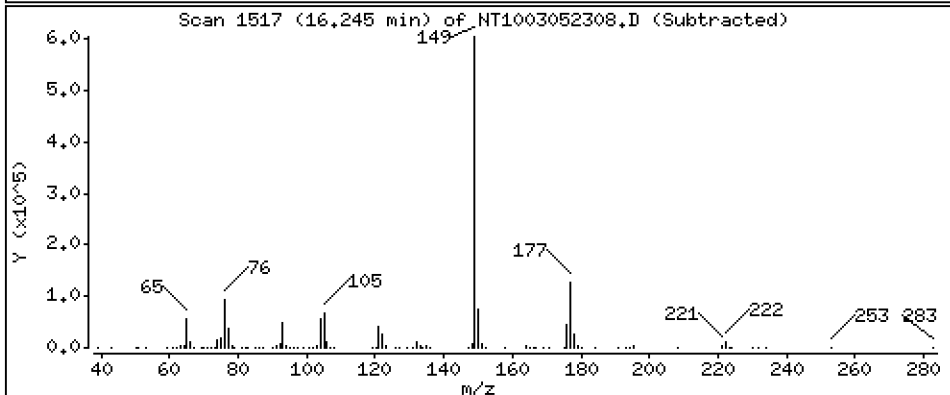
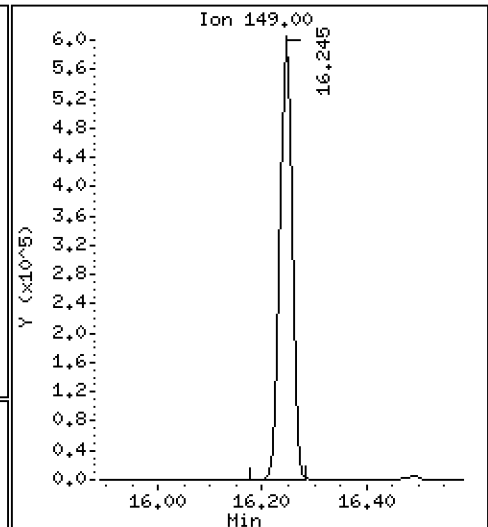
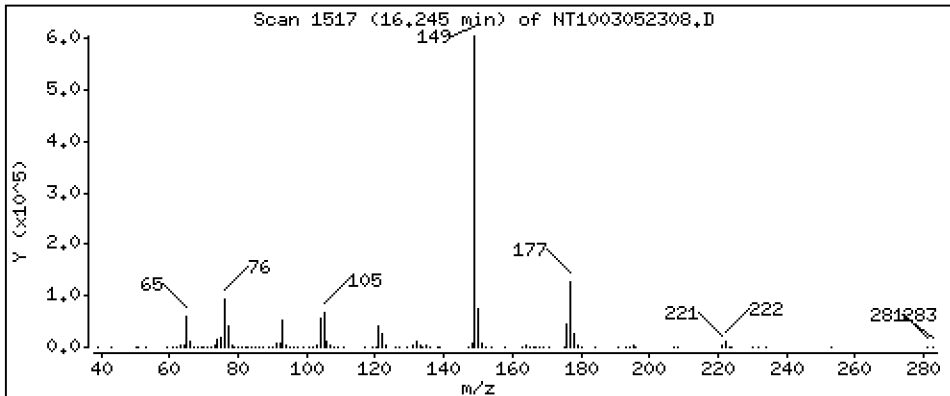
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 4,924 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

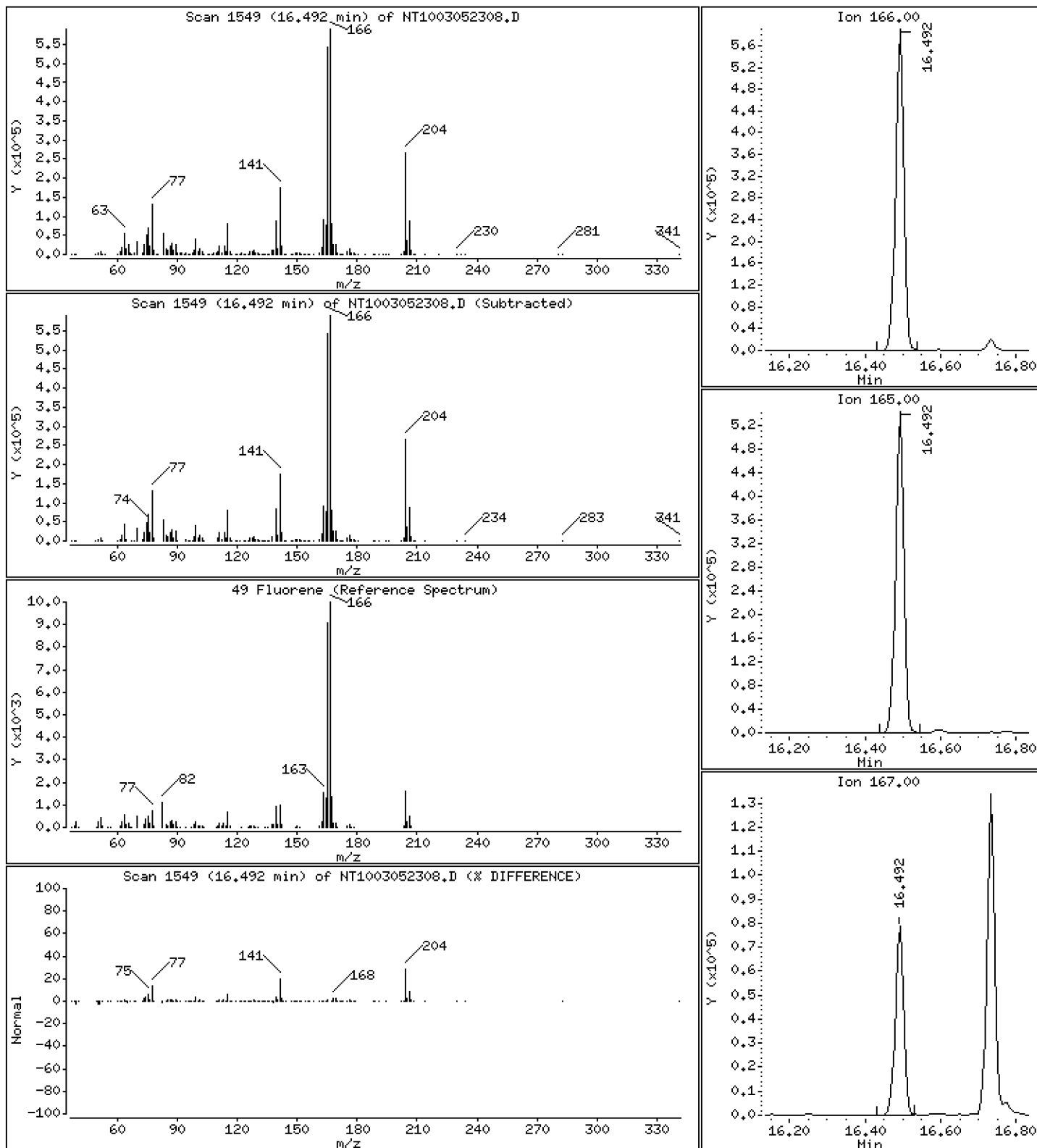
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,509 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

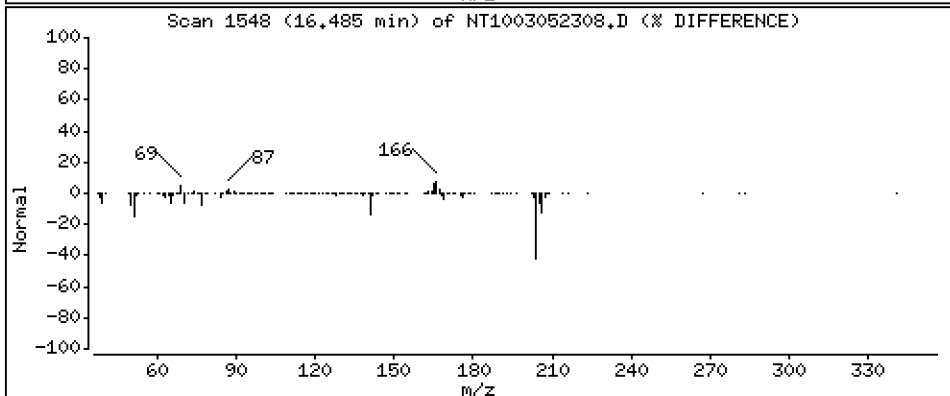
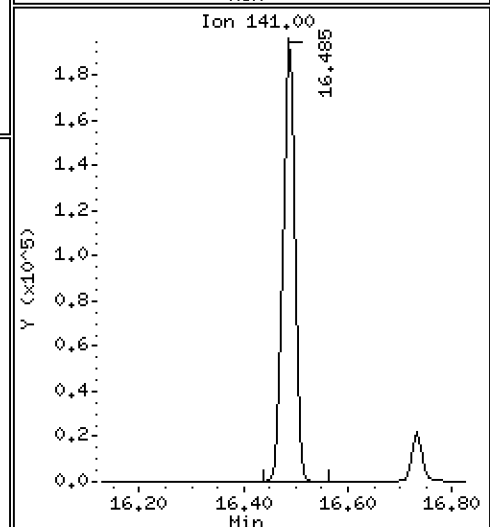
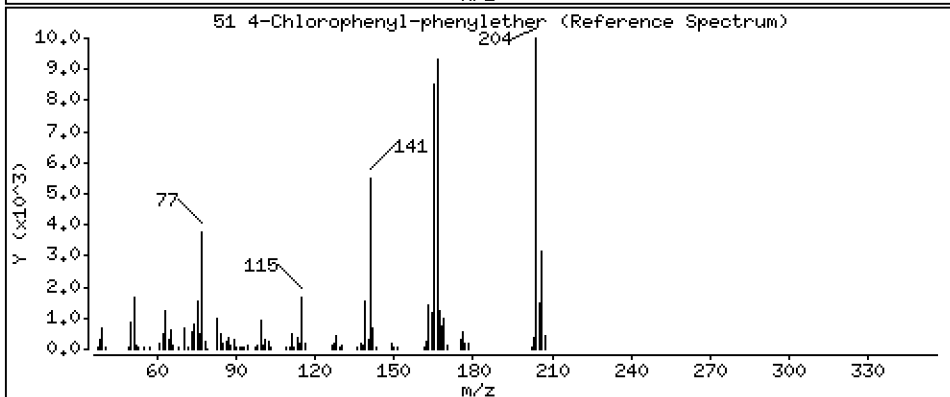
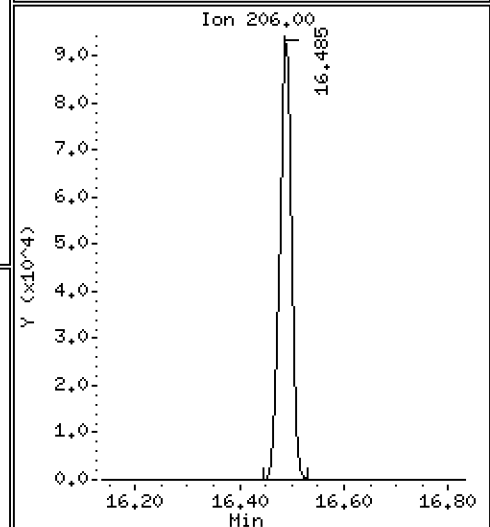
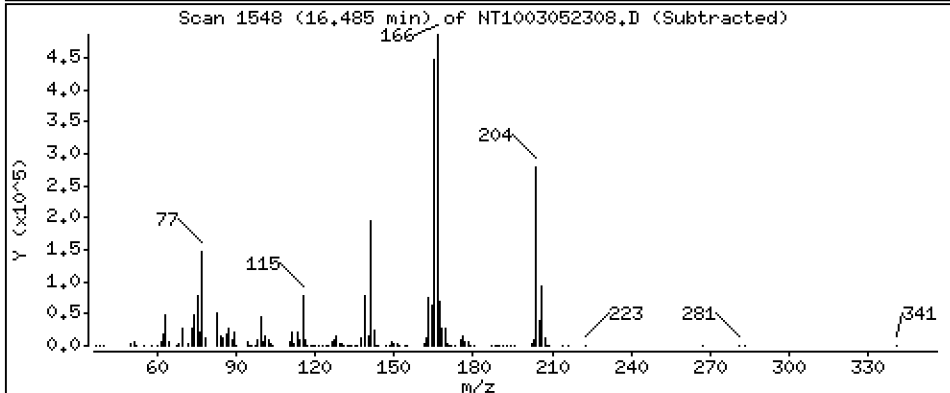
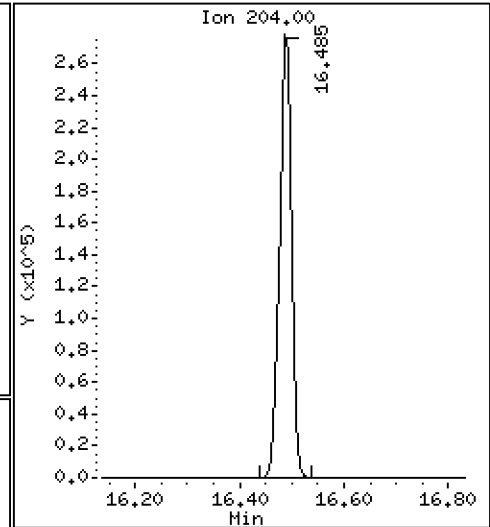
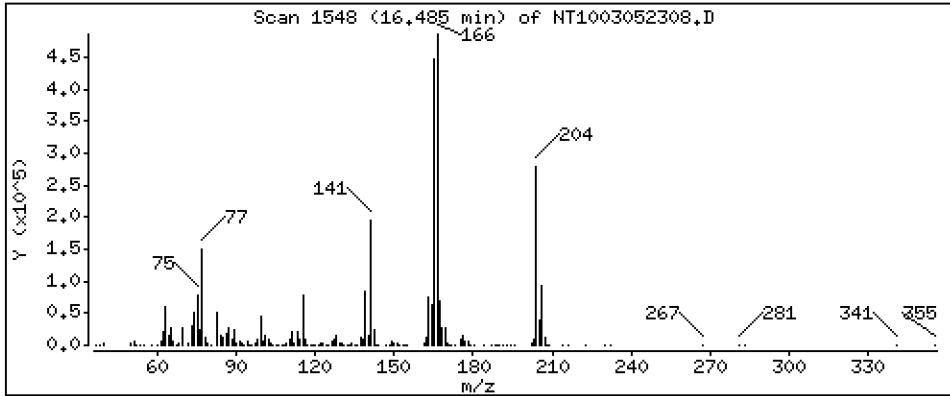
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,846 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

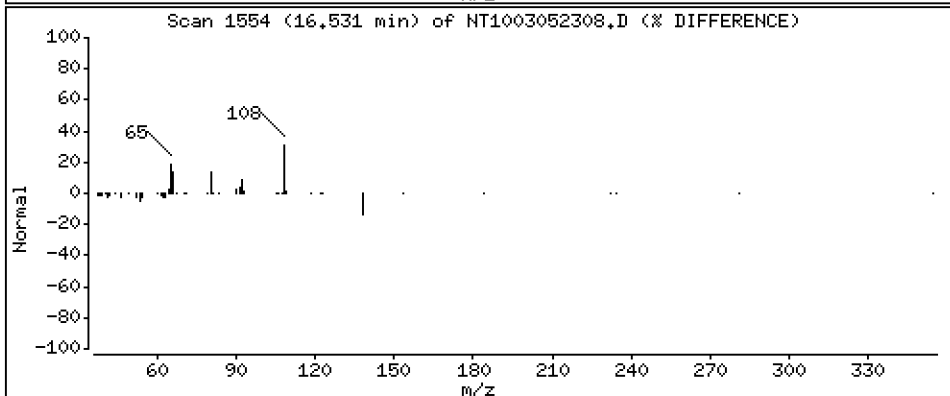
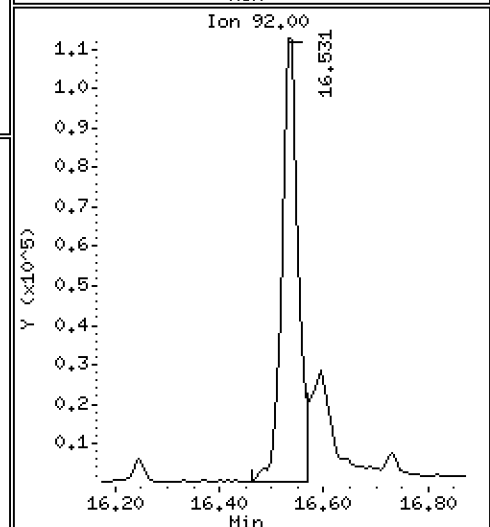
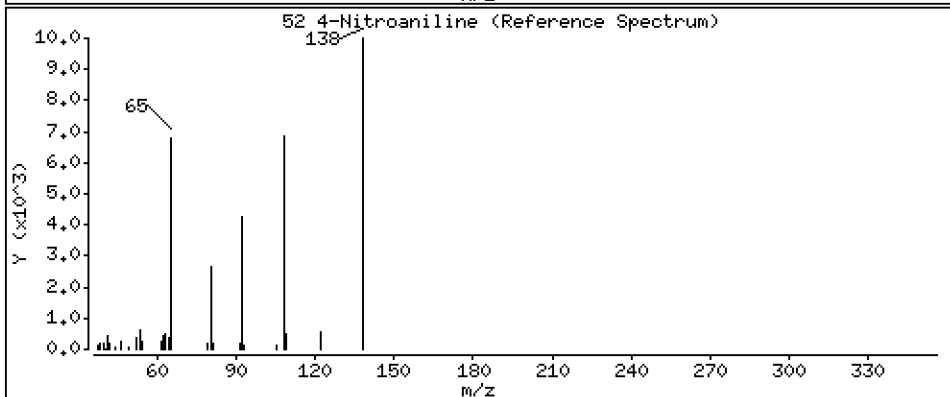
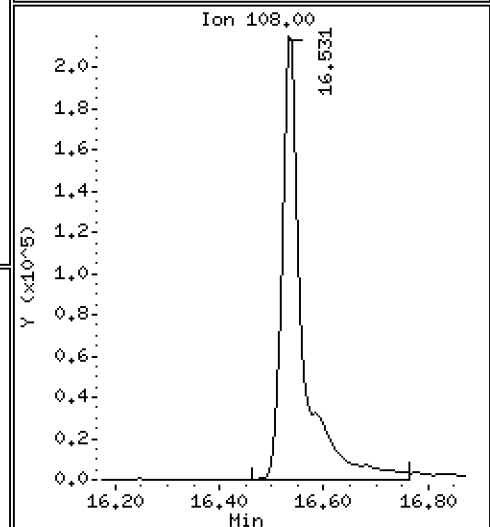
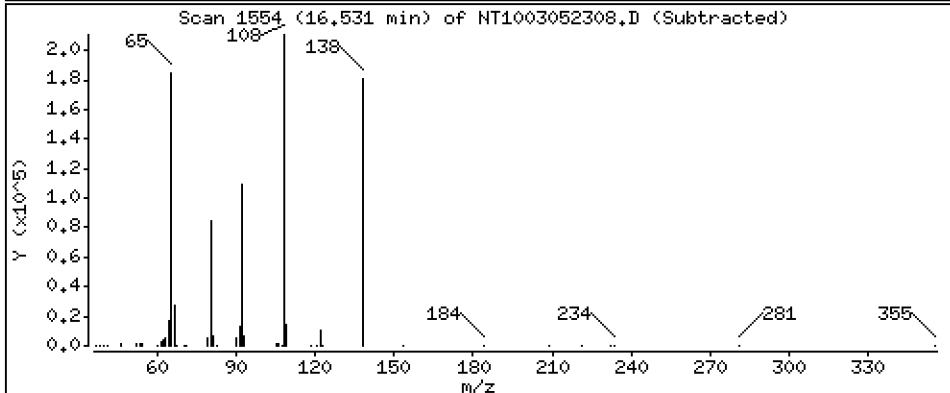
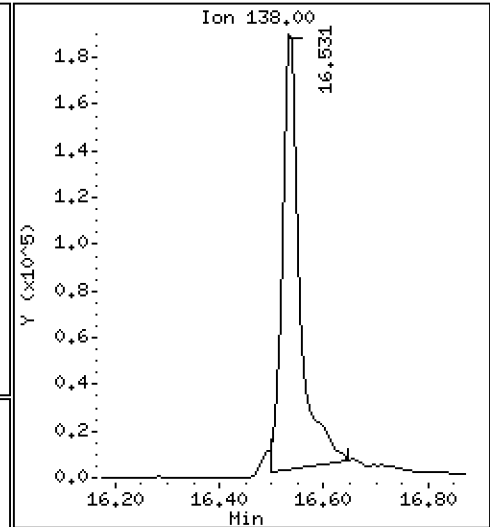
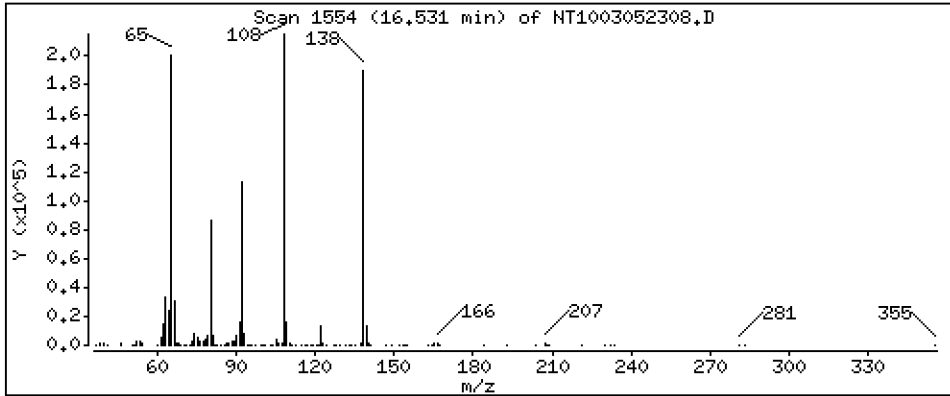
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 10,04 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

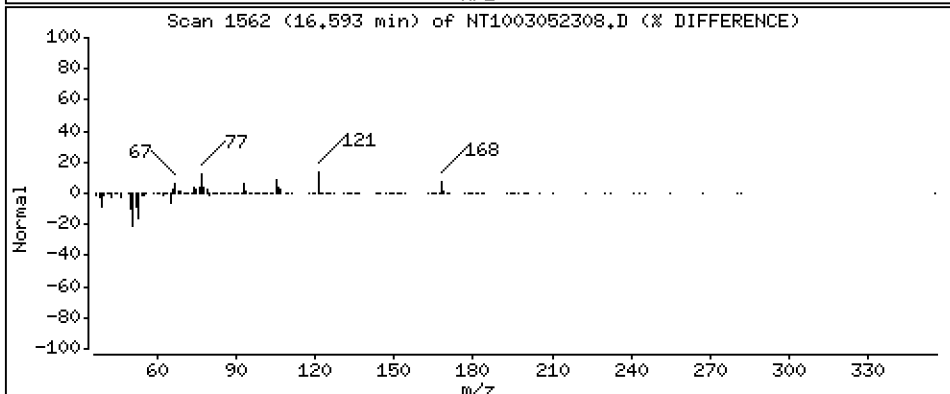
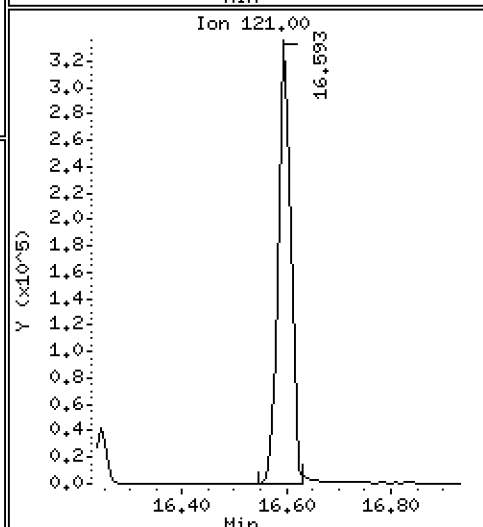
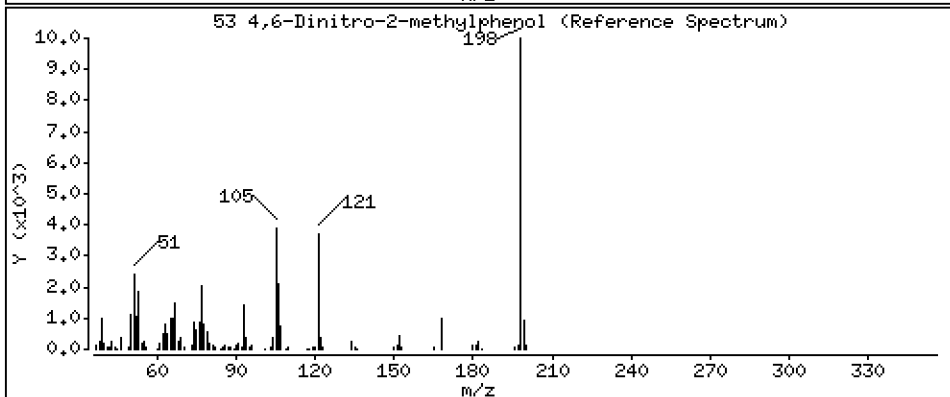
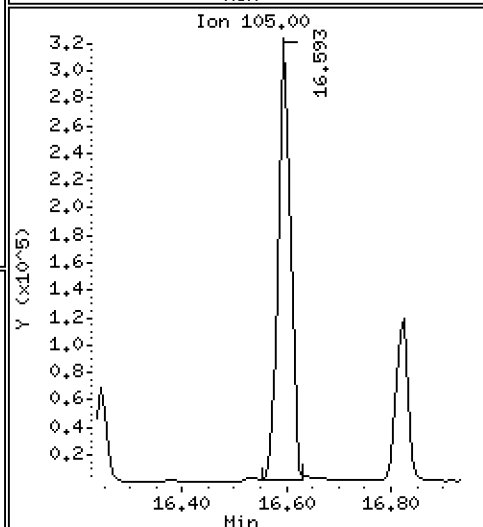
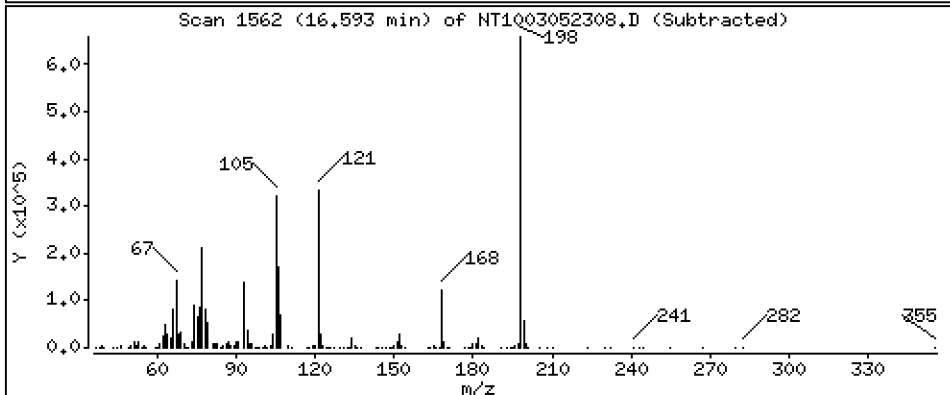
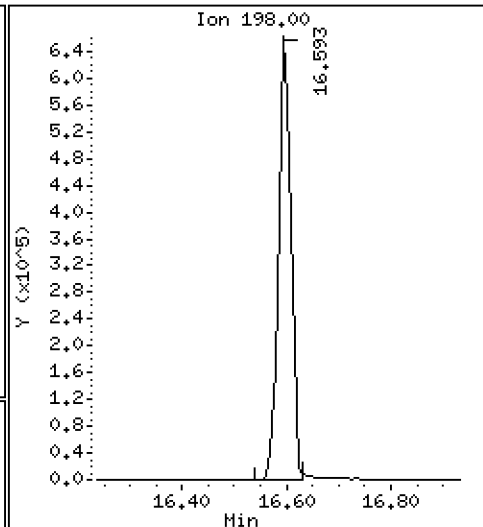
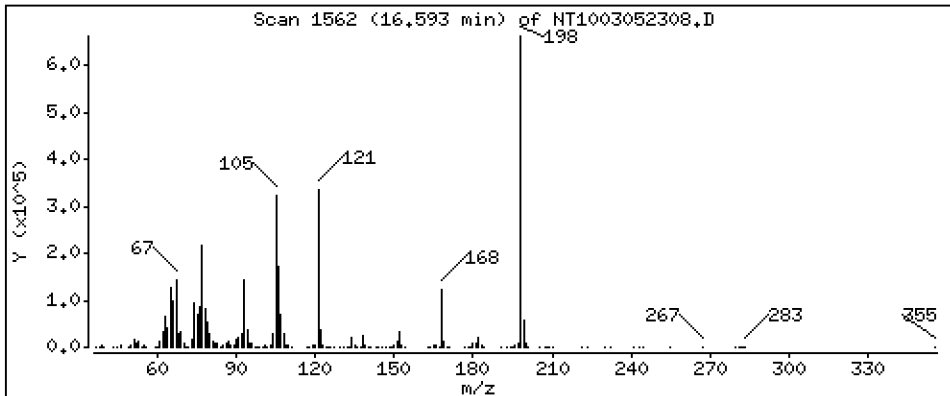
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 38,35 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

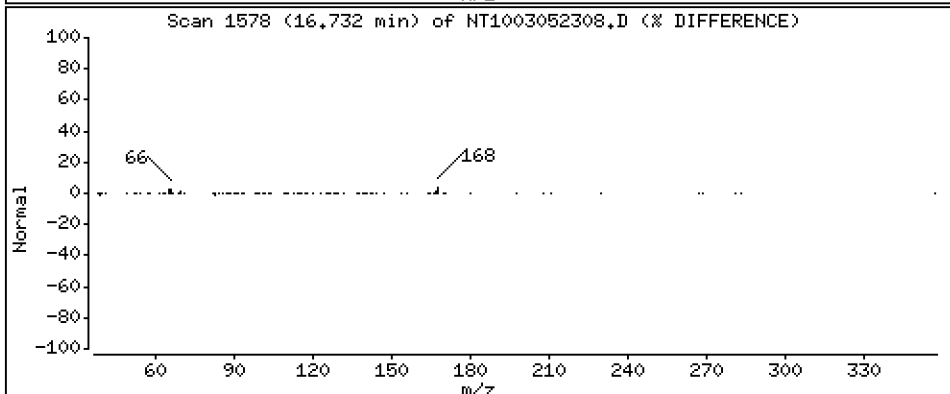
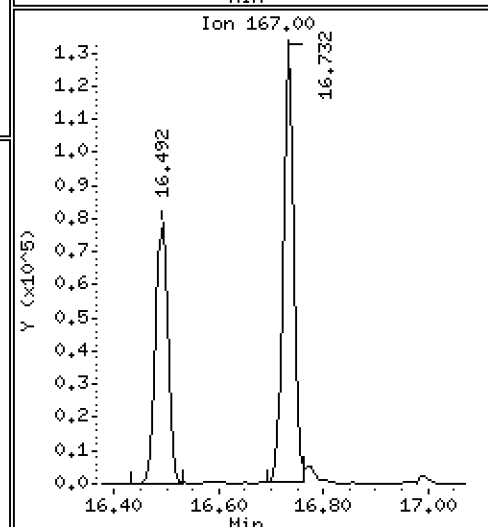
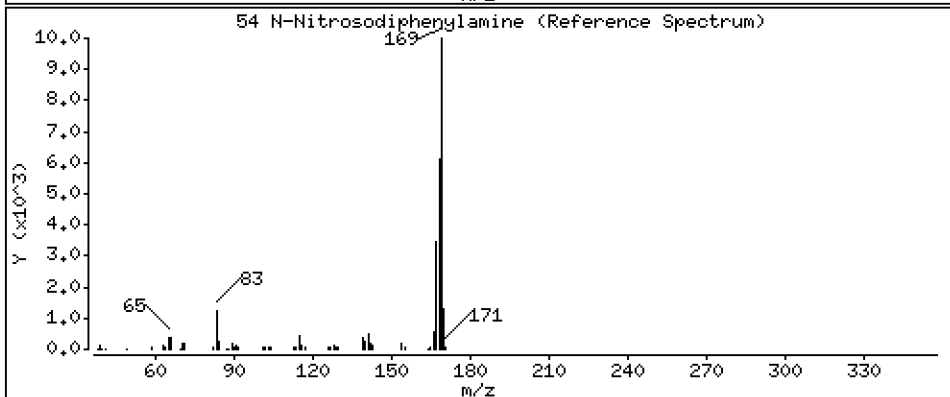
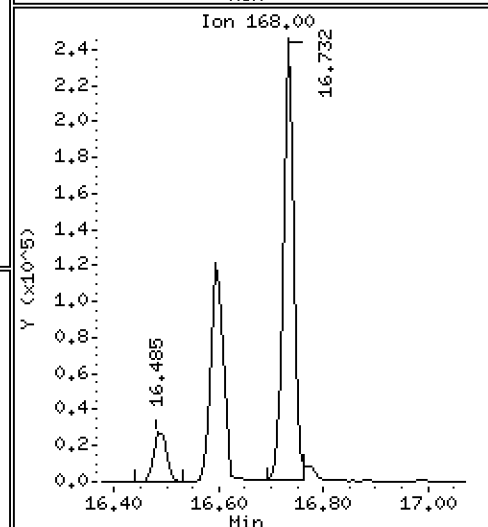
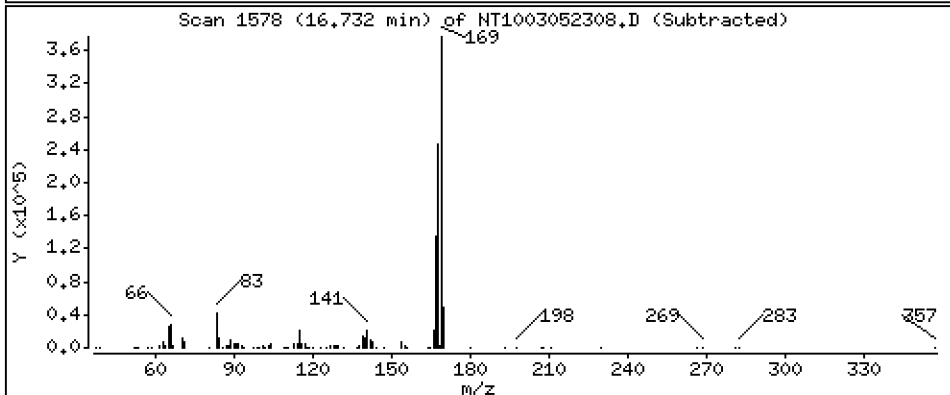
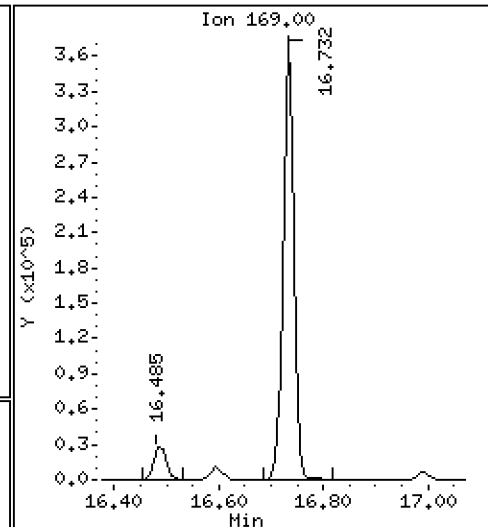
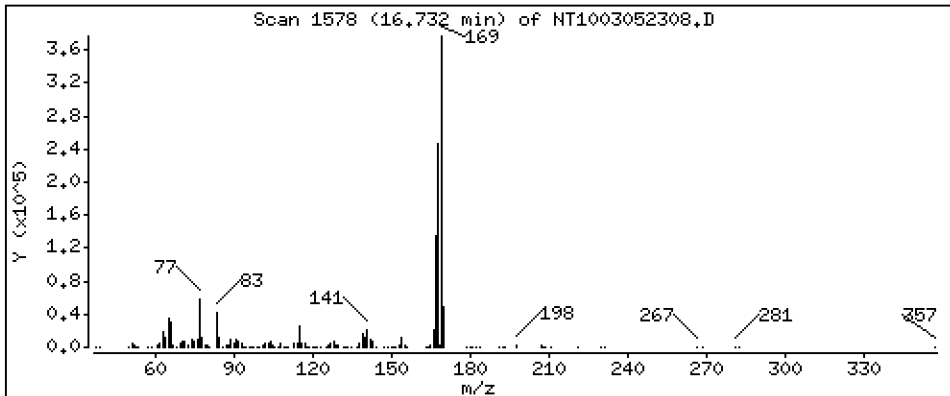
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 3,606 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

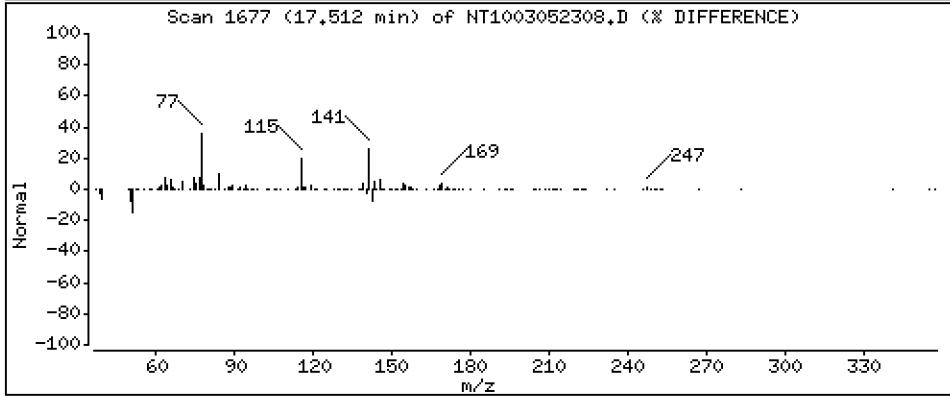
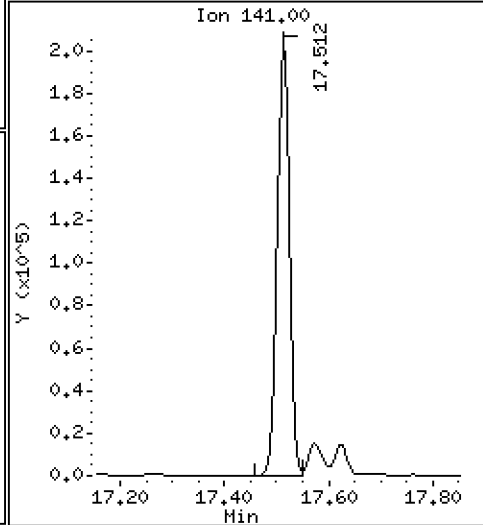
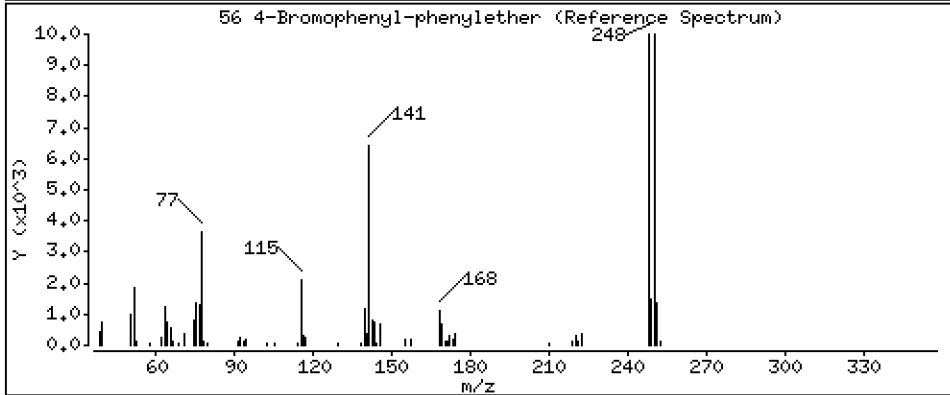
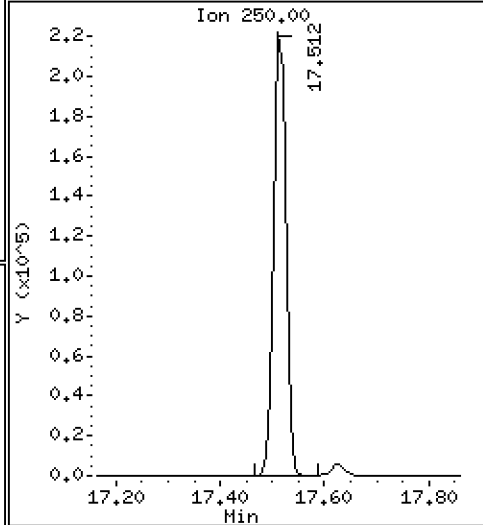
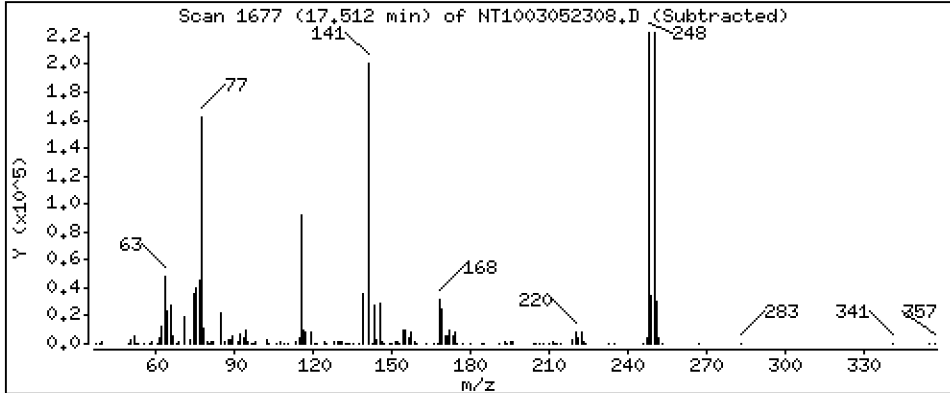
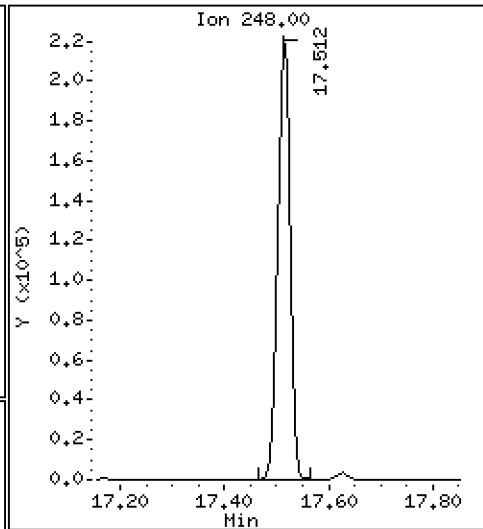
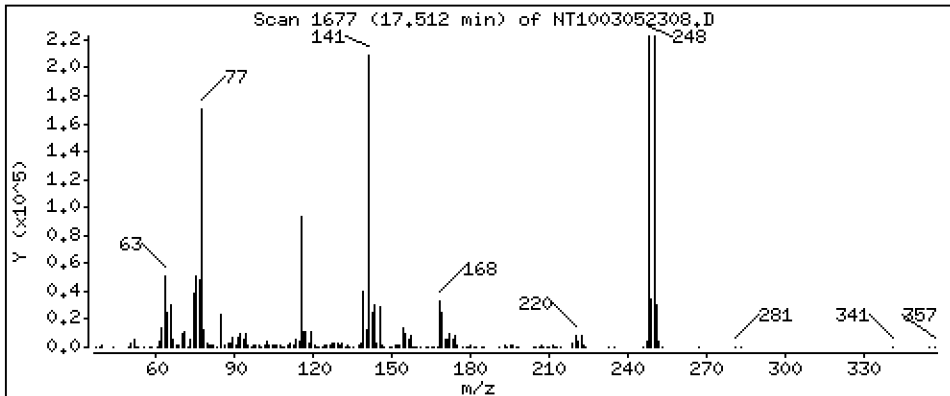
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,740 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

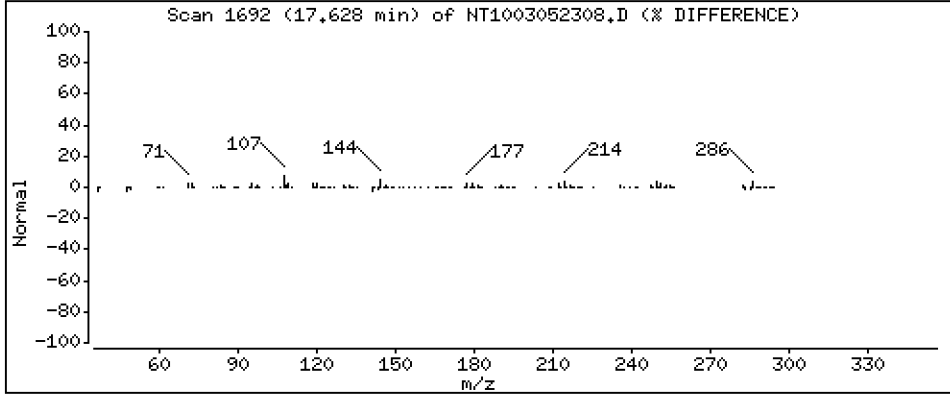
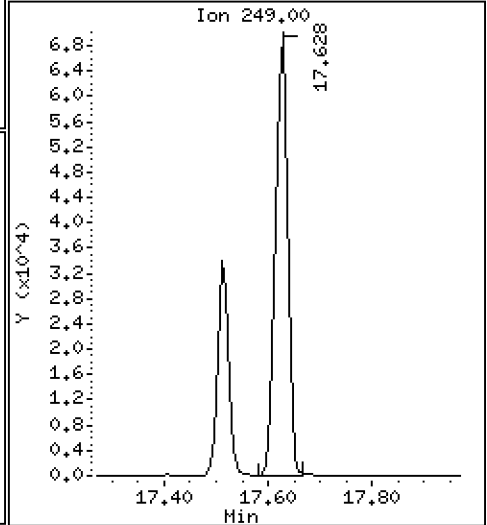
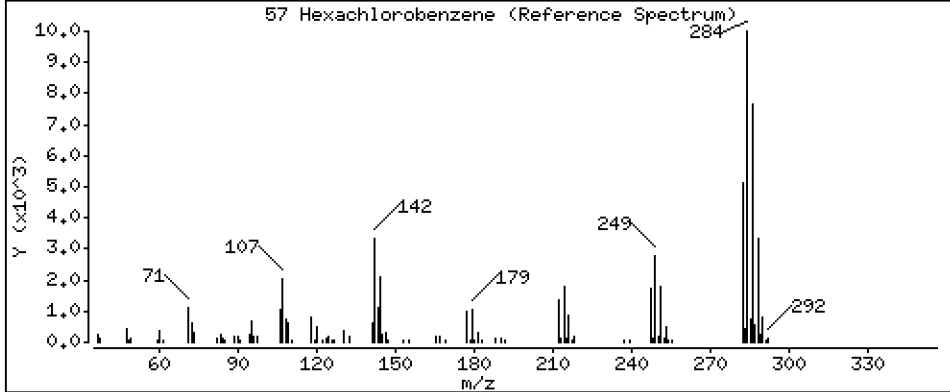
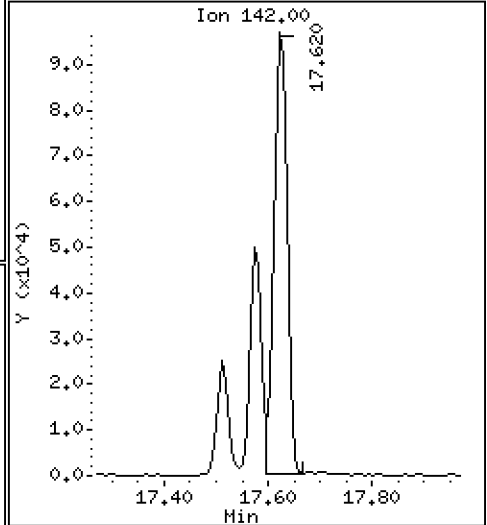
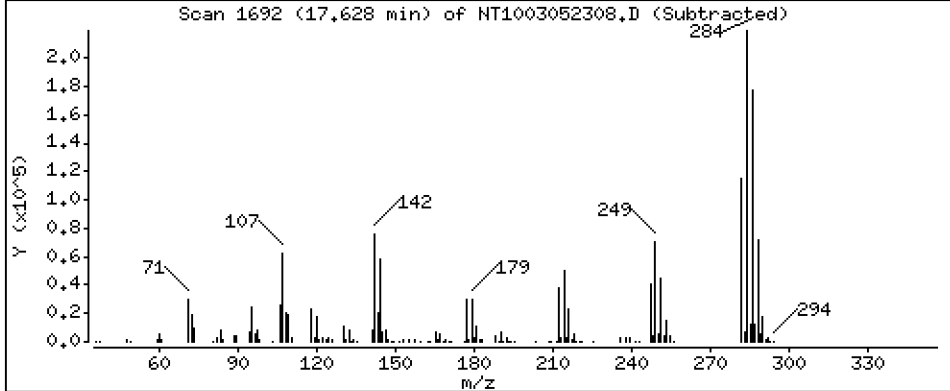
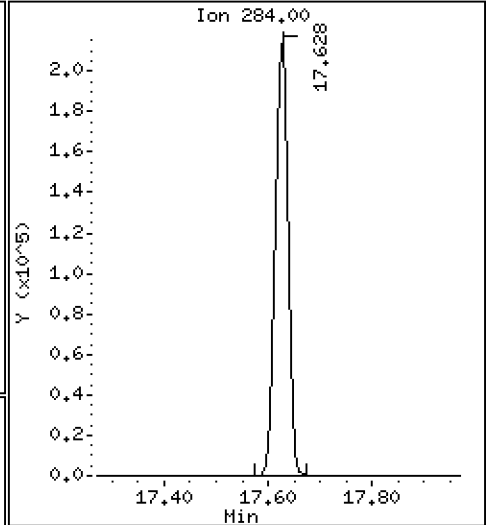
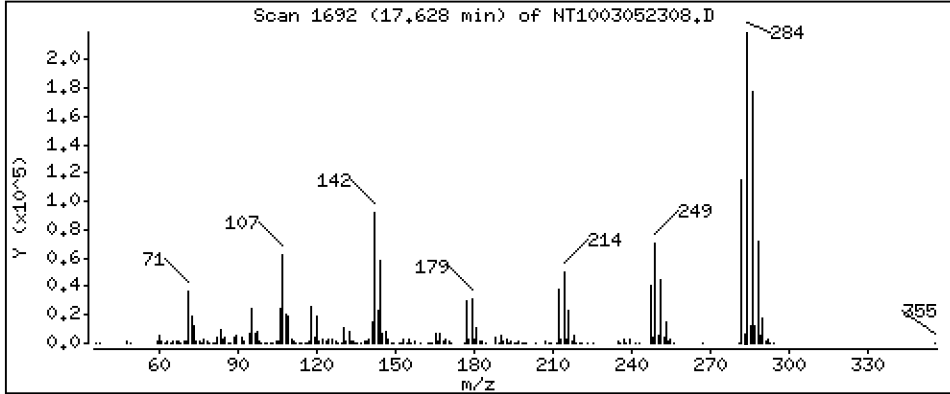
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,261 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

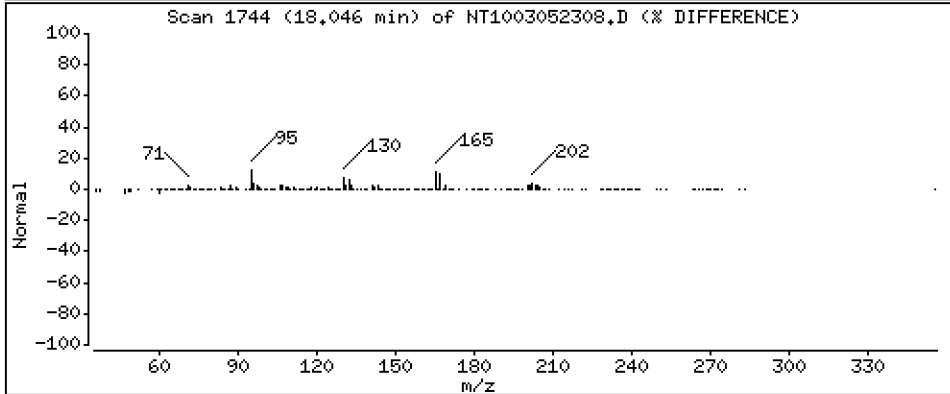
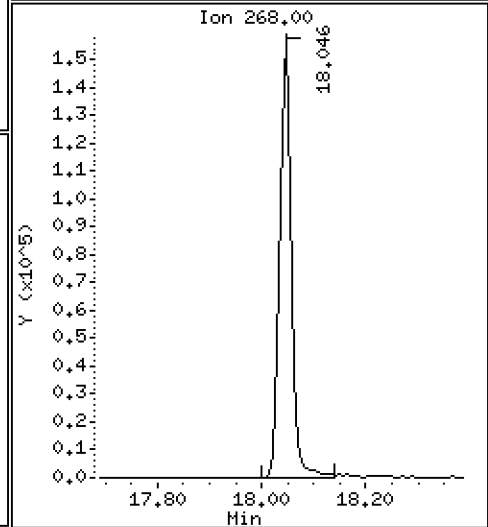
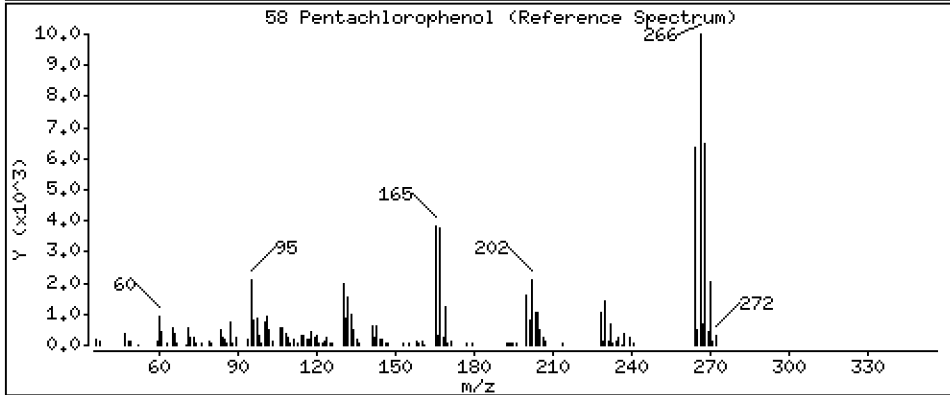
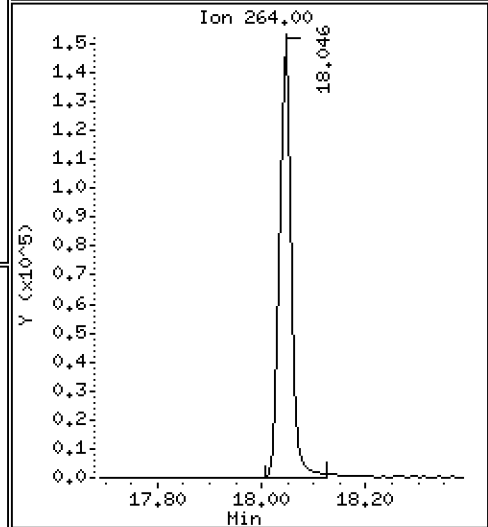
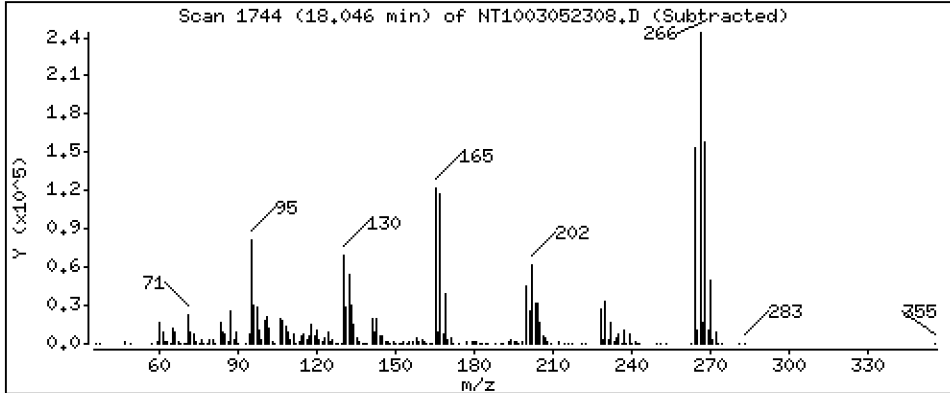
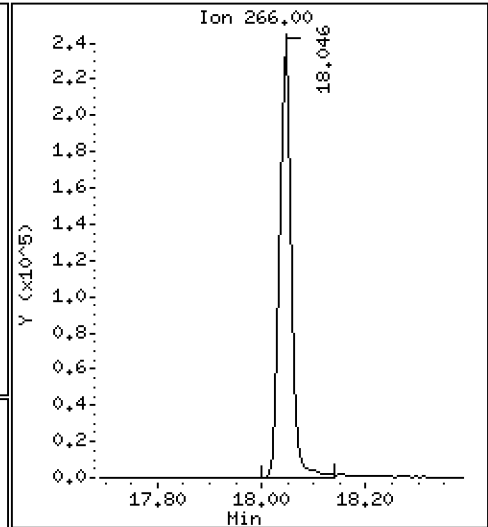
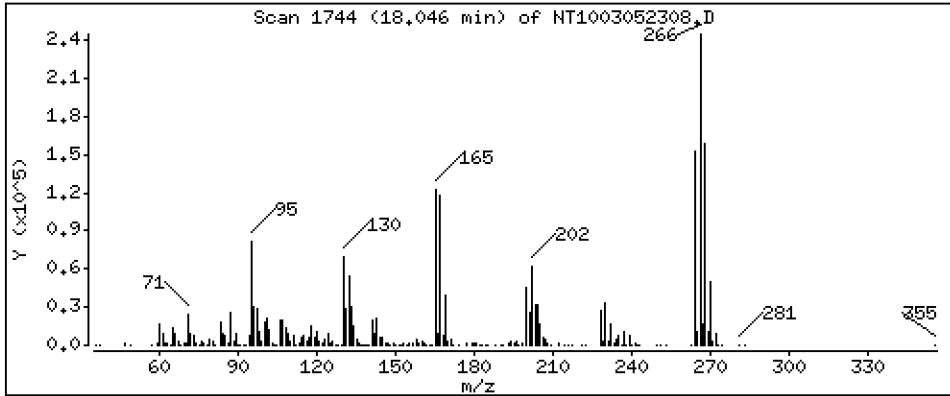
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 10,91 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

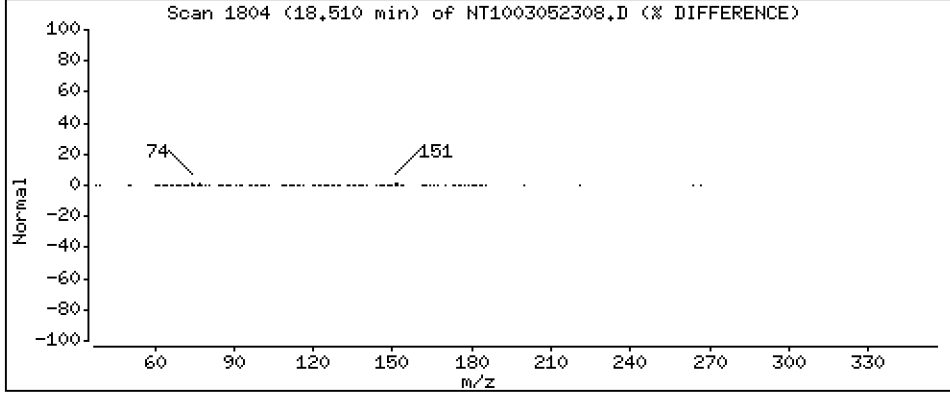
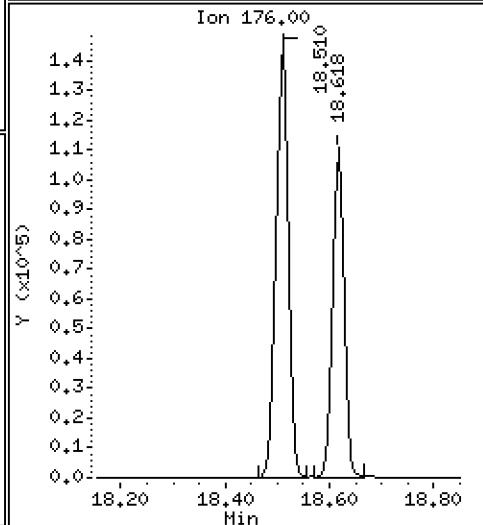
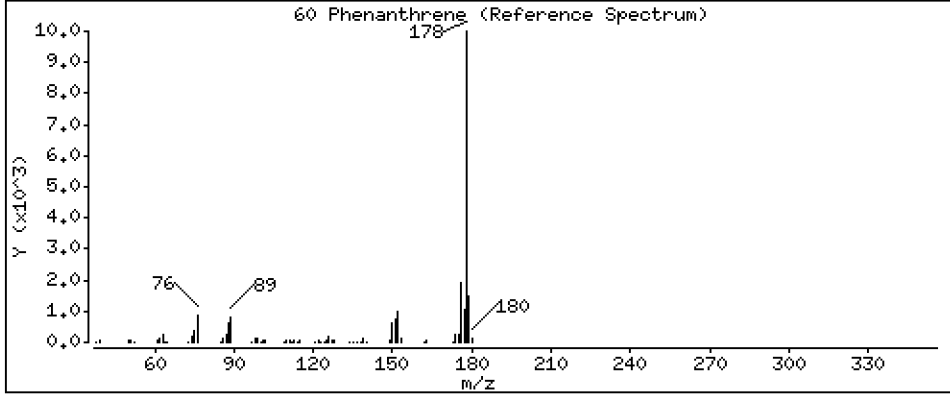
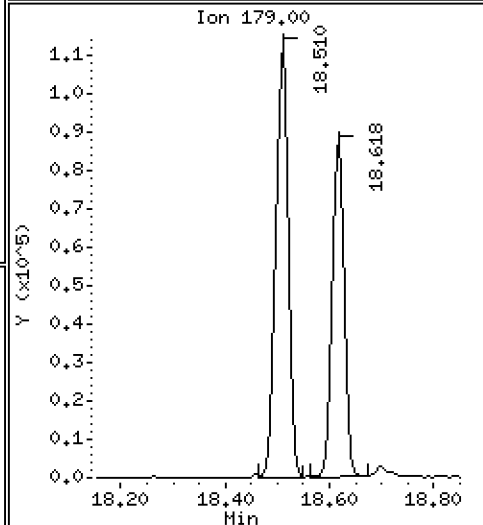
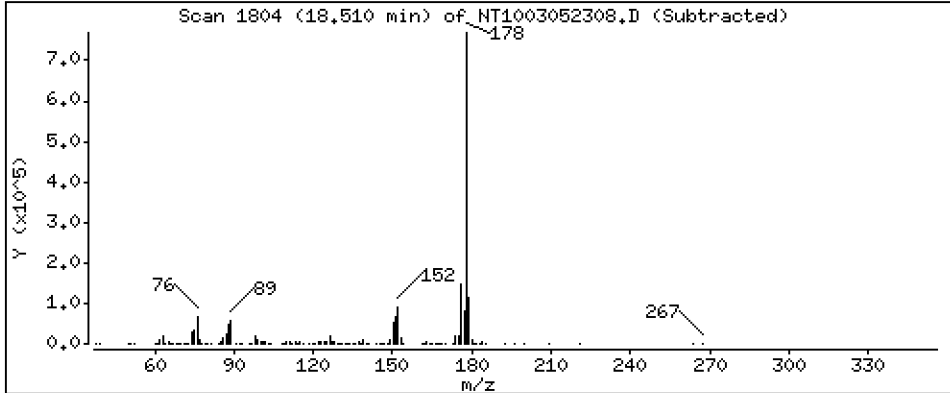
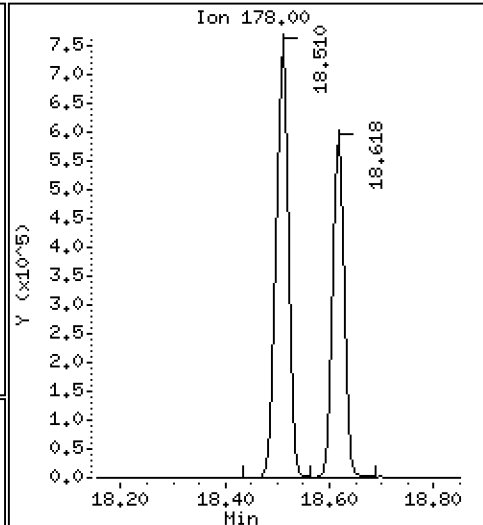
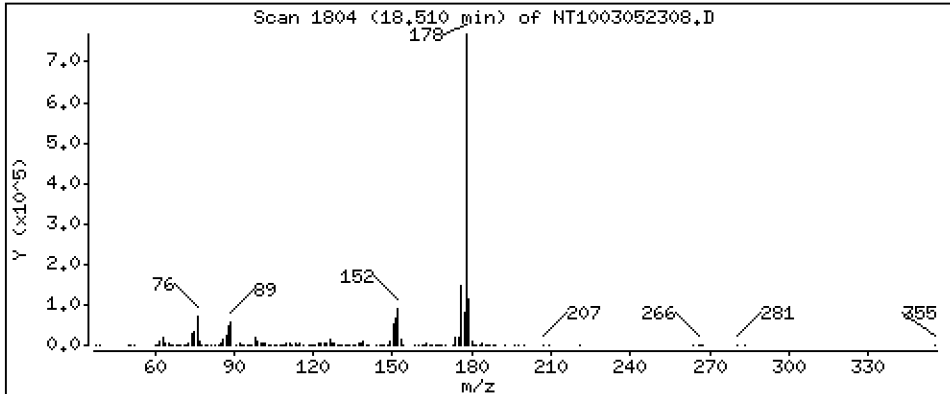
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,691 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

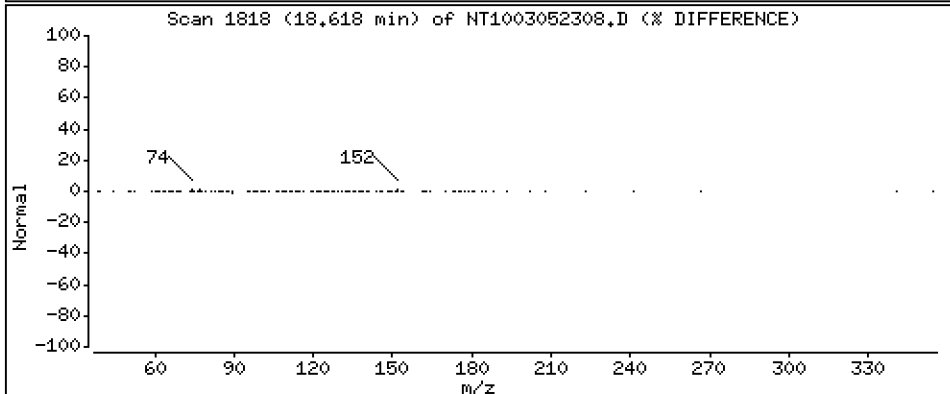
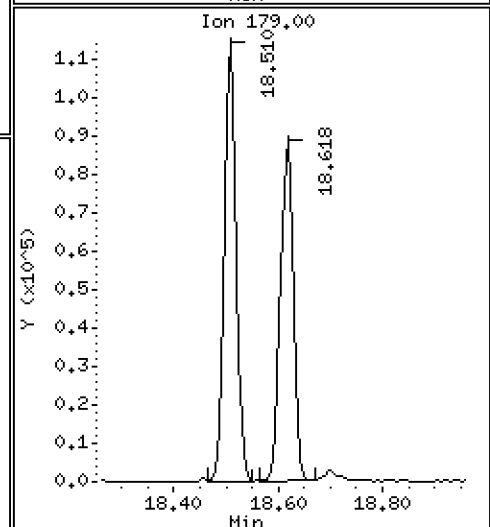
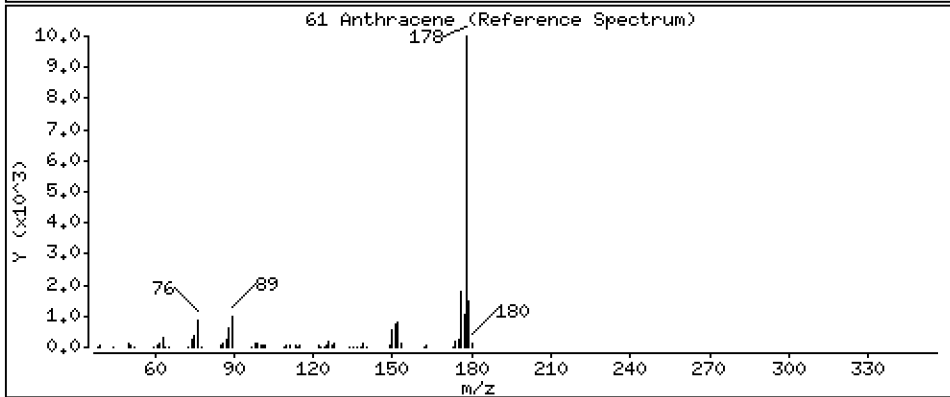
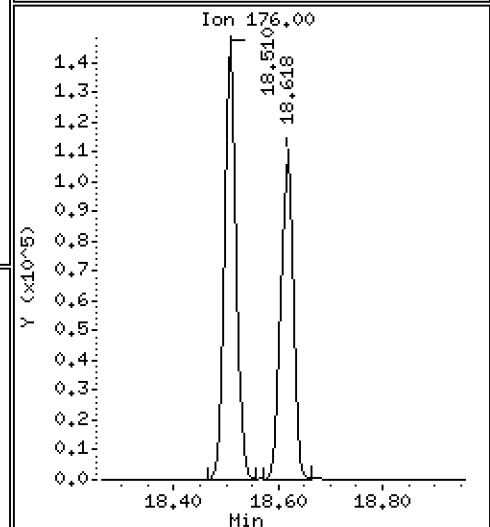
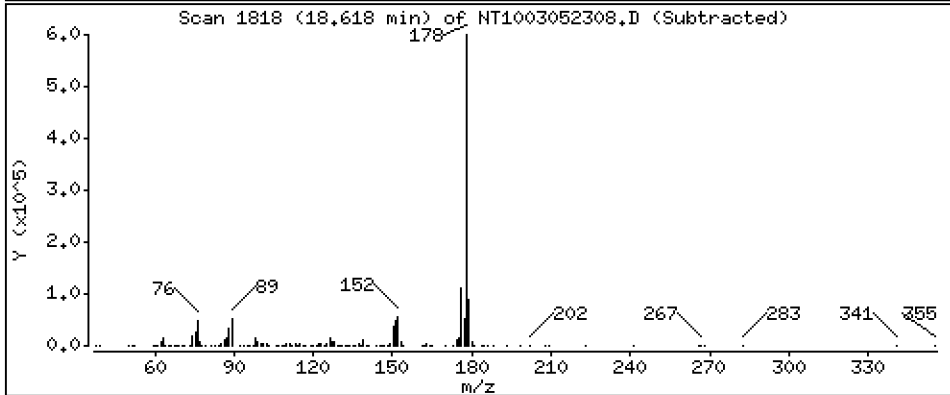
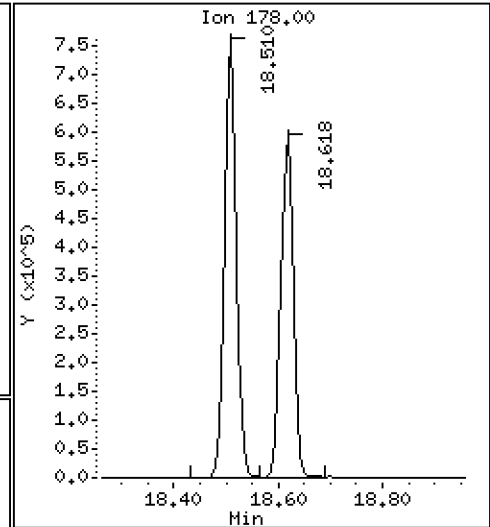
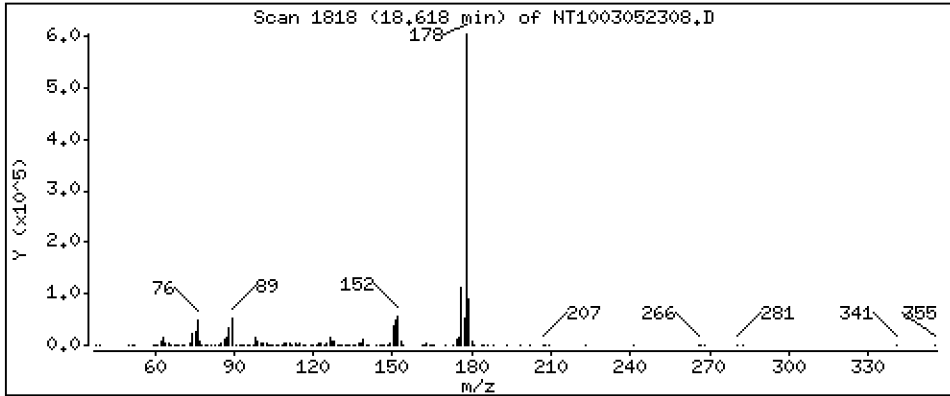
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 3,882 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

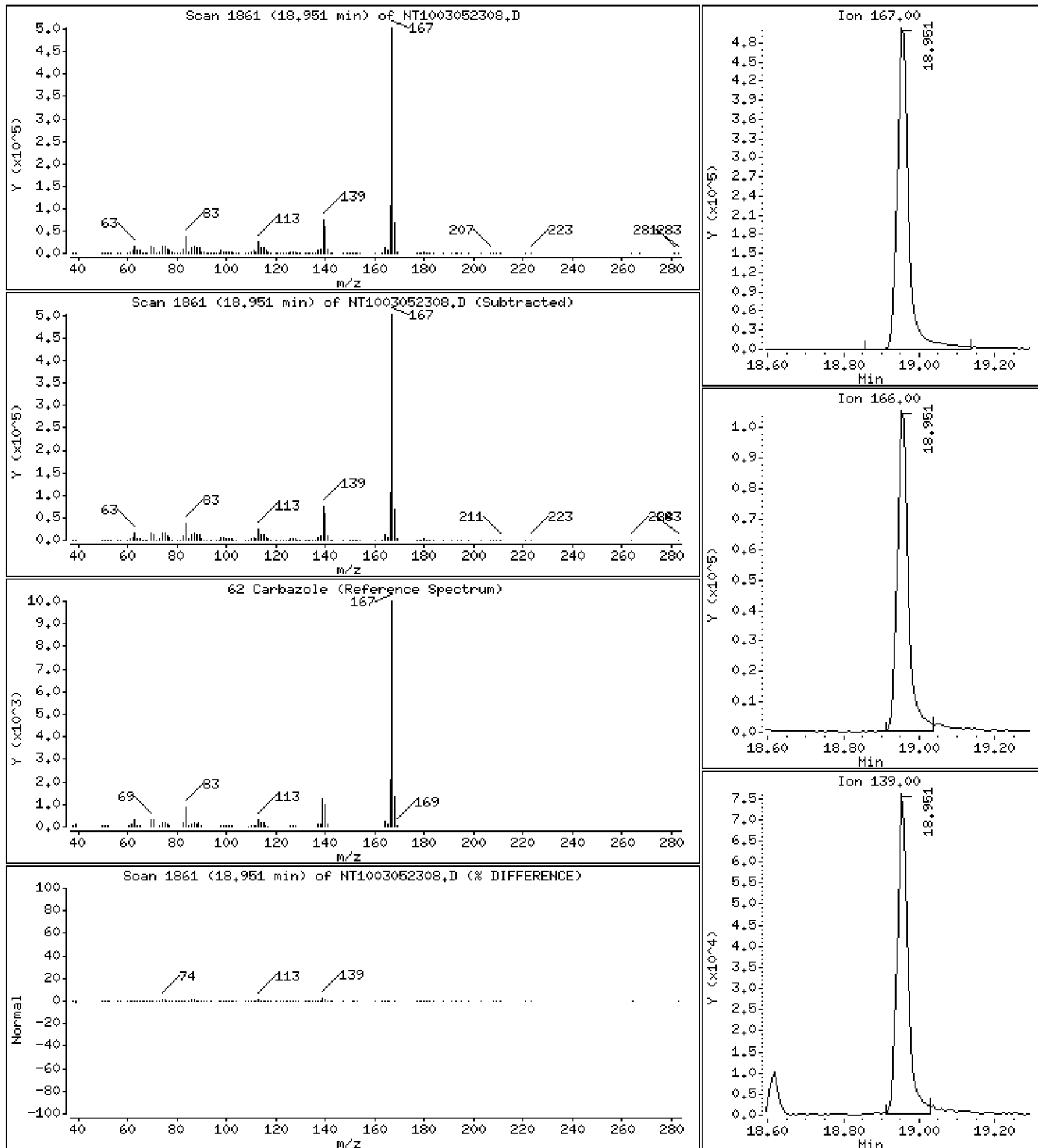
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,640 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

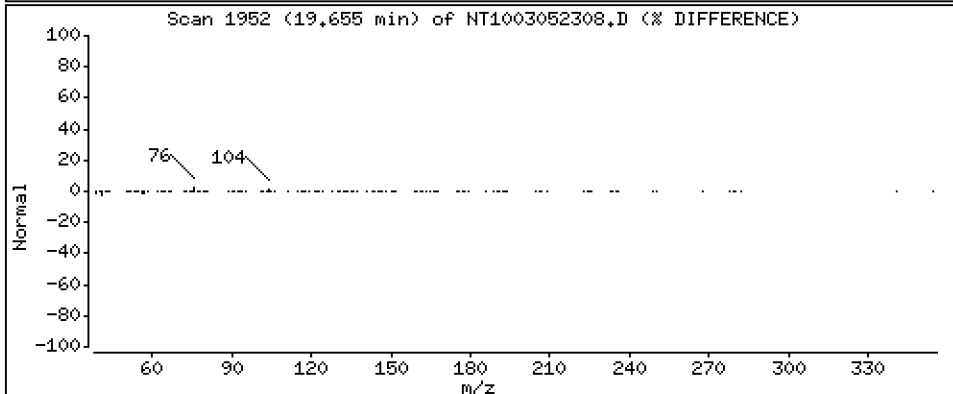
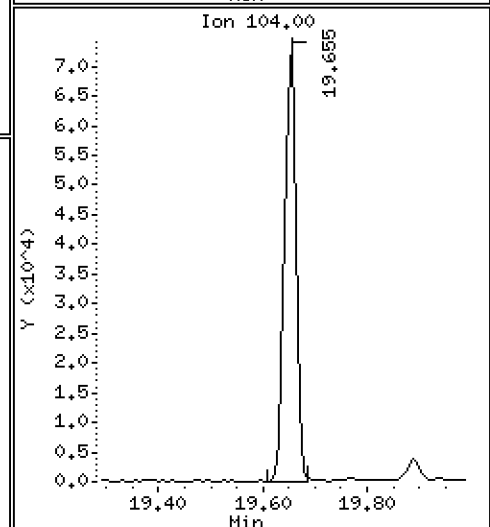
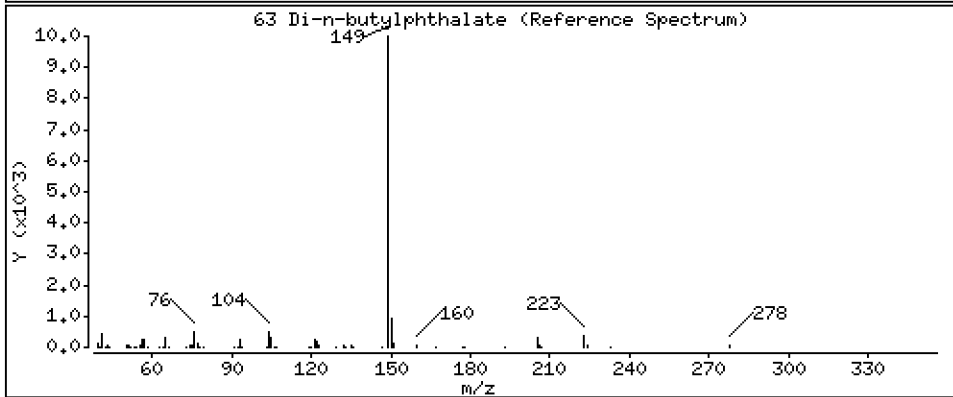
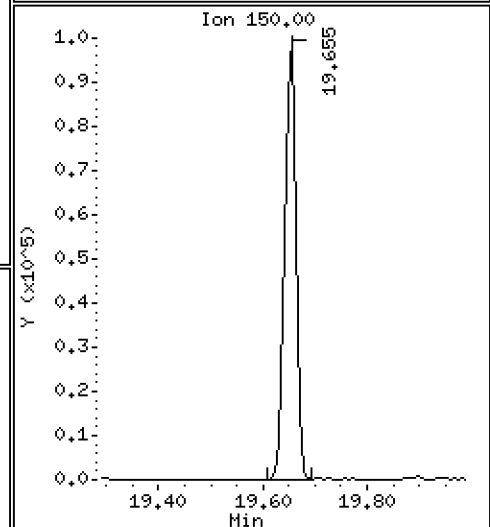
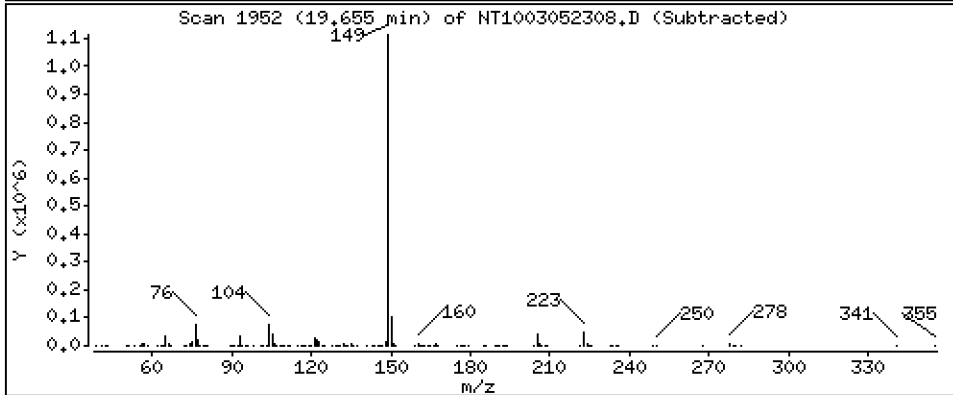
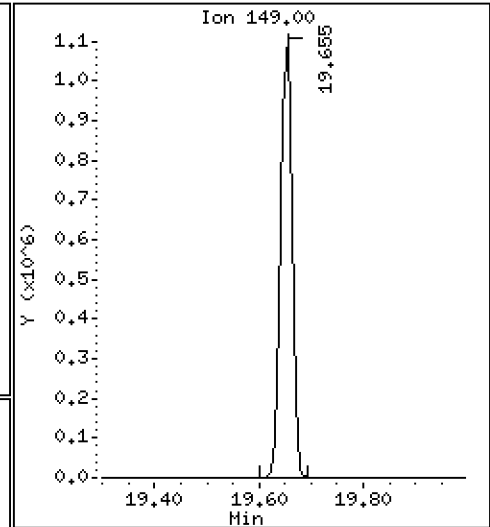
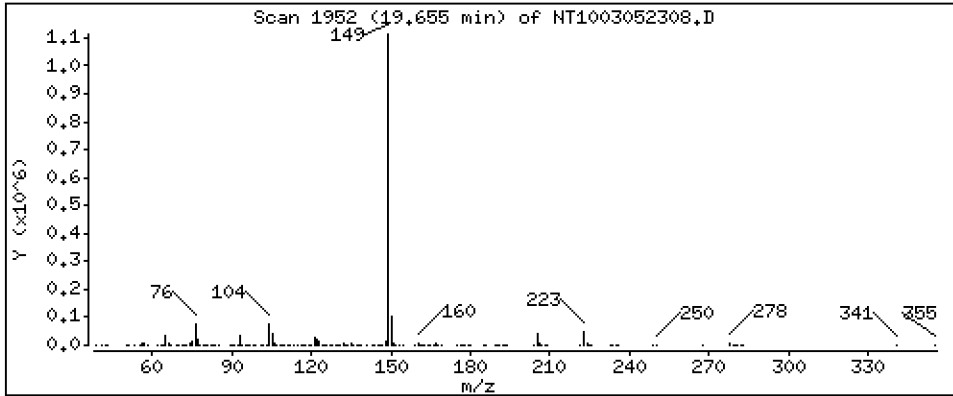
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 4,941 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

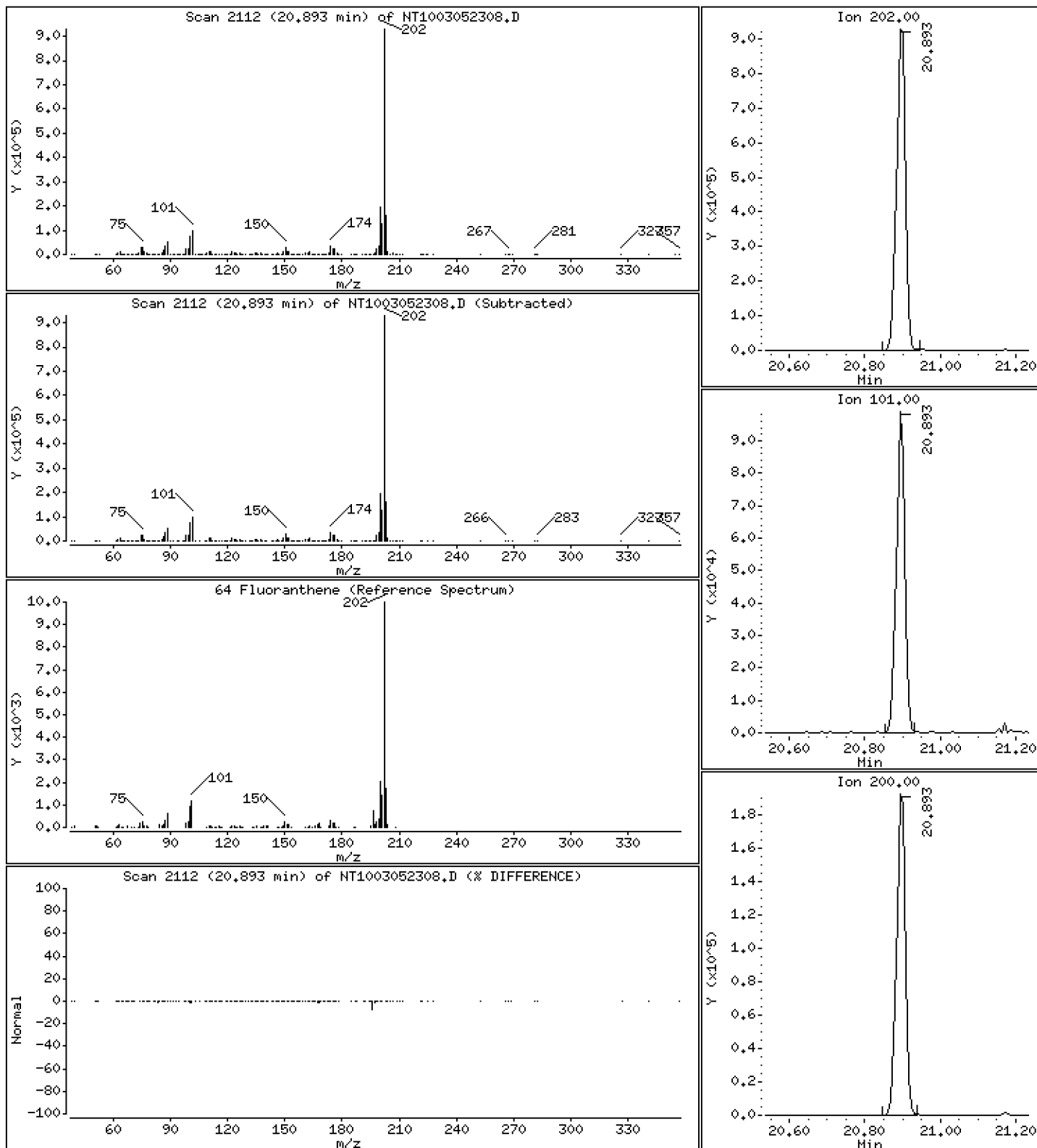
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,805 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

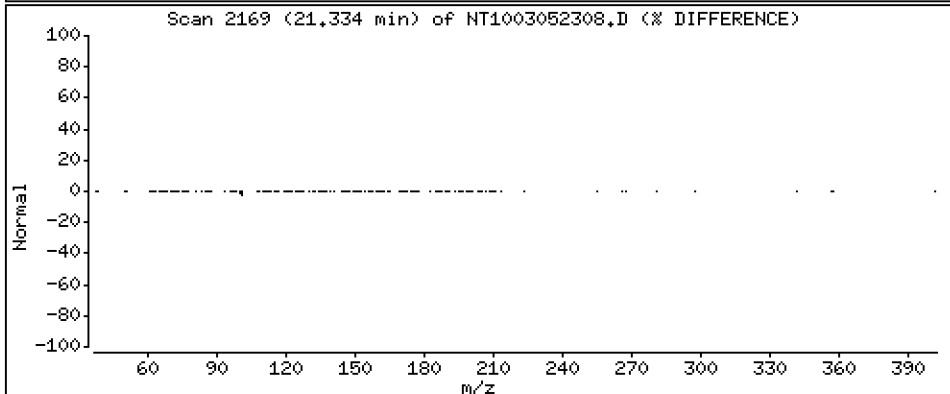
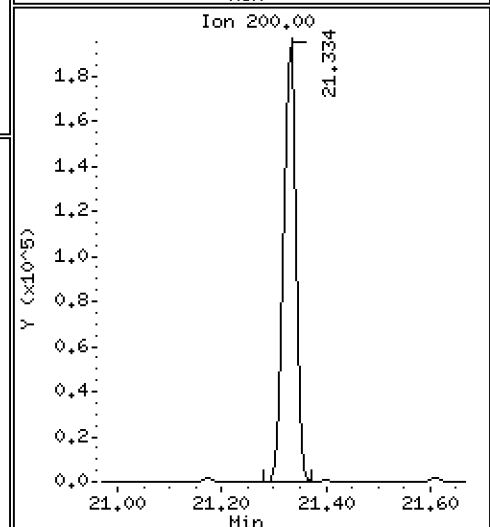
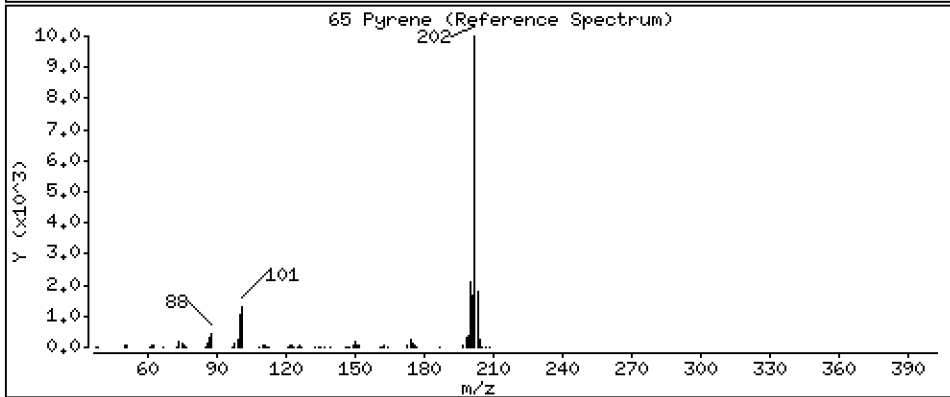
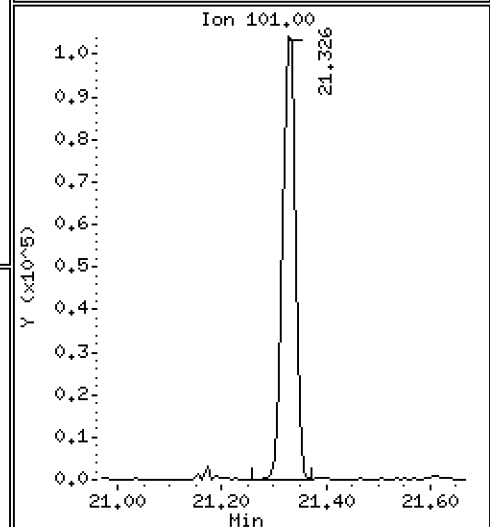
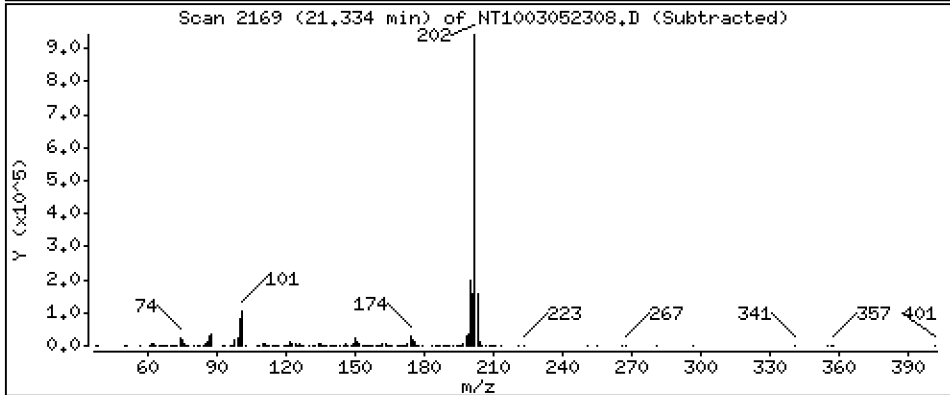
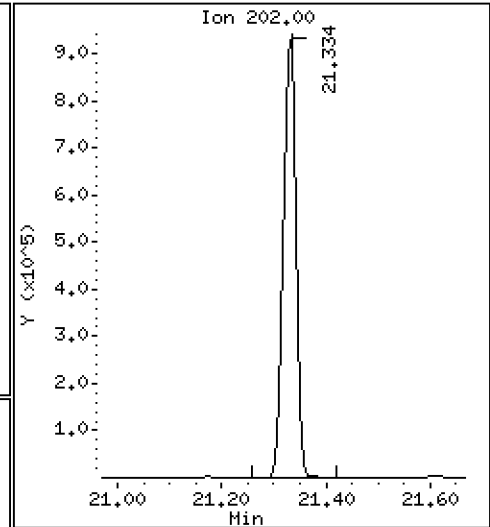
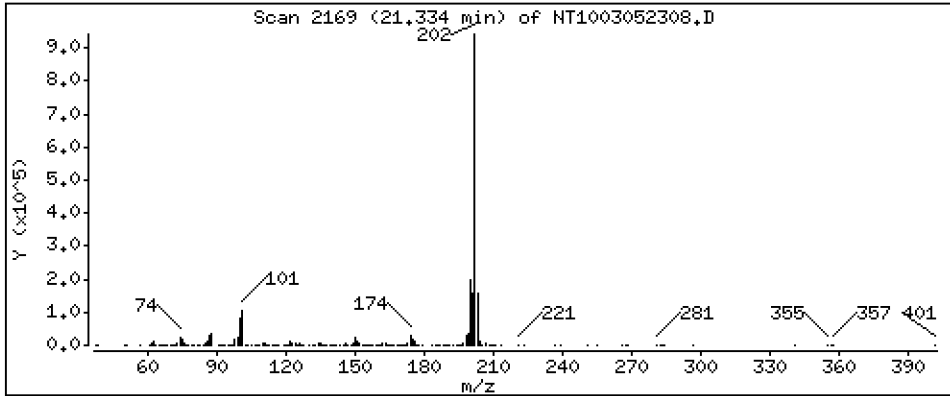
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 5,182 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

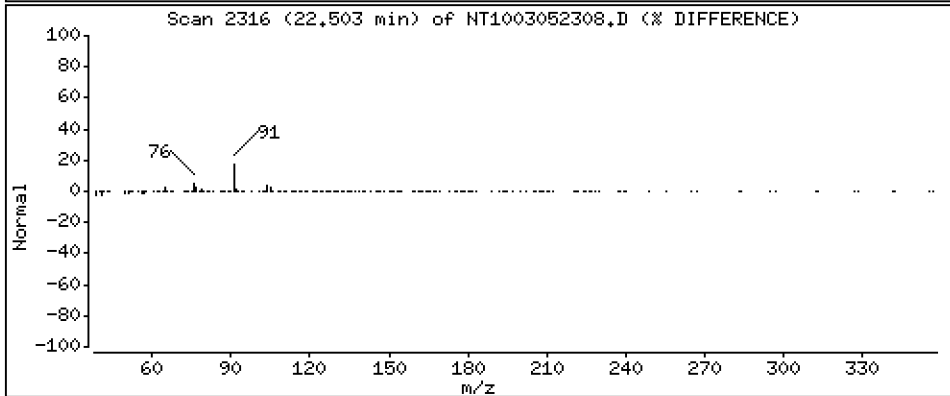
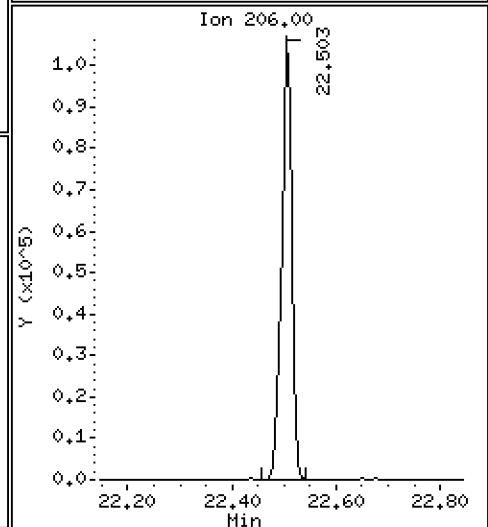
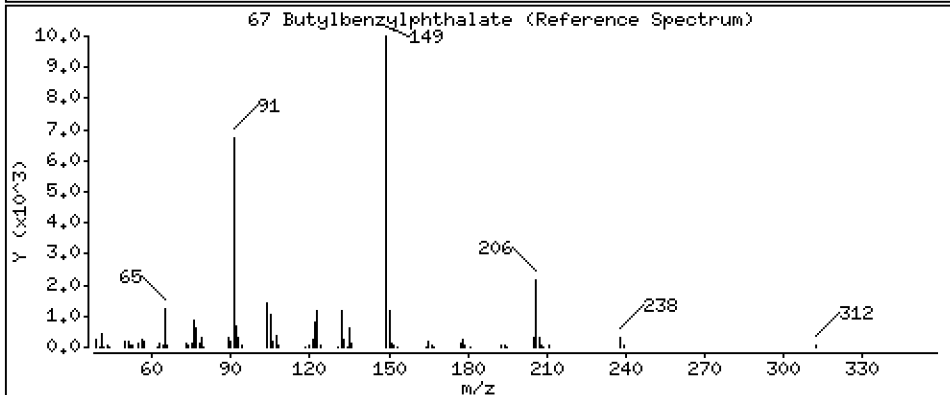
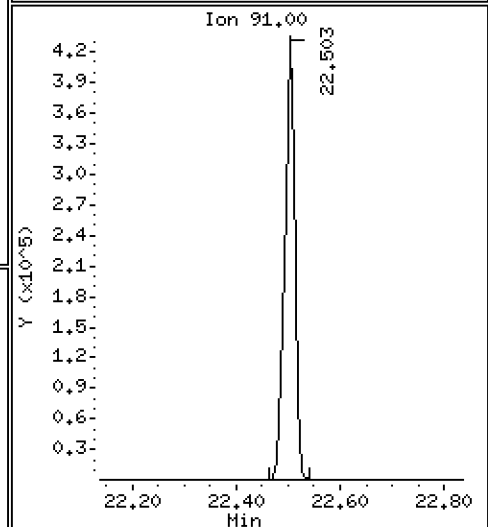
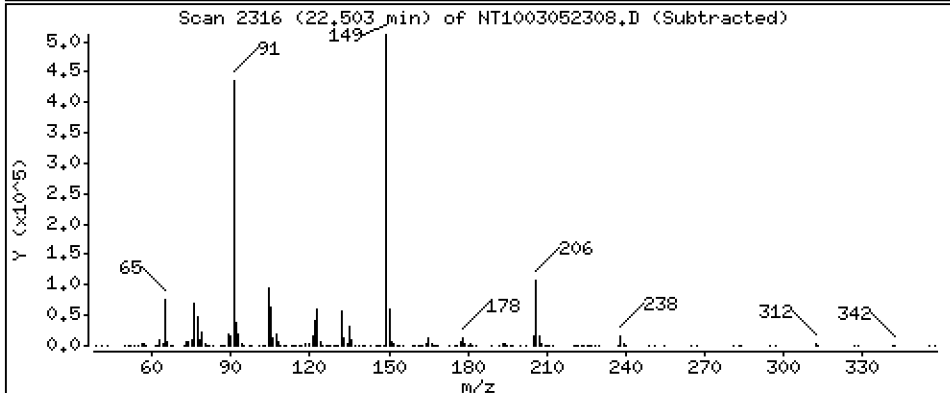
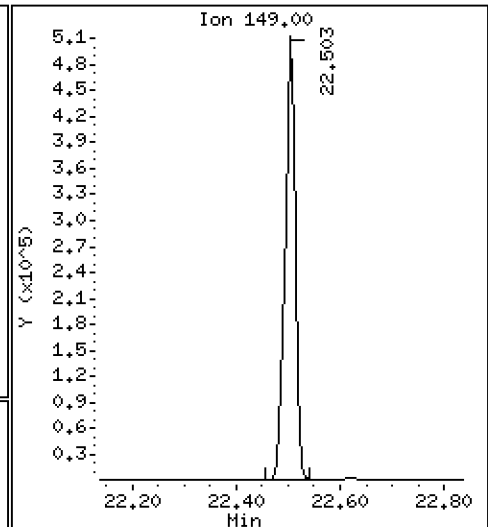
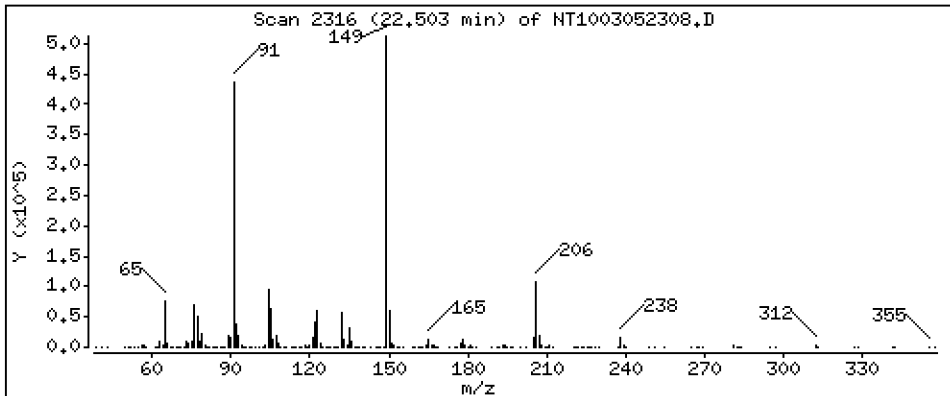
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,015 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

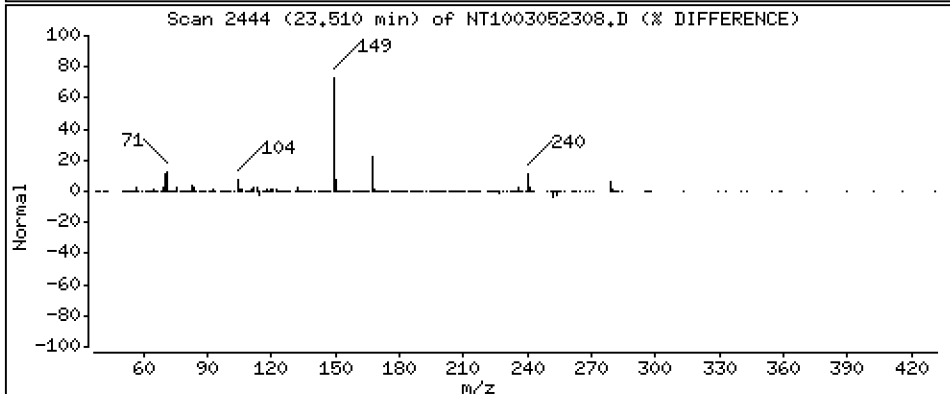
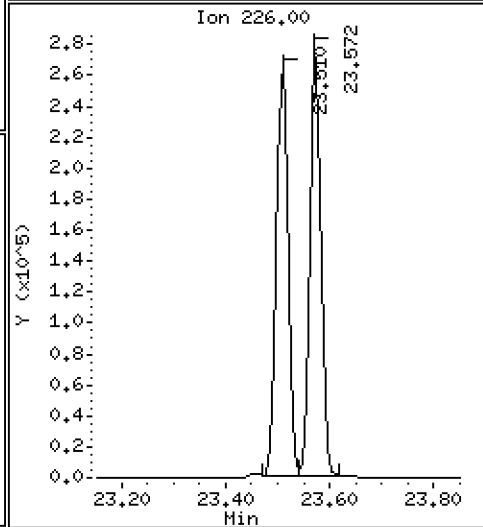
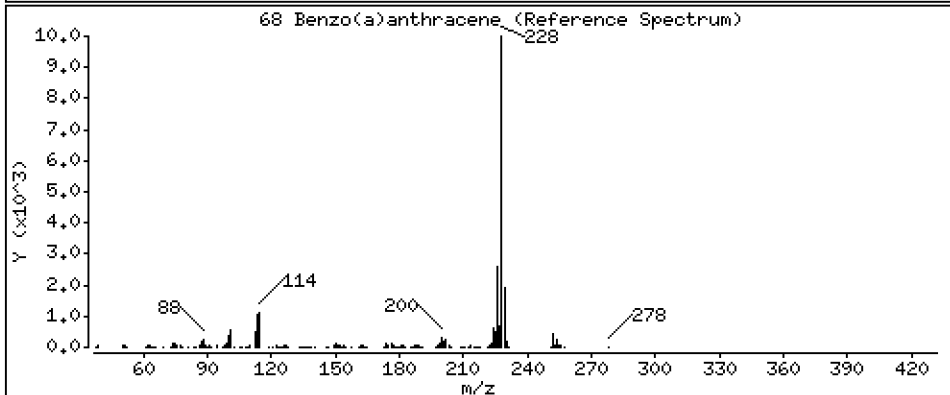
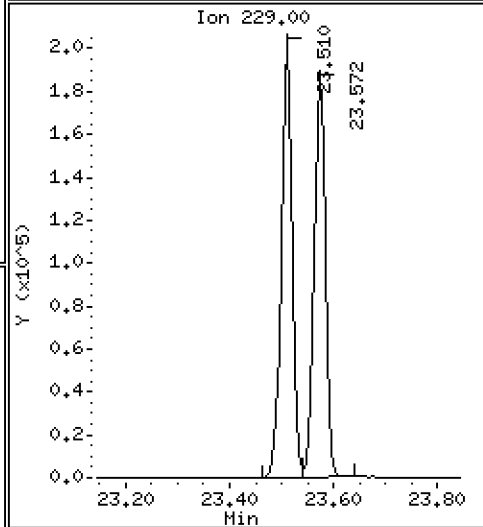
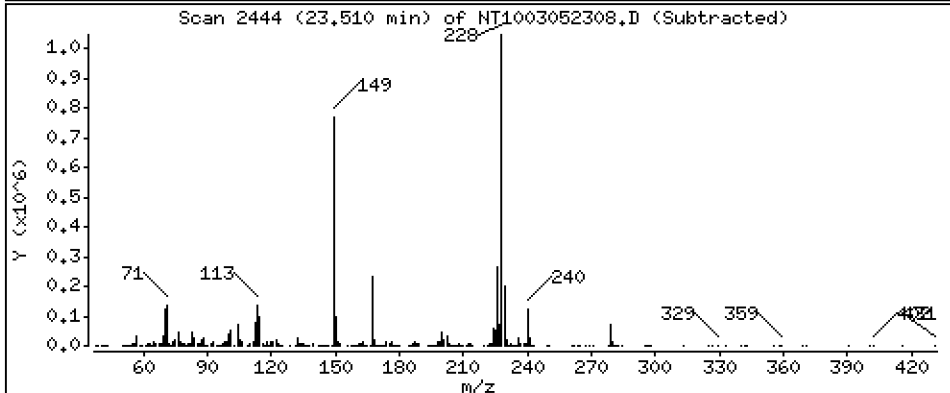
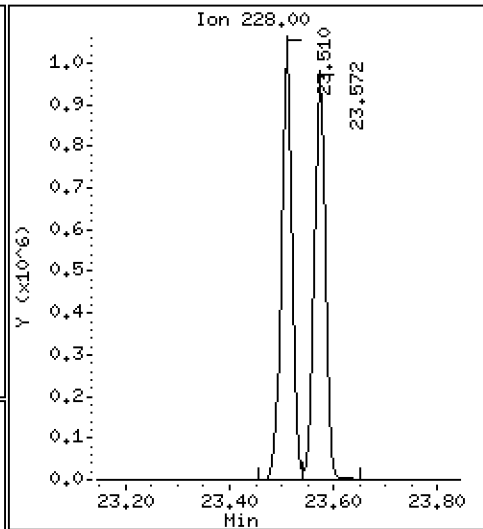
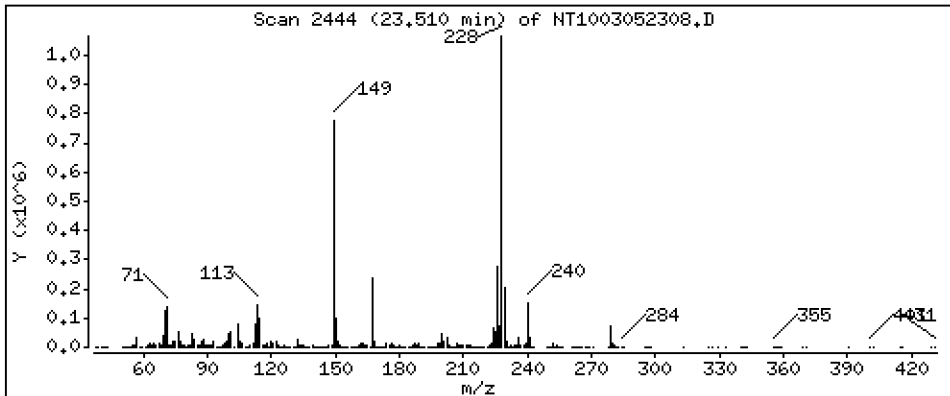
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,671 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

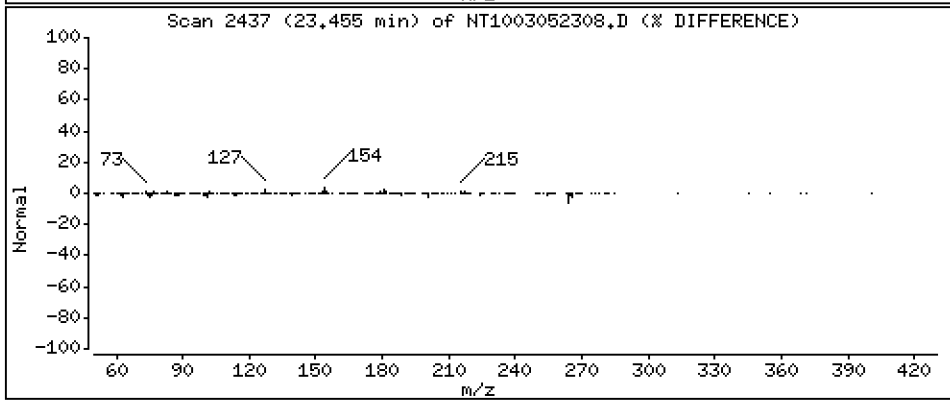
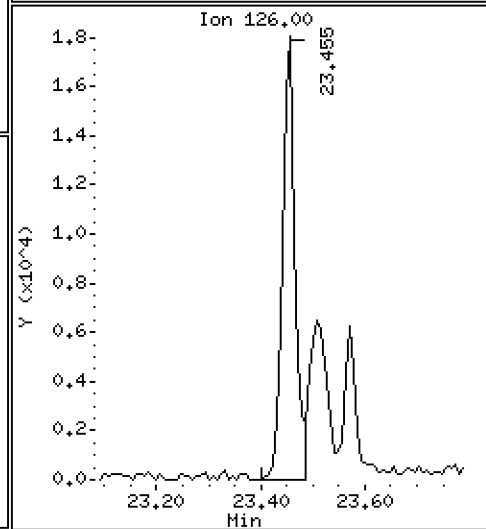
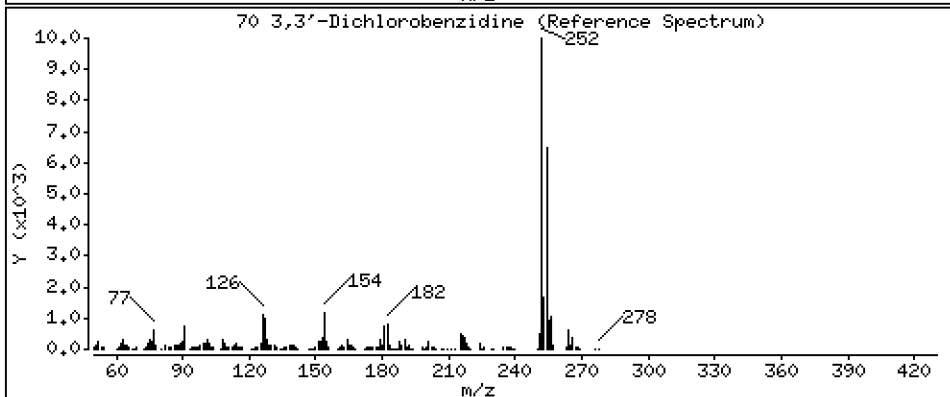
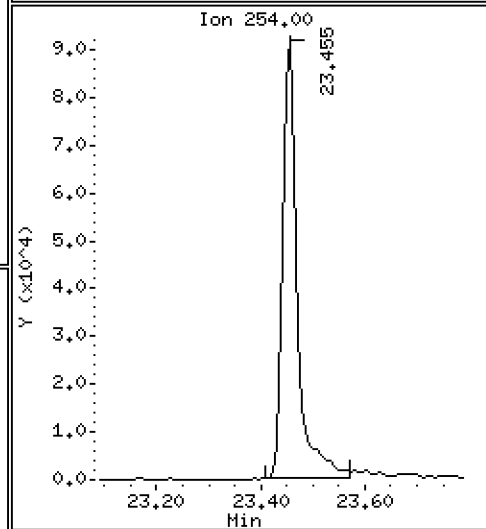
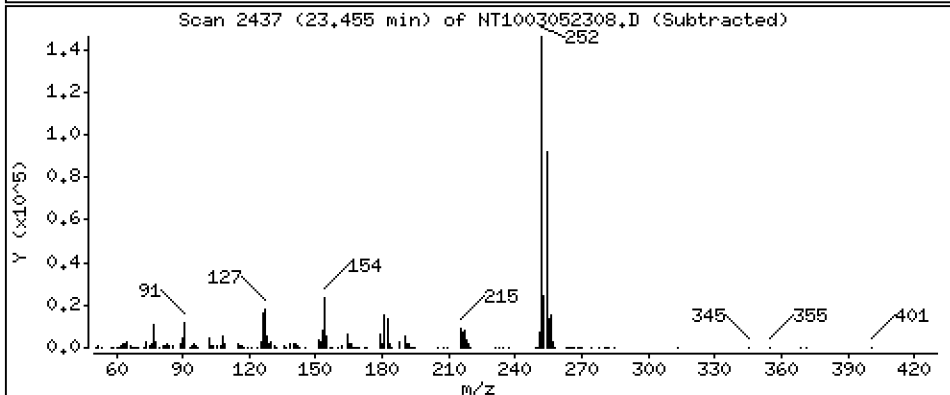
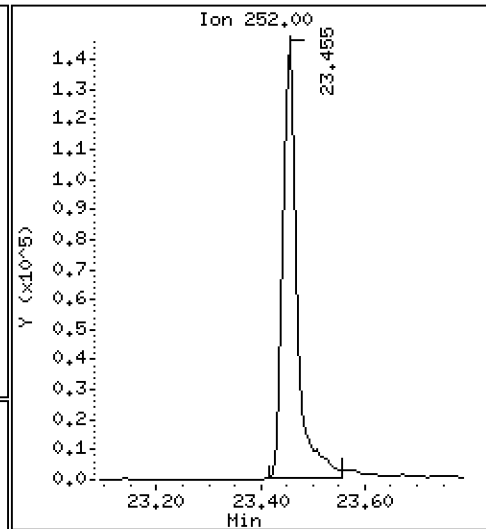
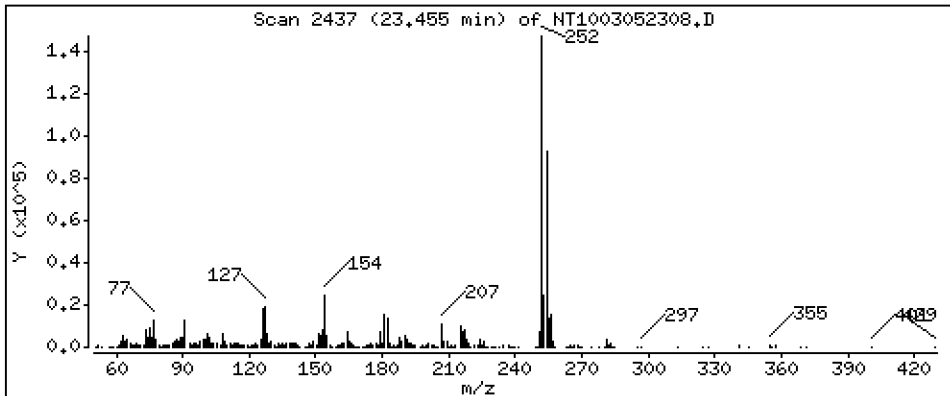
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 1,869 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

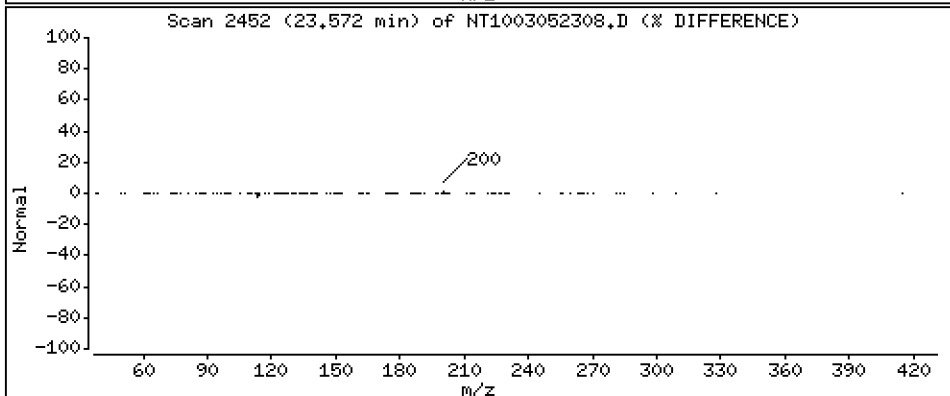
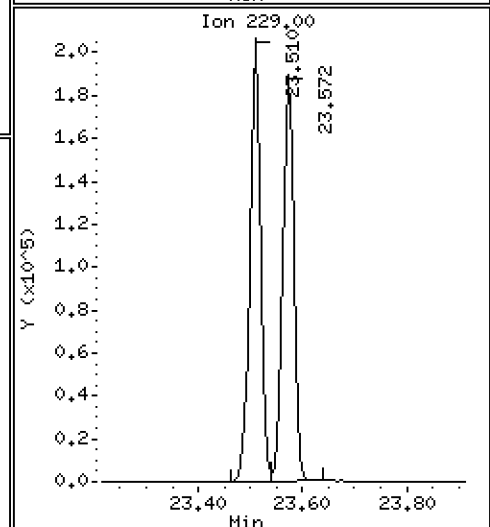
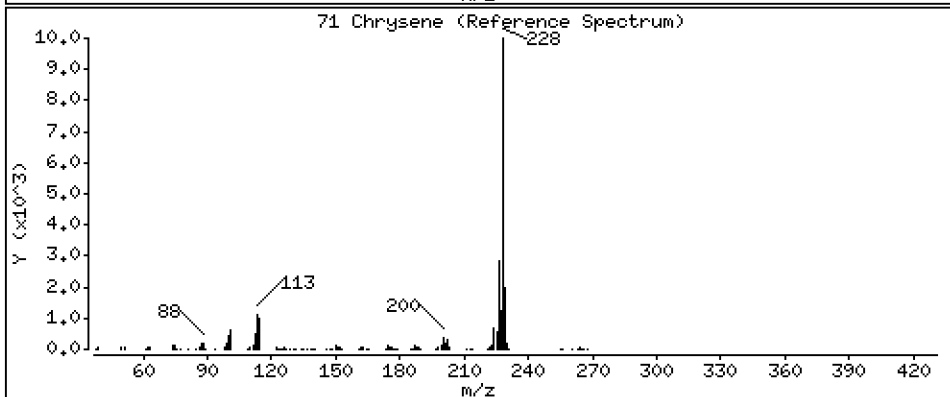
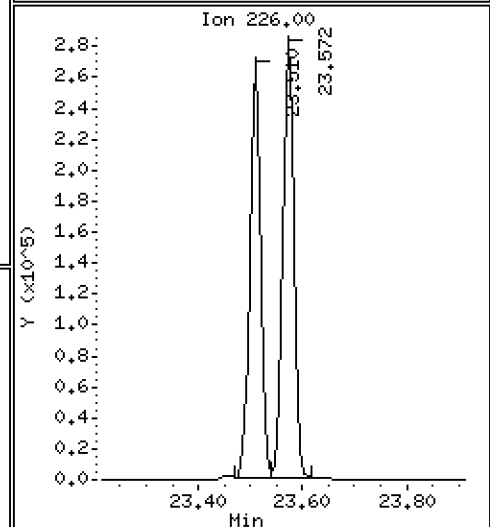
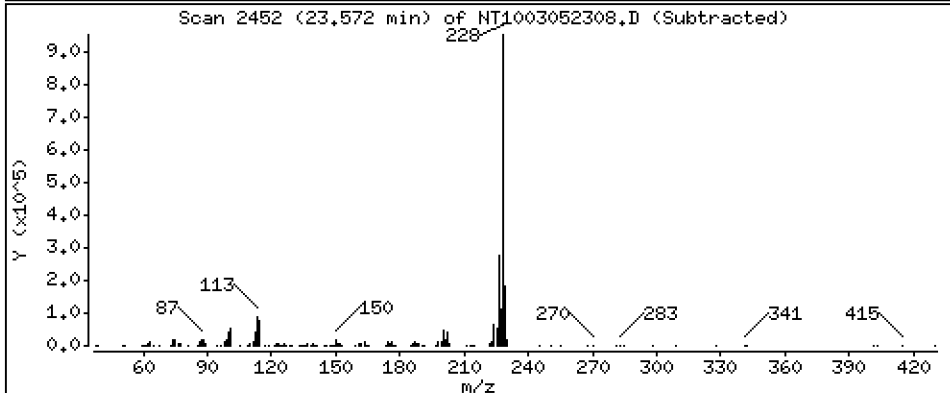
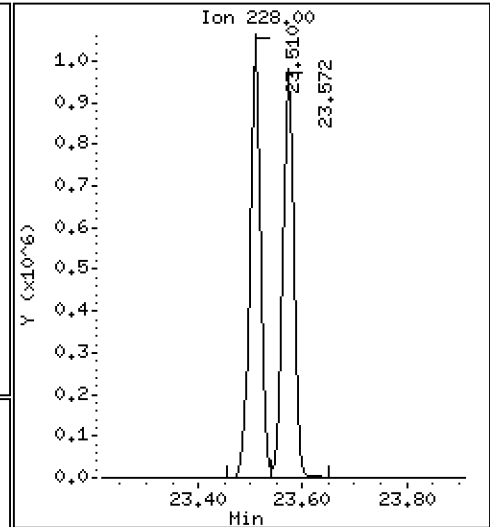
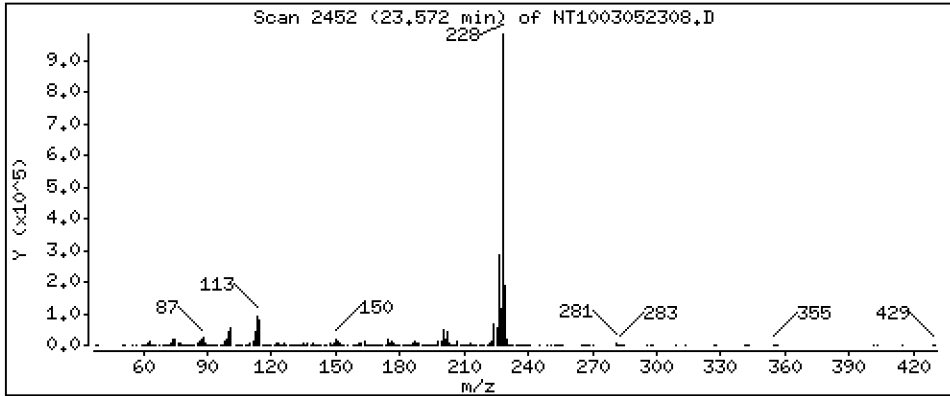
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 5,112 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

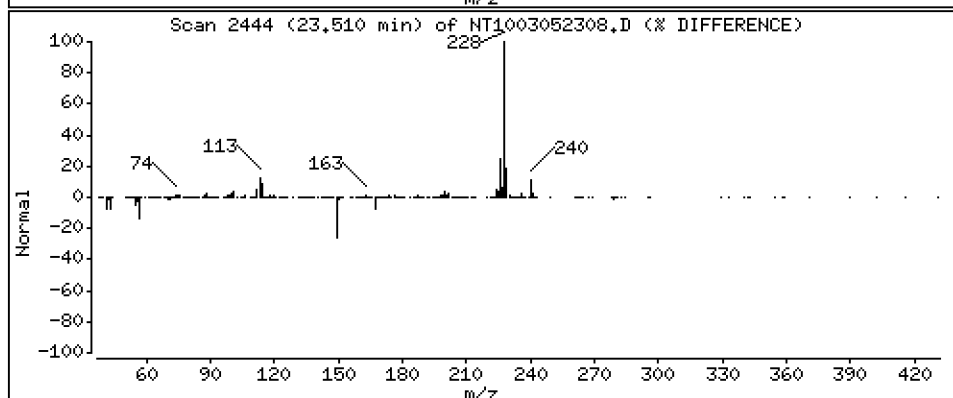
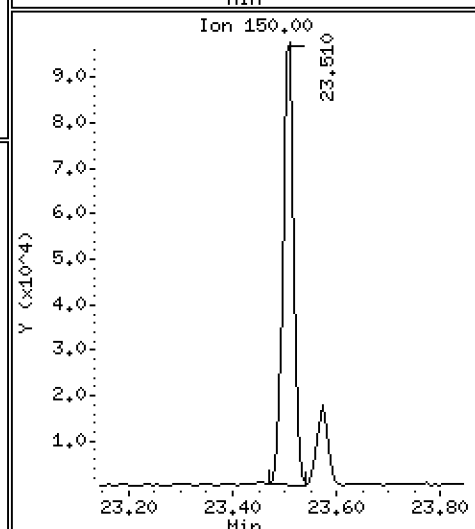
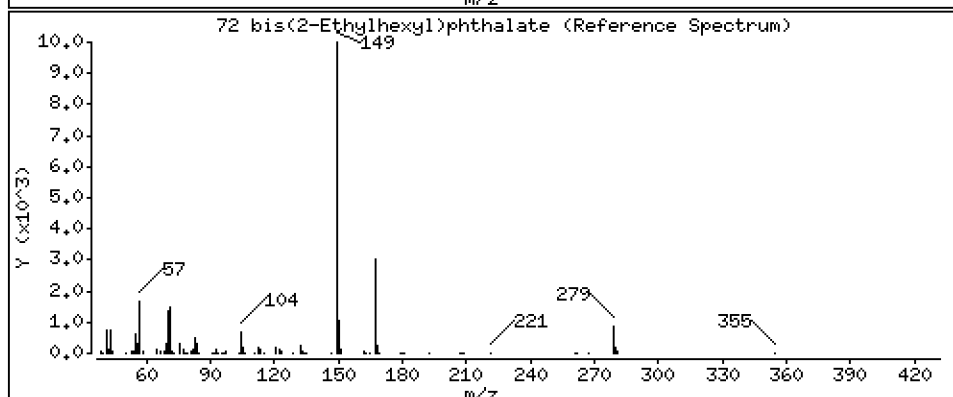
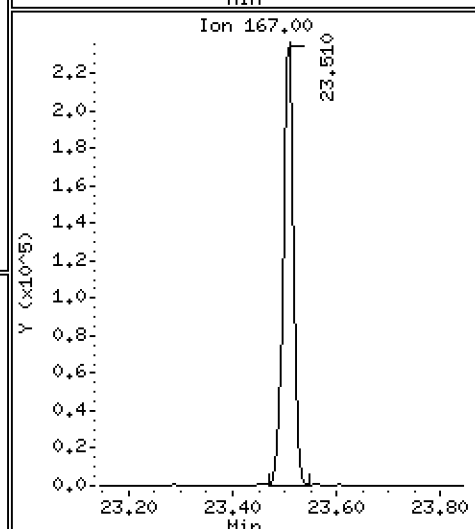
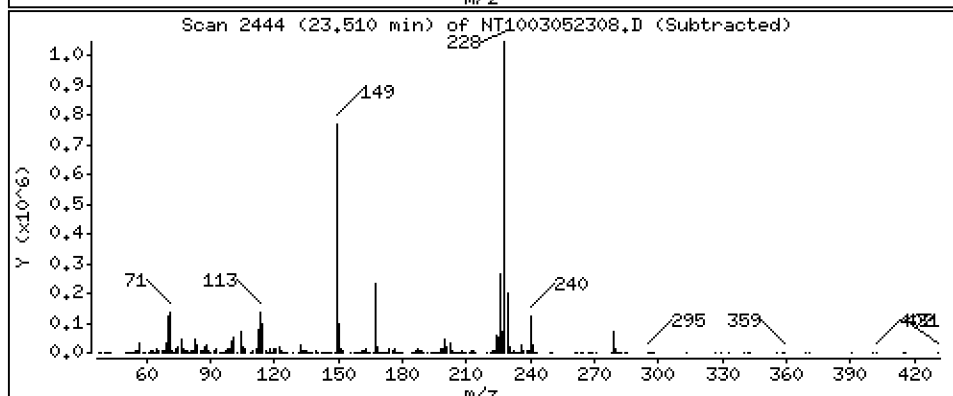
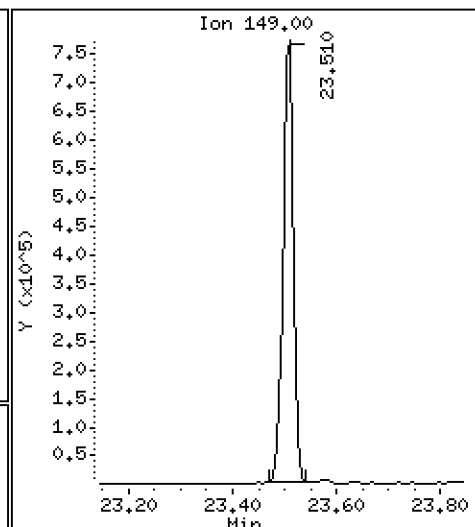
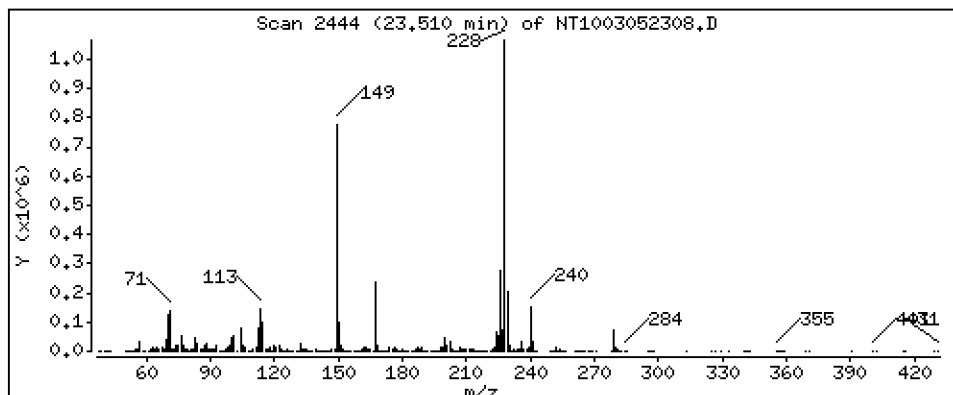
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,797 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

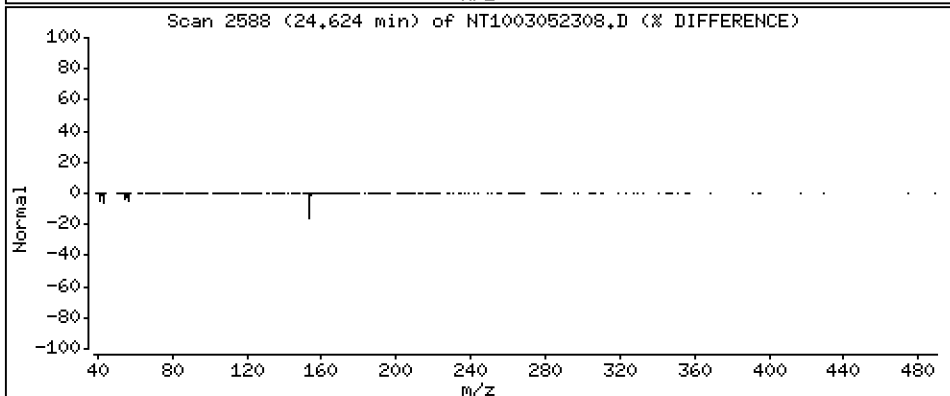
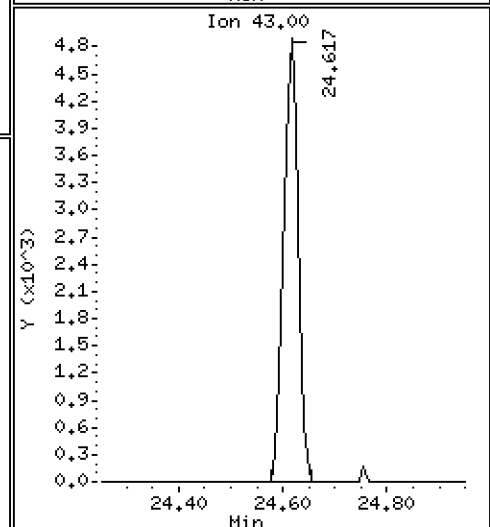
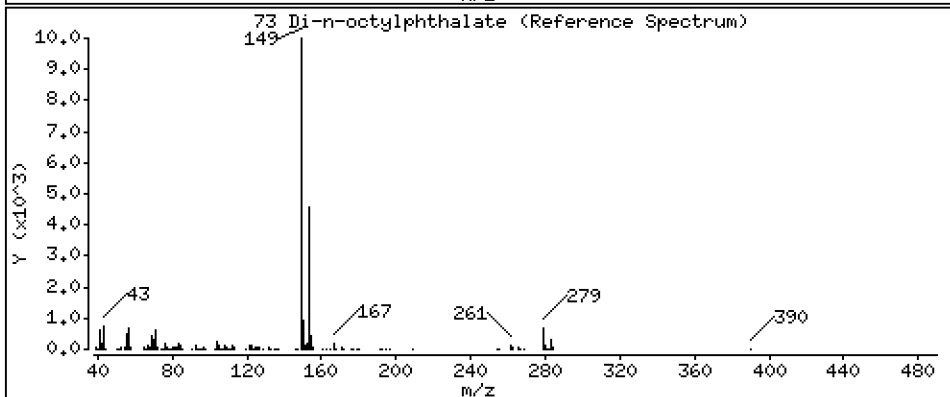
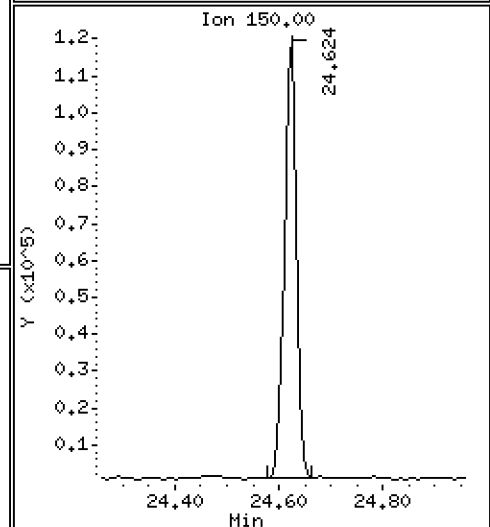
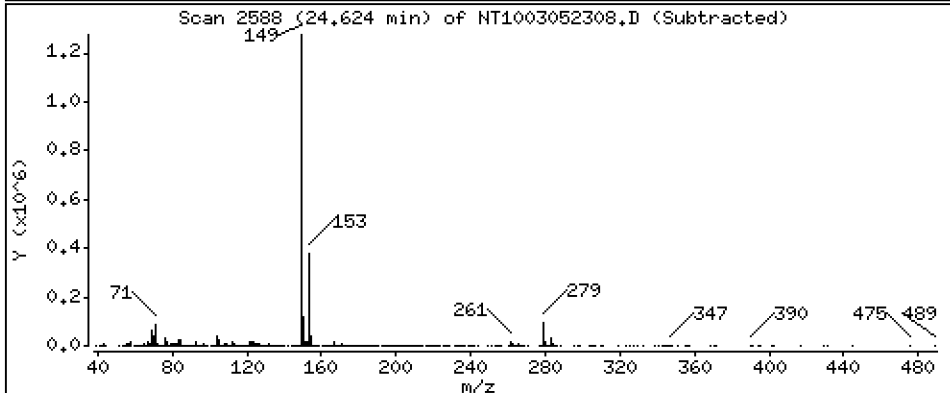
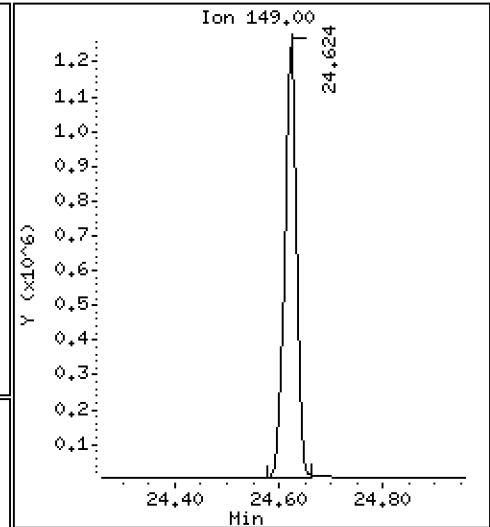
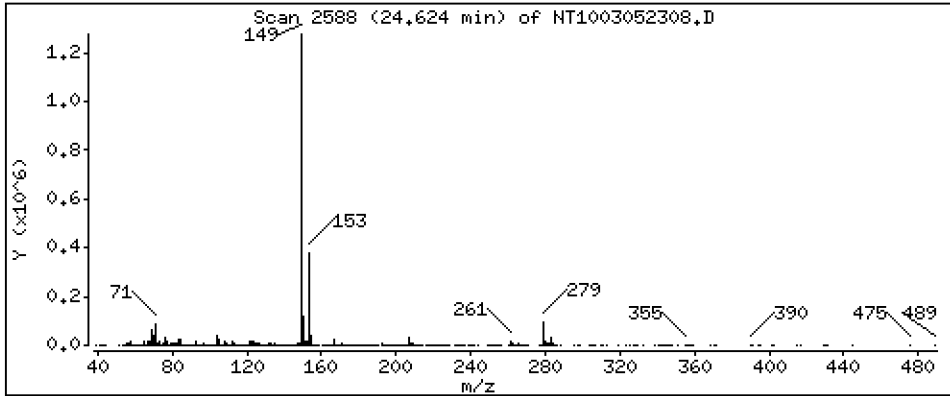
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,819 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

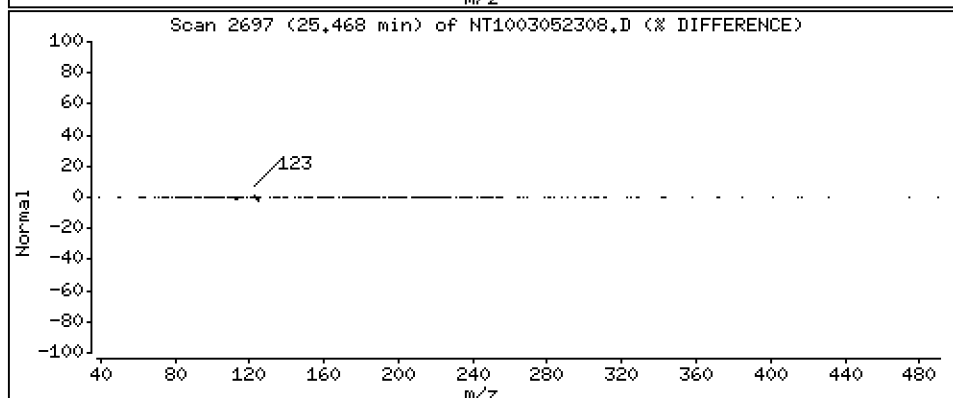
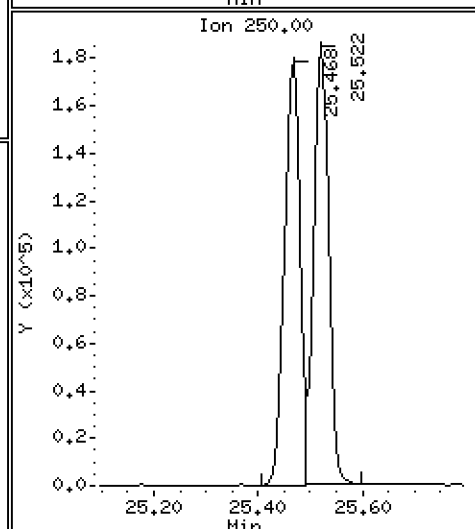
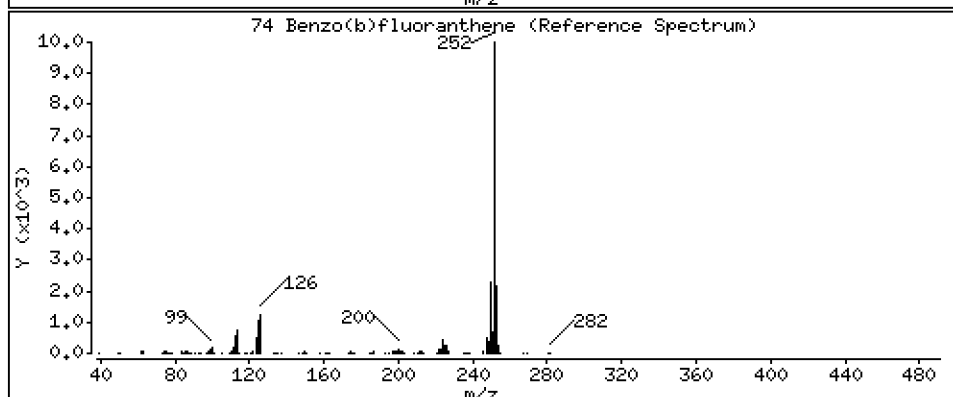
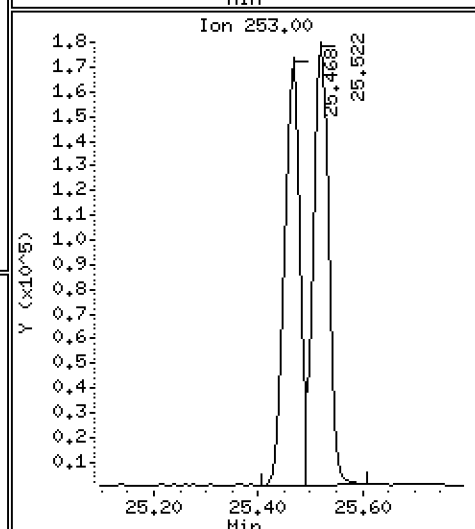
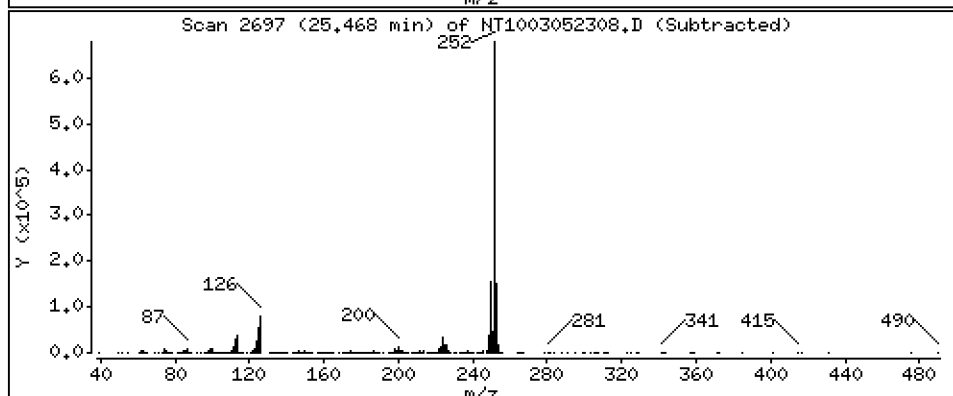
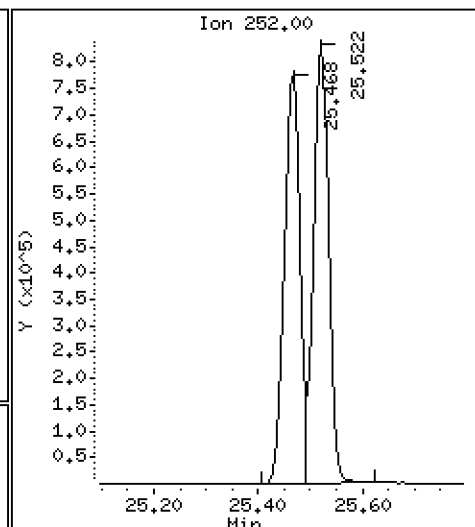
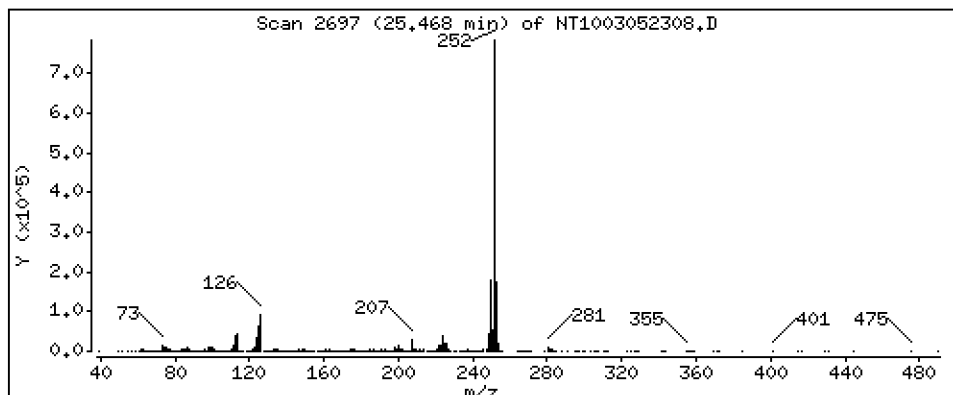
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,648 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

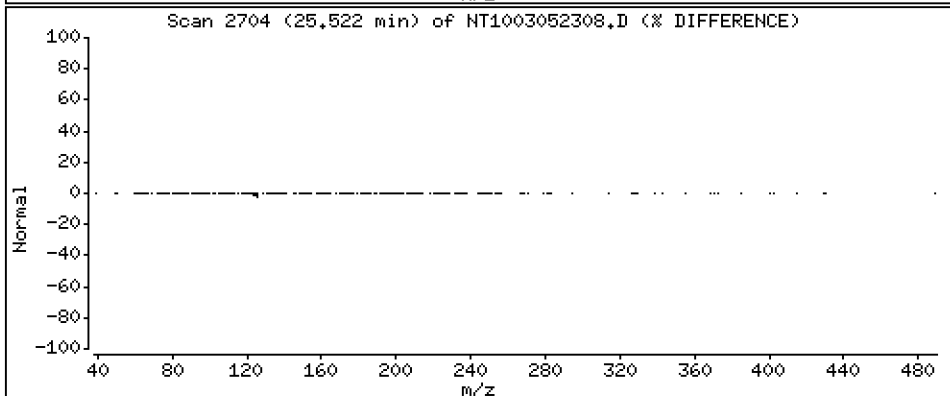
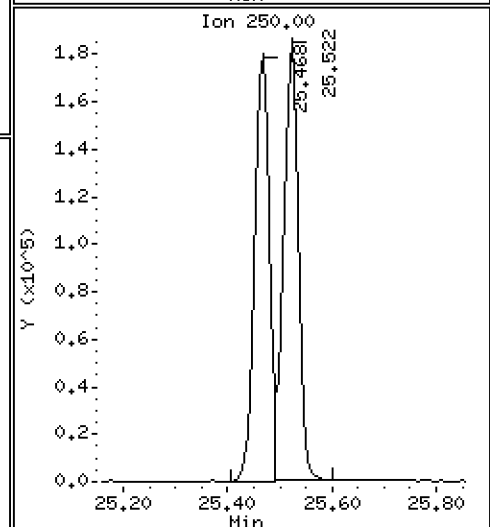
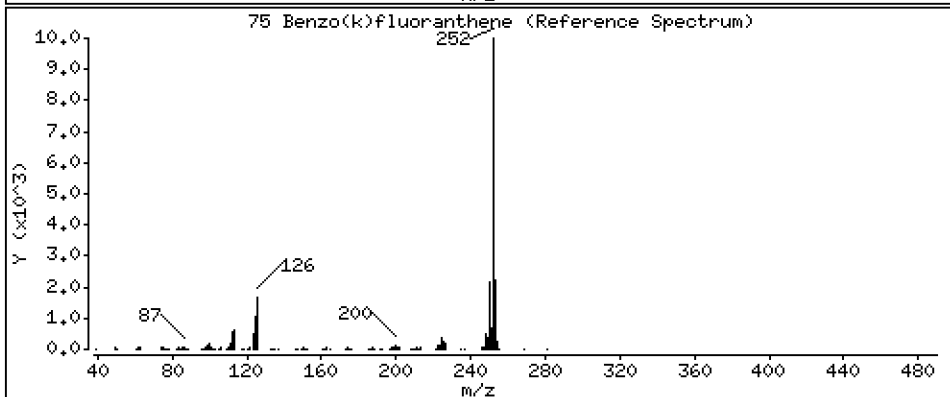
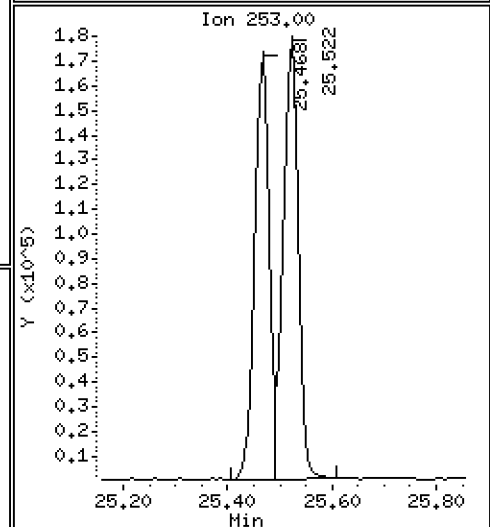
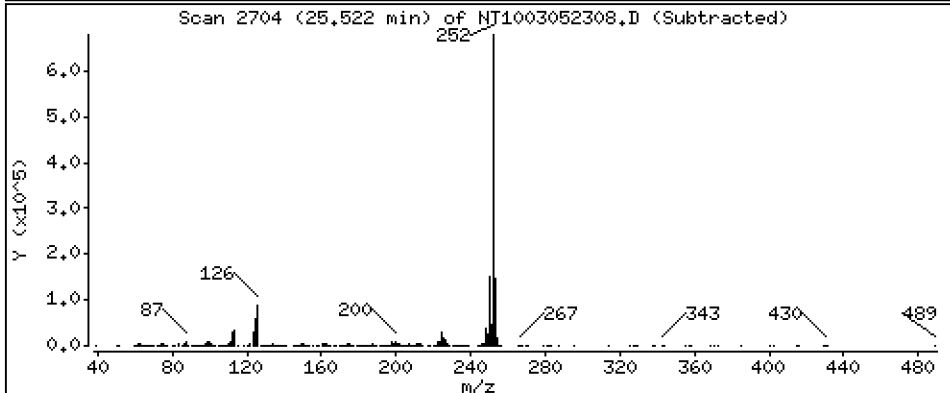
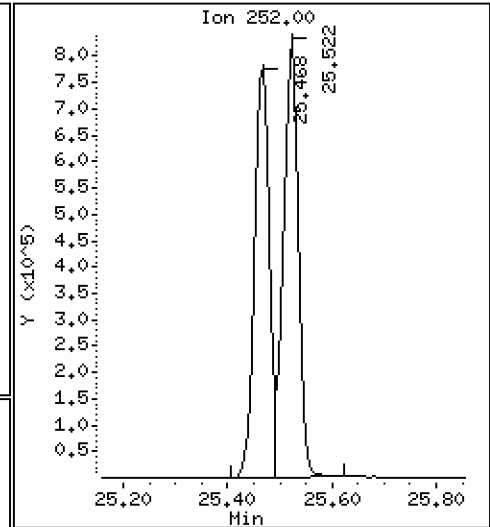
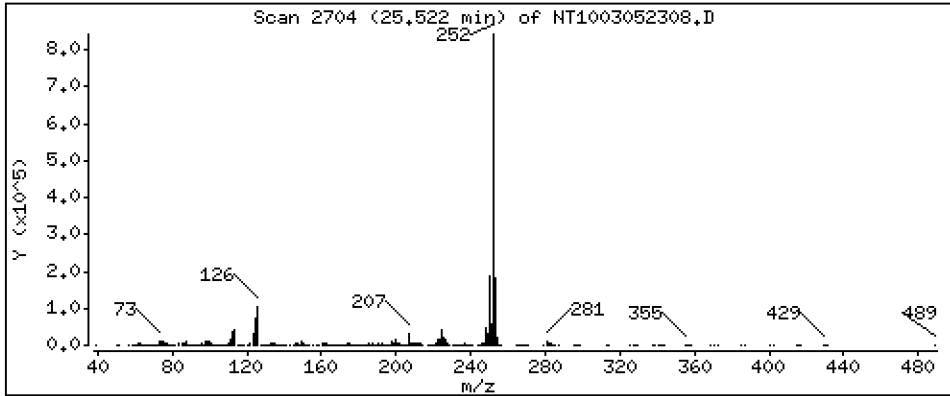
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,852 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

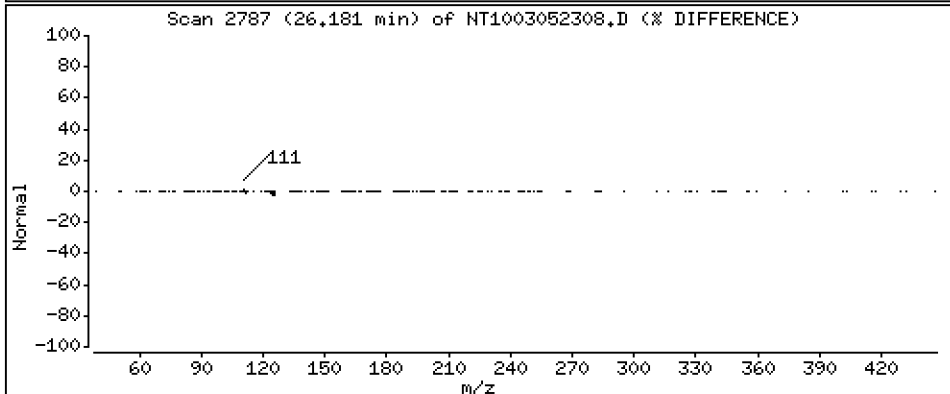
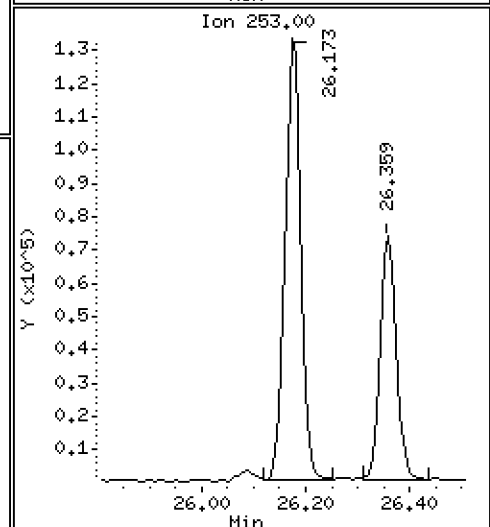
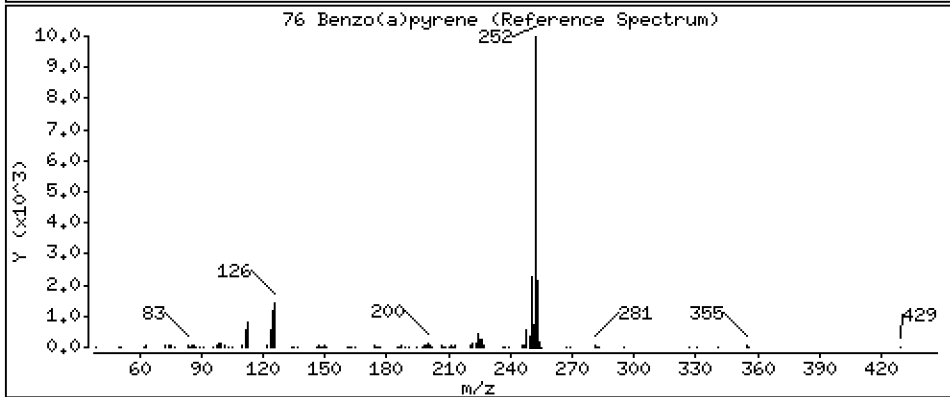
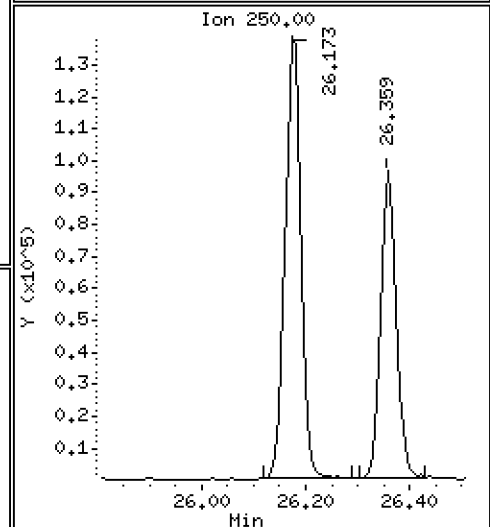
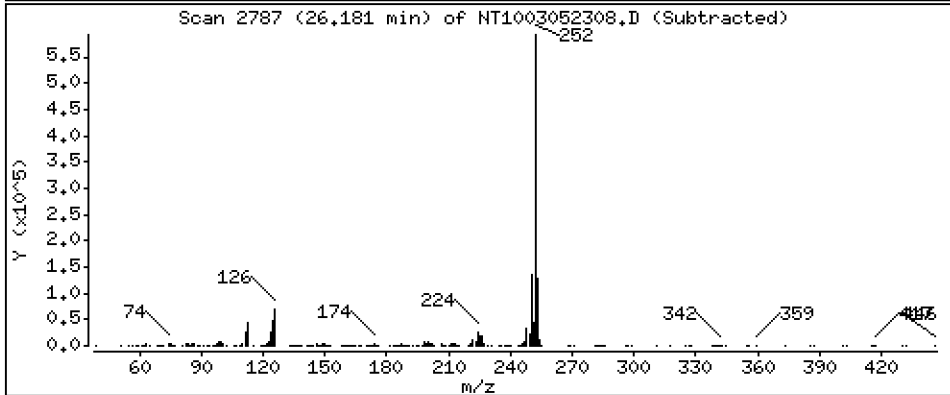
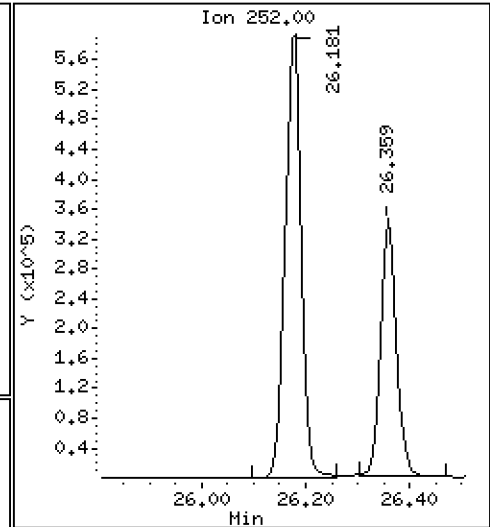
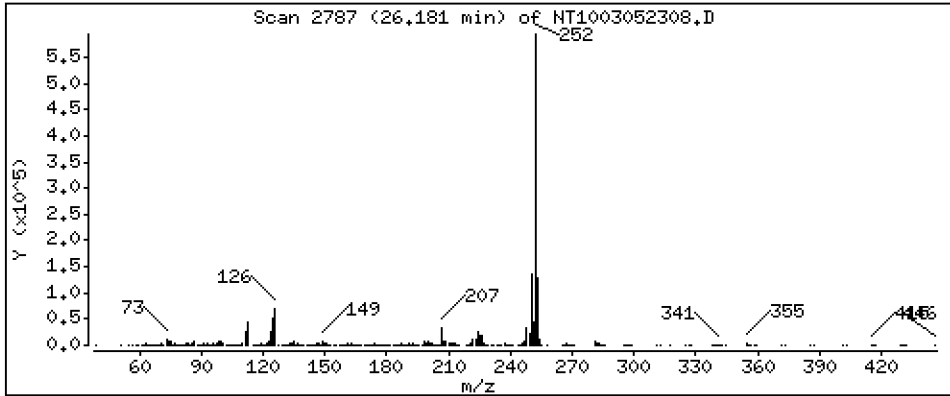
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,053 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

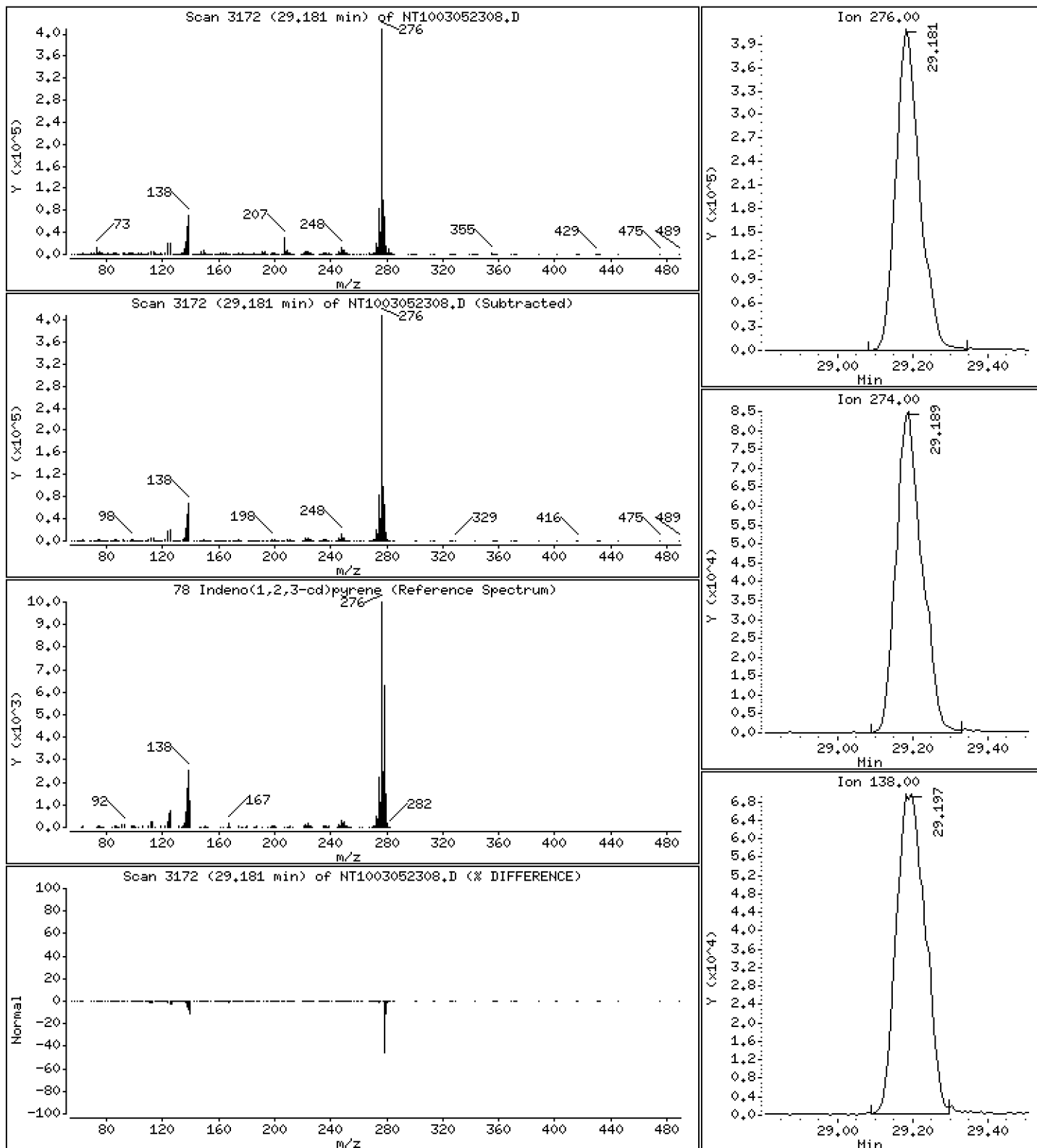
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,951 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

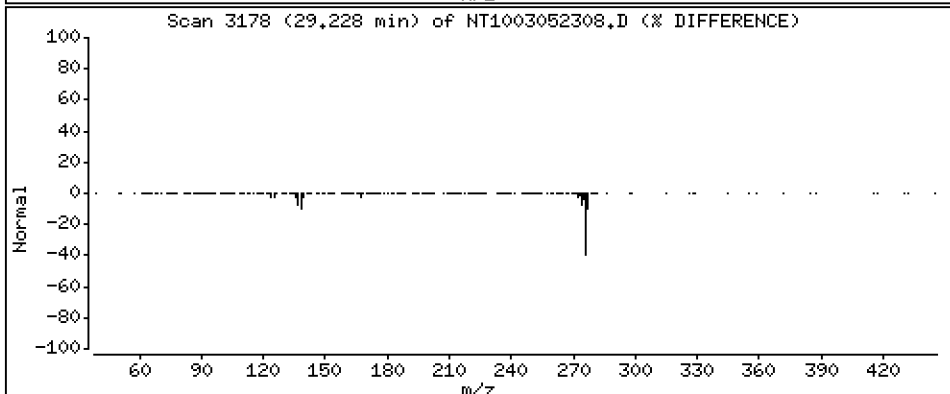
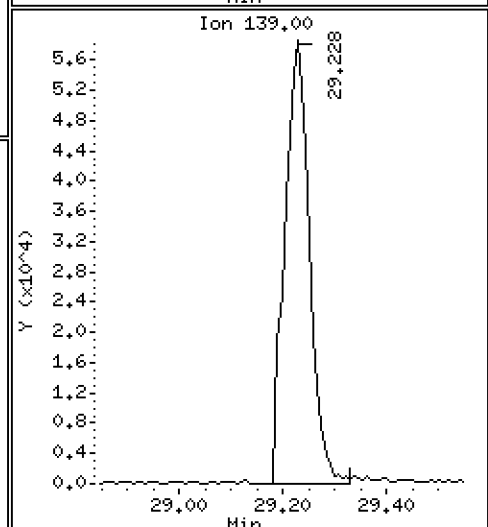
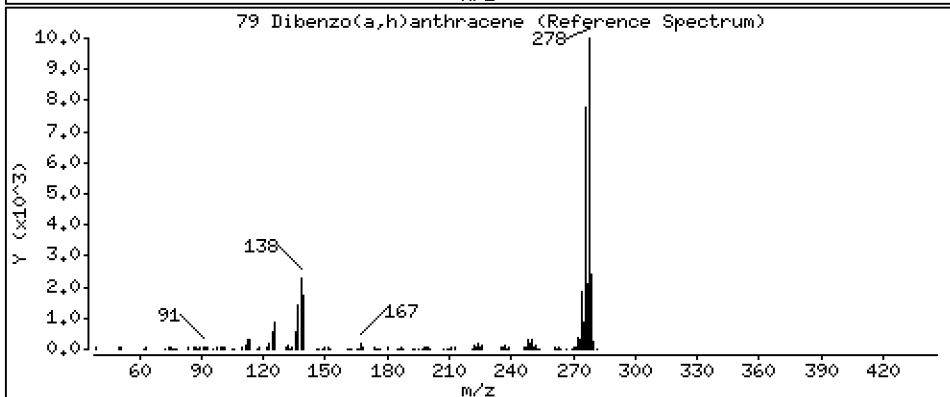
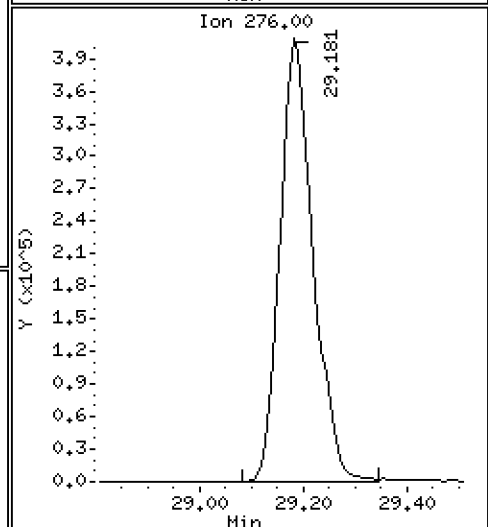
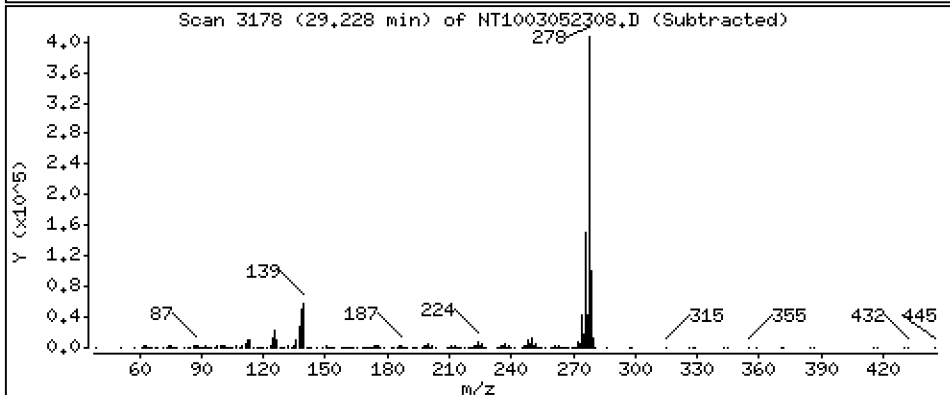
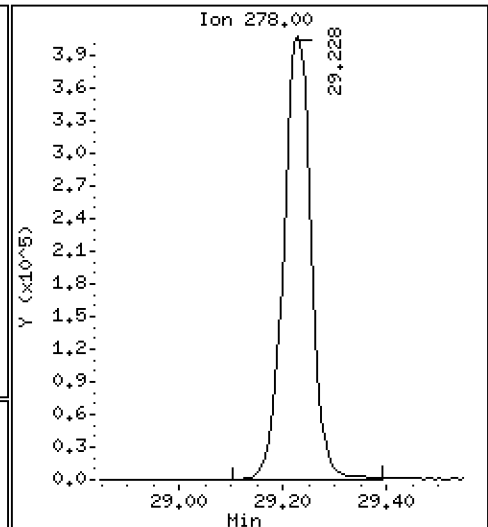
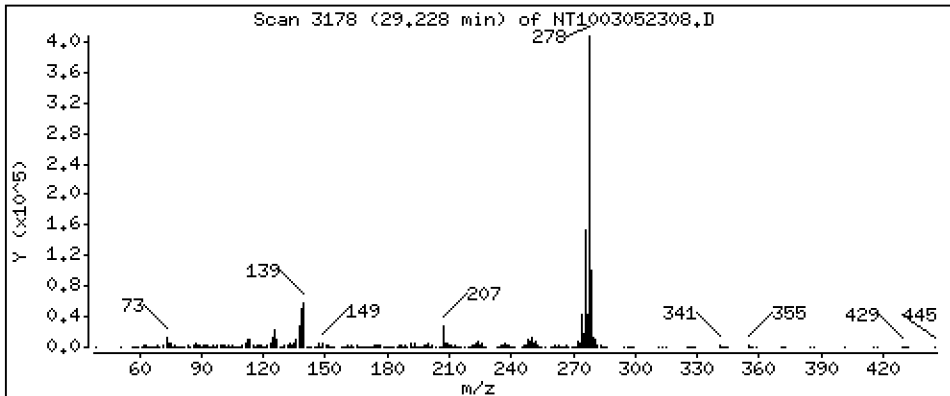
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,488 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

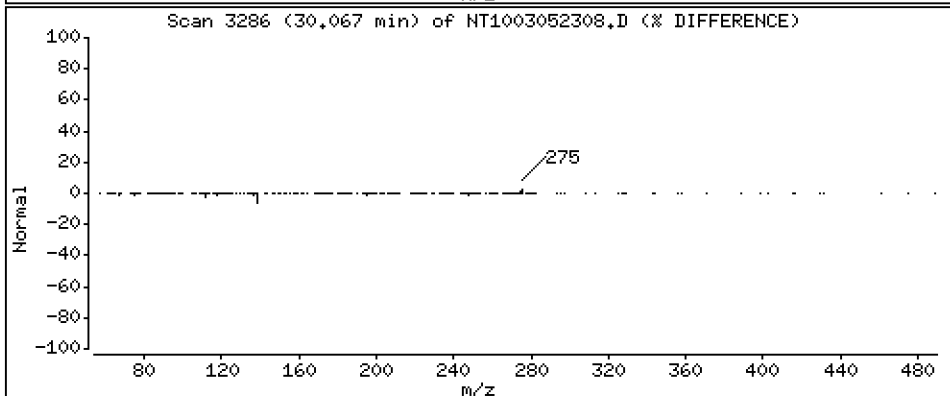
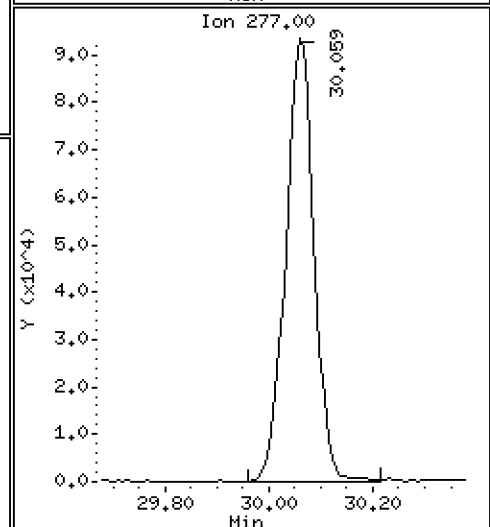
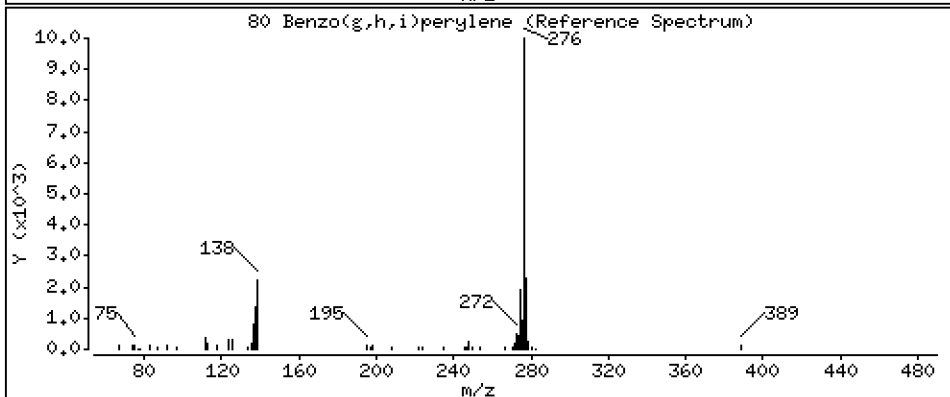
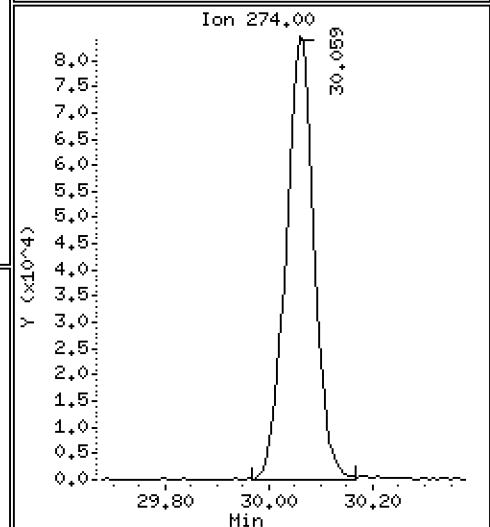
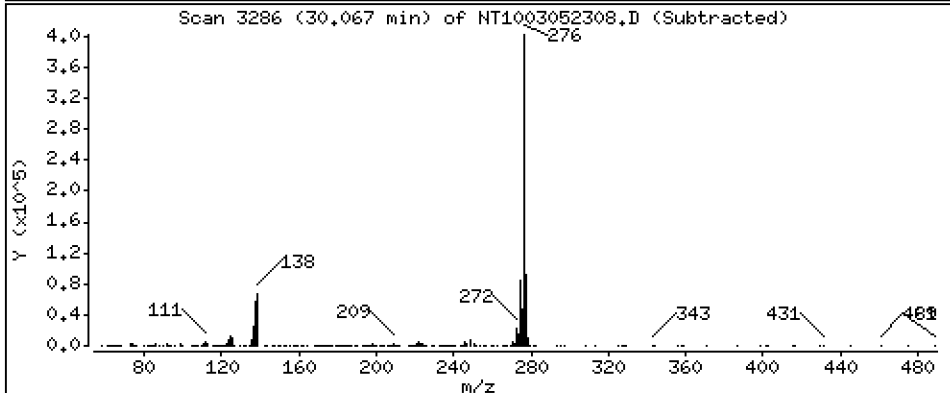
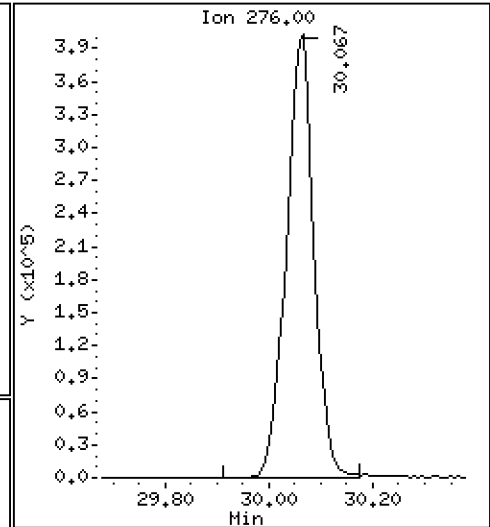
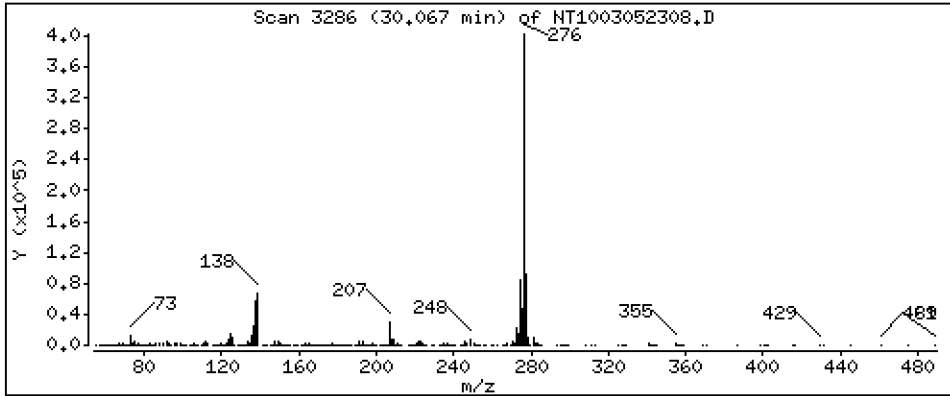
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 5,176 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

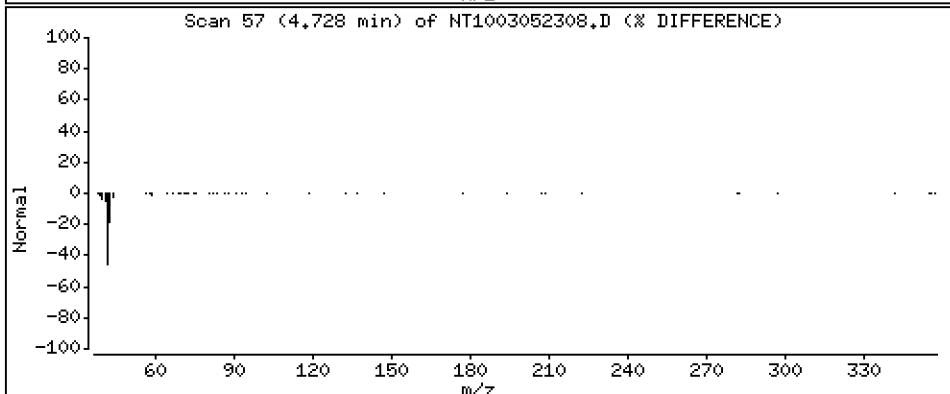
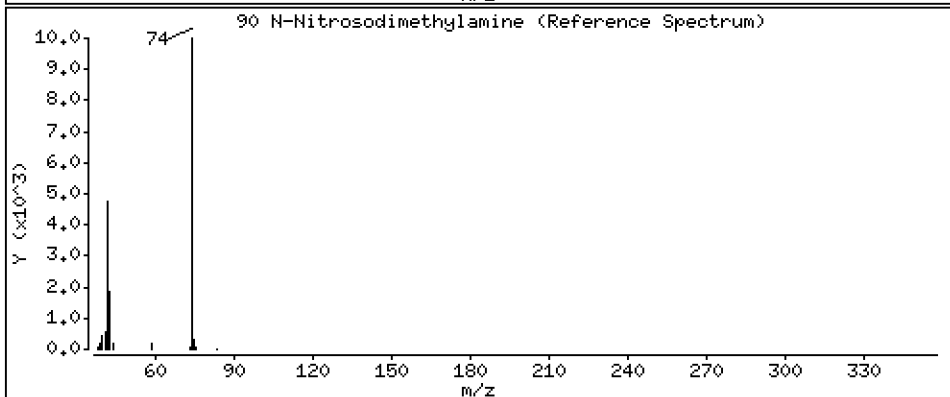
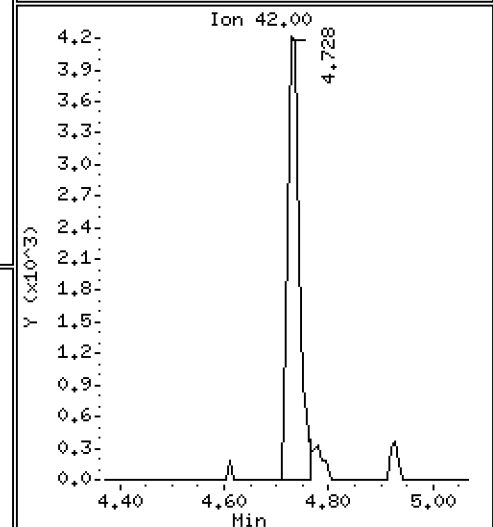
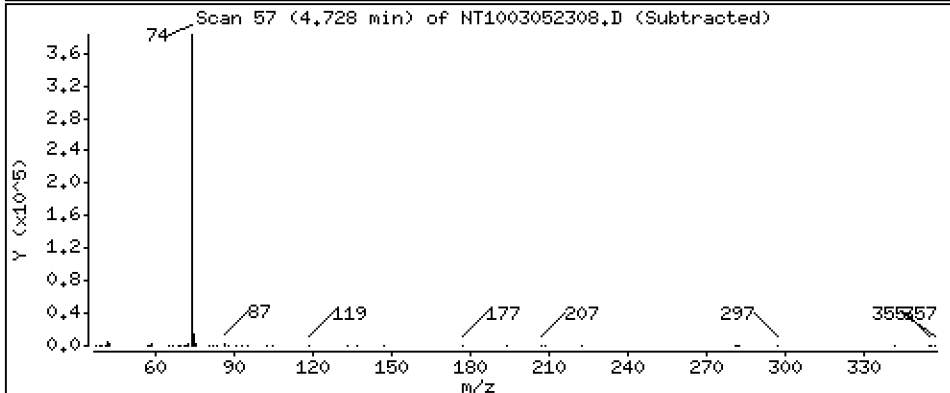
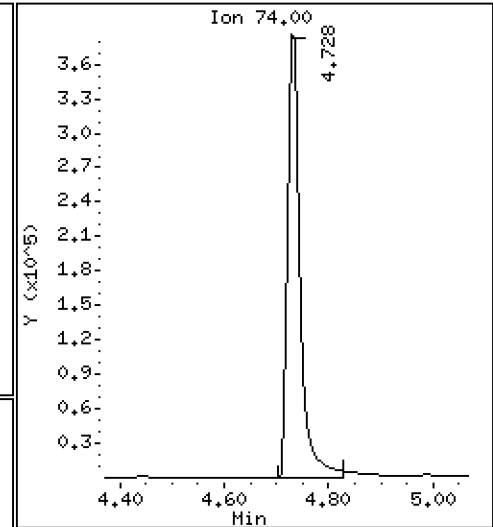
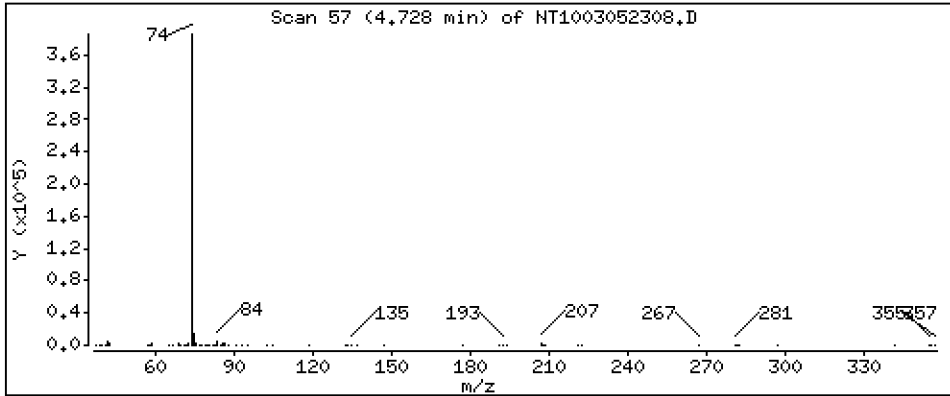
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 10,32 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

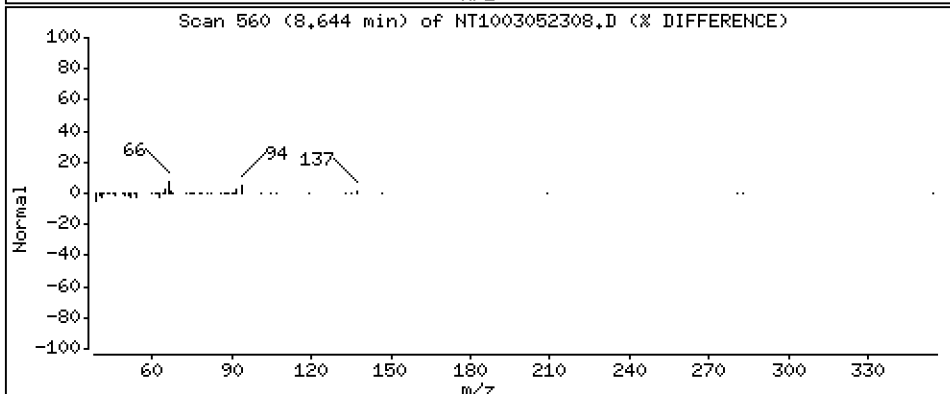
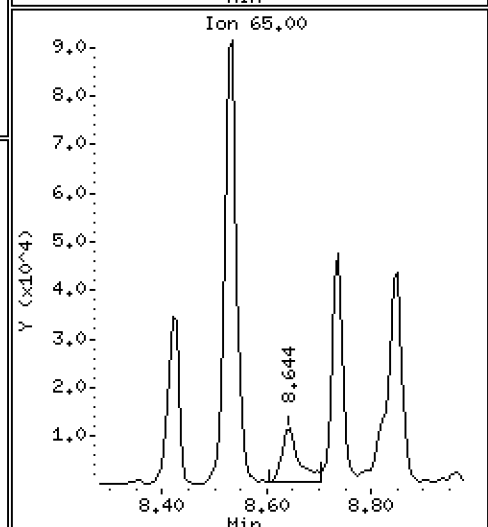
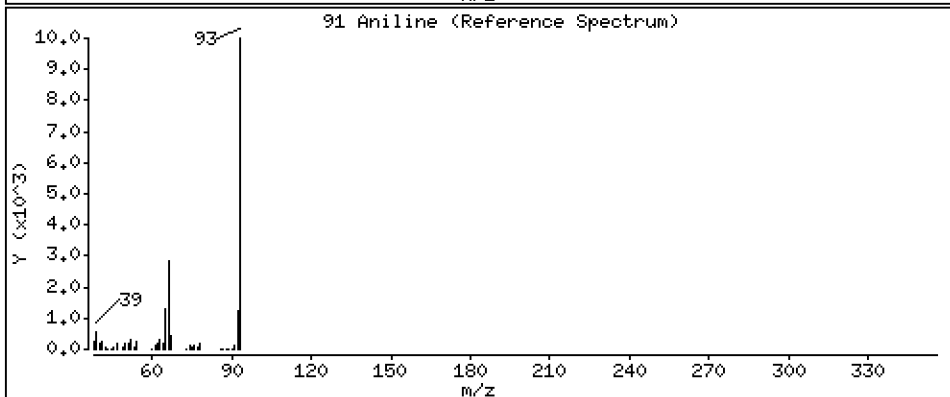
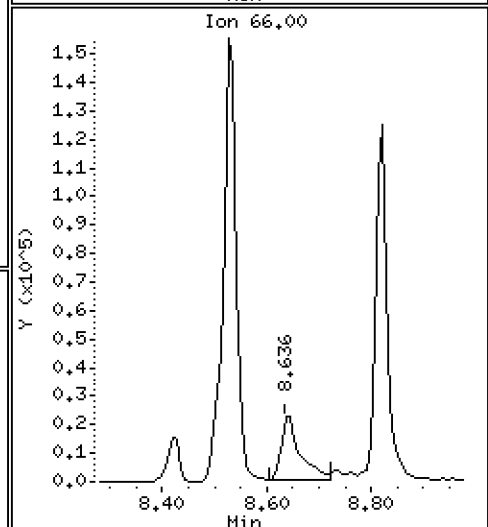
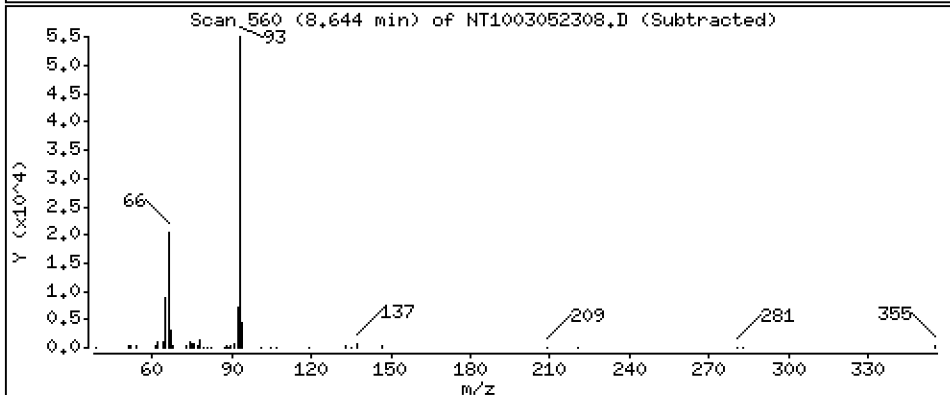
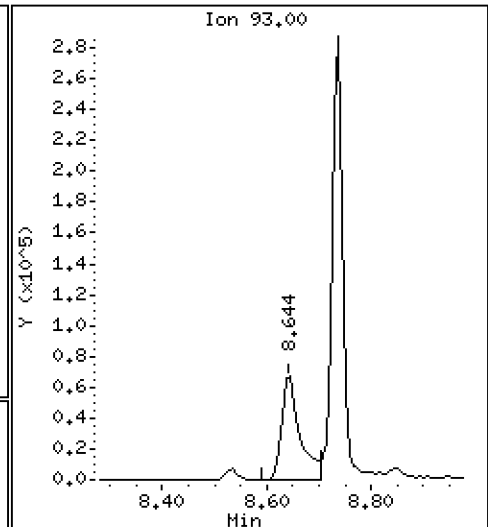
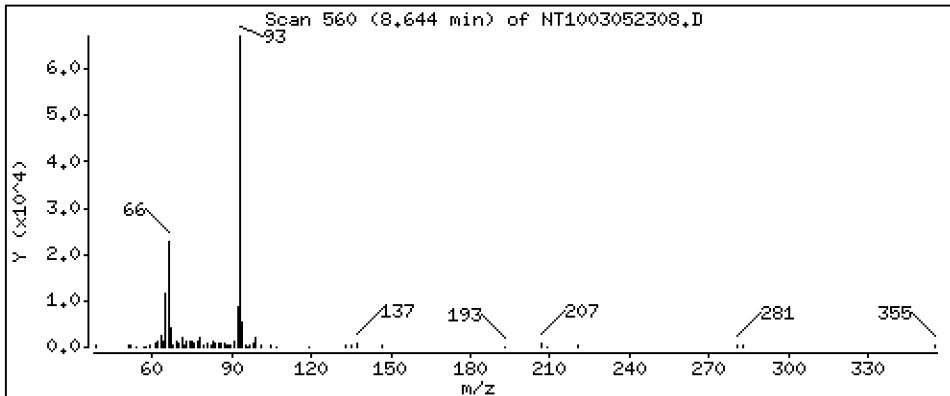
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 1,266 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

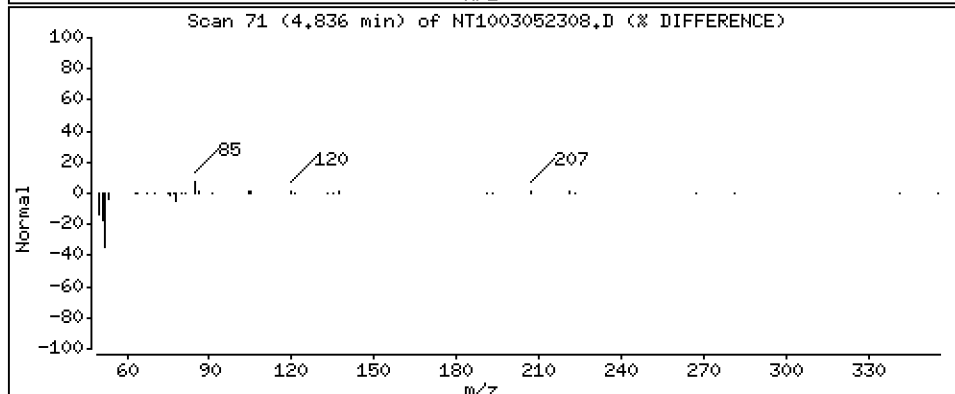
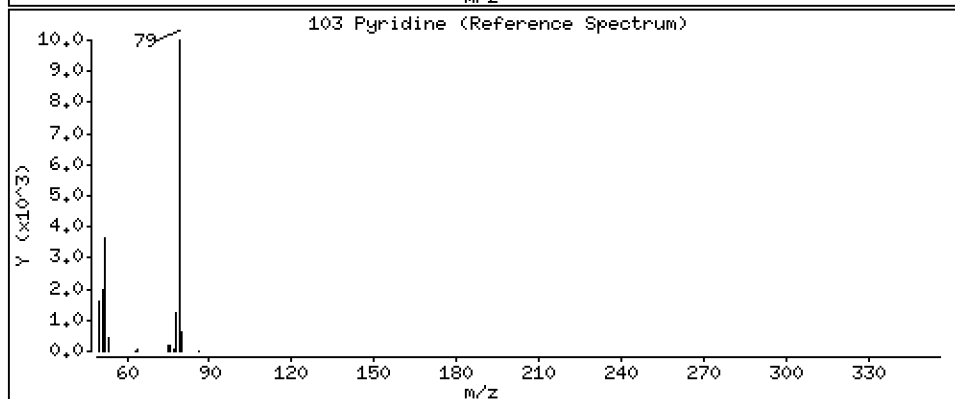
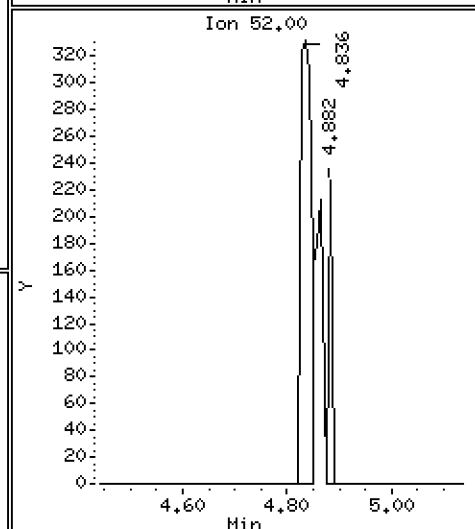
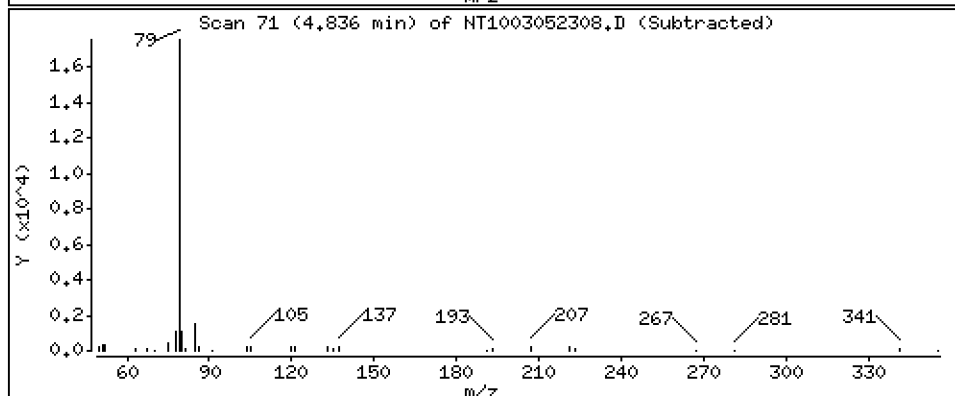
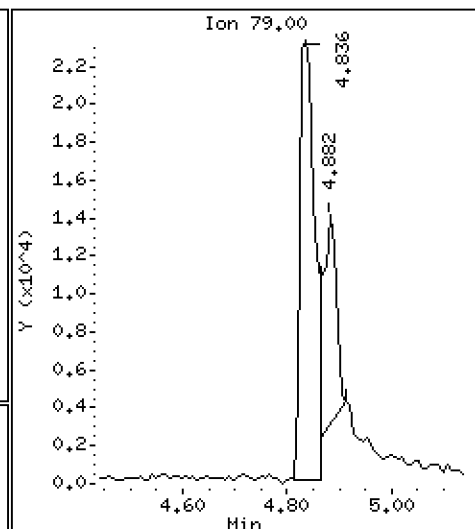
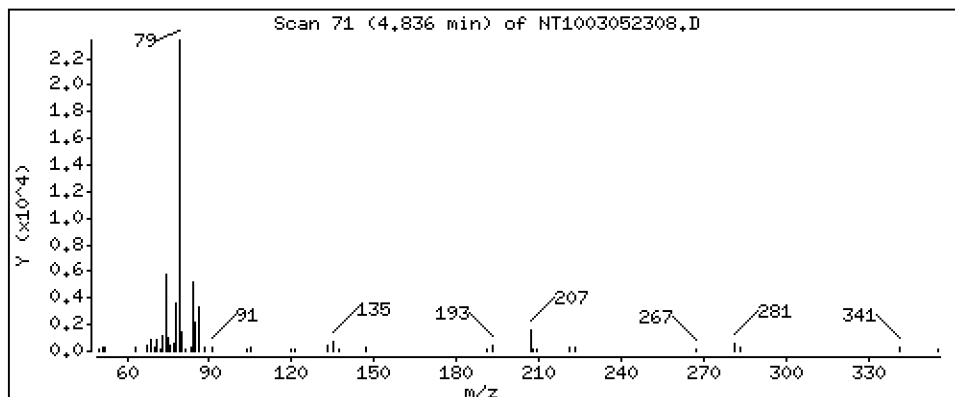
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,4704 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

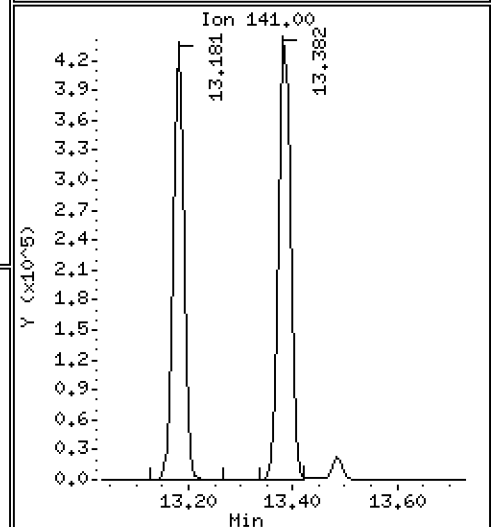
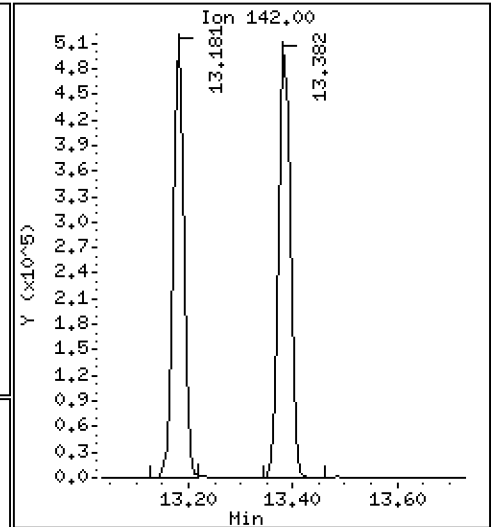
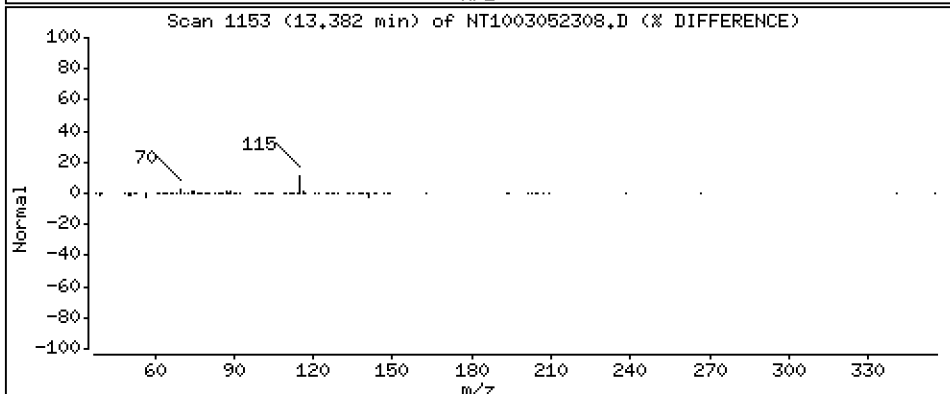
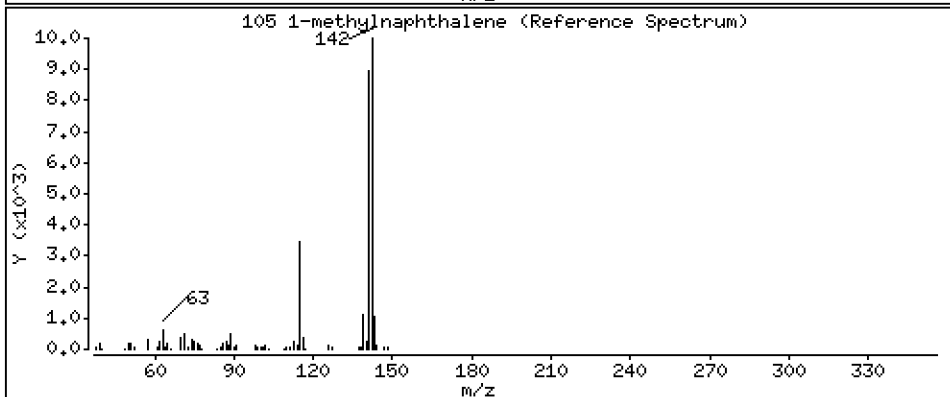
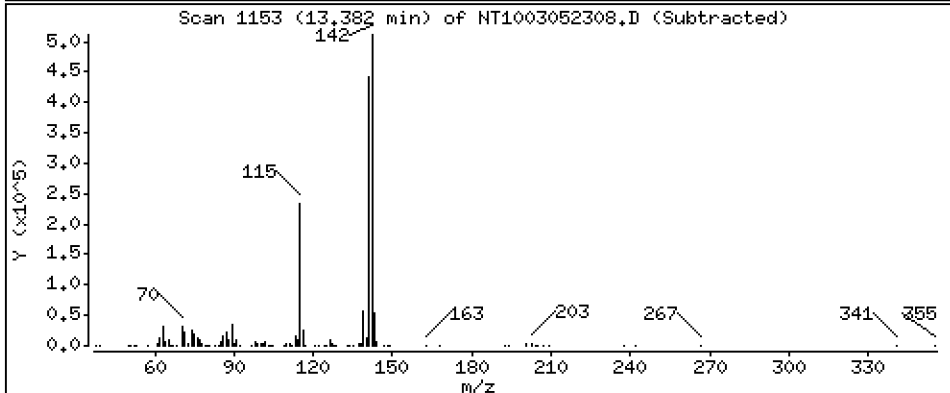
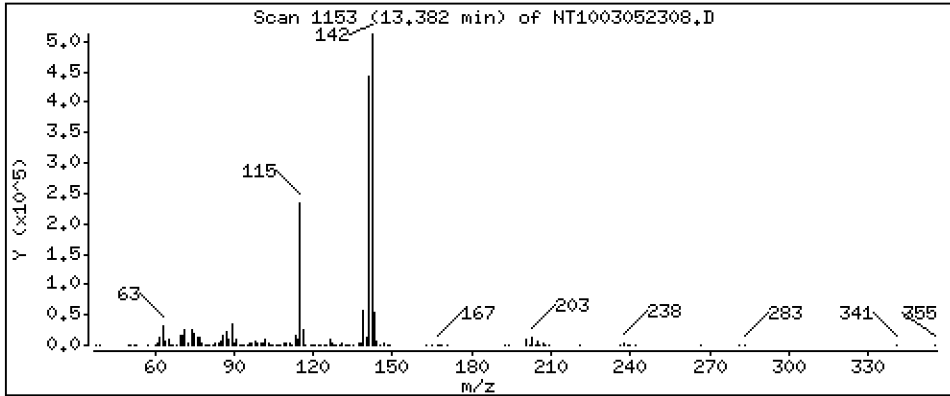
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,230 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

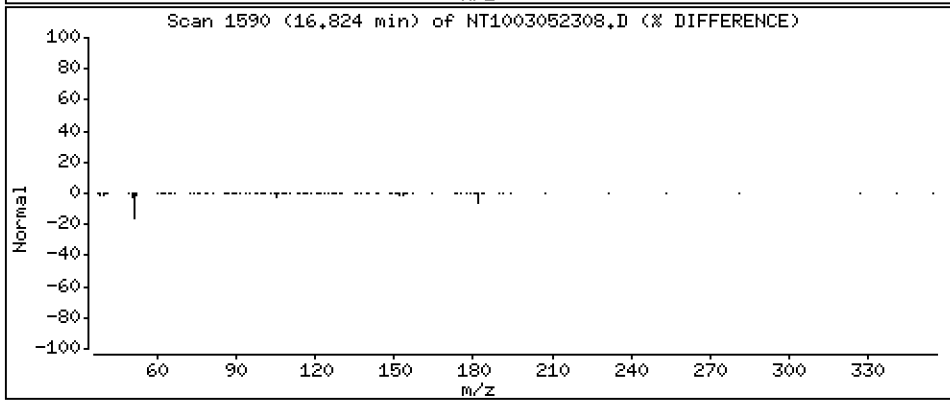
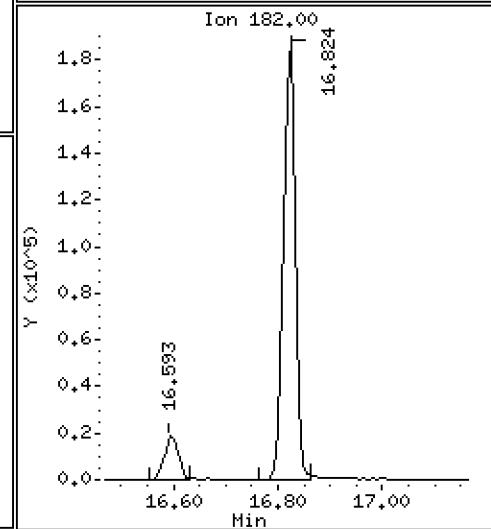
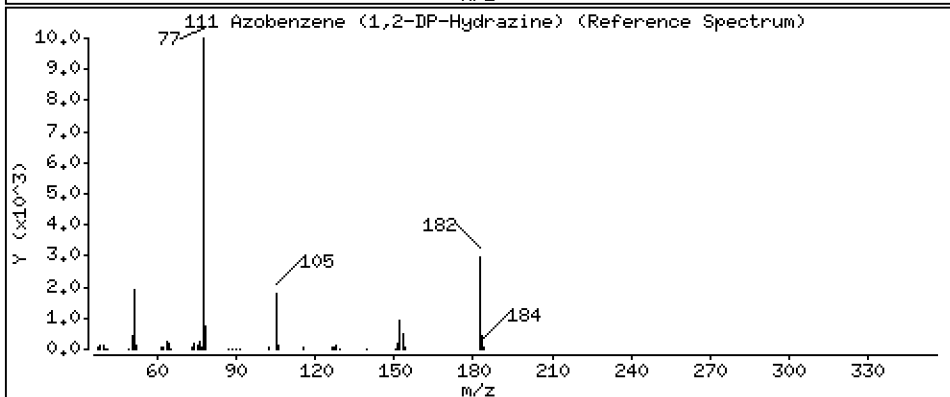
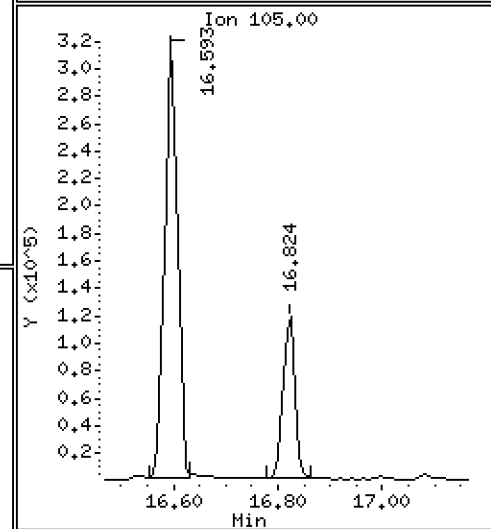
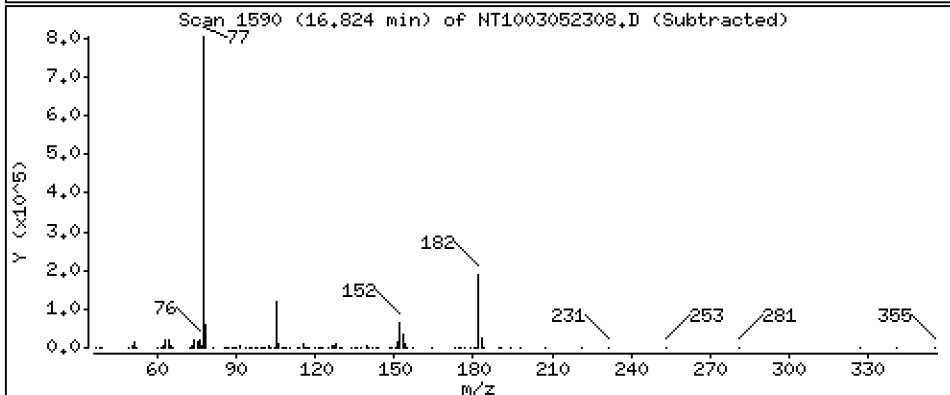
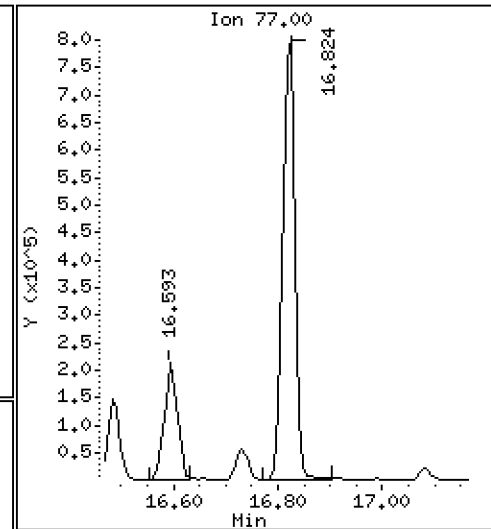
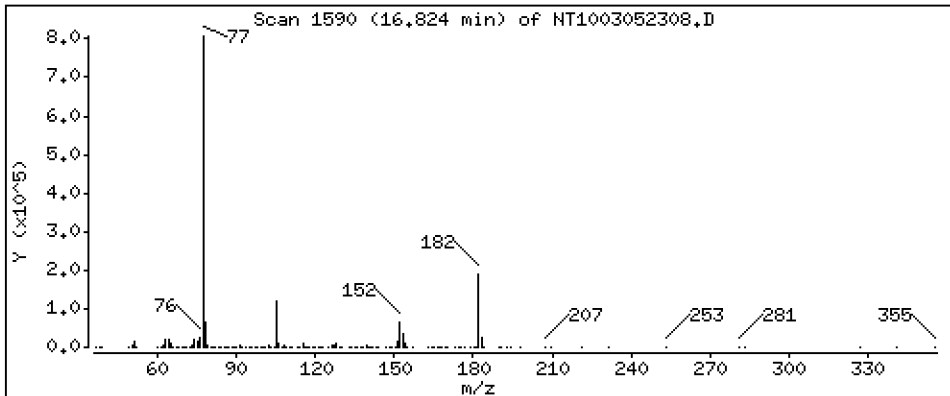
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,359 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

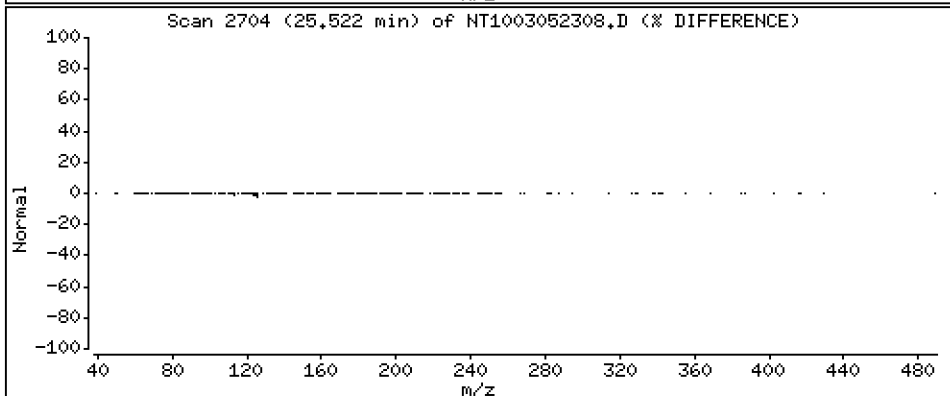
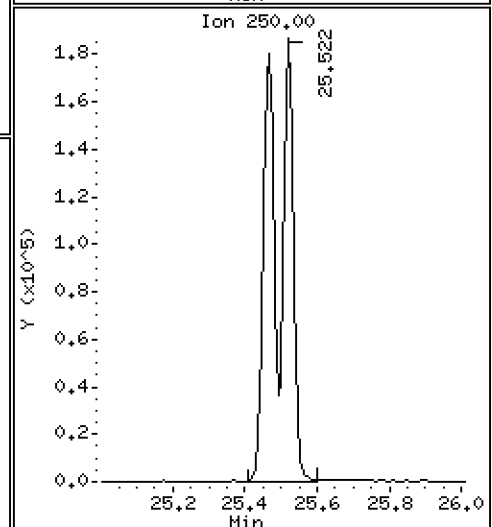
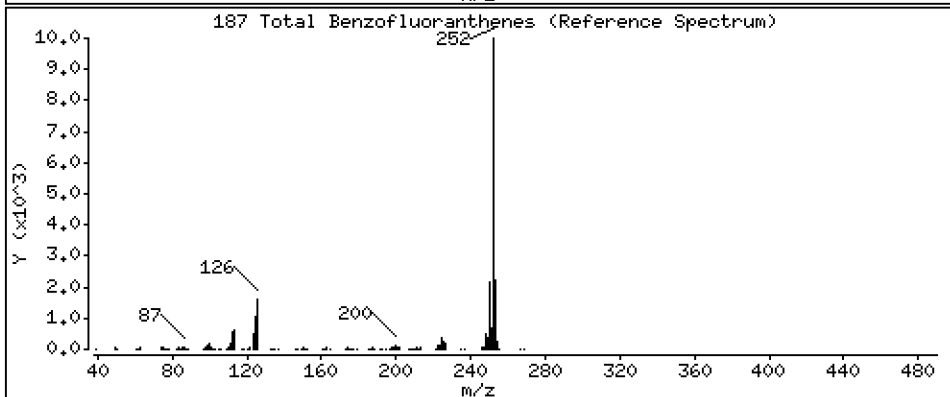
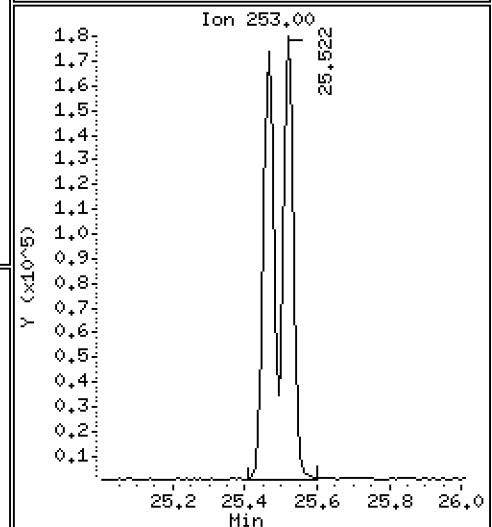
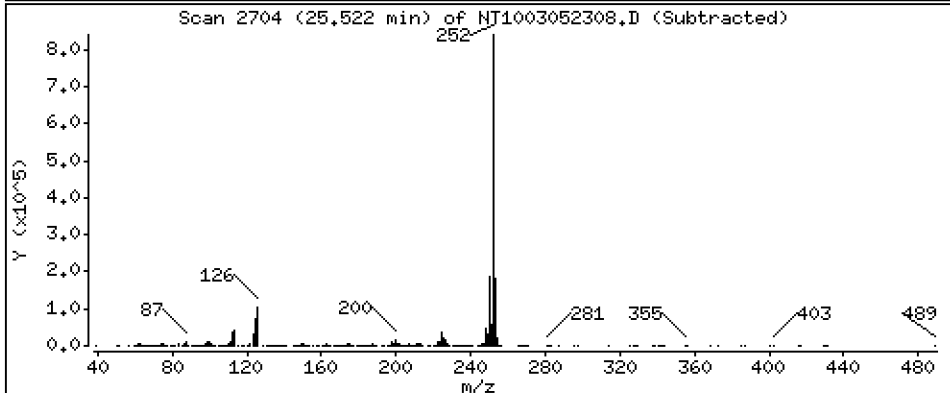
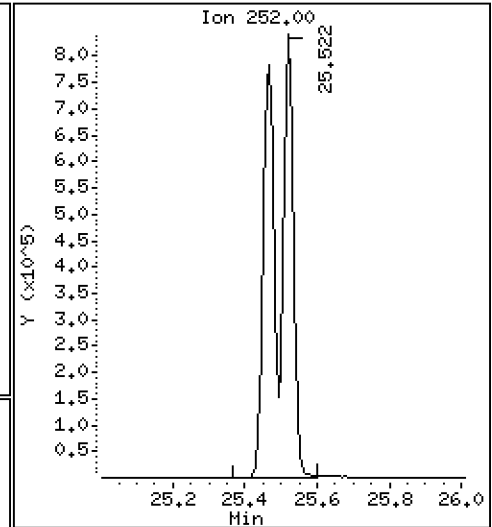
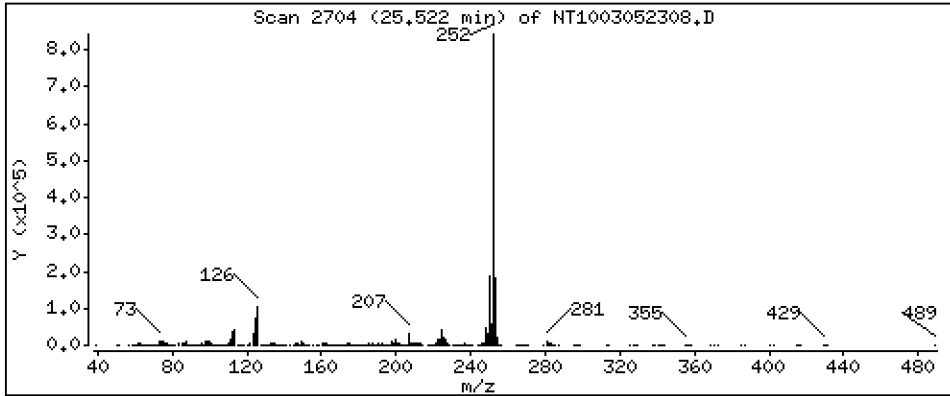
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 9,517 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS1

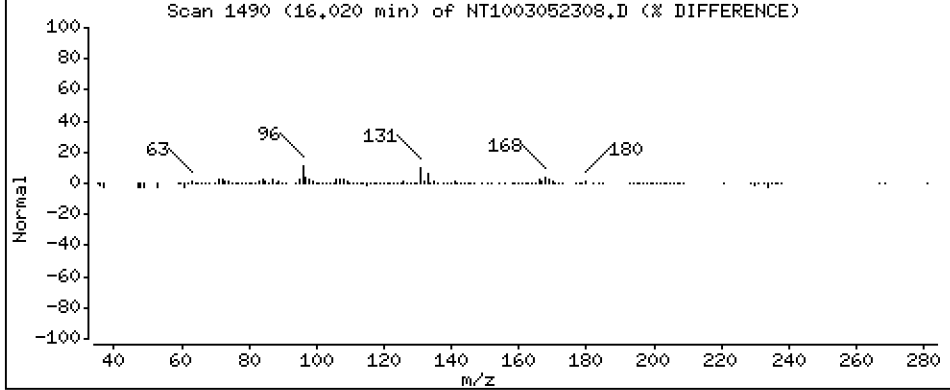
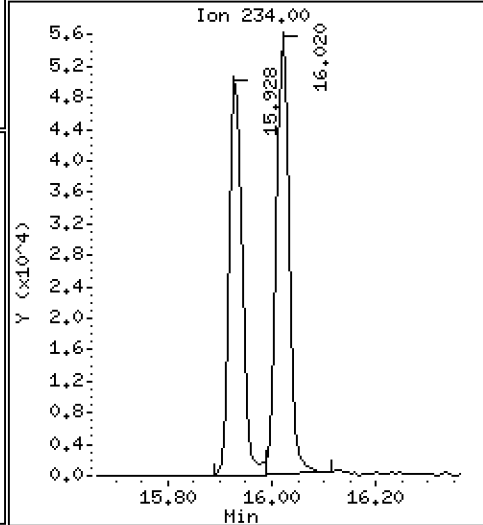
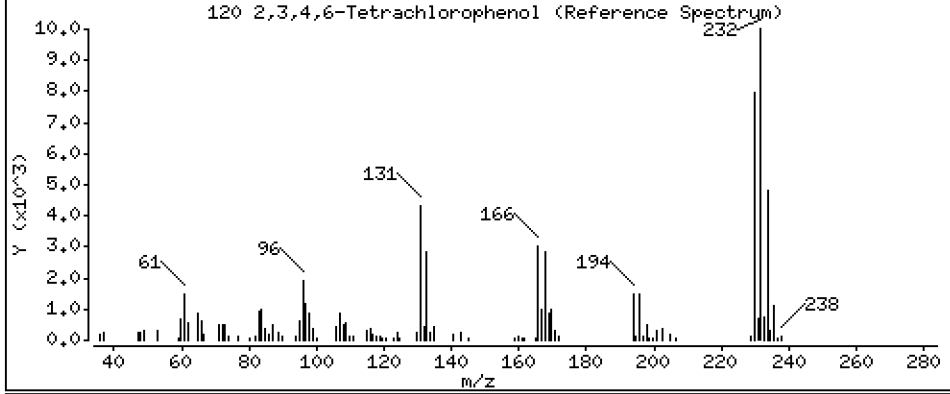
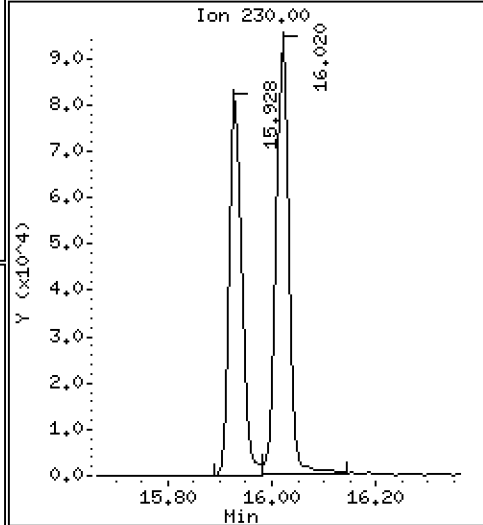
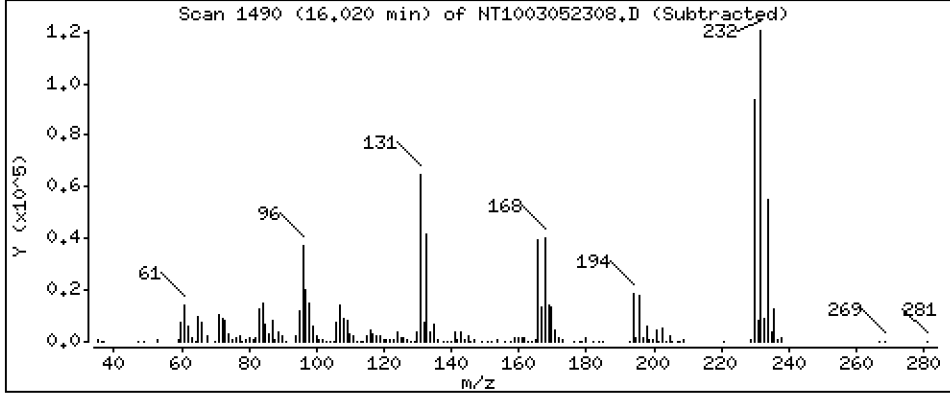
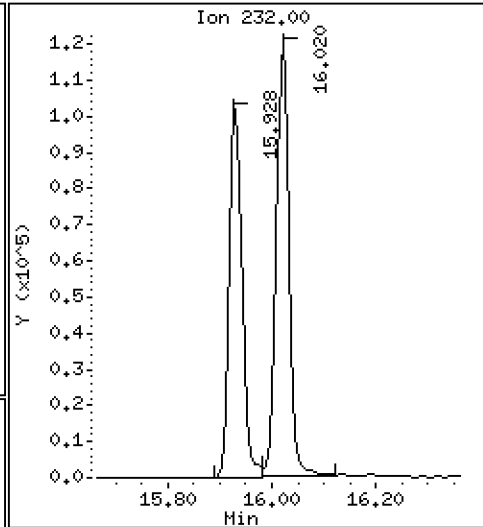
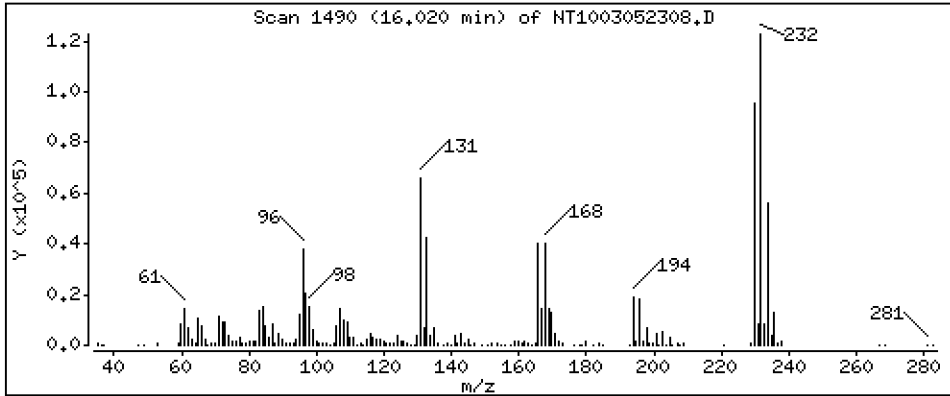
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,972 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052308.D
 Lab Smp Id: BLA0685-BS1
 Inj Date : 05-MAR-2023 17:50
 Operator : VTS
 Smp Info : BLA0685-BS1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.897	(0.747)	544441	5.81565	5.816
\$ 2 Phenol-d5	99		8.504	8.504	(0.920)	704321	6.48022	6.480
3 Phenol	94		8.535	8.528	(0.923)	554446	4.79804	4.798
\$ 5 2-Chlorophenol-d4	132		8.821	8.813	(0.954)	595424	6.42107	6.421
4 Bis(2-Chloroethyl)ether	93		8.736	8.728	(0.945)	411133	4.65591	4.656
6 2-Chlorophenol	128		8.852	8.844	(0.957)	372438	3.86612	3.866
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	404842	3.81166	3.812
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.239	(1.000)	297547	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	402376	3.81399	3.814
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.031)	257736	3.72018	3.720
12 1,2-Dichlorobenzene	146		9.565	9.557	(1.034)	394280	3.86113	3.861
11 Benzyl alcohol	108		9.479	9.480	(1.025)	217514	3.60481	3.605
14 2,2'-oxybis(1-Chloropropane)	121		9.743	9.728	(1.054)	134676	4.57461	4.575
13 2-Methylphenol	108		9.666	9.666	(1.045)	281987	3.10625	3.106
17 Hexachloroethane	117		10.209	10.209	(1.104)	183484	4.23717	4.237
16 N-Nitroso-di-n-propylamine	70		9.984	9.984	(1.080)	273228	3.91832	3.918
15 4-Methylphenol	108		9.961	9.953	(1.077)	330874	2.96802	2.968
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.878)	498032	4.21889	4.219
19 Nitrobenzene	77		10.341	10.341	(0.881)	577906	5.21882	5.219
20 Isophorone	82		10.807	10.799	(0.921)	914358	6.46862	6.469
21 2-Nitrophenol	139		10.967	10.959	(0.935)	196026	3.26001	3.260
22 2,4-Dimethylphenol	107		11.018	11.018	(0.939)	457384	4.27483	4.275
23 Bis(2-Chloroethoxy)methane	93		11.222	11.222	(0.956)	475320	5.44133	5.441
24 Benzoic acid	105		11.230	11.196	(0.957)	1490105	22.5273	22.53
25 2,4-Dichlorophenol	162		11.434	11.434	(0.974)	1303101	14.9830	14.98
26 1,2,4-Trichlorobenzene	180		11.610	11.603	(0.989)	344787	4.14876	4.149
* 27 Naphthalene-d8	136		11.734	11.726	(1.000)	1075395	4.00000	
28 Naphthalene	128		11.780	11.773	(1.004)	1111513	4.02701	4.027
29 4-Chloroaniline	127		11.881	11.873	(1.012)	356959	2.92866	2.929 (H)
30 Hexachlorobutadiene	225		12.004	11.997	(1.023)	267265	4.41668	4.417
31 4-Chloro-3-methylphenol	107		12.832	12.825	(1.094)	1482312	15.7768	15.78
32 2-Methylnaphthalene	142		13.181	13.181	(1.123)	769252	3.94506	3.945
33 Hexachlorocyclopentadiene	237		13.482	13.483	(0.878)	208742	10.5765	10.58

Compounds	QUANT SIG					CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.753	13.746	(0.896)	930295	16.2504	16.25	
35 2,4,5-Trichlorophenol	196	13.823	13.815	(0.901)	1024907	16.6577	16.66	
§ 36 2-Fluorobiphenyl	172	13.931	13.924	(0.908)	886483	4.46333	4.463	
37 2-Chloronaphthalene	162	14.187	14.187	(0.924)	731428	4.69112	4.691	
38 2-Nitroaniline	65	14.403	14.396	(0.938)	818085	17.9814	17.98	
39 Dimethylphthalate	163	14.775	14.767	(0.963)	886419	4.92919	4.929	
40 Acenaphthylene	152	15.054	15.046	(0.981)	1191053	4.43092	4.431	
41 2,6-Dinitrotoluene	165	14.906	14.899	(0.971)	743068	17.7143	17.71	
* 42 Acenaphthene-d10	164	15.347	15.340	(1.000)	556840	4.00000		
43 3-Nitroaniline	138	15.255	15.255	(0.994)	427416	9.42488	9.425	
44 Acenaphthene	153	15.409	15.409	(1.004)	709193	4.37467	4.375	
45 2,4-Dinitrophenol	184	15.487	15.479	(1.009)	610080	48.1039	48.10	
46 Dibenzofuran	168	15.773	15.765	(1.028)	1074587	4.46628	4.466	
47 4-Nitrophenol	109	15.587	15.579	(1.016)	492400	14.5386	14.54	
48 2,4-Dinitrotoluene	165	15.749	15.742	(1.026)	1061935	17.2945	17.29	
50 Diethylphthalate	149	16.244	16.237	(1.058)	937969	4.92354	4.924	
49 Fluorene	166	16.492	16.484	(1.075)	902611	4.50896	4.509	
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.074)	443823	4.84602	4.846	
52 4-Nitroaniline	138	16.531	16.523	(1.077)	489565	10.0430	10.04	
53 4,6-Dinitro-2-methylphenol	198	16.592	16.585	(0.899)	1036508	38.3469	38.35	
54 N-Nitrosodiphenylamine	169	16.731	16.724	(0.907)	537160	3.60624	3.606	
§ 55 2,4,6-Tribromophenol	330	16.994	16.986	(1.107)	268105	7.43543	7.435	
56 4-Bromophenyl-phenylether	248	17.511	17.504	(0.949)	346440	5.74000	5.740	
57 Hexachlorobenzene	284	17.627	17.620	(0.955)	357543	5.26065	5.261	
58 Pentachlorophenol	266	18.045	18.038	(0.978)	365832	10.9057	10.91	
* 59 Phenanthrene-d10	188	18.455	18.448	(1.000)	1006737	4.00000		
60 Phenanthrene	178	18.509	18.502	(1.003)	1208646	4.69118	4.691	
61 Anthracene	178	18.618	18.610	(1.009)	969747	3.88167	3.882	
62 Carbazole	167	18.950	18.943	(1.027)	1061981	4.64008	4.640	
63 Di-n-butylphthalate	149	19.655	19.647	(1.065)	1589951	4.94149	4.941	
64 Fluoranthene	202	20.892	20.885	(0.888)	1515531	4.80511	4.805	
65 Pyrene	202	21.333	21.318	(0.907)	1664139	5.18168	5.182	
§ 66 Terphenyl-d14	244	21.612	21.597	(0.919)	1297122	4.99157	4.992	
67 Butylbenzylphthalate	149	22.503	22.487	(0.957)	683692	4.01470	4.015	
68 Benzo(a)anthracene	228	23.509	23.494	(0.999)	1510090	4.67117	4.671	
* 69 Chrysene-d12	240	23.525	23.517	(1.000)	916837	4.00000		
70 3,3'-Dichlorobenzidine	252	23.455	23.440	(0.997)	269633	1.86893	1.869	
71 Chrysene	228	23.571	23.563	(1.002)	1343146	5.11225	5.112	
72 bis(2-Ethylhexyl)phthalate	149	23.509	23.494	(0.955)	1066721	4.79745	4.797	
* 134 Di-n-octylphthalate-d4	153	24.608	24.593	(1.000)	1539451	4.00000		
73 Di-n-octylphthalate	149	24.624	24.609	(1.001)	1986544	5.81923	5.819	
74 Benzo(b)fluoranthene	252	25.468	25.445	(0.968)	1628733	4.64757	4.648 (H)	
75 Benzo(k)fluoranthene	252	25.522	25.507	(0.971)	1643477	4.85177	4.852	
76 Benzo(a)pyrene	252	26.180	26.157	(0.996)	1260150	4.05259	4.053	
* 77 Perylene-d12	264	26.296	26.281	(1.000)	977237	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	29.181	29.158	(1.110)	1817937	4.95062	4.951	
79 Dibenzo(a,h)anthracene	278	29.228	29.197	(1.111)	1549447	5.48824	5.488	
80 Benzo(g,h,i)perylene	276	30.066	30.028	(1.143)	1503241	5.17613	5.176	
90 N-Nitrosodimethylamine	74	4.727	4.719	(0.511)	623570	10.3180	10.32	
91 Aniline	93	8.643	8.628	(0.935)	169568	1.26557	1.266	
93 Benzidine	184	Compound Not Detected.						
103 Pyridine	79	4.835	4.789	(0.523)	50416	0.47039	0.4704	
105 1-methylnaphthalene	142	13.382	13.382	(1.140)	746580	4.23027	4.230	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.824	16.816	(1.096)	1240177	4.35938	4.359	

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.522	25.507	(0.971)	3211482	9.51745	9.517
120 2,3,4,6-Tetrachlorophenol	232		16.020	16.012	(1.044)	216495	3.97187	3.972

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052308.D Calibration Time: 14:03
 Lab Smp Id: BLA0685-BS1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	297547	0.10
27 Naphthalene-d8	1085336	542668	2170672	1075395	-0.92
42 Acenaphthene-d10	563464	281732	1126928	556840	-1.18
59 Phenanthrene-d10	1038318	519159	2076636	1006737	-3.04
69 Chrysene-d12	1012751	506376	2025502	916837	-9.47
134 Di-n-octylphthala	1628890	814445	3257780	1539451	-5.49
77 Perylene-d12	1152264	576132	2304528	977237	-15.19

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.06
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.52	23.02	24.02	23.53	0.03
134 Di-n-octylphthala	24.59	24.09	25.09	24.61	0.06
77 Perylene-d12	26.28	25.78	26.78	26.30	0.06

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

REVIEW SUMMARY FOR FILE - NT1003052308.D

Lab ID: BLA0685-BS1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 17:50

RT CO-ELUTION COMPOUNDS

23.510 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt10.1\20230305.1\NT1003052309.D

Date: 05-MAR-2023 18:28

Client ID:

Sample Info: BLR0685-BSM1

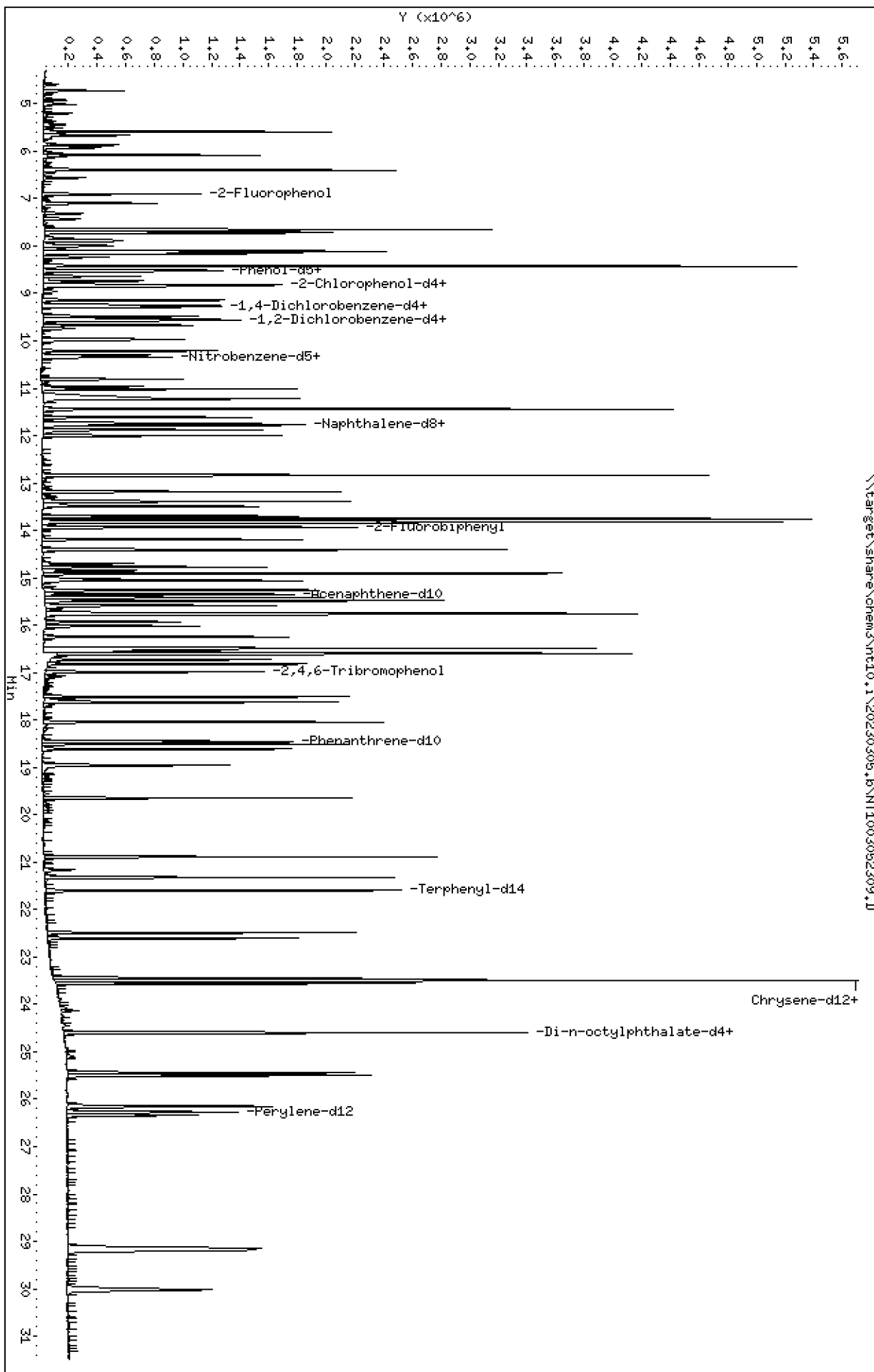
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.1\NT1003052309.D



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

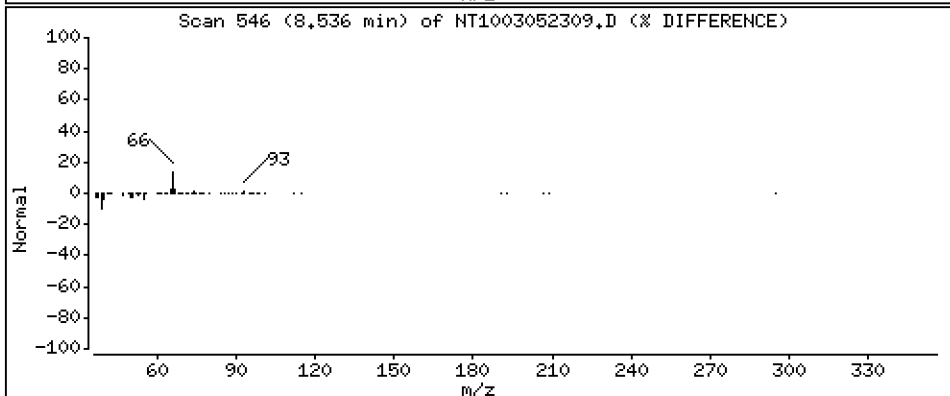
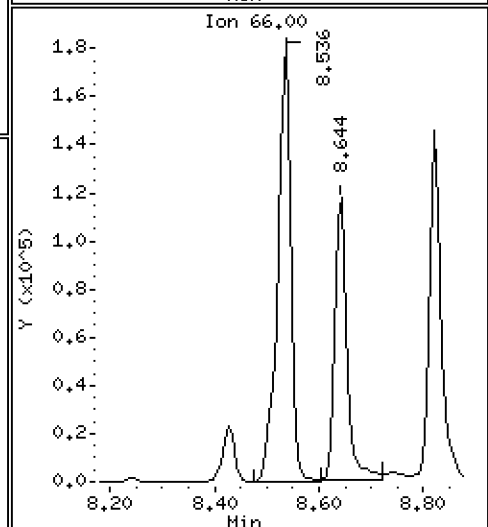
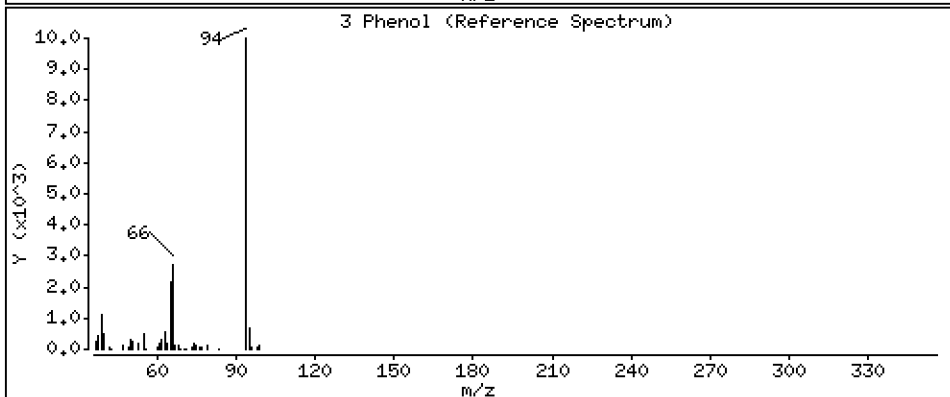
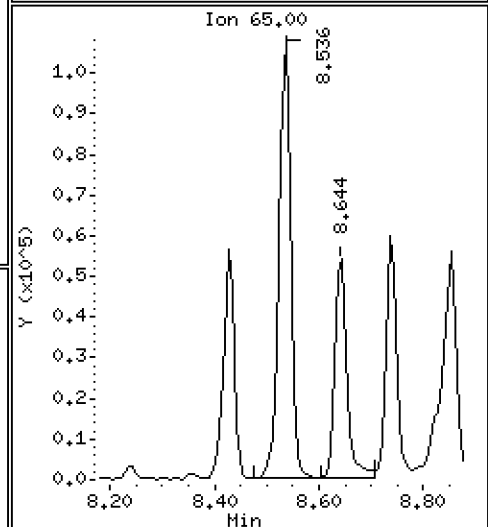
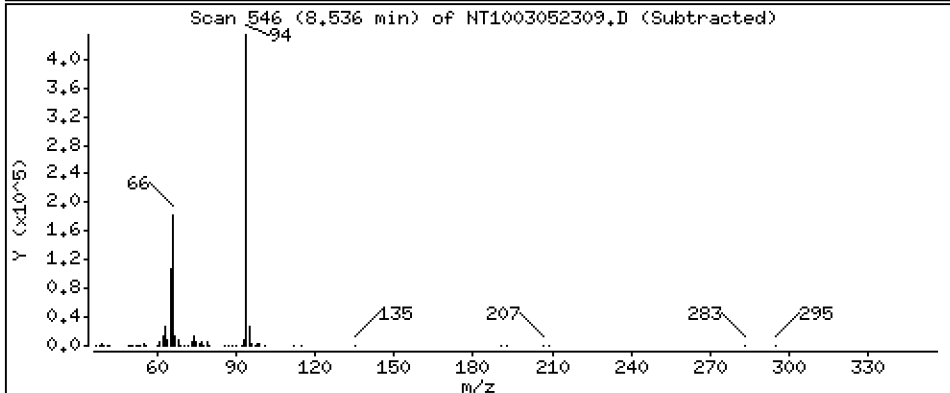
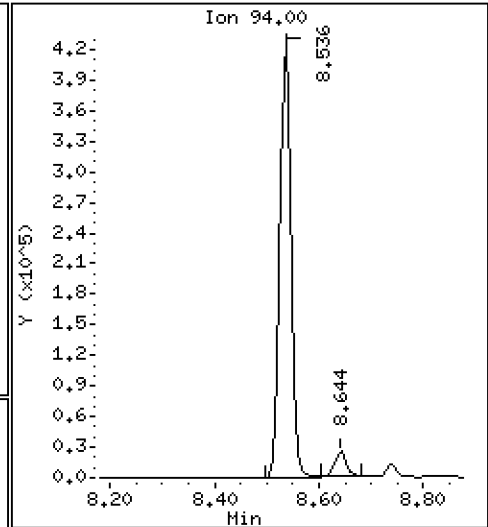
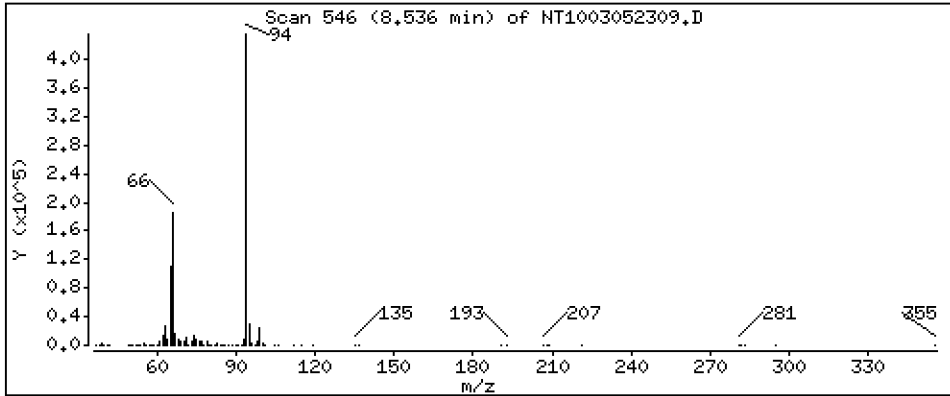
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,611 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

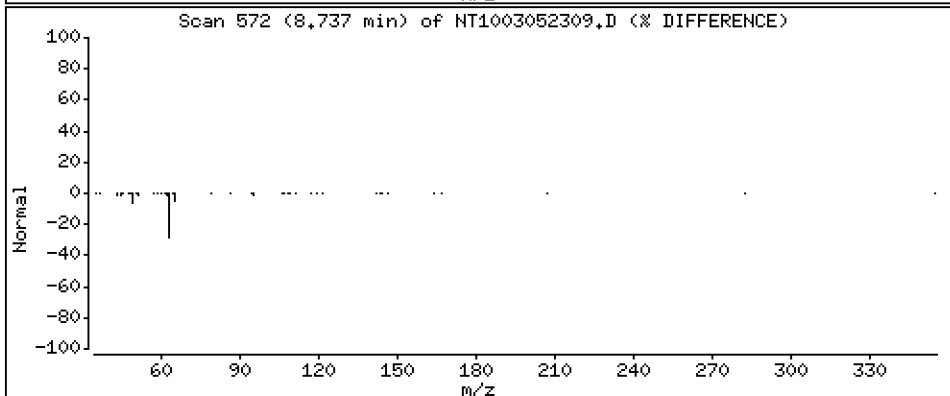
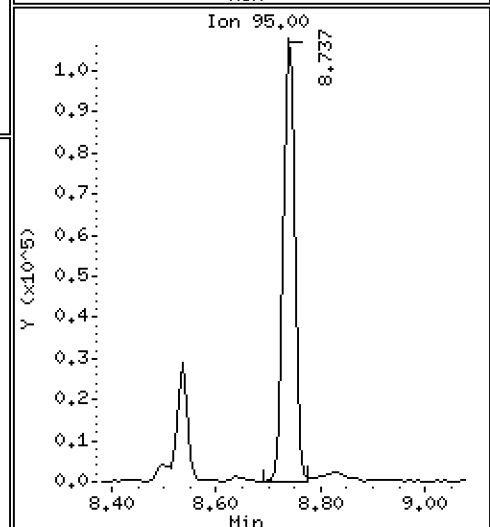
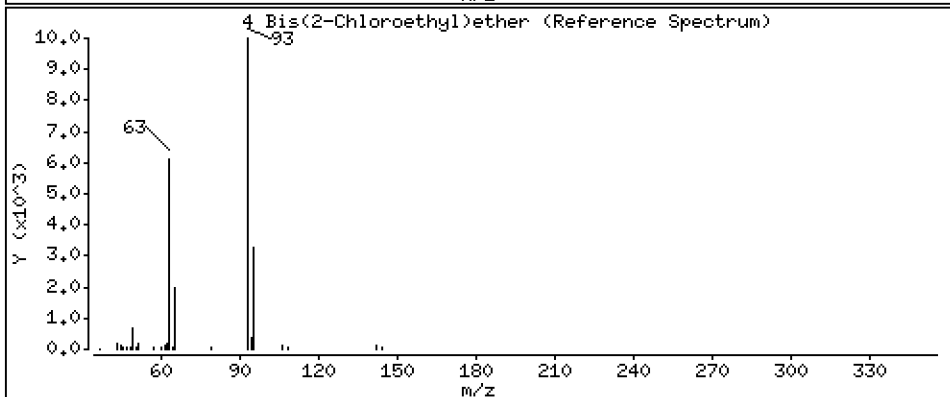
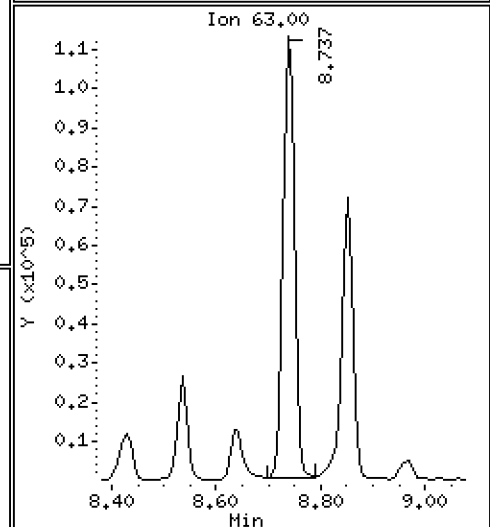
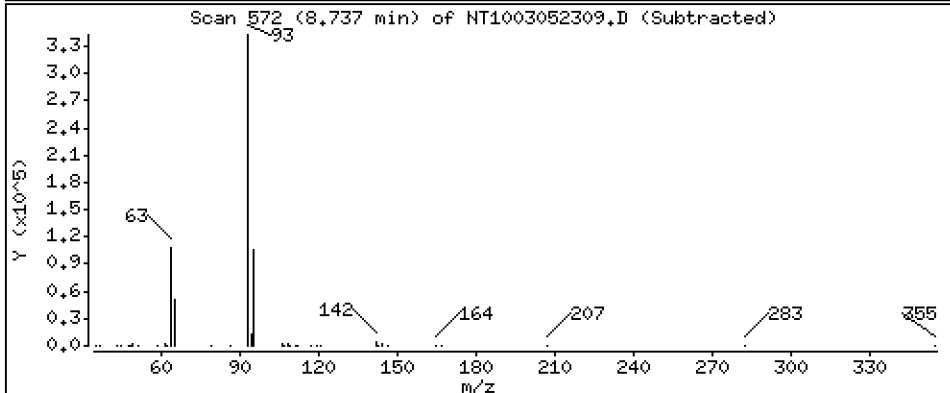
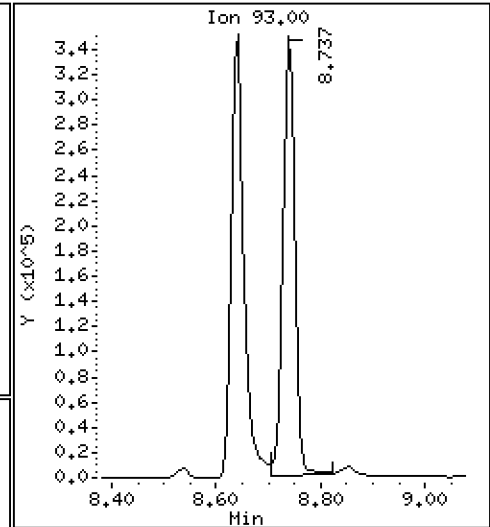
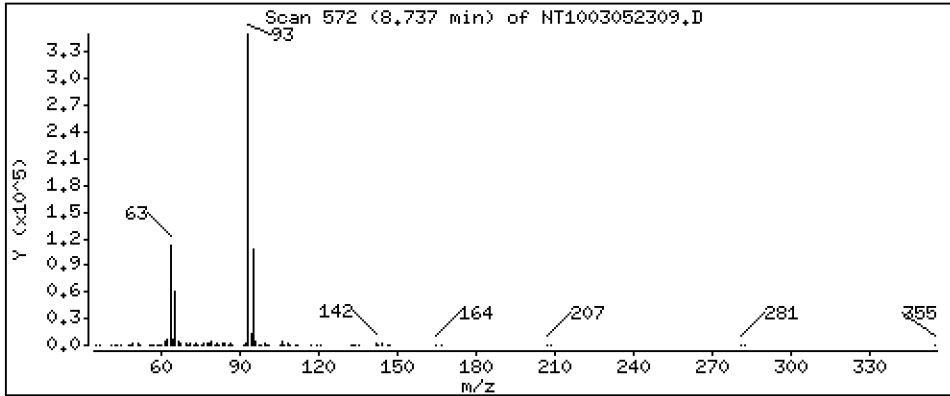
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,262 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

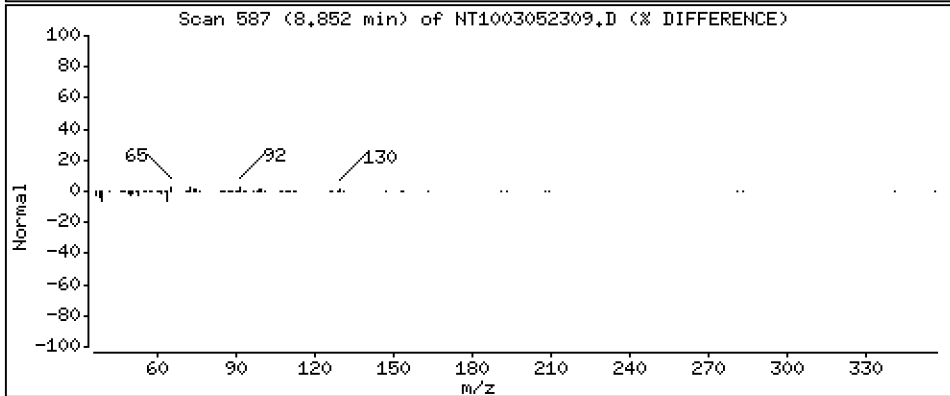
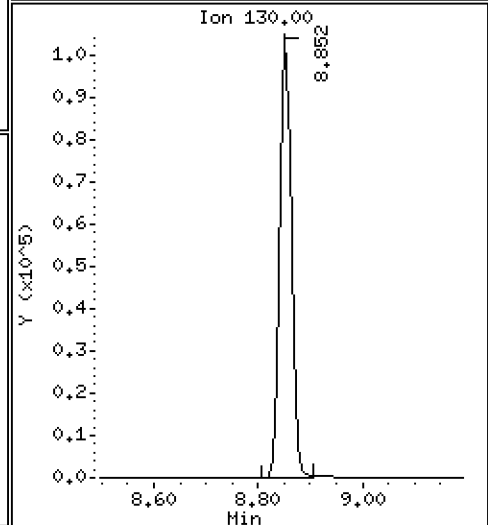
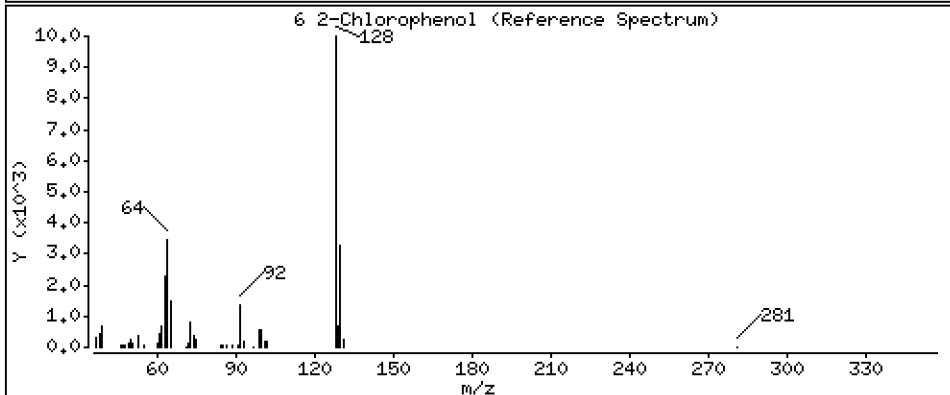
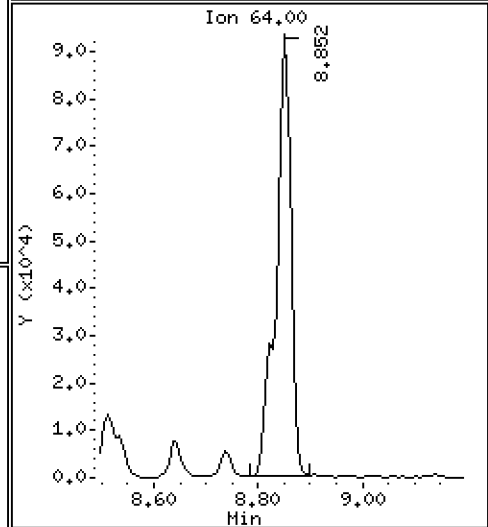
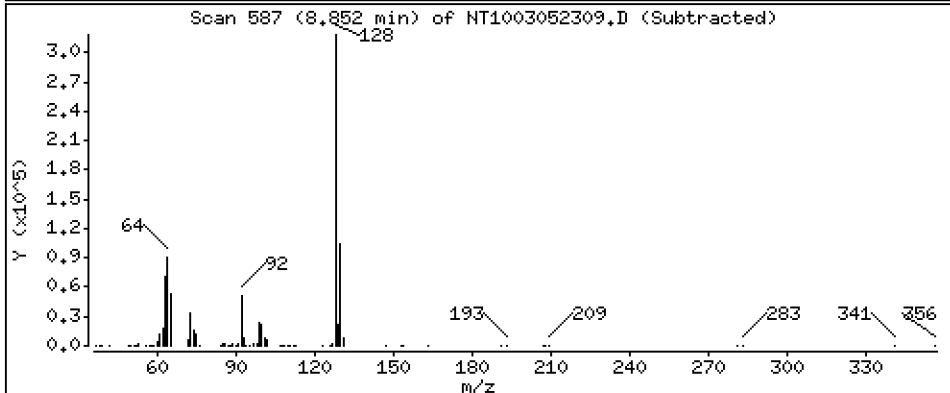
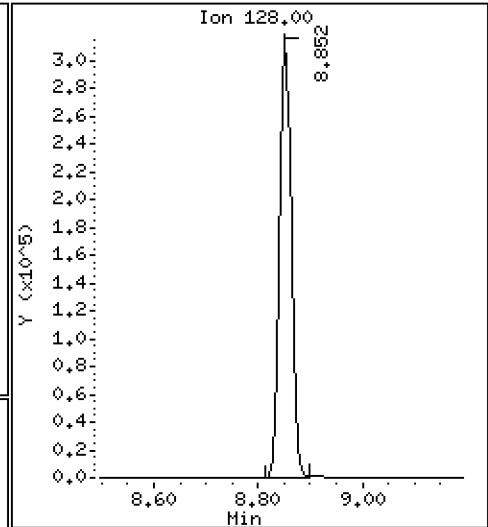
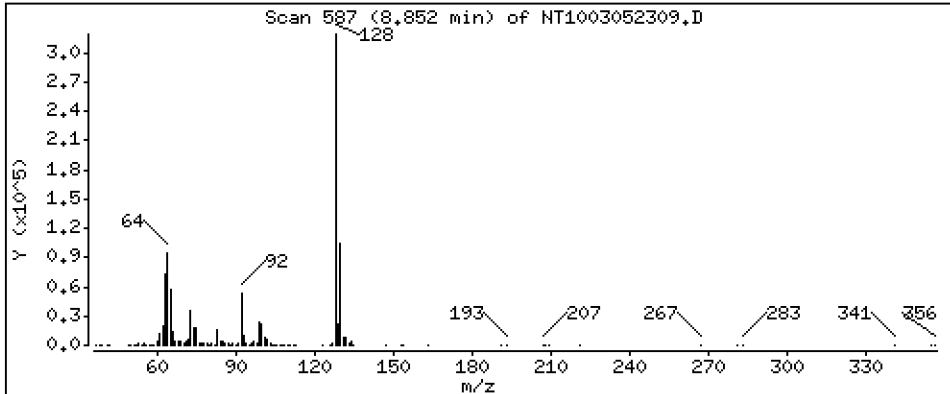
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 4,337 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

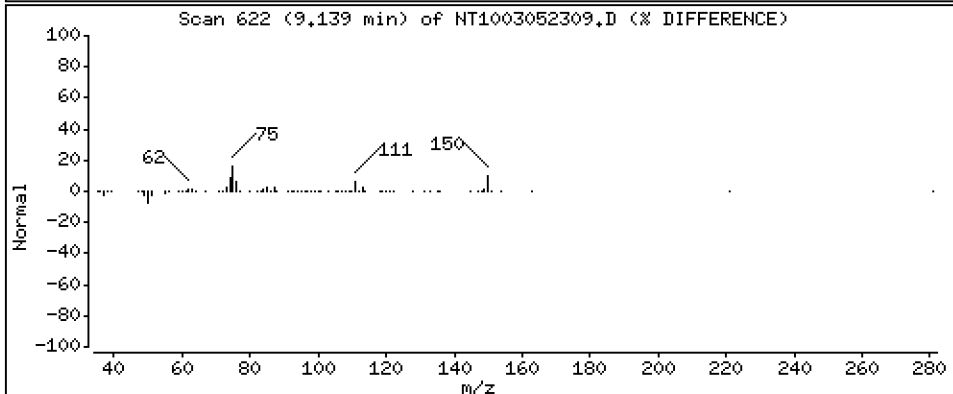
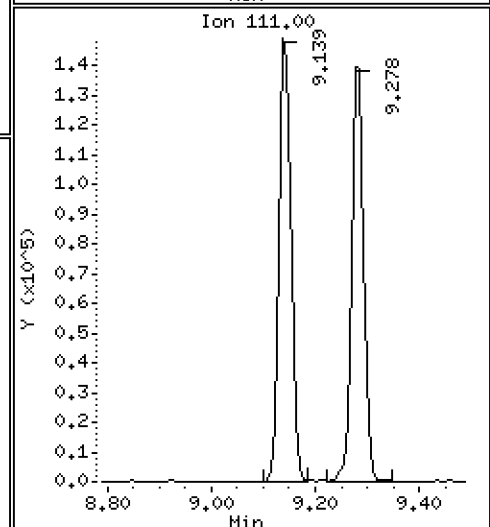
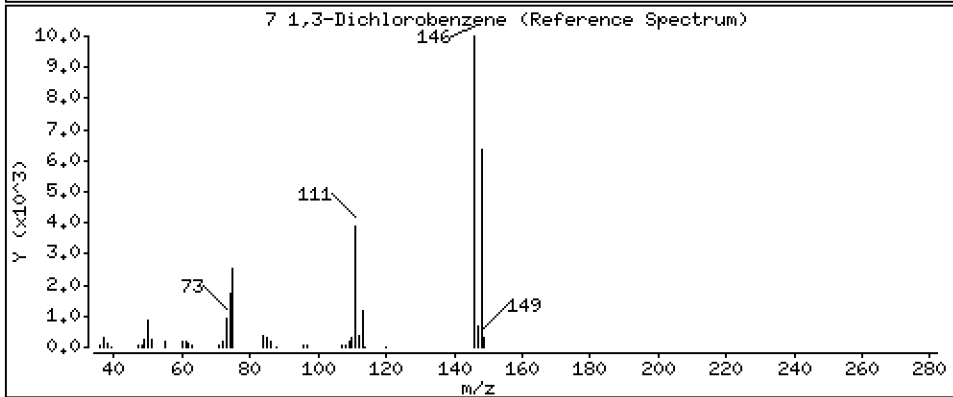
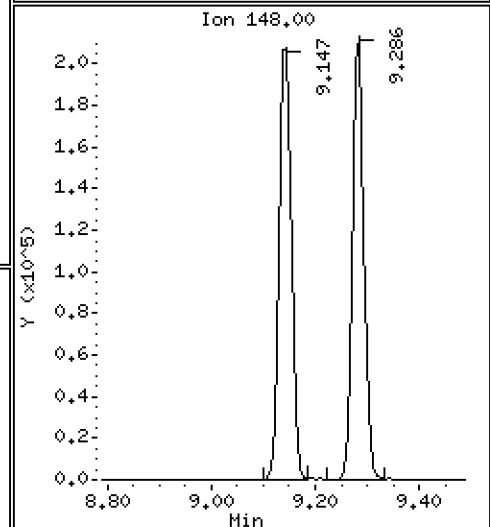
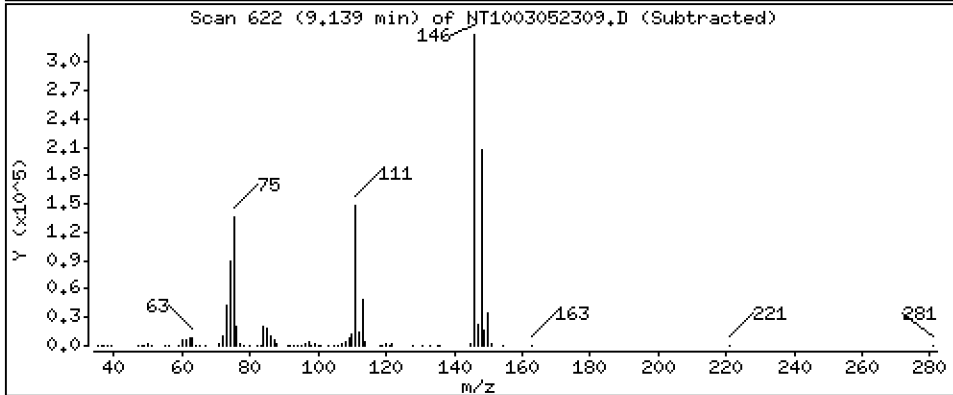
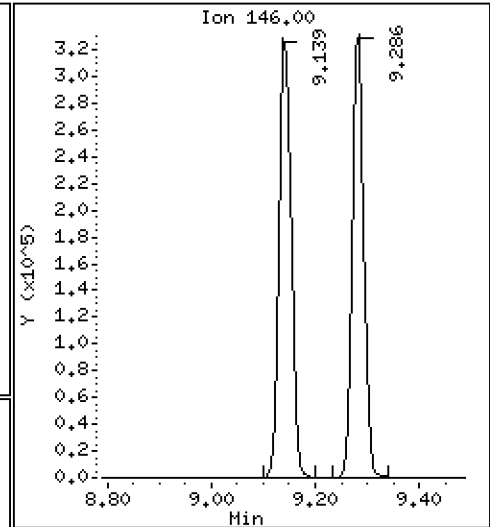
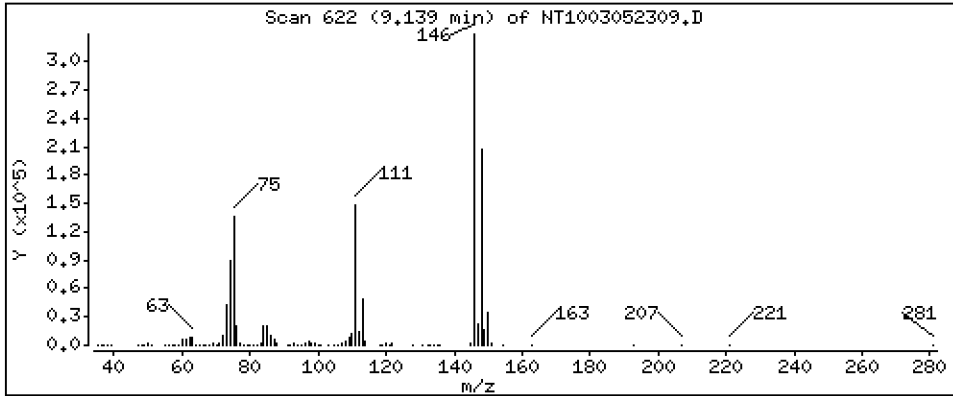
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,344 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

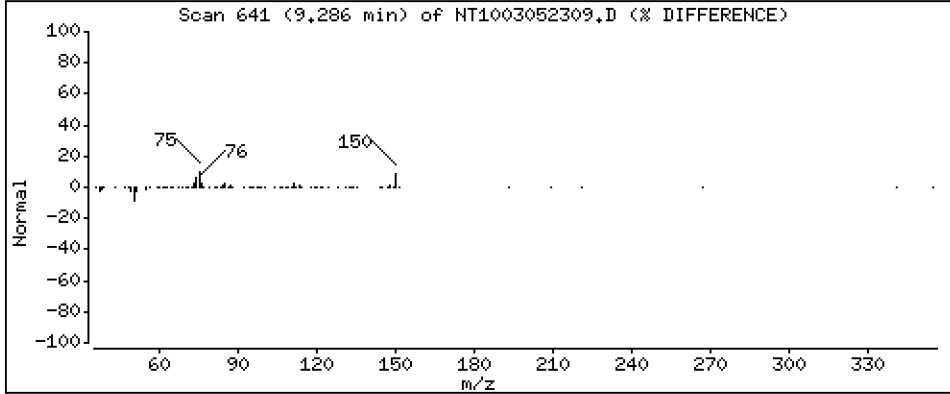
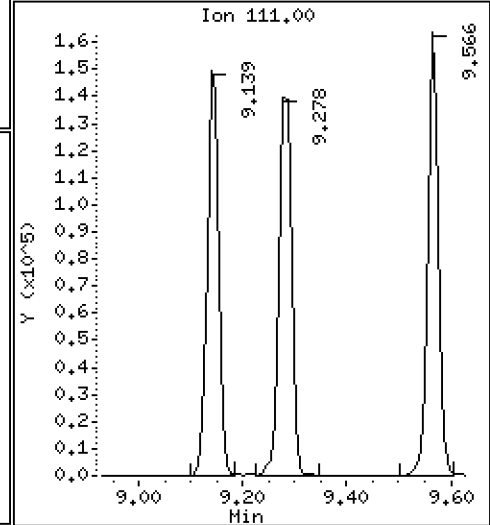
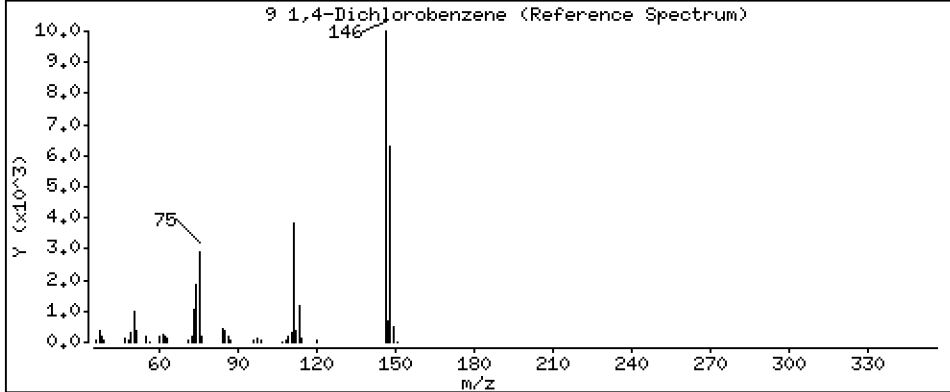
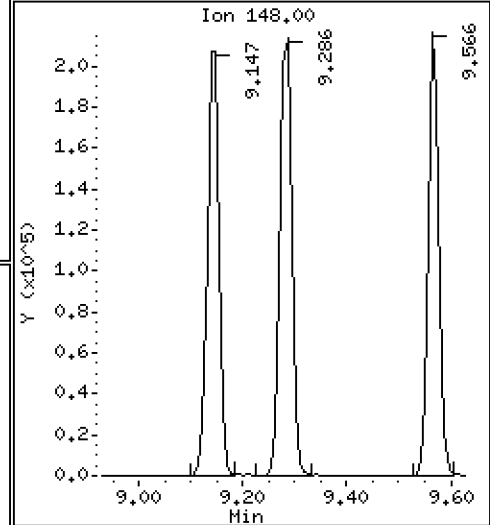
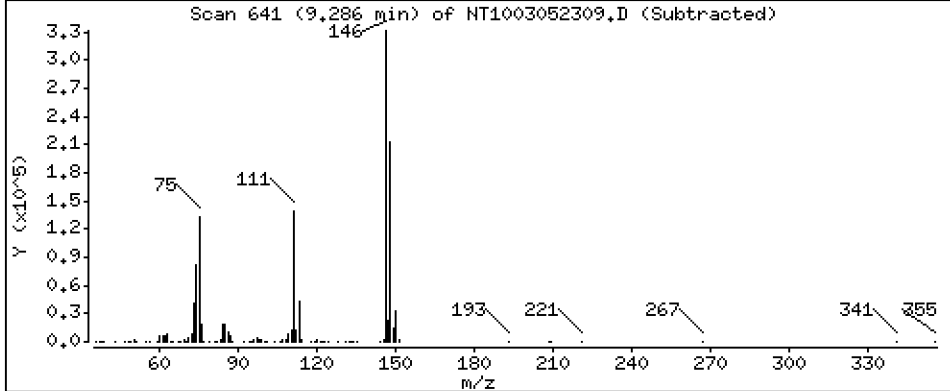
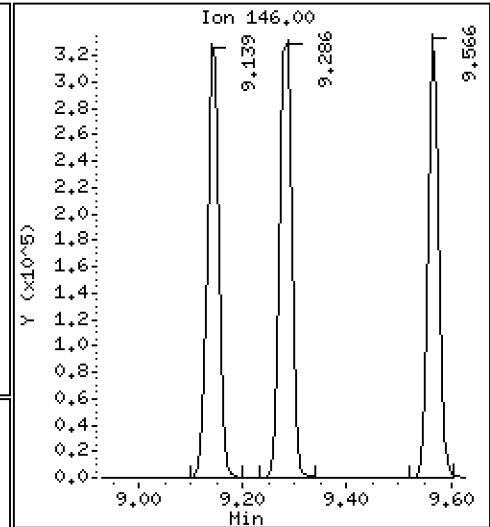
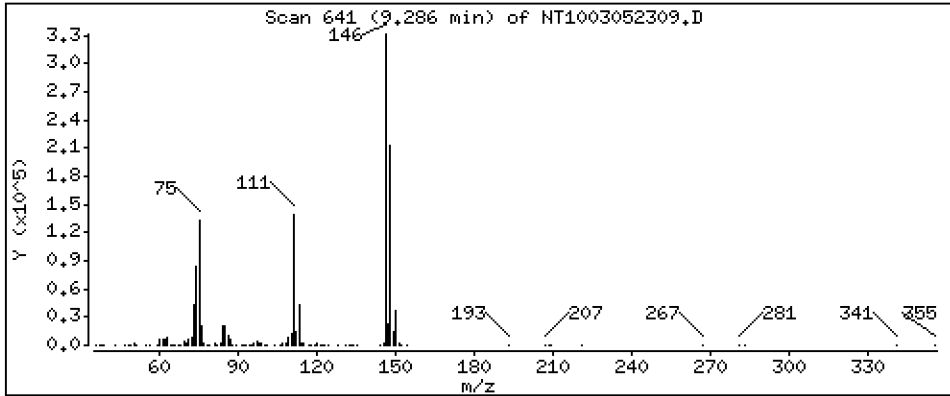
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,350 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

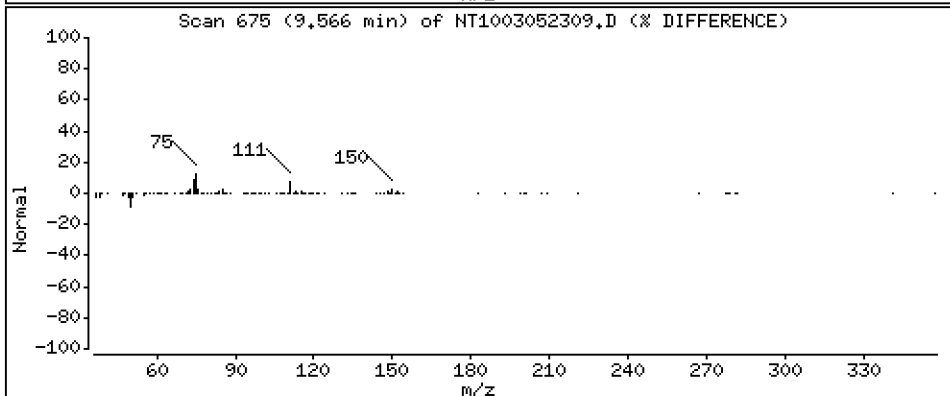
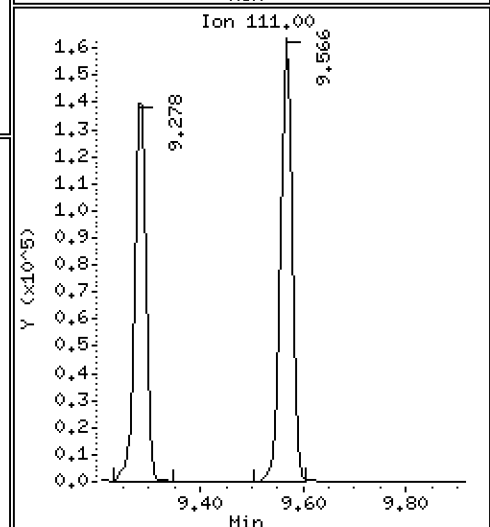
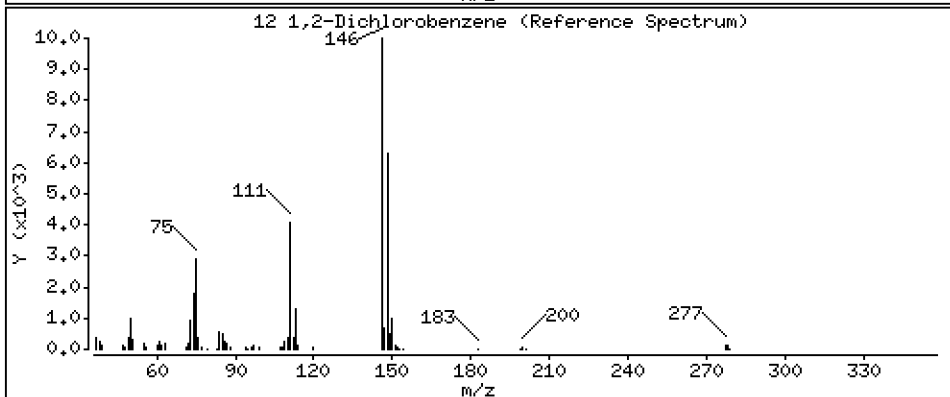
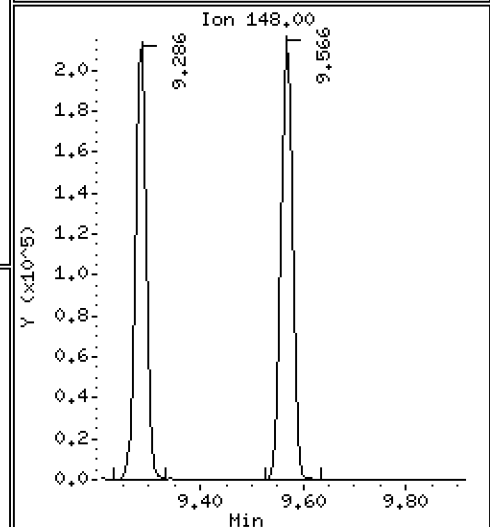
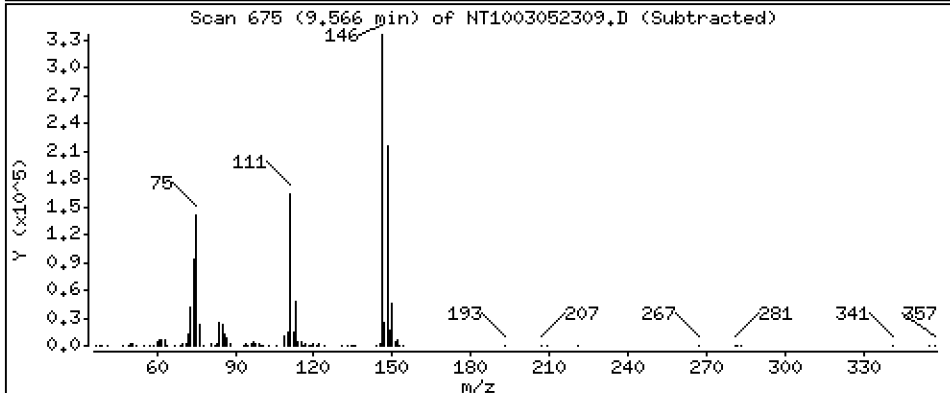
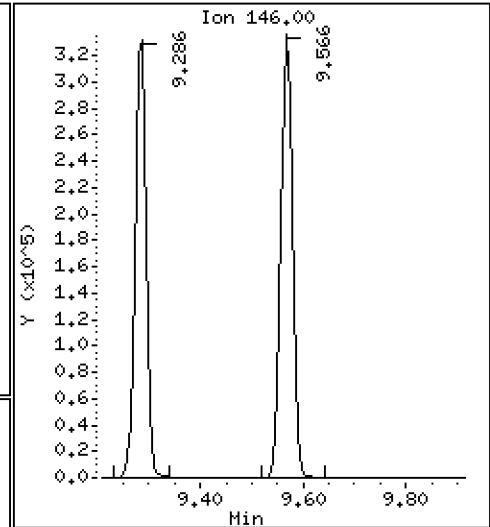
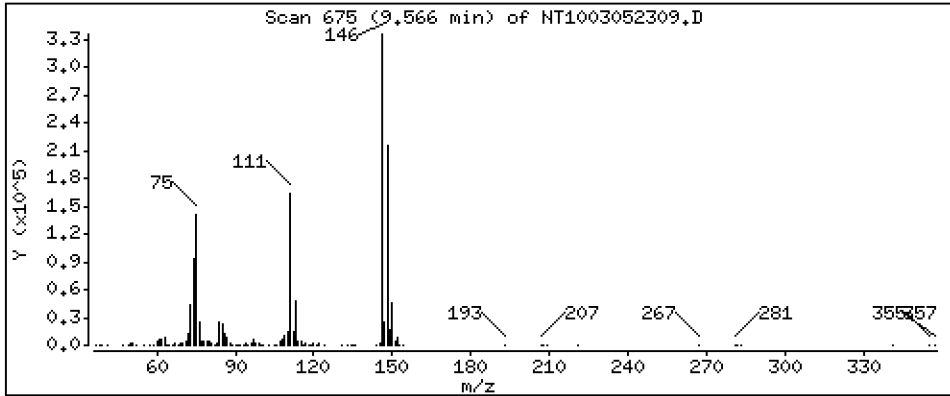
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4.409 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

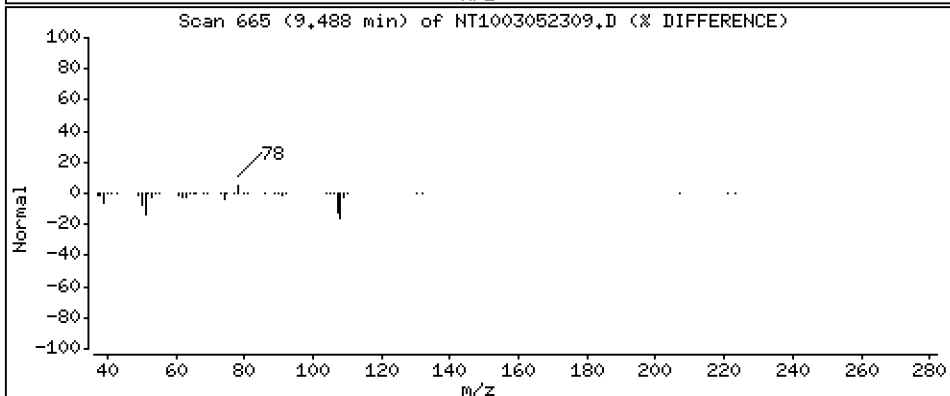
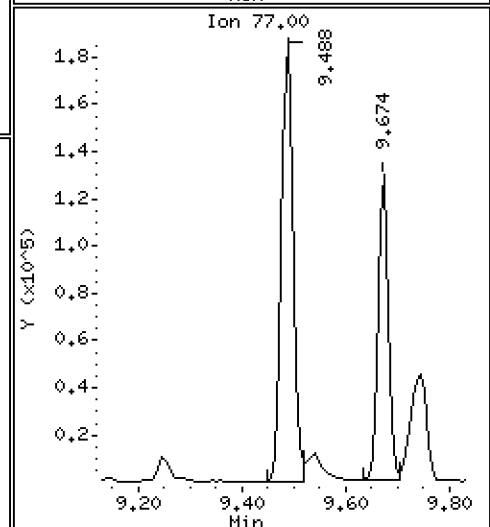
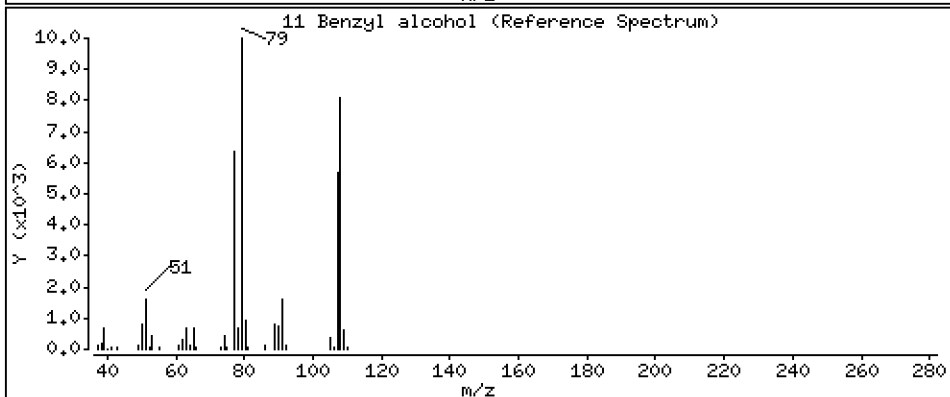
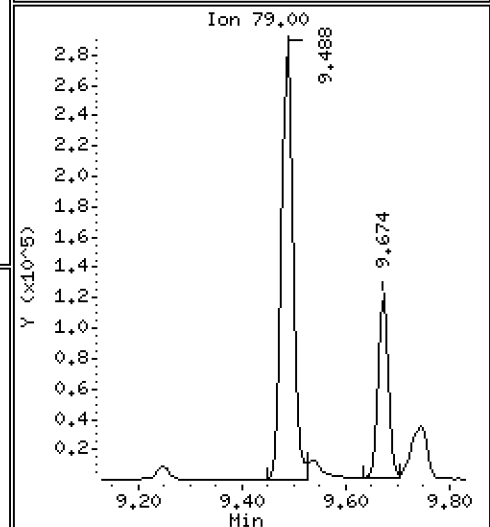
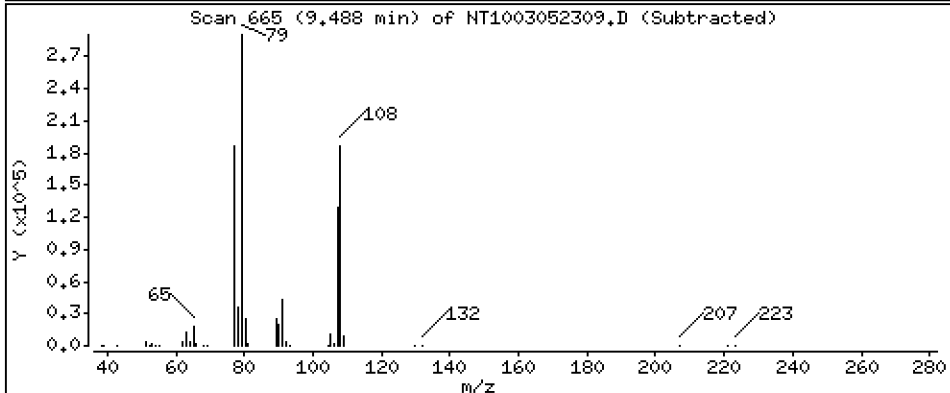
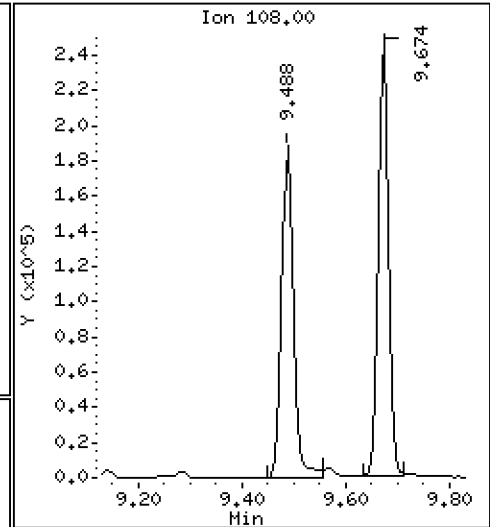
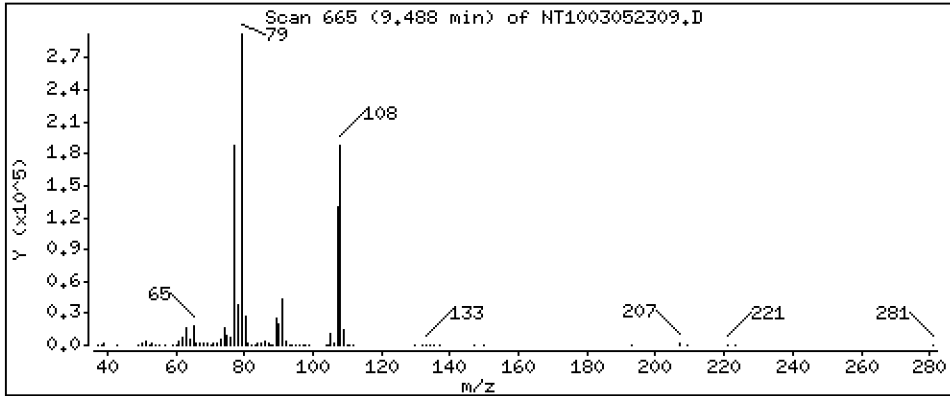
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,223 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

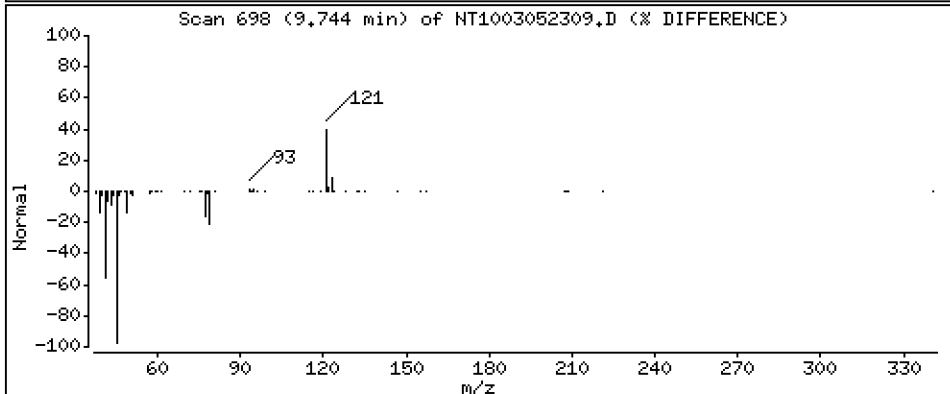
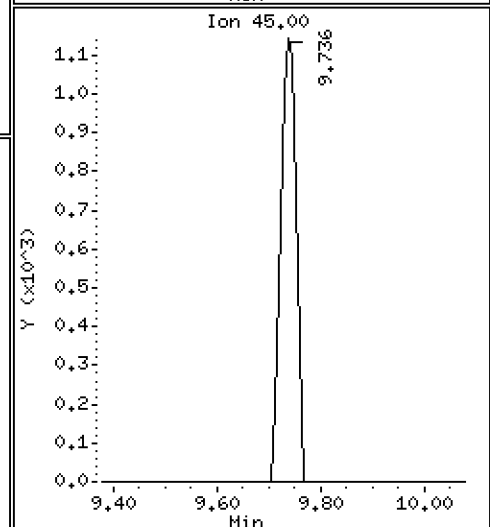
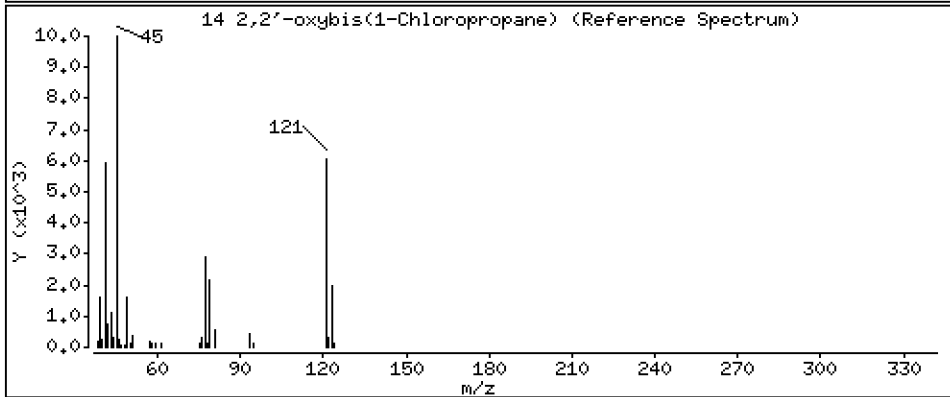
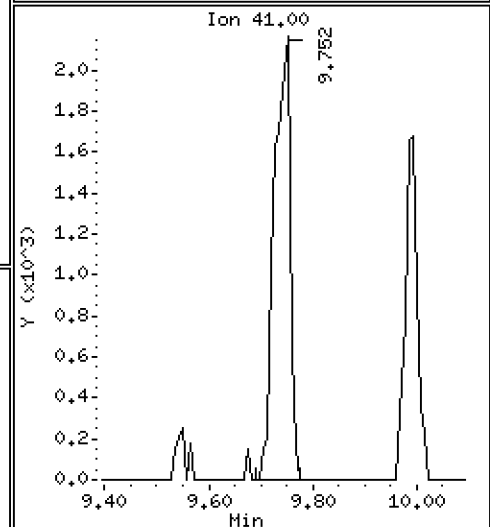
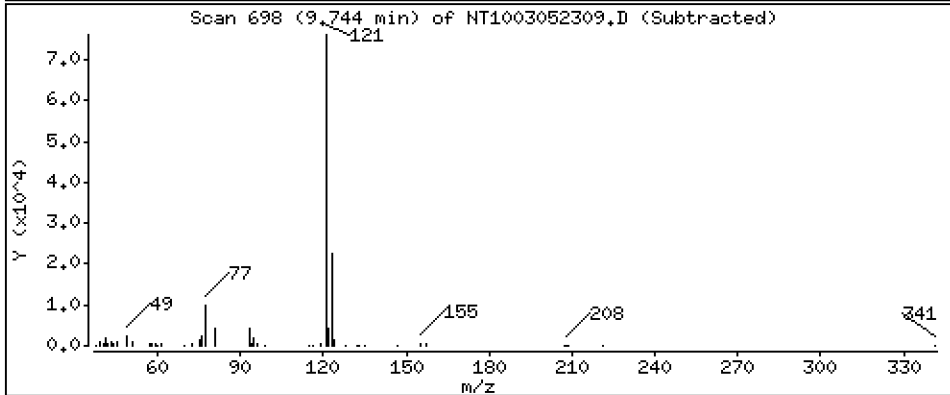
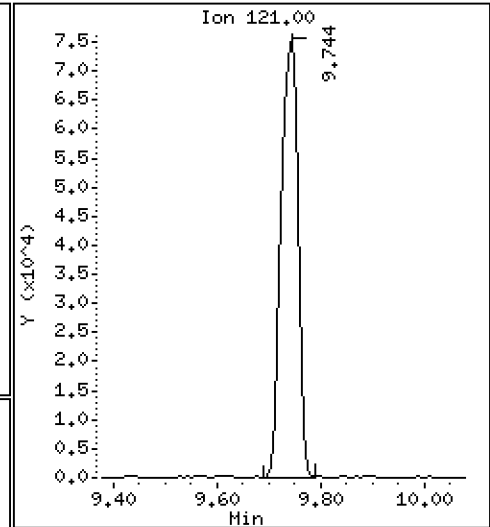
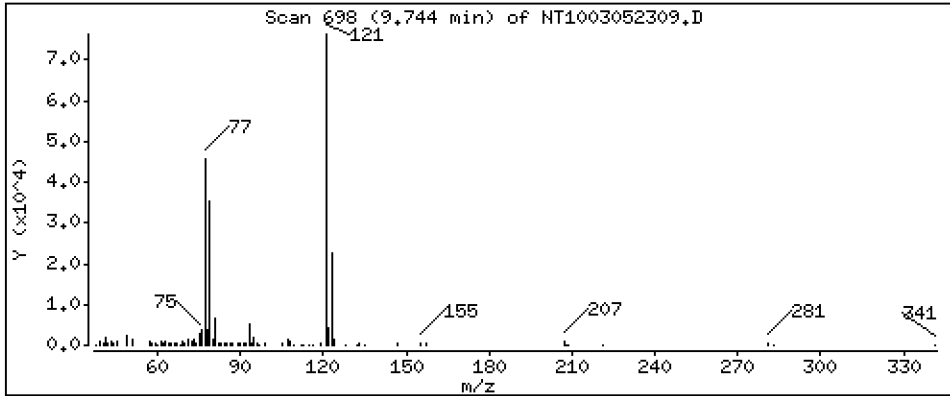
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 5.234 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

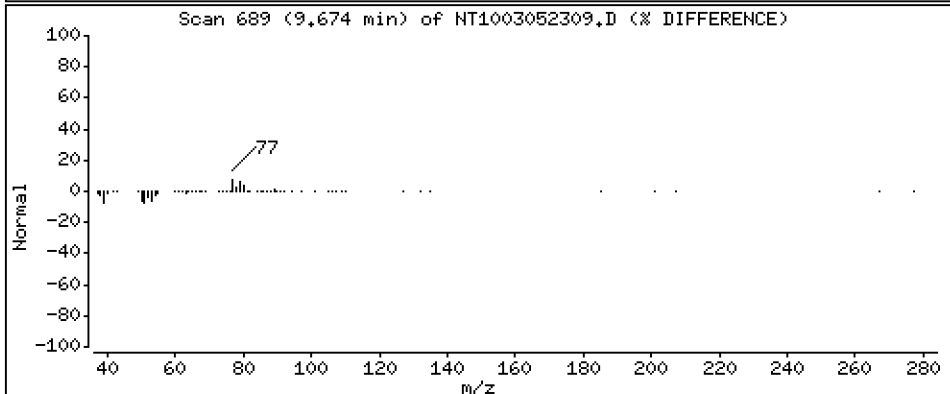
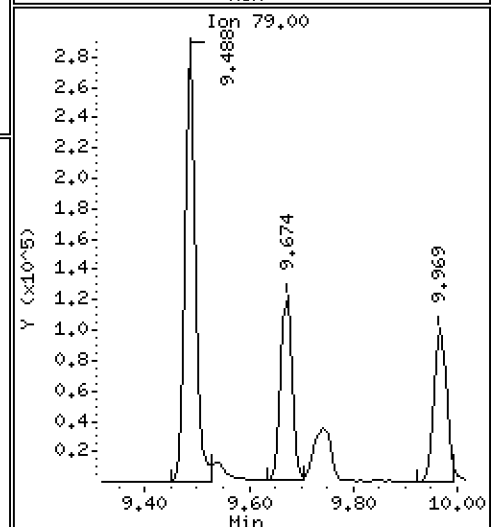
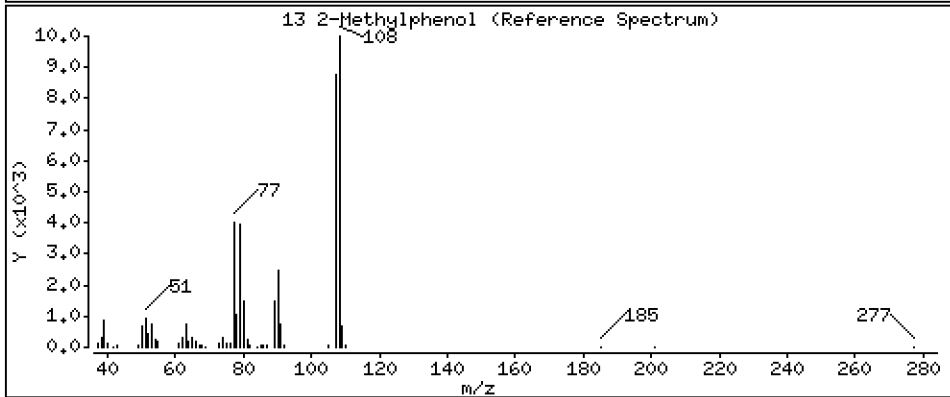
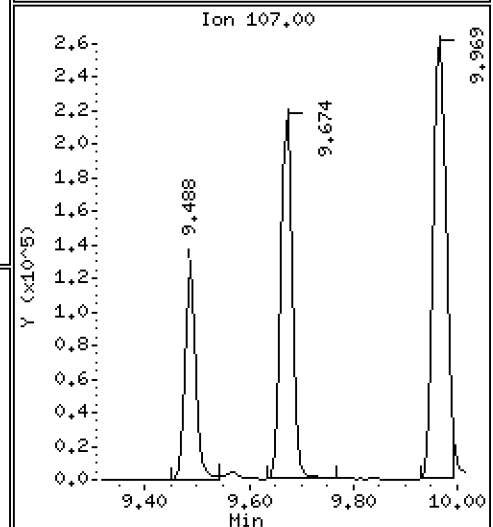
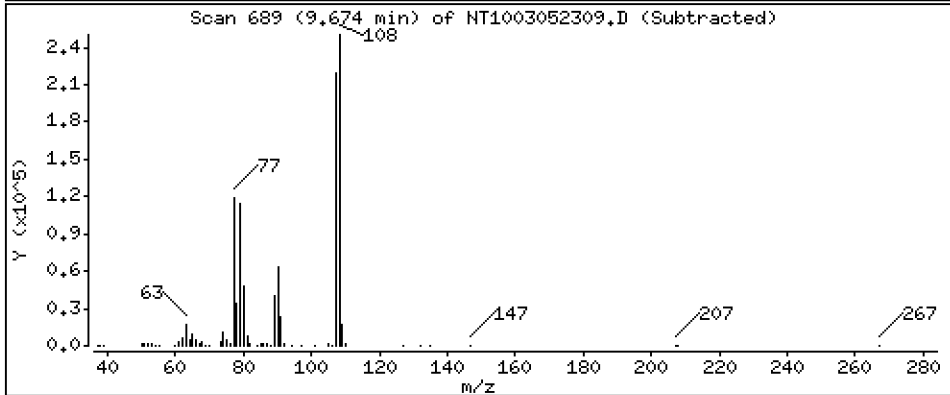
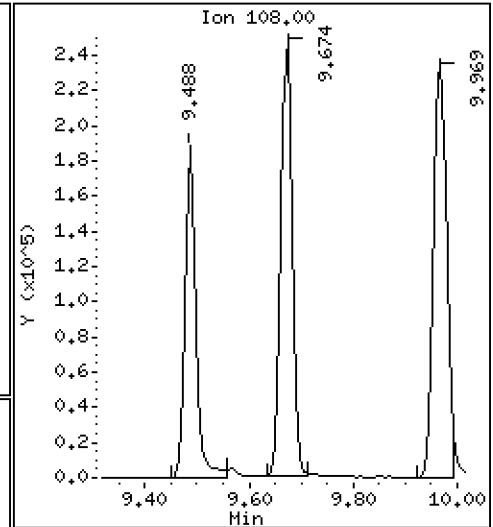
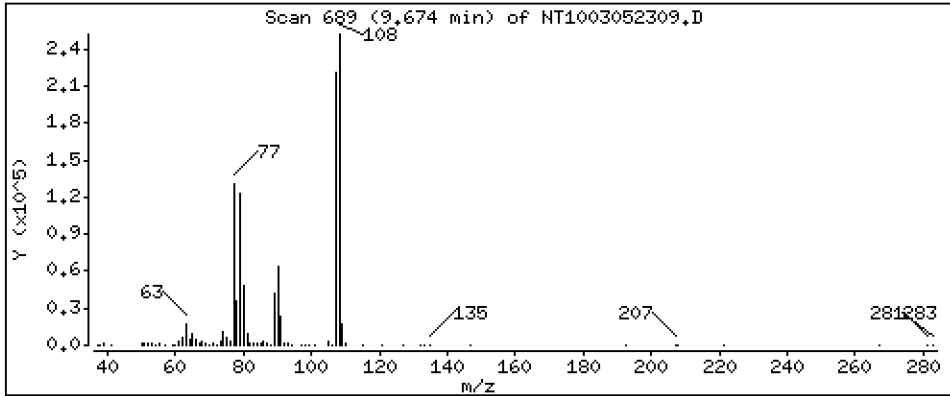
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 3,511 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

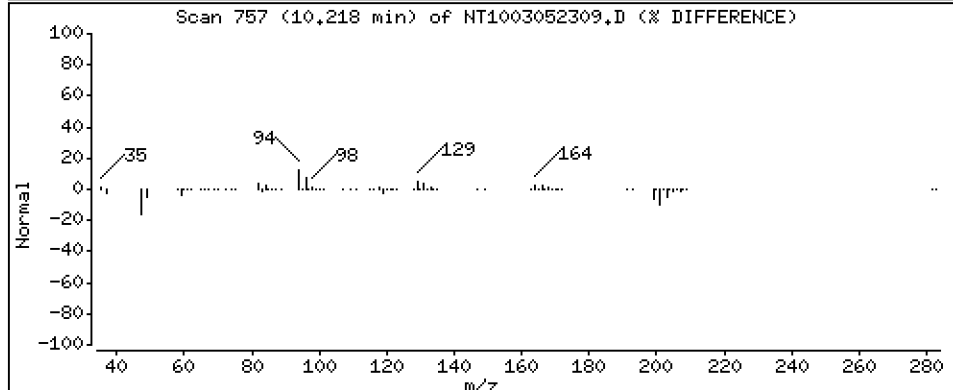
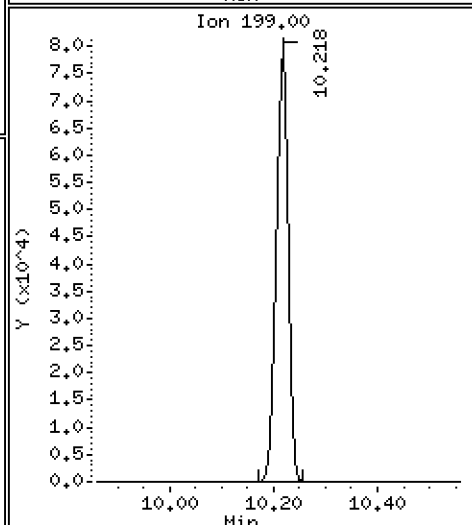
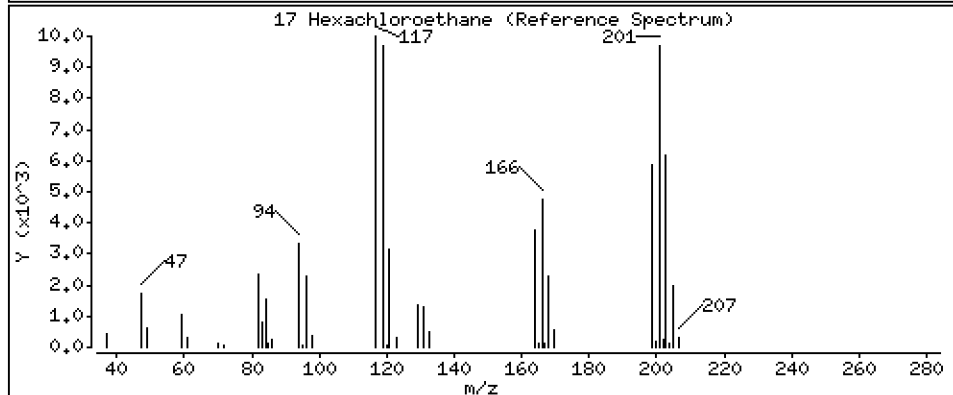
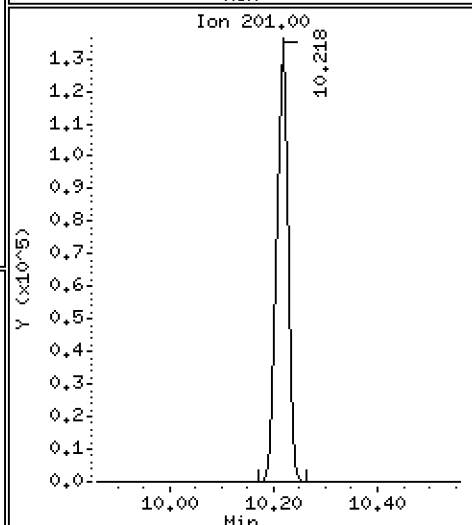
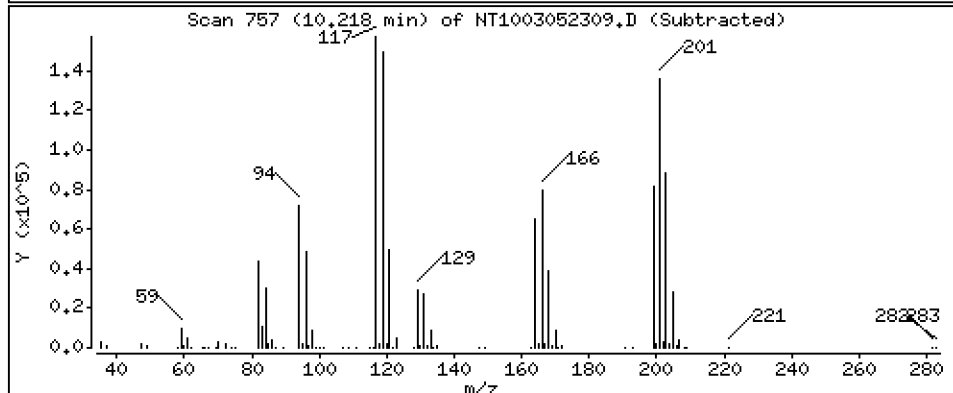
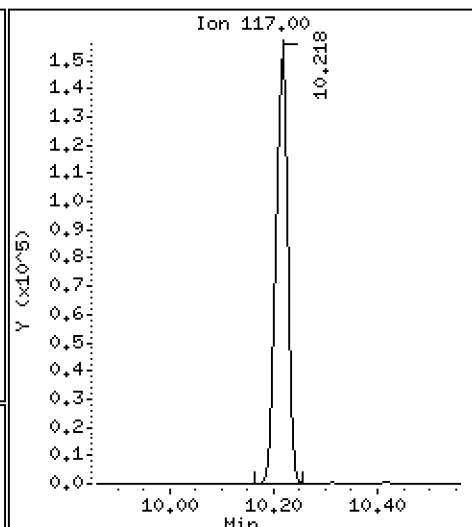
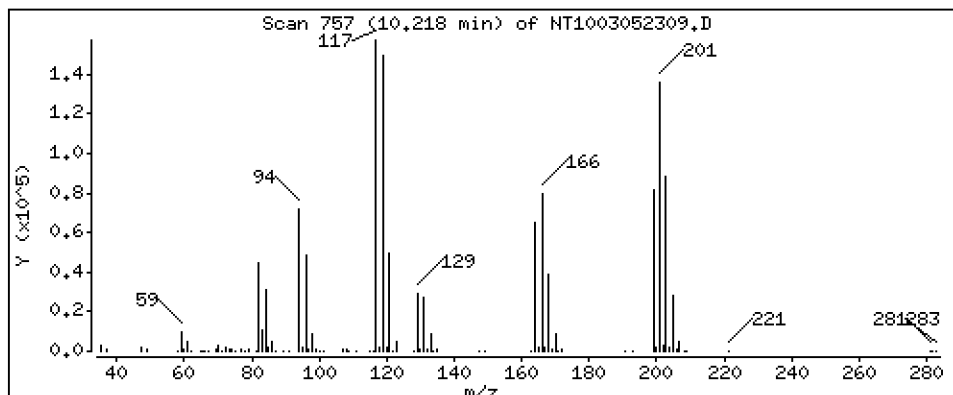
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,906 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

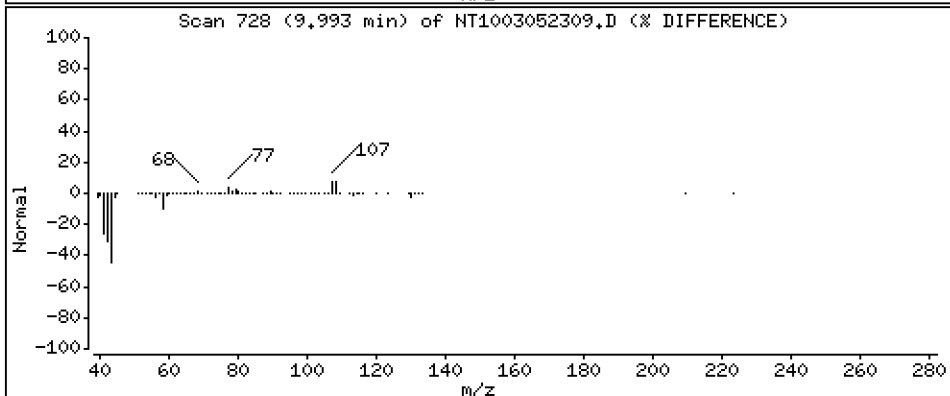
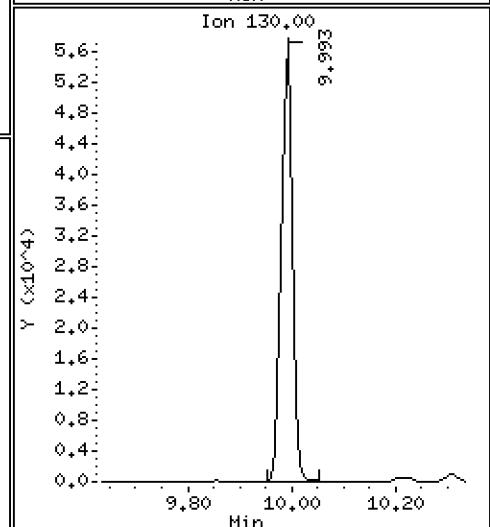
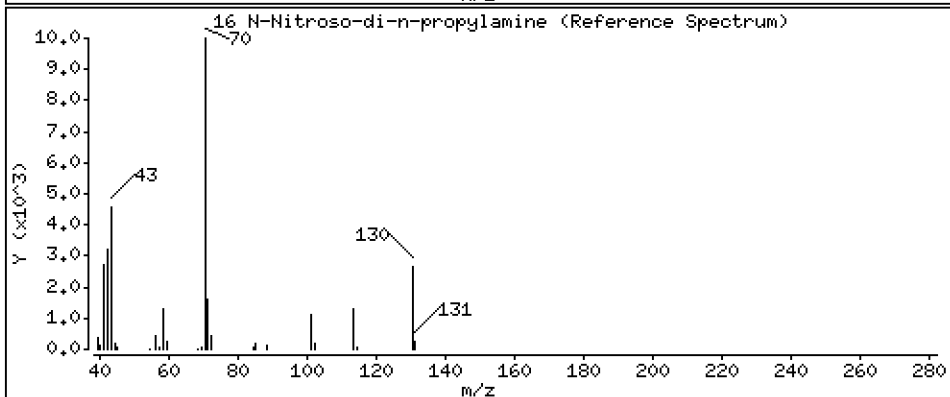
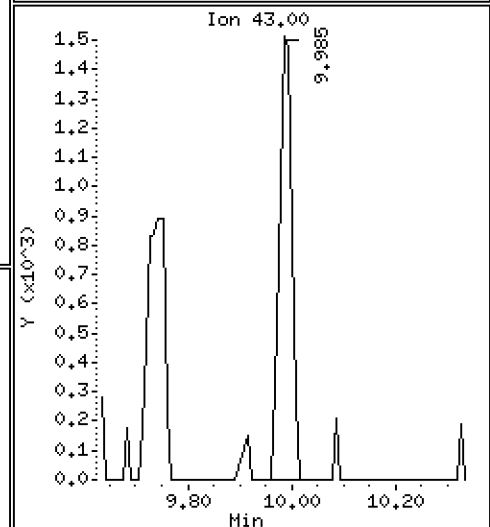
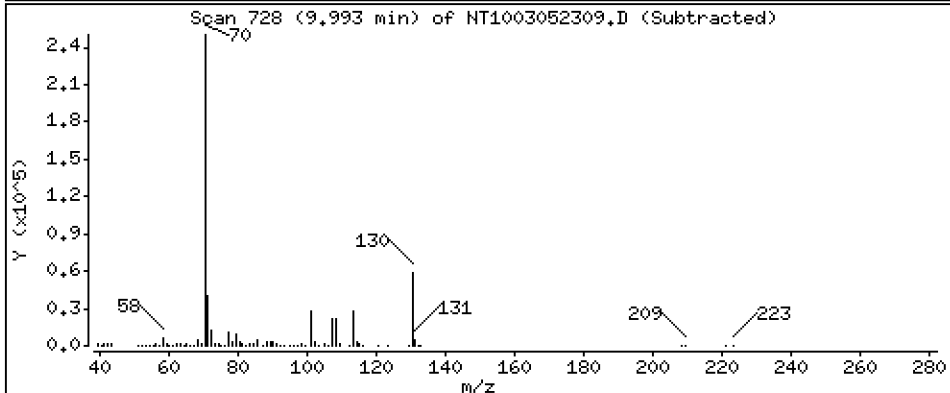
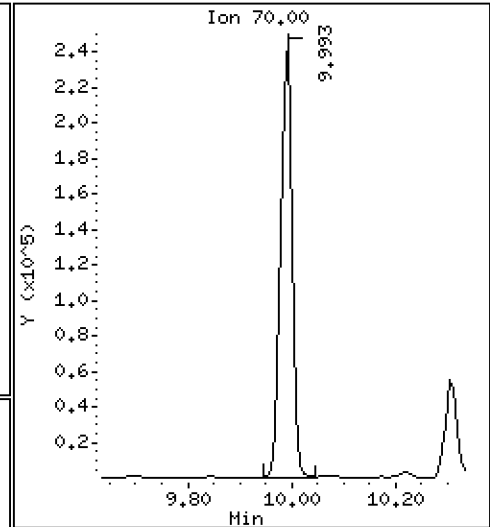
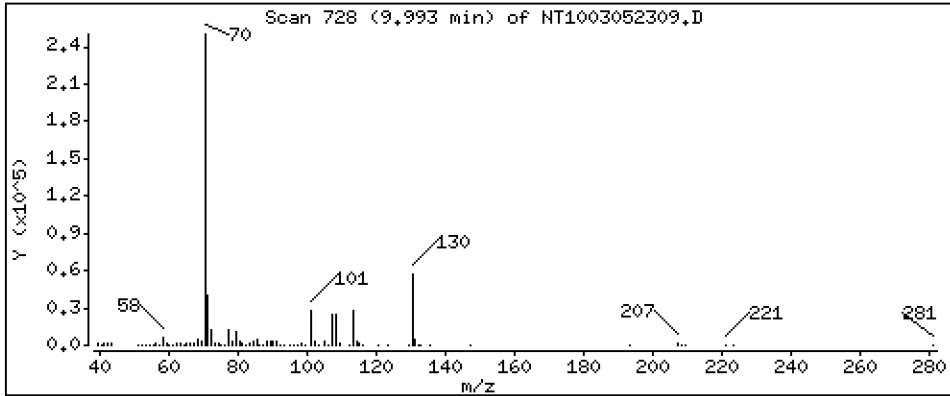
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,652 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

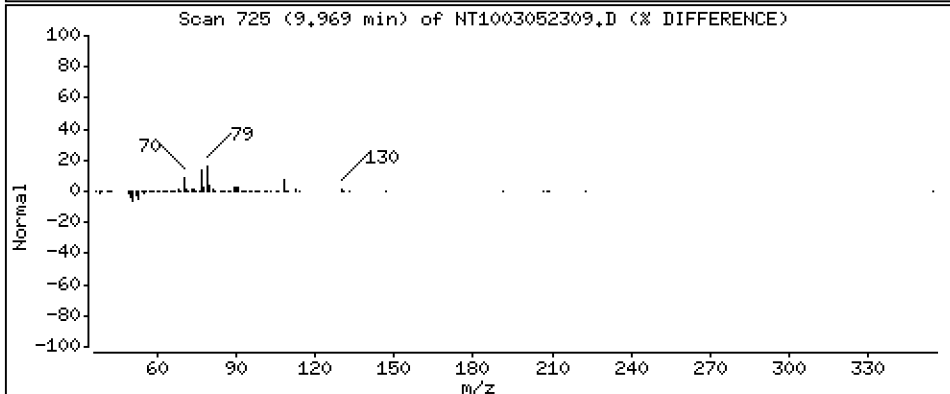
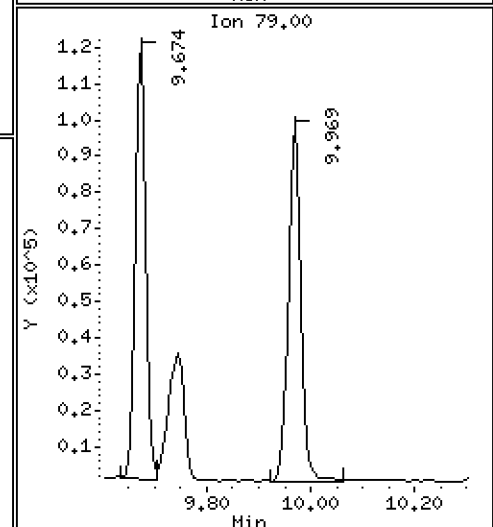
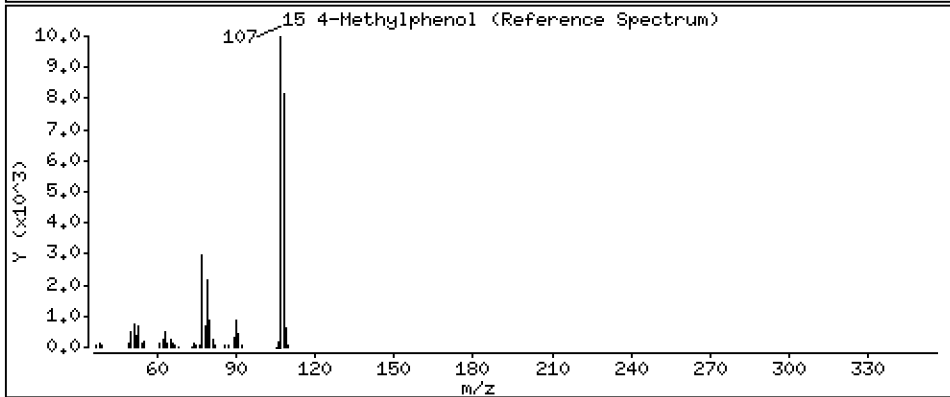
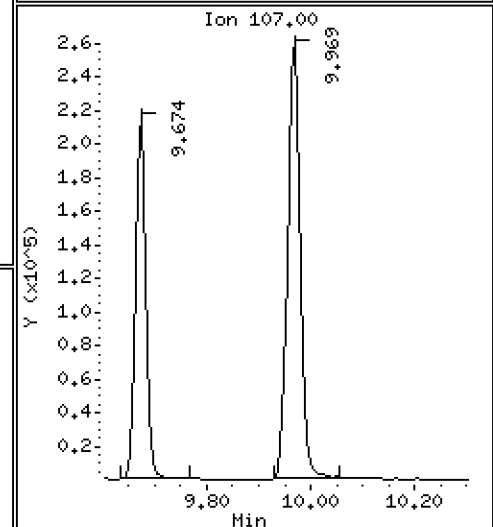
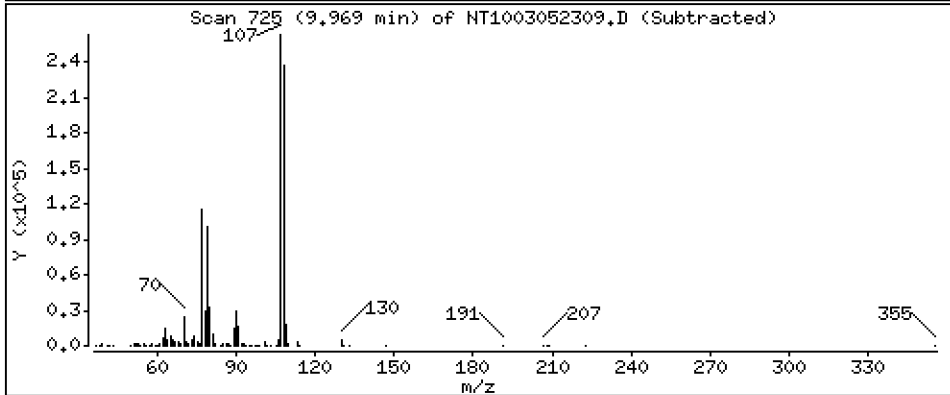
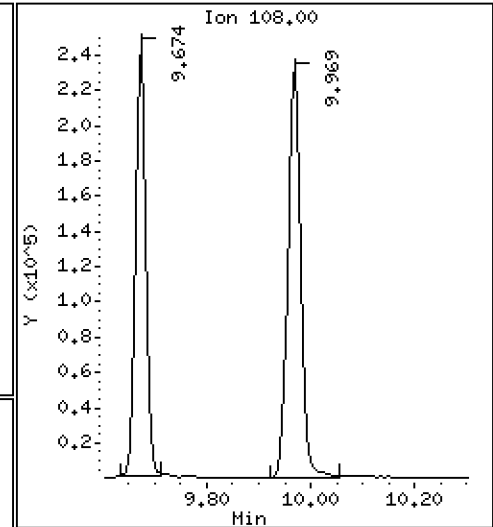
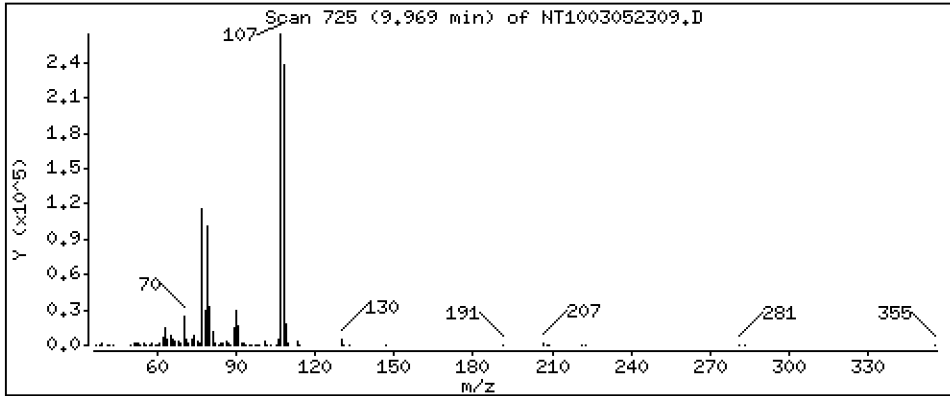
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 3,310 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

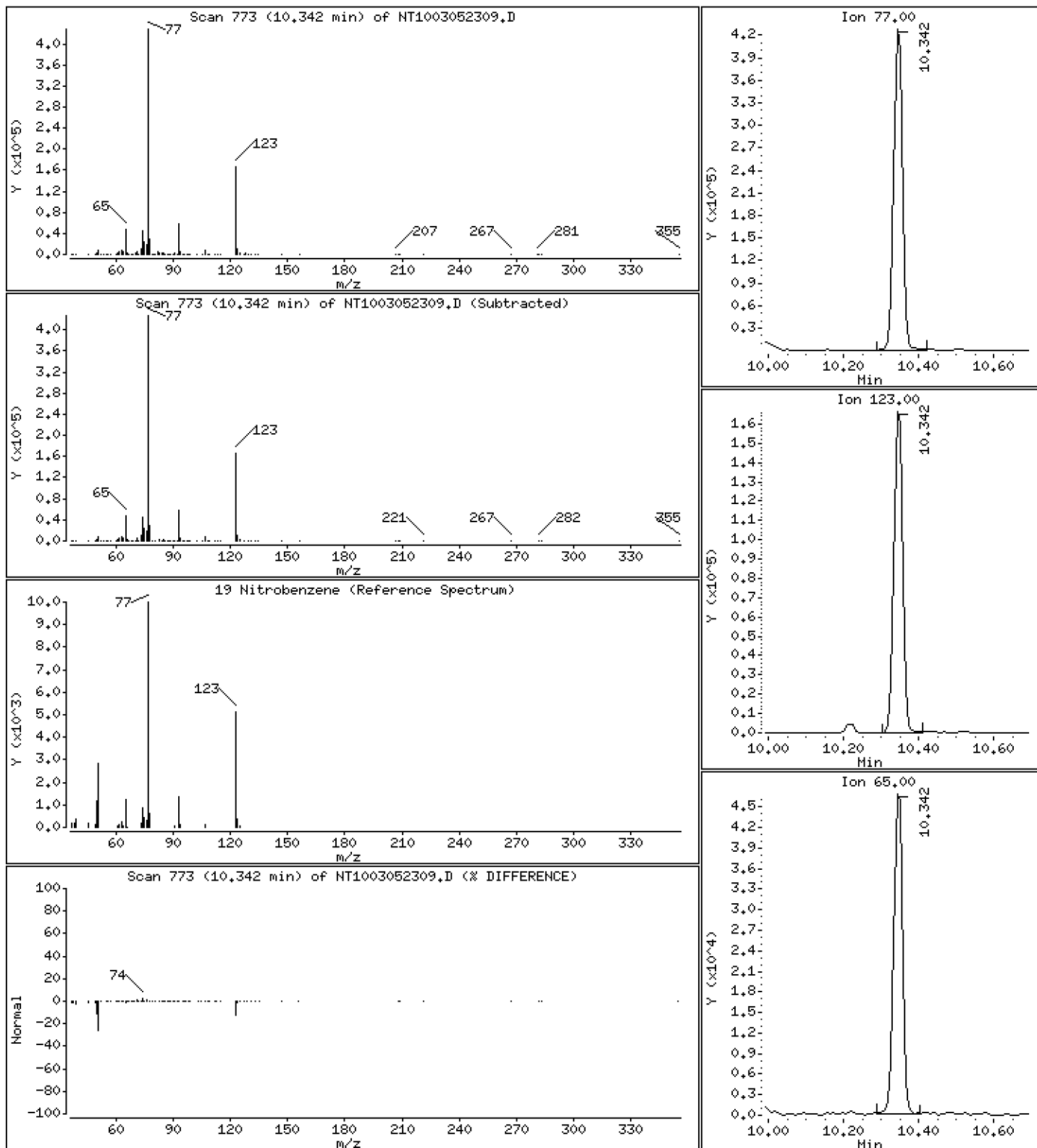
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,331 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

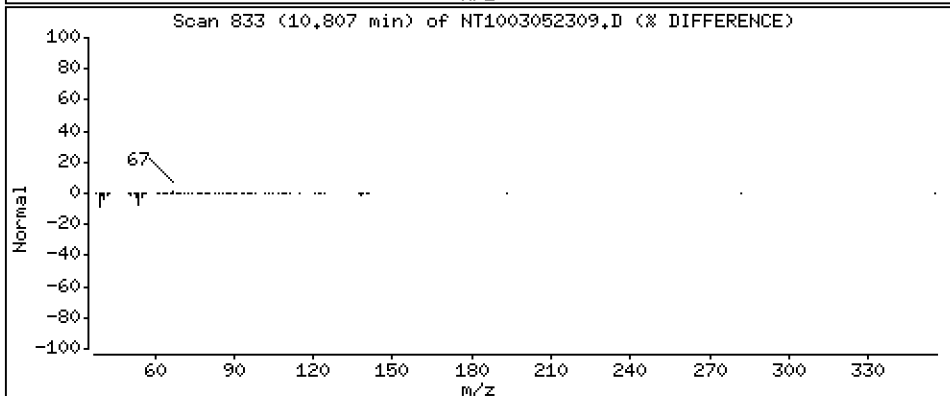
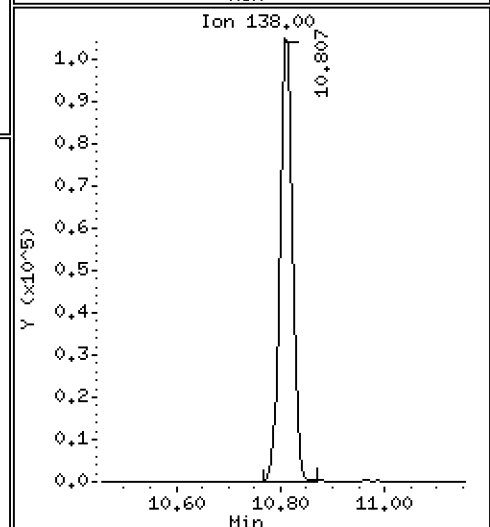
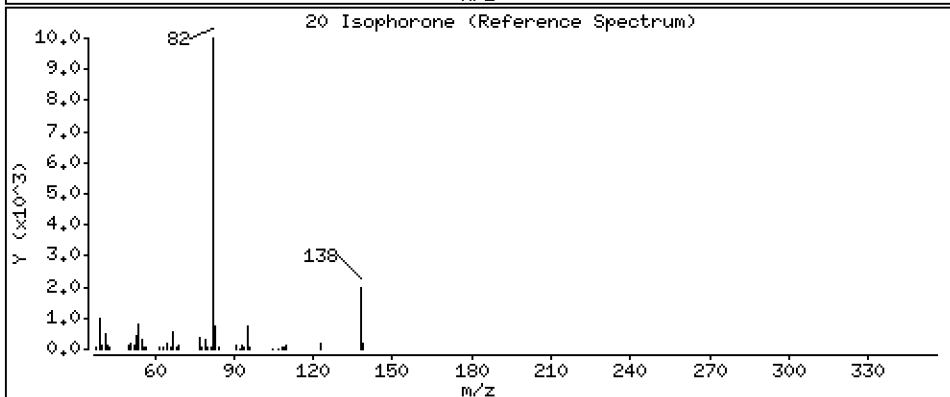
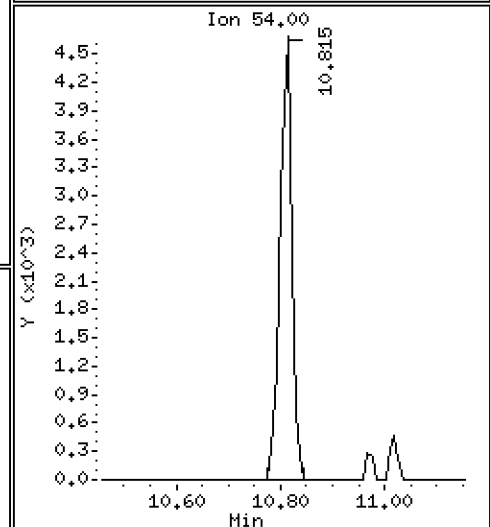
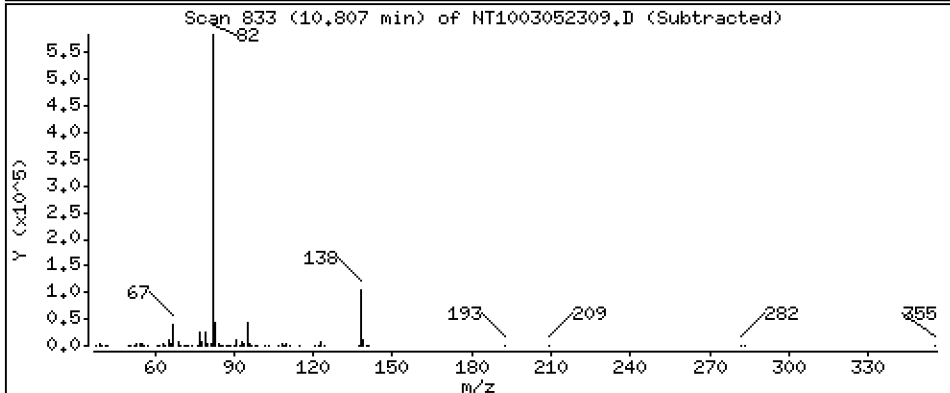
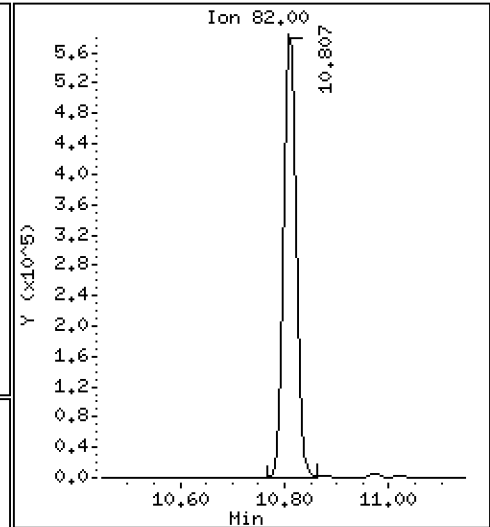
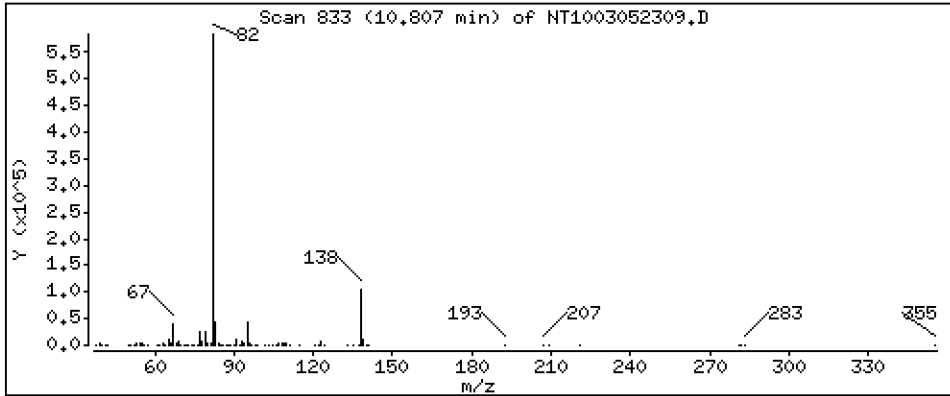
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 6,595 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

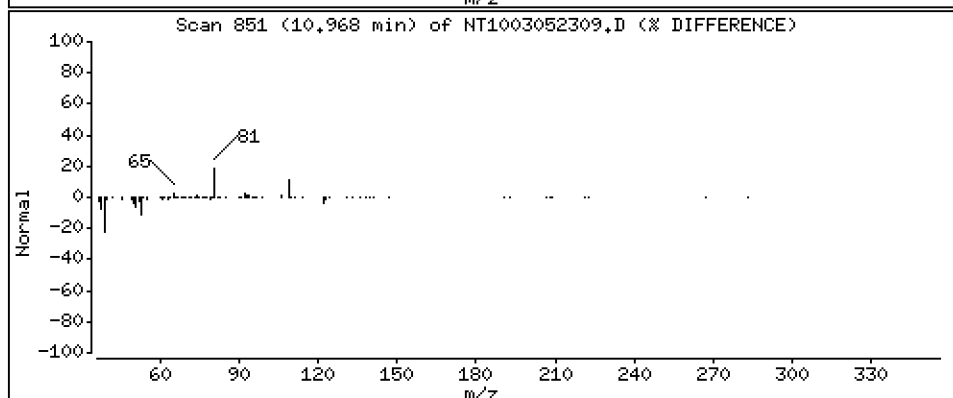
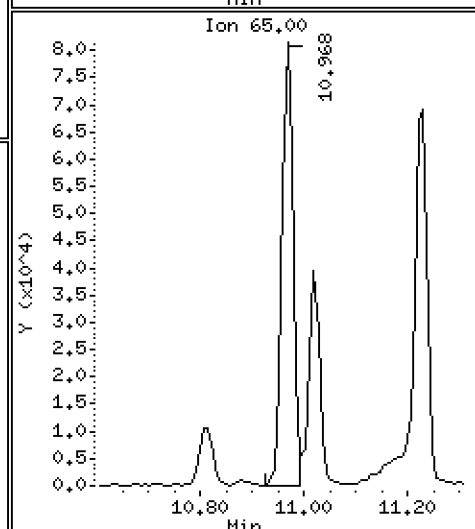
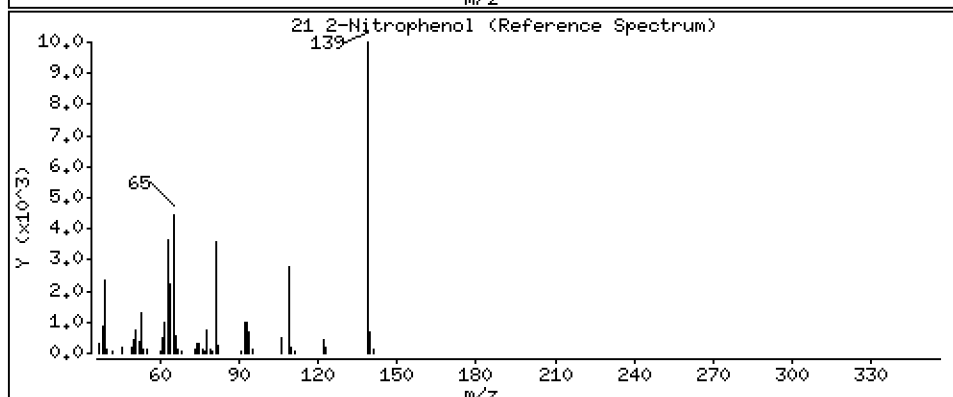
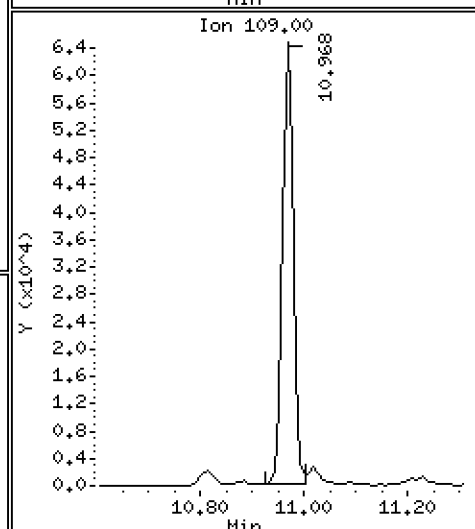
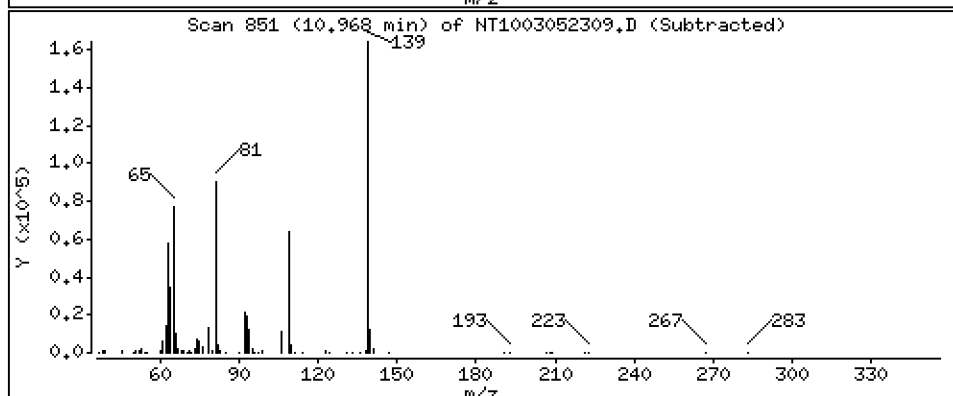
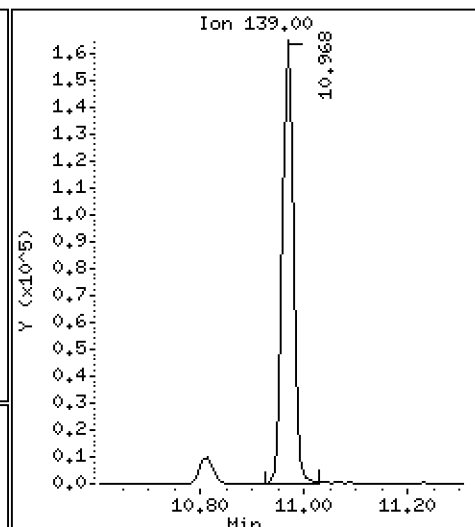
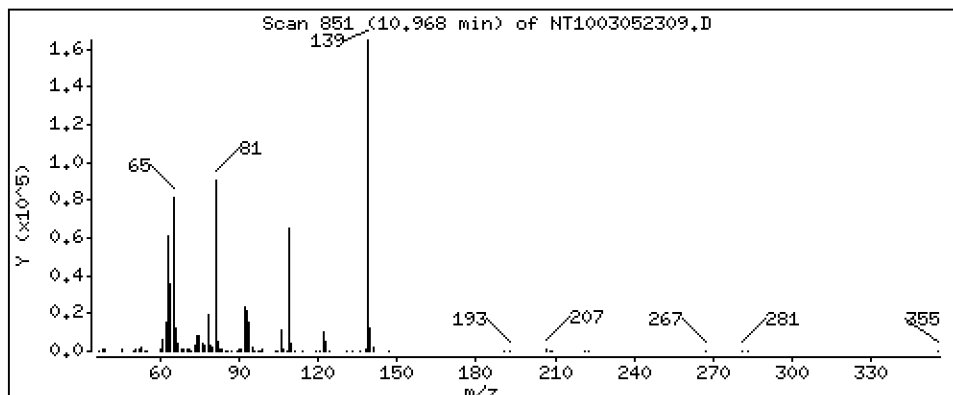
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,704 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

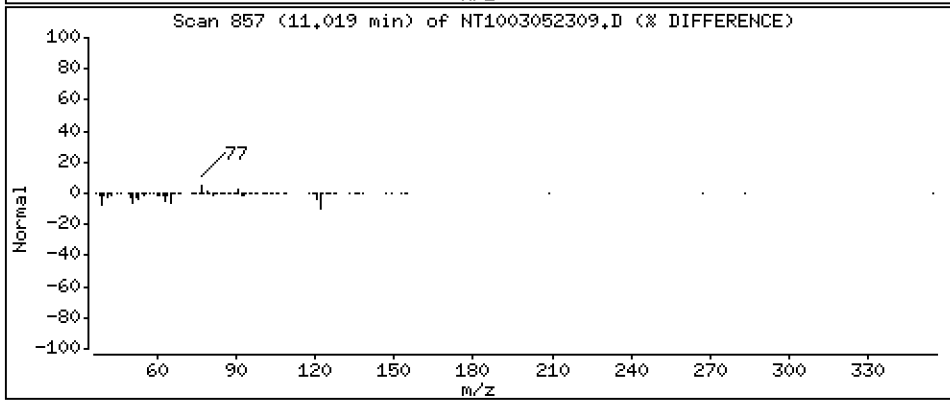
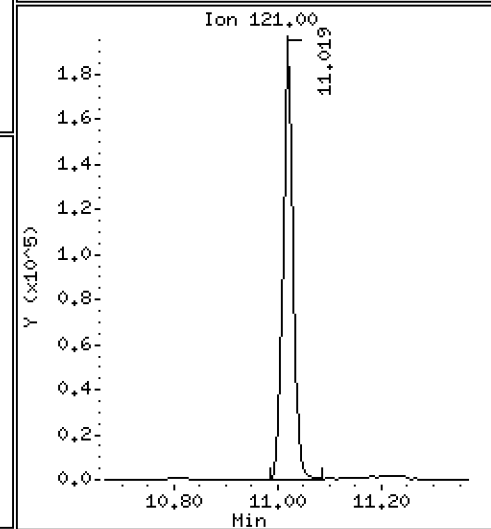
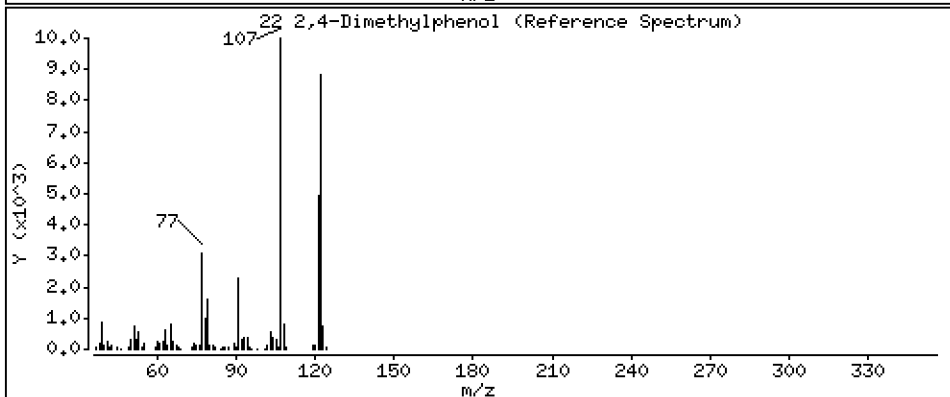
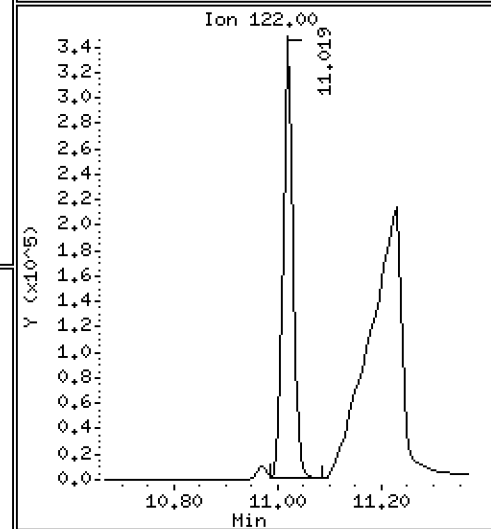
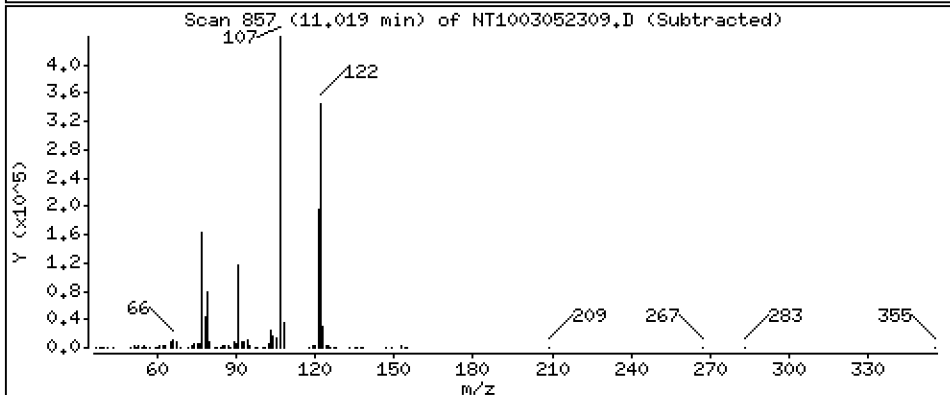
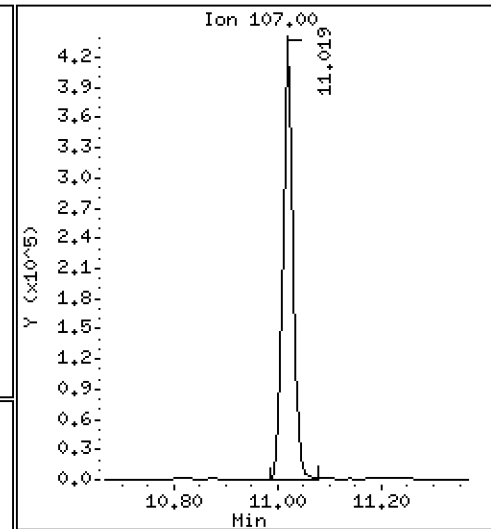
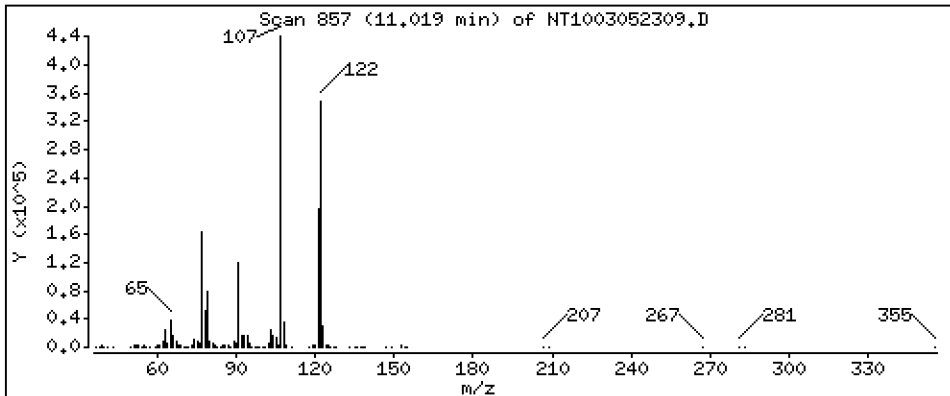
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 5,128 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

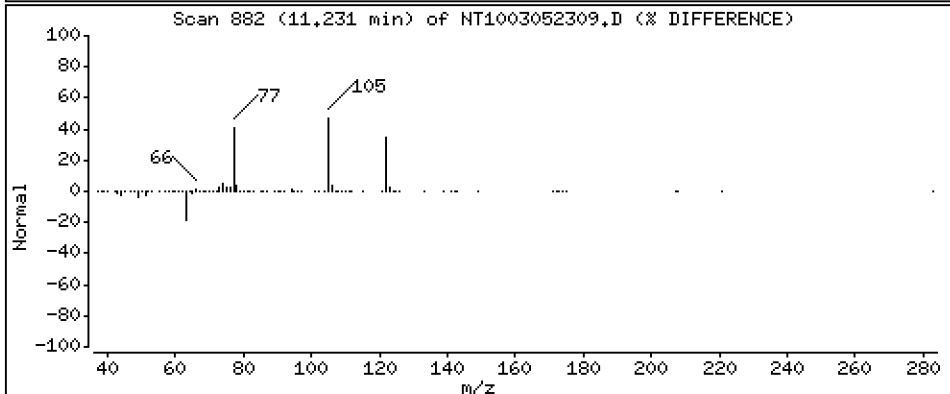
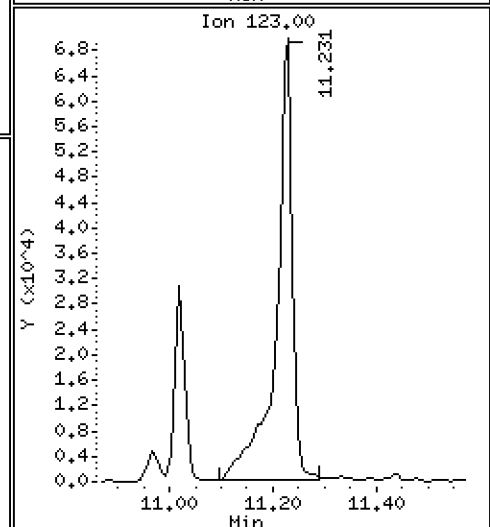
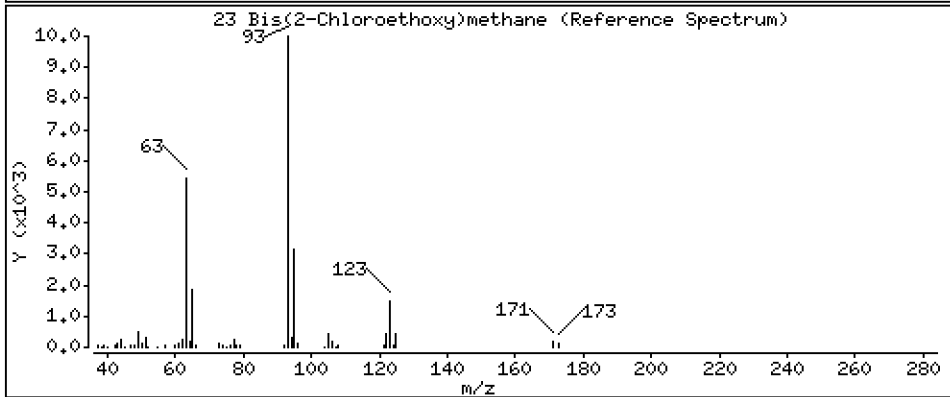
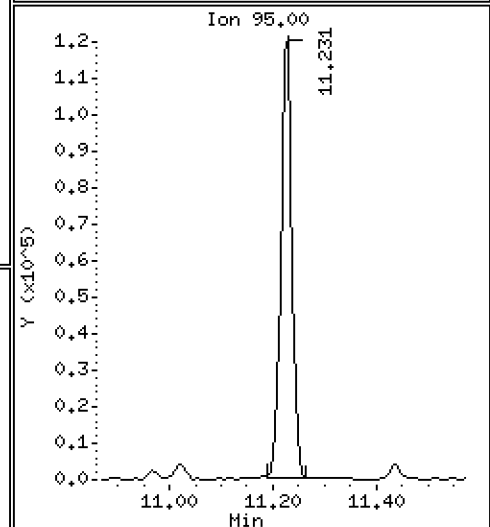
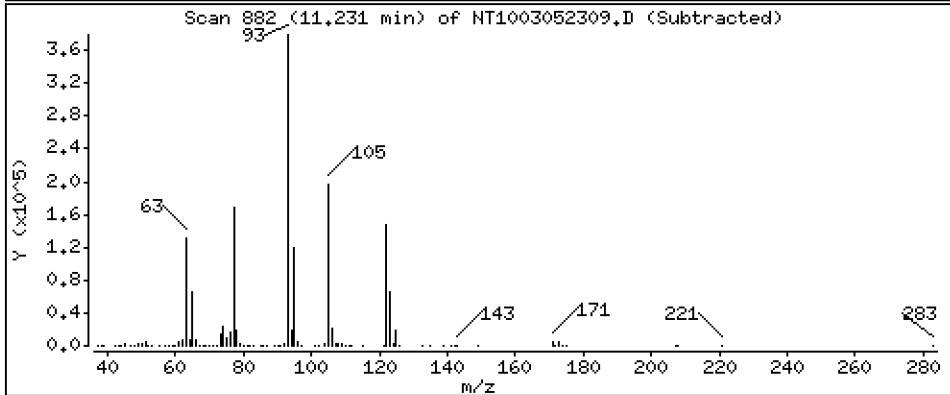
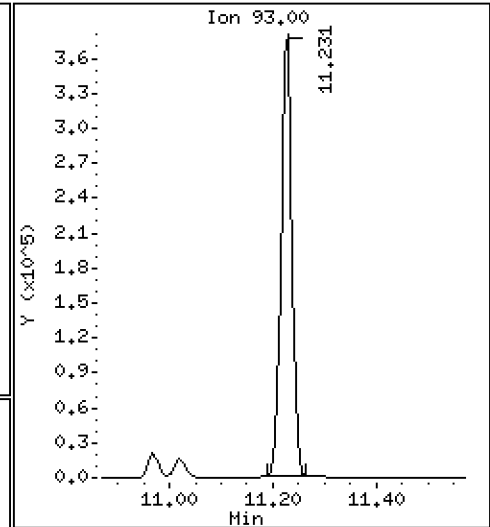
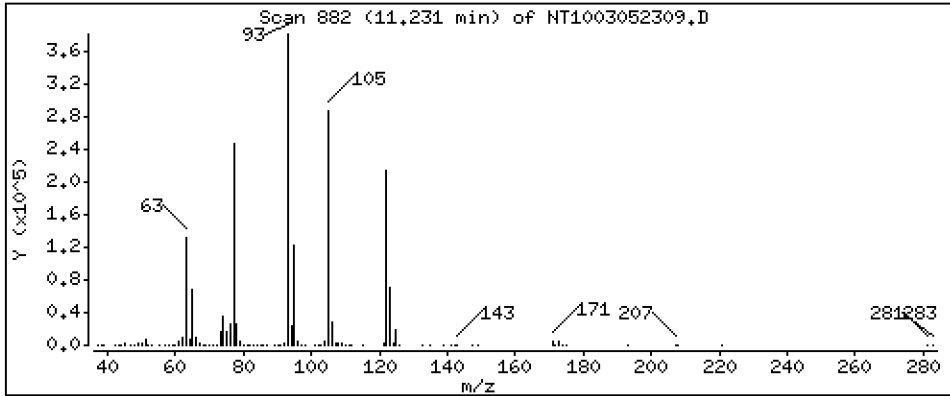
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,891 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

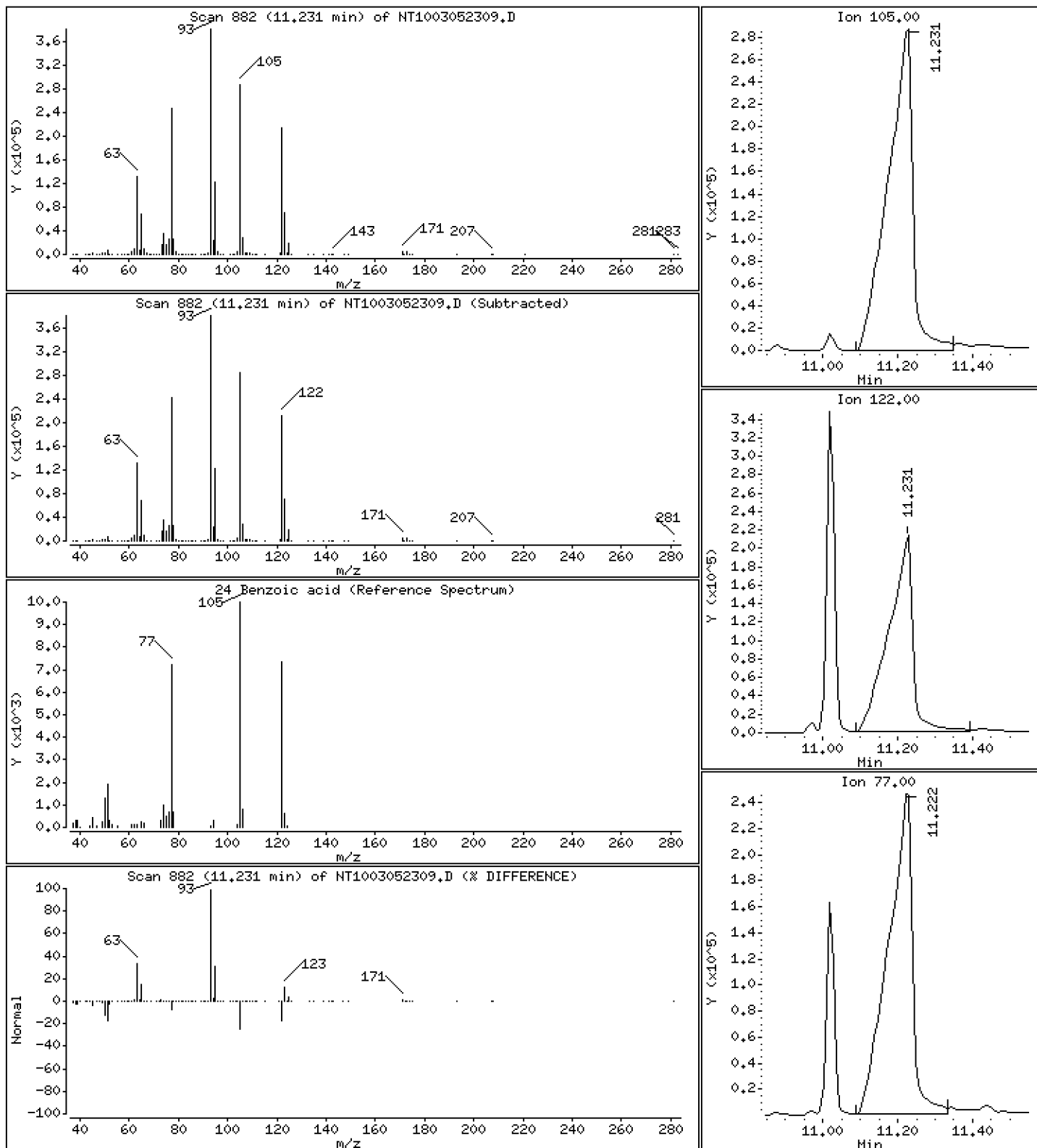
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 18,17 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

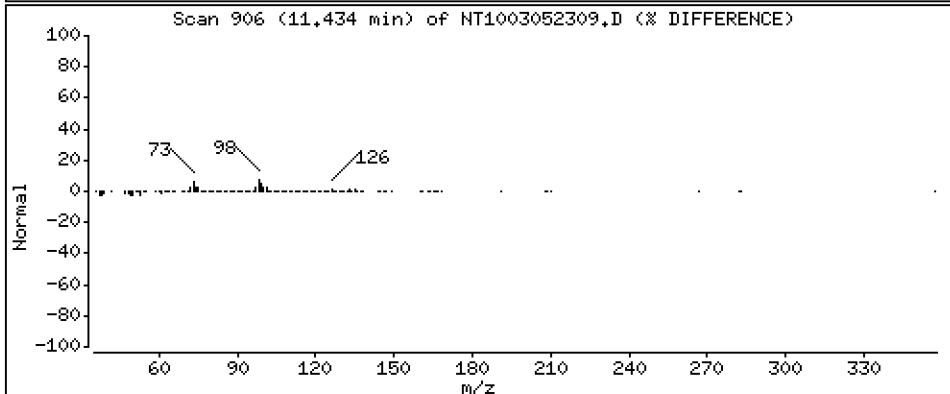
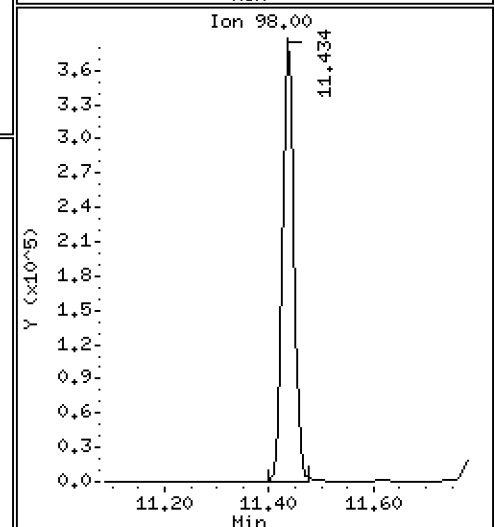
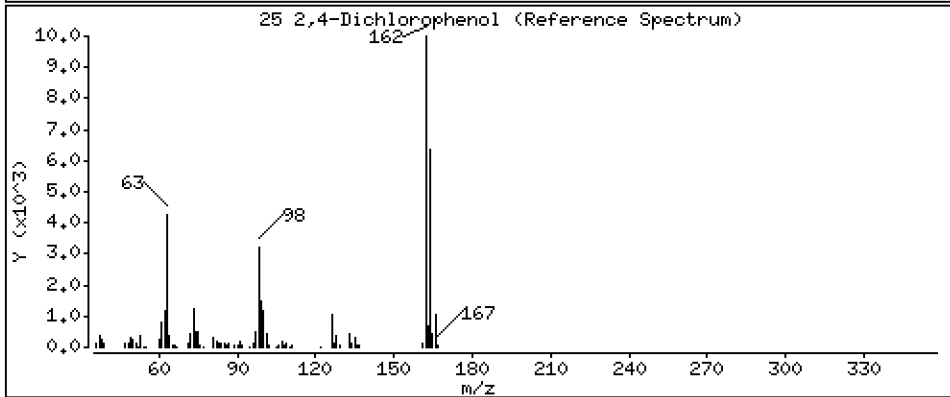
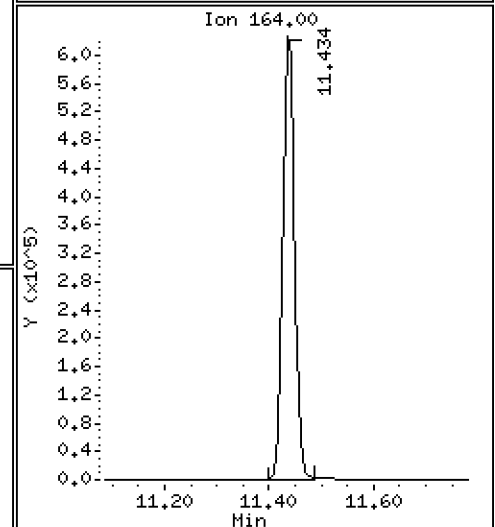
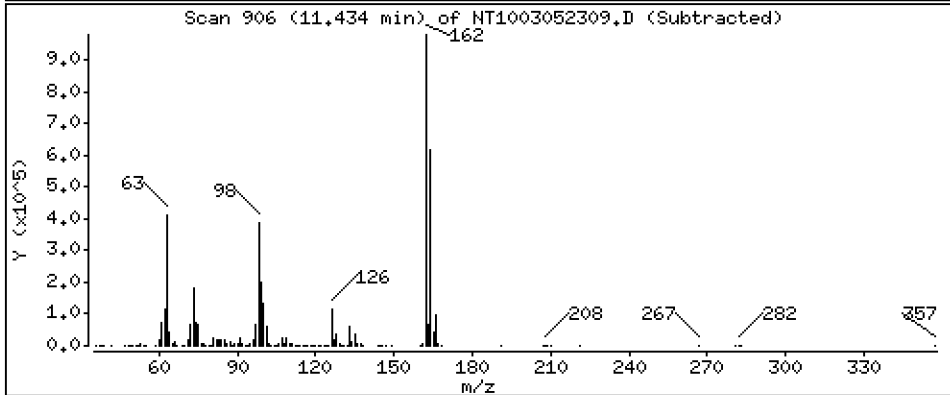
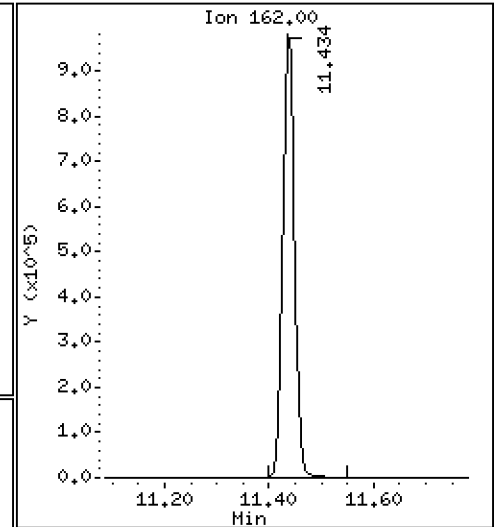
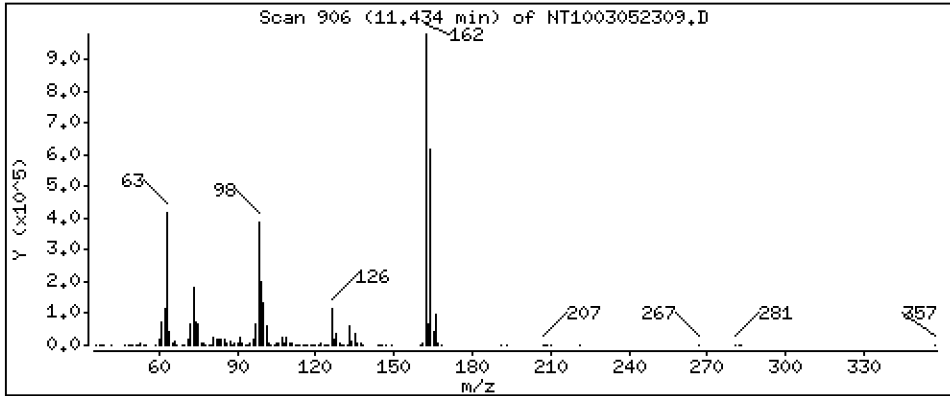
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 17,10 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

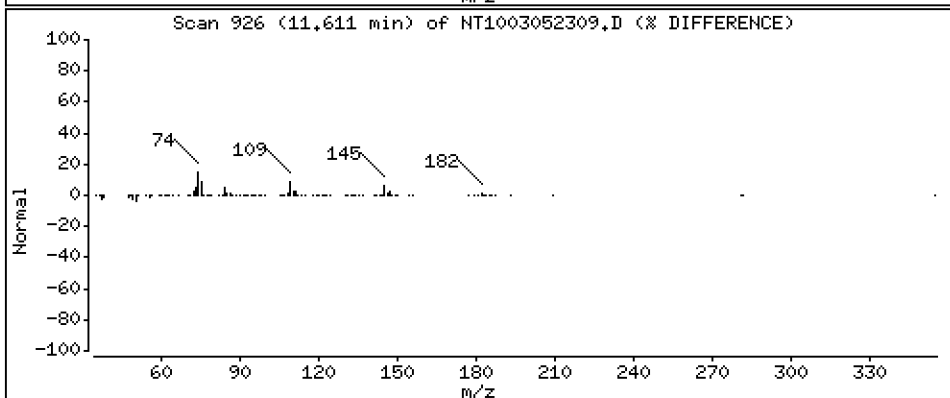
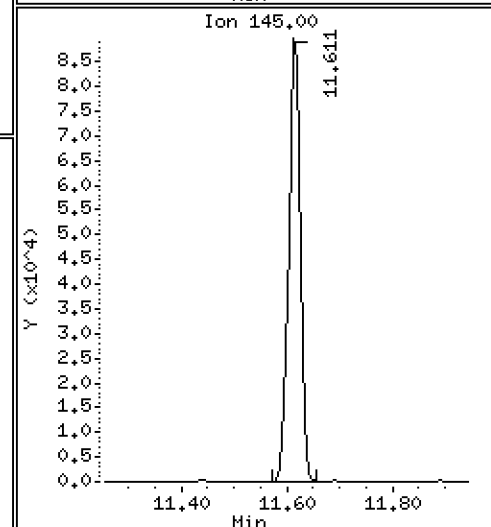
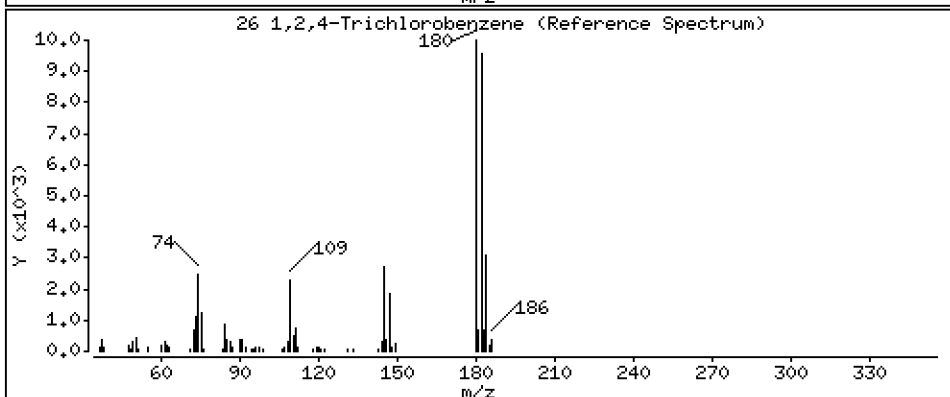
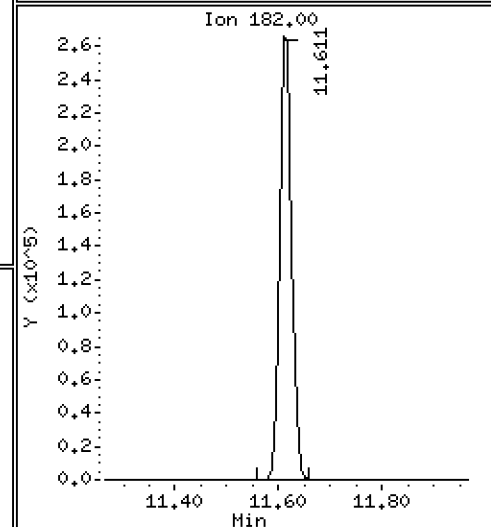
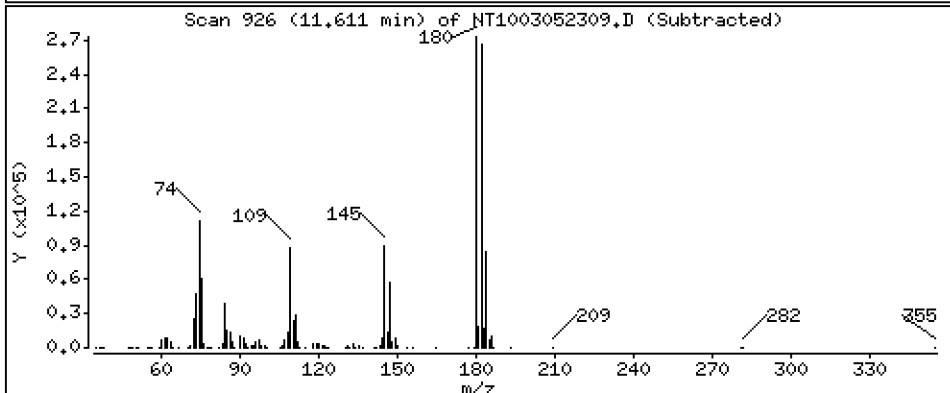
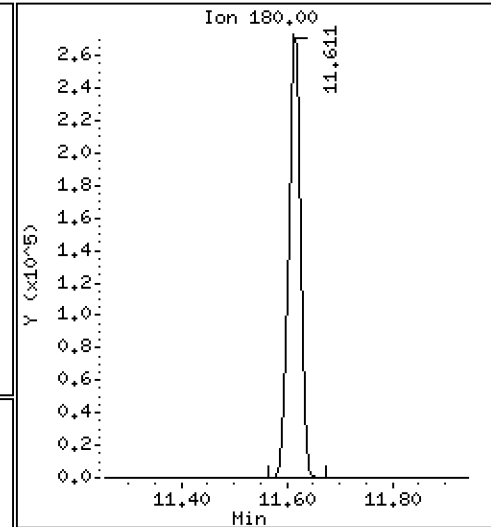
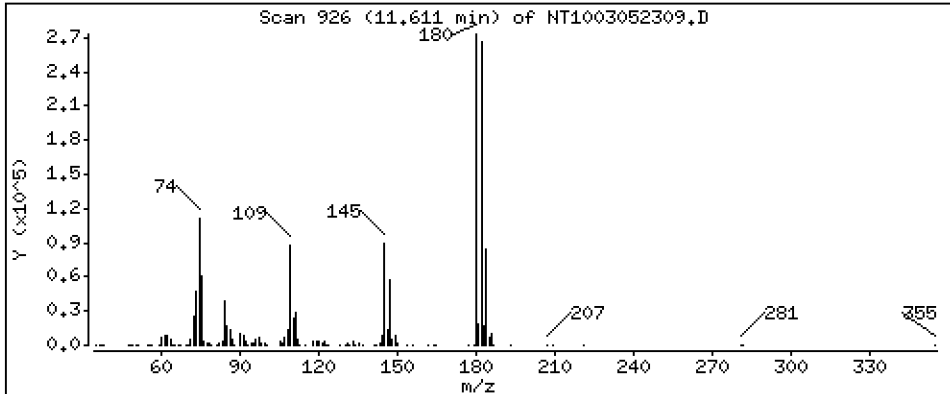
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,684 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

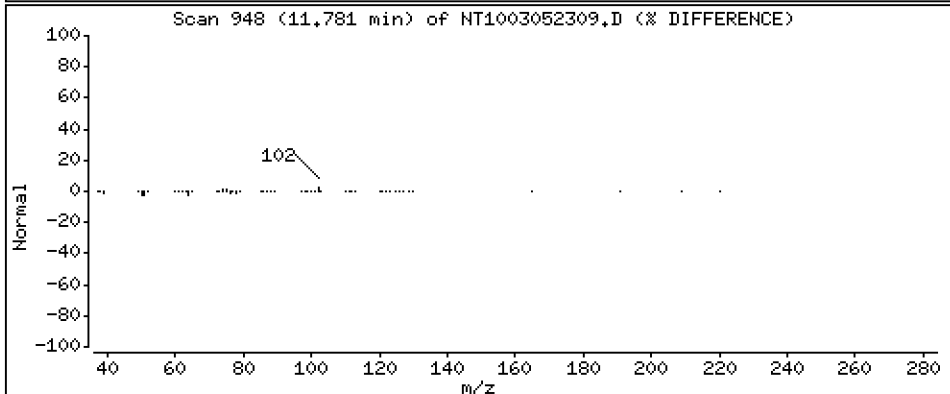
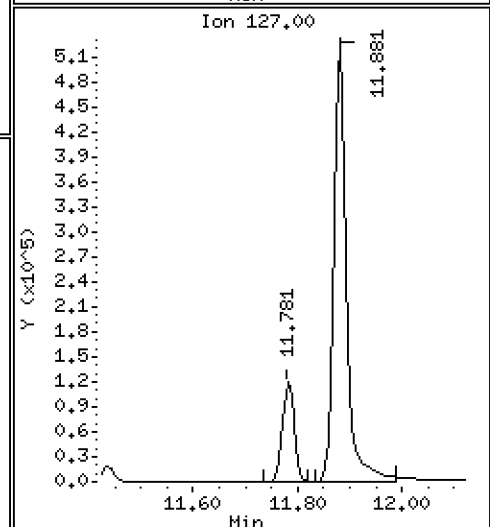
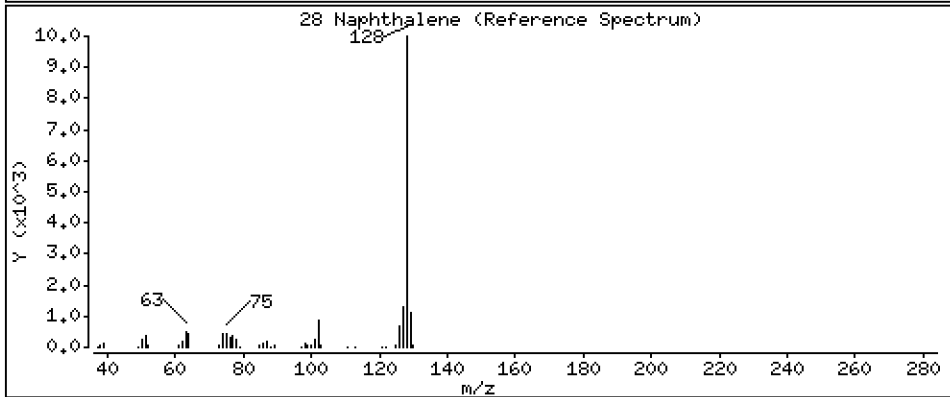
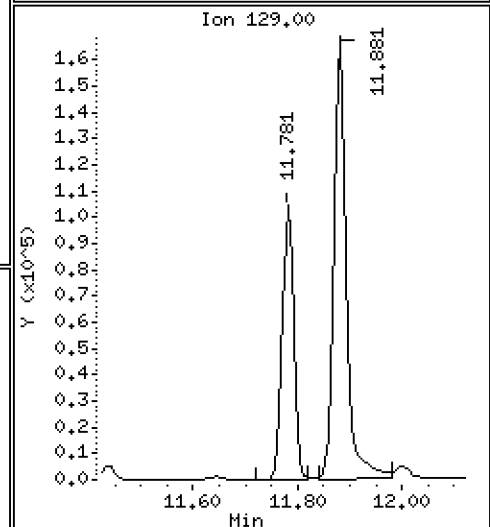
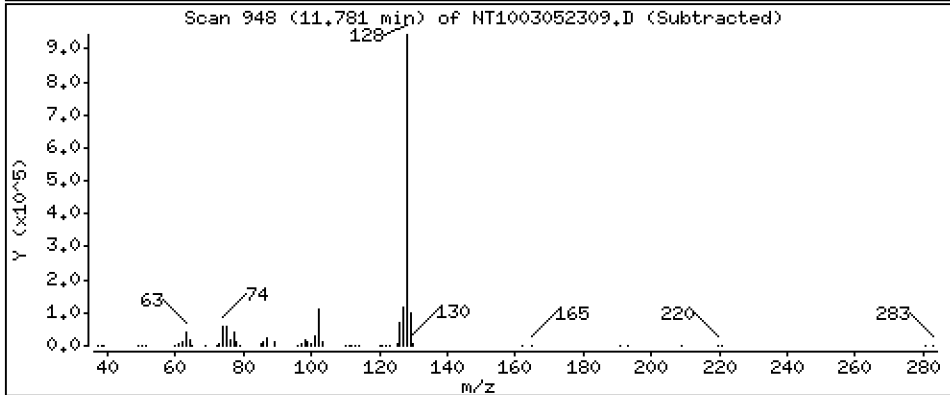
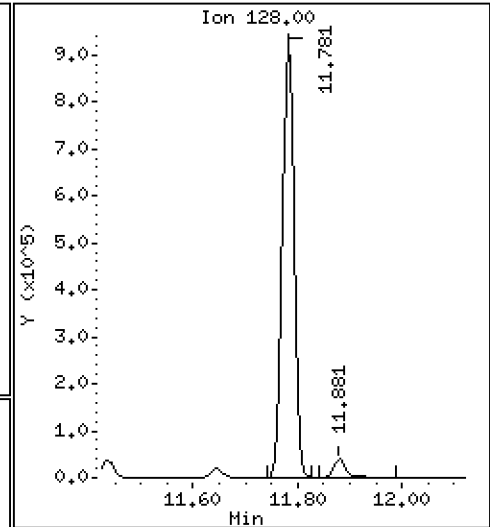
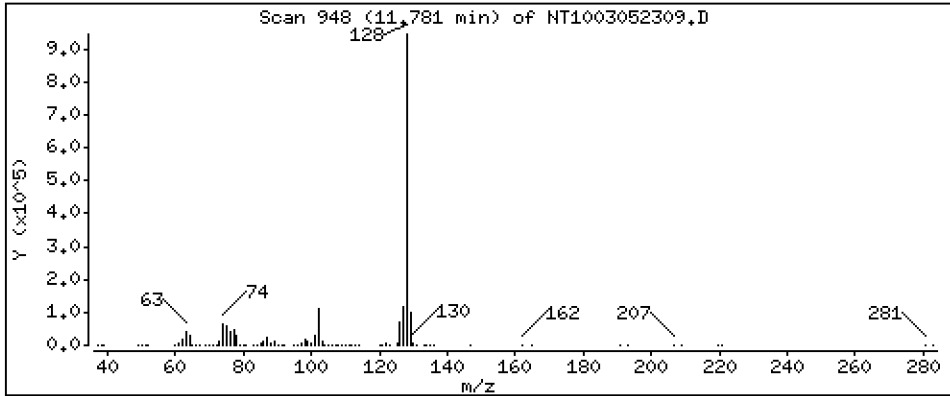
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,437 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

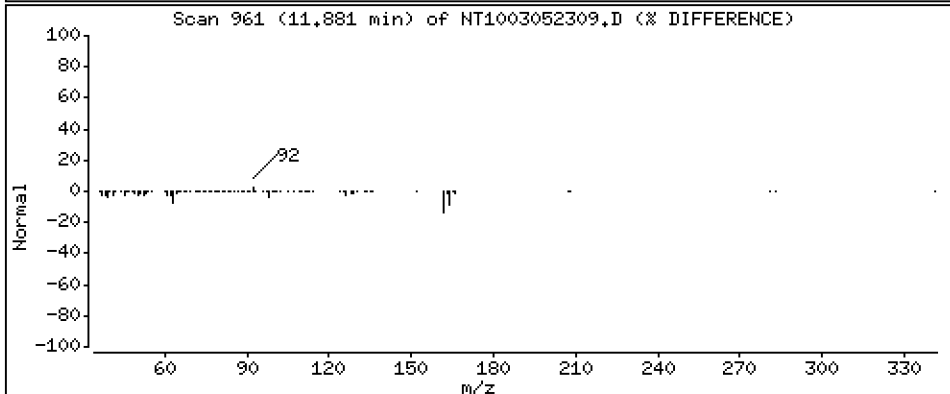
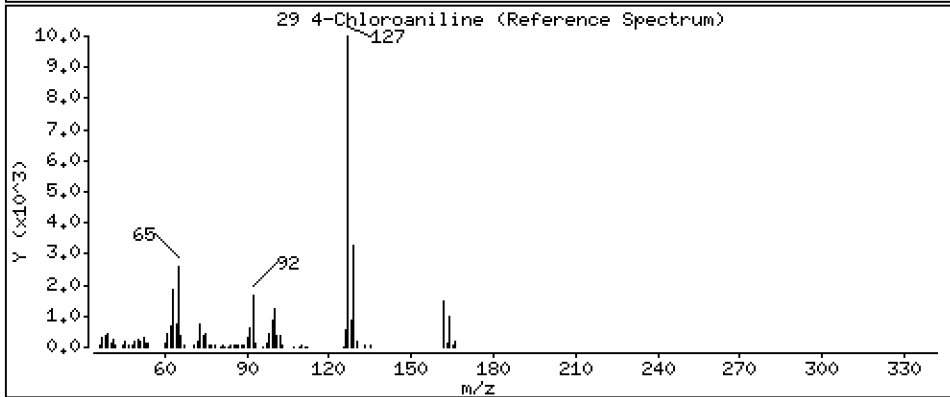
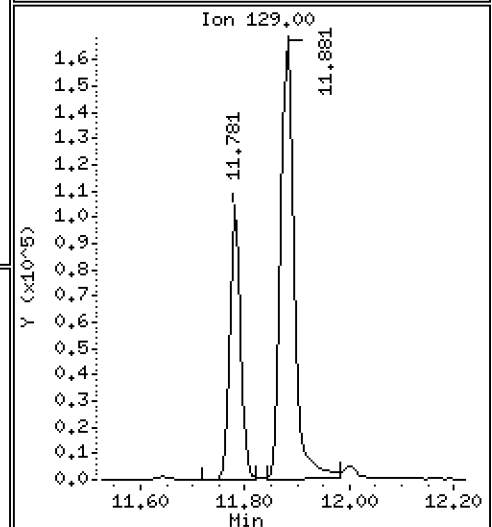
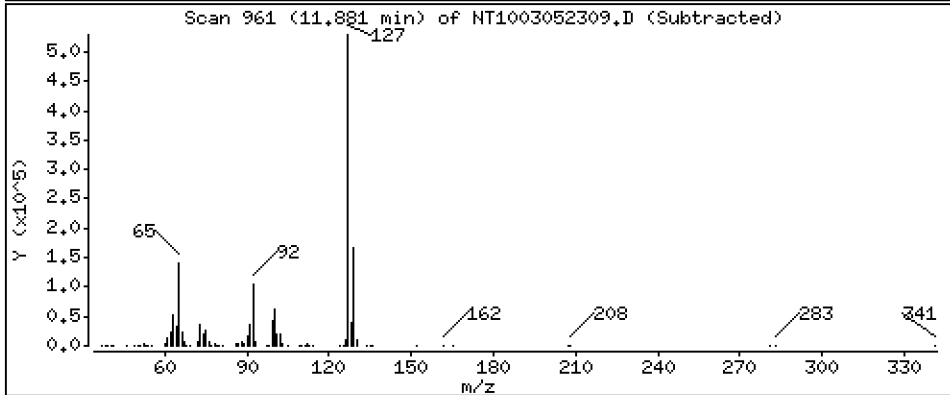
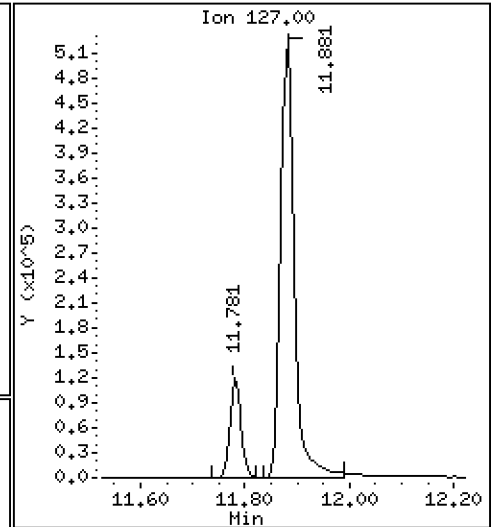
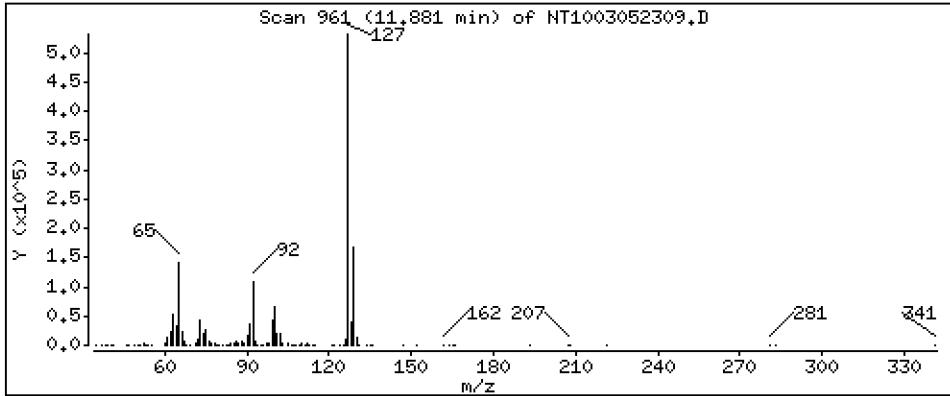
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 7,266 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

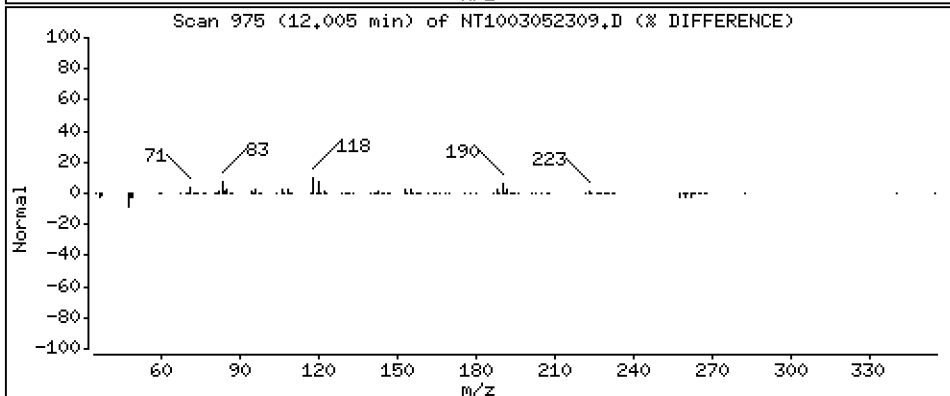
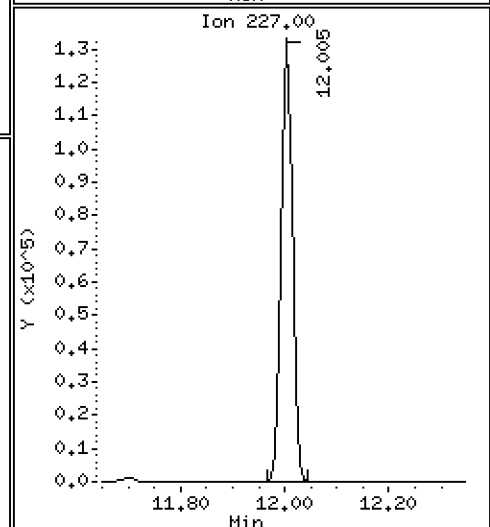
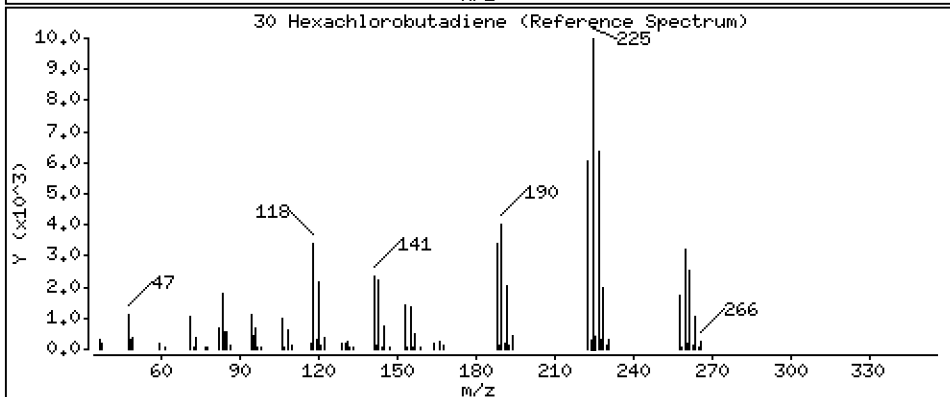
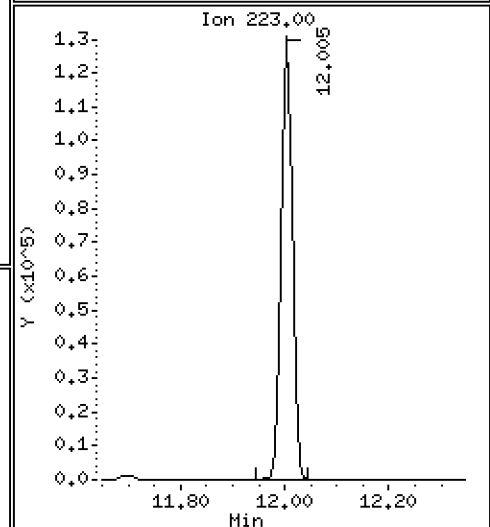
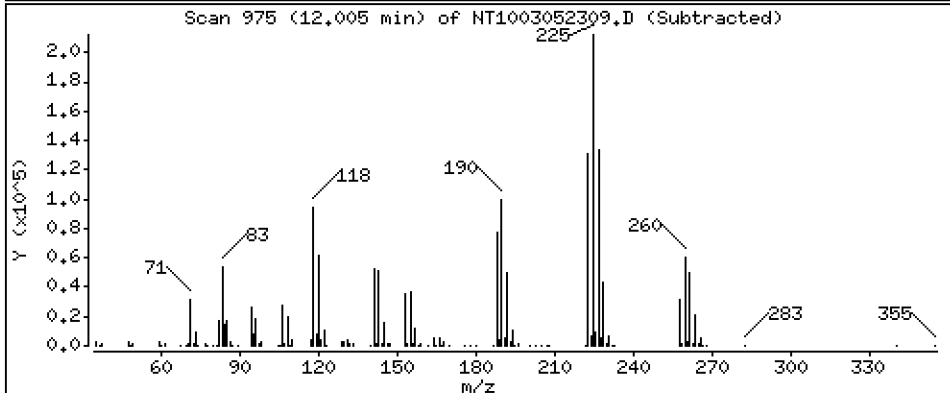
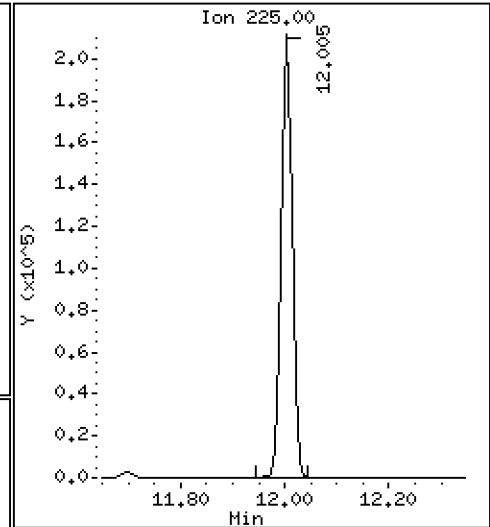
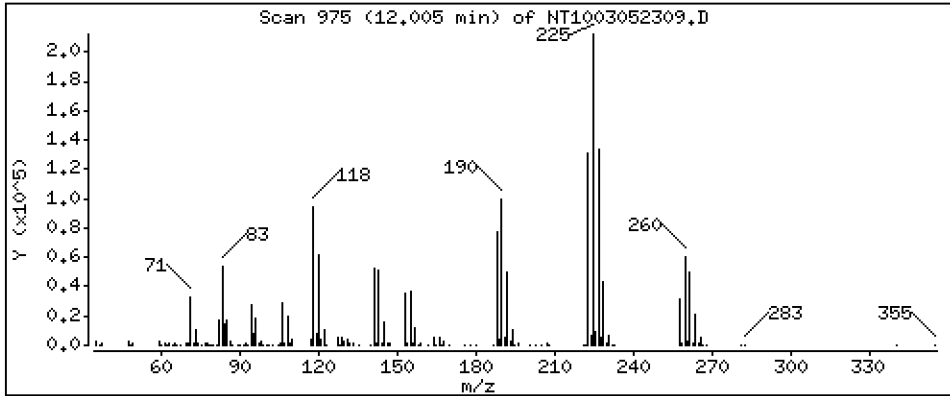
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,077 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

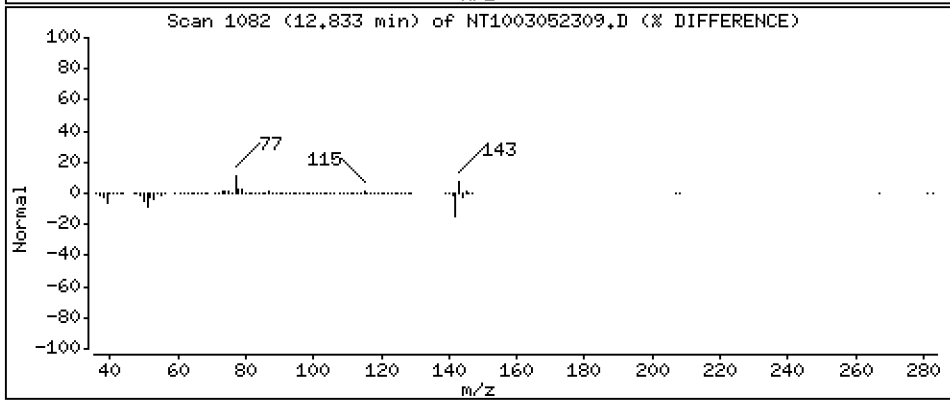
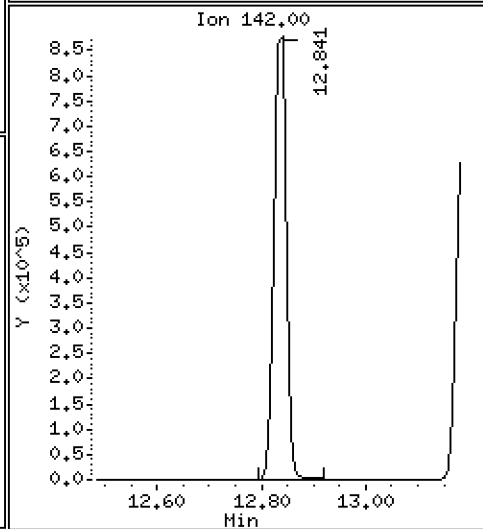
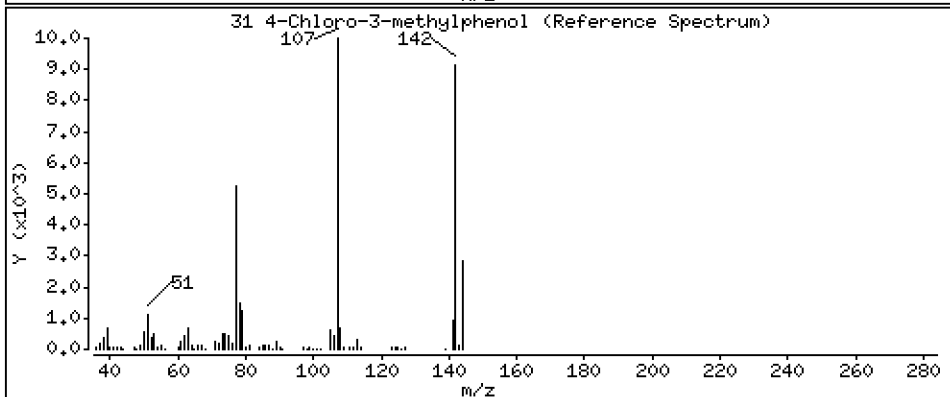
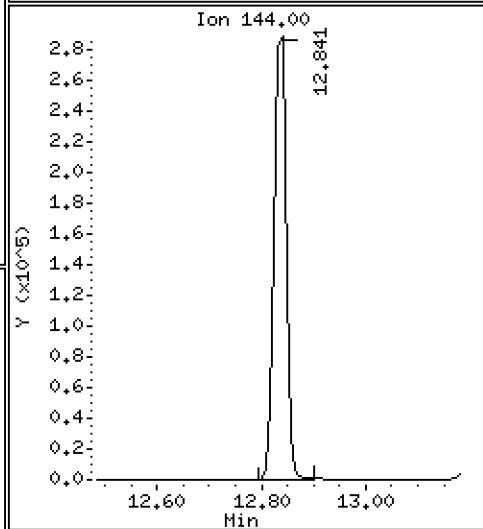
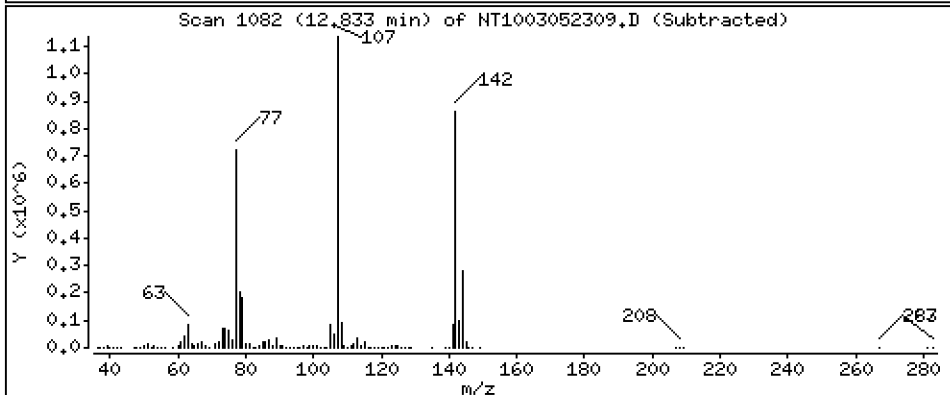
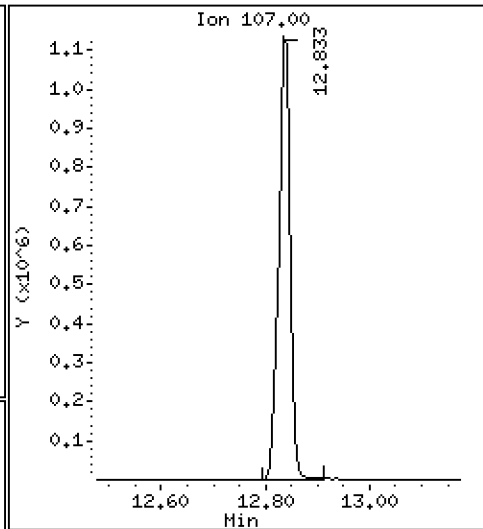
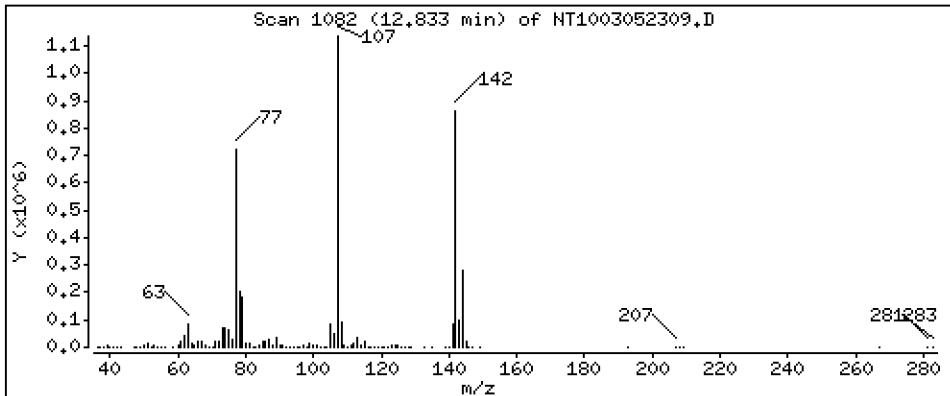
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 16,53 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

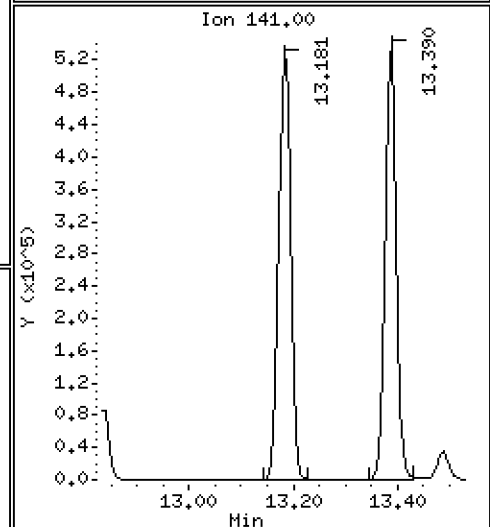
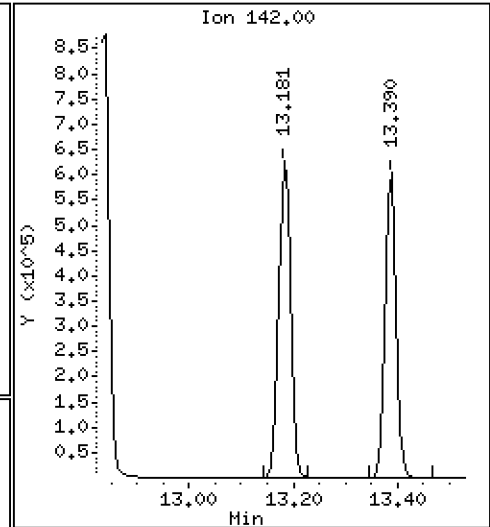
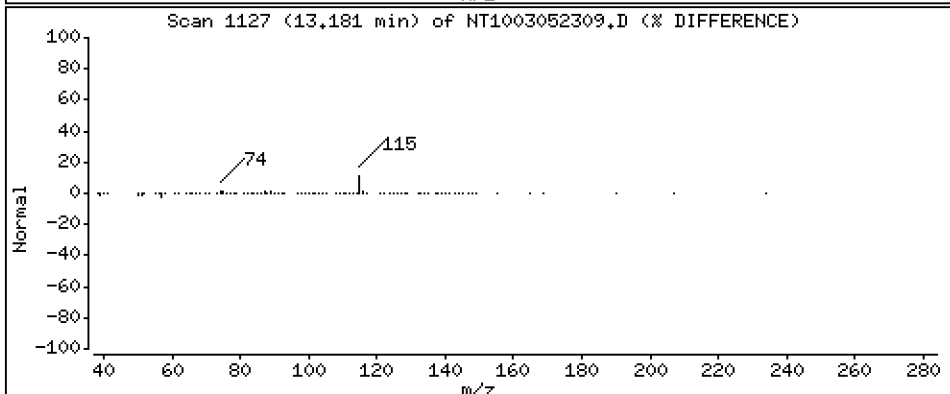
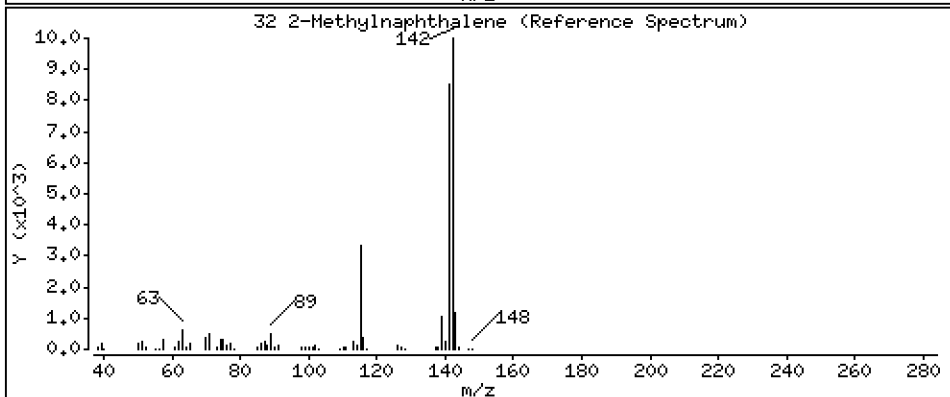
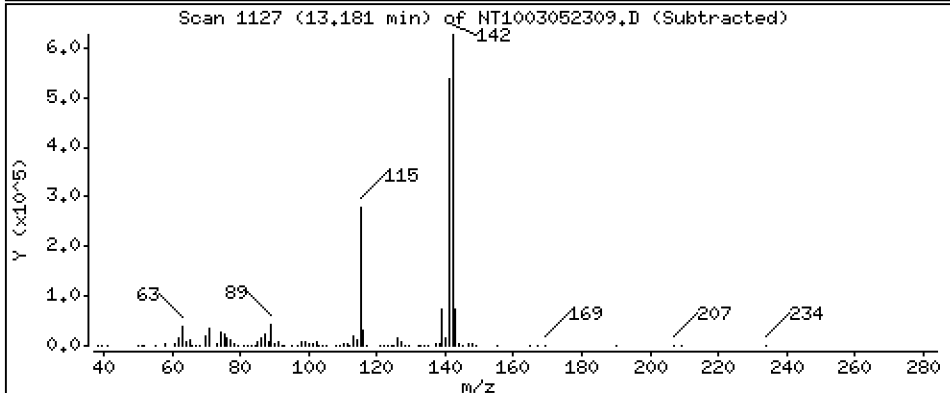
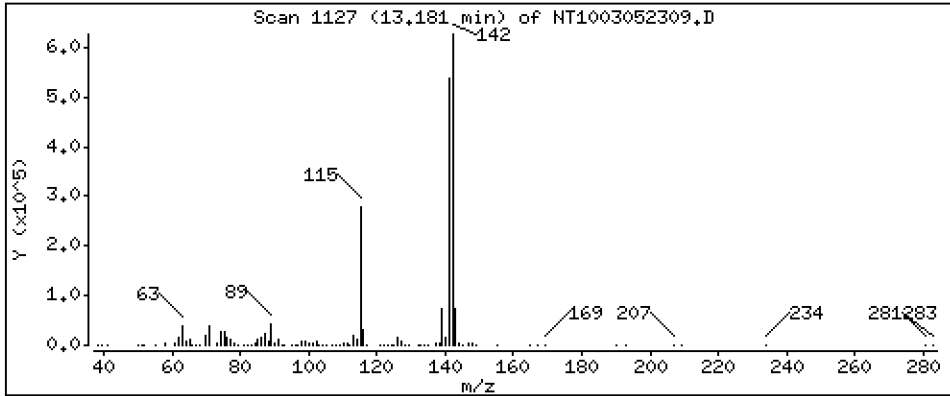
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,335 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

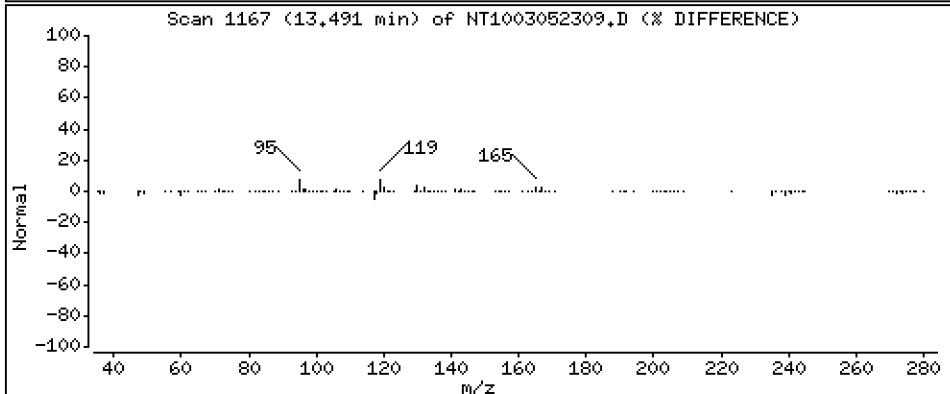
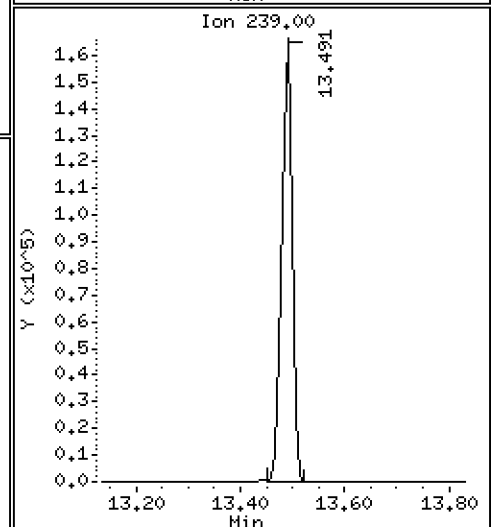
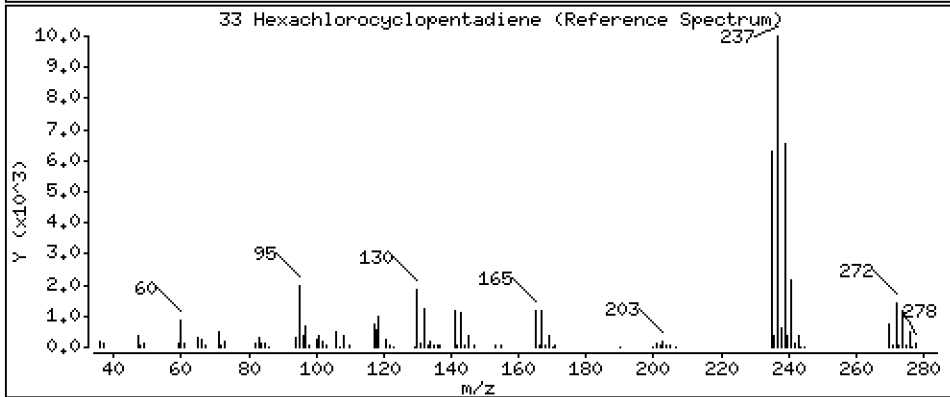
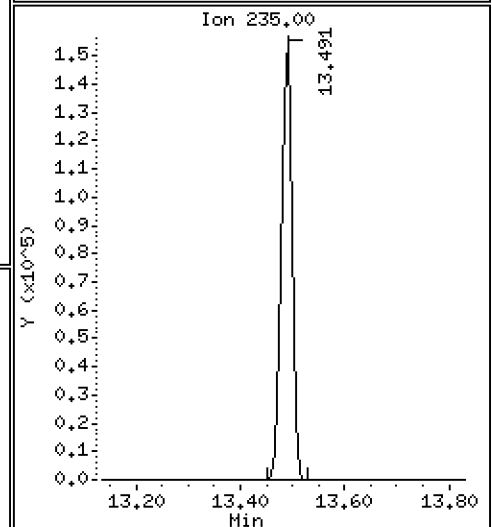
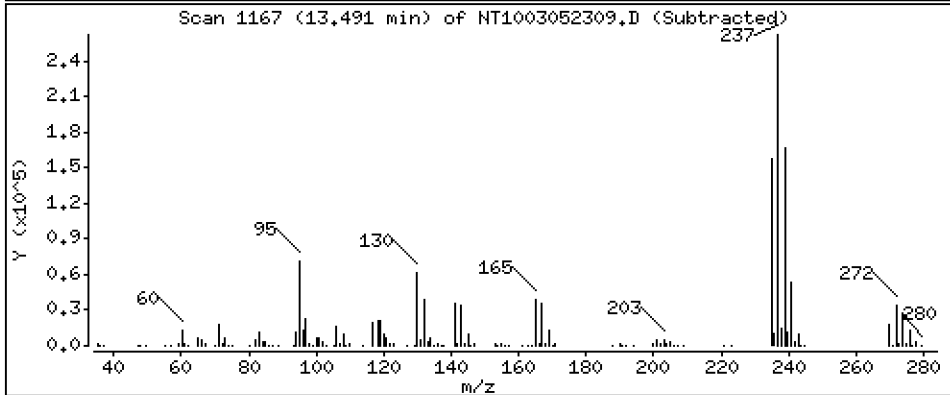
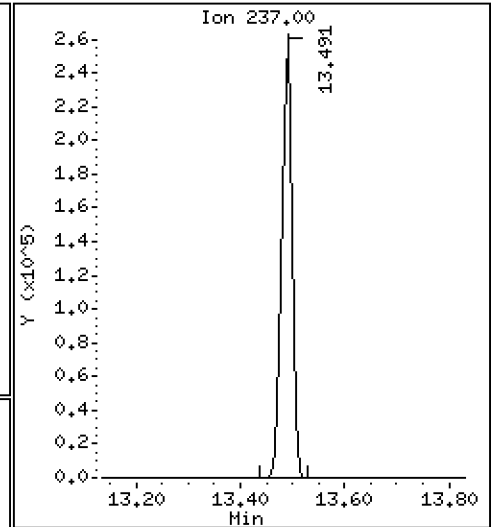
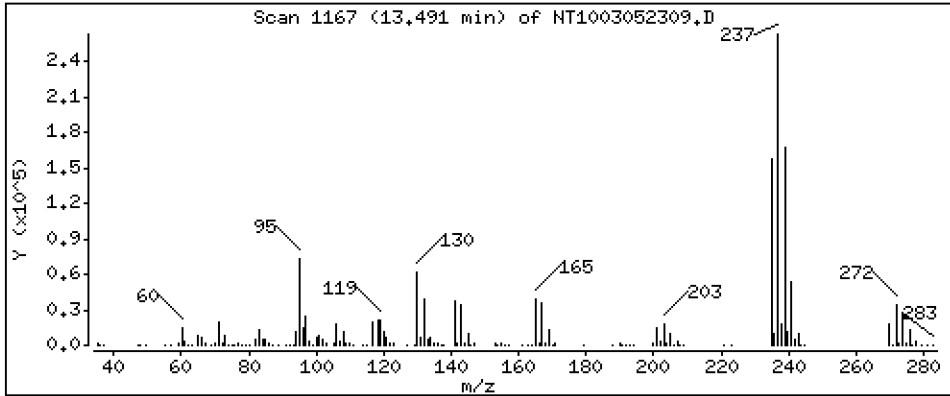
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 15,07 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

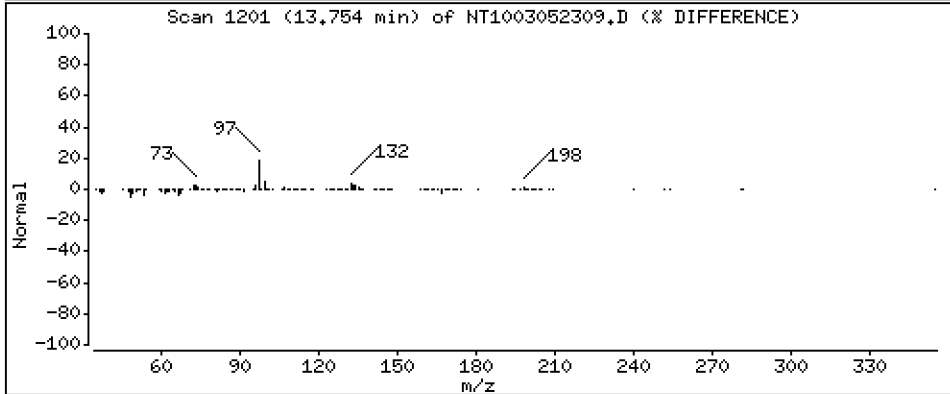
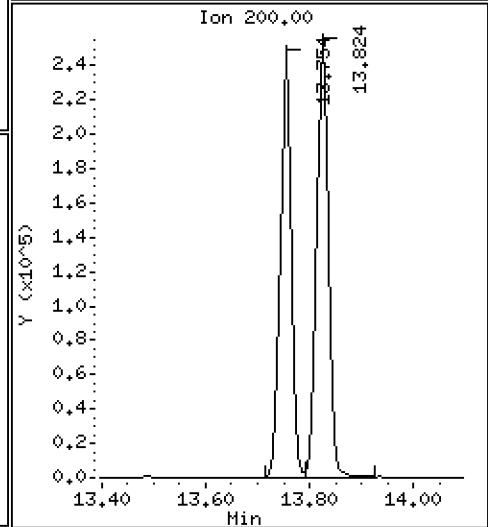
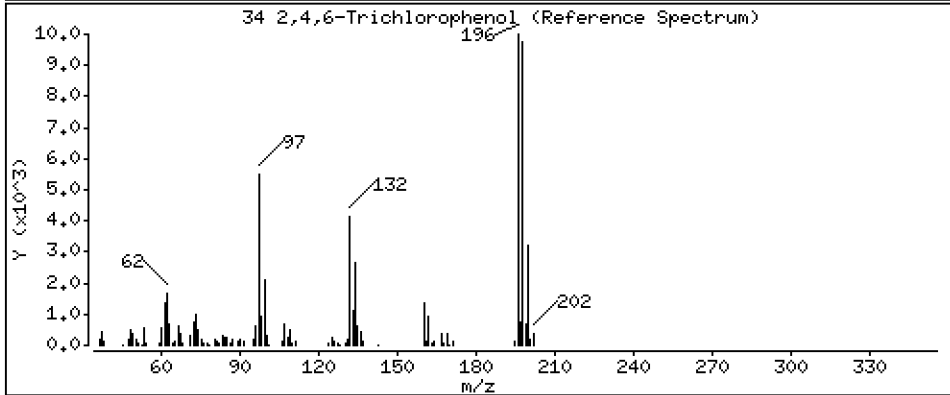
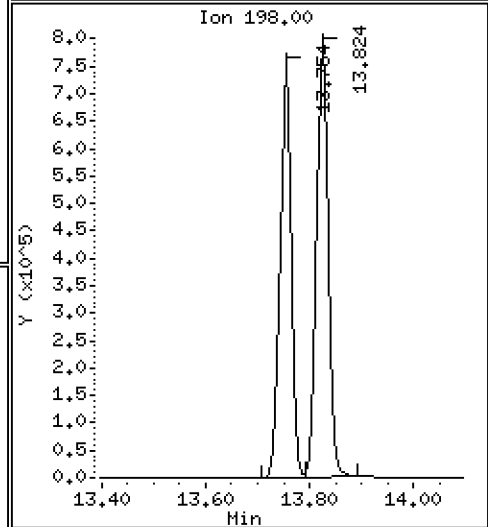
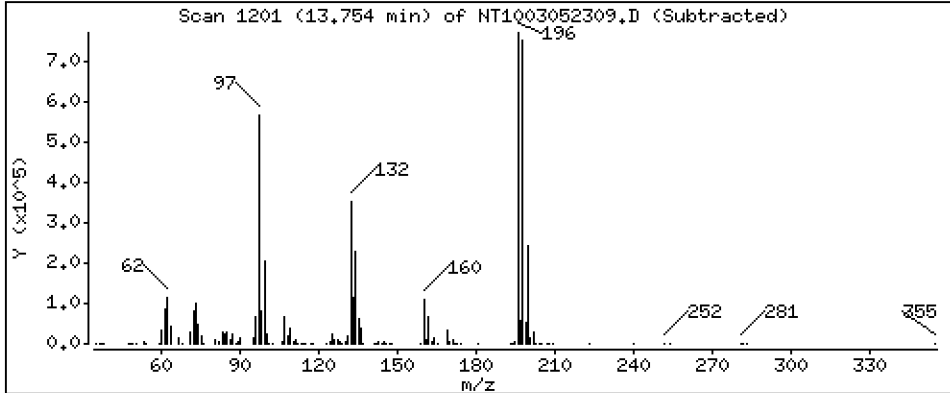
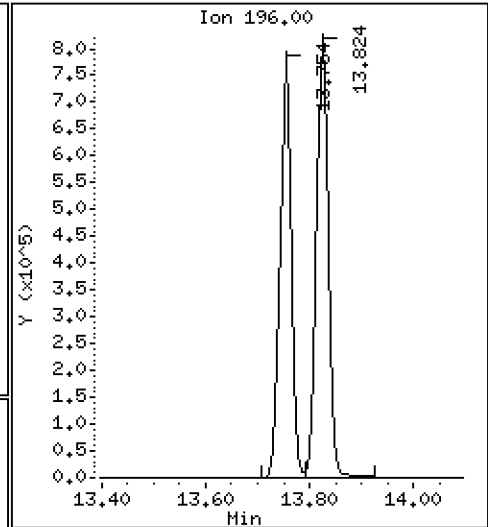
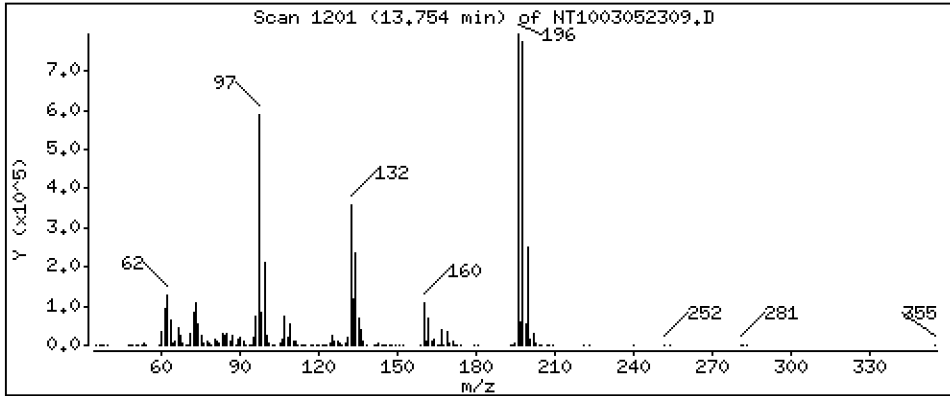
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 17,42 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

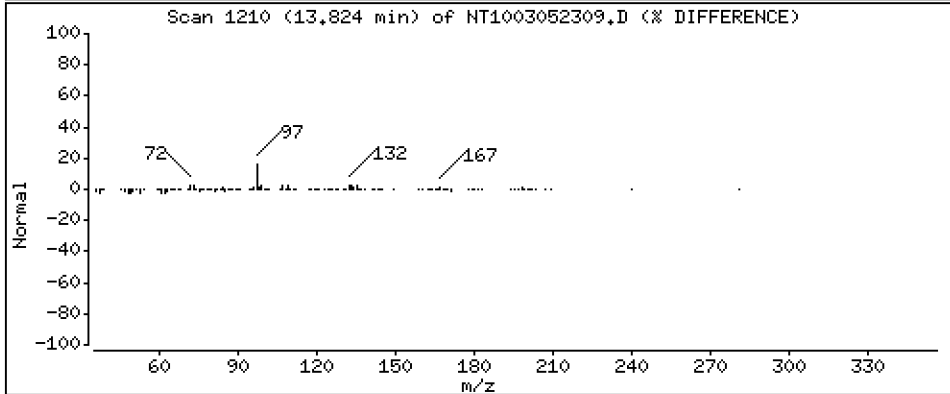
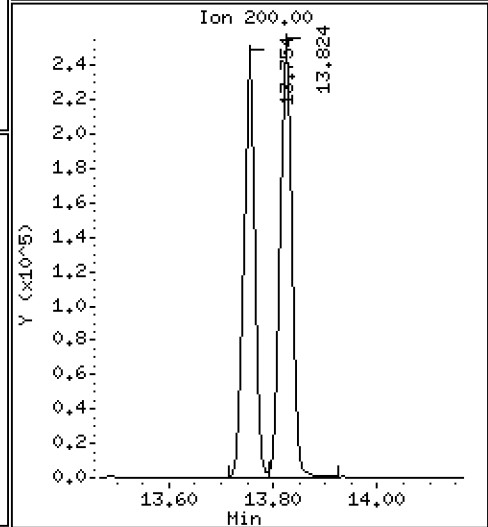
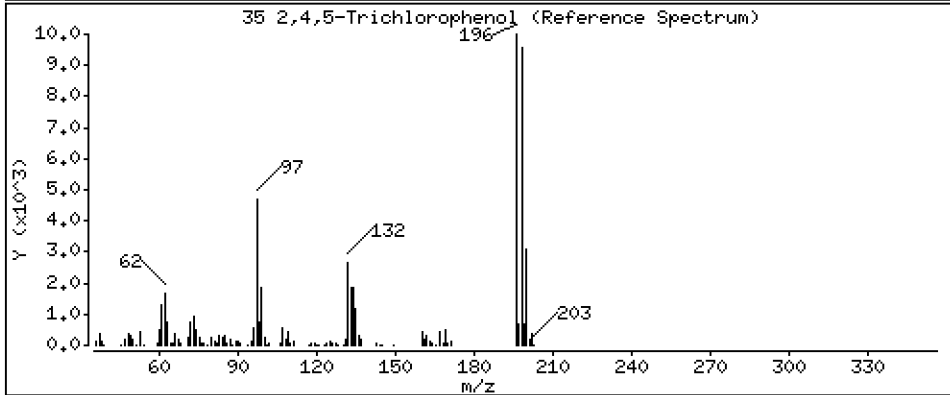
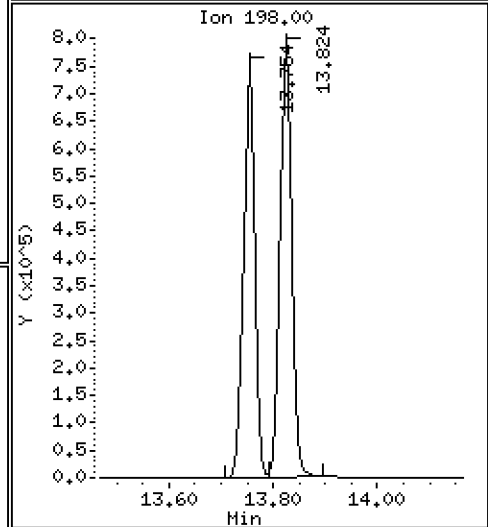
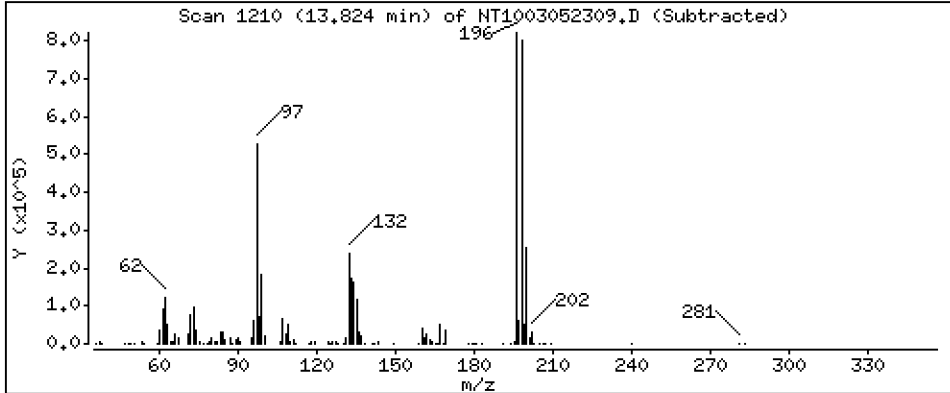
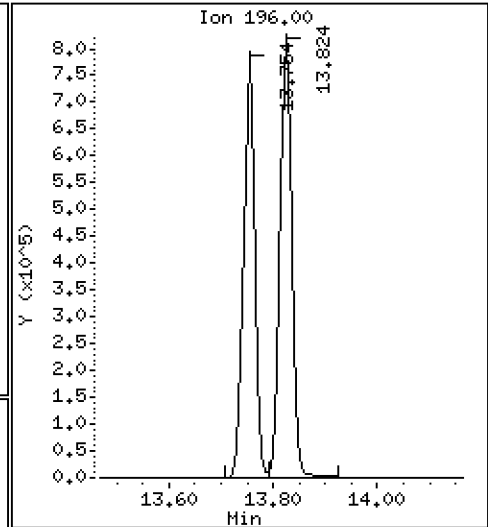
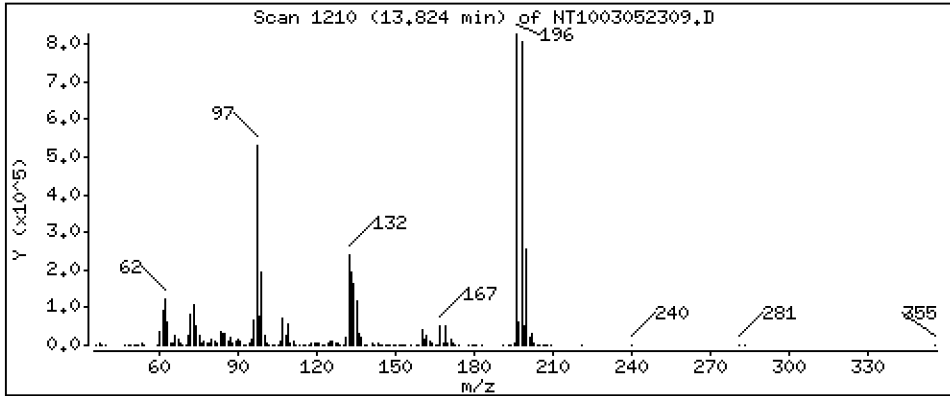
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 17,36 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

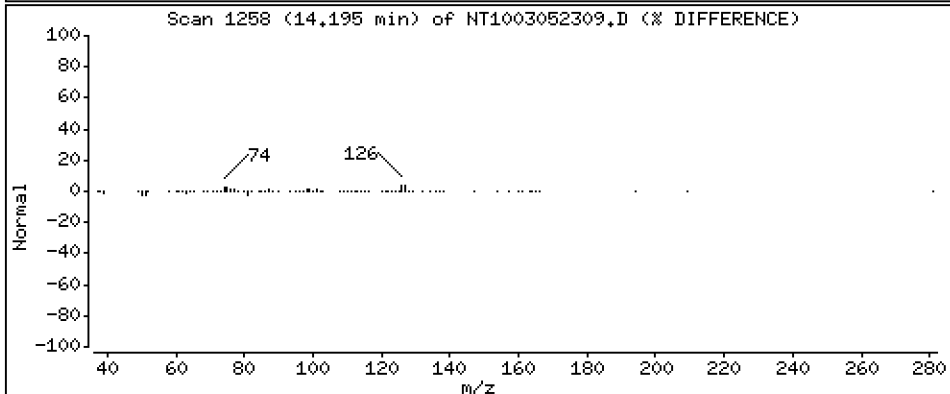
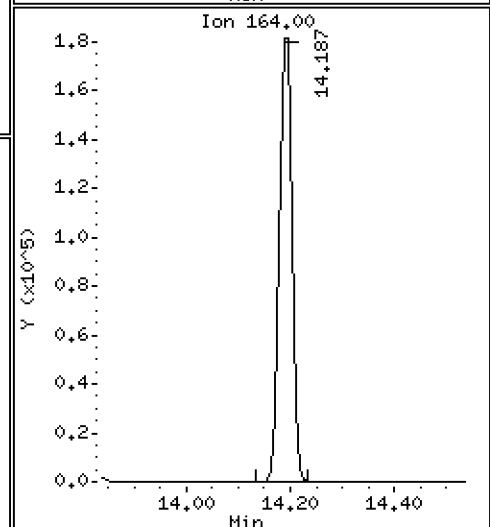
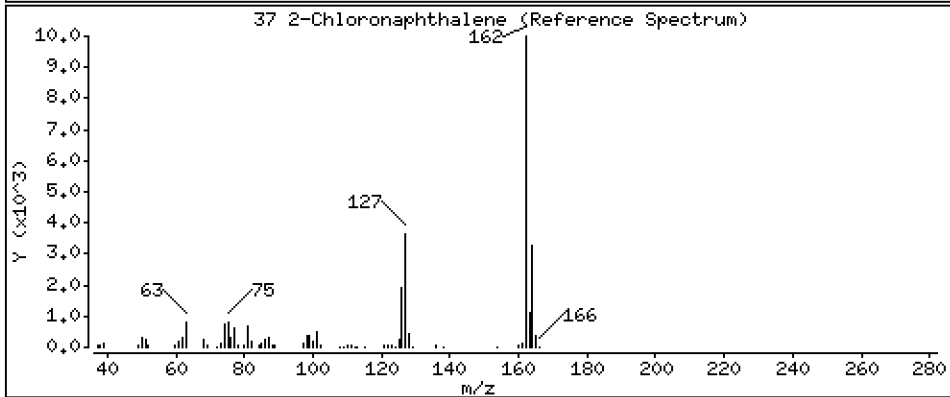
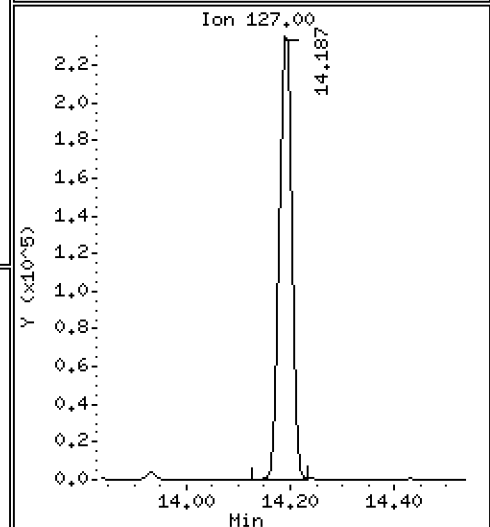
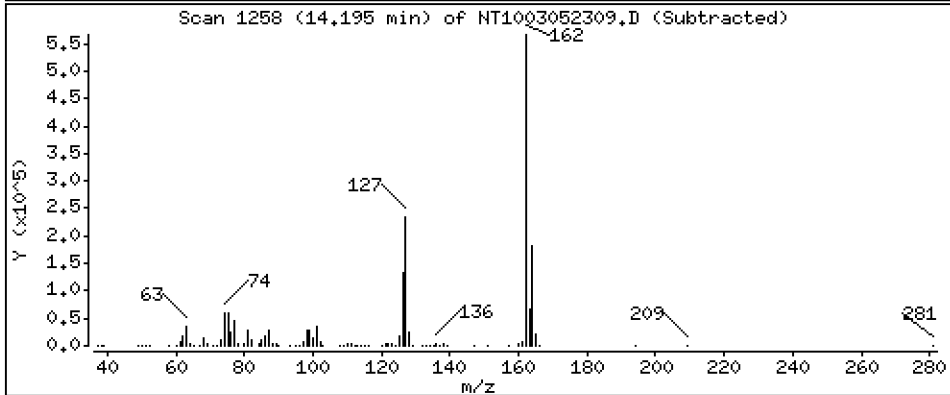
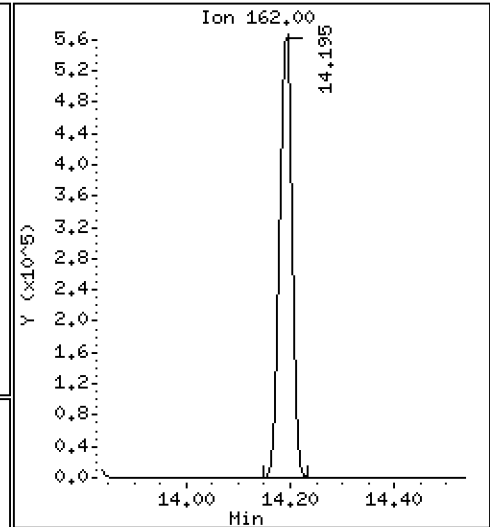
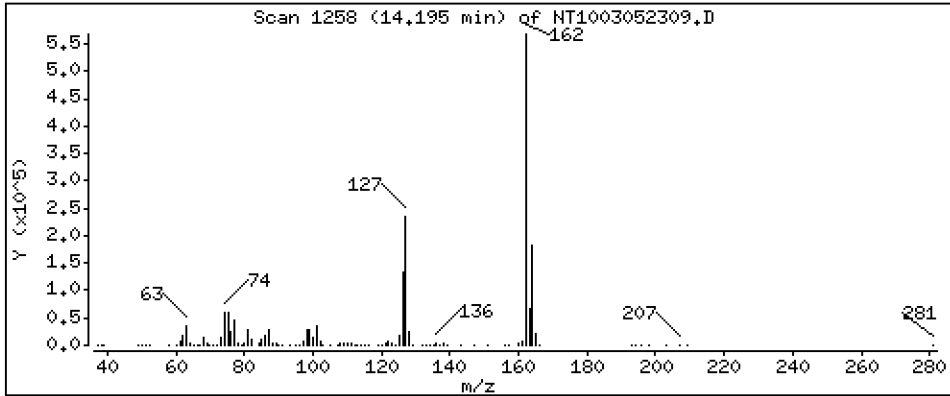
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,114 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

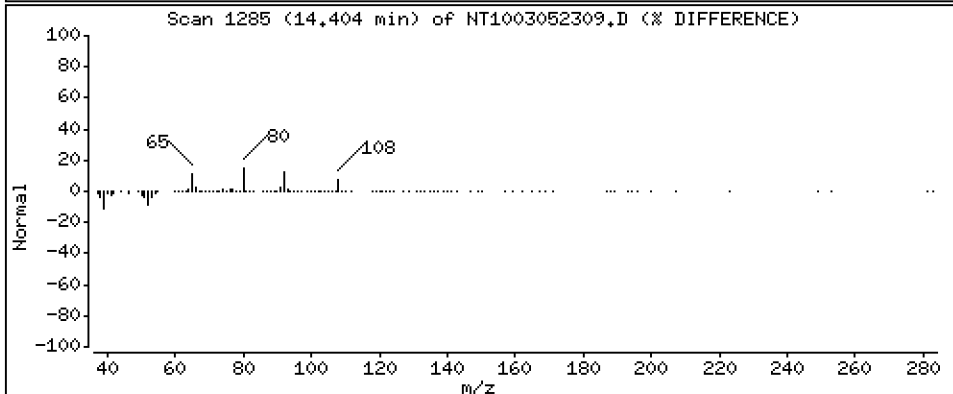
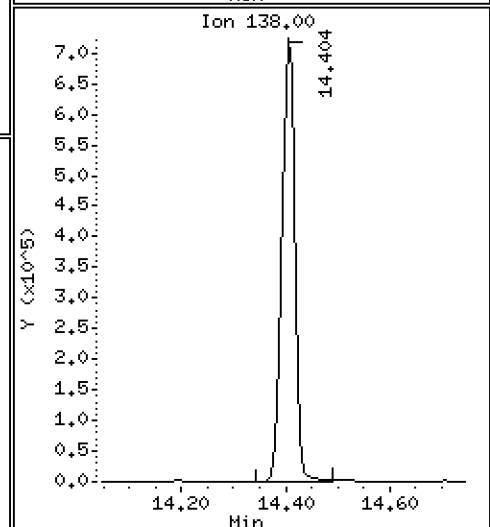
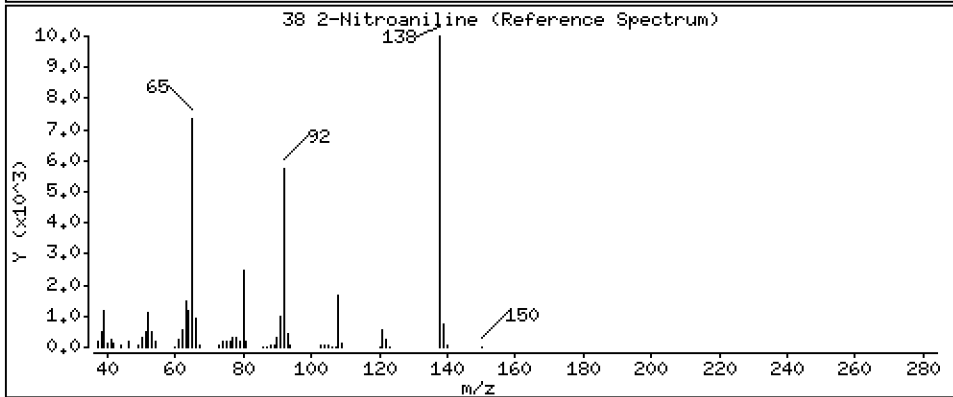
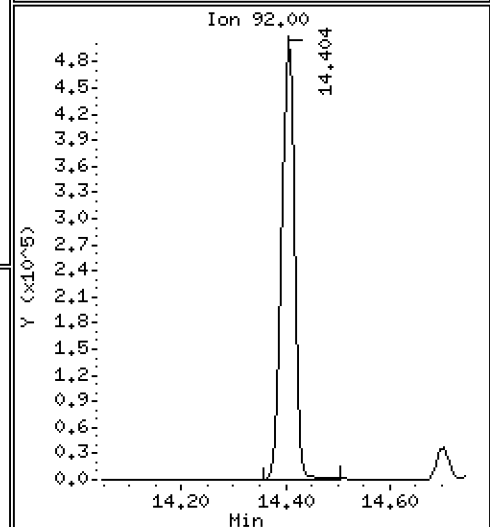
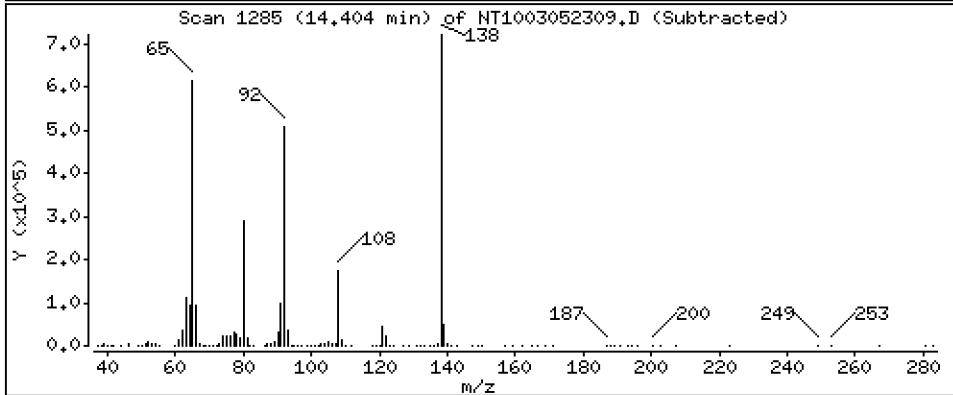
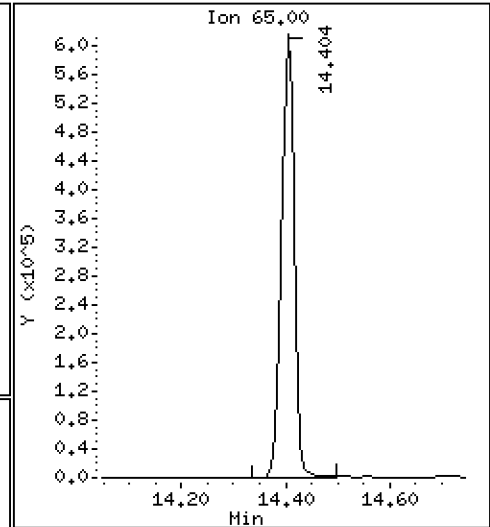
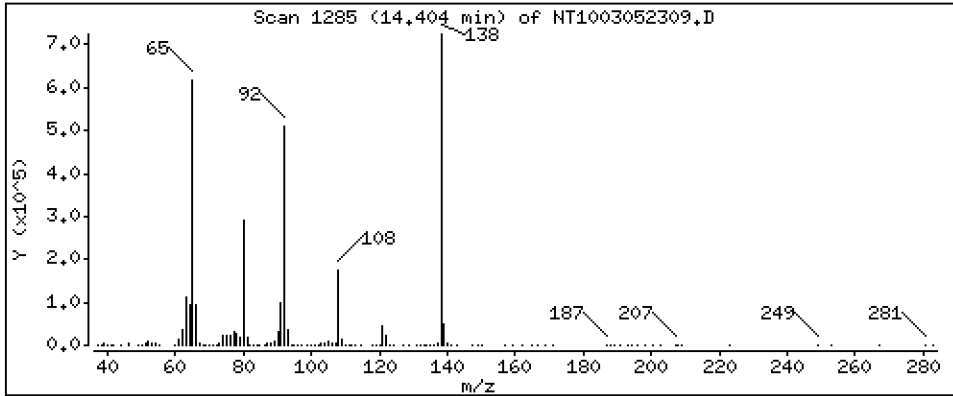
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 19,13 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

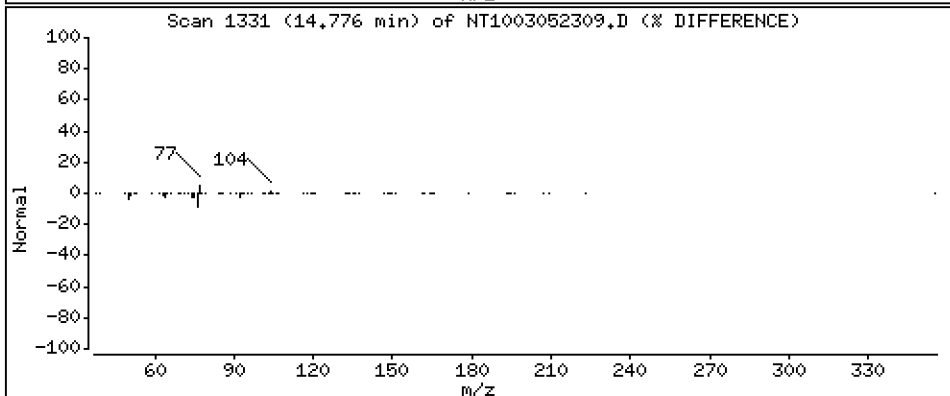
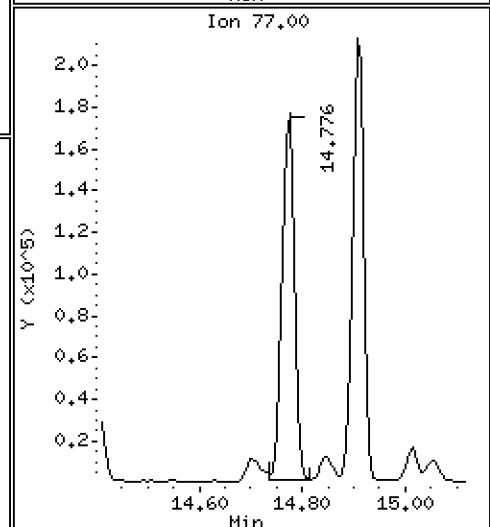
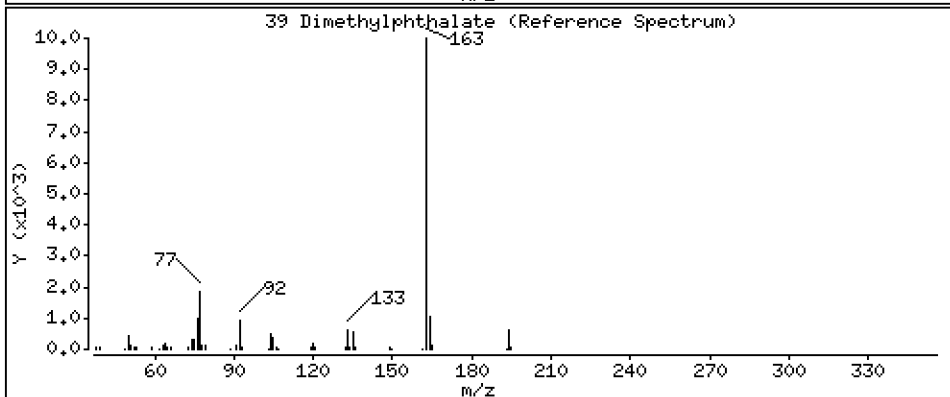
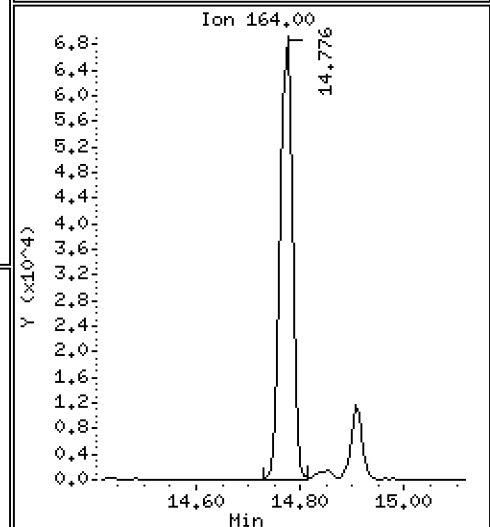
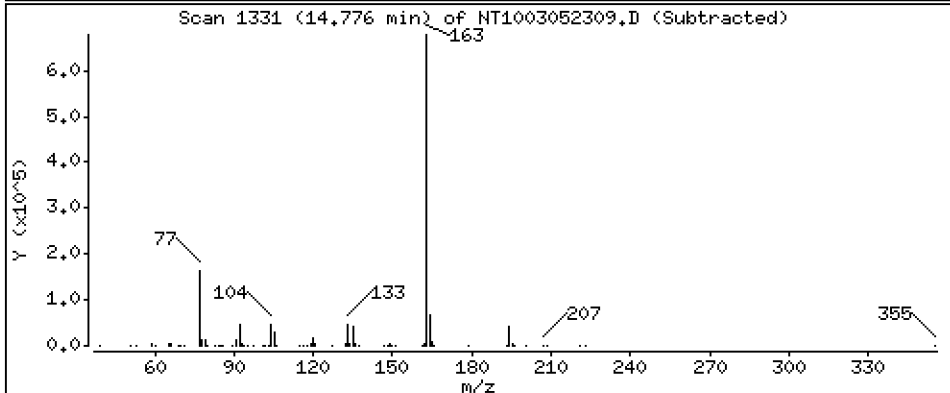
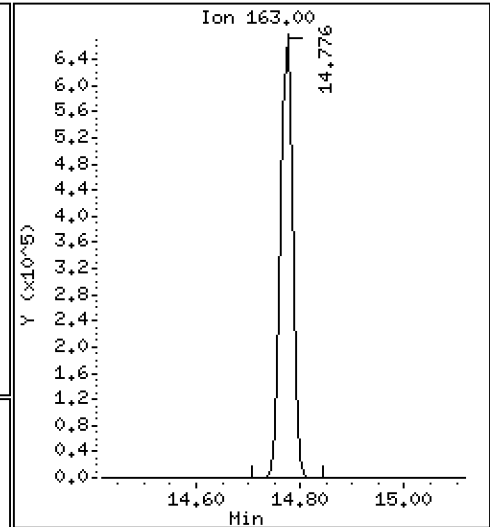
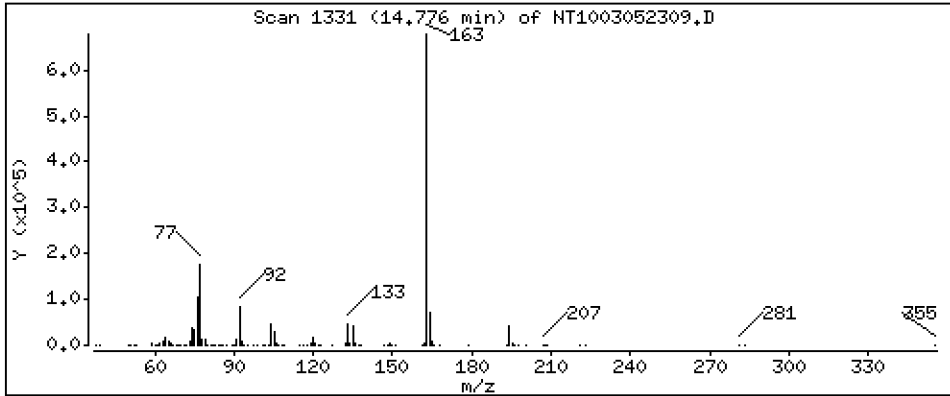
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,131 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

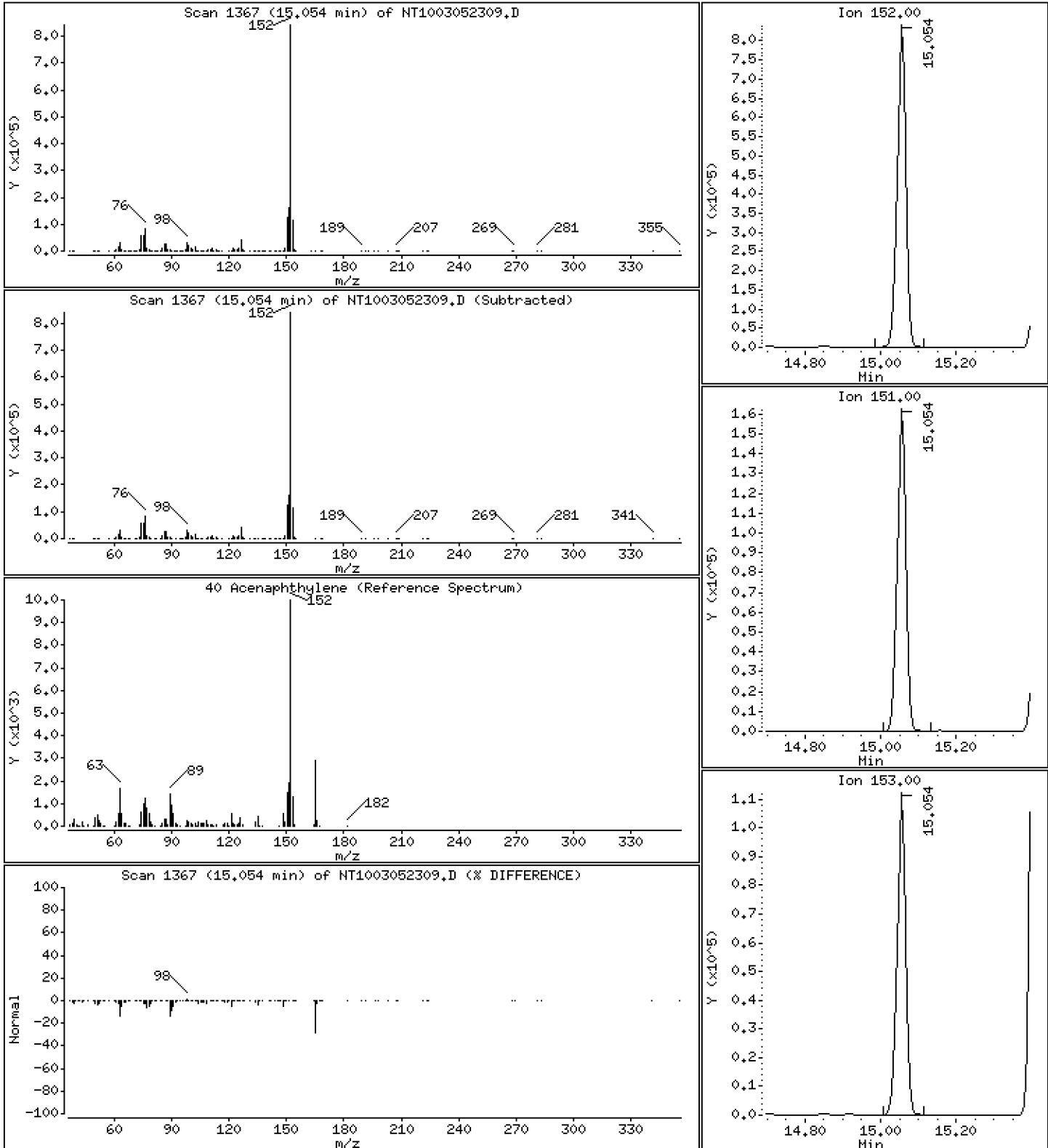
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 4,884 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

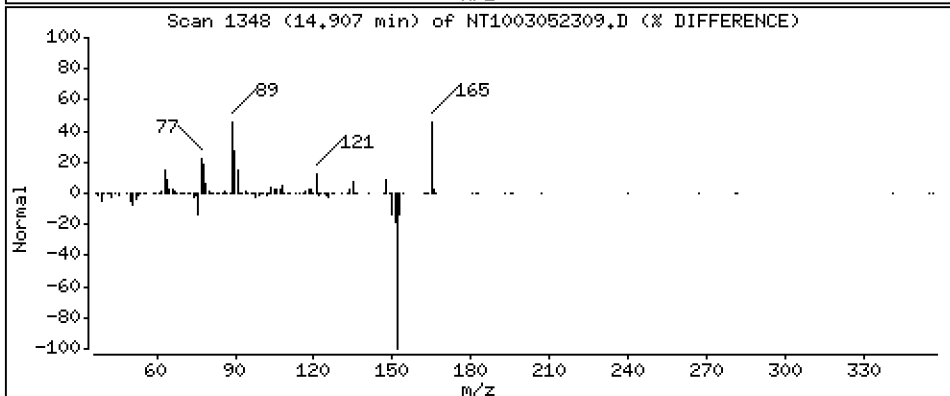
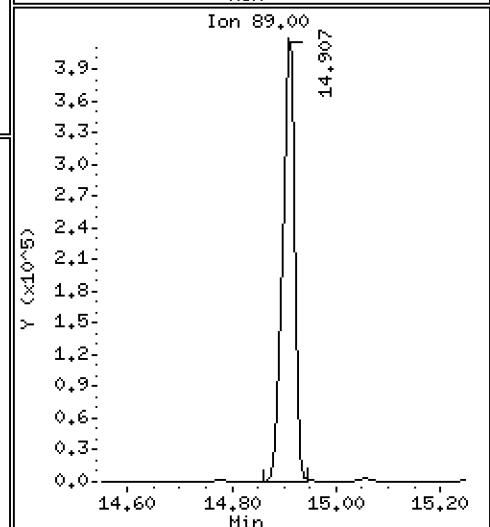
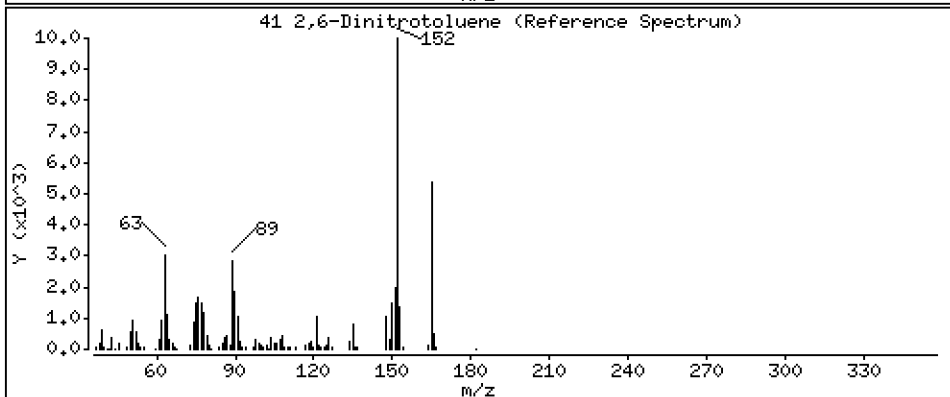
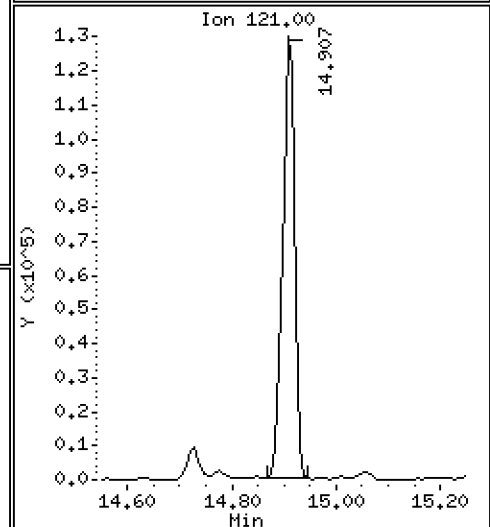
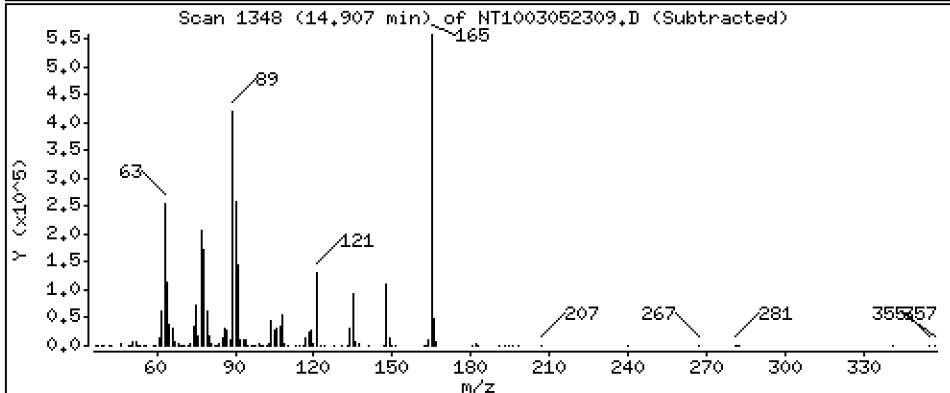
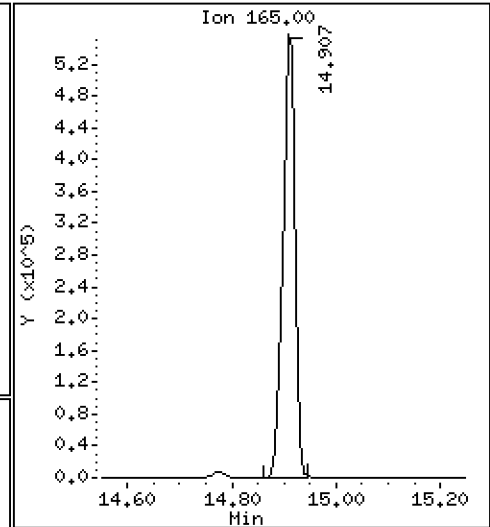
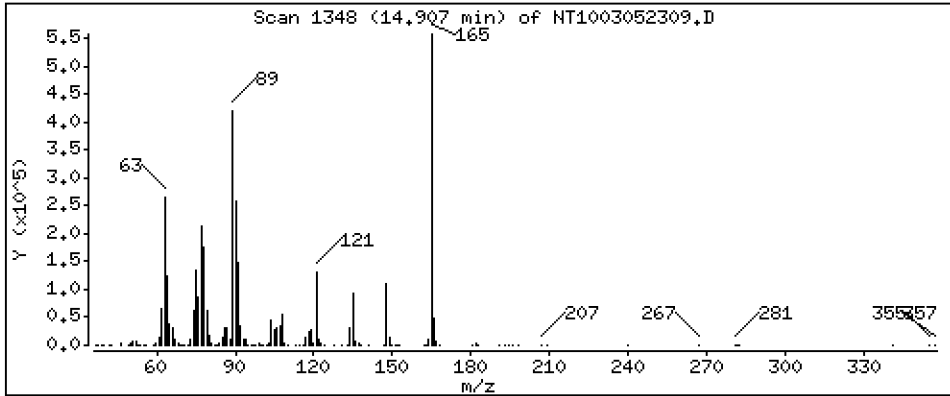
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 18,67 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

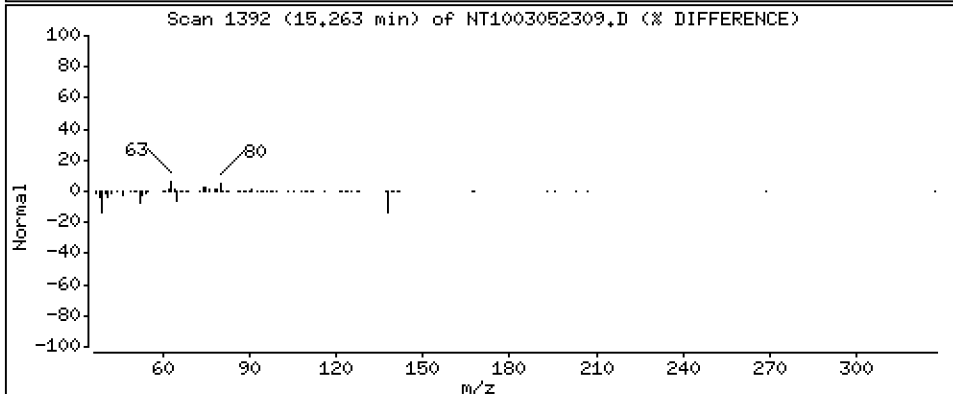
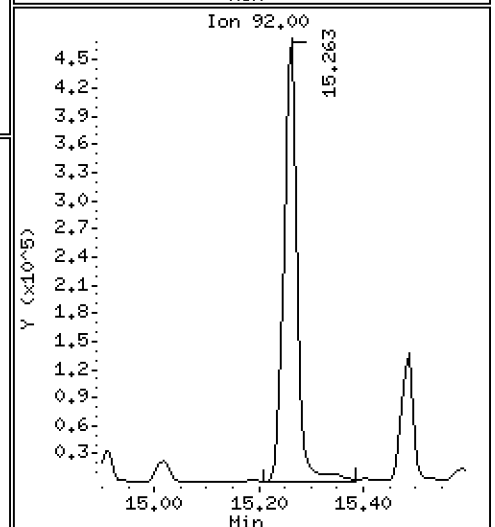
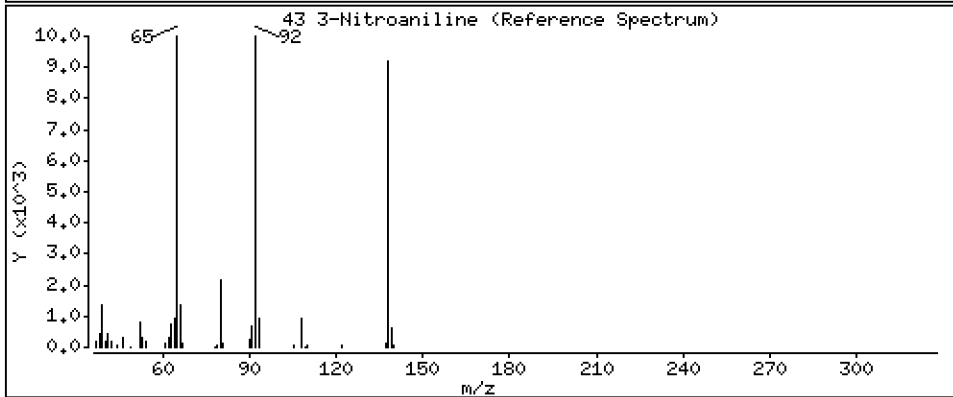
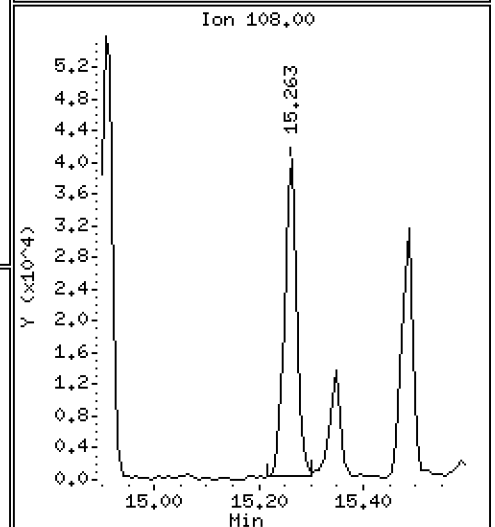
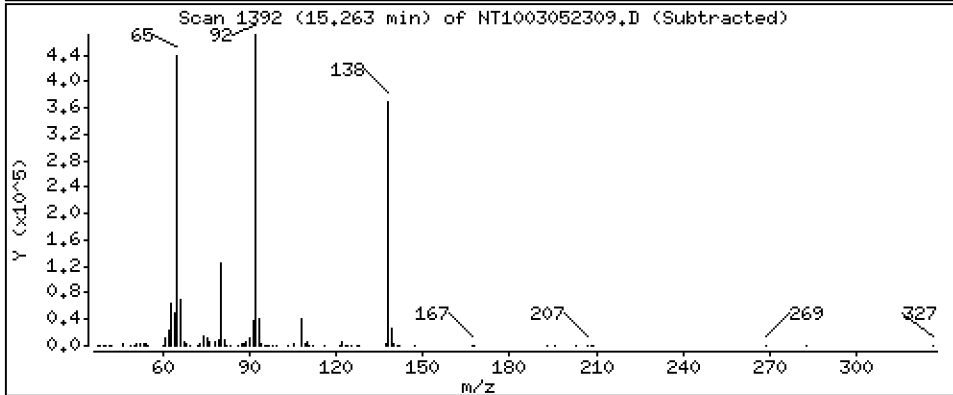
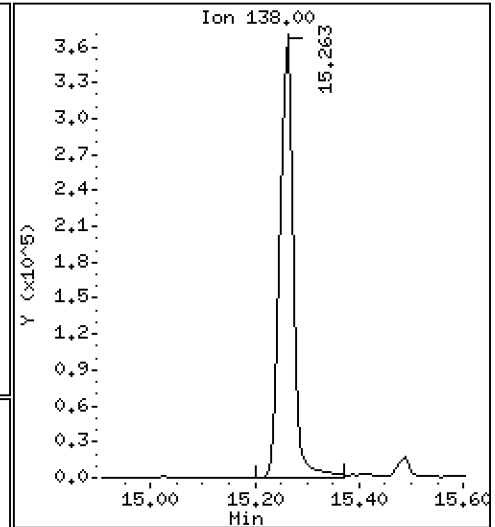
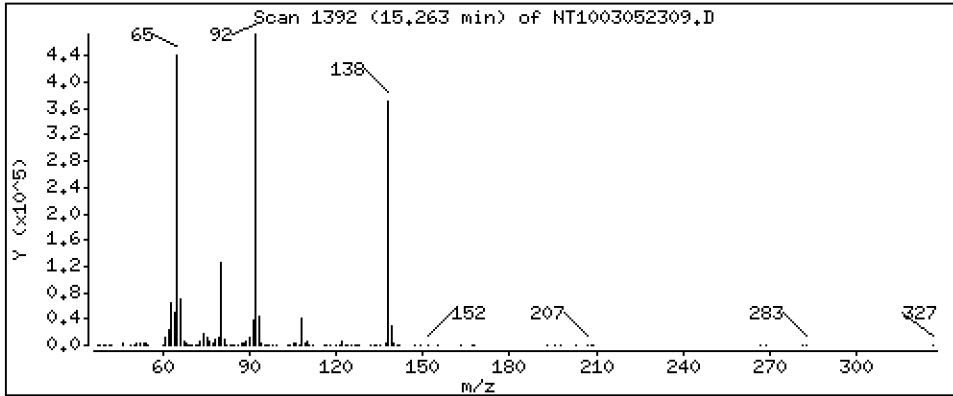
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 12,53 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

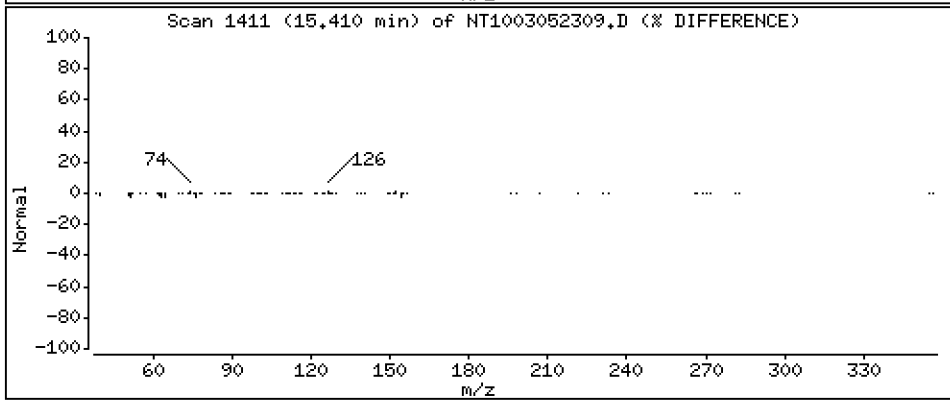
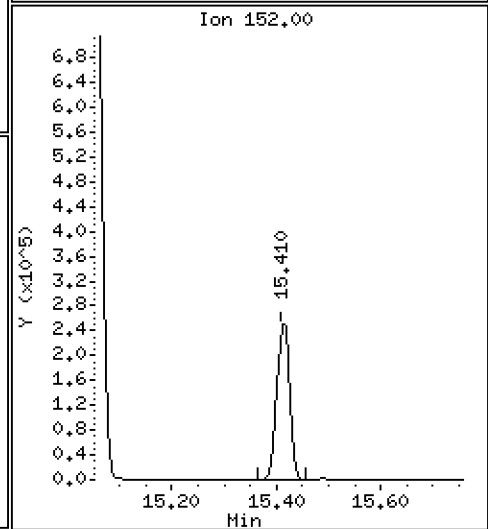
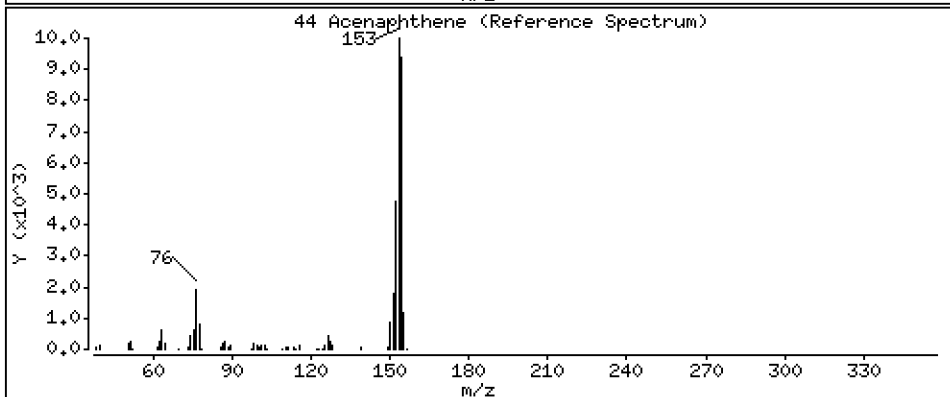
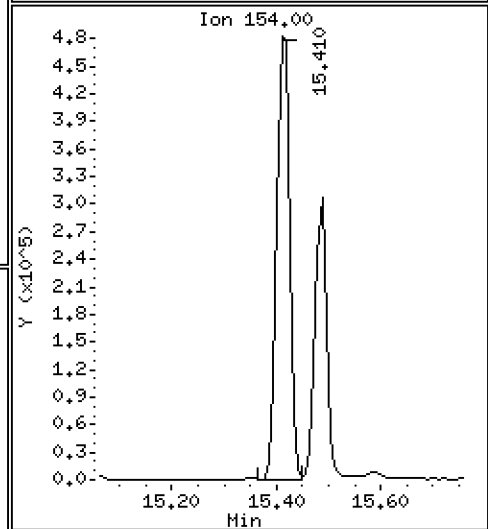
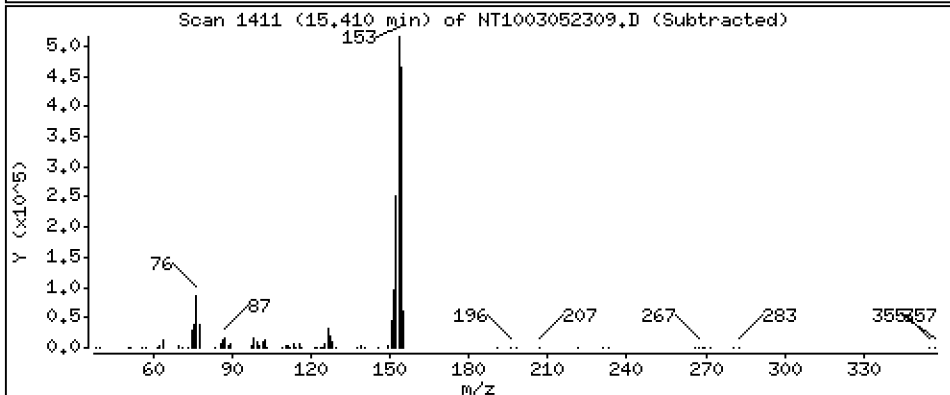
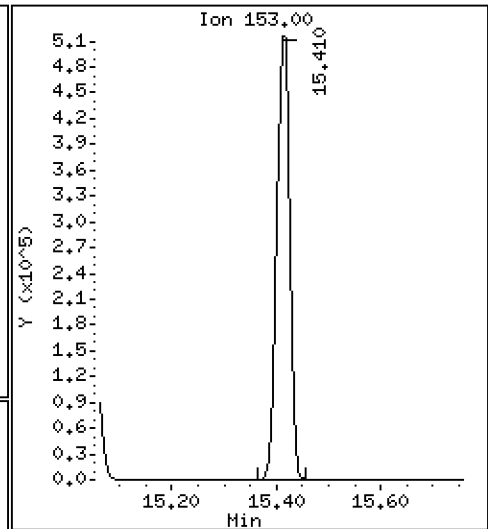
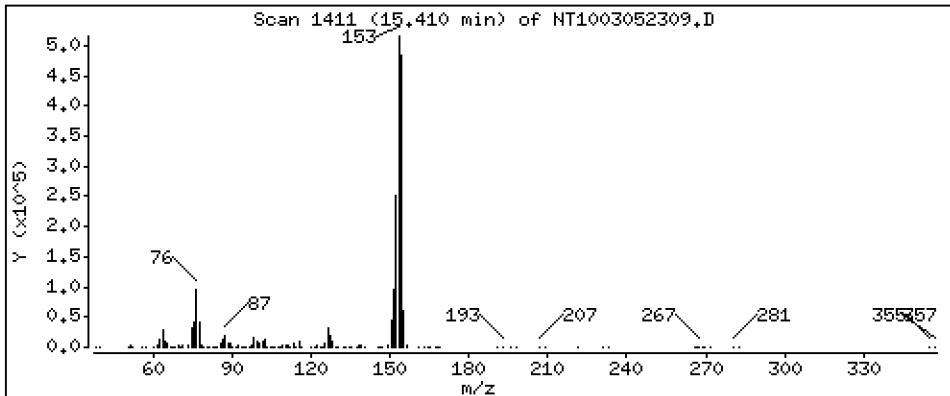
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,653 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

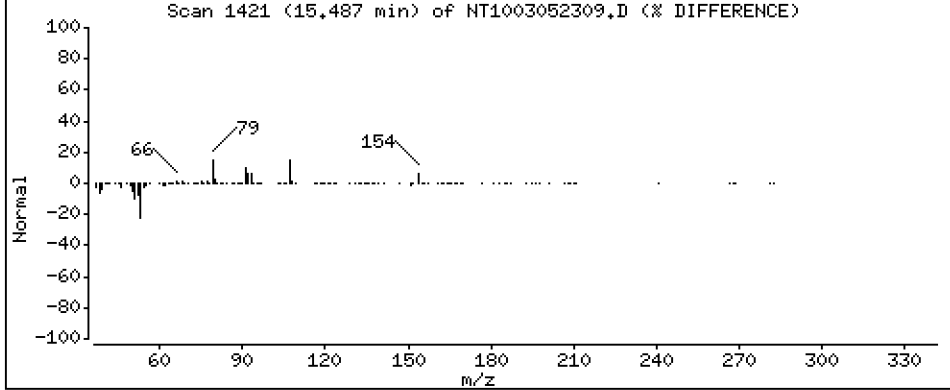
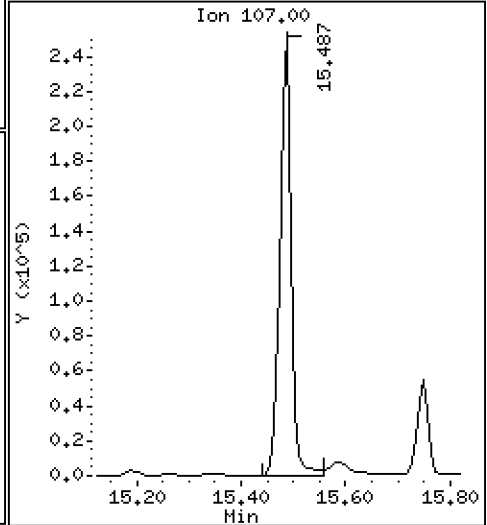
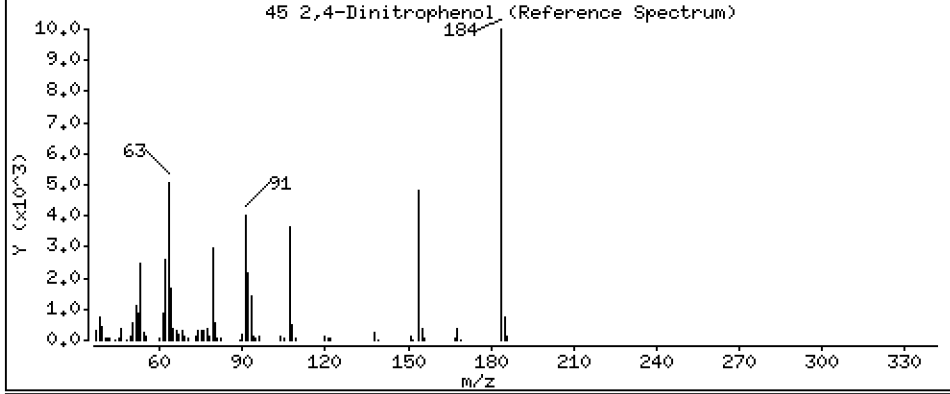
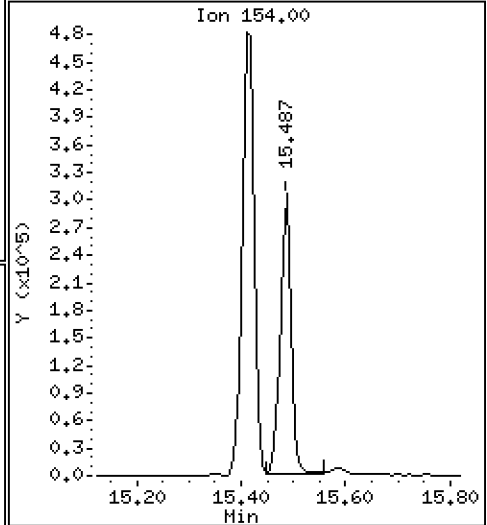
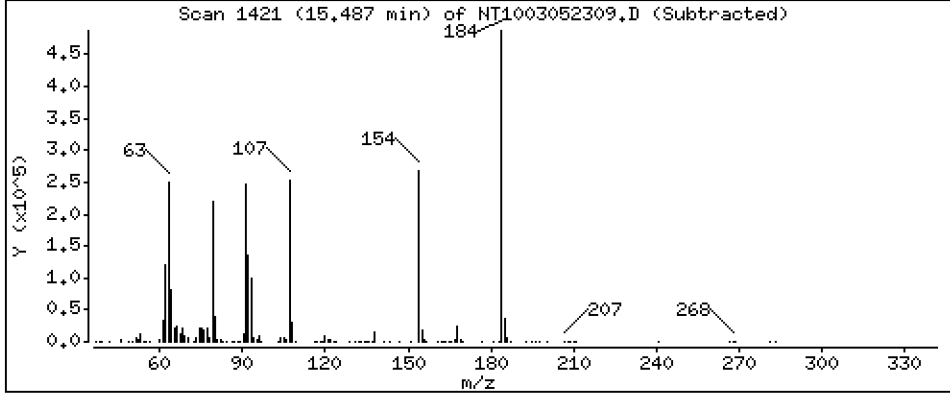
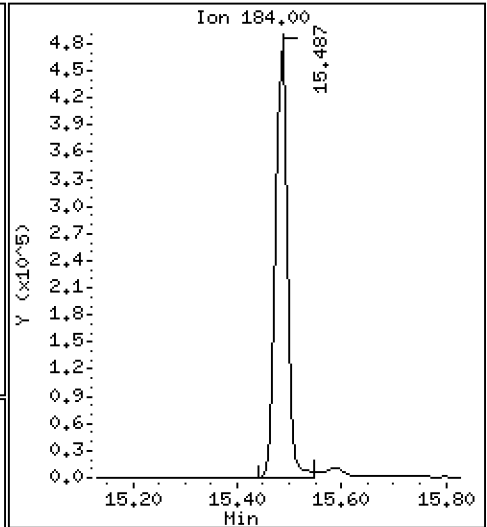
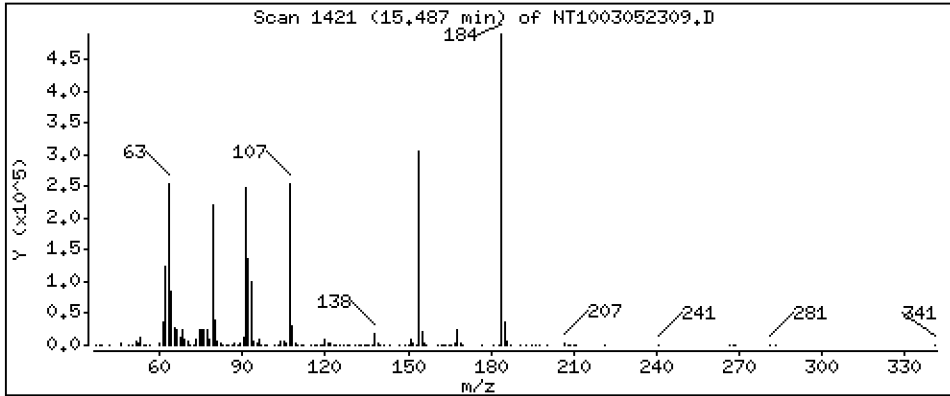
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 49,13 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

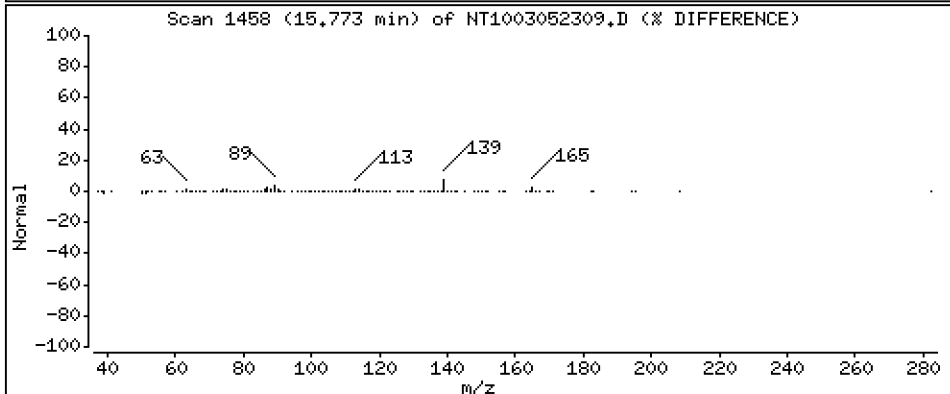
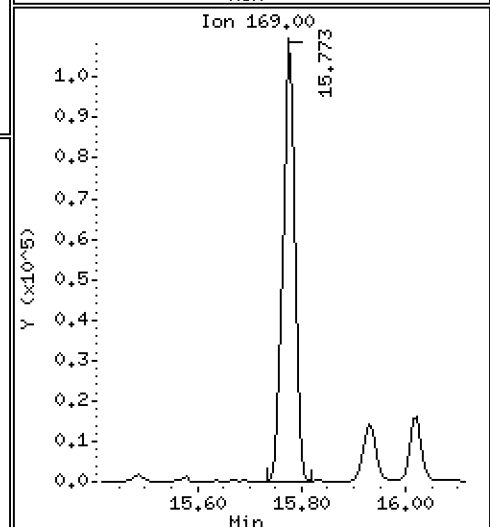
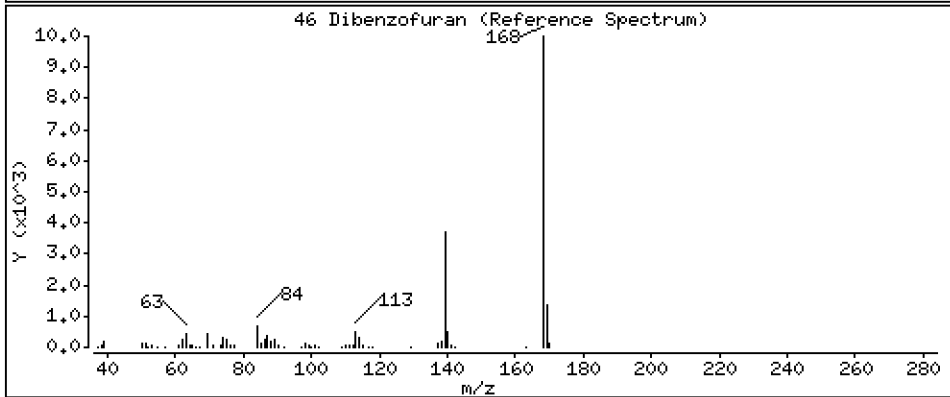
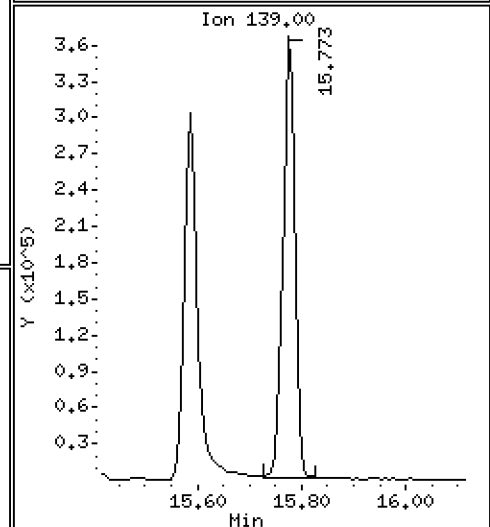
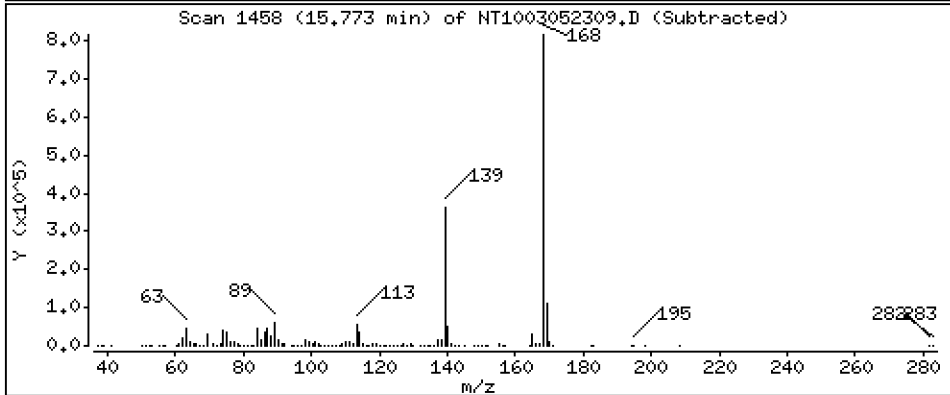
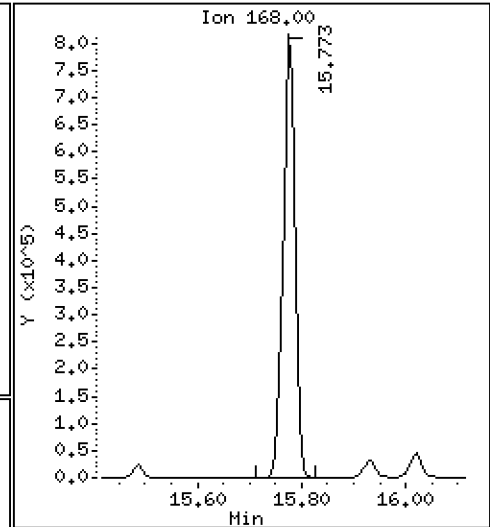
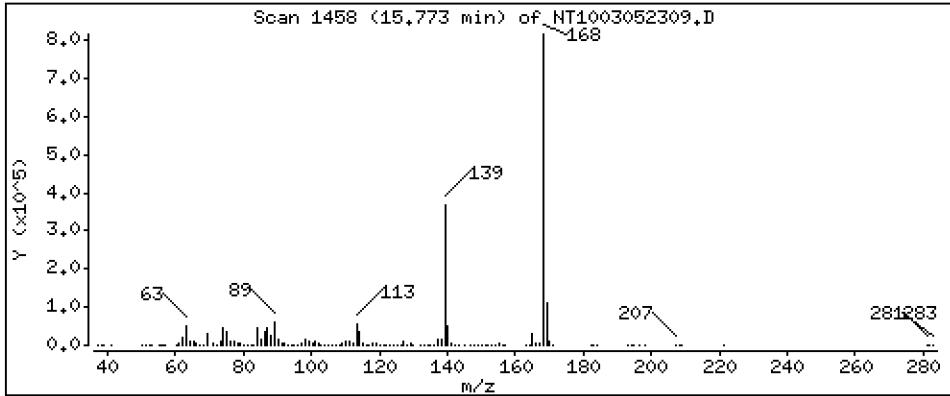
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,723 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

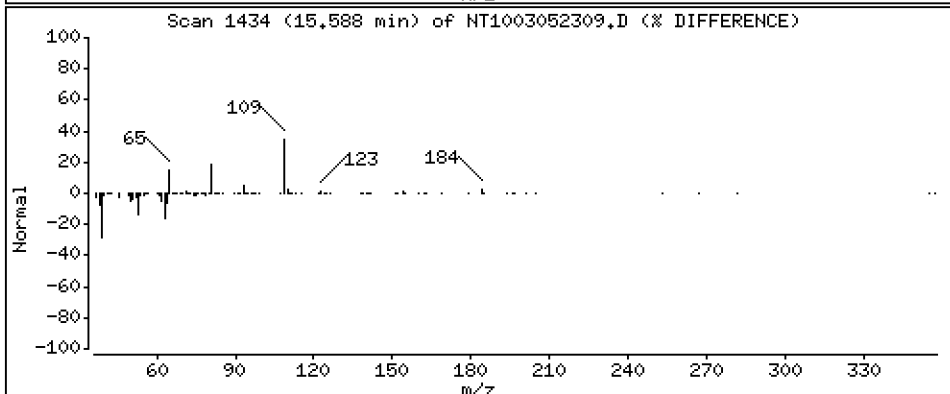
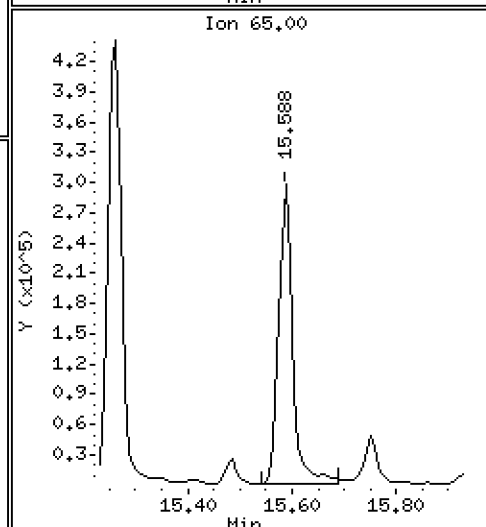
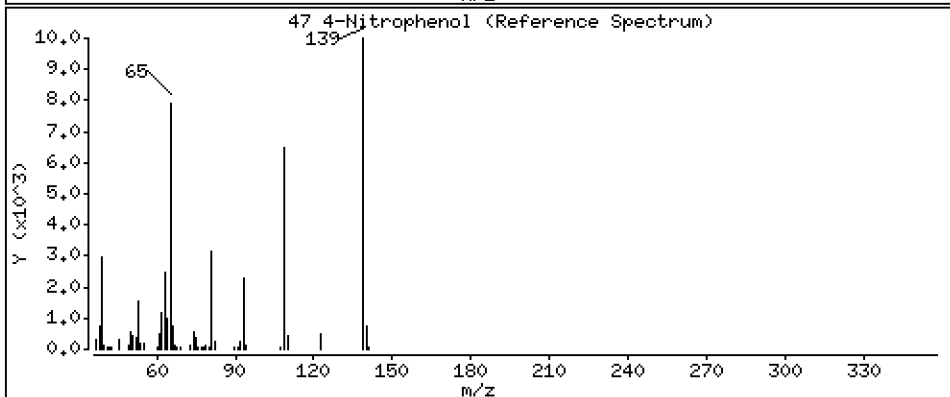
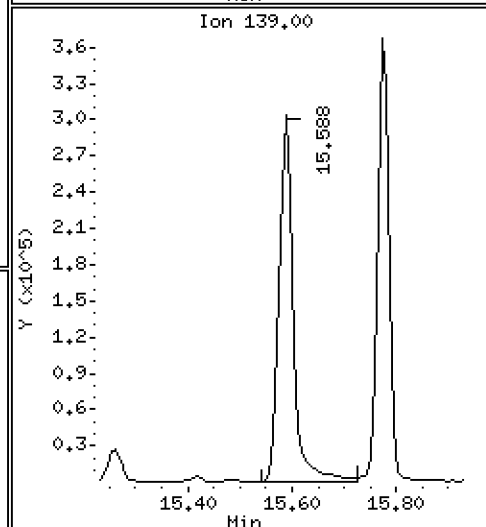
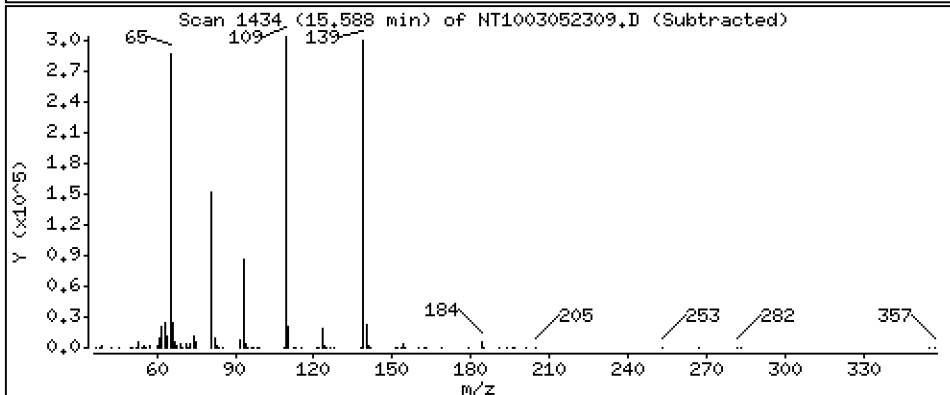
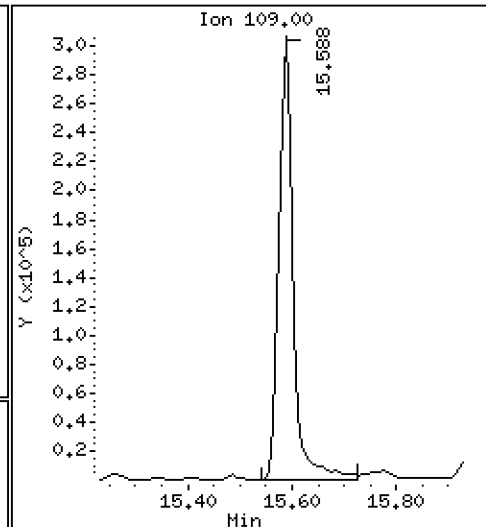
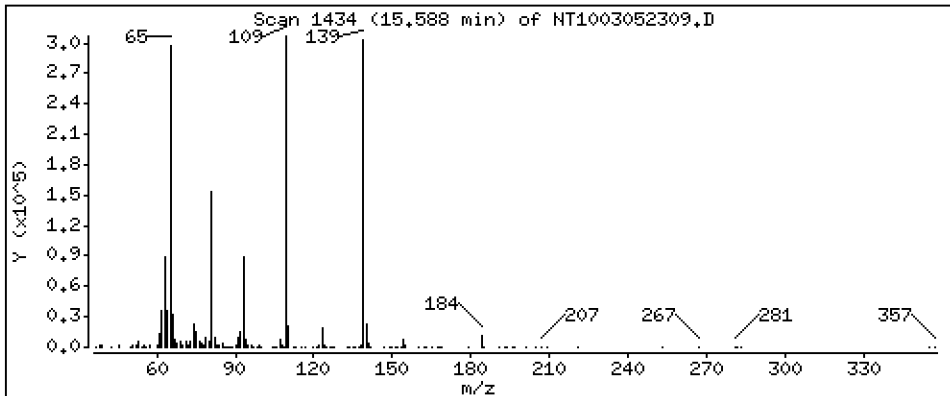
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 14,95 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

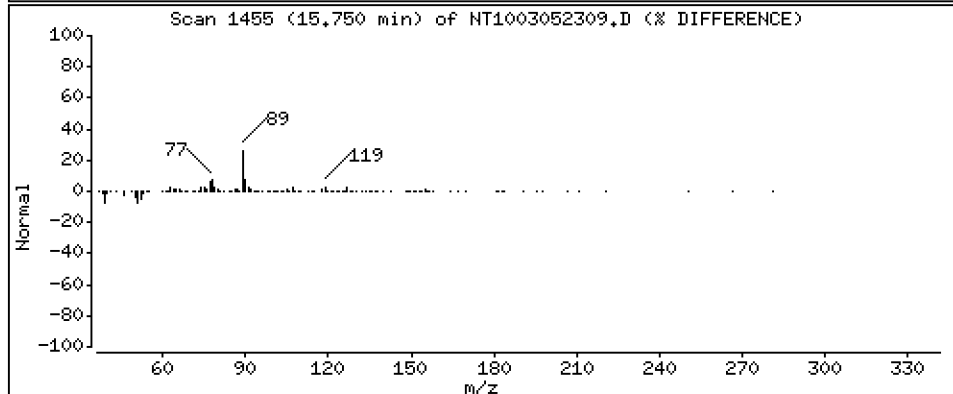
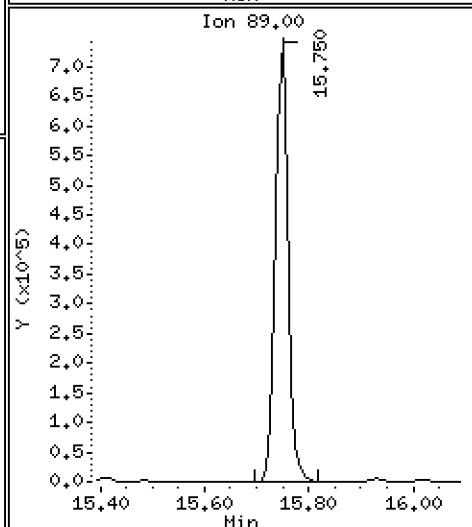
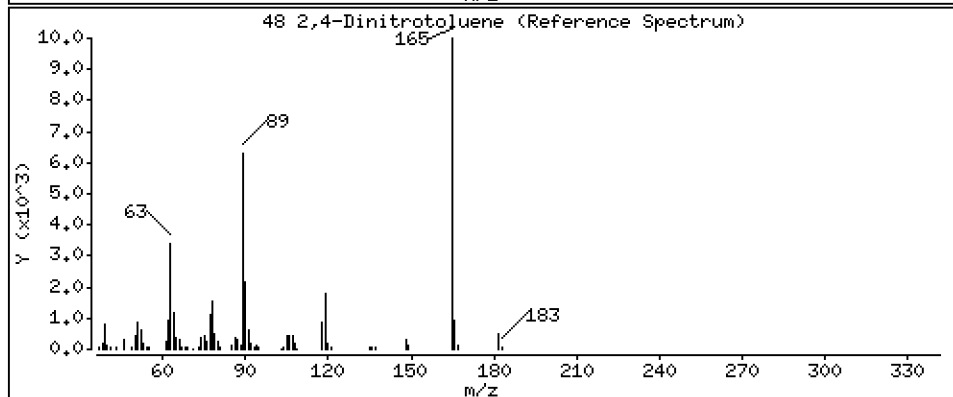
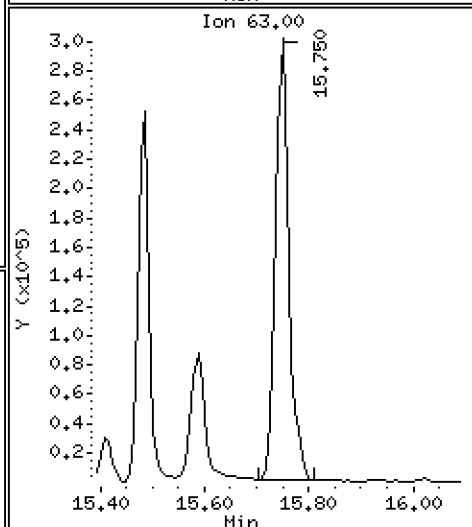
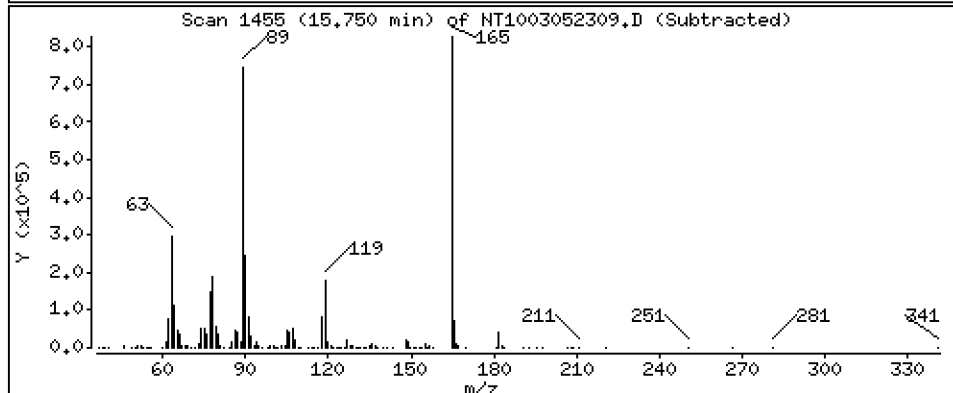
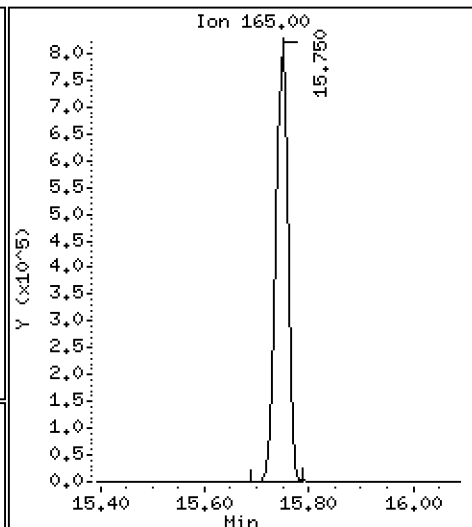
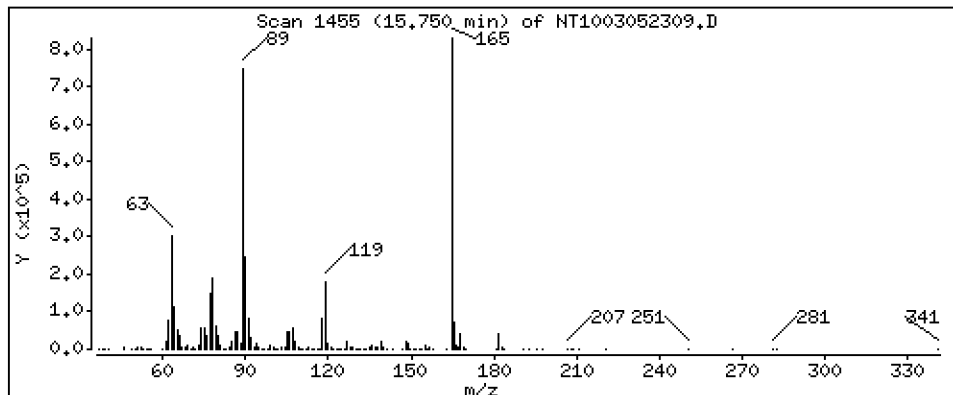
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 17,93 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

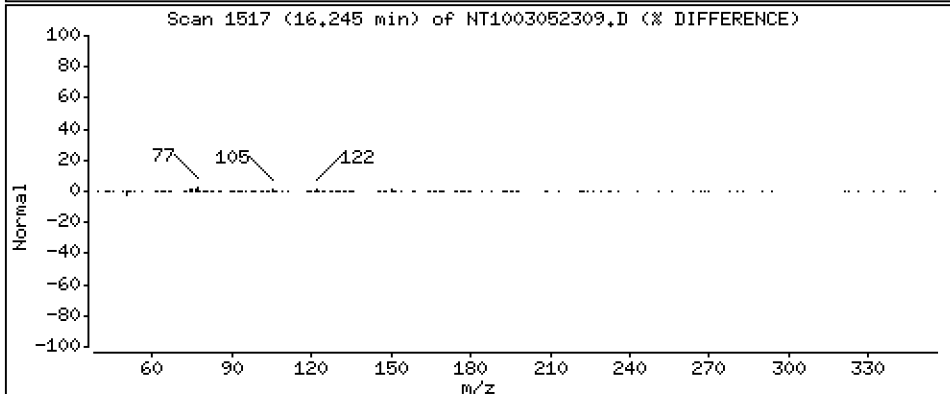
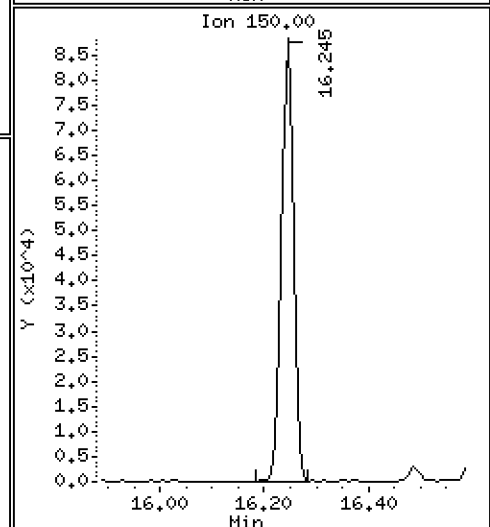
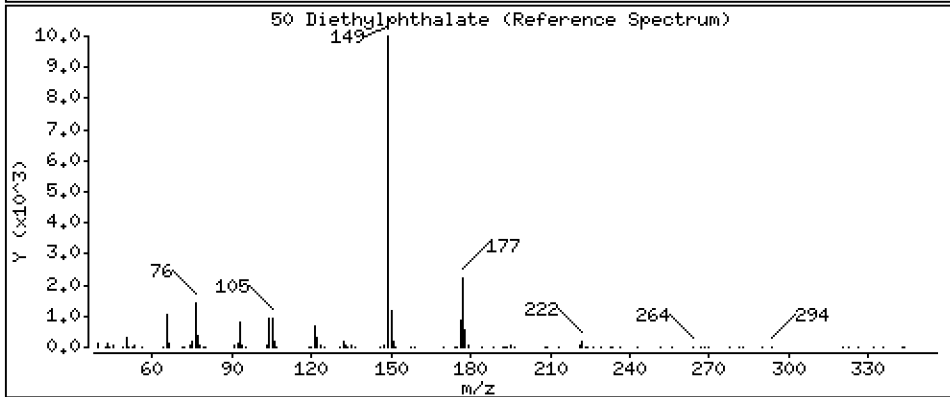
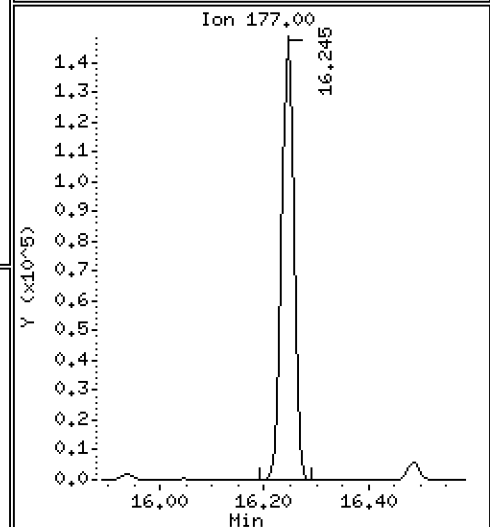
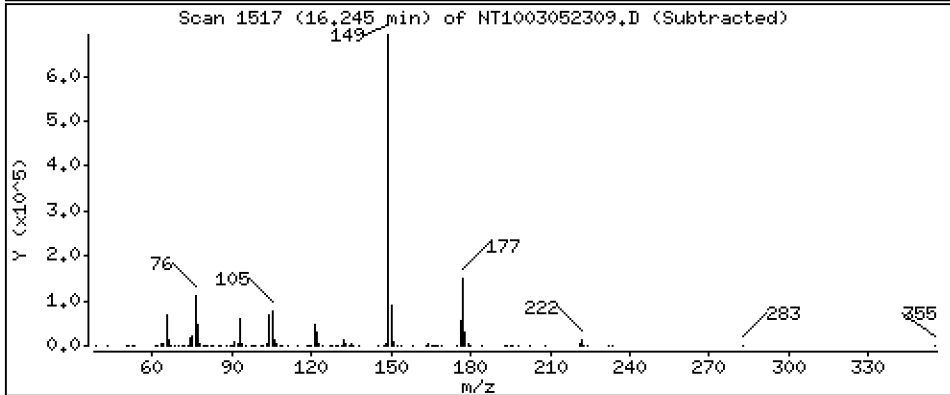
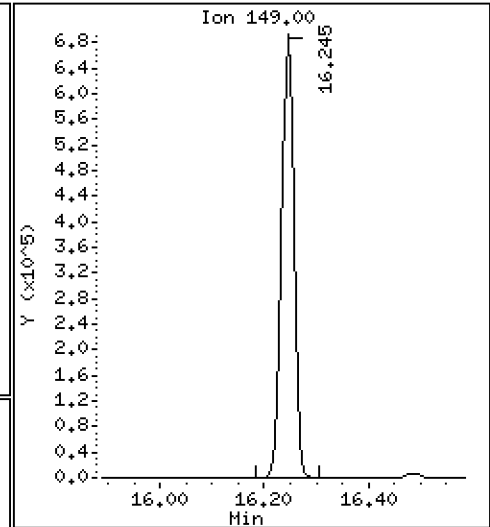
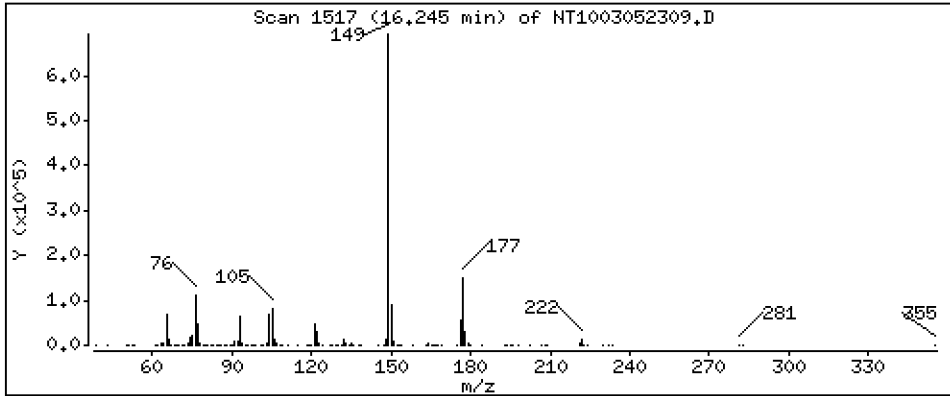
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,041 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

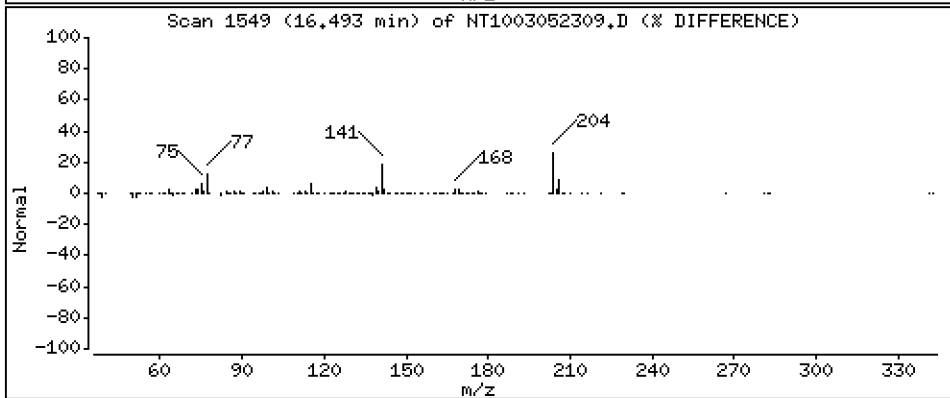
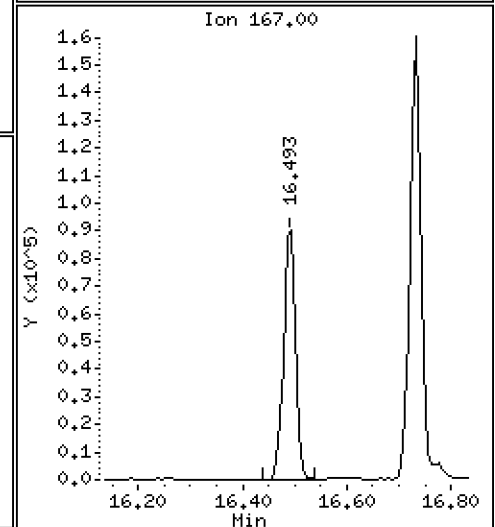
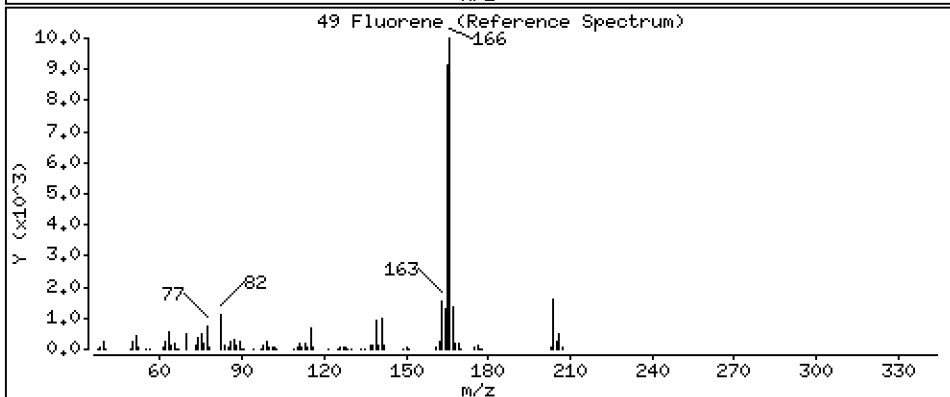
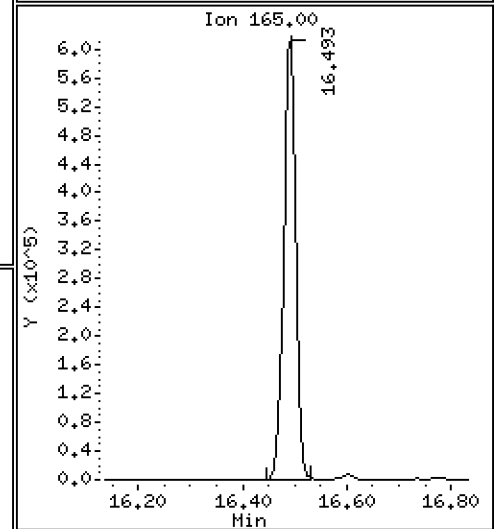
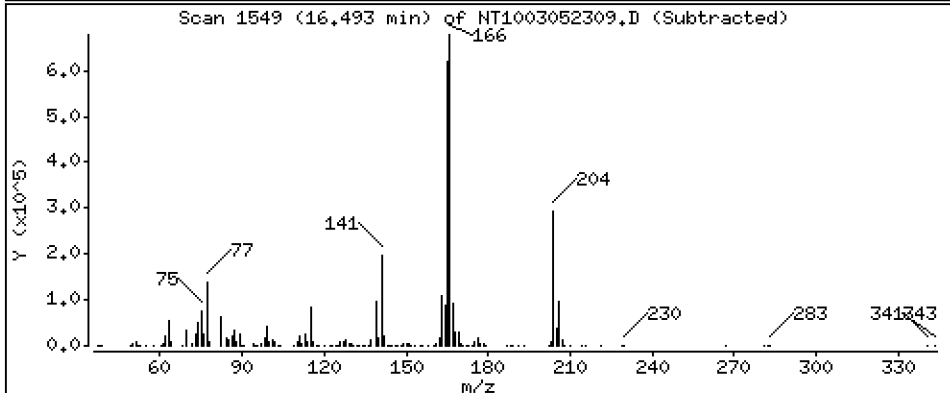
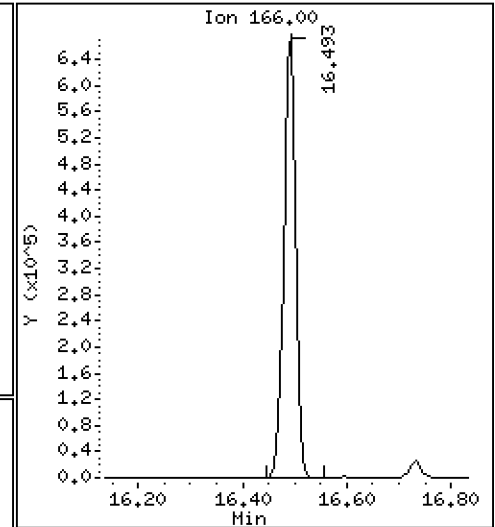
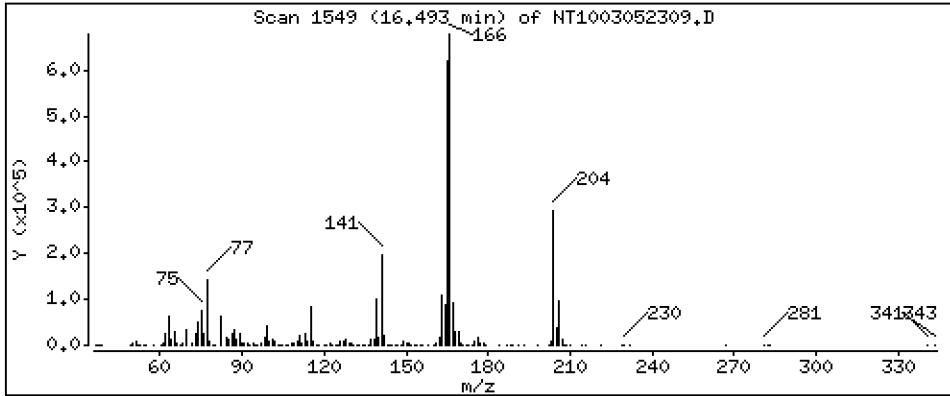
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,748 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

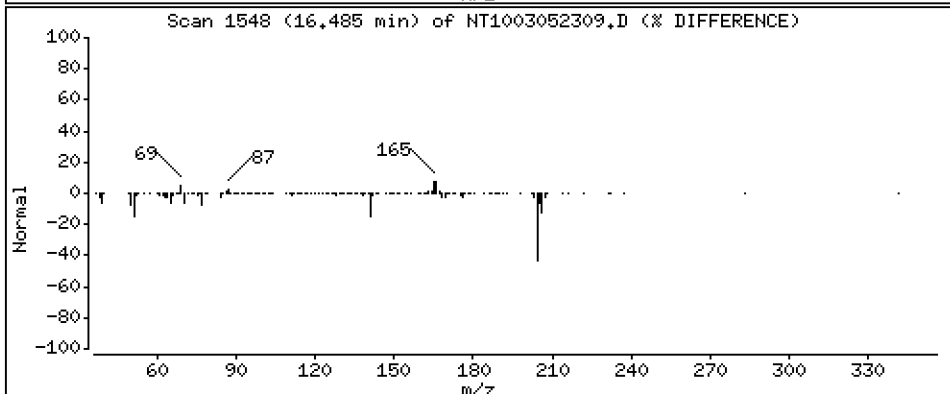
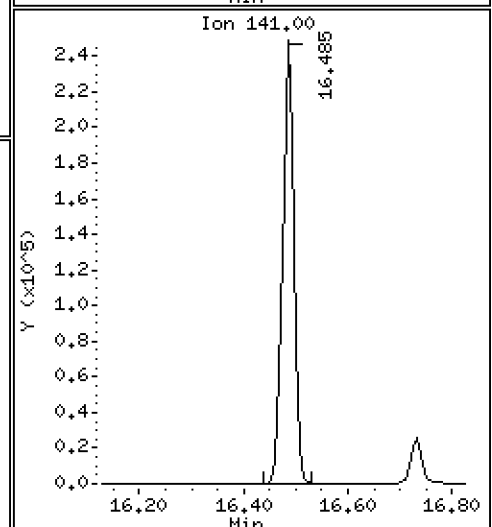
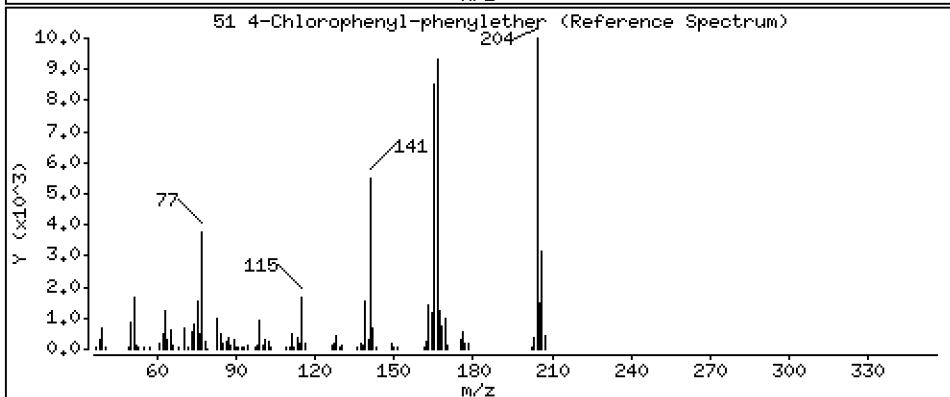
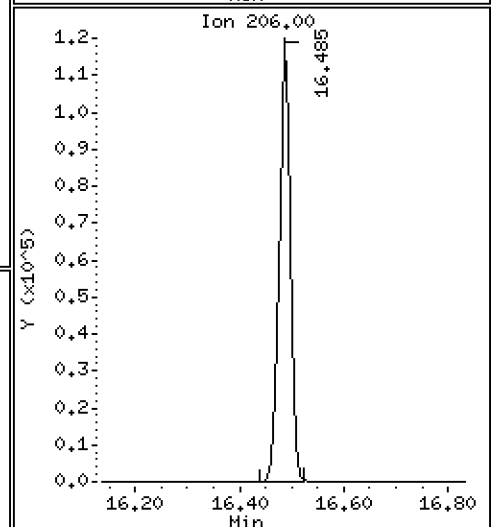
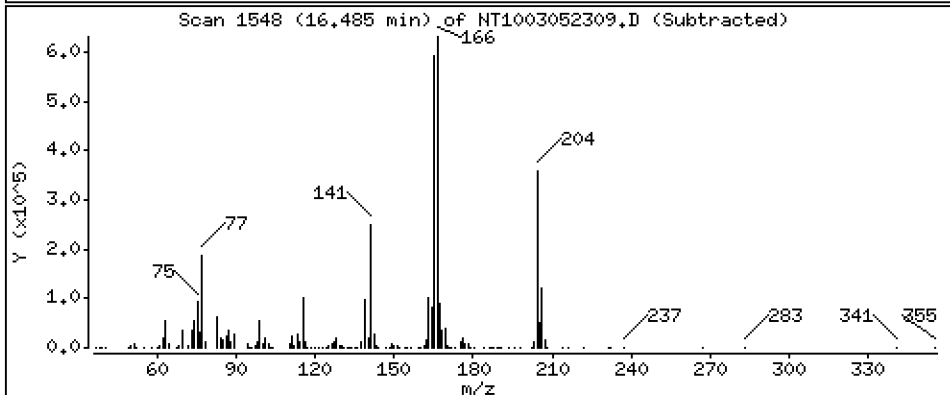
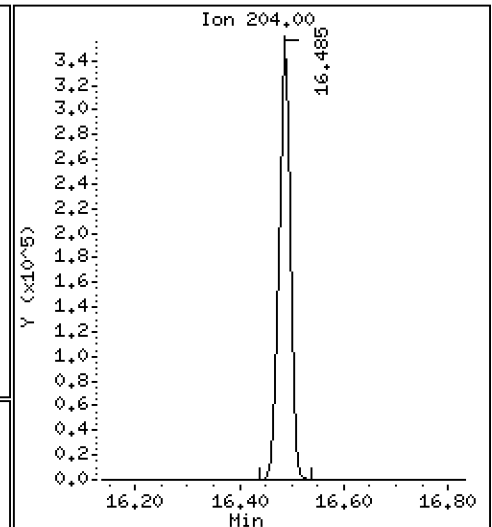
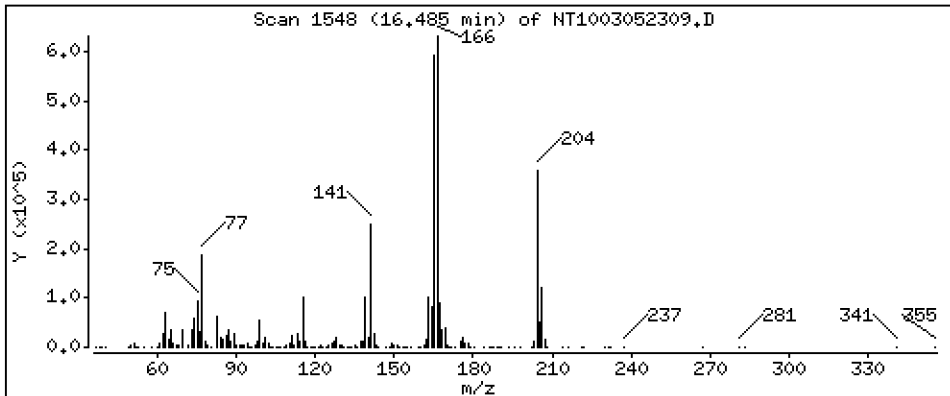
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 5,122 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

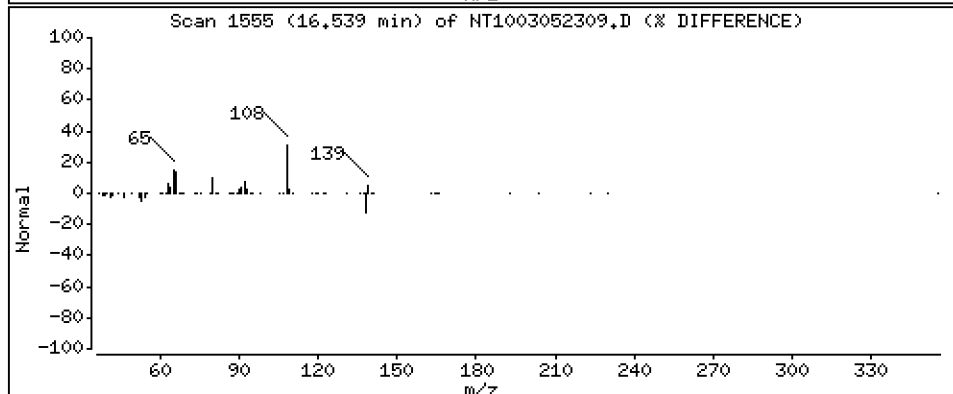
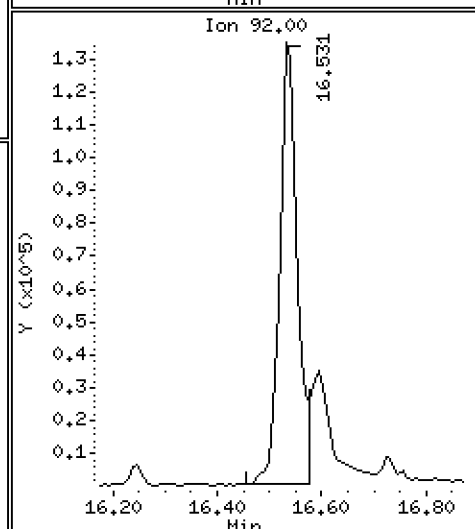
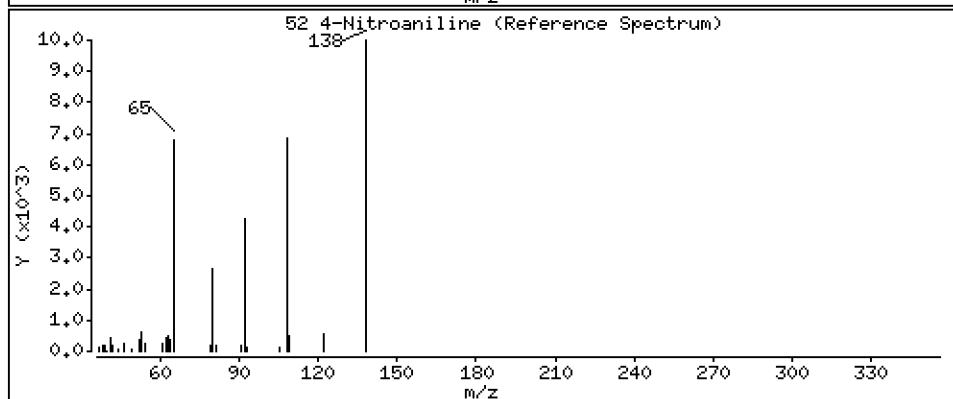
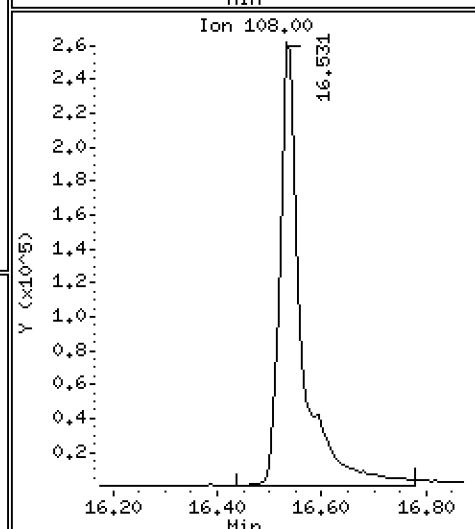
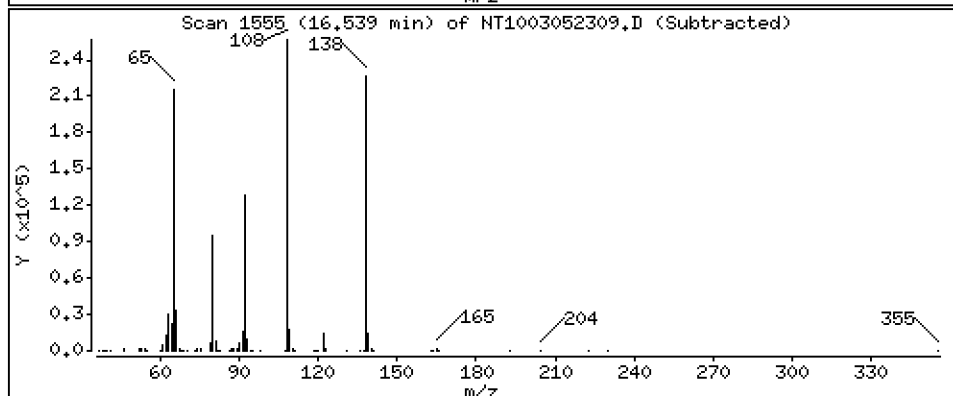
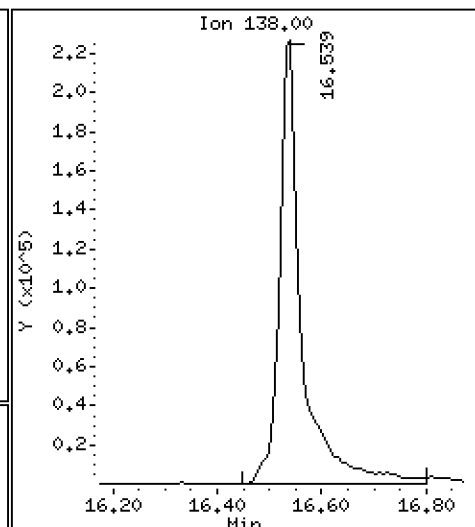
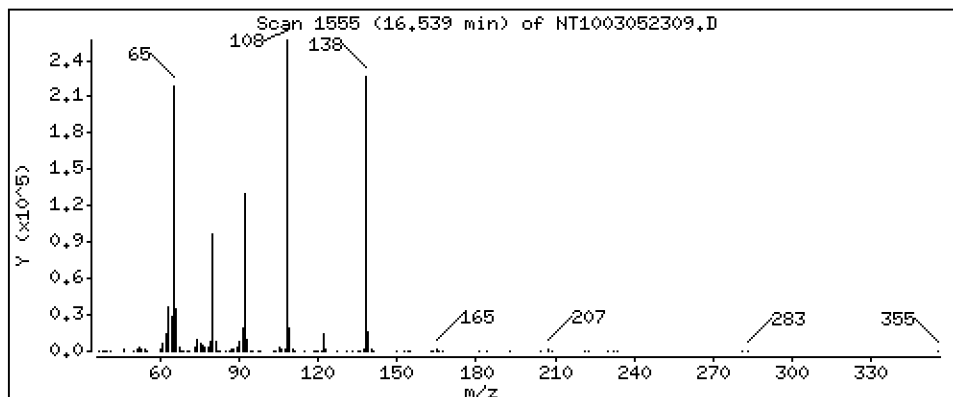
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 12,60 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

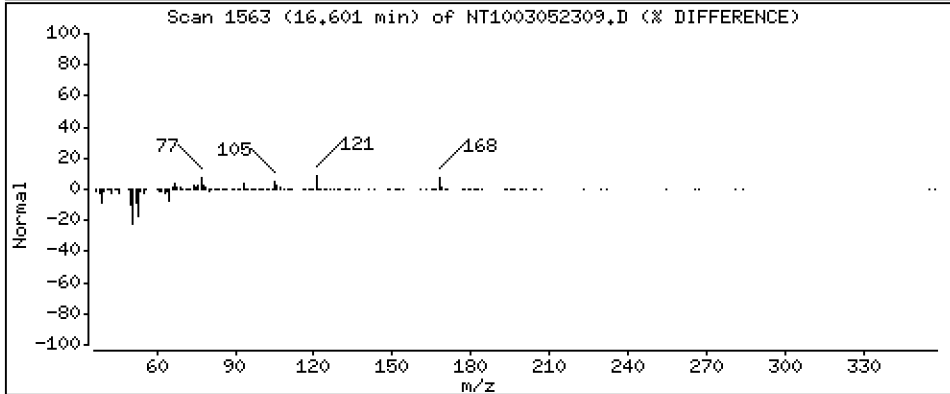
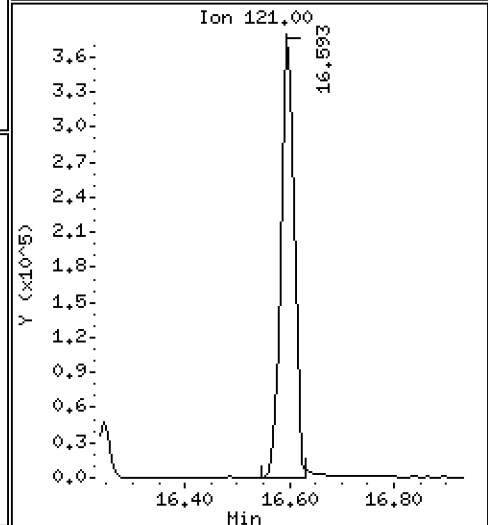
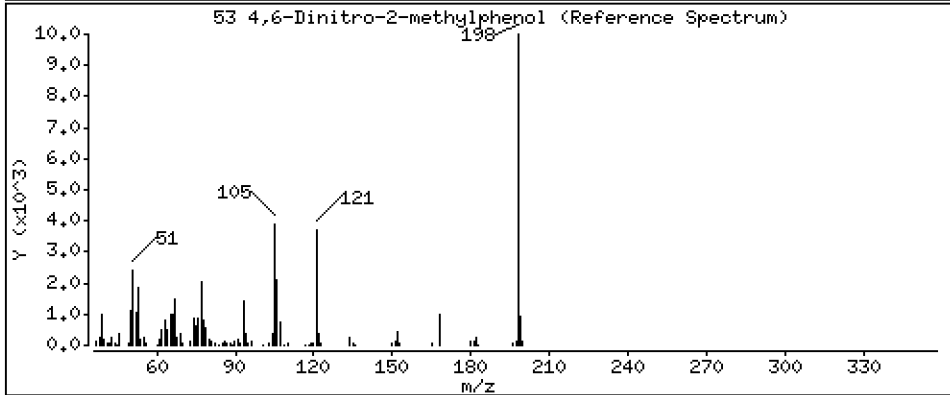
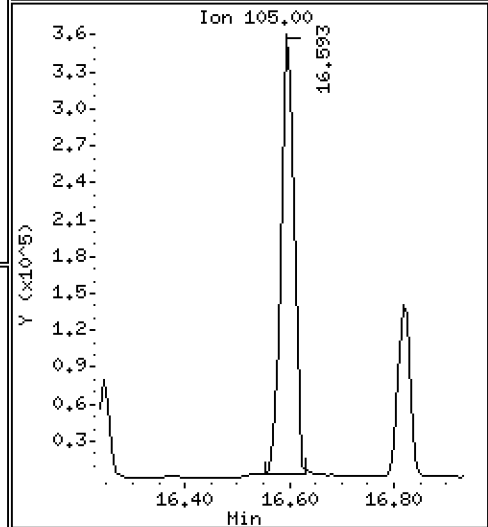
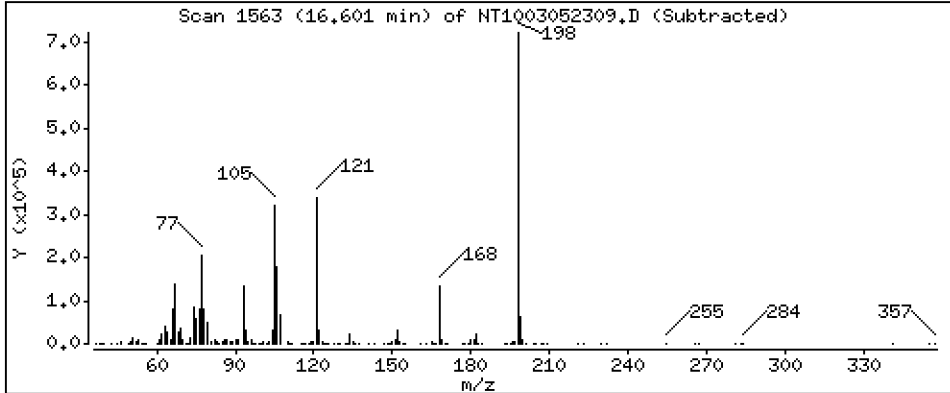
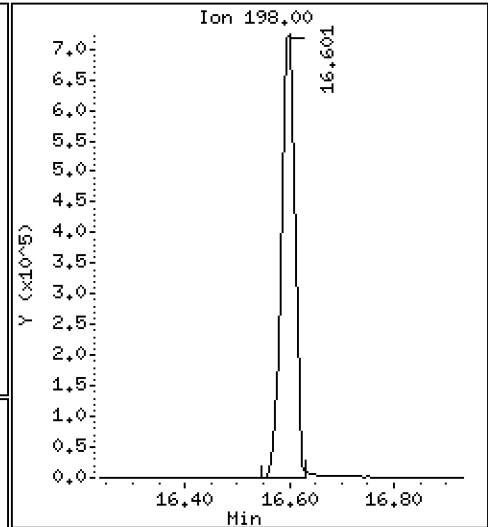
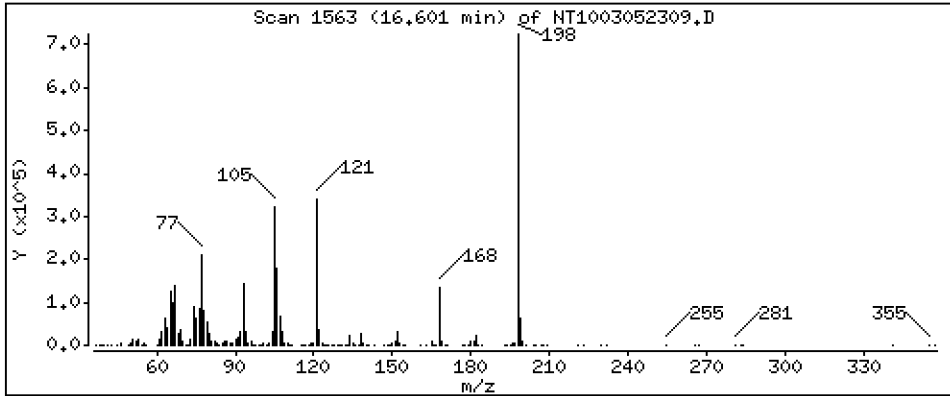
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 40,69 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

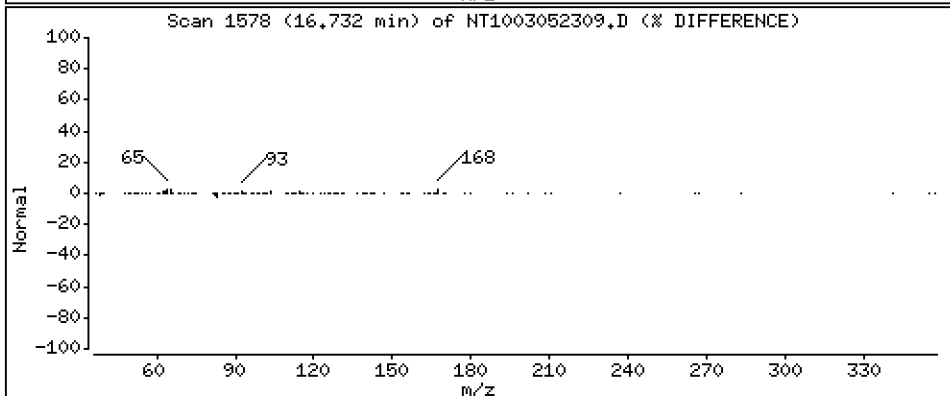
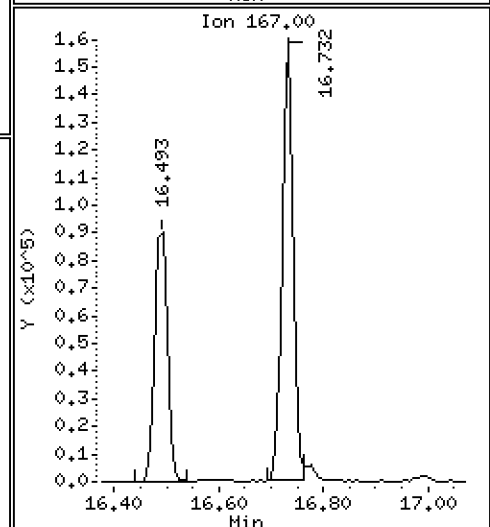
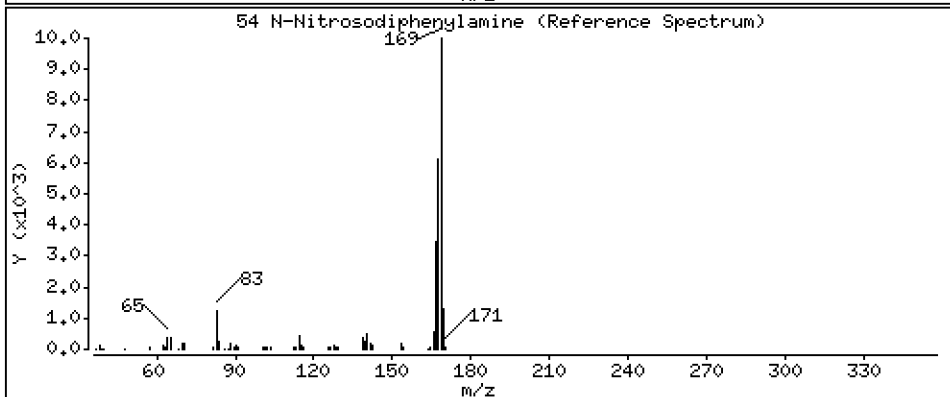
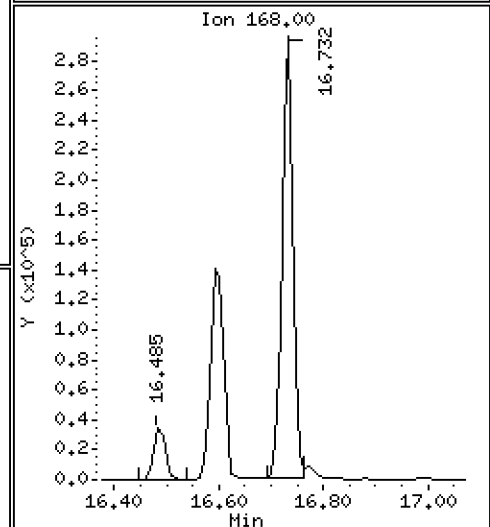
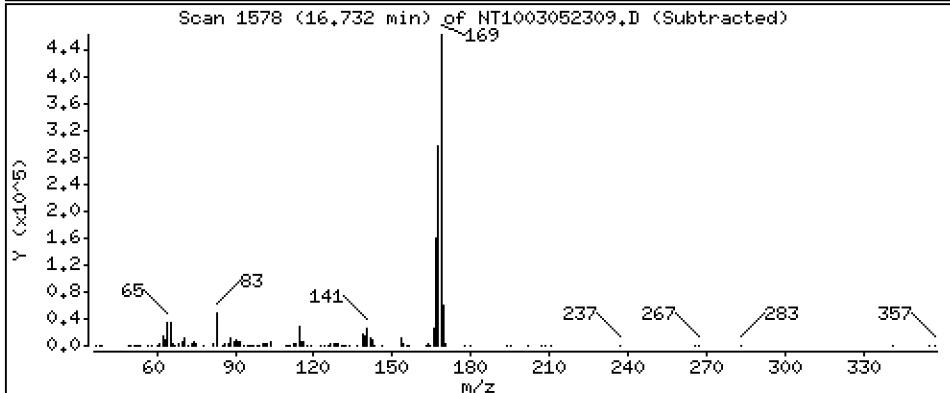
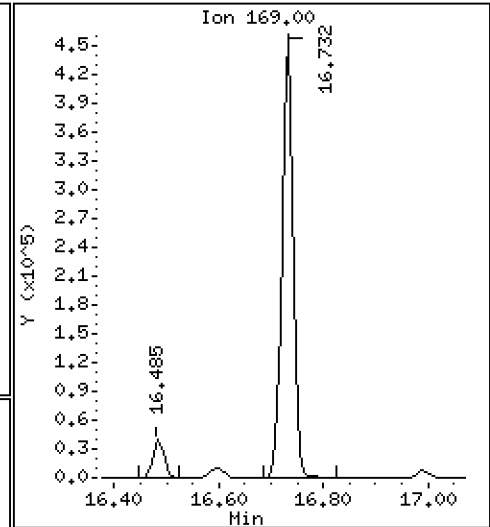
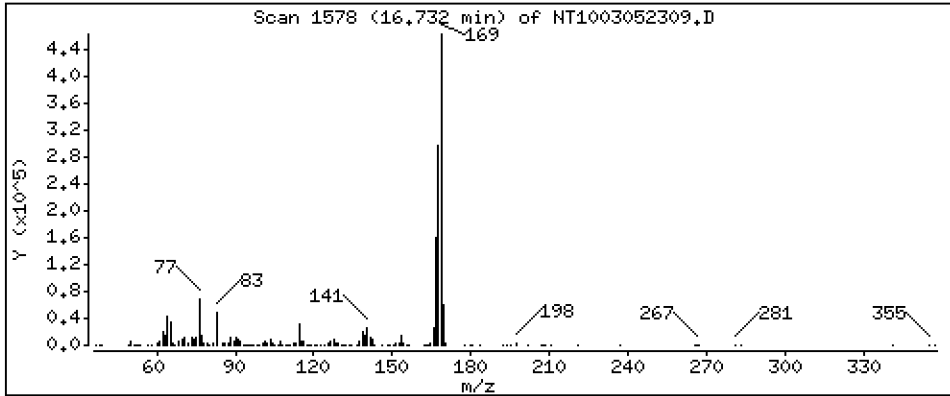
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,102 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

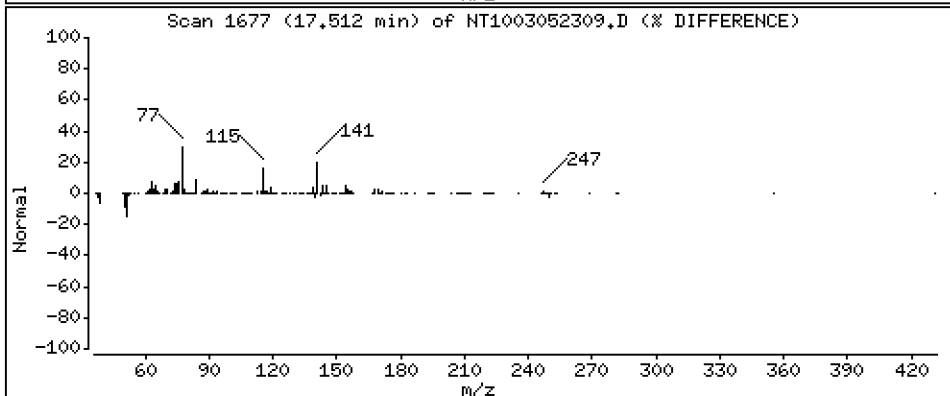
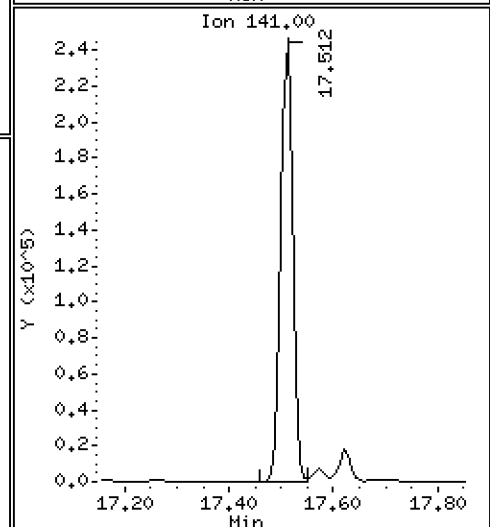
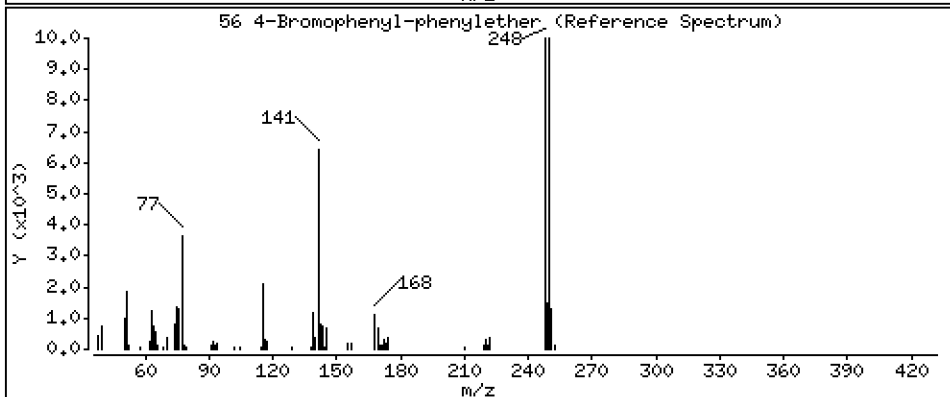
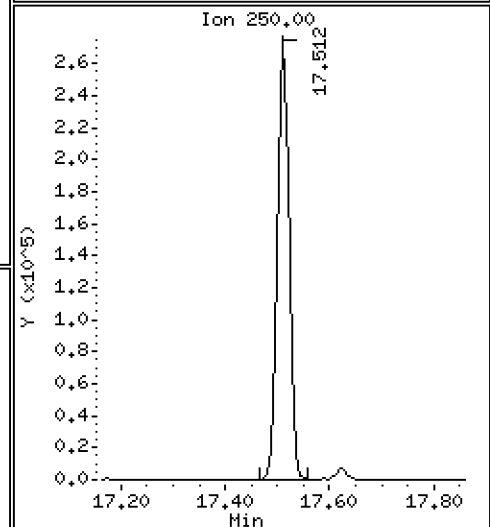
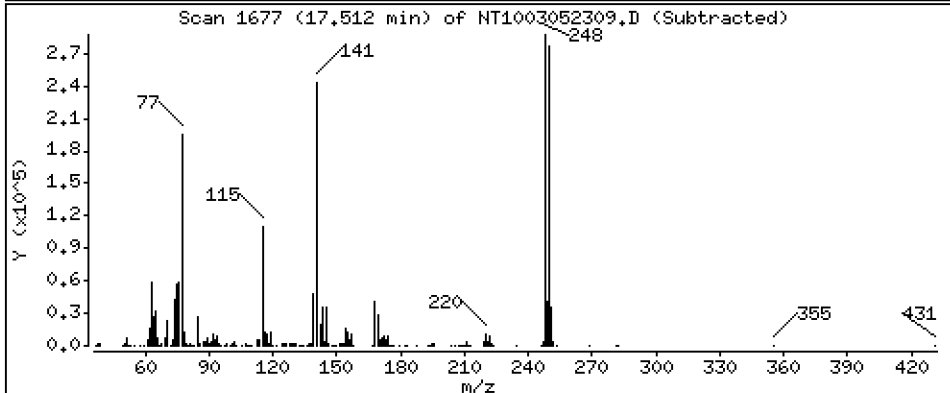
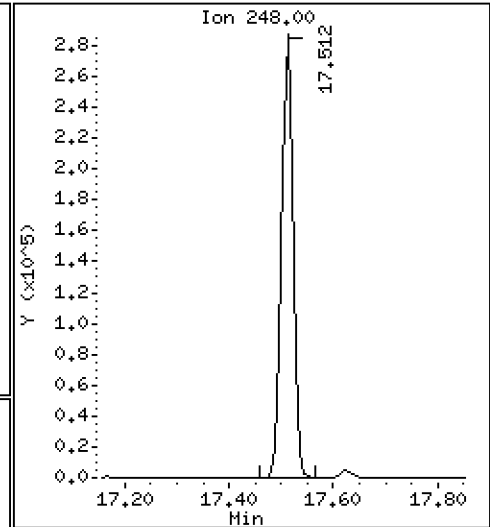
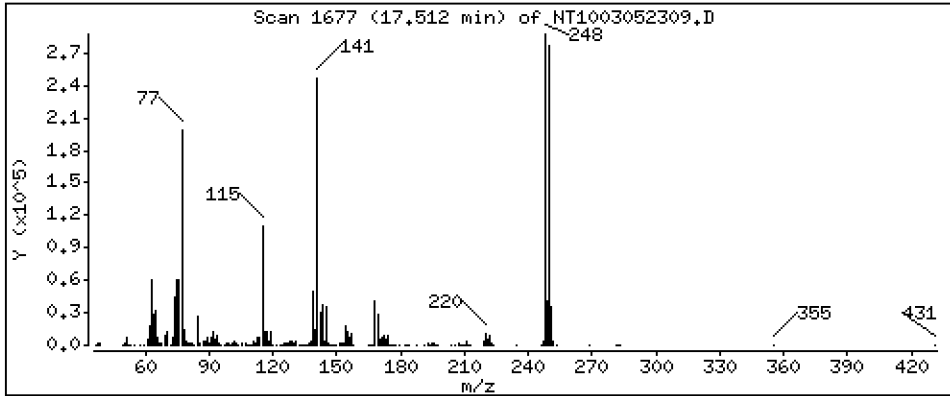
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 6,120 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

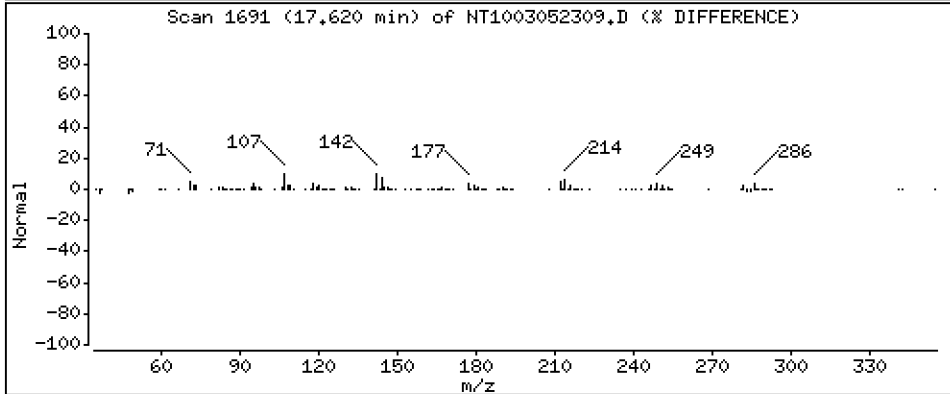
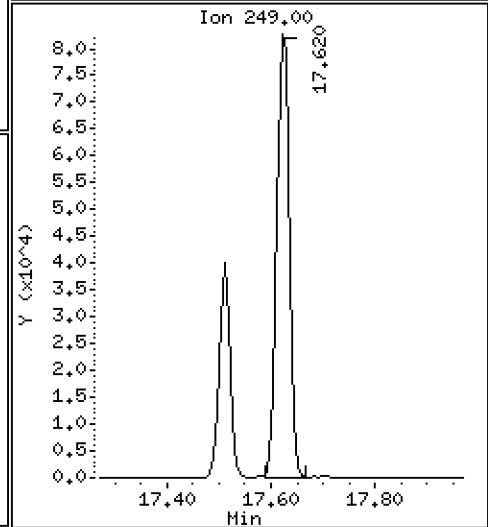
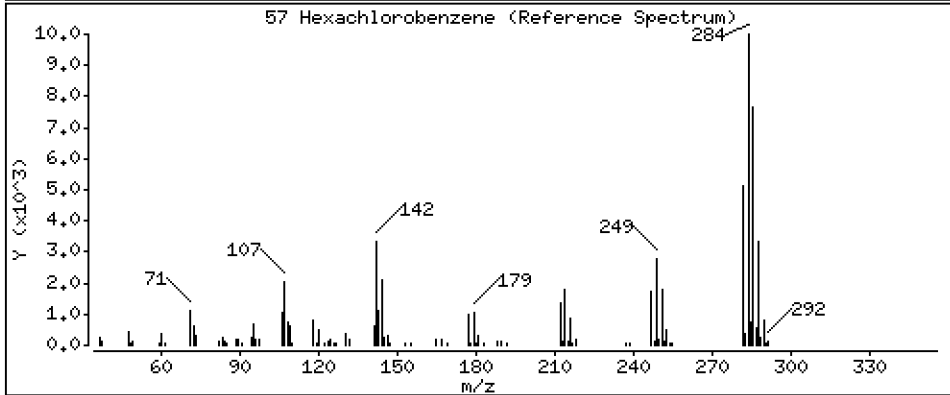
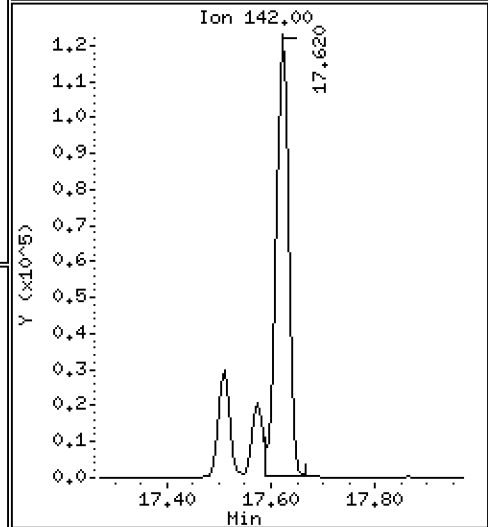
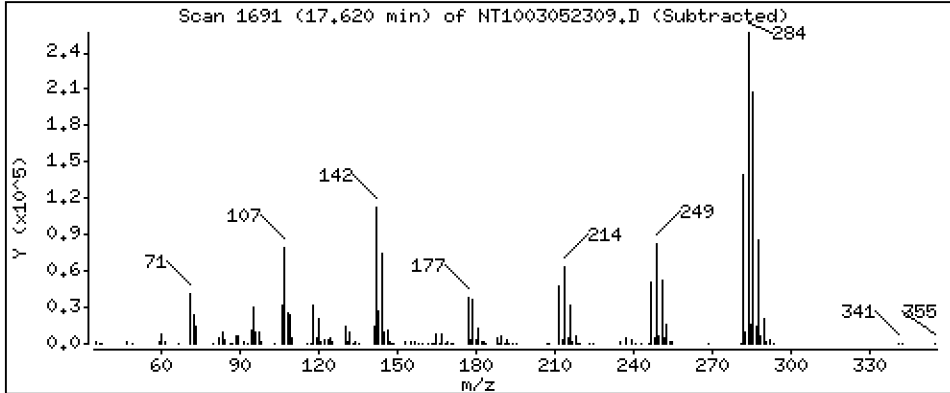
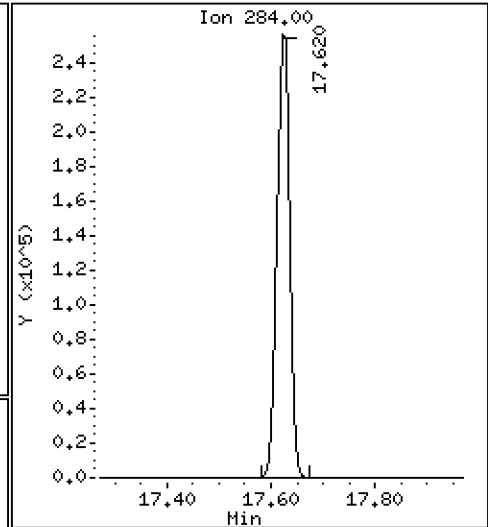
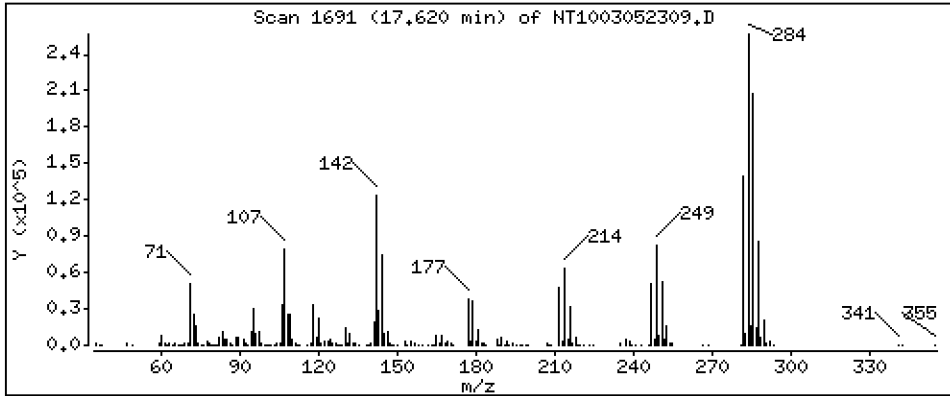
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,452 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

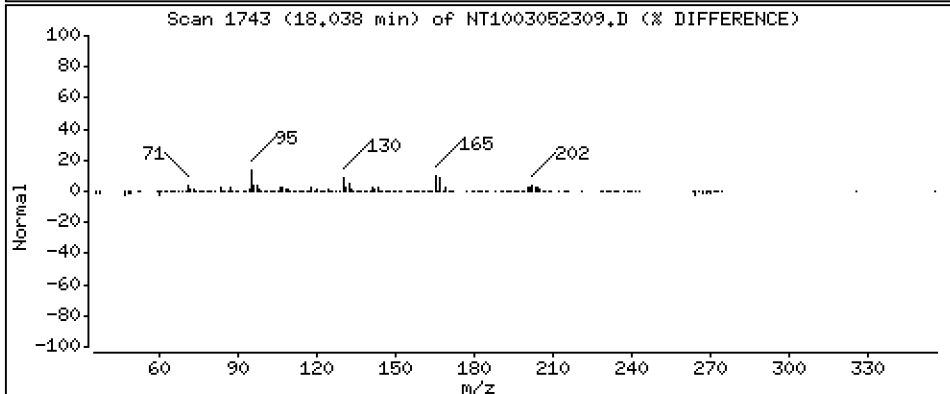
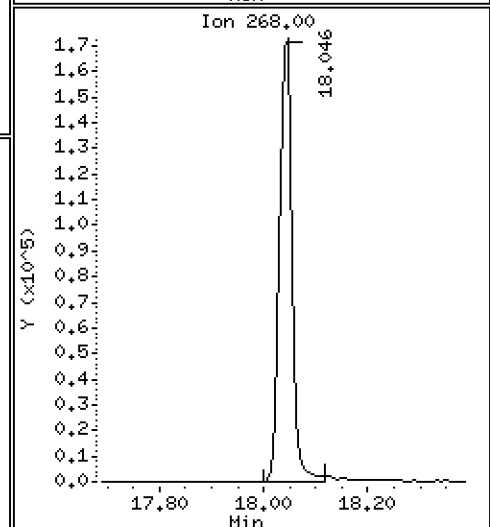
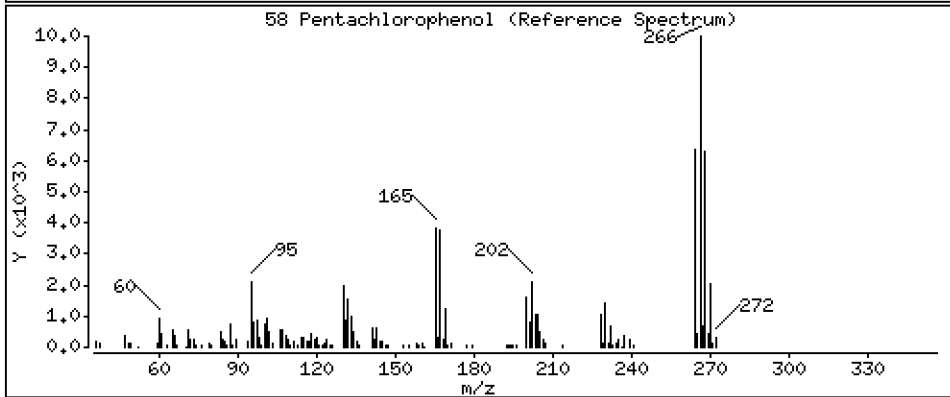
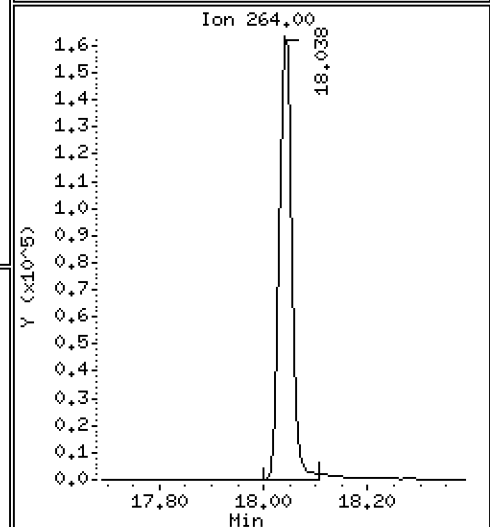
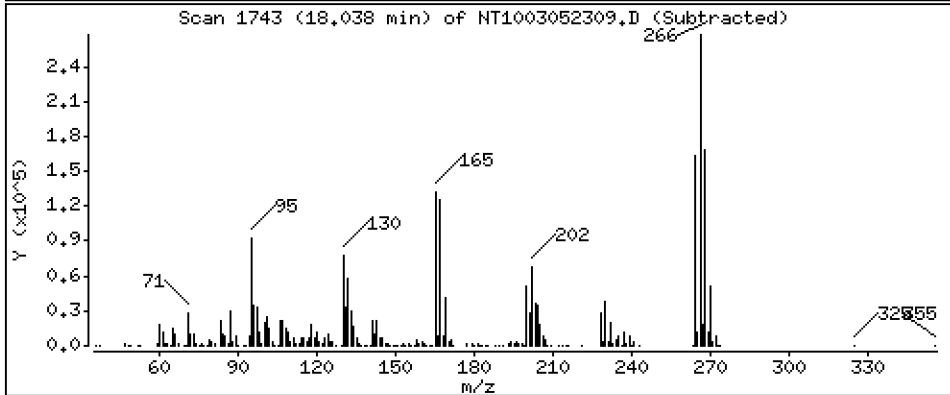
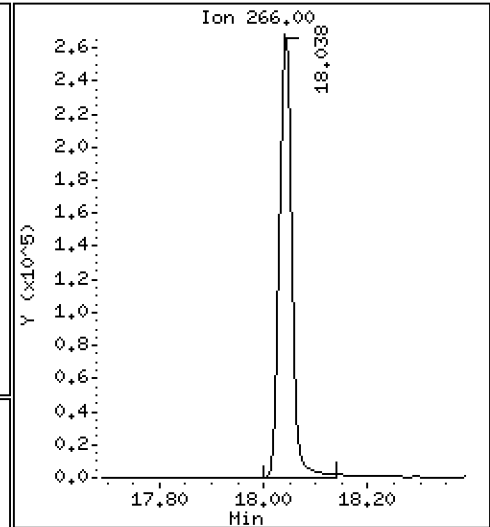
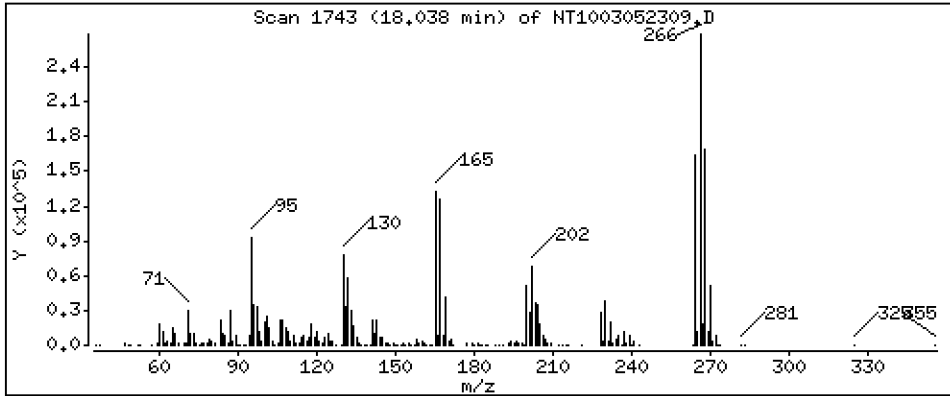
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 11,33 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

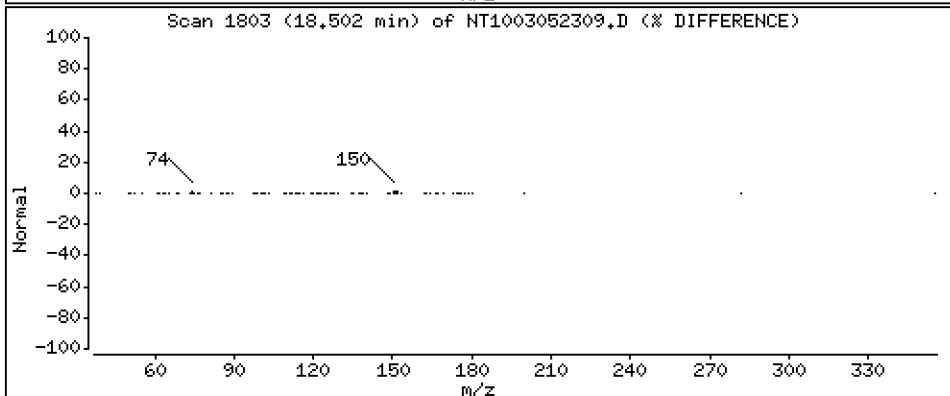
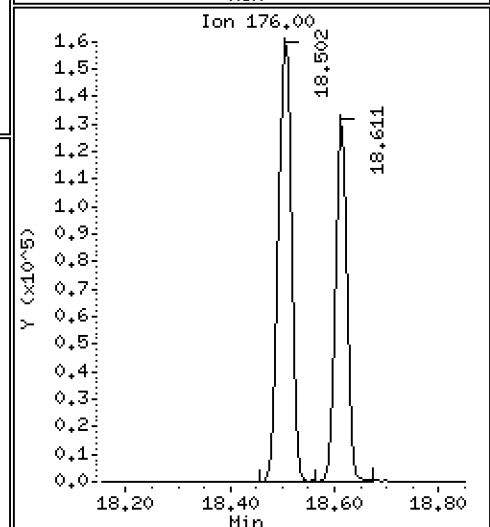
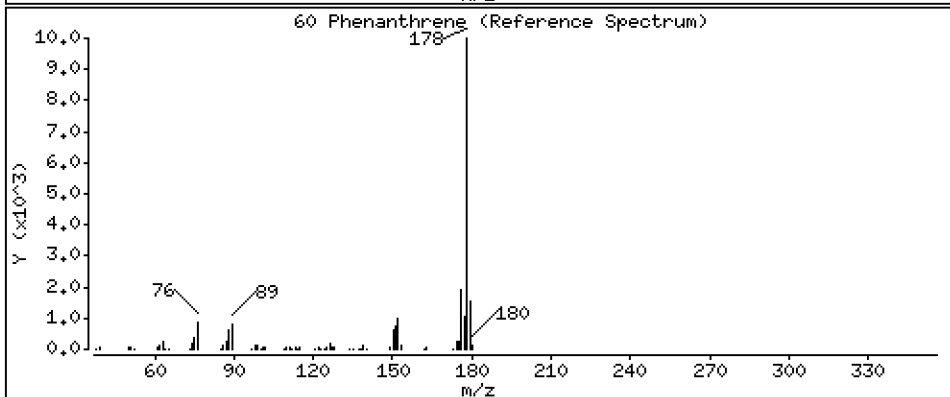
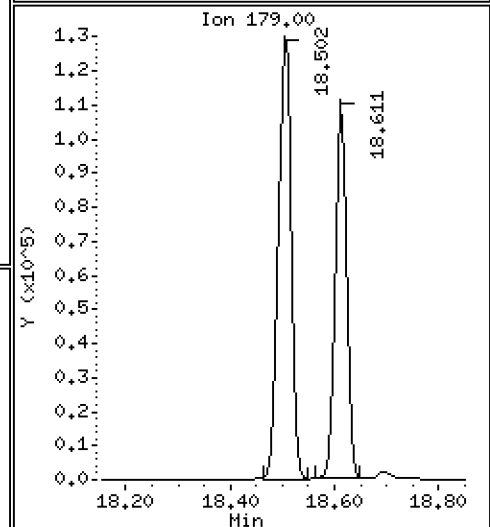
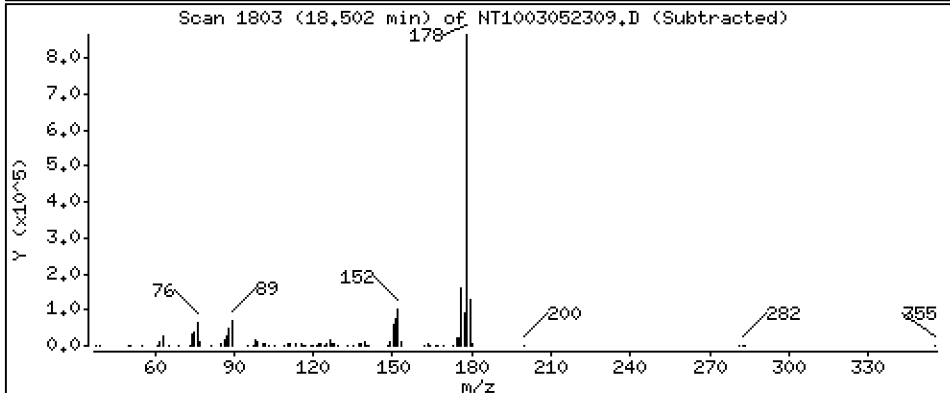
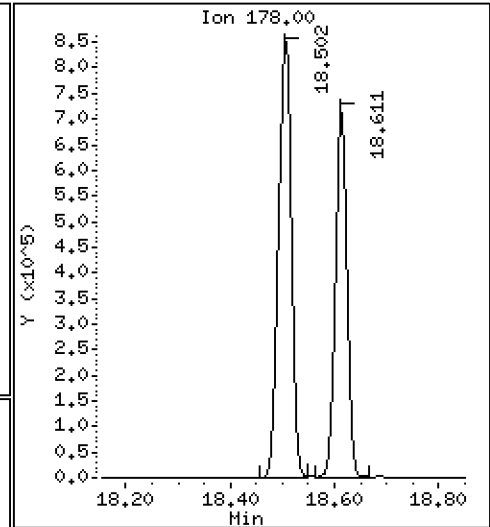
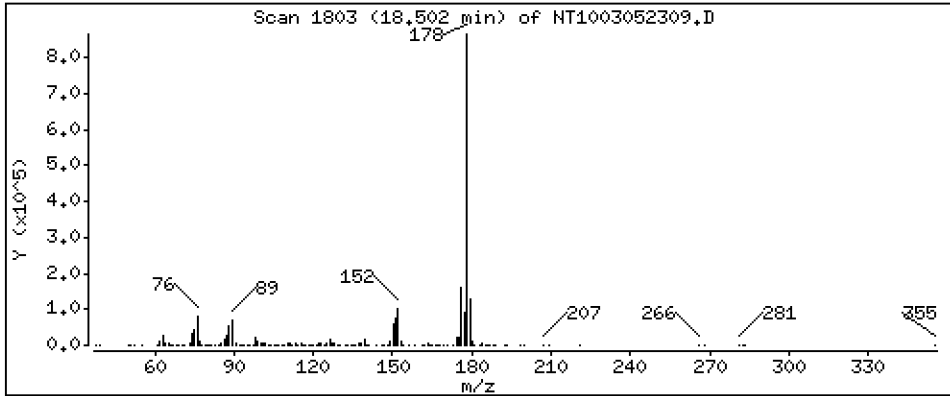
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,845 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

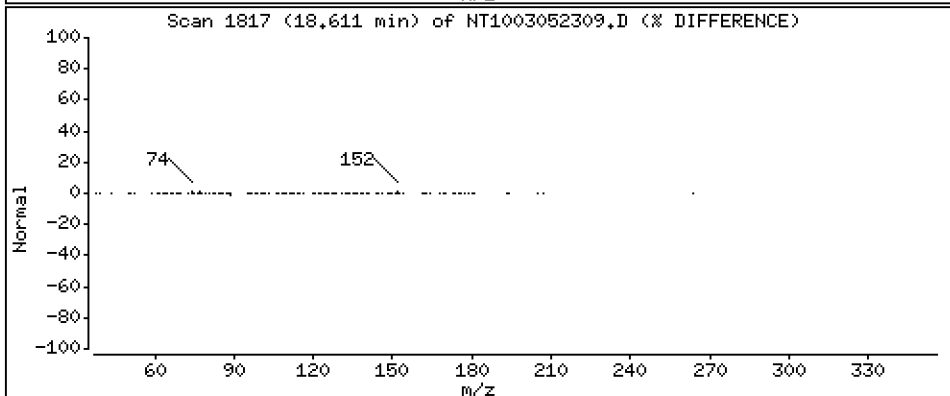
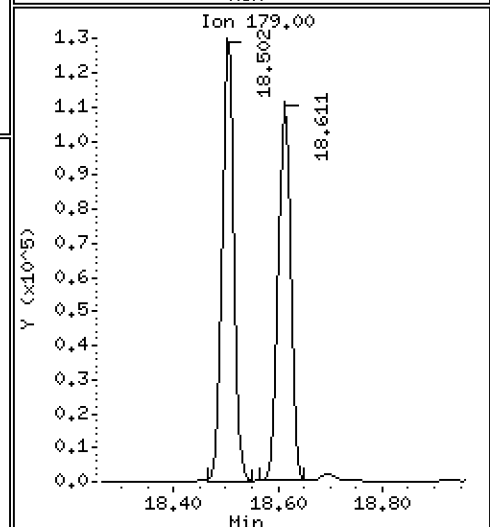
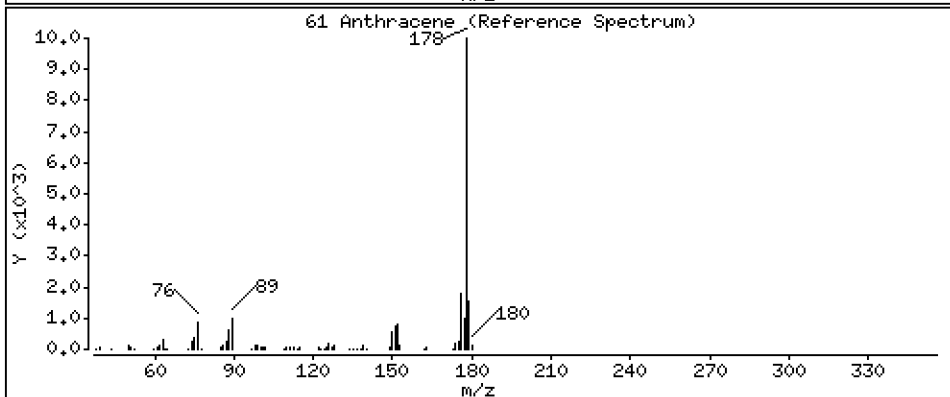
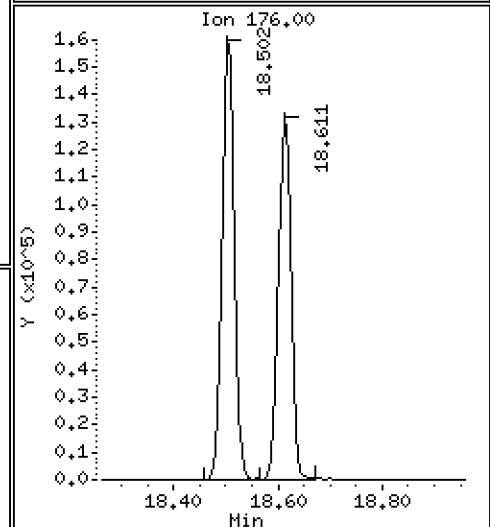
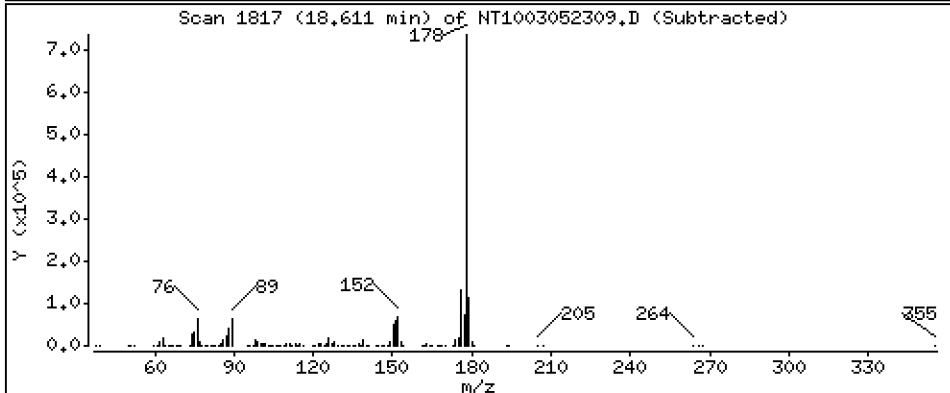
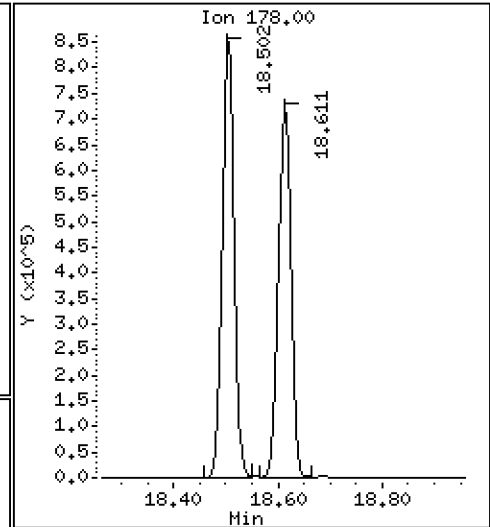
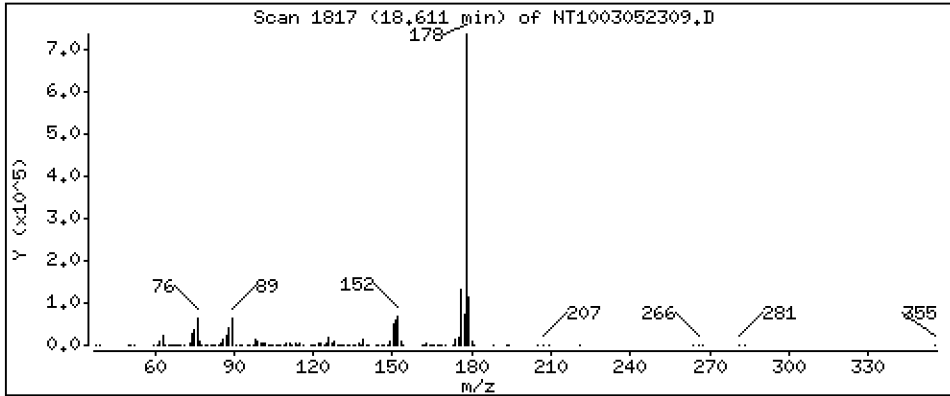
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,137 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

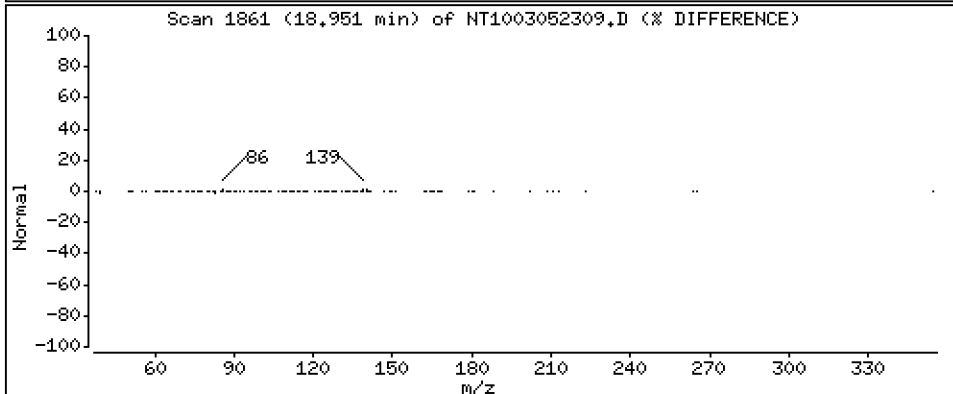
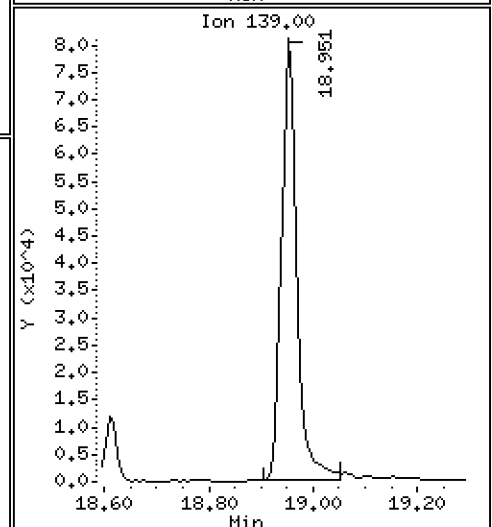
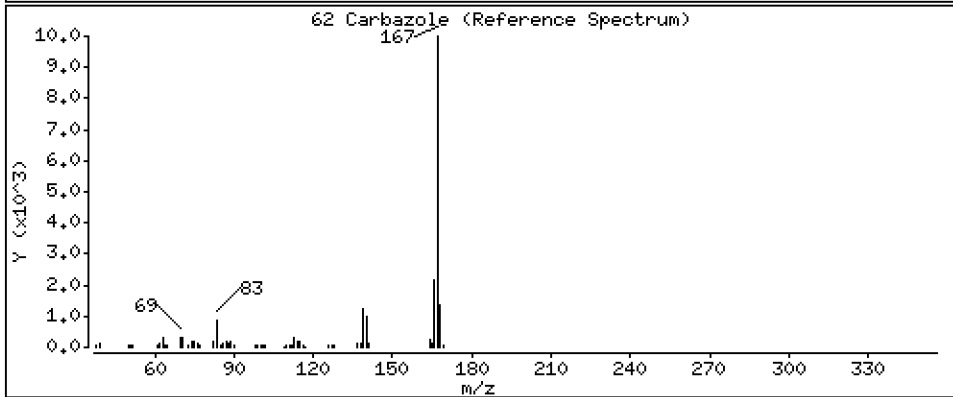
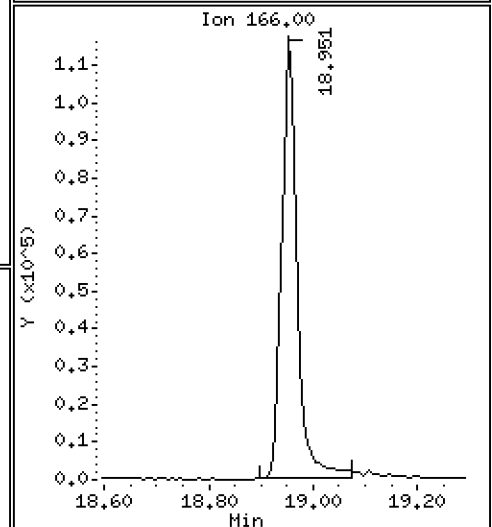
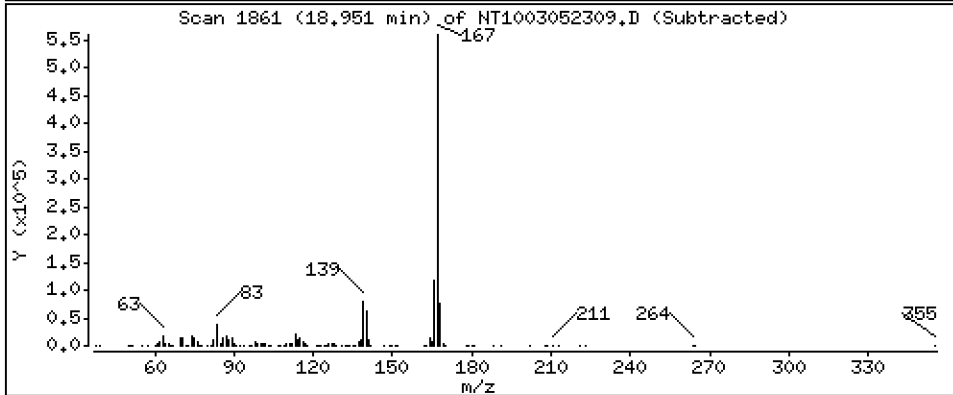
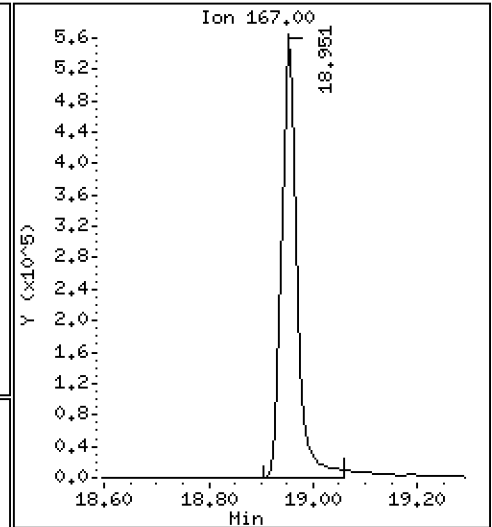
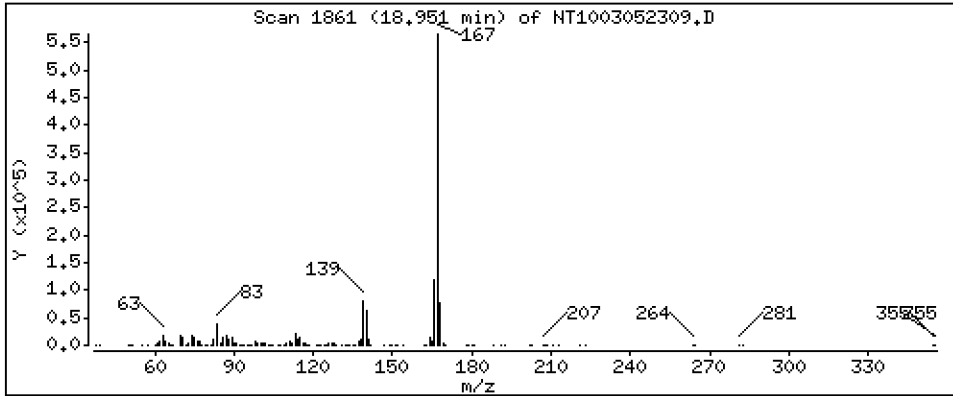
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,413 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

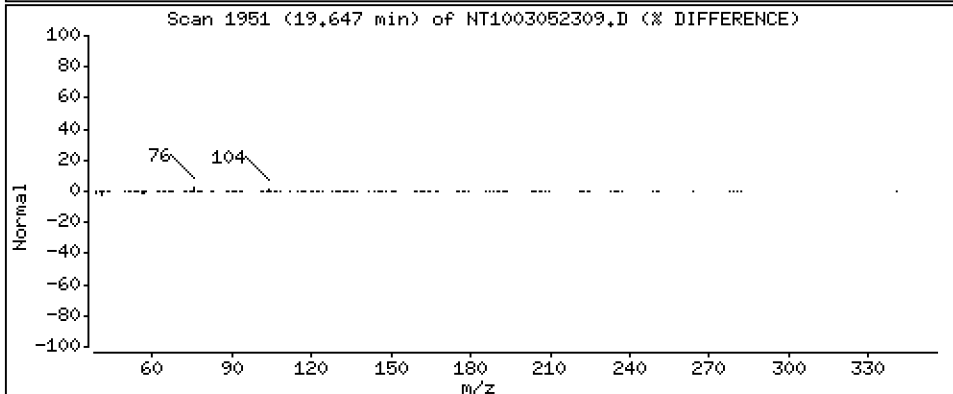
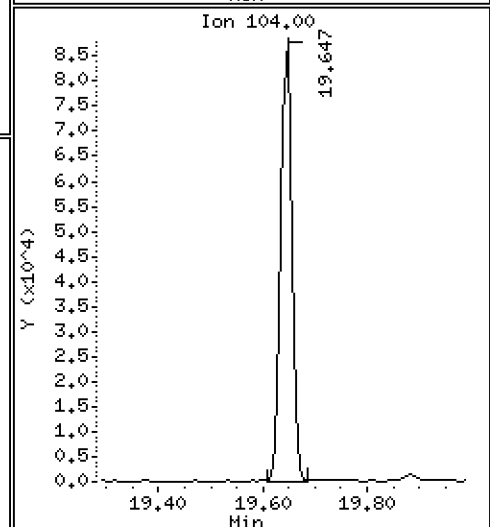
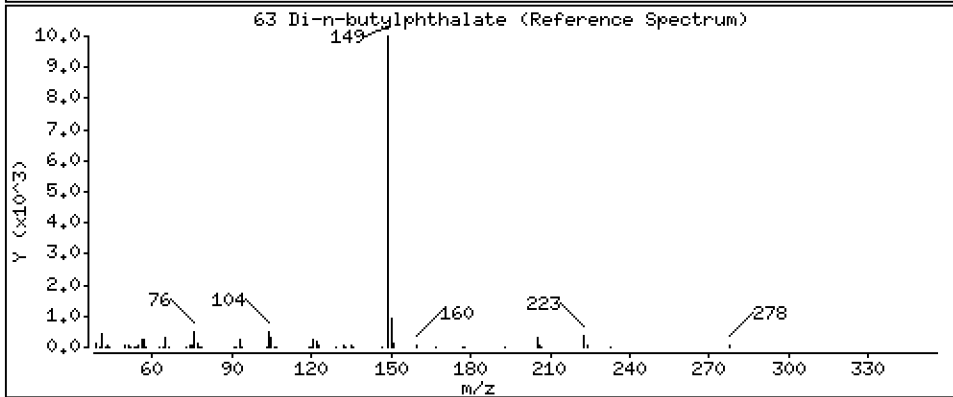
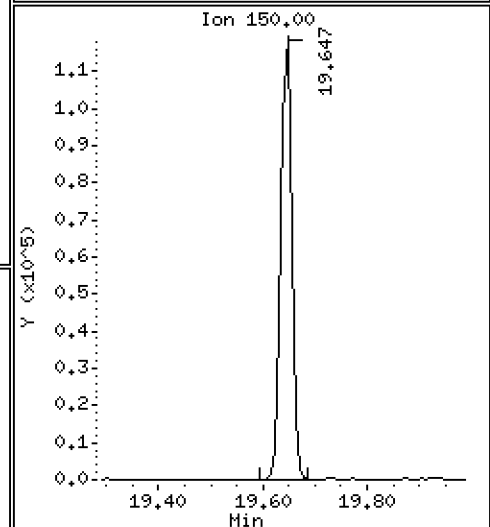
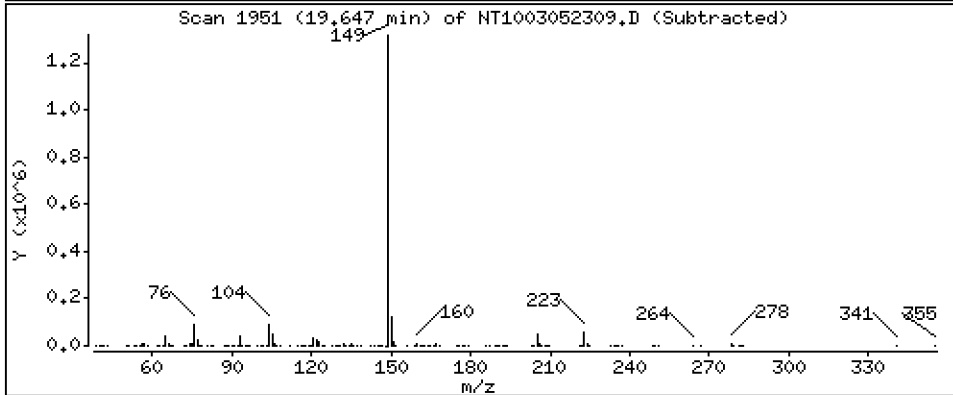
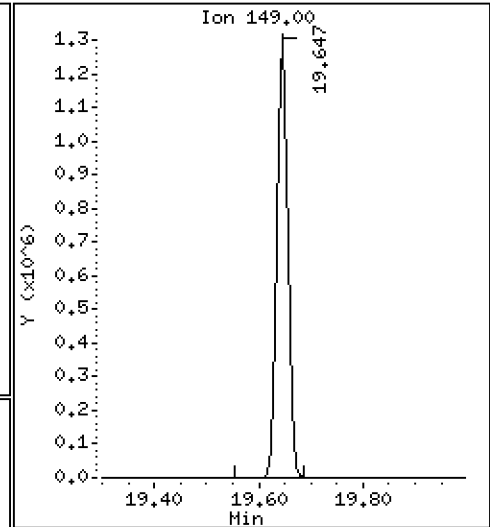
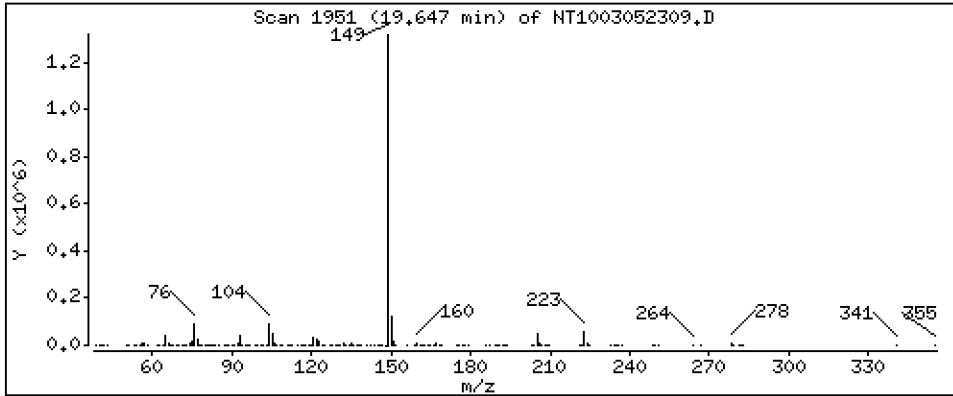
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 4,918 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

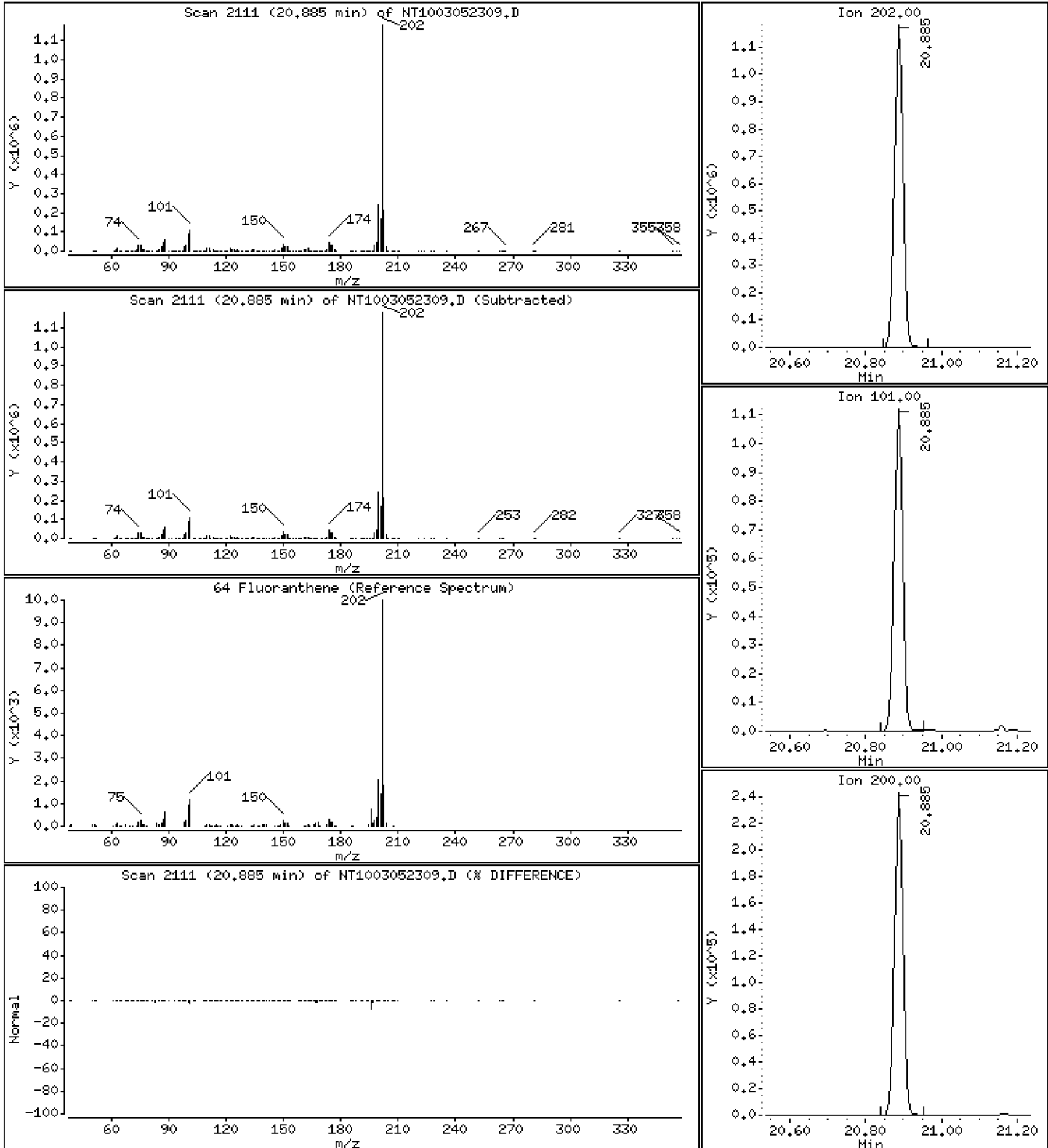
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,843 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

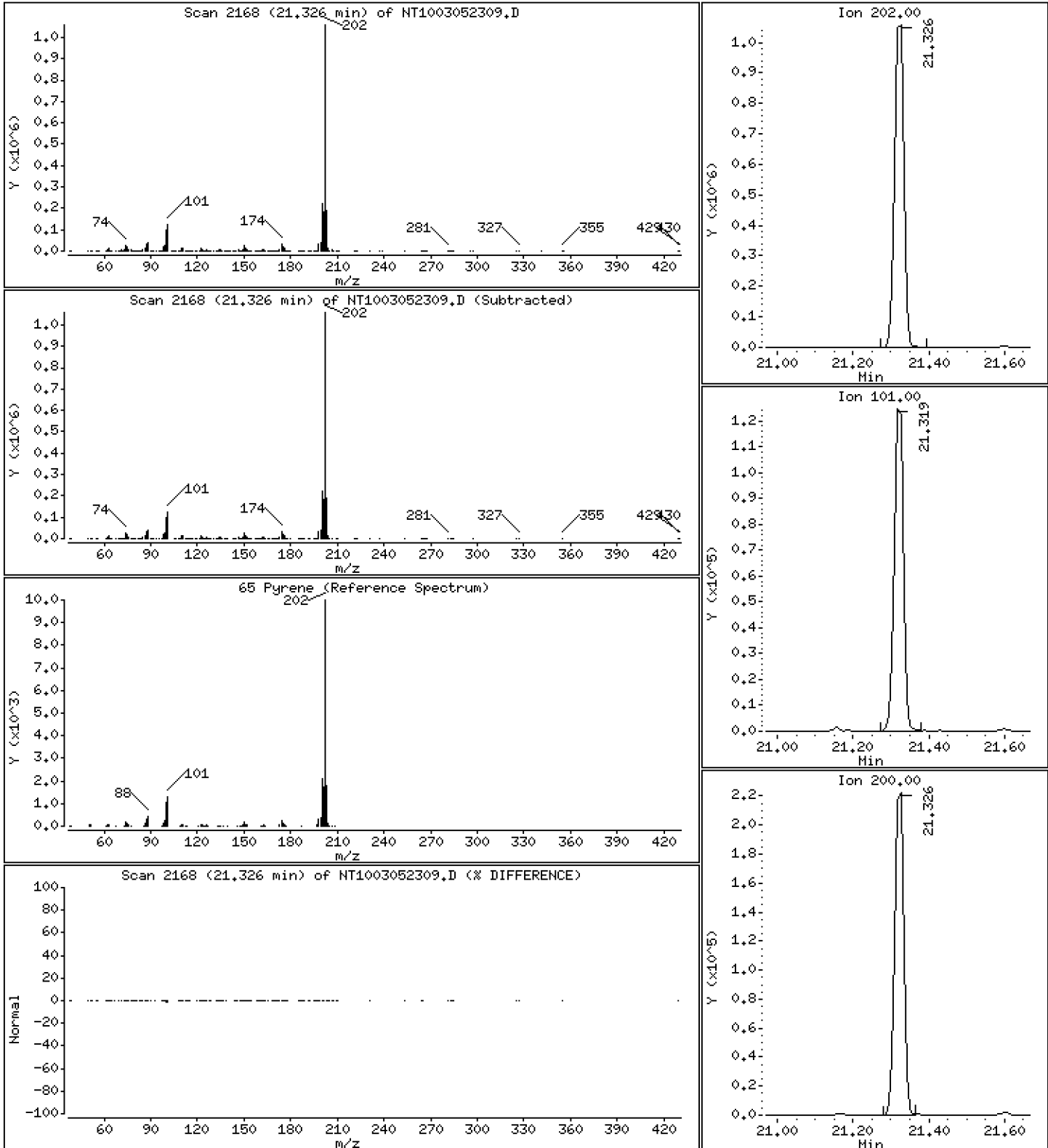
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,647 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

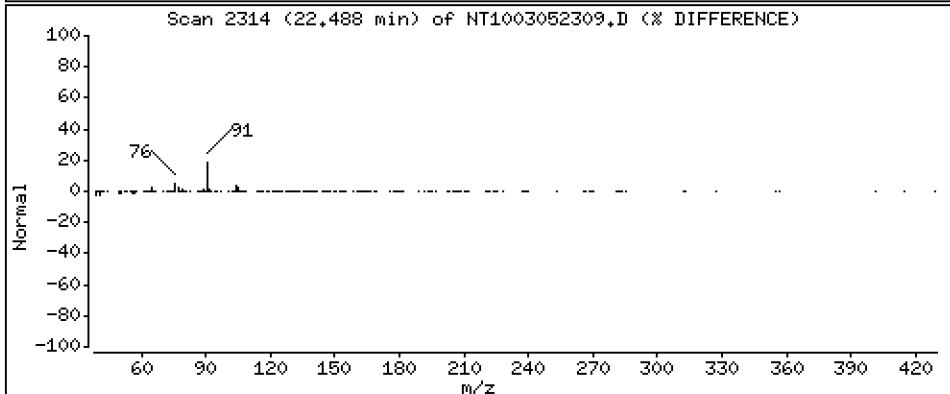
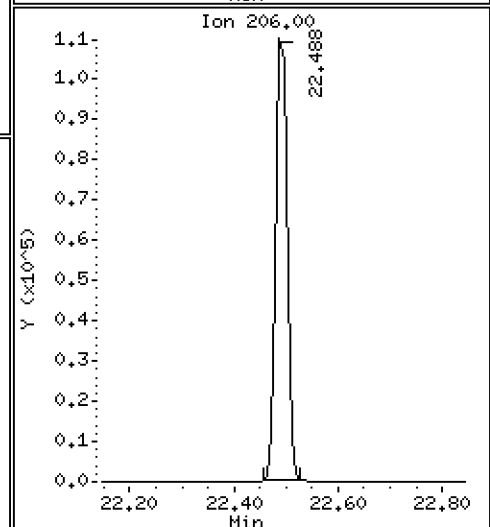
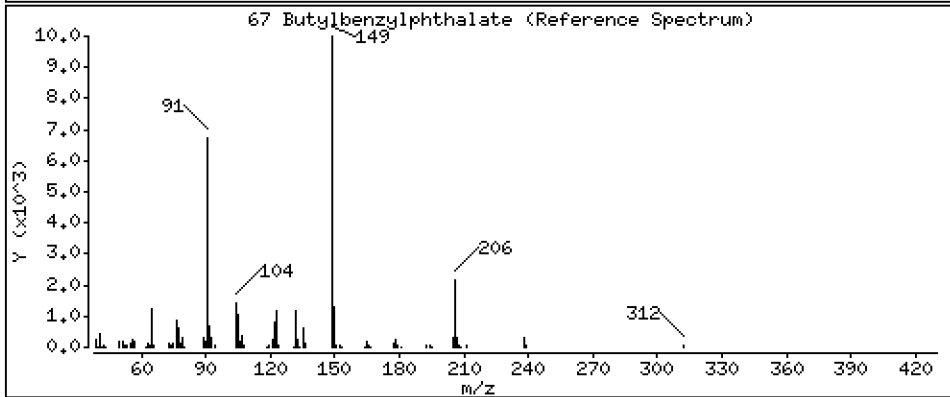
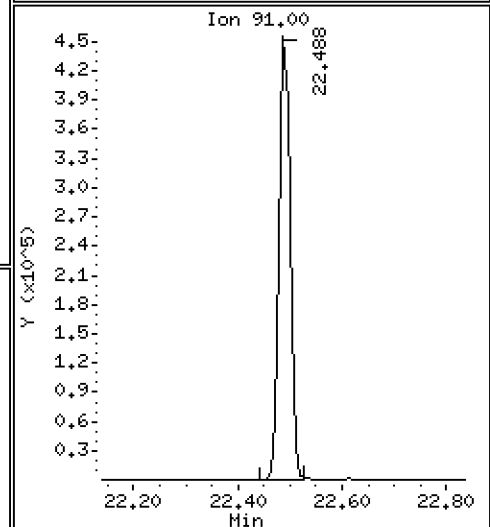
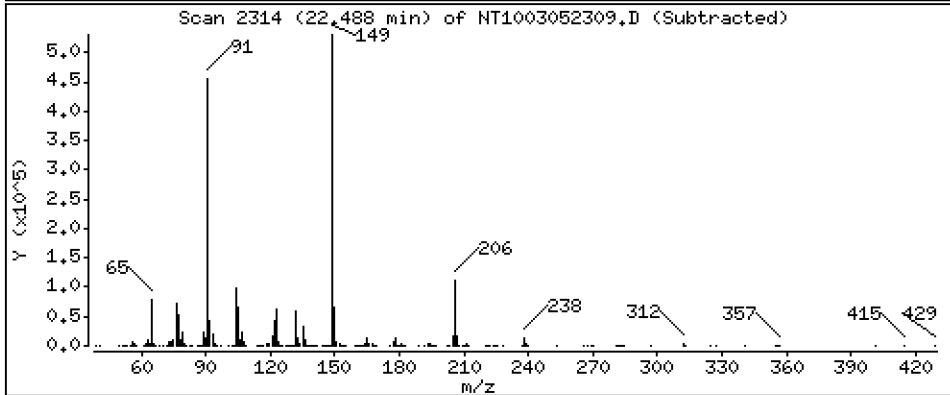
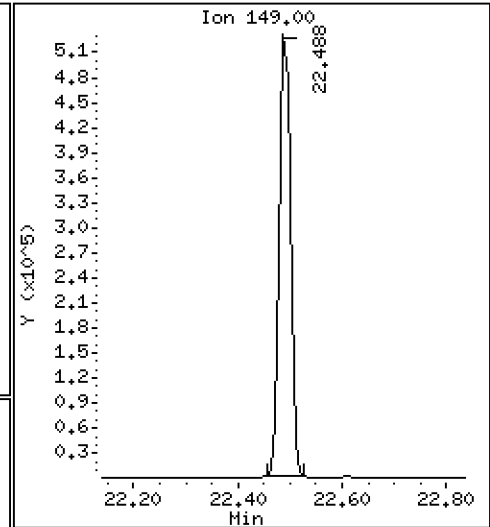
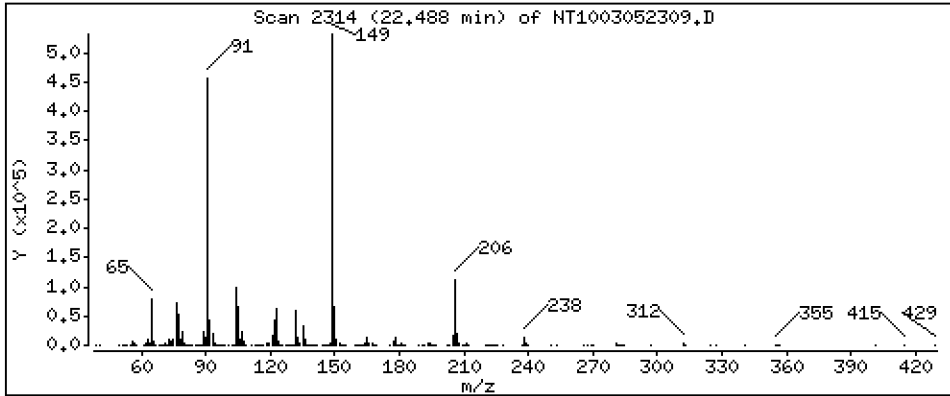
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,852 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

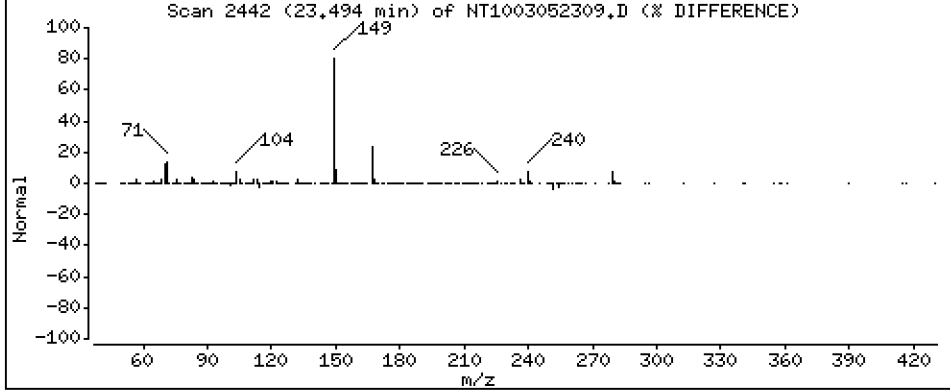
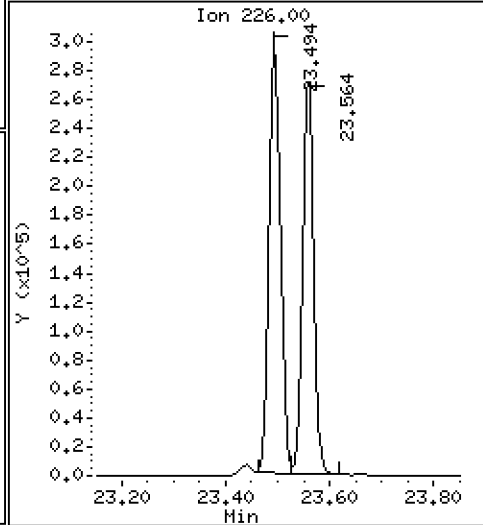
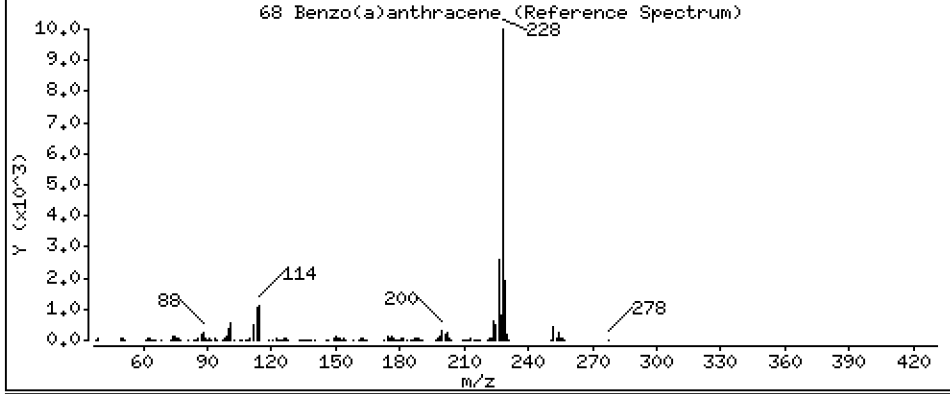
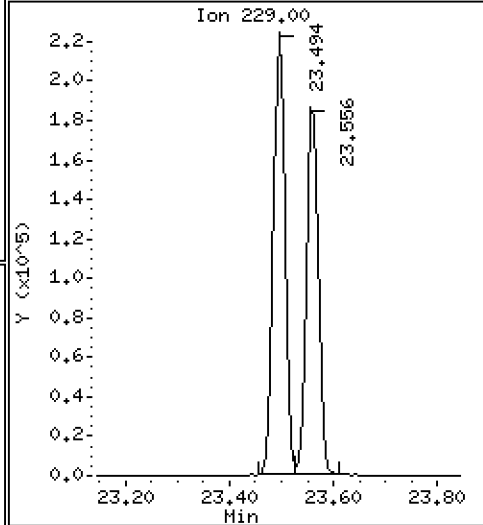
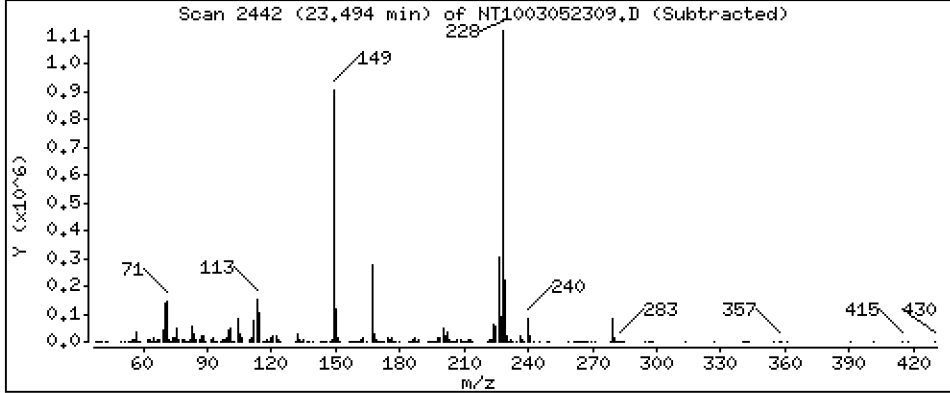
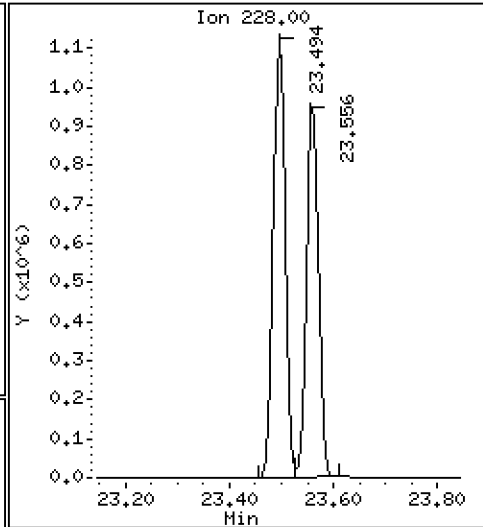
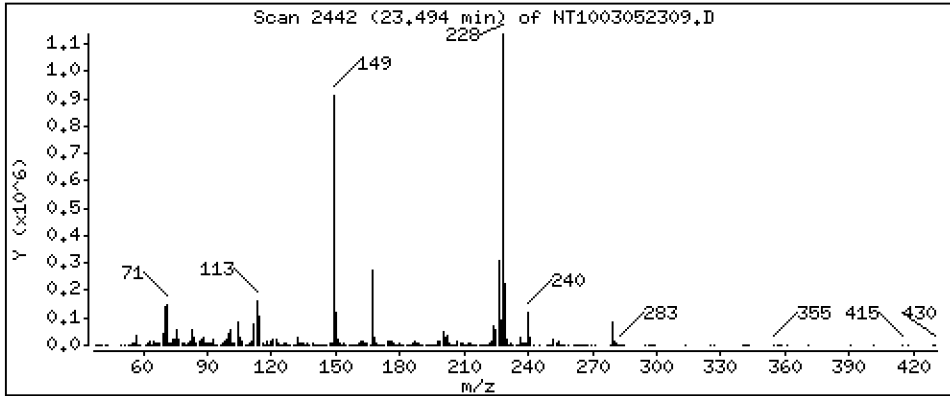
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,602 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

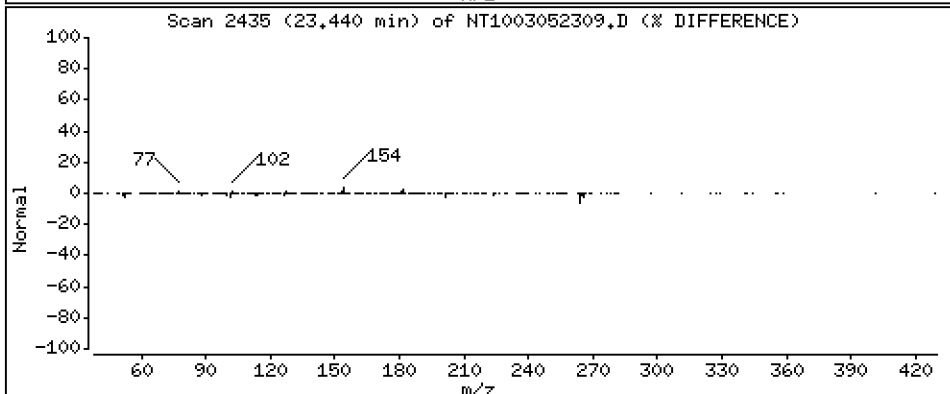
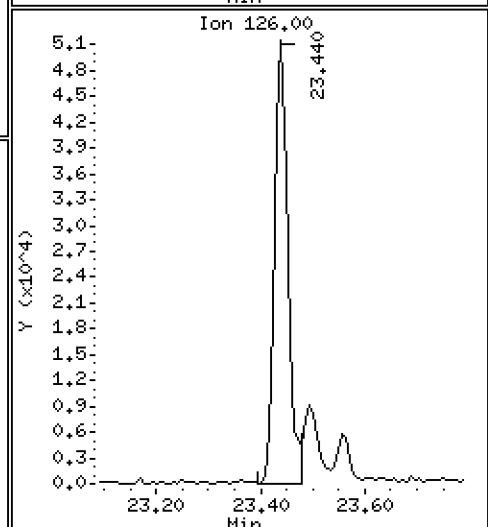
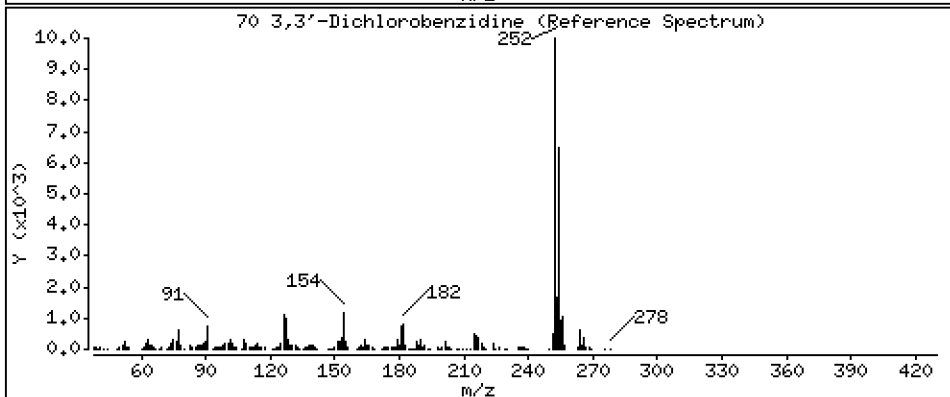
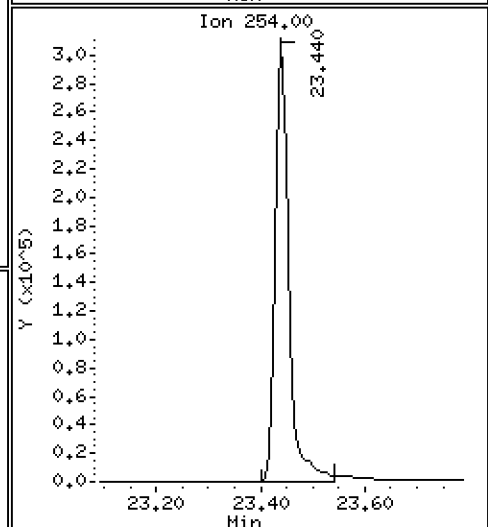
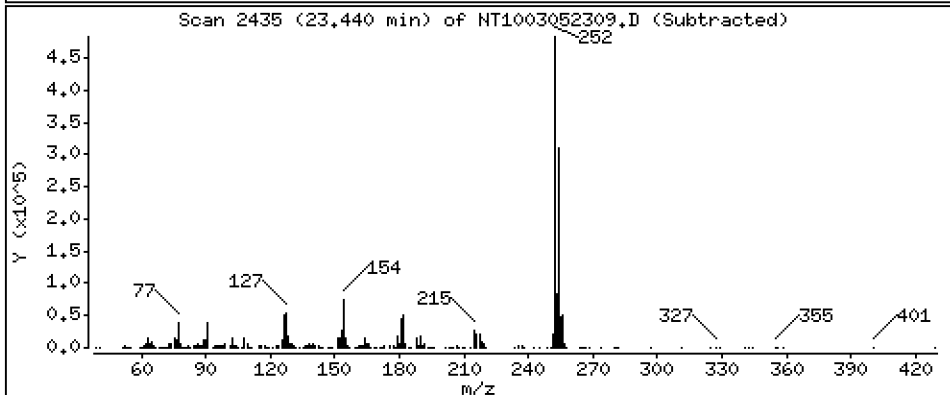
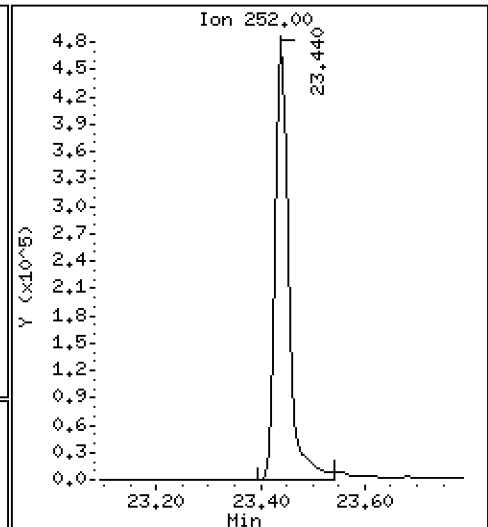
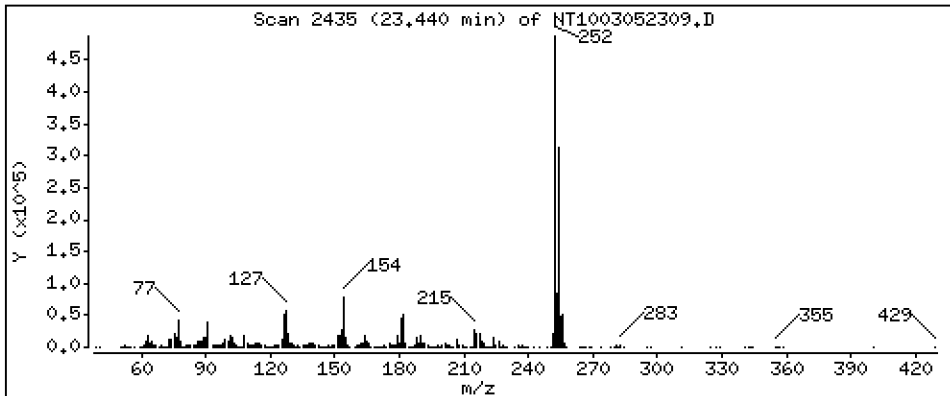
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 5,068 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

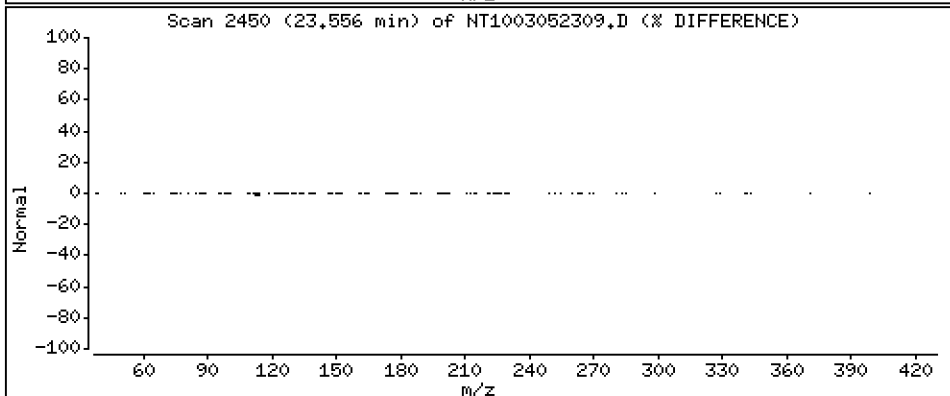
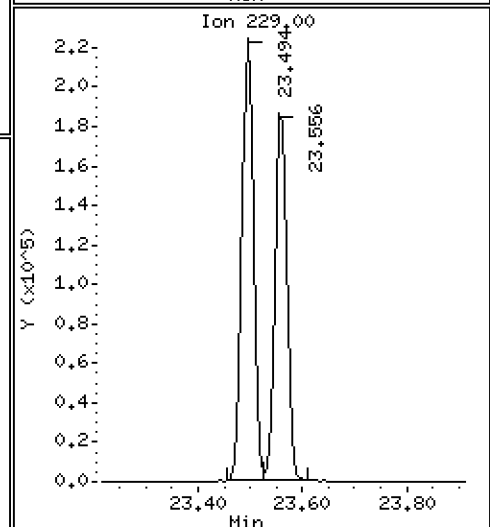
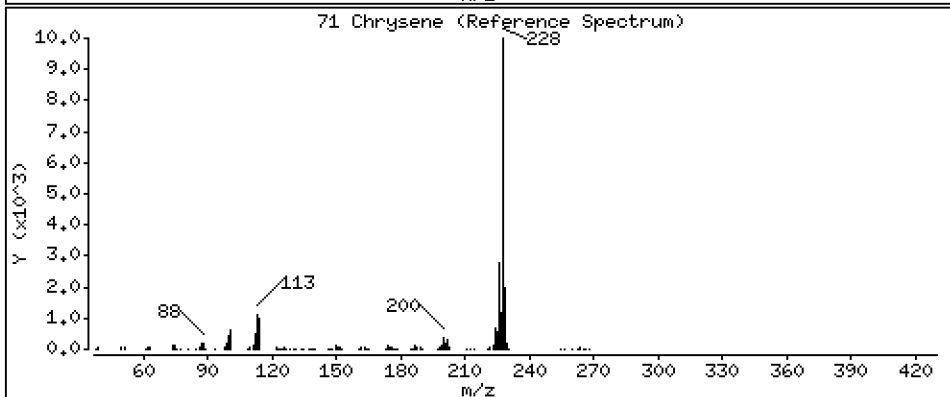
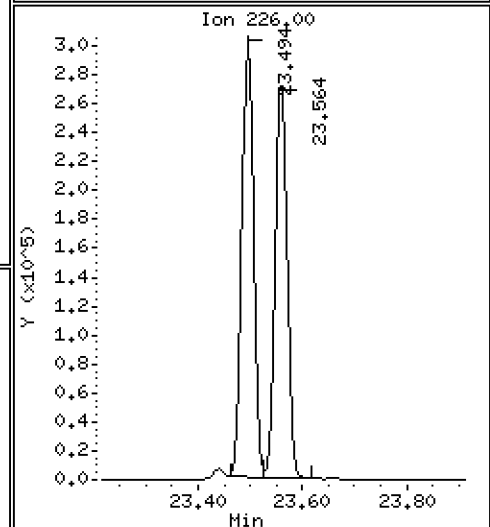
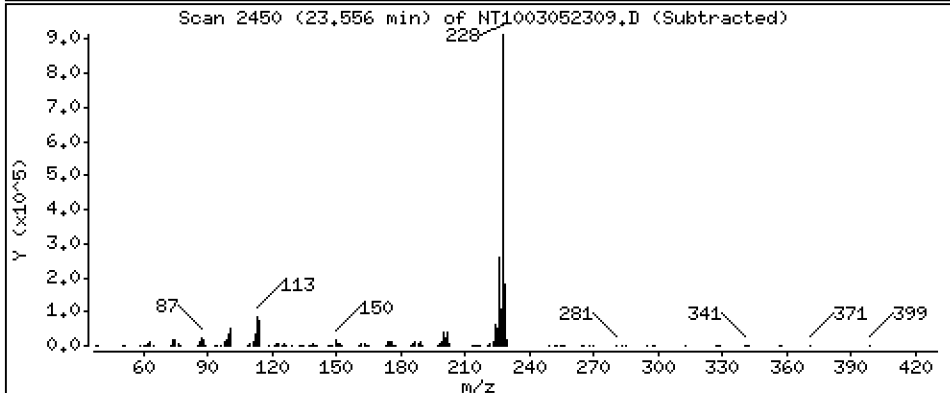
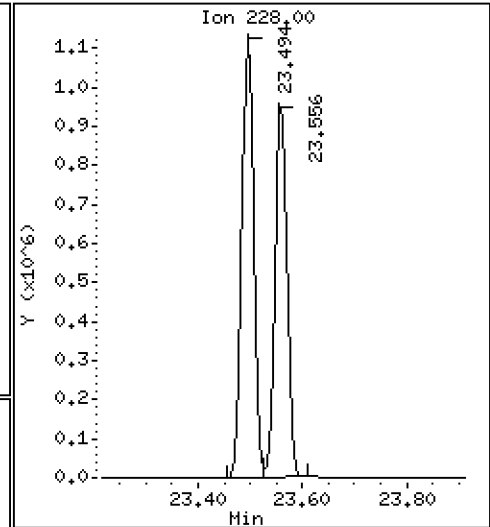
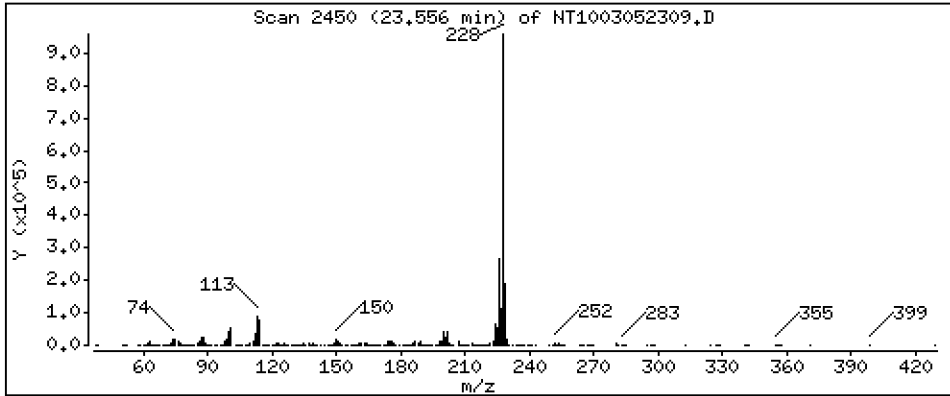
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,888 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

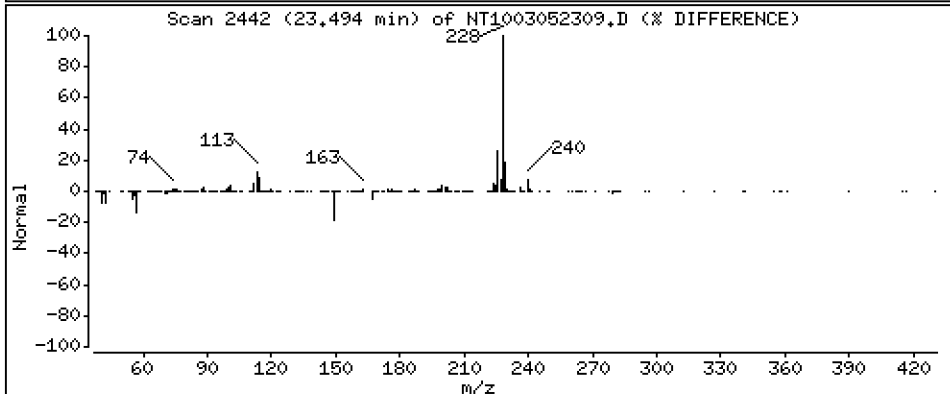
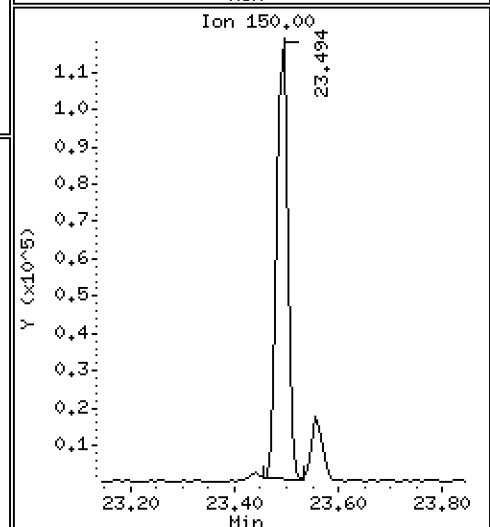
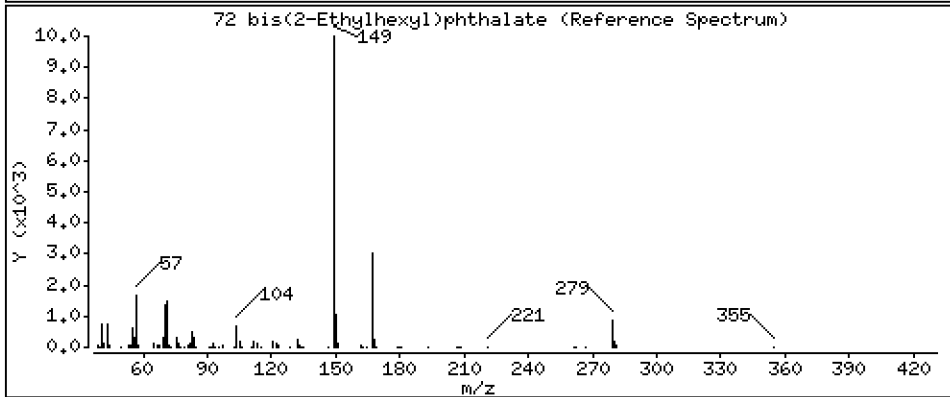
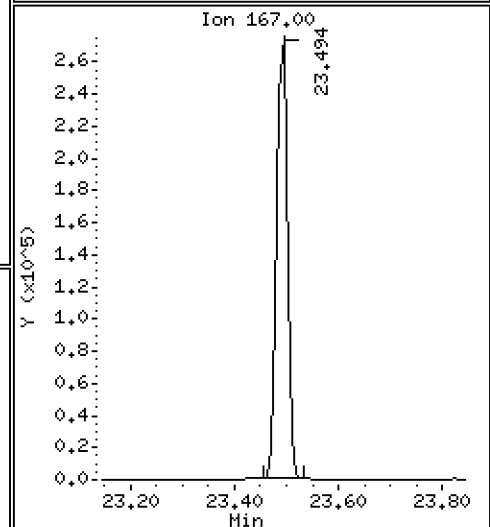
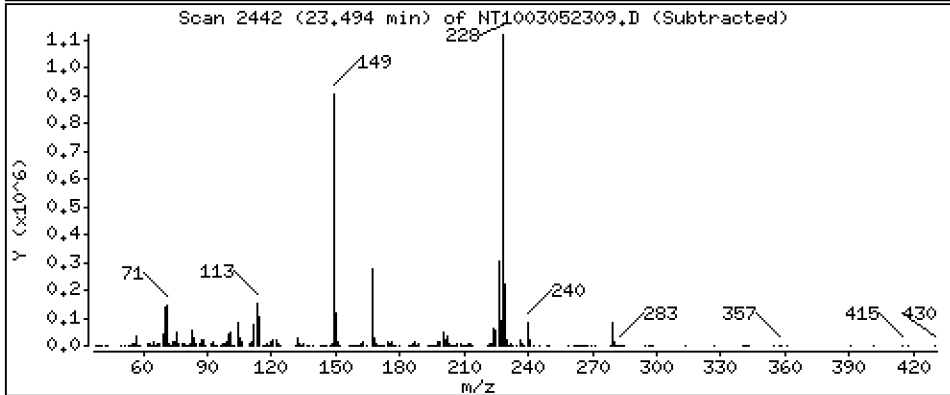
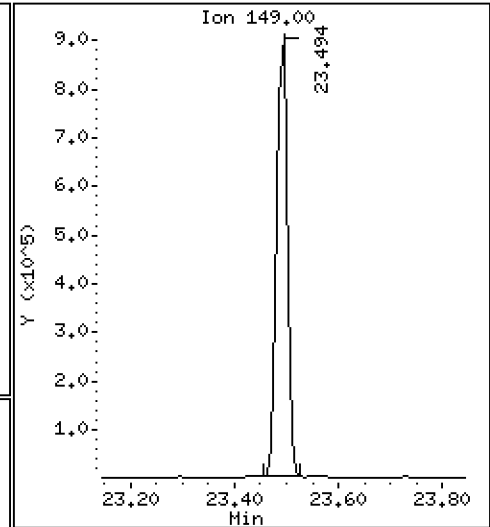
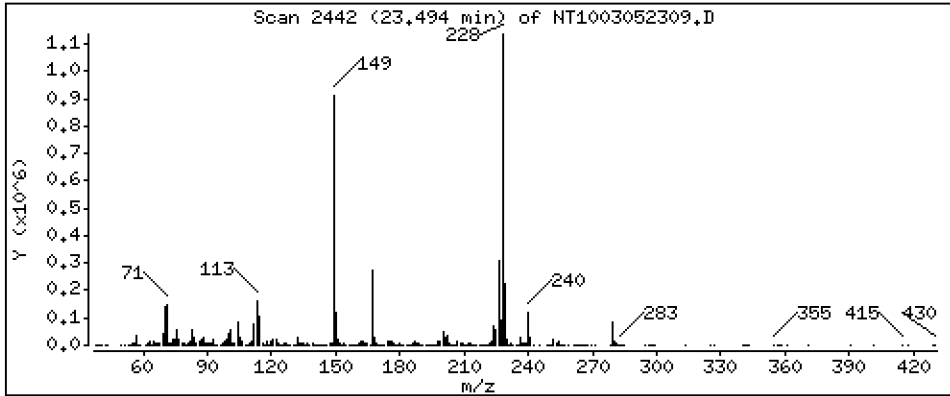
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 5,117 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

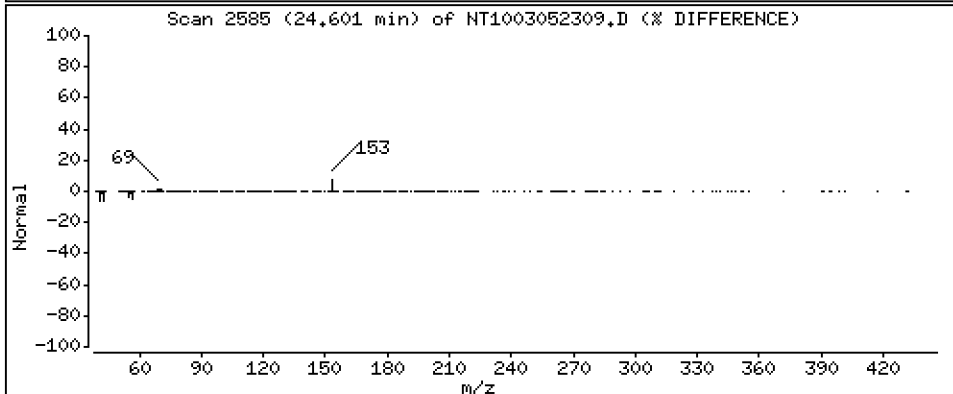
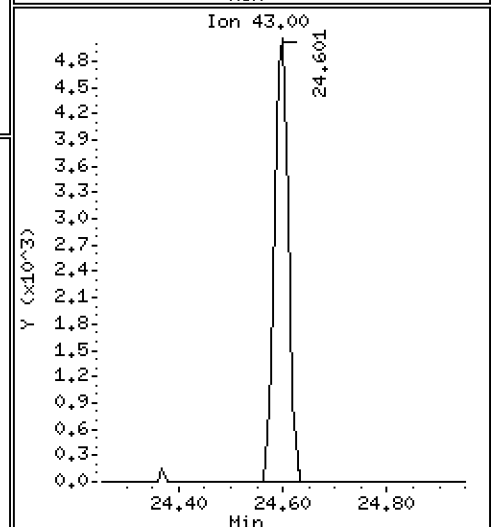
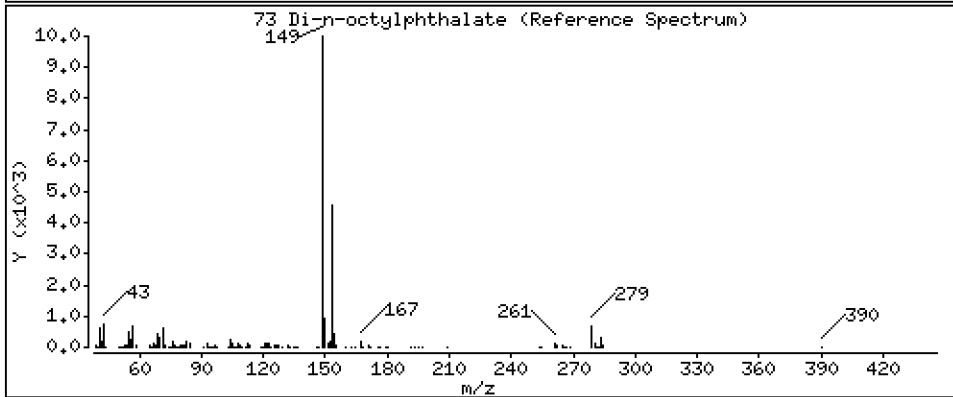
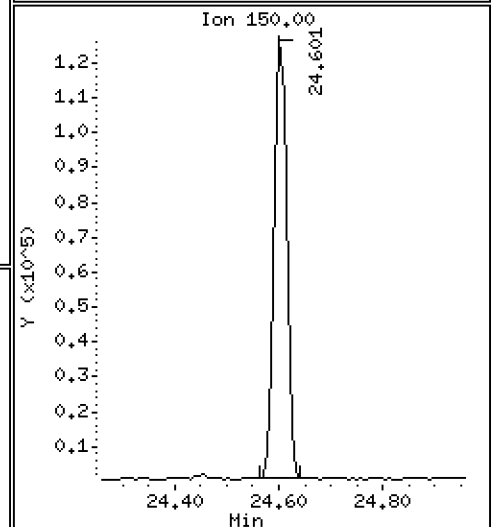
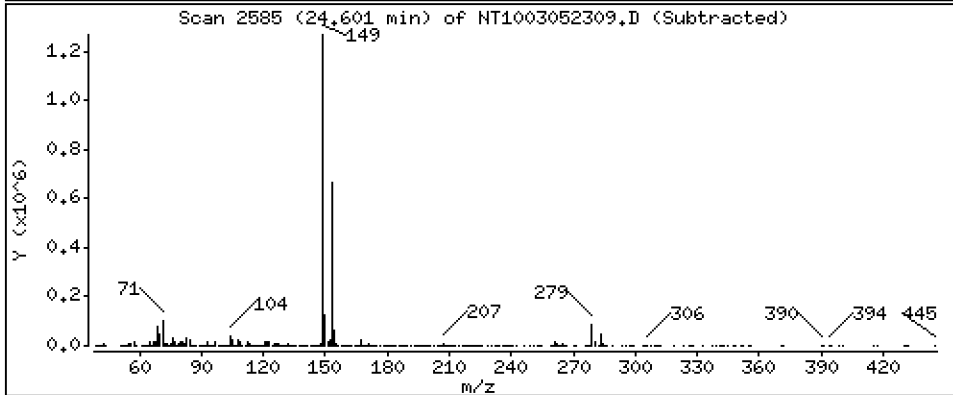
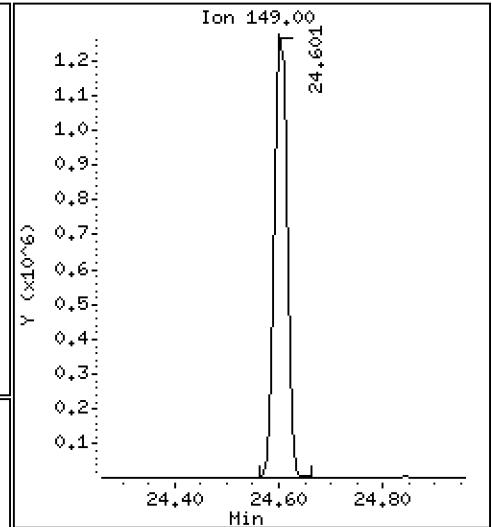
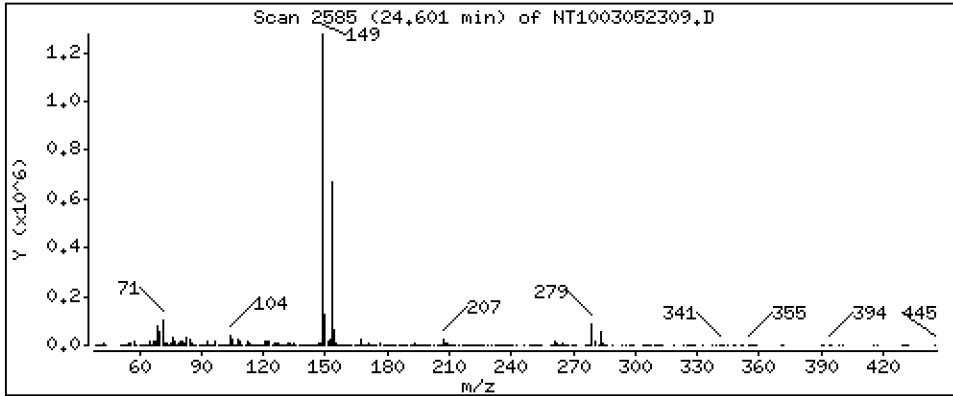
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,667 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

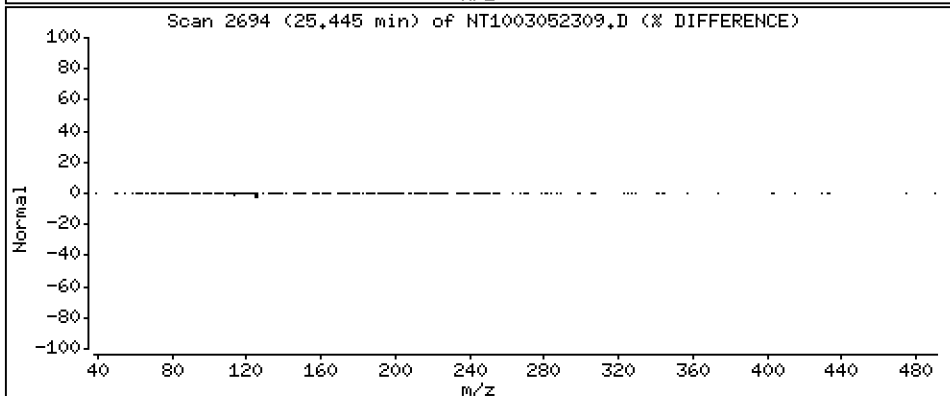
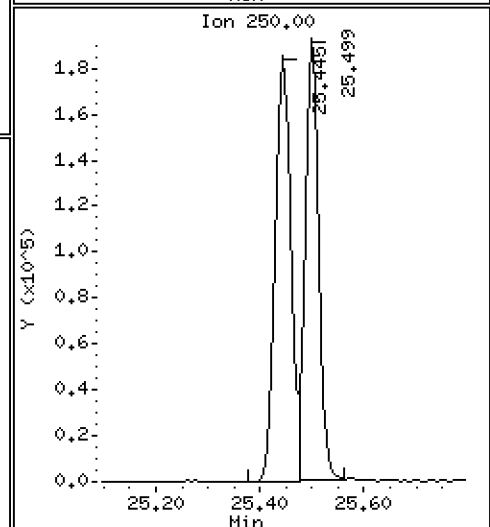
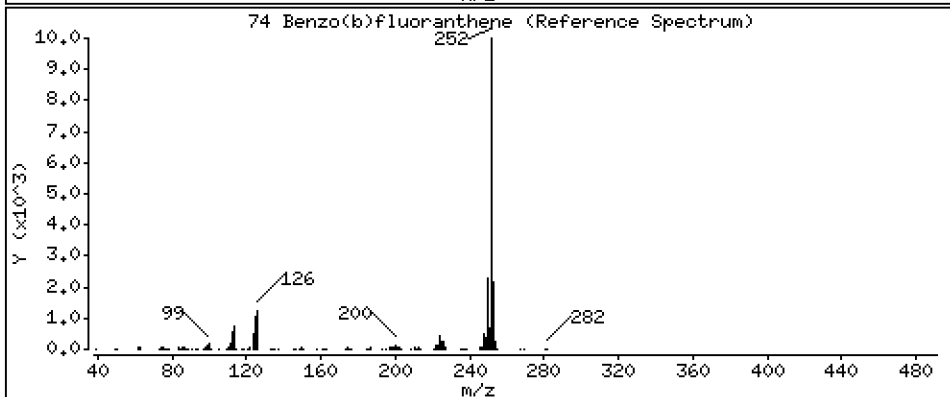
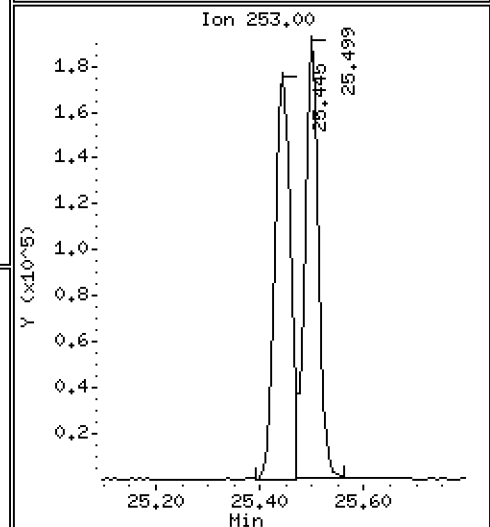
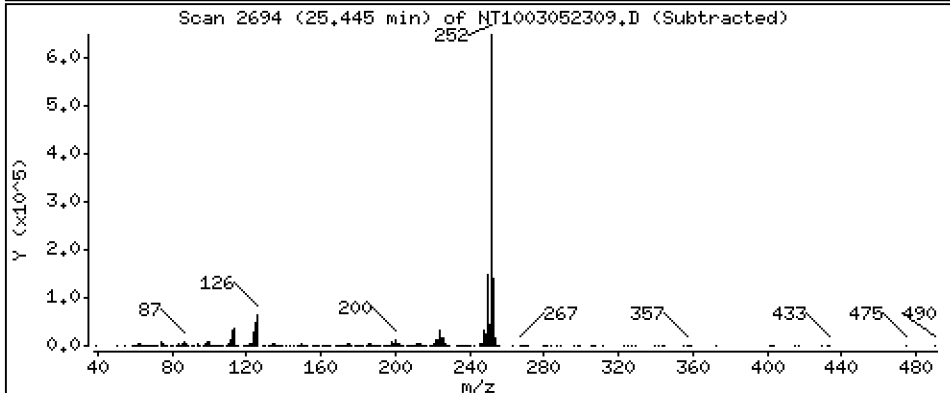
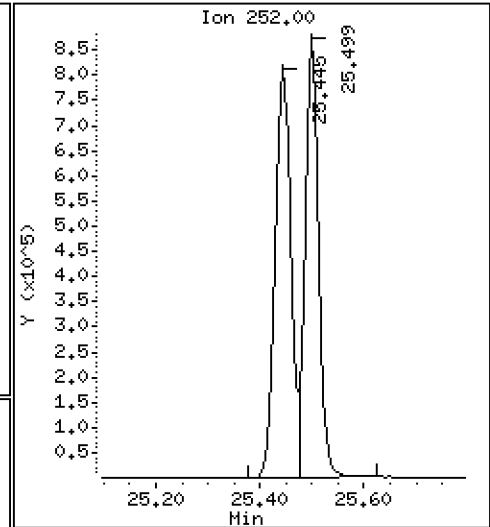
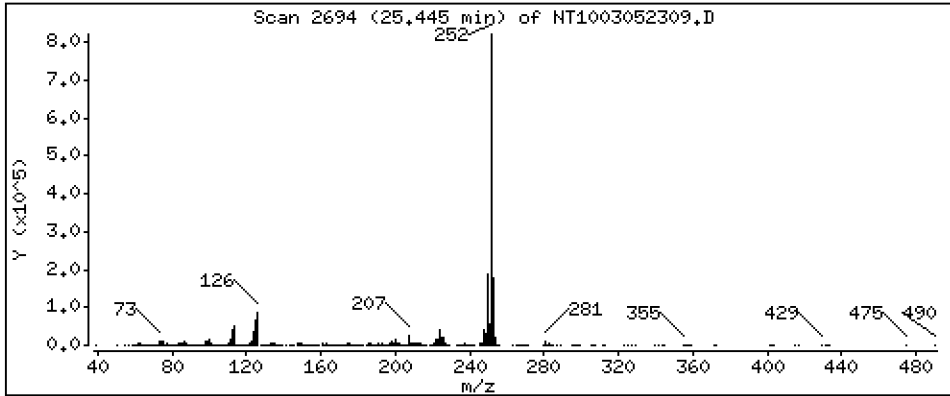
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,599 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

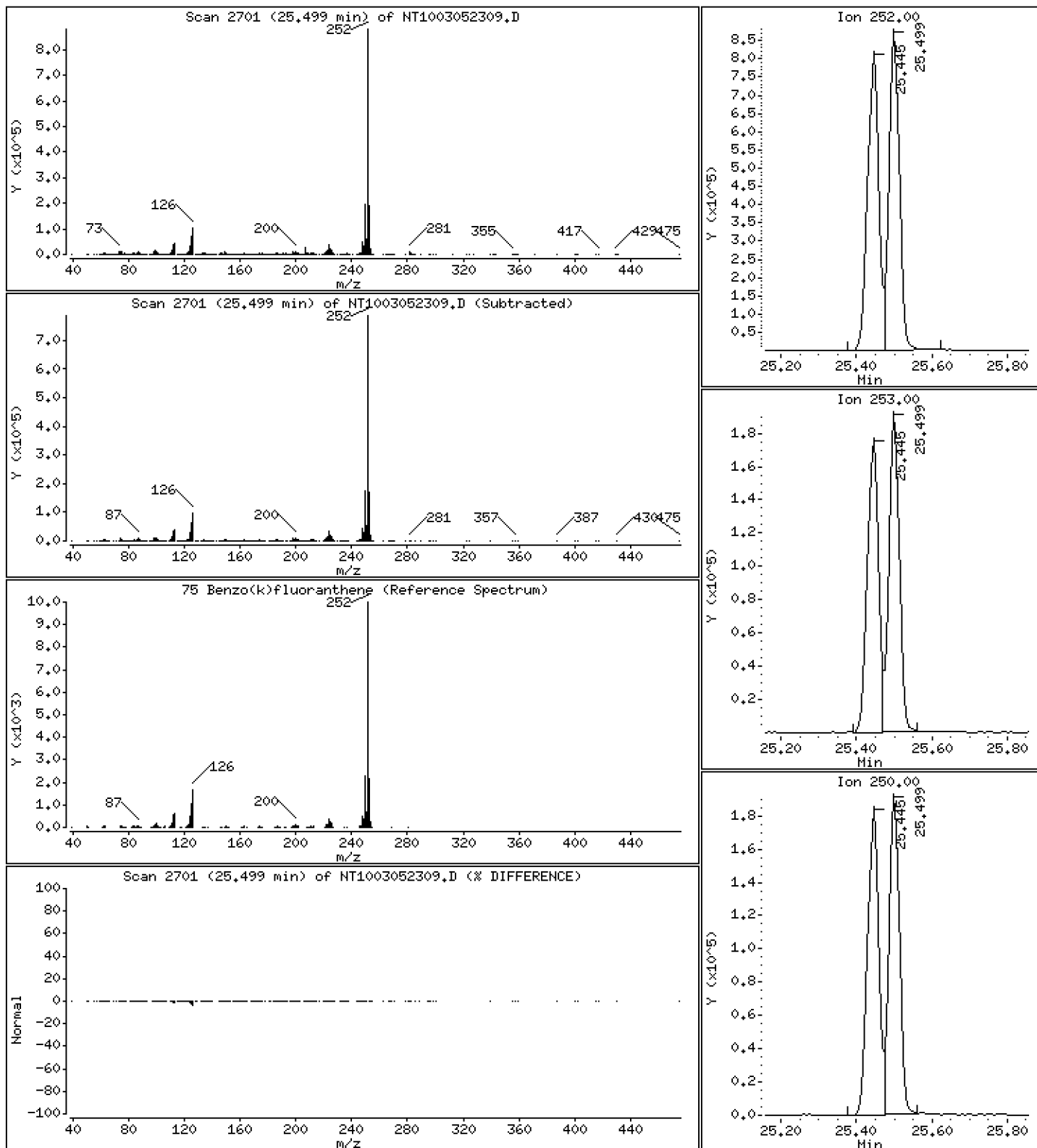
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,621 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

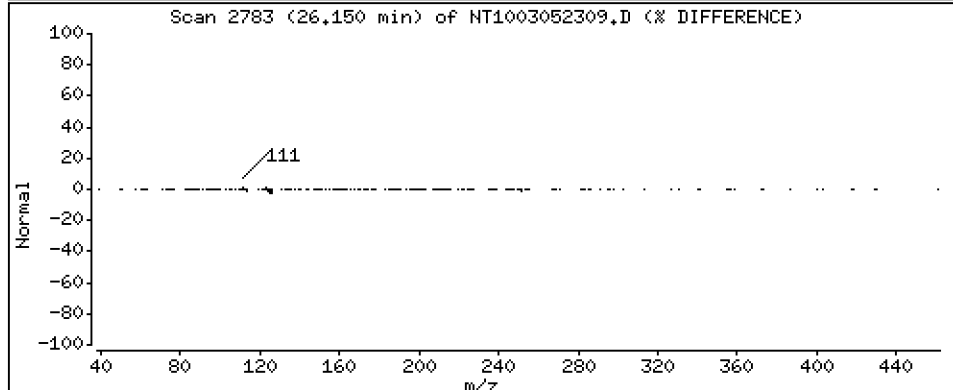
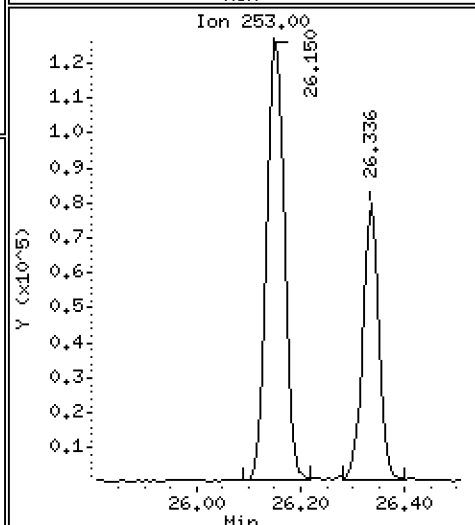
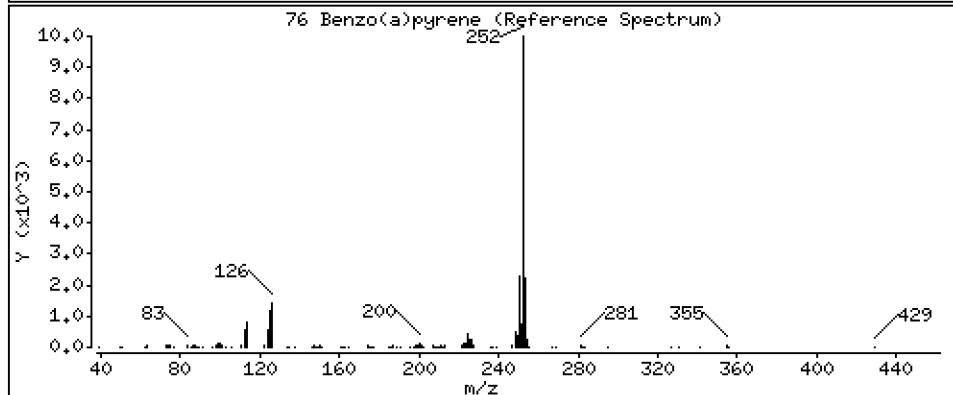
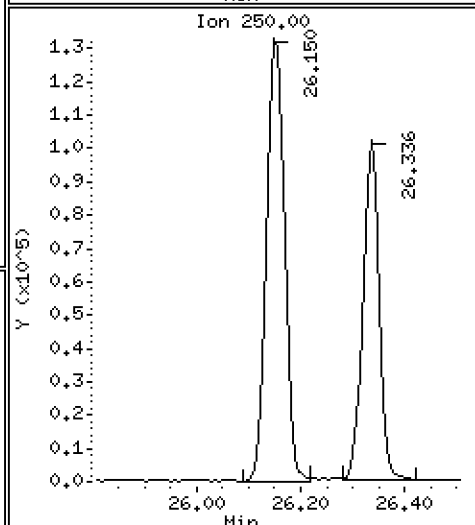
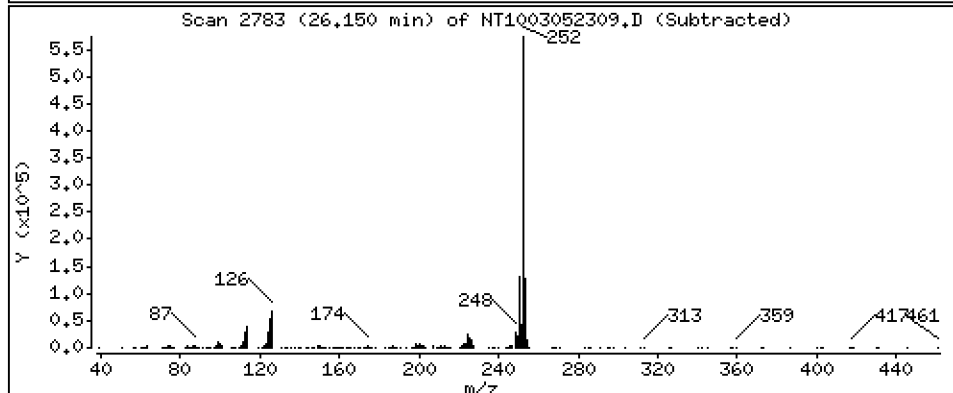
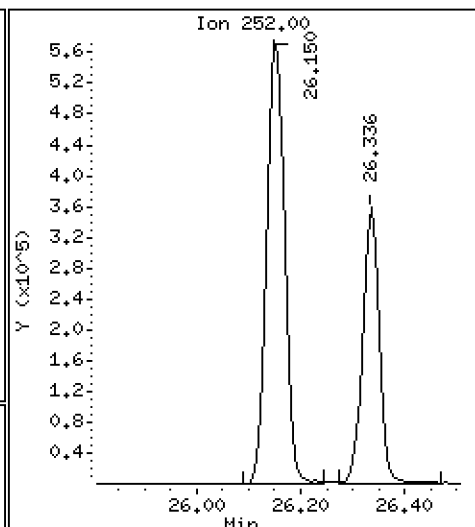
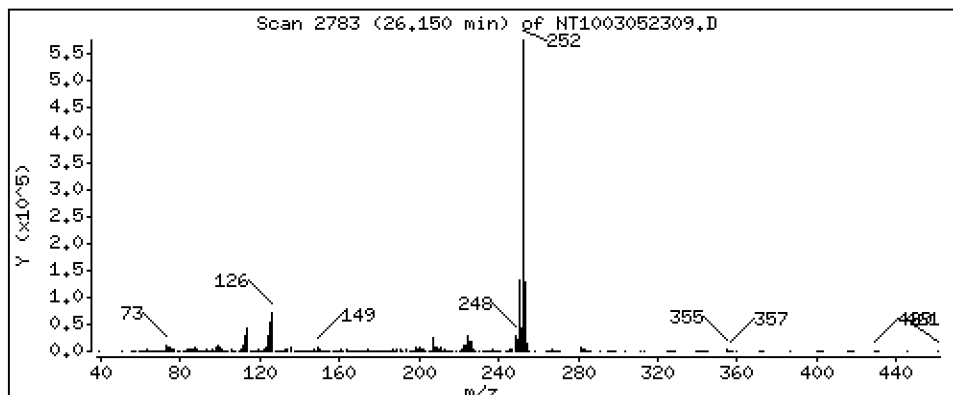
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,138 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

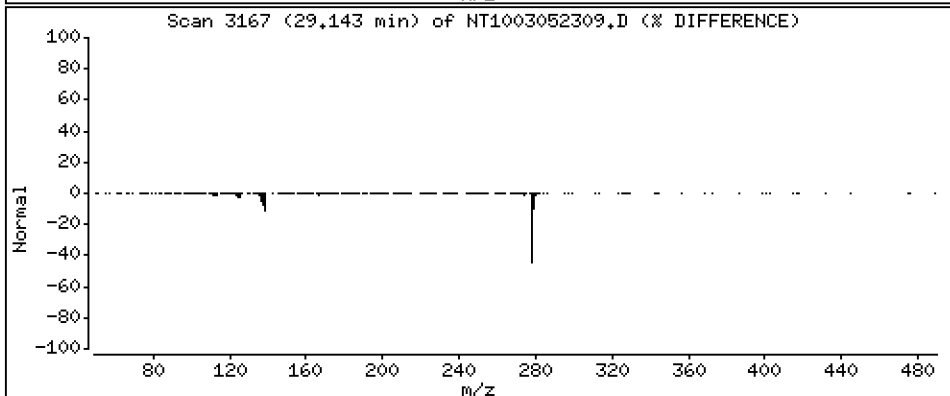
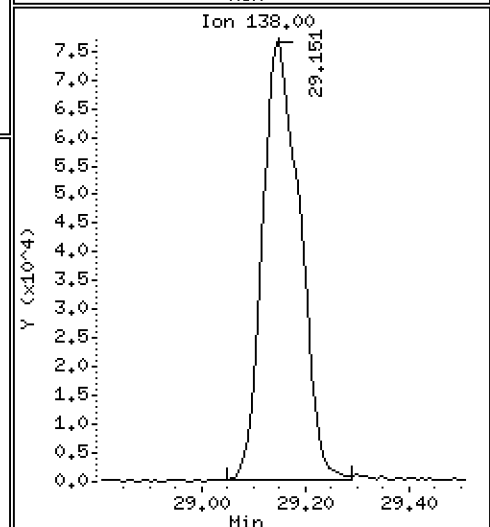
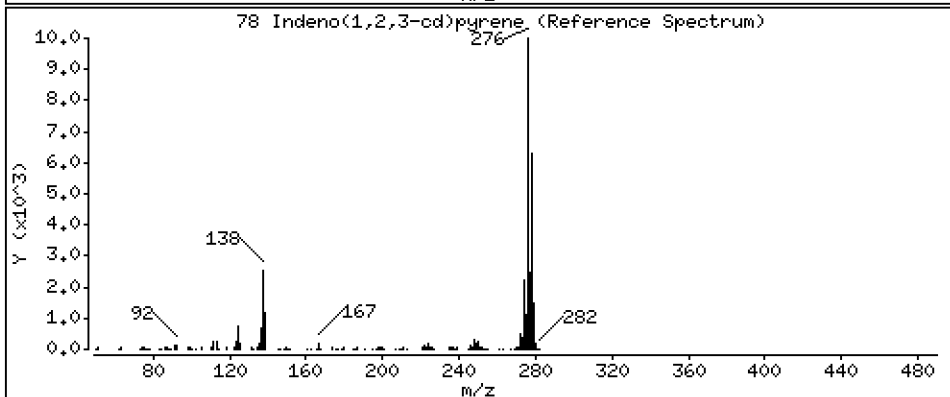
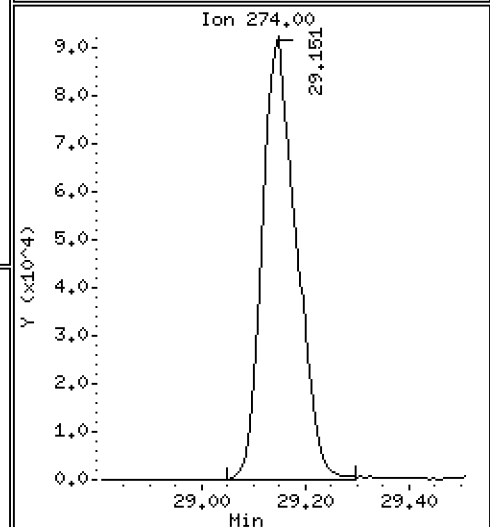
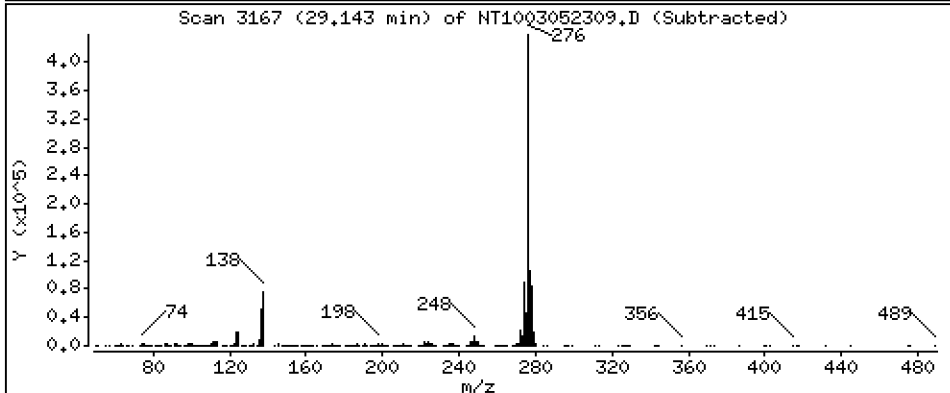
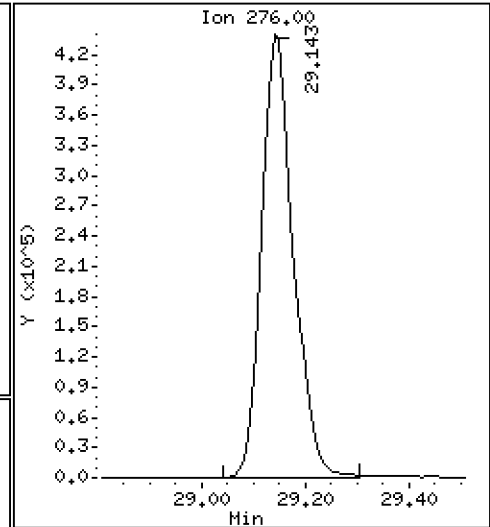
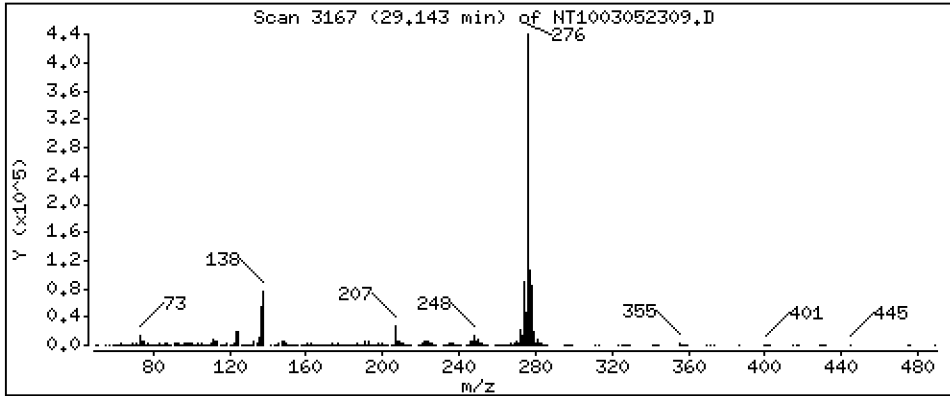
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,879 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

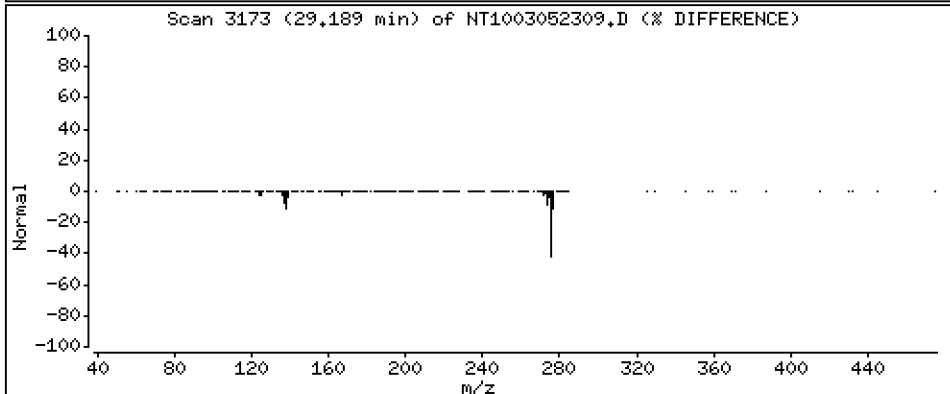
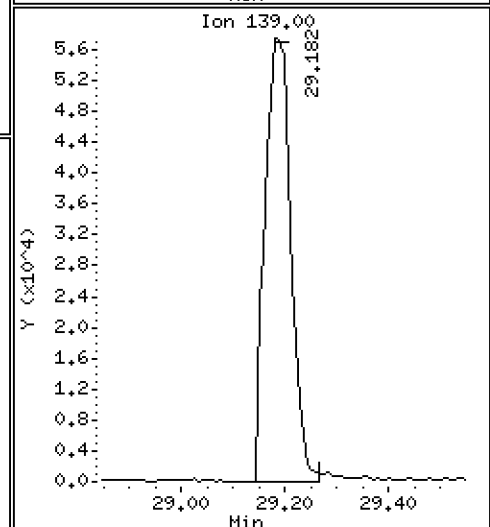
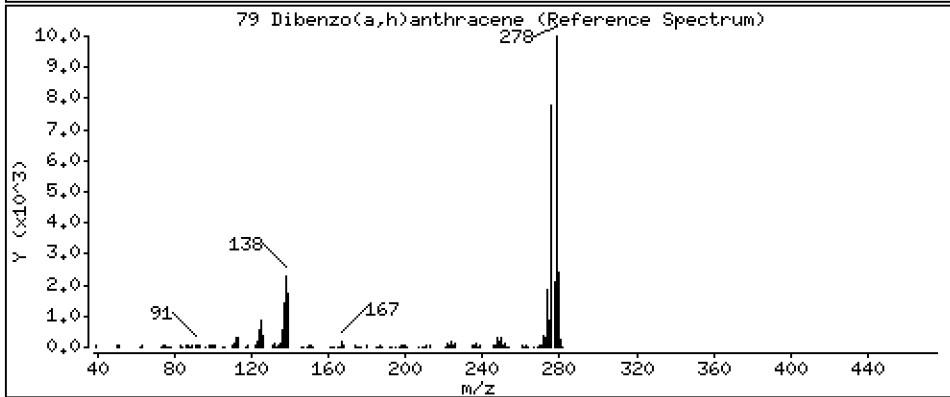
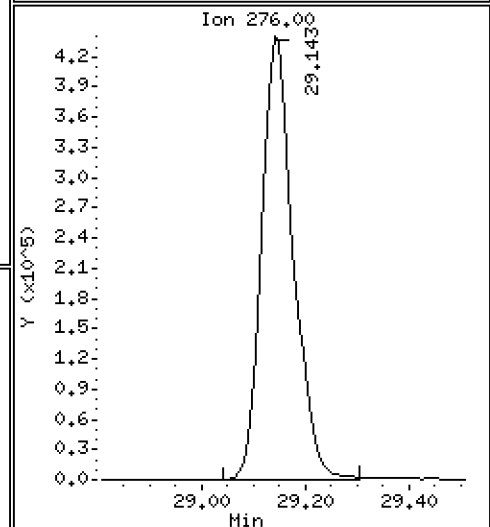
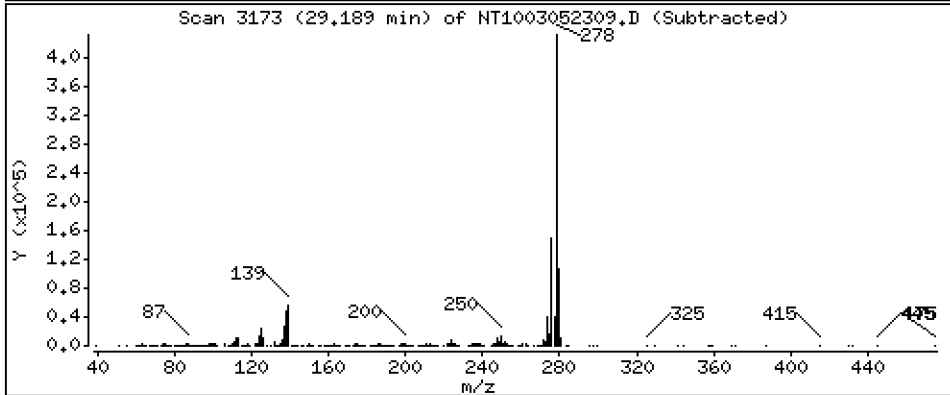
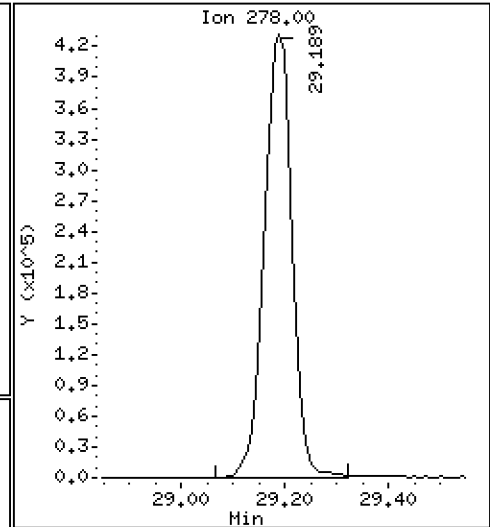
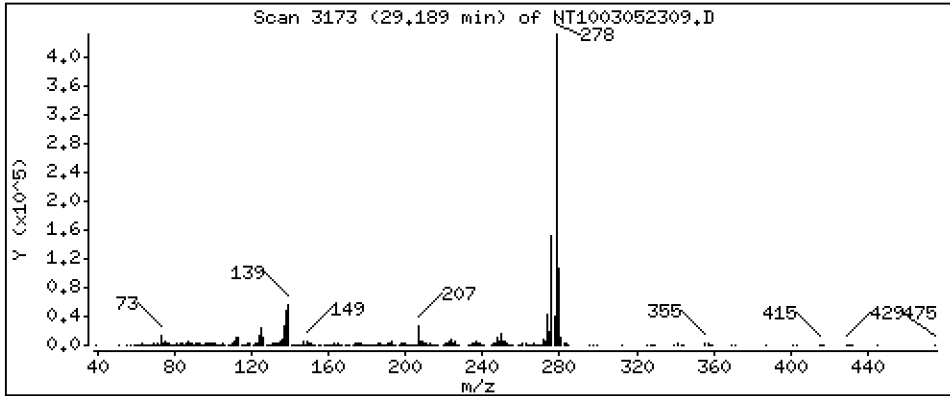
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,405 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

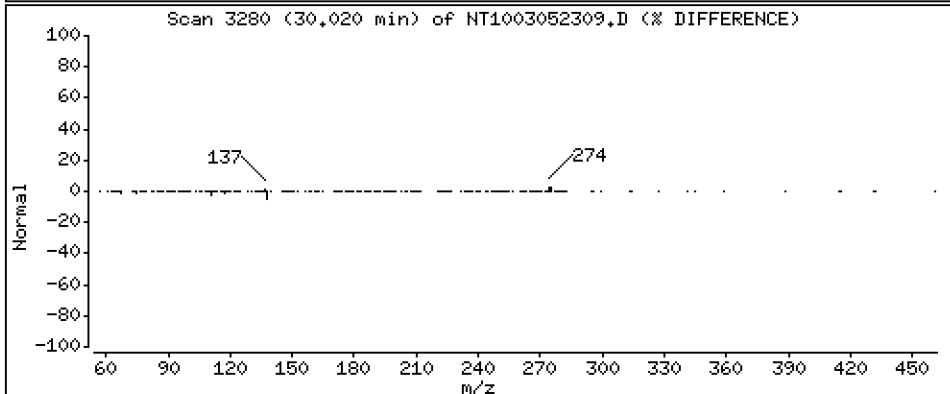
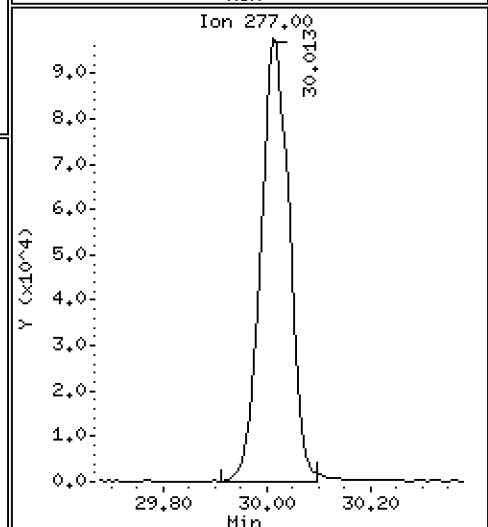
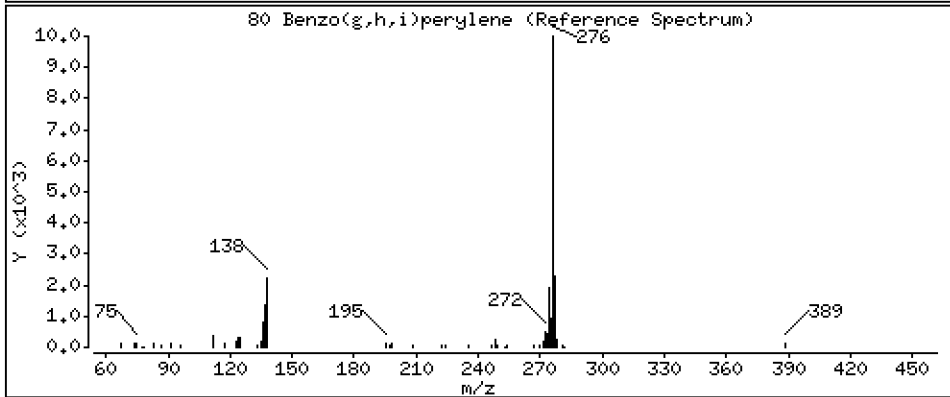
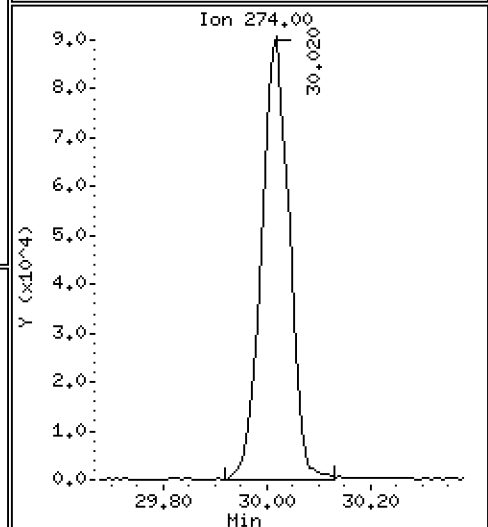
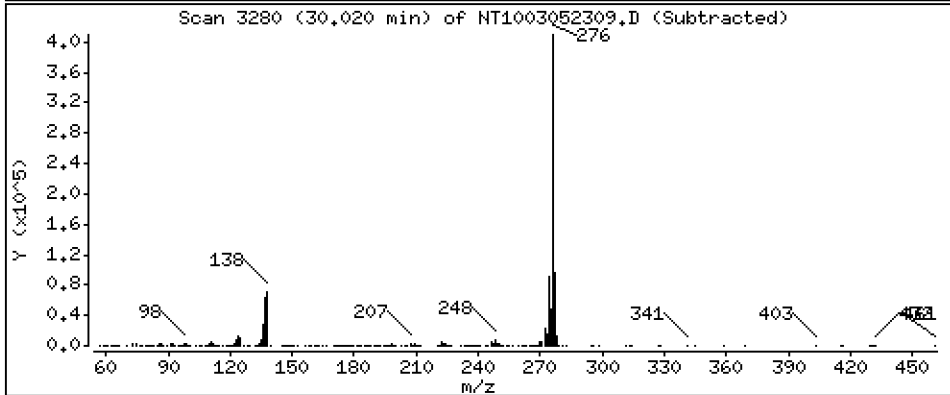
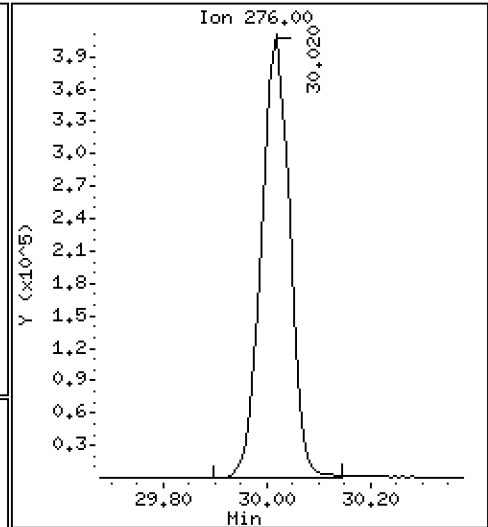
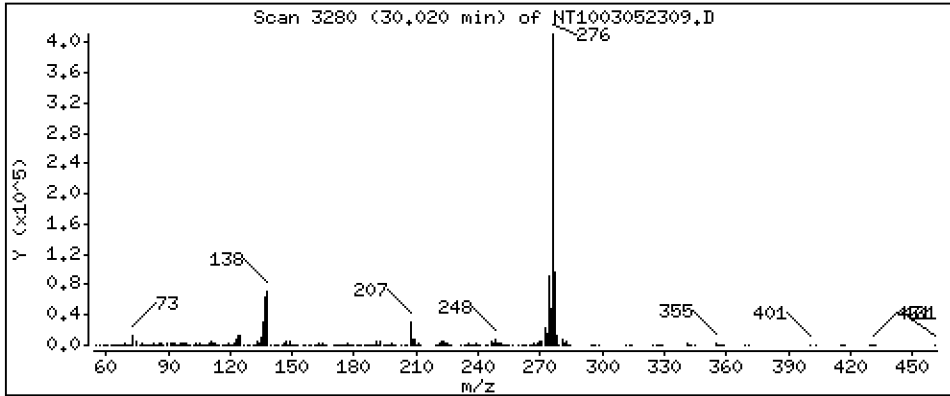
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 5,148 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

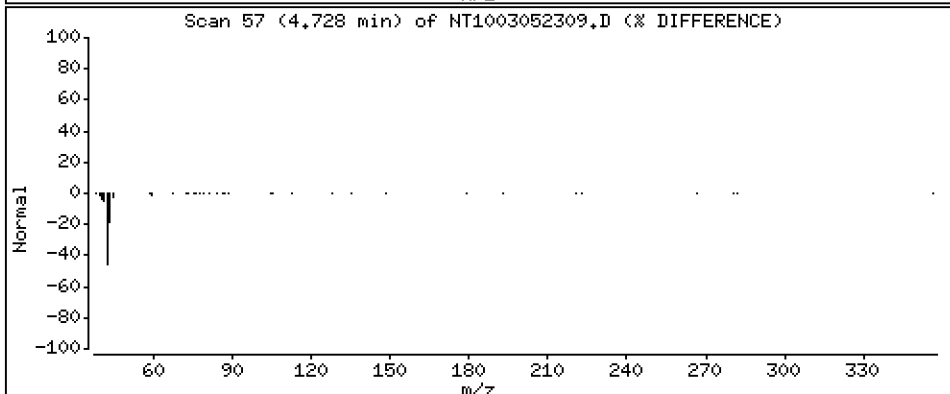
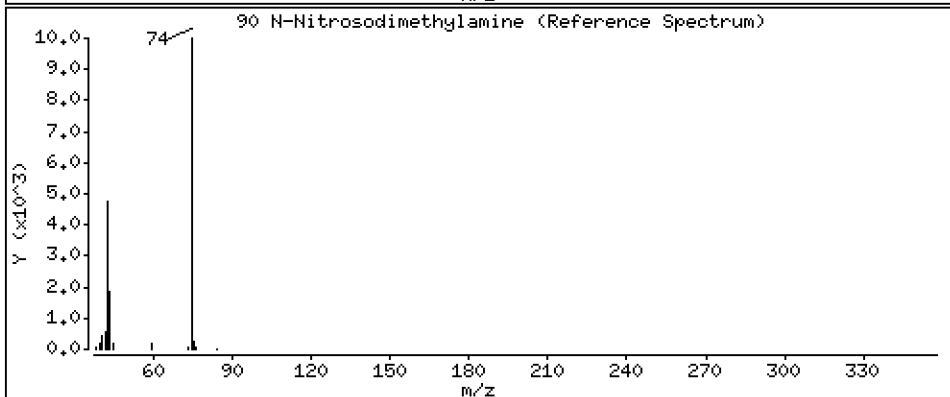
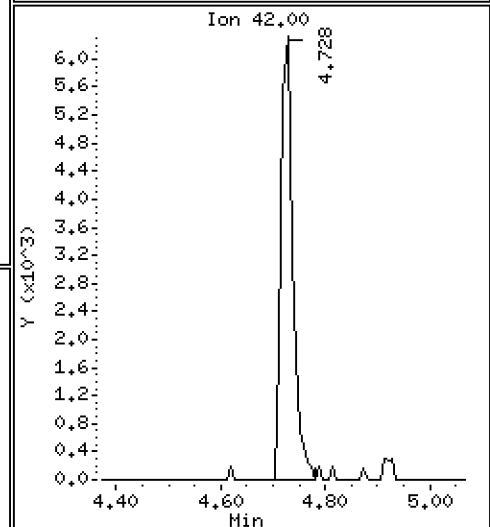
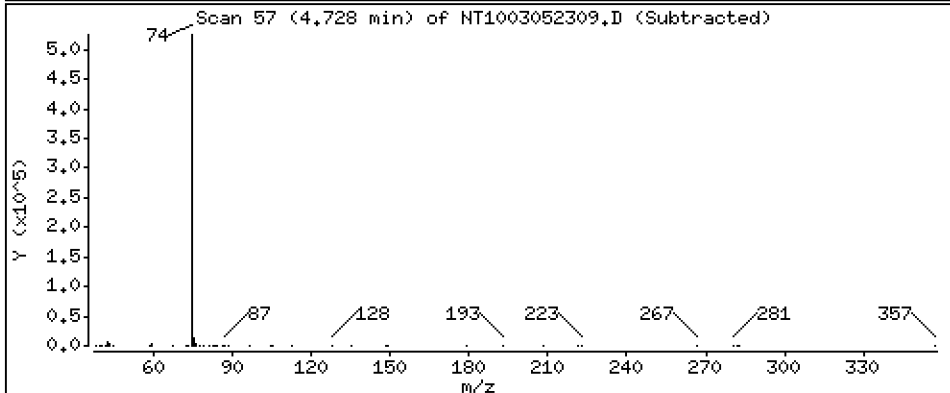
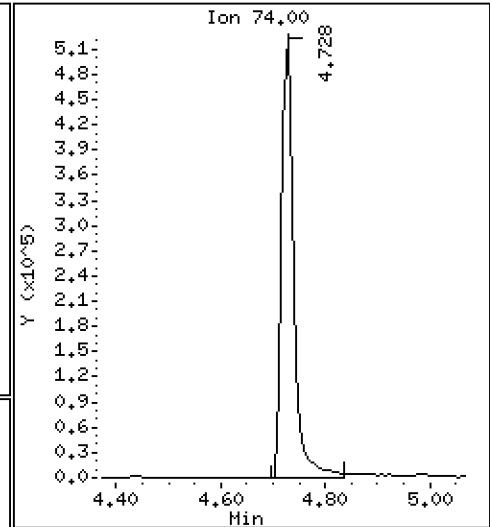
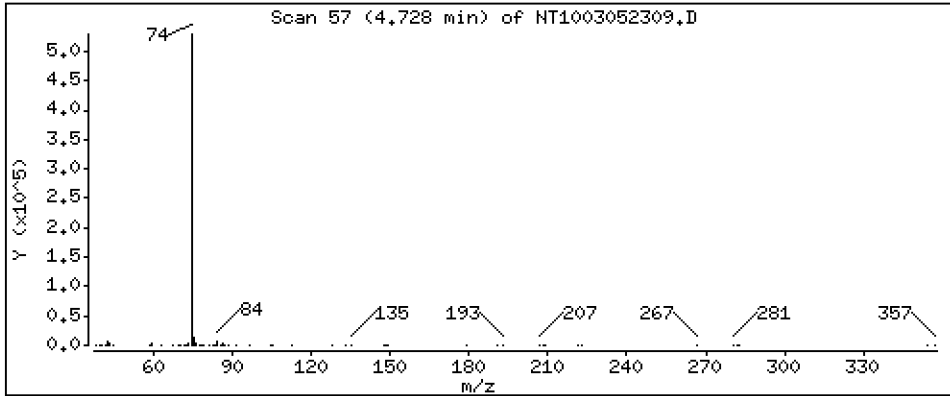
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 11,91 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

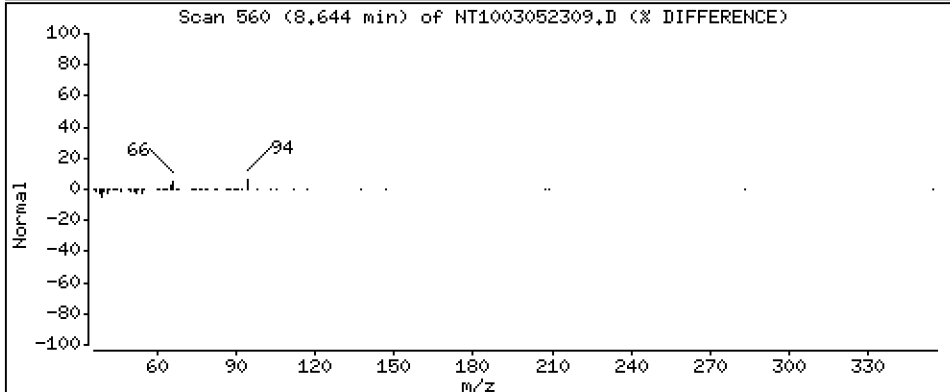
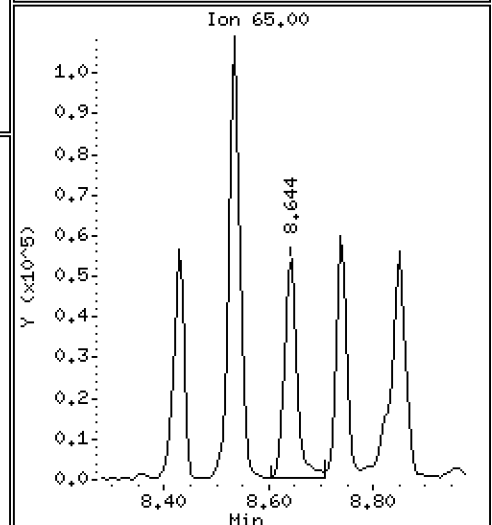
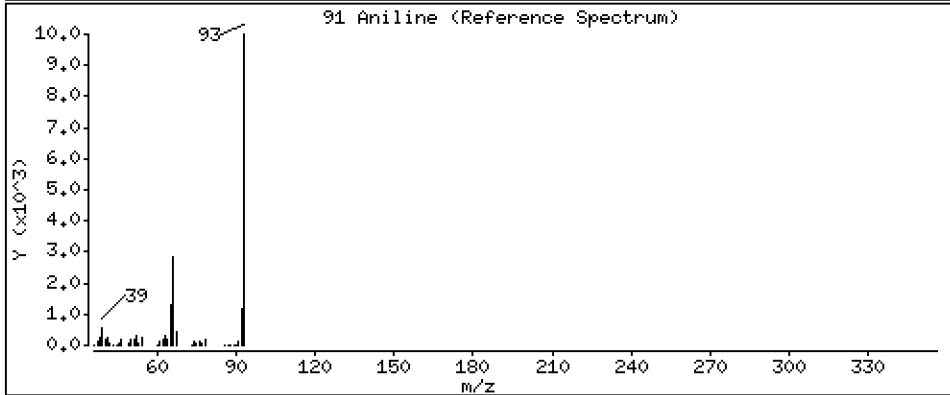
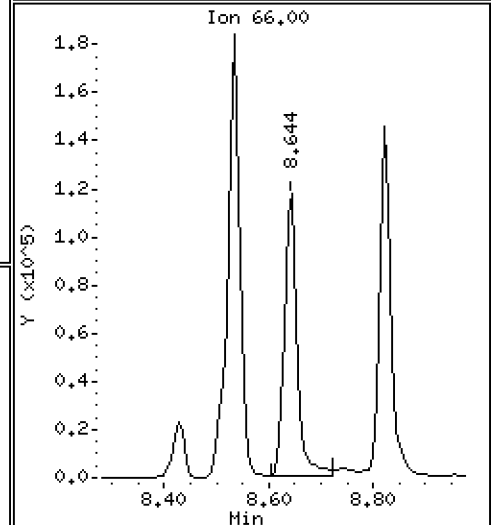
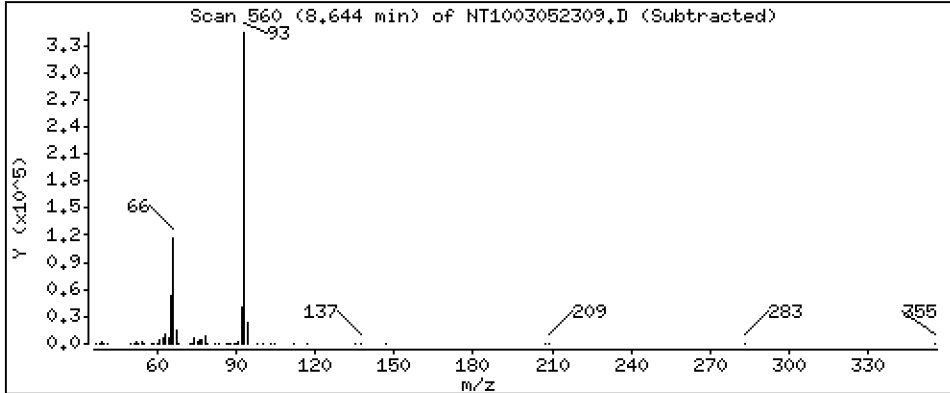
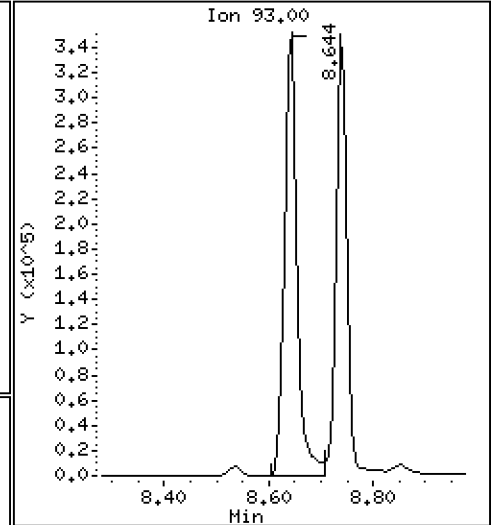
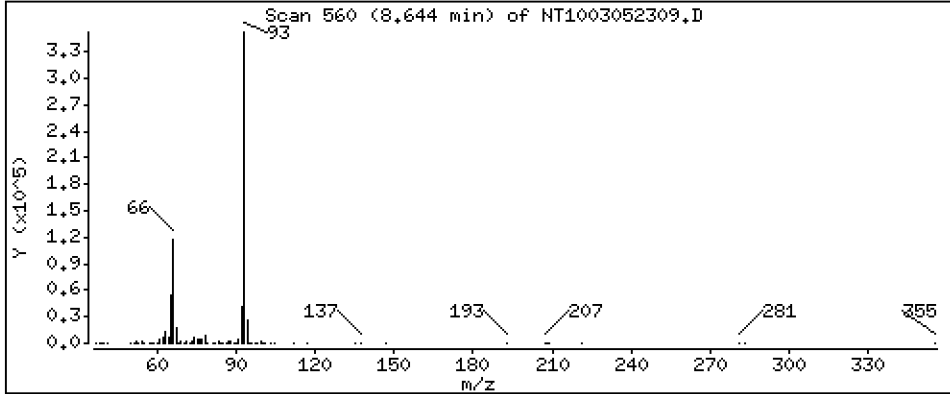
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 3,987 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

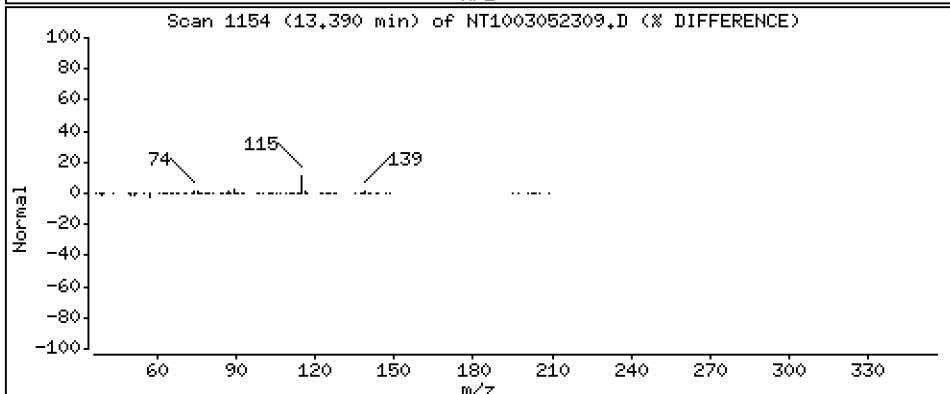
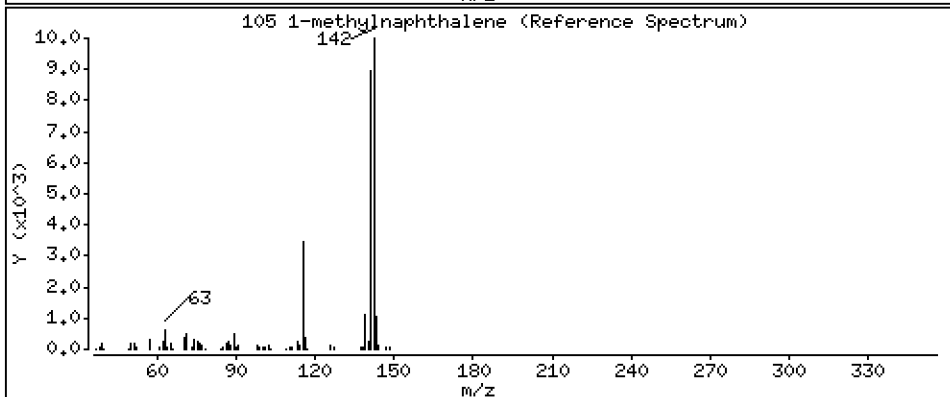
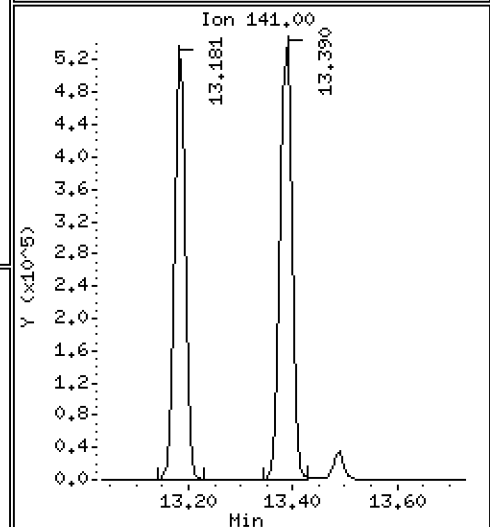
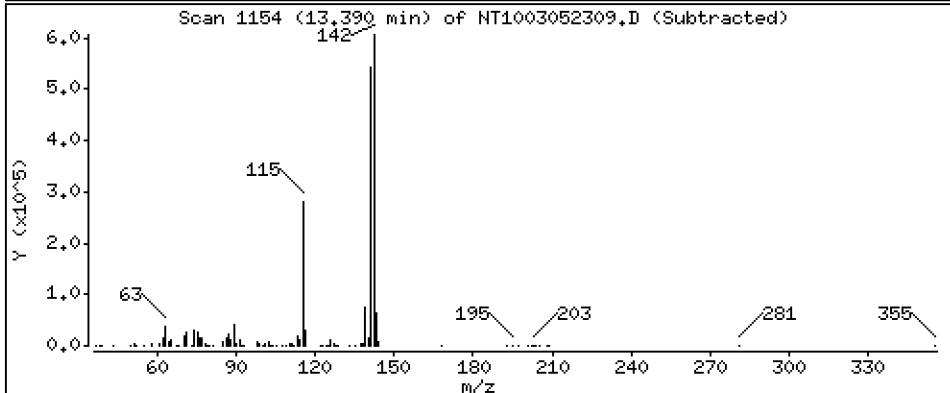
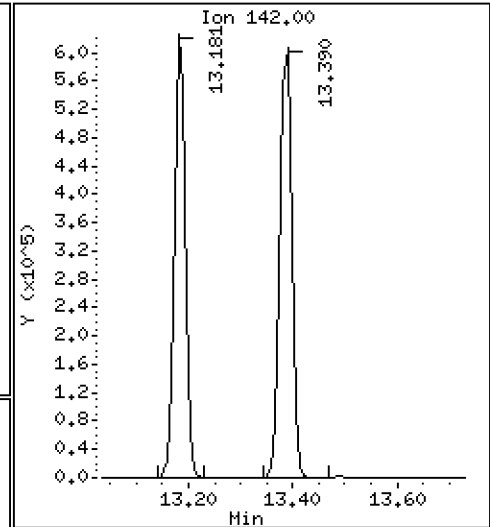
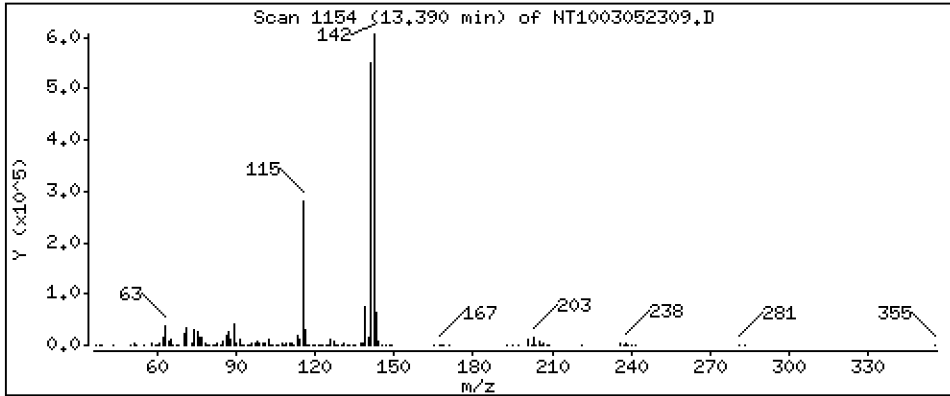
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,654 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

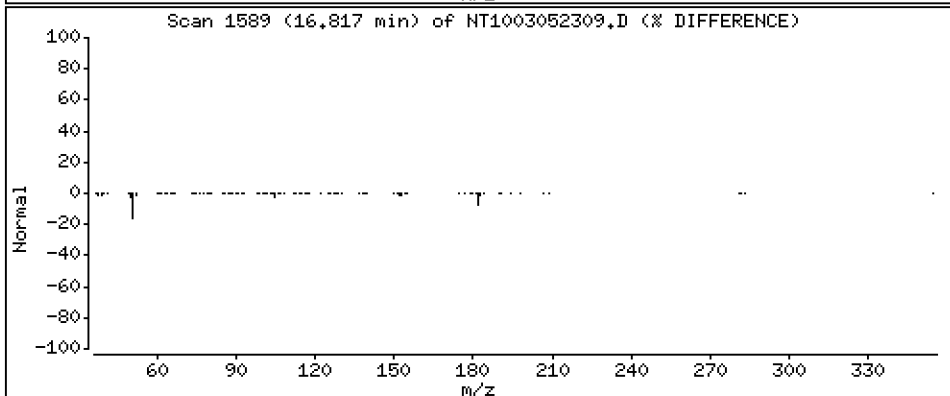
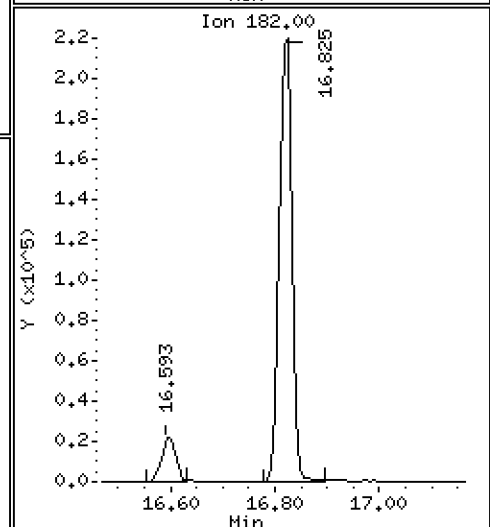
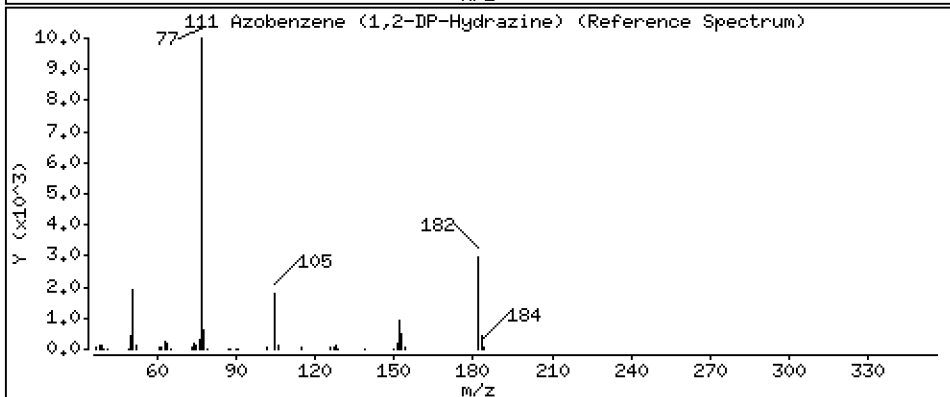
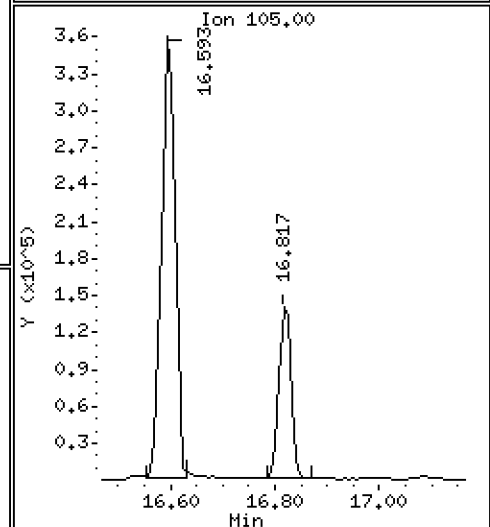
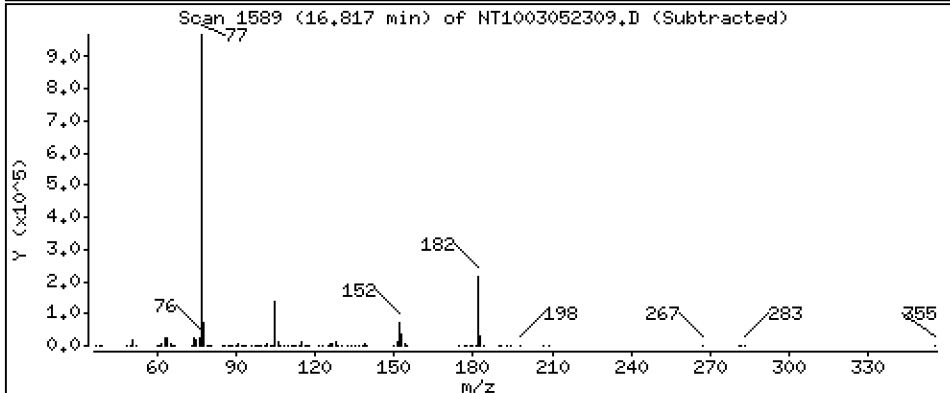
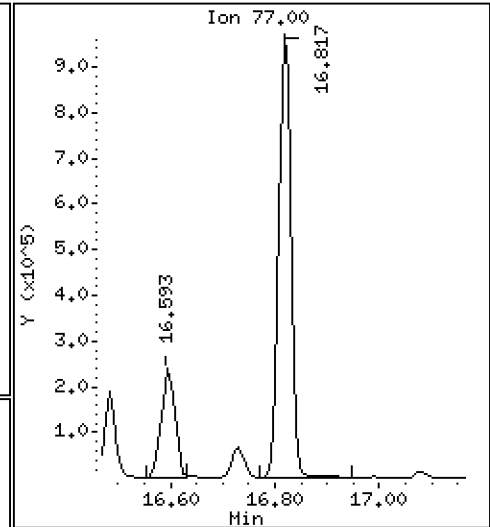
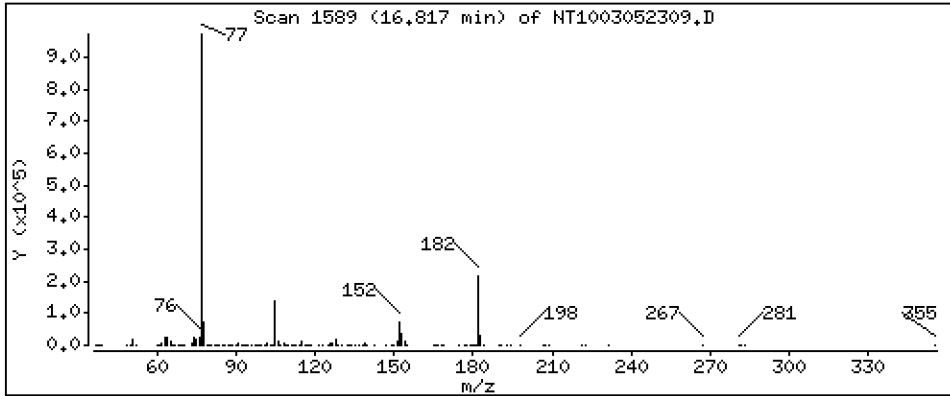
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,674 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

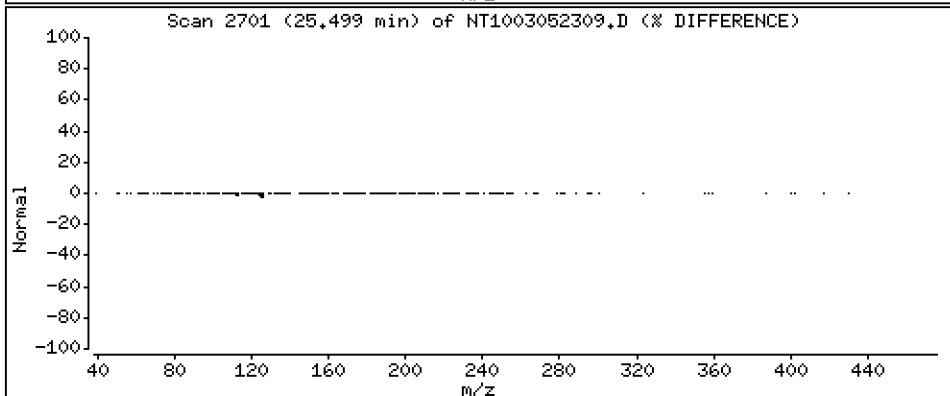
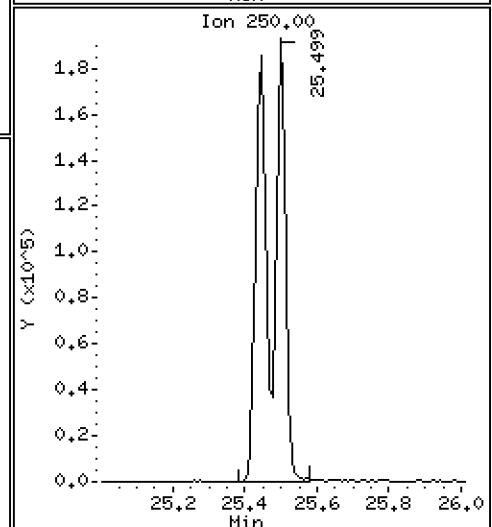
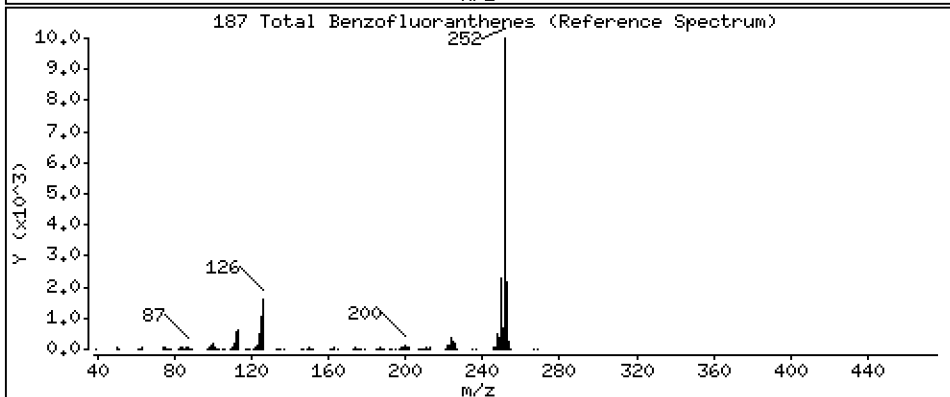
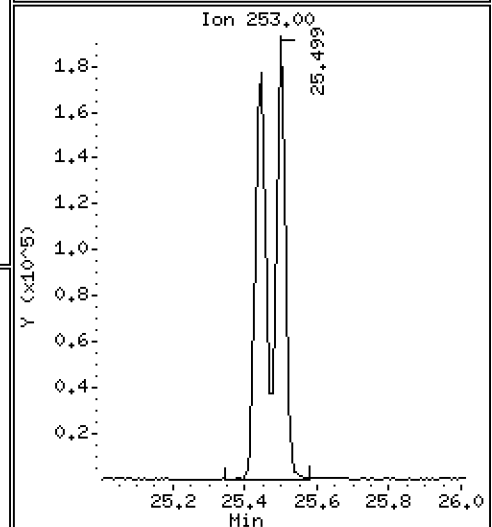
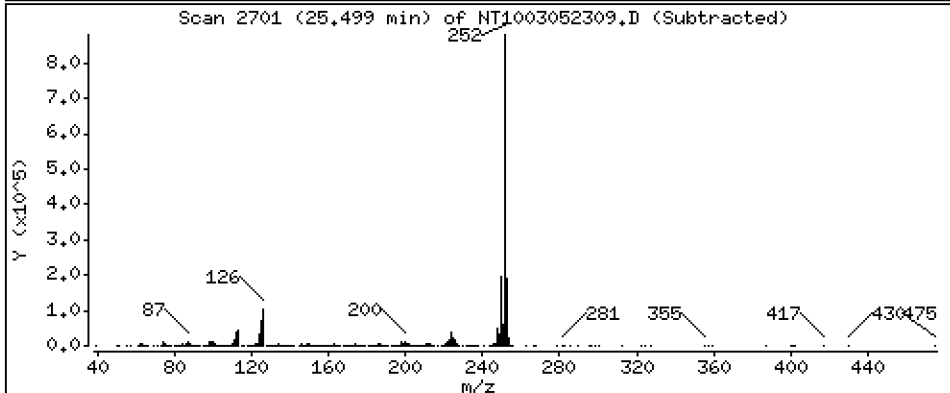
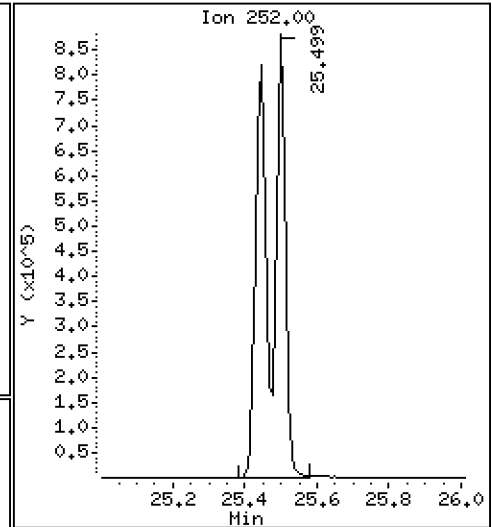
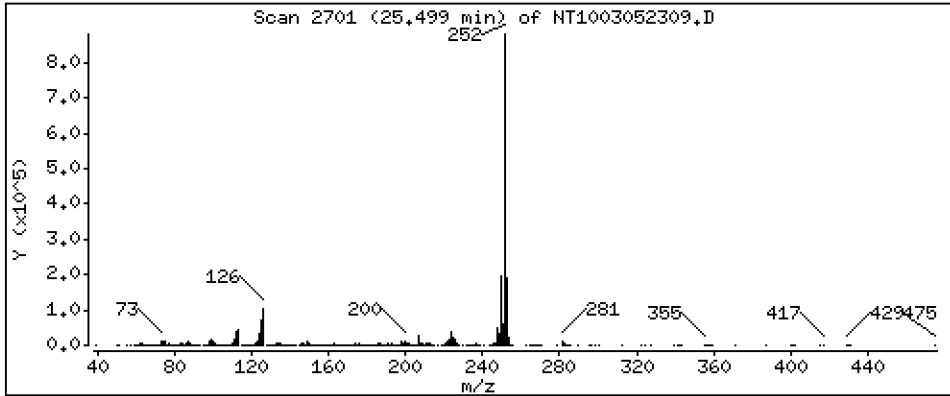
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 9,211 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD1

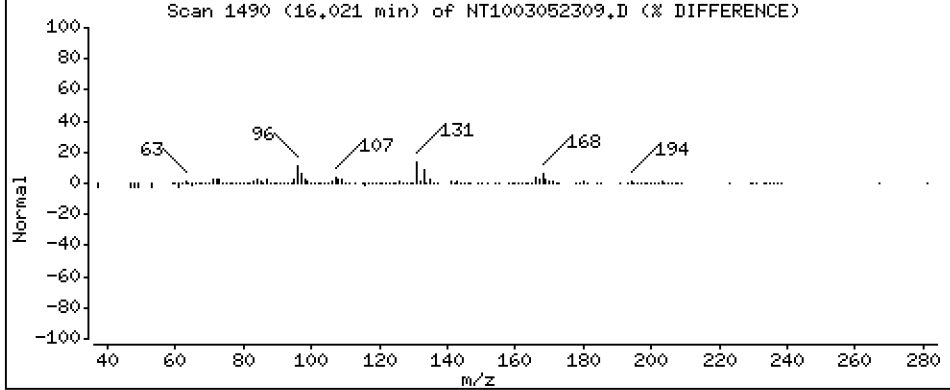
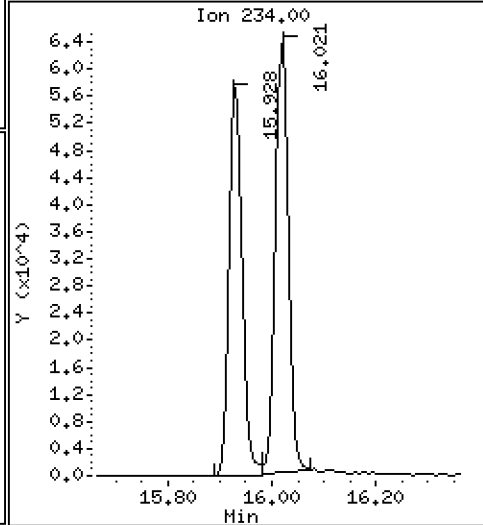
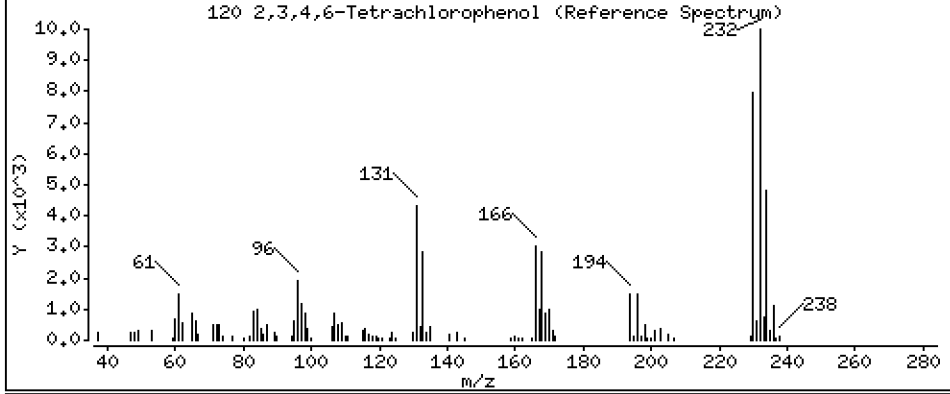
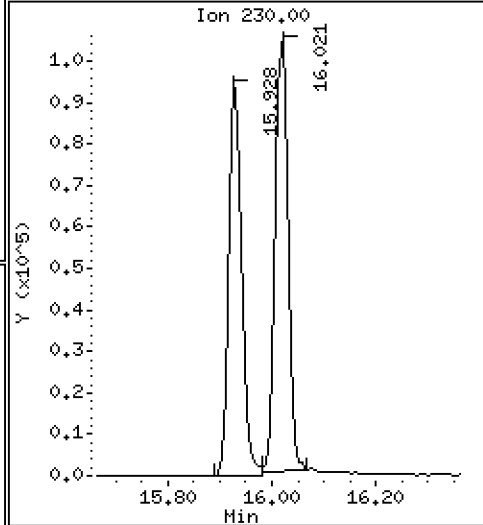
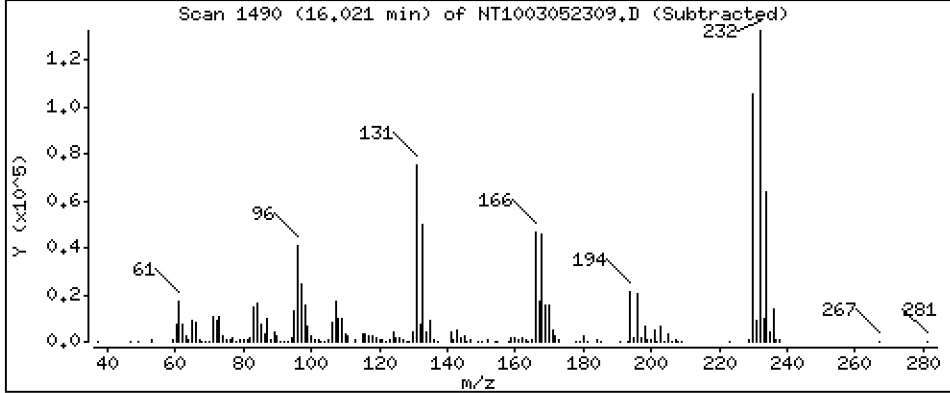
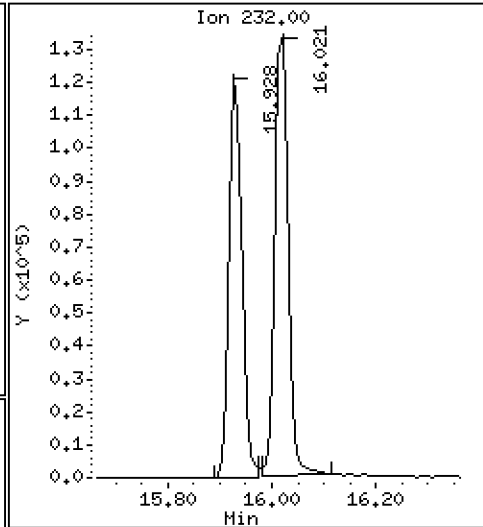
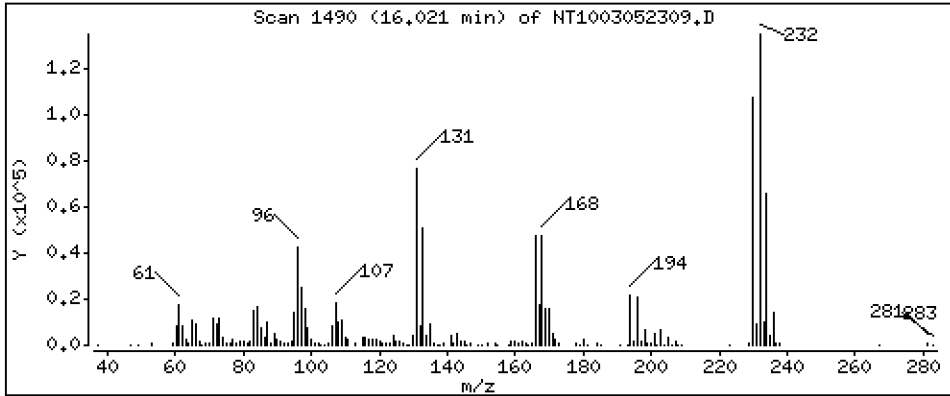
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 4,133 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052309.D
 Lab Smp Id: BLA0685-BSD1
 Inj Date : 05-MAR-2023 18:28
 Operator : VTS
 Smp Info : BLA0685-BSD1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.897	(0.747)	593512	5.72822	5.728
\$ 2 Phenol-d5	99		8.512	8.504	(0.921)	803604	6.68042	6.680
3 Phenol	94		8.535	8.528	(0.923)	589738	4.61112	4.611
\$ 5 2-Chlorophenol-d4	132		8.821	8.813	(0.954)	685965	6.68384	6.684
4 Bis(2-Chloroethyl)ether	93		8.736	8.728	(0.945)	514218	5.26153	5.262
6 2-Chlorophenol	128		8.852	8.844	(0.957)	462389	4.33683	4.337
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	510620	4.34380	4.344
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.239	(1.000)	329316	4.00000	
9 1,4-Dichlorobenzene	146		9.286	9.278	(1.004)	507867	4.34951	4.350
\$ 10 1,2-Dichlorobenzene-d4	152		9.542	9.534	(1.032)	303676	3.96043	3.960
12 1,2-Dichlorobenzene	146		9.565	9.557	(1.034)	498291	4.40896	4.409
11 Benzyl alcohol	108		9.487	9.480	(1.026)	283002	4.22342	4.223
14 2,2'-oxybis(1-Chloropropane)	121		9.744	9.728	(1.054)	170528	5.23362	5.234
13 2-Methylphenol	108		9.674	9.666	(1.046)	353496	3.51139	3.511
17 Hexachloroethane	117		10.217	10.209	(1.105)	235125	4.90591	4.906
16 N-Nitroso-di-n-propylamine	70		9.992	9.984	(1.081)	359009	4.65182	4.652
15 4-Methylphenol	108		9.969	9.953	(1.078)	407995	3.30956	3.310
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.877)	582175	4.42546	4.425
19 Nitrobenzene	77		10.341	10.341	(0.881)	657881	5.33121	5.331
20 Isophorone	82		10.807	10.799	(0.920)	1038837	6.59487	6.595
21 2-Nitrophenol	139		10.967	10.959	(0.934)	247504	3.70444	3.704
22 2,4-Dimethylphenol	107		11.018	11.018	(0.938)	612735	5.12759	5.128
23 Bis(2-Chloroethoxy)methane	93		11.230	11.222	(0.956)	573444	5.89079	5.891
24 Benzoic acid	105		11.230	11.196	(0.956)	1324358	18.1661	18.17
25 2,4-Dichlorophenol	162		11.434	11.434	(0.974)	1667651	17.0972	17.10
26 1,2,4-Trichlorobenzene	180		11.611	11.603	(0.989)	433816	4.68421	4.684
* 27 Naphthalene-d8	136		11.742	11.726	(1.000)	1198408	4.00000	
28 Naphthalene	128		11.780	11.773	(1.003)	1364778	4.43705	4.437
29 4-Chloroaniline	127		11.881	11.873	(1.012)	1001798	7.26570	7.266
30 Hexachlorobutadiene	225		12.004	11.997	(1.022)	342382	5.07724	5.077
31 4-Chloro-3-methylphenol	107		12.832	12.825	(1.093)	1736674	16.5262	16.53
32 2-Methylnaphthalene	142		13.181	13.181	(1.123)	941950	4.33487	4.335
33 Hexachlorocyclopentadiene	237		13.490	13.483	(0.879)	347955	15.0684	15.07

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.753	13.746	(0.896)	1131843	17.4150	17.42
35 2,4,5-Trichlorophenol	196	13.823	13.815	(0.901)	1209430	17.3583	17.36
§ 36 2-Fluorobiphenyl	172	13.931	13.924	(0.908)	1015314	4.53461	4.535
37 2-Chloronaphthalene	162	14.195	14.187	(0.925)	898928	5.11424	5.114
38 2-Nitroaniline	65	14.404	14.396	(0.938)	985640	19.1276	19.13
39 Dimethylphthalate	163	14.775	14.767	(0.963)	1040148	5.13077	5.131
40 Acenaphthylene	152	15.054	15.046	(0.981)	1480024	4.88408	4.884
41 2,6-Dinitrotoluene	165	14.907	14.899	(0.971)	886055	18.6684	18.67
* 42 Acenaphthene-d10	164	15.348	15.340	(1.000)	627739	4.00000	
43 3-Nitroaniline	138	15.263	15.255	(0.994)	640604	12.5304	12.53
44 Acenaphthene	153	15.409	15.409	(1.004)	850329	4.65285	4.653
45 2,4-Dinitrophenol	184	15.487	15.479	(1.009)	706812	49.1309	49.13
46 Dibenzofuran	168	15.773	15.765	(1.028)	1281007	4.72288	4.723
47 4-Nitrophenol	109	15.587	15.579	(1.016)	572191	14.9493	14.95
48 2,4-Dinitrotoluene	165	15.750	15.742	(1.026)	1244784	17.9297	17.93
50 Diethylphthalate	149	16.244	16.237	(1.058)	1082684	5.04130	5.041
49 Fluorene	166	16.492	16.484	(1.075)	1071476	4.74798	4.748
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.074)	530465	5.12160	5.122
52 4-Nitroaniline	138	16.538	16.523	(1.078)	692579	12.6030	12.60
53 4,6-Dinitro-2-methylphenol	198	16.600	16.585	(0.899)	1245681	40.6854	40.69
54 N-Nitrosodiphenylamine	169	16.732	16.724	(0.907)	684441	4.10239	4.102
§ 55 2,4,6-Tribromophenol	330	16.986	16.986	(1.107)	287857	7.10034	7.100
56 4-Bromophenyl-phenylether	248	17.511	17.504	(0.949)	413755	6.12038	6.120
57 Hexachlorobenzene	284	17.620	17.620	(0.955)	415037	5.45191	5.452
58 Pentachlorophenol	266	18.038	18.038	(0.977)	426820	11.3254	11.33
* 59 Phenanthrene-d10	188	18.455	18.448	(1.000)	1127626	4.00000	
60 Phenanthrene	178	18.502	18.502	(1.002)	1398267	4.84533	4.845
61 Anthracene	178	18.610	18.610	(1.008)	1157757	4.13741	4.137
62 Carbazole	167	18.951	18.943	(1.027)	1131273	4.41293	4.413
63 Di-n-butylphthalate	149	19.647	19.647	(1.065)	1772032	4.91787	4.918
64 Fluoranthene	202	20.885	20.885	(0.888)	1725833	4.84291	4.843
65 Pyrene	202	21.326	21.318	(0.907)	1686243	4.64697	4.647
§ 66 Terphenyl-d14	244	21.597	21.597	(0.919)	1353239	4.60892	4.609
67 Butylbenzylphthalate	149	22.487	22.487	(0.957)	741619	3.85183	3.852
68 Benzo(a)anthracene	228	23.494	23.494	(0.999)	1681101	4.60240	4.602
* 69 Chrysene-d12	240	23.509	23.517	(1.000)	1035914	4.00000	
70 3,3'-Dichlorobenzidine	252	23.440	23.440	(0.997)	829523	5.06805	5.068
71 Chrysene	228	23.556	23.563	(1.002)	1450933	4.88770	4.888
72 bis(2-Ethylhexyl)phthalate	149	23.494	23.494	(0.955)	1200370	5.11736	5.117
* 134 Di-n-octylphthalate-d4	153	24.593	24.593	(1.000)	1620537	4.00000	
73 Di-n-octylphthalate	149	24.601	24.609	(1.000)	2036563	5.66725	5.667
74 Benzo(b)fluoranthene	252	25.445	25.445	(0.968)	1681117	4.59885	4.599 (H)
75 Benzo(k)fluoranthene	252	25.499	25.507	(0.971)	1628887	4.62070	4.621
76 Benzo(a)pyrene	252	26.149	26.157	(0.995)	1344229	4.13777	4.138
* 77 Perylene-d12	264	26.273	26.281	(1.000)	1019954	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.142	29.158	(1.109)	1868183	4.87858	4.879
79 Dibenzo(a,h)anthracene	278	29.189	29.197	(1.111)	1590721	5.40471	5.405
80 Benzo(g,h,i)perylene	276	30.020	30.028	(1.143)	1560050	5.14816	5.148
90 N-Nitrosodimethylamine	74	4.727	4.719	(0.511)	796822	11.9128	11.91
91 Aniline	93	8.643	8.628	(0.935)	591227	3.98693	3.987
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	Compound Not Detected.					
105 1-methylnaphthalene	142	13.390	13.382	(1.140)	915349	4.65417	4.654
111 Azobenzene (1,2-DP-Hydrazine)	77	16.816	16.816	(1.096)	1499083	4.67432	4.674

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.499	25.507	(0.971)	3237676	9.21074	9.211
120 2,3,4,6-Tetrachlorophenol	232		16.020	16.012	(1.044)	254441	4.13260	4.133

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052309.D Calibration Time: 14:03
 Lab Smp Id: BLA0685-BSD1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	329316	10.78
27 Naphthalene-d8	1085336	542668	2170672	1198408	10.42
42 Acenaphthene-d10	563464	281732	1126928	627739	11.41
59 Phenanthrene-d10	1038318	519159	2076636	1127626	8.60
69 Chrysene-d12	1012751	506376	2025502	1035914	2.29
134 Di-n-octylphthala	1628890	814445	3257780	1620537	-0.51
77 Perylene-d12	1152264	576132	2304528	1019954	-11.48

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.74	0.13
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.52	23.02	24.02	23.51	-0.03
134 Di-n-octylphthala	24.59	24.09	25.09	24.59	0.00
77 Perylene-d12	26.28	25.78	26.78	26.27	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003052309.D

Lab ID: BLA0685-BSD1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 18:28

RT CO-ELUTION COMPOUNDS

23.494 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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



STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0685-SRM1

Batch: BLA0685

Initial/Final: 1 g / 1 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 03/05/2023 20:22

Standard ID: K003477

Expires: 01/31/2024

Standard Lot#: CRM 143 (LRAC8918)

Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	2790	43.9	200		105	26 - 174
4-Methylphenol	6617.0	5190	73.9	200		78.4	40 - 160
Naphthalene	4458.0	2470	42.4	200		55.4	25 - 175
Acenaphthylene	1948.0	1560	62.4	200		79.8	37 - 167
Dimethylphthalate	4537.0	5270	43.9	200		116	41 - 159
Acenaphthene	5489.0	5550	52.2	200		101	41 - 159
Dibenzofuran	6130.0	6570	141	200		107	45 - 155
Fluorene	3724.0	3900	146	200		105	44 - 156
Pentachlorophenol	3411.0	1690	313	1000	Q	49.5	10 - 206
Phenanthrene	5052.0	5370	87.2	200		106	46 - 154
Anthracene	2866.0	2500	71.9	200		87.1	42 - 158
Fluoranthene	2497.0	2310	60.9	200		92.3	39 - 161
Pyrene	2964.0	3230	56.8	200		109	38 - 162
Butylbenzylphthalate	3511.0	3150	94.1	200	Q	89.6	36 - 164
Benzo(a)anthracene	5751.0	6170	59.6	200		107	49 - 151
Chrysene	1477.0	1600	60.6	200		108	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	3330	54.6	500		114	26 - 174
Benzofluoranthenes, Total	6534.0	5360	100	400		82.1	40 - 160
Benzo(a)pyrene	5902.0	4540	42.3	200		76.9	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	4180	147	200		107	22 - 178
Dibenzo(a,h)anthracene	3420.0	4160	172	200		122	37 - 163
Benzo(g,h,i)perylene	1380.0	1600	136	200		116	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.1\NT1003052312.D

Date: 05-MAR-2023 20:22

Client ID:

Sample Info: BLR0685-SRM1

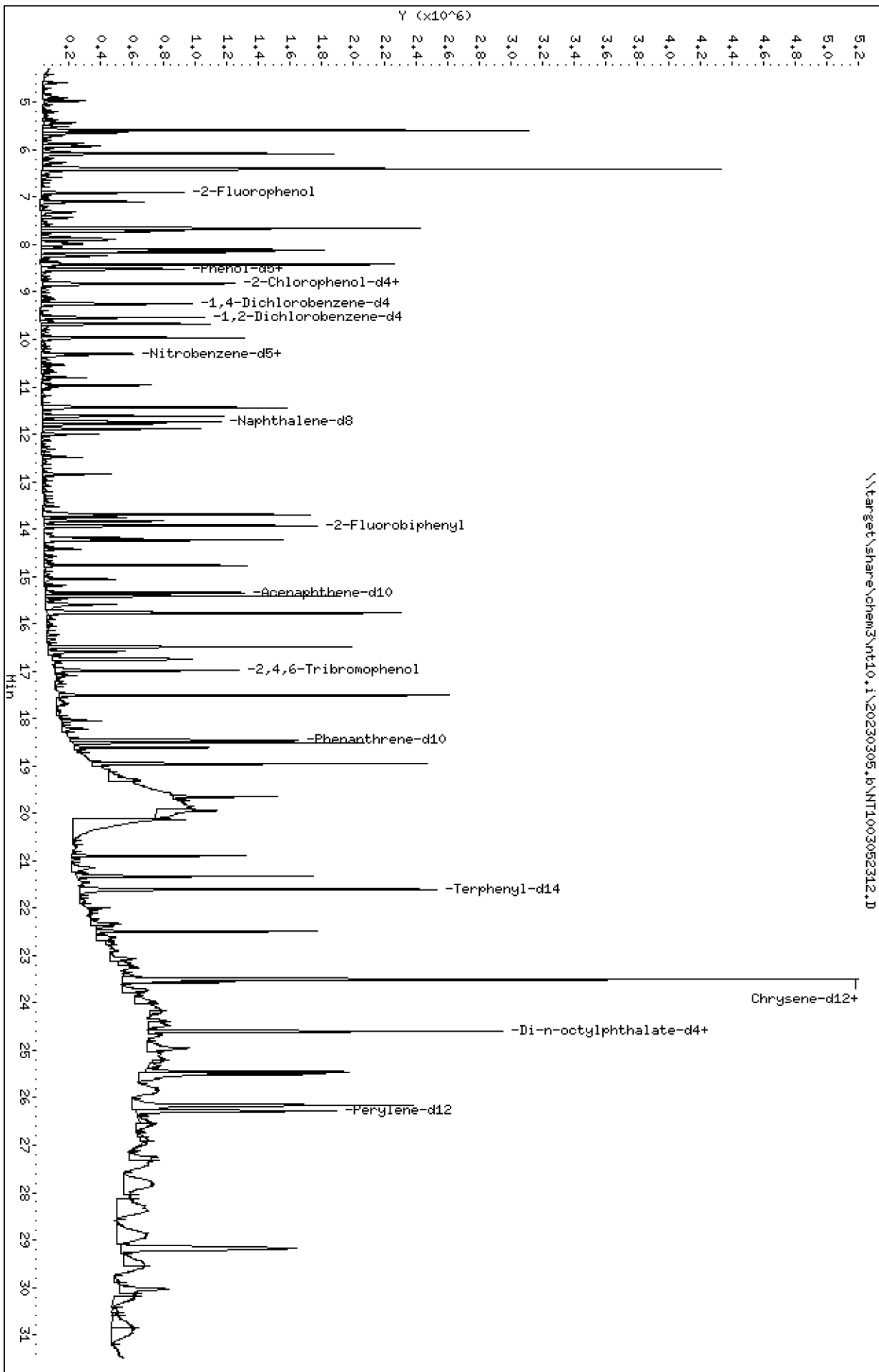
Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Column phase: ZB-5msi

\\target\share\chem3\nt10.1\20230305.1\NT1003052312.D



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

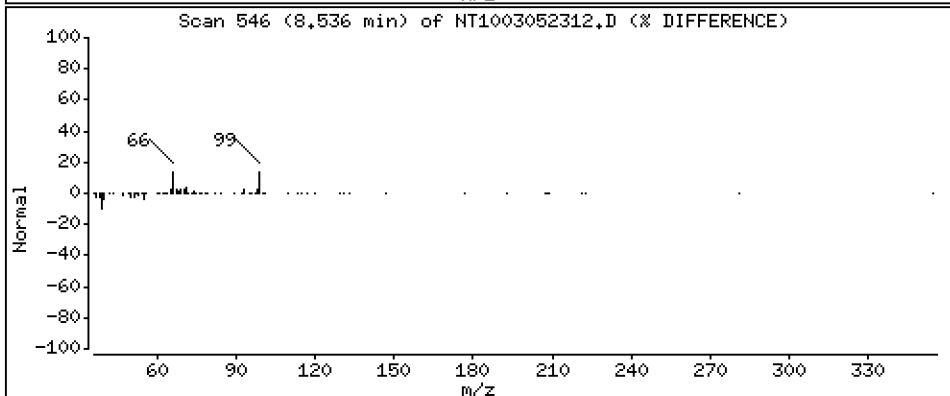
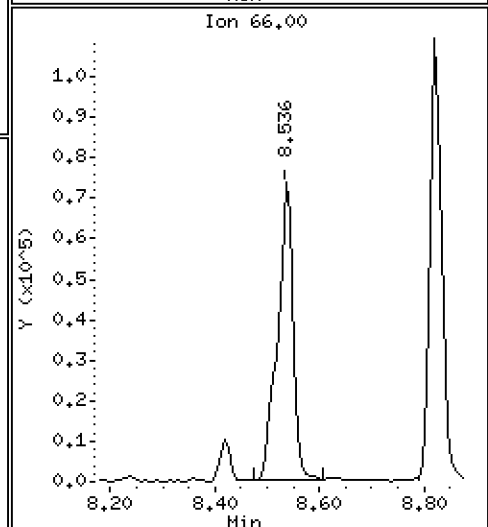
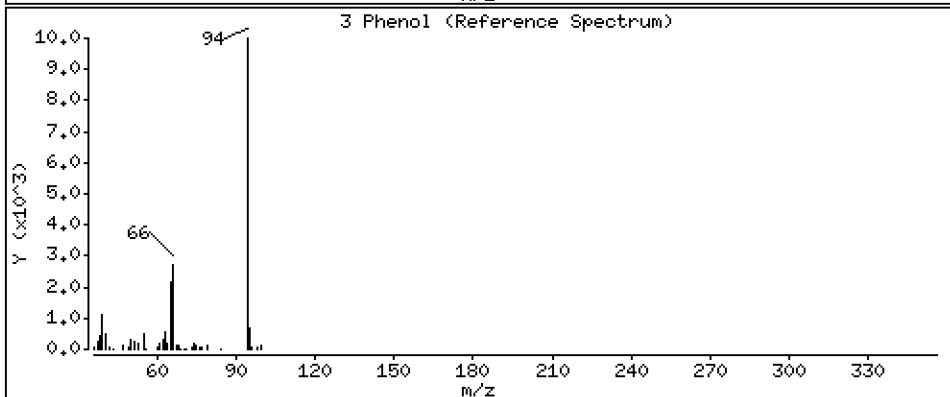
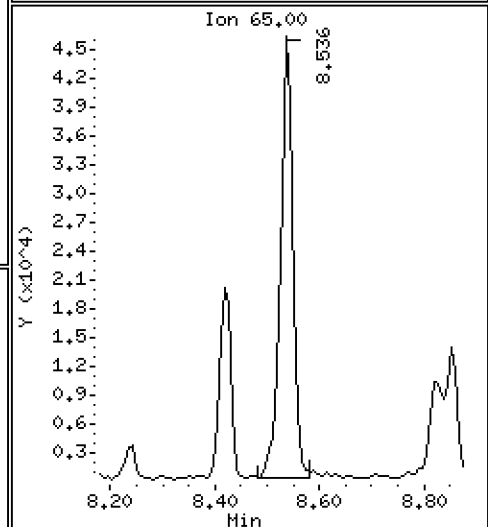
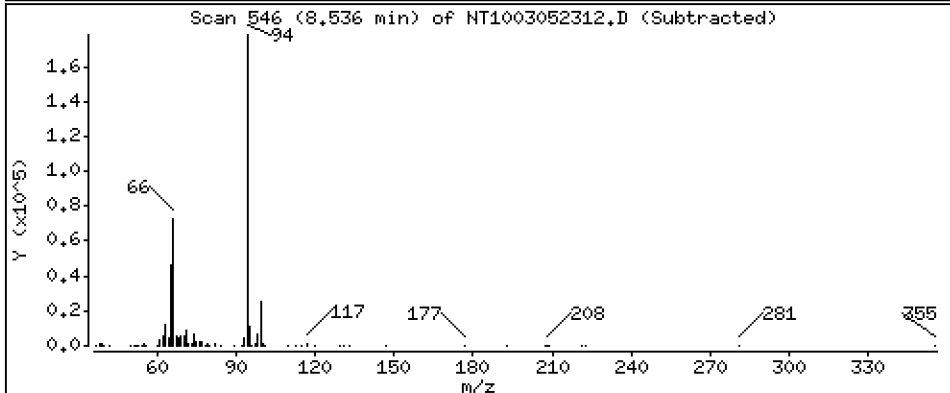
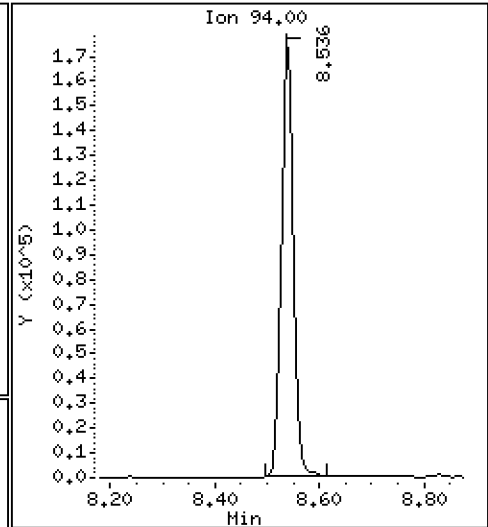
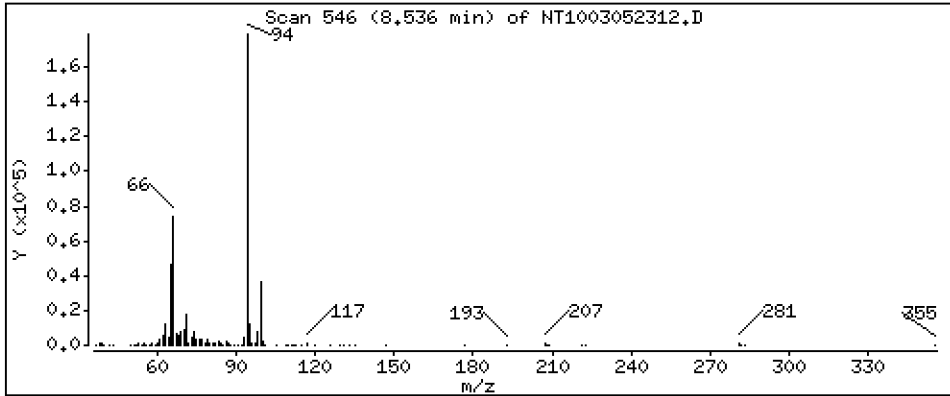
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 2,787 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

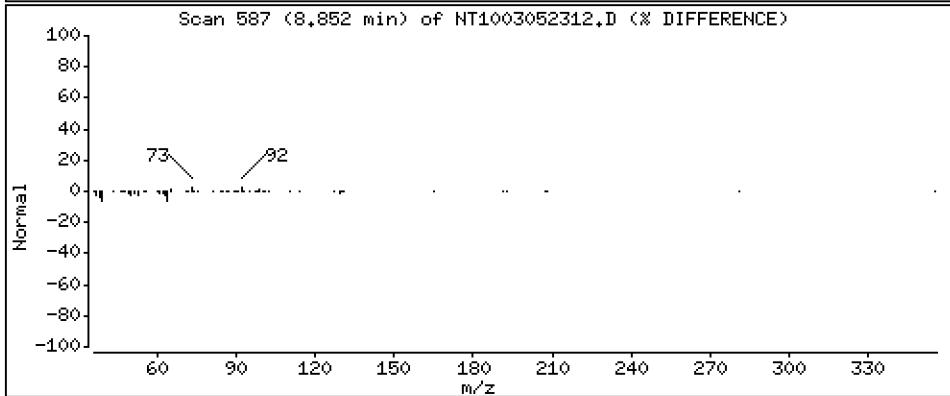
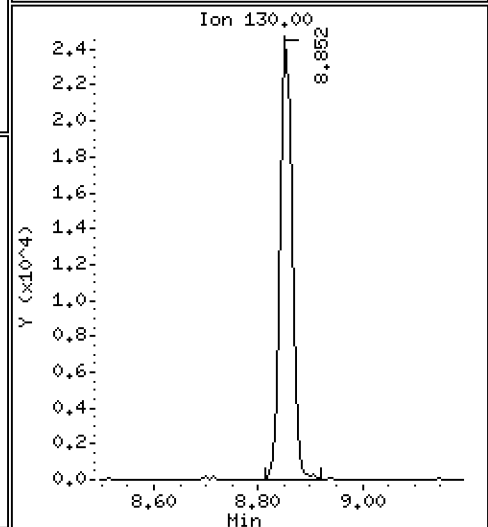
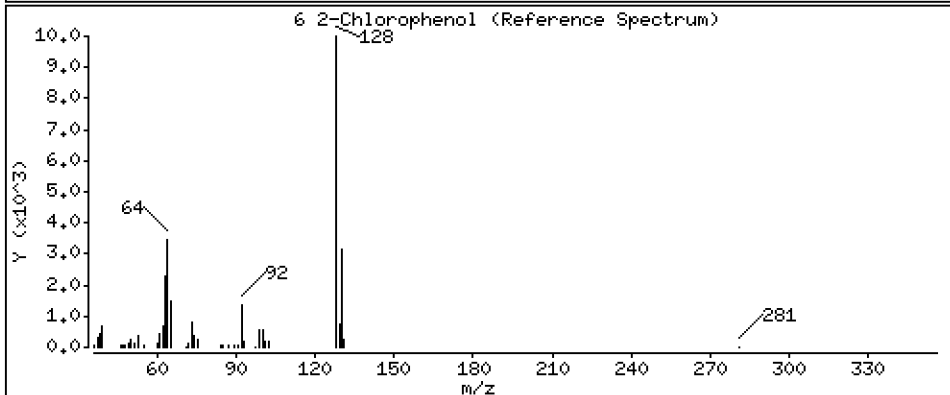
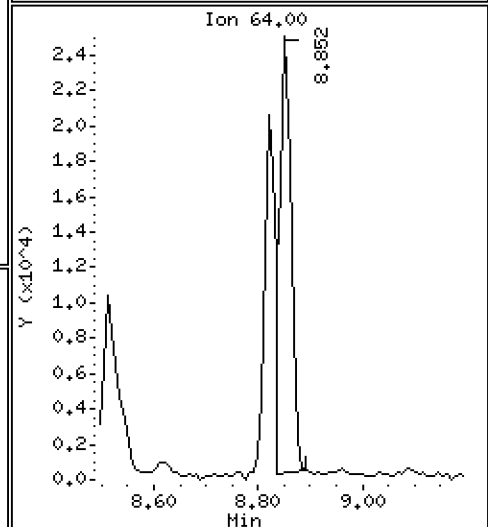
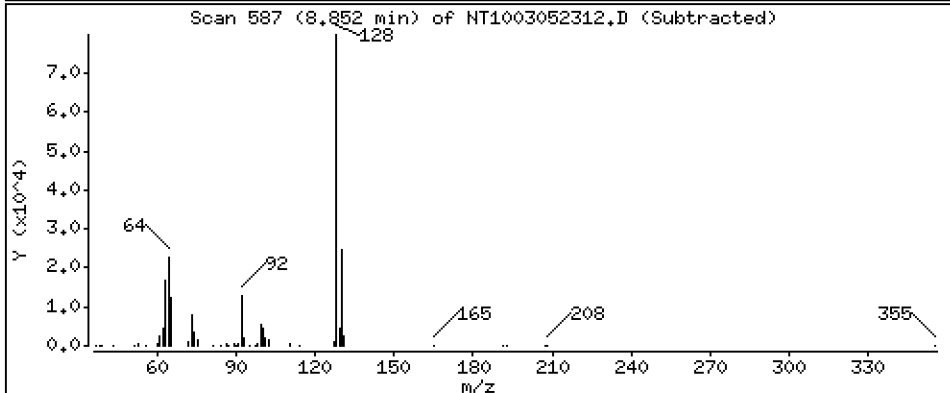
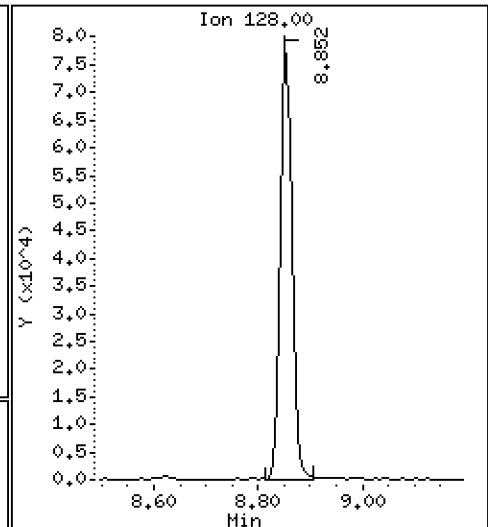
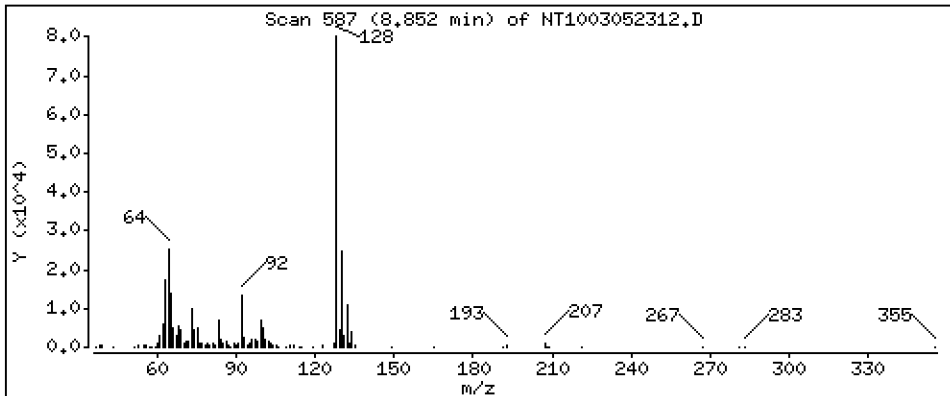
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 1,379 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

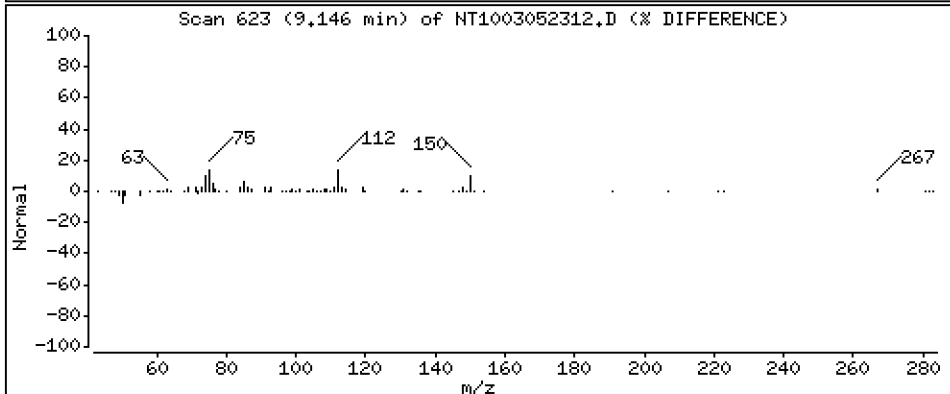
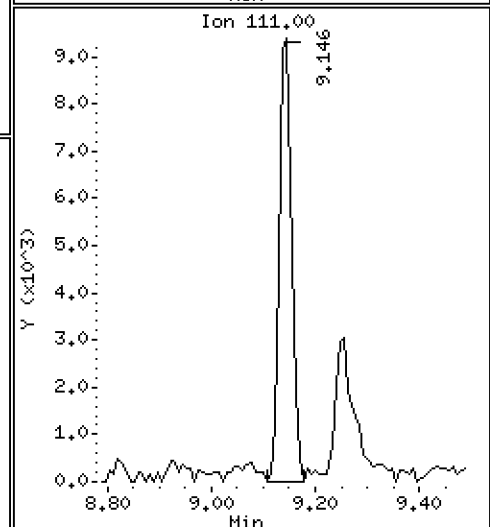
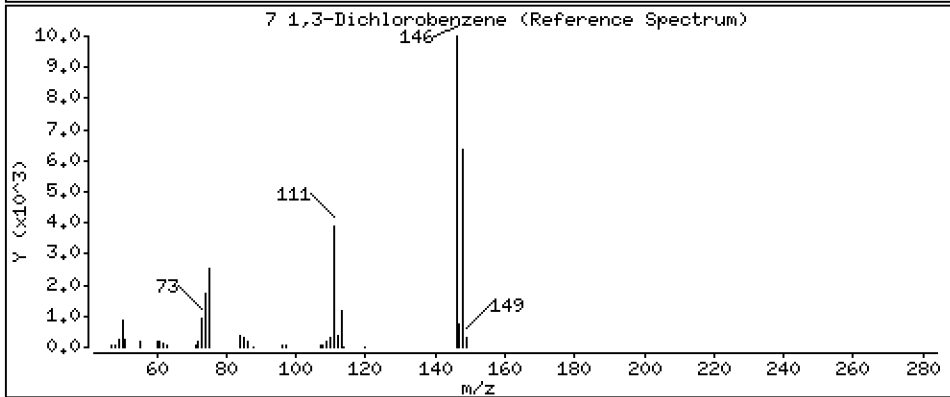
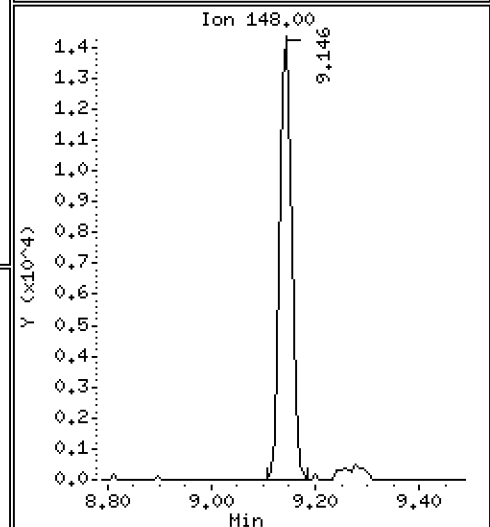
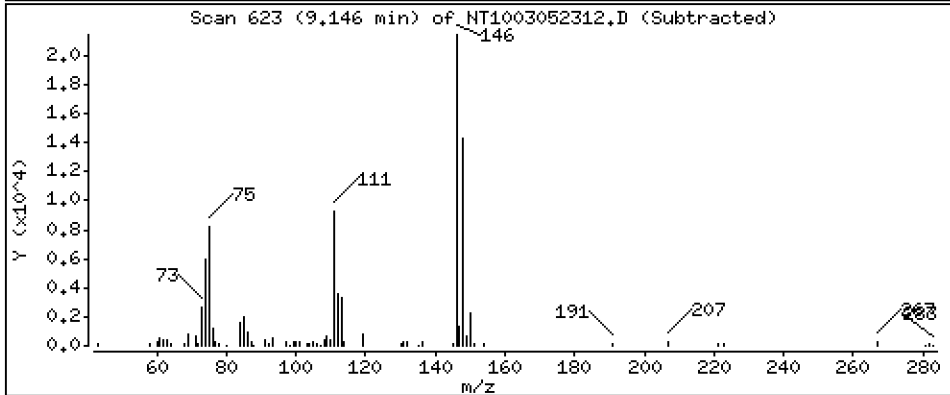
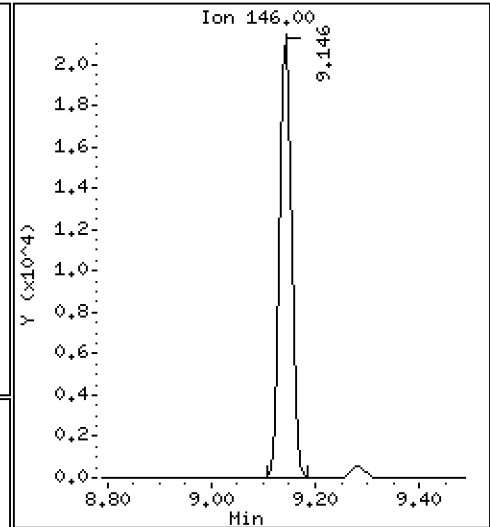
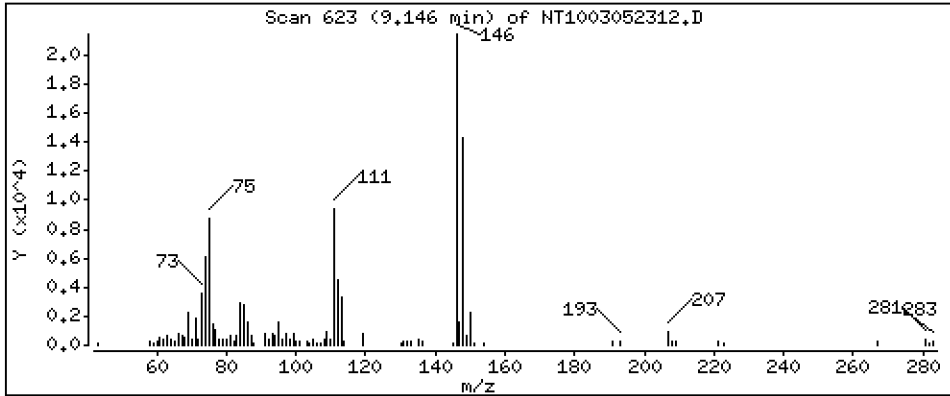
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,3527 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

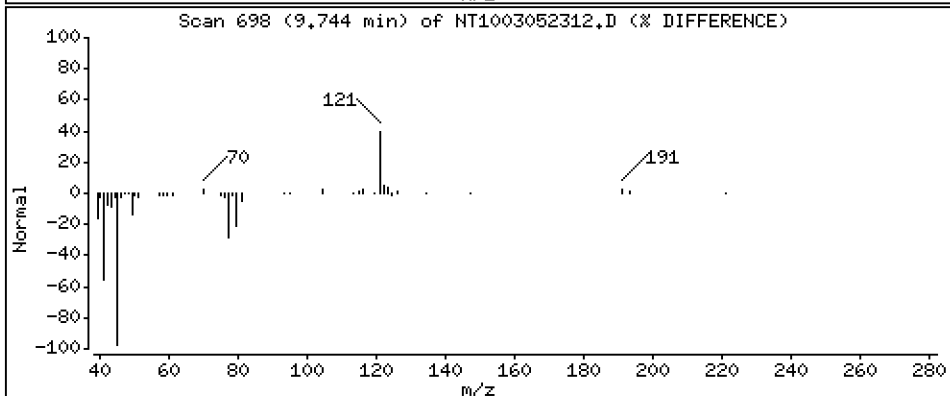
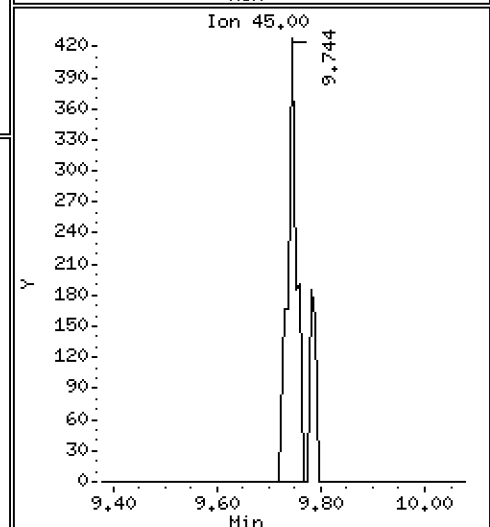
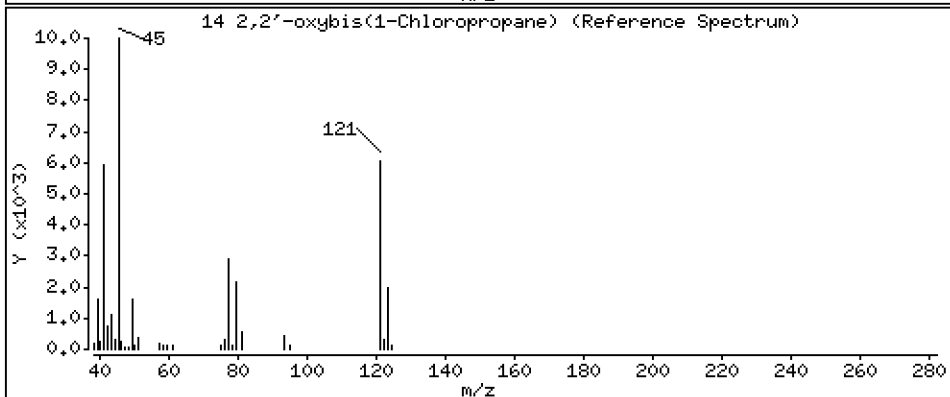
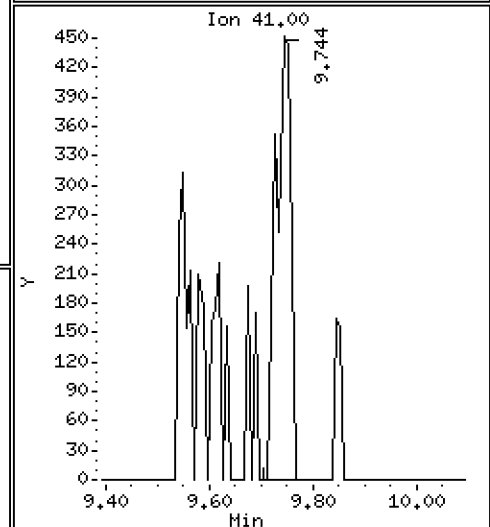
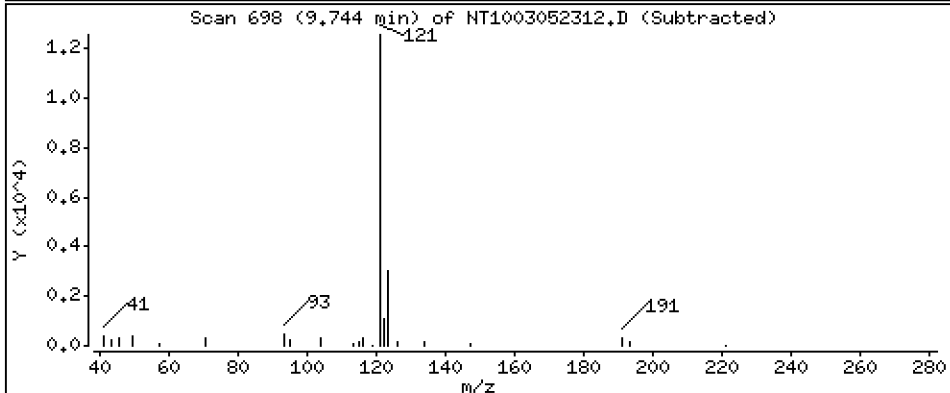
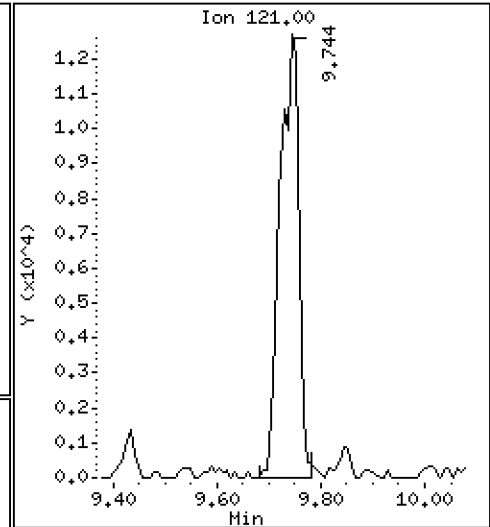
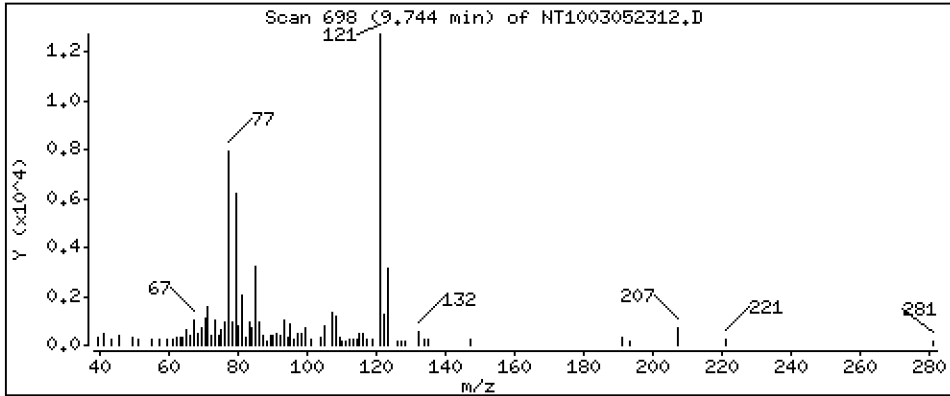
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 1,254 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

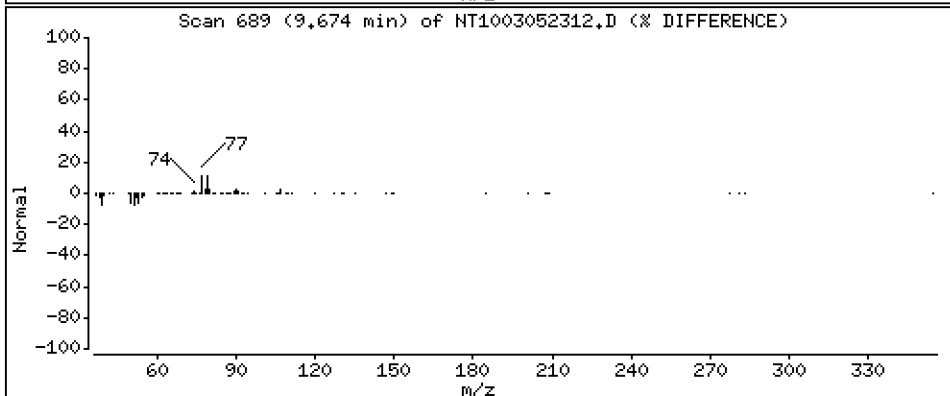
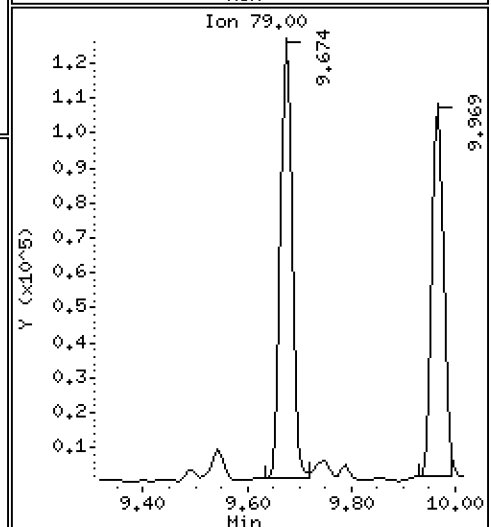
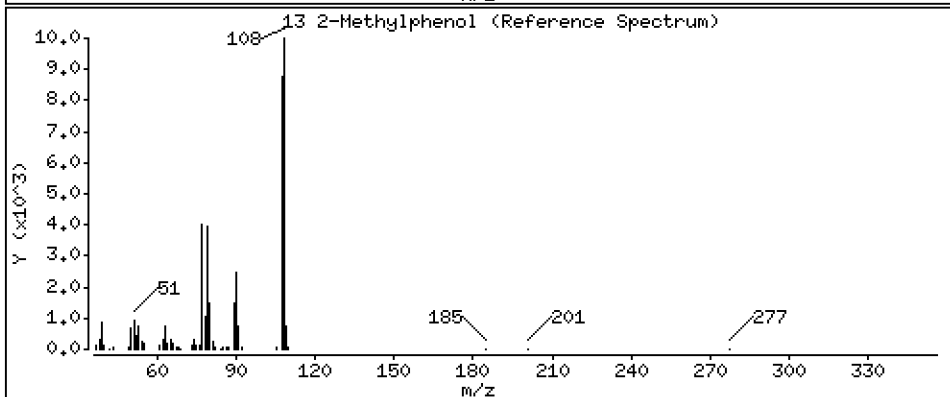
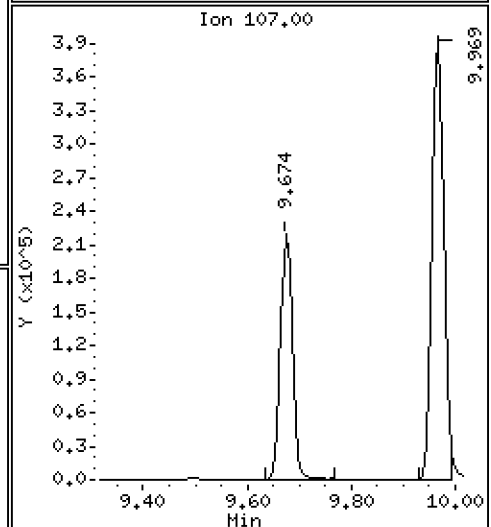
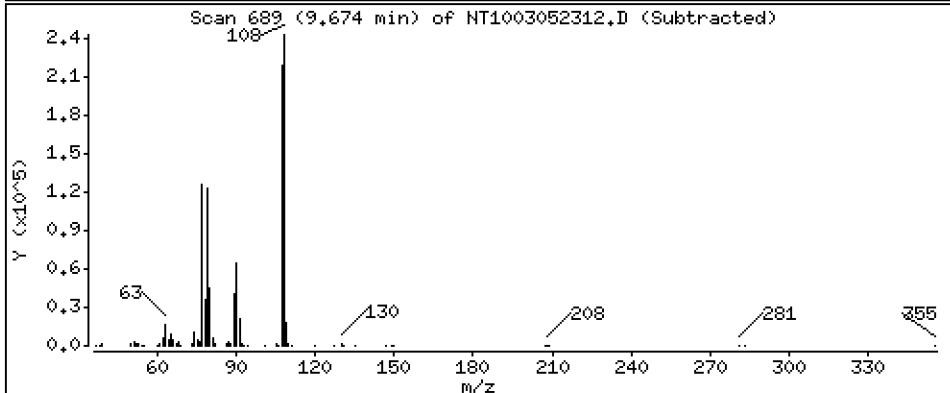
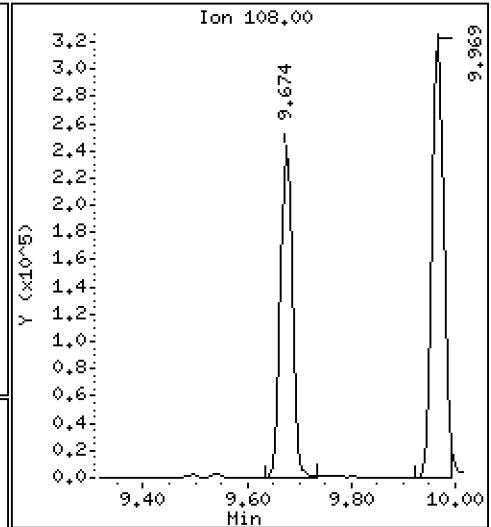
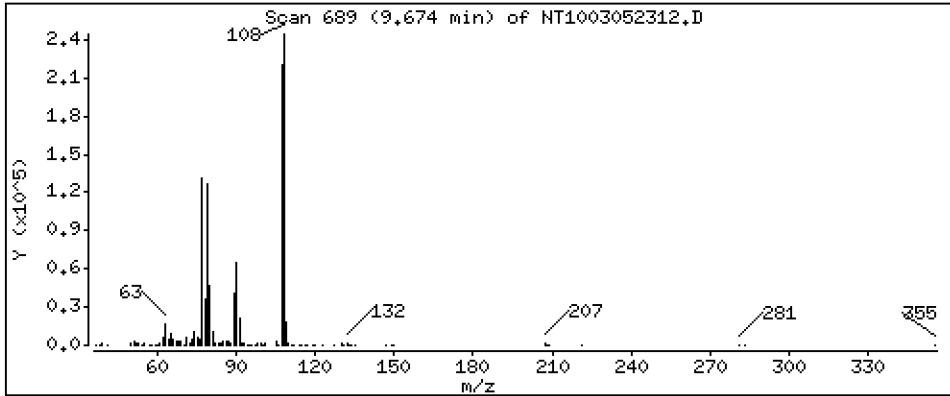
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.714 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

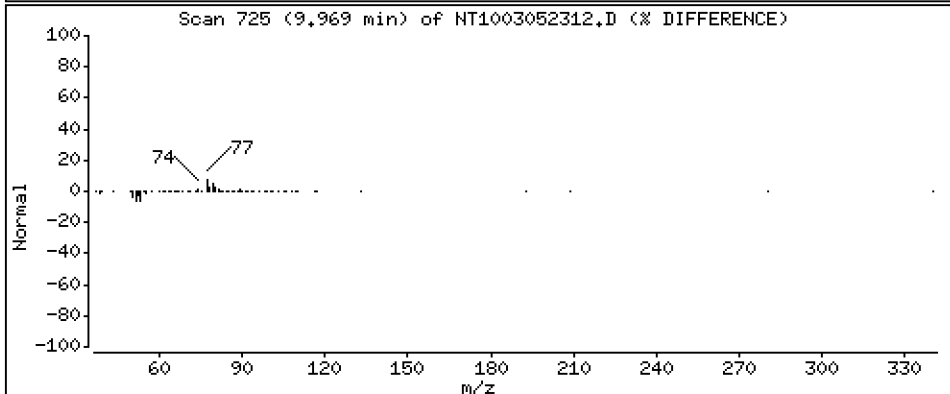
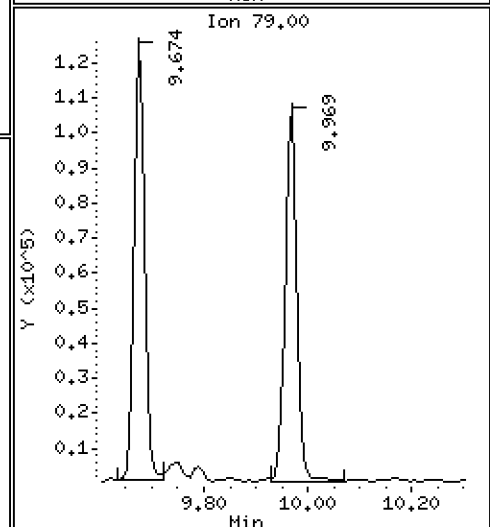
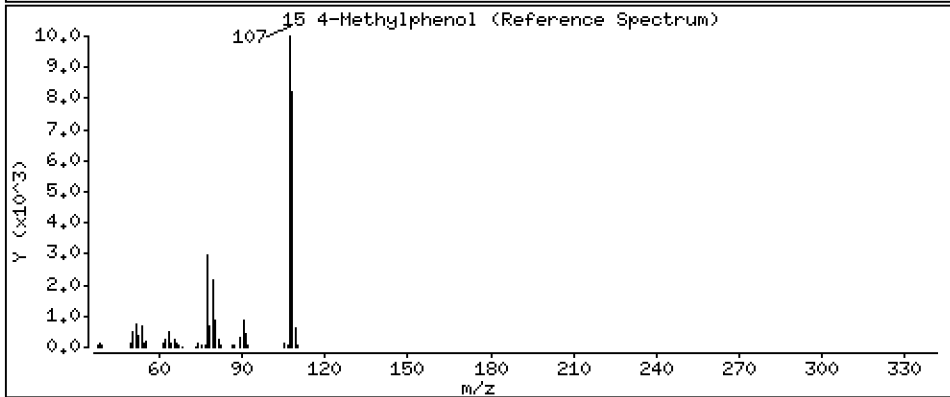
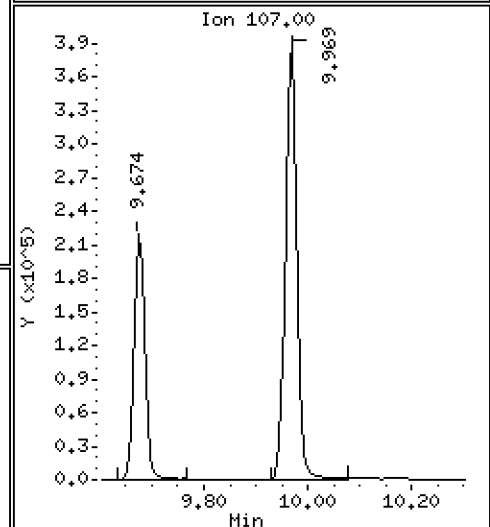
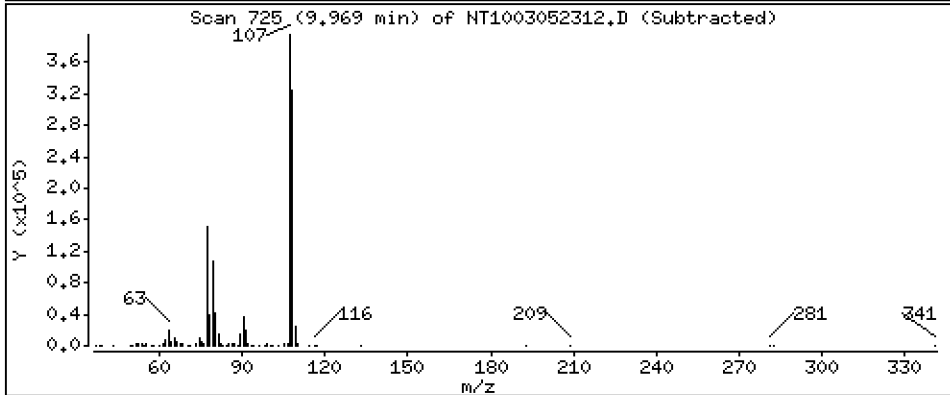
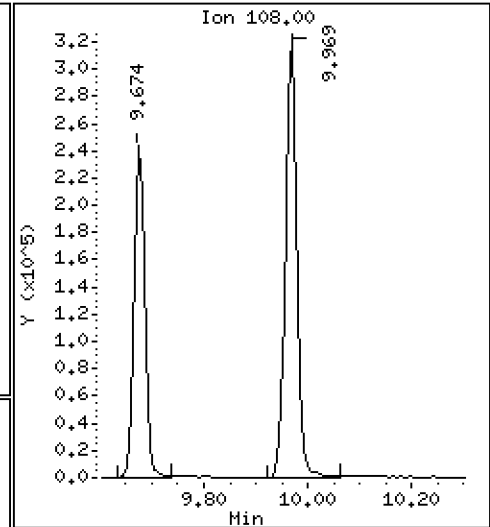
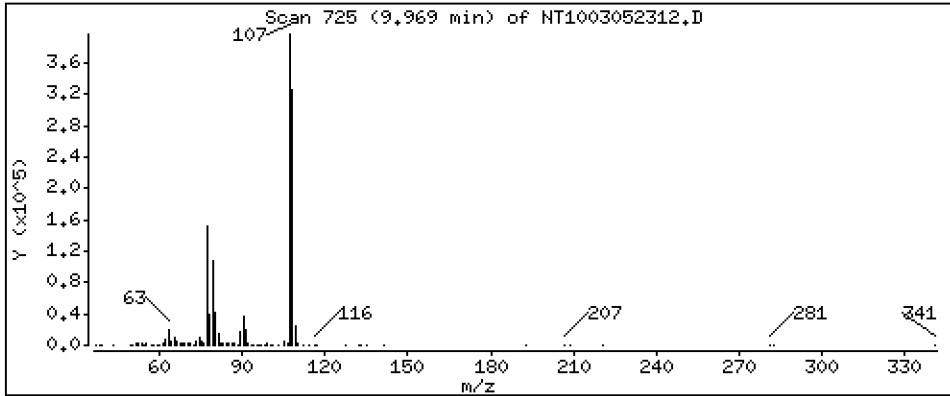
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 5,190 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

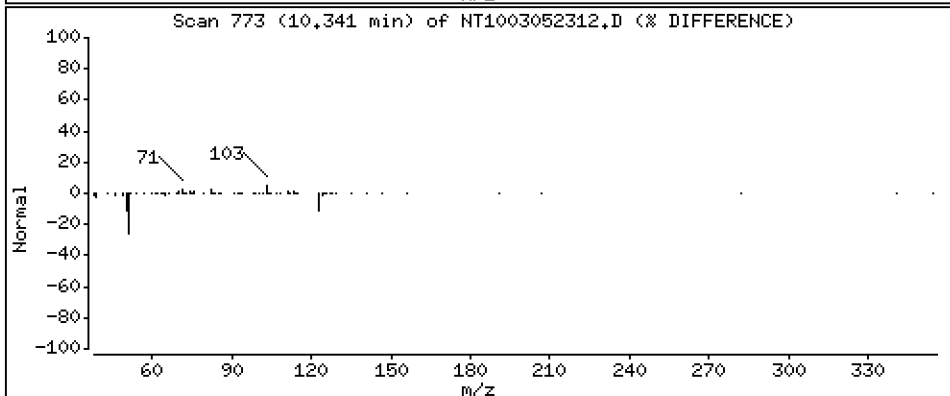
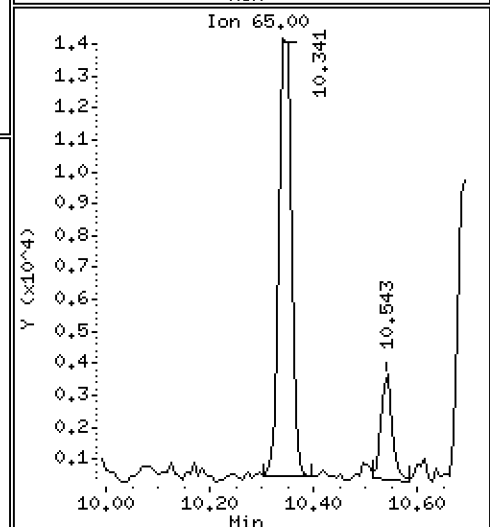
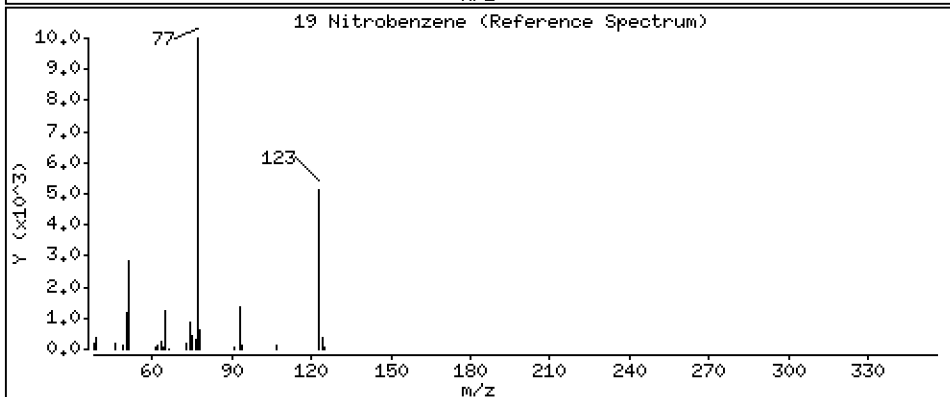
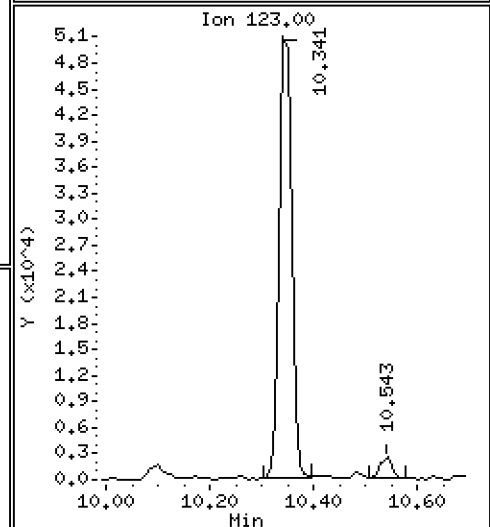
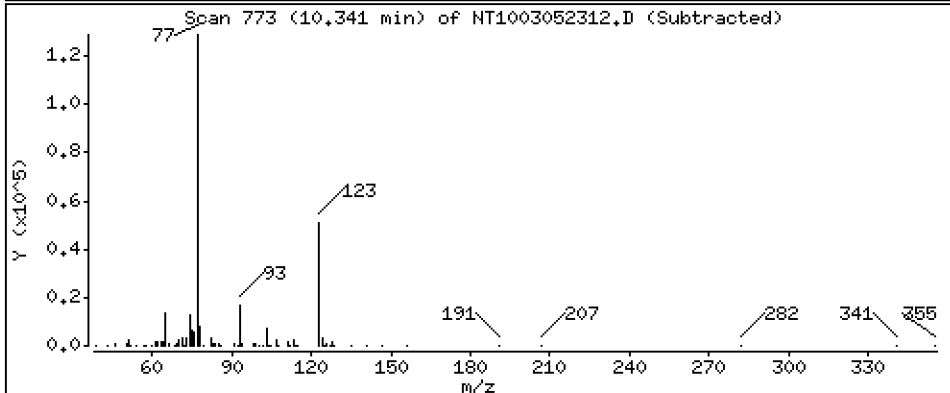
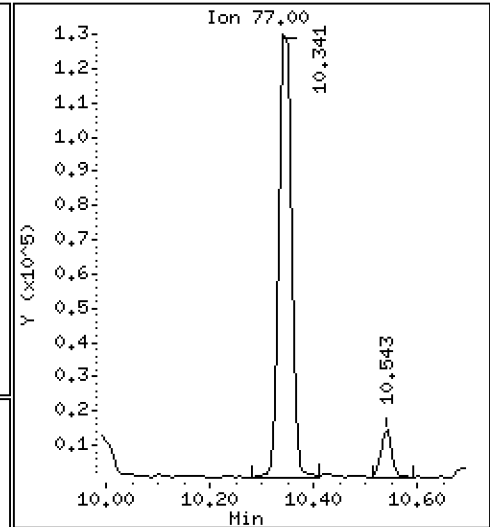
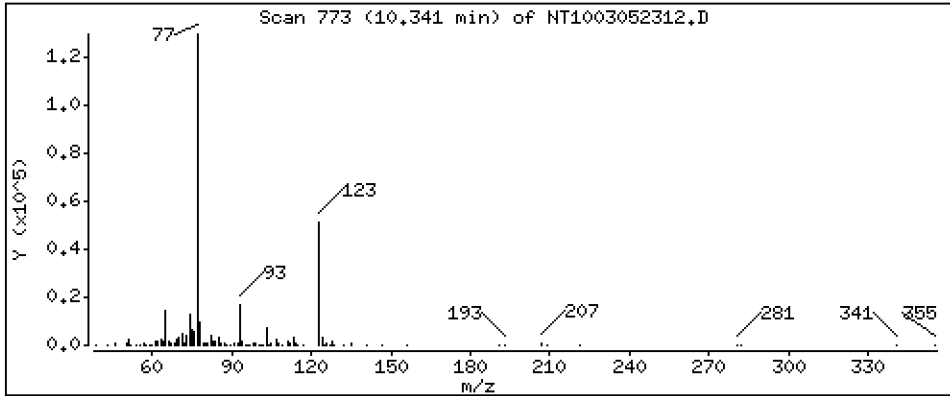
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 2,187 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

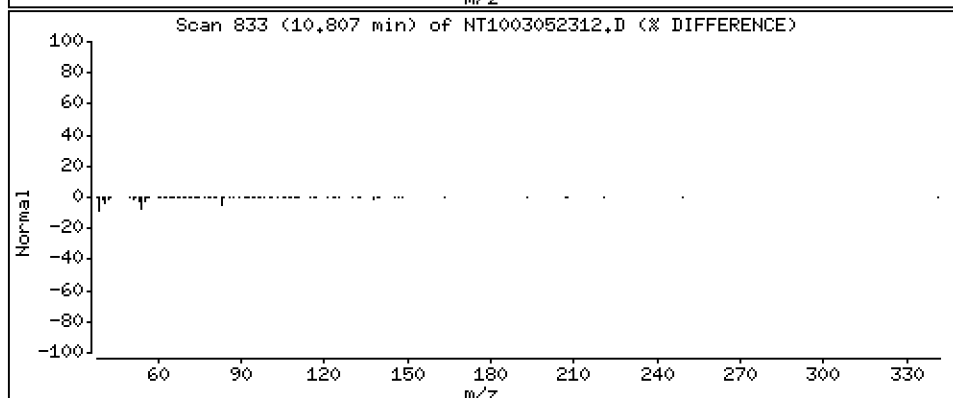
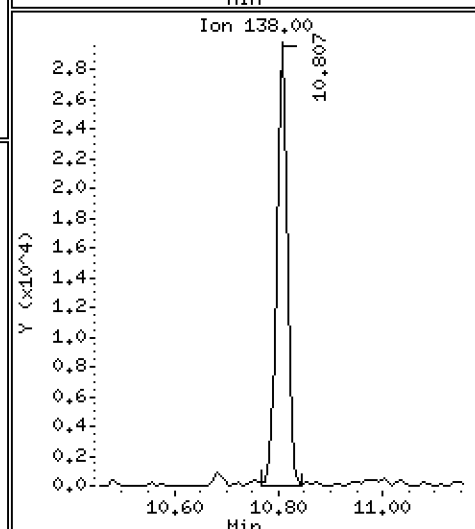
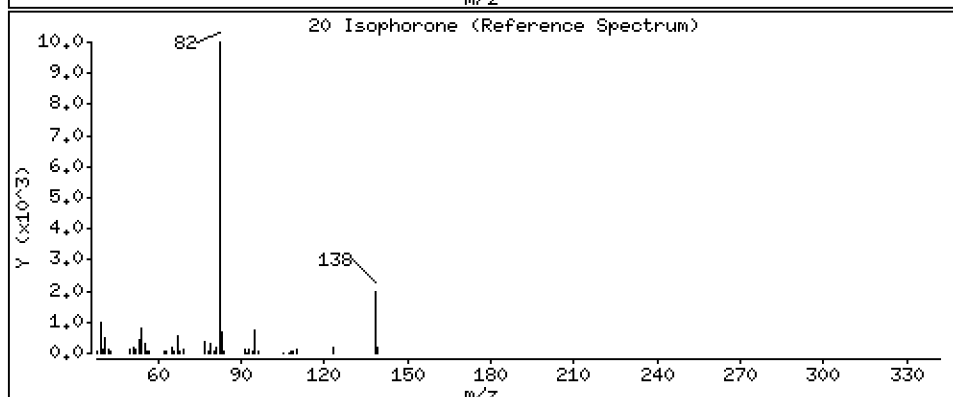
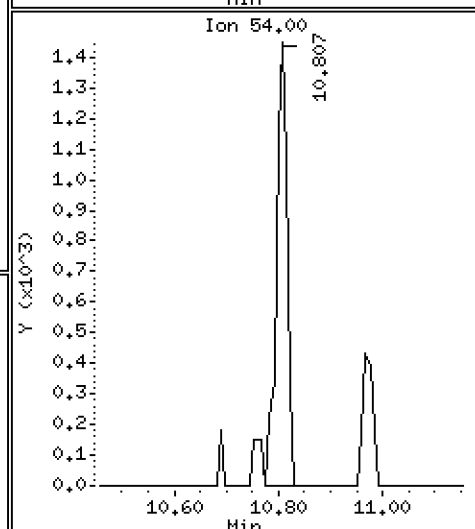
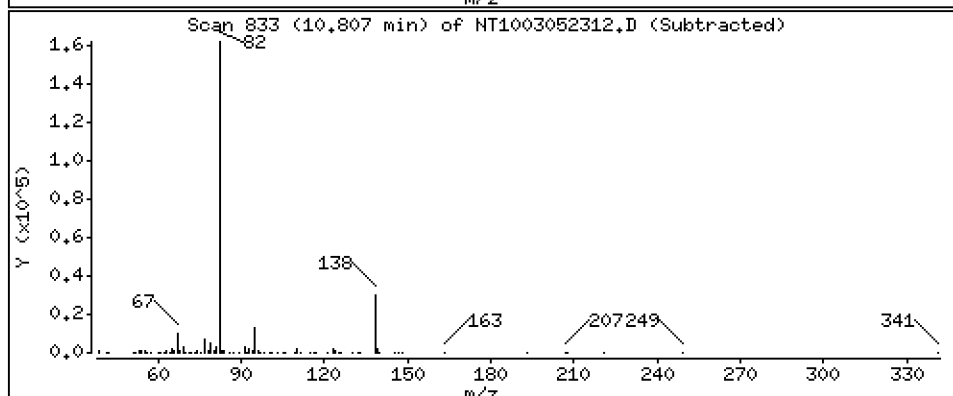
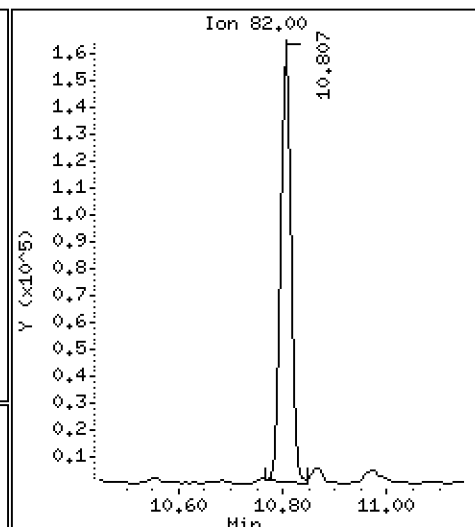
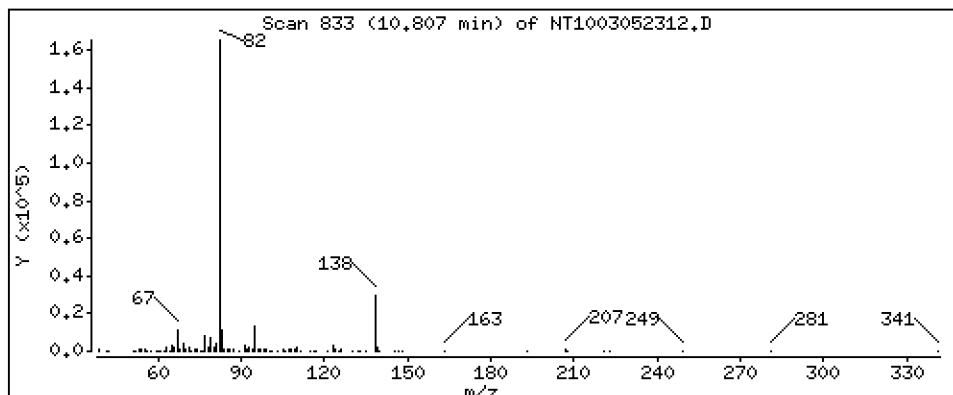
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 1,965 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

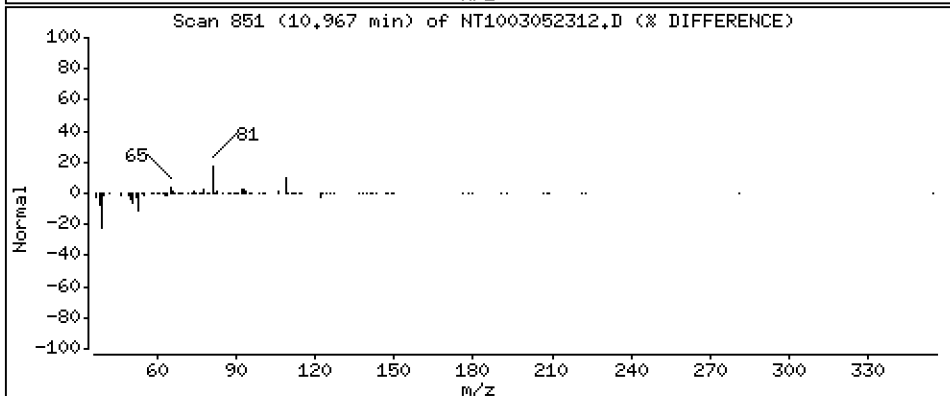
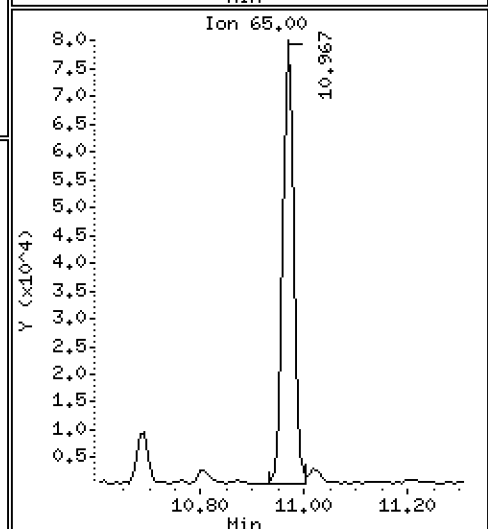
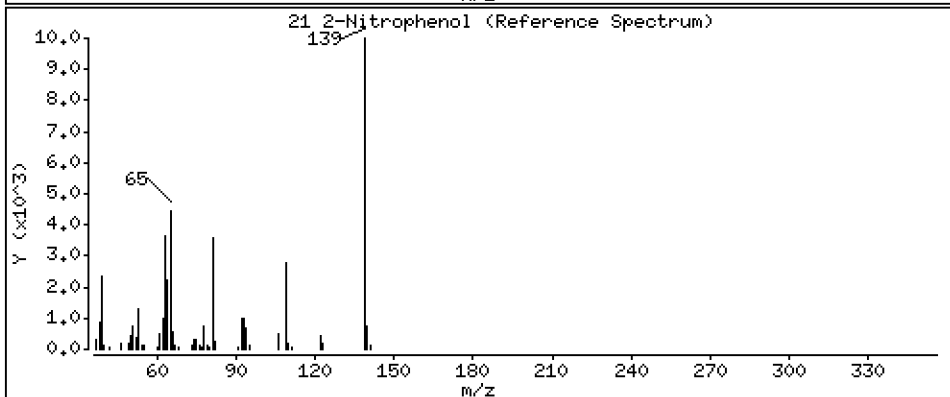
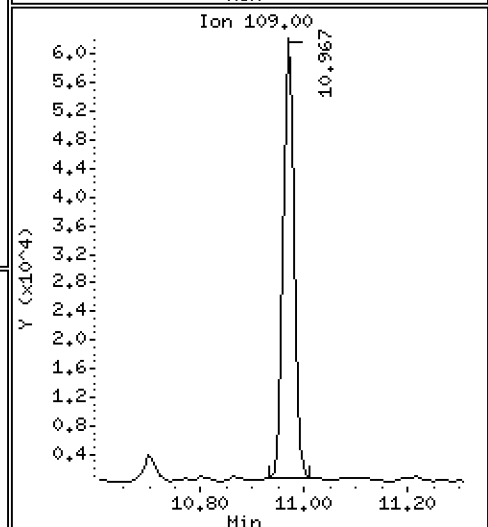
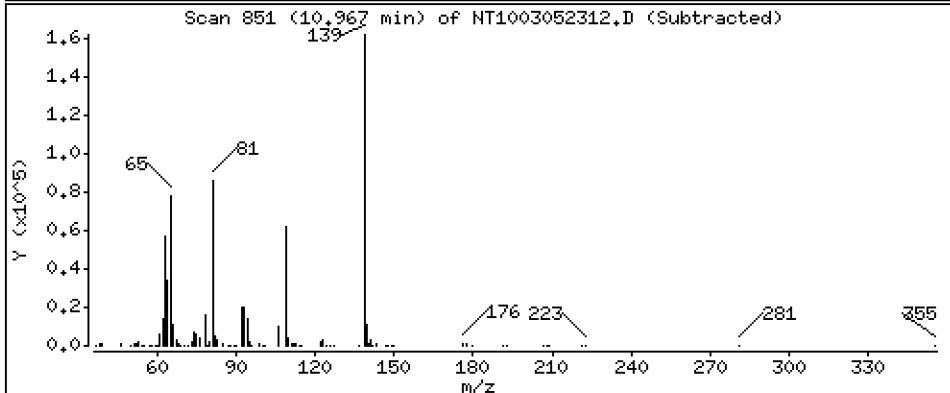
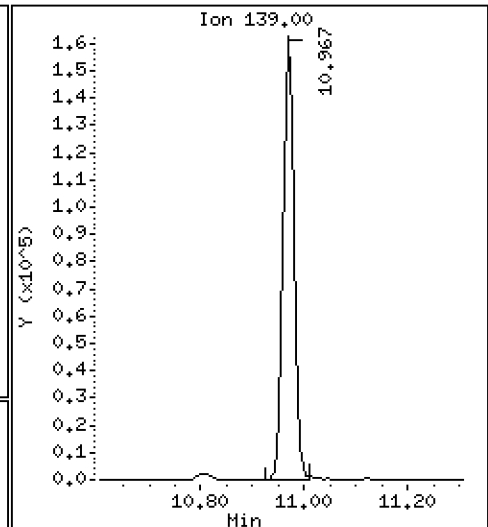
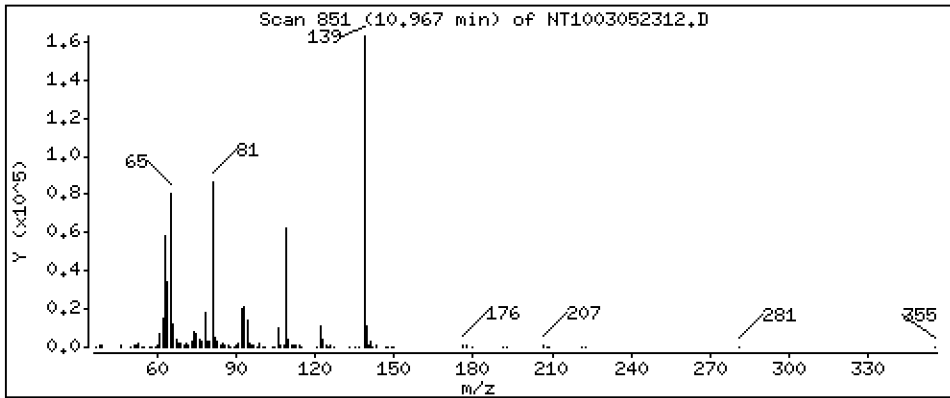
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,757 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

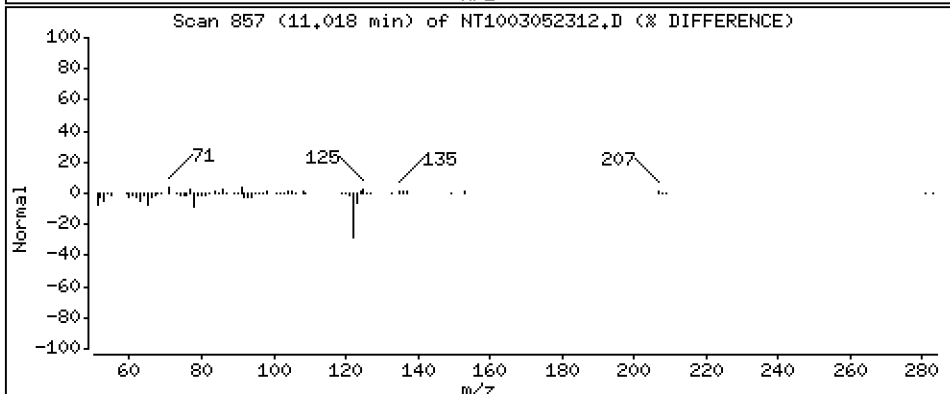
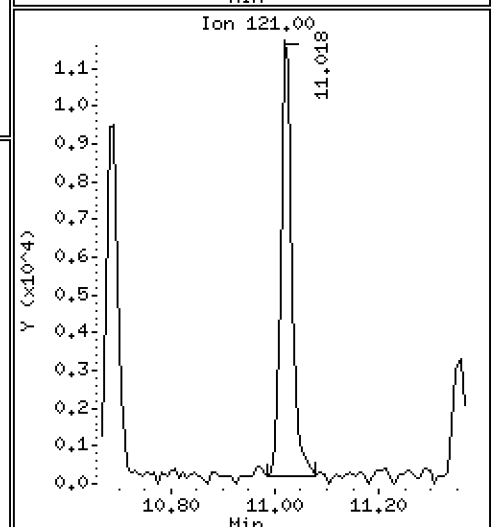
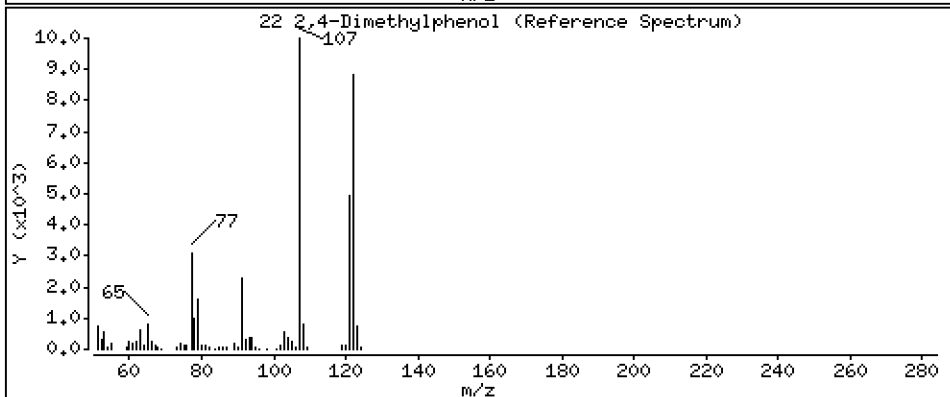
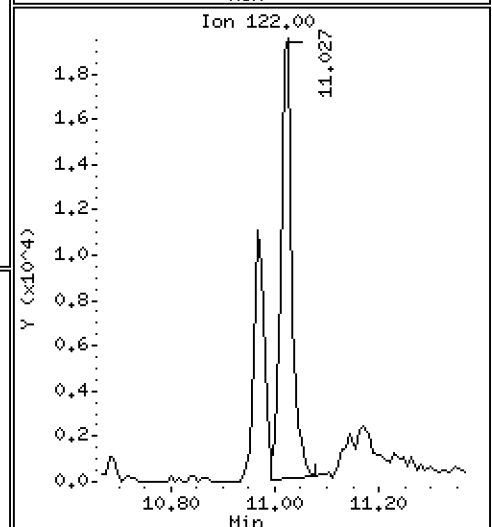
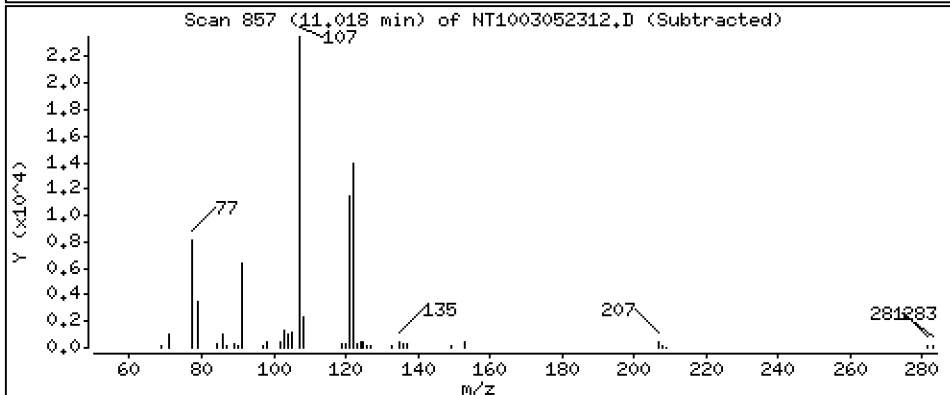
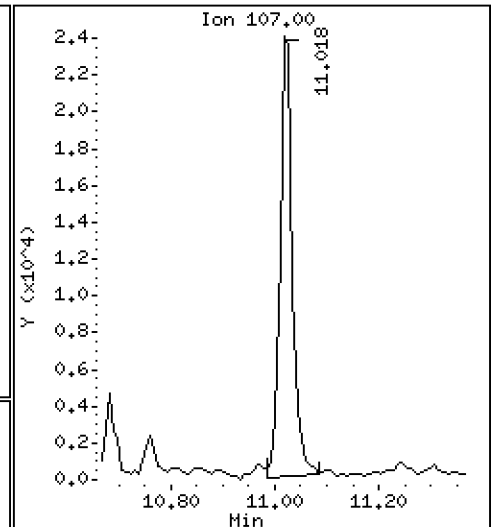
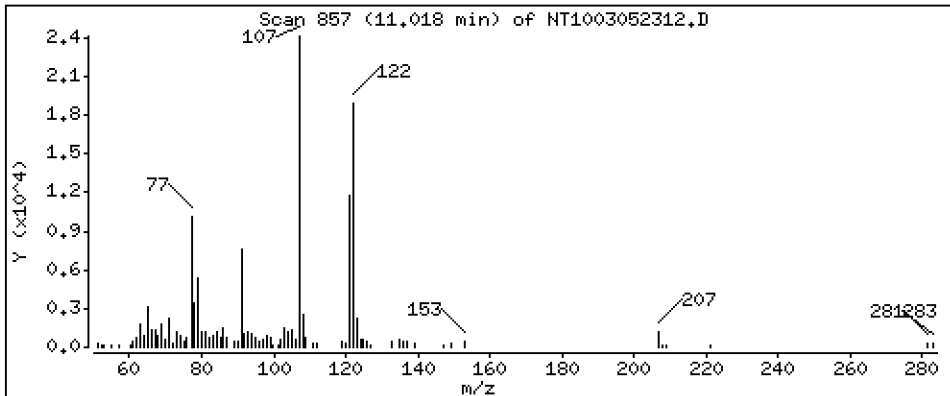
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,4572 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

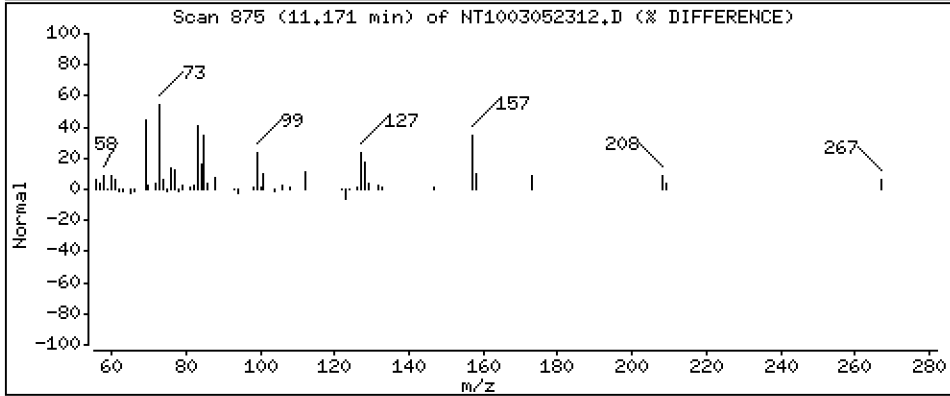
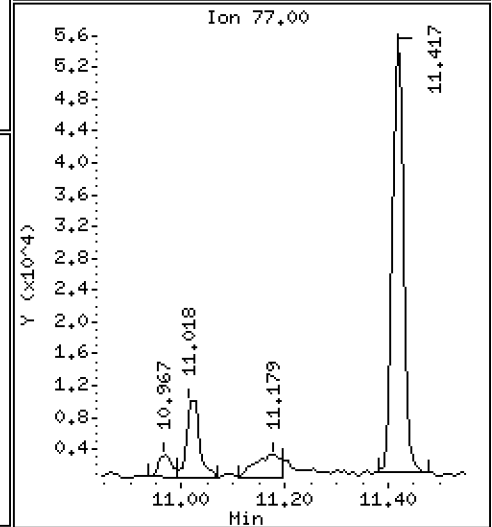
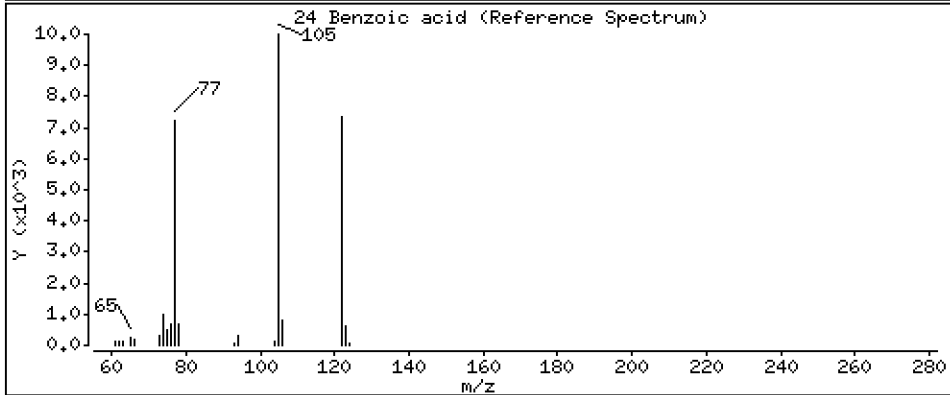
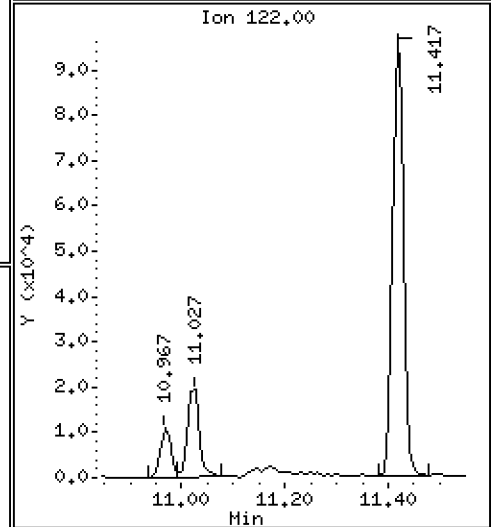
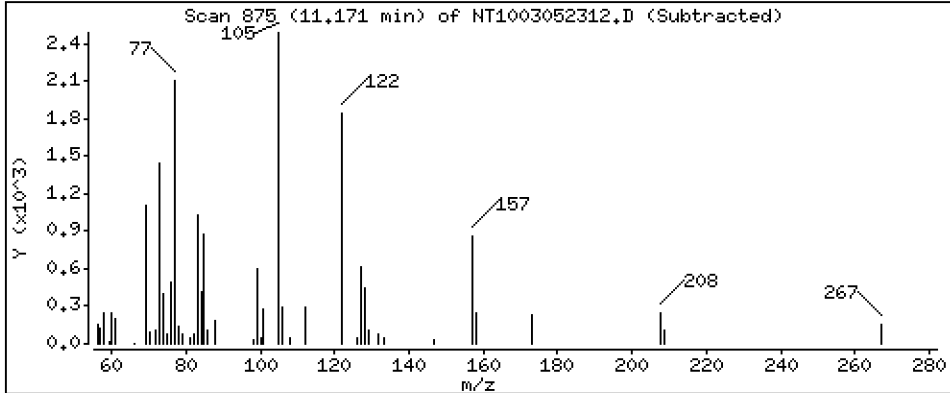
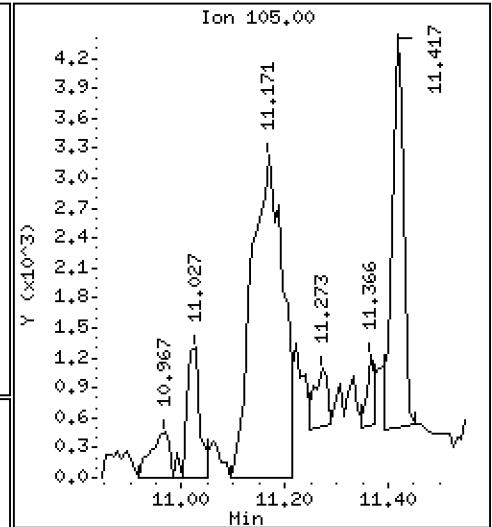
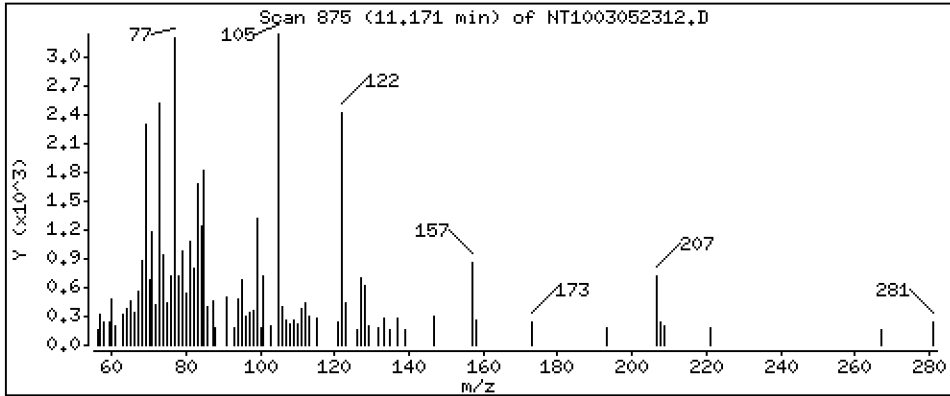
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,2539 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

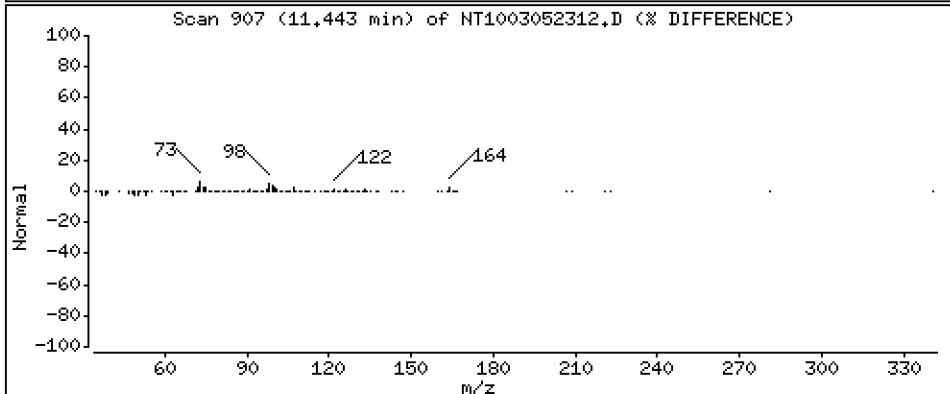
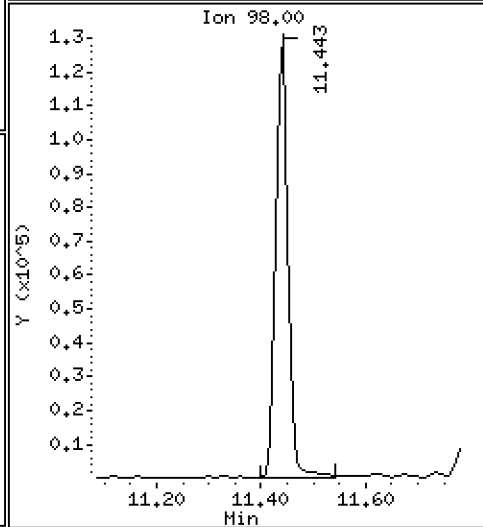
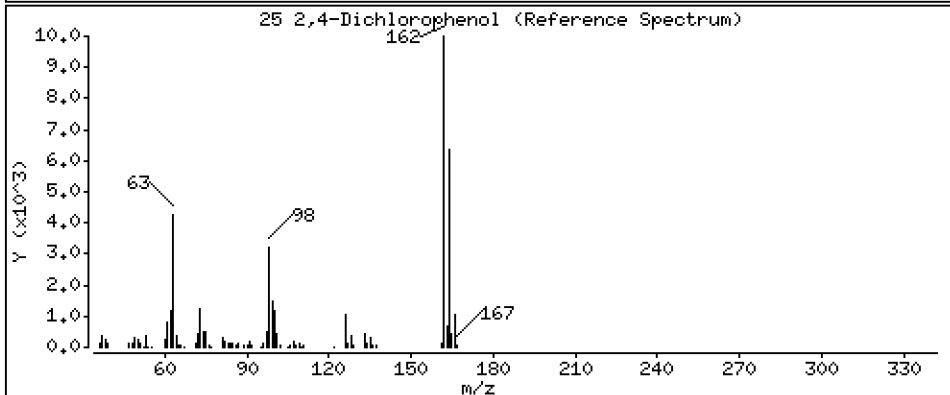
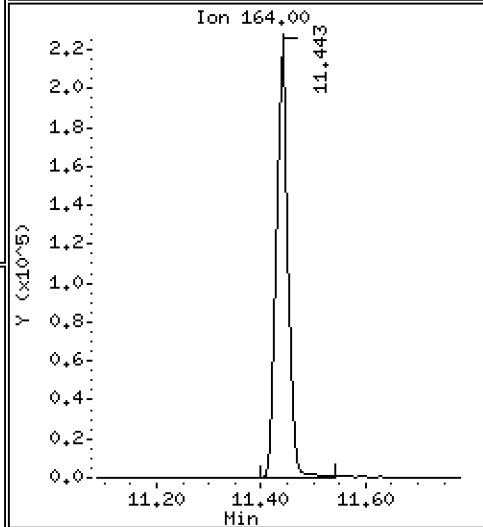
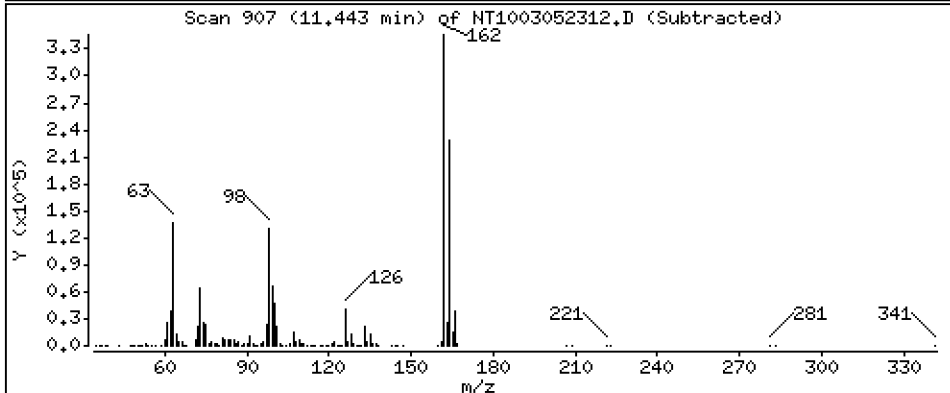
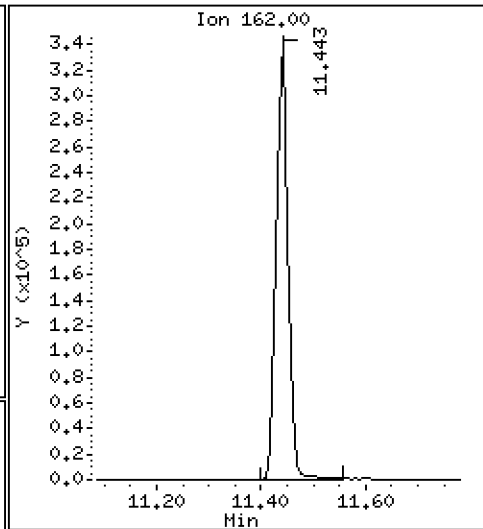
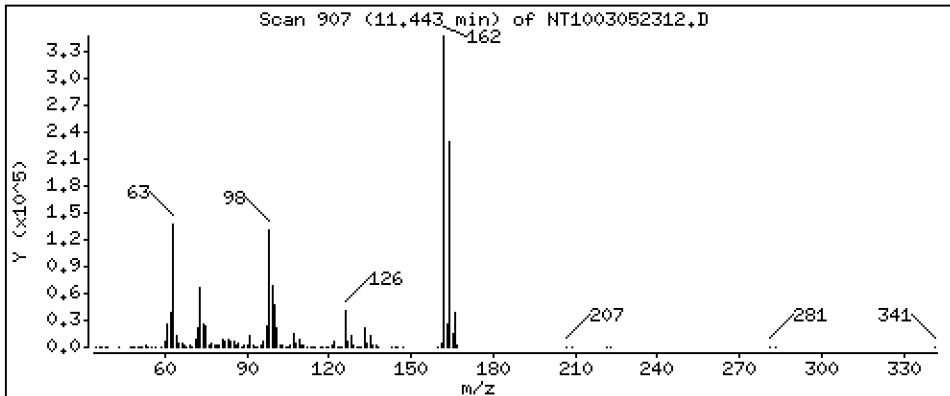
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 7,986 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

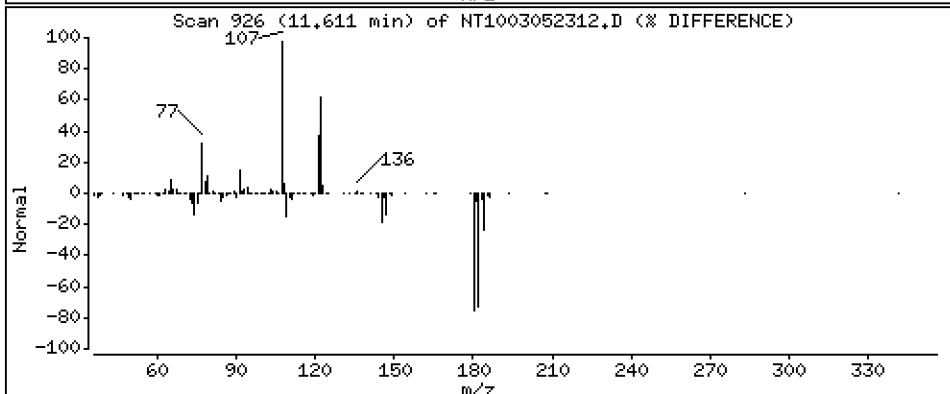
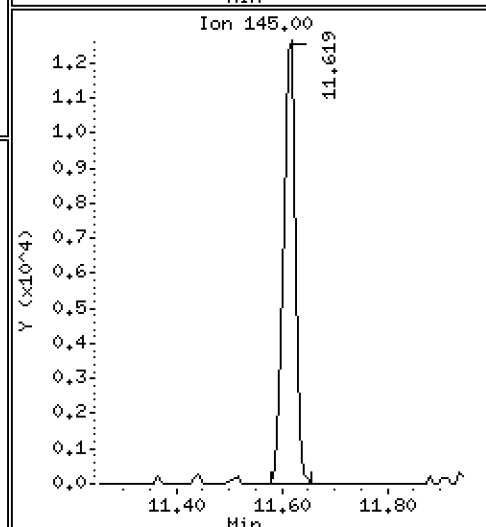
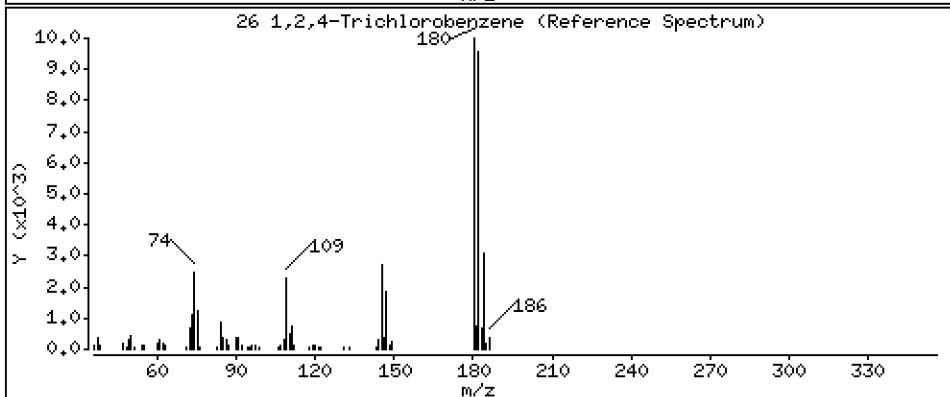
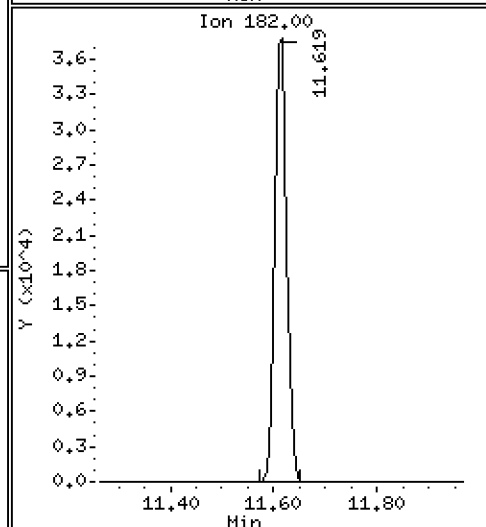
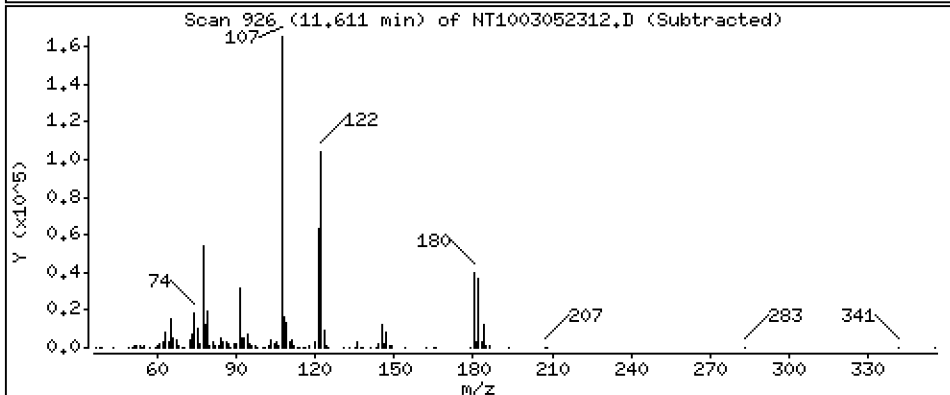
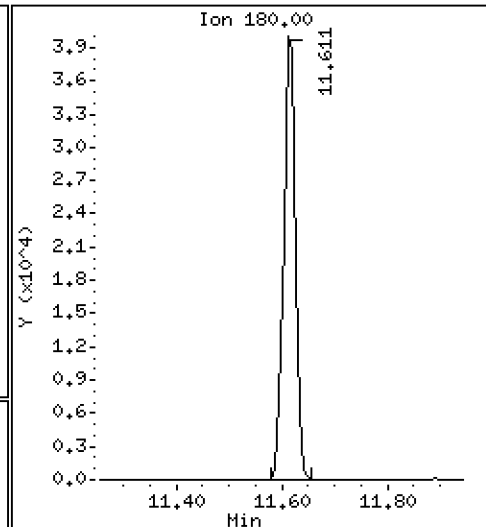
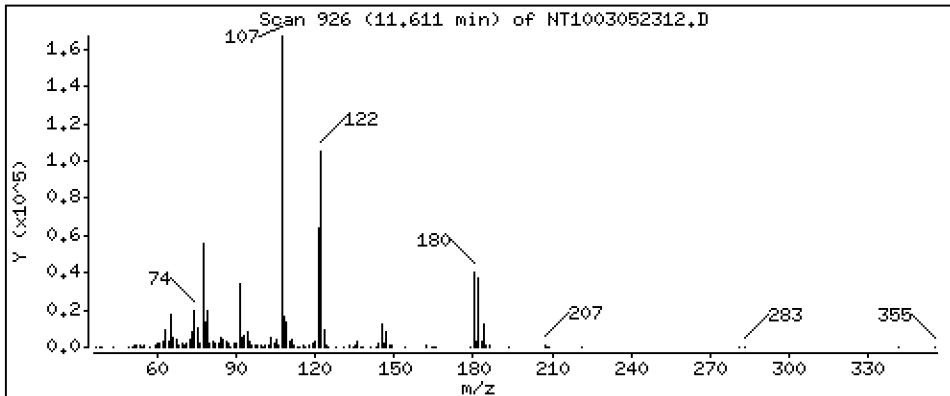
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,8764 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

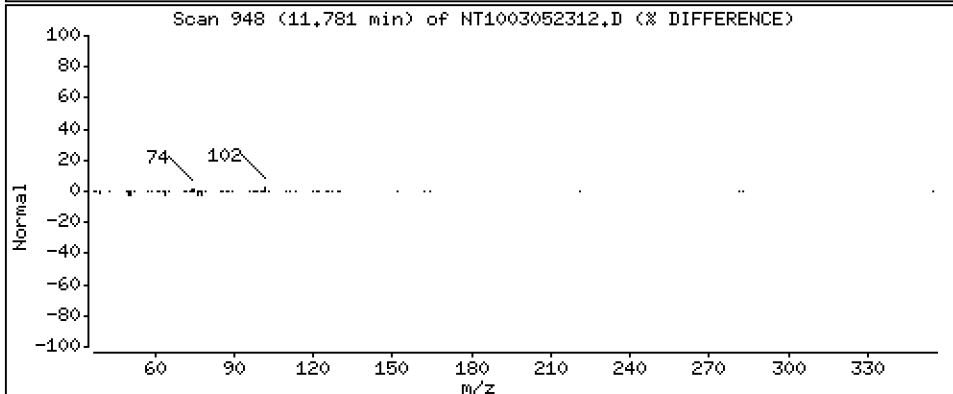
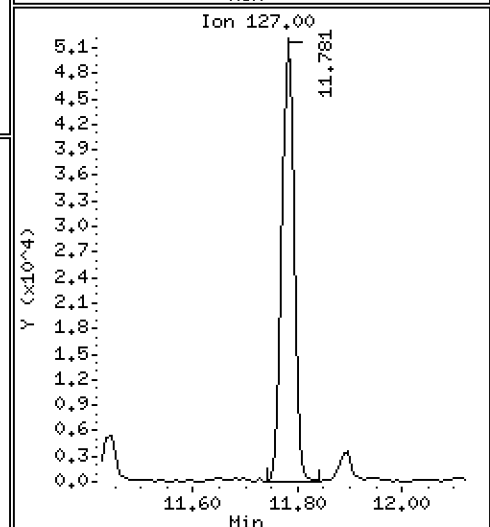
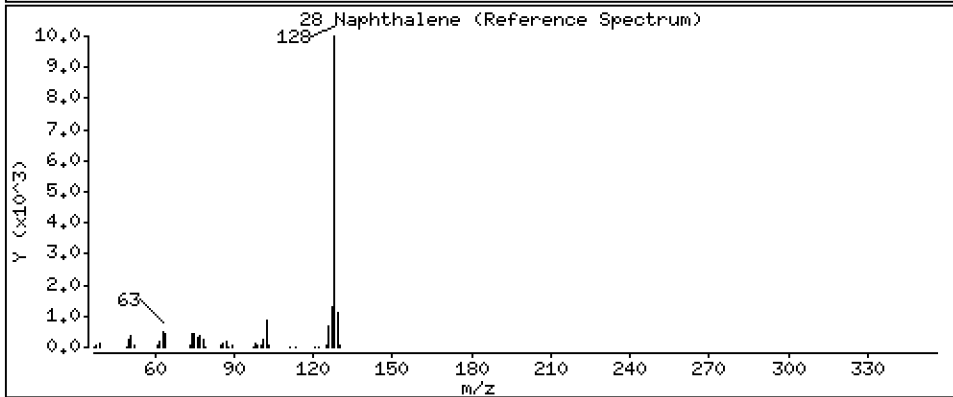
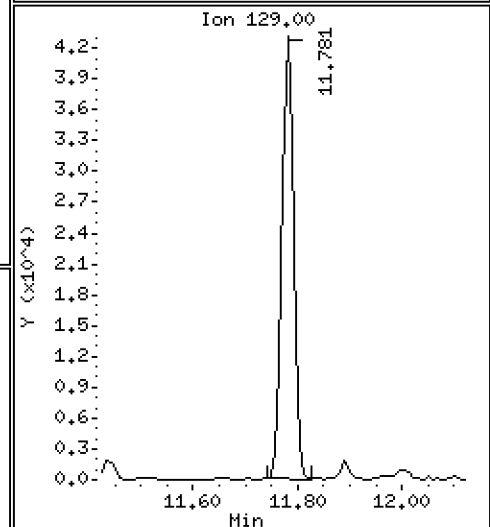
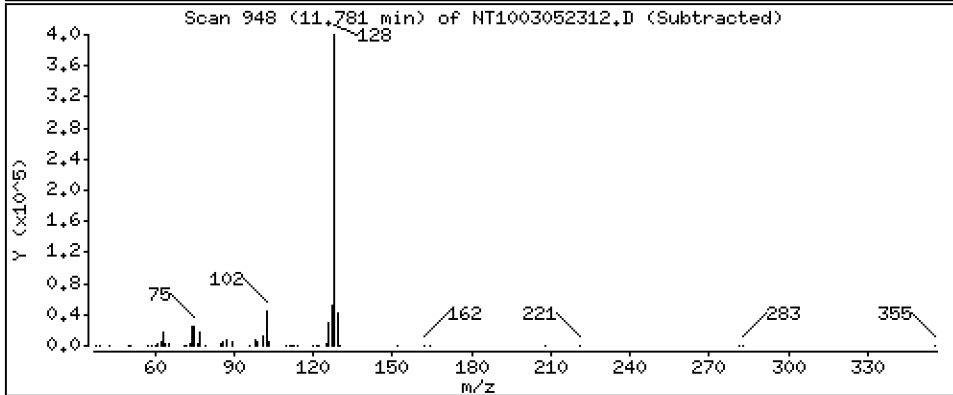
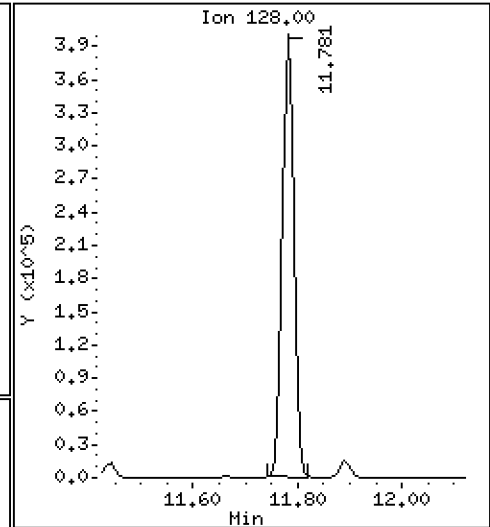
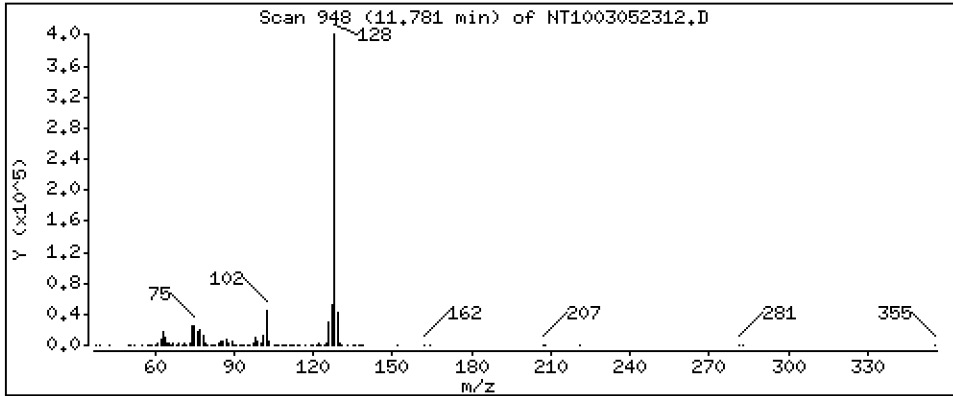
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 2,471 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

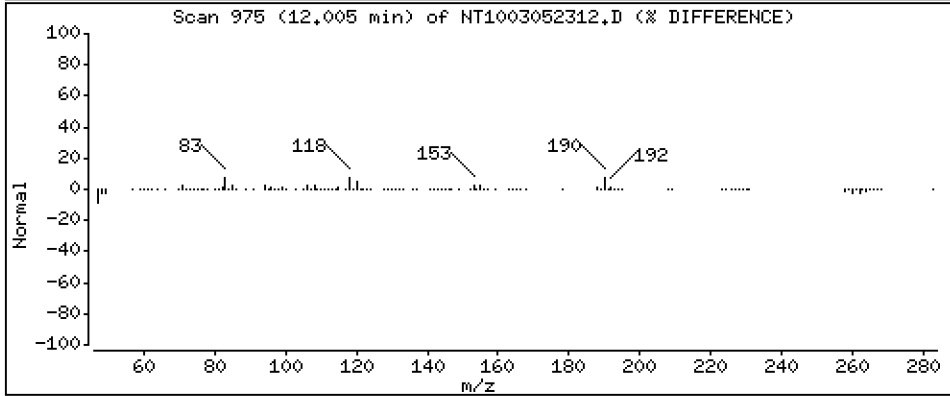
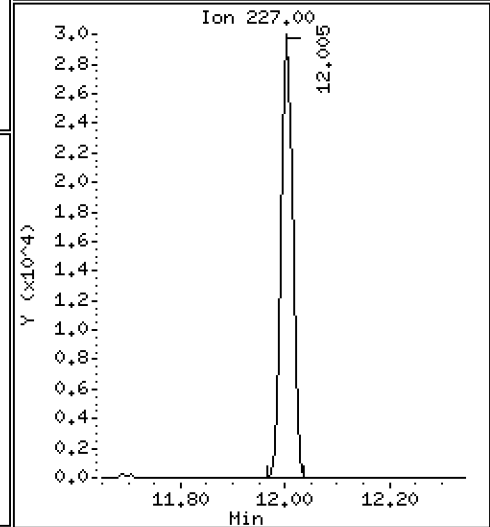
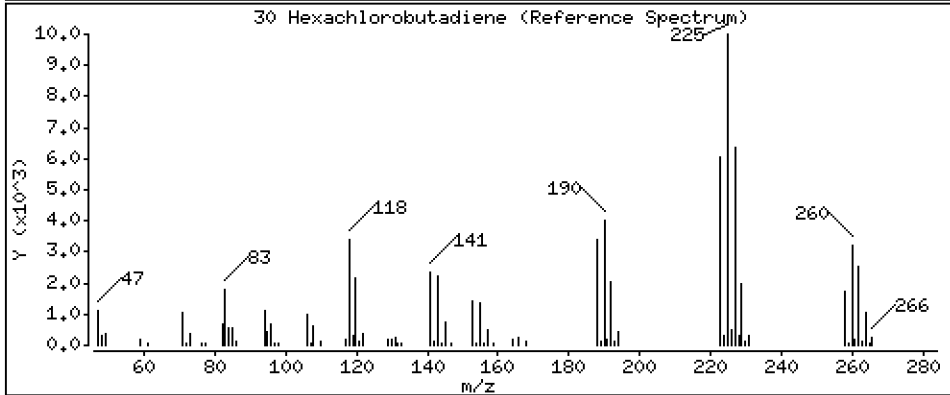
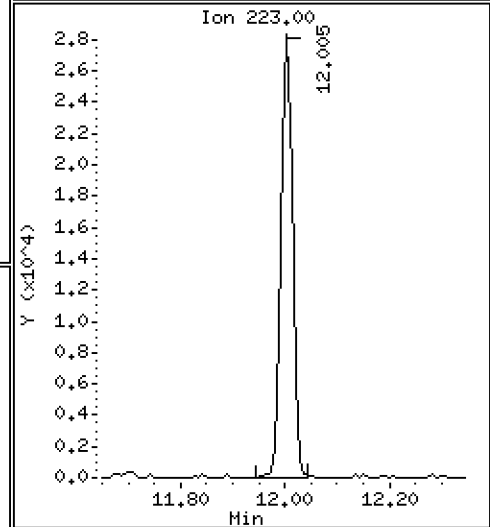
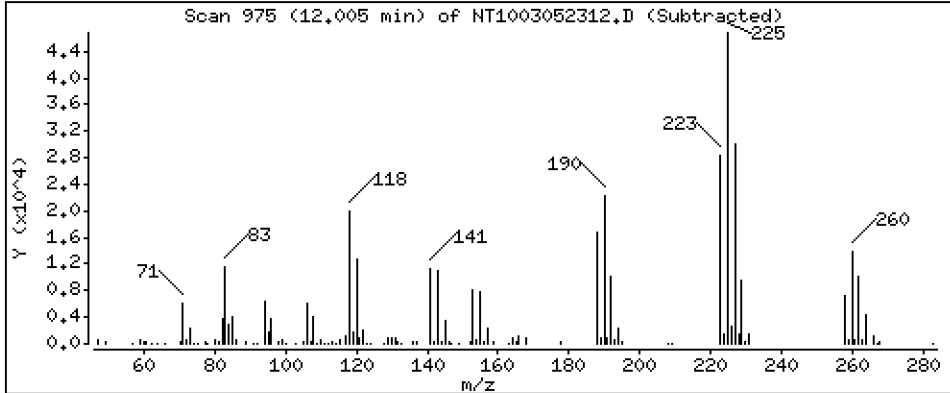
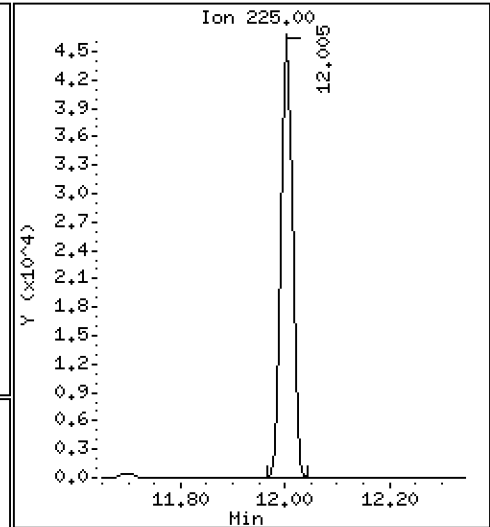
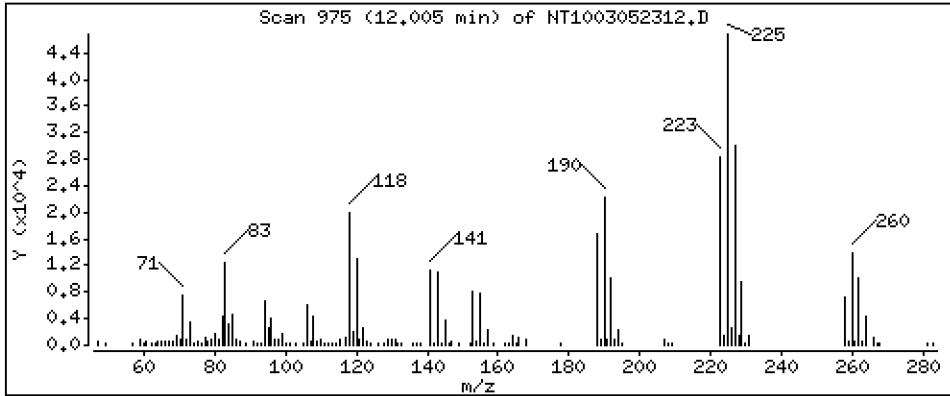
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,300 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

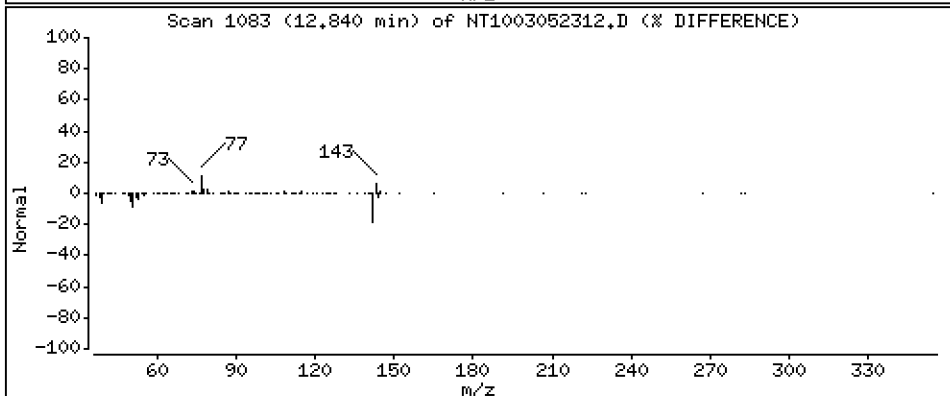
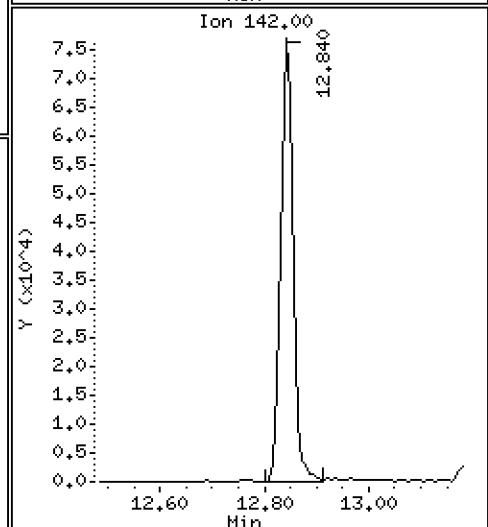
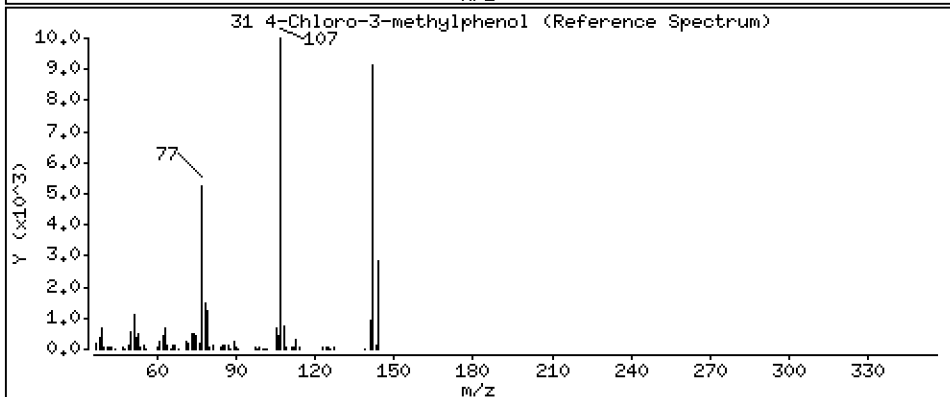
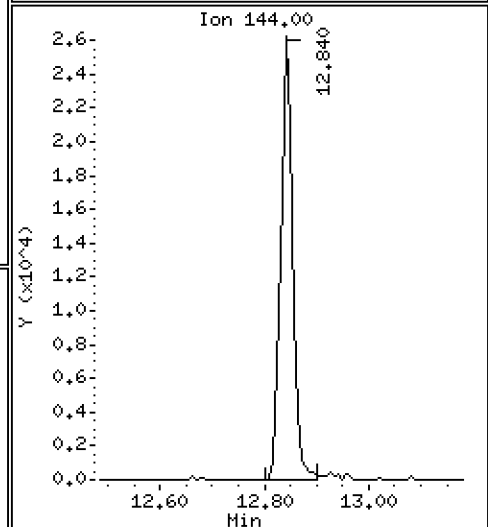
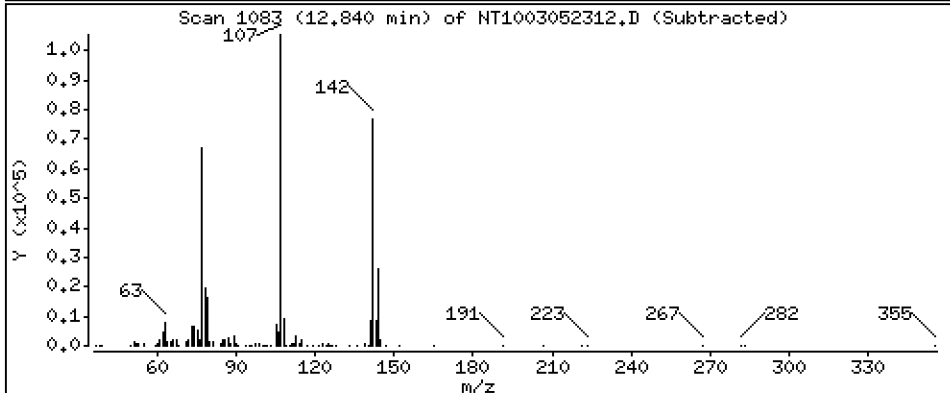
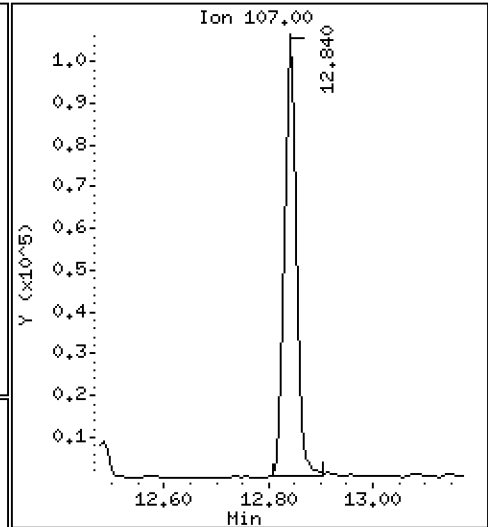
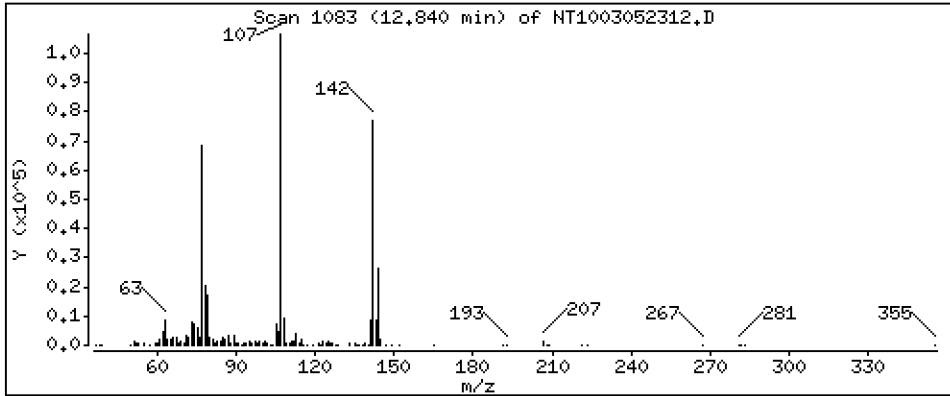
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 2,174 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

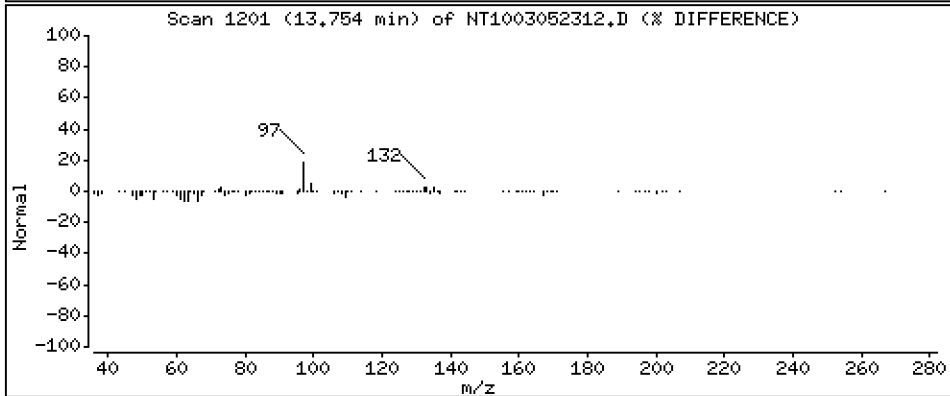
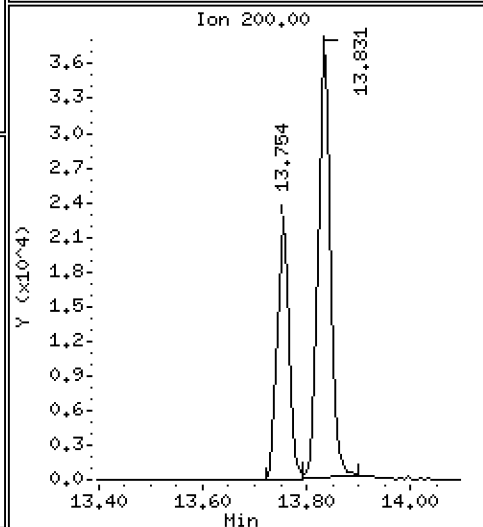
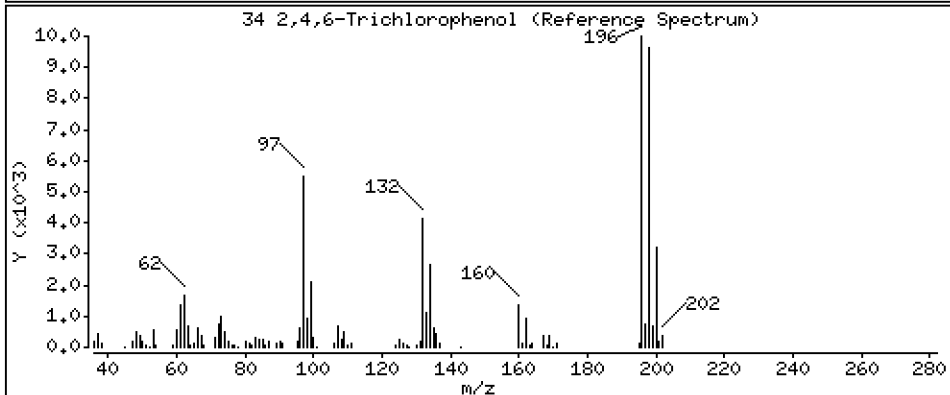
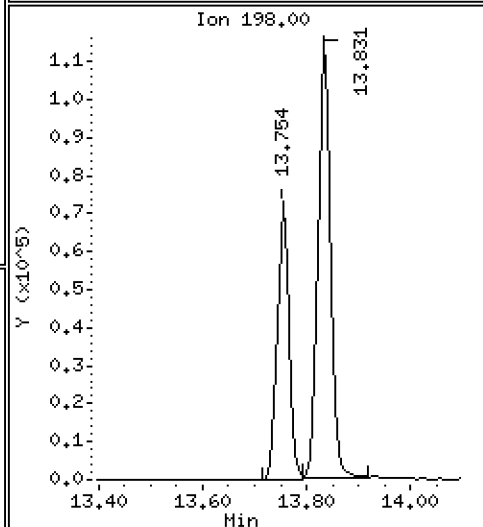
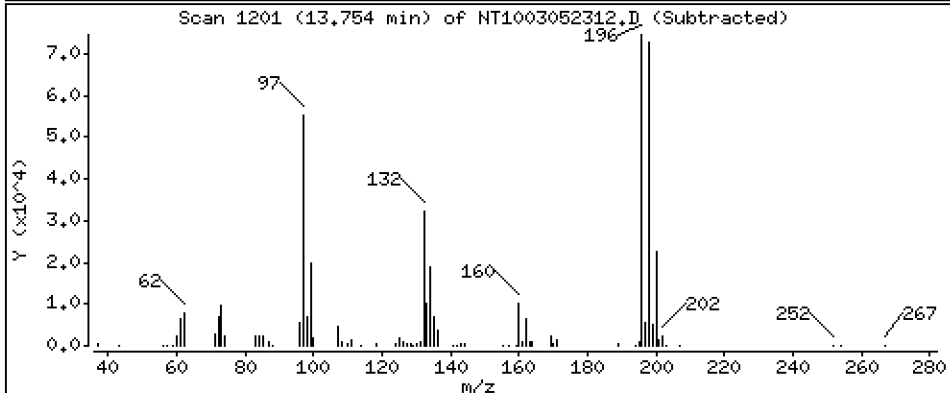
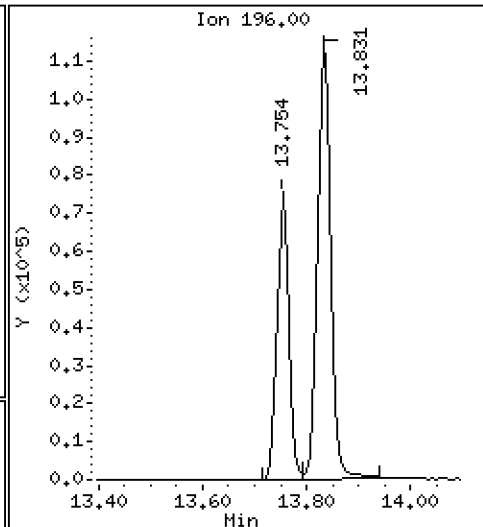
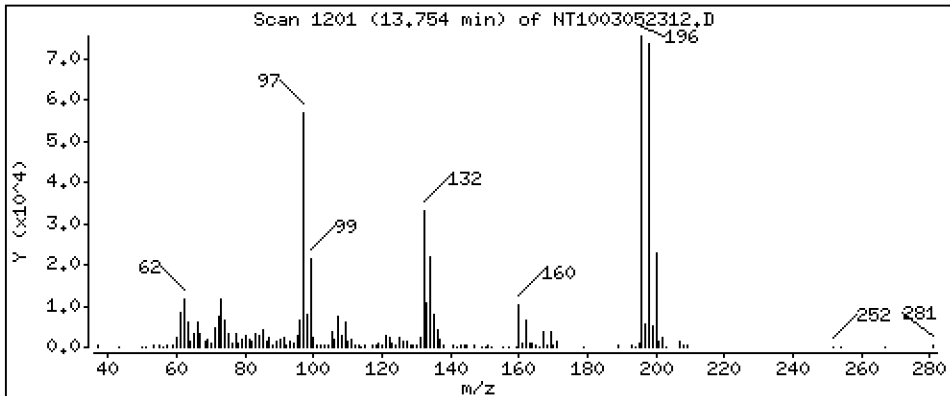
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 2,442 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

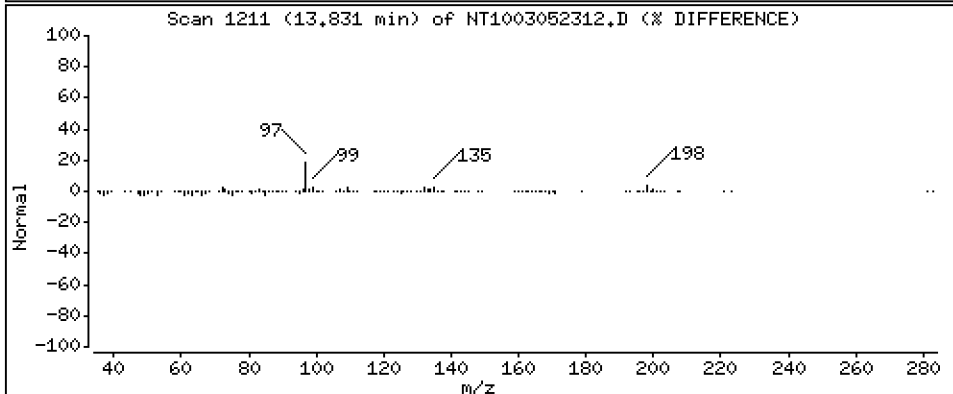
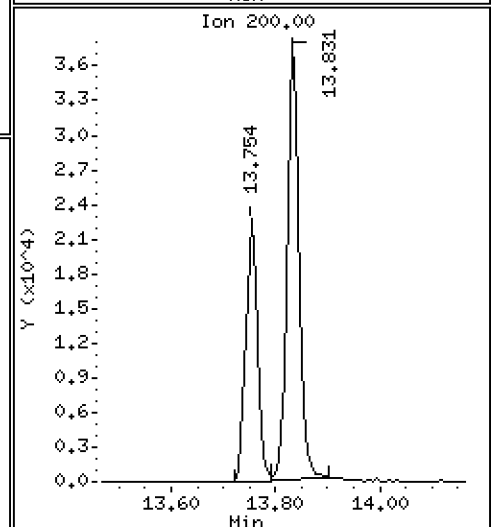
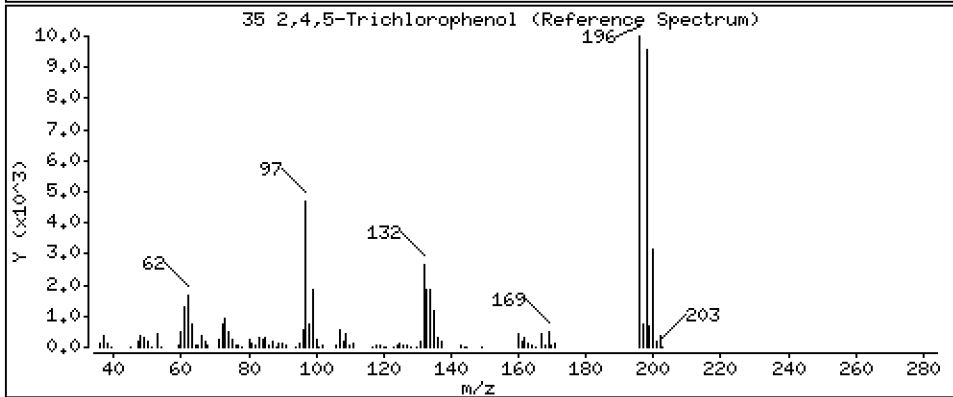
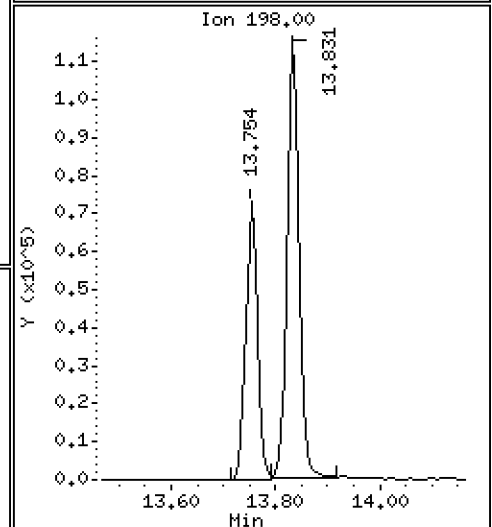
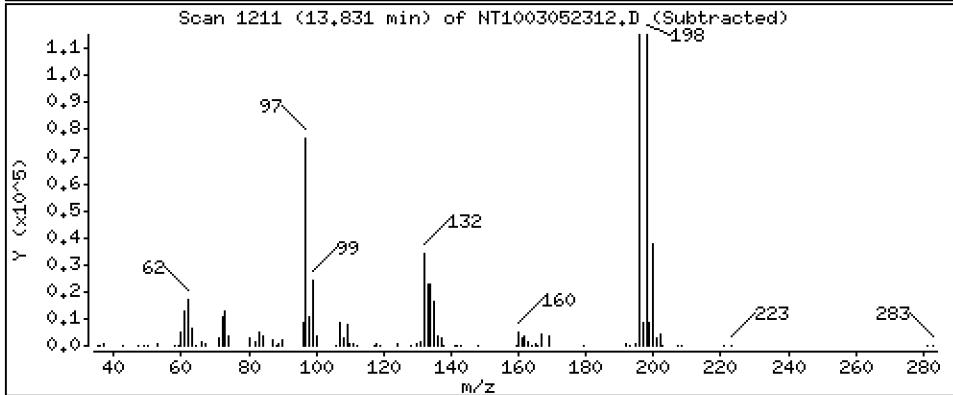
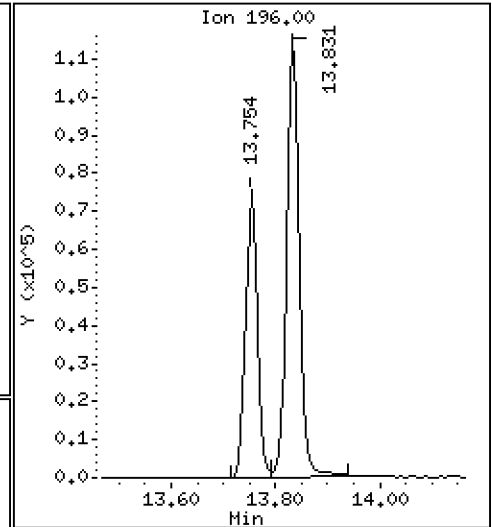
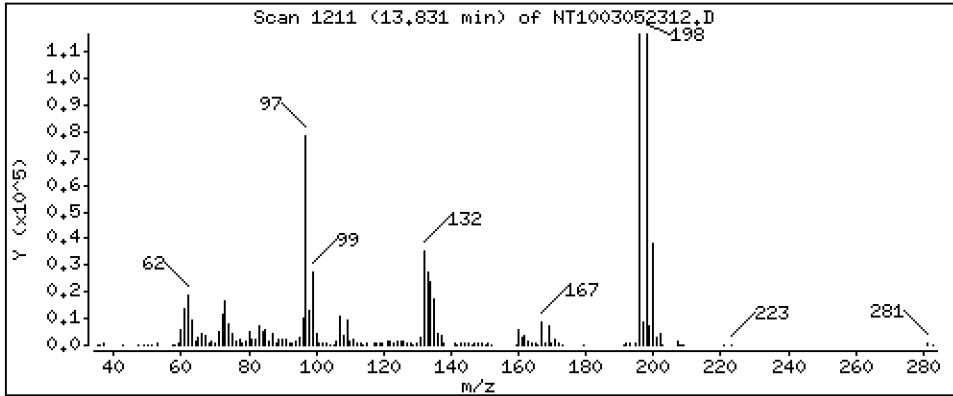
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 3,880 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

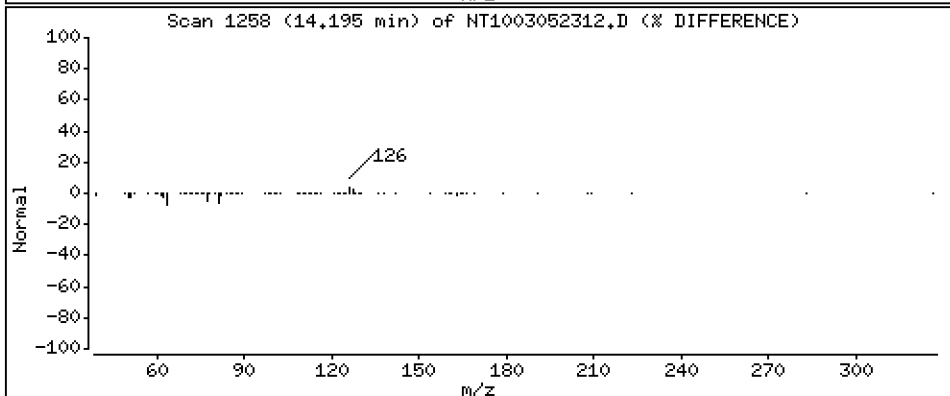
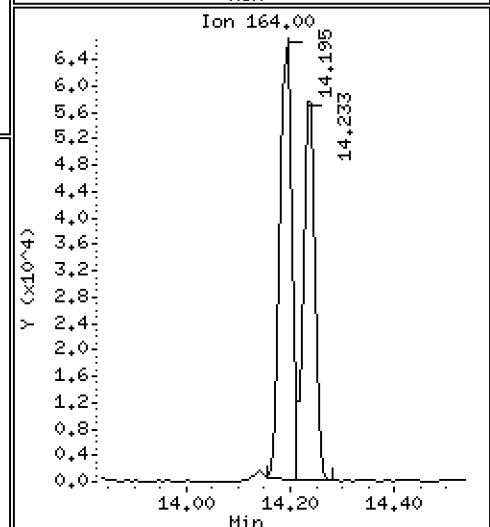
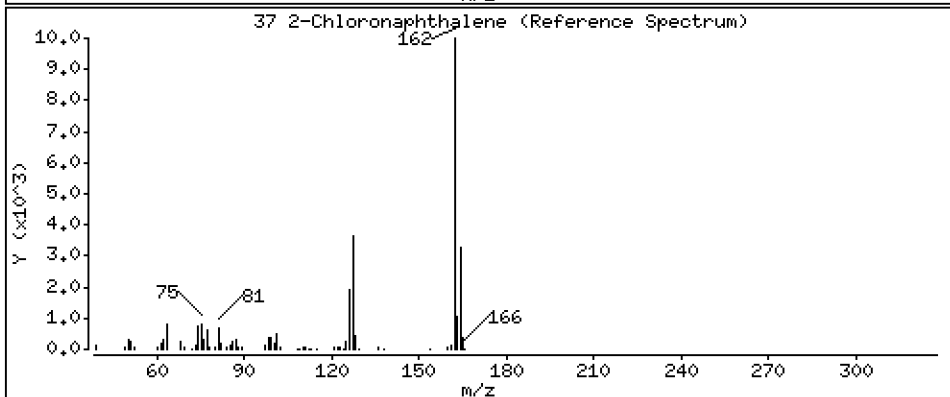
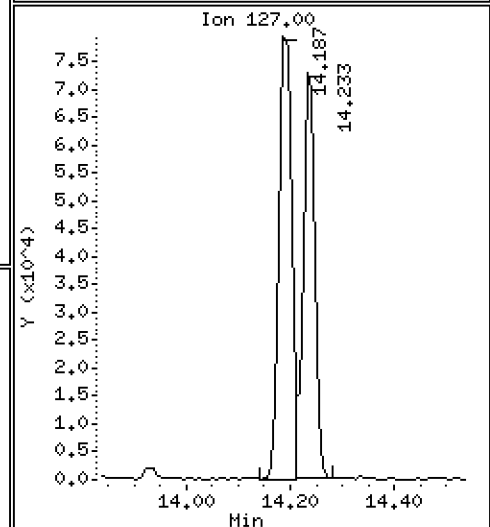
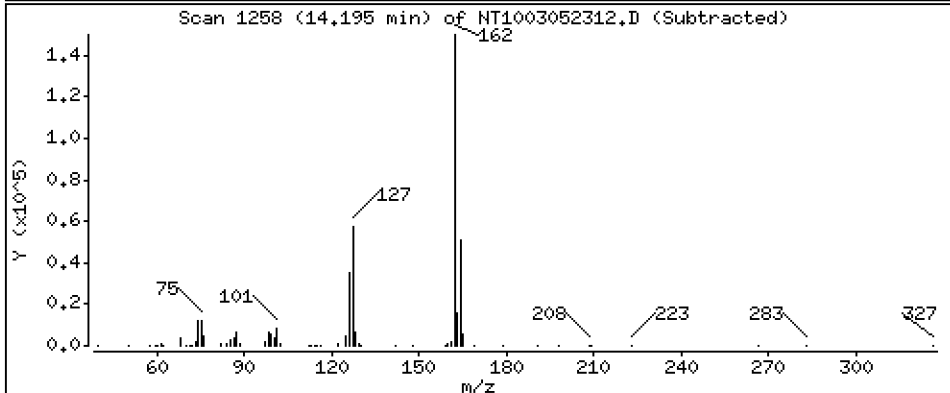
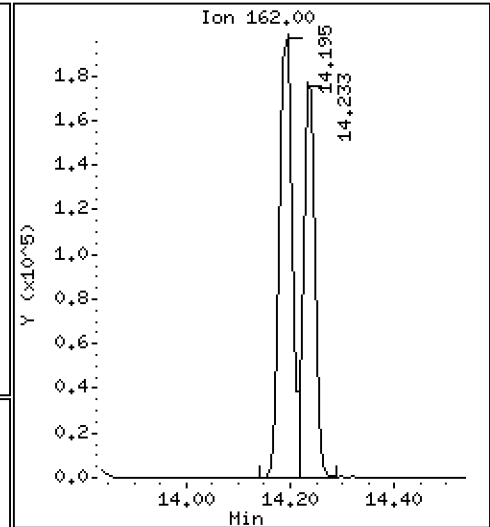
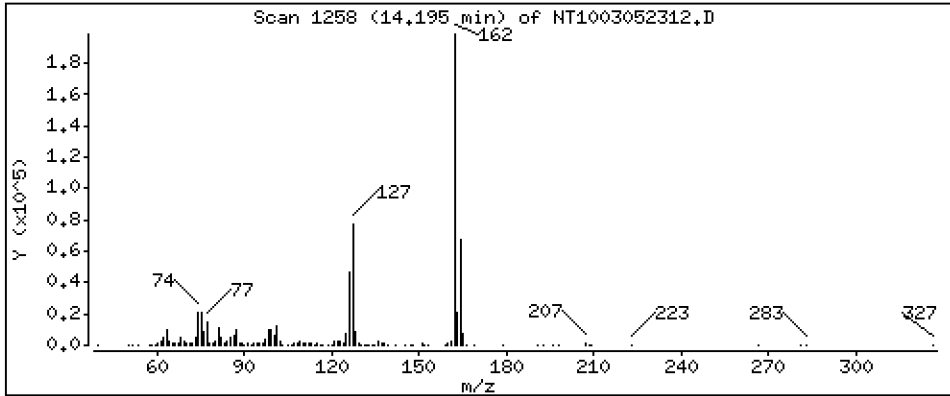
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 2,369 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

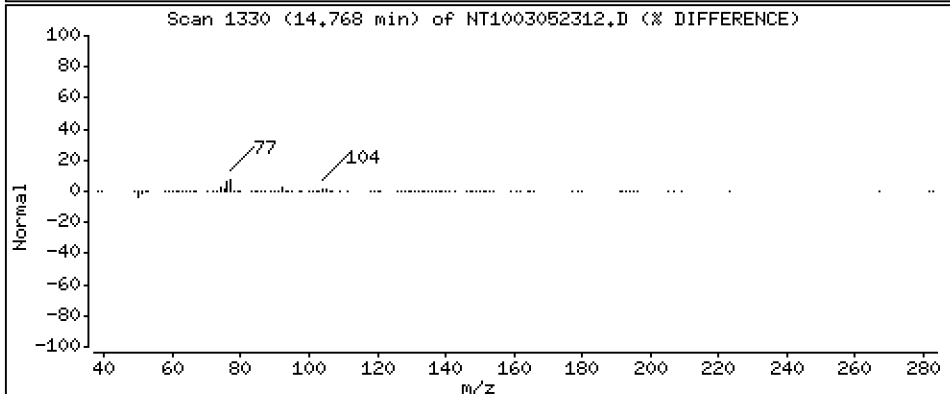
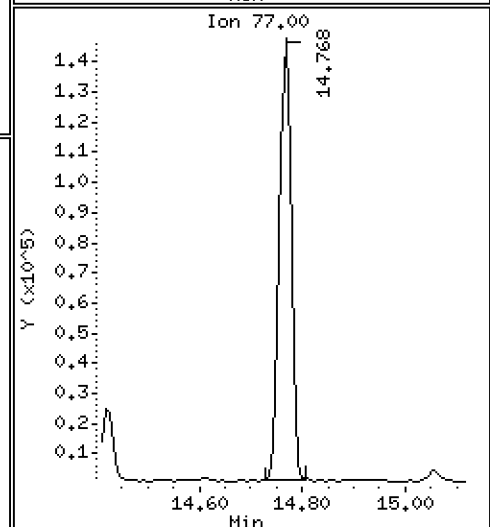
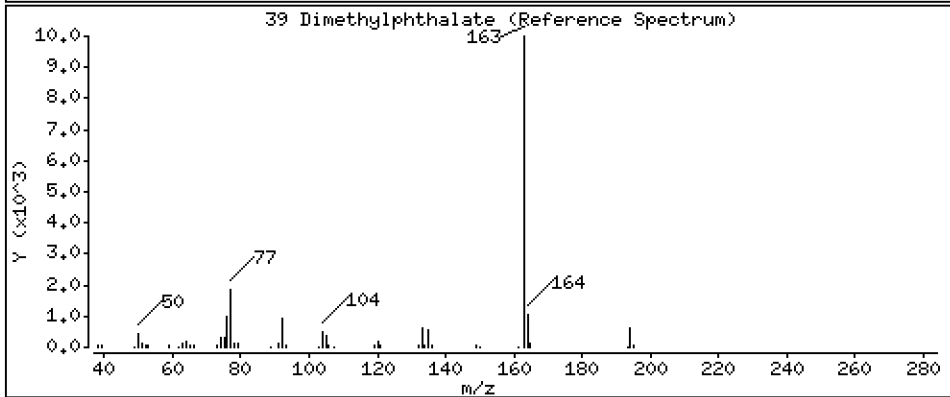
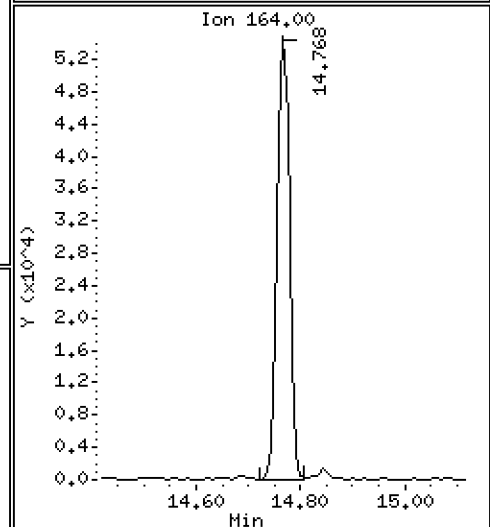
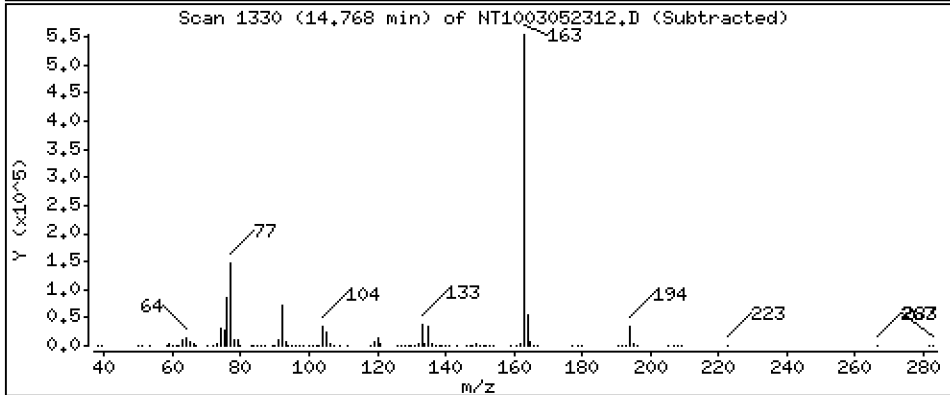
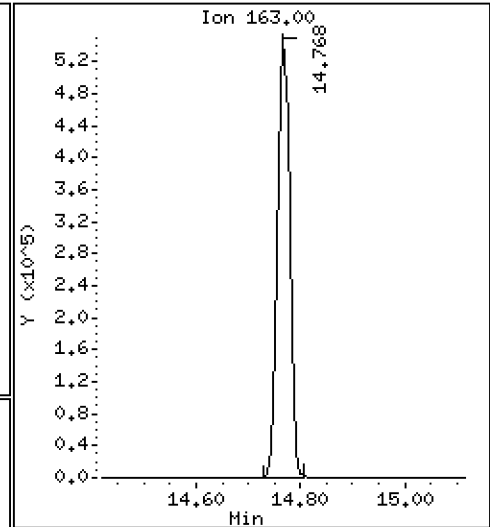
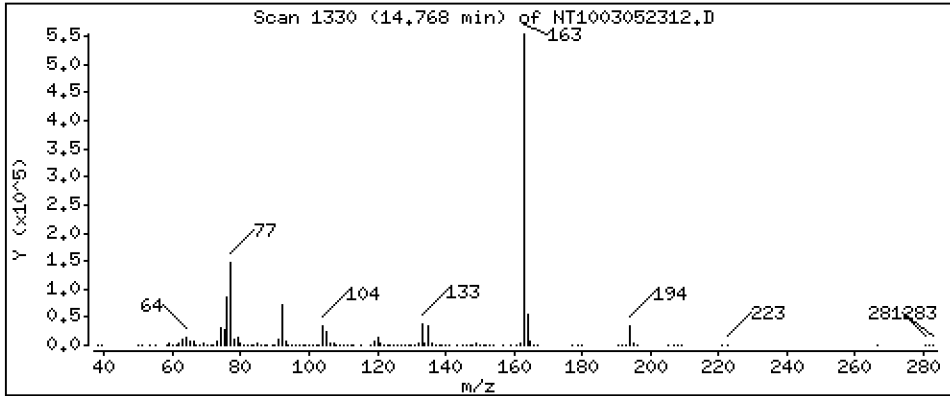
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,265 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

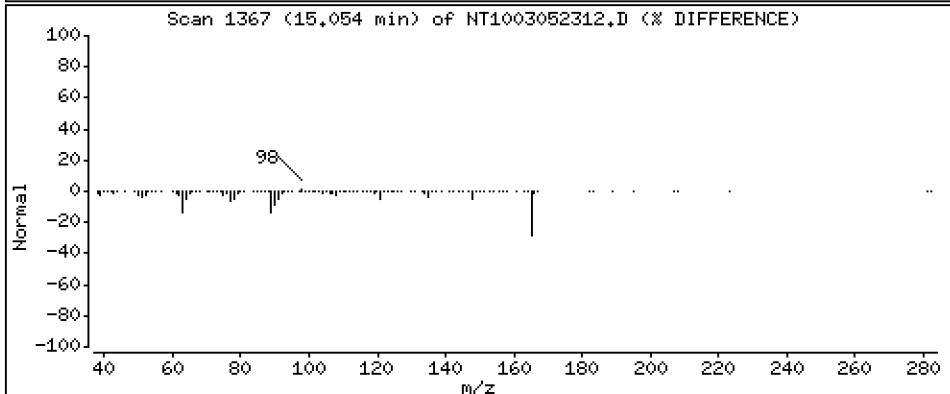
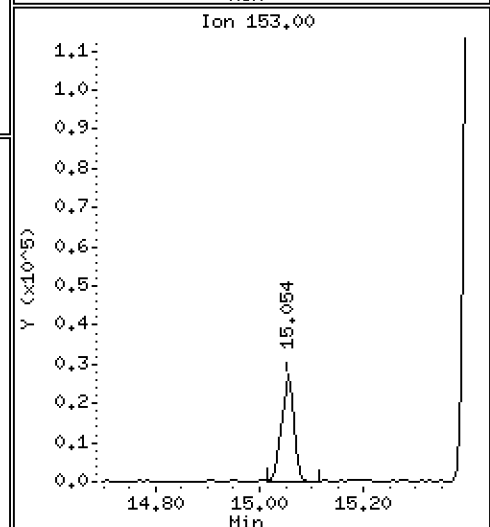
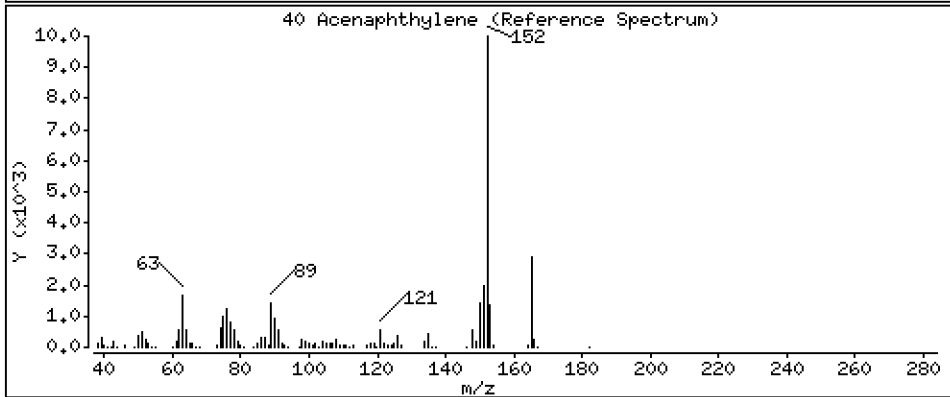
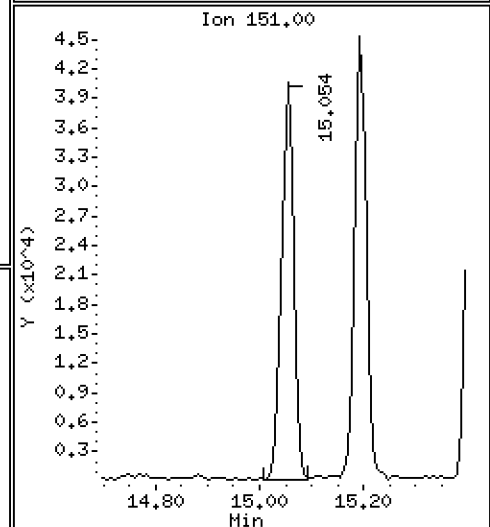
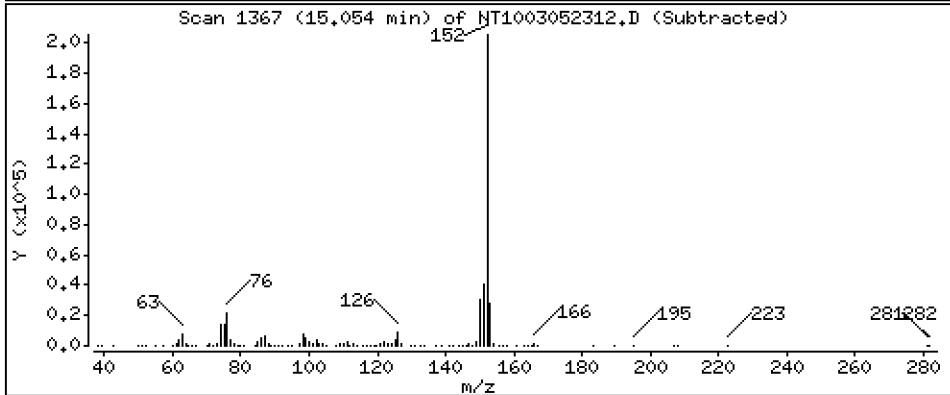
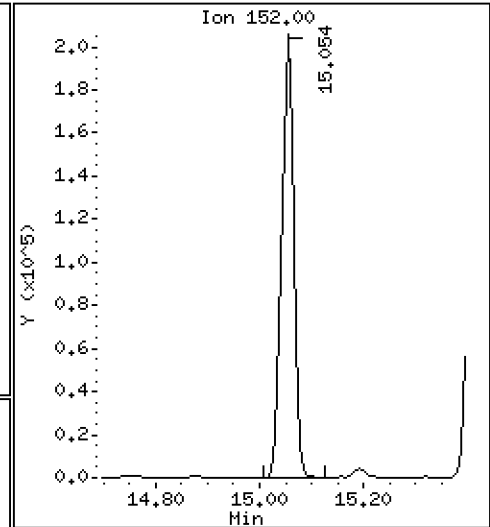
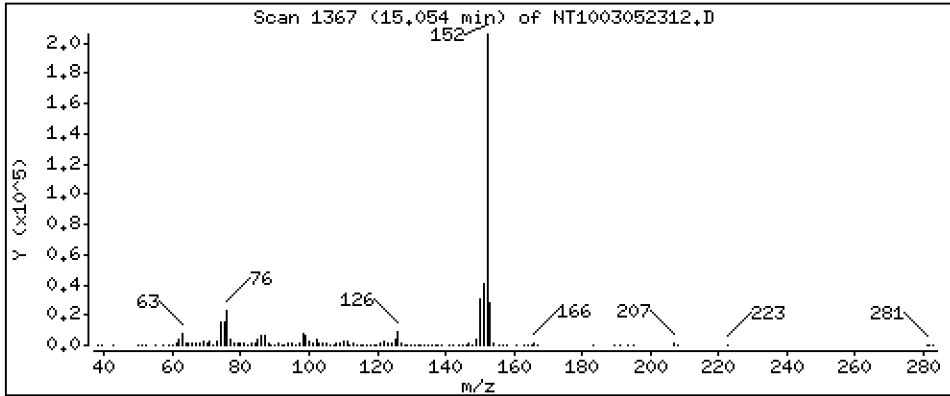
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 1,555 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

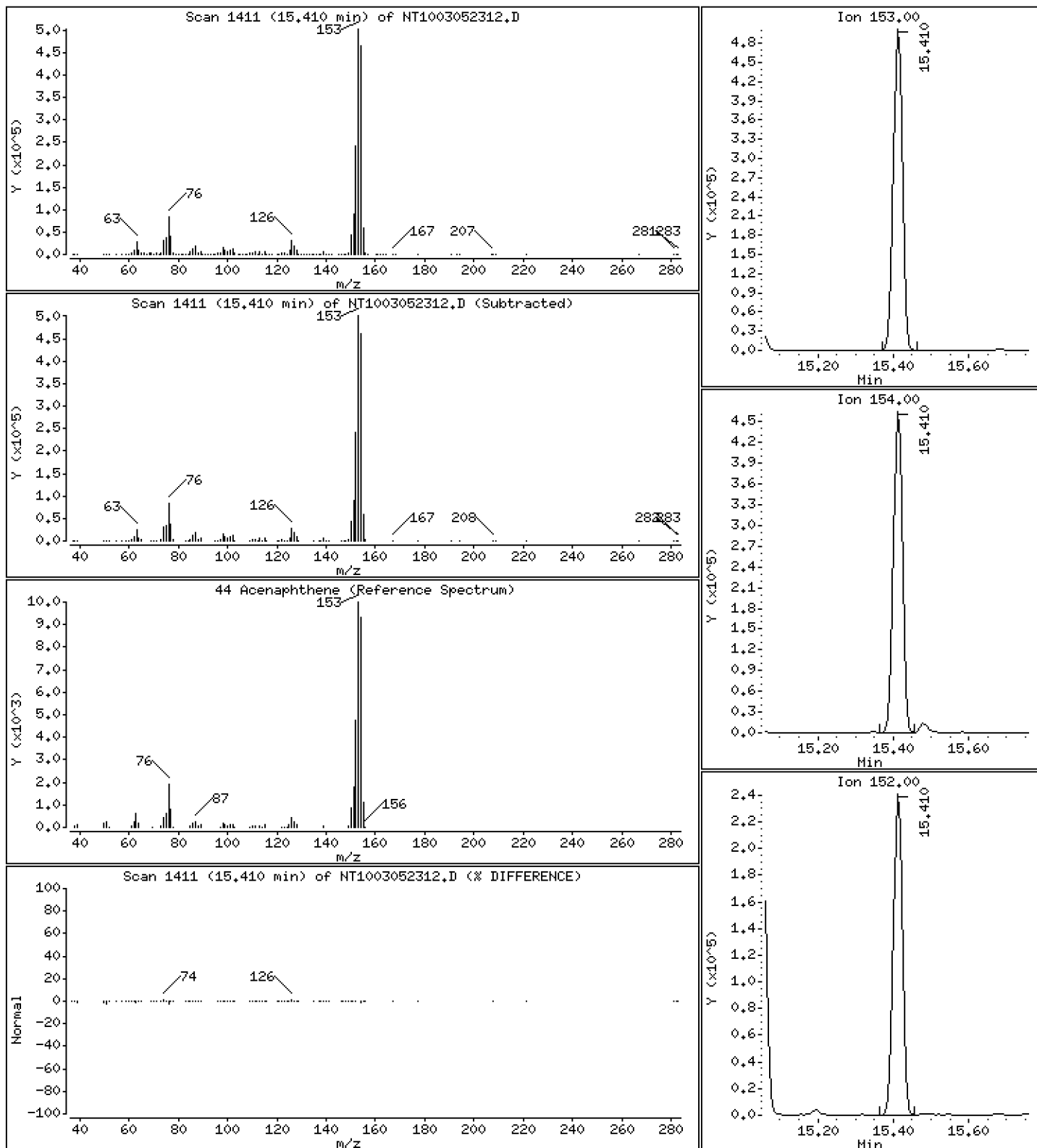
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 5,547 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

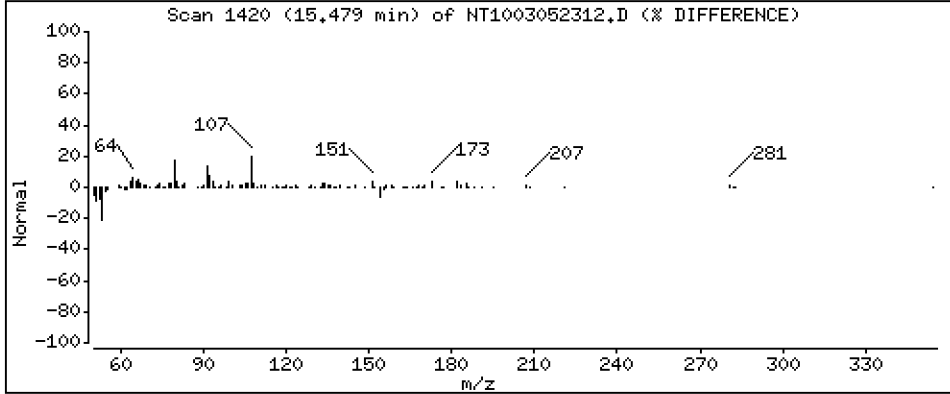
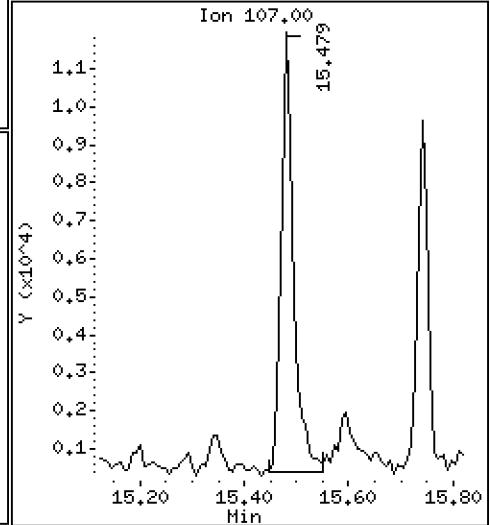
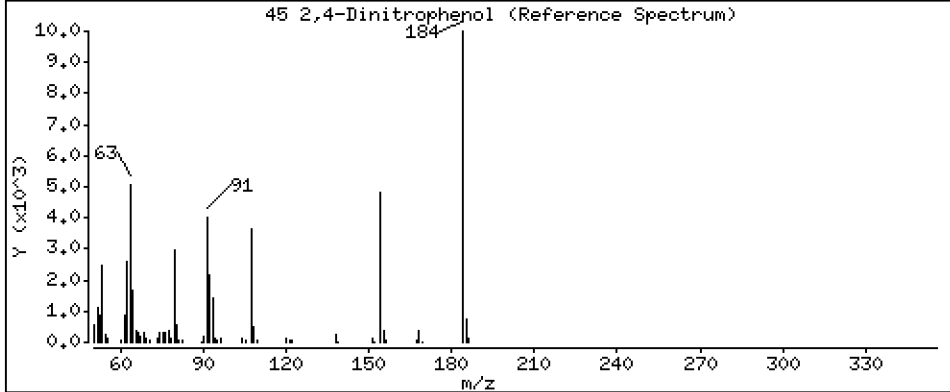
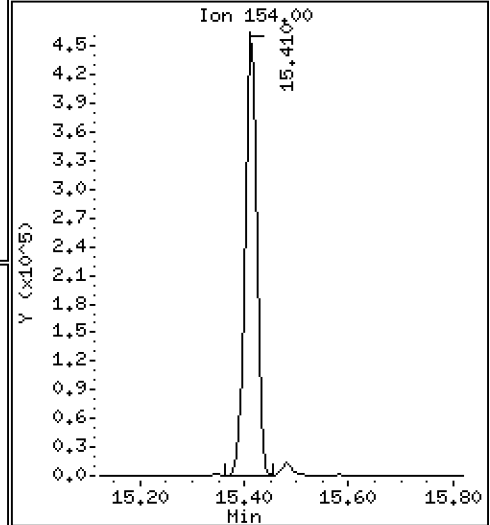
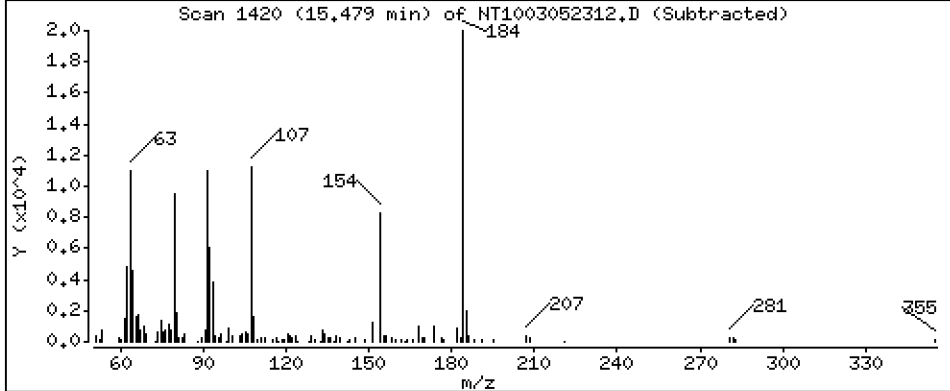
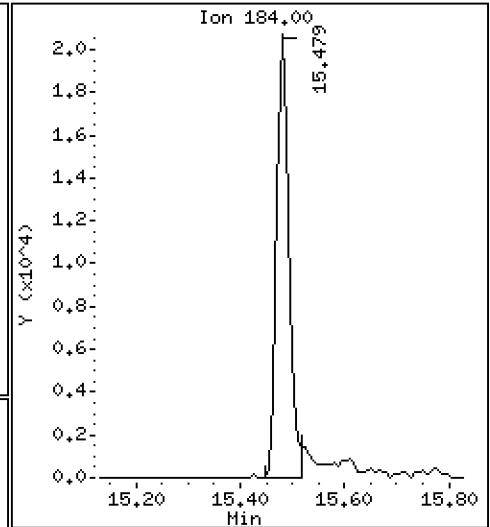
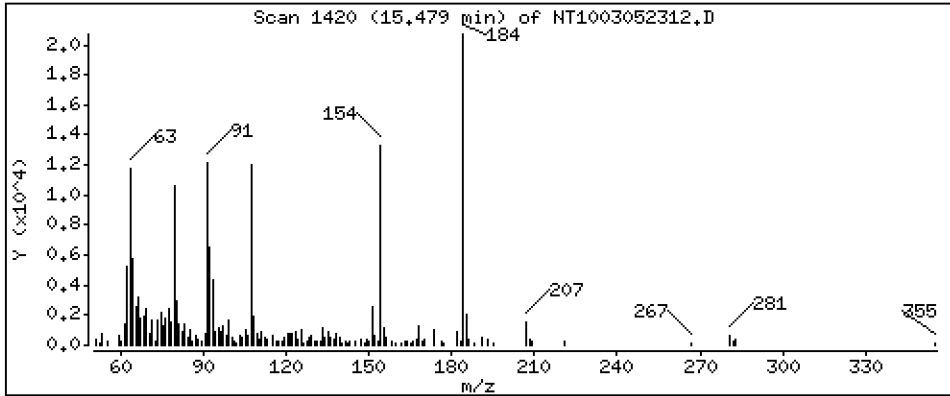
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 3,470 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

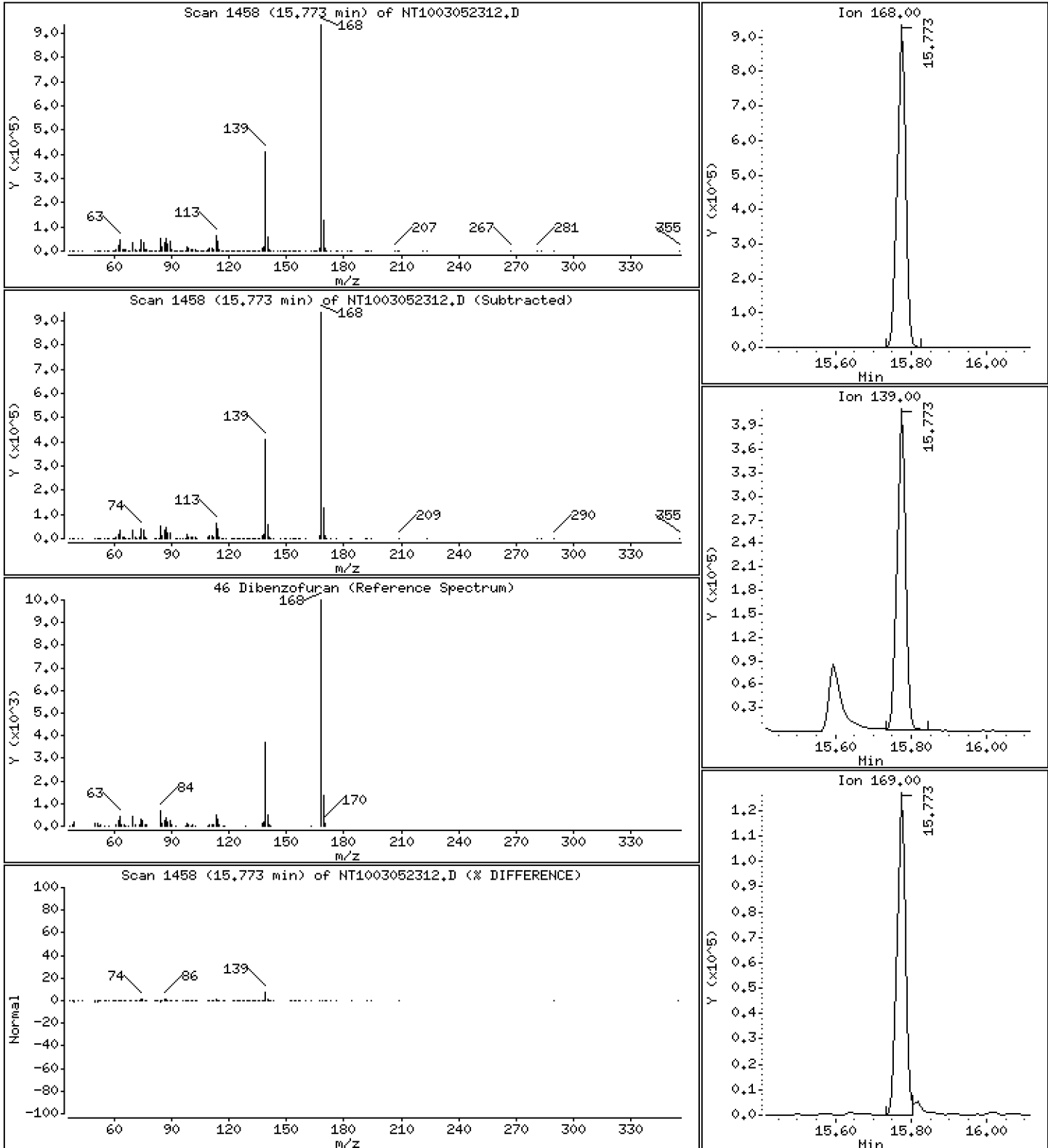
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 6,573 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

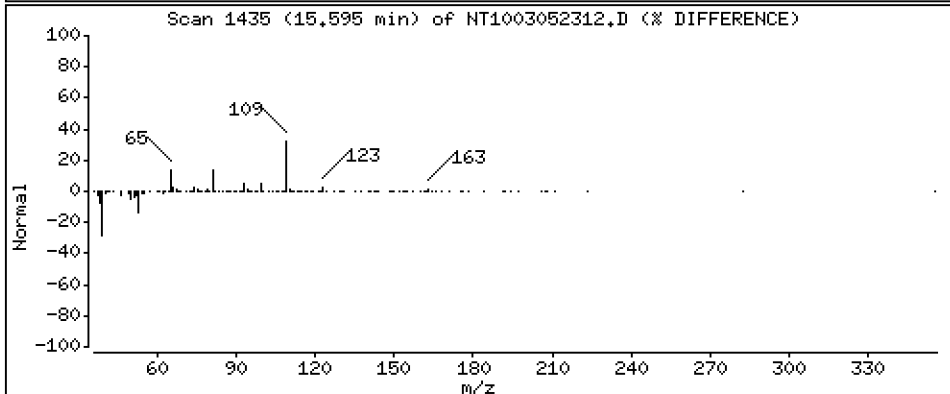
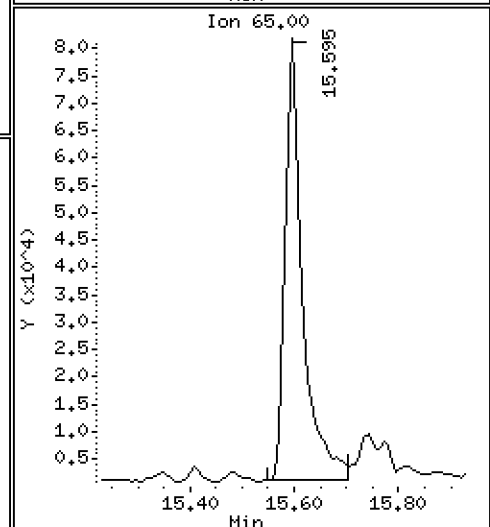
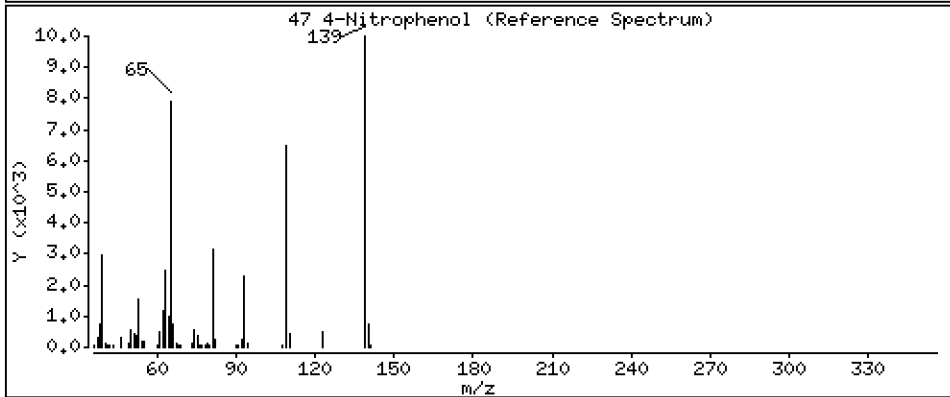
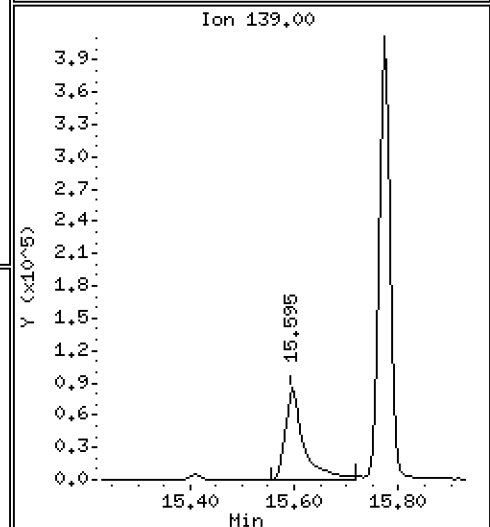
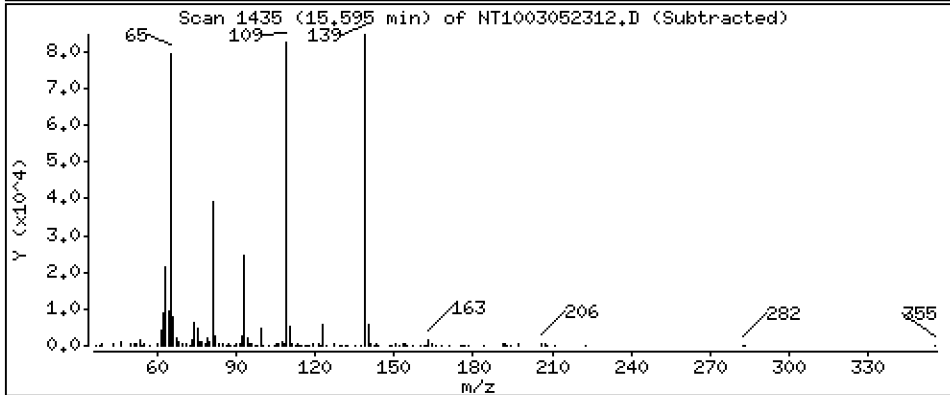
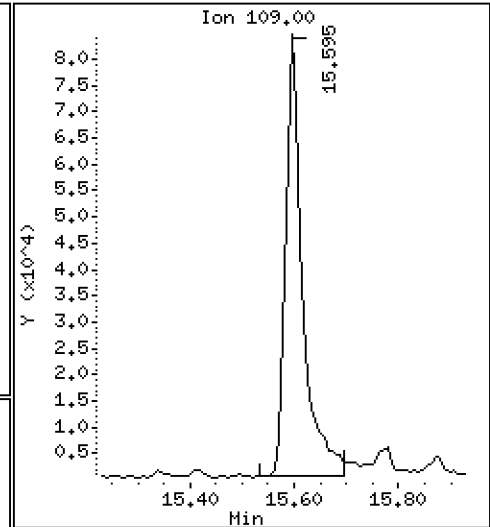
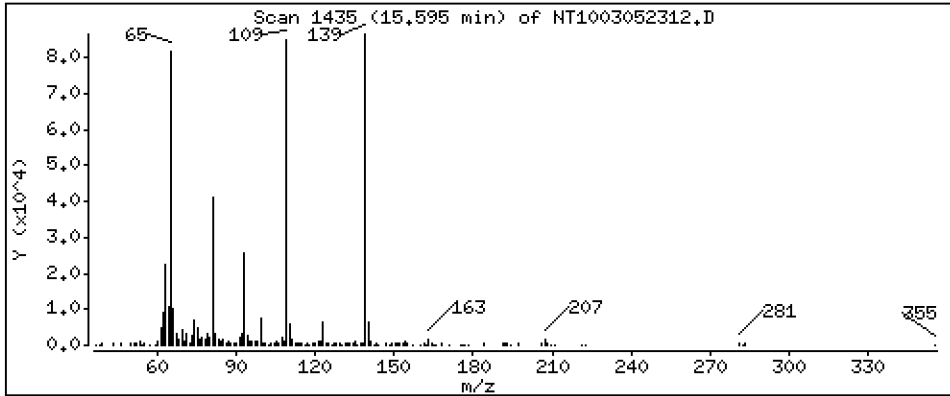
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 6,515 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

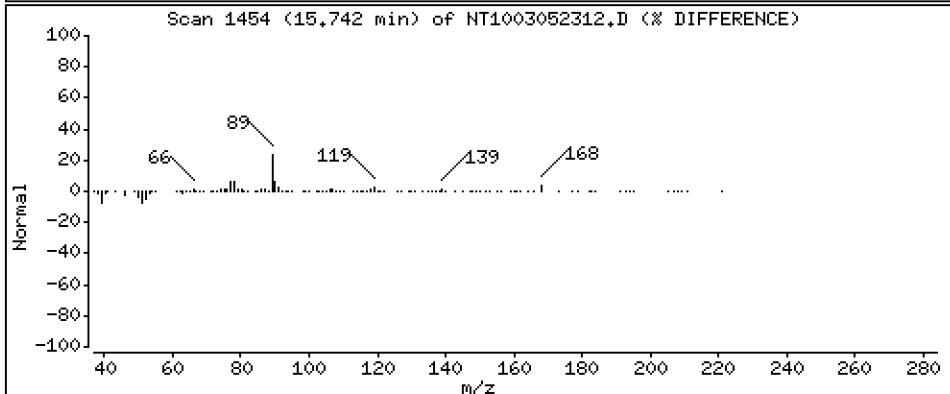
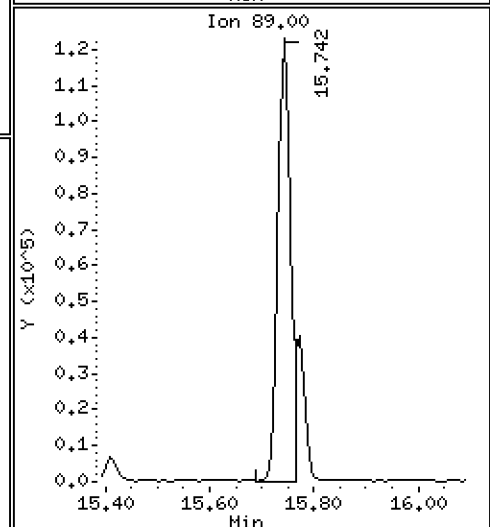
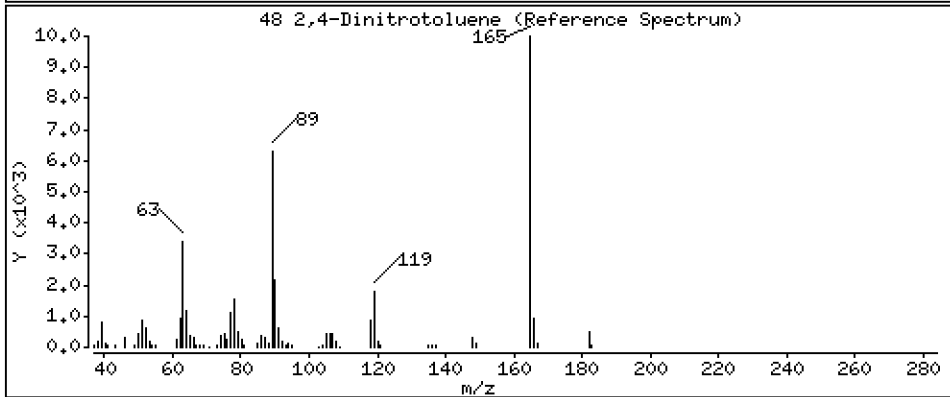
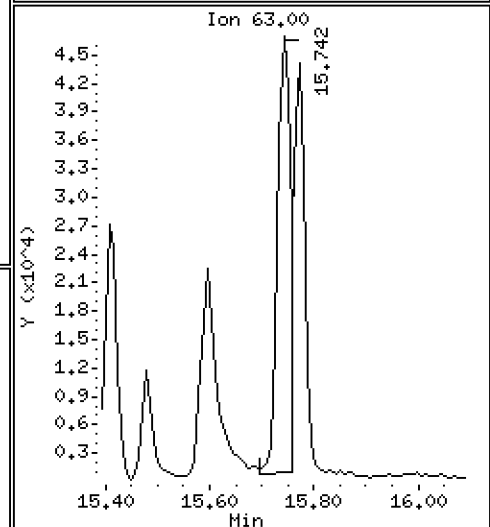
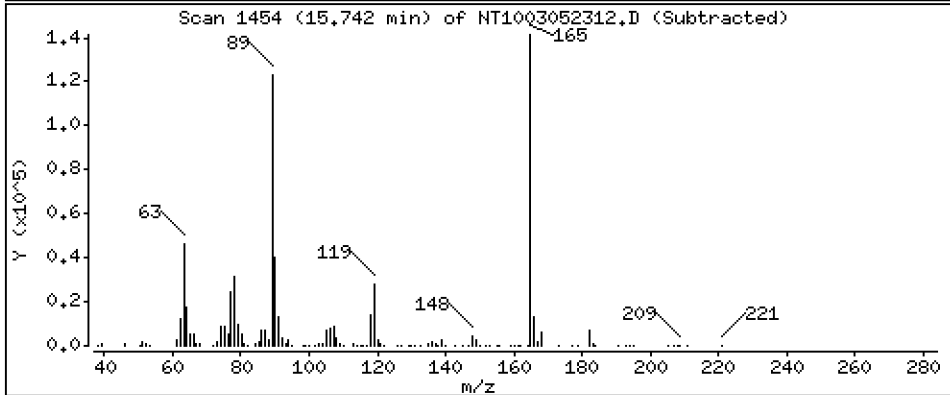
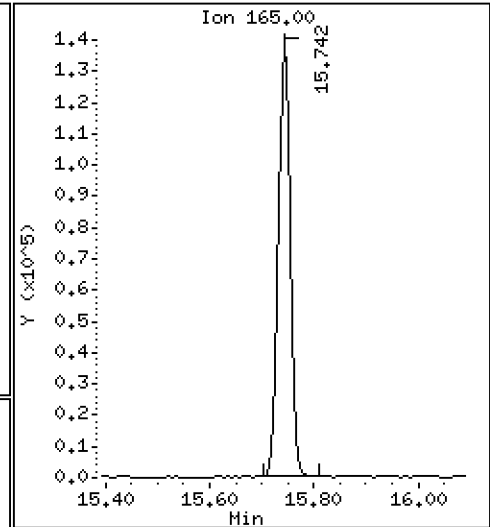
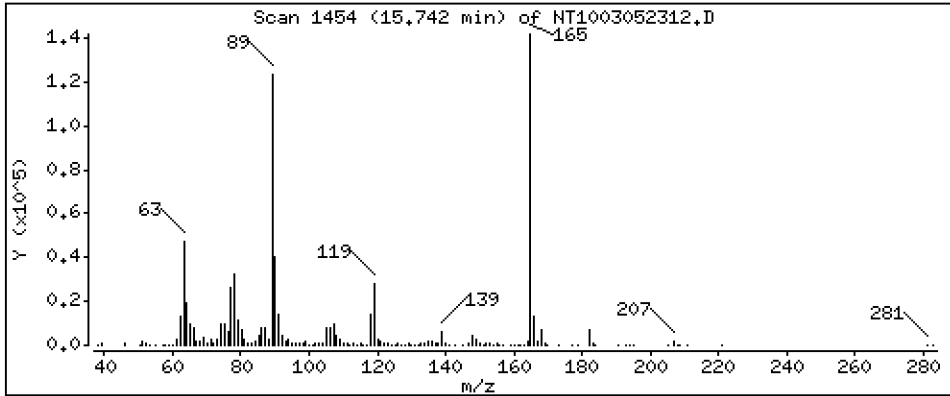
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 4,010 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

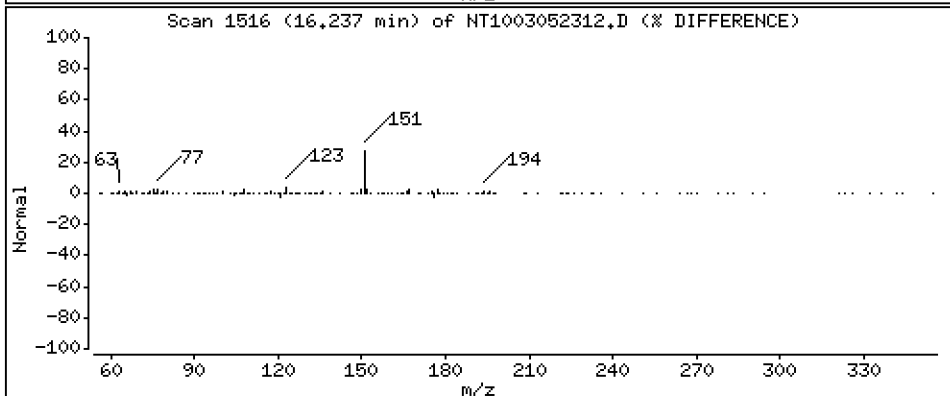
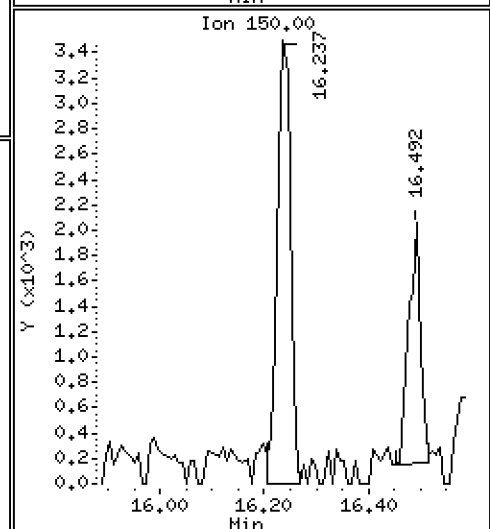
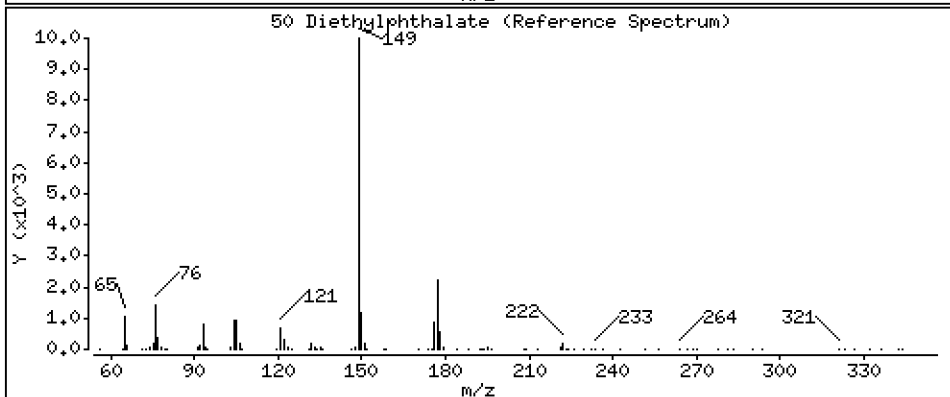
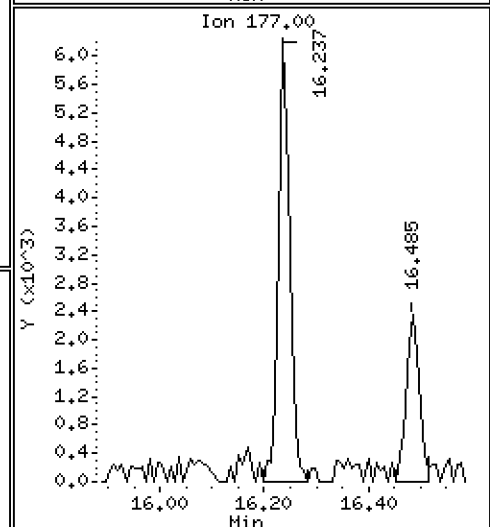
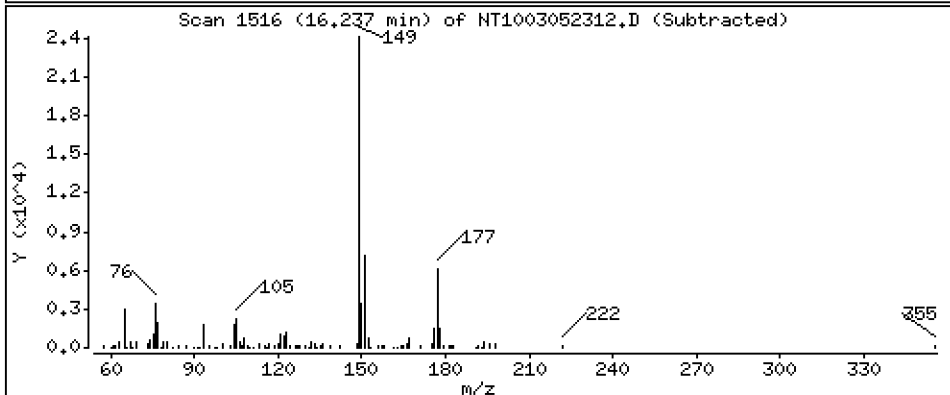
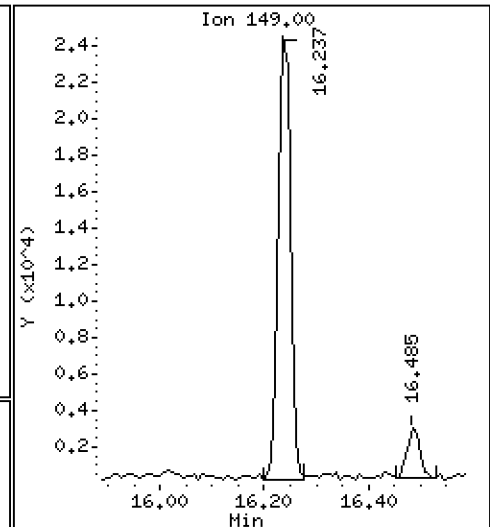
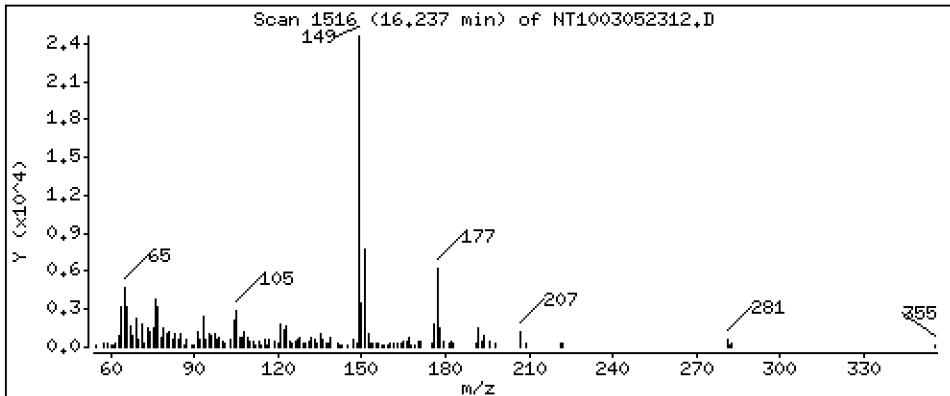
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.2234 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

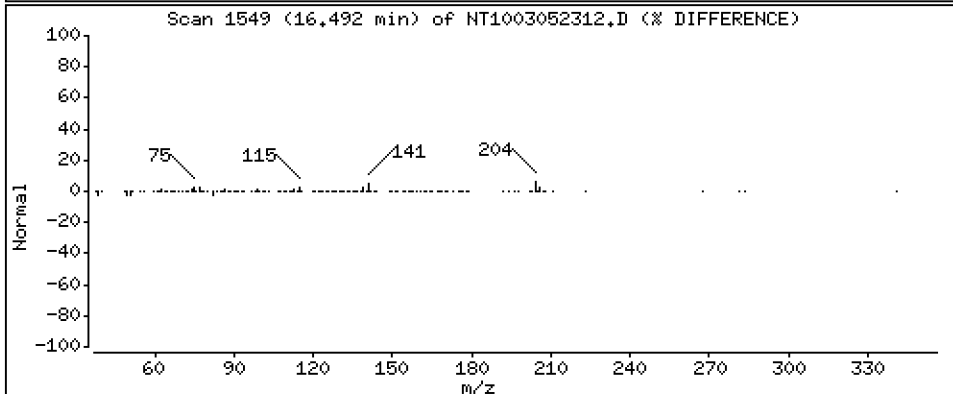
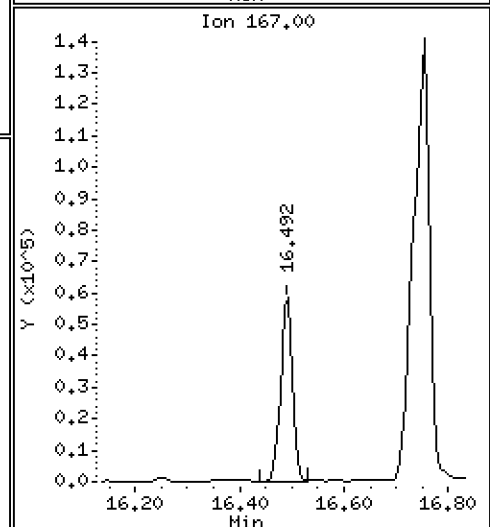
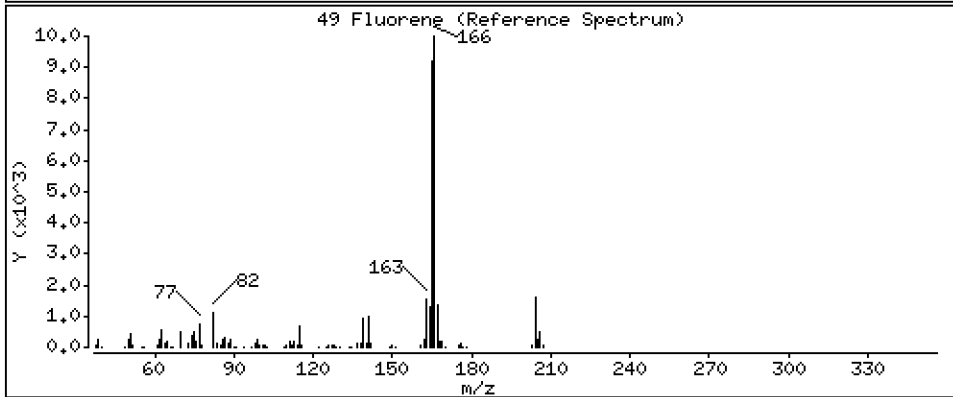
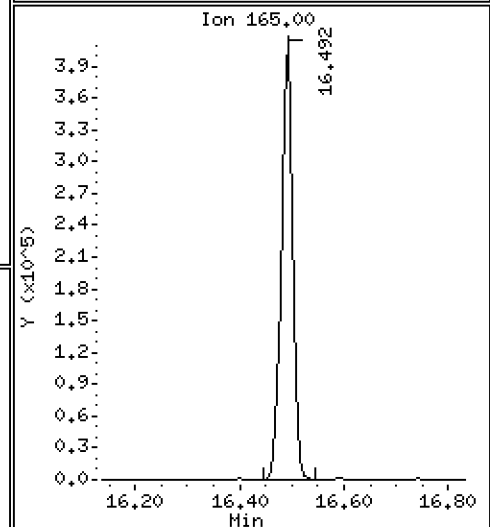
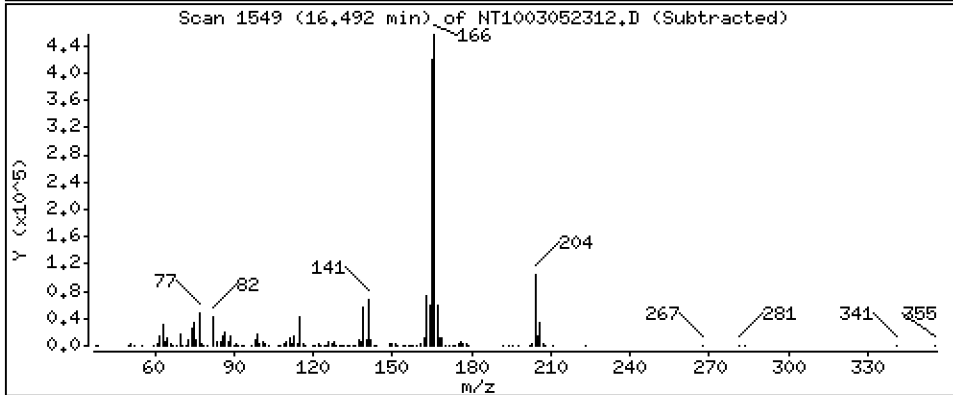
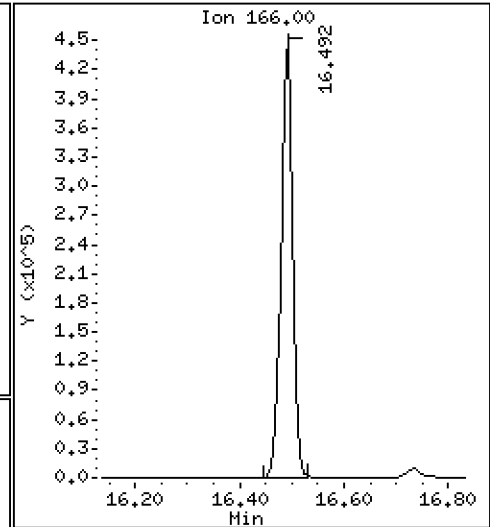
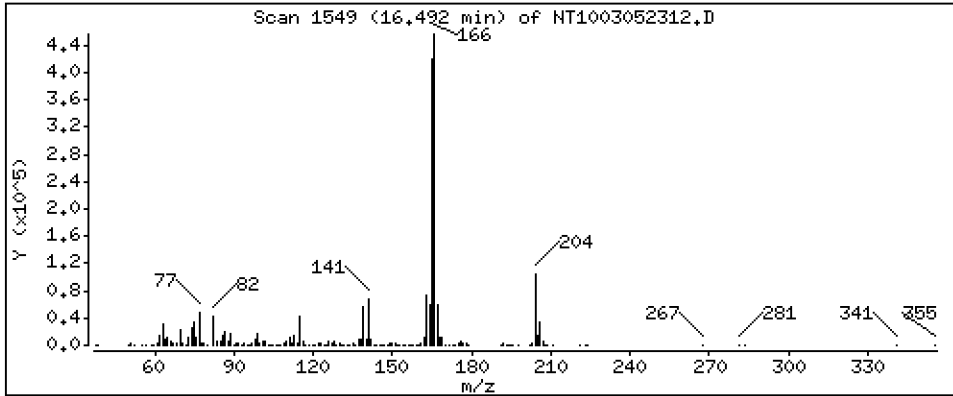
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 3,900 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

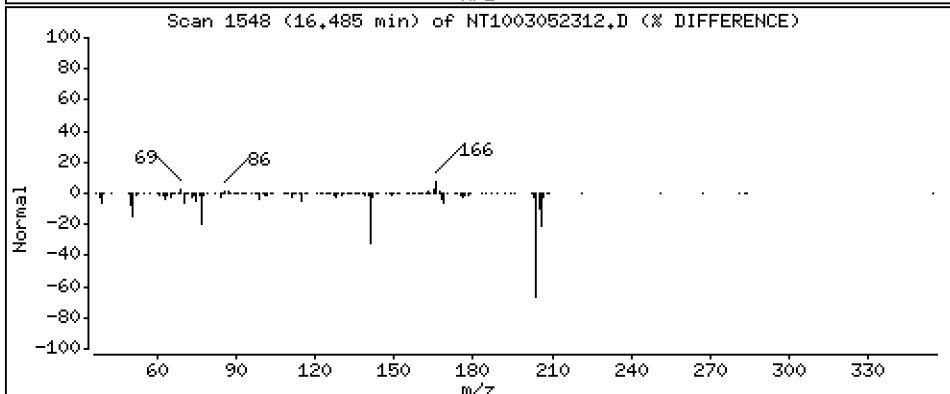
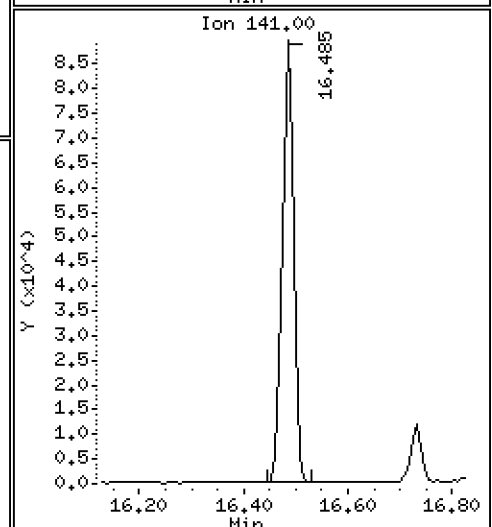
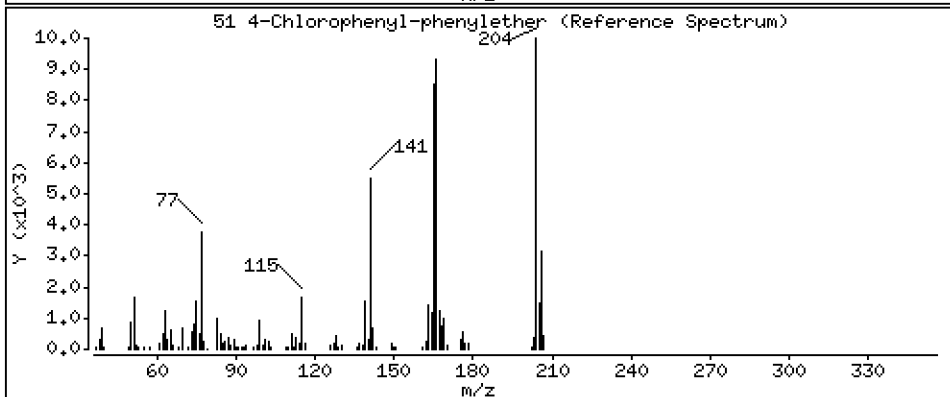
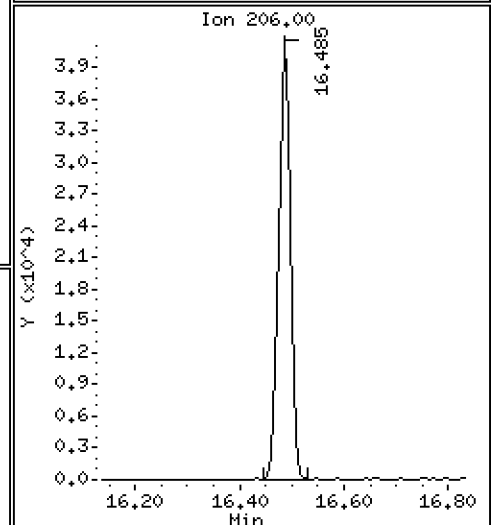
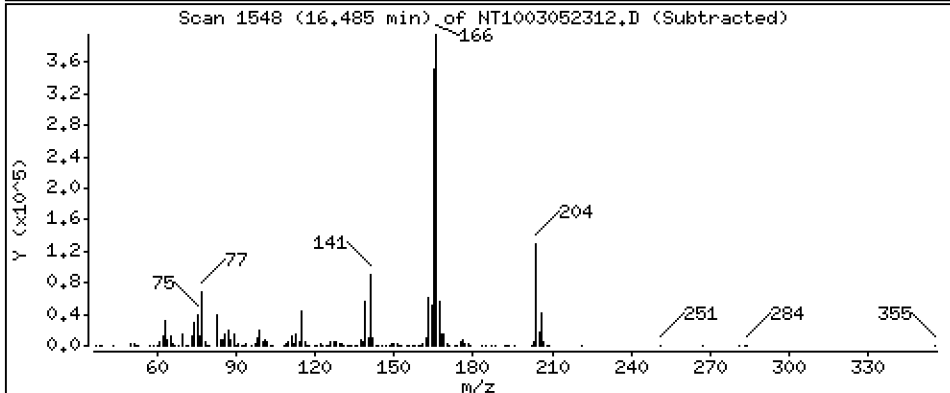
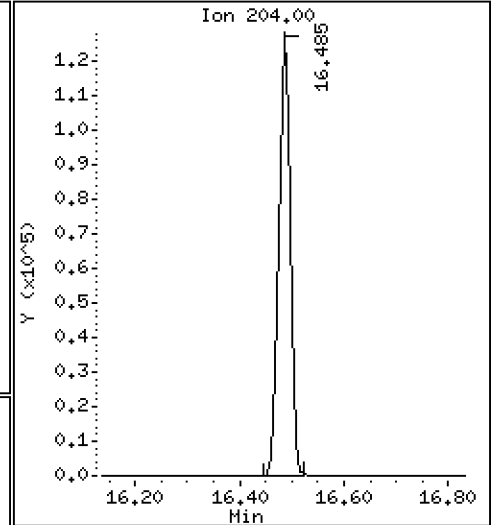
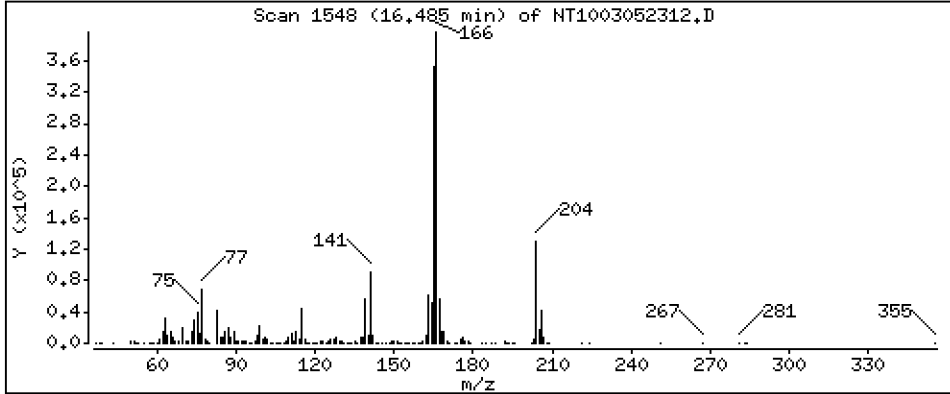
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 2,427 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

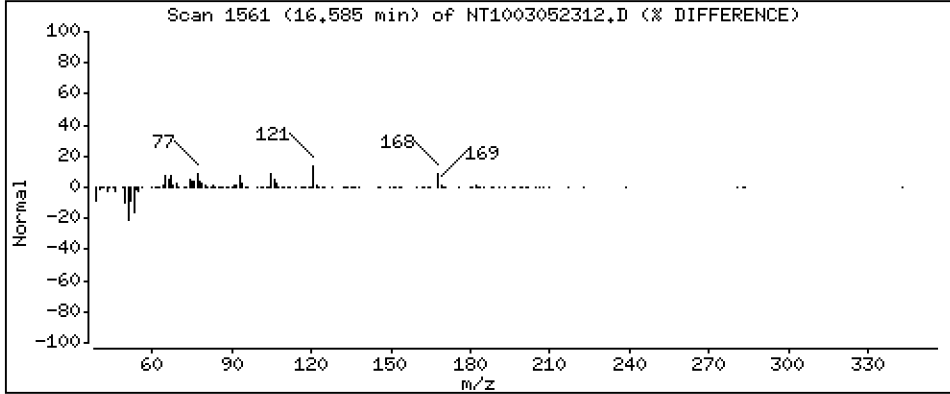
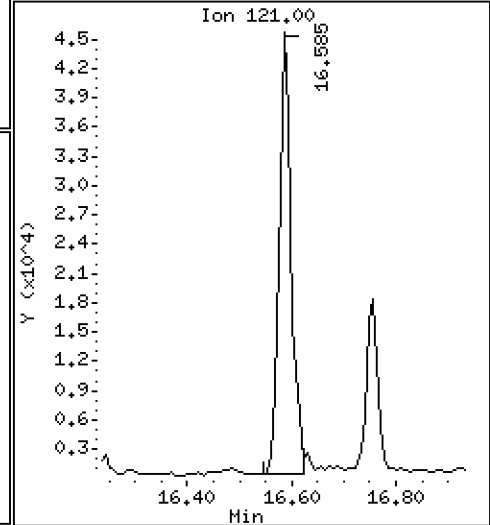
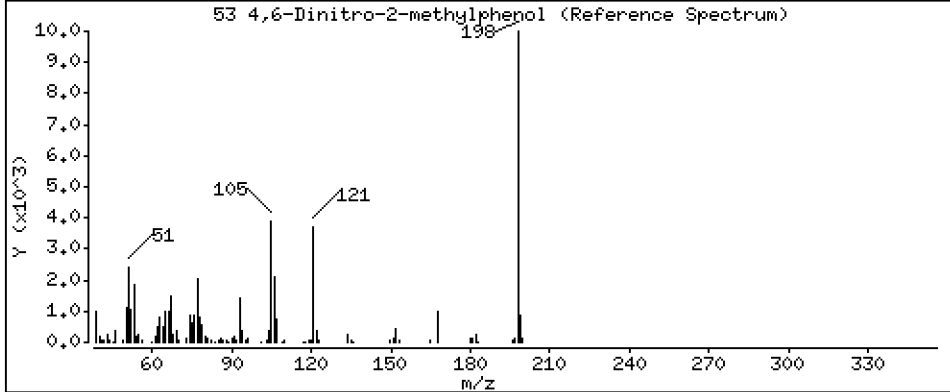
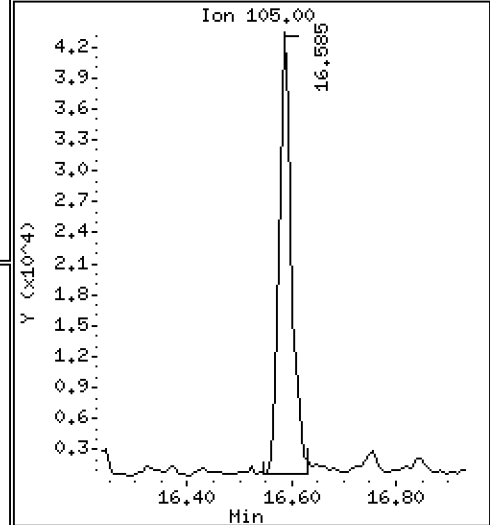
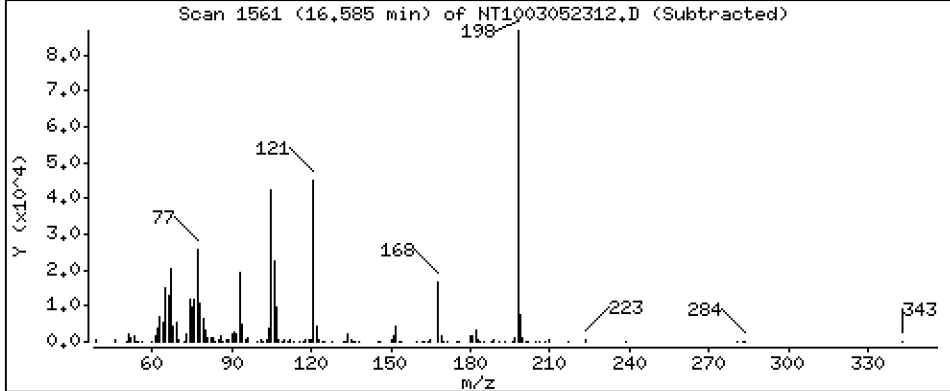
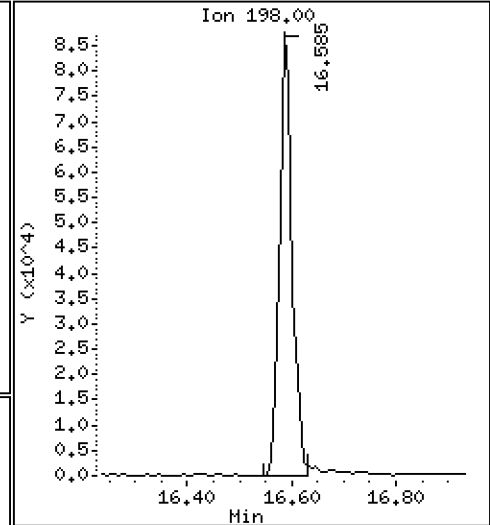
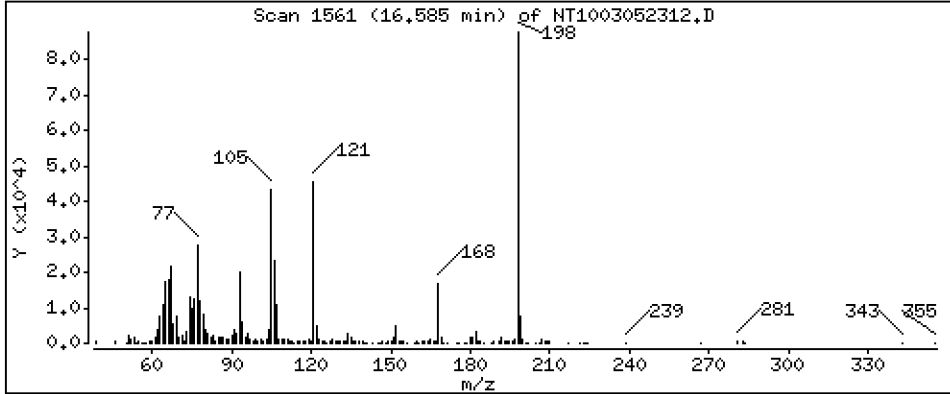
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 7,211 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

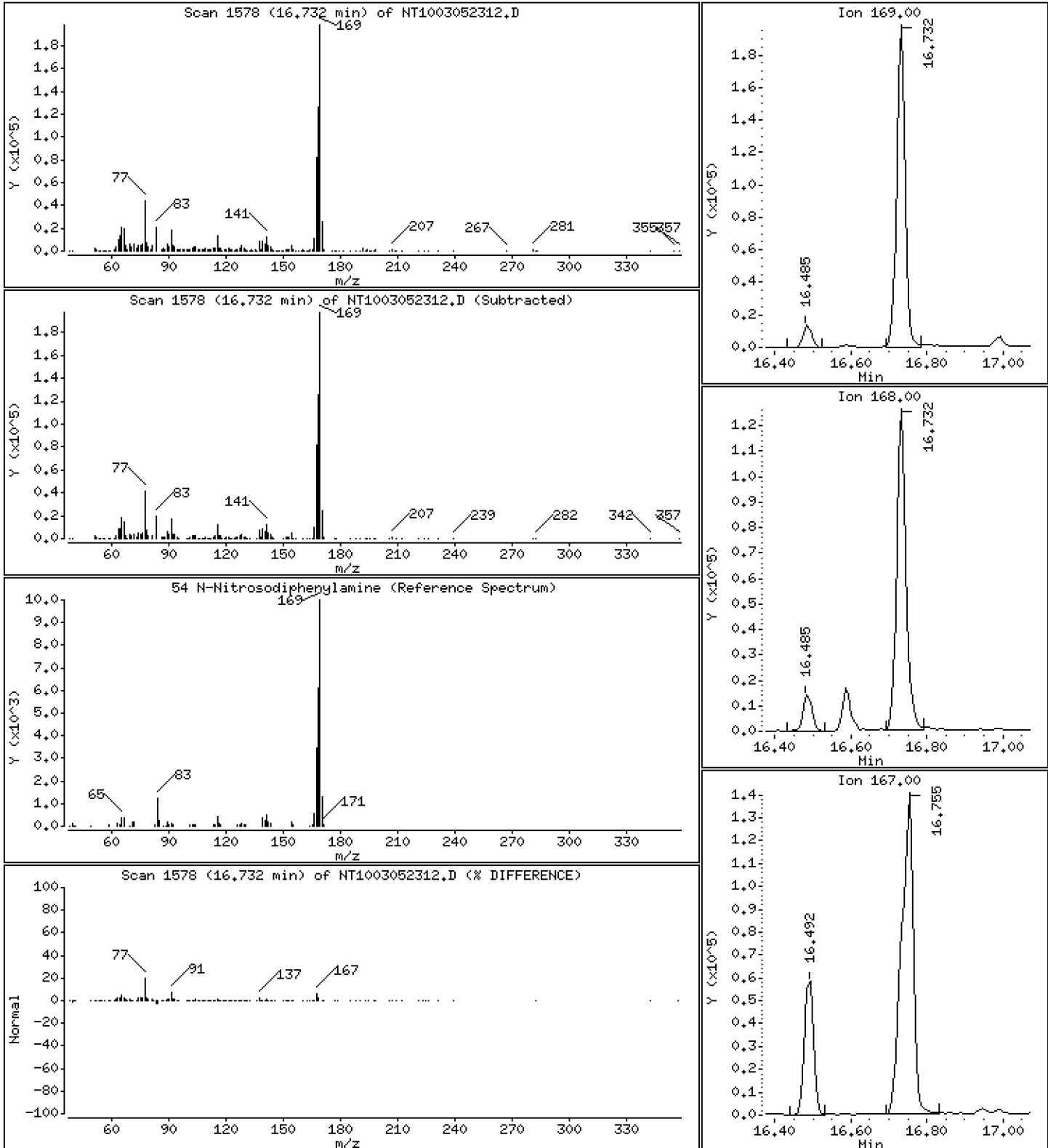
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 2,263 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

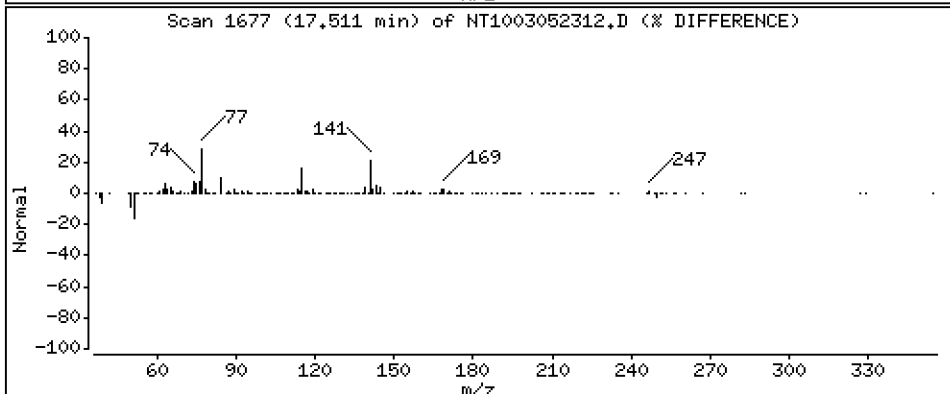
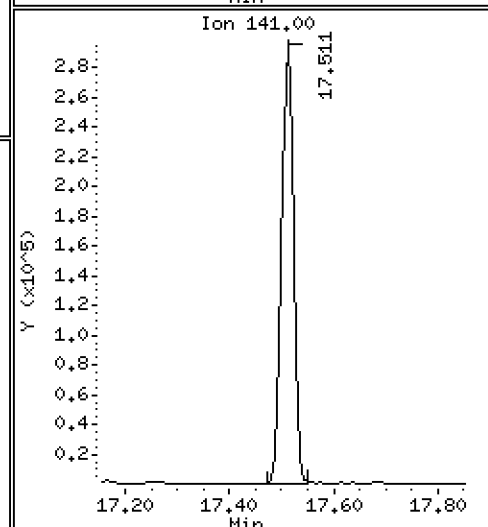
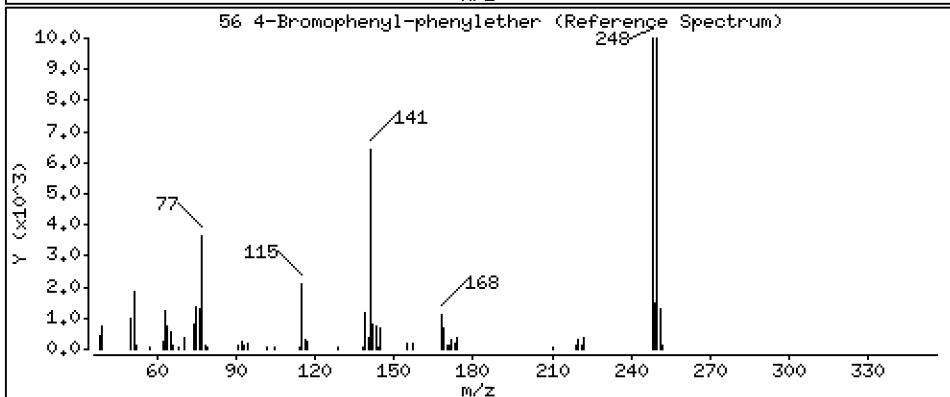
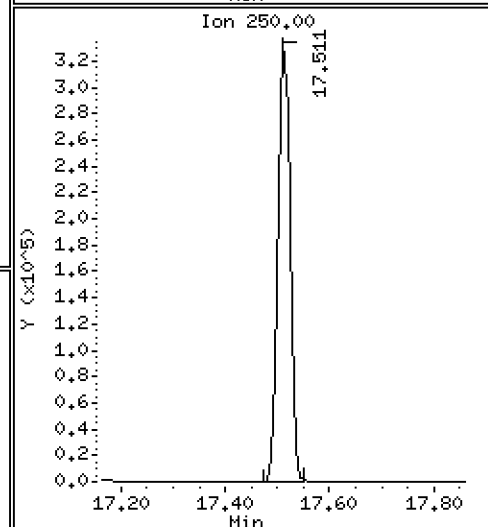
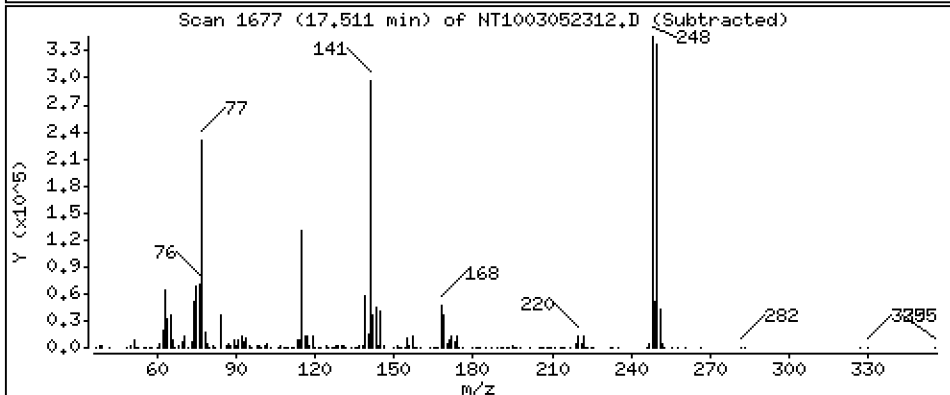
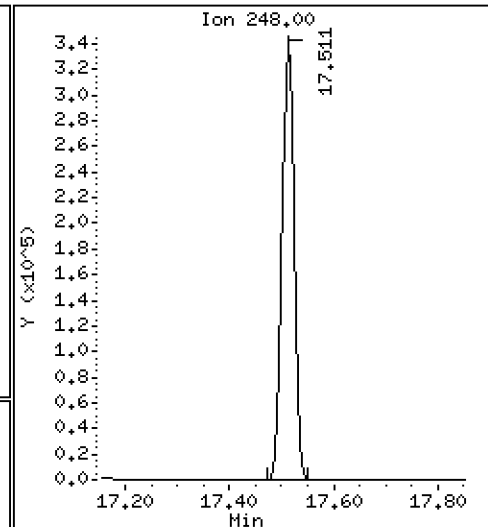
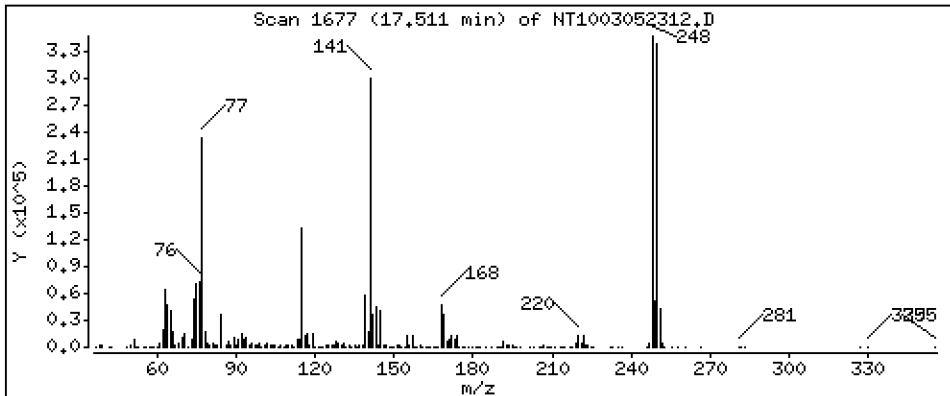
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 9,435 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

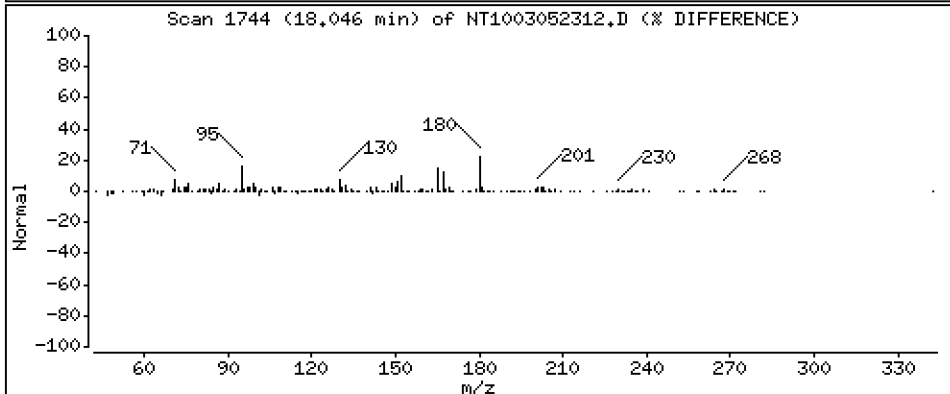
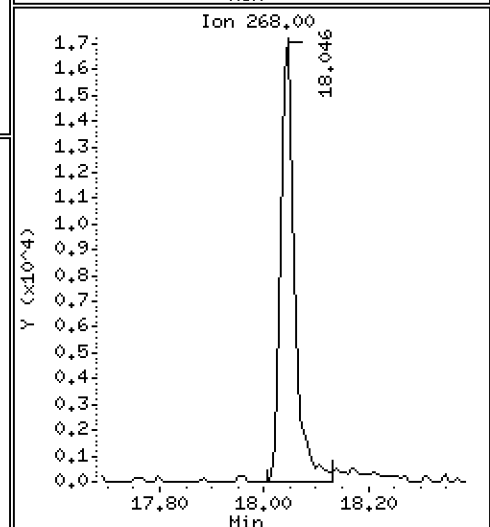
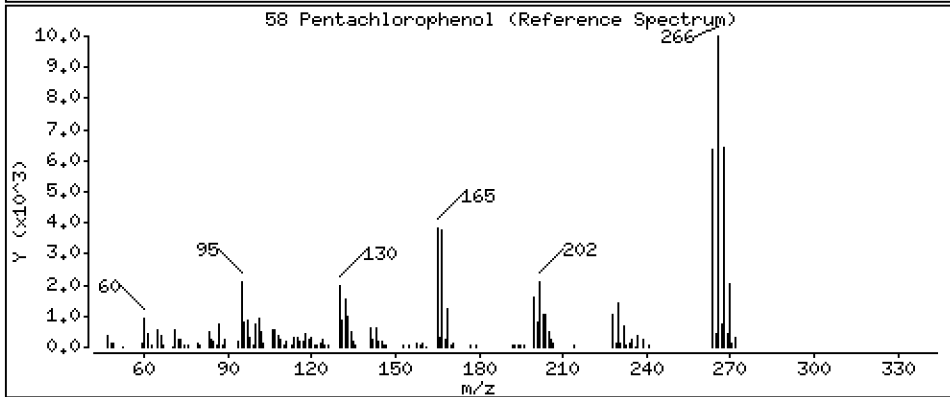
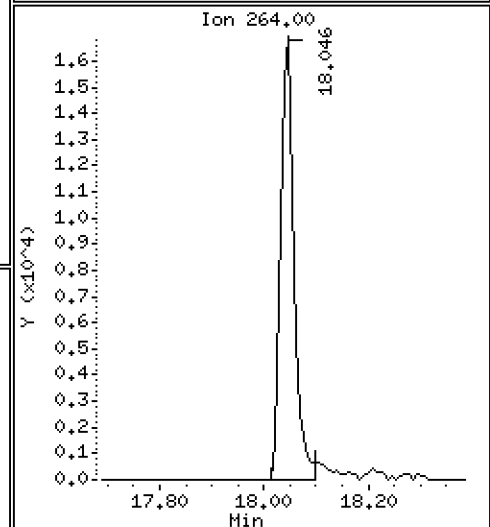
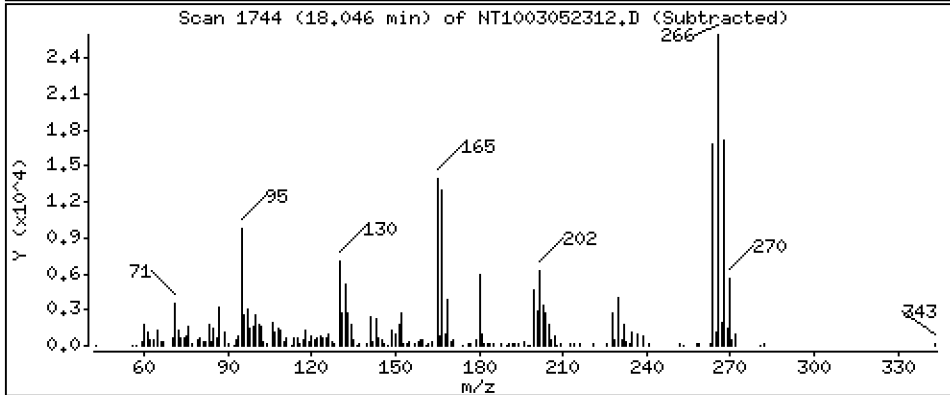
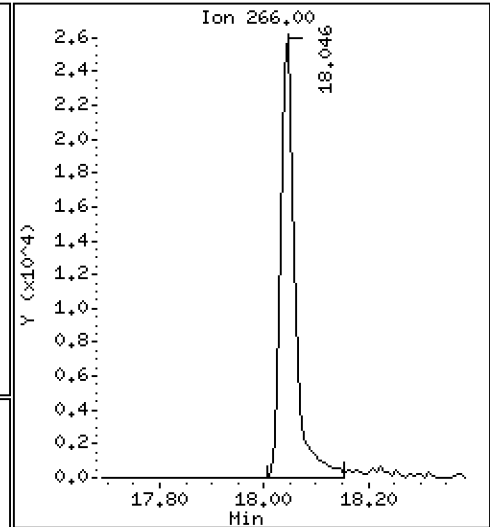
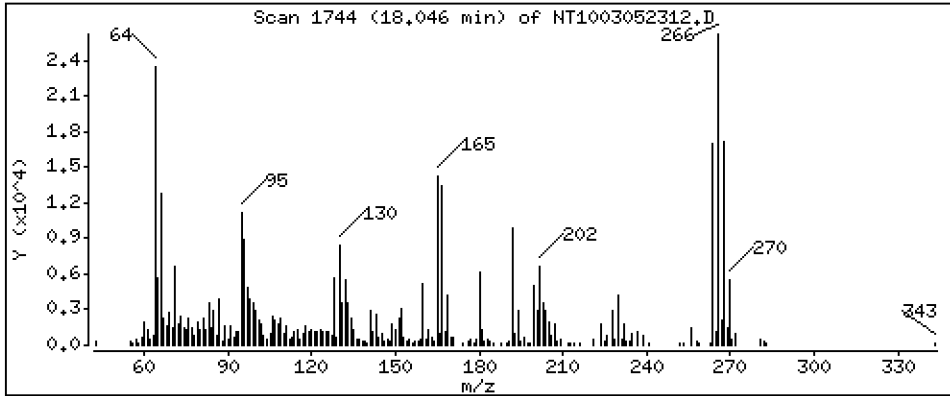
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 1,690 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

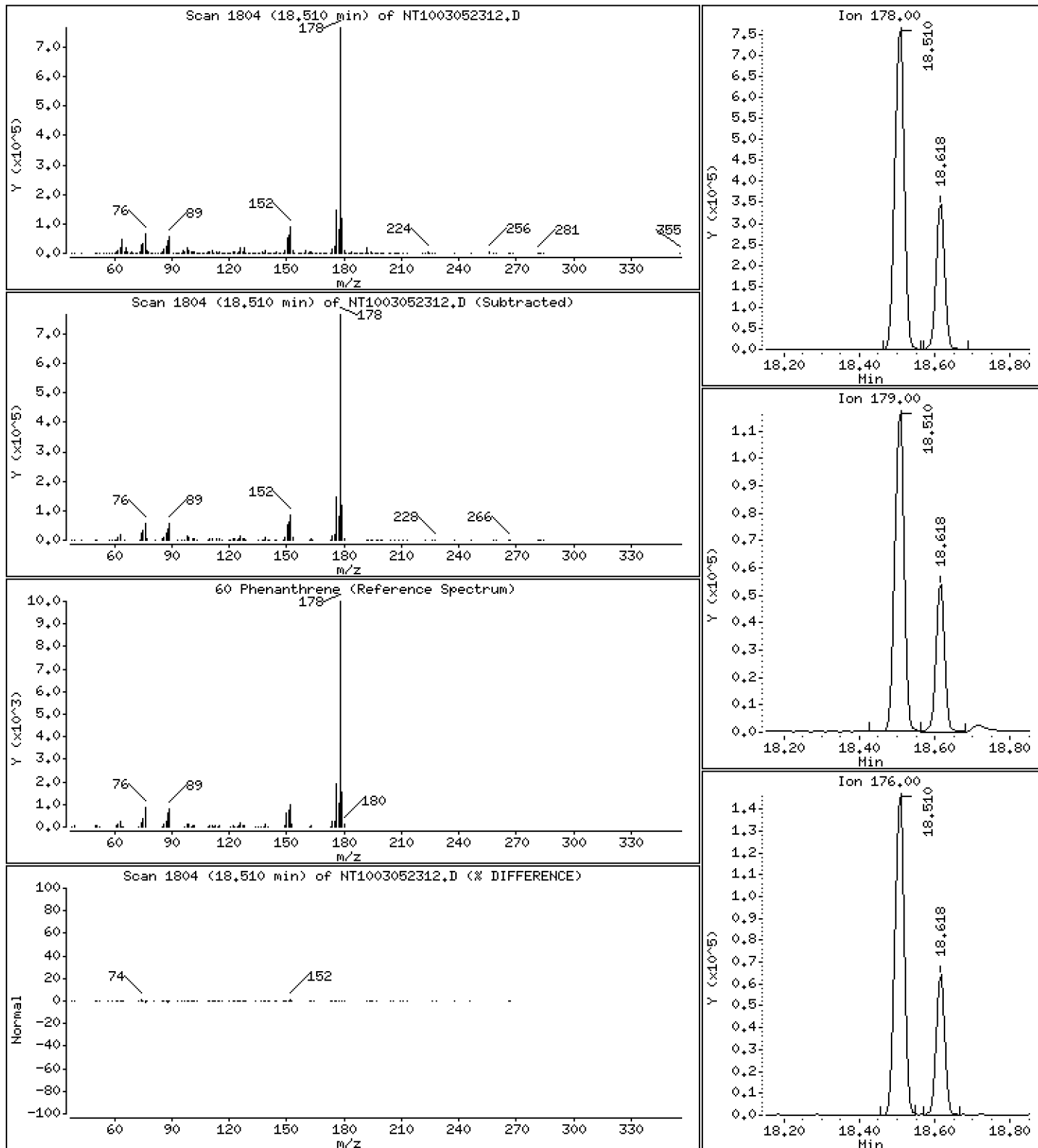
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 5,366 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

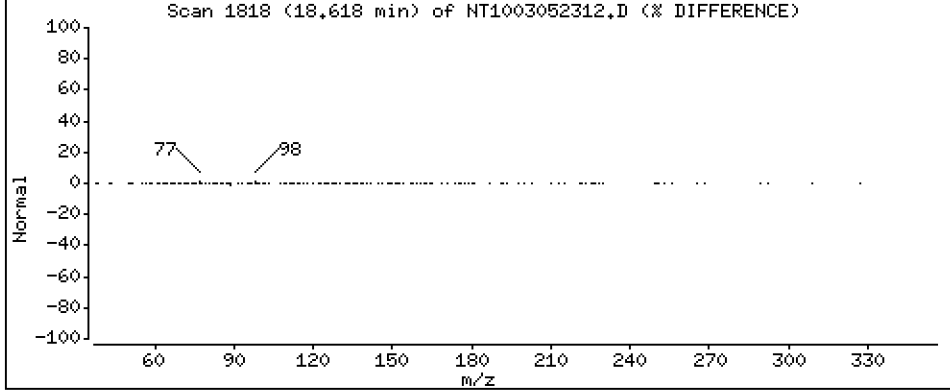
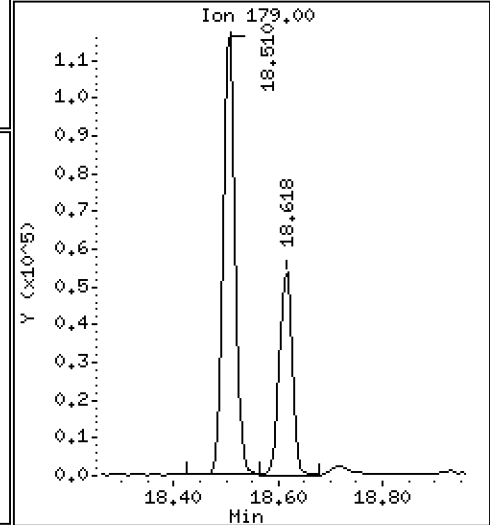
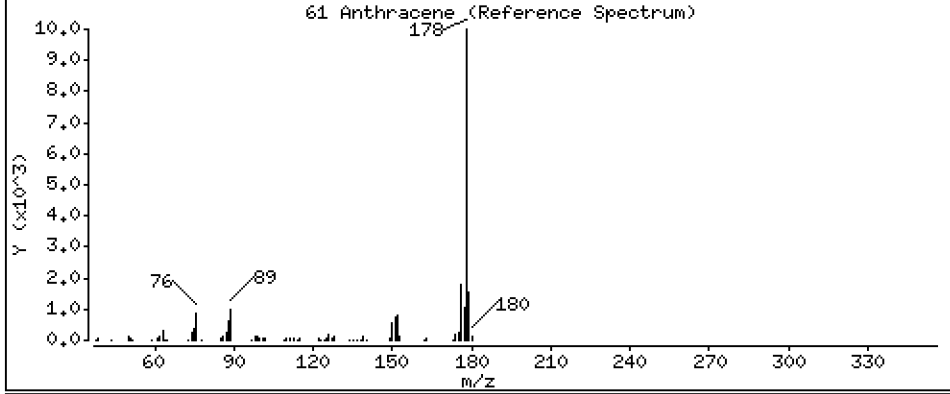
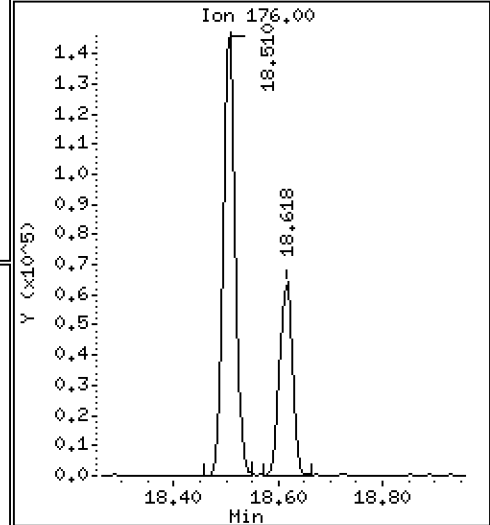
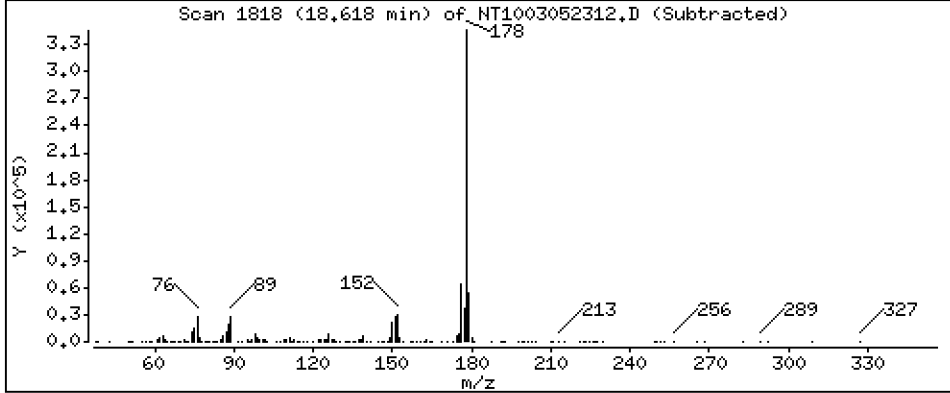
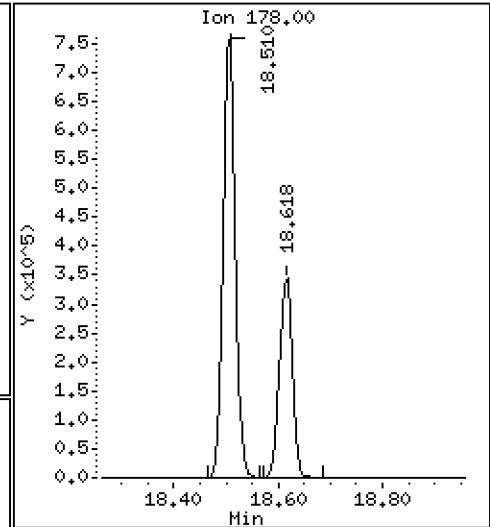
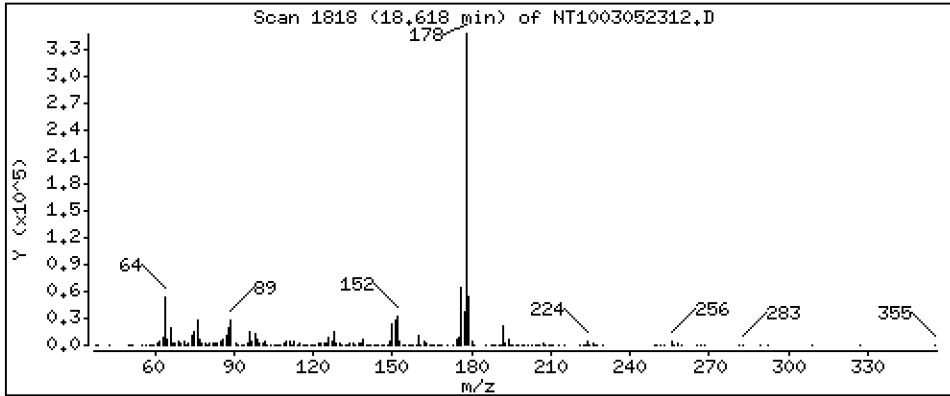
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 2,498 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

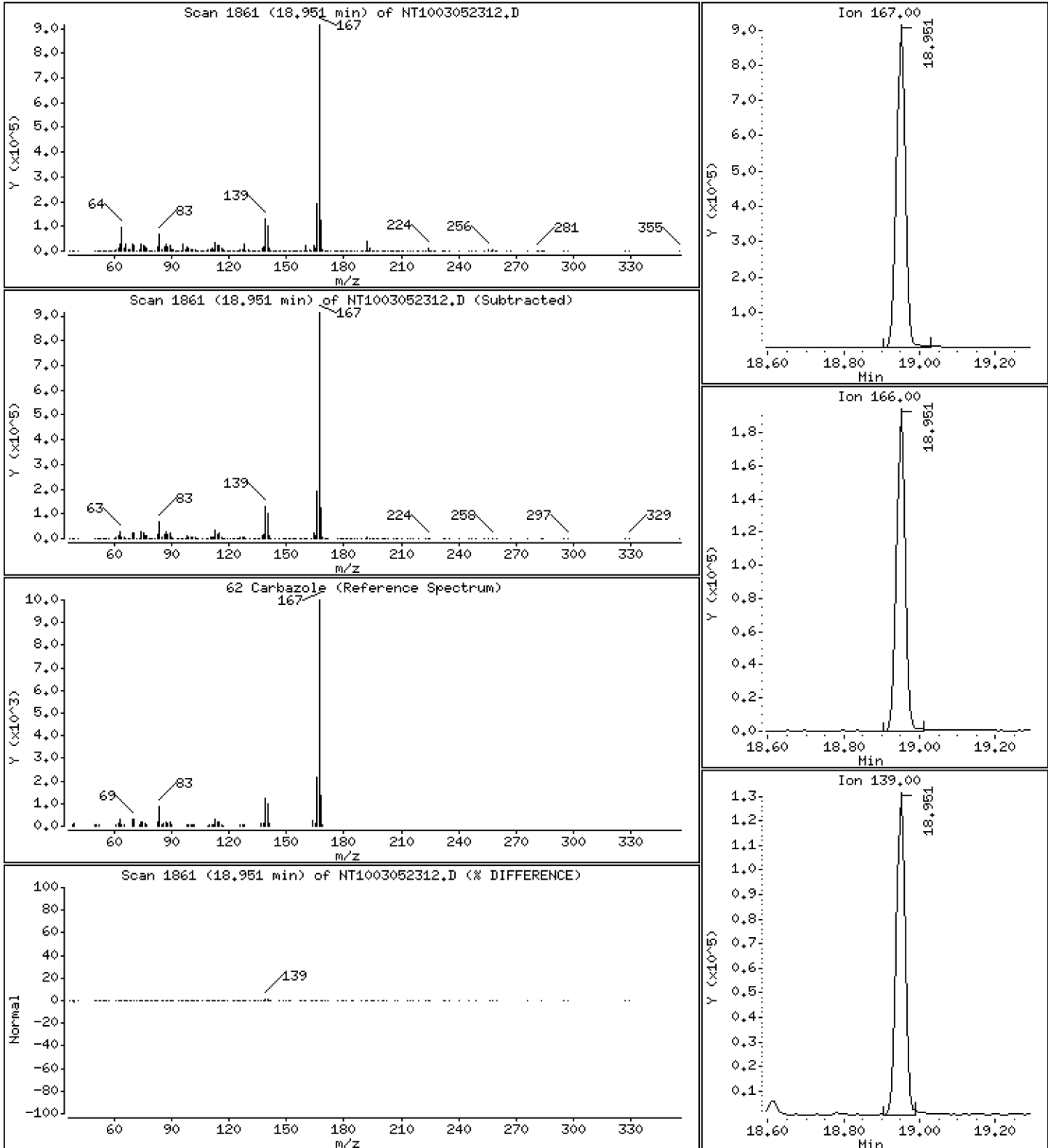
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 6,638 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

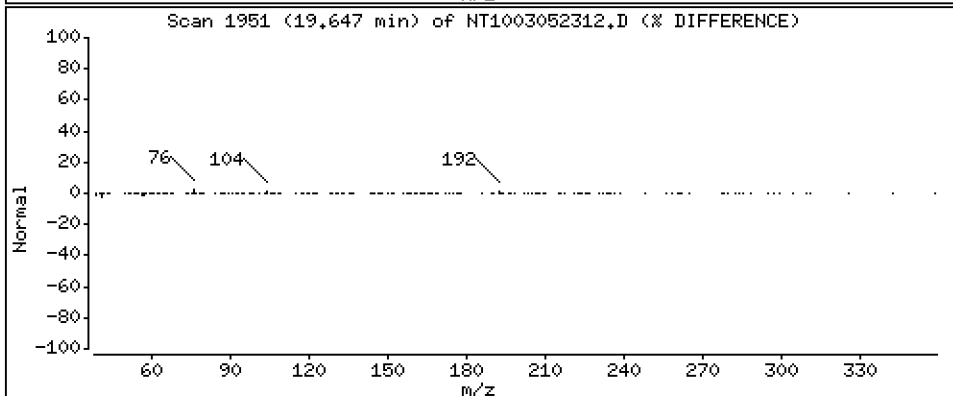
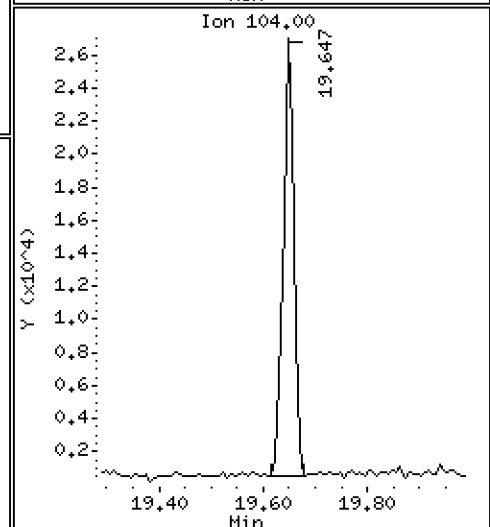
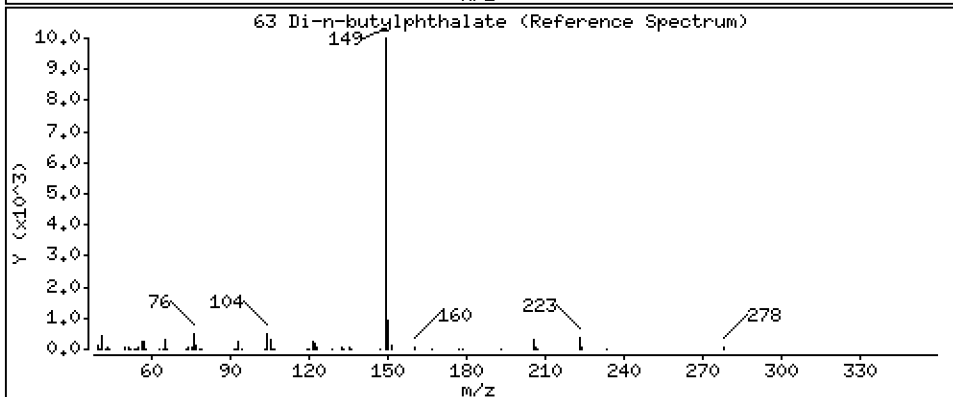
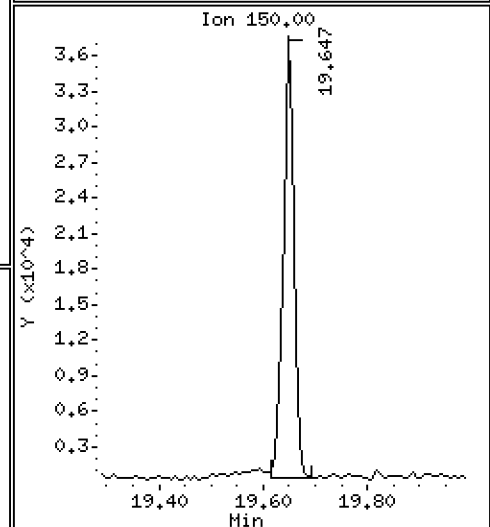
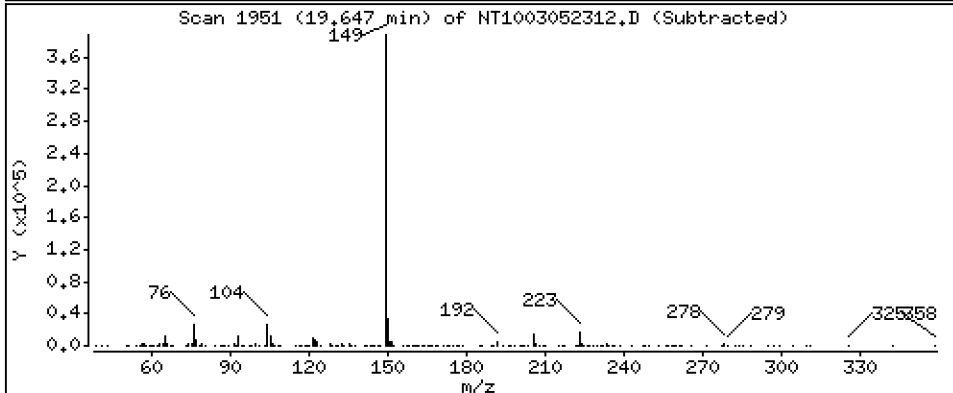
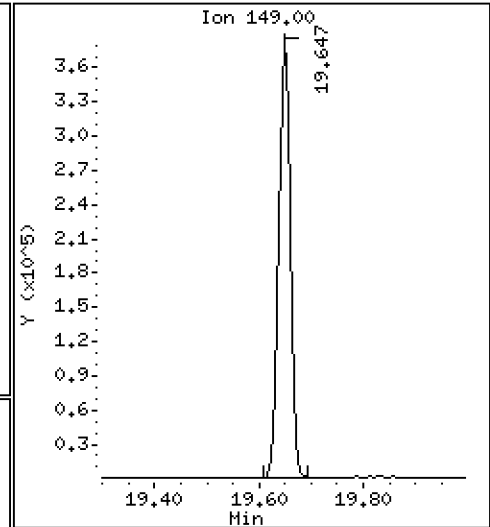
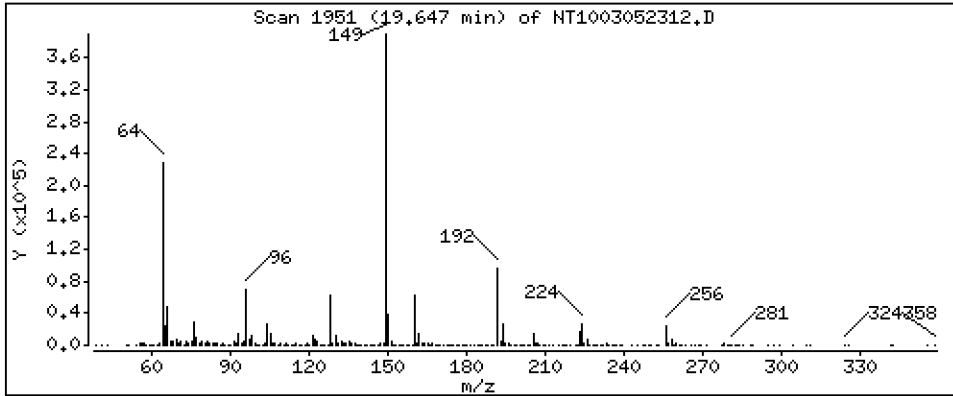
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 1,929 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

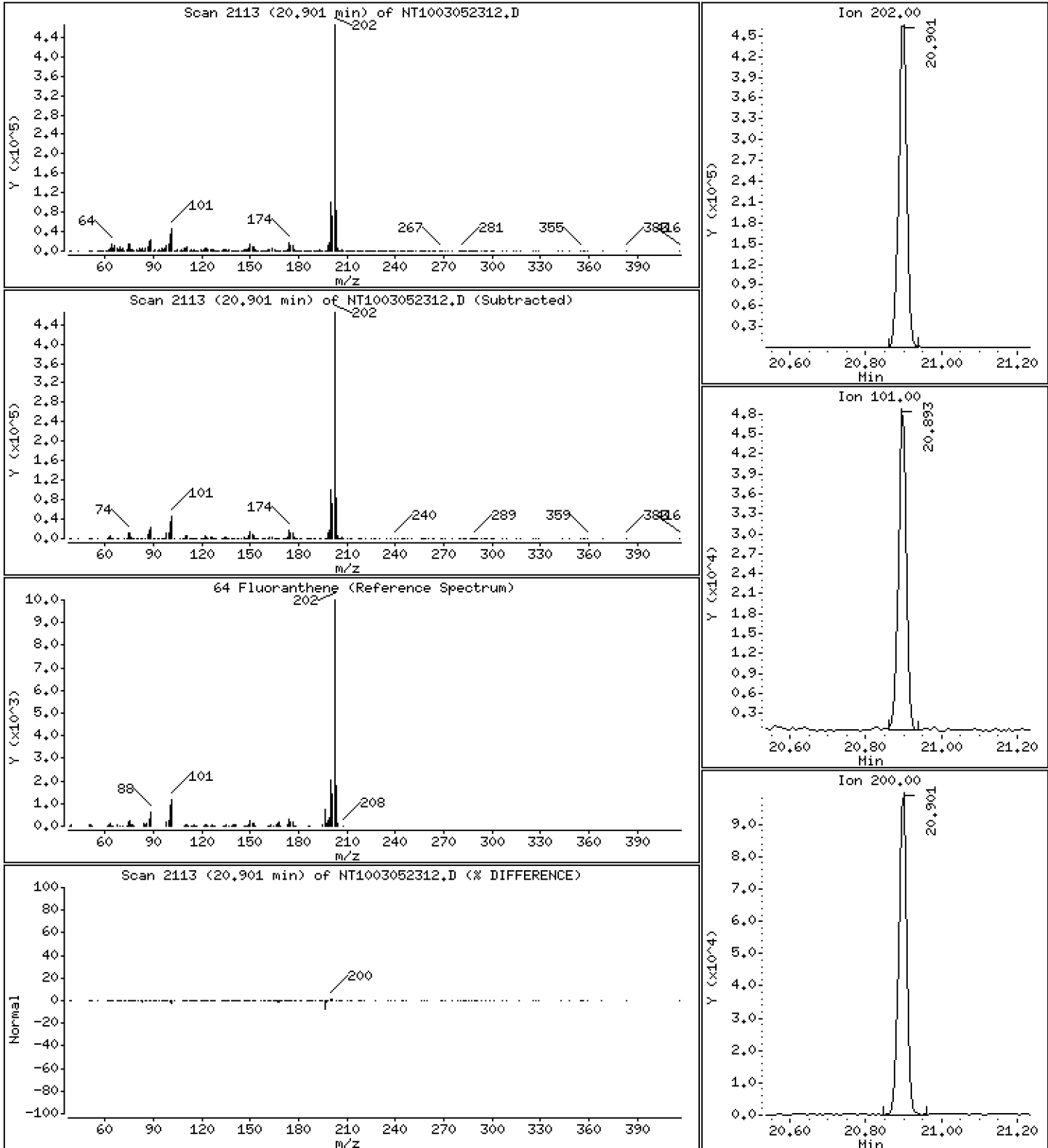
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 2,306 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

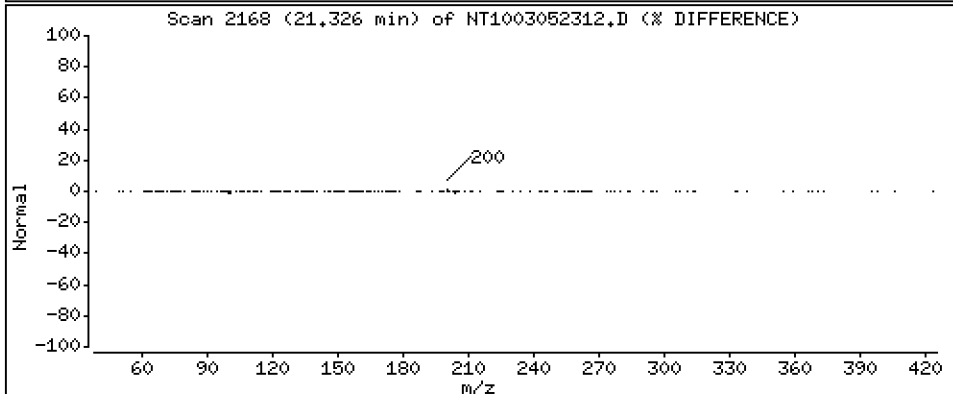
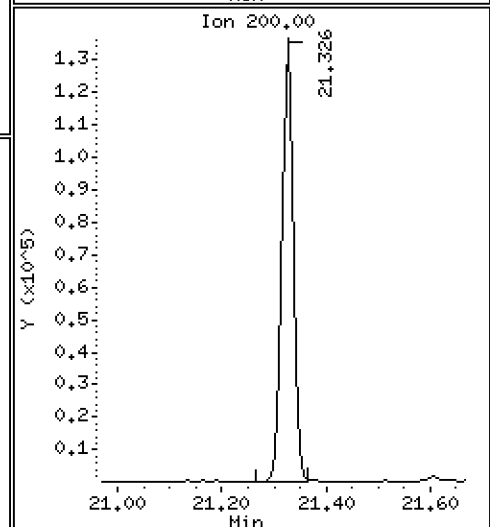
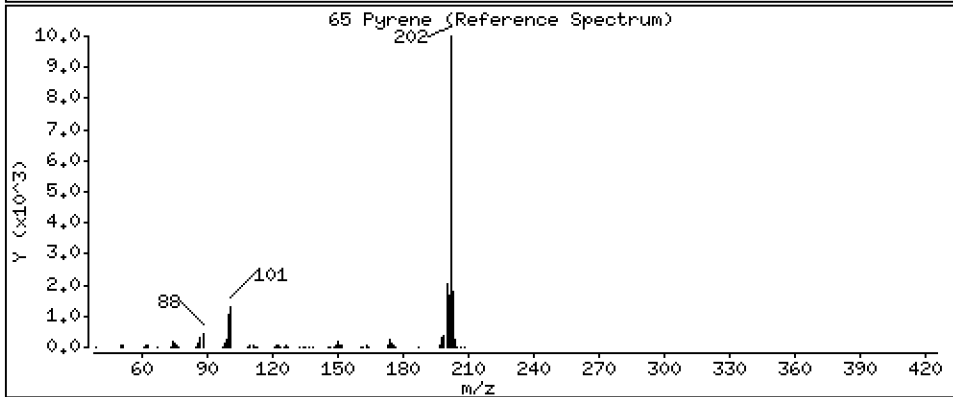
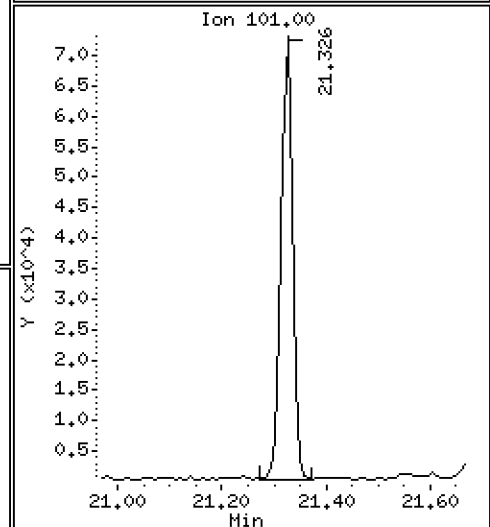
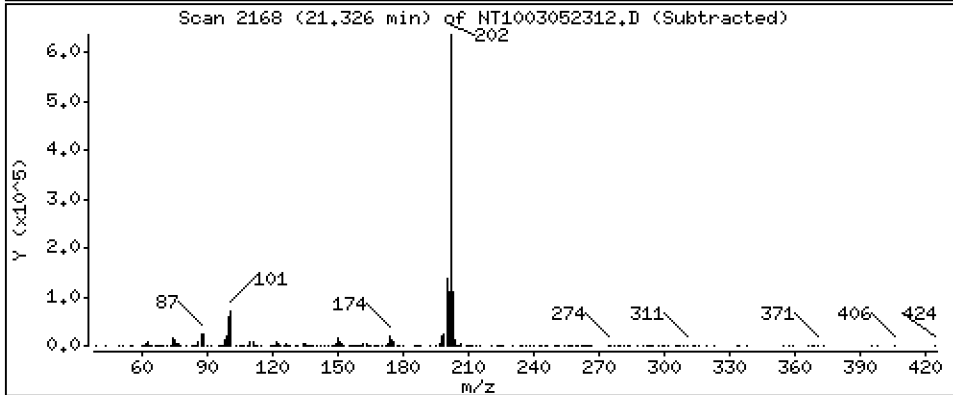
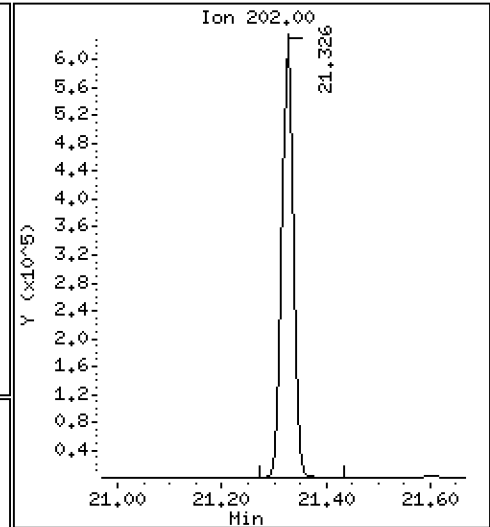
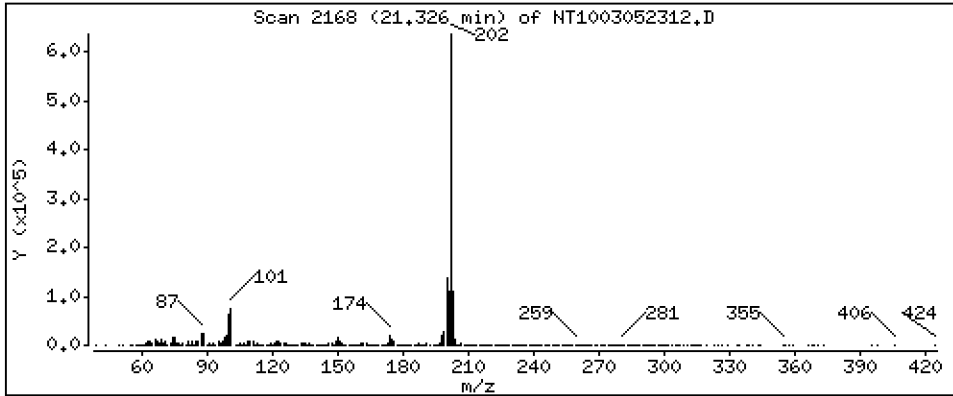
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 3,228 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

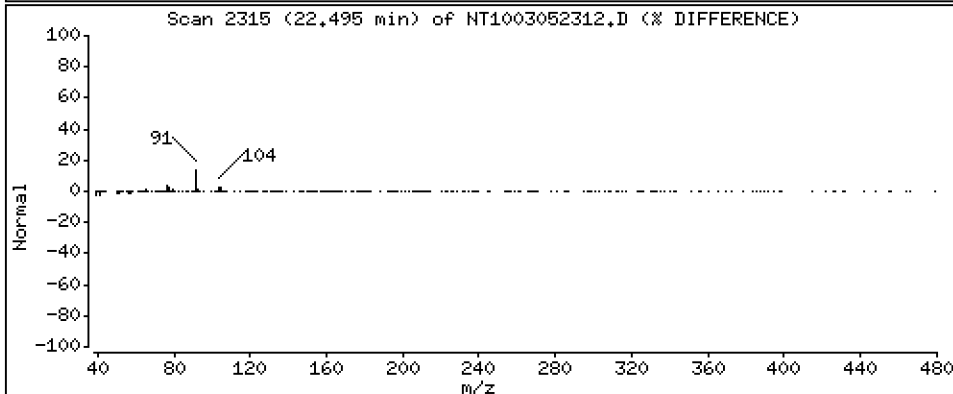
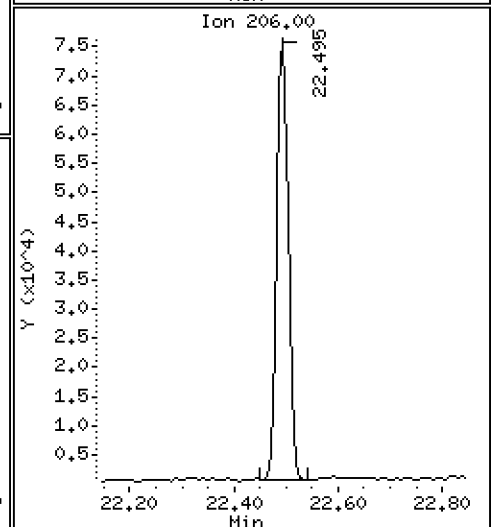
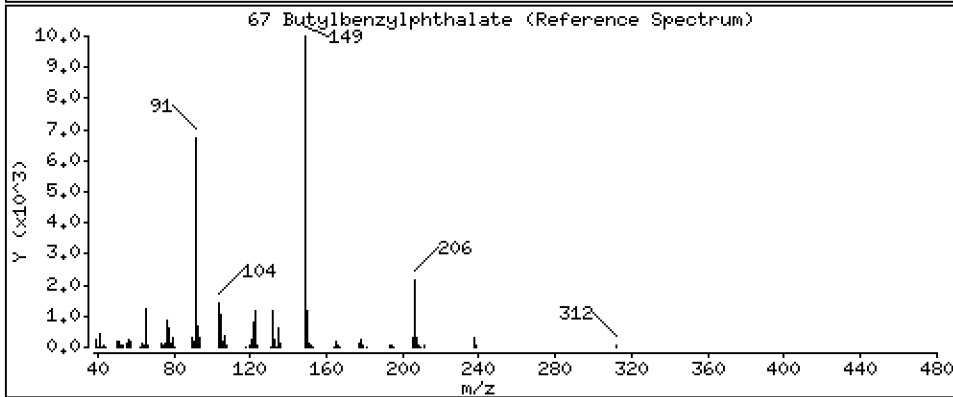
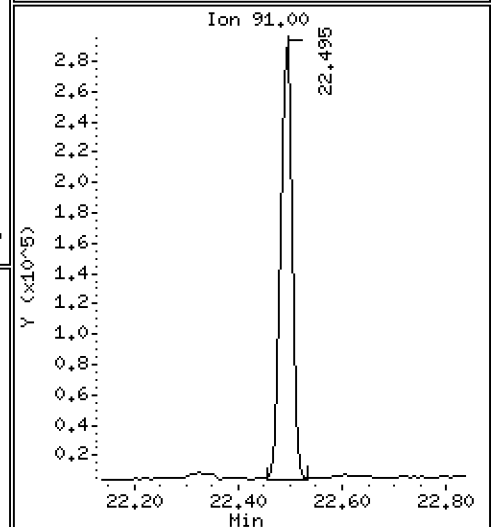
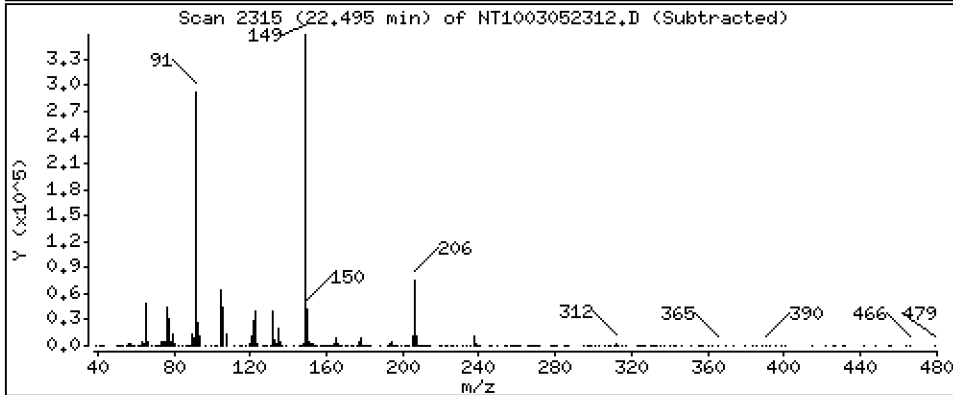
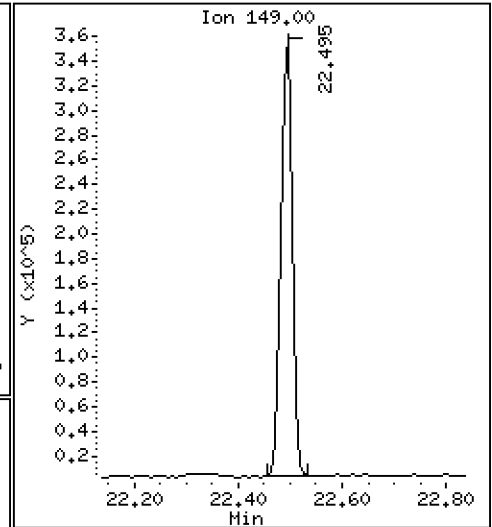
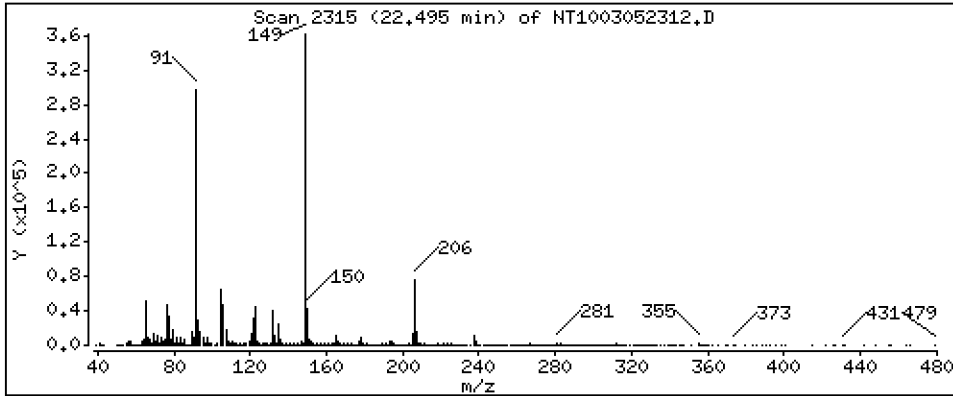
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,148 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

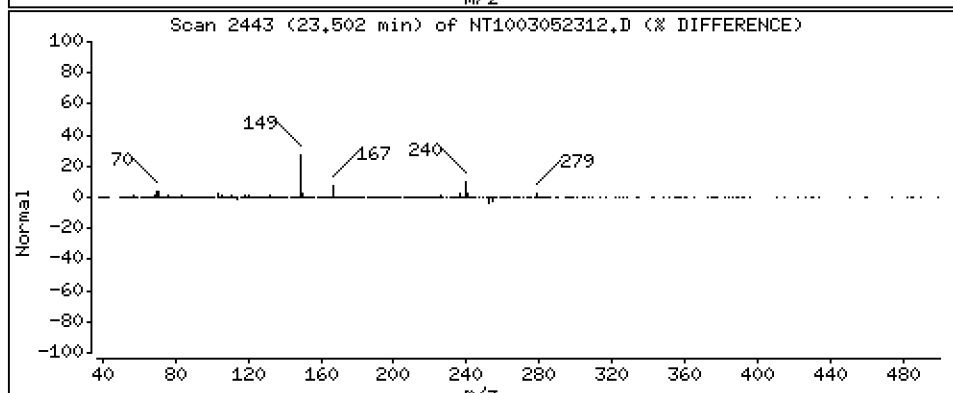
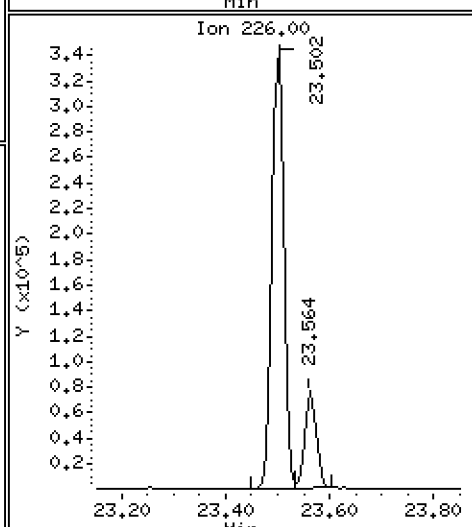
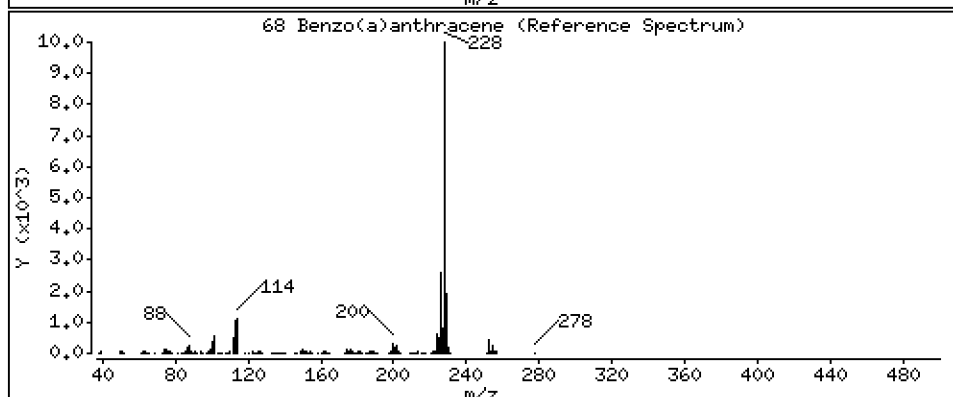
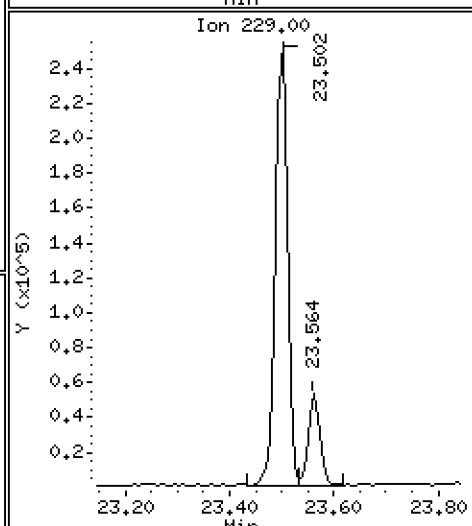
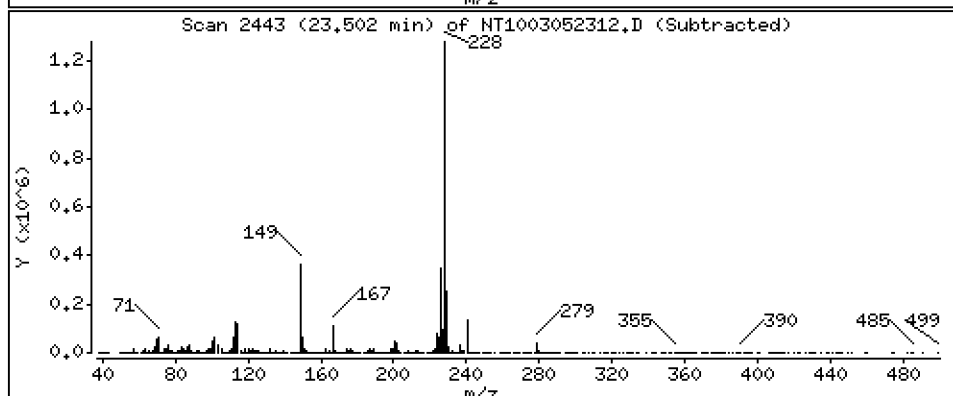
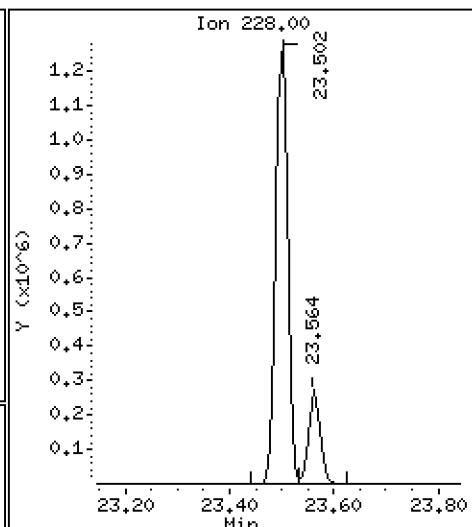
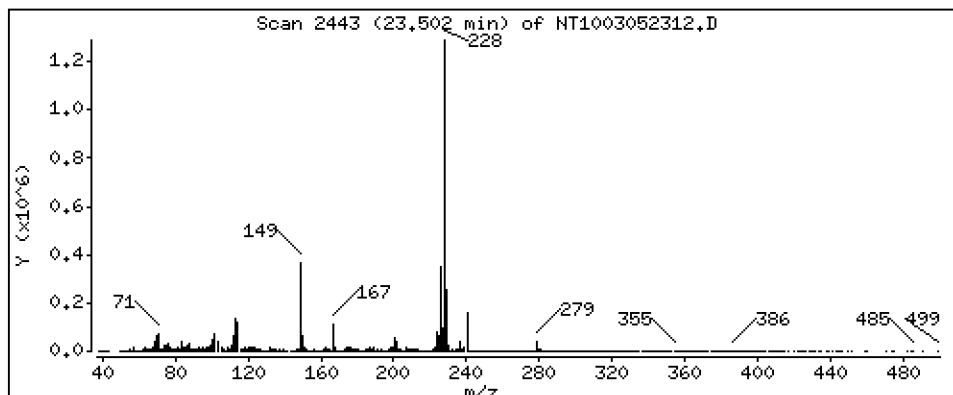
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 6,174 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

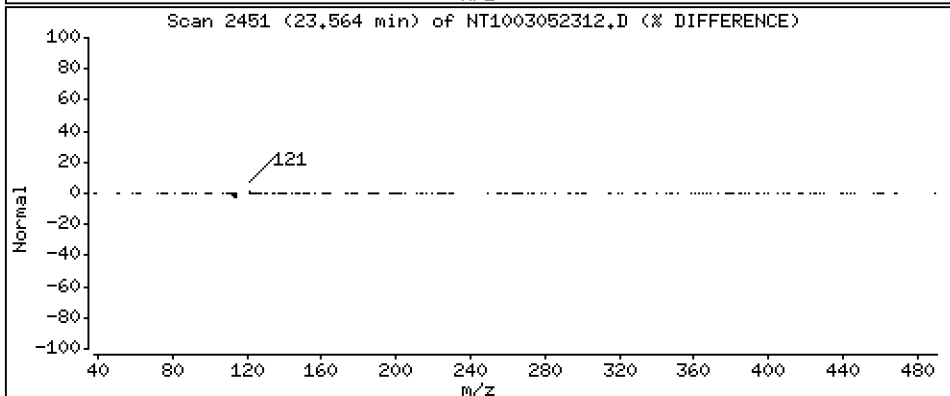
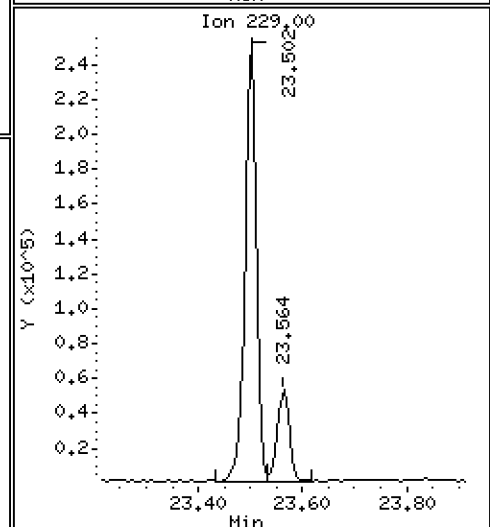
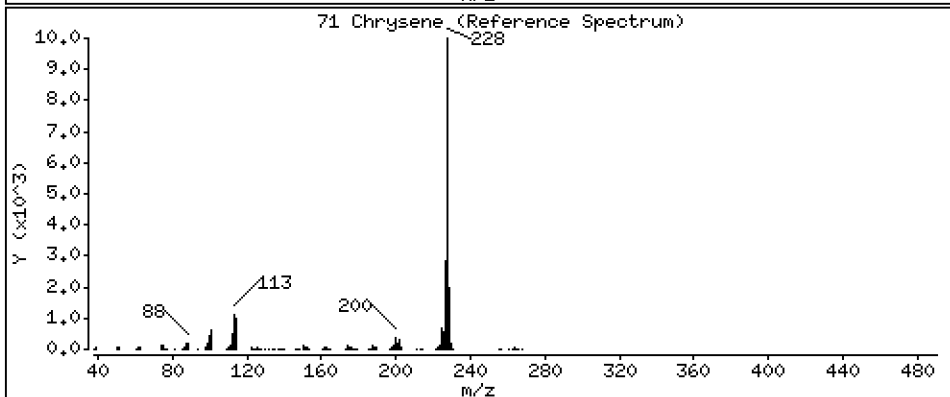
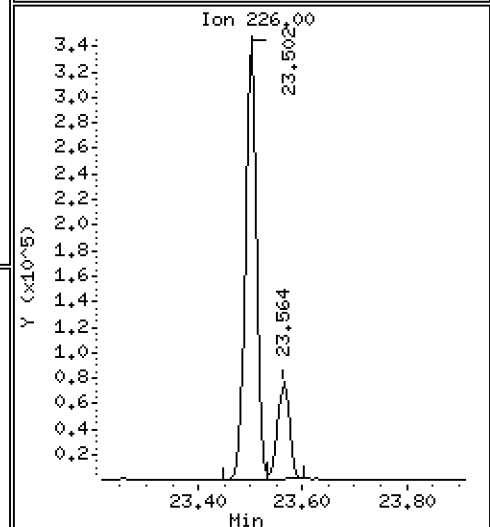
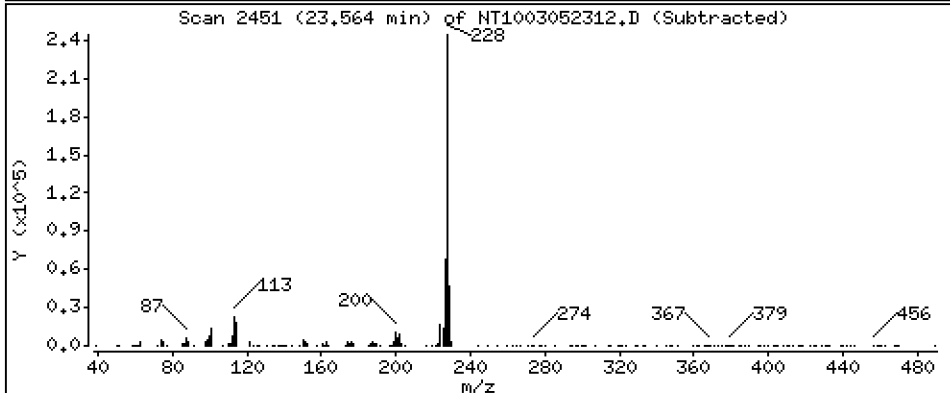
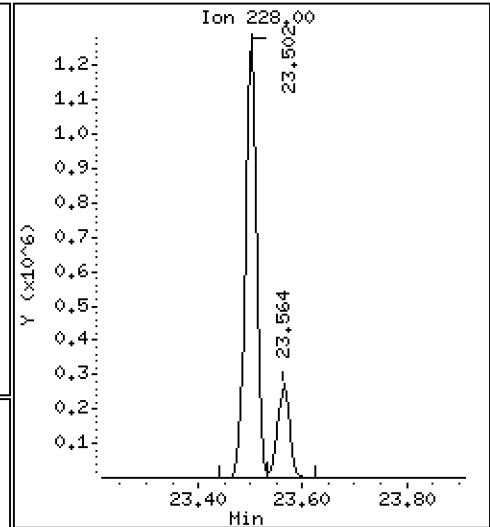
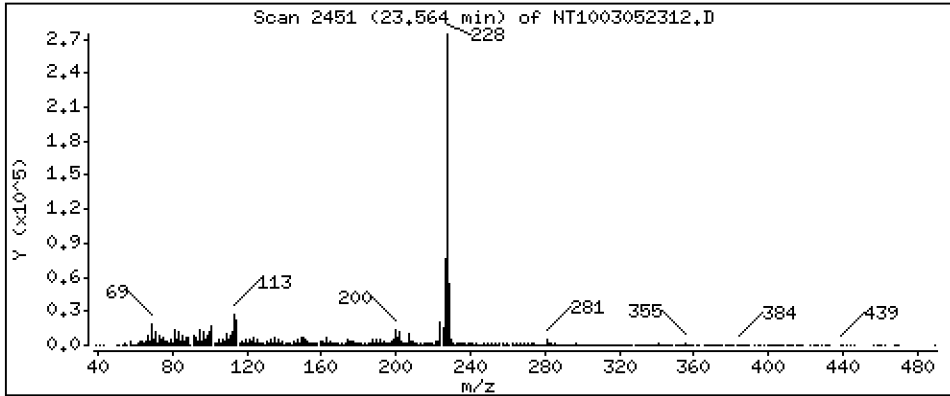
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 1,597 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

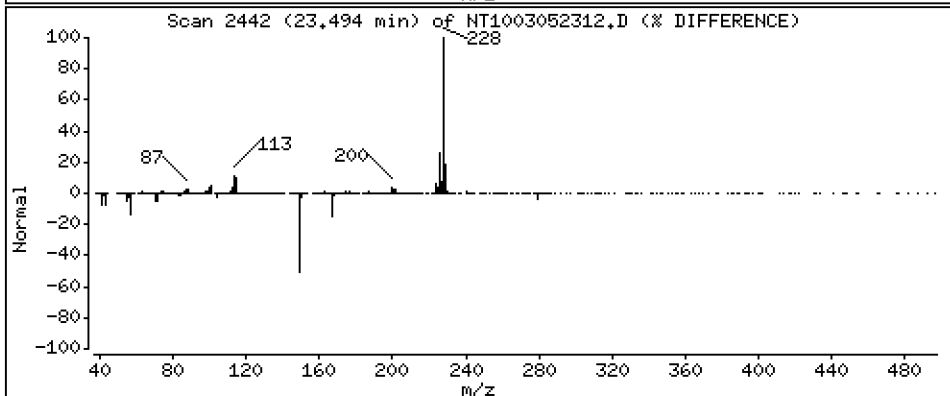
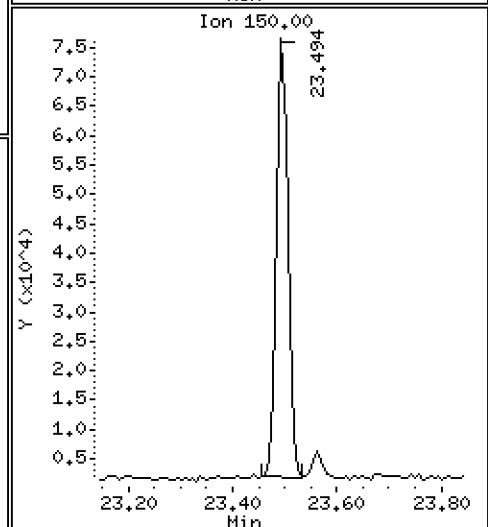
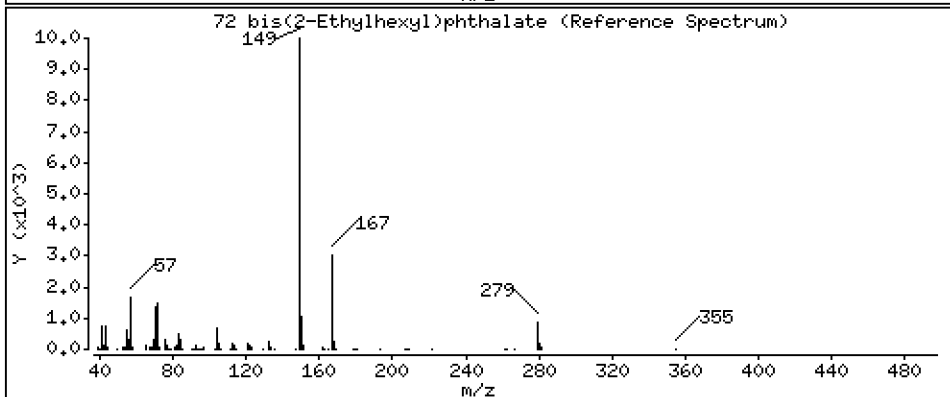
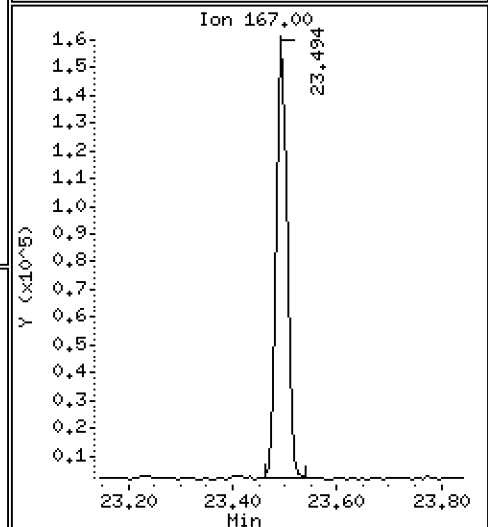
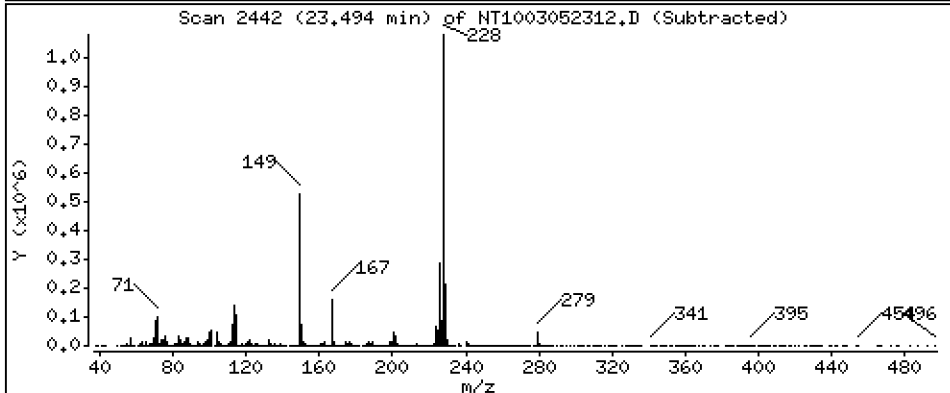
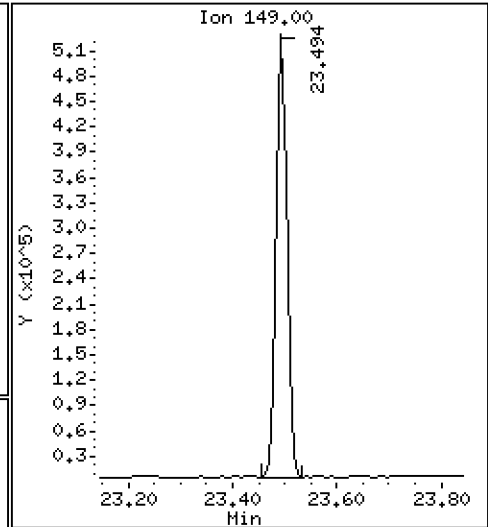
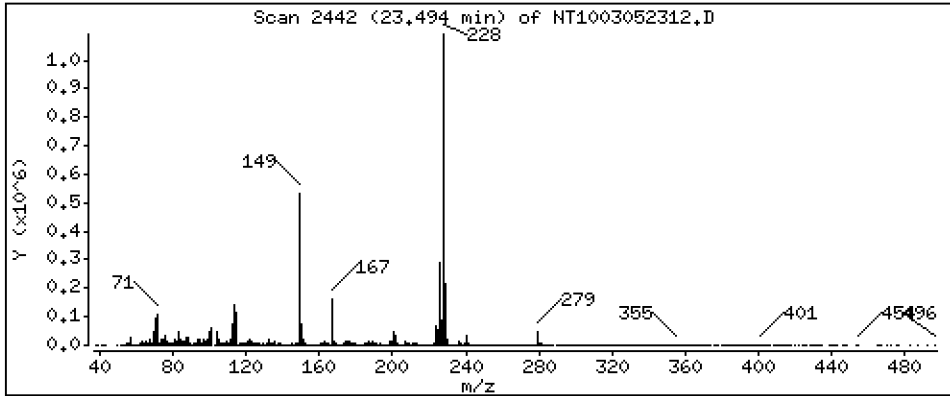
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 3,326 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

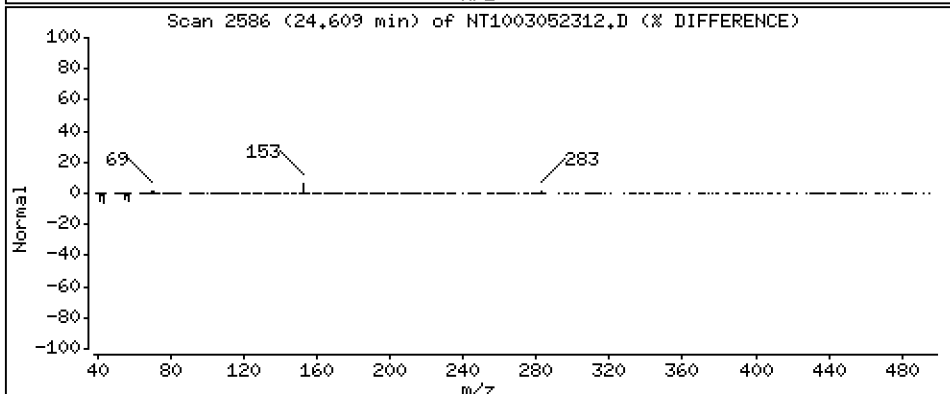
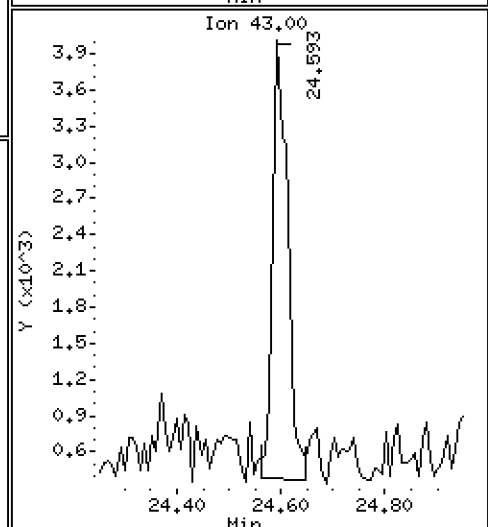
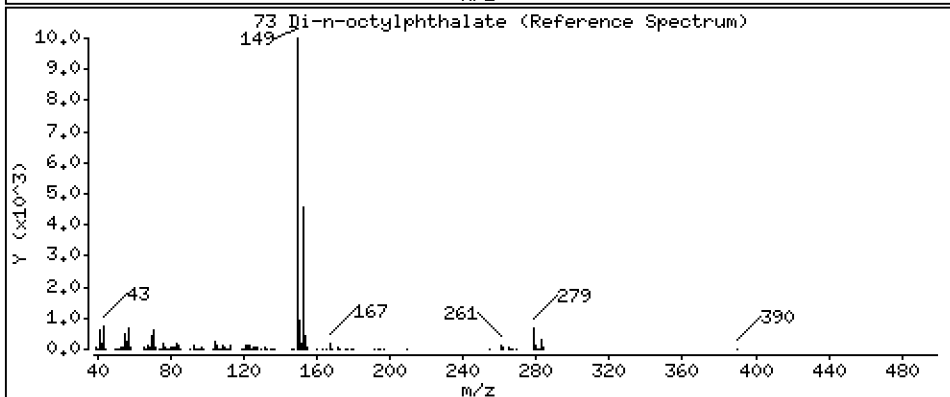
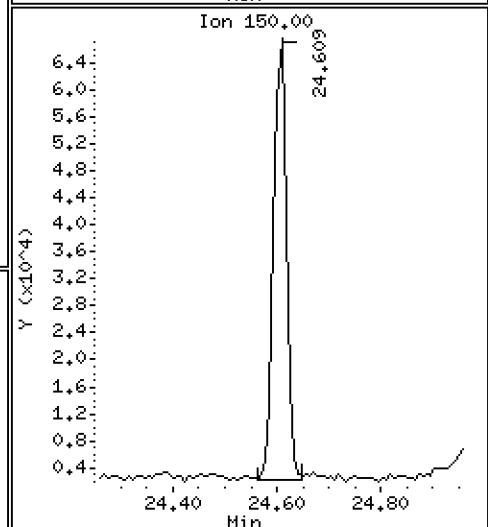
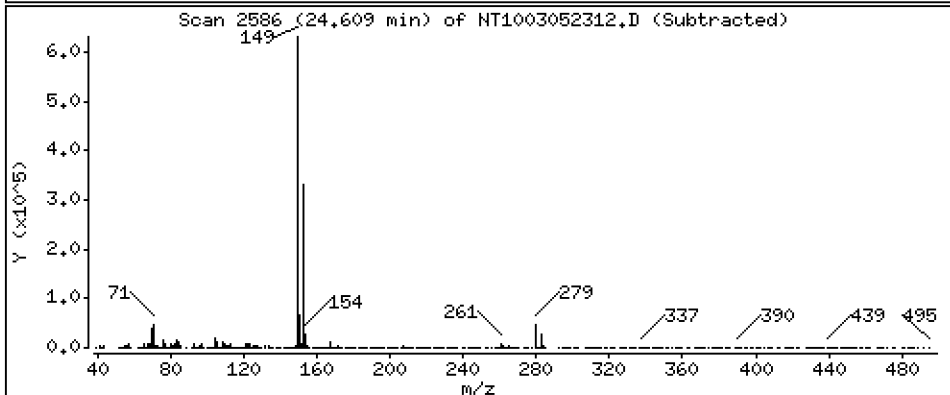
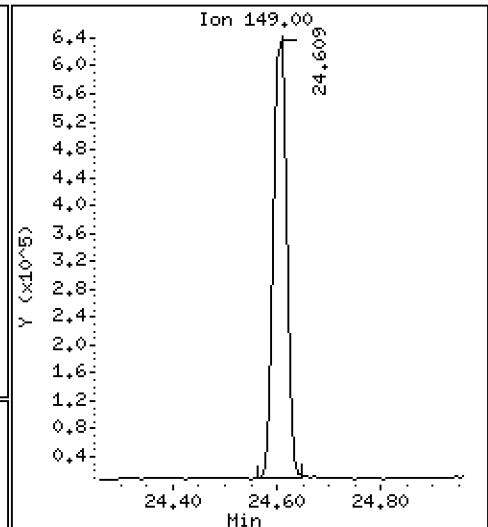
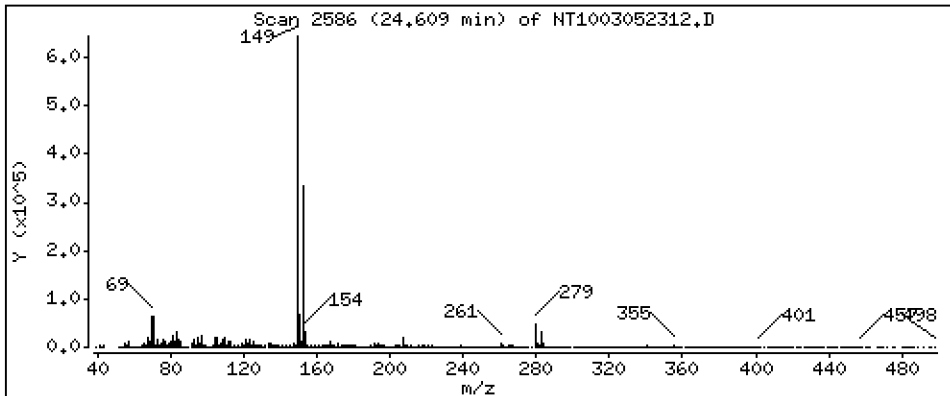
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 3,226 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

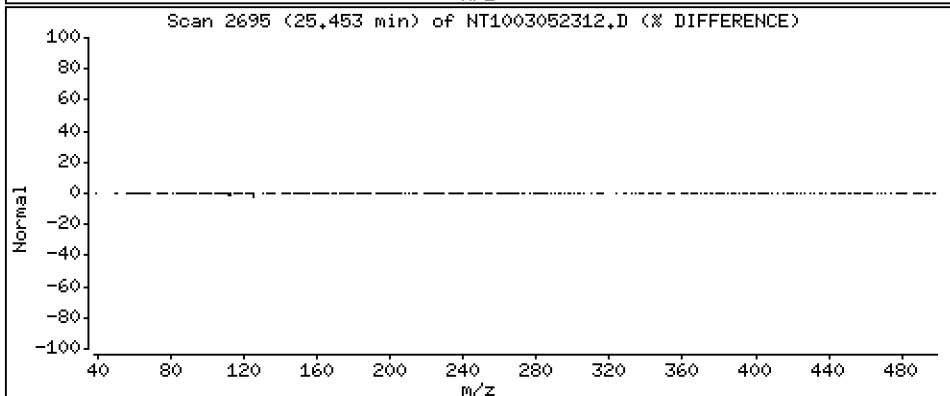
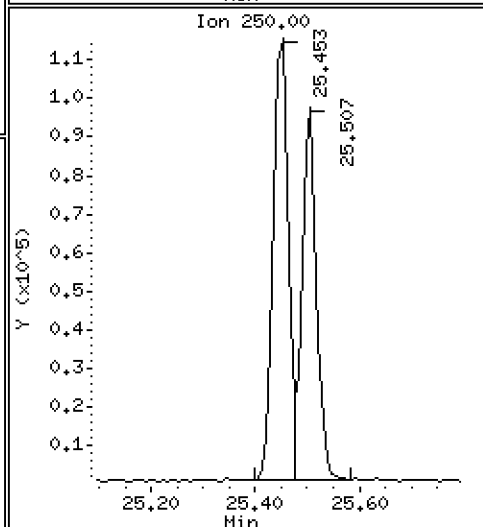
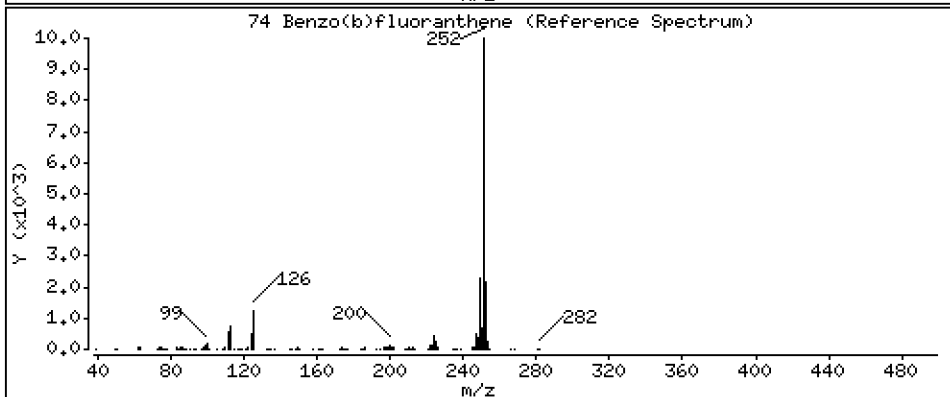
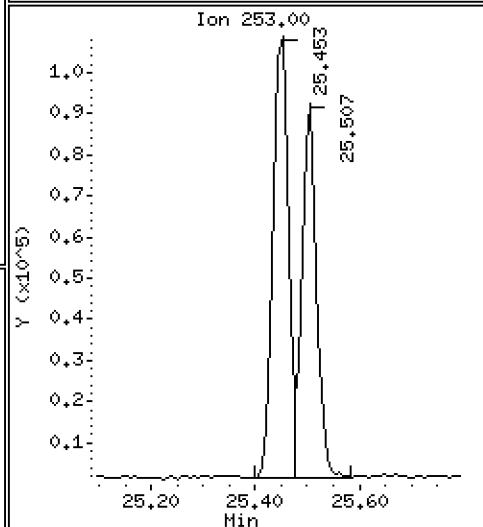
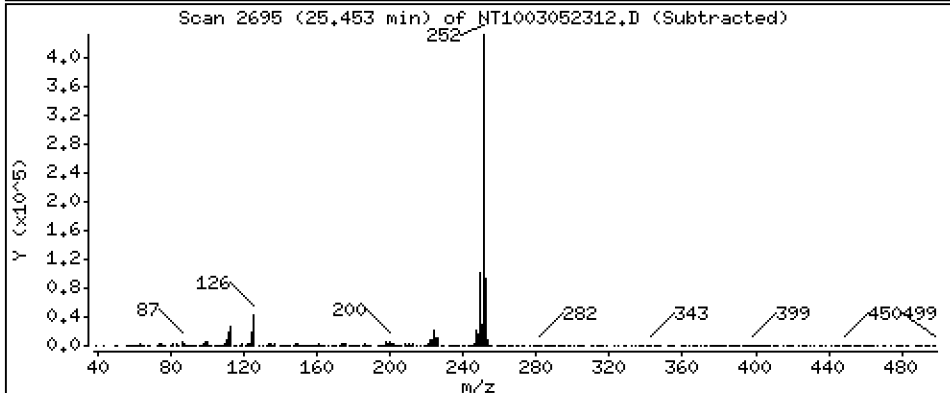
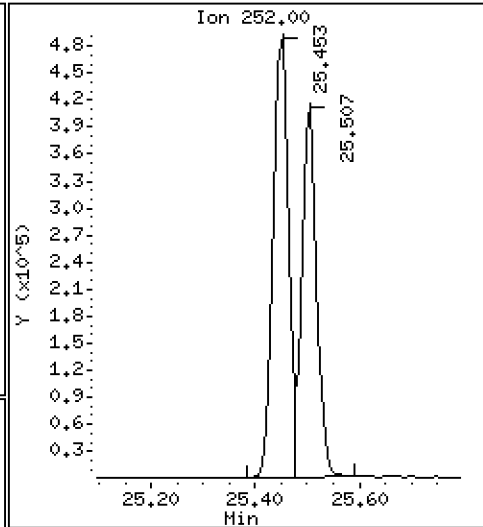
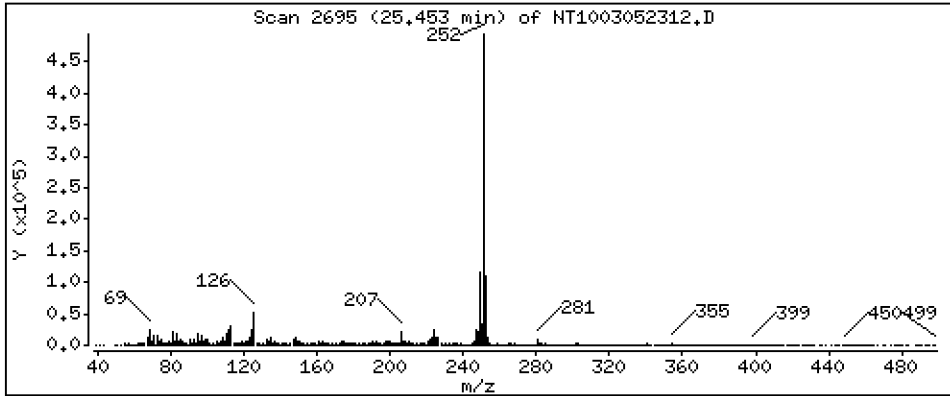
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 2,805 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

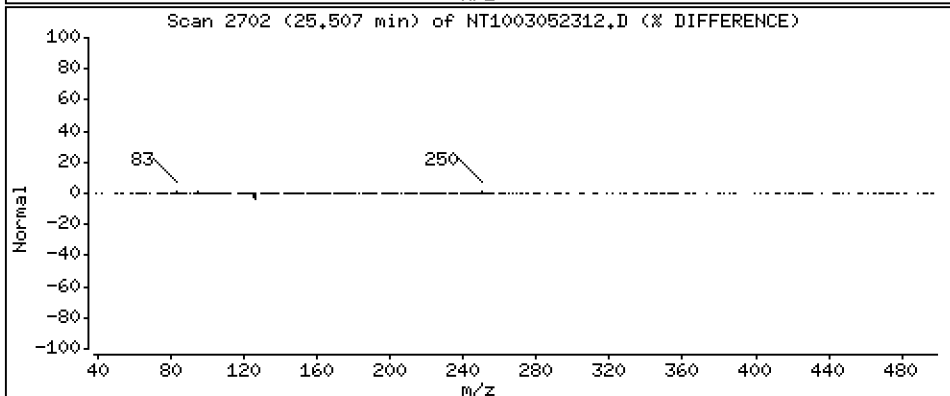
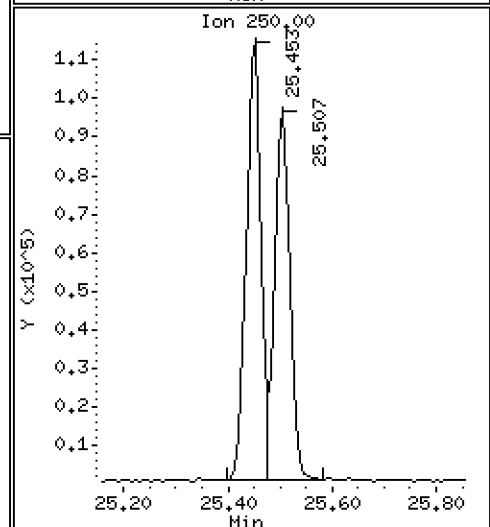
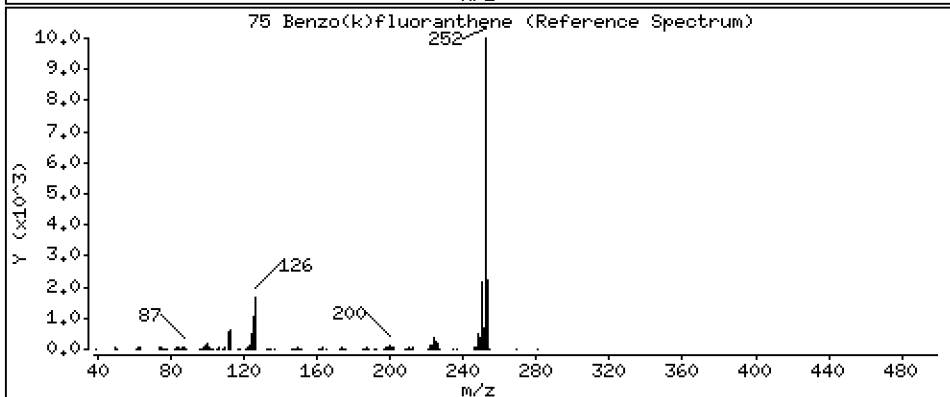
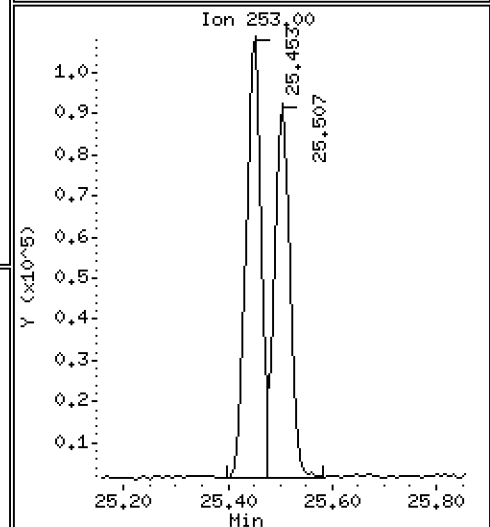
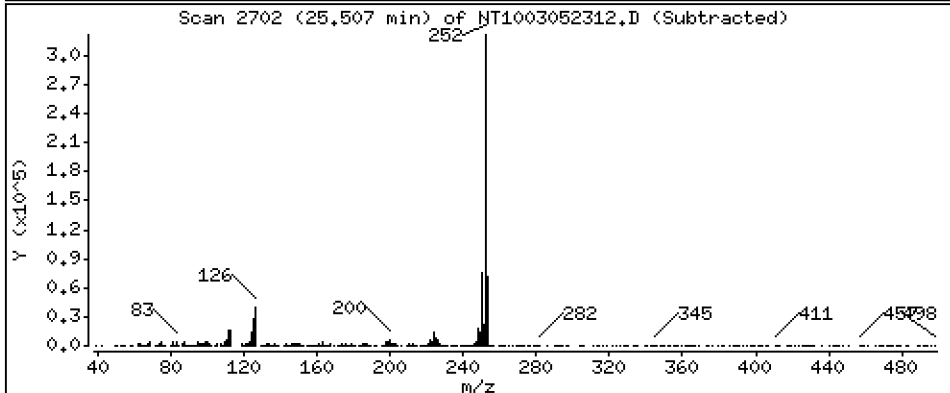
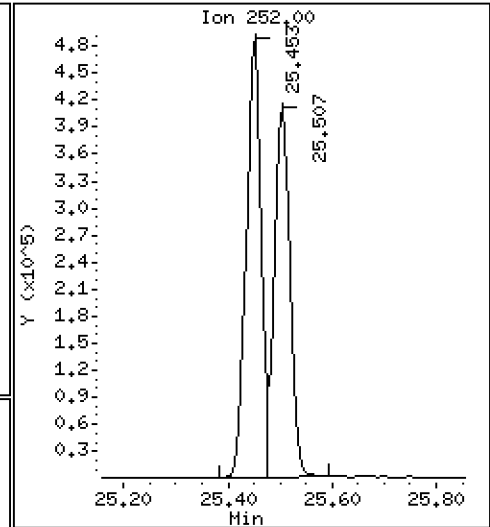
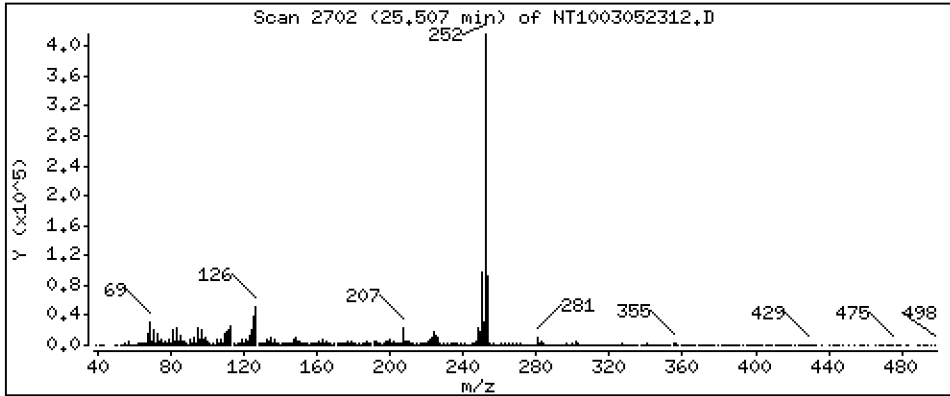
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 2,542 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

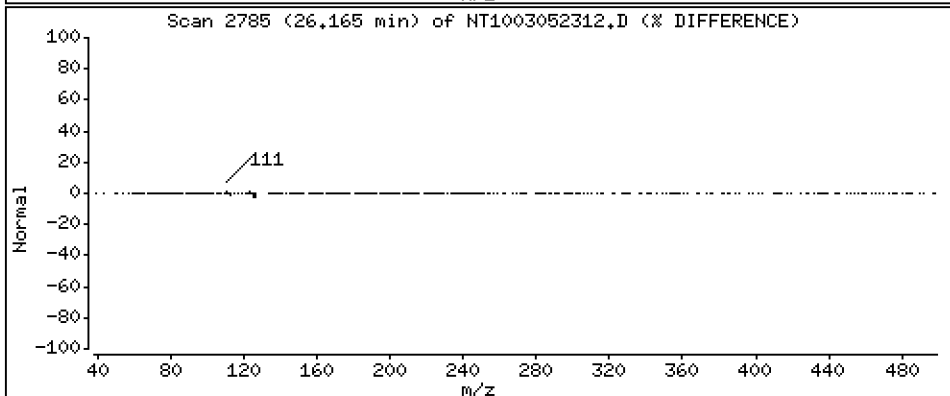
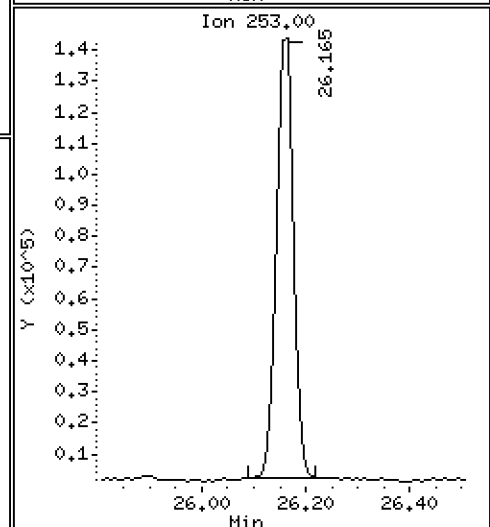
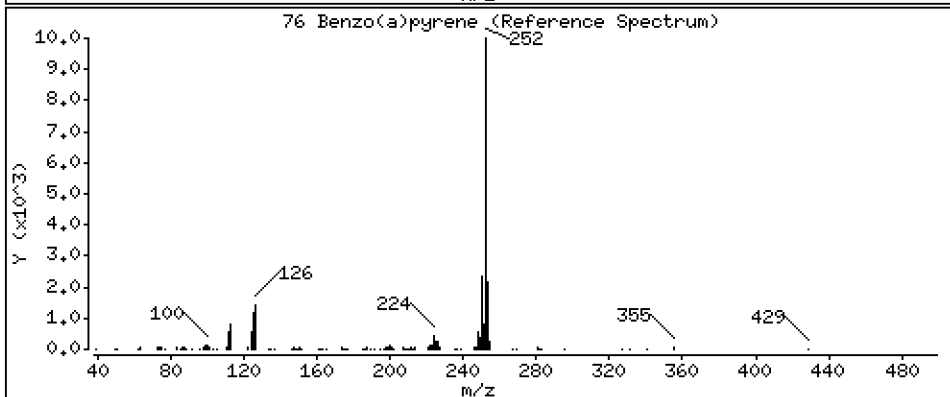
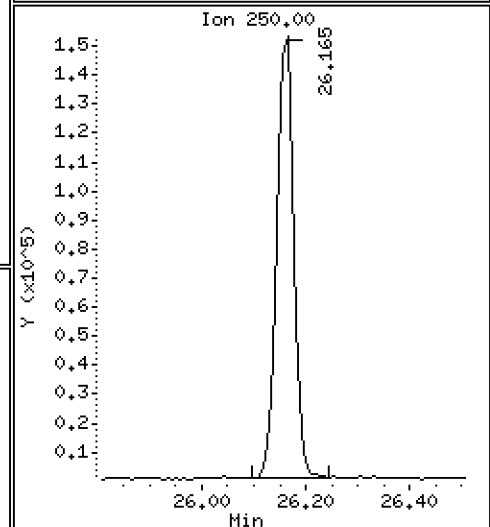
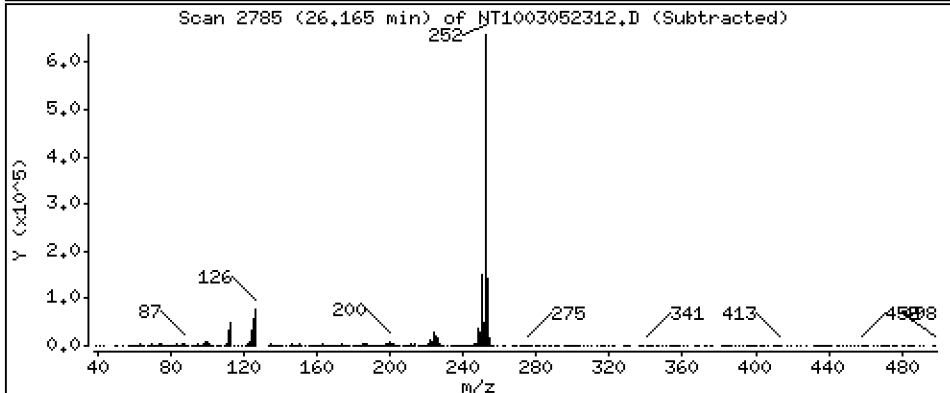
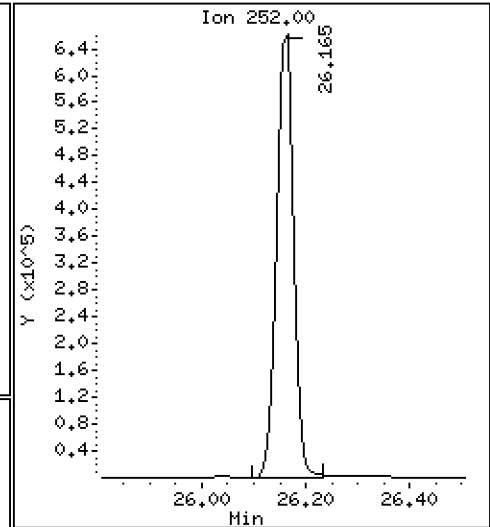
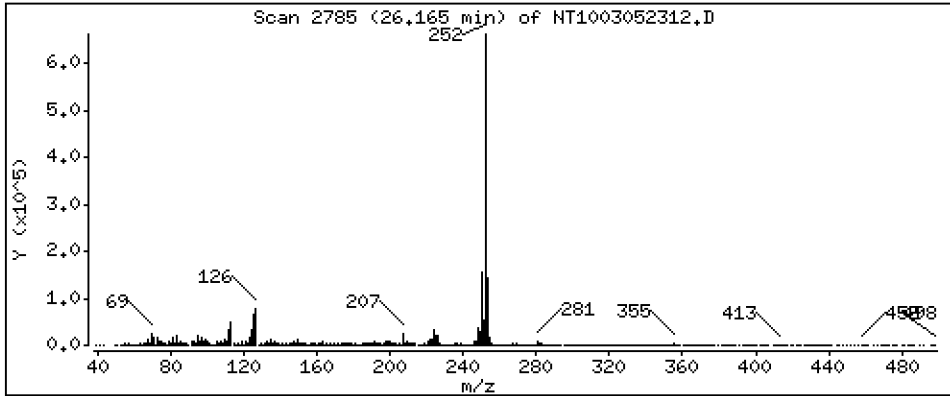
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,540 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

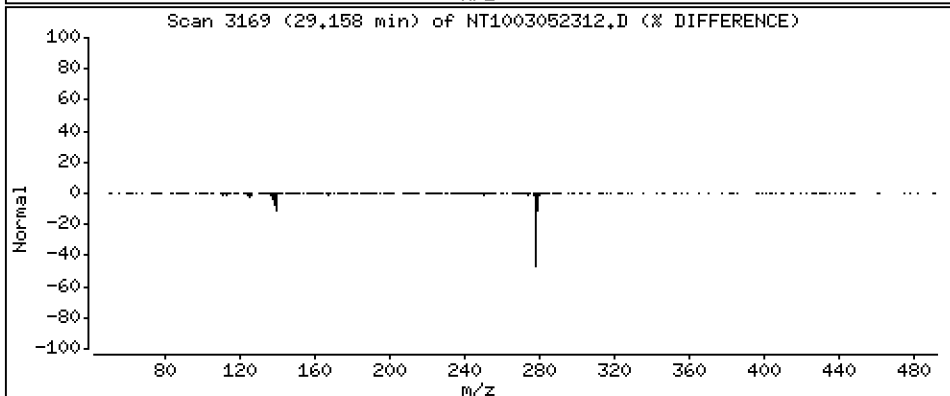
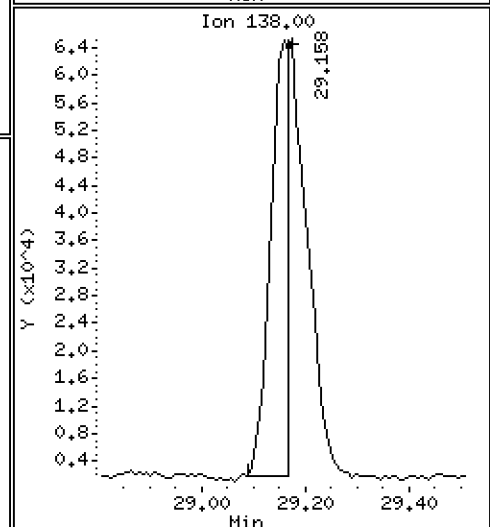
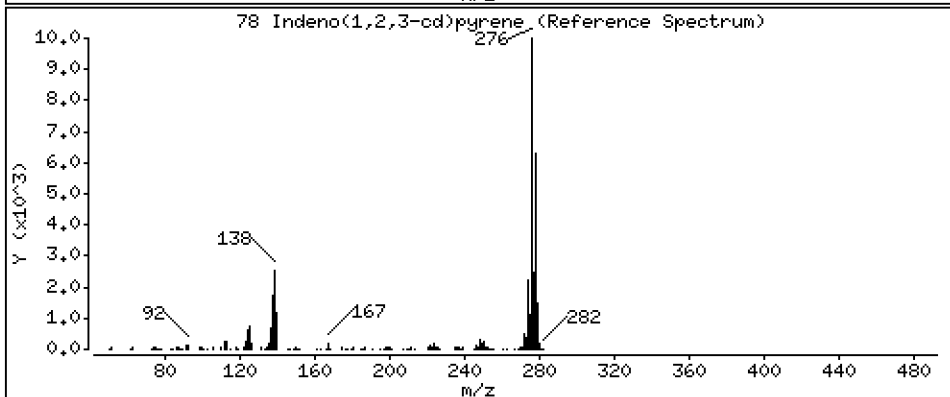
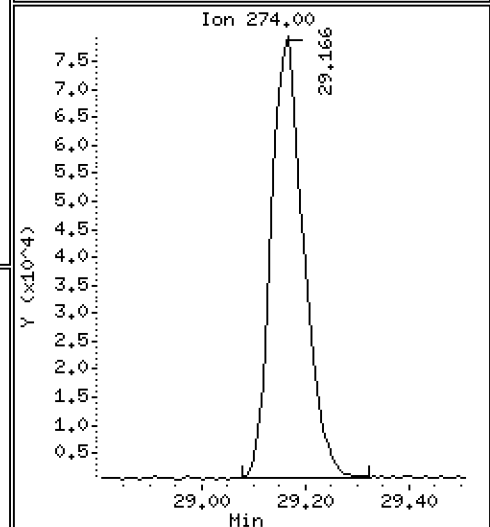
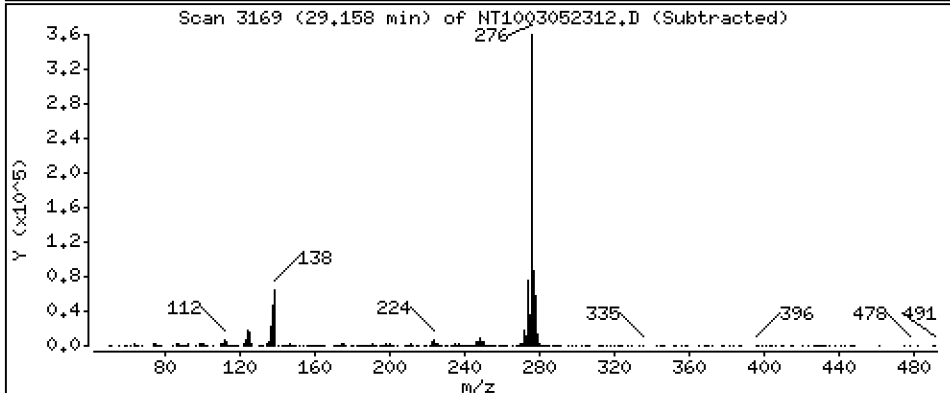
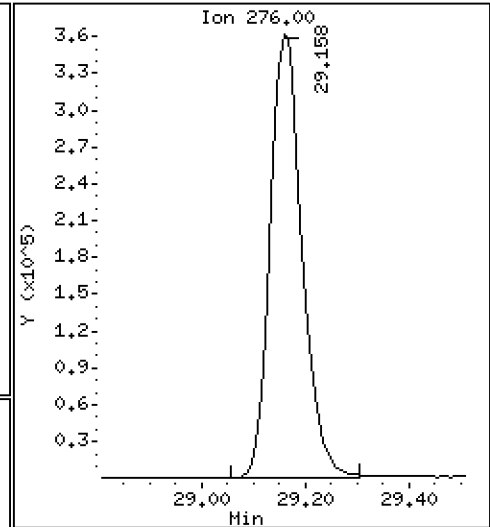
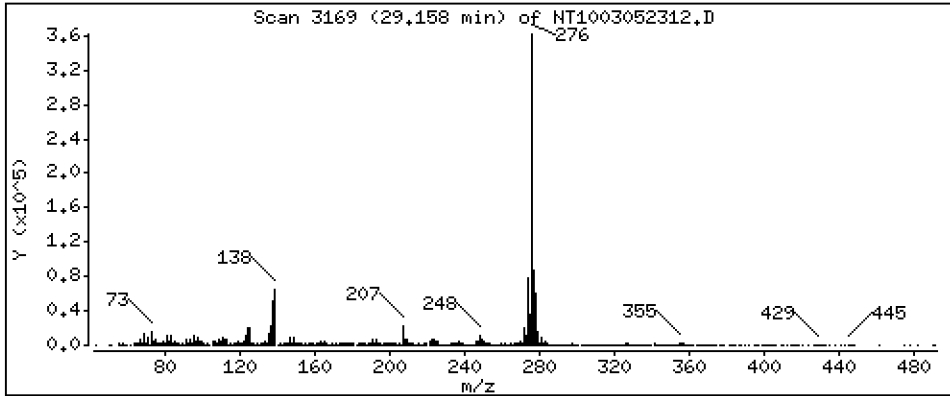
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,177 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

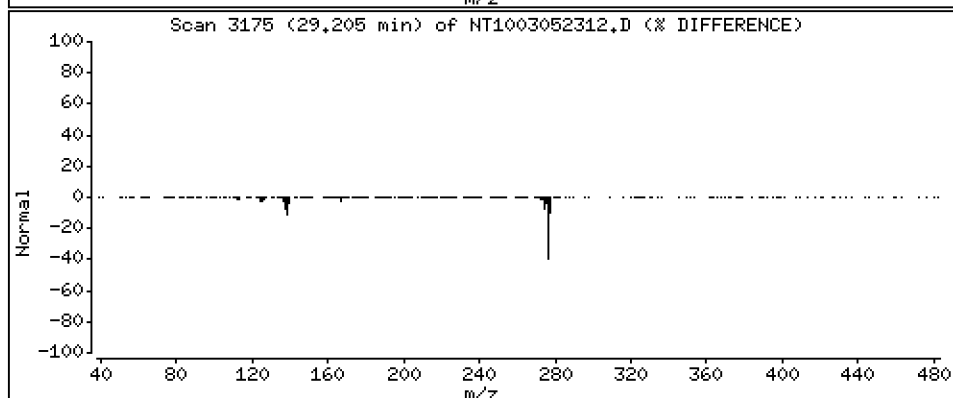
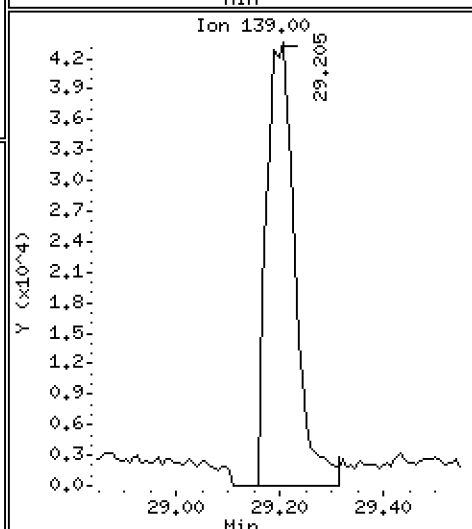
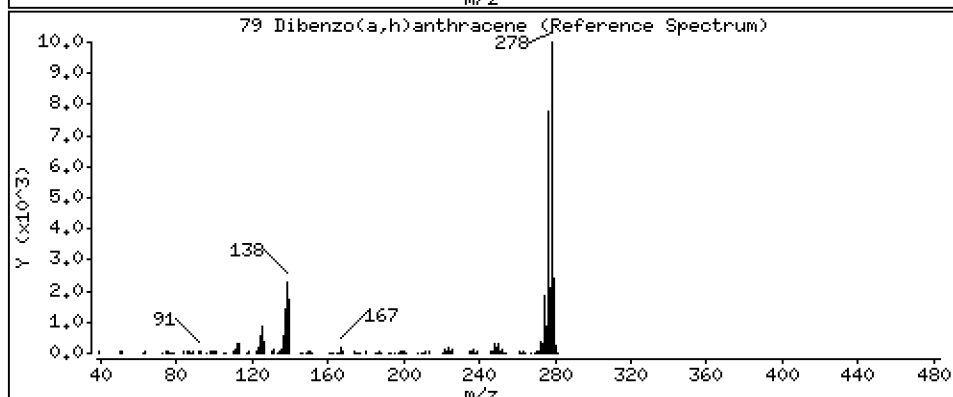
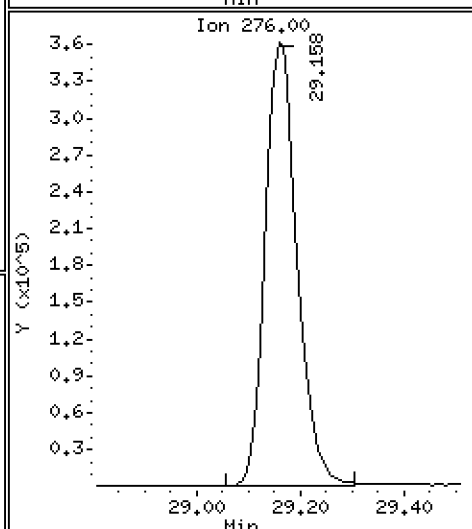
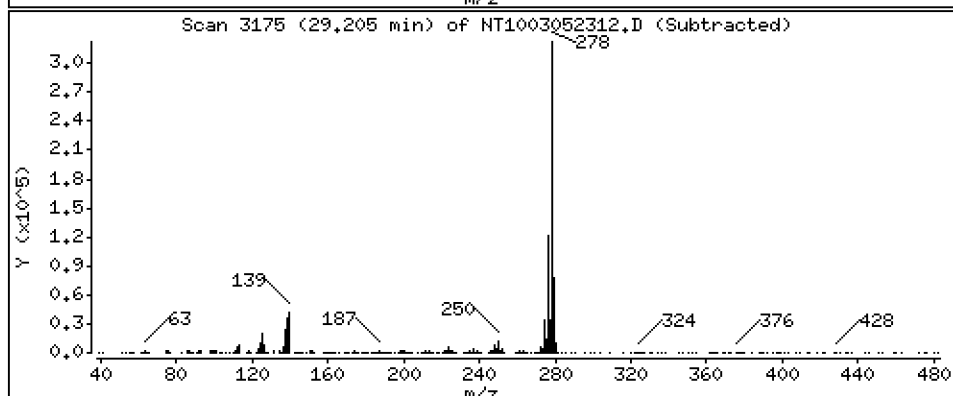
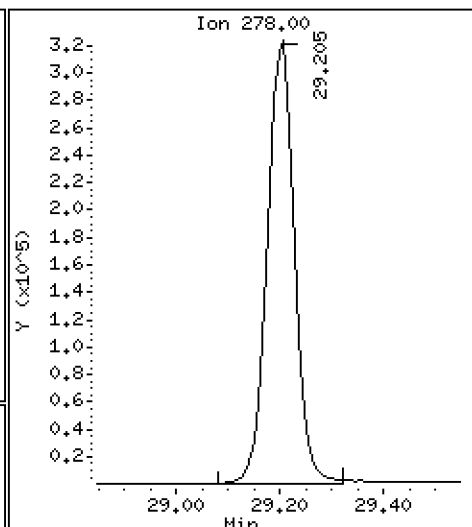
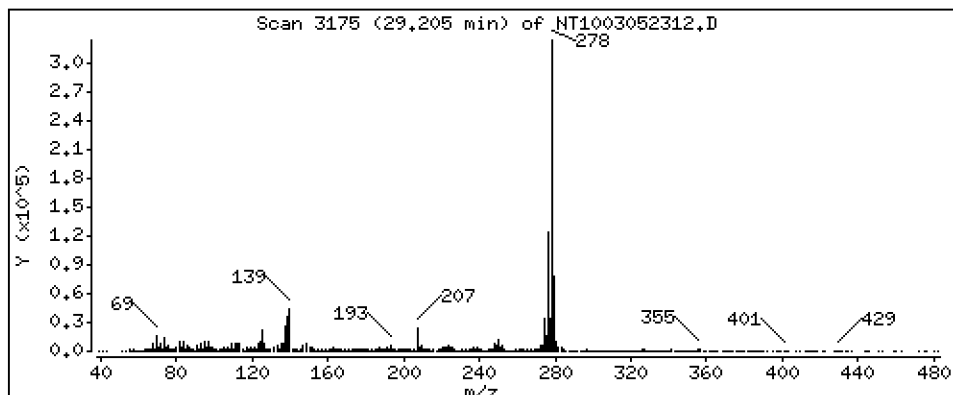
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,163 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

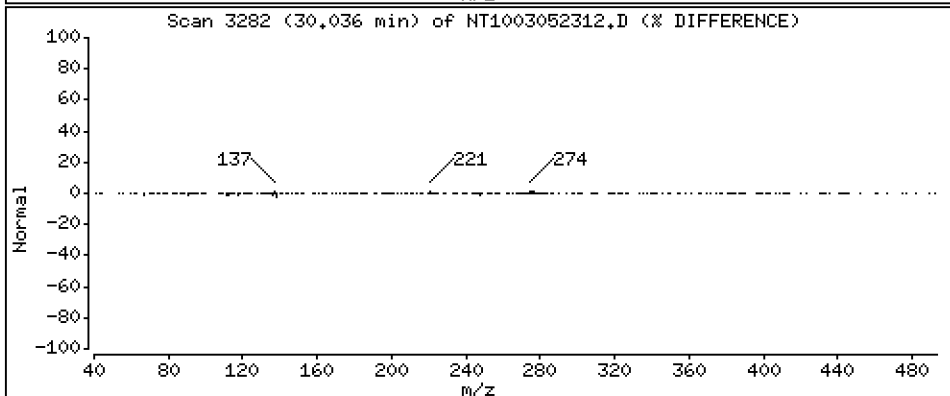
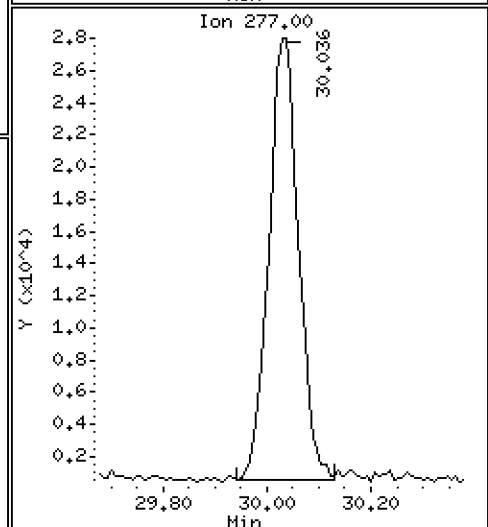
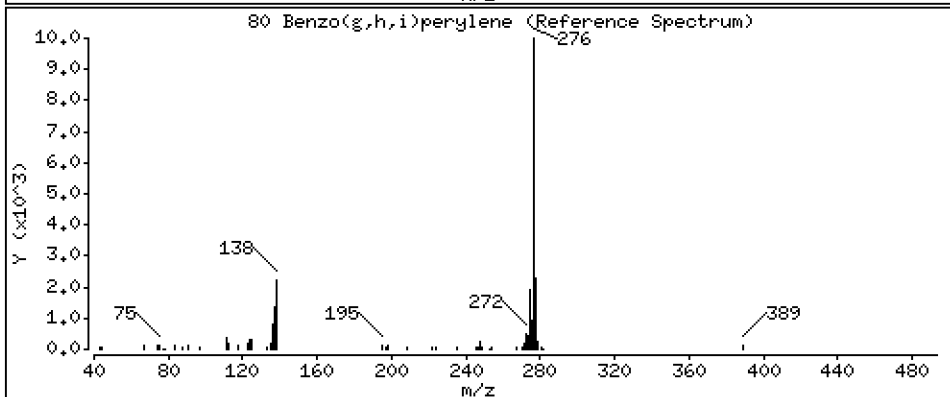
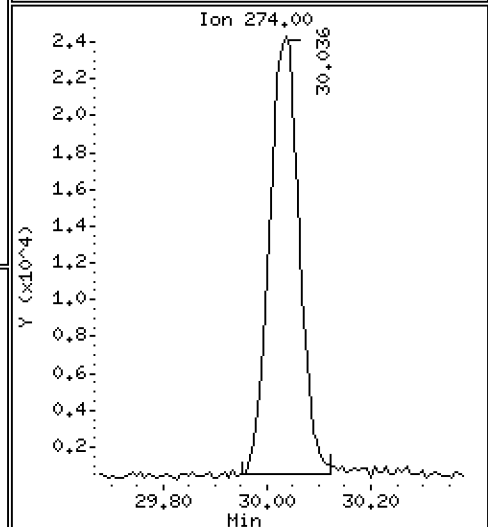
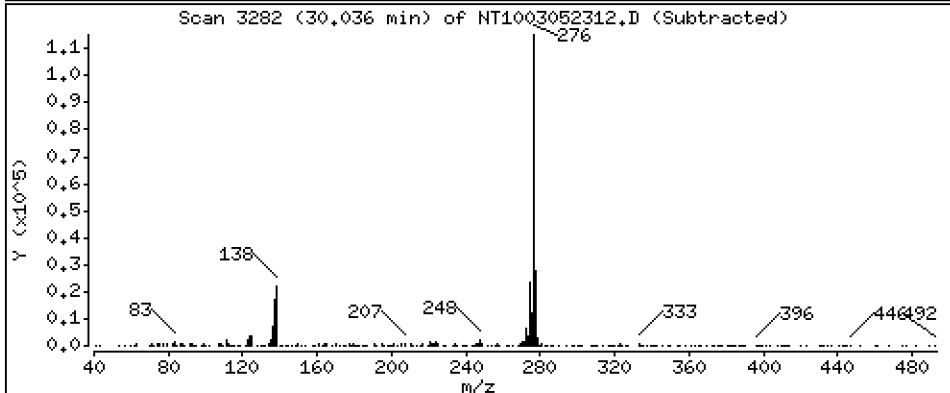
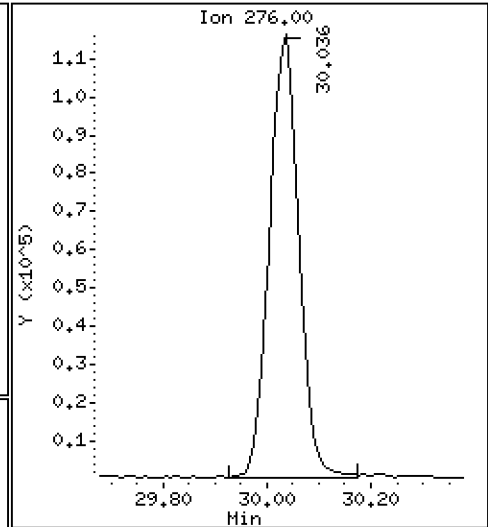
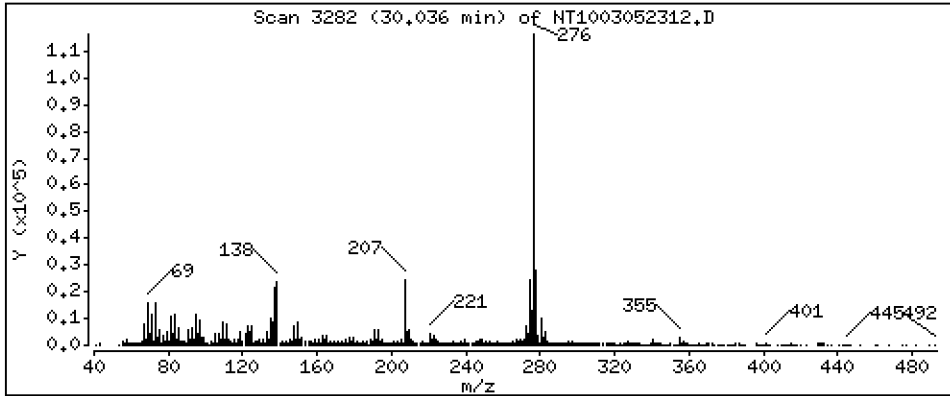
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 1,603 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

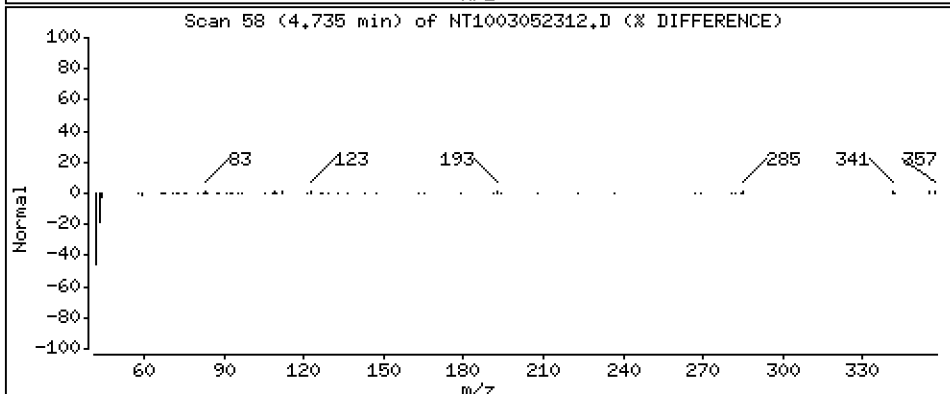
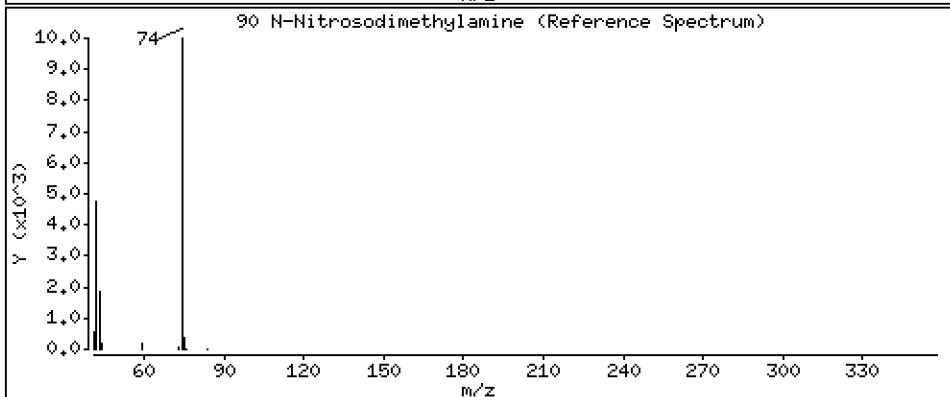
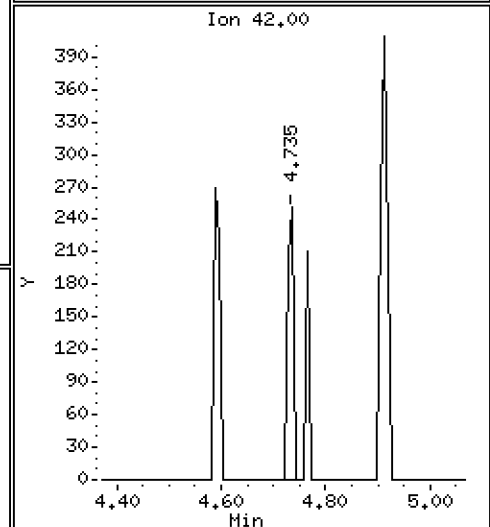
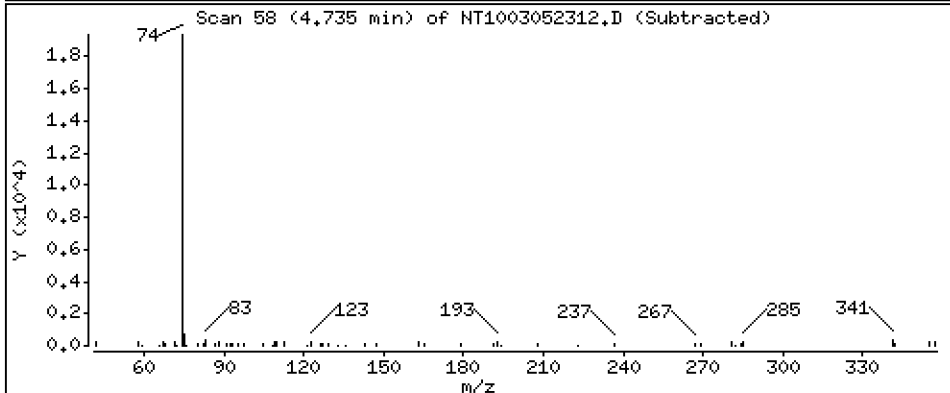
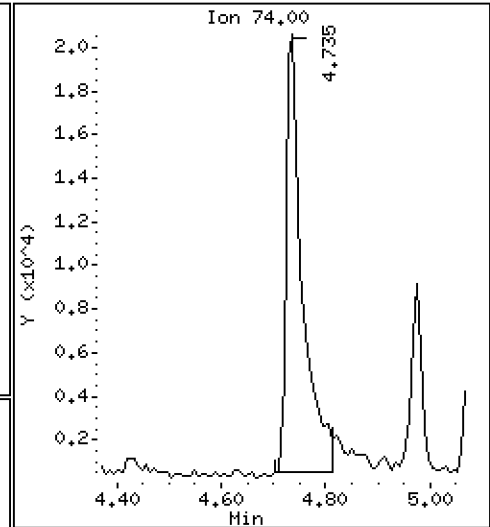
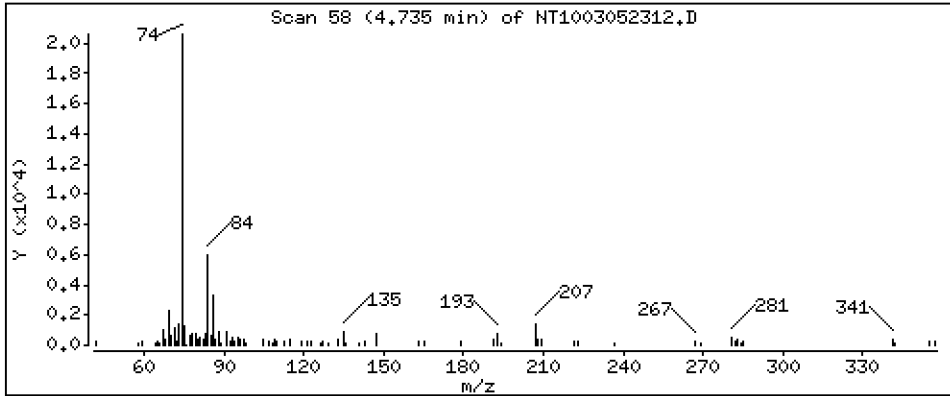
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,8622 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

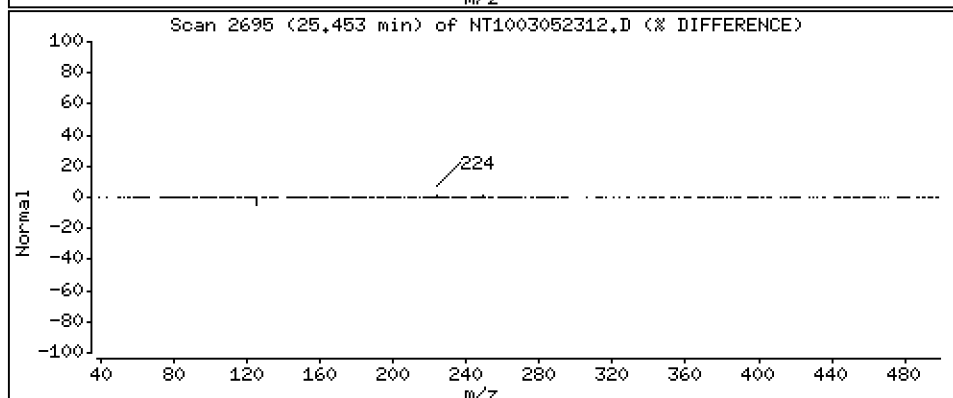
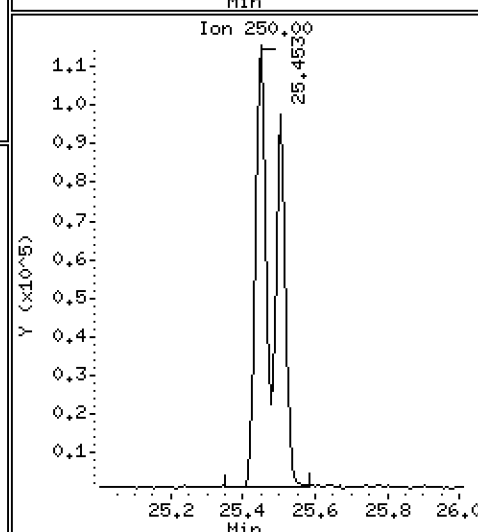
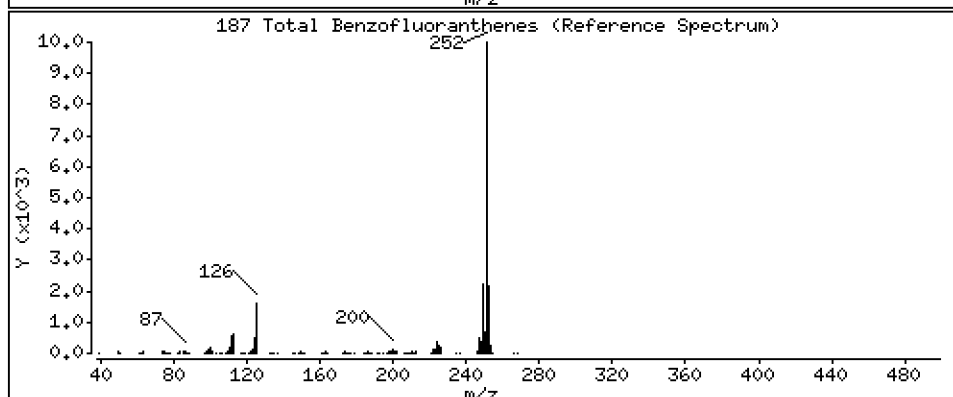
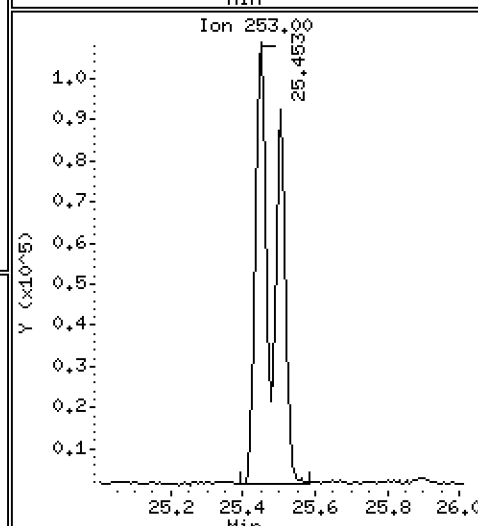
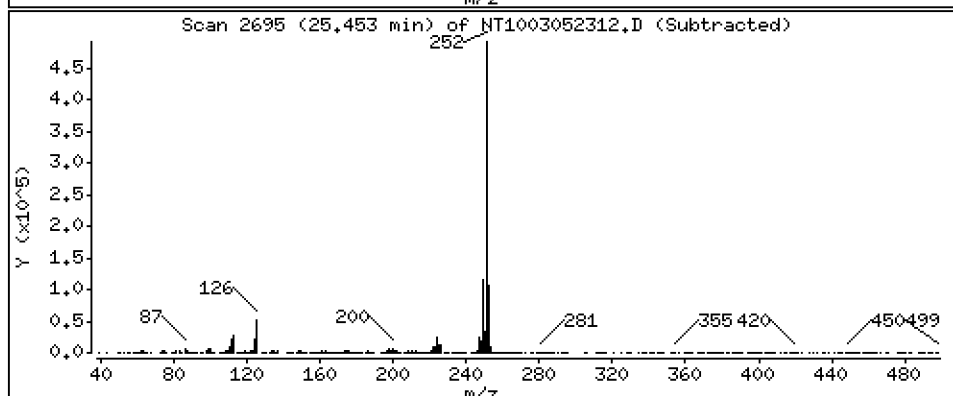
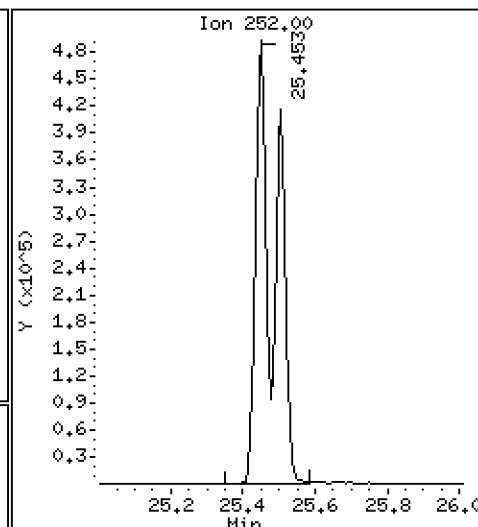
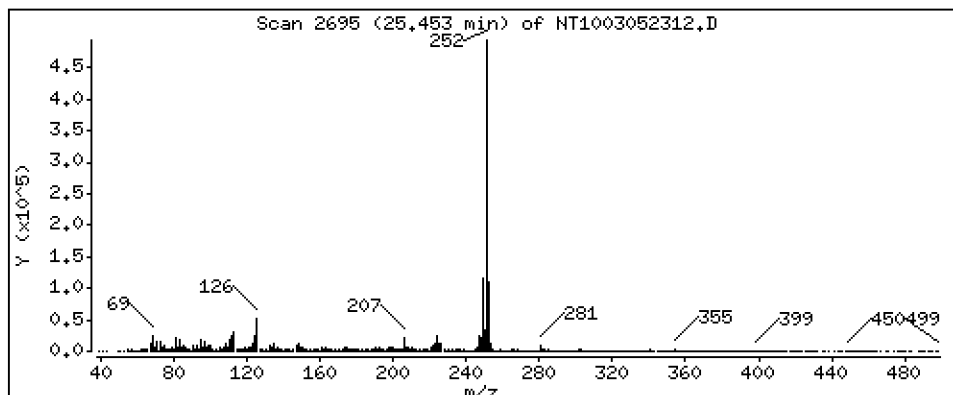
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 5,362 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM1

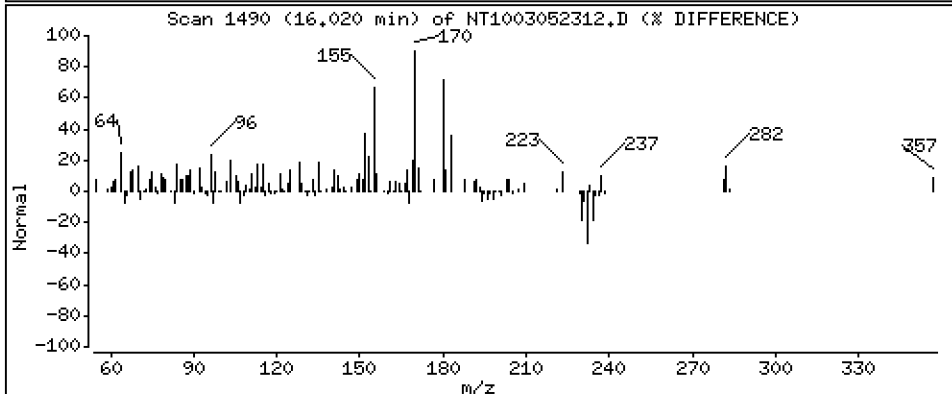
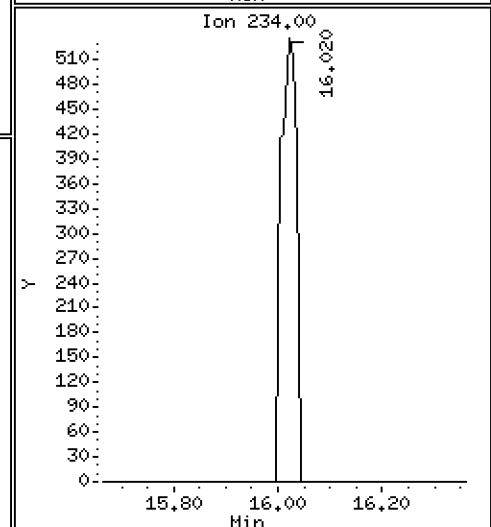
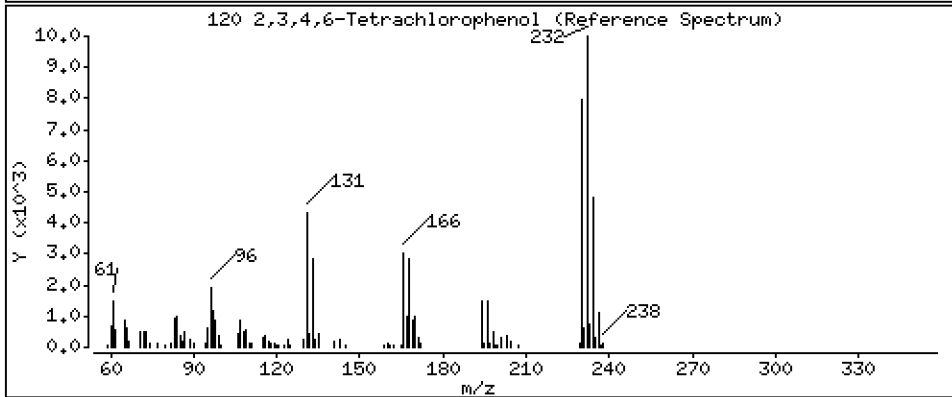
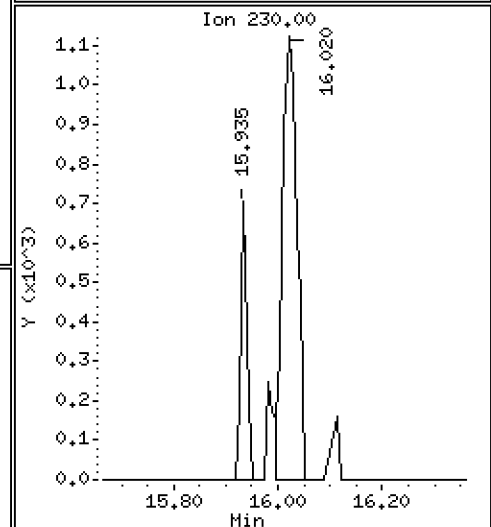
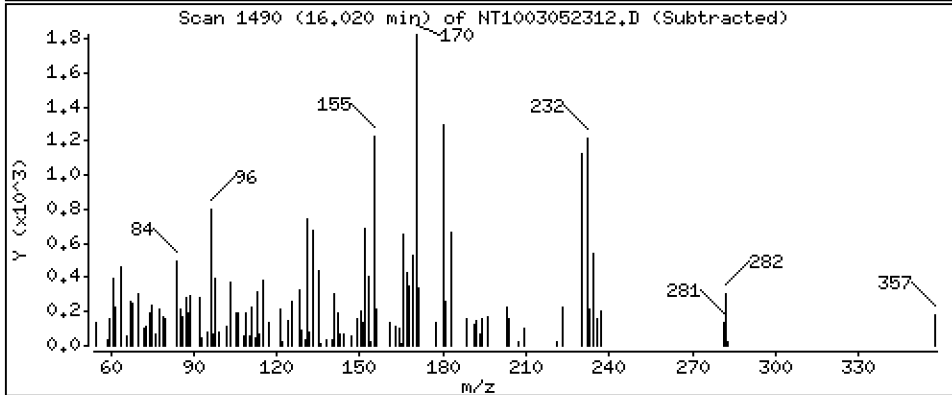
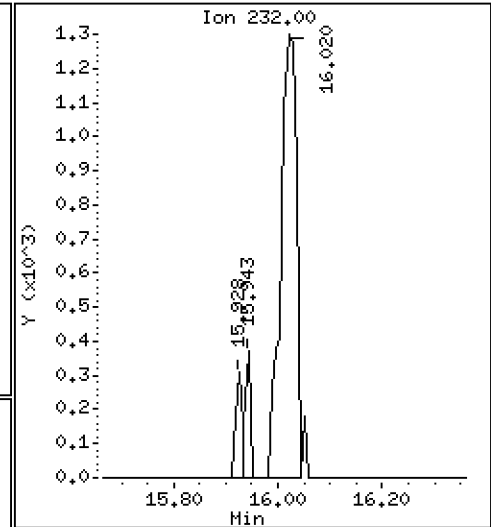
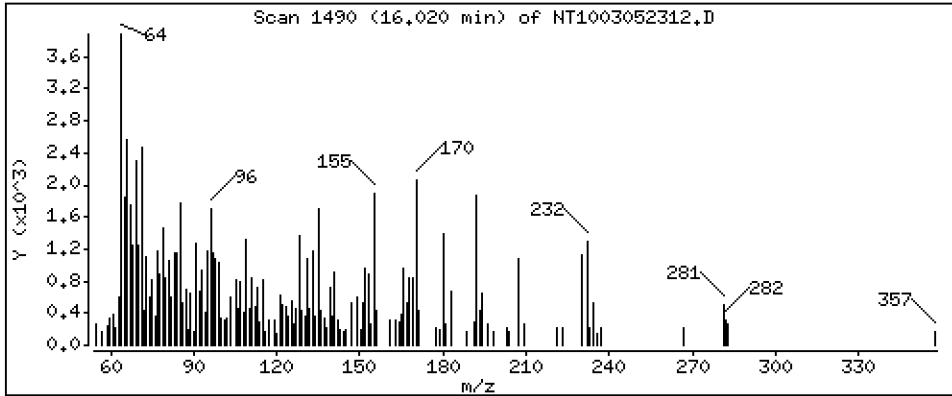
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,05610 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052312.D
 Lab Smp Id: BLA0685-SRM1
 Inj Date : 05-MAR-2023 20:22
 Operator : VTS
 Smp Info : BLA0685-SRM1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.897	(0.747)	487412	6.03072	6.031
\$ 2 Phenol-d5	99		8.512	8.504	(0.921)	603026	6.42658	6.427
3 Phenol	94		8.535	8.528	(0.923)	278057	2.78717	2.787
\$ 5 2-Chlorophenol-d4	132		8.821	8.813	(0.954)	540310	6.74916	6.749
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		8.852	8.844	(0.957)	114711	1.37928	1.379
7 1,3-Dichlorobenzene	146		9.146	9.138	(0.989)	32338	0.35267	0.3527
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.239	(1.000)	256880	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.541	9.534	(1.032)	242079	4.04736	4.047
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.743	9.728	(1.054)	31872	1.25400	1.254
13 2-Methylphenol	108		9.673	9.666	(1.046)	372351	4.71368	4.714
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.968	9.953	(1.078)	496760	5.18986	5.190
\$ 18 Nitrobenzene-d5	82		10.310	10.302	(0.878)	457915	4.54480	4.545
19 Nitrobenzene	77		10.341	10.341	(0.881)	206666	2.18661	2.187
20 Isophorone	82		10.807	10.799	(0.920)	237048	1.96481	1.965
21 2-Nitrophenol	139		10.967	10.959	(0.934)	241758	4.75681	4.757
22 2,4-Dimethylphenol	107		11.018	11.018	(0.938)	41345	0.45717	0.4572
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		11.171	11.196	(0.951)	13598	0.25394	0.2539
25 2,4-Dichlorophenol	162		11.442	11.434	(0.974)	580931	7.98558	7.986
26 1,2,4-Trichlorobenzene	180		11.610	11.603	(0.989)	62168	0.87644	0.8764
* 27 Naphthalene-d8	136		11.742	11.726	(1.000)	917867	4.00000	
28 Naphthalene	128		11.780	11.773	(1.003)	582009	2.47051	2.471
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		12.004	11.997	(1.022)	67138	1.29990	1.300
31 4-Chloro-3-methylphenol	107		12.840	12.825	(1.094)	164211	2.17428	2.174
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
							ON-COLUMN (ug/mL)	FINAL (ug/mL)	
34 2,4,6-Trichlorophenol	196		13.753	13.746	(0.896)	115531	2.44183	2.442	
35 2,4,5-Trichlorophenol	196		13.831	13.815	(0.901)	197473	3.88005	3.880	
§ 36 2-Fluorobiphenyl	172		13.931	13.924	(0.908)	788921	4.46604	4.466	
37 2-Chloronaphthalene	162		14.194	14.187	(0.925)	328461	2.36859	2.369	
38 2-Nitroaniline	65		Compound Not Detected.						
39 Dimethylphthalate	163		14.767	14.767	(0.962)	842171	5.26547	5.265	
40 Acenaphthylene	152		15.053	15.046	(0.981)	371844	1.55533	1.555	
41 2,6-Dinitrotoluene	165		Compound Not Detected.						
* 42 Acenaphthene-d10	164		15.347	15.340	(1.000)	495256	4.00000		
43 3-Nitroaniline	138		Compound Not Detected.						
44 Acenaphthene	153		15.409	15.409	(1.004)	799777	5.54690	5.547	
45 2,4-Dinitrophenol	184		15.479	15.479	(1.009)	32348	3.46965	3.470 (H)	
46 Dibenzofuran	168		15.772	15.765	(1.028)	1406463	6.57253	6.573	
47 4-Nitrophenol	109		15.595	15.579	(1.016)	187654	6.51517	6.515	
48 2,4-Dinitrotoluene	165		15.742	15.742	(1.026)	207041	4.01029	4.010	
50 Diethylphthalate	149		16.236	16.237	(1.058)	37859	0.22344	0.2234	
49 Fluorene	166		16.492	16.484	(1.075)	694328	3.89979	3.900	
51 4-Chlorophenyl-phenylether	204		16.484	16.484	(1.074)	192538	2.42738	2.427	
52 4-Nitroaniline	138		Compound Not Detected.						
53 4,6-Dinitro-2-methylphenol	198		16.585	16.585	(0.899)	157538	7.21108	7.211	
54 N-Nitrosodiphenylamine	169		16.731	16.724	(0.907)	307220	2.26328	2.263	
§ 55 2,4,6-Tribromophenol	330		16.993	16.986	(1.107)	229306	7.16547	7.165	
56 4-Bromophenyl-phenylether	248		17.511	17.504	(0.949)	518968	9.43548	9.435	
57 Hexachlorobenzene	284		Compound Not Detected.						
58 Pentachlorophenol	266		18.045	18.038	(0.978)	48632	1.68953	1.690	
* 59 Phenanthrene-d10	188		18.455	18.448	(1.000)	917438	4.00000		
60 Phenanthrene	178		18.509	18.502	(1.003)	1259949	5.36630	5.366	
61 Anthracene	178		18.618	18.610	(1.009)	568619	2.49759	2.498	
62 Carbazole	167		18.950	18.943	(1.027)	1384571	6.63840	6.638	
63 Di-n-butylphthalate	149		19.647	19.647	(1.065)	553041	1.92948	1.929	
64 Fluoranthene	202		20.900	20.885	(0.889)	700730	2.30577	2.306	
65 Pyrene	202		21.326	21.318	(0.907)	998869	3.22787	3.228	
§ 66 Terphenyl-d14	244		21.604	21.597	(0.919)	1061995	4.24136	4.241	
67 Butylbenzylphthalate	149		22.495	22.487	(0.957)	518232	3.14755	3.148	
68 Benzo(a)anthracene	228		23.501	23.494	(0.999)	1923107	6.17379	6.174	
* 69 Chrysene-d12	240		23.517	23.517	(1.000)	883418	4.00000		
70 3,3'-Dichlorobenzidine	252		Compound Not Detected.						
71 Chrysene	228		23.563	23.563	(1.002)	404248	1.59684	1.597	
72 bis(2-Ethylhexyl)phthalate	149		23.494	23.494	(0.955)	702075	3.32561	3.326	
* 134 Di-n-octylphthalate-d4	153		24.593	24.593	(1.000)	1475913	4.00000		
73 Di-n-octylphthalate	149		24.608	24.609	(1.001)	1055694	3.22560	3.226	
74 Benzo(b)fluoranthene	252		25.452	25.445	(0.968)	971965	2.80490	2.805 (H)	
75 Benzo(k)fluoranthene	252		25.506	25.507	(0.971)	845975	2.54163	2.542	
76 Benzo(a)pyrene	252		26.165	26.157	(0.996)	1434710	4.53999	4.540	
* 77 Perylene-d12	264		26.281	26.281	(1.000)	987411	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		29.158	29.158	(1.109)	1535912	4.17742	4.177	
79 Dibenzo(a,h)anthracene	278		29.204	29.197	(1.111)	1166425	4.16276	4.163	
80 Benzo(g,h,i)perylene	276		30.035	30.028	(1.143)	455110	1.60277	1.603	
90 N-Nitrosodimethylamine	74		4.735	4.719	(0.512)	44983	0.86215	0.8622	
91 Aniline	93		Compound Not Detected.						
93 Benzidine	184		Compound Not Detected.						
103 Pyridine	79		Compound Not Detected.						
105 1-methylnaphthalene	142		Compound Not Detected.						
111 Azobenzene (1,2-DP-Hydrazine)	77		Compound Not Detected.						

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252	25.452	25.507	(0.968)	1783119	5.36169	5.362
120 2,3,4,6-Tetrachlorophenol	232	16.020	16.012	(1.044)	2600	0.05610	0.05610

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052312.D Calibration Time: 14:03
 Lab Smp Id: BLA0685-SRM1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	256880	-13.58
27 Naphthalene-d8	1085336	542668	2170672	917867	-15.43
42 Acenaphthene-d10	563464	281732	1126928	495256	-12.11
59 Phenanthrene-d10	1038318	519159	2076636	917438	-11.64
69 Chrysene-d12	1012751	506376	2025502	883418	-12.77
134 Di-n-octylphthala	1628890	814445	3257780	1475913	-9.39
77 Perylene-d12	1152264	576132	2304528	987411	-14.31

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.74	0.13
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.52	23.02	24.02	23.52	-0.00
134 Di-n-octylphthala	24.59	24.09	25.09	24.59	-0.00
77 Perylene-d12	26.28	25.78	26.78	26.28	-0.00

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

REVIEW SUMMARY FOR FILE - NT1003052312.D

Lab ID: BLA0685-SRM1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 20:22

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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



**MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E**

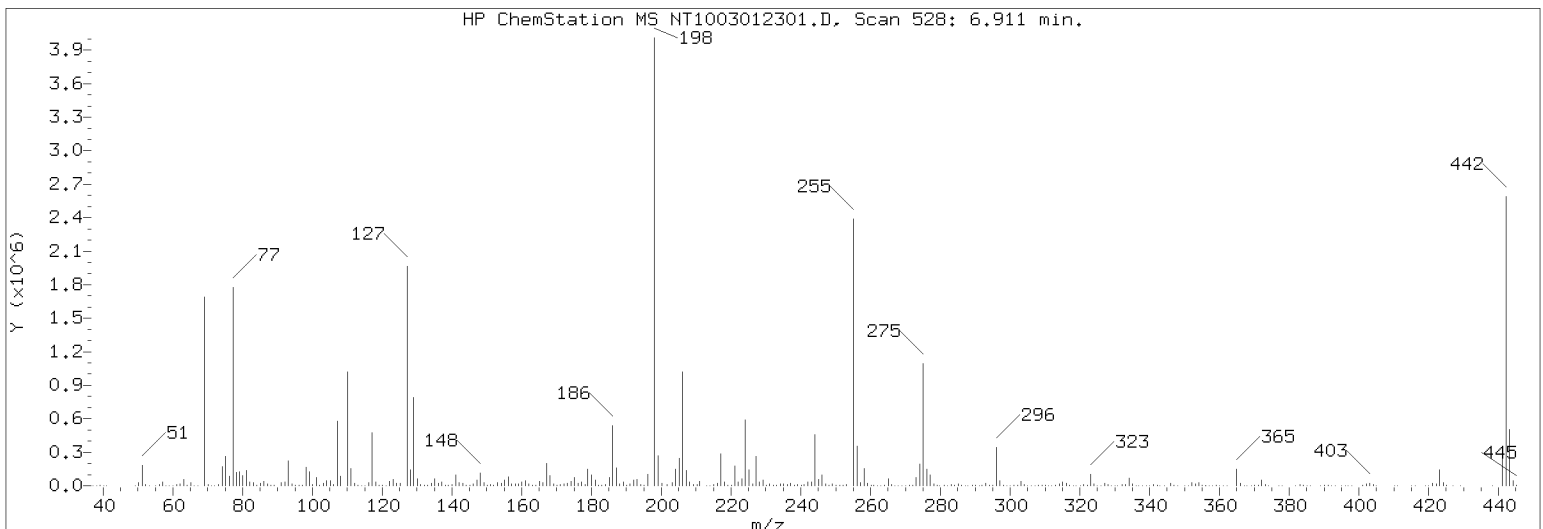
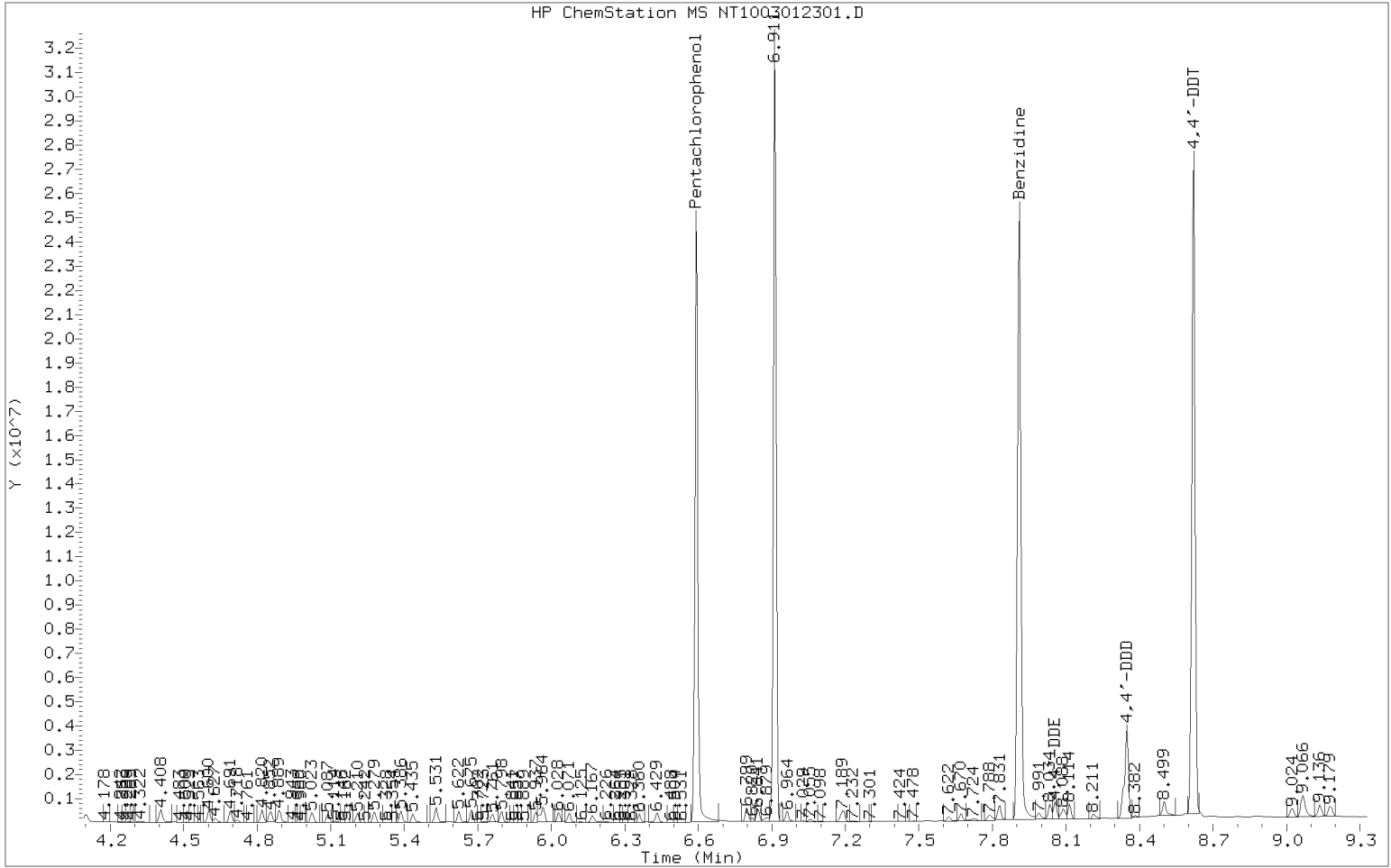
Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Lab File ID:	<u>NT1003012301.D</u>	Injection Date:	<u>03/01/23</u>
Instrument ID:	<u>NT10</u>	Injection Time:	<u>15:49</u>
Sequence:	<u>SLC0084</u>	Lab Sample ID:	<u>SLC0084-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.793	PASS
69	Less than 100% of 198	41.1	PASS
70	Less than 2% of 69	0.366	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.67	PASS
365	1 - 100% of 198	4.33	PASS
441	Less than 150% of 443	73.4	PASS
442	1 - 200% of 198	80.1	PASS
443	15 - 24% of 442	19.1	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

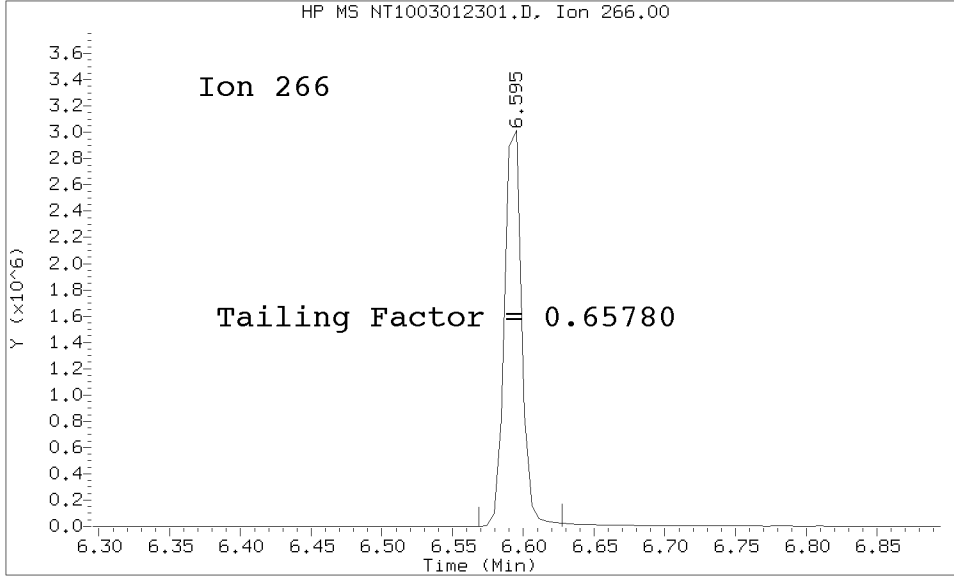
Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0084-TUN1	NT1003012301.D	03/01/2023	15:49
Cal Standard	SLC0084-CAL7	NT1003012302.D	03/01/2023	16:04
Cal Standard	SLC0084-CAL6	NT1003012303.D	03/01/2023	16:42
Cal Standard	SLC0084-CAL5	NT1003012304.D	03/01/2023	17:21
Cal Standard	SLC0084-CAL4	NT1003012305.D	03/01/2023	17:59
Cal Standard	SLC0084-CAL3	NT1003012306.D	03/01/2023	18:37
Cal Standard	SLC0084-CAL2	NT1003012307.D	03/01/2023	19:15
Cal Standard	SLC0084-CAL1	NT1003012308.D	03/01/2023	19:53
Secondary Cal Check	SLC0084-SCV1	NT1003012311.D	03/01/2023	21:46
Initial Cal Blank	SLC0084-ICB1	NT1003012312.D	03/01/2023	22:24

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230301.b/NT1003012301.D/NT1003012301.D
Method Used: \20230301.b\DFTPP8270E.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SLC0084-TUN1 SEQ-TUN1
Report Date: 03/07/2023 12:33



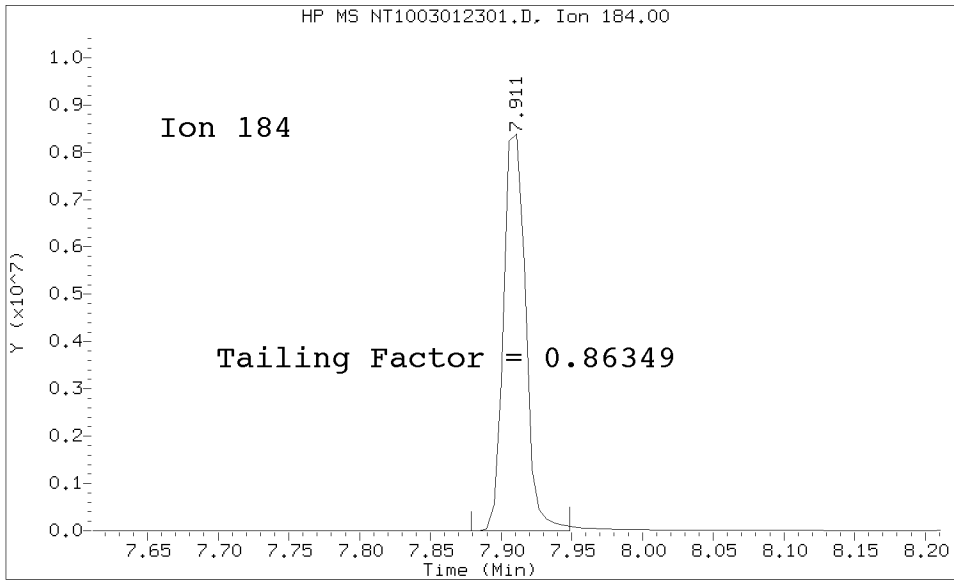
Datafile Analyzed: /20230301.b/NT1003012301.D/NT1003012301.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/07/2023 12:33



Pentachlorophenol

=====
Exp. RT = 6.590
Found RT = 6.595

Tail Factor = 0.658 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.911
Found RT = 7.911

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.6578035	2.000	PASS
Benzidine	0.8634886	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	4780124			N/A
4,4-DDE	47256	1.0	20.0	PASS
4,4-DDD	542360	10.2	20.0	PASS
4,4-DDD + DDE	589616	11.0	20.0	PASS

Tuning Sample, nt10.i/20230301.b/NT1003012301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.33 (0.79)
69	Mass 69 relative abundance	41.10
70	Less than 2.00% of mass 69	0.15 (0.37)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.67
365	1.00 - 100.00% of mass 198	4.33
441	Less than 150.00% of mass 443	11.23 (73.44)
442	Less than 200.00% of mass 198	80.08
443	15.00 - 24.00% of mass 442	15.30 (19.10)

Data File: NT1003012301.D
 Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
 Location of Maximum: 198.00
 Number of points: 369

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	462	140.00	7430	237.00	14976	332.00	6725
38.00	1113	141.00	70248	238.00	2080	333.00	7901
39.00	4743	142.00	22264	239.00	7687	334.00	53800
40.00	108	143.00	15456	240.00	6126	335.00	13827
45.00	84	144.00	4558	241.00	9927	336.00	1422
49.00	890	145.00	3575	242.00	22800	337.00	158
50.00	20560	146.00	12885	243.00	23656	338.00	111
51.00	115400	147.00	37000	244.00	334528	339.00	1435
52.00	5980	148.00	83184	245.00	44200	340.00	1368
53.00	270	151.00	6891	246.00	75208	341.00	9189
55.00	1004	152.00	4801	247.00	14506	342.00	2530
56.00	6893	153.00	21920	248.00	2995	343.00	476
57.00	20032	154.00	16872	249.00	12012	344.00	229
58.00	1173	155.00	39720	250.00	2462	346.00	19040
59.00	381	156.00	58960	251.00	2978	347.00	3868
60.00	603	157.00	10415	252.00	3463	348.00	369
61.00	8555	158.00	12758	253.00	7543	350.00	680
62.00	12181	159.00	10289	254.00	2201	351.00	1509
63.00	36888	160.00	23104	255.00	1779712	352.00	24280
64.00	5850	161.00	32336	256.00	261248	353.00	16313
65.00	19656	162.00	10036	257.00	19960	354.00	23616
66.00	1277	163.00	2211	258.00	115664	355.00	4277
67.00	218	164.00	3370	259.00	18720	356.00	395
68.00	9335	165.00	26672	260.00	3097	357.00	288
69.00	1177088	166.00	21880	261.00	2983	358.00	496
70.00	4303	167.00	140736	262.00	311	359.00	2088
72.00	118	168.00	67144	263.00	1088	360.00	426
73.00	8187	169.00	12299	264.00	2758	361.00	287
74.00	117944	170.00	4307	265.00	46872	362.00	66
75.00	186240	171.00	6152	266.00	6551	363.00	78
76.00	58584	172.00	12323	267.00	641	364.00	312
77.00	1243648	173.00	16696	268.00	1031	365.00	124024
78.00	82568	174.00	30816	269.00	334	366.00	17240
79.00	86720	175.00	56392	270.00	1777	367.00	1640
80.00	67968	176.00	14808	271.00	3758	368.00	51
81.00	95752	177.00	24968	272.00	4667	369.00	81
82.00	22136	178.00	8414	273.00	54184	370.00	2231
83.00	20016	179.00	108176	274.00	145920	371.00	6578
84.00	1703	180.00	69200	275.00	822080	372.00	39896
85.00	15260	181.00	35088	276.00	108424	373.00	10420
86.00	27208	182.00	5707	277.00	76856	374.00	902
87.00	12947	183.00	2410	278.00	12879	377.00	1108
88.00	4317	184.00	9057	281.00	1271	378.00	190
89.00	1969	185.00	53272	282.00	1654	379.00	112
90.00	227	186.00	390848	283.00	8058	382.00	88
91.00	20144	187.00	115736	284.00	6096	383.00	11296
92.00	22872	188.00	12489	285.00	13310	384.00	3498
93.00	159616	189.00	26224	286.00	2664	385.00	1140
94.00	9906	190.00	3820	287.00	301	386.00	187

95.00	2189	191.00	11505	288.00	1049	388.00	81
96.00	5767	192.00	34688	289.00	3146	389.00	105
97.00	2485	193.00	41016	290.00	2684	390.00	4929
98.00	117552	194.00	9131	291.00	1791	391.00	3340
99.00	90792	195.00	3653	292.00	3510	392.00	2390
100.00	7885	196.00	74504	293.00	16520	393.00	475
101.00	52896	198.00	2863616	294.00	4295	395.00	216
102.00	3052	199.00	190976	295.00	4987	396.00	208
103.00	16416	200.00	14335	296.00	267904	397.00	274
104.00	30568	201.00	9948	297.00	37320	398.00	254
105.00	30136	203.00	20560	298.00	2786	401.00	2284
106.00	9766	204.00	107568	299.00	508	402.00	15386
107.00	410176	205.00	182464	300.00	217	403.00	21456
108.00	62280	206.00	743232	301.00	3180	404.00	8460
109.00	6029	207.00	96144	302.00	4702	405.00	1217
110.00	711808	208.00	26352	303.00	29528	408.00	105
111.00	108280	209.00	9347	304.00	7967	410.00	539
112.00	13160	210.00	10562	305.00	1122	411.00	56
113.00	4333	211.00	27120	306.00	358	415.00	1010
114.00	392	212.00	2578	307.00	530	416.00	312
115.00	1356	213.00	2139	308.00	3845	419.00	166
116.00	22112	214.00	764	309.00	2265	420.00	193
117.00	350208	215.00	8027	310.00	3023	421.00	17744
118.00	25424	216.00	16051	311.00	1030	422.00	15463
119.00	2716	217.00	211072	312.00	626	423.00	129392
120.00	4884	218.00	26304	313.00	2222	424.00	25976
121.00	587	219.00	2900	314.00	12766	425.00	2691
122.00	25416	220.00	3351	315.00	29288	426.00	96
123.00	40488	221.00	123968	316.00	15518	427.00	197
124.00	17936	222.00	24608	317.00	2892	429.00	55
125.00	15919	223.00	46856	318.00	260	437.00	78
127.00	1391616	224.00	432000	319.00	629	438.00	106
128.00	102568	225.00	107056	320.00	924	439.00	148
129.00	561152	226.00	10788	321.00	8267	440.00	550
130.00	46696	227.00	195904	322.00	3948	441.00	321664
131.00	8637	228.00	27456	323.00	81096	442.00	2293248
132.00	4190	229.00	39984	324.00	14693	443.00	438016
133.00	1654	230.00	5777	325.00	1371	444.00	39248
134.00	15899	231.00	15009	326.00	1762	445.00	2356
135.00	44024	232.00	3043	327.00	15694	446.00	82
136.00	18272	233.00	3542	328.00	7475	489.00	54
137.00	22936	234.00	12458	329.00	1733		
138.00	5085	235.00	13429	330.00	352		
139.00	2552	236.00	8601	331.00	463		



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: ABN PSDDA
32 to 33 Analytes Quad. fit.

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	0.2	1.237789	0.5	1.423375	1	1.52938	2.5	1.629375	5	1.651228	10	1.692958
bis(2-chloroethyl) ether	0.2	1.190382	0.5	1.202362	1	1.196973	2.5	1.177642	5	1.166505	10	1.182602
2-Chlorophenol	0.2	1.073761	0.5	1.276853	1	1.223013	2.5	1.300179	5	1.349028	10	1.392071
1,3-Dichlorobenzene	0.2	1.470962	0.5	1.463804	1	1.376309	2.5	1.413283	5	1.404678	10	1.407452
1,4-Dichlorobenzene	0.2	1.402764	0.5	1.454668	1	1.390445	2.5	1.327854	5	1.35838	10	1.394084
1,2-Dichlorobenzene	0.2	1.375403	0.5	1.449362	1	1.336466	2.5	1.343903	5	1.31661	10	1.366347
Benzyl Alcohol	0.2	0.3823688	0.5	0.5839947	1	0.6982351	2.5	0.7409103	5	0.8185546	10	0.8502382
2,2'-Oxybis(1-chloropropane)	0.2	0.3729552	0.5	0.4128573	1	0.4068658	2.5	0.3853497	5	0.3936868	10	0.397541
2-Methylphenol	0.2	0.6579371	0.5	0.9084103	1	1.072411	2.5	1.186631	5	1.230888	10	1.271372
Hexachloroethane	0.2	0.5951571	0.5	0.558966	1	0.5181683	2.5	0.5567259	5	0.5780767	10	0.6094776
N-Nitroso-di-n-Propylamine	0.2	0.817833	0.5	0.8639436	1	0.921424	2.5	0.9713214	5	0.968534	10	0.999017
4-Methylphenol	0.2	0.790134	0.5	0.8856075	1	1.097191	2.5	1.303514	5	1.426452	10	1.524046
Nitrobenzene	0.2	0.3593022	0.5	0.4125847	1	0.4194648	2.5	0.417506	5	0.4107371	10	0.427064
Isophorone	0.2	0.5124437	0.5	0.4761757	1	0.5036907	2.5	0.5303679	5	0.5387453	10	0.5589046
2-Nitrophenol	0.2	9.230907E-02	0.5	0.1219809	1	0.133764	2.5	0.1583716	5	0.2032402	10	0.2276972
2,4-Dimethylphenol			1	0.3151268	2	0.3442643	5	0.3800013	10	0.3929658	20	0.422898
Bis(2-Chloroethoxy)methane	0.2	0.267607	0.5	0.3091581	1	0.3293925	2.5	0.3364165	5	0.32793	10	0.3486418
2,4-Dichlorophenol	0.4	0.1660521	1	0.1807178	2	0.2119252	5	0.2913602	10	0.2838135	20	0.3447133
1,2,4-Trichlorobenzene	0.2	0.2896704	0.5	0.3213408	1	0.2998494	2.5	0.3028357	5	0.2998697	10	0.3151722
Naphthalene	0.2	1.007084	0.5	1.029387	1	0.9802583	2.5	1.002021	5	1.01875	10	1.050723
Benzoic acid			2	0.087499	4	0.122722	10	0.1741775	20	0.2267779	40	0.2711873
4-Chloroaniline	0.4	0.2878287	1	0.3052292	2	0.3445382	5	0.3843126	10	0.4612308	20	0.4932998
Hexachlorobutadiene	0.2	0.1902735	0.5	0.2353681	1	0.2127128	2.5	0.2258722	5	0.2286682	10	0.2332442
4-Chloro-3-Methylphenol			1	0.2577252	2	0.241096	5	0.3007188	10	0.3327581	20	0.3643688
2-Methylnaphthalene	0.2	0.6308902	0.5	0.7085788	1	0.6911815	2.5	0.7119533	5	0.7395277	10	0.7692108
Hexachlorocyclopentadiene			1	2.900822E-02	2	3.712456E-02	5	6.999604E-02	10	0.1138107	20	0.1661709
2,4,6-Trichlorophenol			1	0.2483337	2	0.2741153	5	0.3423678	10	0.3881395	20	0.4302867



INITIAL CALIBRATION DATA

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Instrument: NT10

Calibration Date: 03/01/2023

Column (1): ZB-5MSi

Calibration Comments: ABN PSDDA
32 to 33 Analytes Quad. fit.

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol			1	0.3033405	2	0.3019678	5	0.3552101	10	0.4201466	20	0.4608039
2-Chloronaphthalene	0.2	0.9847405	0.5	1.072019	1	1.054807	2.5	1.116004	5	1.139016	10	1.210507
2-Nitroaniline			1	0.1792621	2	0.2232641	5	0.3034832	10	0.3117416	20	0.3338102
Acenaphthylene	0.2	1.852595	0.5	1.718894	1	1.783836	2.5	1.831493	5	1.933401	10	2.276419
Dimethylphthalate	0.2	1.113155	0.5	1.295456	1	1.252652	2.5	1.299909	5	1.337911	10	1.339362
2,6-Dinitrotoluene			1	0.2056607	2	0.2310775	5	0.2626011	10	0.2951861	20	0.3068193
Acenaphthene	0.2	1.085113	0.5	1.124305	1	1.089364	2.5	1.116268	5	1.183736	10	1.222169
3-Nitroaniline			1	0.2839907	2	0.301451	5	0.3031841	10	0.3306409	20	0.3549581
2,4-Dinitrophenol	0.8		2	3.606356E-04	4	4.900991E-03	10	1.999184E-02	20	4.950252E-02	40	0.0951736
Dibenzofuran	0.2	1.529371	0.5	1.587544	1	1.606734	2.5	1.663489	5	1.814226	10	1.887051
4-Nitrophenol			1	9.050643E-02	2	0.1581923	5	0.1969452	10	0.2224502	20	0.2613282
2,4-Dinitrotoluene			1	0.2448191	2	0.3202929	5	0.3622655	10	0.4301237	20	0.4529644
Fluorene	0.2	1.182861	0.5	1.290603	1	1.323395	2.5	1.382538	5	1.488351	10	1.596706
4-Chlorophenylphenyl ether	0.2	0.5206595	0.5	0.5683749	1	0.5782613	2.5	0.6079906	5	0.663476	10	0.7052926
Diethyl phthalate	0.2	1.187883	0.5	1.317395	1	1.347048	2.5	1.355846	5	1.418462	10	1.437326
4-Nitroaniline			1	0.3099499	2	0.290066	5	0.3199367	10	0.3767291	20	0.3861115
4,6-Dinitro-2-methylphenol			2	7.890743E-03	4	1.867191E-02	10	0.0534178	20	7.636342E-02	40	0.117748
N-Nitrosodiphenylamine	0.2	0.4752356	0.5	0.5110202	1	0.5805407	2.5	0.6104635	5	0.6118214	10	0.6466191
4-Bromophenyl phenyl ether	0.2	0.1783261	0.5	0.2334774	1	0.2290381	2.5	0.236359	5	0.2450947	10	0.2619947
Hexachlorobenzene	0.2	0.264642	0.5	0.2787358	1	0.2521605	2.5	0.2543999	5	0.2673938	10	0.2689649
Pentachlorophenol			1	4.829203E-02	2	6.768589E-02	5	0.1039548	10	0.1237917	20	0.1491481
Phenanthrene	0.2	0.9192374	0.5	0.9749482	1	0.9741612	2.5	0.9910938	5	1.016959	10	1.094028
Anthracene	0.2	0.8232807	0.5	0.9126948	1	0.9131284	2.5	0.969178	5	1.016018	10	1.100731
Carbazole	0.2	0.762805	0.5	0.8378231	1	0.8791639	2.5	0.914396	5	0.9244507	10	0.9809884
Di-n-Butylphthalate	0.2	0.897945	0.5	0.9983239	1	1.099341	2.5	1.18703	5	1.25964	10	1.351168
Fluoranthene	0.2	1.08313	0.5	1.244509	1	1.329339	2.5	1.464169	5	1.56619	10	1.538862
Pyrene	0.2	1.207927	0.5	1.314345	1	1.36291	2.5	1.45954	5	1.554002	10	1.496866



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Calibration: GC00019 Instrument: NT10
 Calibration Date: 03/01/2023 Column (1): ZB-5MSi

Calibration Comments: ABN PSDDA
32 to 33 Analytes Quad. fit.

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Butylbenzylphthalate	0.2	0.4551824	0.5	0.5606288	1	0.6258917	2.5	0.7113312	5	0.7485187	10	0.7299492
Benzo(a)anthracene	0.2	1.222677	0.5	1.26331	1	1.303592	2.5	1.350765	5	1.417005	10	1.593218
3,3'-Dichlorobenzidine			1.5	0.3781026	3	0.4318944	7.5	0.5089537	15	0.5886671	30	0.6867233
Chrysene	0.2	1.160355	0.5	1.121026	1	1.107342	2.5	1.07249	5	1.118093	10	1.166851
bis(2-Ethylhexyl)phthalate	0.2	0.3999472	0.5	0.473416	1	0.5092929	2.5	0.5327348	5	0.5502302	10	0.6148331
Di-n-Octylphthalate	0.2	0.9200329	0.5	0.9194176	1	0.8859107	2.5	0.8660992	5	0.8513586	10	0.887873
Benzo(a)fluoranthene, Total	0.4	1.086703	1	1.163268	2	1.165762	5	1.235897	10	1.32605	20	1.520944
Benzo(a)pyrene	0.2	0.9326916	0.5	1.087162	1	1.10904	2.5	1.137554	5	1.227546	10	1.412948
Indeno(1,2,3-cd)pyrene	0.2	1.041732	0.5	1.137871	1	1.214088	2.5	1.354999	5	1.455807	10	1.640022
Dibenzo(a,h)anthracene	0.2	0.8390162	0.5	0.9499121	1	0.9616022	2.5	1.052088	5	1.103072	10	1.263728
Benzo(g,h,i)perylene	0.2	0.9192859	0.5	0.9590816	1	1.000648	2.5	1.115522	5	1.172504	10	1.263363
1-Methylnaphthalene	0.2	0.5875448	0.5	0.6383146	1	0.6280282	2.5	0.6495483	5	0.6746664	10	0.6854012
2-Fluorophenol	0.3	1.15591	0.75	1.261064	1.5	1.266294	3.75	1.259175	7.5	1.262003	15	1.298348
Phenol-d5	0.3	1.206252	0.75	1.242342	1.5	1.387843	3.75	1.498376	7.5	1.55432	15	1.664825
2-Chlorophenol-d4	0.3	0.9559445	0.75	1.127215	1.5	1.205728	3.75	1.271792	7.5	1.319434	15	1.380813
1,2-Dichlorobenzene-d4	0.2	0.9107501	0.5	0.9962826	1	0.908125	2.5	0.8838883	5	0.9100577	10	0.9338885
Nitrobenzene-d5	0.2	0.3600835	0.5	0.4235407	1	0.4367567	2.5	0.4596222	5	0.4535854	10	0.4648953
2-Fluorobiphenyl	0.2	1.243586	0.5	1.361144	1	1.361419	2.5	1.405476	5	1.475165	10	1.512933
2,4,6-Tribromophenol	0.3	0.1450166	0.75	0.1658224	1.5	0.1889403	3.75	0.2219042	7.5	0.2583988	15	0.2811215
p-Terphenyl-d14	0.2	1.000908	0.5	1.047604	1	1.075873	2.5	1.16204	5	1.238279	10	1.225061



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: ABN PSDDA
32 to 33 Analytes Quad. fit.

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	20	1.710108										
bis(2-chloroethyl) ether	20	1.19314										
2-Chlorophenol	20	1.450363										
1,3-Dichlorobenzene	20	1.458296										
1,4-Dichlorobenzene	20	1.599659										
1,2-Dichlorobenzene	20	1.421225										
Benzyl Alcohol	20	0.8989961										
2,2'-Oxybis(1-chloropropane)	20	0.4011212										
2-Methylphenol	20	1.340478										
Hexachloroethane	20	0.6583989										
N-Nitroso-di-n-Propylamine	20	1.019793										
4-Methylphenol	20	1.434435										
Nitrobenzene	20	0.4365429										
Isophorone	20	0.5600685										
2-Nitrophenol	20	0.2015619										
2,4-Dimethylphenol	40	0.4429856										
Bis(2-Chloroethoxy)methane	20	0.3552745										
2,4-Dichlorophenol	40	0.3503969										
1,2,4-Trichlorobenzene	20	0.3350871										
Naphthalene	20	1.098343										
Benzoic acid	80	0.2999431										
4-Chloroaniline	40	0.5304621										
Hexachlorobutadiene	20	0.2494264										
4-Chloro-3-Methylphenol	40	0.4045101										
2-Methylnaphthalene	20	0.8256305										
Hexachlorocyclopentadiene	40	0.2416717										
2,4,6-Trichlorophenol	40	0.4978498										



INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: ABN PSDDA
32 to 33 Analytes Quad. fit.

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4,5-Trichlorophenol	40	0.5431348										
2-Chloronaphthalene	20	1.263021										
2-Nitroaniline	40	0.3626974										
Acenaphthylene	20	2.119888										
Dimethylphthalate	20	1.404111										
2,6-Dinitrotoluene	40	0.3326913										
Acenaphthene	20	1.330718										
3-Nitroaniline	40	0.3803653										
2,4-Dinitrophenol	80	0.165298										
Dibenzofuran	20	2.009868										
4-Nitrophenol	40	0.300473										
2,4-Dinitrotoluene	40	0.5008524										
Fluorene	20	1.801433										
4-Chlorophenylphenyl ether	20	0.8527636										
Diethyl phthalate	20	1.515442										
4-Nitroaniline	40	0.4182217										
4,6-Dinitro-2-methylphenol	80	0.1534116										
N-Nitrosodiphenylamine	20	0.7070765										
4-Bromophenyl phenyl ether	20	0.294352										
Hexachlorobenzene	20	0.3040043										
Pentachlorophenol	40	0.1944574										
Phenanthrene	20	1.195283										
Anthracene	20	1.213327										
Carbazole	20	1.06588										
Di-n-Butylphthalate	20	1.479832										
Fluoranthene	20	1.406035										
Pyrene	20	1.412502										



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: ABN PSDDA
32 to 33 Analytes Quad. fit.

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Butylbenzylphthalate	20	0.7013138										
Benzo(a)anthracene	20	1.722304										
3,3'-Dichlorobenzidine	60	0.6806052										
Chrysene	20	1.277591										
bis(2-Ethylhexyl)phthalate	20	0.6518326										
Di-n-Octylphthalate	20	0.8783523										
Benzo(a)fluoranthene, Total	40	1.869524										
Benzo(a)pyrene	20	1.711472										
Indeno(1,2,3-cd)pyrene	20	1.978991										
Dibenzo(a,h)anthracene	20	1.636061										
Benzo(g,h,i)perylene	20	1.441266										
1-Methylnaphthalene	20	0.7316309										
2-Fluorophenol	30	1.306775										
Phenol-d5	30	1.673875										
2-Chlorophenol-d4	30	1.465192										
1,2-Dichlorobenzene-d4	20	0.9764885										
Nitrobenzene-d5	20	0.4751259										
2-Fluorobiphenyl	20	1.627365										
2,4,6-Tribromophenol	30	0.3402775										
p-Terphenyl-d14	20	1.18638										



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi
Calibration Comments:	ABN PSSDDA 32 to 33 Analytes Quad. fit.		

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.553459	11.0			RSD (15)	
bis(2-chloroethyl) ether	1.187087	1.0			RSD (15)	
2-Chlorophenol	1.295038	9.5			RSD (15)	
1,3-Dichlorobenzene	1.427826	2.5			RSD (15)	
1,4-Dichlorobenzene	1.418265	6.3			RSD (15)	
1,2-Dichlorobenzene	1.372759	3.5			RSD (15)	
Benzyl Alcohol	0.7104711	25.1		0.9997	QCOD (0.99)	
2,2'-Oxybis(1-chloropropane)	0.3957681	3.4			RSD (15)	
2-Methylphenol	1.095447	21.9		0.9999	QCOD (0.99)	
Hexachloroethane	0.5821386	7.7			RSD (15)	
N-Nitroso-di-n-Propylamine	0.9374094	7.9			RSD (15)	
4-Methylphenol	1.208768	23.9		0.9987	QCOD (0.99)	
Nitrobenzene	0.411886	6.0			RSD (15)	
Isophorone	0.5257709	5.8			RSD (15)	
2-Nitrophenol	0.1627036	30.6		0.9954	QCOD (0.99)	
2,4-Dimethylphenol	0.3830403	12.5		0.9997	QCOD (0.99)	
Bis(2-Chloroethoxy)methane	0.3249172	9.0			RSD (15)	
2,4-Dichlorophenol	0.2612827	28.9		0.9978	QCOD (0.99)	
1,2,4-Trichlorobenzene	0.3091179	5.0			RSD (15)	
Naphthalene	1.026652	3.8			RSD (15)	
Benzoic acid	0.1970511	42.5		0.9961	QCOD (0.99)	
4-Chloroaniline	0.4009859	23.7		0.9991	QCOD (0.99)	
Hexachlorobutadiene	0.2250808	8.4			RSD (15)	
4-Chloro-3-Methylphenol	0.3168628	19.8		0.9993	QCOD (0.99)	
2-Methylnaphthalene	0.7252818	8.5			RSD (15)	
Hexachlorocyclopentadiene	0.1096304	75.2		0.9881	QCOD (0.99)	*
2,4,6-Trichlorophenol	0.3635155	26.0		0.9991	QCOD (0.99)	
2,4,5-Trichlorophenol	0.397434	24.0		0.9992	QCOD (0.99)	
2-Chloronaphthalene	1.120016	8.5			RSD (15)	



INITIAL CALIBRATION DATA
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi
Calibration Comments:	ABN PSSDA 32 to 33 Analytes Quad. fit.		

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
bis(2-Ethylhexyl)phthalate	0.5331838	15.9		0.9995	QCOD (0.99)	
Di-n-Octylphthalate	0.8870063	2.9			RSD (15)	
Benzofluoranthenes, Total	1.338307	20.5		0.9996	QCOD (0.99)	
Benzo(a)pyrene	1.231202	20.9		0.9995	QCOD (0.99)	
Indeno(1,2,3-cd)pyrene	1.403359	23.1		0.9996	QCOD (0.99)	
Dibenzo(a,h)anthracene	1.115069	23.9		0.9997	QCOD (0.99)	
Benzo(g,h,i)perylene	1.124524	16.5		0.9999	QCOD (0.99)	
1-Methylnaphthalene	0.6564478	7.0			RSD (15)	
2-Fluorophenol	1.25851	3.9			RSD (15)	
Phenol-d5	1.461119	13.0			RSD (15)	
2-Chlorophenol-d4	1.246588	13.6			RSD (15)	
1,2-Dichlorobenzene-d4	0.9313544	4.4			RSD (15)	
Nitrobenzene-d5	0.4390871	8.9			RSD (15)	
2-Fluorobiphenyl	1.426727	8.7			RSD (15)	
2,4,6-Tribromophenol	0.228783	30.2		0.9994	QCOD (0.99)	
p-Terphenyl-d14	1.133735	8.2			RSD (15)	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b

Time	Filename	LabID	ClientId	DF															
1	1549	NT1003012301.D	SLC0084-TUN1	1	|	NO ISTDS FOUND|													
2	1604	NT1003012302.D	SLC0084-CAL7	1	|	9.25	350339|	11.73	1337321|	15.32	721926|	18.41	1389567|	23.42	1382735|	26.11	1052577|	24.49	2772507|
3	1642	NT1003012303.D	SLC0084-CAL6	1	|	9.25	343229|	11.72	1283371|	15.32	697310|	18.40	1340795|	23.42	1088479|	26.11	973894|	24.48	2152692|
4	1721	NT1003012304.D	SLC0084-CAL5	1	|	9.25	337641|	11.72	1265187|	15.31	692385|	18.40	1376777|	23.42	1019524|	26.10	1027409|	24.48	2027111|
5	1759	NT1003012305.D	SLC0084-CAL4	1	|	9.25	320922|	11.72	1174958|	15.31	642002|	18.40	1218560|	23.42	904733|	26.10	947785|	24.48	1785837|
6	1837	NT1003012306.D	SLC0084-CAL3	1	|	9.25	301377|	11.72	1117281|	15.31	611509|	18.40	1193129|	23.42	938680|	26.10	995239|	24.49	1744984|
7	1915	NT1003012307.D	SLC0084-CAL2	1	|	9.25	309085|	11.72	1141293|	15.31	610034|	18.40	1173527|	23.42	1001661|	26.10	1066145|	24.49	1783007|
8	1953	NT1003012308.D	SLC0084-CAL1	1	|	9.25	295317|	11.72	1075084|	15.32	525641|	18.40	1064230|	23.42	908515|	26.10	969731|	24.48	1659419|
9	2030	NT1003012309.D	SEQ-SIM2	1	|	9.25	285326|	11.72	1006391|	15.31	485266|	18.40	993728|	23.42	888551|	26.10	1001314|	24.49	1646702|
10	2109	NT1003012310.D	SEQ-SIM1	1	|	9.25	350039|	11.72	1219070|	15.31	587402|	18.40	1179509|	23.42	1044485|	26.10	1189301|	24.48	1916581|
11	2146	NT1003012311.D	SLC0084-SCV1	1	|	9.25	283537|	11.72	1089120|	15.32	607772|	18.40	1205858|	23.42	1219436|	26.10	1289108|	24.49	2317357|
12	2224	NT1003012312.D	SLC0084-ICB1	1	|	9.25	480761|	11.72	1681746|	15.31	836849|	18.40	1648281|	23.42	1391477|	26.10	1542419|	24.48	2481481|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1549	NT1003012301.D	SLC0084-TUN1		1	NO MANUAL INTEGRATION
1604	NT1003012302.D	SLC0084-CAL7		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol,
1642	NT1003012303.D	SLC0084-CAL6		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol,
1721	NT1003012304.D	SLC0084-CAL5		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol,
1759	NT1003012305.D	SLC0084-CAL4		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol, 4-Nitrophenol,
1837	NT1003012306.D	SLC0084-CAL3		1	2,2'-oxybis(1-Chloropropane), Benzoic acid, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol,
1915	NT1003012307.D	SLC0084-CAL2		1	2,2'-oxybis(1-Chloropropane), Benzoic acid, 4-Chloro-3-methylphenol, 2,4,5-Trichlorophenol, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, 4-Nitroaniline, N-Nitrosodimethylamine, Benzidine,
1953	NT1003012308.D	SLC0084-CAL1		1	2,2'-oxybis(1-Chloropropane), N-Nitroso-di-n-propylamine, 4-Methylphenol, Isophorone, 2,4-Dichlorophenol, Benzoic acid, 4-Chloroaniline, 4-Chloro-3-methylphenol, 2,4,5-Trichlorophenol, 2-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, Pentachlorophenol, Carbazole, Chrysene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, N-Nitrosodimethylami
2030	NT1003012309.D	SEQ-SIM2		1	NO MANUAL INTEGRATION
2109	NT1003012310.D	SEQ-SIM1		1	NO MANUAL INTEGRATION
2146	NT1003012311.D	SLC0084-SCV1		1	Bis(2-Chloroethyl)ether, 2,4,5-Trichlorophenol, 4-Nitrophenol,
2224	NT1003012312.D	SLC0084-ICB1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 07-Mar-2023 12:54

NT1003012301.D	Data Locked	yev, 07-
NT1003012302.D	Data Locked	yev, 07-
NT1003012303.D	Data Locked	yev, 07-
NT1003012304.D	Data Locked	yev, 07-
NT1003012305.D	Data Locked	yev, 07-
NT1003012306.D	Data Locked	yev, 07-
NT1003012307.D	Data Locked	yev, 07-
NT1003012308.D	Data Locked	yev, 07-
NT1003012309.D	Data Locked	yev, 07-
NT1003012310.D	Data Locked	yev, 07-
NT1003012311.D	Data Locked	yev, 07-
NT1003012312.D	Data Locked	yev, 07-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: NT1003012302 NT1003012303 NT1003012304 NT1003012305 NT1003012306 NT1003012307 NT1003012308
INJ. DATE: 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023
INJ. TIME: 16:04 16:42 17:21 17:59 18:37 19:15 19:53

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPECT RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like 2-Fluorophenol, Carbaryl, n-Decane, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
| 148 Dieldrin	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 47.281|	| 44.281-50.281 |	| +++++|	| +++++|
| 149 TCMX	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 43.387|	| 40.387-46.387 |	| +++++|	| +++++|
| 150 DCBP	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 50.989|	| 47.989-53.989 |	| +++++|	| +++++|
| 138 Chlorobenzilate	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 67.733|	| 64.733-70.733 |	| +++++|	| +++++|
| 139 Isodrin	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.067|	| 62.067-68.067 |	| +++++|	| +++++|
| 140 Diallate A	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.487|	| 62.487-68.487 |	| +++++|	| +++++|
| 141 Diallate B	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.487|	| 62.487-68.487 |	| +++++|	| +++++|
| 142 1,2-Dibromo-3-Chloropr	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 49.917|	| 46.917-52.917 |	| +++++|	| +++++|
| 135 2,3,5,6-Tetrachlorophe	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 16.383|	| 13.383-19.383 |	| +++++|	| +++++|
| 136 2,3,4,5-tetrachlorophe	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 39.317|	| 36.317-42.317 |	| +++++|	| +++++|
| \$ 137 d8-1,4-Dioxane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 2.445|	| 0.000-5.445 |	| +++++|	| +++++|
| * 134 Di-n-octylphthalate-d4	| 24.493|	| 24.485|	| 24.485|	| 24.485|	| 24.485|	| 24.485|	| 24.485|	| 24.485|	| 21.485-27.485 |	| 24.486|	| 0.003|
| 133 Butylatedhydroxytoluen	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 15.571|	| 12.571-18.571 |	| +++++|	| +++++|
| 132 3,6-Dimethylphenanthre	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 65.450|	| 62.450-68.450 |	| +++++|	| +++++|
| 131 1-Methylphenanthrene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 64.400|	| 61.400-67.400 |	| +++++|	| +++++|
| 130 Dibenzothiophene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 62.100|	| 59.100-65.100 |	| +++++|	| +++++|
| 129 1-Methylfluorene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 54.912|	| 51.912-57.912 |	| +++++|	| +++++|
| 128 N-Hexadecane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 54.212|	| 51.212-57.212 |	| +++++|	| +++++|
| 127 2-Isopropyl-naphthalene	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 57.650|	| 54.650-60.650 |	| +++++|	| +++++|
| 126 N-Tetradecane	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 56.750|	| 53.750-59.750 |	| +++++|	| +++++|
| 144 alpha-Terpineol	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 11.447|	| 8.447-14.447 |	| +++++|	| +++++|
| 125 Safrole	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| +++++|	| 52.166|	| 49.166-55.166 |	| +++++|	| +++++|

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.252	7.252-13.252	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	15.982	15.981	15.974	15.974	15.982	15.982	15.981	15.982	12.982-18.982	15.979	0.004
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.761	13.761-19.761	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.923	13.923-19.923	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.085	11.085-17.085	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	16.793	16.778	16.778	16.778	16.778	16.778	16.778	16.778	13.778-19.778	16.780	0.006
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.140	14.140-20.140	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.070	12.070-18.070	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.232	12.232-18.232	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.374	13.374-19.374	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.120	10.120-16.120	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.096	11.096-17.096	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.735	8.735-14.735	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.243	6.243-12.243	+++++	+++++
105 1-methylnaphthalene	13.374	13.367	13.366	13.367	13.367	13.367	13.366	13.367	10.367-16.367	13.368	0.003
151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.642	24.642-30.642	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.953	22.953-28.953	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.750	24.750-30.750	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.464	23.464-29.464	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.099	24.099-30.099	+++++	+++++
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.513	21.513-27.513	+++++	+++++
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.132	22.132-28.132	+++++	+++++
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.528	16.528-22.528	+++++	+++++
161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
\$ 2 Phenol-d5	8.505	8.497	8.489	8.489	8.489	8.489	8.489	8.489	5.489-11.489	8.492	0.006
3 Phenol	8.528	8.520	8.512	8.512	8.513	8.513	8.520	8.513	5.513-11.513	8.517	0.006
4 Bis(2-Chloroethyl)ethe	8.744	8.736	8.728	8.728	8.729	8.729	8.728	8.729	5.729-11.729	8.732	0.006
\$ 5 2-Chlorophenol-d4	8.821	8.813	8.813	8.813	8.814	8.814	8.813	8.814	5.814-11.814	8.815	0.003

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
6 2-Chlorophenol	8.852	8.844	8.844	8.844	8.845	8.845	8.844	8.845	5.845-11.845	8.845	0.003
7 1,3-Dichlorobenzene	9.146	9.138	9.138	9.138	9.139	9.139	9.138	9.139	6.139-12.139	9.140	0.003
* 8 1,4-Dichlorobenzene-d4	9.247	9.247	9.247	9.247	9.247	9.247	9.247	9.247	6.247-12.247	9.247	0.000
9 1,4-Dichlorobenzene	9.286	9.278	9.278	9.278	9.278	9.278	9.278	9.278	6.278-12.278	9.279	0.003
\$ 10 1,2-Dichlorobenzene-d4	9.542	9.534	9.534	9.534	9.534	9.534	9.534	9.534	6.534-12.534	9.535	0.003
11 Benzyl alcohol	9.480	9.472	9.472	9.472	9.472	9.472	9.480	9.472	6.472-12.472	9.474	0.004
12 1,2-Dichlorobenzene	9.565	9.565	9.565	9.557	9.558	9.565	9.565	9.565	6.565-12.565	9.563	0.004
13 2-Methylphenol	9.658	9.650	9.650	9.651	9.651	9.651	9.658	9.651	6.651-12.651	9.653	0.004
14 2,2'-oxybis(1-Chloropr	9.744	9.736	9.728	9.728	9.728	9.729	9.736	9.729	6.729-12.729	9.733	0.006
15 4-Methylphenol	9.953	9.945	9.938	9.938	9.946	9.938	9.953	9.938	6.938-12.938	9.945	0.007
16 N-Nitroso-di-n-propyla	9.992	9.984	9.976	9.977	9.977	9.977	9.976	9.977	6.977-12.977	9.980	0.006
17 Hexachloroethane	10.217	10.209	10.209	10.209	10.210	10.210	10.209	10.210	7.210-13.210	10.211	0.003
\$ 18 Nitrobenzene-d5	10.303	10.295	10.295	10.287	10.287	10.295	10.295	10.295	7.295-13.295	10.294	0.005
19 Nitrobenzene	10.341	10.334	10.333	10.326	10.326	10.326	10.333	10.326	7.326-13.326	10.331	0.006
20 Isophorone	10.815	10.791	10.791	10.784	10.784	10.784	10.784	10.784	7.784-13.784	10.790	0.011
21 2-Nitrophenol	10.959	10.950	10.950	10.950	10.951	10.951	10.950	10.951	7.951-13.951	10.952	0.003
22 2,4-Dimethylphenol	11.010	11.001	11.001	10.993	10.993	10.993	11.001	10.993	7.993-13.993	10.999	0.006
23 Bis(2-Chloroethoxy)met	11.222	11.213	11.205	11.205	11.205	11.205	11.213	11.205	8.205-14.205	11.210	0.007
24 Benzoic acid	11.315	11.213	11.162	11.111	11.069	11.052	11.086	11.052	8.052-14.052	11.144	0.094
25 2,4-Dichlorophenol	11.426	11.417	11.417	11.408	11.417	11.417	11.417	11.417	8.417-14.417	11.417	0.005
26 1,2,4-Trichlorobenzene	11.603	11.595	11.595	11.595	11.596	11.596	11.595	11.596	8.596-14.596	11.596	0.003
* 27 Naphthalene-d8	11.727	11.719	11.719	11.719	11.719	11.719	11.719	11.719	8.719-14.719	11.720	0.003
28 Naphthalene	11.773	11.765	11.765	11.765	11.765	11.765	11.765	11.765	8.765-14.765	11.766	0.003
29 4-Chloroaniline	11.866	11.858	11.858	11.858	11.858	11.858	11.865	11.858	8.858-14.858	11.860	0.004

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
30 Hexachlorobutadiene	11.997	11.997	11.997	11.989	11.989	11.997	11.997	11.997	8.997-14.997	11.995	0.004
31 4-Chloro-3-methylpheno	12.817	12.809	12.802	12.802	12.810	12.810	12.817	12.810	9.810-15.810	12.809	0.006
32 2-Methylnaphthalene	13.165	13.165	13.165	13.165	13.166	13.166	13.165	13.166	10.166-16.166	13.165	0.000
33 Hexachlorocyclopentadi	13.475	13.467	13.467	13.467	13.467	13.475	13.467	13.475	10.475-16.475	13.469	0.004
34 2,4,6-Trichlorophenol	13.730	13.730	13.722	13.723	13.723	13.731	13.730	13.731	10.731-16.731	13.727	0.004
35 2,4,5-Trichlorophenol	13.800	13.792	13.792	13.792	13.793	13.808	13.815	13.808	10.808-16.808	13.799	0.009
36 2-Fluorobiphenyl	13.916	13.916	13.908	13.908	13.909	13.909	13.908	13.909	10.909-16.909	13.911	0.004
37 2-Chloronaphthalene	14.171	14.164	14.164	14.164	14.164	14.164	14.164	14.164	11.164-17.164	14.165	0.003
38 2-Nitroaniline	14.380	14.373	14.365	14.365	14.365	14.365	14.373	14.365	11.365-17.365	14.369	0.006
39 Dimethylphthalate	14.752	14.744	14.736	14.736	14.737	14.737	14.744	14.737	11.737-17.737	14.741	0.006
40 Acenaphthylene	15.031	15.023	15.023	15.023	15.023	15.023	15.023	15.023	12.023-18.023	15.024	0.003
41 2,6-Dinitrotoluene	14.884	14.876	14.868	14.868	14.868	14.868	14.868	14.868	11.868-17.868	14.871	0.006
42 Acenaphthene-d10	15.317	15.317	15.309	15.309	15.309	15.309	15.317	15.309	12.309-18.309	15.312	0.004
43 3-Nitroaniline	15.240	15.216	15.216	15.216	15.217	15.224	15.232	15.224	12.224-18.224	15.223	0.009
44 Acenaphthene	15.386	15.386	15.378	15.379	15.379	15.379	15.378	15.379	12.379-18.379	15.381	0.004
45 2,4-Dinitrophenol	15.448	15.433	15.433	15.433	15.448	15.487	+++++	15.487	12.487-18.487	15.447	0.021
46 Dibenzofuran	15.750	15.742	15.742	15.734	15.734	15.735	15.742	15.735	12.735-18.735	15.740	0.006
47 4-Nitrophenol	15.549	15.533	15.525	15.525	15.572	15.603	+++++	15.603	12.603-18.603	15.551	0.031
48 2,4-Dinitrotoluene	15.719	15.703	15.695	15.696	15.696	15.704	15.703	15.704	12.704-18.704	15.702	0.008
49 Fluorene	16.461	16.453	16.453	16.453	16.454	16.454	16.453	16.454	13.454-19.454	16.455	0.003
50 Diethylphthalate	16.221	16.213	16.206	16.198	16.198	16.198	16.198	16.198	13.198-19.198	16.205	0.009
51 4-Chlorophenyl-phenyle	16.461	16.453	16.446	16.446	16.446	16.454	16.453	16.454	13.454-19.454	16.451	0.006
52 4-Nitroaniline	16.523	16.492	16.477	16.469	16.477	16.485	16.515	16.485	13.485-19.485	16.491	0.021
53 4,6-Dinitro-2-methylph	16.562	16.546	16.538	16.531	16.531	16.539	+++++	16.539	13.539-19.539	16.541	0.012

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
54 N-Nitrosodiphenylamine	16.701	16.693	16.693	16.685	16.686	16.693	16.693	16.693	13.693-19.693	16.692	0.005
\$ 55 2,4,6-Tribromophenol	16.955	16.947	16.940	16.947	16.948	16.948	16.947	16.948	13.948-19.948	16.948	0.005
56 4-Bromophenyl-phenylet	17.473	17.473	17.465	17.465	17.473	17.473	17.473	17.473	14.473-20.473	17.470	0.004
57 Hexachlorobenzene	17.581	17.573	17.573	17.573	17.574	17.574	17.581	17.574	14.574-20.574	17.576	0.004
58 Pentachlorophenol	17.991	17.984	17.983	17.984	17.984	17.984	17.999	17.984	14.984-20.984	17.987	0.006
* 59 Phenanthrene-d10	18.409	18.401	18.401	18.401	18.402	18.402	18.401	18.402	15.402-21.402	18.403	0.003
60 Phenanthrene	18.456	18.455	18.448	18.448	18.448	18.448	18.448	18.448	15.448-21.448	18.450	0.004
61 Anthracene	18.564	18.556	18.556	18.556	18.556	18.557	18.556	18.557	15.557-21.557	18.557	0.003
62 Carbazole	18.897	18.889	18.881	18.881	18.889	18.889	18.896	18.889	15.889-21.889	18.889	0.006
63 Di-n-butylphthalate	19.593	19.585	19.585	19.585	19.585	19.586	19.593	19.586	16.586-22.586	19.587	0.004
64 Fluoranthene	20.823	20.815	20.815	20.815	20.816	20.816	20.815	20.816	17.816-23.816	20.816	0.003
65 Pyrene	21.256	21.249	21.248	21.241	21.241	21.249	21.248	21.249	18.249-24.249	21.248	0.005
\$ 66 Terphenyl-d14	21.527	21.527	21.519	21.519	21.520	21.528	21.527	21.528	18.528-24.528	21.524	0.004
67 Butylbenzylphthalate	22.410	22.410	22.410	22.410	22.410	22.410	22.410	22.410	19.410-25.410	22.410	0.000
68 Benzo(a)anthracene	23.409	23.401	23.401	23.393	23.394	23.401	23.401	23.401	20.401-26.401	23.400	0.005
* 69 Chrysene-d12	23.424	23.416	23.416	23.416	23.417	23.417	23.416	23.417	20.417-26.417	23.418	0.003
70 3,3'-Dichlorobenzidine	23.355	23.347	23.347	23.339	23.347	23.347	23.362	23.347	20.347-26.347	23.349	0.007
71 Chrysene	23.478	23.463	23.463	23.463	23.463	23.463	23.463	23.463	20.463-26.463	23.465	0.006
72 bis(2-Ethylhexyl)phtha	23.409	23.401	23.401	23.401	23.401	23.409	23.409	23.409	20.409-26.409	23.404	0.004
73 Di-n-octylphthalate	24.500	24.493	24.492	24.493	24.493	24.493	24.492	24.493	21.493-27.493	24.494	0.003
74 Benzo(b)fluoranthene	25.321	25.305	25.298	25.298	25.290	25.298	25.298	25.298	22.298-28.298	25.301	0.010
75 Benzo(k)fluoranthene	25.375	25.360	25.352	25.352	25.352	25.352	25.360	25.352	22.352-28.352	25.357	0.009
187 Total Benzofluoranthen	25.375	25.360	25.298	25.352	25.352	25.352	25.298	25.352	22.352-28.352	25.341	0.031
76 Benzo(a)pyrene	26.002	25.987	25.987	25.979	25.979	25.987	25.987	25.987	22.987-28.987	25.987	0.008

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Batch File: \\target\share\chem3\nt10.i\20230301.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 77 Perylene-d12	26.111	26.111	26.103	26.103	26.103	26.103	26.103	26.103	23.103-29.103	26.105	0.004
78 Indeno(1,2,3-cd)pyrene	28.902	28.878	28.870	28.863	28.863	28.863	28.870	28.863	25.863-31.863	28.873	0.014
79 Dibenzo(a,h)anthracene	28.948	28.933	28.909	28.909	28.910	28.925	28.925	28.925	25.925-31.925	28.923	0.015
80 Benzo(g,h,i)perylene	29.756	29.725	29.694	29.702	29.694	29.710	29.717	29.710	26.710-32.710	29.714	0.022
\$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
\$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
\$ 88 Dibenzo(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
90 N-Nitrosodimethylamine	4.743	4.727	4.719	4.720	4.720	4.720	4.743	4.720	1.720-7.720	4.727	0.011
91 Aniline	8.644	8.628	8.628	8.620	8.621	8.628	8.628	8.628	5.628-11.628	8.628	0.008
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
93 Benzidine	21.078	21.063	21.063	21.071	21.071	21.094	21.094	21.094	18.094-24.094	21.076	0.013
\$ 95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.787	15.787-21.787	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.361	21.361-27.361	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
103 Pyridine	4.781	4.781	4.781	4.781	4.782	4.789	4.797	4.789	1.789-7.789	4.785	0.006
188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.874	8.874-14.874	+++++	+++++
189 N-Nitrosomethylethylam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.818	2.818-8.818	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Calibration File Names:

Level 1: \\target\share\chem3\nt10.i\20230301.b\NT1003012308.D
 Level 2: \\target\share\chem3\nt10.i\20230301.b\NT1003012307.D
 Level 3: \\target\share\chem3\nt10.i\20230301.b\NT1003012306.D
 Level 4: \\target\share\chem3\nt10.i\20230301.b\NT1003012305.D
 Level 5: \\target\share\chem3\nt10.i\20230301.b\NT1003012304.D
 Level 6: \\target\share\chem3\nt10.i\20230301.b\NT1003012303.D
 Level 7: \\target\share\chem3\nt10.i\20230301.b\NT1003012302.D

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|	|0.000e+000|			|0.000e+000|<-
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|	|0.000e+000|			|0.000e+000|
120 2,3,4,6-Tetrachlorophenol	0.19782|	0.26940|	0.29342|	0.33469|	0.39319|	0.43368|					
	0.54201|						|AVRG|	|0.35203|			|32.55426|<-
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|	|0.000e+000|			|0.000e+000|<-
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|	|0.000e+000|			|0.000e+000|
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|	|0.000e+000|			|0.000e+000|<-
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|	|0.000e+000|			|0.000e+000|<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
116 Dibutyl Phenyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
115 Tributyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
114 Beta-Pinene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000
113 Diphenyl Oxide	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
112 Biphenyl	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
111 Azobenzene (1,2-DP-Hydrazine)	1.59527	1.87182	1.97939	2.08840	2.14898	2.23341					
	2.38768						AVRG		2.04356		12.66882
110 Tetrachloroguaiacol	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
105 1-methylnaphthalene	0.58754|	0.63831|	0.62803|	0.64955|	0.67467|	0.68540|					
	0.73163|						|AVRG|		|0.65645|		|7.02352|
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
163 1,2,3,5,8-Pentachloronaphthal	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|		|0.000e+000|		|0.000e+000|
164 1,2,3,4,6,7-Hexachloronaphtha	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|		|0.000e+000|		|0.000e+000|
165 1,2,3,4,5,6,7-Heptachloronaph	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|		|0.000e+000|		|0.000e+000|
166 Octachloronaphthalene	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|		|0.000e+000|		|0.000e+000|
167 2,2',4,4',5-Pentabromobipheny	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|		|0.000e+000|		|0.000e+000|
3 Phenol	1.23779|	1.42338|	1.52938|	1.62938|	1.65123|	1.69296|					
	1.71011|						|AVRG|		1.55346|		11.03978|
4 Bis(2-Chloroethyl)ether	1.19038|	1.20236|	1.19697|	1.17764|	1.16651|	1.18260|					
	1.19314|						|AVRG|		1.18709|		1.03828|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
6 2-Chlorophenol	1.07376 1.45036	1.27685	1.22301	1.30018	1.34903	1.39207					
							AVRG		1.29504		9.50773
7 1,3-Dichlorobenzene	1.47096 1.45830	1.46380	1.37631	1.41328	1.40468	1.40745					
							AVRG		1.42783		2.54133
9 1,4-Dichlorobenzene	1.40276 1.59966	1.45467	1.39044	1.32785	1.35838	1.39408					
							AVRG		1.41826		6.27938
11 Benzyl alcohol	5646 1574767	22563	52608	148609	345472	729566					
							QUAD	0.000e+000	1.25640	-0.03230	0.99987
12 1,2-Dichlorobenzene	1.37540 1.42123	1.44936	1.33647	1.34390	1.31661	1.36635					
							AVRG		1.37276		3.46403
13 2-Methylphenol	9715 2348109	35097	80800	238010	519498	1090929					
							QUAD	0.000e+000	0.83157	-0.01283	0.99996<-
14 2,2'-oxybis(1-Chloropropane)	0.37296 0.40112	0.41286	0.40687	0.38535	0.39369	0.39754					
							AVRG		0.39577		3.39044

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
15 4-Methylphenol	11667 2512692	34216	82667	261454	602036	1307742	QUAD	0.000e+000	0.66231	0.00446	0.99922
16 N-Nitroso-di-n-propylamine	0.81783 1.01979	0.86394	0.92142	0.97132	0.96853	0.99902	AVRG		0.93741		7.86962
17 Hexachloroethane	0.59516 0.65840	0.55897	0.51817	0.55673	0.57808	0.60948	AVRG		0.58214		7.68993
19 Nitrobenzene	0.35930 0.43654	0.41258	0.41946	0.41751	0.41074	0.42706	AVRG		0.41189		6.02434
20 Isophorone	0.51244 0.56007	0.47618	0.50369	0.53037	0.53875	0.55890	AVRG		0.52577		5.80463
21 2-Nitrophenol	++++ 1347765	17402	37363	116300	321421	730550	QUAD	0.000e+000	4.37246	0.54104	0.99681
22 2,4-Dimethylphenol	27927 5924139	89913	192320	558107	1242938	2713675	QUAD	0.000e+000	2.54020	-0.06459	0.99984

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
23 Bis(2-Chloroethoxy)methane	0.26761	0.30916	0.32939	0.33642	0.32793	0.34864					
	0.35527						AVRG		0.32492		9.04183
24 Benzoic acid	14999	49931	137115	511628	1434582	3480339					
	8022405						QUAD	0.000e+000	4.28758	-0.16104	0.99828
25 2,4-Dichlorophenol	17852	51563	118390	427920	897693	2211975					
	4685931						QUAD	0.000e+000	3.22328	-0.10899	0.99847
26 1,2,4-Trichlorobenzene	0.28967	0.32134	0.29985	0.30284	0.29987	0.31517					
	0.33509						AVRG		0.30912		5.02827
28 Naphthalene	1.00708	1.02939	0.98026	1.00202	1.01875	1.05072					
	1.09834						AVRG		1.02665		3.75792
29 4-Chloroaniline	30944	87089	192473	564439	1458858	3165433					
	7093981						QUAD	0.000e+000	2.22739	-0.06517	0.99952
30 Hexachlorobutadiene	0.19027	0.23537	0.21271	0.22587	0.22867	0.23324					
	0.24943						AVRG		0.22508		8.39685

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
31 4-Chloro-3-methylphenol	++++ 5409598	73535	134686	441665	1052503	2338102	QUAD	0.000e+000	3.06470	-0.14745	0.99968
32 2-Methylnaphthalene	0.63089 0.82563	0.70858	0.69118	0.71195	0.73953	0.76921	AVRG		0.72528		8.48661
33 Hexachlorocyclopentadiene	++++ 1744691	4424	11351	56172	197002	579363	QUAD	0.000e+000	7.59108	-1.43409	0.99520
34 2,4,6-Trichlorophenol	++++ 3594107	37873	83812	274751	671855	1500216	QUAD	0.000e+000	2.64695	-0.12883	0.99965
35 2,4,5-Trichlorophenol	++++ 3921031	46262	92328	285057	727258	1606616	QUAD	0.000e+000	2.47983	-0.11804	0.99960
37 2-Chloronaphthalene	0.98474 1.26302	1.07202	1.05481	1.11600	1.13902	1.21051	AVRG		1.12002		8.46019
38 2-Nitroaniline	++++ 2618407	27339	68264	243546	539613	1163846	QUAD	0.000e+000	3.26785	-0.14160	0.99979

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
39 Dimethylphthalate	1.11316|	1.29546|	1.25265|	1.29991|	1.33791|	1.33936|					
	1.40411|						AVRG		1.29179|		7.10389|
40 Acenaphthylene	1.85260|	1.71889|	1.78364|	1.83149|	1.93340|	2.27642|					
	2.11989|						AVRG		1.93093|		10.30781|
41 2,6-Dinitrotoluene	++++|	31365|	70653|	210738|	510956|	1069741|					
	2401785|						QUAD	0.000e+000|	3.53000|	-0.15836|	0.99982|
43 3-Nitroaniline	++++|	0.28399|	0.30145|	0.30318|	0.33064|	0.35496|					
	0.38037|						AVRG		0.32577|		11.23975|
44 Acenaphthene	1.08511|	1.12430|	1.08936|	1.11627|	1.18374|	1.22217|					
	1.33072|						AVRG		1.16452|		7.61746|
45 2,4-Dinitrophenol	++++|	110|	2997|	32087|	171374|	663655|					
	2386659|						QUAD	0.000e+000|	13.42637|	-2.23607|	0.98860|<-
46 Dibenzofuran	1.52937|	1.58754|	1.60673|	1.66349|	1.81423|	1.88705|					
	2.00987|						AVRG		1.72833|		10.30238|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
47 4-Nitrophenol	++++ 2169193	13803	48368	158049	385053	911134	QUAD	0.000e+000	4.43996	-0.37279	0.99922
48 2,4-Dinitrotoluene	12046 3615784	37337	97931	290719	744528	1579283	QUAD	0.000e+000	2.43502	-0.08802	0.99966
49 Fluorene	1.18286 1.80143	1.29060	1.32340	1.38254	1.48835	1.59671	AVRG		1.43798		14.55509
50 Diethylphthalate	1.18788 1.51544	1.31740	1.34705	1.35585	1.41846	1.43733	AVRG		1.36849		7.58696
51 4-Chlorophenyl-phenylether	13684 3078161	43341	88403	243957	574226	1229519	QUAD	0.000e+000	1.59995	-0.10030	0.99995
52 4-Nitroaniline	++++ 0.41822	0.30995	0.29007	0.31994	0.37673	0.38611	AVRG		0.35017		14.43356
53 4,6-Dinitro-2-methylphenol	++++ 4263513	4630	22278	162732	525677	1578759	QUAD	0.000e+000	10.73625	-1.38395	0.99450

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
54 N-Nitrosodiphenylamine	0.47524	0.51102	0.58054	0.61046	0.61182	0.64662					
	0.70708						AVRG		0.59183		13.31934
56 4-Bromophenyl-phenylether	0.17833	0.23348	0.22904	0.23636	0.24509	0.26199					
	0.29435						AVRG		0.23981		14.68741
57 Hexachlorobenzene	0.26464	0.27874	0.25216	0.25440	0.26739	0.26896					
	0.30400						AVRG		0.27004		6.46858
58 Pentachlorophenol	+++++	14168	40379	158344	426084	999885					
	2702116						QUAD	0.000e+000	8.04768	-1.49919	0.99905
60 Phenanthrene	0.91924	0.97495	0.97416	0.99109	1.01696	1.09403					
	1.19528						AVRG		1.02367		9.02739
61 Anthracene	0.82328	0.91269	0.91313	0.96918	1.01602	1.10073					
	1.21333						AVRG		0.99262		13.19181
62 Carbazole	0.76281	0.83782	0.87916	0.91440	0.92445	0.98099					
	1.06588						AVRG		0.90936		10.75491

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
63 Di-n-butylphthalate	47781	146445	327914	904042	2167805	4529098					
	10281629						QUAD	0.000e+000	0.81130	-0.01841	0.99990
64 Fluoranthene	1.08313	1.24451	1.32934	1.46417	1.56619	1.53886					
	1.40603						AVRG		1.37603		12.46825
65 Pyrene	1.20793	1.31434	1.36291	1.45954	1.55400	1.49687					
	1.41250						AVRG		1.40116		8.36356
67 Butylbenzylphthalate	20677	70195	146878	402228	953916	1986336					
	4848656						QUAD	0.000e+000	1.32463	0.02857	0.99990
68 Benzo(a)anthracene	1.22268	1.26331	1.30359	1.35076	1.41700	1.59322					
	1.72230						AVRG		1.41041		13.02832
70 3,3'-Dichlorobenzidine	++++	142024	304058	863376	2250601	5606129					
	14116451						QUAD	0.000e+000	1.59250	-0.01279	0.99833
71 Chrysene	1.16036	1.12103	1.10734	1.07249	1.11809	1.16685					
	1.27759						AVRG		1.14625		5.77126

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
72 bis(2-Ethylhexyl)phthalate	33184	105513	222177	594611	1394222	3308866					
	9036052						QUAD	0.000e+000	1.78483	-0.07787	0.99964
73 Di-n-octylphthalate	0.92003	0.91942	0.88591	0.86610	0.85136	0.88787					
	0.87835						AVRG		0.88701		2.88383
74 Benzo(b)fluoranthene	50227	156722	281873	726977	1825423	3823921					
	10113499						QUAD	0.000e+000	0.73435	-0.02233	0.99971
75 Benzo(k)fluoranthene	51821	155908	306114	757491	1645283	3744000					
	9917423						QUAD	0.000e+000	0.76283	-0.02473	0.99939
187 Total Benzofluoranthenes	105381	310053	580106	1464206	3405989	7406193					
	19678177						QUAD	0.000e+000	0.76451	-0.01232	0.99970
76 Benzo(a)pyrene	45223	144884	275940	673848	1576490	3440154					
	9007280						QUAD	0.000e+000	0.82157	-0.02783	0.99964
78 Indeno(1,2,3-cd)pyrene	50510	151642	302077	802655	1869637	3993020					
	10415201						QUAD	0.000e+000	0.70249	-0.01999	0.99979

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	20.0000										
	Level 7										
79 Dibenzo(a,h)anthracene	40681 8610401	126593	239256	623221	1416633	3076842	QUAD	0.000e+000	0.92660	-0.03862	0.99980
80 Benzo(g,h,i)perylene	44573 7585215	127815	248971	660797	1505801	3075954	QUAD	0.000e+000	0.88137	-0.02609	0.99993
90 N-Nitrosodimethylamine	0.87266 0.78859	0.90410	0.71609	0.80174	0.77322	0.83070	AVRG		0.81244		7.76269
91 Aniline	1.62276 1.91085	1.75468	1.78807	1.82664	1.81777	1.88766	AVRG		1.80121		5.29596
92 1,2-Diphenylhydrazine	++++ ++++	++++	++++	++++	++++	++++	AVRG		0.000e+000		0.000e+000
93 Benzidine	++++ 0.60694	0.48550	0.57960	0.68694	0.70001	0.60616	AVRG		0.61086		12.77852
96 p-Cymene	++++ ++++	++++	++++	++++	++++	++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
97 Caffeine	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000
98 Retene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
99 Perylene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
100 3-beta-Coprostanol	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
101 Cholesterol	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000<-
102 beta-Sitosterol	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+000		0.000e+000
103 Pyridine	1.47269	1.45222	1.43777	1.41290	1.41588	1.47038					
	1.42409						AVRG		1.44085		1.72589

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
188 2,6-Dichlorophenol	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
189 N-Nitrosomethylethylamine	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
\$ 1 2-Fluorophenol	1.15591|	1.26106|	1.26629|	1.25918|	1.26200|	1.29835|					
	1.30678|						|AVRG|	|1.25851|		|3.90928|	
\$ 137 d8-1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++						|AVRG|	|0.000e+000|		|0.000e+000|	<-
\$ 2 Phenol-d5	1.20625|	1.24234|	1.38784|	1.49838|	1.55432|	1.66483|					
	1.67388|						|AVRG|	|1.46112|		|12.95640|	
\$ 5 2-Chlorophenol-d4	0.95594|	1.12722|	1.20573|	1.27179|	1.31943|	1.38081|					
	1.46519|						|AVRG|	|1.24659|		|13.58753|	
\$ 10 1,2-Dichlorobenzene-d4	0.91075|	0.99628|	0.90813|	0.88389|	0.91006|	0.93389|					
	0.97649|						|AVRG|	|0.93135|		|4.36799|	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

Compound	0.2000000	0.5000000	1.0000	2.5000	5.0000	10.0000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	20.0000										
	Level 7										
\$ 18 Nitrobenzene-d5	0.36008	0.42354	0.43676	0.45962	0.45359	0.46490					
	0.47513						AVRG		0.43909		8.86231
\$ 36 2-Fluorobiphenyl	1.24359	1.36114	1.36142	1.40548	1.47517	1.51293					
	1.62737						AVRG		1.42673		8.70703
\$ 55 2,4,6-Tribromophenol	5717	18967	43327	133559	335459	735108					
	1842414						QUAD	0.000e+000	4.07583	-0.44670	0.99973
\$ 66 Terphenyl-d14	1.00091	1.04760	1.07587	1.16204	1.23828	1.22506					
	1.18638						AVRG		1.13373		8.15209
\$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
\$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
 End Cal Date : 01-MAR-2023 19:53
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

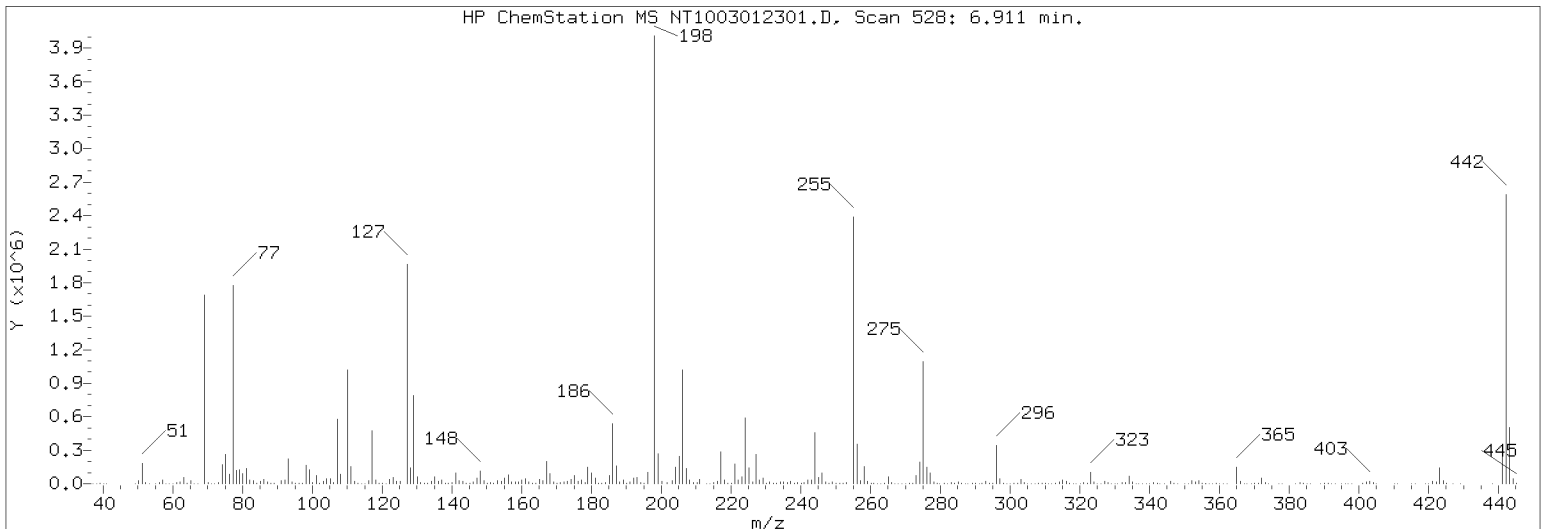
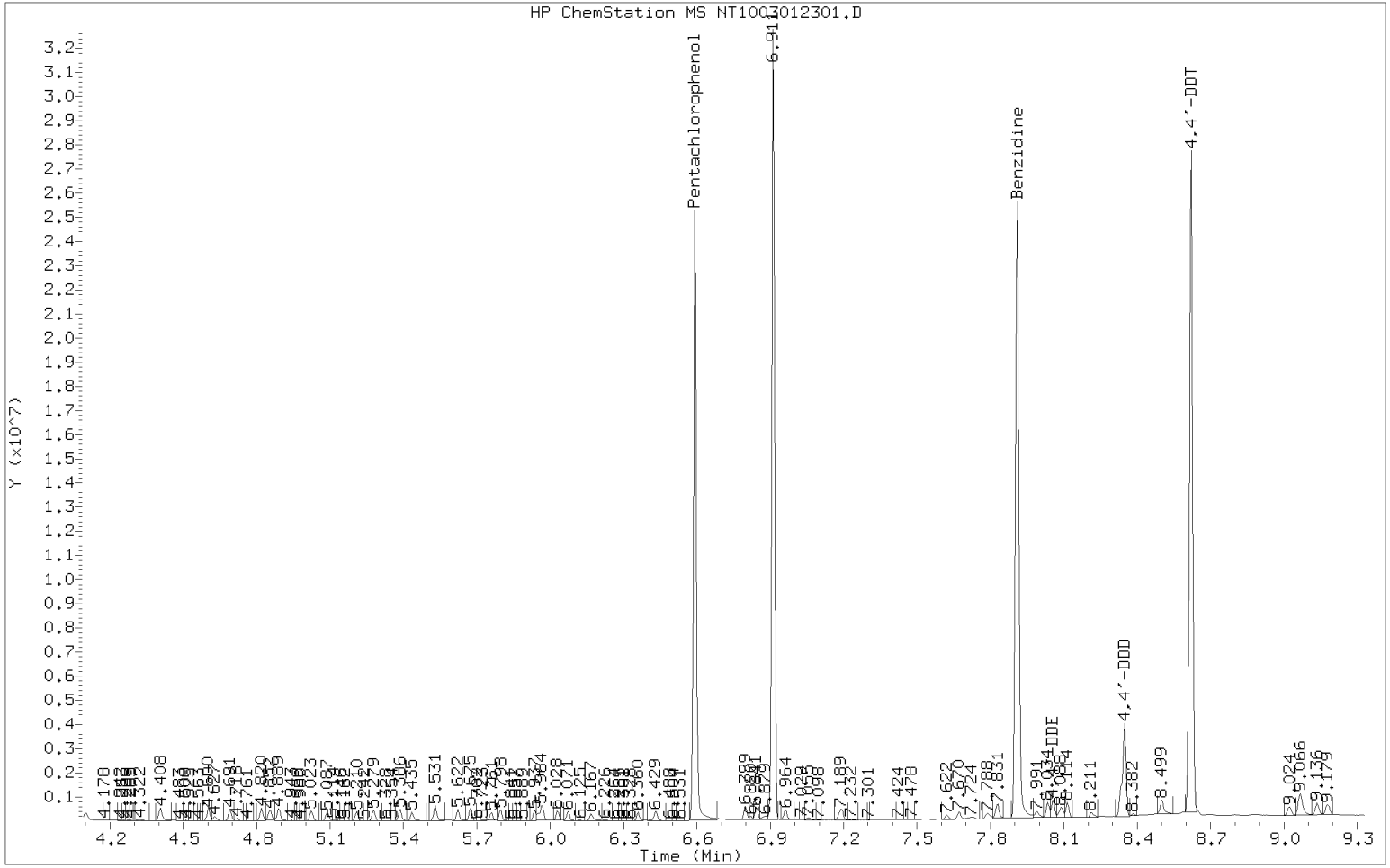
INITIAL CALIBRATION DATA

Start Cal Date : 30-DEC-2022 08:06
End Cal Date : 01-MAR-2023 19:53
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Last Edit : 07-Mar-2023 12:01 yev

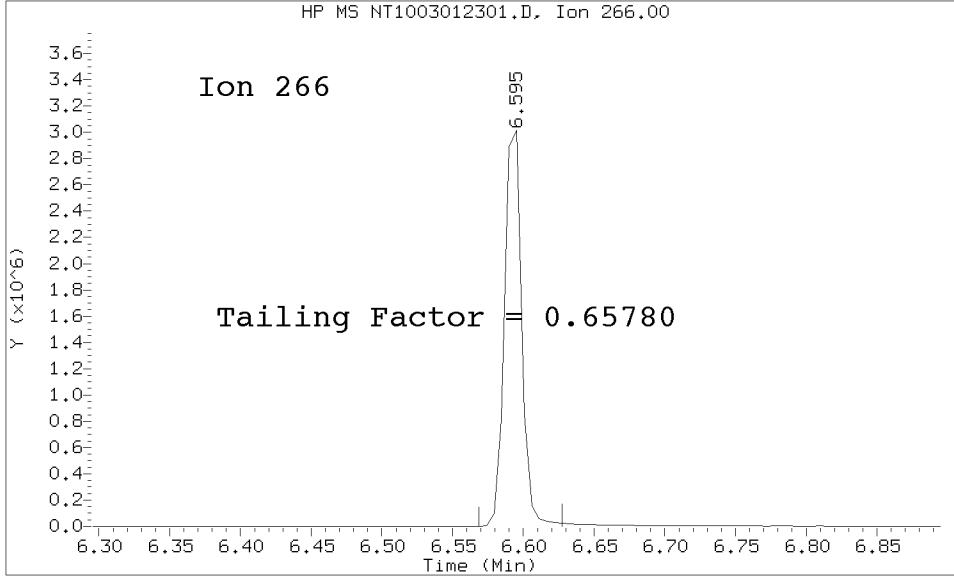
Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230301.b/NT1003012301.D/NT1003012301.D
Method Used: \20230301.b\DFTPP8270E.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SLC0084-TUN1 SEQ-TUN1
Report Date: 03/07/2023 12:33



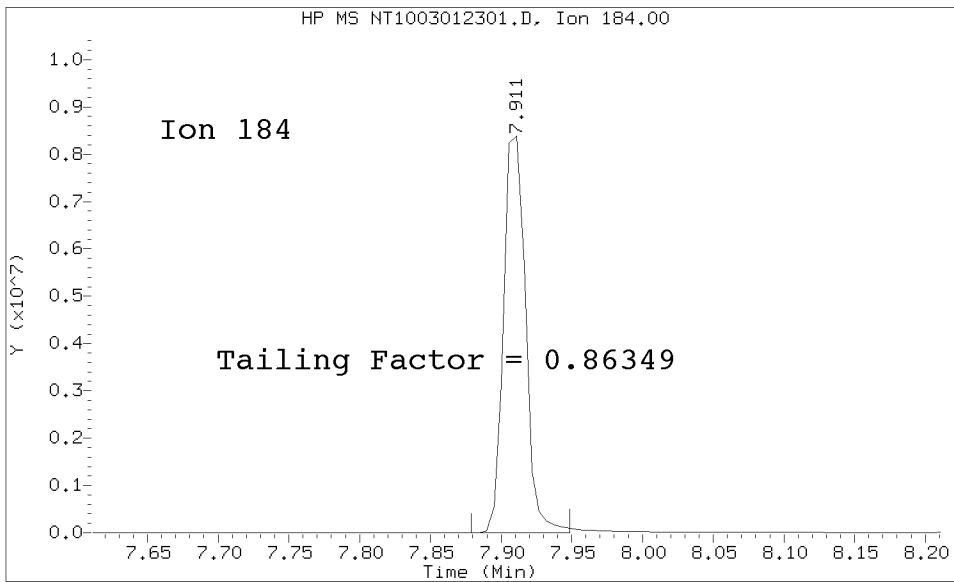
Datafile Analyzed: /20230301.b/NT1003012301.D/NT1003012301.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/07/2023 12:33



Pentachlorophenol

=====
Exp. RT = 6.590
Found RT = 6.595

Tail Factor = 0.658 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.911
Found RT = 7.911

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.6578035	2.000	PASS
Benzidine	0.8634886	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	4780124			N/A
4,4-DDE	47256	1.0	20.0	PASS
4,4-DDD	542360	10.2	20.0	PASS
4,4-DDD + DDE	589616	11.0	20.0	PASS

Tuning Sample, nt10.i/20230301.b/NT1003012301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.33 (0.79)
69	Mass 69 relative abundance	41.10
70	Less than 2.00% of mass 69	0.15 (0.37)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.67
365	1.00 - 100.00% of mass 198	4.33
441	Less than 150.00% of mass 443	11.23 (73.44)
442	Less than 200.00% of mass 198	80.08
443	15.00 - 24.00% of mass 442	15.30 (19.10)

Data File: NT1003012301.D
 Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
 Location of Maximum: 198.00
 Number of points: 369

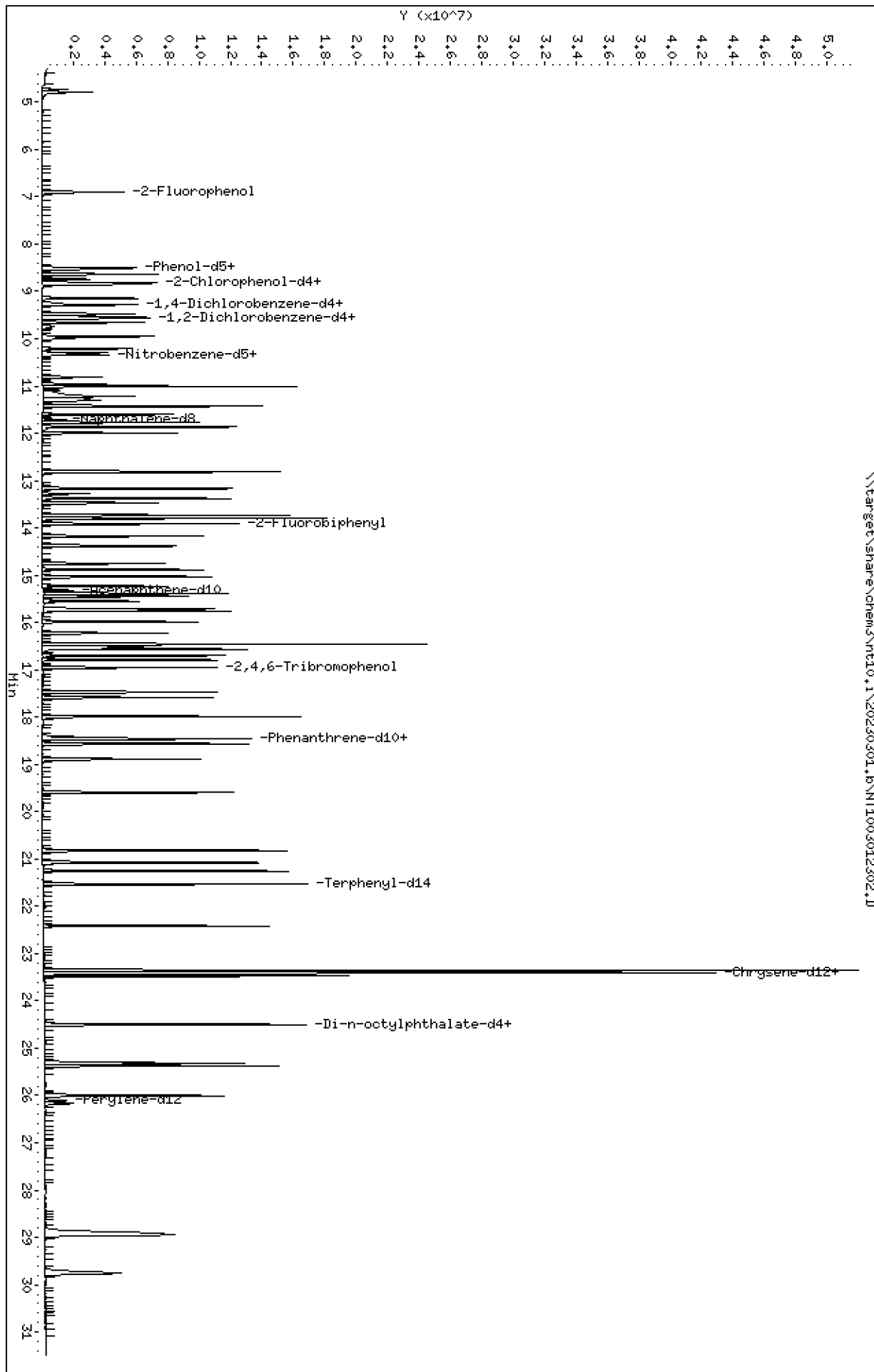
m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	462	140.00	7430	237.00	14976	332.00	6725
38.00	1113	141.00	70248	238.00	2080	333.00	7901
39.00	4743	142.00	22264	239.00	7687	334.00	53800
40.00	108	143.00	15456	240.00	6126	335.00	13827
45.00	84	144.00	4558	241.00	9927	336.00	1422
49.00	890	145.00	3575	242.00	22800	337.00	158
50.00	20560	146.00	12885	243.00	23656	338.00	111
51.00	115400	147.00	37000	244.00	334528	339.00	1435
52.00	5980	148.00	83184	245.00	44200	340.00	1368
53.00	270	151.00	6891	246.00	75208	341.00	9189
55.00	1004	152.00	4801	247.00	14506	342.00	2530
56.00	6893	153.00	21920	248.00	2995	343.00	476
57.00	20032	154.00	16872	249.00	12012	344.00	229
58.00	1173	155.00	39720	250.00	2462	346.00	19040
59.00	381	156.00	58960	251.00	2978	347.00	3868
60.00	603	157.00	10415	252.00	3463	348.00	369
61.00	8555	158.00	12758	253.00	7543	350.00	680
62.00	12181	159.00	10289	254.00	2201	351.00	1509
63.00	36888	160.00	23104	255.00	1779712	352.00	24280
64.00	5850	161.00	32336	256.00	261248	353.00	16313
65.00	19656	162.00	10036	257.00	19960	354.00	23616
66.00	1277	163.00	2211	258.00	115664	355.00	4277
67.00	218	164.00	3370	259.00	18720	356.00	395
68.00	9335	165.00	26672	260.00	3097	357.00	288
69.00	1177088	166.00	21880	261.00	2983	358.00	496
70.00	4303	167.00	140736	262.00	311	359.00	2088
72.00	118	168.00	67144	263.00	1088	360.00	426
73.00	8187	169.00	12299	264.00	2758	361.00	287
74.00	117944	170.00	4307	265.00	46872	362.00	66
75.00	186240	171.00	6152	266.00	6551	363.00	78
76.00	58584	172.00	12323	267.00	641	364.00	312
77.00	1243648	173.00	16696	268.00	1031	365.00	124024
78.00	82568	174.00	30816	269.00	334	366.00	17240
79.00	86720	175.00	56392	270.00	1777	367.00	1640
80.00	67968	176.00	14808	271.00	3758	368.00	51
81.00	95752	177.00	24968	272.00	4667	369.00	81
82.00	22136	178.00	8414	273.00	54184	370.00	2231
83.00	20016	179.00	108176	274.00	145920	371.00	6578
84.00	1703	180.00	69200	275.00	822080	372.00	39896
85.00	15260	181.00	35088	276.00	108424	373.00	10420
86.00	27208	182.00	5707	277.00	76856	374.00	902
87.00	12947	183.00	2410	278.00	12879	377.00	1108
88.00	4317	184.00	9057	281.00	1271	378.00	190
89.00	1969	185.00	53272	282.00	1654	379.00	112
90.00	227	186.00	390848	283.00	8058	382.00	88
91.00	20144	187.00	115736	284.00	6096	383.00	11296
92.00	22872	188.00	12489	285.00	13310	384.00	3498
93.00	159616	189.00	26224	286.00	2664	385.00	1140
94.00	9906	190.00	3820	287.00	301	386.00	187

95.00	2189	191.00	11505	288.00	1049	388.00	81
96.00	5767	192.00	34688	289.00	3146	389.00	105
97.00	2485	193.00	41016	290.00	2684	390.00	4929
98.00	117552	194.00	9131	291.00	1791	391.00	3340
99.00	90792	195.00	3653	292.00	3510	392.00	2390
100.00	7885	196.00	74504	293.00	16520	393.00	475
101.00	52896	198.00	2863616	294.00	4295	395.00	216
102.00	3052	199.00	190976	295.00	4987	396.00	208
103.00	16416	200.00	14335	296.00	267904	397.00	274
104.00	30568	201.00	9948	297.00	37320	398.00	254
105.00	30136	203.00	20560	298.00	2786	401.00	2284
106.00	9766	204.00	107568	299.00	508	402.00	15386
107.00	410176	205.00	182464	300.00	217	403.00	21456
108.00	62280	206.00	743232	301.00	3180	404.00	8460
109.00	6029	207.00	96144	302.00	4702	405.00	1217
110.00	711808	208.00	26352	303.00	29528	408.00	105
111.00	108280	209.00	9347	304.00	7967	410.00	539
112.00	13160	210.00	10562	305.00	1122	411.00	56
113.00	4333	211.00	27120	306.00	358	415.00	1010
114.00	392	212.00	2578	307.00	530	416.00	312
115.00	1356	213.00	2139	308.00	3845	419.00	166
116.00	22112	214.00	764	309.00	2265	420.00	193
117.00	350208	215.00	8027	310.00	3023	421.00	17744
118.00	25424	216.00	16051	311.00	1030	422.00	15463
119.00	2716	217.00	211072	312.00	626	423.00	129392
120.00	4884	218.00	26304	313.00	2222	424.00	25976
121.00	587	219.00	2900	314.00	12766	425.00	2691
122.00	25416	220.00	3351	315.00	29288	426.00	96
123.00	40488	221.00	123968	316.00	15518	427.00	197
124.00	17936	222.00	24608	317.00	2892	429.00	55
125.00	15919	223.00	46856	318.00	260	437.00	78
127.00	1391616	224.00	432000	319.00	629	438.00	106
128.00	102568	225.00	107056	320.00	924	439.00	148
129.00	561152	226.00	10788	321.00	8267	440.00	550
130.00	46696	227.00	195904	322.00	3948	441.00	321664
131.00	8637	228.00	27456	323.00	81096	442.00	2293248
132.00	4190	229.00	39984	324.00	14693	443.00	438016
133.00	1654	230.00	5777	325.00	1371	444.00	39248
134.00	15899	231.00	15009	326.00	1762	445.00	2356
135.00	44024	232.00	3043	327.00	15694	446.00	82
136.00	18272	233.00	3542	328.00	7475	489.00	54
137.00	22936	234.00	12458	329.00	1733		
138.00	5085	235.00	13429	330.00	352		
139.00	2552	236.00	8601	331.00	463		

Data File: \\target\share\chem3\nt10.1\20230301.1\NT1003012302.D
 Date: 01-MAR-2023 16:04
 Client ID:
 Sample Info: SEQ-CAL7
 Column phase: ZB-5msi

Instrument: nt10.1
 Operator: VTS
 Column diameter: 0.25

\\target\share\chem3\nt10.1\20230301.1\NT1003012302.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012302.D
 Lab Smp Id: SLC0084-CAL7
 Inj Date : 01-MAR-2023 16:04
 Operator : VTS
 Smp Info : SEQ-CAL7
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 7
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.898	(0.747)	3433608	30.0000	31.15
\$ 2 Phenol-d5	99		8.504	8.489	(0.920)	4398179	30.0000	34.37
3 Phenol	94		8.527	8.512	(0.922)	2995587	20.0000	22.02
\$ 5 2-Chlorophenol-d4	132		8.821	8.813	(0.954)	3849853	30.0000	35.26
4 Bis(2-Chloroethyl)ether	93		8.743	8.728	(0.946)	2090017	20.0000	20.10
6 2-Chlorophenol	128		8.852	8.844	(0.957)	2540593	20.0000	22.40
7 1,3-Dichlorobenzene	146		9.146	9.138	(0.989)	2554489	20.0000	20.43
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	350339	4.00000	
9 1,4-Dichlorobenzene	146		9.285	9.278	(1.004)	2802114	20.0000	22.56
\$ 10 1,2-Dichlorobenzene-d4	152		9.541	9.534	(1.032)	1710510	20.0000	20.97 (H)
12 1,2-Dichlorobenzene	146		9.565	9.565	(1.034)	2489553	20.0000	20.71
11 Benzyl alcohol	108		9.479	9.472	(1.025)	1574767	20.0000	19.98
14 2,2'-oxybis(1-Chloropropane)	121		9.743	9.728	(1.054)	702642	20.0000	20.27 (M)
13 2-Methylphenol	108		9.658	9.650	(1.044)	2348109	20.0000	19.99
17 Hexachloroethane	117		10.217	10.209	(1.105)	1153314	20.0000	22.62
16 N-Nitroso-di-n-propylamine	70		9.992	9.976	(1.081)	1786366	20.0000	21.76
15 4-Methylphenol	108		9.953	9.938	(1.076)	2512692	20.0000	19.92
\$ 18 Nitrobenzene-d5	82		10.302	10.295	(0.879)	3176979	20.0000	21.64
19 Nitrobenzene	77		10.341	10.326	(0.882)	2918990	20.0000	21.20
20 Isophorone	82		10.814	10.784	(0.922)	3744957	20.0000	21.30
21 2-Nitrophenol	139		10.958	10.951	(0.935)	1347765	20.0000	19.82
22 2,4-Dimethylphenol	107		11.009	10.993	(0.939)	5924139	40.0000	39.94
23 Bis(2-Chloroethoxy)methane	93		11.221	11.205	(0.957)	2375580	20.0000	21.87
24 Benzoic acid	105		11.315	11.052	(0.965)	8022405	80.0000	79.70
25 2,4-Dichlorophenol	162		11.425	11.417	(0.974)	4685931	40.0000	39.82
26 1,2,4-Trichlorobenzene	180		11.603	11.595	(0.989)	2240595	20.0000	21.68
* 27 Naphthalene-d8	136		11.726	11.719	(1.000)	1337321	4.00000	
28 Naphthalene	128		11.772	11.765	(1.004)	7344186	20.0000	21.40
29 4-Chloroaniline	127		11.865	11.858	(1.012)	7093981	40.0000	39.93
30 Hexachlorobutadiene	225		11.996	11.997	(1.023)	1667816	20.0000	22.16
31 4-Chloro-3-methylphenol	107		12.817	12.809	(1.093)	5409598	40.0000	39.94
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	5520665	20.0000	22.77
33 Hexachlorocyclopentadiene	237		13.474	13.475	(0.880)	1744691	40.0000	39.88

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.730	13.730	(0.896)	3594107	40.0000	39.94
35 2,4,5-Trichlorophenol	196	13.800	13.808	(0.901)	3921031	40.0000	39.95
\$ 36 2-Fluorobiphenyl	172	13.916	13.908	(0.909)	5874186	20.0000	22.81
37 2-Chloronaphthalene	162	14.171	14.164	(0.925)	4559040	20.0000	22.55
38 2-Nitroaniline	65	14.380	14.365	(0.939)	2618407	40.0000	39.96
39 Dimethylphthalate	163	14.751	14.736	(0.963)	5068322	20.0000	21.74
40 Acenaphthylene	152	15.030	15.023	(0.981)	7652012	20.0000	21.96
41 2,6-Dinitrotoluene	165	14.883	14.868	(0.972)	2401785	40.0000	39.96
* 42 Acenaphthene-d10	164	15.316	15.309	(1.000)	721926	4.00000	
43 3-Nitroaniline	138	15.239	15.224	(0.995)	2745956	40.0000	46.70
44 Acenaphthene	153	15.386	15.378	(1.005)	4803401	20.0000	22.85
45 2,4-Dinitrophenol	184	15.448	15.487	(1.009)	2386659	80.0000	79.79 (M)
46 Dibenzofuran	168	15.749	15.734	(1.028)	7254880	20.0000	23.26
47 4-Nitrophenol	109	15.548	15.603	(1.015)	2169193	40.0000	39.90
48 2,4-Dinitrotoluene	165	15.718	15.703	(1.026)	3615784	40.0000	39.95
50 Diethylphthalate	149	16.221	16.198	(1.059)	5470185	20.0000	22.15
49 Fluorene	166	16.461	16.453	(1.075)	6502507	20.0000	25.05
51 4-Chlorophenyl-phenylether	204	16.461	16.453	(1.075)	3078161	20.0000	19.99
52 4-Nitroaniline	138	16.523	16.484	(1.079)	3019251	40.0000	47.77
53 4,6-Dinitro-2-methylphenol	198	16.561	16.538	(0.900)	4263513	80.0000	79.65
54 N-Nitrosodiphenylamine	169	16.700	16.693	(0.907)	4912651	20.0000	23.89
\$ 55 2,4,6-Tribromophenol	330	16.955	16.947	(1.107)	1842414	30.0000	29.97
56 4-Bromophenyl-phenylether	248	17.472	17.472	(0.949)	2045109	20.0000	24.55
57 Hexachlorobenzene	284	17.581	17.573	(0.955)	2112172	20.0000	22.52
58 Pentachlorophenol	266	17.991	17.983	(0.977)	2702116	40.0000	39.92
* 59 Phenanthrene-d10	188	18.409	18.401	(1.000)	1389567	4.00000	
60 Phenanthrene	178	18.455	18.448	(1.003)	8304629	20.0000	23.35
61 Anthracene	178	18.563	18.556	(1.008)	8429997	20.0000	24.45
62 Carbazole	167	18.896	18.889	(1.026)	7405556	20.0000	23.44
63 Di-n-butylphthalate	149	19.592	19.585	(1.064)	10281629	20.0000	19.98
64 Fluoranthene	202	20.823	20.815	(0.889)	9720868	20.0000	20.44
65 Pyrene	202	21.256	21.248	(0.907)	9765581	20.0000	20.16
\$ 66 Terphenyl-d14	244	21.527	21.527	(0.919)	8202245	20.0000	20.93
67 Butylbenzylphthalate	149	22.409	22.410	(0.957)	4848656	20.0000	19.98
68 Benzo(a)anthracene	228	23.408	23.401	(0.999)	11907454	20.0000	24.42
* 69 Chrysene-d12	240	23.424	23.416	(1.000)	1382735	4.00000	
70 3,3'-Dichlorobenzidine	252	23.354	23.347	(0.997)	14116451	60.0000	59.70
71 Chrysene	228	23.478	23.463	(1.002)	8832851	20.0000	22.29
72 bis(2-Ethylhexyl)phthalate	149	23.408	23.409	(0.956)	9036052	20.0000	19.96
* 134 Di-n-octylphthalate-d4	153	24.492	24.485	(1.000)	2772507	4.00000	
73 Di-n-octylphthalate	149	24.500	24.492	(1.000)	12176189	20.0000	19.80
74 Benzo(b)fluoranthene	252	25.320	25.298	(0.970)	10113499	20.0000	19.98
75 Benzo(k)fluoranthene	252	25.375	25.352	(0.972)	9917423	20.0000	19.97
76 Benzo(a)pyrene	252	26.002	25.987	(0.996)	9007280	20.0000	19.97
* 77 Perylene-d12	264	26.110	26.103	(1.000)	1052577	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.901	28.863	(1.107)	10415201	20.0000	19.98
79 Dibenzo(a,h)anthracene	278	28.948	28.925	(1.109)	8610401	20.0000	19.98
80 Benzo(g,h,i)perylene	276	29.756	29.709	(1.140)	7585215	20.0000	19.99
90 N-Nitrosodimethylamine	74	4.742	4.719	(0.513)	2762745	40.0000	38.83
91 Aniline	93	8.643	8.628	(0.935)	6694460	40.0000	42.43
93 Benzidine	184	21.078	21.094	(0.900)	8392394	40.0000	39.74
103 Pyridine	79	4.781	4.789	(0.517)	4989157	40.0000	39.53
105 1-methylnaphthalene	142	13.374	13.366	(1.141)	4892127	20.0000	22.29
111 Azobenzene (1,2-DP-Hydrazine)	77	16.793	16.778	(1.096)	8618633	20.0000	23.37

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.375	25.352	(0.972)	19678177	40.0000	39.95
120 2,3,4,6-Tetrachlorophenol	232		15.981	15.982	(1.043)	1956466	20.0000	19.98

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012302.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL7
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	350339	3.76
27 Naphthalene-d8	1265187	632594	2530374	1337321	5.70
42 Acenaphthene-d10	692385	346193	1384770	721926	4.27
59 Phenanthrene-d10	1376777	688389	2753554	1389567	0.93
69 Chrysene-d12	1019524	509762	2039048	1382735	35.63
134 Di-n-octylphthala	2027111	1013556	4054222	2772507	36.77
77 Perylene-d12	1027409	513705	2054818	1052577	2.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.73	0.07
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.03
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012302.D

Lab ID: SLC0084-CAL7
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 16:04

RT CO-ELUTION COMPOUNDS

23.409 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.965	0.943	0.0218	Benzoic acid

RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

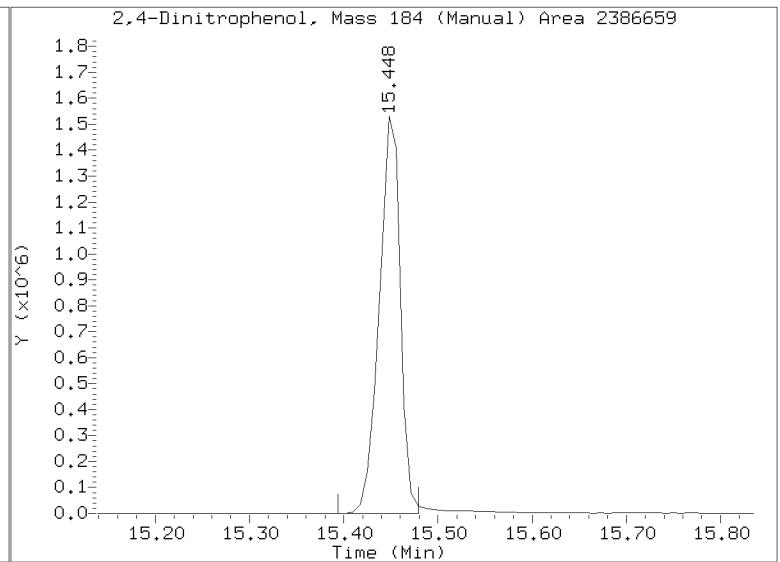
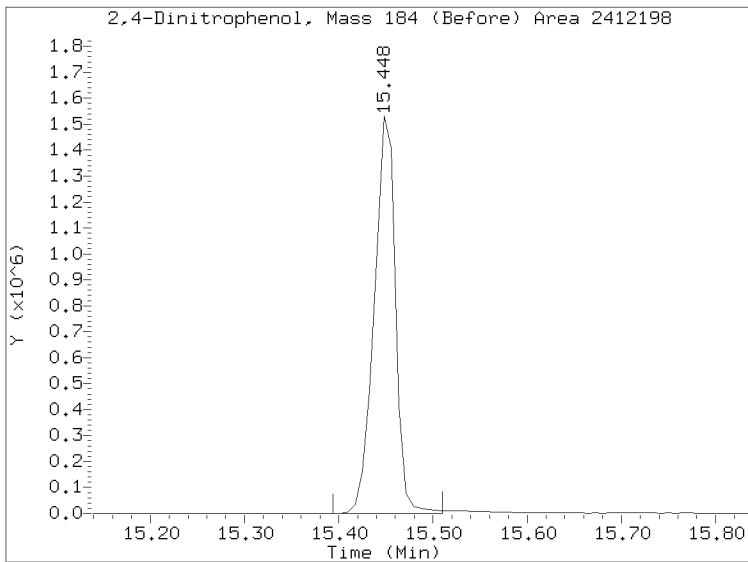
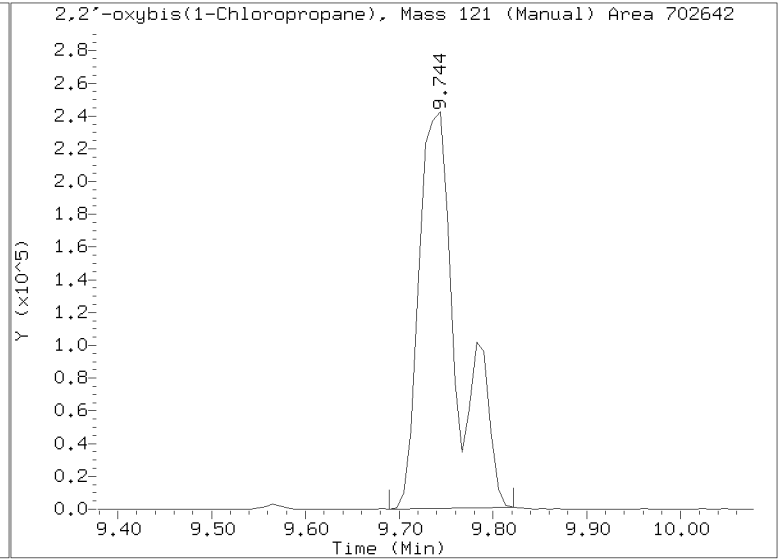
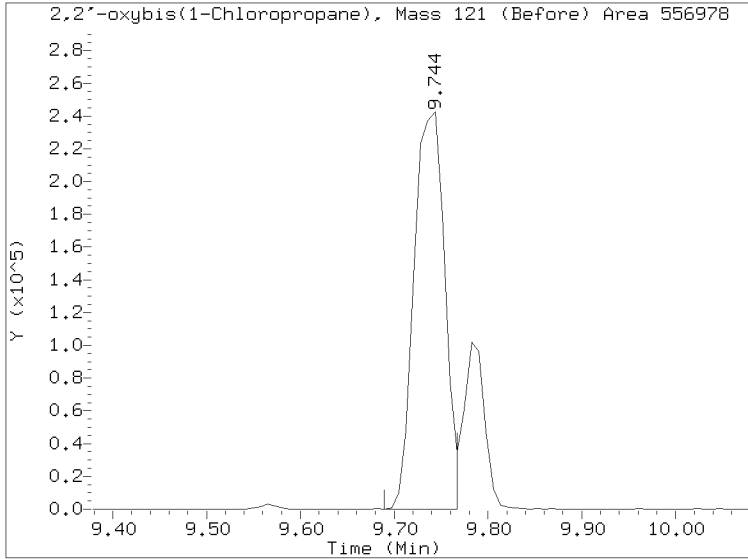
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012302.D

Injection Date: 01-MAR-2023 16:04

Lab ID:SLC0084-CAL7 Client ID:

Report Date: 03/07/2023 12:47



Data File: \\target\share\chem3\nt10.1\20230301.1\NT1003012303.D

Date: 01-MAR-2023 16:42

Client ID:

Sample Info: SEQ-CAL6

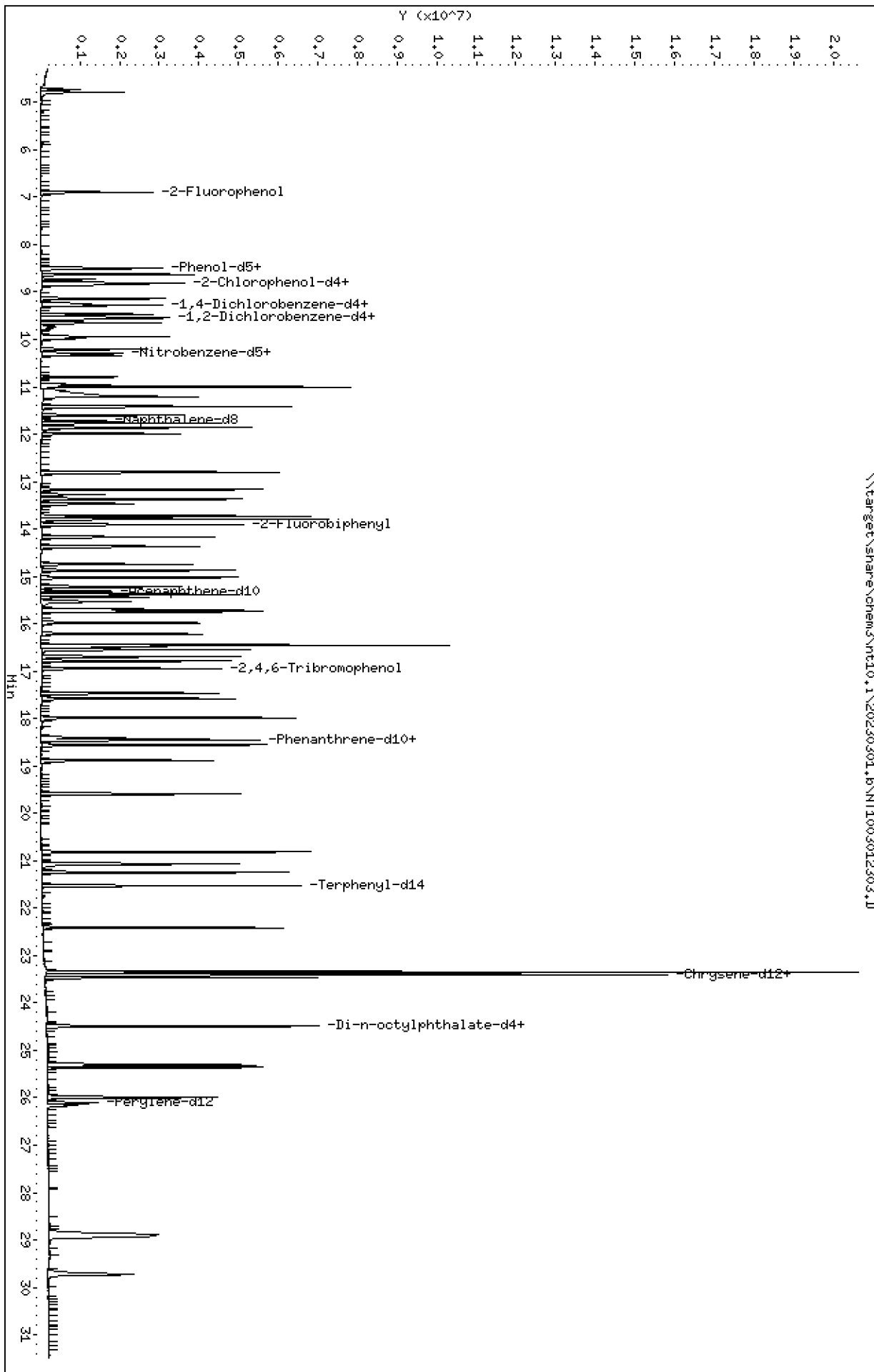
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230301.1\NT1003012303.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012303.D
 Lab Smp Id: SLC0084-CAL6
 Inj Date : 01-MAR-2023 16:42
 Operator : VTS
 Smp Info : SEQ-CAL6
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 6
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
1 2-Fluorophenol	112		6.897	6.898	(0.746)	1671115	15.0000	15.47
2 Phenol-d5	99		8.496	8.489	(0.919)	2142811	15.0000	17.09
3 Phenol	94		8.519	8.512	(0.921)	1452681	10.0000	10.90
5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	1777257	15.0000	16.62
4 Bis(2-Chloroethyl)ether	93		8.736	8.728	(0.945)	1014758	10.0000	9.962
6 2-Chlorophenol	128		8.844	8.844	(0.956)	1194498	10.0000	10.75
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	1207696	10.0000	9.857
* 8 1,4-Dichlorobenzene-d4	152		9.246	9.247	(1.000)	343229	4.00000	
9 1,4-Dichlorobenzene	146		9.277	9.278	(1.003)	1196225	10.0000	9.830
\$ 10 1,2-Dichlorobenzene-d4	152		9.533	9.534	(1.031)	801344	10.0000	10.03 (H)
12 1,2-Dichlorobenzene	146		9.565	9.565	(1.034)	1172425	10.0000	9.953
11 Benzyl alcohol	108		9.471	9.472	(1.024)	729566	10.0000	10.10
14 2,2'-oxybis(1-Chloropropane)	121		9.735	9.728	(1.053)	341119	10.0000	10.04 (M)
13 2-Methylphenol	108		9.650	9.650	(1.044)	1090929	10.0000	10.05
17 Hexachloroethane	117		10.209	10.209	(1.104)	522976	10.0000	10.47
16 N-Nitroso-di-n-propylamine	70		9.984	9.976	(1.080)	857229	10.0000	10.66
15 4-Methylphenol	108		9.945	9.938	(1.076)	1307742	10.0000	10.35
\$ 18 Nitrobenzene-d5	82		10.294	10.295	(0.878)	1491583	10.0000	10.59
19 Nitrobenzene	77		10.333	10.326	(0.882)	1370204	10.0000	10.37
20 Isophorone	82		10.791	10.784	(0.921)	1793205	10.0000	10.63
21 2-Nitrophenol	139		10.950	10.951	(0.934)	730550	10.0000	10.66
22 2,4-Dimethylphenol	107		11.001	10.993	(0.939)	2713675	20.0000	20.33
23 Bis(2-Chloroethoxy)methane	93		11.213	11.205	(0.957)	1118592	10.0000	10.73
24 Benzoic acid	105		11.213	11.052	(0.957)	3480339	40.0000	41.77
25 2,4-Dichlorophenol	162		11.416	11.417	(0.974)	2211975	20.0000	20.93
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	1011207	10.0000	10.20
* 27 Naphthalene-d8	136		11.718	11.719	(1.000)	1283371	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	3371168	10.0000	10.23
29 4-Chloroaniline	127		11.857	11.858	(1.012)	3165433	20.0000	20.39
30 Hexachlorobutadiene	225		11.996	11.997	(1.024)	748347	10.0000	10.36
31 4-Chloro-3-methylphenol	107		12.809	12.809	(1.093)	2338102	20.0000	20.38
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	2467957	10.0000	10.61
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.879)	579363	20.0000	21.27

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.730	13.730	(0.896)	1500216	20.0000	20.39
35 2,4,5-Trichlorophenol	196	13.792	13.808	(0.900)	1606616	20.0000	20.35
§ 36 2-Fluorobiphenyl	172	13.915	13.908	(0.909)	2637459	10.0000	10.60
37 2-Chloronaphthalene	162	14.163	14.164	(0.925)	2110247	10.0000	10.81
38 2-Nitroaniline	65	14.372	14.365	(0.938)	1163846	20.0000	20.24
39 Dimethylphthalate	163	14.744	14.736	(0.963)	2334876	10.0000	10.37
40 Acenaphthylene	152	15.022	15.023	(0.981)	3968425	10.0000	11.79
41 2,6-Dinitrotoluene	165	14.875	14.868	(0.971)	1069741	20.0000	20.17
* 42 Acenaphthene-d10	164	15.316	15.309	(1.000)	697310	4.00000	
43 3-Nitroaniline	138	15.216	15.224	(0.993)	1237579	20.0000	21.79
44 Acenaphthene	153	15.386	15.378	(1.005)	2130576	10.0000	10.49
45 2,4-Dinitrophenol	184	15.432	15.487	(1.008)	663655	40.0000	43.01 (M)
46 Dibenzofuran	168	15.741	15.734	(1.028)	3289648	10.0000	10.92
47 4-Nitrophenol	109	15.533	15.603	(1.014)	911134	20.0000	20.66
48 2,4-Dinitrotoluene	165	15.703	15.703	(1.025)	1579283	20.0000	20.25
50 Diethylphthalate	149	16.213	16.198	(1.059)	2505654	10.0000	10.50
49 Fluorene	166	16.453	16.453	(1.074)	2783498	10.0000	11.10
51 4-Chlorophenyl-phenylether	204	16.453	16.453	(1.074)	1229519	10.0000	10.04
52 4-Nitroaniline	138	16.492	16.484	(1.077)	1346197	20.0000	22.05
53 4,6-Dinitro-2-methylphenol	198	16.546	16.538	(0.899)	1578759	40.0000	42.89
54 N-Nitrosodiphenylamine	169	16.692	16.693	(0.907)	2167459	10.0000	10.93
§ 55 2,4,6-Tribromophenol	330	16.947	16.947	(1.106)	735108	15.0000	15.20
56 4-Bromophenyl-phenylether	248	17.472	17.472	(0.950)	878203	10.0000	10.93
57 Hexachlorobenzene	284	17.573	17.573	(0.955)	901567	10.0000	9.960
58 Pentachlorophenol	266	17.983	17.983	(0.977)	999885	20.0000	20.67
* 59 Phenanthrene-d10	188	18.401	18.401	(1.000)	1340795	4.00000	
60 Phenanthrene	178	18.455	18.448	(1.003)	3667169	10.0000	10.69
61 Anthracene	178	18.556	18.556	(1.008)	3689636	10.0000	11.09
62 Carbazole	167	18.888	18.889	(1.026)	3288261	10.0000	10.79
63 Di-n-butylphthalate	149	19.585	19.585	(1.064)	4529098	10.0000	10.12
64 Fluoranthene	202	20.815	20.815	(0.889)	4187547	10.0000	11.18
65 Pyrene	202	21.248	21.248	(0.907)	4073267	10.0000	10.68
§ 66 Terphenyl-d14	244	21.527	21.527	(0.919)	3333633	10.0000	10.81
67 Butylbenzylphthalate	149	22.409	22.410	(0.957)	1986336	10.0000	10.05
68 Benzo(a)anthracene	228	23.400	23.401	(0.999)	4335462	10.0000	11.30
* 69 Chrysene-d12	240	23.416	23.416	(1.000)	1088479	4.00000	
70 3,3'-Dichlorobenzidine	252	23.346	23.347	(0.997)	5606129	30.0000	31.45
71 Chrysene	228	23.462	23.463	(1.002)	3175231	10.0000	10.18
72 bis(2-Ethylhexyl)phthalate	149	23.400	23.409	(0.956)	3308866	10.0000	10.24
* 134 Di-n-octylphthalate-d4	153	24.484	24.485	(1.000)	2152692	4.00000	
73 Di-n-octylphthalate	149	24.492	24.492	(1.000)	4778293	10.0000	10.01
74 Benzo(b)fluoranthene	252	25.305	25.298	(0.969)	3823921	10.0000	10.16
75 Benzo(k)fluoranthene	252	25.359	25.352	(0.971)	3744000	10.0000	10.27
76 Benzo(a)pyrene	252	25.986	25.987	(0.995)	3440154	10.0000	10.22
* 77 Perylene-d12	264	26.110	26.103	(1.000)	973894	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.878	28.863	(1.106)	3993020	10.0000	10.18
79 Dibenzo(a,h)anthracene	278	28.932	28.925	(1.108)	3076842	10.0000	10.17
80 Benzo(g,h,i)perylene	276	29.724	29.709	(1.138)	3075954	10.0000	10.09
90 N-Nitrosodimethylamine	74	4.727	4.719	(0.511)	1425602	20.0000	20.45
91 Aniline	93	8.628	8.628	(0.933)	3239498	20.0000	20.96
93 Benzidine	184	21.062	21.094	(0.899)	3298965	20.0000	19.85
103 Pyridine	79	4.781	4.789	(0.517)	2523388	20.0000	20.41
105 1-methylnaphthalene	142	13.366	13.366	(1.141)	2199060	10.0000	10.44
111 Azobenzene (1,2-DP-Hydrazine)	77	16.777	16.778	(1.095)	3893455	10.0000	10.93

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.359	25.352	(0.971)	7406193	20.0000	20.41
120 2,3,4,6-Tetrachlorophenol	232		15.981	15.982	(1.043)	756020	10.0000	10.15

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012303.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL6
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	343229	1.66
27 Naphthalene-d8	1265187	632594	2530374	1283371	1.44
42 Acenaphthene-d10	692385	346193	1384770	697310	0.71
59 Phenanthrene-d10	1376777	688389	2753554	1340795	-2.61
69 Chrysene-d12	1019524	509762	2039048	1088479	6.76
134 Di-n-octylphthala	2027111	1013556	4054222	2152692	6.20
77 Perylene-d12	1027409	513705	2054818	973894	-5.21

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012303.D

Lab ID: SLC0084-CAL6
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 16:42

RT CO-ELUTION COMPOUNDS

23.401 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.943	0.0138	Benzoic acid
1.014	1.019	-0.0051	4-Nitrophenol

RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

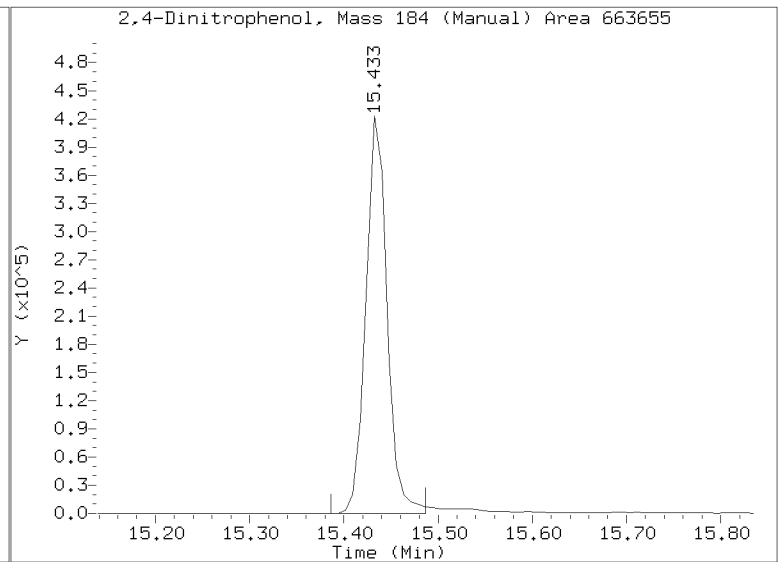
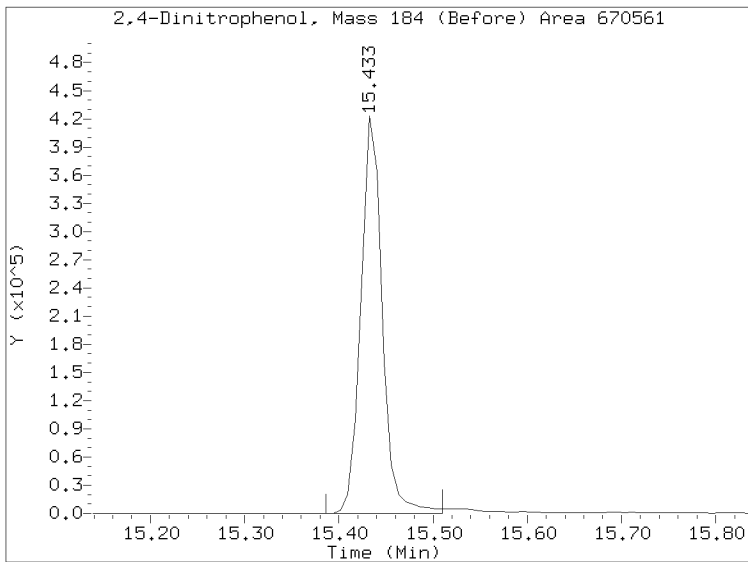
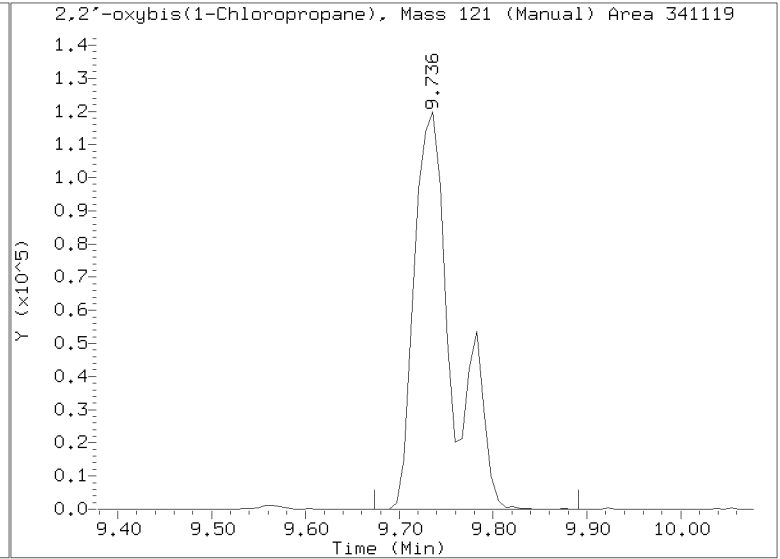
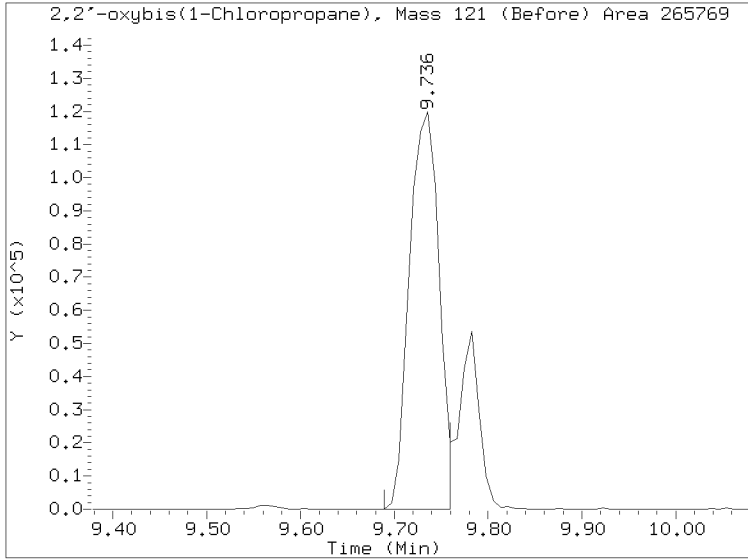
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012303.D

Injection Date: 01-MAR-2023 16:42

Lab ID:SLC0084-CAL6 Client ID:

Report Date: 03/07/2023 12:47



Data File: \\target\share\chem3\nt10.1\20230304.1\NT1003042304.D

Date: 01-HRR-2023 17:21

Client ID:

Sample Info: SEQ-CALS

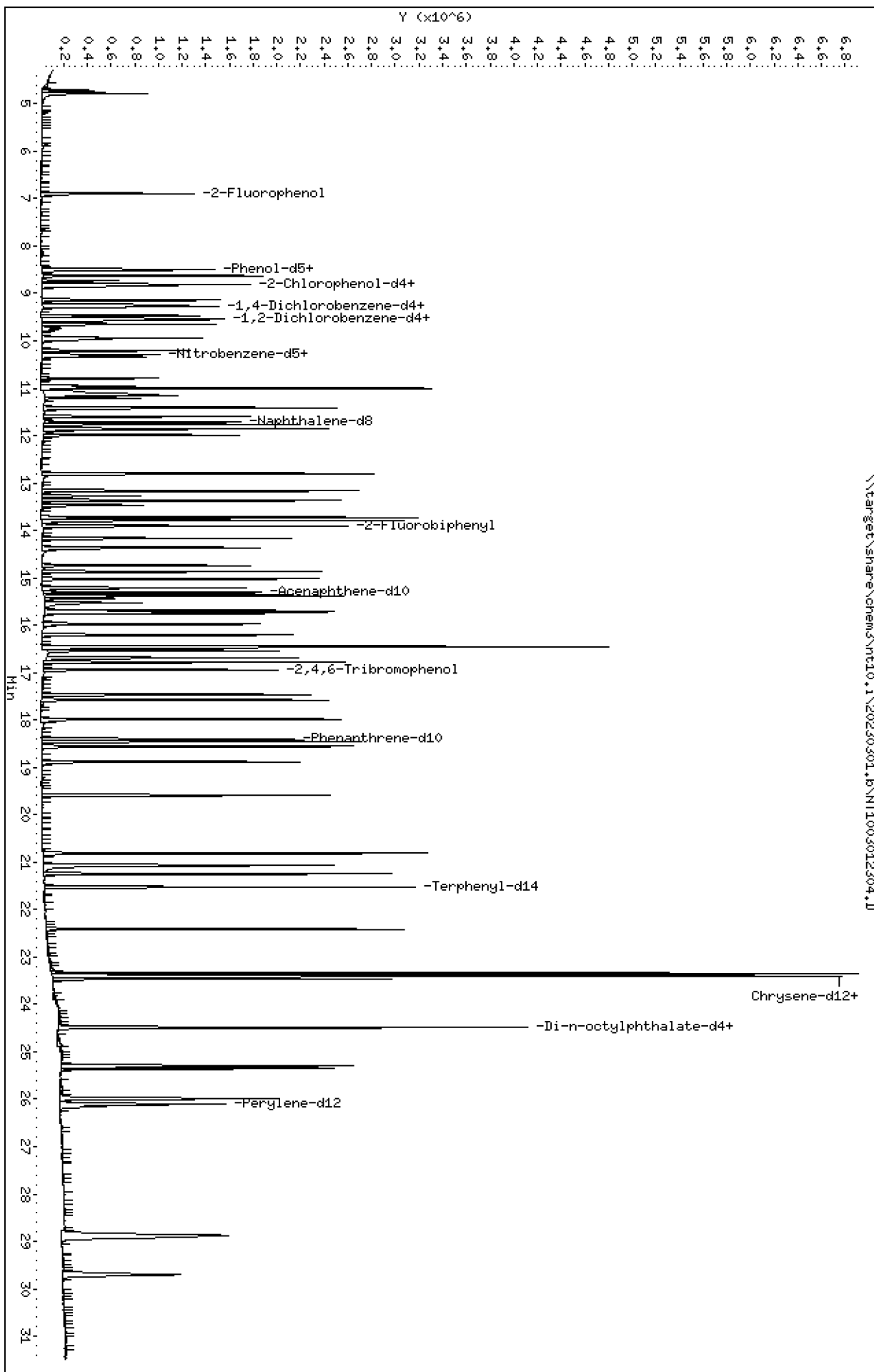
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230304.1\NT1003042304.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012304.D
 Lab Smp Id: SLC0084-CAL5
 Inj Date : 01-MAR-2023 17:21
 Operator : VTS
 Smp Info : SEQ-CAL5
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 5
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.898	(0.746)	798945	7.50000	7.521
\$ 2 Phenol-d5	99		8.488	8.489	(0.918)	984004	7.50000	7.978
3 Phenol	94		8.512	8.512	(0.921)	696903	5.00000	5.315
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	835303	7.50000	7.938
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	492325	5.00000	4.913
6 2-Chlorophenol	128		8.844	8.844	(0.956)	569359	5.00000	5.208
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	592846	5.00000	4.919
* 8 1,4-Dichlorobenzene-d4	152		9.246	9.247	(1.000)	337641	4.00000	
9 1,4-Dichlorobenzene	146		9.277	9.278	(1.003)	573306	5.00000	4.789
\$ 10 1,2-Dichlorobenzene-d4	152		9.533	9.534	(1.031)	384091	5.00000	4.886 (H)
12 1,2-Dichlorobenzene	146		9.564	9.565	(1.034)	555677	5.00000	4.795
11 Benzyl alcohol	108		9.471	9.472	(1.024)	345472	5.00000	5.007
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.728	(1.052)	166156	5.00000	4.974 (M)
13 2-Methylphenol	108		9.650	9.650	(1.044)	519498	5.00000	4.996
17 Hexachloroethane	117		10.209	10.209	(1.104)	243978	5.00000	4.965
16 N-Nitroso-di-n-propylamine	70		9.976	9.976	(1.079)	408771	5.00000	5.166
15 4-Methylphenol	108		9.937	9.938	(1.075)	602036	5.00000	4.780
\$ 18 Nitrobenzene-d5	82		10.294	10.295	(0.878)	717338	5.00000	5.165
19 Nitrobenzene	77		10.333	10.326	(0.882)	649574	5.00000	4.986
20 Isophorone	82		10.791	10.784	(0.921)	852017	5.00000	5.123
21 2-Nitrophenol	139		10.950	10.951	(0.934)	321421	5.00000	4.583
22 2,4-Dimethylphenol	107		11.001	10.993	(0.939)	1242938	10.0000	9.733
23 Bis(2-Chloroethoxy)methane	93		11.204	11.205	(0.956)	518616	5.00000	5.046
24 Benzoic acid	105		11.162	11.052	(0.953)	1434582	20.0000	18.62
25 2,4-Dichlorophenol	162		11.416	11.417	(0.974)	897693	10.0000	8.929
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	474239	5.00000	4.850
* 27 Naphthalene-d8	136		11.718	11.719	(1.000)	1265187	4.00000	
28 Naphthalene	128		11.764	11.765	(1.004)	1611137	5.00000	4.962
29 4-Chloroaniline	127		11.857	11.858	(1.012)	1458858	10.0000	9.927
30 Hexachlorobutadiene	225		11.996	11.997	(1.024)	361635	5.00000	5.080
31 4-Chloro-3-methylphenol	107		12.801	12.809	(1.092)	1052503	10.0000	9.790
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	1169551	5.00000	5.098
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.880)	197002	10.0000	8.175

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.722	13.730	(0.896)	671855	10.0000	9.789
35 2,4,5-Trichlorophenol	196	13.792	13.808	(0.901)	727258	10.0000	9.898
§ 36 2-Fluorobiphenyl	172	13.908	13.908	(0.909)	1276728	5.00000	5.170
37 2-Chloronaphthalene	162	14.163	14.164	(0.925)	985797	5.00000	5.085
38 2-Nitroaniline	65	14.364	14.365	(0.938)	539613	10.0000	9.843
39 Dimethylphthalate	163	14.736	14.736	(0.963)	1157937	5.00000	5.179
40 Acenaphthylene	152	15.022	15.023	(0.981)	1673322	5.00000	5.006
41 2,6-Dinitrotoluene	165	14.867	14.868	(0.971)	510956	10.0000	10.08
* 42 Acenaphthene-d10	164	15.308	15.309	(1.000)	692385	4.00000	
43 3-Nitroaniline	138	15.216	15.224	(0.994)	572327	10.0000	10.15
44 Acenaphthene	153	15.378	15.378	(1.005)	1024501	5.00000	5.082
45 2,4-Dinitrophenol	184	15.432	15.487	(1.008)	171374	20.0000	12.74 (M)
46 Dibenzofuran	168	15.741	15.734	(1.028)	1570179	5.00000	5.249
47 4-Nitrophenol	109	15.525	15.603	(1.014)	385053	10.0000	9.416
48 2,4-Dinitrotoluene	165	15.695	15.703	(1.025)	744528	10.0000	10.07
50 Diethylphthalate	149	16.205	16.198	(1.059)	1227652	5.00000	5.183
49 Fluorene	166	16.453	16.453	(1.075)	1288140	5.00000	5.175
51 4-Chlorophenyl-phenylether	204	16.445	16.453	(1.074)	574226	5.00000	5.032
52 4-Nitroaniline	138	16.476	16.484	(1.076)	652104	10.0000	10.76
53 4,6-Dinitro-2-methylphenol	198	16.538	16.538	(0.899)	525677	20.0000	15.59
54 N-Nitrosodiphenylamine	169	16.692	16.693	(0.907)	1052927	5.00000	5.169
§ 55 2,4,6-Tribromophenol	330	16.939	16.947	(1.107)	335459	7.50000	7.479
56 4-Bromophenyl-phenylether	248	17.464	17.472	(0.949)	421801	5.00000	5.110
57 Hexachlorobenzene	284	17.573	17.573	(0.955)	460177	5.00000	4.951
58 Pentachlorophenol	266	17.983	17.983	(0.977)	426084	10.0000	9.388
* 59 Phenanthrene-d10	188	18.401	18.401	(1.000)	1376777	4.00000	
60 Phenanthrene	178	18.447	18.448	(1.003)	1750157	5.00000	4.967
61 Anthracene	178	18.556	18.556	(1.008)	1748537	5.00000	5.118
62 Carbazole	167	18.880	18.889	(1.026)	1590953	5.00000	5.083
63 Di-n-butylphthalate	149	19.585	19.585	(1.064)	2167805	5.00000	4.927
64 Fluoranthene	202	20.815	20.815	(0.889)	1995961	5.00000	5.691
65 Pyrene	202	21.248	21.248	(0.907)	1980428	5.00000	5.545
§ 66 Terphenyl-d14	244	21.519	21.527	(0.919)	1578069	5.00000	5.461
67 Butylbenzylphthalate	149	22.409	22.410	(0.957)	953916	5.00000	5.058
68 Benzo(a)anthracene	228	23.400	23.401	(0.999)	1805838	5.00000	5.023
* 69 Chrysene-d12	240	23.416	23.416	(1.000)	1019524	4.00000	
70 3,3'-Dichlorobenzidine	252	23.346	23.347	(0.997)	2250601	15.0000	13.81
71 Chrysene	228	23.462	23.463	(1.002)	1424903	5.00000	4.877
72 bis(2-Ethylhexyl)phthalate	149	23.400	23.409	(0.956)	1394222	5.00000	4.763
* 134 Di-n-octylphthalate-d4	153	24.484	24.485	(1.000)	2027111	4.00000	
73 Di-n-octylphthalate	149	24.492	24.492	(1.000)	2157248	5.00000	4.799
74 Benzo(b)fluoranthene	252	25.297	25.298	(0.969)	1825423	5.00000	4.937
75 Benzo(k)fluoranthene	252	25.351	25.352	(0.971)	1645283	5.00000	4.633
76 Benzo(a)pyrene	252	25.986	25.987	(0.996)	1576490	5.00000	4.781
* 77 Perylene-d12	264	26.102	26.103	(1.000)	1027409	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.870	28.863	(1.106)	1869637	5.00000	4.849
79 Dibenzo(a,h)anthracene	278	28.909	28.925	(1.108)	1416633	5.00000	4.817
80 Benzo(g,h,i)perylene	276	29.693	29.709	(1.138)	1505801	5.00000	4.943
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.510)	652679	10.0000	9.517
91 Aniline	93	8.627	8.628	(0.933)	1534382	10.0000	10.09
93 Benzidine	184	21.062	21.094	(0.899)	1784190	10.0000	11.46
103 Pyridine	79	4.781	4.789	(0.517)	1195147	10.0000	9.827
105 1-methylnaphthalene	142	13.366	13.366	(1.141)	1066974	5.00000	5.139
111 Azobenzene (1,2-DP-Hydrazine)	77	16.777	16.778	(1.096)	1859900	5.00000	5.258

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.297	25.352	(0.969)	3405989	10.0000	9.596
120 2,3,4,6-Tetrachlorophenol	232		15.973	15.982	(1.043)	340297	5.00000	4.959

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012304.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL5
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	337641	0.00
27 Naphthalene-d8	1265187	632594	2530374	1265187	0.00
42 Acenaphthene-d10	692385	346193	1384770	692385	0.00
59 Phenanthrene-d10	1376777	688389	2753554	1376777	0.00
69 Chrysene-d12	1019524	509762	2039048	1019524	0.00
134 Di-n-octylphthala	2027111	1013556	4054222	2027111	0.00
77 Perylene-d12	1027409	513705	2054818	1027409	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012304.D

Lab ID: SLC0084-CAL5
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 17:21

RT CO-ELUTION COMPOUNDS

23.401 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.943	0.0094	Benzoic acid
1.014	1.019	-0.0050	4-Nitrophenol

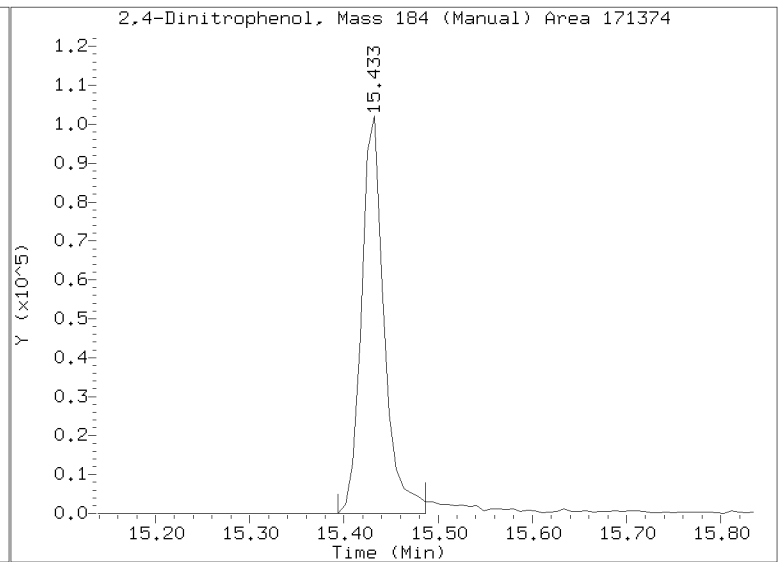
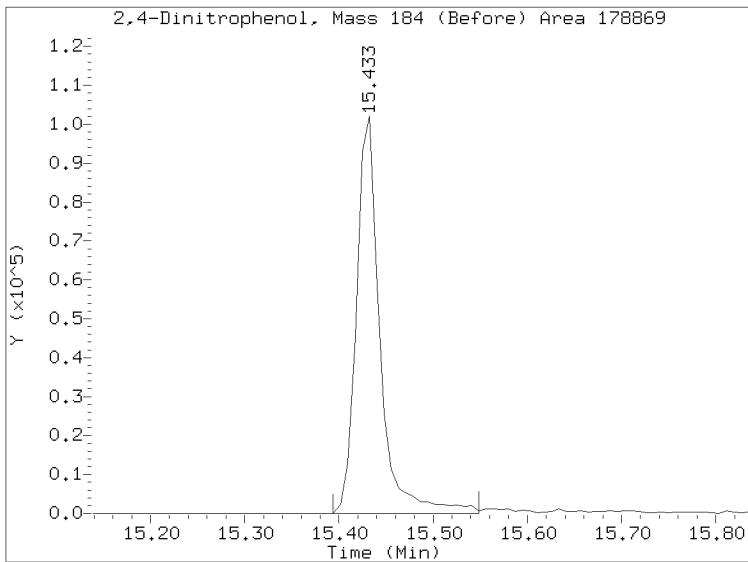
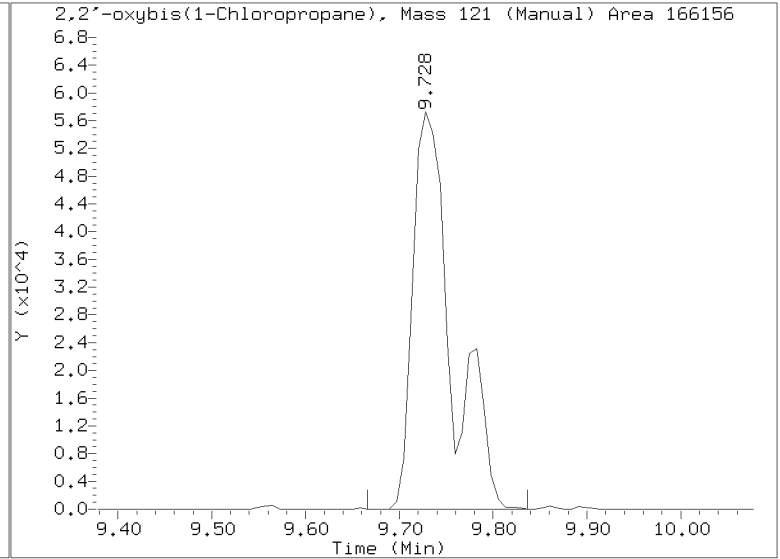
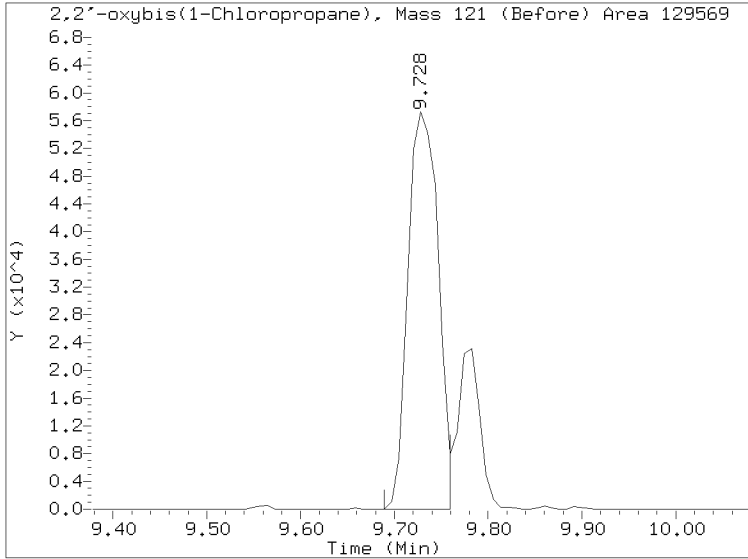
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012304.D
Injection Date: 01-MAR-2023 17:21
Lab ID:SLC0084-CAL5 Client ID:
Report Date: 03/07/2023 12:47



Data File: \\target\share\chem3\nt10.1\20230304.1\NT1003042305.D

Date: 01-HRR-2023 17:59

Client ID:

Sample Info: SEQ-CAL4

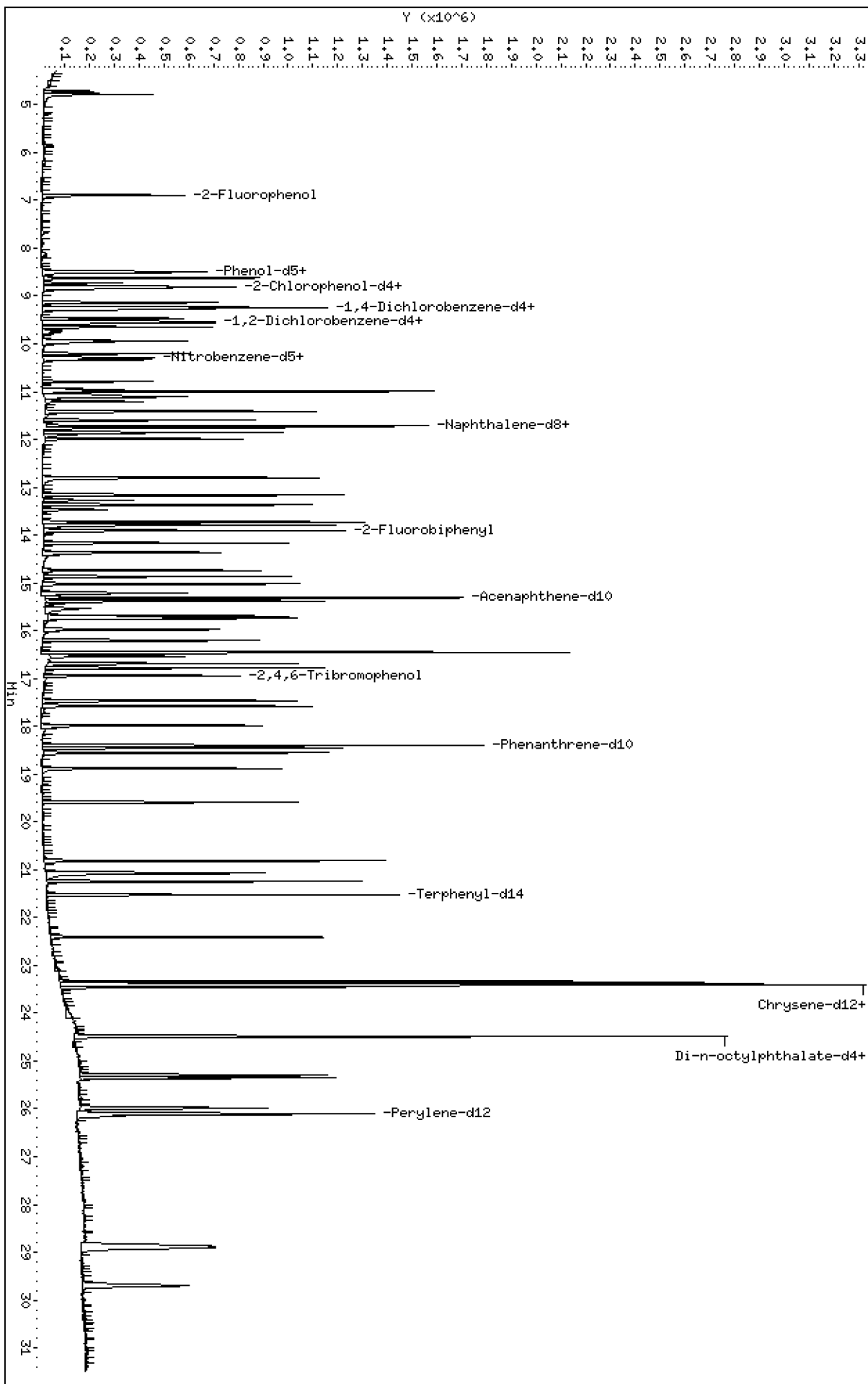
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230304.1\NT1003042305.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012305.D
 Lab Smp Id: SLC0084-CAL4
 Inj Date : 01-MAR-2023 17:59
 Operator : VTS
 Smp Info : SEQ-CAL4
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 4
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
1 2-Fluorophenol	112		6.897	6.898	(0.746)	378841	3.75000	3.752
2 Phenol-d5	99		8.489	8.489	(0.918)	450808	3.75000	3.846
3 Phenol	94		8.512	8.512	(0.921)	326814	2.50000	2.622
5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	382637	3.75000	3.826
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	236207	2.50000	2.480
6 2-Chlorophenol	128		8.844	8.844	(0.956)	260785	2.50000	2.510
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	283471	2.50000	2.475
* 8 1,4-Dichlorobenzene-d4	152		9.246	9.247	(1.000)	320922	4.00000	
9 1,4-Dichlorobenzene	146		9.277	9.278	(1.003)	266336	2.50000	2.341
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.031)	177287	2.50000	2.373 (H)
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	269555	2.50000	2.447
11 Benzyl alcohol	108		9.471	9.472	(1.024)	148609	2.50000	2.300
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.728	(1.052)	77292	2.50000	2.434 (M)
13 2-Methylphenol	108		9.650	9.650	(1.044)	238010	2.50000	2.439
17 Hexachloroethane	117		10.209	10.209	(1.104)	111666	2.50000	2.391
16 N-Nitroso-di-n-propylamine	70		9.976	9.976	(1.079)	194824	2.50000	2.590
15 4-Methylphenol	108		9.937	9.938	(1.075)	261454	2.50000	2.170
\$ 18 Nitrobenzene-d5	82		10.286	10.295	(0.878)	337523	2.50000	2.617
19 Nitrobenzene	77		10.325	10.326	(0.881)	306595	2.50000	2.534
20 Isophorone	82		10.783	10.784	(0.920)	389475	2.50000	2.522
21 2-Nitrophenol	139		10.950	10.951	(0.934)	116300	2.50000	1.752
22 2,4-Dimethylphenol	107		10.992	10.993	(0.938)	558107	5.00000	4.768
23 Bis(2-Chloroethoxy)methane	93		11.204	11.205	(0.956)	247047	2.50000	2.588
24 Benzoic acid	105		11.111	11.052	(0.948)	511628	10.0000	7.346
25 2,4-Dichlorophenol	162		11.408	11.417	(0.974)	427920	5.00000	4.638
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	222387	2.50000	2.449
* 27 Naphthalene-d8	136		11.718	11.719	(1.000)	1174958	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	735833	2.50000	2.440
29 4-Chloroaniline	127		11.857	11.858	(1.012)	564439	5.00000	4.220
30 Hexachlorobutadiene	225		11.989	11.997	(1.023)	165869	2.50000	2.509
31 4-Chloro-3-methylphenol	107		12.801	12.809	(1.092)	441665	5.00000	4.525
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	522822	2.50000	2.454
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.880)	56172	5.00000	2.613

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.722	13.730	(0.896)	274751	5.00000	4.437
35 2,4,5-Trichlorophenol	196	13.792	13.808	(0.901)	285057	5.00000	4.311
§ 36 2-Fluorobiphenyl	172	13.908	13.908	(0.909)	563949	2.50000	2.463
37 2-Chloronaphthalene	162	14.163	14.164	(0.925)	447798	2.50000	2.491
38 2-Nitroaniline	65	14.364	14.365	(0.938)	243546	5.00000	4.877
39 Dimethylphthalate	163	14.736	14.736	(0.963)	521590	2.50000	2.516
40 Acenaphthylene	152	15.022	15.023	(0.981)	734889	2.50000	2.371
41 2,6-Dinitrotoluene	165	14.868	14.868	(0.971)	210738	5.00000	4.567
* 42 Acenaphthene-d10	164	15.309	15.309	(1.000)	642002	4.00000	
43 3-Nitroaniline	138	15.216	15.224	(0.994)	243306	5.00000	4.653
44 Acenaphthene	153	15.378	15.378	(1.005)	447904	2.50000	2.396
45 2,4-Dinitrophenol	184	15.432	15.487	(1.008)	32087	10.0000	2.662 (M)
46 Dibenzofuran	168	15.734	15.734	(1.028)	667477	2.50000	2.406
47 4-Nitrophenol	109	15.525	15.603	(1.014)	158049	5.00000	4.282 (M)
48 2,4-Dinitrotoluene	165	15.695	15.703	(1.025)	290719	5.00000	4.338
50 Diethylphthalate	149	16.198	16.198	(1.058)	544035	2.50000	2.477
49 Fluorene	166	16.453	16.453	(1.075)	554745	2.50000	2.404
51 4-Chlorophenyl-phenylether	204	16.445	16.453	(1.074)	243957	2.50000	2.374
52 4-Nitroaniline	138	16.468	16.484	(1.076)	256750	5.00000	4.568
53 4,6-Dinitro-2-methylphenol	198	16.530	16.538	(0.898)	162732	10.0000	5.636
54 N-Nitrosodiphenylamine	169	16.685	16.693	(0.907)	464929	2.50000	2.579
§ 55 2,4,6-Tribromophenol	330	16.947	16.947	(1.107)	133559	3.75000	3.314
56 4-Bromophenyl-phenylether	248	17.464	17.472	(0.949)	180011	2.50000	2.464
57 Hexachlorobenzene	284	17.573	17.573	(0.955)	193751	2.50000	2.355
58 Pentachlorophenol	266	17.983	17.983	(0.977)	158344	5.00000	4.082
* 59 Phenanthrene-d10	188	18.401	18.401	(1.000)	1218560	4.00000	
60 Phenanthrene	178	18.447	18.448	(1.003)	754817	2.50000	2.420
61 Anthracene	178	18.556	18.556	(1.008)	738126	2.50000	2.441
62 Carbazole	167	18.881	18.889	(1.026)	696404	2.50000	2.514
63 Di-n-butylphthalate	149	19.585	19.585	(1.064)	904042	2.50000	2.367
64 Fluoranthene	202	20.815	20.815	(0.889)	827926	2.50000	2.660
65 Pyrene	202	21.240	21.248	(0.907)	825309	2.50000	2.604
§ 66 Terphenyl-d14	244	21.519	21.527	(0.919)	657085	2.50000	2.562
67 Butylbenzylphthalate	149	22.409	22.410	(0.957)	402228	2.50000	2.378
68 Benzo(a)anthracene	228	23.393	23.401	(0.999)	763801	2.50000	2.394
* 69 Chrysene-d12	240	23.416	23.416	(1.000)	904733	4.00000	
70 3,3'-Dichlorobenzidine	252	23.339	23.347	(0.997)	863376	7.50000	6.032
71 Chrysene	228	23.462	23.463	(1.002)	606448	2.50000	2.339
72 bis(2-Ethylhexyl)phthalate	149	23.400	23.409	(0.956)	594611	2.50000	2.343
* 134 Di-n-octylphthalate-d4	153	24.484	24.485	(1.000)	1785837	4.00000	
73 Di-n-octylphthalate	149	24.492	24.492	(1.000)	966695	2.50000	2.441
74 Benzo(b)fluoranthene	252	25.297	25.298	(0.969)	726977	2.50000	2.201
75 Benzo(k)fluoranthene	252	25.351	25.352	(0.971)	757491	2.50000	2.375
76 Benzo(a)pyrene	252	25.979	25.987	(0.995)	673848	2.50000	2.280
* 77 Perylene-d12	264	26.102	26.103	(1.000)	947785	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.862	28.863	(1.106)	802655	2.50000	2.322
79 Dibenzo(a,h)anthracene	278	28.909	28.925	(1.108)	623221	2.50000	2.370
80 Benzo(g,h,i)perylene	276	29.701	29.709	(1.138)	660797	2.50000	2.407
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.510)	321620	5.00000	4.934
91 Aniline	93	8.620	8.628	(0.932)	732763	5.00000	5.071
93 Benzidine	184	21.070	21.094	(0.900)	776867	5.00000	5.623
103 Pyridine	79	4.781	4.789	(0.517)	566787	5.00000	4.903
105 1-methylnaphthalene	142	13.366	13.366	(1.141)	476995	2.50000	2.474
111 Azobenzene (1,2-DP-Hydrazine)	77	16.777	16.778	(1.096)	837975	2.50000	2.555

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.351	25.352	(0.971)	1464206	5.00000	4.607
120 2,3,4,6-Tetrachlorophenol	232		15.973	15.982	(1.043)	134294	2.50000	2.183

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012305.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL4
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	320922	-4.95
27 Naphthalene-d8	1265187	632594	2530374	1174958	-7.13
42 Acenaphthene-d10	692385	346193	1384770	642002	-7.28
59 Phenanthrene-d10	1376777	688389	2753554	1218560	-11.49
69 Chrysene-d12	1019524	509762	2039048	904733	-11.26
134 Di-n-octylphthala	2027111	1013556	4054222	1785837	-11.90
77 Perylene-d12	1027409	513705	2054818	947785	-7.75

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012305.D

Lab ID: SLC0084-CAL4
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 17:59

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.948	0.943	0.0051	Benzoic acid
1.014	1.019	-0.0050	4-Nitrophenol

RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

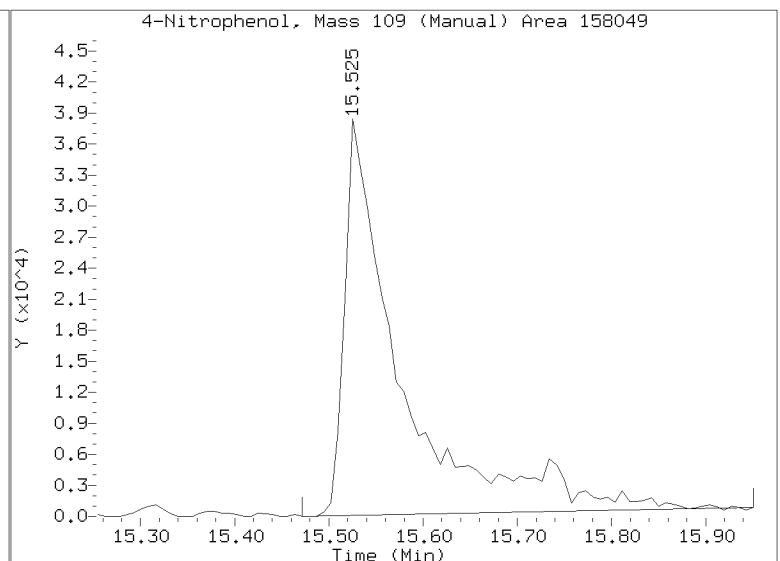
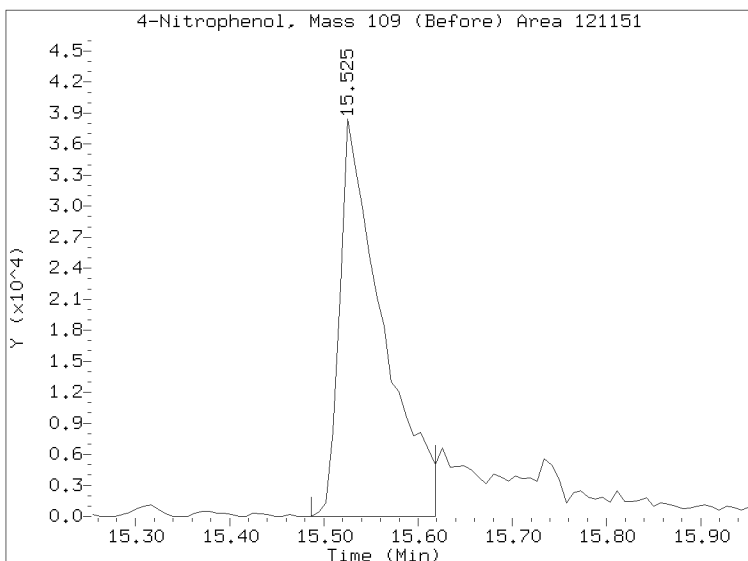
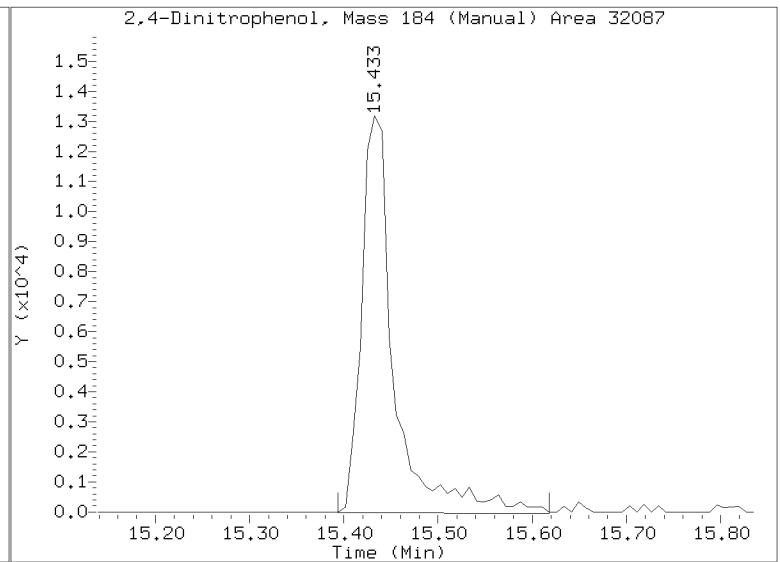
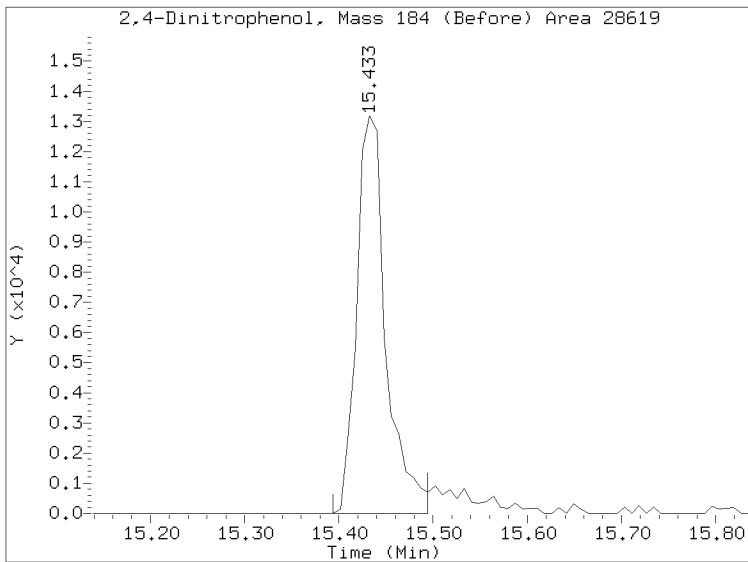
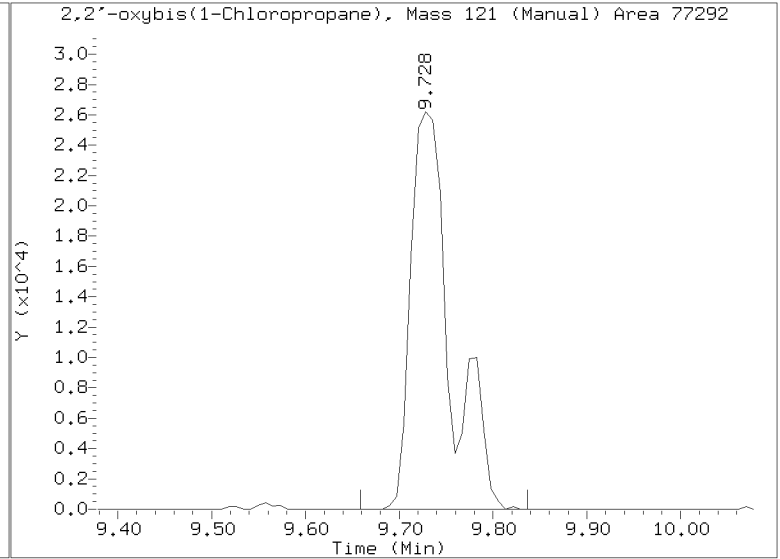
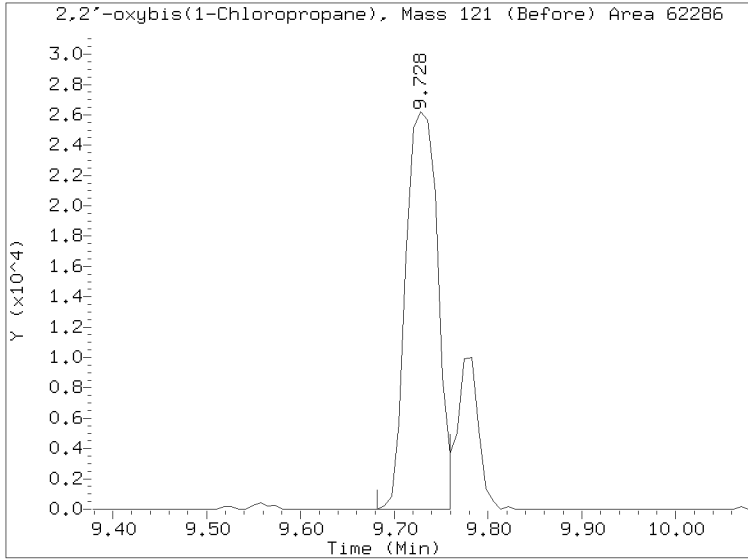
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012305.D

Injection Date: 01-MAR-2023 17:59

Lab ID: SLC0084-CAL4 Client ID:

Report Date: 03/07/2023 12:47



Data File: \\target\share\chem3\nt10,1\20230304,16\NT1003012306.D

Date: 01-MAR-2023 18:37

Client ID:

Sample Info: SEQ-CAL3

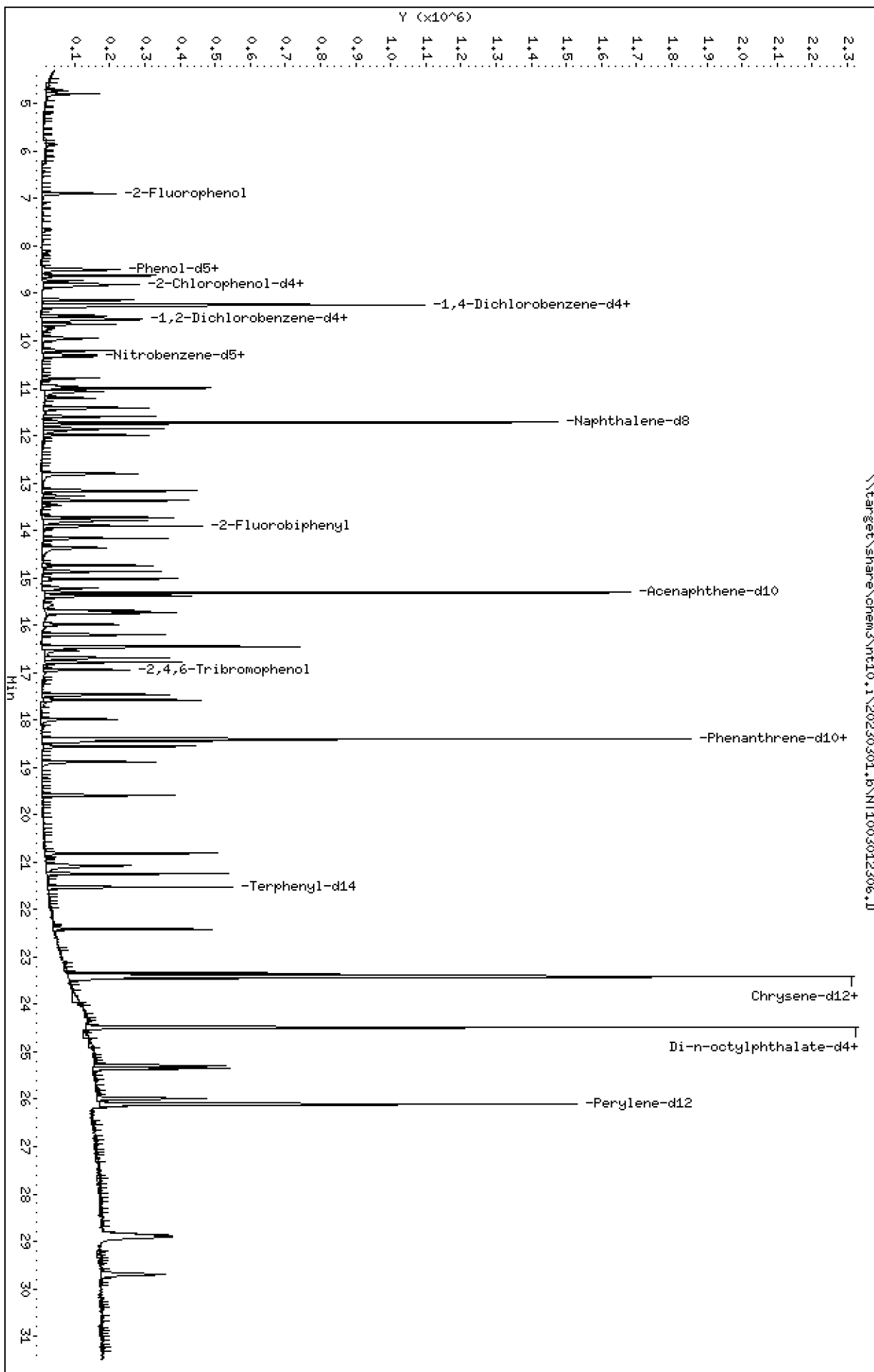
Column phase: ZB-5msi

Instrument: nt10,1

Operator: VTS

Column diameter: 0,25

\\target\share\chem3\nt10,1\20230304,16\NT1003012306.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012306.D
 Lab Smp Id: SLC0084-CAL3
 Inj Date : 01-MAR-2023 18:37
 Operator : VTS
 Smp Info : SEQ-CAL3
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 3
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
1 2-Fluorophenol	112		6.897	6.898	(0.746)	143112	1.50000	1.509
2 Phenol-d5	99		8.489	8.489	(0.918)	156849	1.50000	1.425
3 Phenol	94		8.512	8.512	(0.921)	115230	1.00000	0.9845
5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	136267	1.50000	1.451
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	90185	1.00000	1.008
6 2-Chlorophenol	128		8.844	8.844	(0.956)	92147	1.00000	0.9444
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	103697	1.00000	0.9639
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	301377	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	104762	1.00000	0.9804
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.031)	68422	1.00000	0.9751
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	100695	1.00000	0.9736
11 Benzyl alcohol	108		9.472	9.472	(1.024)	52608	1.00000	0.8733
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.728	(1.052)	30655	1.00000	1.028 (M)
13 2-Methylphenol	108		9.650	9.650	(1.044)	80800	1.00000	0.8881
17 Hexachloroethane	117		10.209	10.209	(1.104)	39041	1.00000	0.8901
16 N-Nitroso-di-n-propylamine	70		9.976	9.976	(1.079)	69424	1.00000	0.9829
15 4-Methylphenol	108		9.945	9.938	(1.076)	82667	1.00000	0.7280
\$ 18 Nitrobenzene-d5	82		10.287	10.295	(0.878)	121995	1.00000	0.9947
19 Nitrobenzene	77		10.326	10.326	(0.881)	117165	1.00000	1.018
20 Isophorone	82		10.783	10.784	(0.920)	140691	1.00000	0.9580
21 2-Nitrophenol	139		10.950	10.951	(0.934)	37363	1.00000	0.5873
22 2,4-Dimethylphenol	107		10.992	10.993	(0.938)	192320	2.00000	1.741
23 Bis(2-Chloroethoxy)methane	93		11.205	11.205	(0.956)	92006	1.00000	1.014
24 Benzoic acid	105		11.069	11.052	(0.945)	137115	4.00000	2.095 (M)
25 2,4-Dichlorophenol	162		11.417	11.417	(0.974)	118390	2.00000	1.361
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	83754	1.00000	0.9700
* 27 Naphthalene-d8	136		11.719	11.719	(1.000)	1117281	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	273806	1.00000	0.9548
29 4-Chloroaniline	127		11.858	11.858	(1.012)	192473	2.00000	1.527
30 Hexachlorobutadiene	225		11.989	11.997	(1.023)	59415	1.00000	0.9451
31 4-Chloro-3-methylphenol	107		12.809	12.809	(1.093)	134686	2.00000	1.469
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	193061	1.00000	0.9530
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.880)	11351	2.00000	0.5617

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.722	13.730	(0.896)	83812	2.00000	1.441
35 2,4,5-Trichlorophenol	196	13.792	13.808	(0.901)	92328	2.00000	1.487
§ 36 2-Fluorobiphenyl	172	13.908	13.908	(0.909)	208130	1.00000	0.9542
37 2-Chloronaphthalene	162	14.164	14.164	(0.925)	161256	1.00000	0.9418
38 2-Nitroaniline	65	14.365	14.365	(0.938)	68264	2.00000	1.452
39 Dimethylphthalate	163	14.736	14.736	(0.963)	191502	1.00000	0.9697
40 Acenaphthylene	152	15.023	15.023	(0.981)	272708	1.00000	0.9238
41 2,6-Dinitrotoluene	165	14.868	14.868	(0.971)	70653	2.00000	1.623
* 42 Acenaphthene-d10	164	15.309	15.309	(1.000)	611509	4.00000	
43 3-Nitroaniline	138	15.216	15.224	(0.994)	92170	2.00000	1.851 (M)
44 Acenaphthene	153	15.378	15.378	(1.005)	166539	1.00000	0.9355
45 2,4-Dinitrophenol	184	15.448	15.487	(1.009)	2997	4.00000	0.2630 (M)
46 Dibenzofuran	168	15.734	15.734	(1.028)	245633	1.00000	0.9296
47 4-Nitrophenol	109	15.572	15.603	(1.017)	48368	2.00000	1.395 (M)
48 2,4-Dinitrotoluene	165	15.695	15.703	(1.025)	97931	2.00000	1.551
50 Diethylphthalate	149	16.198	16.198	(1.058)	205933	1.00000	0.9843
49 Fluorene	166	16.453	16.453	(1.075)	202317	1.00000	0.9203
51 4-Chlorophenyl-phenylether	204	16.446	16.453	(1.074)	88403	1.00000	0.9168
52 4-Nitroaniline	138	16.476	16.484	(1.076)	88689	2.00000	1.657
53 4,6-Dinitro-2-methylphenol	198	16.531	16.538	(0.898)	22278	4.00000	0.7999
54 N-Nitrosodiphenylamine	169	16.685	16.693	(0.907)	173165	1.00000	0.9809
§ 55 2,4,6-Tribromophenol	330	16.947	16.947	(1.107)	43327	1.50000	1.146
56 4-Bromophenyl-phenylether	248	17.472	17.472	(0.950)	68318	1.00000	0.9551
57 Hexachlorobenzene	284	17.573	17.573	(0.955)	75215	1.00000	0.9338
58 Pentachlorophenol	266	17.983	17.983	(0.977)	40379	2.00000	1.083
* 59 Phenanthrene-d10	188	18.401	18.401	(1.000)	1193129	4.00000	
60 Phenanthrene	178	18.448	18.448	(1.003)	290575	1.00000	0.9516
61 Anthracene	178	18.556	18.556	(1.008)	272370	1.00000	0.9199
62 Carbazole	167	18.889	18.889	(1.026)	262239	1.00000	0.9668
63 Di-n-butylphthalate	149	19.585	19.585	(1.064)	327914	1.00000	0.8863
64 Fluoranthene	202	20.815	20.815	(0.889)	311956	1.00000	0.9661
65 Pyrene	202	21.241	21.248	(0.907)	319834	1.00000	0.9727
§ 66 Terphenyl-d14	244	21.519	21.527	(0.919)	252475	1.00000	0.9490
67 Butylbenzylphthalate	149	22.410	22.410	(0.957)	146878	1.00000	0.8319
68 Benzo(a)anthracene	228	23.393	23.401	(0.999)	305914	1.00000	0.9243
* 69 Chrysene-d12	240	23.416	23.416	(1.000)	938680	4.00000	
70 3,3'-Dichlorobenzidine	252	23.347	23.347	(0.997)	304058	3.00000	2.058
71 Chrysene	228	23.463	23.463	(1.002)	259860	1.00000	0.9661
72 bis(2-Ethylhexyl)phthalate	149	23.401	23.409	(0.956)	222177	1.00000	0.9040
* 134 Di-n-octylphthalate-d4	153	24.485	24.485	(1.000)	1744984	4.00000	
73 Di-n-octylphthalate	149	24.492	24.492	(1.000)	386475	1.00000	0.9988
74 Benzo(b)fluoranthene	252	25.290	25.298	(0.969)	281873	1.00000	0.8248
75 Benzo(k)fluoranthene	252	25.352	25.352	(0.971)	306114	1.00000	0.9292
76 Benzo(a)pyrene	252	25.979	25.987	(0.995)	275940	1.00000	0.9026
* 77 Perylene-d12	264	26.103	26.103	(1.000)	995239	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.863	28.863	(1.106)	302077	1.00000	0.8455
79 Dibenzo(a,h)anthracene	278	28.909	28.925	(1.108)	239256	1.00000	0.8821
80 Benzo(g,h,i)perylene	276	29.694	29.709	(1.138)	248971	1.00000	0.8754
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.510)	107907	2.00000	1.763
91 Aniline	93	8.620	8.628	(0.932)	269442	2.00000	1.985
93 Benzidine	184	21.070	21.094	(0.900)	272028	2.00000	1.898
103 Pyridine	79	4.781	4.789	(0.517)	216655	2.00000	1.996
105 1-methylnaphthalene	142	13.366	13.366	(1.141)	175421	1.00000	0.9567
111 Azobenzene (1,2-DP-Hydrazine)	77	16.778	16.778	(1.096)	302604	1.00000	0.9686

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.352	25.352	(0.971)	580106	2.00000	1.766
120 2,3,4,6-Tetrachlorophenol	232		15.981	15.982	(1.044)	44857	1.00000	0.7777

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012306.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL3
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	301377	-10.74
27 Naphthalene-d8	1265187	632594	2530374	1117281	-11.69
42 Acenaphthene-d10	692385	346193	1384770	611509	-11.68
59 Phenanthrene-d10	1376777	688389	2753554	1193129	-13.34
69 Chrysene-d12	1019524	509762	2039048	938680	-7.93
134 Di-n-octylphthala	2027111	1013556	4054222	1744984	-13.92
77 Perylene-d12	1027409	513705	2054818	995239	-3.13

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012306.D

Lab ID: SLC0084-CAL3
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 18:37

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

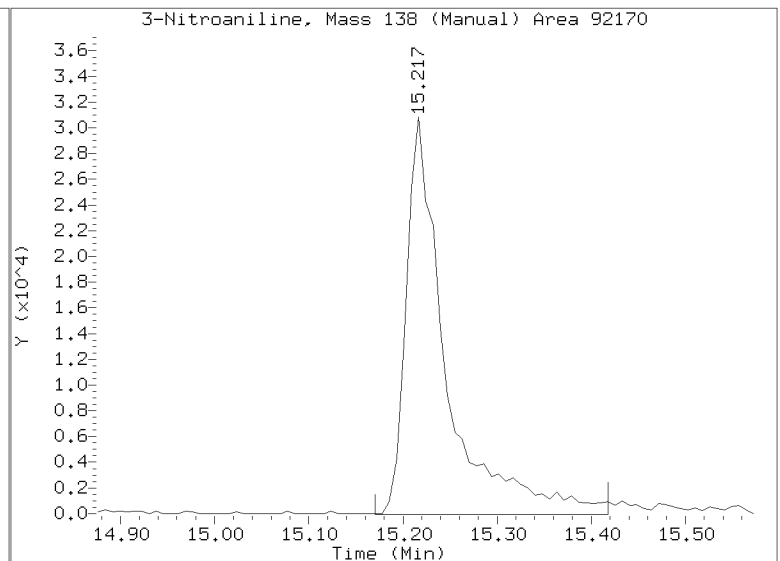
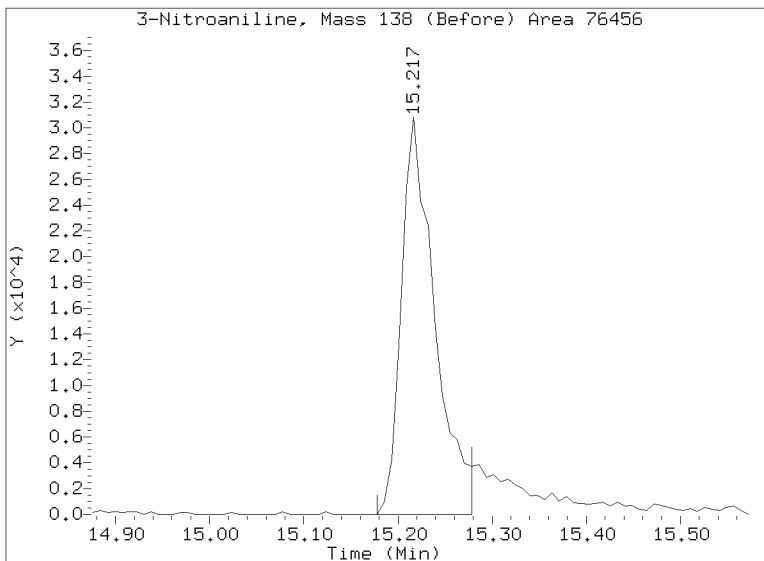
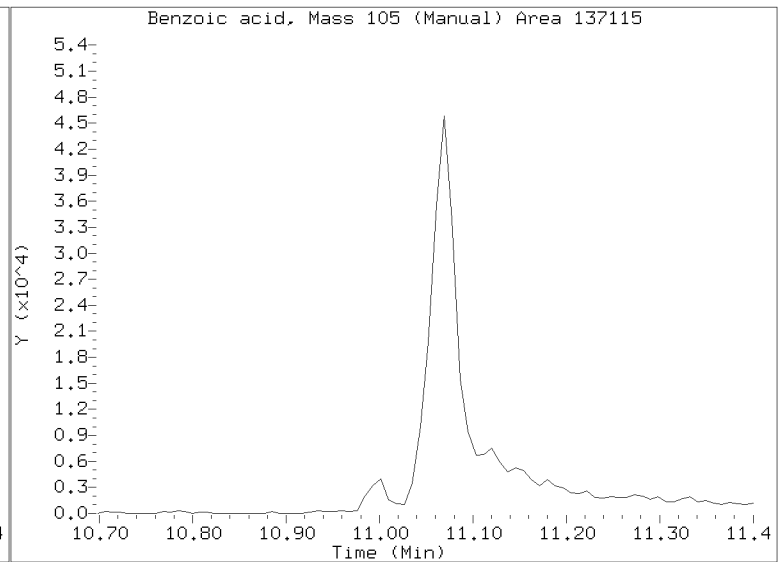
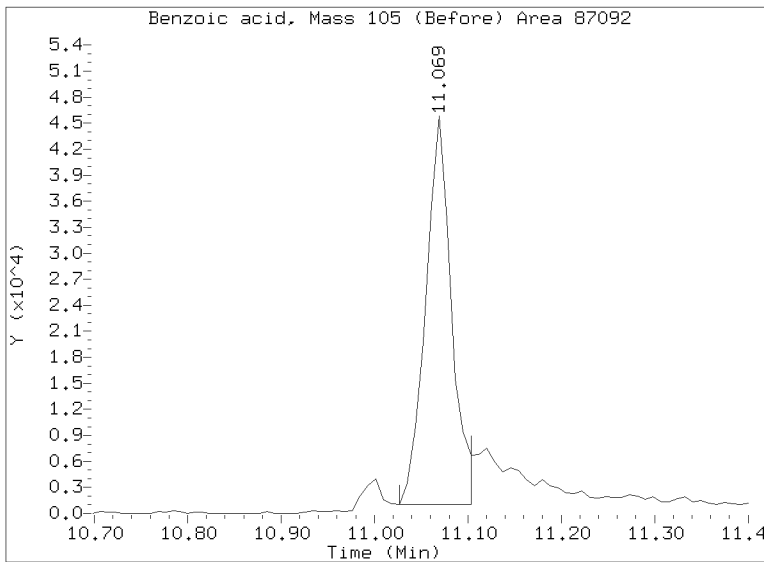
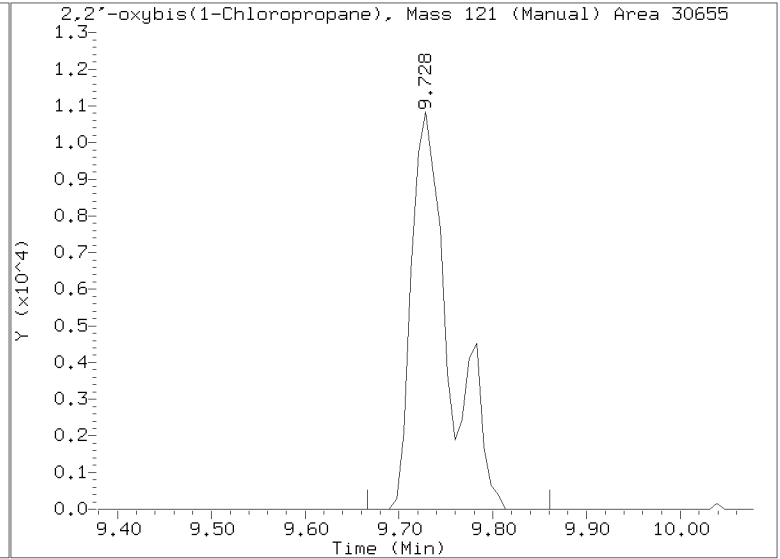
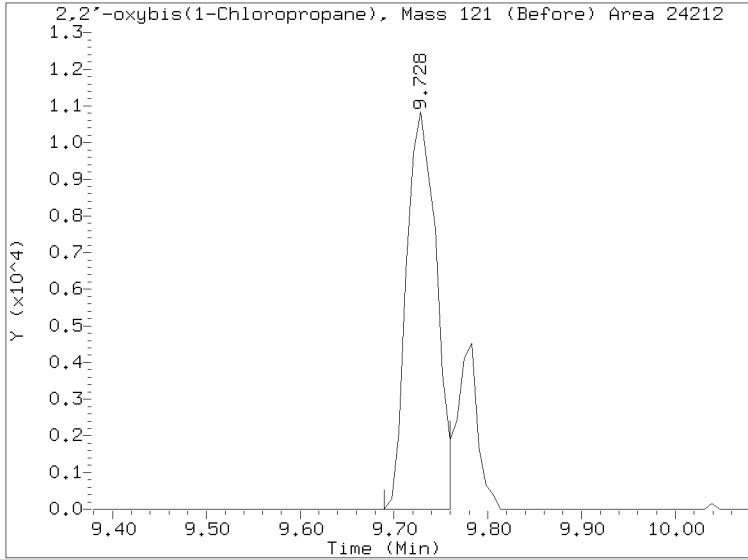
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012306.D
Injection Date: 01-MAR-2023 18:37
Lab ID: SLC0084-CAL3 Client ID:
Report Date: 03/07/2023 12:47



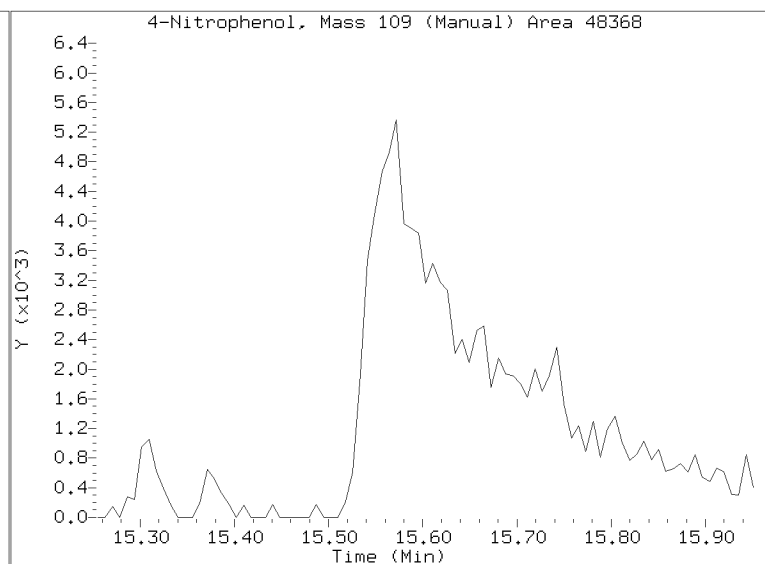
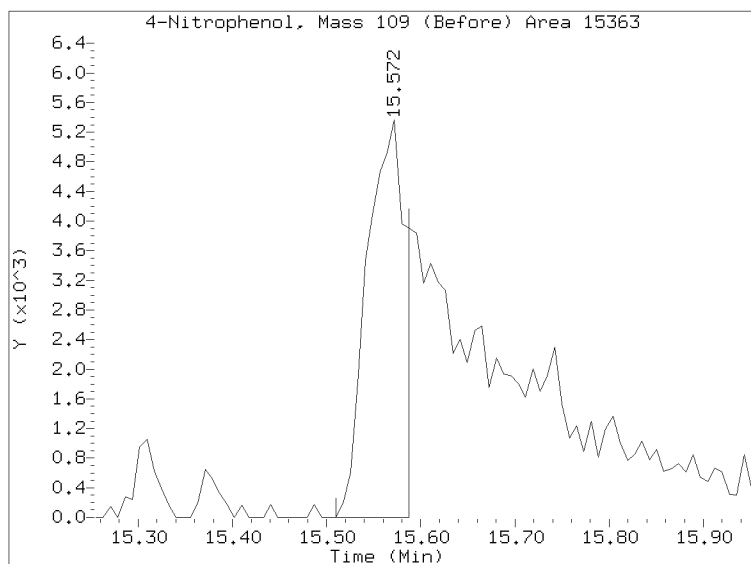
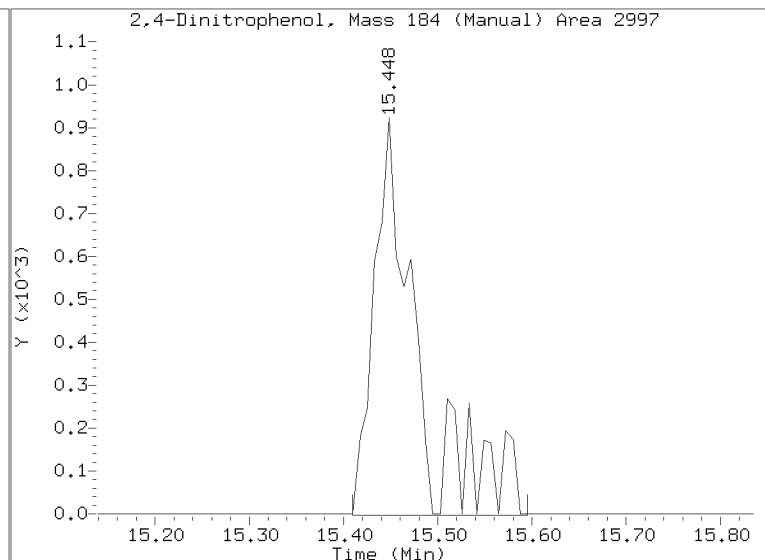
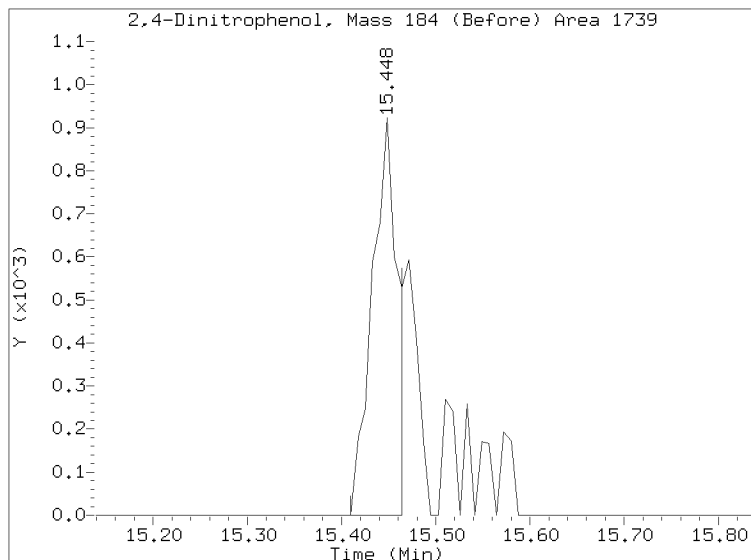
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012306.D

Injection Date: 01-MAR-2023 18:37

Lab ID:SLC0084-CAL3 Client ID:

Report Date: 03/07/2023 12:47



Data File: \\target\share\chem3\nt10.1\20230304.1\NT1003042307.D

Date: 01-MAR-2023 19:15

Client ID:

Sample Info: SEQ-CAL2

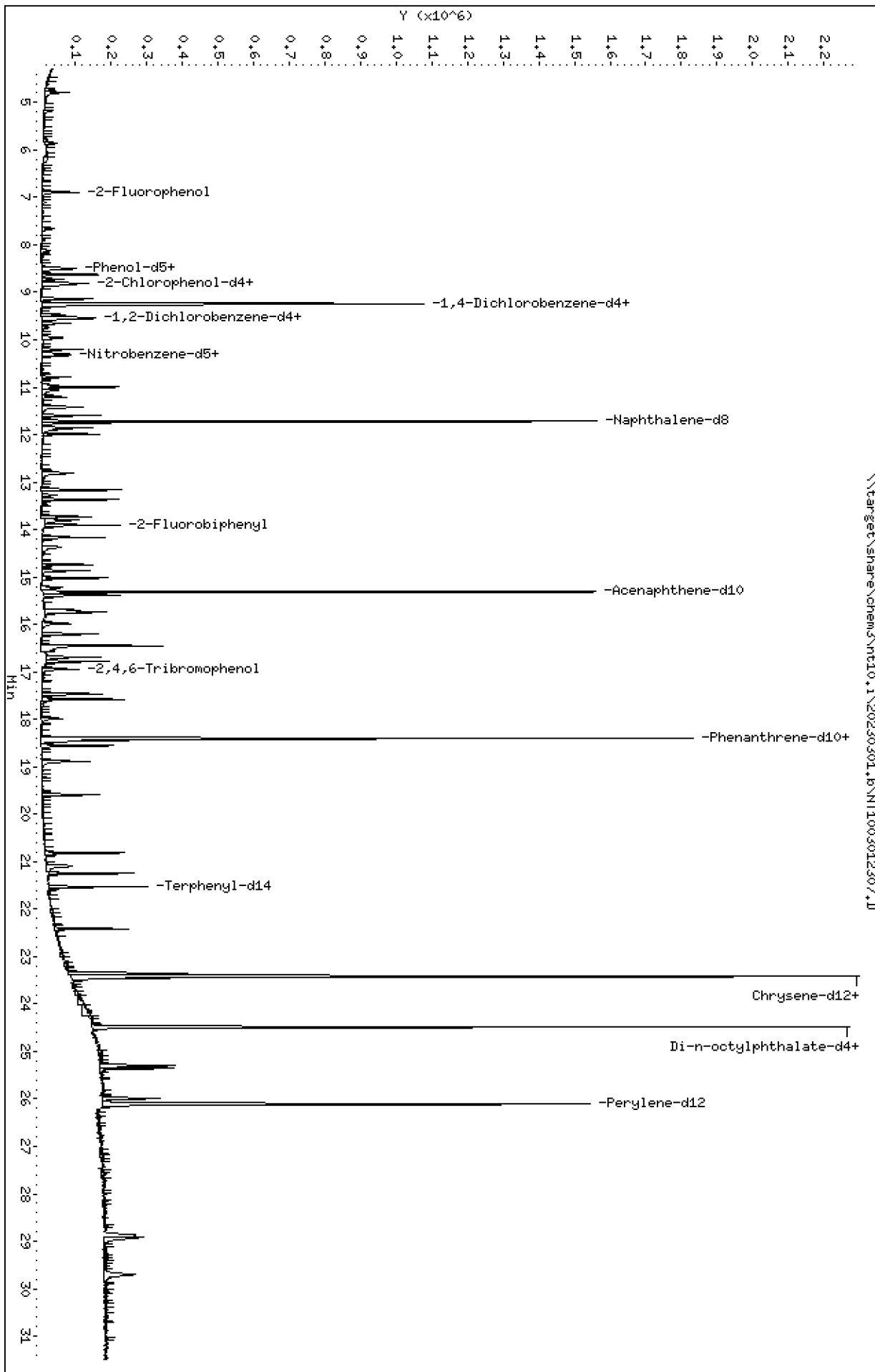
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230304.1\NT1003042307.D



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012307.D
 Lab Smp Id: SLC0084-CAL2
 Inj Date : 01-MAR-2023 19:15
 Operator : VTS
 Smp Info : SEQ-CAL2
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 2
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.898	(0.746)	73083	0.75000	0.7515
\$ 2 Phenol-d5	99		8.489	8.489	(0.918)	71998	0.75000	0.6377
3 Phenol	94		8.512	8.512	(0.921)	54993	0.50000	0.4581
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	65326	0.75000	0.6782
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	46454	0.50000	0.5064
6 2-Chlorophenol	128		8.844	8.844	(0.956)	49332	0.50000	0.4930
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	56555	0.50000	0.5126
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	309085	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	56202	0.50000	0.5128
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.031)	38492	0.50000	0.5349
12 1,2-Dichlorobenzene	146		9.565	9.565	(1.034)	55997	0.50000	0.5279
11 Benzyl alcohol	108		9.472	9.472	(1.024)	22563	0.50000	0.3662
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.728	(1.052)	15951	0.50000	0.5216 (M)
13 2-Methylphenol	108		9.650	9.650	(1.044)	35097	0.50000	0.3770
17 Hexachloroethane	117		10.209	10.209	(1.104)	21596	0.50000	0.4801
16 N-Nitroso-di-n-propylamine	70		9.976	9.976	(1.079)	33379	0.50000	0.4608
15 4-Methylphenol	108		9.938	9.938	(1.075)	34216	0.50000	0.2935
\$ 18 Nitrobenzene-d5	82		10.295	10.295	(0.878)	60423	0.50000	0.4823
19 Nitrobenzene	77		10.326	10.326	(0.881)	58860	0.50000	0.5008
20 Isophorone	82		10.784	10.784	(0.920)	67932	0.50000	0.4528
21 2-Nitrophenol	139		10.950	10.951	(0.934)	17402	0.50000	0.2672
22 2,4-Dimethylphenol	107		10.993	10.993	(0.938)	89913	1.00000	0.7989
23 Bis(2-Chloroethoxy)methane	93		11.205	11.205	(0.956)	44105	0.50000	0.4757
24 Benzoic acid	105		11.052	11.052	(0.943)	49931	2.00000	0.7491 (M)
25 2,4-Dichlorophenol	162		11.417	11.417	(0.974)	51563	1.00000	0.5816
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	45843	0.50000	0.5198
* 27 Naphthalene-d8	136		11.719	11.719	(1.000)	1141293	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	146854	0.50000	0.5013
29 4-Chloroaniline	127		11.858	11.858	(1.012)	87089	1.00000	0.6783
30 Hexachlorobutadiene	225		11.997	11.997	(1.024)	33578	0.50000	0.5229
31 4-Chloro-3-methylphenol	107		12.809	12.809	(1.093)	73535	1.00000	0.7874 (M)
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	101087	0.50000	0.4885
33 Hexachlorocyclopentadiene	237		13.475	13.475	(0.880)	4424	1.00000	0.2199

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.730	13.730	(0.897)	37873	1.00000	0.6553
35 2,4,5-Trichlorophenol	196	13.808	13.808	(0.902)	46262	1.00000	0.7495 (M)
§ 36 2-Fluorobiphenyl	172	13.908	13.908	(0.909)	103793	0.50000	0.4770
37 2-Chloronaphthalene	162	14.164	14.164	(0.925)	81746	0.50000	0.4786
38 2-Nitroaniline	65	14.365	14.365	(0.938)	27339	1.00000	0.5847
39 Dimethylphthalate	163	14.736	14.736	(0.963)	98784	0.50000	0.5014
40 Acenaphthylene	152	15.023	15.023	(0.981)	131073	0.50000	0.4451
41 2,6-Dinitrotoluene	165	14.868	14.868	(0.971)	31365	1.00000	0.7243
* 42 Acenaphthene-d10	164	15.309	15.309	(1.000)	610034	4.00000	
43 3-Nitroaniline	138	15.224	15.224	(0.994)	43311	1.00000	0.8718 (M)
44 Acenaphthene	153	15.378	15.378	(1.005)	85733	0.50000	0.4827
45 2,4-Dinitrophenol	184	15.487	15.487	(1.012)	110	2.00000	0.009684 (M)
46 Dibenzofuran	168	15.734	15.734	(1.028)	121057	0.50000	0.4593
47 4-Nitrophenol	109	15.603	15.603	(1.019)	13803	1.00000	0.4011 (M)
48 2,4-Dinitrotoluene	165	15.703	15.703	(1.026)	37337	1.00000	0.5948
50 Diethylphthalate	149	16.198	16.198	(1.058)	100457	0.50000	0.4813
49 Fluorene	166	16.453	16.453	(1.075)	98414	0.50000	0.4488
51 4-Chlorophenyl-phenylether	204	16.453	16.453	(1.075)	43341	0.50000	0.4527
52 4-Nitroaniline	138	16.484	16.484	(1.077)	47270	1.00000	0.8851 (M)
53 4,6-Dinitro-2-methylphenol	198	16.538	16.538	(0.899)	4630	2.00000	0.1693
54 N-Nitrosodiphenylamine	169	16.693	16.693	(0.907)	74962	0.50000	0.4317
§ 55 2,4,6-Tribromophenol	330	16.947	16.947	(1.107)	18967	0.75000	0.5052
56 4-Bromophenyl-phenylether	248	17.472	17.472	(0.950)	34249	0.50000	0.4868
57 Hexachlorobenzene	284	17.573	17.573	(0.955)	40888	0.50000	0.5161
58 Pentachlorophenol	266	17.983	17.983	(0.977)	14168	1.00000	0.3878
* 59 Phenanthrene-d10	188	18.401	18.401	(1.000)	1173527	4.00000	
60 Phenanthrene	178	18.448	18.448	(1.003)	143016	0.50000	0.4762
61 Anthracene	178	18.556	18.556	(1.008)	133884	0.50000	0.4597
62 Carbazole	167	18.889	18.889	(1.026)	122901	0.50000	0.4607
63 Di-n-butylphthalate	149	19.585	19.585	(1.064)	146445	0.50000	0.4038
64 Fluoranthene	202	20.815	20.815	(0.889)	155822	0.50000	0.4522
65 Pyrene	202	21.248	21.248	(0.907)	164566	0.50000	0.4690
§ 66 Terphenyl-d14	244	21.527	21.527	(0.919)	131168	0.50000	0.4620
67 Butylbenzylphthalate	149	22.410	22.410	(0.957)	70195	0.50000	0.3719
68 Benzo(a)anthracene	228	23.401	23.401	(0.999)	158176	0.50000	0.4479
* 69 Chrysene-d12	240	23.416	23.416	(1.000)	1001661	4.00000	
70 3,3'-Dichlorobenzidine	252	23.347	23.347	(0.997)	142024	1.50000	0.9022
71 Chrysene	228	23.463	23.463	(1.002)	140361	0.50000	0.4890
72 bis(2-Ethylhexyl)phthalate	149	23.409	23.409	(0.956)	105513	0.50000	0.4214
* 134 Di-n-octylphthalate-d4	153	24.485	24.485	(1.000)	1783007	4.00000	
73 Di-n-octylphthalate	149	24.492	24.492	(1.000)	204916	0.50000	0.5183
74 Benzo(b)fluoranthene	252	25.298	25.298	(0.969)	156722	0.50000	0.4299
75 Benzo(k)fluoranthene	252	25.352	25.352	(0.971)	155908	0.50000	0.4441
76 Benzo(a)pyrene	252	25.987	25.987	(0.996)	144884	0.50000	0.4445
* 77 Perylene-d12	264	26.103	26.103	(1.000)	1066145	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	28.863	28.863	(1.106)	151642	0.50000	0.3981
79 Dibenzo(a,h)anthracene	278	28.925	28.925	(1.108)	126593	0.50000	0.4379
80 Benzo(g,h,i)perylene	276	29.709	29.709	(1.138)	127815	0.50000	0.4212
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.510)	69861	1.00000	1.113 (M)
91 Aniline	93	8.628	8.628	(0.933)	135586	1.00000	0.9742
93 Benzidine	184	21.094	21.094	(0.901)	121576	1.00000	0.7948 (M)
103 Pyridine	79	4.789	4.789	(0.518)	112215	1.00000	1.008
105 1-methylnaphthalene	142	13.366	13.366	(1.141)	91063	0.50000	0.4862
111 Azobenzene (1,2-DP-Hydrazine)	77	16.778	16.778	(1.096)	142734	0.50000	0.4580

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.352	25.352	(0.971)	310053	1.00000	0.8852
120 2,3,4,6-Tetrachlorophenol	232		15.981	15.982	(1.044)	20543	0.50000	0.3587

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012307.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	309085	-8.46
27 Naphthalene-d8	1265187	632594	2530374	1141293	-9.79
42 Acenaphthene-d10	692385	346193	1384770	610034	-11.89
59 Phenanthrene-d10	1376777	688389	2753554	1173527	-14.76
69 Chrysene-d12	1019524	509762	2039048	1001661	-1.75
134 Di-n-octylphthala	2027111	1013556	4054222	1783007	-12.04
77 Perylene-d12	1027409	513705	2054818	1066145	3.77

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.01
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012307.D

Lab ID: SLC0084-CAL2
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 19:15

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

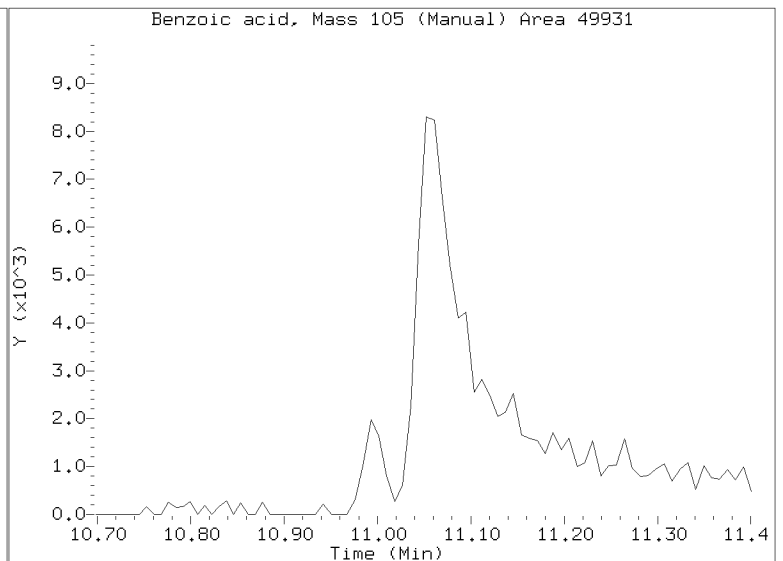
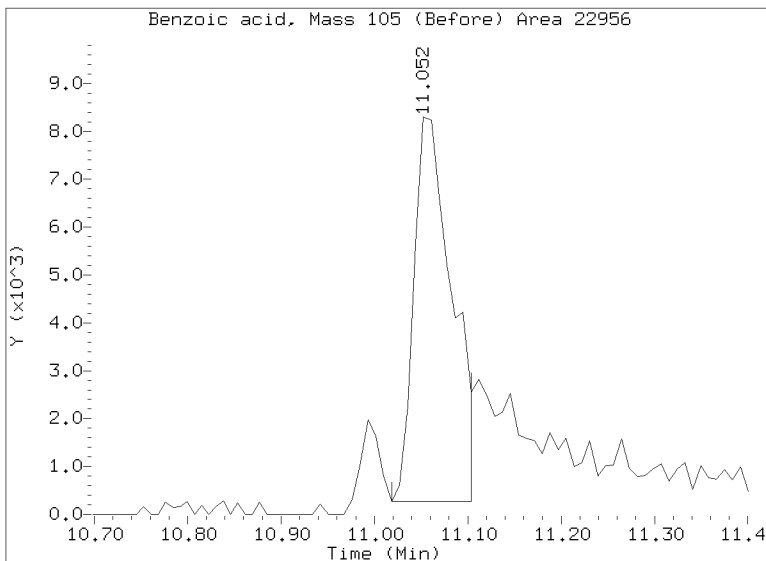
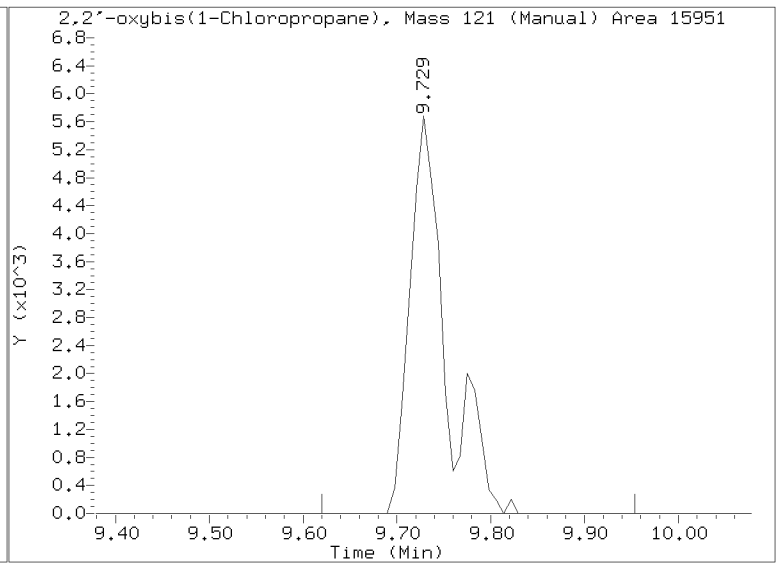
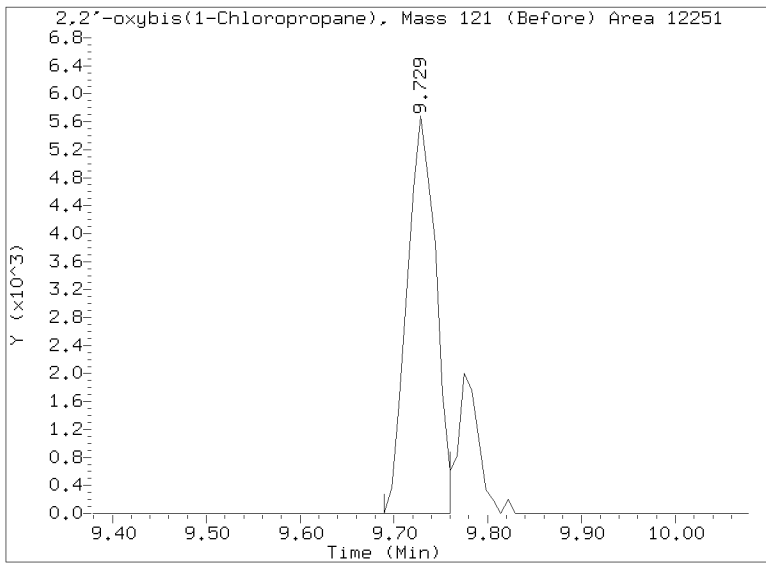
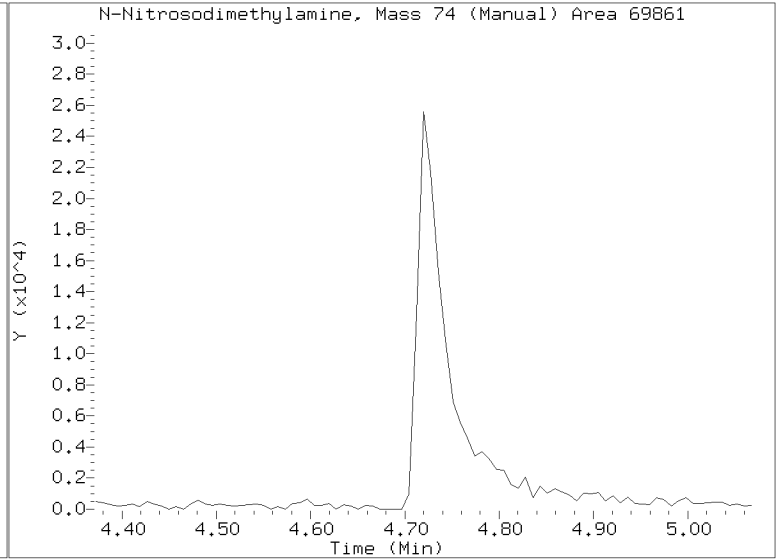
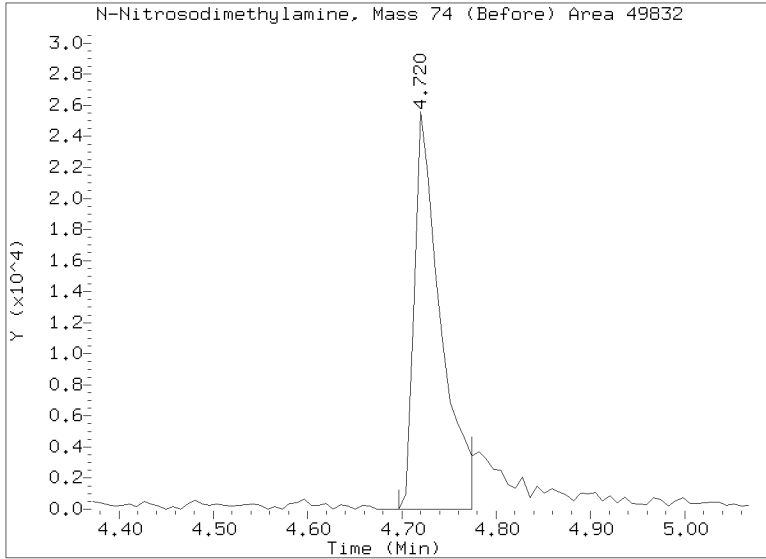
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

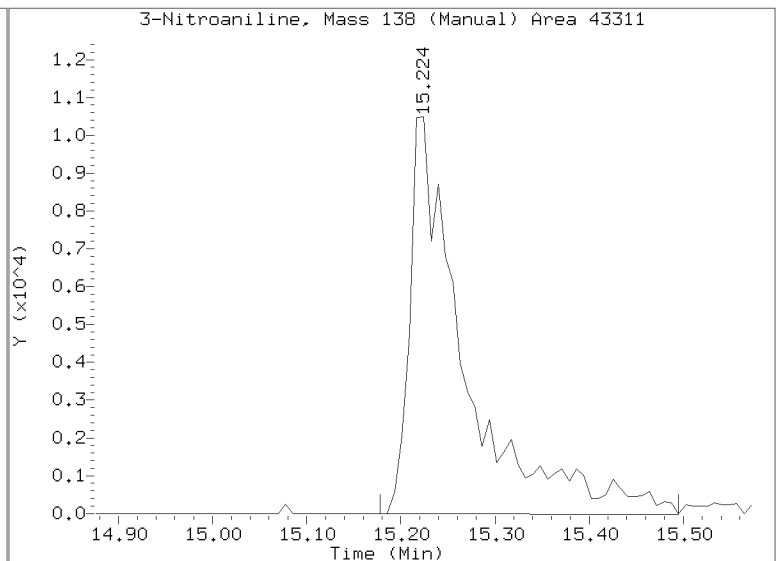
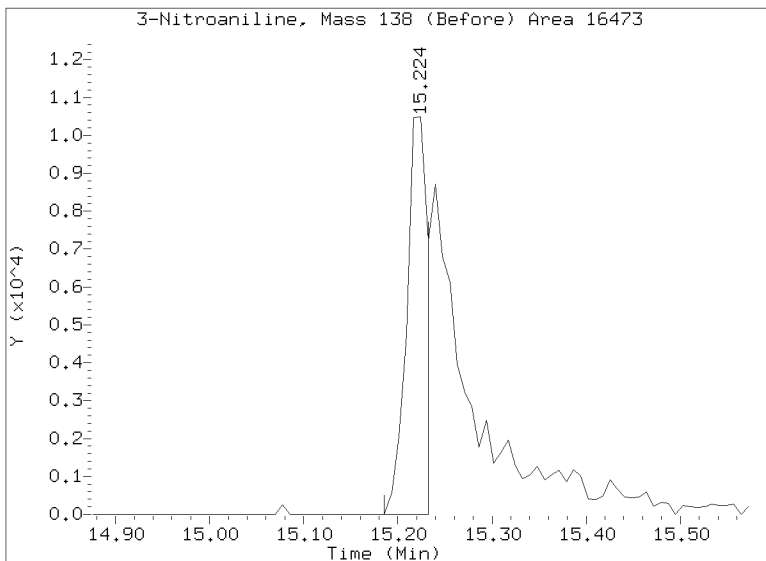
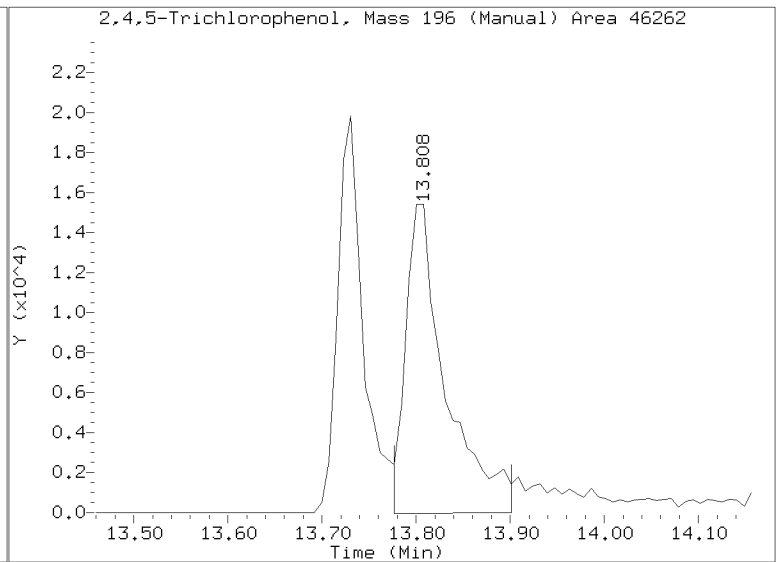
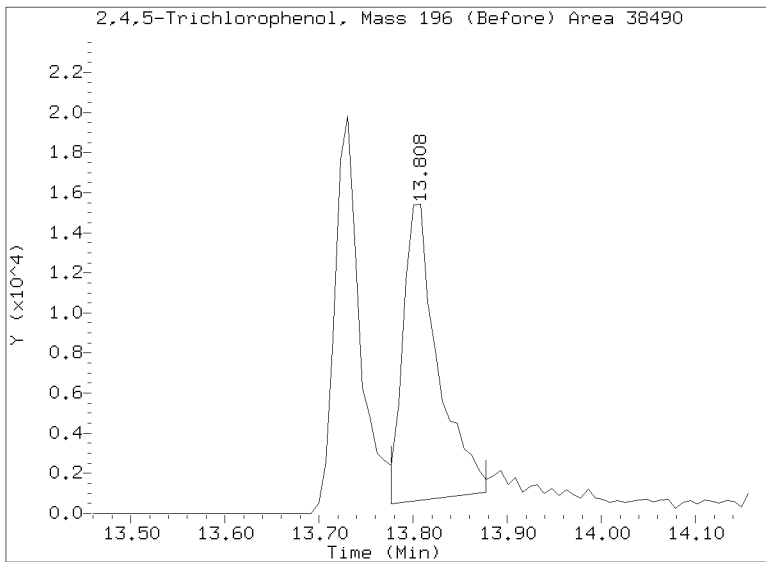
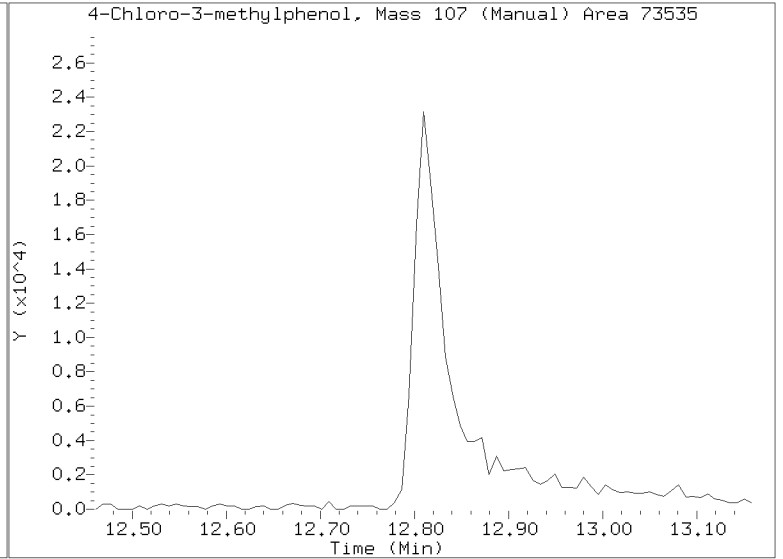
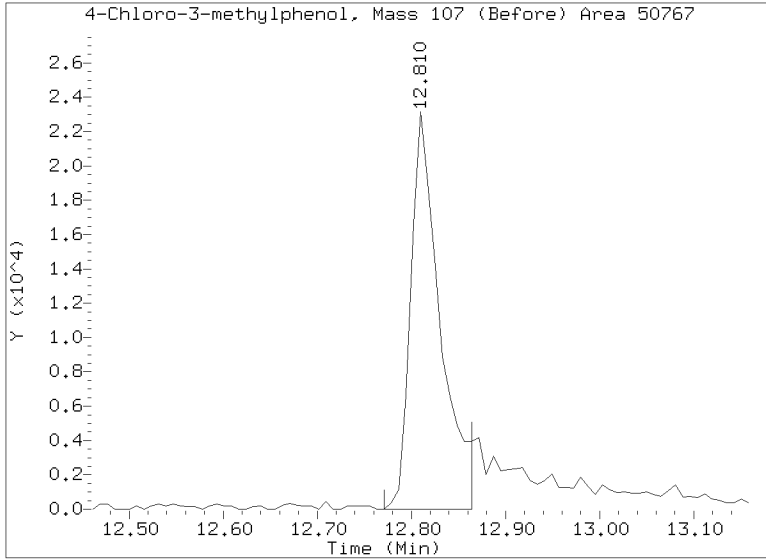
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012307.D
Injection Date: 01-MAR-2023 19:15
Lab ID: SLC0084-CAL2 Client ID:
Report Date: 03/07/2023 12:48



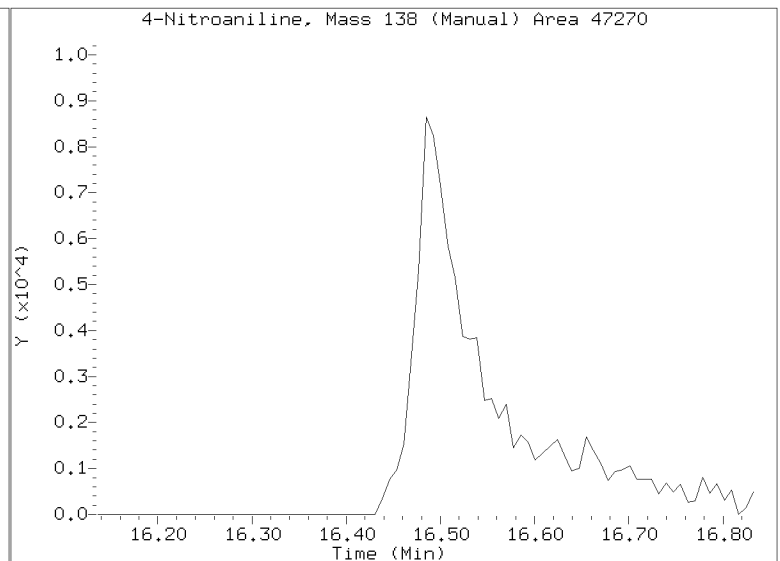
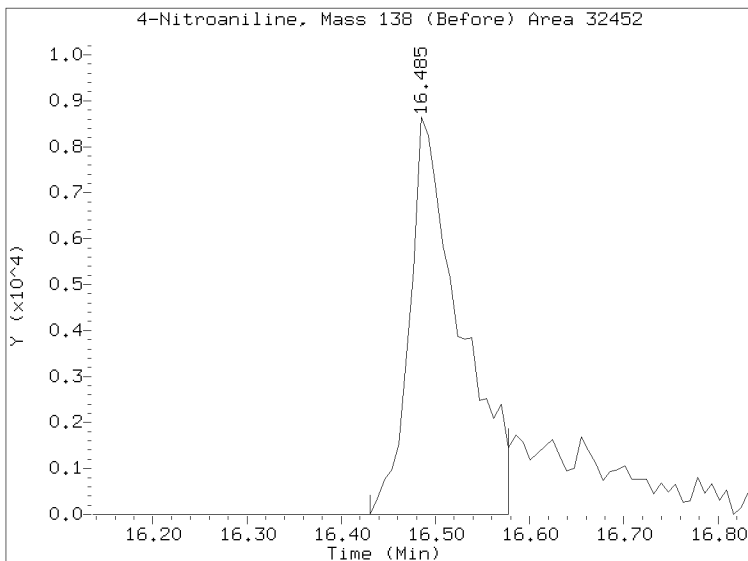
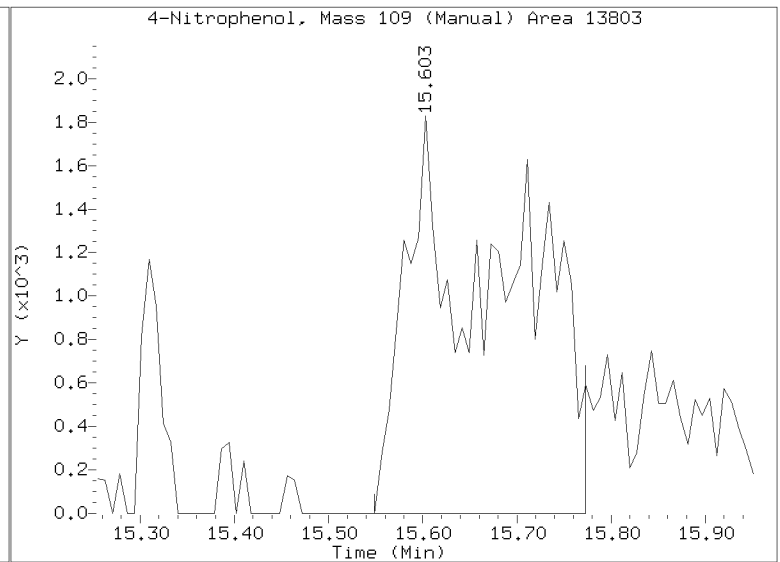
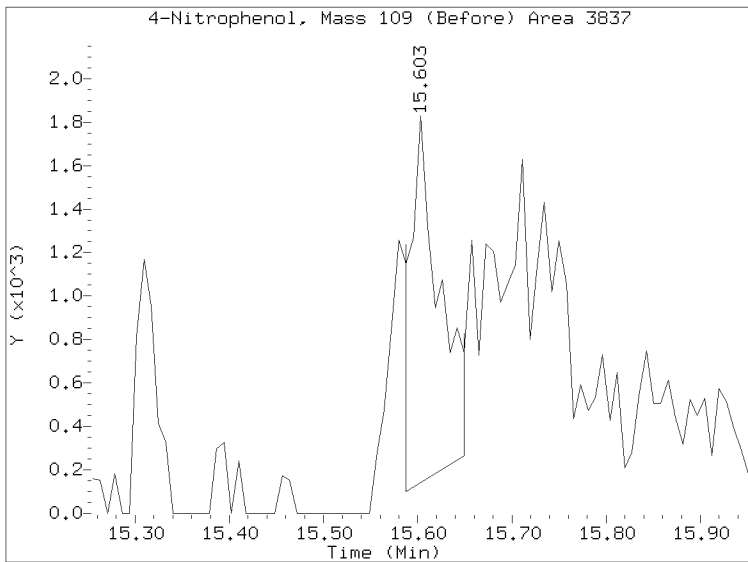
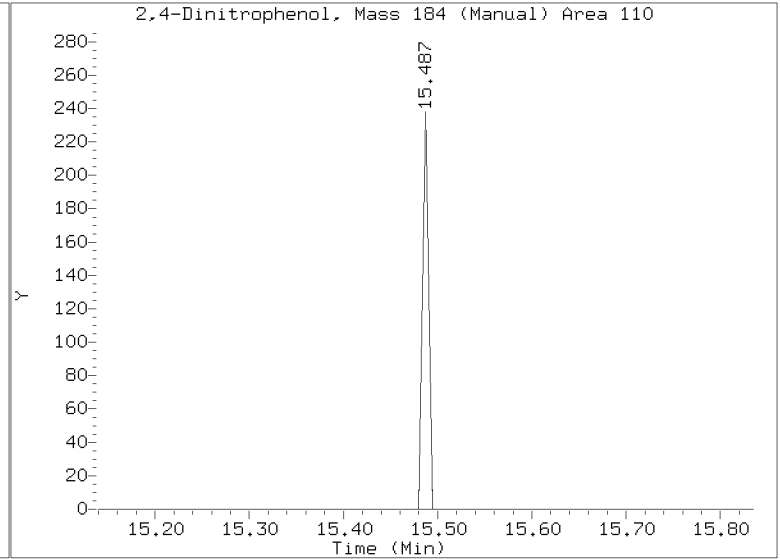
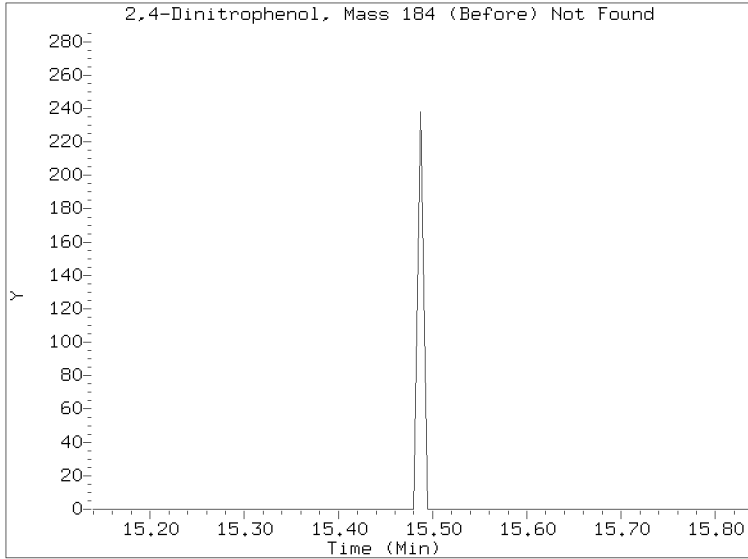
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012307.D
Injection Date: 01-MAR-2023 19:15
Lab ID: SLC0084-CAL2 Client ID:
Report Date: 03/07/2023 12:48



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012307.D
Injection Date: 01-MAR-2023 19:15
Lab ID: SLC0084-CAL2 Client ID:
Report Date: 03/07/2023 12:48



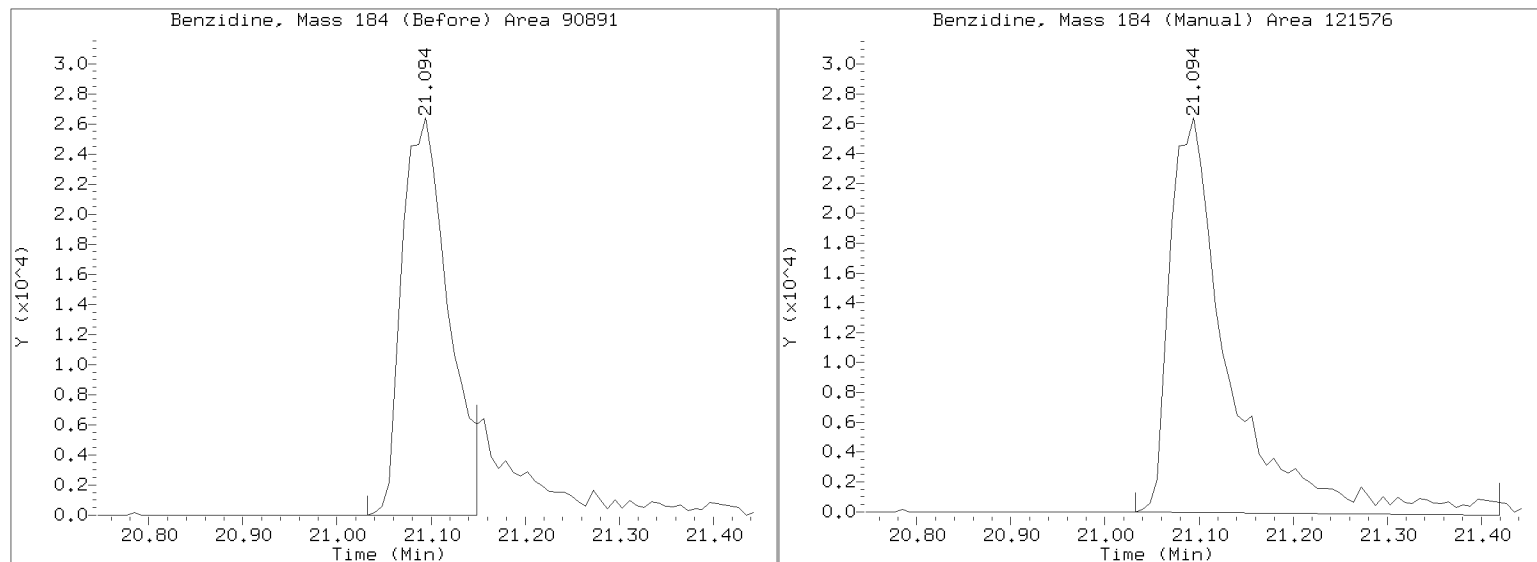
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012307.D

Injection Date: 01-MAR-2023 19:15

Lab ID: SLC0084-CAL2 Client ID:

Report Date: 03/07/2023 12:48



Data File: \\target\share\chem3\nt10,1\20230304,16\NT1003042308.D

Date: 01-HR-2023 19:53

Client ID:

Sample Info: SEQ-CALL

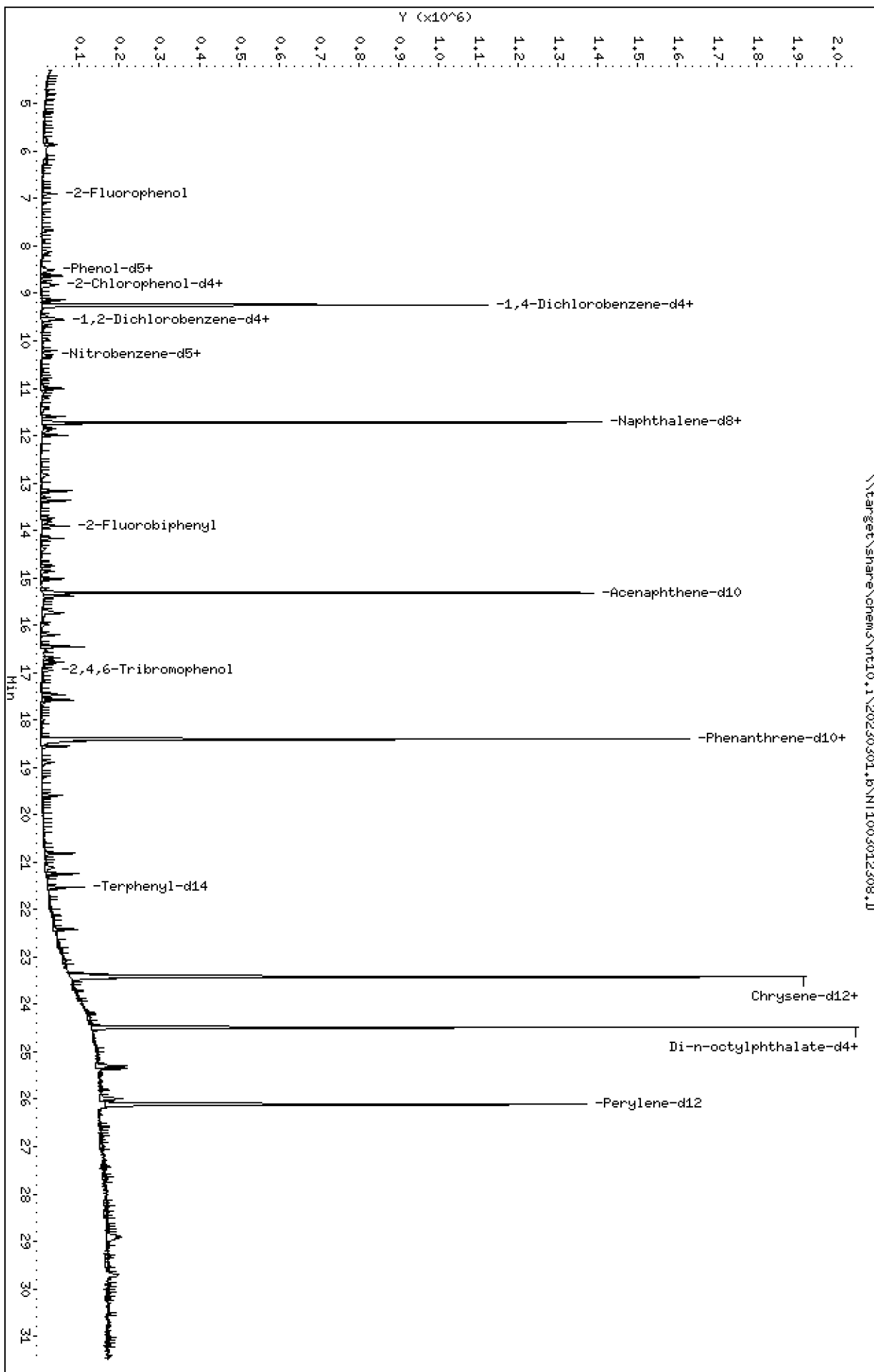
Column phase: ZB-5msi

Instrument: nt10,1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10,1\20230304,16\NT1003042308.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012308.D
 Lab Smp Id: SLC0084-CAL1
 Inj Date : 01-MAR-2023 19:53
 Operator : VTS
 Smp Info : SEQ-CAL1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i
 Quant Type: ISTD
 Cal File: NT1003012307.D
 Calibration Sample, Level: 1
 Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.898	(0.746)	25602	0.30000	0.2755
\$ 2 Phenol-d5	99		8.488	8.489	(0.918)	26717	0.30000	0.2477 (M)
3 Phenol	94		8.519	8.512	(0.921)	18277	0.20000	0.1594
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	21173	0.30000	0.2301
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	17577	0.20000	0.2006
6 2-Chlorophenol	128		8.844	8.844	(0.956)	15855	0.20000	0.1658
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	21720	0.20000	0.2060
* 8 1,4-Dichlorobenzene-d4	152		9.246	9.247	(1.000)	295317	4.00000	
9 1,4-Dichlorobenzene	146		9.277	9.278	(1.003)	20713	0.20000	0.1978
\$ 10 1,2-Dichlorobenzene-d4	152		9.533	9.534	(1.031)	13448	0.20000	0.1956 (M)
12 1,2-Dichlorobenzene	146		9.565	9.565	(1.034)	20309	0.20000	0.2004
11 Benzyl alcohol	108		9.479	9.472	(1.025)	5646	0.20000	0.09603
14 2,2'-oxybis(1-Chloropropane)	121		9.735	9.728	(1.053)	5507	0.20000	0.1885 (M)
13 2-Methylphenol	108		9.658	9.650	(1.044)	9715	0.20000	0.1094
17 Hexachloroethane	117		10.209	10.209	(1.104)	8788	0.20000	0.2045
16 N-Nitroso-di-n-propylamine	70		9.976	9.976	(1.079)	12076	0.20000	0.1745 (M)
15 4-Methylphenol	108		9.953	9.938	(1.076)	11667	0.20000	0.1047 (M)
\$ 18 Nitrobenzene-d5	82		10.294	10.295	(0.878)	19356	0.20000	0.1640
19 Nitrobenzene	77		10.333	10.326	(0.882)	19314	0.20000	0.1745
20 Isophorone	82		10.783	10.784	(0.920)	27546	0.20000	0.1949 (M)
21 2-Nitrophenol	139		10.950	10.951	(0.934)	4962	0.20000	0.08077
22 2,4-Dimethylphenol	107		11.001	10.993	(0.939)	27927	0.40000	0.2638
23 Bis(2-Chloroethoxy)methane	93		11.213	11.205	(0.957)	14385	0.20000	0.1647
24 Benzoic acid	105		11.085	11.052	(0.946)	14999	0.80000	0.2391 (M)
25 2,4-Dichlorophenol	162		11.416	11.417	(0.974)	17852	0.40000	0.2140 (M)
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	15571	0.20000	0.1874
* 27 Naphthalene-d8	136		11.718	11.719	(1.000)	1075084	4.00000	
28 Naphthalene	128		11.764	11.765	(1.004)	54135	0.20000	0.1962
29 4-Chloroaniline	127		11.865	11.858	(1.013)	30944	0.40000	0.2562 (M)
30 Hexachlorobutadiene	225		11.996	11.997	(1.024)	10228	0.20000	0.1691
31 4-Chloro-3-methylphenol	107		12.817	12.809	(1.094)	26030	0.40000	0.2965 (M)
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	33913	0.20000	0.1740
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.879)	1171	0.40000	0.06762

Compounds	QUANT SIG		AMOUNTS					
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)	
34 2,4,6-Trichlorophenol	196	13.730	13.730	(0.896)	9351	0.40000	0.1882	
35 2,4,5-Trichlorophenol	196	13.815	13.808	(0.902)	15928	0.40000	0.3001 (M)	
§ 36 2-Fluorobiphenyl	172	13.908	13.908	(0.908)	32684	0.20000	0.1743	
37 2-Chloronaphthalene	162	14.163	14.164	(0.925)	25881	0.20000	0.1758	
38 2-Nitroaniline	65	14.372	14.365	(0.938)	15452	0.40000	0.3838 (M)	
39 Dimethylphthalate	163	14.744	14.736	(0.963)	29256	0.20000	0.1723	
40 Acenaphthylene	152	15.022	15.023	(0.981)	48690	0.20000	0.1919	
41 2,6-Dinitrotoluene	165	14.867	14.868	(0.971)	7739	0.40000	0.2078	
* 42 Acenaphthene-d10	164	15.316	15.309	(1.000)	525641	4.00000		
43 3-Nitroaniline	138	15.231	15.224	(0.994)	11148	0.40000	0.2604 (M)	
44 Acenaphthene	153	15.378	15.378	(1.004)	28519	0.20000	0.1864	
45 2,4-Dinitrophenol	184	Compound Not Detected.						
46 Dibenzofuran	168	15.741	15.734	(1.028)	40195	0.20000	0.1770	
47 4-Nitrophenol	109	Compound Not Detected.						
48 2,4-Dinitrotoluene	165	15.703	15.703	(1.025)	12046	0.40000	0.2230	
50 Diethylphthalate	149	16.197	16.198	(1.058)	31220	0.20000	0.1736	
49 Fluorene	166	16.453	16.453	(1.074)	31088	0.20000	0.1645	
51 4-Chlorophenyl-phenylether	204	16.453	16.453	(1.074)	13684	0.20000	0.1663	
52 4-Nitroaniline	138	16.515	16.484	(1.078)	14319	0.40000	0.3112 (M)	
53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
54 N-Nitrosodiphenylamine	169	16.692	16.693	(0.907)	25288	0.20000	0.1606	
§ 55 2,4,6-Tribromophenol	330	16.947	16.947	(1.106)	5717	0.30000	0.1771	
56 4-Bromophenyl-phenylether	248	17.472	17.472	(0.950)	9489	0.20000	0.1487	
57 Hexachlorobenzene	284	17.580	17.573	(0.955)	14082	0.20000	0.1960	
58 Pentachlorophenol	266	17.998	17.983	(0.978)	2963	0.40000	0.08958 (M)	
* 59 Phenanthrene-d10	188	18.401	18.401	(1.000)	1064230	4.00000		
60 Phenanthrene	178	18.447	18.448	(1.003)	48914	0.20000	0.1796	
61 Anthracene	178	18.556	18.556	(1.008)	43808	0.20000	0.1659	
62 Carbazole	167	18.896	18.889	(1.027)	40590	0.20000	0.1678 (M)	
63 Di-n-butylphthalate	149	19.592	19.585	(1.065)	47781	0.20000	0.1456	
64 Fluoranthene	202	20.815	20.815	(0.889)	49202	0.20000	0.1574	
65 Pyrene	202	21.248	21.248	(0.907)	54871	0.20000	0.1724	
§ 66 Terphenyl-d14	244	21.527	21.527	(0.919)	45467	0.20000	0.1766	
67 Butylbenzylphthalate	149	22.409	22.410	(0.957)	20677	0.20000	0.1206	
68 Benzo(a)anthracene	228	23.400	23.401	(0.999)	55541	0.20000	0.1734	
* 69 Chrysene-d12	240	23.416	23.416	(1.000)	908515	4.00000		
70 3,3'-Dichlorobenzidine	252	23.362	23.347	(0.998)	43228	0.60000	0.3030	
71 Chrysene	228	23.462	23.463	(1.002)	52710	0.20000	0.2025 (M)	
72 bis(2-Ethylhexyl)phthalate	149	23.408	23.409	(0.956)	33184	0.20000	0.1426	
* 134 Di-n-octylphthalate-d4	153	24.484	24.485	(1.000)	1659419	4.00000		
73 Di-n-octylphthalate	149	24.492	24.492	(1.000)	76336	0.20000	0.2074	
74 Benzo(b)fluoranthene	252	25.297	25.298	(0.969)	50227	0.20000	0.1519	
75 Benzo(k)fluoranthene	252	25.359	25.352	(0.972)	51821	0.20000	0.1628	
76 Benzo(a)pyrene	252	25.986	25.987	(0.996)	45223	0.20000	0.1530	
* 77 Perylene-d12	264	26.102	26.103	(1.000)	969731	4.00000		
78 Indeno(1,2,3-cd)pyrene	276	28.870	28.863	(1.106)	50510	0.20000	0.1461 (M)	
79 Dibenzo(a,h)anthracene	278	28.924	28.925	(1.108)	40681	0.20000	0.1552 (M)	
80 Benzo(g,h,i)perylene	276	29.717	29.709	(1.138)	44573	0.20000	0.1618 (M)	
90 N-Nitrosodimethylamine	74	4.742	4.719	(0.513)	25771	0.40000	0.4296 (M)	
91 Aniline	93	8.627	8.628	(0.933)	47923	0.40000	0.3604	
93 Benzidine	184	21.093	21.094	(0.901)	29448	0.40000	0.2122 (M)	
103 Pyridine	79	4.796	4.789	(0.519)	43491	0.40000	0.4088 (M)	
105 1-methylnaphthalene	142	13.366	13.366	(1.141)	31583	0.20000	0.1790	
111 Azobenzene (1,2-DP-Hydrazine)	77	16.777	16.778	(1.095)	41927	0.20000	0.1561	

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.297	25.352	(0.969)	105381	0.40000	0.3317
120 2,3,4,6-Tetrachlorophenol	232		15.981	15.982	(1.043)	5199	0.20000	0.1056

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012308.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-CAL1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	295317	-12.54
27 Naphthalene-d8	1265187	632594	2530374	1075084	-15.03
42 Acenaphthene-d10	692385	346193	1384770	525641	-24.08
59 Phenanthrene-d10	1376777	688389	2753554	1064230	-22.70
69 Chrysene-d12	1019524	509762	2039048	908515	-10.89
134 Di-n-octylphthala	2027111	1013556	4054222	1659419	-18.14
77 Perylene-d12	1027409	513705	2054818	969731	-5.61

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012308.D

Lab ID: SLC0084-CAL1
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 19:53

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

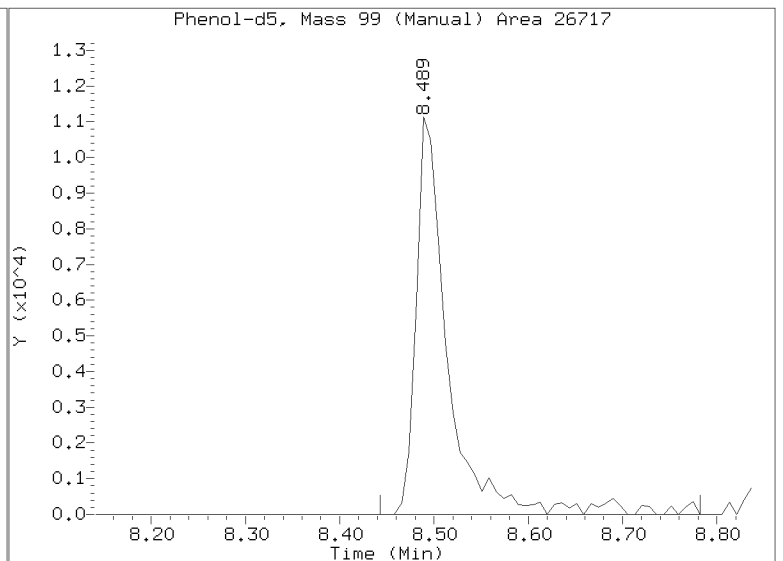
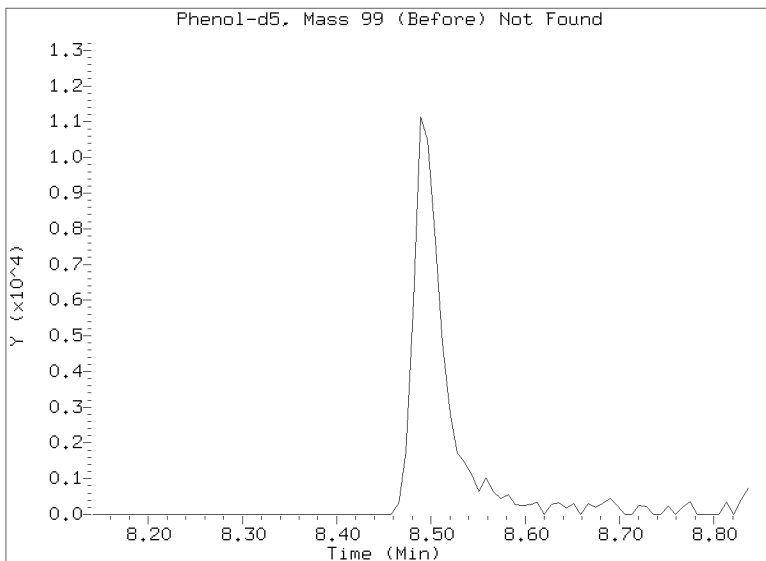
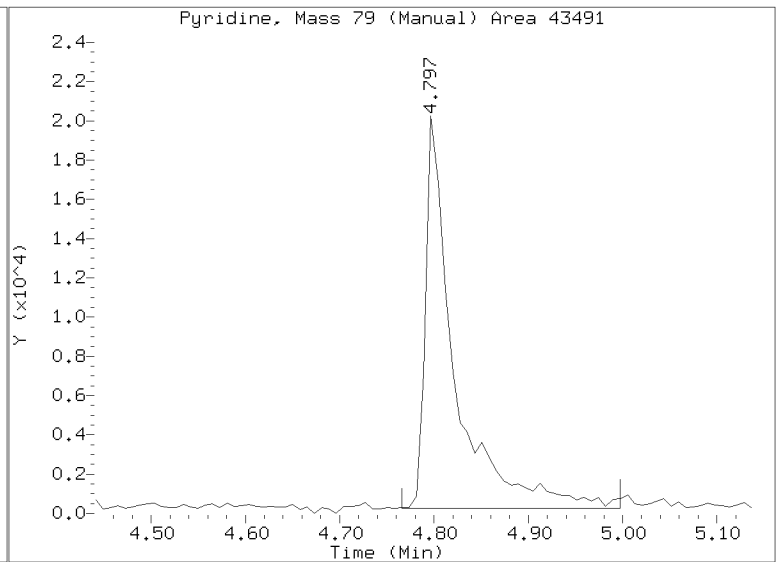
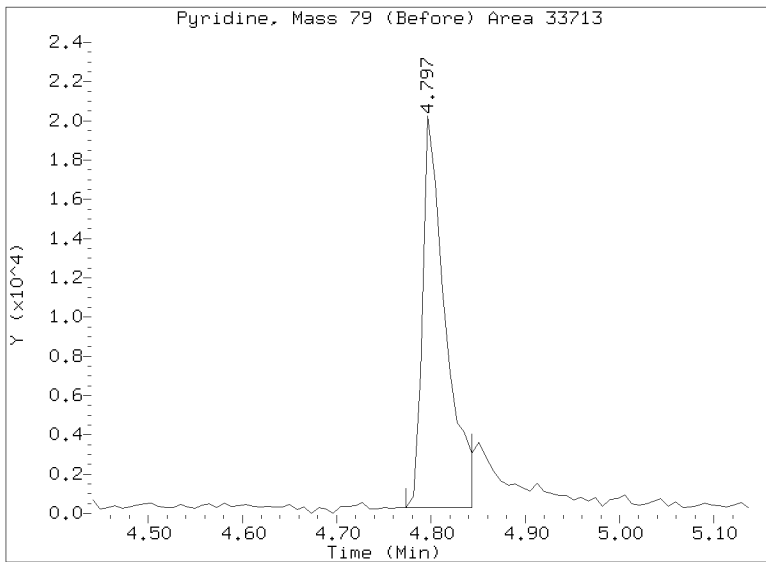
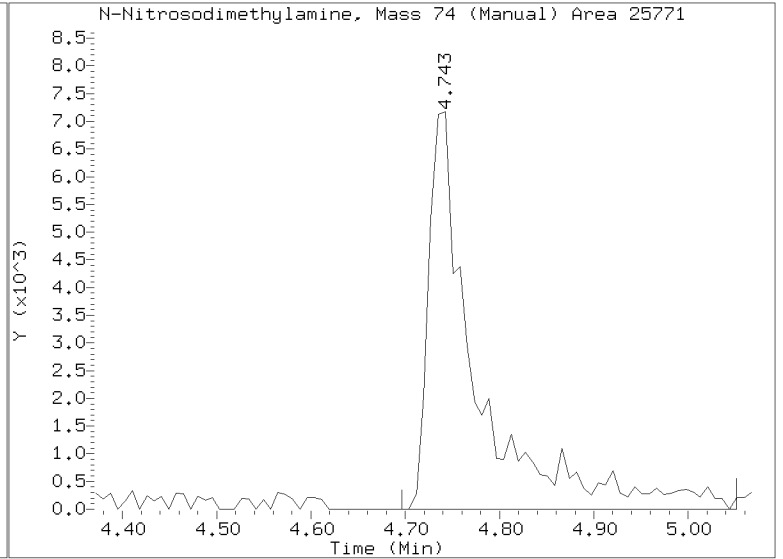
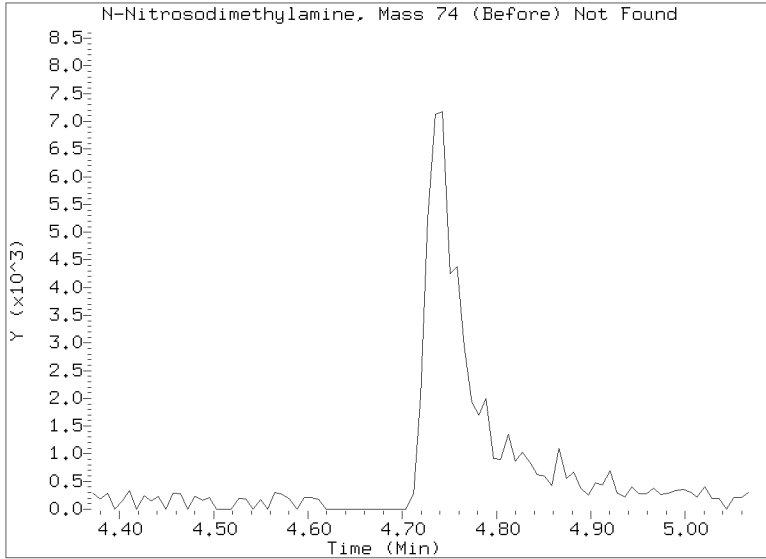
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

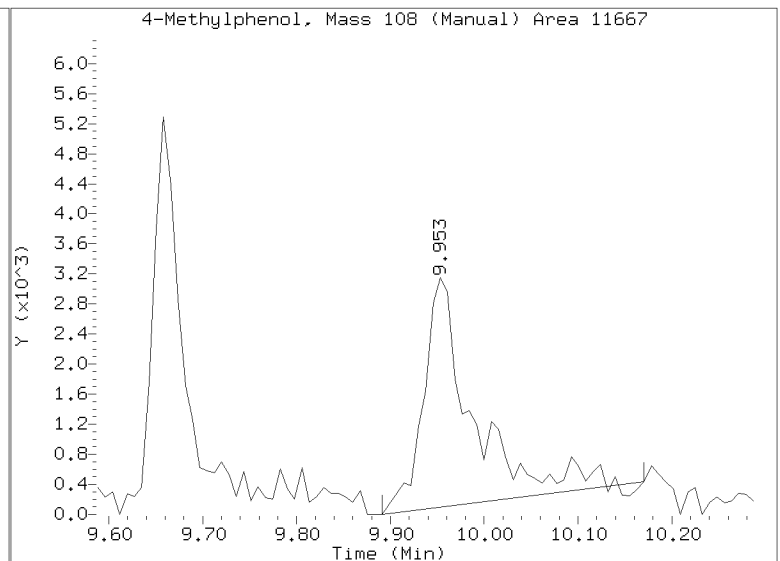
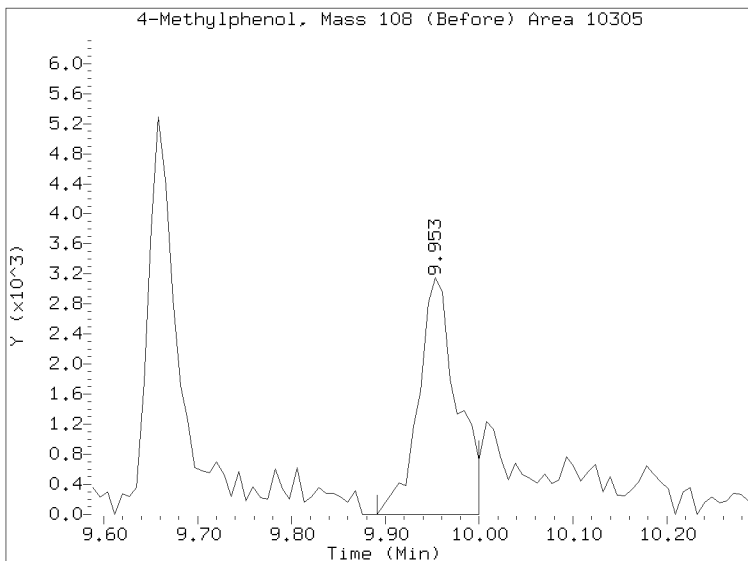
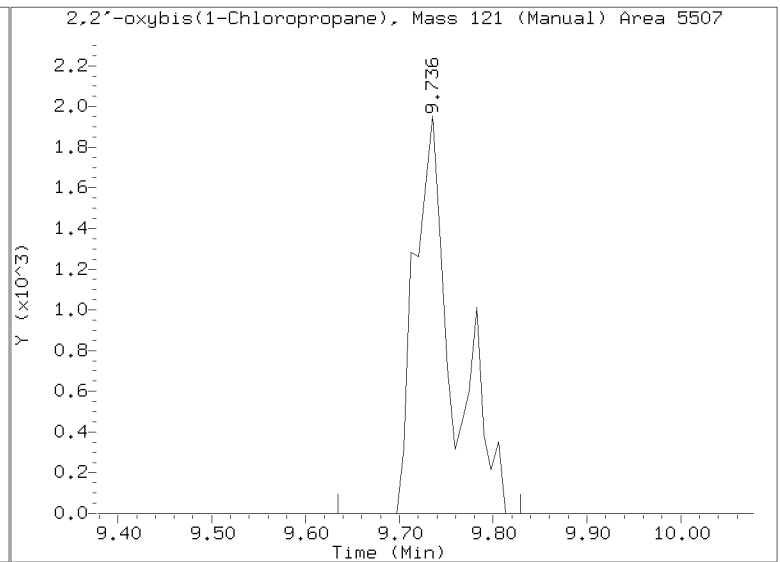
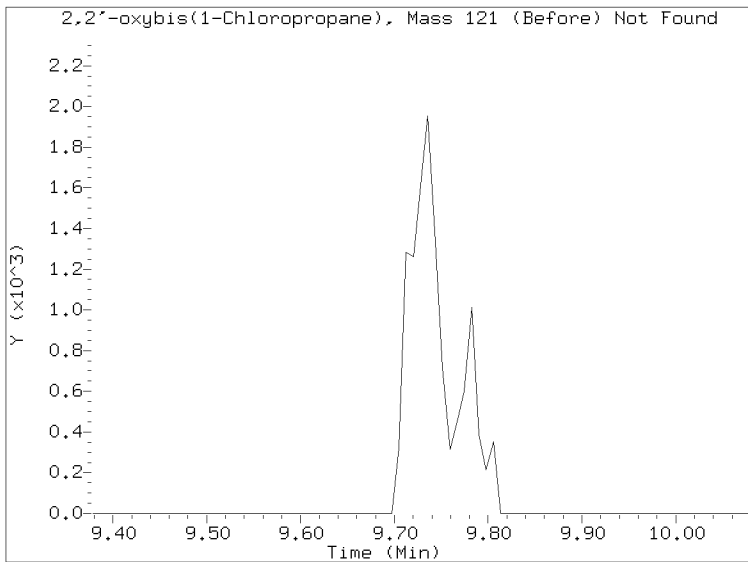
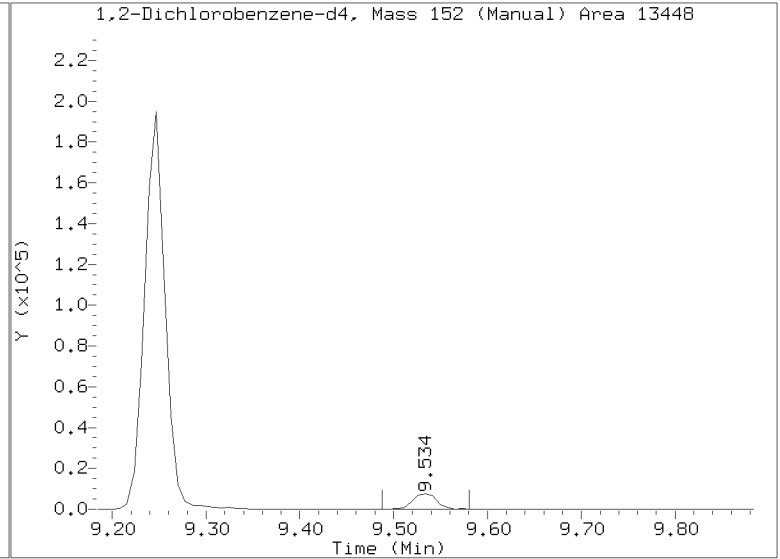
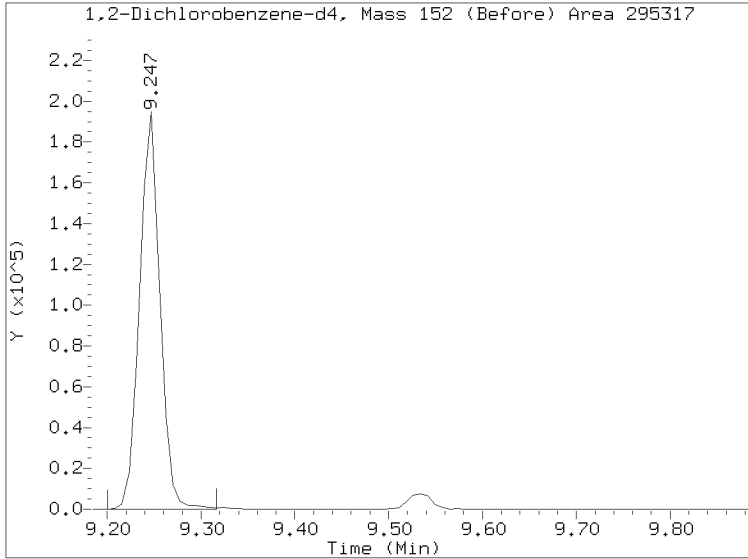
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID: SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48



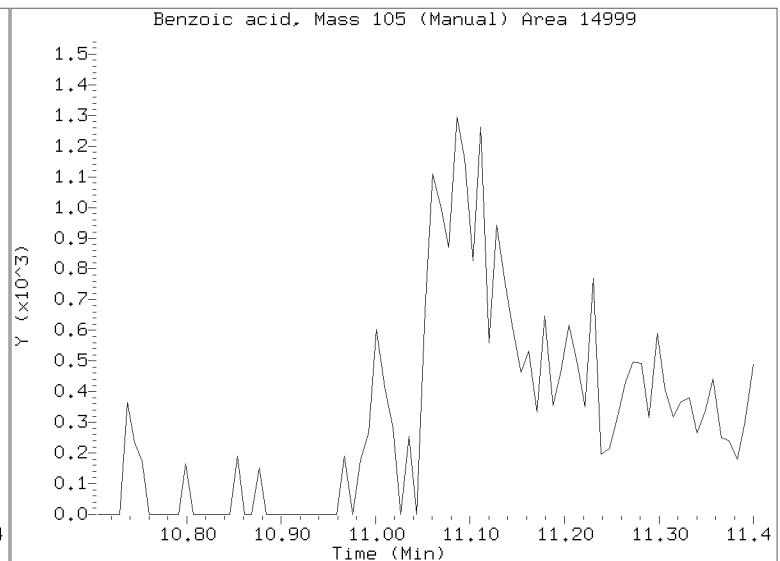
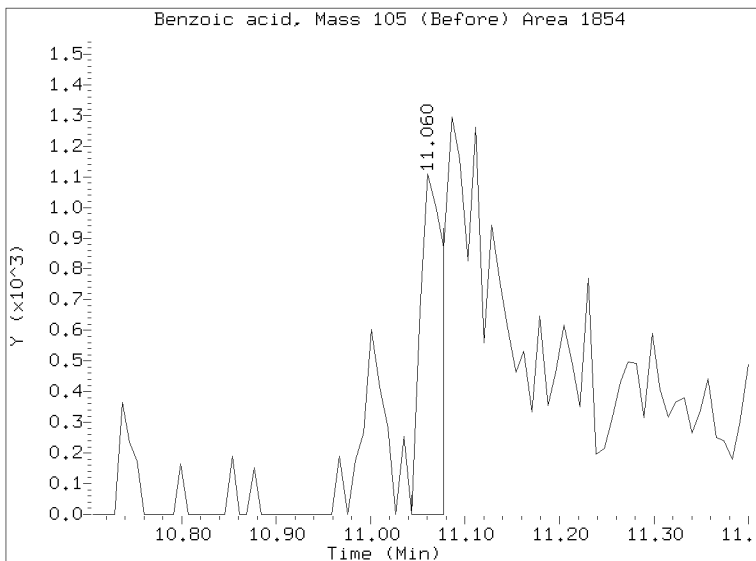
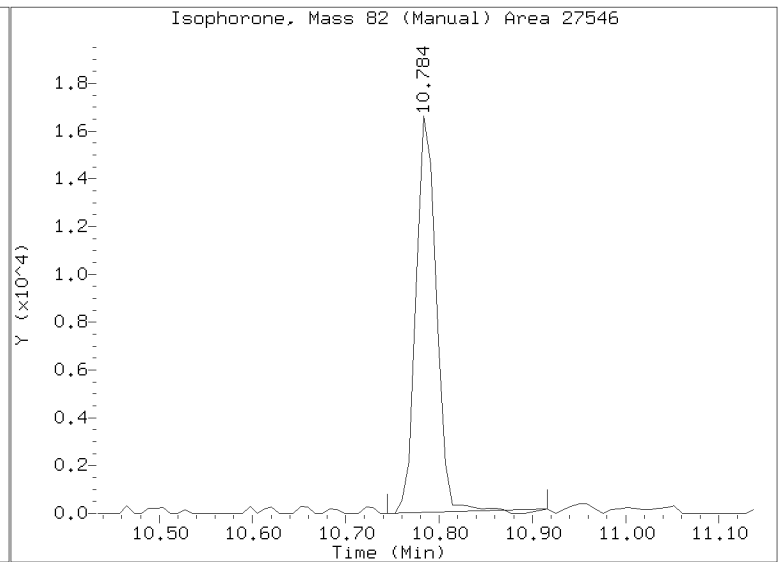
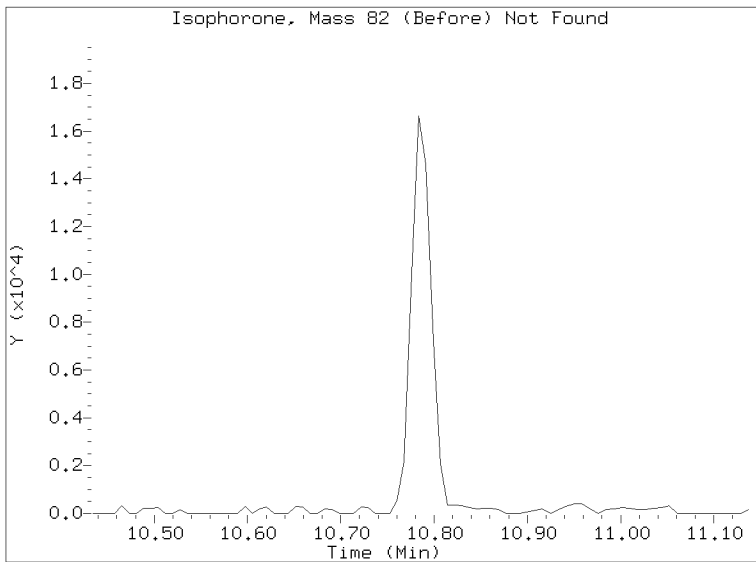
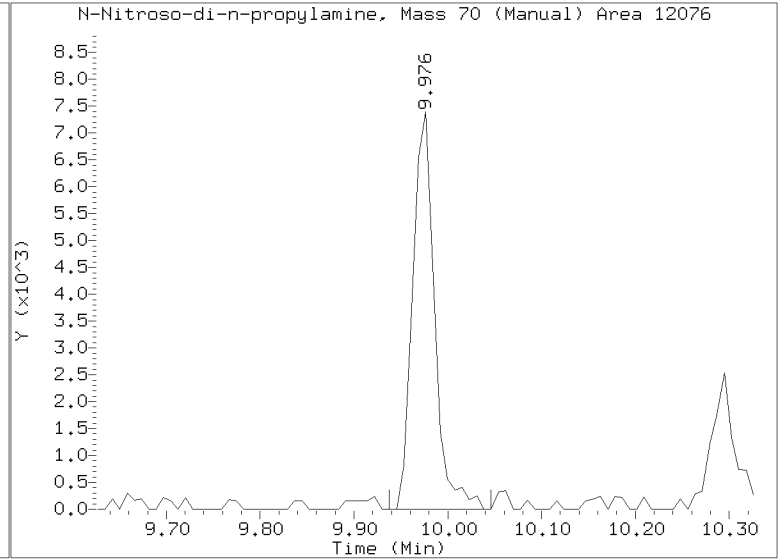
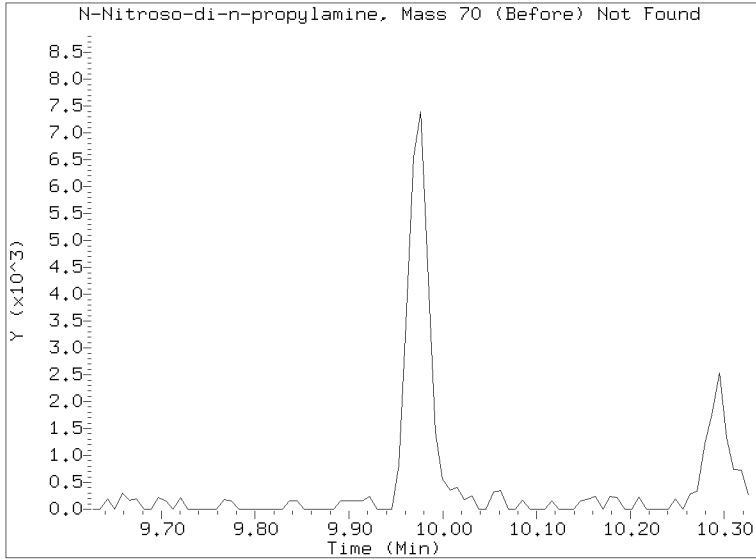
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID: SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID: SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48



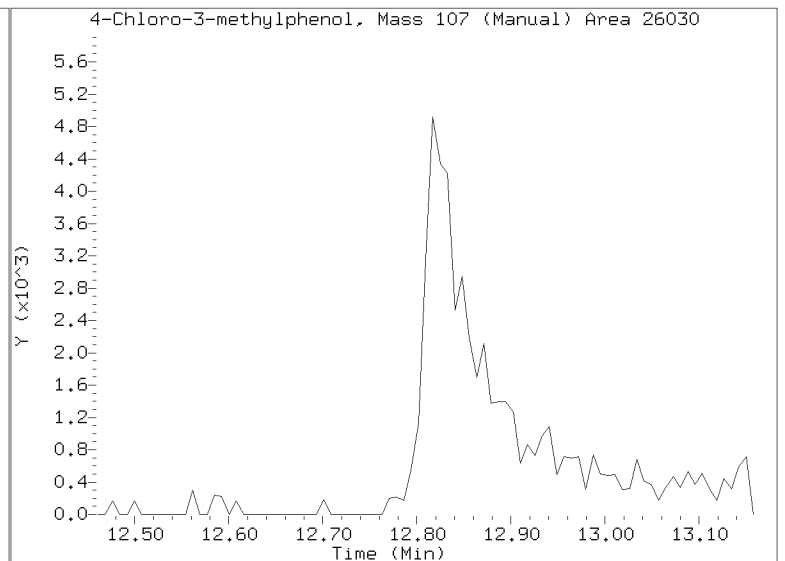
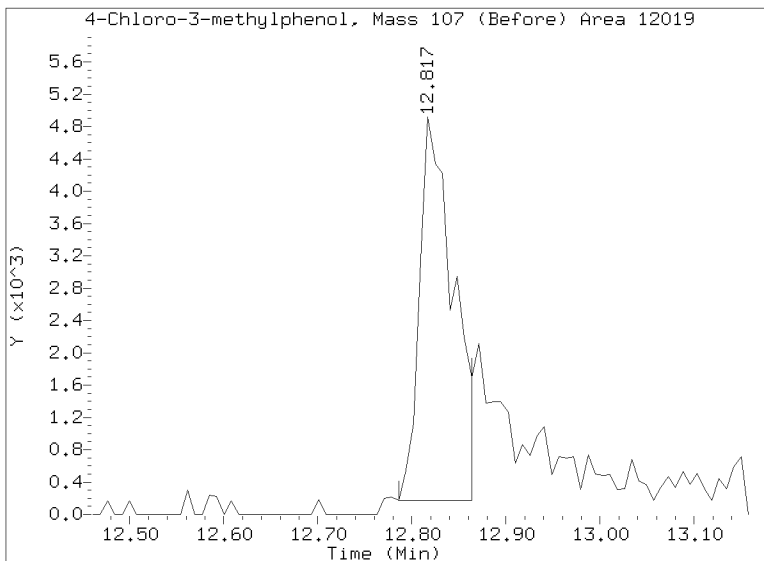
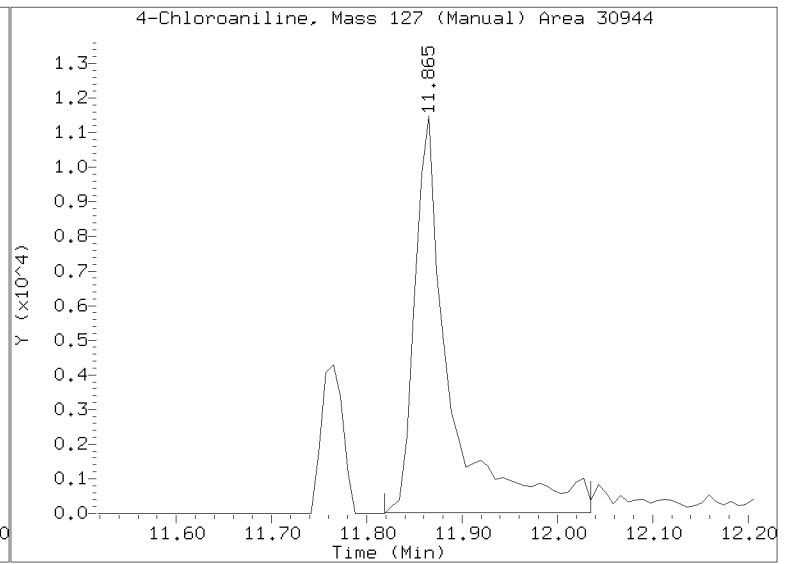
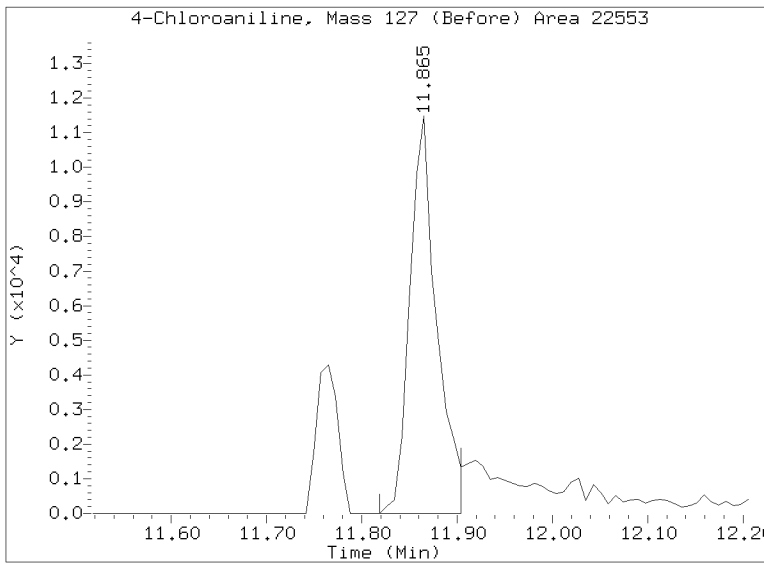
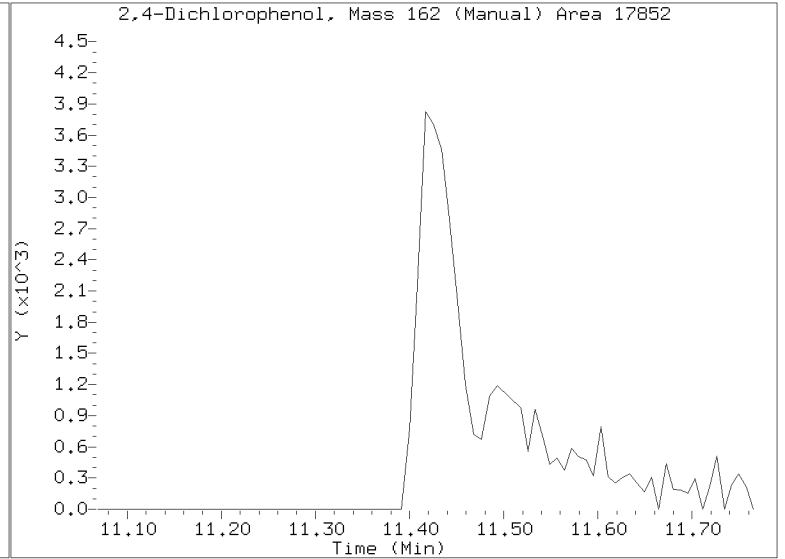
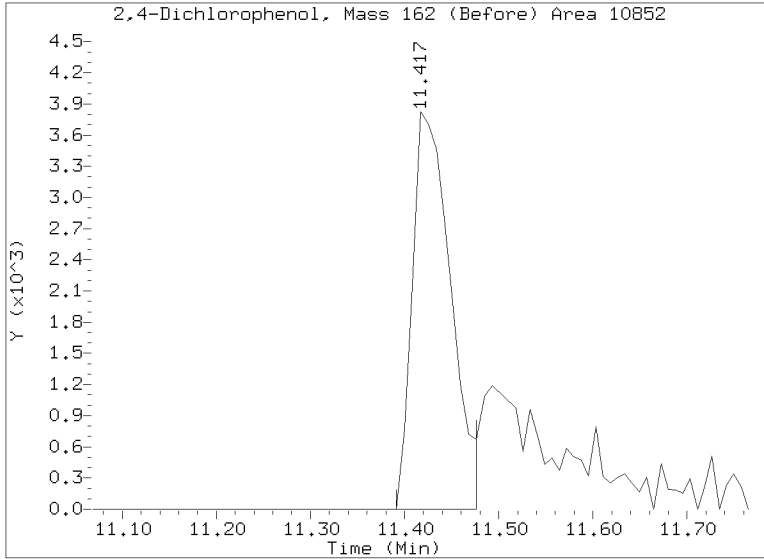
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D

Injection Date: 01-MAR-2023 19:53

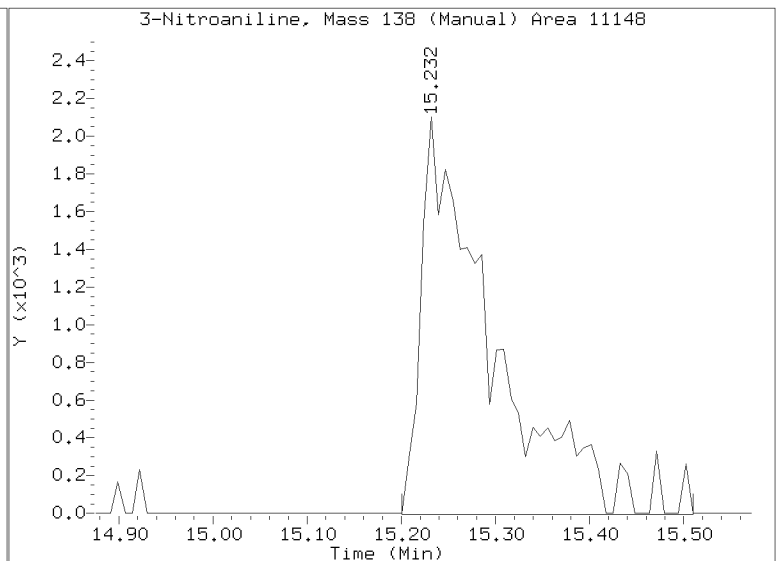
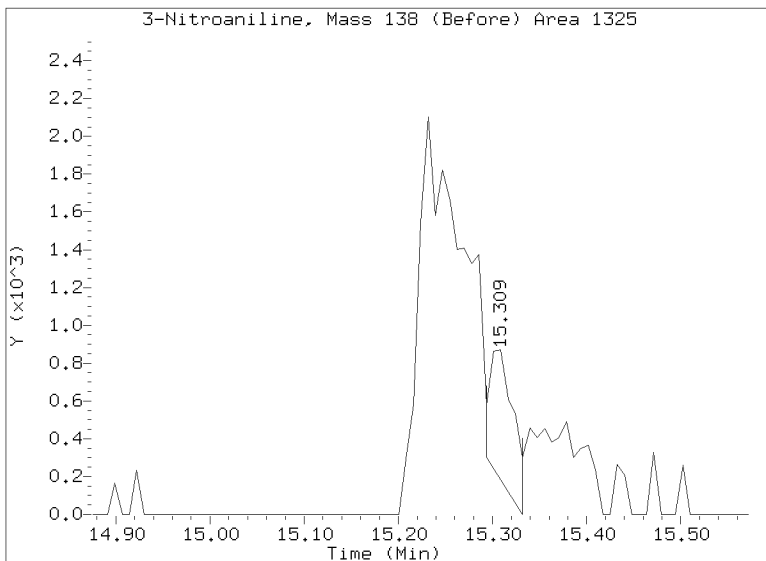
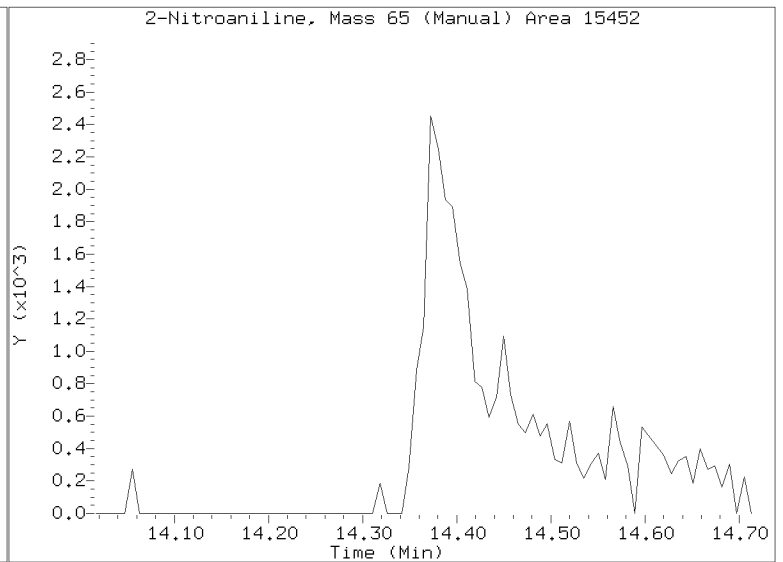
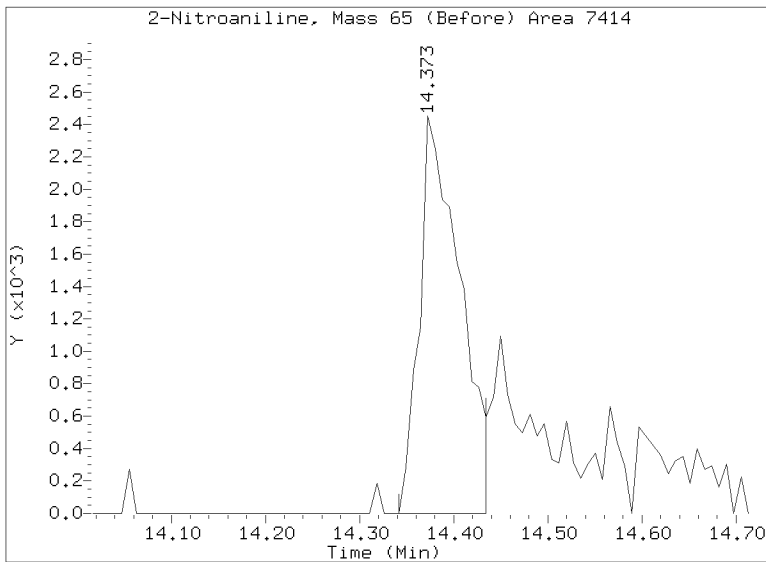
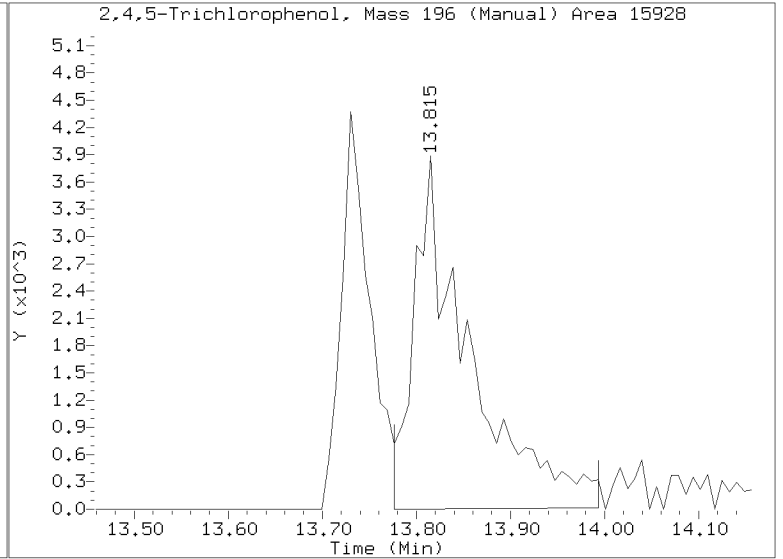
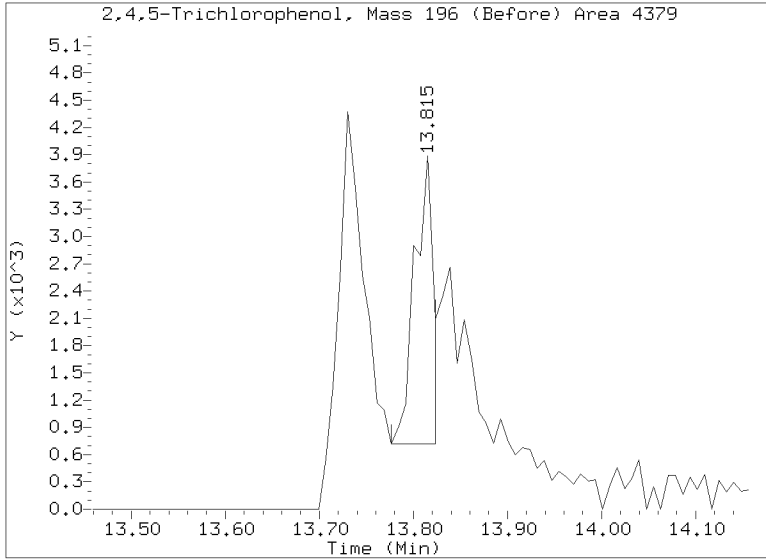
Lab ID: SLC0084-CAL1 Client ID:

Report Date: 03/07/2023 12:48



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID: SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48



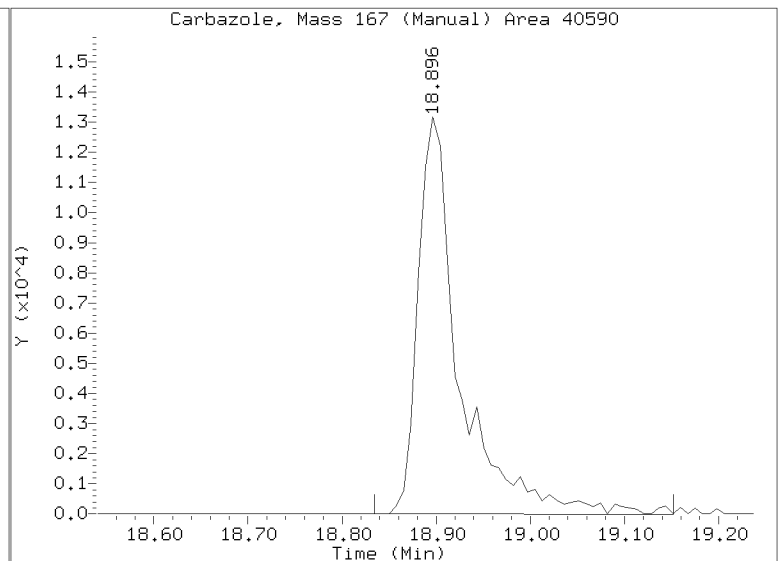
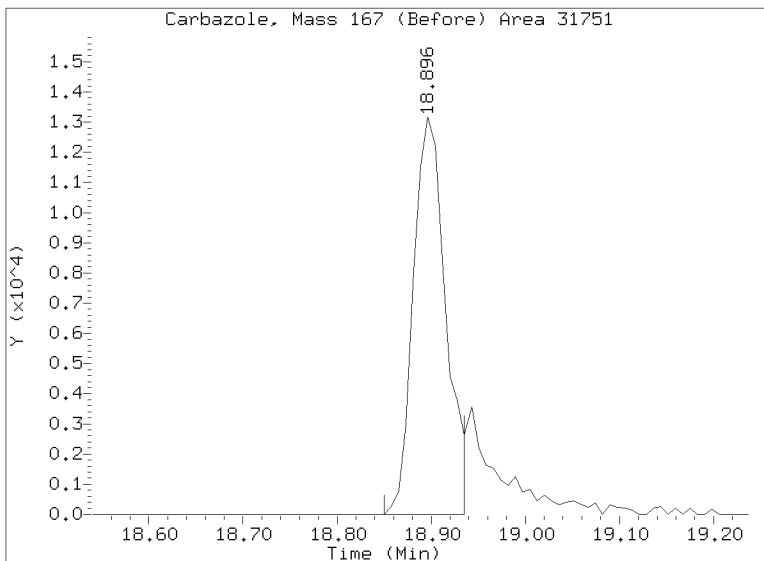
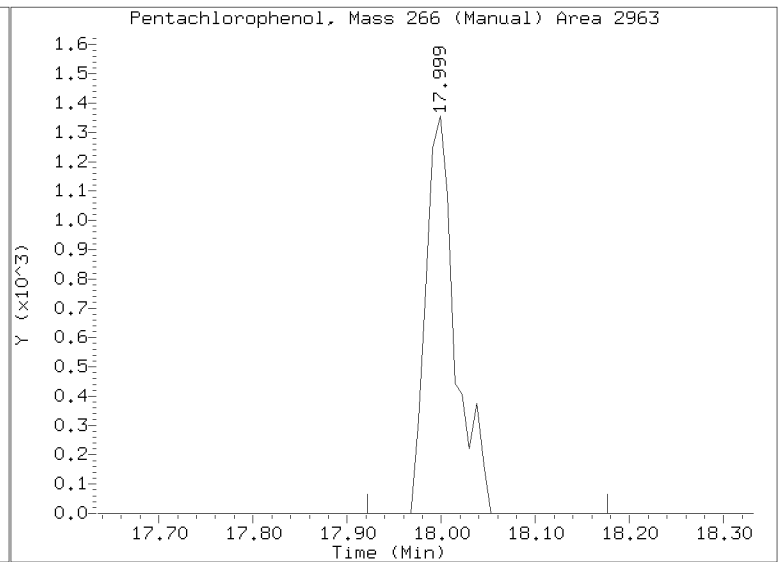
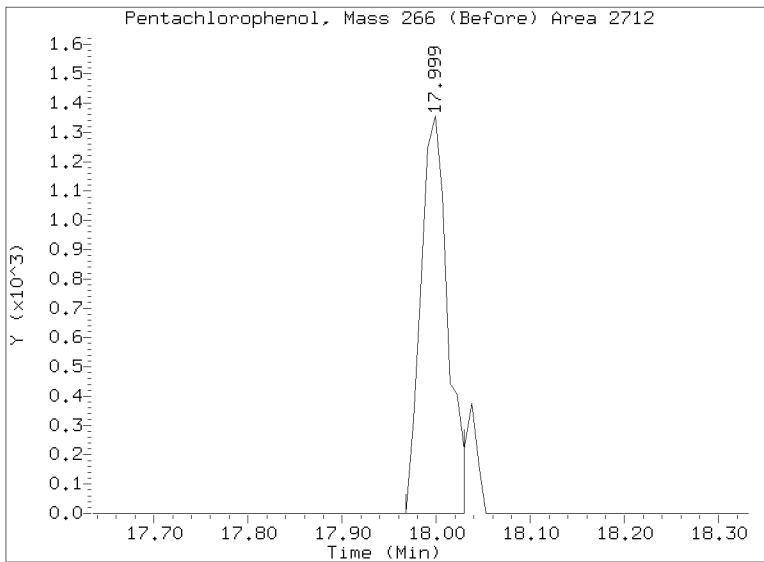
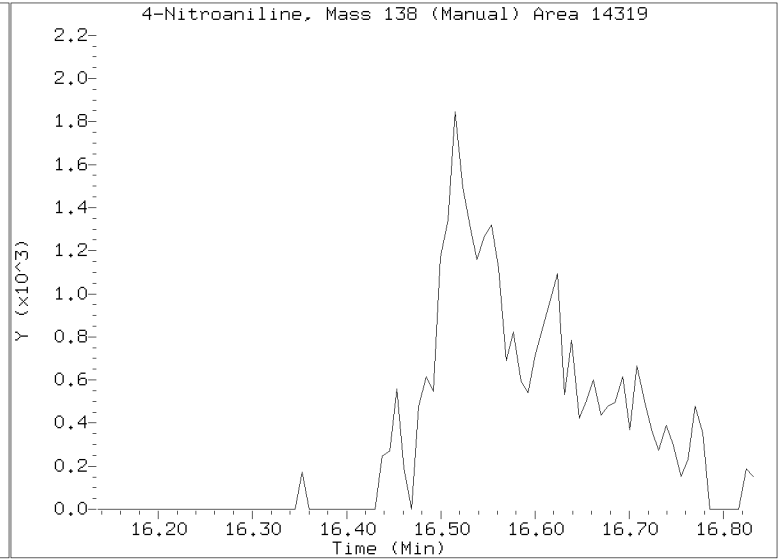
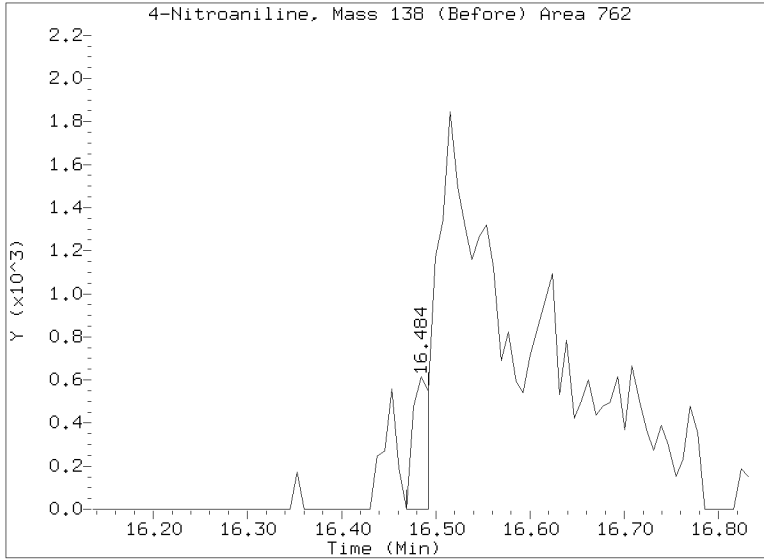
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D

Injection Date: 01-MAR-2023 19:53

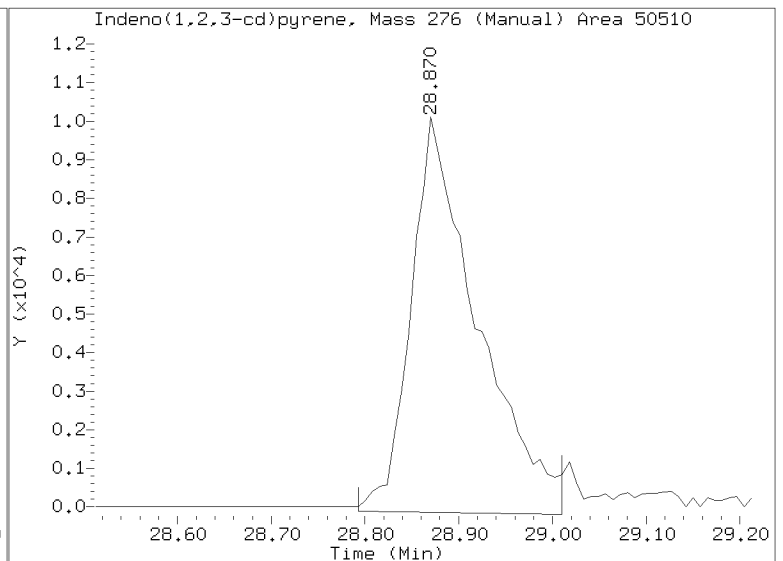
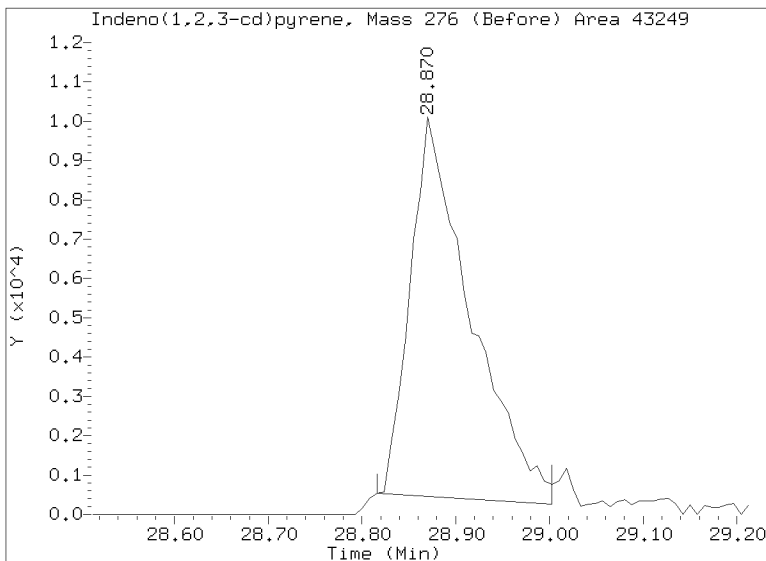
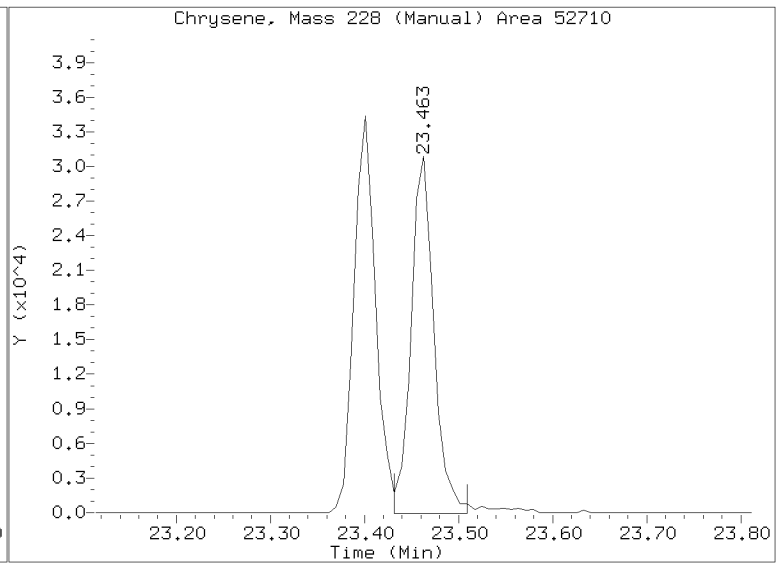
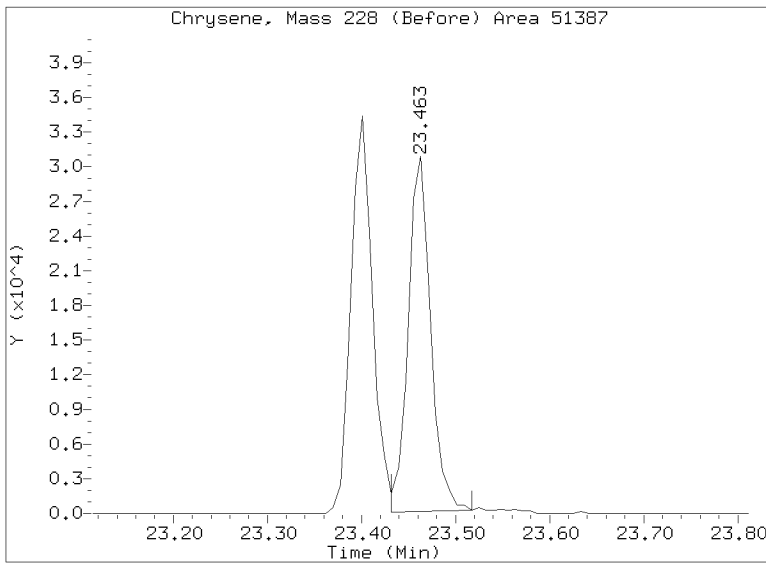
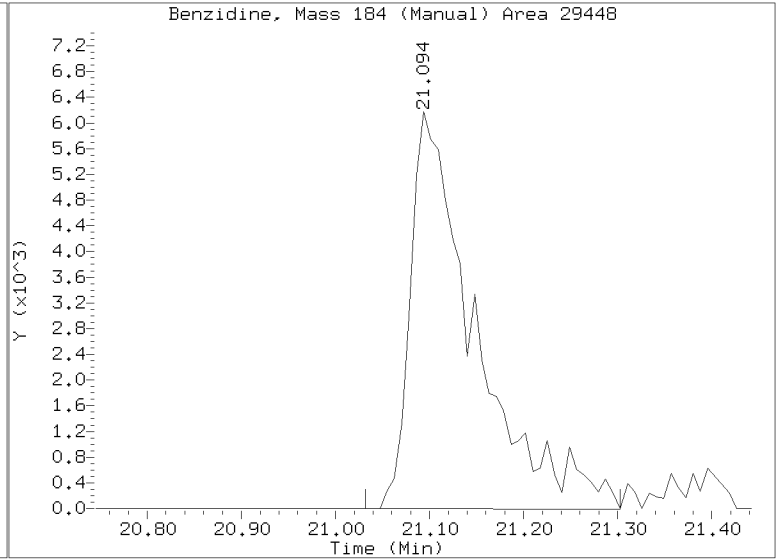
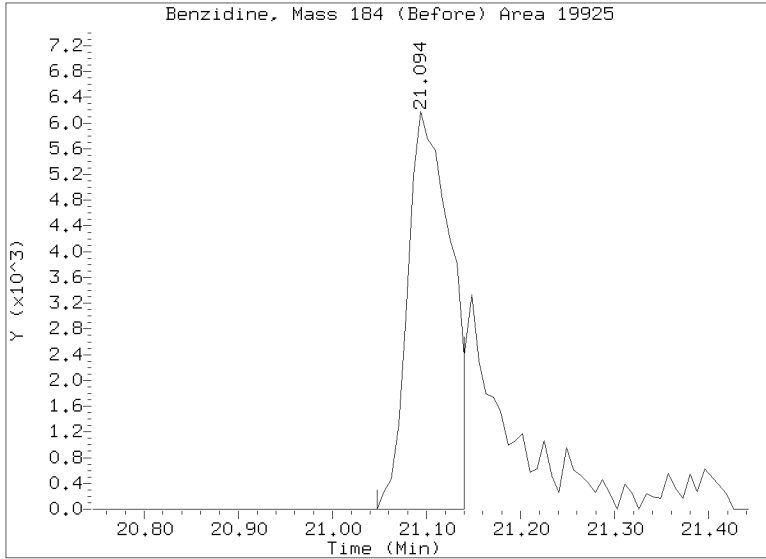
Lab ID: SLC0084-CAL1 Client ID:

Report Date: 03/07/2023 12:48



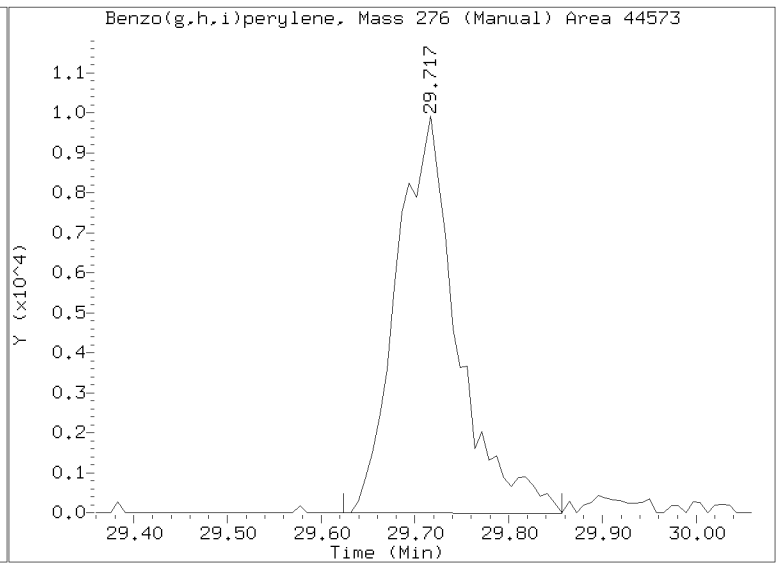
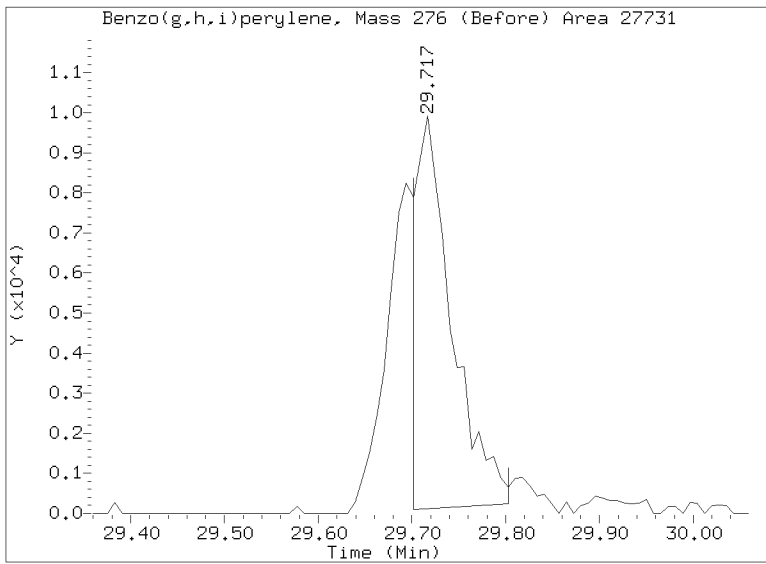
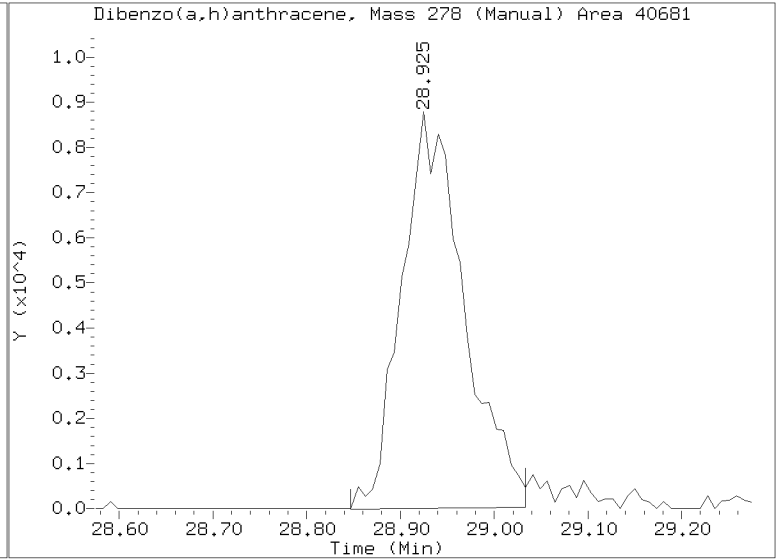
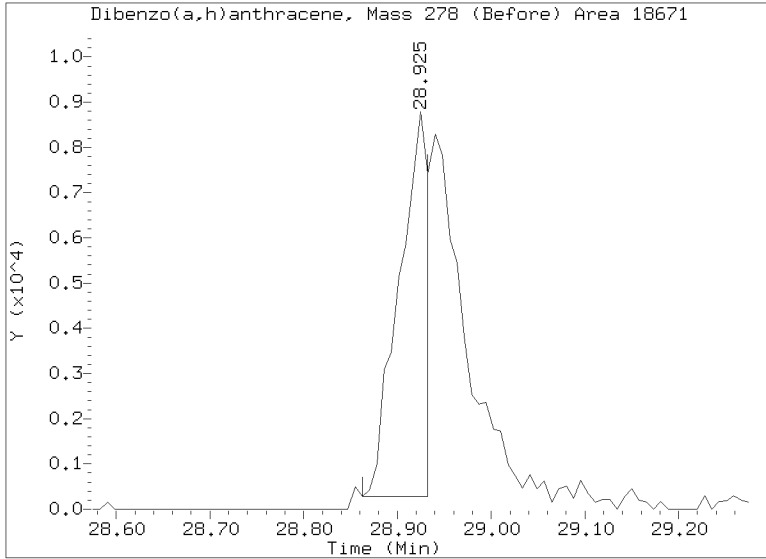
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID: SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48



Quant Ion Manual Peak Adjustment Report

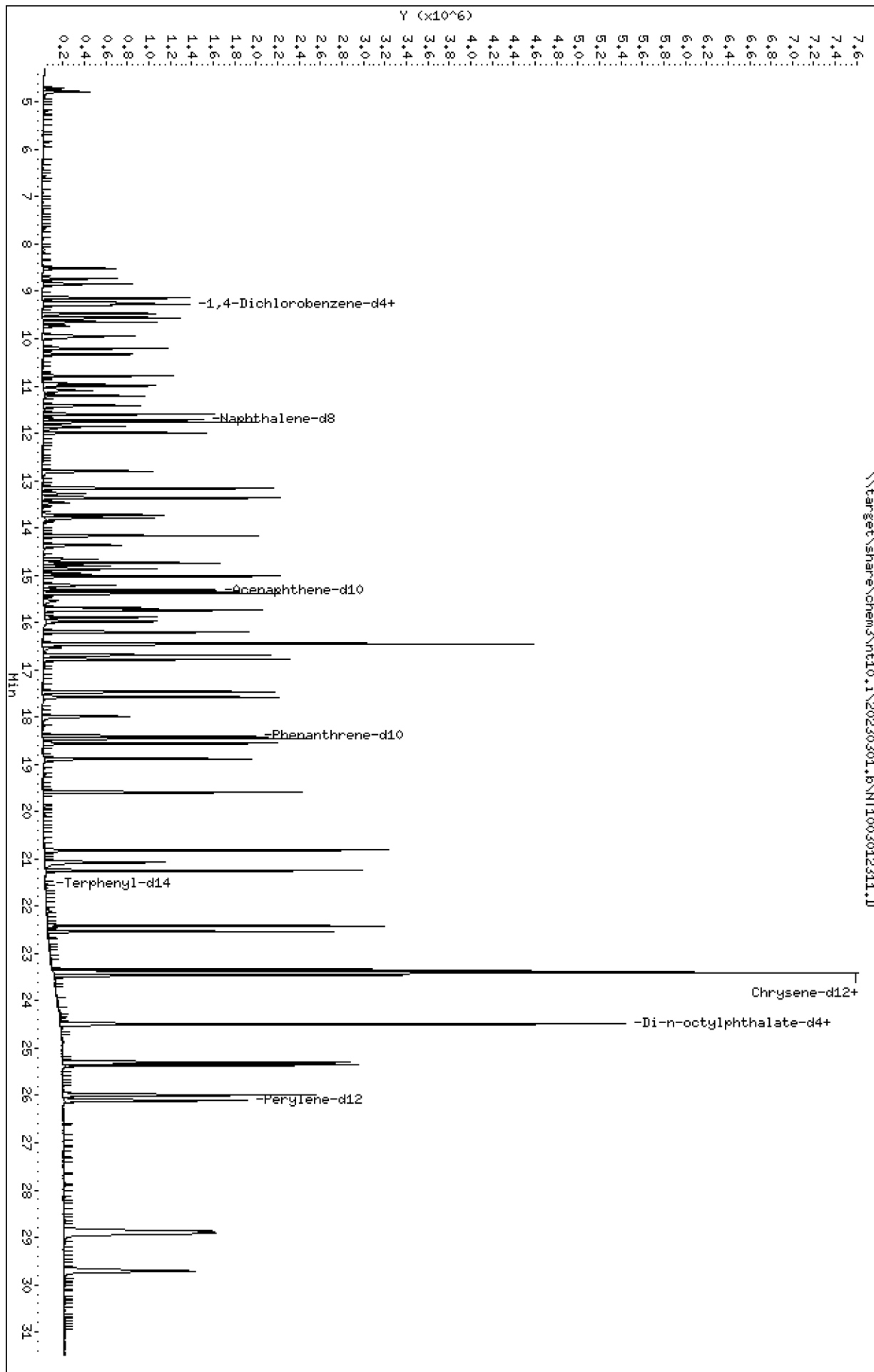
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48



Data File: \\target\share\chem3\nt10.1\20230301.1\NT1003012311.D
Date: 01-HRR-2023 21:46
Client ID:
Sample Info: SEQ-SCV1
Column phase: ZB-5msi

Instrument: nt10.1
Operator: VTS
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230301.1\NT1003012311.D



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

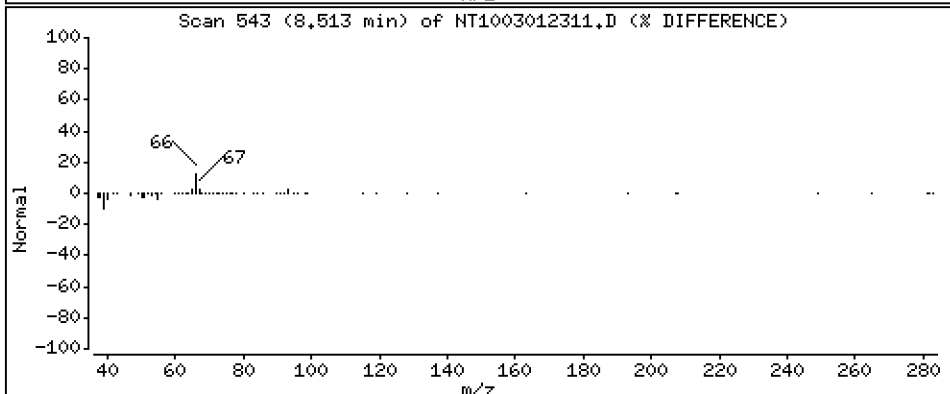
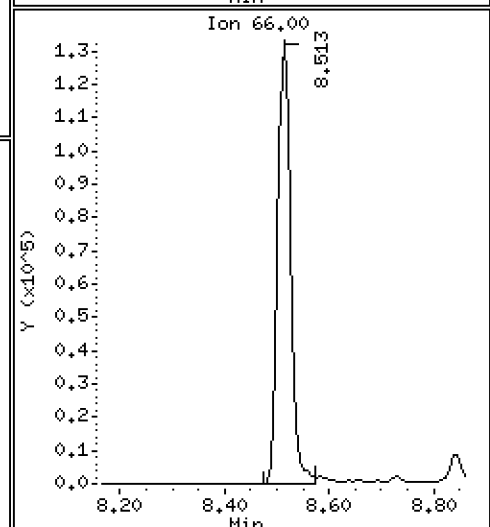
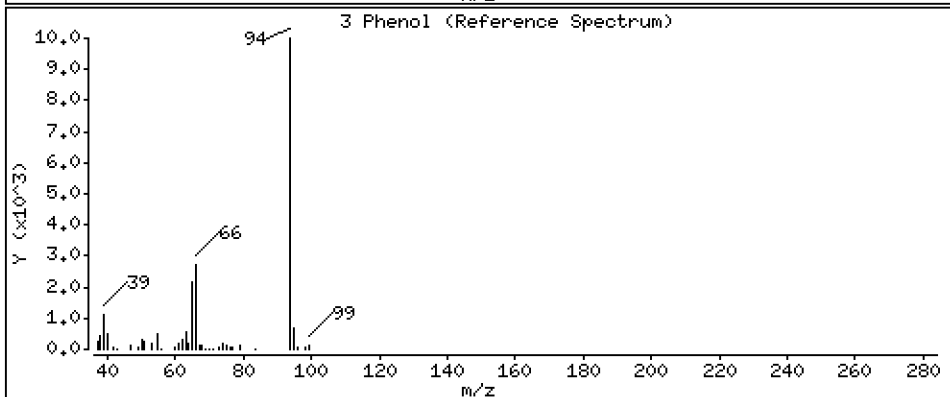
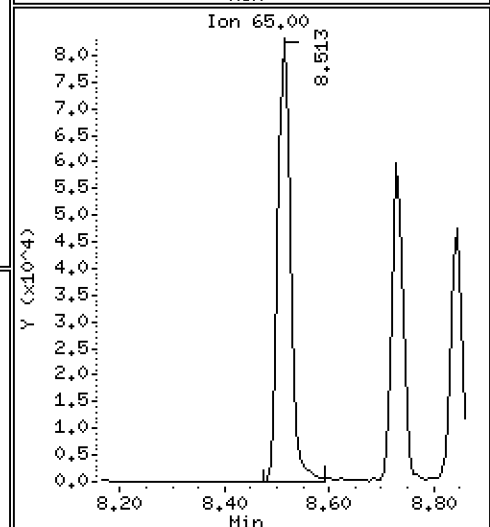
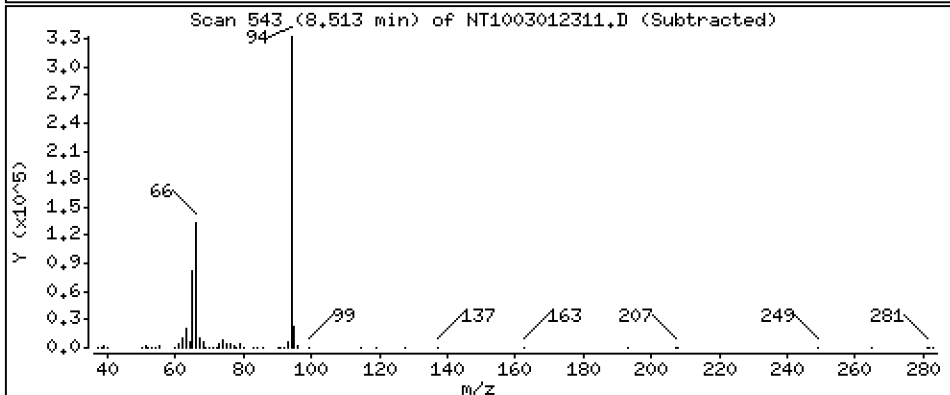
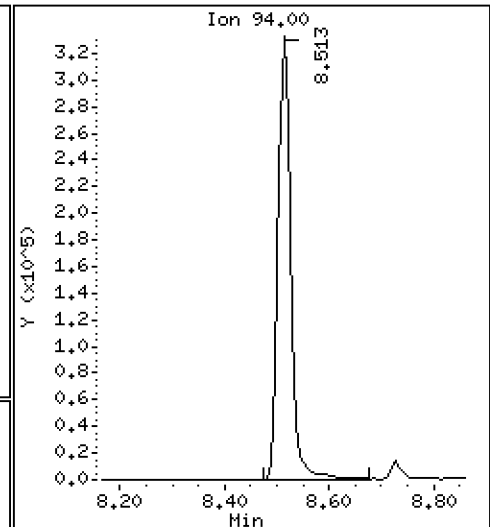
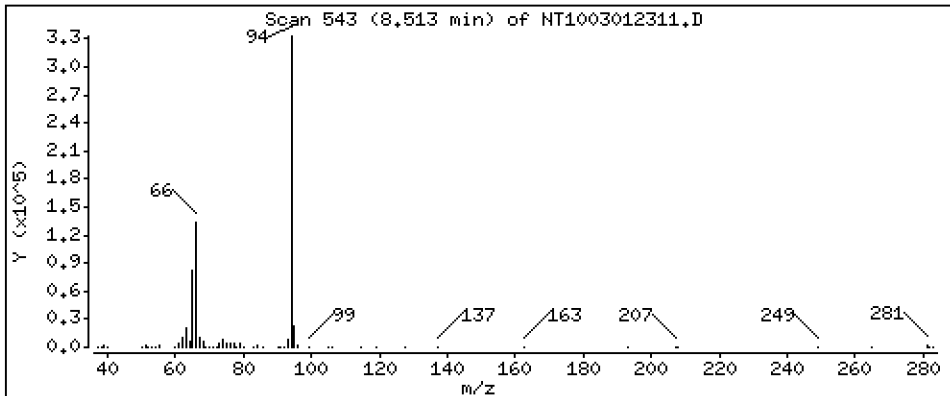
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,852 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

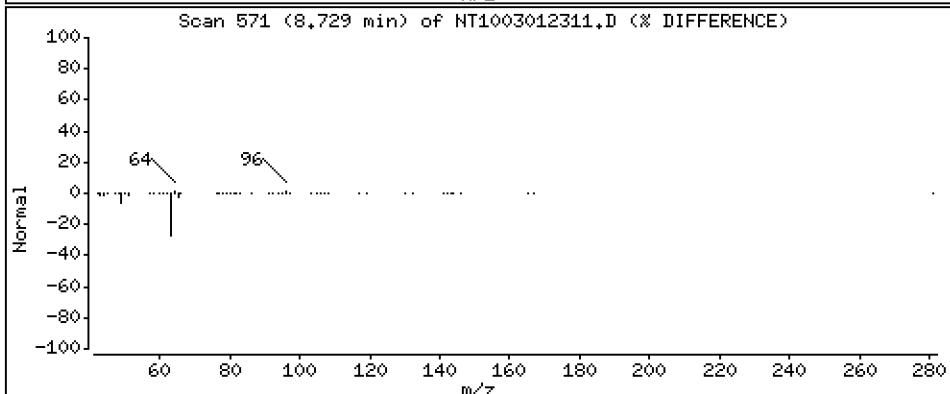
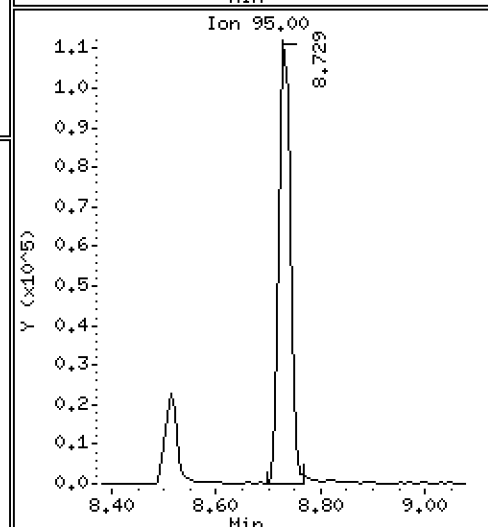
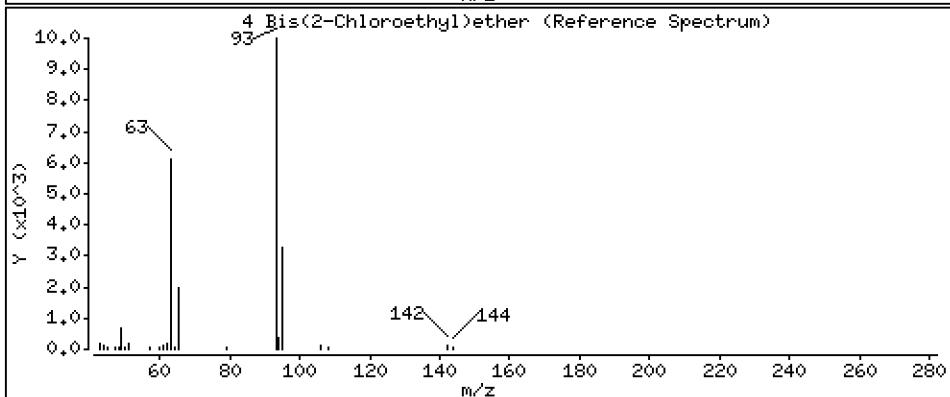
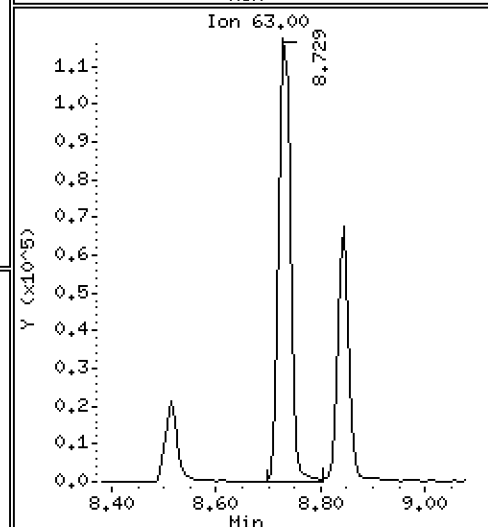
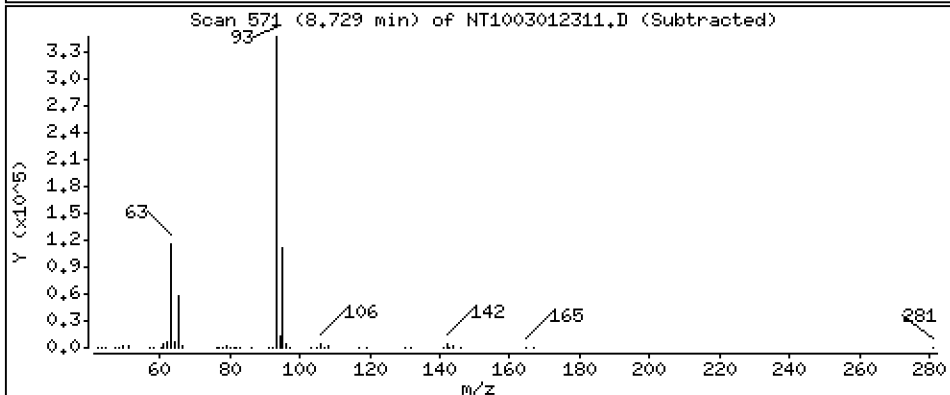
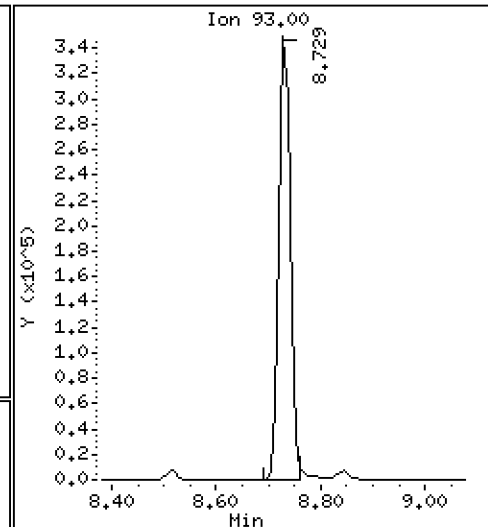
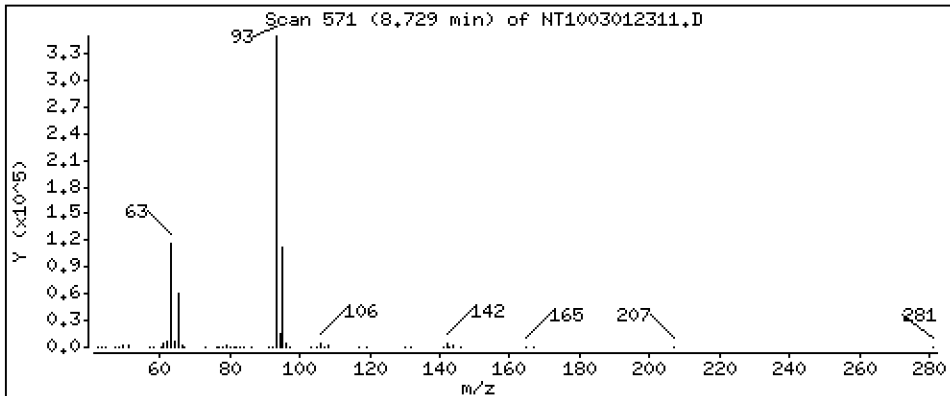
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,928 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

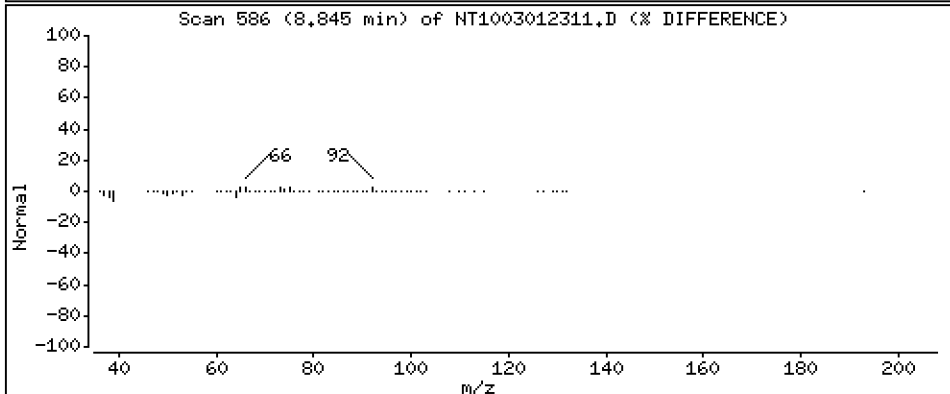
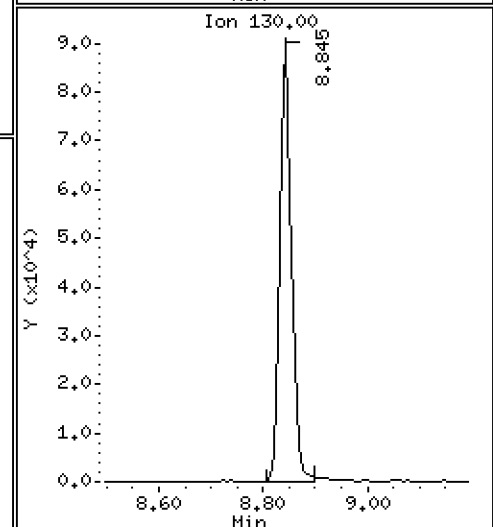
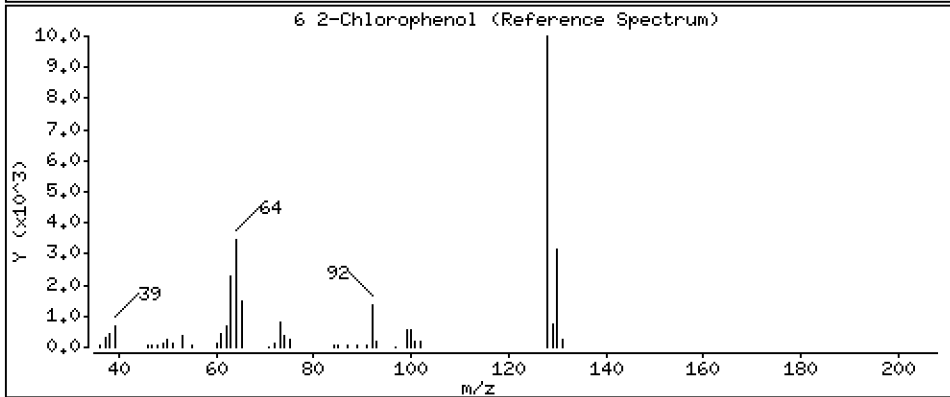
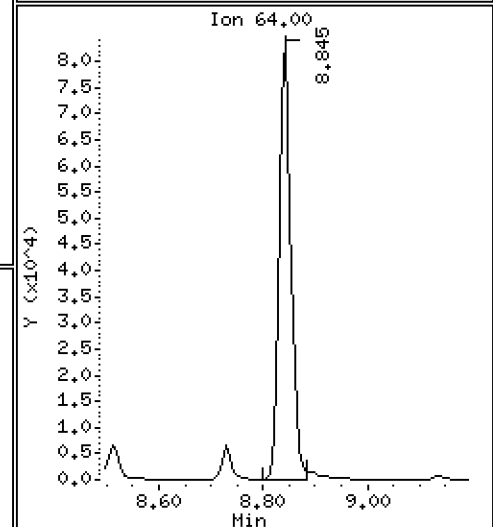
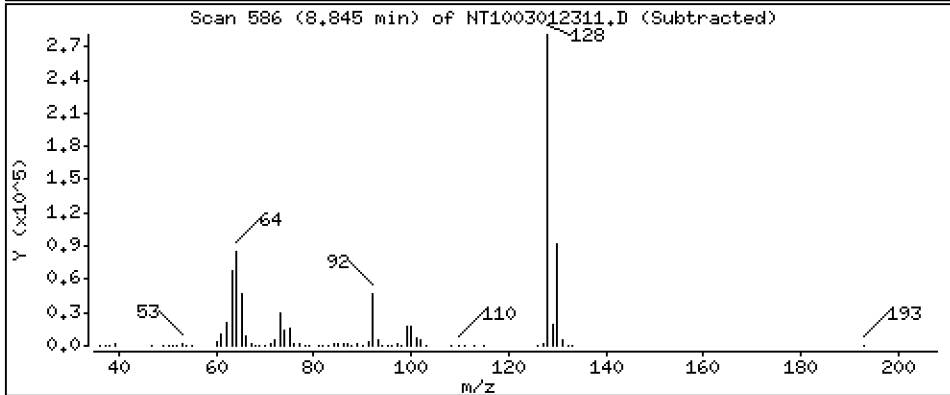
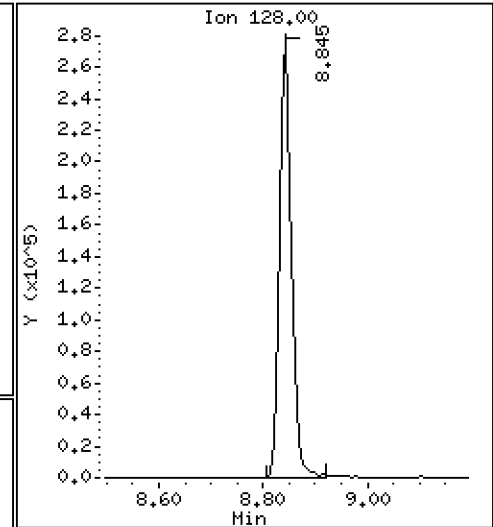
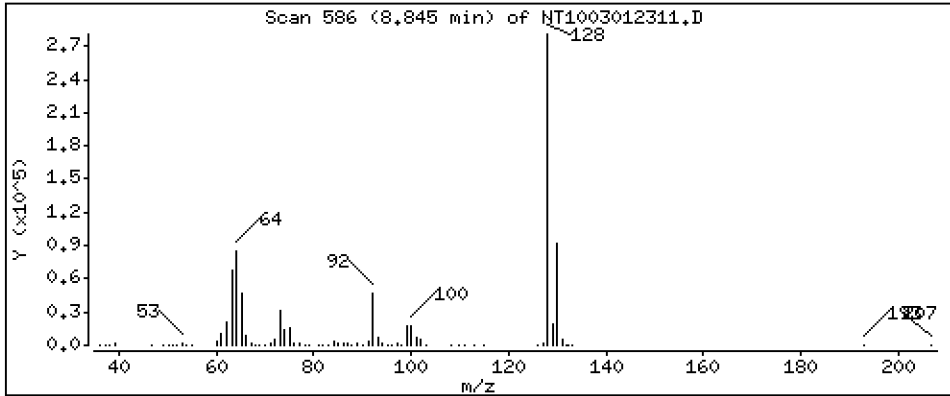
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 4.692 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

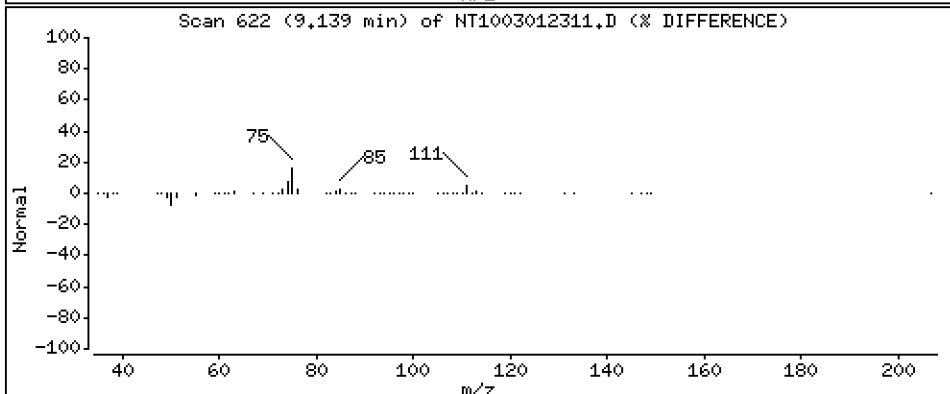
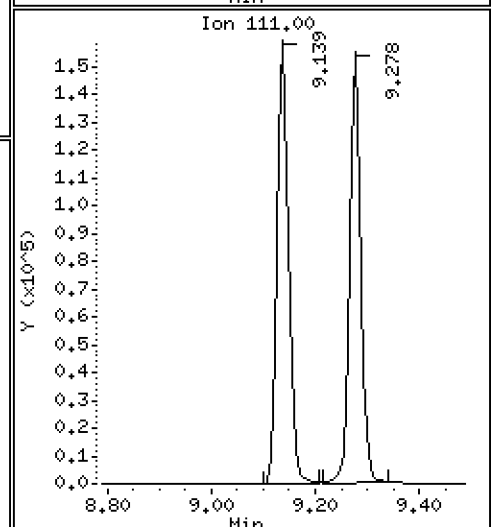
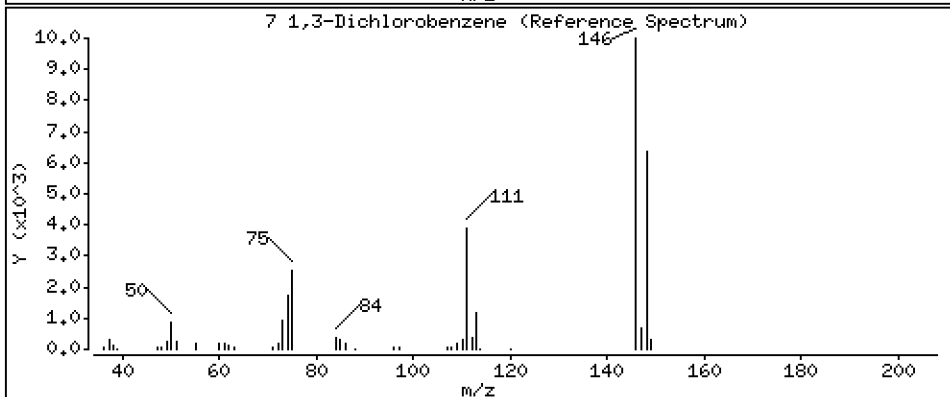
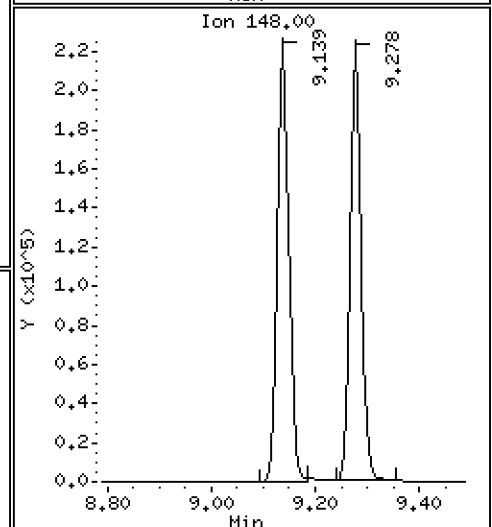
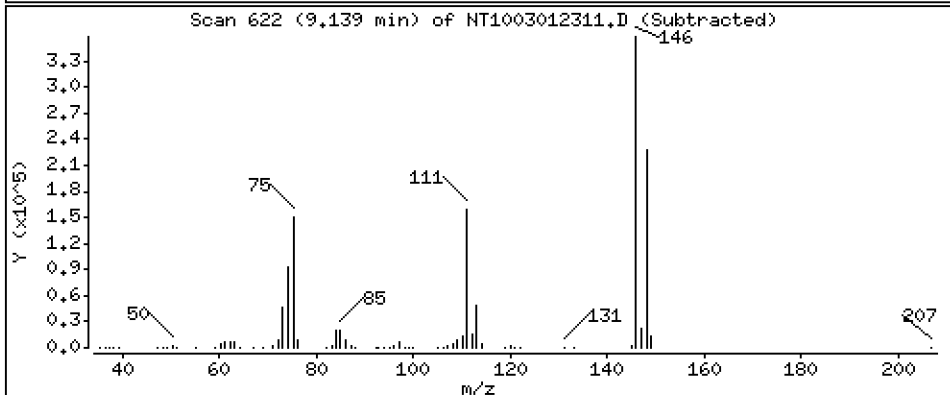
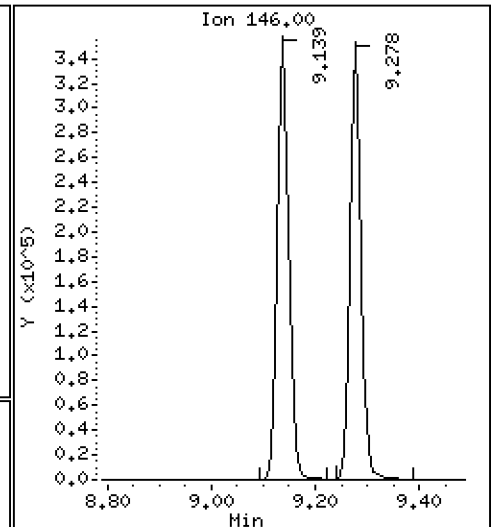
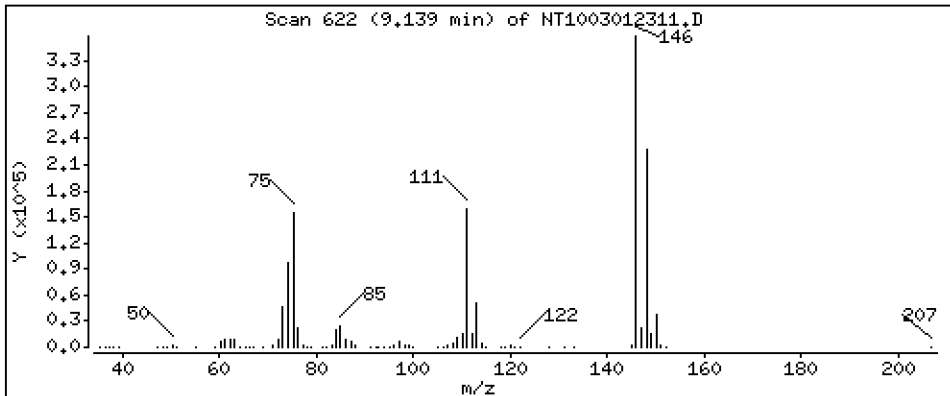
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 5,266 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

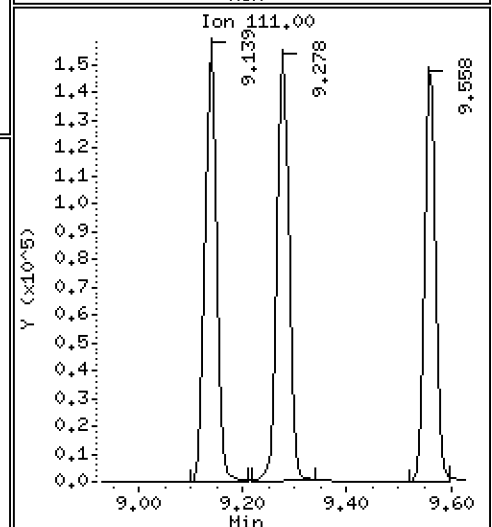
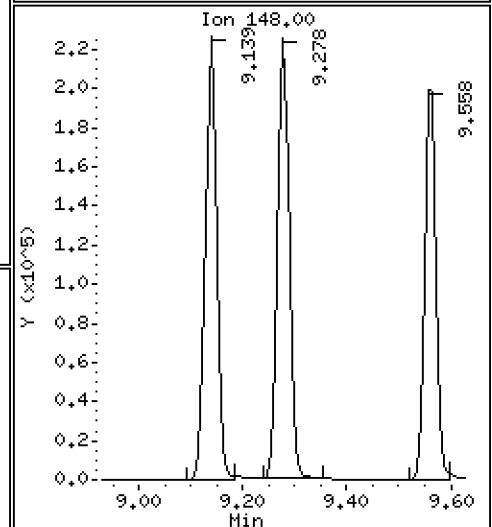
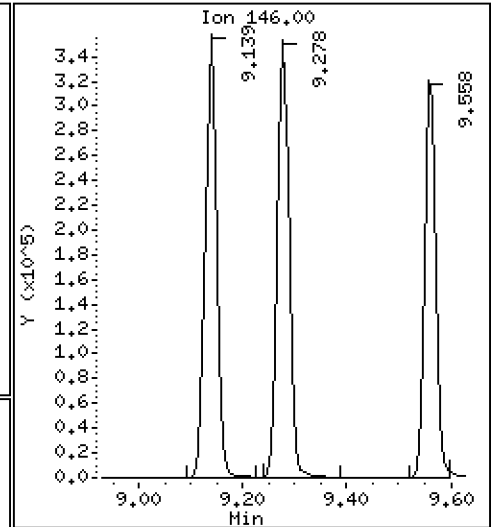
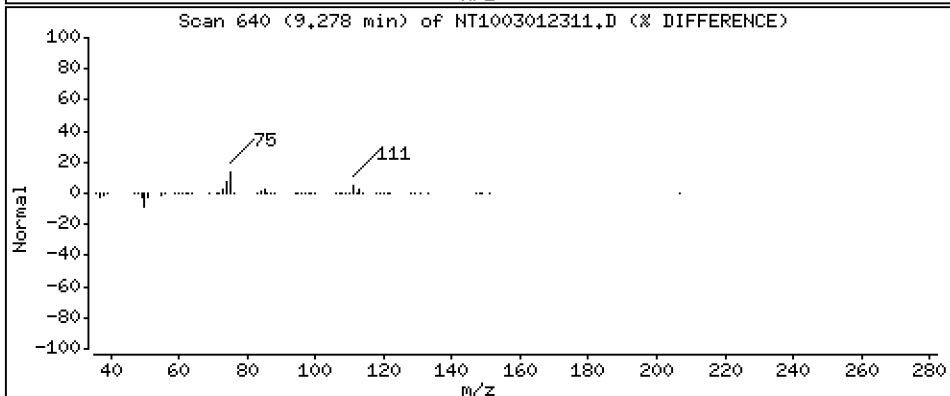
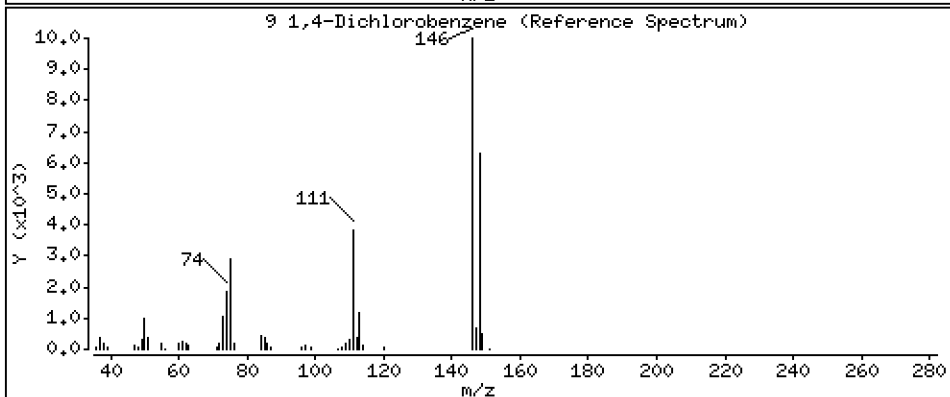
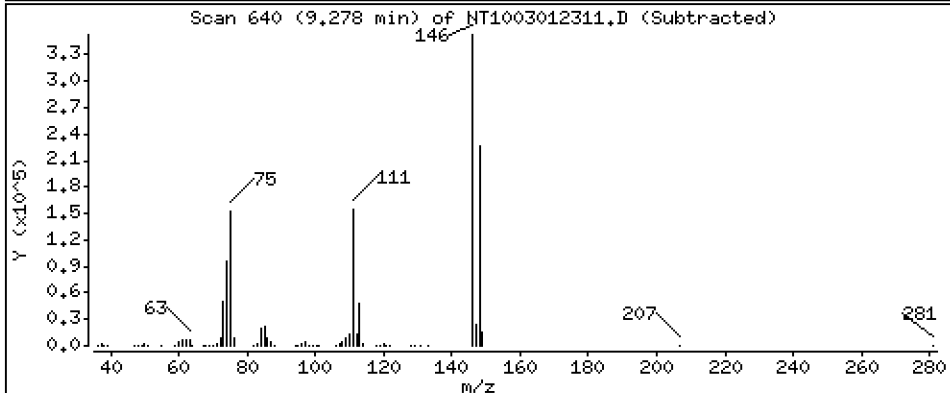
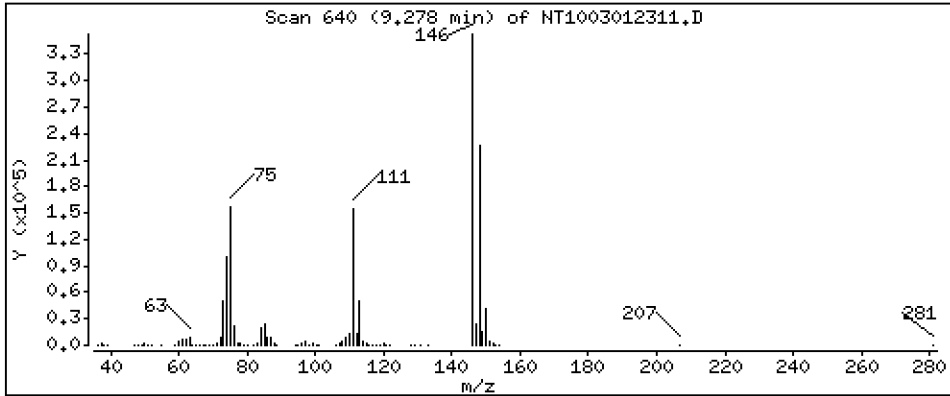
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 5,216 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

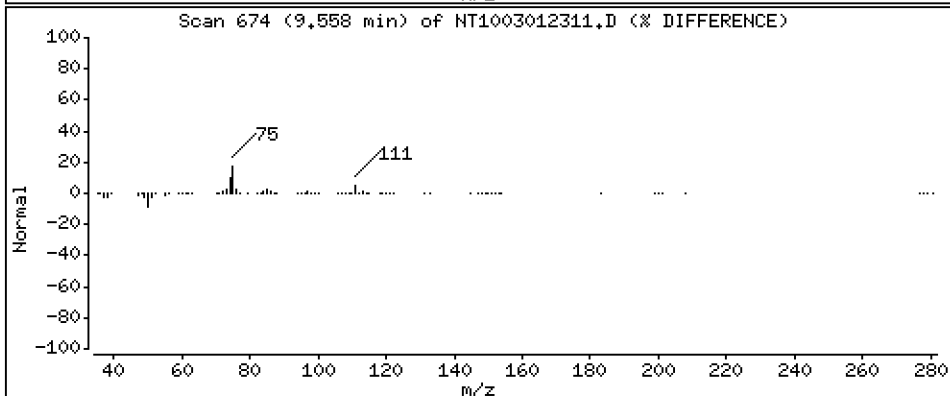
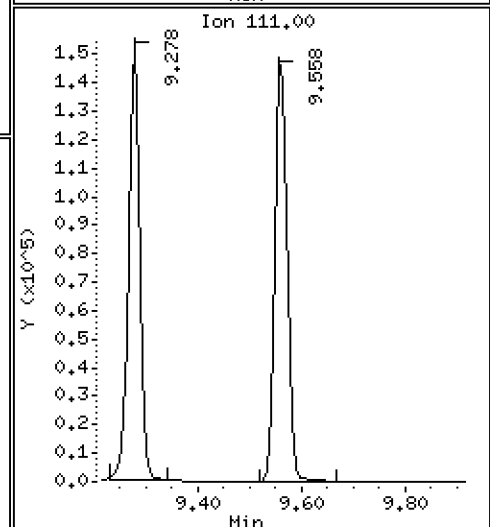
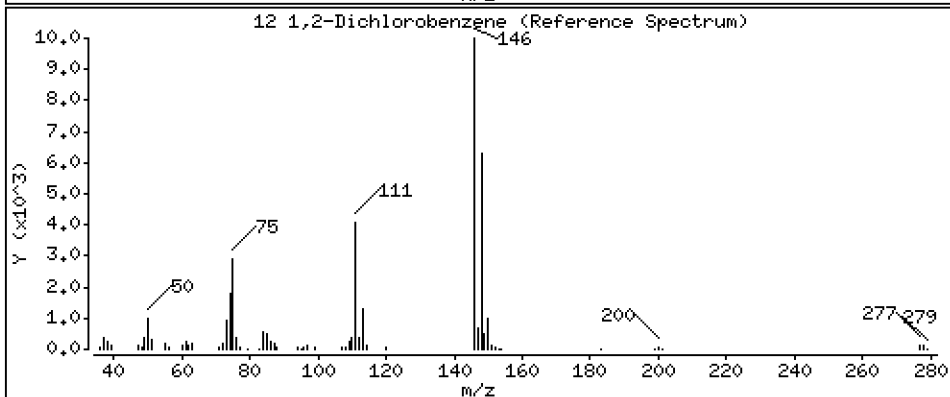
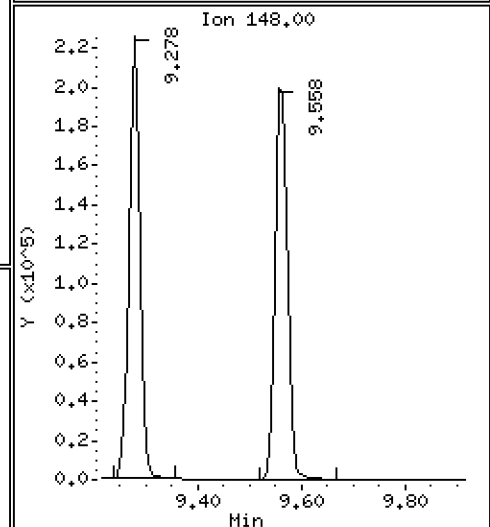
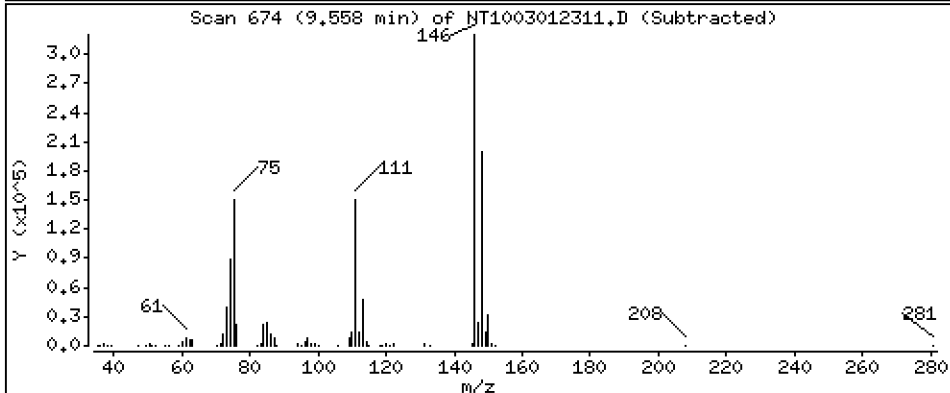
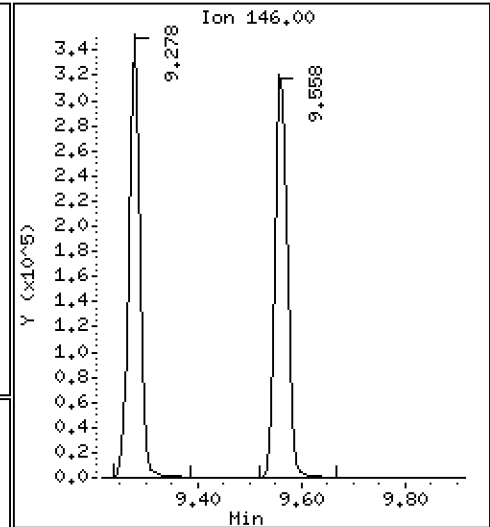
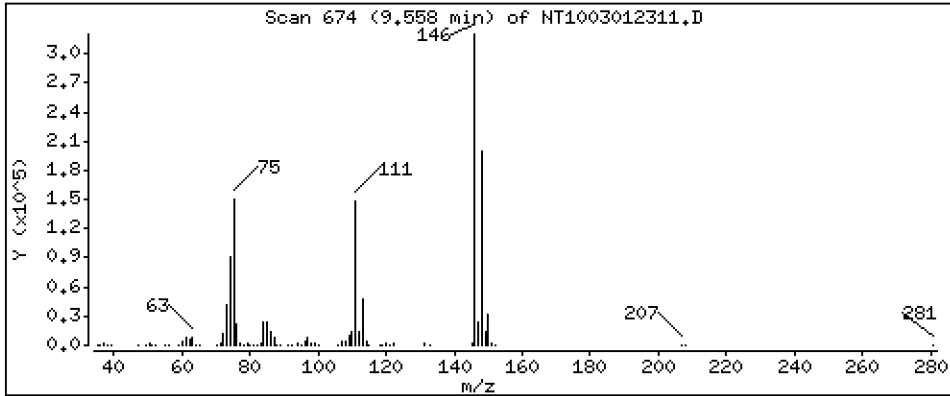
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5.194 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

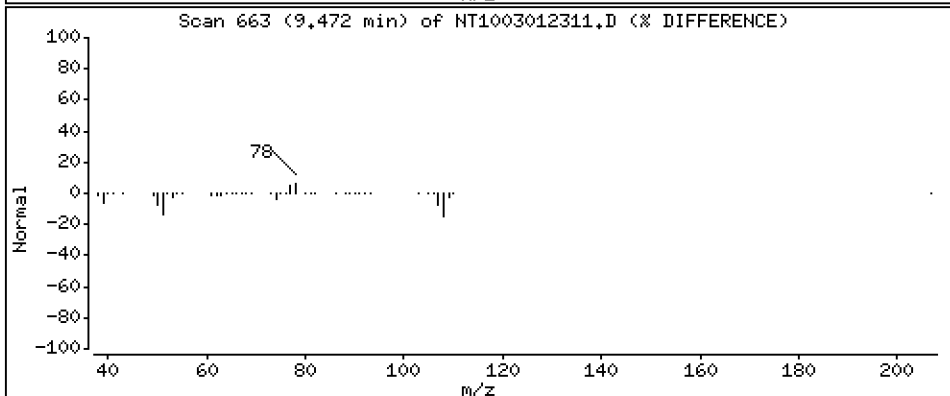
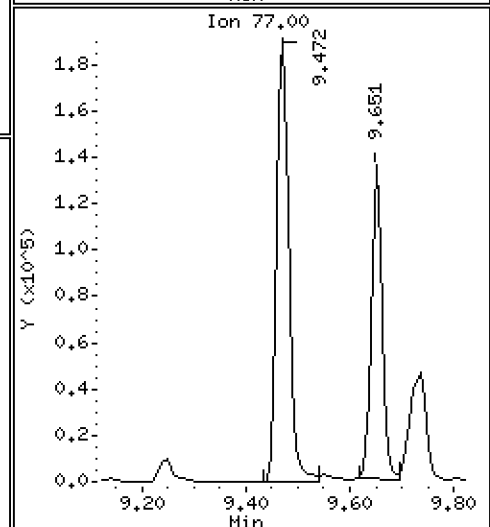
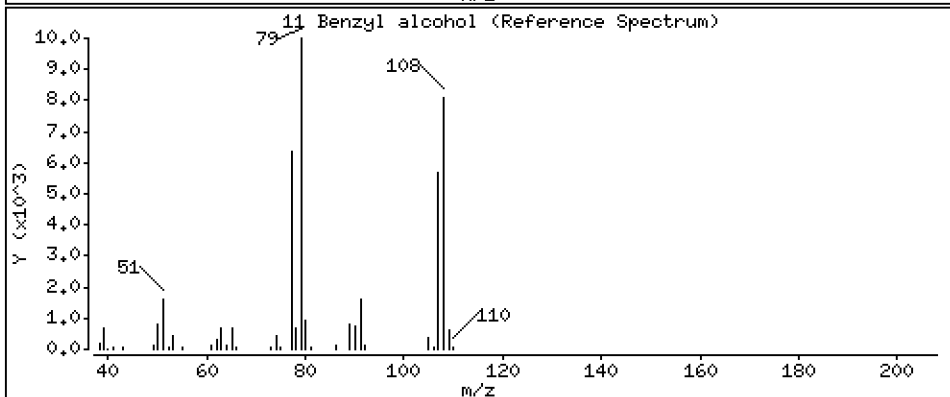
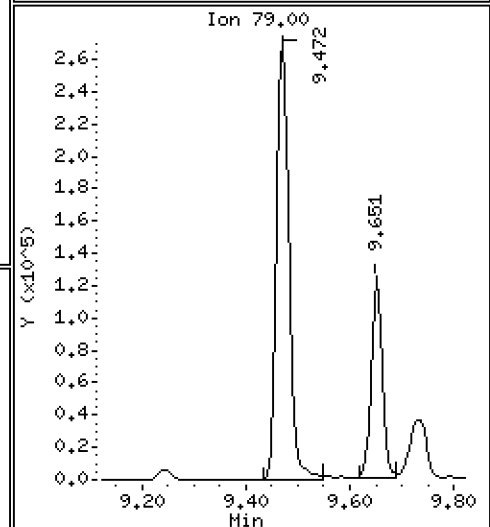
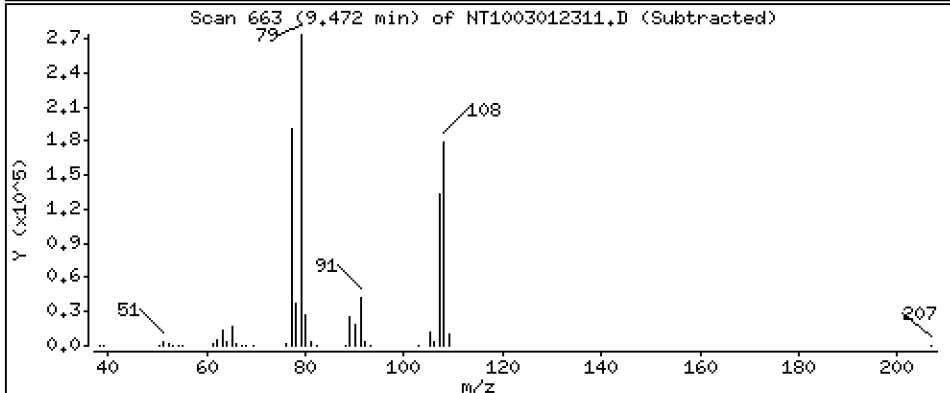
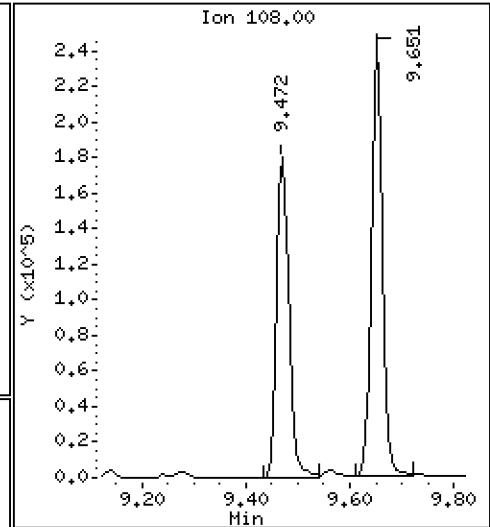
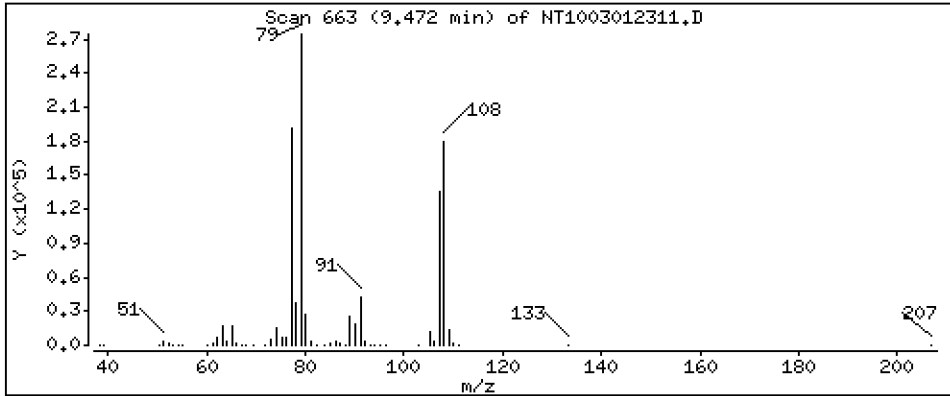
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,898 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

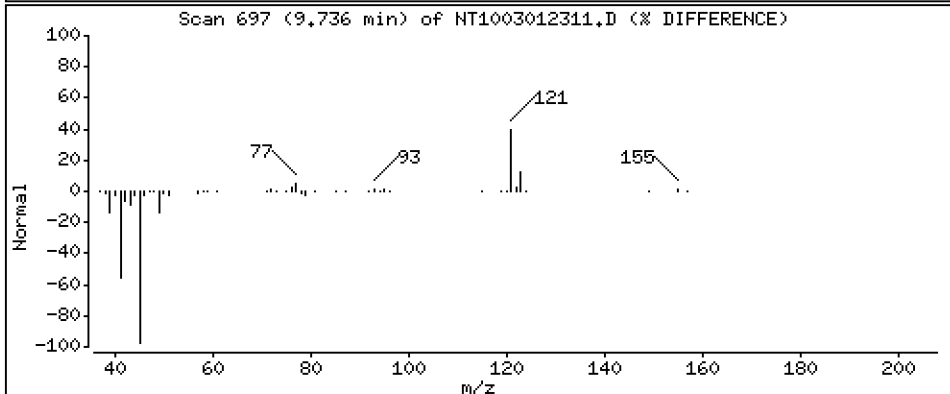
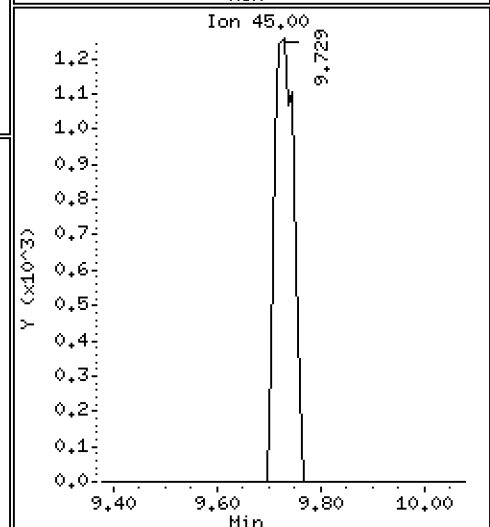
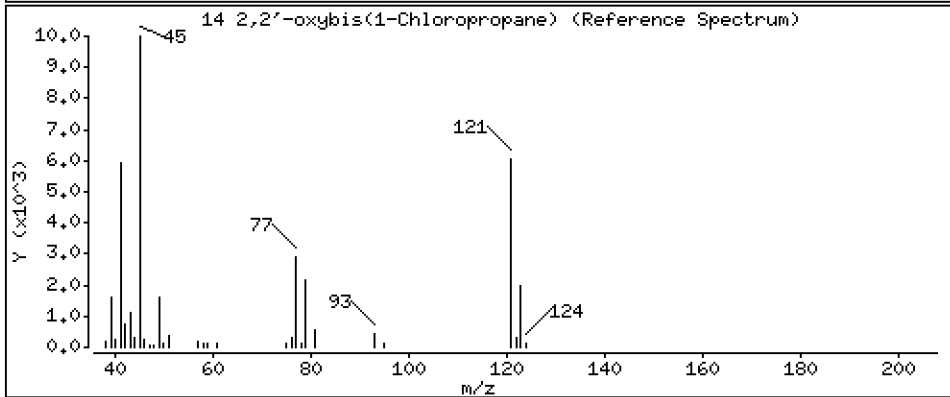
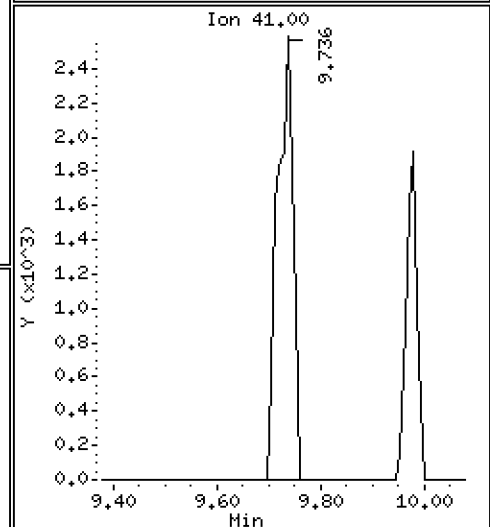
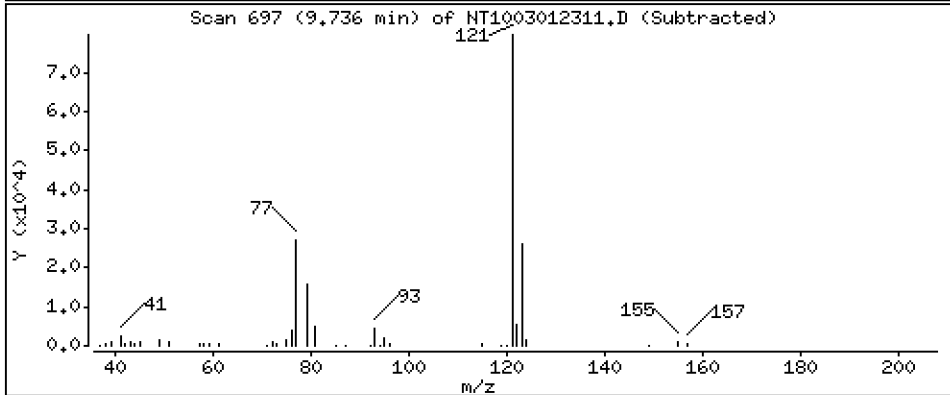
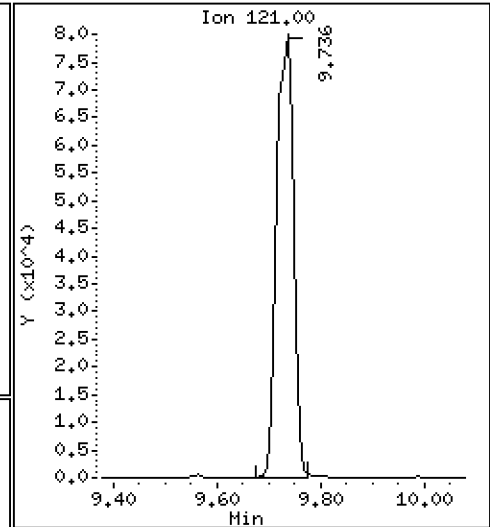
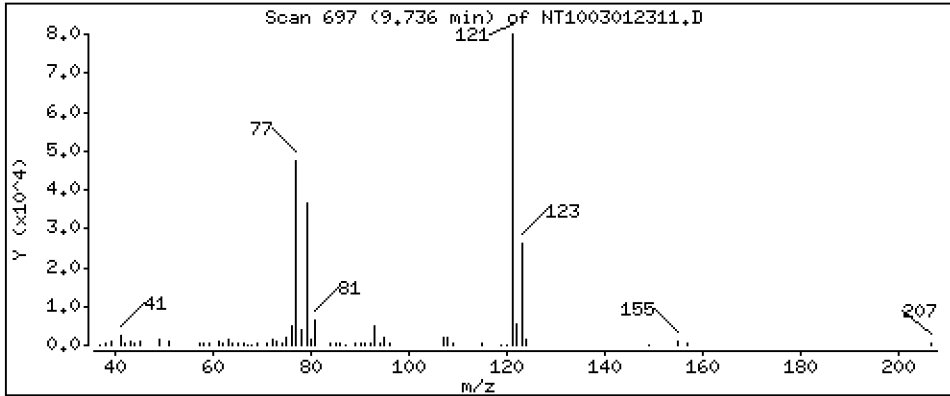
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 6,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

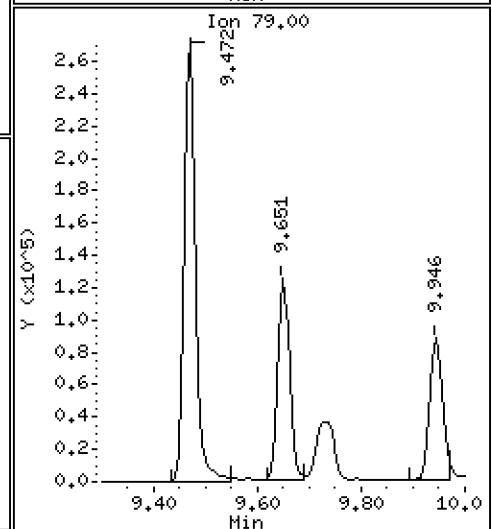
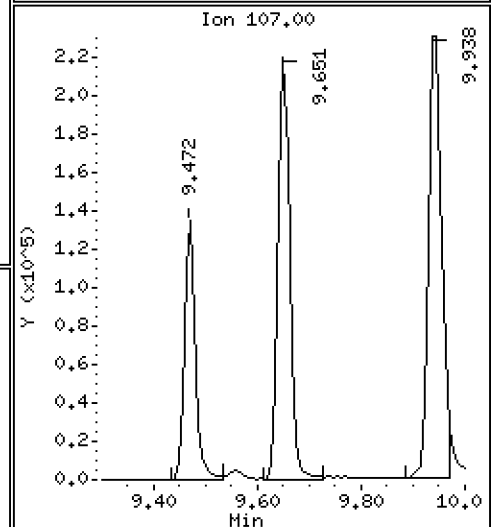
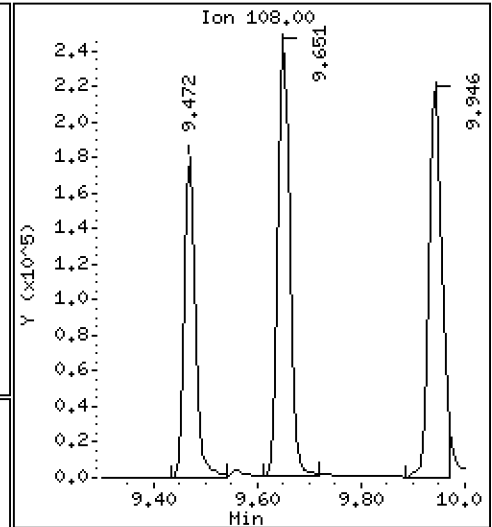
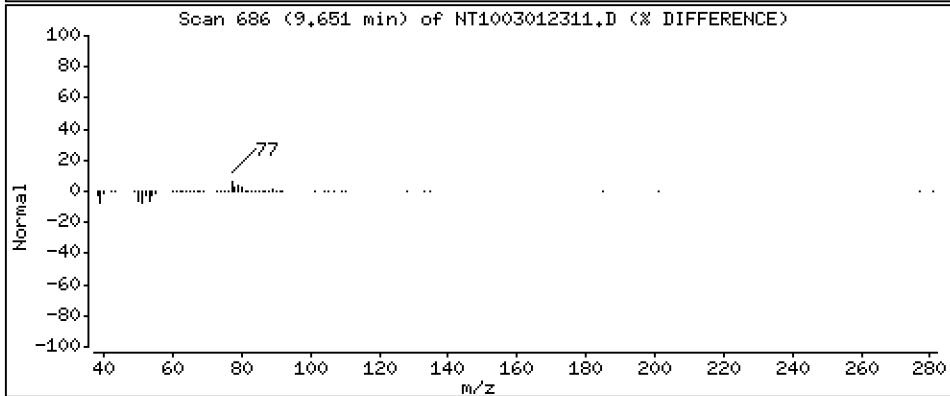
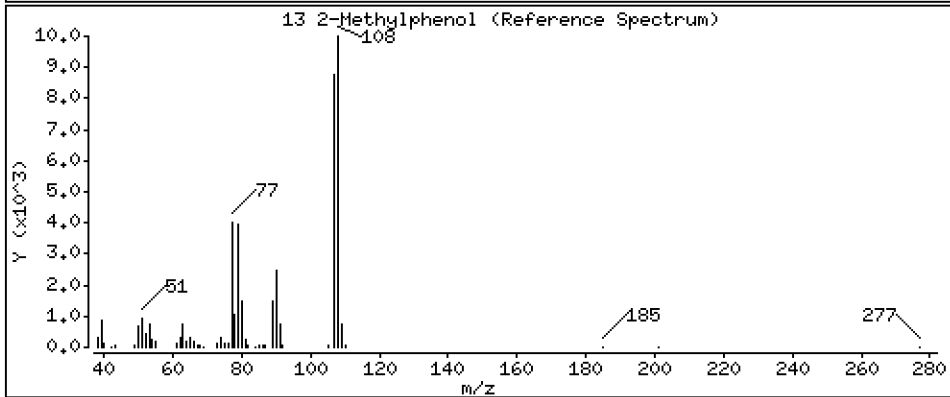
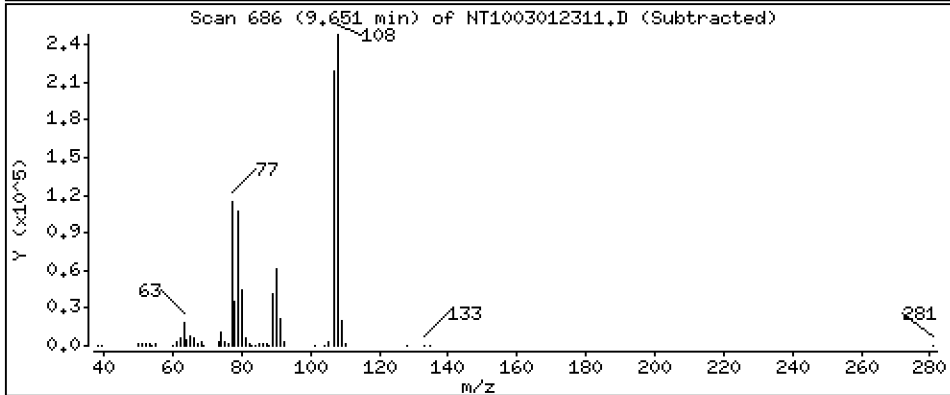
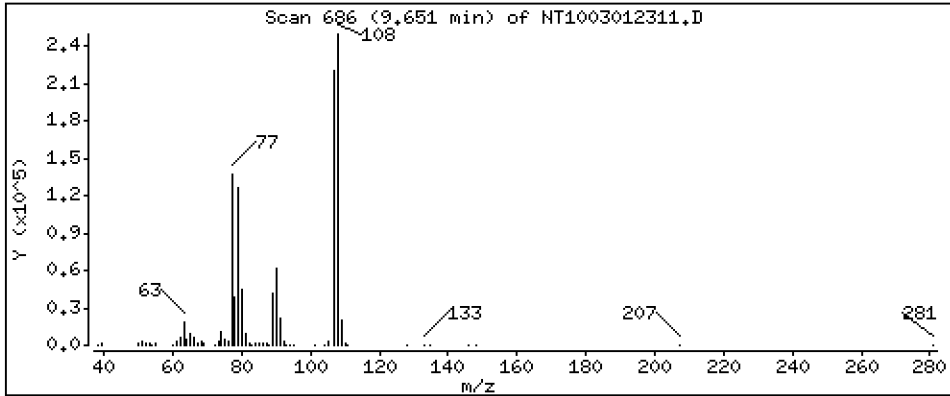
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.192 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

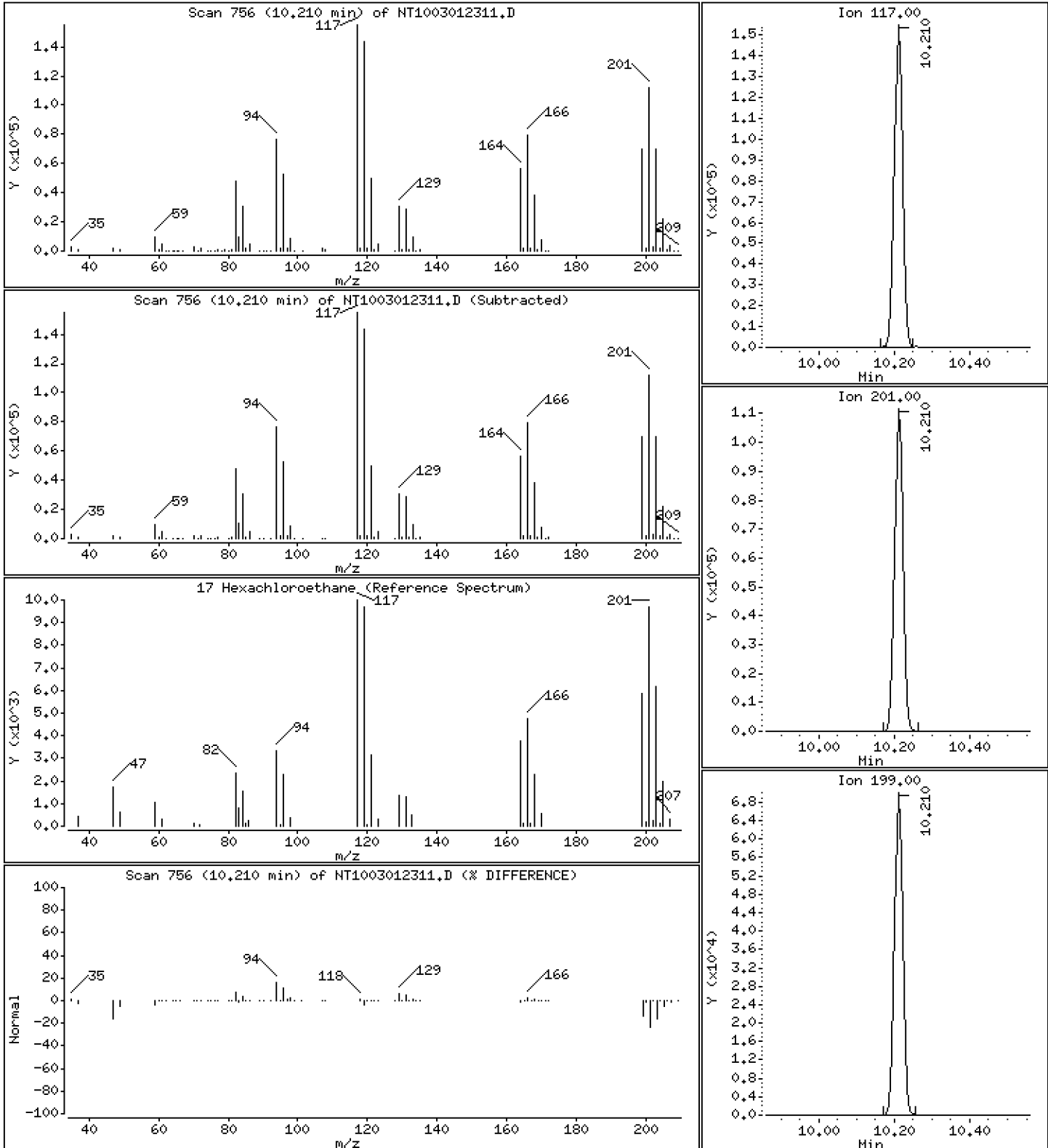
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 5,443 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

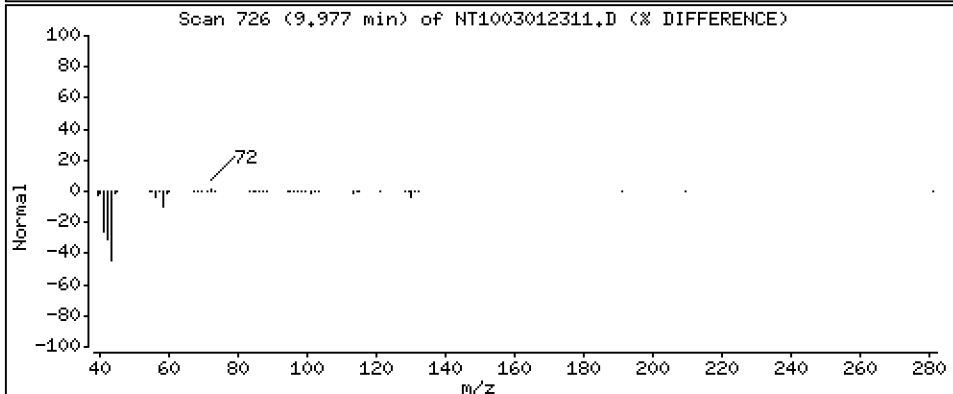
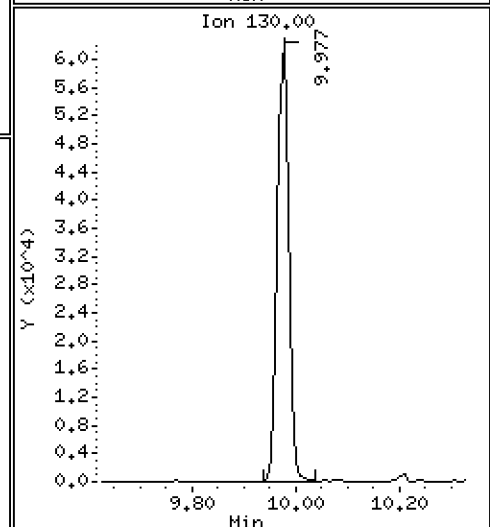
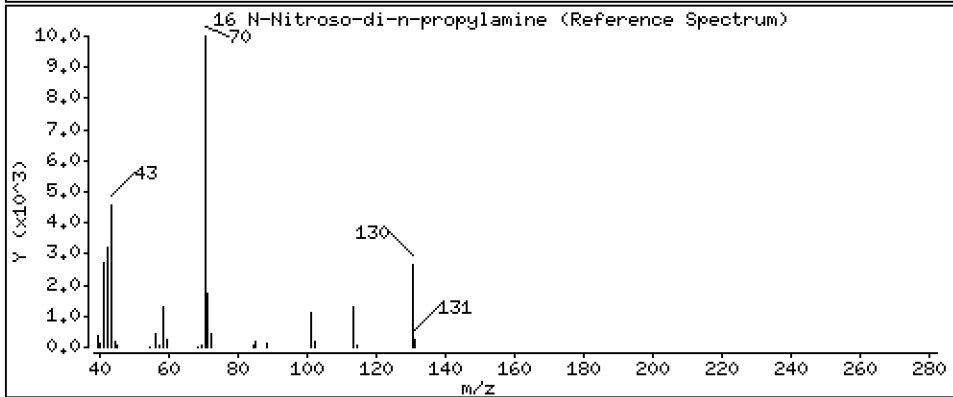
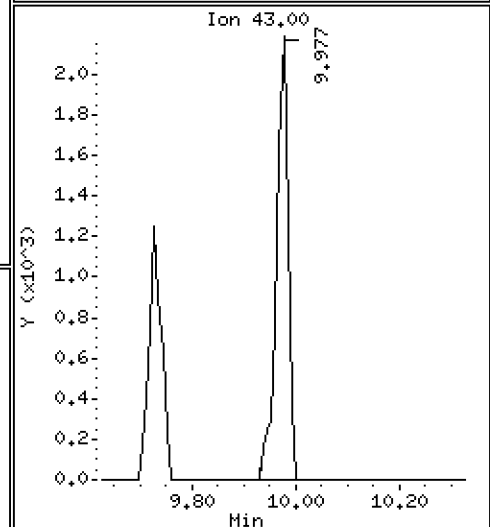
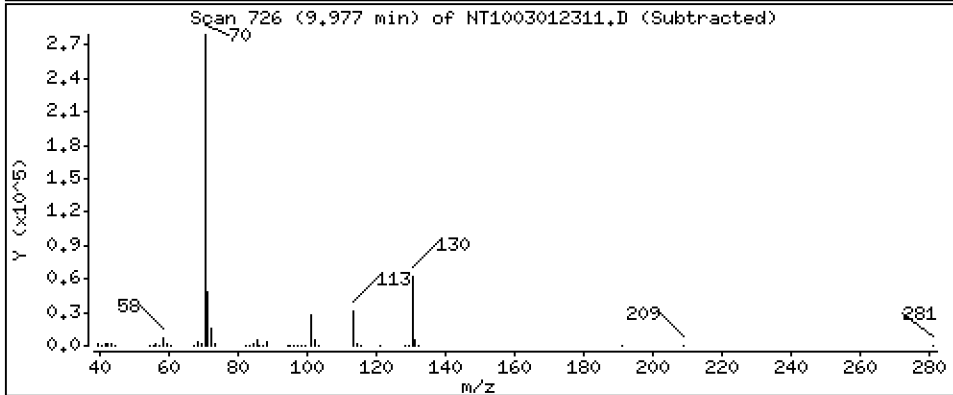
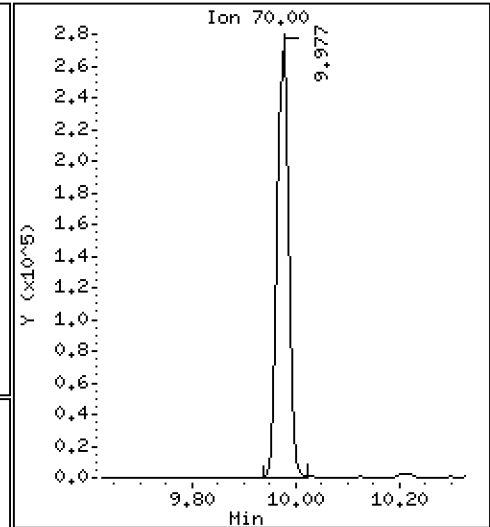
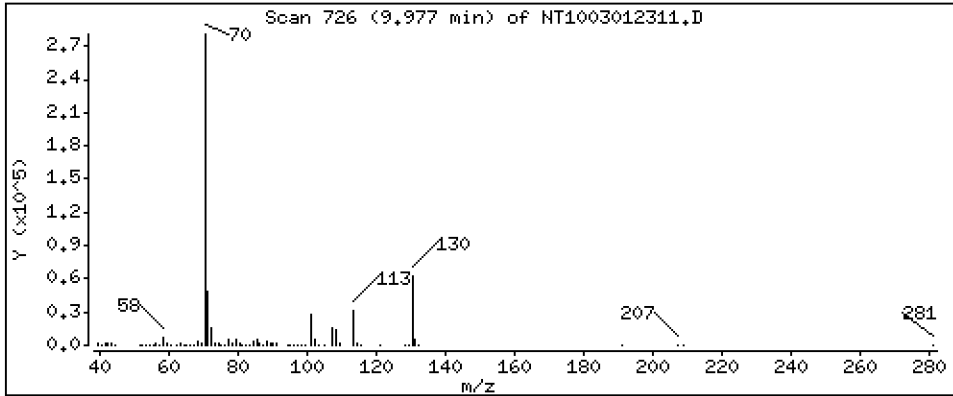
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

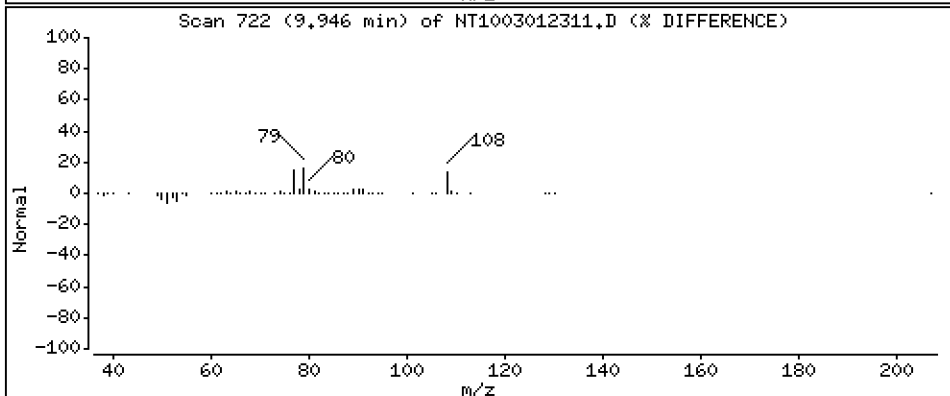
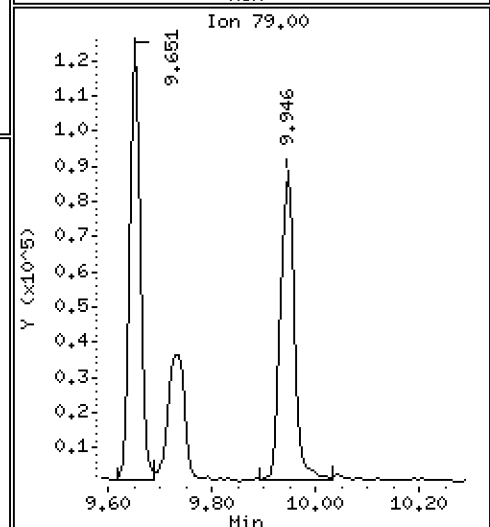
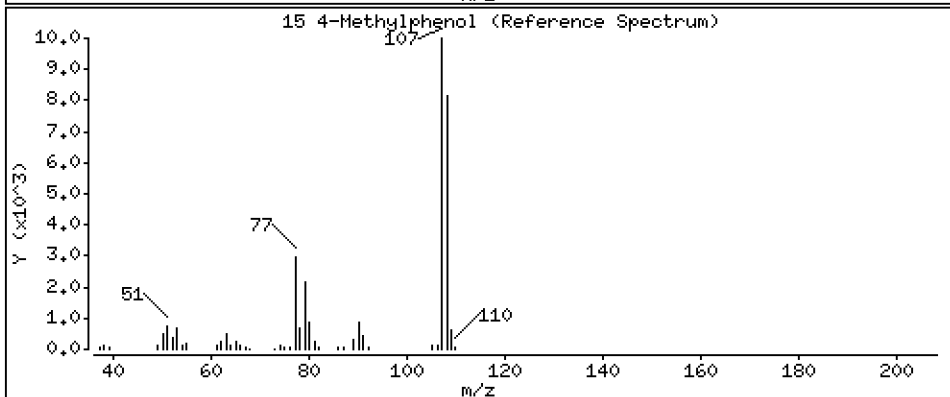
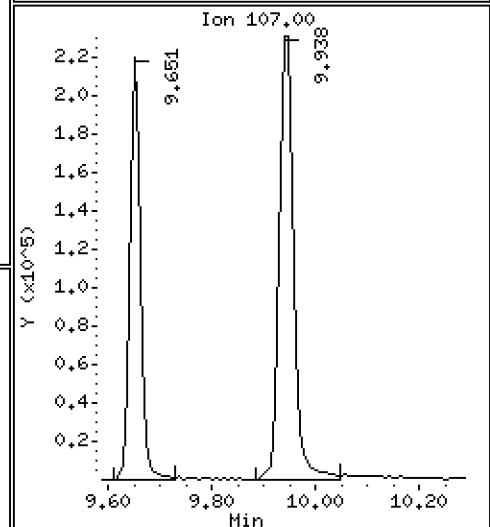
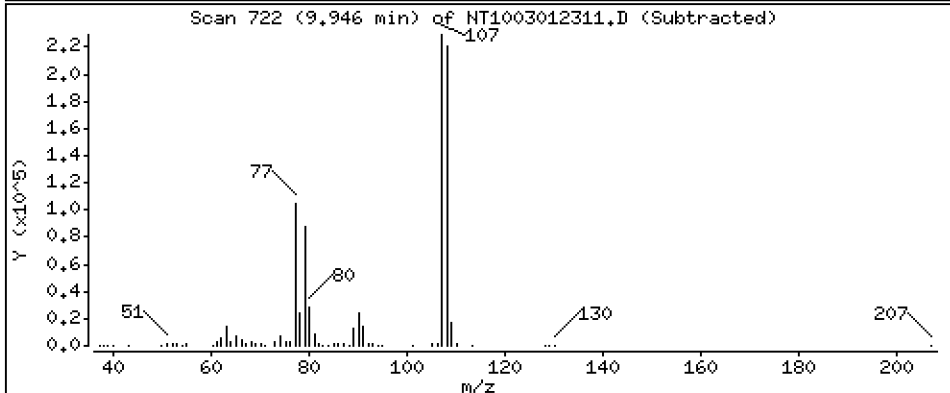
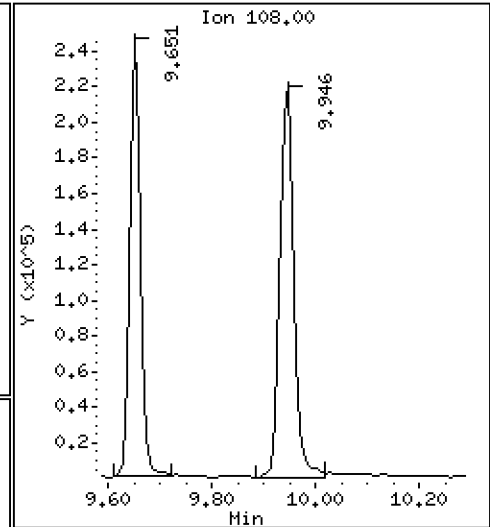
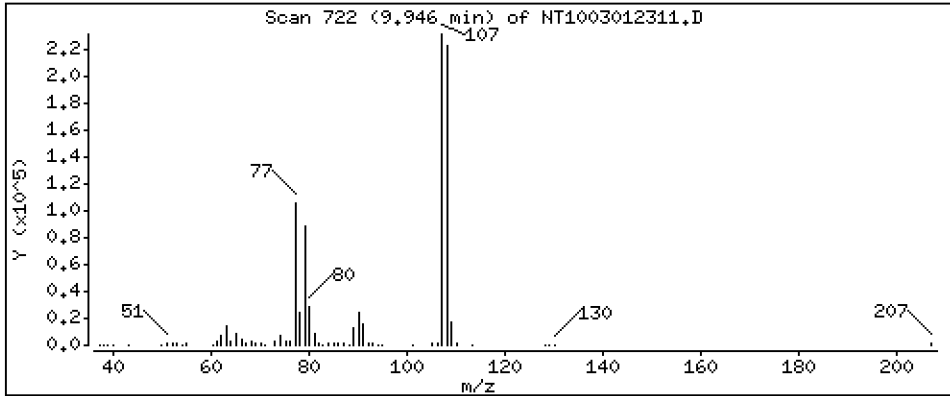
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.239 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

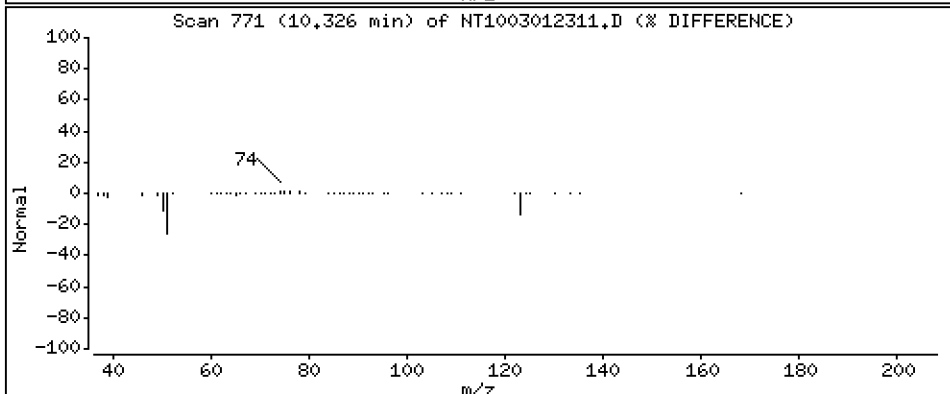
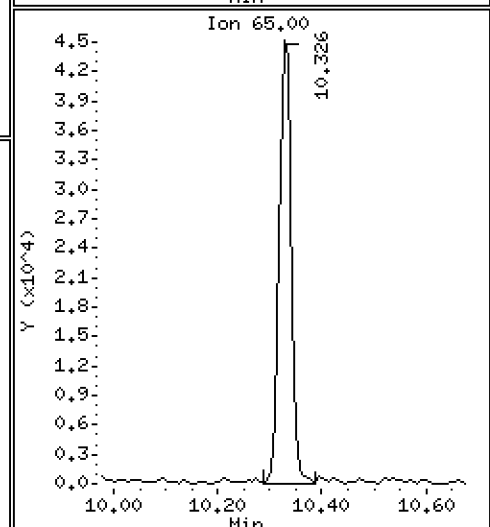
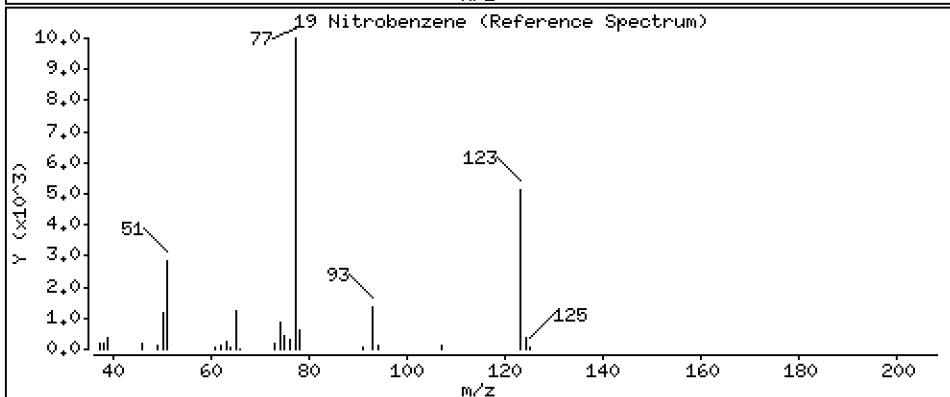
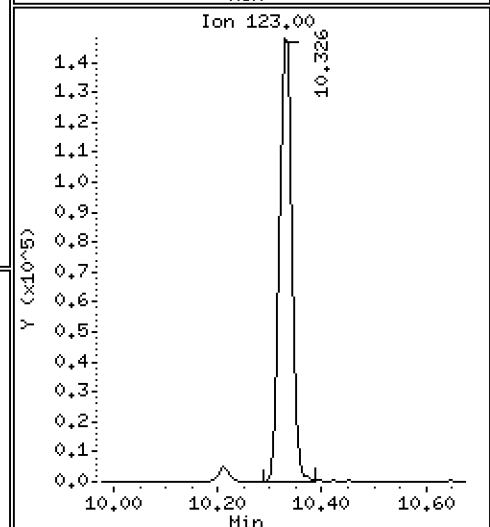
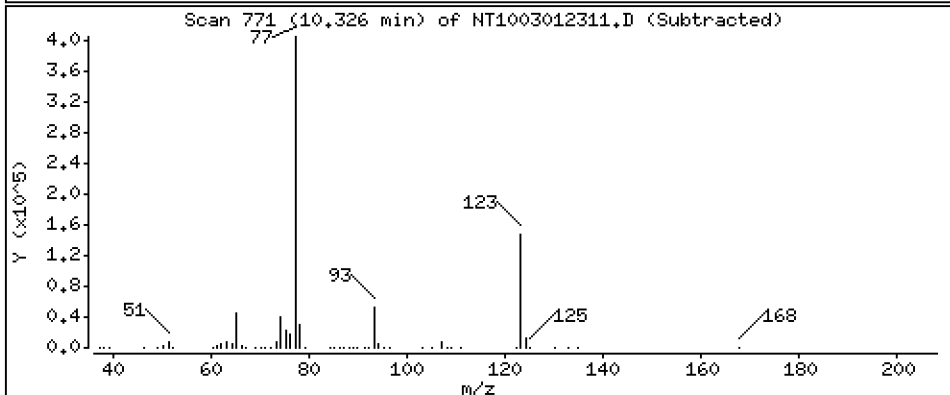
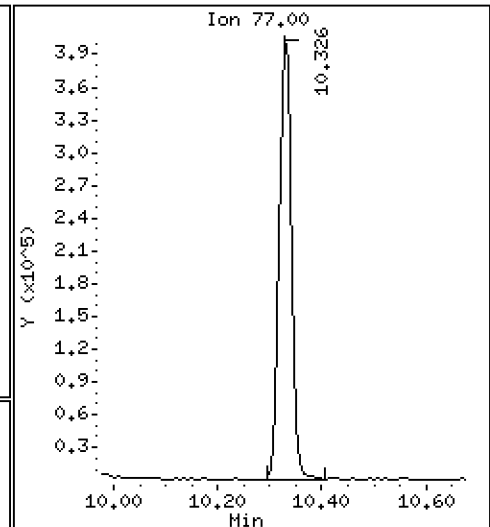
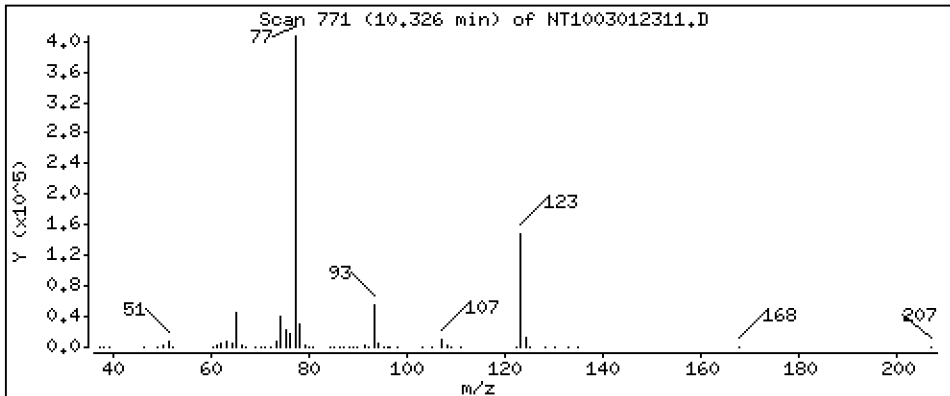
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,569 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

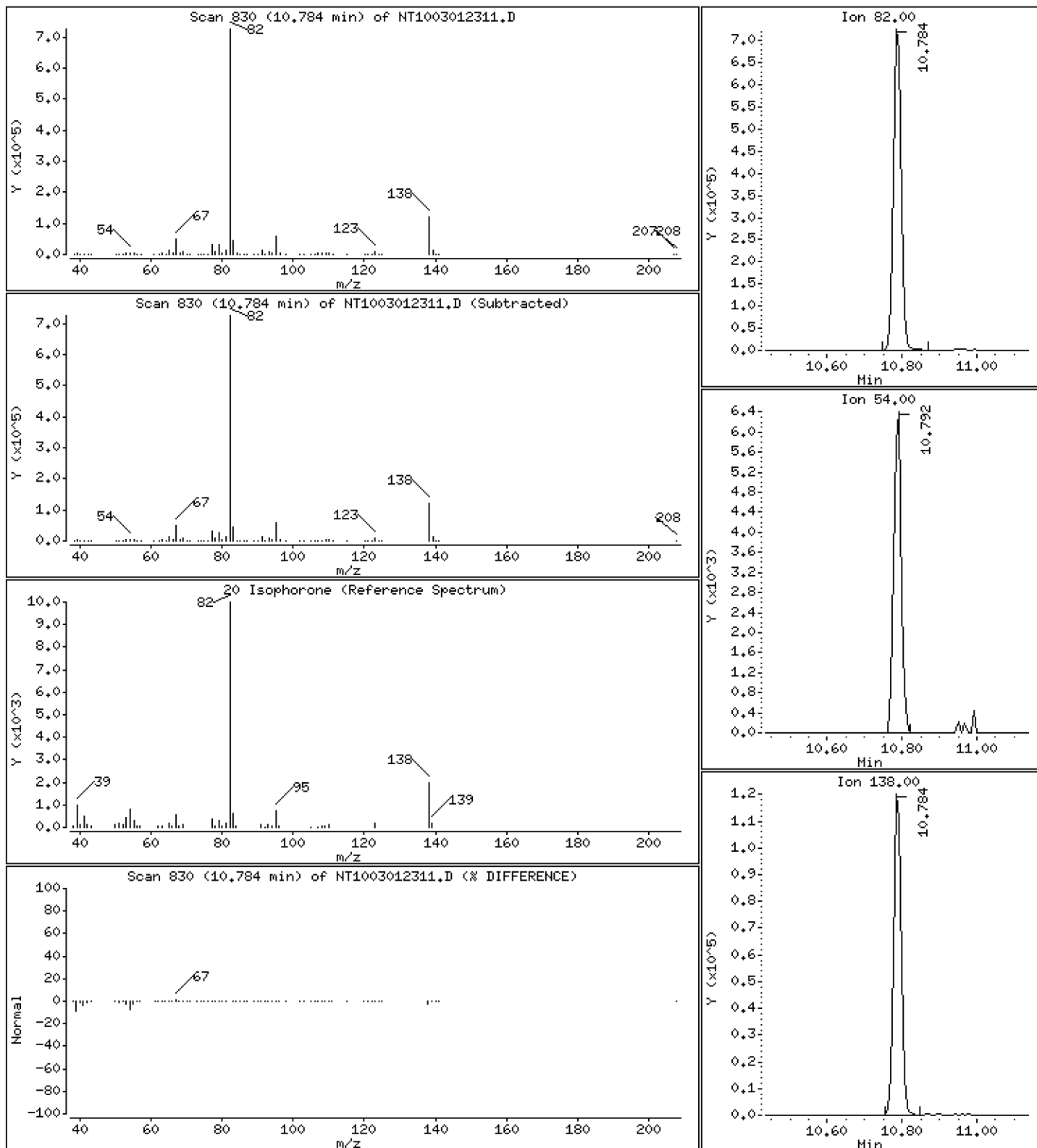
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 7,672 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

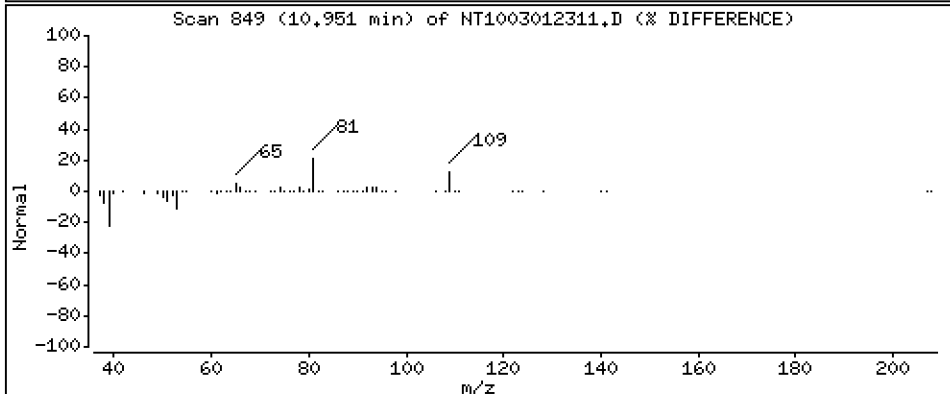
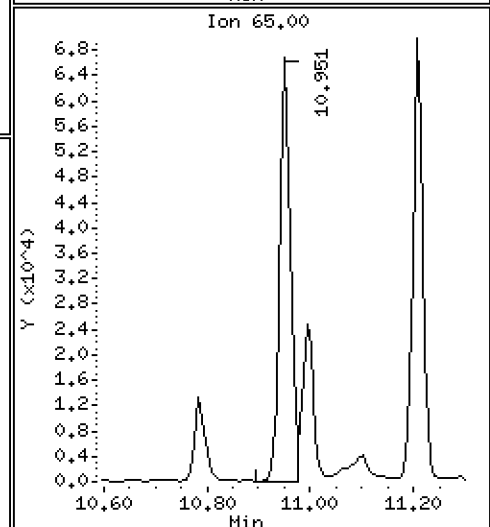
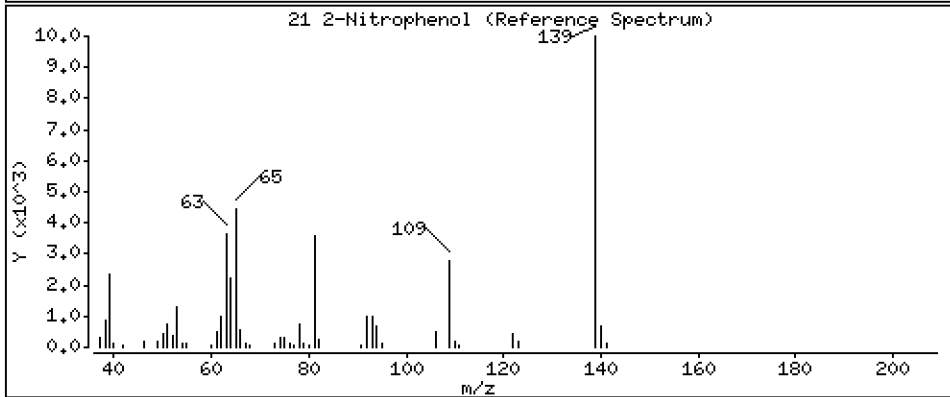
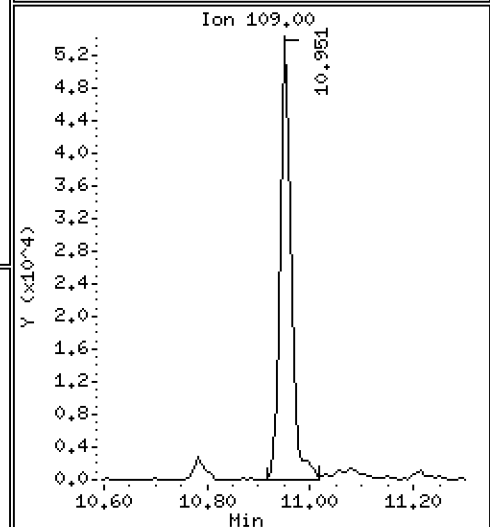
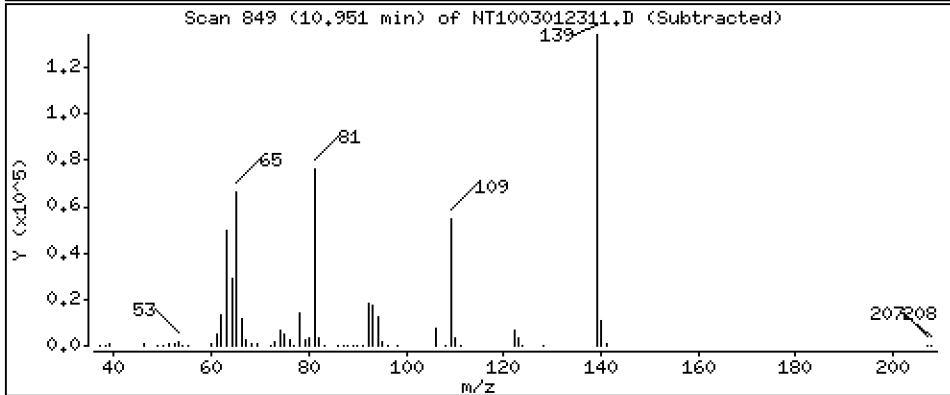
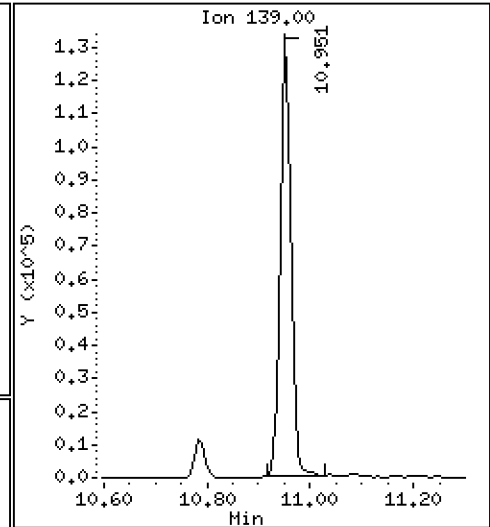
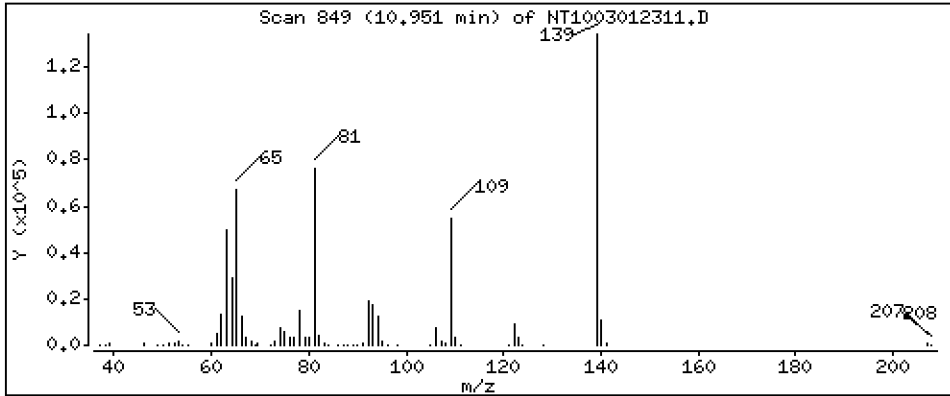
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,244 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

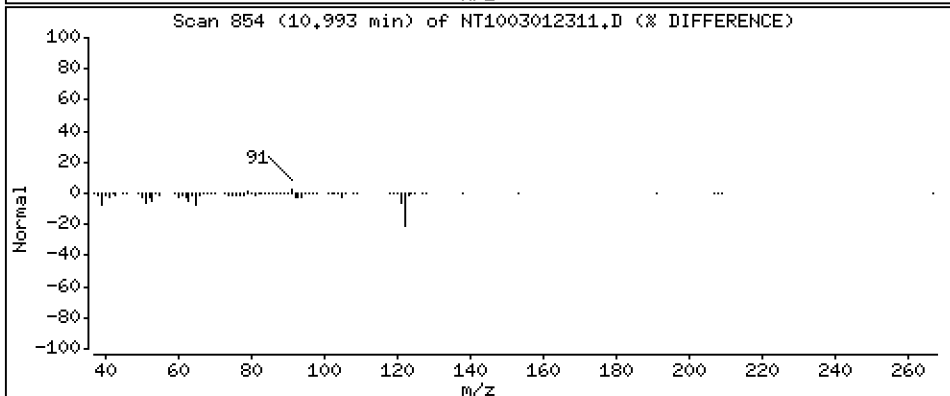
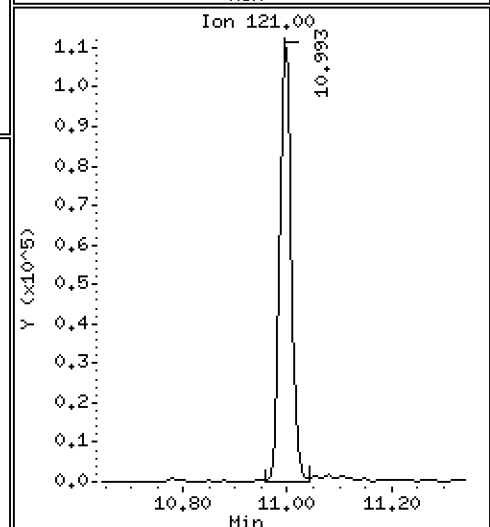
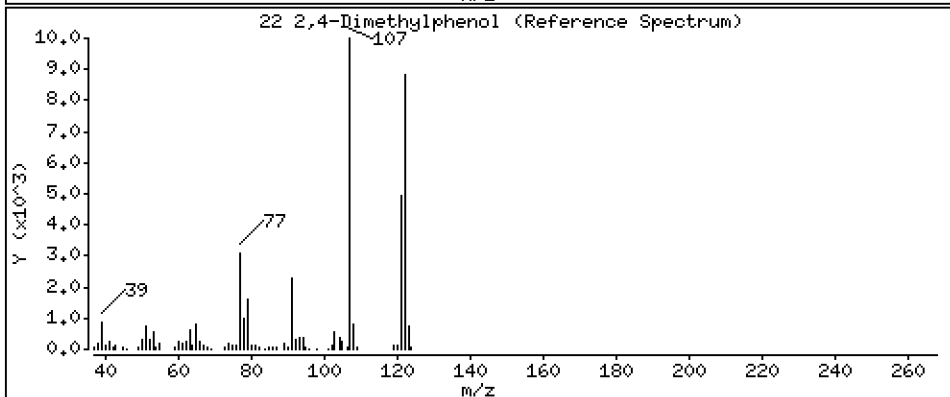
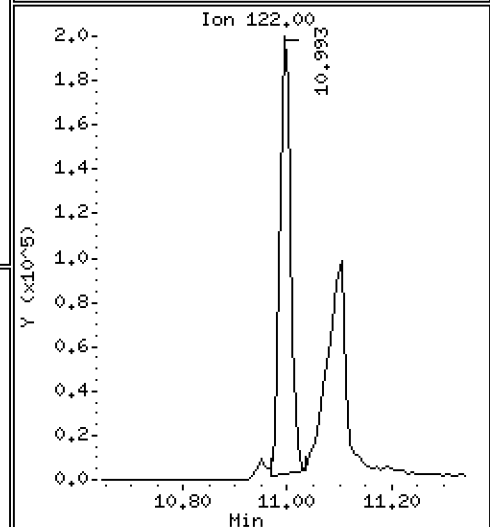
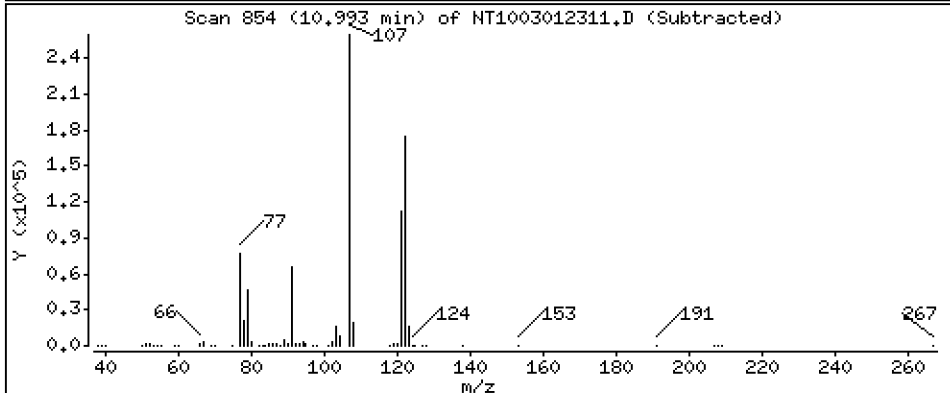
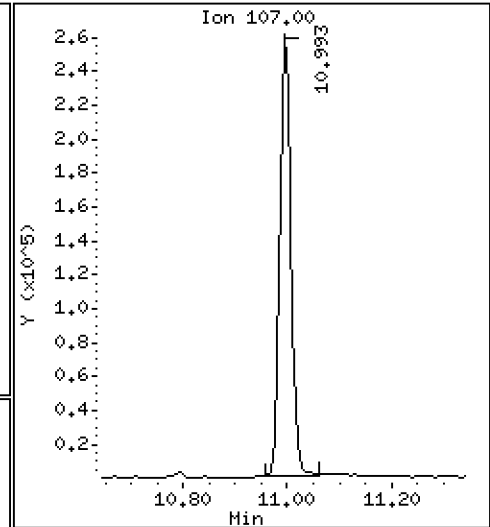
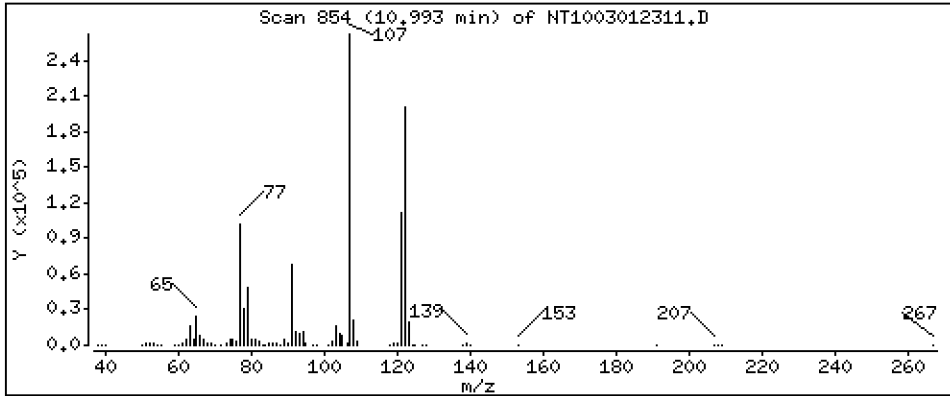
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,507 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

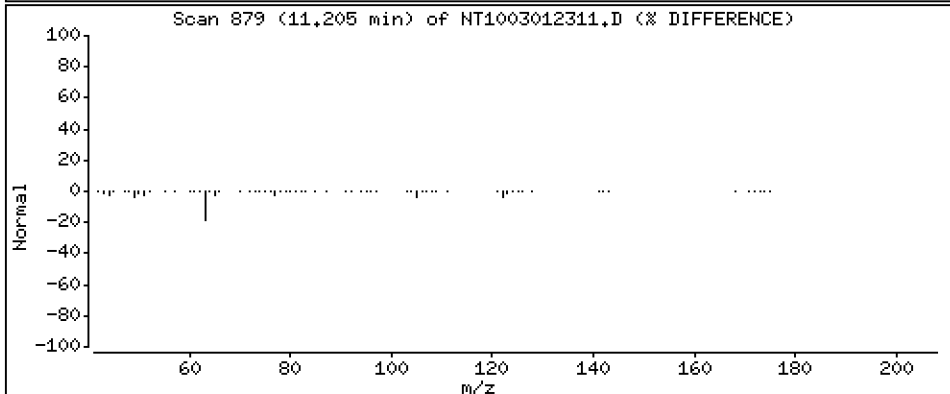
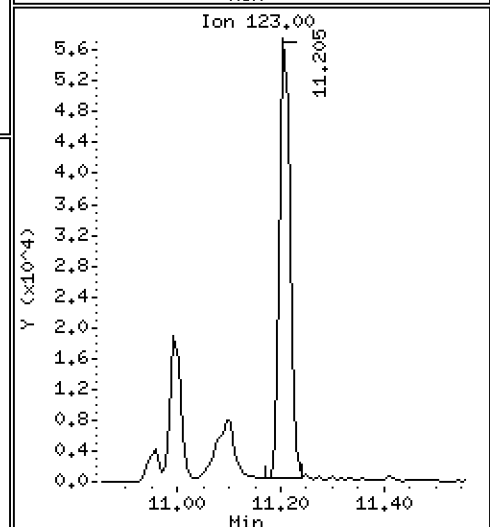
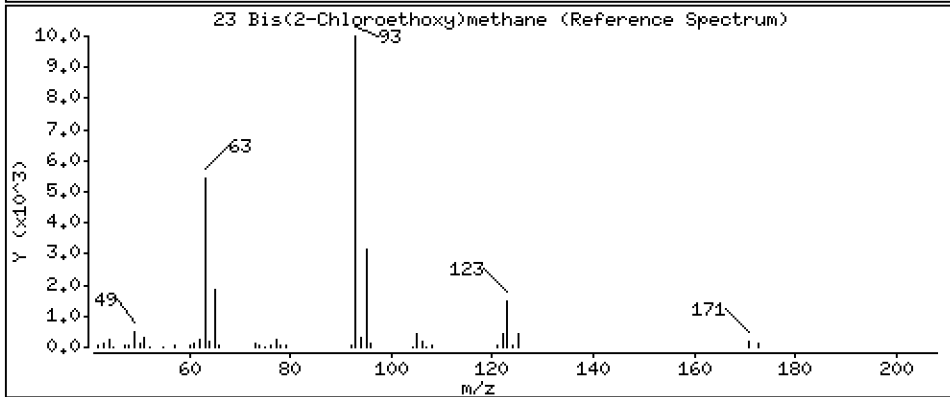
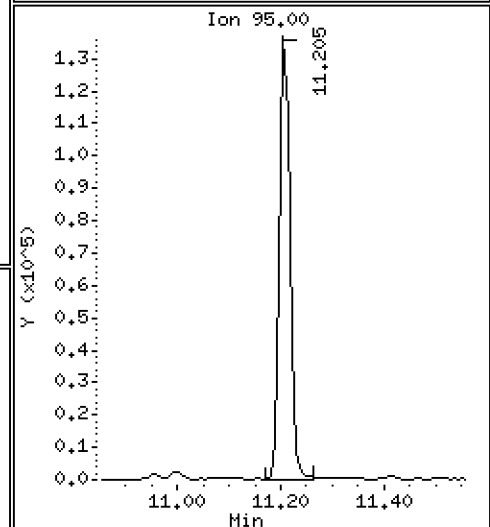
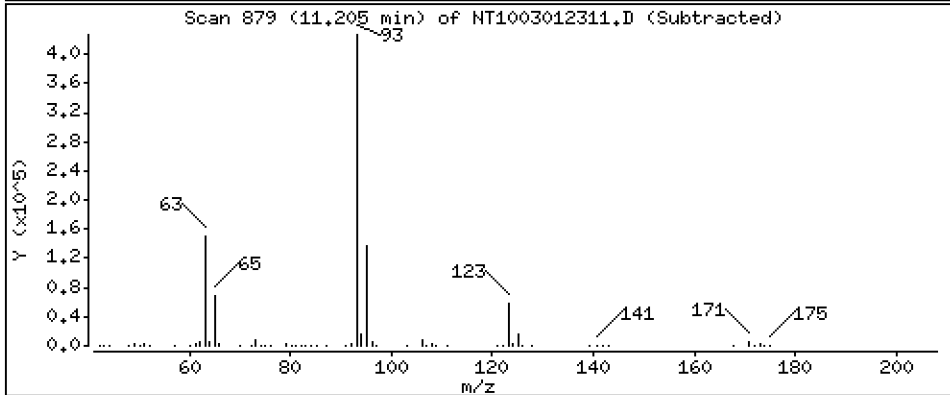
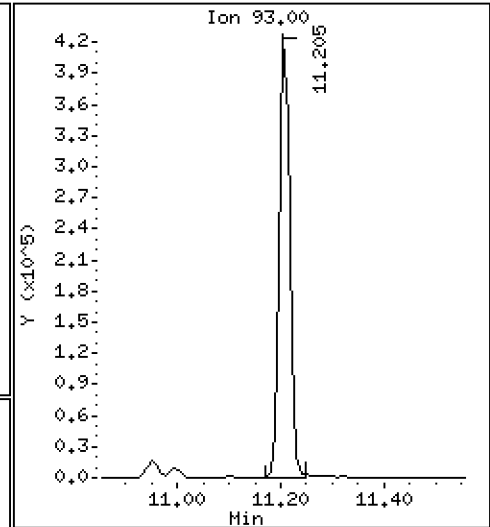
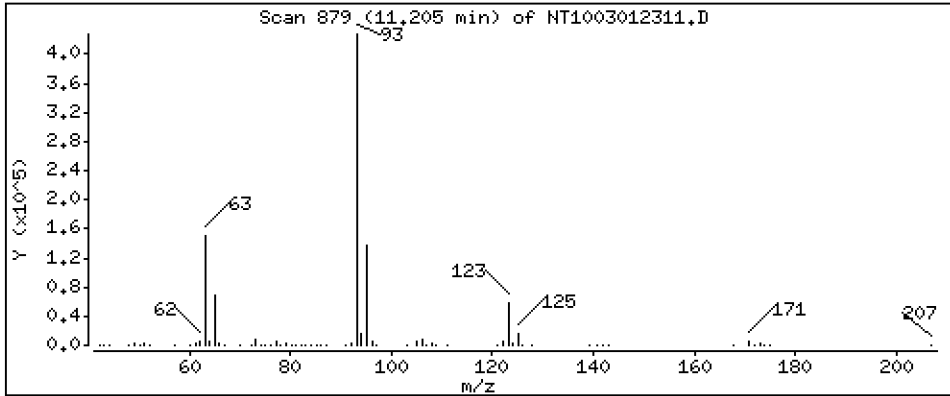
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 6,727 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

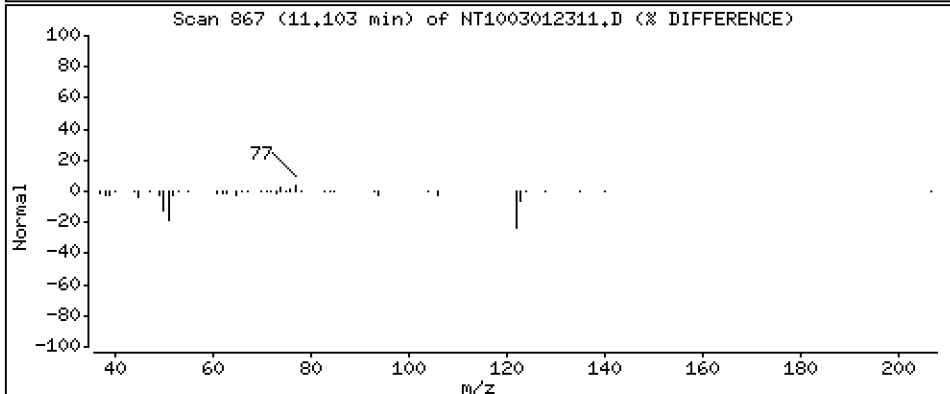
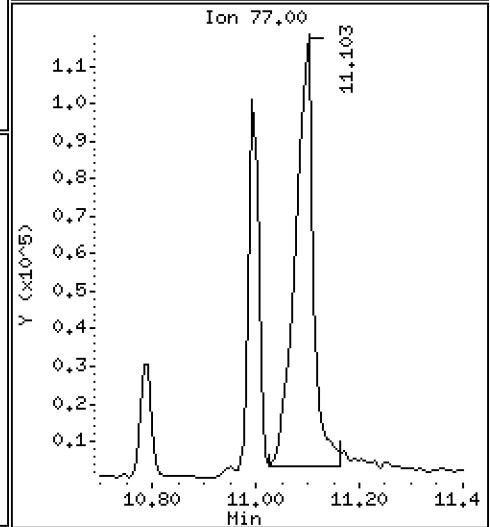
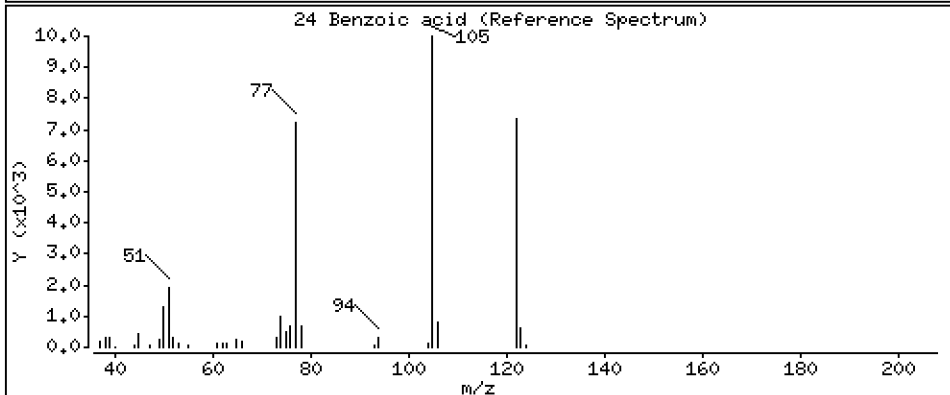
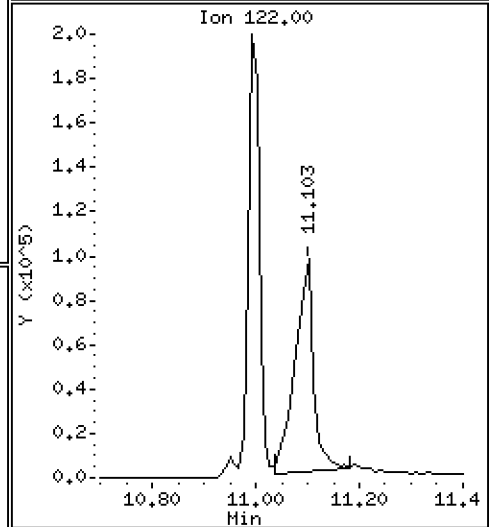
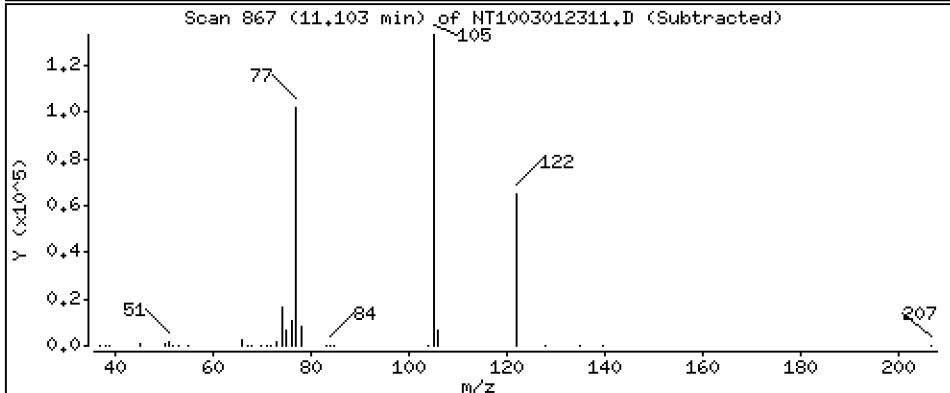
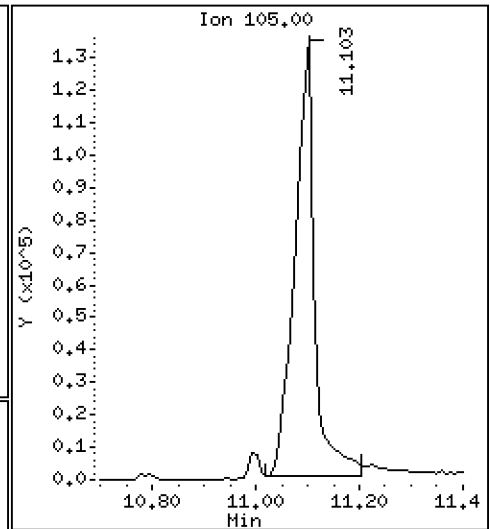
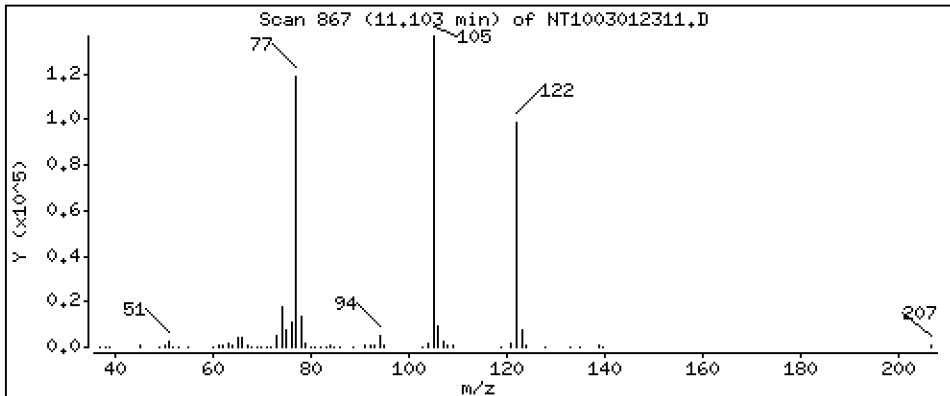
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 5,635 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

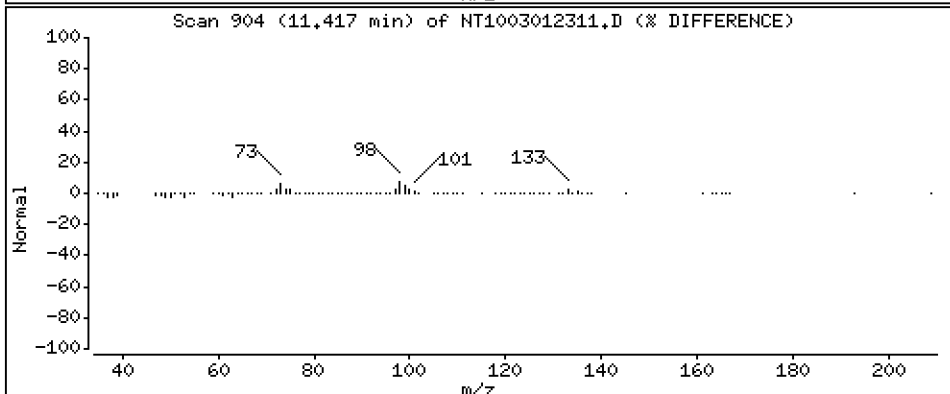
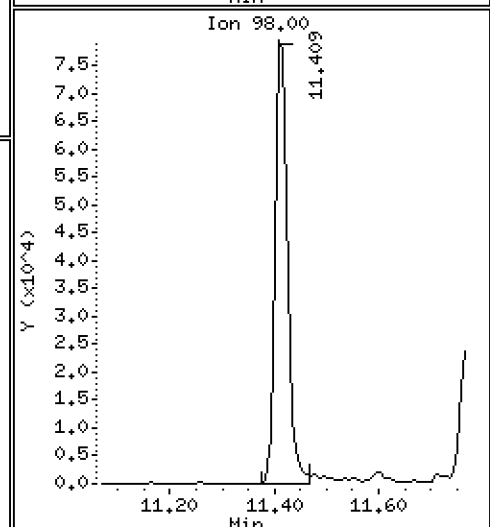
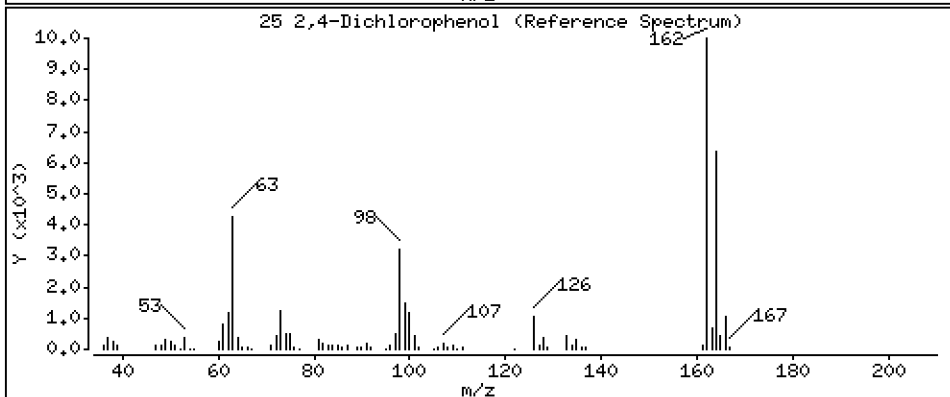
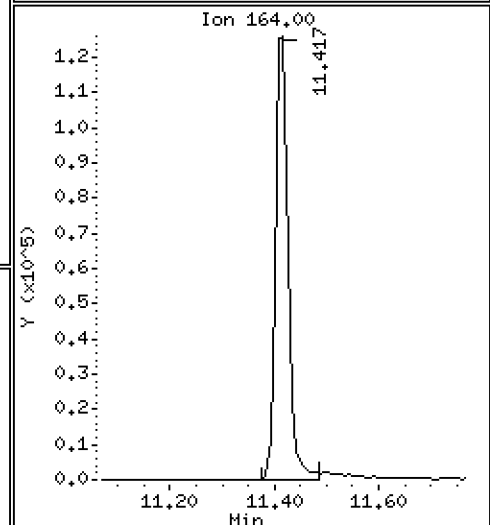
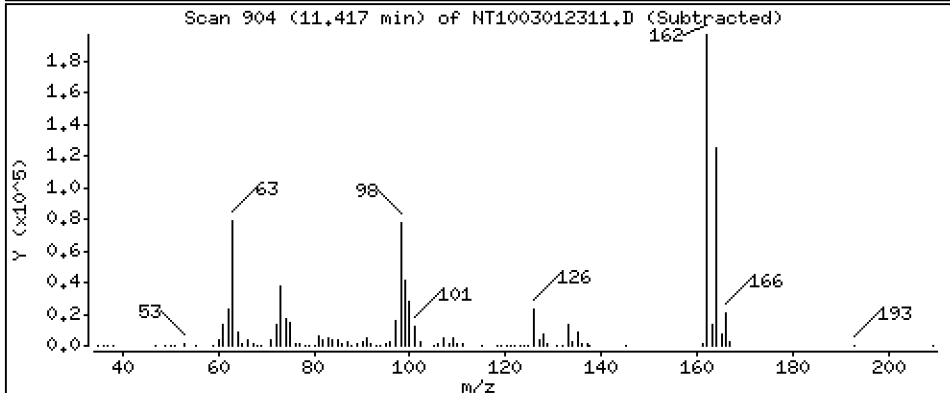
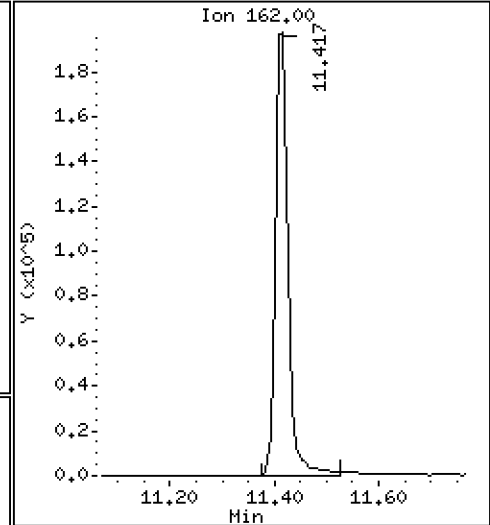
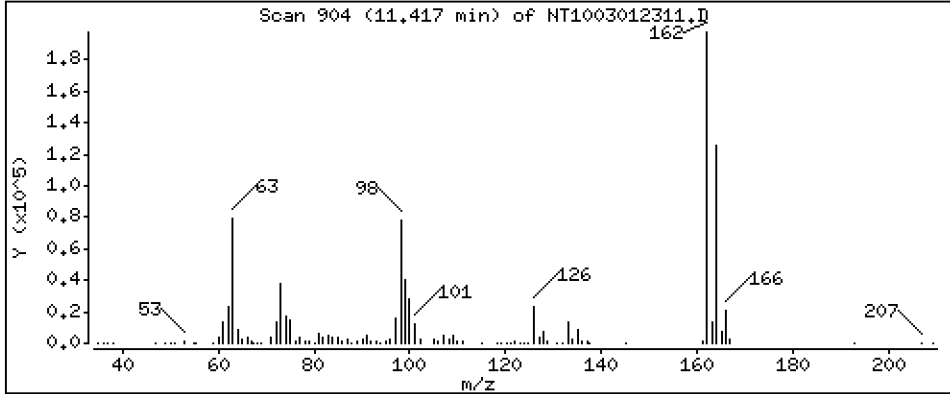
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,437 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

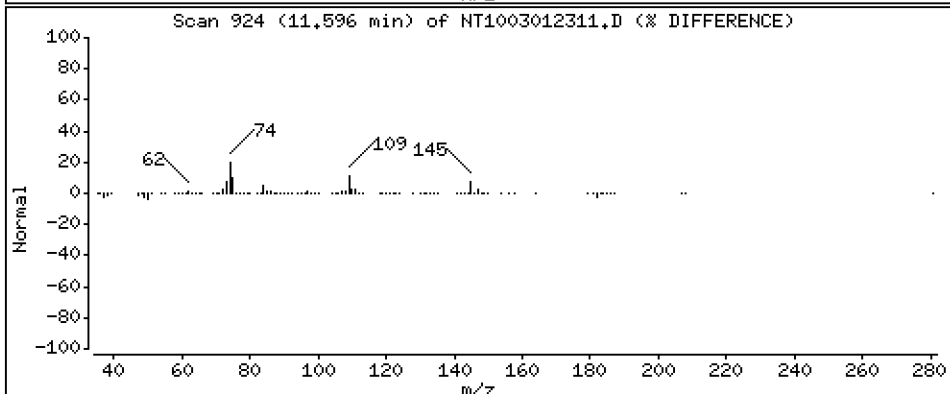
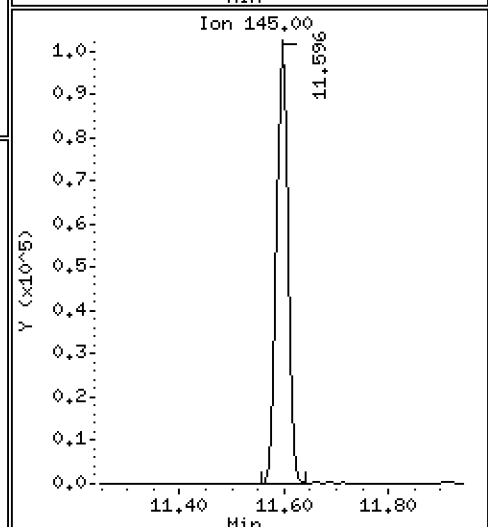
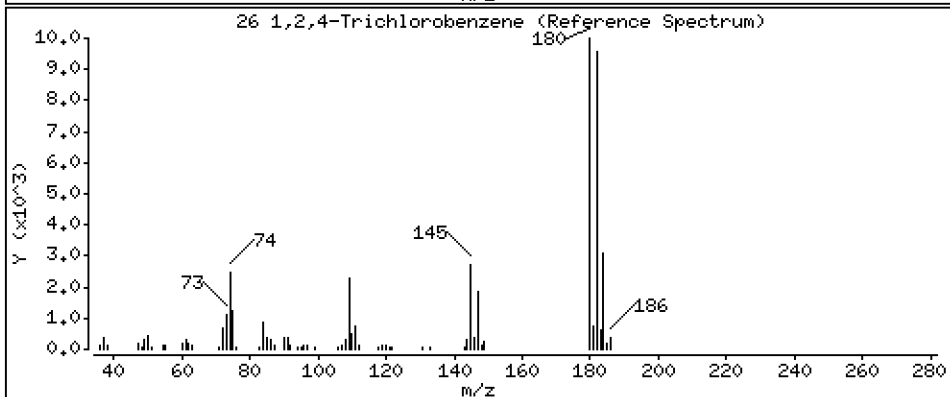
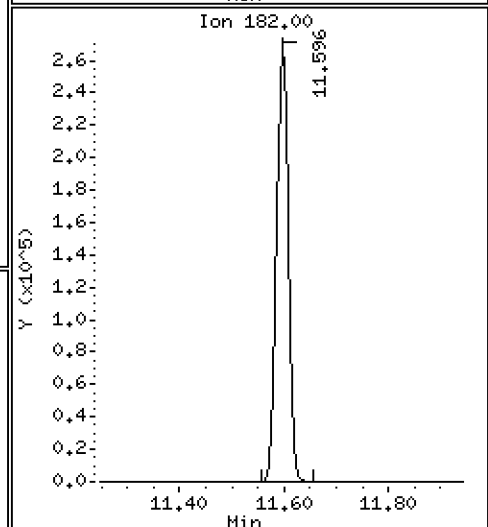
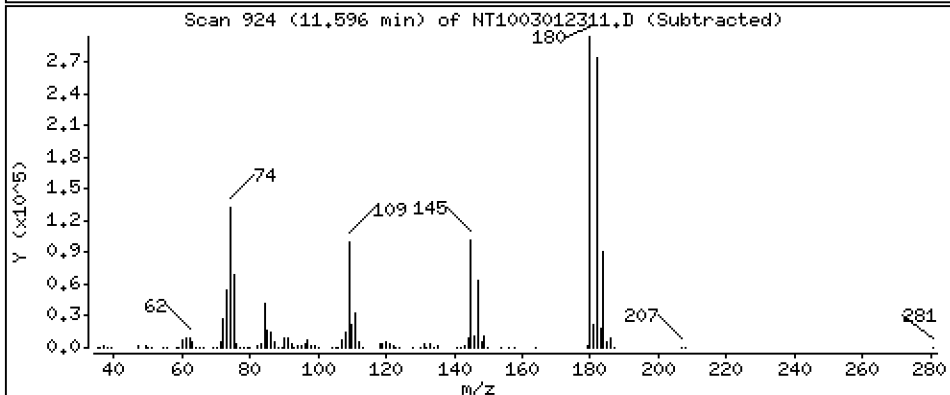
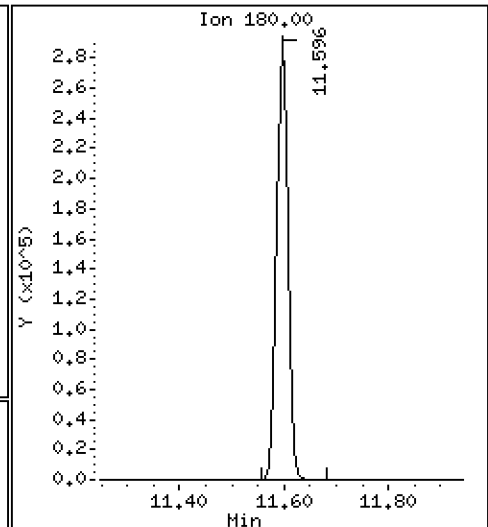
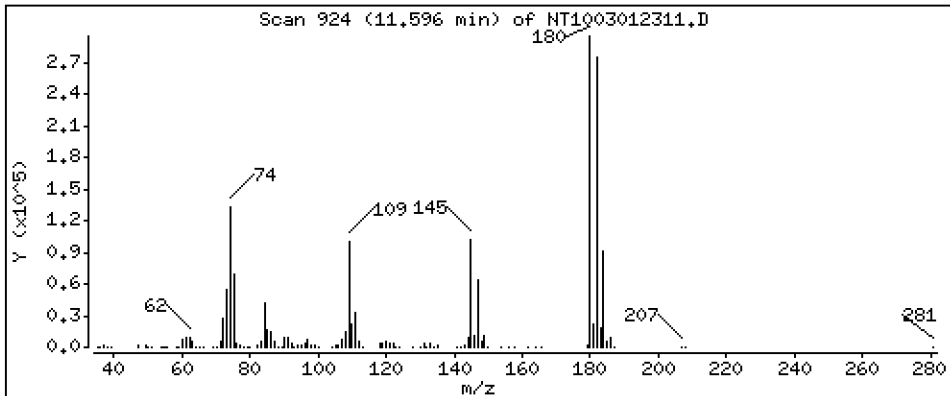
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,908 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

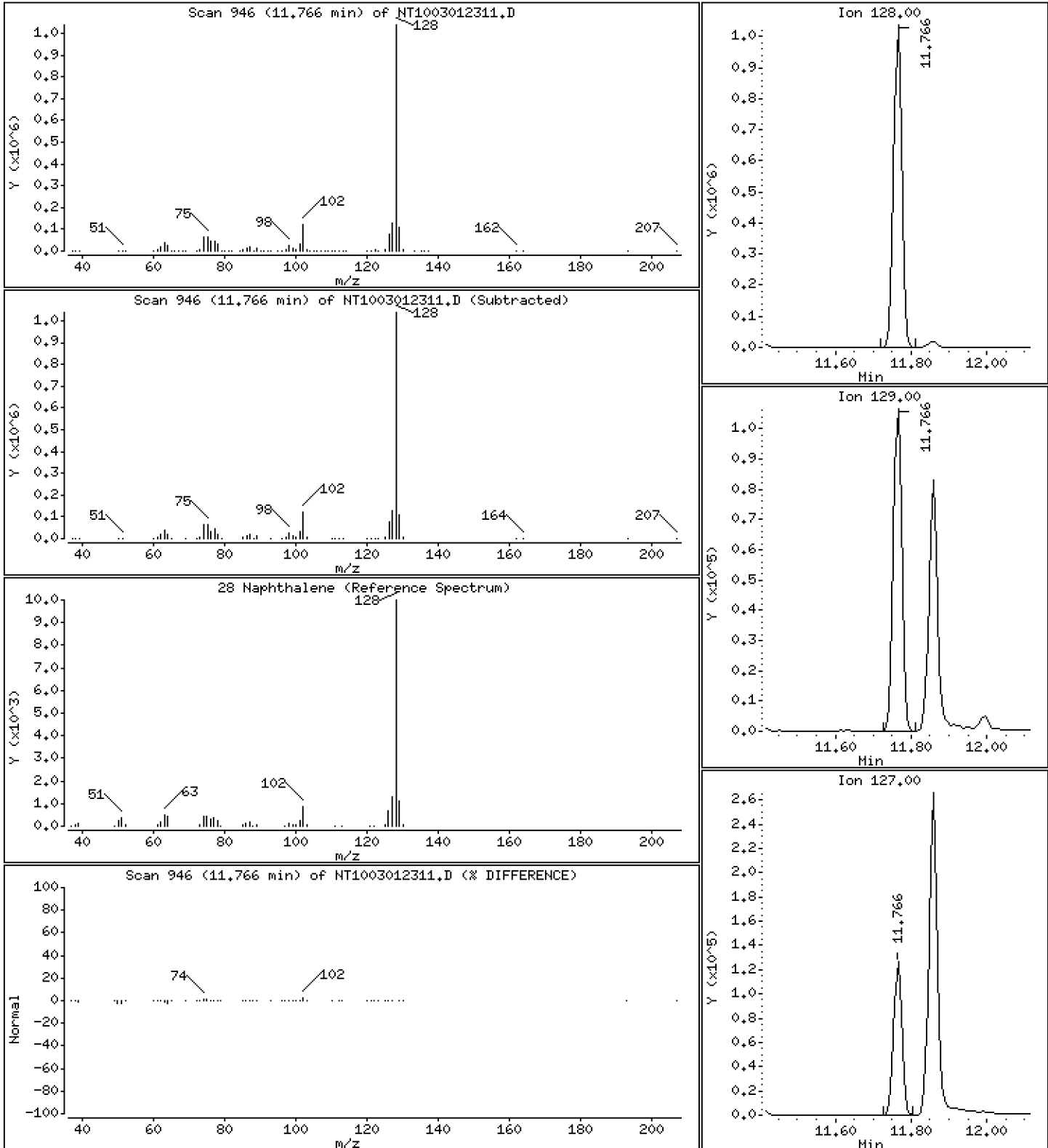
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 5,255 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

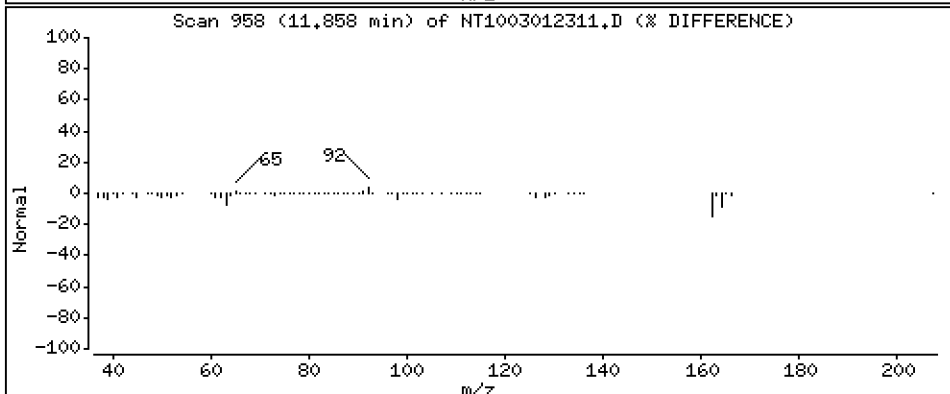
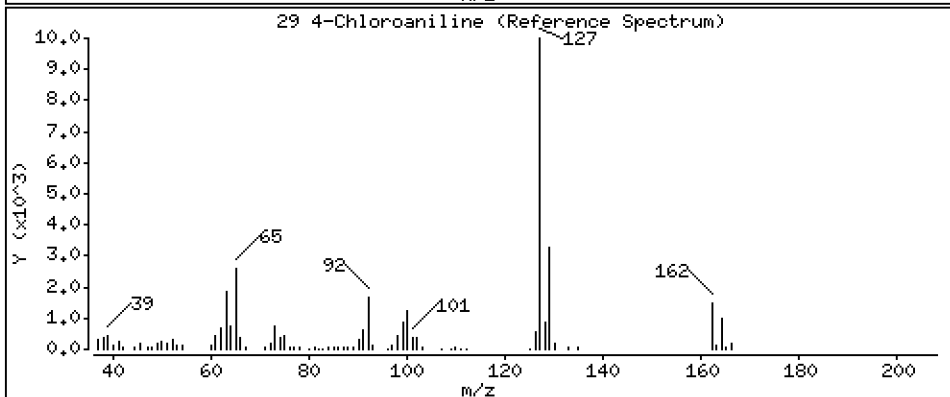
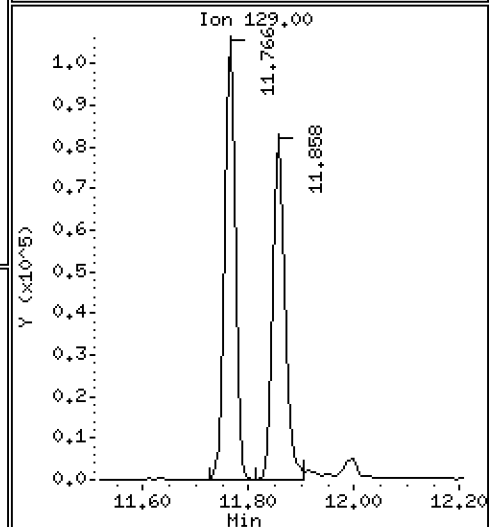
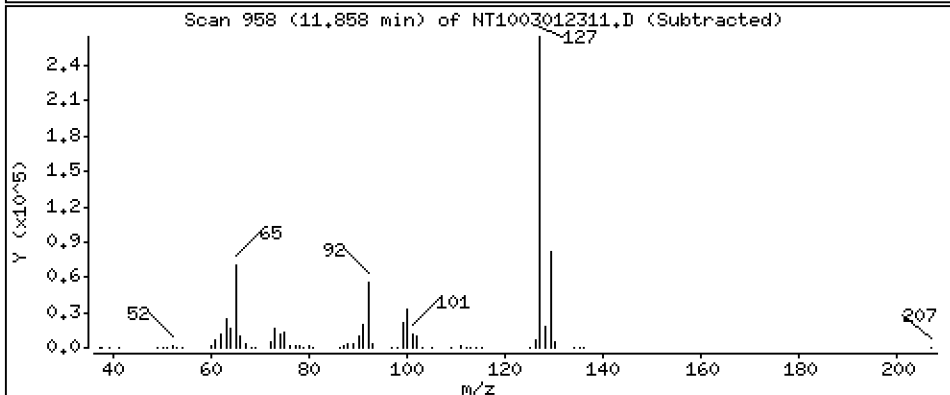
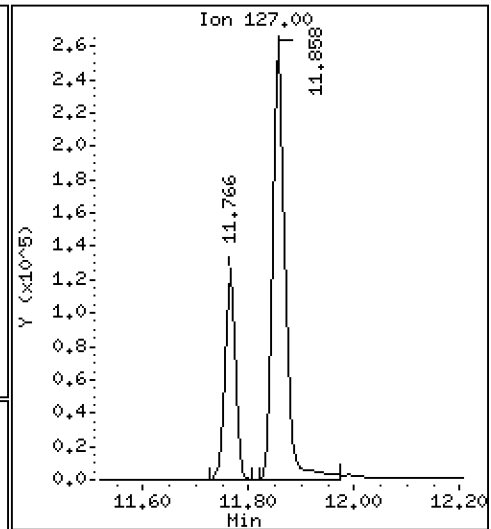
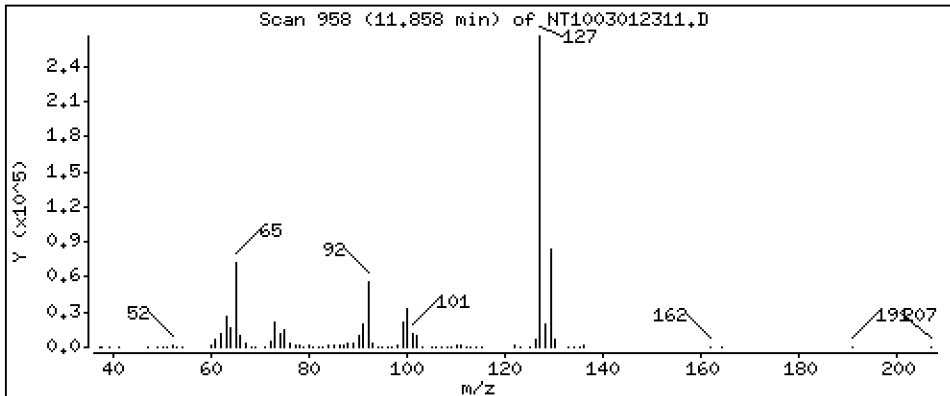
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

29 4-Chloroaniline

Concentration: 3.791 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

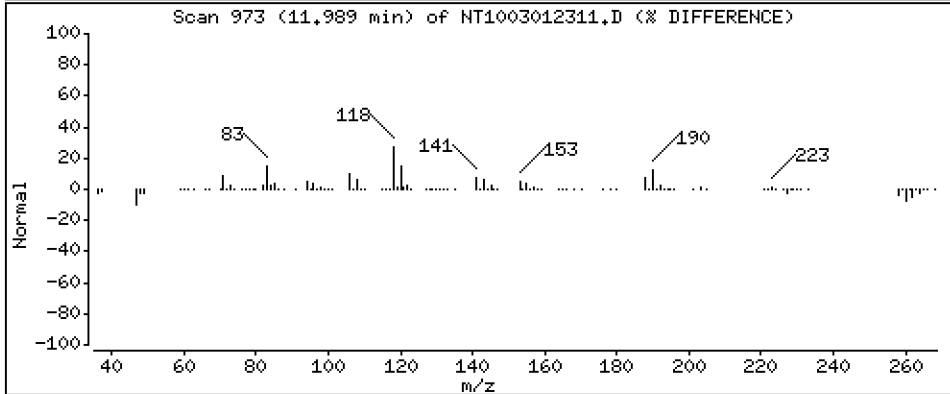
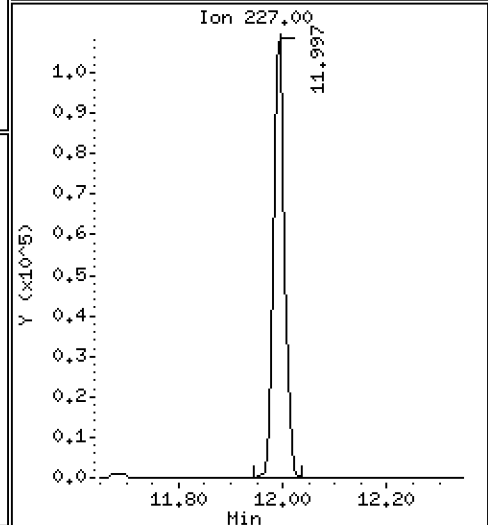
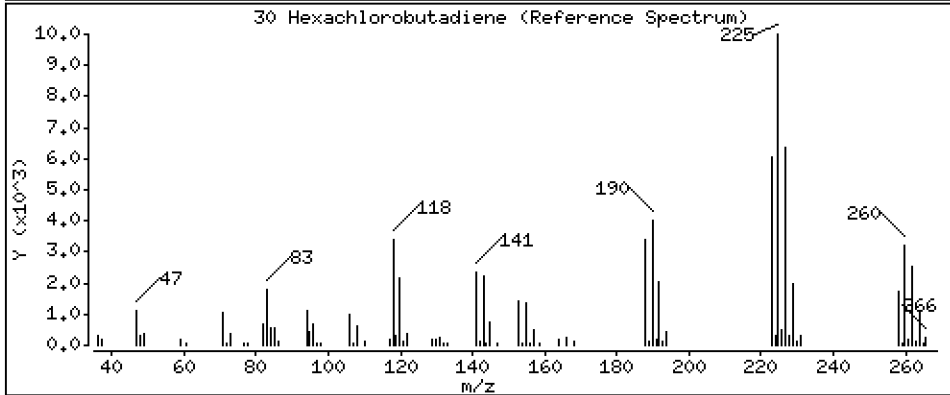
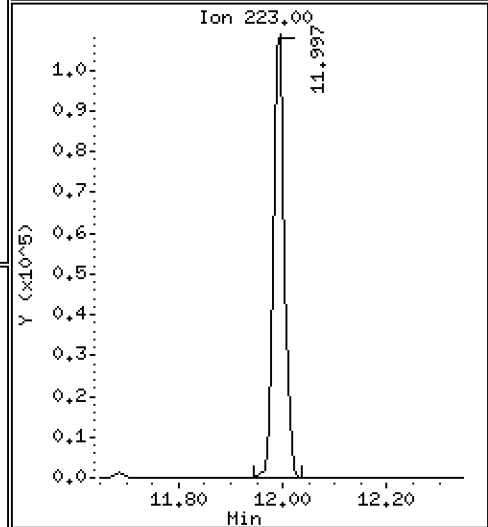
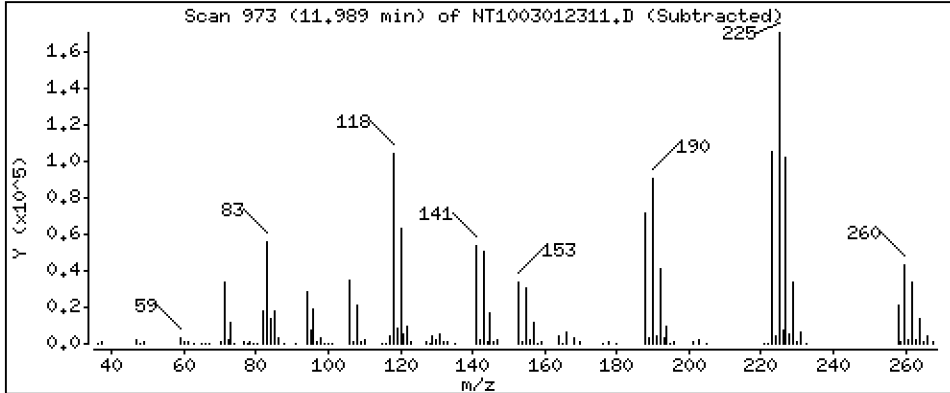
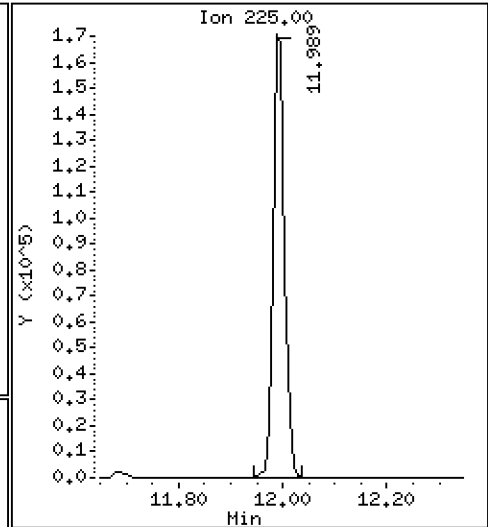
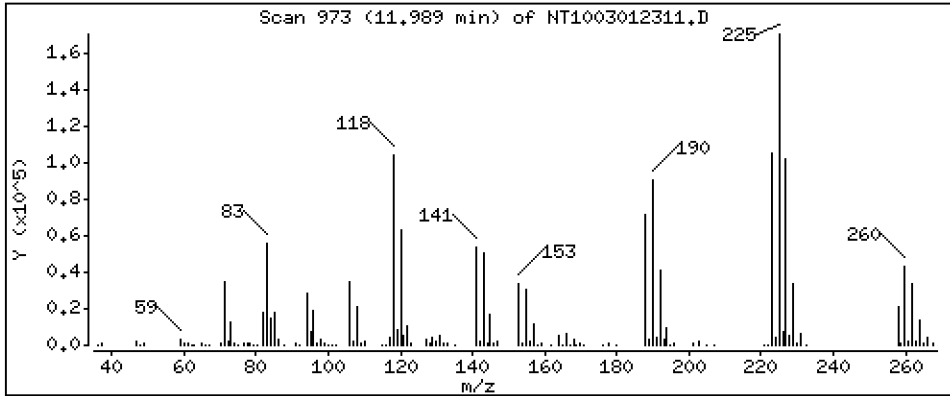
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,014 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

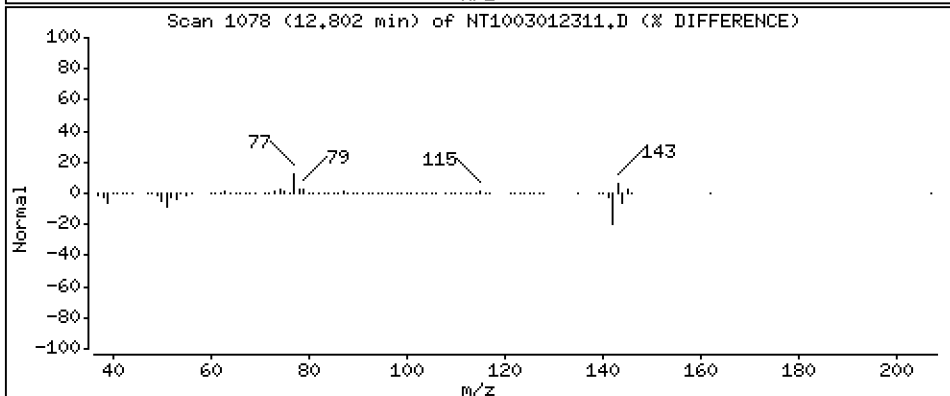
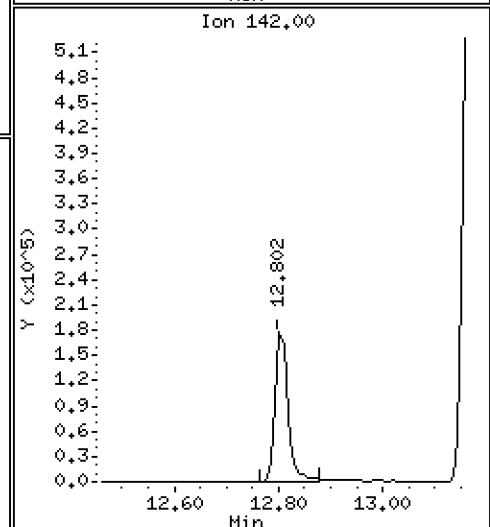
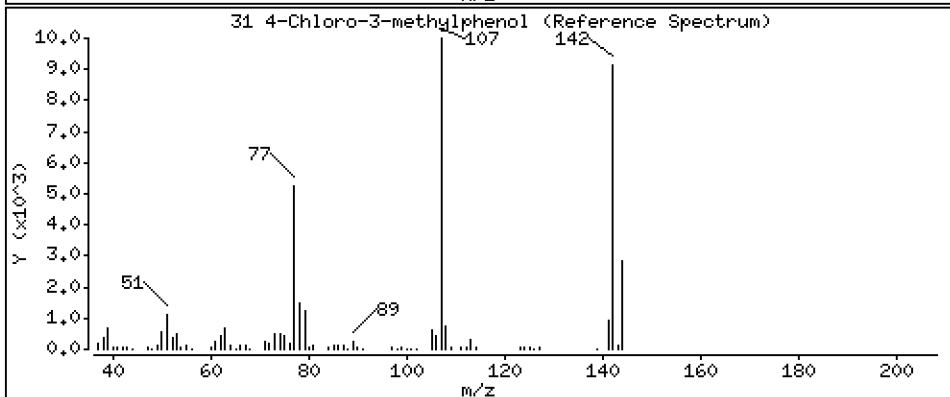
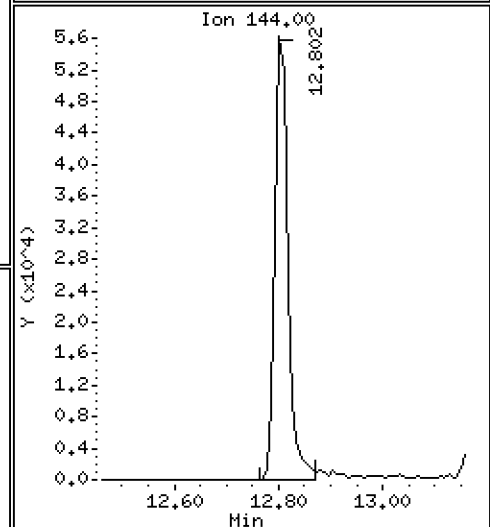
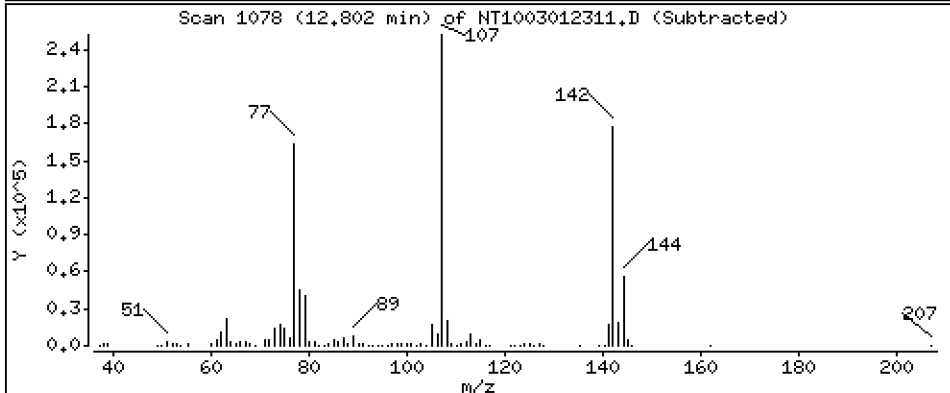
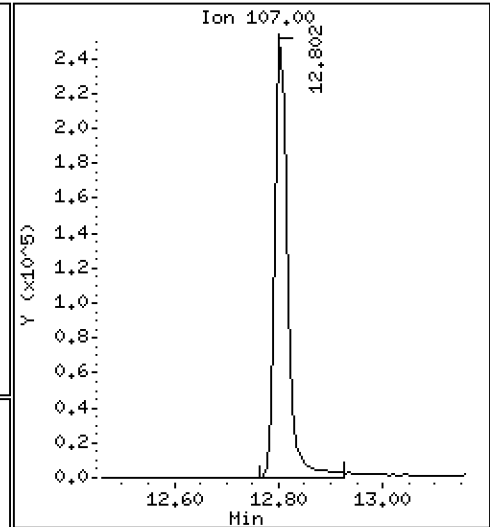
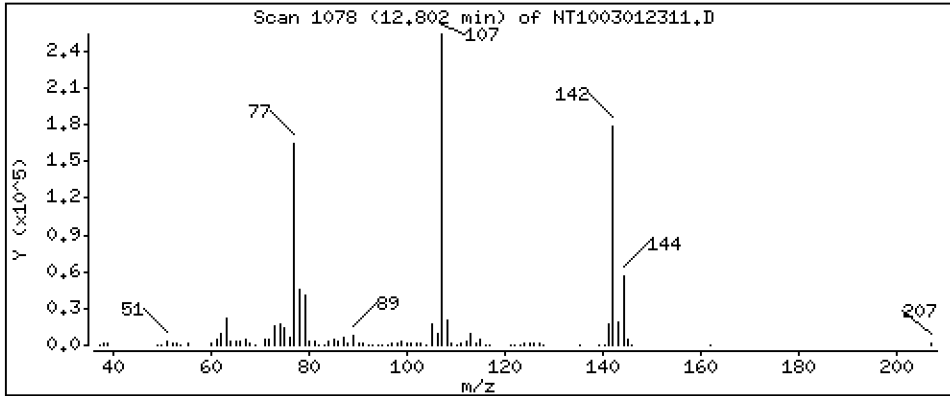
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,452 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

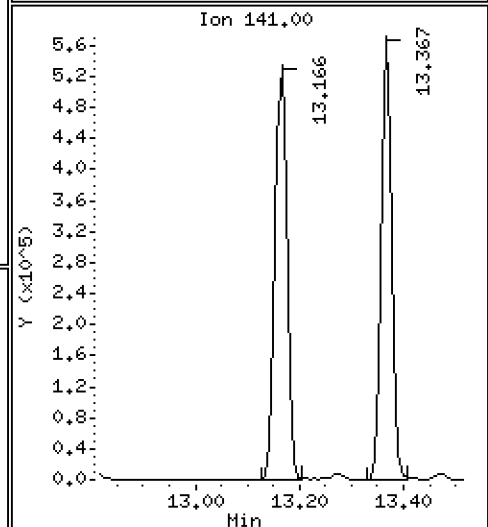
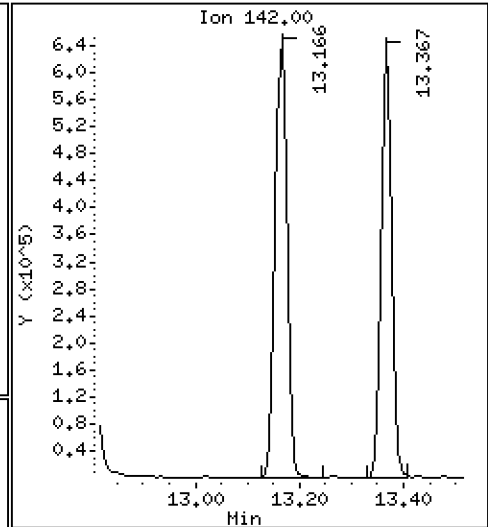
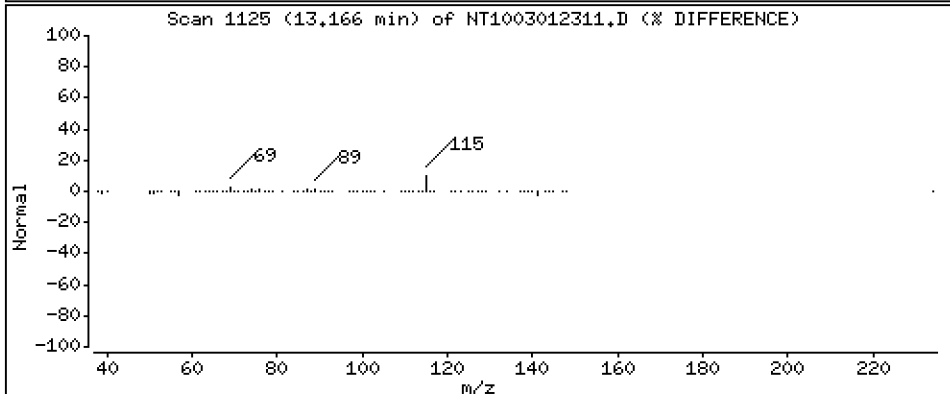
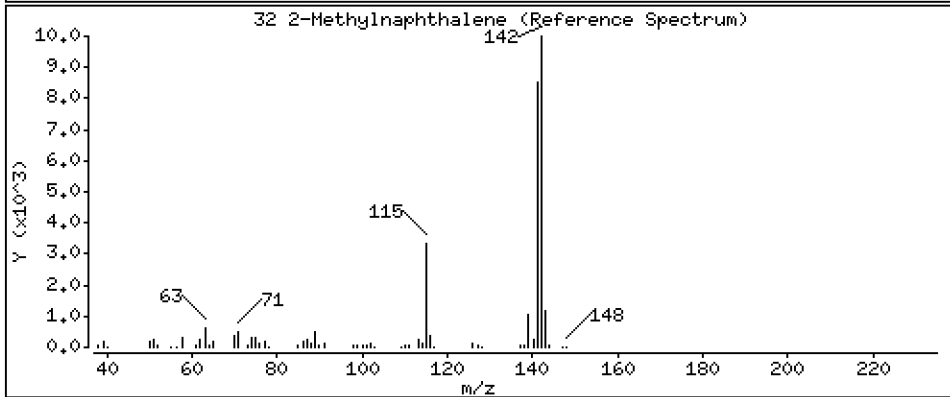
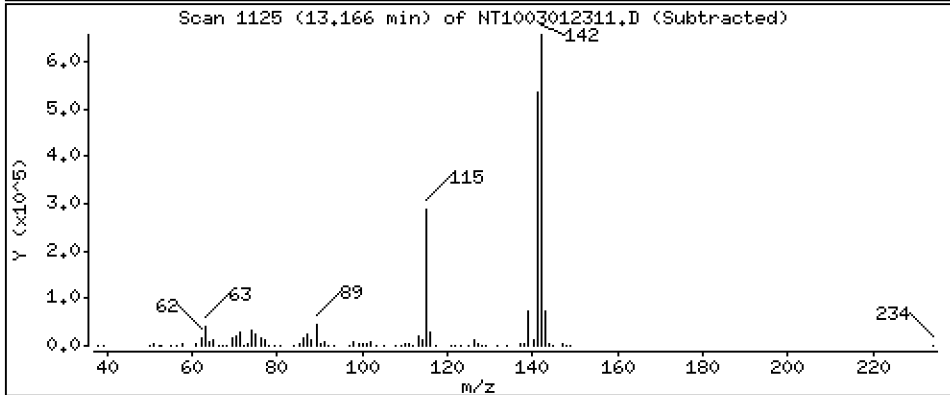
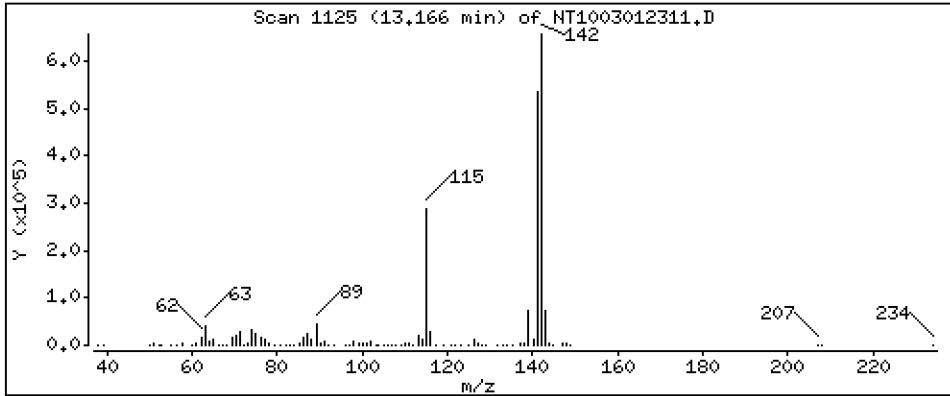
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,951 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

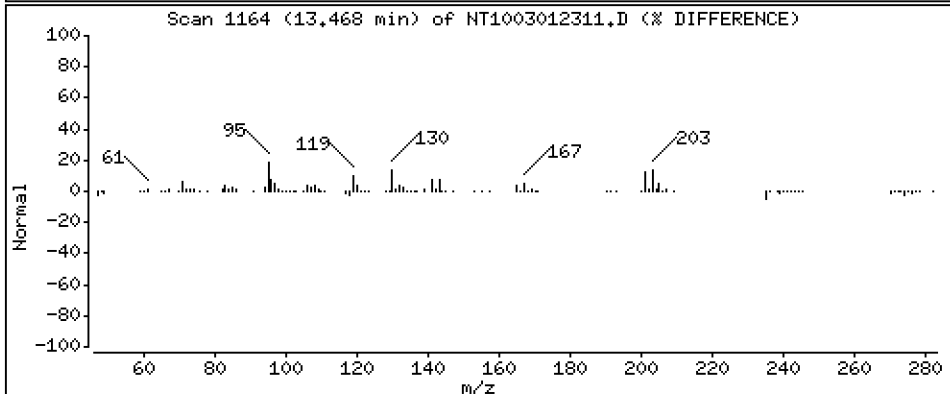
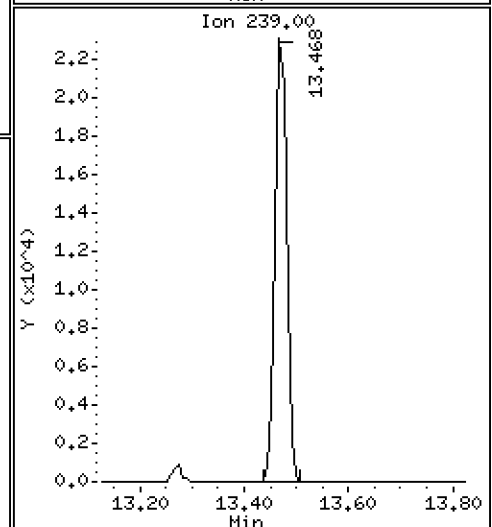
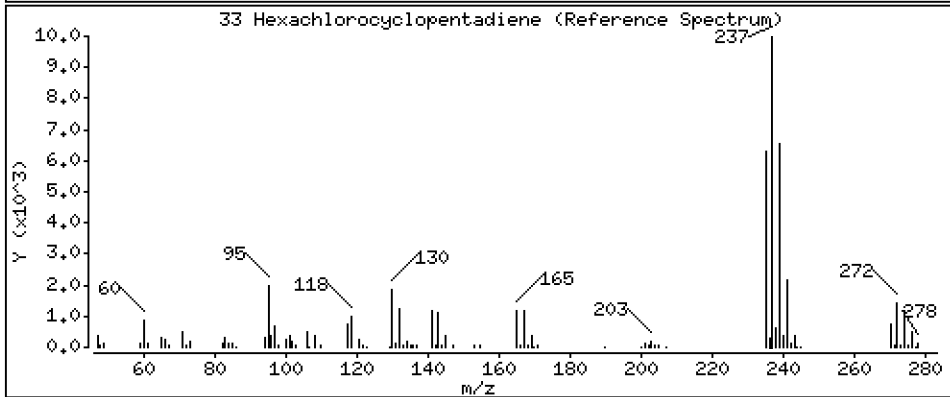
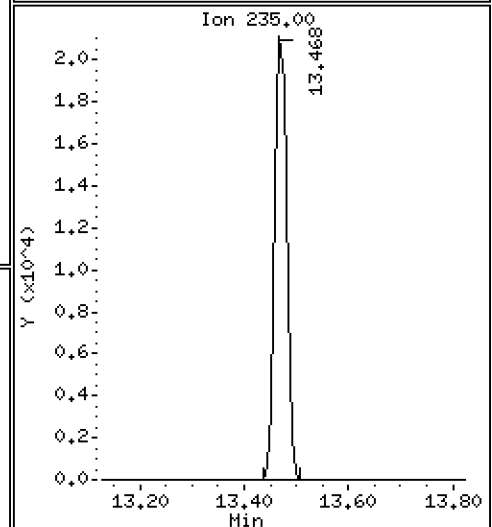
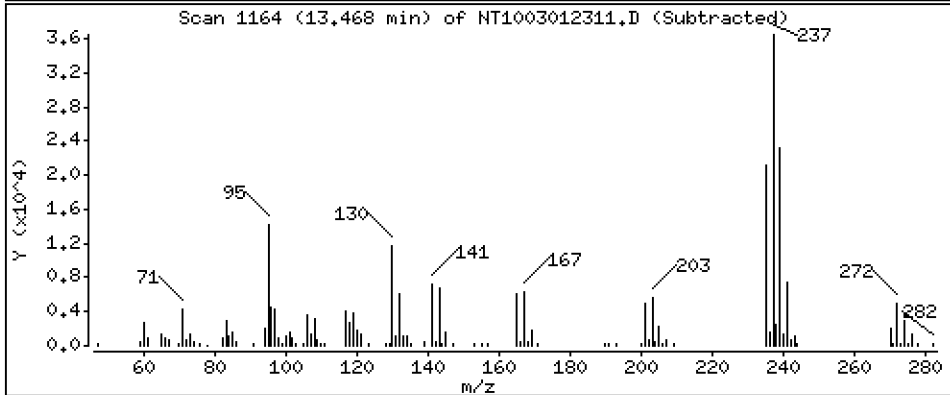
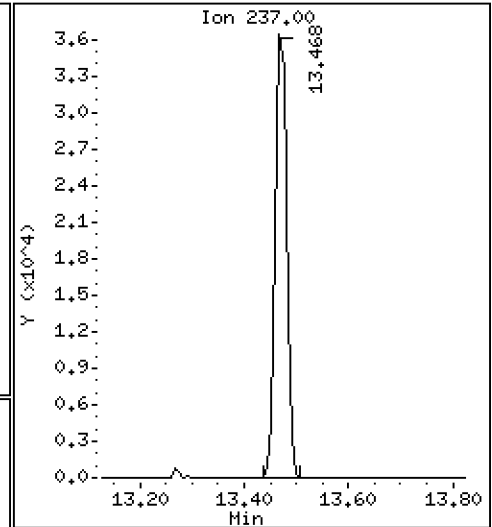
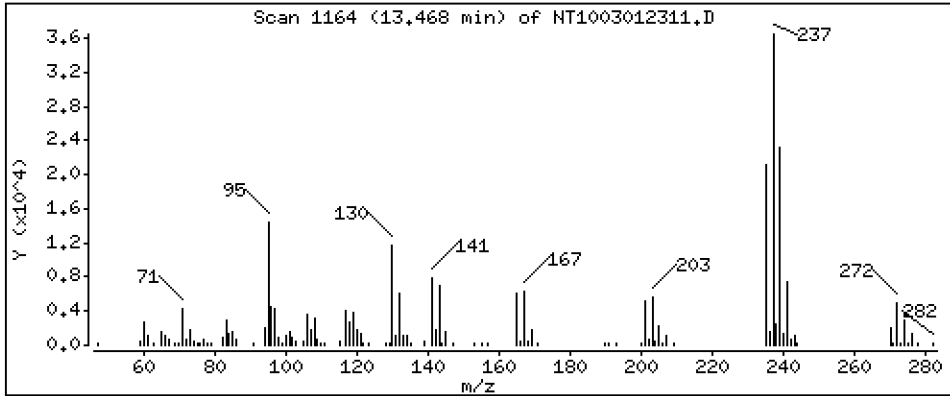
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 2,562 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

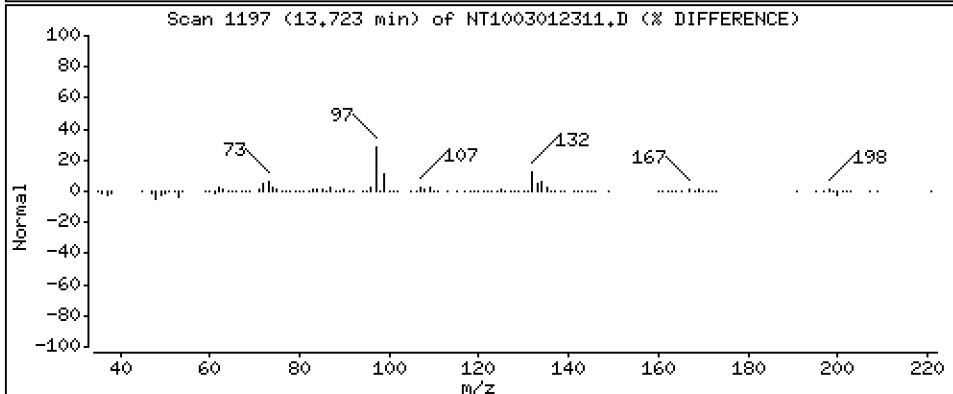
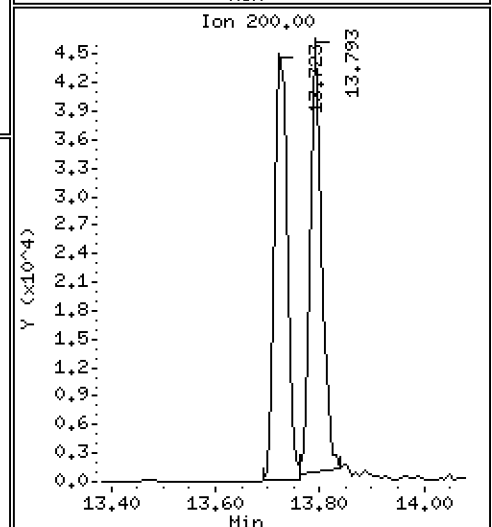
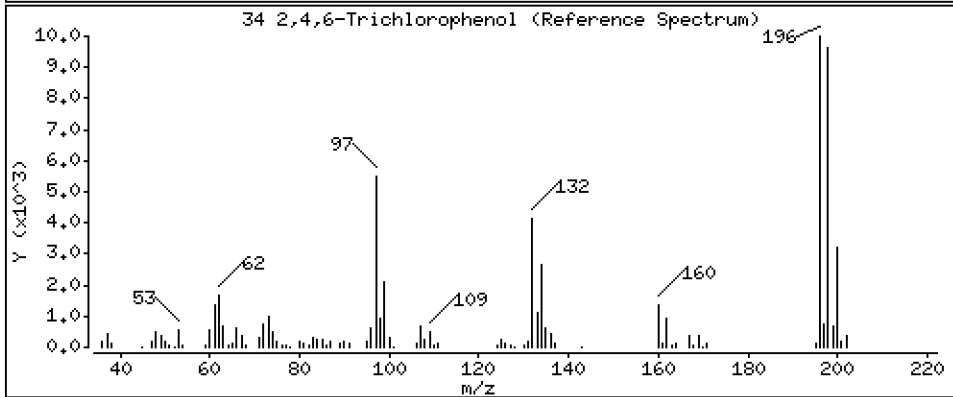
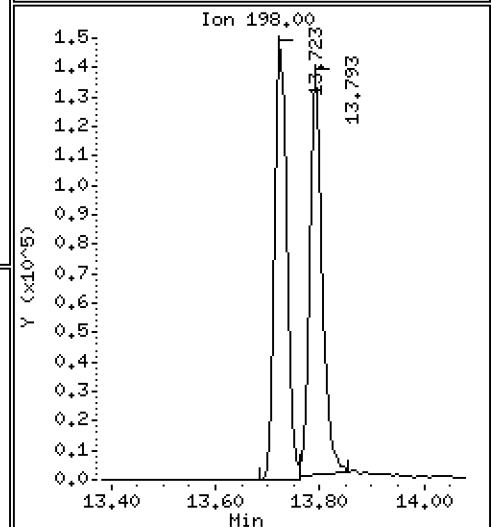
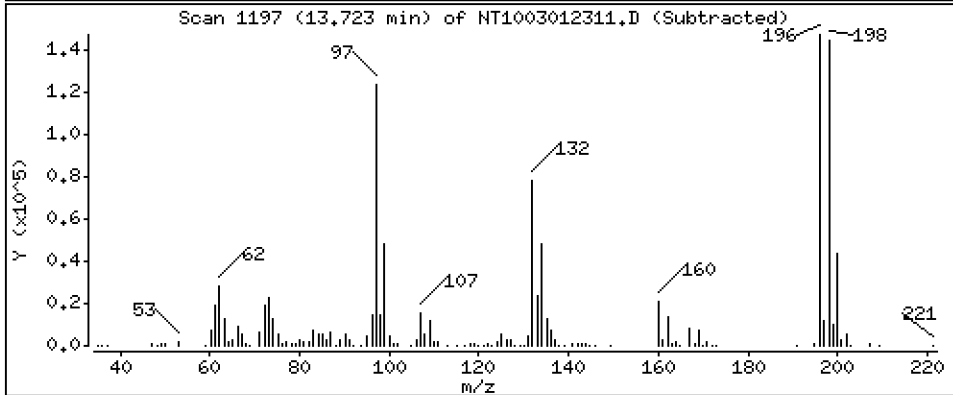
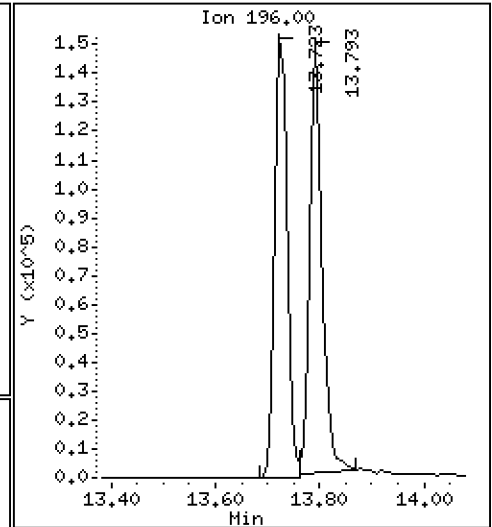
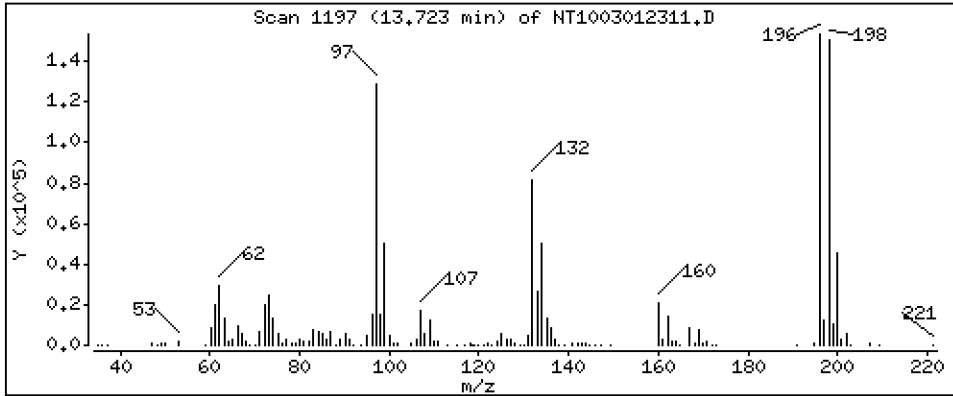
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,120 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

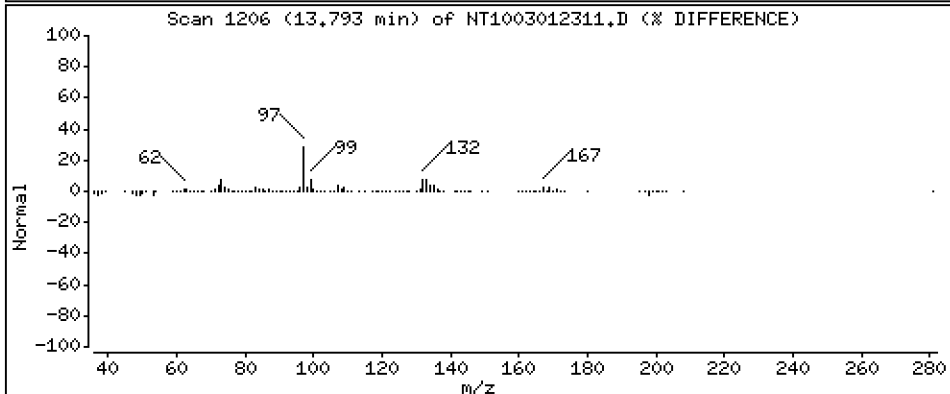
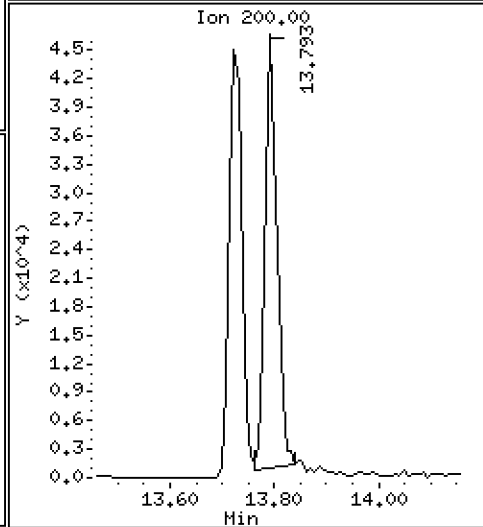
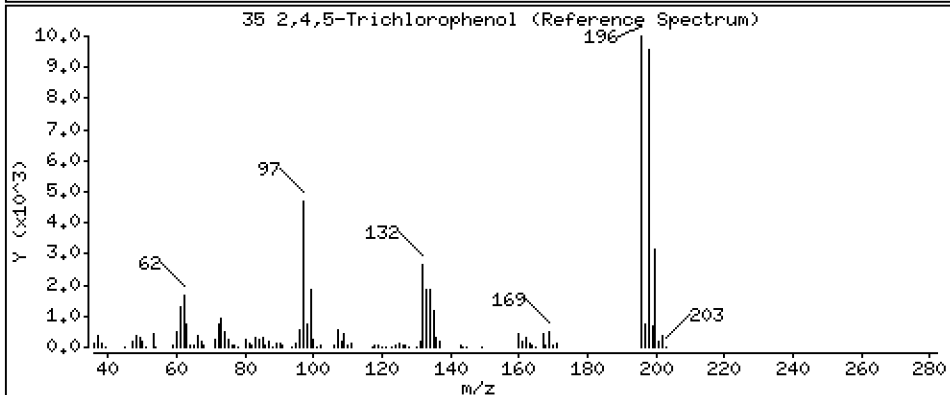
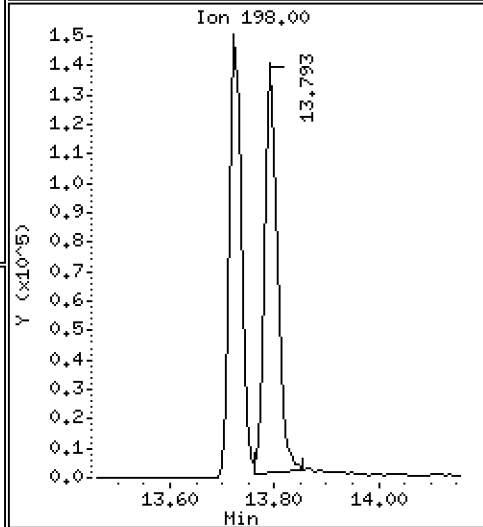
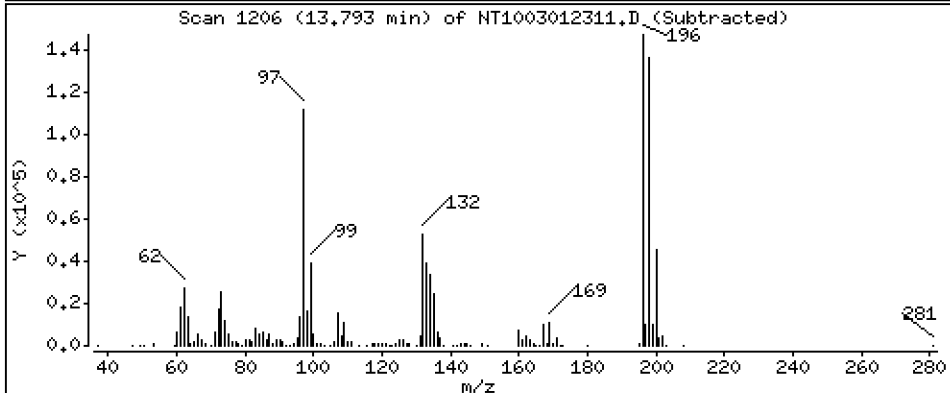
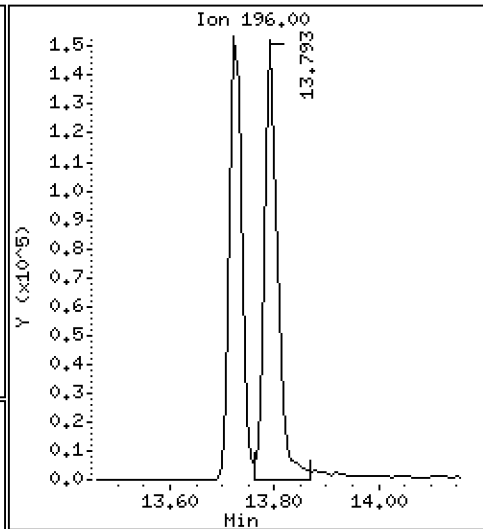
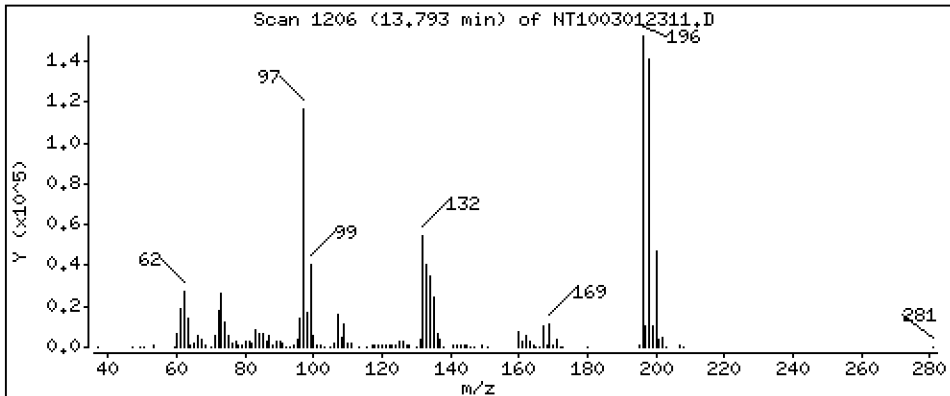
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,149 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

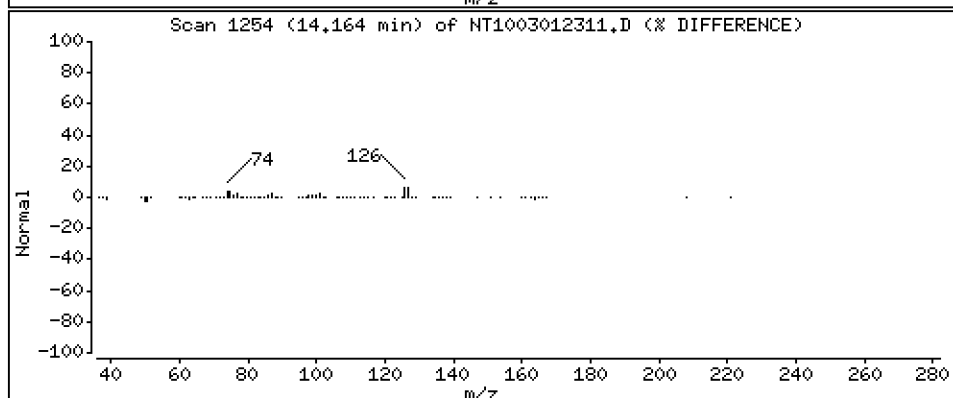
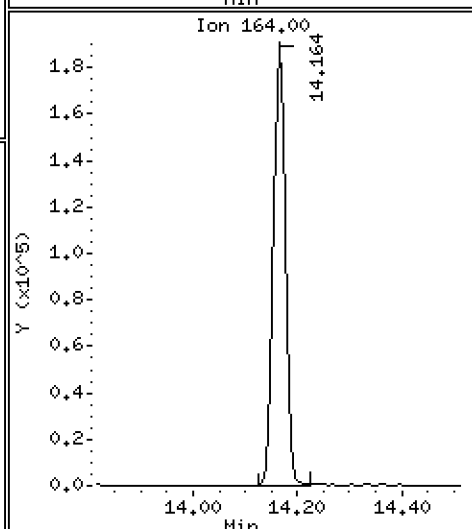
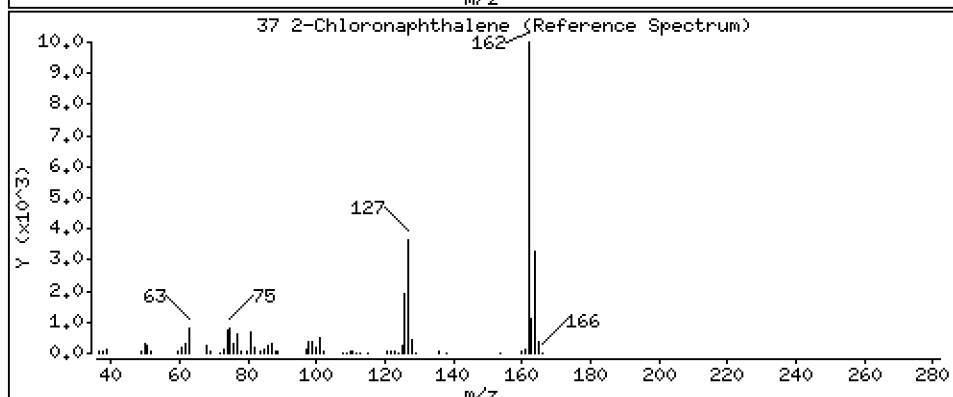
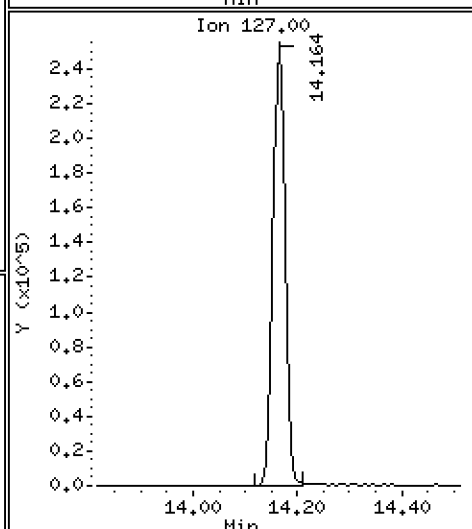
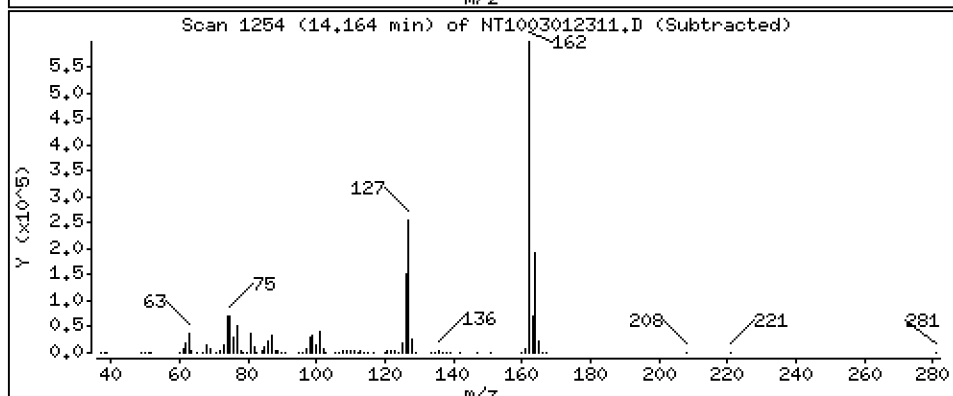
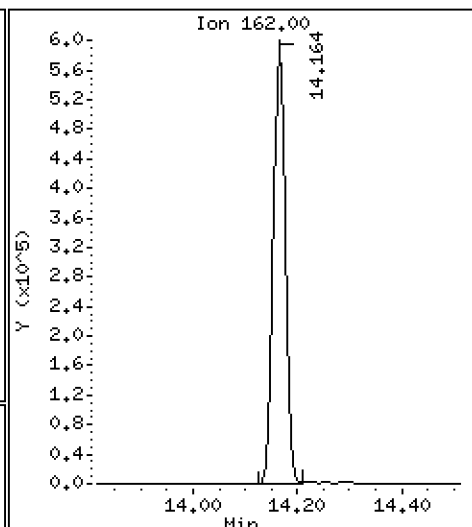
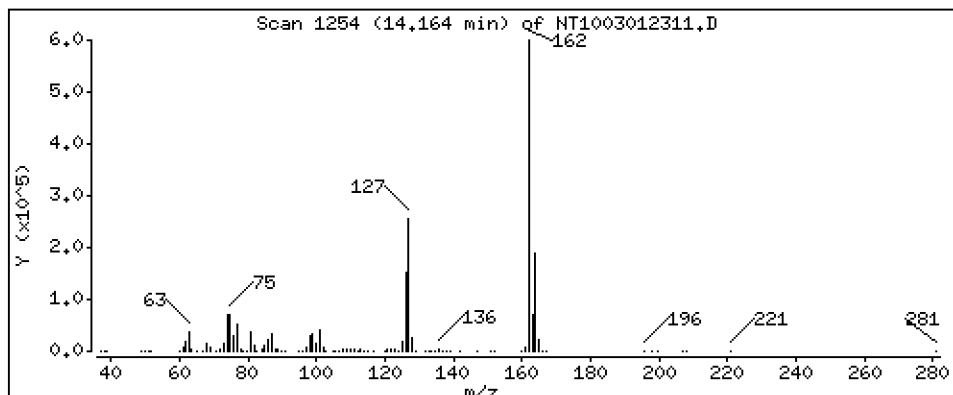
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,264 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

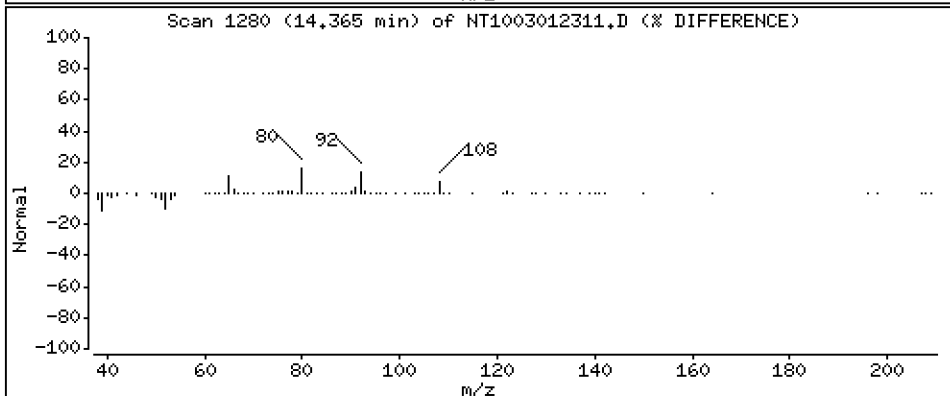
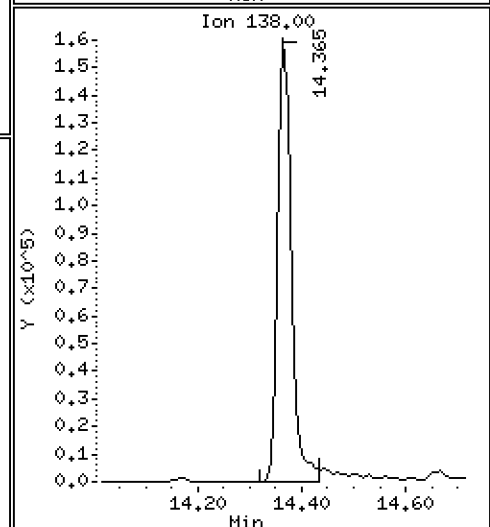
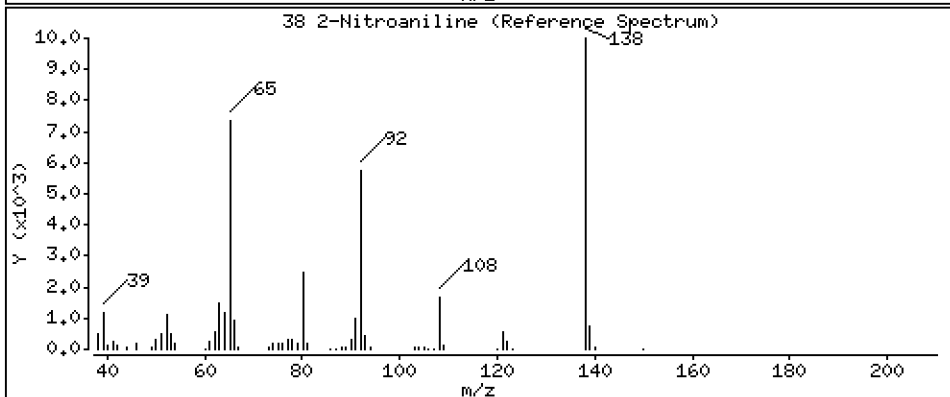
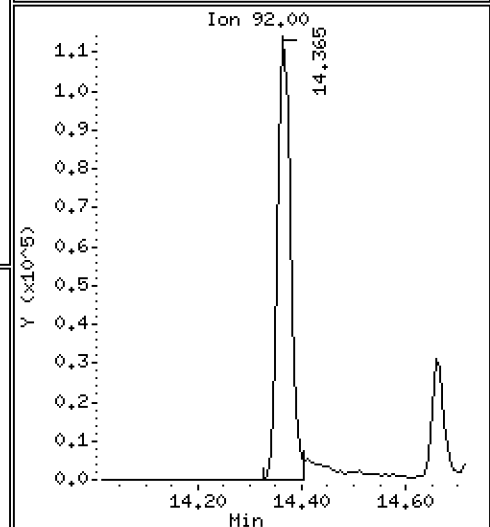
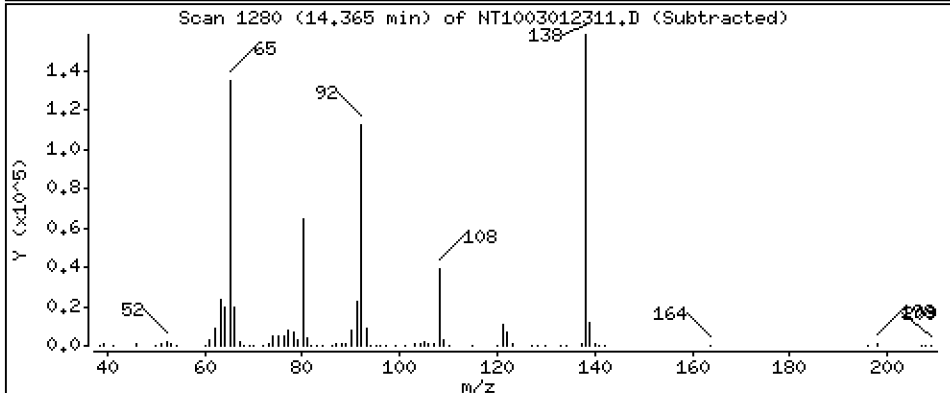
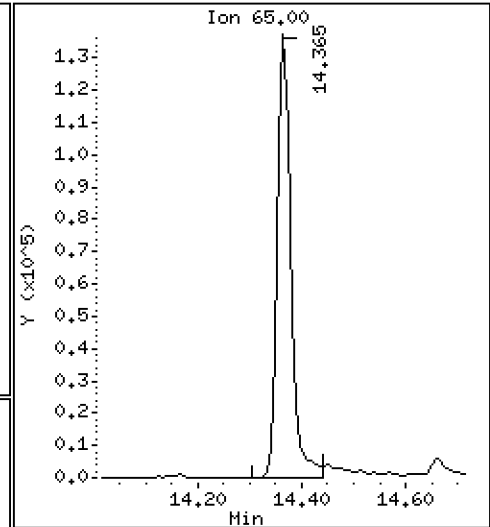
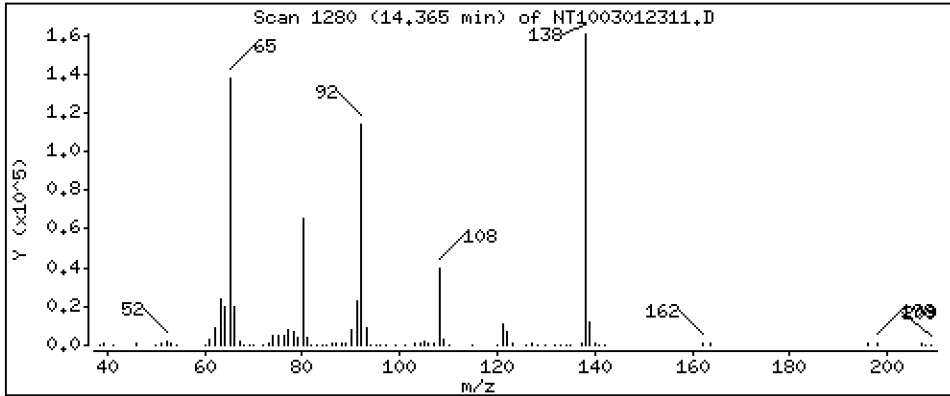
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,027 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

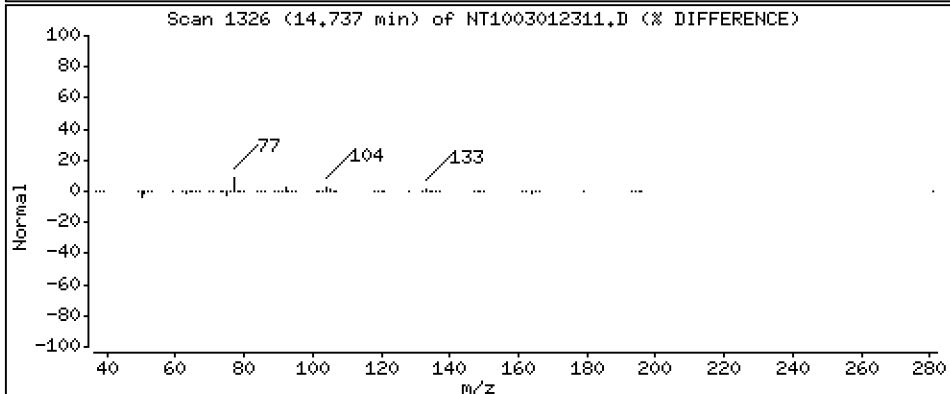
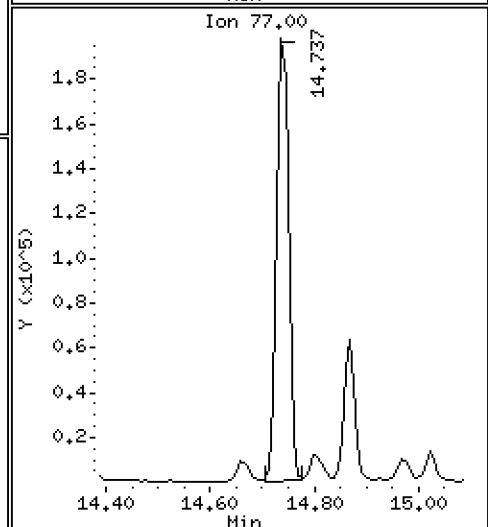
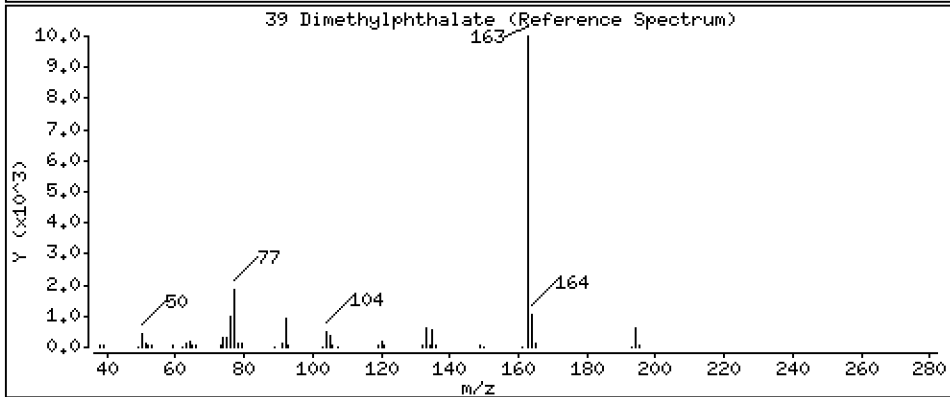
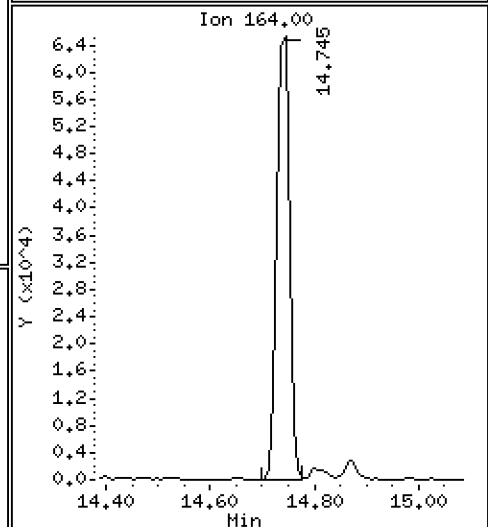
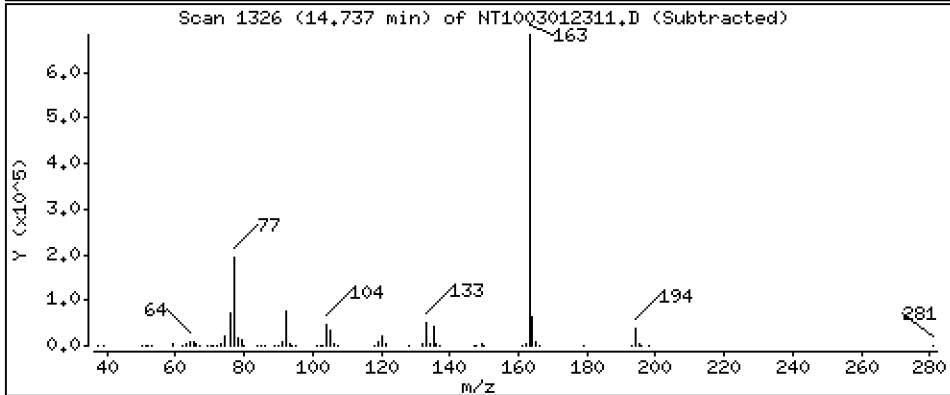
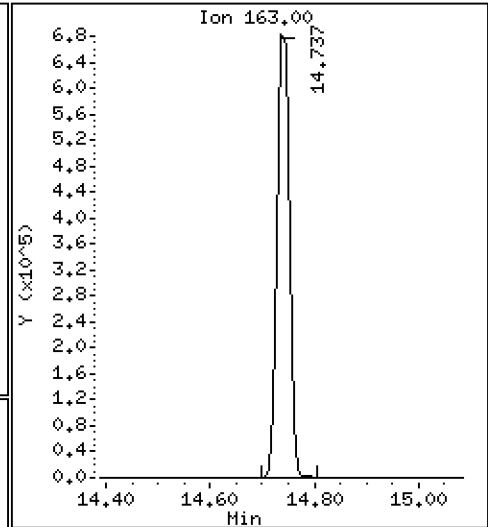
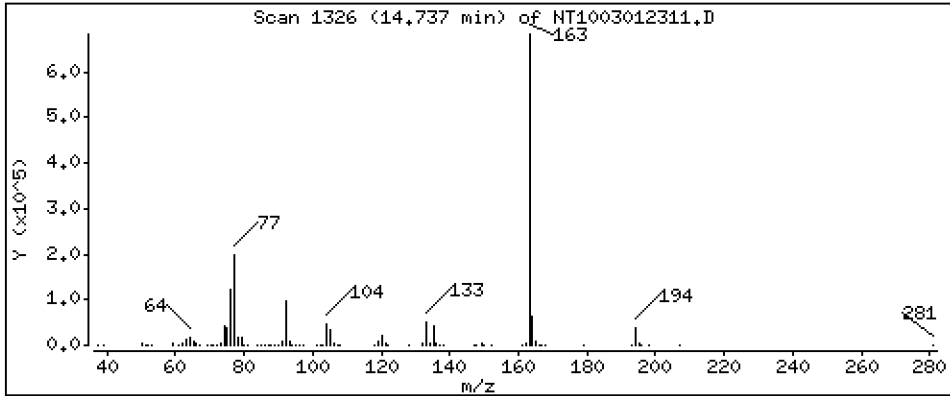
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,384 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

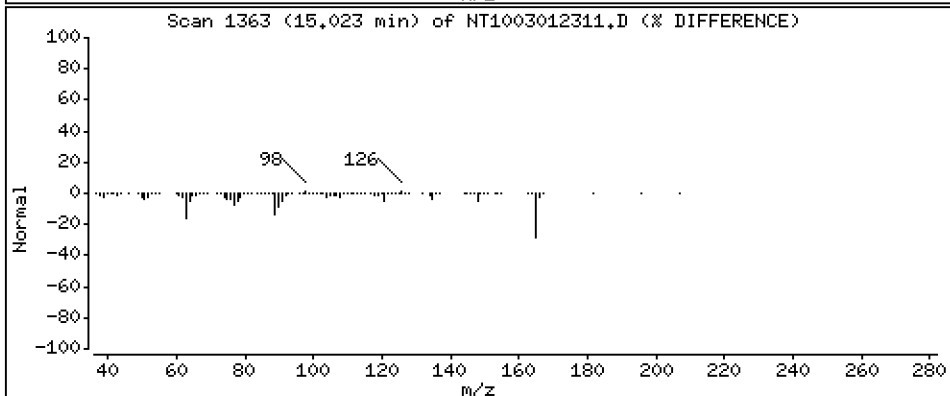
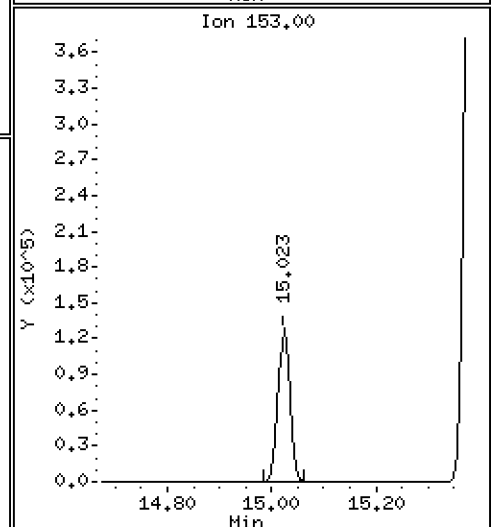
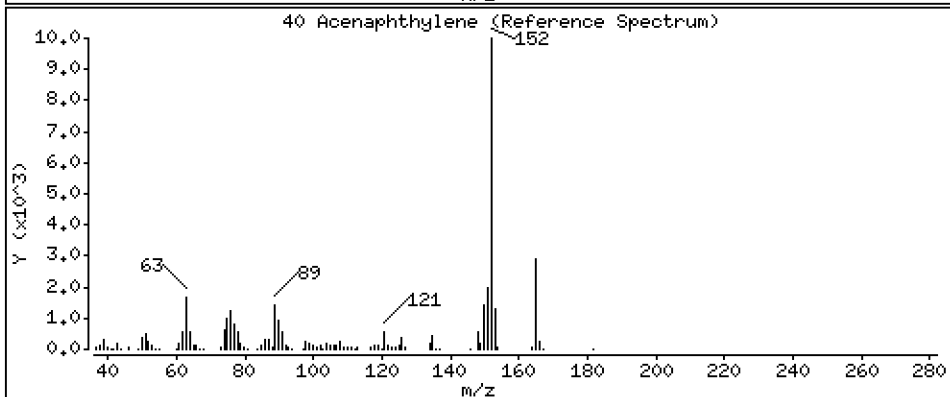
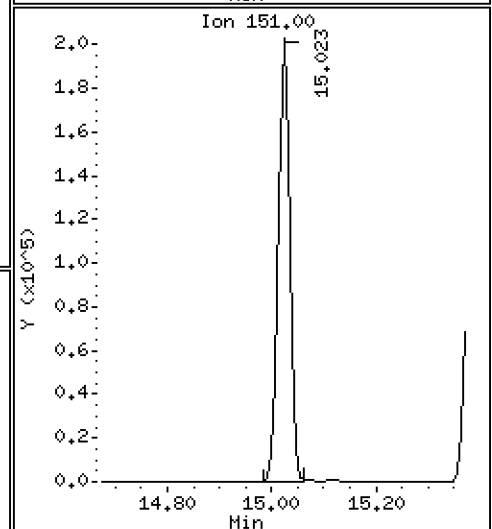
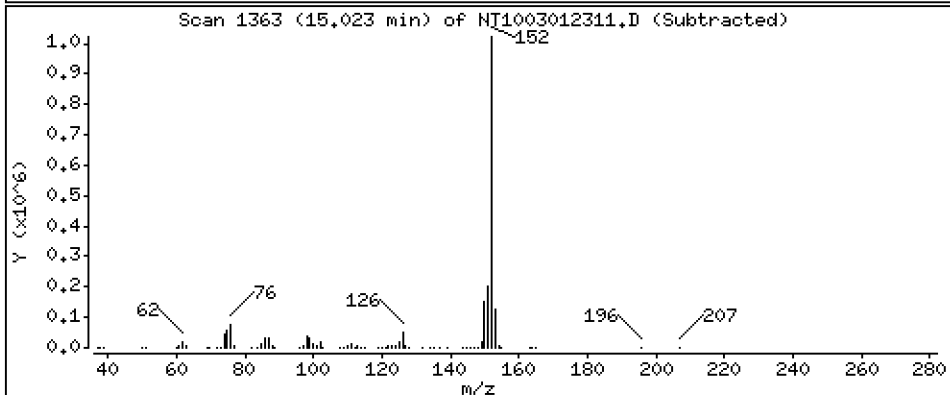
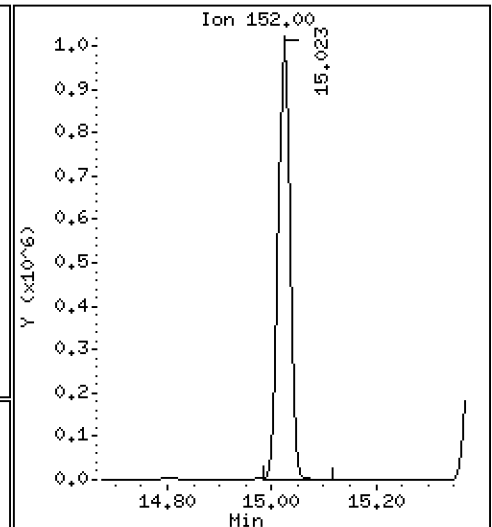
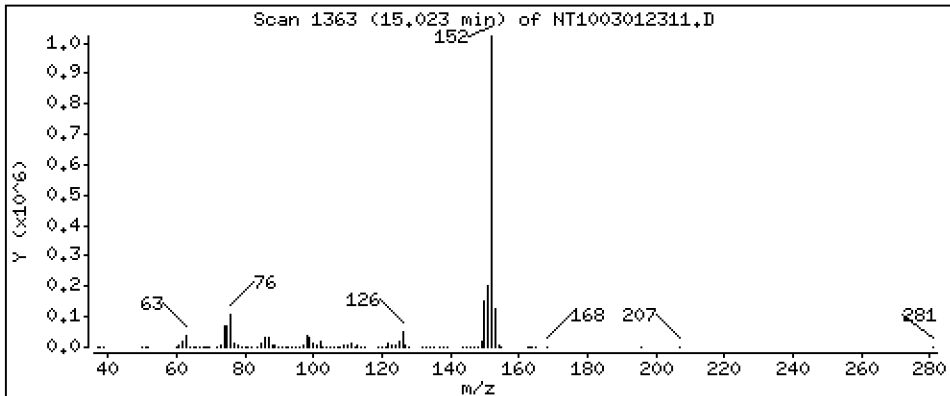
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,806 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

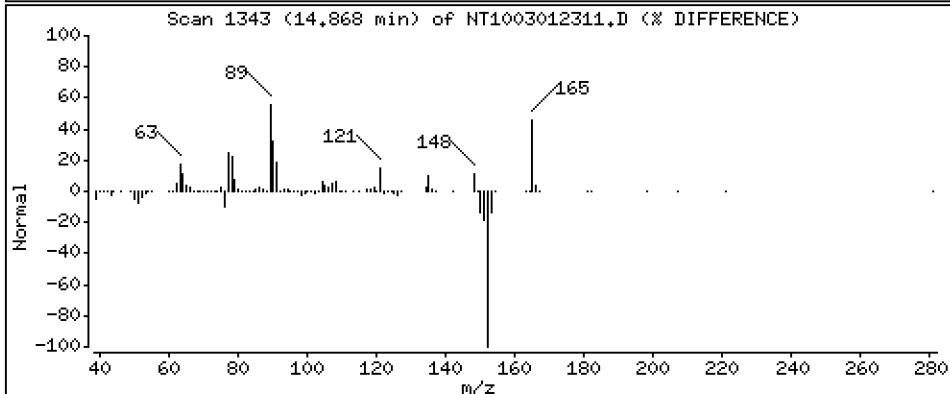
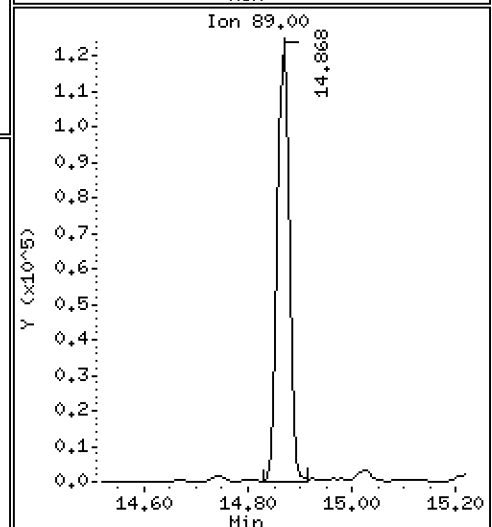
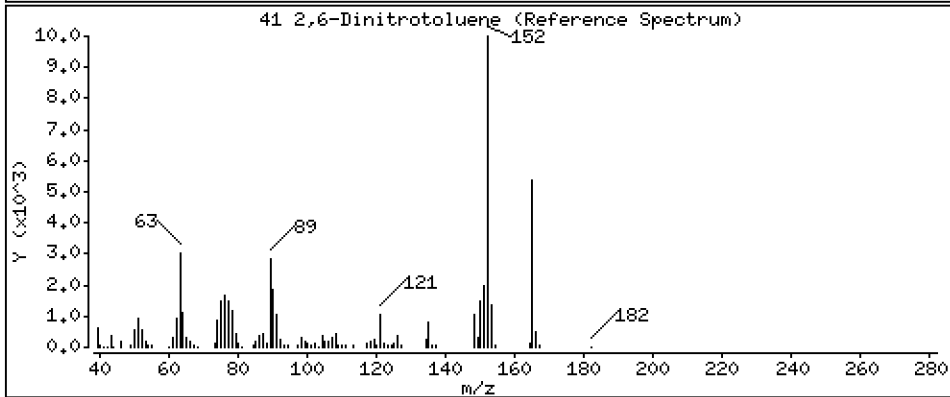
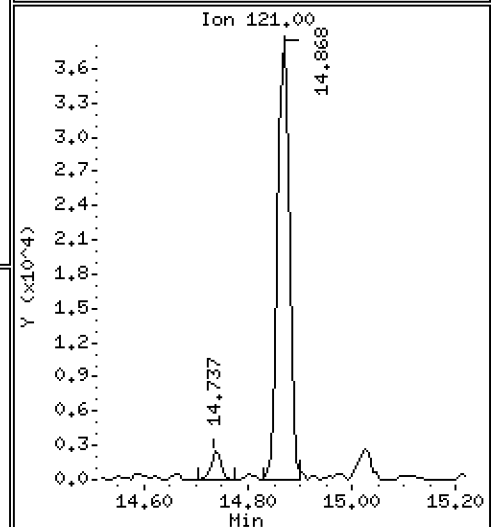
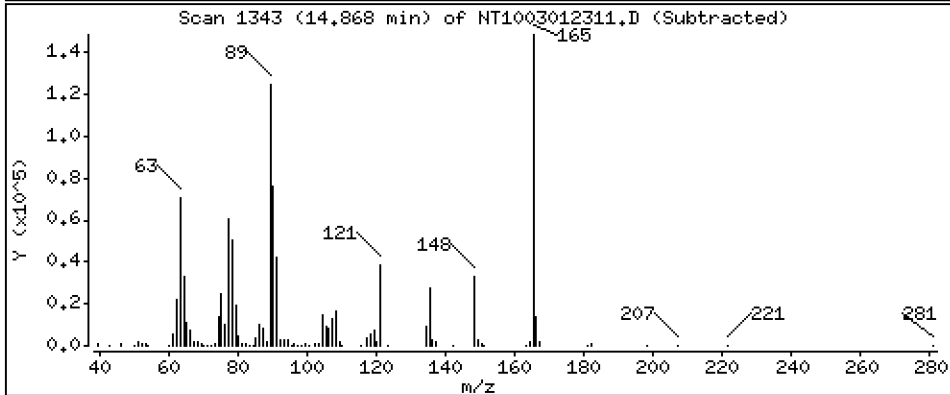
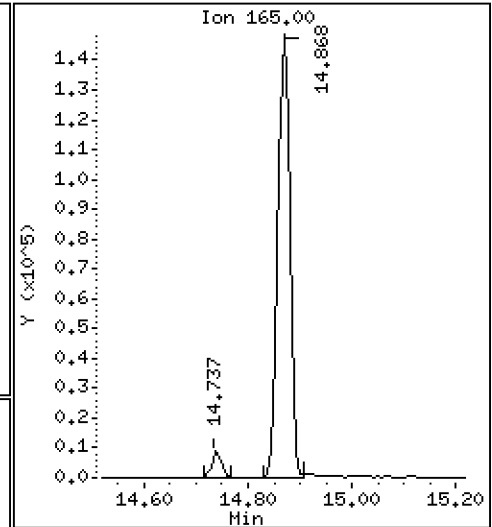
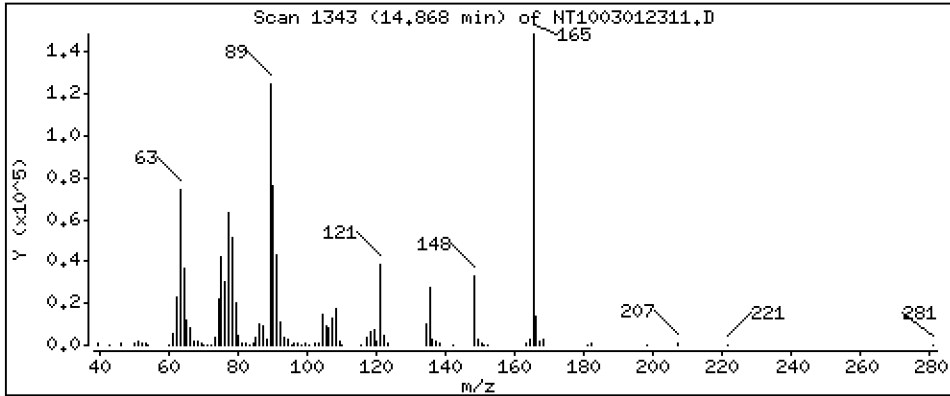
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 5,187 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

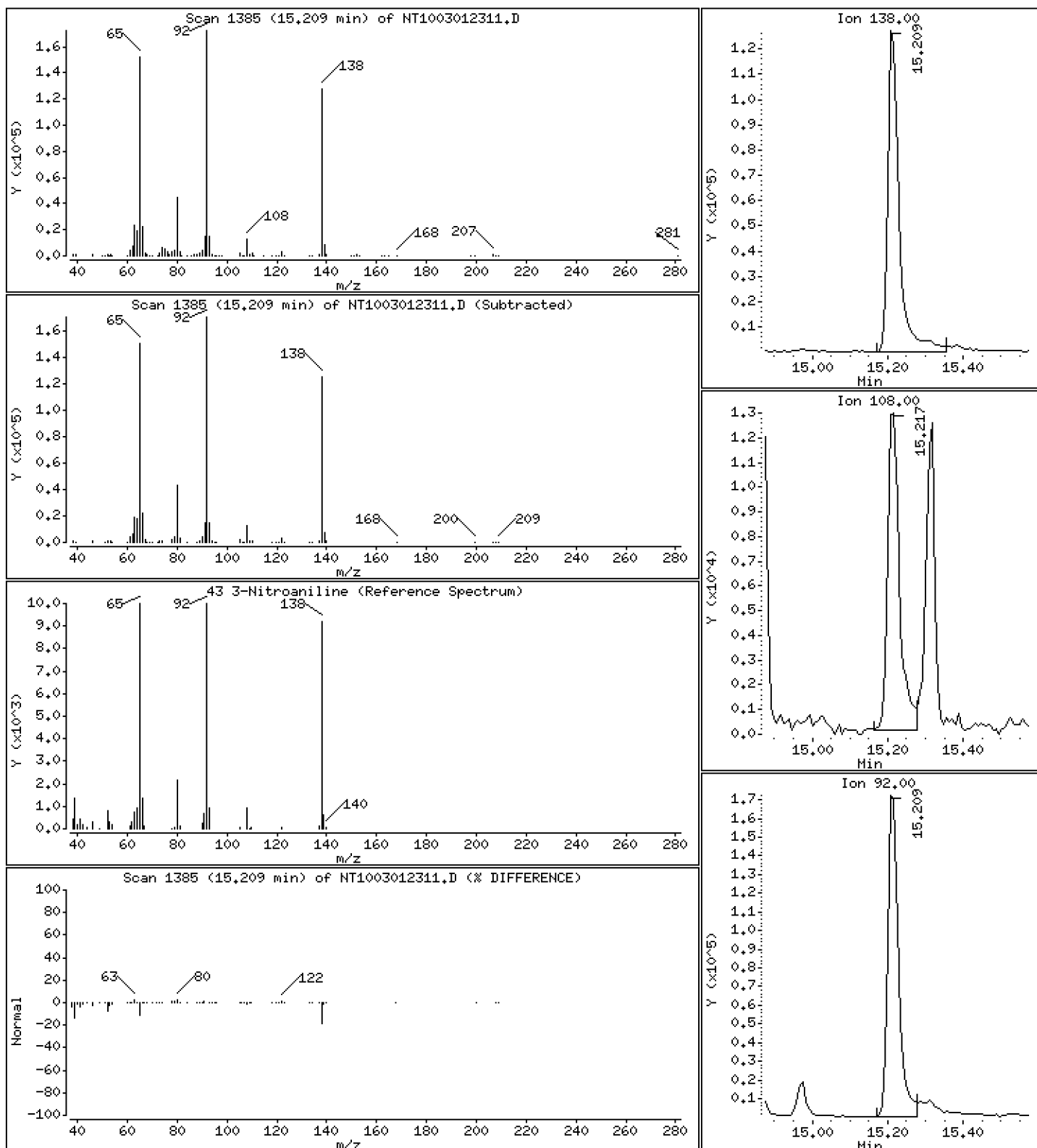
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,172 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

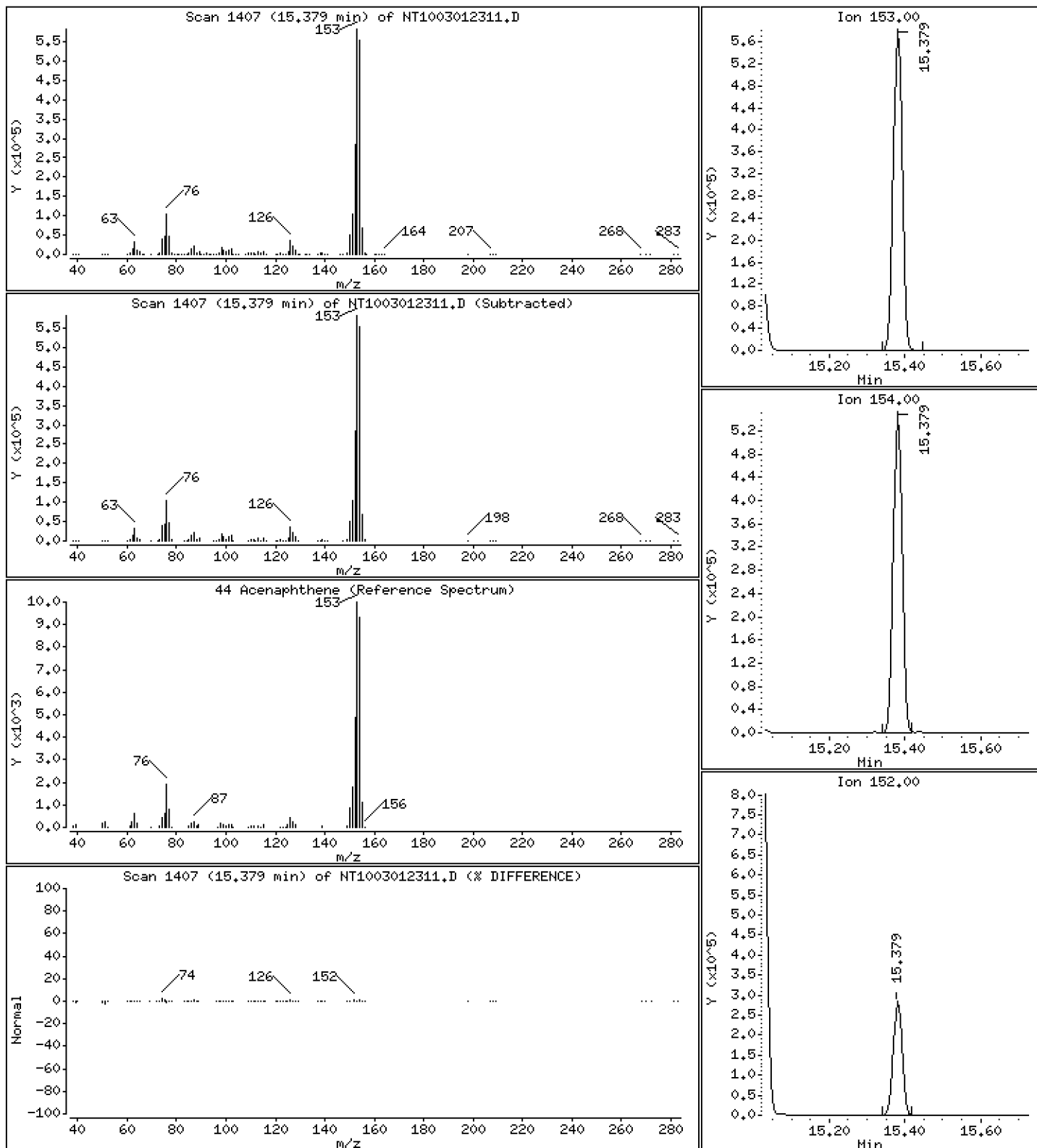
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 5,154 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

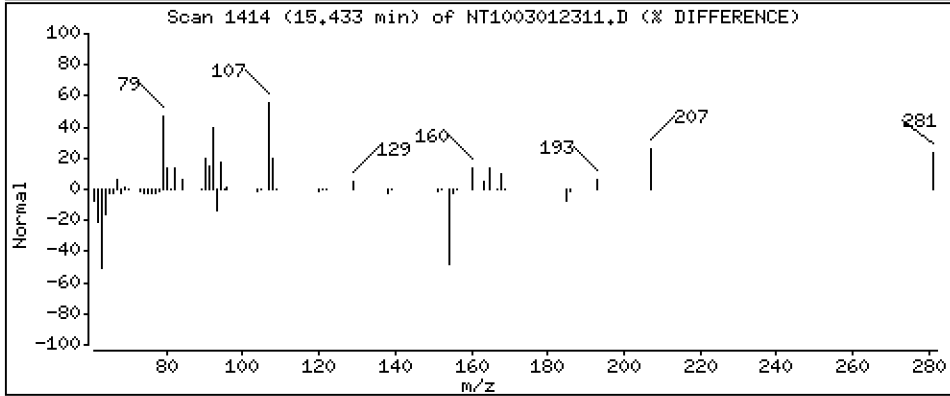
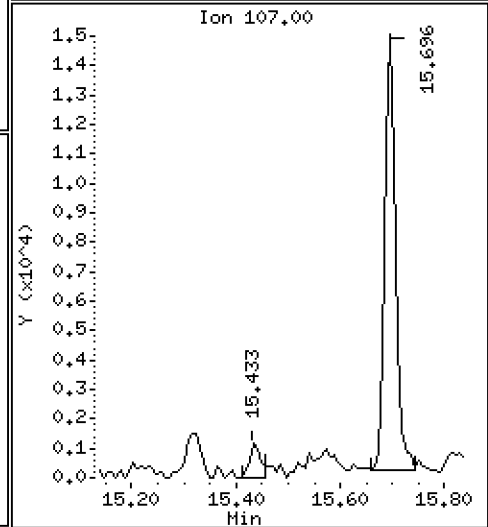
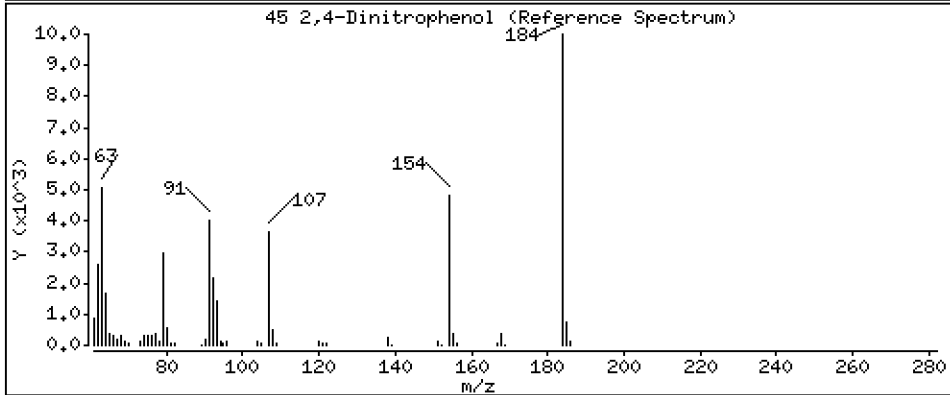
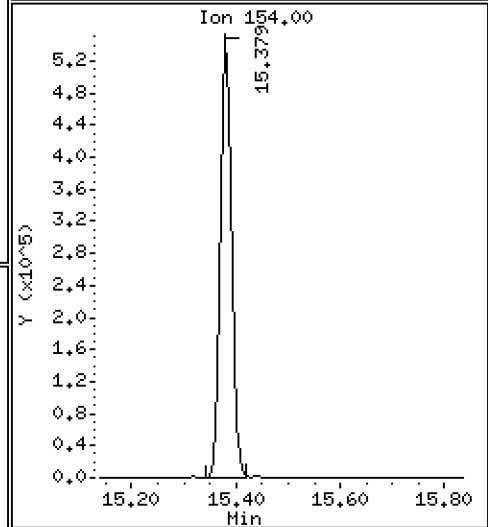
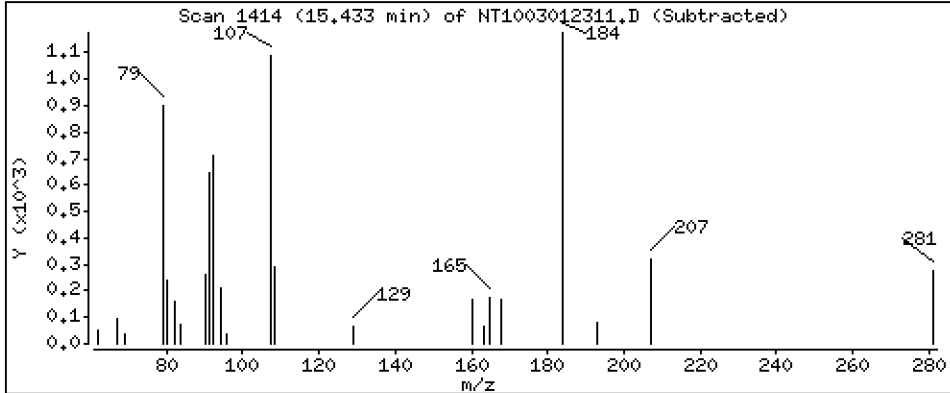
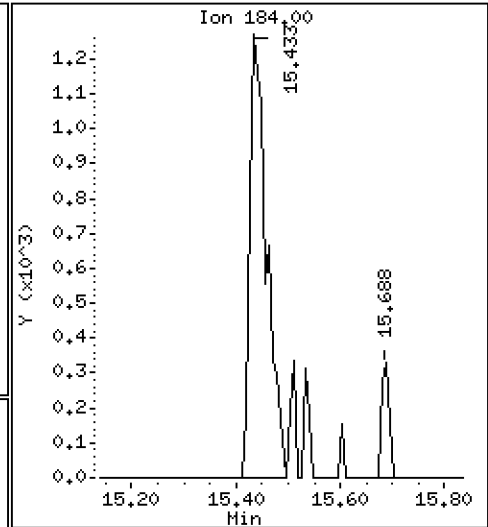
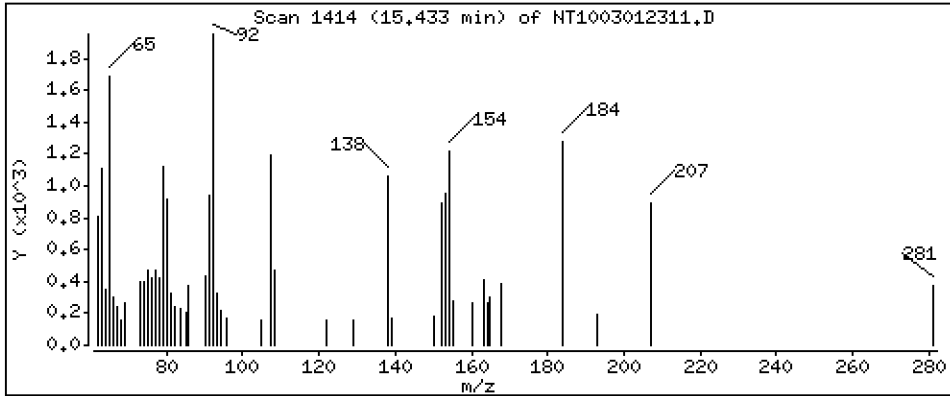
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,2667 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

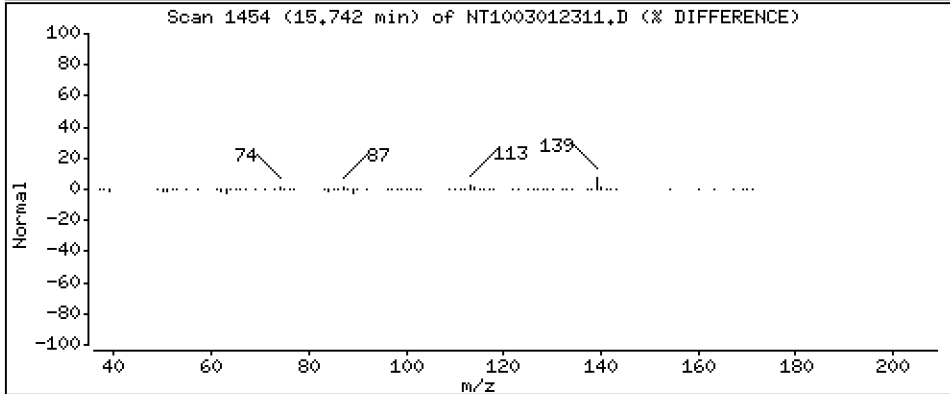
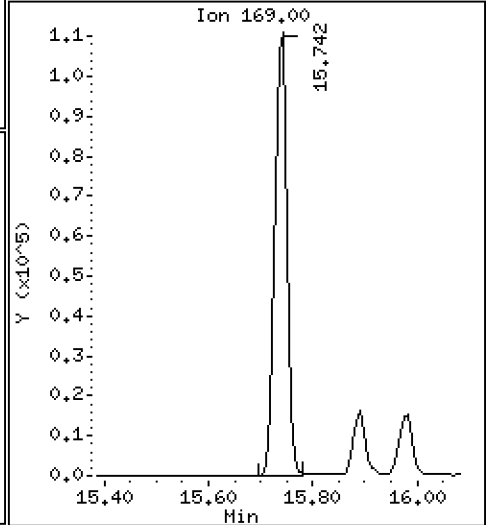
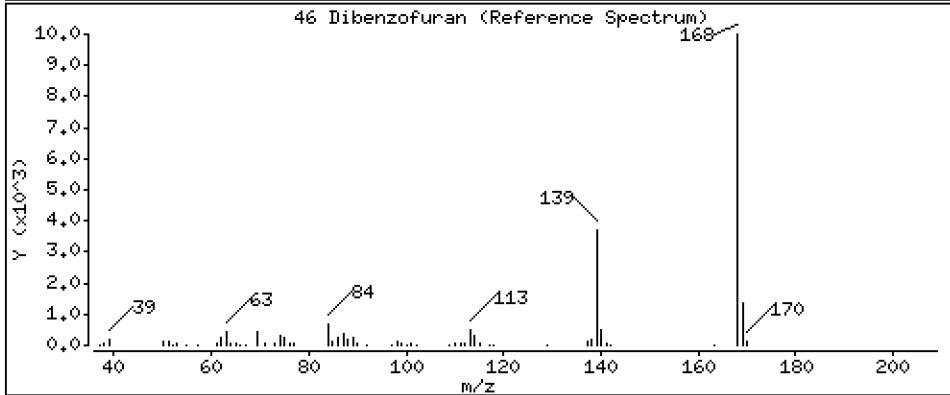
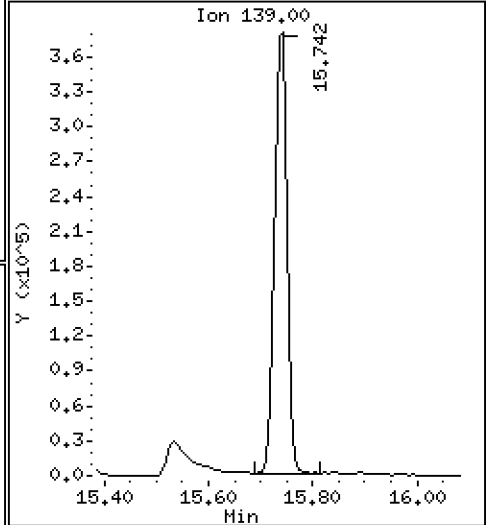
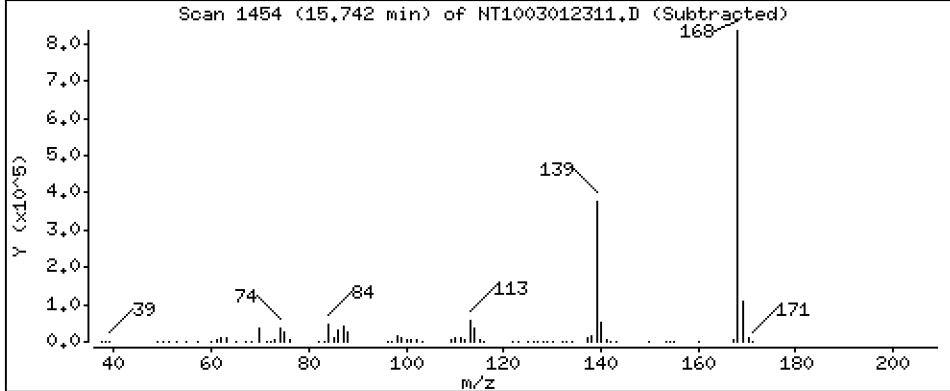
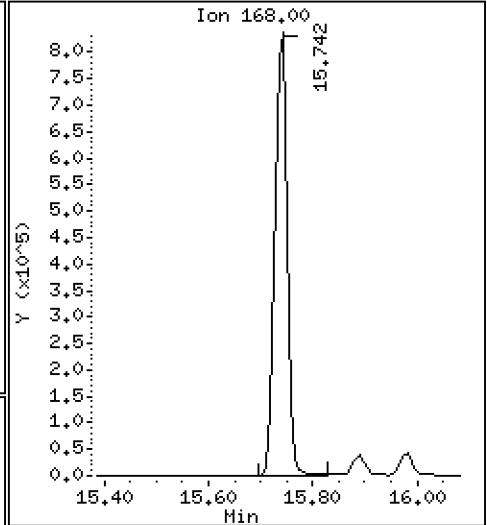
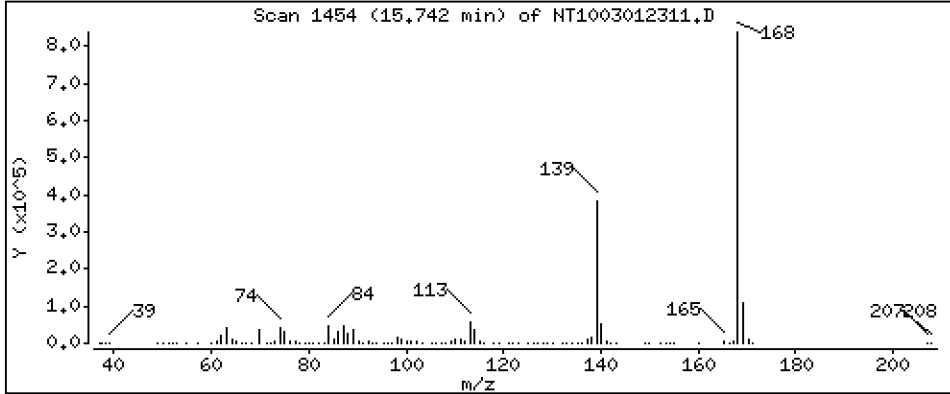
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,994 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

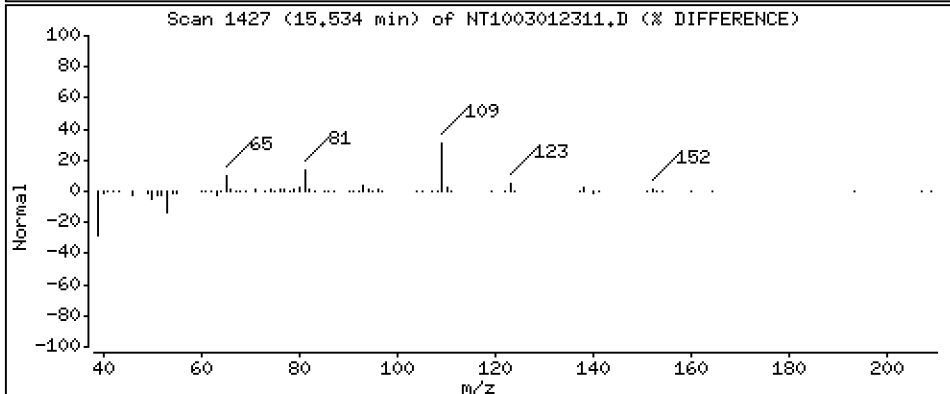
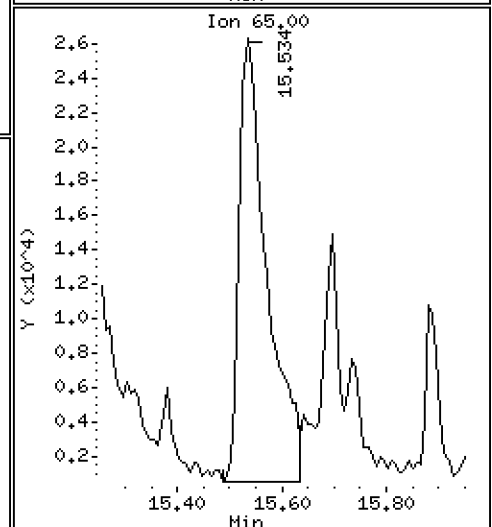
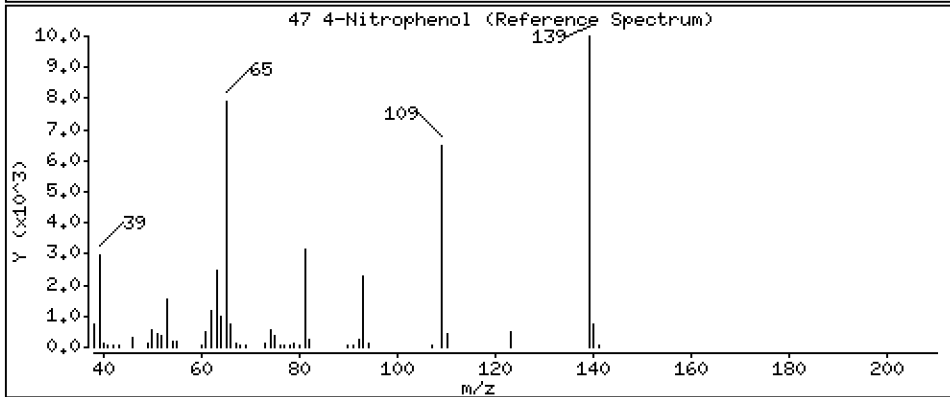
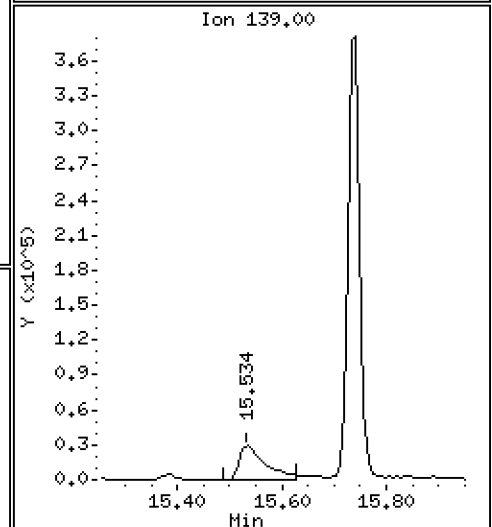
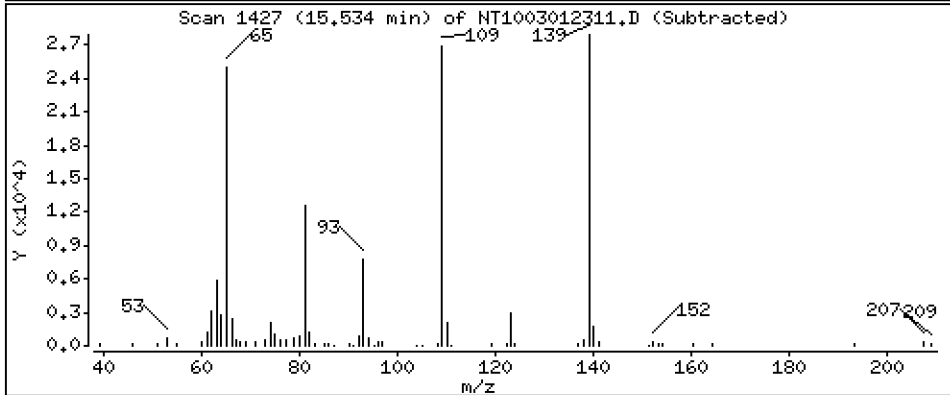
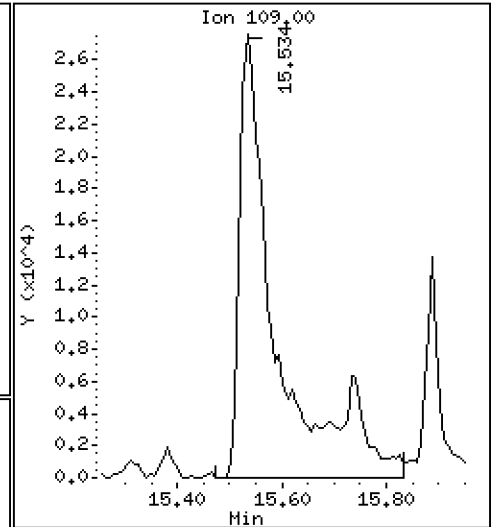
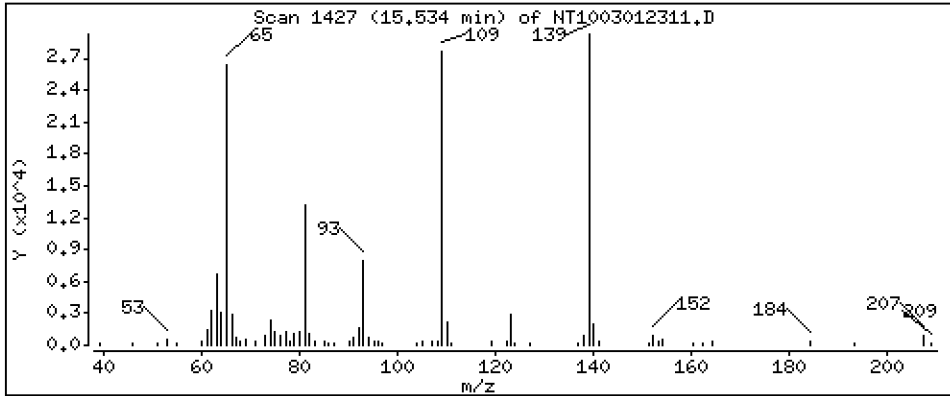
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 3,822 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

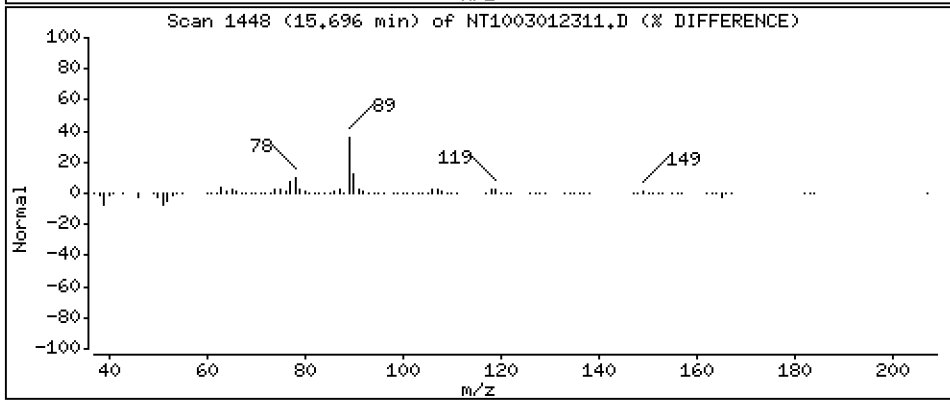
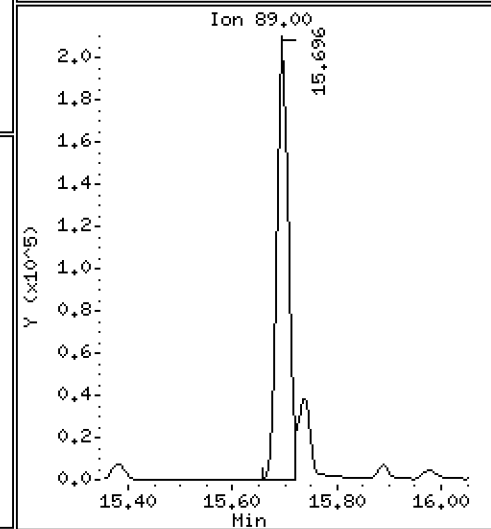
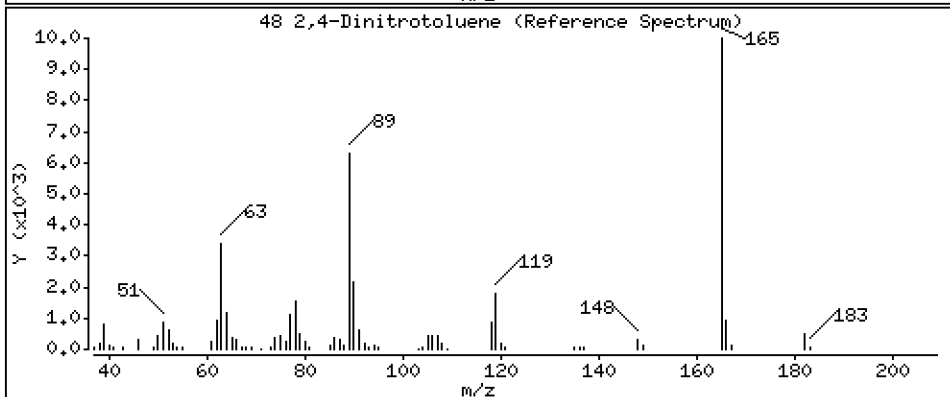
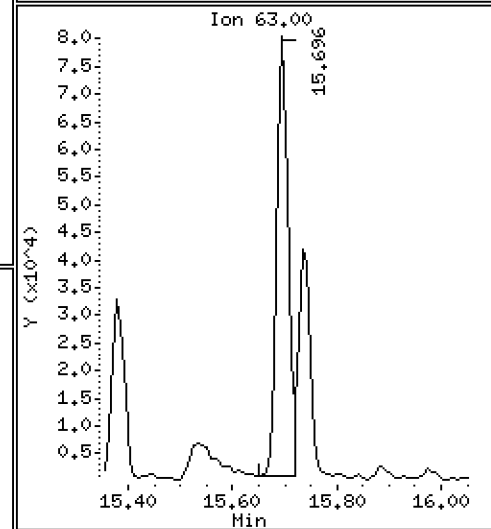
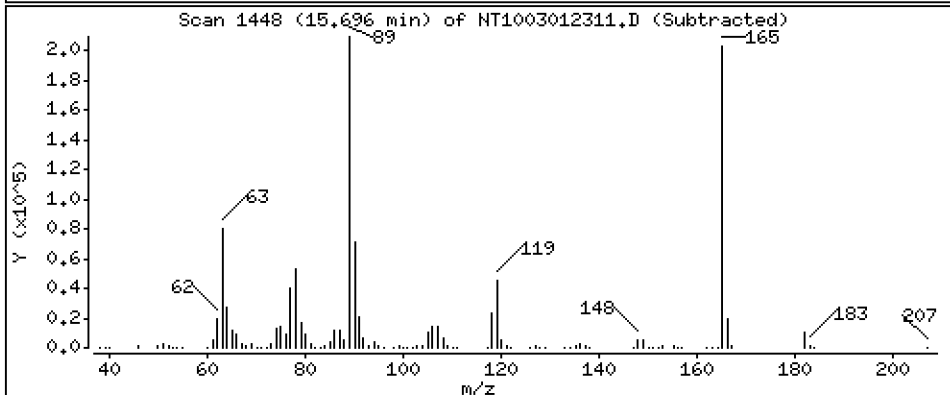
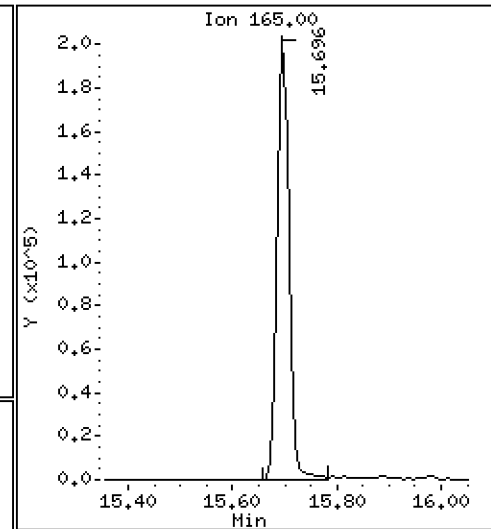
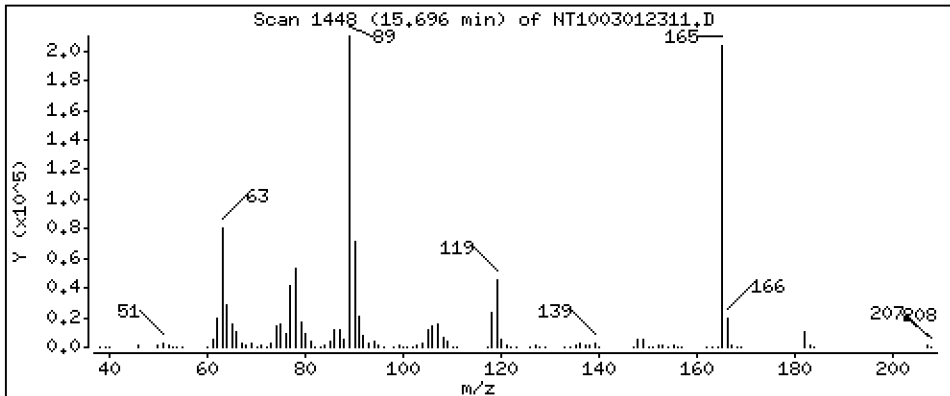
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

48 2,4-Dinitrotoluene

Concentration: 4.729 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

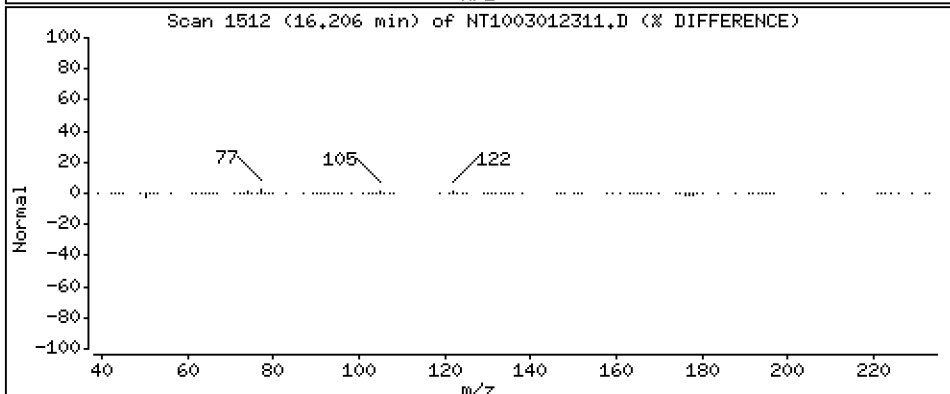
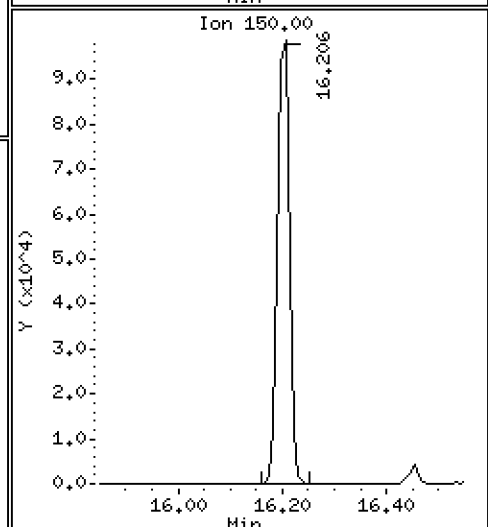
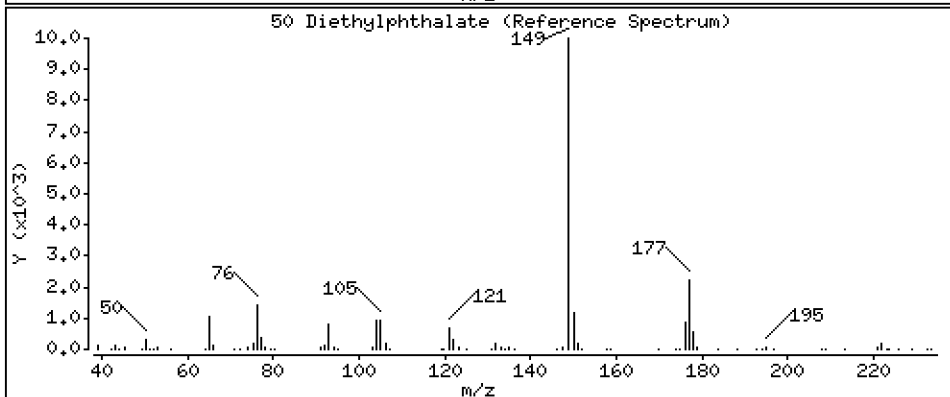
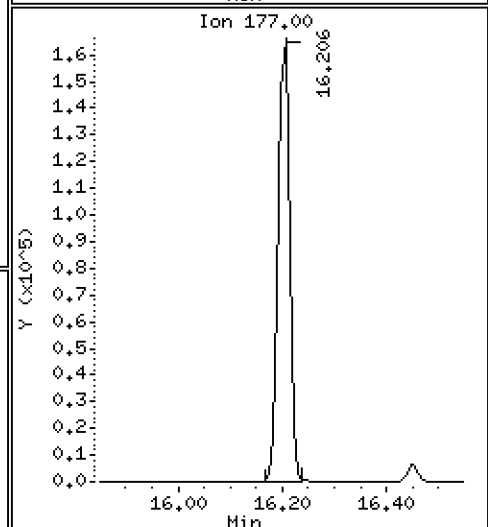
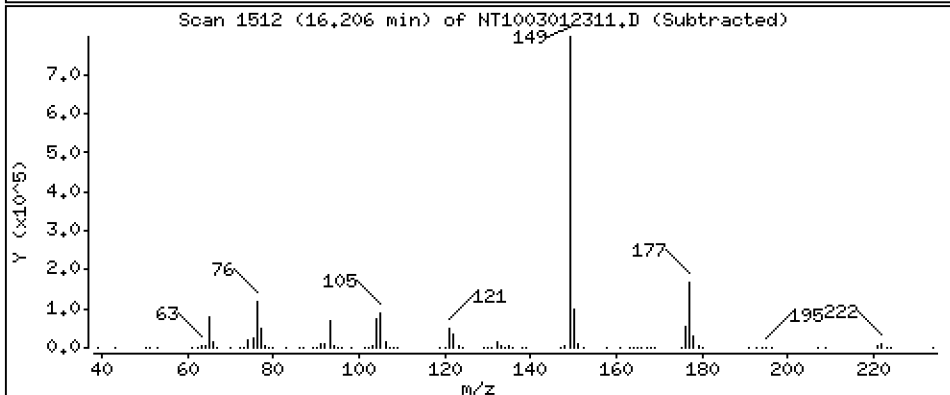
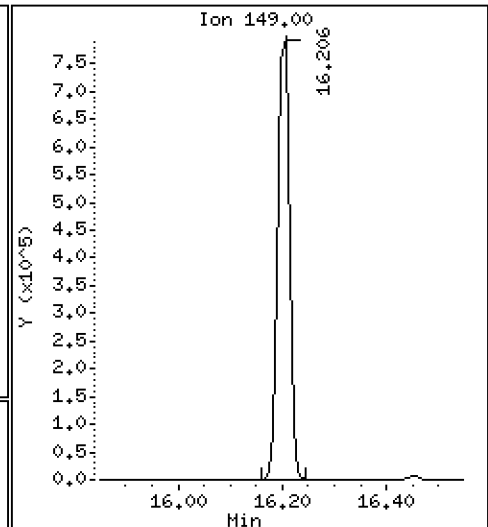
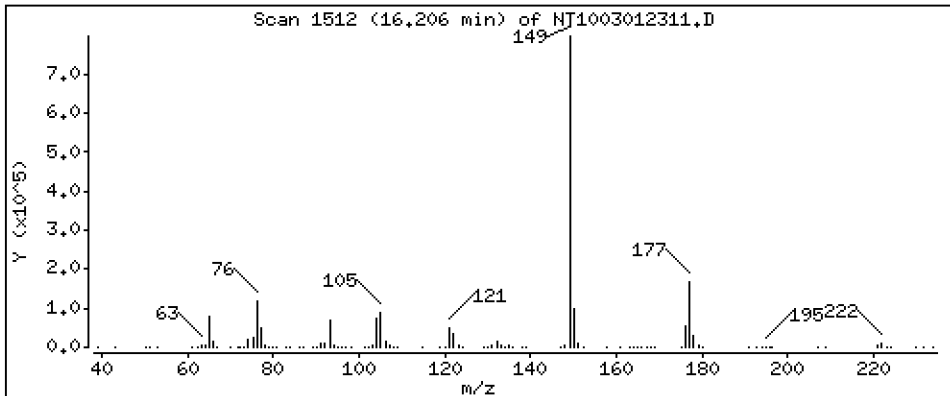
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,639 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

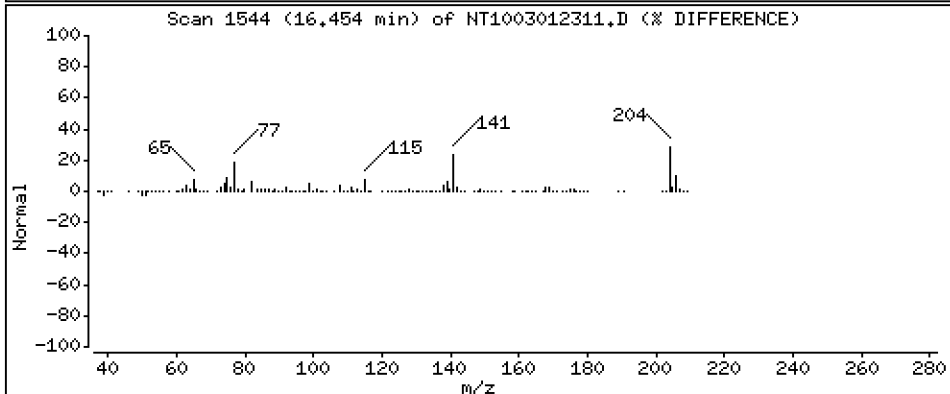
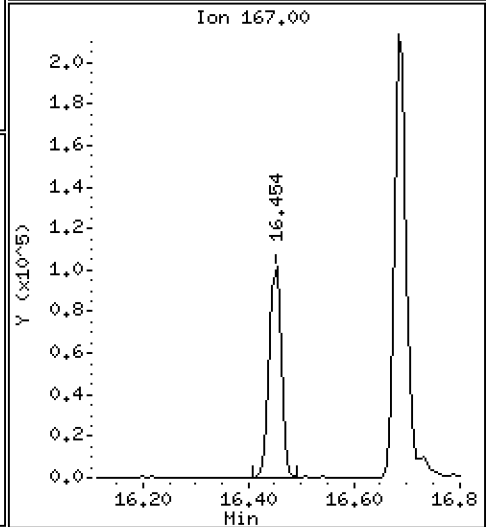
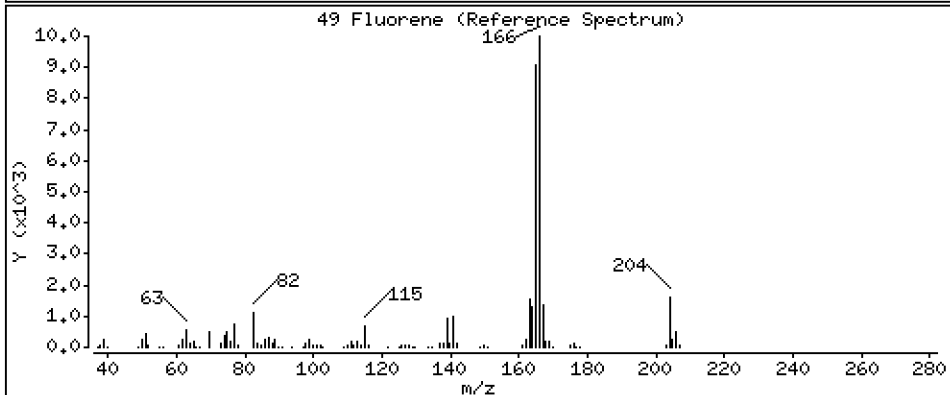
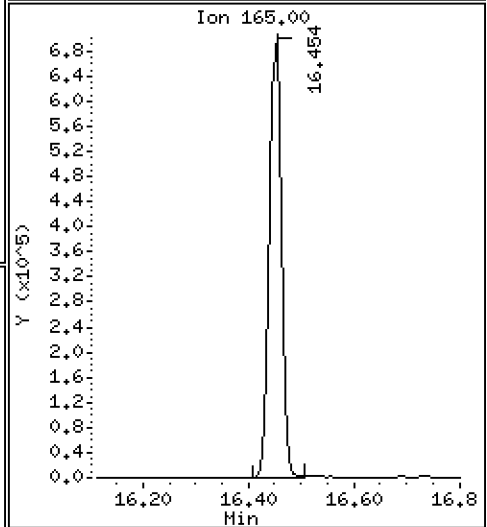
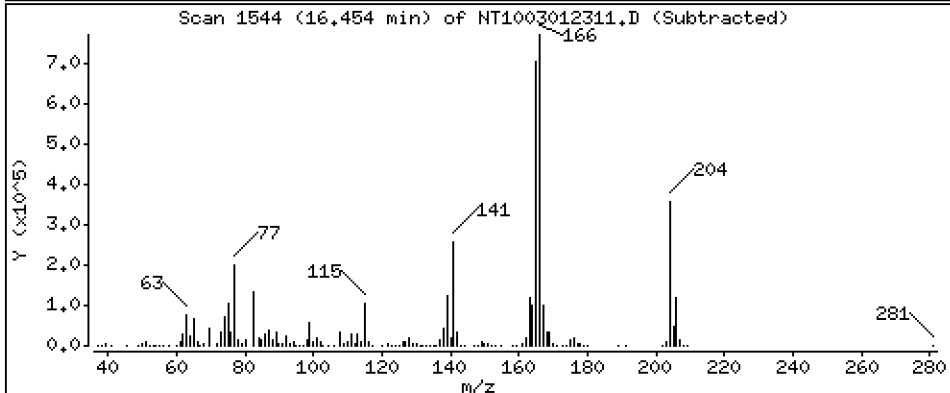
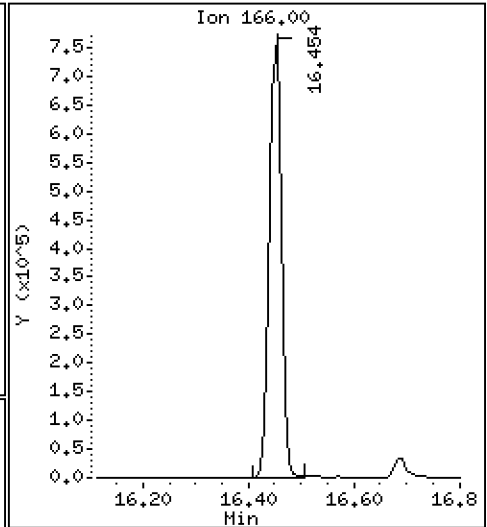
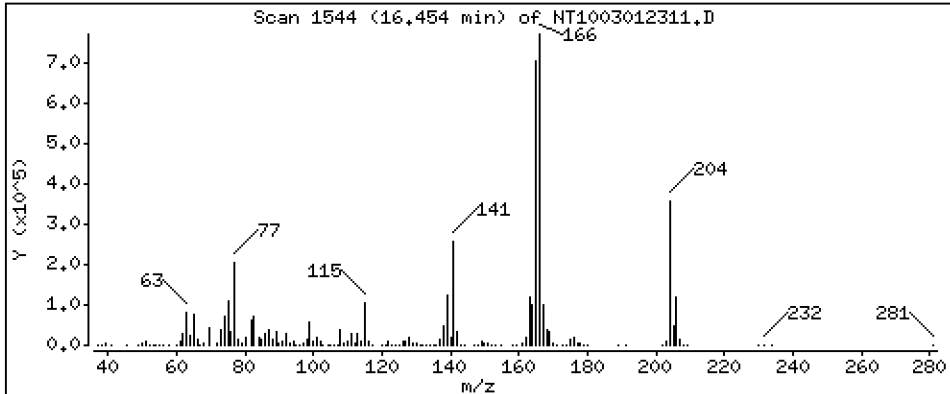
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 5,305 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

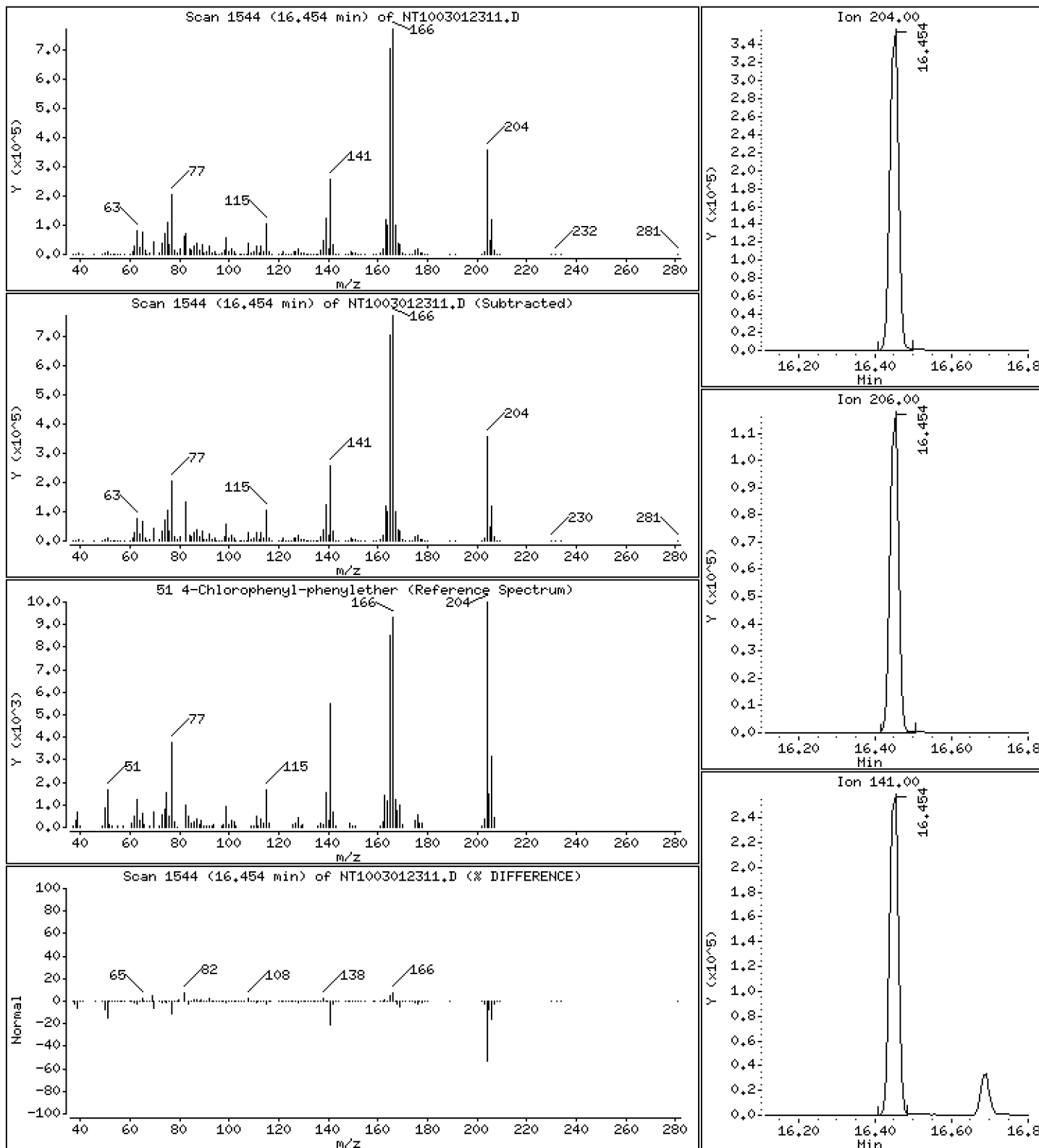
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 5,253 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

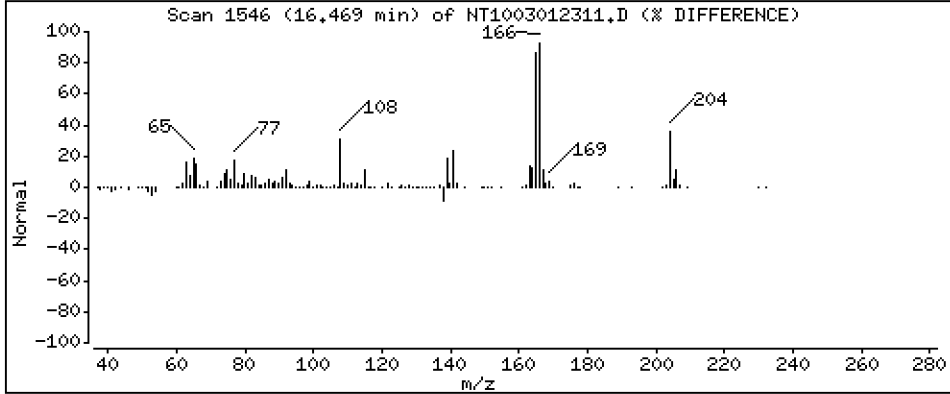
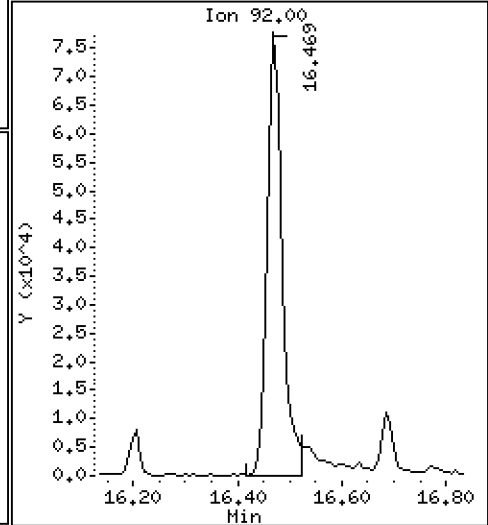
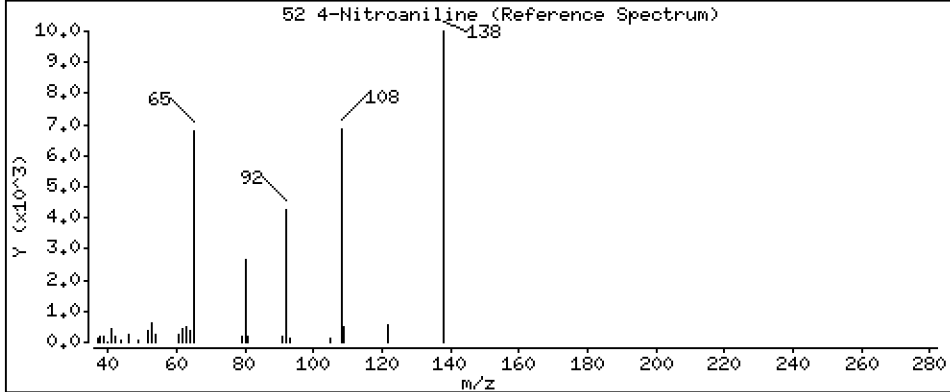
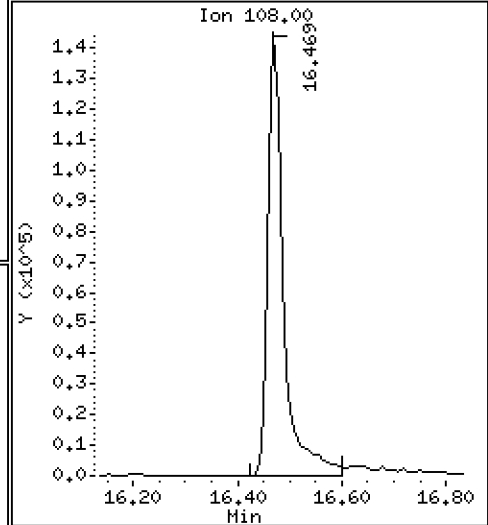
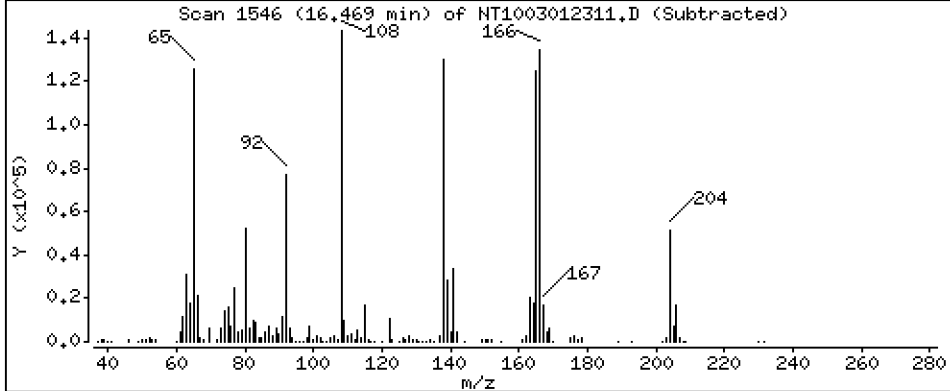
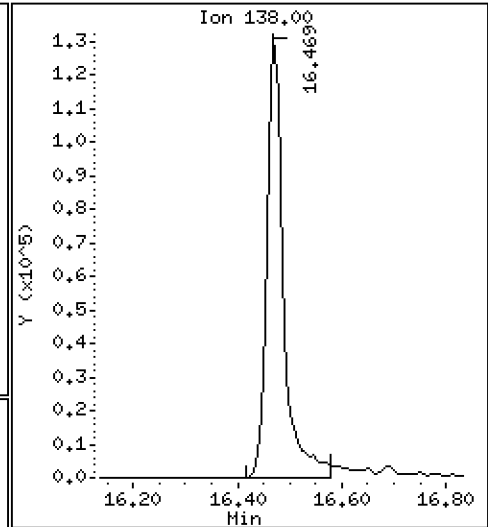
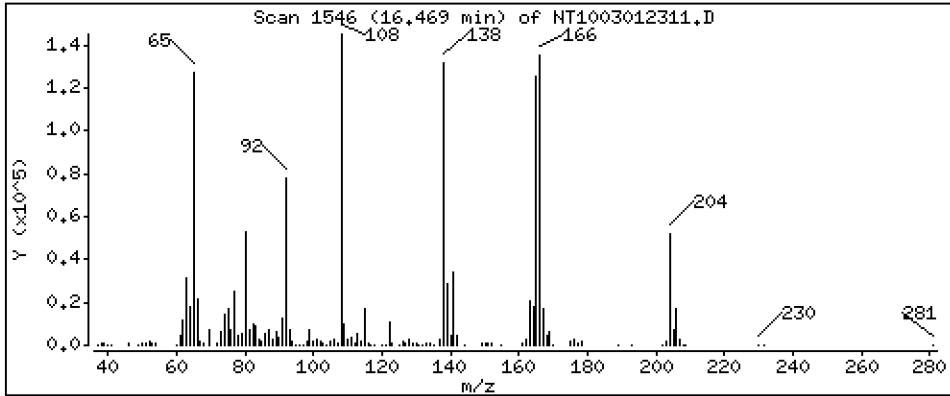
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 5,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

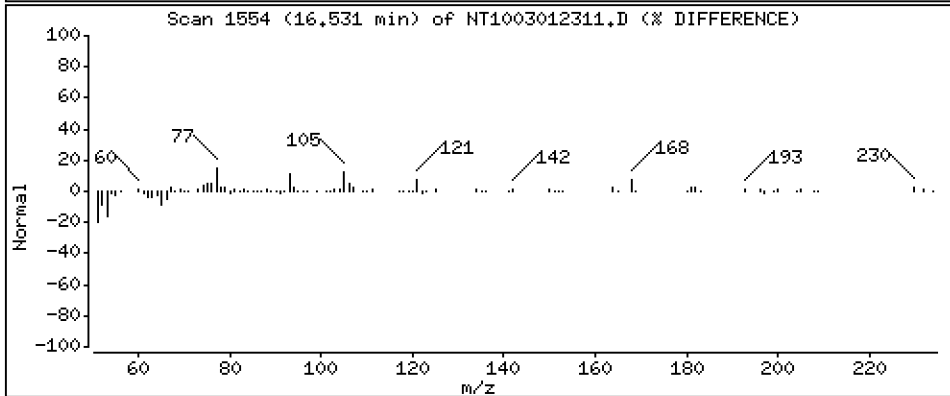
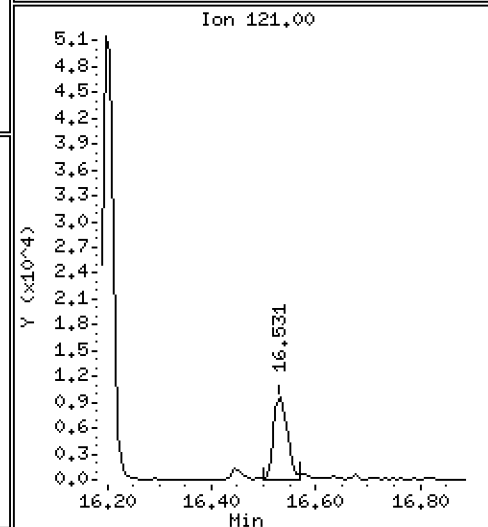
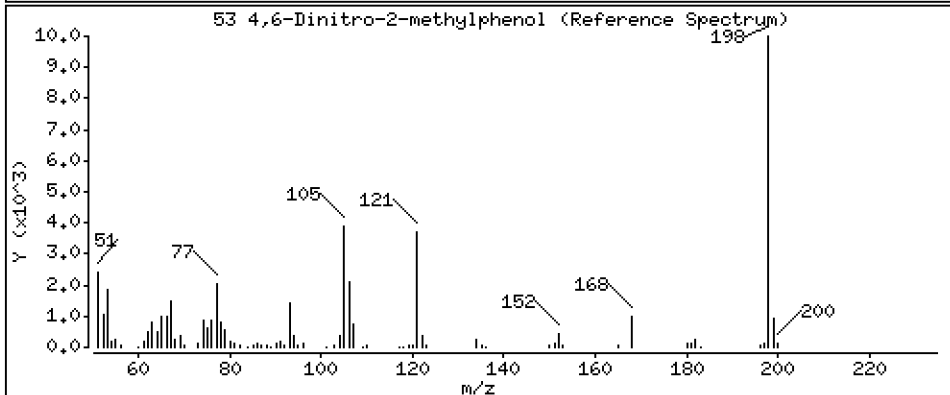
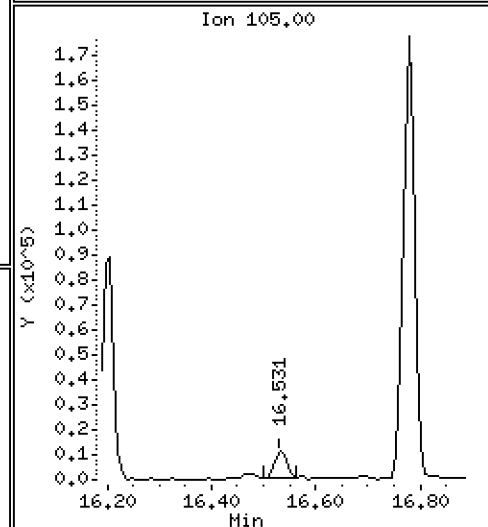
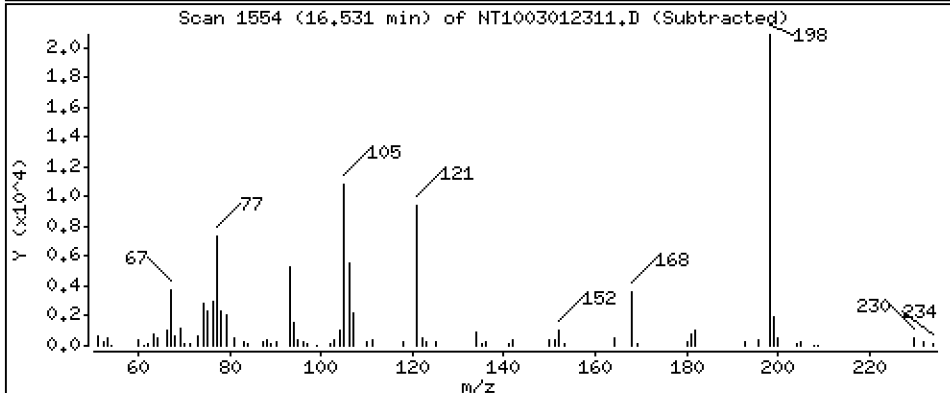
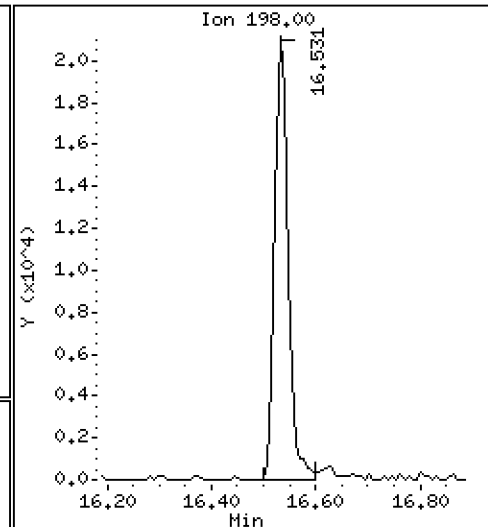
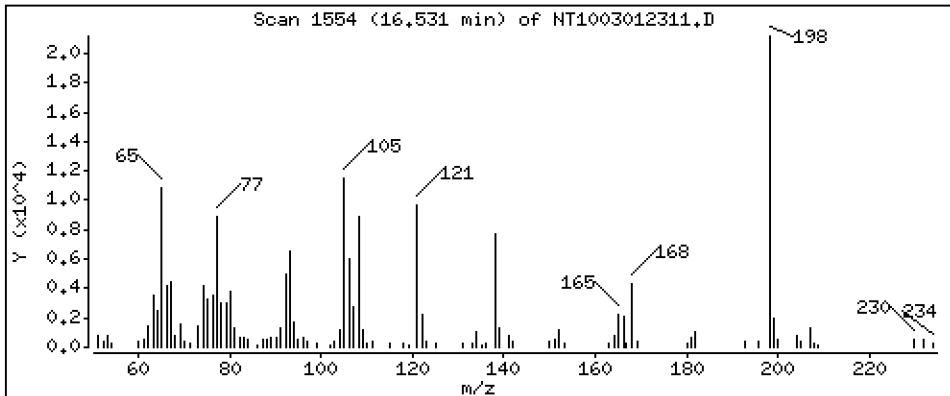
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 1,292 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

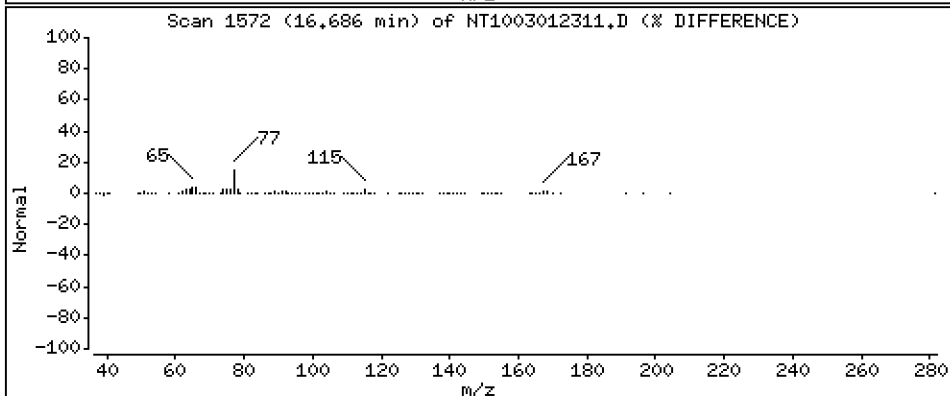
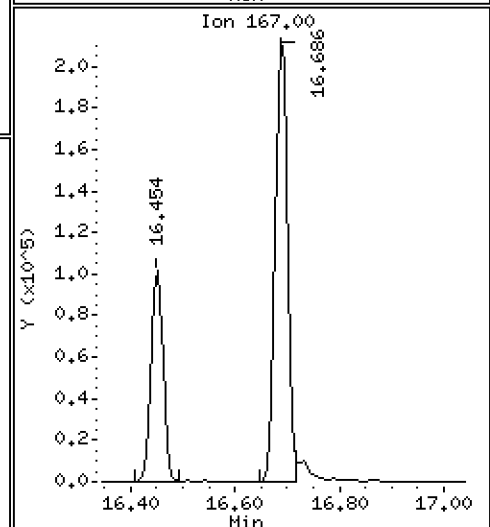
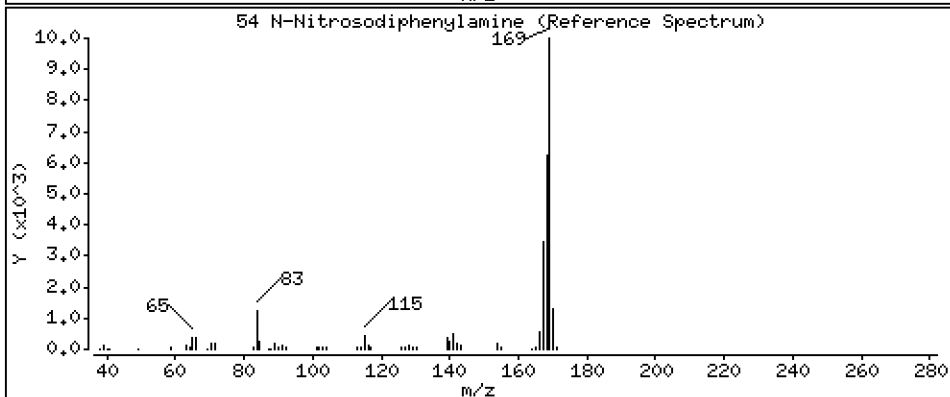
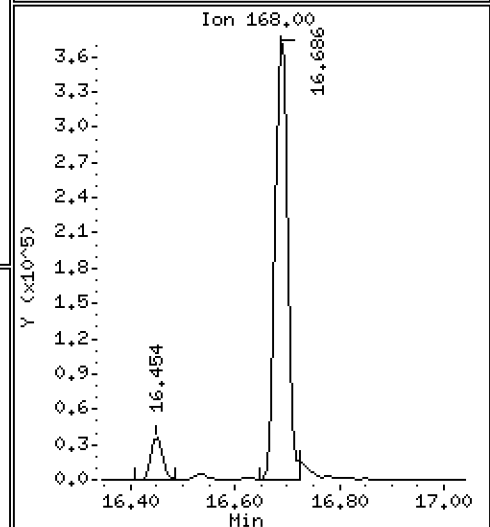
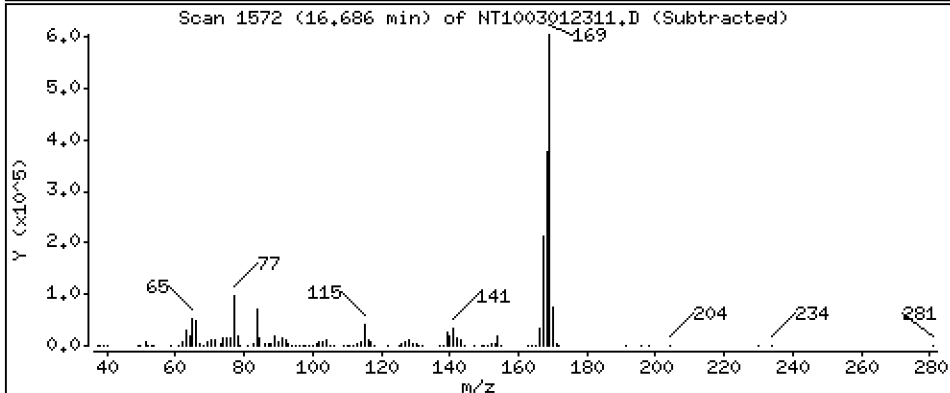
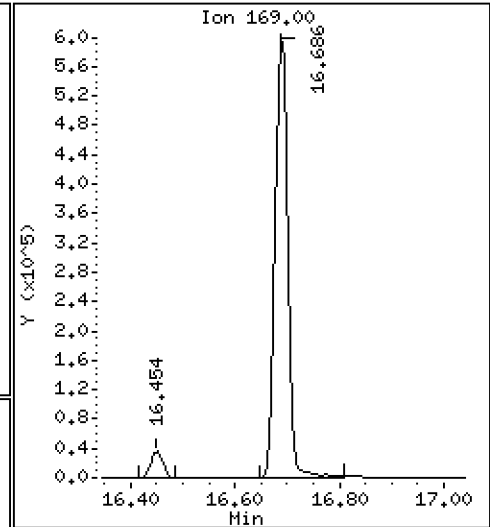
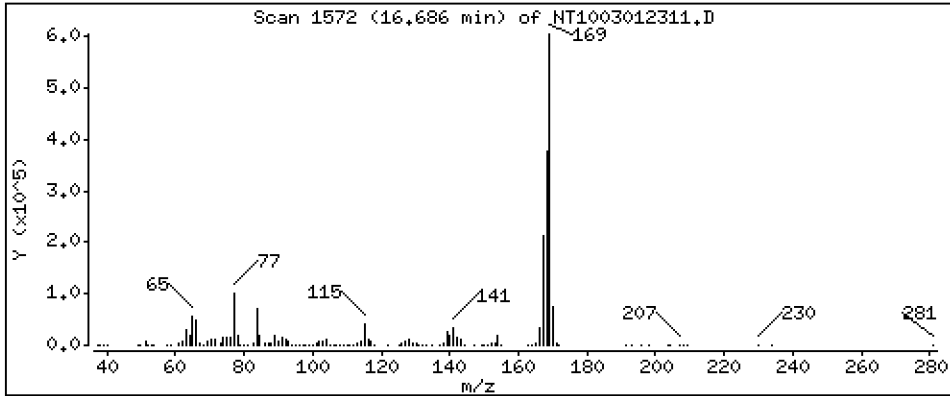
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,416 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

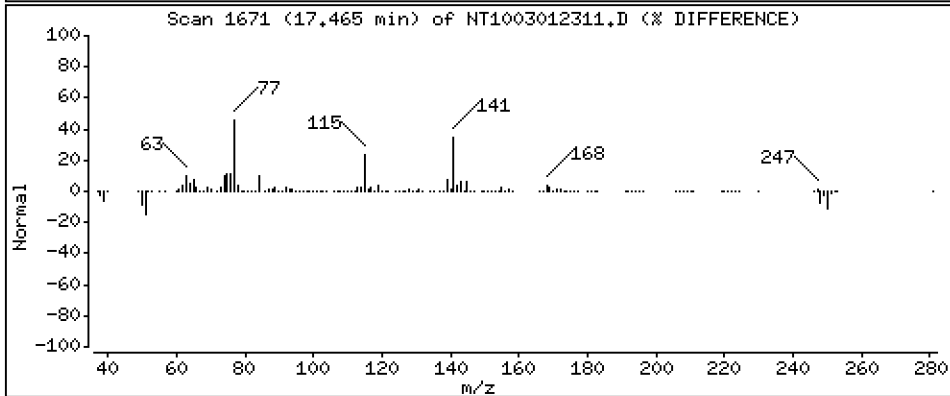
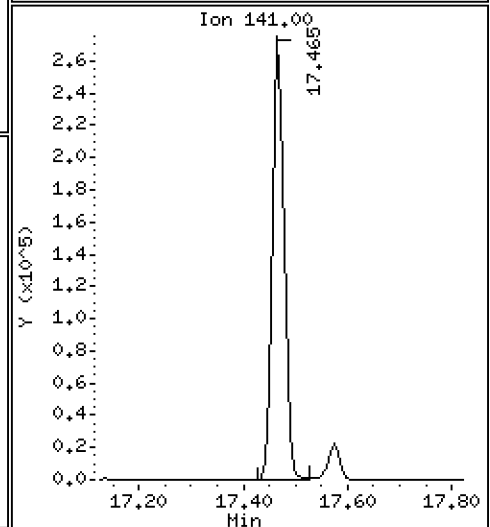
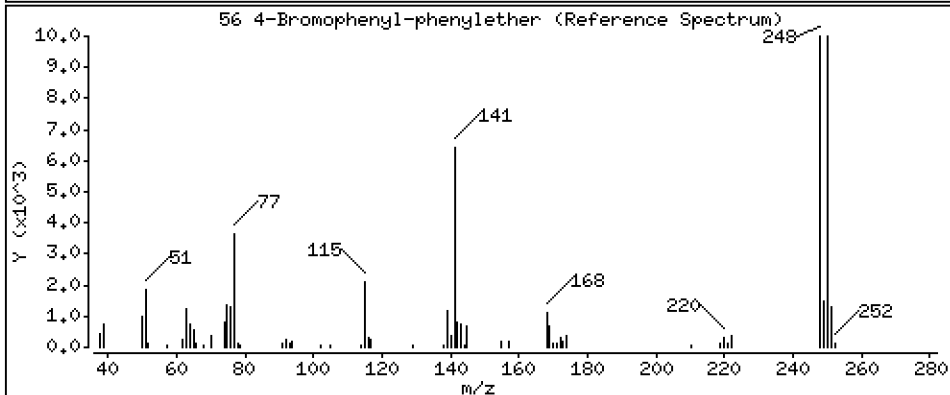
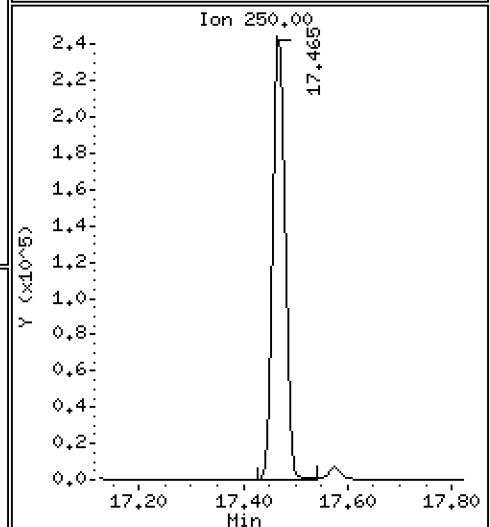
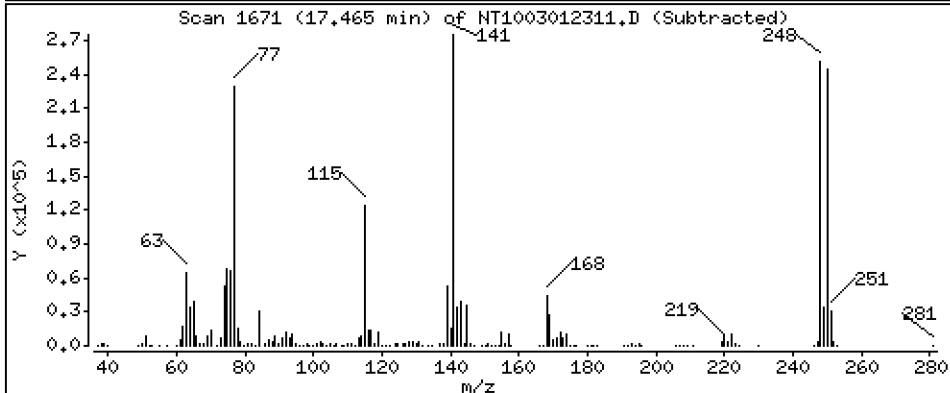
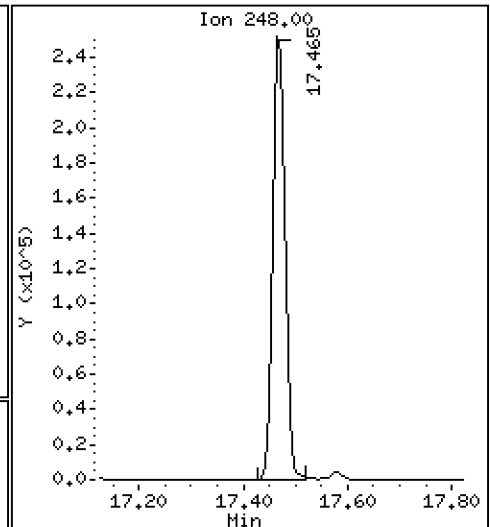
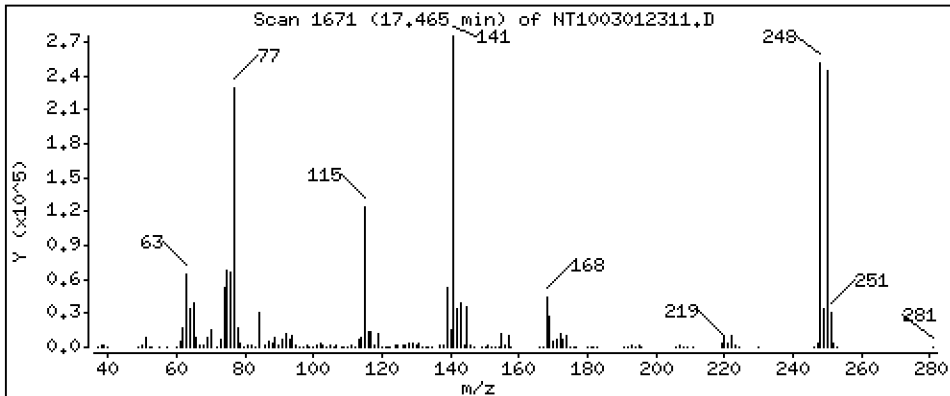
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,460 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

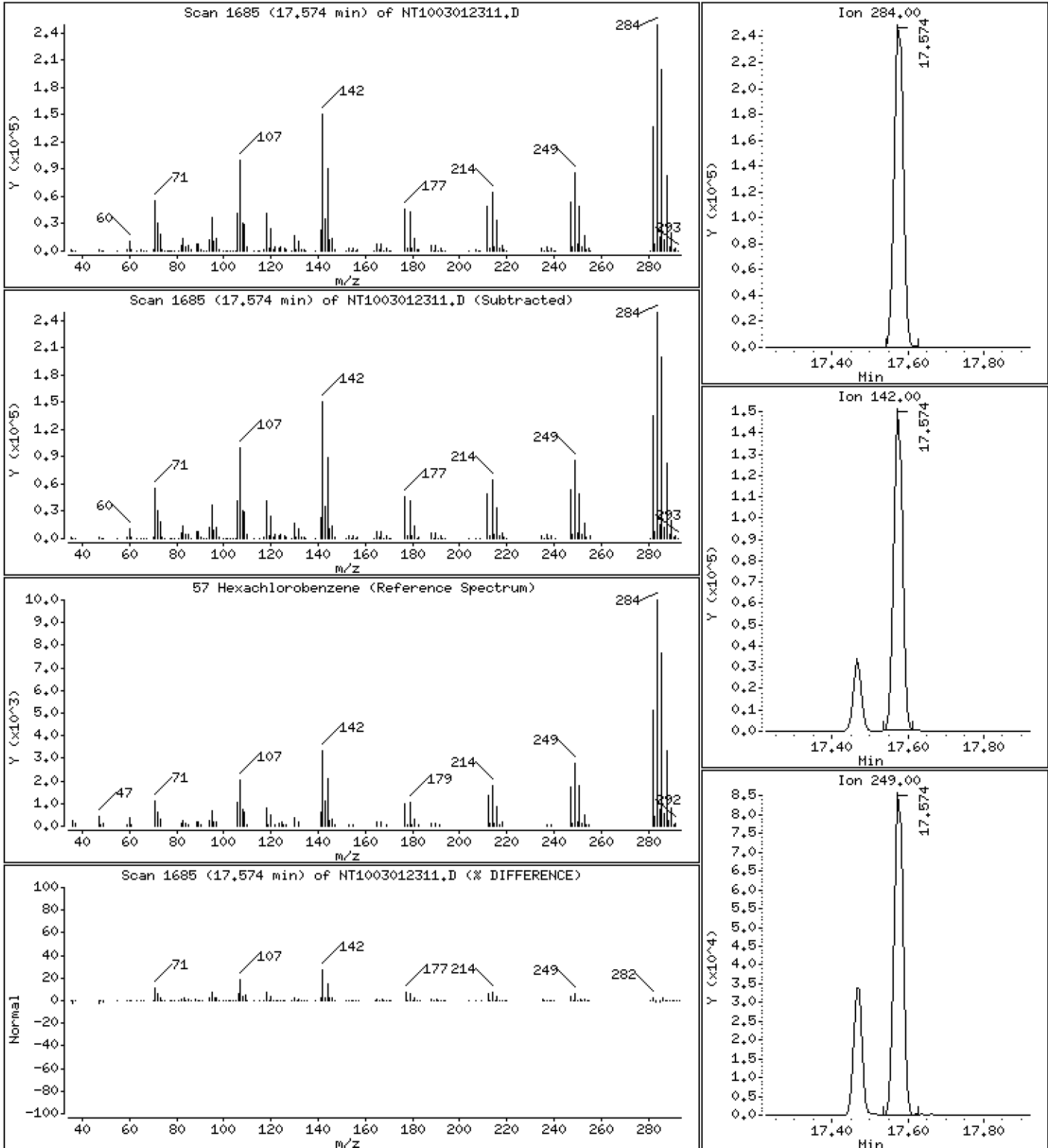
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,805 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

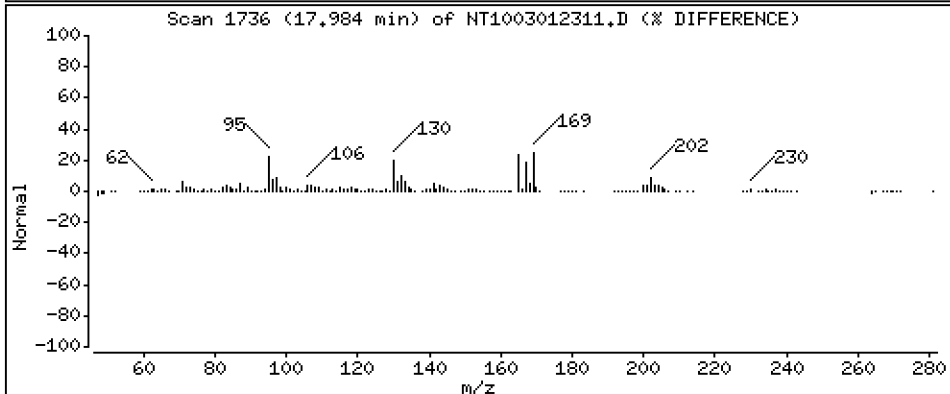
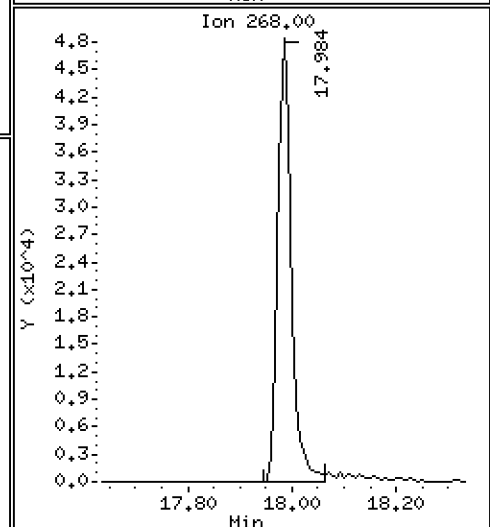
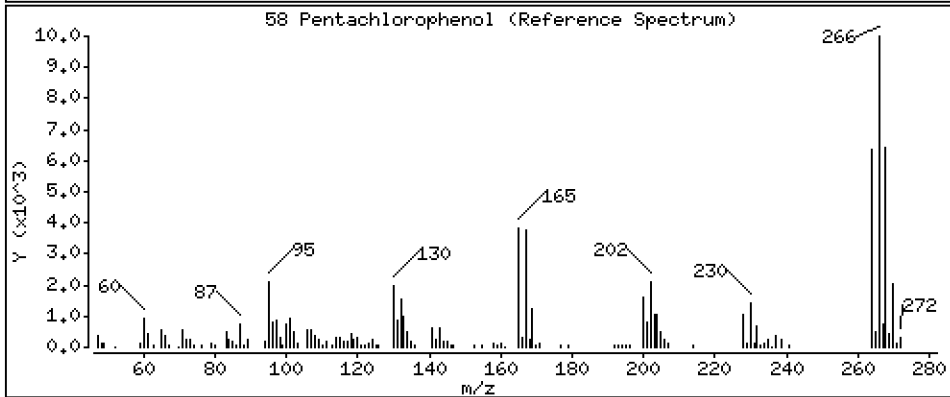
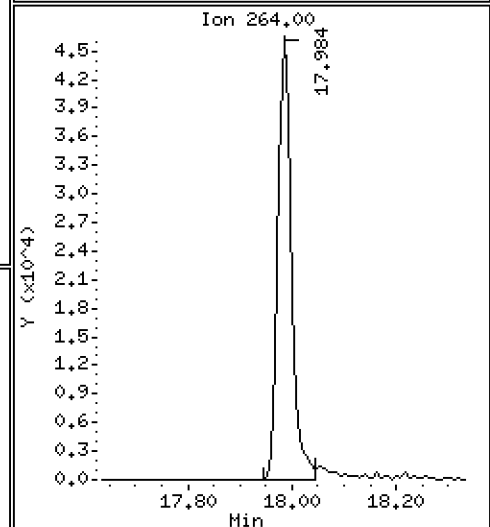
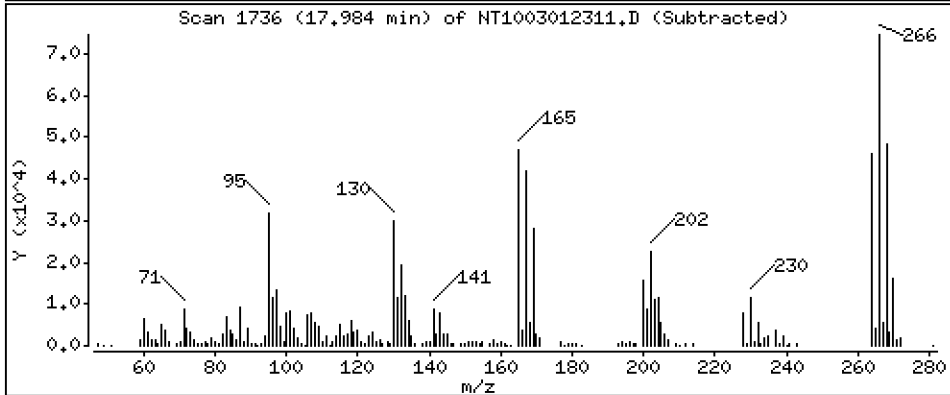
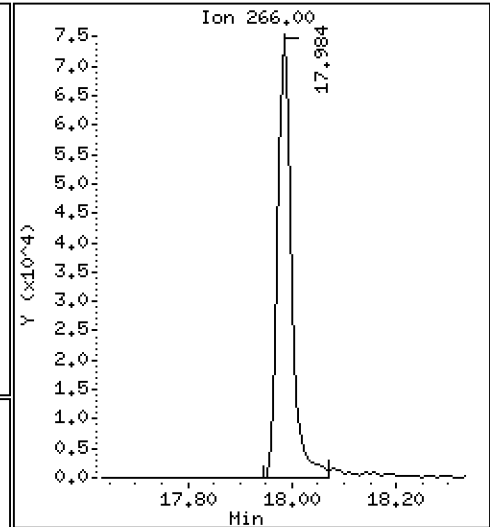
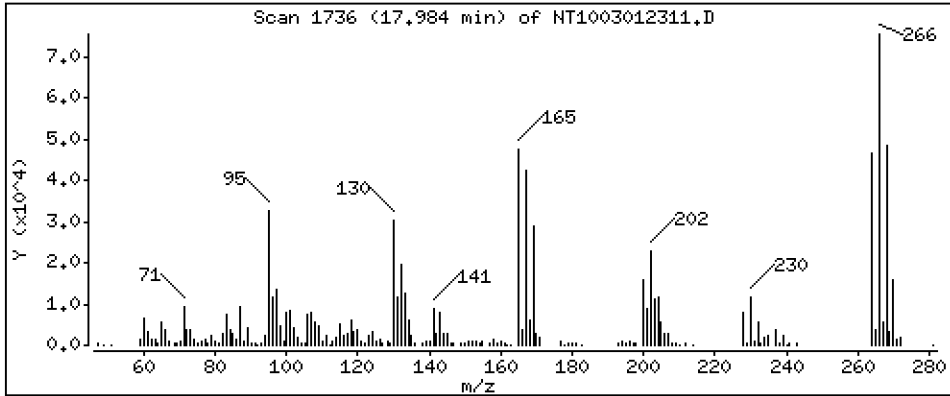
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,492 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

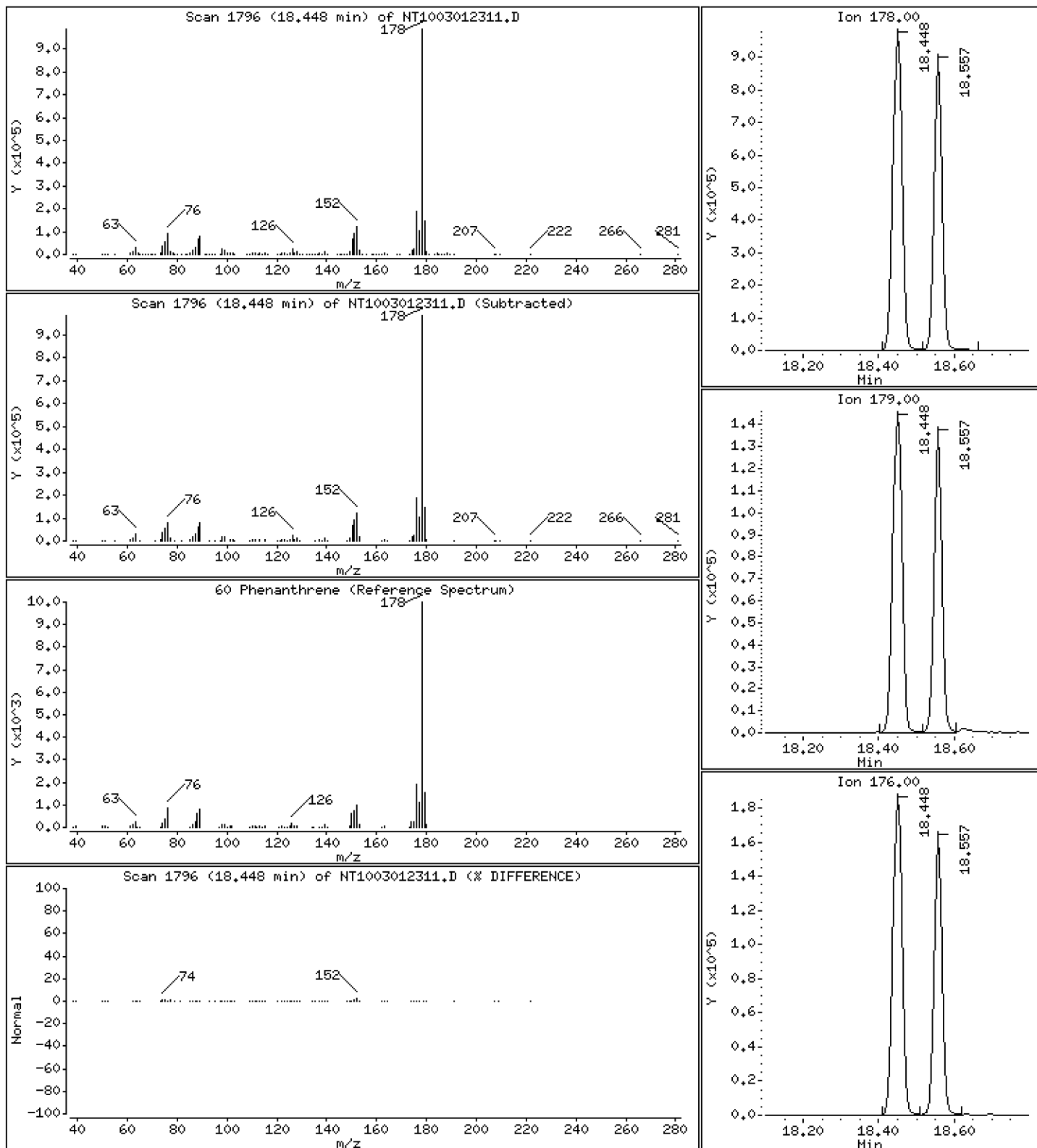
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 5,085 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

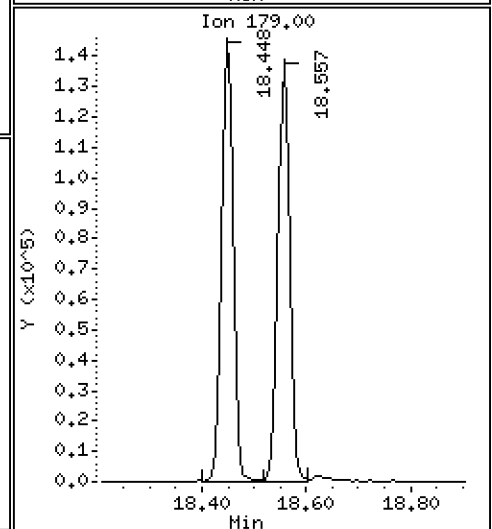
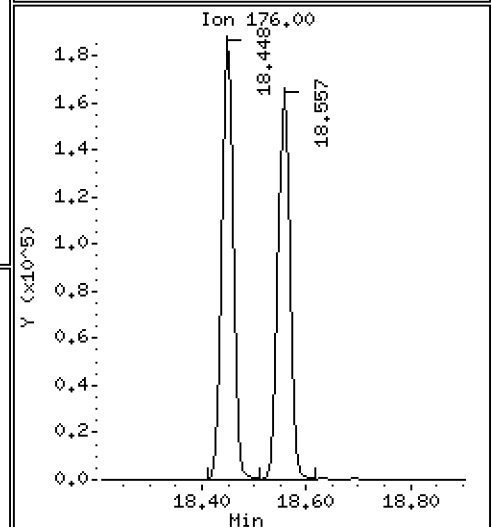
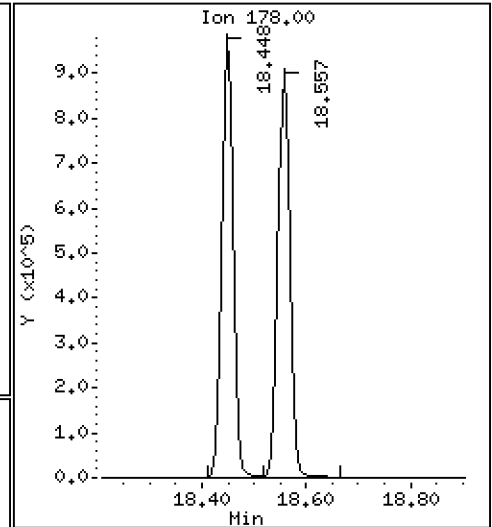
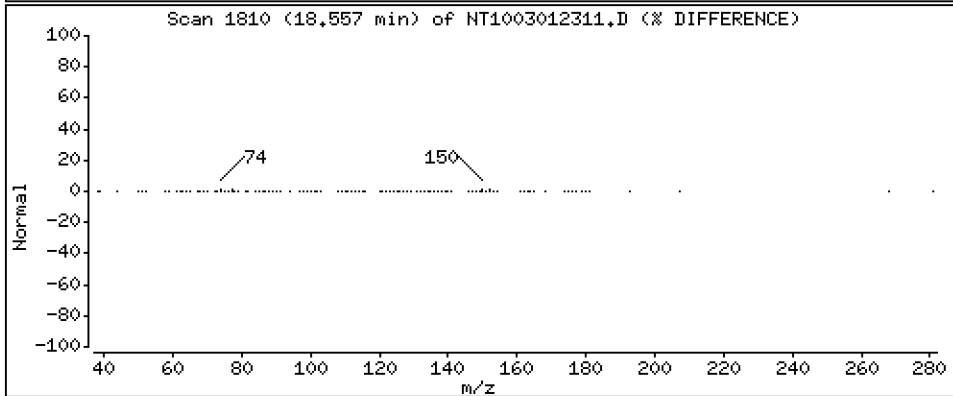
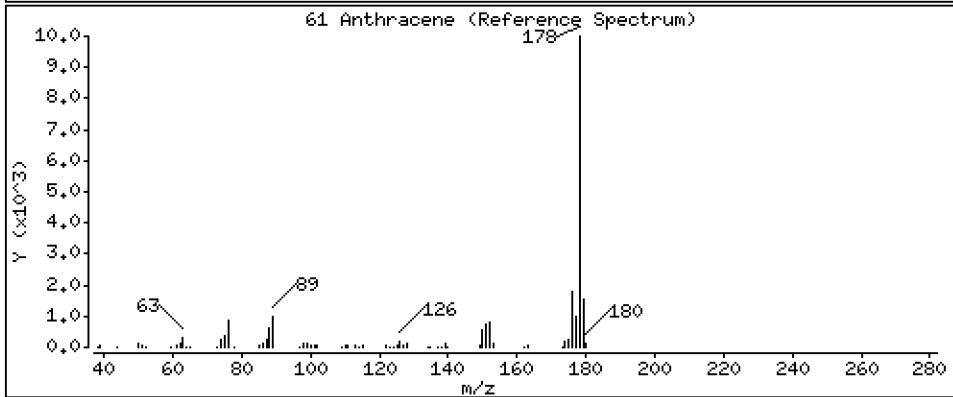
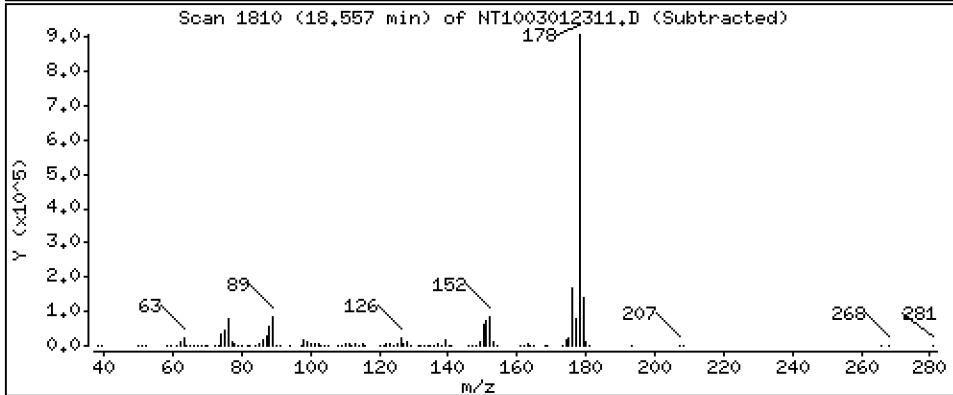
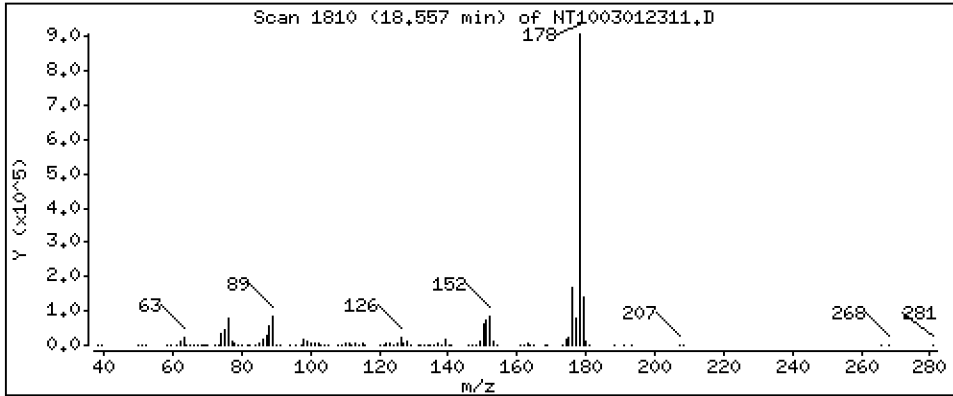
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,585 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

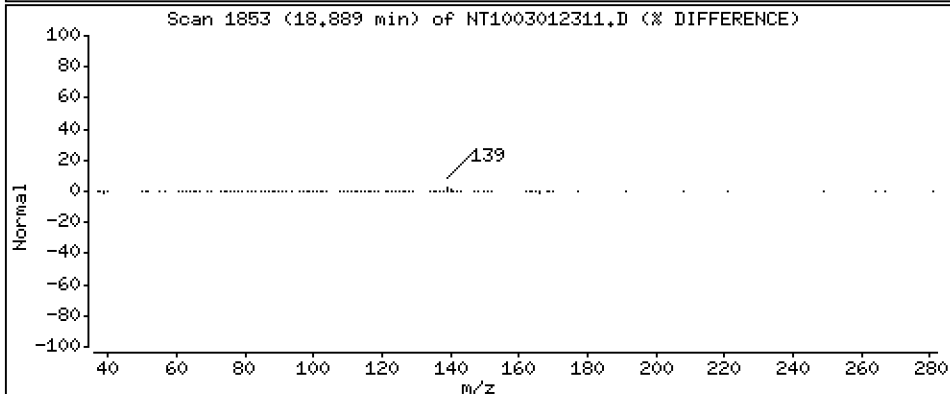
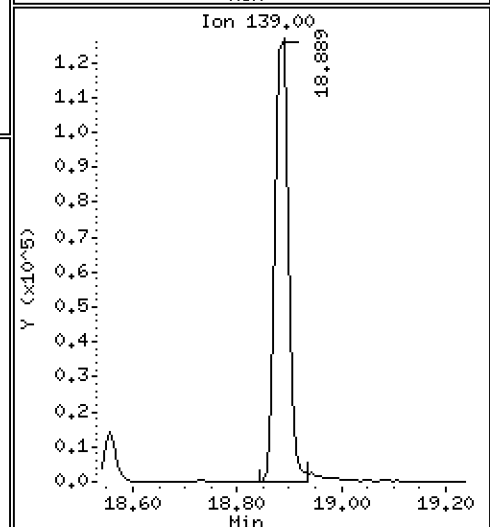
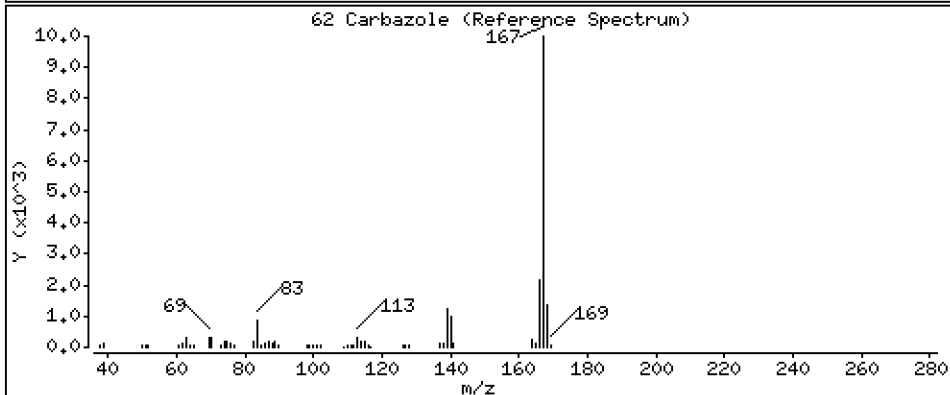
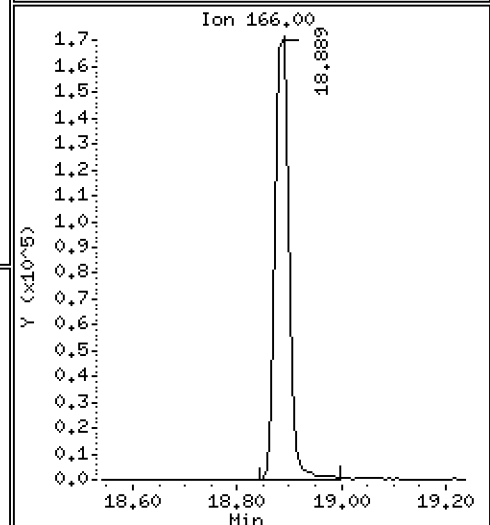
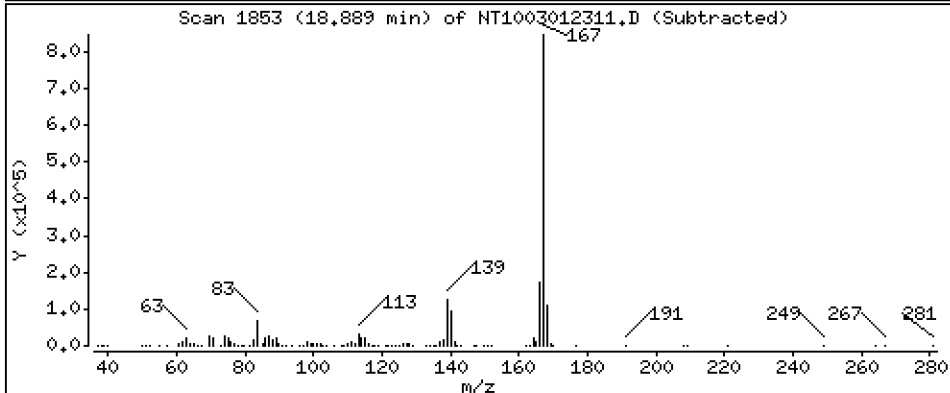
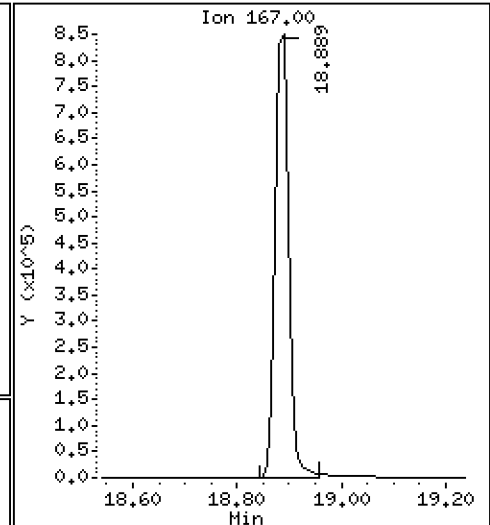
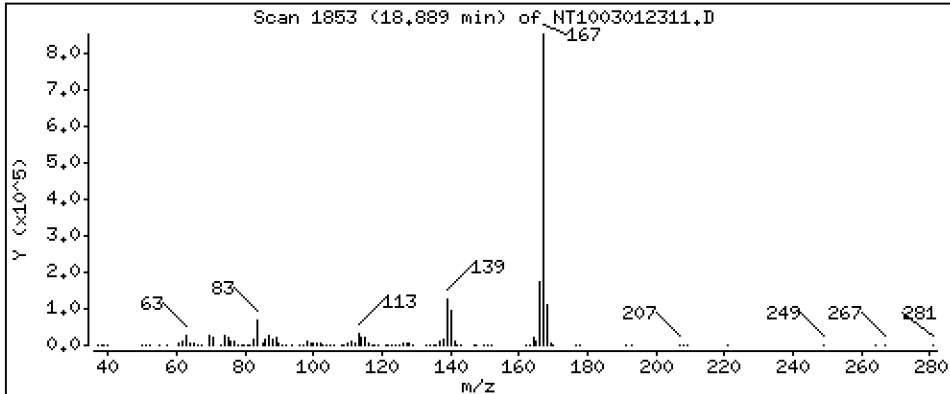
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,335 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

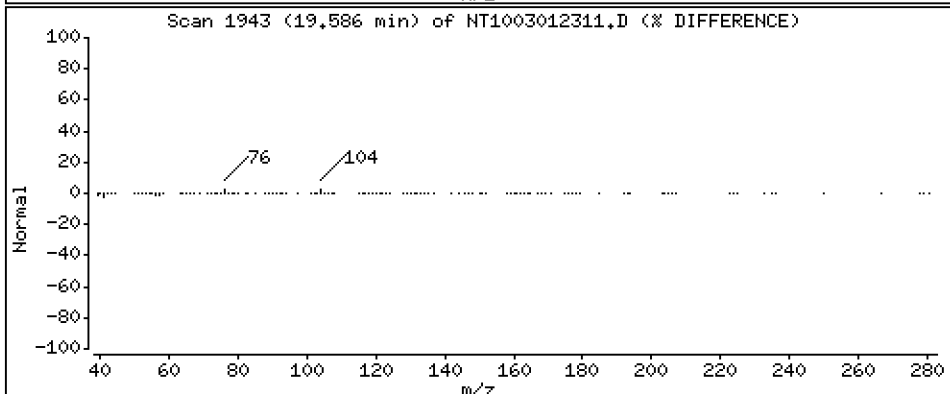
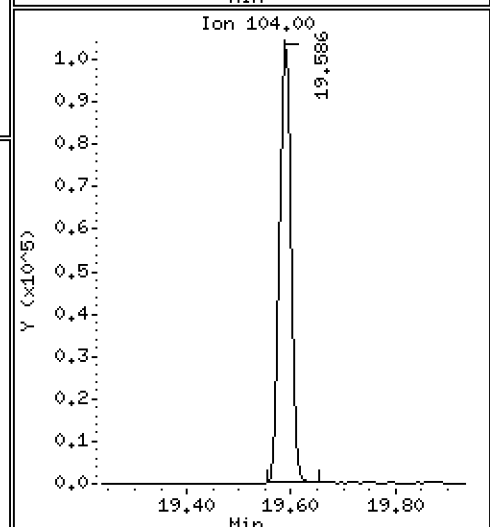
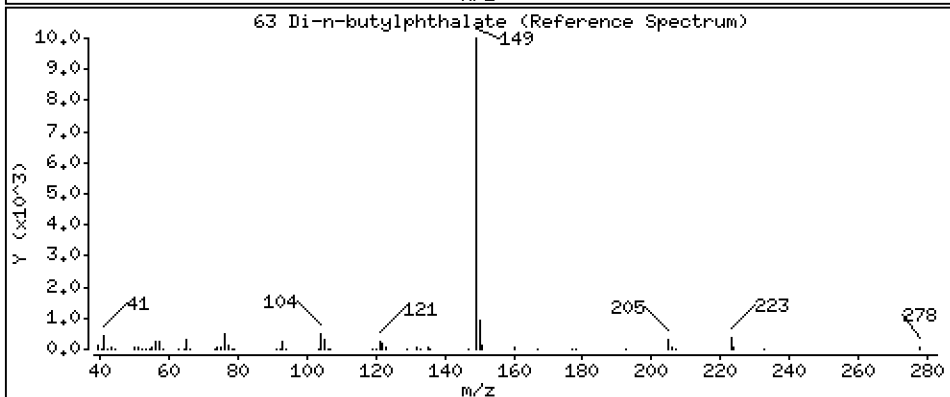
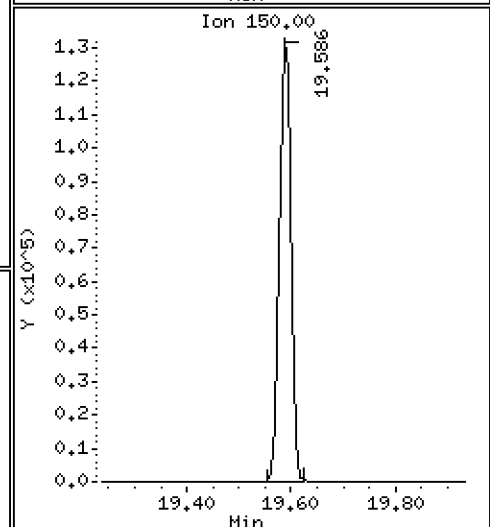
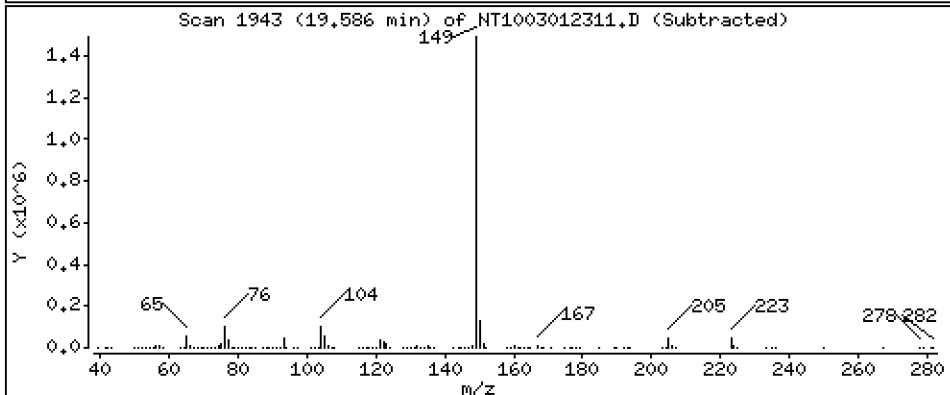
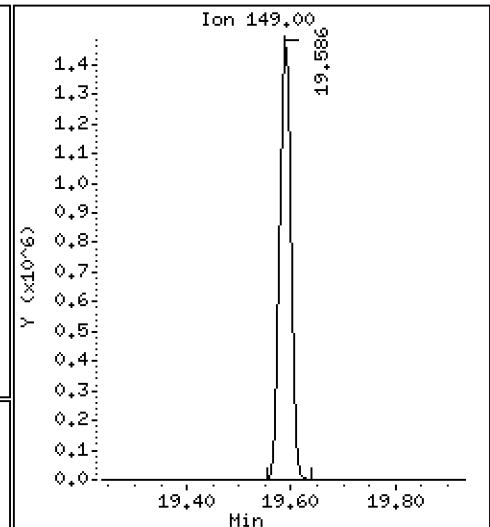
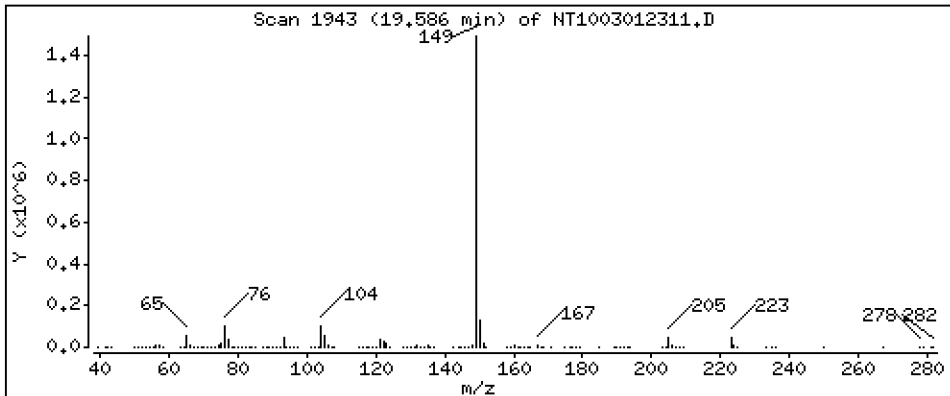
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,463 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

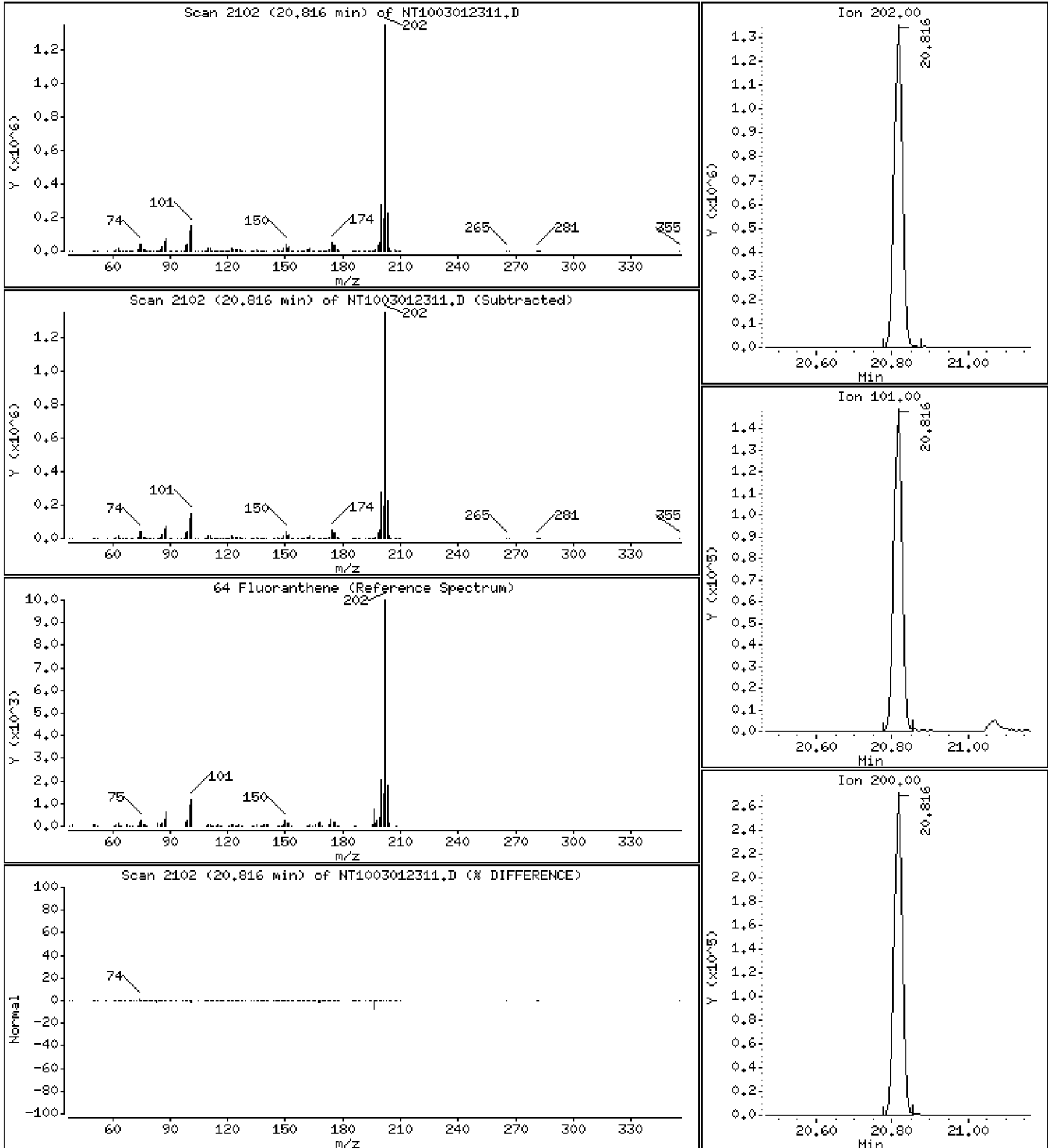
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,542 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

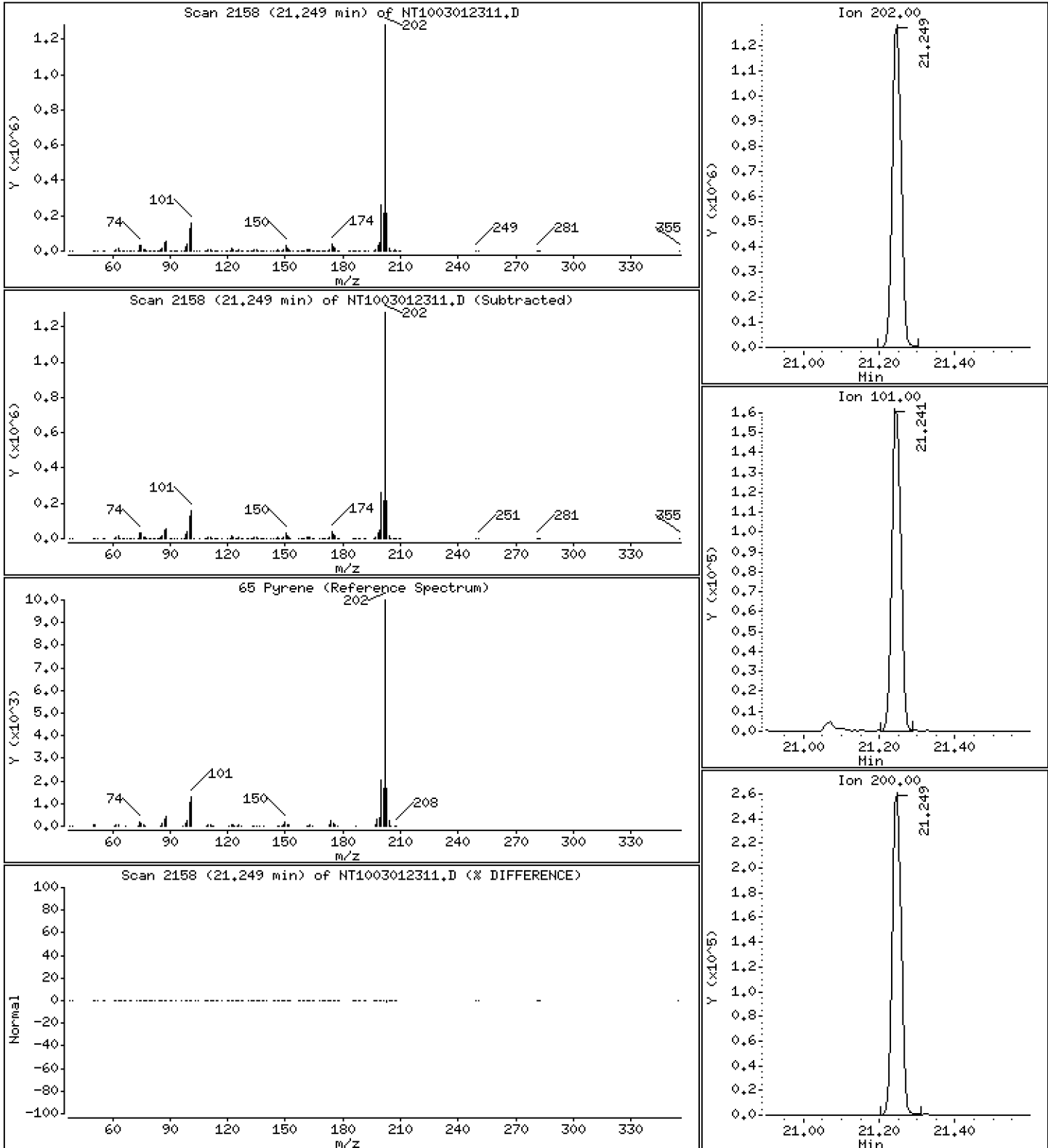
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,626 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

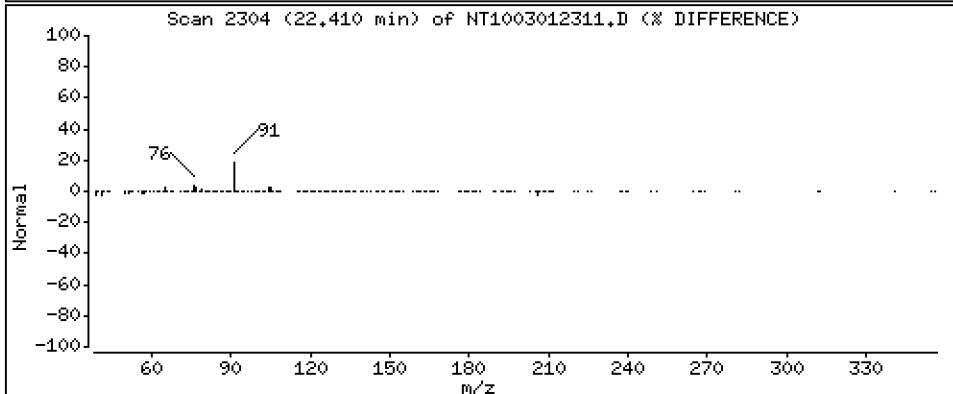
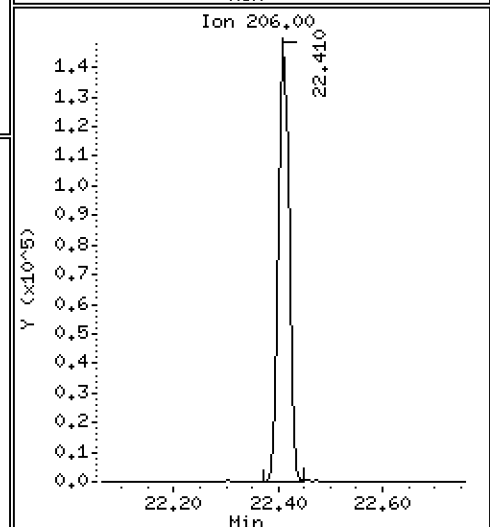
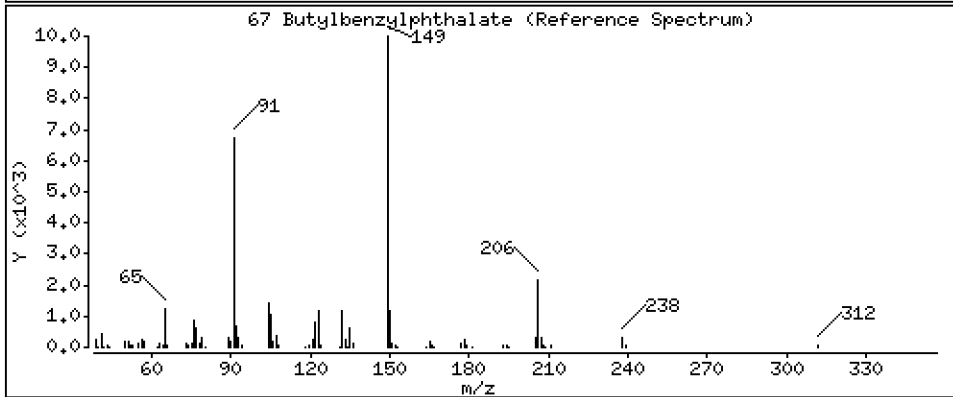
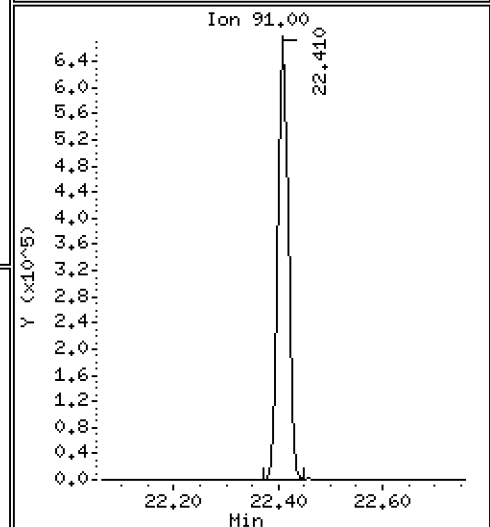
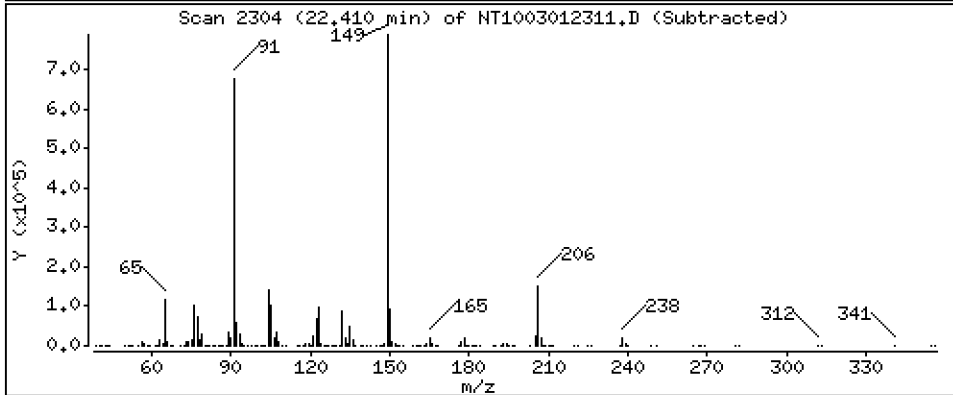
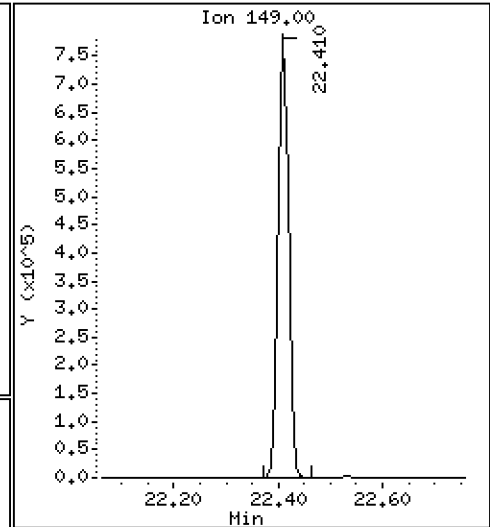
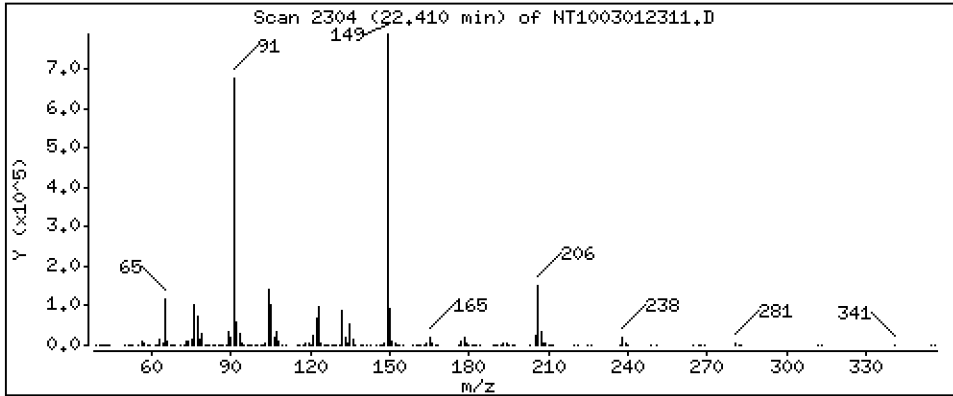
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,525 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

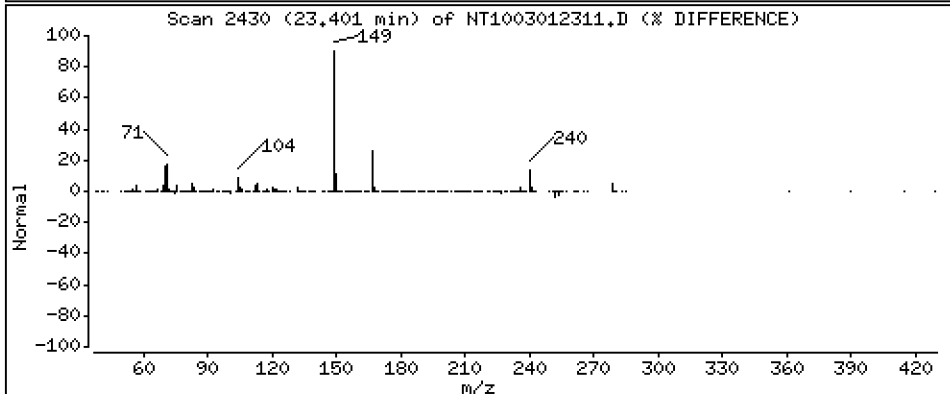
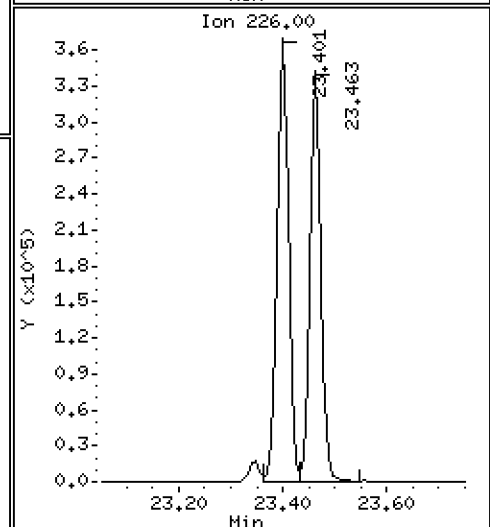
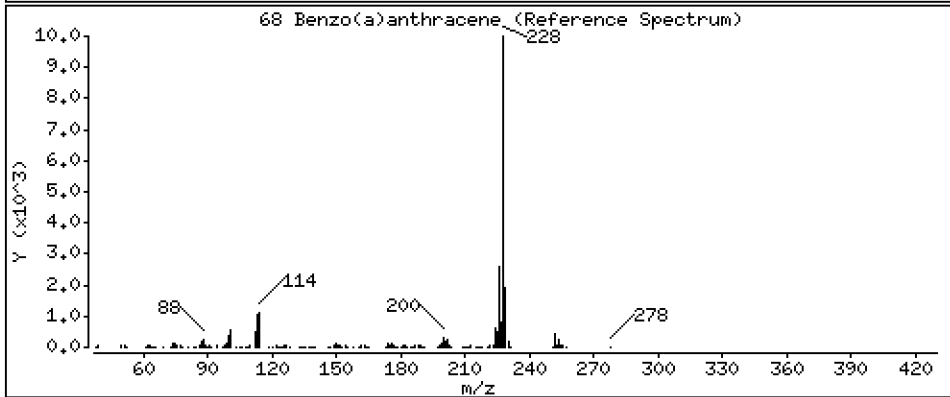
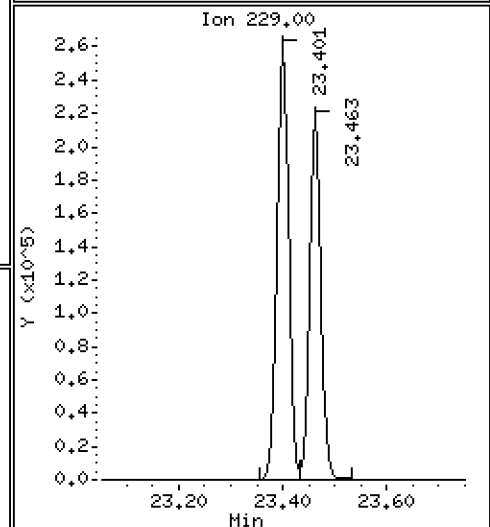
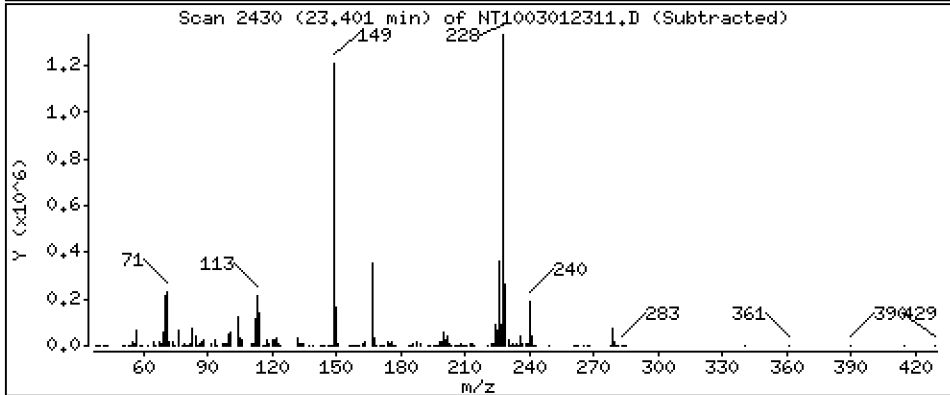
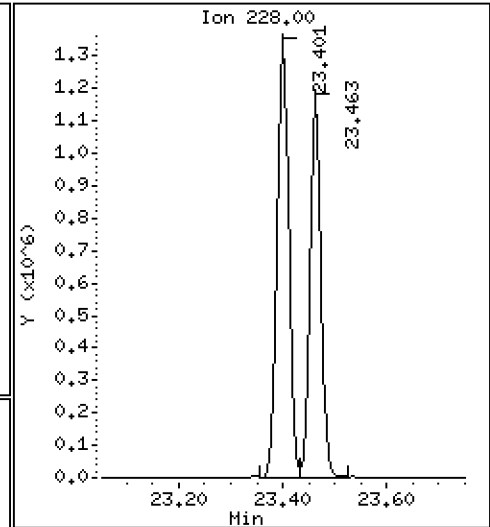
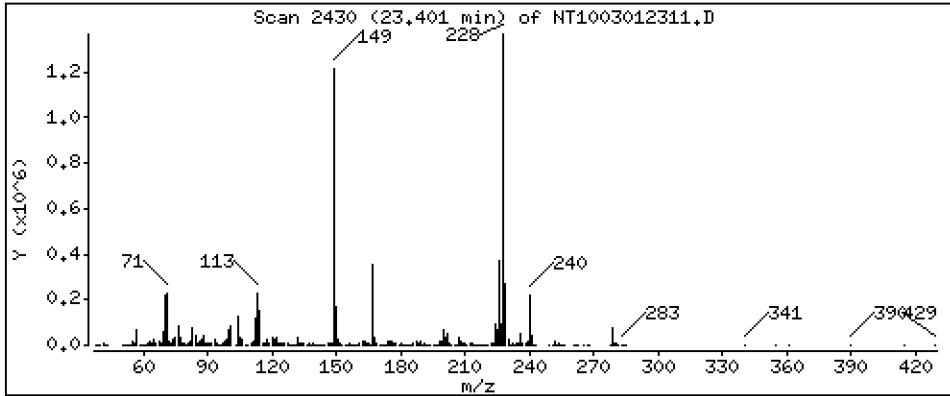
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,578 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

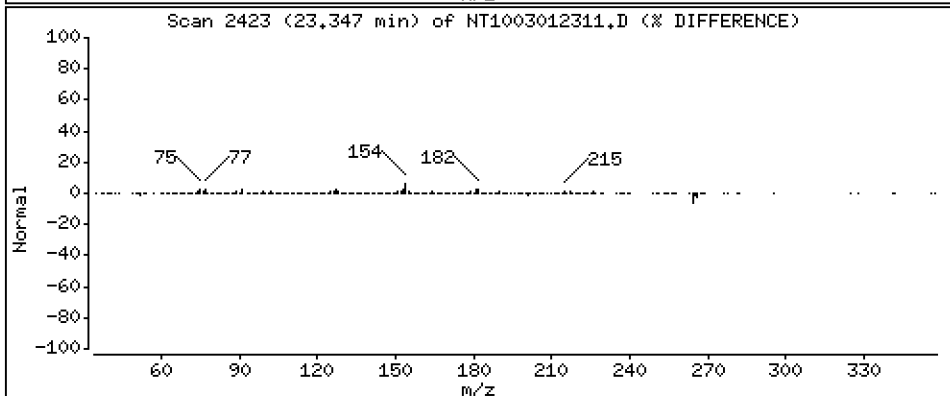
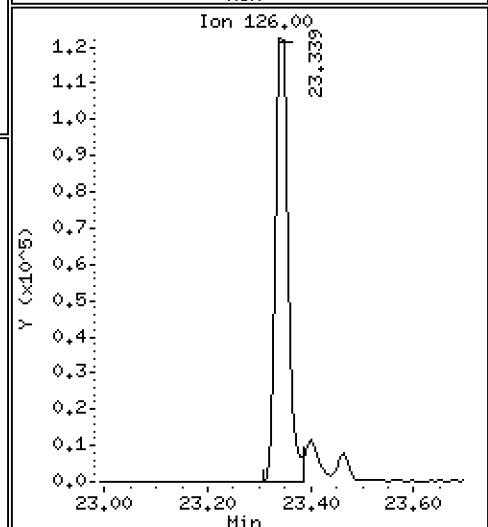
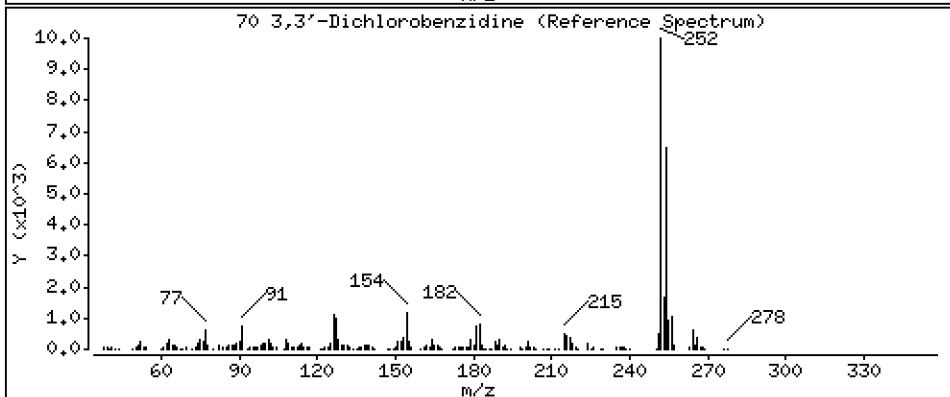
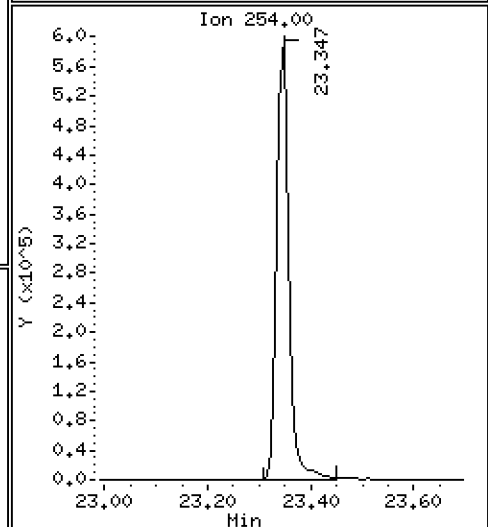
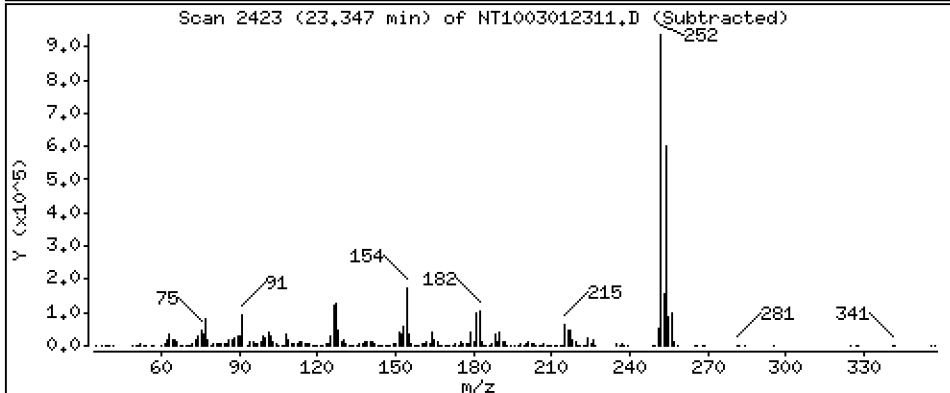
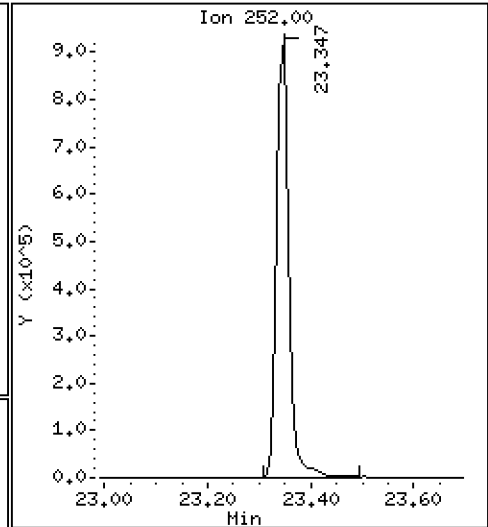
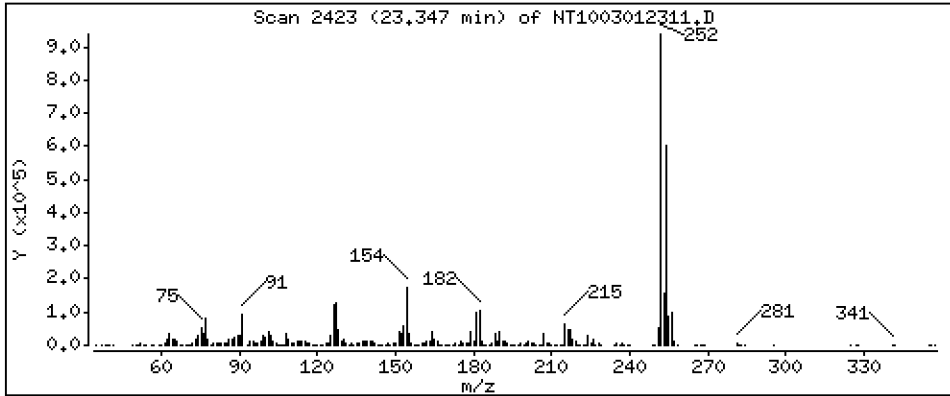
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 7,383 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

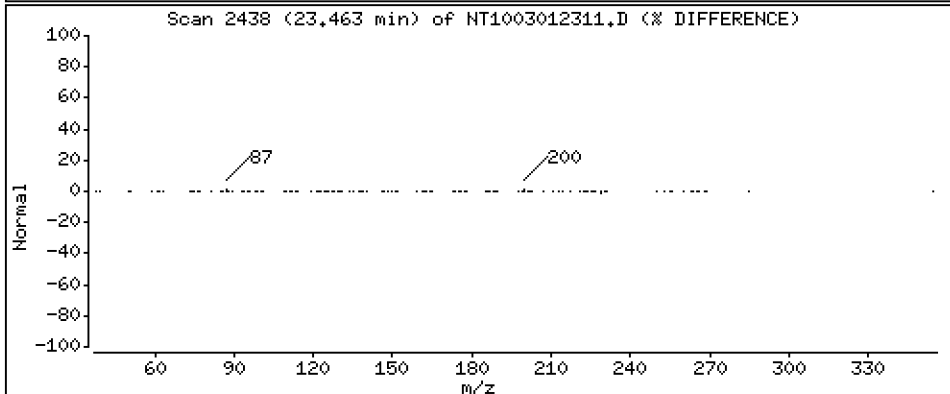
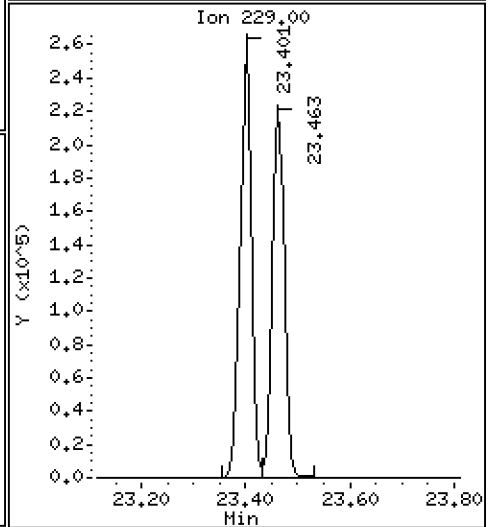
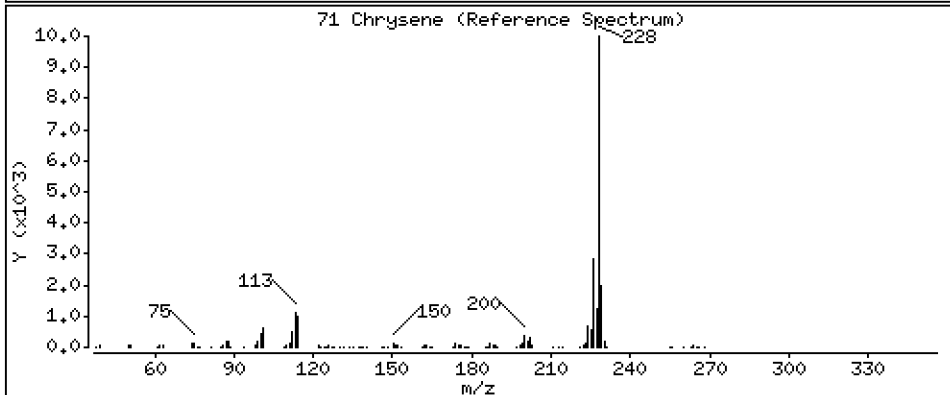
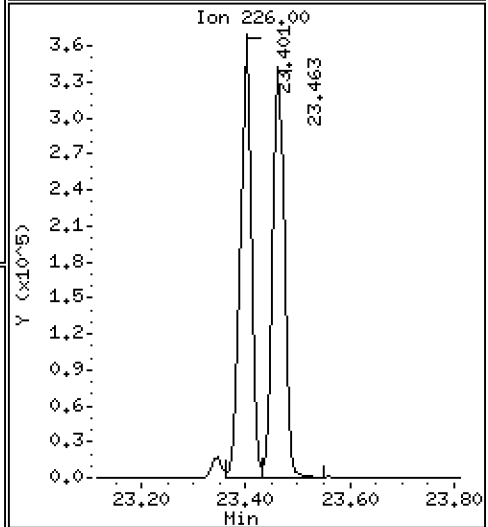
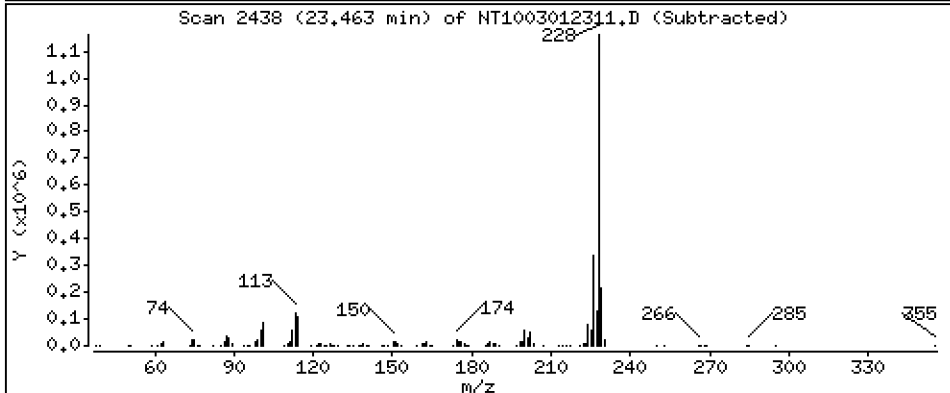
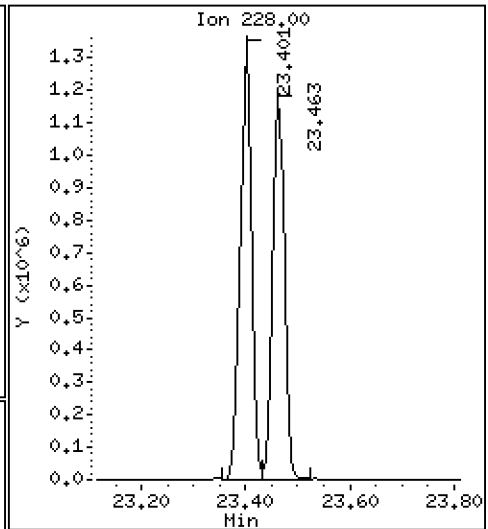
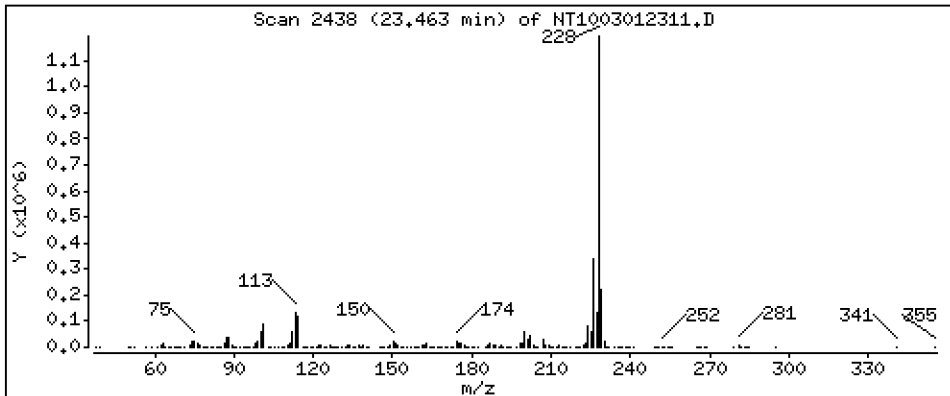
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,967 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

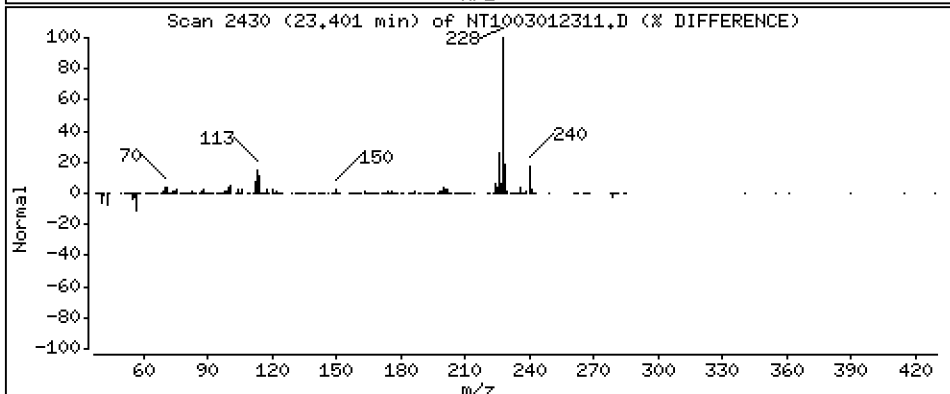
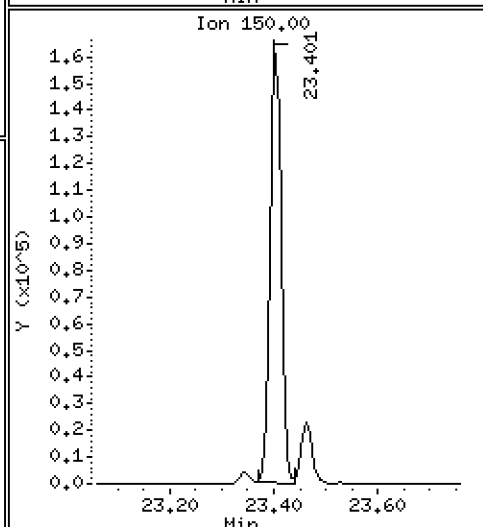
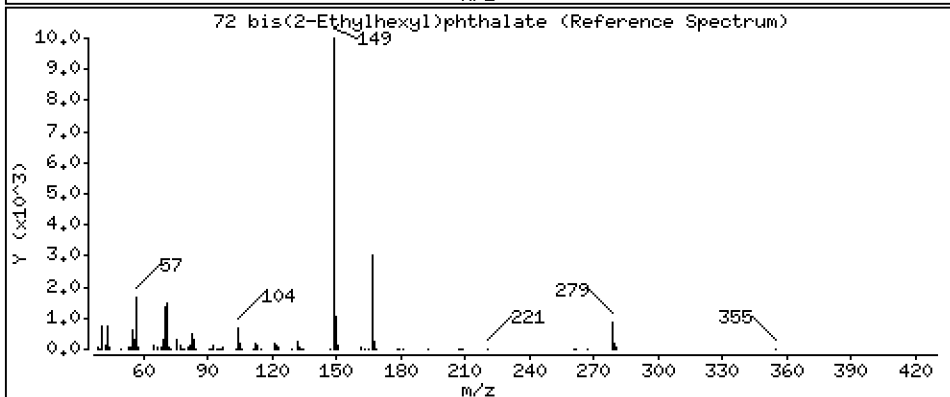
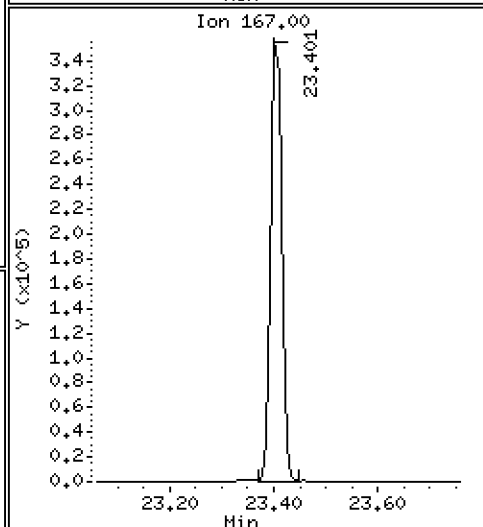
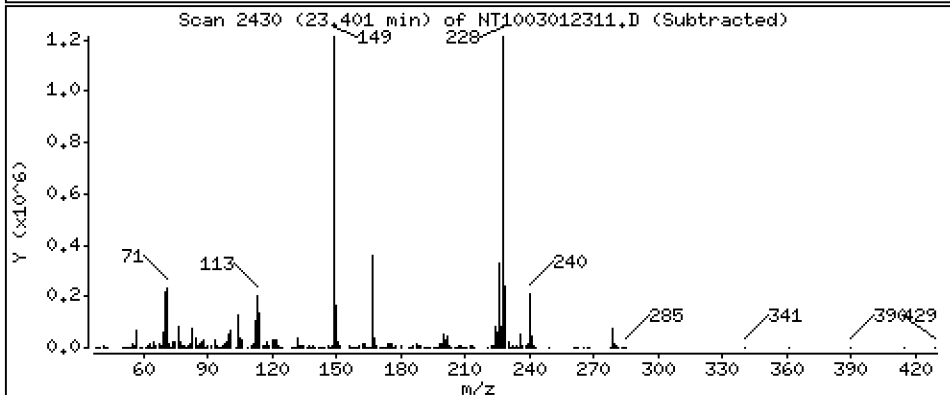
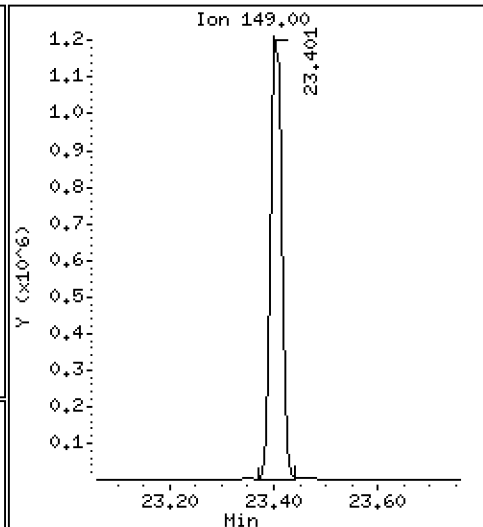
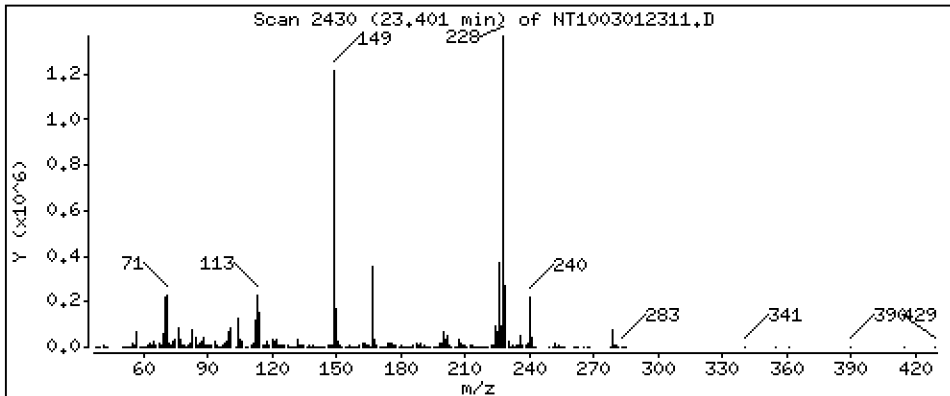
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,956 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

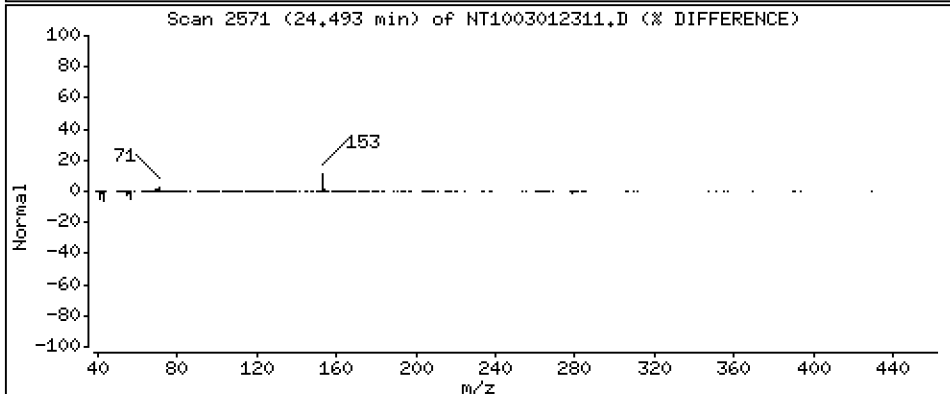
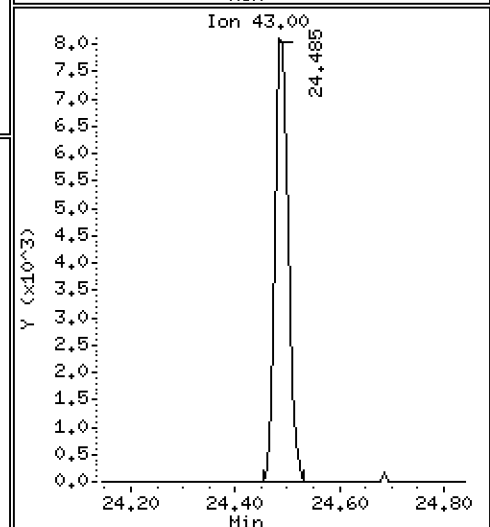
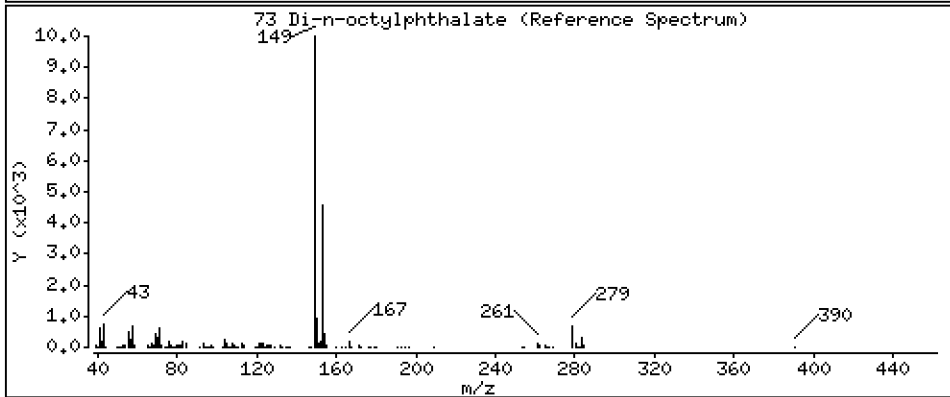
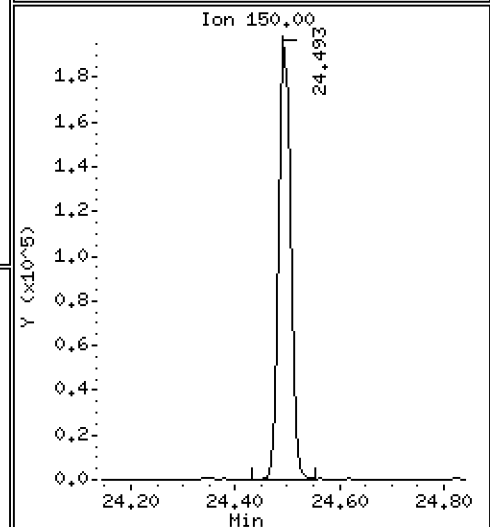
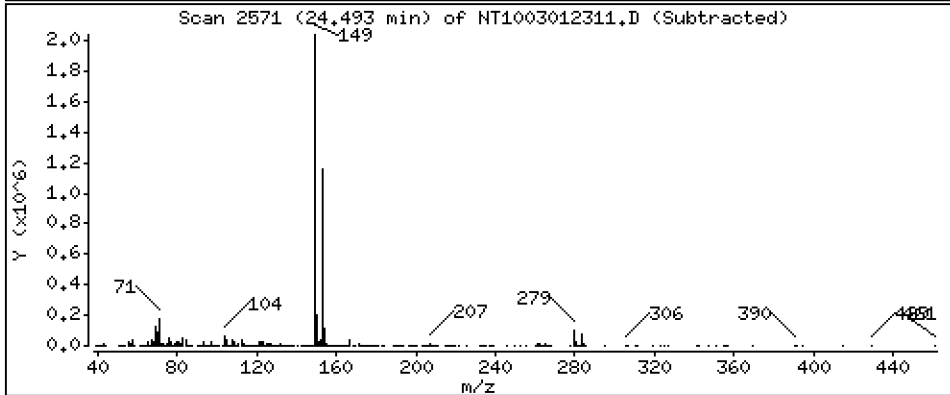
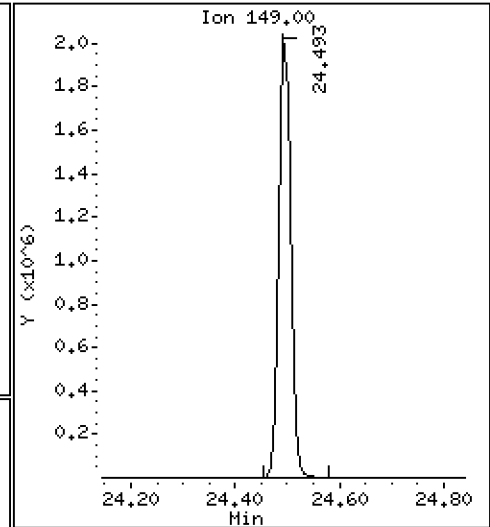
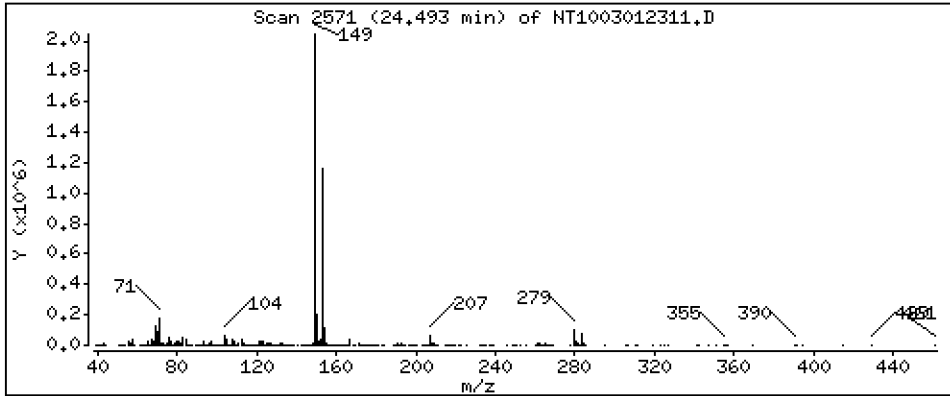
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,844 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

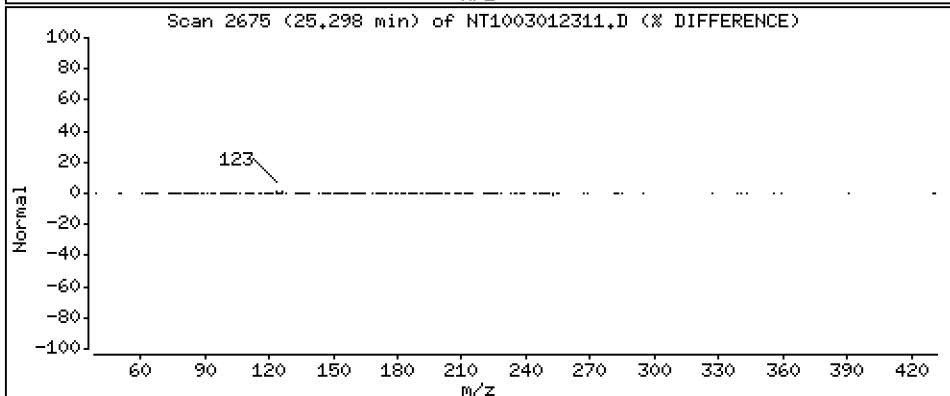
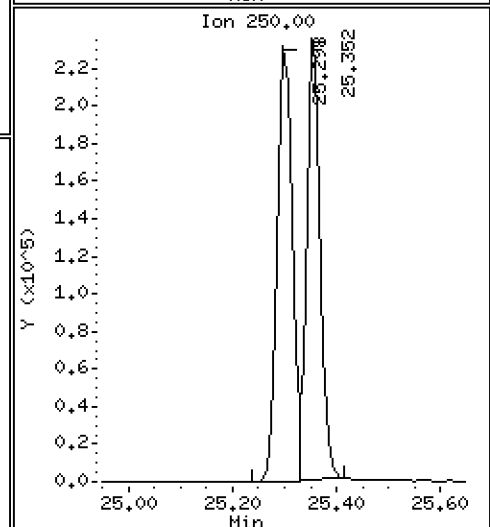
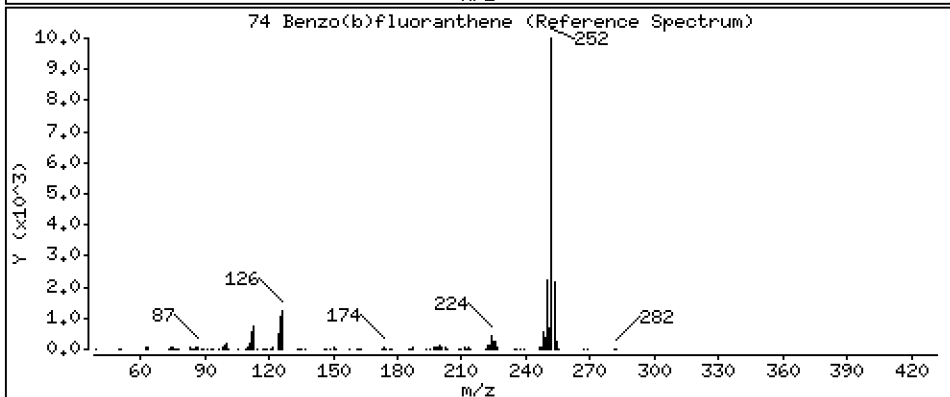
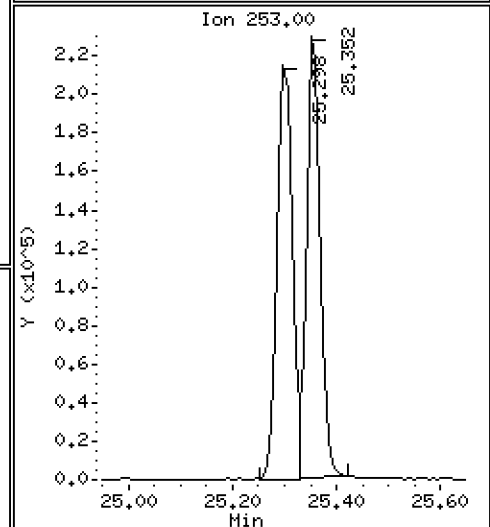
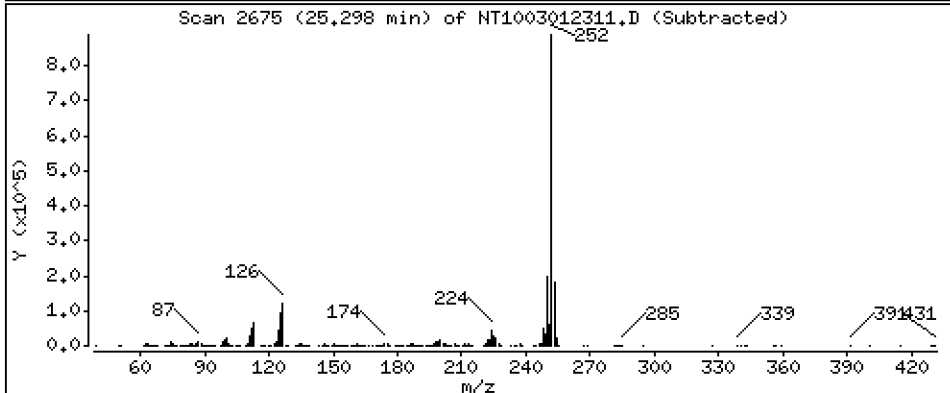
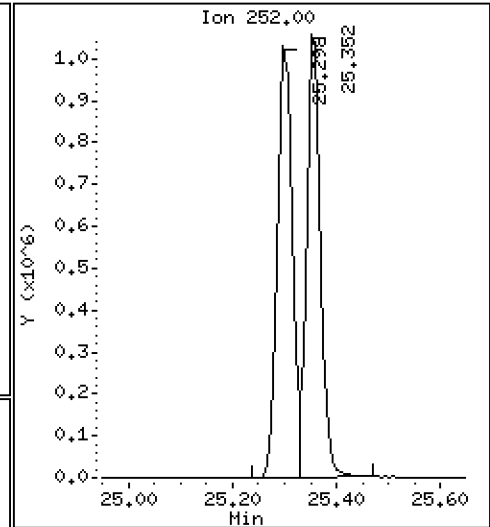
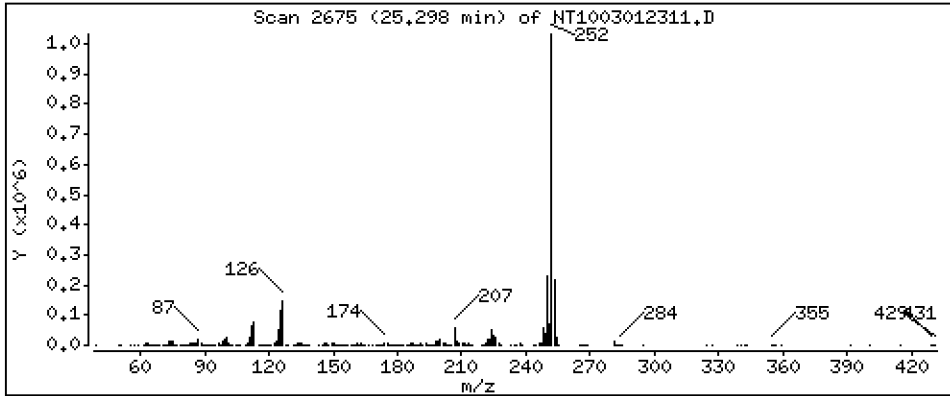
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,319 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

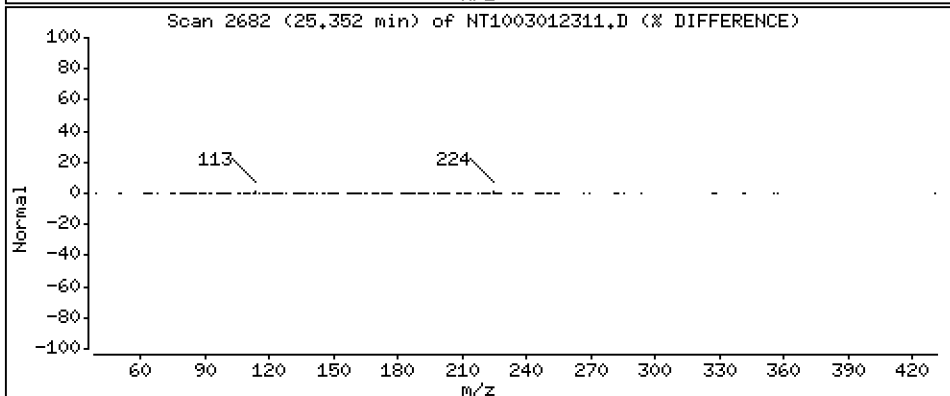
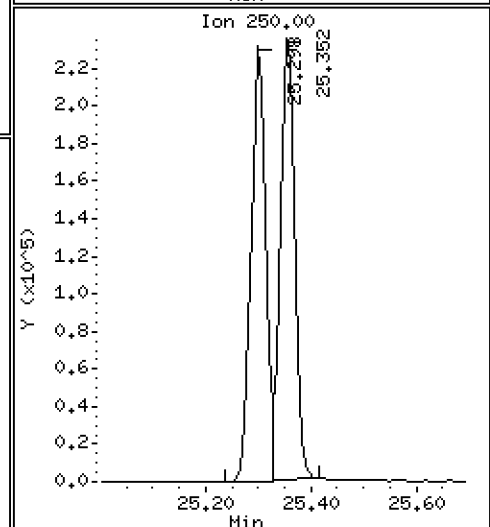
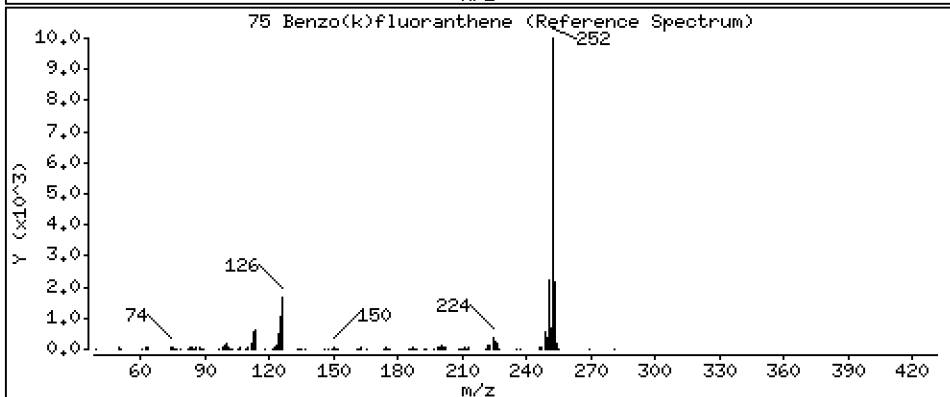
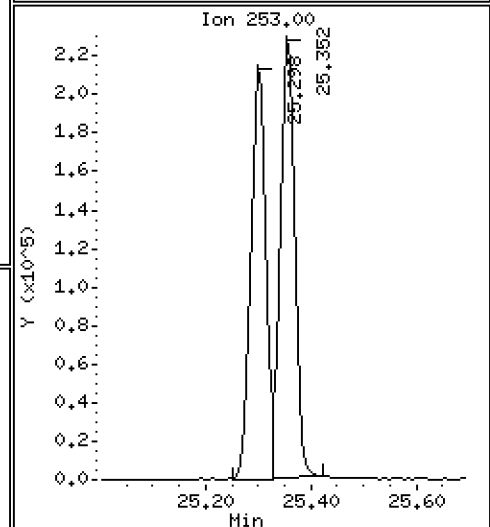
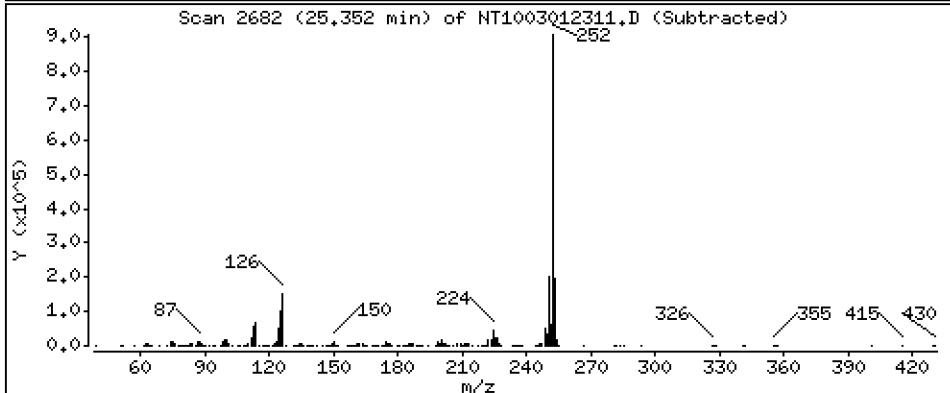
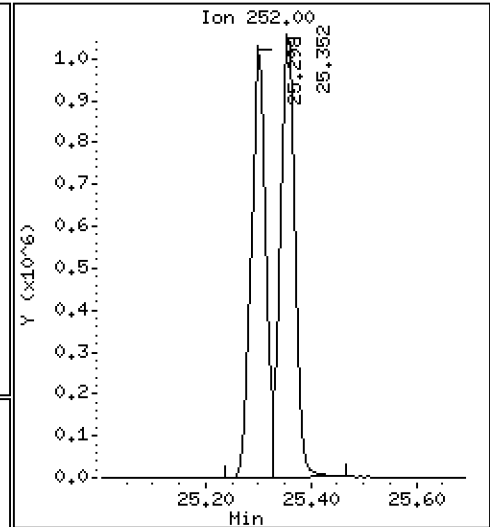
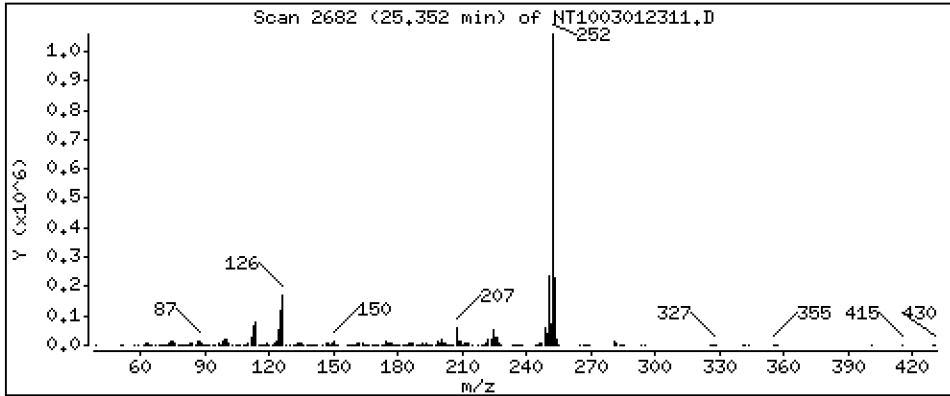
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,563 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

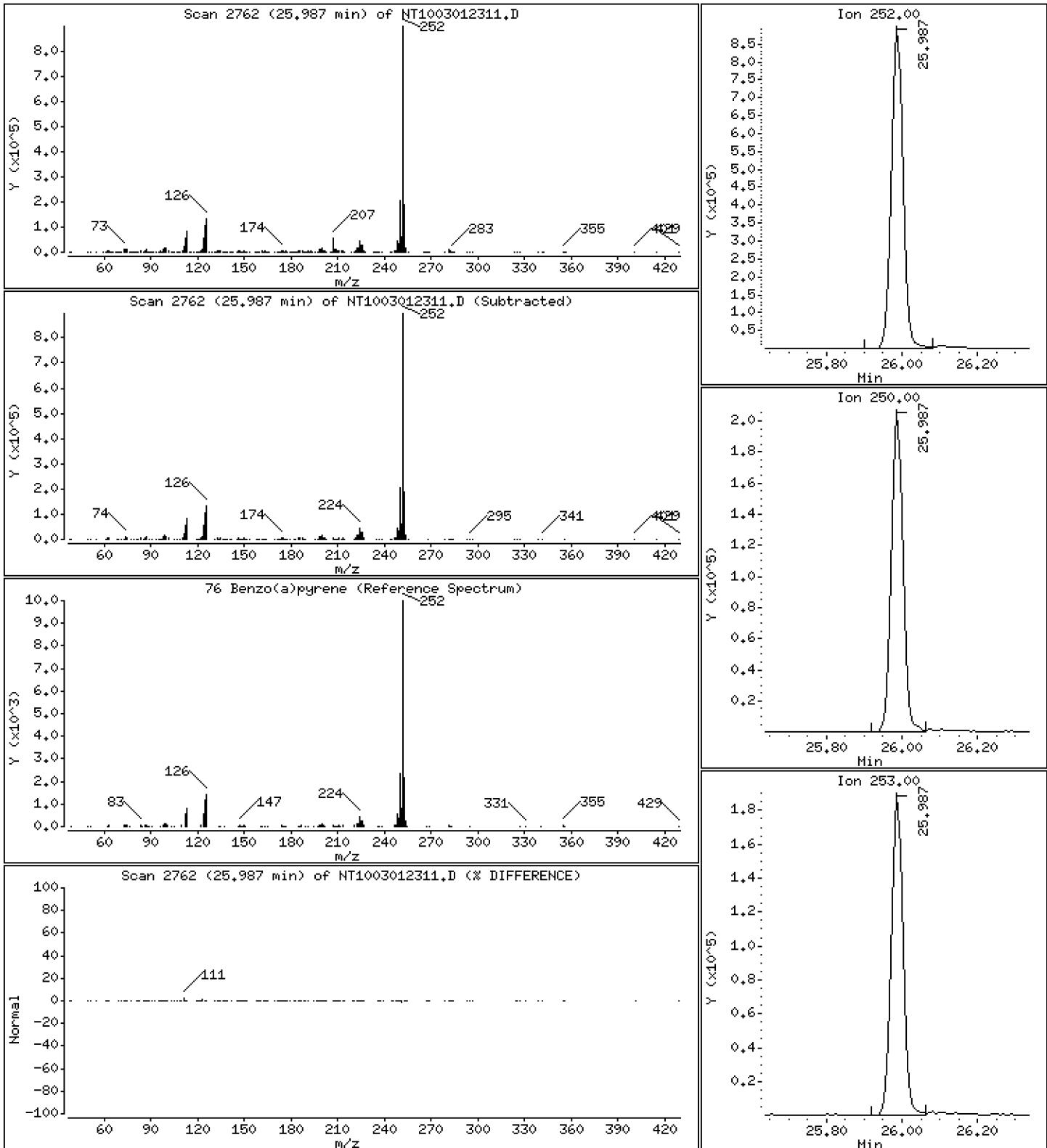
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,445 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

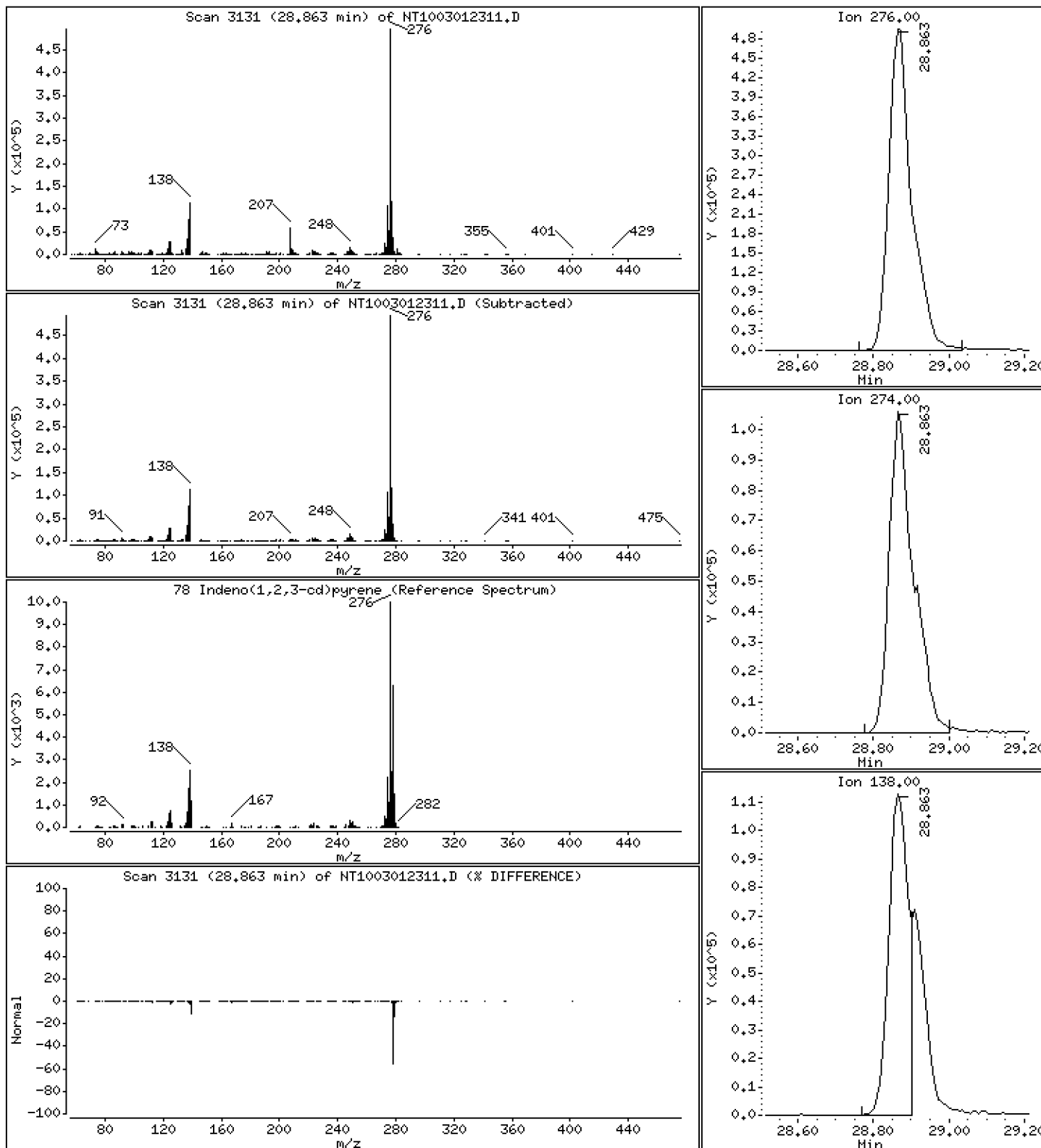
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,345 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

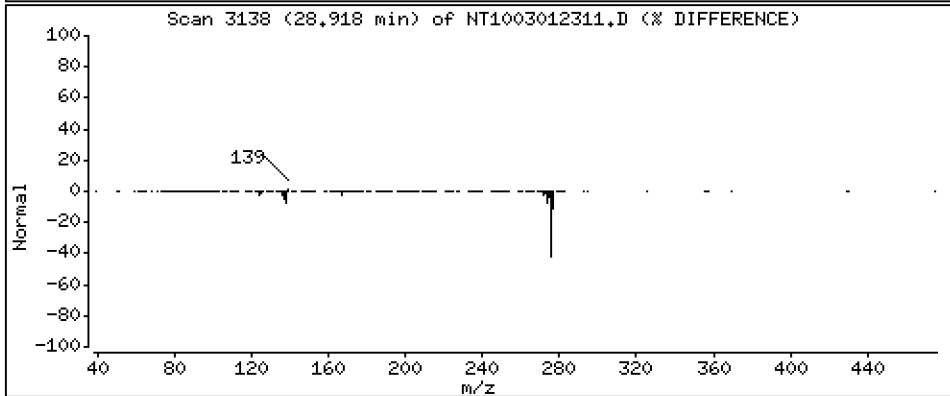
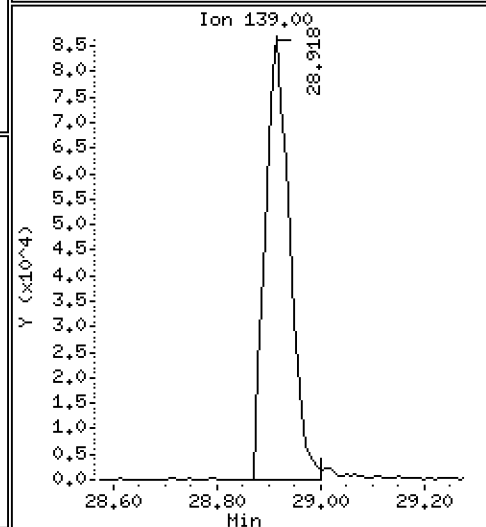
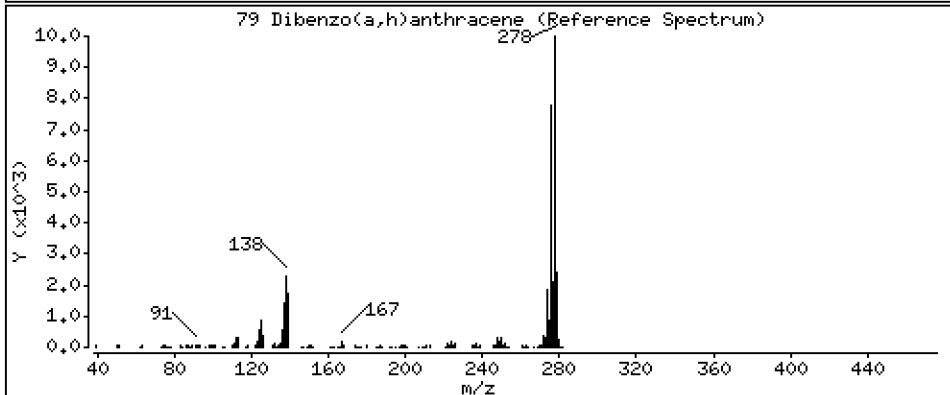
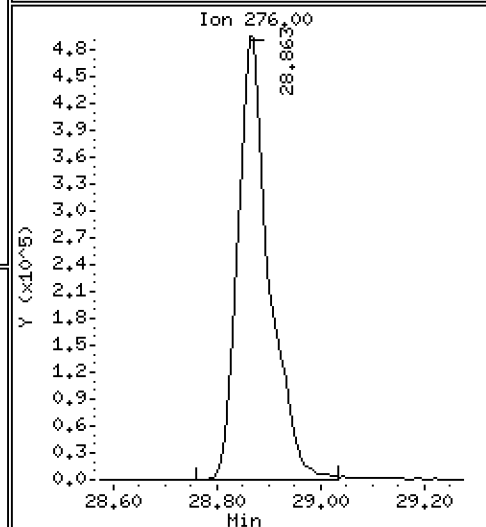
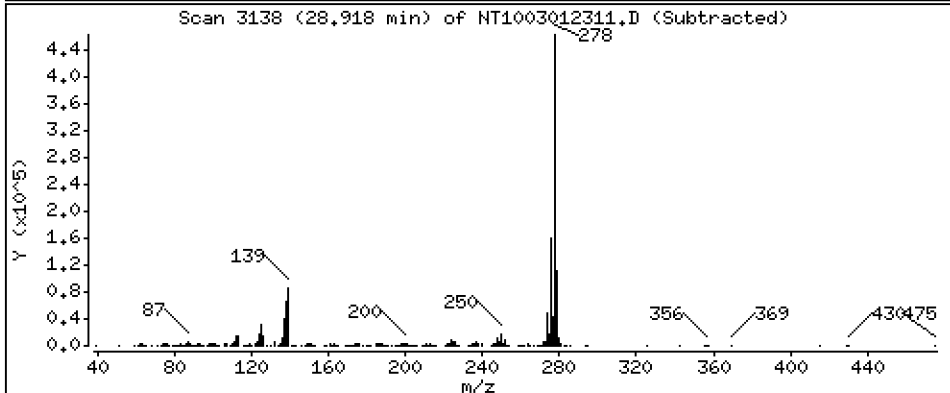
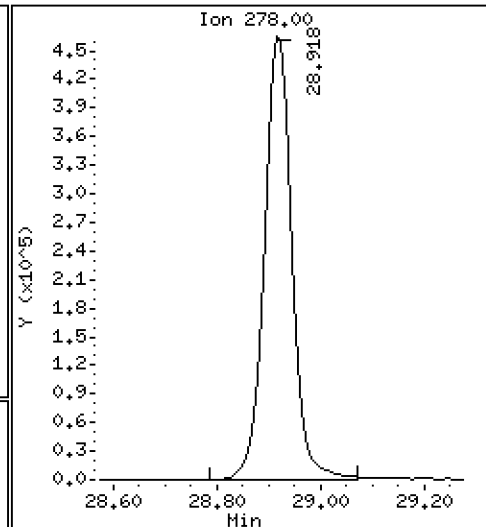
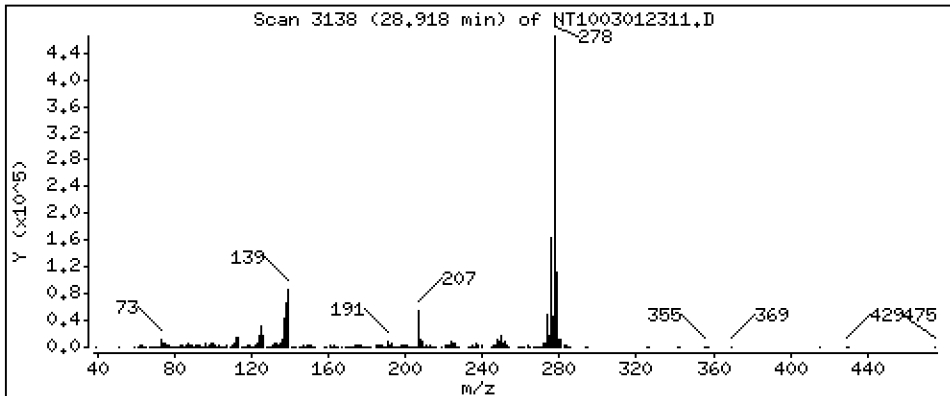
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,608 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

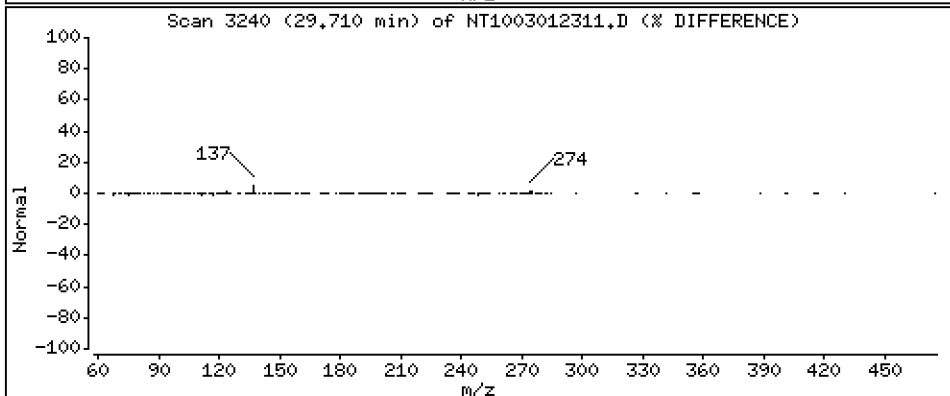
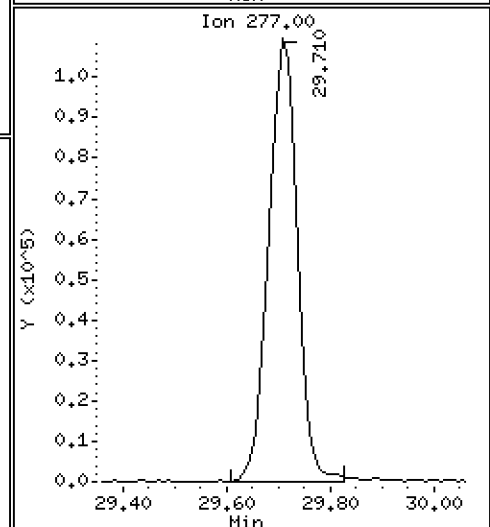
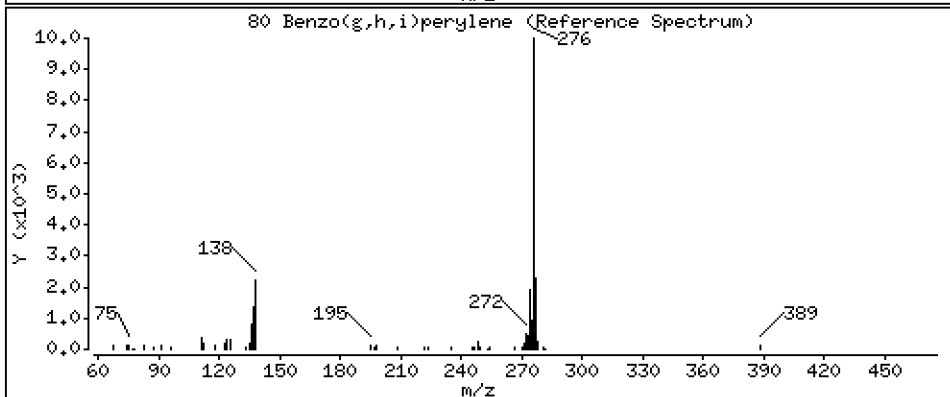
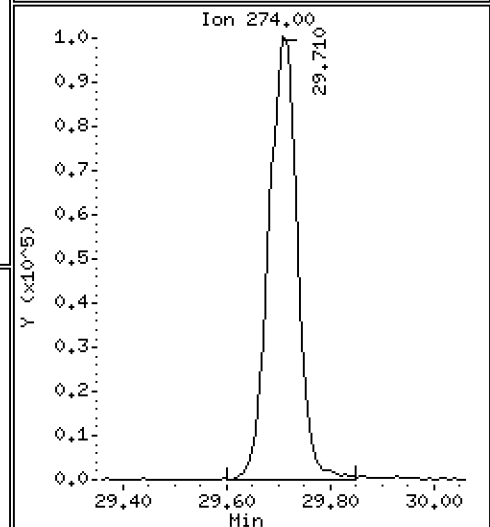
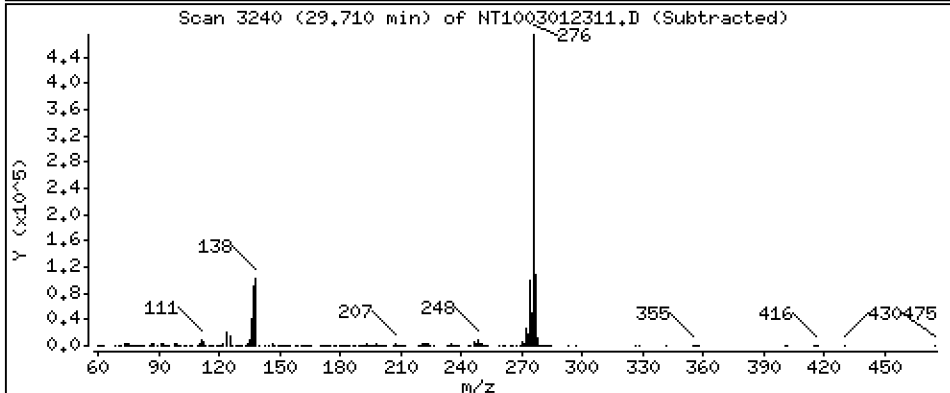
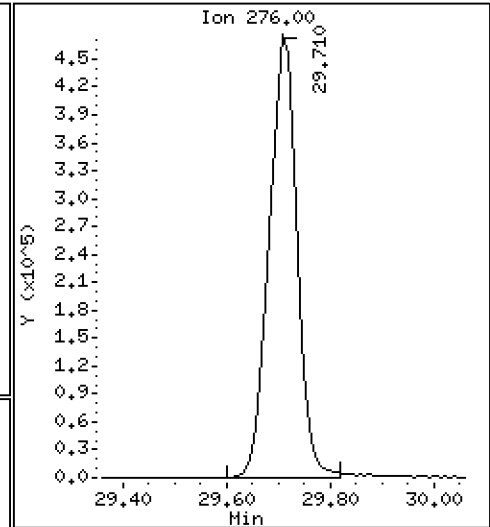
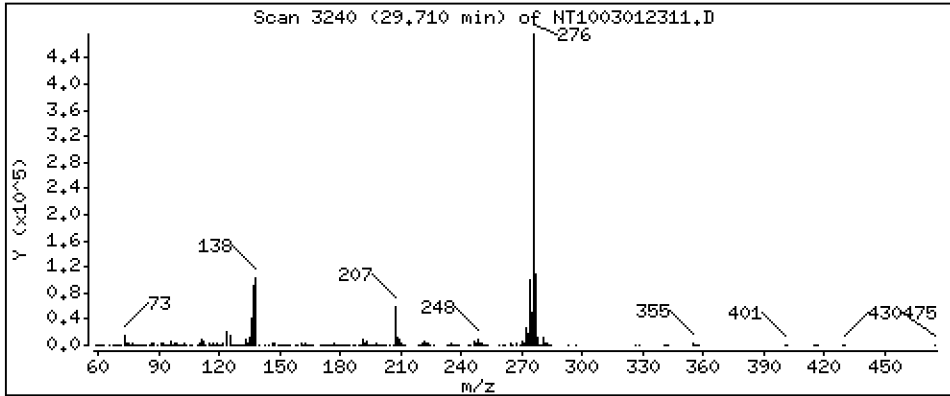
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,602 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

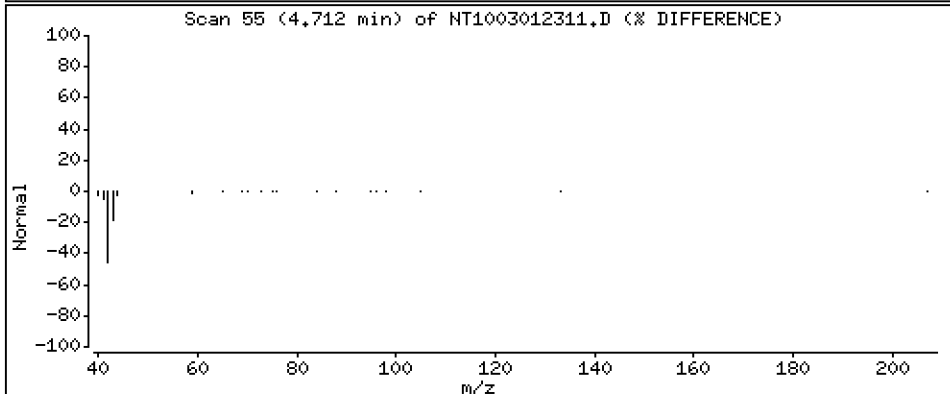
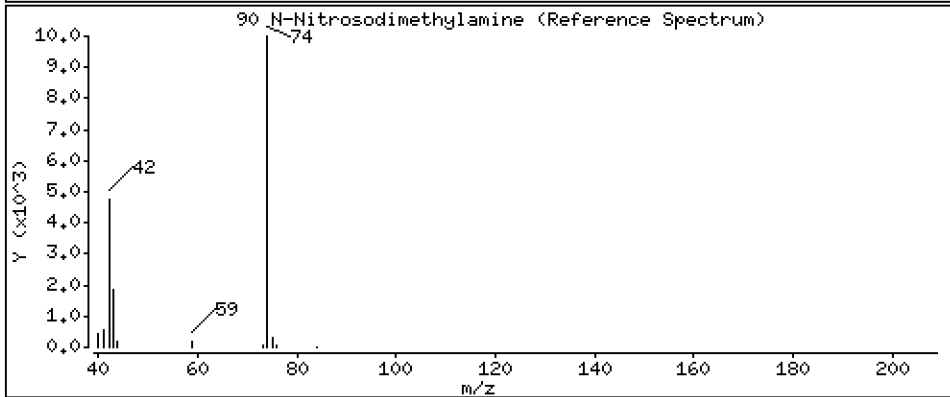
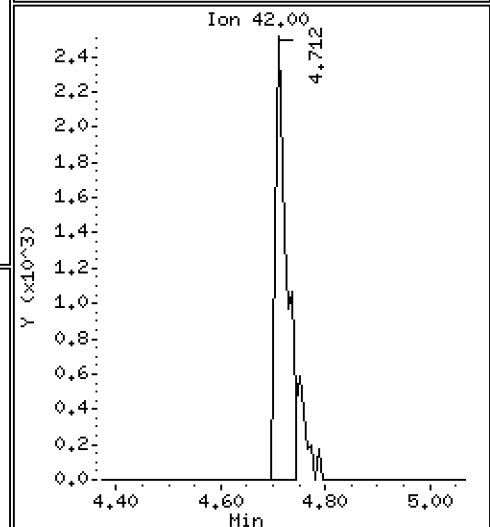
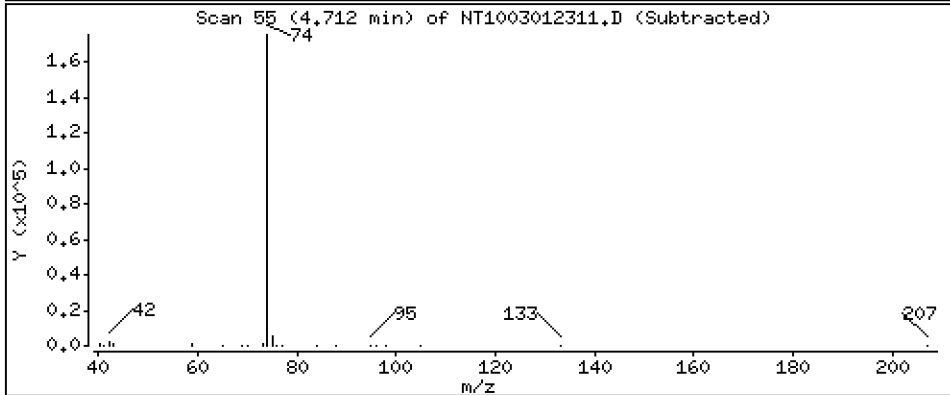
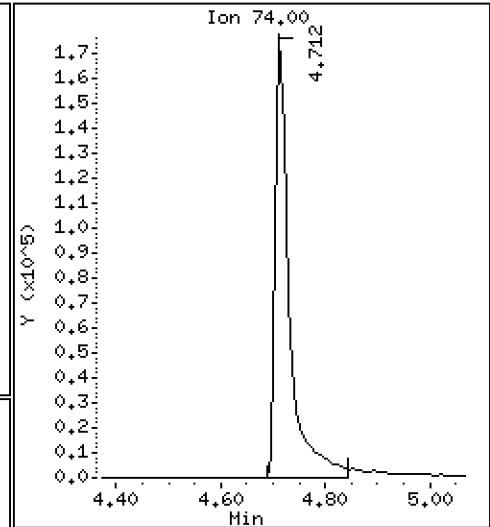
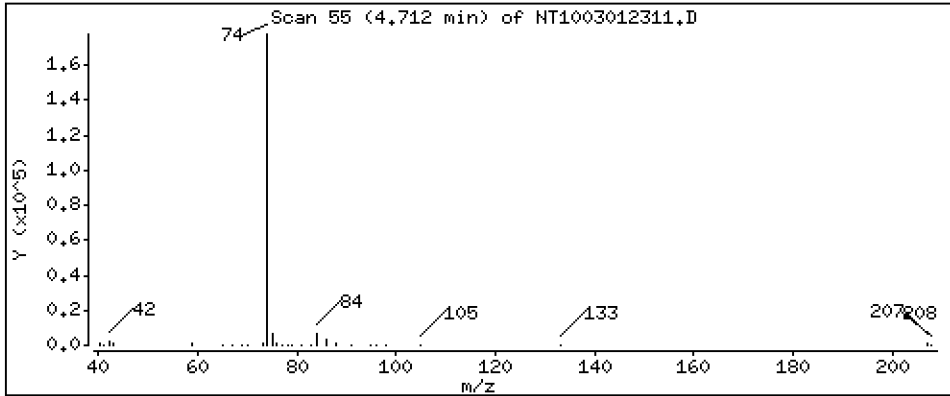
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.491 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

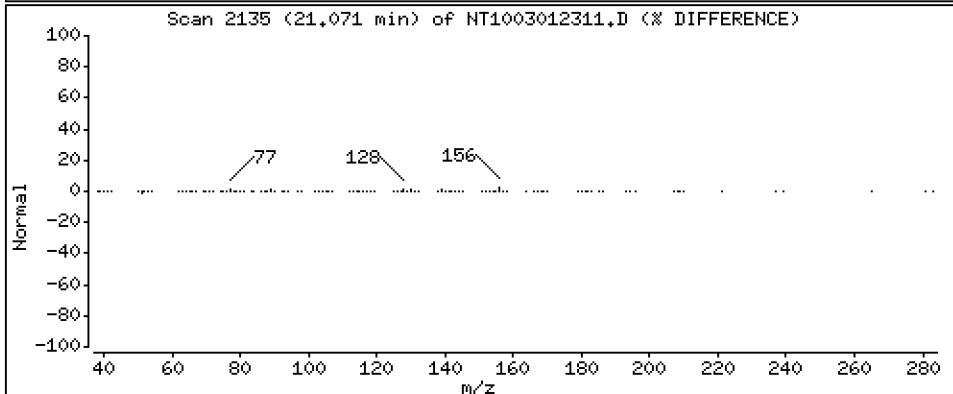
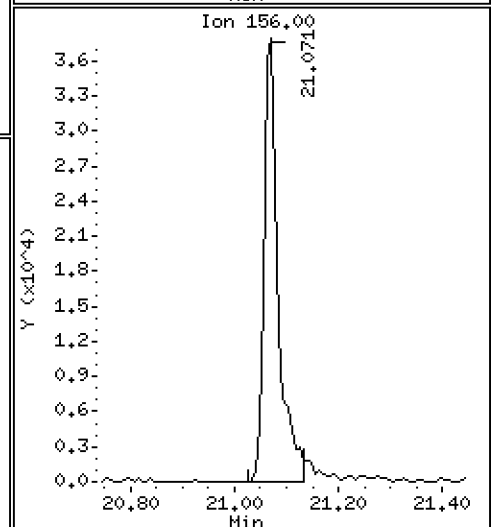
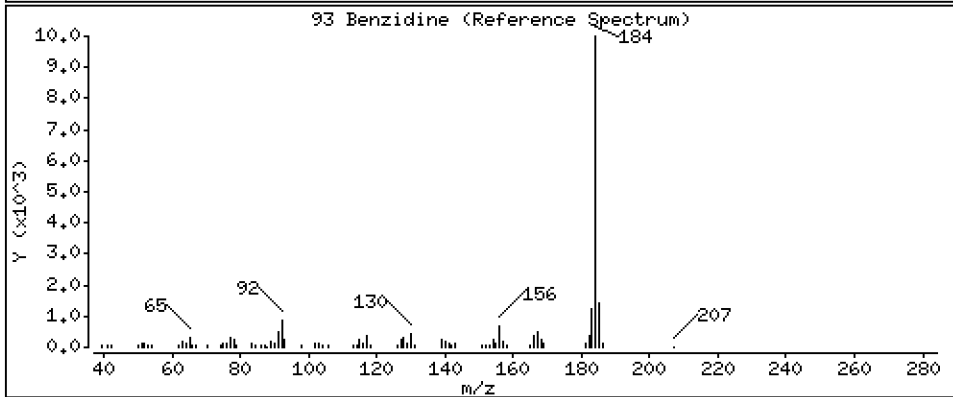
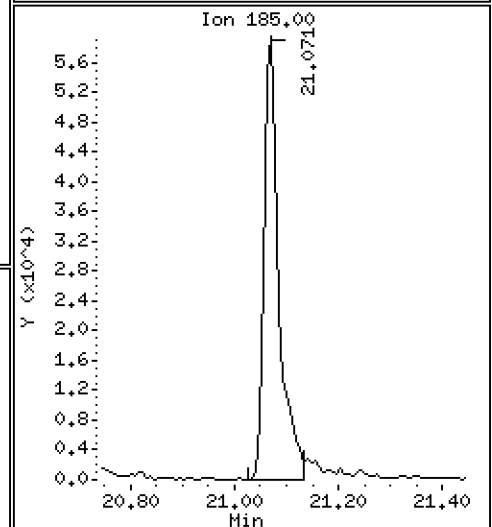
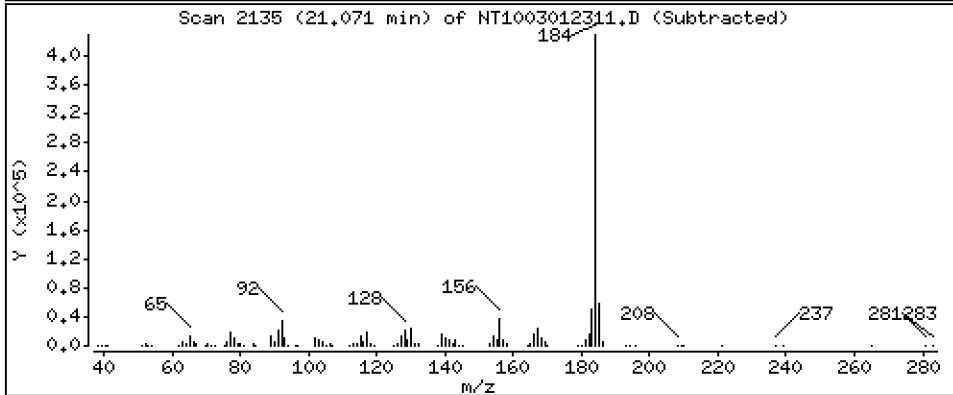
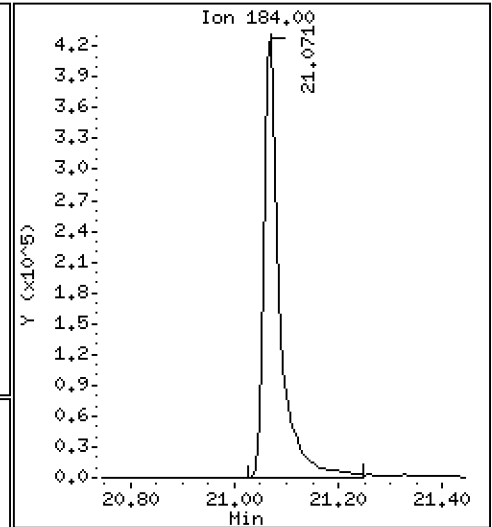
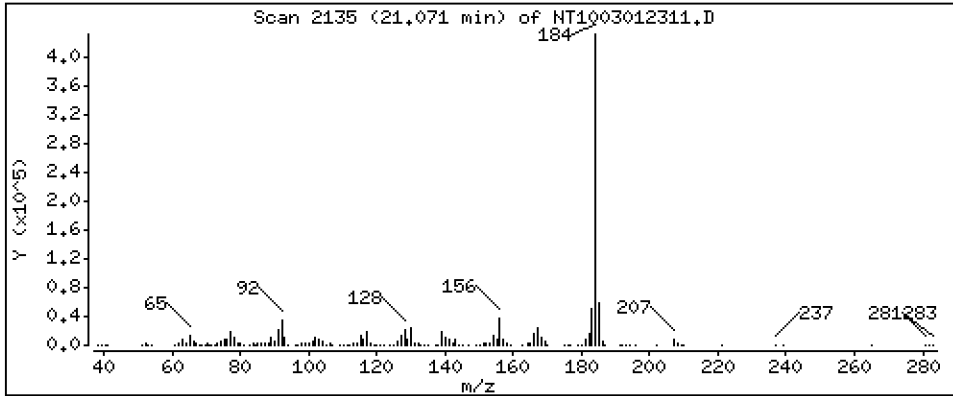
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,007 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

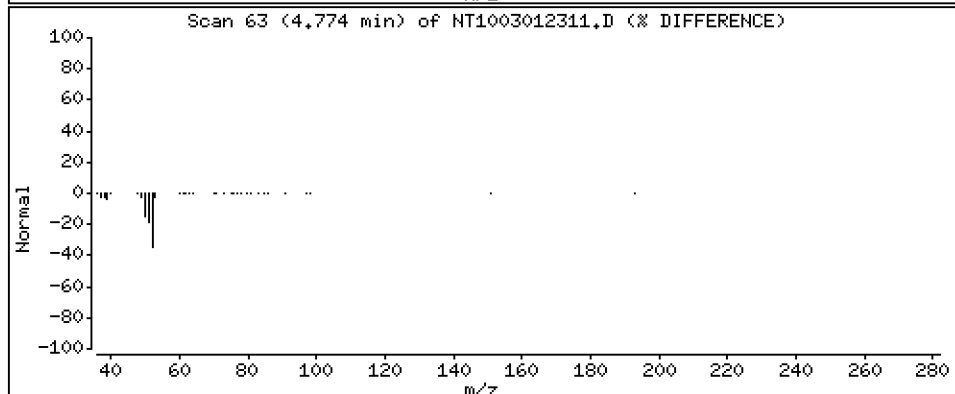
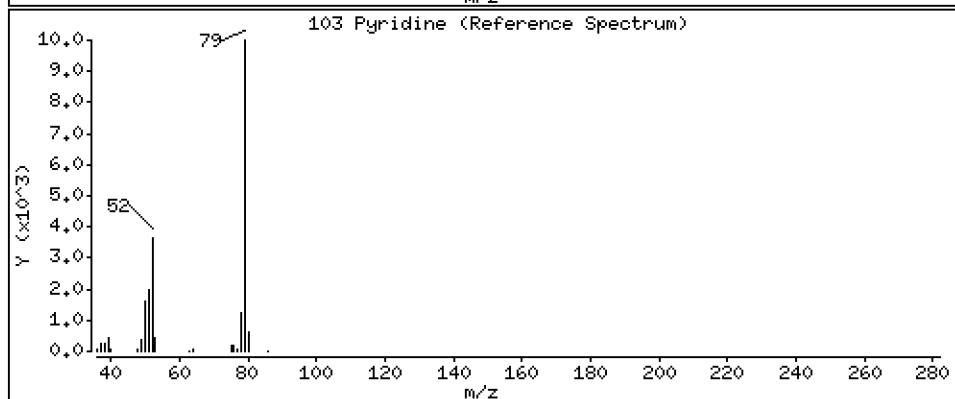
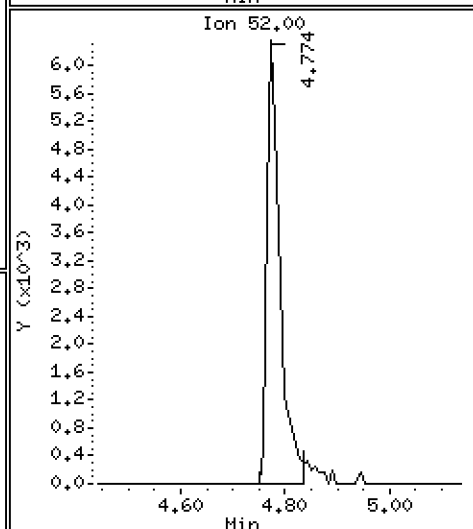
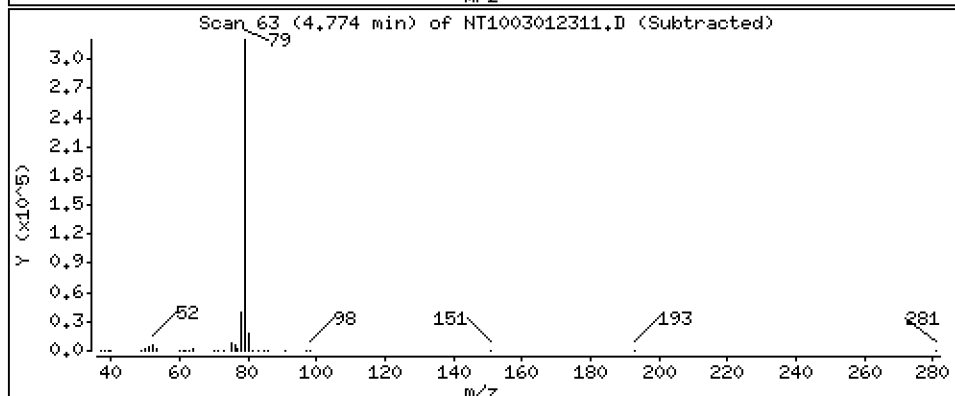
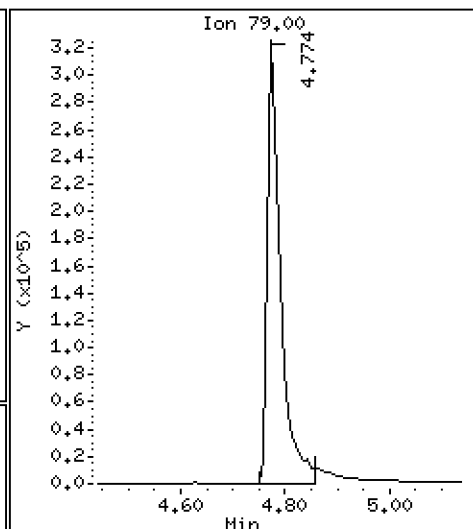
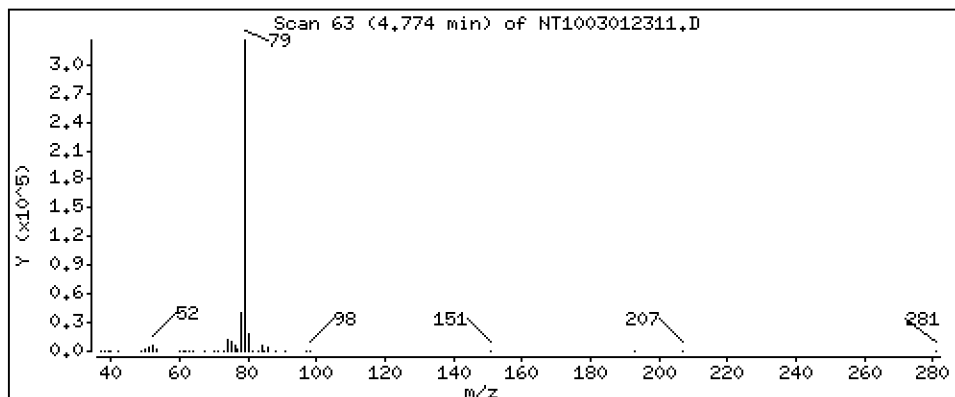
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 5,430 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

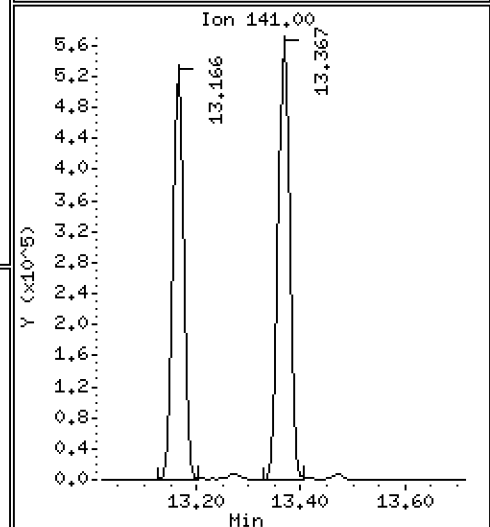
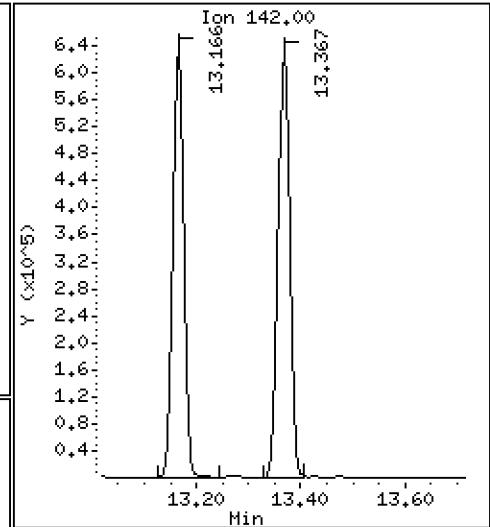
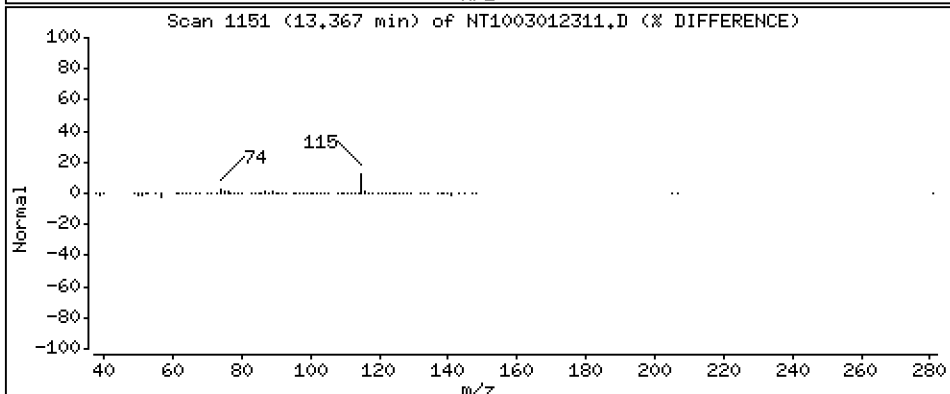
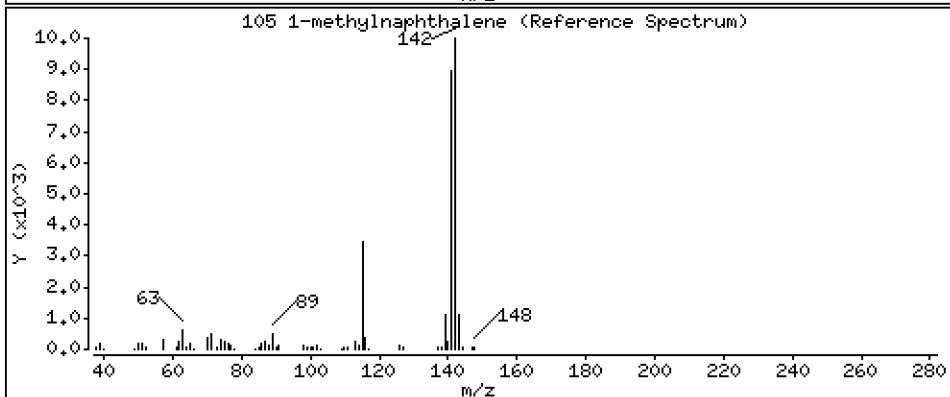
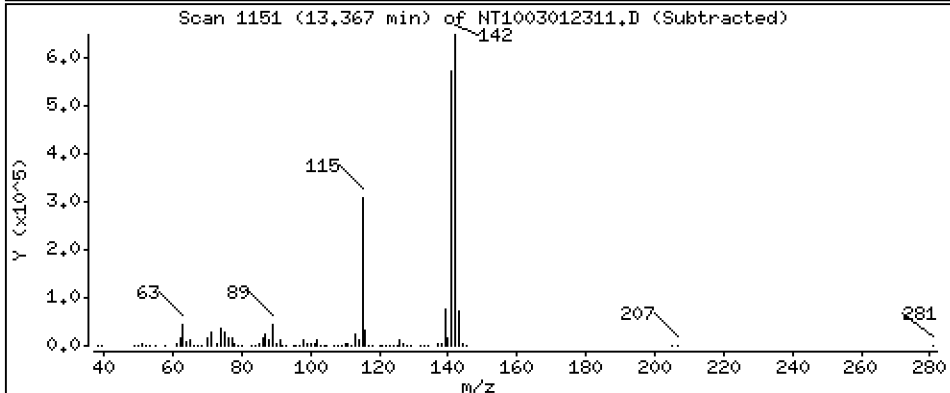
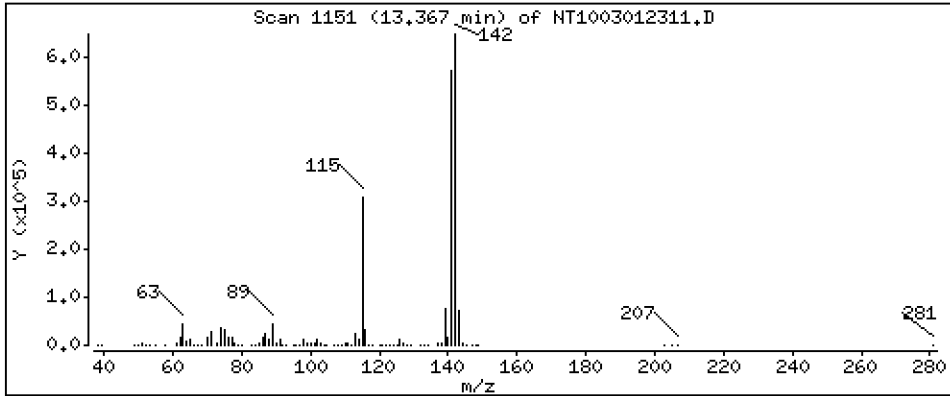
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,219 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

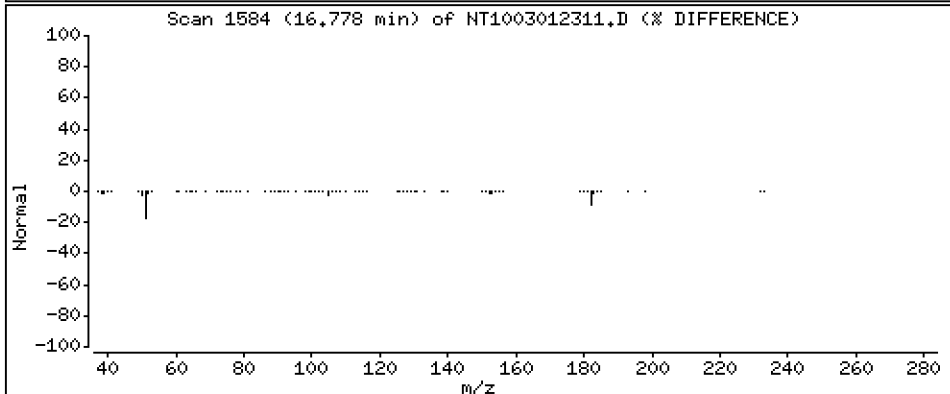
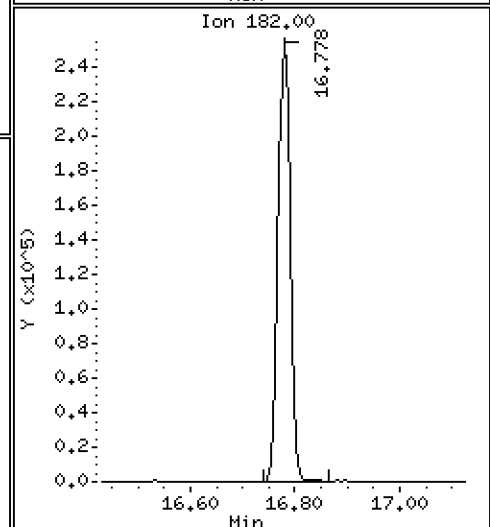
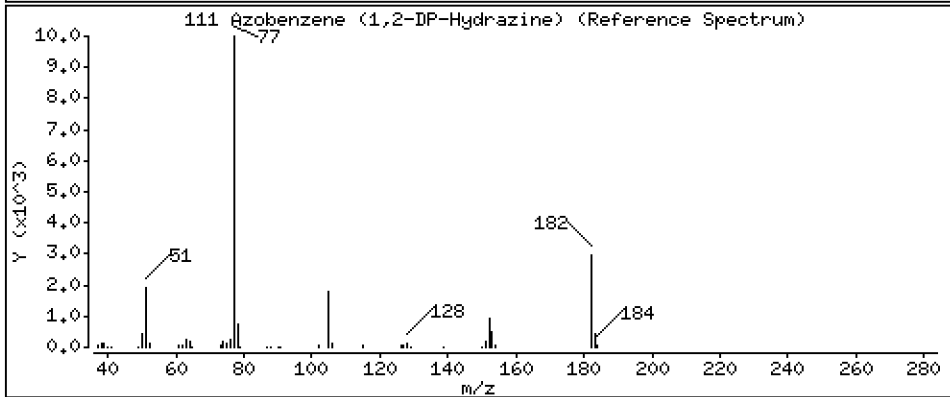
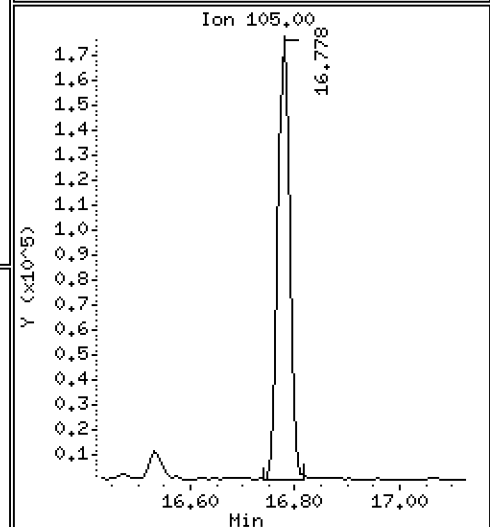
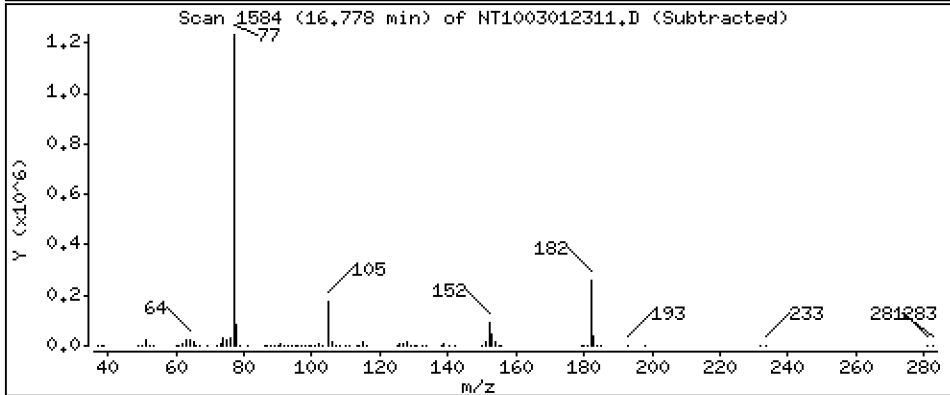
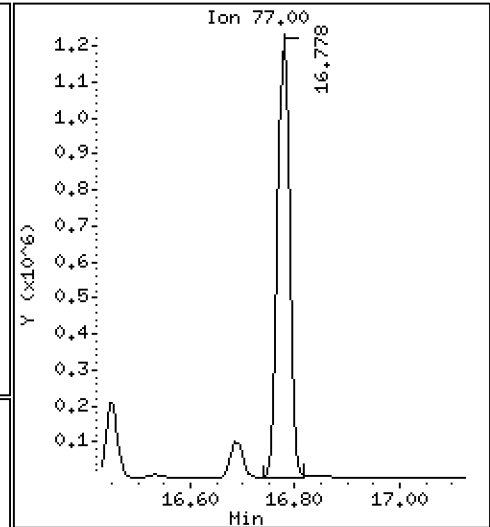
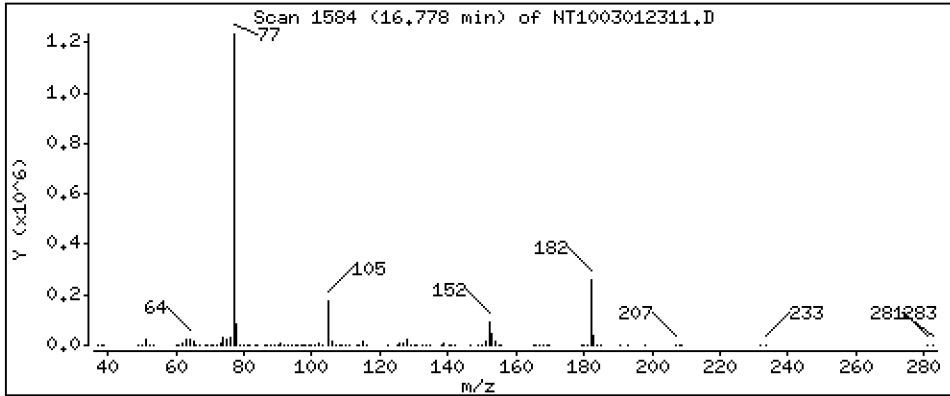
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,953 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

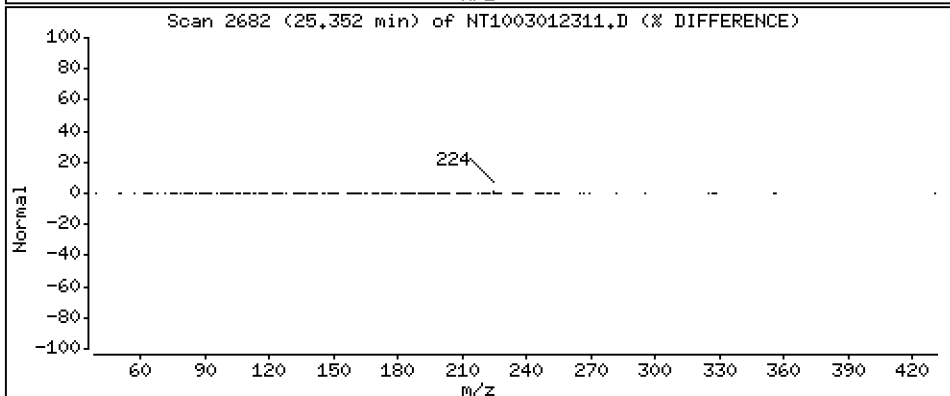
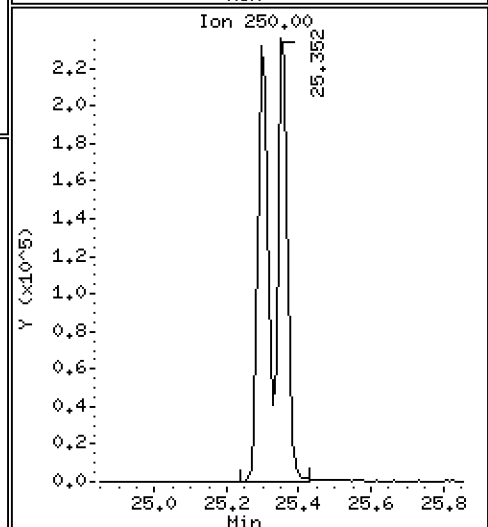
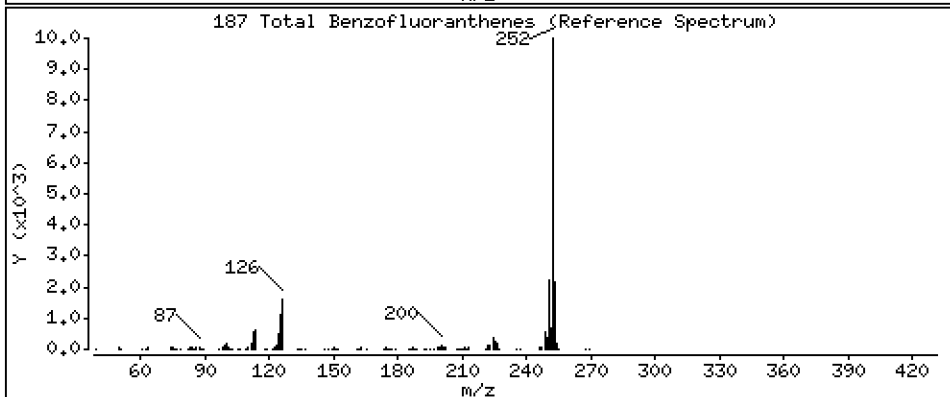
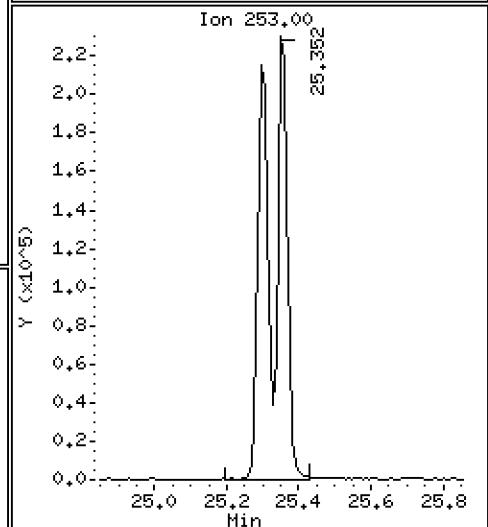
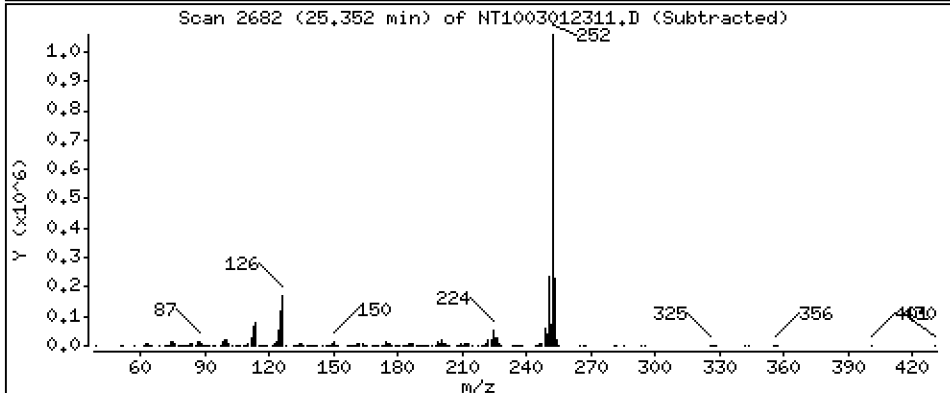
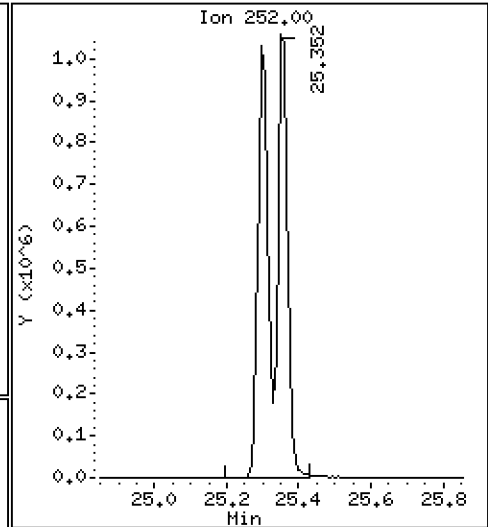
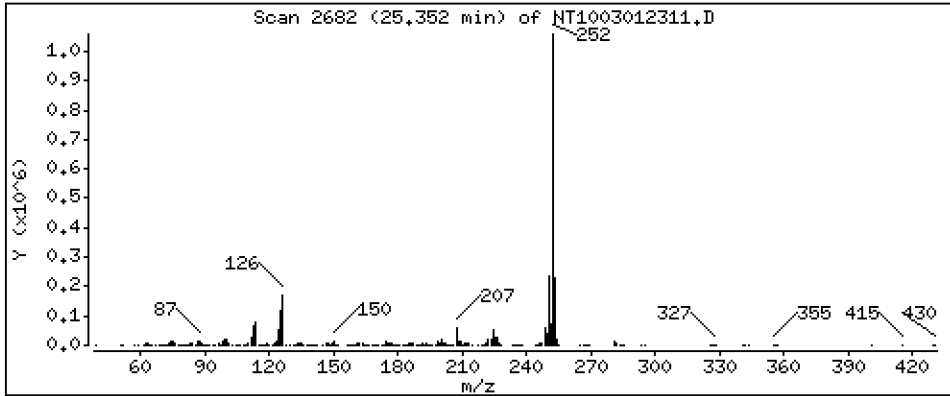
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

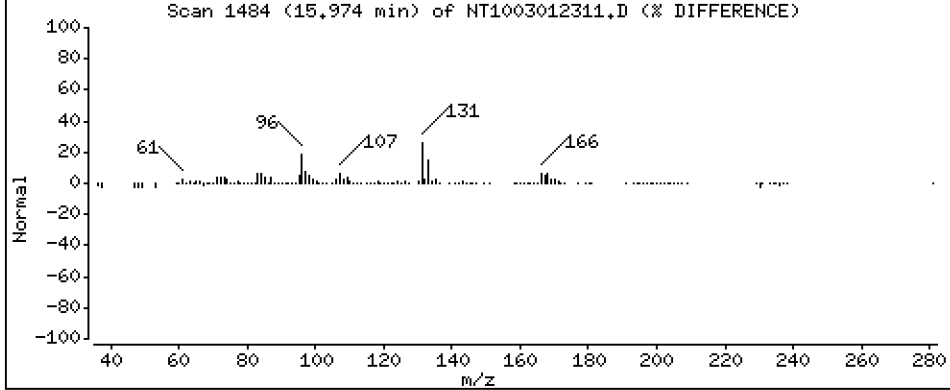
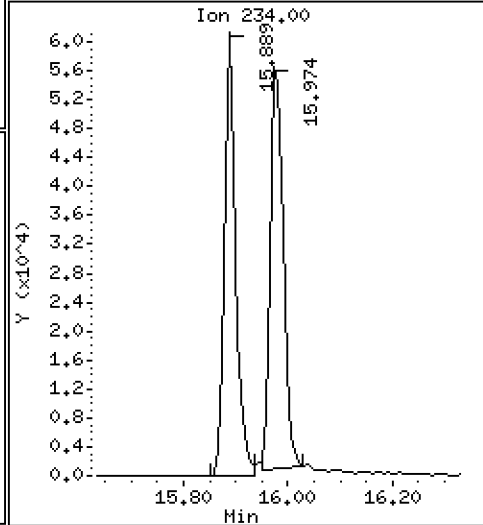
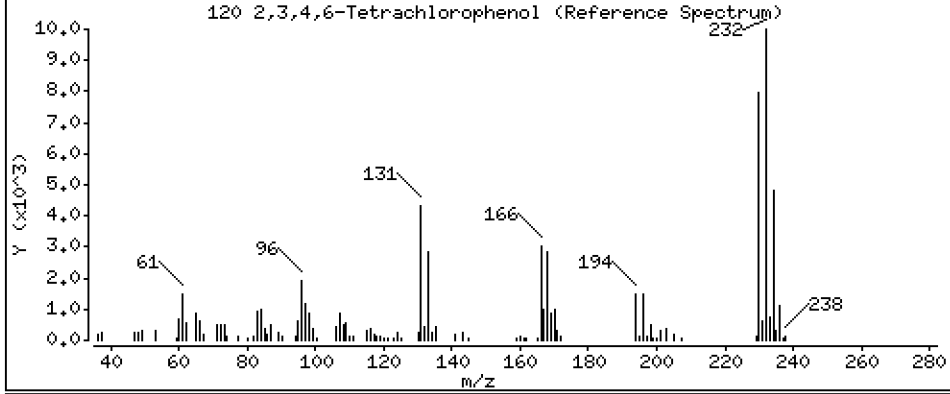
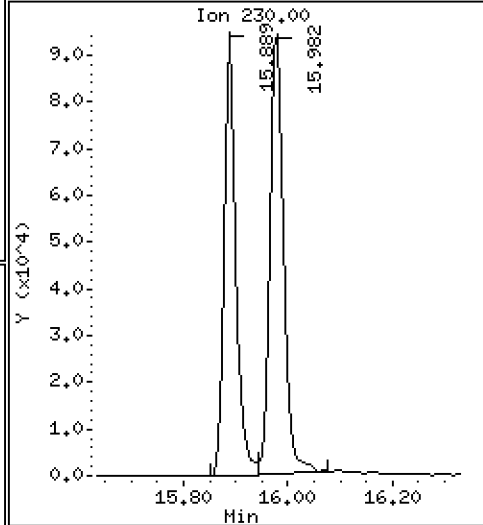
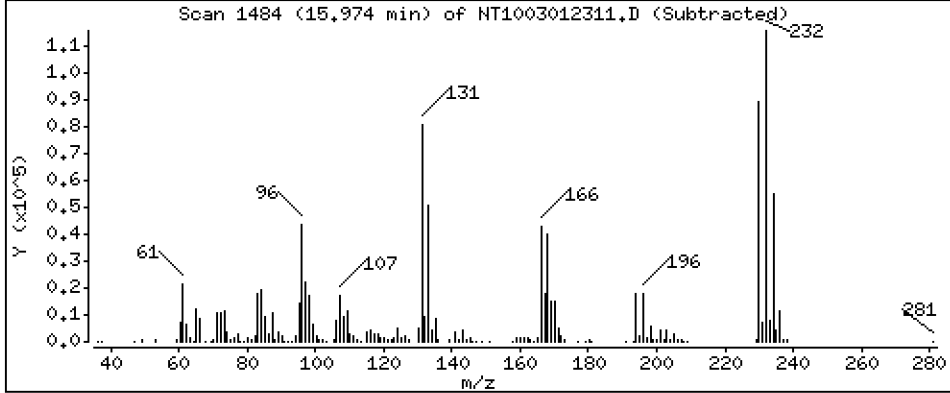
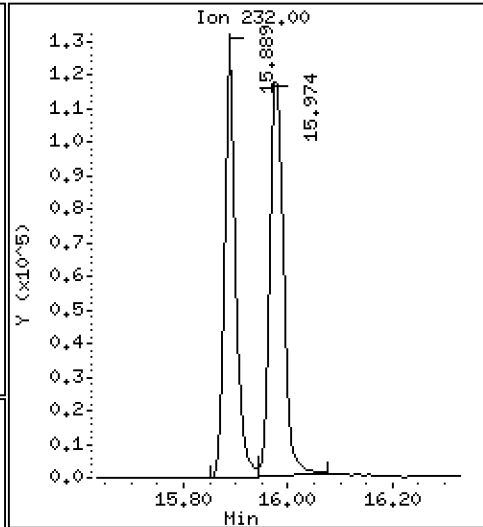
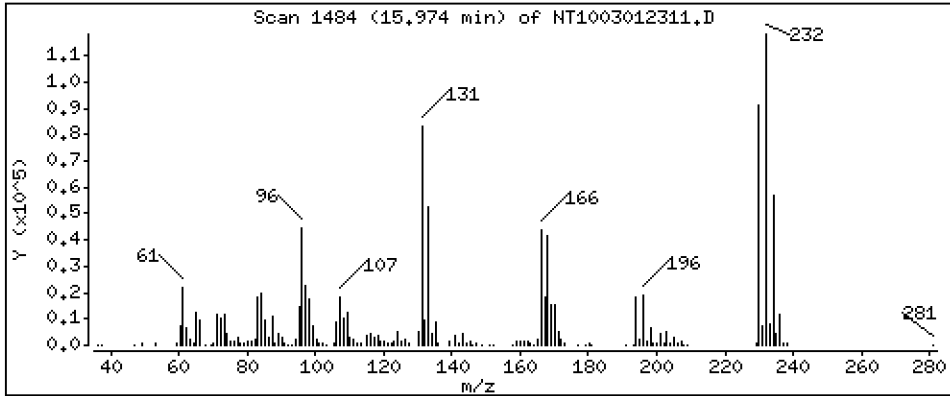
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,534 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
 Lab Smp Id: SLC0084-SCV1
 Inj Date : 01-MAR-2023 21:46
 Operator : VTS
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012307.D

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		Compound Not Detected.					
\$ 2 Phenol-d5	99		Compound Not Detected.					
3 Phenol	94		8.512	8.512	(0.921)	534295	4.85212	4.852
\$ 5 2-Chlorophenol-d4	132		Compound Not Detected.					
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	498825	5.92811	5.928 (M)
6 2-Chlorophenol	128		8.844	8.844	(0.956)	430747	4.69234	4.692
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	533006	5.26632	5.266
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	283537	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	524367	5.21589	5.216
\$ 10 1,2-Dichlorobenzene-d4	152		9.247	9.534	(1.000)	283537	4.29482	4.295
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	505415	5.19402	5.194
11 Benzyl alcohol	108		9.472	9.472	(1.024)	283618	4.89779	4.898
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728	(1.053)	174821	6.23165	6.232
13 2-Methylphenol	108		9.650	9.650	(1.044)	364596	4.19238	4.192
17 Hexachloroethane	117		10.209	10.209	(1.104)	224586	5.44260	5.443
16 N-Nitroso-di-n-propylamine	70		9.977	9.976	(1.079)	392376	5.90505	5.905
15 4-Methylphenol	108		9.945	9.938	(1.076)	448938	4.23938	4.239
\$ 18 Nitrobenzene-d5	82		Compound Not Detected.					
19 Nitrobenzene	77		10.326	10.326	(0.881)	624582	5.56925	5.569
20 Isophorone	82		10.784	10.784	(0.920)	1098236	7.67155	7.672
21 2-Nitrophenol	139		10.950	10.951	(0.934)	197578	3.24407	3.244
22 2,4-Dimethylphenol	107		10.993	10.993	(0.938)	379240	3.50675	3.507
23 Bis(2-Chloroethoxy)methane	93		11.205	11.205	(0.956)	595145	6.72720	6.727
24 Benzoic acid	105		11.103	11.052	(0.947)	362406	5.63546	5.635
25 2,4-Dichlorophenol	162		11.417	11.417	(0.974)	379310	4.43743	4.437
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	413079	4.90787	4.908
* 27 Naphthalene-d8	136		11.719	11.719	(1.000)	1089120	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	1468990	5.25508	5.255
29 4-Chloroaniline	127		11.858	11.858	(1.012)	469377	3.79133	3.791
30 Hexachlorobutadiene	225		11.989	11.997	(1.023)	307313	5.01449	5.014
31 4-Chloro-3-methylphenol	107		12.802	12.809	(1.092)	402740	4.45246	4.452
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	977687	4.95082	4.951
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.879)	52130	2.56222	2.562

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.722	13.730	(0.896)	241174	4.12027	4.120	
35 2,4,5-Trichlorophenol	196		13.792	13.808	(0.900)	259485	4.14893	4.149 (M)	
§ 36 2-Fluorobiphenyl	172		Compound Not Detected.						
37 2-Chloronaphthalene	162		14.164	14.164	(0.925)	895889	5.26440	5.264	
38 2-Nitroaniline	65		14.365	14.365	(0.938)	237773	5.02711	5.027	
39 Dimethylphthalate	163		14.736	14.736	(0.962)	1056857	5.38446	5.384	
40 Acenaphthylene	152		15.023	15.023	(0.981)	1703355	5.80574	5.806	
41 2,6-Dinitrotoluene	165		14.868	14.868	(0.971)	227062	5.18679	5.187	
* 42 Acenaphthene-d10	164		15.317	15.309	(1.000)	607772	4.00000		
43 3-Nitroaniline	138		15.208	15.224	(0.993)	256002	5.17200	5.172	
44 Acenaphthene	153		15.379	15.378	(1.004)	911910	5.15374	5.154	
45 2,4-Dinitrophenol	184		15.433	15.487	(1.008)	3021	0.26673	0.2667	
46 Dibenzofuran	168		15.742	15.734	(1.028)	1311367	4.99365	4.994	
47 4-Nitrophenol	109		15.533	15.603	(1.014)	133260	3.82233	3.822 (M)	
48 2,4-Dinitrotoluene	165		15.695	15.703	(1.025)	300469	4.72923	4.729	
50 Diethylphthalate	149		16.206	16.198	(1.058)	1172442	5.63859	5.639	
49 Fluorene	166		16.453	16.453	(1.074)	1159050	5.30478	5.305	
51 4-Chlorophenyl-phenylether	204		16.453	16.453	(1.074)	527532	5.25262	5.253	
52 4-Nitroaniline	138		16.469	16.484	(1.075)	278392	5.23237	5.232	
53 4,6-Dinitro-2-methylphenol	198		16.531	16.538	(0.898)	36409	1.29161	1.292	
54 N-Nitrosodiphenylamine	169		16.685	16.693	(0.907)	966268	5.41587	5.416	
§ 55 2,4,6-Tribromophenol	330		Compound Not Detected.						
56 4-Bromophenyl-phenylether	248		17.465	17.472	(0.949)	394706	5.45981	5.460	
57 Hexachlorobenzene	284		17.573	17.573	(0.955)	391196	4.80535	4.805	
58 Pentachlorophenol	266		17.984	17.983	(0.977)	133557	3.49178	3.492	
* 59 Phenanthrene-d10	188		18.401	18.401	(1.000)	1205858	4.00000		
60 Phenanthrene	178		18.448	18.448	(1.003)	1569094	5.08454	5.085	
61 Anthracene	178		18.556	18.556	(1.008)	1371933	4.58472	4.585	
62 Carbazole	167		18.889	18.889	(1.026)	1462441	5.33467	5.335	
63 Di-n-butylphthalate	149		19.585	19.585	(1.064)	2114080	5.46304	5.463	
64 Fluoranthene	202		20.815	20.815	(0.889)	1905220	4.54169	4.542	
65 Pyrene	202		21.248	21.248	(0.907)	1975953	4.62585	4.626	
§ 66 Terphenyl-d14	244		21.519	21.527	(0.919)	6779	0.01961	0.01961	
67 Butylbenzylphthalate	149		22.410	22.410	(0.957)	1022950	4.52520	4.525	
68 Benzo(a)anthracene	228		23.401	23.401	(0.999)	1968545	4.57826	4.578	
* 69 Chrysene-d12	240		23.416	23.416	(1.000)	1219436	4.00000		
70 3,3'-Dichlorobenzidine	252		23.347	23.347	(0.997)	1426681	7.38255	7.383	
71 Chrysene	228		23.463	23.463	(1.002)	1735599	4.96674	4.967	
72 bis(2-Ethylhexyl)phthalate	149		23.401	23.409	(0.956)	1660477	4.95568	4.956	
* 134 Di-n-octylphthalate-d4	153		24.485	24.485	(1.000)	2317357	4.00000		
73 Di-n-octylphthalate	149		24.492	24.492	(1.000)	3003083	5.84397	5.844	
74 Benzo(b)fluoranthene	252		25.298	25.298	(0.969)	1988643	4.31882	4.319	
75 Benzo(k)fluoranthene	252		25.352	25.352	(0.971)	2031546	4.56297	4.563	
76 Benzo(a)pyrene	252		25.987	25.987	(0.996)	1831856	4.44514	4.445	
* 77 Perylene-d12	264		26.103	26.103	(1.000)	1289108	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		28.863	28.863	(1.106)	2089660	4.34488	4.345	
79 Dibenzo(a,h)anthracene	278		28.917	28.925	(1.108)	1695484	4.60754	4.608	
80 Benzo(g,h,i)perylene	276		29.709	29.709	(1.138)	1753537	4.60249	4.602	
90 N-Nitrosodimethylamine	74		4.712	4.719	(0.510)	316213	5.49082	5.491	
91 Aniline	93		Compound Not Detected.						
93 Benzidine	184		21.071	21.094	(0.900)	932502	5.00739	5.007	
103 Pyridine	79		4.774	4.789	(0.516)	554573	5.42989	5.430	
105 1-methylnaphthalene	142		13.366	13.366	(1.141)	932752	5.21855	5.219	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.778	16.778	(1.095)	1848373	5.95279	5.953	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.352	25.352	(0.971)	3948555	8.90452	8.905
120 2,3,4,6-Tetrachlorophenol	232	15.974	15.982	(1.043)	209122	3.53394	3.534

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012311.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	283537	-16.02
27 Naphthalene-d8	1265187	632594	2530374	1089120	-13.92
42 Acenaphthene-d10	692385	346193	1384770	607772	-12.22
59 Phenanthrene-d10	1376777	688389	2753554	1205858	-12.41
69 Chrysene-d12	1019524	509762	2039048	1219436	19.61
134 Di-n-octylphthala	2027111	1013556	4054222	2317357	14.32
77 Perylene-d12	1027409	513705	2054818	1289108	25.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.01
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

Lab ID: SLC0084-SCV1
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

23.401 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.014	1.019	-0.0051	4-Nitrophenol
1.000	1.031	-0.0310	1,2-Dichlorobenzene-d4

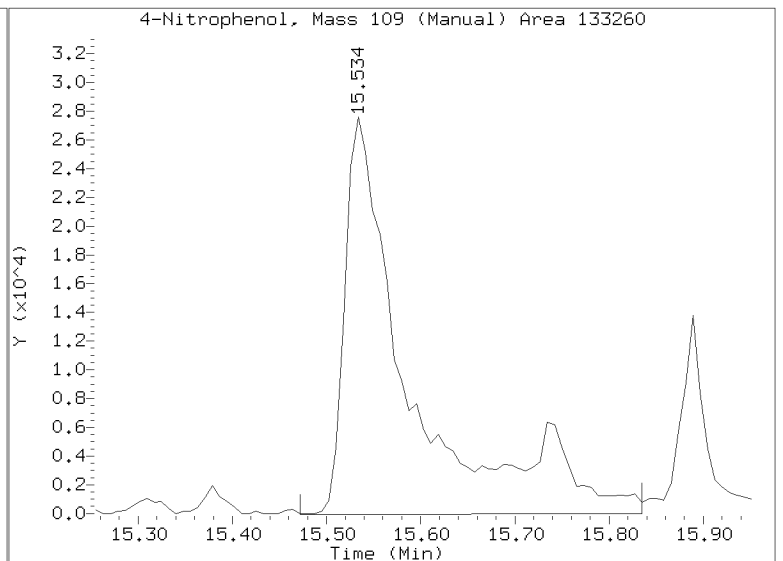
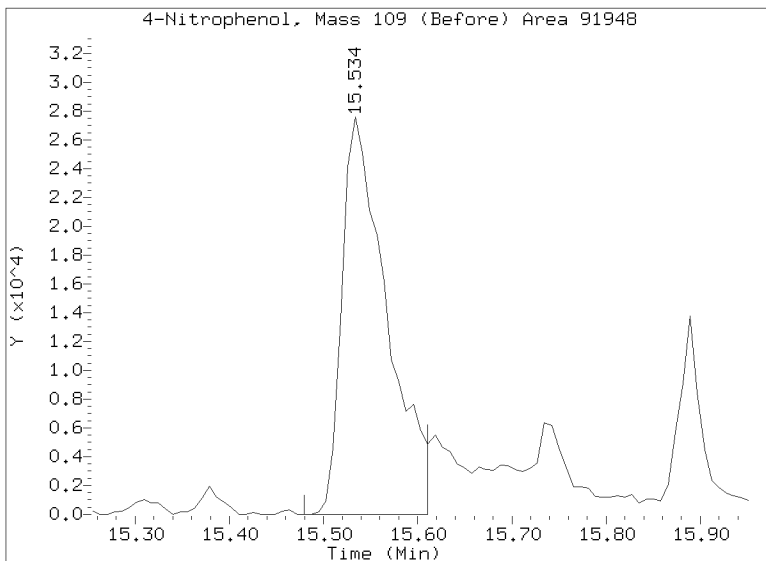
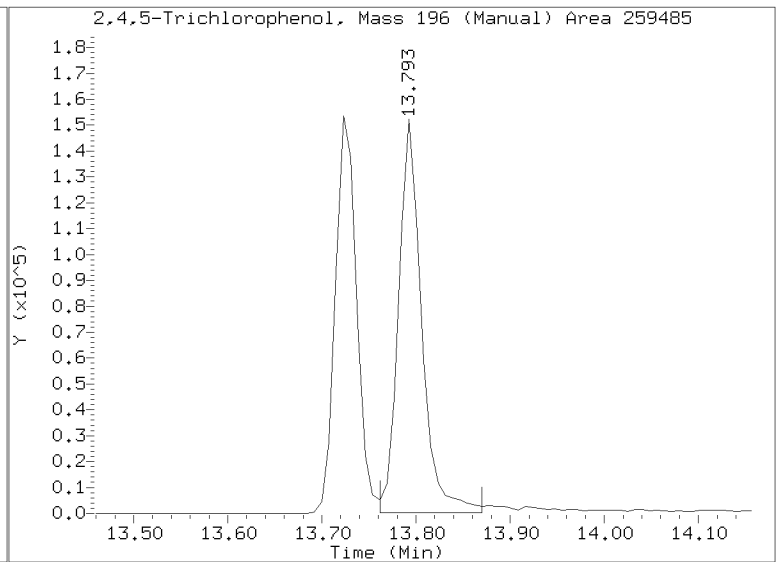
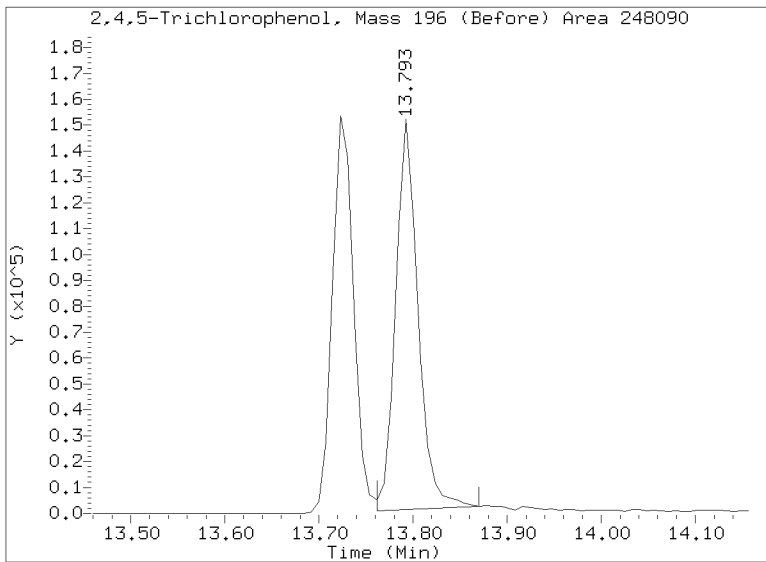
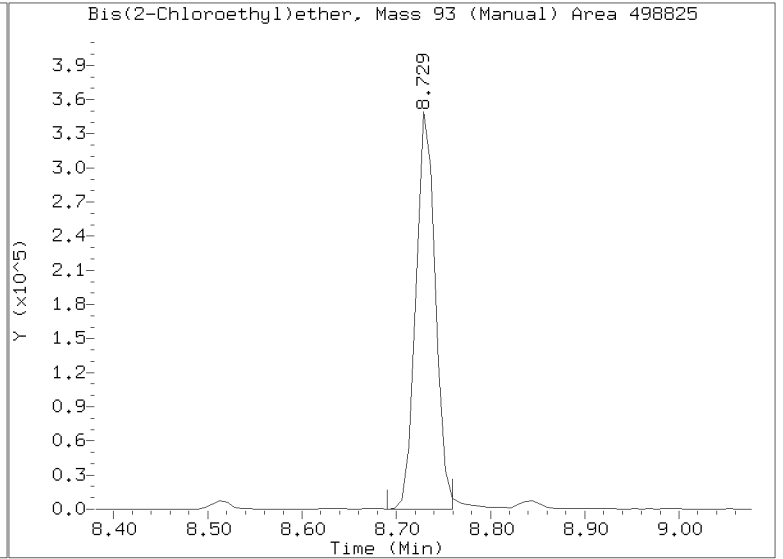
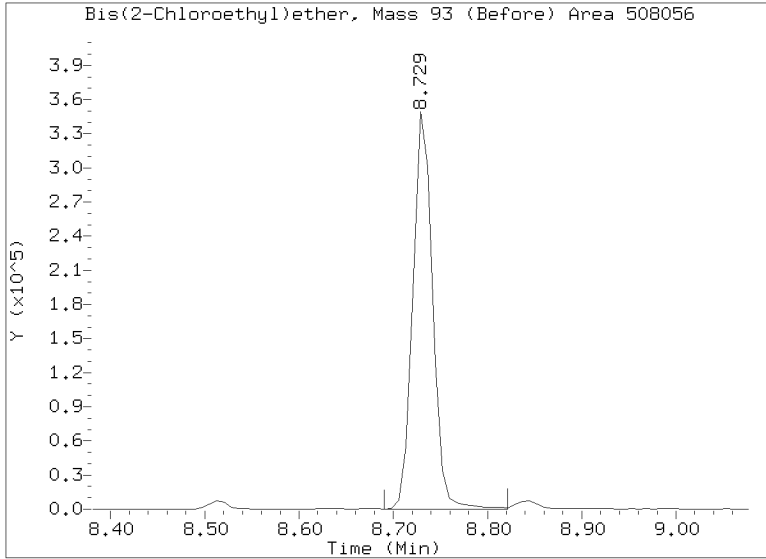
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID: SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48



Data File: \\target\share\chem3\nt10.1\20230304.1\NT1003042312.D

Date: 01-HRR-2023 22:24

Client ID:

Sample Info: SEQ-IBL1

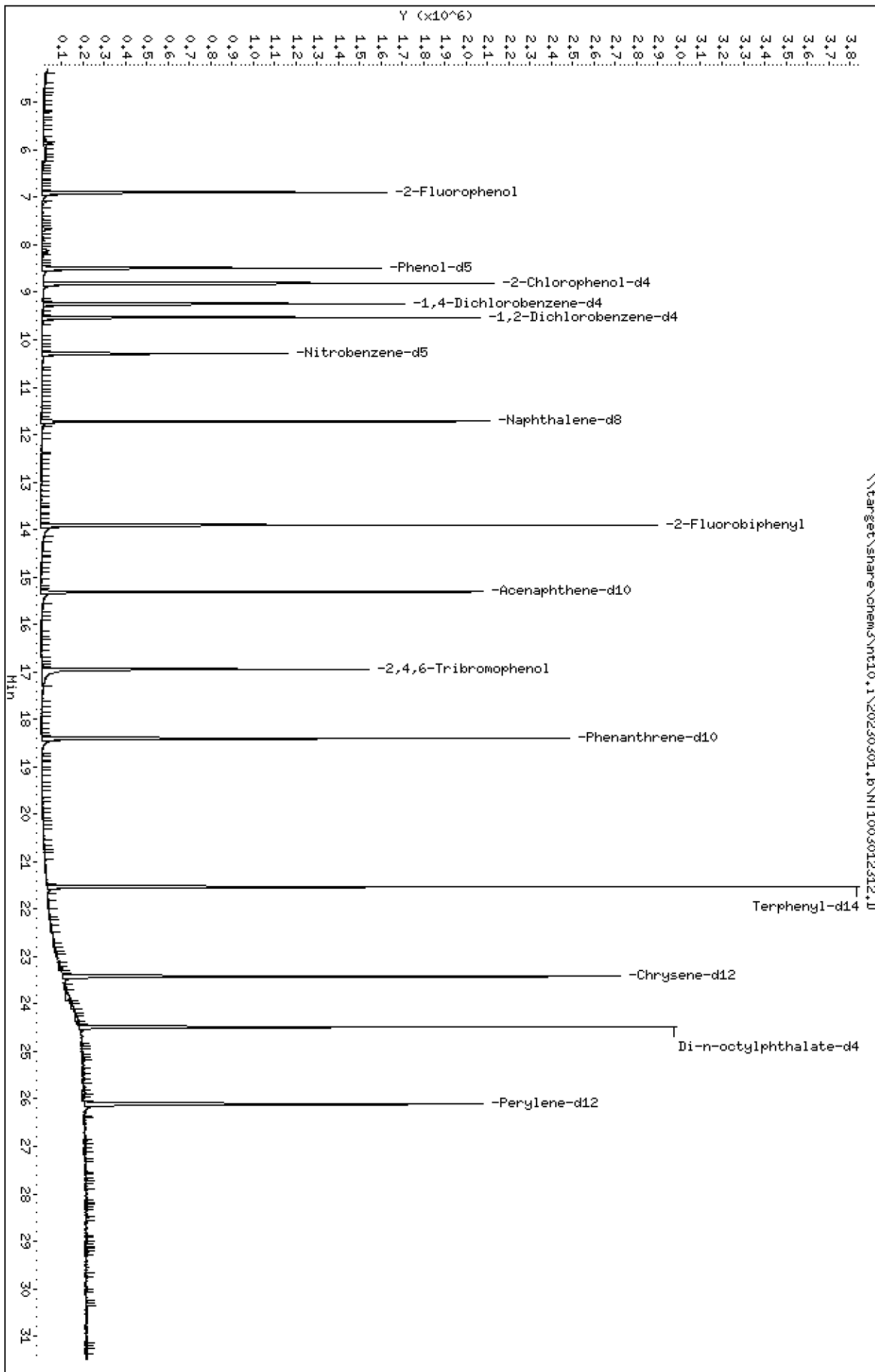
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230304.1\NT1003042312.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012312.D
 Lab Smp Id: SLC0084-ICB1
 Inj Date : 01-MAR-2023 22:24
 Operator : VTS
 Smp Info : SEQ-IBL1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012307.D

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.898	(0.746)	1136457	7.51324	7.513
\$ 2 Phenol-d5	99		8.489	8.489	(0.918)	1260755	7.17920	7.179
3 Phenol	94		Compound Not Detected.					
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.953)	1111618	7.41931	7.419
4 Bis(2-Chloroethyl)ether	93		Compound Not Detected.					
6 2-Chlorophenol	128		Compound Not Detected.					
7 1,3-Dichlorobenzene	146		Compound Not Detected.					
* 8 1,4-Dichlorobenzene-d4	152		9.246	9.247	(1.000)	480761	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.031)	531349	4.74674	4.747
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		Compound Not Detected.					
13 2-Methylphenol	108		Compound Not Detected.					
17 Hexachloroethane	117		Compound Not Detected.					
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		Compound Not Detected.					
\$ 18 Nitrobenzene-d5	82		10.294	10.295	(0.878)	924001	5.00520	5.005
19 Nitrobenzene	77		Compound Not Detected.					
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
23 Bis(2-Chloroethoxy)methane	93		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.718	11.719	(1.000)	1681746	4.00000	
28 Naphthalene	128		Compound Not Detected.					
29 4-Chloroaniline	127		Compound Not Detected.					
30 Hexachlorobutadiene	225		Compound Not Detected.					
31 4-Chloro-3-methylphenol	107		Compound Not Detected.					
32 2-Methylnaphthalene	142		Compound Not Detected.					
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====	=====
34 2,4,6-Trichlorophenol	196							
35 2,4,5-Trichlorophenol	196							
\$ 36 2-Fluorobiphenyl	172		13.908	13.908	(0.909)	1465702	4.91041	4.910
37 2-Chloronaphthalene	162							
38 2-Nitroaniline	65							
39 Dimethylphthalate	163							
40 Acenaphthylene	152							
41 2,6-Dinitrotoluene	165							
* 42 Acenaphthene-d10	164		15.308	15.309	(1.000)	836849	4.00000	
43 3-Nitroaniline	138							
44 Acenaphthene	153							
45 2,4-Dinitrophenol	184							
46 Dibenzofuran	168							
47 4-Nitrophenol	109							
48 2,4-Dinitrotoluene	165							
50 Diethylphthalate	149							
49 Fluorene	166							
51 4-Chlorophenyl-phenylether	204							
52 4-Nitroaniline	138							
53 4,6-Dinitro-2-methylphenol	198							
54 N-Nitrosodiphenylamine	169							
\$ 55 2,4,6-Tribromophenol	330		16.947	16.947	(1.107)	300263	5.61962	5.620
56 4-Bromophenyl-phenylether	248							
57 Hexachlorobenzene	284							
58 Pentachlorophenol	266							
* 59 Phenanthrene-d10	188		18.401	18.401	(1.000)	1648281	4.00000	
60 Phenanthrene	178							
61 Anthracene	178							
62 Carbazole	167							
63 Di-n-butylphthalate	149							
64 Fluoranthene	202							
65 Pyrene	202							
\$ 66 Terphenyl-d14	244		21.527	21.527	(0.919)	1900377	4.81850	4.819
67 Butylbenzylphthalate	149							
68 Benzo(a)anthracene	228							
* 69 Chrysene-d12	240		23.416	23.416	(1.000)	1391477	4.00000	
70 3,3'-Dichlorobenzidine	252							
71 Chrysene	228							
72 bis(2-Ethylhexyl)phthalate	149							
* 134 Di-n-octylphthalate-d4	153		24.484	24.485	(1.000)	2481481	4.00000	
73 Di-n-octylphthalate	149							
74 Benzo(b)fluoranthene	252							
75 Benzo(k)fluoranthene	252							
76 Benzo(a)pyrene	252							
* 77 Perylene-d12	264		26.102	26.103	(1.000)	1542419	4.00000	
78 Indeno(1,2,3-cd)pyrene	276							
79 Dibenzo(a,h)anthracene	278							
80 Benzo(g,h,i)perylene	276							
90 N-Nitrosodimethylamine	74							
91 Aniline	93							
93 Benzidine	184							
103 Pyridine	79							
105 1-methylnaphthalene	142							
111 Azobenzene (1,2-DP-Hydrazine)	77							

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012312.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-ICB1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	480761	42.39
27 Naphthalene-d8	1265187	632594	2530374	1681746	32.92
42 Acenaphthene-d10	692385	346193	1384770	836849	20.86
59 Phenanthrene-d10	1376777	688389	2753554	1648281	19.72
69 Chrysene-d12	1019524	509762	2039048	1391477	36.48
134 Di-n-octylphthala	2027111	1013556	4054222	2481481	22.41
77 Perylene-d12	1027409	513705	2054818	1542419	50.13

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.48	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012312.D

Lab ID: SLC0084-ICB1
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 22:24

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0084-SCV1

Sequence: SLC0084

Sequence Name: SCV 5.0

Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.9	-3.0	20.00
bis(2-chloroethyl) ether	5.0000	5.9	18.6	20.00
2-Chlorophenol	5.0000	4.7	-6.2	20.00
1,3-Dichlorobenzene	5.0000	5.3	5.3	20.00
1,4-Dichlorobenzene	5.0000	5.2	4.3	20.00
1,2-Dichlorobenzene	5.0000	5.2	3.9	20.00
Benzyl Alcohol	5.0000	4.9	-2.0	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	6.2	24.6 *	20.00
2-Methylphenol	5.0000	4.2	-16.2	20.00
Hexachloroethane	5.0000	5.4	8.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.9	18.1	20.00
4-Methylphenol	5.0000	4.2	-15.2	20.00
Nitrobenzene	5.0000	5.6	11.4	20.00
Isophorone	5.0000	7.7	53.4 *	20.00
2-Nitrophenol	5.0000	3.2	-35.1 *	20.00
2,4-Dimethylphenol	5.0000	3.5	-29.9 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	6.7	34.5 *	20.00
2,4-Dichlorophenol	5.0000	4.4	-11.3	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-1.8	20.00
Naphthalene	5.0000	5.3	5.1	20.00
Benzoic acid	10.0000	5.6	-43.6 *	20.00
4-Chloroaniline	5.0000	3.8	-24.2 *	20.00
Hexachlorobutadiene	5.0000	5.0	0.3	20.00
4-Chloro-3-Methylphenol	5.0000	4.5	-11.0	20.00
2-Methylnaphthalene	5.0000	5.0	-1.0	20.00
Hexachlorocyclopentadiene	5.0000	2.6	-48.8 *	20.00
2,4,6-Trichlorophenol	5.0000	4.1	-17.6	20.00
2,4,5-Trichlorophenol	5.0000	4.1	-17.0	20.00
2-Chloronaphthalene	5.0000	5.3	5.3	20.00
2-Nitroaniline	5.0000	5.0	0.5	20.00
Acenaphthylene	5.0000	5.8	16.1	20.00
Dimethylphthalate	5.0000	5.4	7.7	20.00
2,6-Dinitrotoluene	5.0000	5.2	3.7	20.00
Acenaphthene	5.0000	5.2	3.1	20.00



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0084-SCV1

Sequence: SLC0084

Sequence Name: SCV 5.0

Standard ID: K010066

3-Nitroaniline	5.0000	5.2	3.4		20.00
2,4-Dinitrophenol	5.0000	0.3	-94.7	*	20.00
Dibenzofuran	5.0000	5.0	-0.1		20.00
4-Nitrophenol	5.0000	3.8	-23.6	*	20.00
2,4-Dinitrotoluene	5.0000	4.7	-5.4		20.00
Fluorene	5.0000	5.3	6.1		20.00
4-Chlorophenylphenyl ether	5.0000	5.3	5.1		20.00
Diethyl phthalate	5.0000	5.6	12.8		20.00
4-Nitroaniline	5.0000	5.2	4.6		20.00
4,6-Dinitro-2-methylphenol	5.0000	1.3	-74.2	*	20.00
N-Nitrosodiphenylamine	5.0000	5.4	8.3		20.00
4-Bromophenyl phenyl ether	5.0000	5.5	9.2		20.00
Hexachlorobenzene	5.0000	4.8	-3.9		20.00
Pentachlorophenol	5.0000	3.5	-30.2	*	20.00
Phenanthrene	5.0000	5.1	1.7		20.00
Anthracene	5.0000	4.6	-8.3		20.00
Carbazole	5.0000	5.3	6.7		20.00
Di-n-Butylphthalate	5.0000	5.5	9.3		20.00
Fluoranthene	5.0000	4.5	-9.2		20.00
Pyrene	5.0000	4.6	-7.5		20.00
Butylbenzylphthalate	5.0000	4.5	-9.5		20.00
Benzo(a)anthracene	5.0000	4.6	-8.4		20.00
3,3'-Dichlorobenzidine	10.0000	7.4	-26.2	*	20.00
Chrysene	5.0000	5.0	-0.7		20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.0	-0.9		20.00
Di-n-Octylphthalate	5.0000	5.8	16.9		20.00
Benzo(a)fluoranthene, Total	10.0000	8.9	-11.0		20.00
Benzo(a)pyrene	5.0000	4.4	-11.1		20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.3	-13.1		20.00
Dibenzo(a,h)anthracene	5.0000	4.6	-7.8		20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.0		20.00
1-Methylnaphthalene	5.0000	5.2	4.4		20.00
2-Fluorophenol	7.5000	0.00		*	20.00
Phenol-d5	7.5000	0.00		*	20.00
2-Chlorophenol-d4	7.5000	0.00		*	20.00
1,2-Dichlorobenzene-d4	5.0000	4.29	-14.1		20.00
Nitrobenzene-d5	5.0000	0.00		*	20.00



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0084-SCV1

Sequence: SLC0084

Sequence Name: SCV 5.0

Standard ID: K010066

2-Fluorobiphenyl	5.0000	0.00	*	20.00
2,4,6-Tribromophenol	7.5000	0.00	*	20.00
p-Terphenyl-d14	5.0000	0.0196	-99.6 *	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230301.1\NT1003012311.D

Date: 01-HRR-2023 21:46

Client ID:

Sample Info: SEQ-SCV1

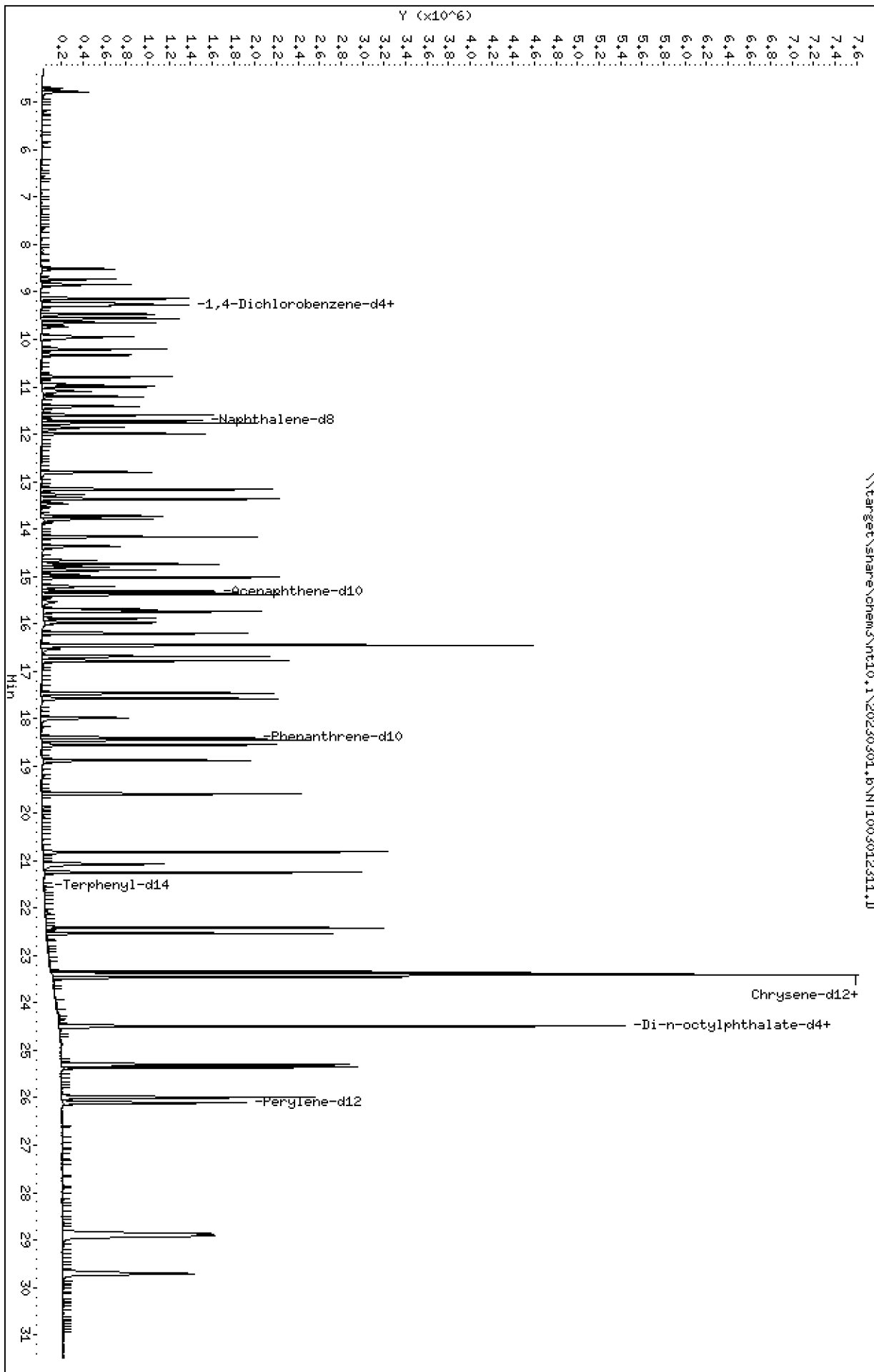
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

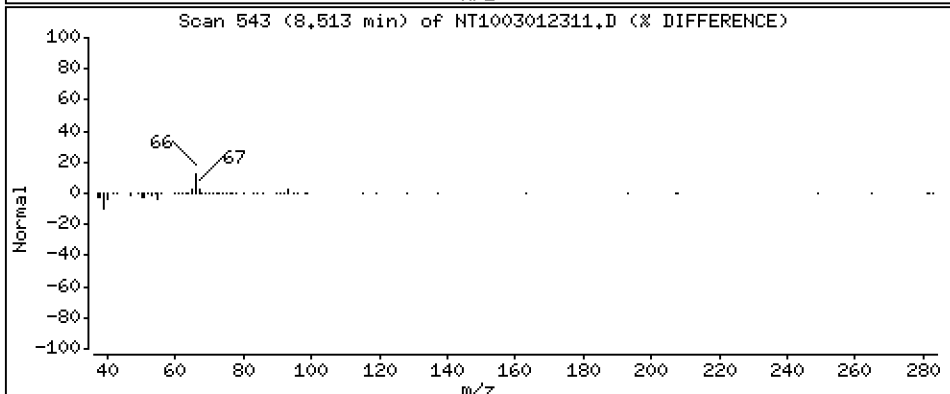
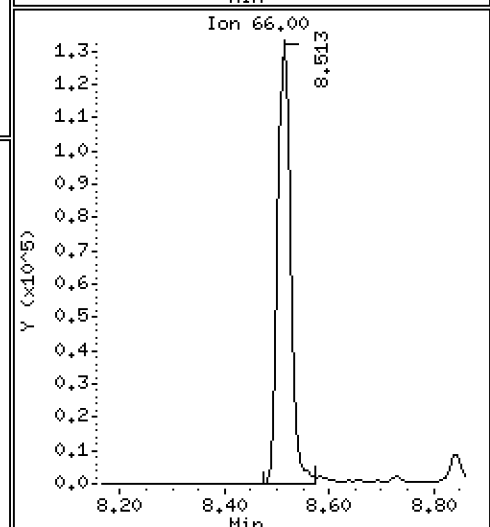
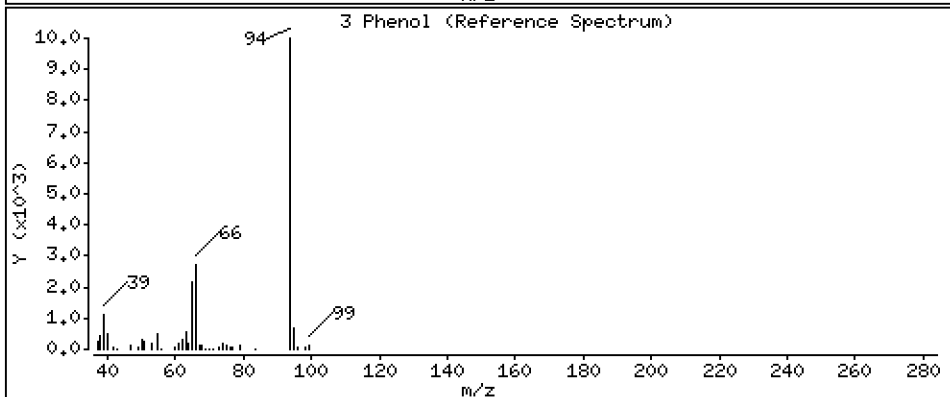
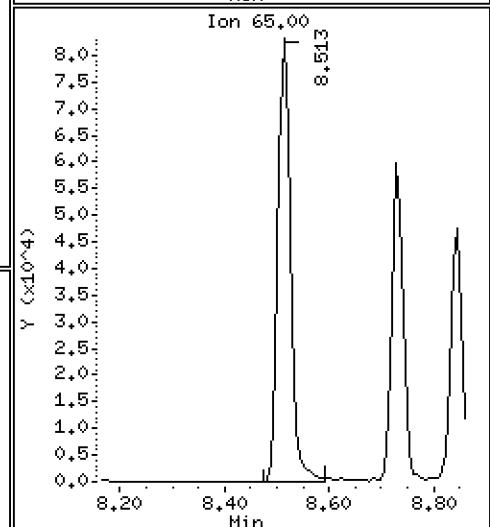
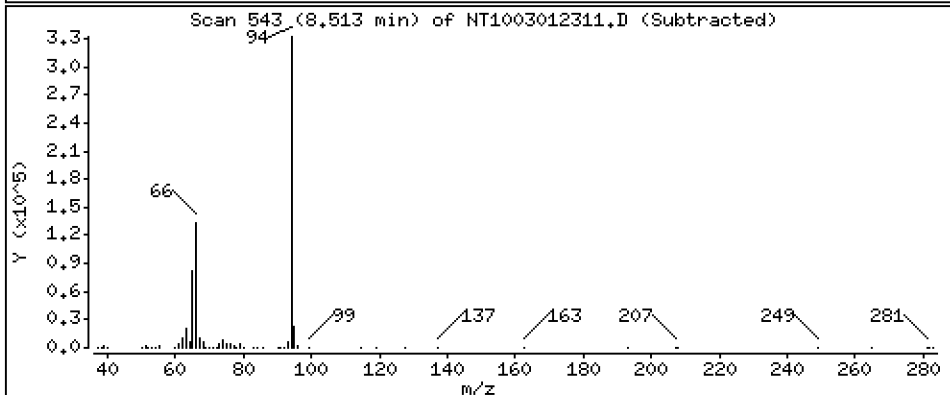
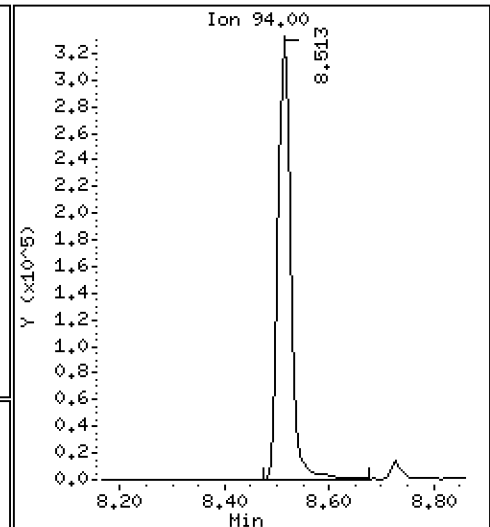
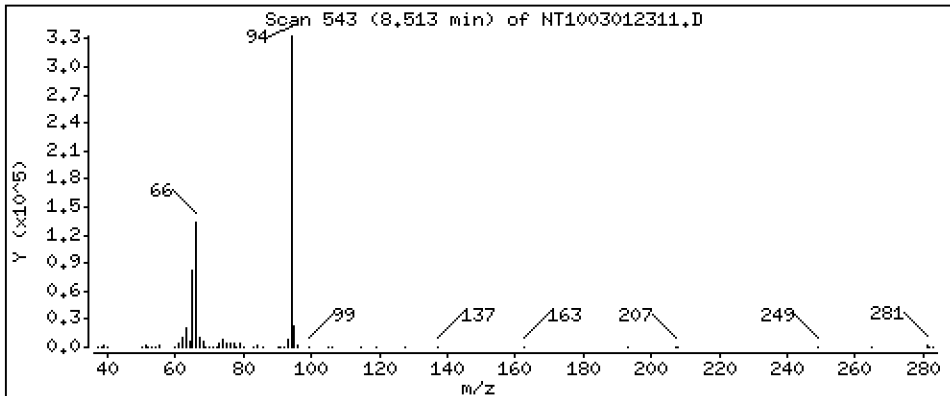
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,852 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

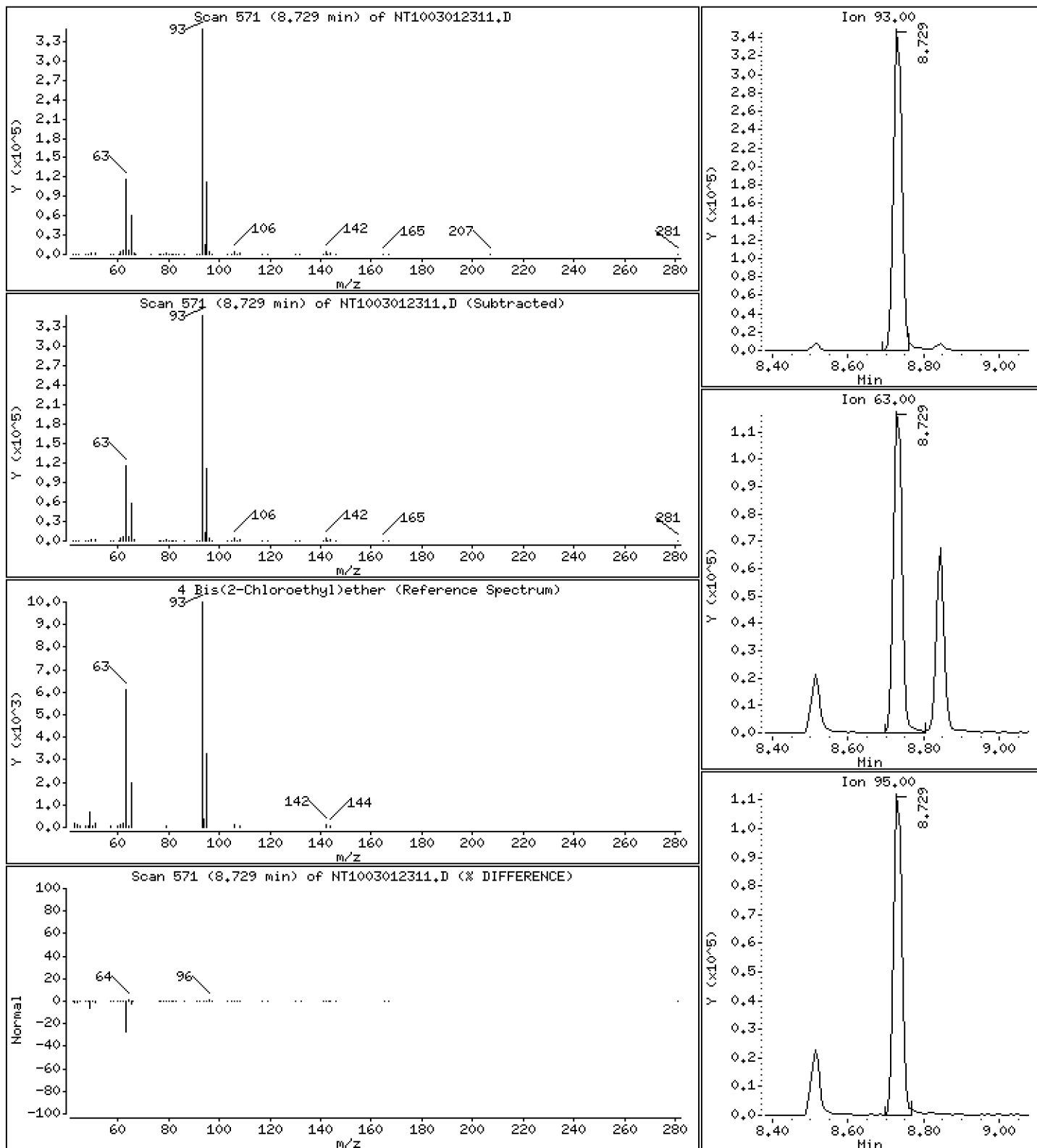
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,928 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

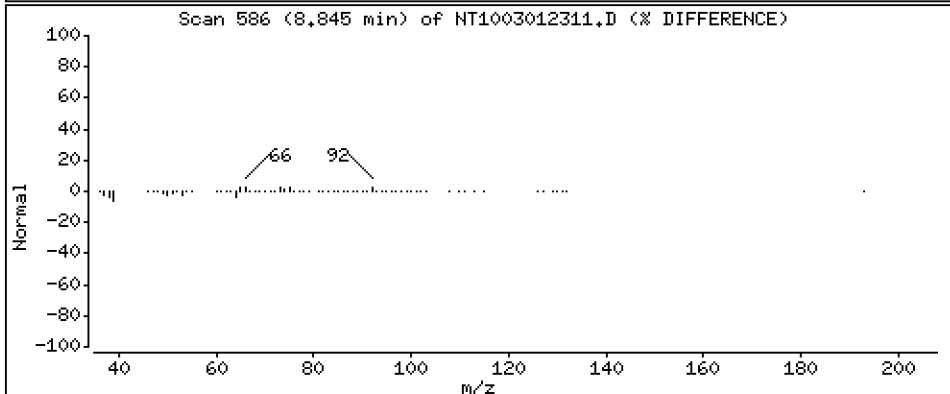
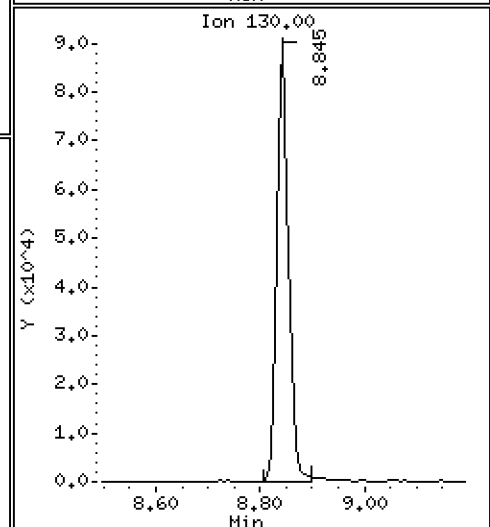
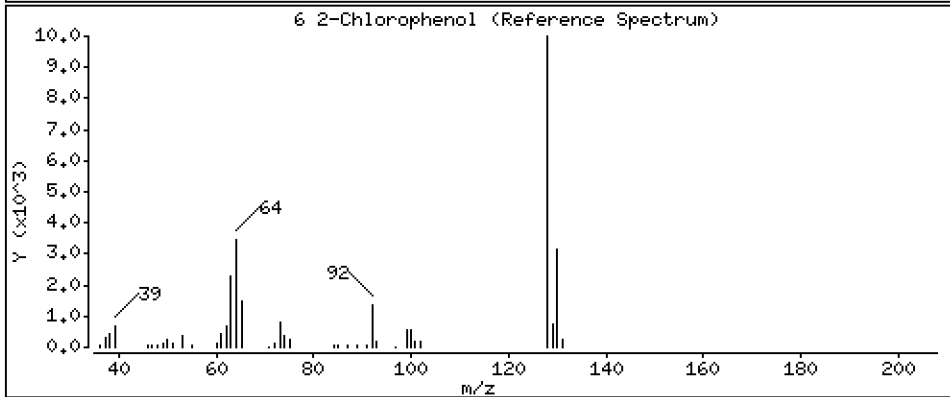
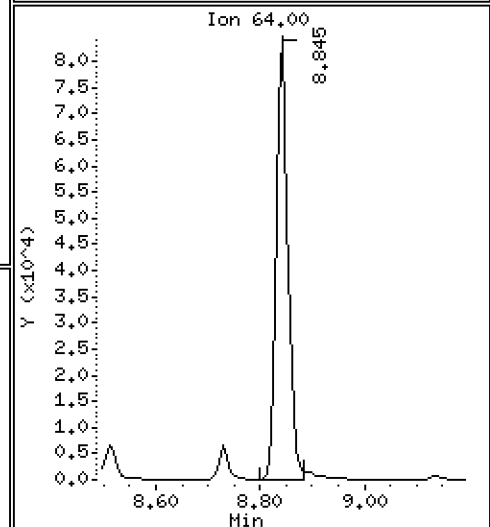
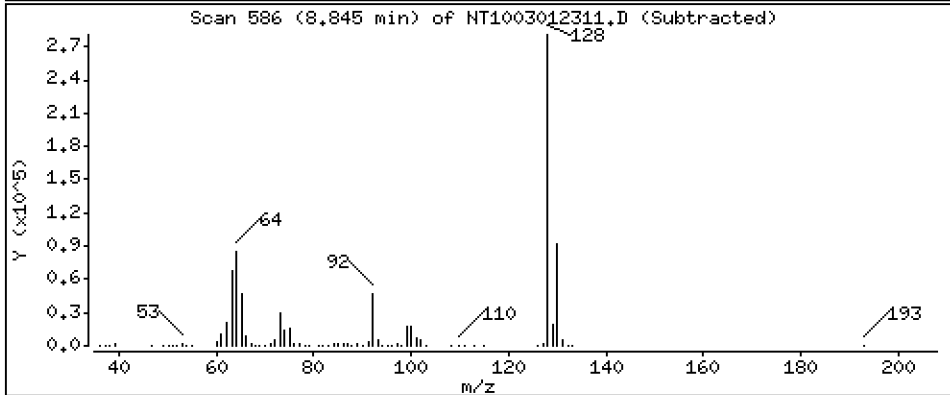
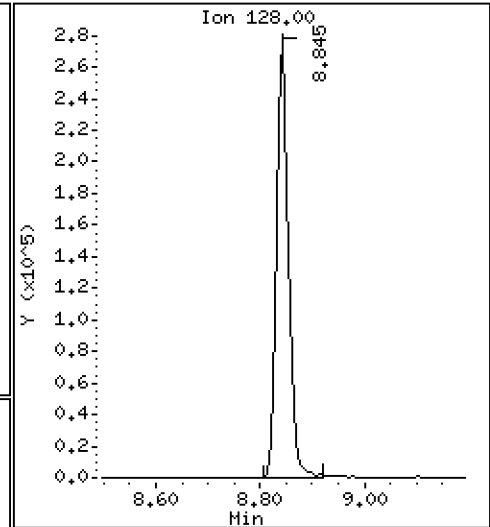
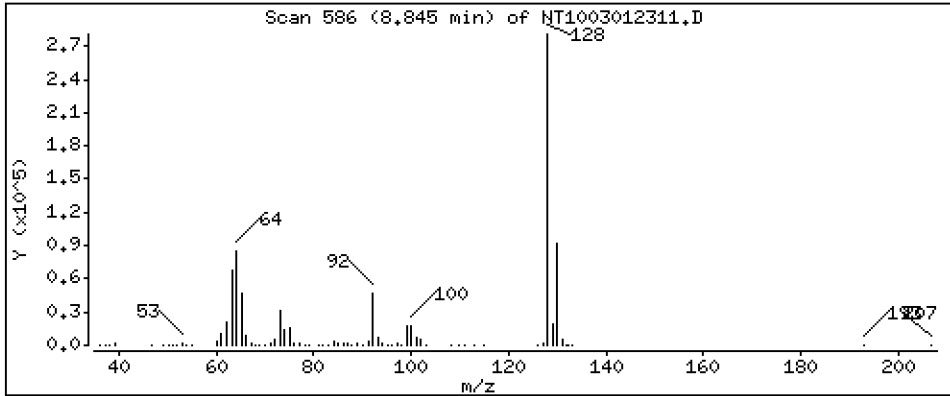
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 4.692 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

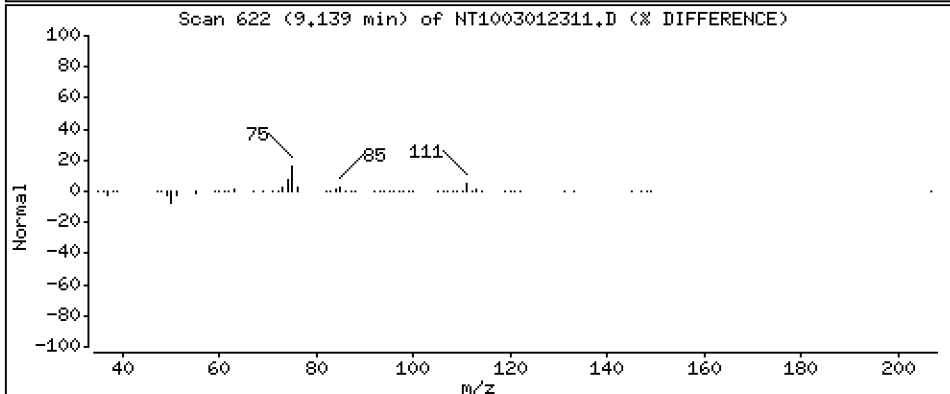
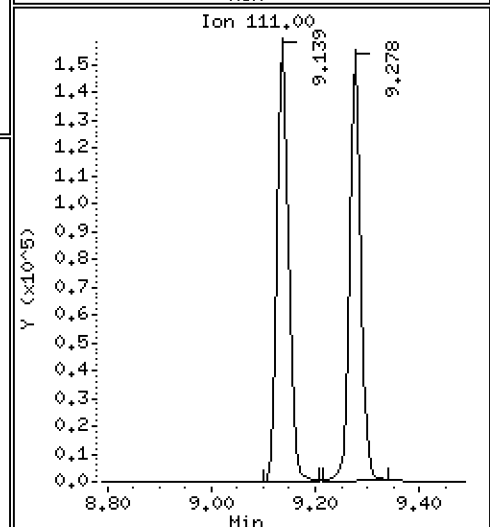
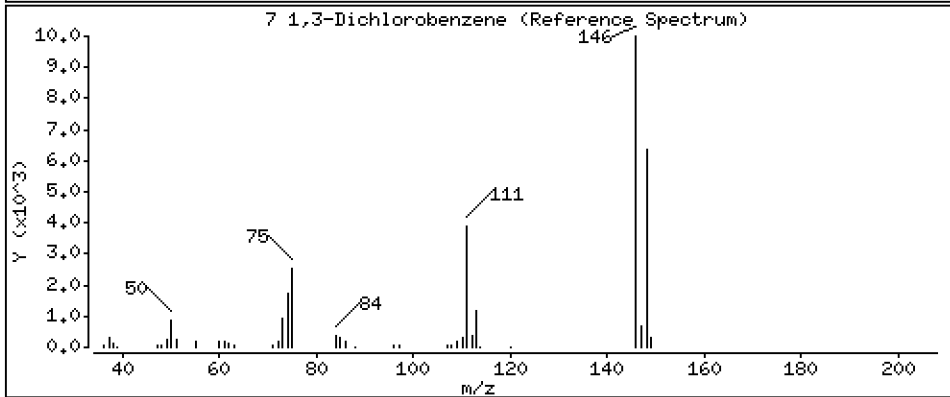
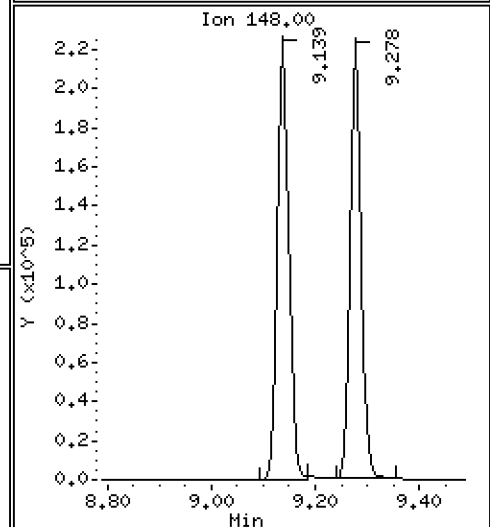
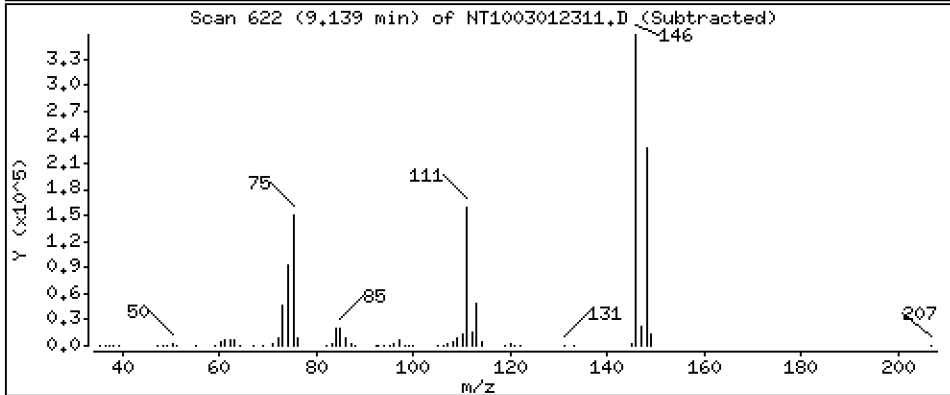
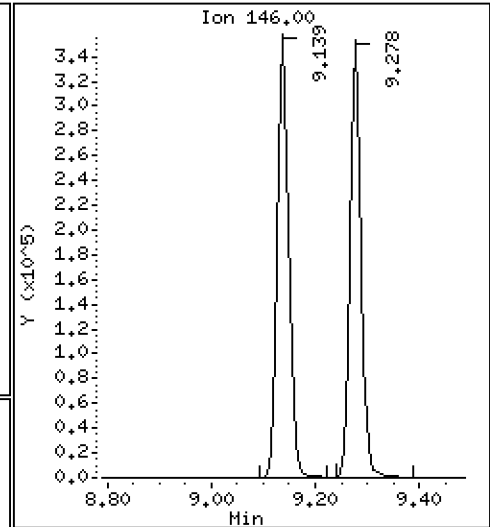
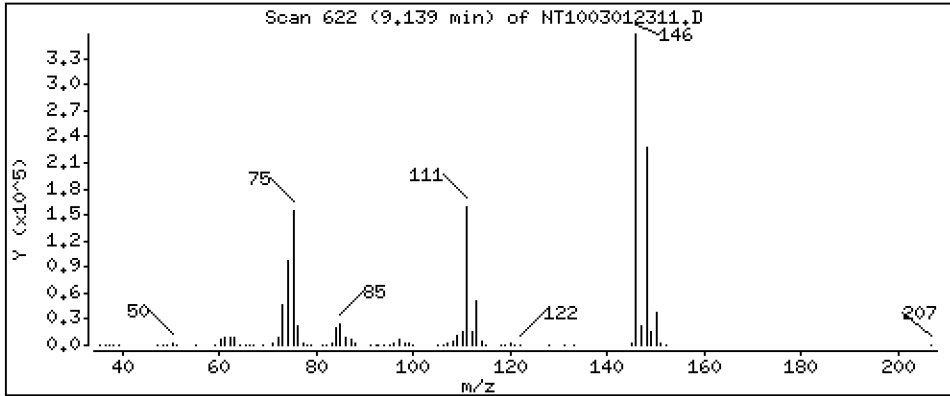
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 5,266 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

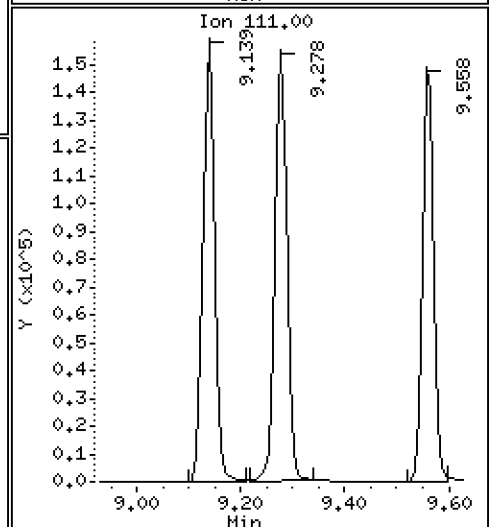
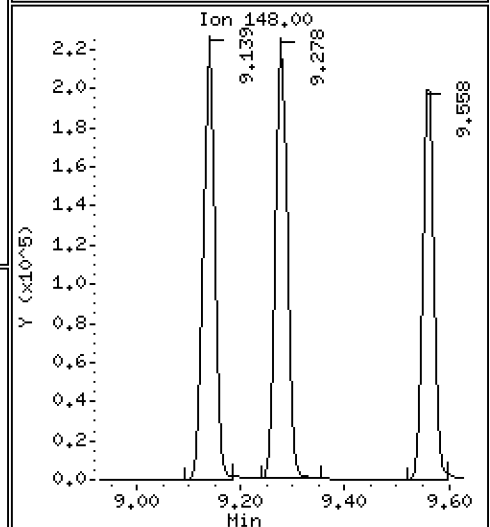
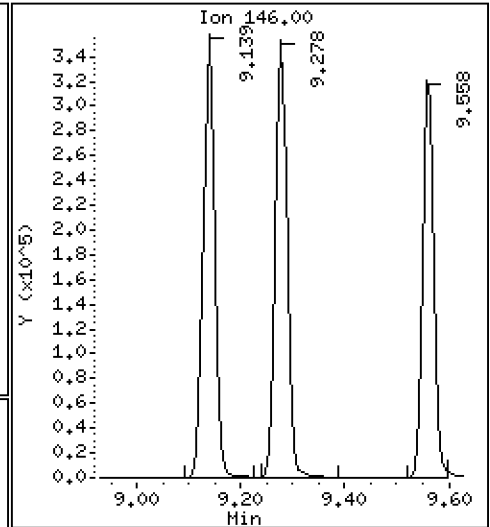
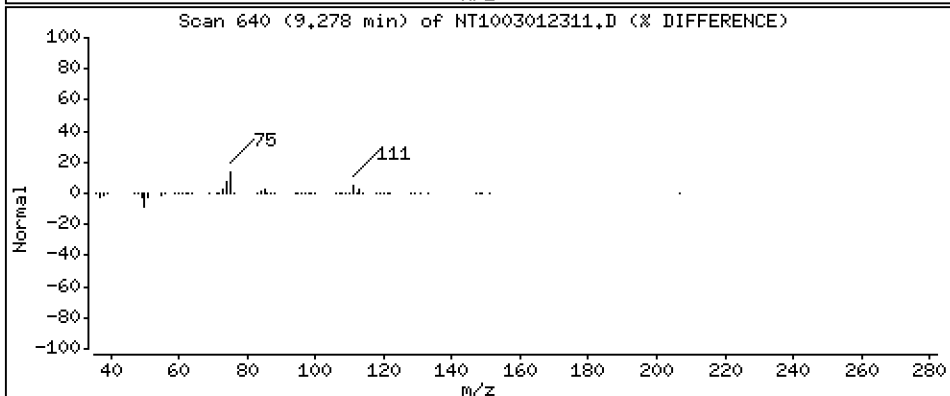
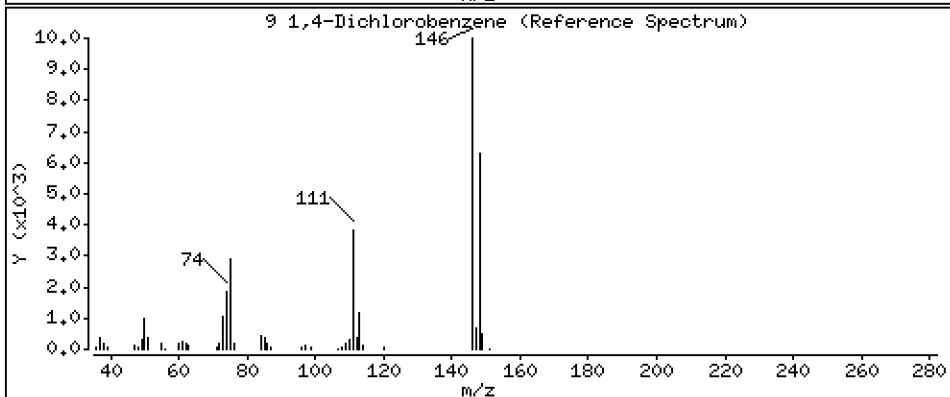
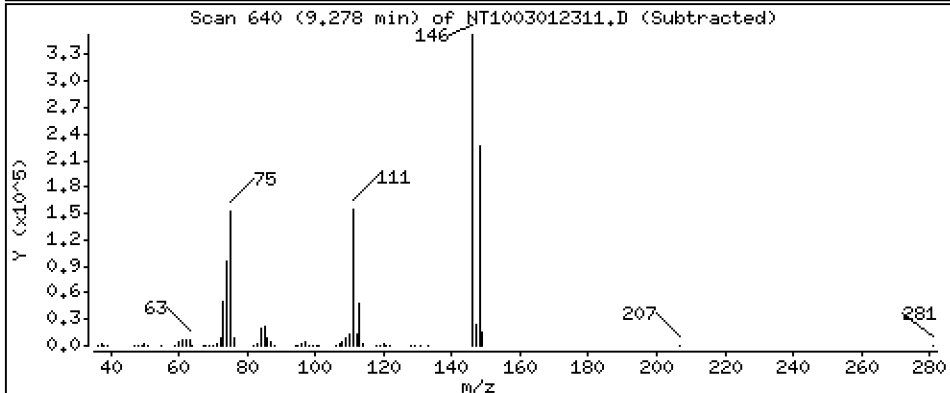
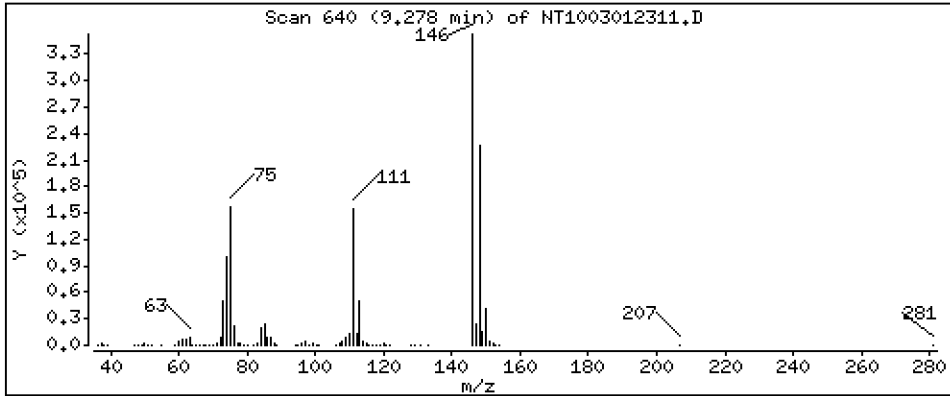
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 5,216 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

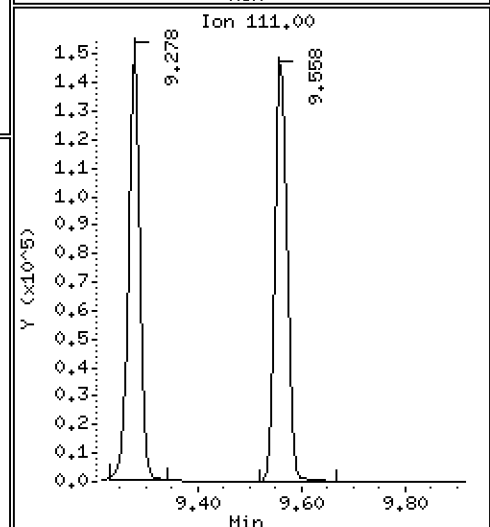
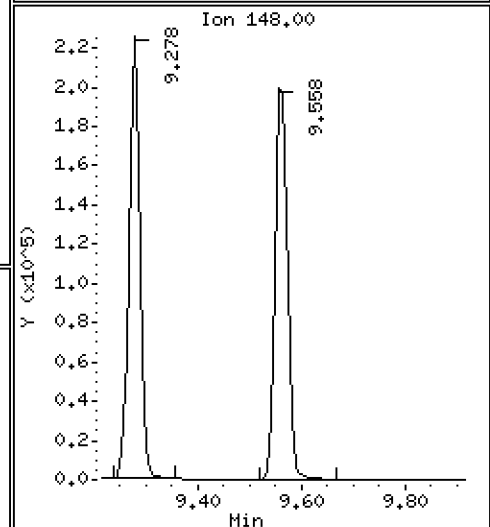
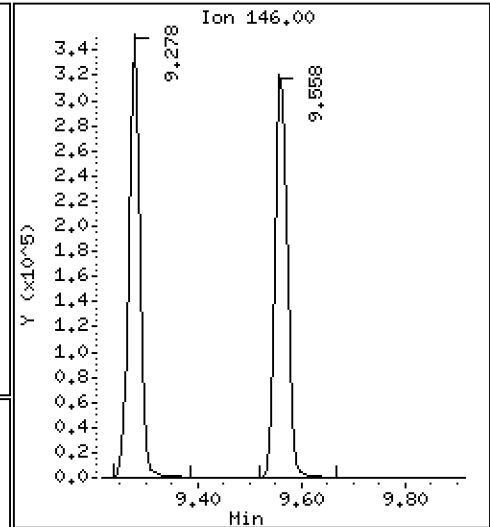
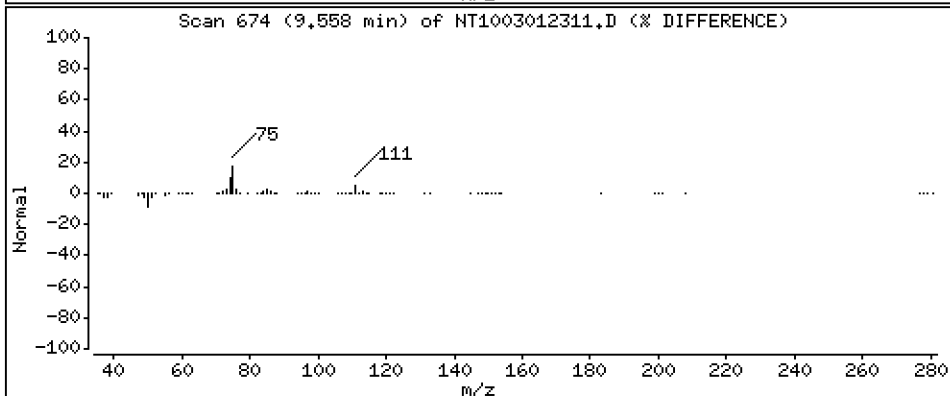
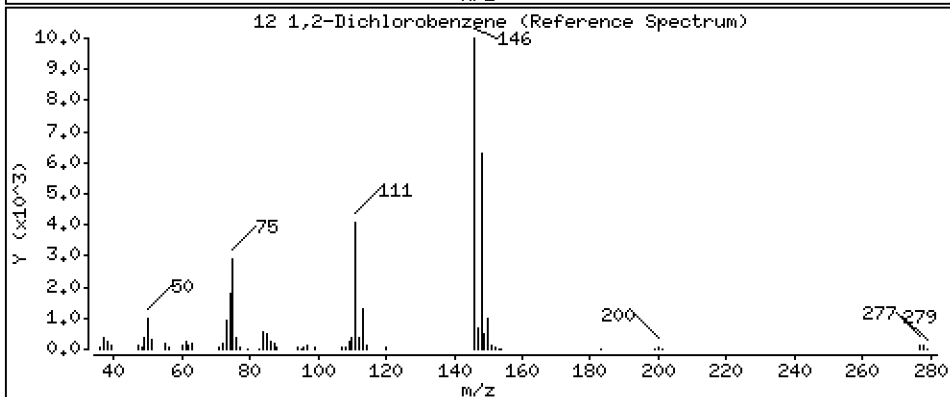
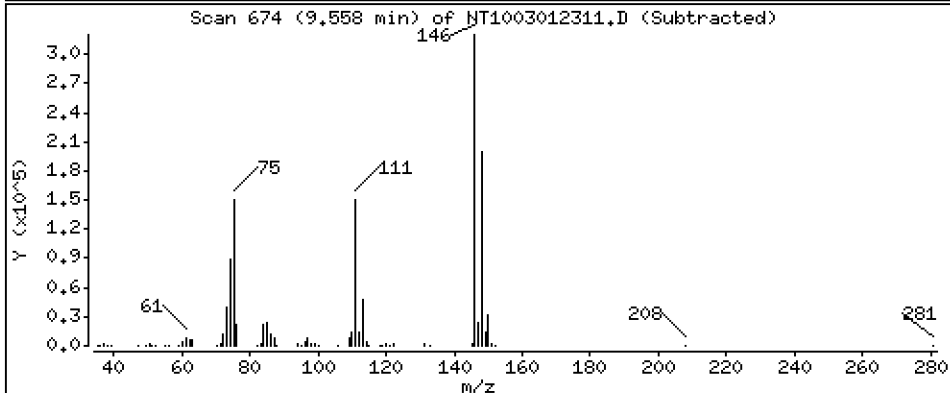
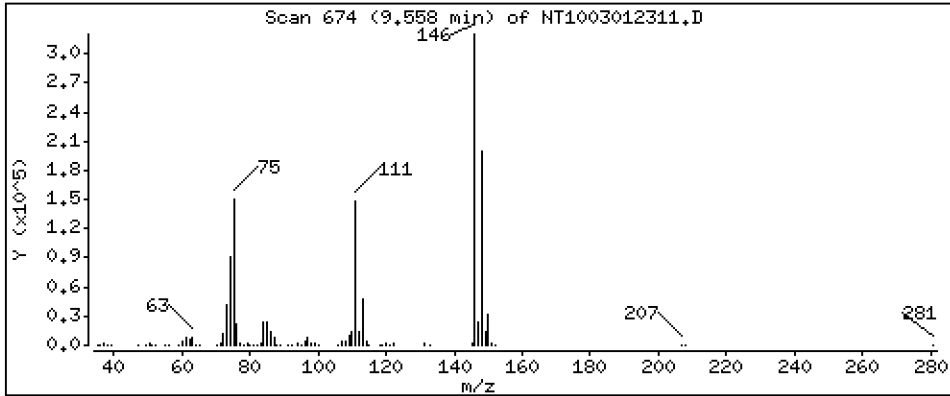
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5,194 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

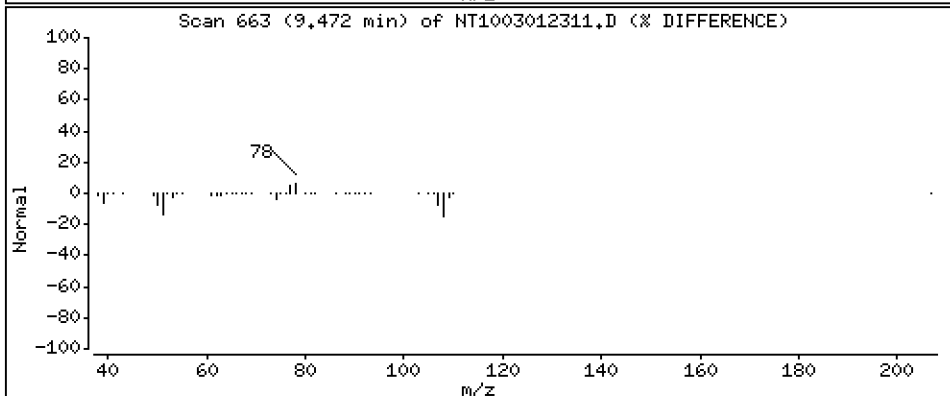
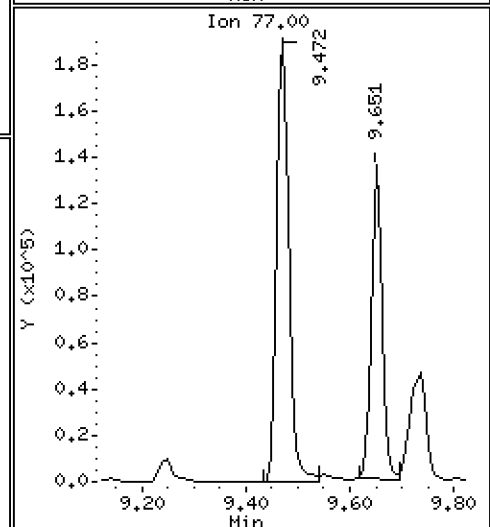
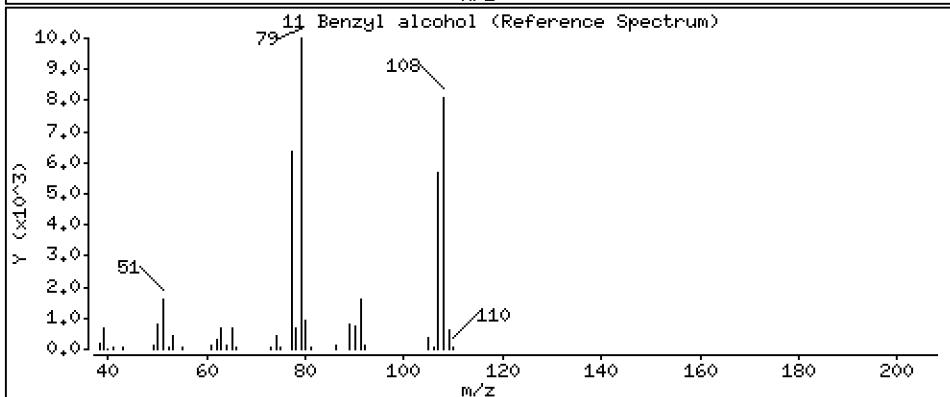
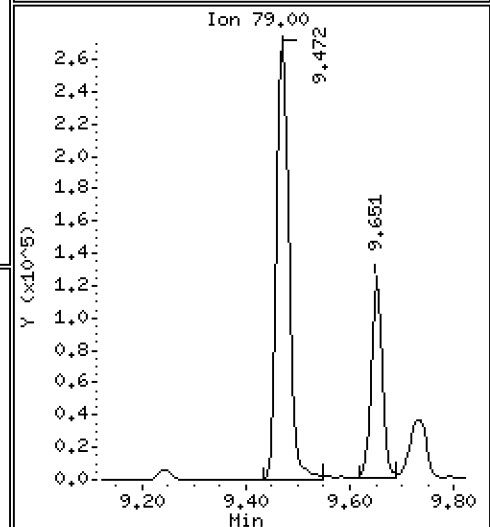
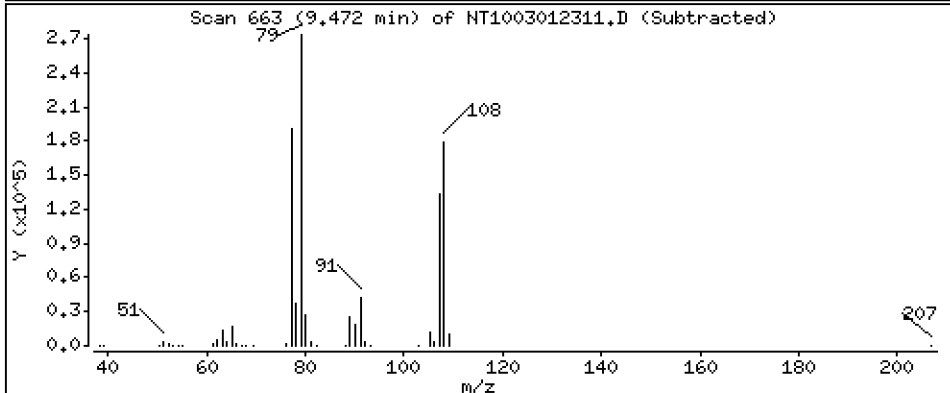
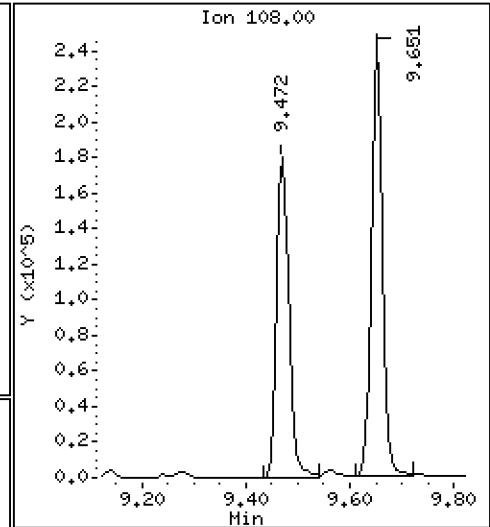
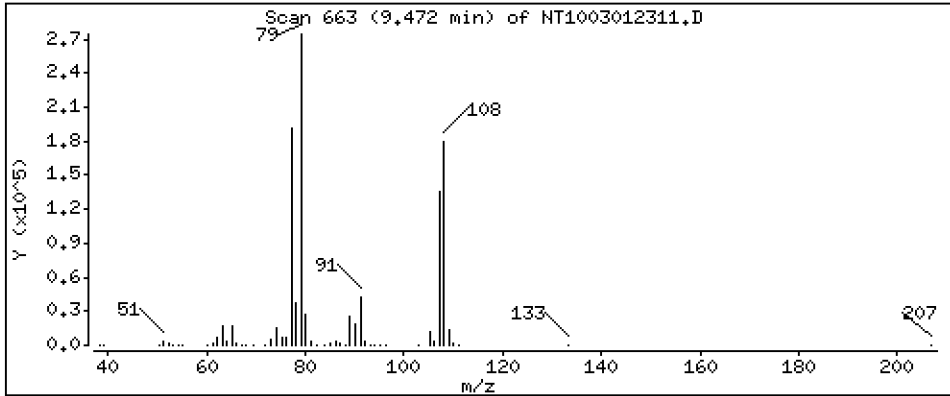
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.898 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

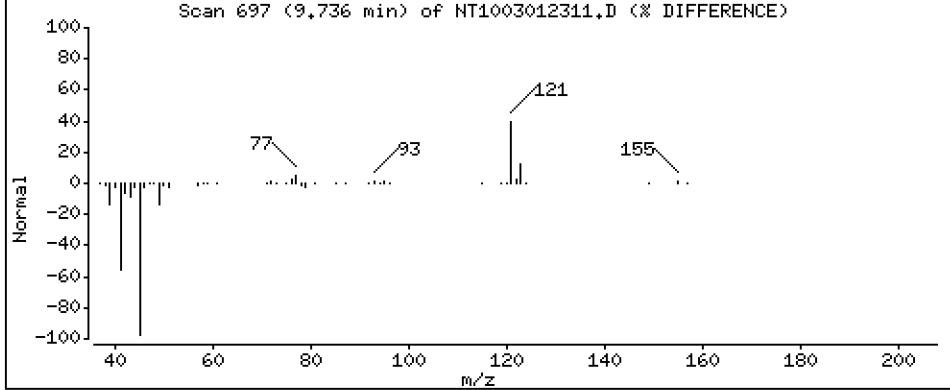
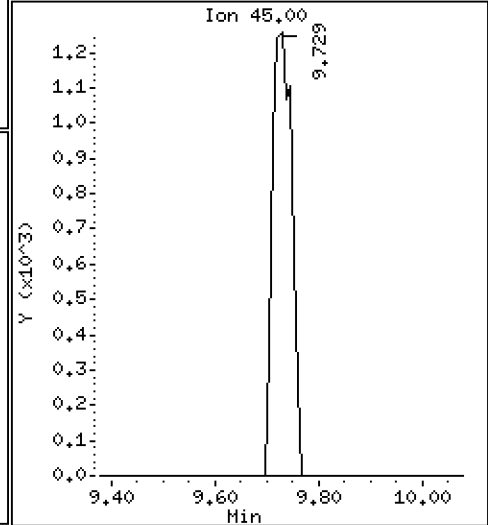
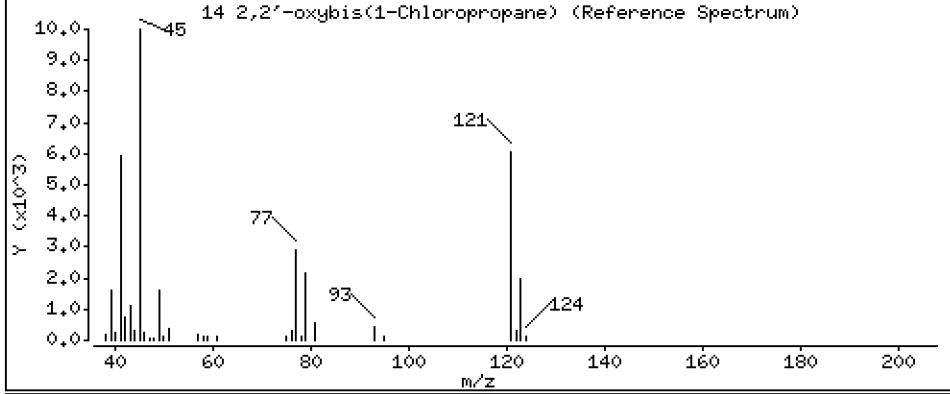
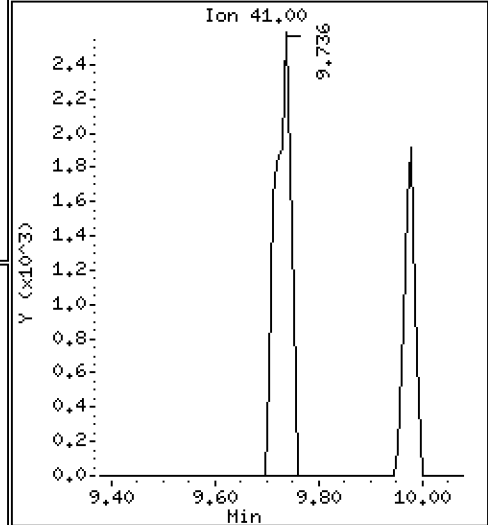
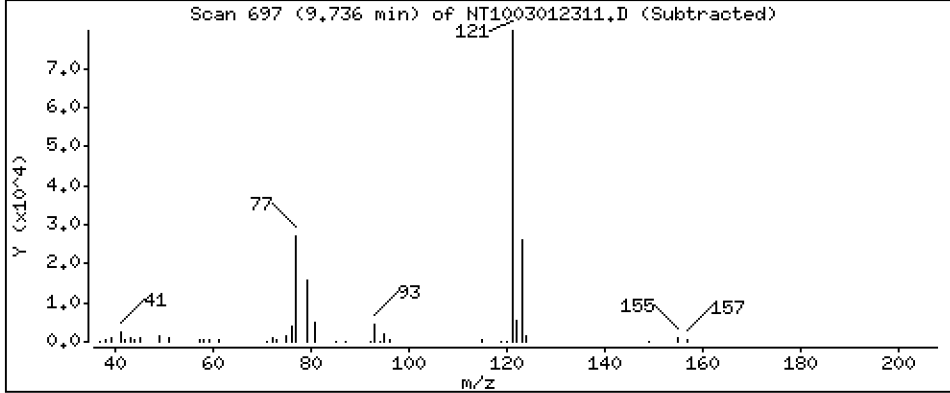
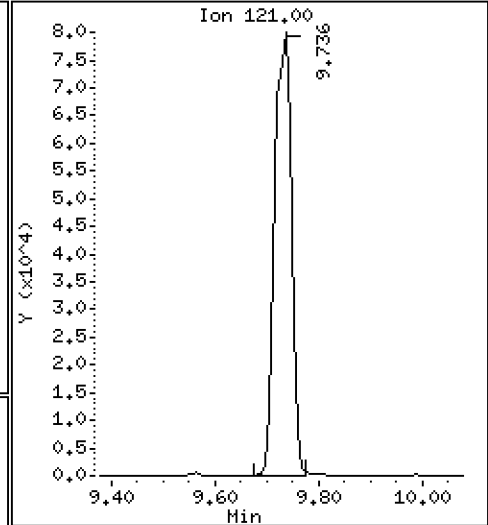
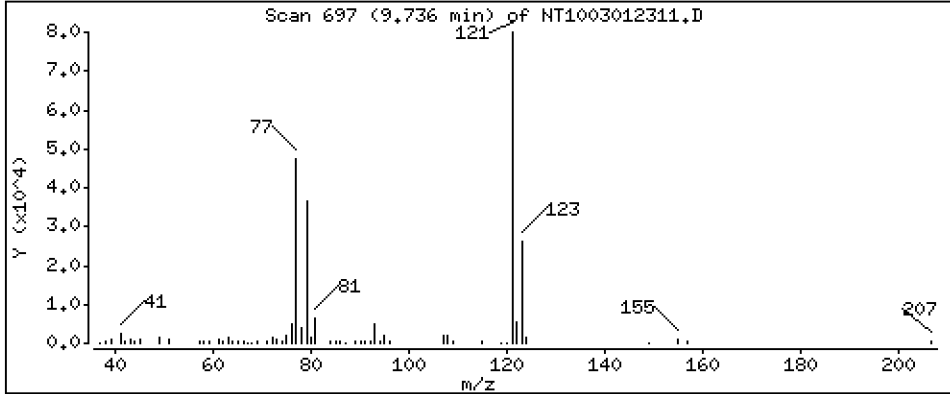
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 6,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

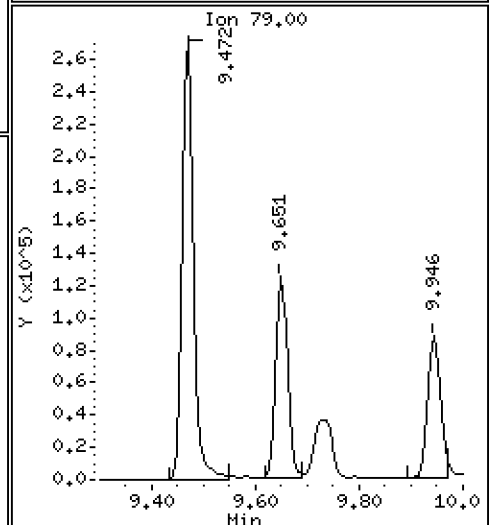
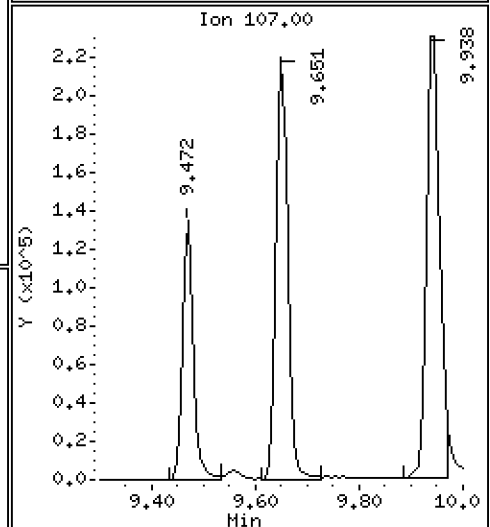
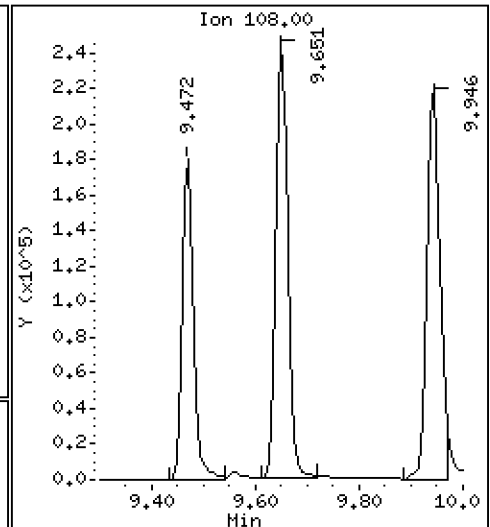
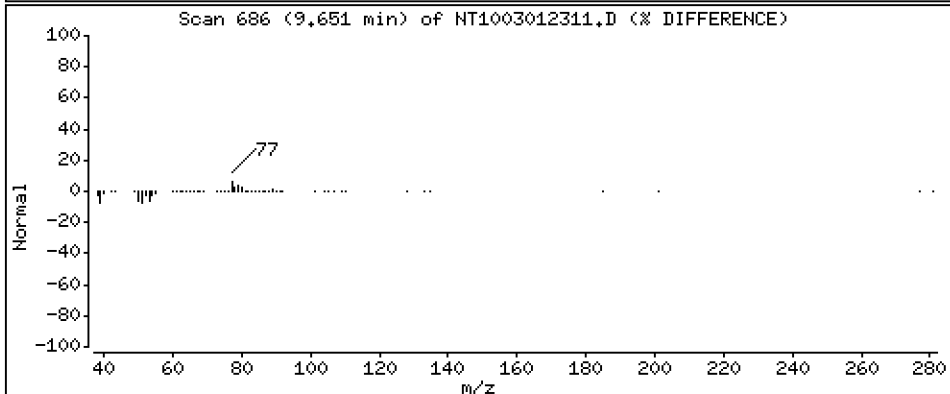
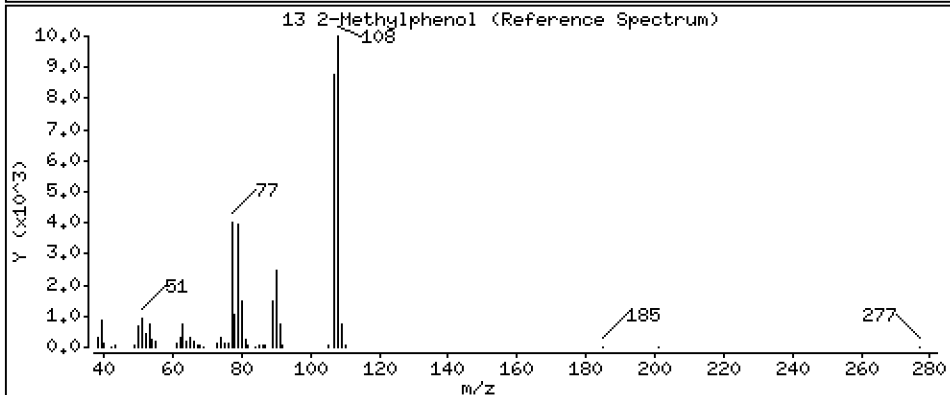
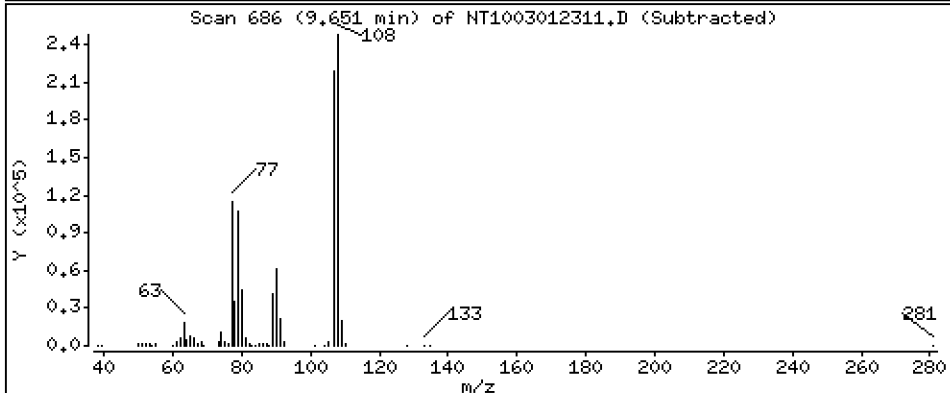
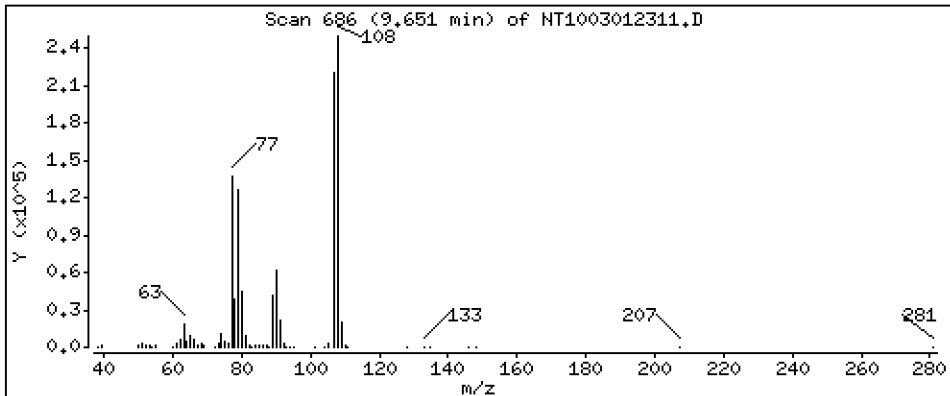
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.192 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

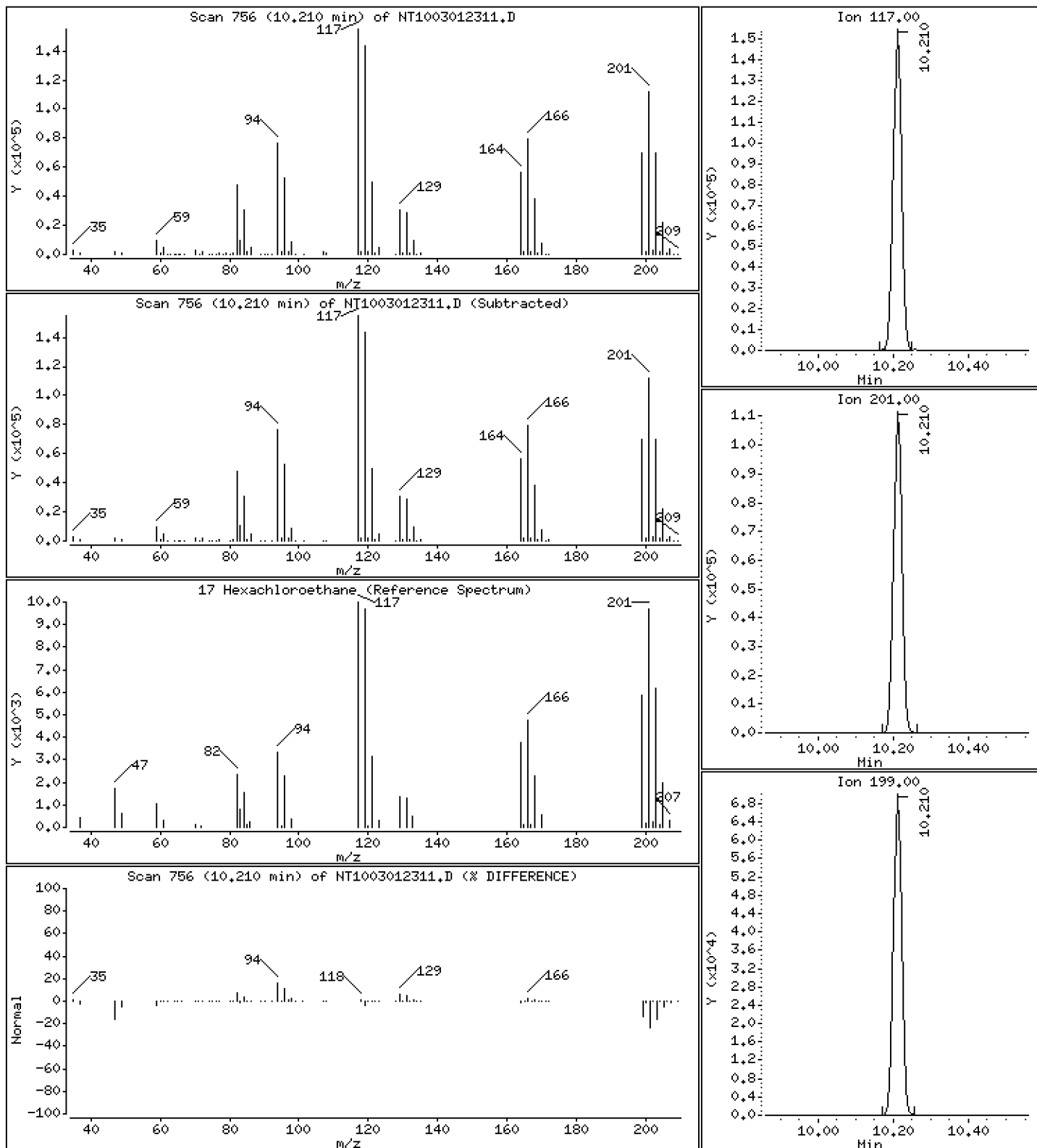
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 5,443 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

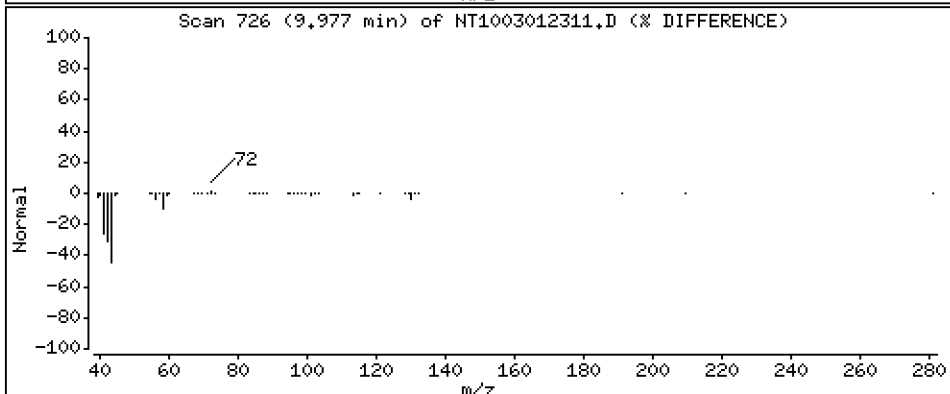
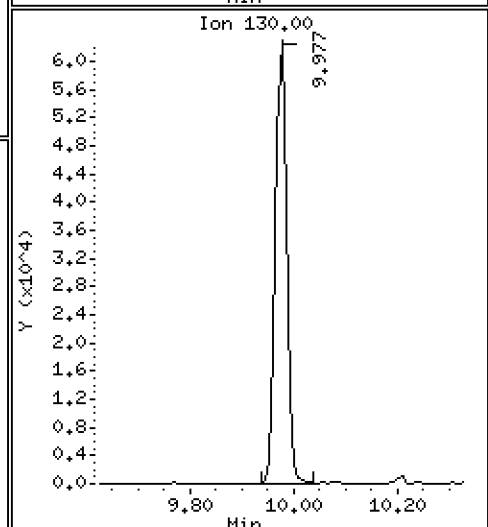
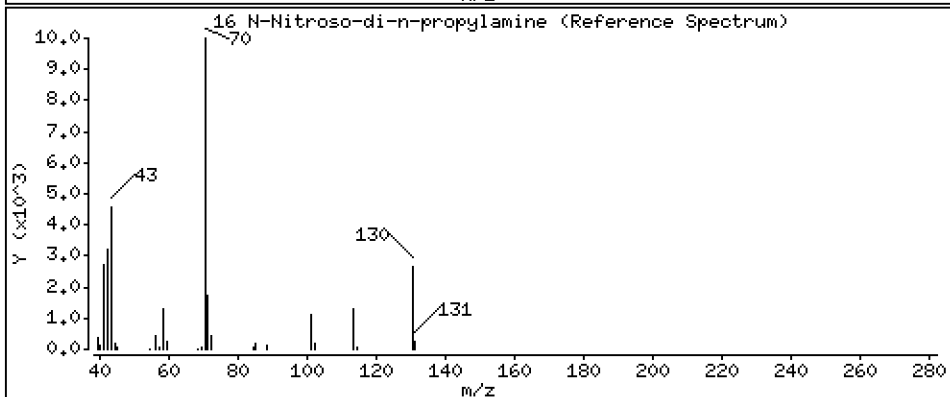
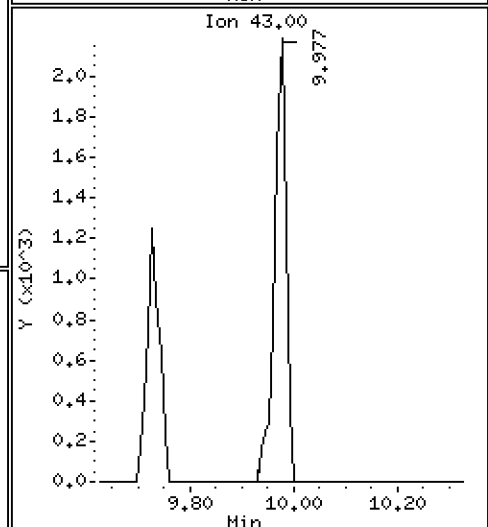
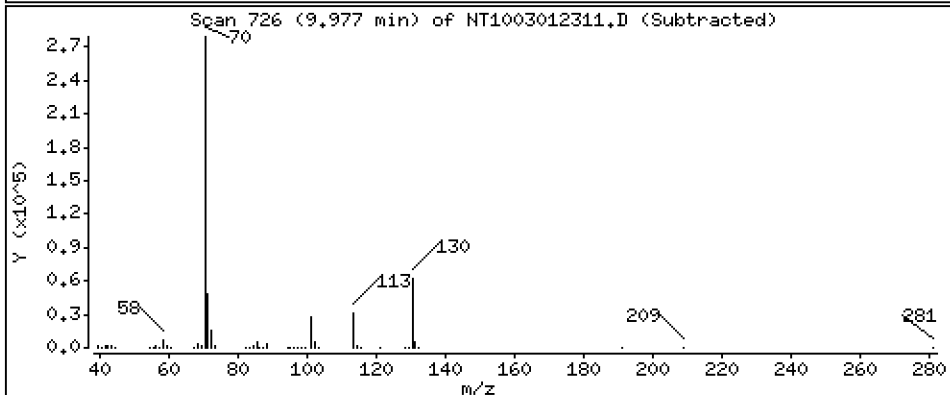
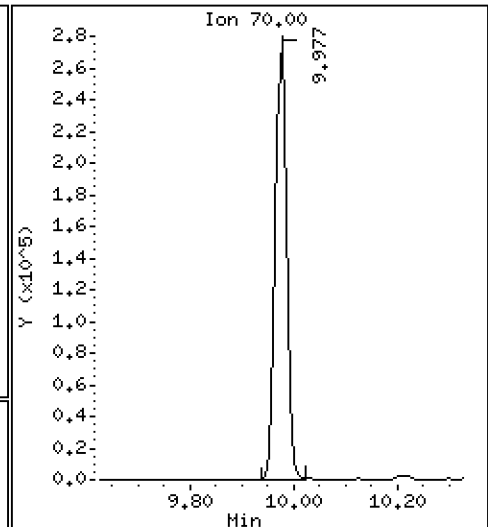
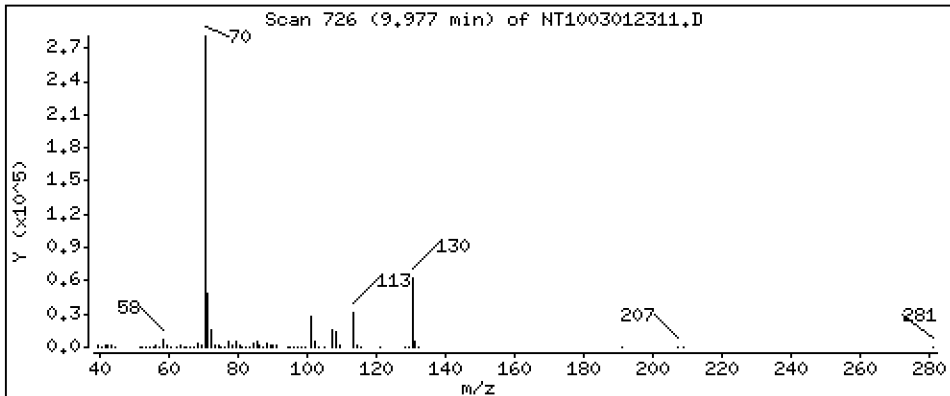
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

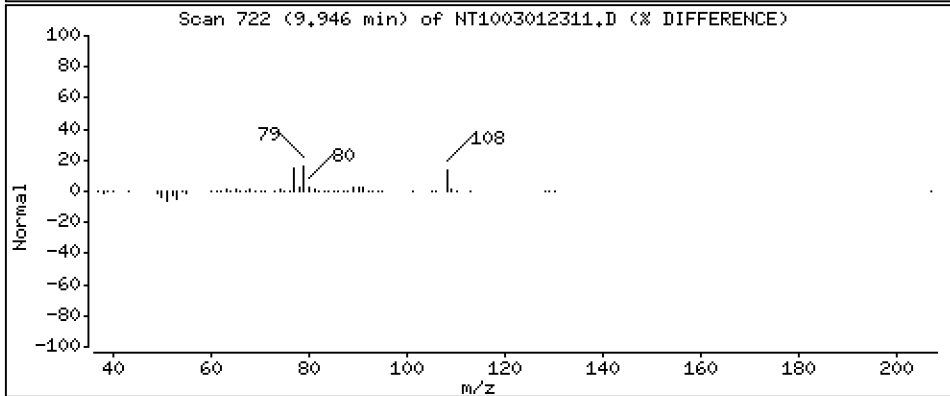
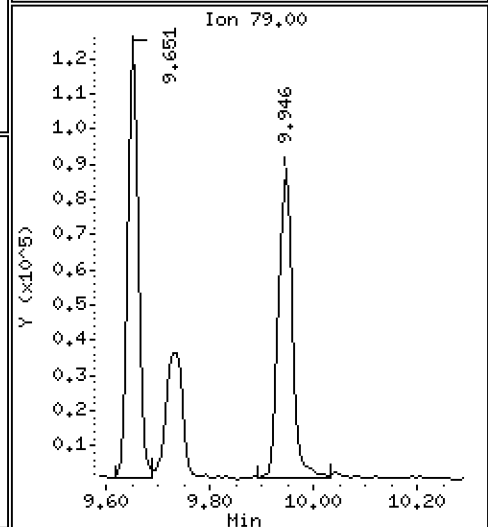
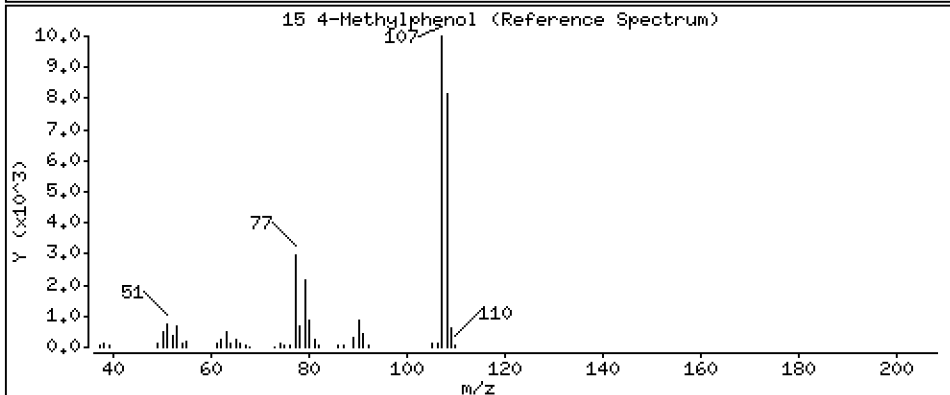
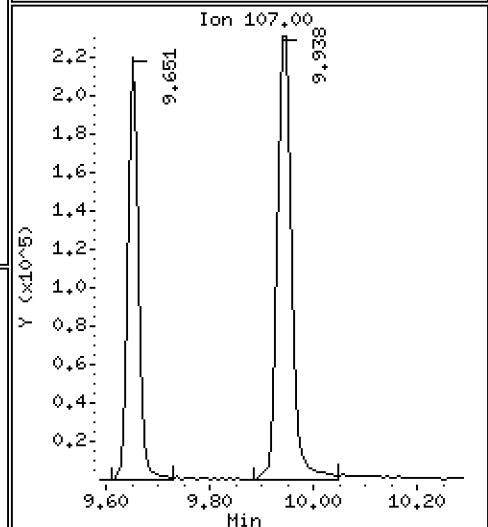
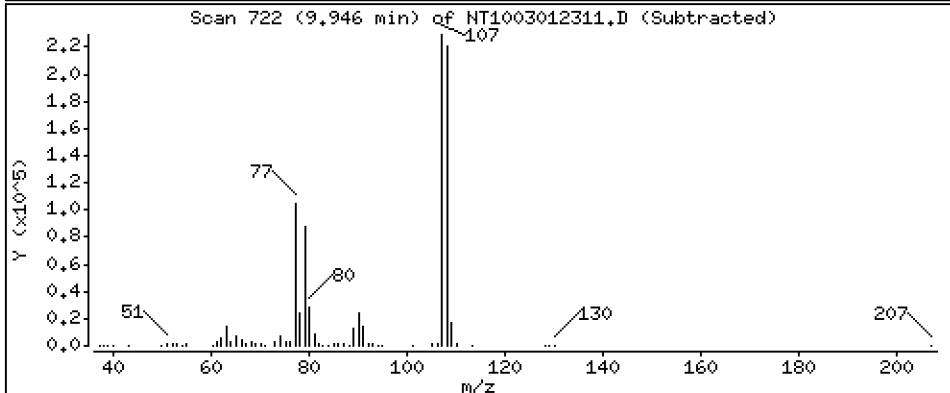
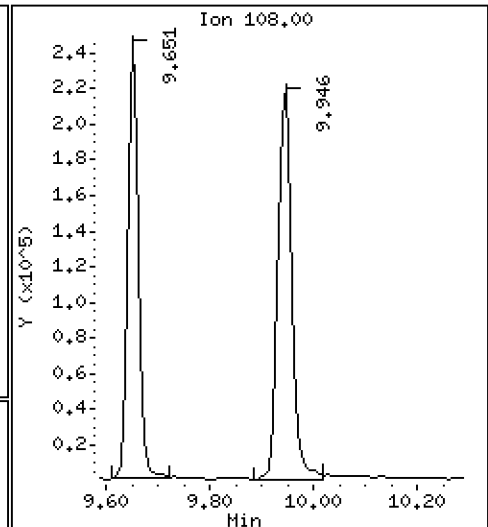
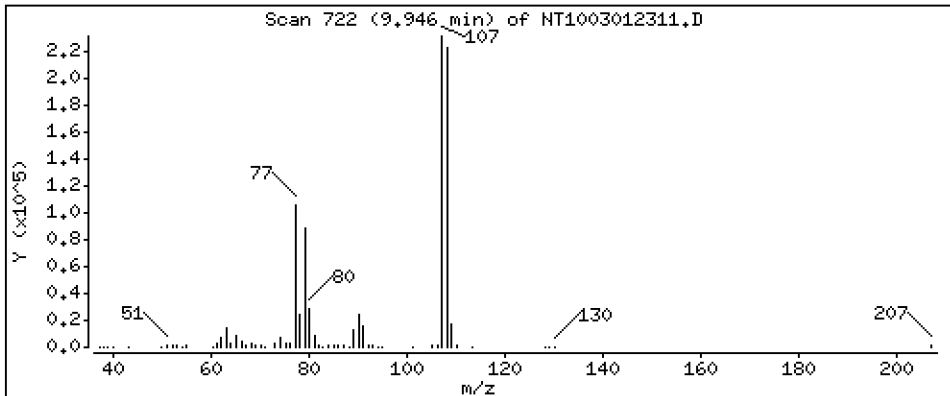
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.239 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

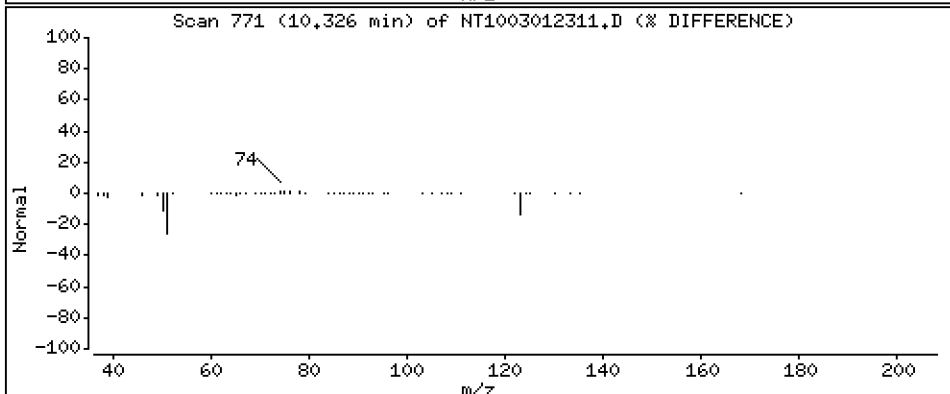
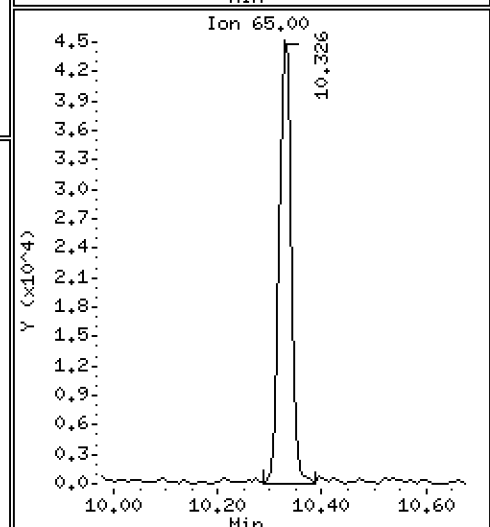
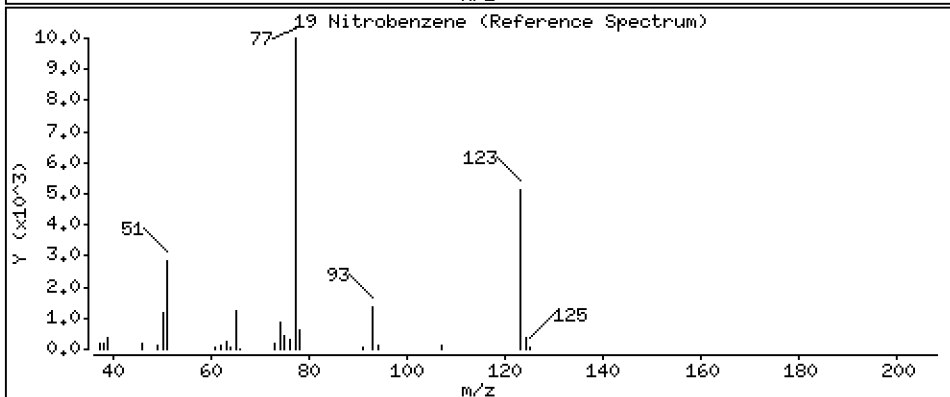
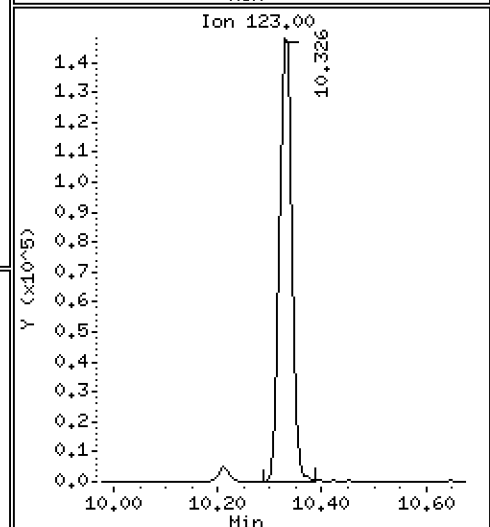
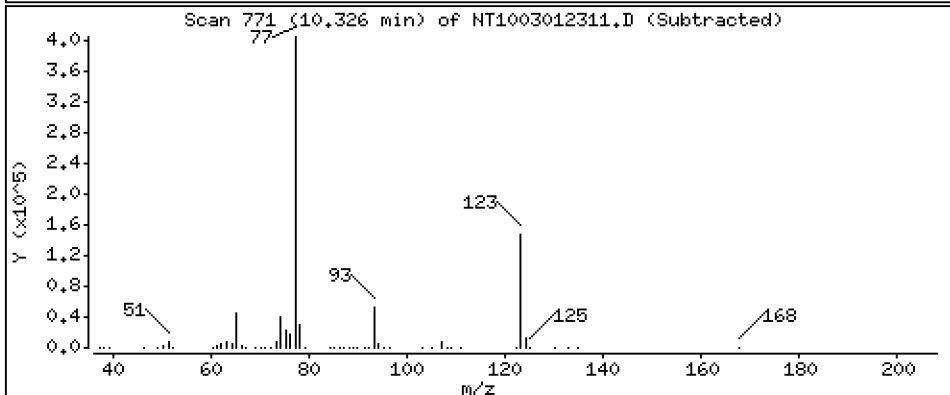
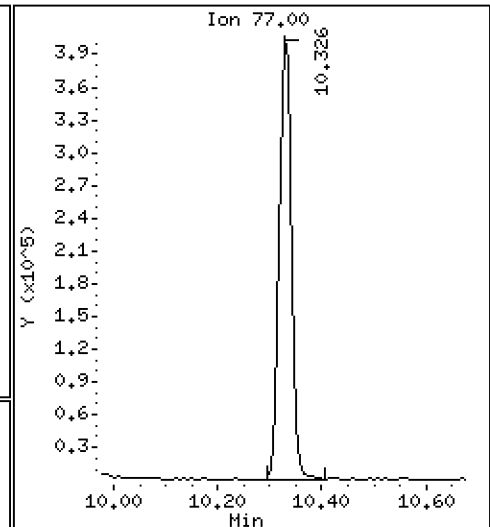
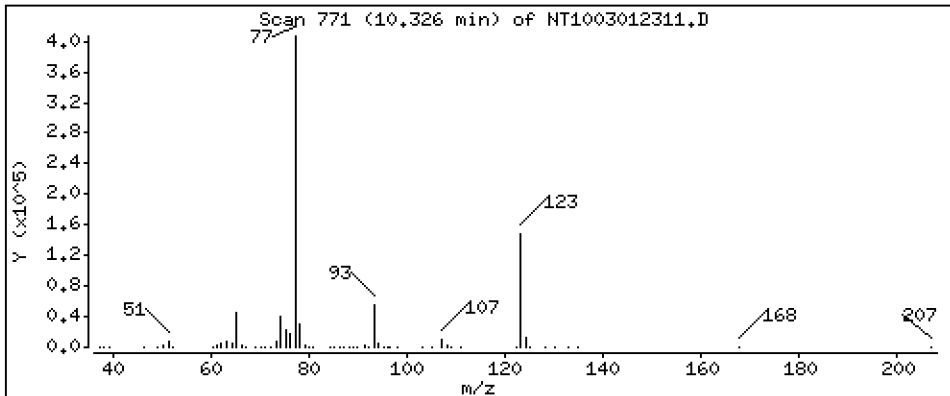
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,569 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

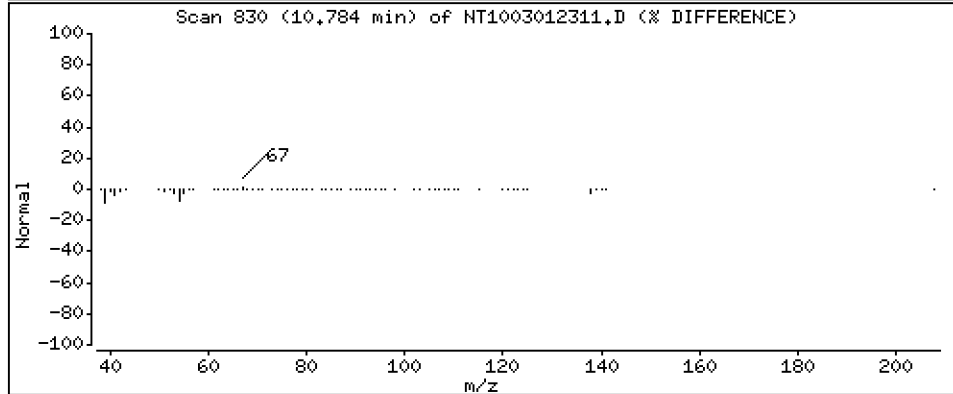
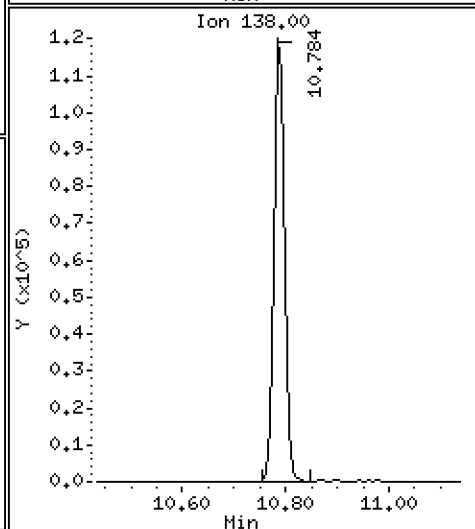
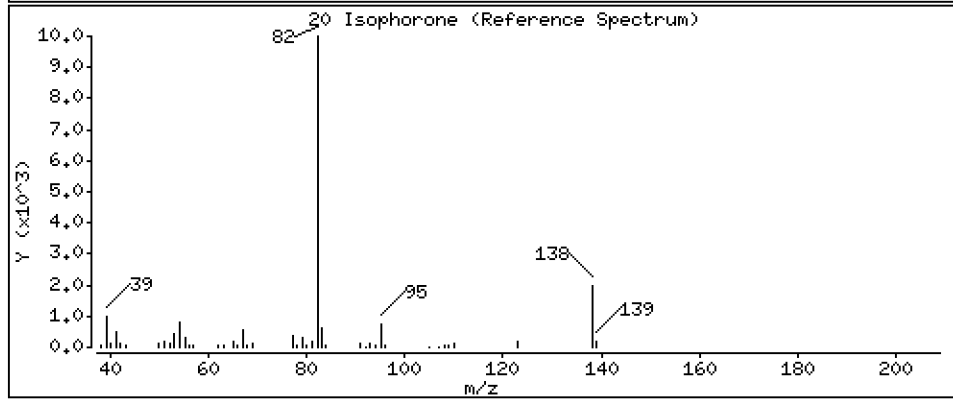
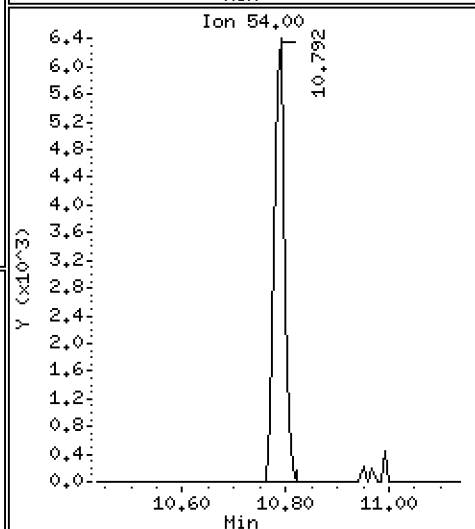
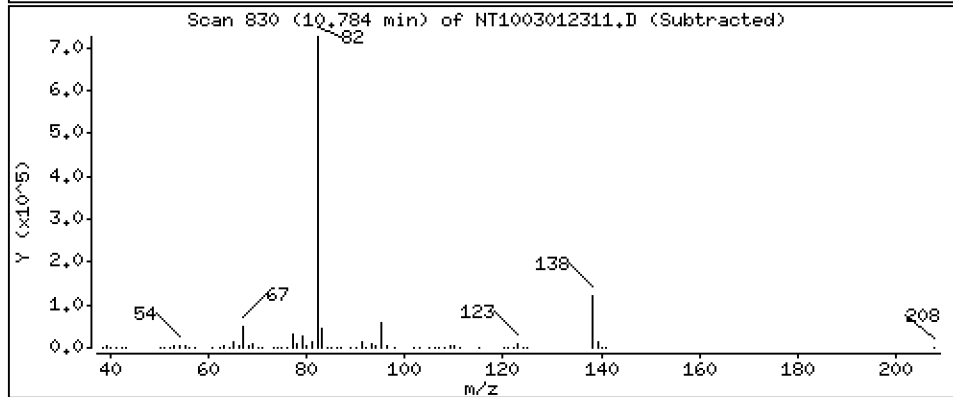
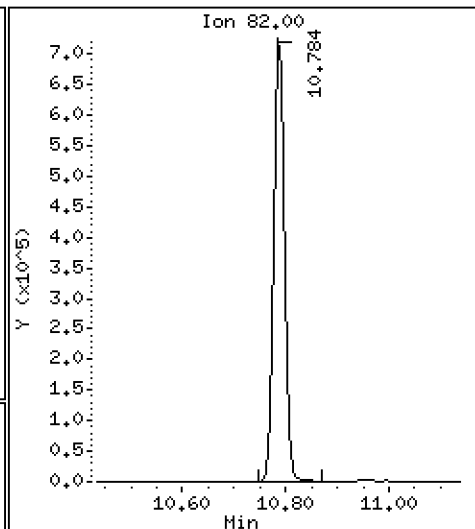
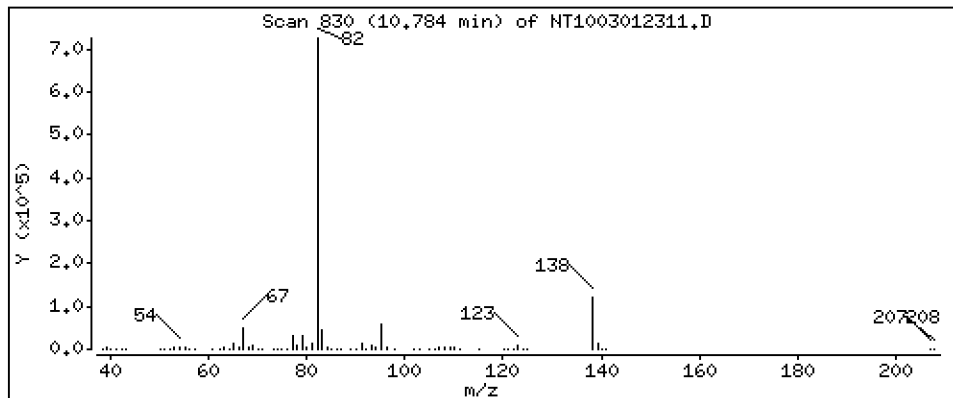
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 7,672 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

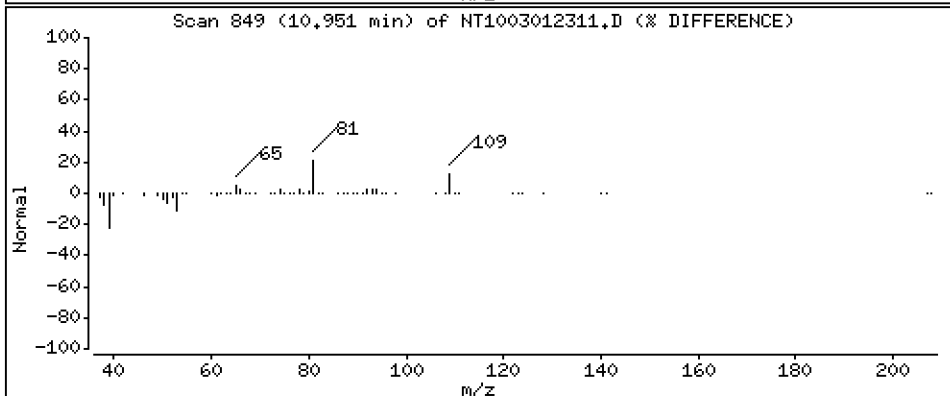
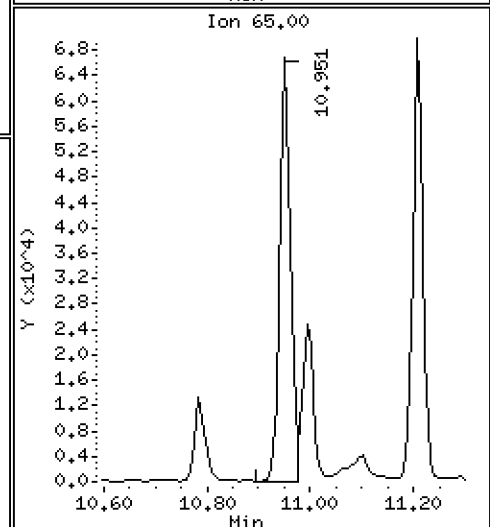
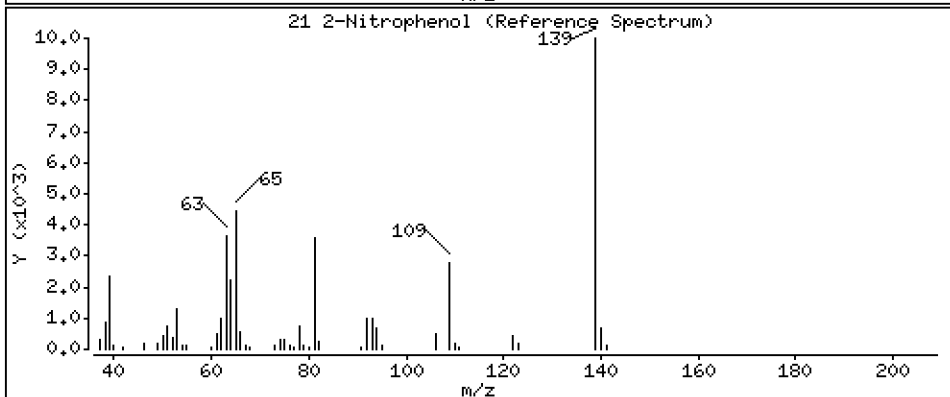
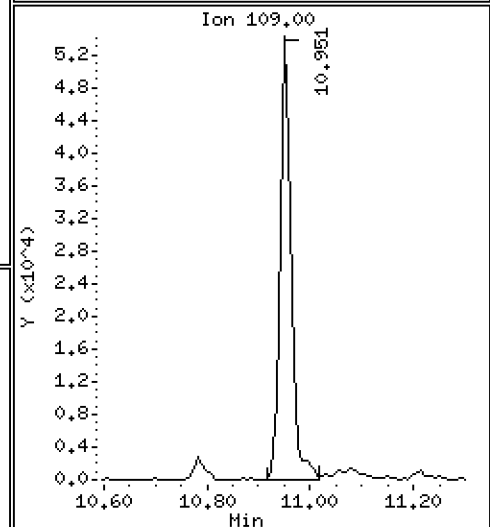
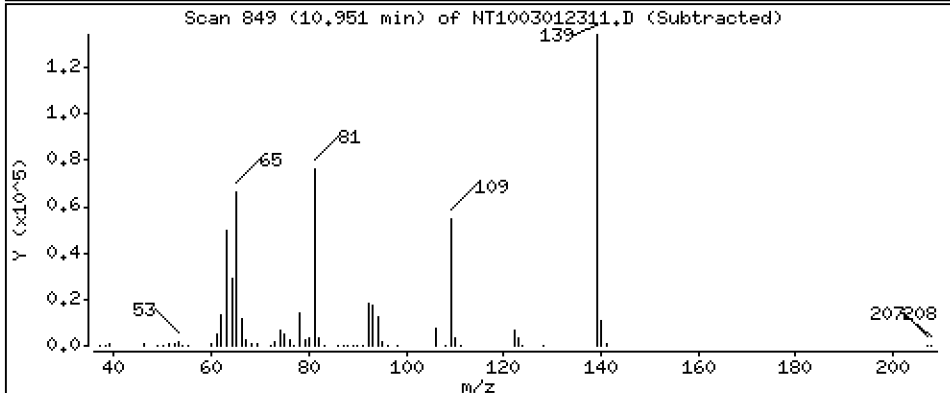
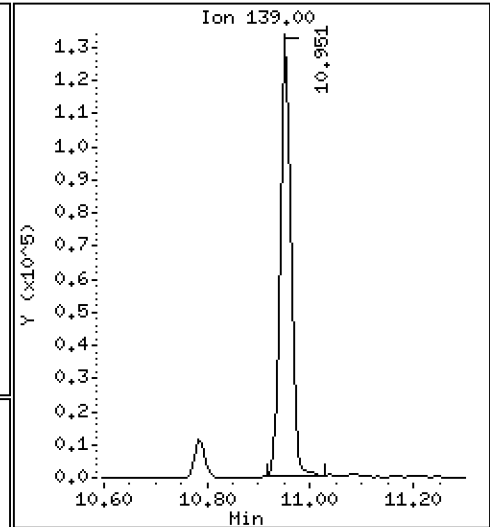
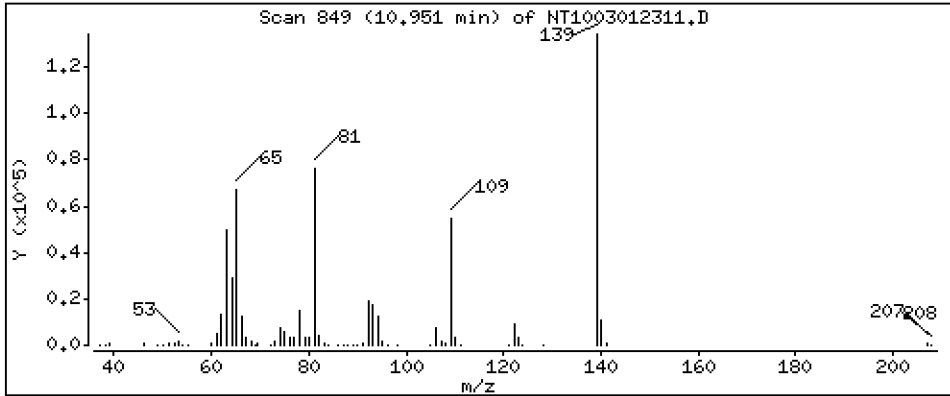
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,244 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

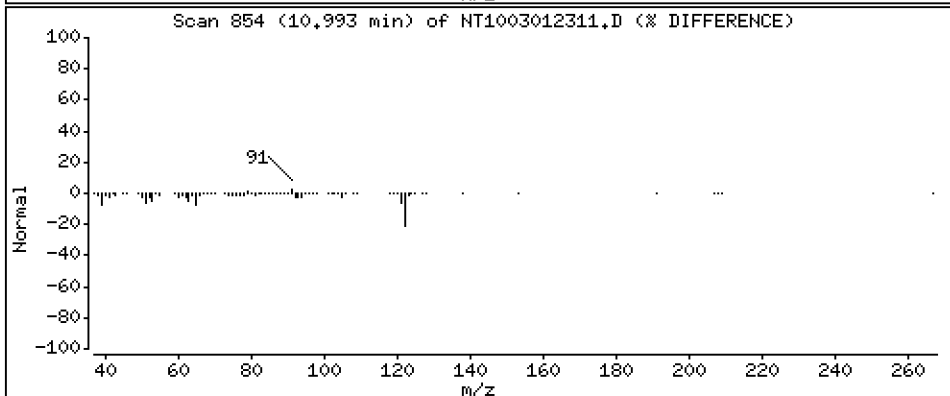
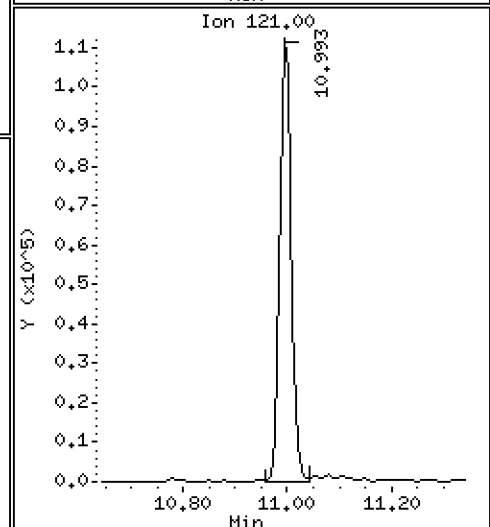
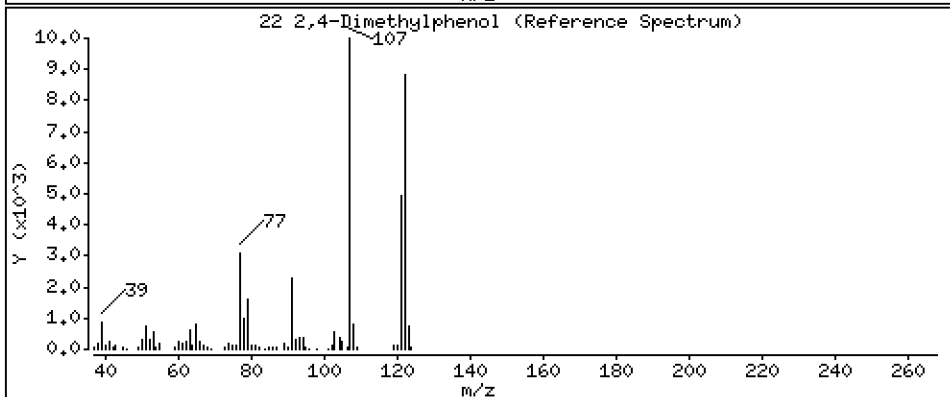
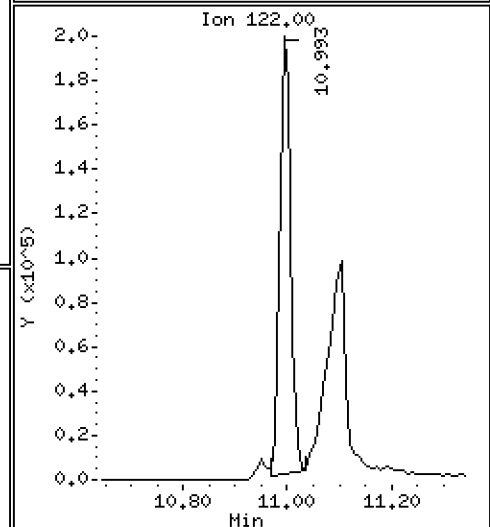
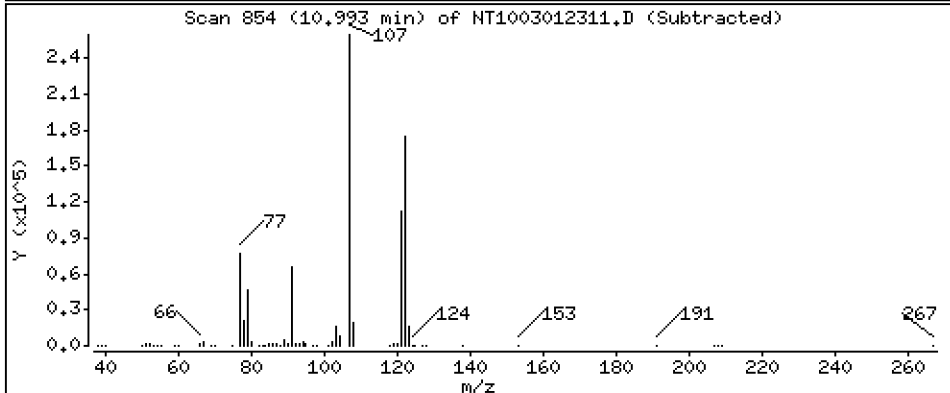
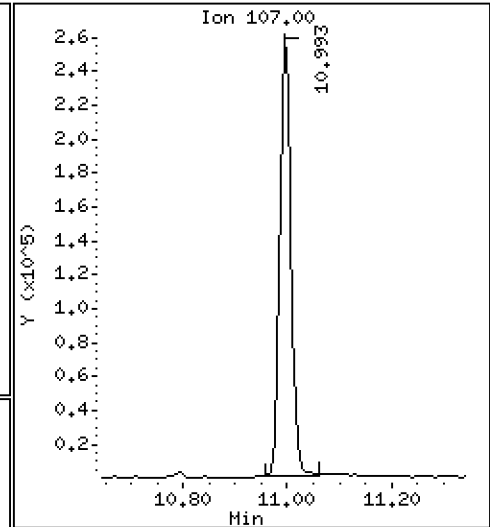
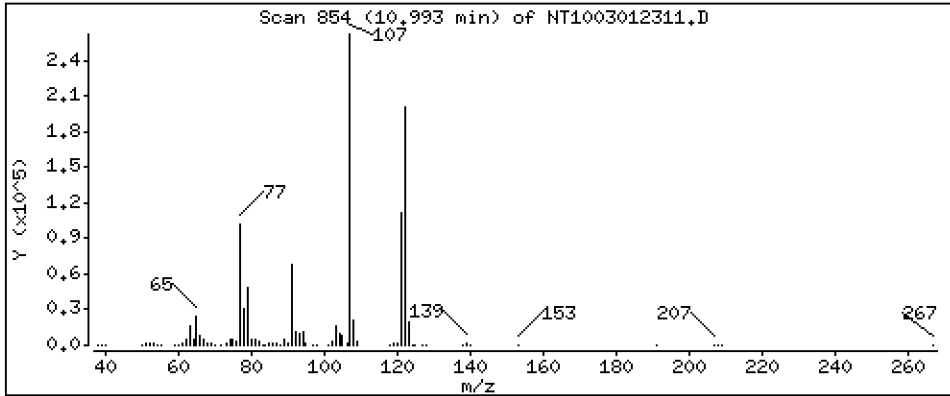
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,507 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

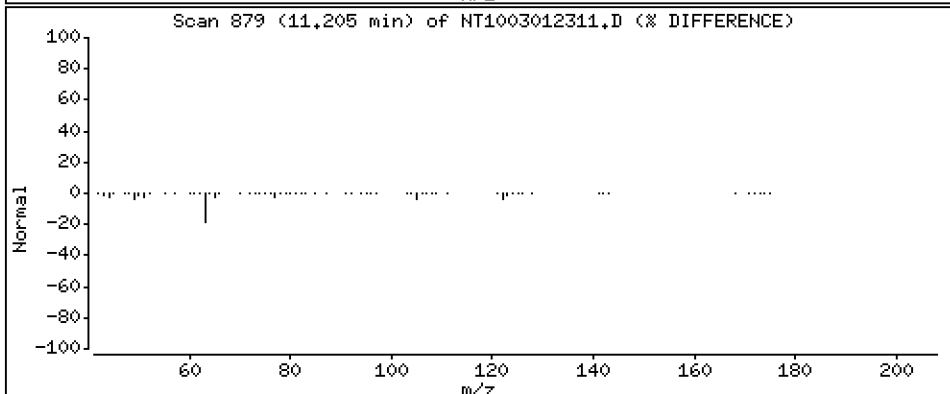
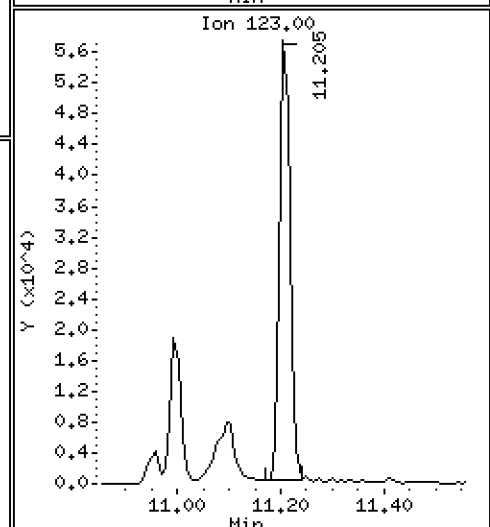
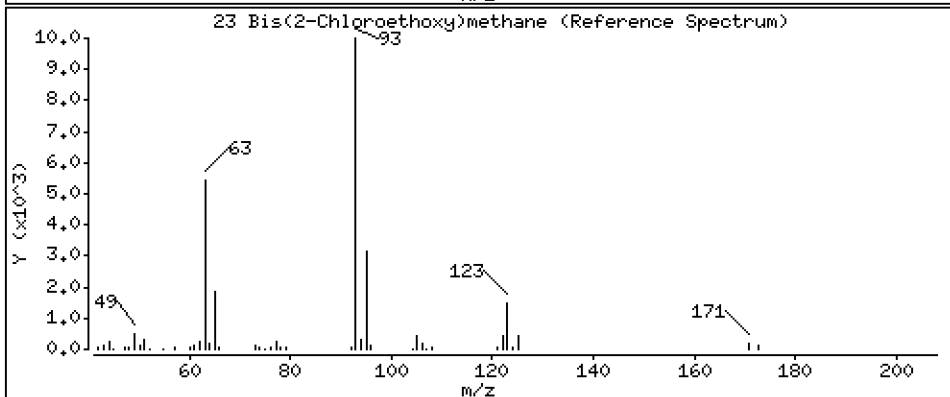
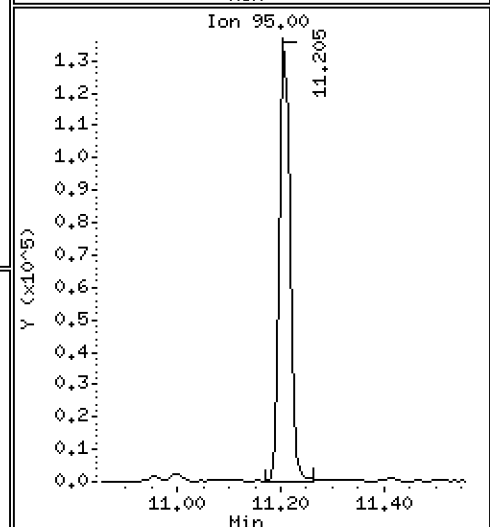
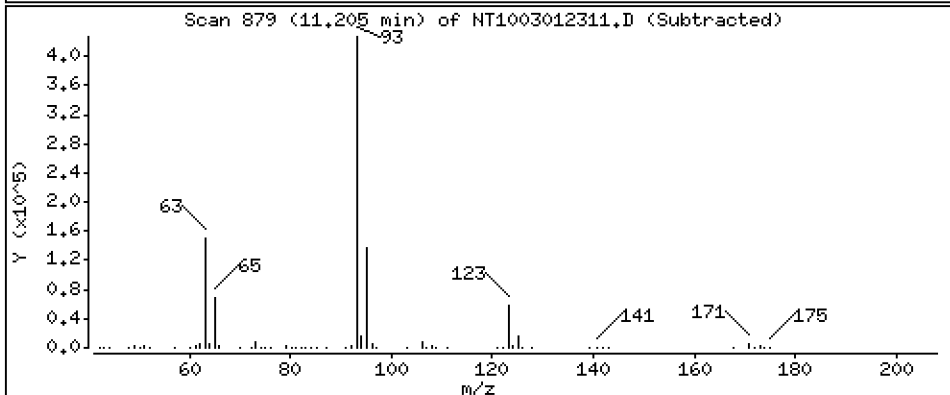
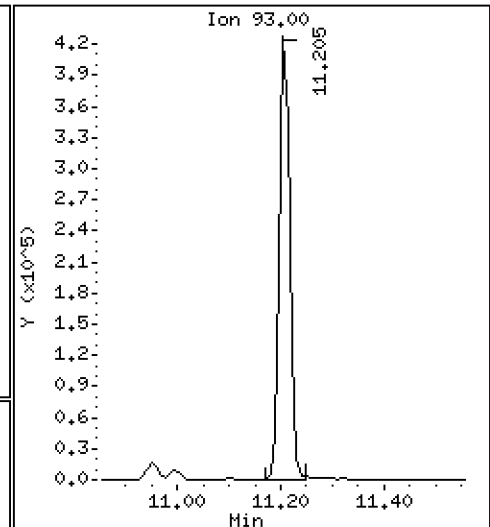
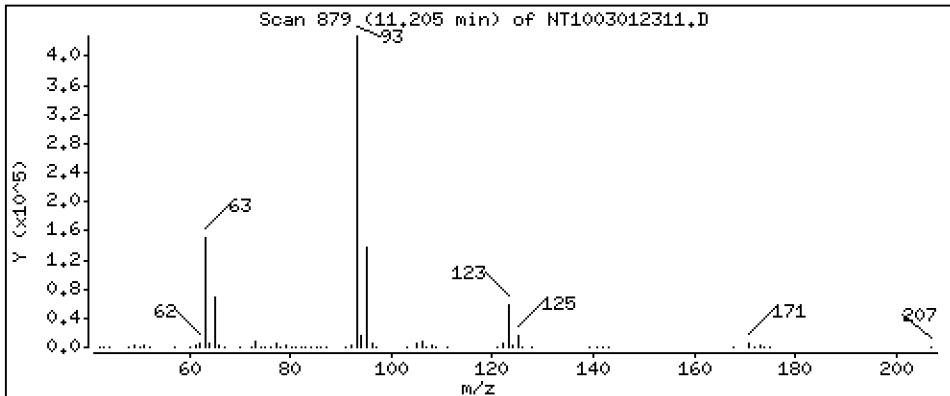
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 6,727 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

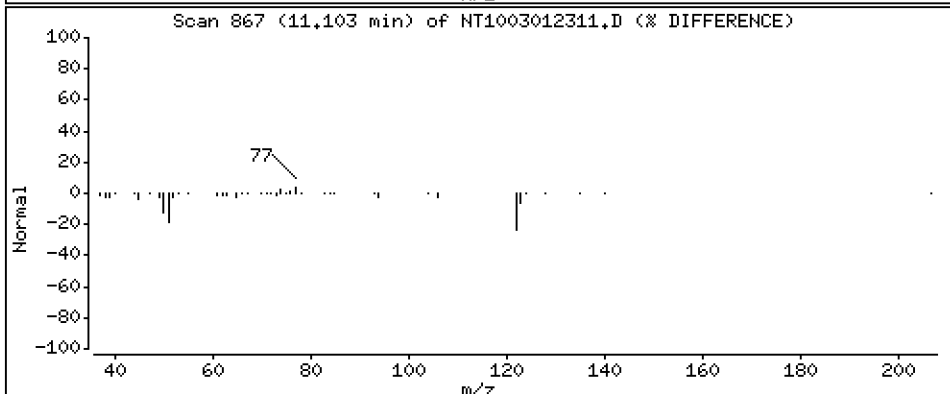
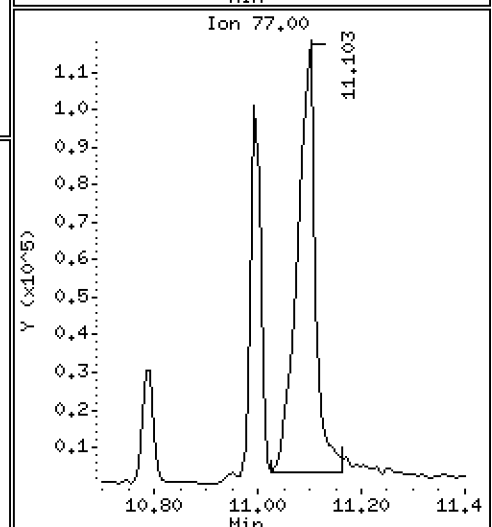
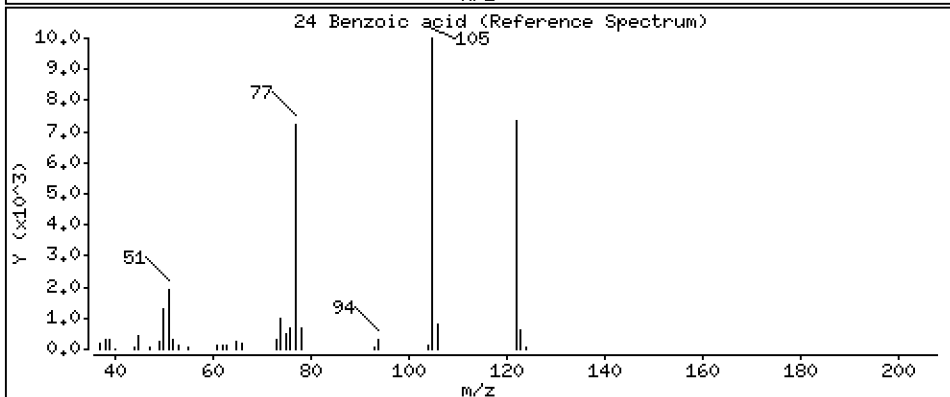
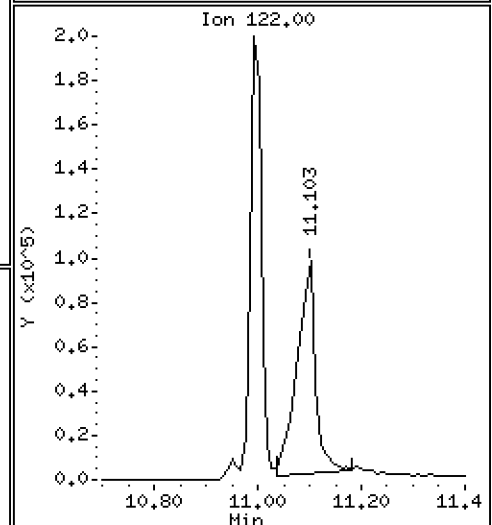
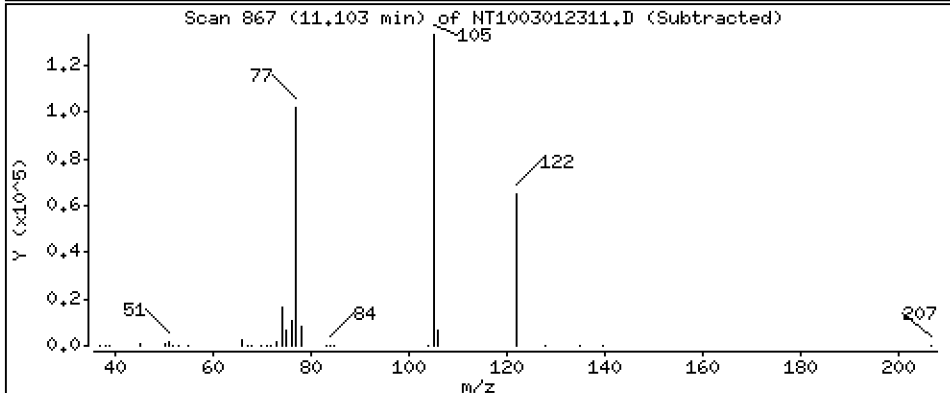
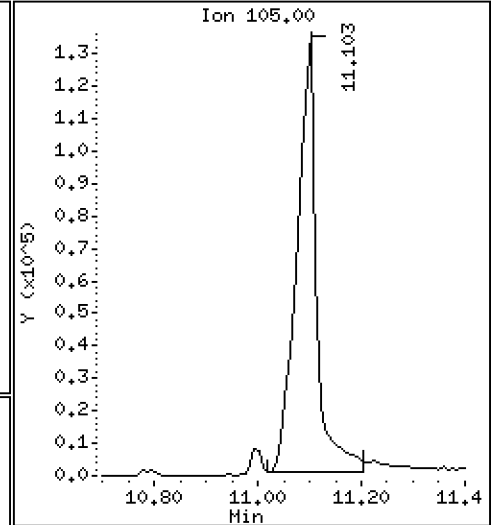
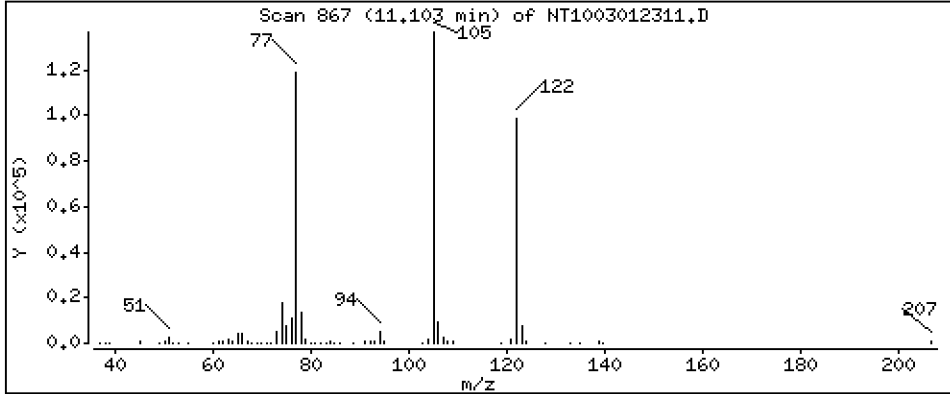
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 5,635 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

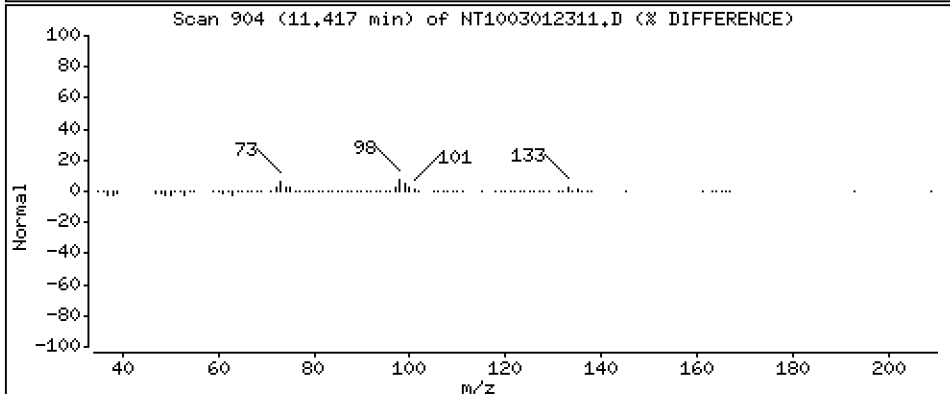
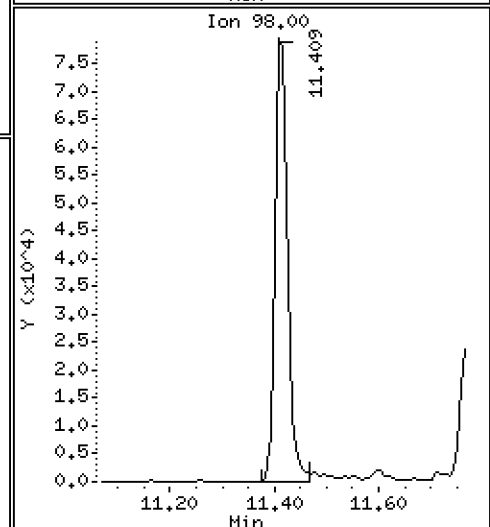
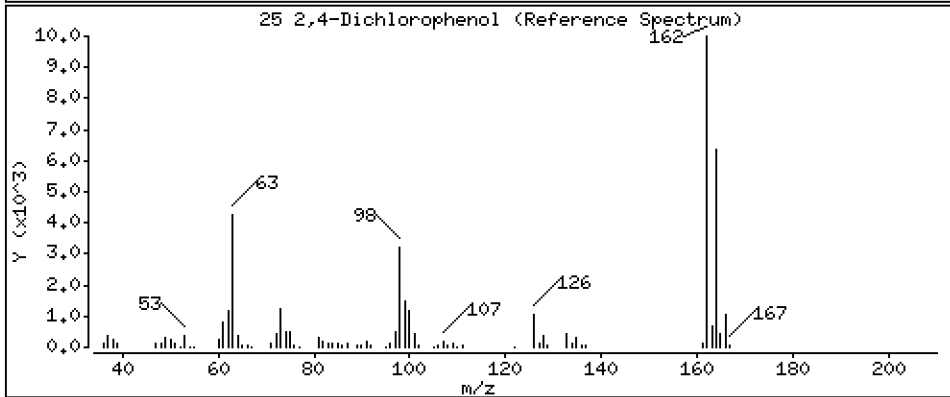
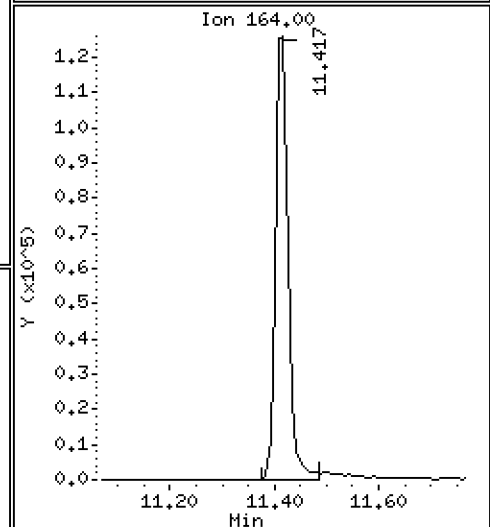
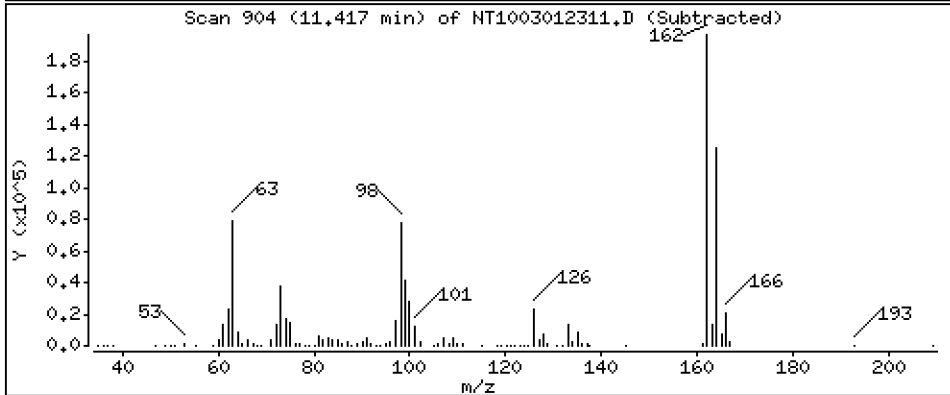
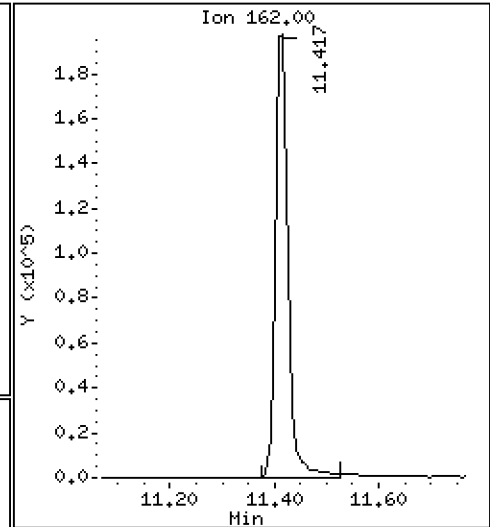
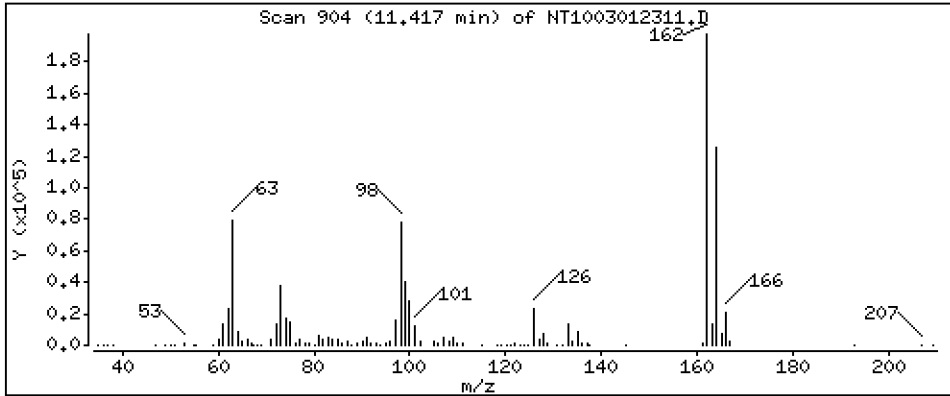
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,437 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

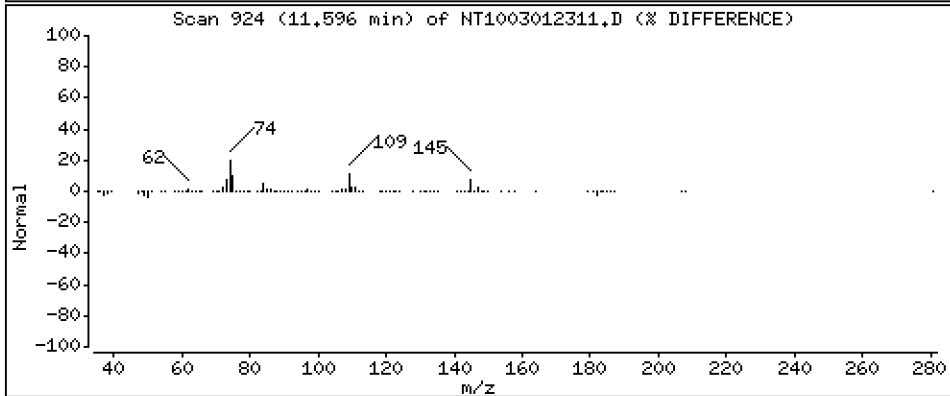
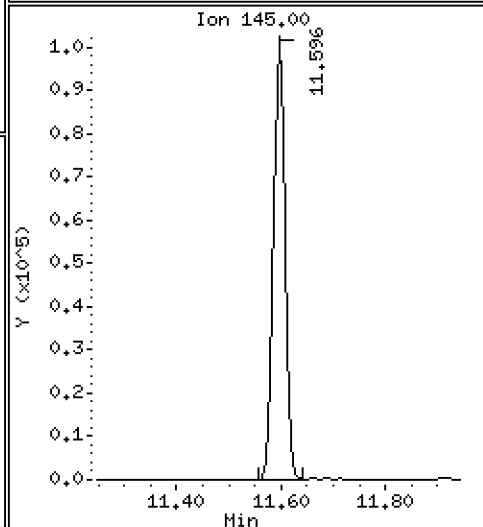
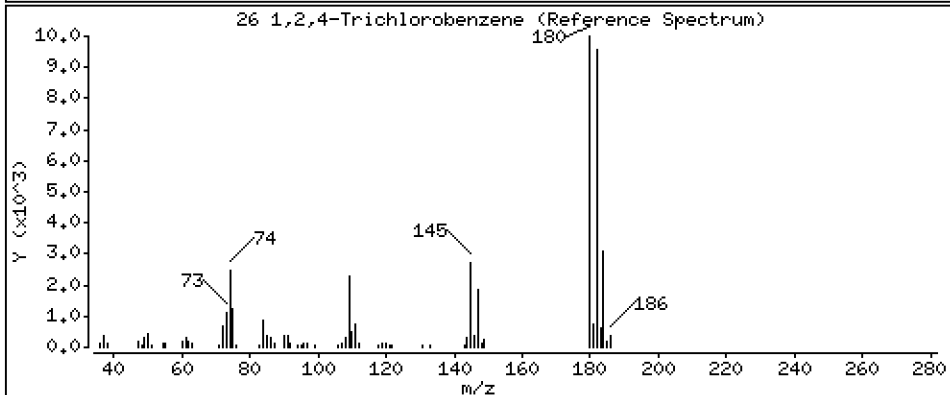
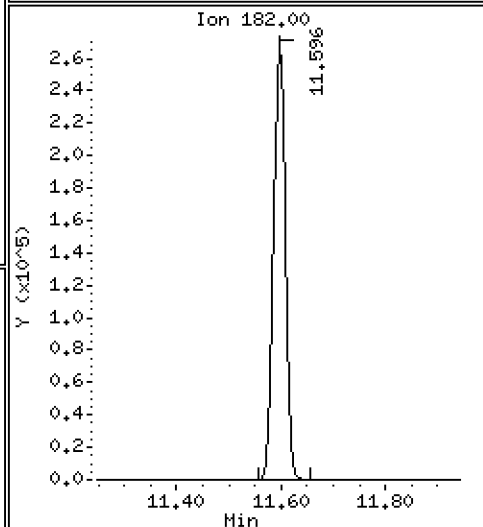
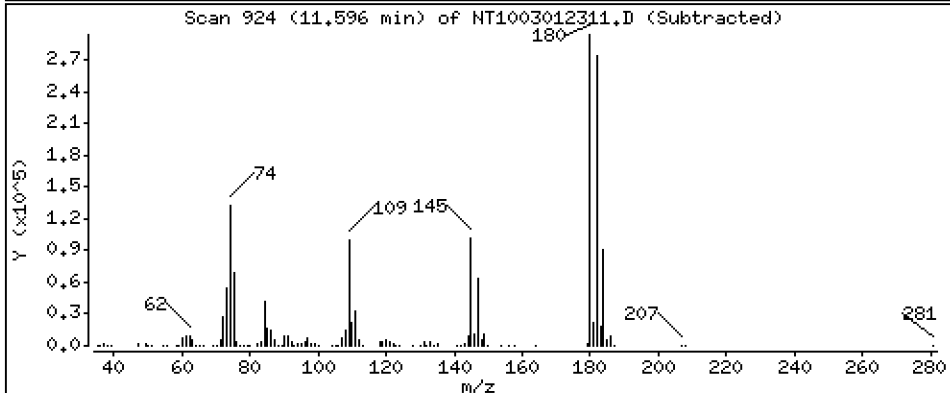
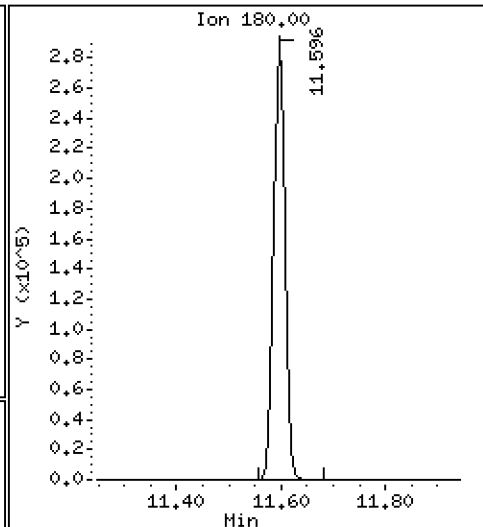
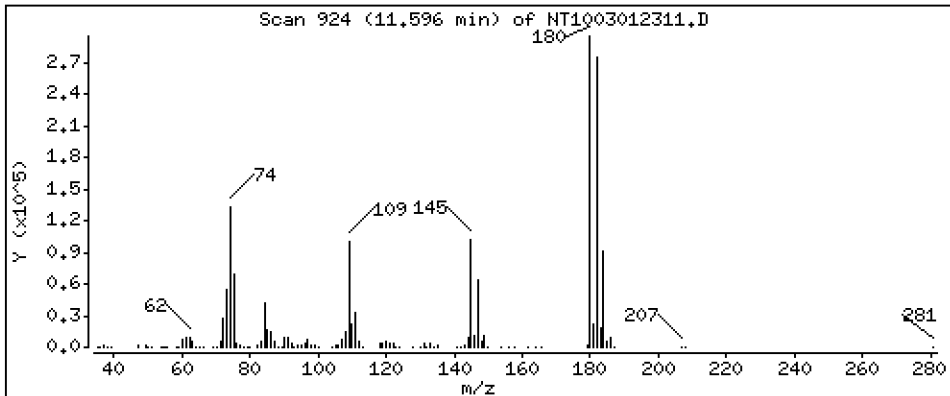
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,908 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

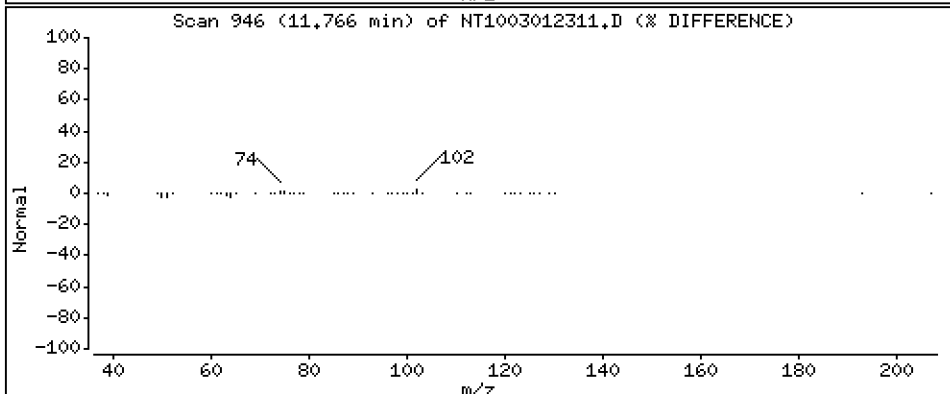
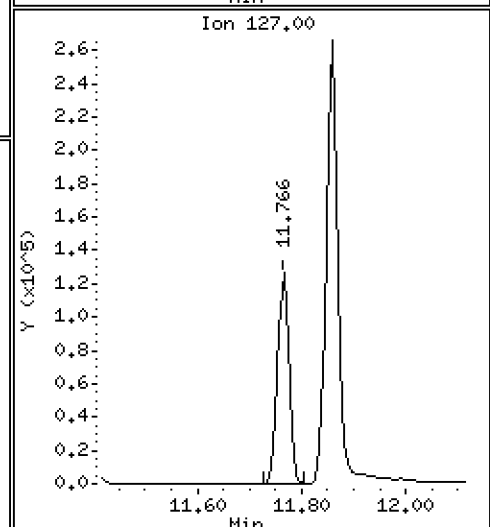
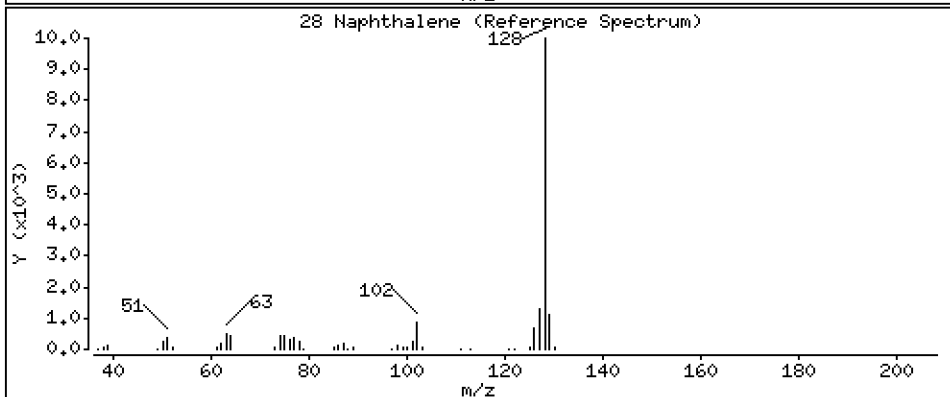
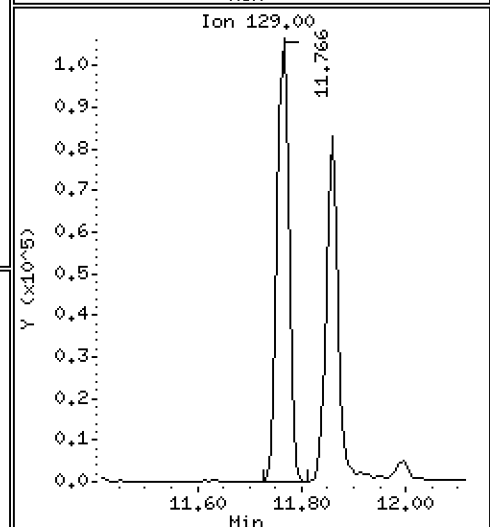
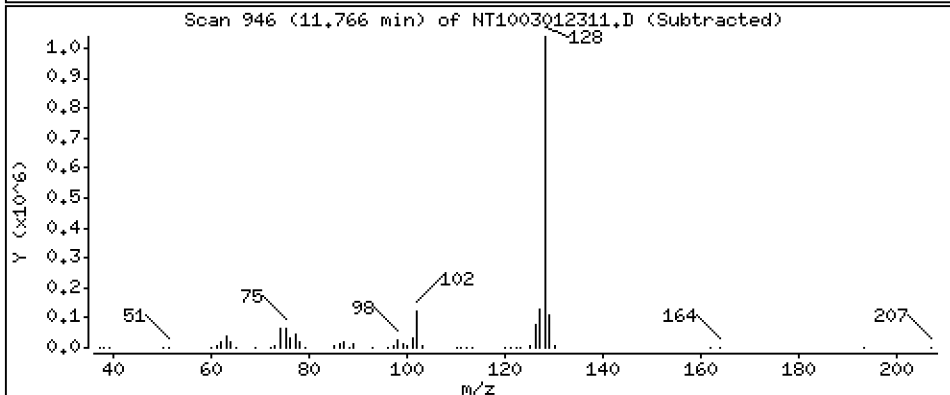
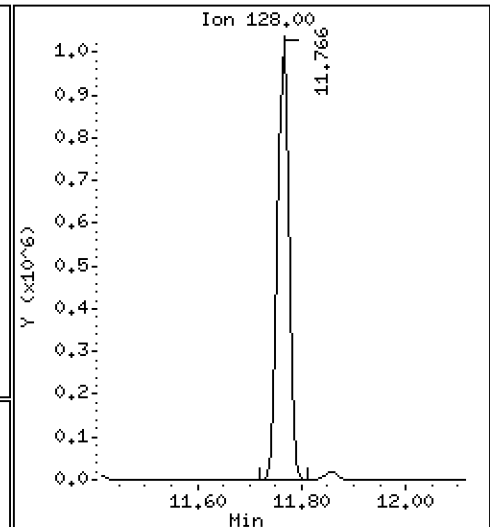
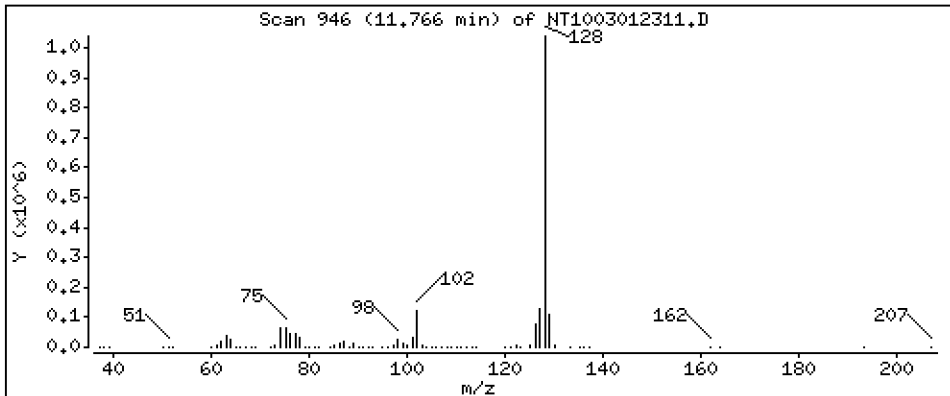
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 5,255 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

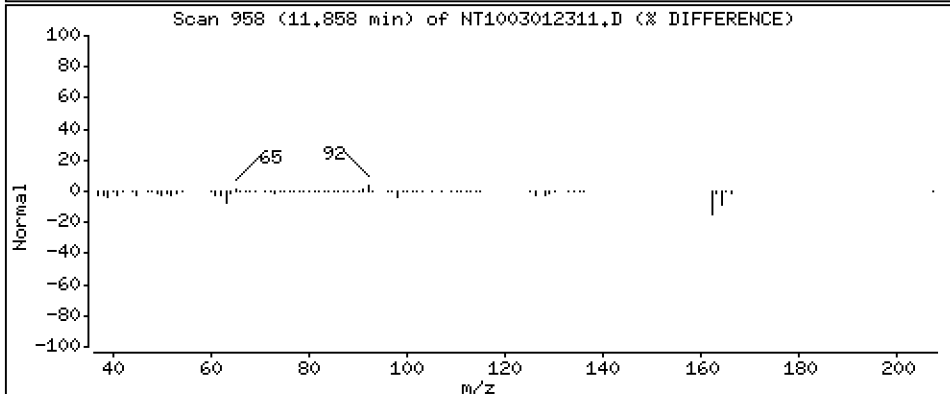
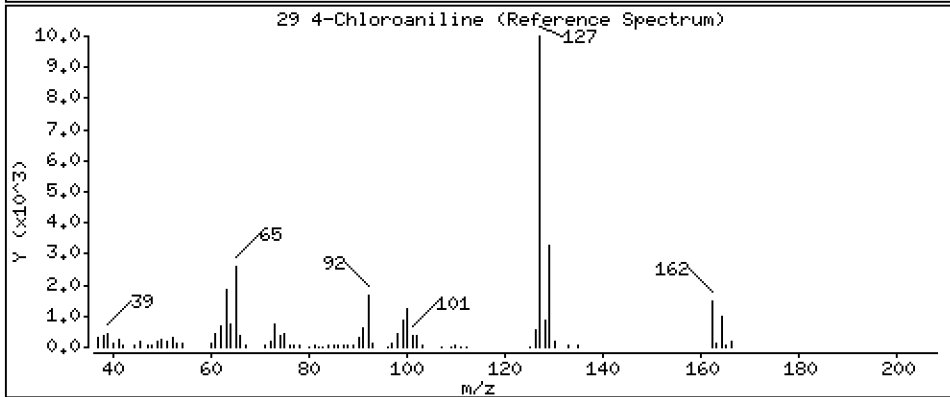
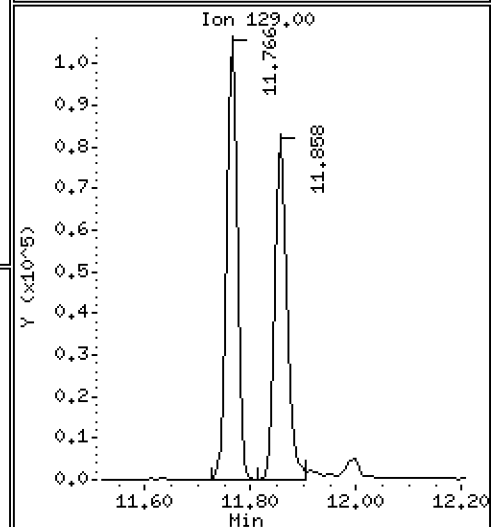
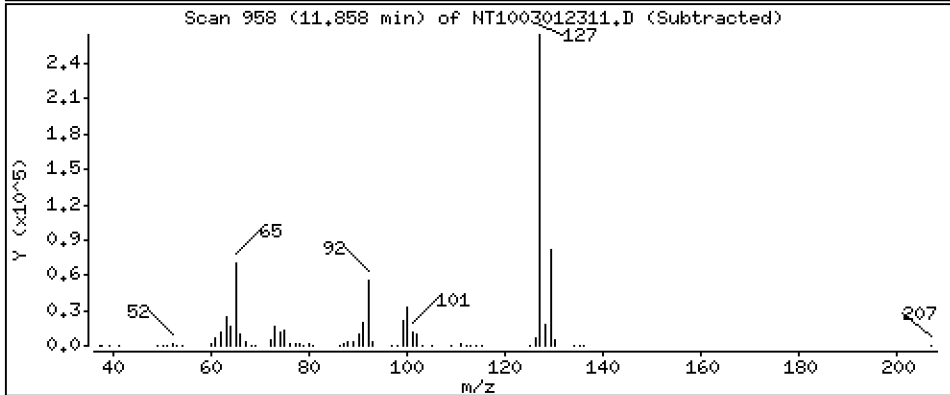
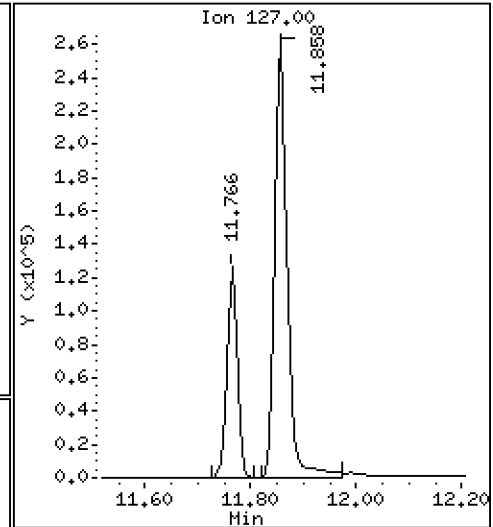
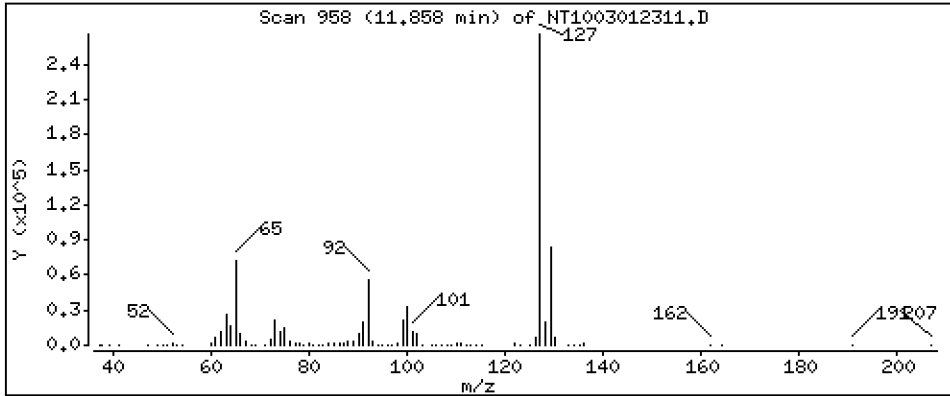
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 3,791 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

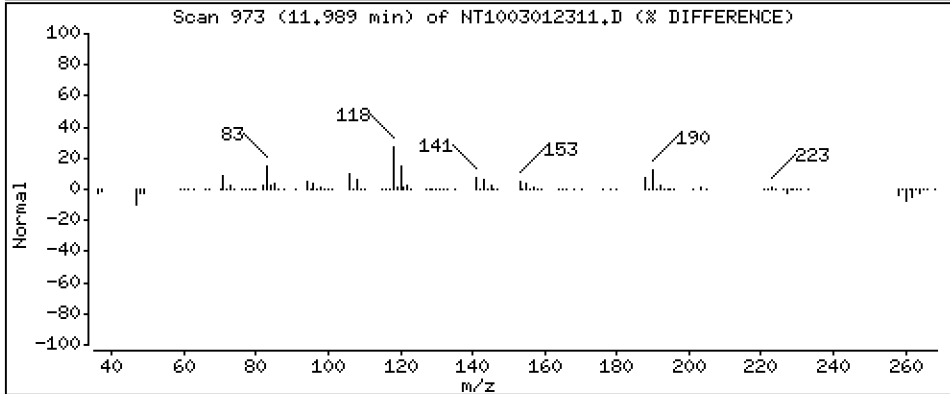
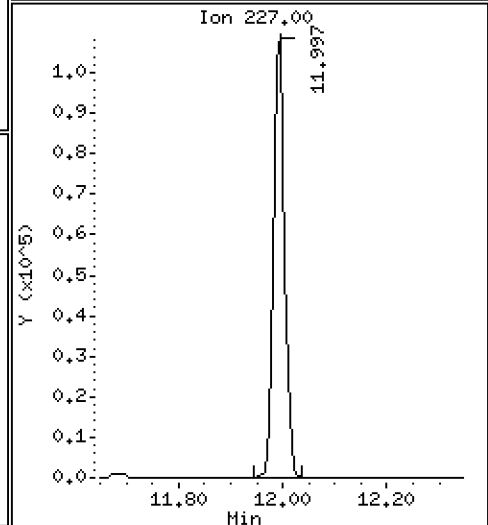
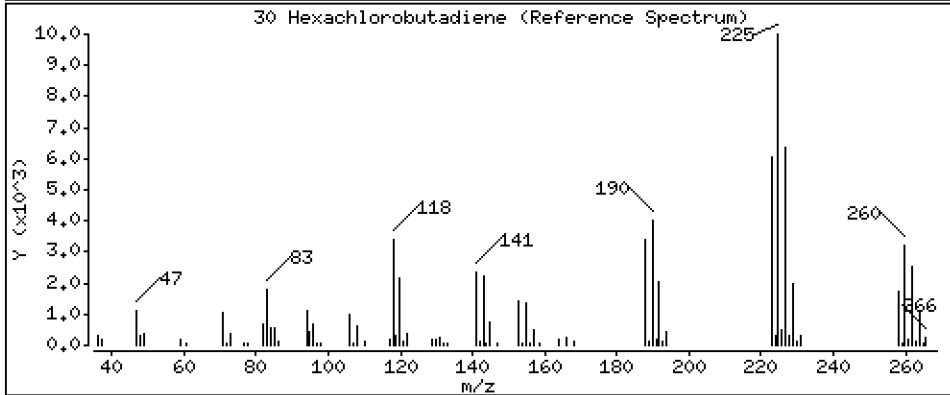
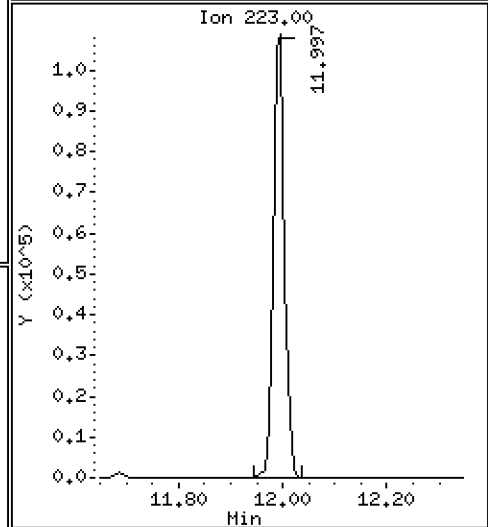
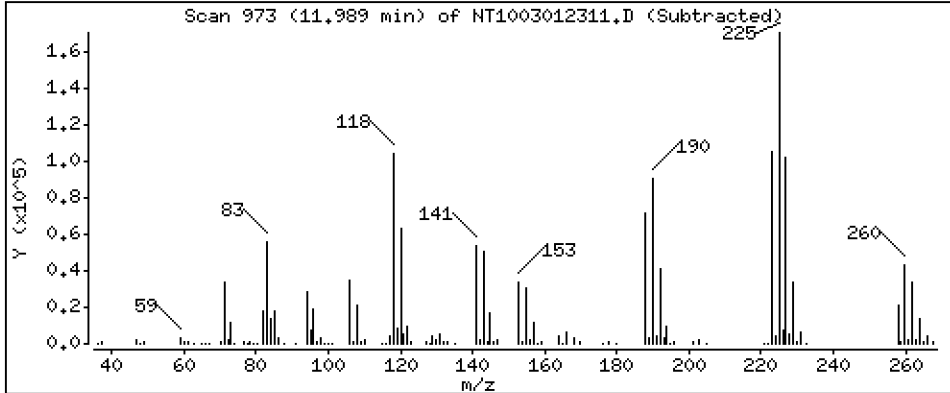
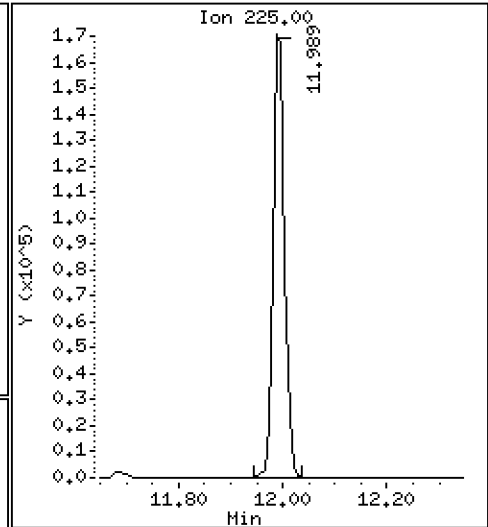
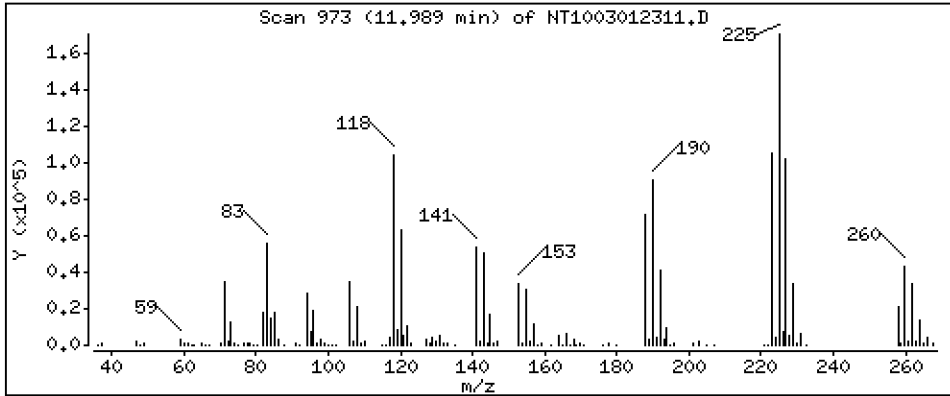
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,014 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

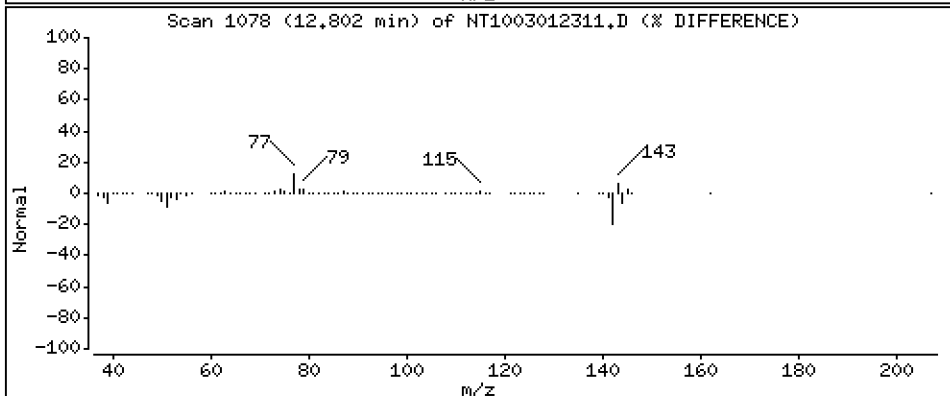
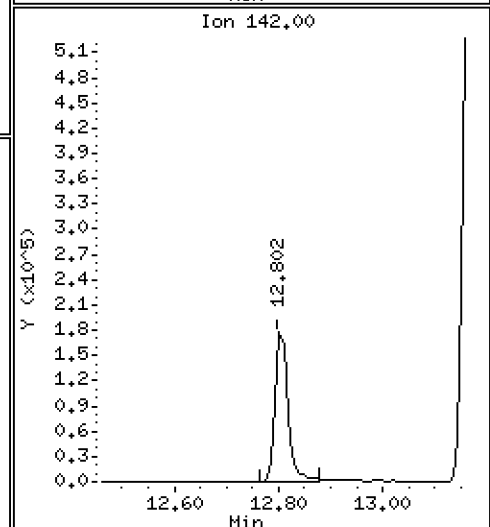
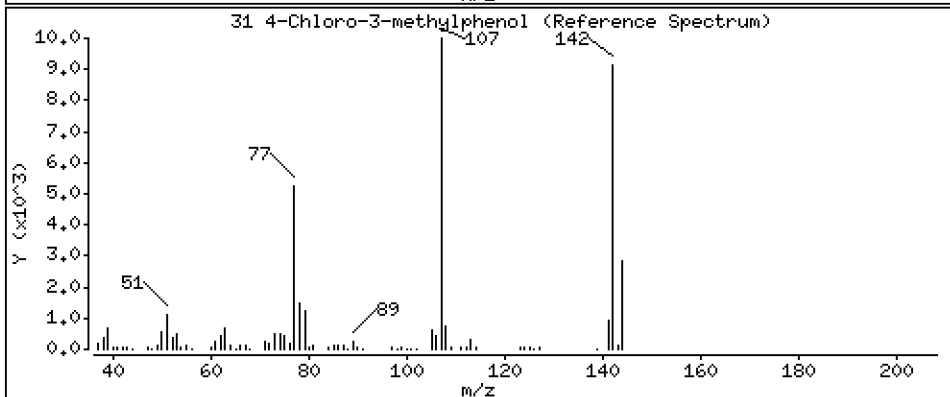
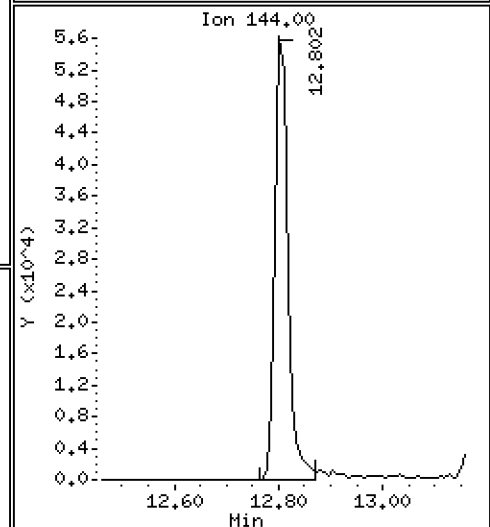
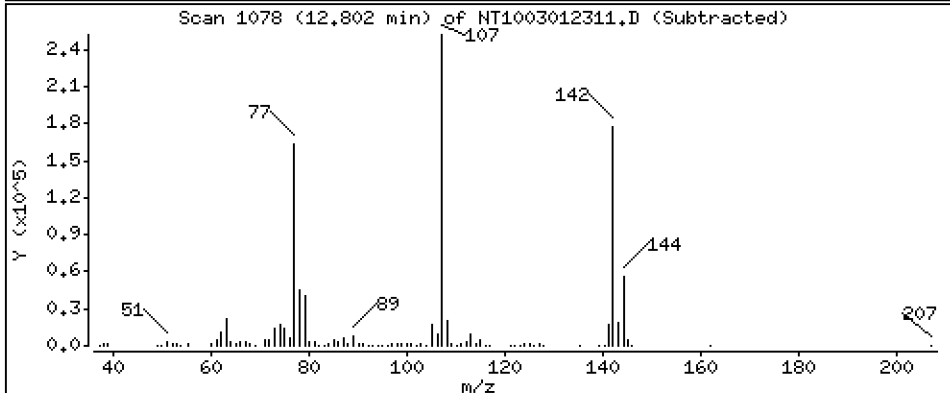
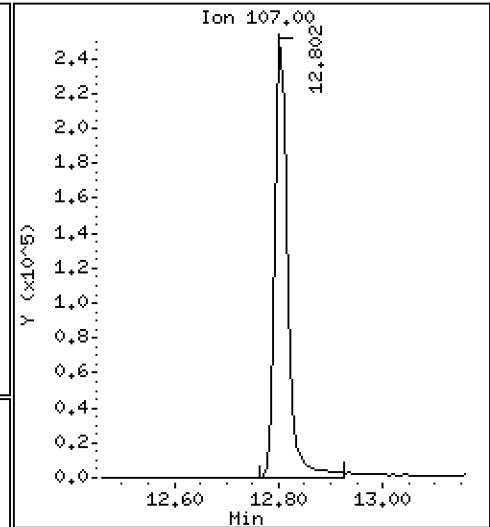
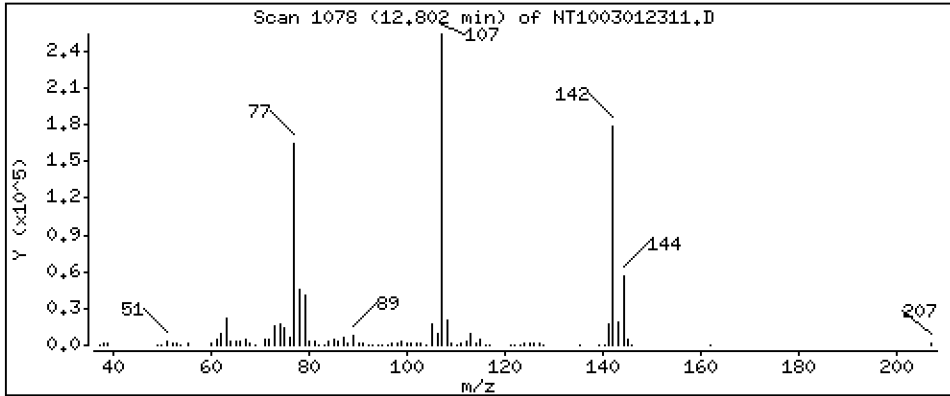
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,452 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

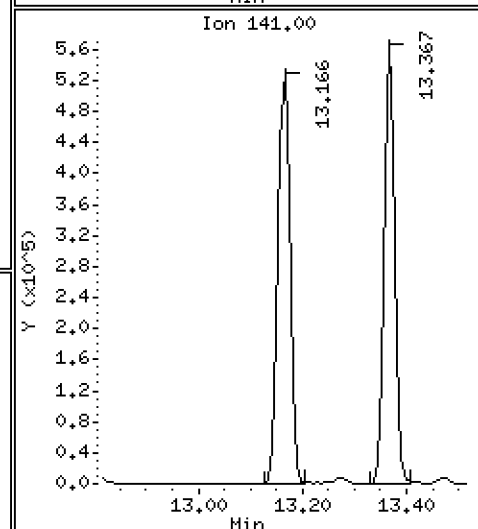
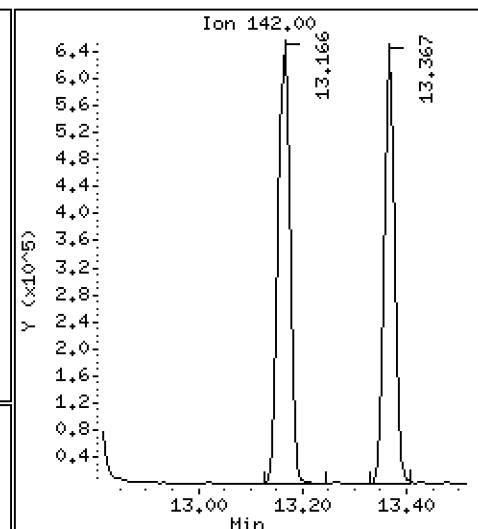
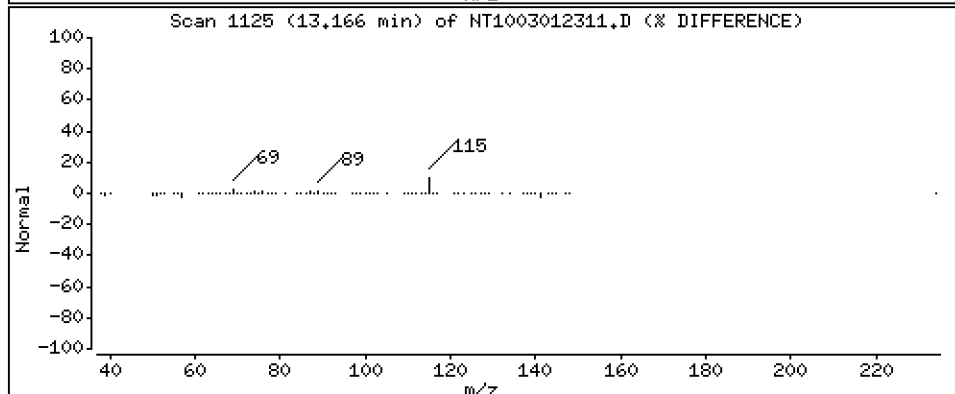
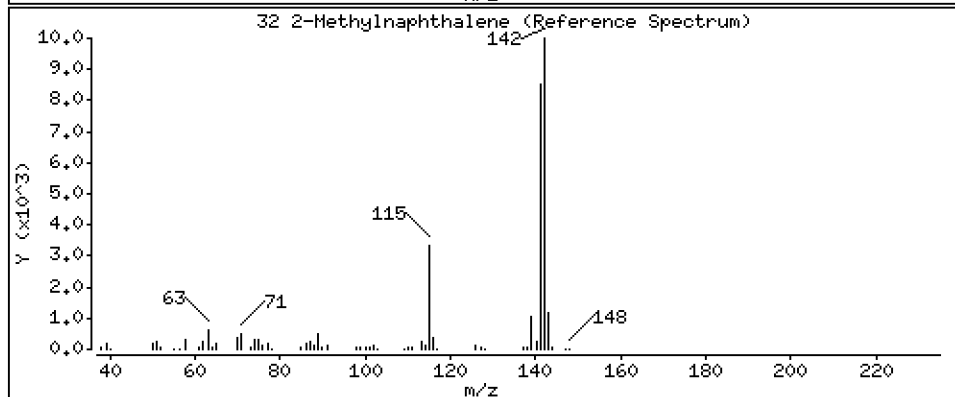
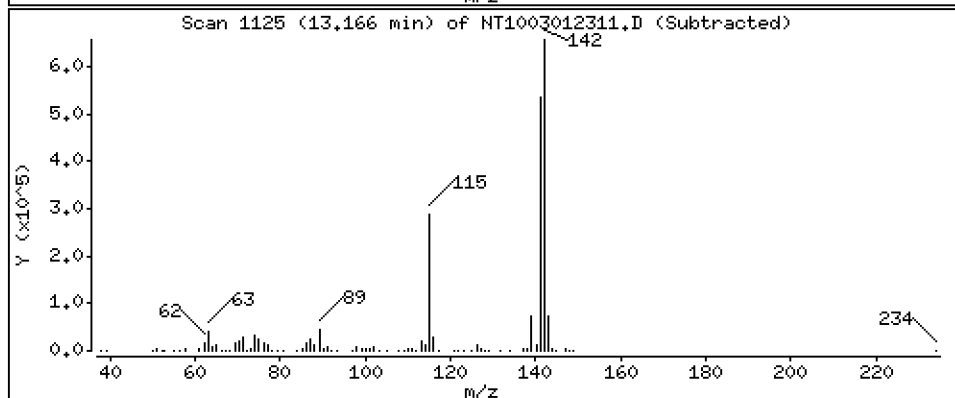
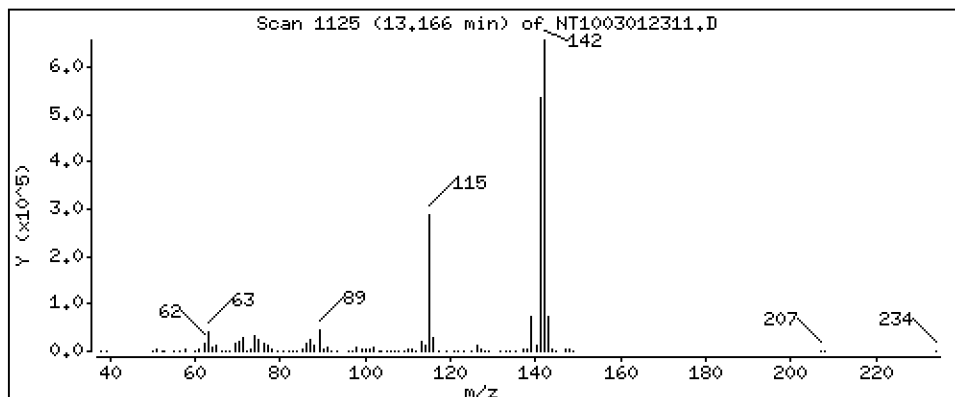
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,951 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

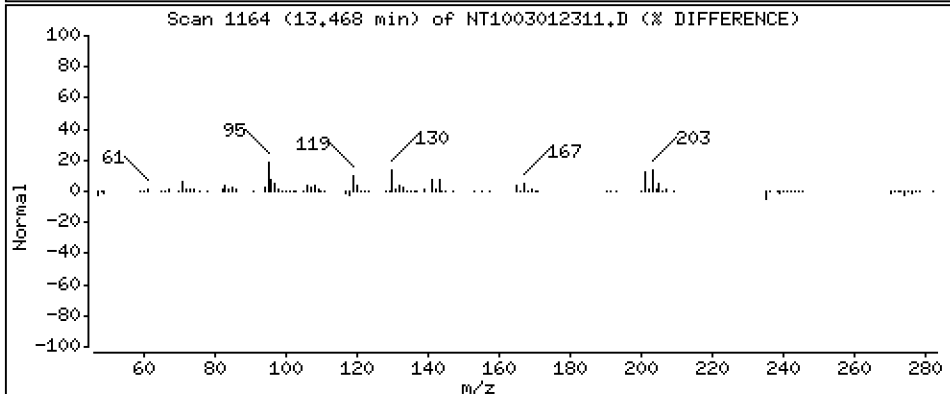
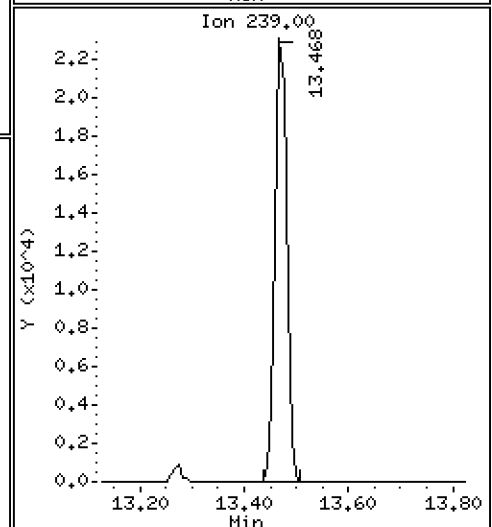
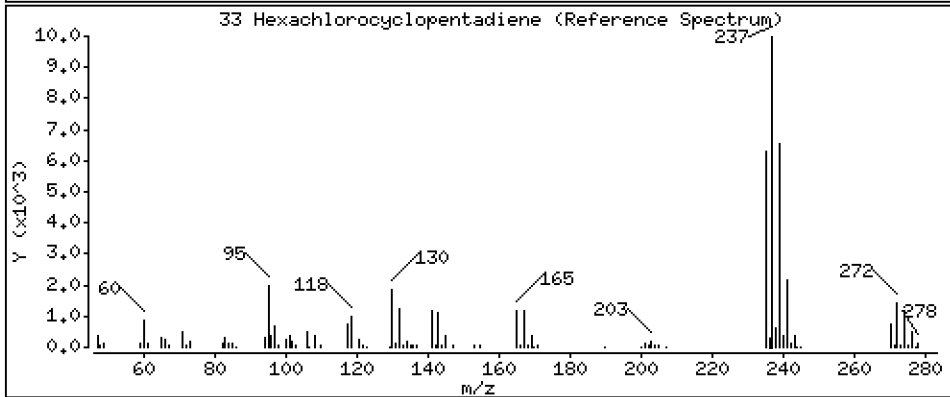
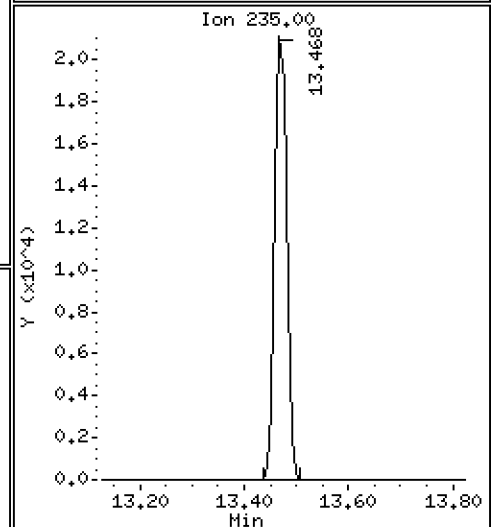
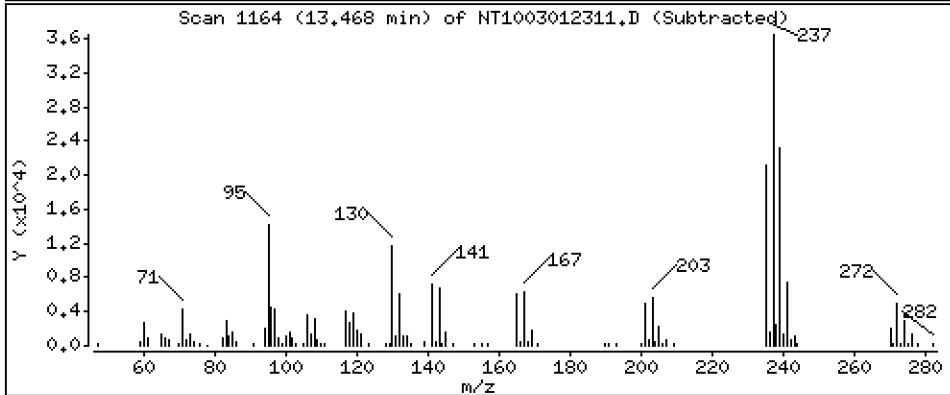
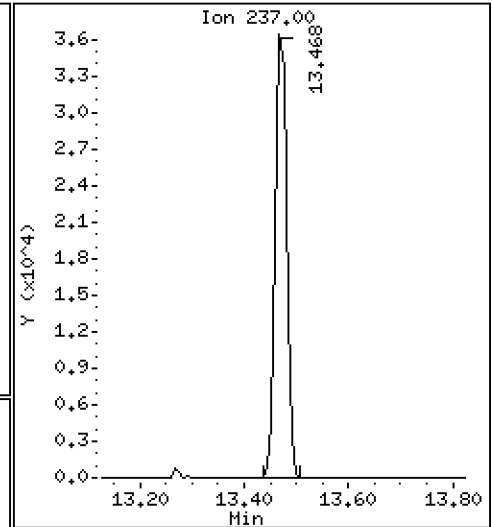
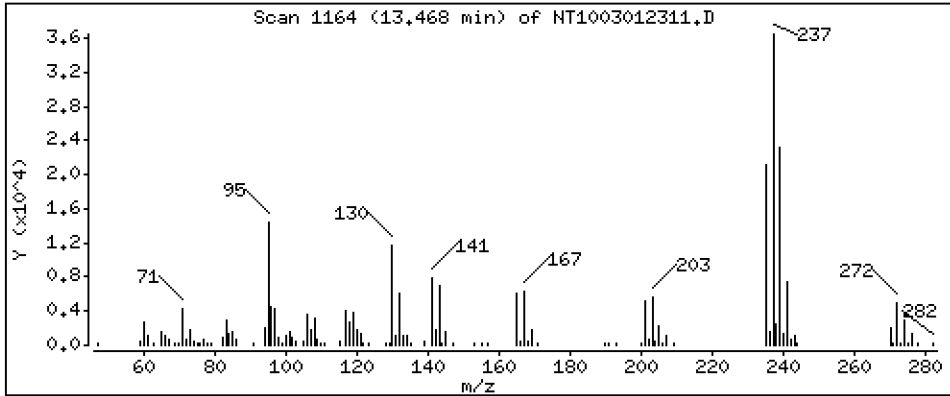
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 2,562 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

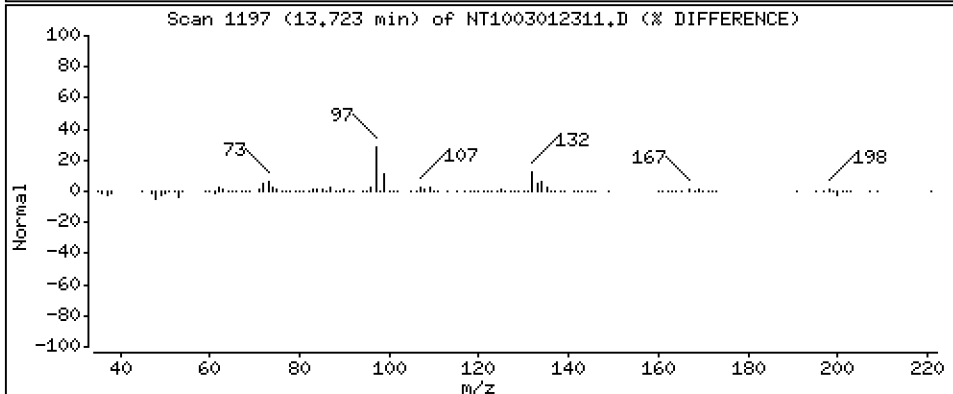
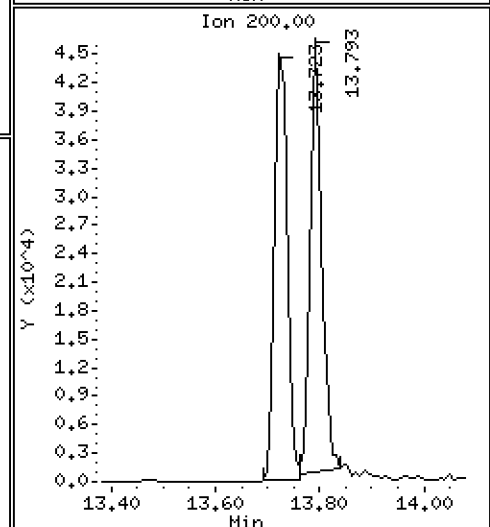
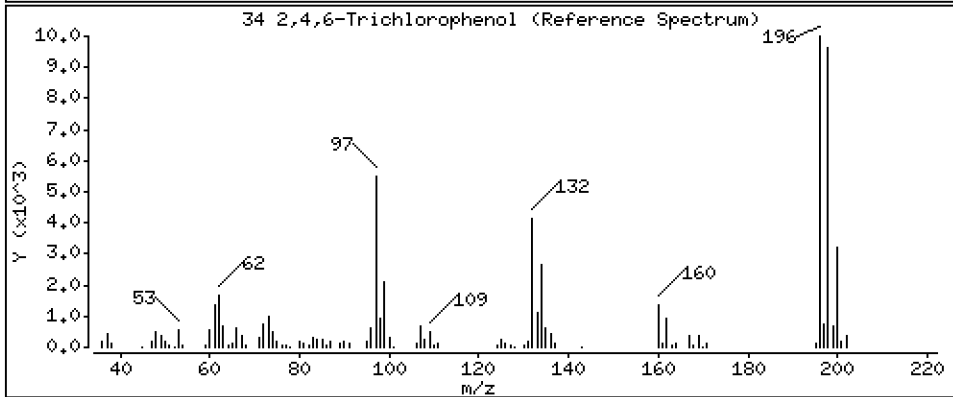
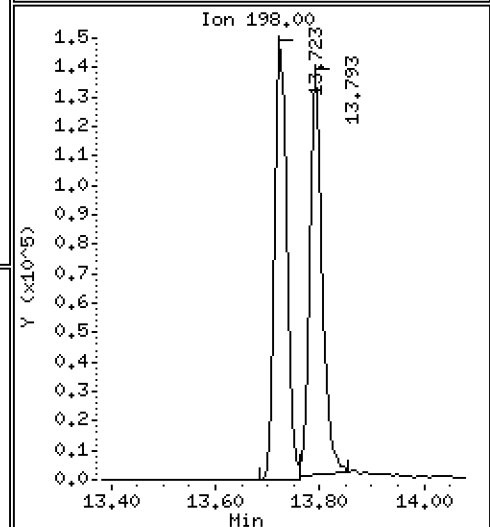
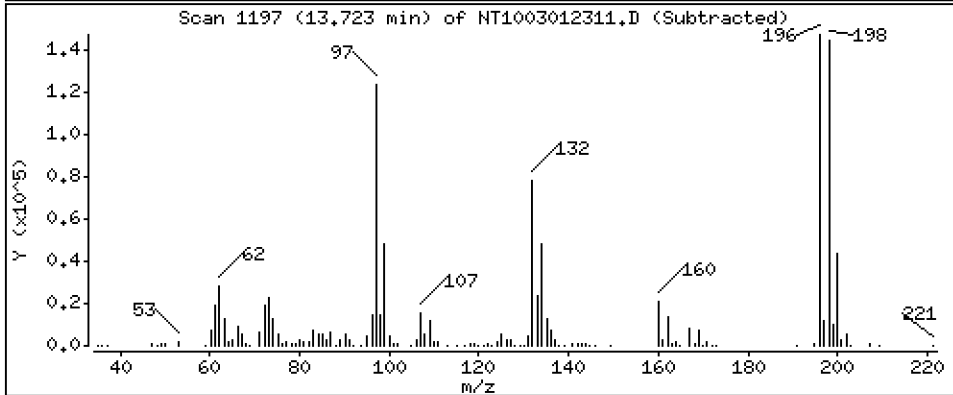
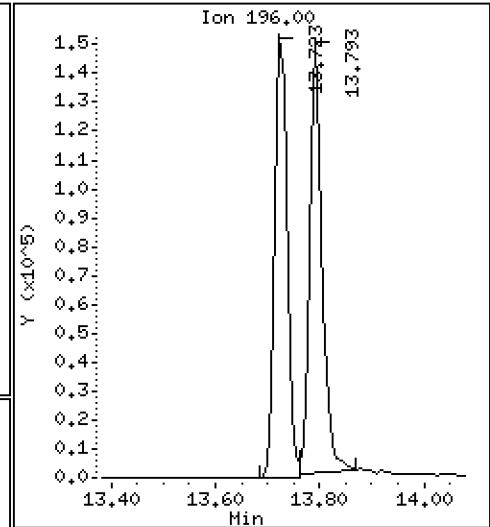
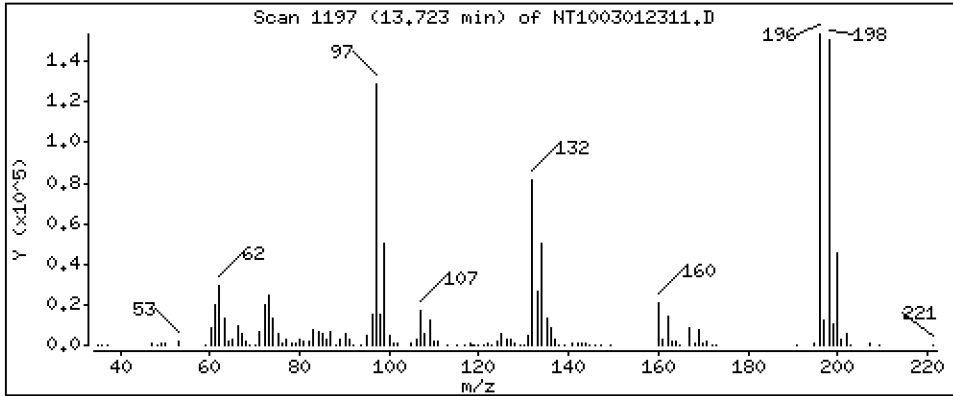
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,120 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

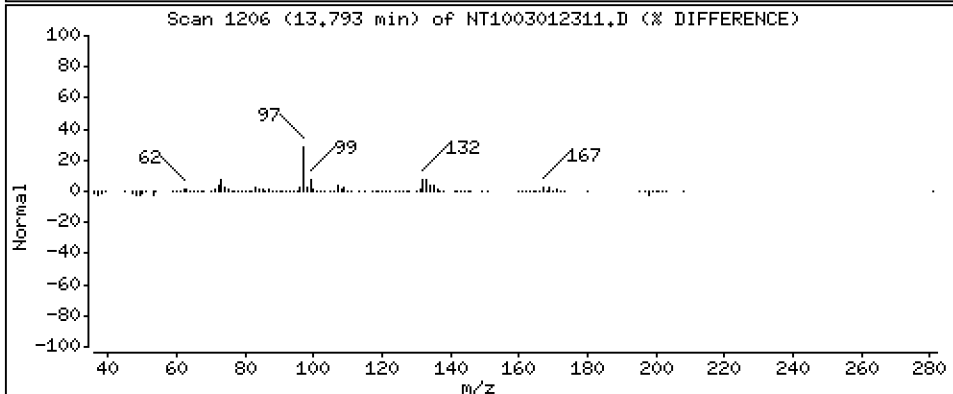
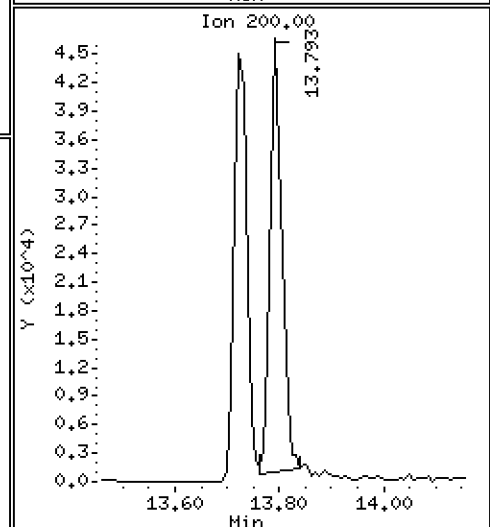
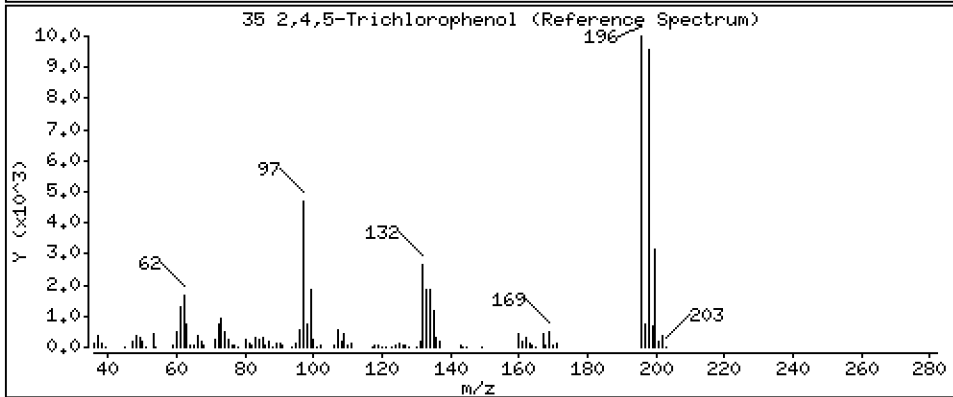
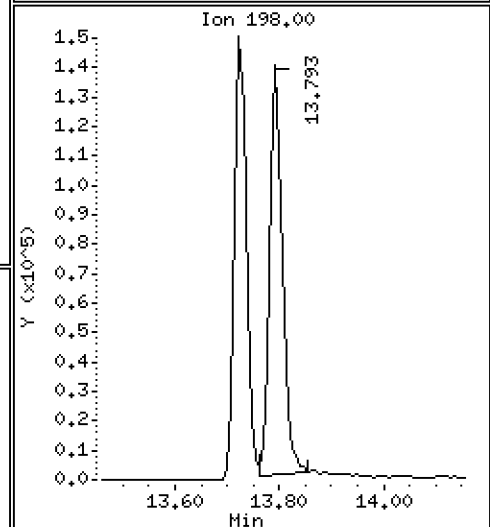
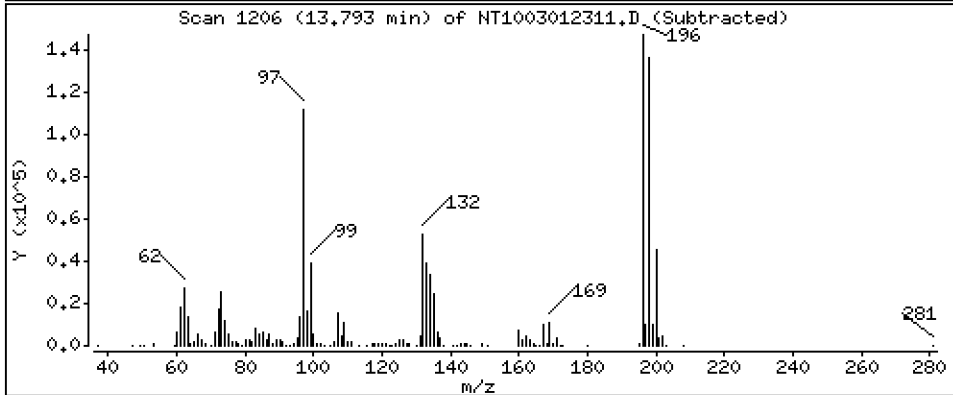
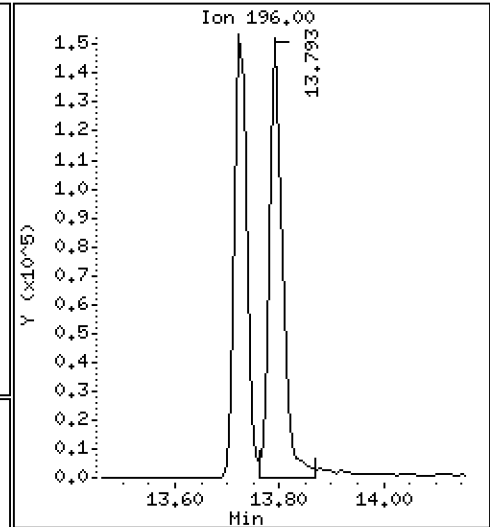
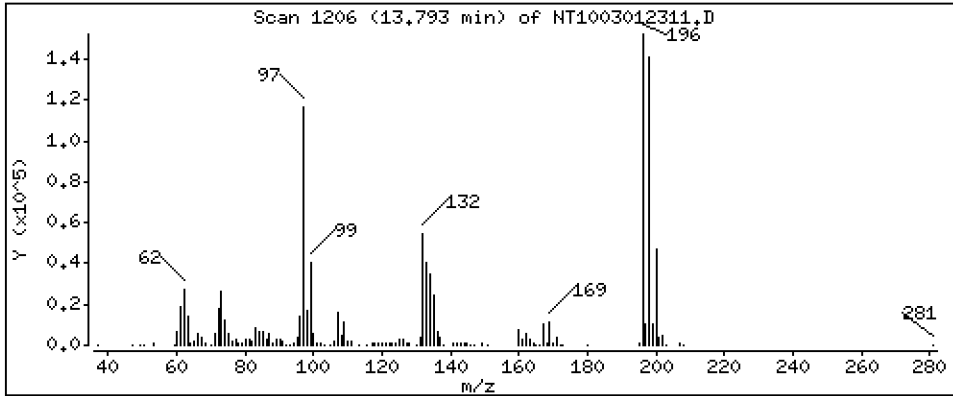
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,149 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

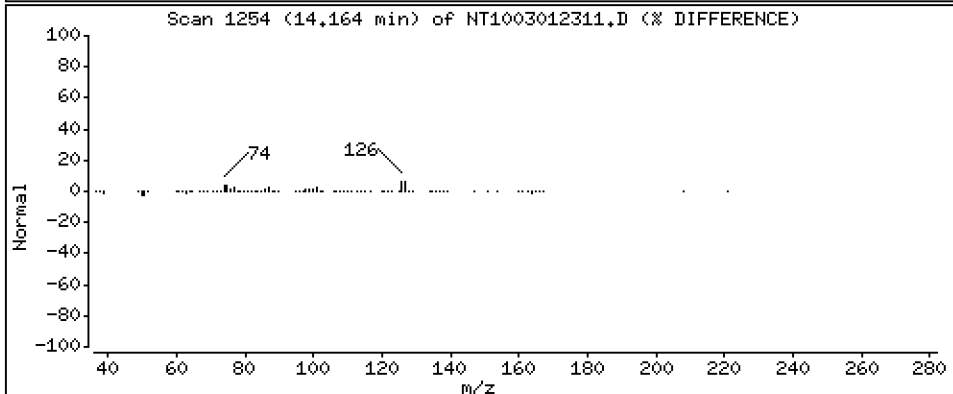
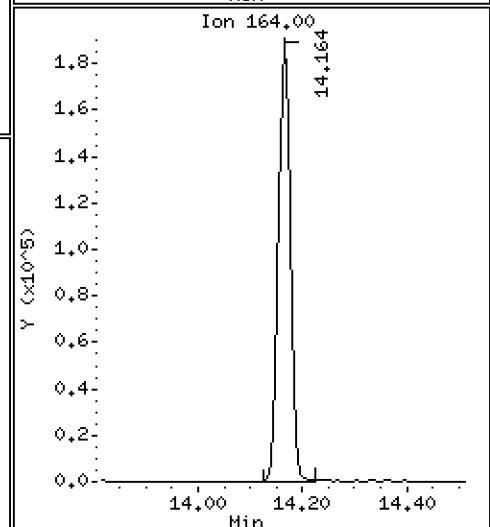
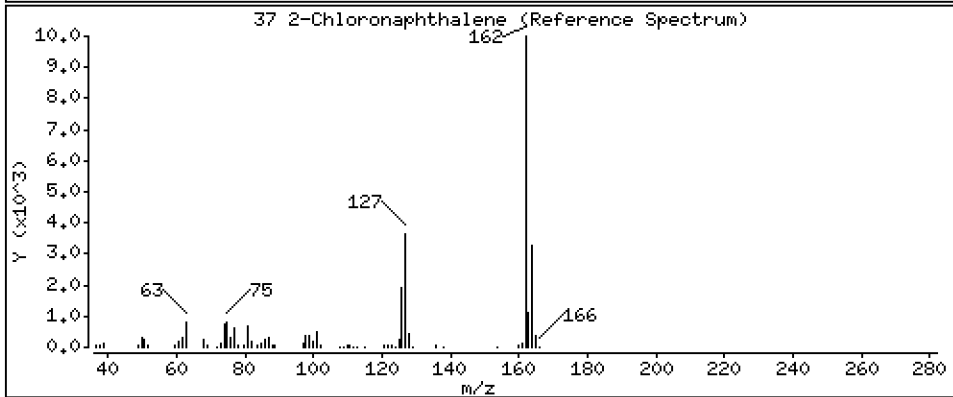
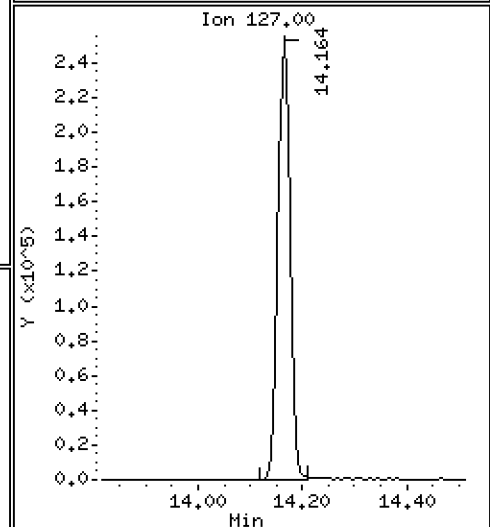
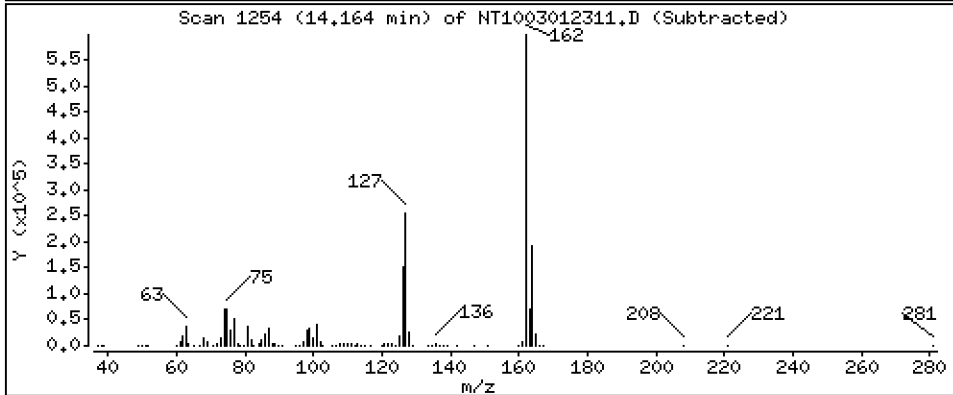
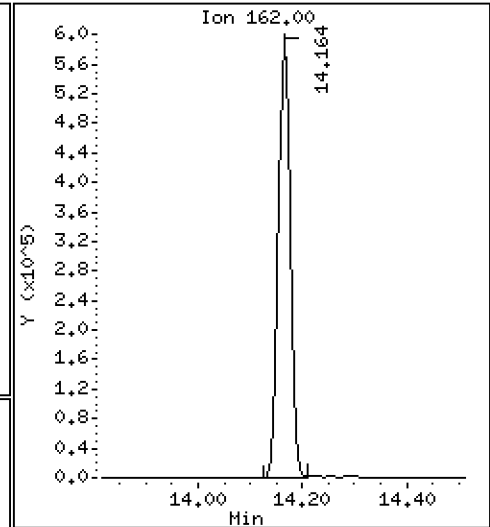
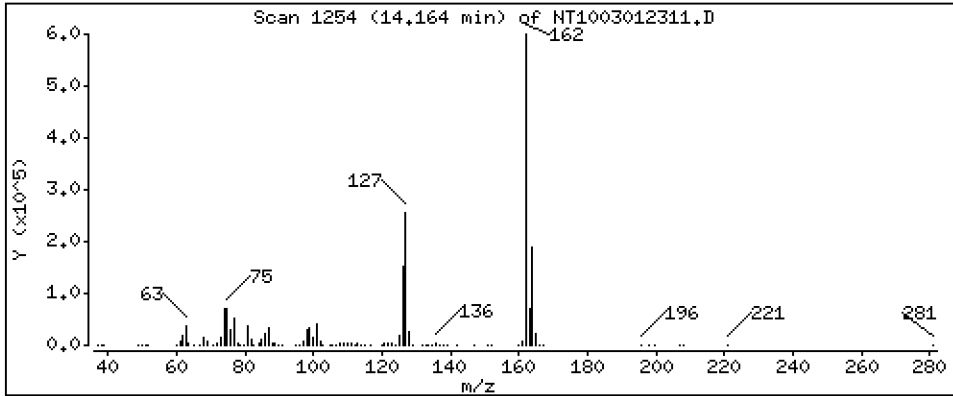
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,264 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

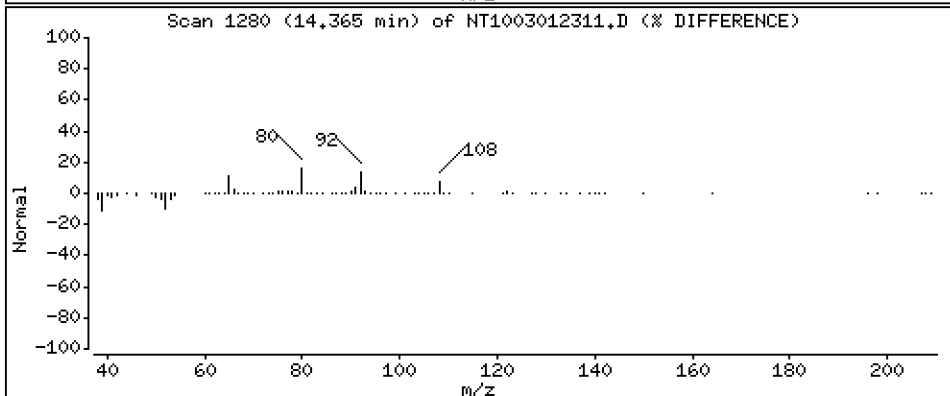
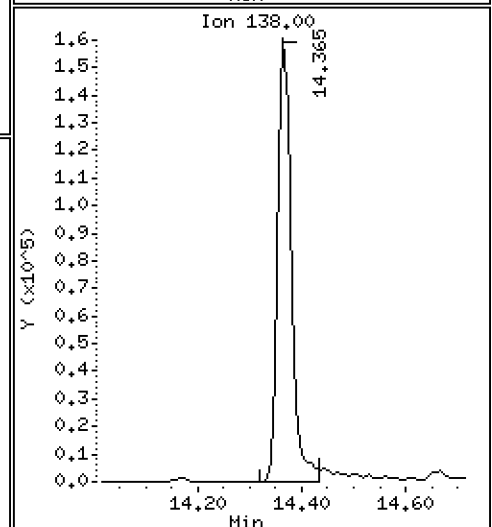
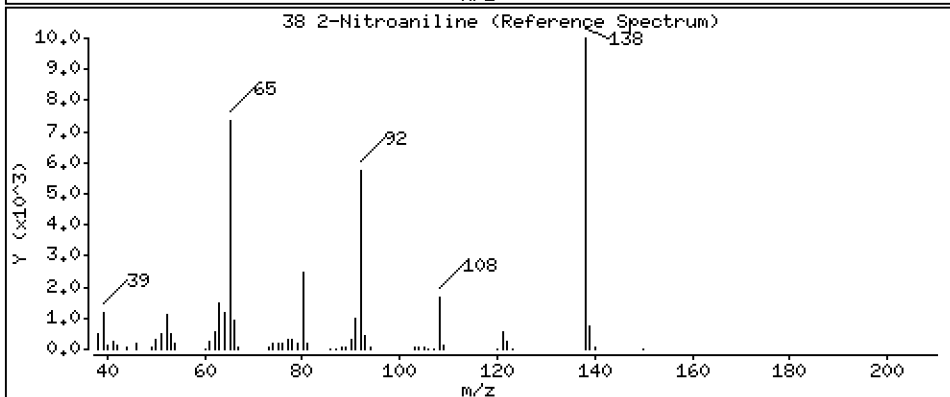
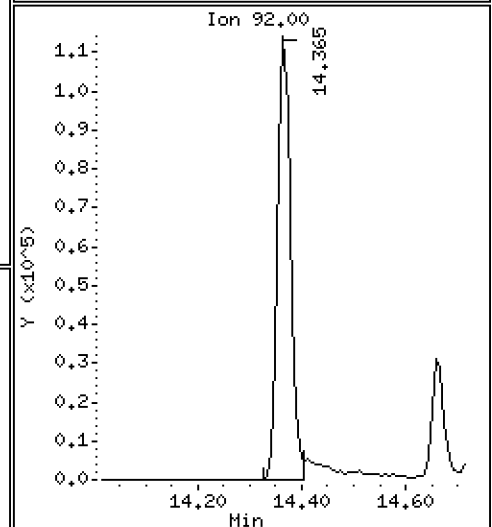
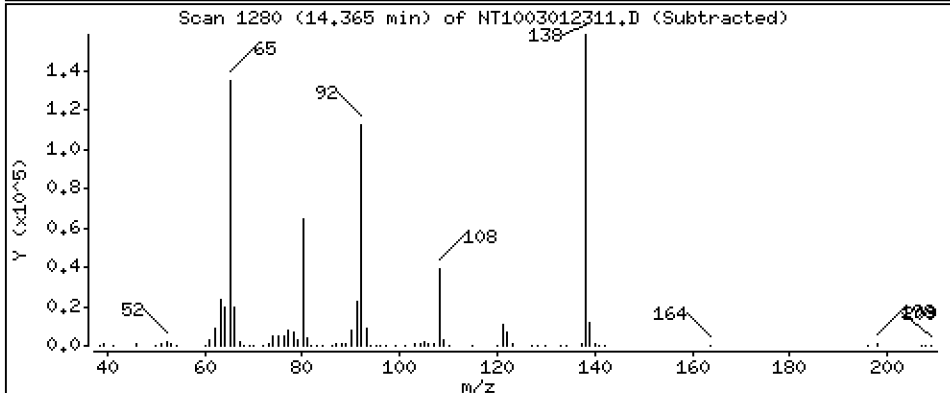
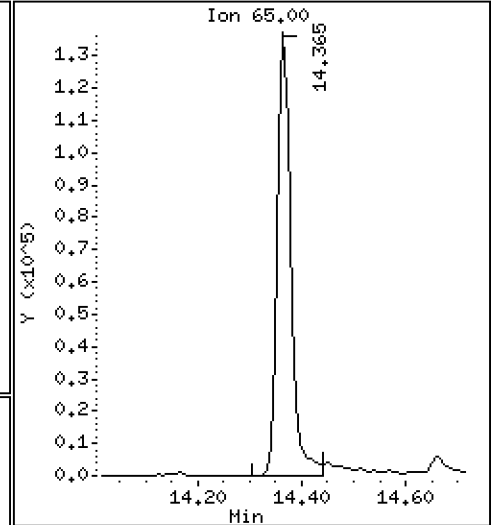
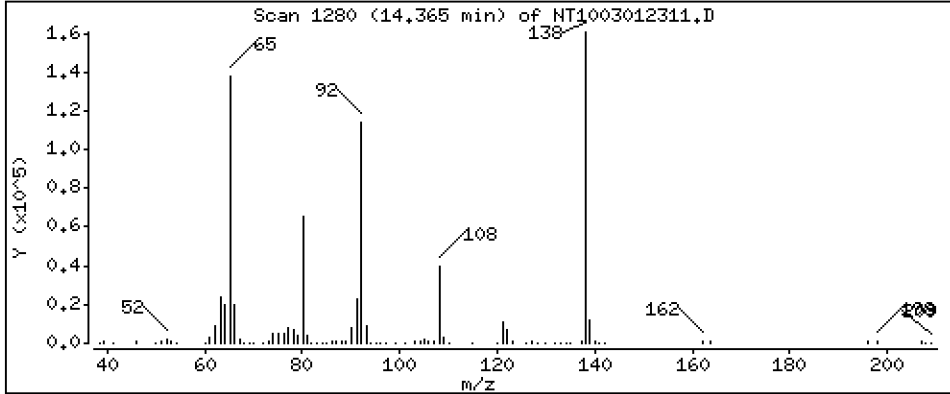
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,027 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

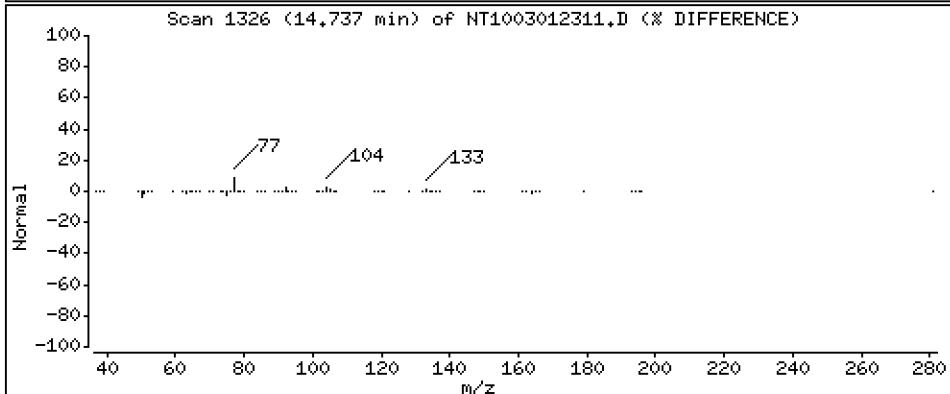
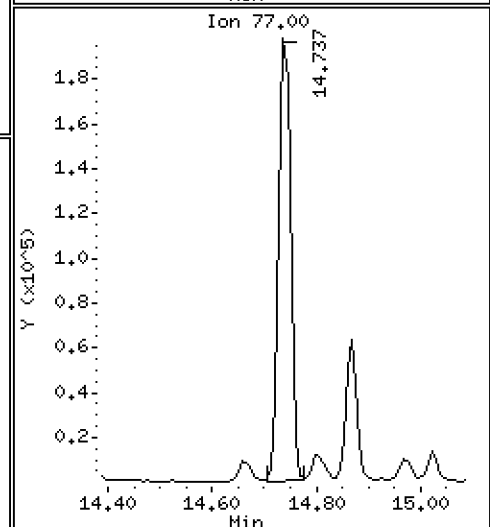
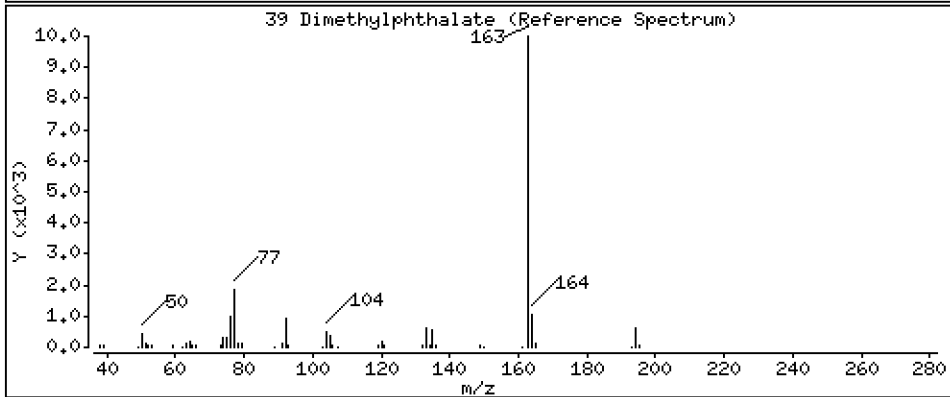
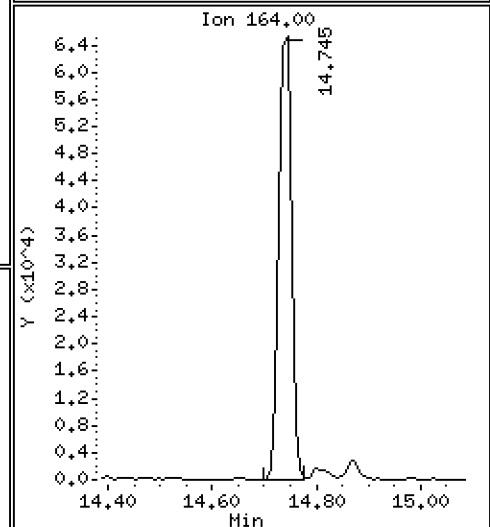
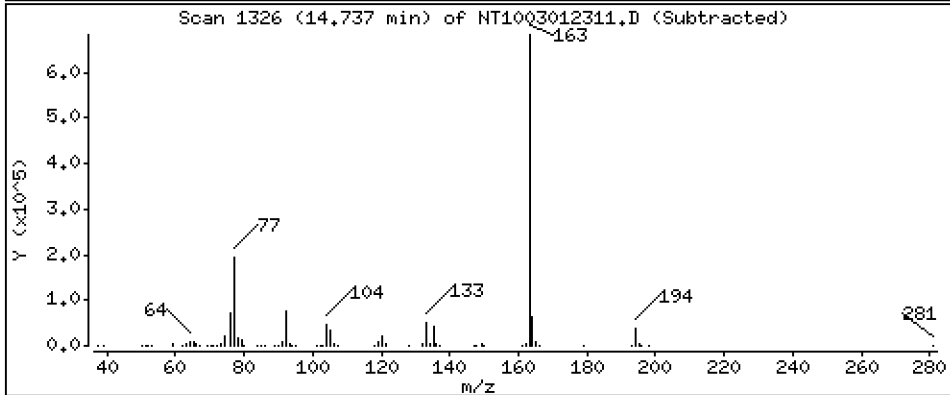
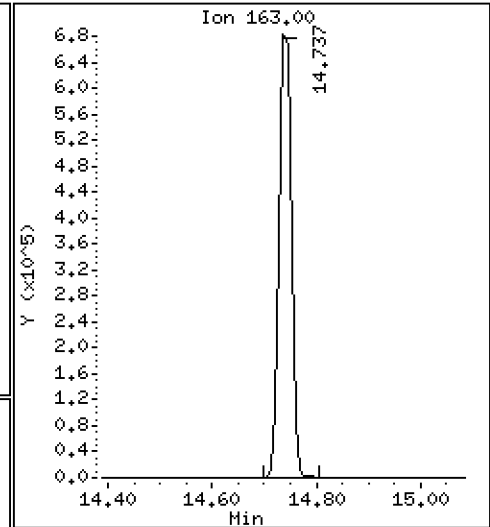
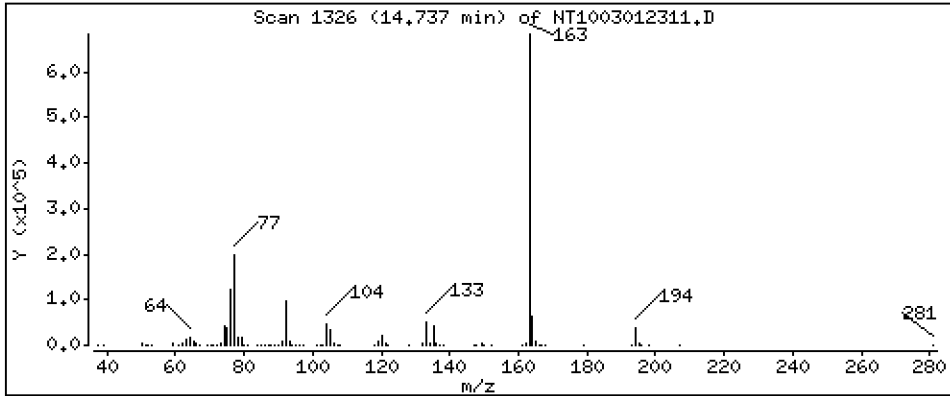
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,384 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

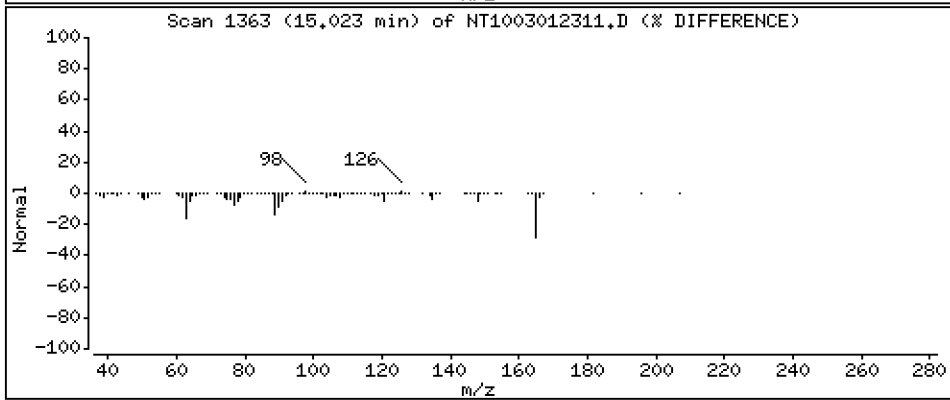
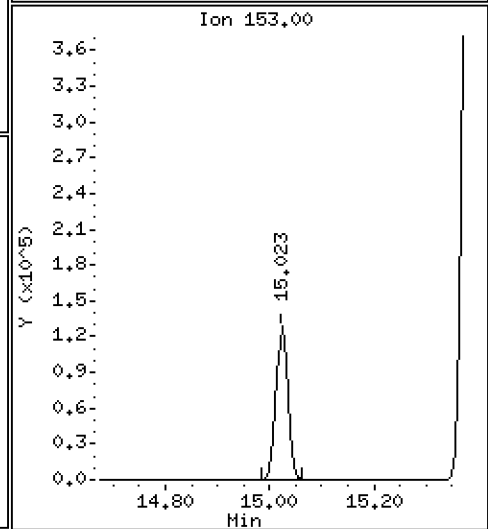
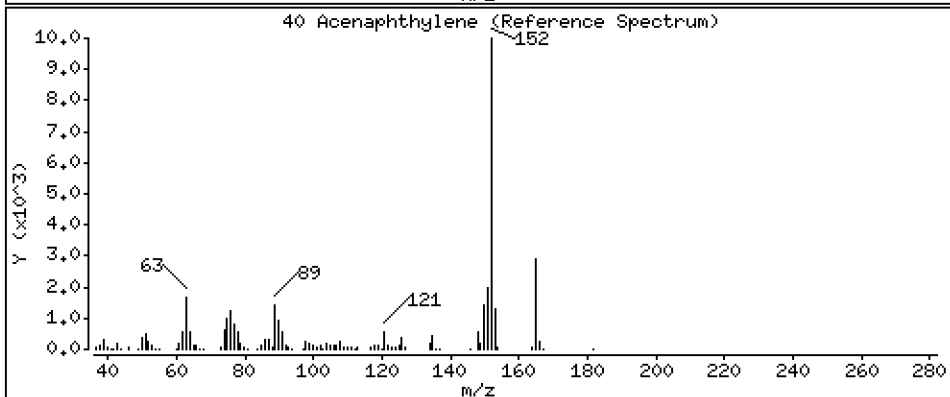
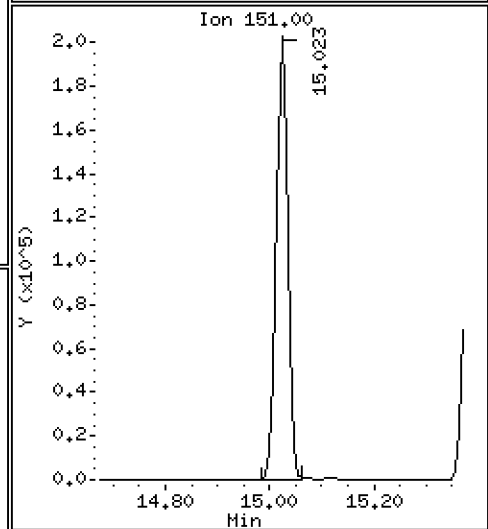
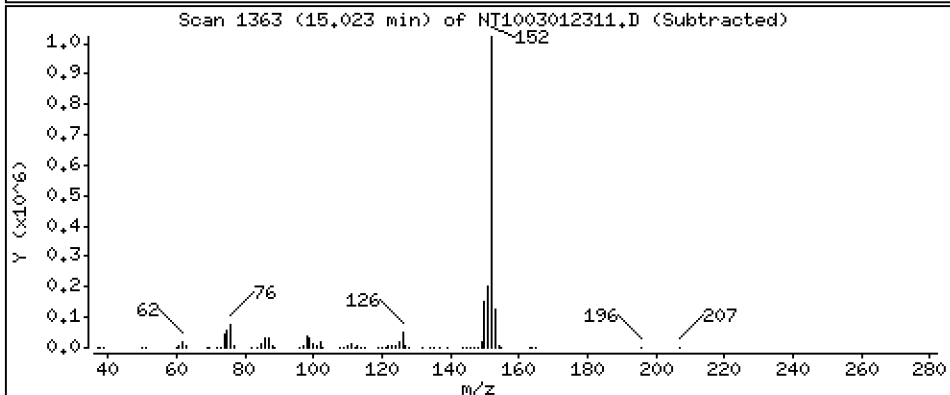
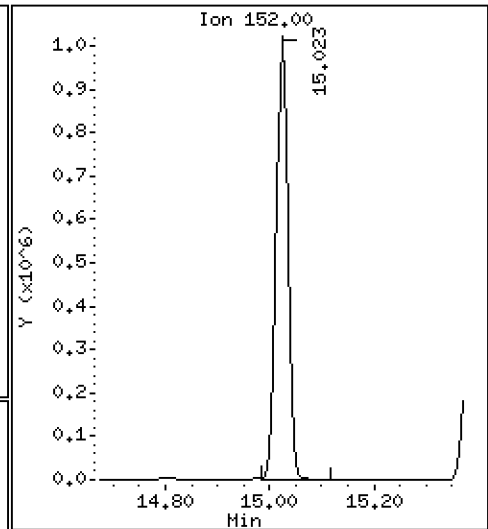
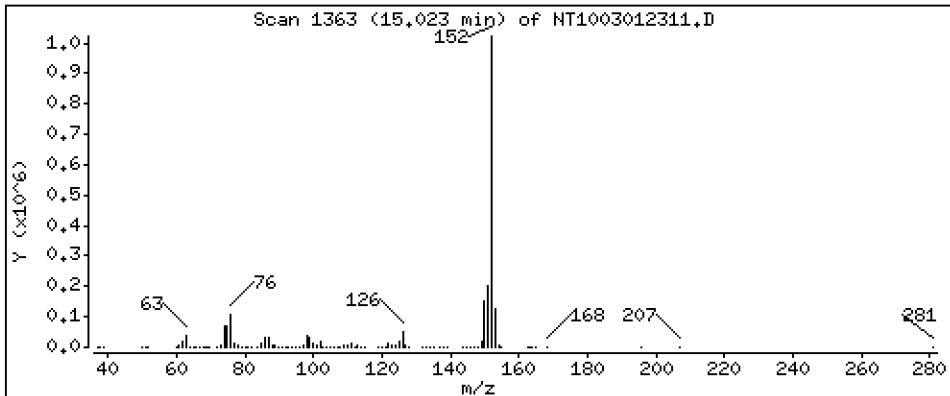
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,806 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

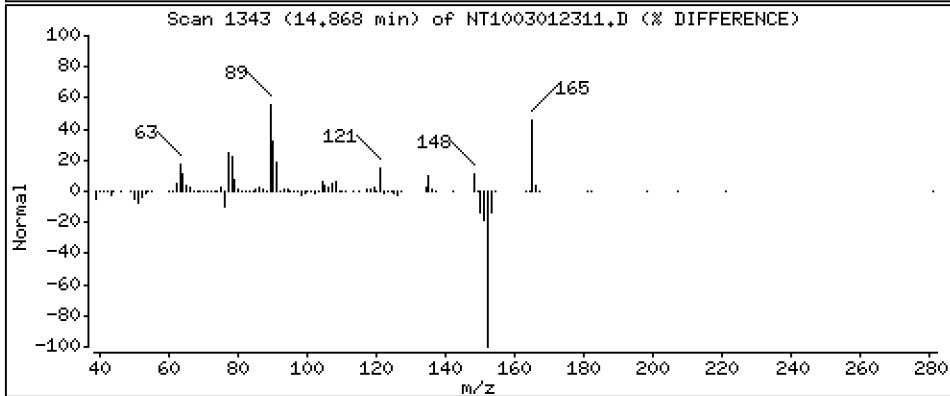
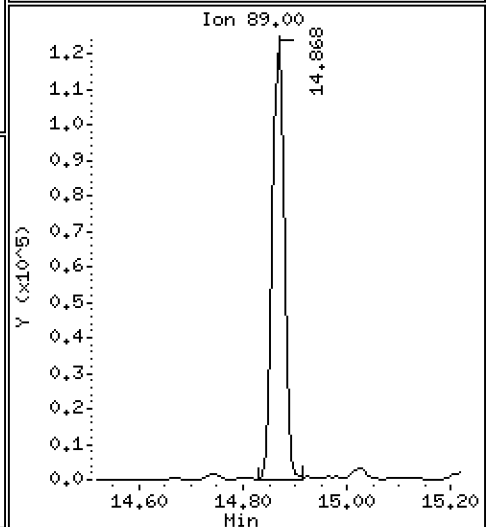
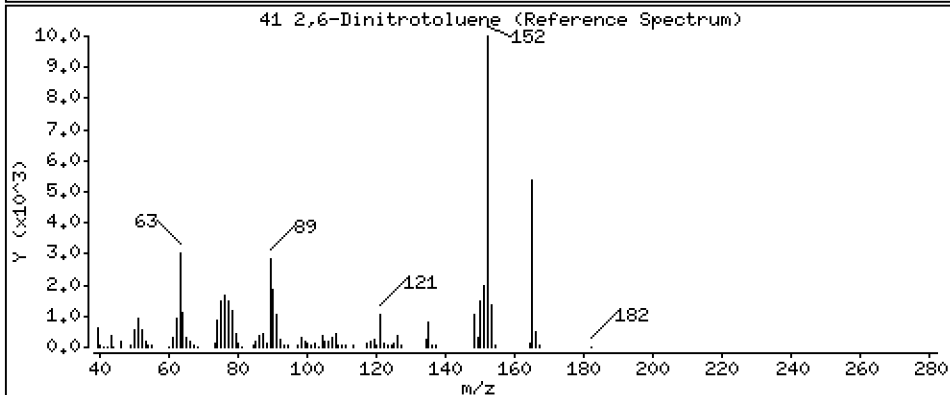
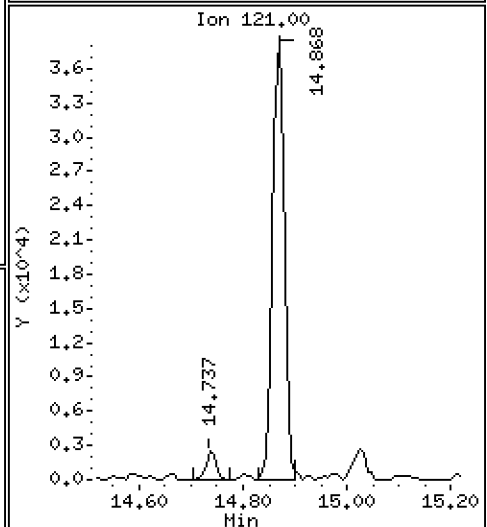
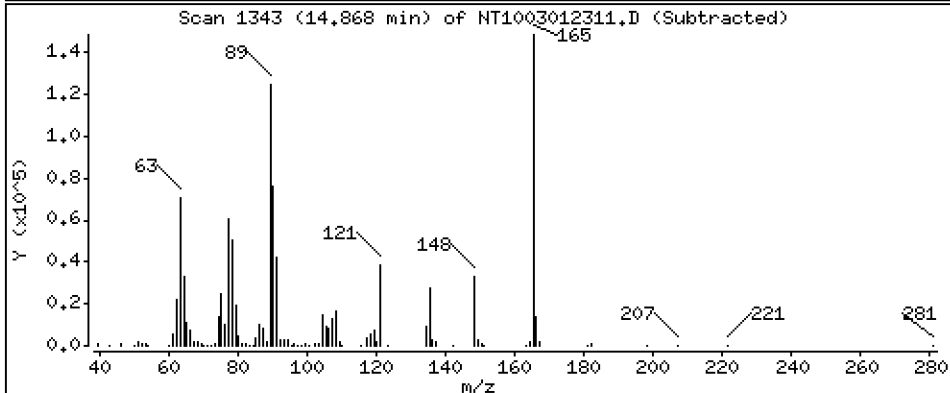
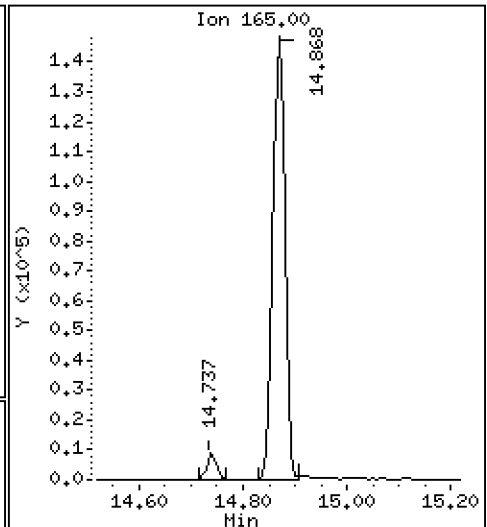
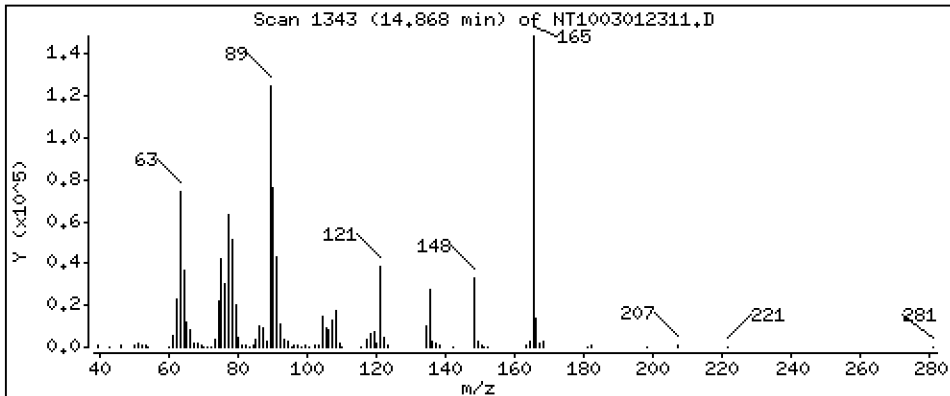
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 5,187 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

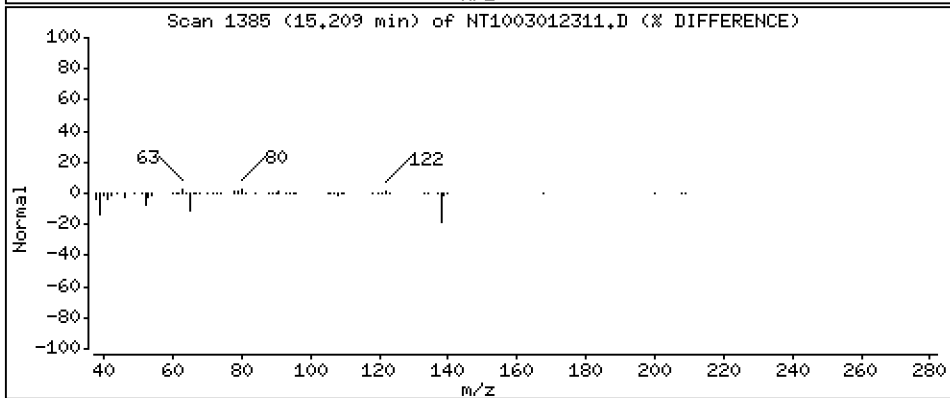
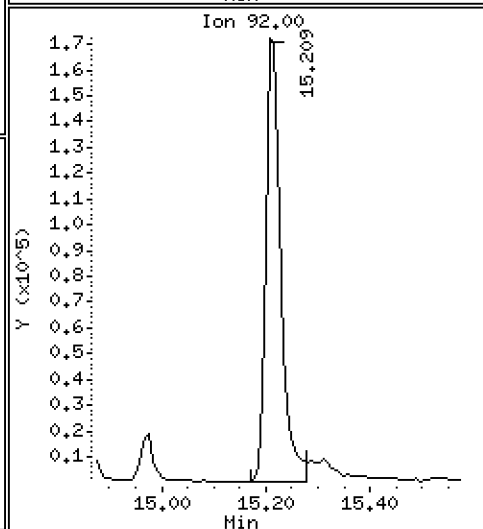
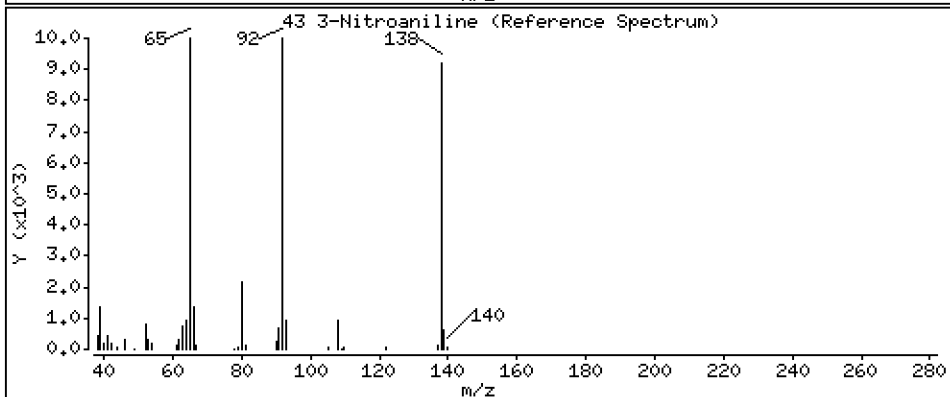
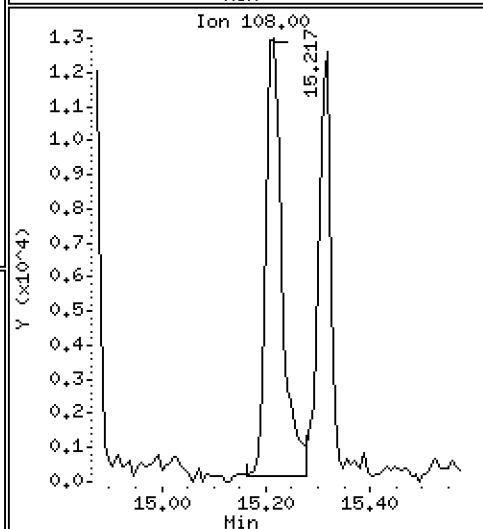
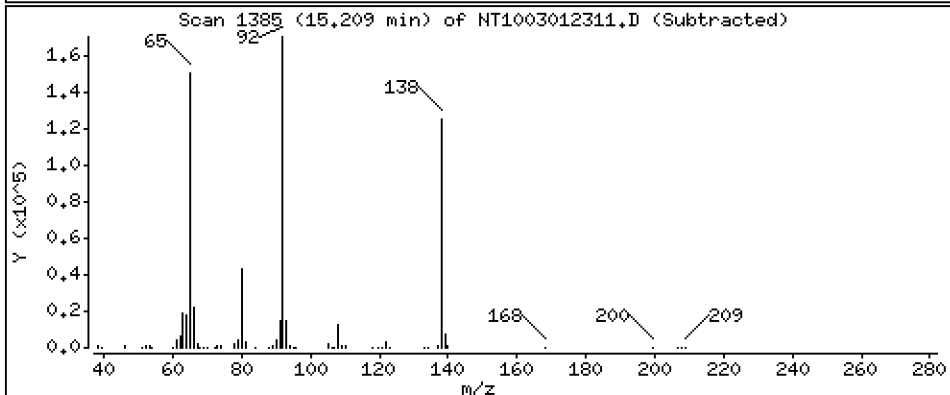
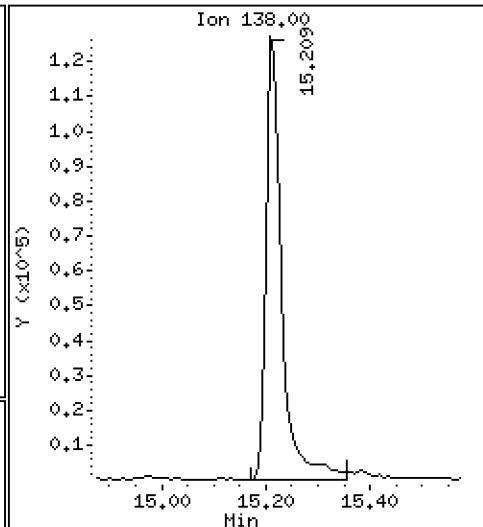
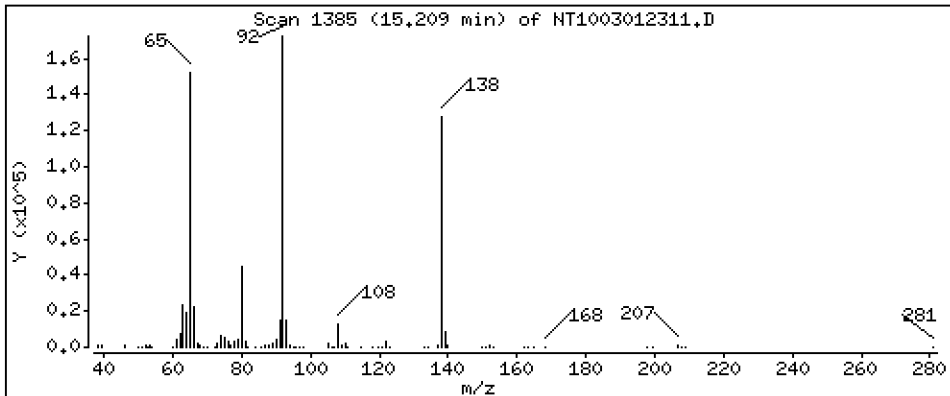
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,172 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

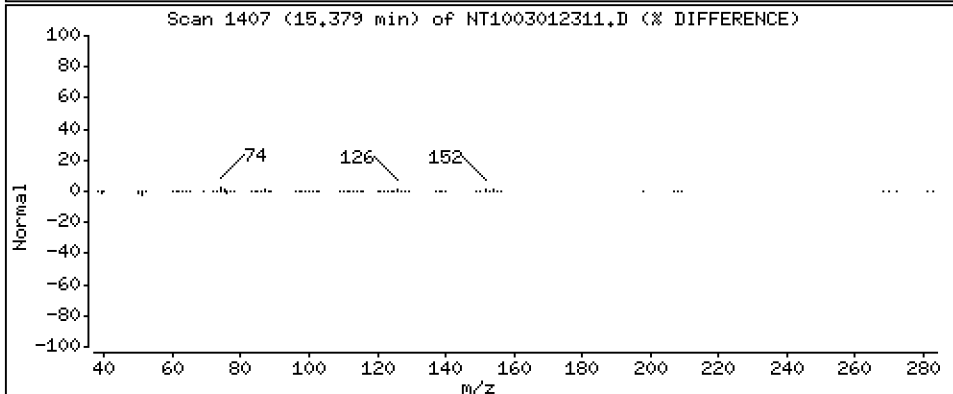
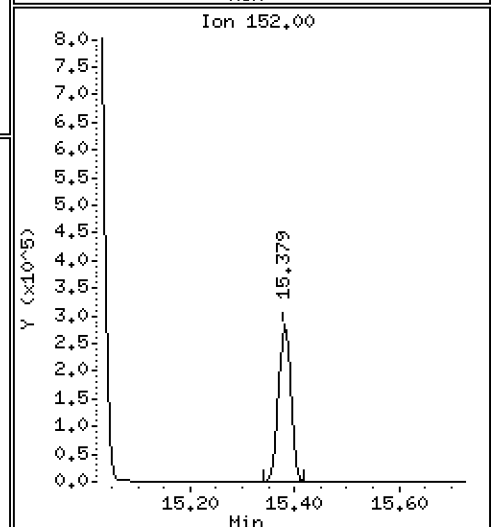
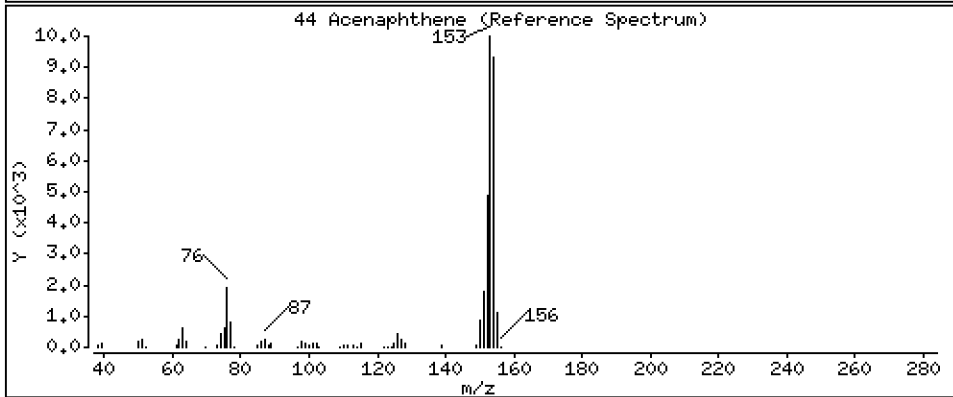
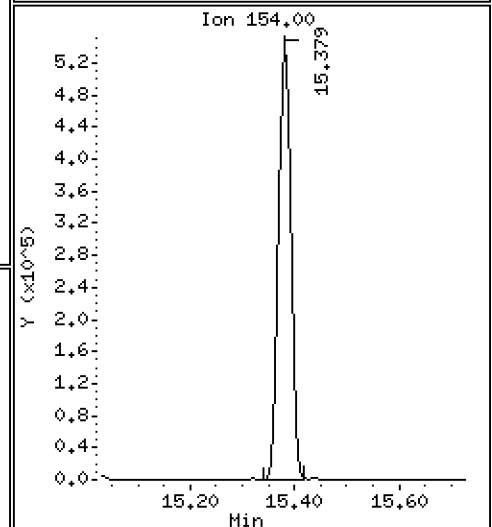
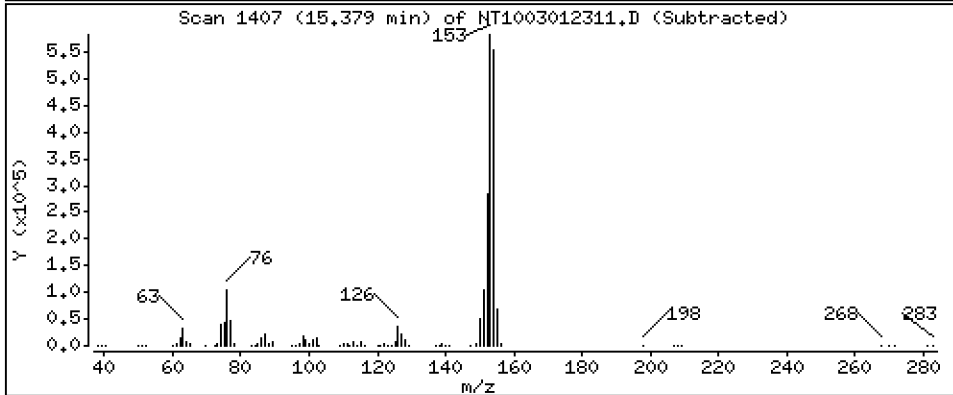
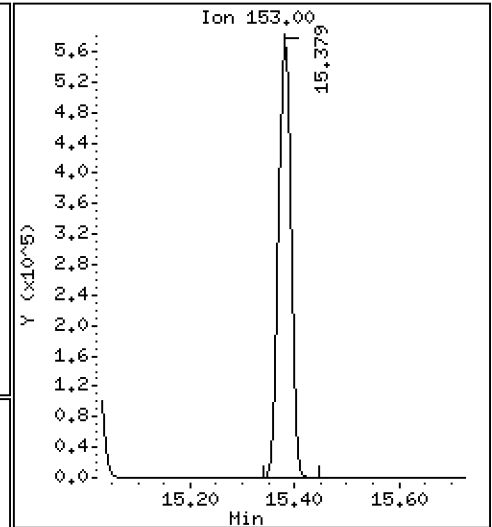
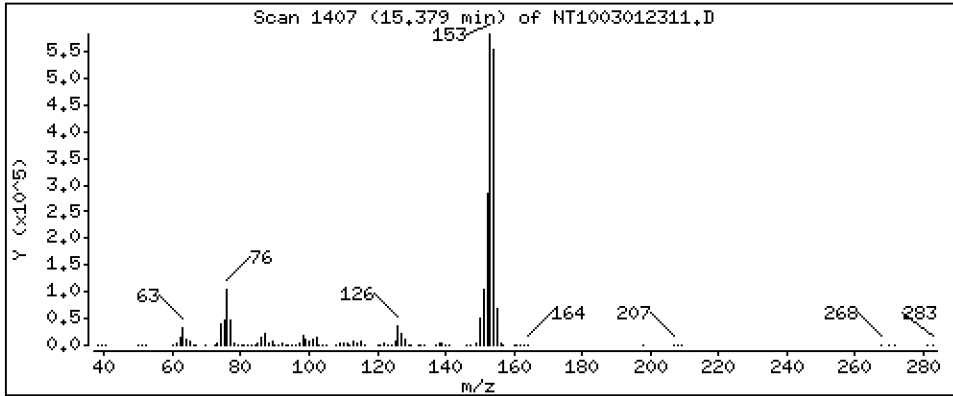
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 5,154 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

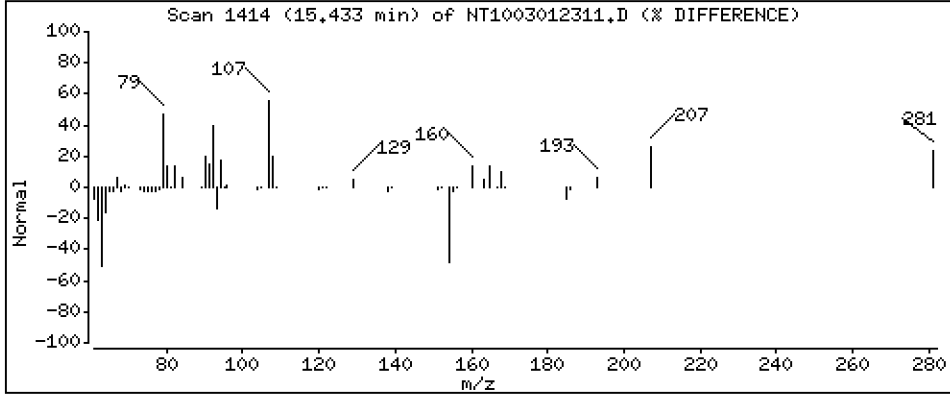
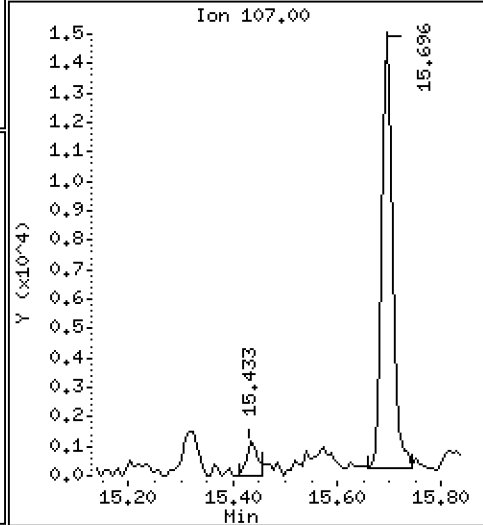
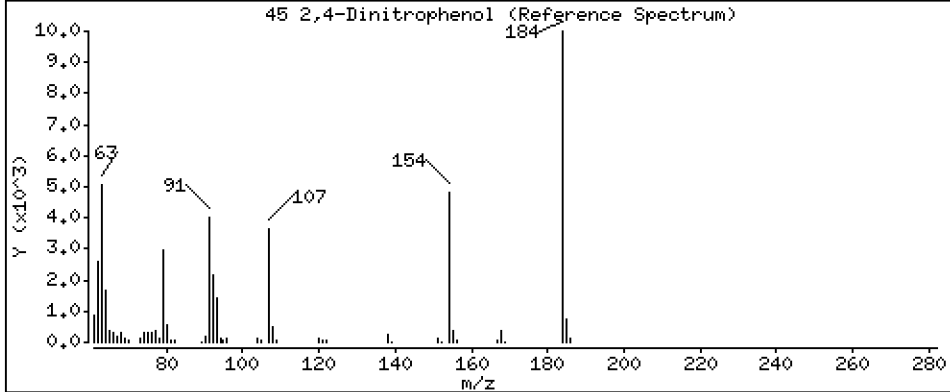
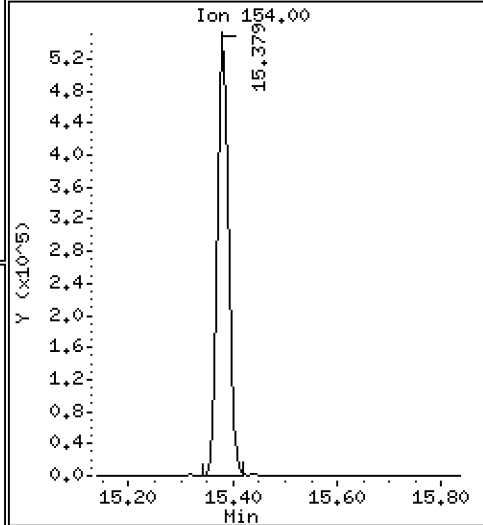
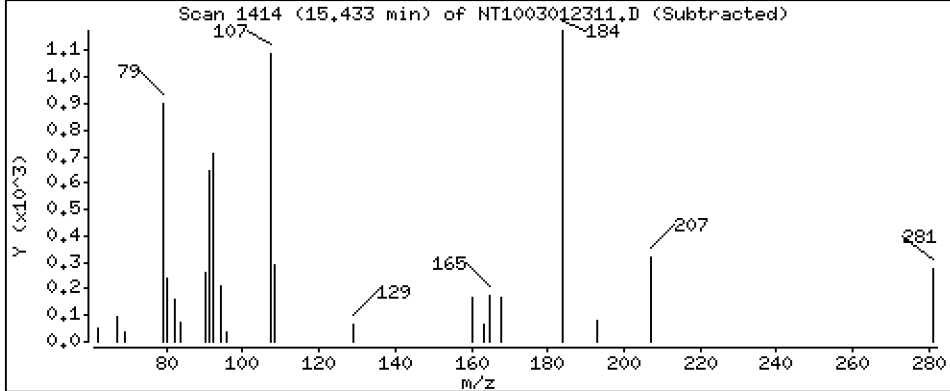
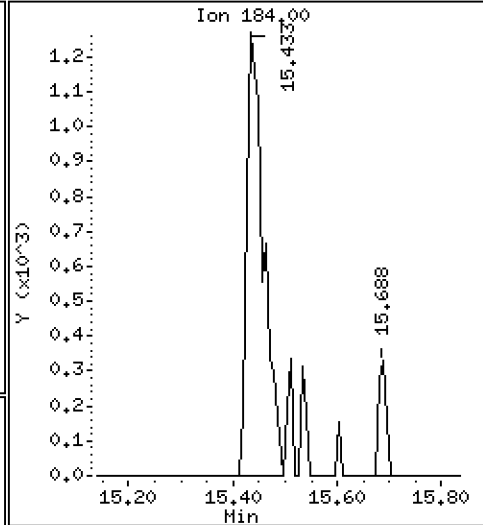
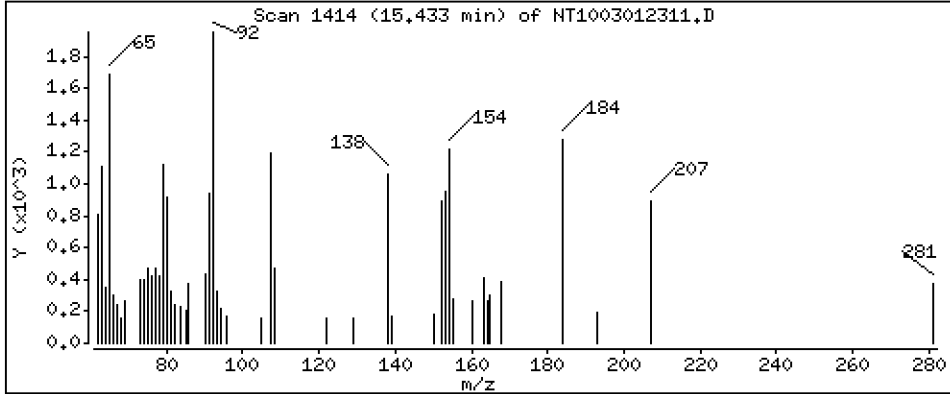
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,2667 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

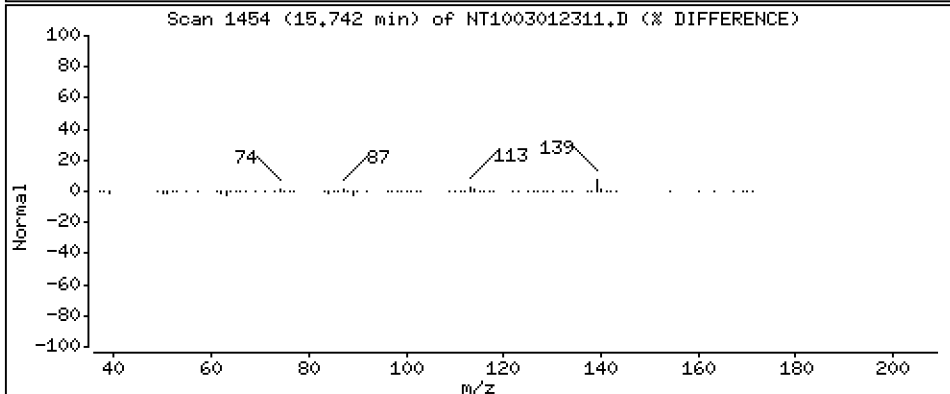
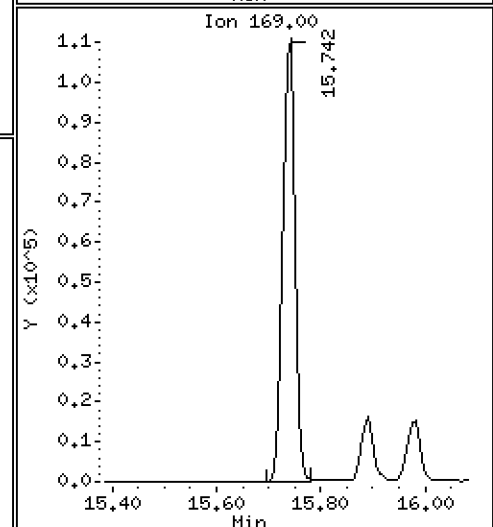
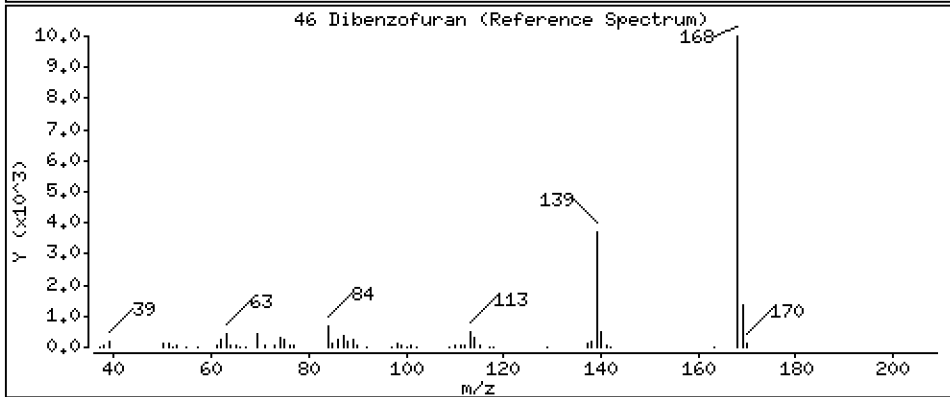
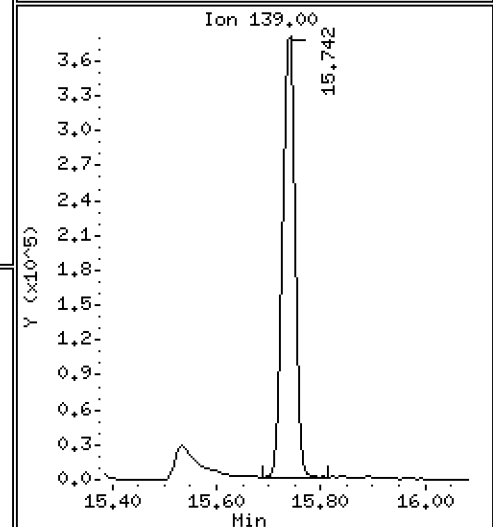
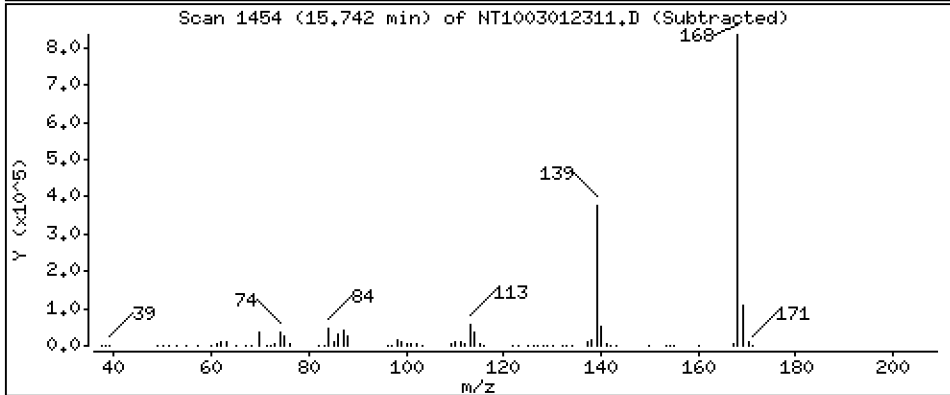
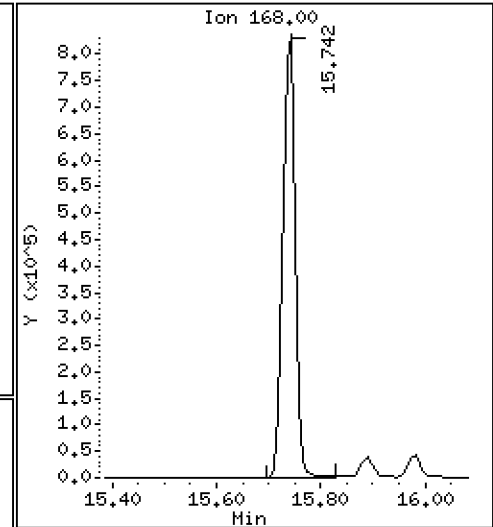
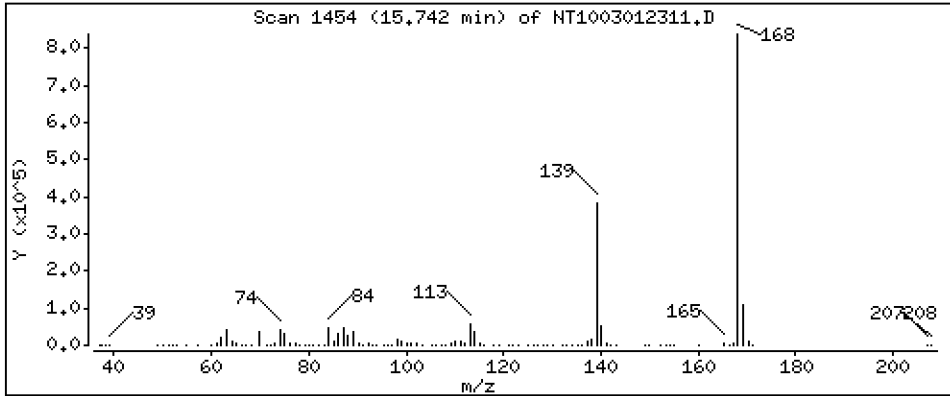
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,994 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

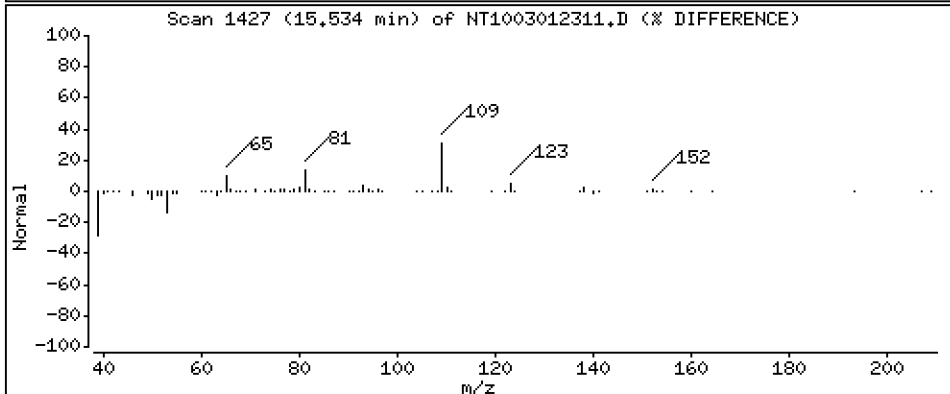
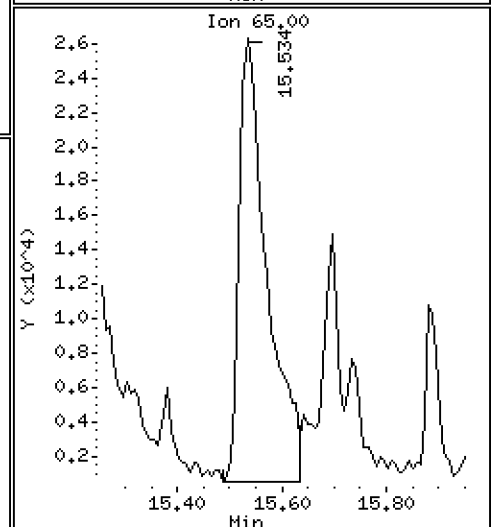
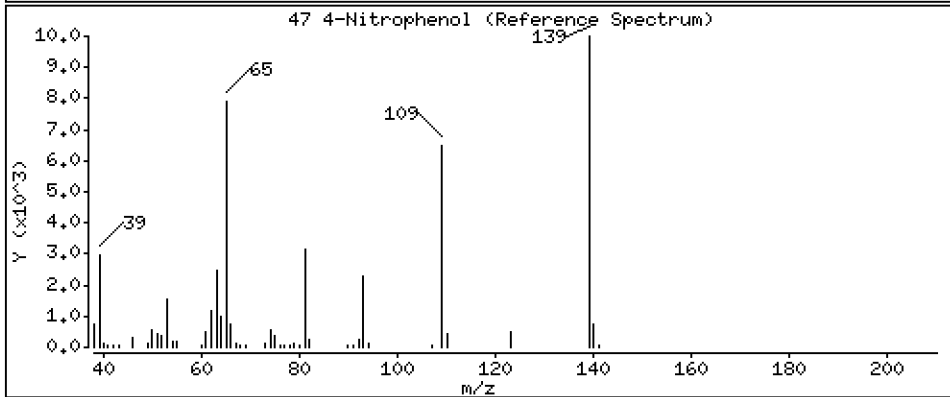
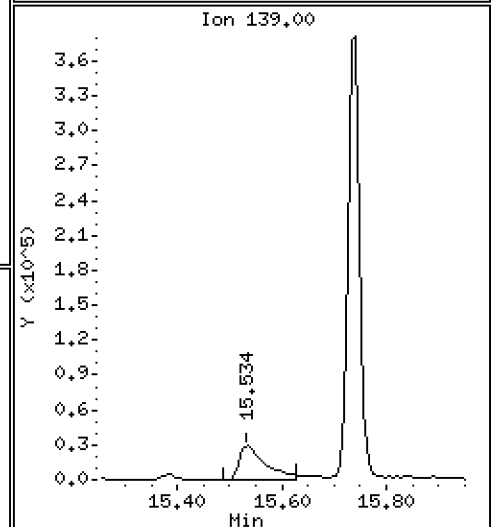
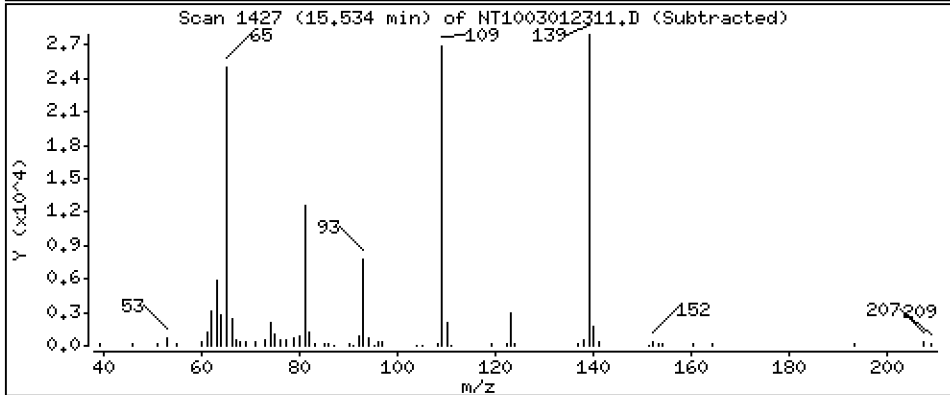
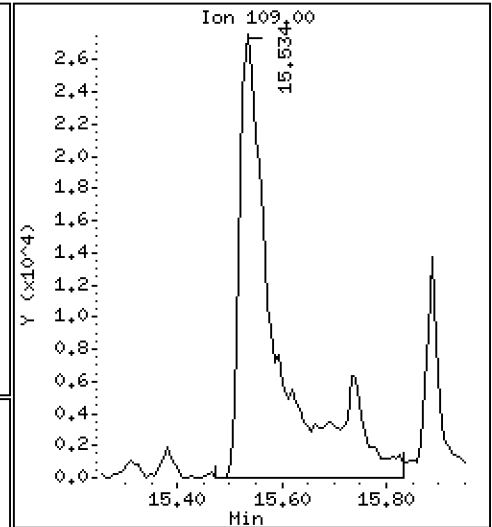
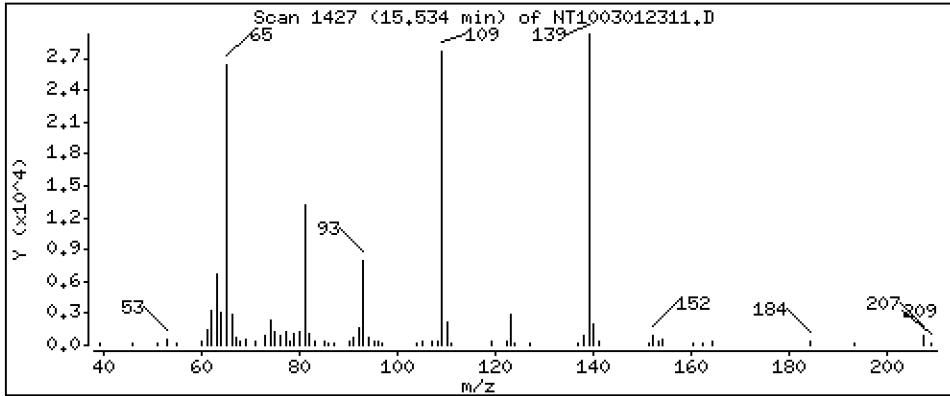
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 3,822 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

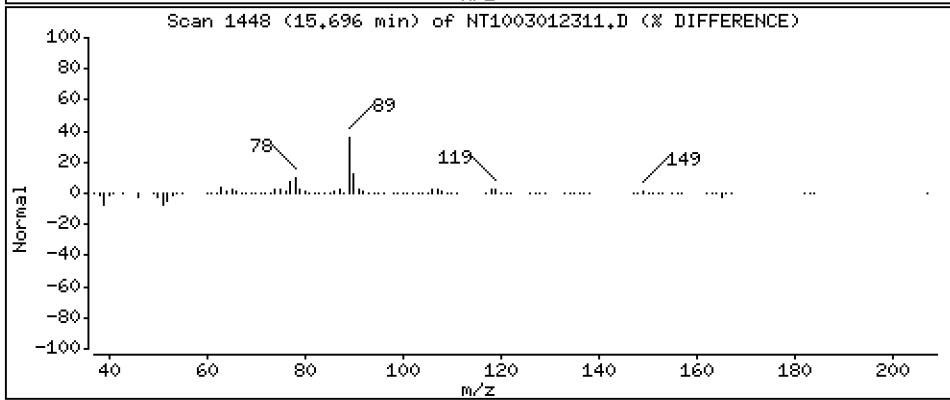
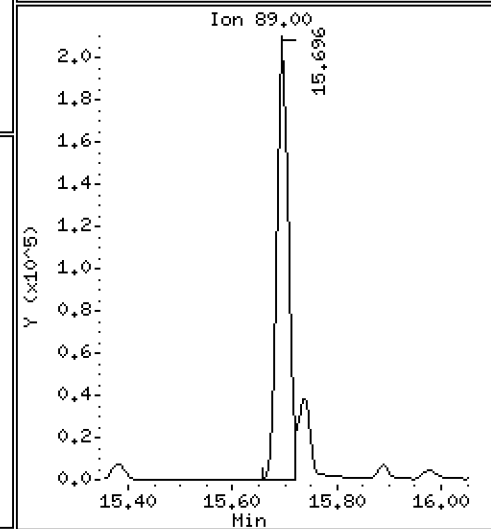
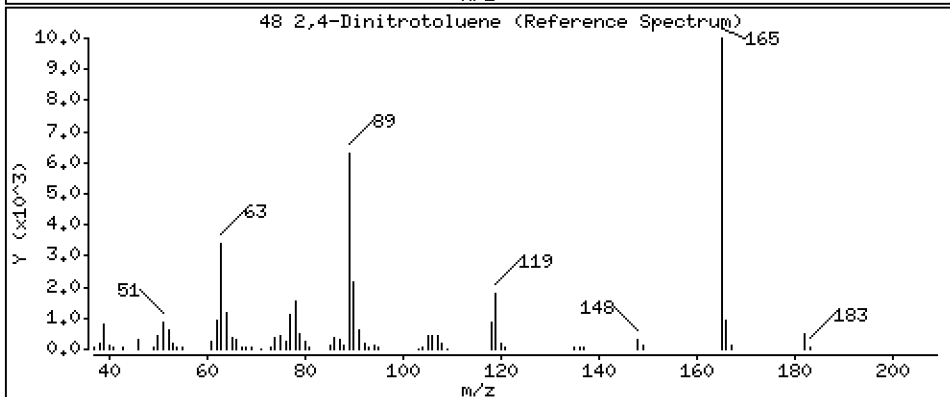
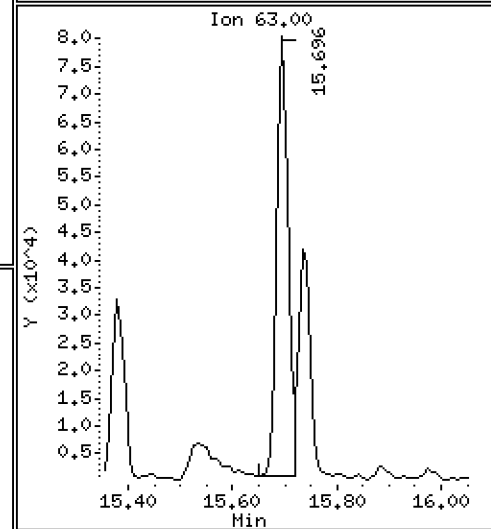
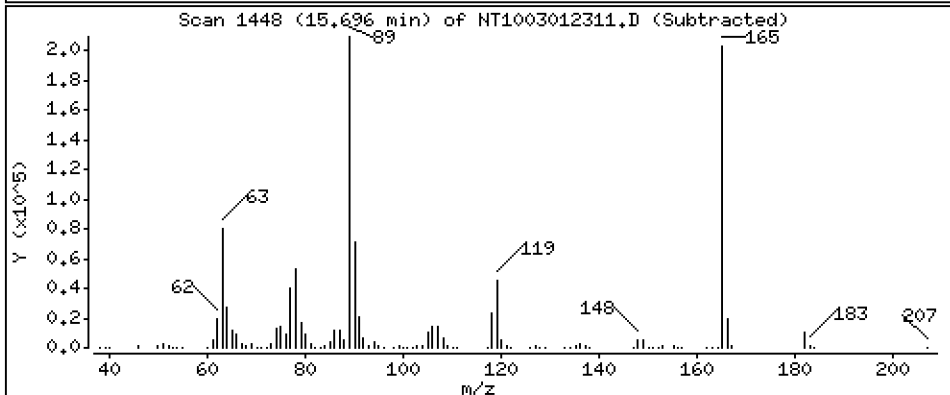
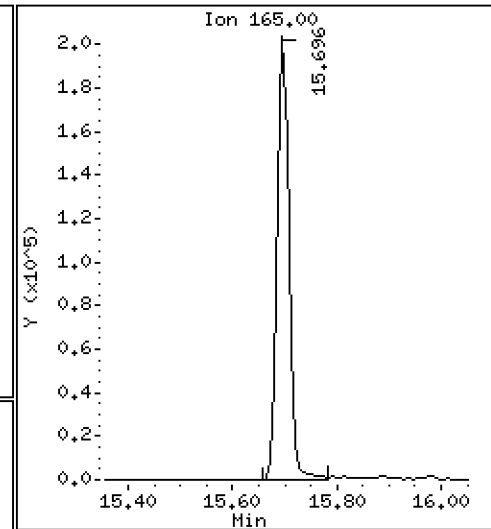
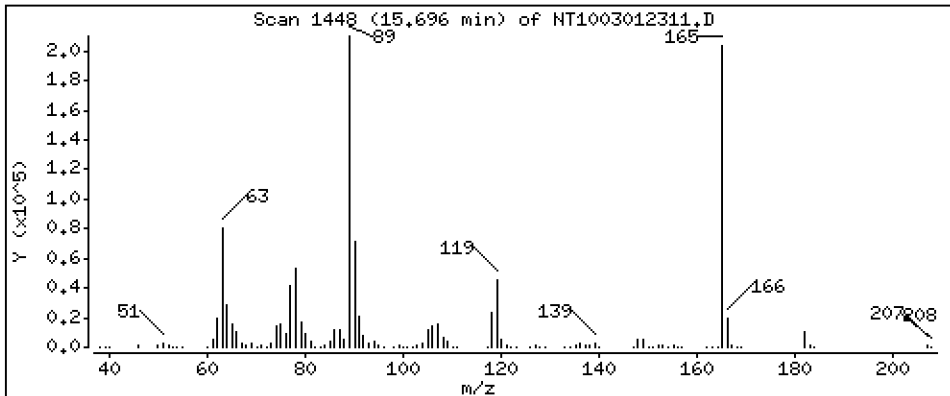
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

48 2,4-Dinitrotoluene

Concentration: 4.729 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

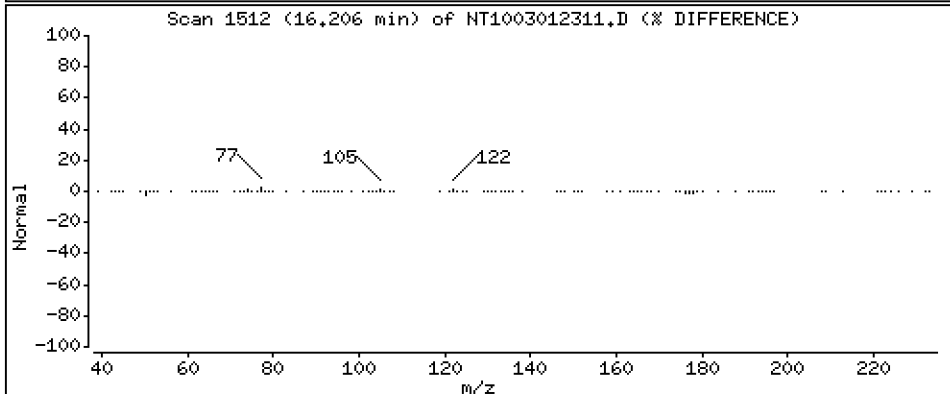
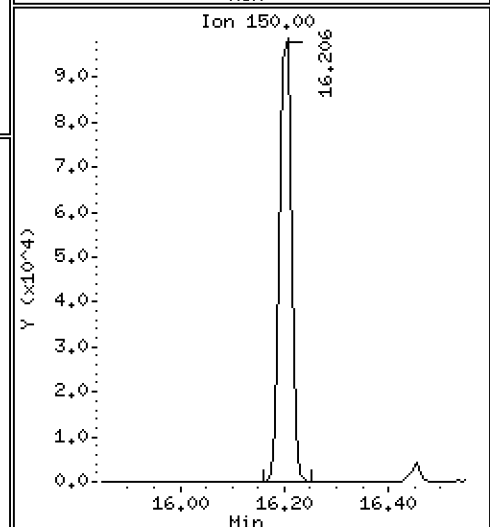
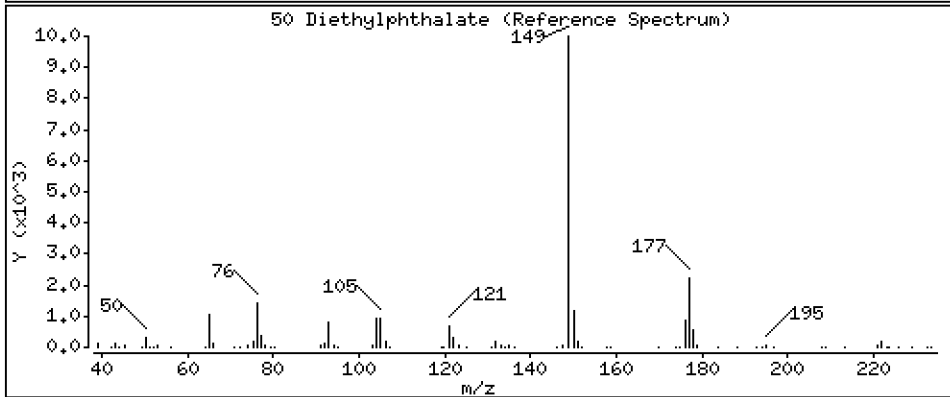
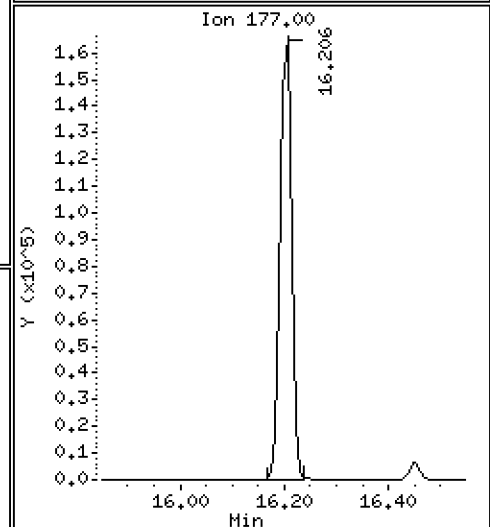
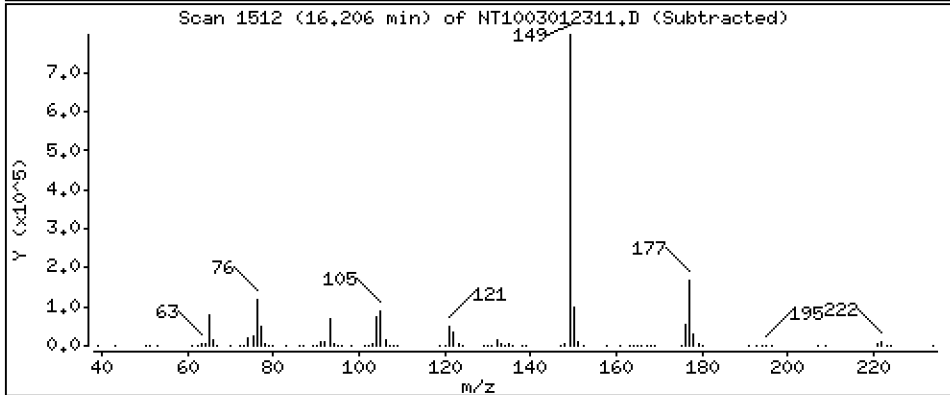
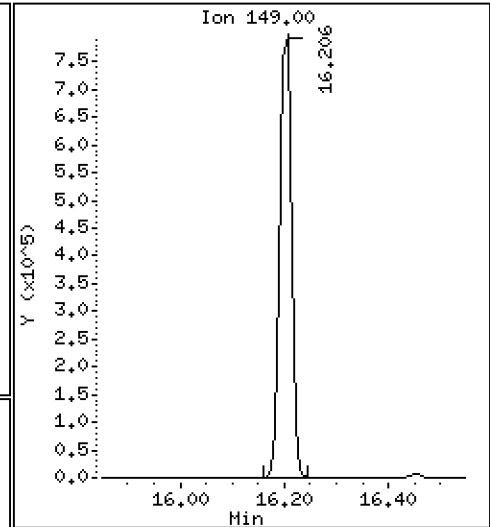
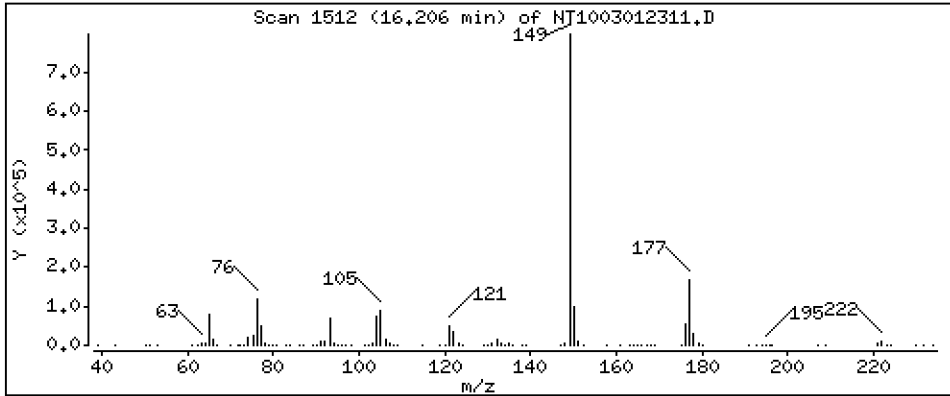
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,639 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

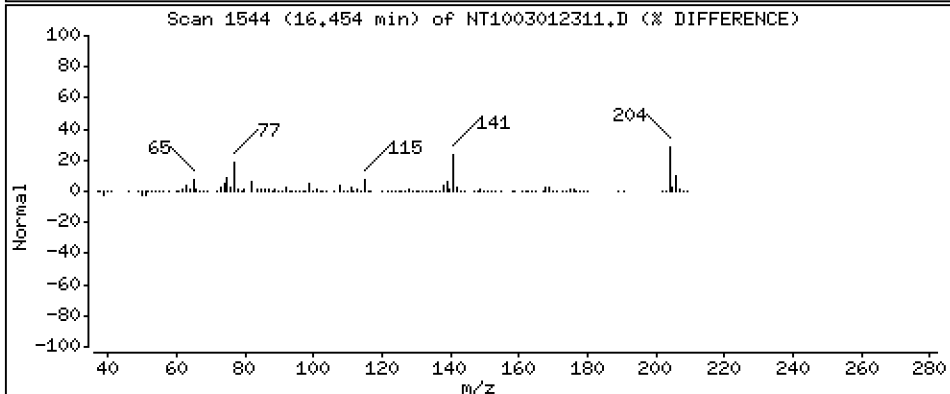
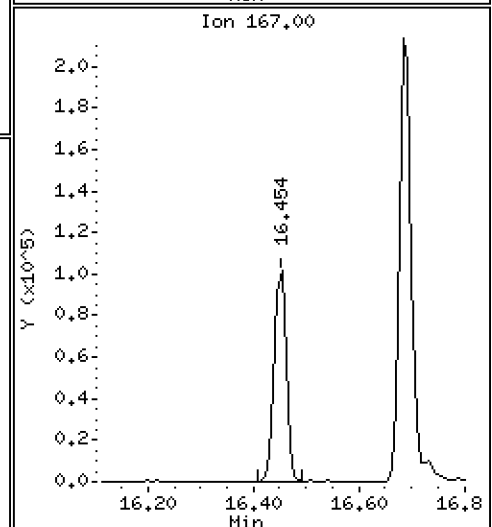
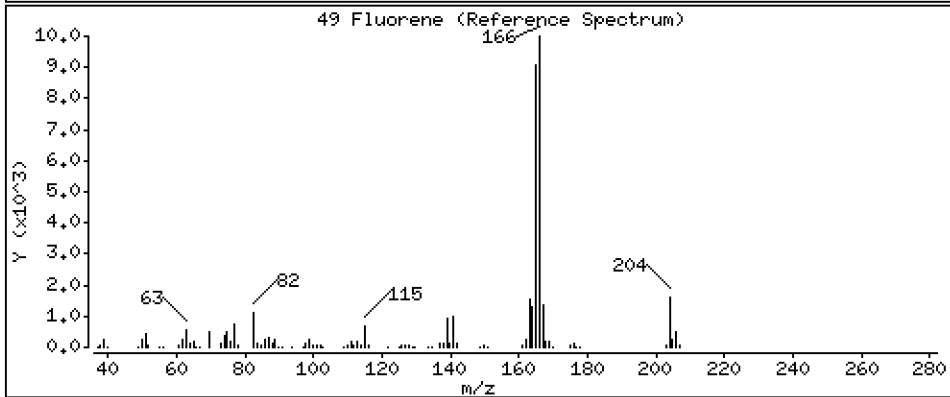
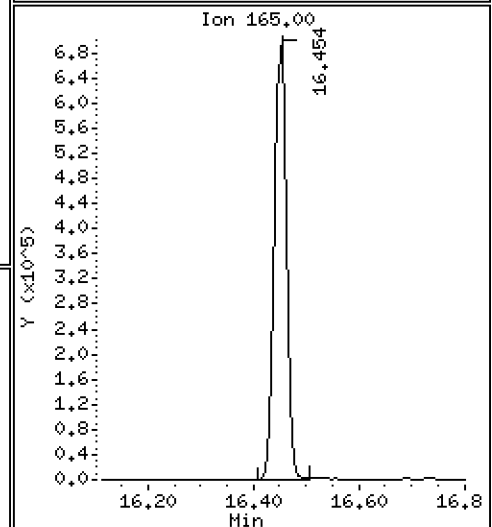
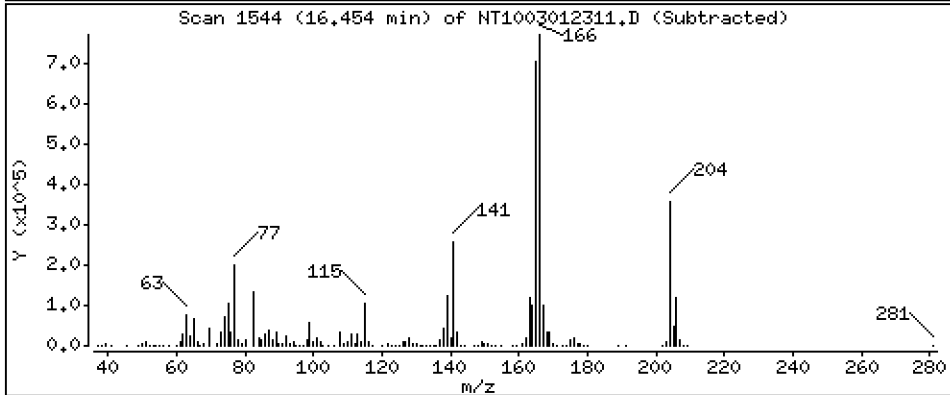
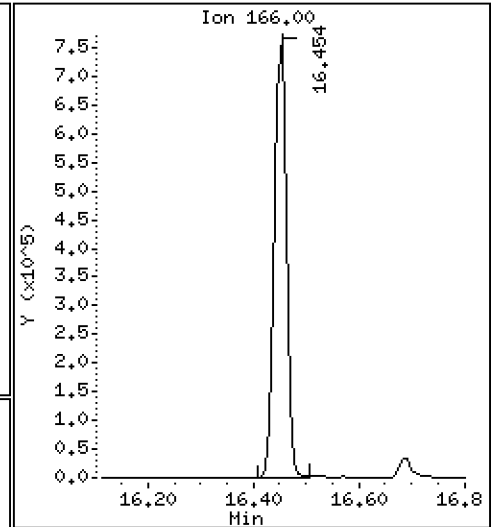
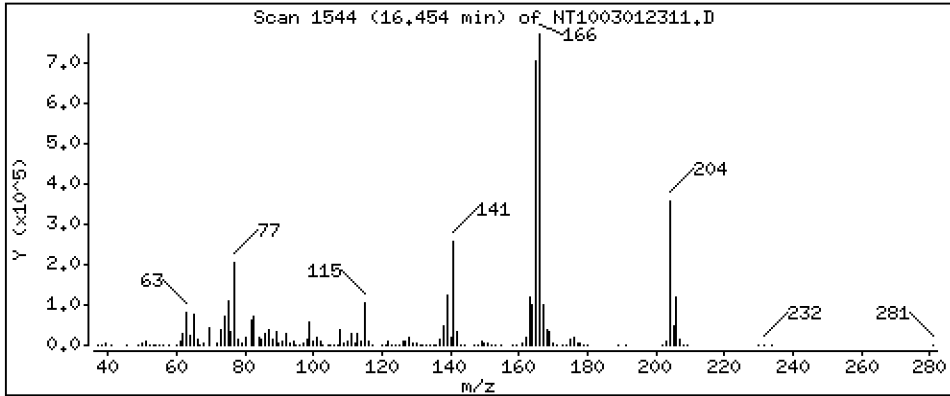
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 5,305 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

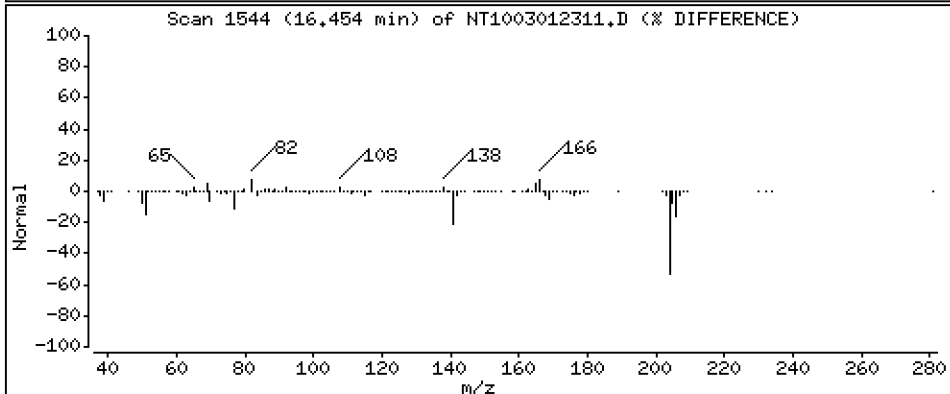
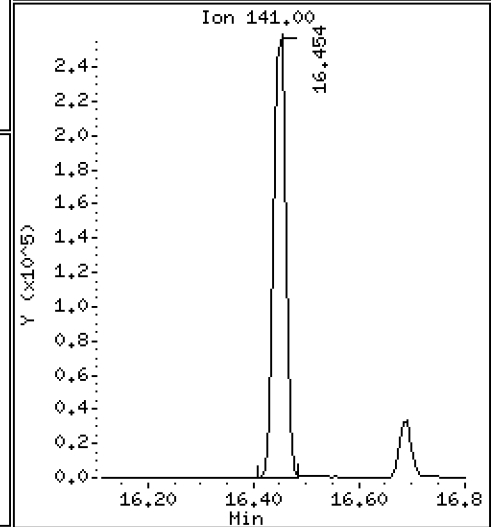
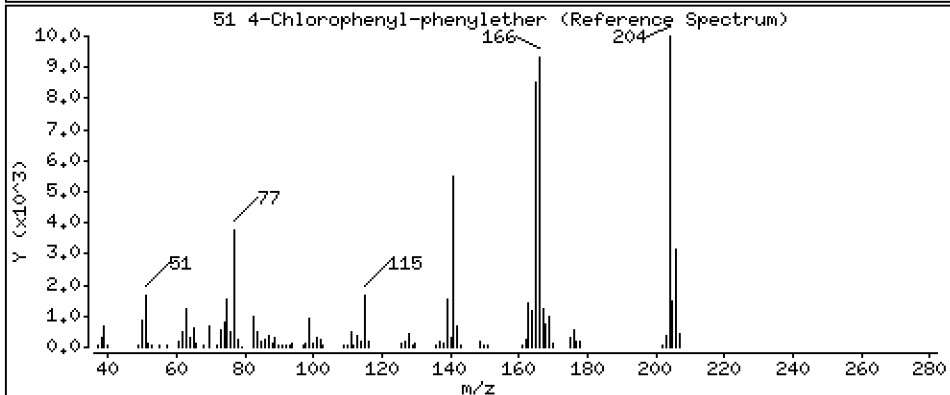
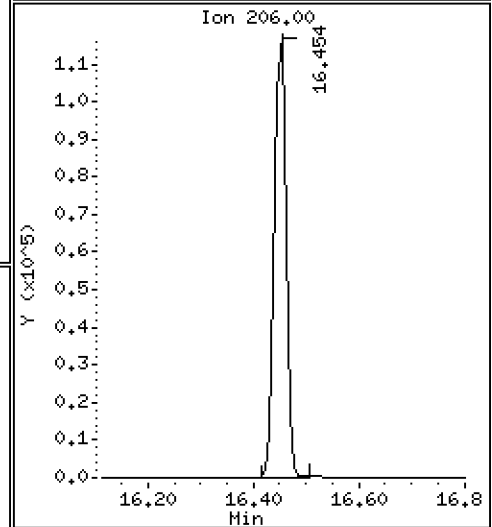
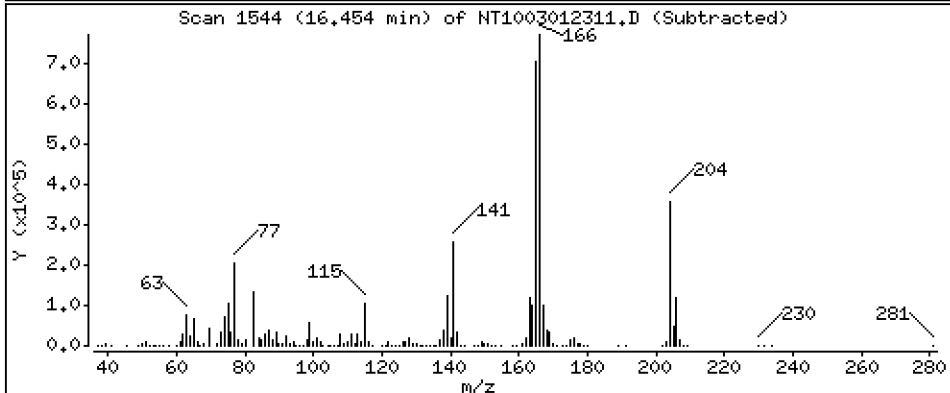
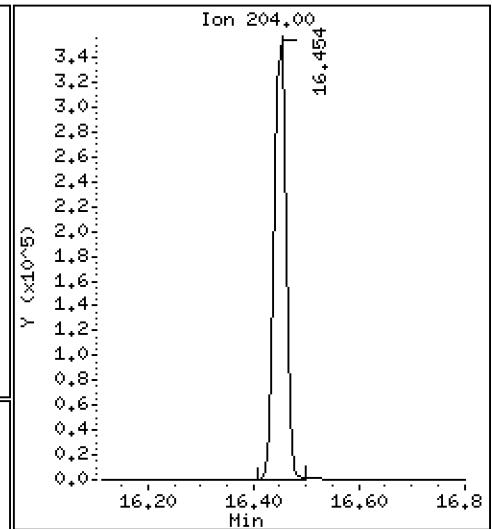
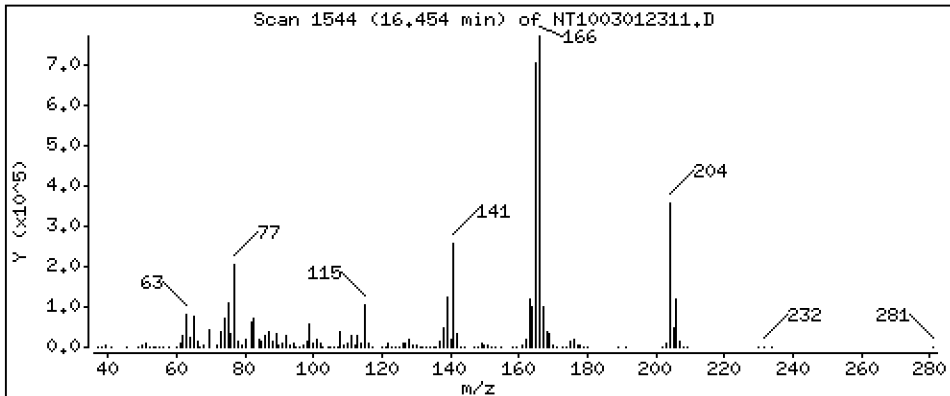
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 5,253 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

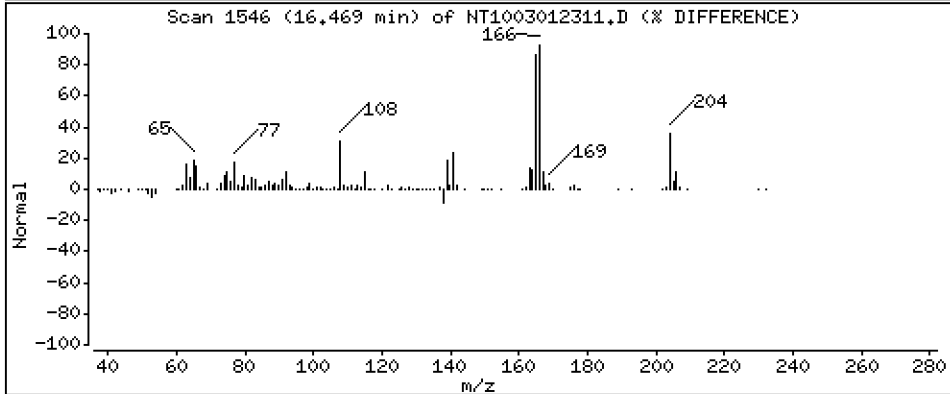
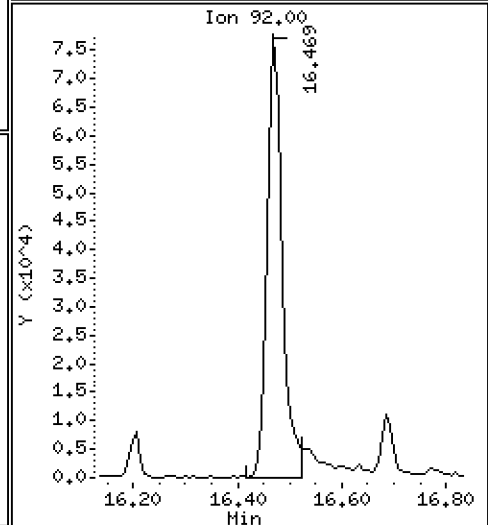
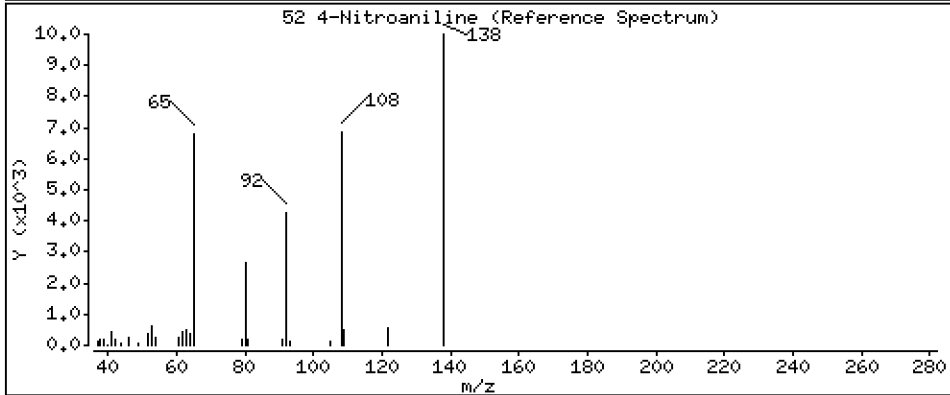
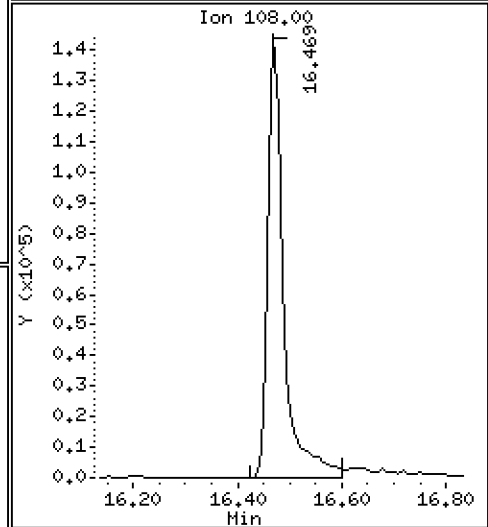
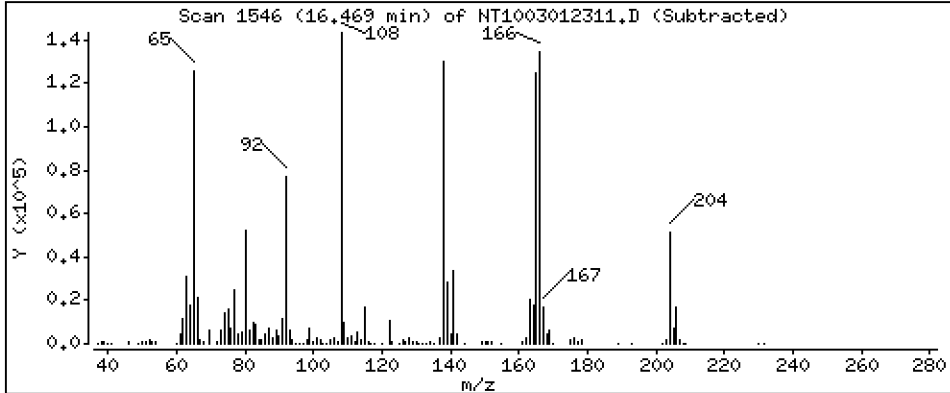
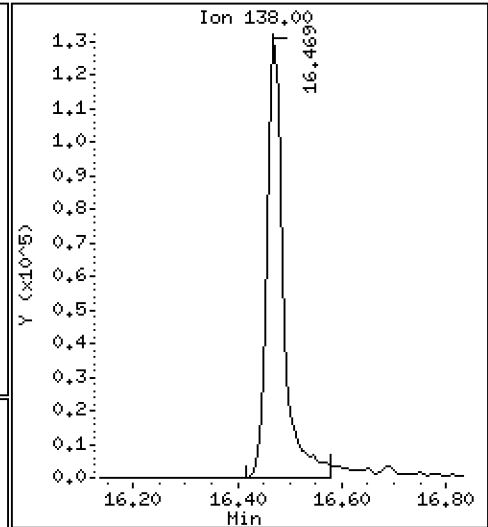
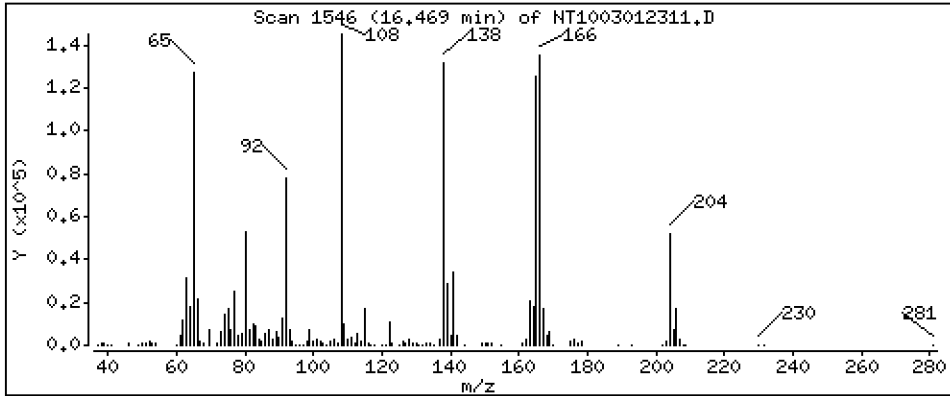
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 5,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

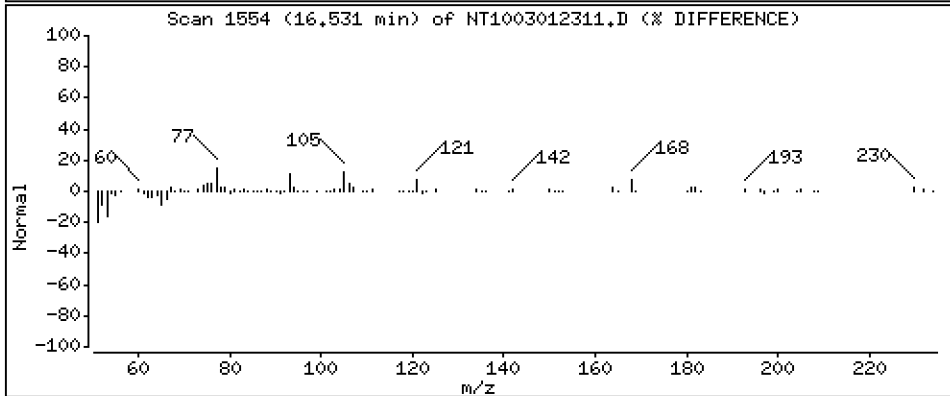
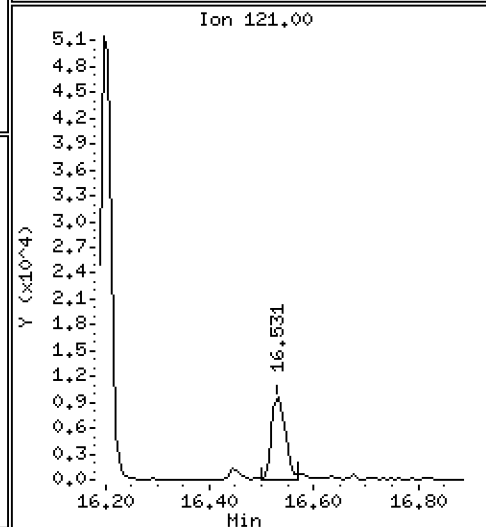
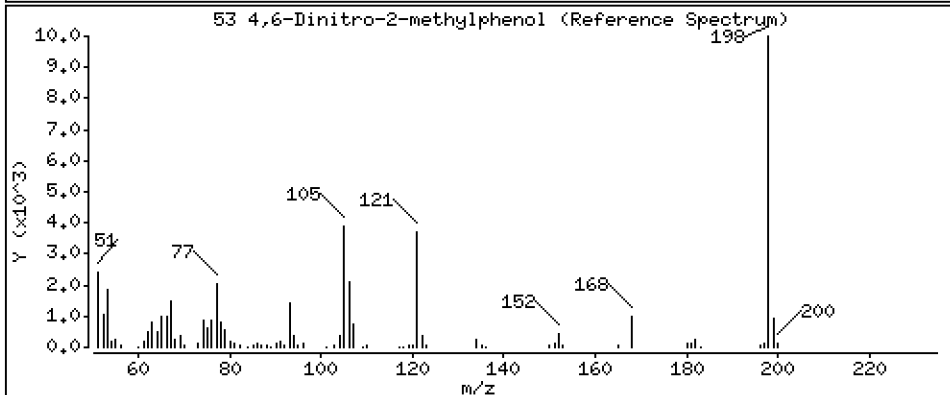
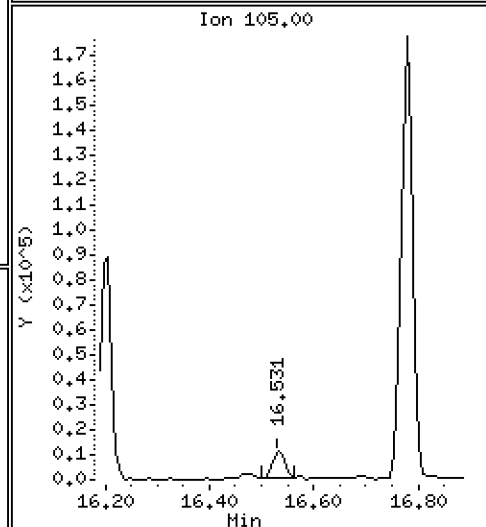
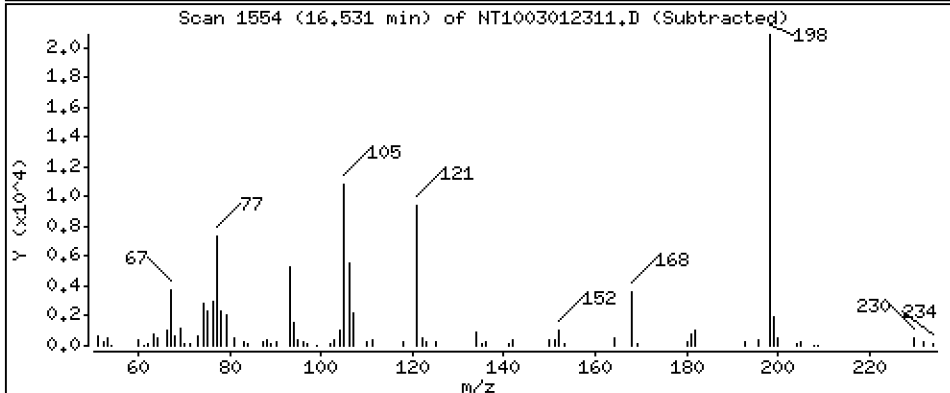
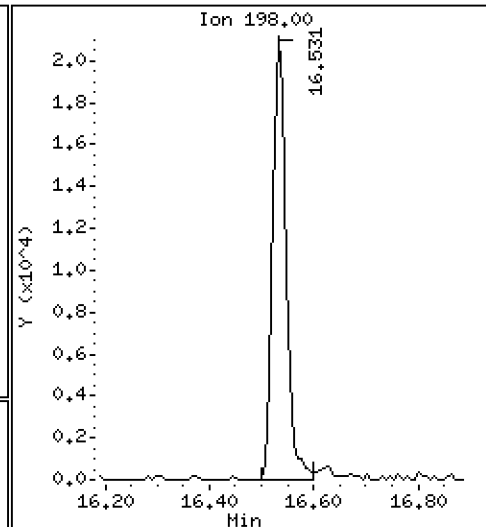
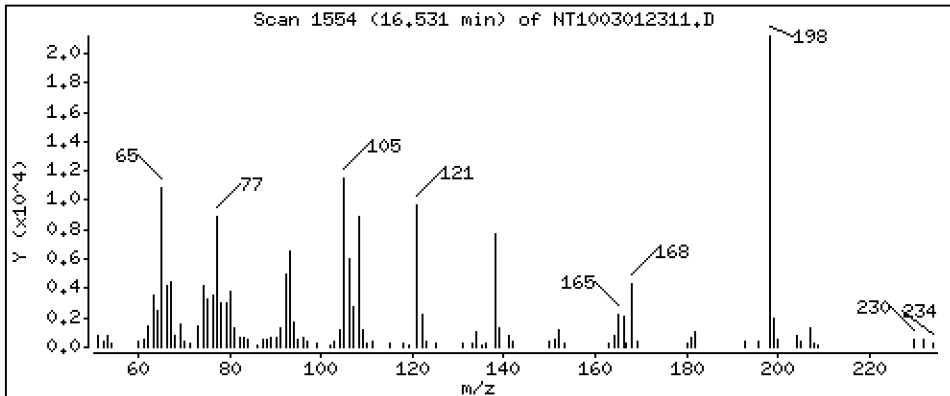
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 1,292 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

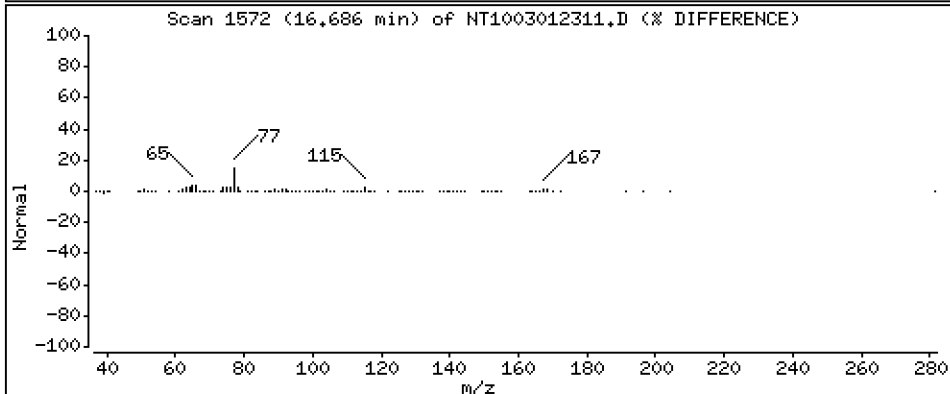
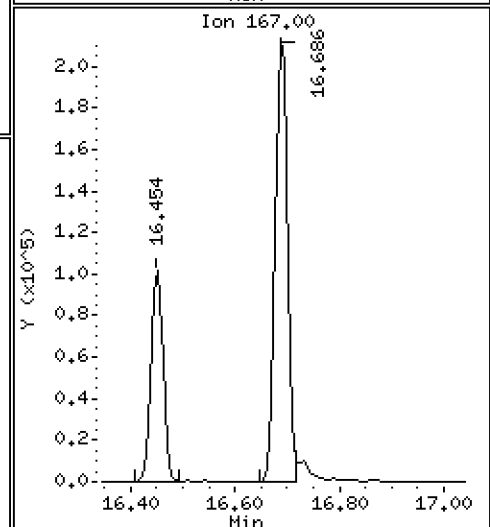
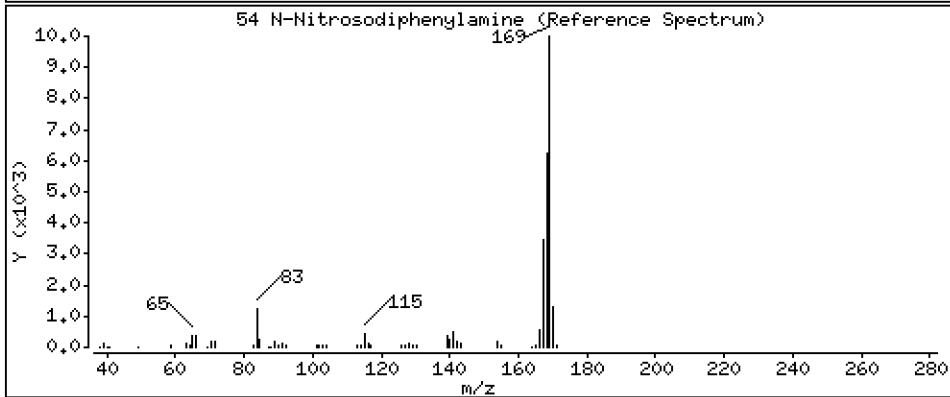
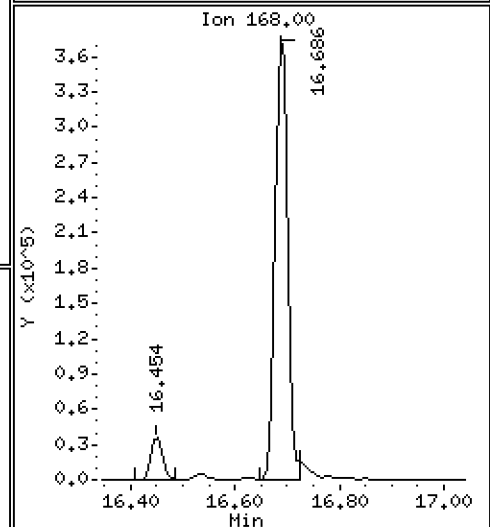
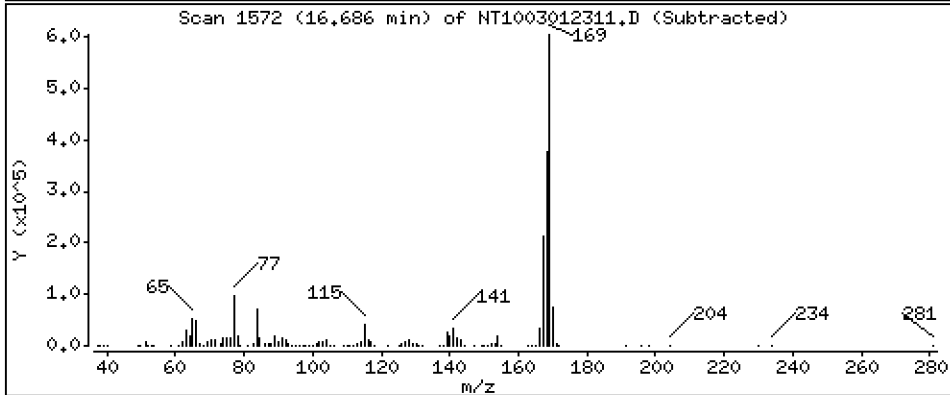
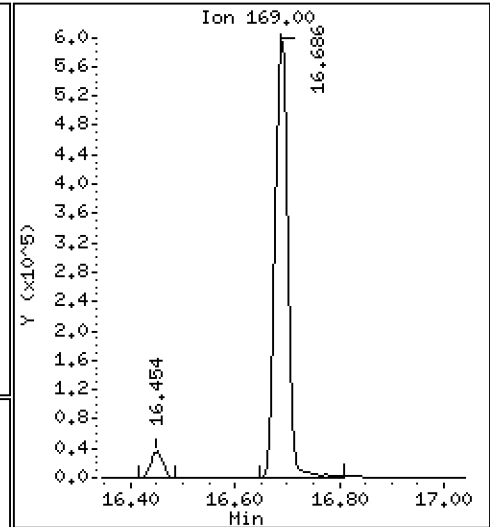
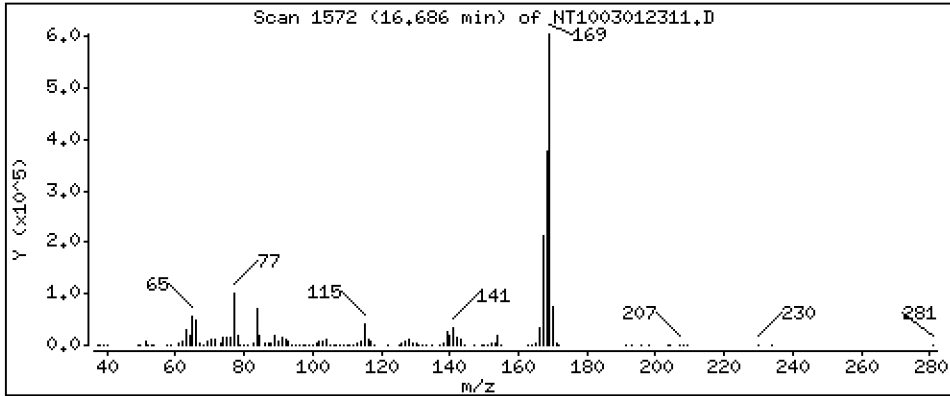
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,416 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

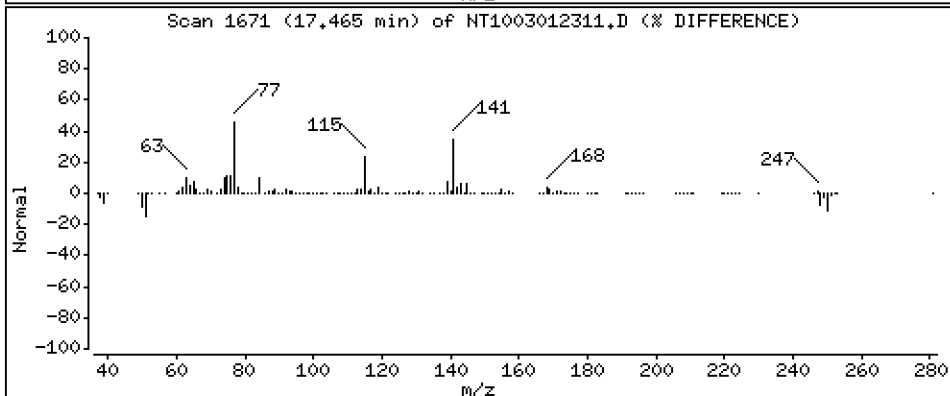
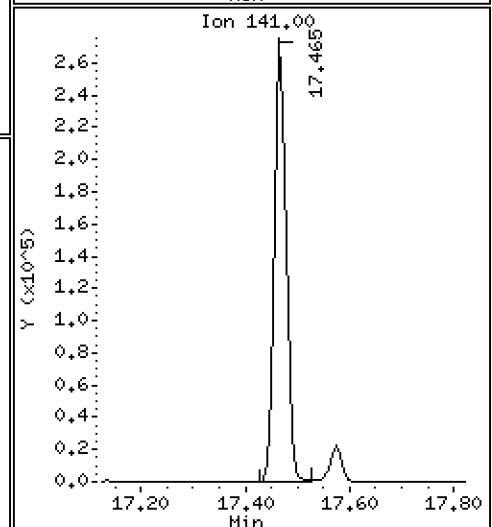
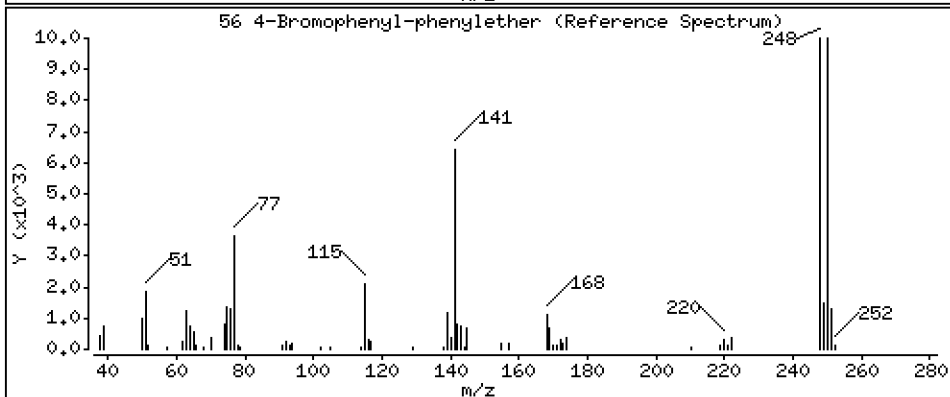
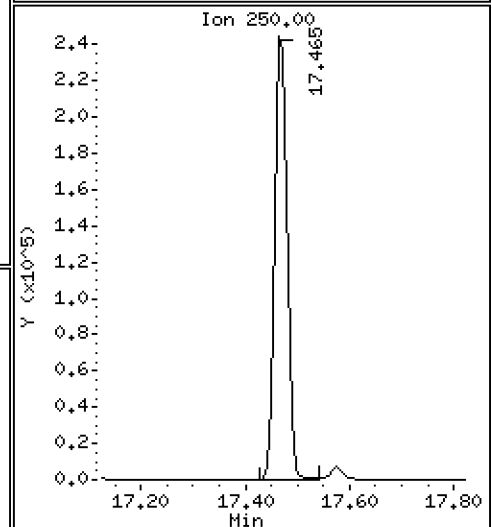
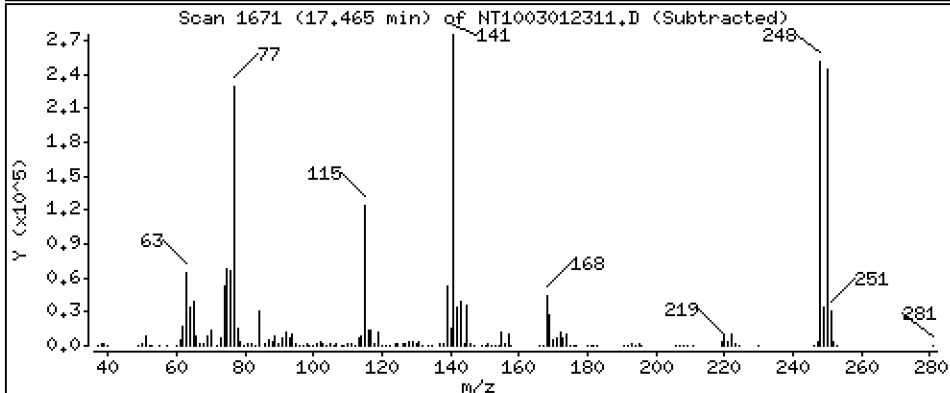
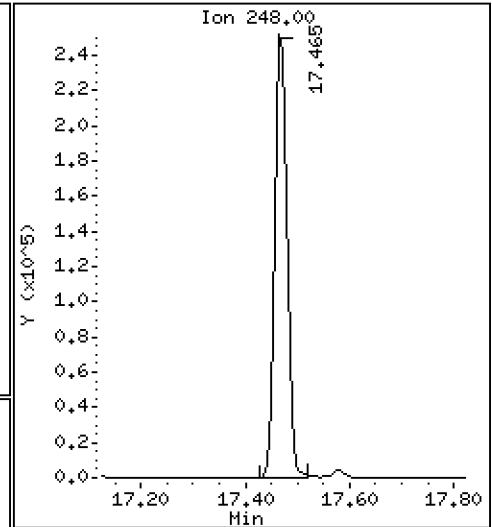
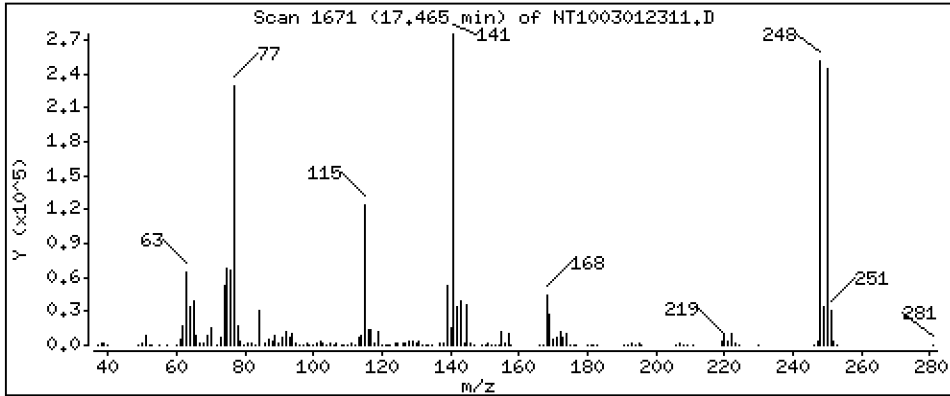
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,460 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

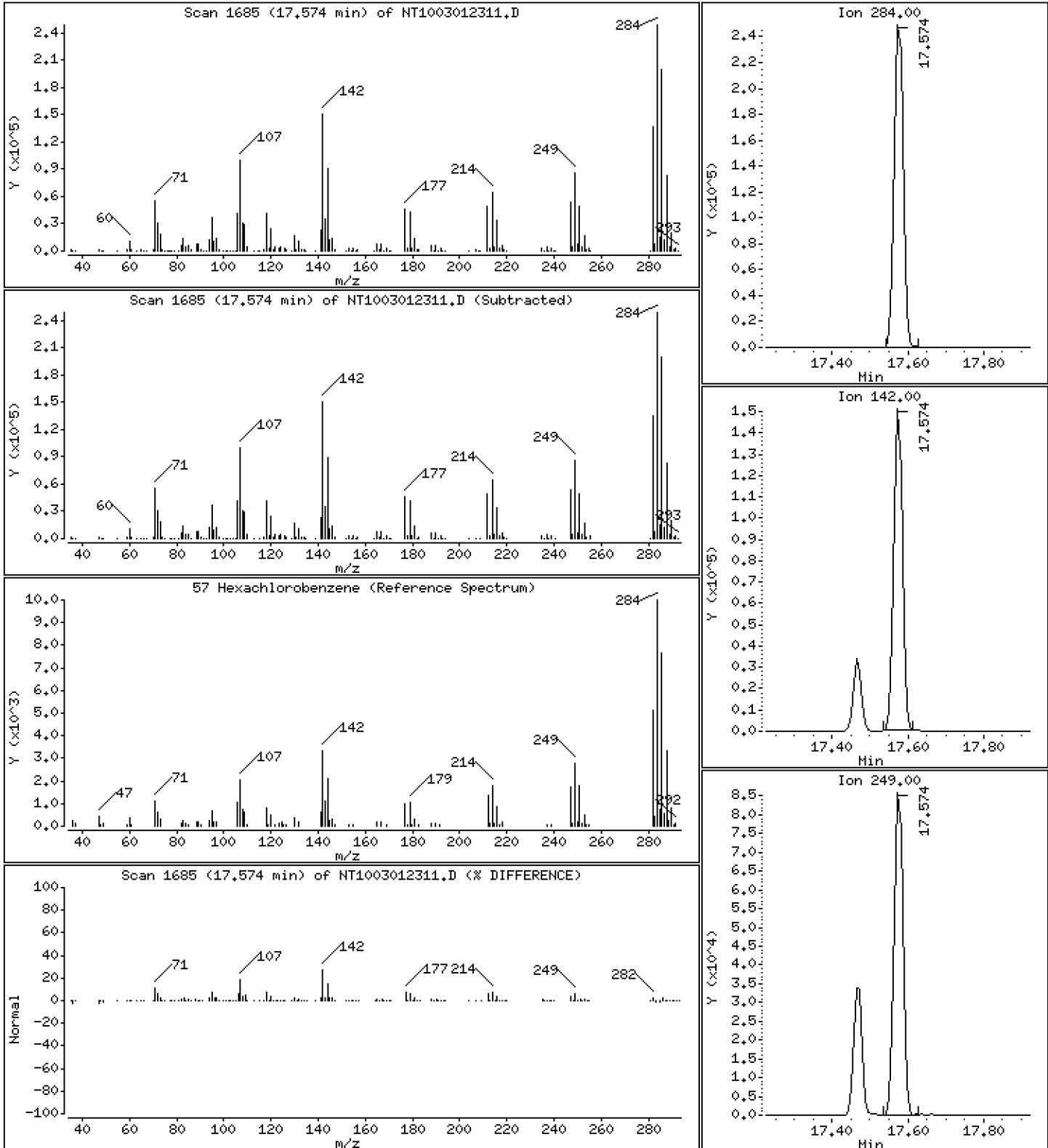
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,805 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

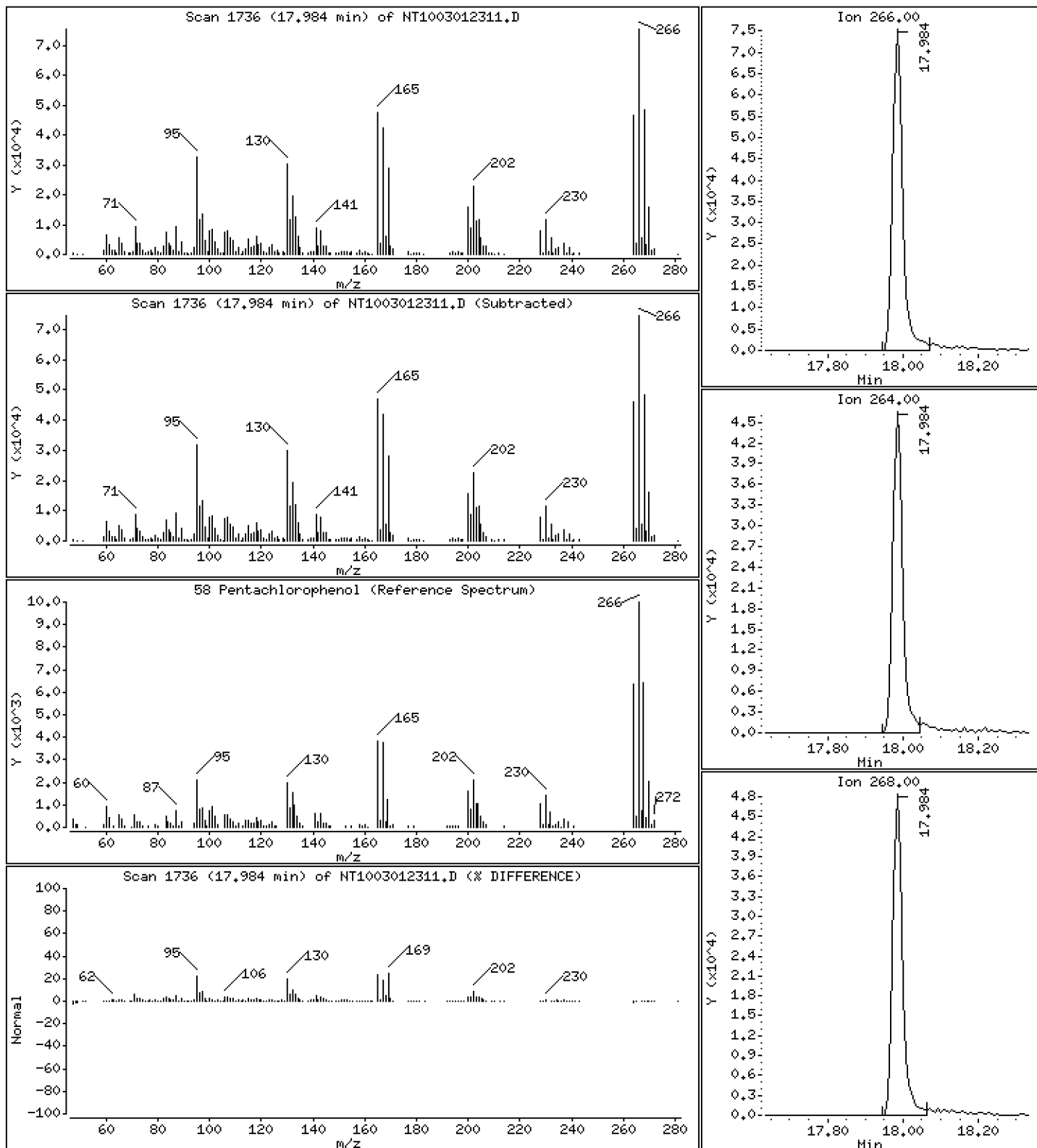
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,492 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

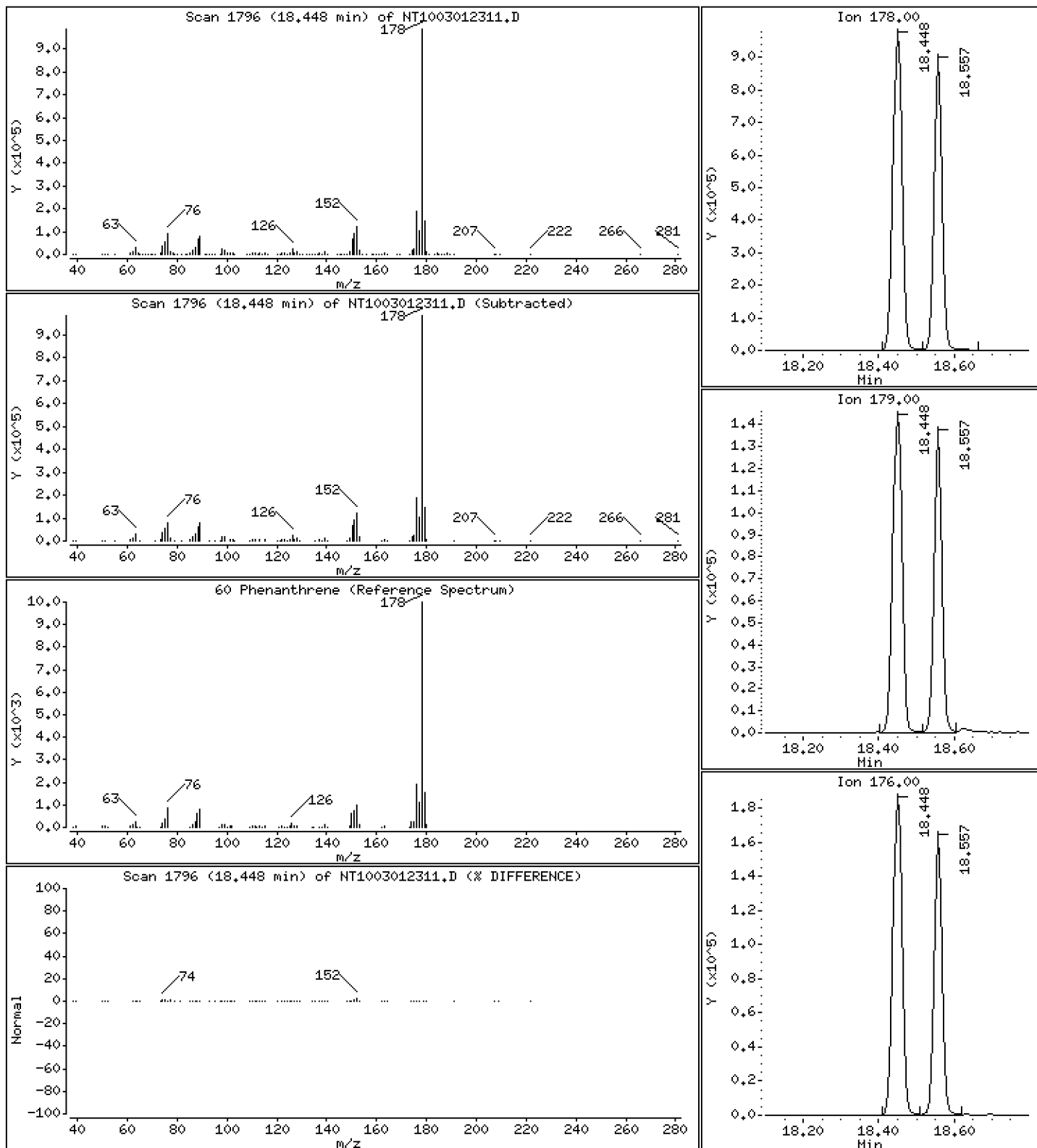
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 5,085 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

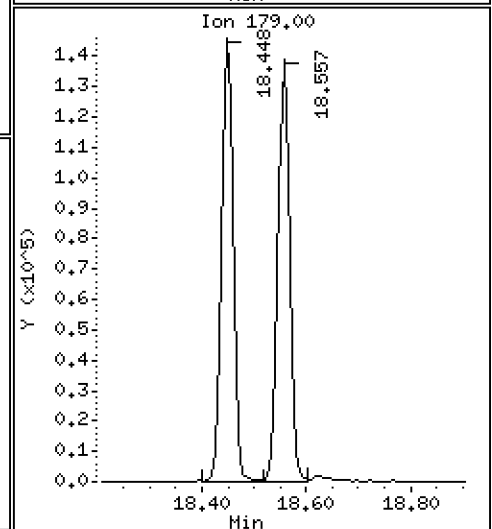
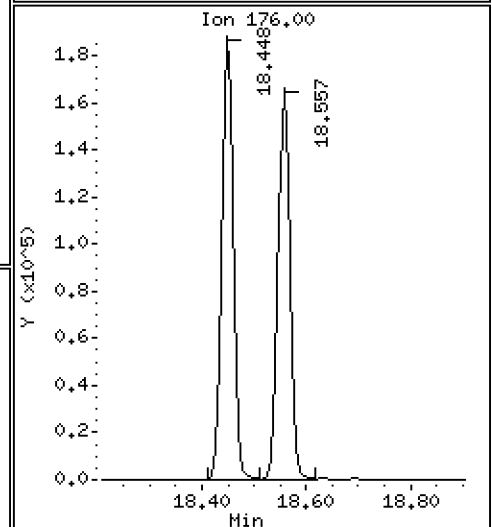
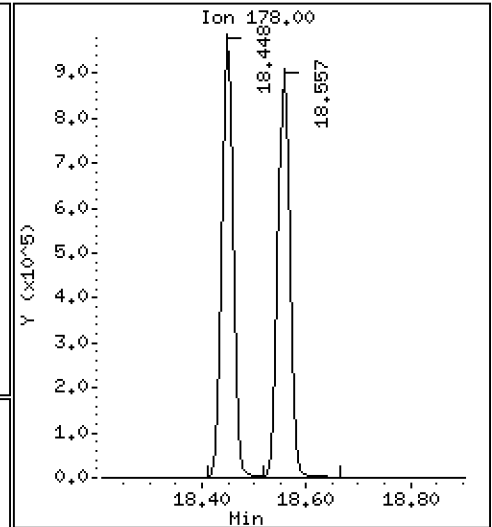
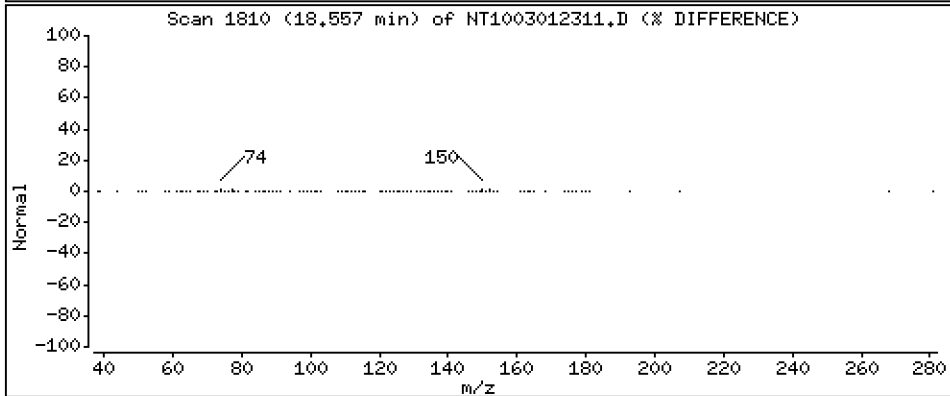
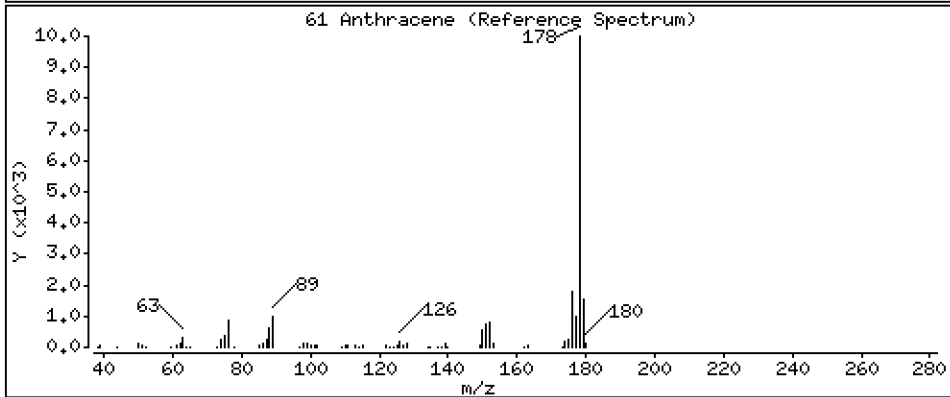
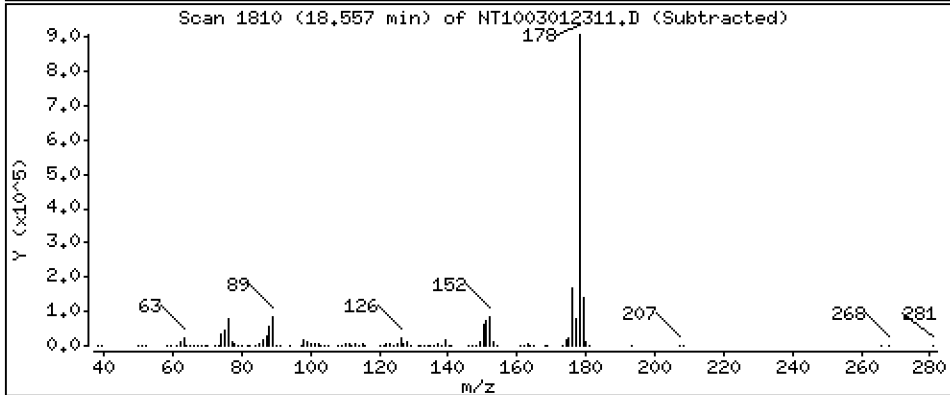
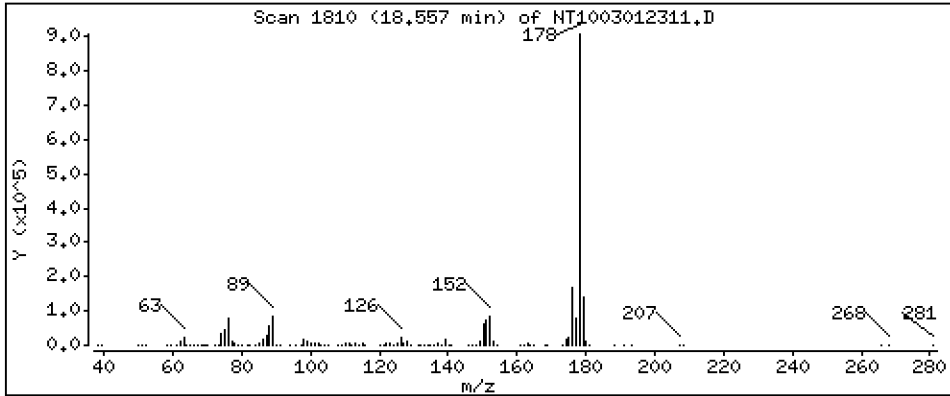
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,585 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

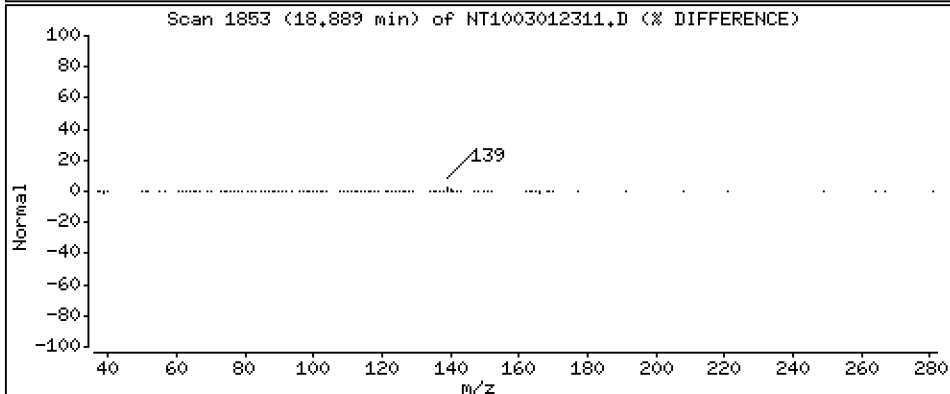
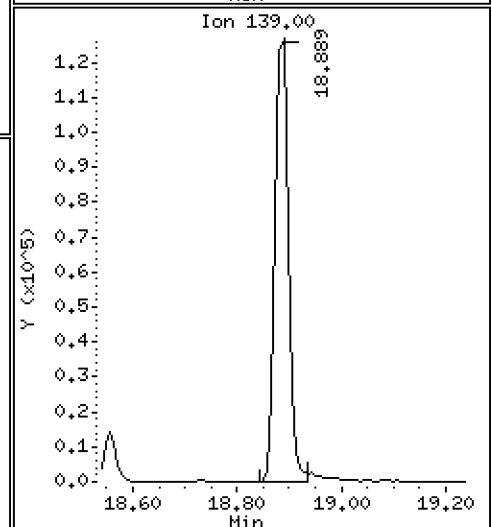
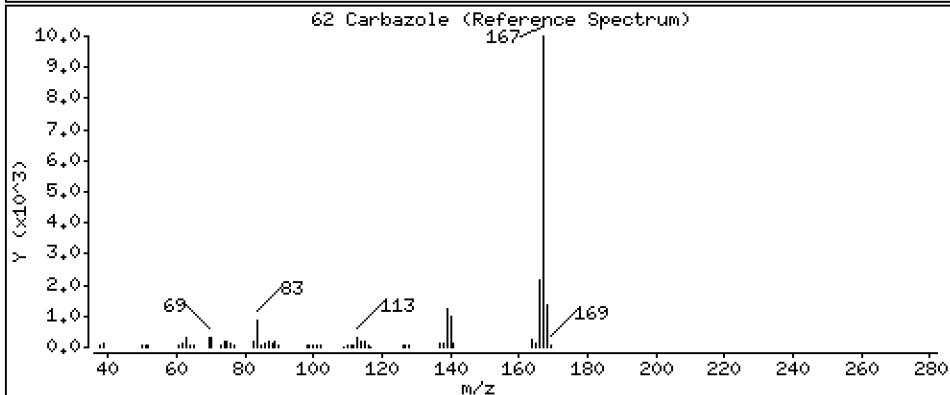
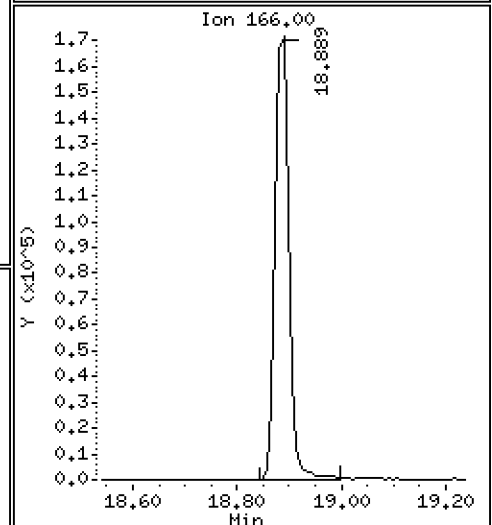
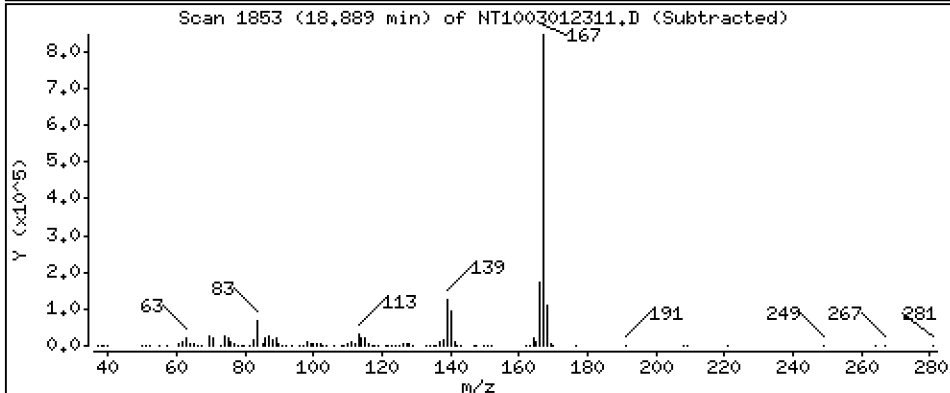
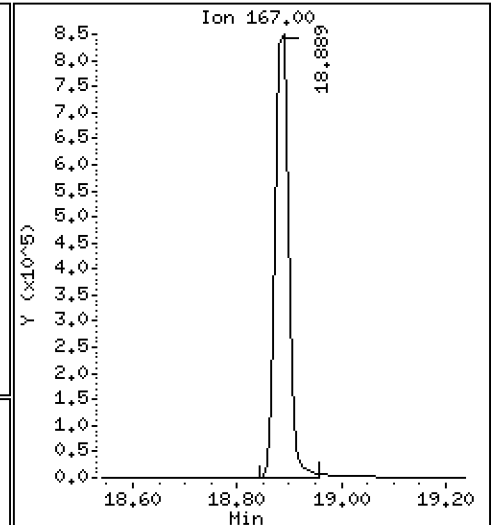
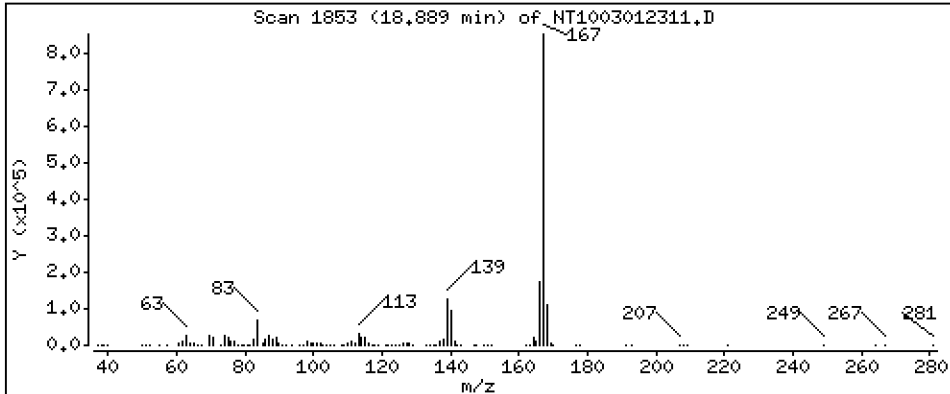
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,335 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

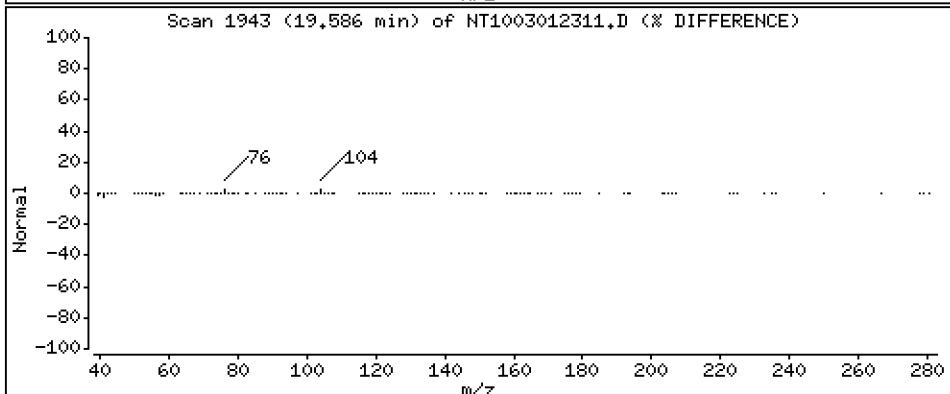
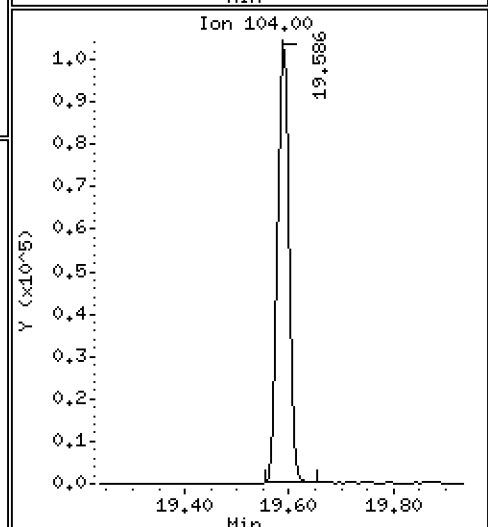
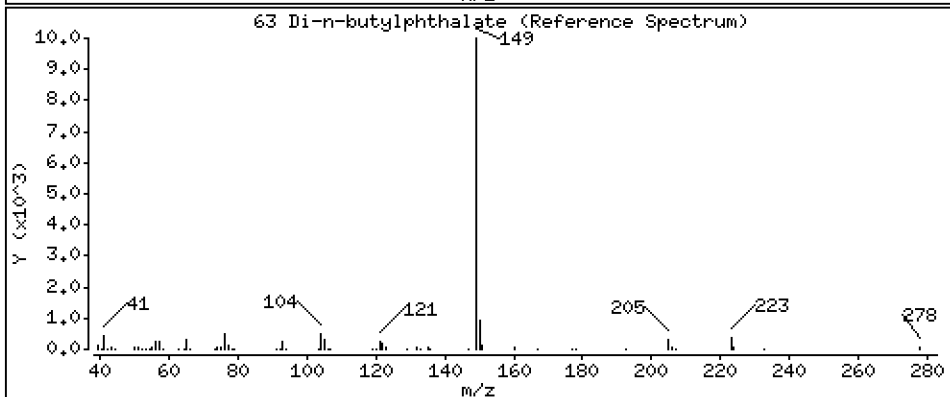
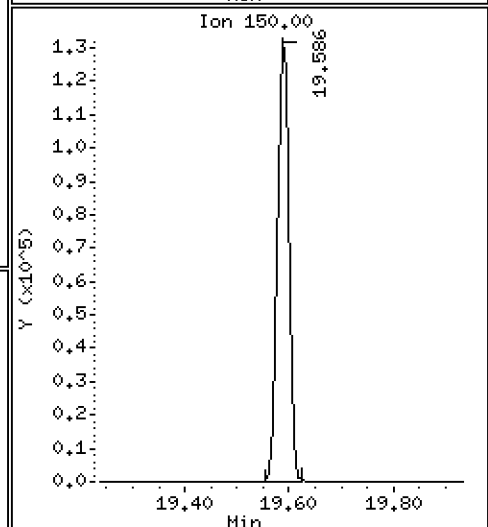
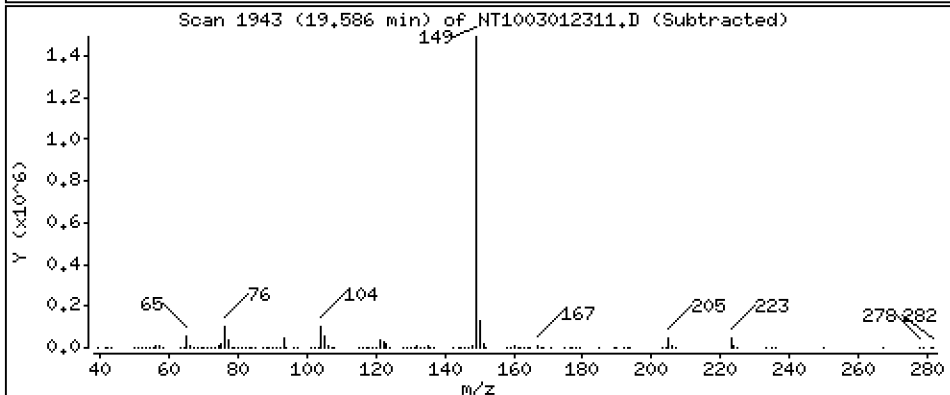
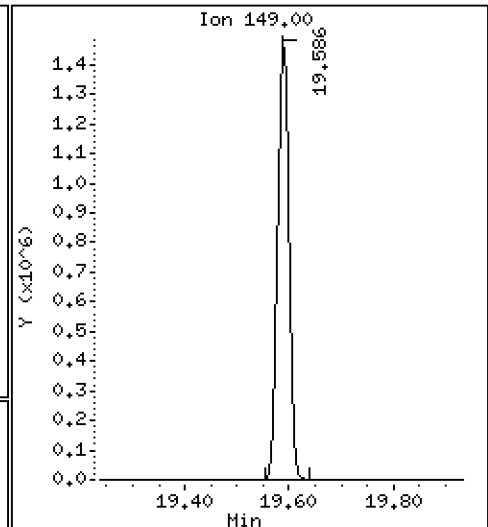
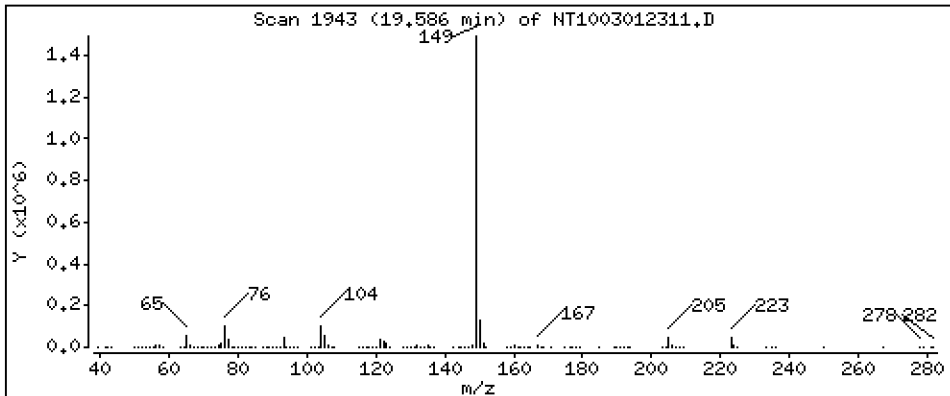
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,463 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

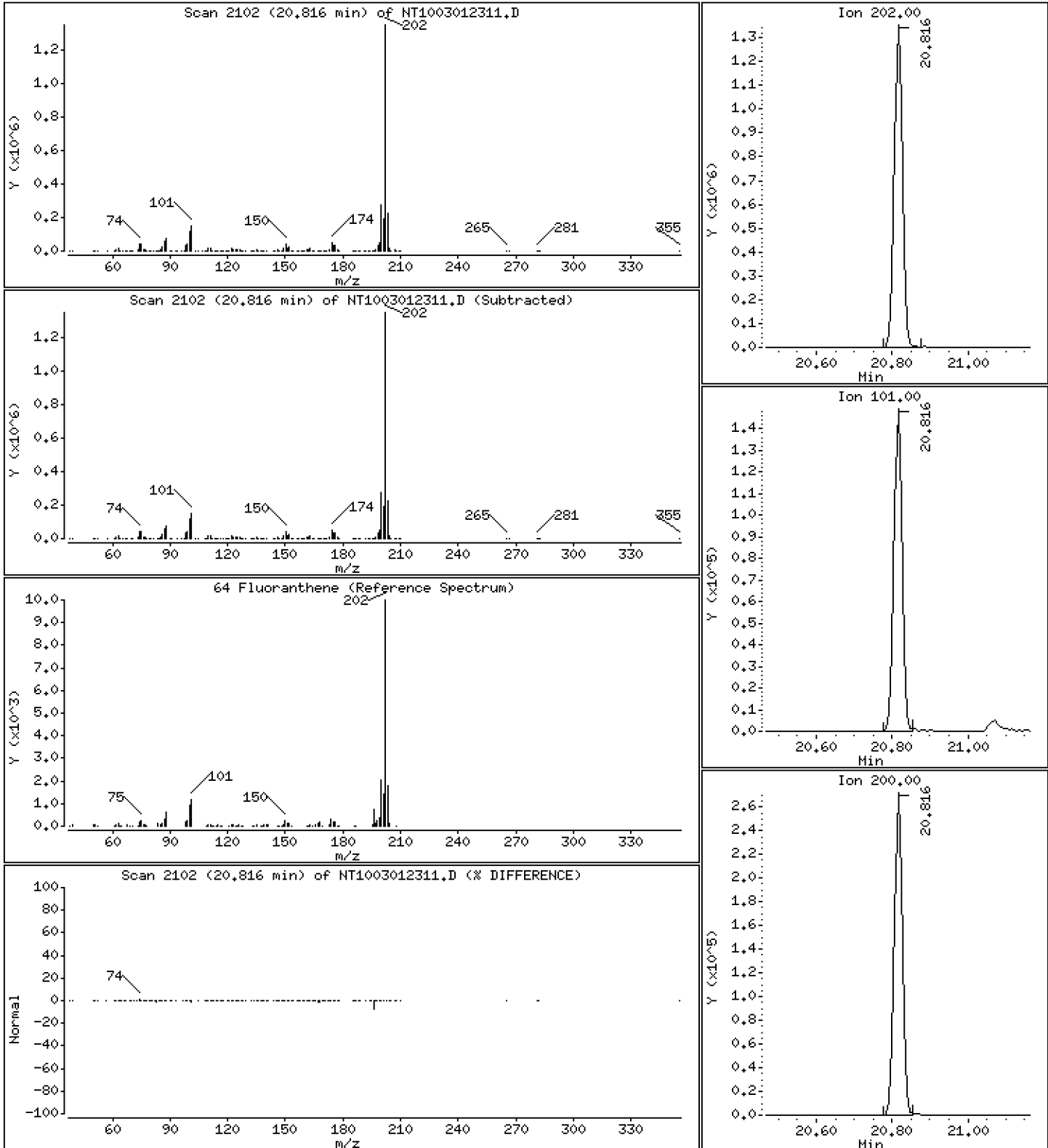
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,542 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

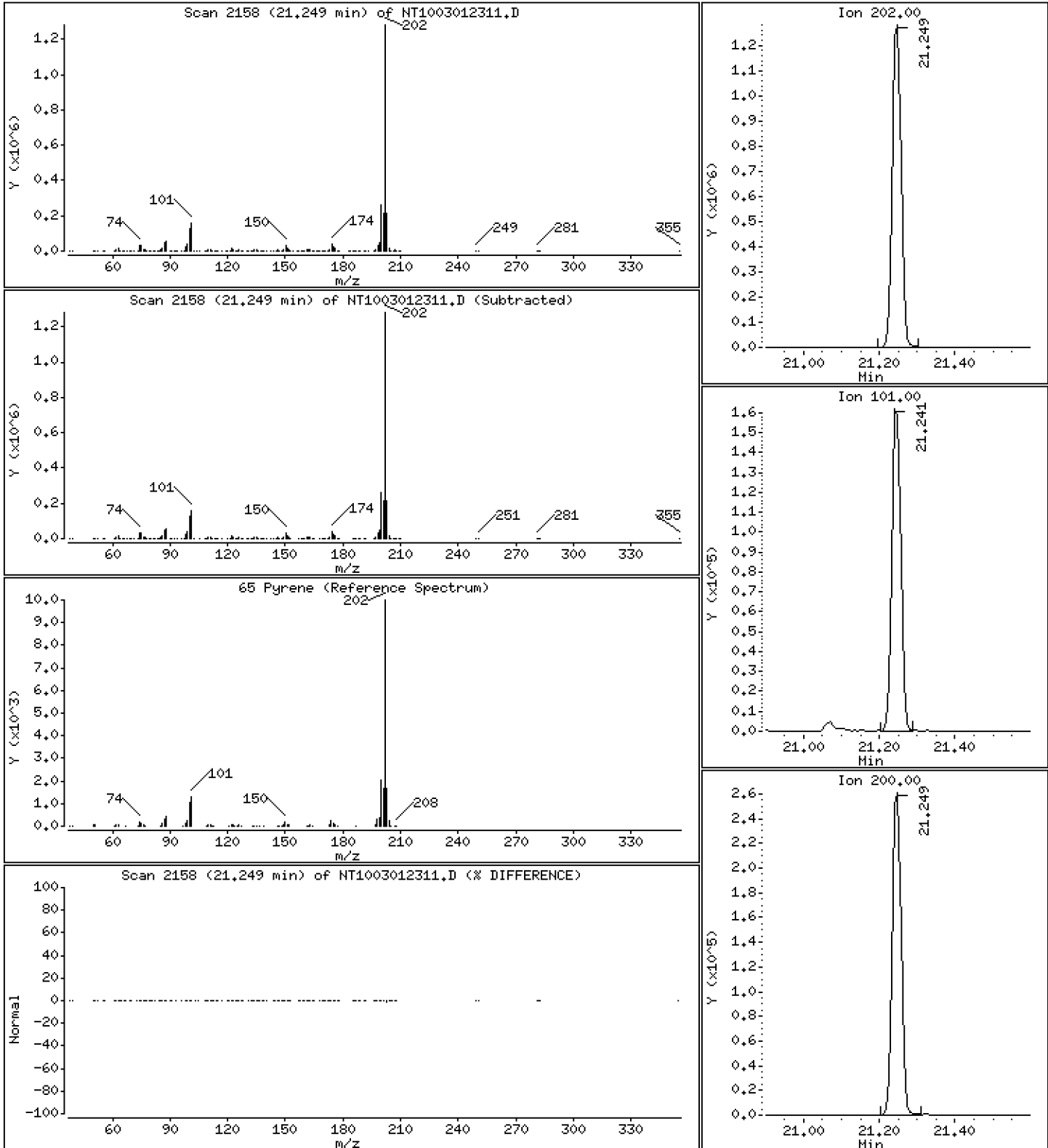
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,626 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

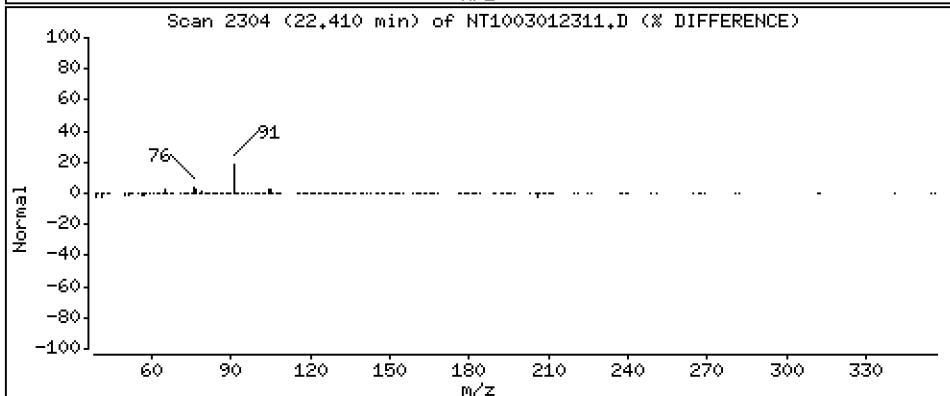
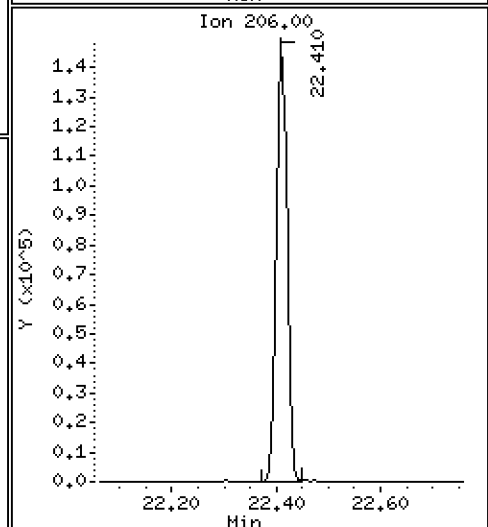
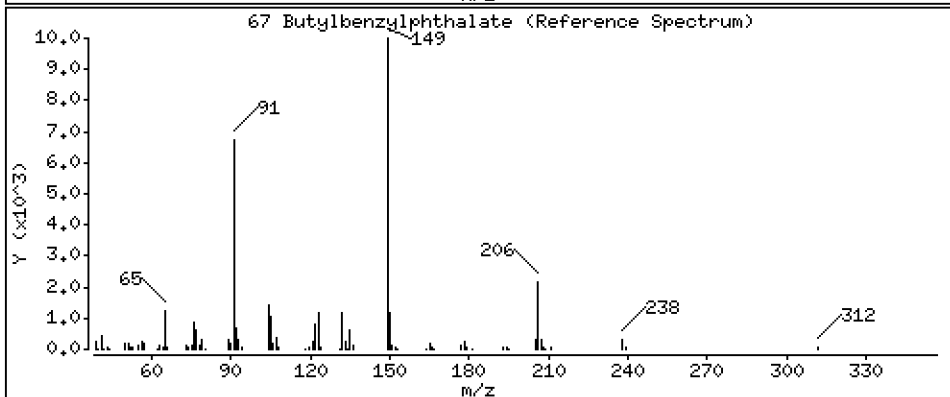
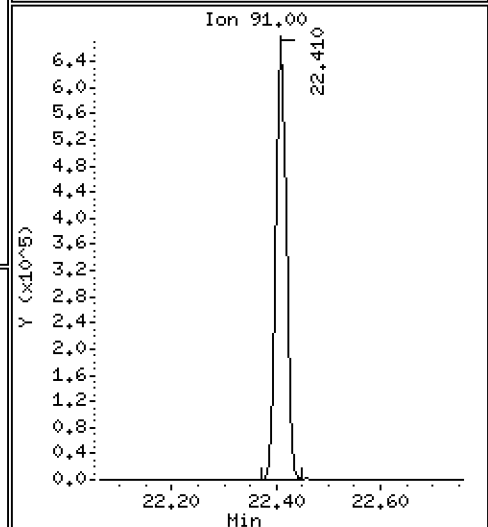
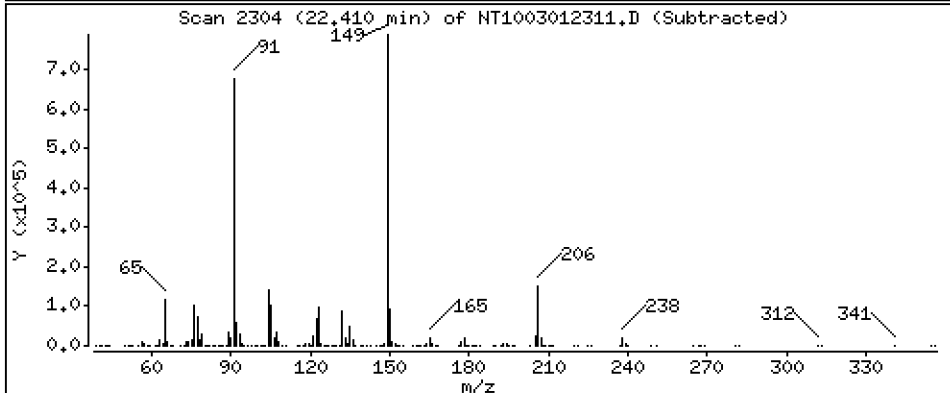
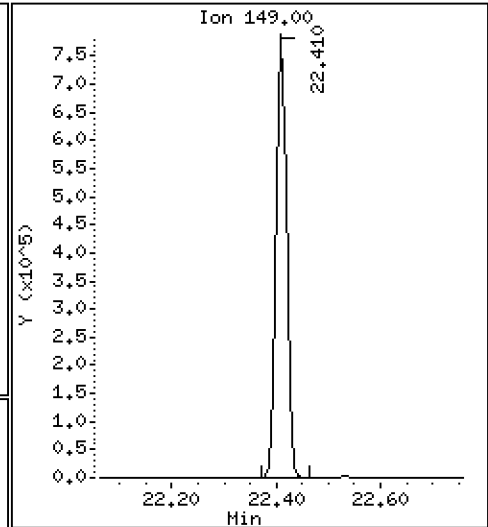
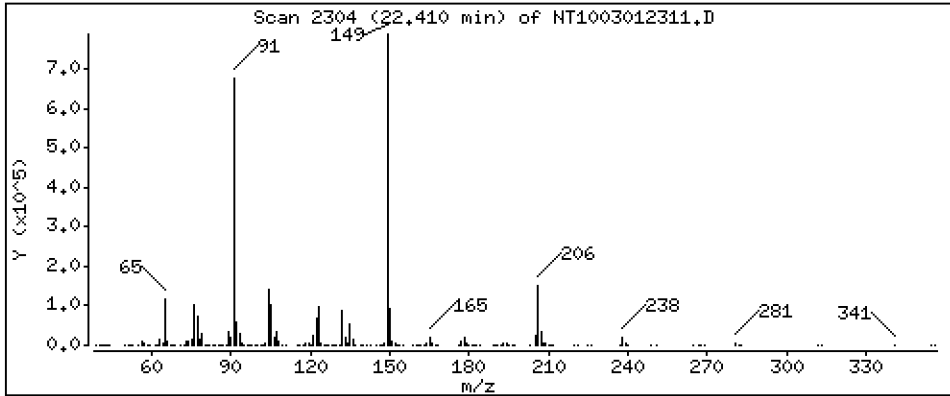
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,525 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

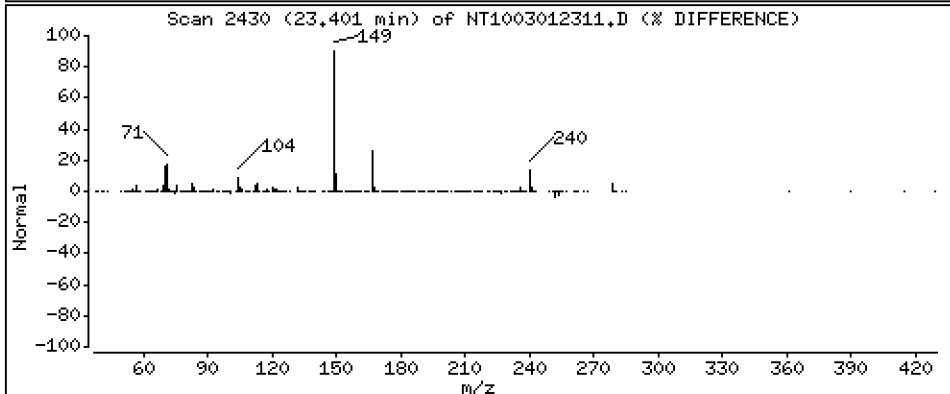
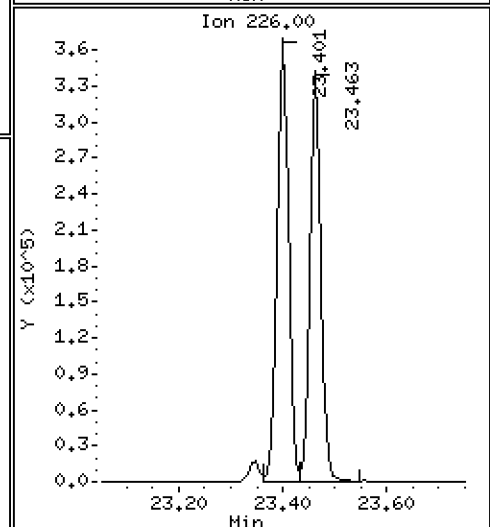
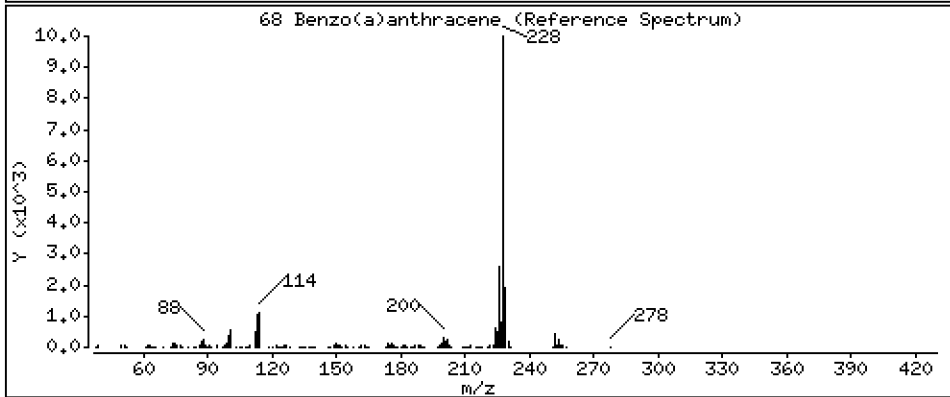
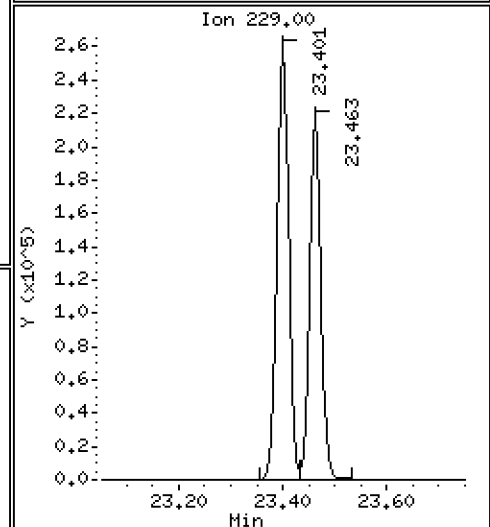
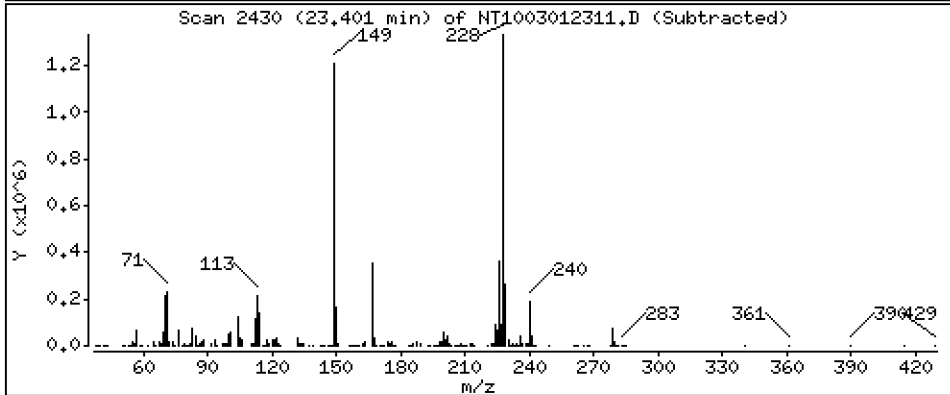
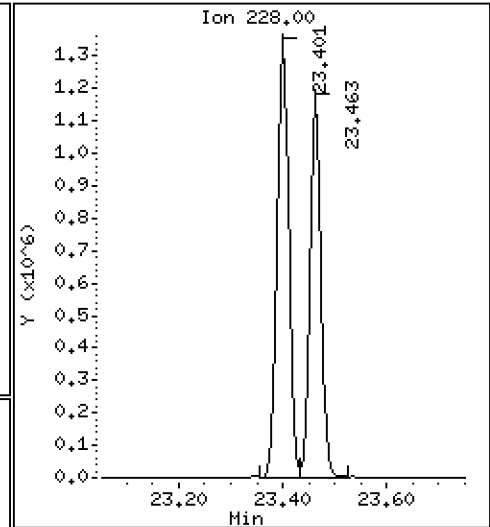
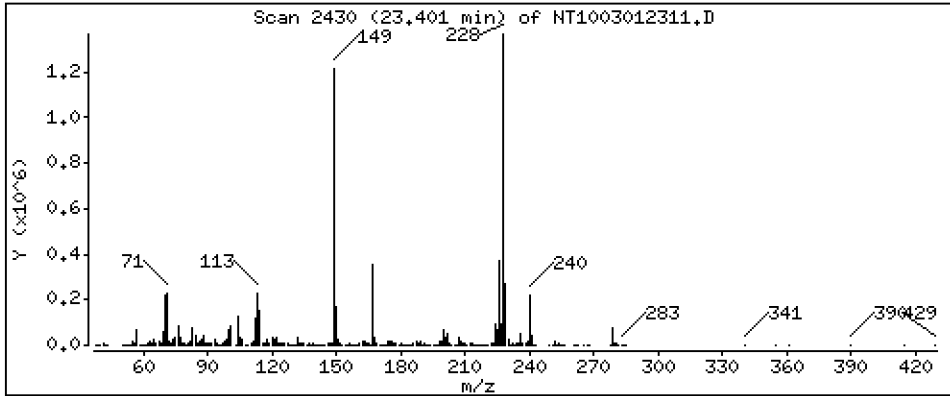
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,578 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

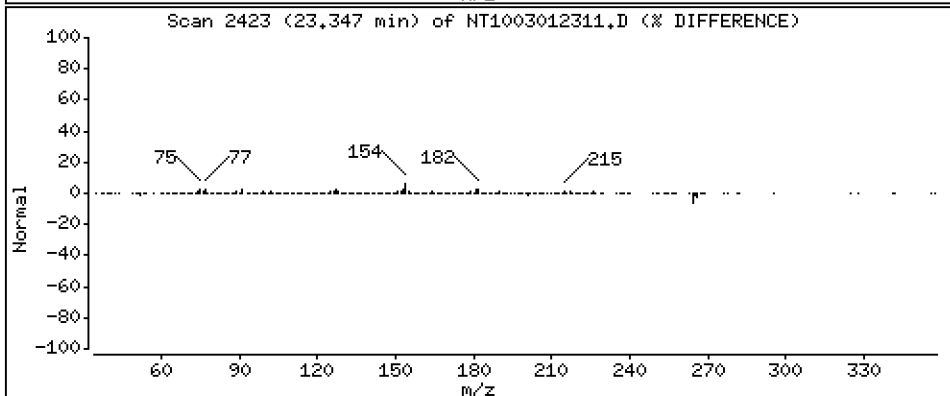
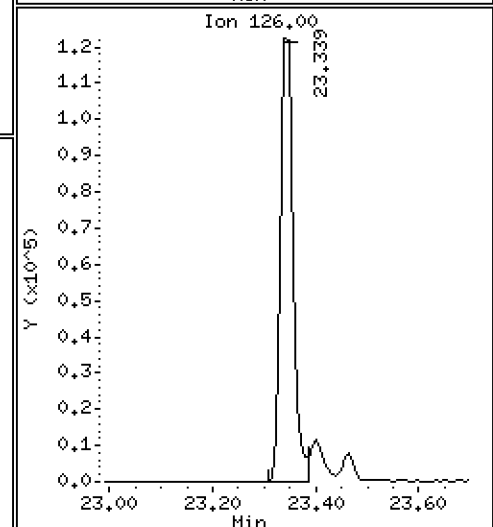
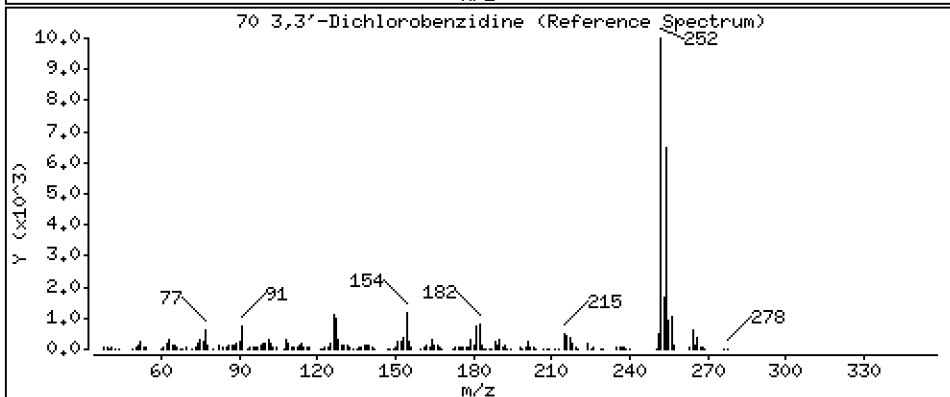
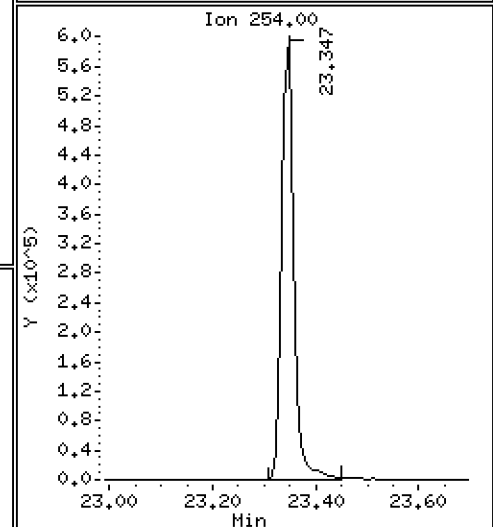
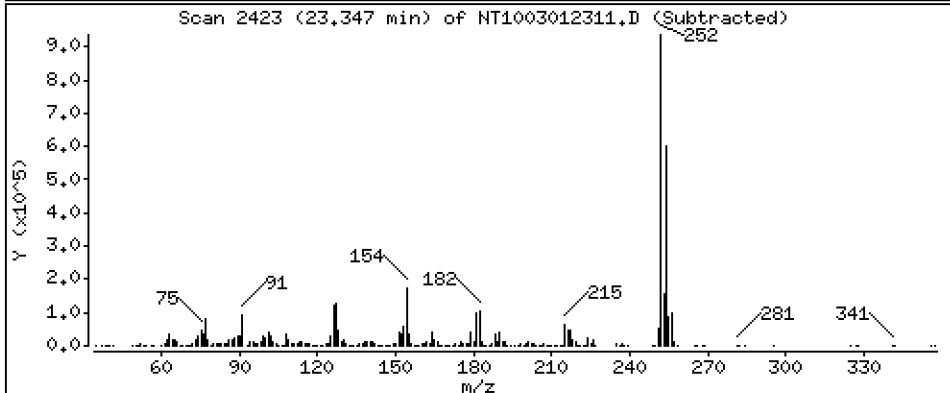
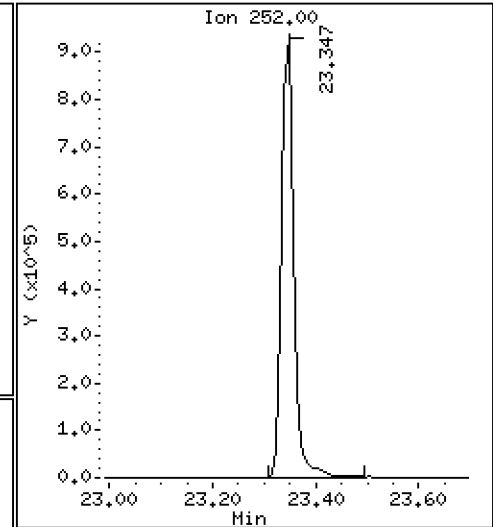
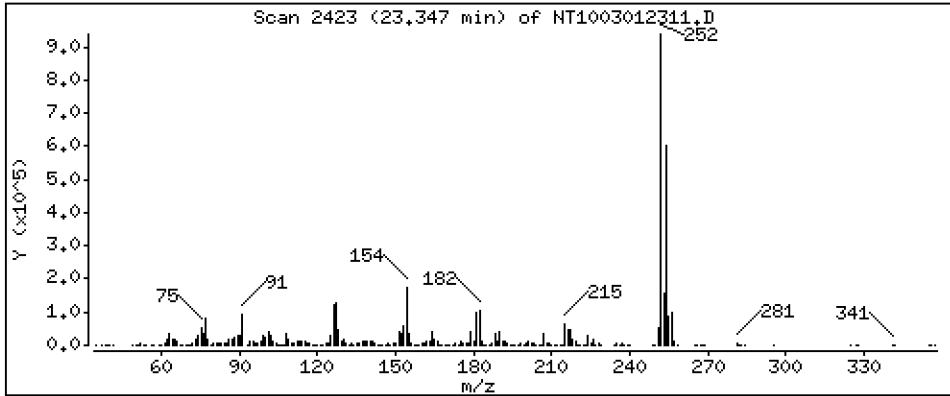
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 7,383 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

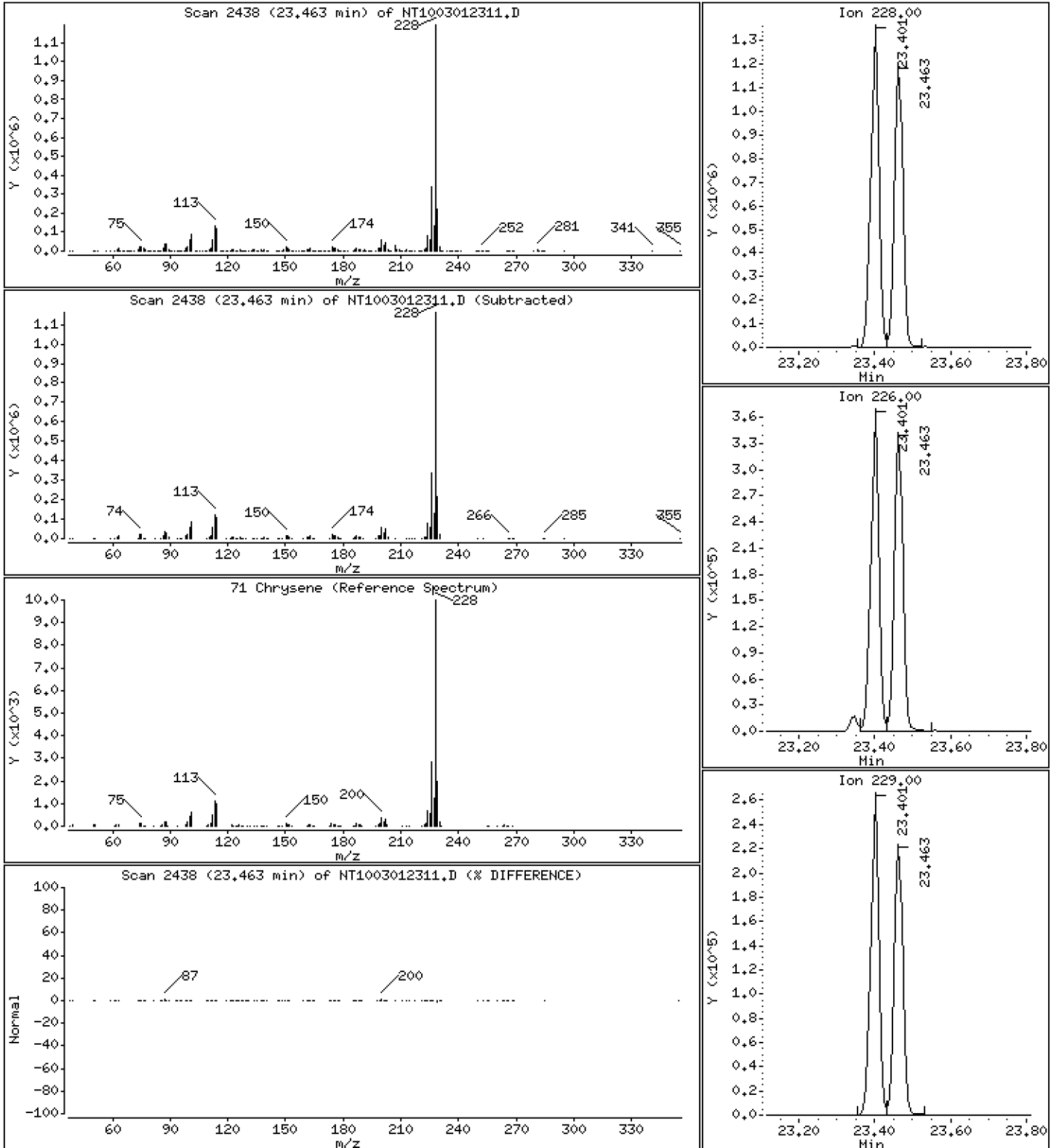
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,967 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

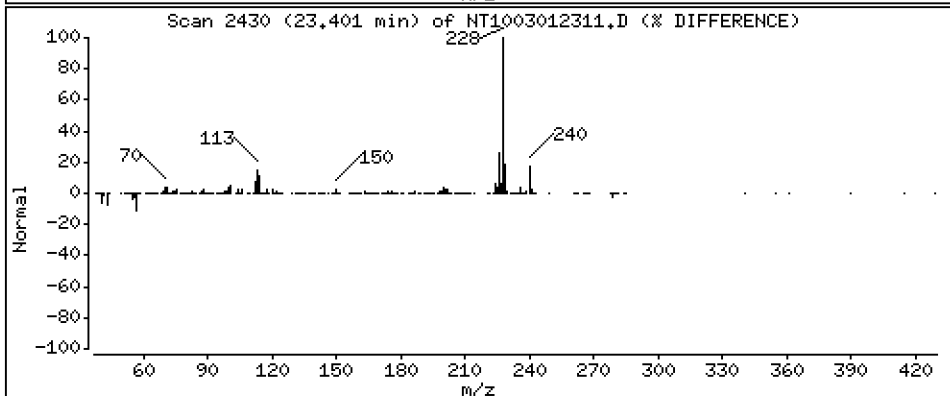
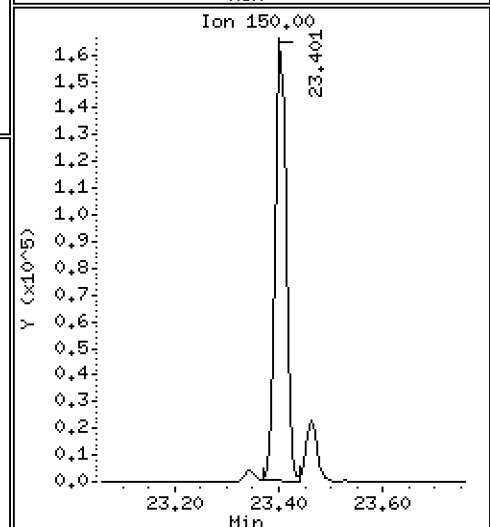
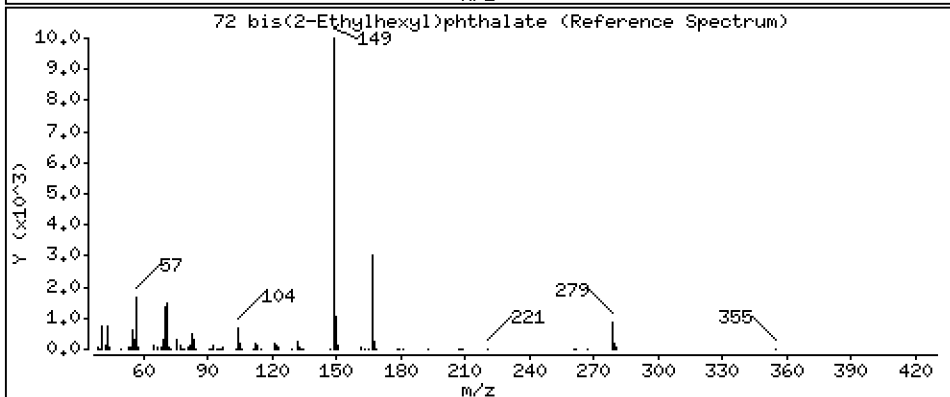
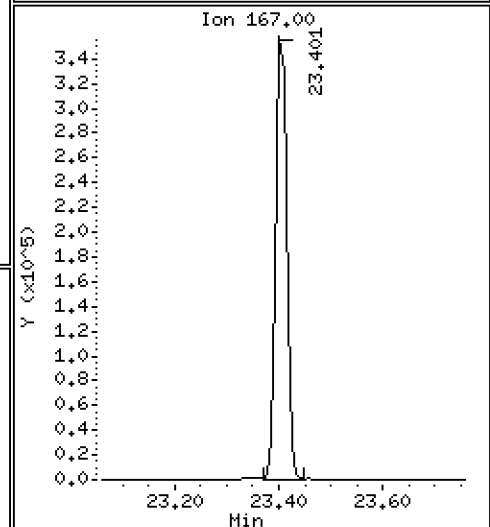
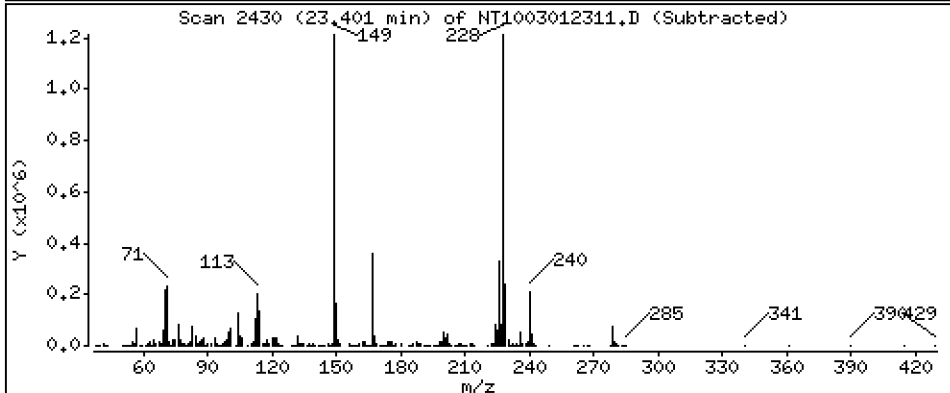
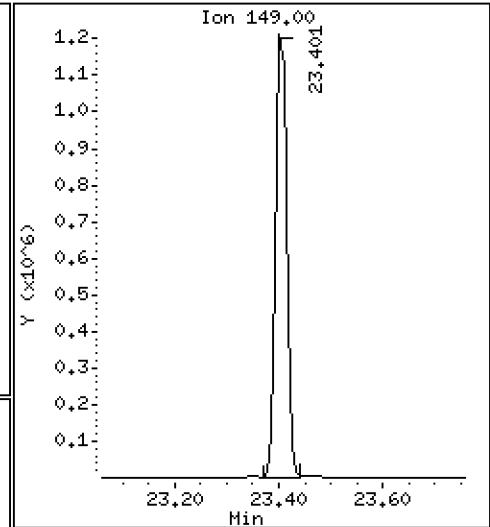
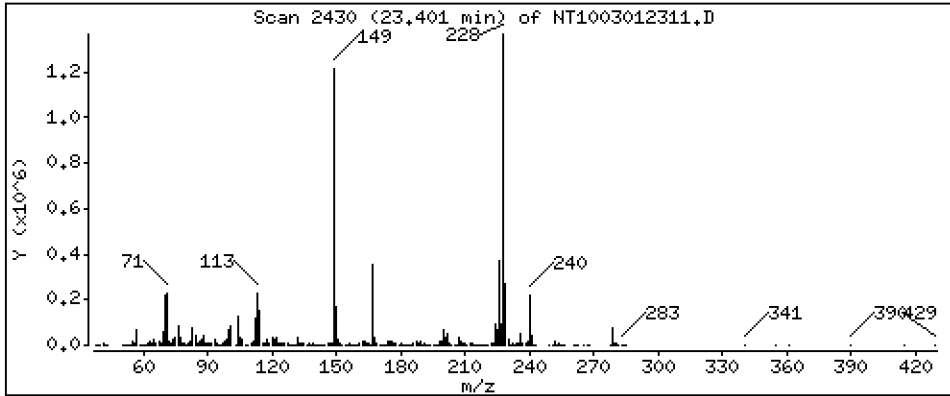
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,956 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

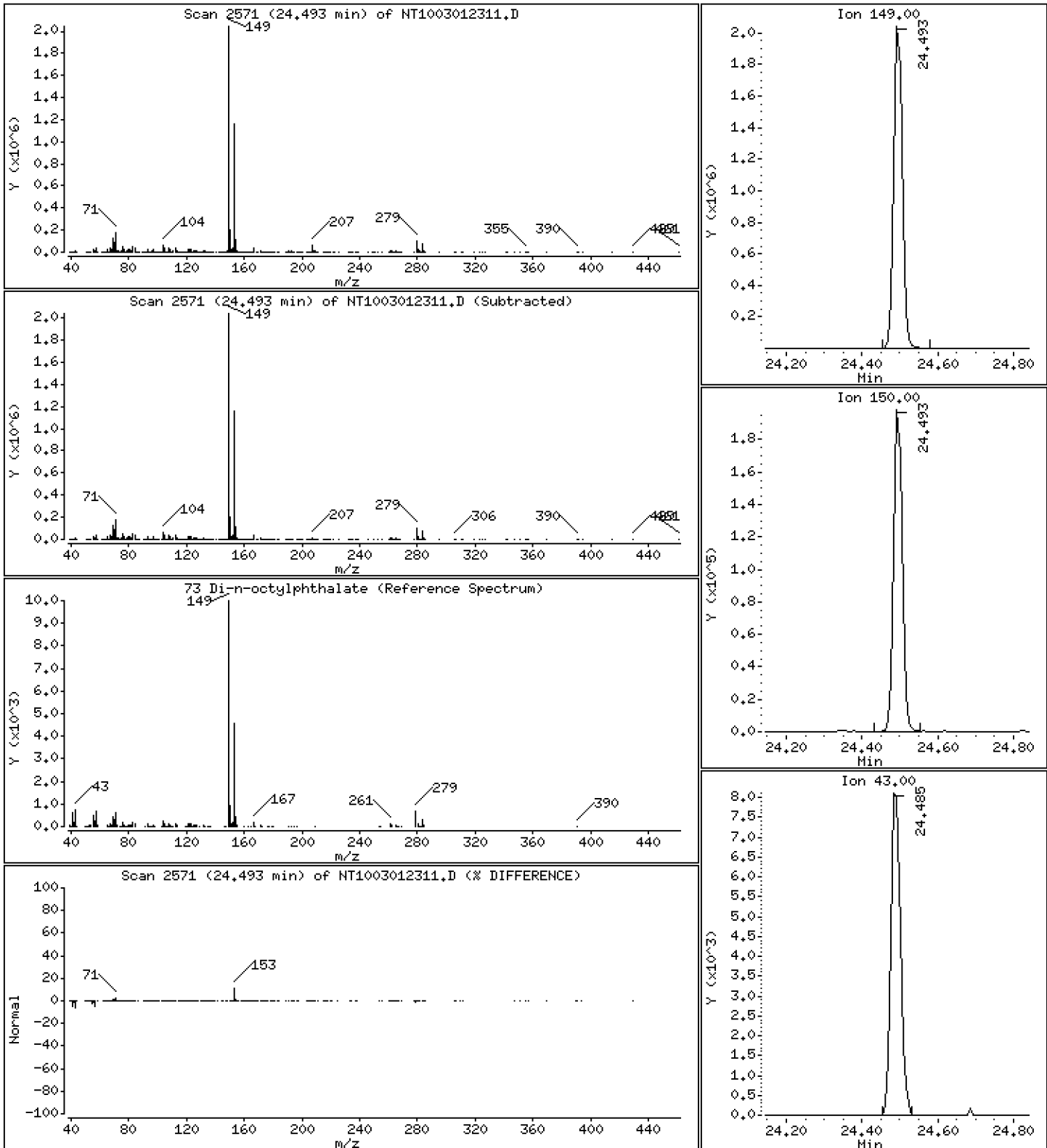
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,844 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

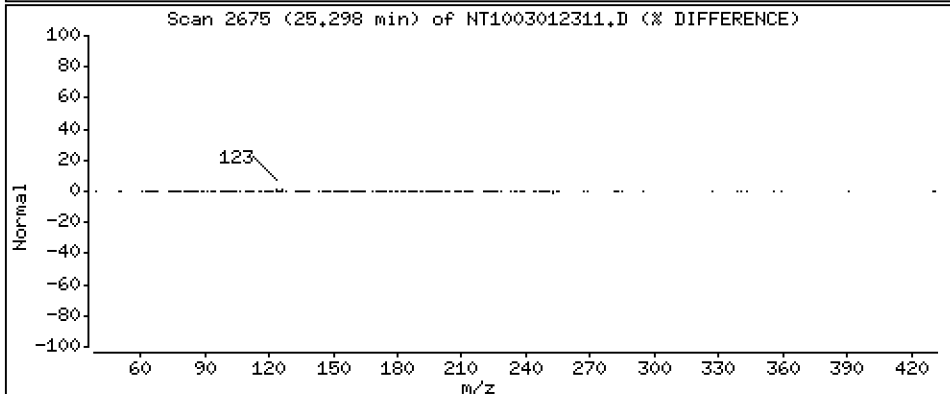
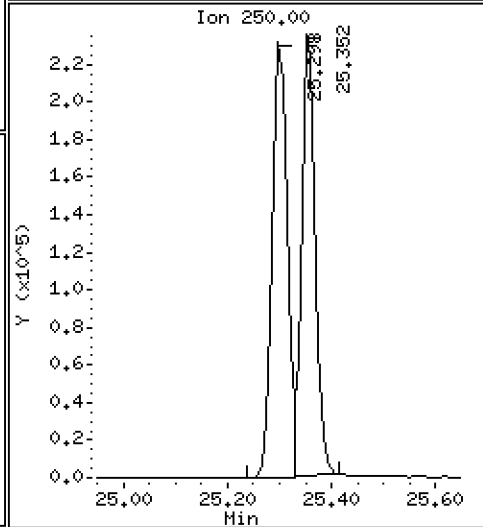
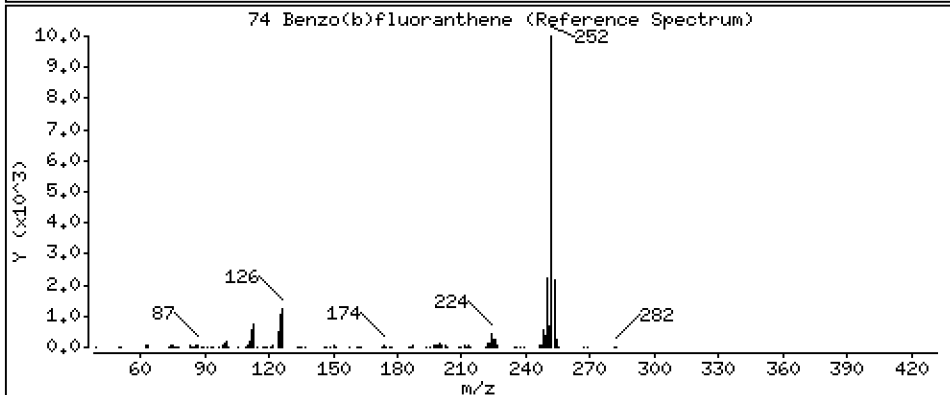
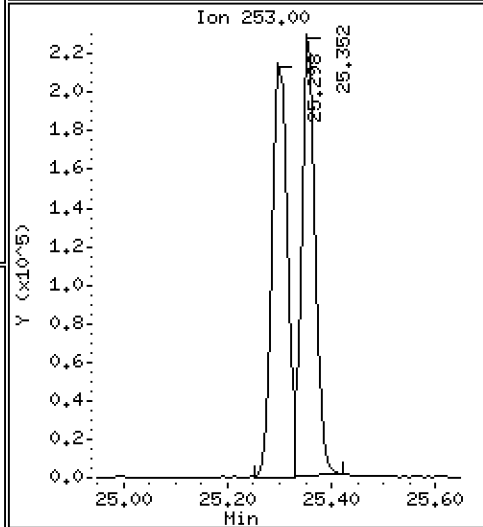
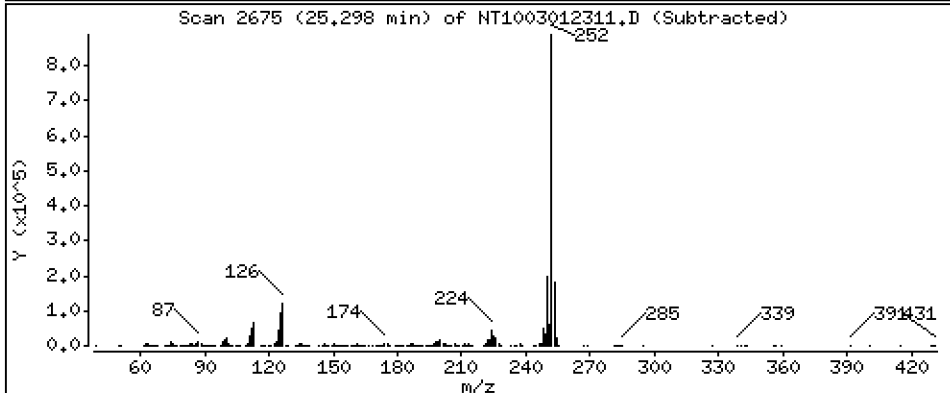
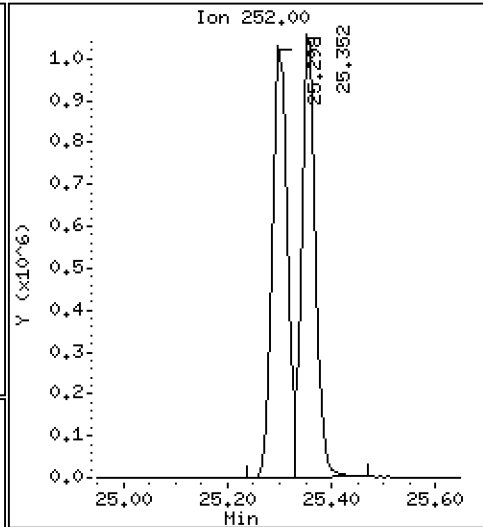
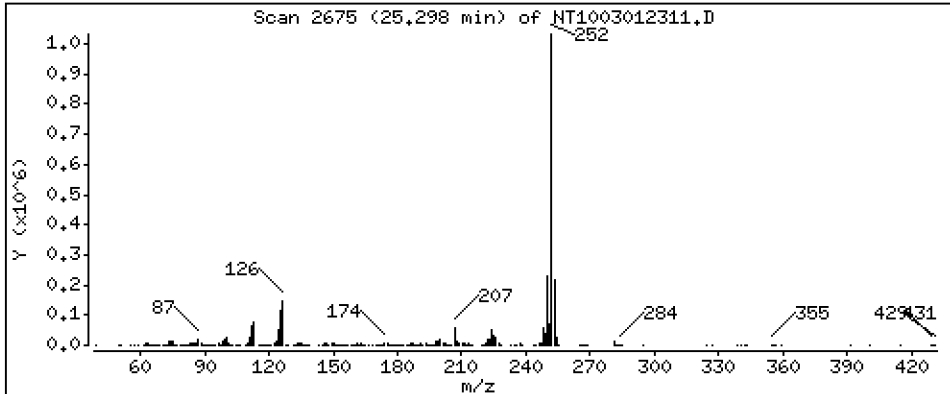
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,319 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

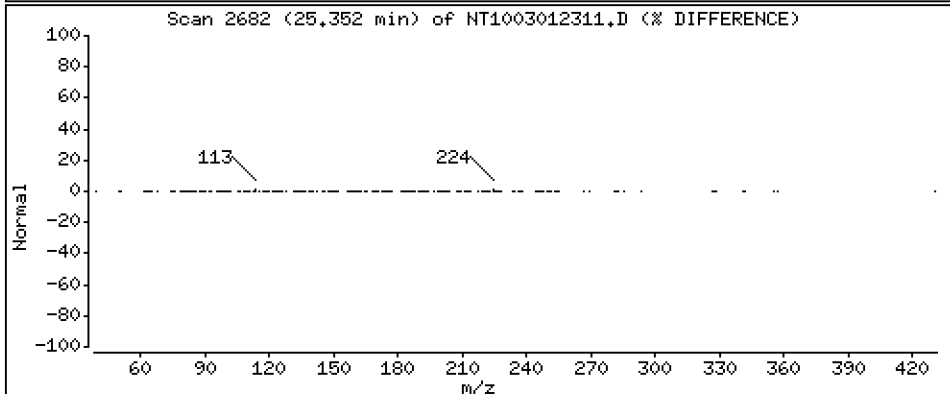
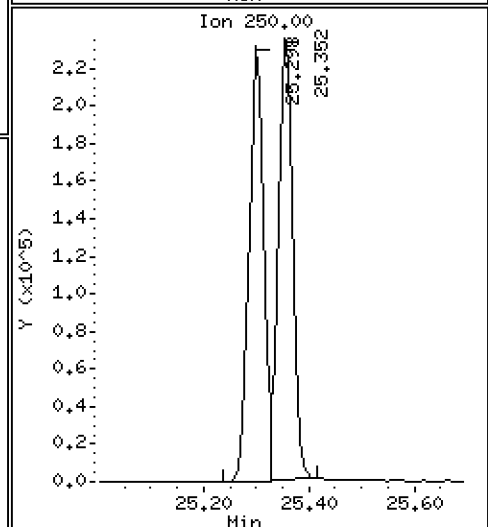
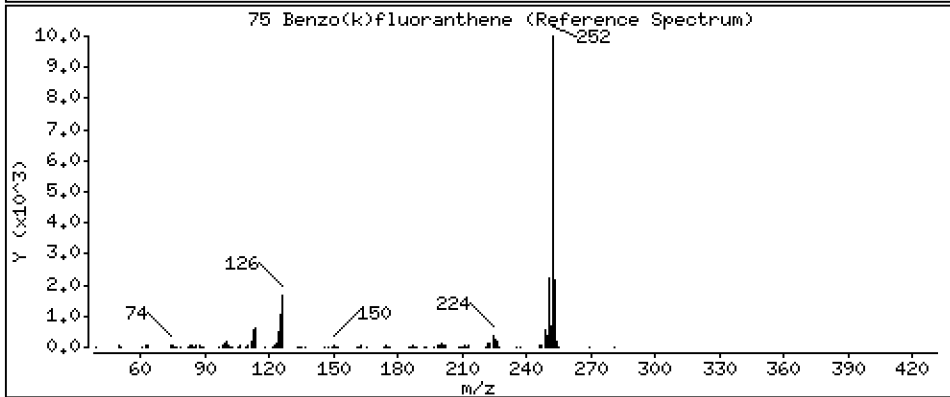
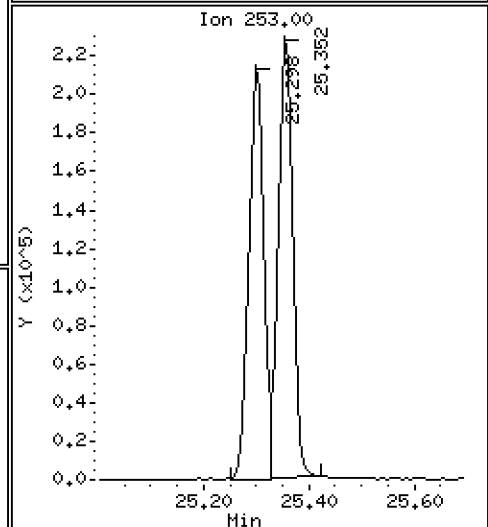
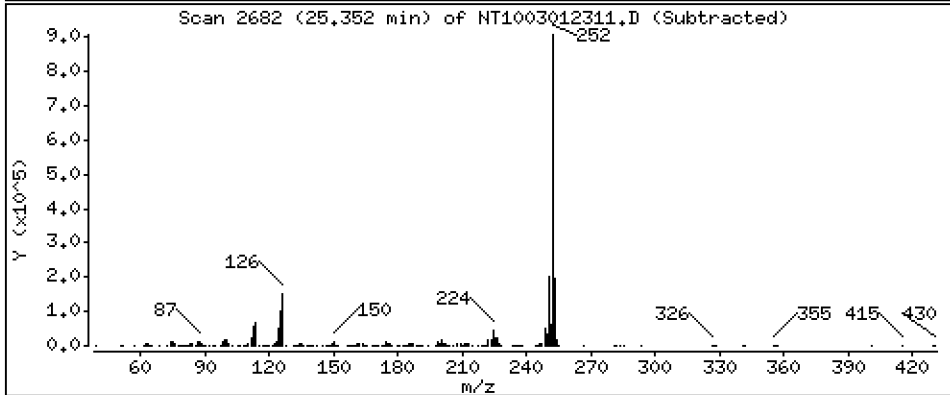
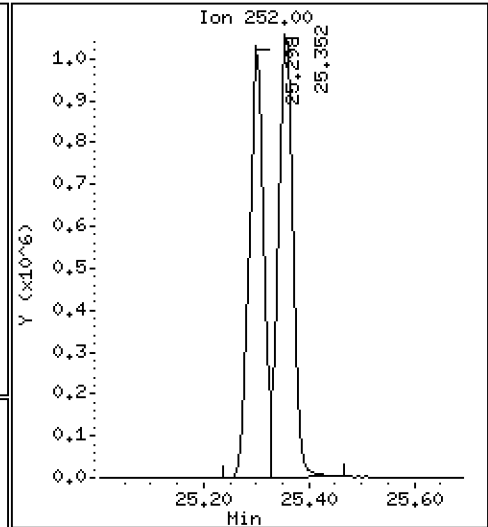
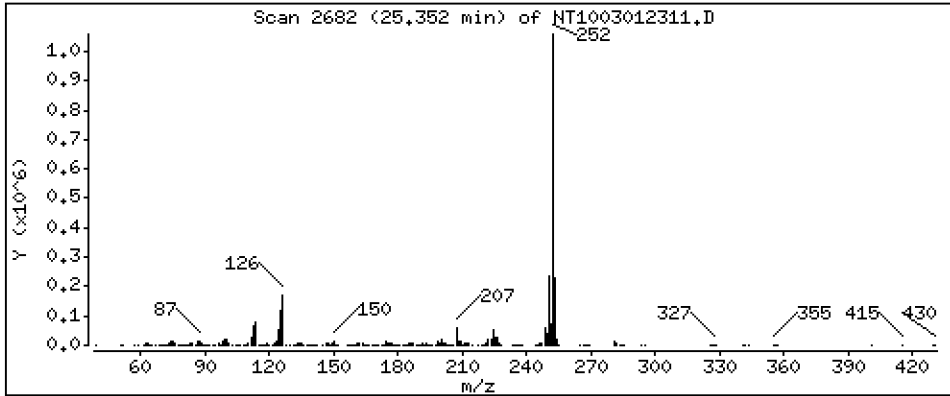
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,563 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

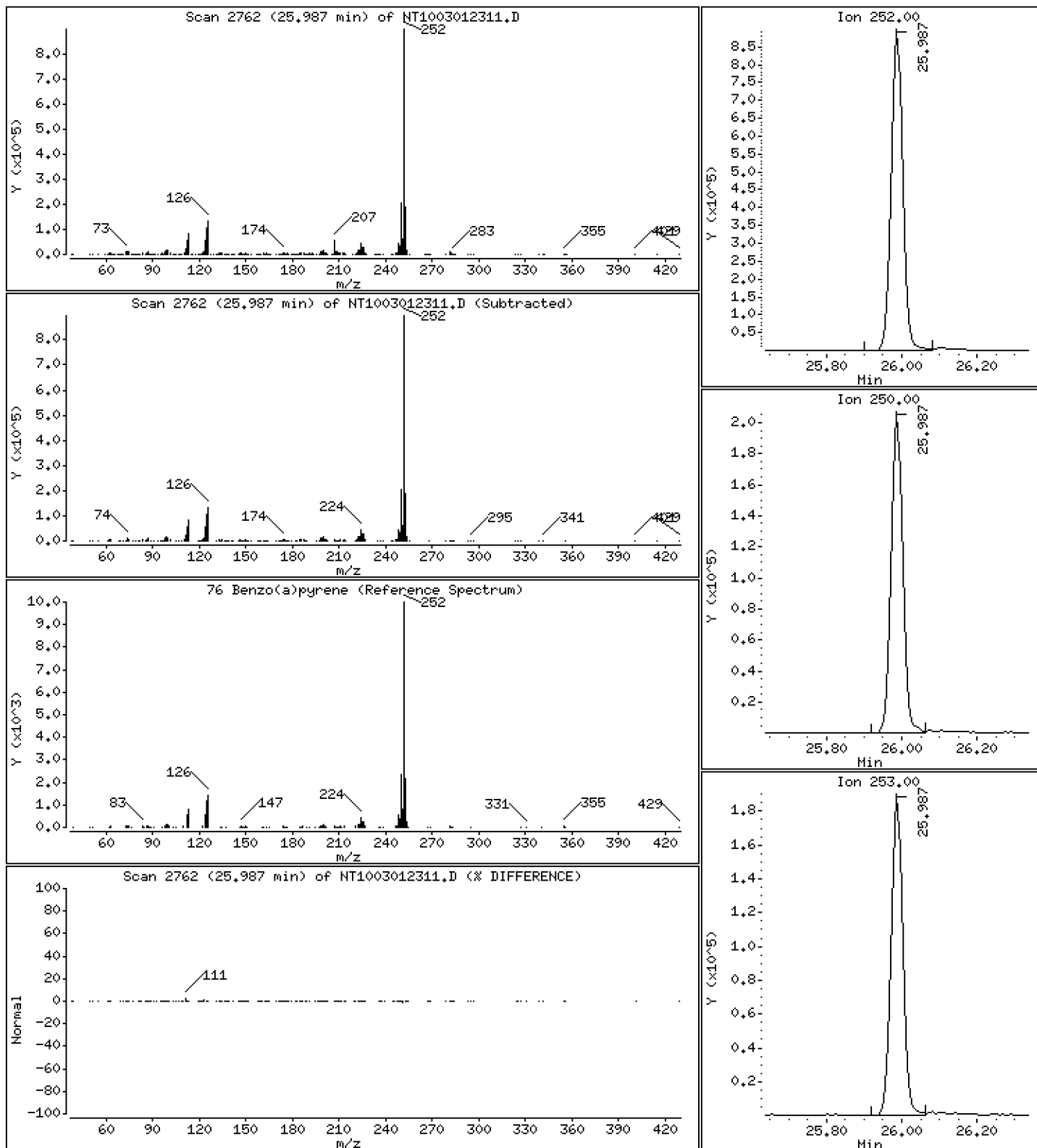
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

76 Benzo(a)pyrene

Concentration: 4.445 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

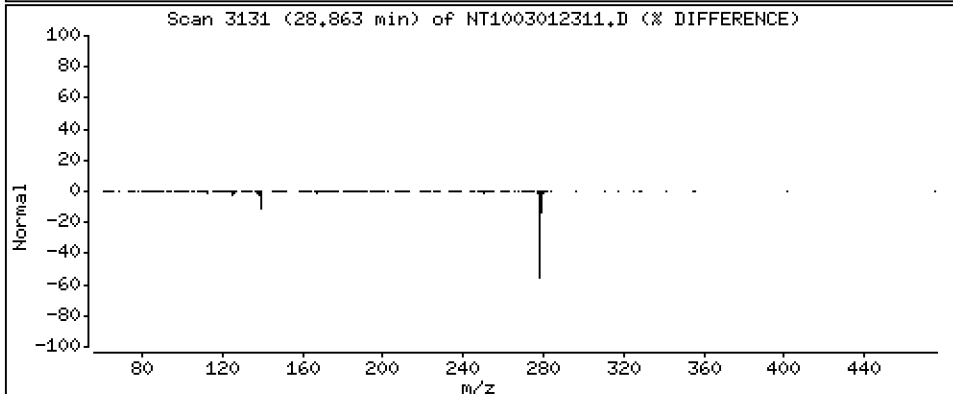
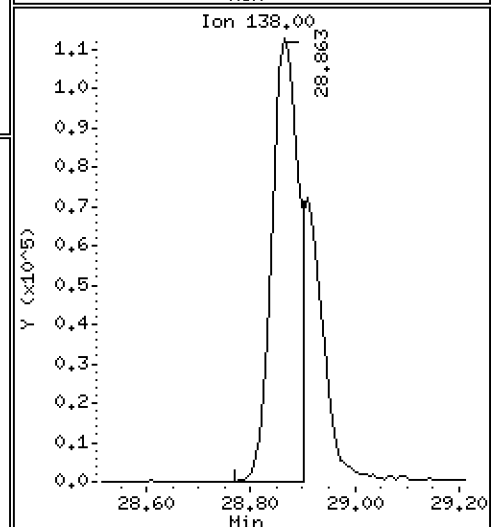
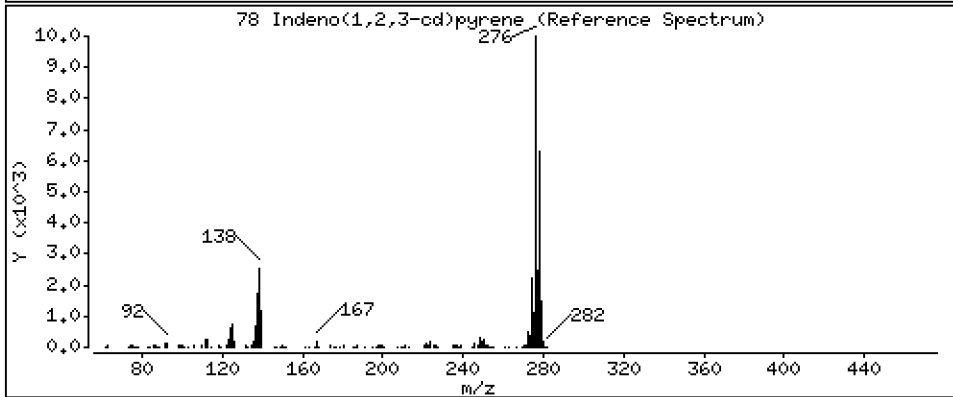
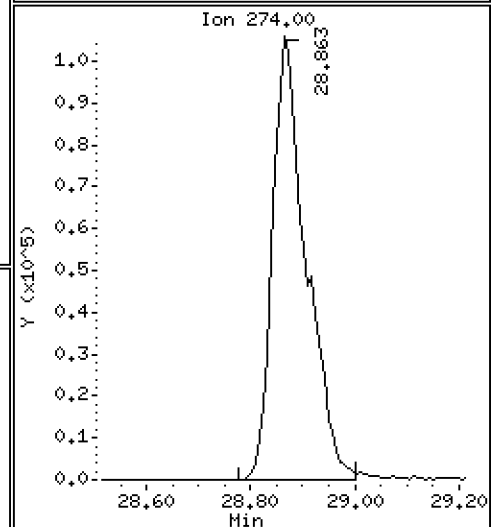
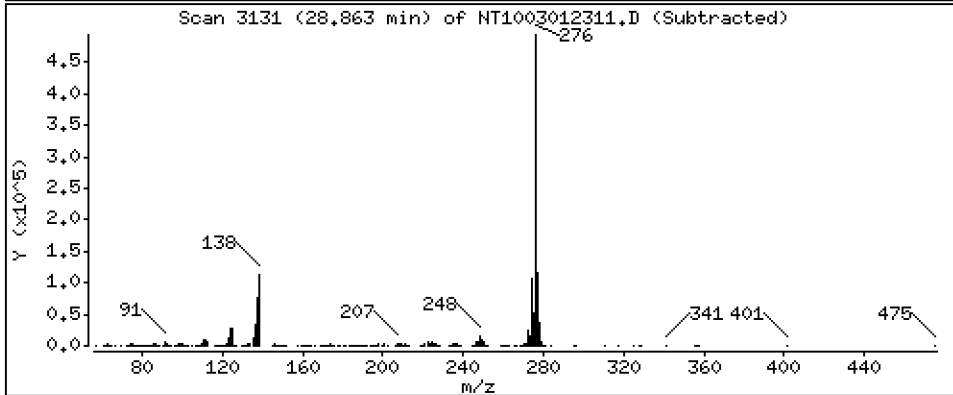
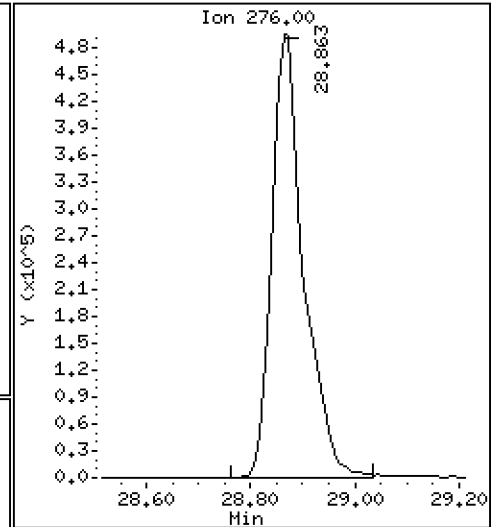
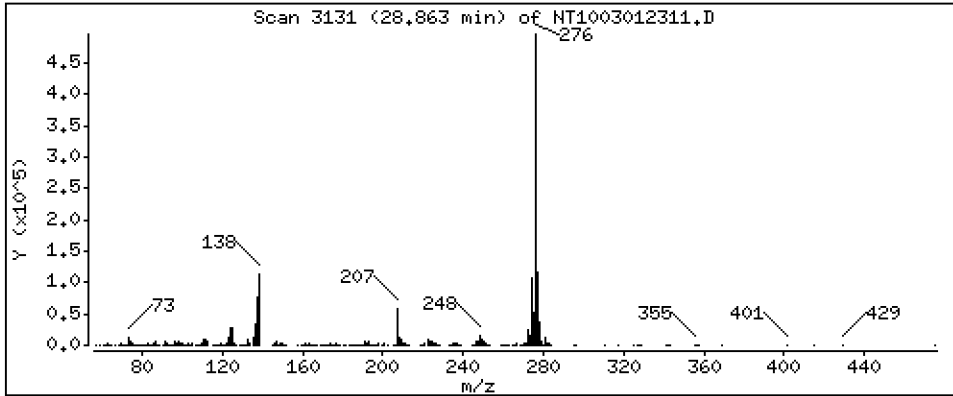
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,345 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

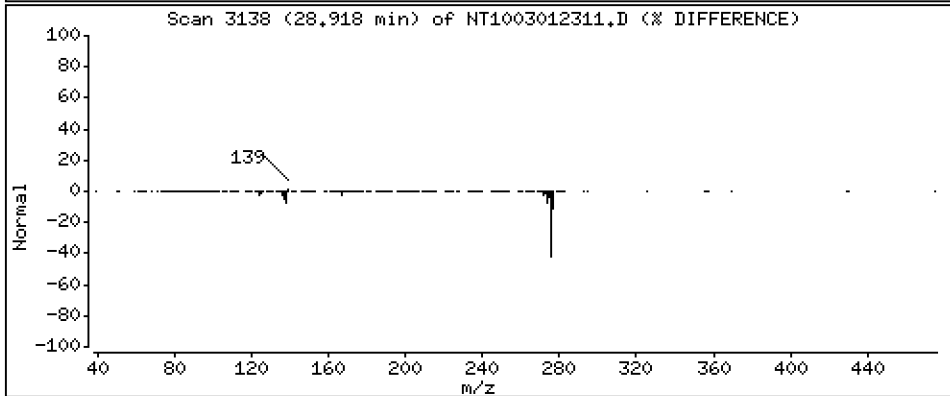
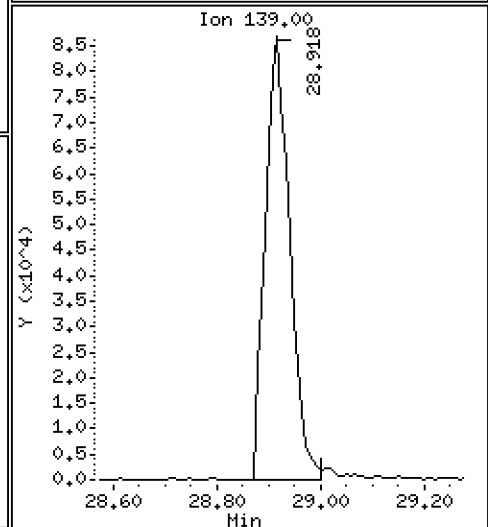
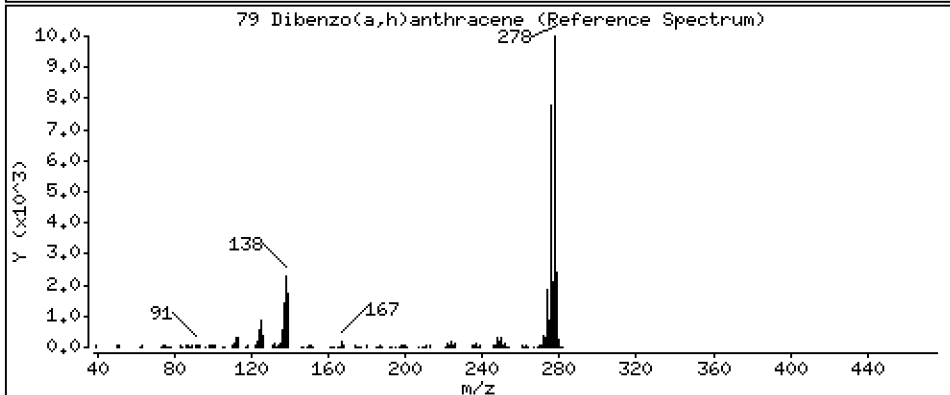
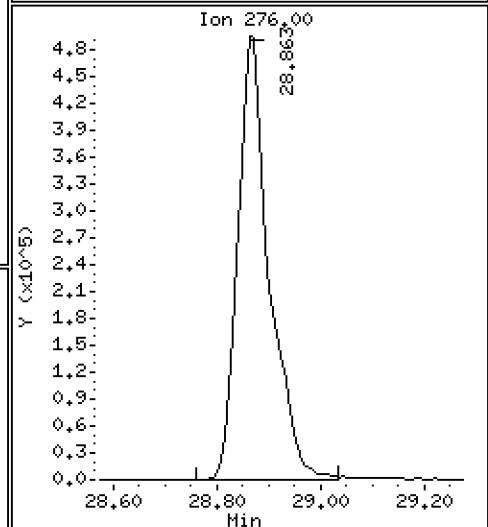
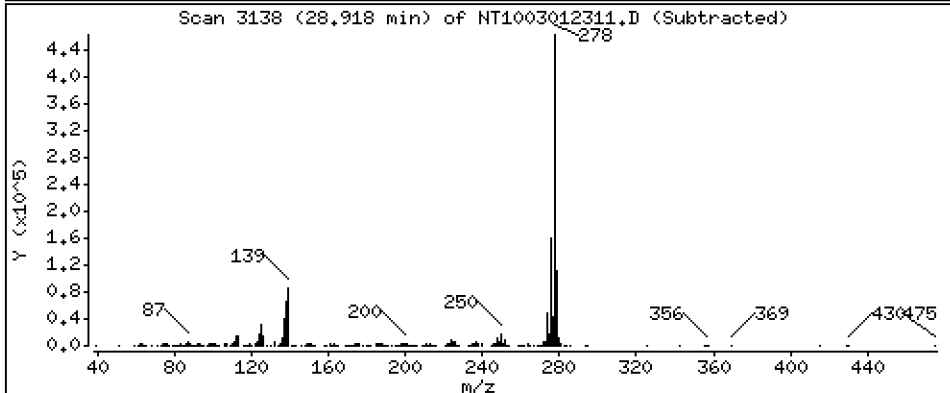
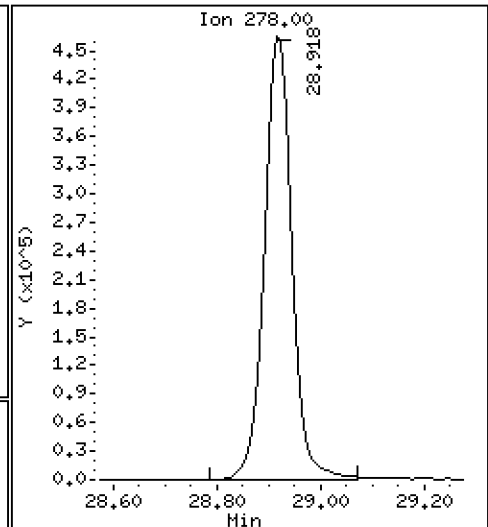
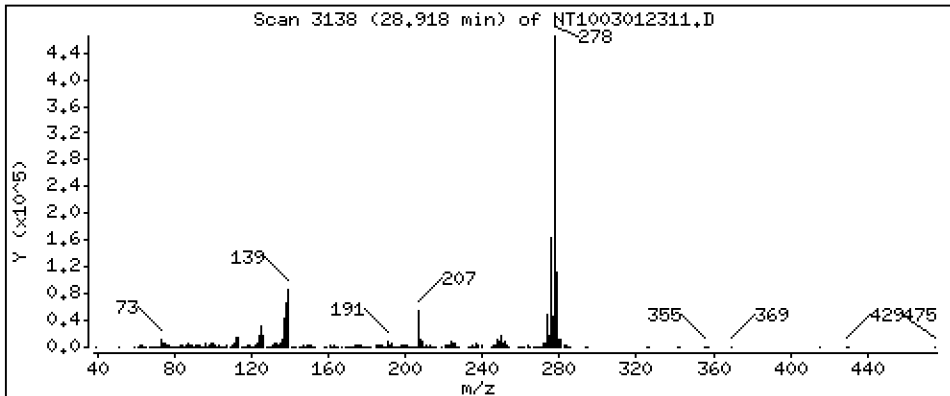
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,608 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

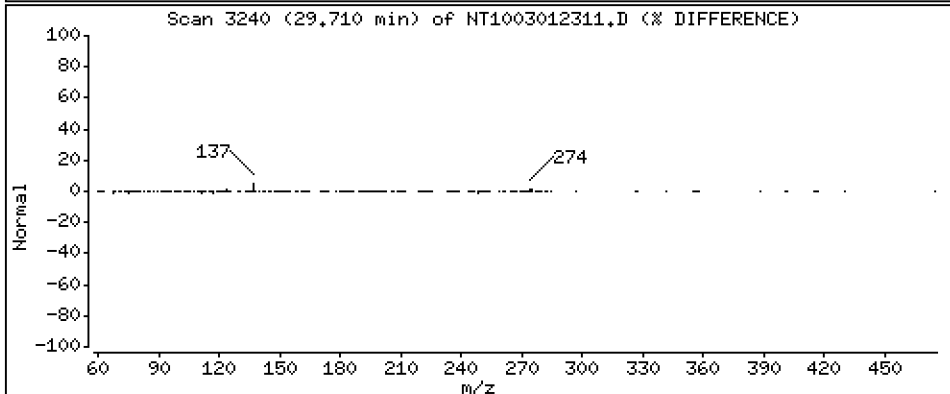
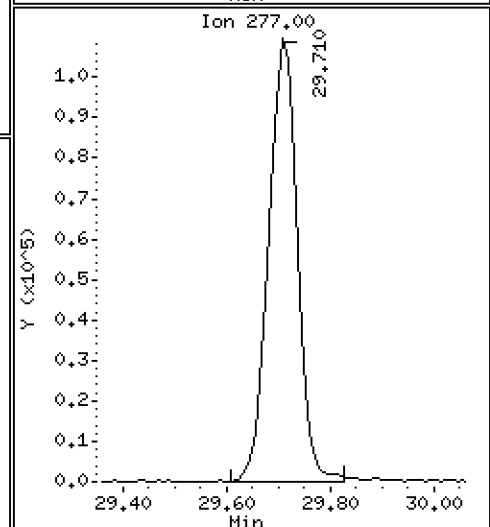
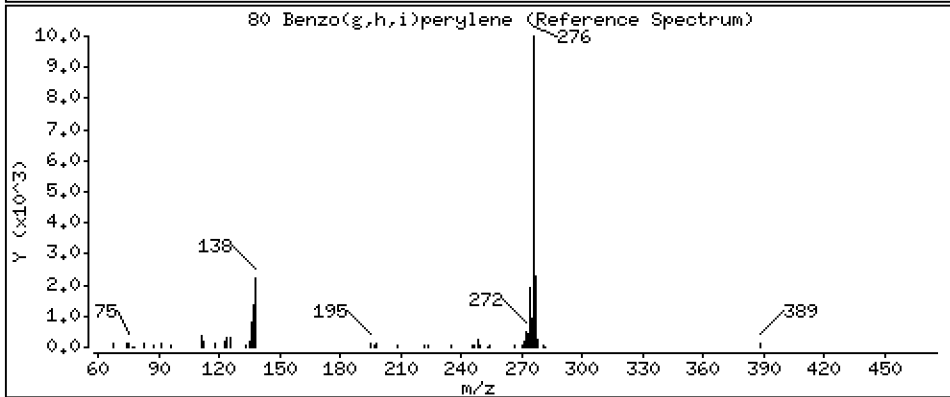
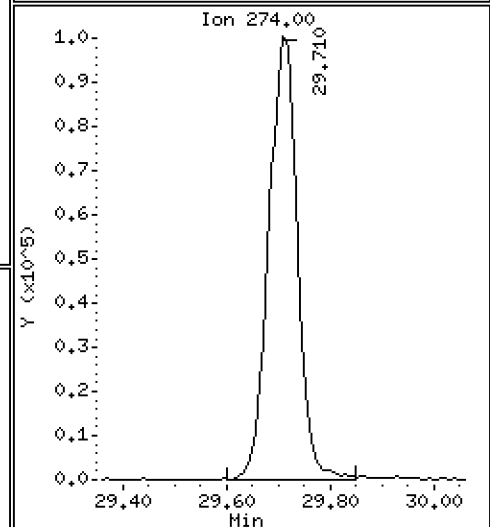
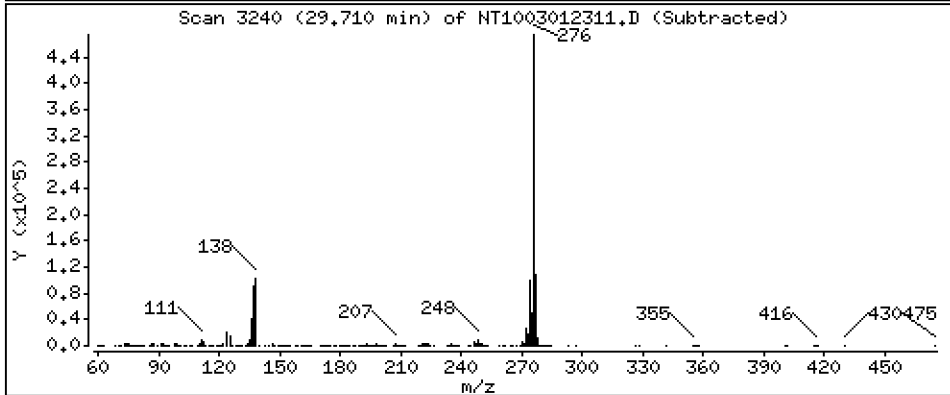
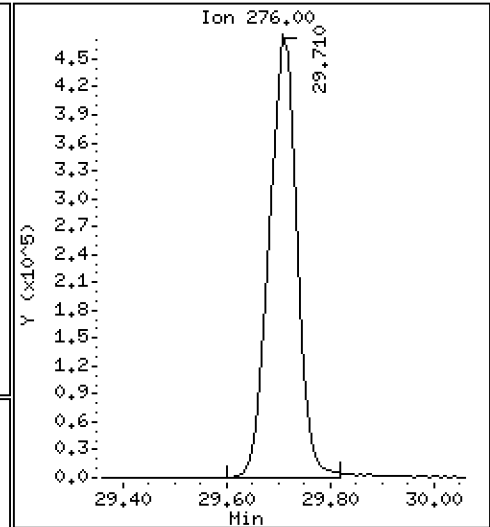
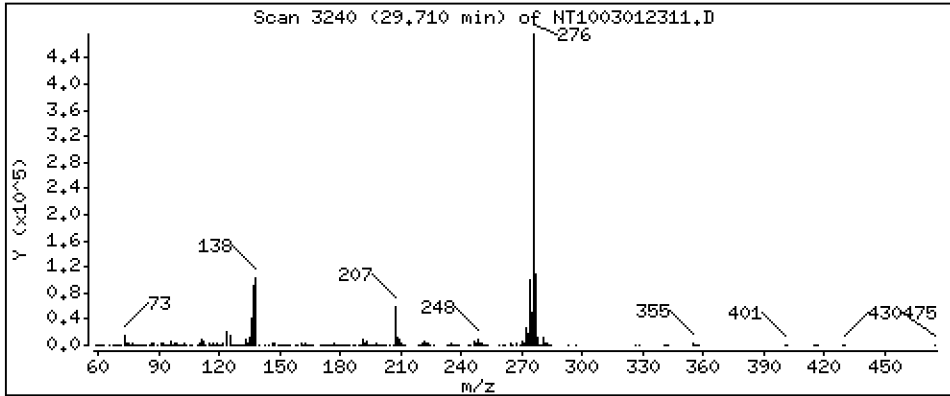
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,602 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

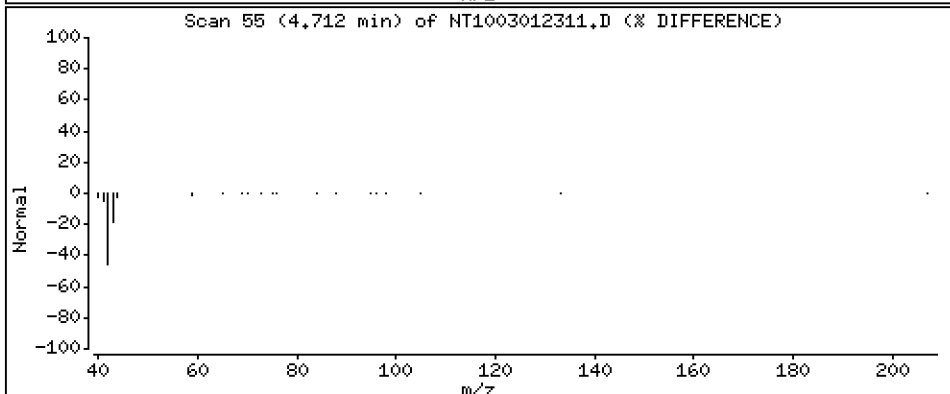
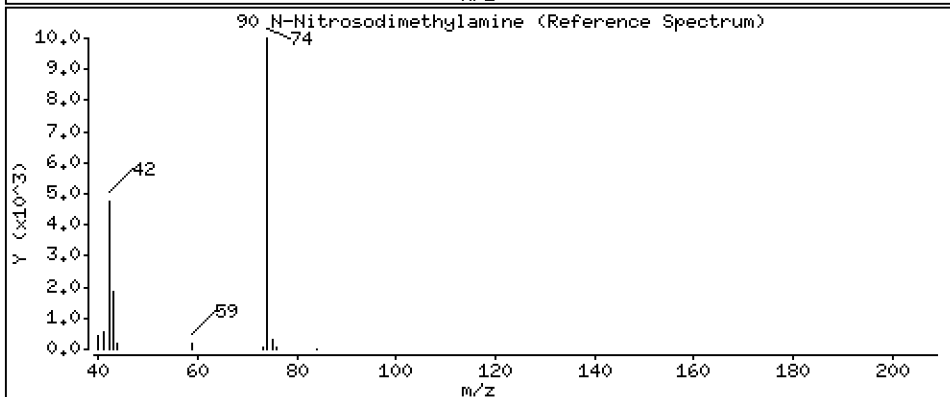
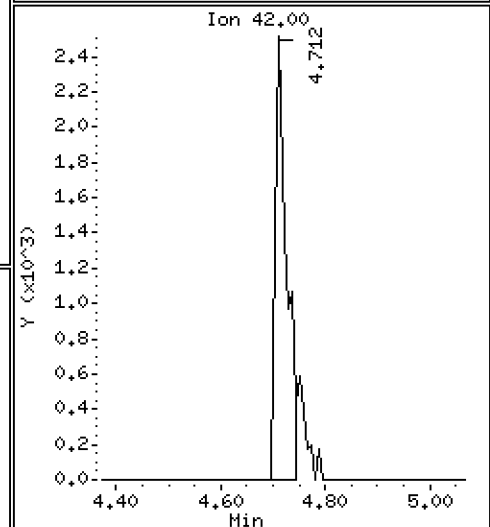
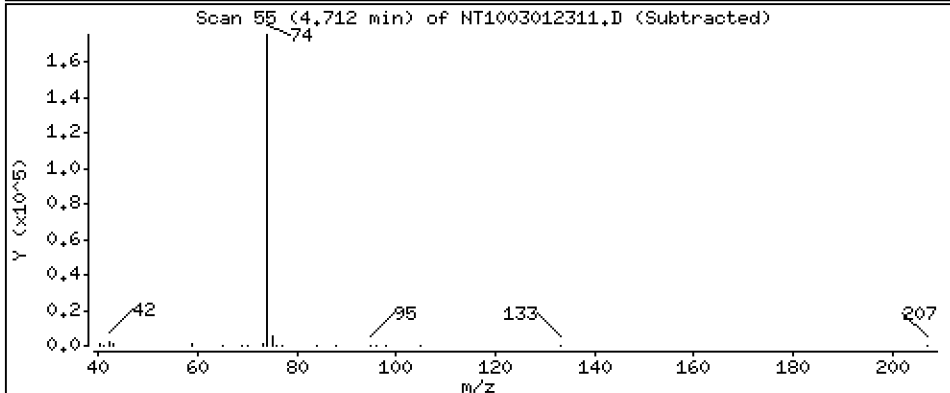
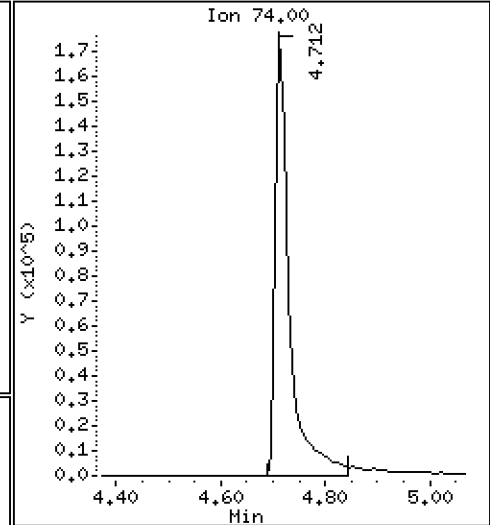
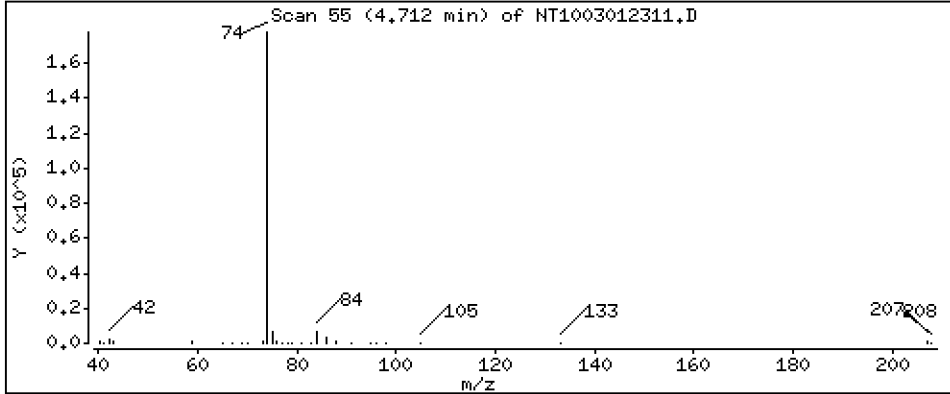
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.491 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

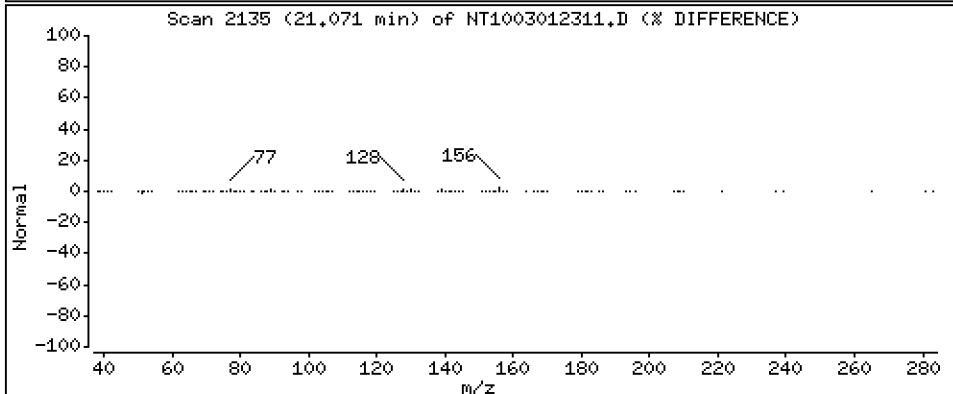
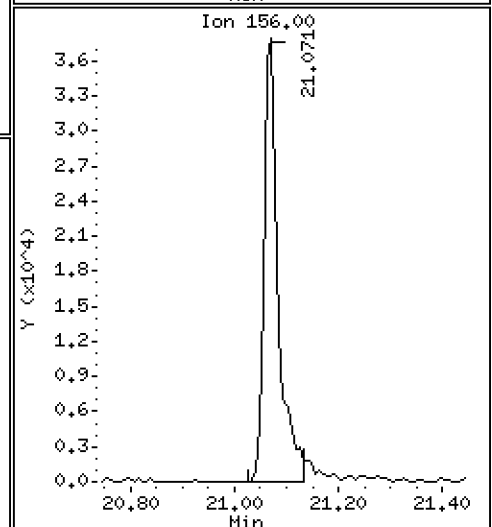
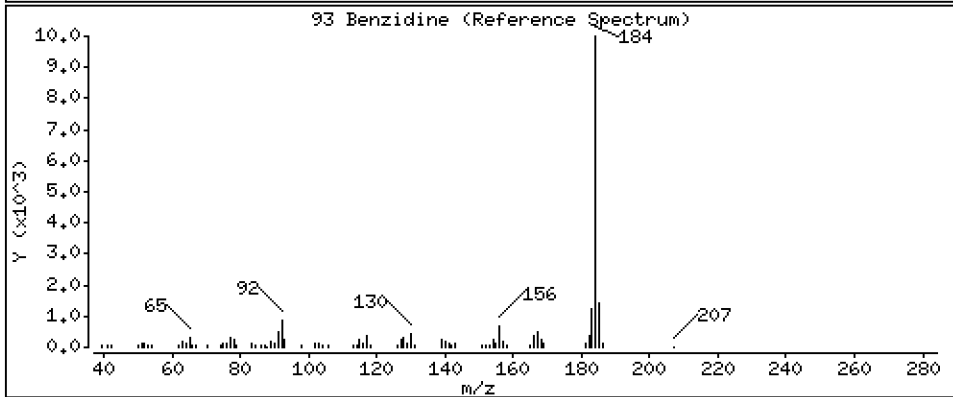
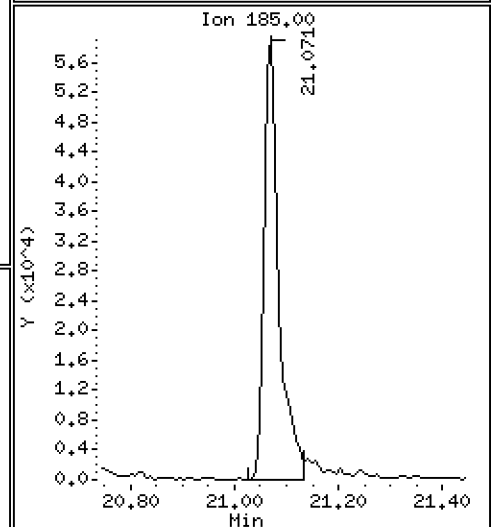
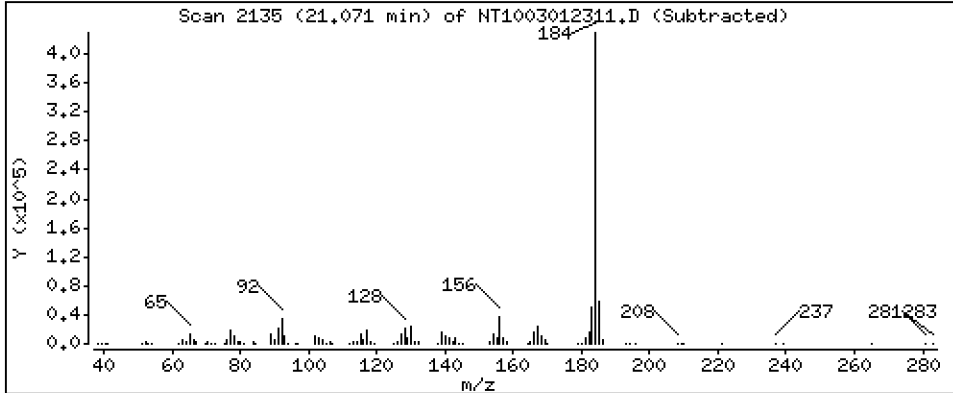
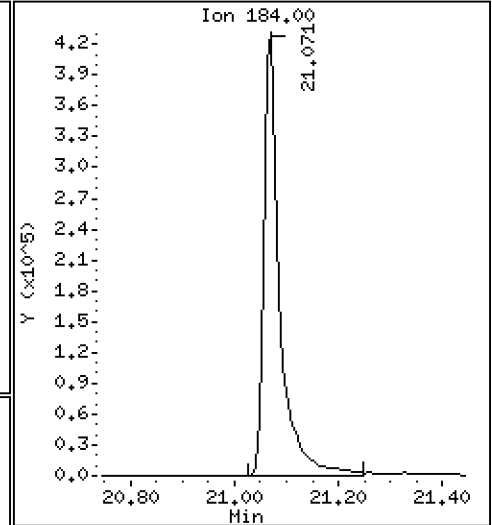
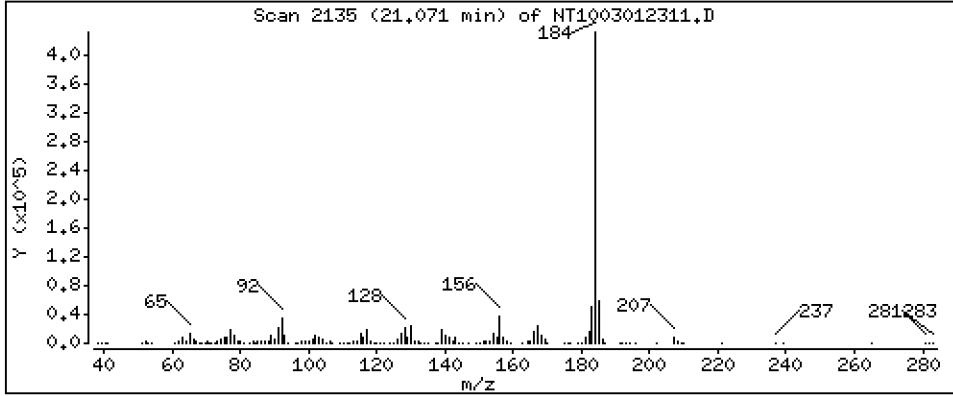
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,007 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

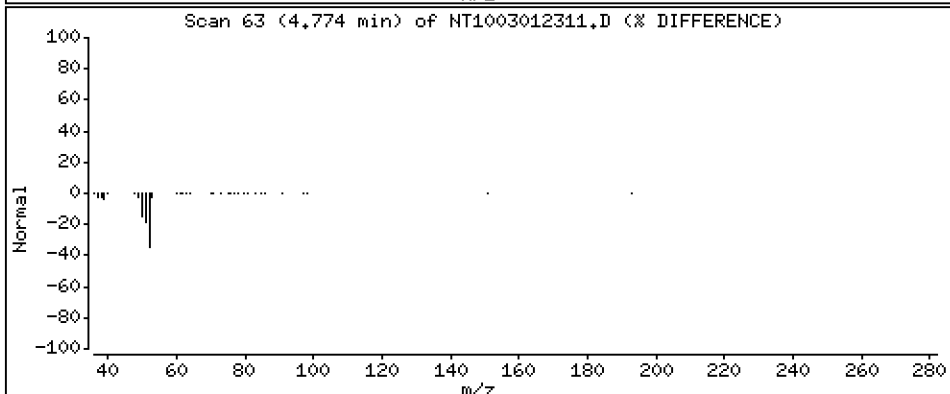
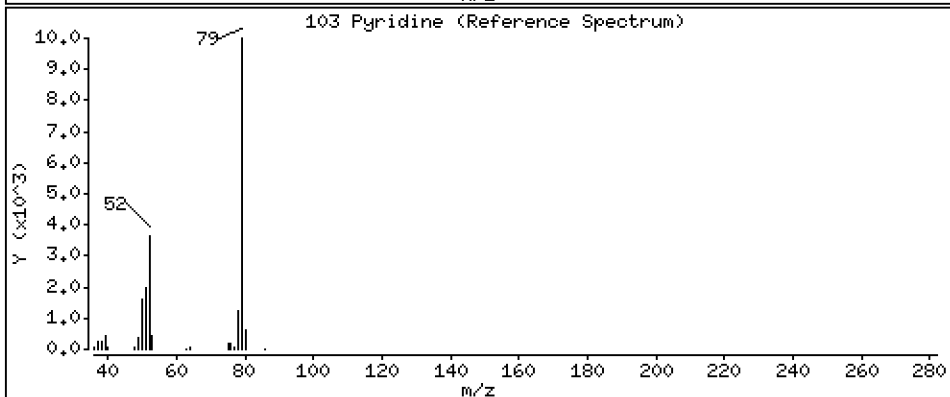
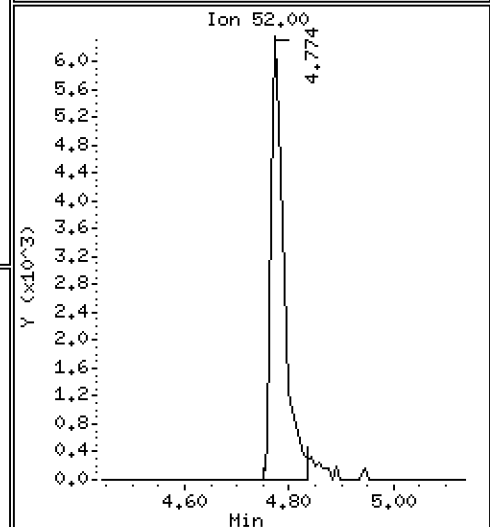
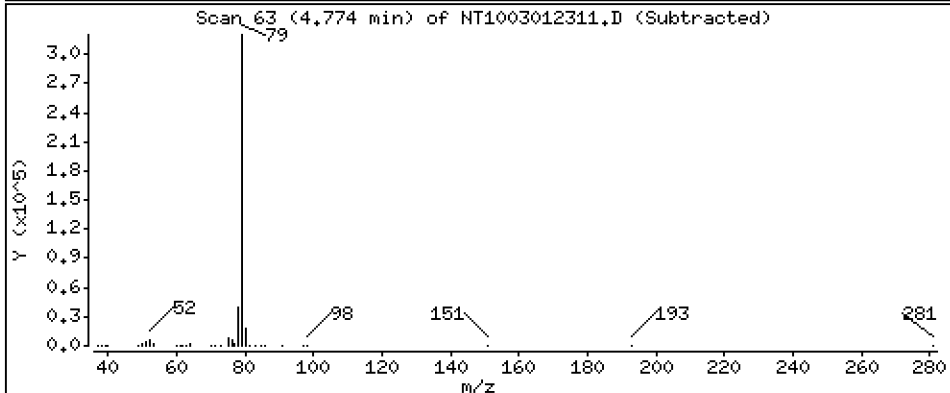
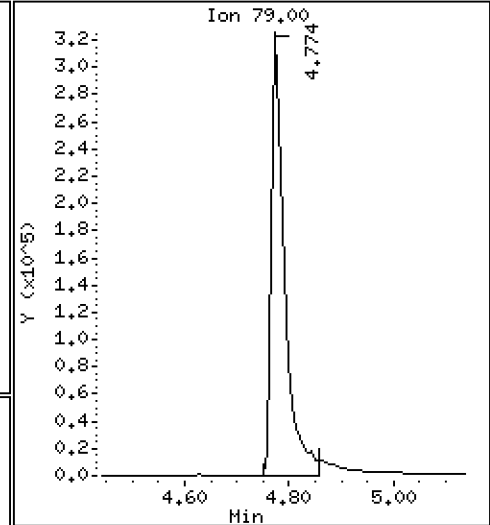
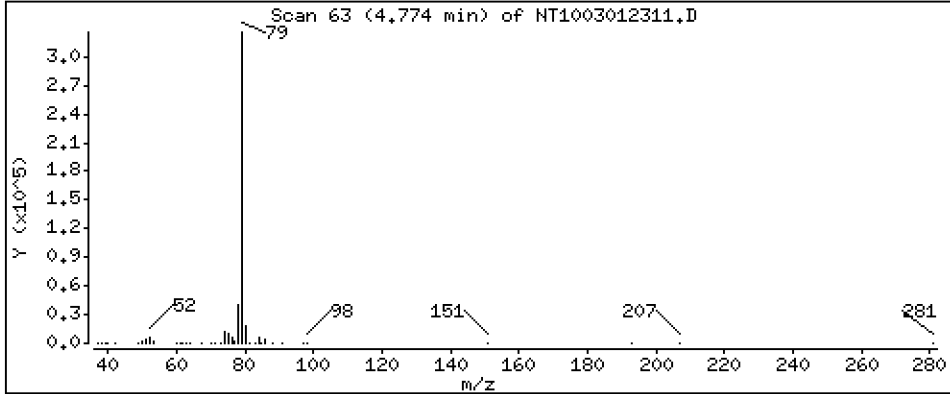
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 5,430 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

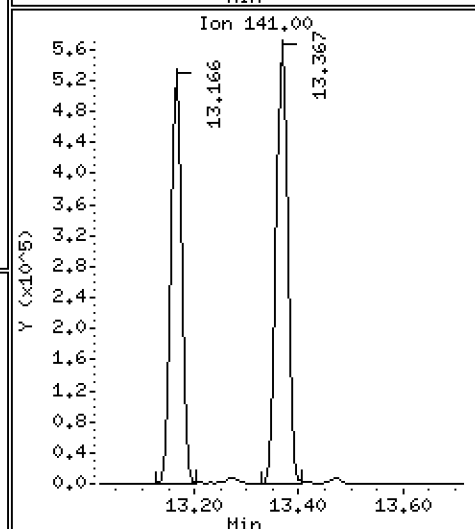
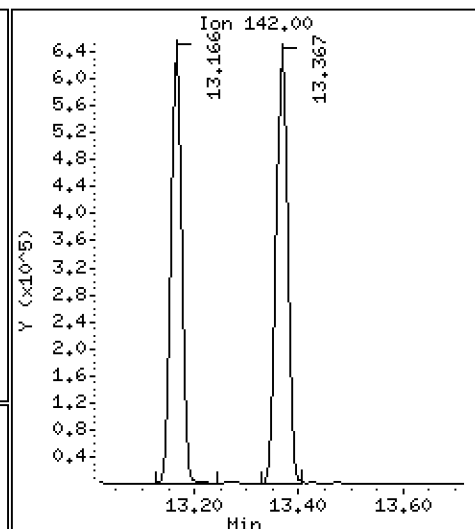
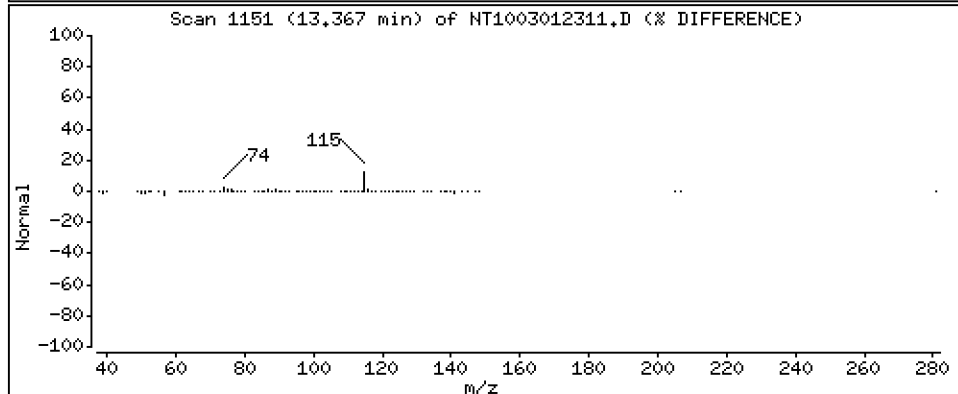
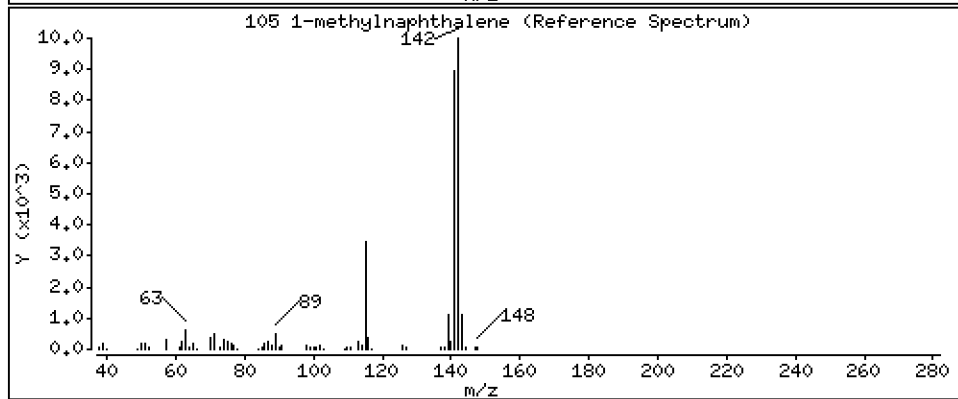
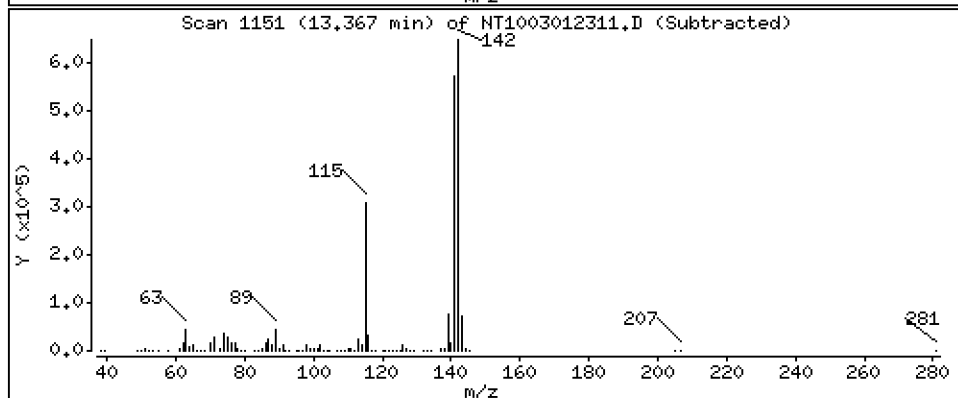
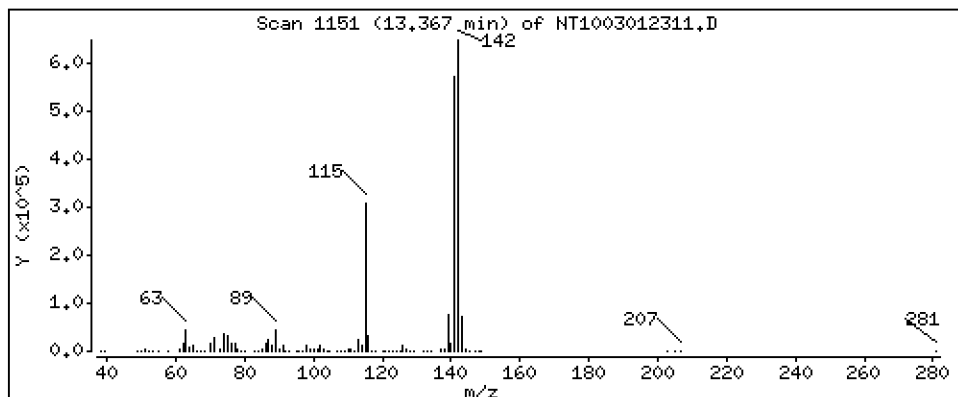
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,219 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

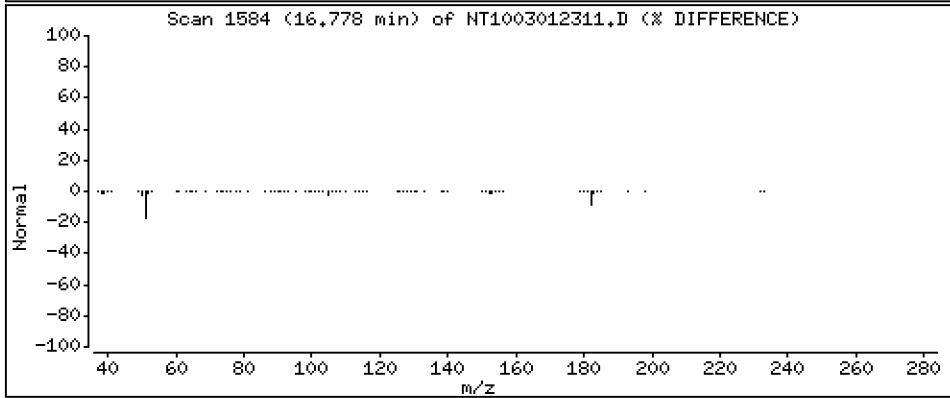
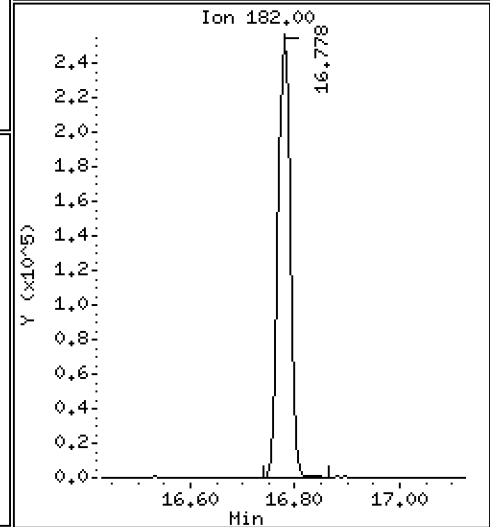
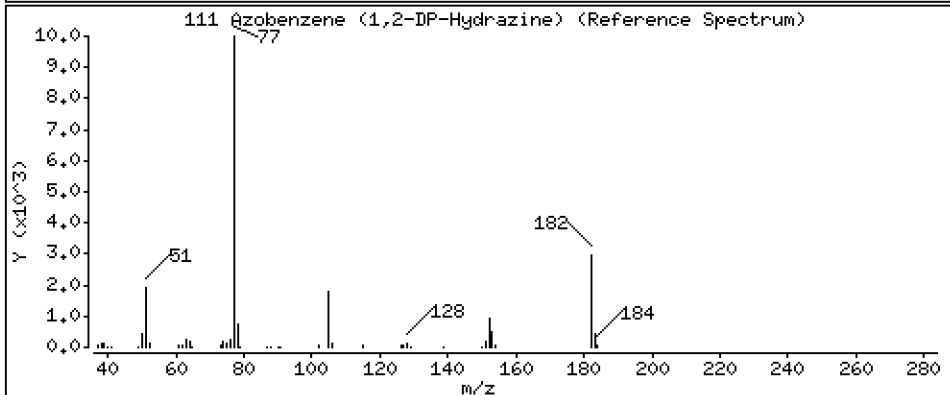
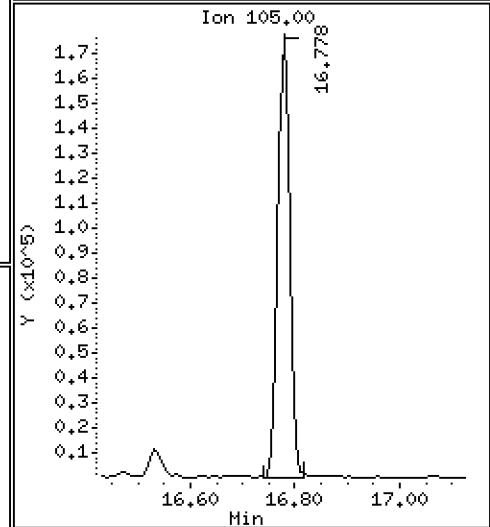
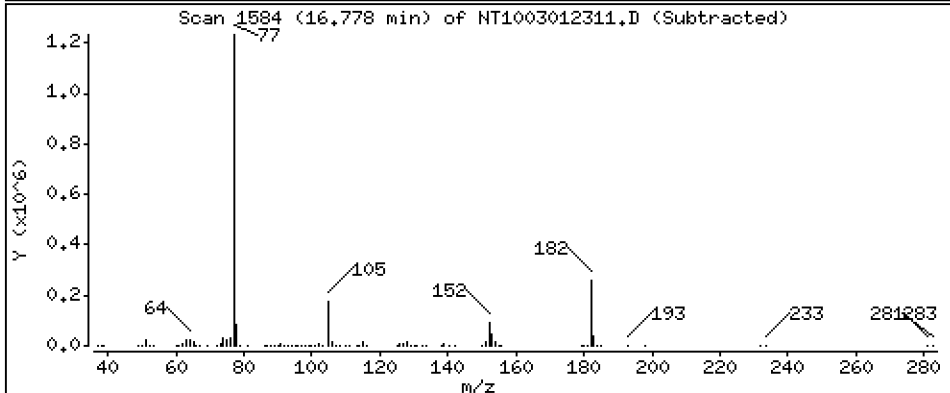
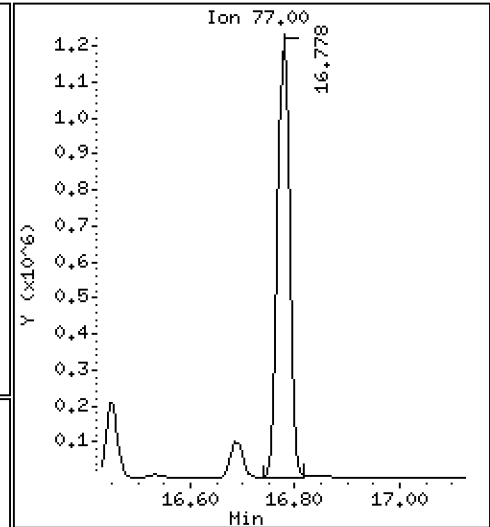
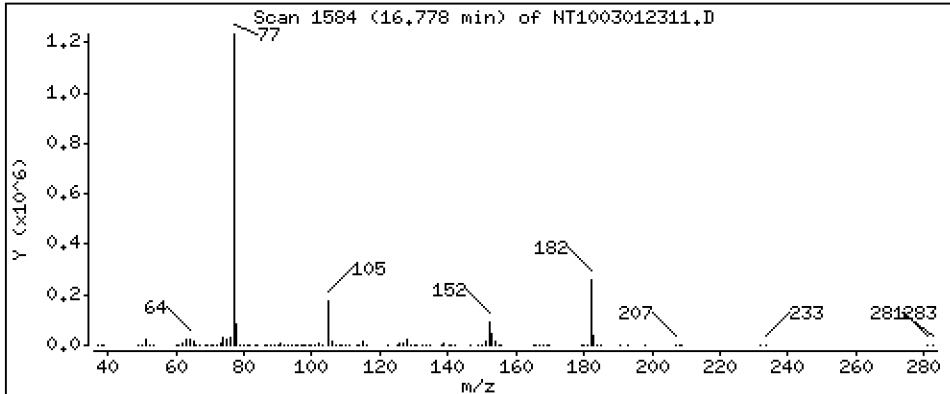
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,953 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

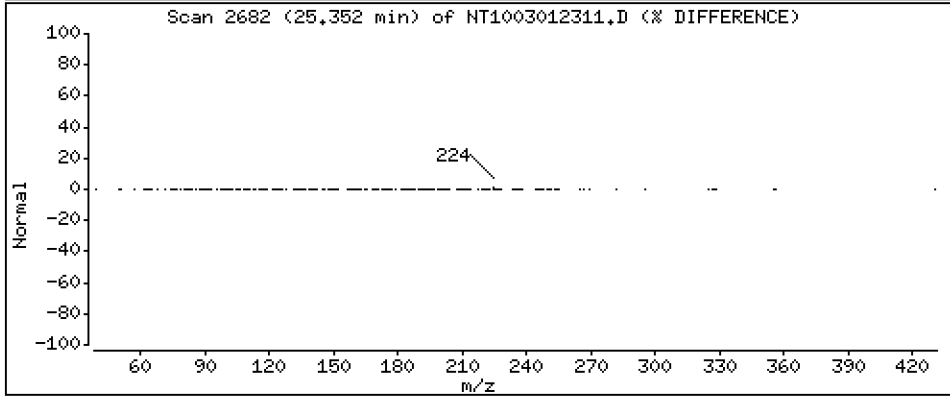
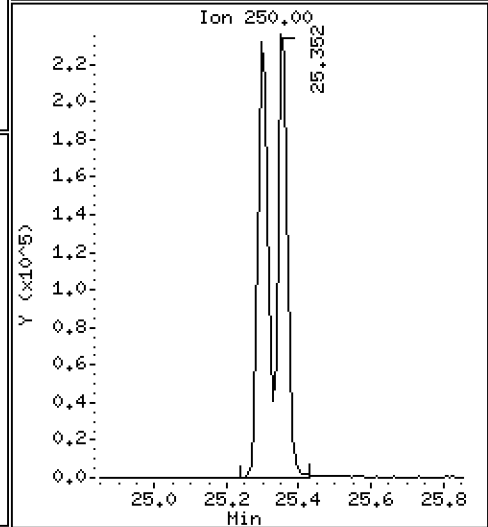
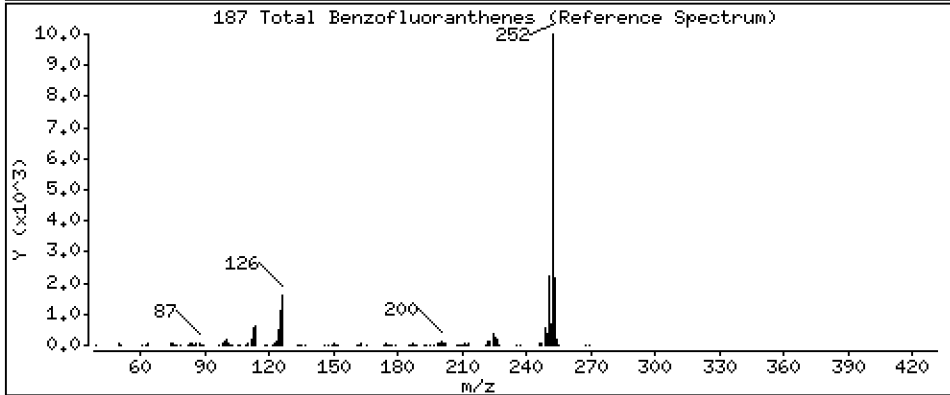
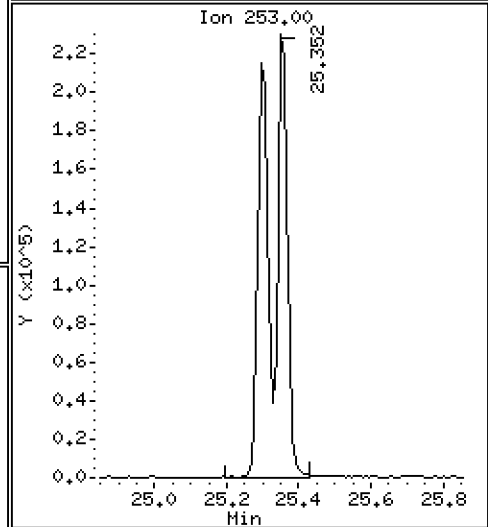
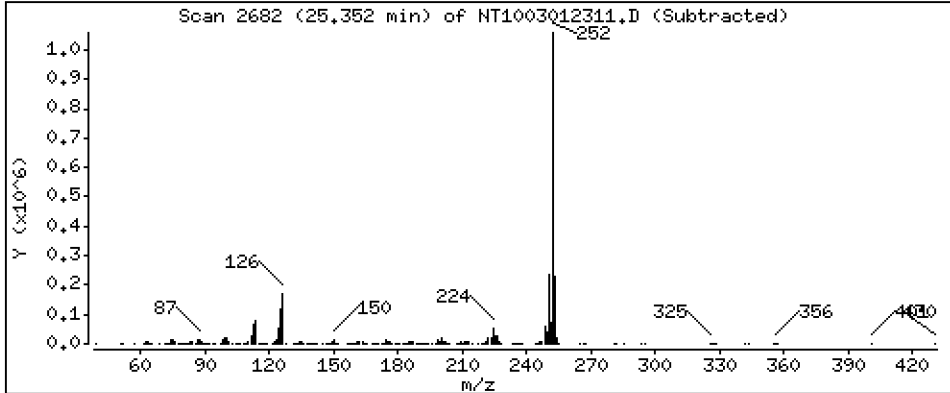
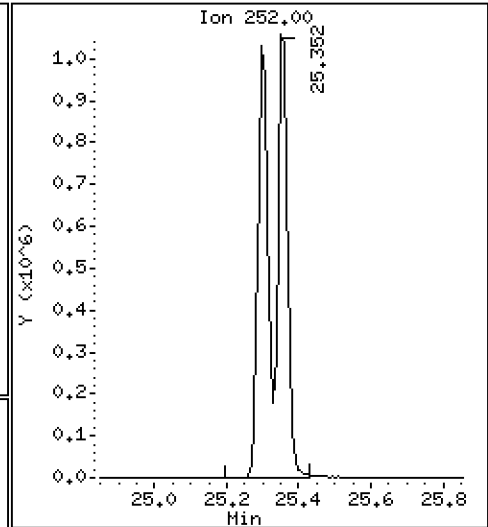
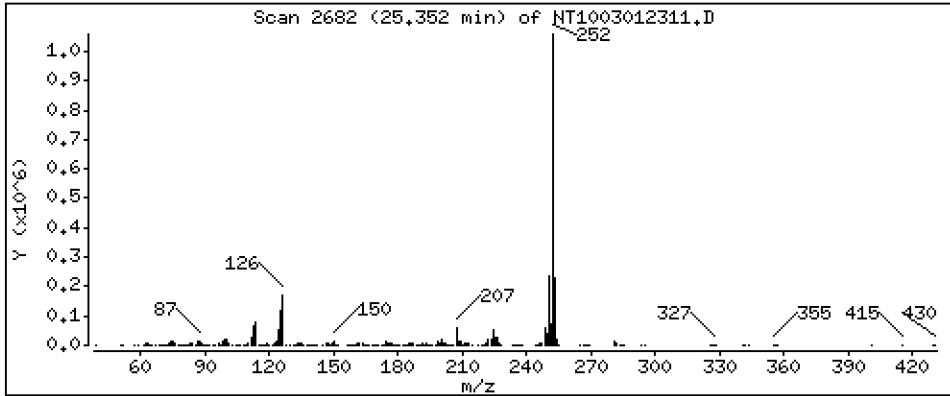
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

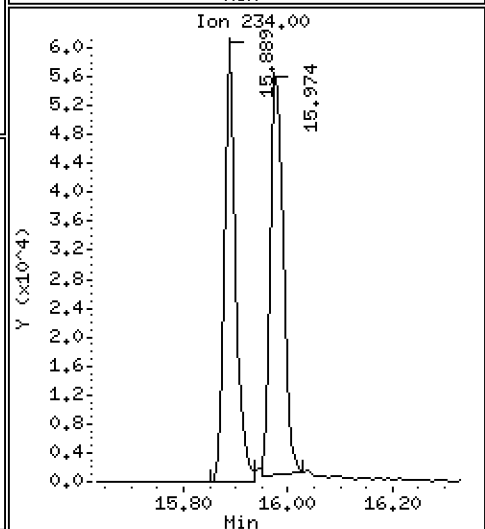
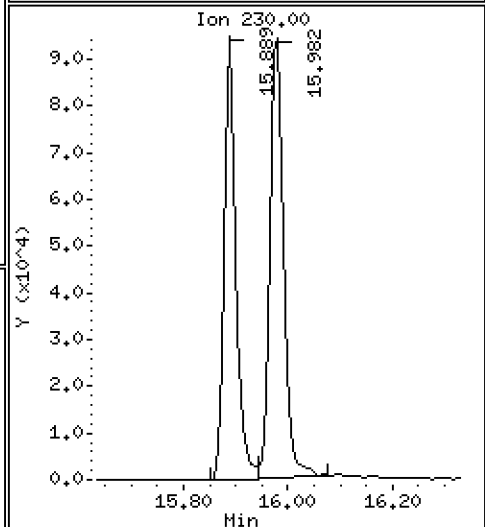
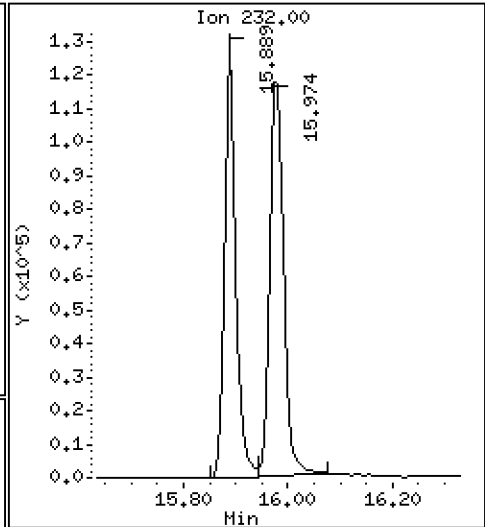
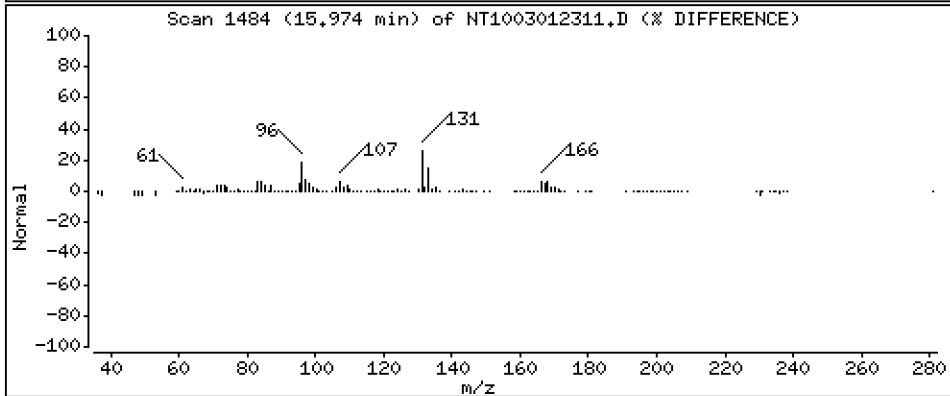
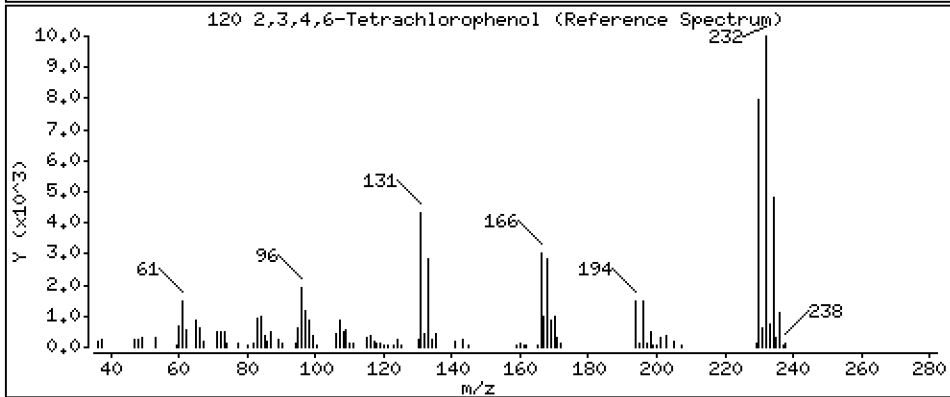
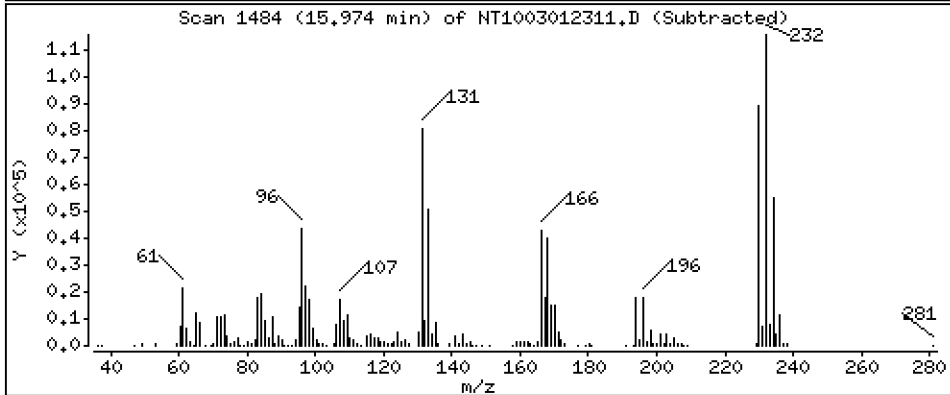
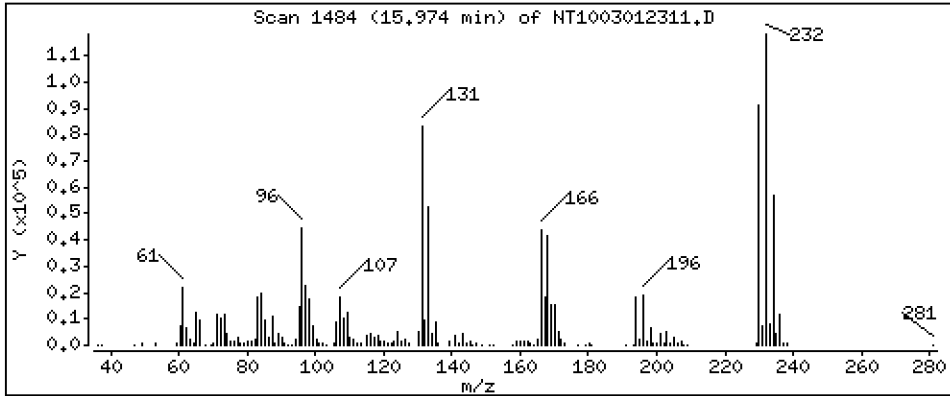
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,534 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
 Lab Smp Id: SLC0084-SCV1
 Inj Date : 01-MAR-2023 21:46
 Operator : VTS
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012307.D

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		Compound Not Detected.					
\$ 2 Phenol-d5	99		Compound Not Detected.					
3 Phenol	94		8.512	8.512	(0.921)	534295	4.85212	4.852
\$ 5 2-Chlorophenol-d4	132		Compound Not Detected.					
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	498825	5.92811	5.928 (M)
6 2-Chlorophenol	128		8.844	8.844	(0.956)	430747	4.69234	4.692
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	533006	5.26632	5.266
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	283537	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	524367	5.21589	5.216
\$ 10 1,2-Dichlorobenzene-d4	152		9.247	9.534	(1.000)	283537	4.29482	4.295
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	505415	5.19402	5.194
11 Benzyl alcohol	108		9.472	9.472	(1.024)	283618	4.89779	4.898
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728	(1.053)	174821	6.23165	6.232
13 2-Methylphenol	108		9.650	9.650	(1.044)	364596	4.19238	4.192
17 Hexachloroethane	117		10.209	10.209	(1.104)	224586	5.44260	5.443
16 N-Nitroso-di-n-propylamine	70		9.977	9.976	(1.079)	392376	5.90505	5.905
15 4-Methylphenol	108		9.945	9.938	(1.076)	448938	4.23938	4.239
\$ 18 Nitrobenzene-d5	82		Compound Not Detected.					
19 Nitrobenzene	77		10.326	10.326	(0.881)	624582	5.56925	5.569
20 Isophorone	82		10.784	10.784	(0.920)	1098236	7.67155	7.672
21 2-Nitrophenol	139		10.950	10.951	(0.934)	197578	3.24407	3.244
22 2,4-Dimethylphenol	107		10.993	10.993	(0.938)	379240	3.50675	3.507
23 Bis(2-Chloroethoxy)methane	93		11.205	11.205	(0.956)	595145	6.72720	6.727
24 Benzoic acid	105		11.103	11.052	(0.947)	362406	5.63546	5.635
25 2,4-Dichlorophenol	162		11.417	11.417	(0.974)	379310	4.43743	4.437
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	413079	4.90787	4.908
* 27 Naphthalene-d8	136		11.719	11.719	(1.000)	1089120	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	1468990	5.25508	5.255
29 4-Chloroaniline	127		11.858	11.858	(1.012)	469377	3.79133	3.791
30 Hexachlorobutadiene	225		11.989	11.997	(1.023)	307313	5.01449	5.014
31 4-Chloro-3-methylphenol	107		12.802	12.809	(1.092)	402740	4.45246	4.452
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	977687	4.95082	4.951
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.879)	52130	2.56222	2.562

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.722	13.730	(0.896)	241174	4.12027	4.120	
35 2,4,5-Trichlorophenol	196		13.792	13.808	(0.900)	259485	4.14893	4.149 (M)	
§ 36 2-Fluorobiphenyl	172		Compound Not Detected.						
37 2-Chloronaphthalene	162		14.164	14.164	(0.925)	895889	5.26440	5.264	
38 2-Nitroaniline	65		14.365	14.365	(0.938)	237773	5.02711	5.027	
39 Dimethylphthalate	163		14.736	14.736	(0.962)	1056857	5.38446	5.384	
40 Acenaphthylene	152		15.023	15.023	(0.981)	1703355	5.80574	5.806	
41 2,6-Dinitrotoluene	165		14.868	14.868	(0.971)	227062	5.18679	5.187	
* 42 Acenaphthene-d10	164		15.317	15.309	(1.000)	607772	4.00000		
43 3-Nitroaniline	138		15.208	15.224	(0.993)	256002	5.17200	5.172	
44 Acenaphthene	153		15.379	15.378	(1.004)	911910	5.15374	5.154	
45 2,4-Dinitrophenol	184		15.433	15.487	(1.008)	3021	0.26673	0.2667	
46 Dibenzofuran	168		15.742	15.734	(1.028)	1311367	4.99365	4.994	
47 4-Nitrophenol	109		15.533	15.603	(1.014)	133260	3.82233	3.822 (M)	
48 2,4-Dinitrotoluene	165		15.695	15.703	(1.025)	300469	4.72923	4.729	
50 Diethylphthalate	149		16.206	16.198	(1.058)	1172442	5.63859	5.639	
49 Fluorene	166		16.453	16.453	(1.074)	1159050	5.30478	5.305	
51 4-Chlorophenyl-phenylether	204		16.453	16.453	(1.074)	527532	5.25262	5.253	
52 4-Nitroaniline	138		16.469	16.484	(1.075)	278392	5.23237	5.232	
53 4,6-Dinitro-2-methylphenol	198		16.531	16.538	(0.898)	36409	1.29161	1.292	
54 N-Nitrosodiphenylamine	169		16.685	16.693	(0.907)	966268	5.41587	5.416	
§ 55 2,4,6-Tribromophenol	330		Compound Not Detected.						
56 4-Bromophenyl-phenylether	248		17.465	17.472	(0.949)	394706	5.45981	5.460	
57 Hexachlorobenzene	284		17.573	17.573	(0.955)	391196	4.80535	4.805	
58 Pentachlorophenol	266		17.984	17.983	(0.977)	133557	3.49178	3.492	
* 59 Phenanthrene-d10	188		18.401	18.401	(1.000)	1205858	4.00000		
60 Phenanthrene	178		18.448	18.448	(1.003)	1569094	5.08454	5.085	
61 Anthracene	178		18.556	18.556	(1.008)	1371933	4.58472	4.585	
62 Carbazole	167		18.889	18.889	(1.026)	1462441	5.33467	5.335	
63 Di-n-butylphthalate	149		19.585	19.585	(1.064)	2114080	5.46304	5.463	
64 Fluoranthene	202		20.815	20.815	(0.889)	1905220	4.54169	4.542	
65 Pyrene	202		21.248	21.248	(0.907)	1975953	4.62585	4.626	
§ 66 Terphenyl-d14	244		21.519	21.527	(0.919)	6779	0.01961	0.01961	
67 Butylbenzylphthalate	149		22.410	22.410	(0.957)	1022950	4.52520	4.525	
68 Benzo(a)anthracene	228		23.401	23.401	(0.999)	1968545	4.57826	4.578	
* 69 Chrysene-d12	240		23.416	23.416	(1.000)	1219436	4.00000		
70 3,3'-Dichlorobenzidine	252		23.347	23.347	(0.997)	1426681	7.38255	7.383	
71 Chrysene	228		23.463	23.463	(1.002)	1735599	4.96674	4.967	
72 bis(2-Ethylhexyl)phthalate	149		23.401	23.409	(0.956)	1660477	4.95568	4.956	
* 134 Di-n-octylphthalate-d4	153		24.485	24.485	(1.000)	2317357	4.00000		
73 Di-n-octylphthalate	149		24.492	24.492	(1.000)	3003083	5.84397	5.844	
74 Benzo(b)fluoranthene	252		25.298	25.298	(0.969)	1988643	4.31882	4.319	
75 Benzo(k)fluoranthene	252		25.352	25.352	(0.971)	2031546	4.56297	4.563	
76 Benzo(a)pyrene	252		25.987	25.987	(0.996)	1831856	4.44514	4.445	
* 77 Perylene-d12	264		26.103	26.103	(1.000)	1289108	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		28.863	28.863	(1.106)	2089660	4.34488	4.345	
79 Dibenzo(a,h)anthracene	278		28.917	28.925	(1.108)	1695484	4.60754	4.608	
80 Benzo(g,h,i)perylene	276		29.709	29.709	(1.138)	1753537	4.60249	4.602	
90 N-Nitrosodimethylamine	74		4.712	4.719	(0.510)	316213	5.49082	5.491	
91 Aniline	93		Compound Not Detected.						
93 Benzidine	184		21.071	21.094	(0.900)	932502	5.00739	5.007	
103 Pyridine	79		4.774	4.789	(0.516)	554573	5.42989	5.430	
105 1-methylnaphthalene	142		13.366	13.366	(1.141)	932752	5.21855	5.219	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.778	16.778	(1.095)	1848373	5.95279	5.953	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.352	25.352	(0.971)	3948555	8.90452	8.905
120 2,3,4,6-Tetrachlorophenol	232	15.974	15.982	(1.043)	209122	3.53394	3.534

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012311.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	283537	-16.02
27 Naphthalene-d8	1265187	632594	2530374	1089120	-13.92
42 Acenaphthene-d10	692385	346193	1384770	607772	-12.22
59 Phenanthrene-d10	1376777	688389	2753554	1205858	-12.41
69 Chrysene-d12	1019524	509762	2039048	1219436	19.61
134 Di-n-octylphthala	2027111	1013556	4054222	2317357	14.32
77 Perylene-d12	1027409	513705	2054818	1289108	25.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.01
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

Lab ID: SLC0084-SCV1
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

23.401 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.014	1.019	-0.0051	4-Nitrophenol
1.000	1.031	-0.0310	1,2-Dichlorobenzene-d4

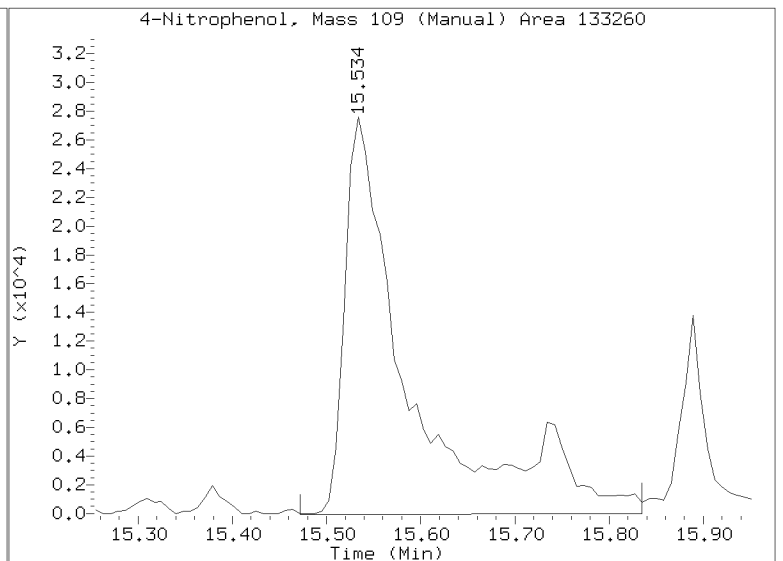
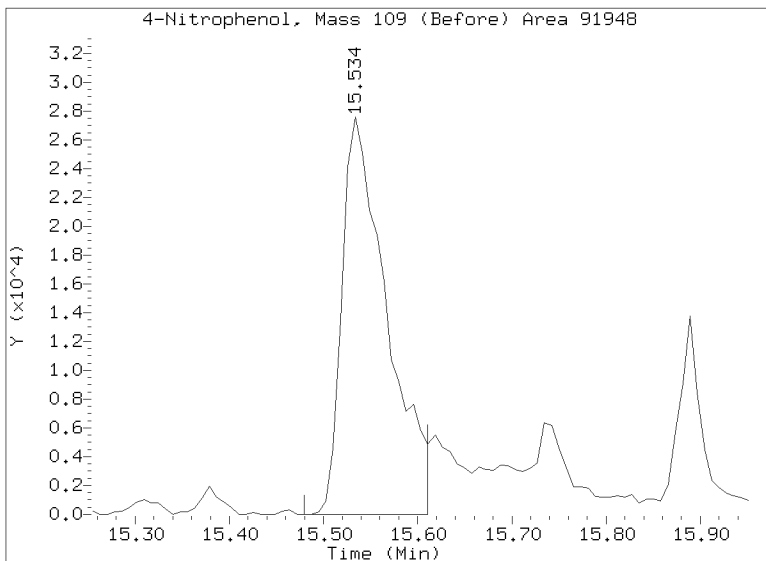
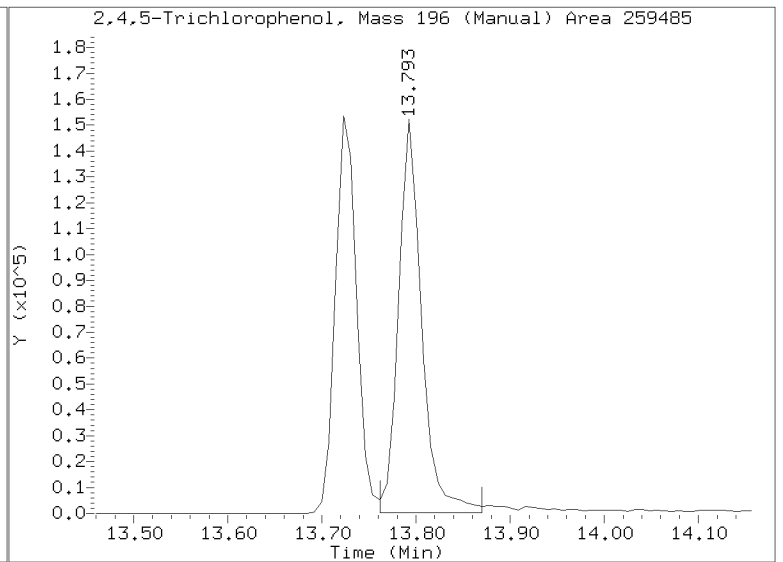
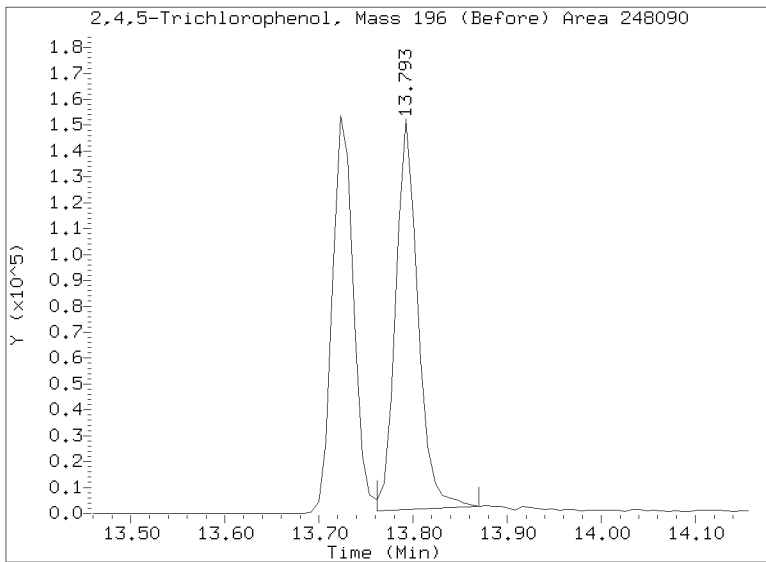
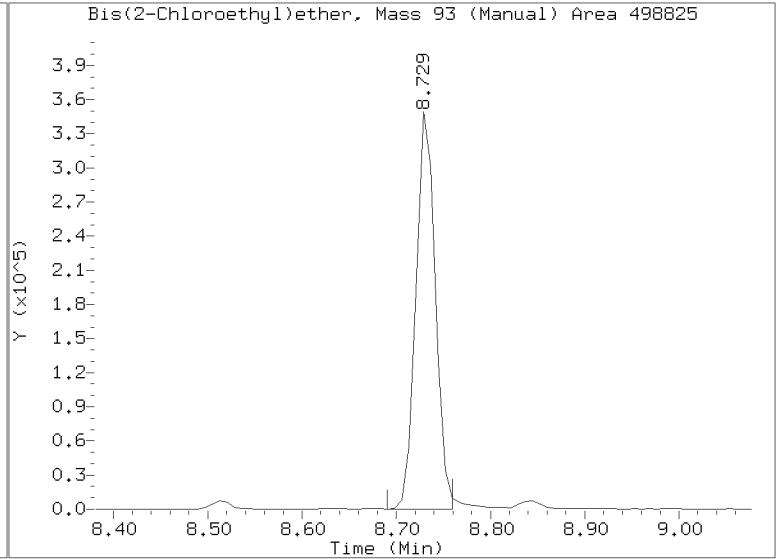
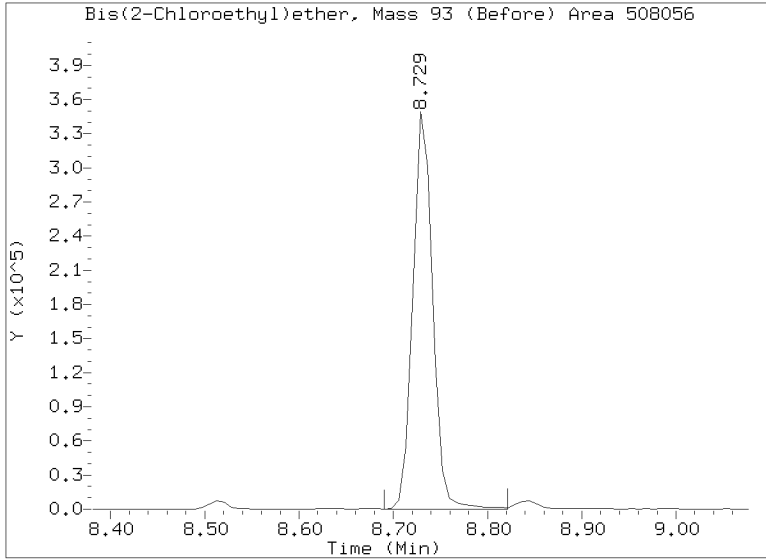
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID: SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48





**SECOND-SOURCE
CALIBRATION VERIFICATION**

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0084-SCV1

Sequence: SLC0084

Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.9	-3.0	20.00
bis(2-chloroethyl) ether	5.0000	5.9	18.6	20.00
2-Chlorophenol	5.0000	4.7	-6.2	20.00
1,3-Dichlorobenzene	5.0000	5.3	5.3	20.00
1,4-Dichlorobenzene	5.0000	5.2	4.3	20.00
1,2-Dichlorobenzene	5.0000	5.2	3.9	20.00
Benzyl Alcohol	5.0000	4.9	-2.0	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	6.2	24.6 *	20.00
2-Methylphenol	5.0000	4.2	-16.2	20.00
Hexachloroethane	5.0000	5.4	8.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.9	18.1	20.00
4-Methylphenol	5.0000	4.2	-15.2	20.00
Nitrobenzene	5.0000	5.6	11.4	20.00
Isophorone	5.0000	7.7	53.4 *	20.00
2-Nitrophenol	5.0000	3.2	-35.1 *	20.00
2,4-Dimethylphenol	5.0000	3.5	-29.9 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	6.7	34.5 *	20.00
2,4-Dichlorophenol	5.0000	4.4	-11.3	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-1.8	20.00
Naphthalene	5.0000	5.3	5.1	20.00
Benzoic acid	10.0000	5.6	-43.6 *	20.00
4-Chloroaniline	5.0000	3.8	-24.2 *	20.00
Hexachlorobutadiene	5.0000	5.0	0.3	20.00
4-Chloro-3-Methylphenol	5.0000	4.5	-11.0	20.00
2-Methylnaphthalene	5.0000	5.0	-1.0	20.00
Hexachlorocyclopentadiene	5.0000	2.6	-48.8 *	20.00
2,4,6-Trichlorophenol	5.0000	4.1	-17.6	20.00
2,4,5-Trichlorophenol	5.0000	4.1	-17.0	20.00
2-Chloronaphthalene	5.0000	5.3	5.3	20.00
2-Nitroaniline	5.0000	5.0	0.5	20.00
Acenaphthylene	5.0000	5.8	16.1	20.00
Dimethylphthalate	5.0000	5.4	7.7	20.00



**SECOND-SOURCE
CALIBRATION VERIFICATION**

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0084-SCV1

Sequence: SLC0084

Standard ID: K010066

2,6-Dinitrotoluene	5.0000	5.2	3.7	20.00
Acenaphthene	5.0000	5.2	3.1	20.00
3-Nitroaniline	5.0000	5.2	3.4	20.00
2,4-Dinitrophenol	5.0000	0.3	-94.7 *	20.00
Dibenzofuran	5.0000	5.0	-0.1	20.00
4-Nitrophenol	5.0000	3.8	-23.6 *	20.00
2,4-Dinitrotoluene	5.0000	4.7	-5.4	20.00
Fluorene	5.0000	5.3	6.1	20.00
4-Chlorophenylphenyl ether	5.0000	5.3	5.1	20.00
Diethyl phthalate	5.0000	5.6	12.8	20.00
4-Nitroaniline	5.0000	5.2	4.6	20.00
4,6-Dinitro-2-methylphenol	5.0000	1.3	-74.2 *	20.00
N-Nitrosodiphenylamine	5.0000	5.4	8.3	20.00
4-Bromophenyl phenyl ether	5.0000	5.5	9.2	20.00
Hexachlorobenzene	5.0000	4.8	-3.9	20.00
Pentachlorophenol	5.0000	3.5	-30.2 *	20.00
Phenanthrene	5.0000	5.1	1.7	20.00
Anthracene	5.0000	4.6	-8.3	20.00
Carbazole	5.0000	5.3	6.7	20.00
Di-n-Butylphthalate	5.0000	5.5	9.3	20.00
Fluoranthene	5.0000	4.5	-9.2	20.00
Pyrene	5.0000	4.6	-7.5	20.00
Butylbenzylphthalate	5.0000	4.5	-9.5	20.00
Benzo(a)anthracene	5.0000	4.6	-8.4	20.00
3,3'-Dichlorobenzidine	10.0000	7.4	-26.2 *	20.00
Chrysene	5.0000	5.0	-0.7	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.0	-0.9	20.00
Di-n-Octylphthalate	5.0000	5.8	16.9	20.00
Benzo(a)fluoranthene, Total	10.0000	8.9	-11.0	20.00
Benzo(a)pyrene	5.0000	4.4	-11.1	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.3	-13.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.6	-7.8	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.0	20.00
1-Methylnaphthalene	5.0000	5.2	4.4	20.00
2-Fluorophenol	7.5000	0.00	*	20.00



SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0084-SCV1

Sequence: SLC0084

Standard ID: K010066

Phenol-d5	7.5000	0.00	*	20.00
2-Chlorophenol-d4	7.5000	0.00	*	20.00
1,2-Dichlorobenzene-d4	5.0000	4.29	-14.1	20.00
Nitrobenzene-d5	5.0000	0.00	*	20.00
2-Fluorobiphenyl	5.0000	0.00	*	20.00
2,4,6-Tribromophenol	7.5000	0.00	*	20.00
p-Terphenyl-d14	5.0000	0.0196	-99.6 *	20.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230301.1\NT1003012311.D

Date: 01-HRR-2023 21:46

Client ID:

Sample Info: SEQ-SCV1

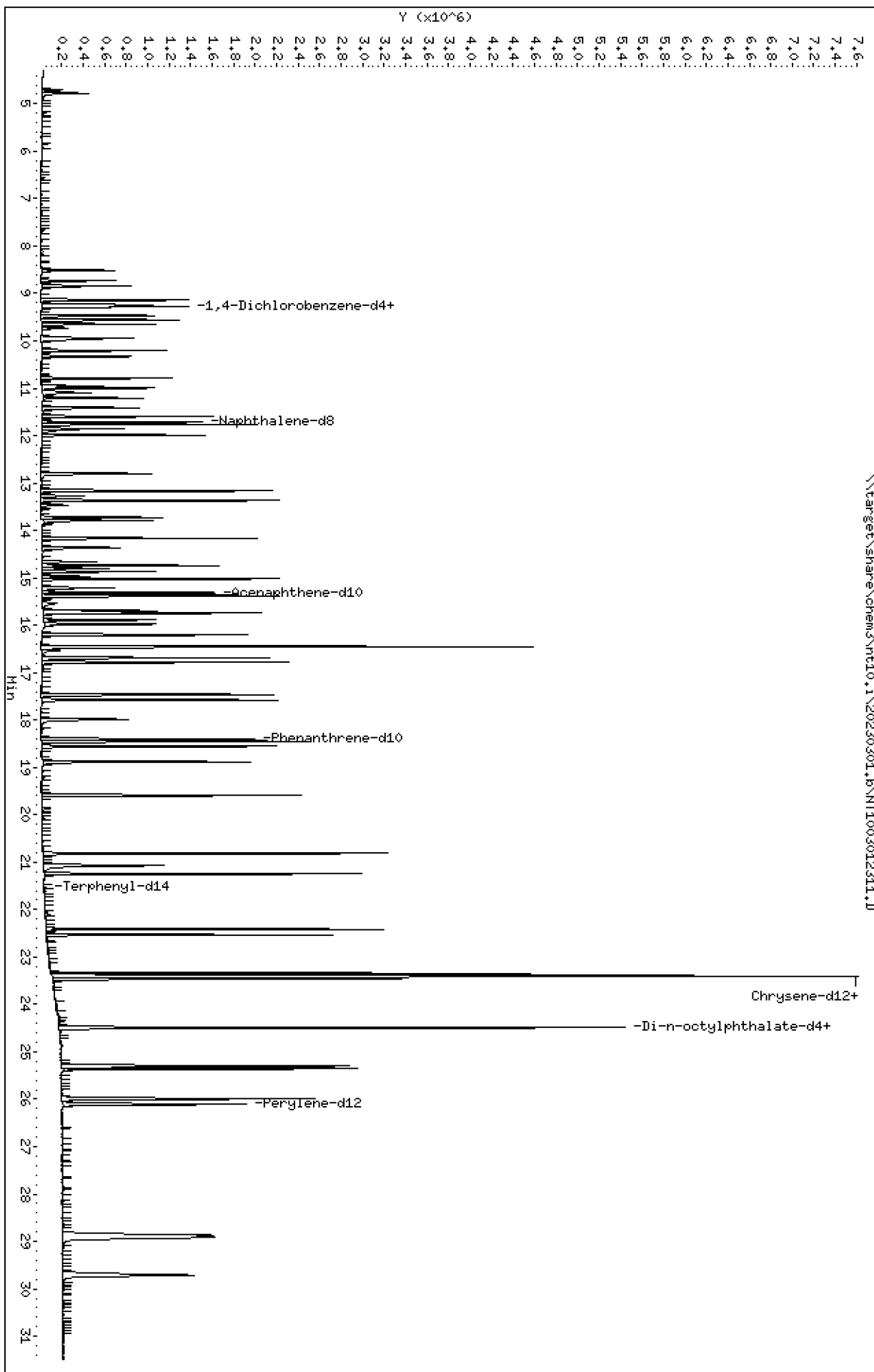
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

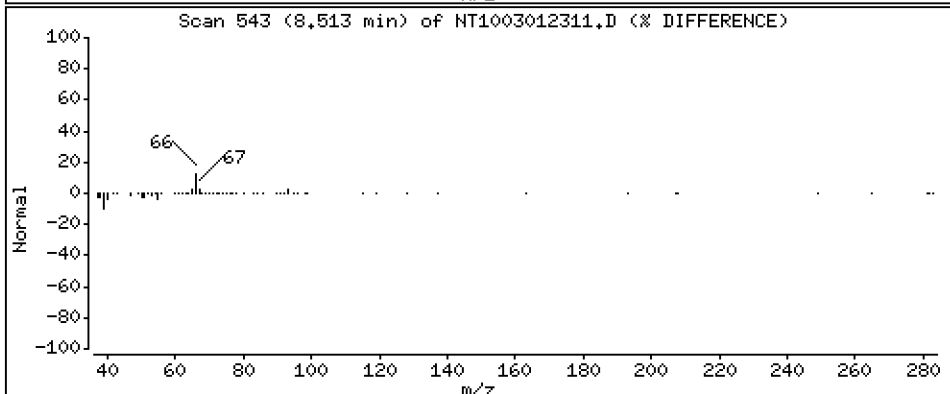
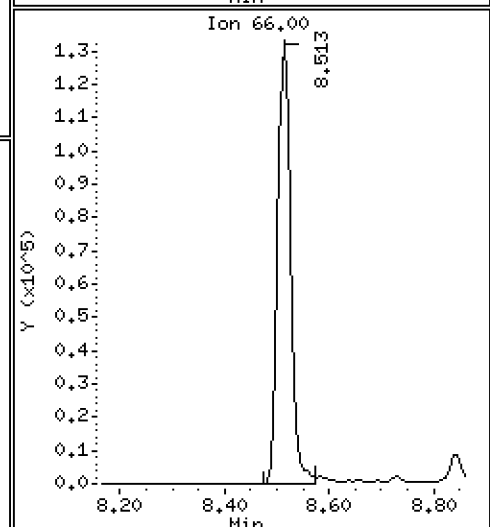
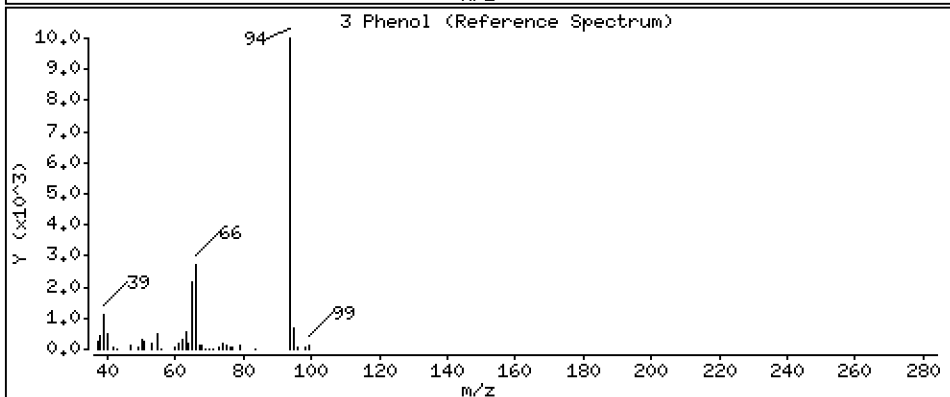
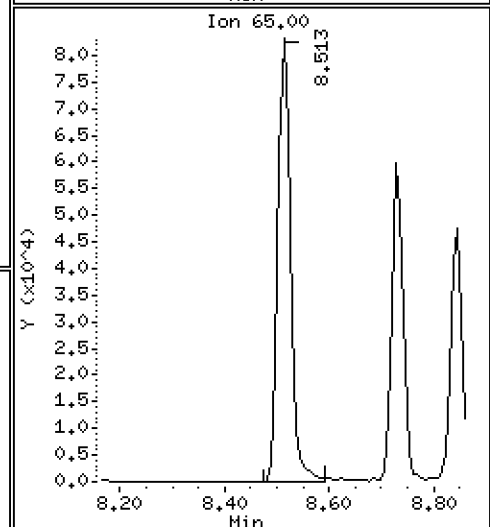
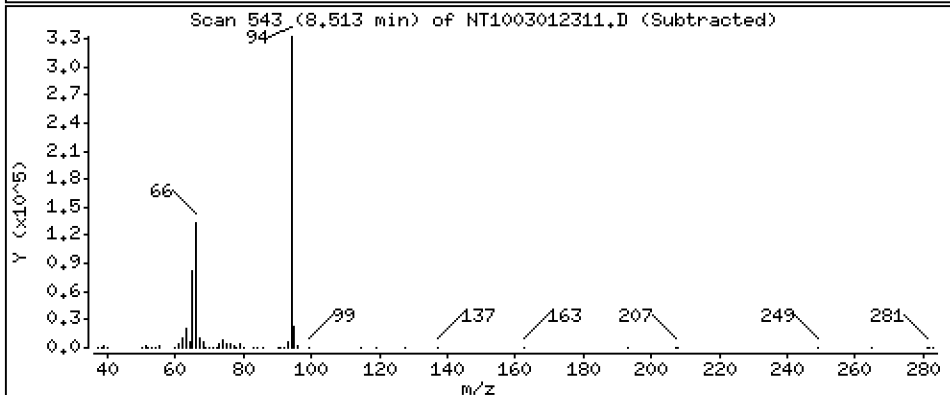
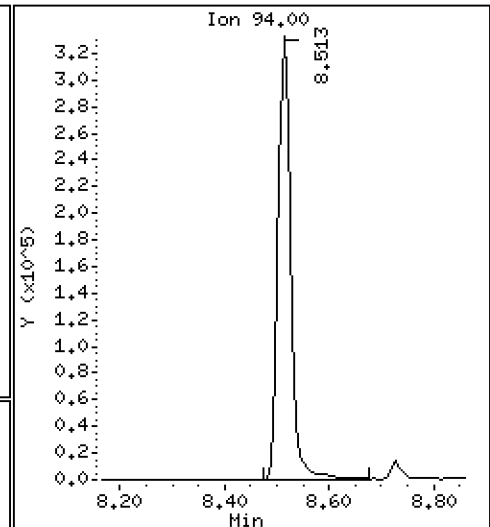
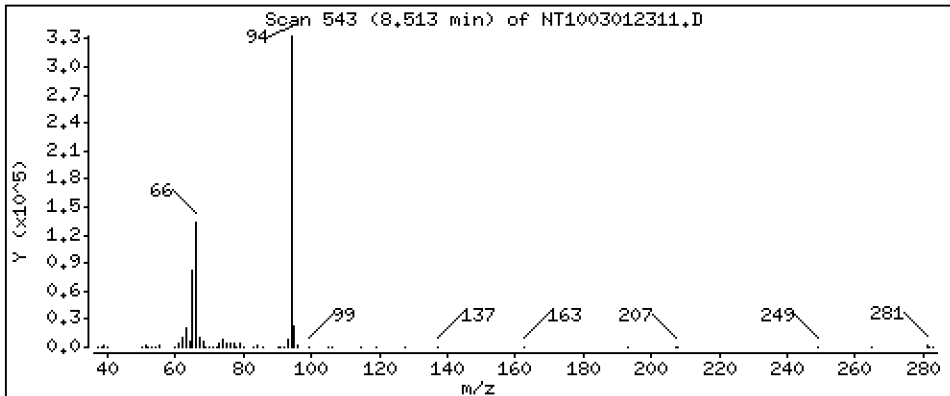
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,852 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

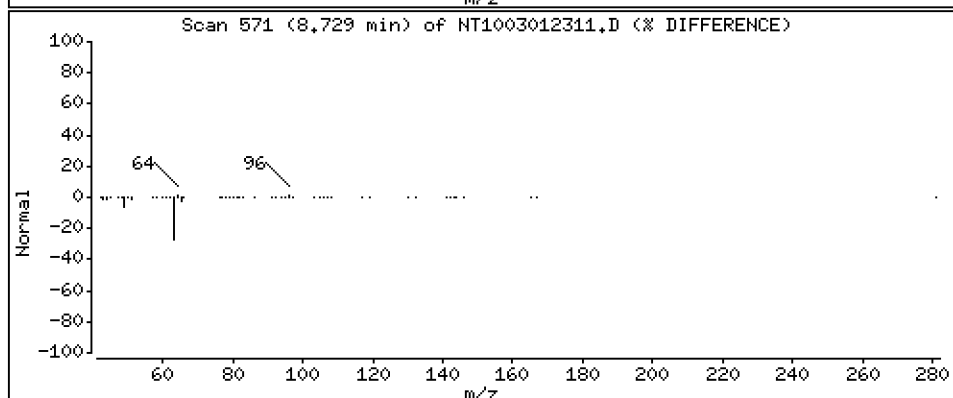
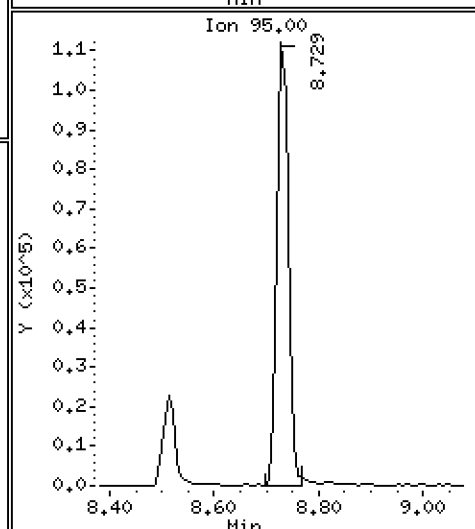
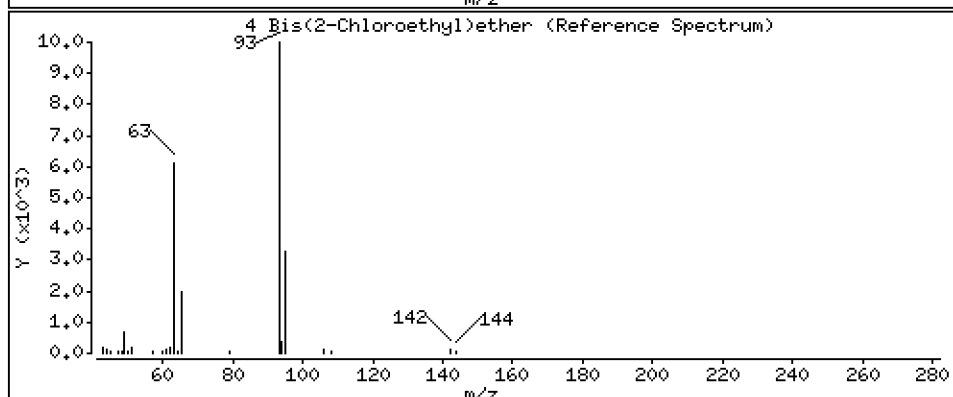
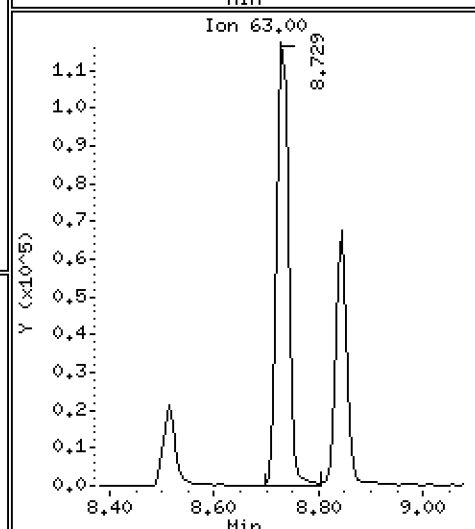
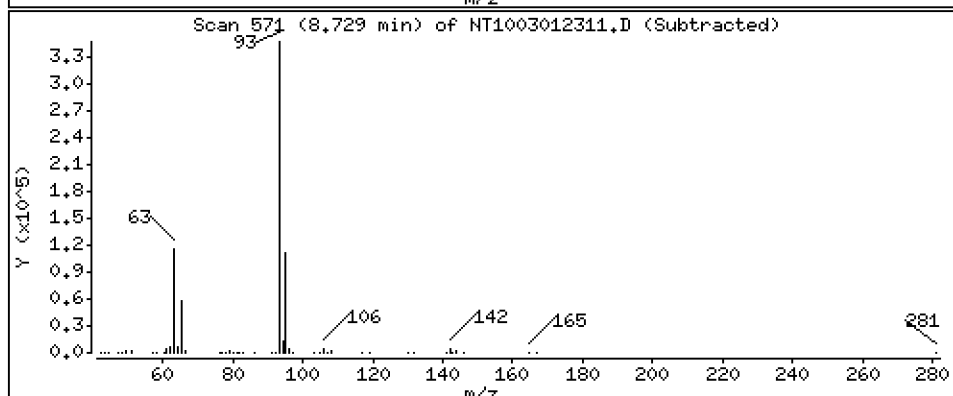
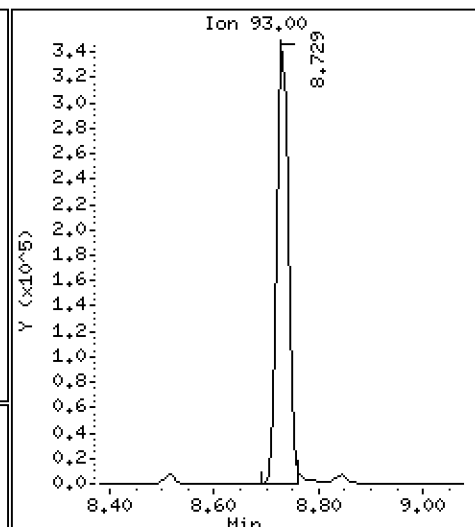
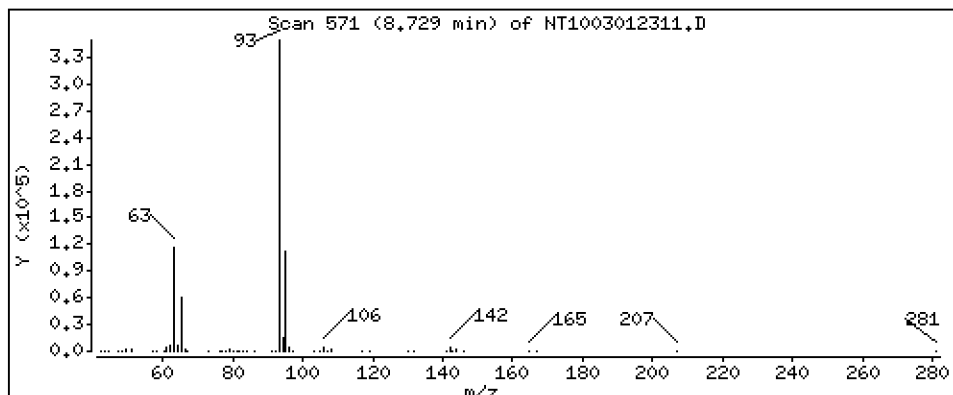
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,928 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

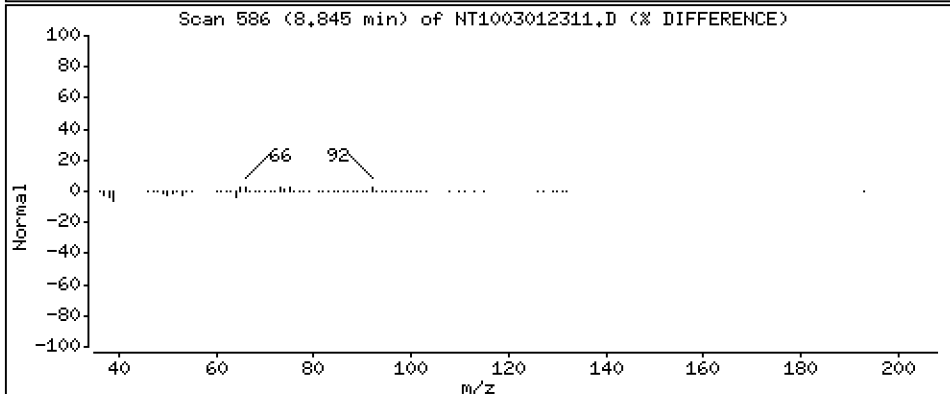
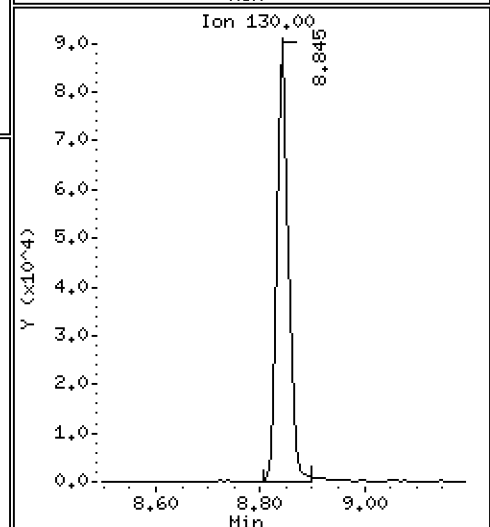
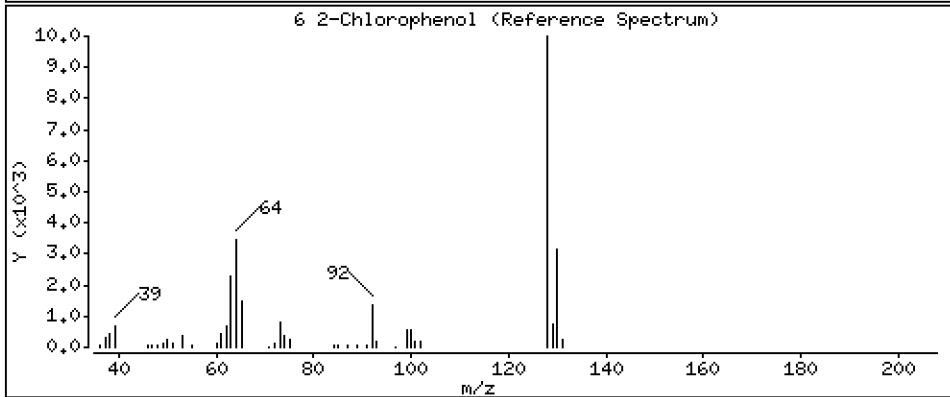
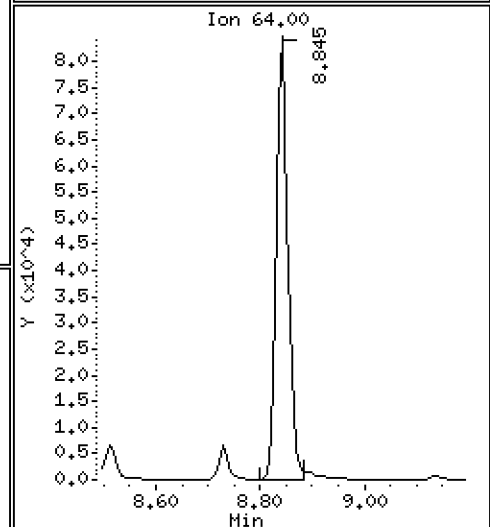
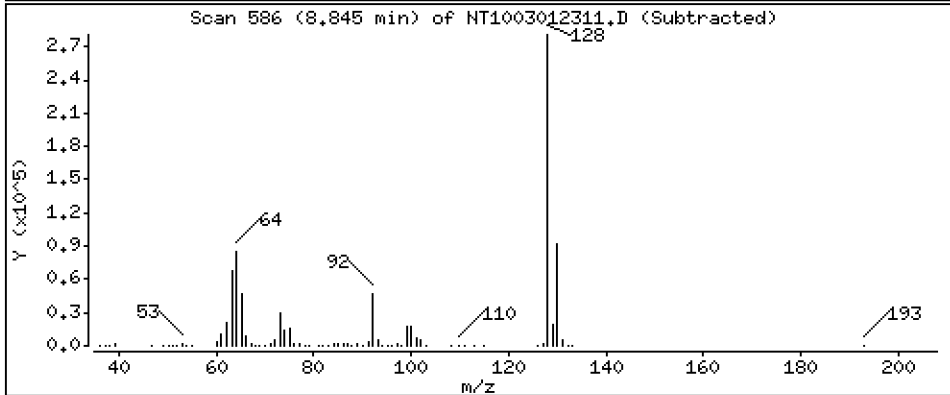
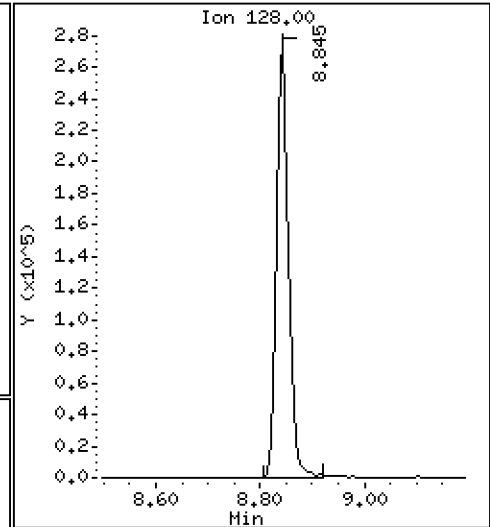
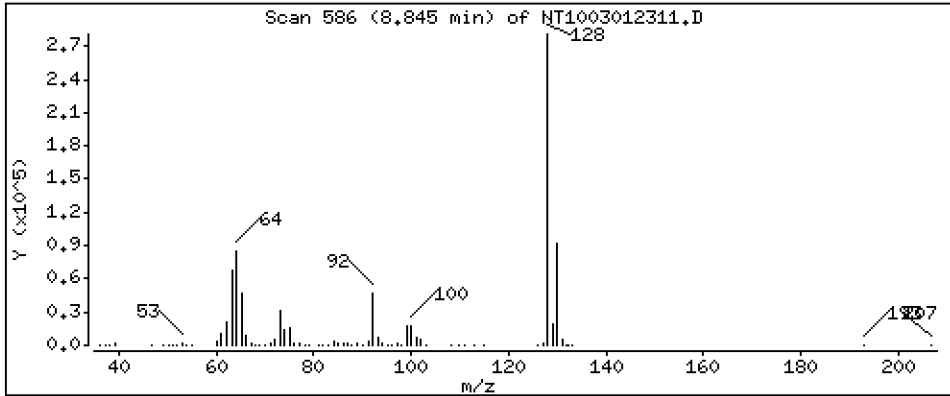
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 4.692 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

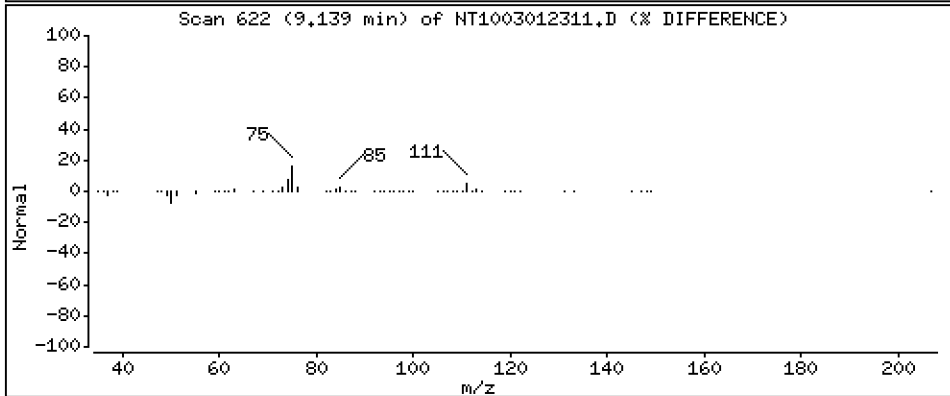
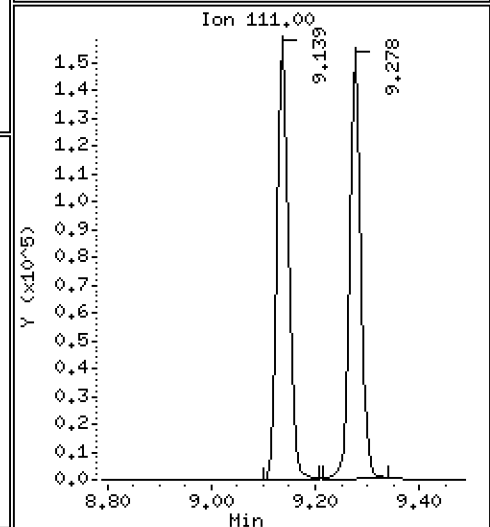
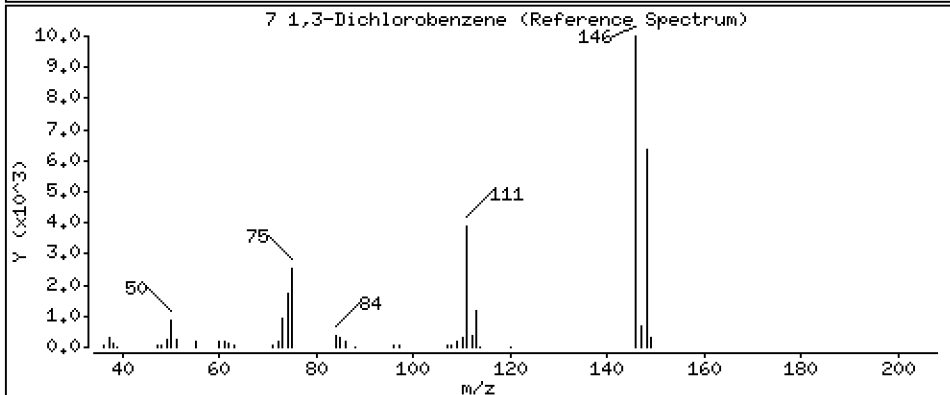
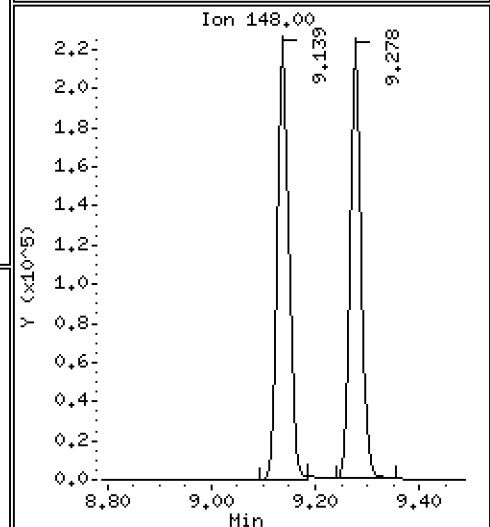
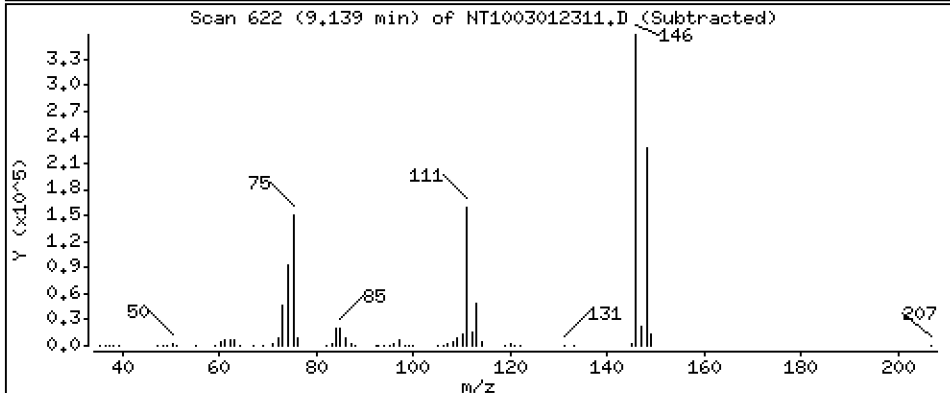
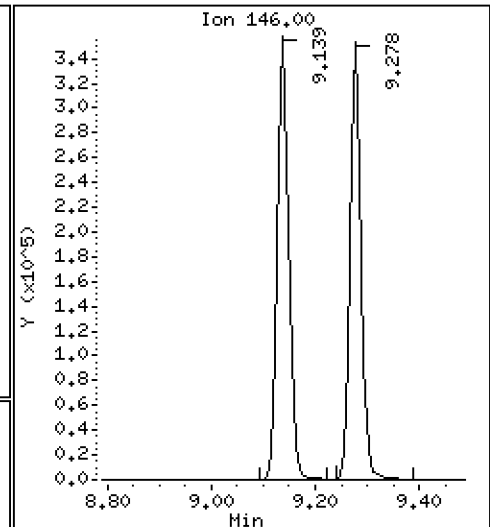
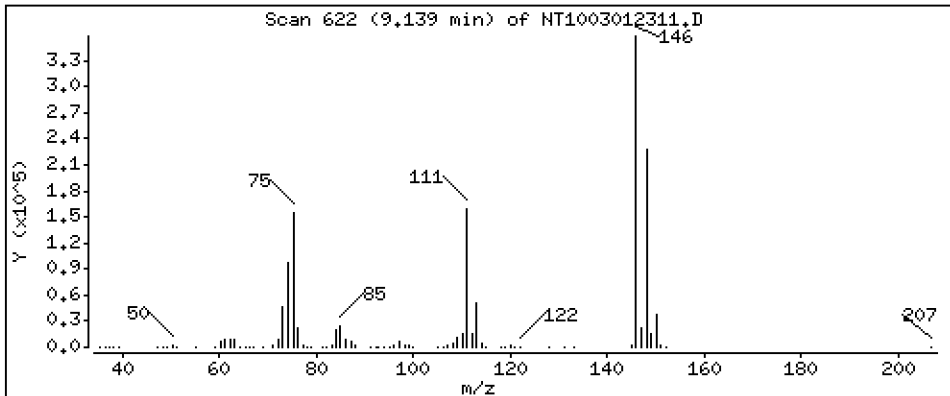
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 5,266 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

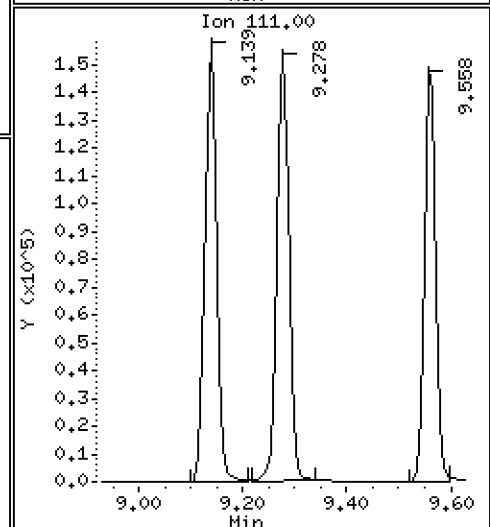
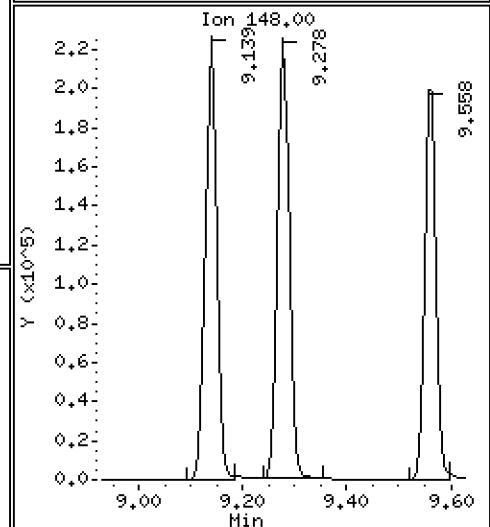
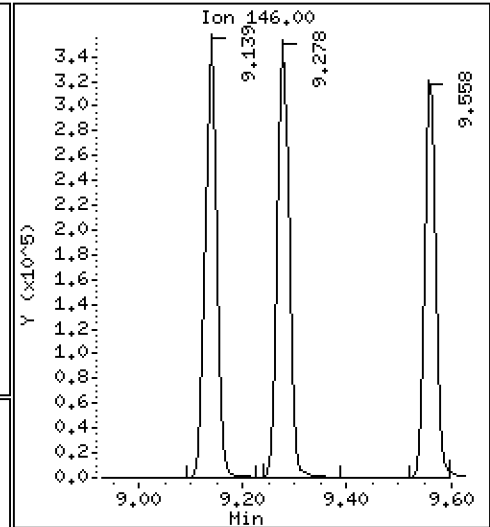
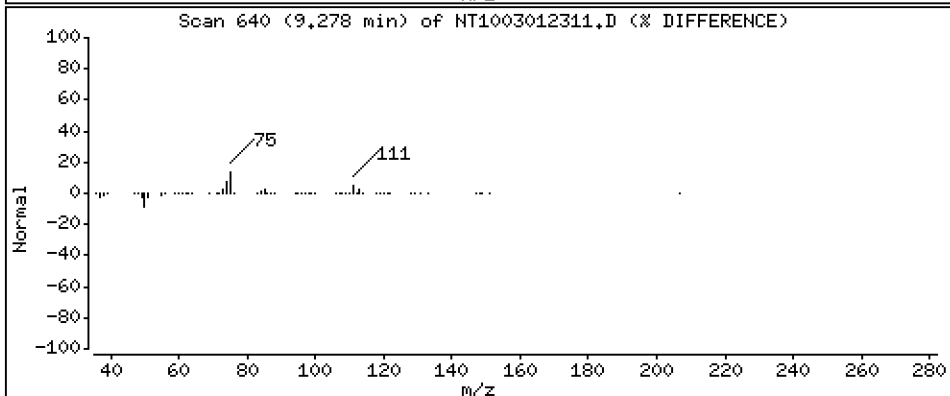
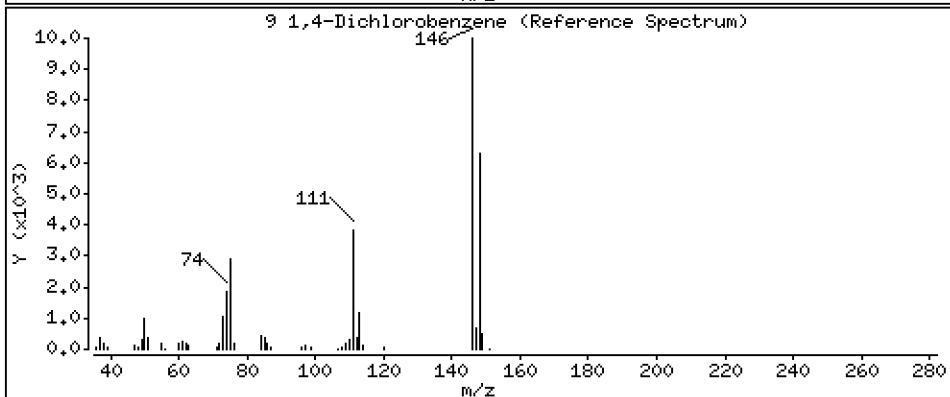
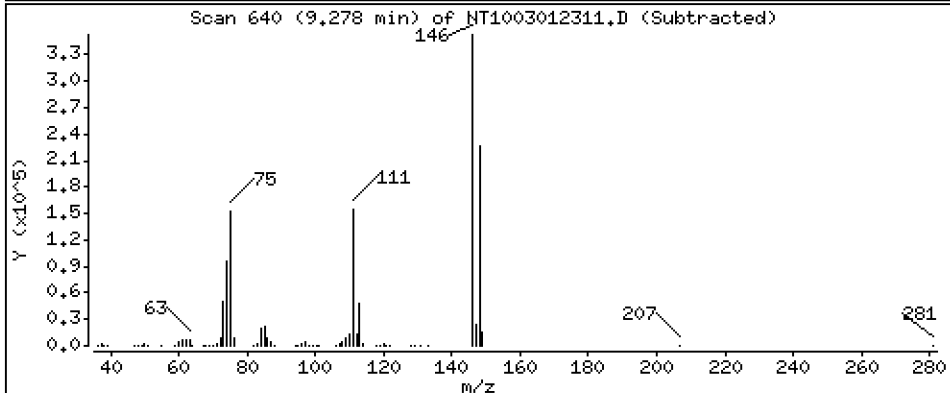
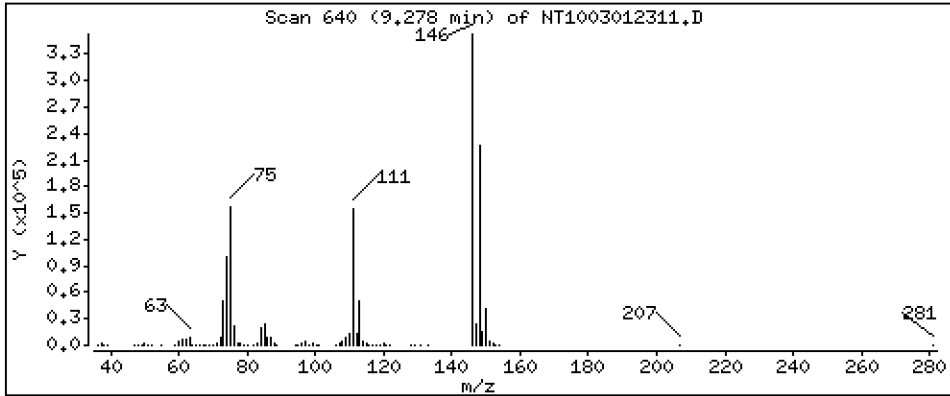
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 5,216 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

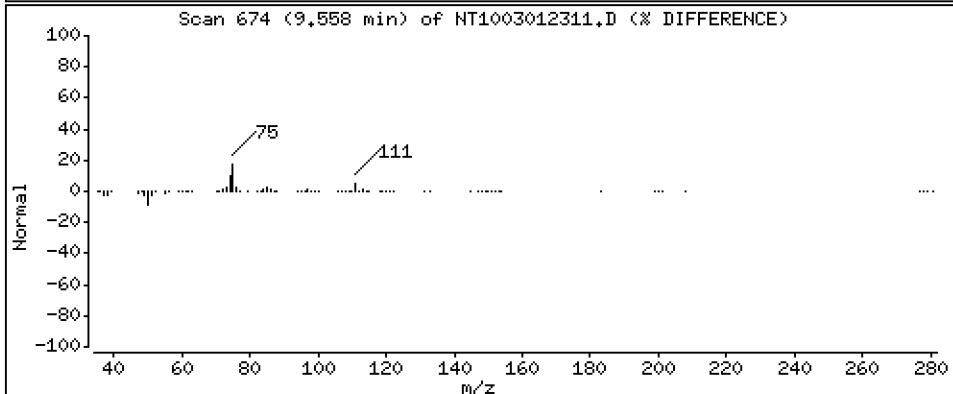
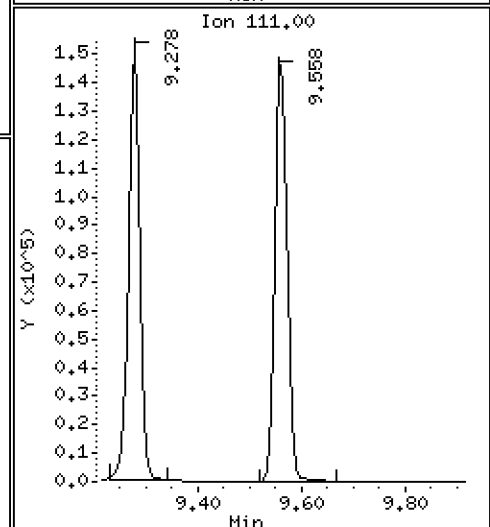
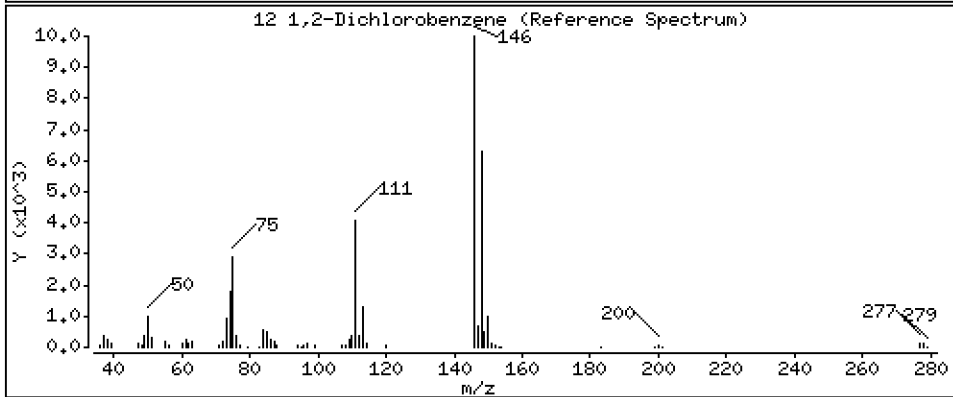
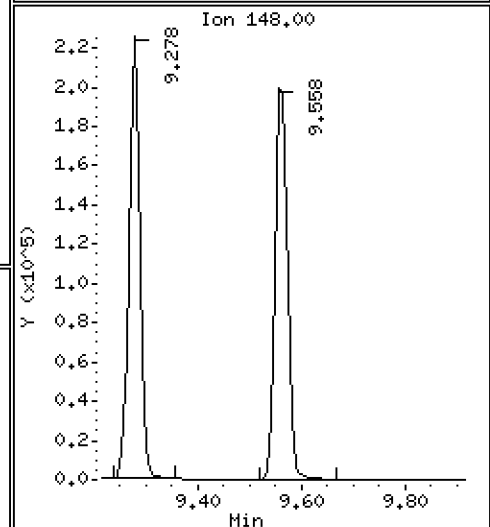
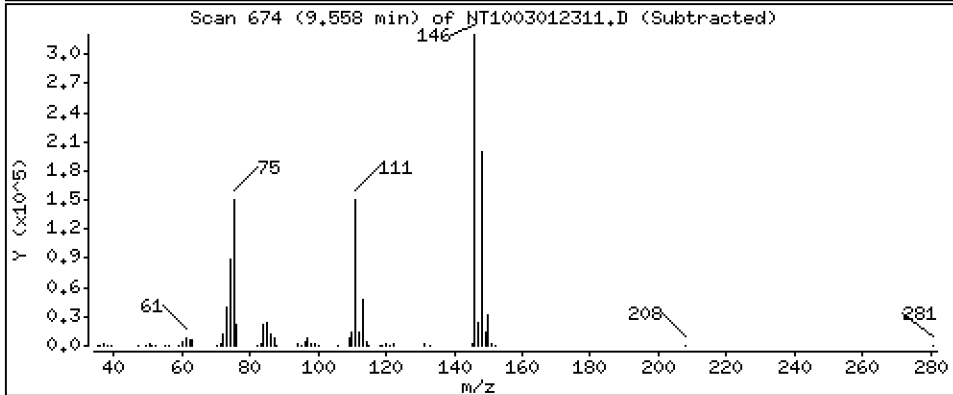
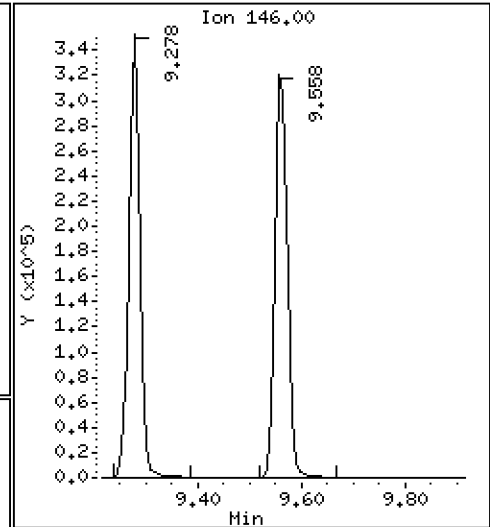
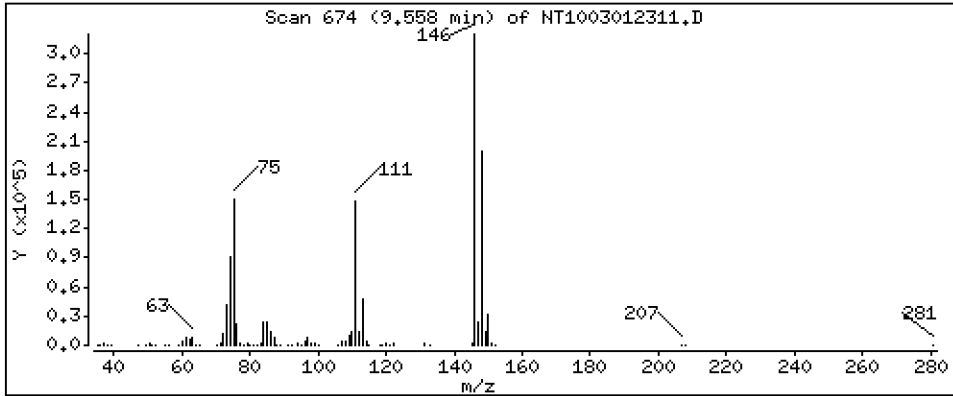
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5,194 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

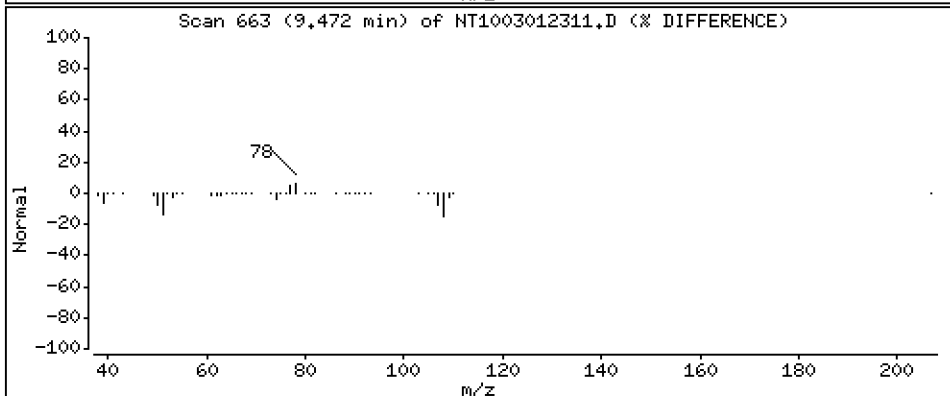
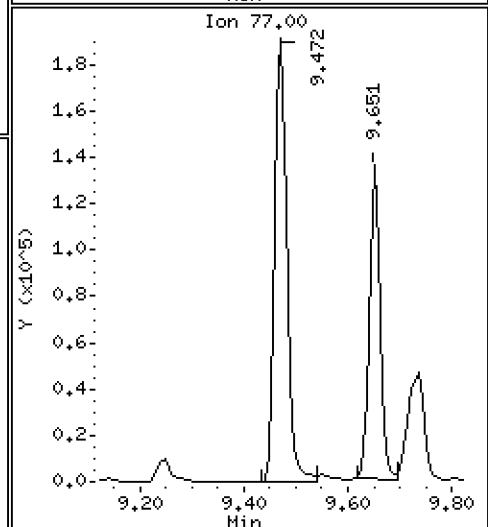
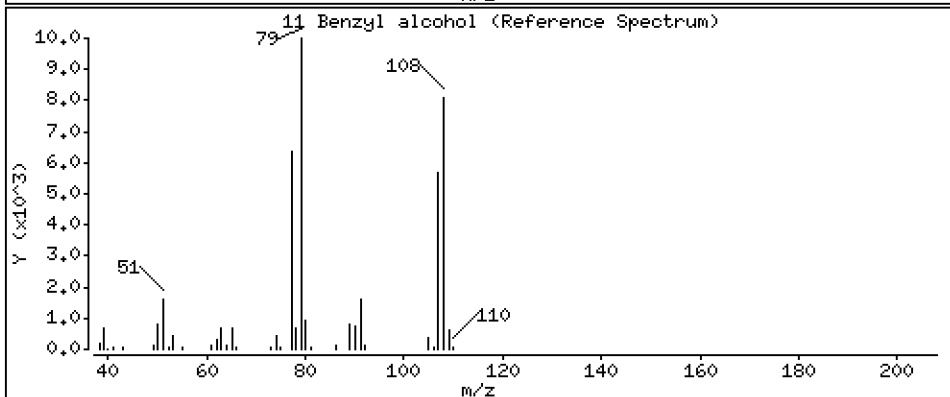
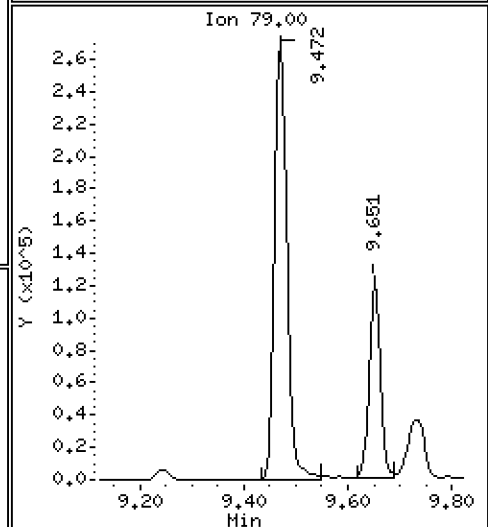
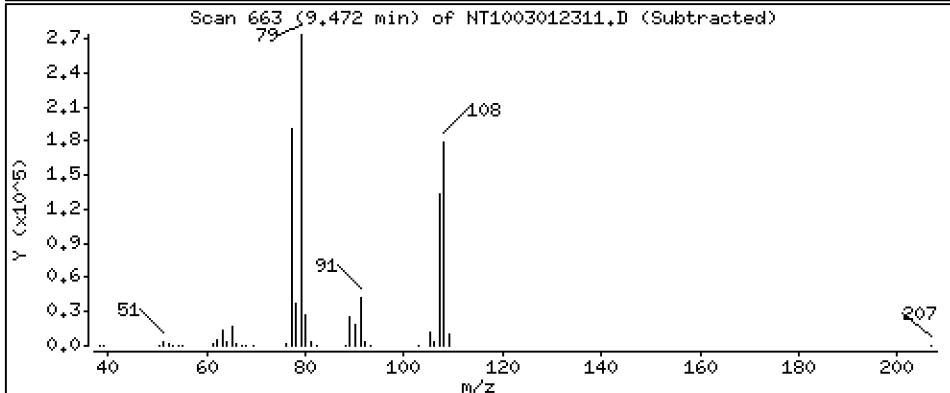
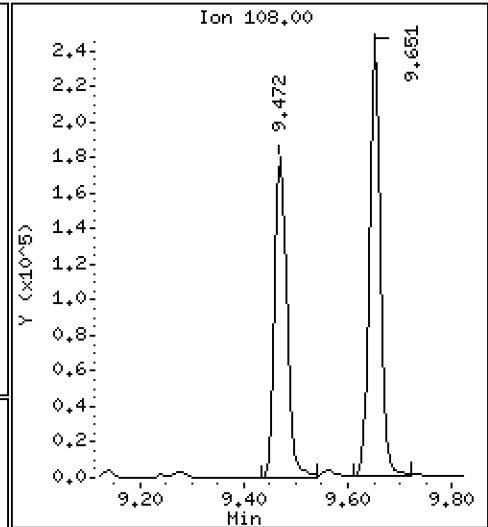
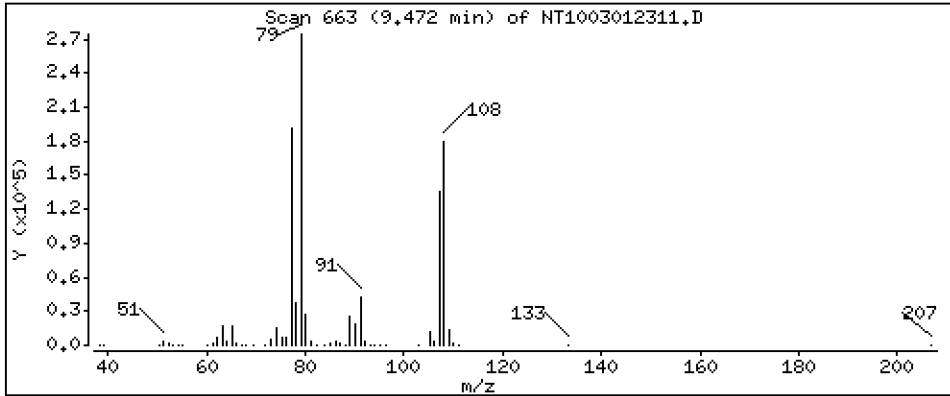
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.898 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

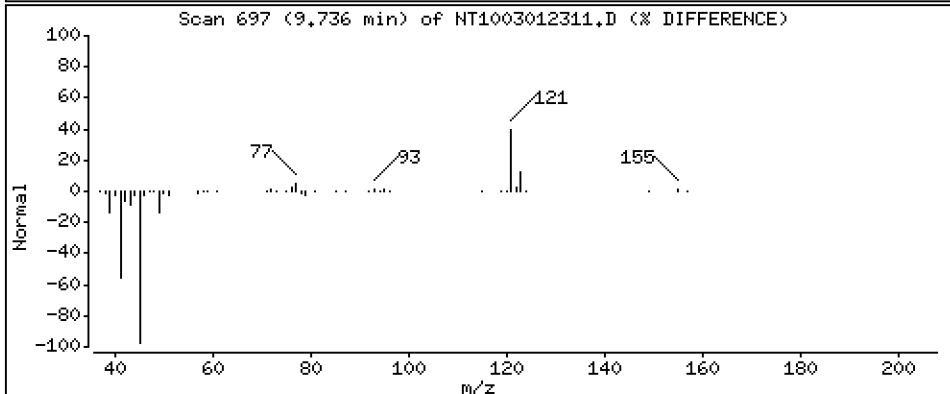
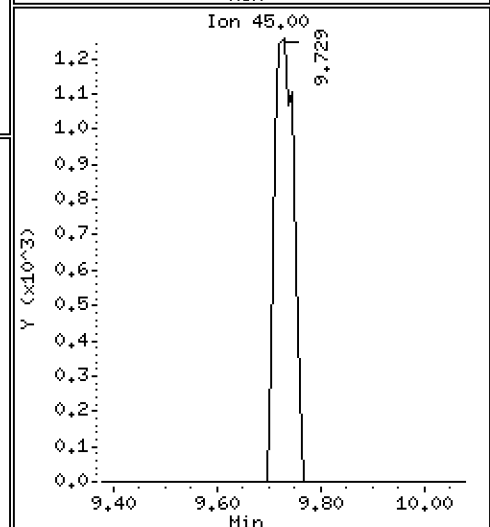
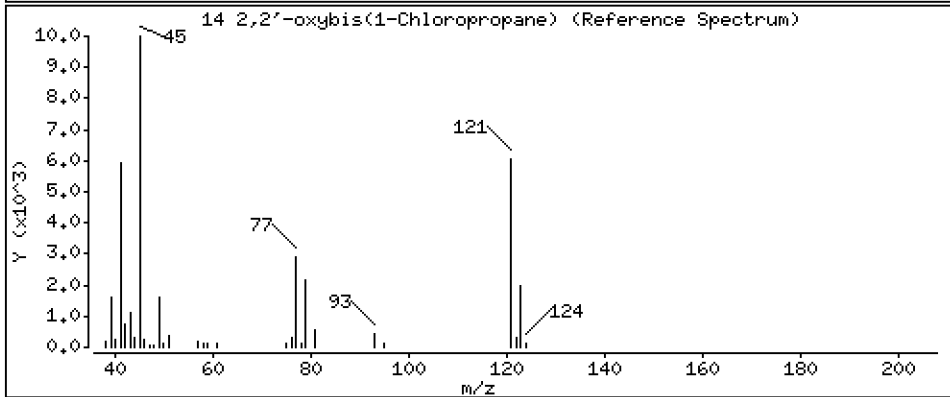
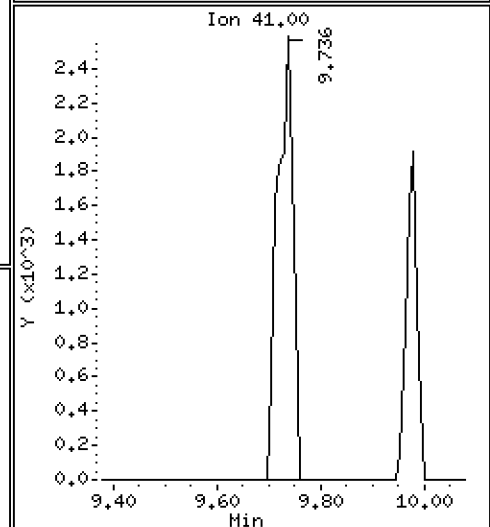
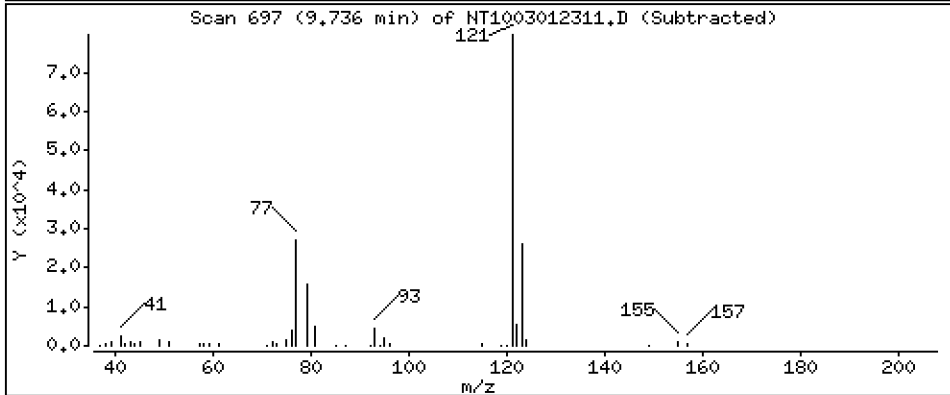
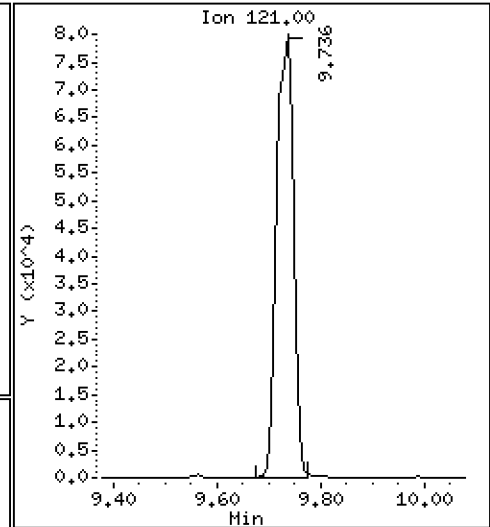
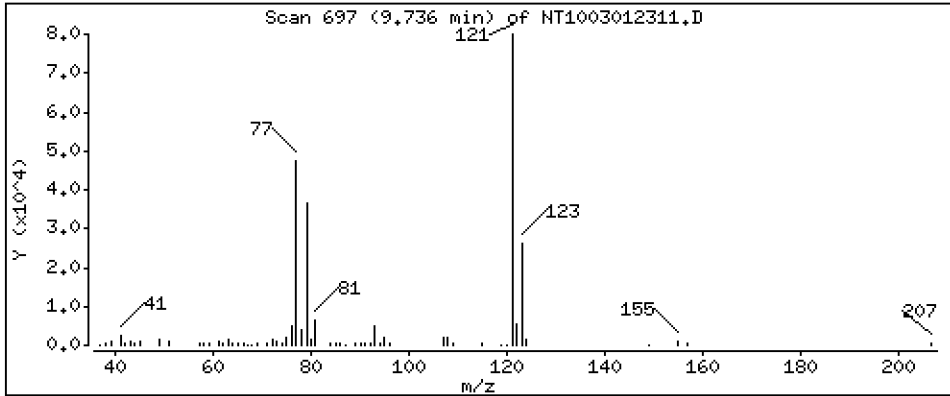
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

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

Concentration: 6.232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

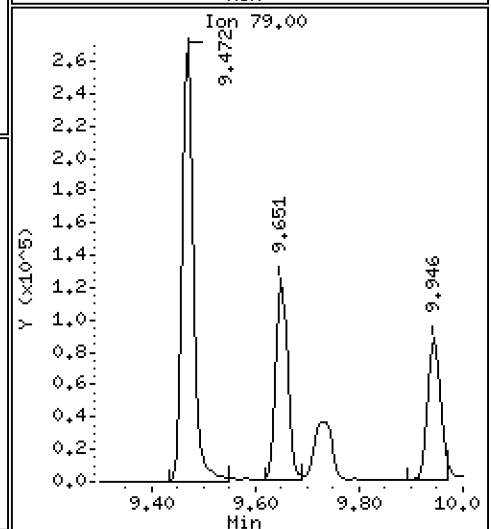
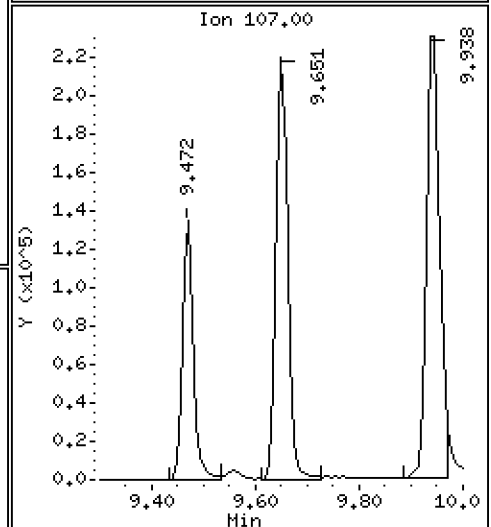
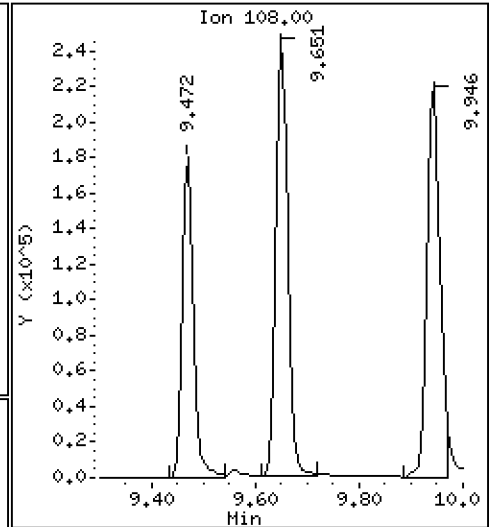
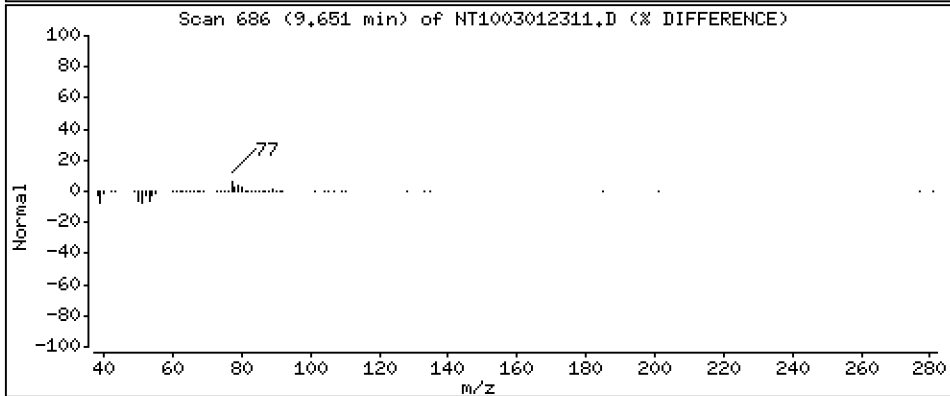
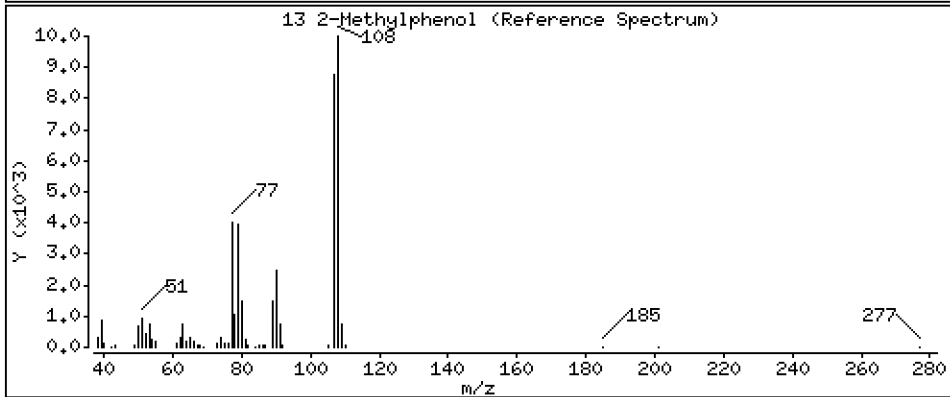
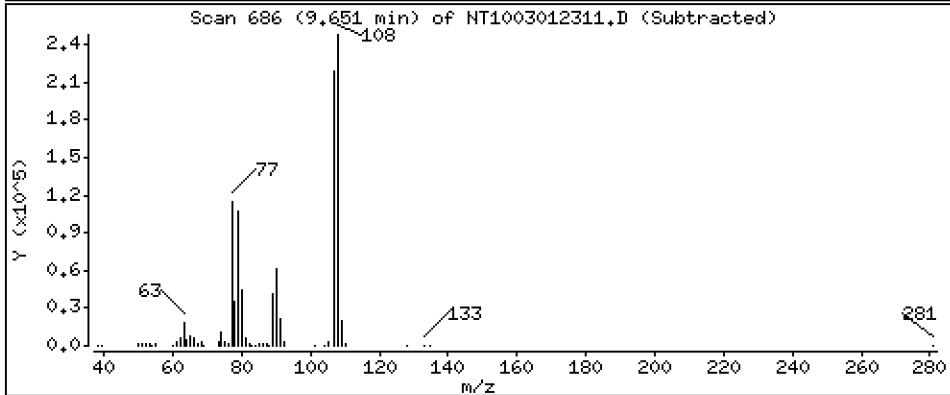
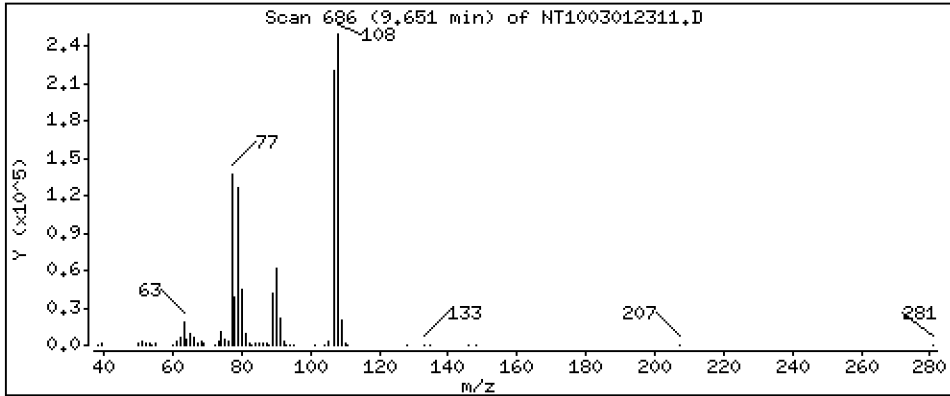
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.192 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

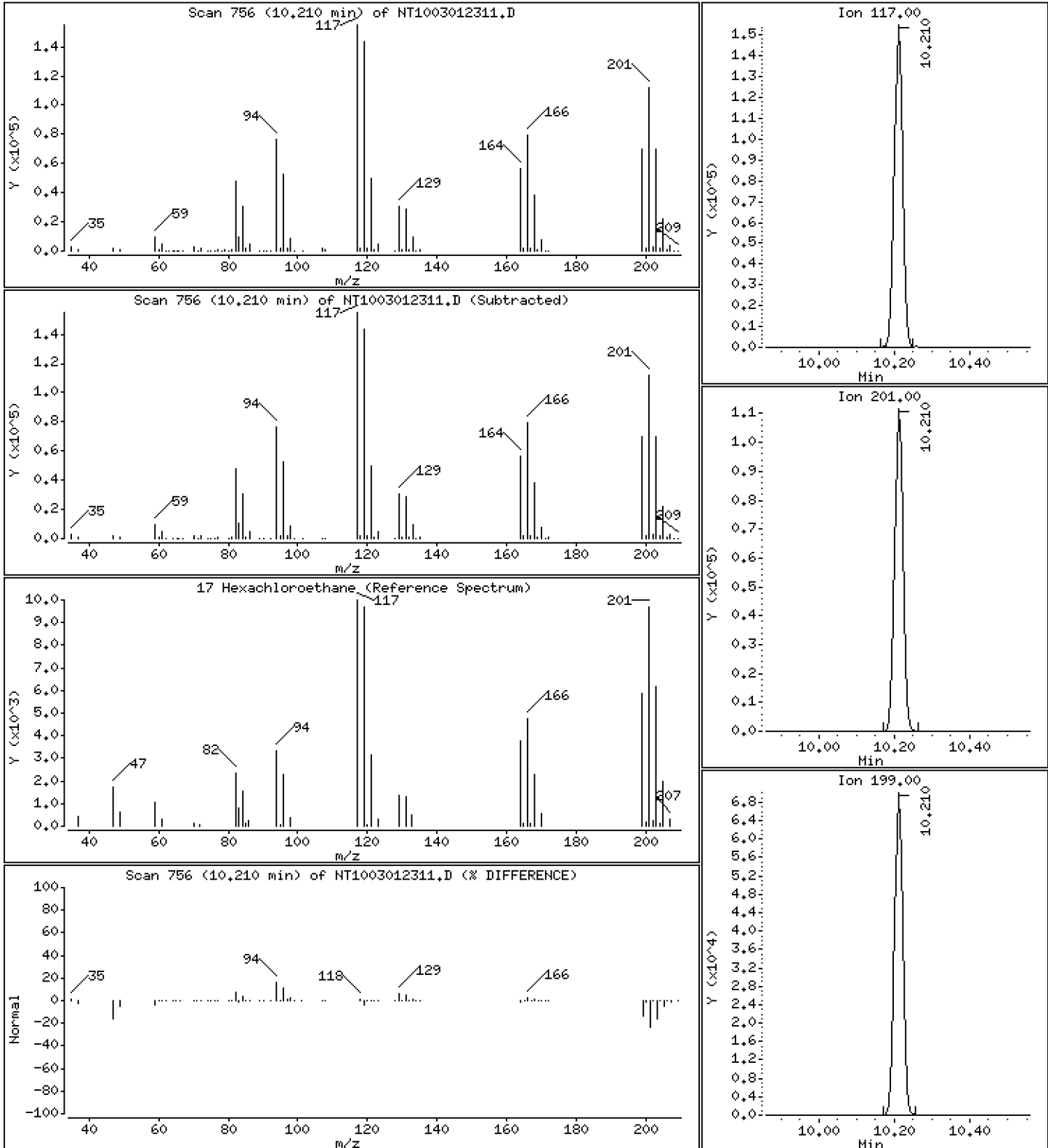
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 5,443 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

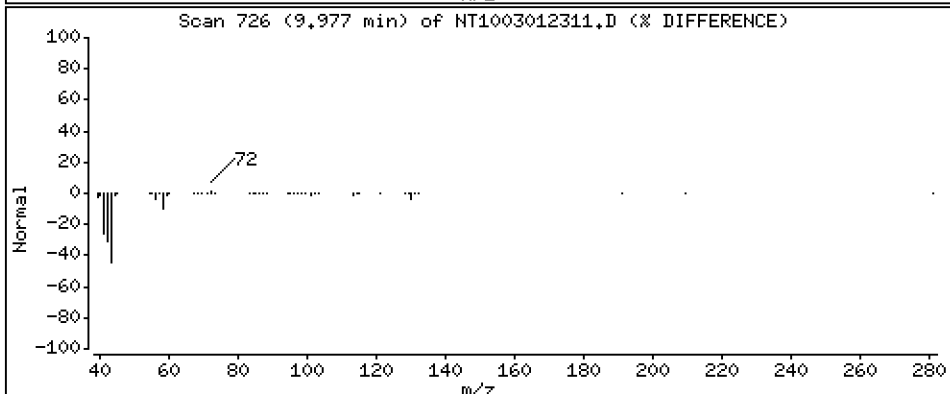
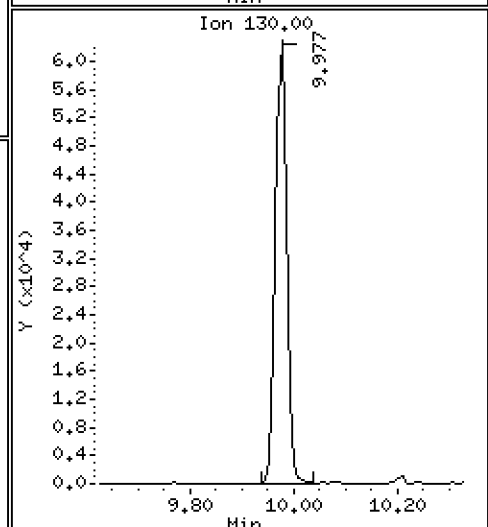
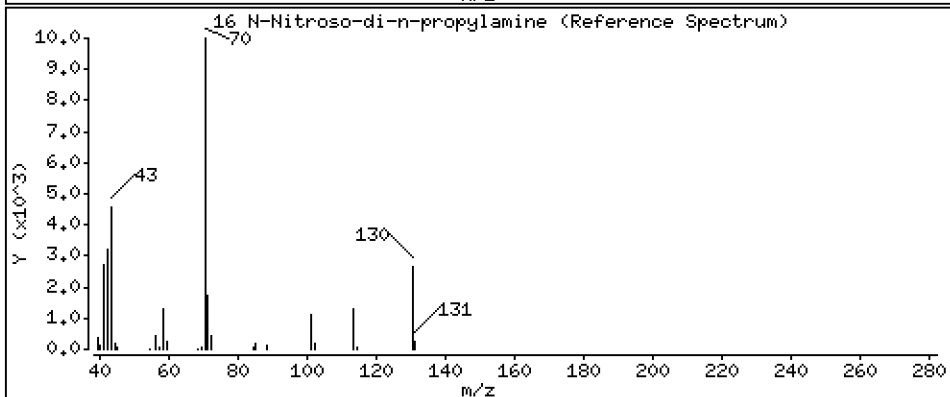
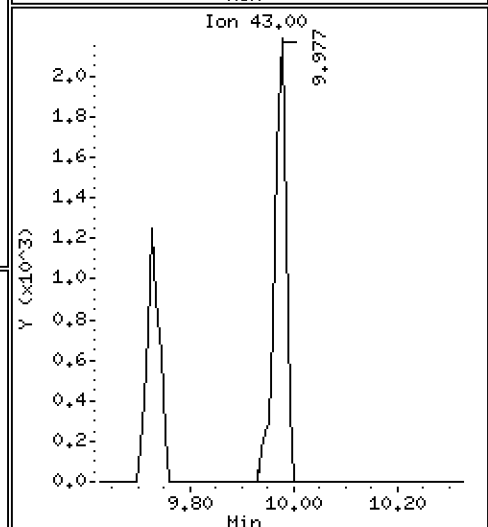
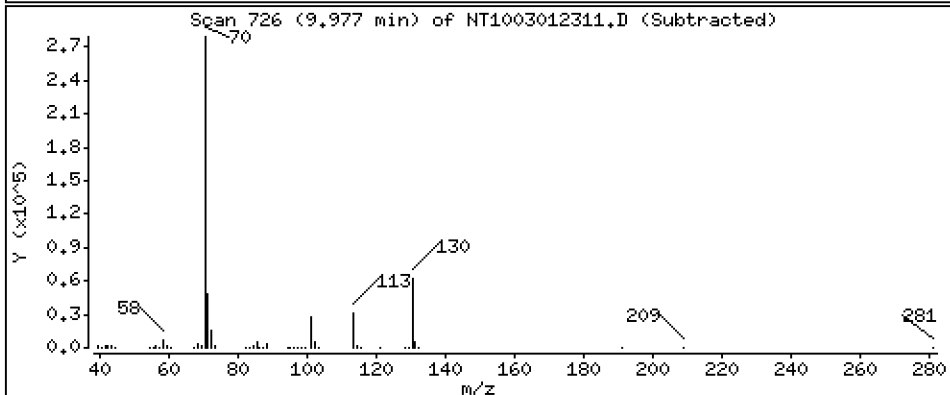
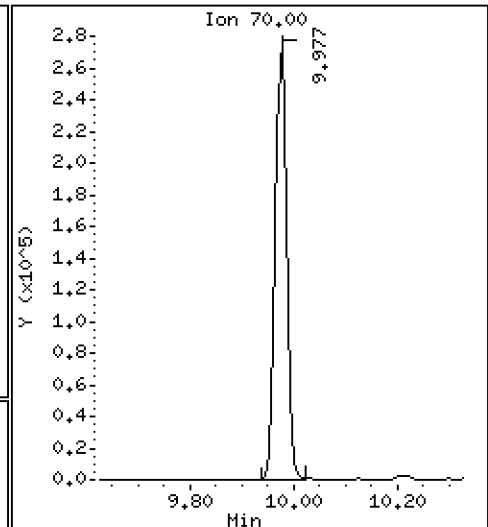
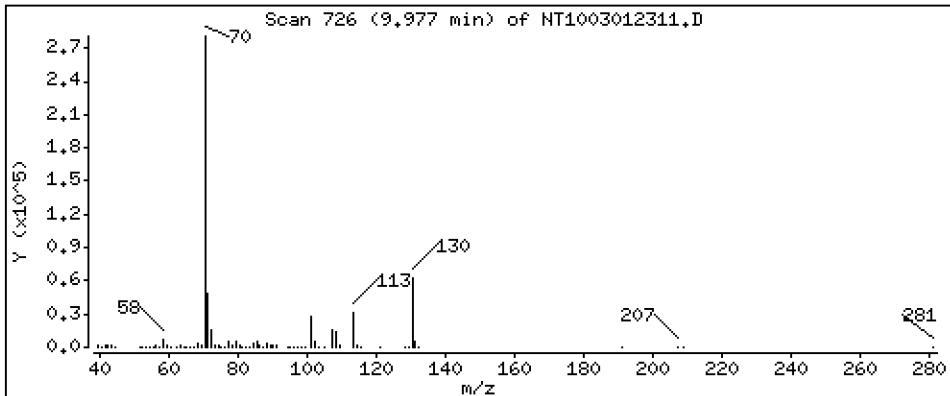
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

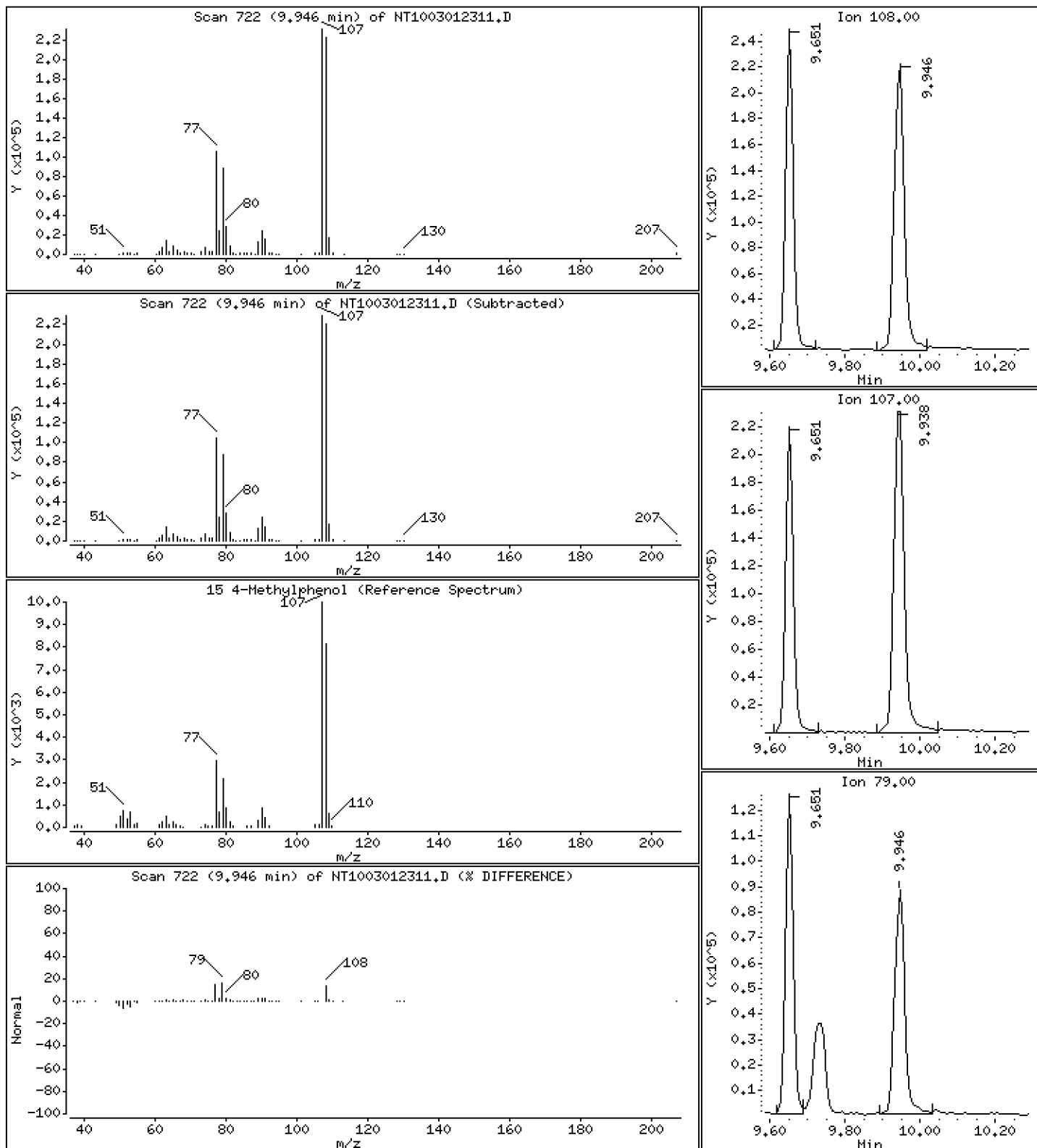
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,239 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

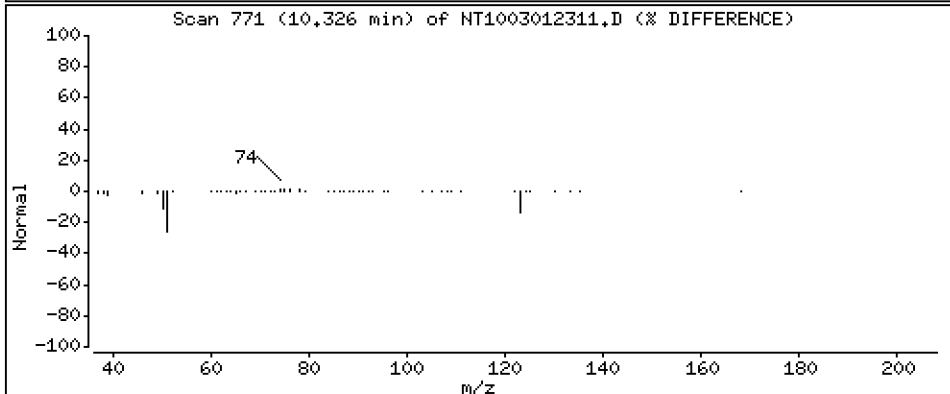
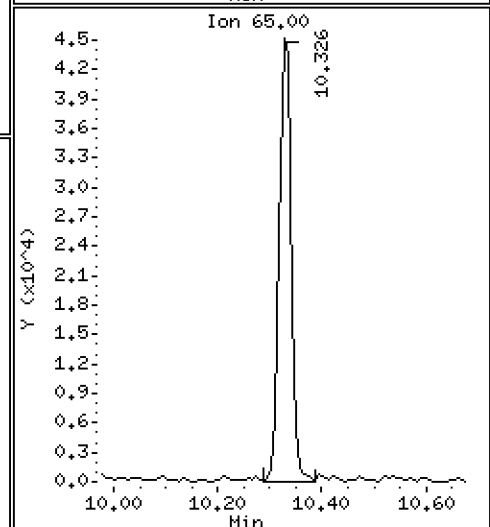
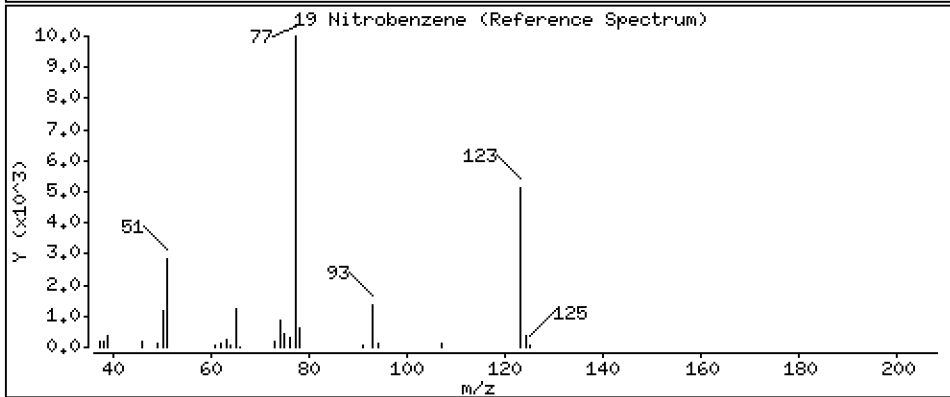
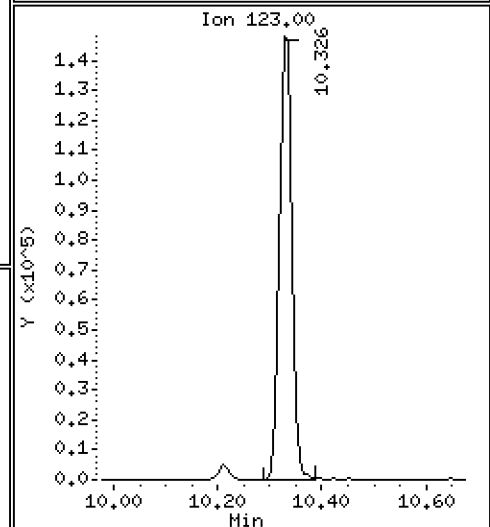
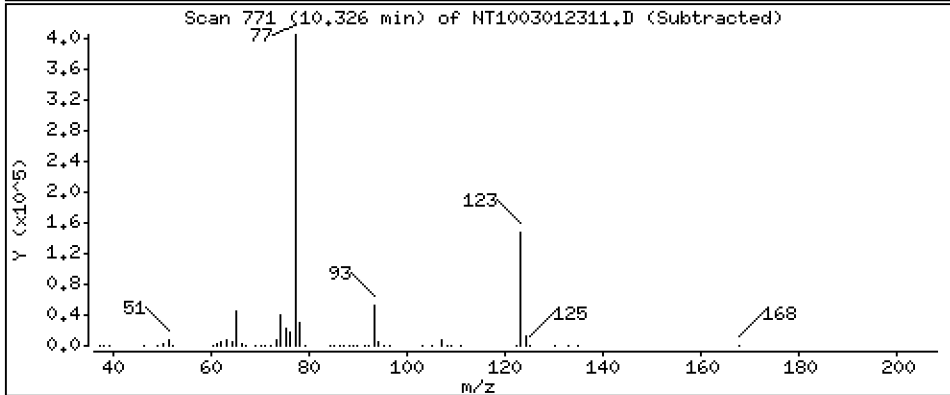
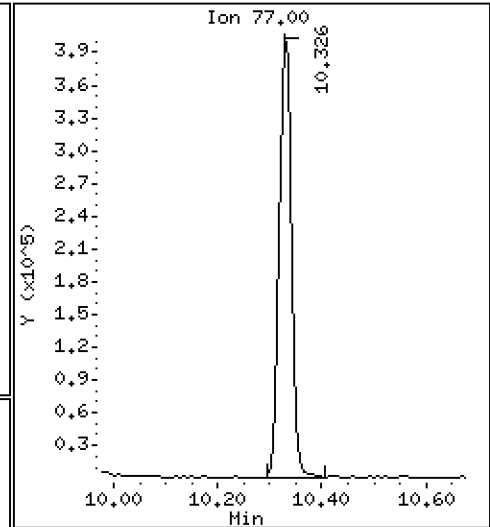
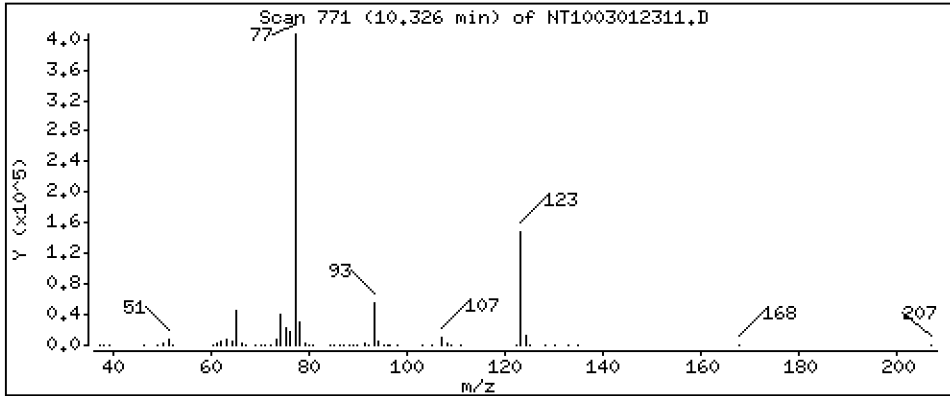
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,569 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

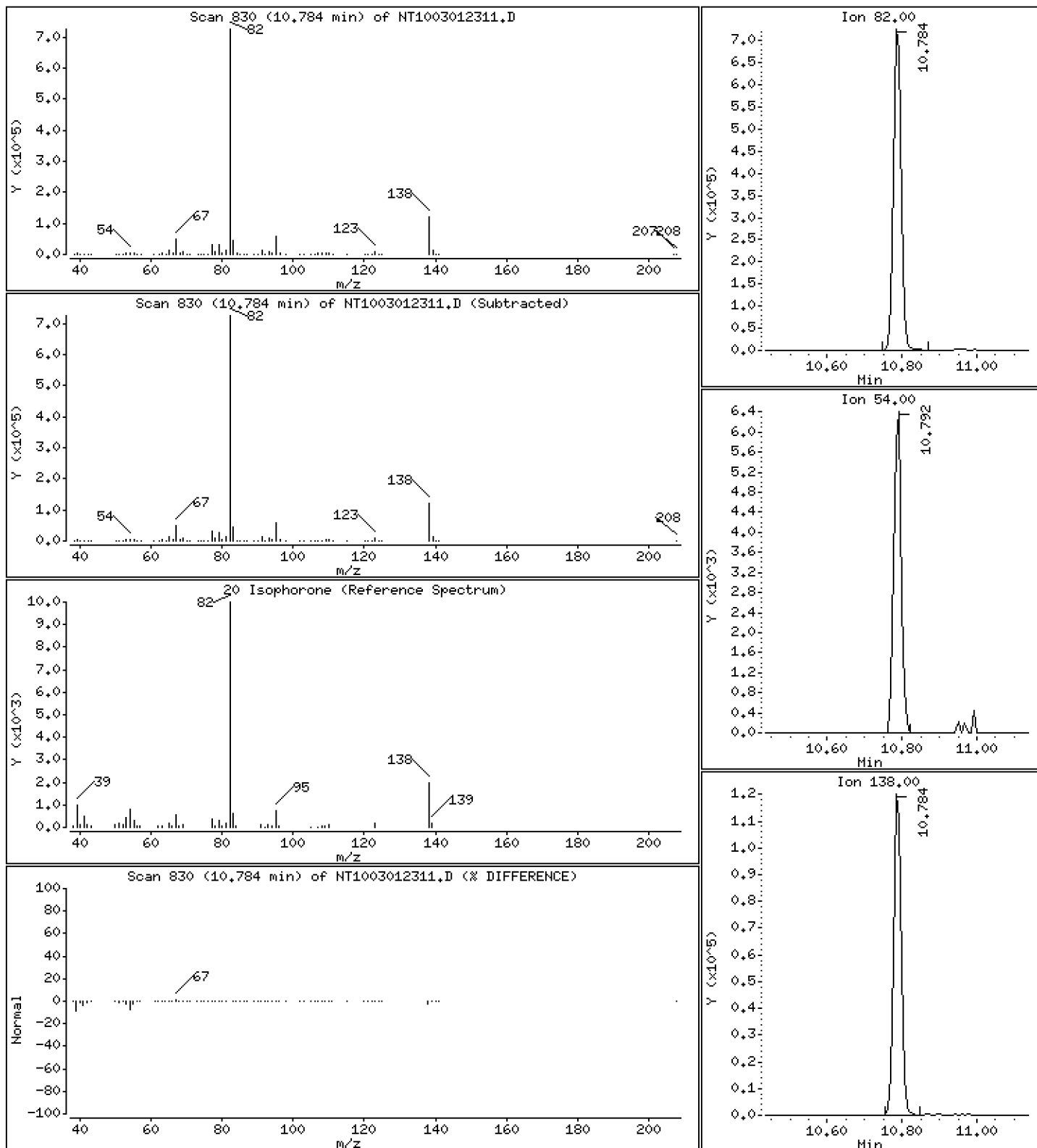
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 7,672 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

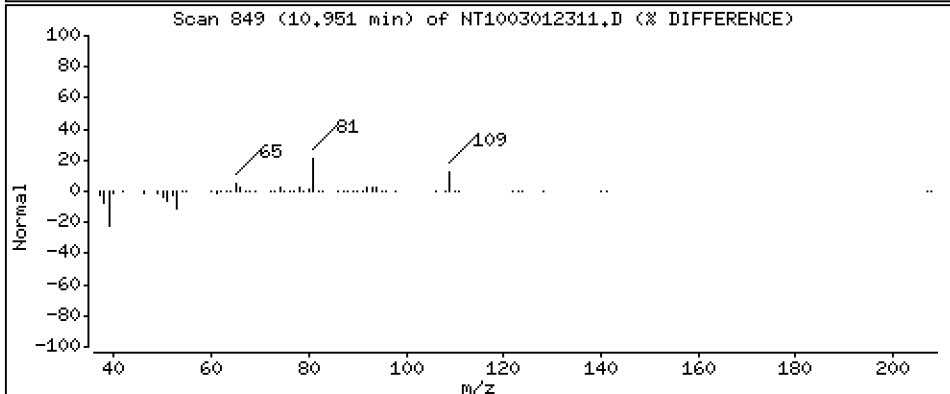
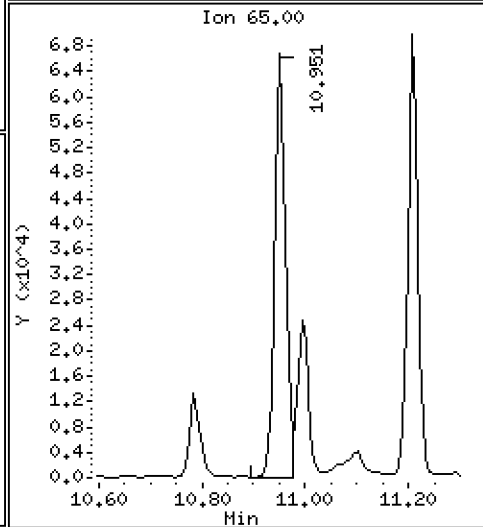
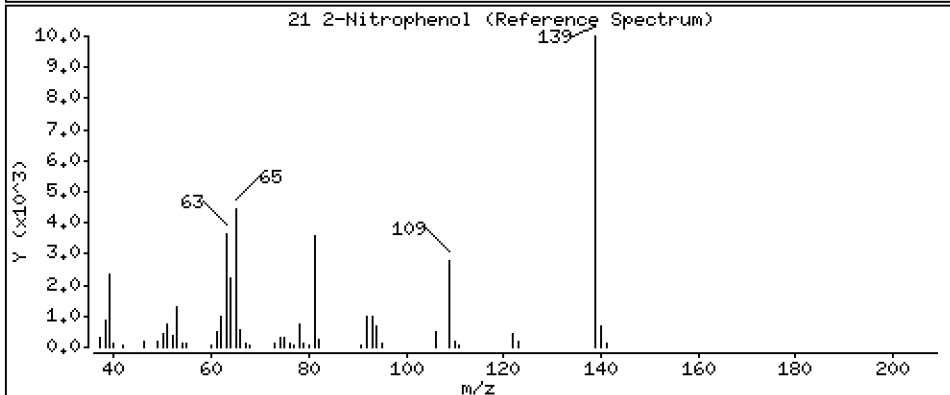
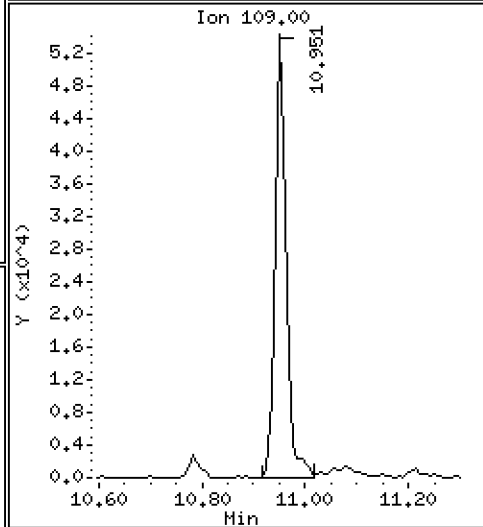
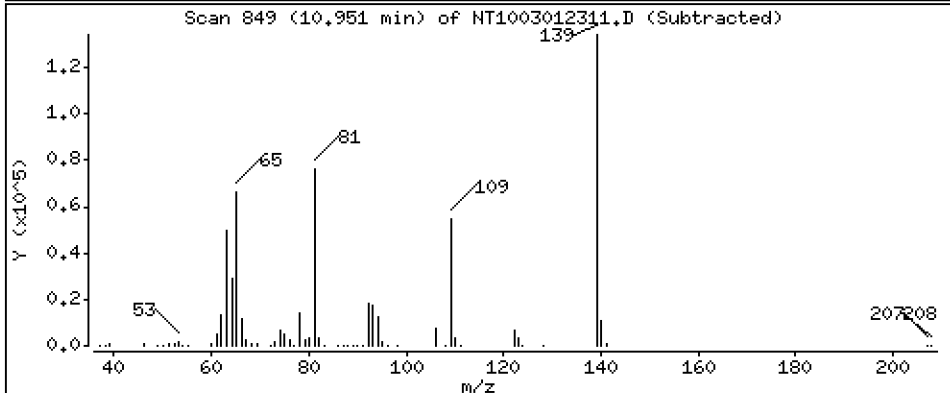
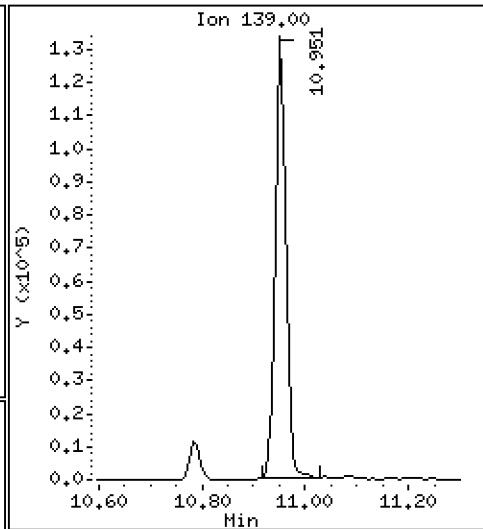
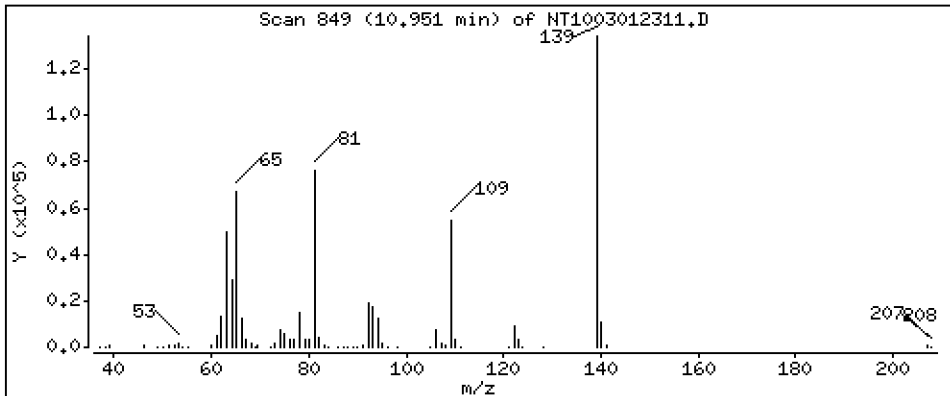
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,244 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

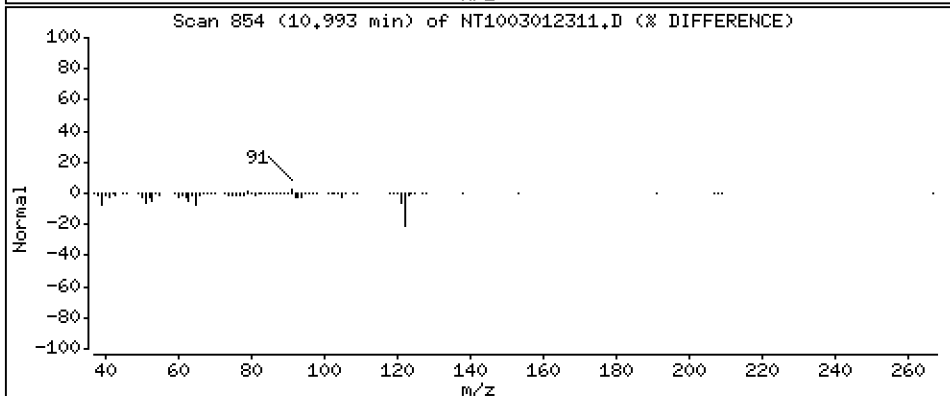
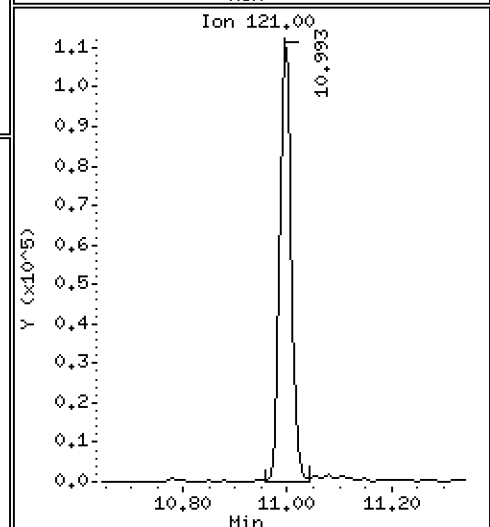
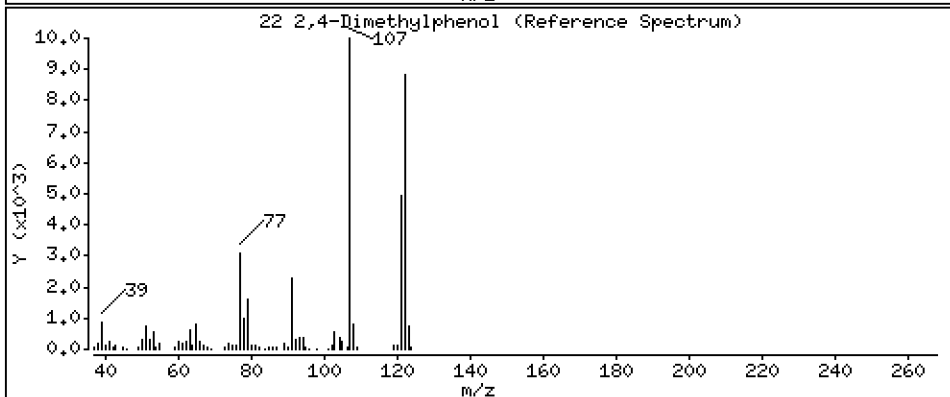
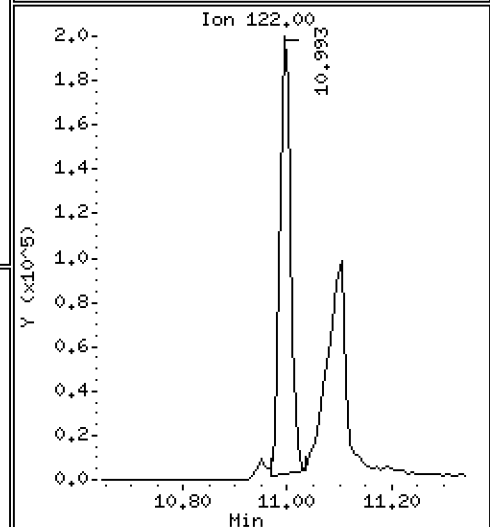
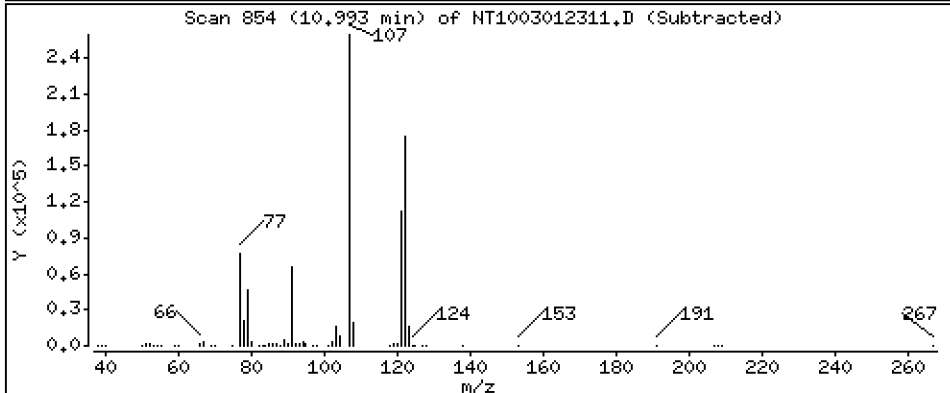
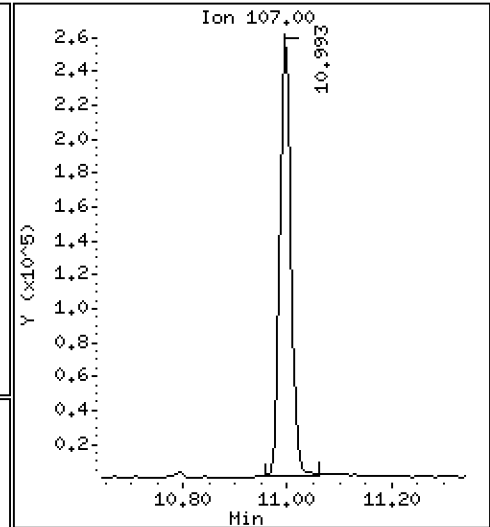
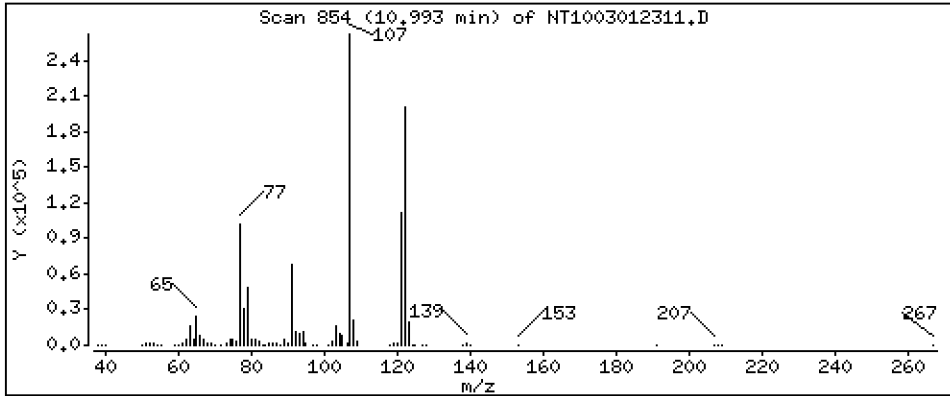
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,507 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

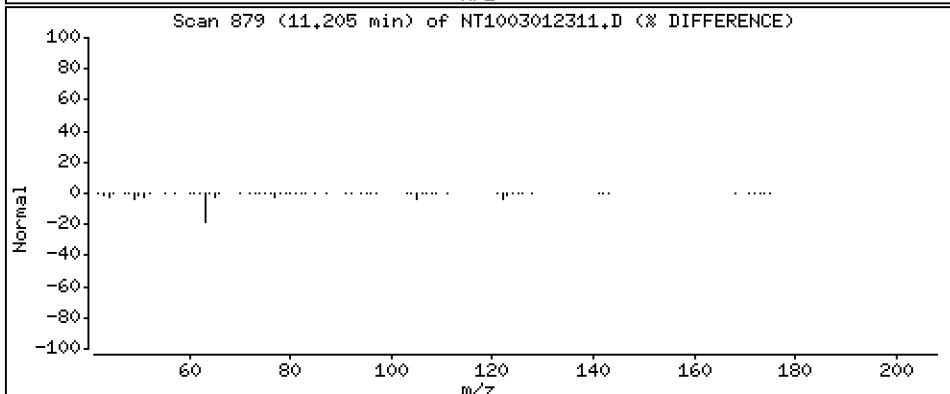
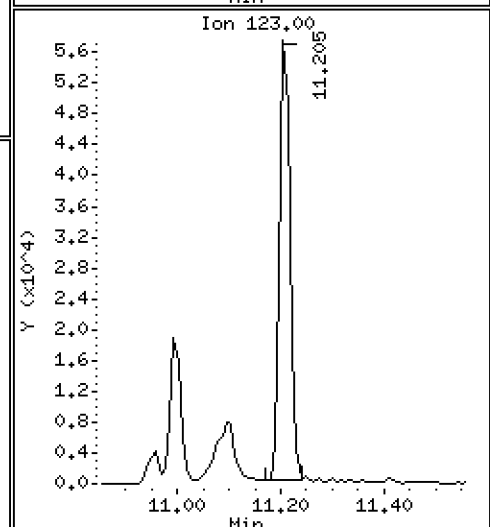
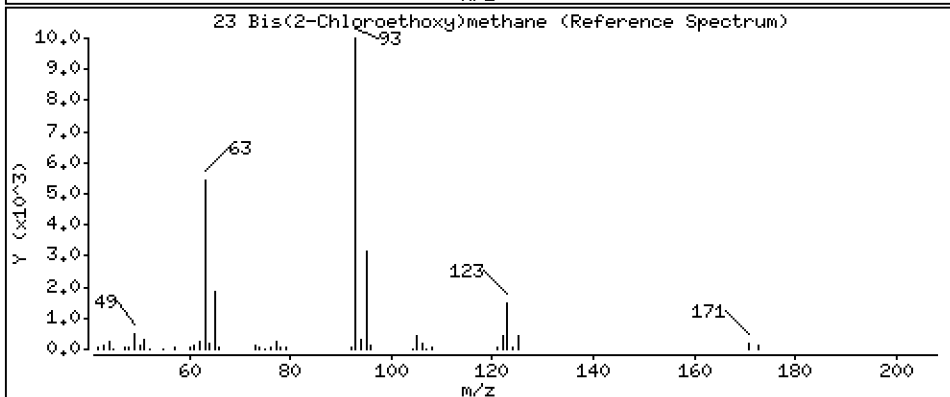
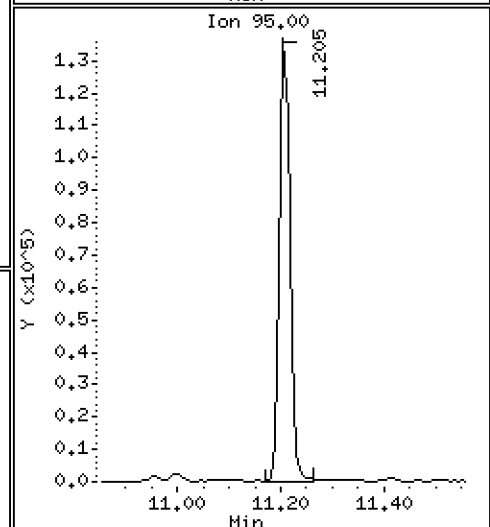
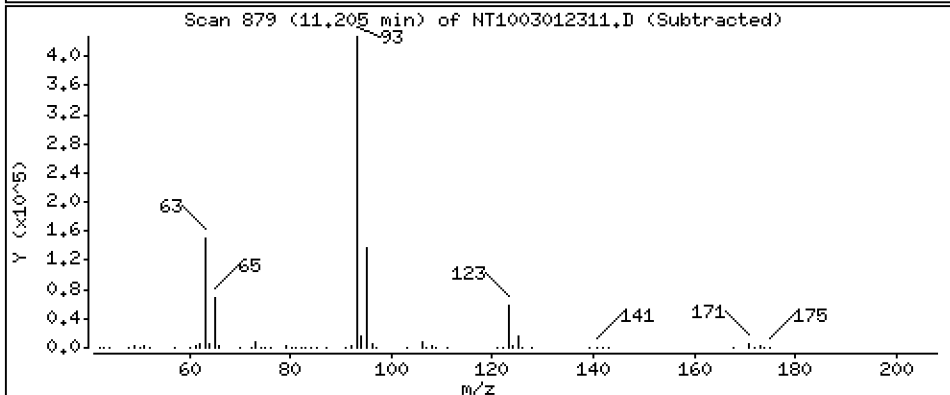
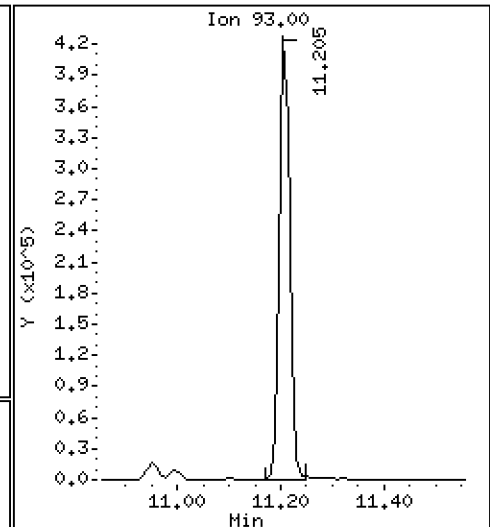
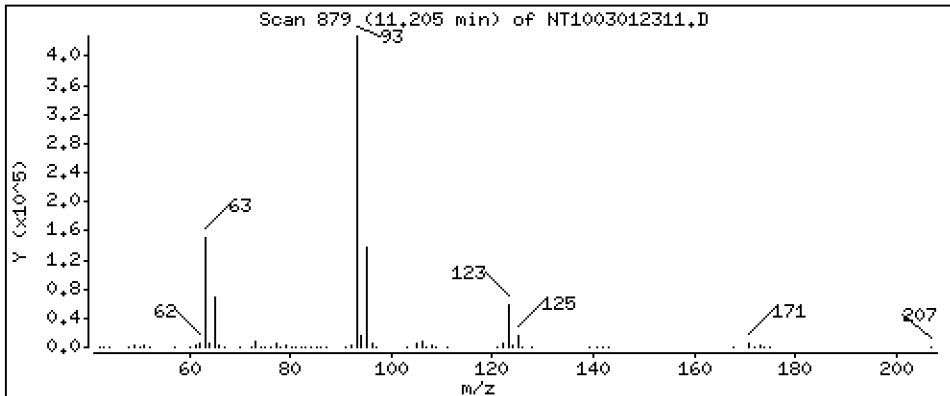
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 6,727 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

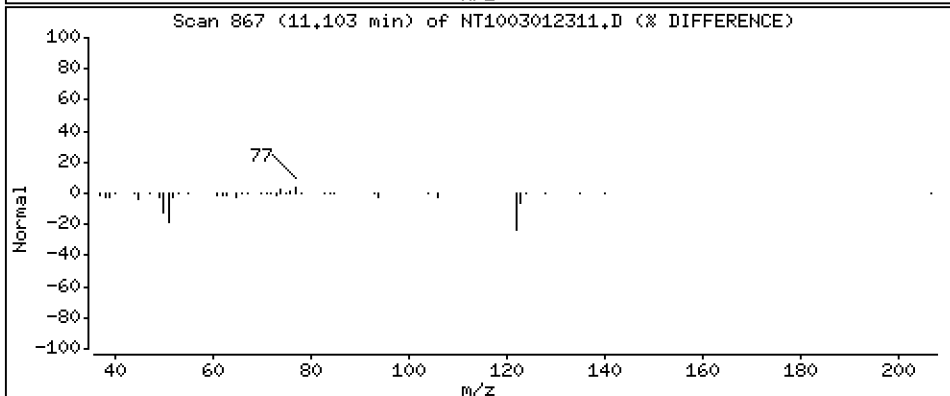
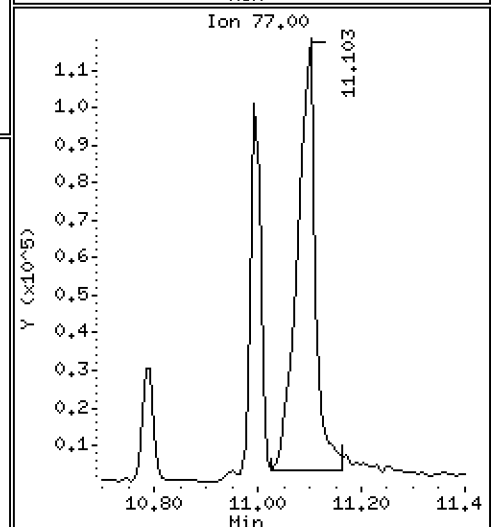
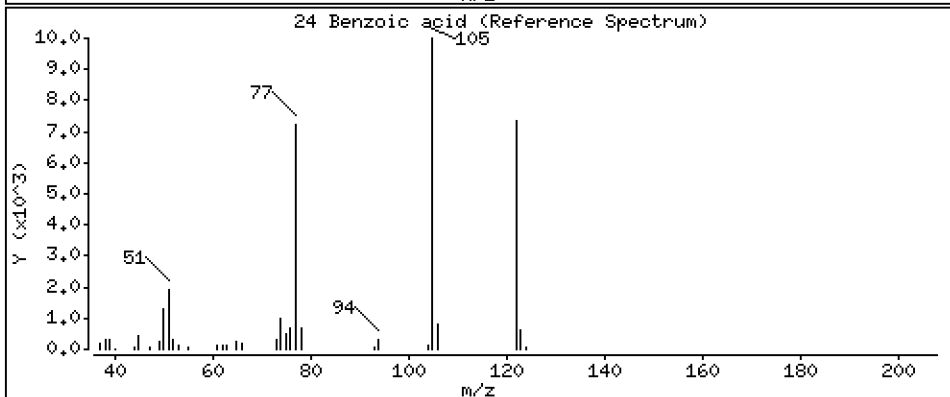
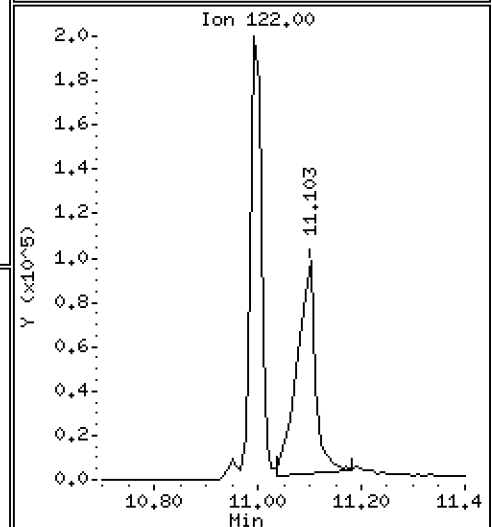
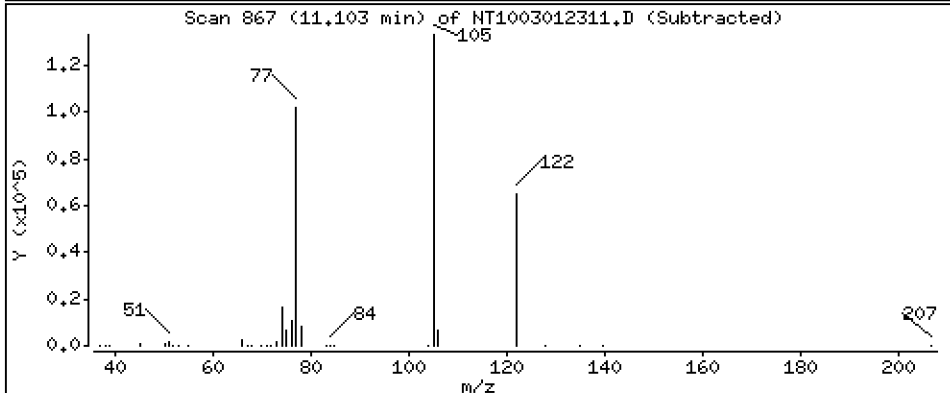
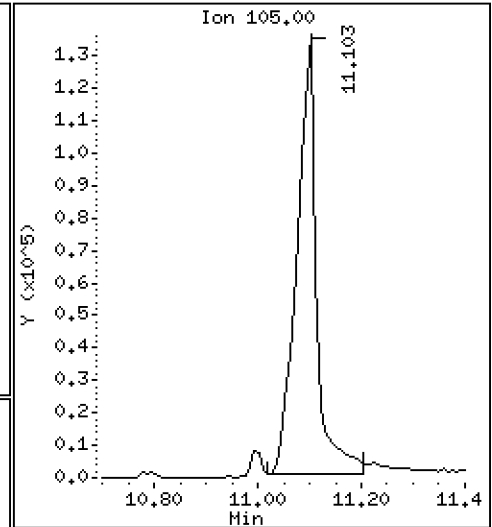
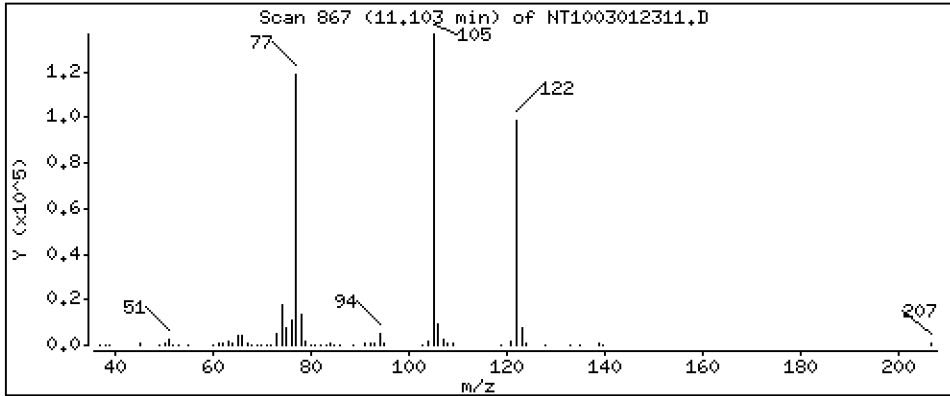
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 5,635 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

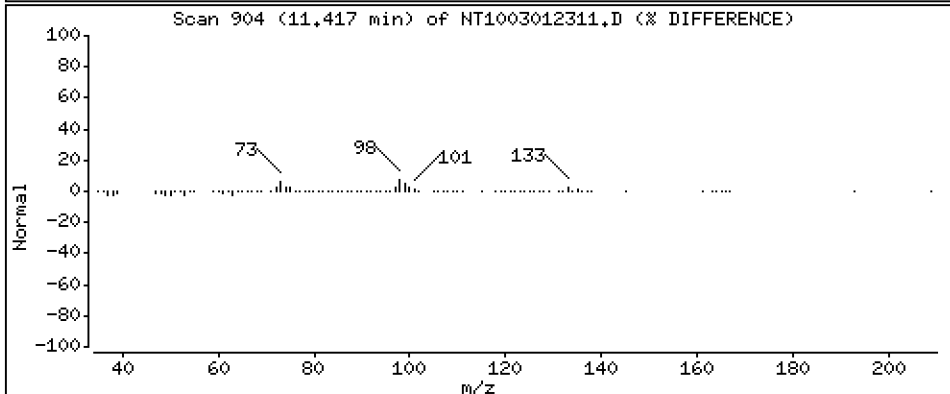
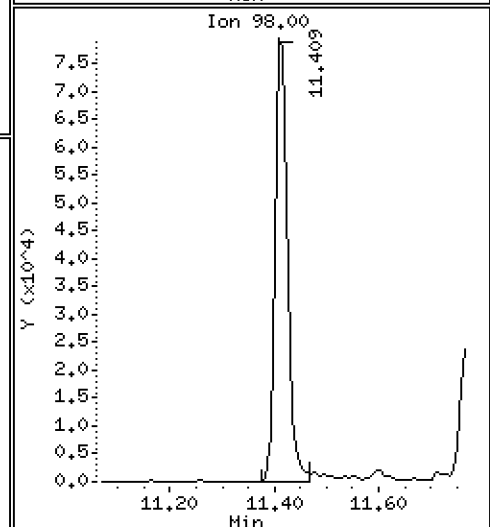
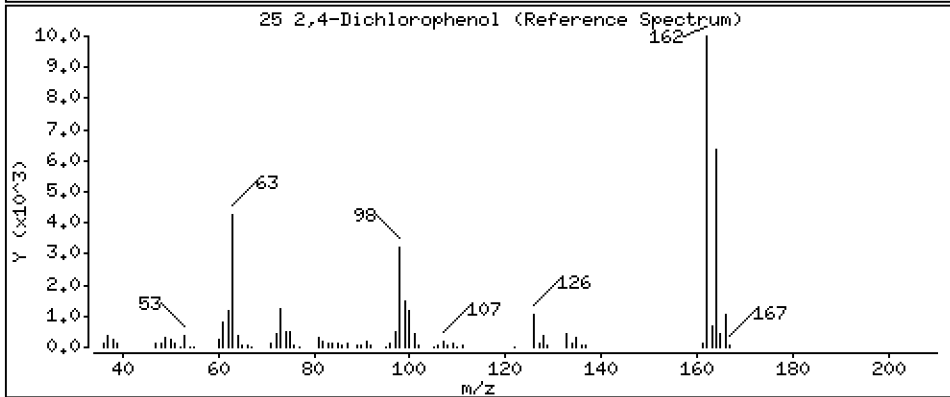
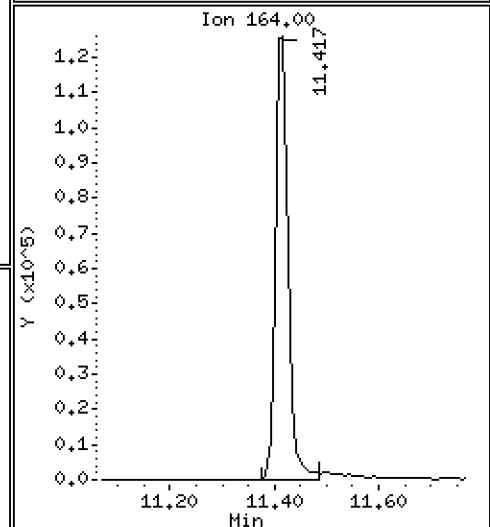
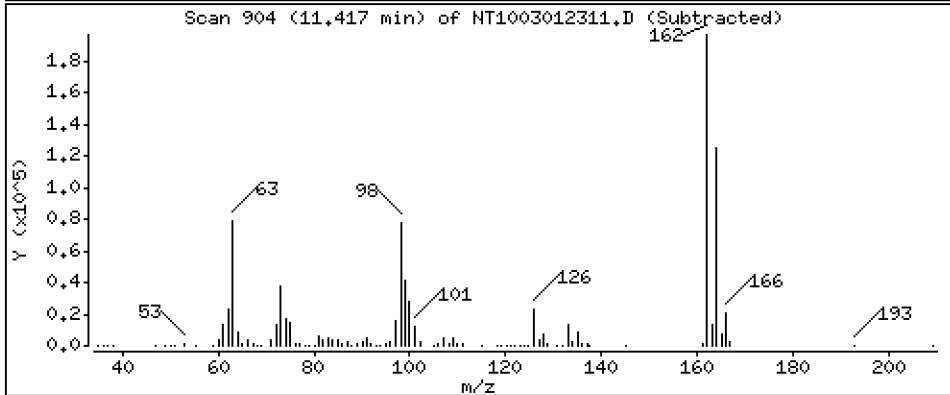
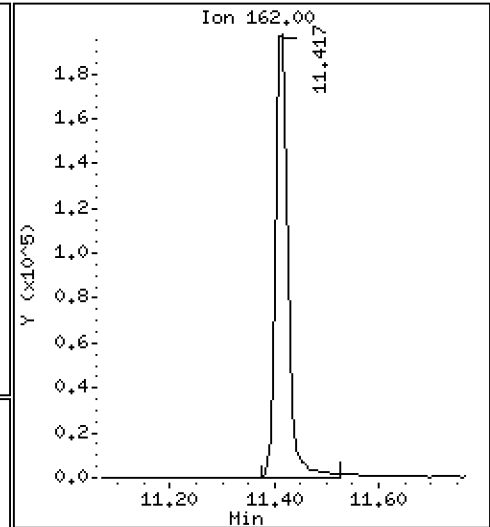
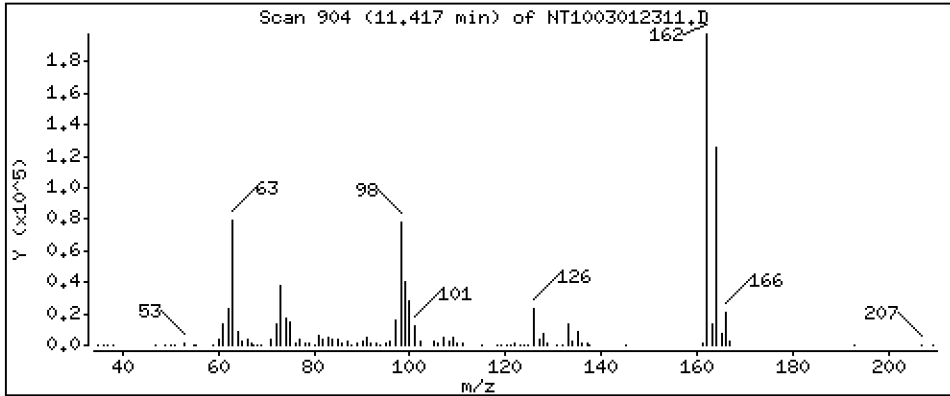
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,437 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

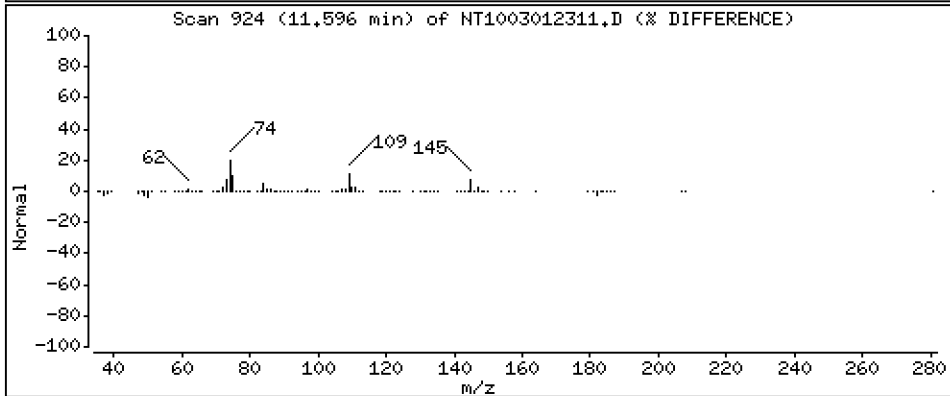
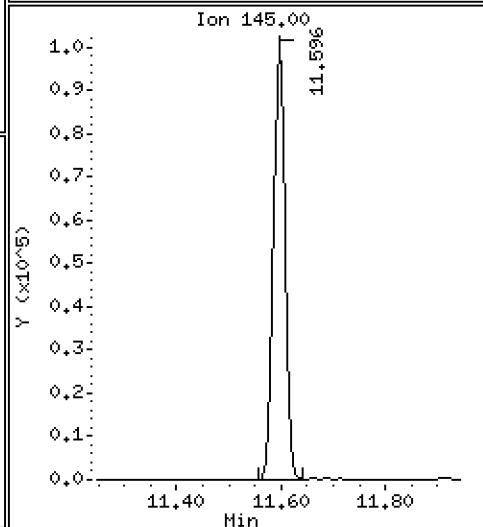
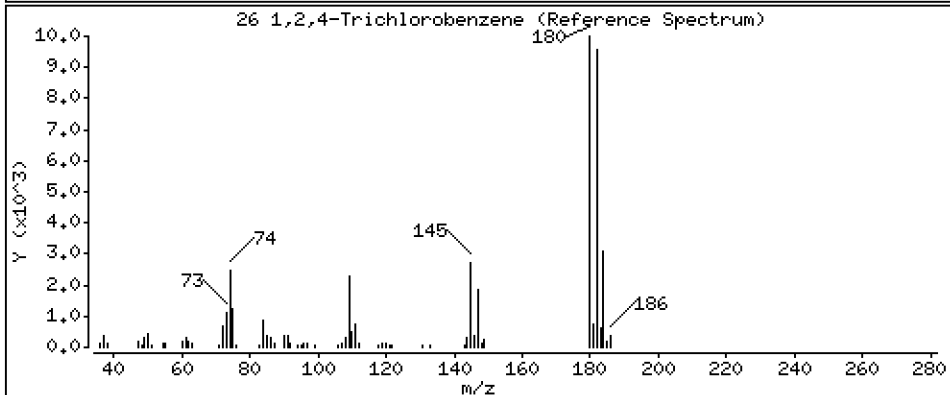
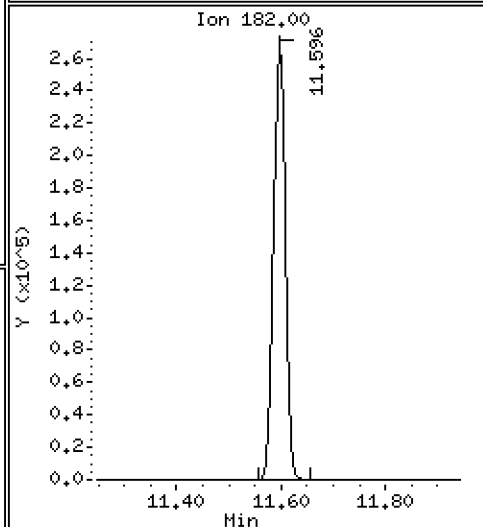
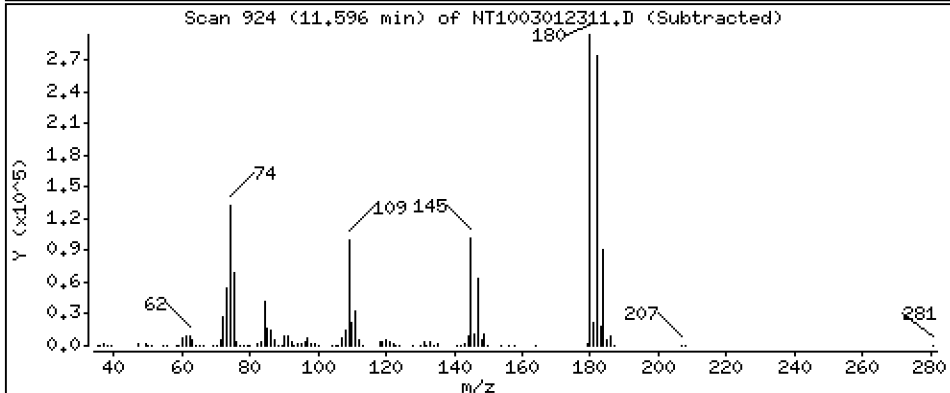
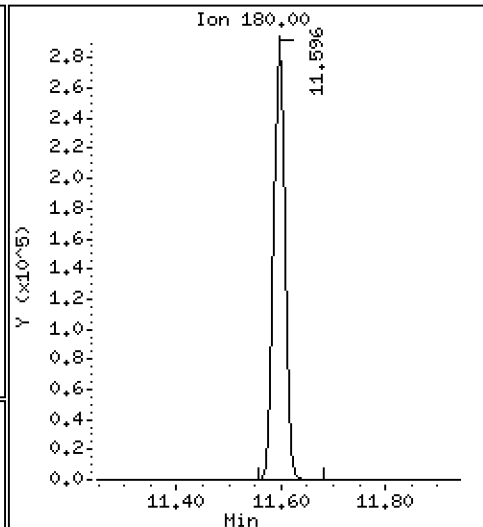
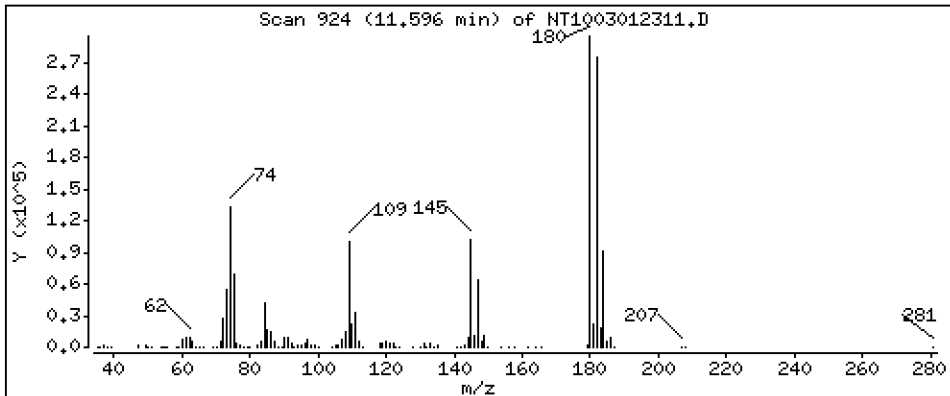
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,908 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

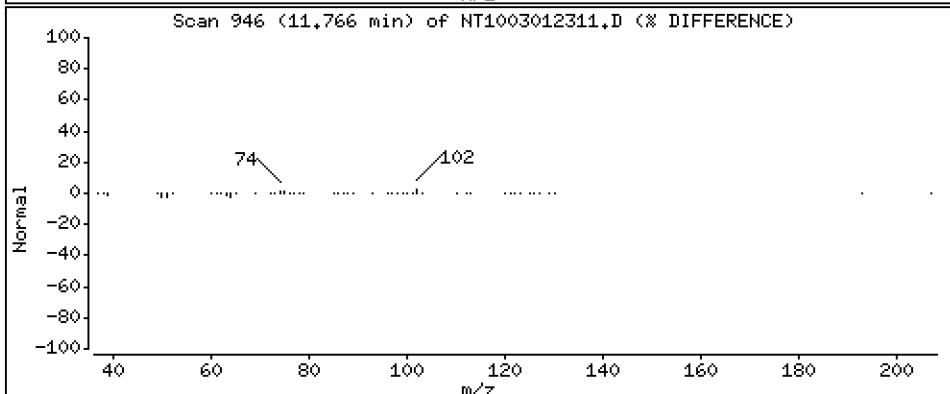
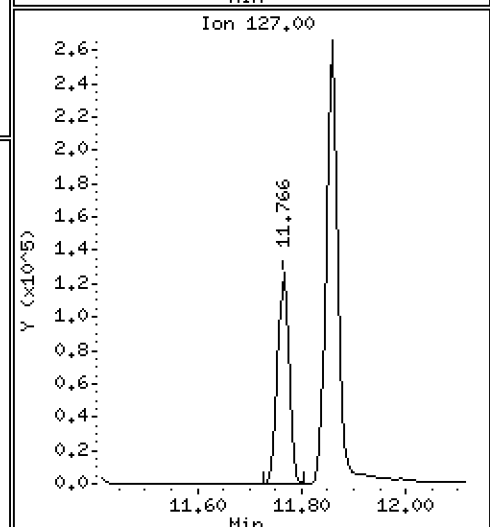
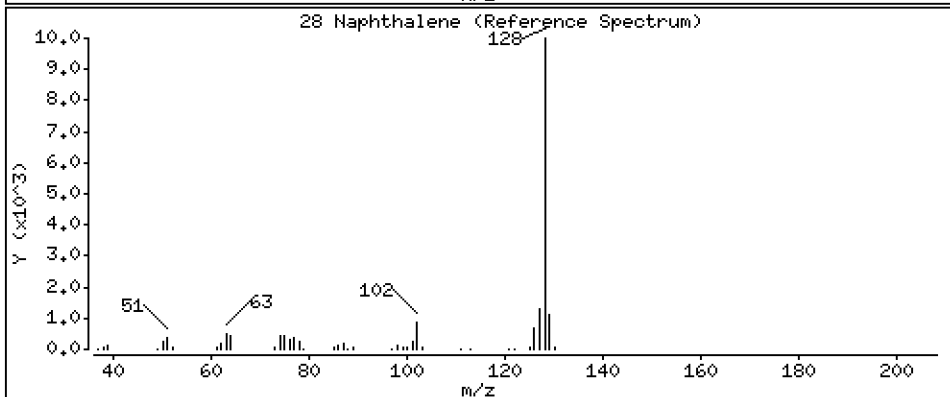
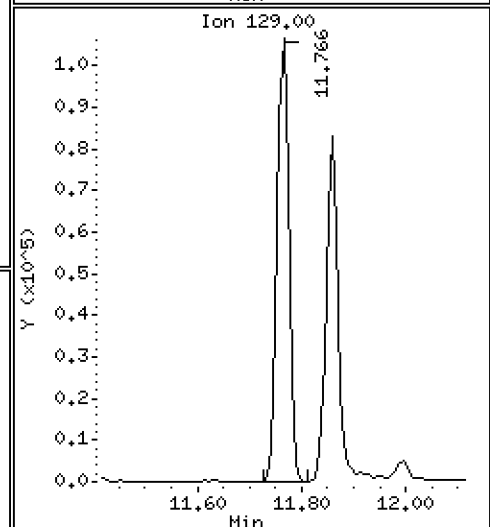
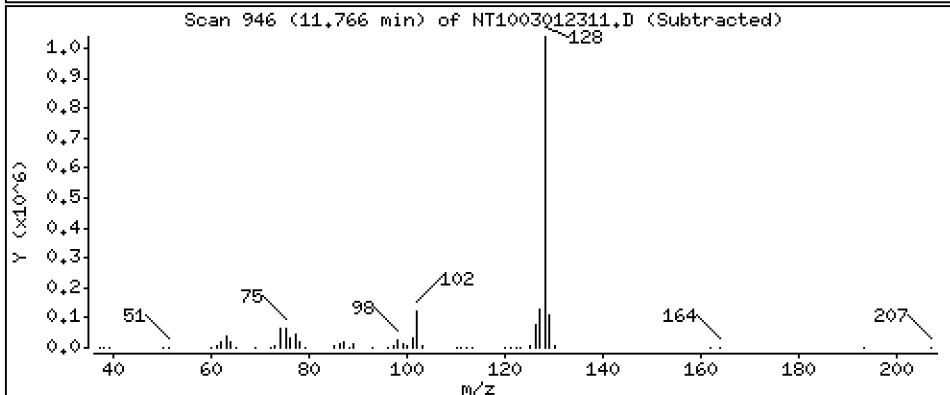
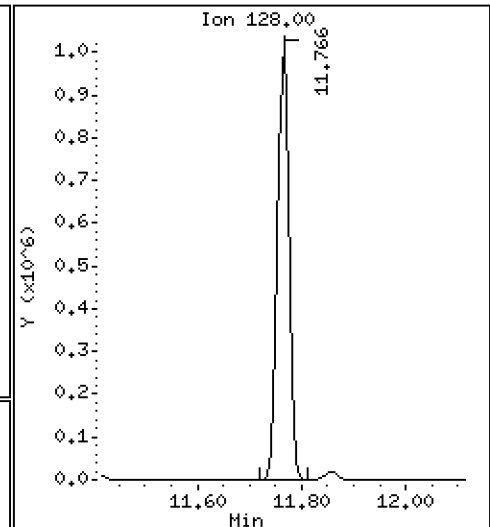
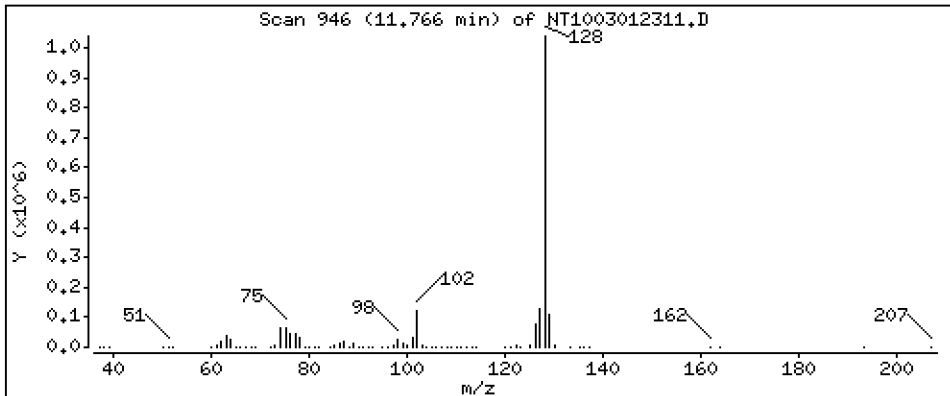
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 5.255 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

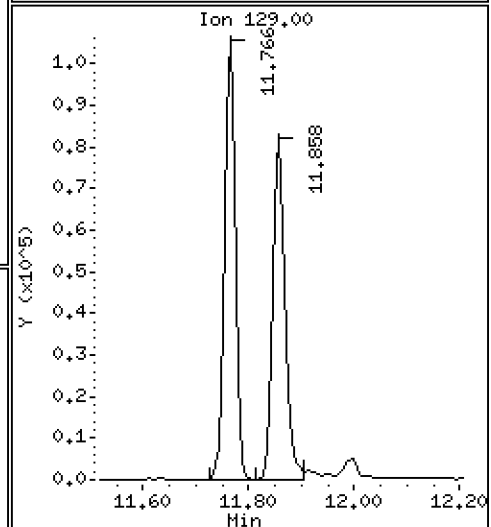
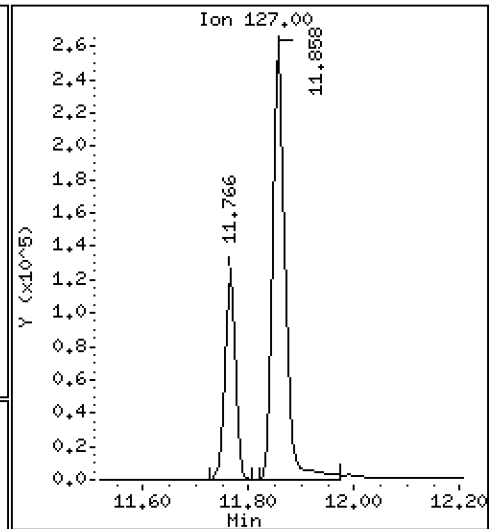
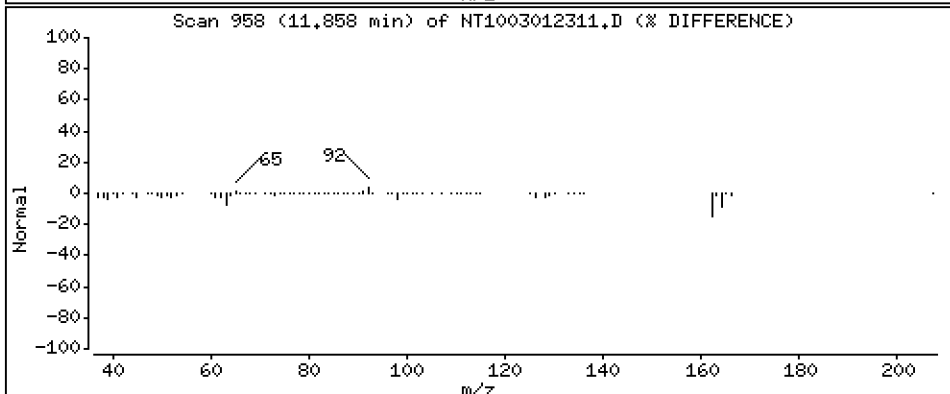
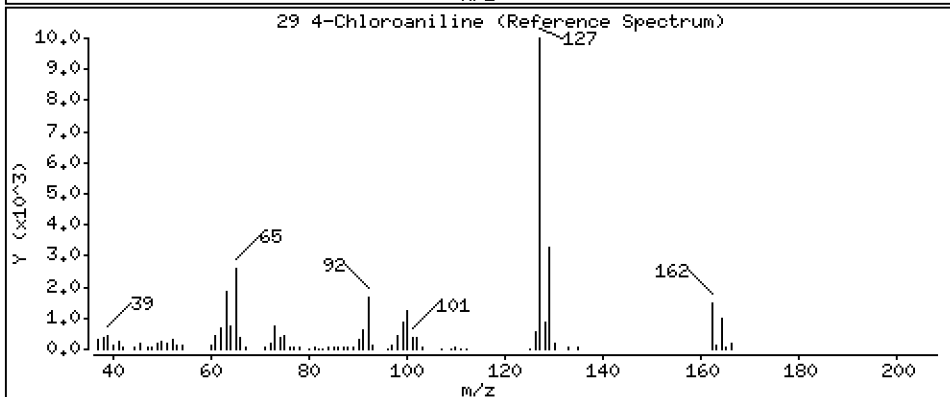
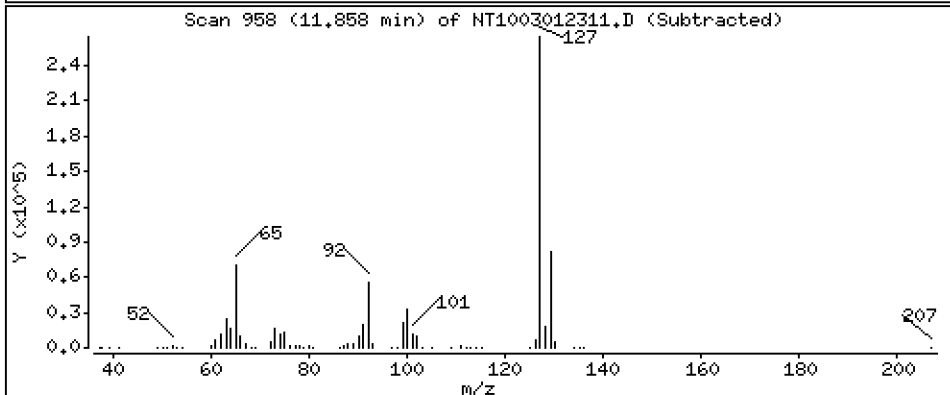
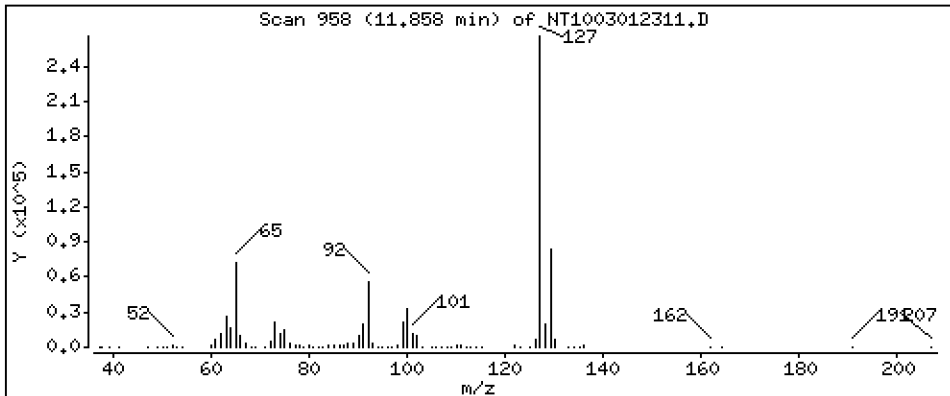
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 3,791 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

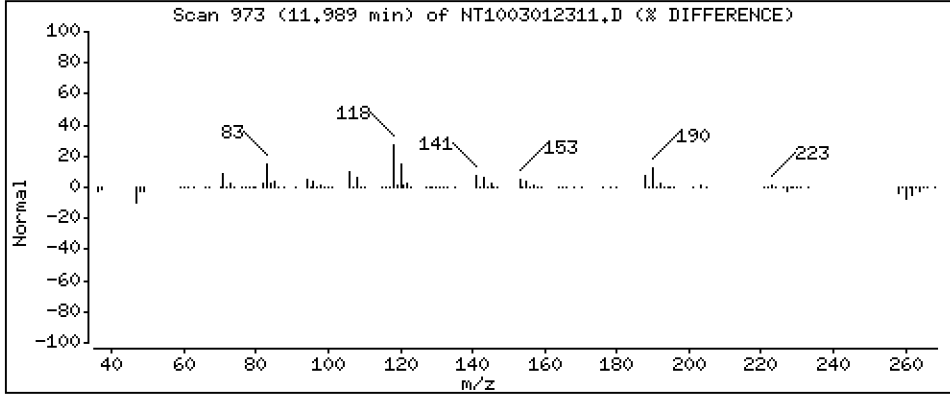
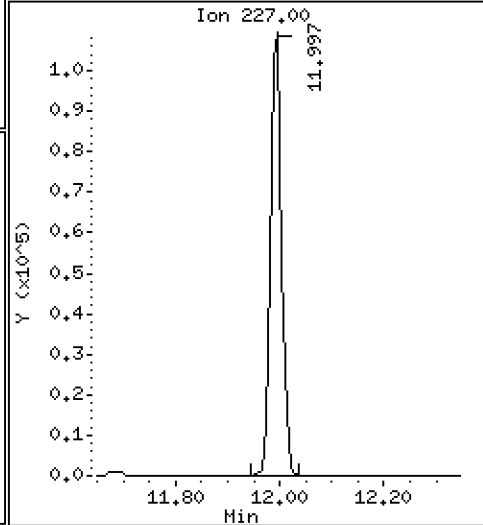
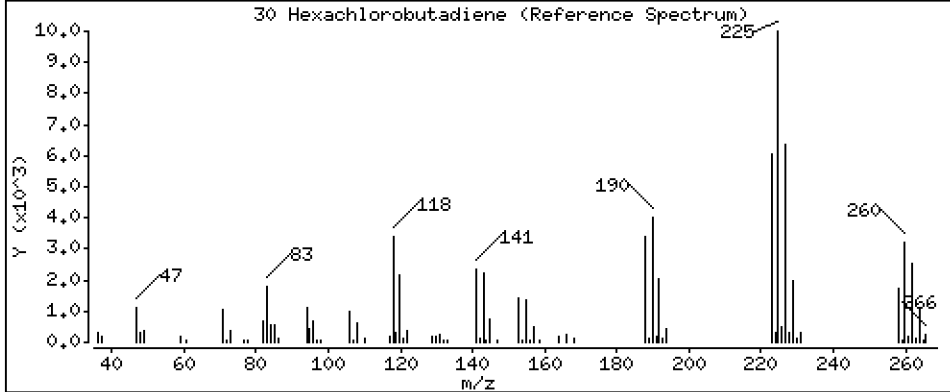
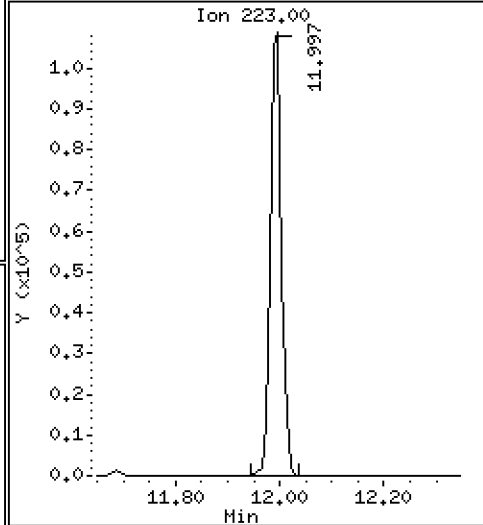
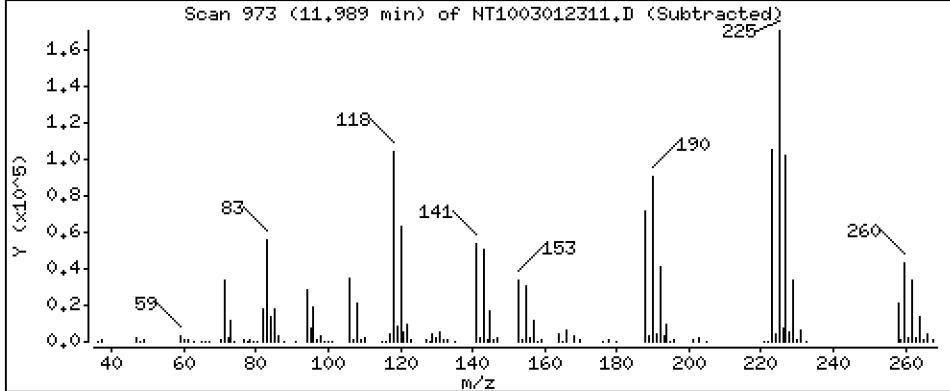
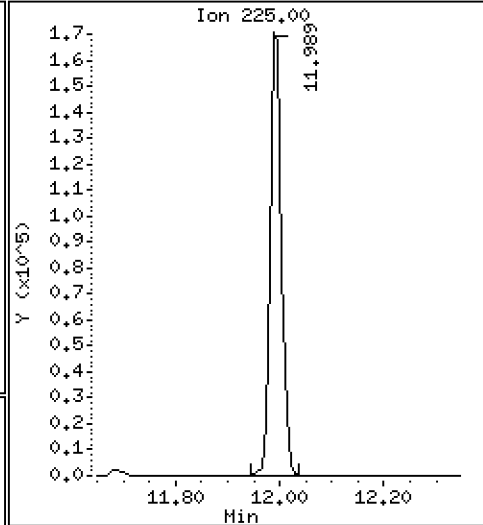
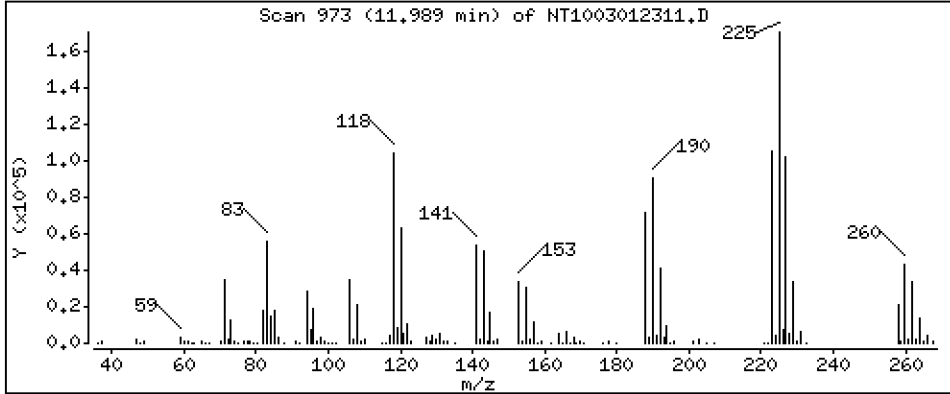
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,014 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

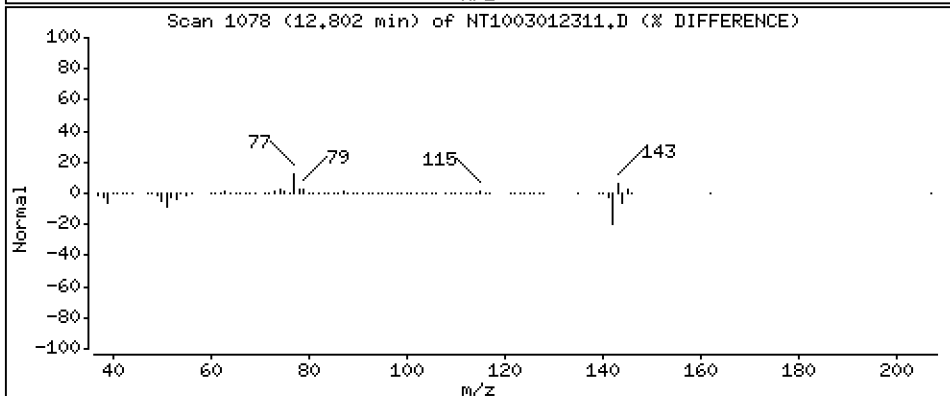
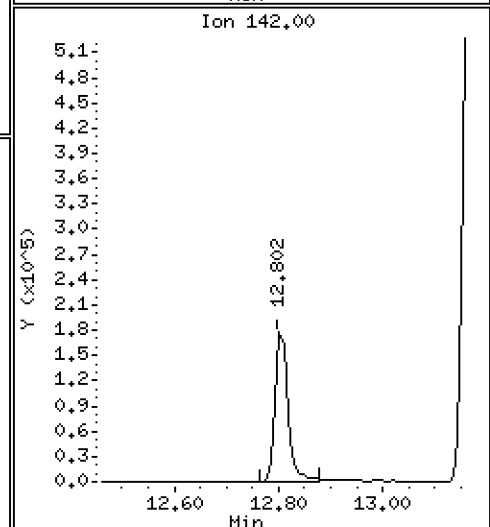
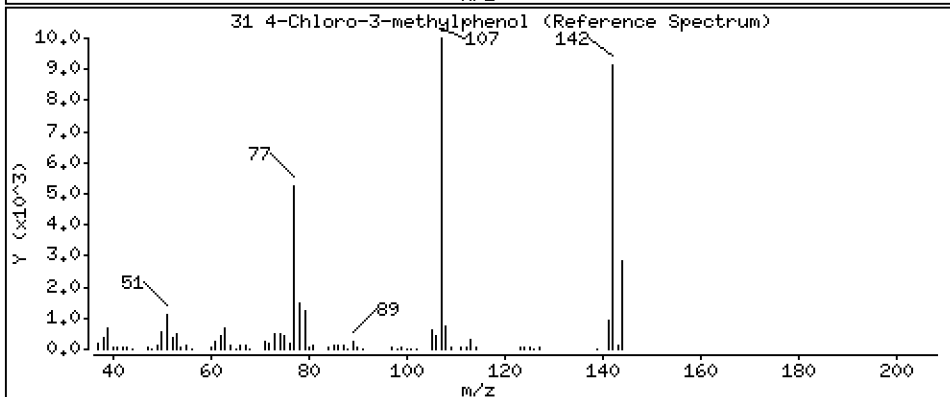
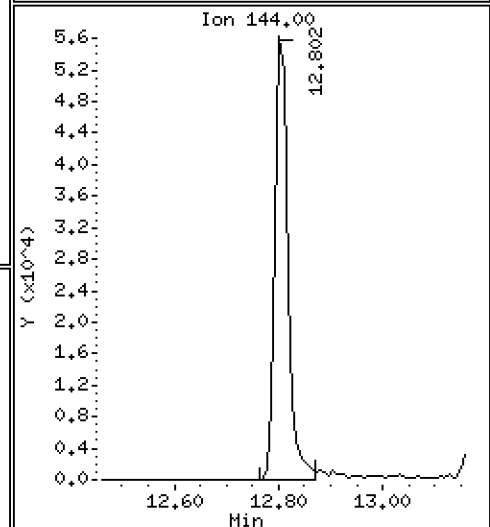
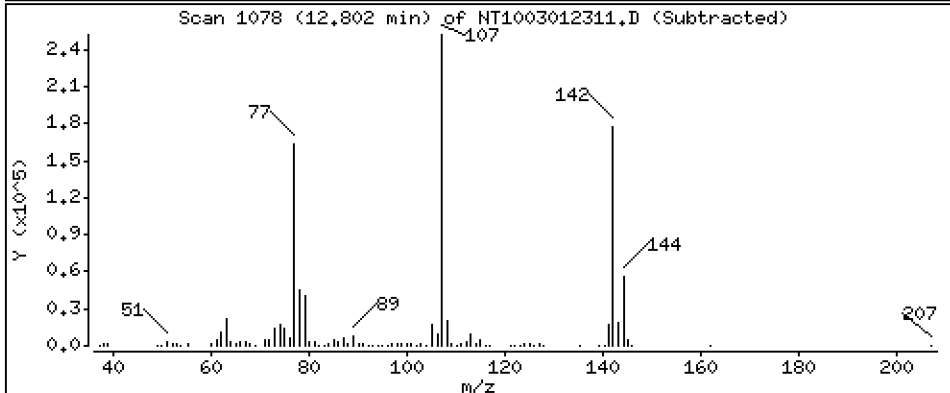
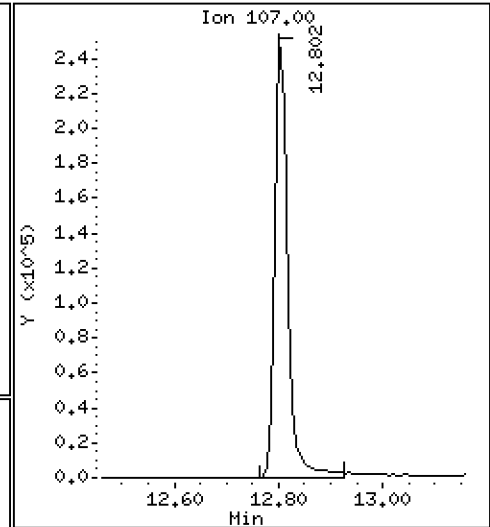
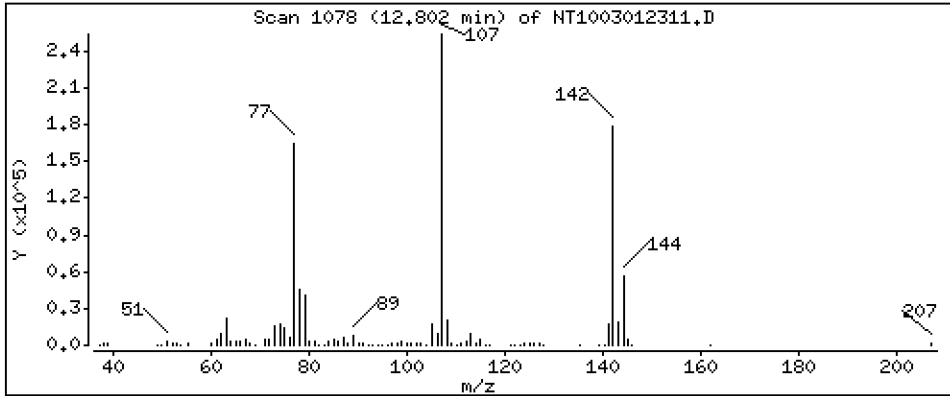
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,452 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

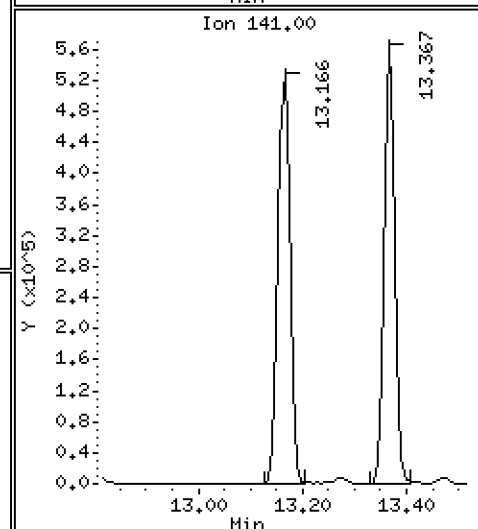
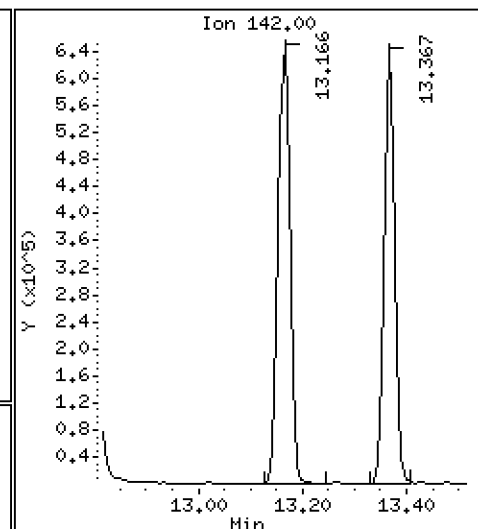
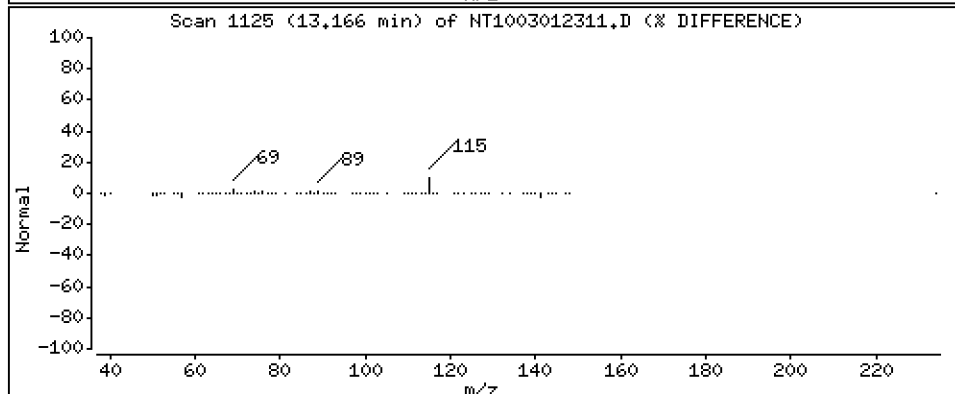
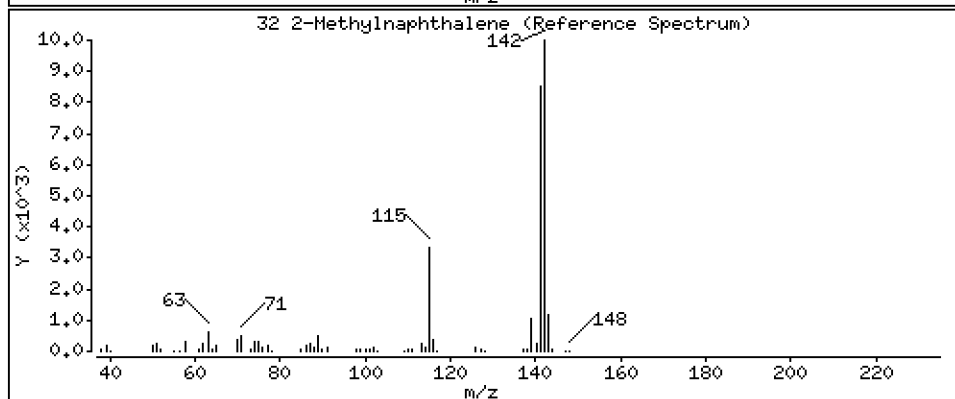
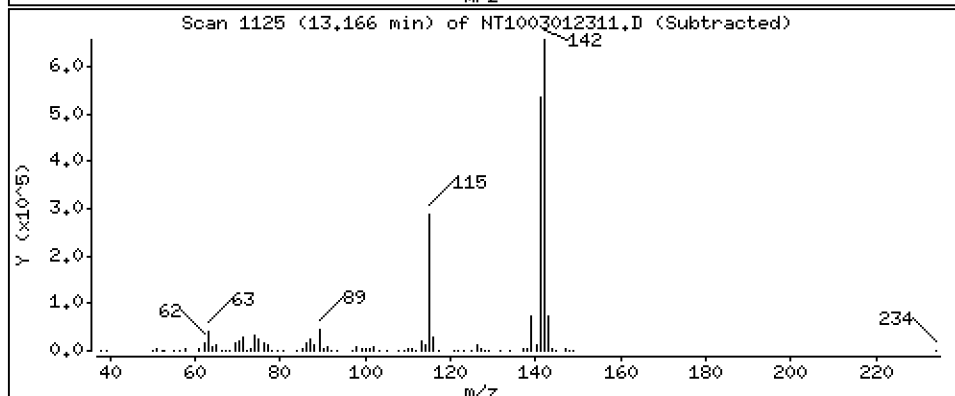
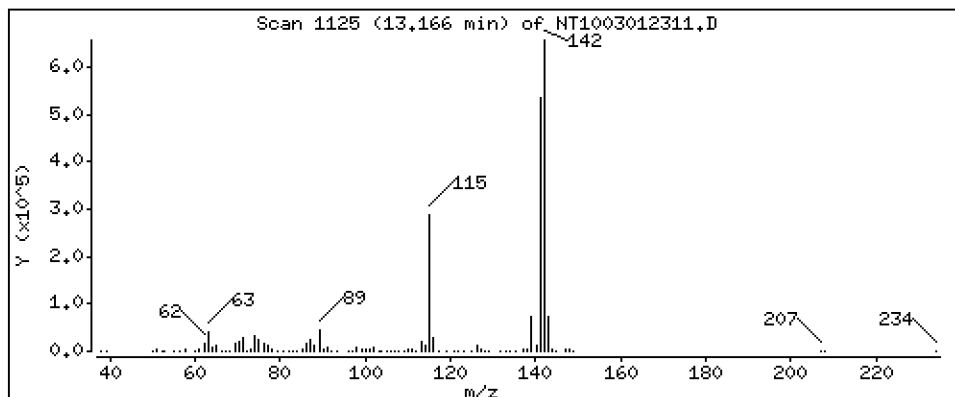
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,951 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

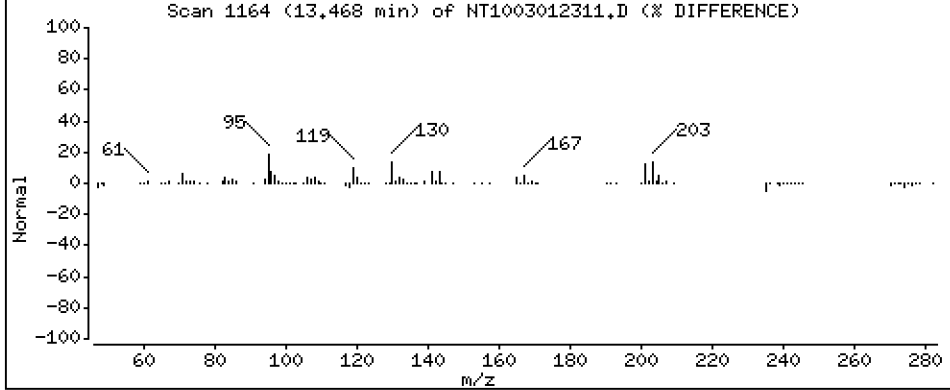
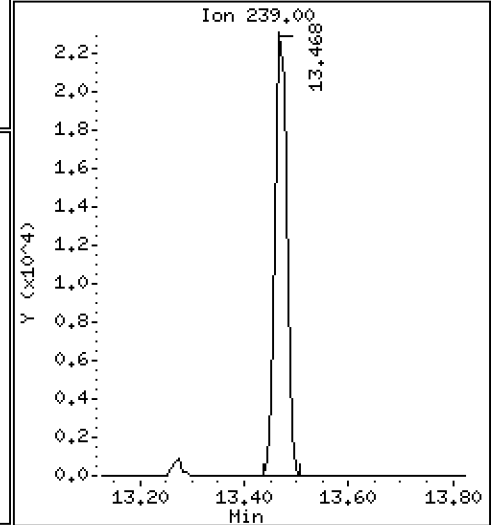
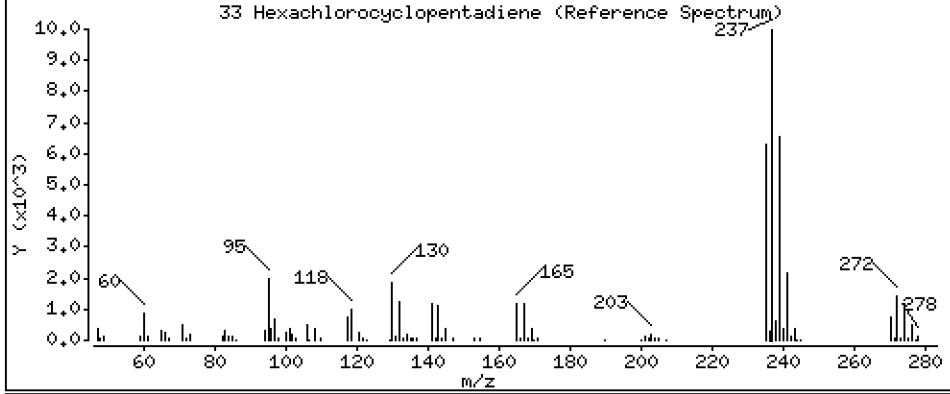
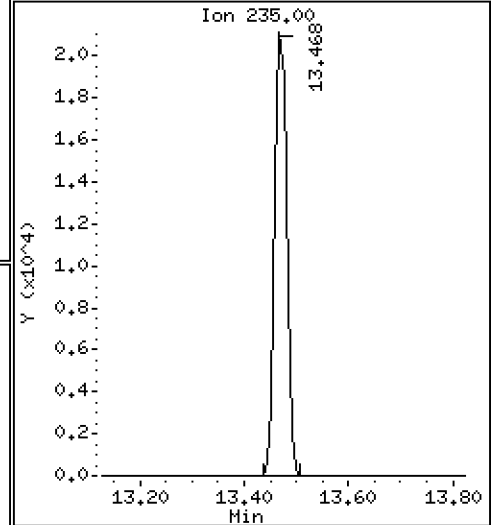
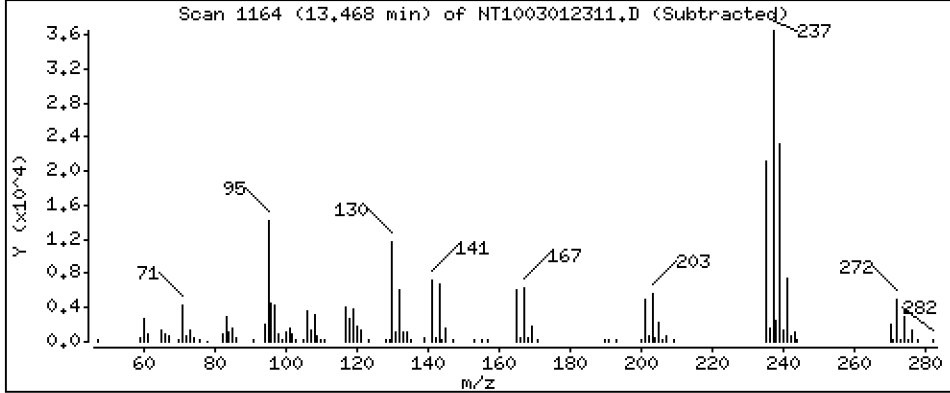
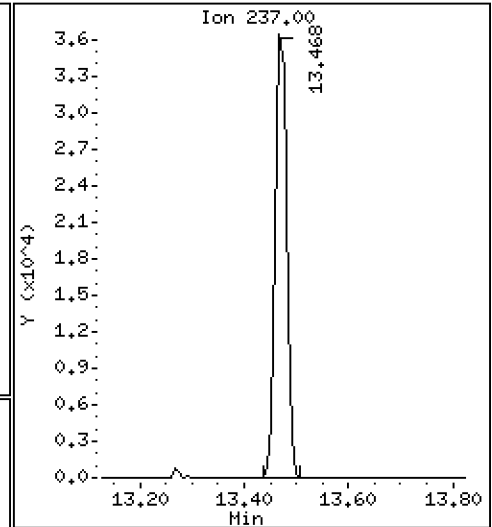
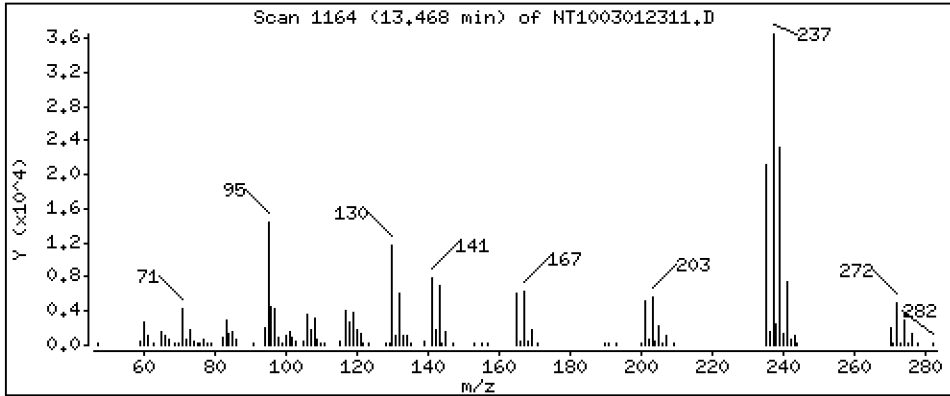
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 2,562 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

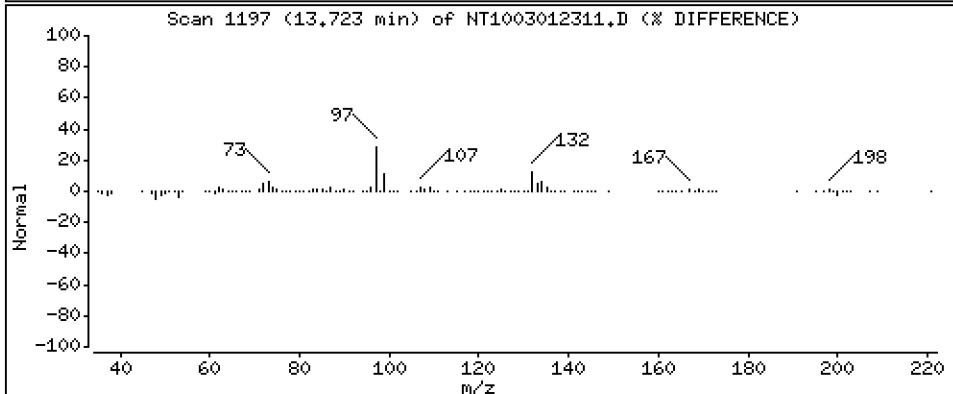
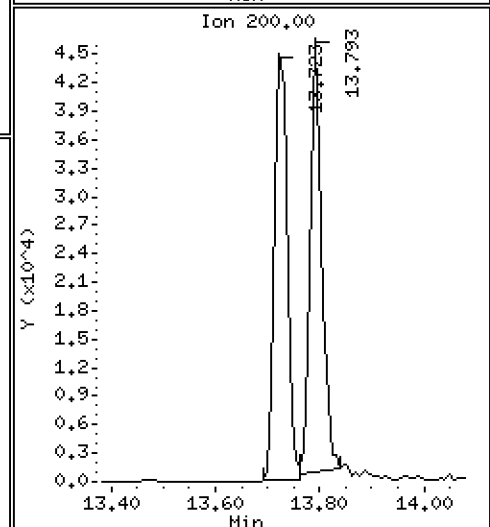
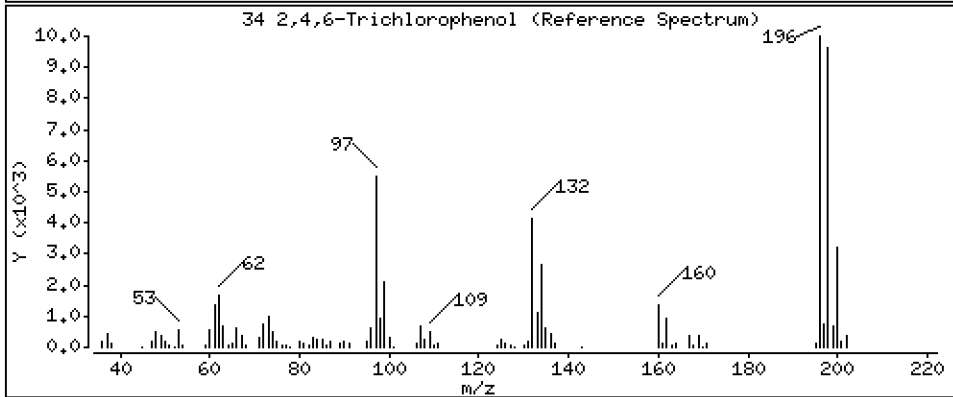
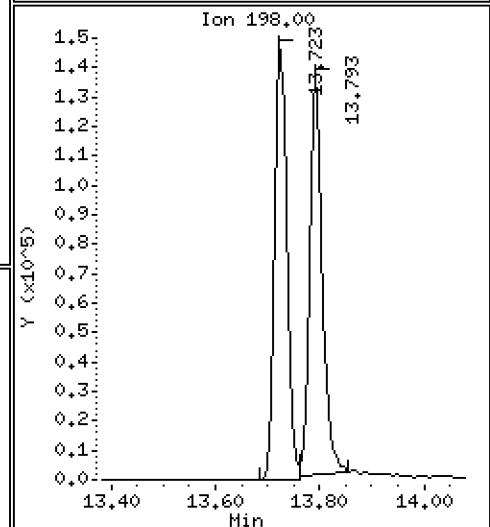
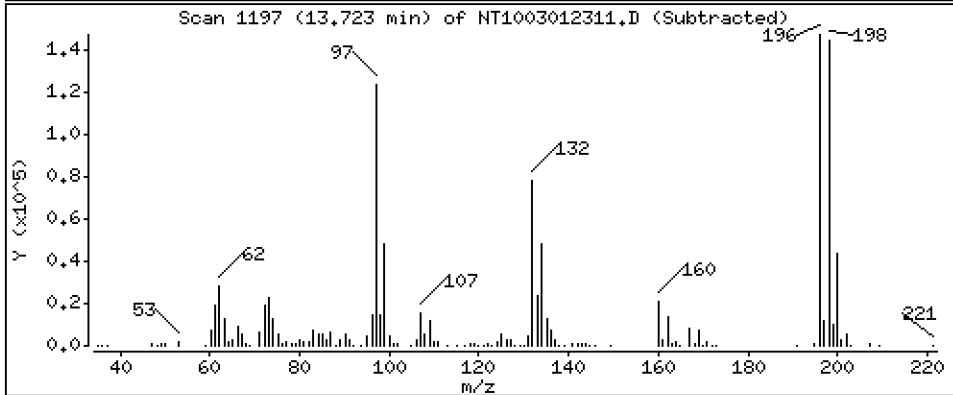
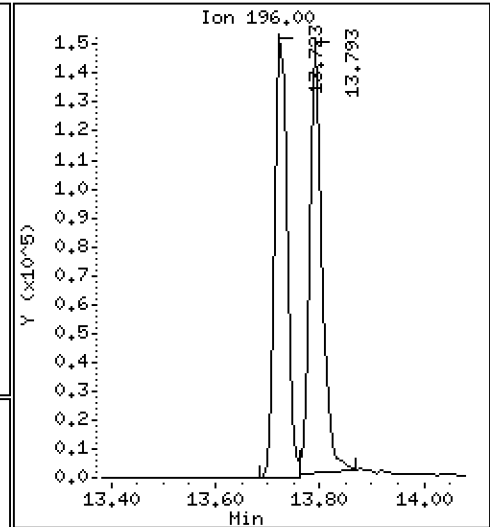
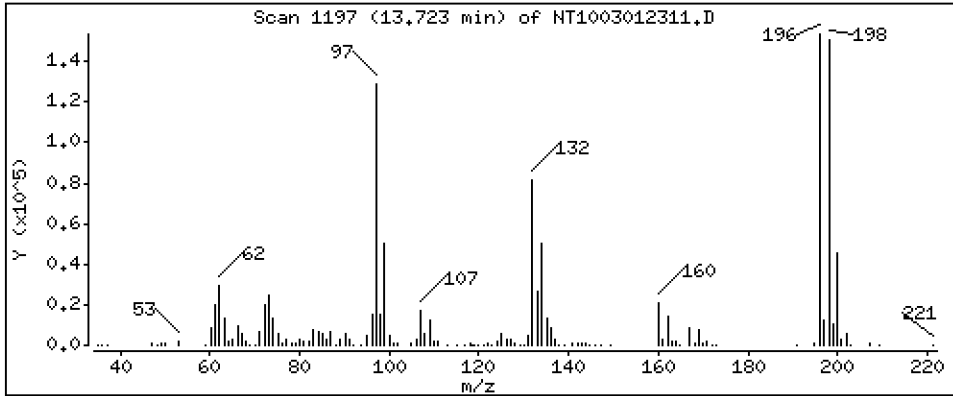
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 4,120 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

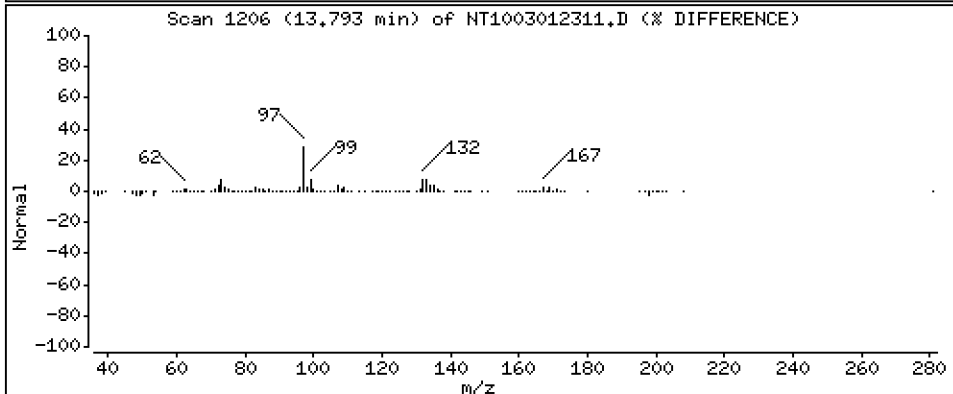
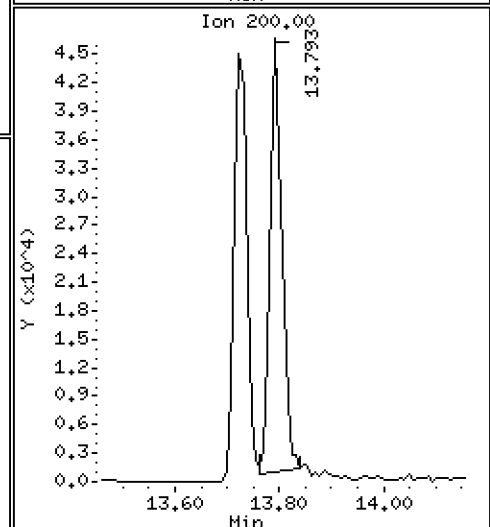
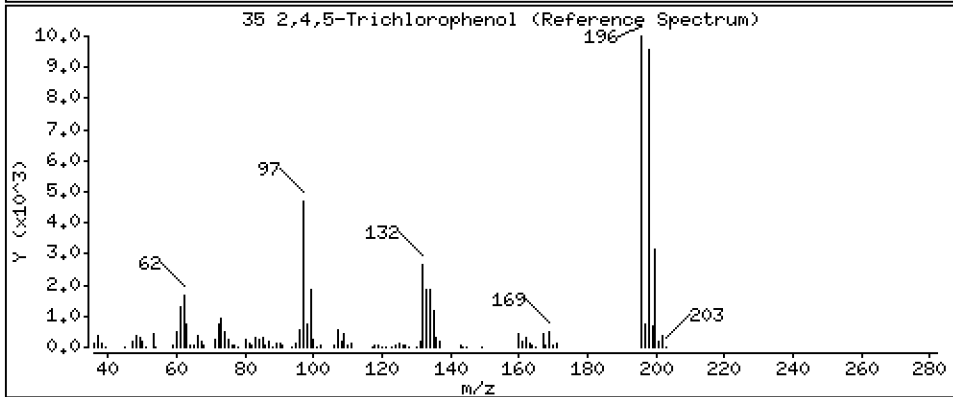
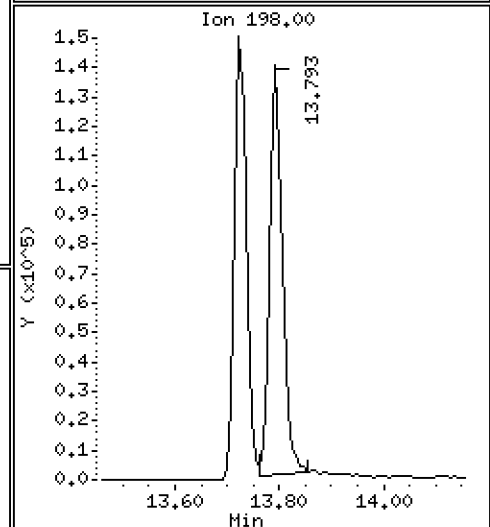
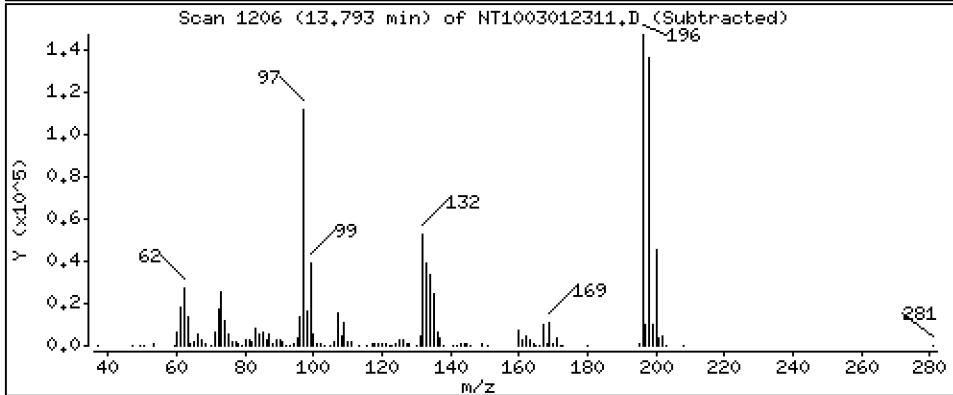
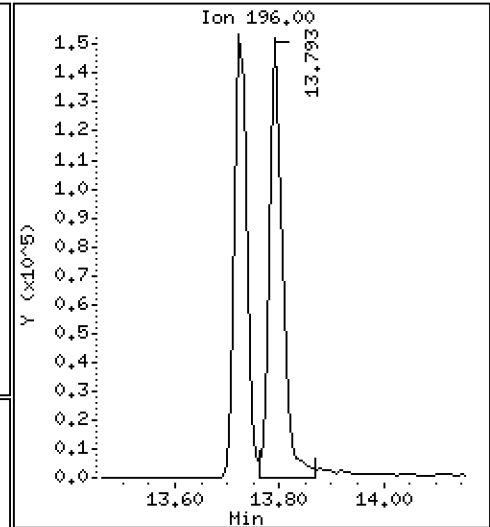
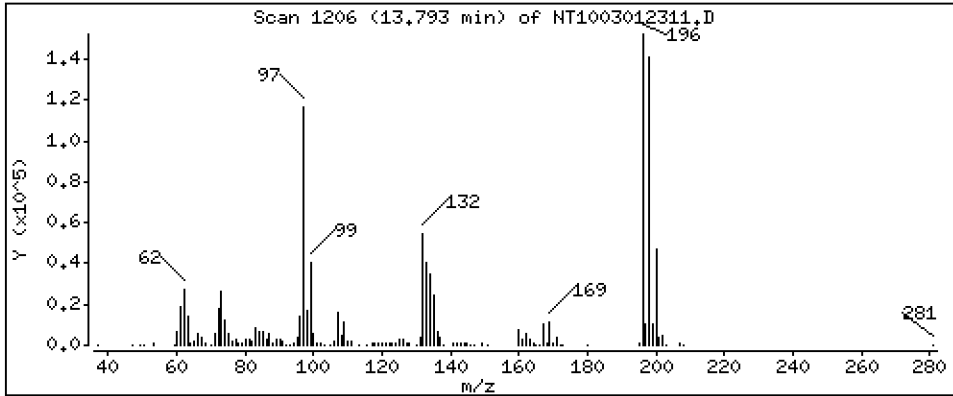
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,149 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

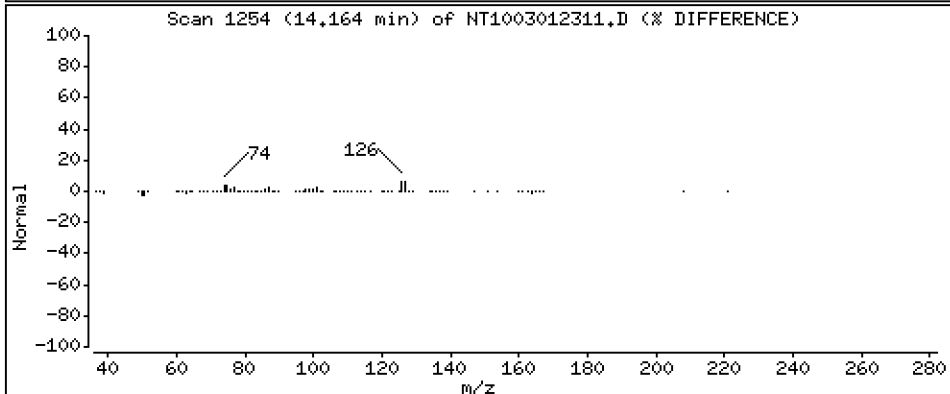
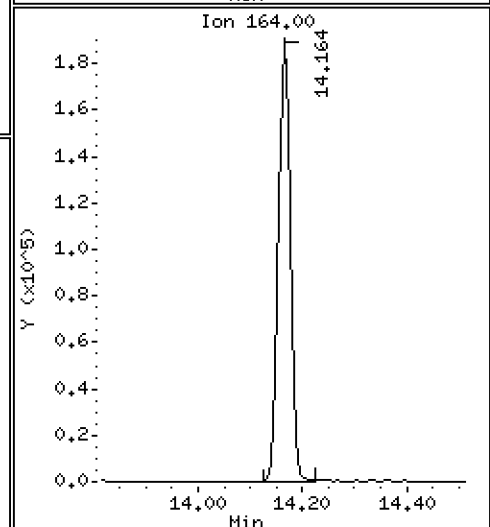
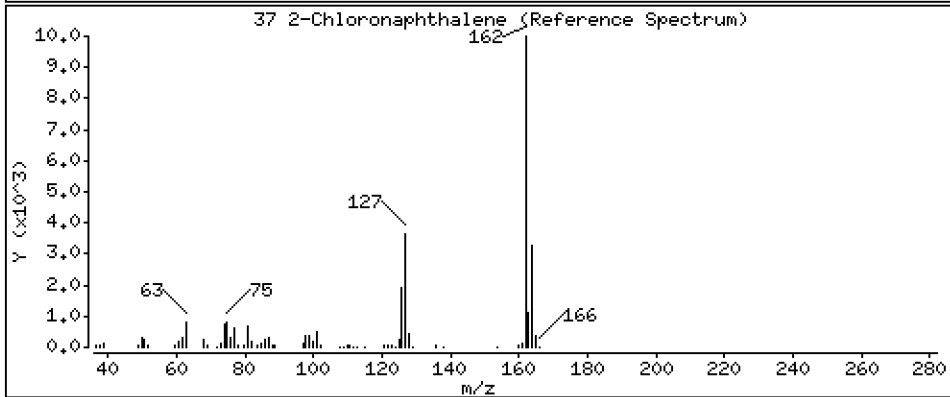
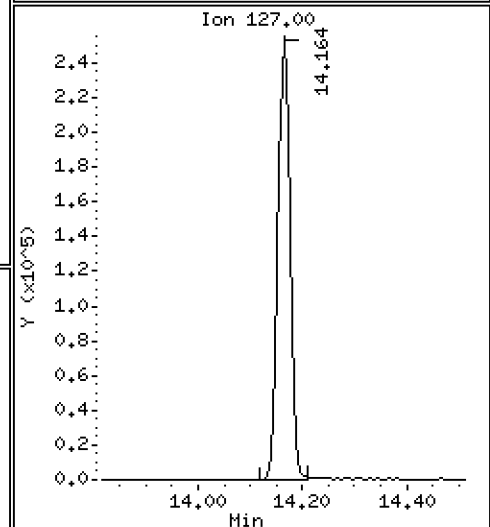
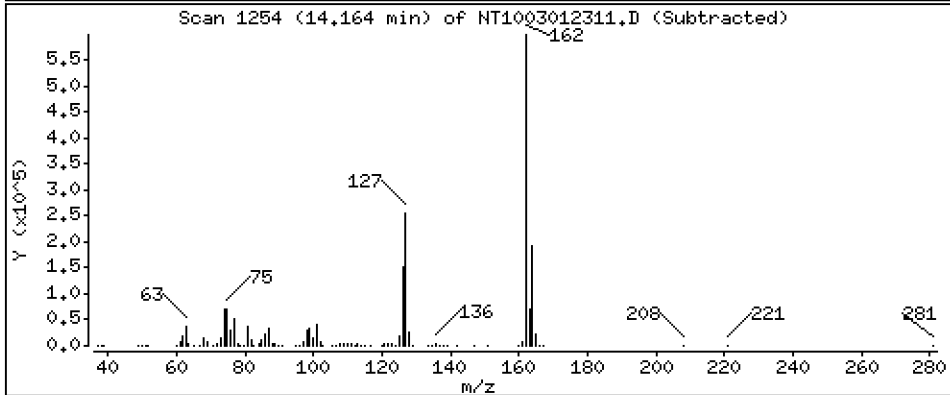
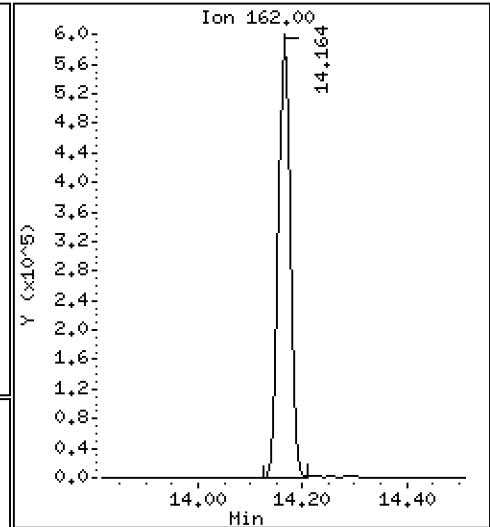
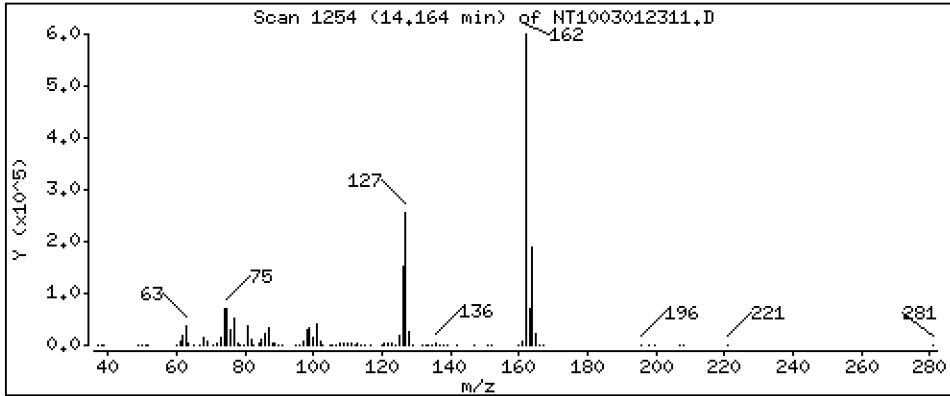
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,264 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

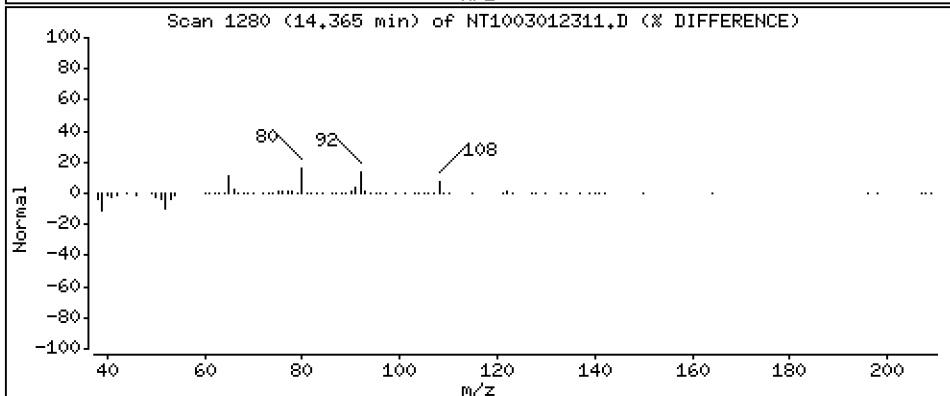
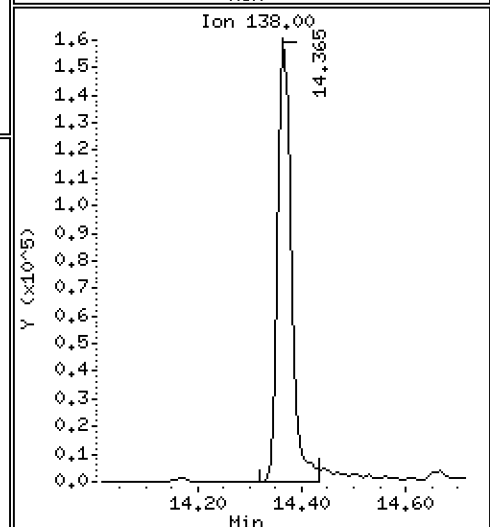
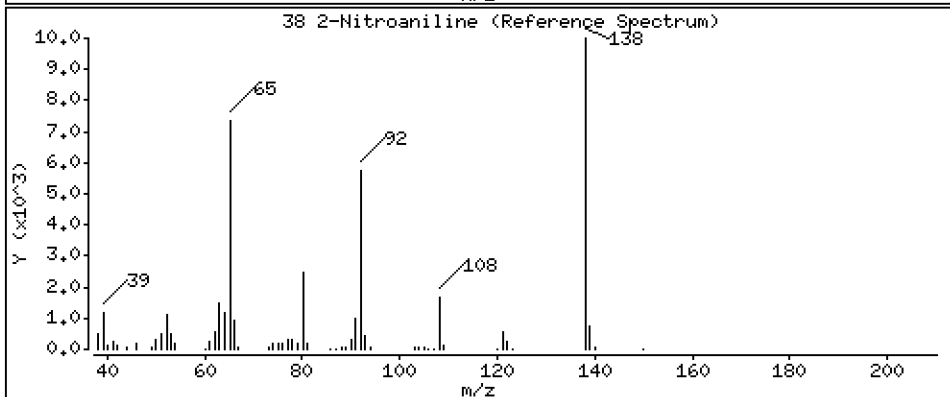
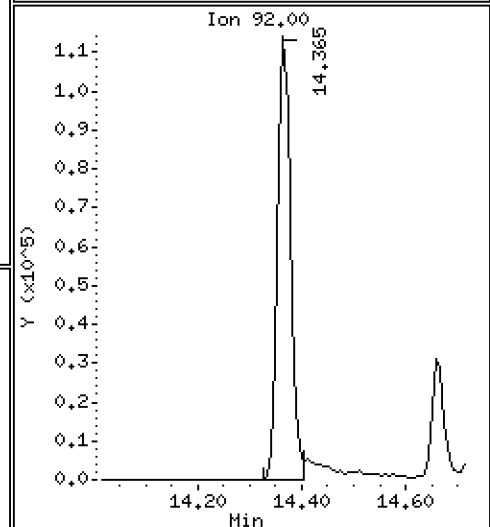
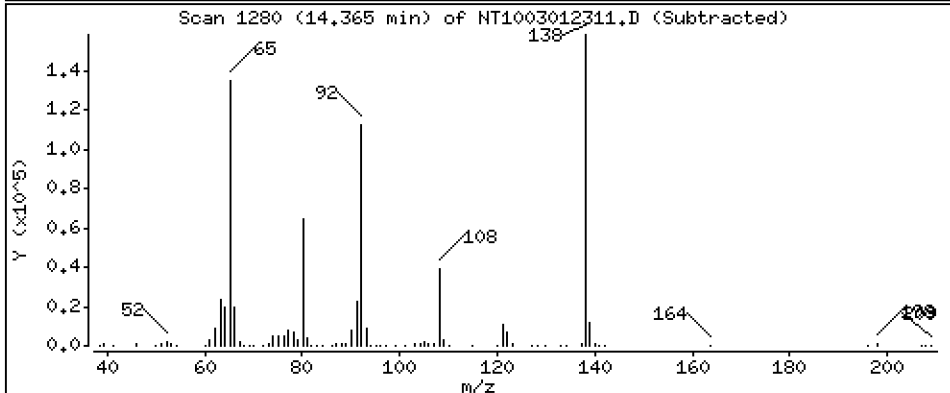
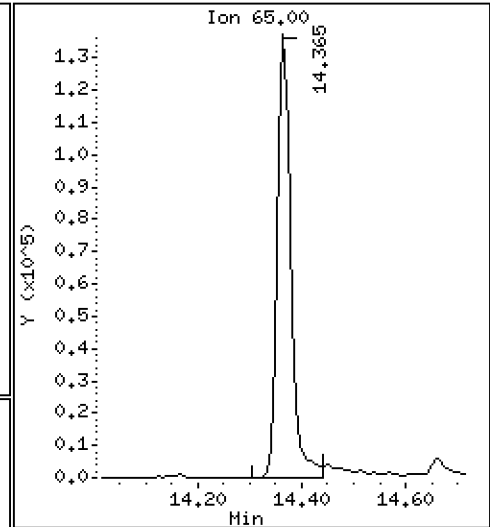
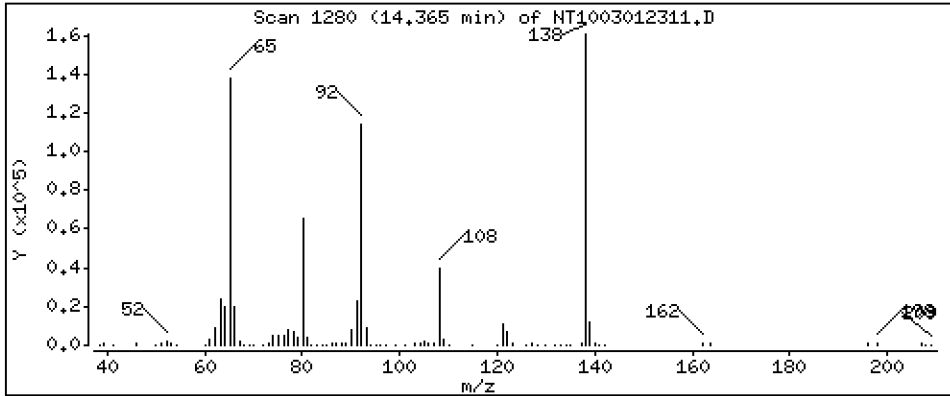
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,027 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

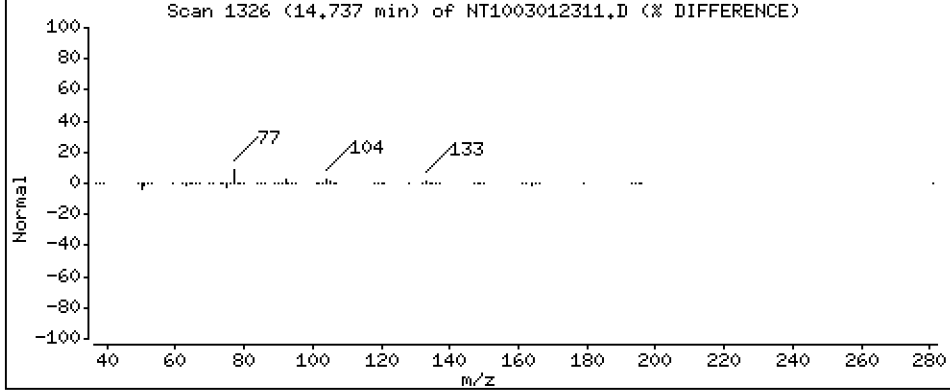
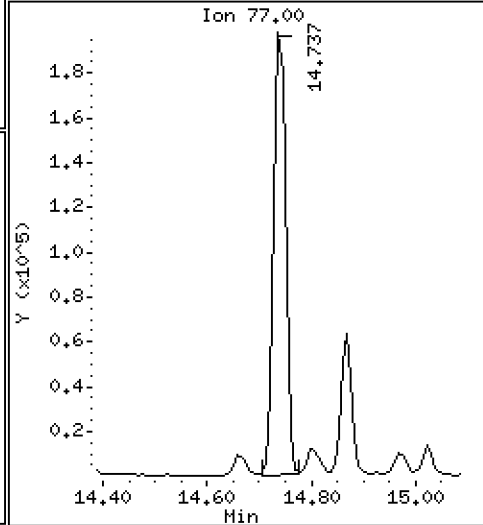
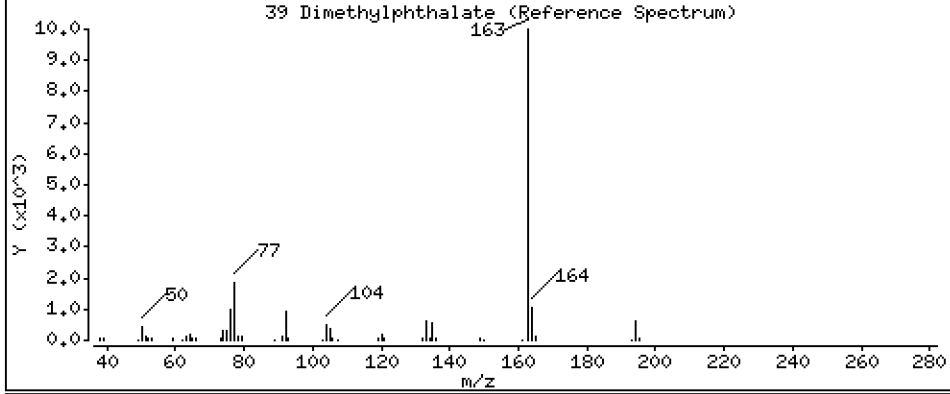
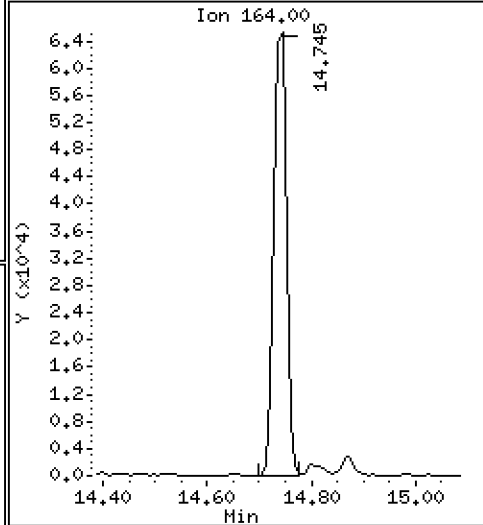
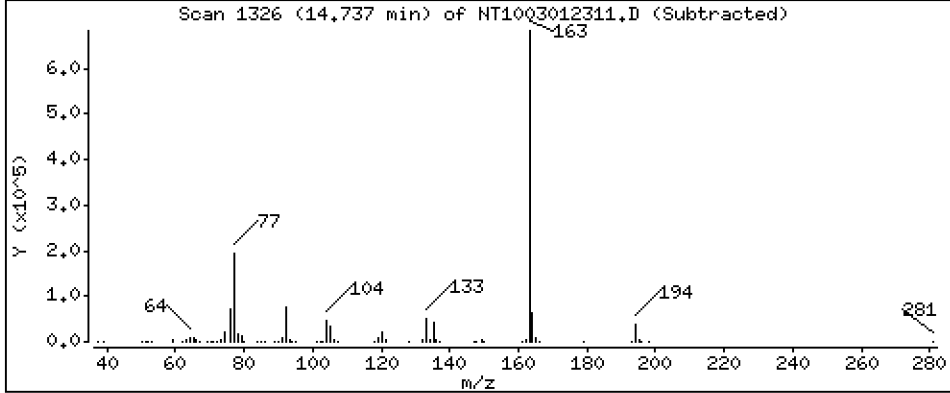
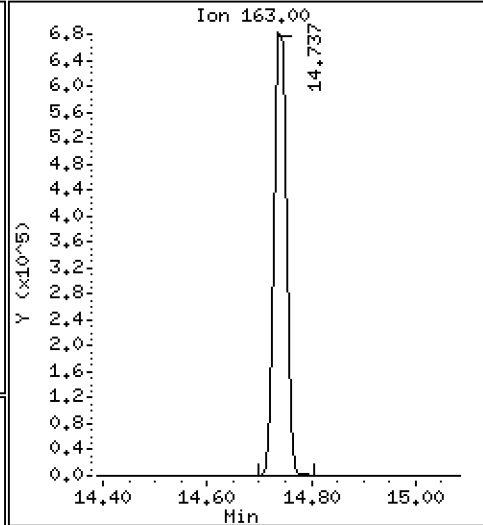
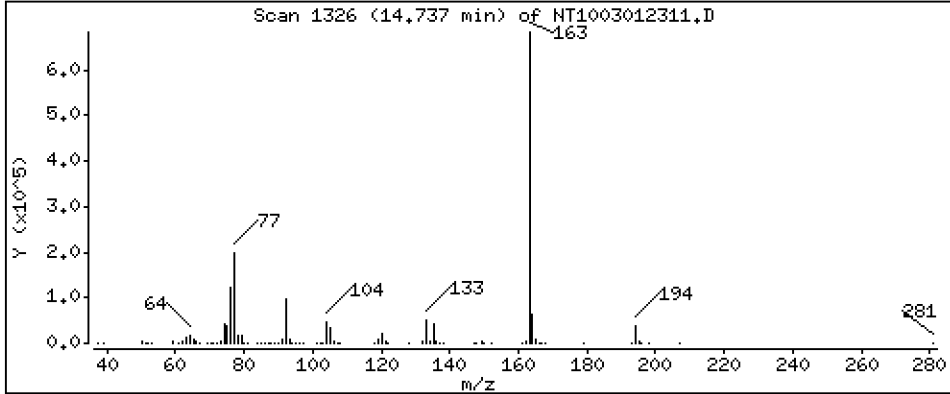
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,384 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

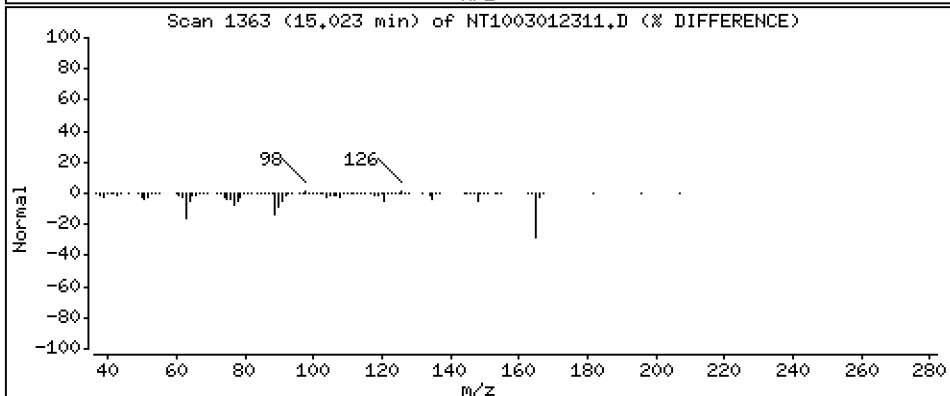
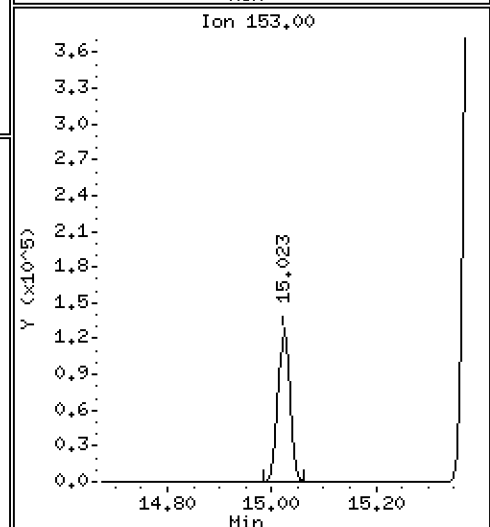
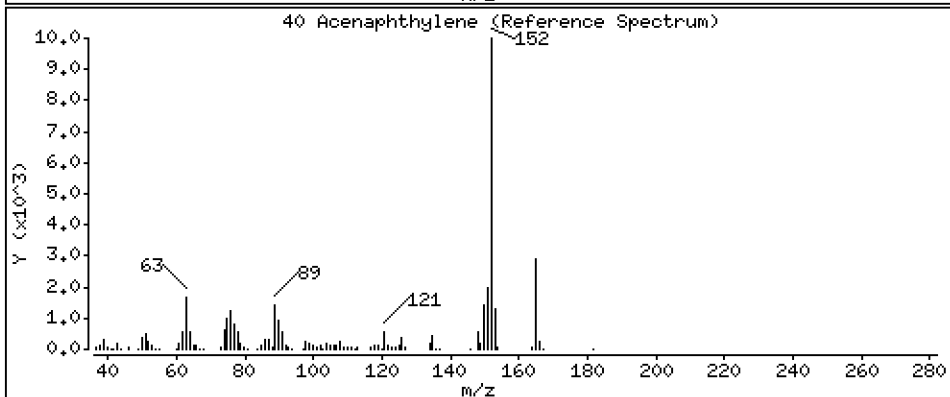
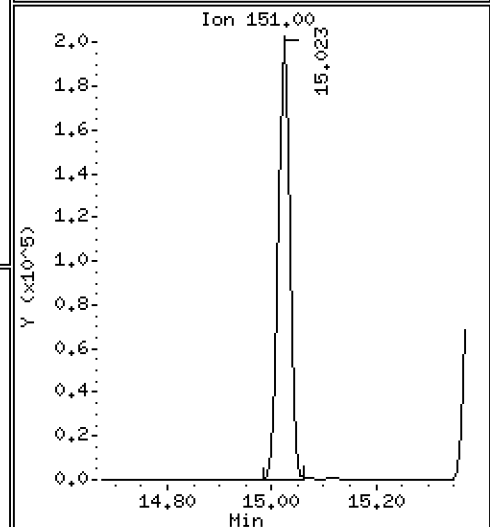
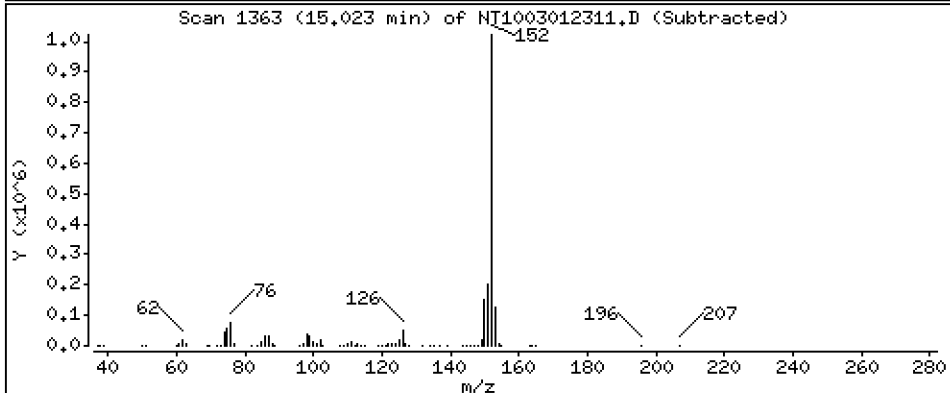
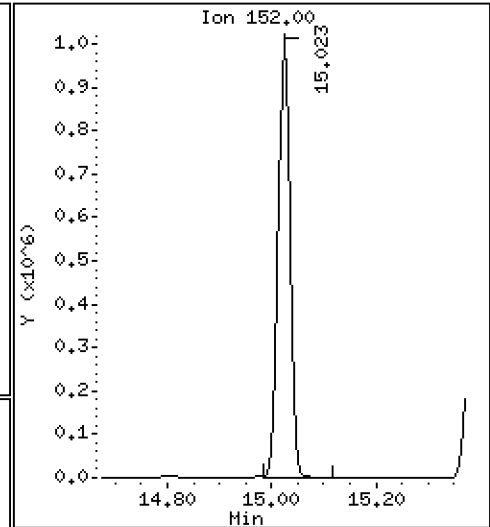
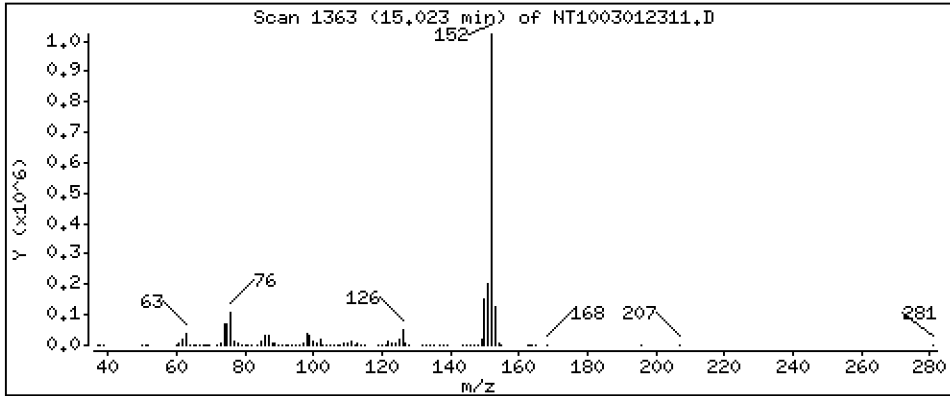
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,806 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

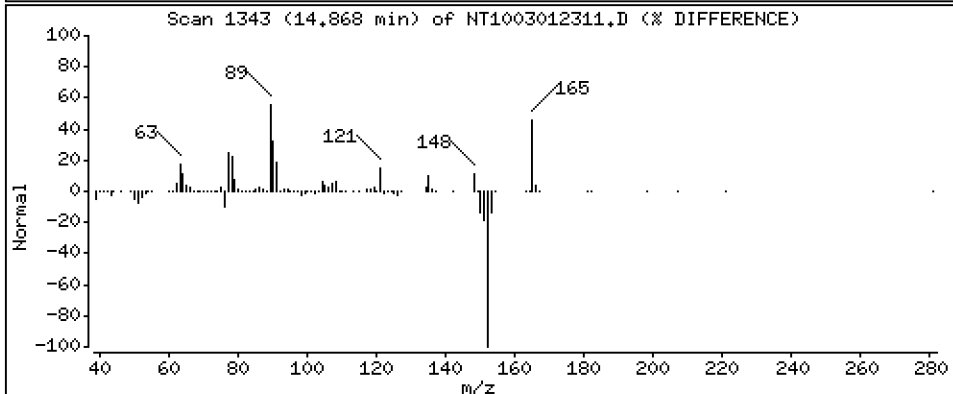
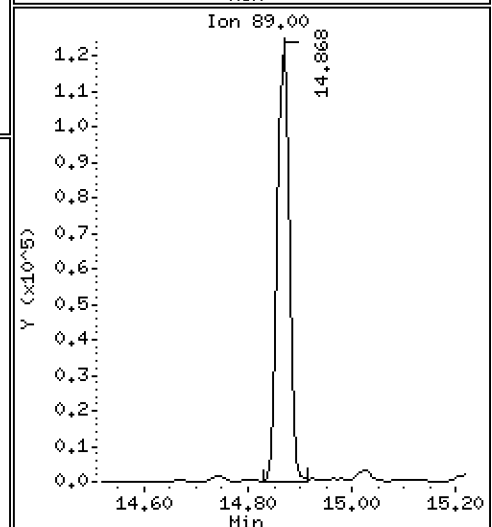
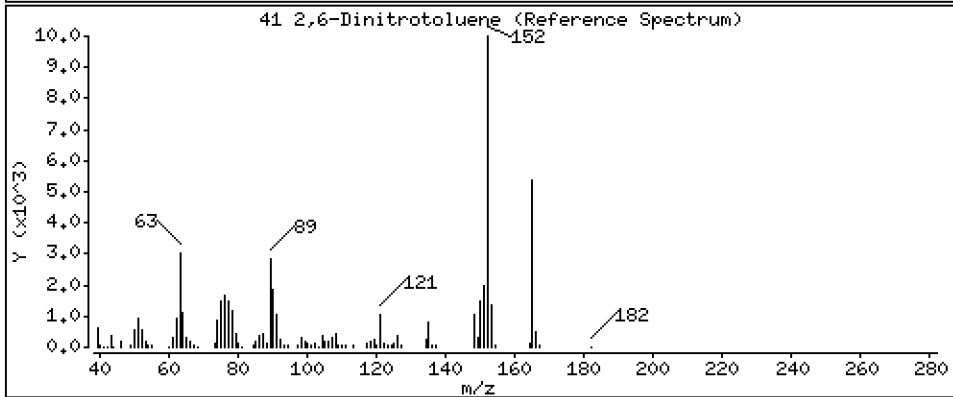
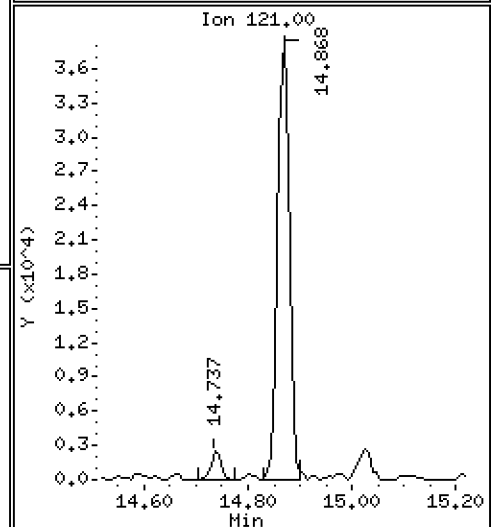
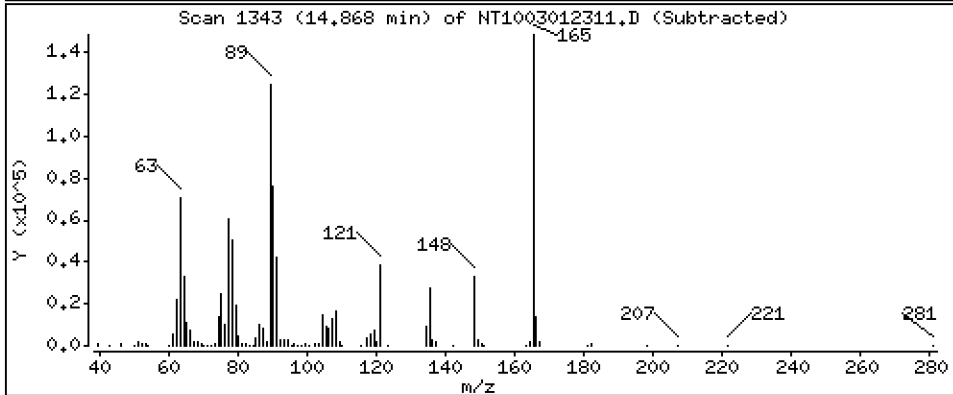
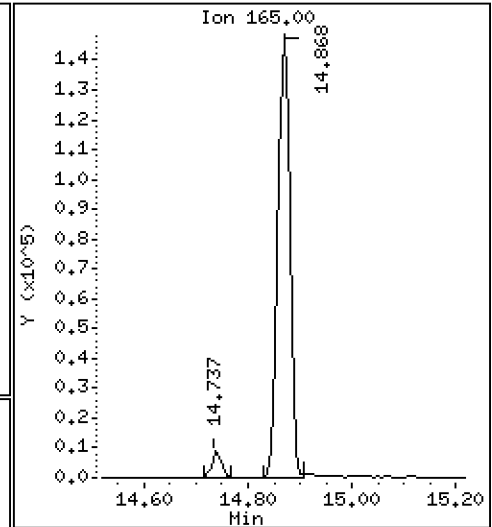
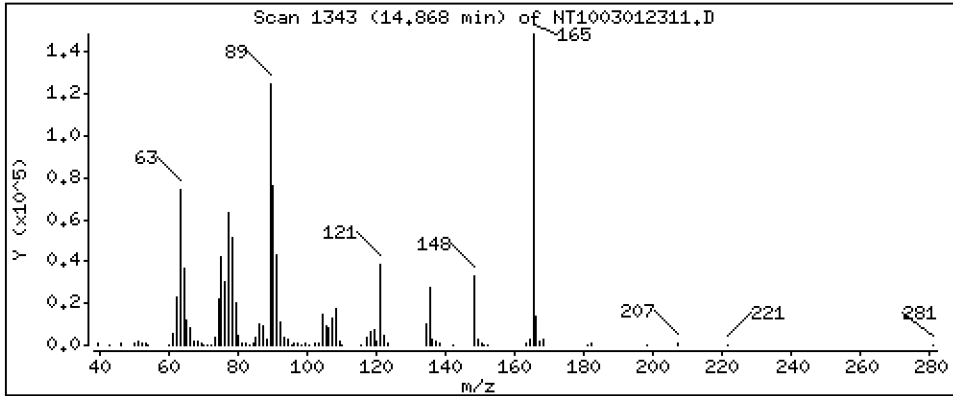
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 5.187 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

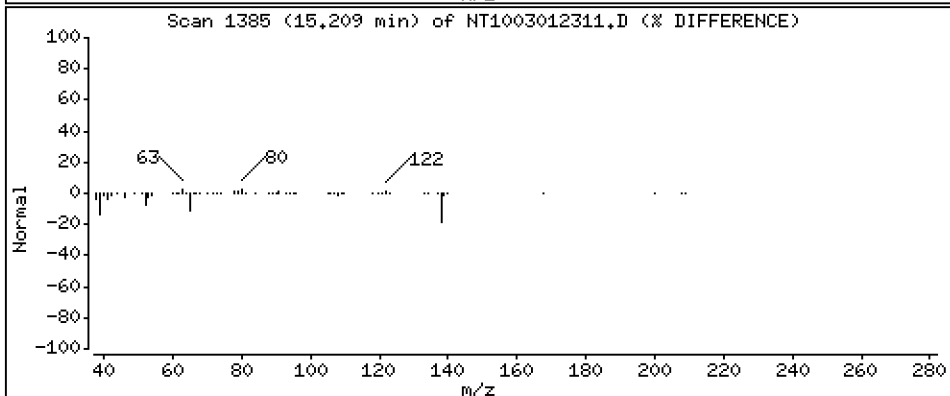
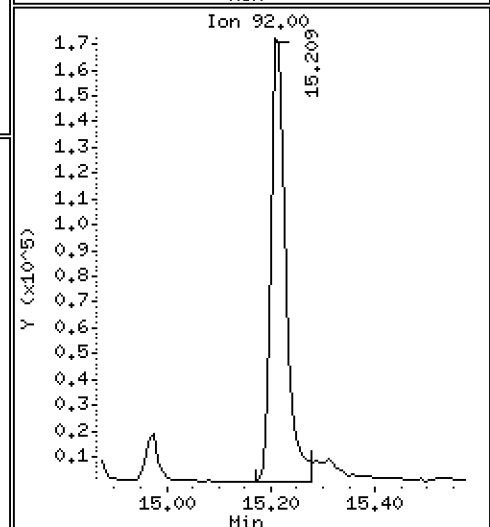
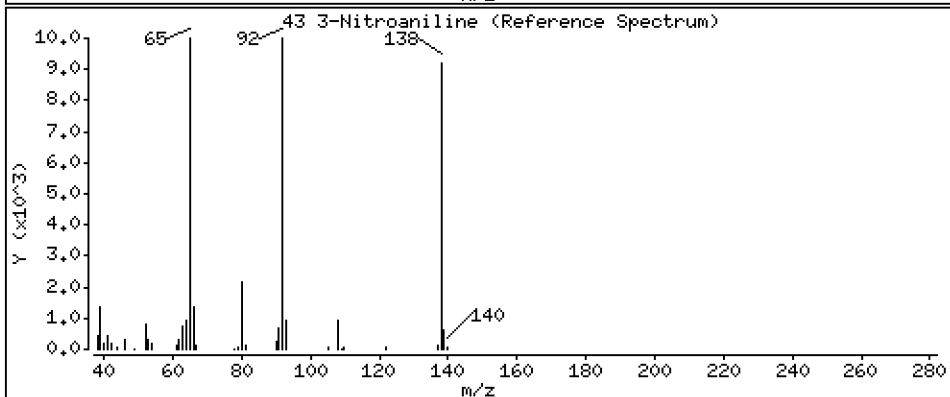
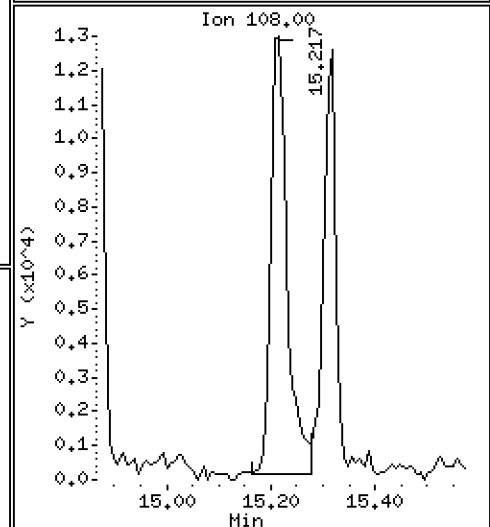
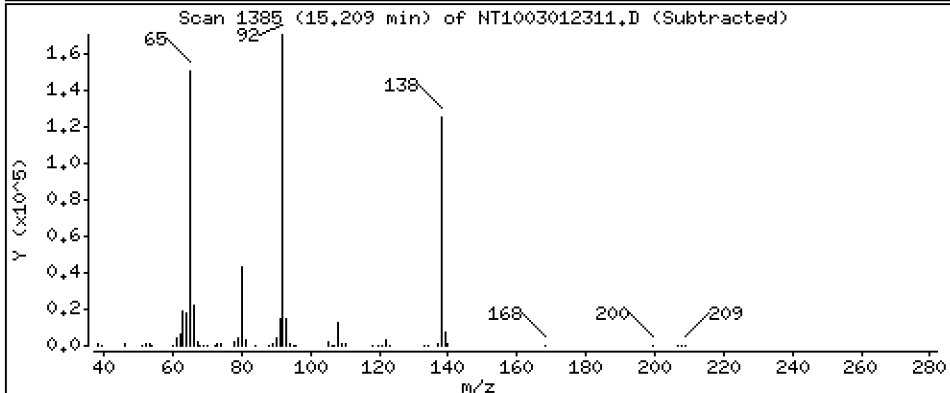
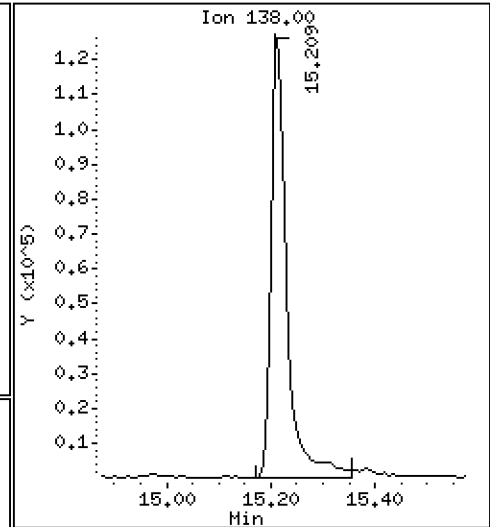
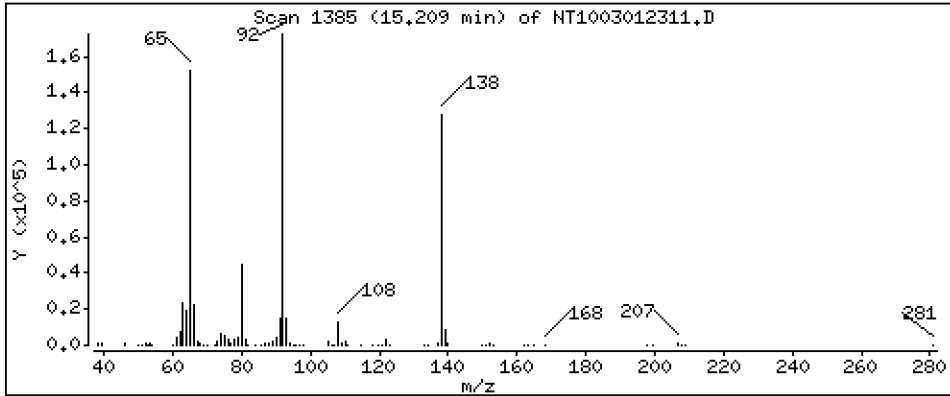
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 5,172 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

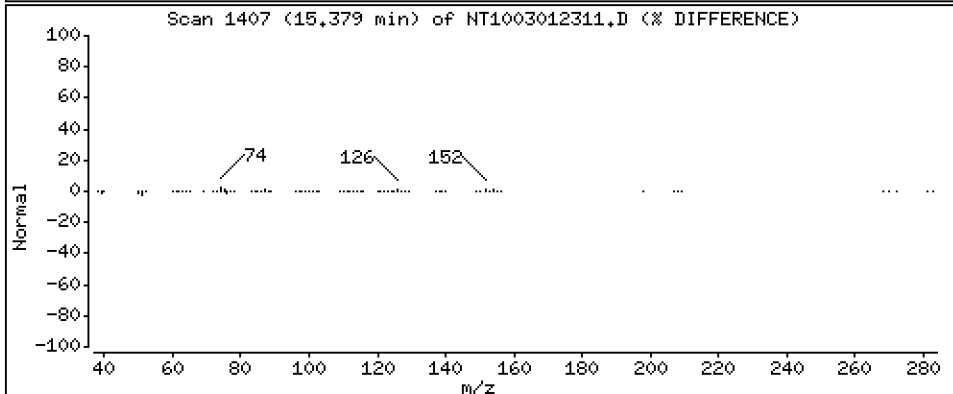
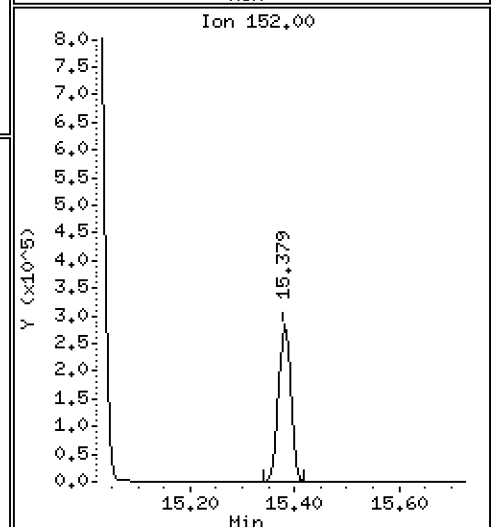
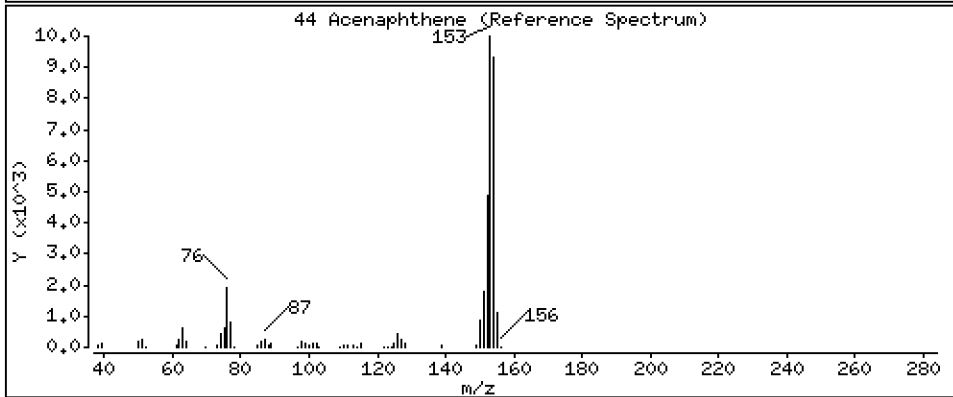
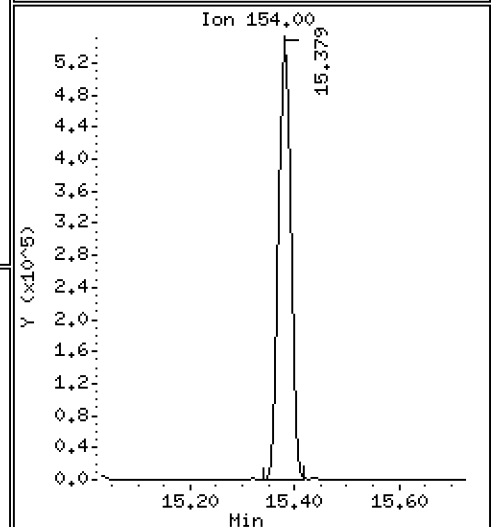
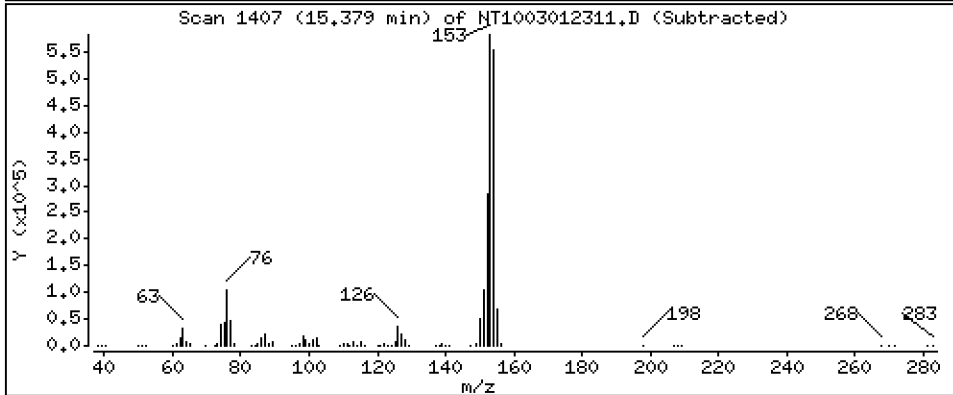
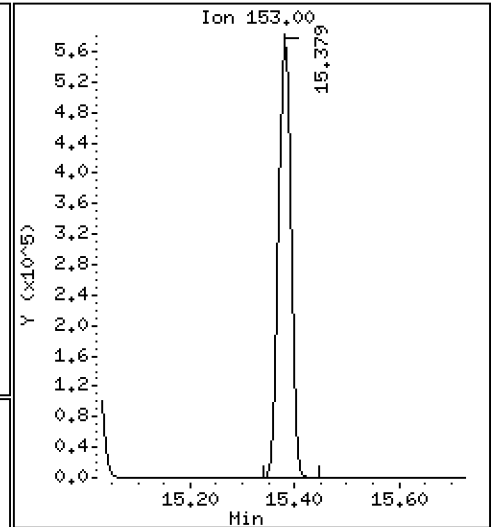
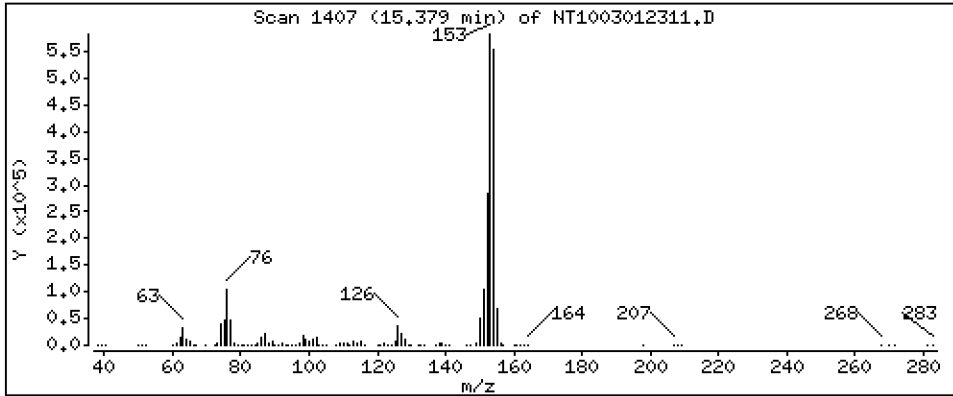
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 5,154 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

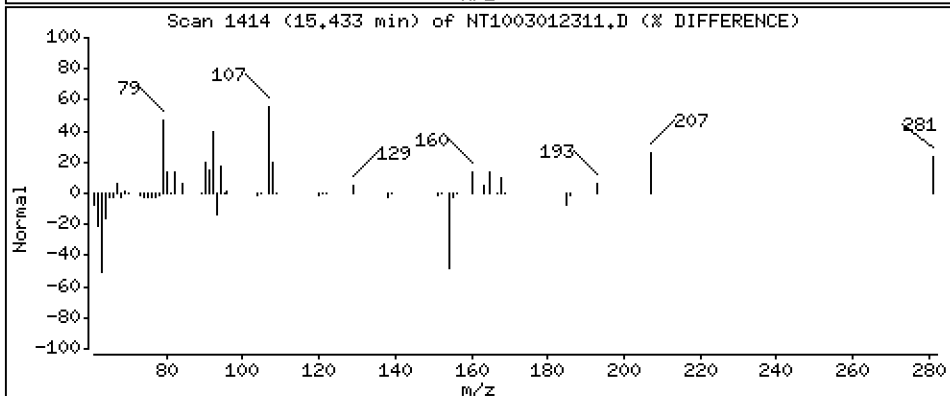
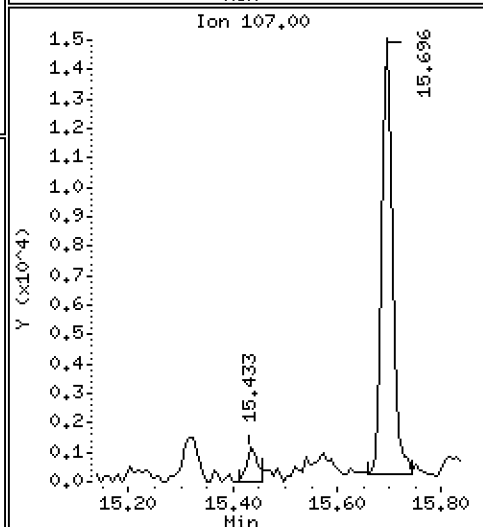
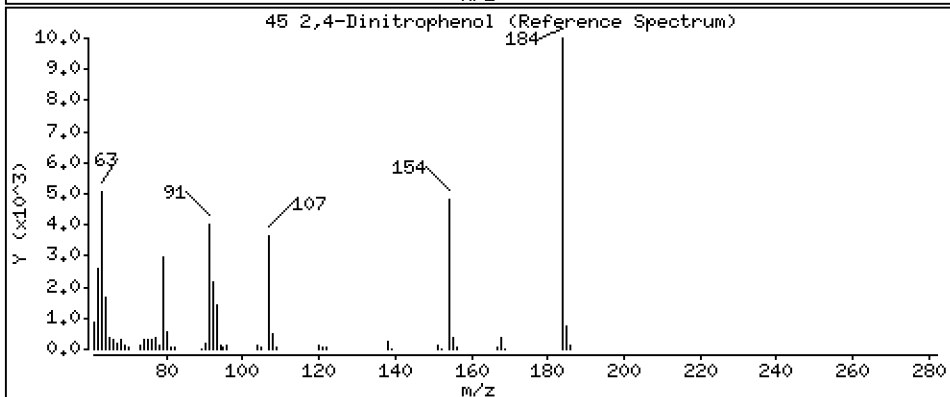
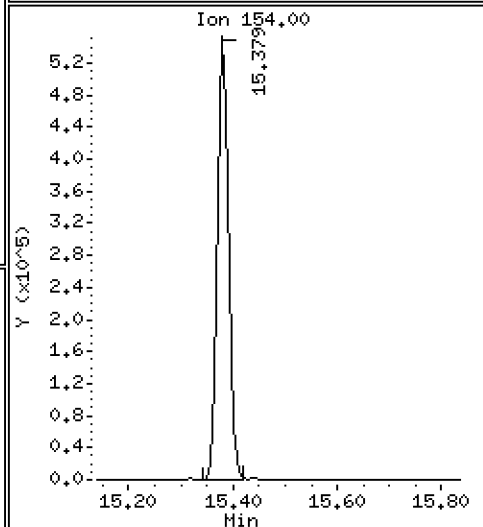
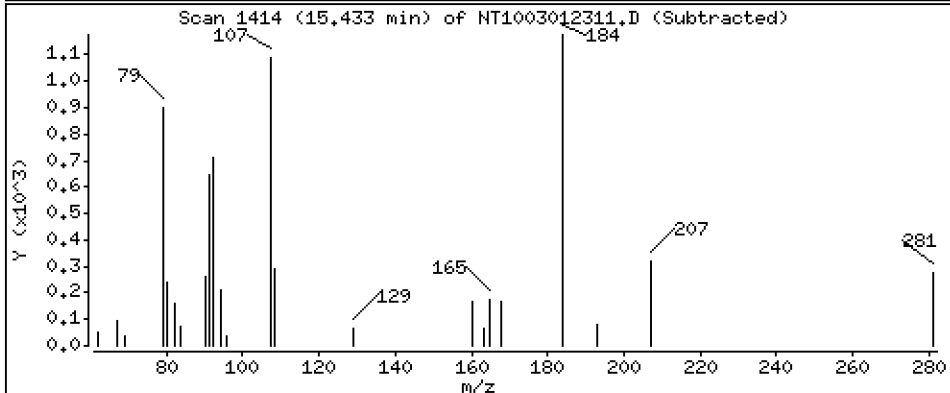
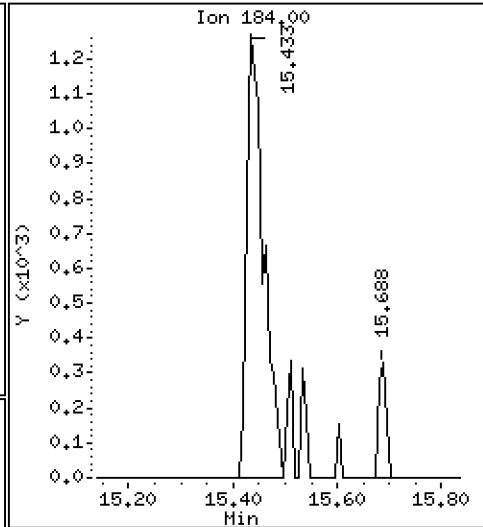
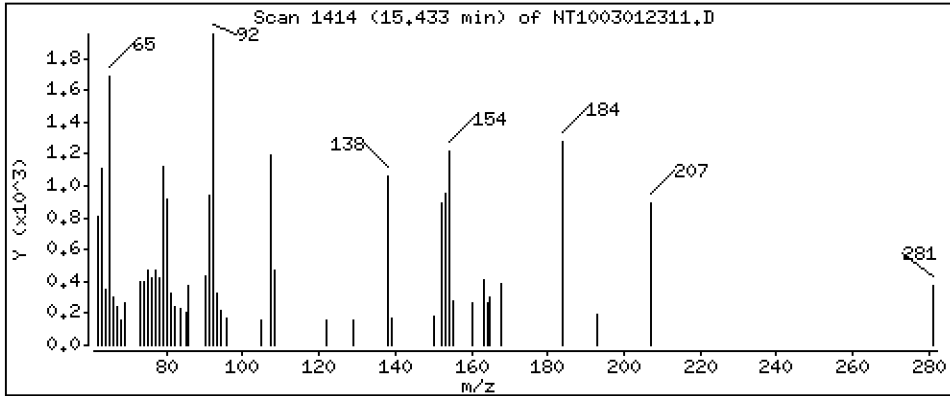
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,2667 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

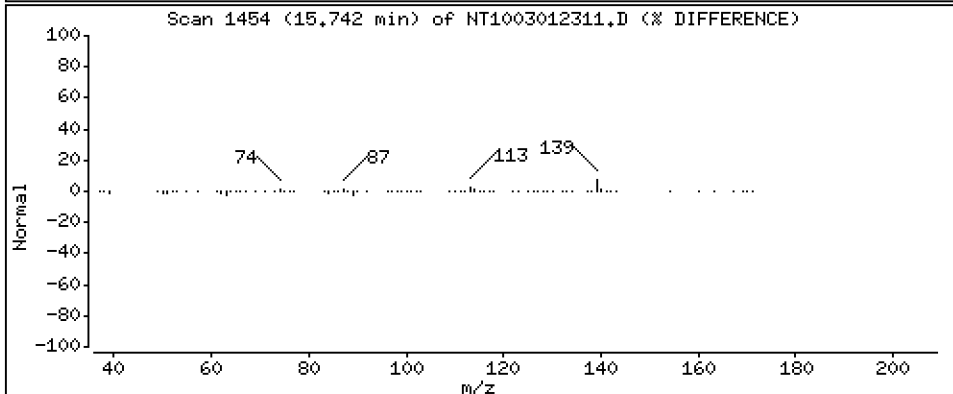
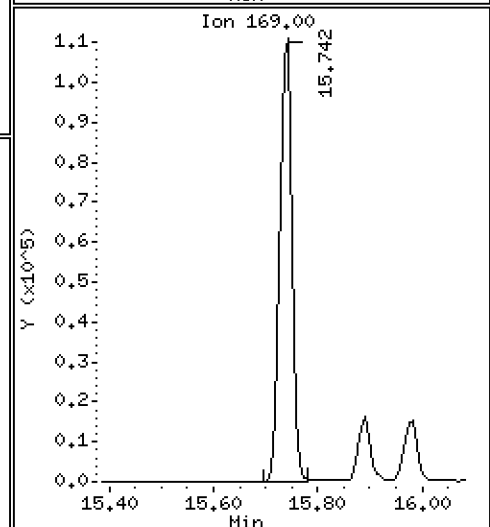
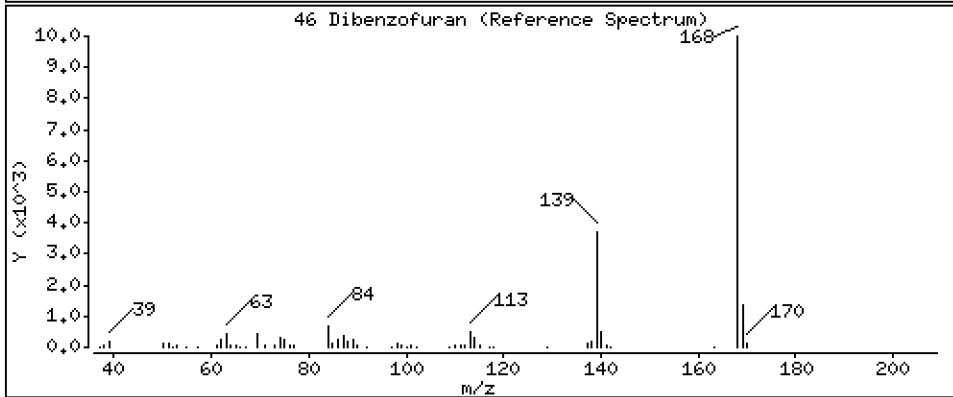
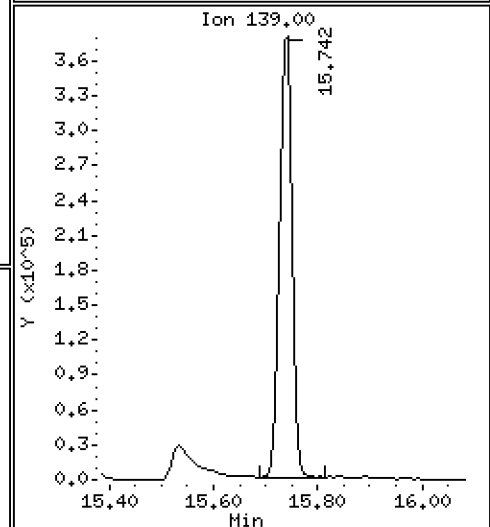
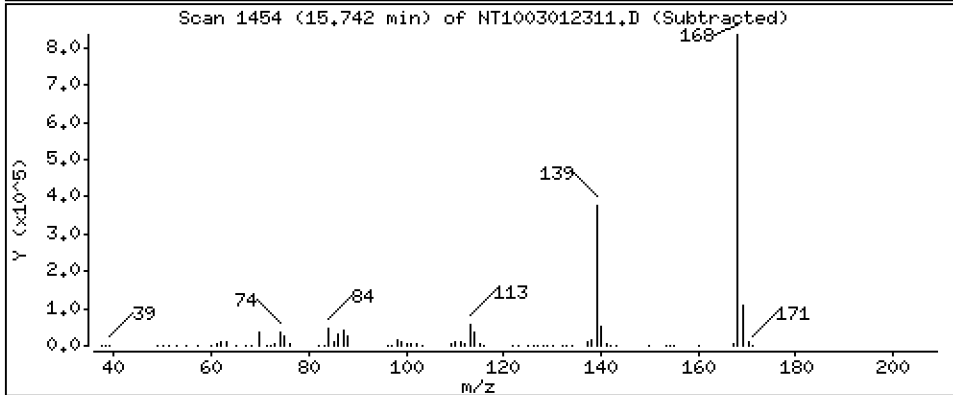
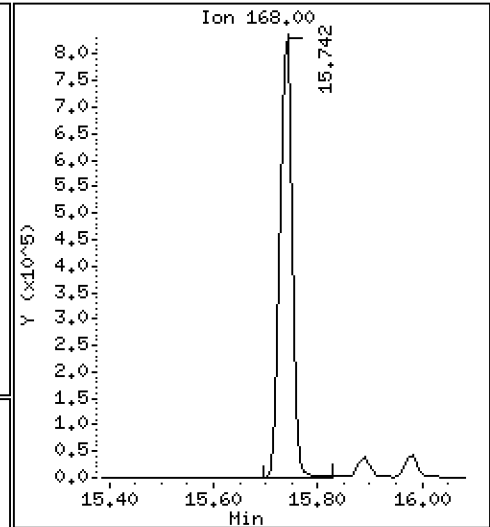
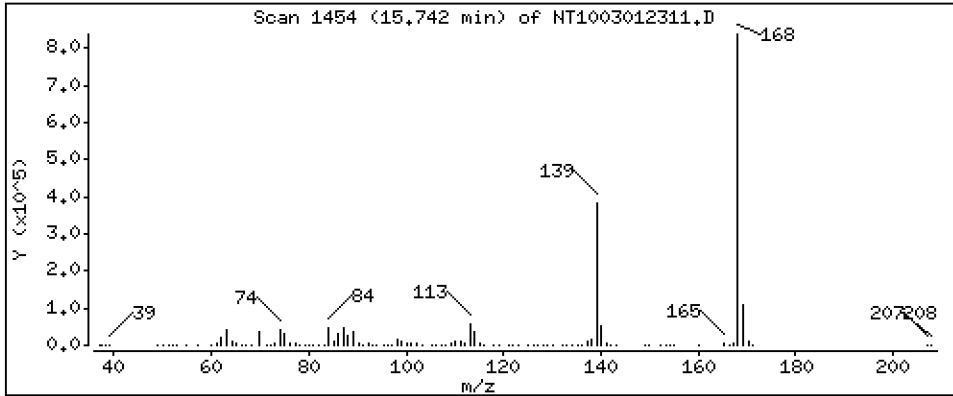
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,994 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

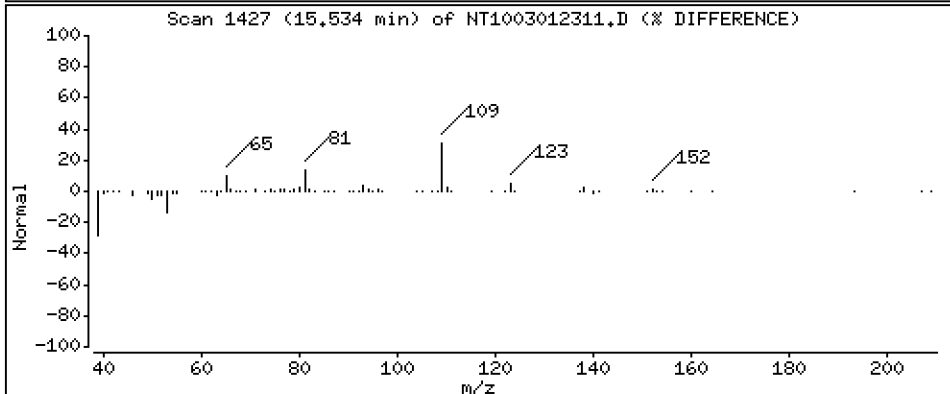
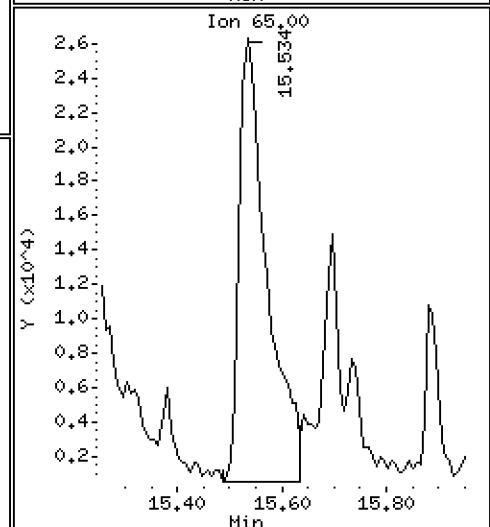
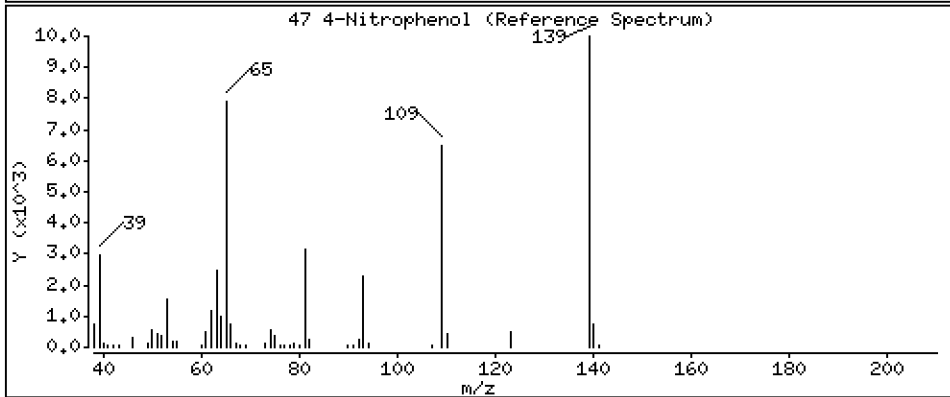
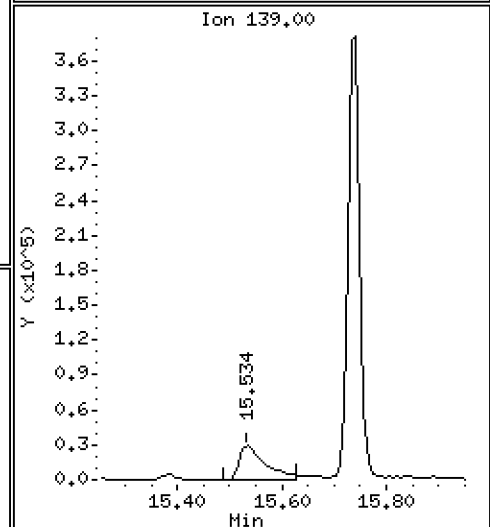
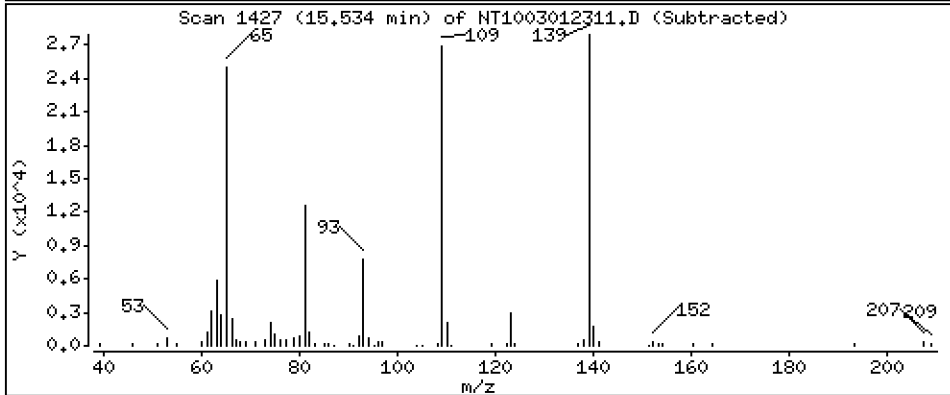
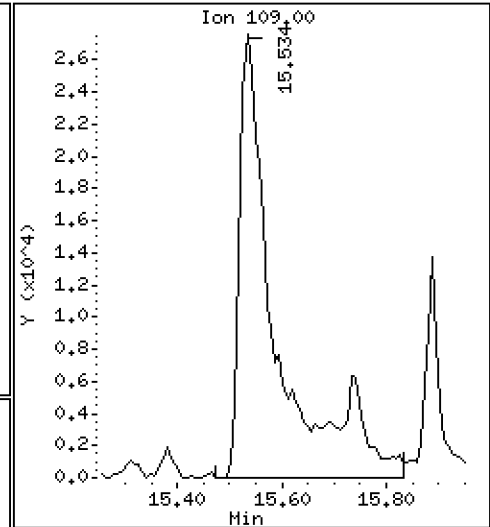
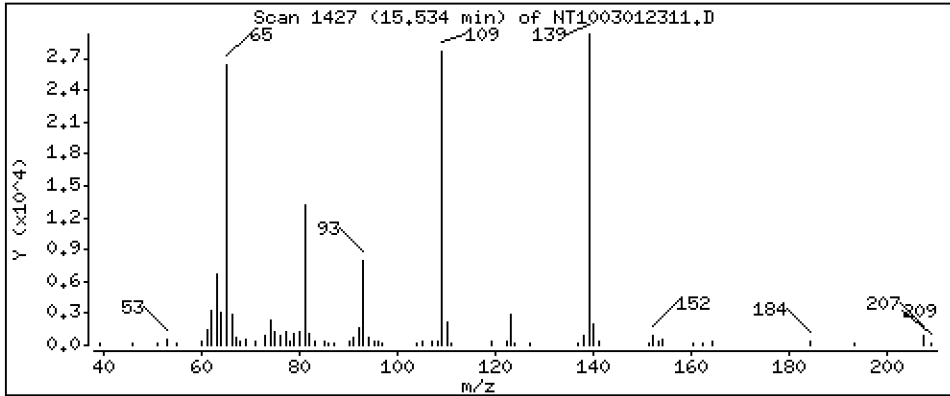
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 3,822 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

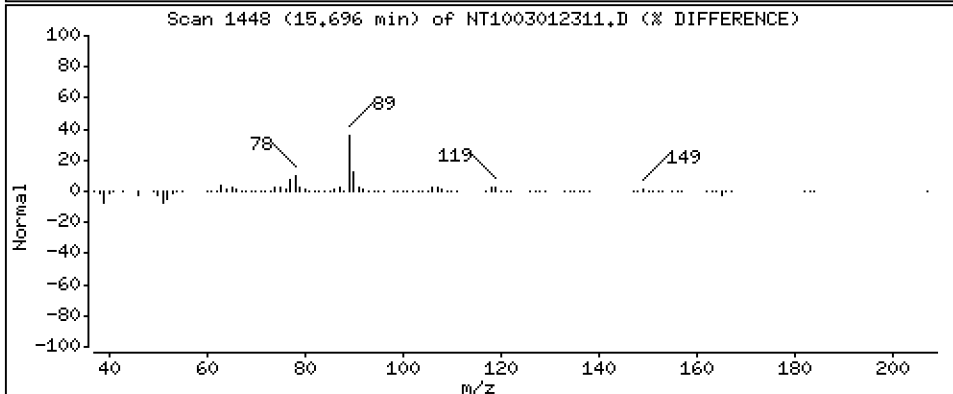
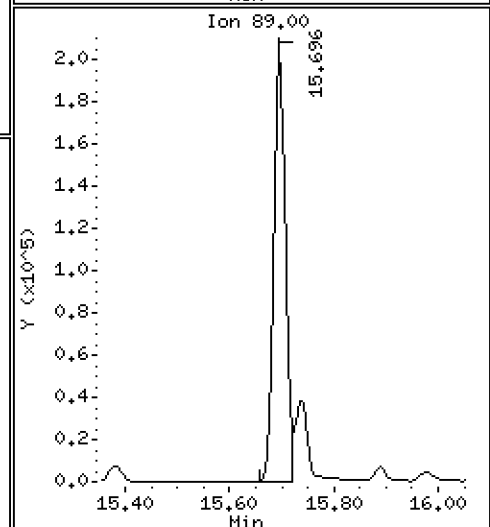
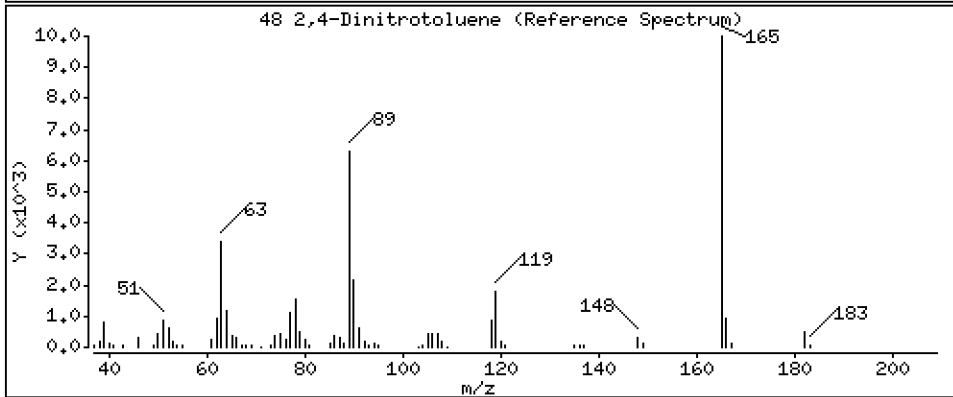
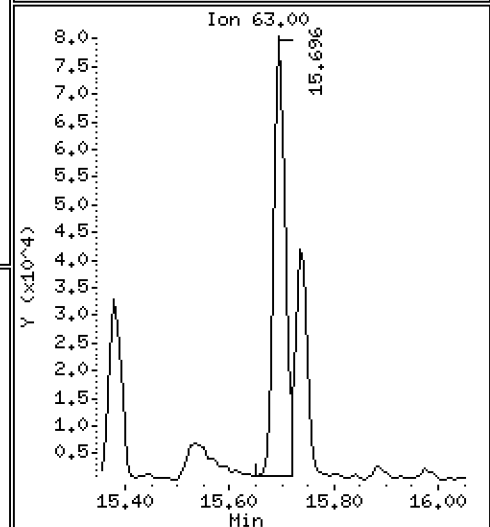
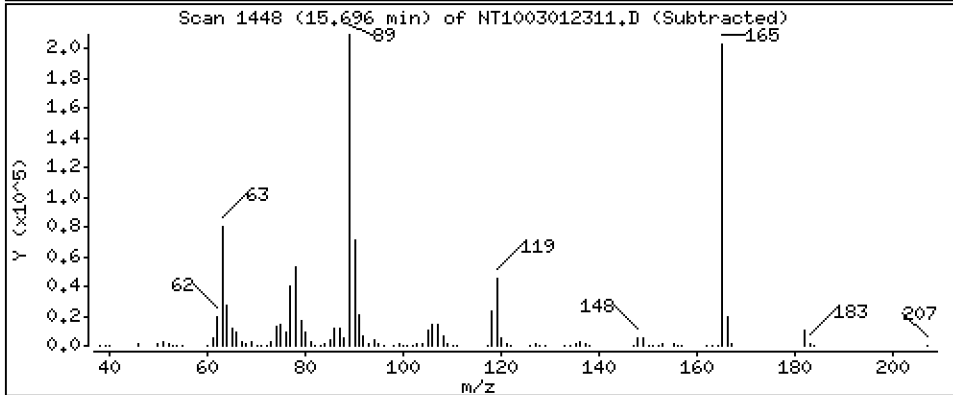
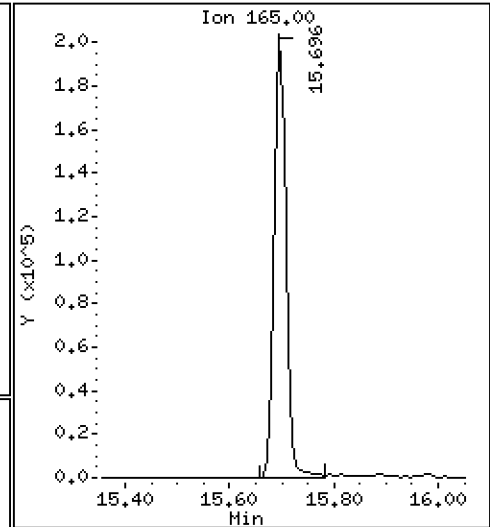
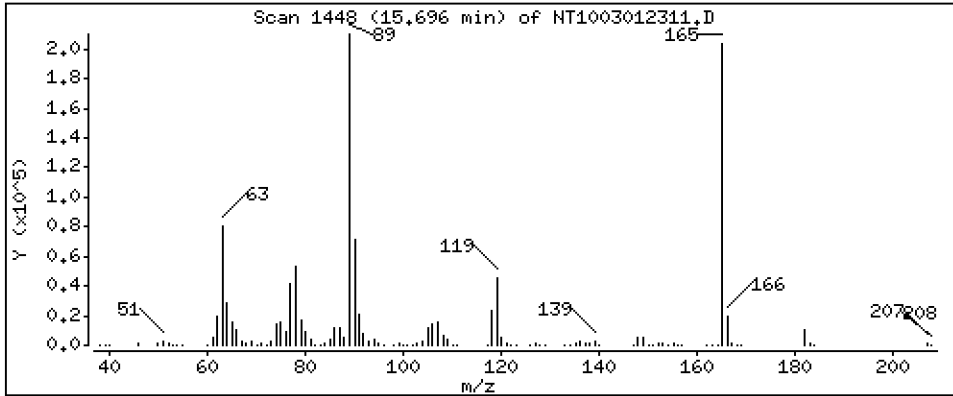
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

48 2,4-Dinitrotoluene

Concentration: 4.729 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

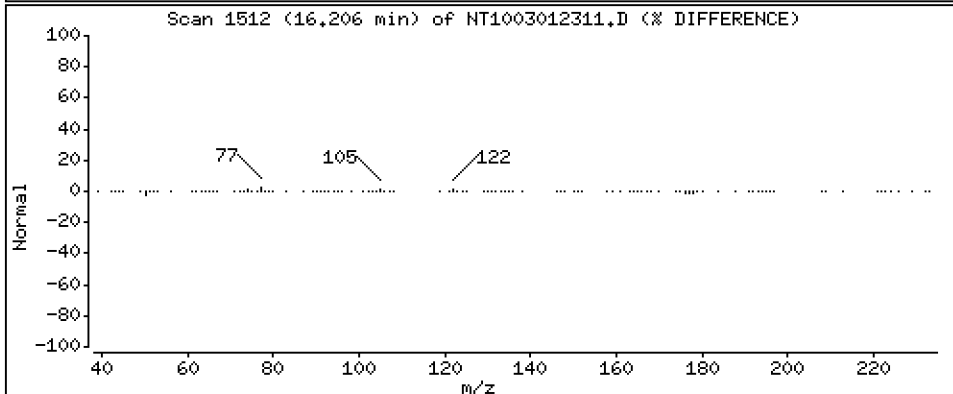
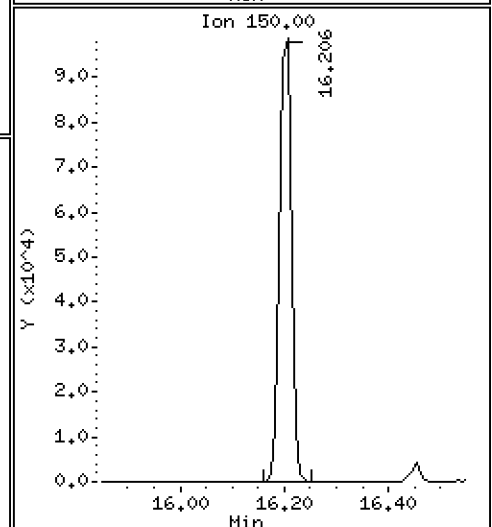
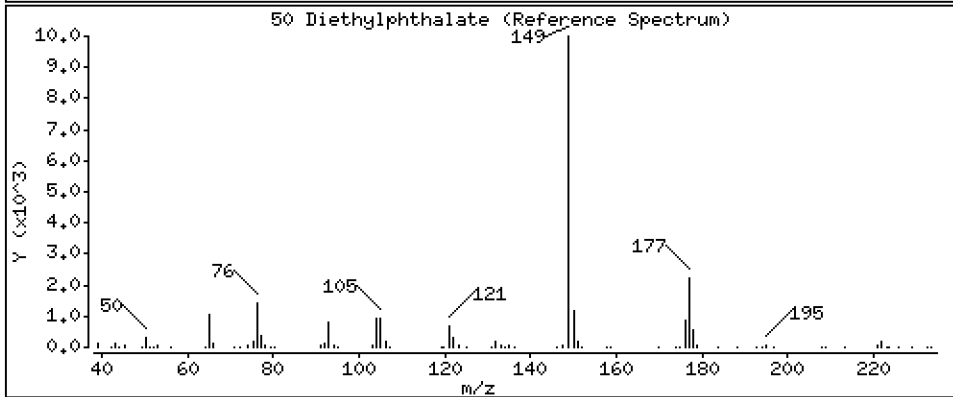
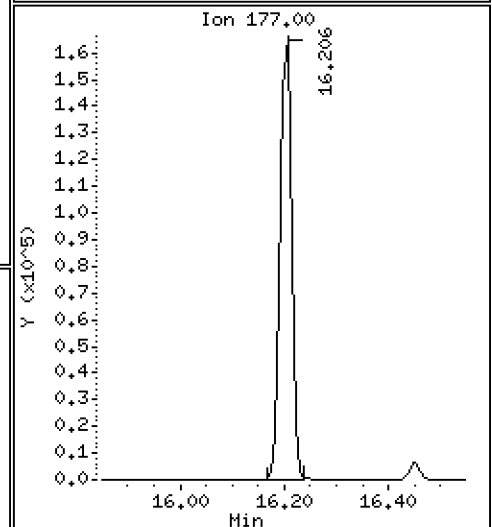
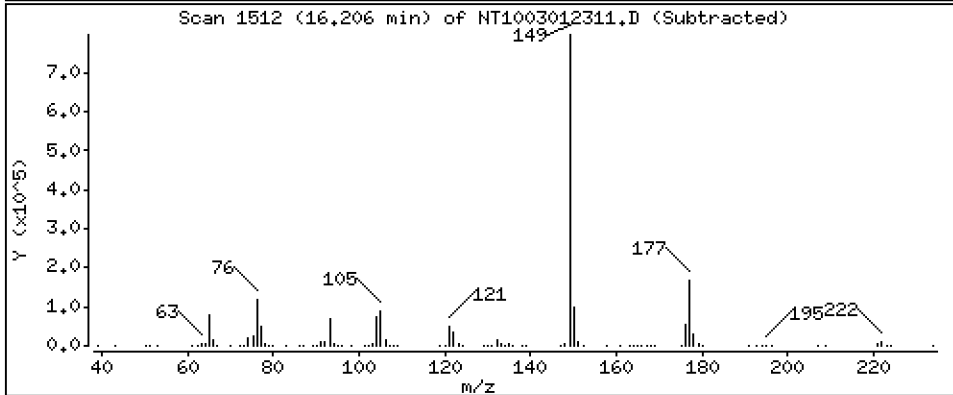
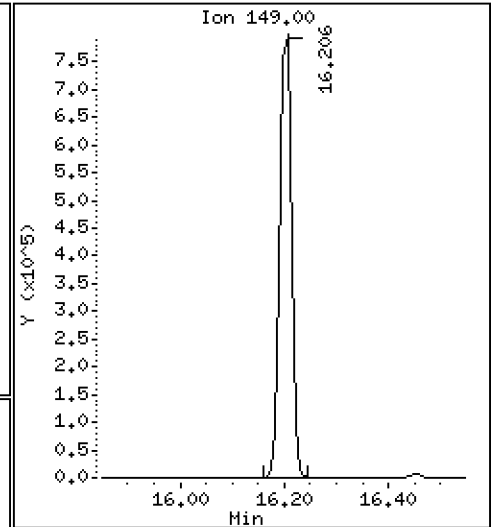
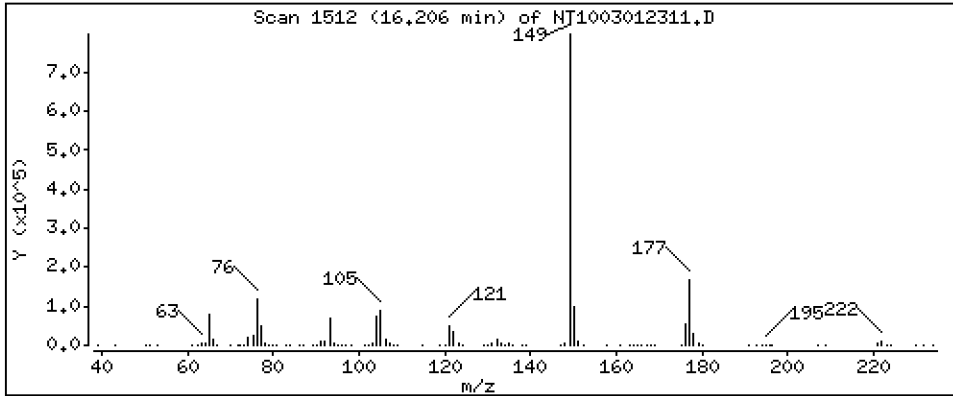
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,639 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

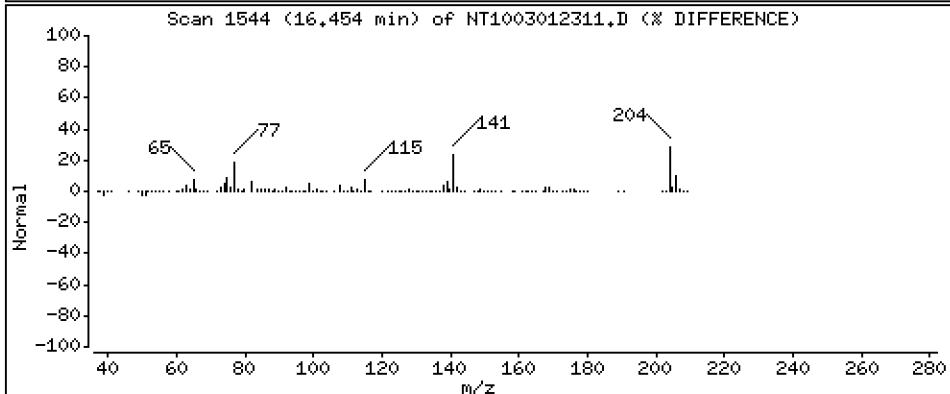
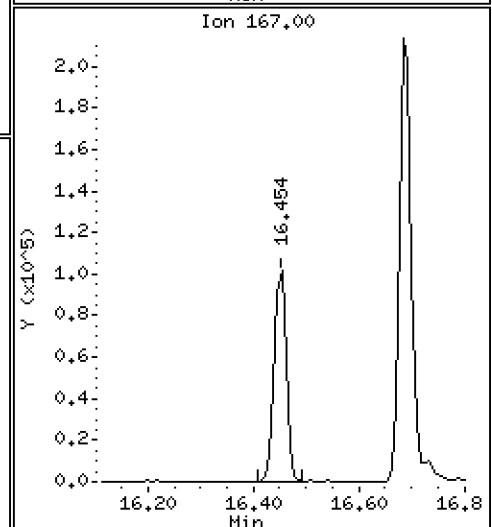
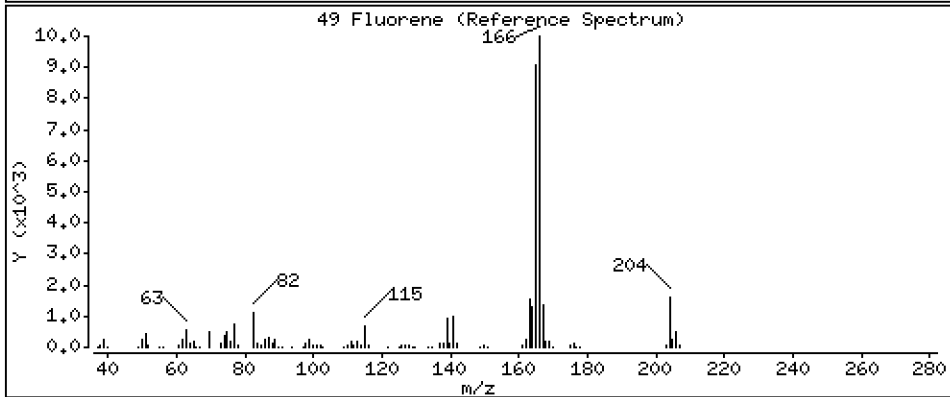
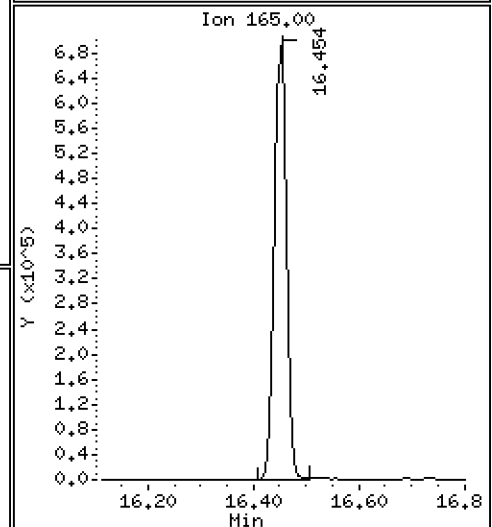
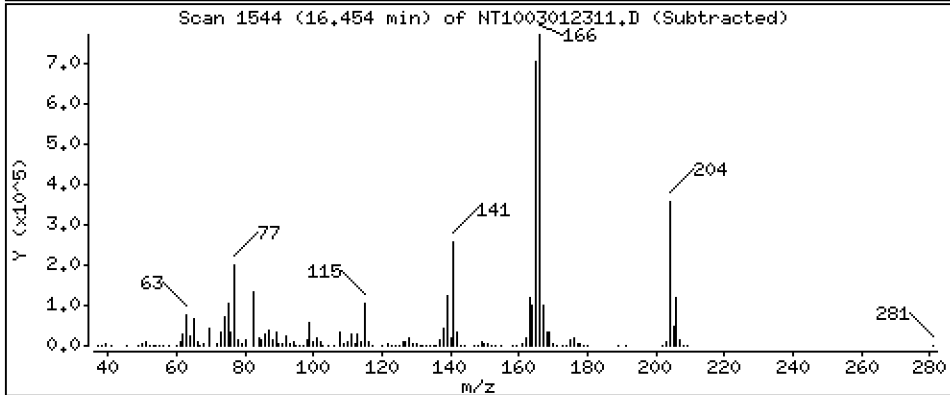
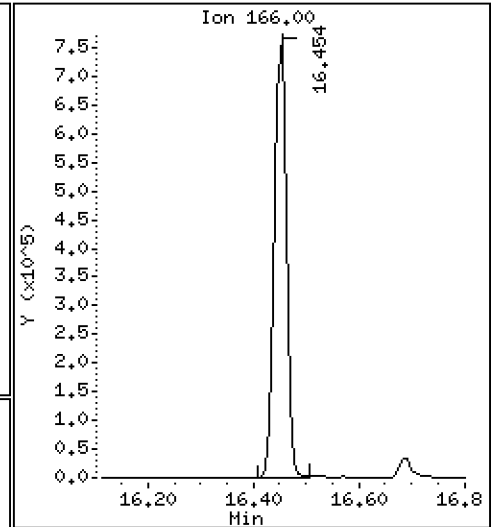
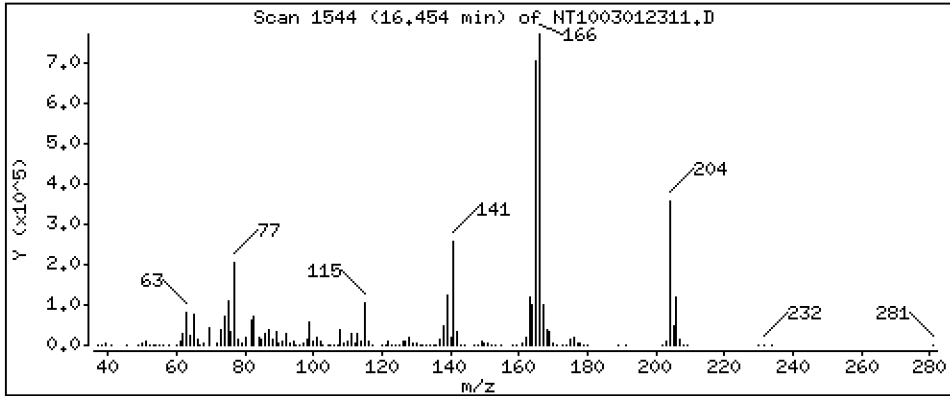
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 5,305 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

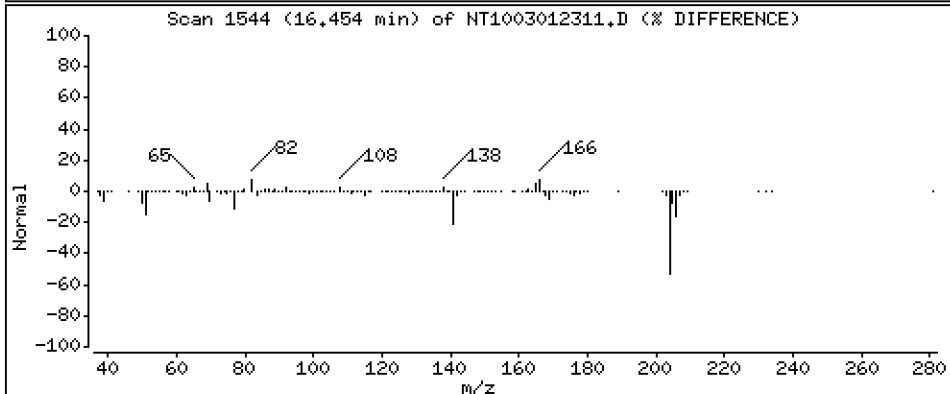
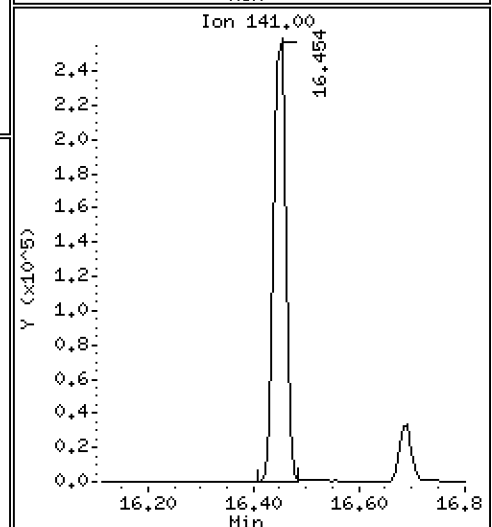
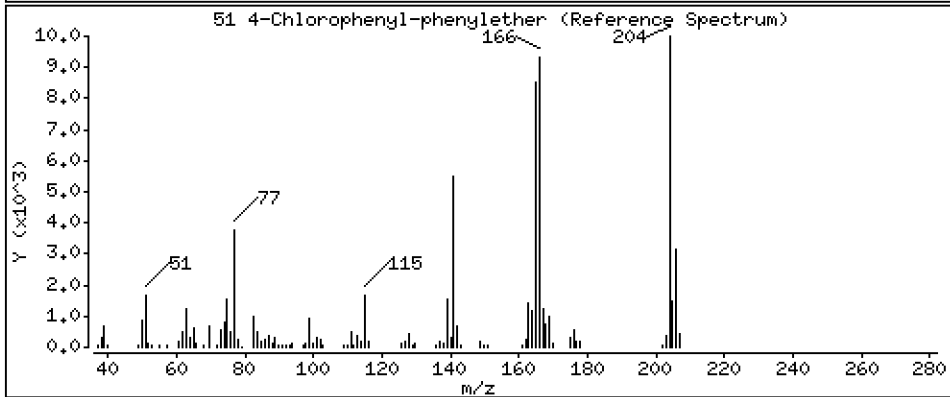
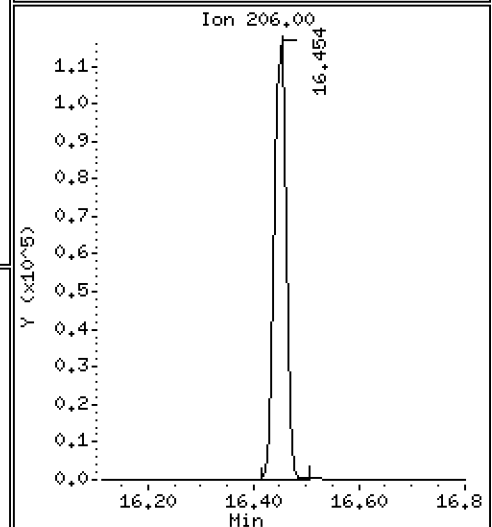
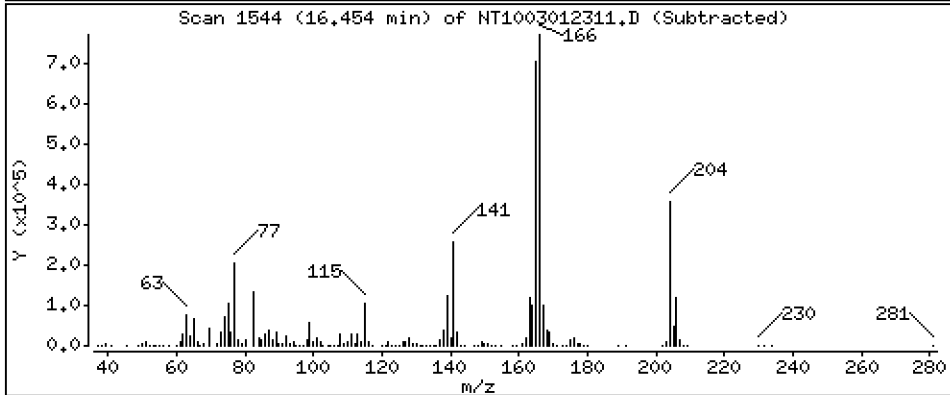
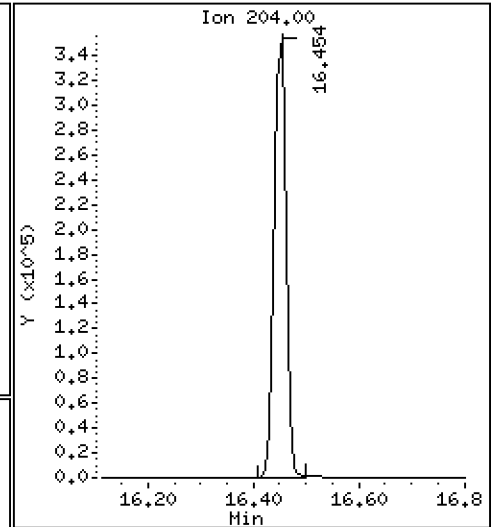
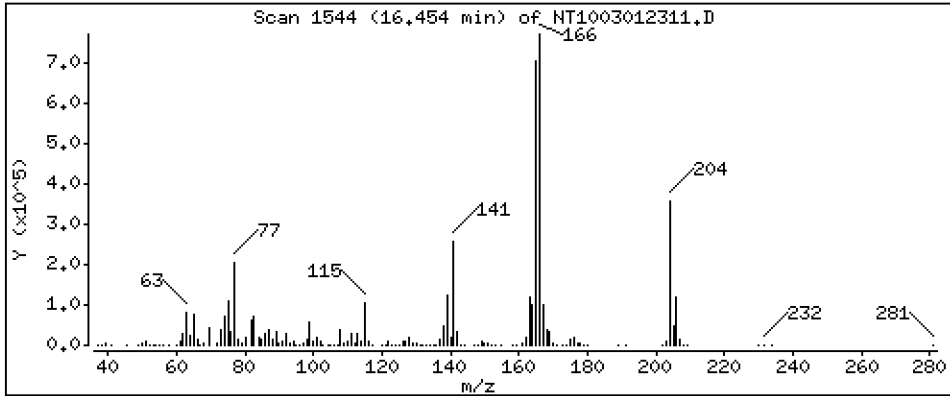
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 5,253 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

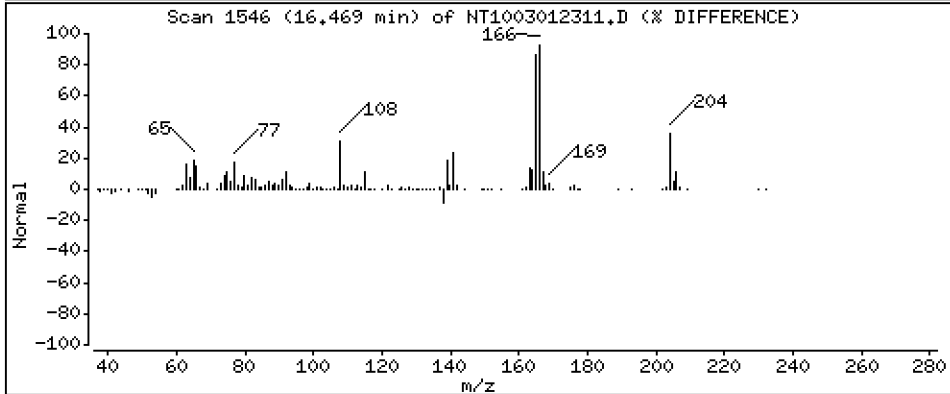
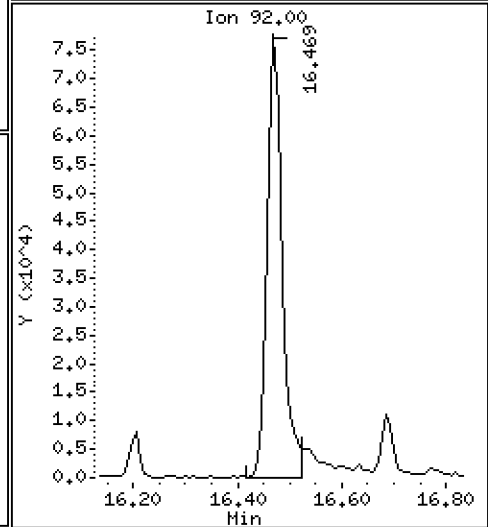
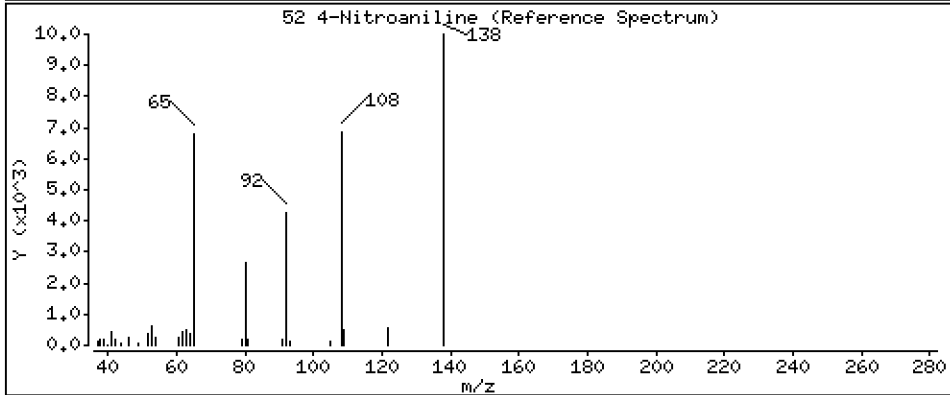
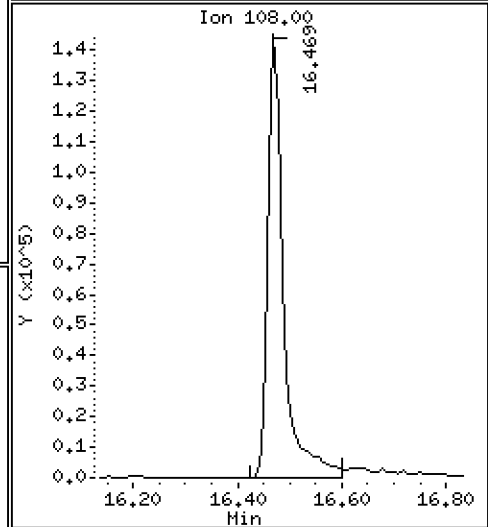
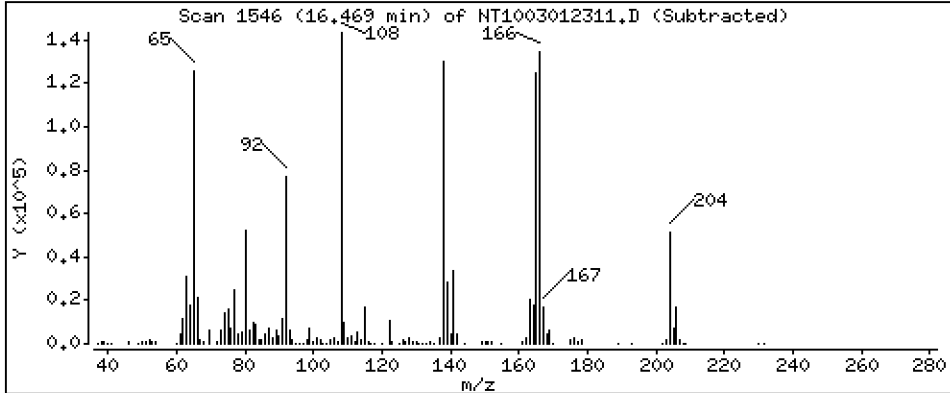
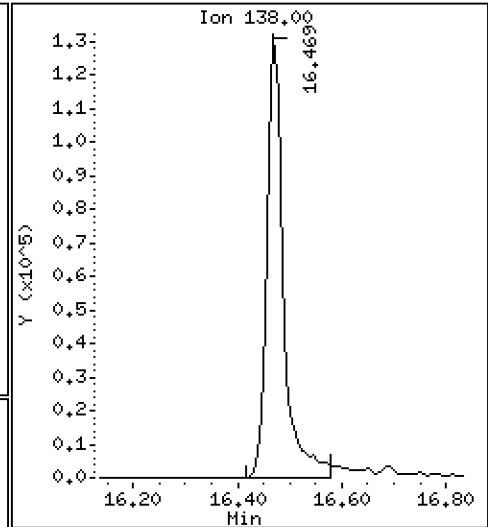
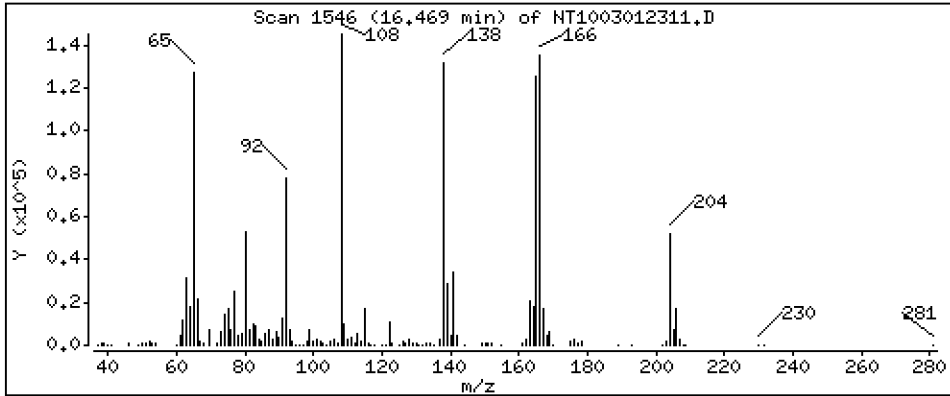
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 5,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

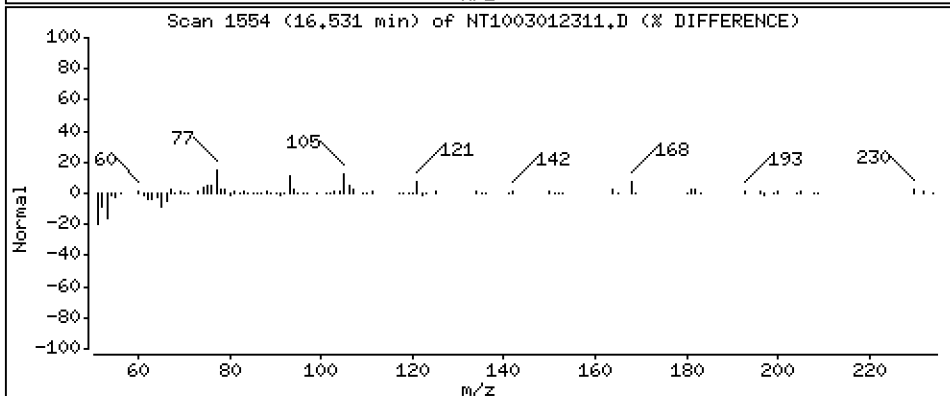
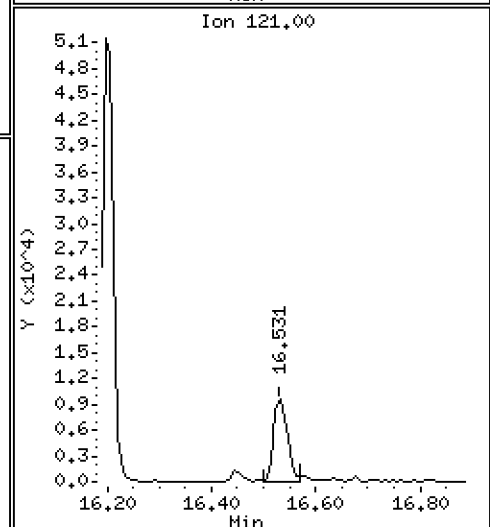
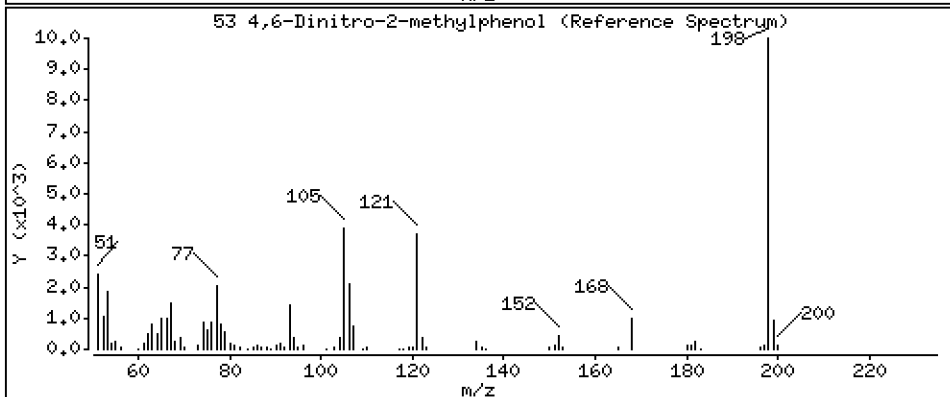
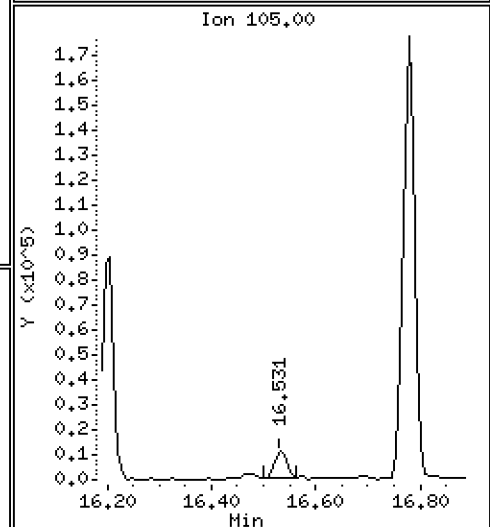
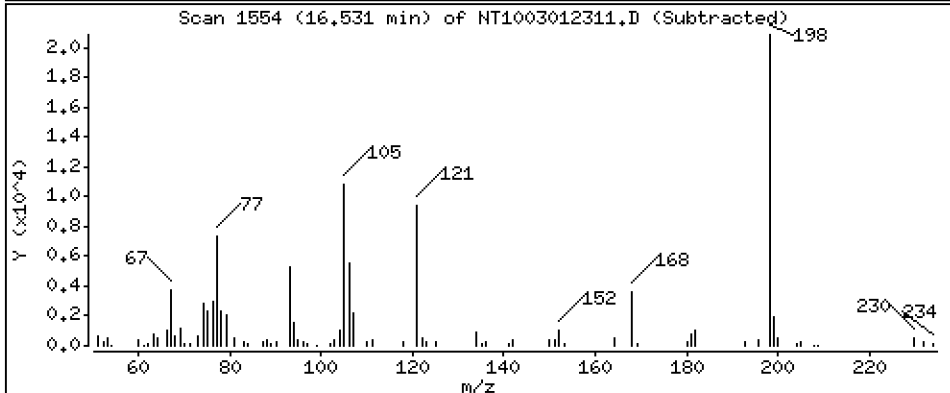
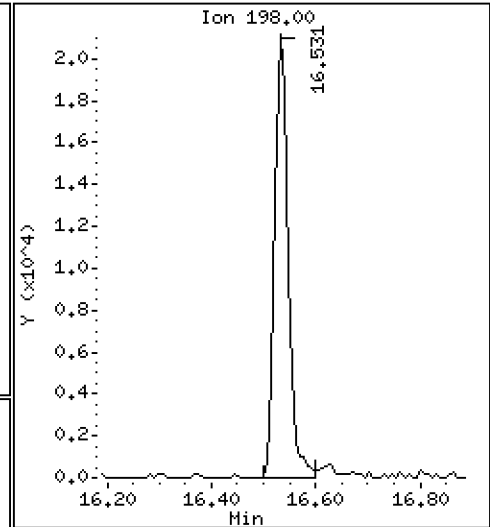
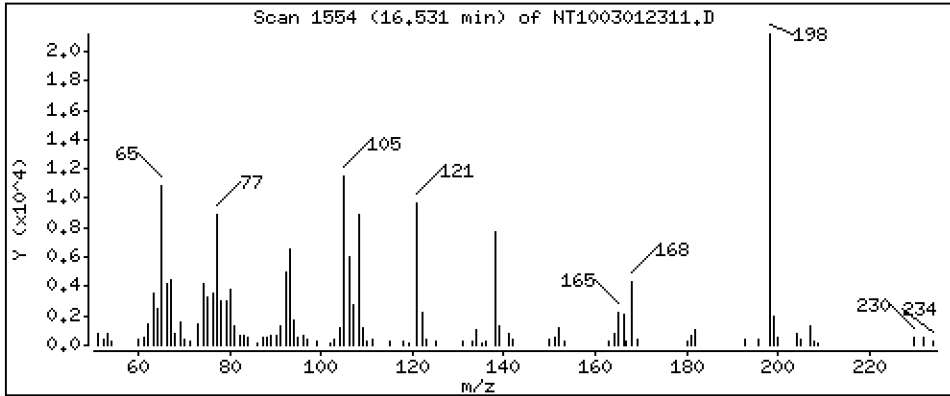
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 1.292 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

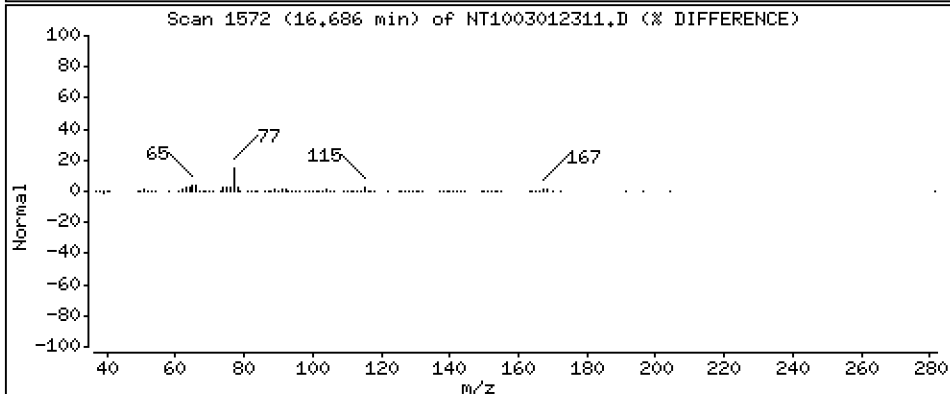
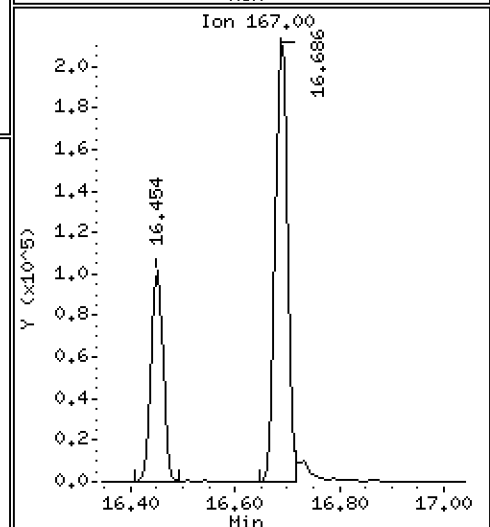
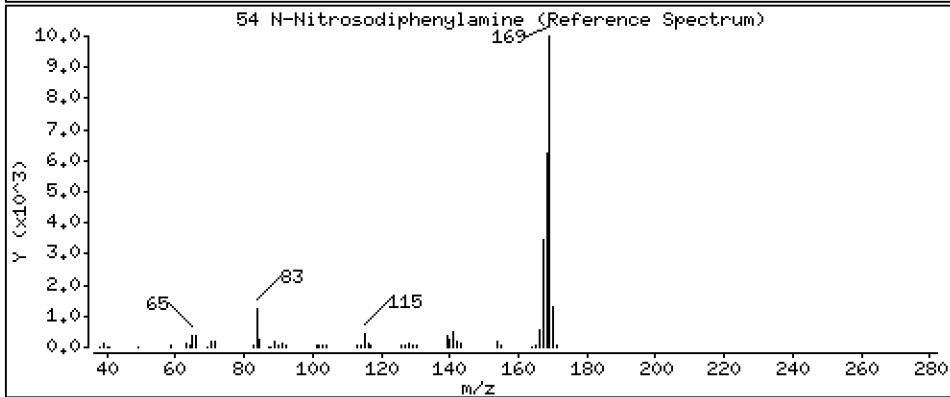
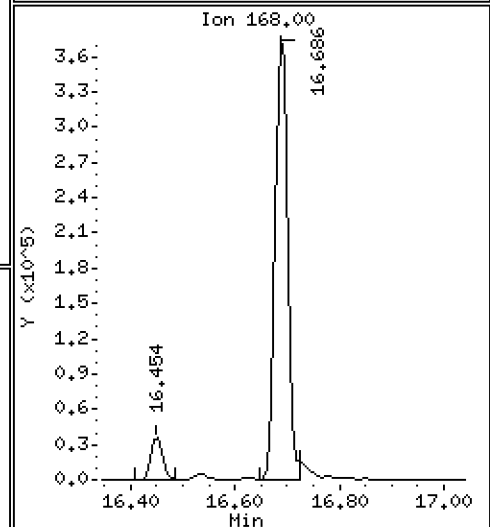
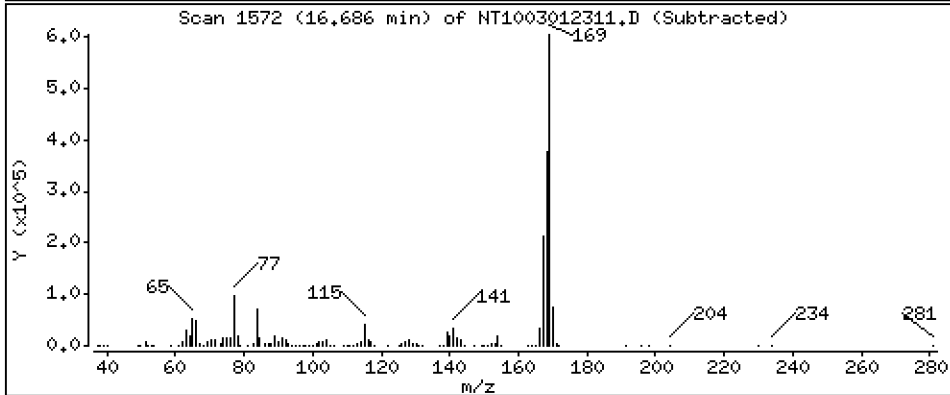
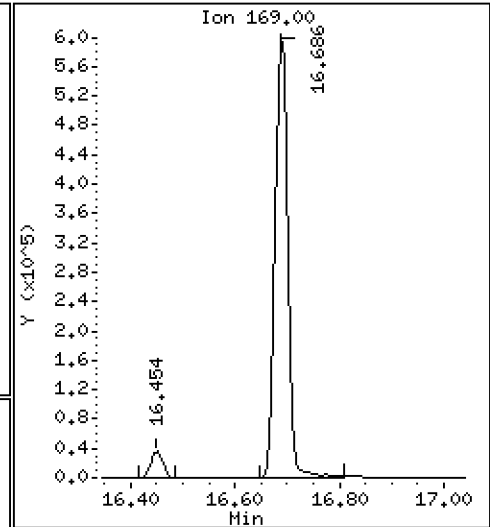
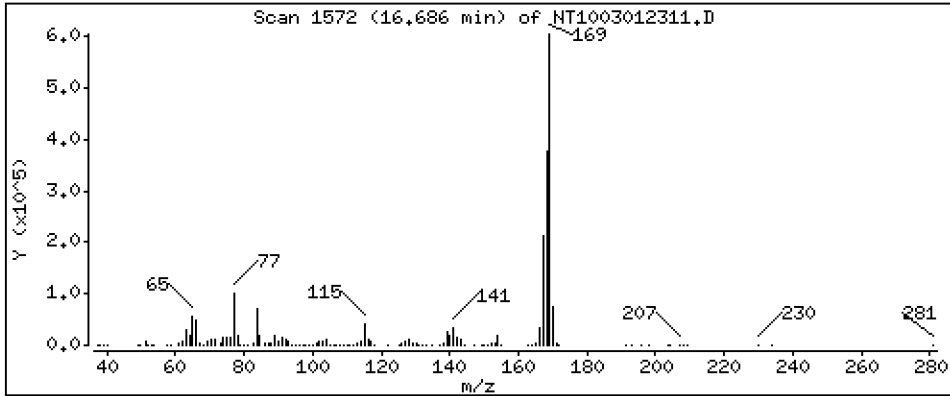
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,416 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

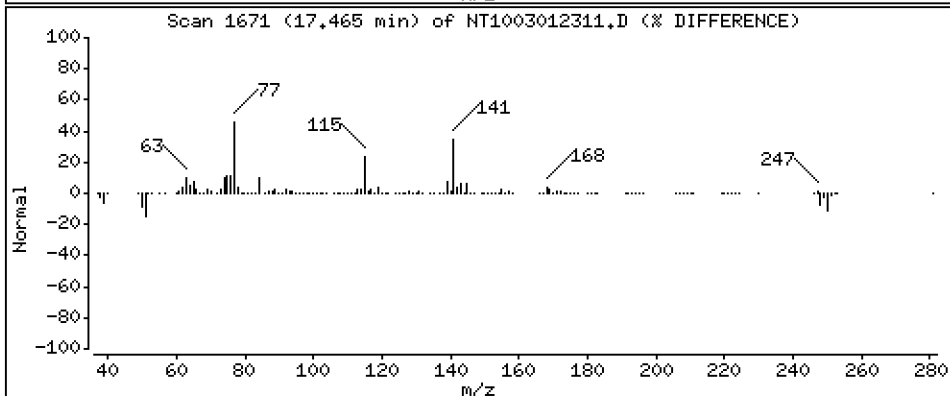
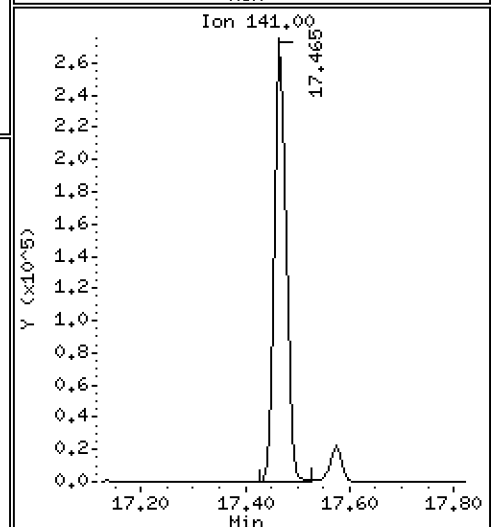
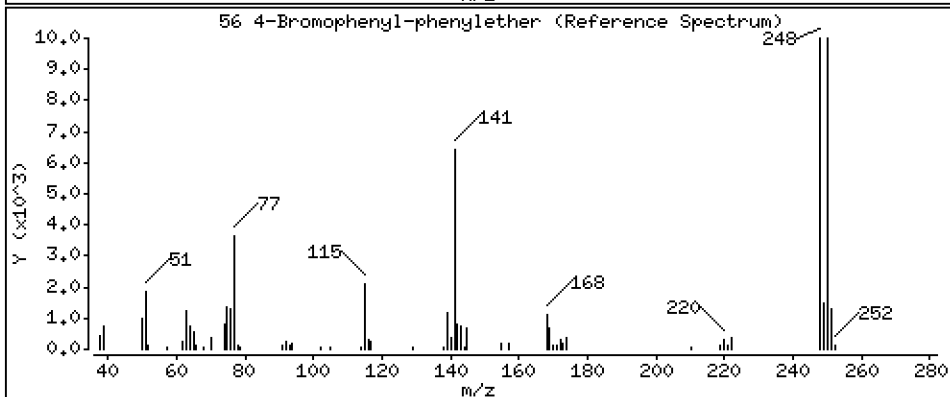
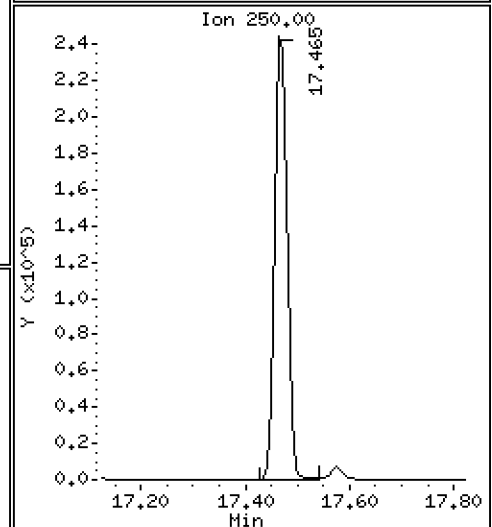
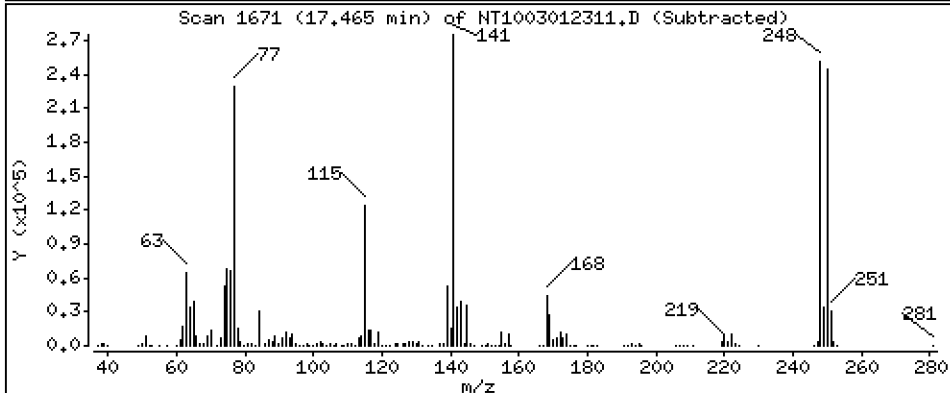
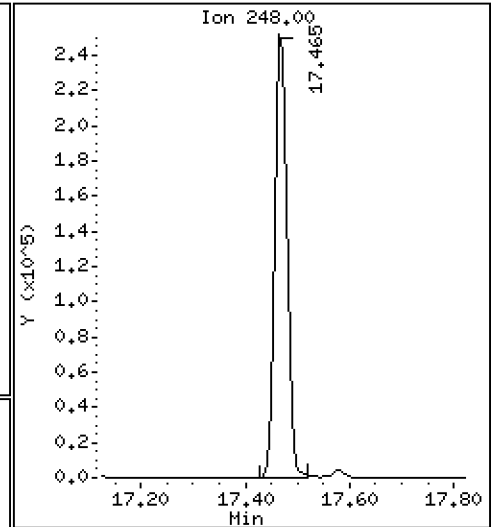
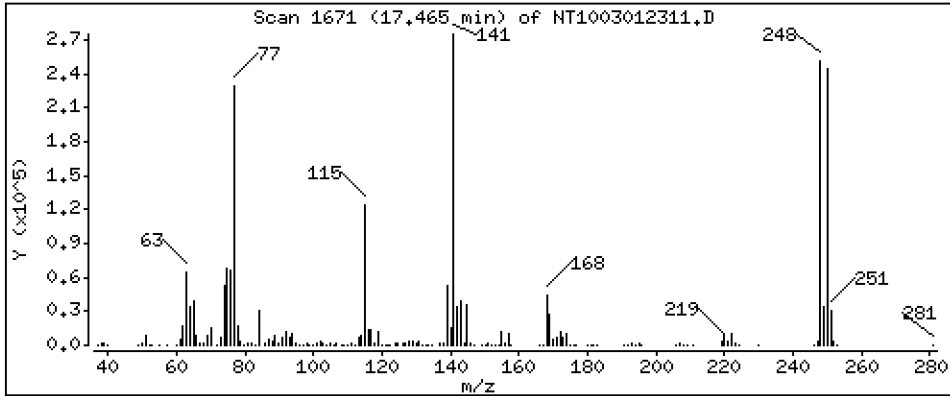
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,460 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

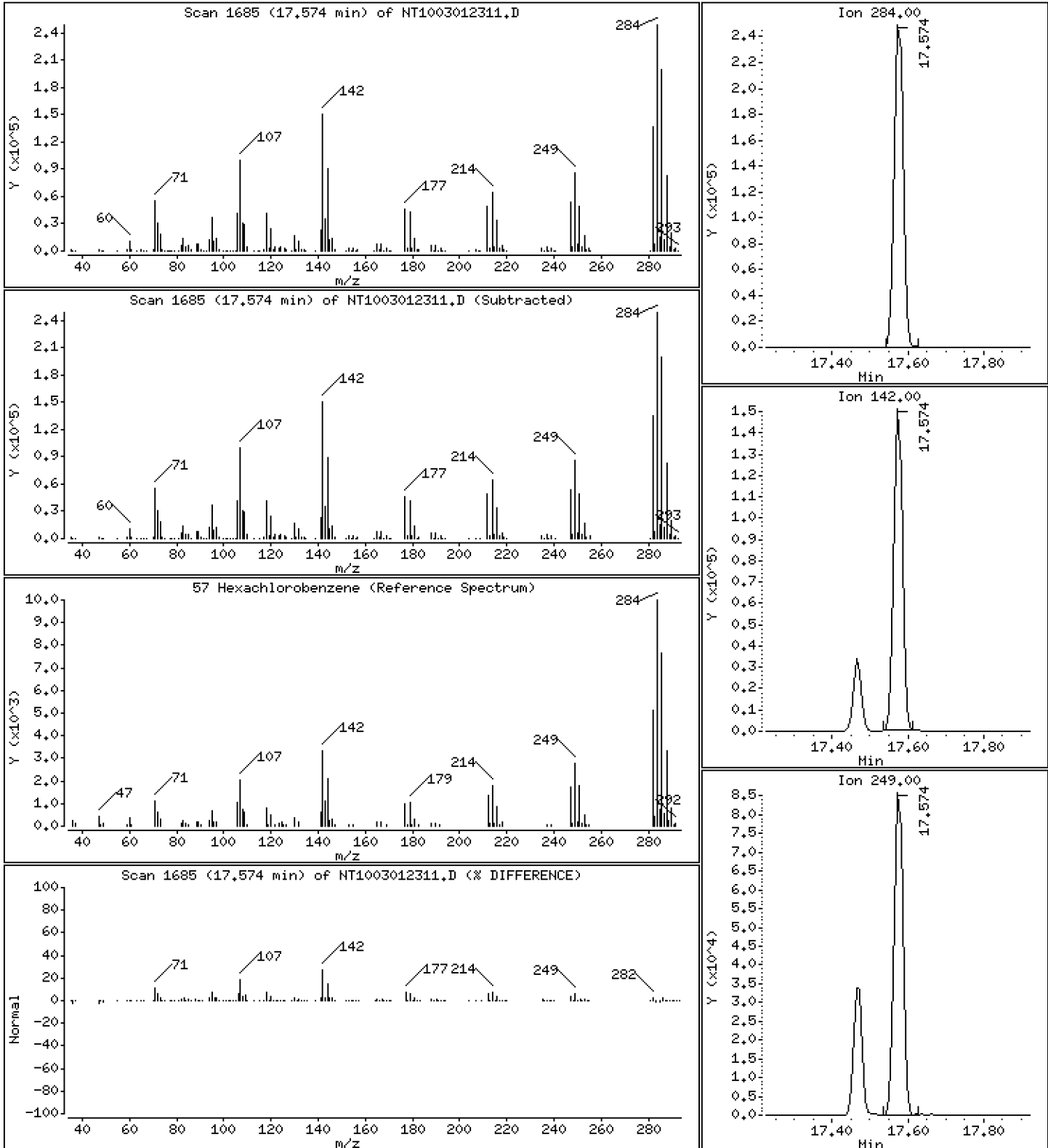
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,805 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

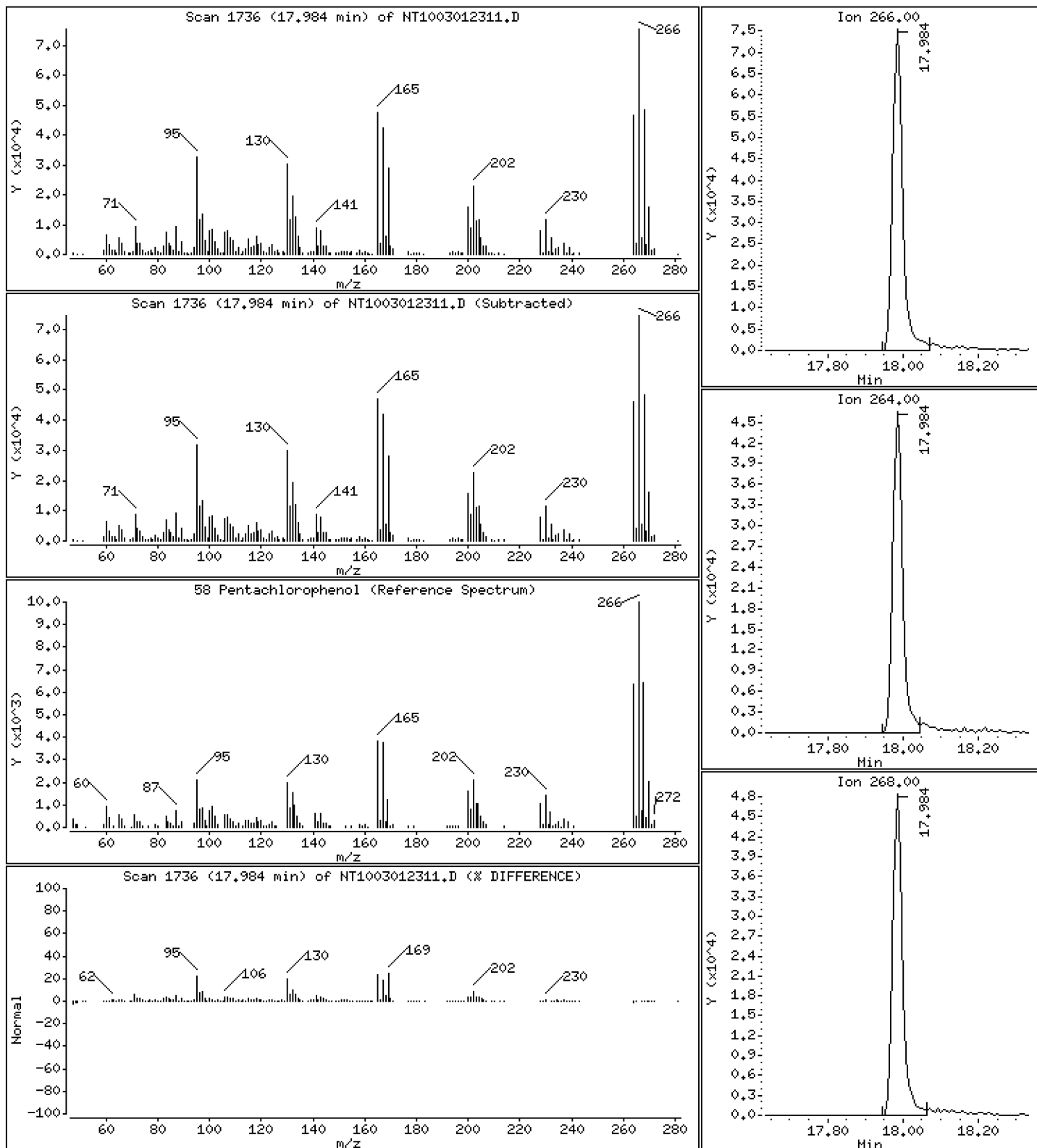
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,492 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

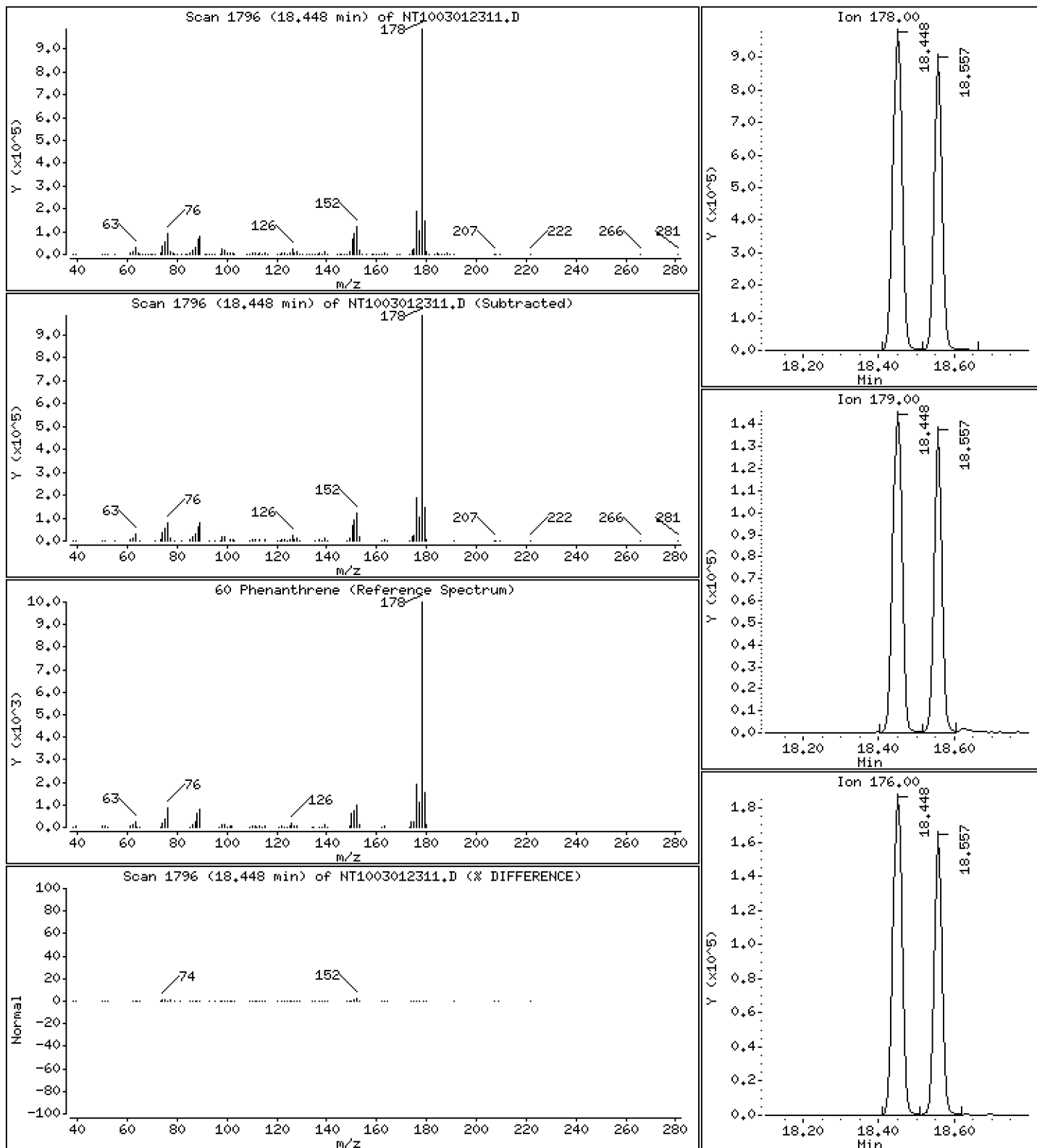
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 5,085 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

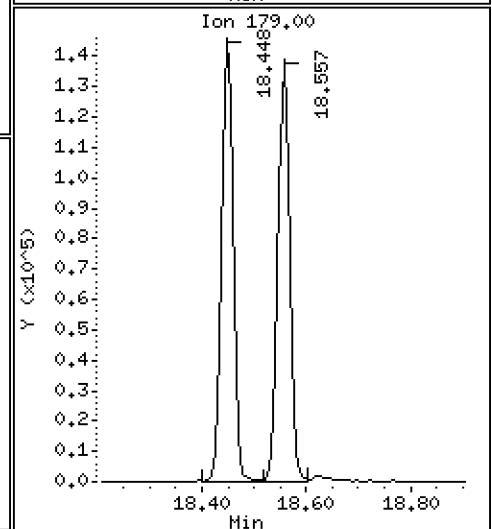
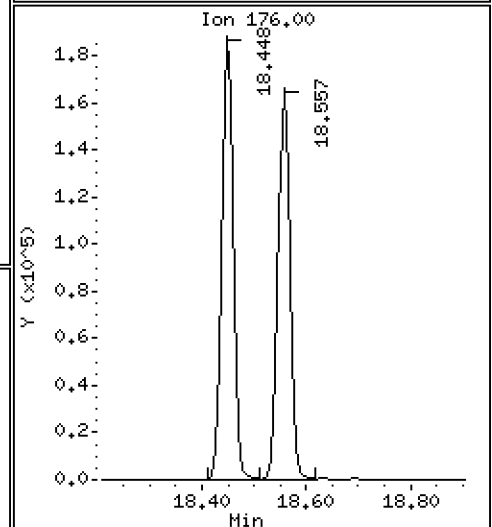
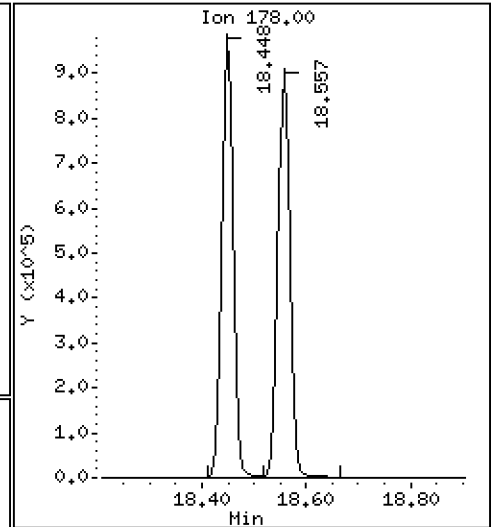
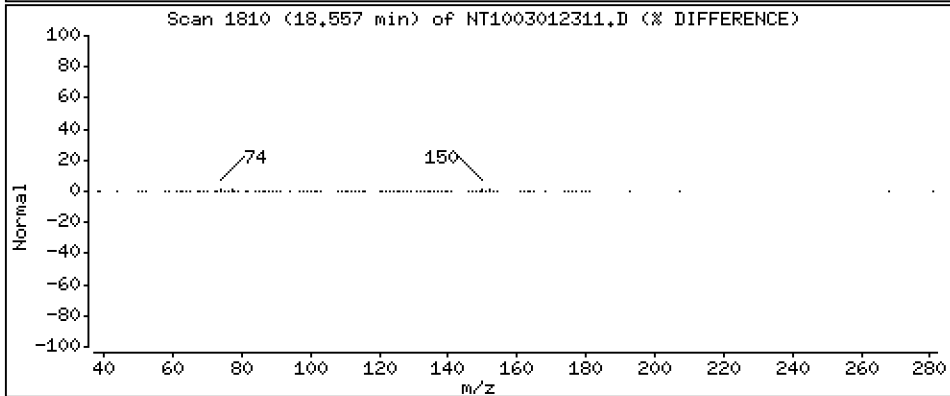
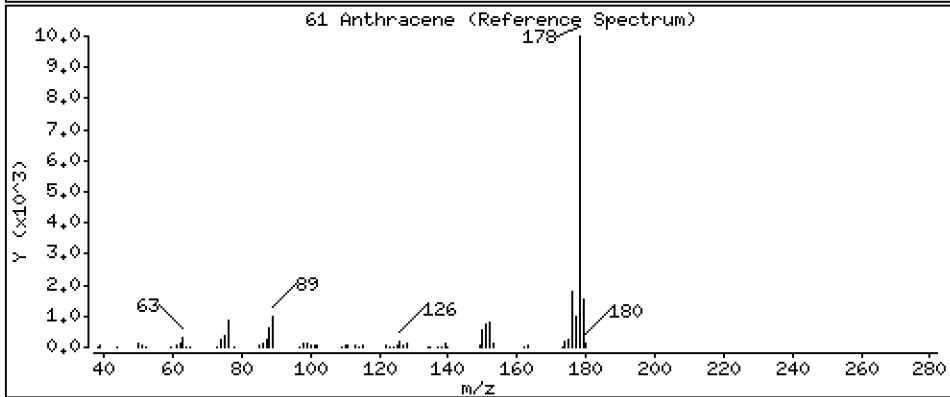
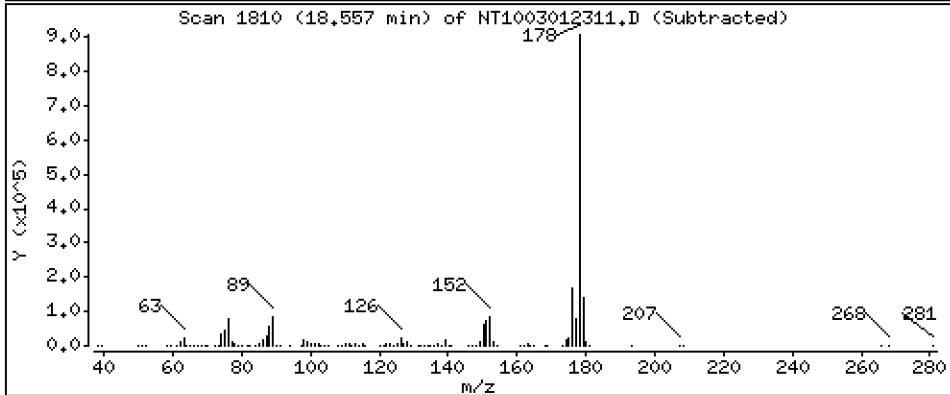
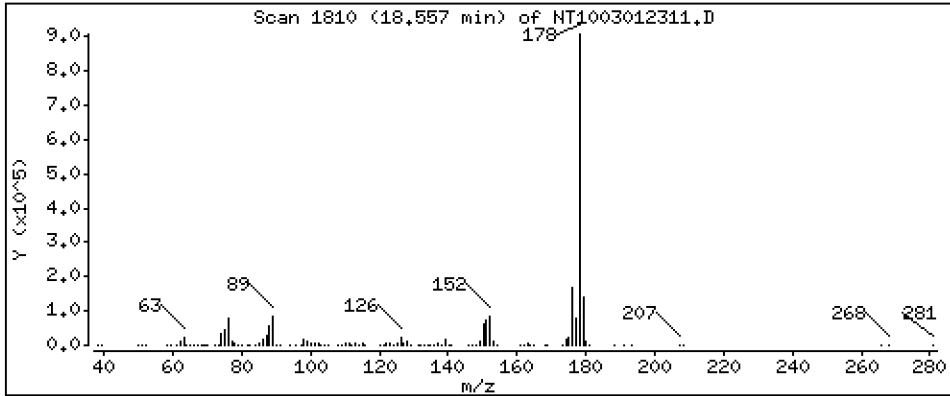
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,585 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

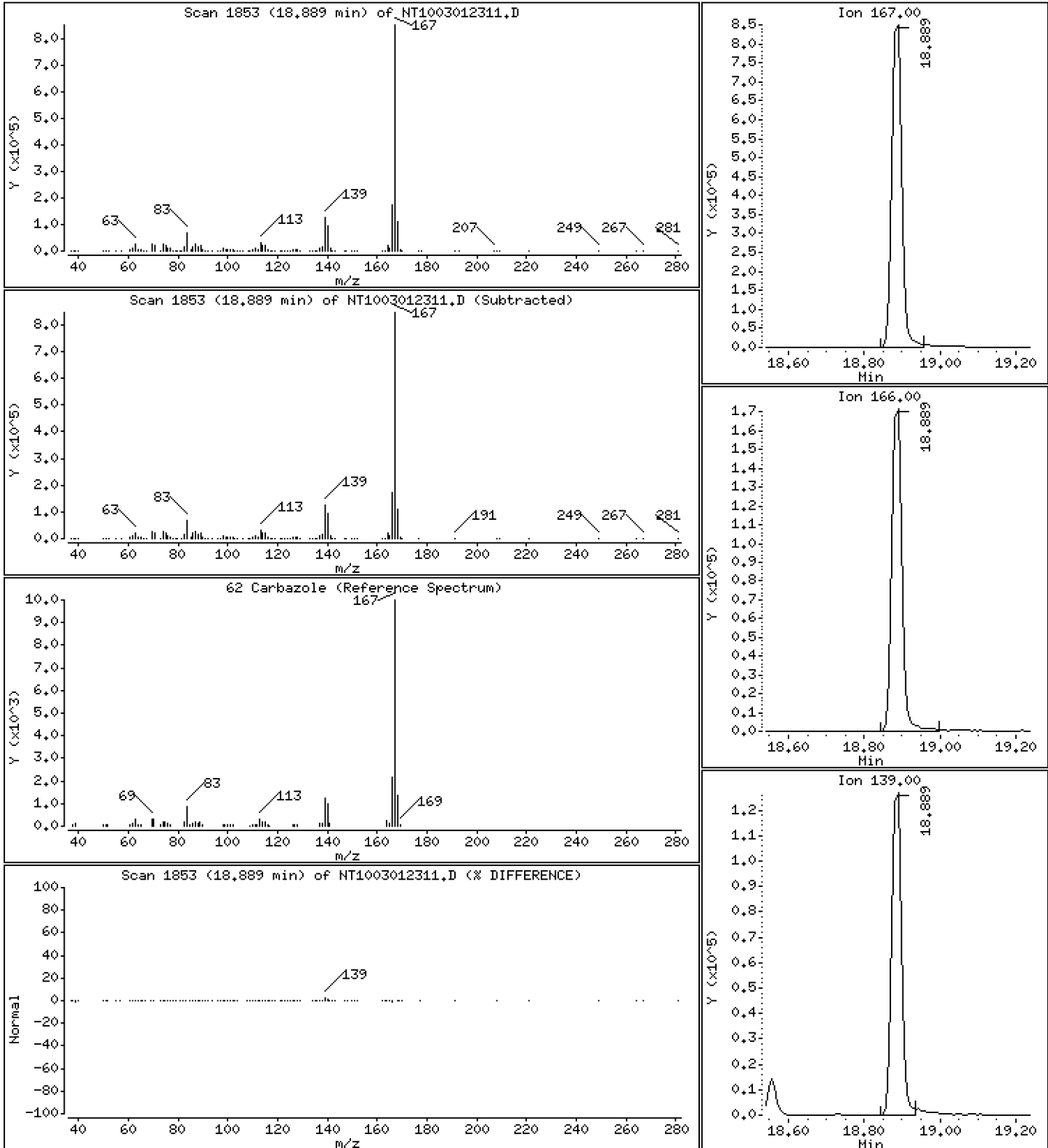
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,335 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

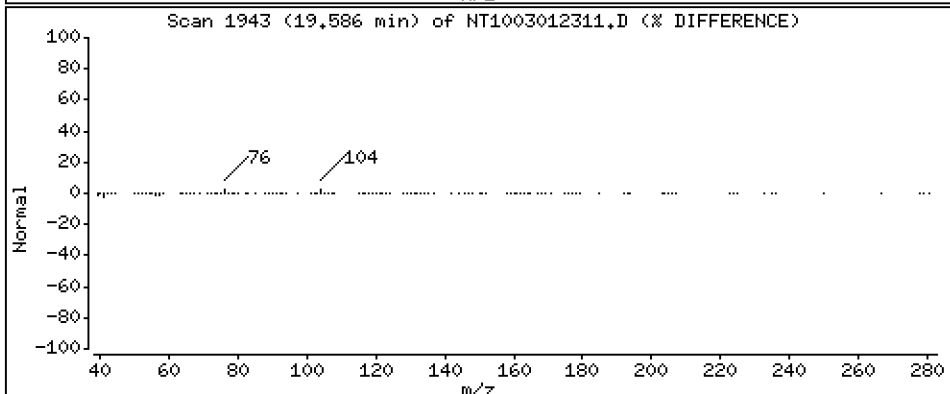
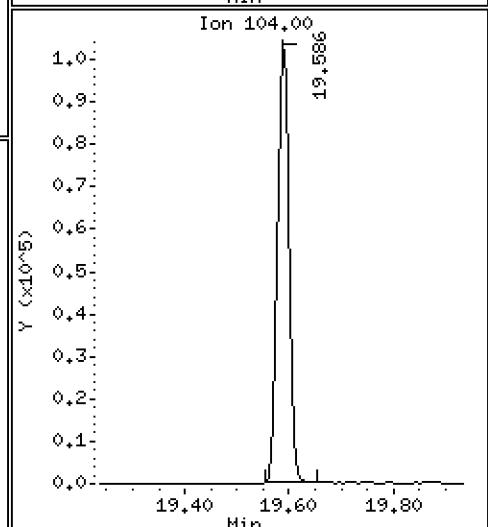
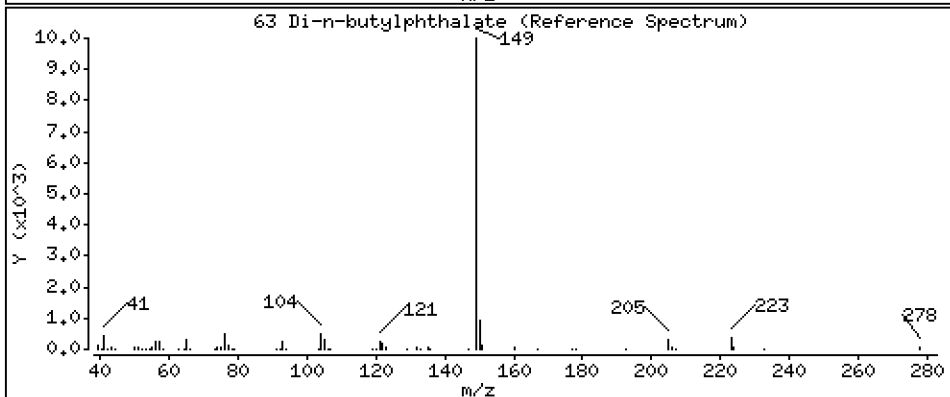
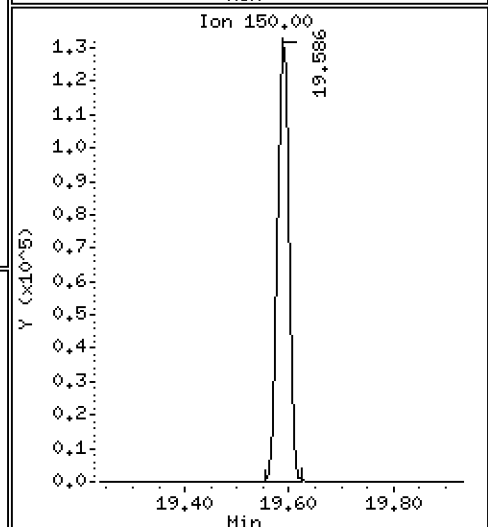
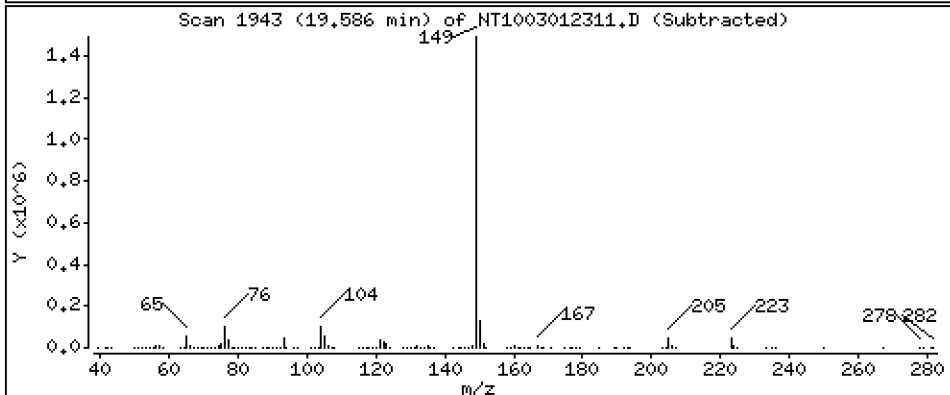
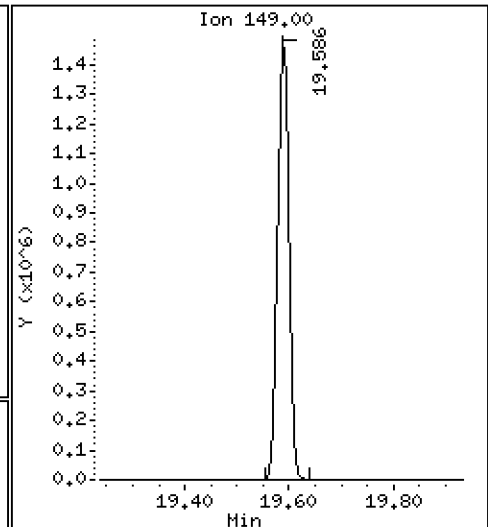
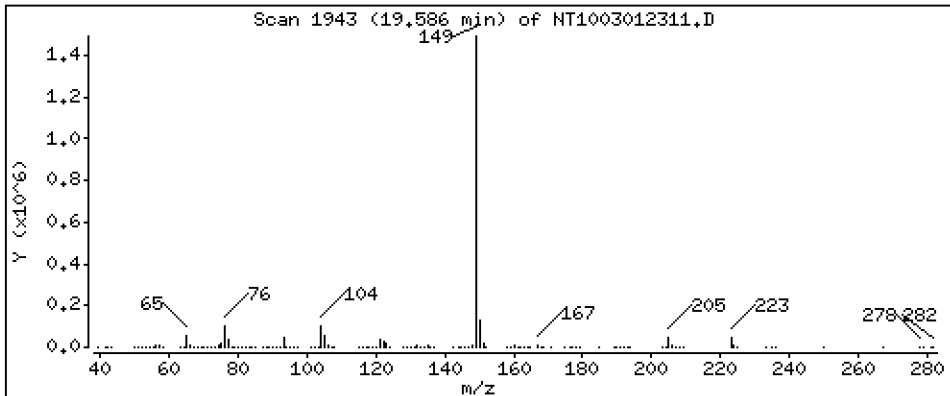
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,463 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

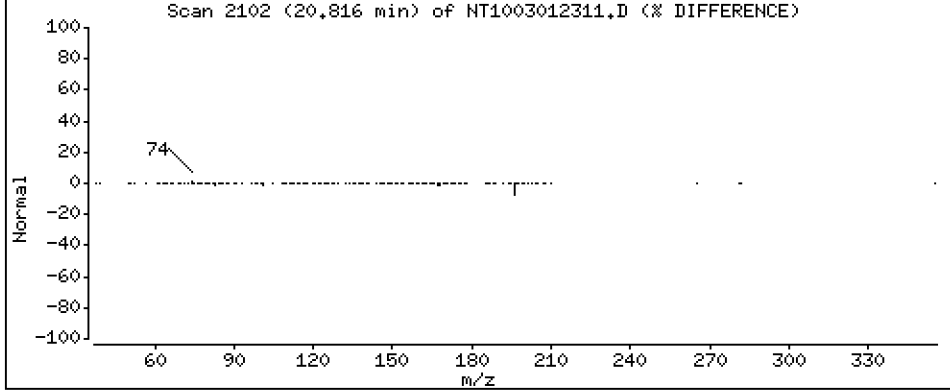
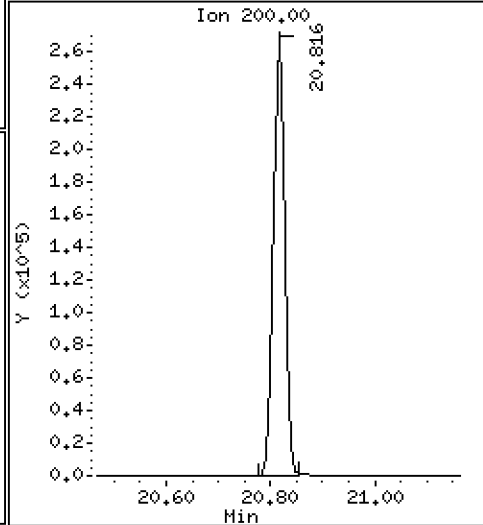
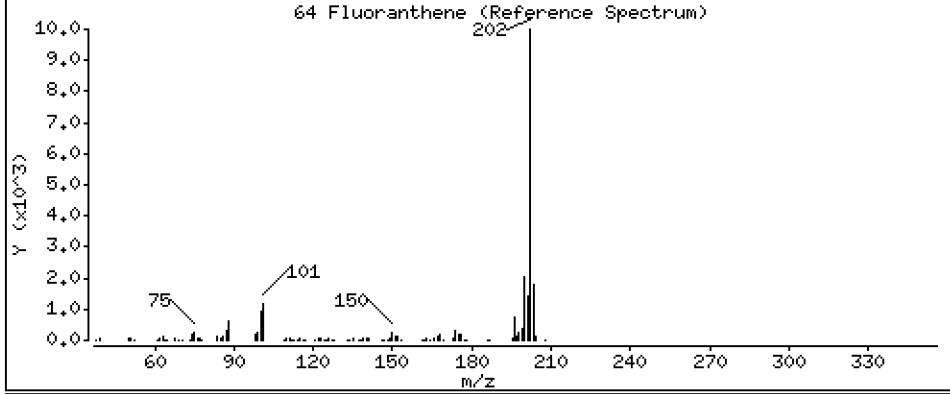
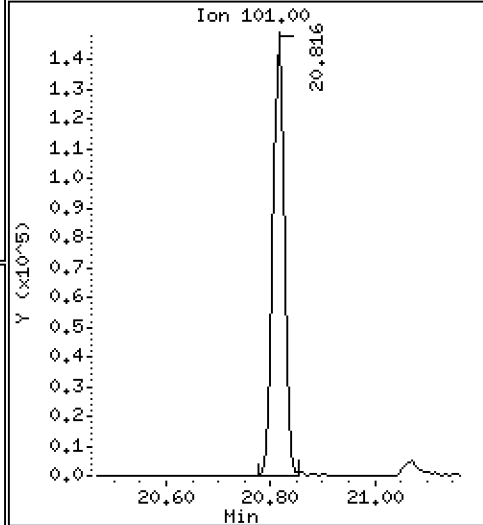
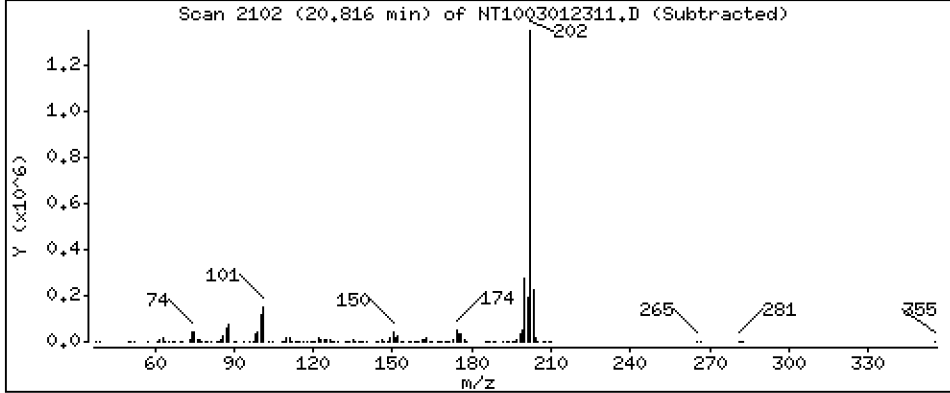
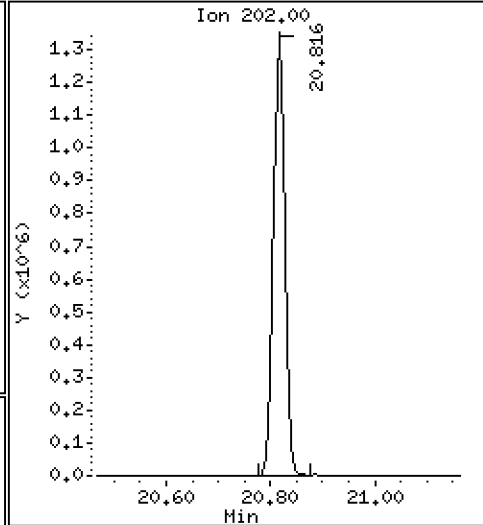
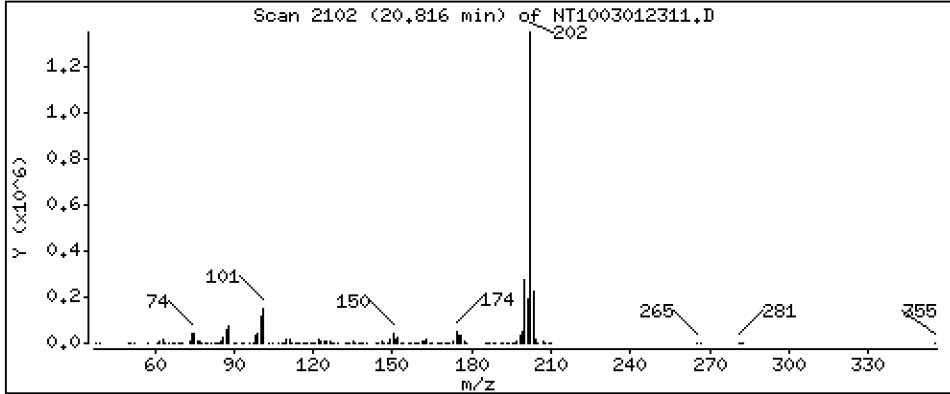
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,542 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

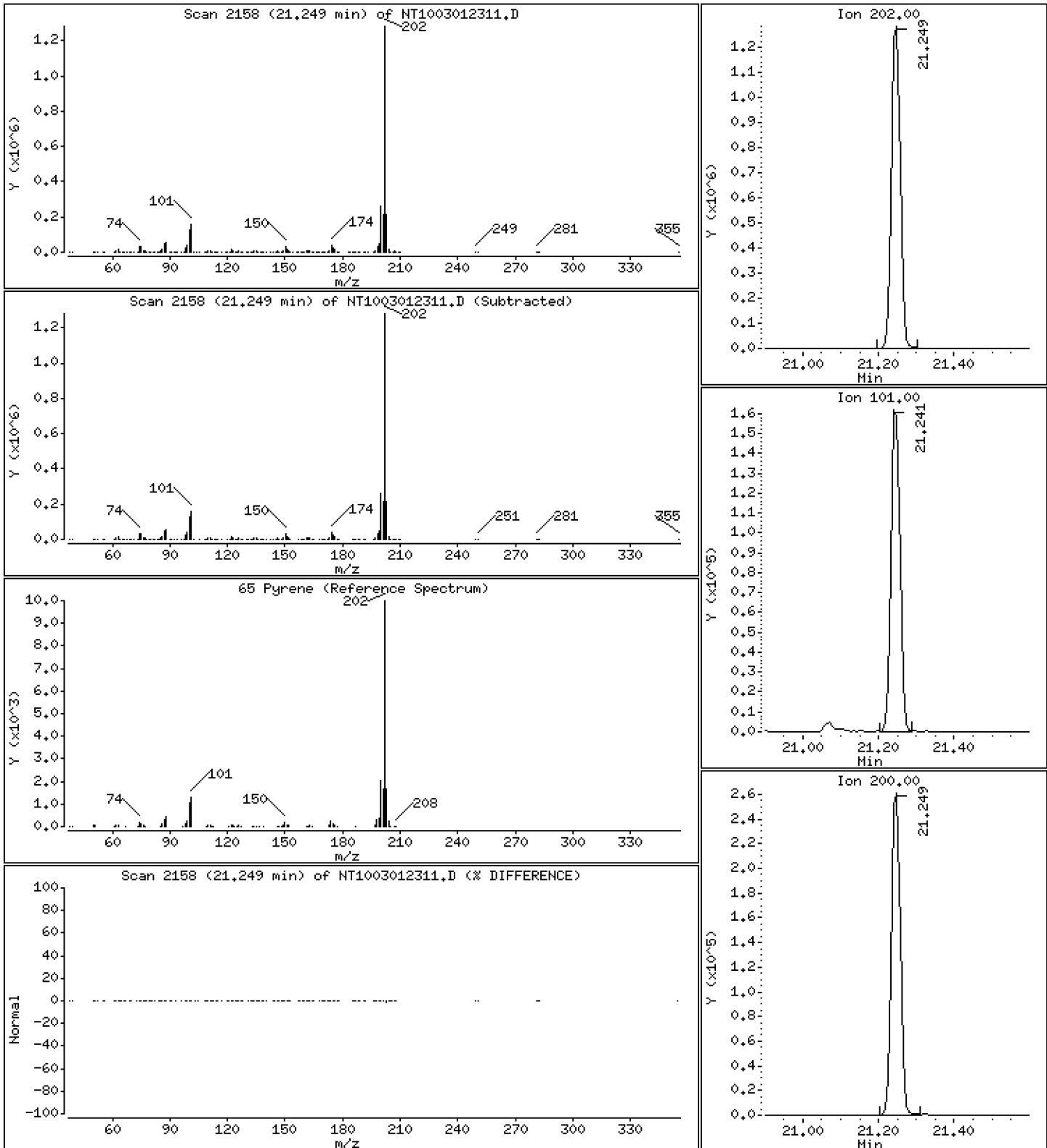
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,626 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

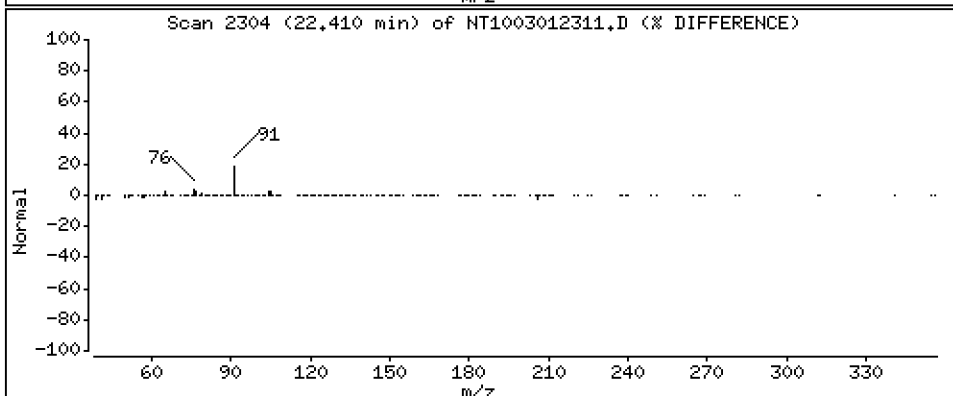
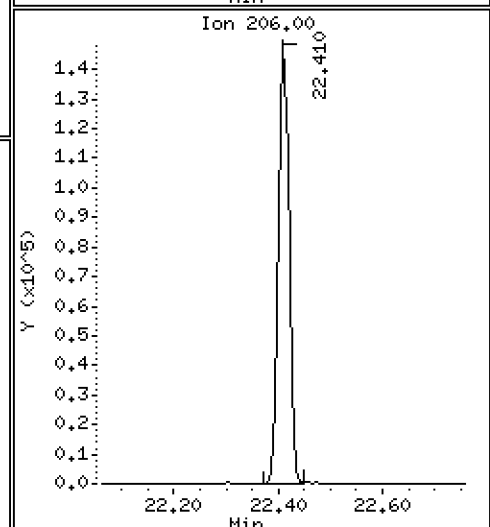
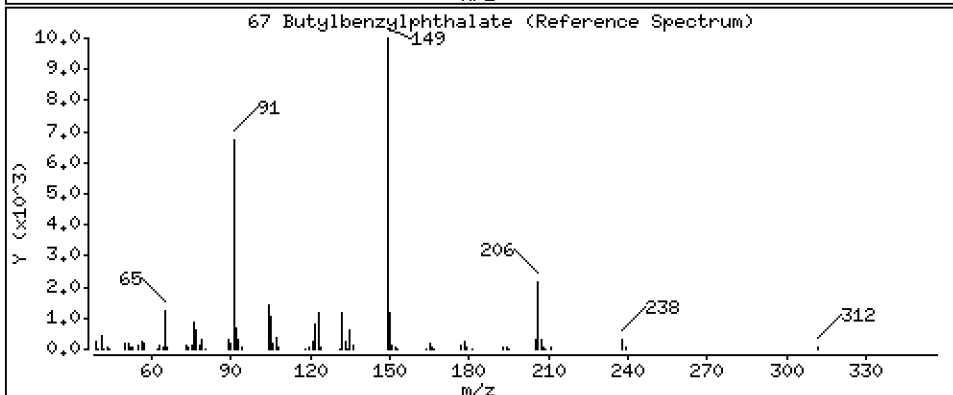
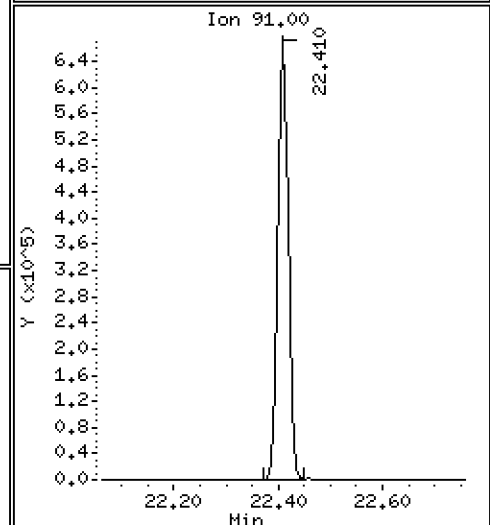
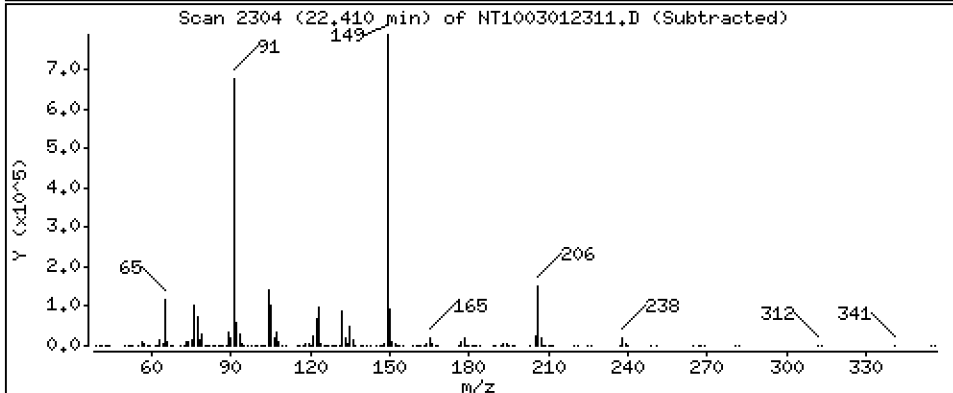
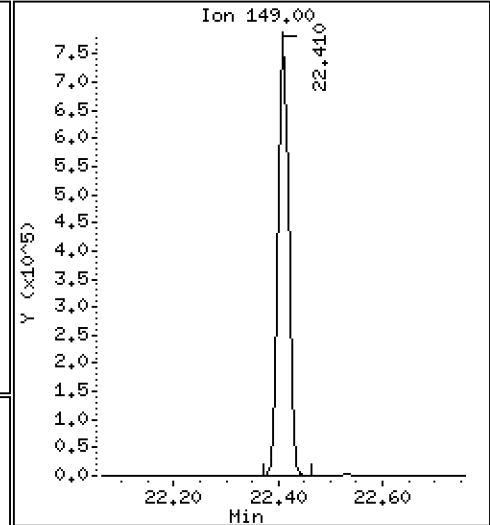
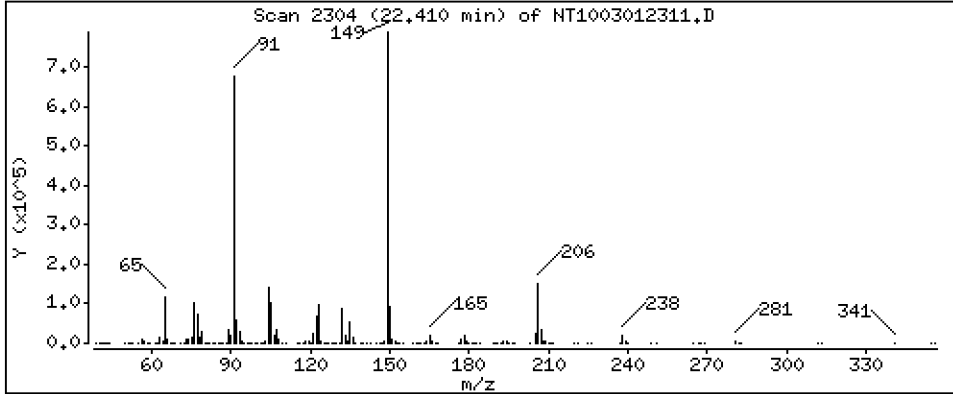
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,525 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

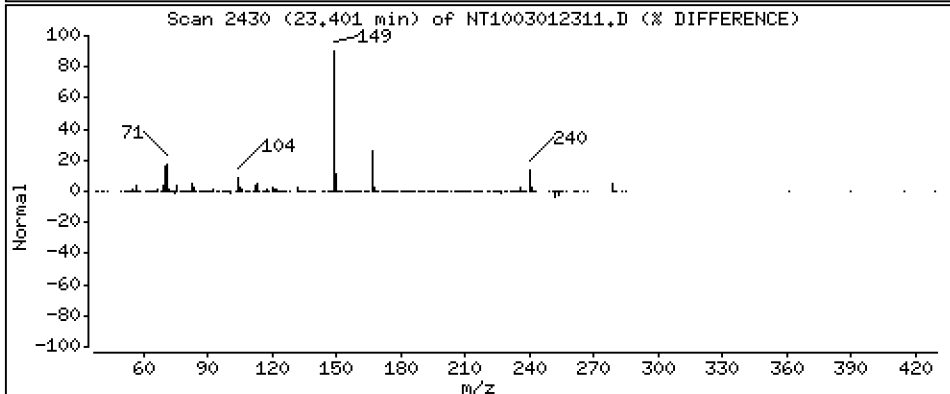
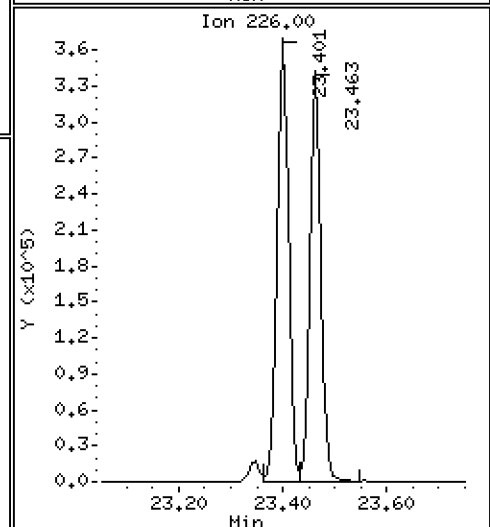
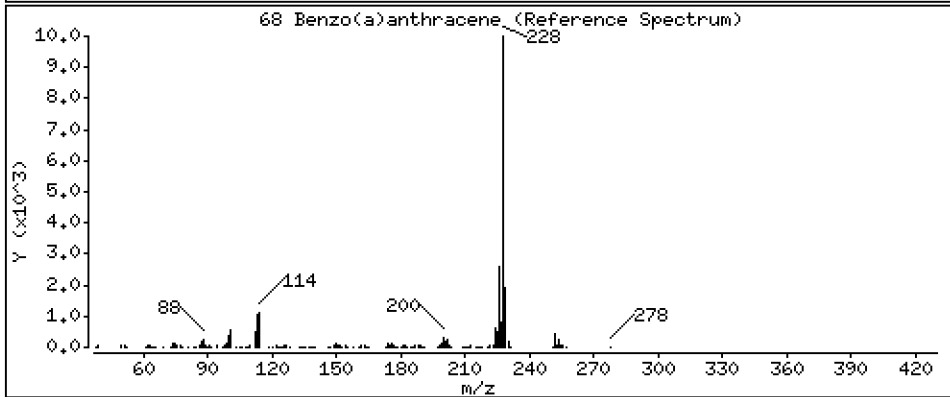
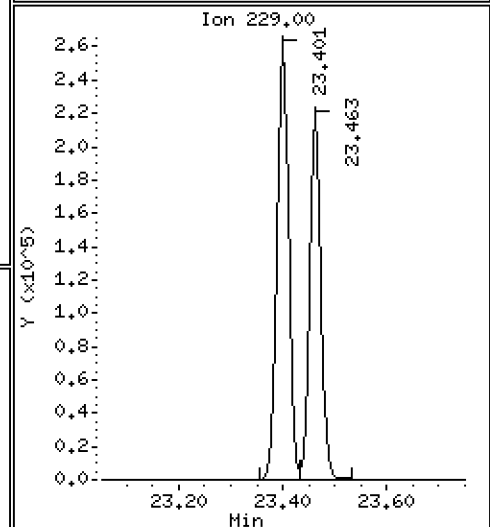
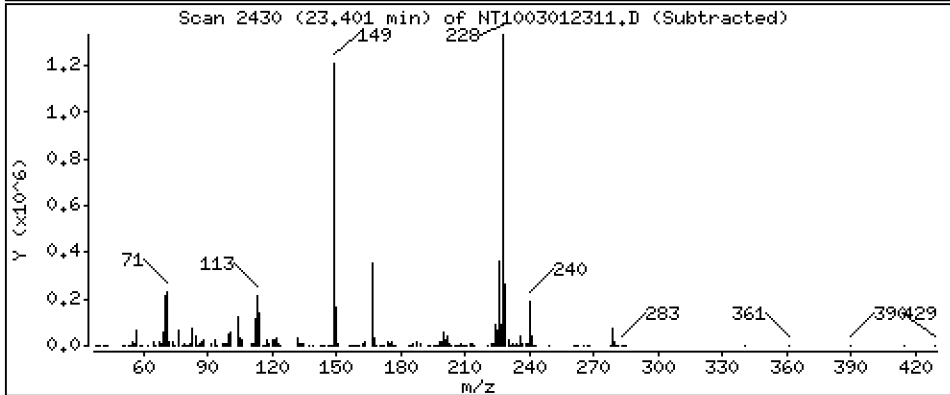
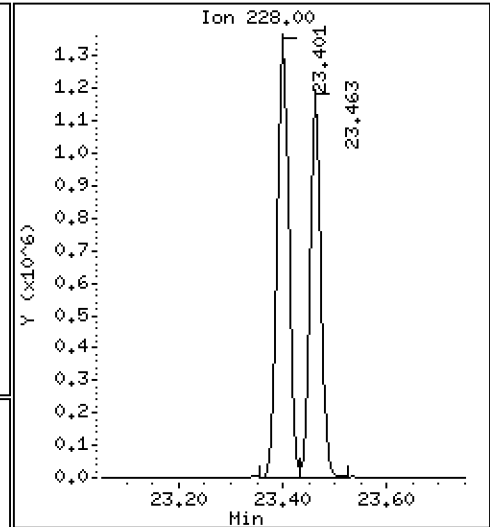
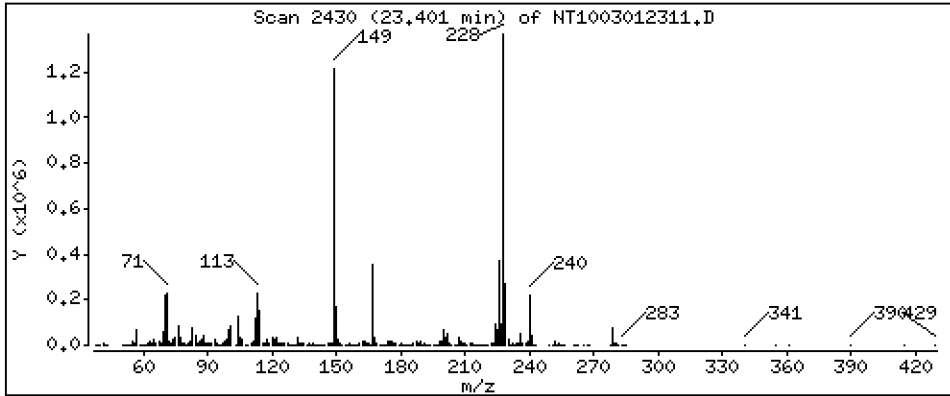
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,578 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

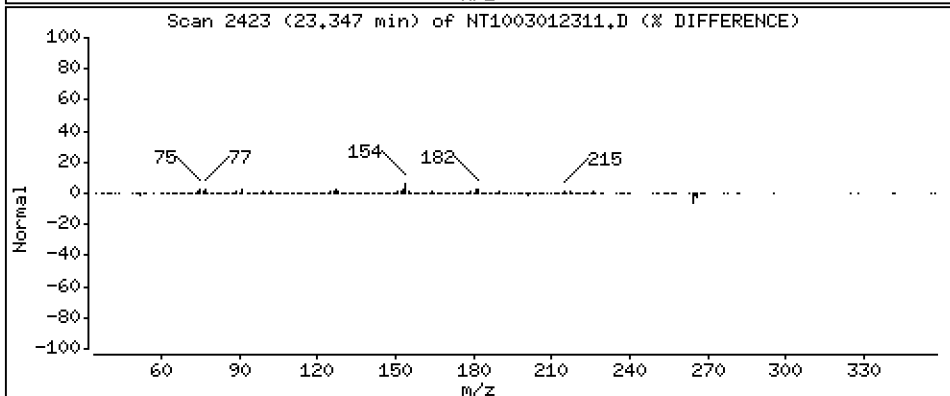
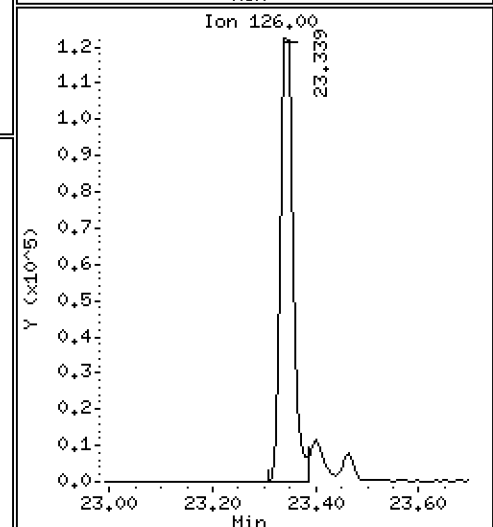
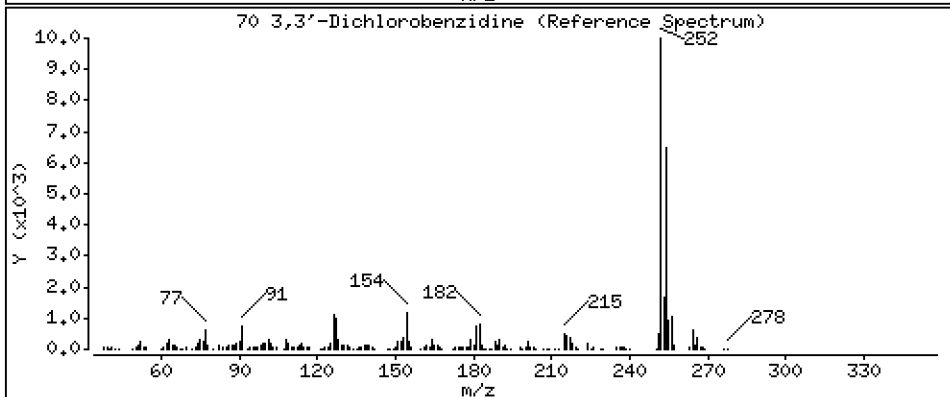
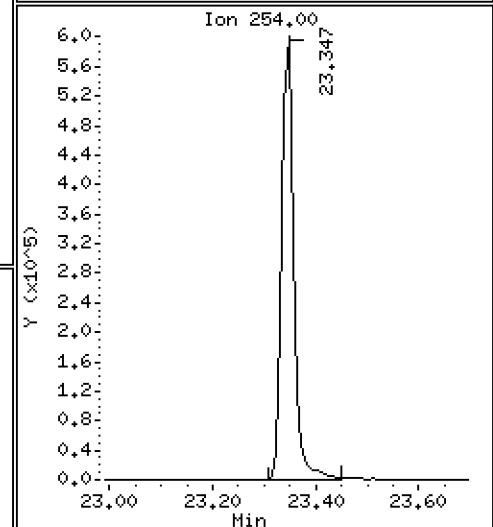
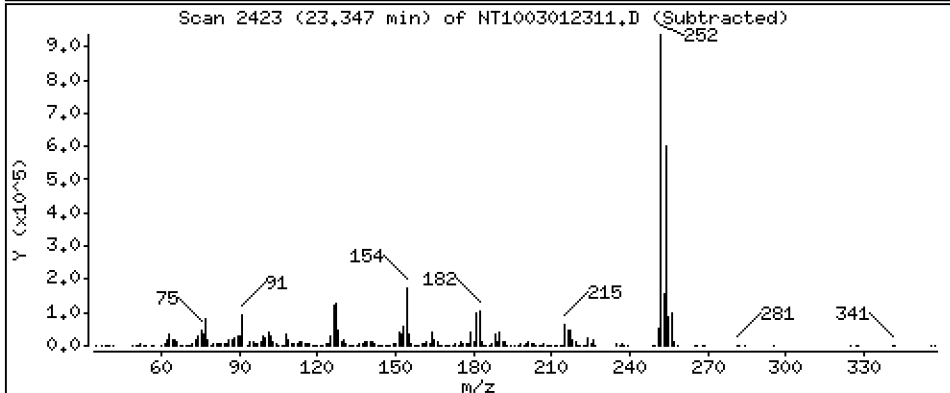
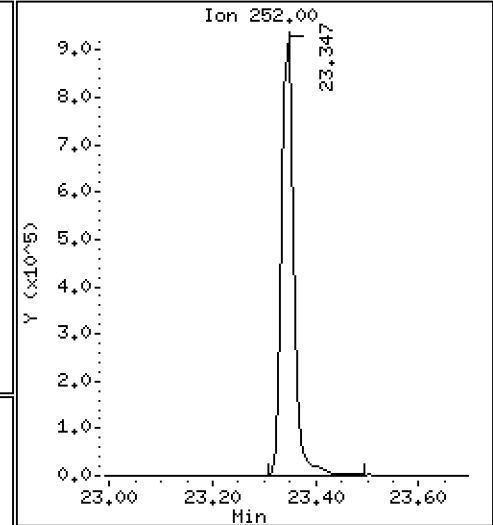
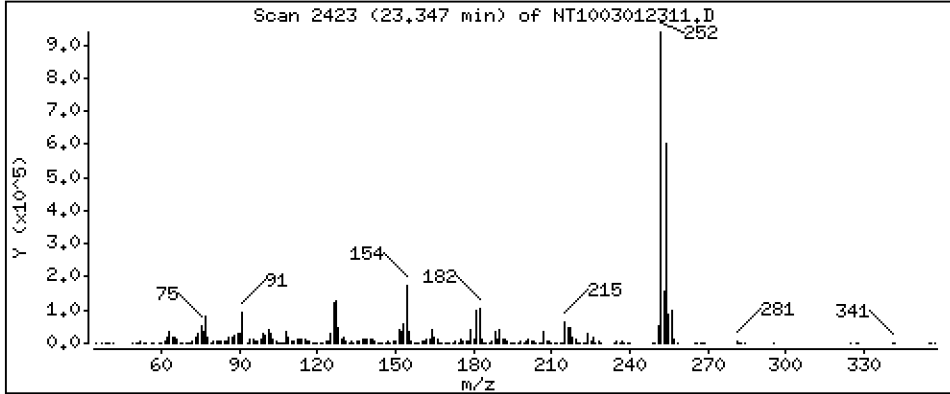
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 7,383 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

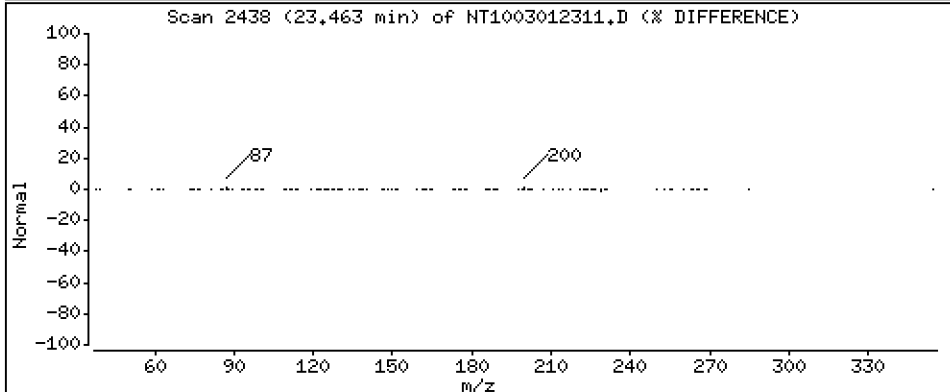
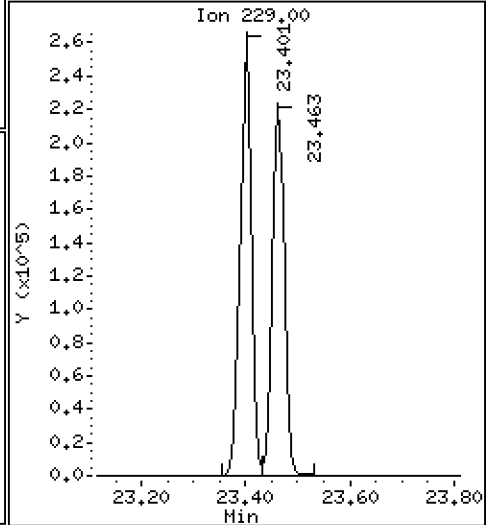
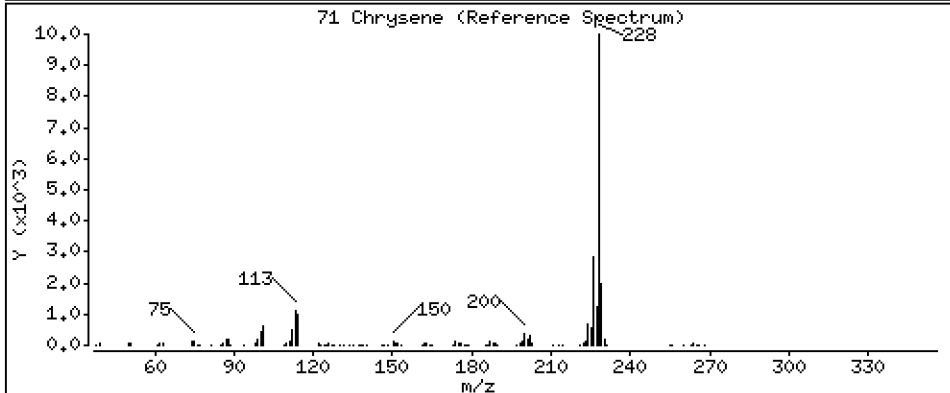
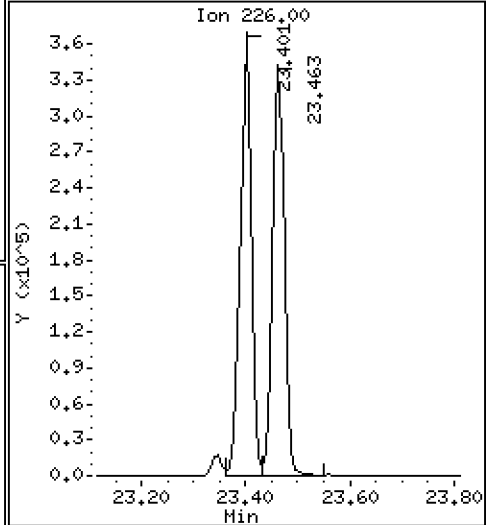
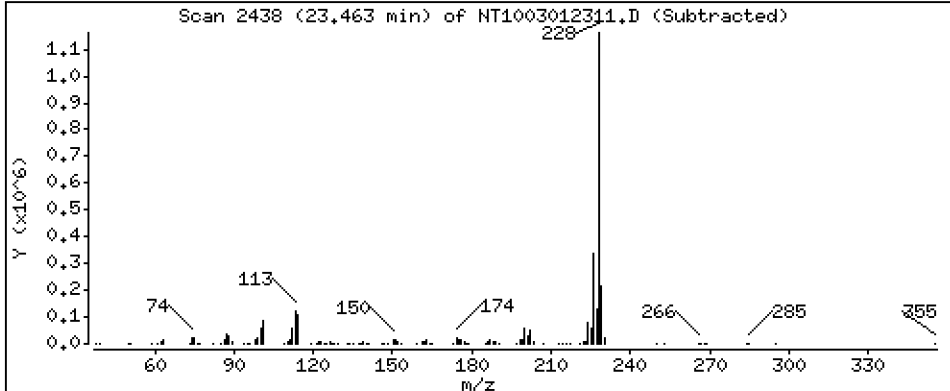
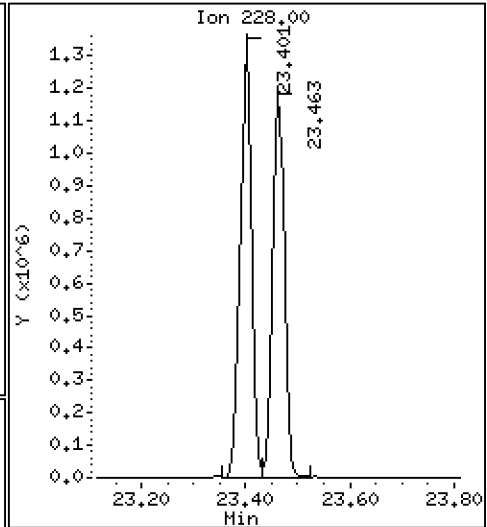
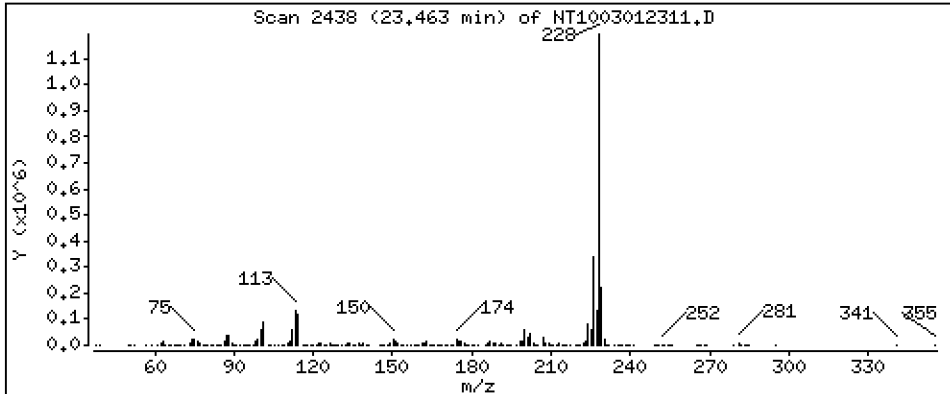
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,967 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

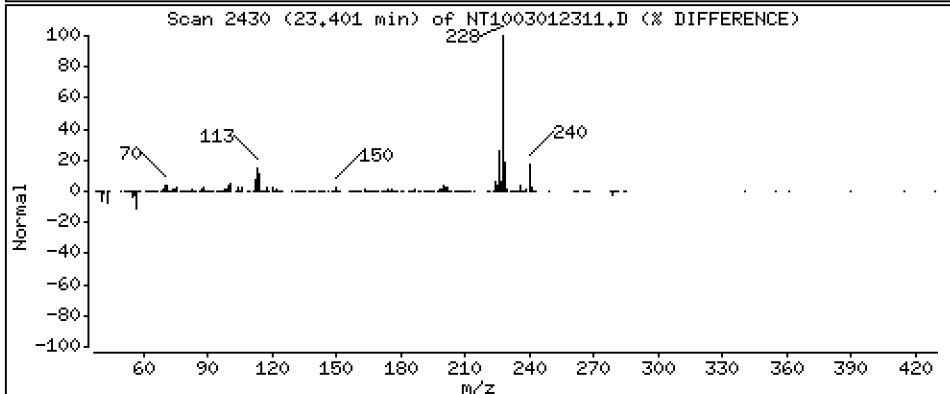
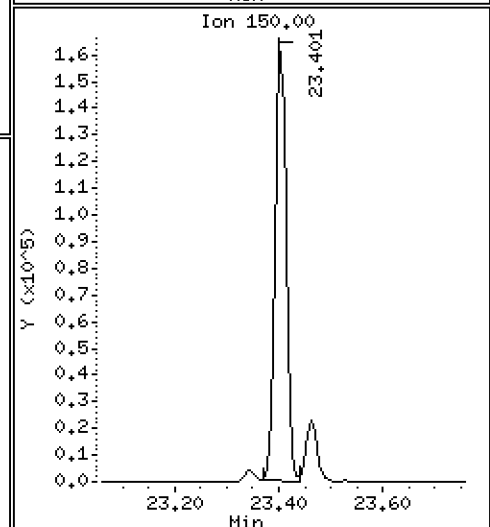
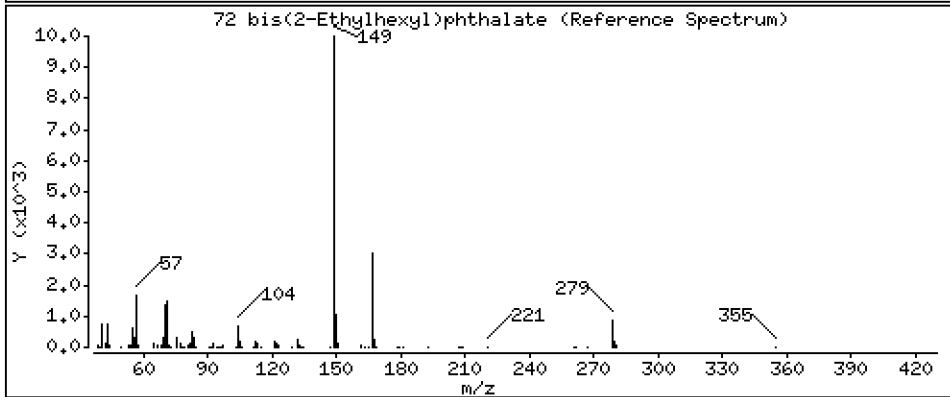
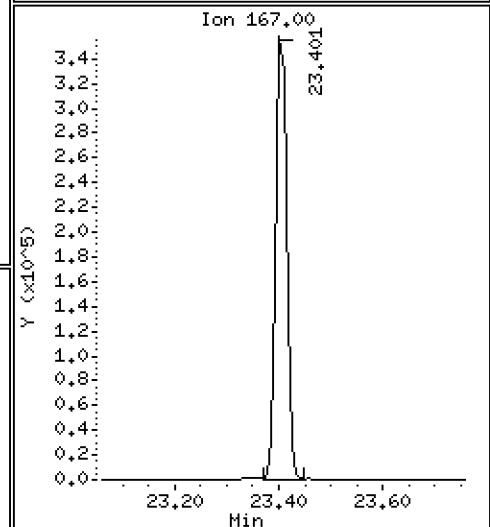
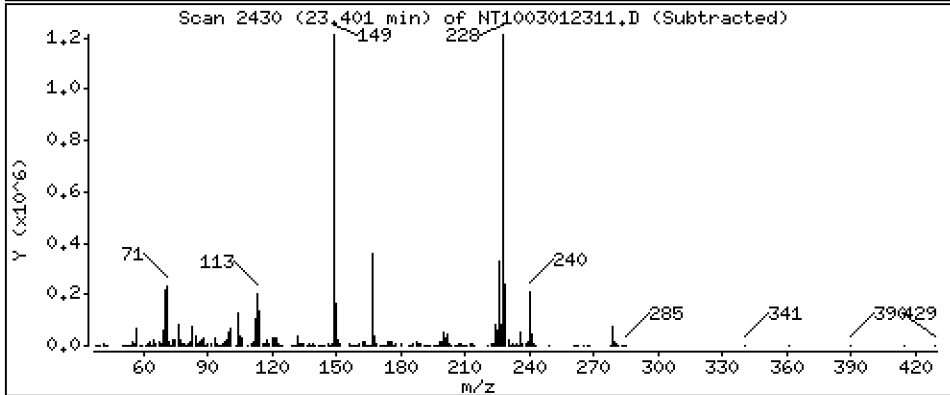
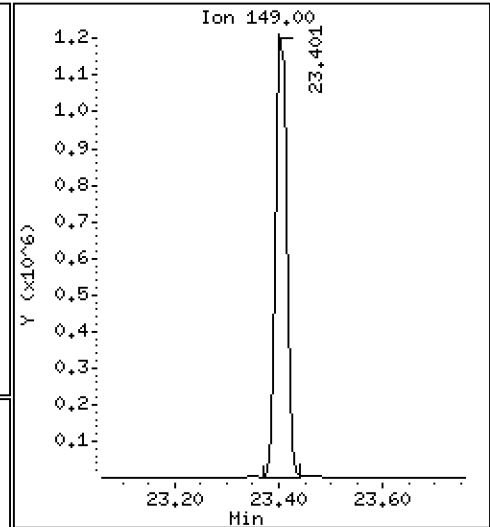
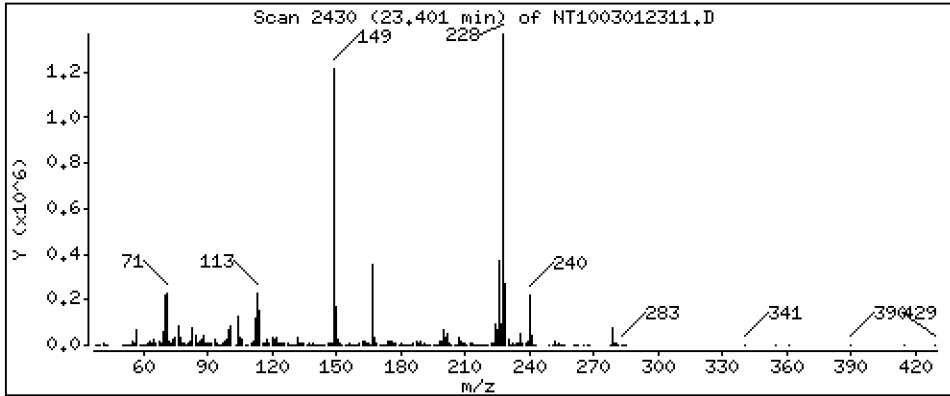
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,956 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

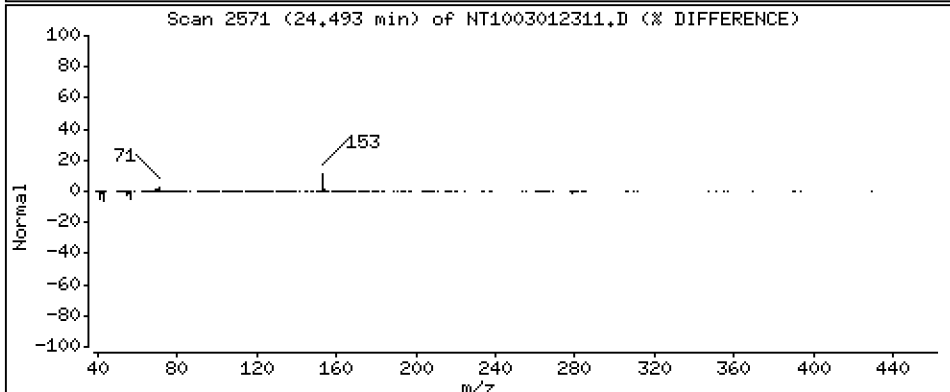
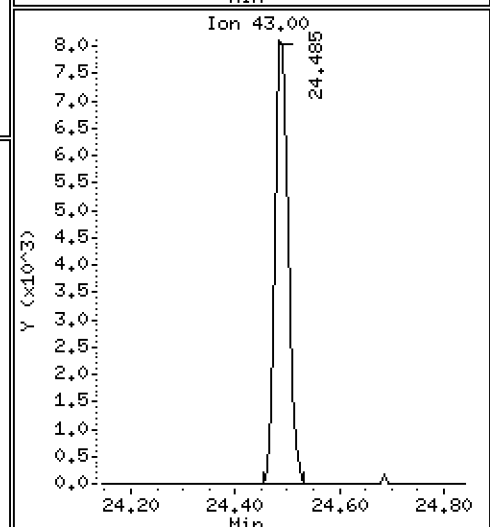
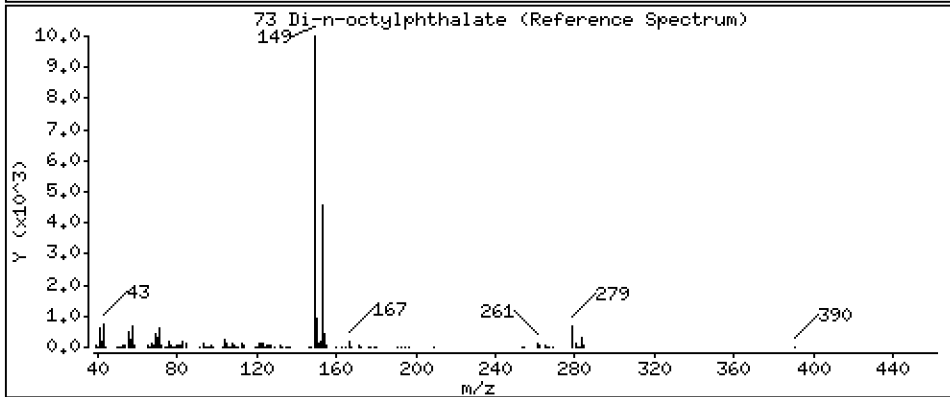
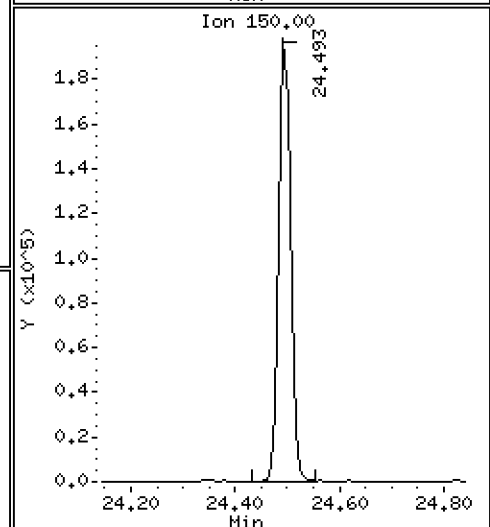
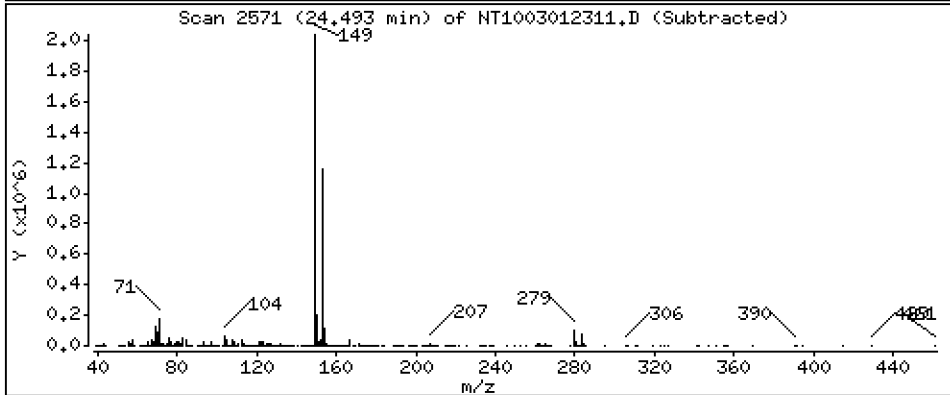
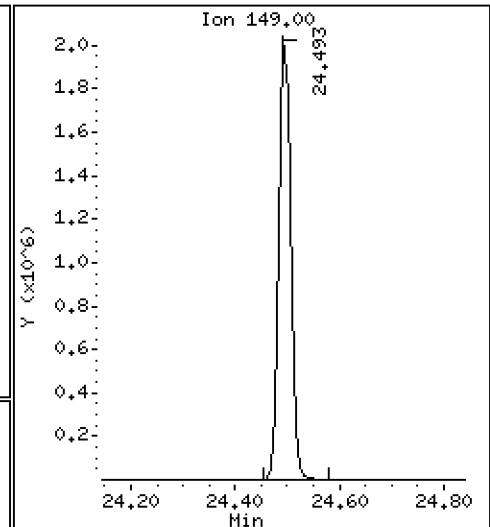
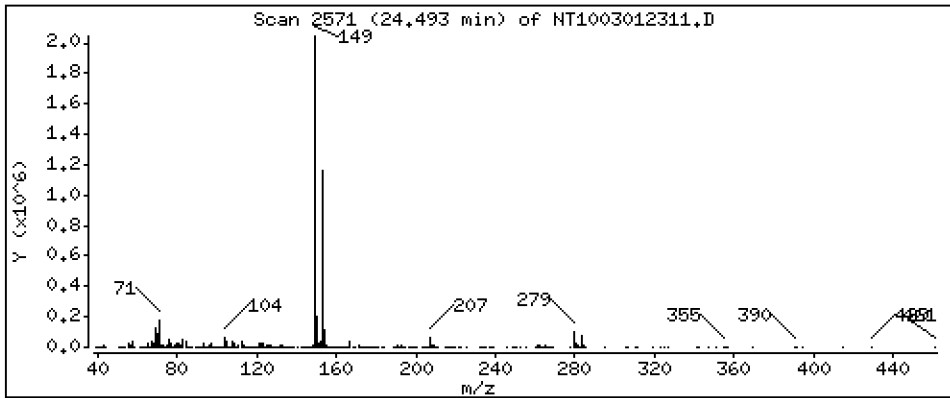
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,844 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

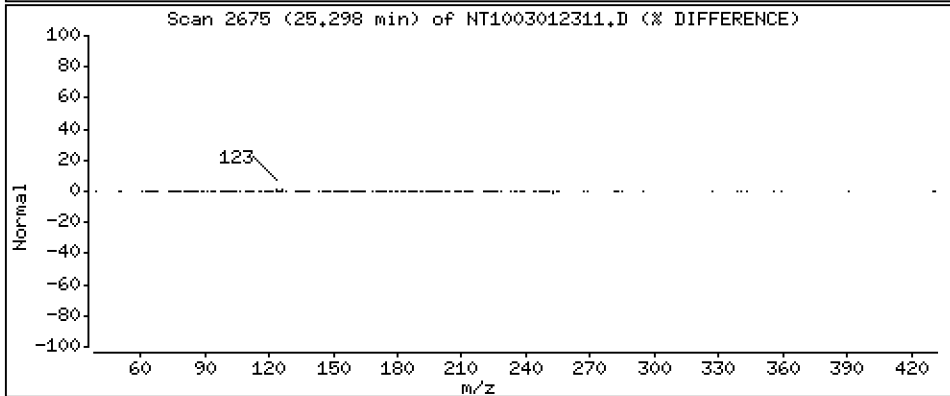
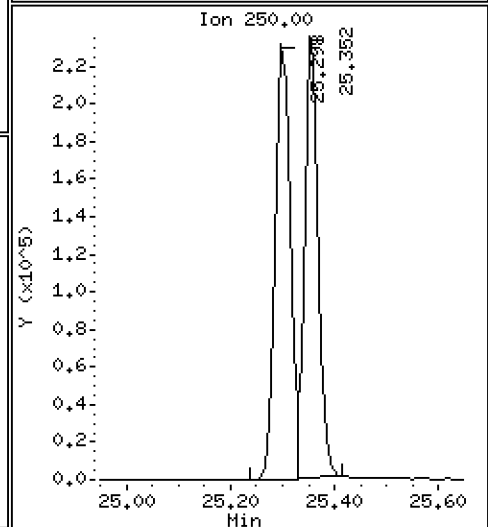
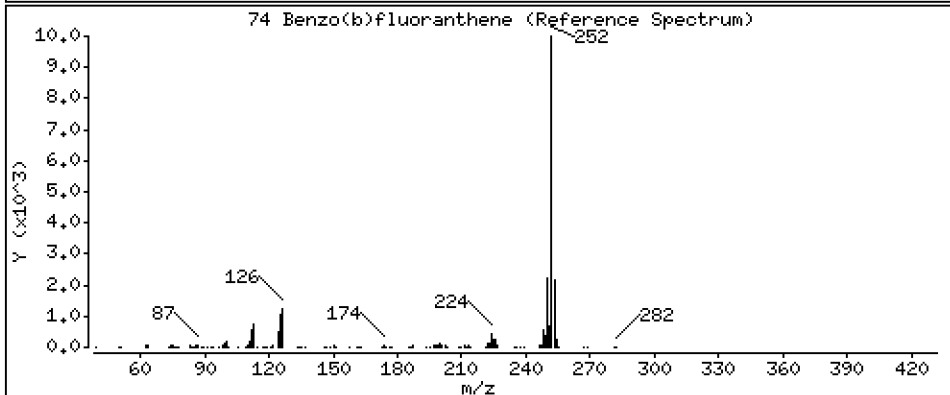
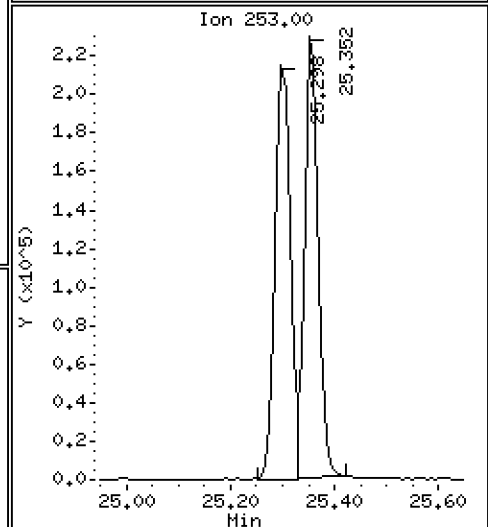
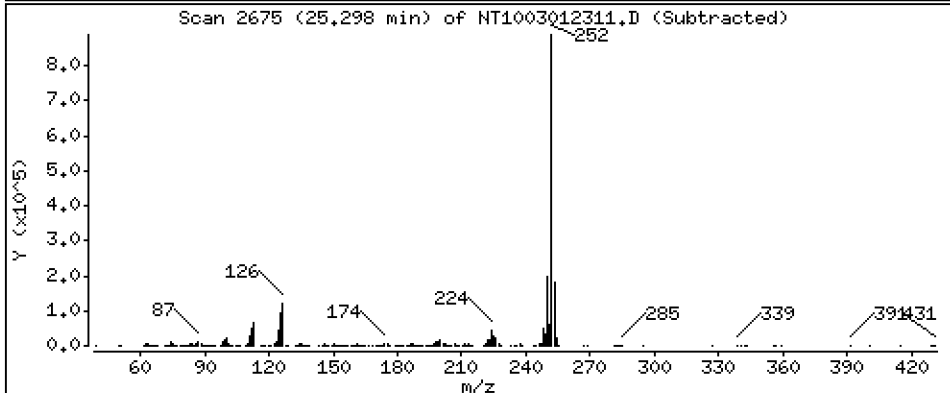
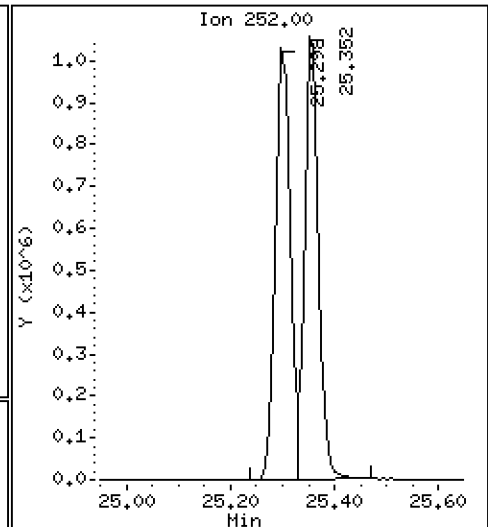
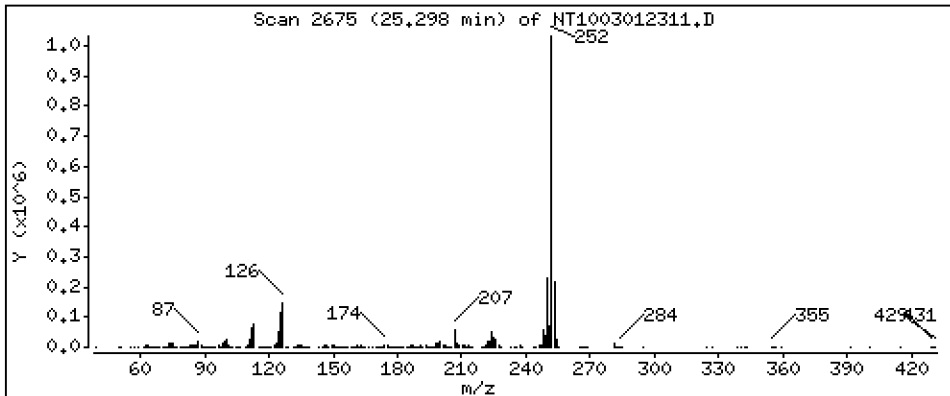
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,319 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

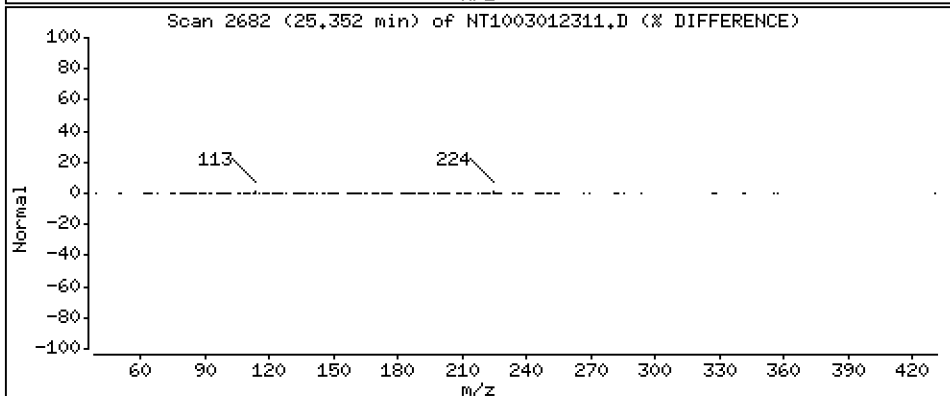
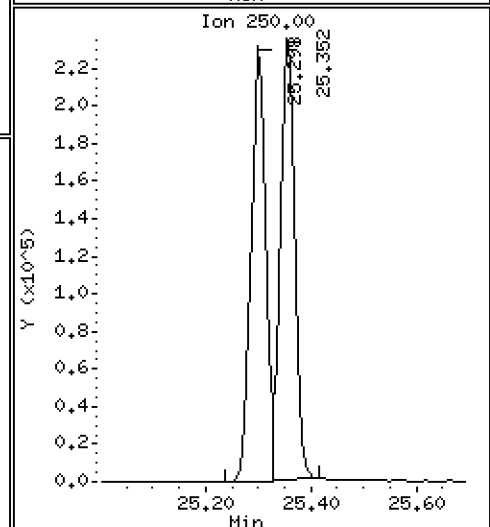
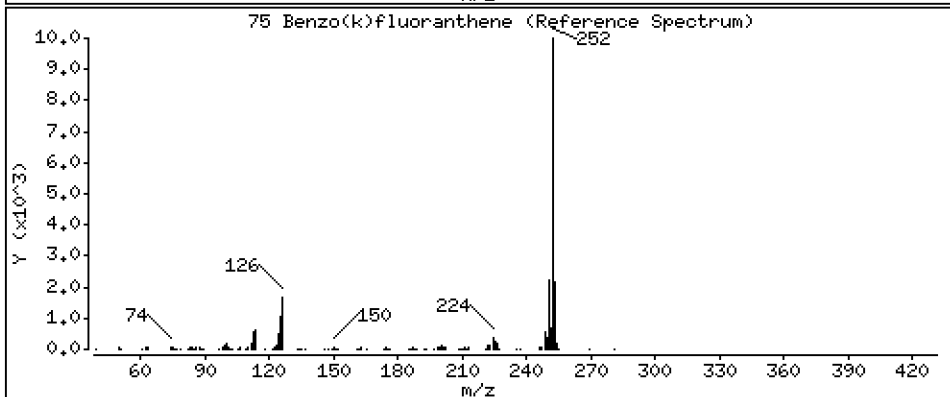
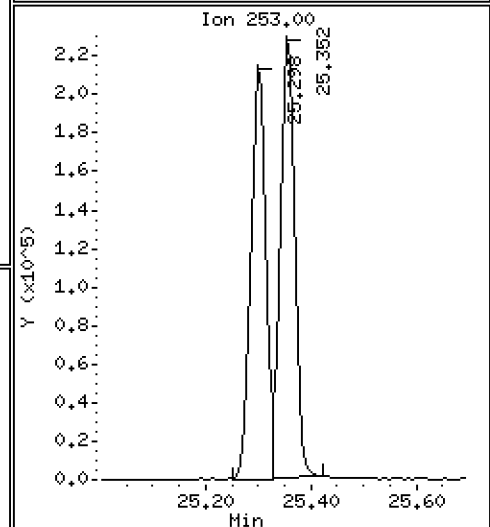
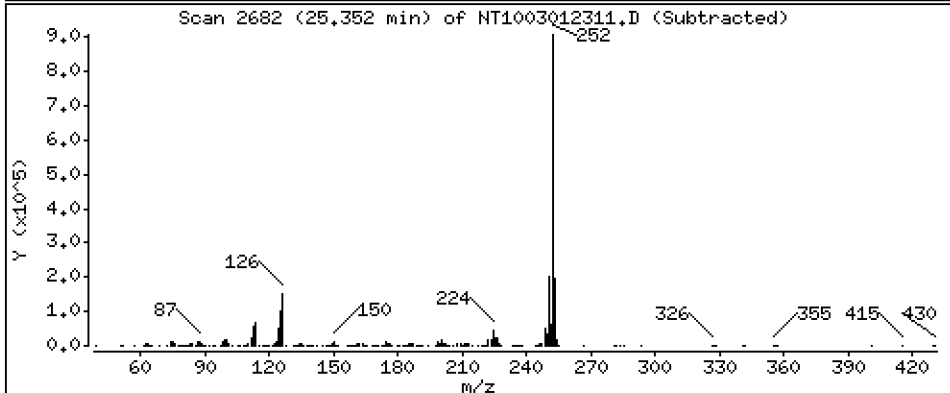
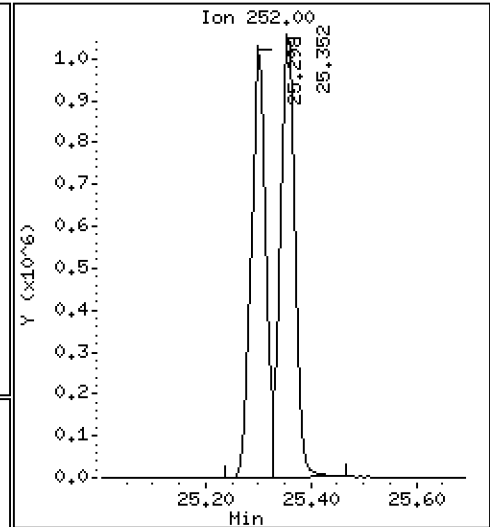
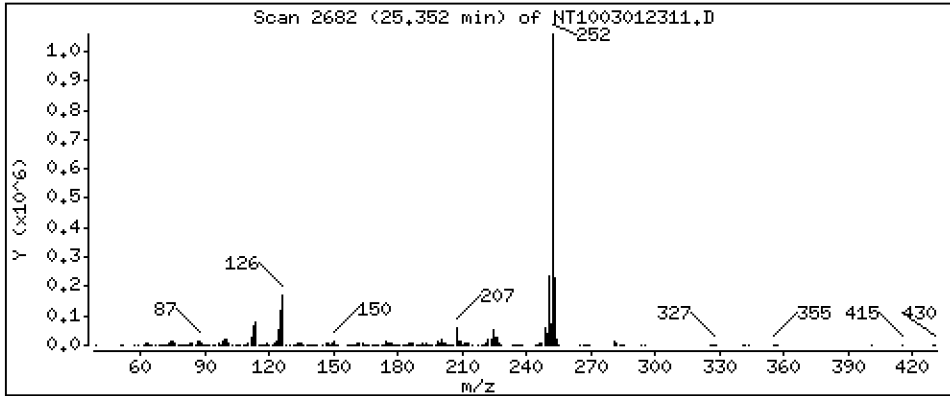
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,563 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

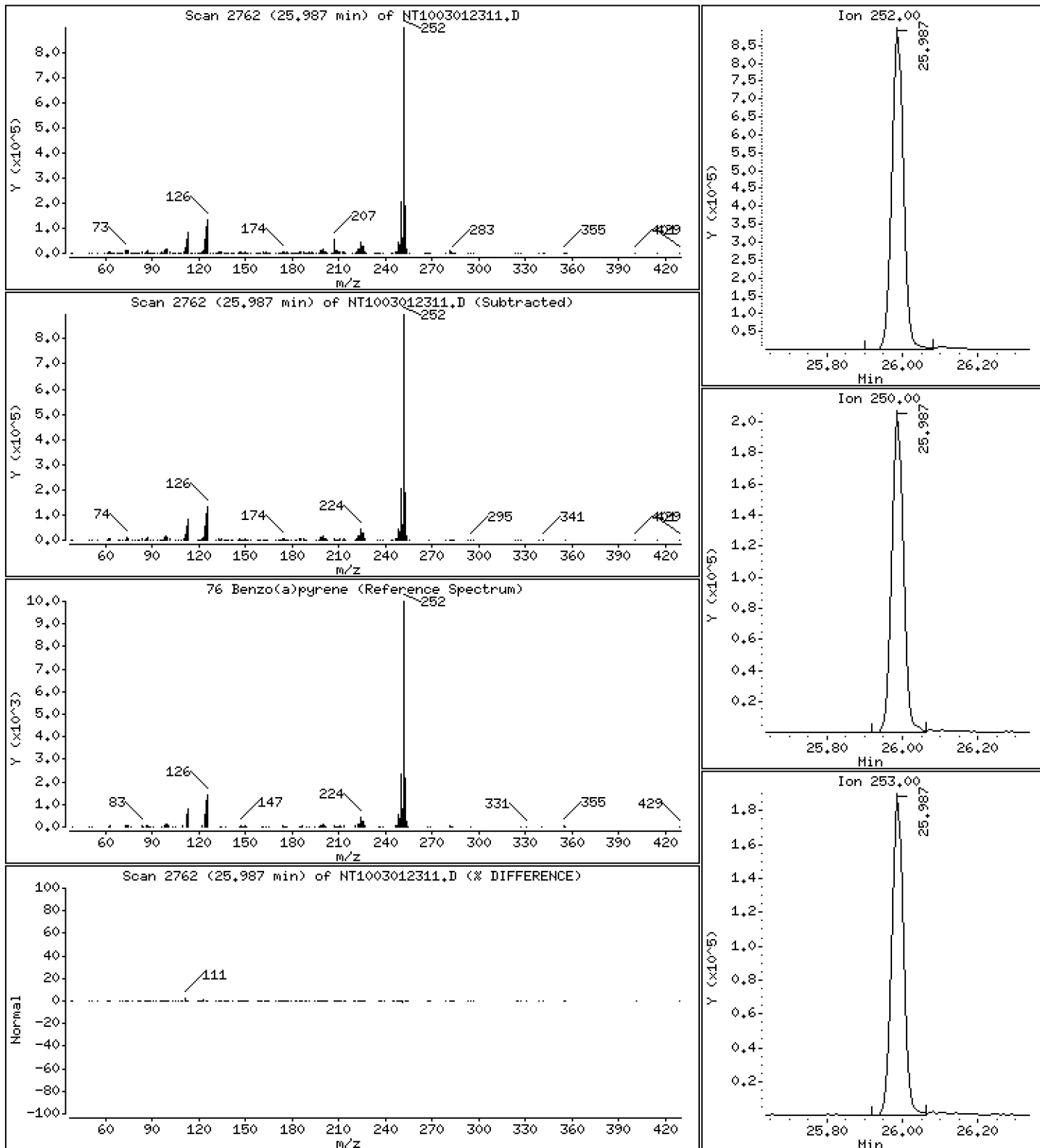
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,445 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

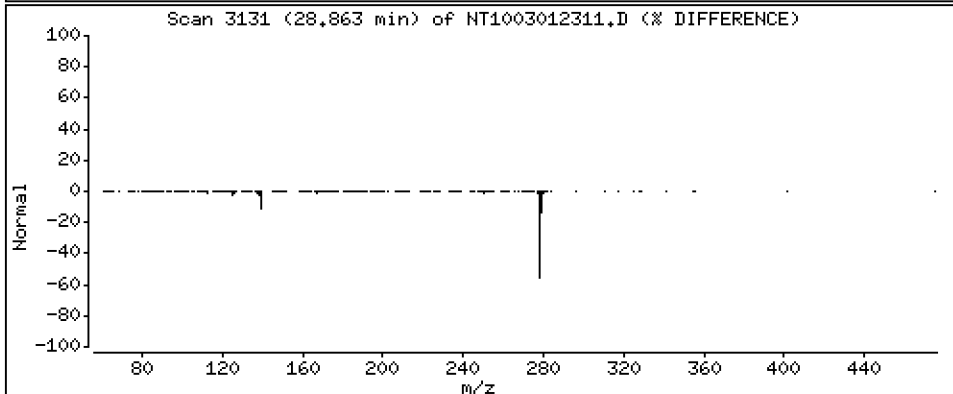
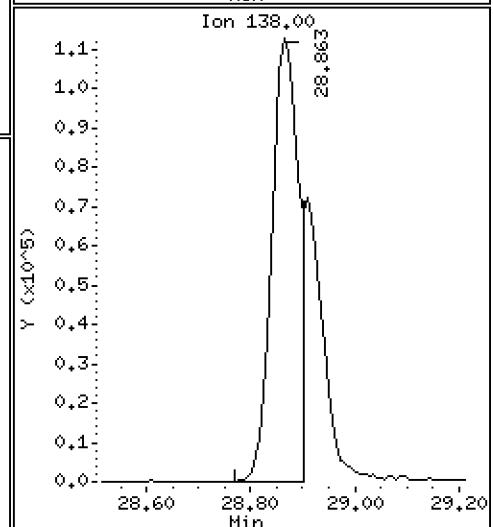
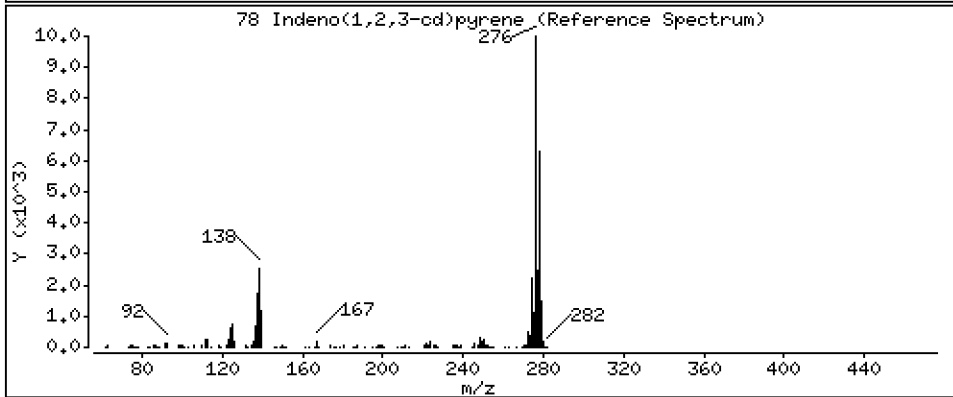
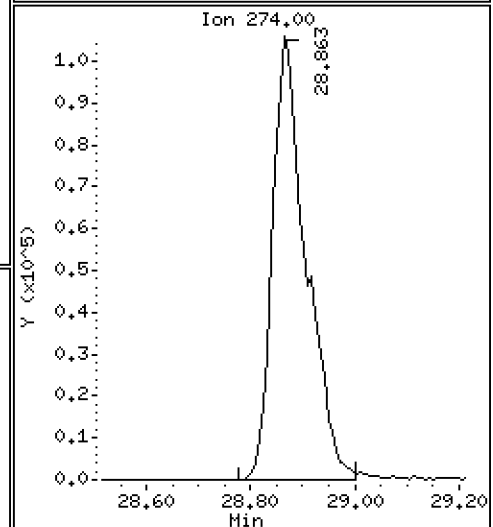
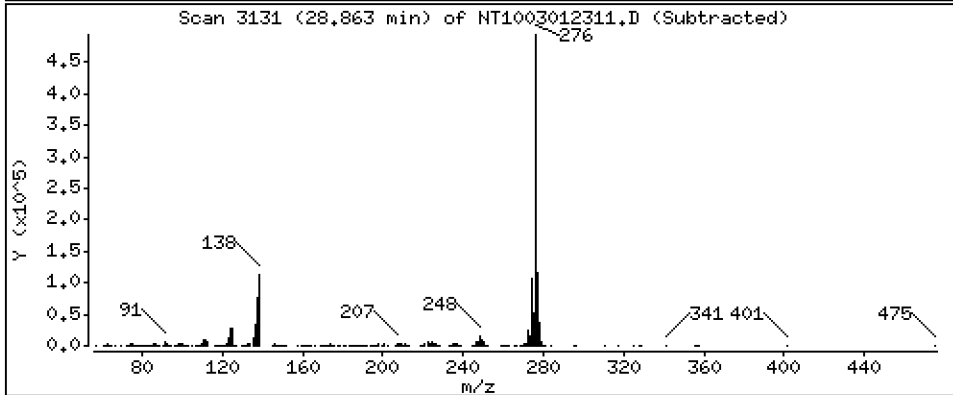
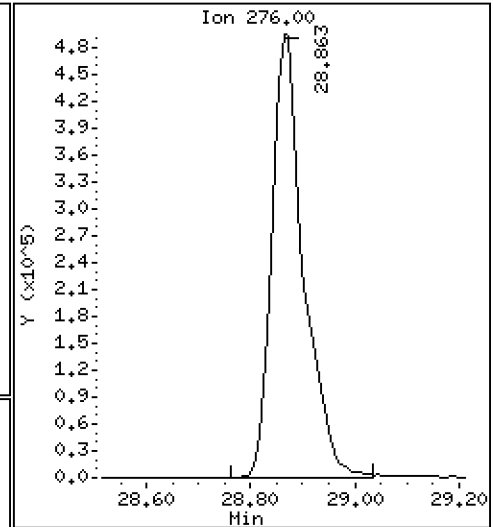
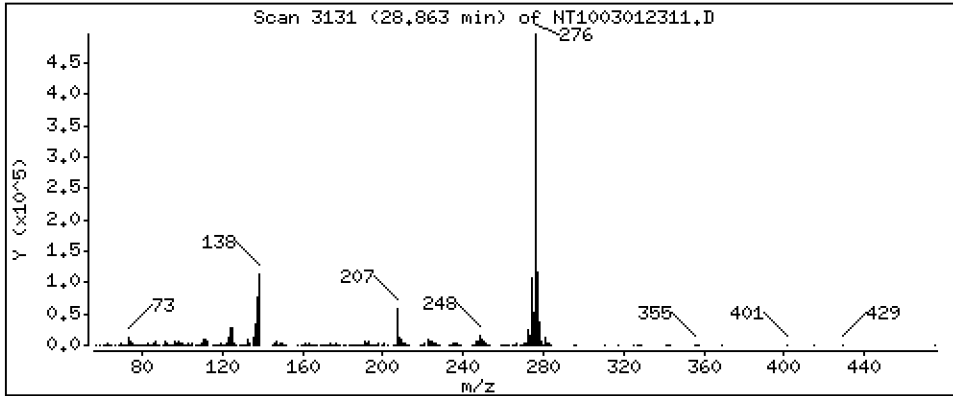
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,345 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

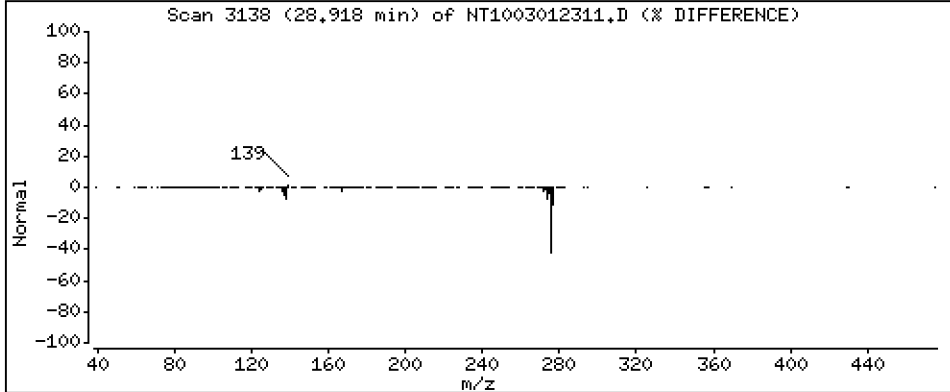
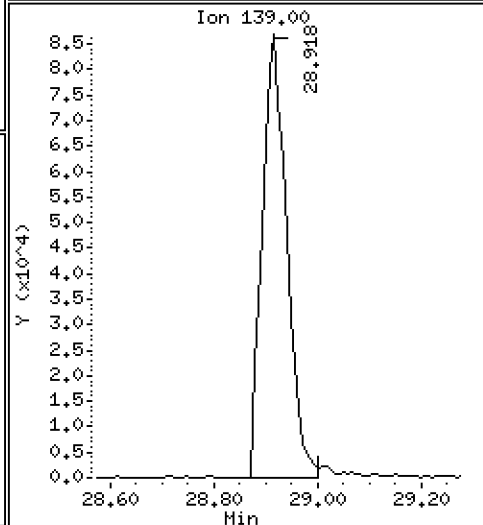
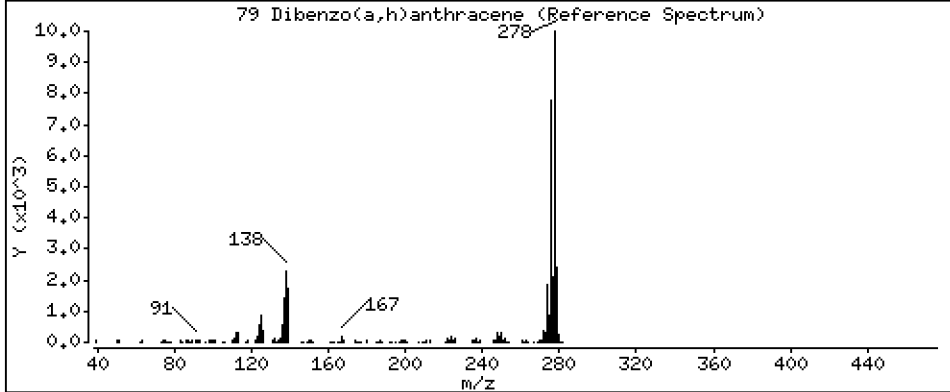
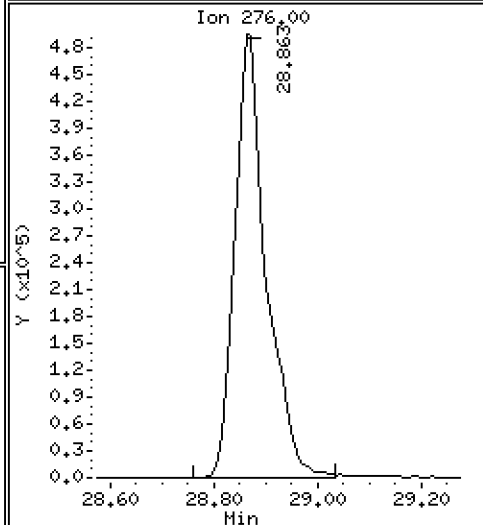
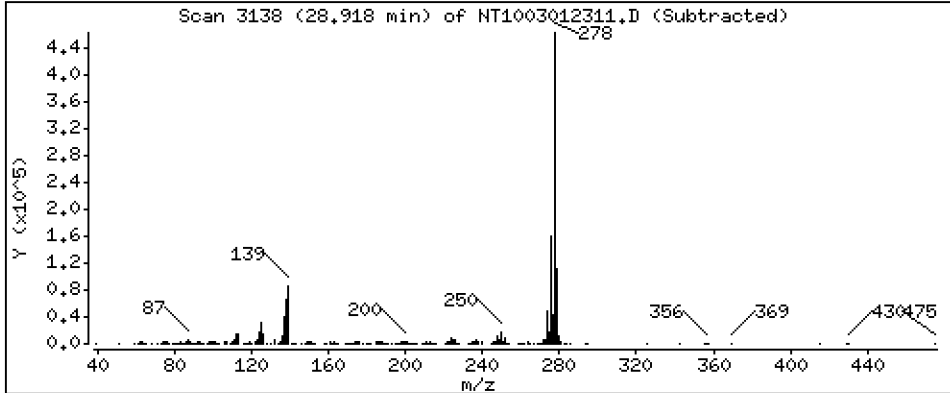
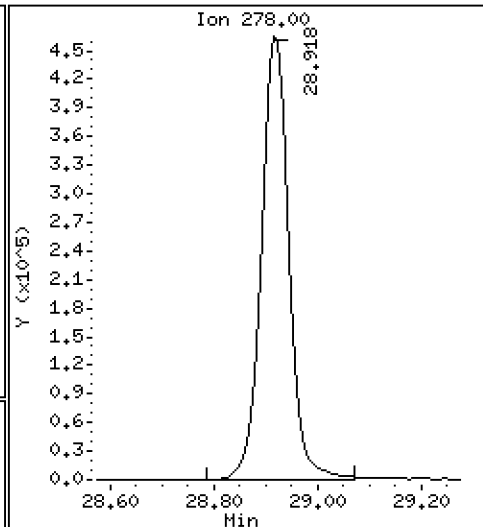
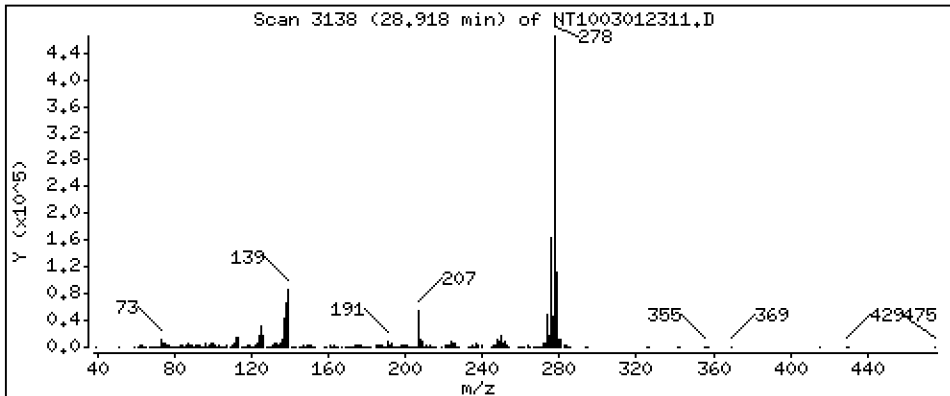
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,608 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

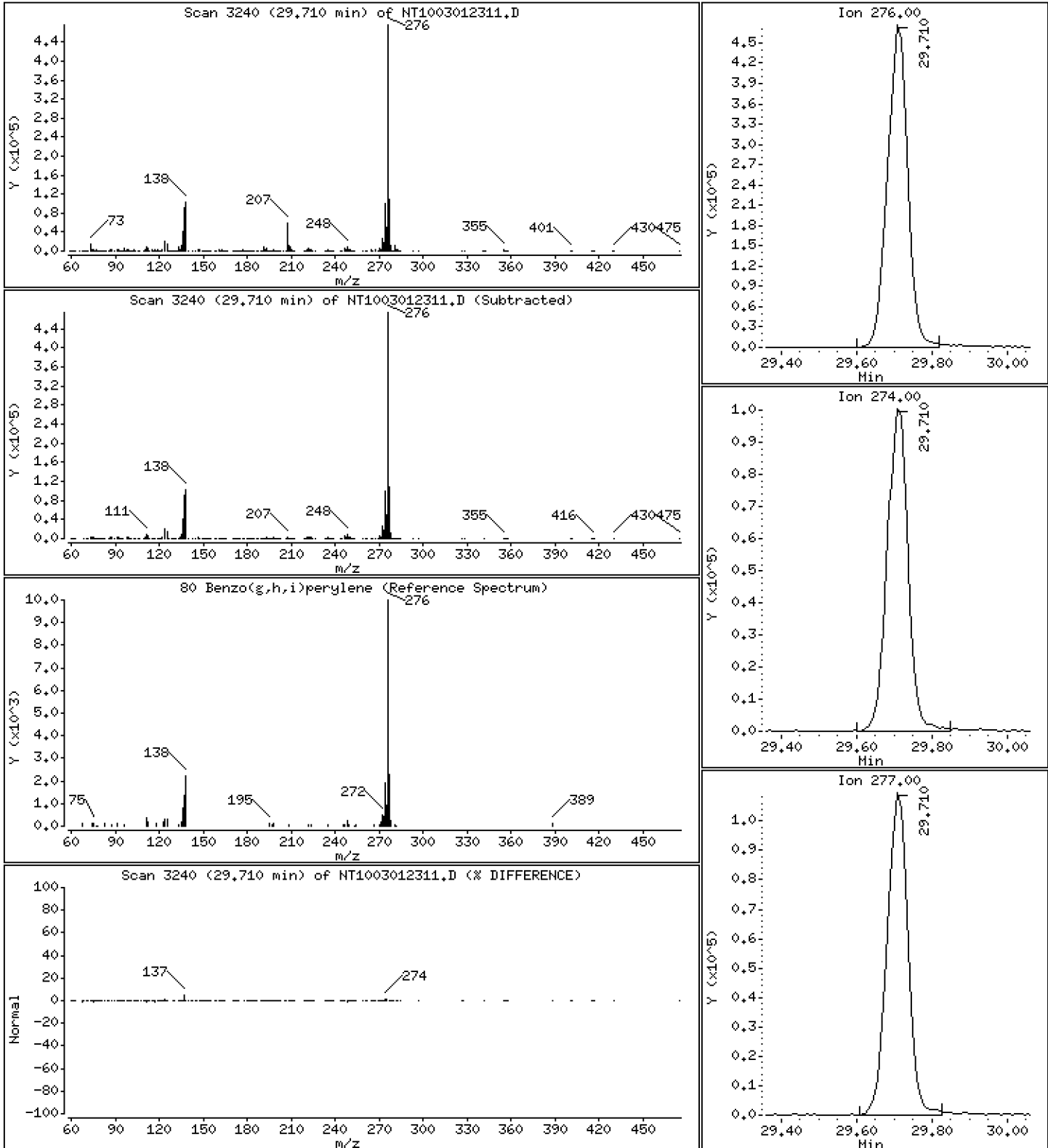
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,602 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

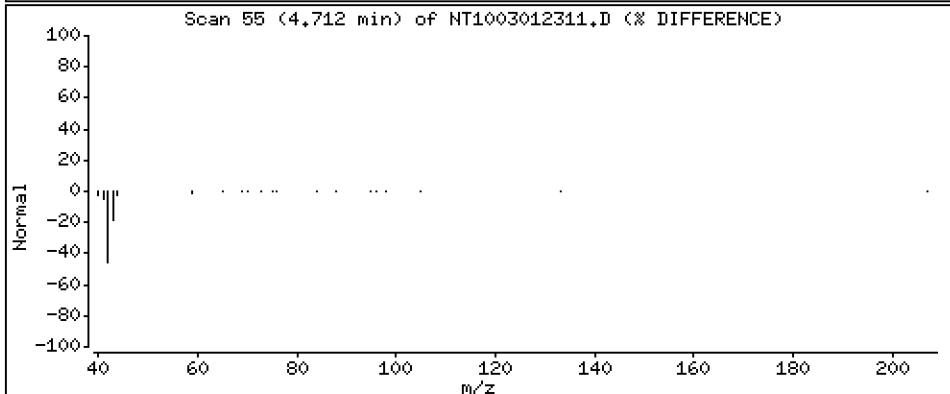
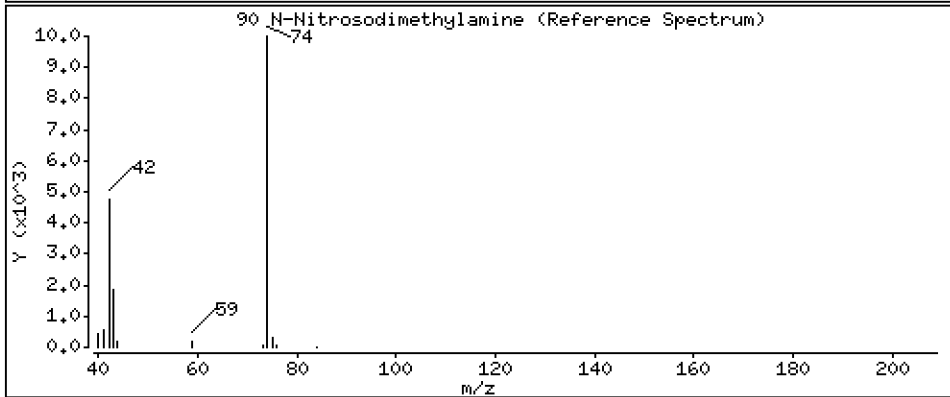
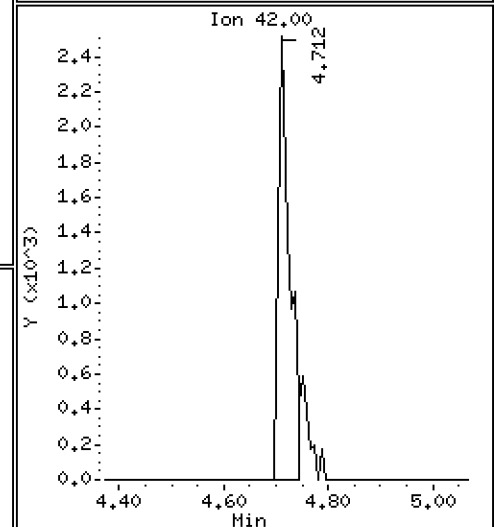
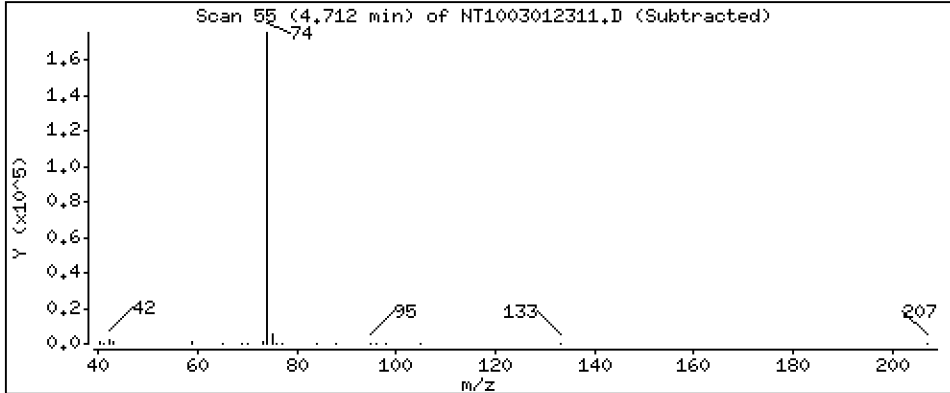
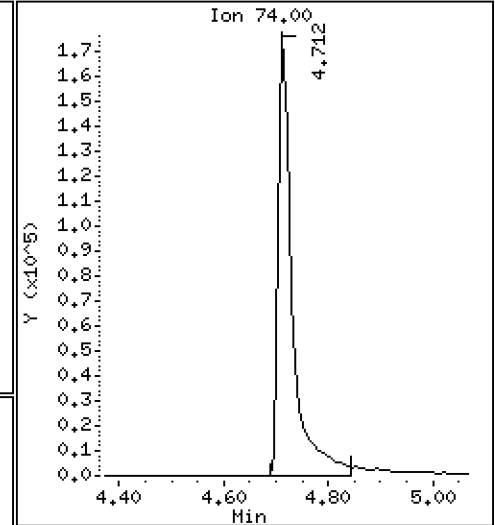
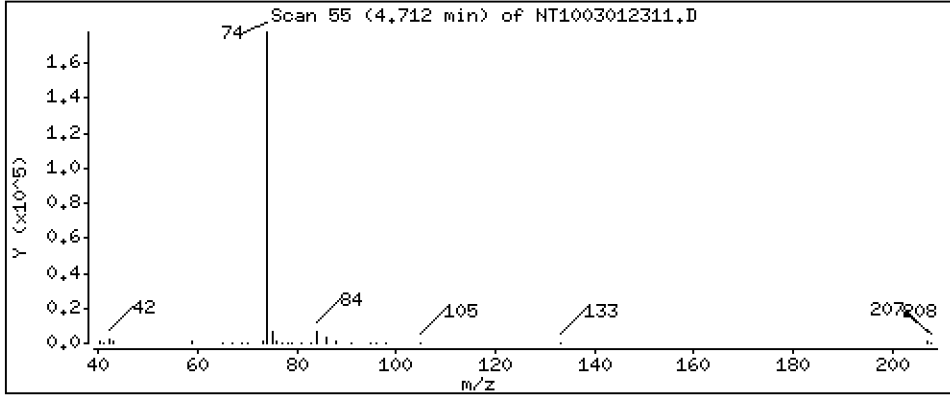
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.491 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

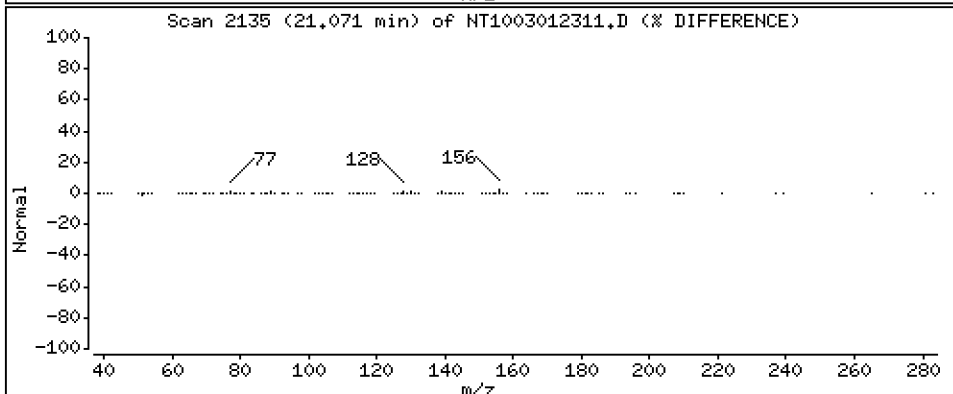
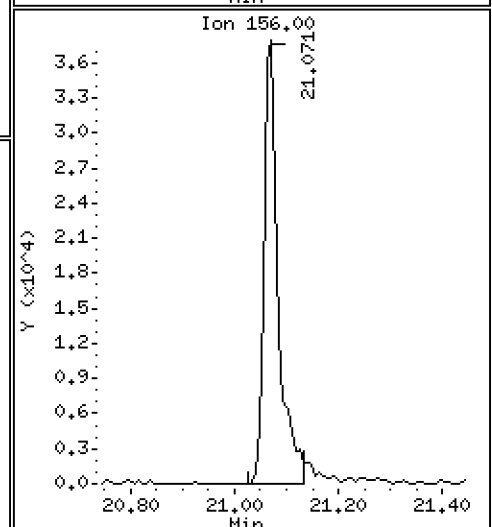
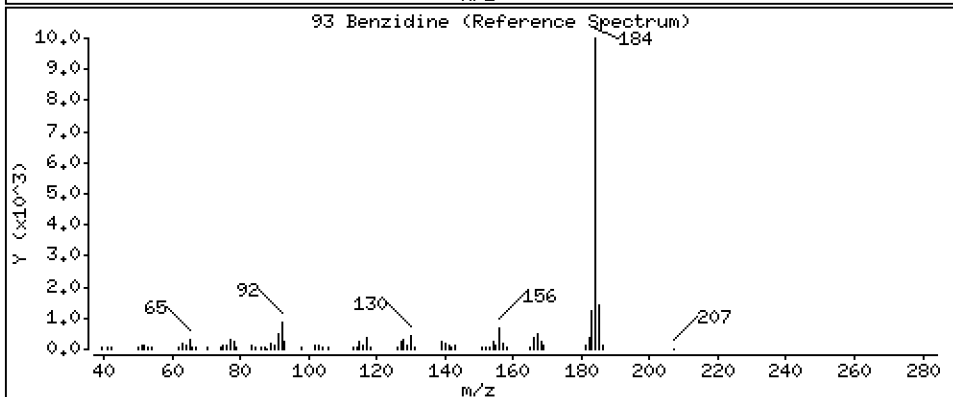
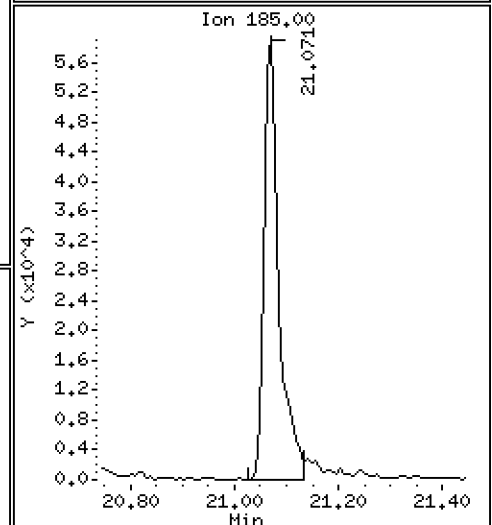
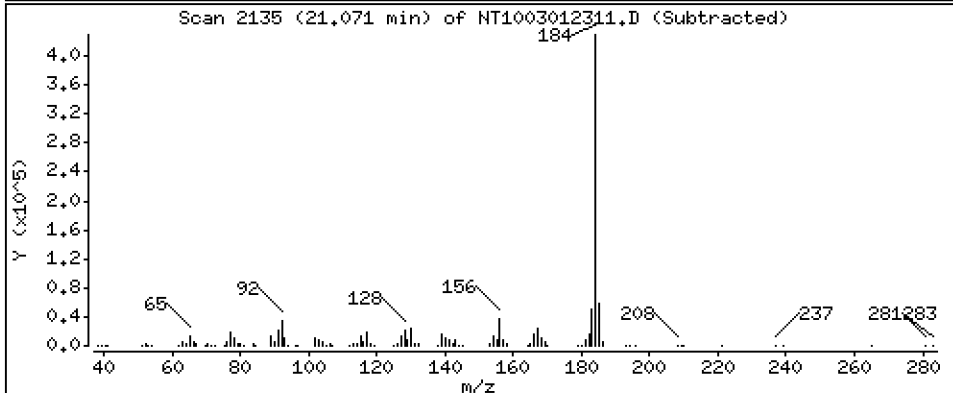
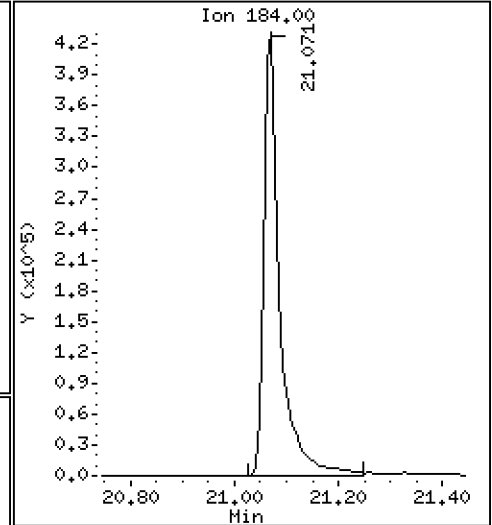
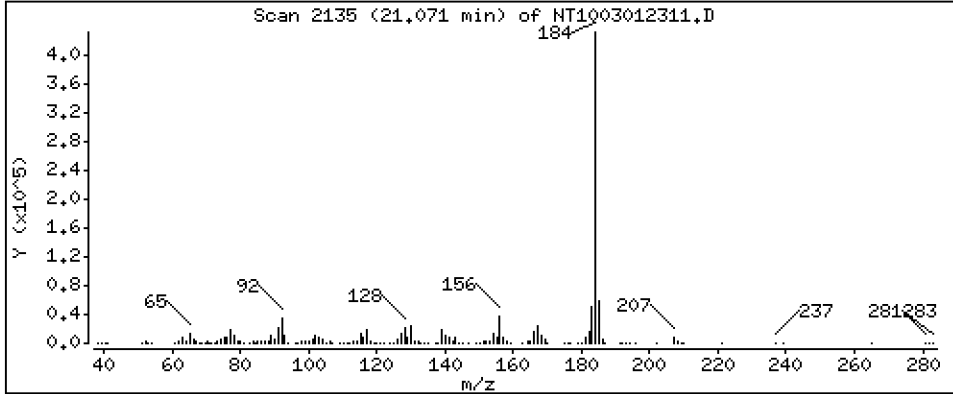
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,007 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

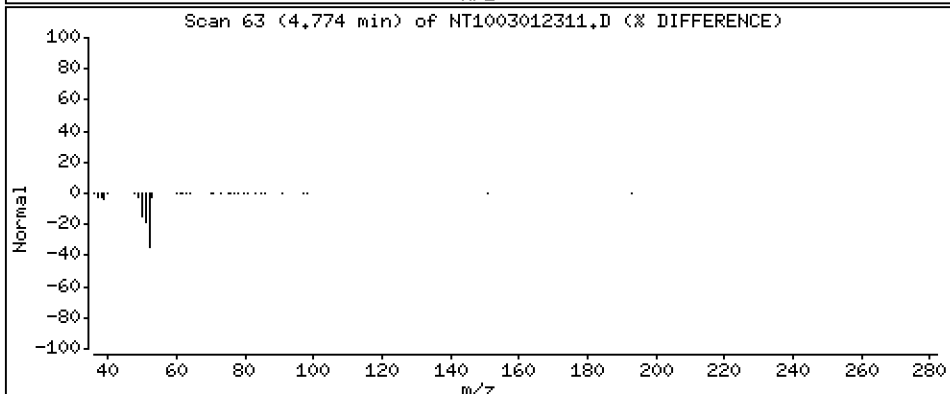
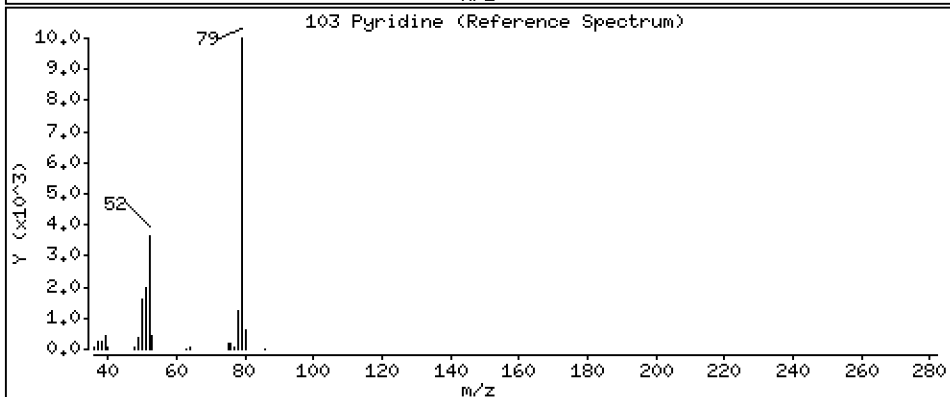
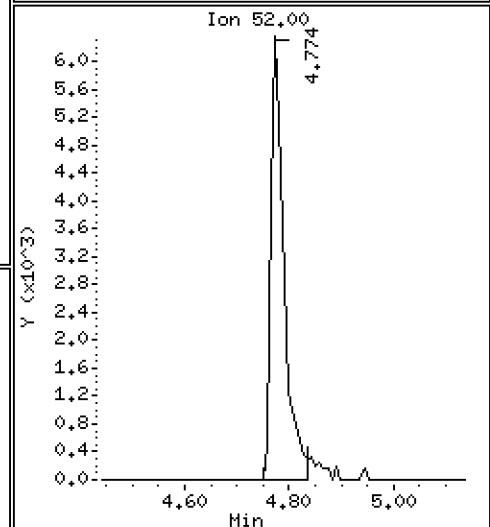
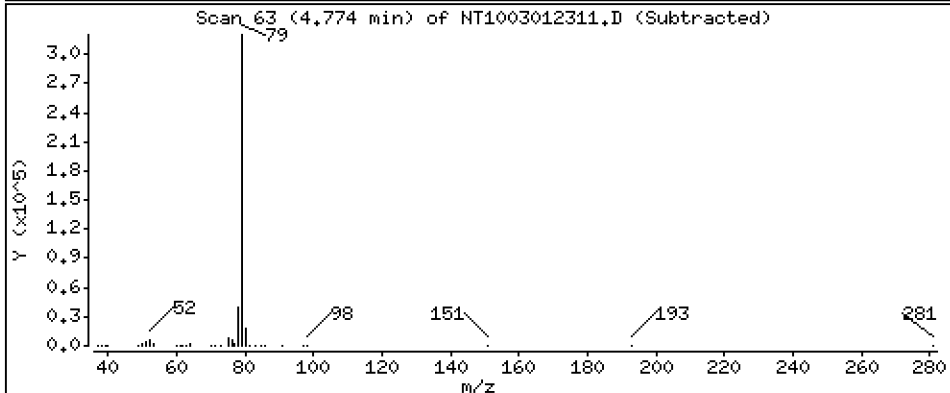
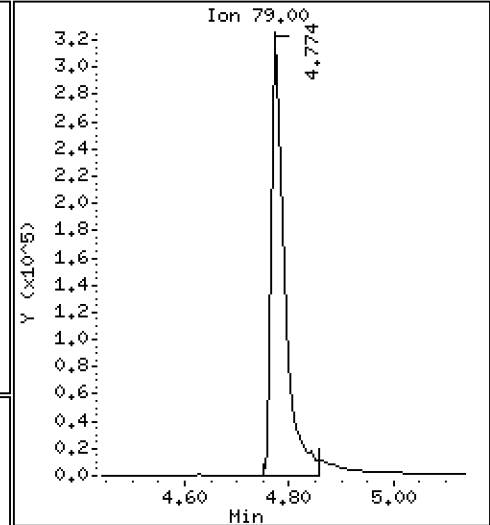
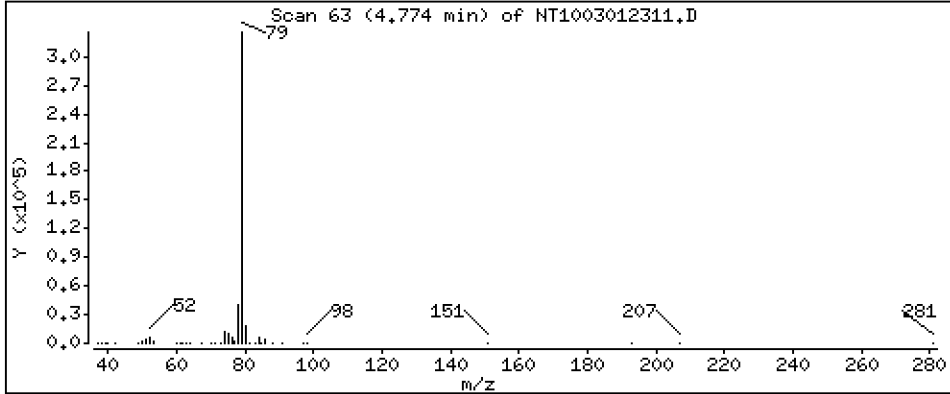
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 5,430 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

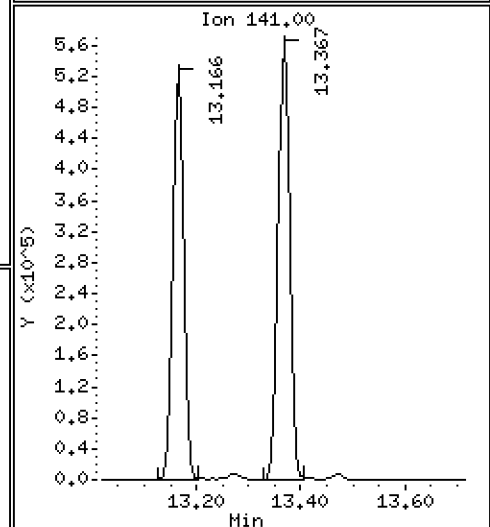
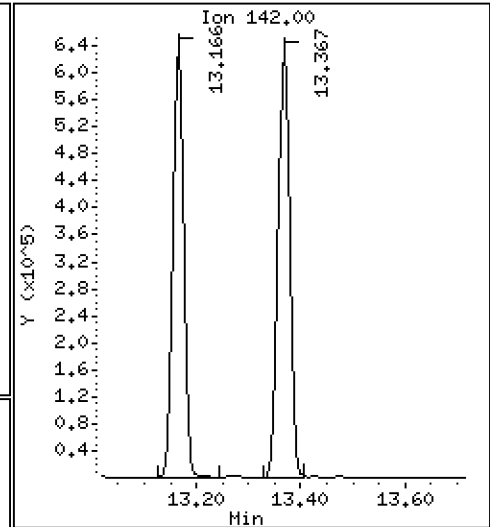
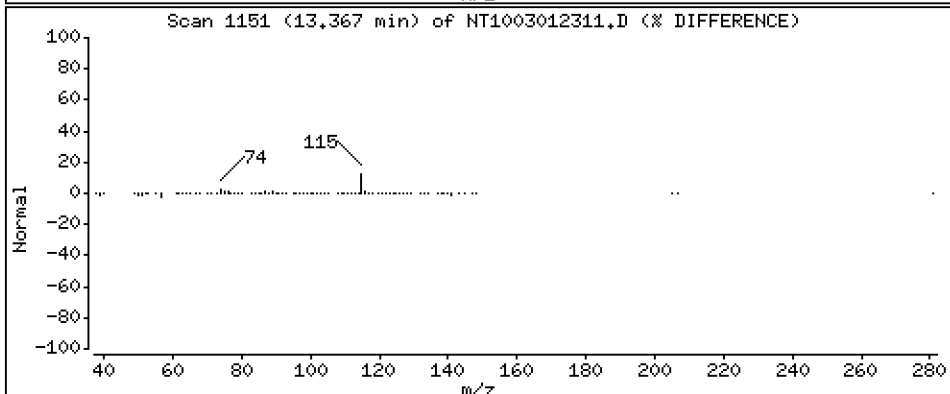
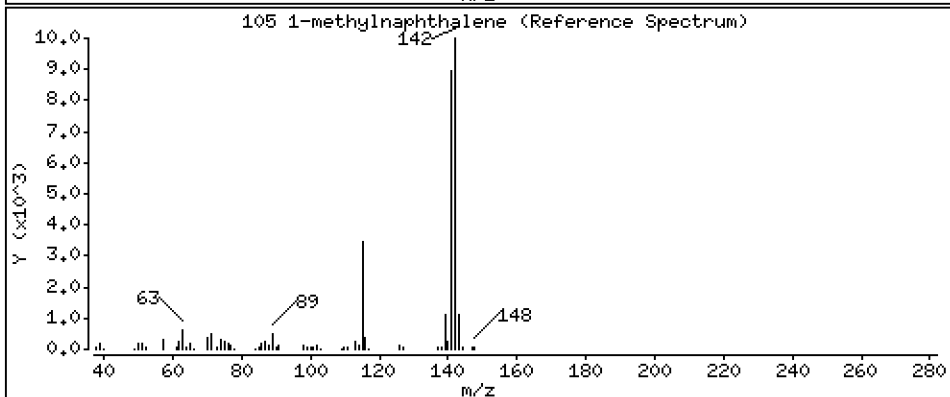
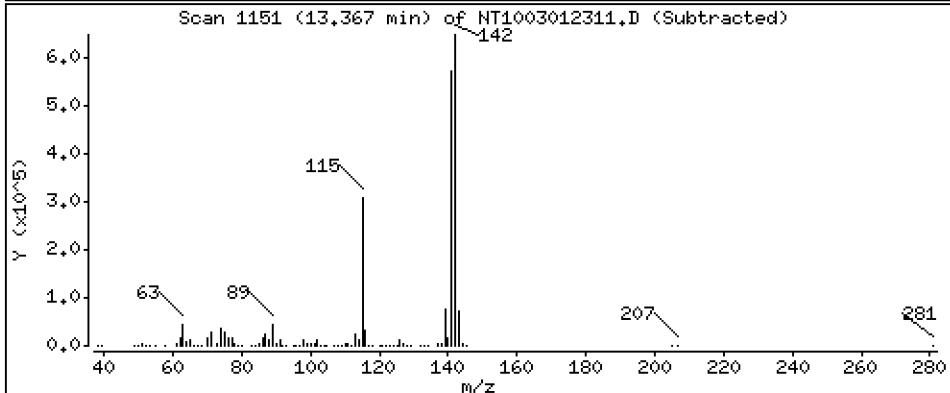
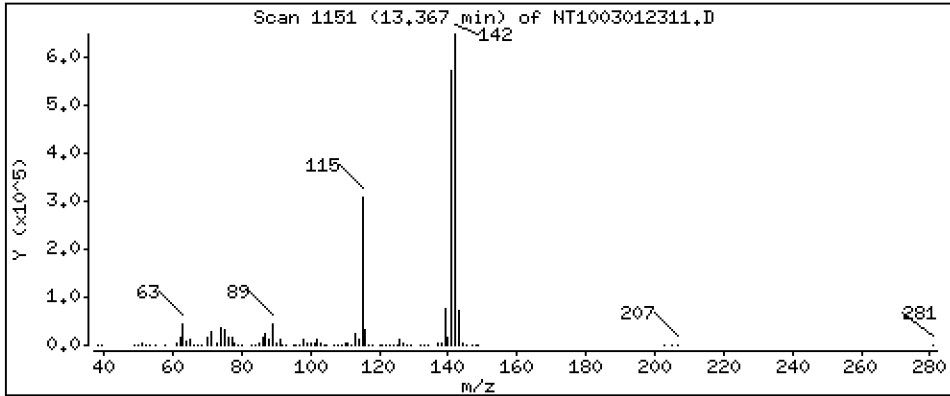
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,219 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

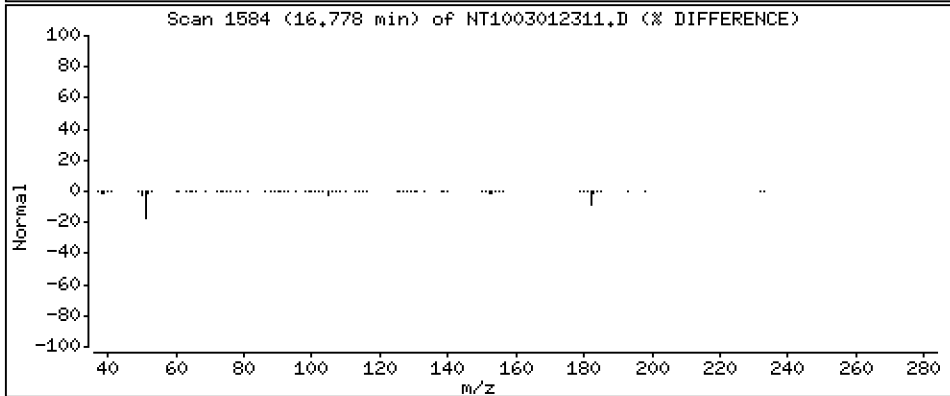
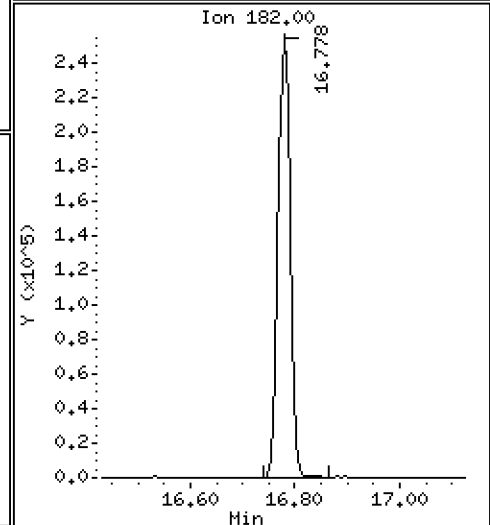
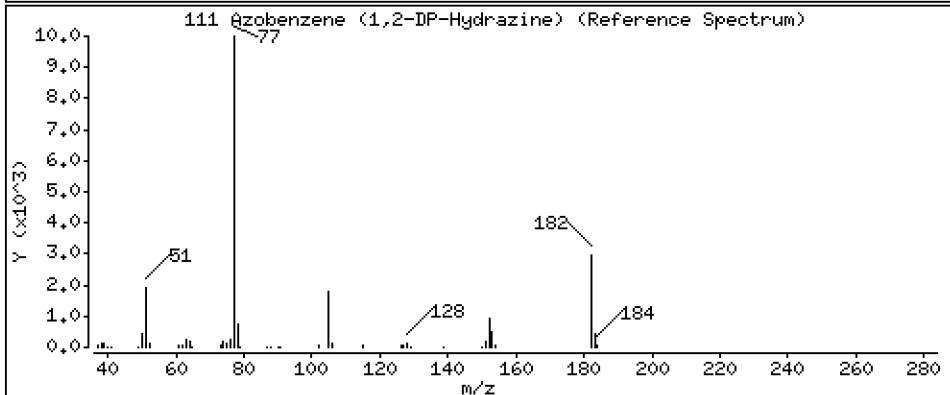
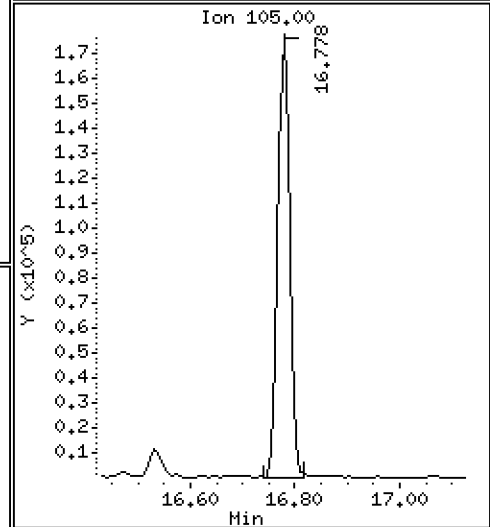
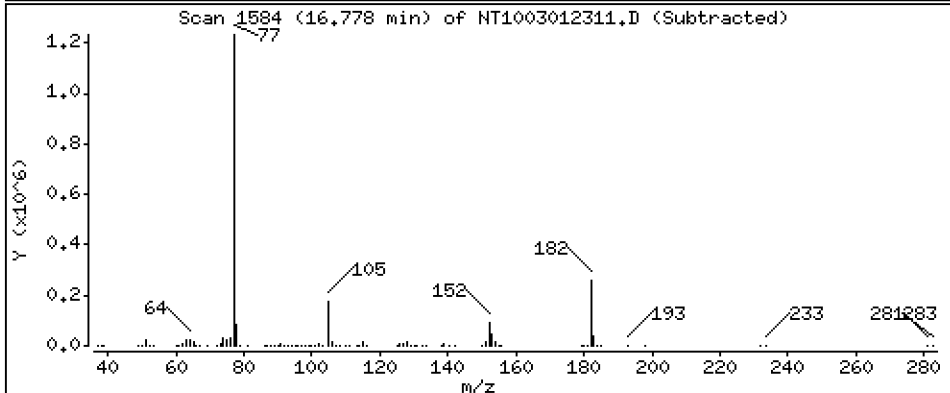
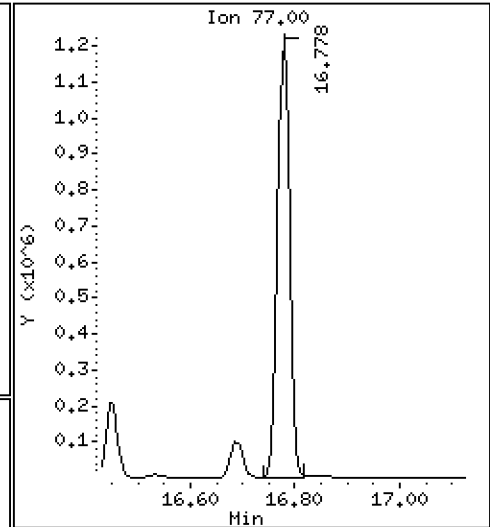
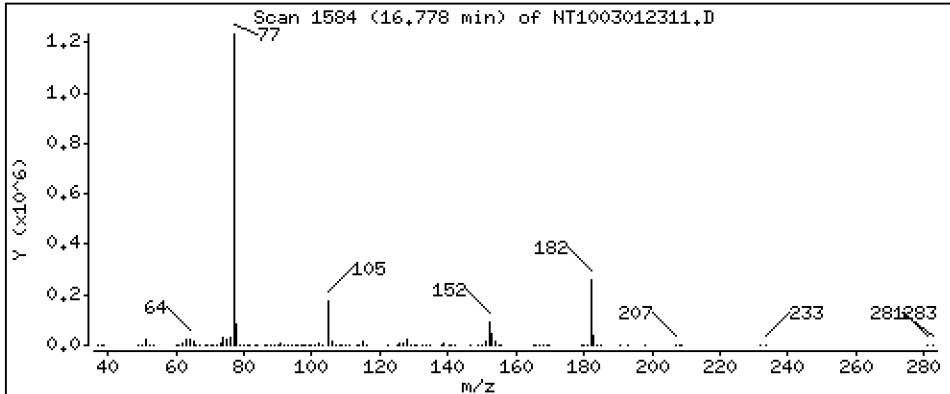
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,953 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

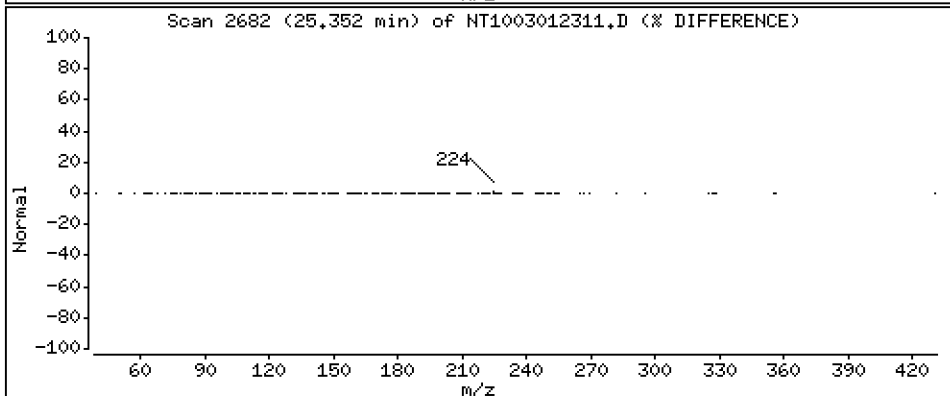
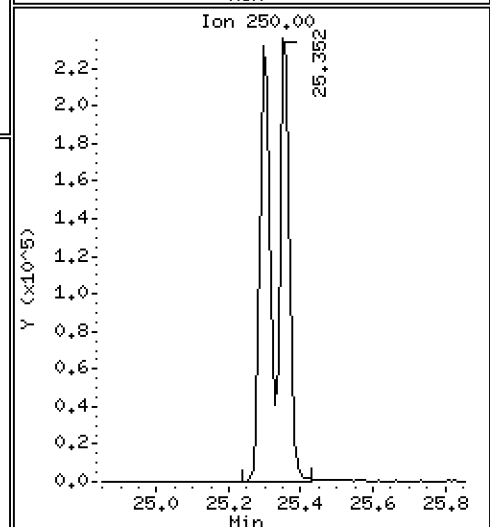
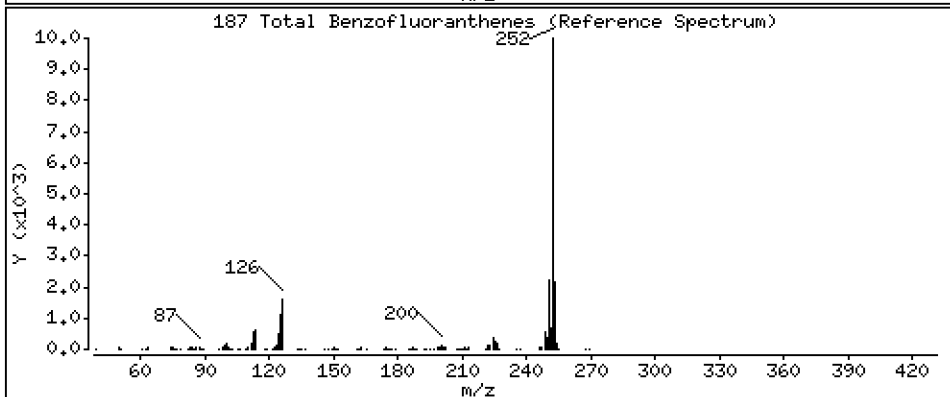
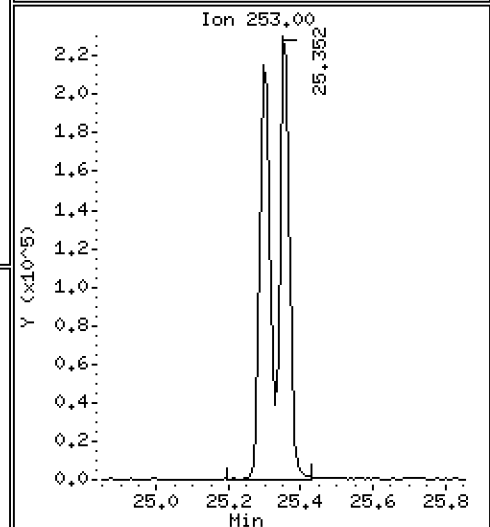
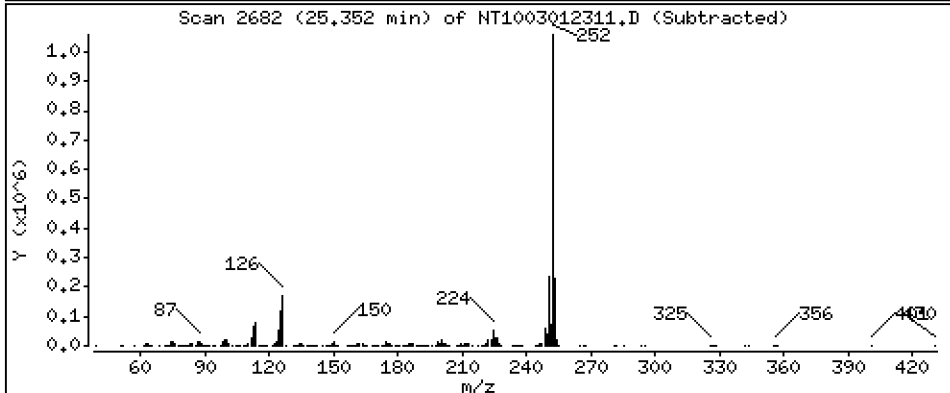
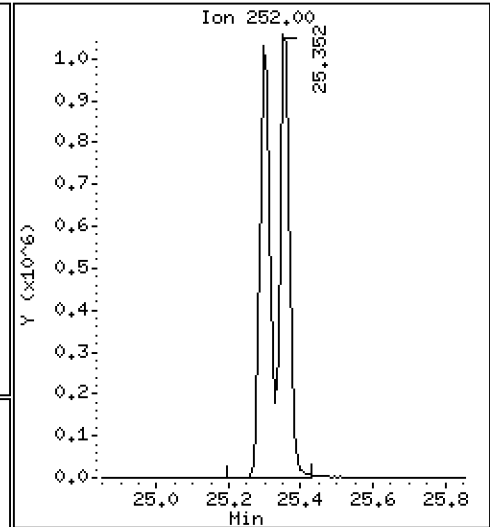
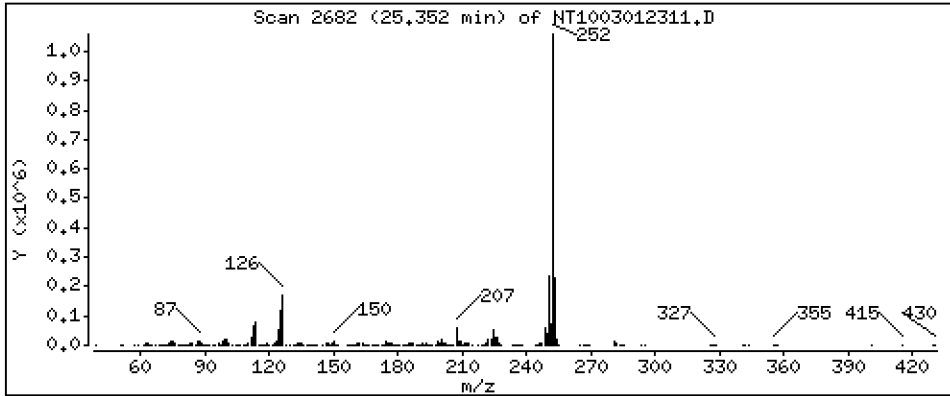
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

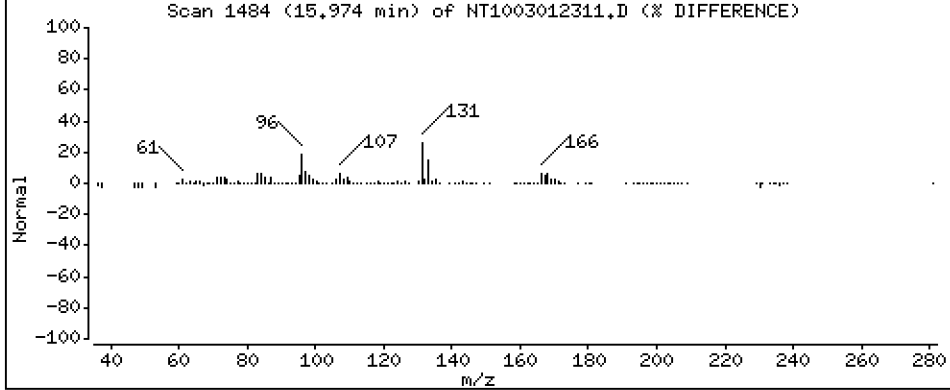
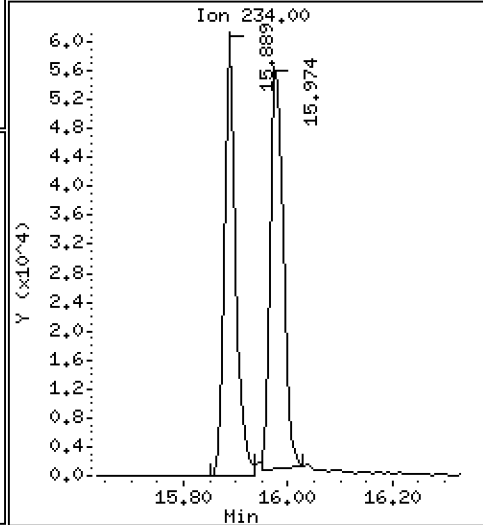
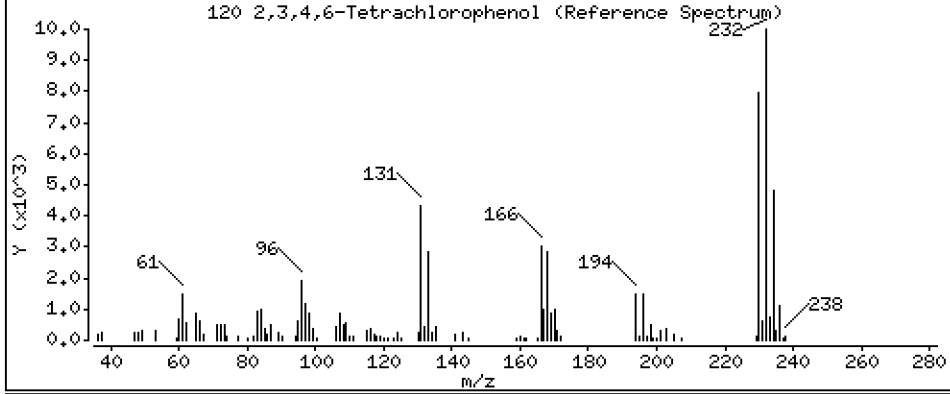
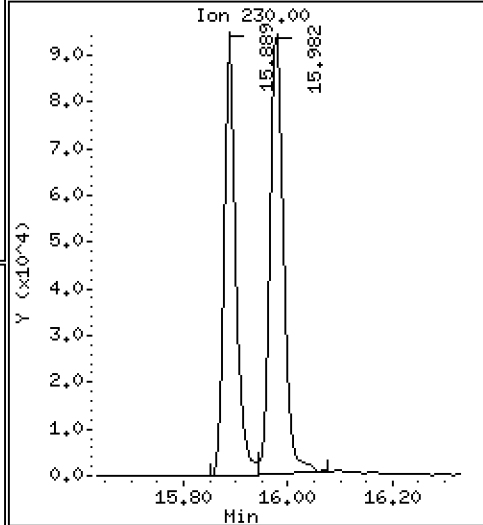
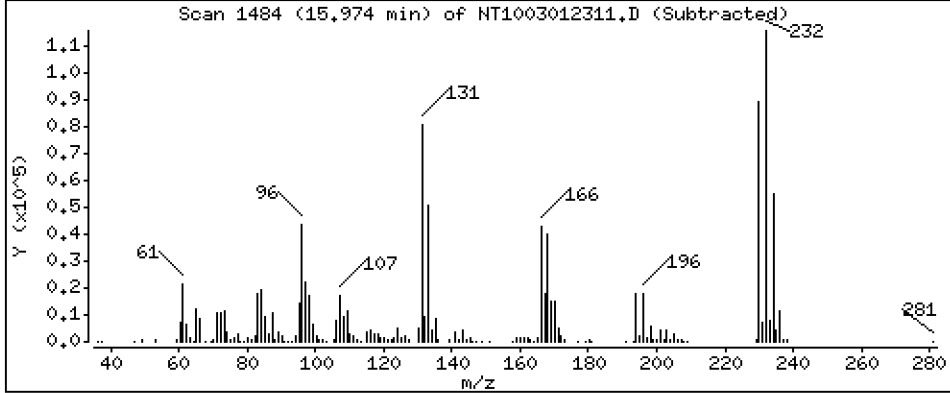
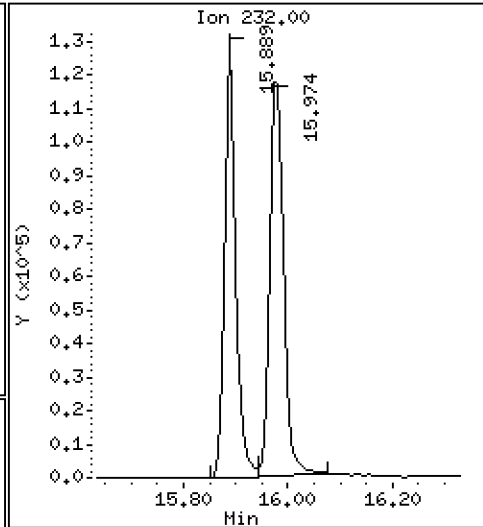
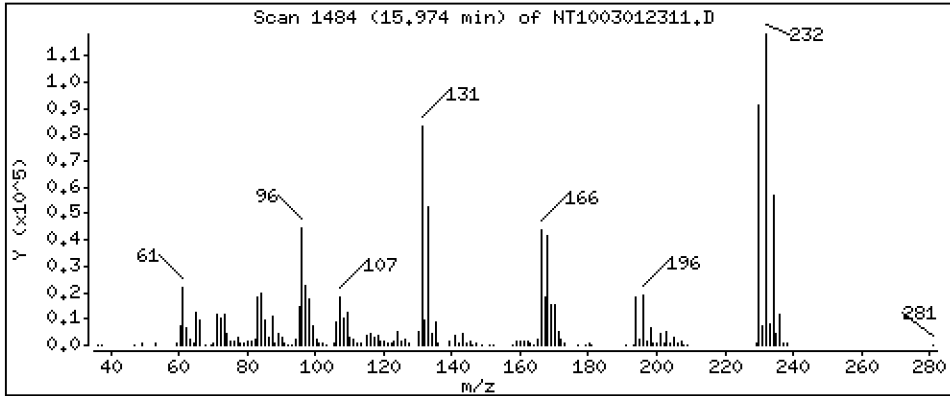
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,534 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
 Lab Smp Id: SLC0084-SCV1
 Inj Date : 01-MAR-2023 21:46
 Operator : VTS
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012307.D

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		Compound Not Detected.					
\$ 2 Phenol-d5	99		Compound Not Detected.					
3 Phenol	94		8.512	8.512	(0.921)	534295	4.85212	4.852
\$ 5 2-Chlorophenol-d4	132		Compound Not Detected.					
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	498825	5.92811	5.928 (M)
6 2-Chlorophenol	128		8.844	8.844	(0.956)	430747	4.69234	4.692
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	533006	5.26632	5.266
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	283537	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	524367	5.21589	5.216
\$ 10 1,2-Dichlorobenzene-d4	152		9.247	9.534	(1.000)	283537	4.29482	4.295
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	505415	5.19402	5.194
11 Benzyl alcohol	108		9.472	9.472	(1.024)	283618	4.89779	4.898
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728	(1.053)	174821	6.23165	6.232
13 2-Methylphenol	108		9.650	9.650	(1.044)	364596	4.19238	4.192
17 Hexachloroethane	117		10.209	10.209	(1.104)	224586	5.44260	5.443
16 N-Nitroso-di-n-propylamine	70		9.977	9.976	(1.079)	392376	5.90505	5.905
15 4-Methylphenol	108		9.945	9.938	(1.076)	448938	4.23938	4.239
\$ 18 Nitrobenzene-d5	82		Compound Not Detected.					
19 Nitrobenzene	77		10.326	10.326	(0.881)	624582	5.56925	5.569
20 Isophorone	82		10.784	10.784	(0.920)	1098236	7.67155	7.672
21 2-Nitrophenol	139		10.950	10.951	(0.934)	197578	3.24407	3.244
22 2,4-Dimethylphenol	107		10.993	10.993	(0.938)	379240	3.50675	3.507
23 Bis(2-Chloroethoxy)methane	93		11.205	11.205	(0.956)	595145	6.72720	6.727
24 Benzoic acid	105		11.103	11.052	(0.947)	362406	5.63546	5.635
25 2,4-Dichlorophenol	162		11.417	11.417	(0.974)	379310	4.43743	4.437
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	413079	4.90787	4.908
* 27 Naphthalene-d8	136		11.719	11.719	(1.000)	1089120	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	1468990	5.25508	5.255
29 4-Chloroaniline	127		11.858	11.858	(1.012)	469377	3.79133	3.791
30 Hexachlorobutadiene	225		11.989	11.997	(1.023)	307313	5.01449	5.014
31 4-Chloro-3-methylphenol	107		12.802	12.809	(1.092)	402740	4.45246	4.452
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	977687	4.95082	4.951
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.879)	52130	2.56222	2.562

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.722	13.730	(0.896)	241174	4.12027	4.120	
35 2,4,5-Trichlorophenol	196		13.792	13.808	(0.900)	259485	4.14893	4.149 (M)	
§ 36 2-Fluorobiphenyl	172		Compound Not Detected.						
37 2-Chloronaphthalene	162		14.164	14.164	(0.925)	895889	5.26440	5.264	
38 2-Nitroaniline	65		14.365	14.365	(0.938)	237773	5.02711	5.027	
39 Dimethylphthalate	163		14.736	14.736	(0.962)	1056857	5.38446	5.384	
40 Acenaphthylene	152		15.023	15.023	(0.981)	1703355	5.80574	5.806	
41 2,6-Dinitrotoluene	165		14.868	14.868	(0.971)	227062	5.18679	5.187	
* 42 Acenaphthene-d10	164		15.317	15.309	(1.000)	607772	4.00000		
43 3-Nitroaniline	138		15.208	15.224	(0.993)	256002	5.17200	5.172	
44 Acenaphthene	153		15.379	15.378	(1.004)	911910	5.15374	5.154	
45 2,4-Dinitrophenol	184		15.433	15.487	(1.008)	3021	0.26673	0.2667	
46 Dibenzofuran	168		15.742	15.734	(1.028)	1311367	4.99365	4.994	
47 4-Nitrophenol	109		15.533	15.603	(1.014)	133260	3.82233	3.822 (M)	
48 2,4-Dinitrotoluene	165		15.695	15.703	(1.025)	300469	4.72923	4.729	
50 Diethylphthalate	149		16.206	16.198	(1.058)	1172442	5.63859	5.639	
49 Fluorene	166		16.453	16.453	(1.074)	1159050	5.30478	5.305	
51 4-Chlorophenyl-phenylether	204		16.453	16.453	(1.074)	527532	5.25262	5.253	
52 4-Nitroaniline	138		16.469	16.484	(1.075)	278392	5.23237	5.232	
53 4,6-Dinitro-2-methylphenol	198		16.531	16.538	(0.898)	36409	1.29161	1.292	
54 N-Nitrosodiphenylamine	169		16.685	16.693	(0.907)	966268	5.41587	5.416	
§ 55 2,4,6-Tribromophenol	330		Compound Not Detected.						
56 4-Bromophenyl-phenylether	248		17.465	17.472	(0.949)	394706	5.45981	5.460	
57 Hexachlorobenzene	284		17.573	17.573	(0.955)	391196	4.80535	4.805	
58 Pentachlorophenol	266		17.984	17.983	(0.977)	133557	3.49178	3.492	
* 59 Phenanthrene-d10	188		18.401	18.401	(1.000)	1205858	4.00000		
60 Phenanthrene	178		18.448	18.448	(1.003)	1569094	5.08454	5.085	
61 Anthracene	178		18.556	18.556	(1.008)	1371933	4.58472	4.585	
62 Carbazole	167		18.889	18.889	(1.026)	1462441	5.33467	5.335	
63 Di-n-butylphthalate	149		19.585	19.585	(1.064)	2114080	5.46304	5.463	
64 Fluoranthene	202		20.815	20.815	(0.889)	1905220	4.54169	4.542	
65 Pyrene	202		21.248	21.248	(0.907)	1975953	4.62585	4.626	
§ 66 Terphenyl-d14	244		21.519	21.527	(0.919)	6779	0.01961	0.01961	
67 Butylbenzylphthalate	149		22.410	22.410	(0.957)	1022950	4.52520	4.525	
68 Benzo(a)anthracene	228		23.401	23.401	(0.999)	1968545	4.57826	4.578	
* 69 Chrysene-d12	240		23.416	23.416	(1.000)	1219436	4.00000		
70 3,3'-Dichlorobenzidine	252		23.347	23.347	(0.997)	1426681	7.38255	7.383	
71 Chrysene	228		23.463	23.463	(1.002)	1735599	4.96674	4.967	
72 bis(2-Ethylhexyl)phthalate	149		23.401	23.409	(0.956)	1660477	4.95568	4.956	
* 134 Di-n-octylphthalate-d4	153		24.485	24.485	(1.000)	2317357	4.00000		
73 Di-n-octylphthalate	149		24.492	24.492	(1.000)	3003083	5.84397	5.844	
74 Benzo(b)fluoranthene	252		25.298	25.298	(0.969)	1988643	4.31882	4.319	
75 Benzo(k)fluoranthene	252		25.352	25.352	(0.971)	2031546	4.56297	4.563	
76 Benzo(a)pyrene	252		25.987	25.987	(0.996)	1831856	4.44514	4.445	
* 77 Perylene-d12	264		26.103	26.103	(1.000)	1289108	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		28.863	28.863	(1.106)	2089660	4.34488	4.345	
79 Dibenzo(a,h)anthracene	278		28.917	28.925	(1.108)	1695484	4.60754	4.608	
80 Benzo(g,h,i)perylene	276		29.709	29.709	(1.138)	1753537	4.60249	4.602	
90 N-Nitrosodimethylamine	74		4.712	4.719	(0.510)	316213	5.49082	5.491	
91 Aniline	93		Compound Not Detected.						
93 Benzidine	184		21.071	21.094	(0.900)	932502	5.00739	5.007	
103 Pyridine	79		4.774	4.789	(0.516)	554573	5.42989	5.430	
105 1-methylnaphthalene	142		13.366	13.366	(1.141)	932752	5.21855	5.219	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.778	16.778	(1.095)	1848373	5.95279	5.953	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.352	25.352	(0.971)	3948555	8.90452	8.905
120 2,3,4,6-Tetrachlorophenol	232	15.974	15.982	(1.043)	209122	3.53394	3.534

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012311.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	283537	-16.02
27 Naphthalene-d8	1265187	632594	2530374	1089120	-13.92
42 Acenaphthene-d10	692385	346193	1384770	607772	-12.22
59 Phenanthrene-d10	1376777	688389	2753554	1205858	-12.41
69 Chrysene-d12	1019524	509762	2039048	1219436	19.61
134 Di-n-octylphthala	2027111	1013556	4054222	2317357	14.32
77 Perylene-d12	1027409	513705	2054818	1289108	25.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.01
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

Lab ID: SLC0084-SCV1
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

23.401 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.014	1.019	-0.0051	4-Nitrophenol
1.000	1.031	-0.0310	1,2-Dichlorobenzene-d4

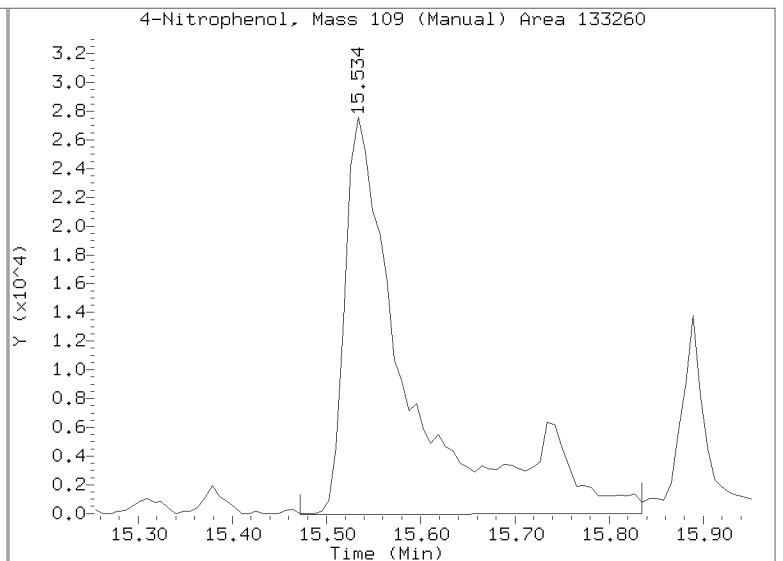
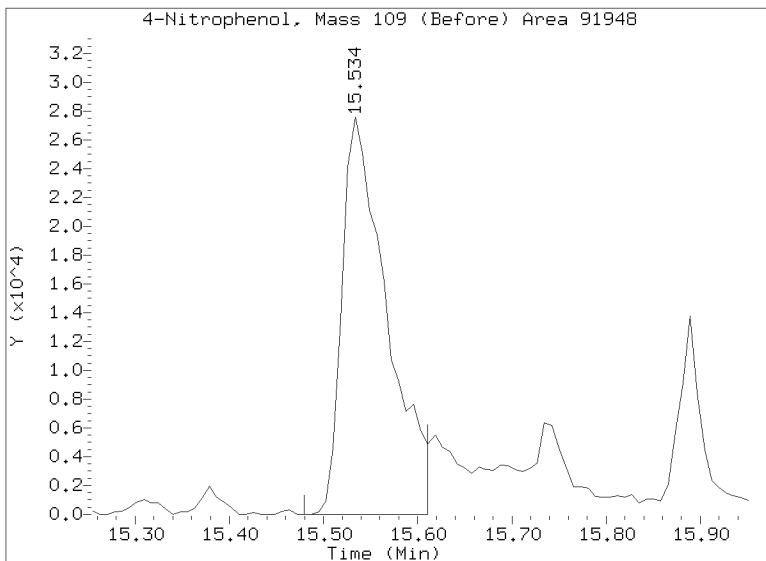
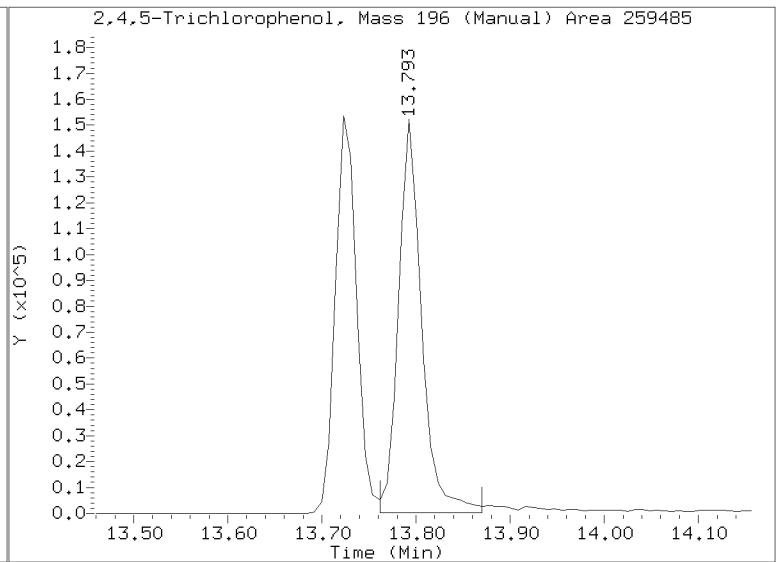
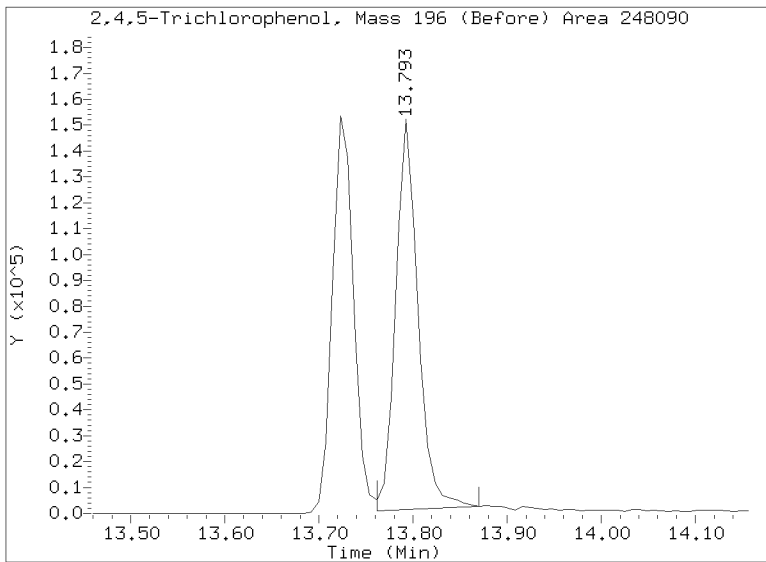
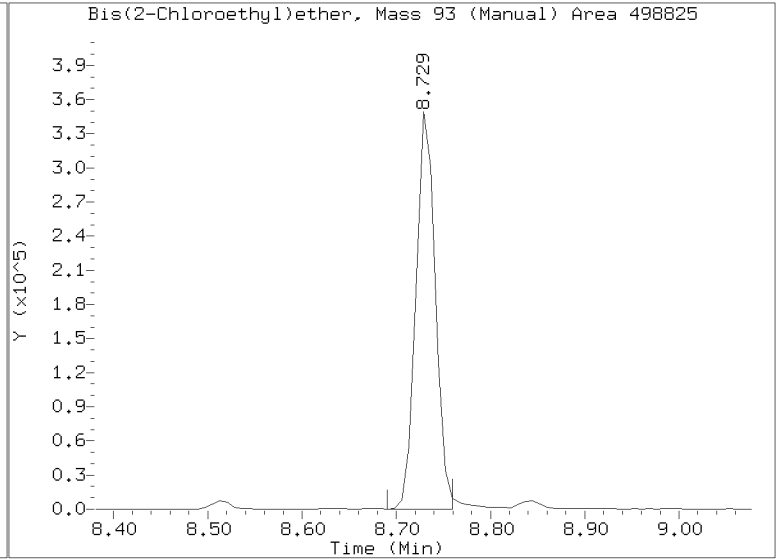
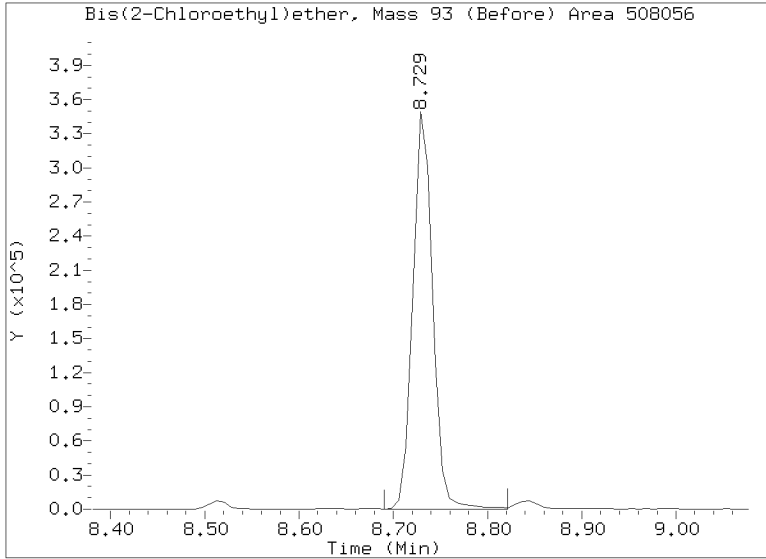
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID: SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48





**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0401-LCV1

Sequence: SLC0401

Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.1	-28.9	50.00
4-Methylphenol	0.20000	0.1	-37.2	50.00
Naphthalene	0.20000	0.2	2.5	50.00
2-Methylnaphthalene	0.20000	0.2	-2.8	50.00
Acenaphthylene	0.20000	0.2	-6.0	50.00
Dimethylphthalate	0.20000	0.2	-16.8	50.00
Acenaphthene	0.20000	0.2	-1.7	50.00
Dibenzofuran	0.20000	0.2	2.6	50.00
Fluorene	0.20000	0.2	-1.2	50.00
Pentachlorophenol	0.40000	0.0	*	50.00
Phenanthrene	0.20000	0.2	-4.2	50.00
Anthracene	0.20000	0.2	-13.2	50.00
Fluoranthene	0.20000	0.2	-11.0	50.00
Pyrene	0.20000	0.2	-10.2	50.00
Butylbenzylphthalate	0.20000	0.09	-54.7 *	50.00
Benzo(a)anthracene	0.20000	0.2	-6.4	50.00
Chrysene	0.20000	0.2	1.4	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.1	-27.3	50.00
Benzo(a)fluoranthene, Total	0.40000	0.4	-8.0	50.00
Benzo(a)pyrene	0.20000	0.2	-12.7	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-7.7	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	3.7	50.00
Benzo(g,h,i)perylene	0.20000	0.2	6.0	50.00
2-Fluorophenol	0.30000	0.219	-27.1	50.00
Phenol-d5	0.30000	0.187	-37.8	50.00
2-Chlorophenol-d4	0.30000	0.241	-19.7	50.00
1,2-Dichlorobenzene-d4	0.20000	0.220	9.9	50.00
Nitrobenzene-d5	0.20000	0.156	-22.1	50.00
2-Fluorobiphenyl	0.20000	0.216	8.1	50.00



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0401-LCV1

Sequence: SLC0401

Standard ID: K011105

2,4,6-Tribromophenol	0.30000	0.0217	-92.8 *	50.00
p-Terphenyl-d14	0.20000	0.191	-4.3	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.6\NT1003052304.D

Date: 05-MAR-2023 15:18

Client ID:

Sample Info: SLC0401-LCW1

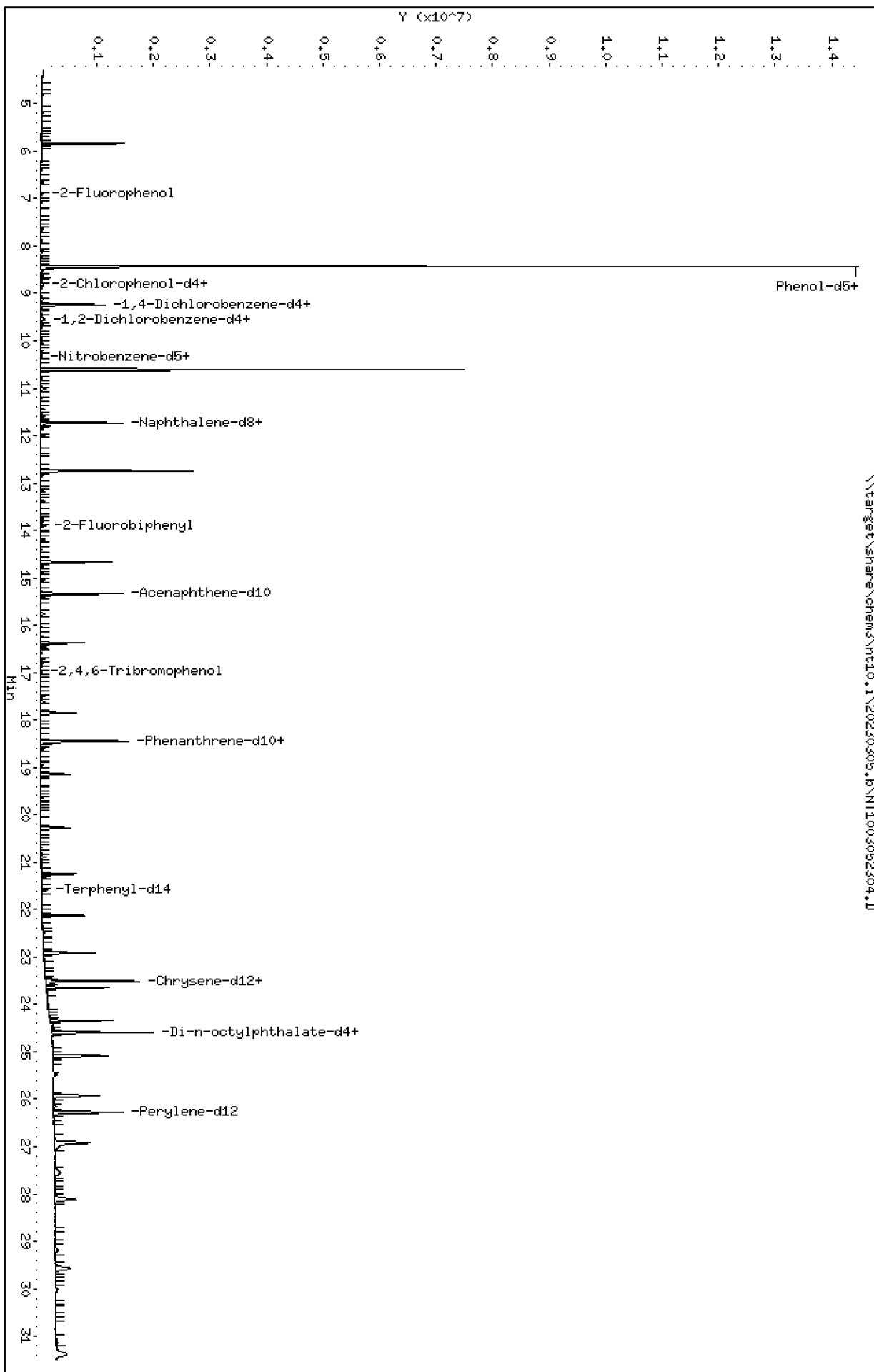
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.6\NT1003052304.D



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

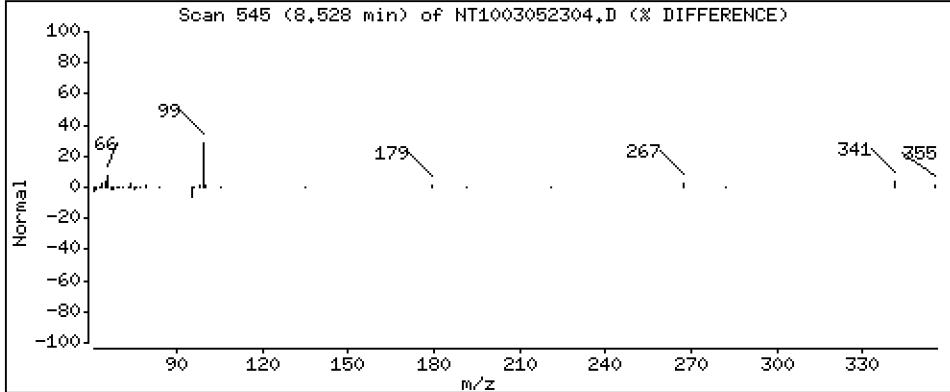
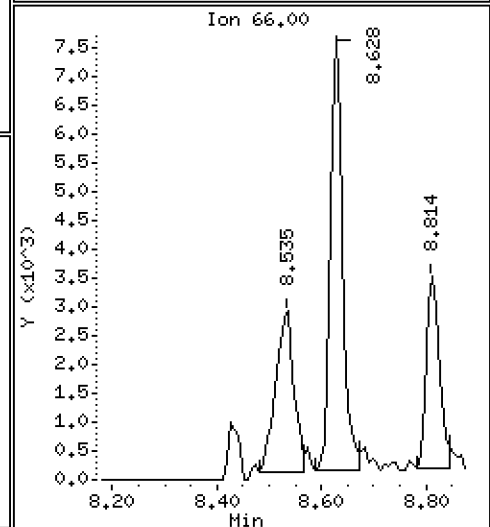
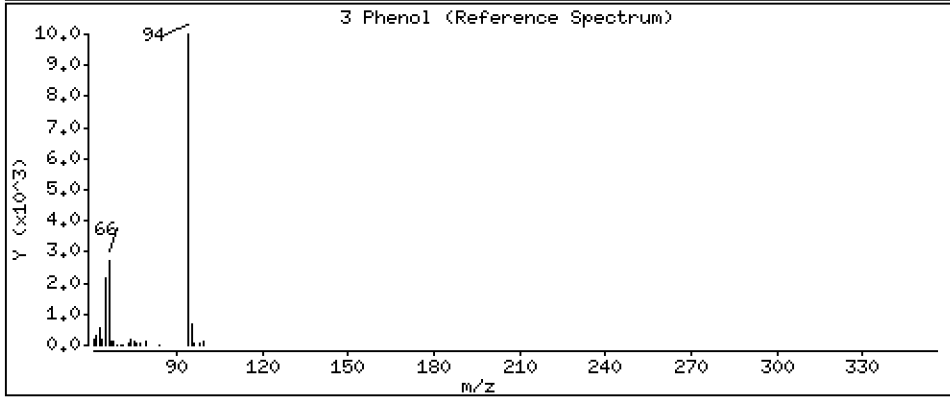
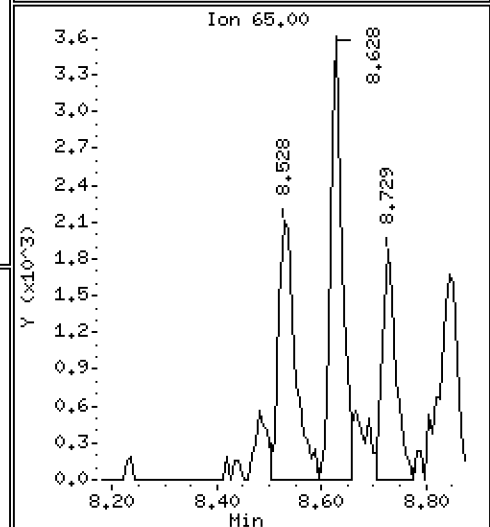
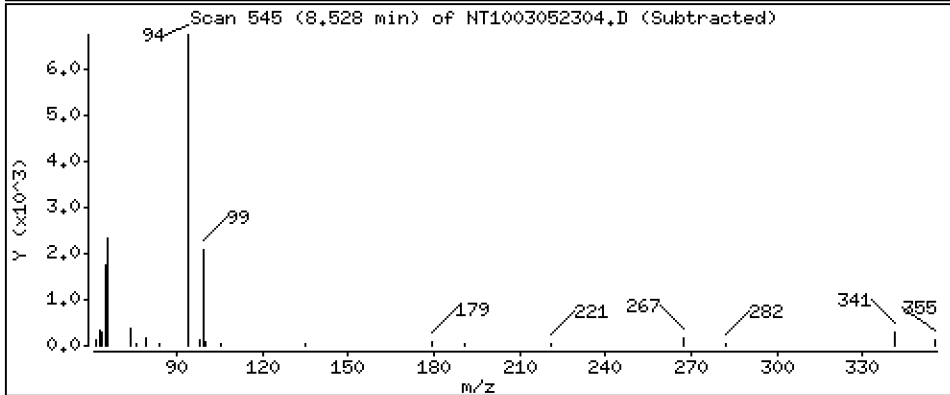
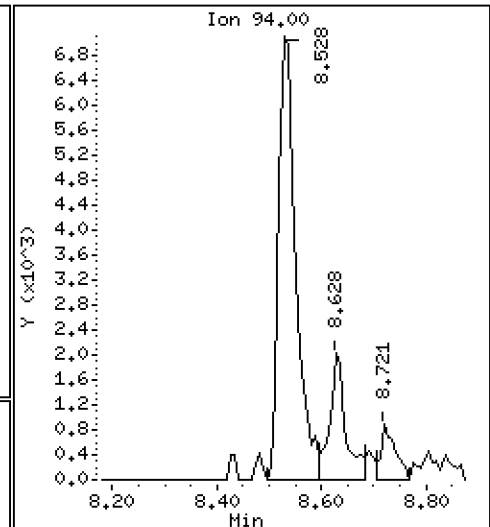
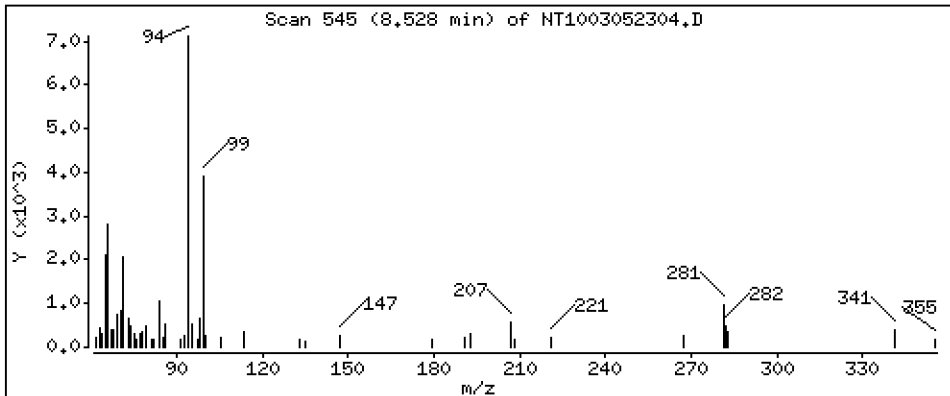
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1422 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

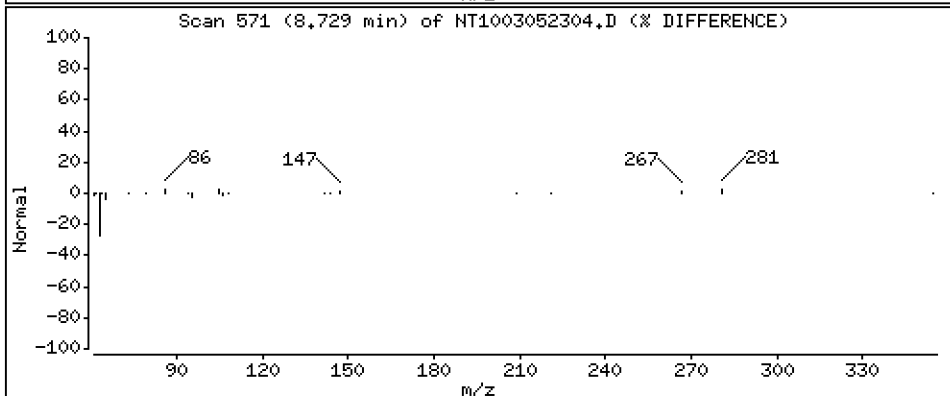
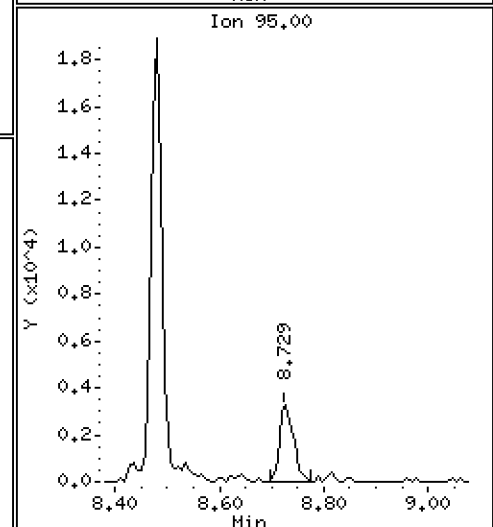
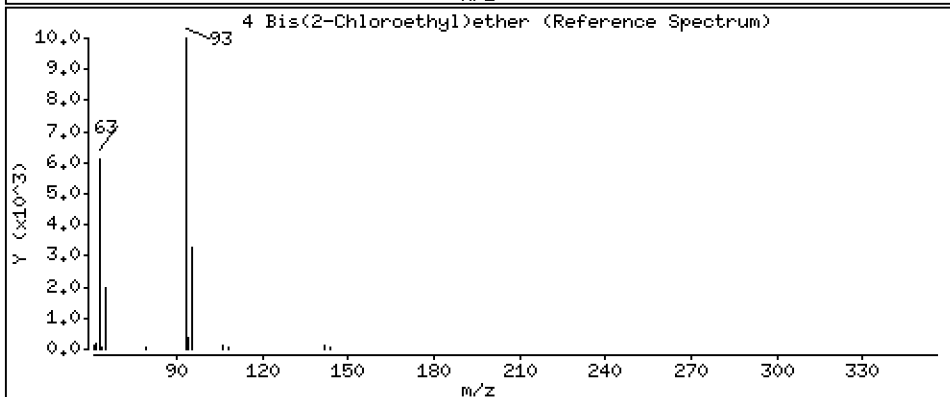
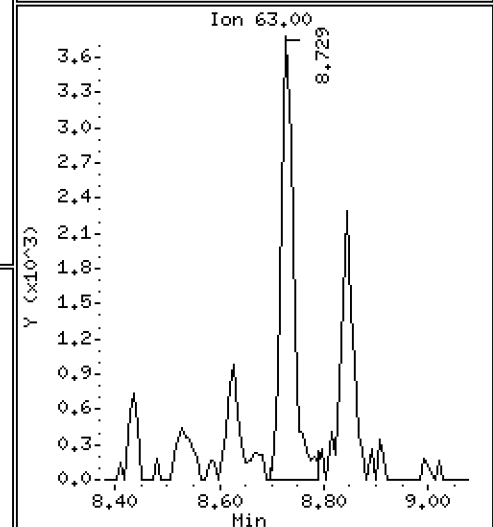
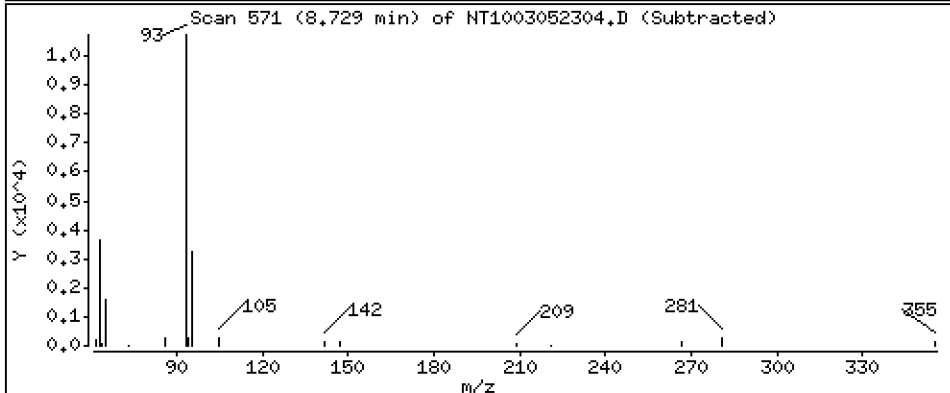
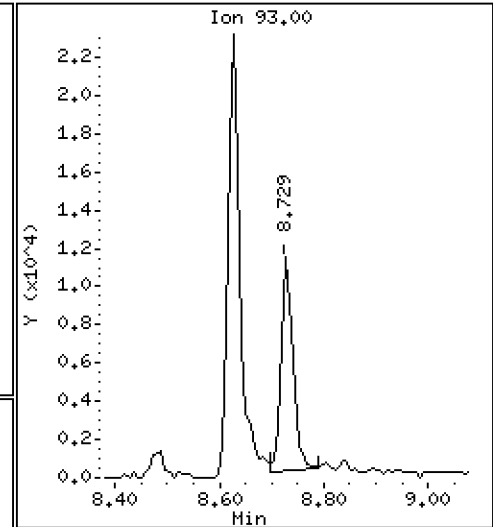
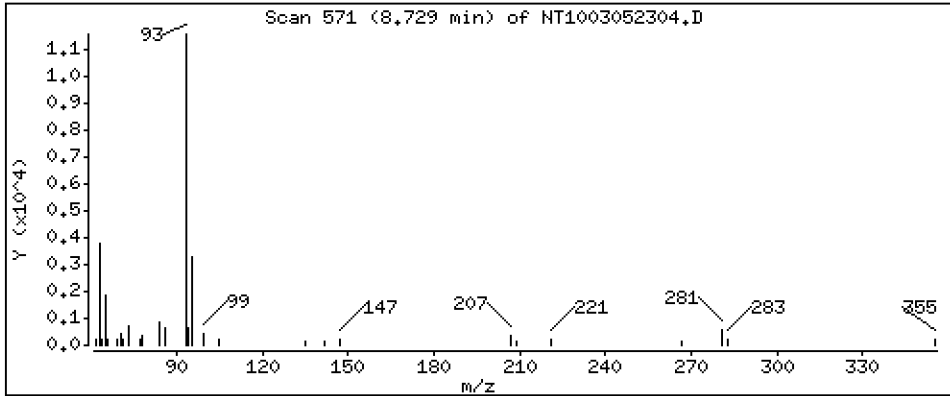
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,1911 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

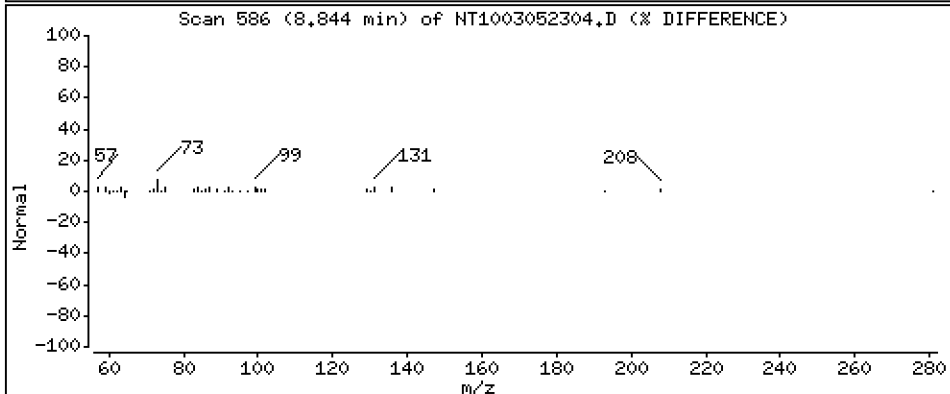
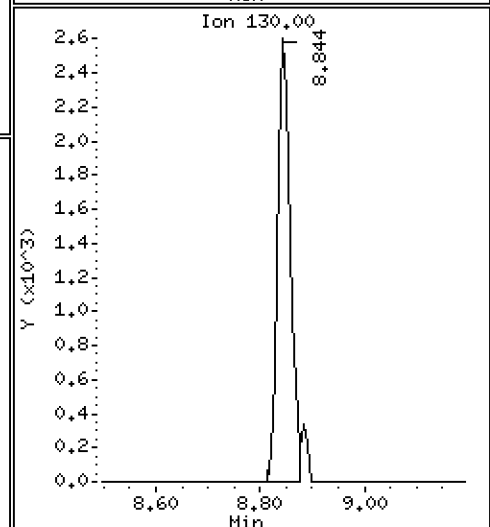
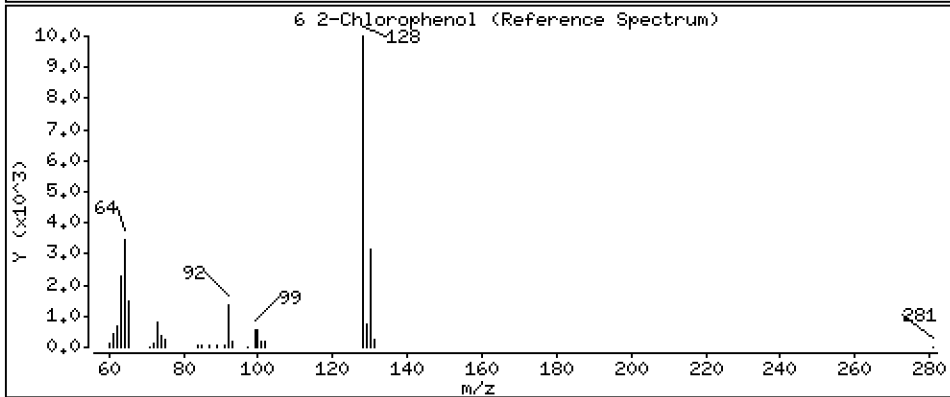
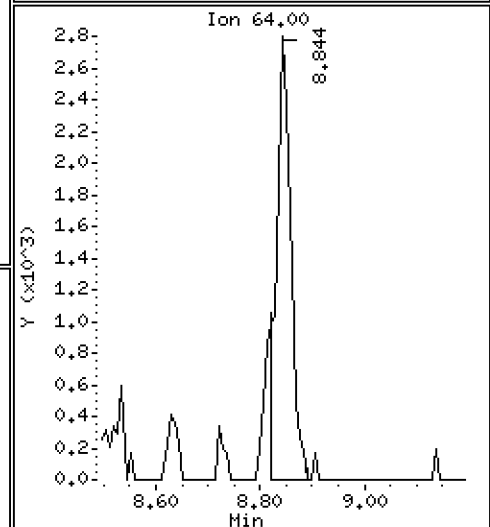
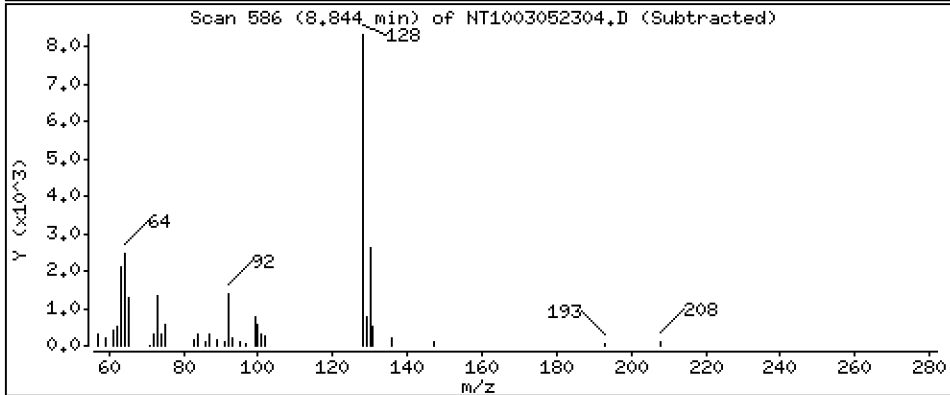
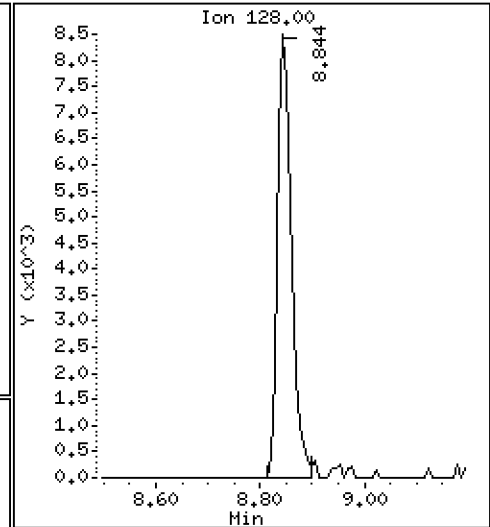
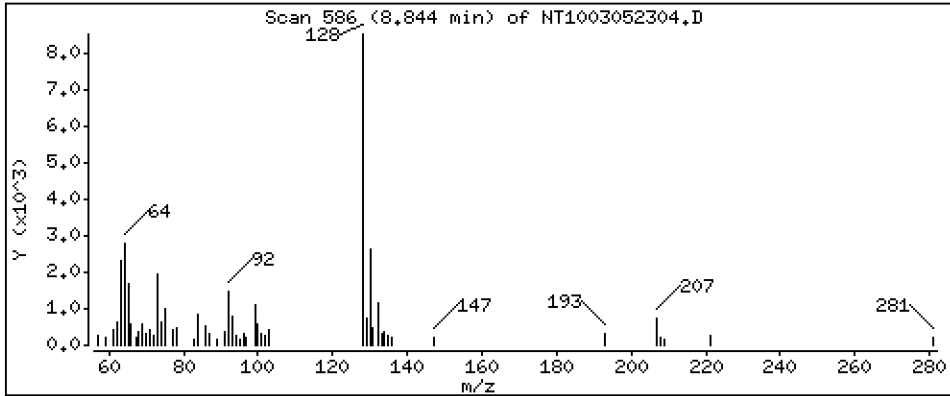
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1636 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

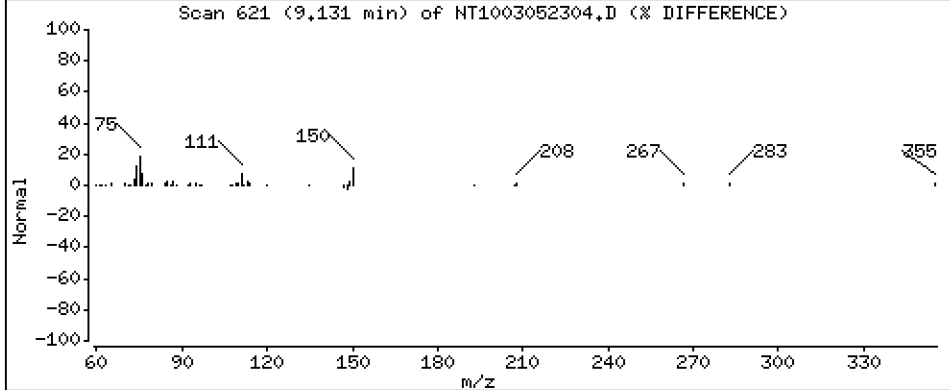
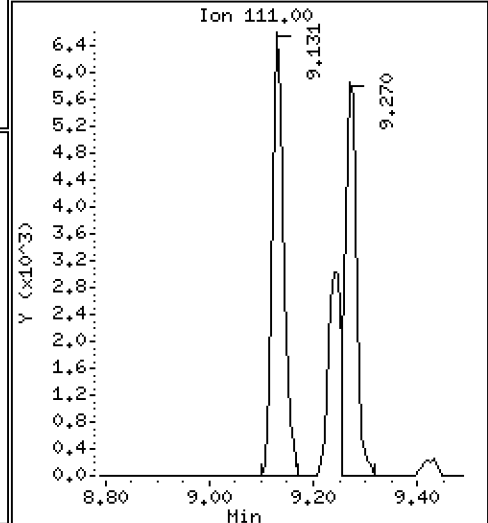
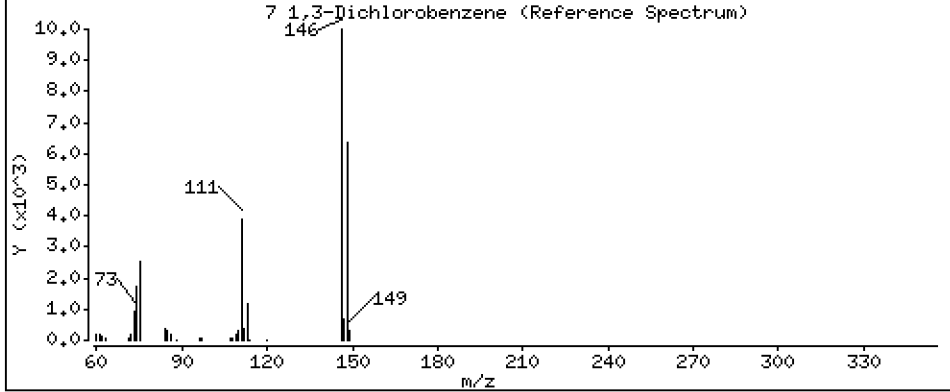
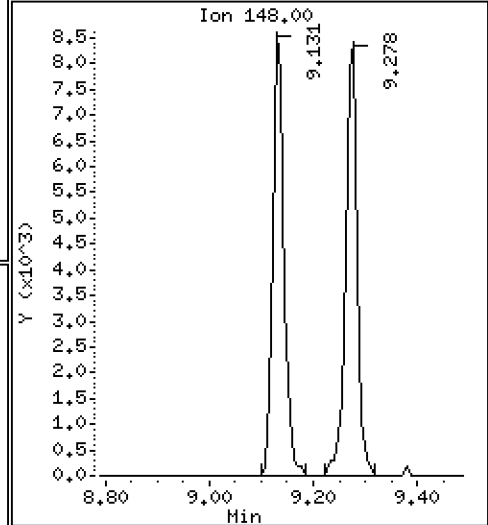
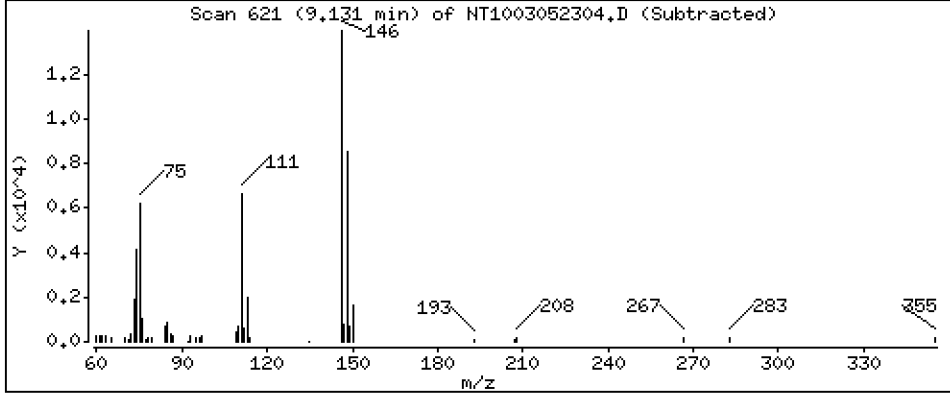
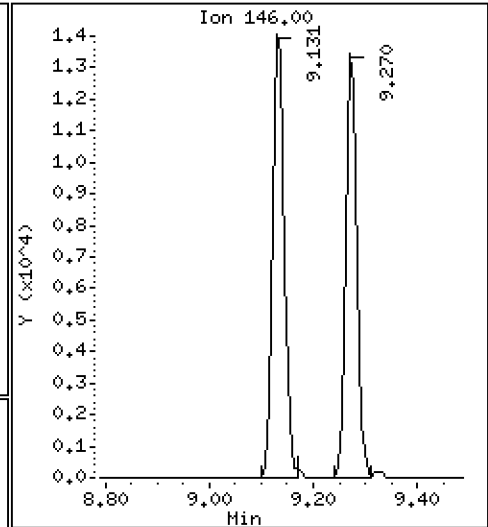
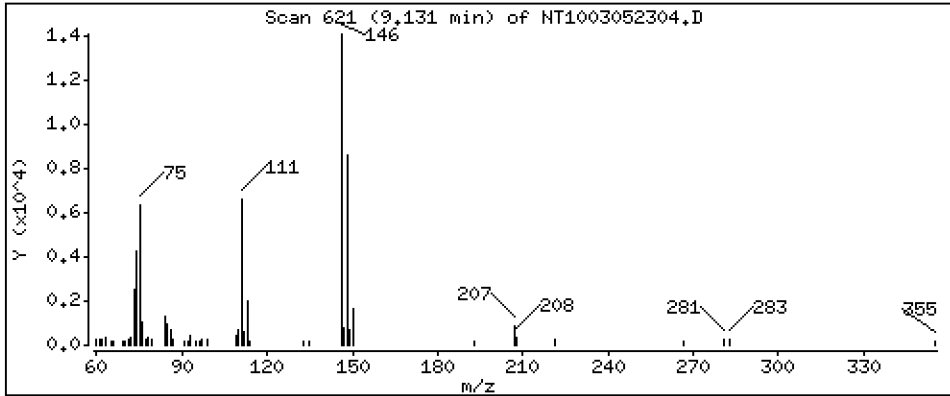
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2131 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

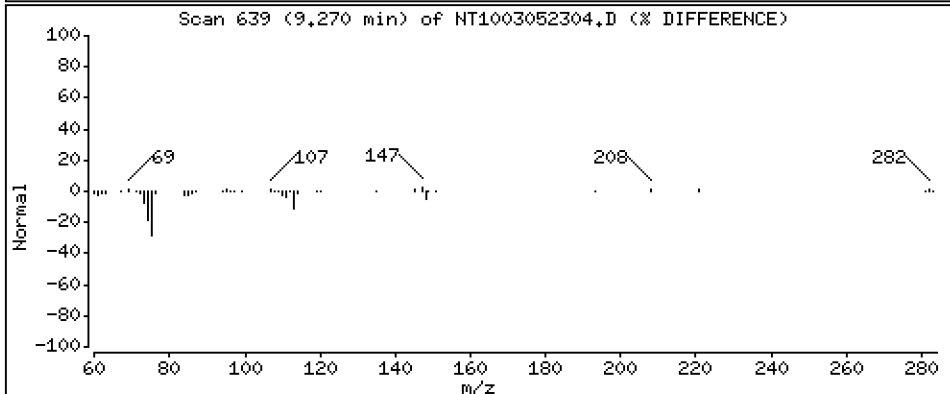
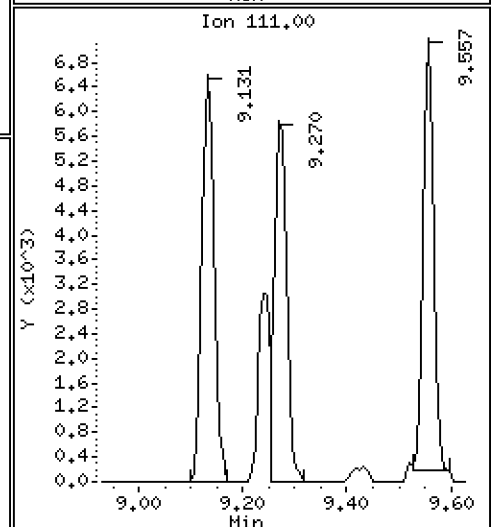
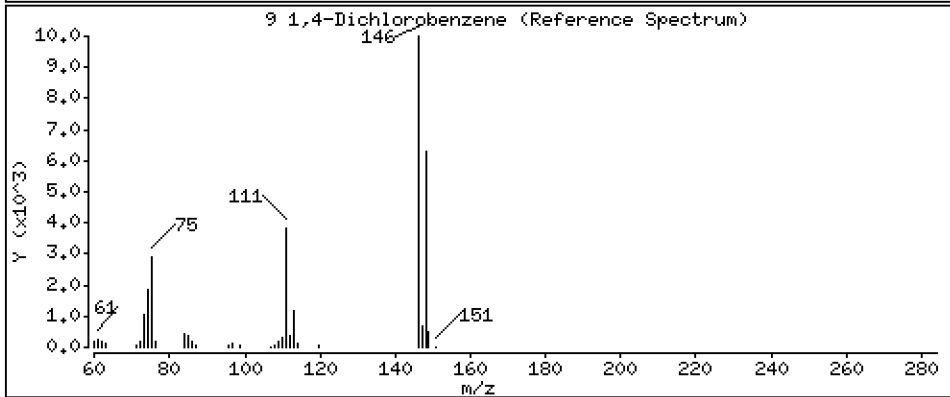
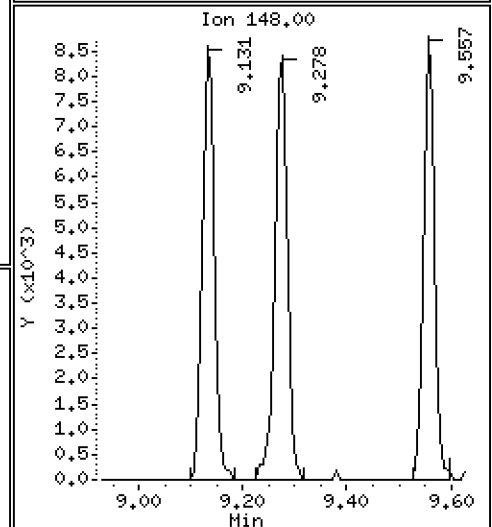
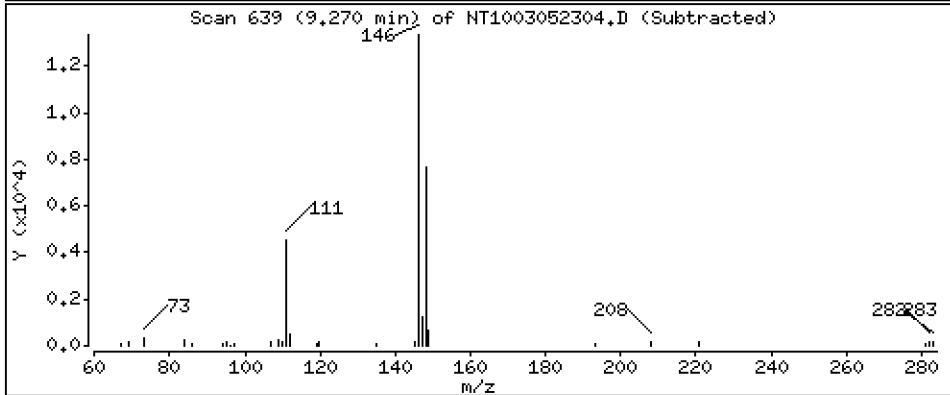
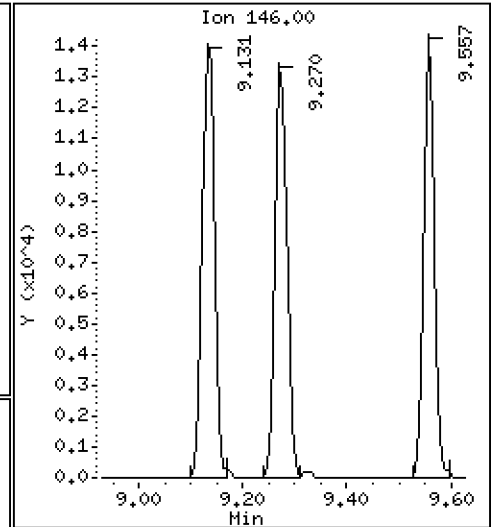
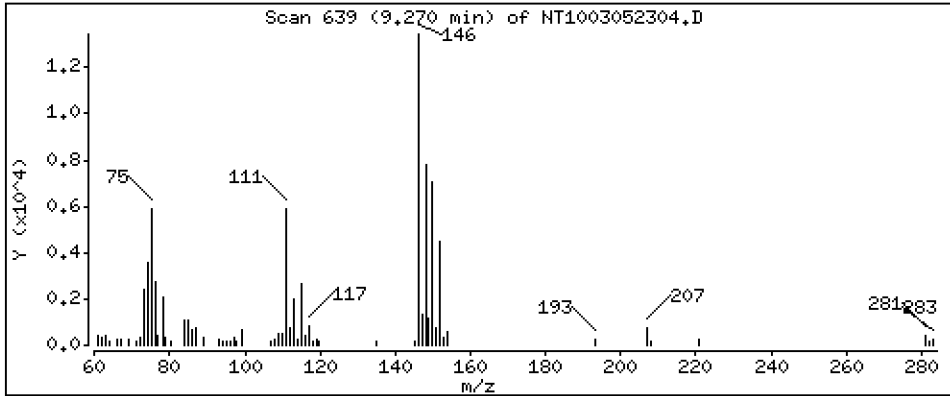
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1992 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

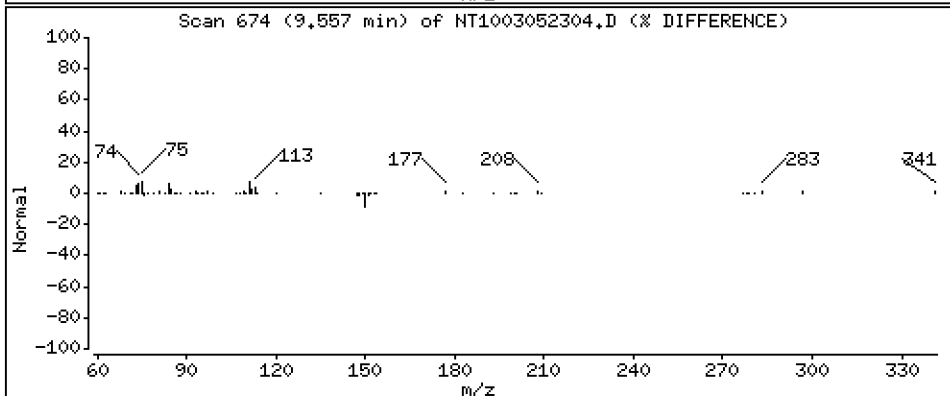
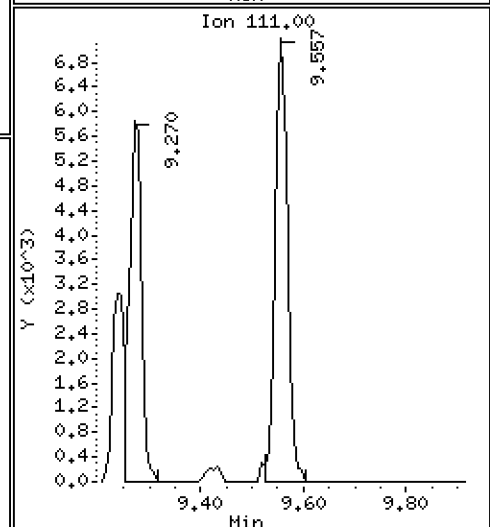
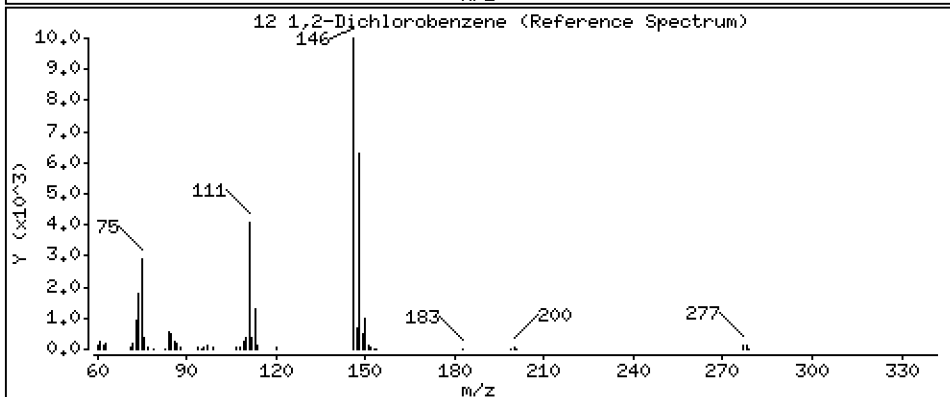
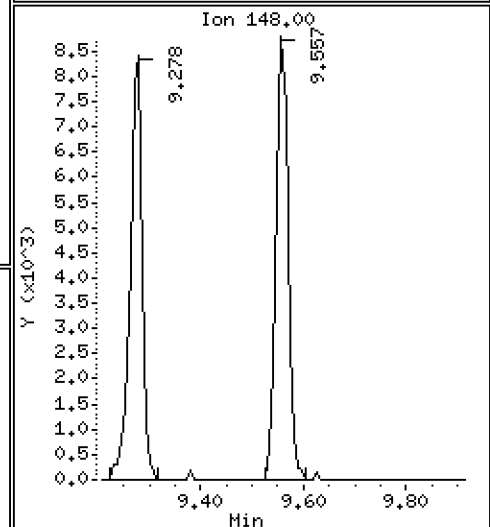
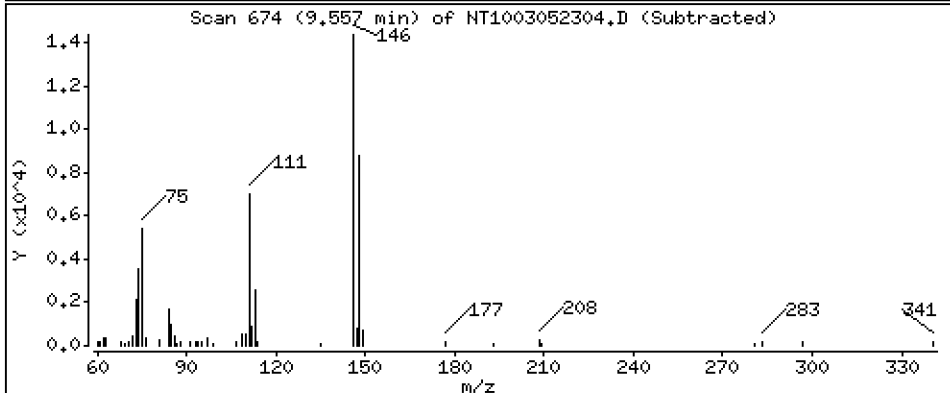
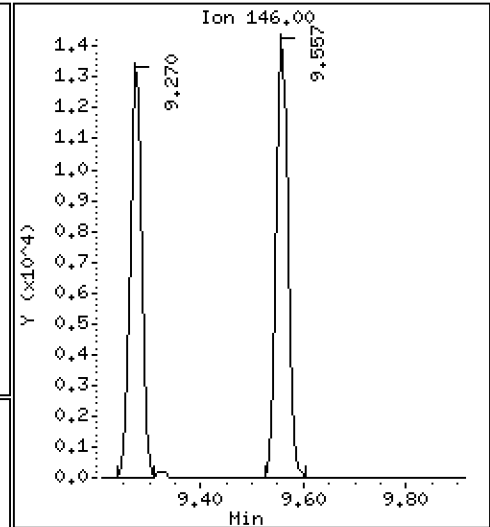
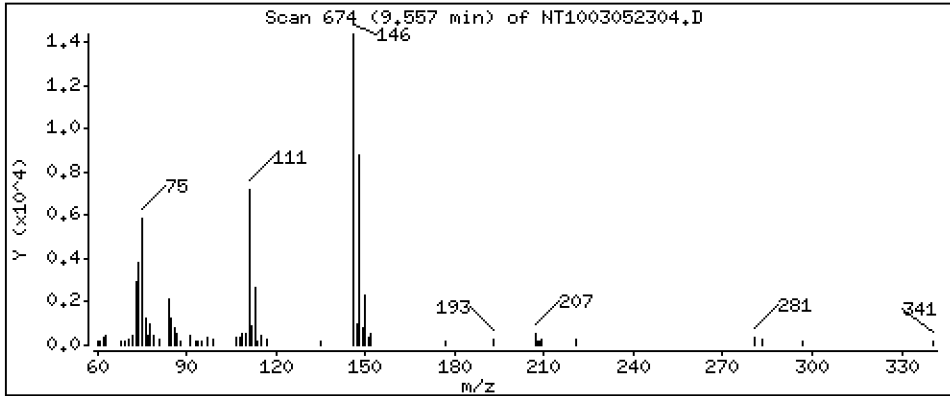
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.2113 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

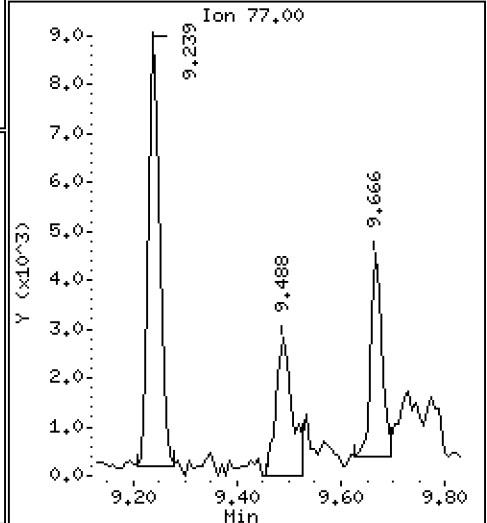
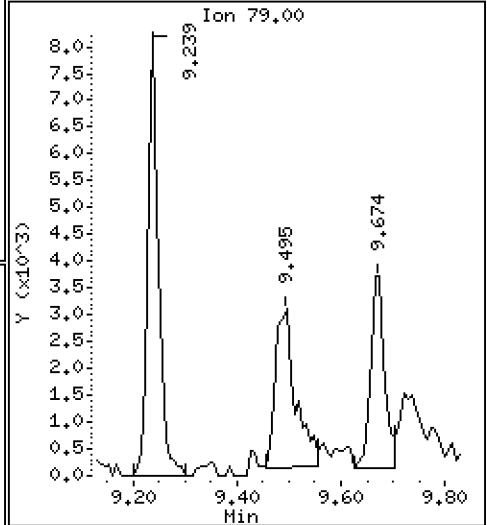
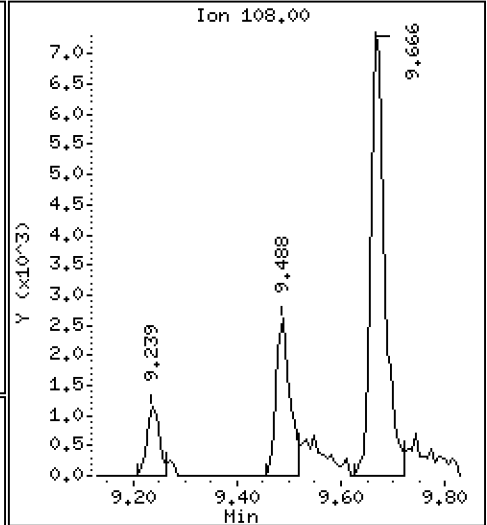
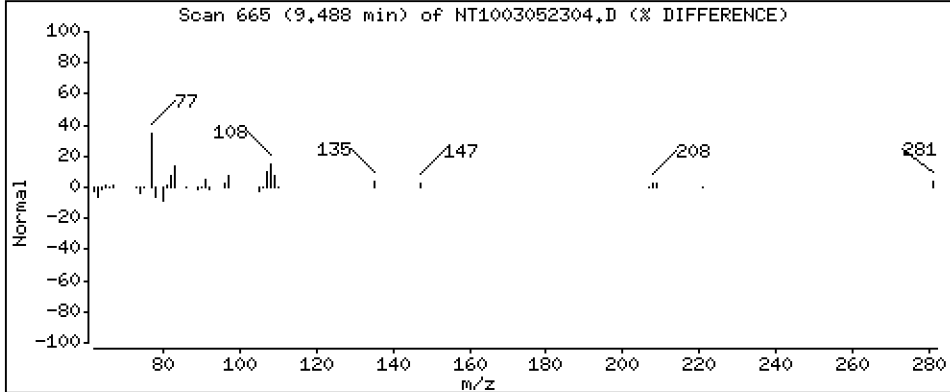
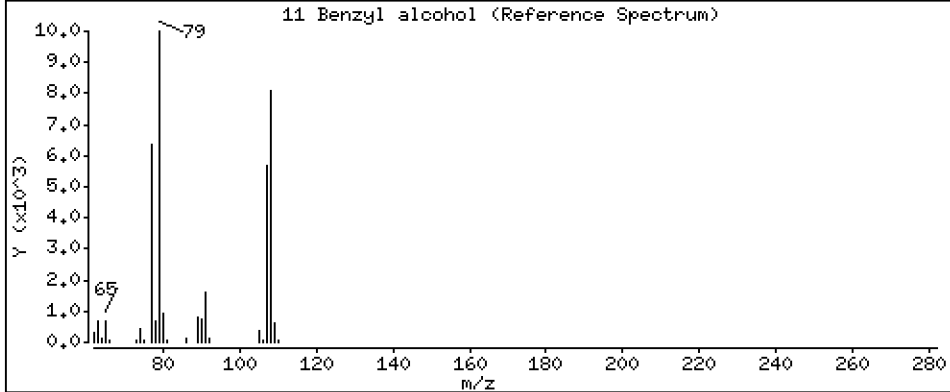
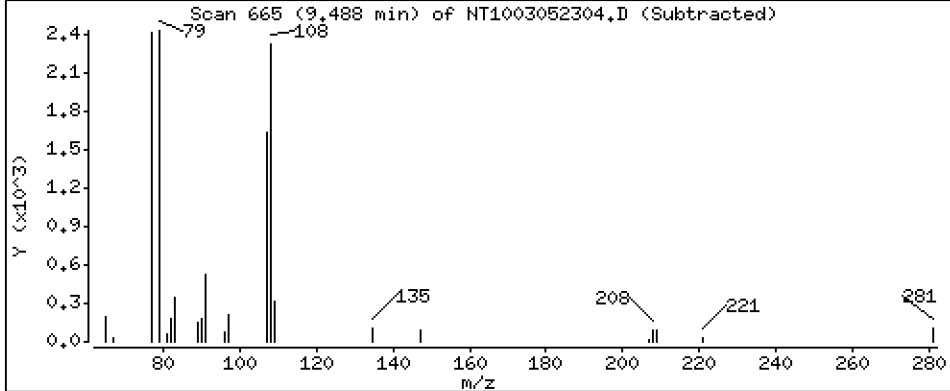
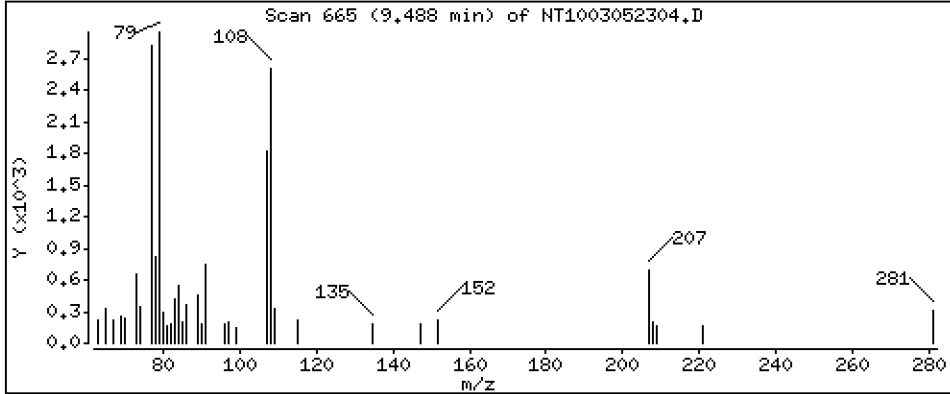
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.07919 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

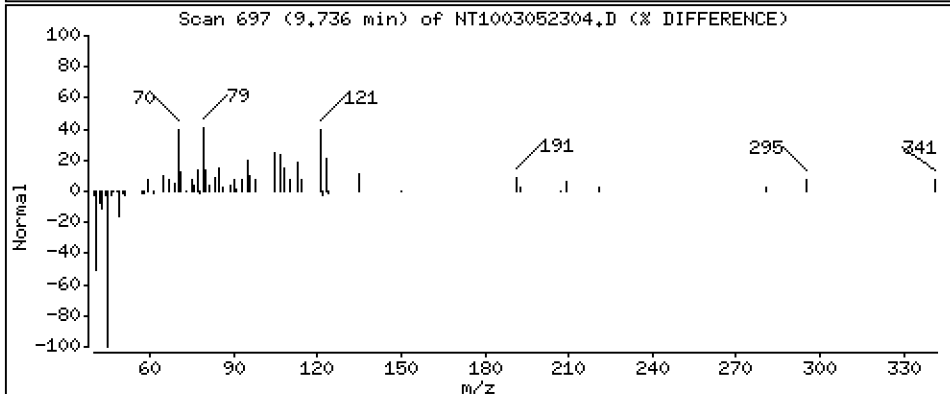
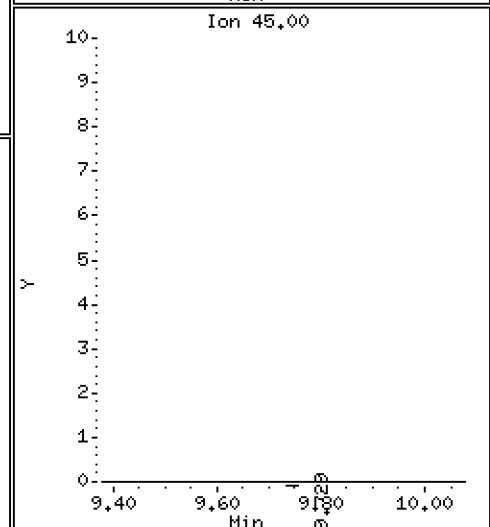
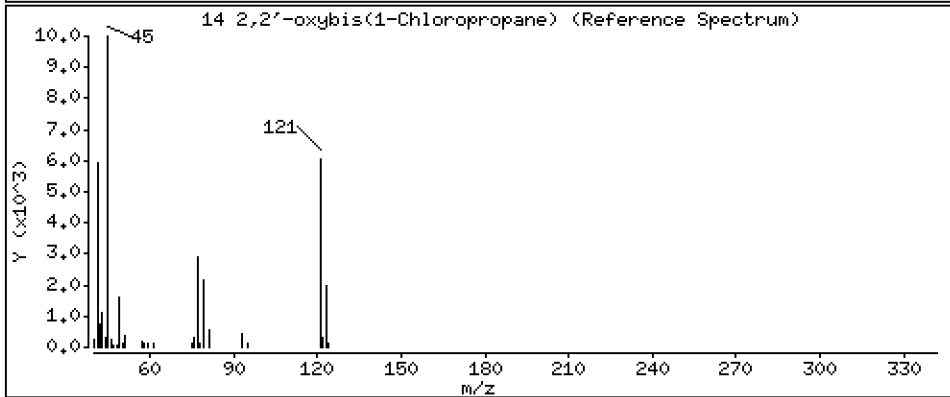
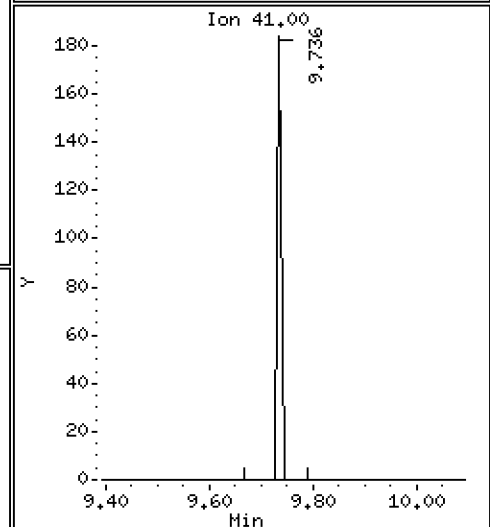
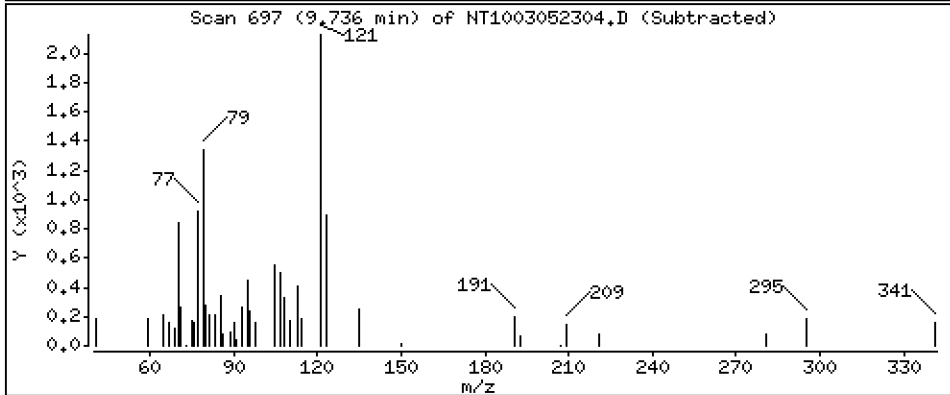
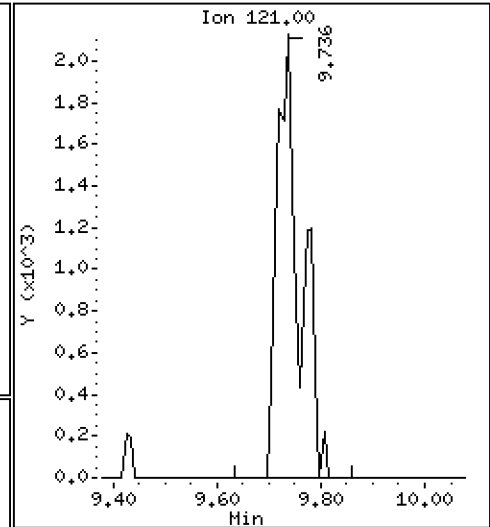
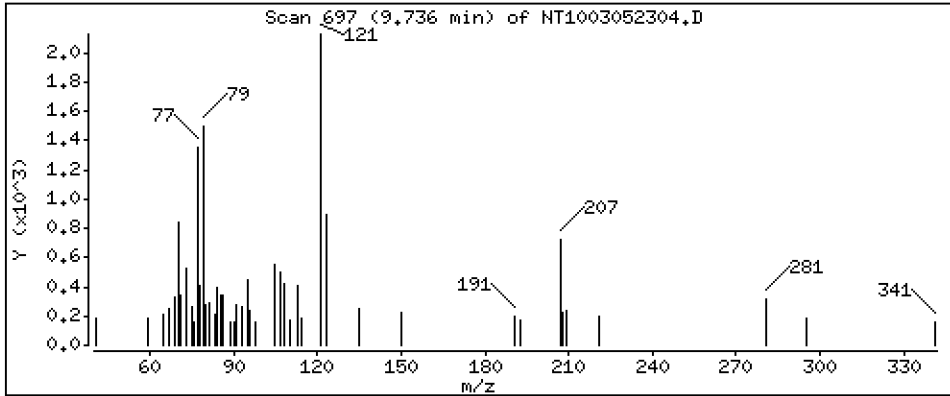
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2239 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

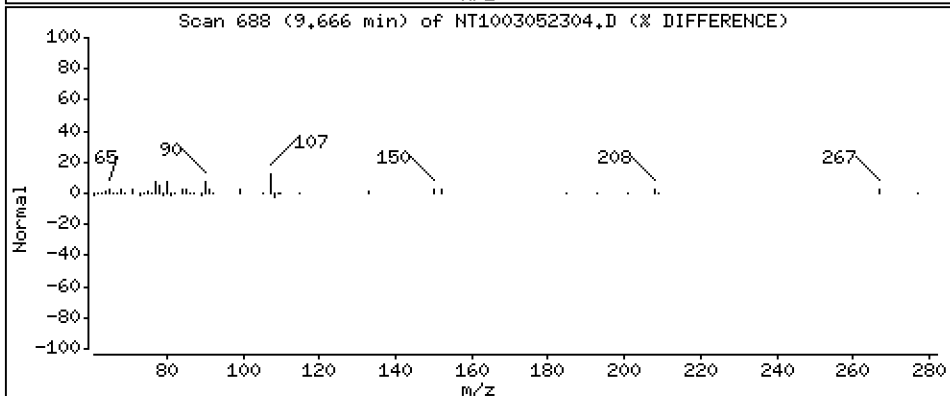
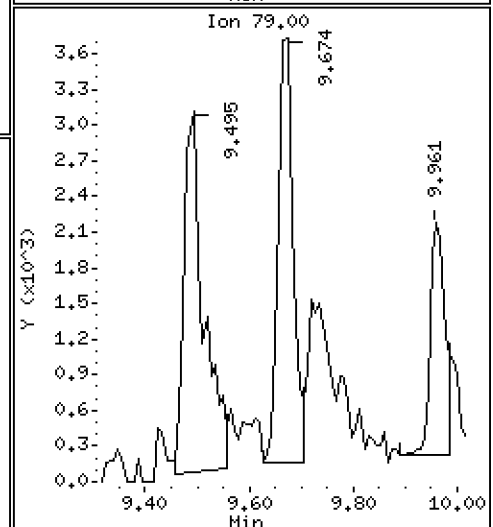
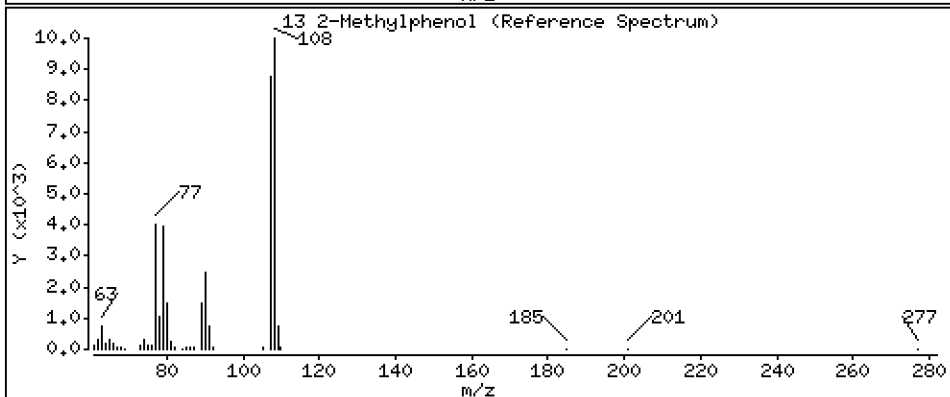
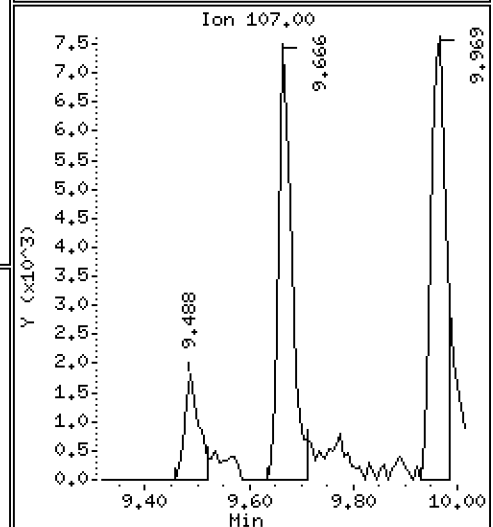
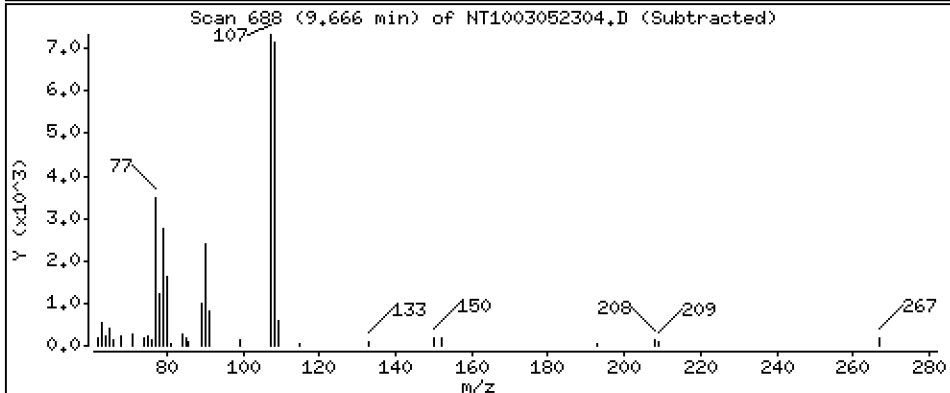
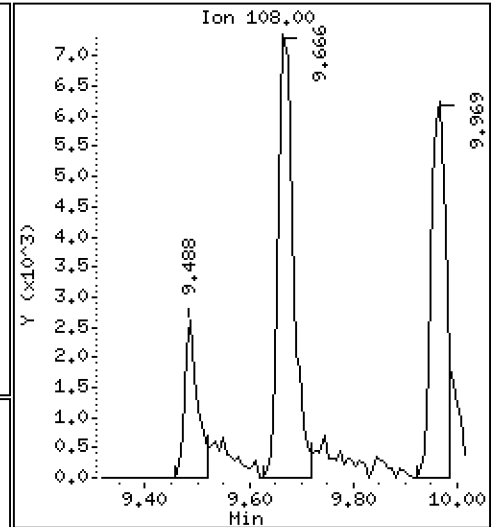
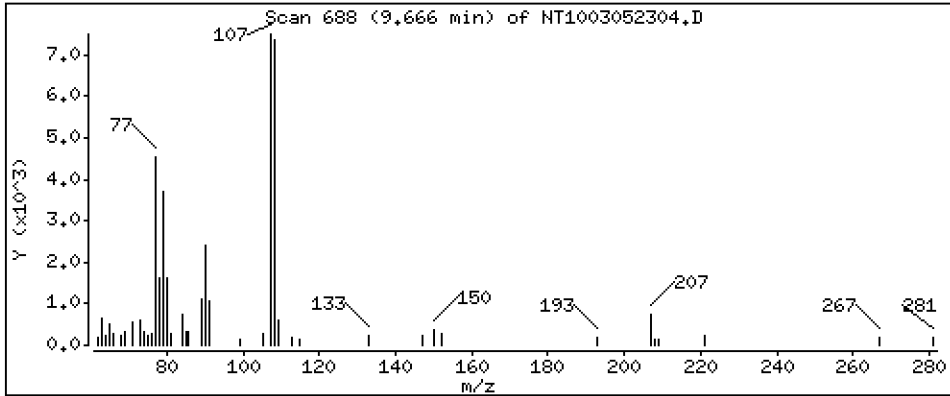
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,1660 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

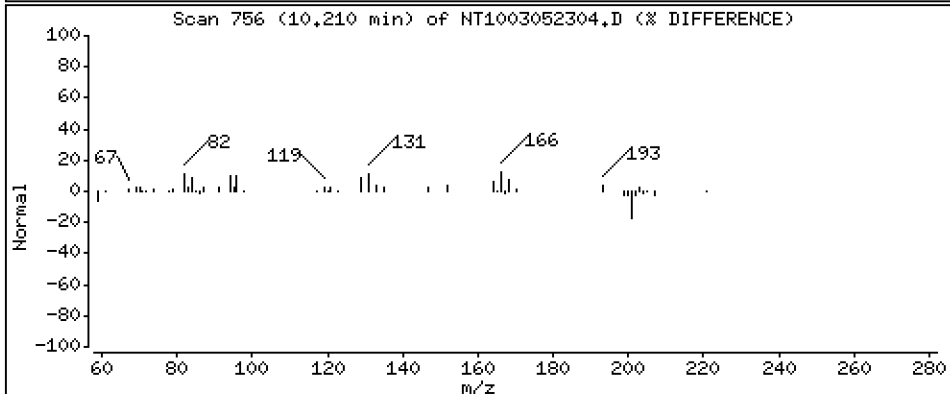
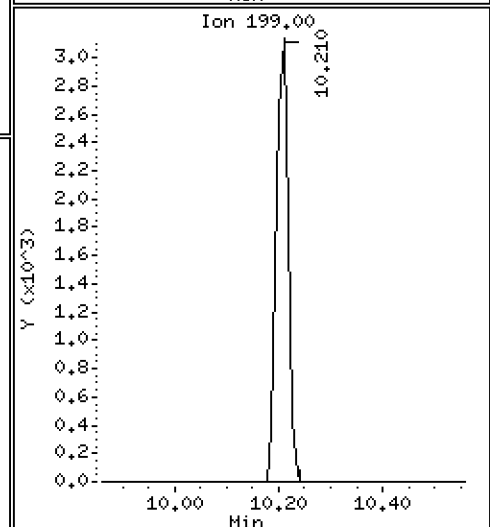
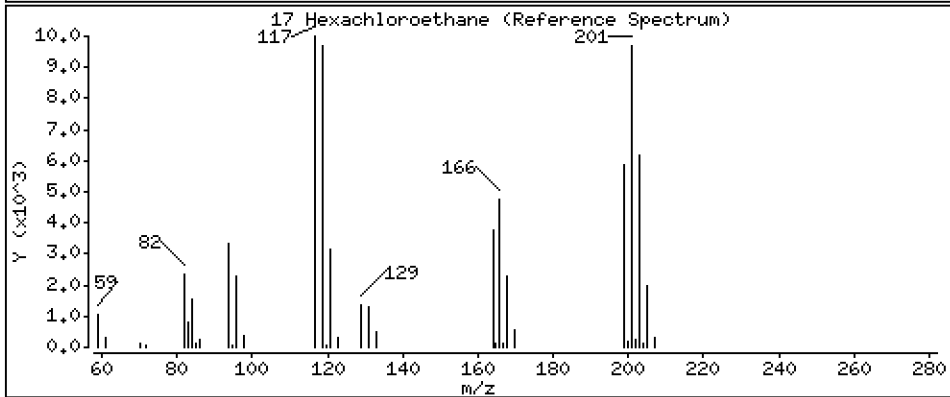
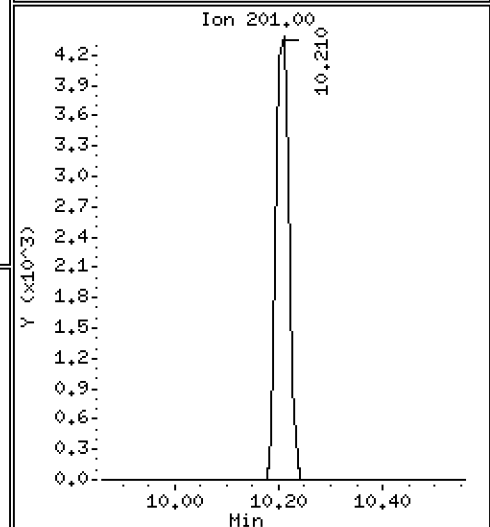
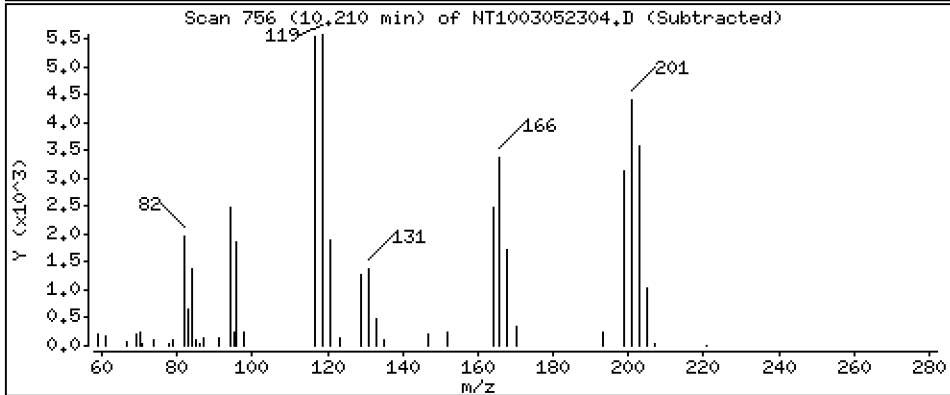
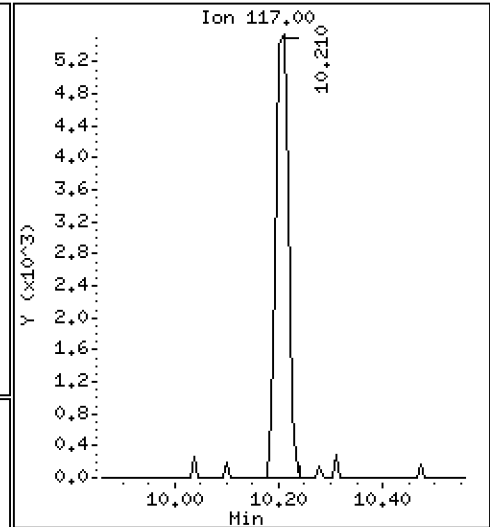
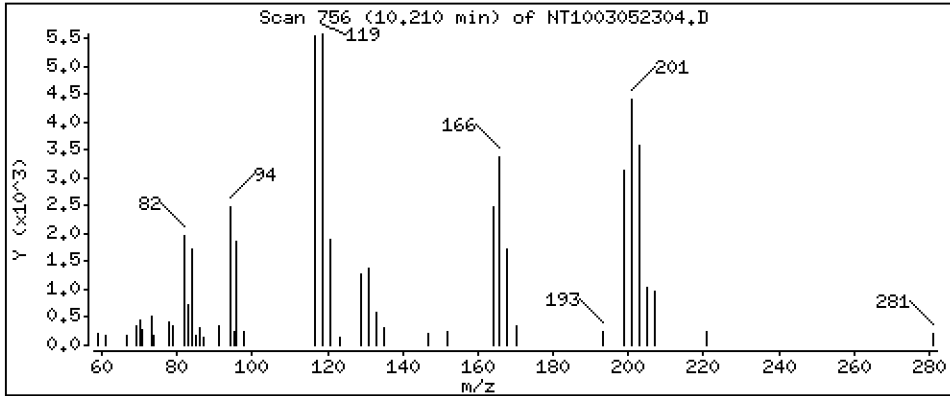
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,2085 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

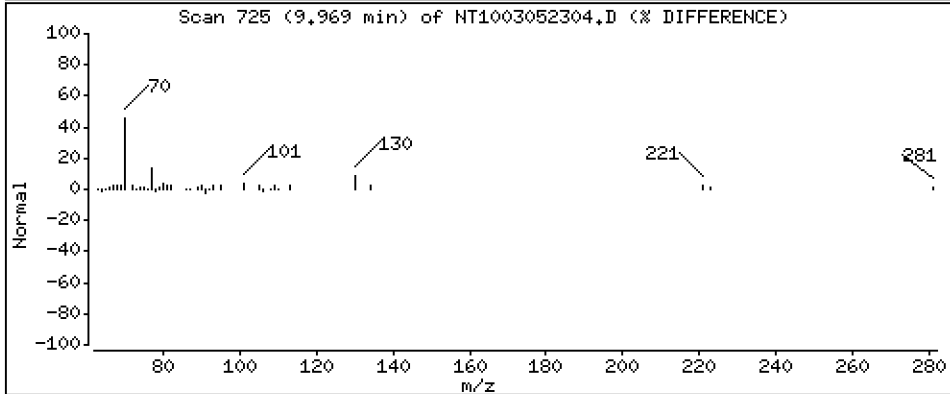
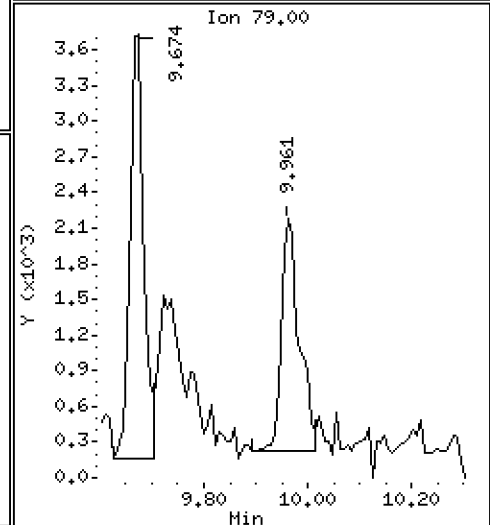
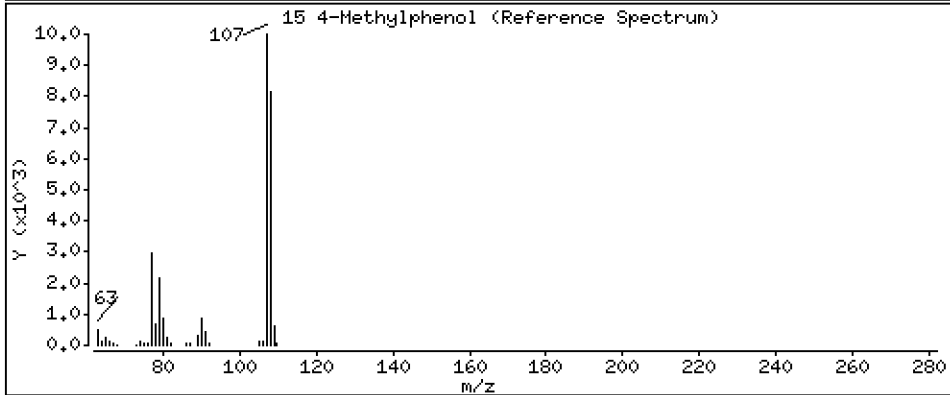
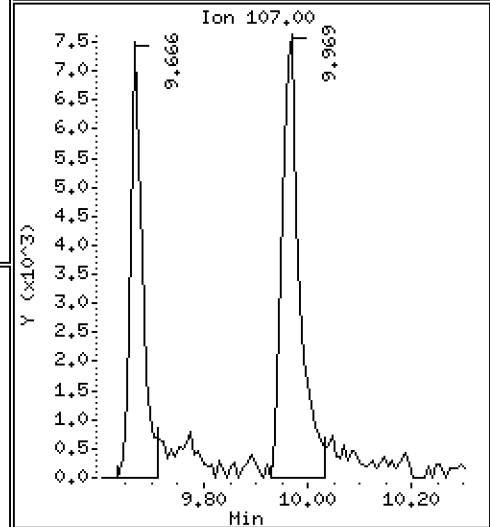
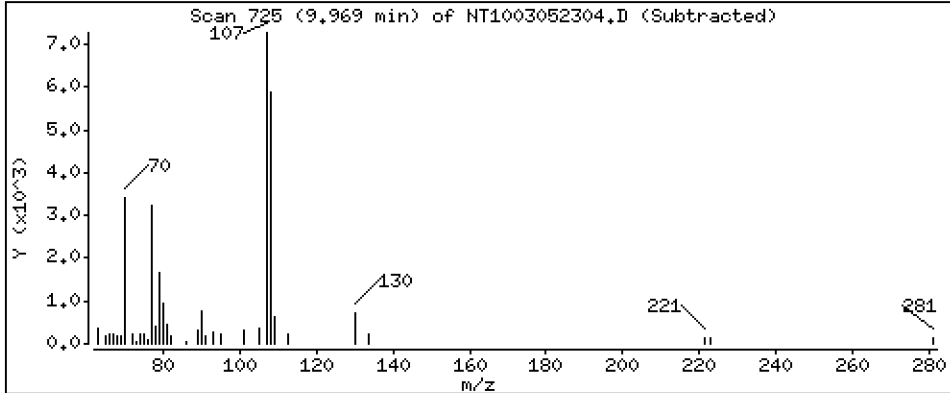
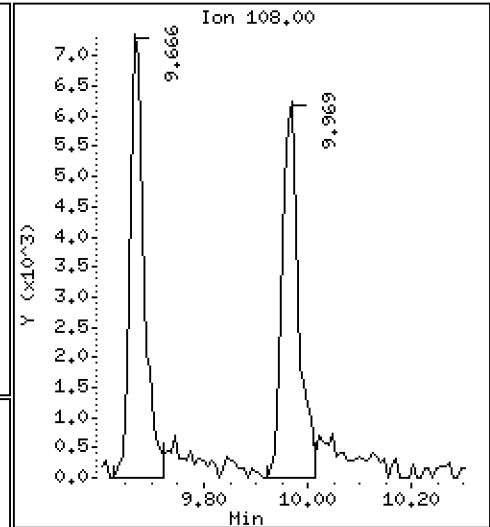
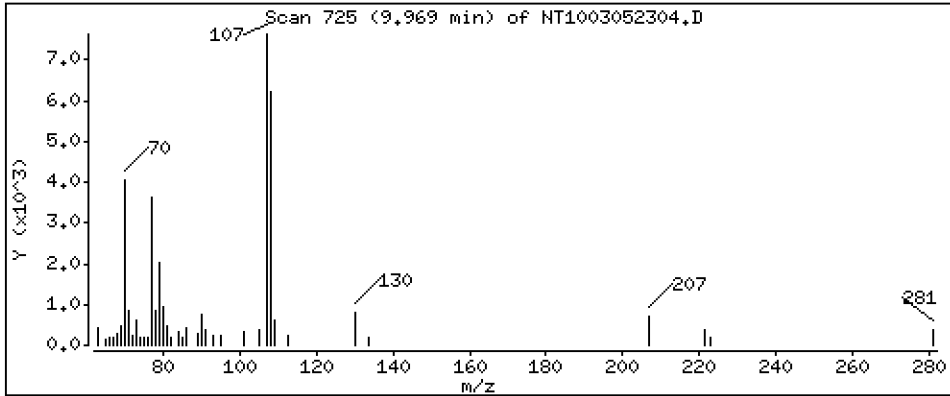
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,1256 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

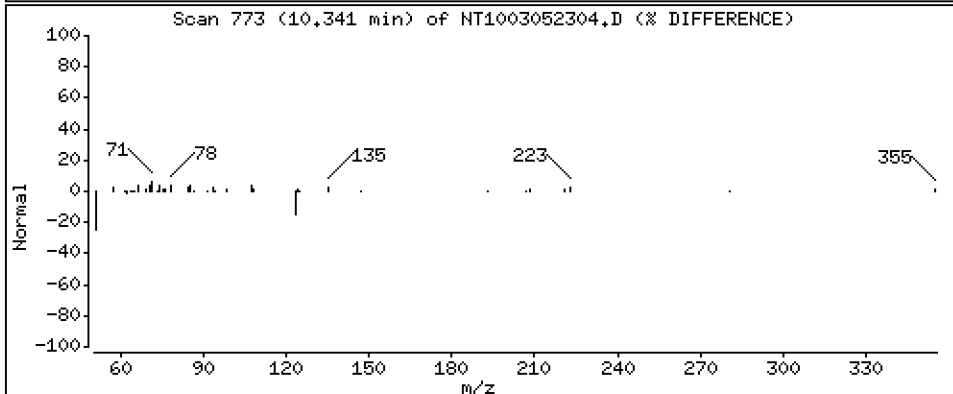
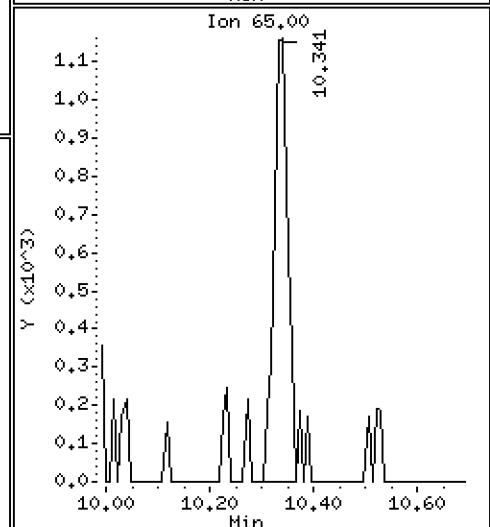
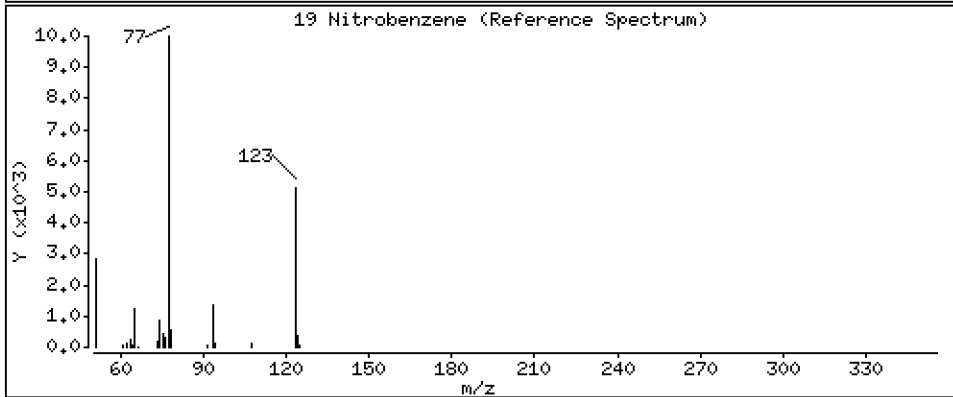
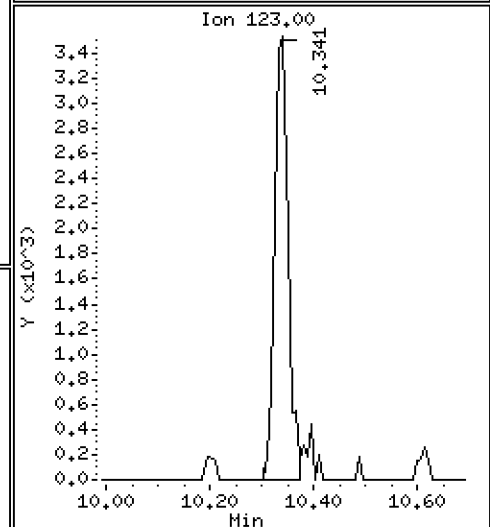
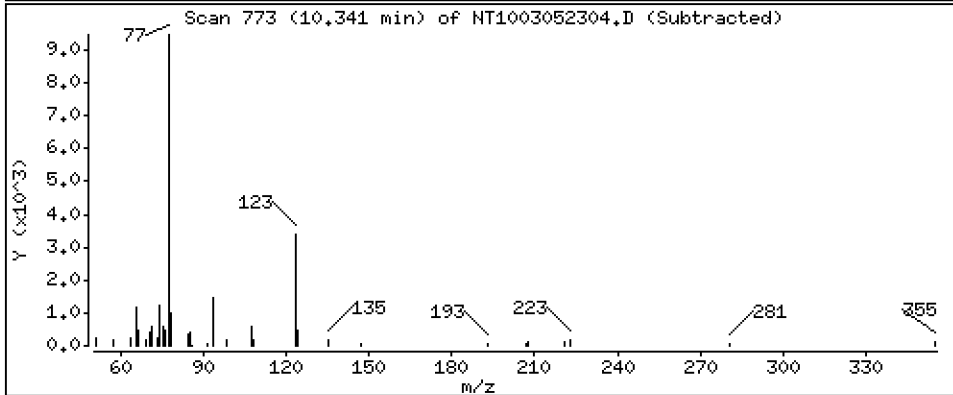
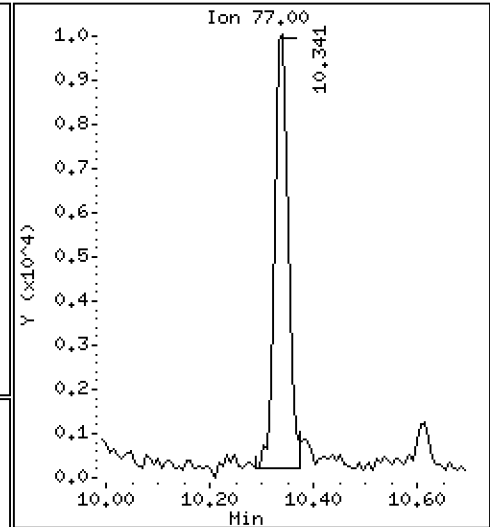
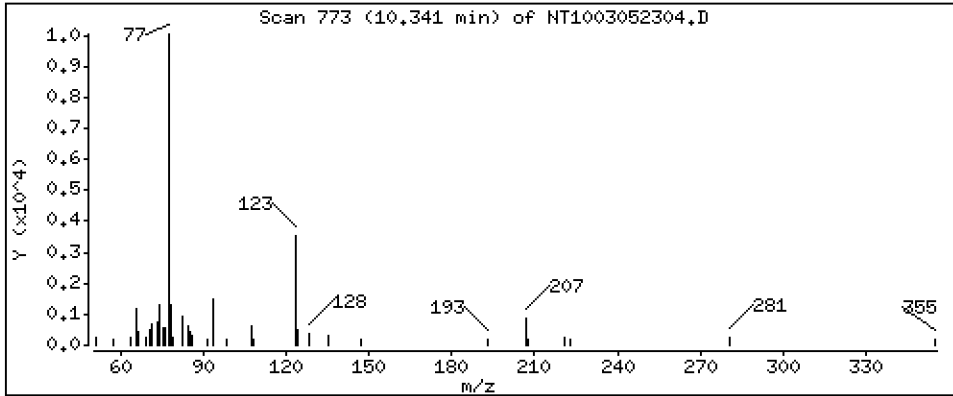
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,1566 ug/mL

19 Nitrobenzene



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

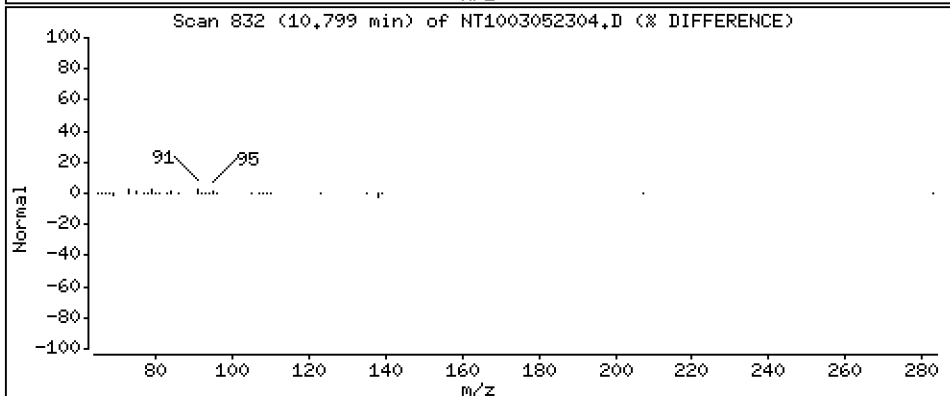
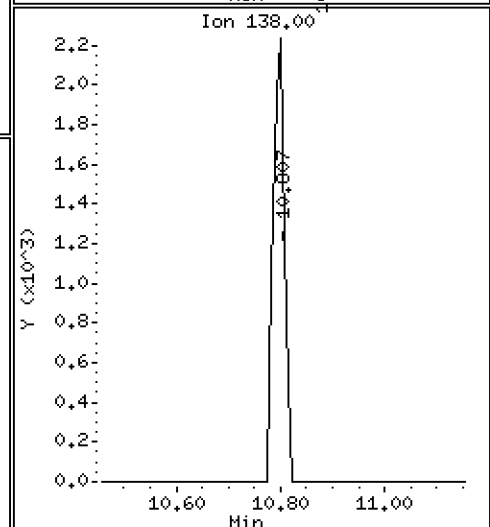
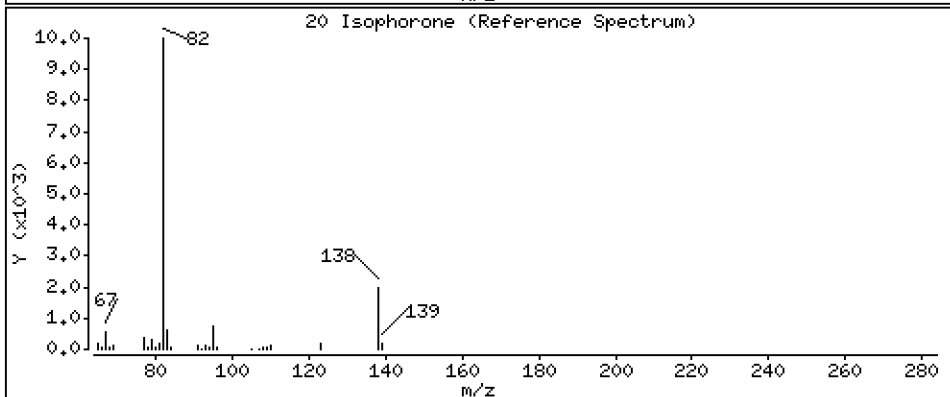
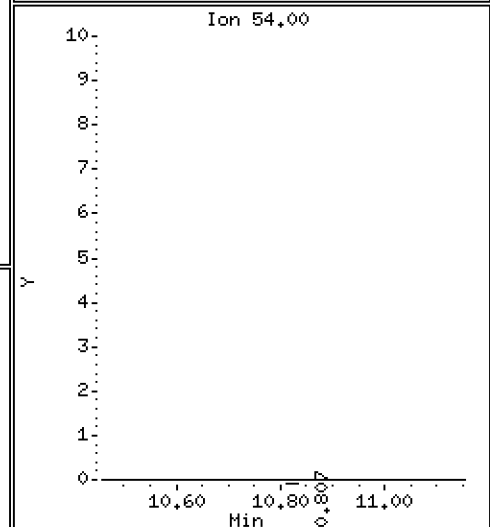
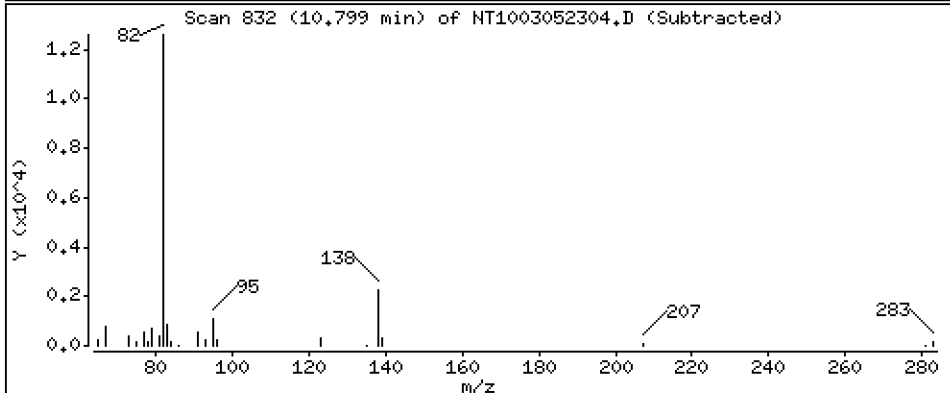
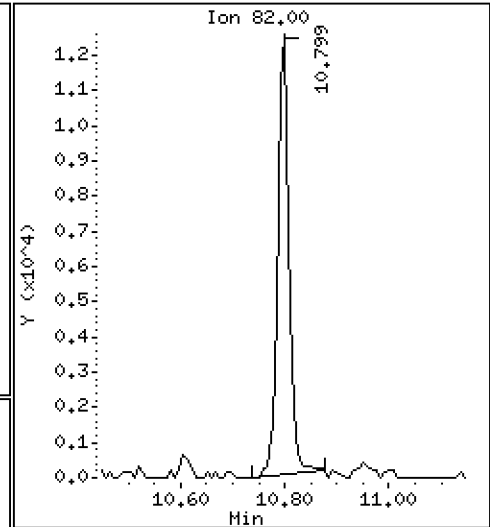
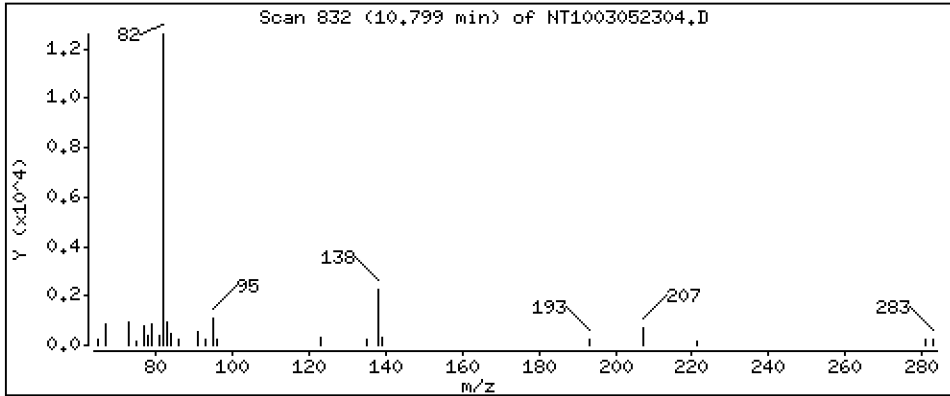
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1386 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

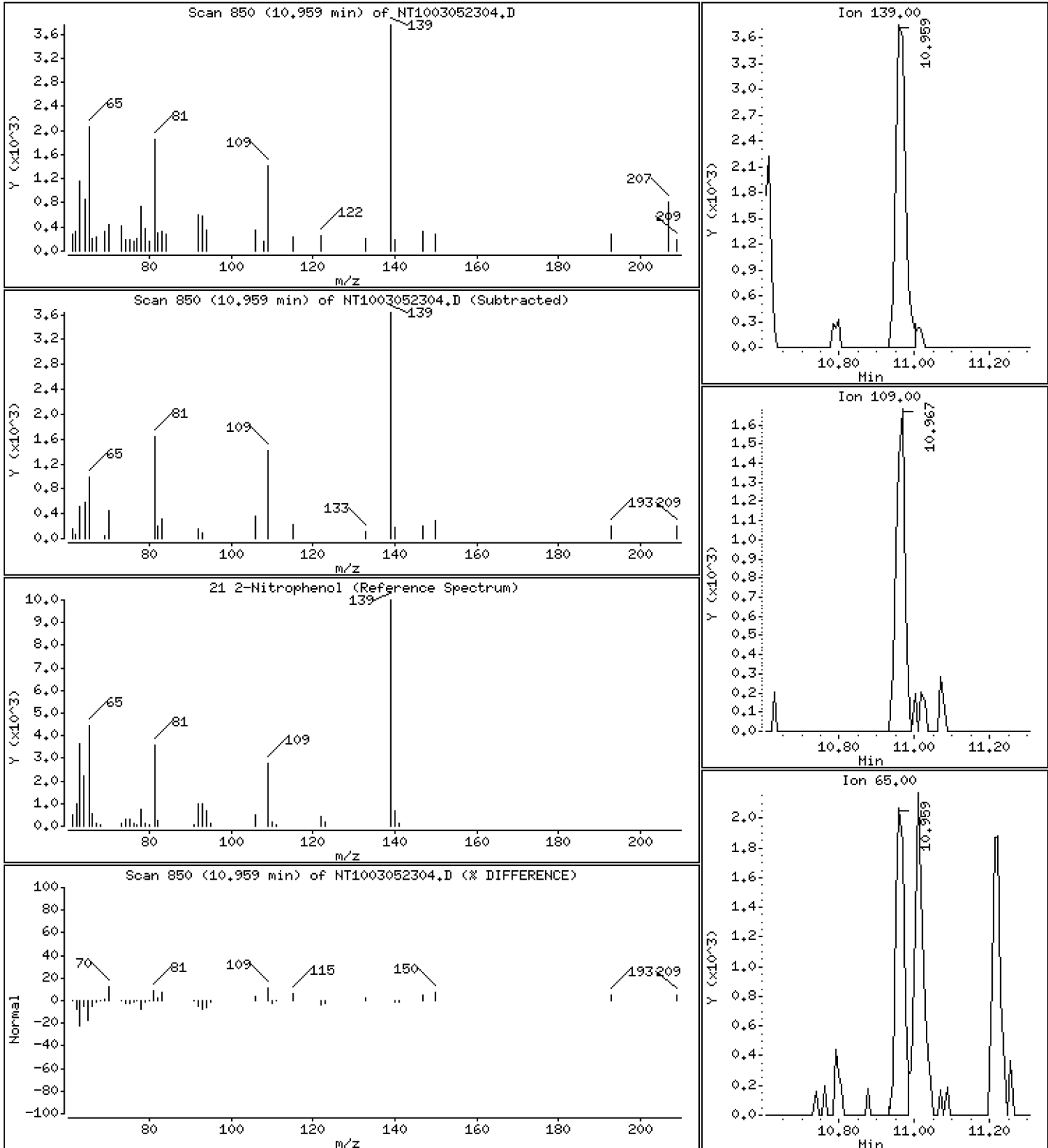
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1110 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

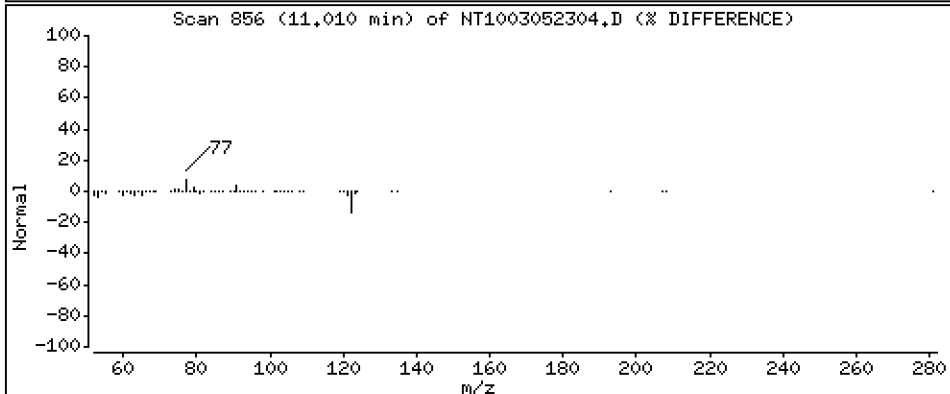
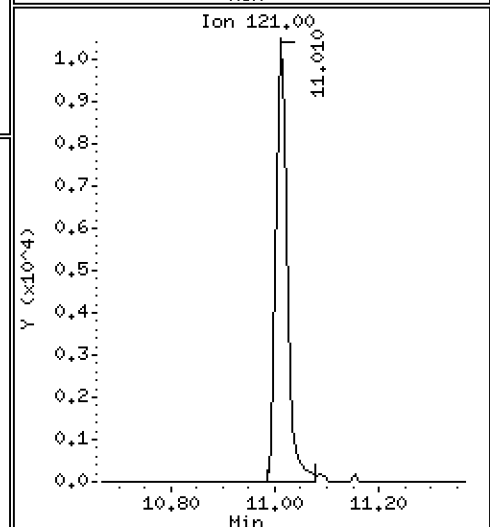
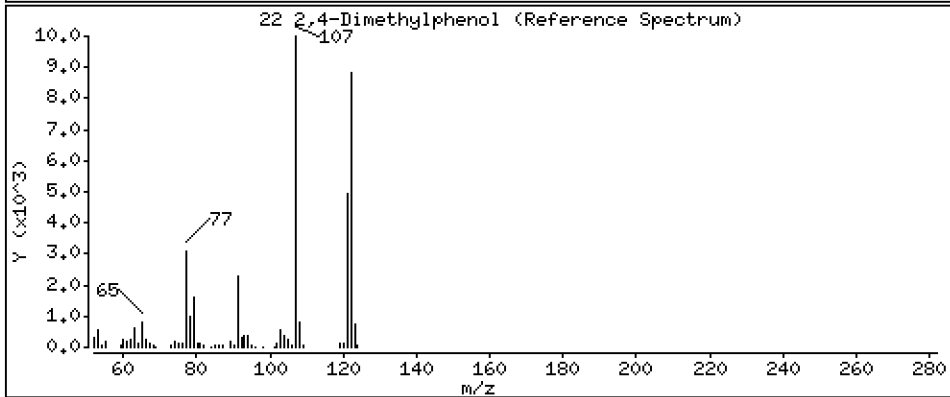
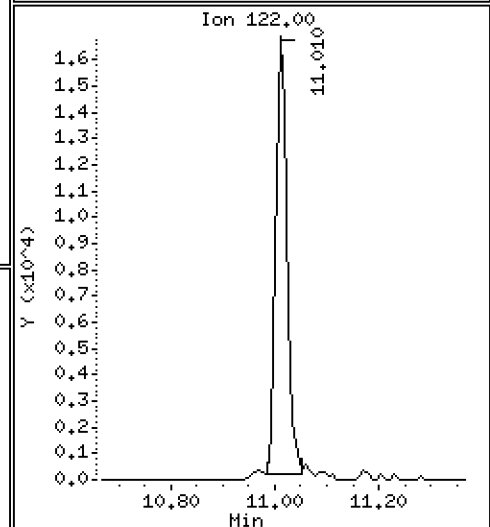
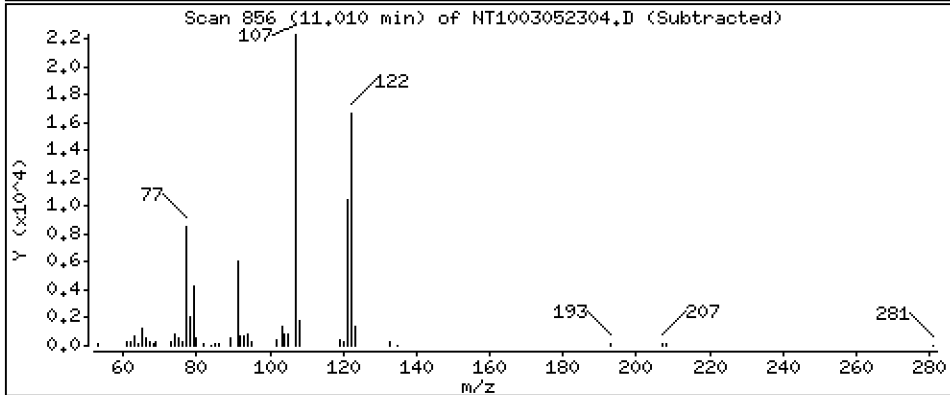
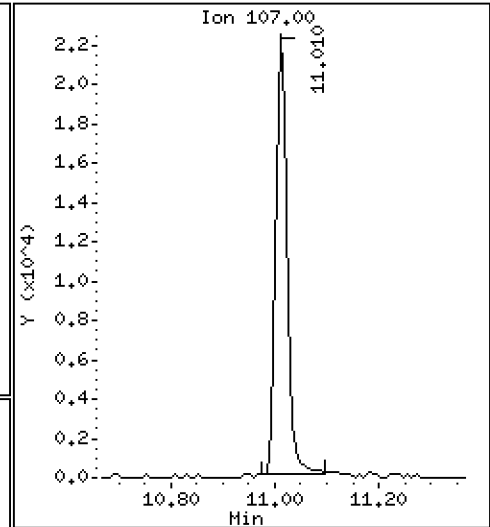
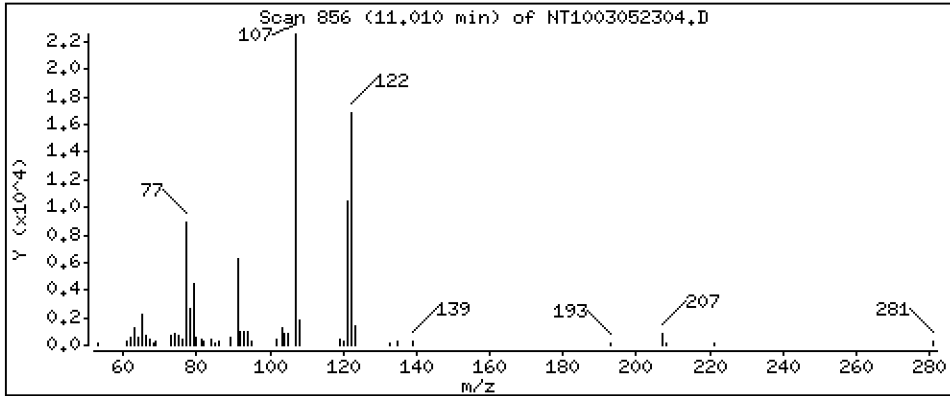
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3287 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

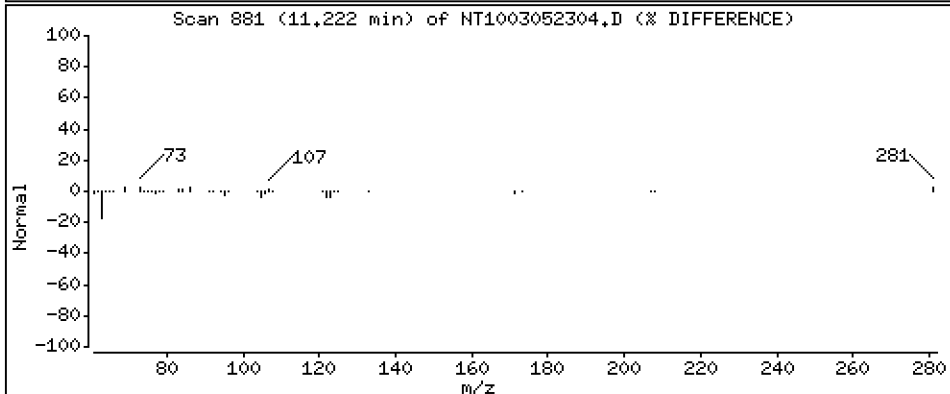
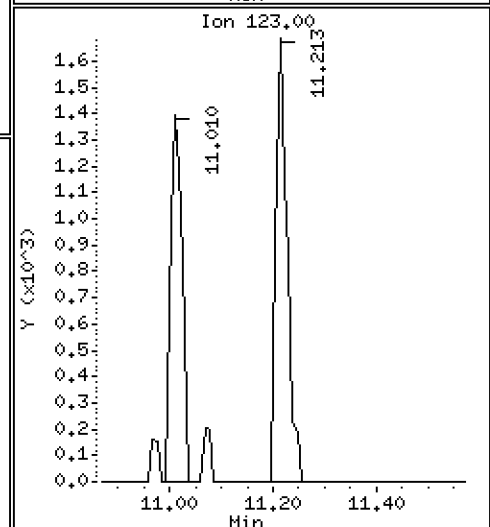
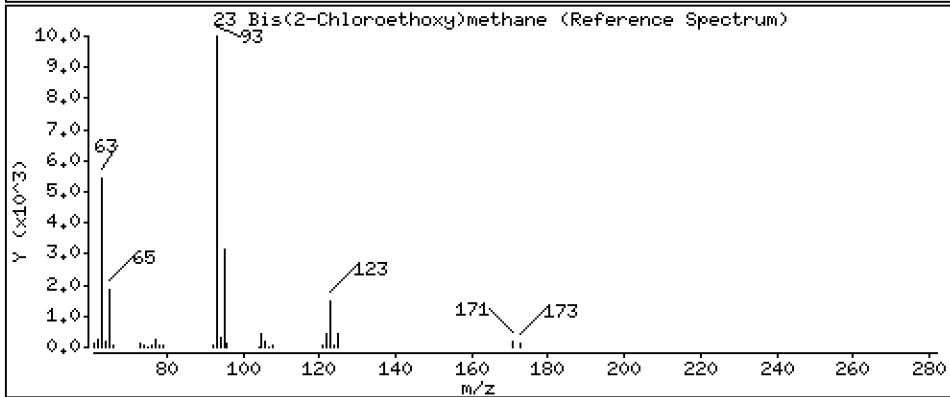
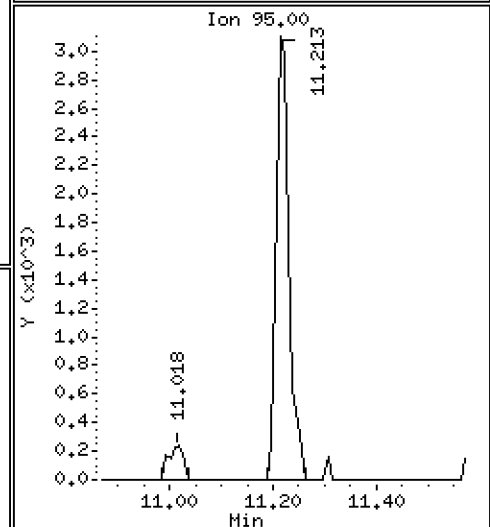
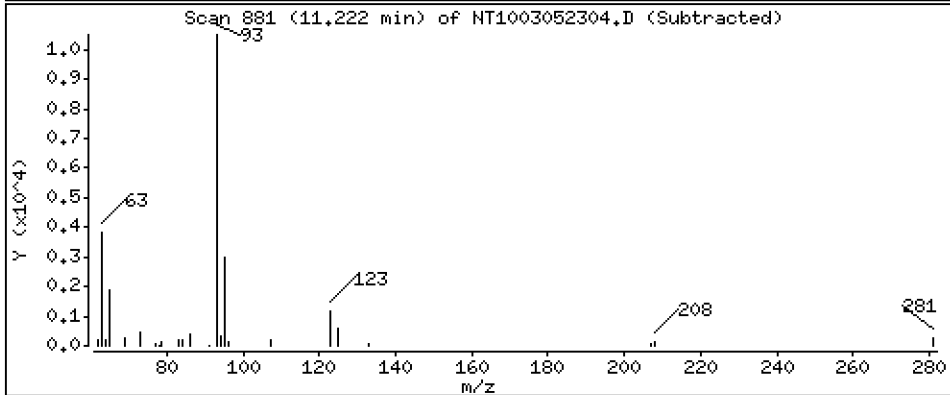
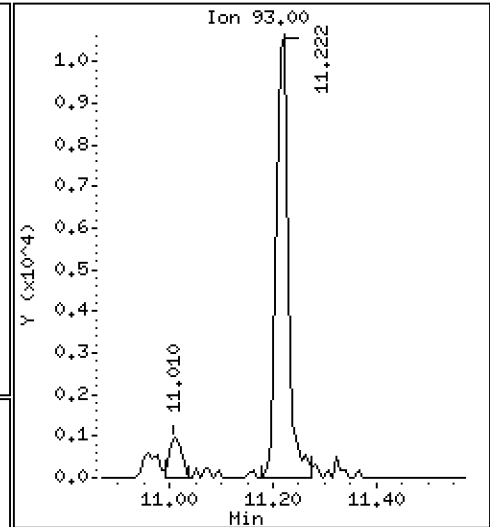
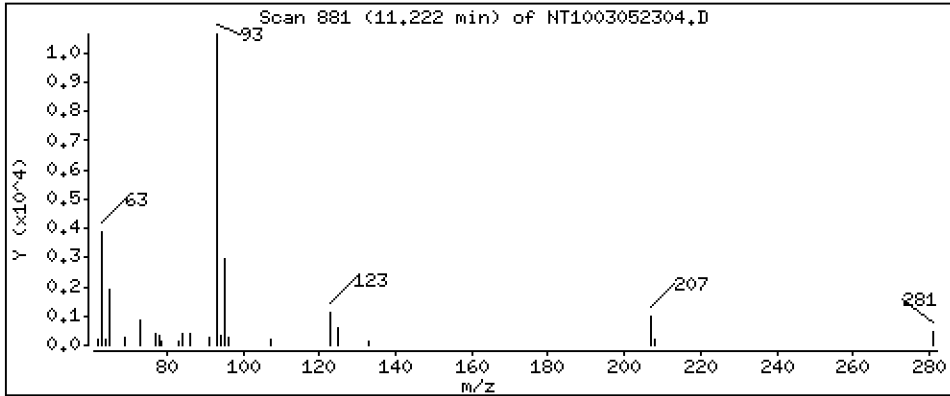
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 0,2050 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

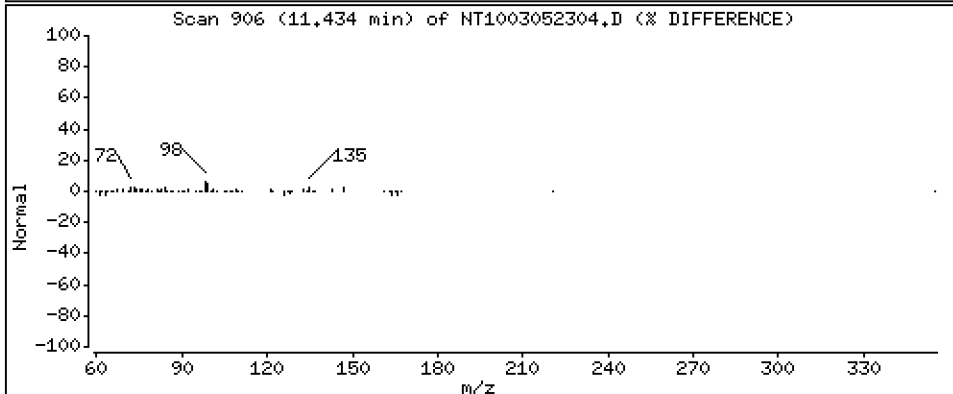
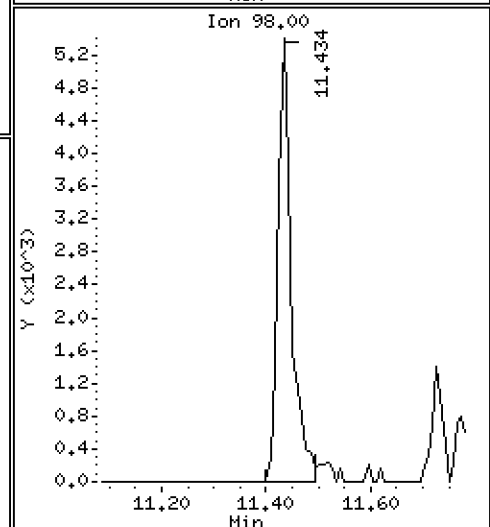
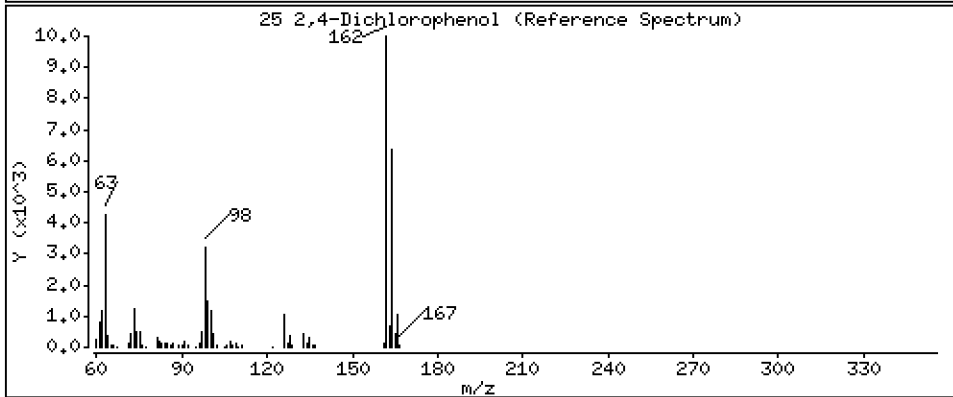
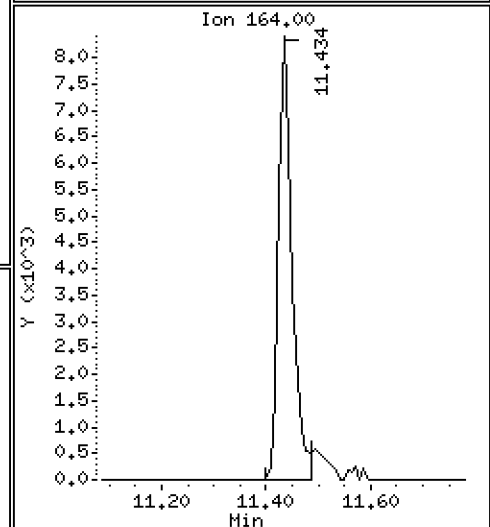
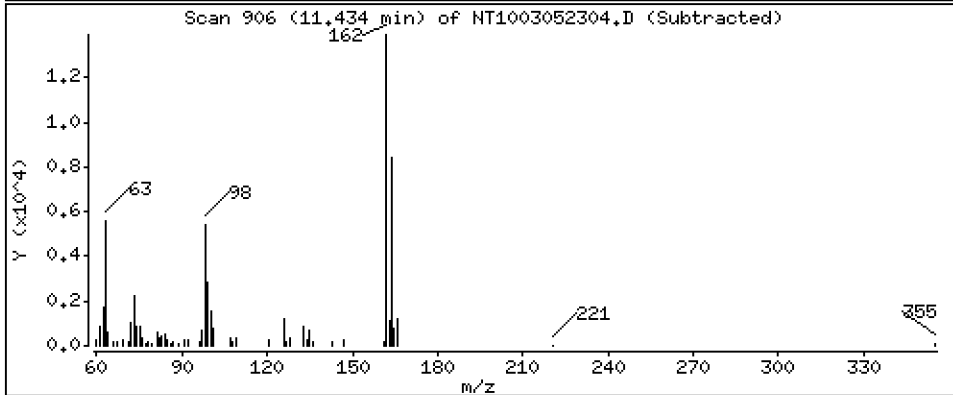
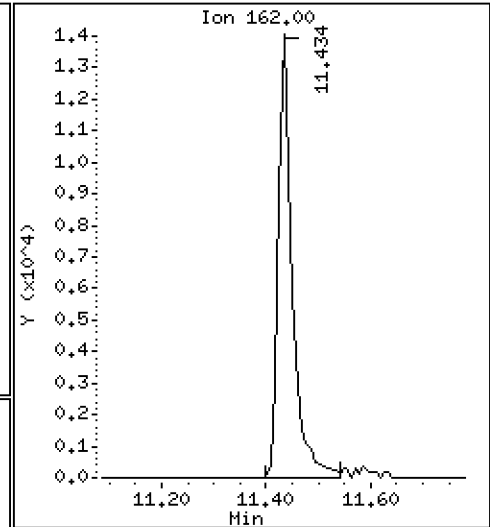
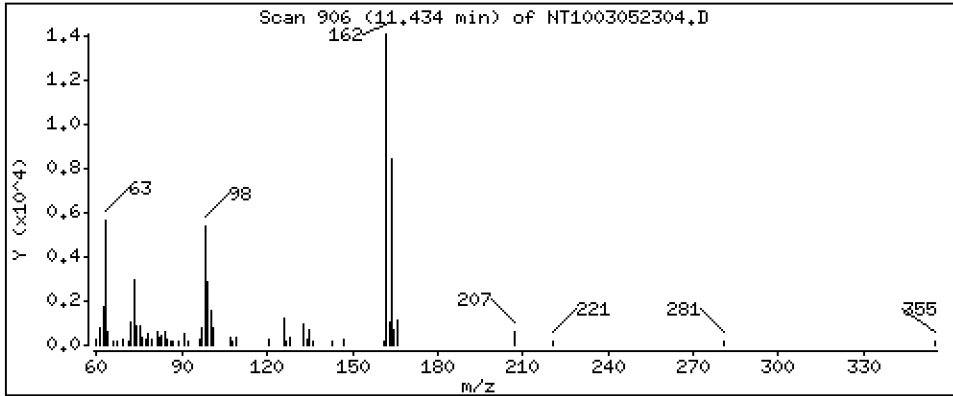
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3393 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

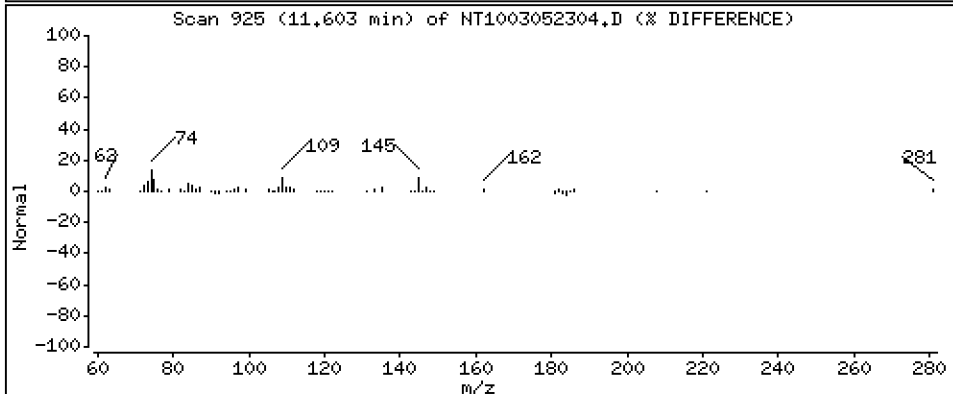
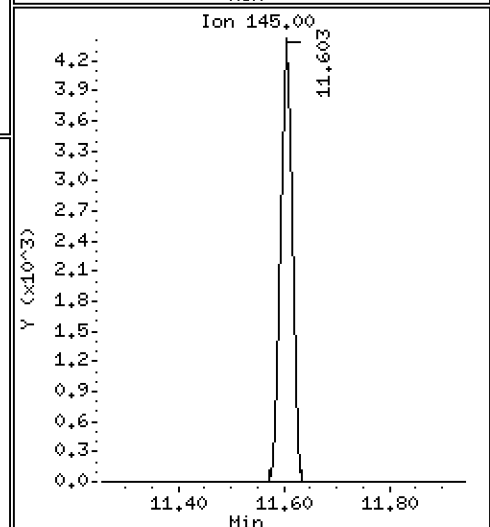
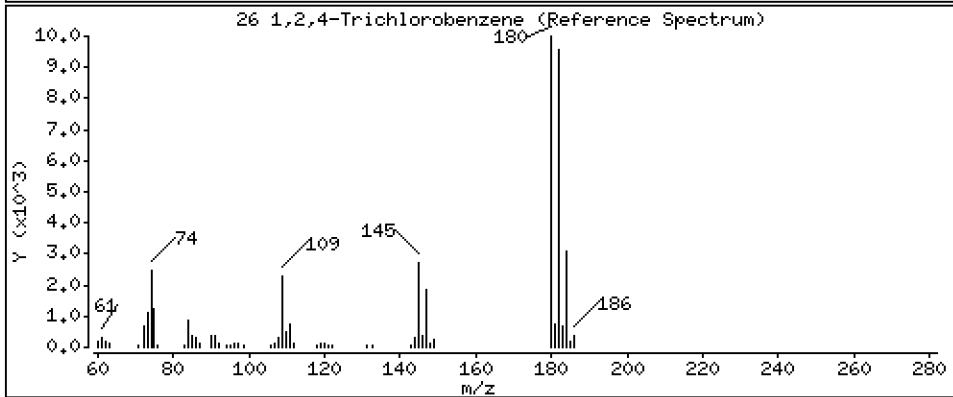
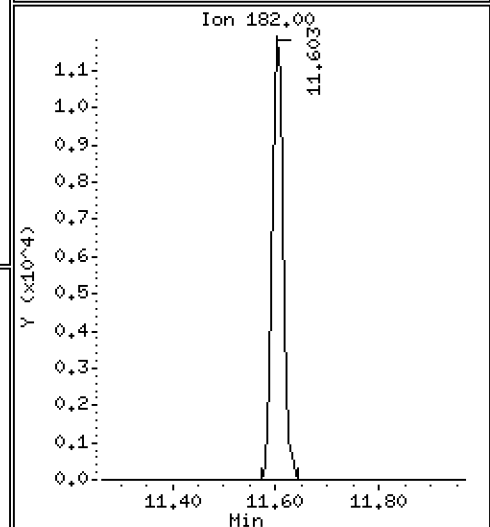
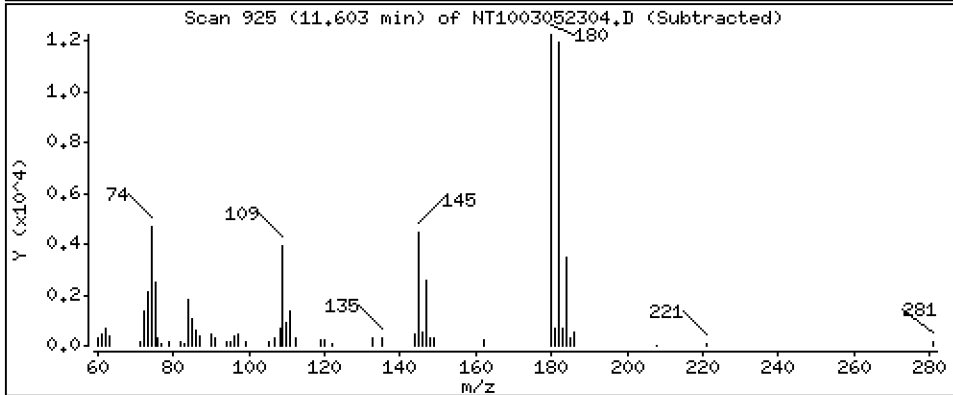
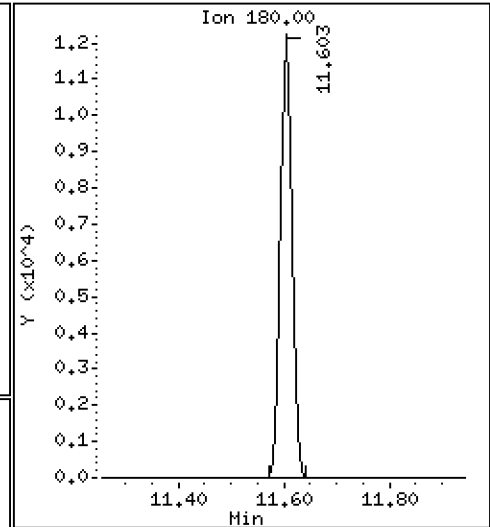
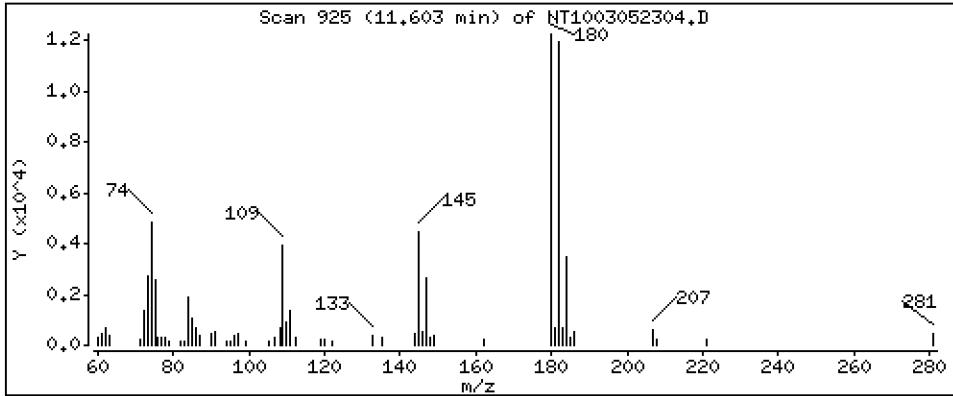
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2133 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

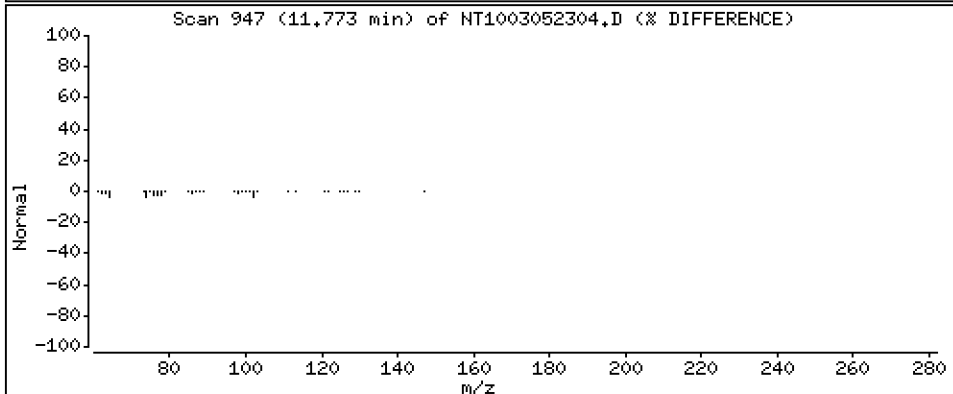
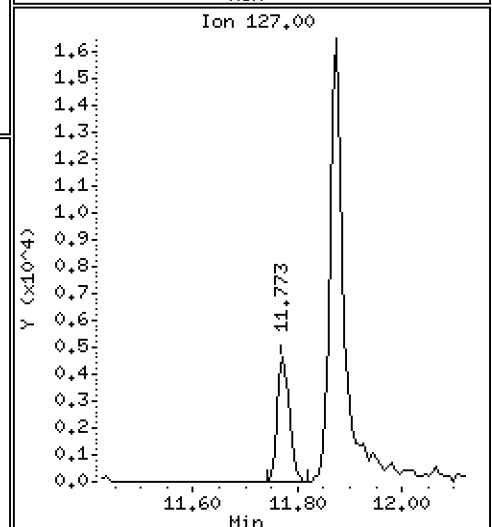
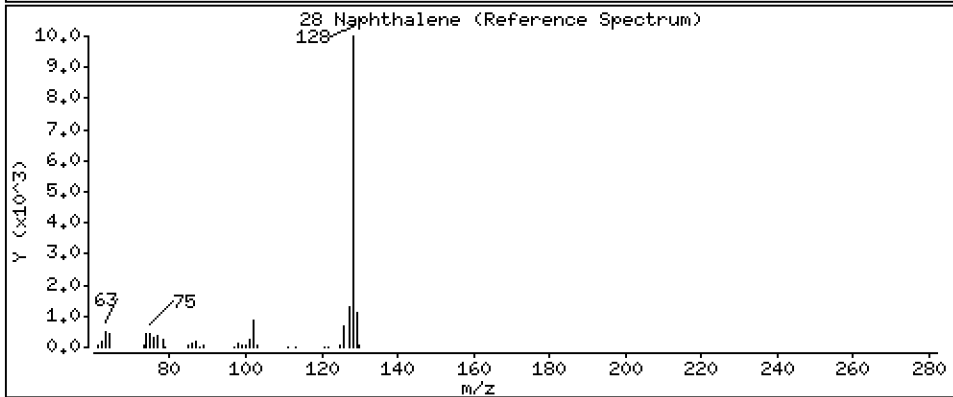
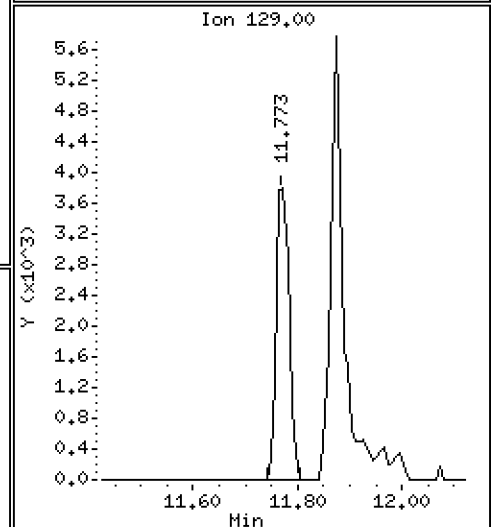
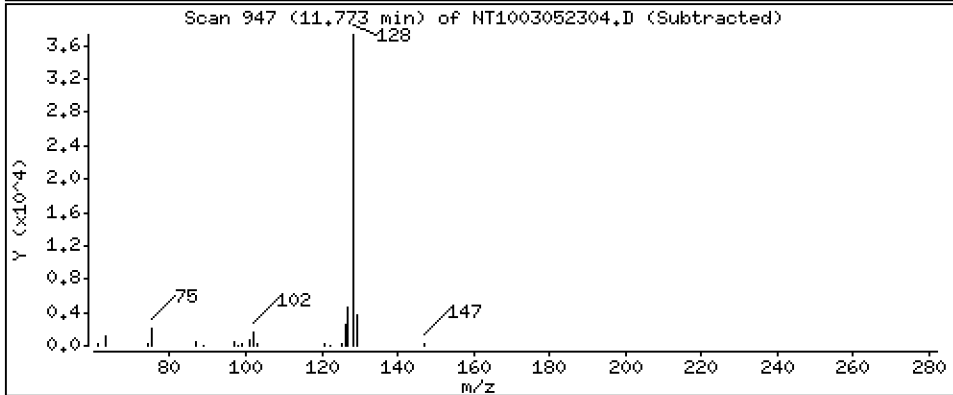
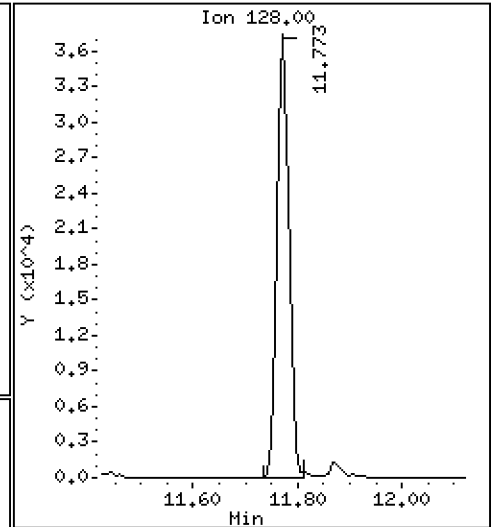
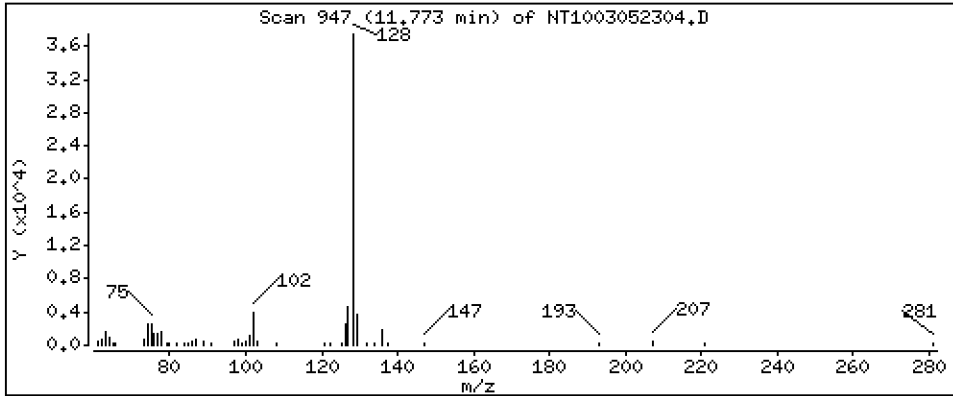
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2050 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

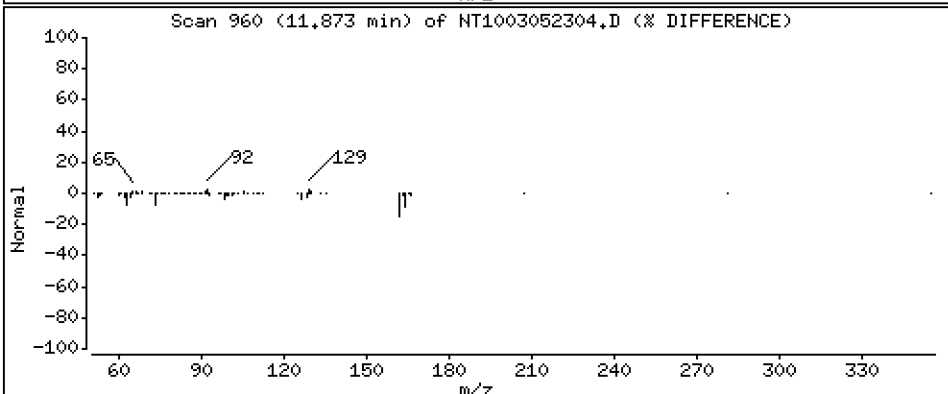
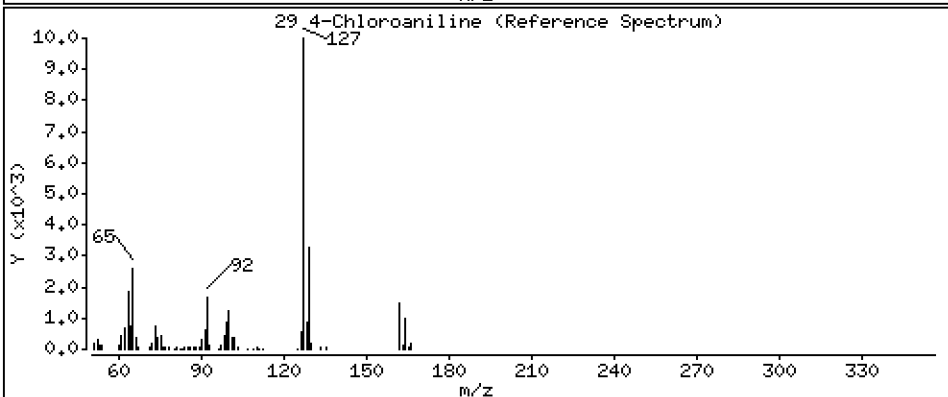
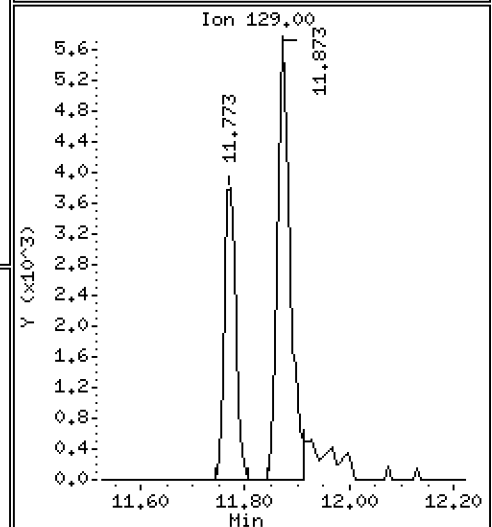
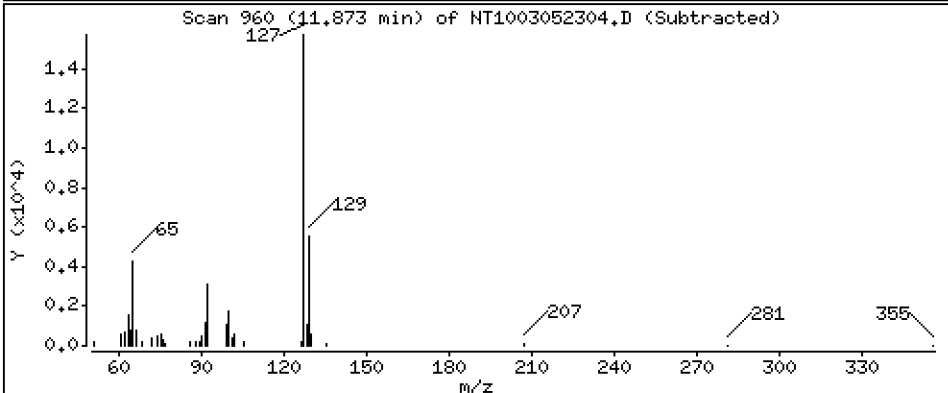
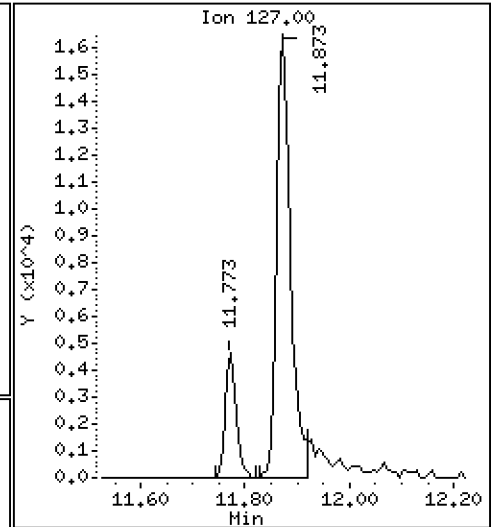
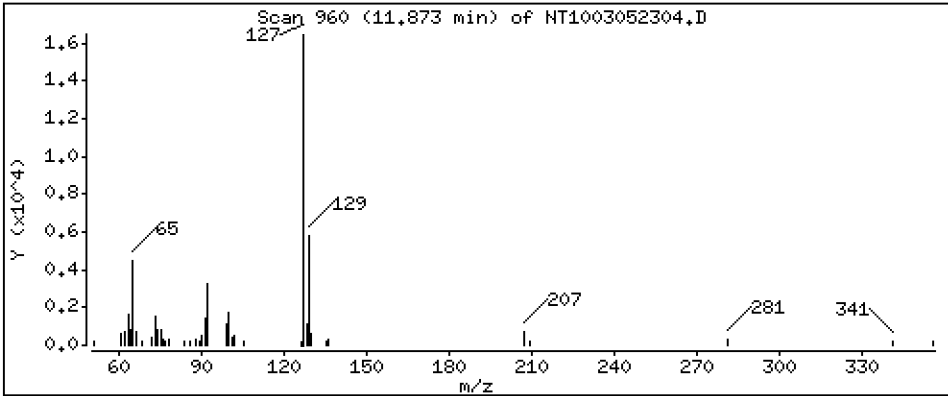
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,2422 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

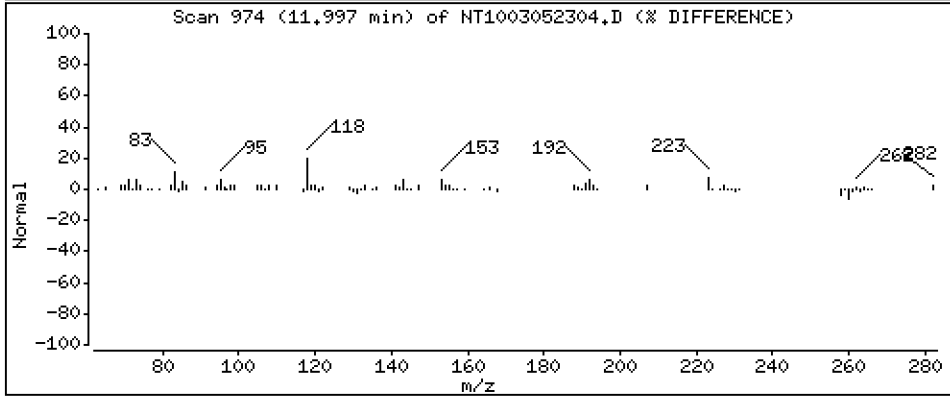
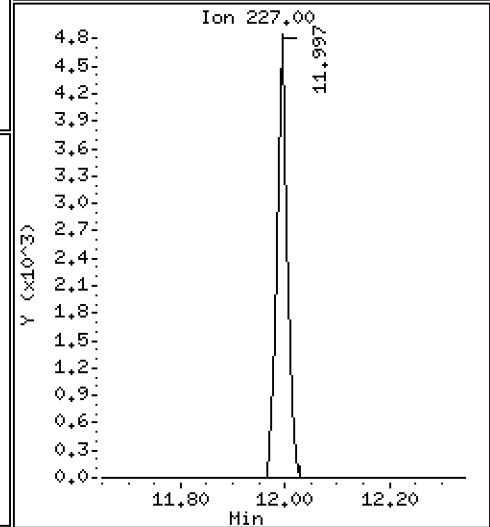
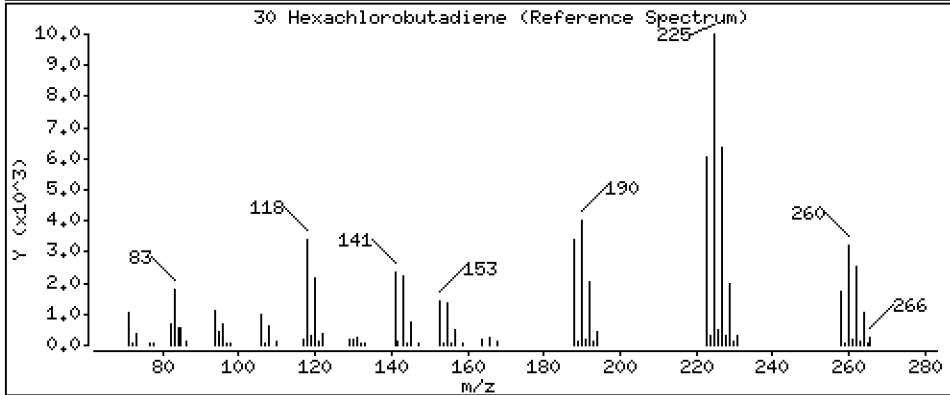
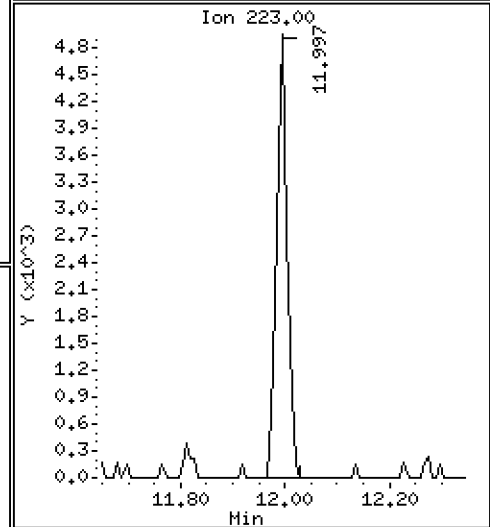
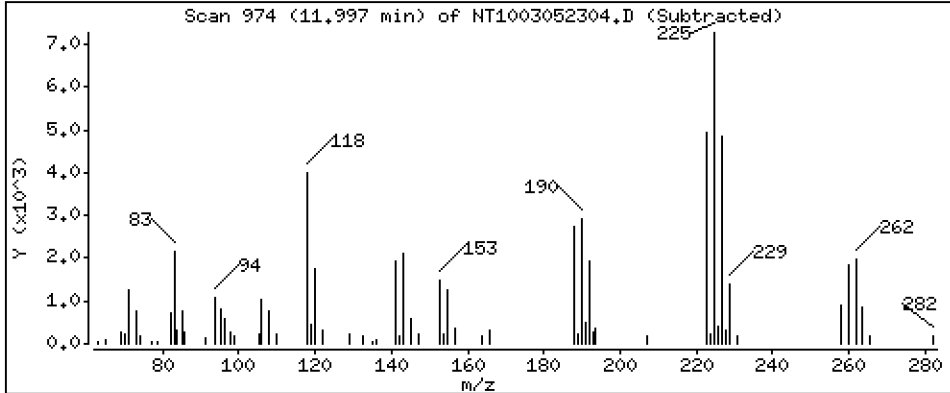
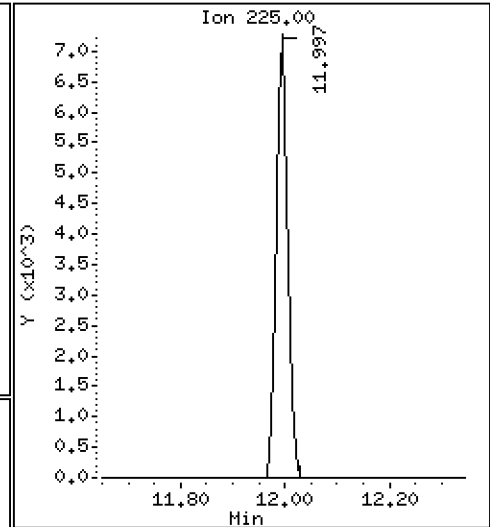
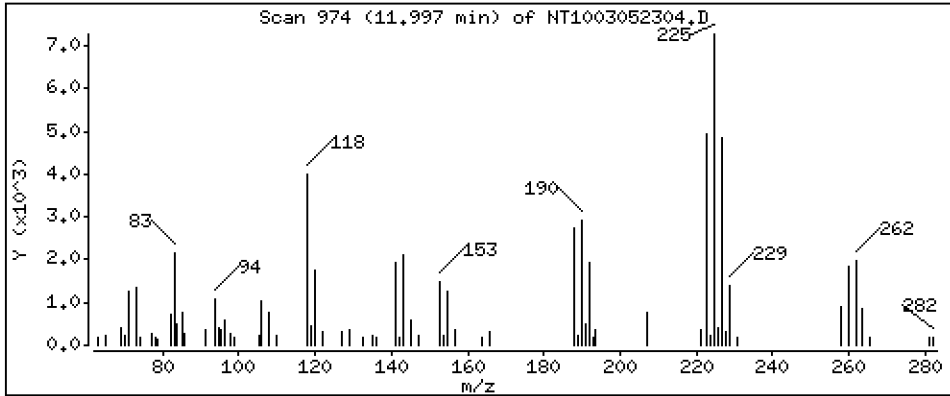
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1815 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

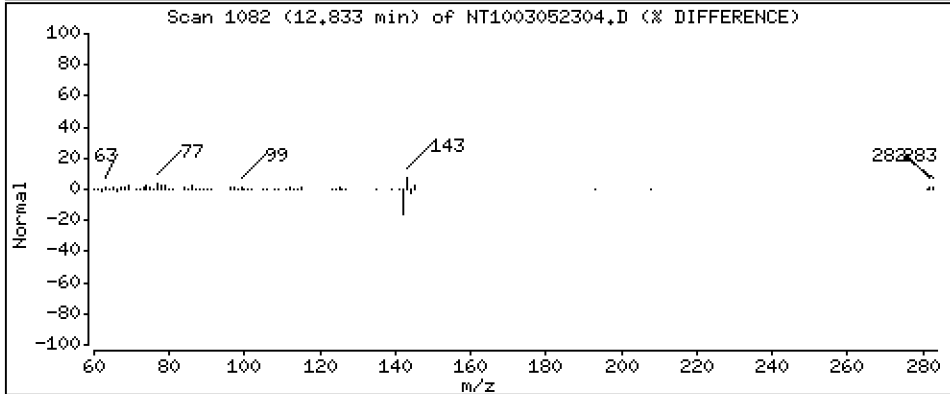
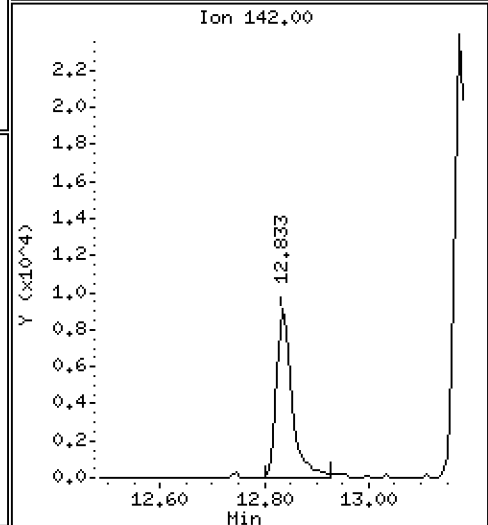
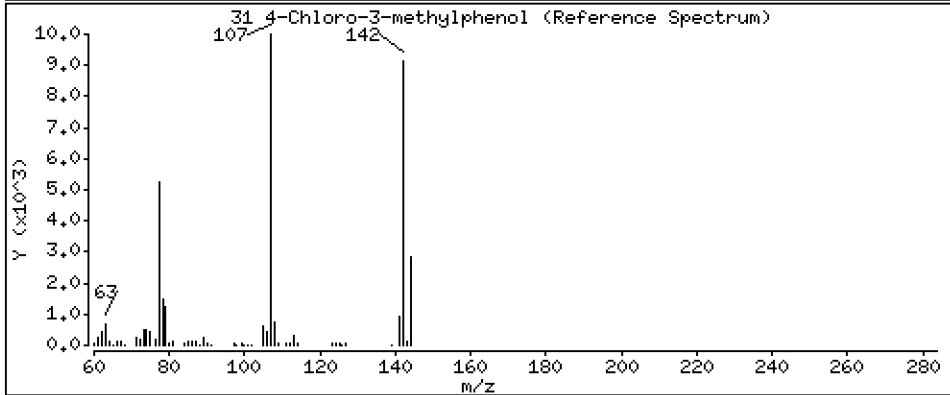
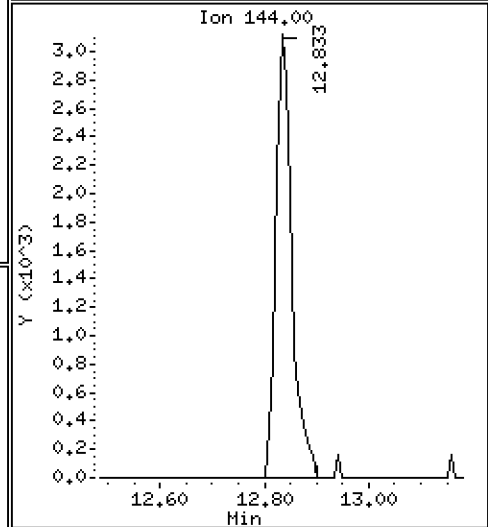
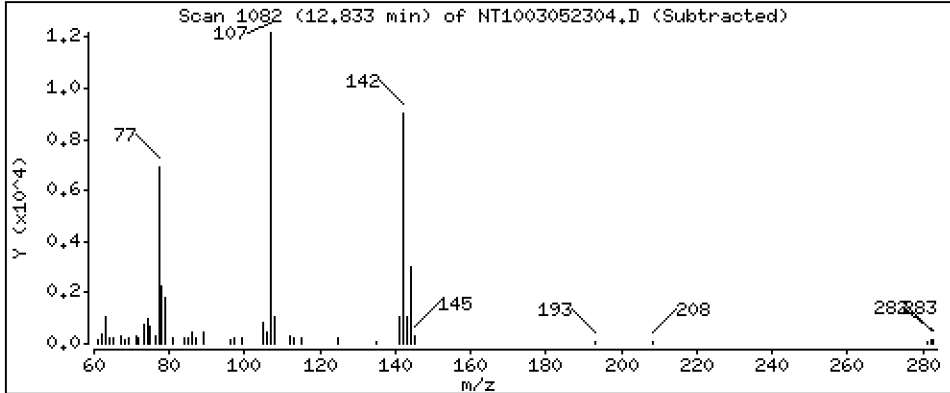
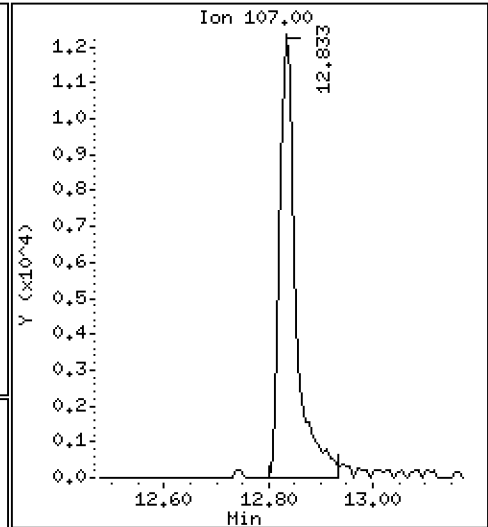
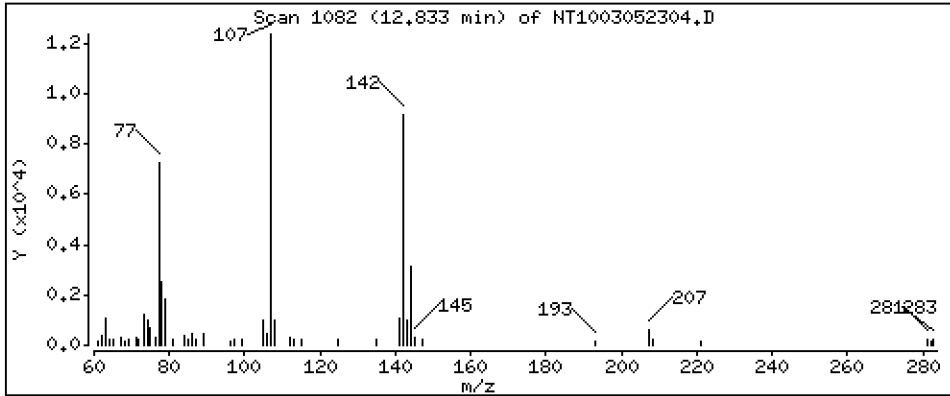
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 0,2973 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

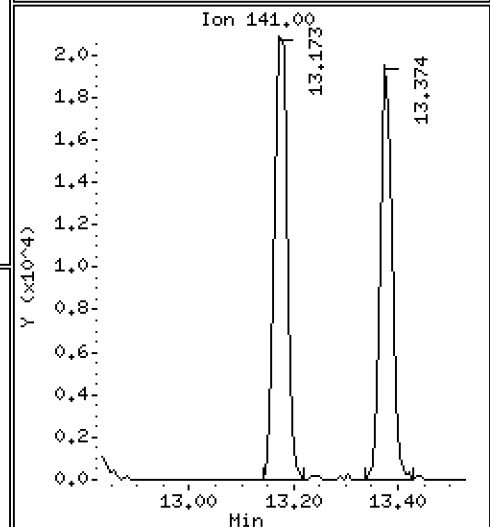
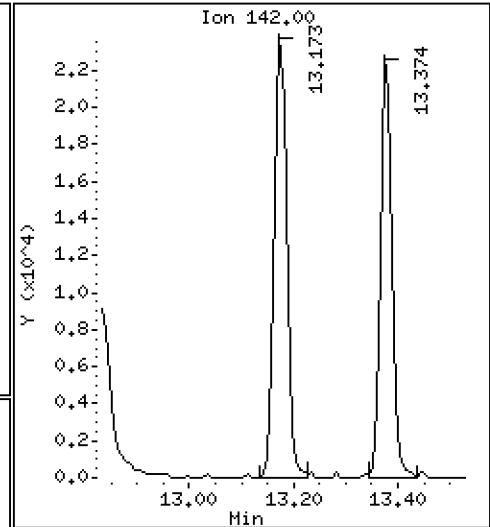
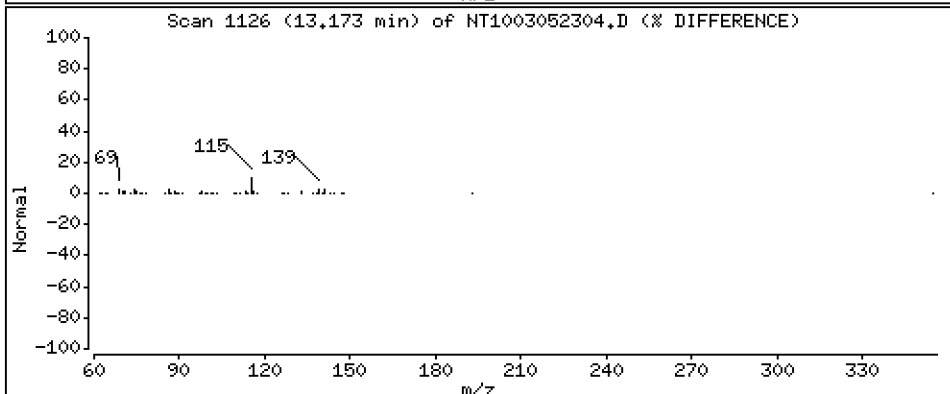
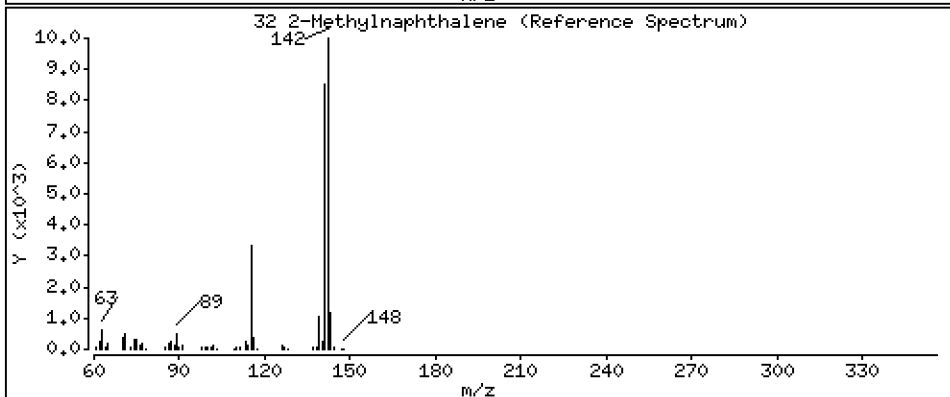
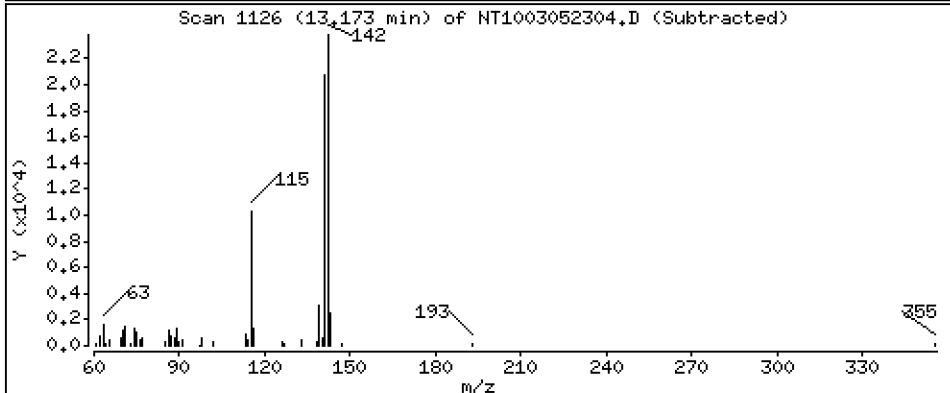
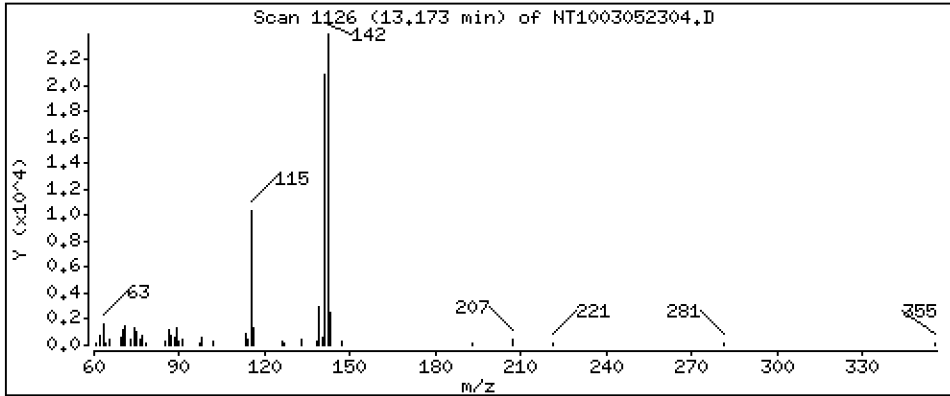
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1944 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

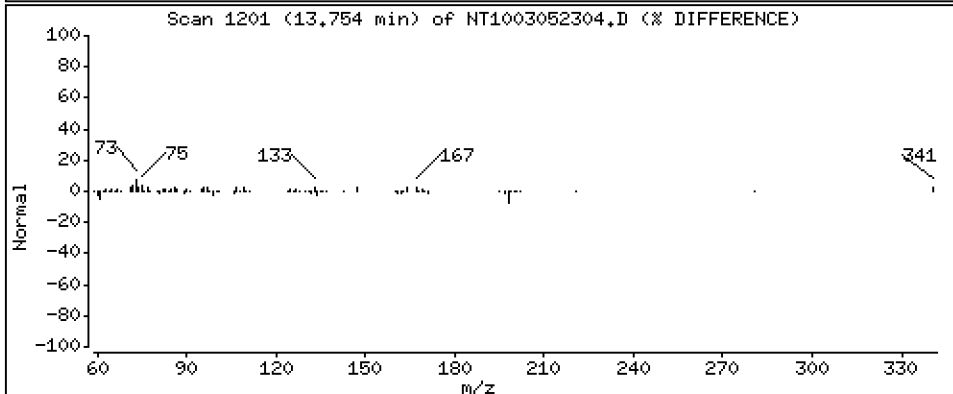
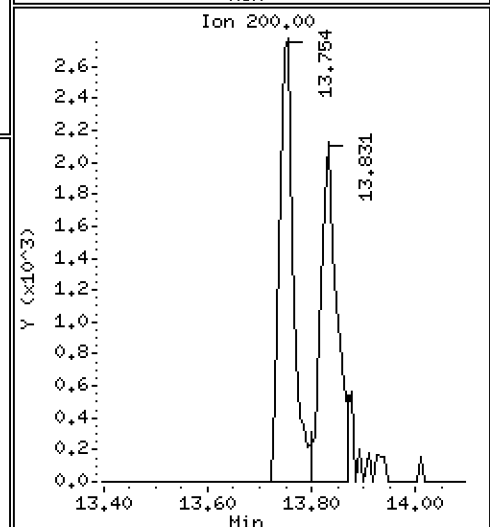
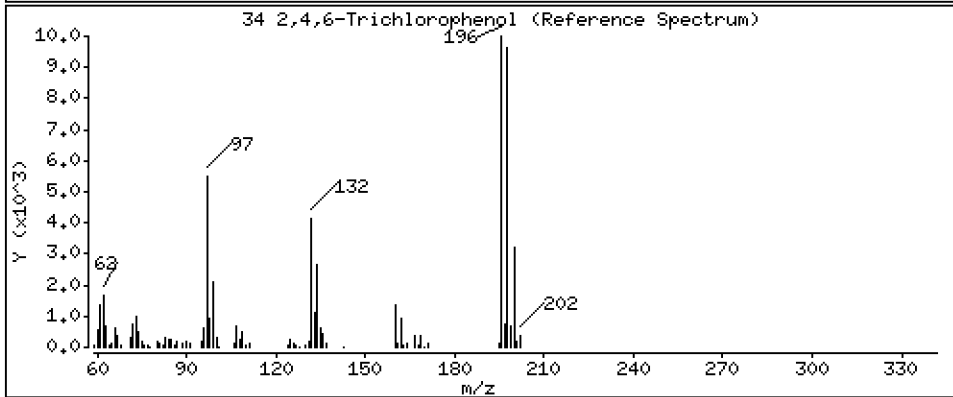
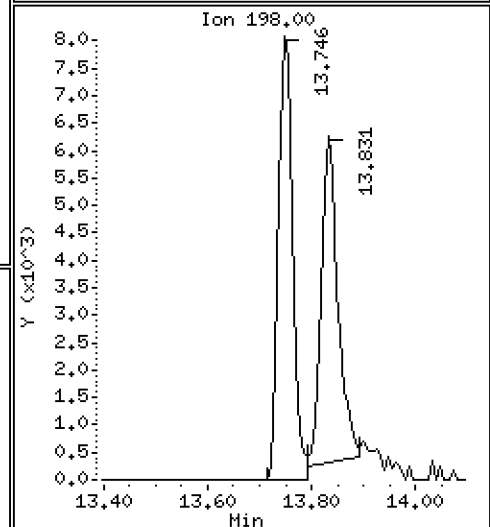
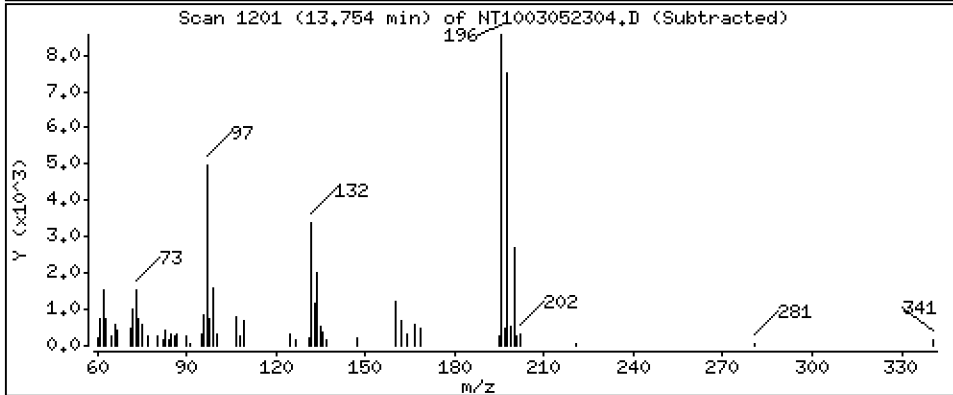
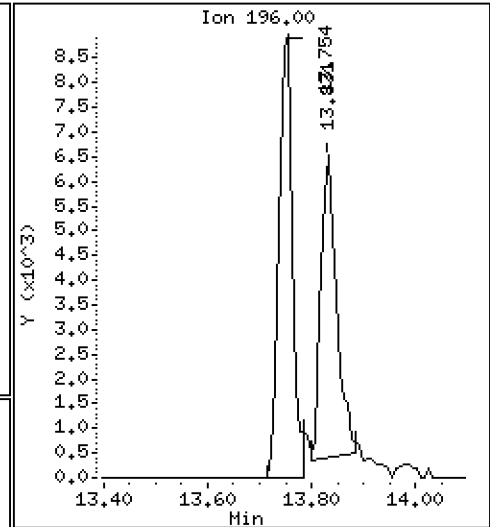
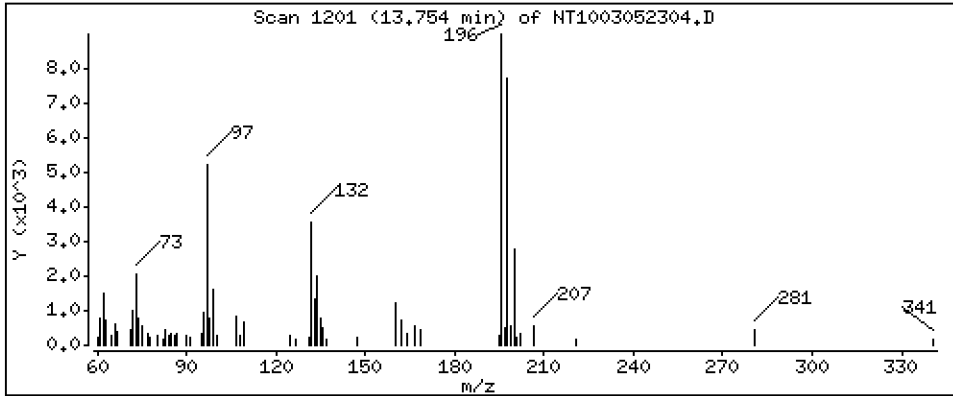
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,3094 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

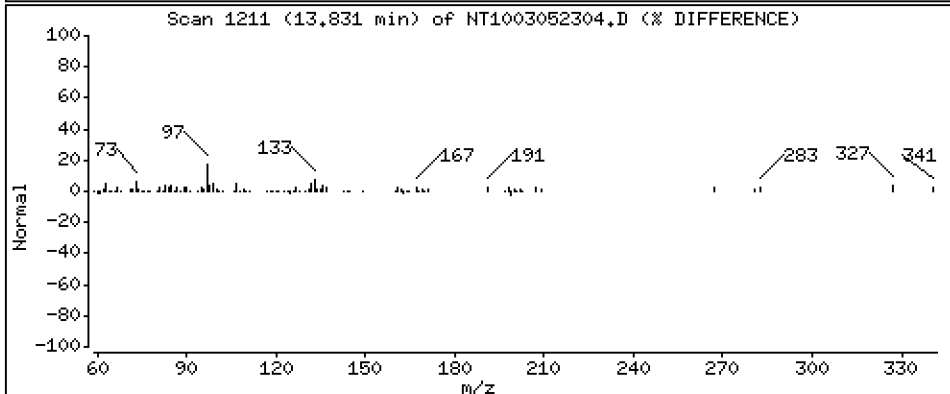
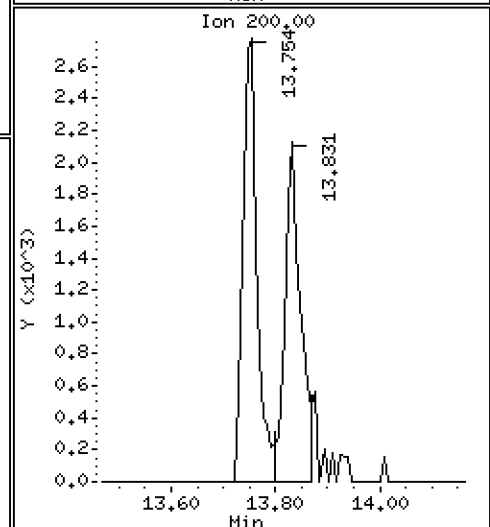
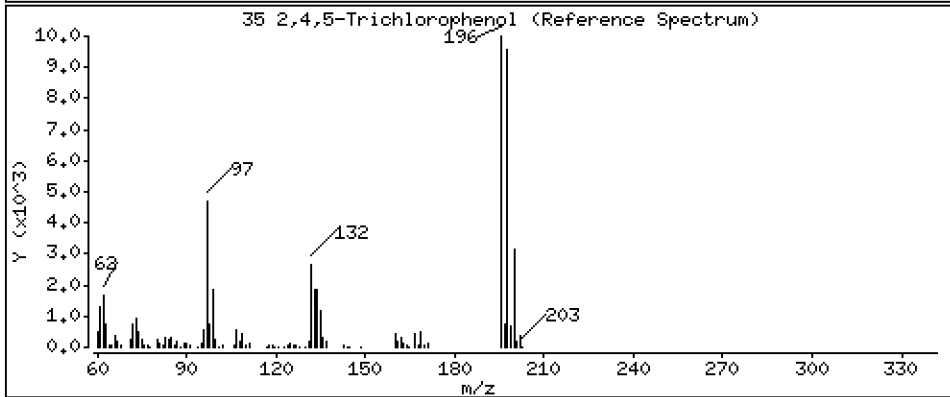
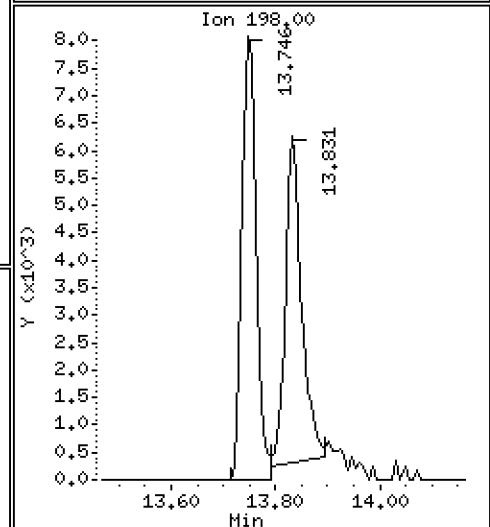
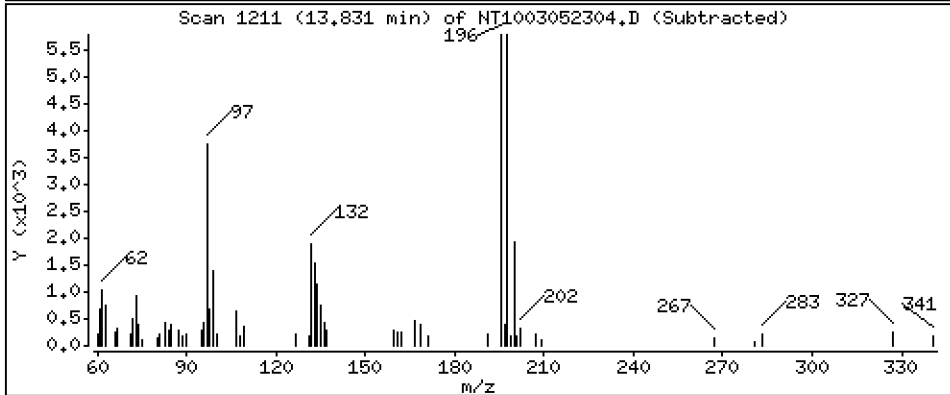
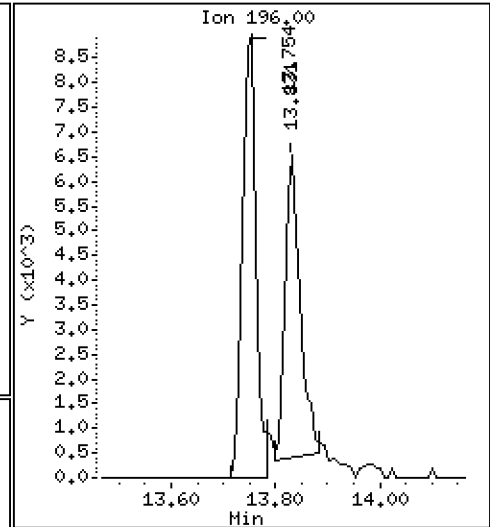
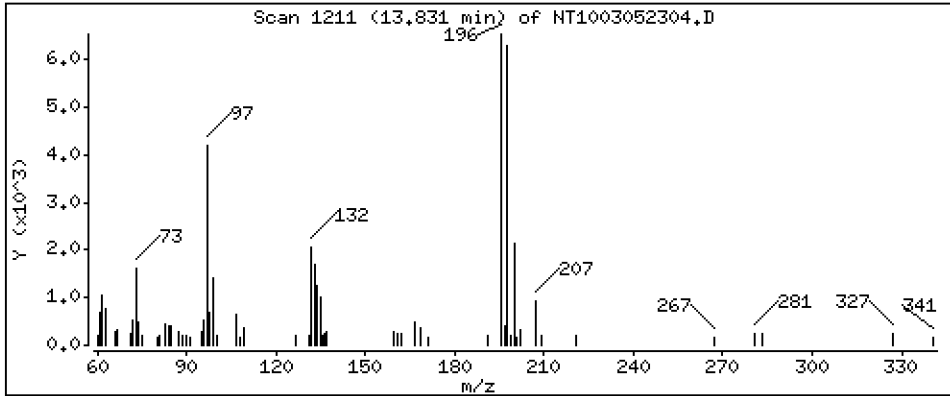
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2335 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

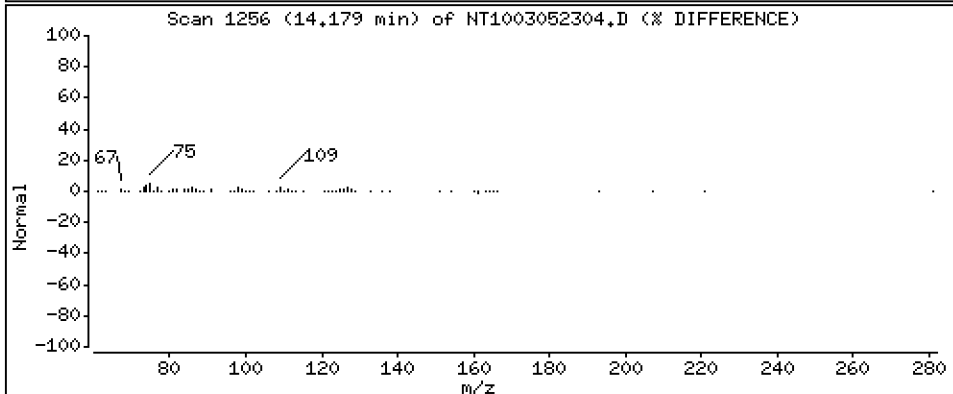
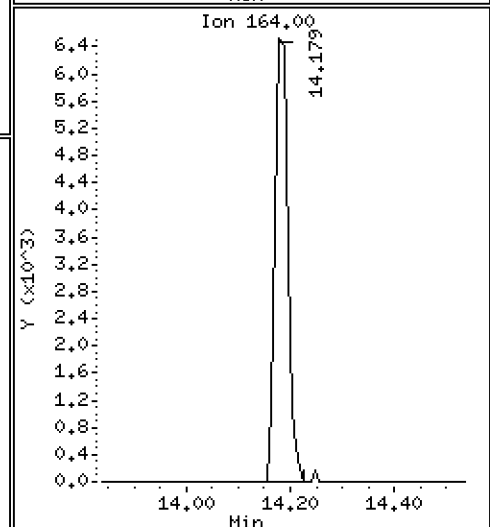
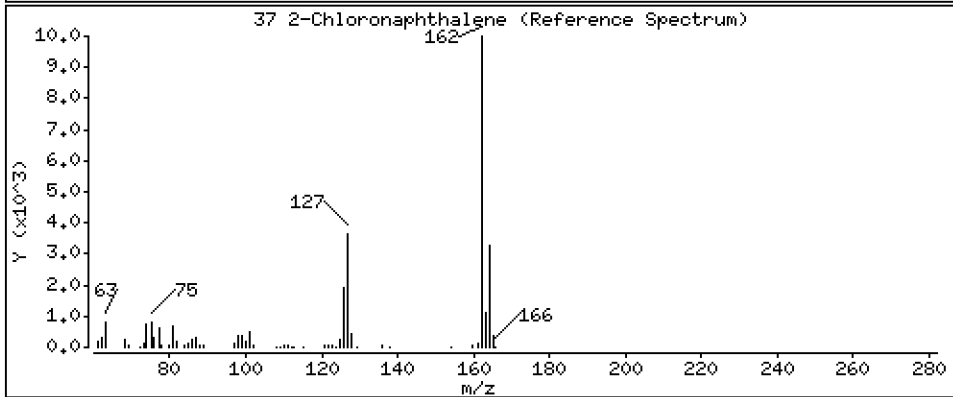
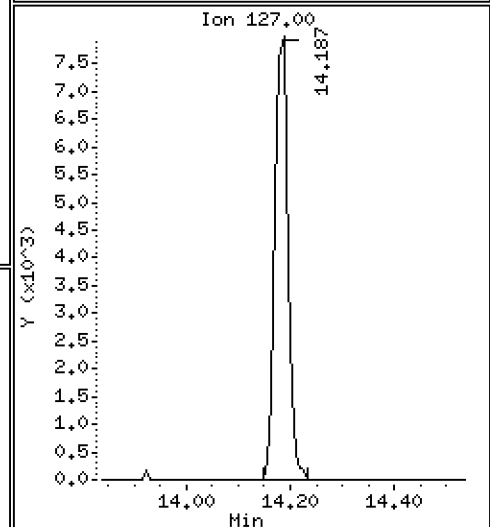
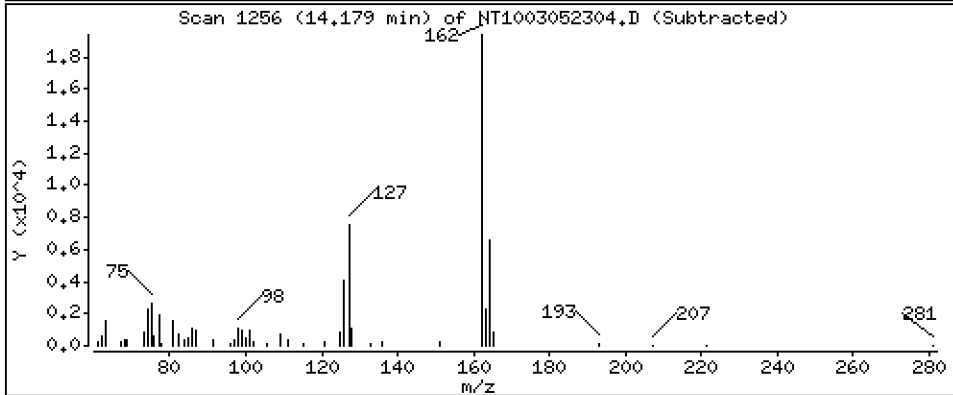
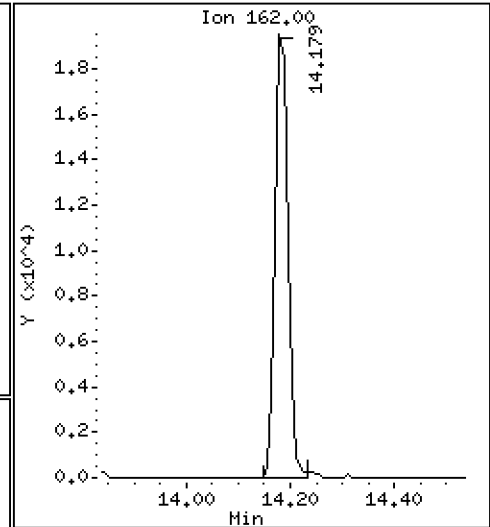
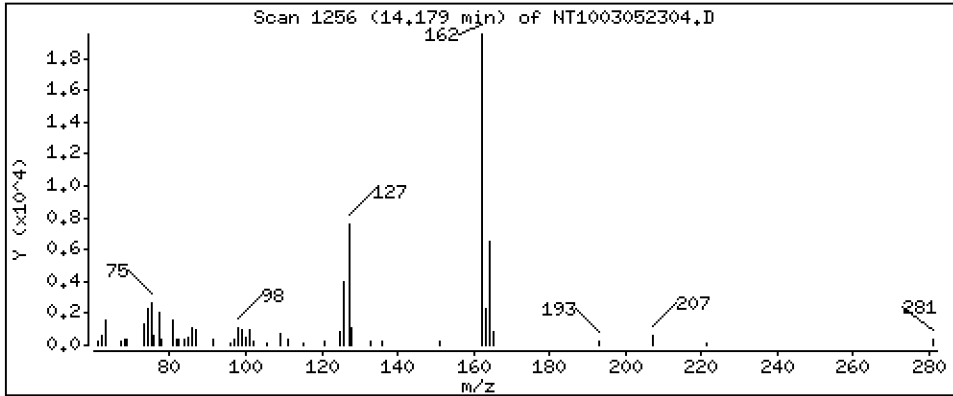
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2133 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

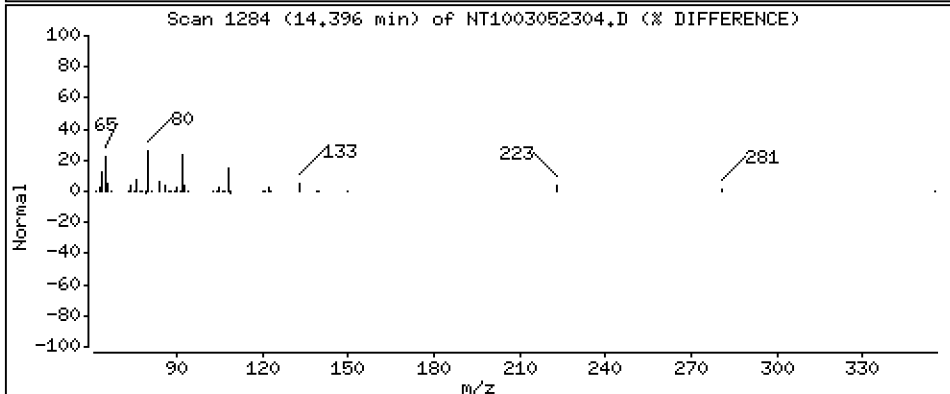
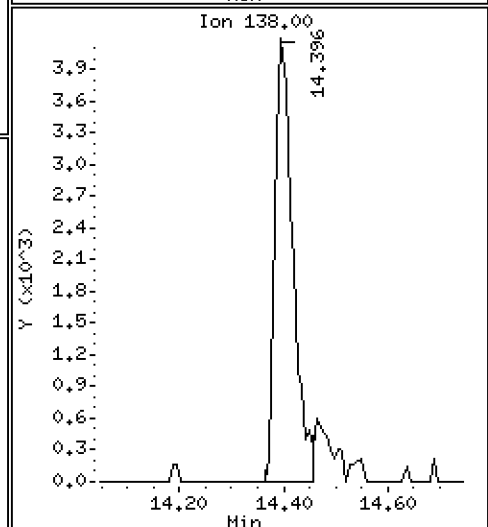
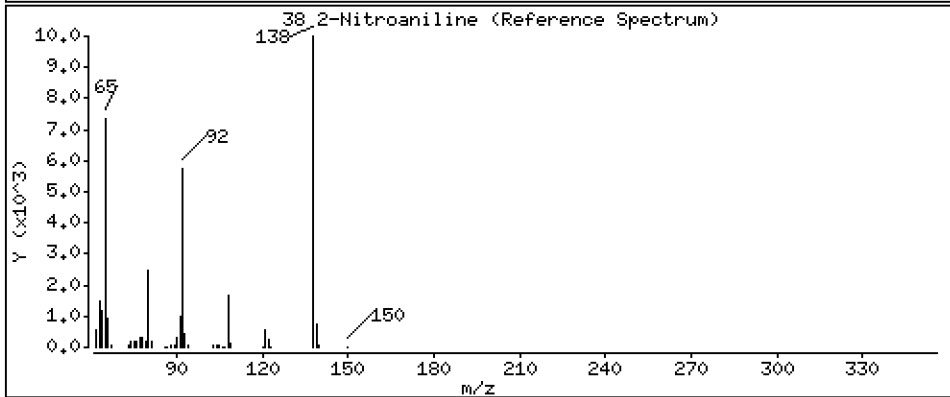
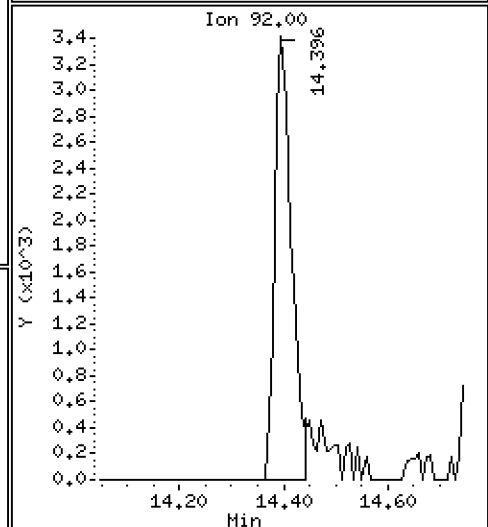
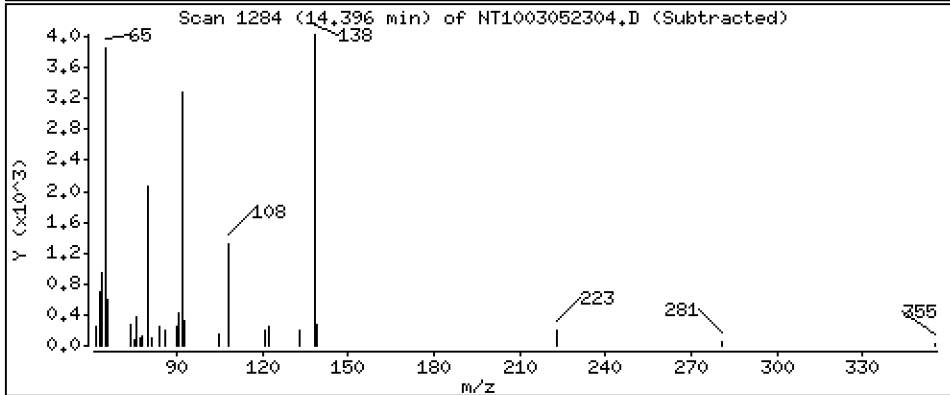
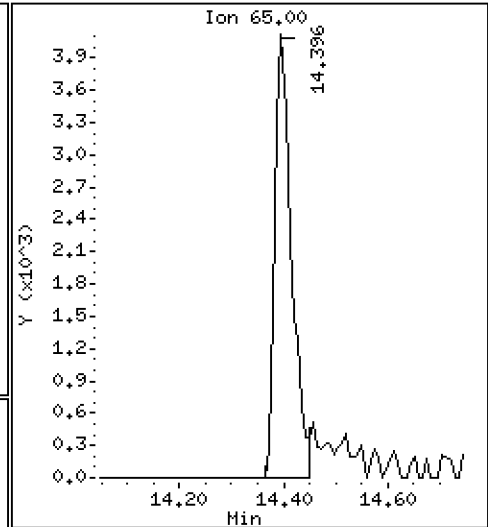
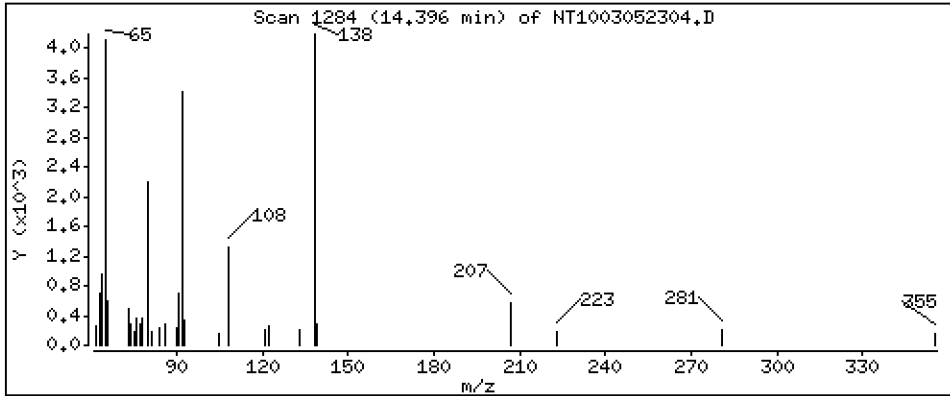
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2160 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

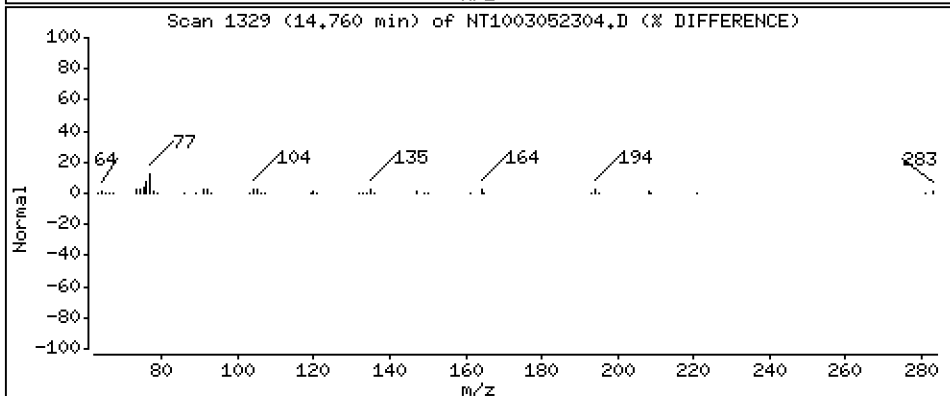
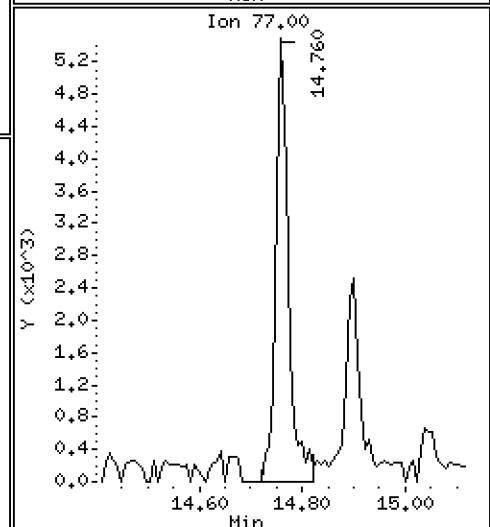
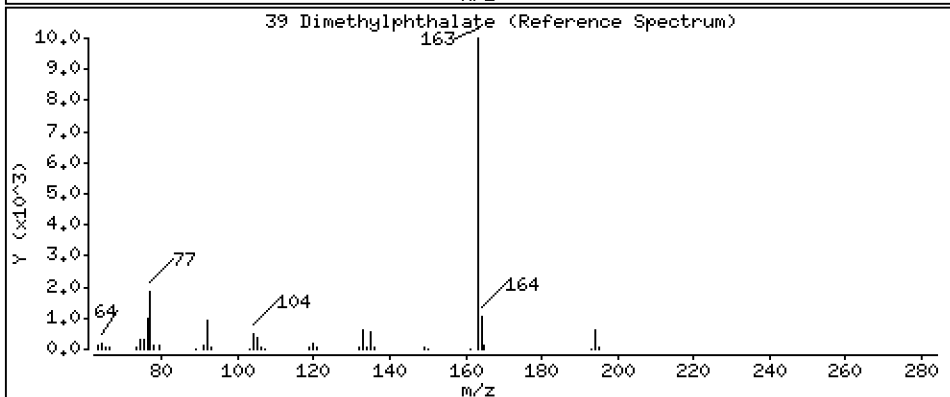
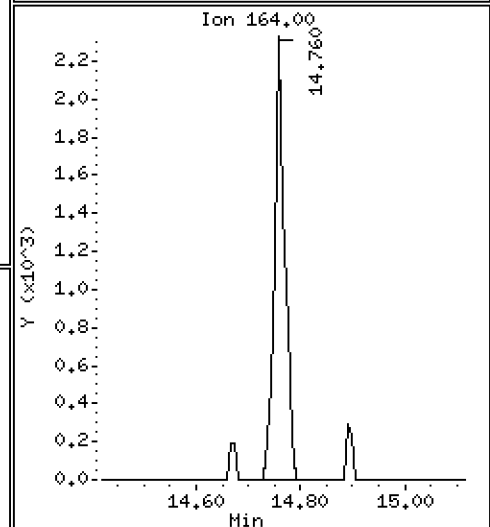
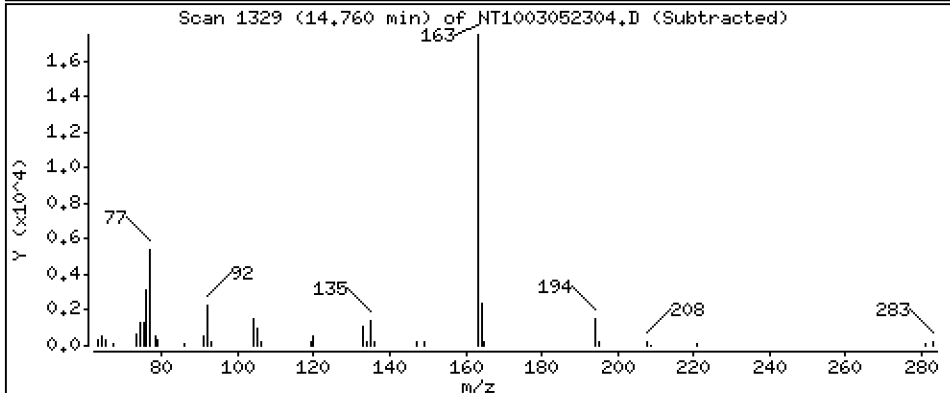
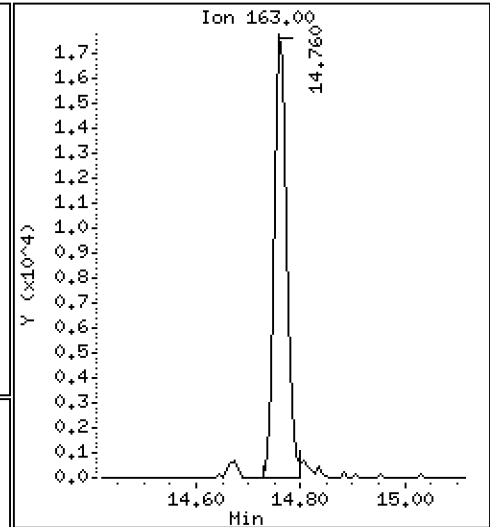
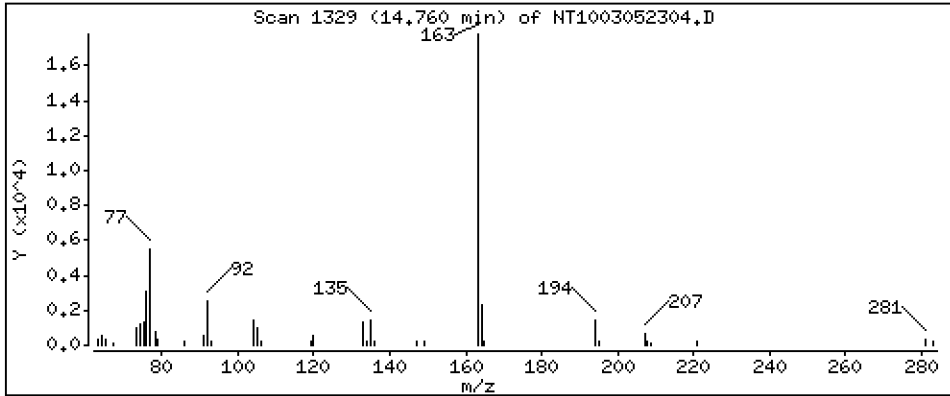
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1663 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

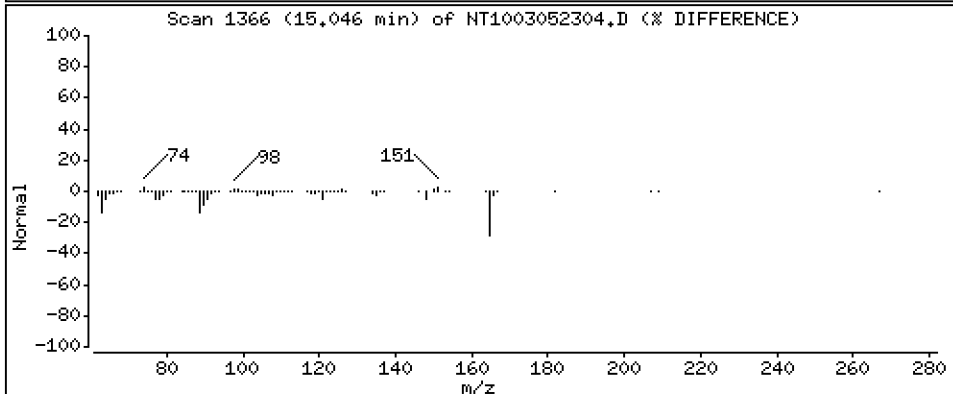
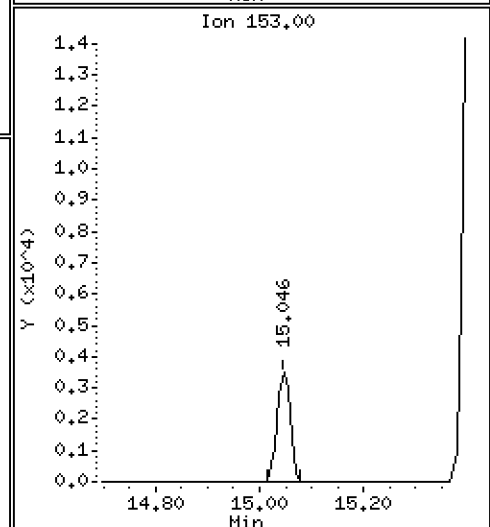
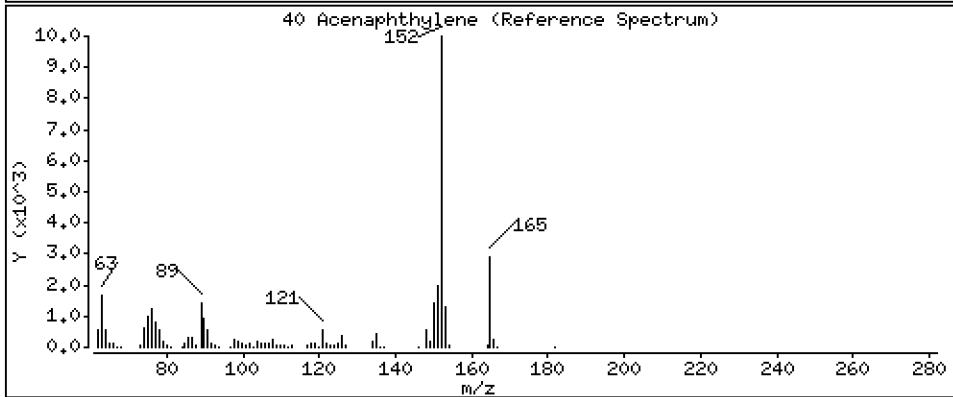
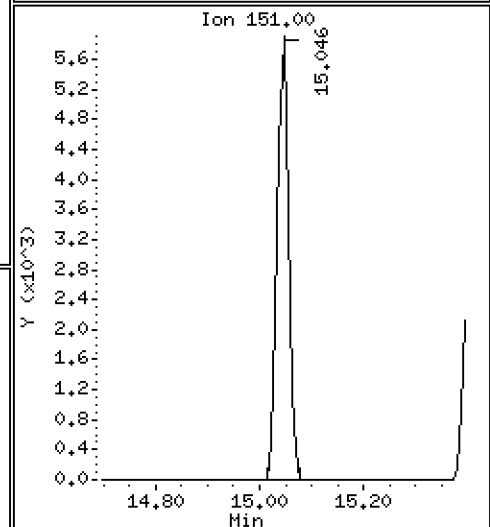
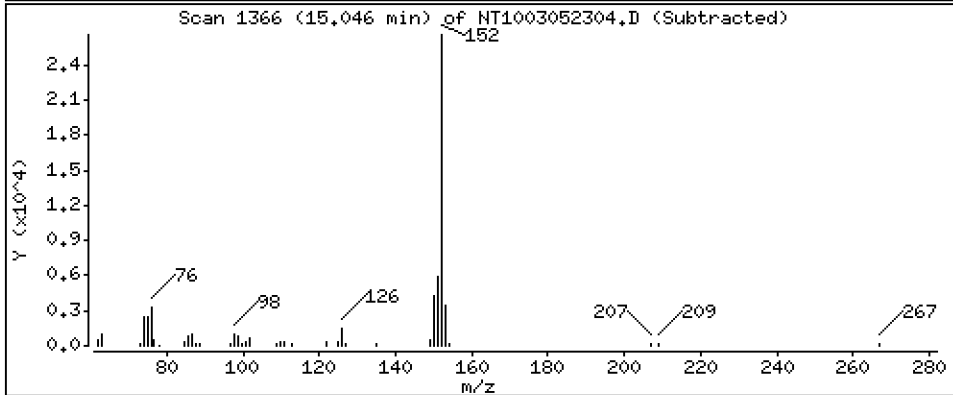
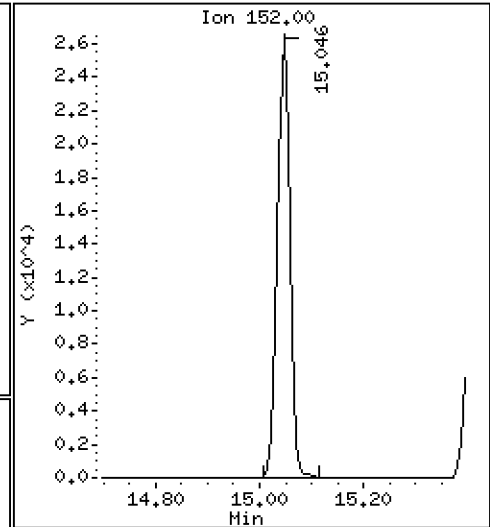
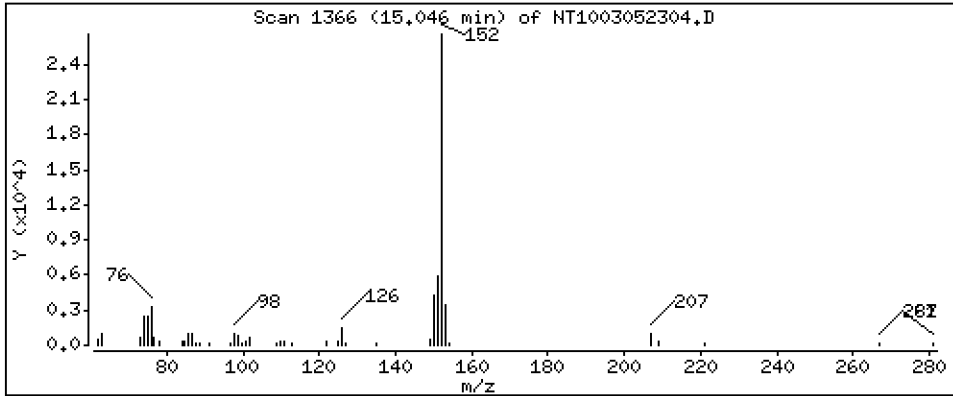
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1880 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

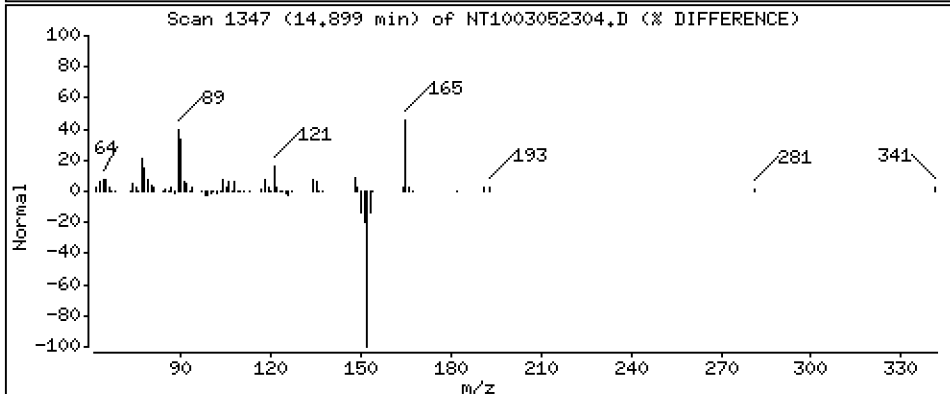
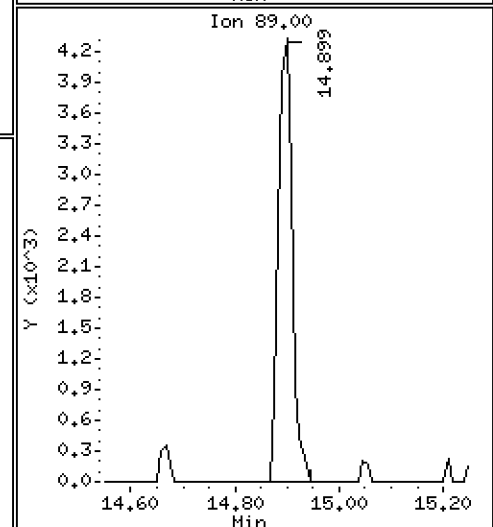
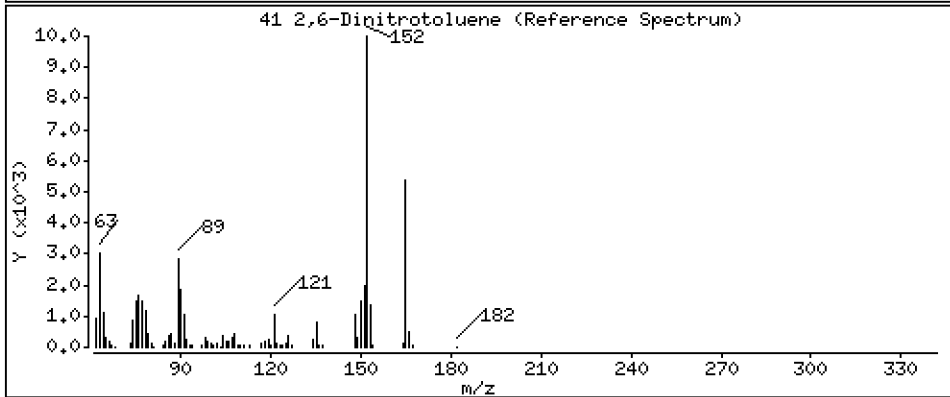
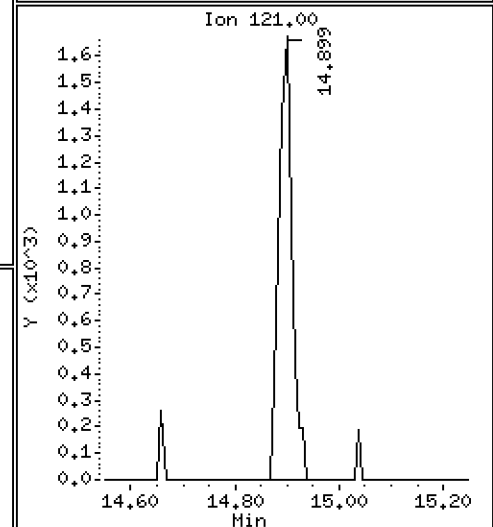
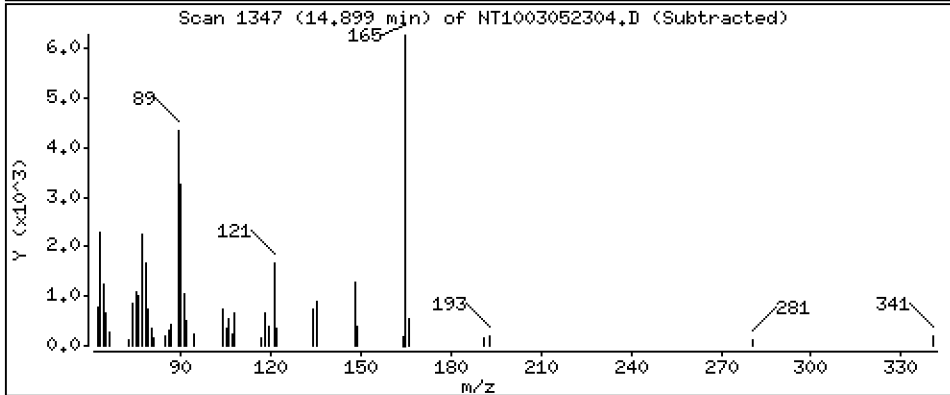
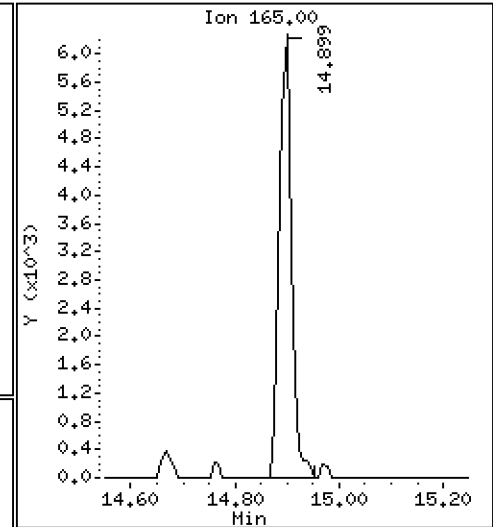
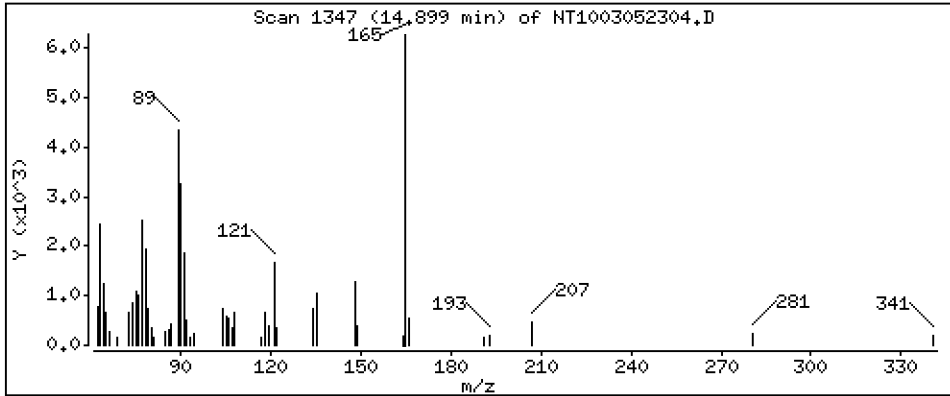
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,2545 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

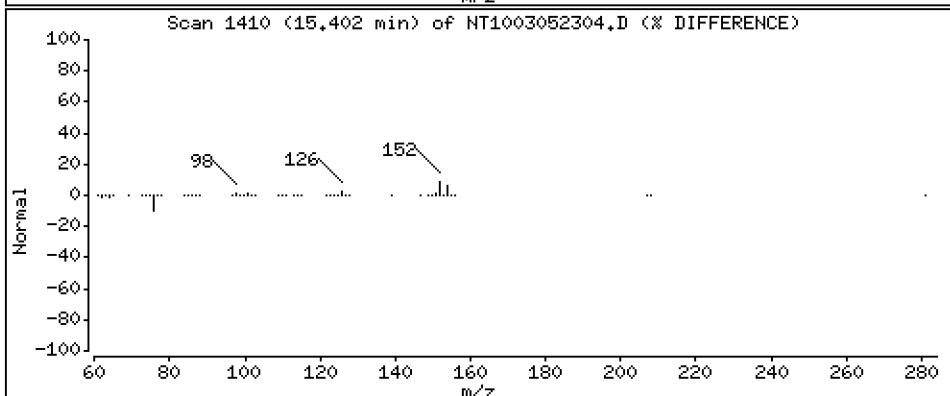
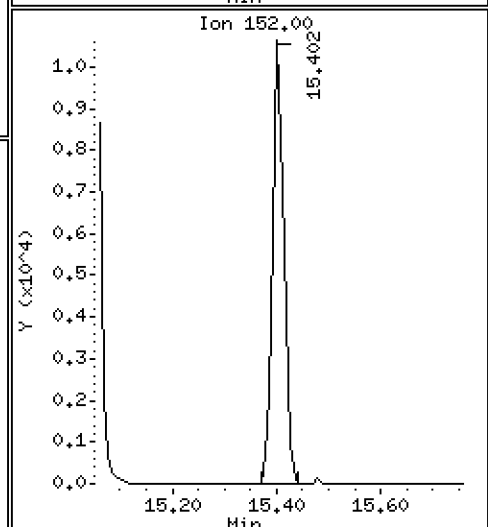
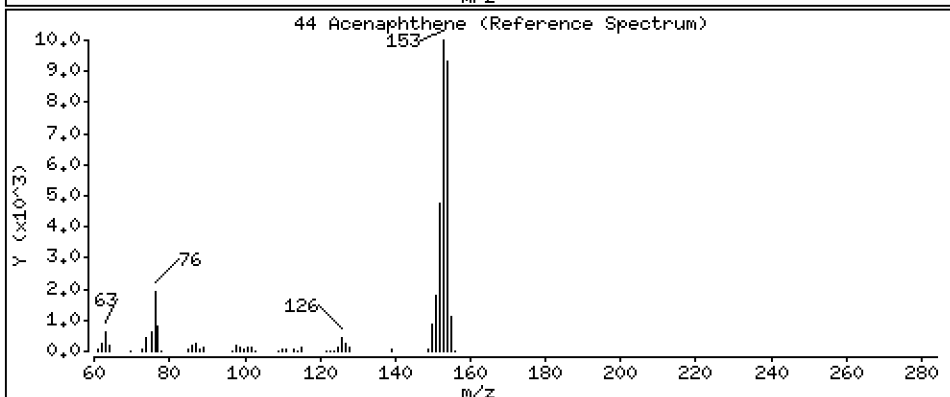
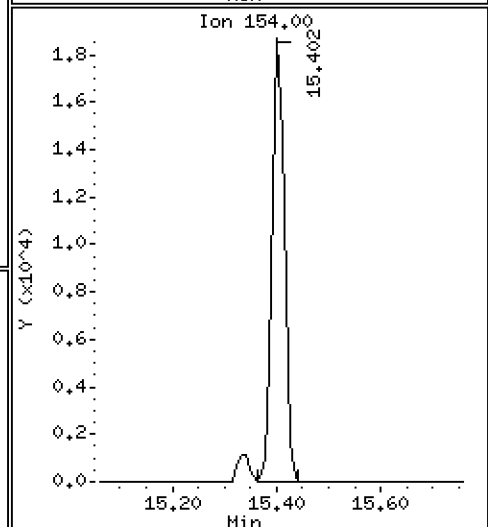
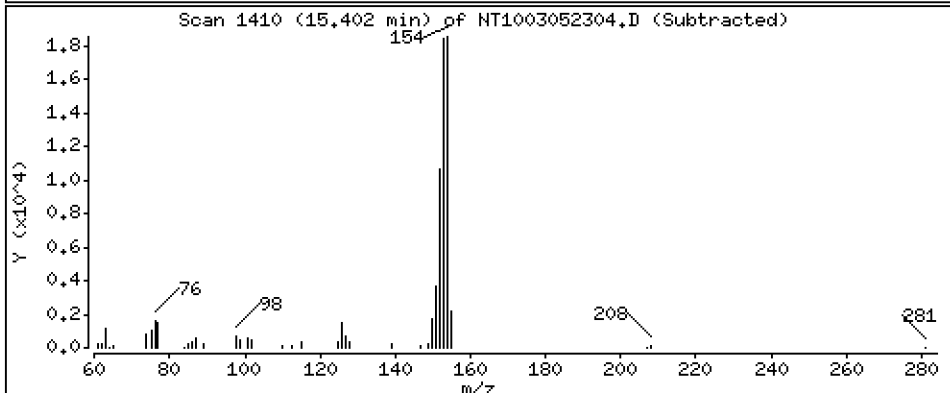
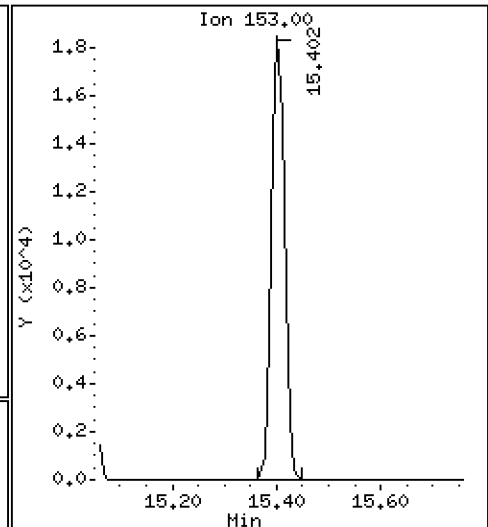
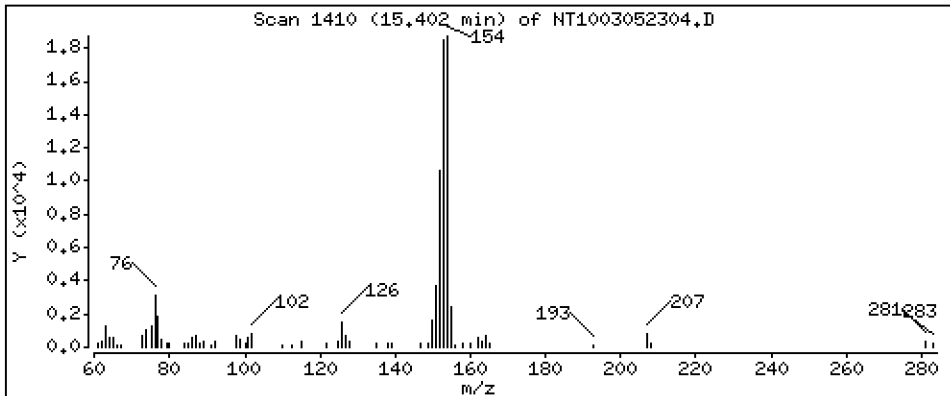
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1966 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

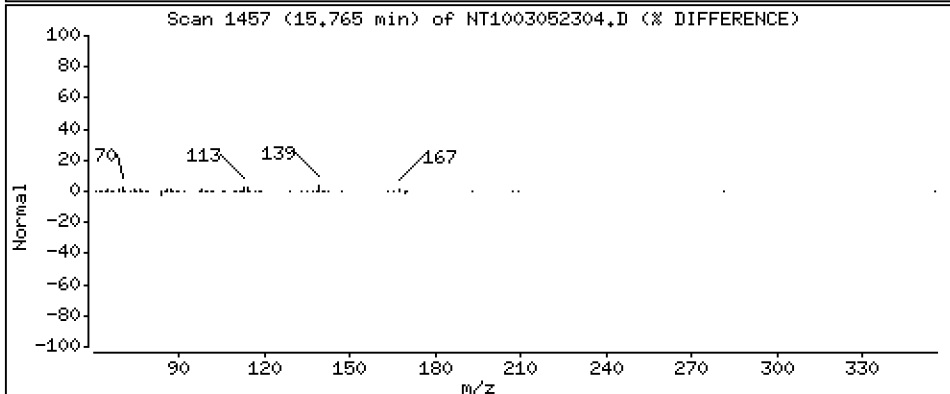
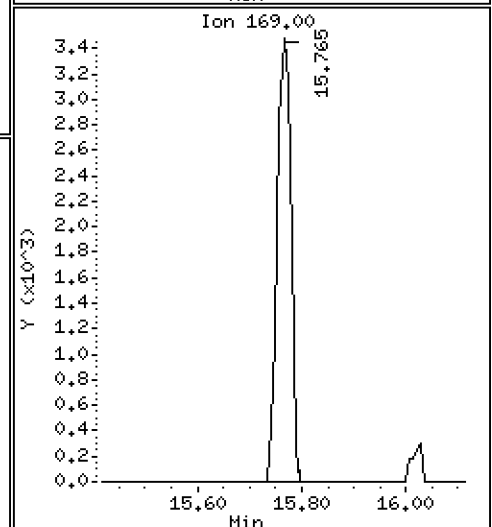
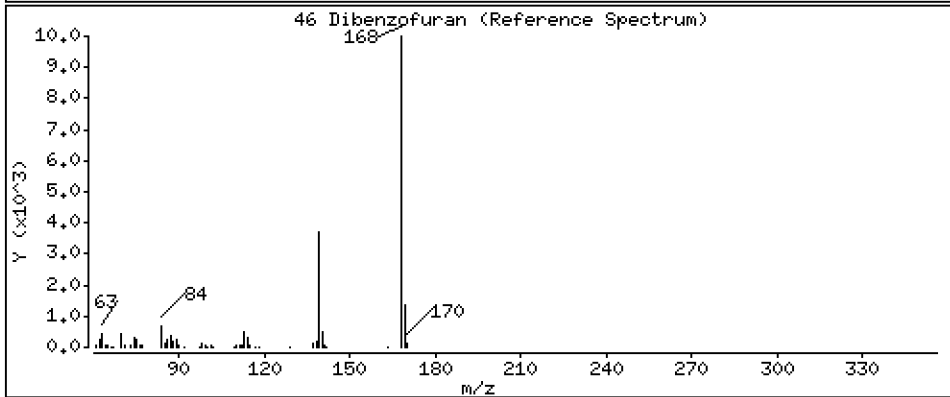
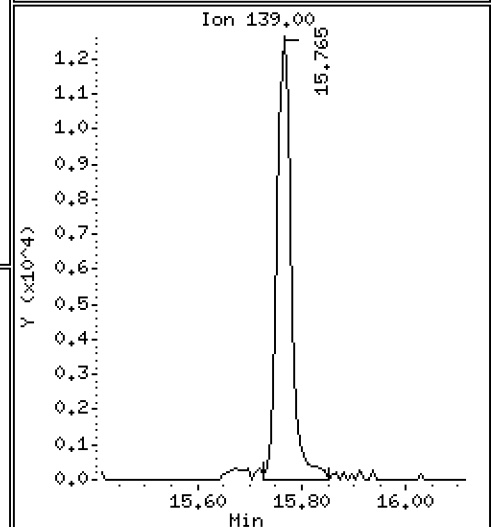
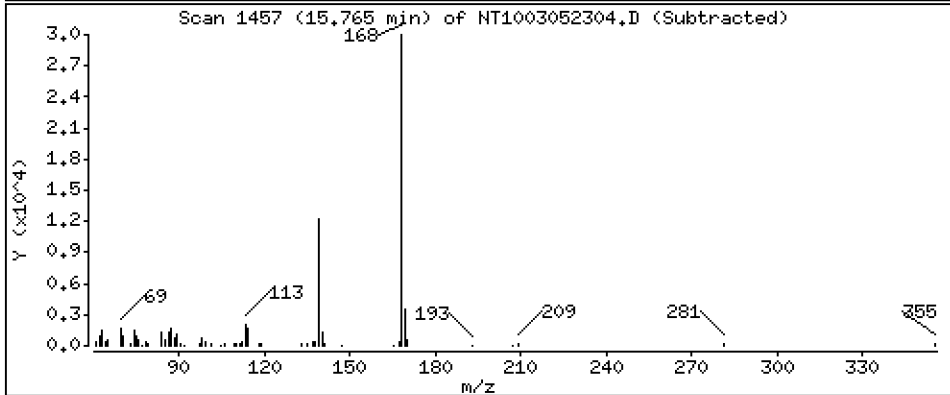
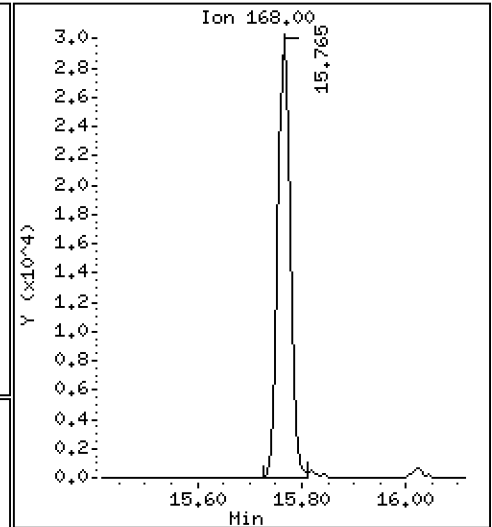
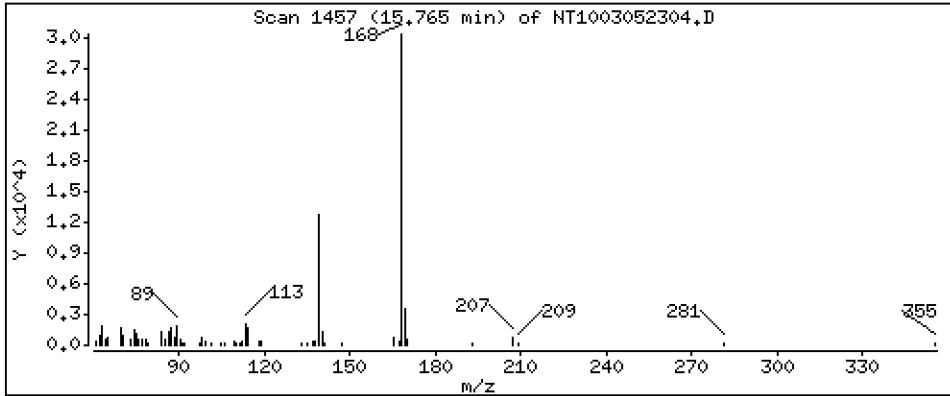
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2052 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

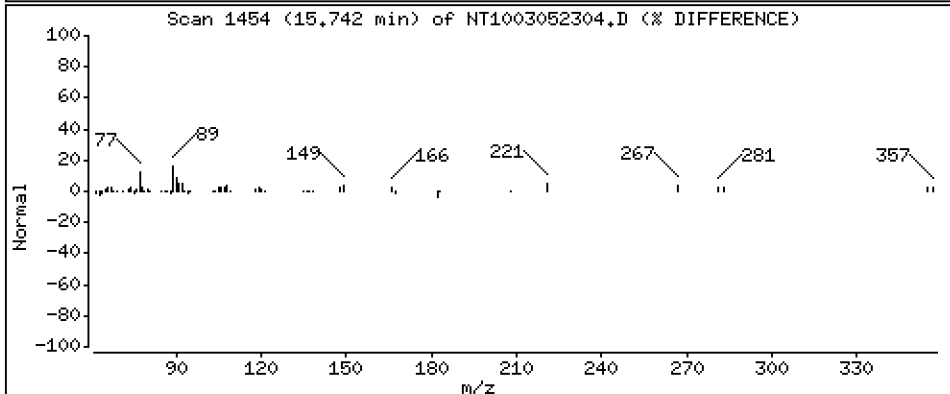
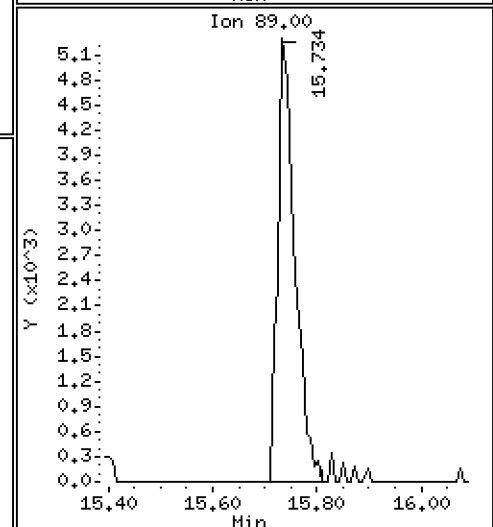
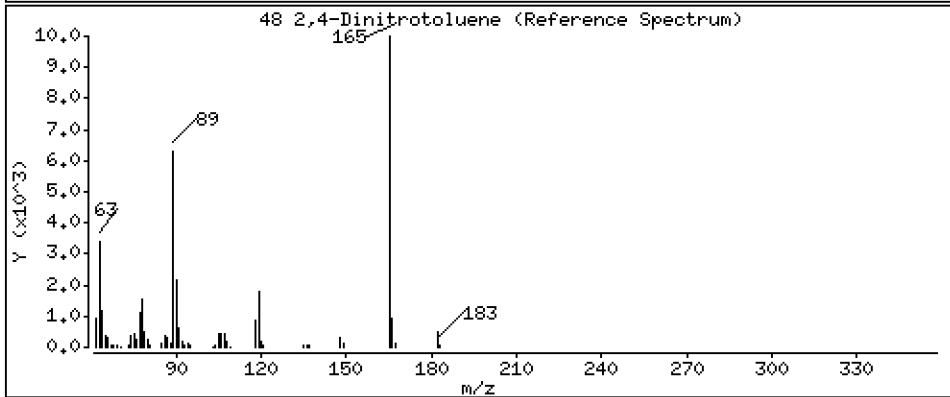
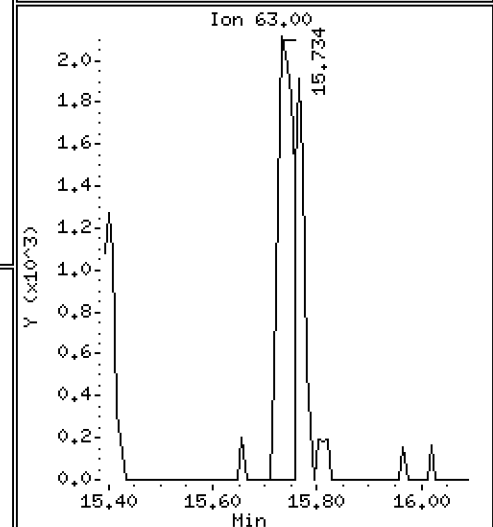
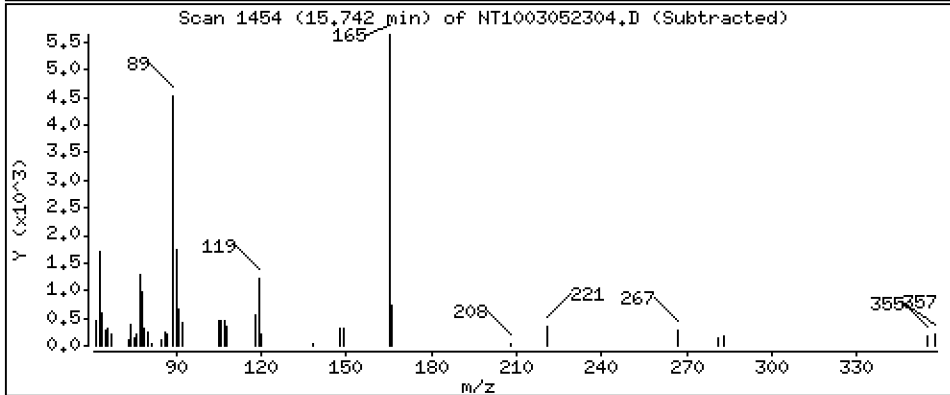
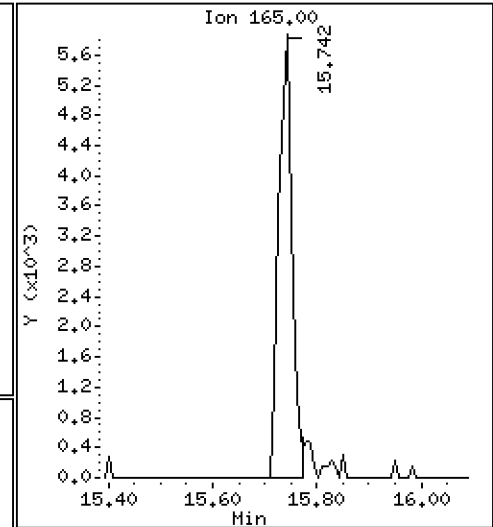
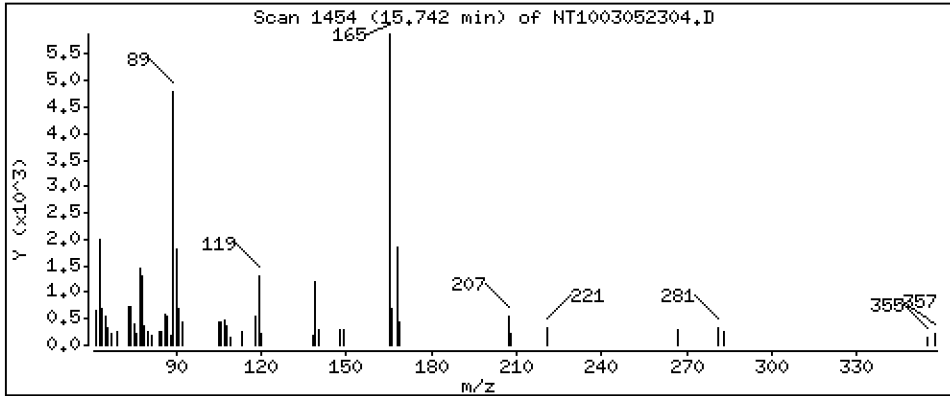
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,1793 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

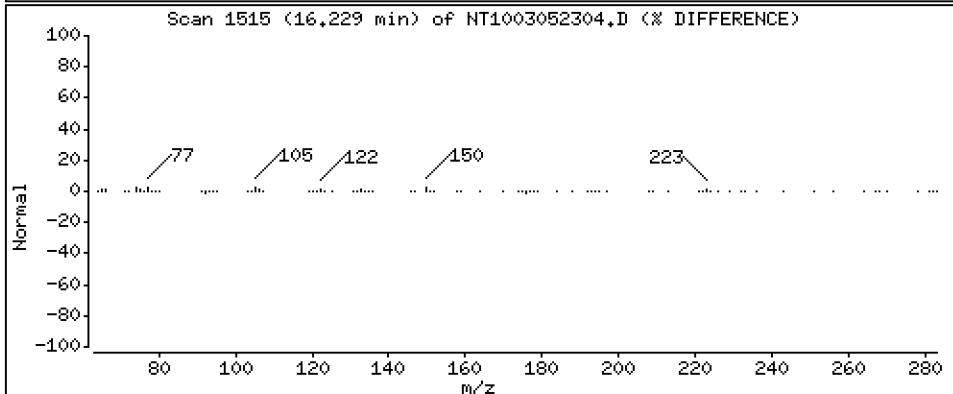
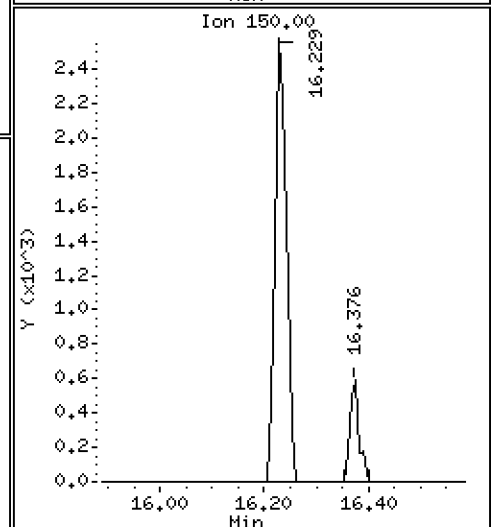
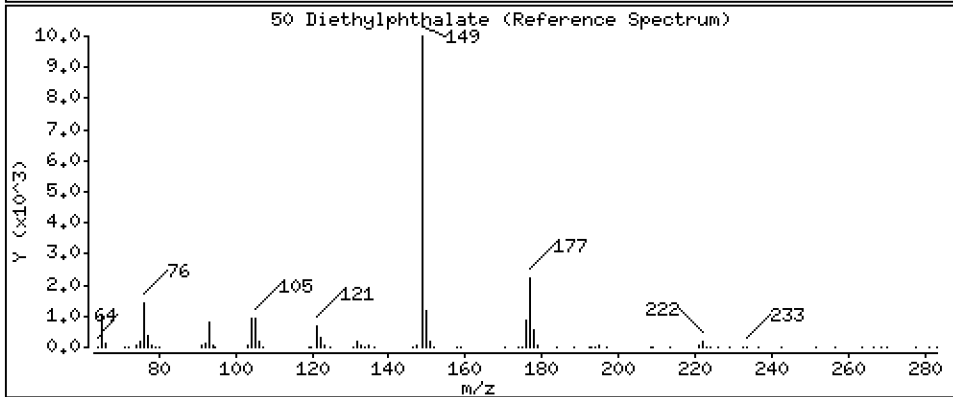
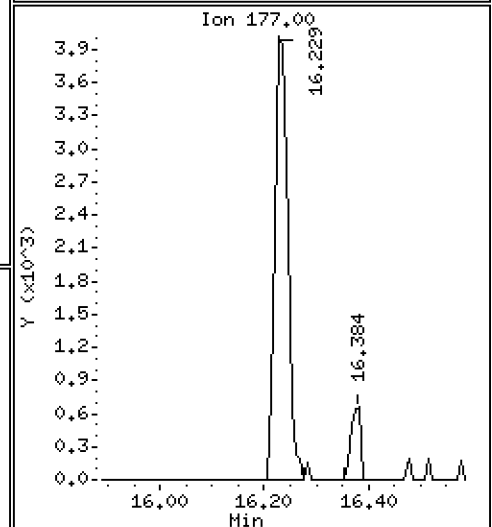
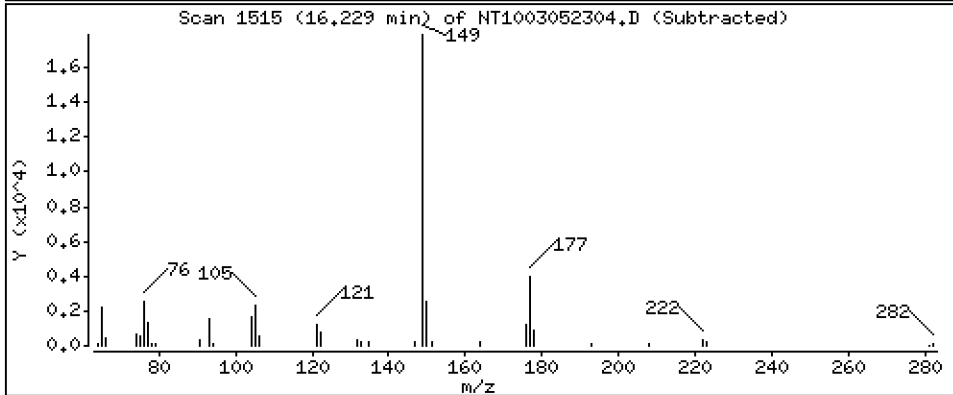
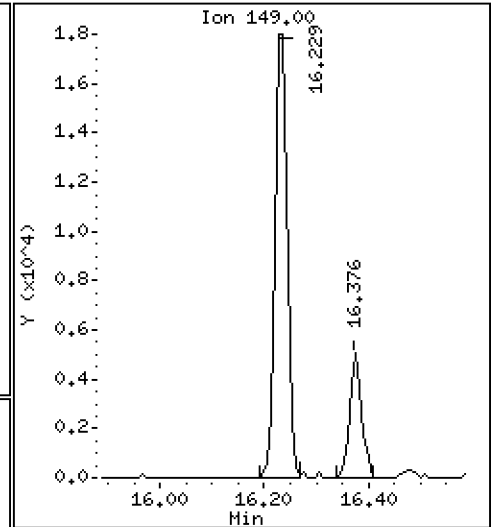
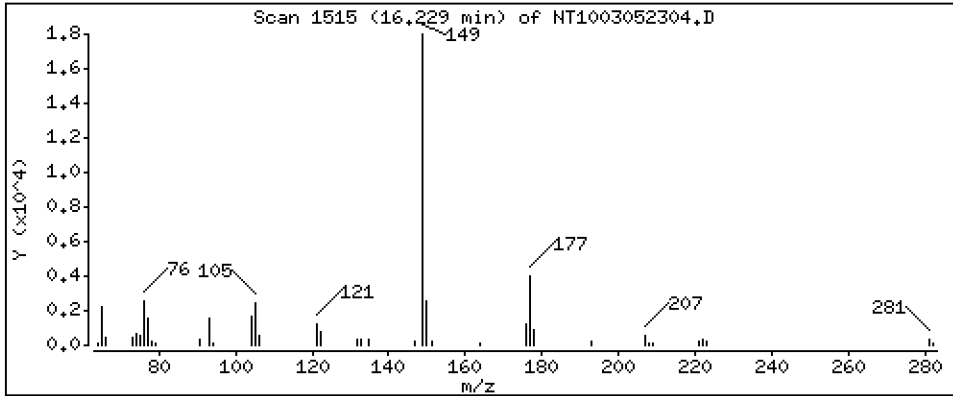
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1525 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

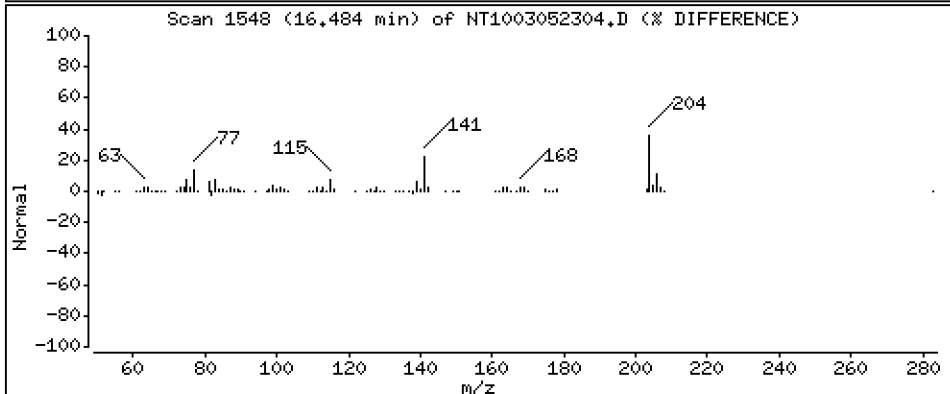
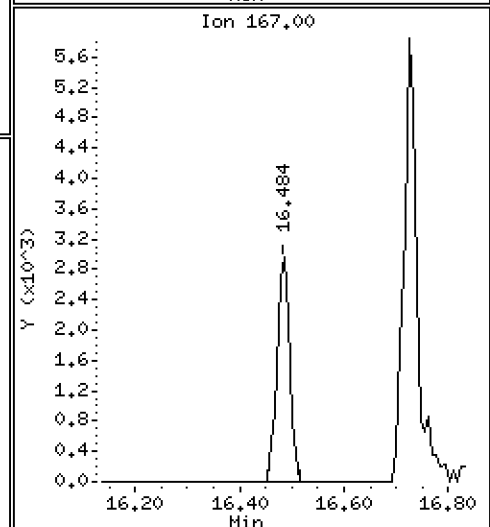
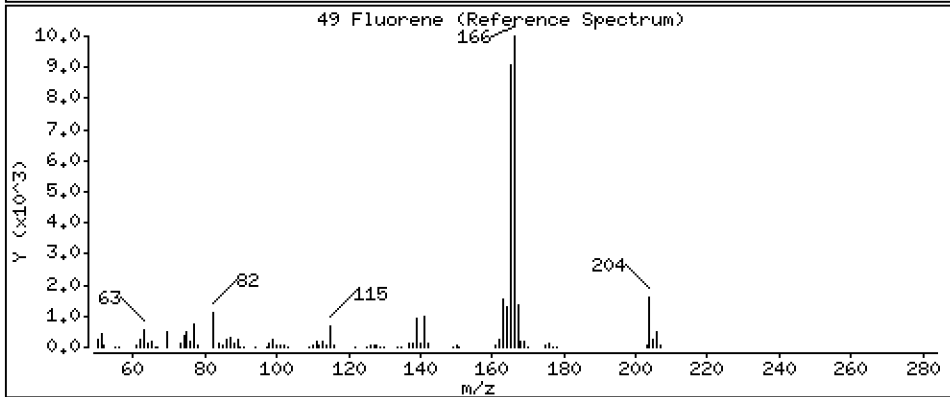
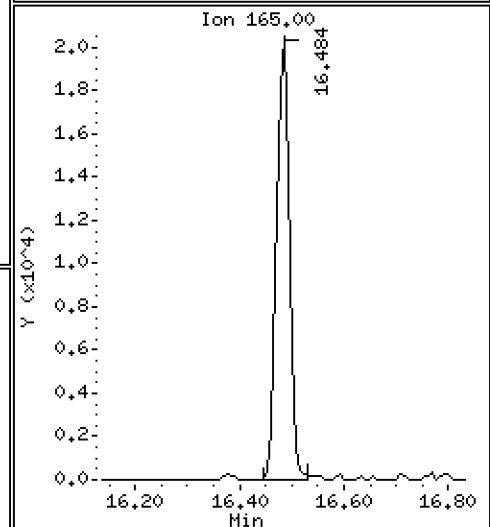
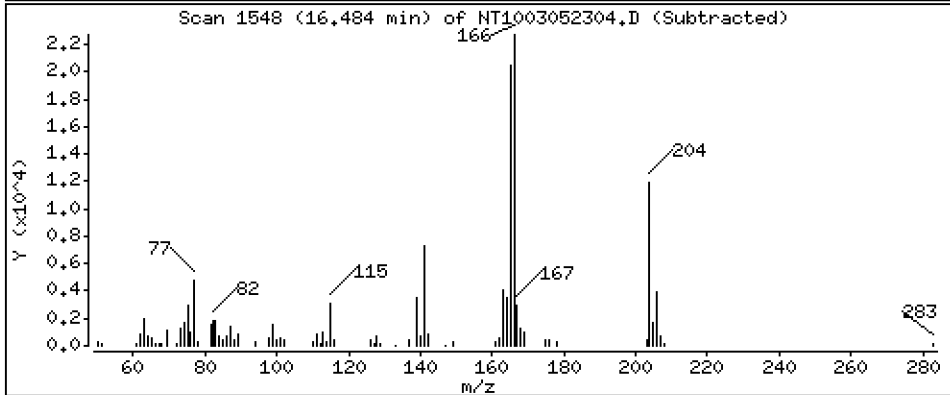
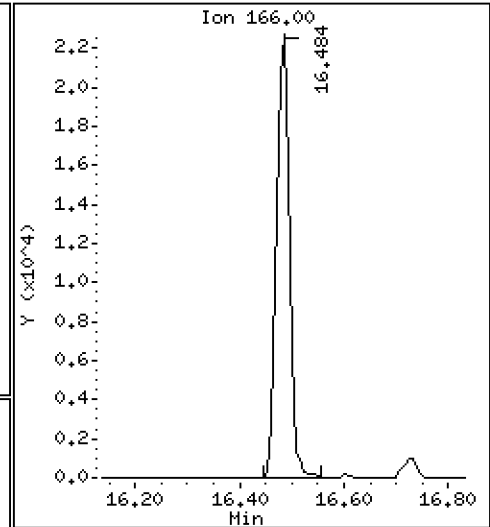
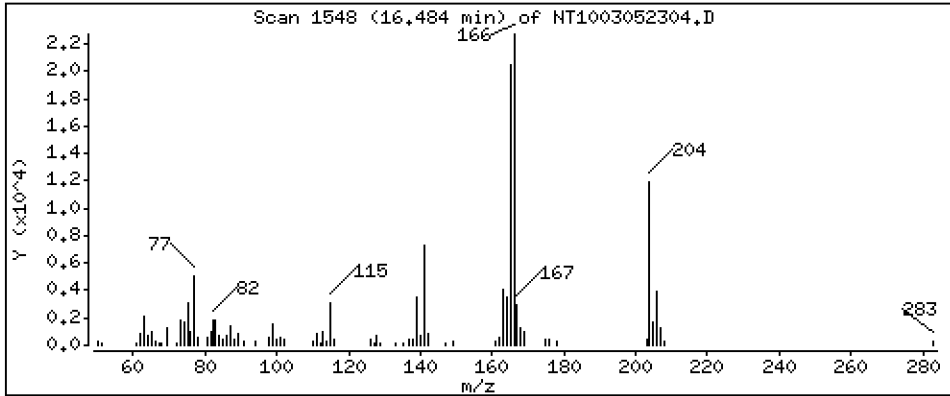
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1976 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

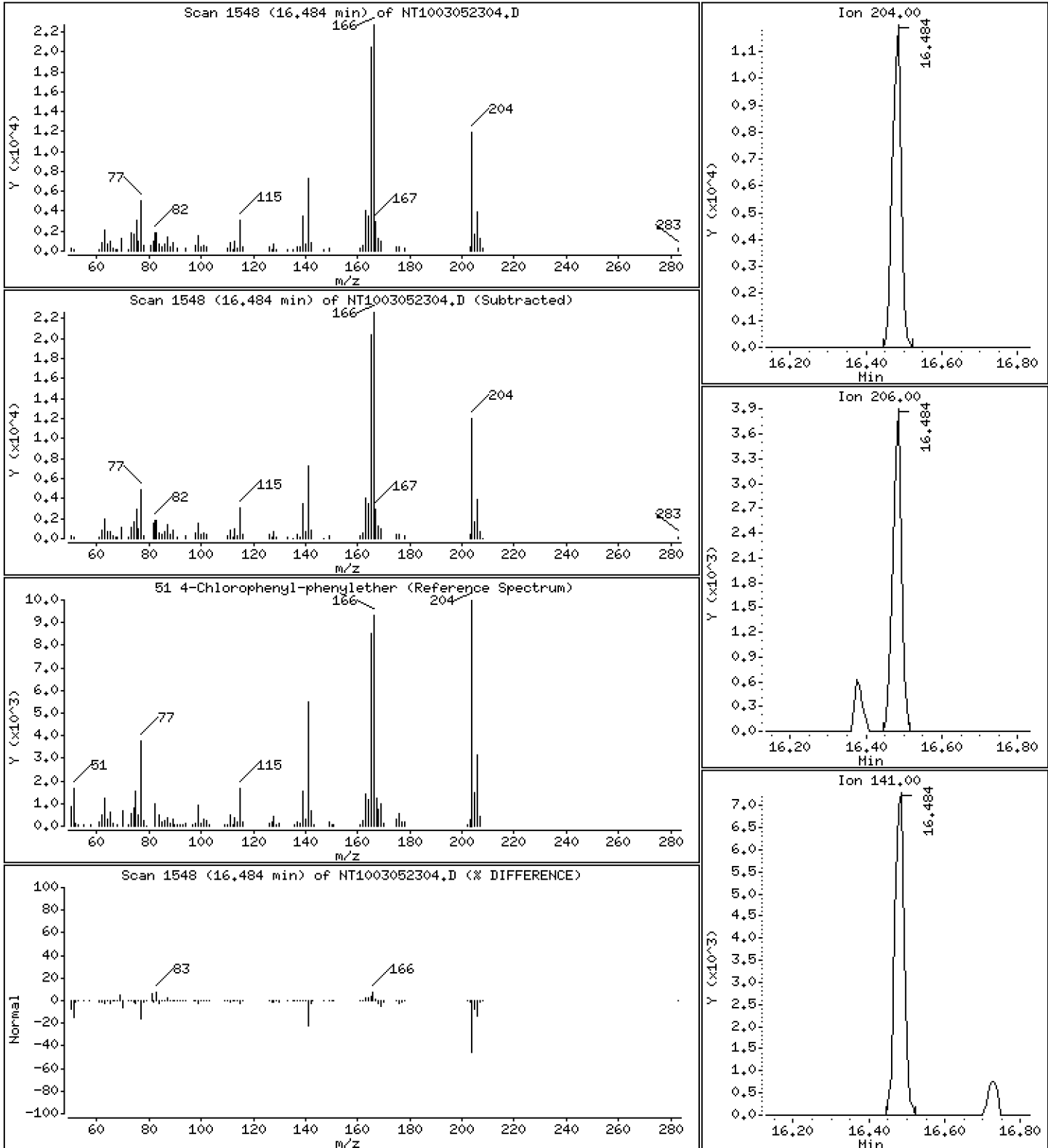
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2177 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

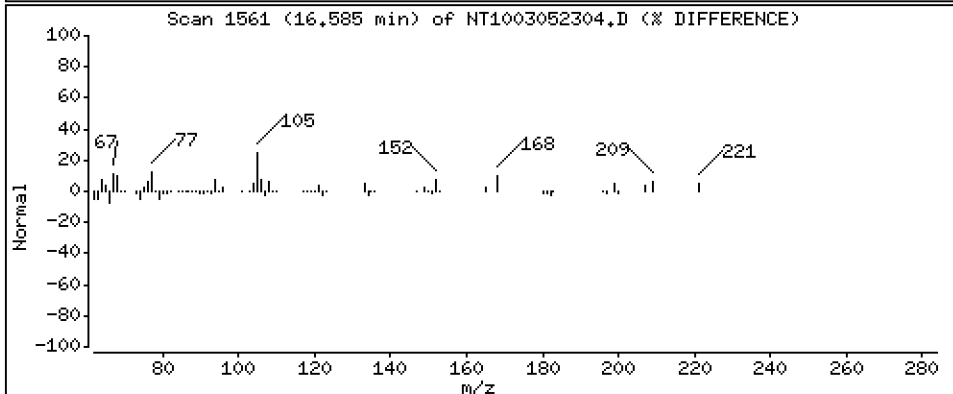
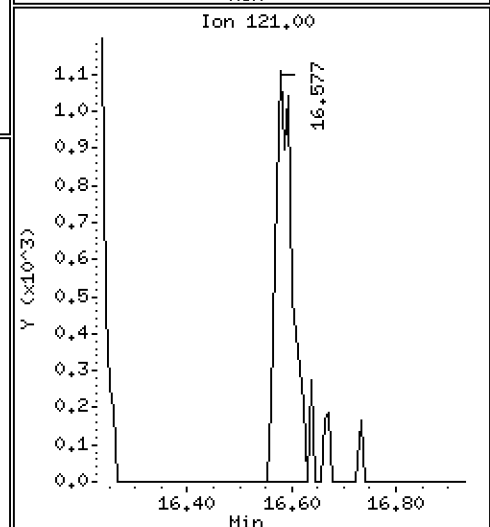
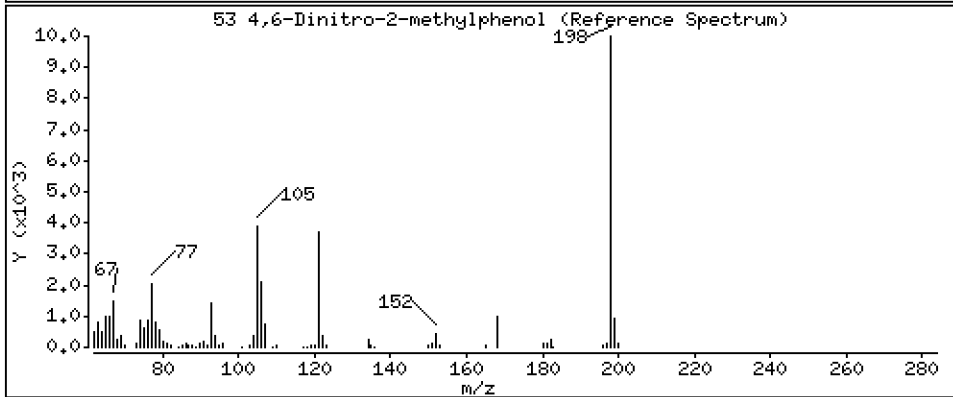
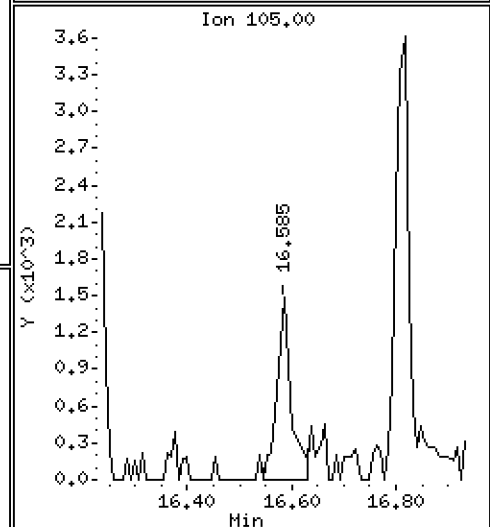
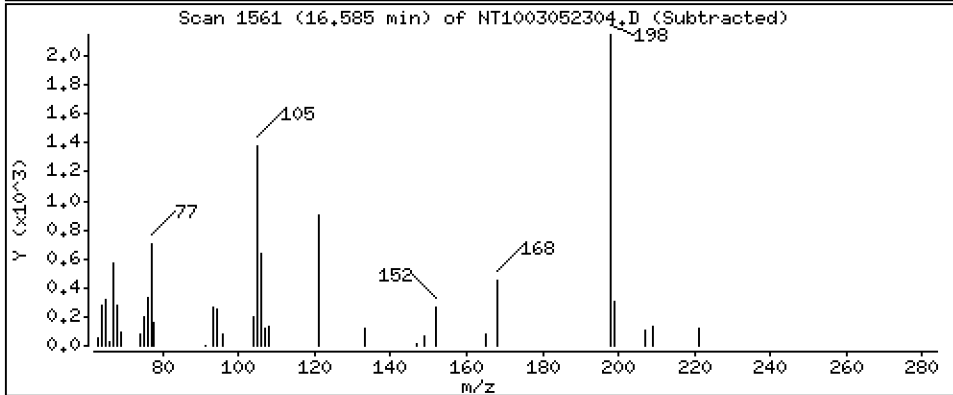
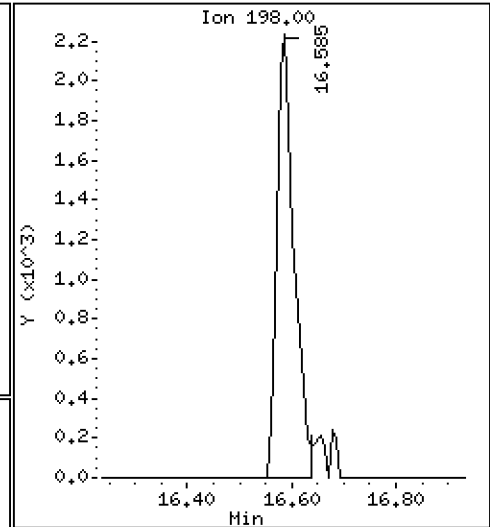
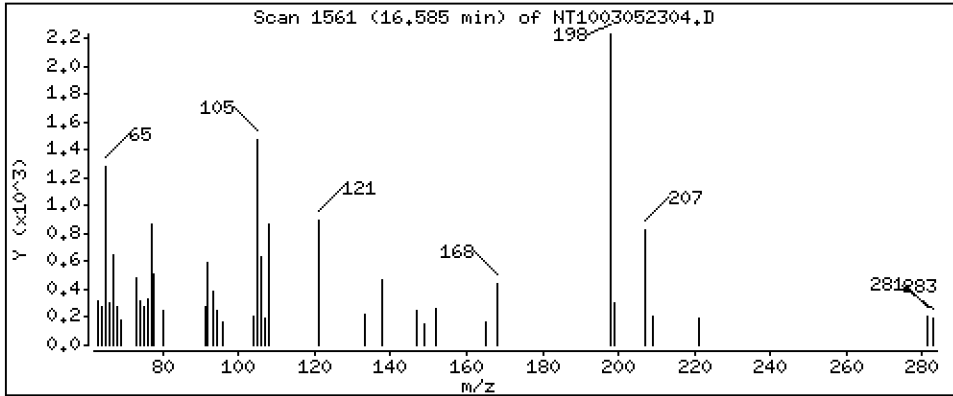
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2329 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

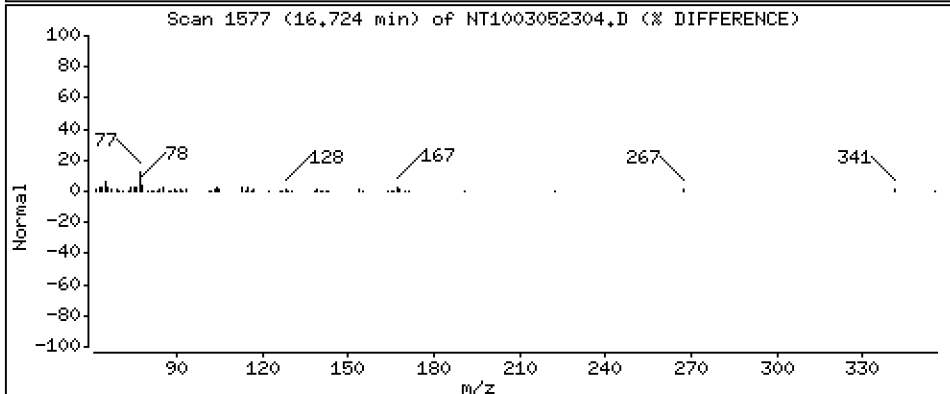
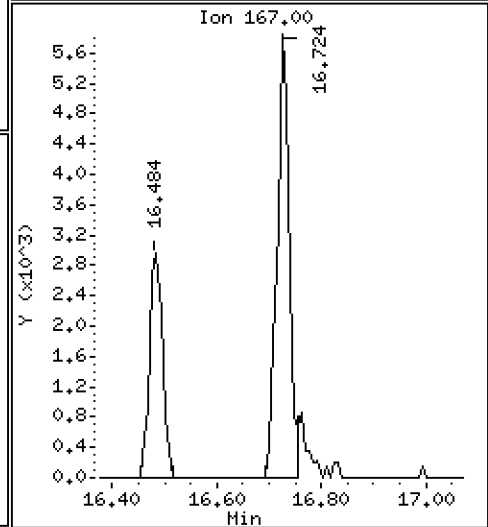
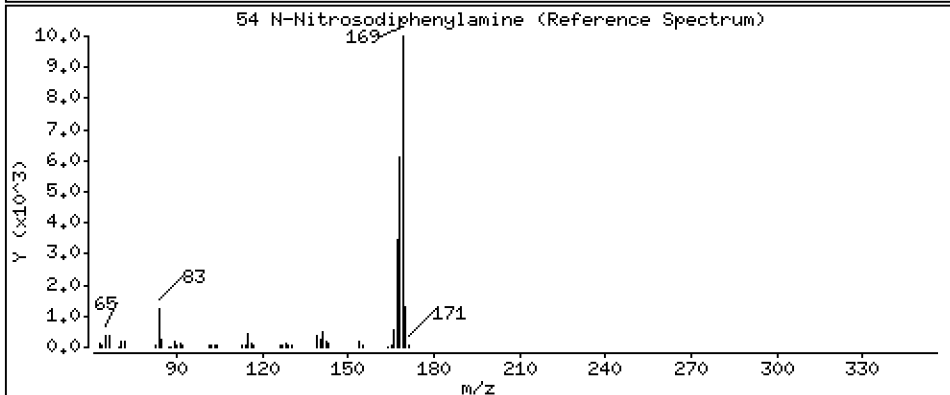
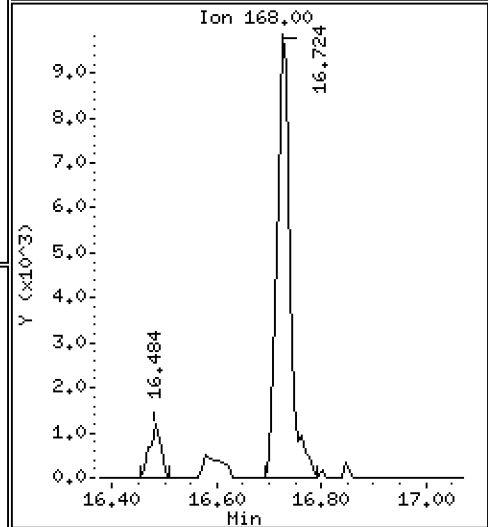
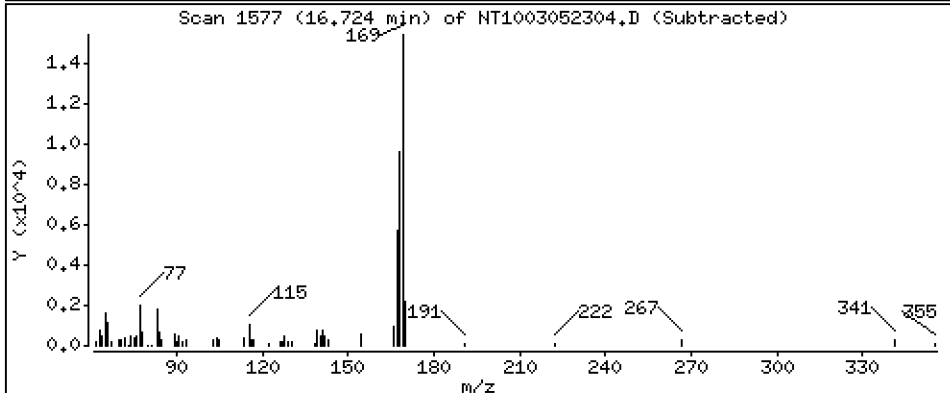
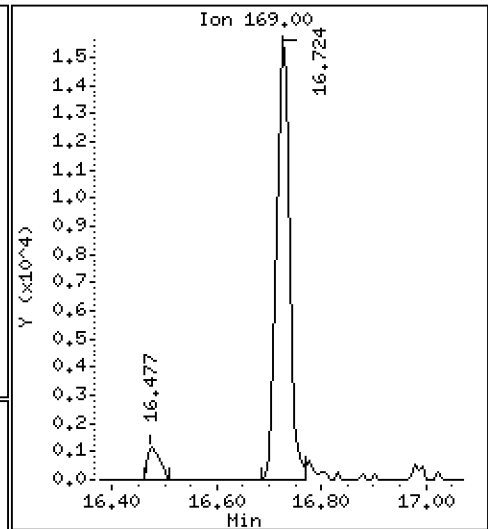
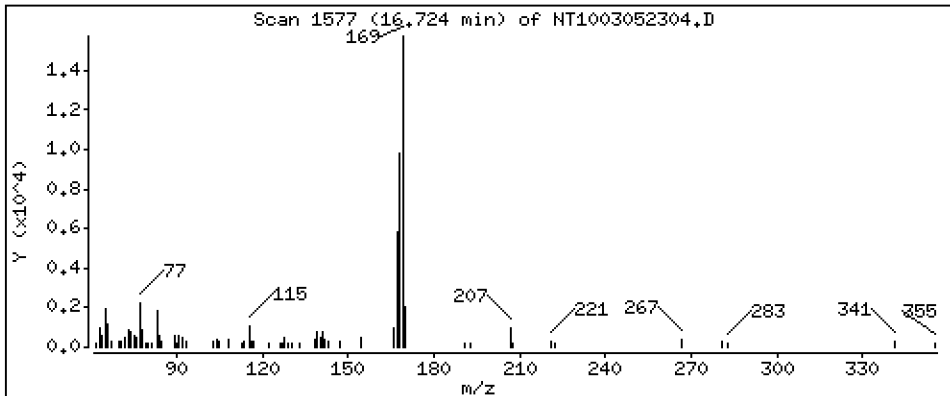
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.1900 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

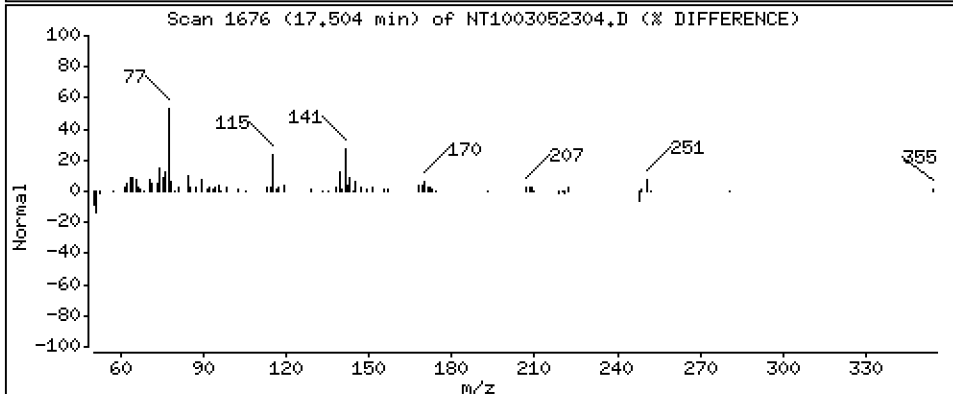
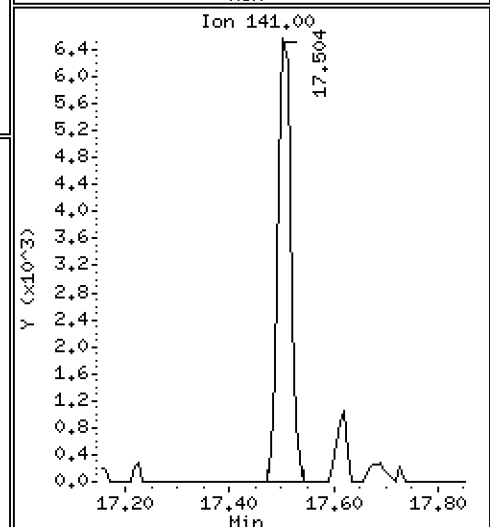
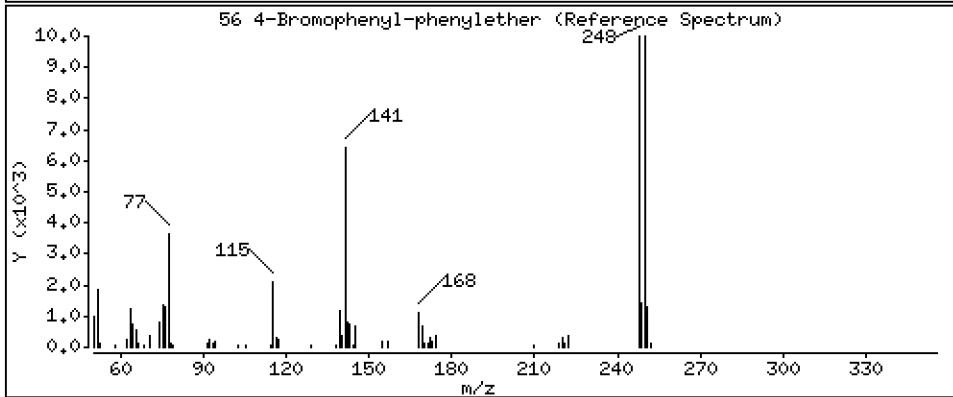
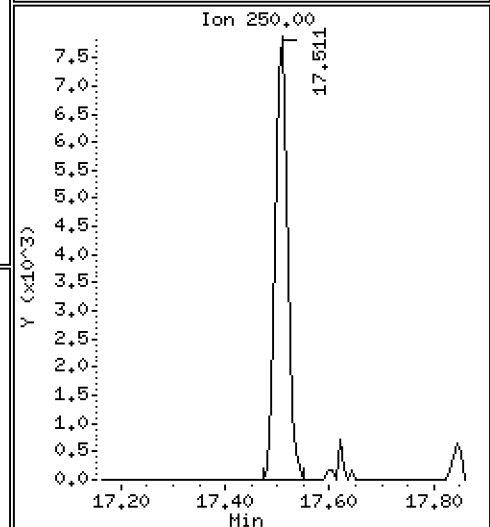
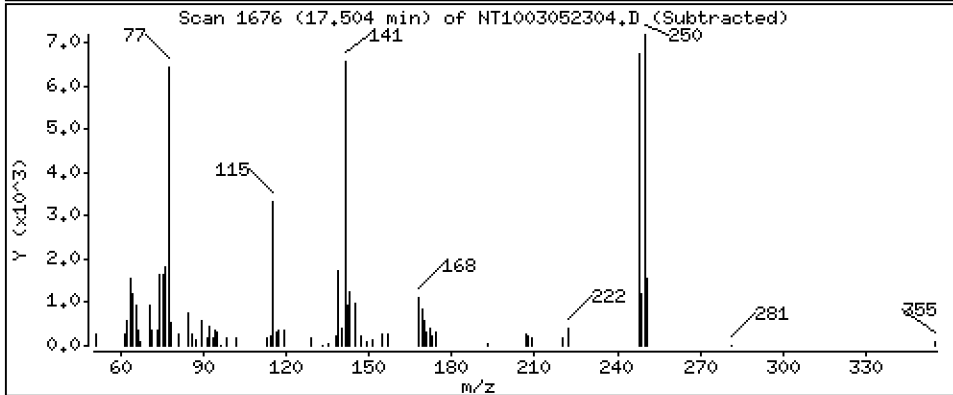
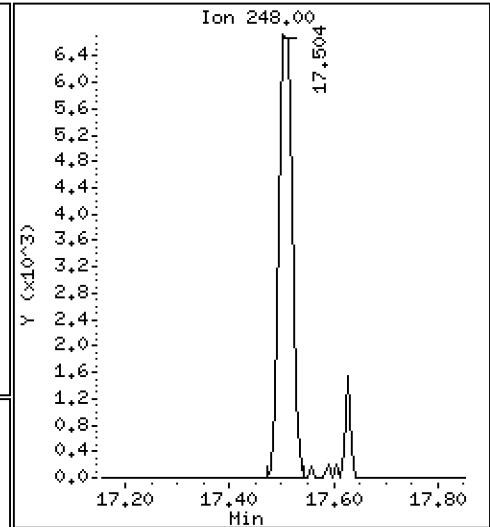
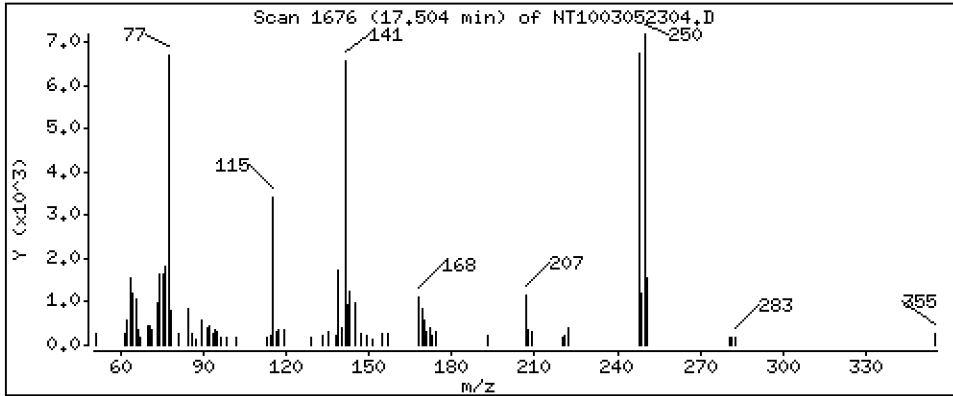
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1965 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

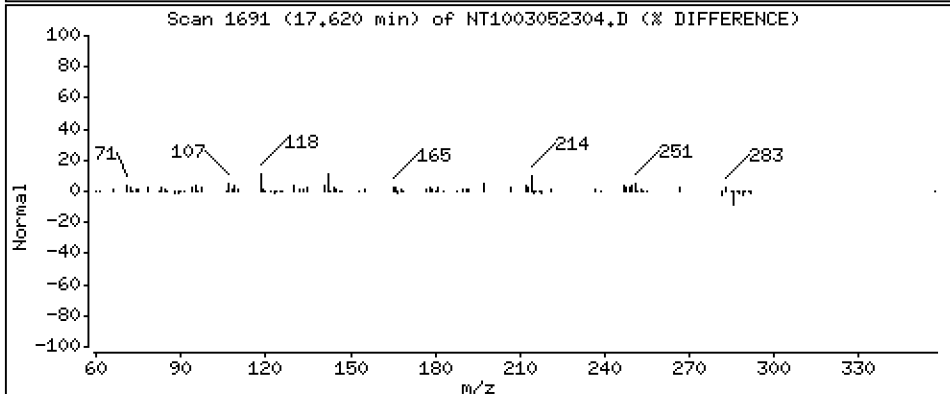
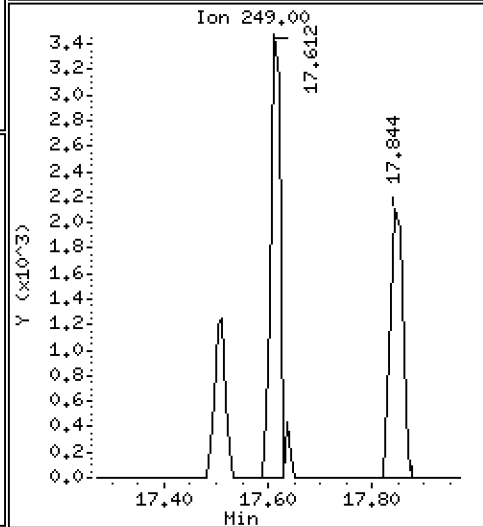
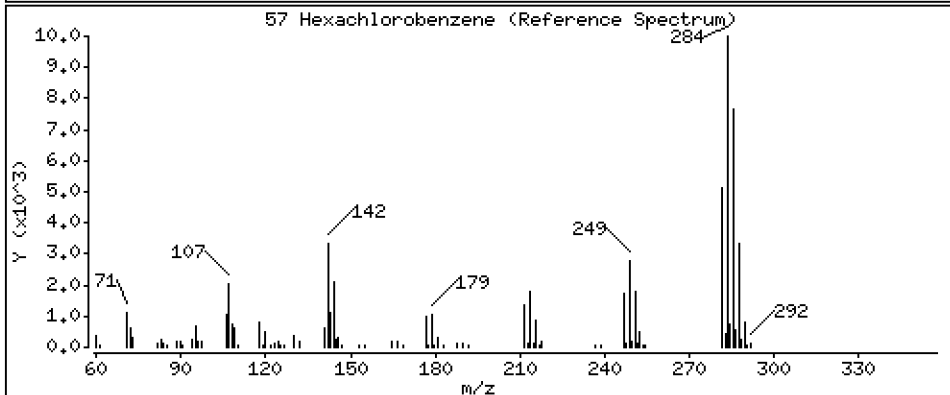
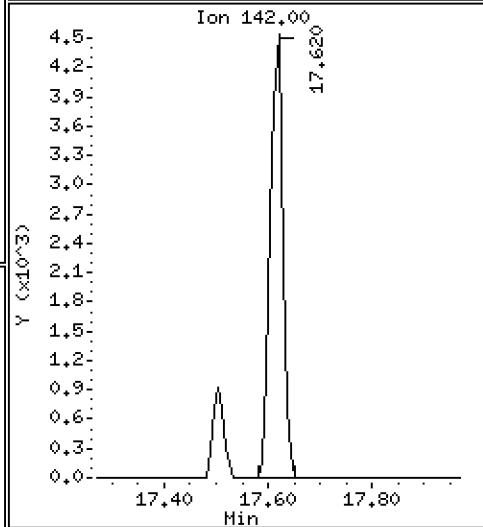
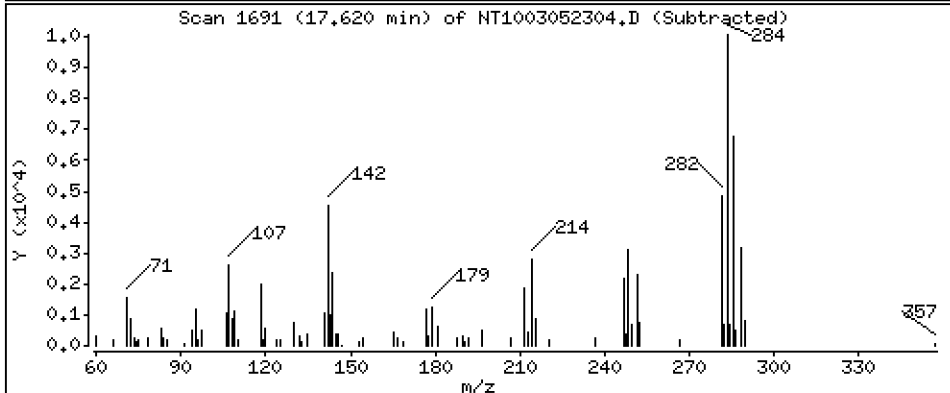
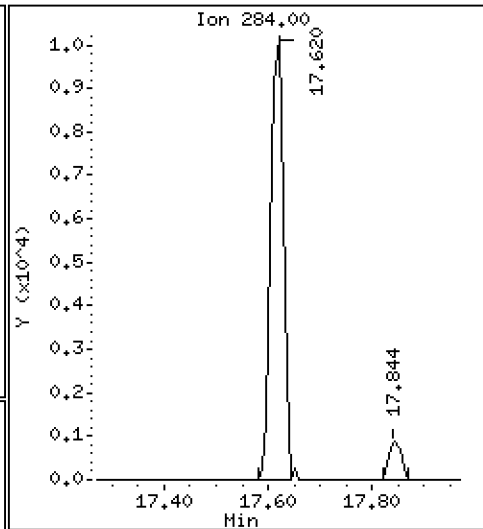
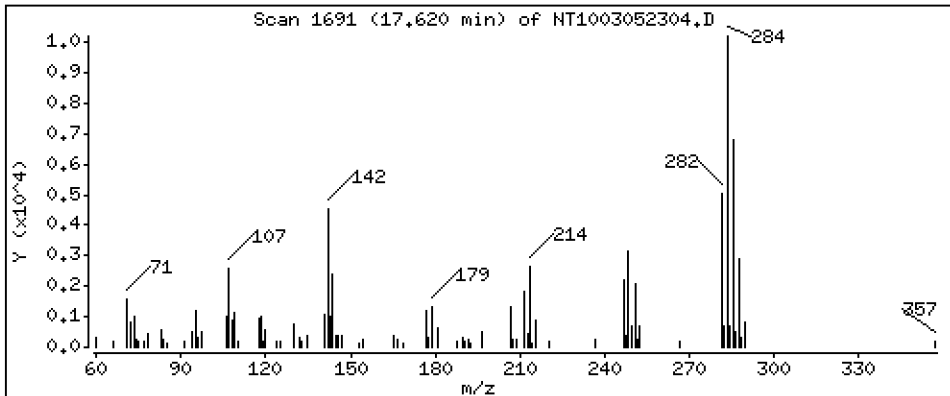
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2515 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

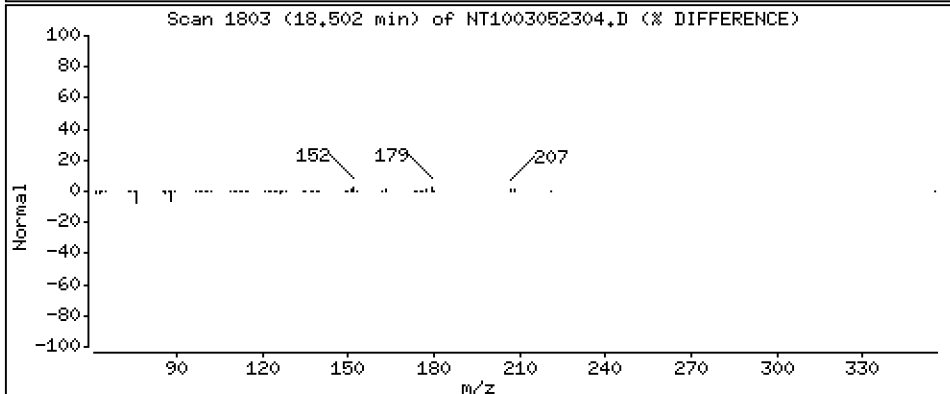
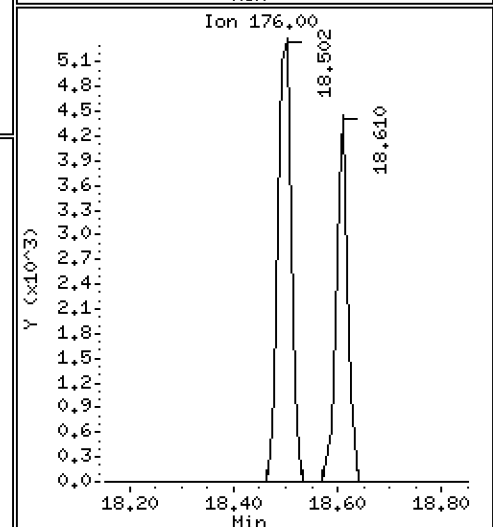
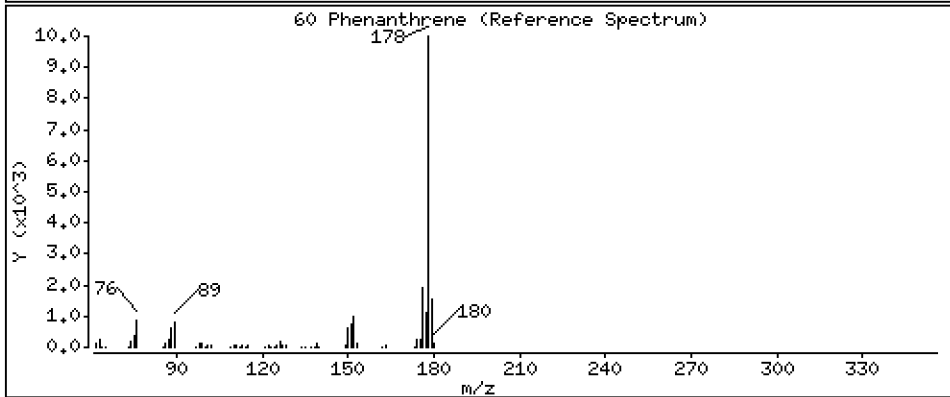
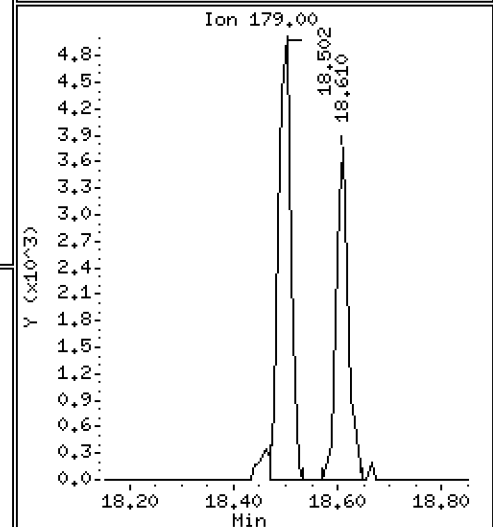
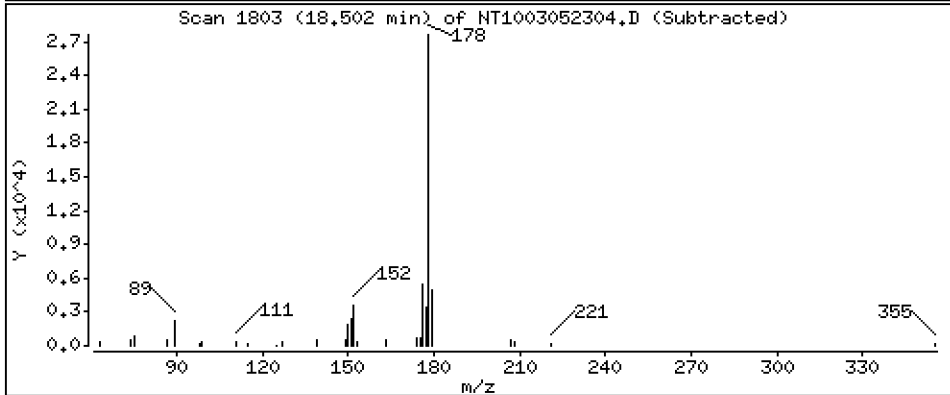
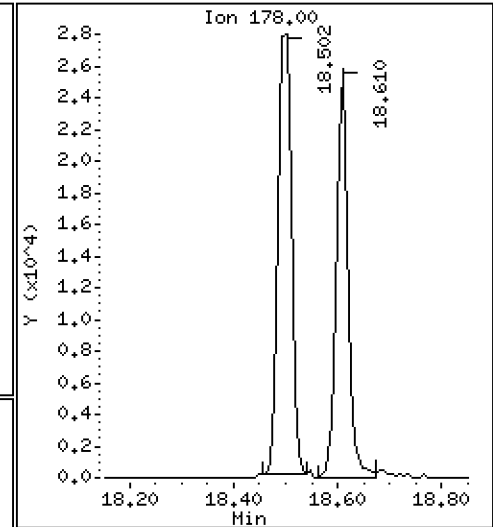
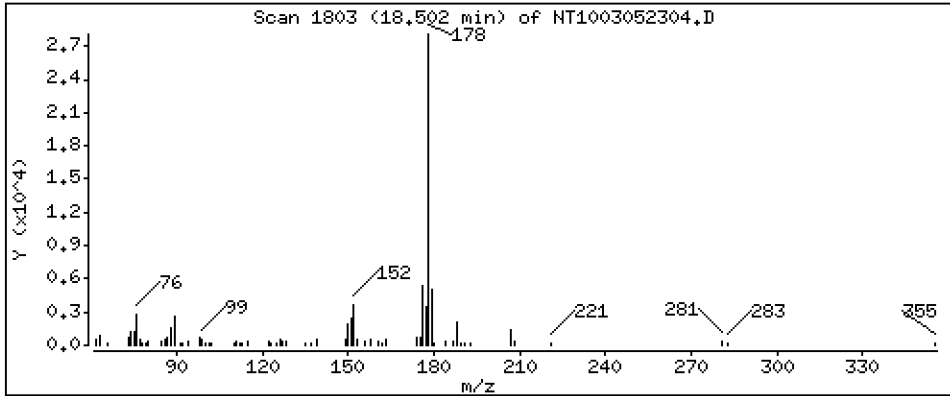
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1917 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

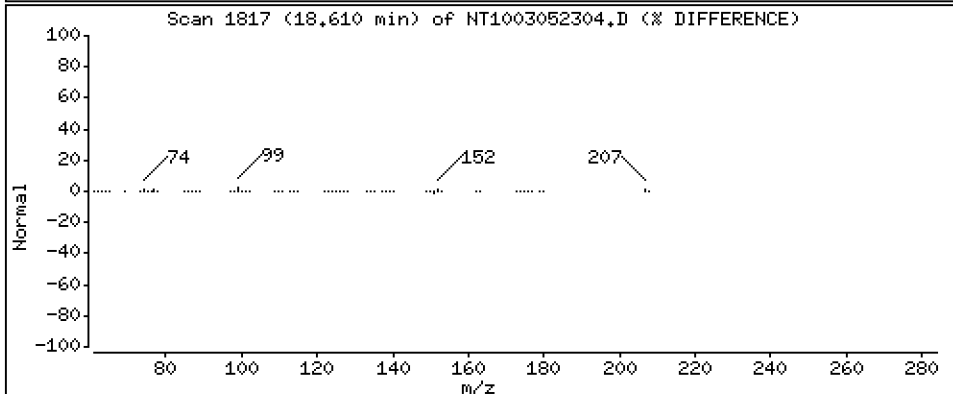
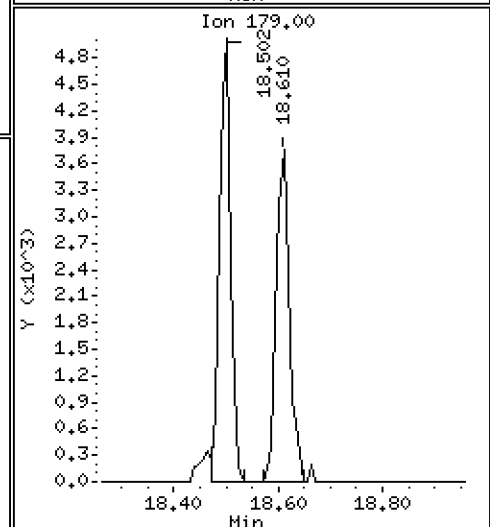
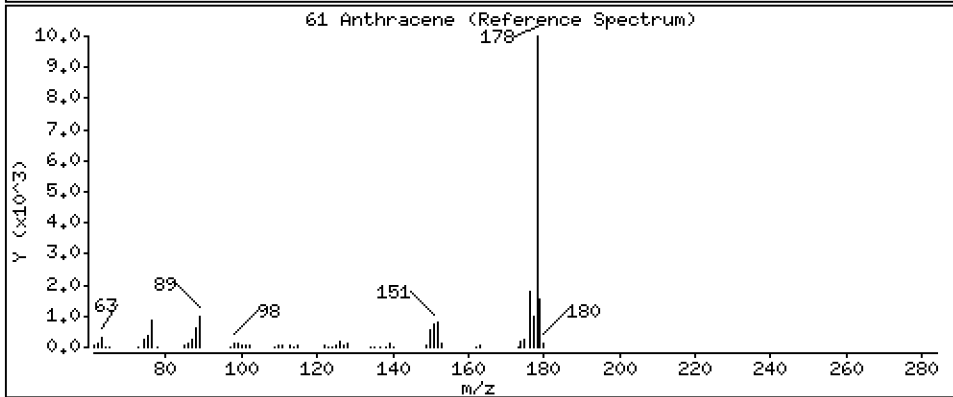
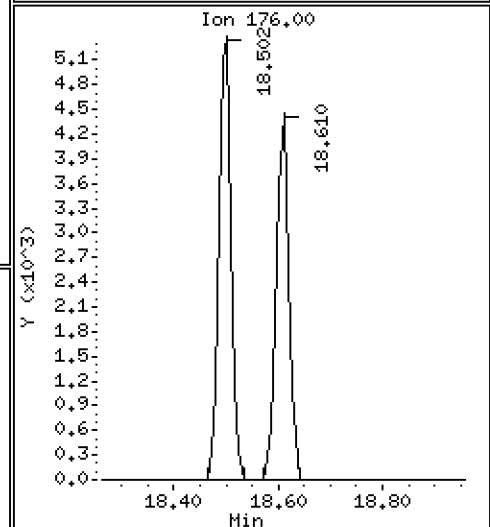
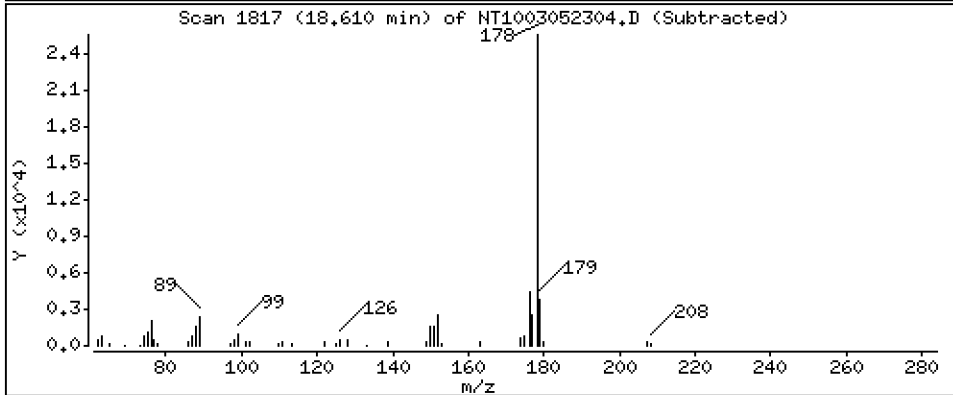
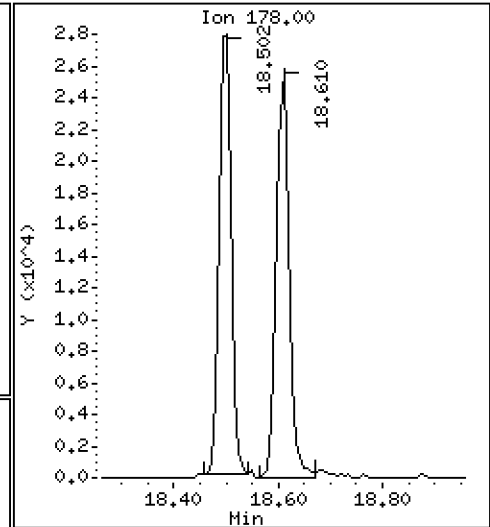
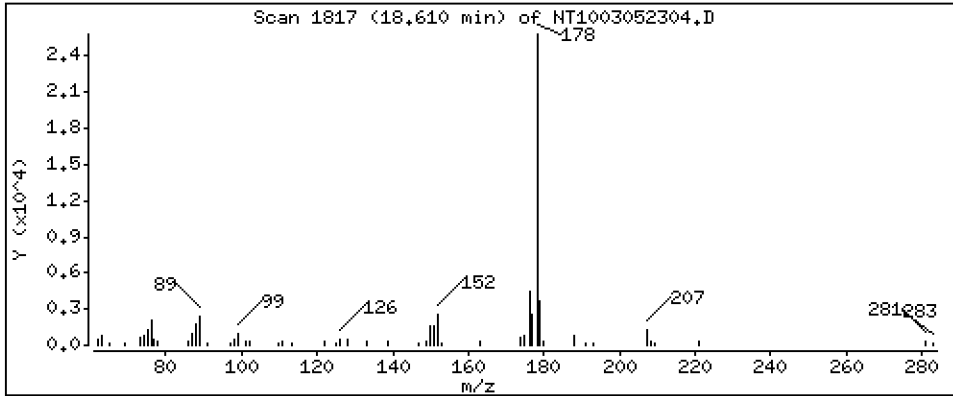
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1737 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

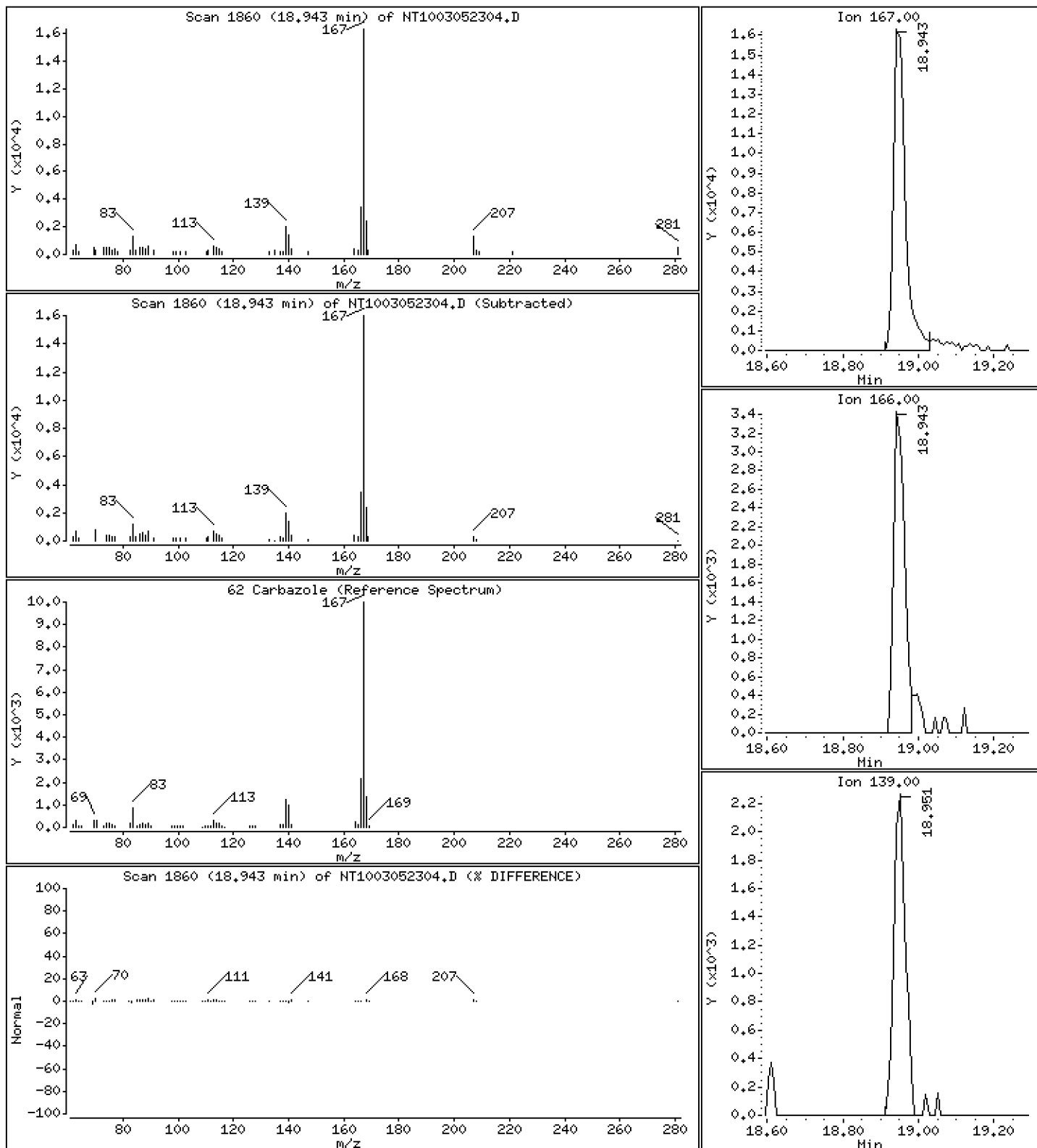
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1563 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

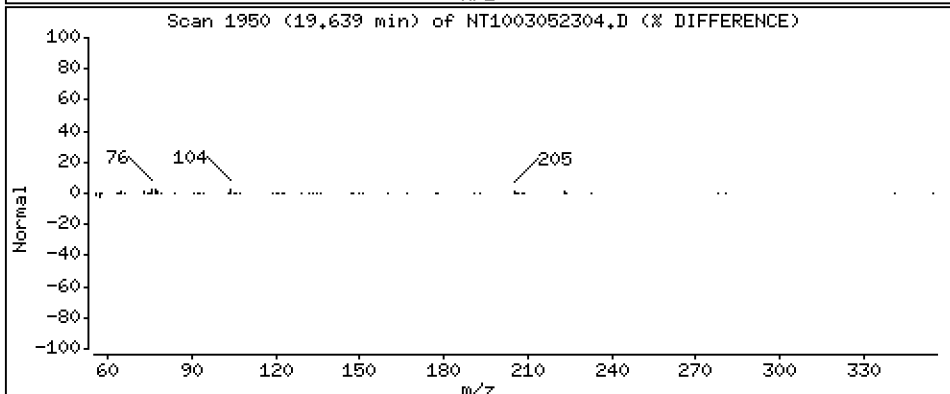
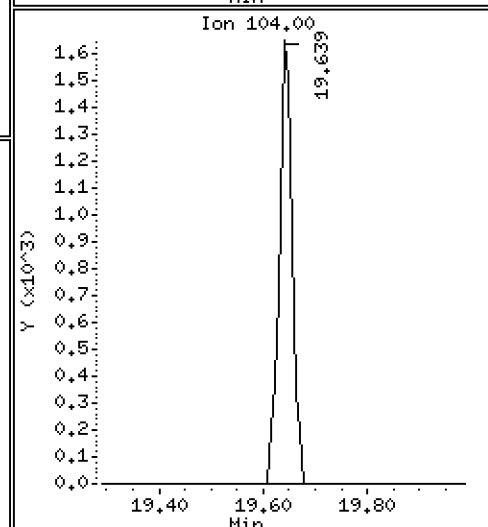
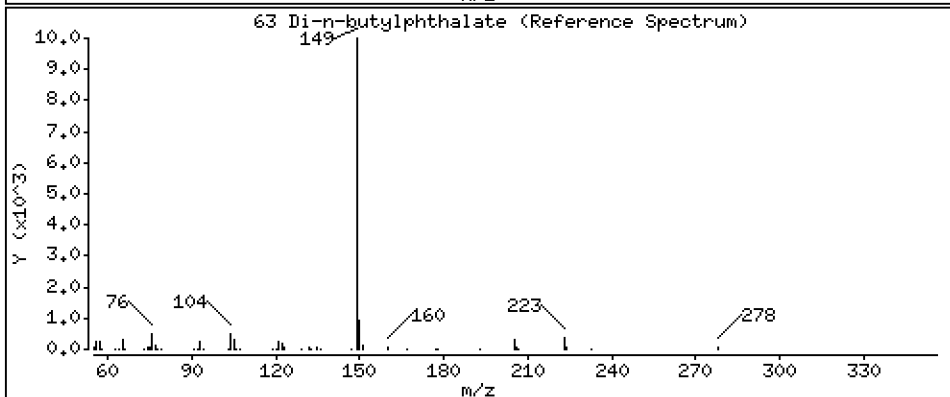
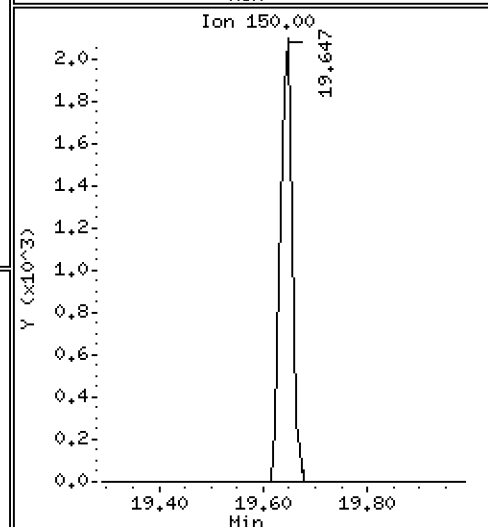
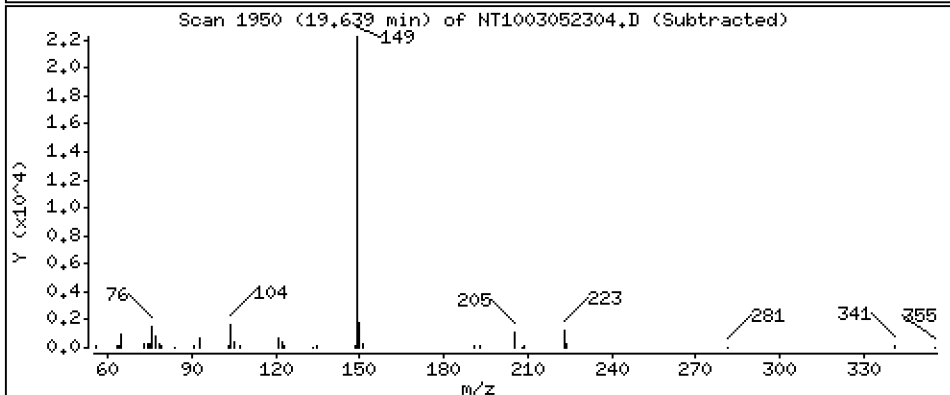
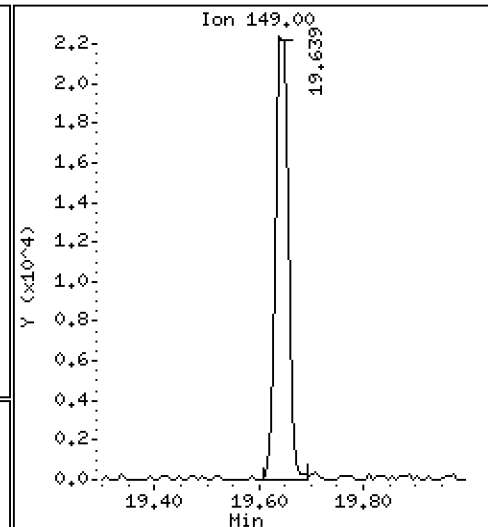
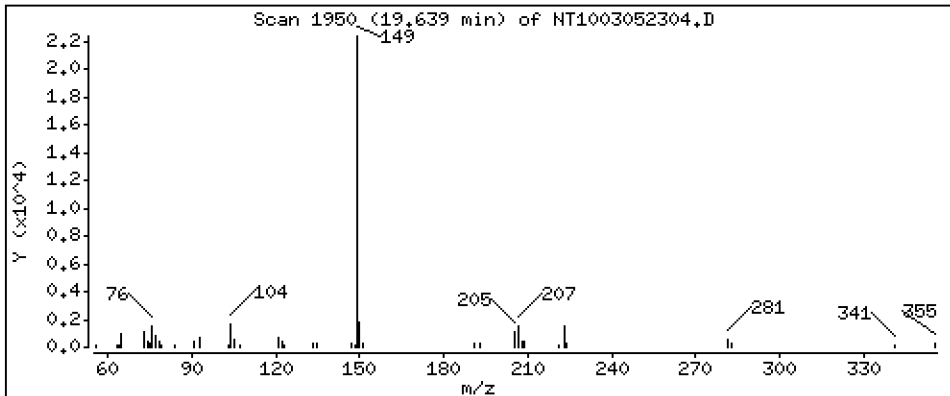
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 0,1206 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

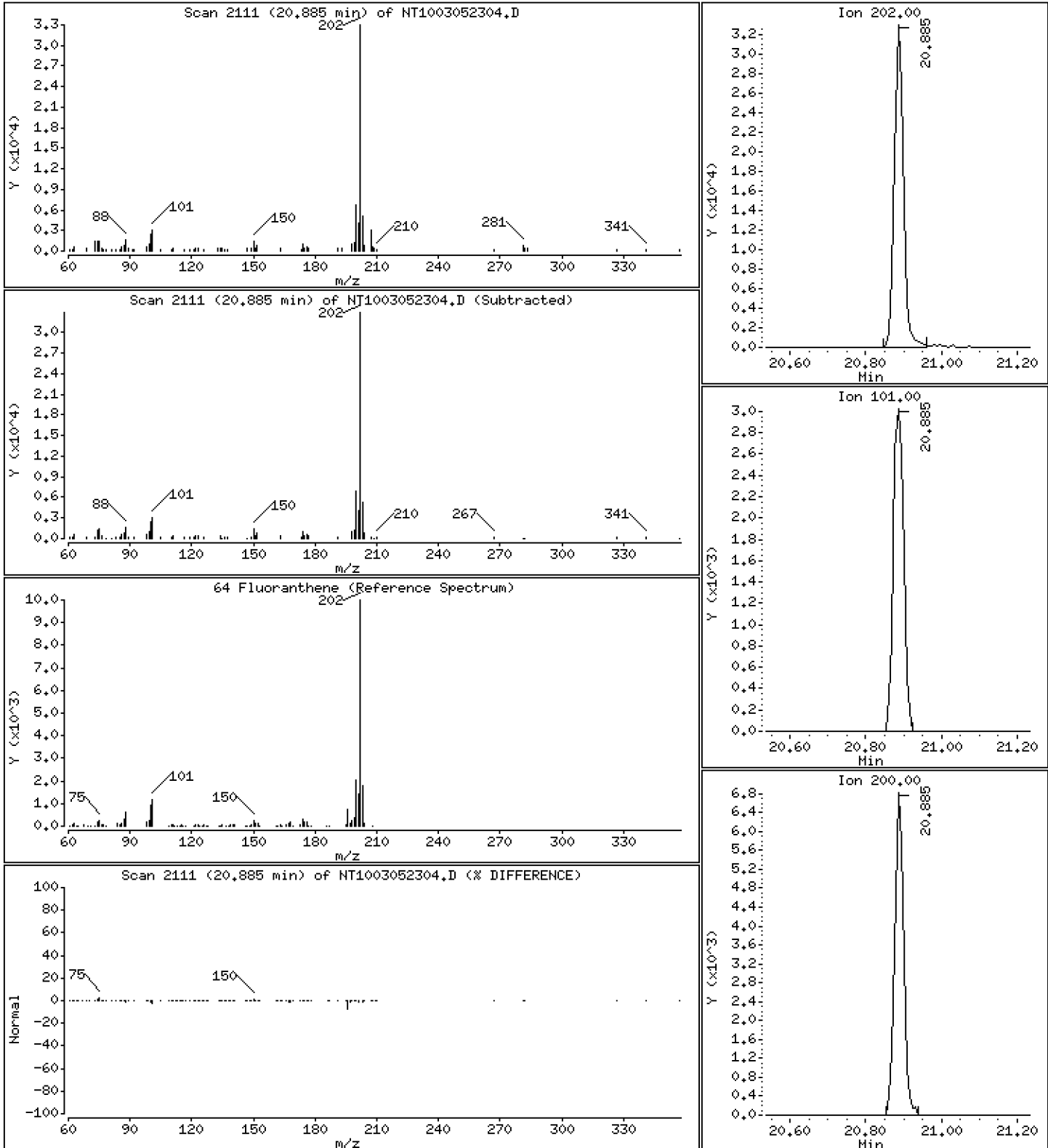
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,1781 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

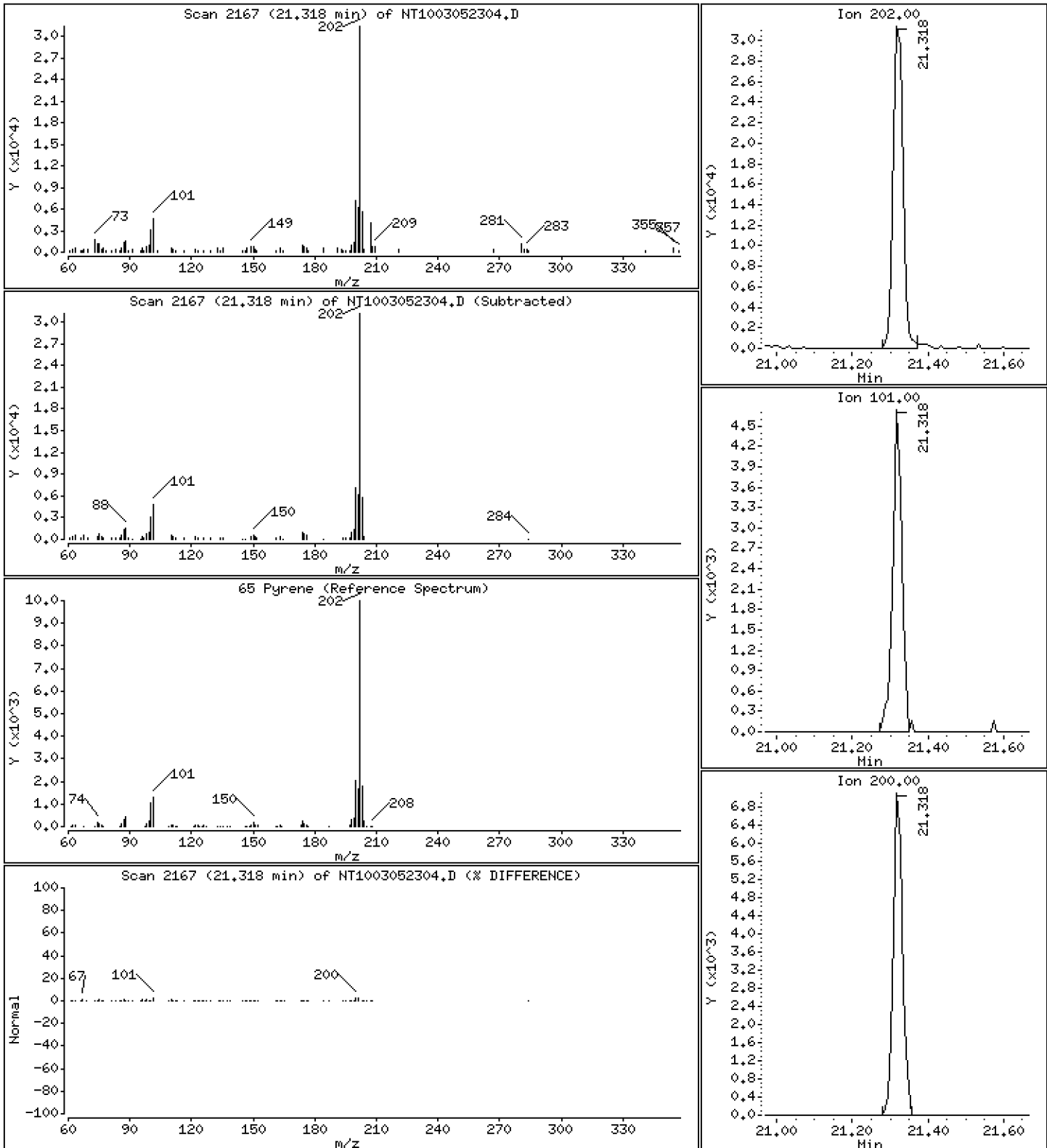
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 0.1795 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

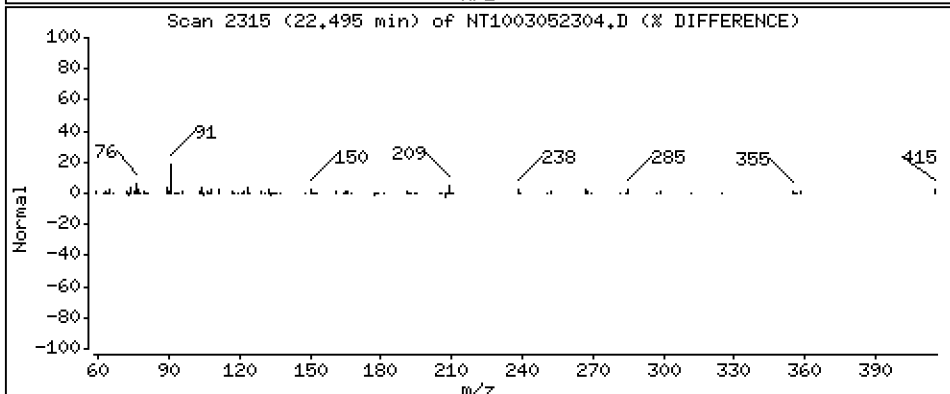
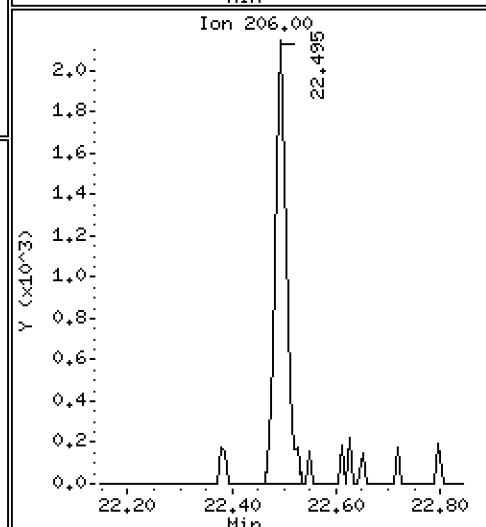
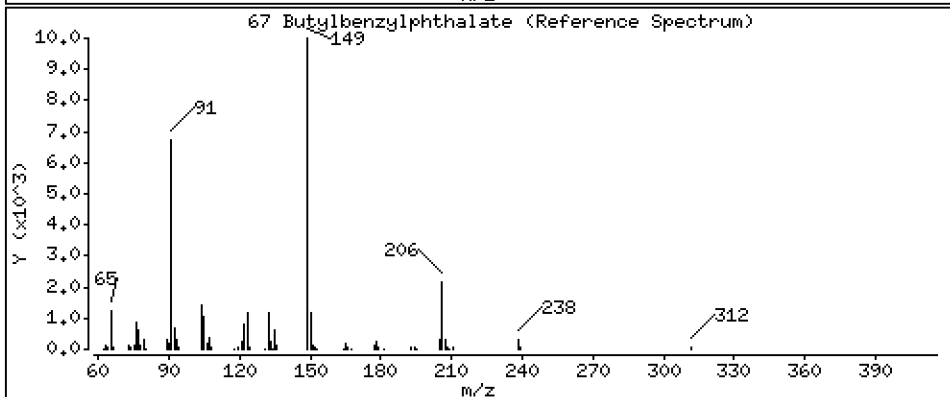
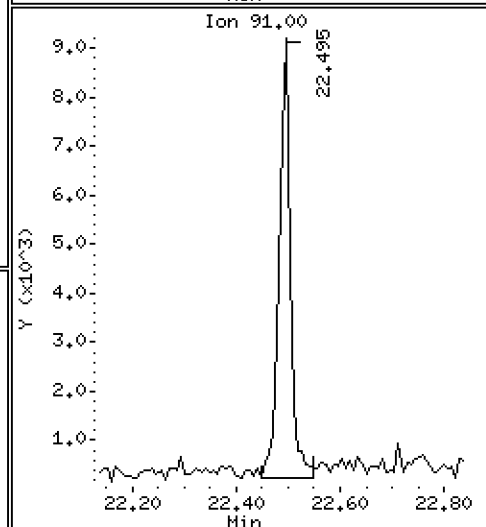
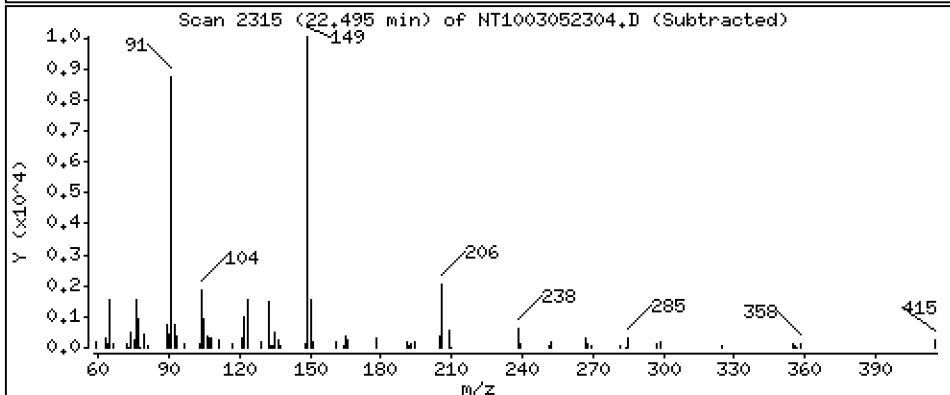
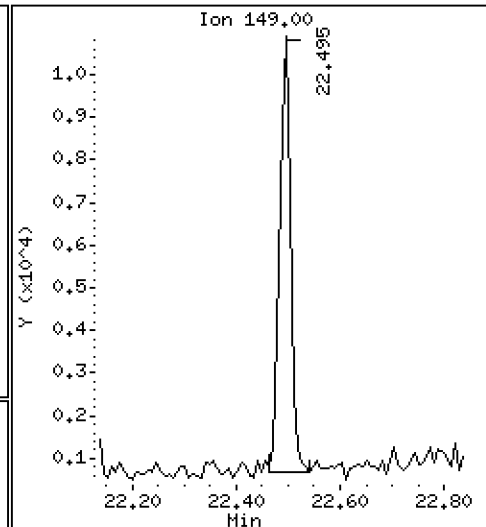
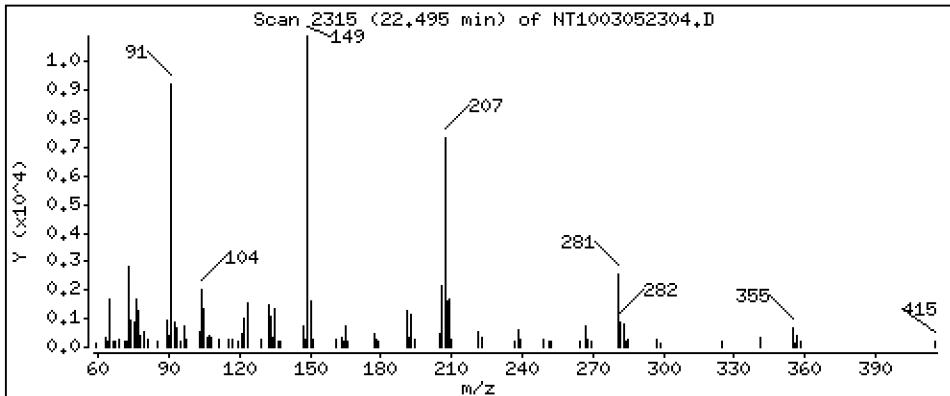
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.09053 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

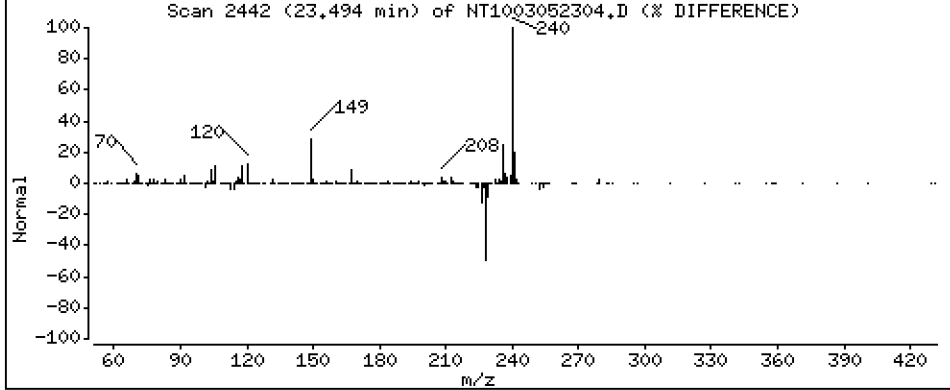
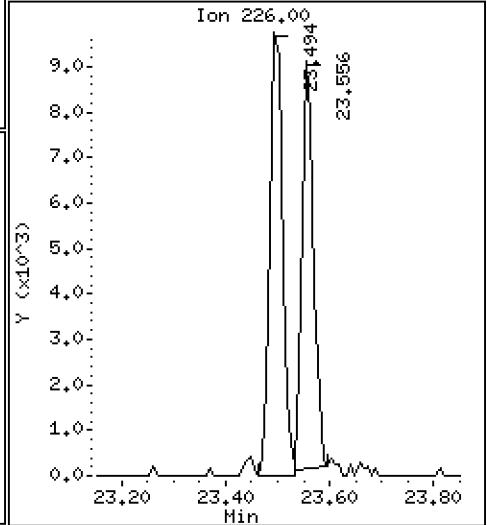
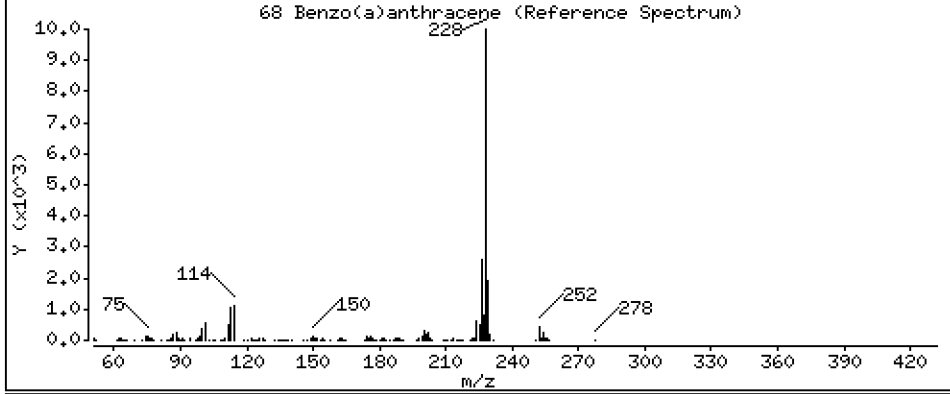
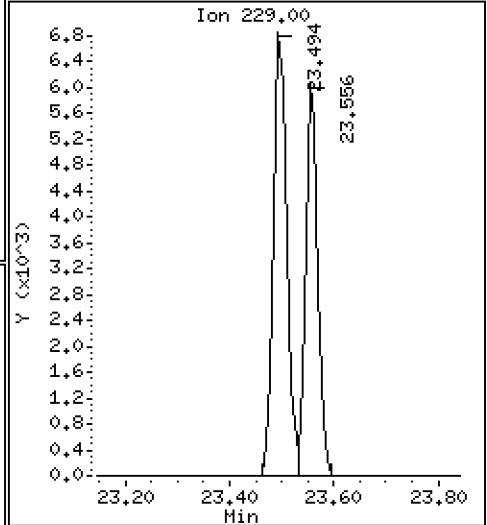
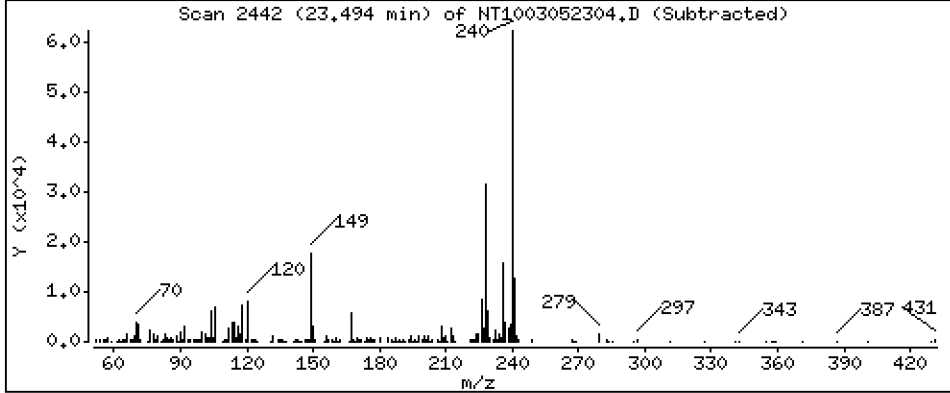
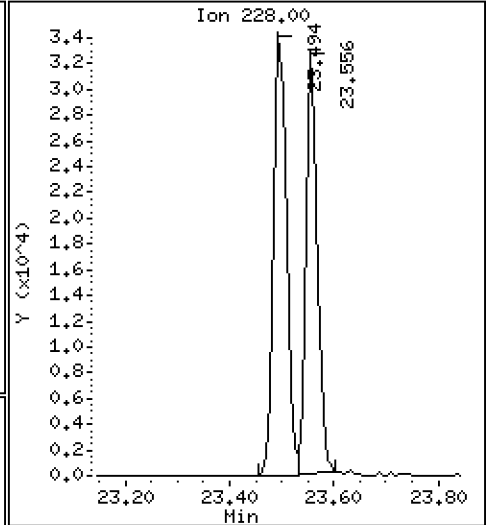
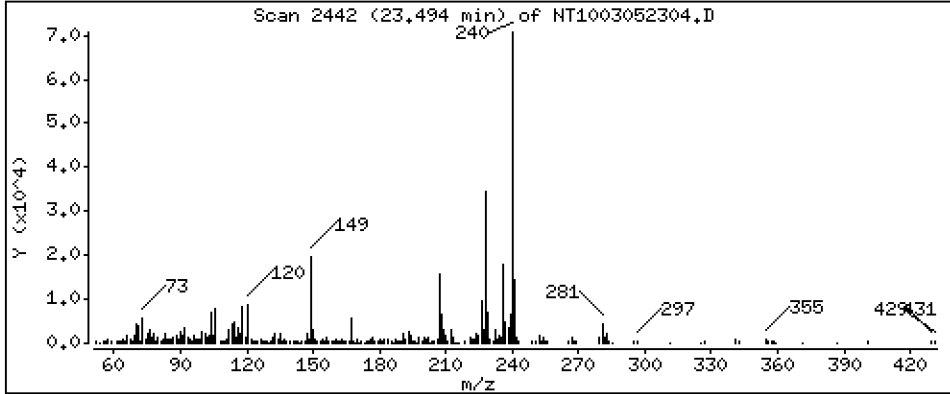
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,1871 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

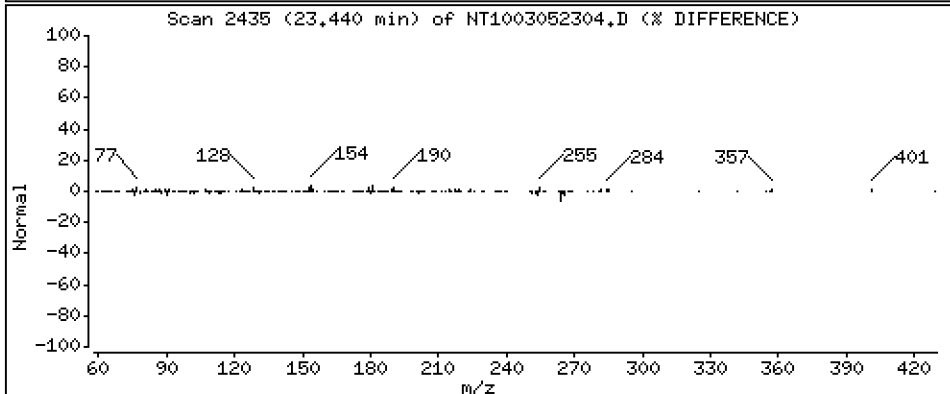
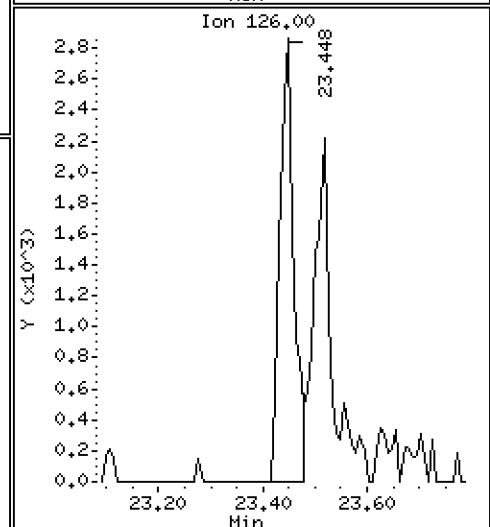
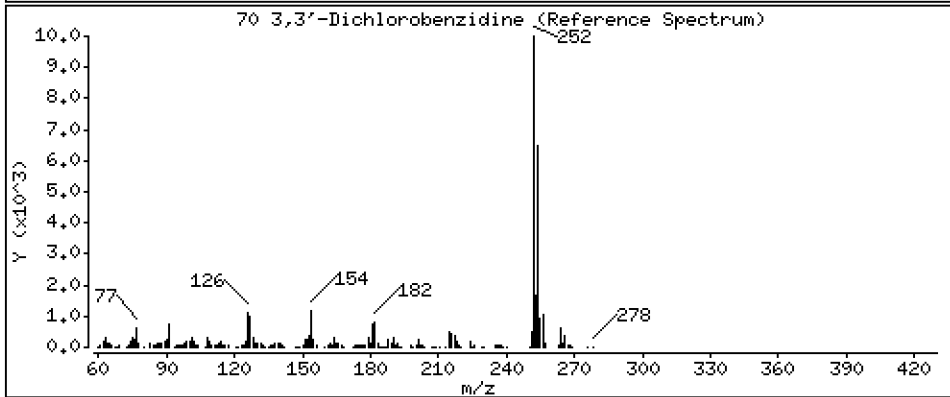
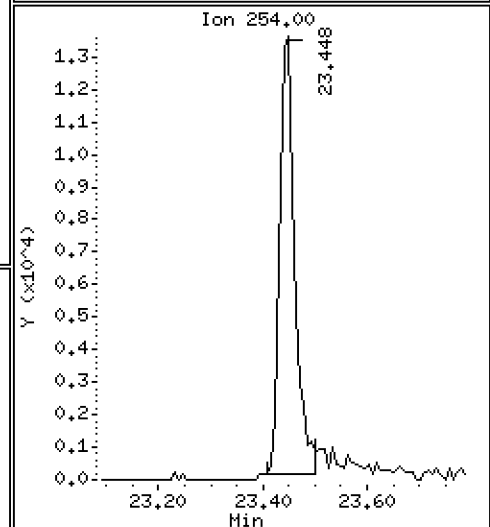
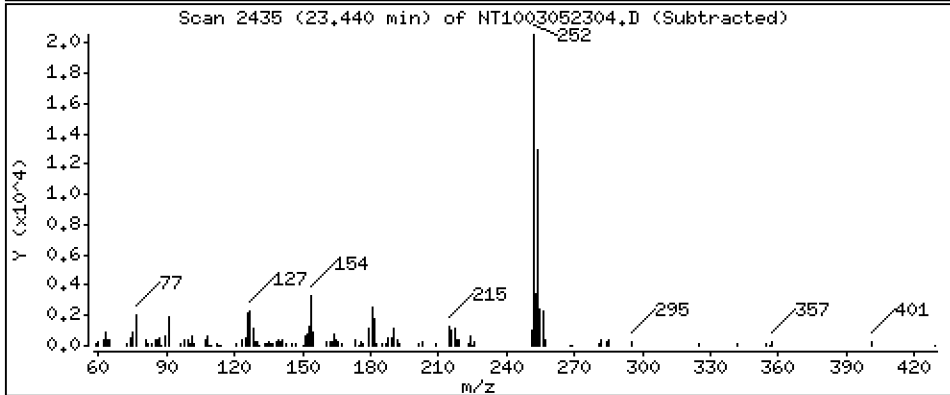
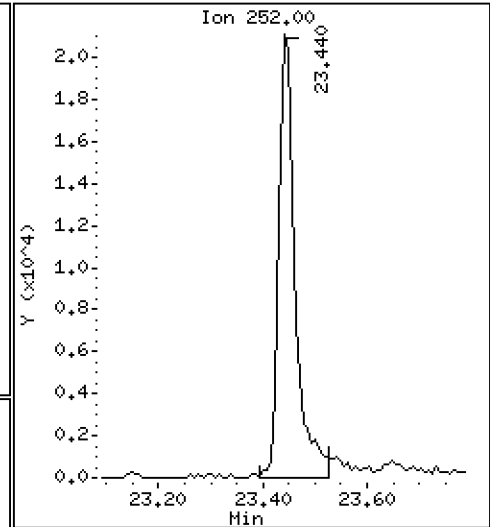
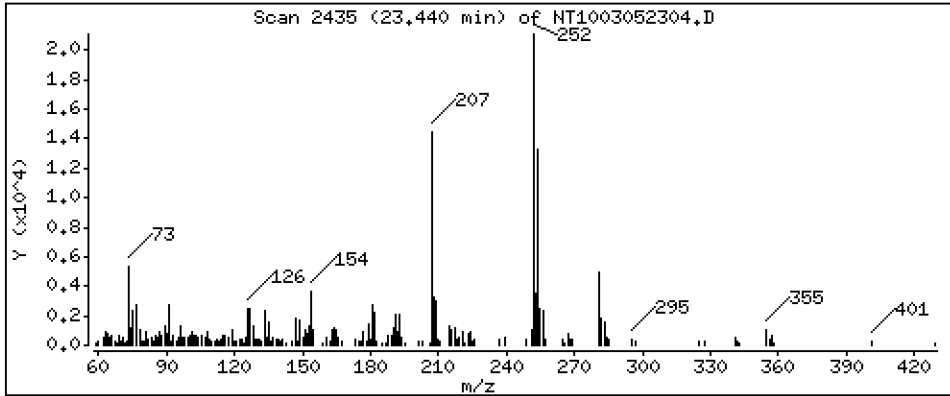
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,3333 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

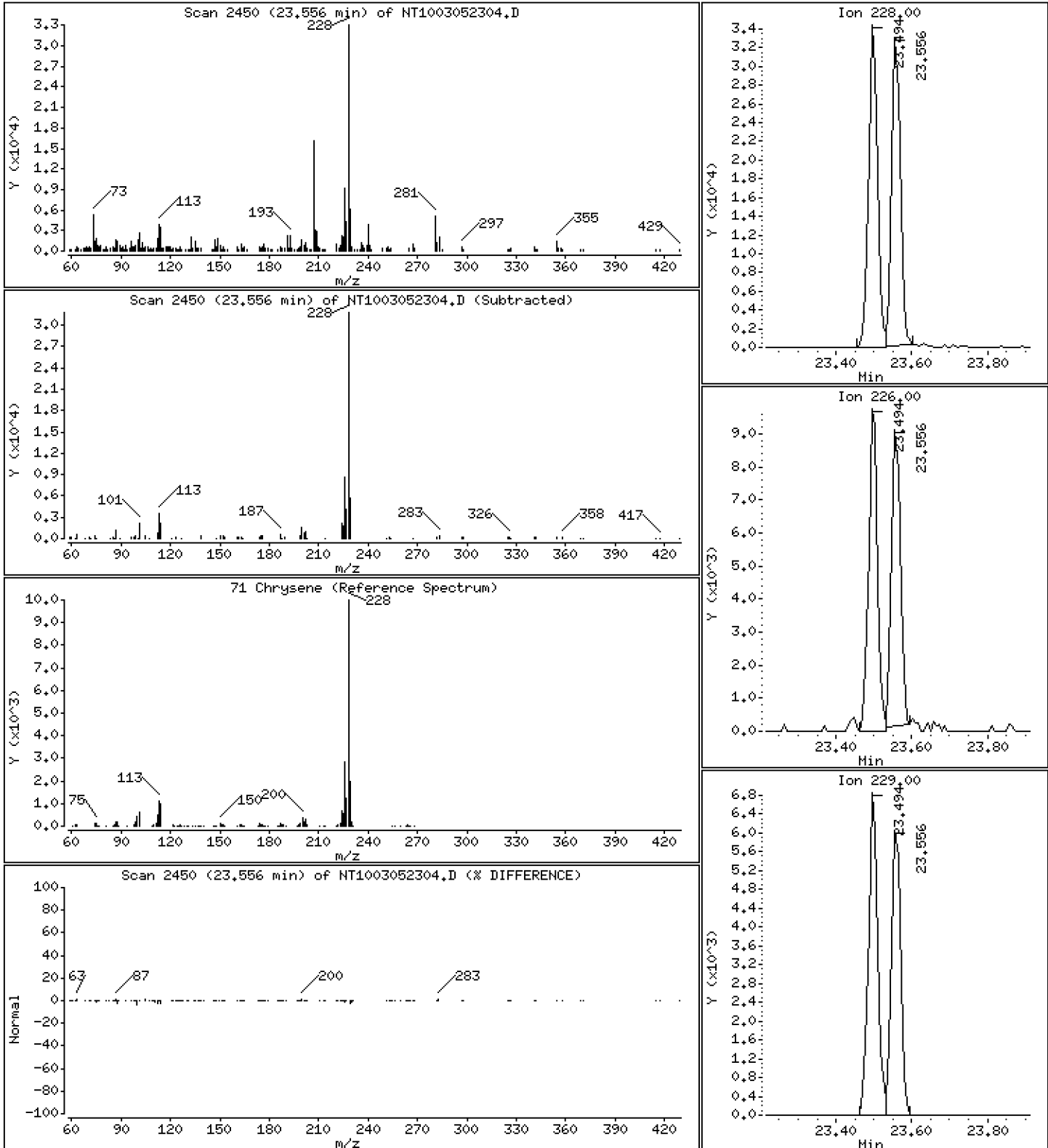
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2028 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

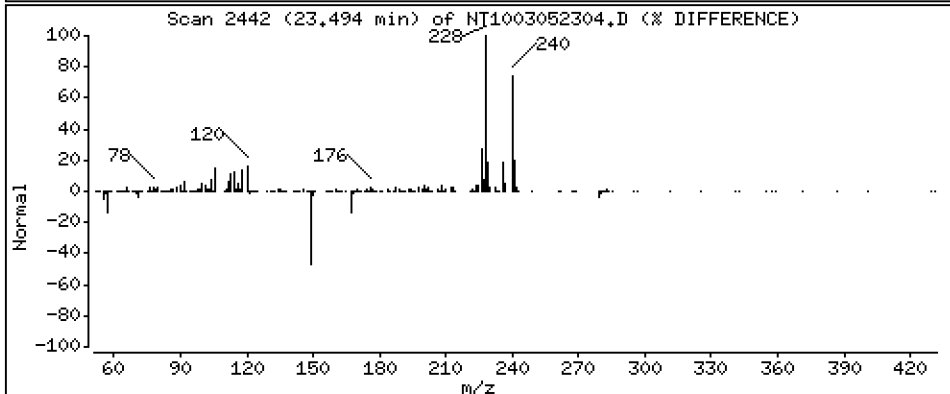
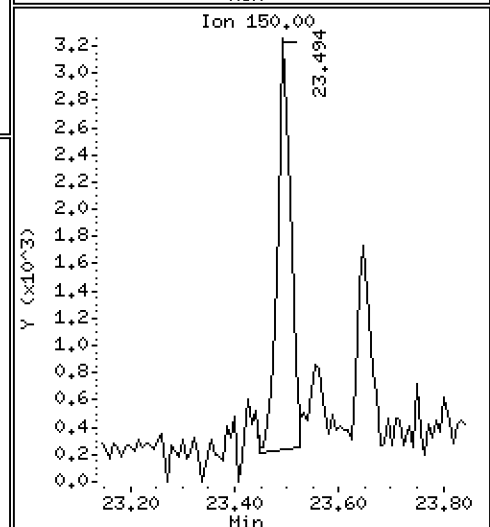
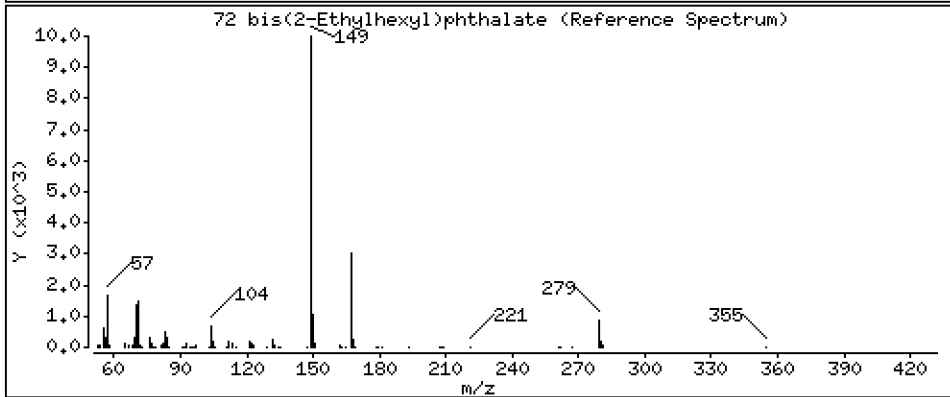
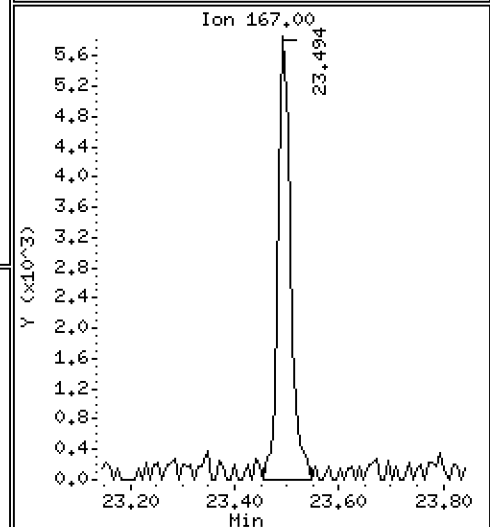
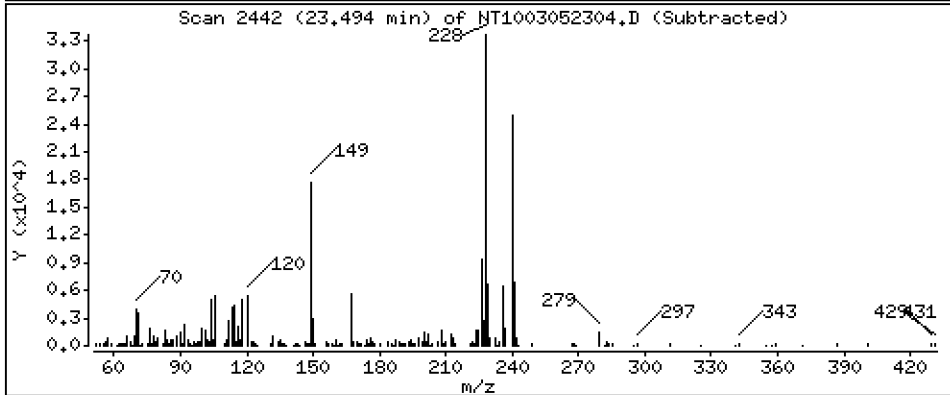
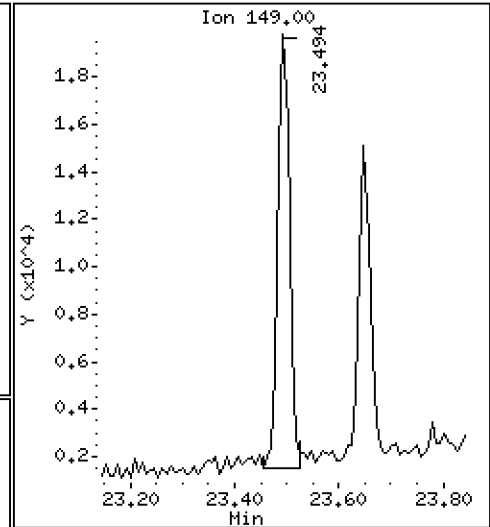
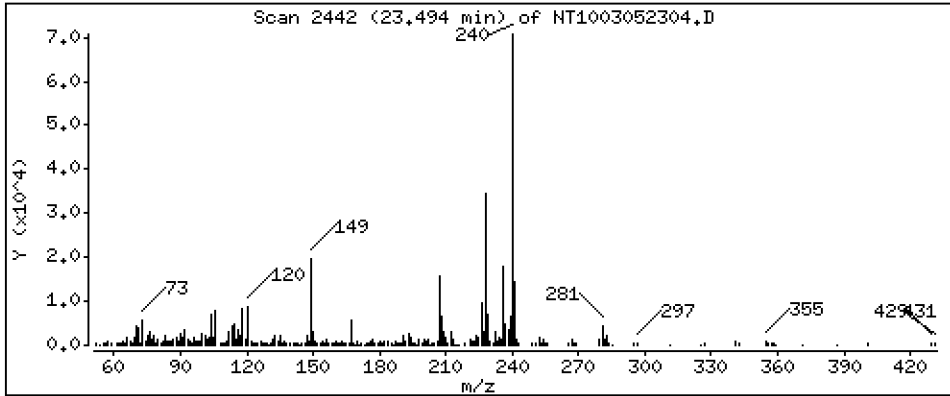
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,1454 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

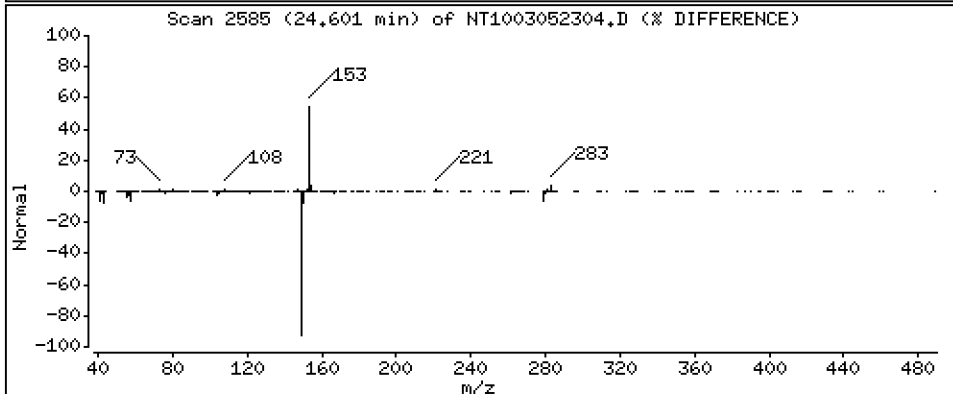
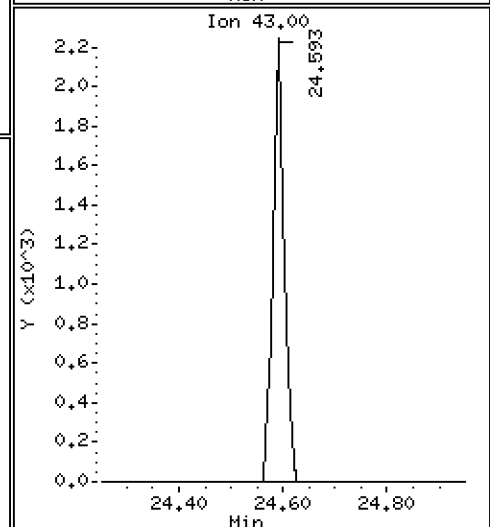
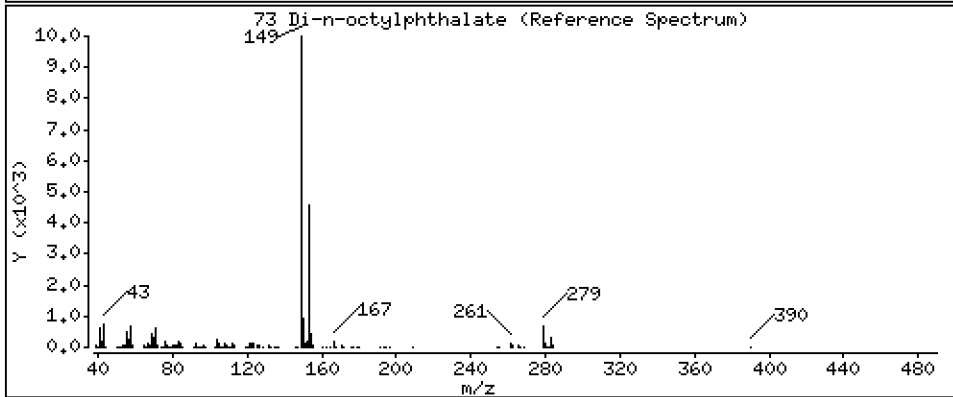
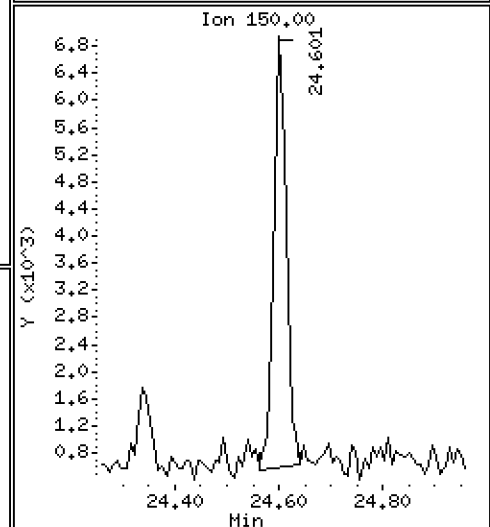
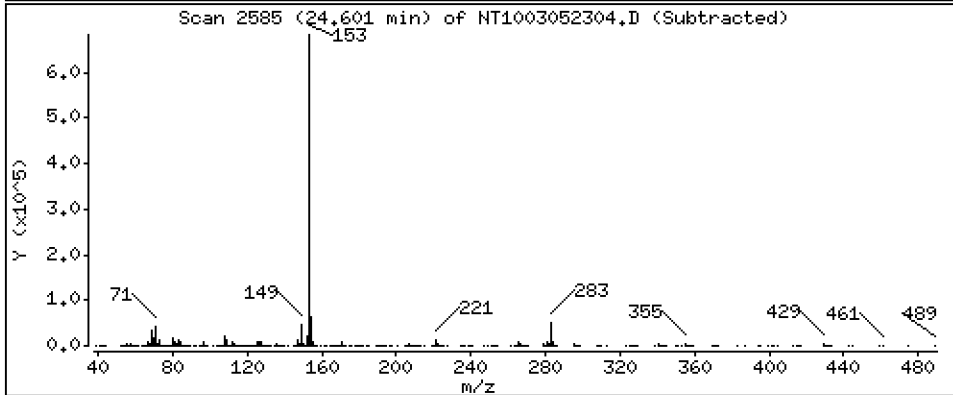
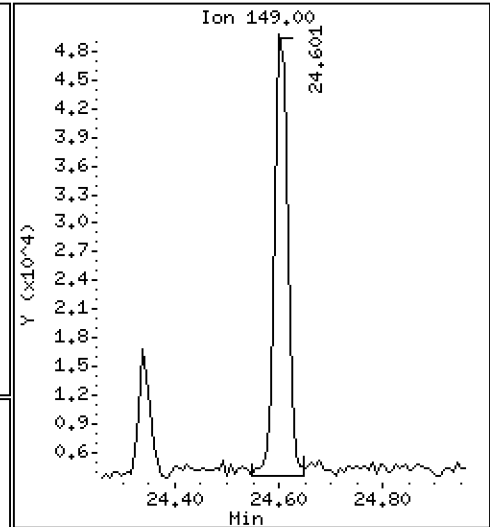
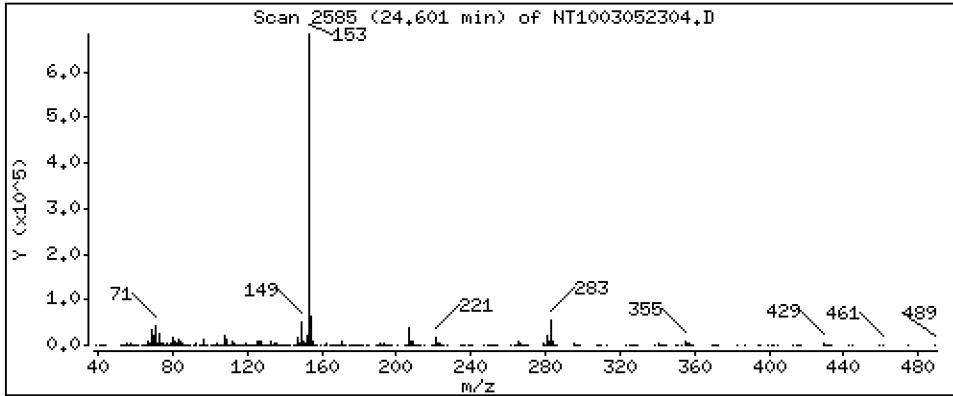
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2618 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

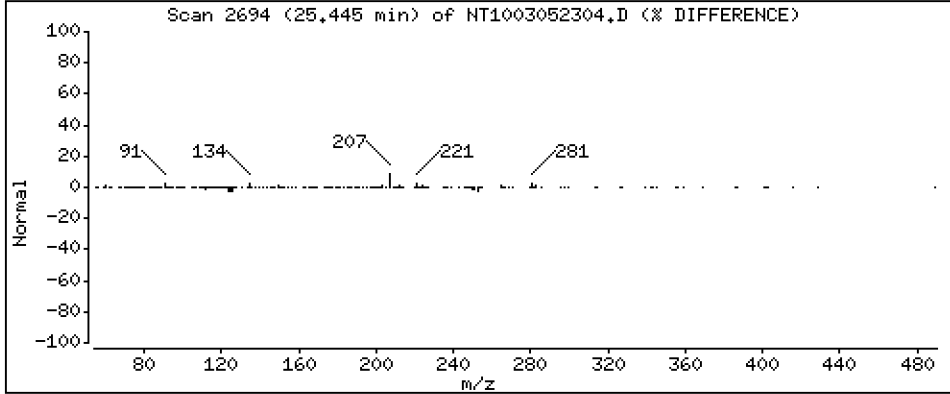
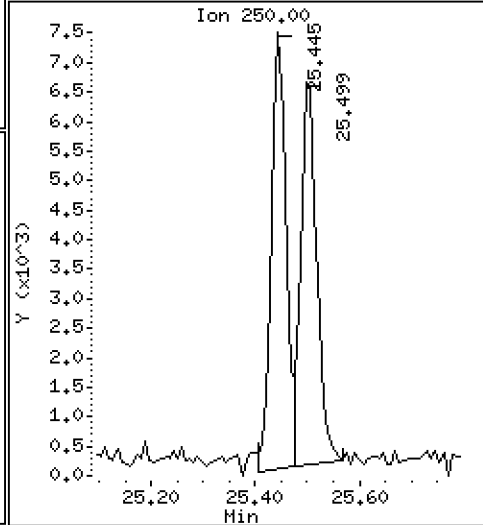
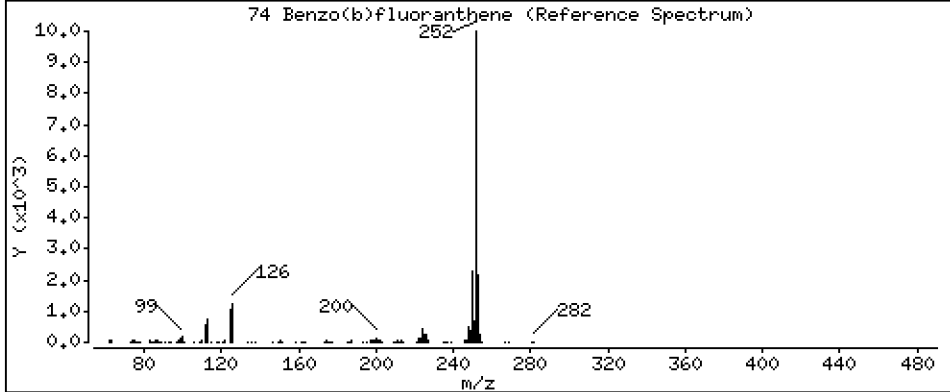
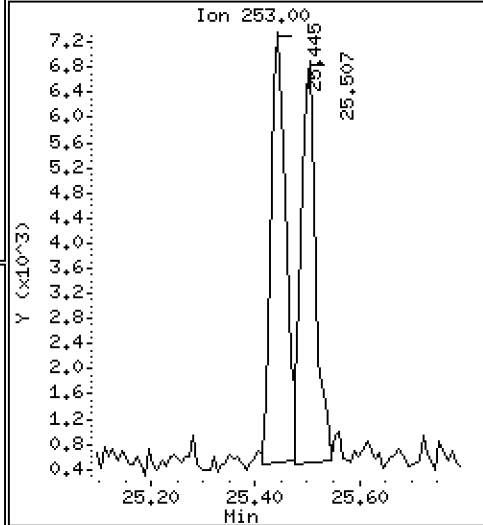
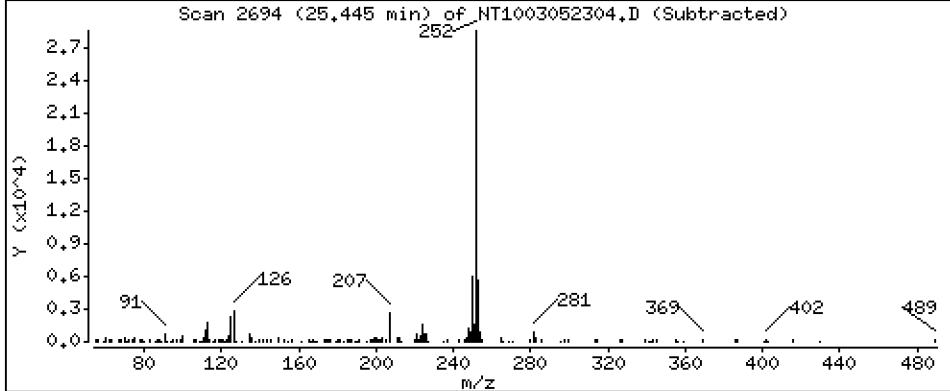
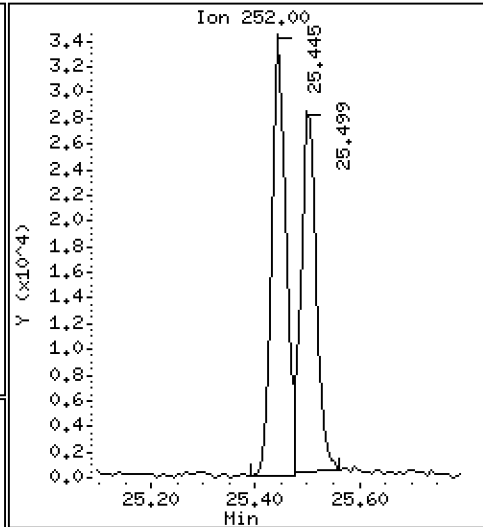
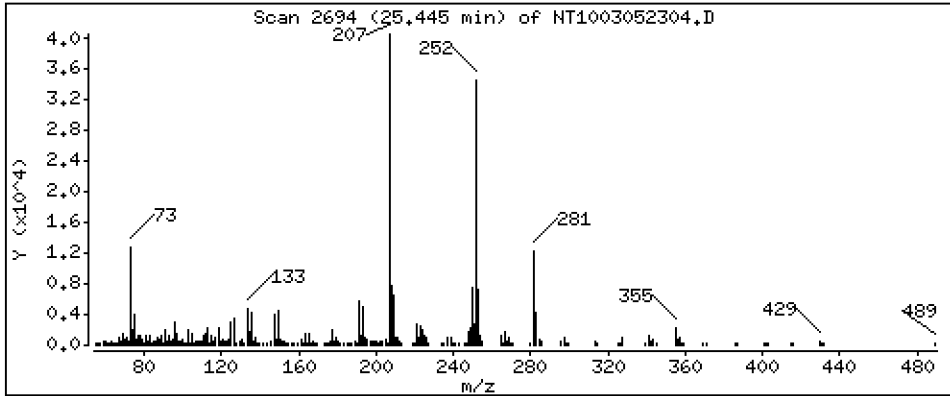
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1779 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

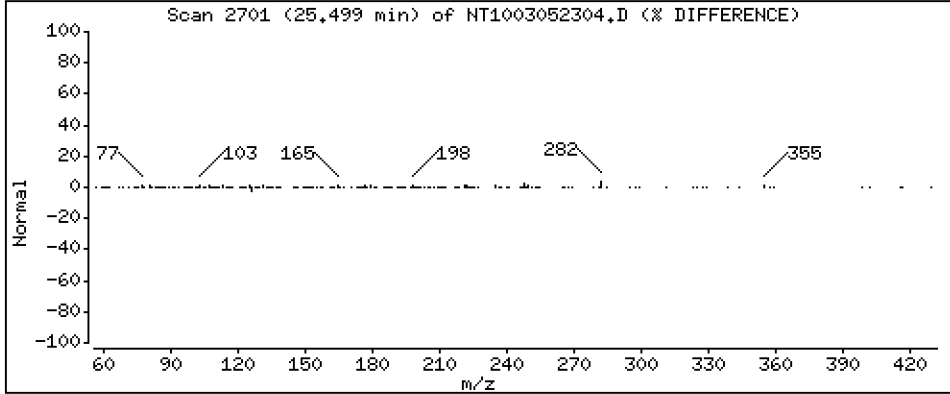
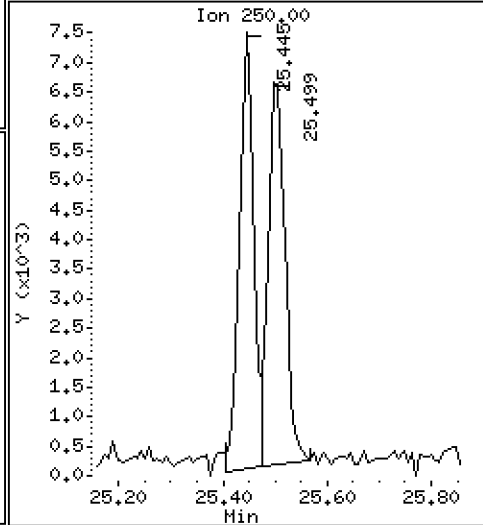
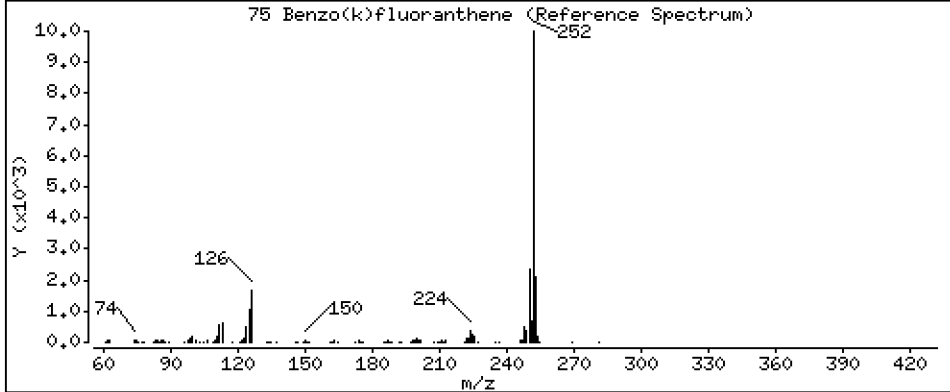
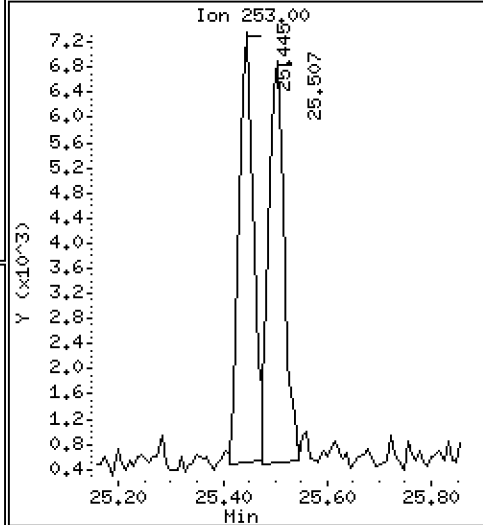
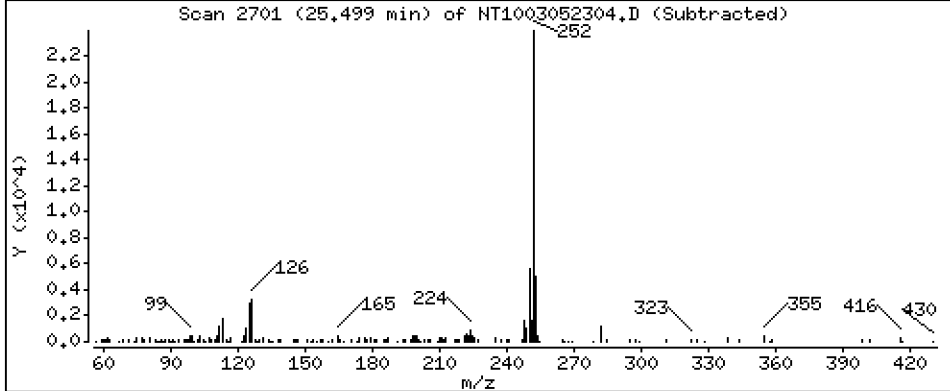
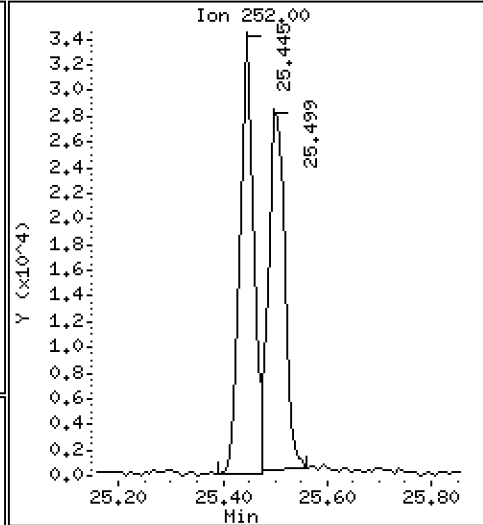
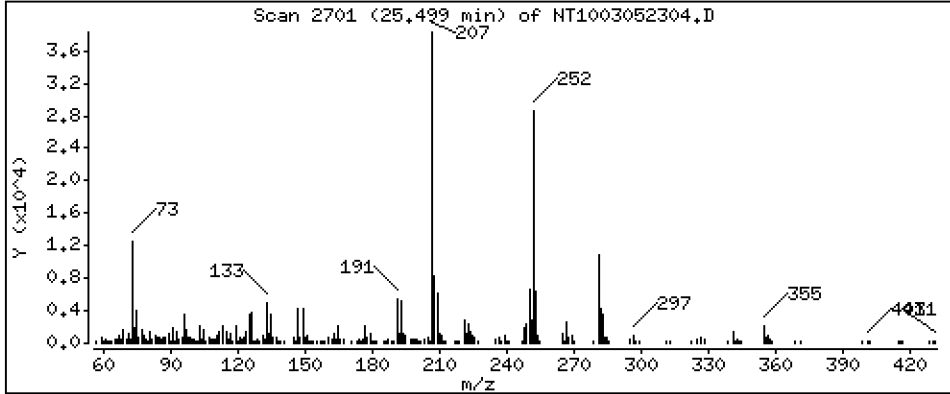
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,1763 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

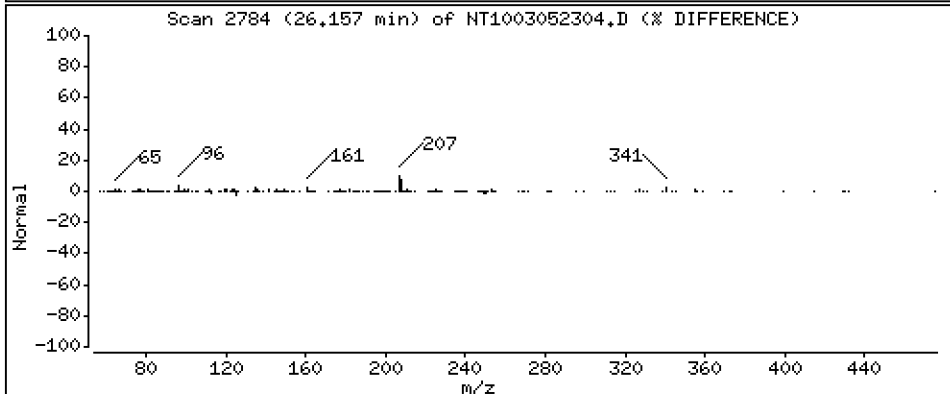
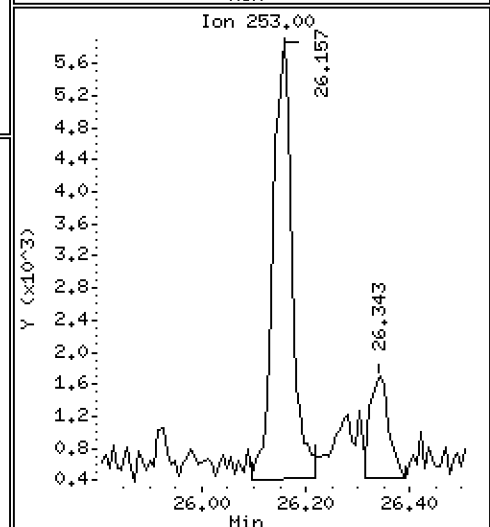
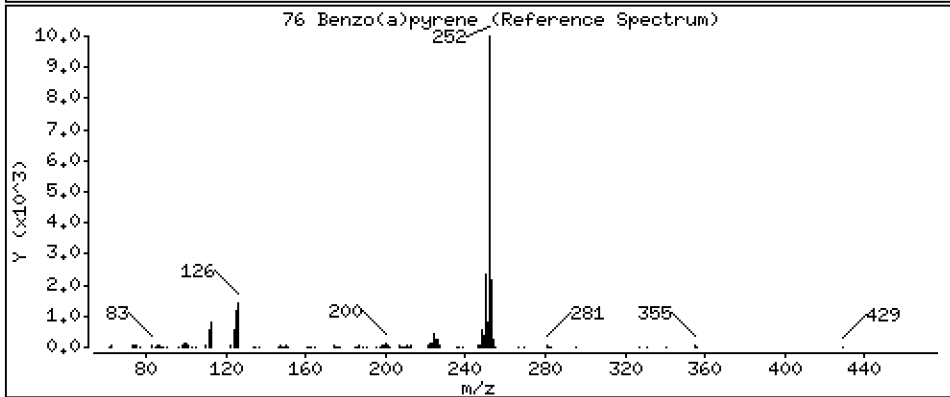
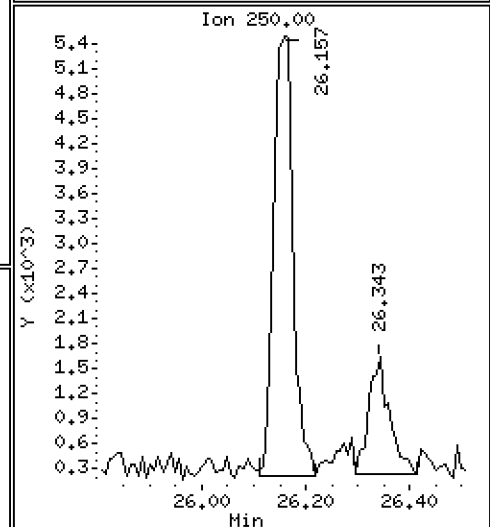
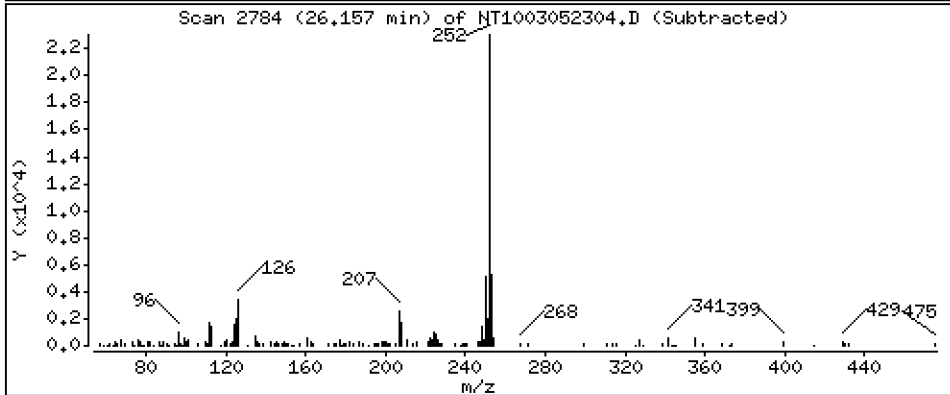
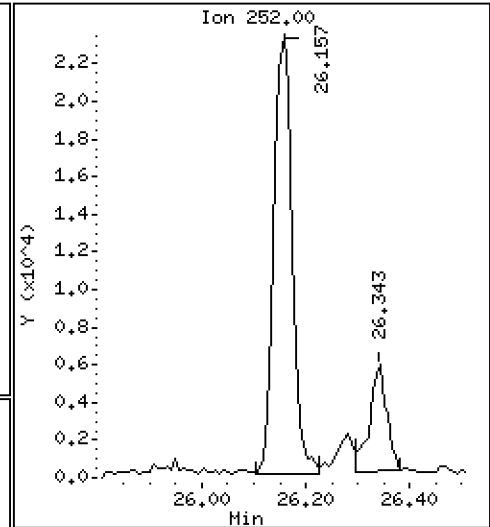
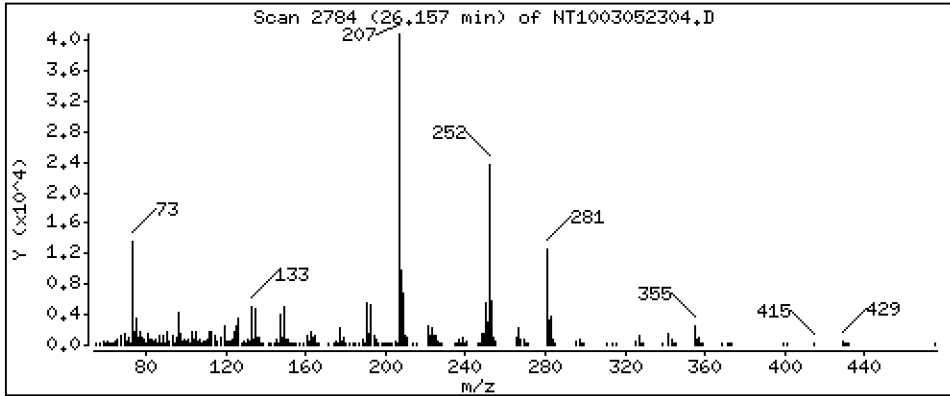
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1746 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

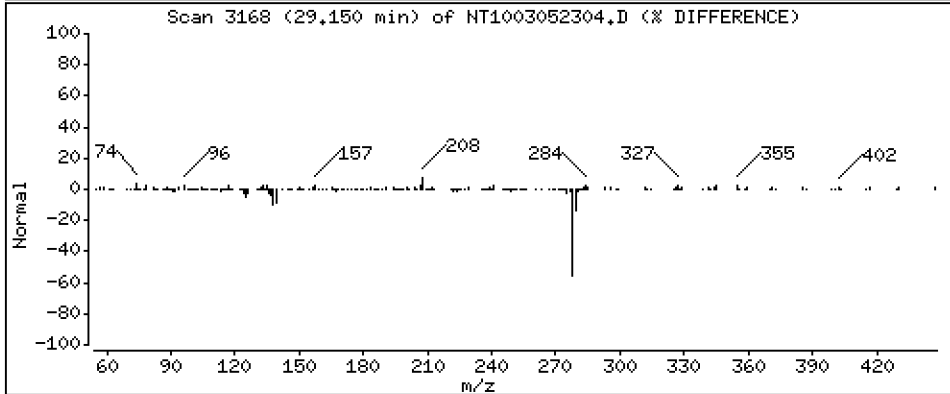
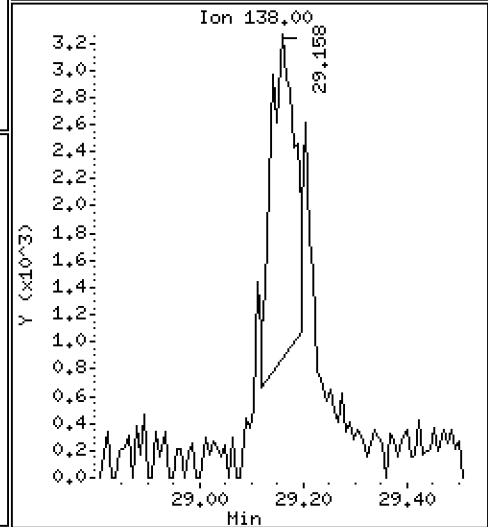
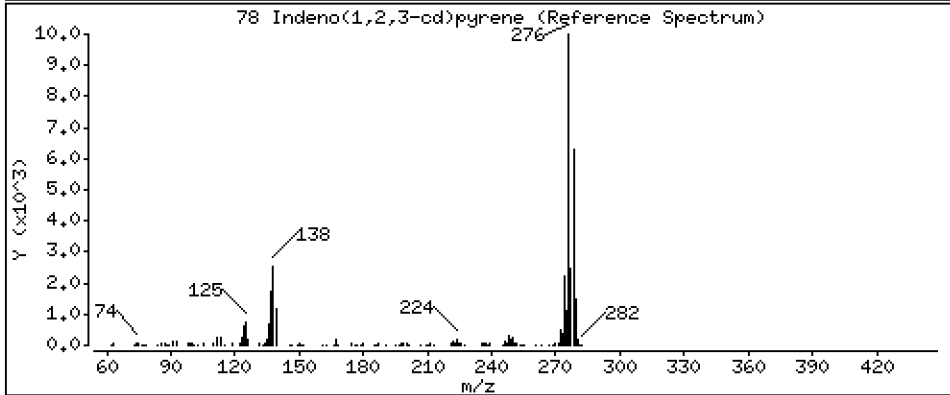
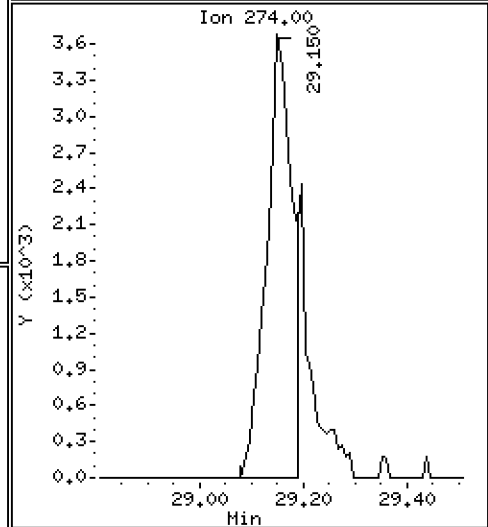
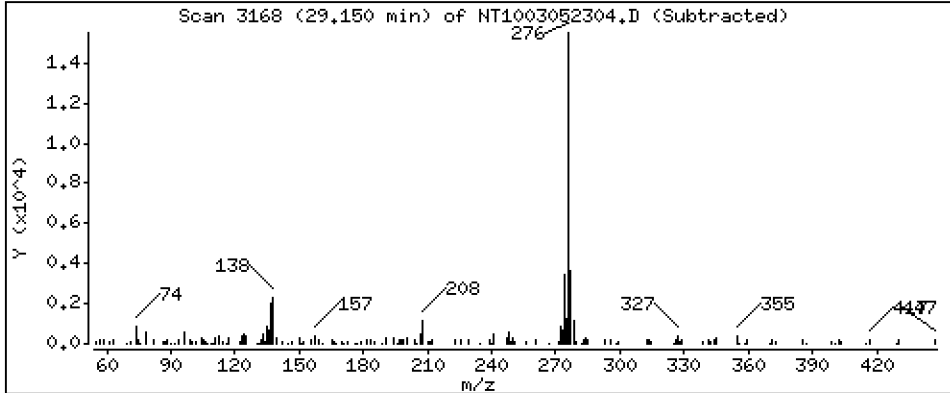
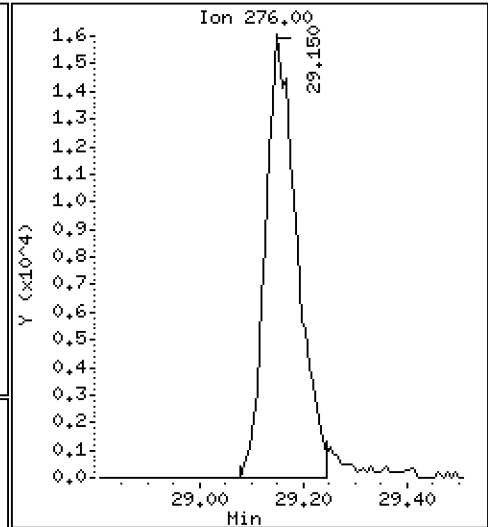
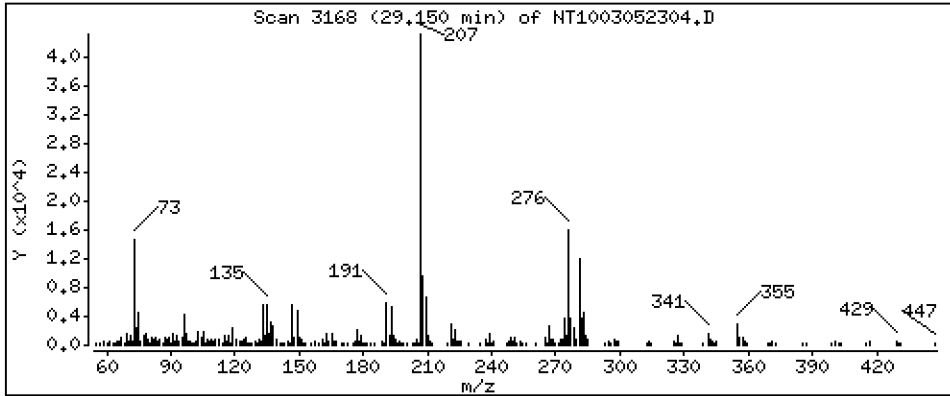
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1845 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

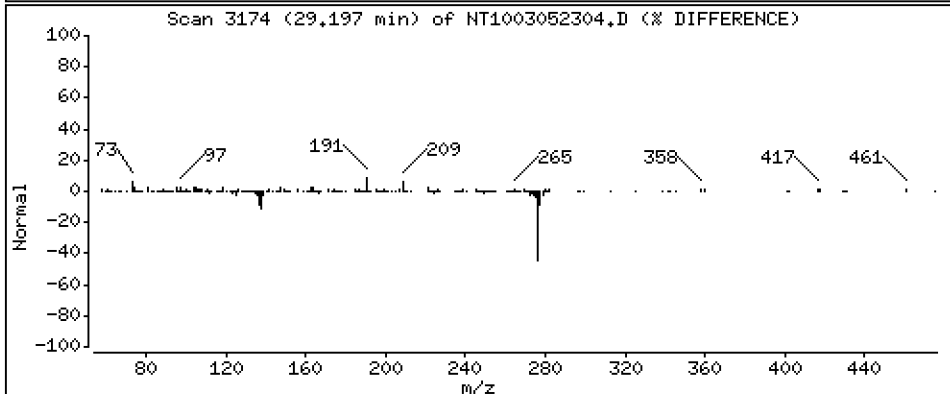
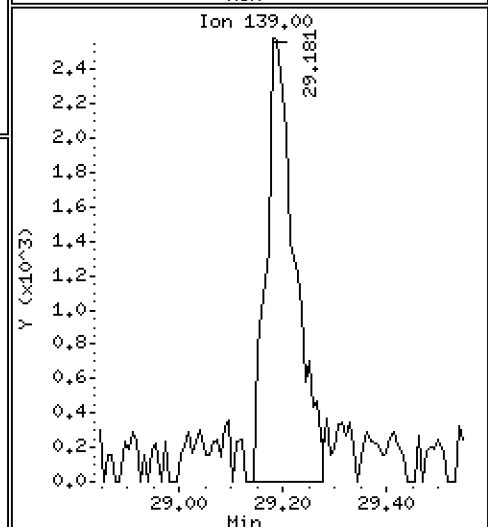
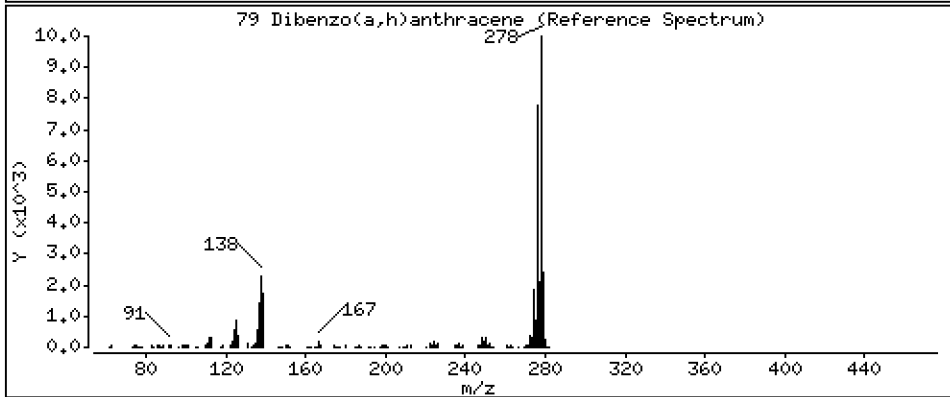
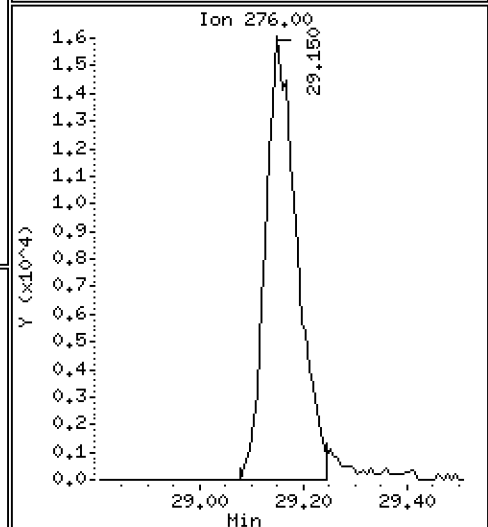
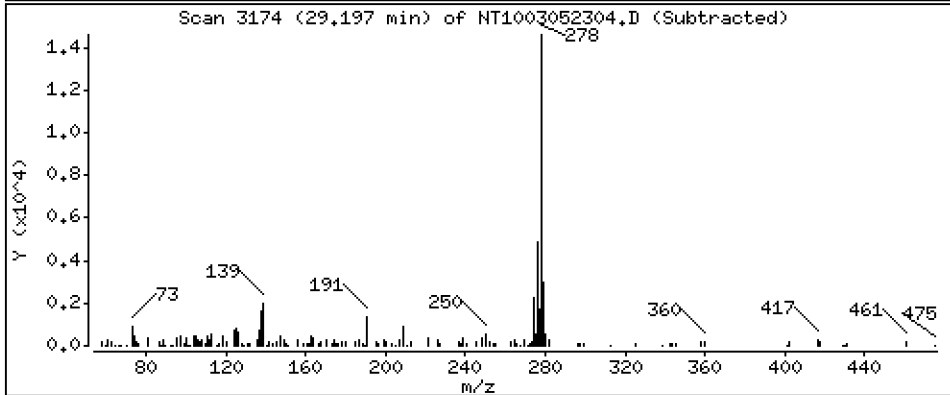
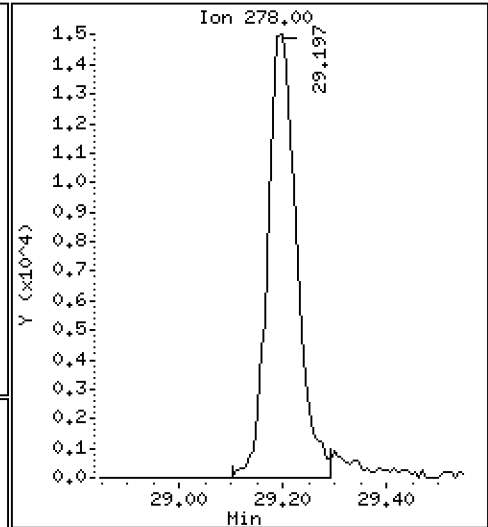
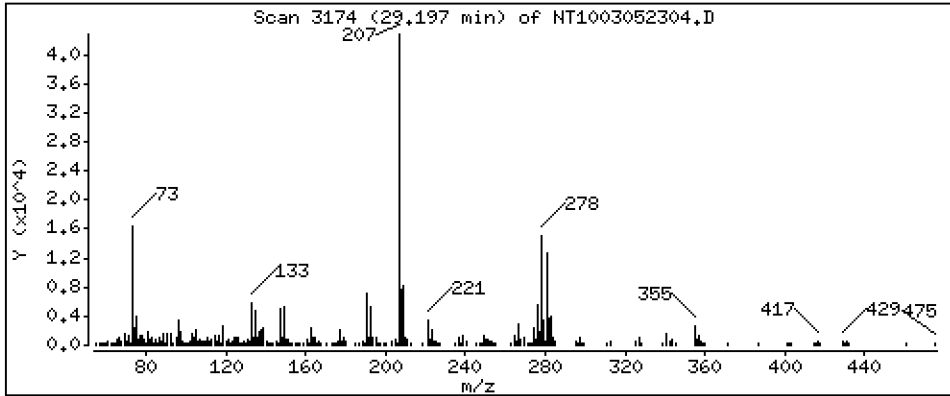
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2073 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

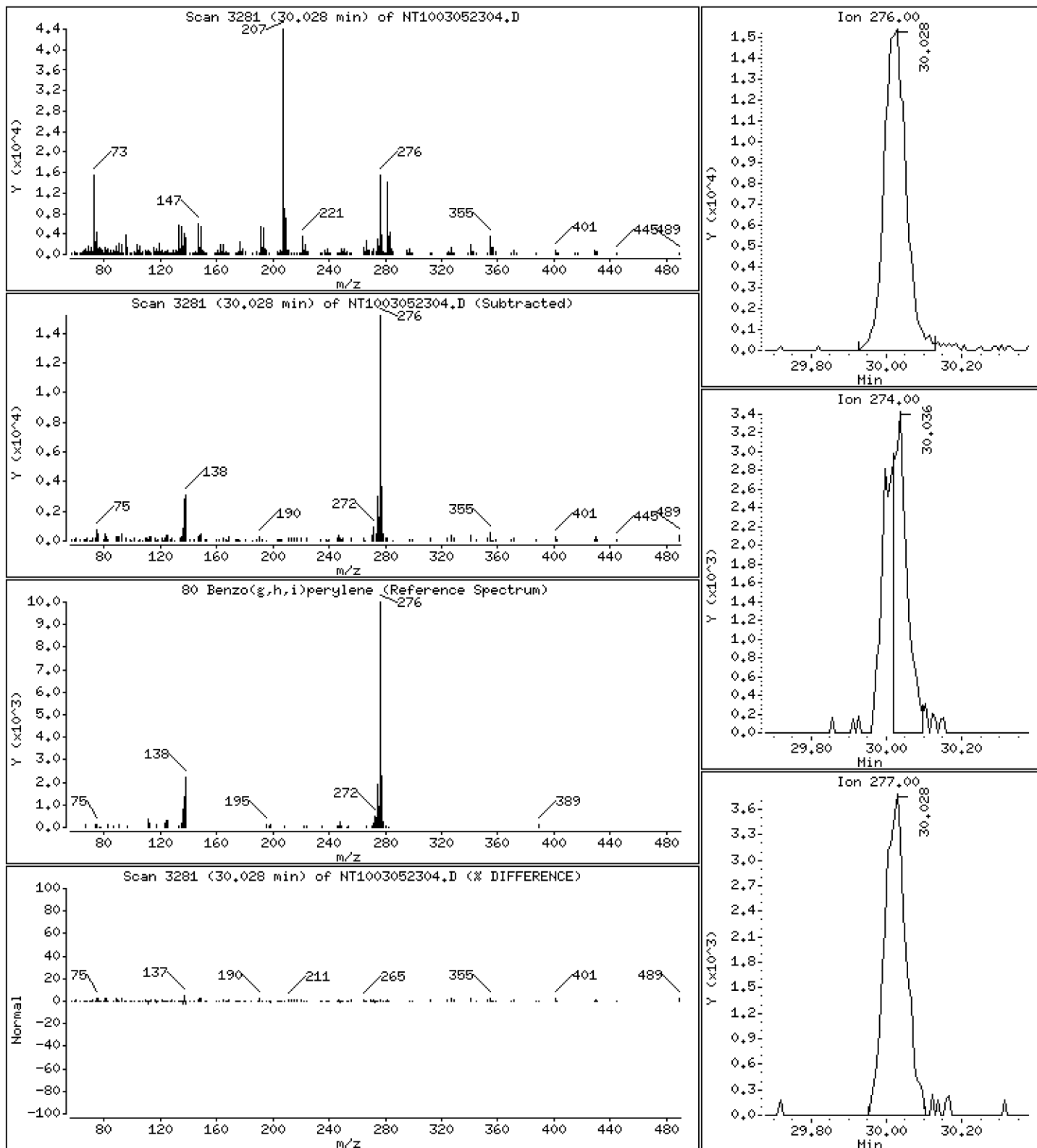
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,2119 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

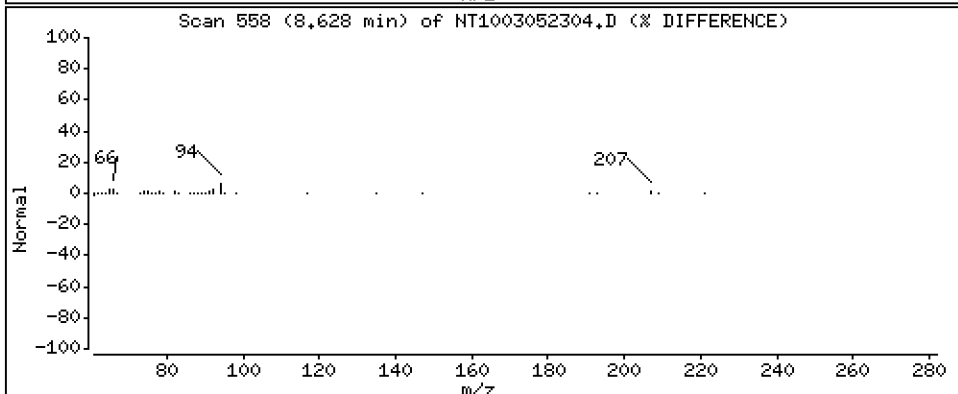
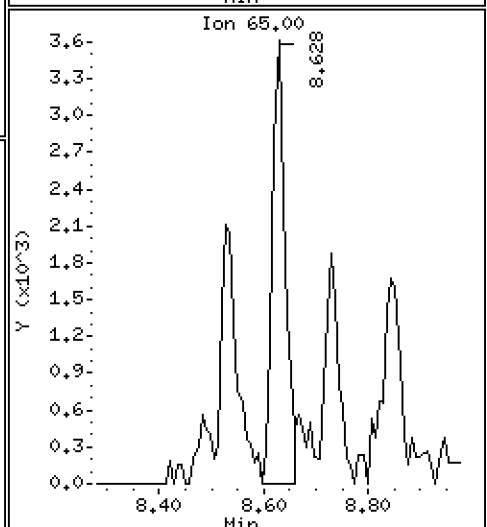
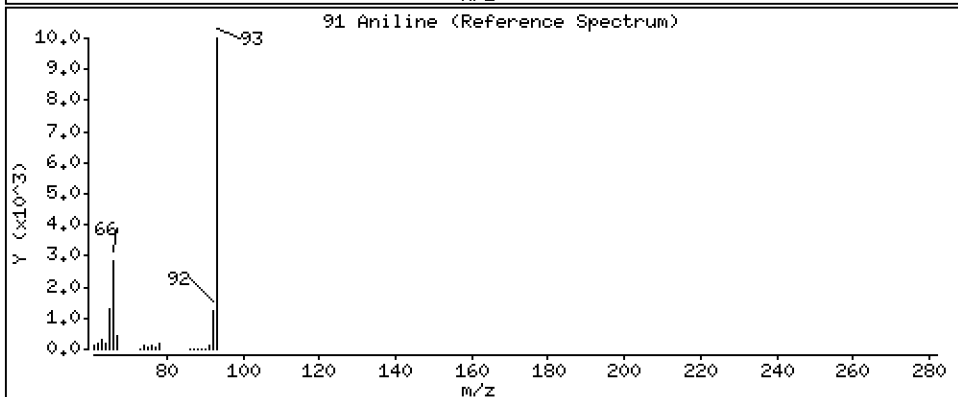
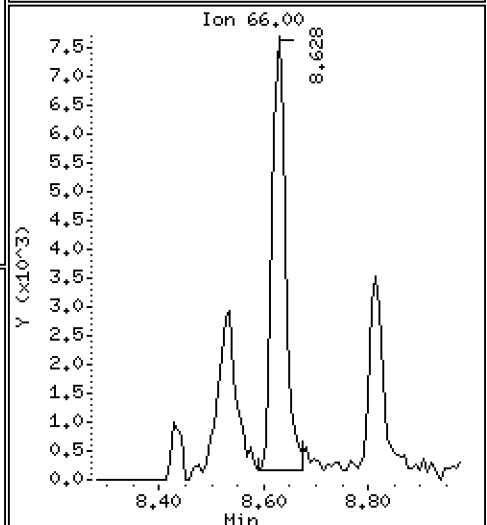
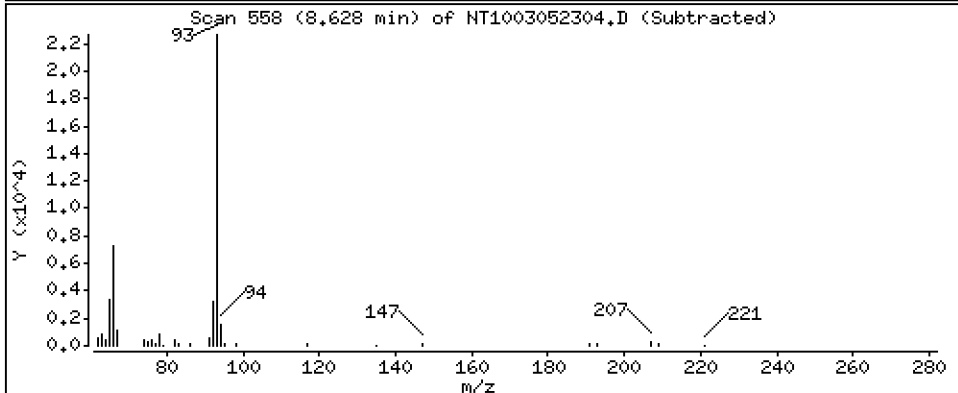
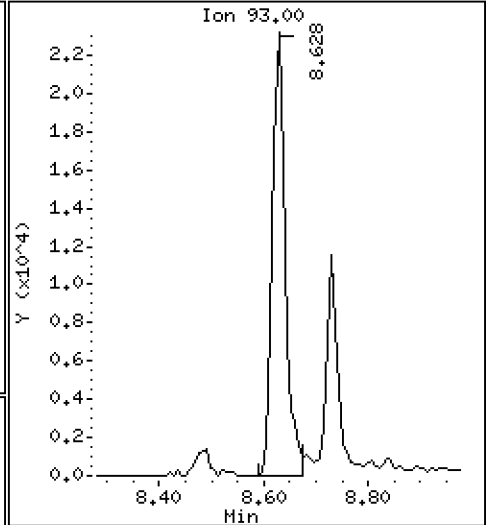
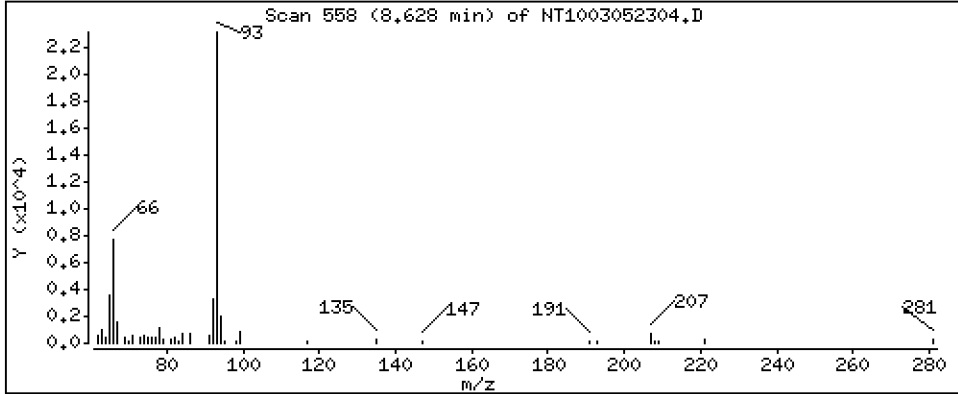
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,2915 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

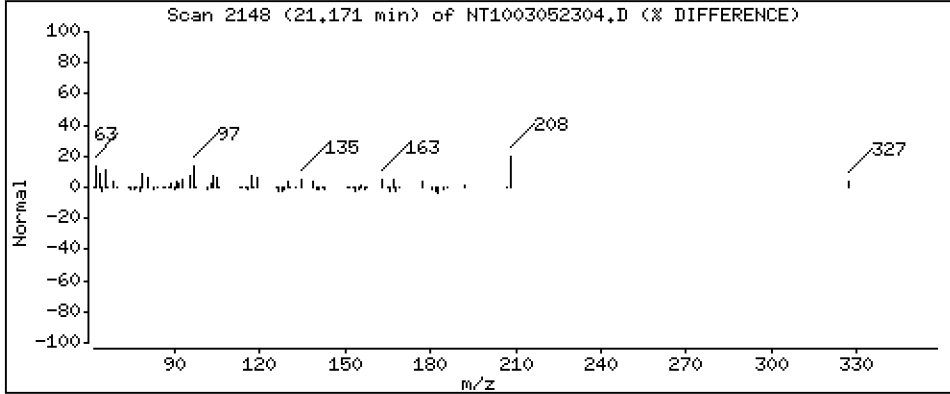
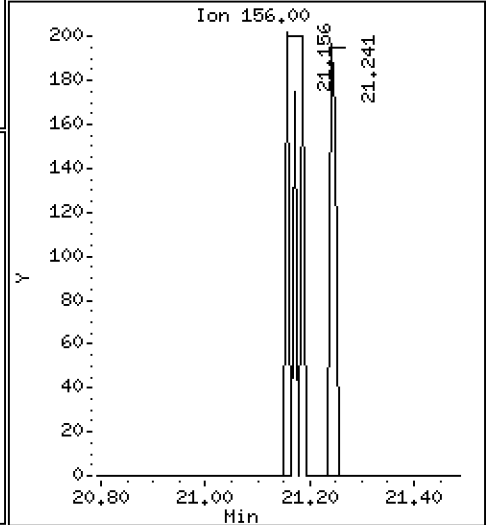
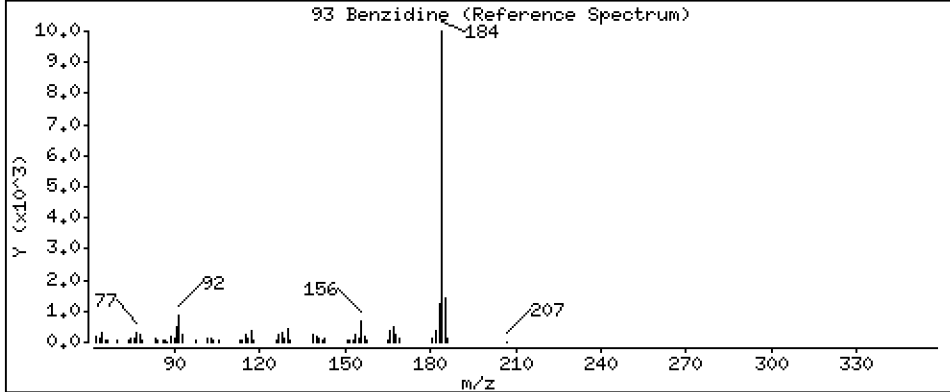
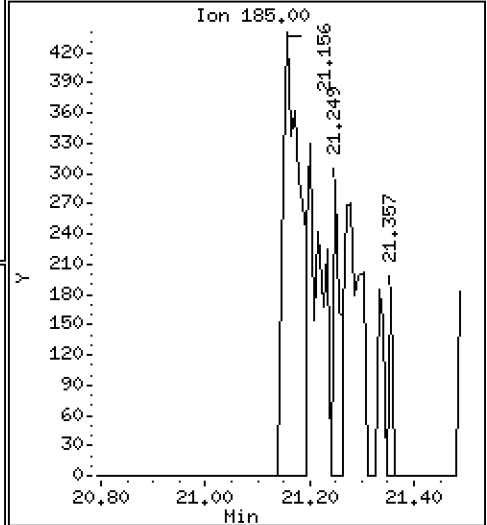
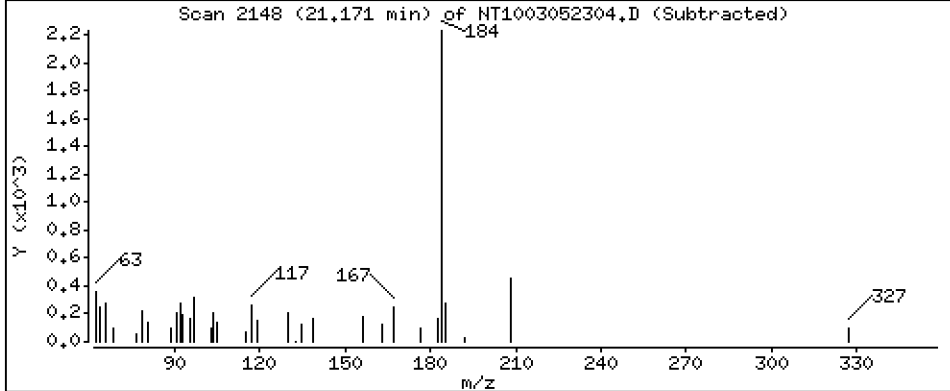
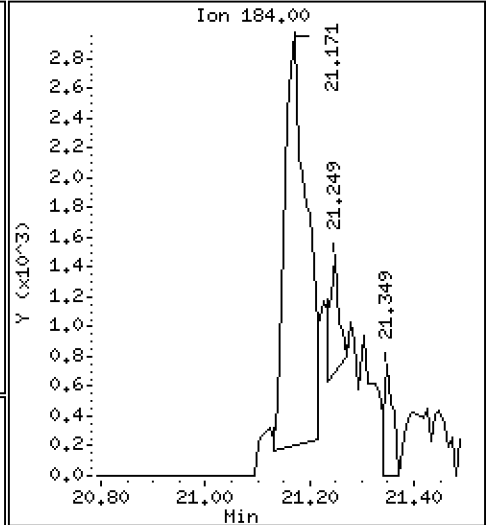
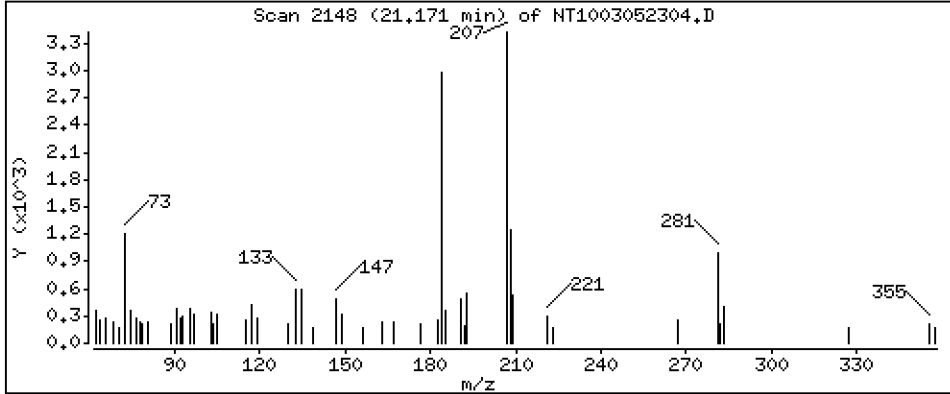
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,06408 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

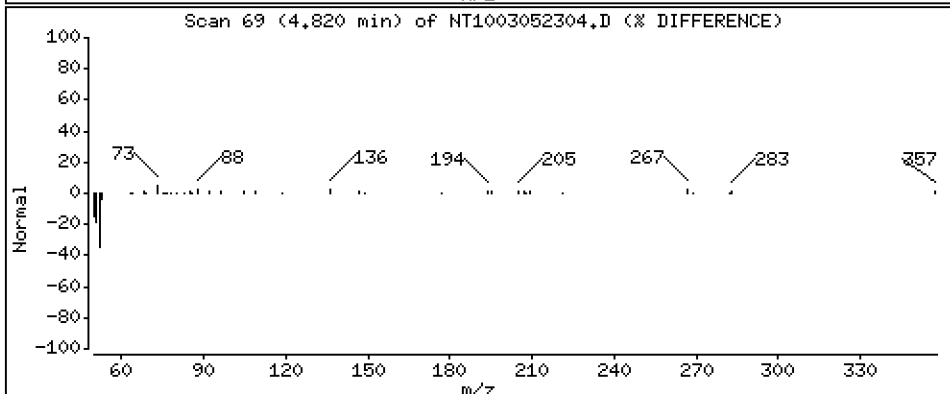
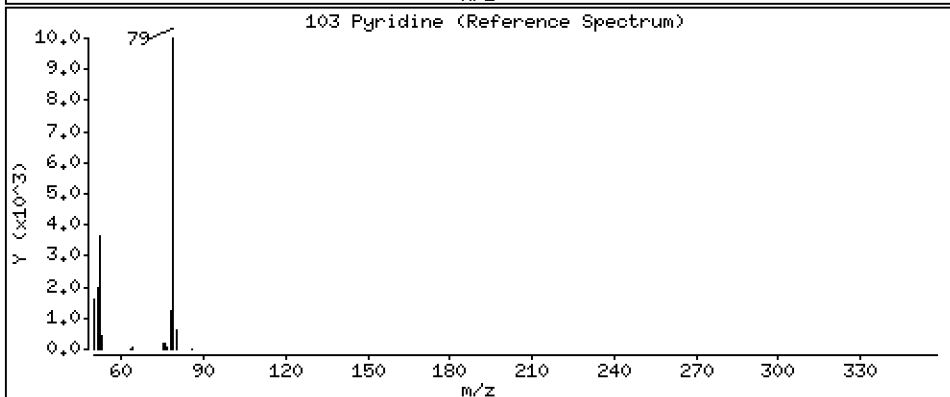
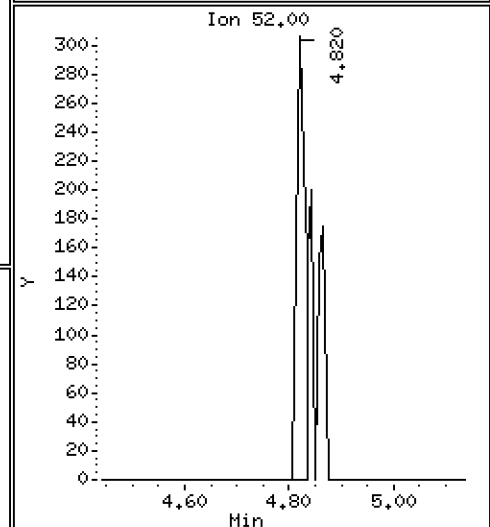
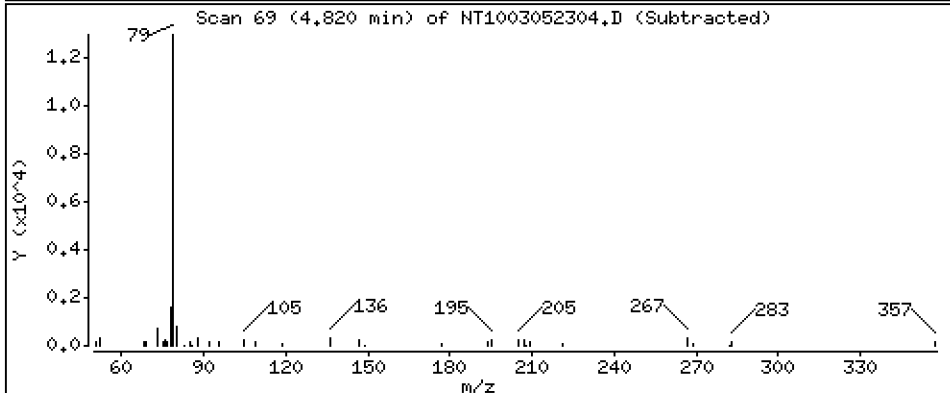
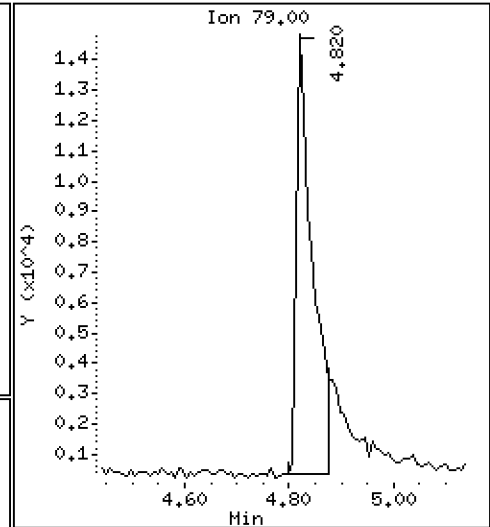
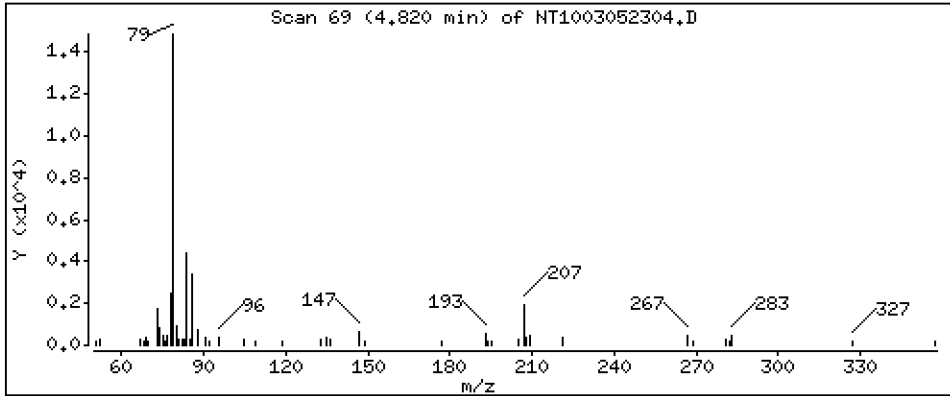
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,3047 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

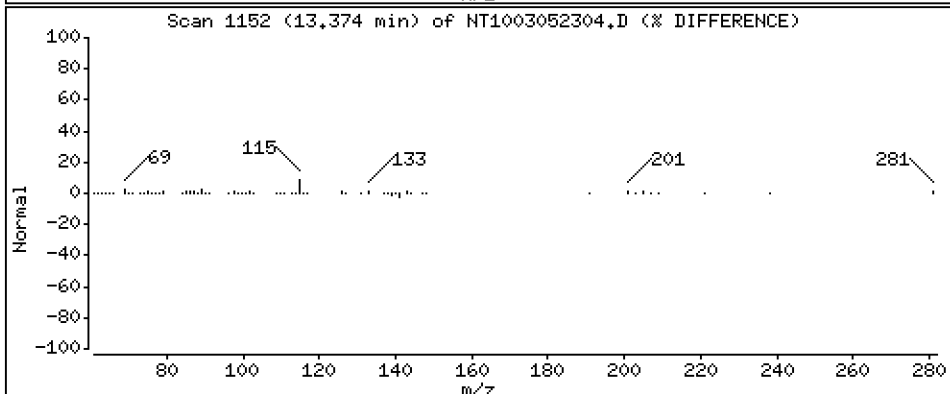
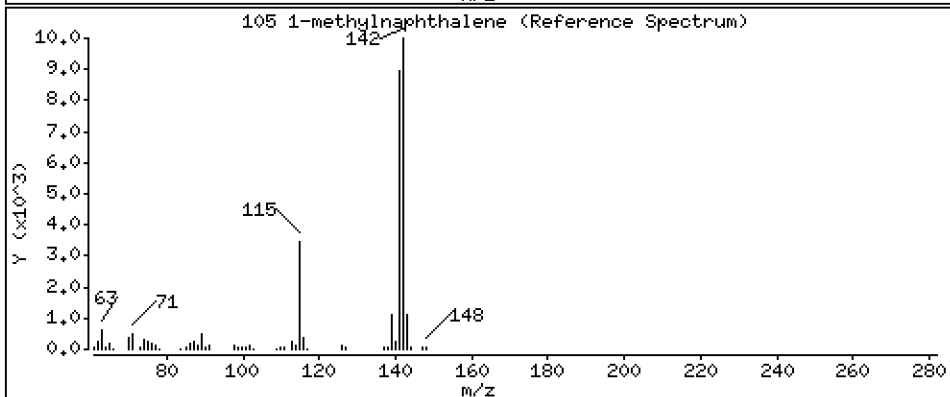
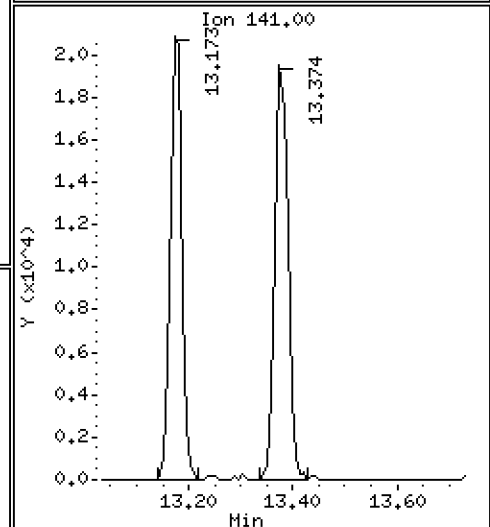
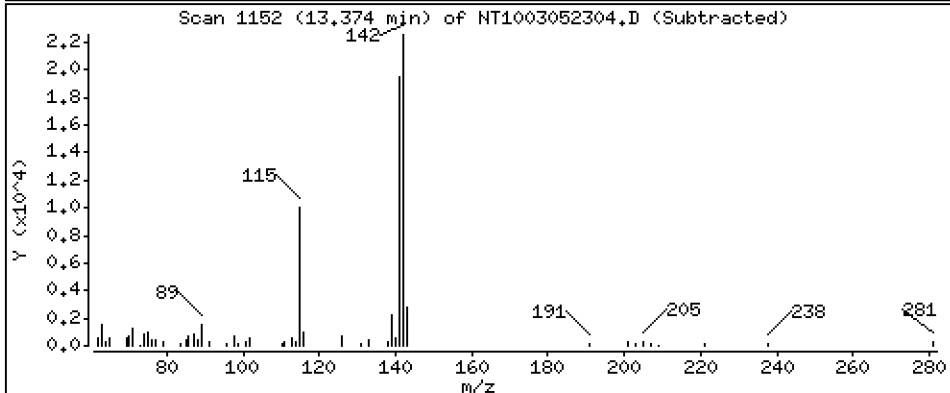
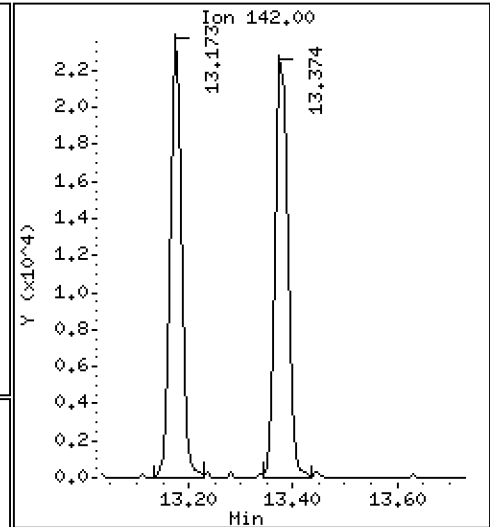
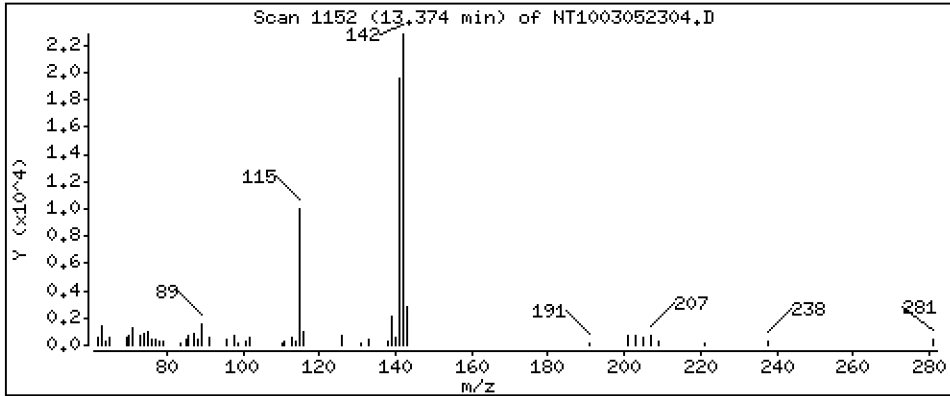
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2064 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

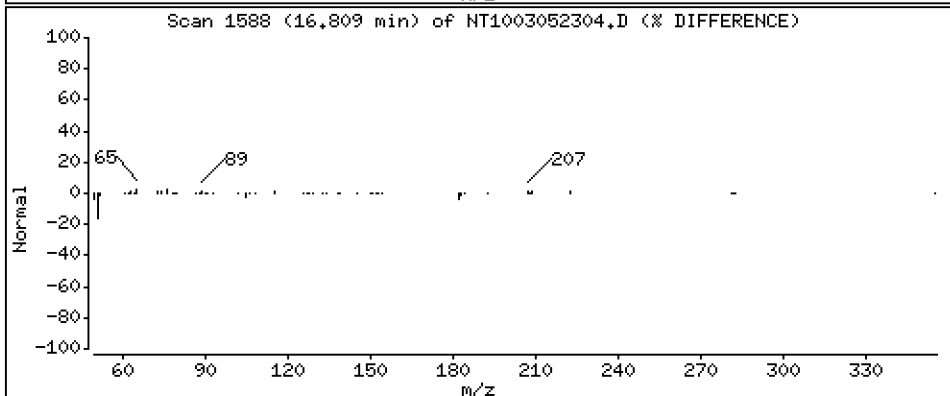
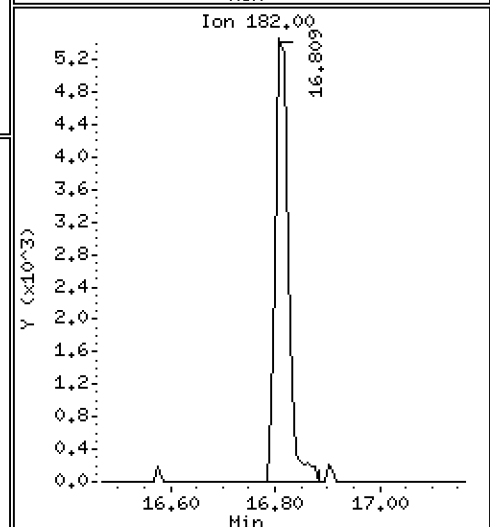
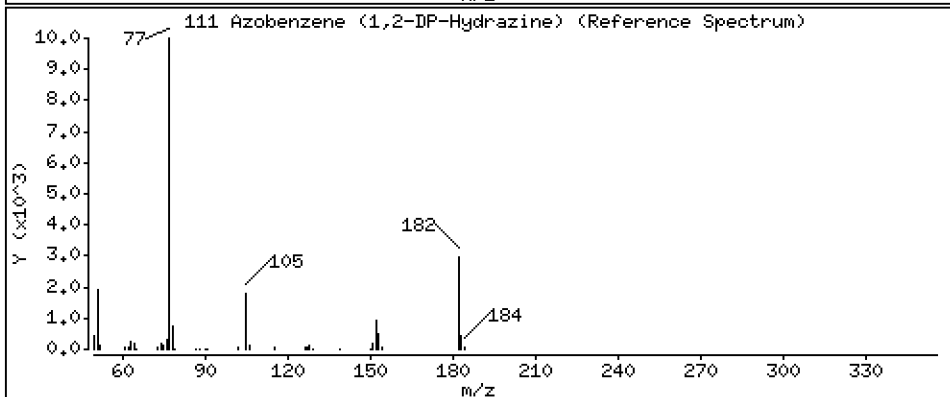
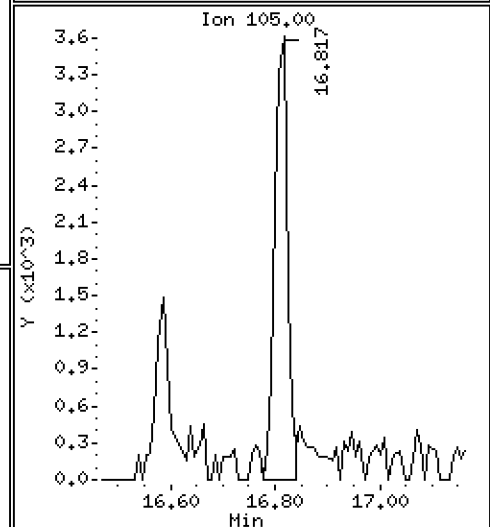
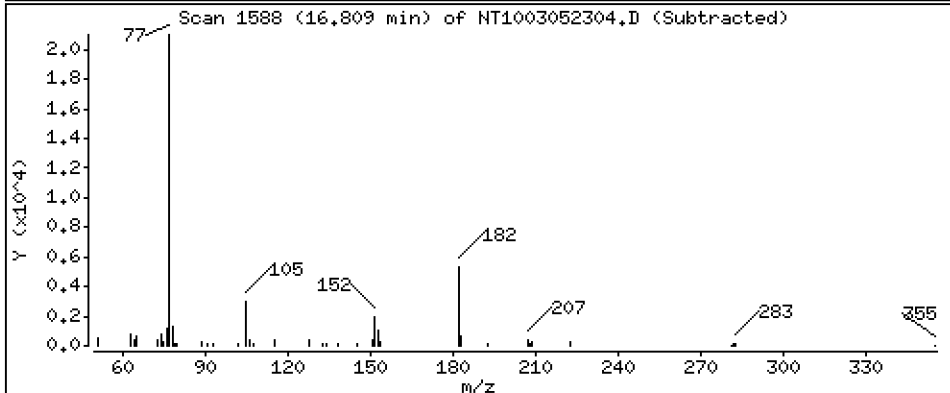
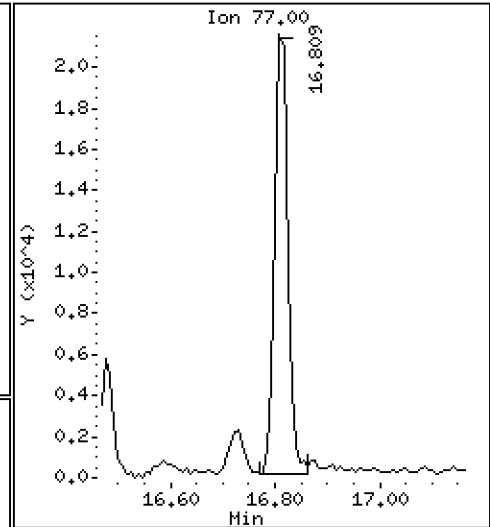
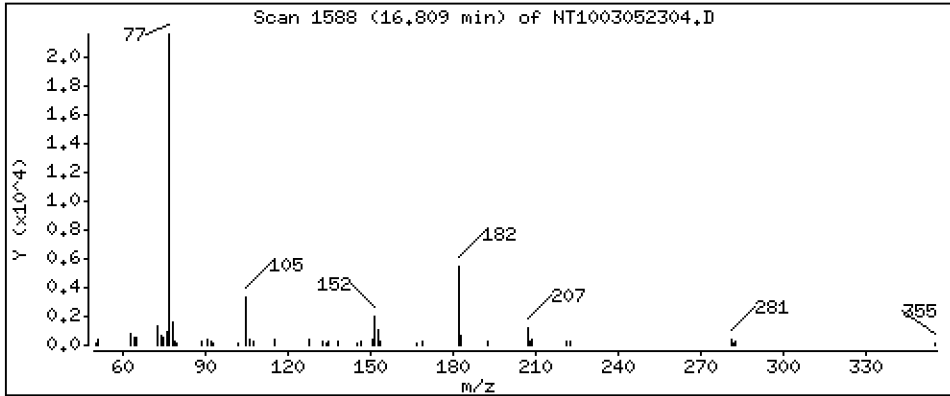
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1298 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

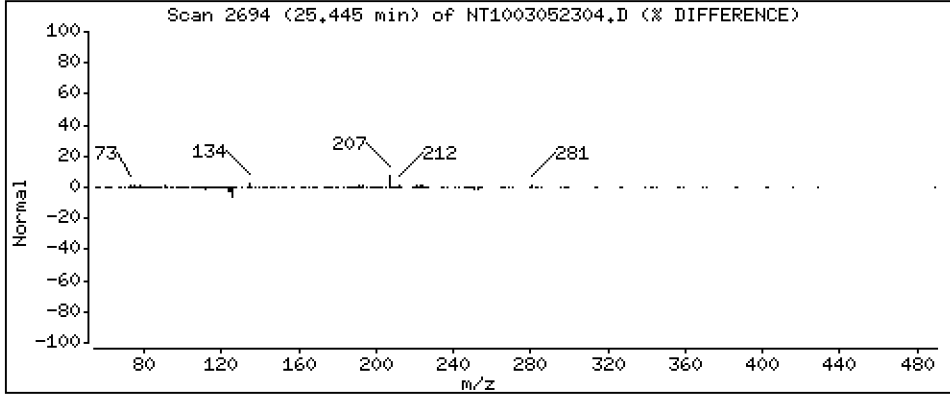
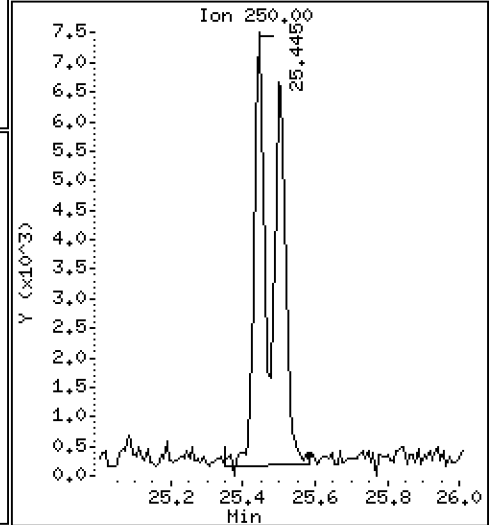
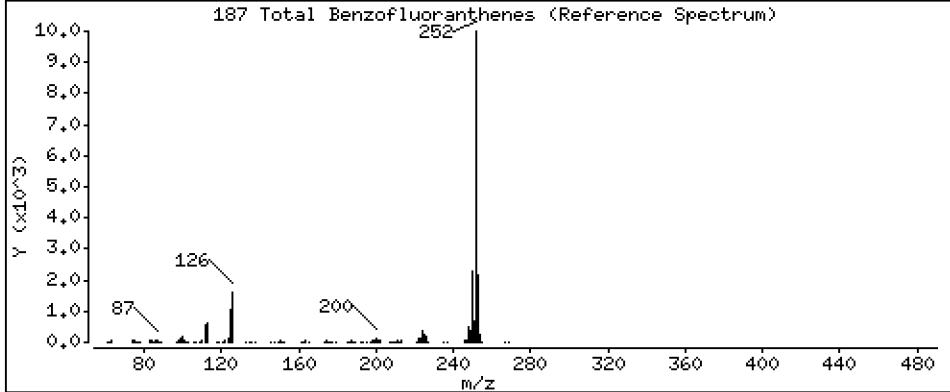
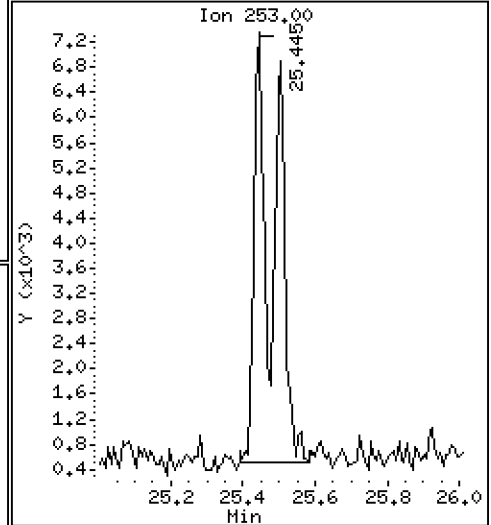
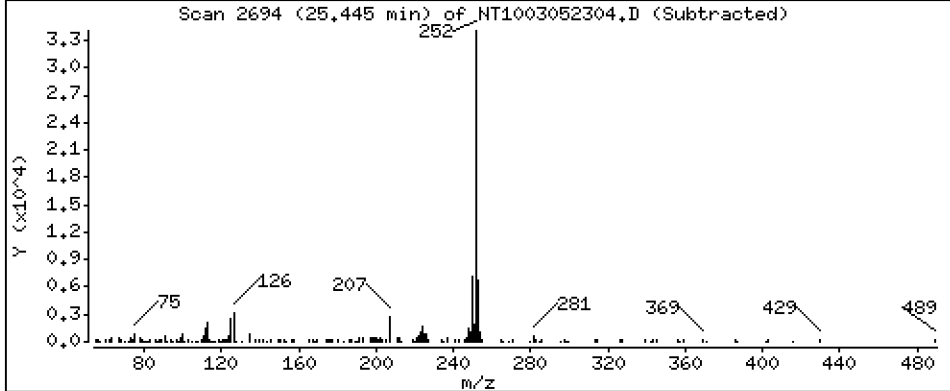
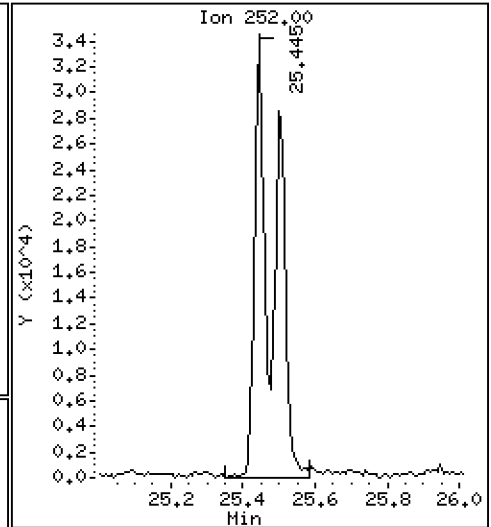
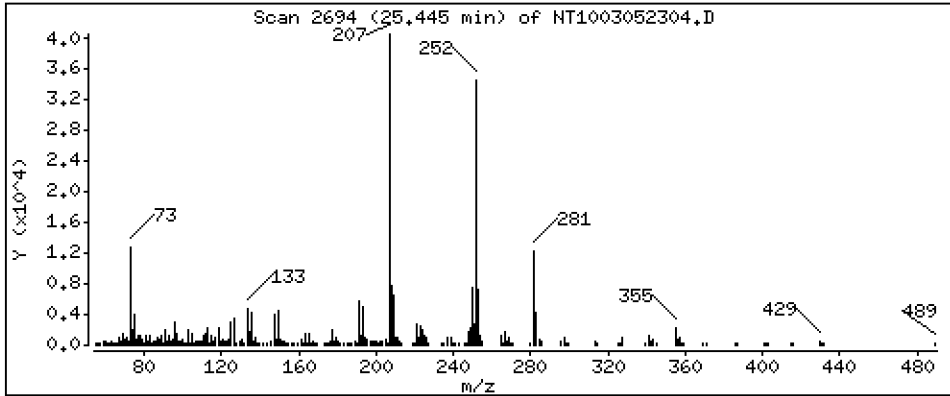
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3679 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

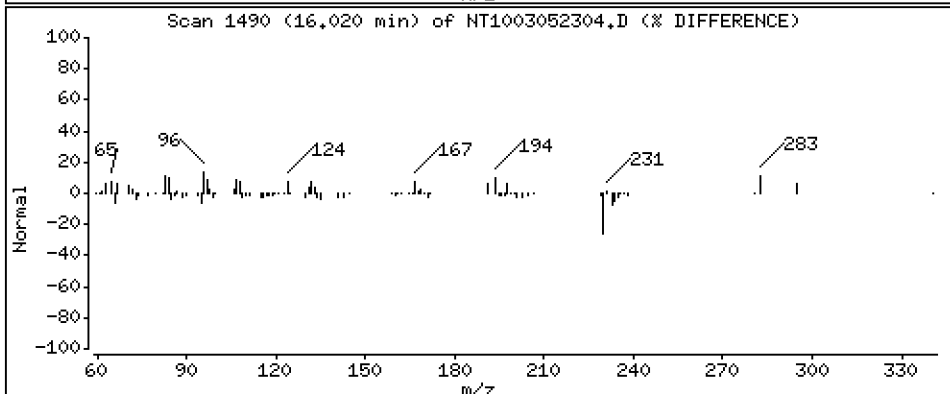
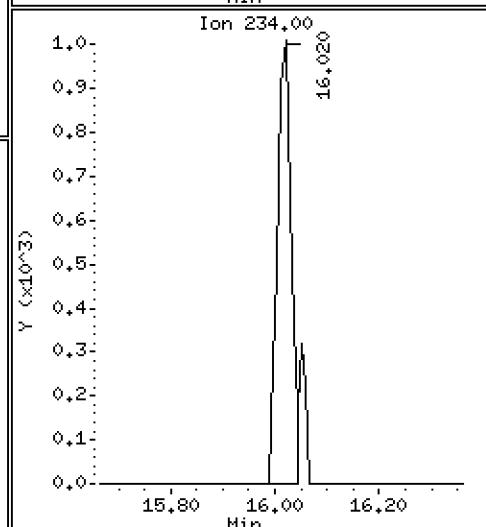
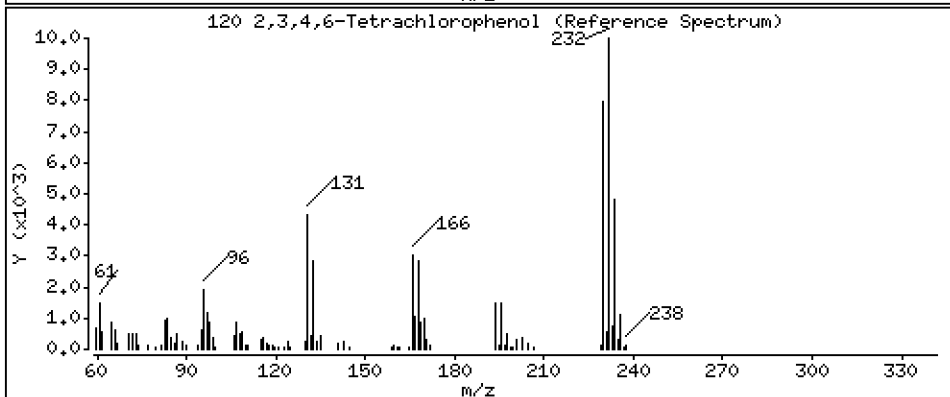
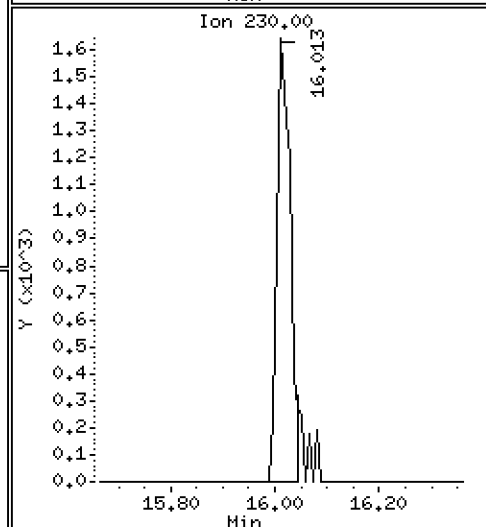
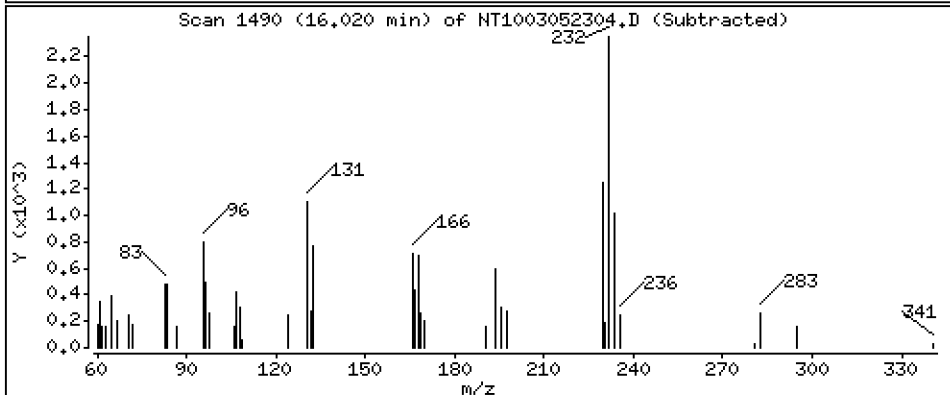
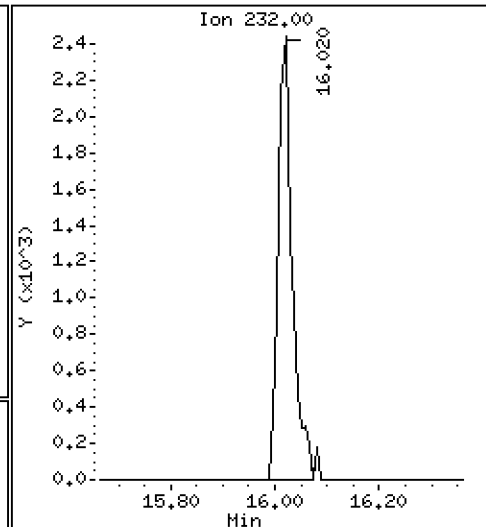
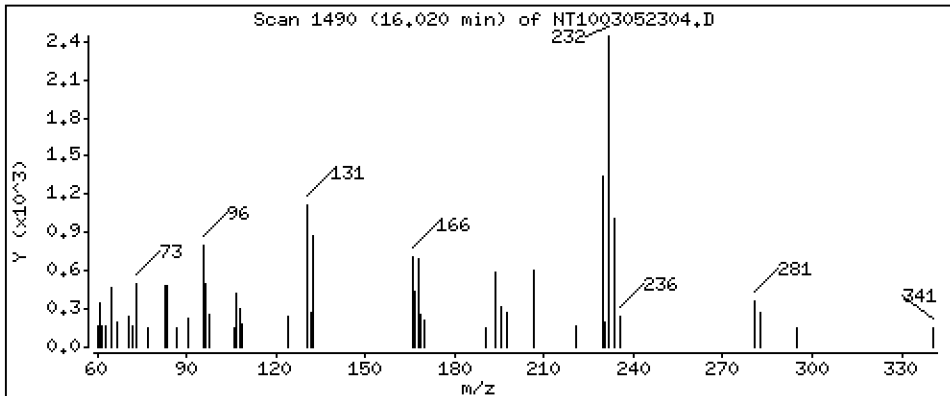
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,08686 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052304.D
 Lab Smp Id: SLC0401-LCV1
 Inj Date : 05-MAR-2023 15:18
 Operator : VTS
 Smp Info : SLC0401-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.897	(0.747)	20033	0.21877	0.2188
\$ 2 Phenol-d5	99		8.504	8.504	(0.920)	19854	0.18675	0.1867 (M)
3 Phenol	94		8.527	8.528	(0.923)	16076	0.14222	0.1422
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.954)	21847	0.24086	0.2409
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.945)	16507	0.19111	0.1911
6 2-Chlorophenol	128		8.844	8.844	(0.957)	15414	0.16358	0.1636
7 1,3-Dichlorobenzene	146		9.130	9.138	(0.988)	22137	0.21308	0.2131
* 8 1,4-Dichlorobenzene-d4	152		9.239	9.239	(1.000)	291047	4.00000	
9 1,4-Dichlorobenzene	146		9.270	9.278	(1.003)	20559	0.19922	0.1992
\$ 10 1,2-Dichlorobenzene-d4	152		9.526	9.534	(1.031)	14899	0.21986	0.2199
12 1,2-Dichlorobenzene	146		9.557	9.557	(1.034)	21110	0.21134	0.2113
11 Benzyl alcohol	108		9.487	9.480	(1.027)	4588	0.07919	0.07919
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728	(1.054)	6447	0.22388	0.2239 (M)
13 2-Methylphenol	108		9.666	9.666	(1.046)	14535	0.16599	0.1660
17 Hexachloroethane	117		10.209	10.209	(1.105)	8831	0.20849	0.2085
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.968	9.953	(1.079)	13799	0.12564	0.1256
\$ 18 Nitrobenzene-d5	82		10.294	10.302	(0.878)	18312	0.15586	0.1559
19 Nitrobenzene	77		10.341	10.341	(0.882)	17256	0.15657	0.1566
20 Isophorone	82		10.799	10.799	(0.921)	19501	0.13862	0.1386 (M)
21 2-Nitrophenol	139		10.958	10.959	(0.935)	6786	0.11098	0.1110
22 2,4-Dimethylphenol	107		11.009	11.018	(0.939)	34653	0.32871	0.3287
23 Bis(2-Chloroethoxy)methane	93		11.221	11.222	(0.957)	17820	0.20497	0.2050
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.434	11.434	(0.975)	28189	0.33927	0.3393
26 1,2,4-Trichlorobenzene	180		11.603	11.603	(0.989)	17643	0.21331	0.2133
* 27 Naphthalene-d8	136		11.726	11.726	(1.000)	1070295	4.00000	
28 Naphthalene	128		11.772	11.773	(1.004)	56321	0.20502	0.2050
29 4-Chloroaniline	127		11.873	11.873	(1.013)	29121	0.24222	0.2422
30 Hexachlorobutadiene	225		11.996	11.997	(1.023)	10931	0.18150	0.1815
31 4-Chloro-3-methylphenol	107		12.832	12.825	(1.094)	25987	0.29730	0.2973
32 2-Methylnaphthalene	142		13.173	13.181	(1.123)	37728	0.19441	0.1944
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.753	13.746	(0.897)	15665	0.30937	0.3094
35 2,4,5-Trichlorophenol	196	13.831	13.815	(0.902)	12614	0.23346	0.2335
§ 36 2-Fluorobiphenyl	172	13.923	13.924	(0.908)	41292	0.21625	0.2162
37 2-Chloronaphthalene	162	14.179	14.187	(0.925)	31977	0.21332	0.2133
38 2-Nitroaniline	65	14.395	14.396	(0.939)	8851	0.21596	0.2160
39 Dimethylphthalate	163	14.759	14.767	(0.963)	28755	0.16632	0.1663
40 Acenaphthylene	152	15.046	15.046	(0.981)	48589	0.18802	0.1880
41 2,6-Dinitrotoluene	165	14.899	14.899	(0.972)	9657	0.25450	0.2545
* 42 Acenaphthene-d10	164	15.332	15.340	(1.000)	535349	4.00000	
43 3-Nitroaniline	138	Compound Not Detected.					
44 Acenaphthene	153	15.401	15.409	(1.005)	30643	0.19661	0.1966
45 2,4-Dinitrophenol	184	Compound Not Detected.					
46 Dibenzofuran	168	15.765	15.765	(1.028)	47461	0.20518	0.2052
47 4-Nitrophenol	109	Compound Not Detected.					
48 2,4-Dinitrotoluene	165	15.742	15.742	(1.027)	9863	0.17933	0.1793
50 Diethylphthalate	149	16.229	16.237	(1.058)	27937	0.15253	0.1525
49 Fluorene	166	16.484	16.484	(1.075)	38035	0.19763	0.1976
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.075)	18253	0.21774	0.2177
52 4-Nitroaniline	138	Compound Not Detected.					
53 4,6-Dinitro-2-methylphenol	198	16.585	16.585	(0.899)	5226	0.23289	0.2329
54 N-Nitrosodiphenylamine	169	16.723	16.724	(0.907)	27067	0.18997	0.1900
§ 55 2,4,6-Tribromophenol	330	16.970	16.986	(1.107)	714	0.02174	0.02174
56 4-Bromophenyl-phenylether	248	17.503	17.504	(0.949)	11347	0.19654	0.1965
57 Hexachlorobenzene	284	17.619	17.620	(0.955)	16352	0.25152	0.2515
58 Pentachlorophenol	266	Compound Not Detected.					
* 59 Phenanthrene-d10	188	18.447	18.448	(1.000)	962985	4.00000	
60 Phenanthrene	178	18.502	18.502	(1.003)	47244	0.19170	0.1917
61 Anthracene	178	18.610	18.610	(1.009)	41502	0.17367	0.1737
62 Carbazole	167	18.943	18.943	(1.027)	34213	0.15628	0.1563
63 Di-n-butylphthalate	149	19.639	19.647	(1.065)	35815	0.12059	0.1206
64 Fluoranthene	202	20.885	20.885	(0.888)	52527	0.17809	0.1781
65 Pyrene	202	21.318	21.318	(0.906)	53917	0.17953	0.1795
§ 66 Terphenyl-d14	244	21.596	21.597	(0.918)	46499	0.19135	0.1913
67 Butylbenzylphthalate	149	22.495	22.487	(0.957)	14643	0.09053	0.09053
68 Benzo(a)anthracene	228	23.493	23.494	(0.999)	56576	0.18715	0.1871
* 69 Chrysene-d12	240	23.517	23.517	(1.000)	857365	4.00000	
70 3,3'-Dichlorobenzidine	252	23.439	23.440	(0.997)	44875	0.33327	0.3333
71 Chrysene	228	23.555	23.563	(1.002)	49822	0.20279	0.2028
72 bis(2-Ethylhexyl)phthalate	149	23.493	23.494	(0.955)	27381	0.14537	0.1454
* 134 Di-n-octylphthalate-d4	153	24.593	24.593	(1.000)	1343499	4.00000	
73 Di-n-octylphthalate	149	24.601	24.609	(1.000)	77989	0.26178	0.2618
74 Benzo(b)fluoranthene	252	25.444	25.445	(0.968)	62792	0.17794	0.1779 (H)
75 Benzo(k)fluoranthene	252	25.499	25.507	(0.970)	59902	0.17633	0.1763
76 Benzo(a)pyrene	252	26.157	26.157	(0.995)	55083	0.17465	0.1746
* 77 Perylene-d12	264	26.281	26.281	(1.000)	1034621	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.150	29.158	(1.109)	68069	0.18452	0.1845
79 Dibenzo(a,h)anthracene	278	29.196	29.197	(1.111)	58001	0.20730	0.2073
80 Benzo(g,h,i)perylene	276	30.027	30.028	(1.143)	62302	0.21192	0.2119
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	8.628	8.628	(0.934)	38208	0.29153	0.2915
93 Benzidine	184	21.171	21.140	(0.900)	8390	0.06408	0.06408
103 Pyridine	79	4.820	4.789	(0.522)	31948	0.30474	0.3047
105 1-methylnaphthalene	142	13.374	13.382	(1.141)	36246	0.20636	0.2064
111 Azobenzene (1,2-DP-Hydrazine)	77	16.808	16.816	(1.096)	35500	0.12980	0.1298

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
=====	=====		=====	=====	=====	=====	=====	=====	
187 Total Benzofluoranthenes	252		25.444	25.507	(0.968)	124707	0.36788	0.3679	
120 2,3,4,6-Tetrachlorophenol	232		16.020	16.012	(1.045)	4353	0.08686	0.08686	

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052304.D Calibration Time: 14:03
 Lab Smp Id: SLC0401-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	291047	-2.09
27 Naphthalene-d8	1085336	542668	2170672	1070295	-1.39
42 Acenaphthene-d10	563464	281732	1126928	535349	-4.99
59 Phenanthrene-d10	1038318	519159	2076636	962985	-7.26
69 Chrysene-d12	1012751	506376	2025502	857365	-15.34
134 Di-n-octylphthala	1628890	814445	3257780	1343499	-17.52
77 Perylene-d12	1152264	576132	2304528	1034621	-10.21

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.33	-0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.52	23.02	24.02	23.52	-0.00
134 Di-n-octylphthala	24.59	24.09	25.09	24.59	-0.00
77 Perylene-d12	26.28	25.78	26.78	26.28	-0.00

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

REVIEW SUMMARY FOR FILE - NT1003052304.D

Lab ID: SLC0401-LCV1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 15:18

RT CO-ELUTION COMPOUNDS

23.494 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

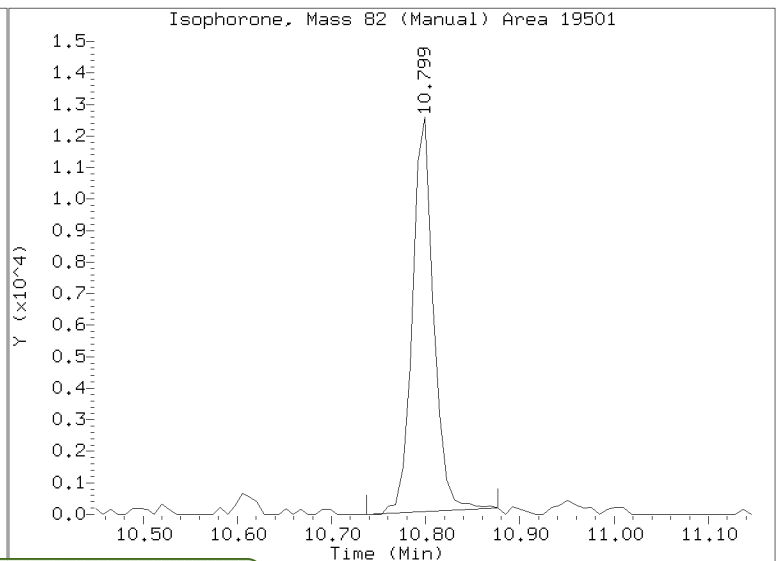
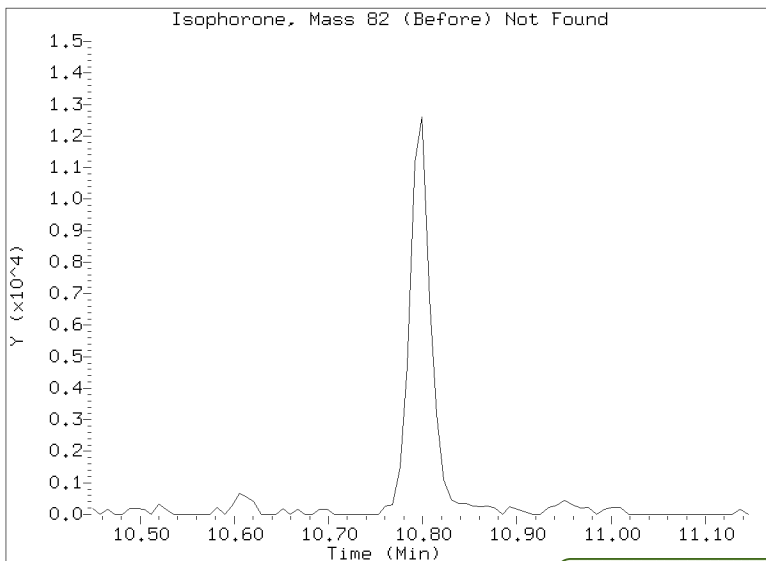
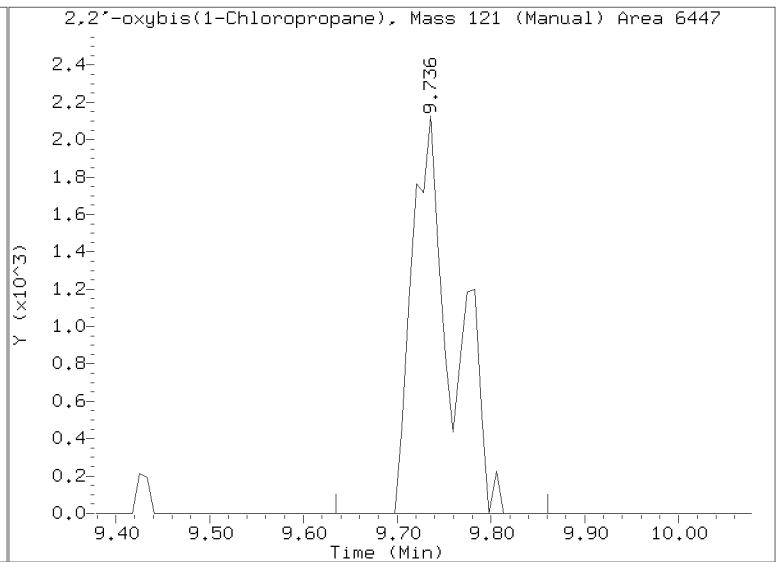
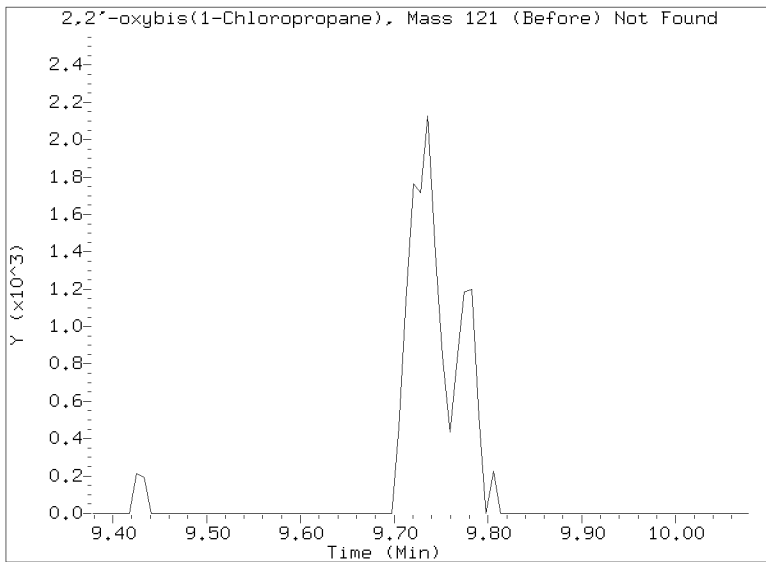
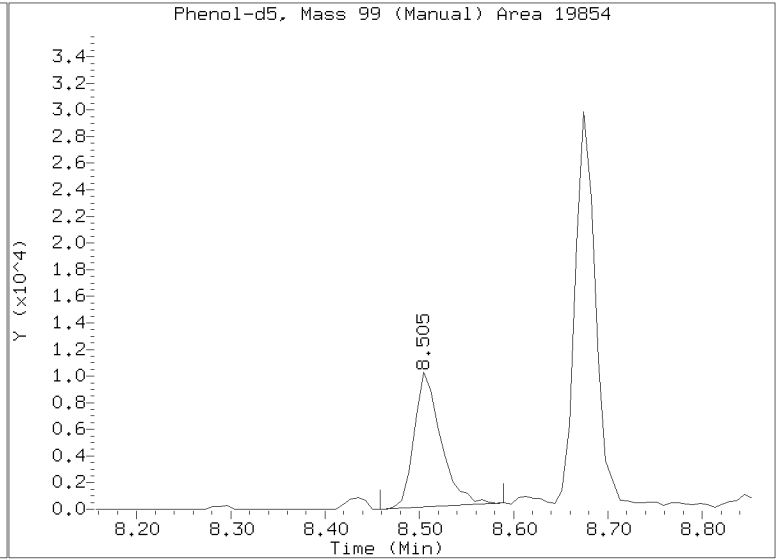
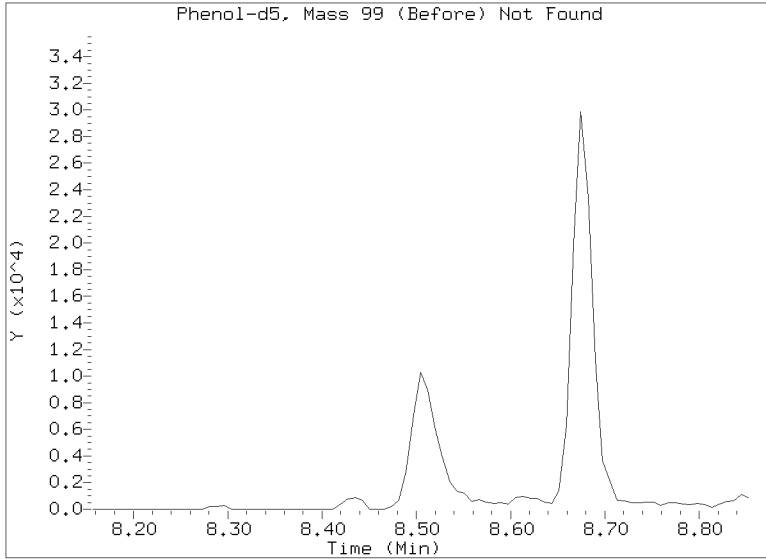
RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/NT1003052304.D
Injection Date: 05-MAR-2023 15:18
Lab ID:SLC0401-LCV1 Client ID:
Report Date: 03/27/2023 11:22



APPROVED

By Deenay Dunmore at 2:07 pm, Mar 27, 2023



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0415-LCV1

Sequence: SLC0415

Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-15.7	50.00
4-Methylphenol	0.20000	0.1	-25.8	50.00
Naphthalene	0.20000	0.2	1.3	50.00
2-Methylnaphthalene	0.20000	0.2	-1.7	50.00
Acenaphthylene	0.20000	0.2	-6.1	50.00
Dimethylphthalate	0.20000	0.2	-2.3	50.00
Acenaphthene	0.20000	0.2	-1.0	50.00
Dibenzofuran	0.20000	0.2	0.8	50.00
Fluorene	0.20000	0.2	-3.2	50.00
Pentachlorophenol	0.40000	0.0	*	50.00
Phenanthrene	0.20000	0.2	-1.1	50.00
Anthracene	0.20000	0.2	-1.8	50.00
Fluoranthene	0.20000	0.2	-8.4	50.00
Pyrene	0.20000	0.2	-9.2	50.00
Butylbenzylphthalate	0.20000	0.1	-31.6	50.00
Benzo(a)anthracene	0.20000	0.2	-0.2	50.00
Chrysene	0.20000	0.2	9.4	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	-6.8	50.00
Benzo(a)fluoranthene, Total	0.40000	0.4	-7.7	50.00
Benzo(a)pyrene	0.20000	0.2	-6.2	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-0.6	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	8.9	50.00
Benzo(g,h,i)perylene	0.20000	0.2	3.4	50.00
2-Fluorophenol	0.30000	0.257	-14.2	50.00
Phenol-d5	0.30000	0.241	-19.5	50.00
2-Chlorophenol-d4	0.30000	0.295	-1.6	50.00
1,2-Dichlorobenzene-d4	0.20000	0.186	-6.9	50.00
Nitrobenzene-d5	0.20000	0.194	-3.2	50.00
2-Fluorobiphenyl	0.20000	0.224	11.9	50.00



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0415-LCV1

Sequence: SLC0415

Standard ID: K011105

2,4,6-Tribromophenol	0.30000	0.136	-54.6 *	50.00
p-Terphenyl-d14	0.20000	0.197	-1.3	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A.B\NT1003052316.D

Date: 05-HR-2023 22:54

Client ID:

Sample Info: SLC0415-LCW1

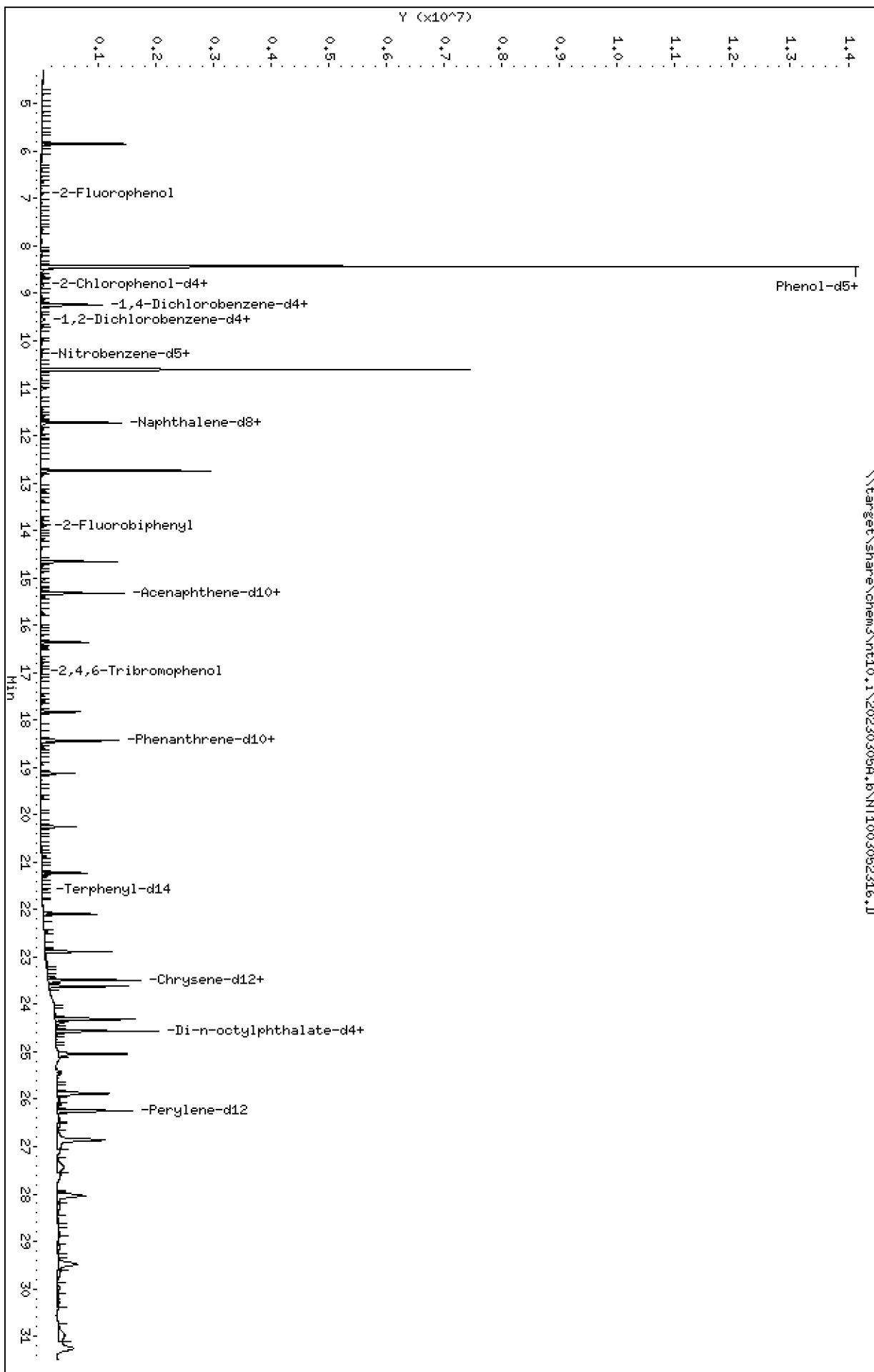
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305A.B\NT1003052316.D



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

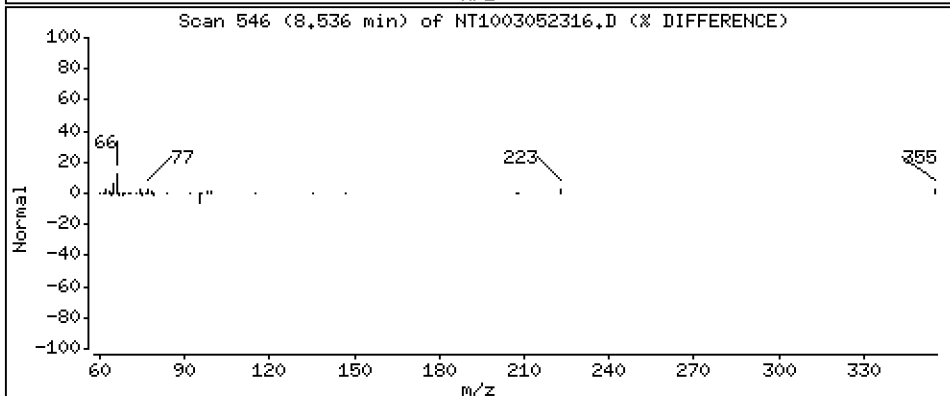
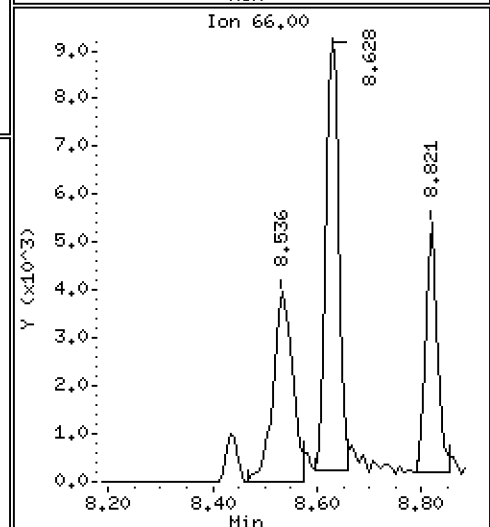
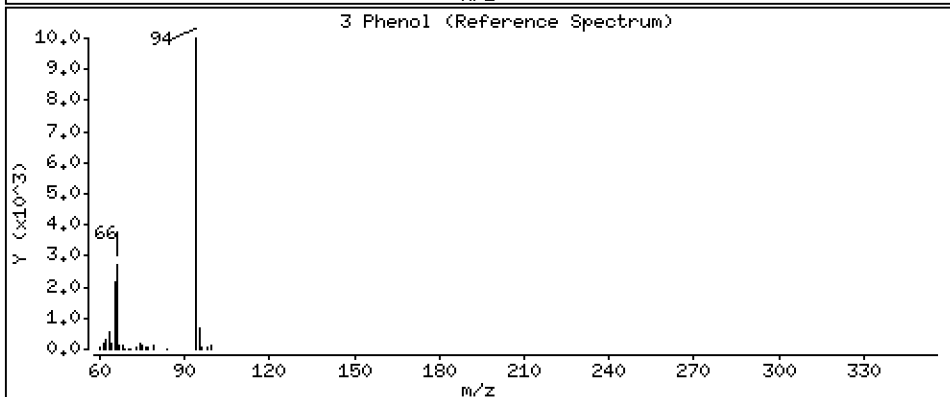
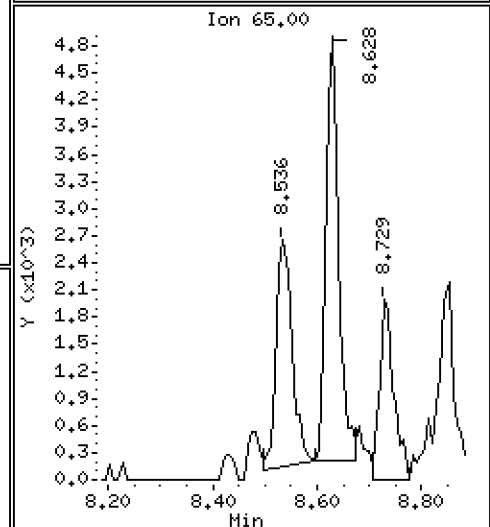
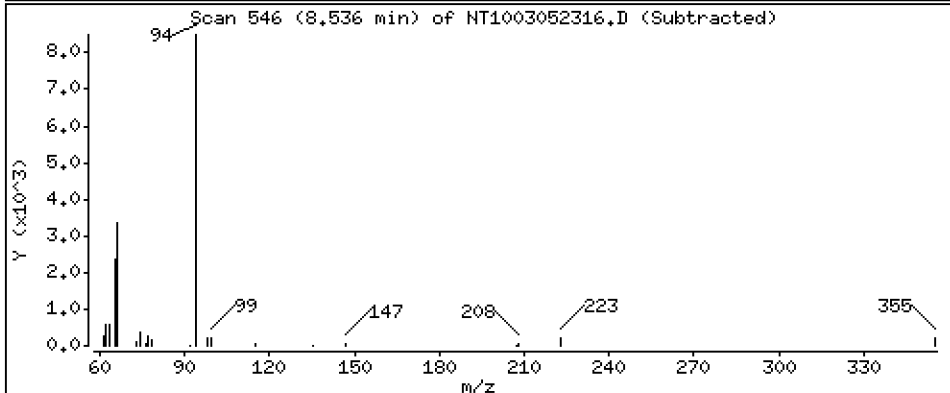
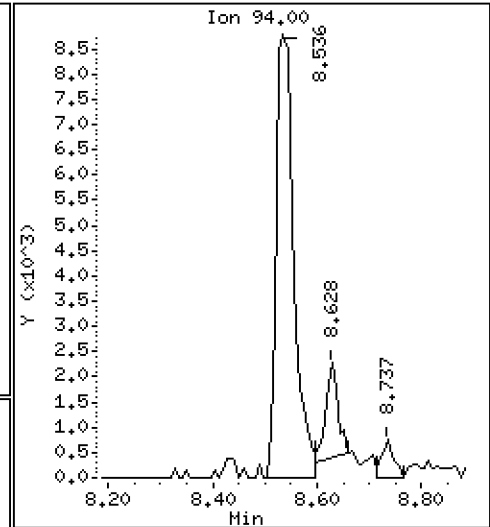
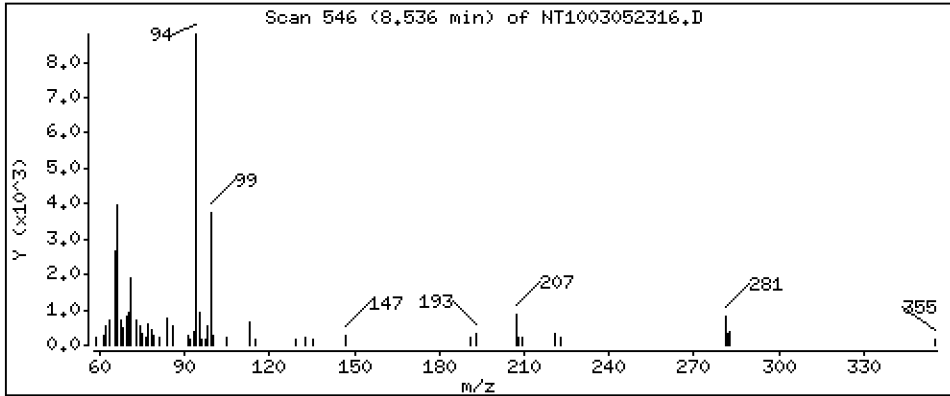
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1687 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

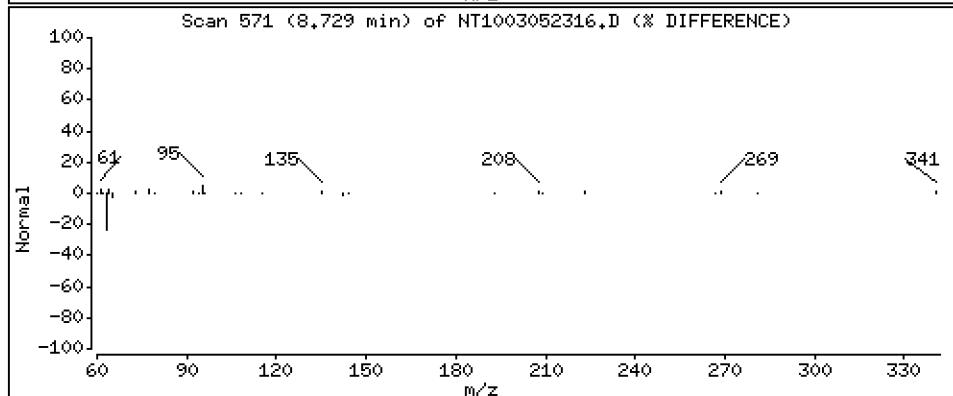
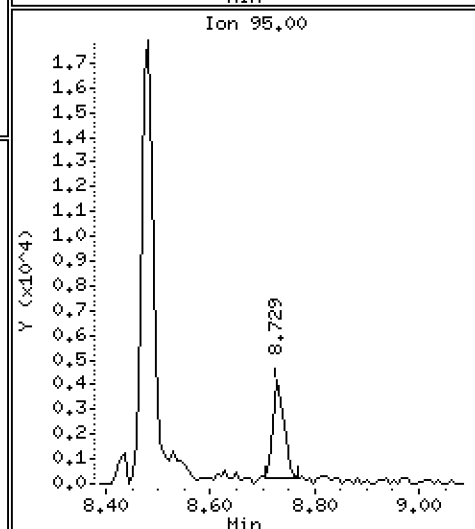
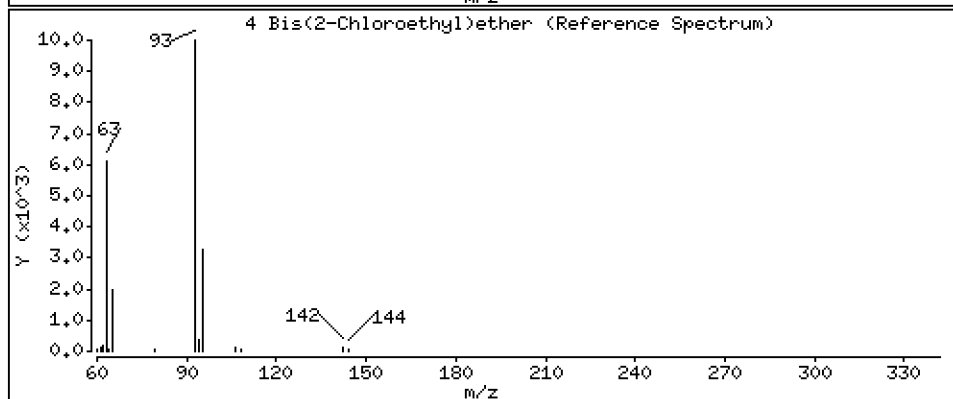
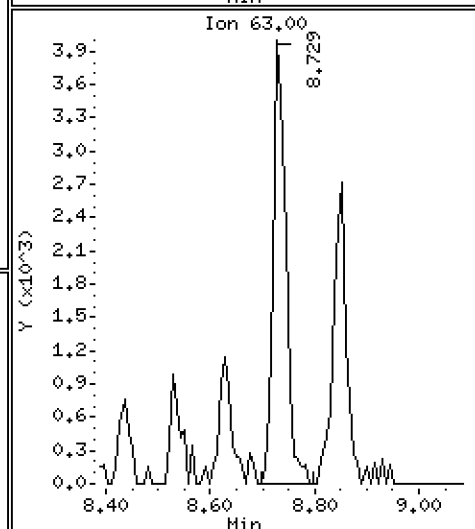
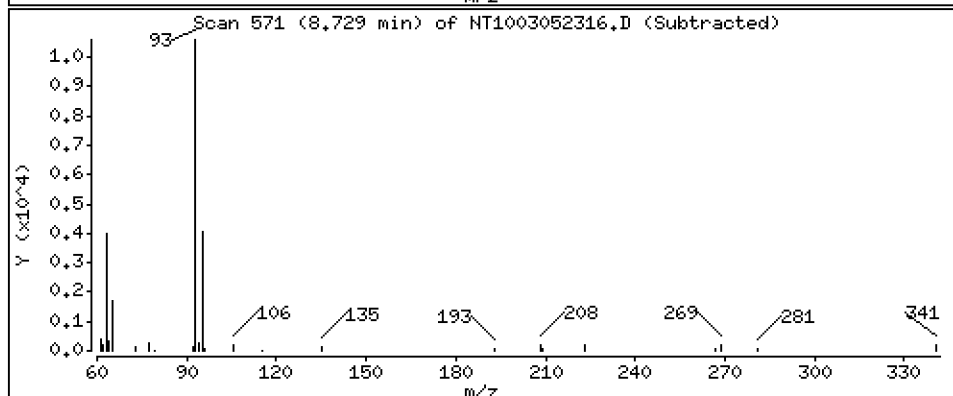
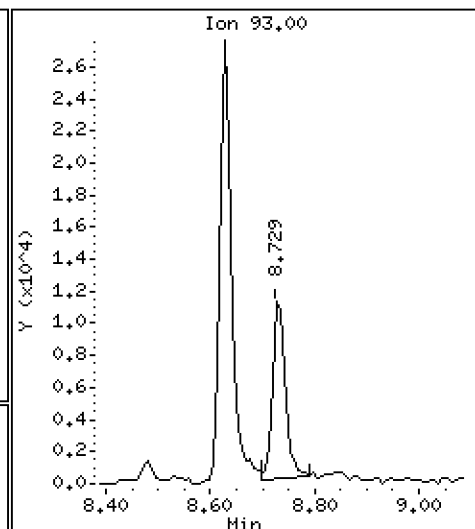
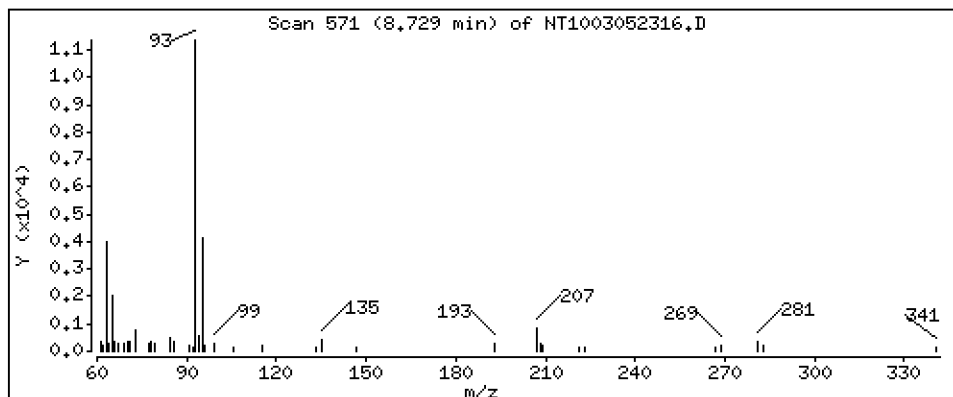
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,2005 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

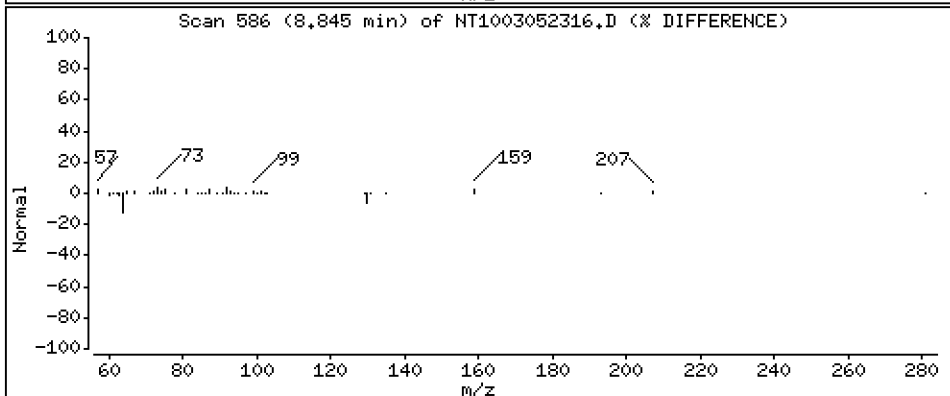
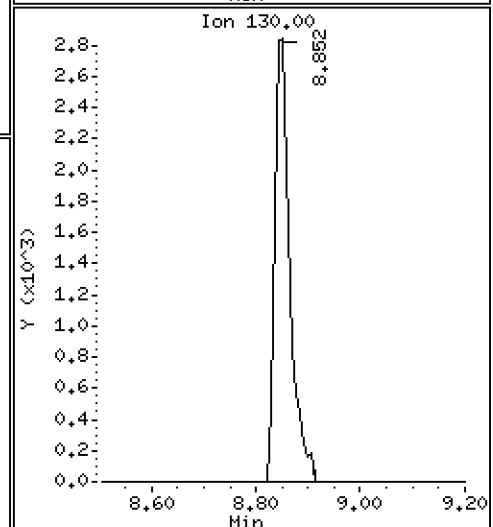
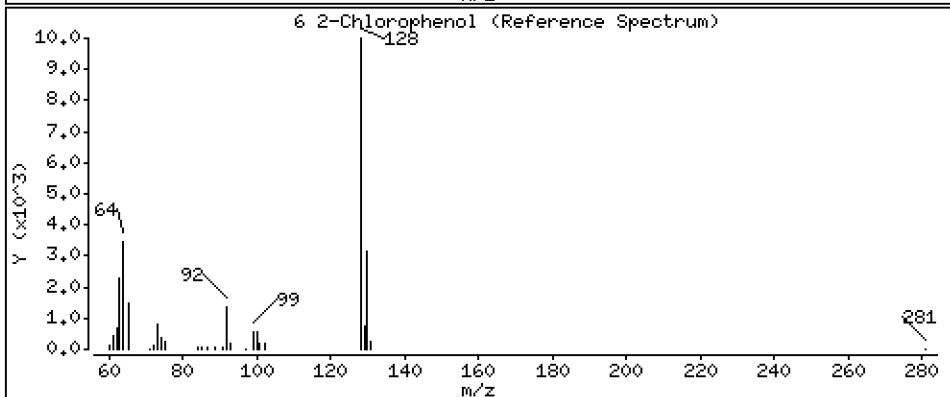
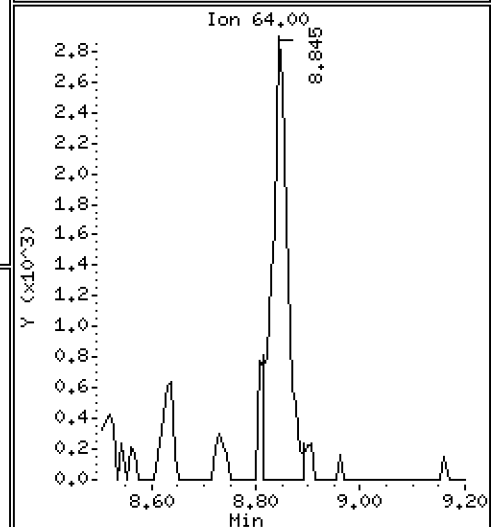
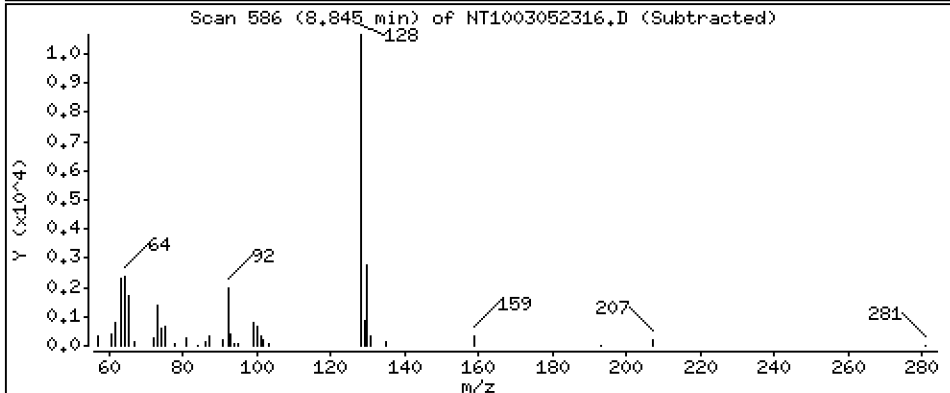
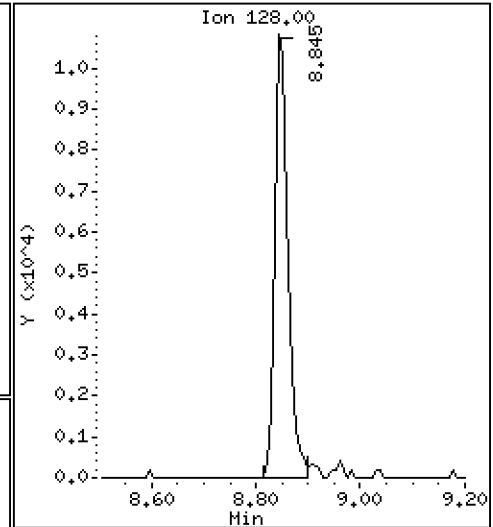
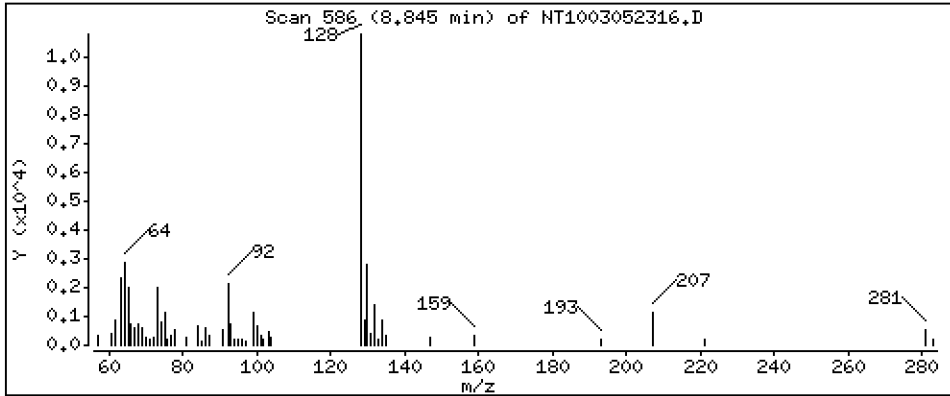
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 0.1918 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

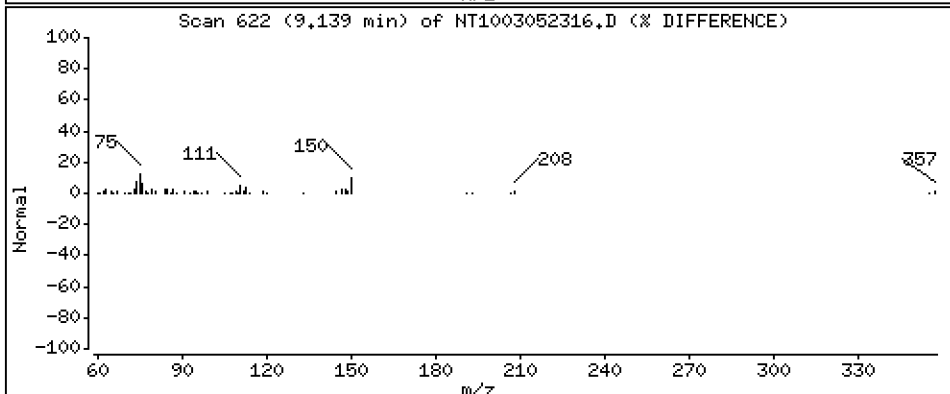
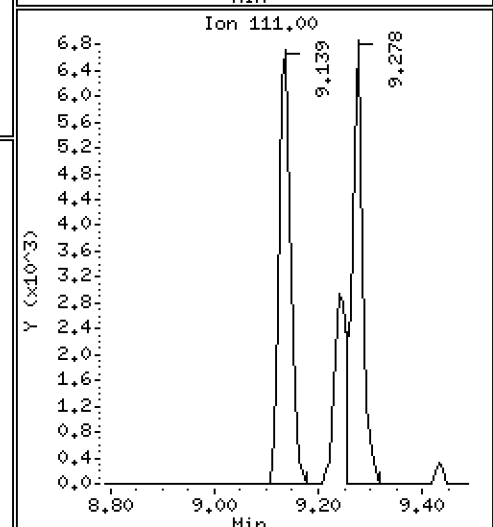
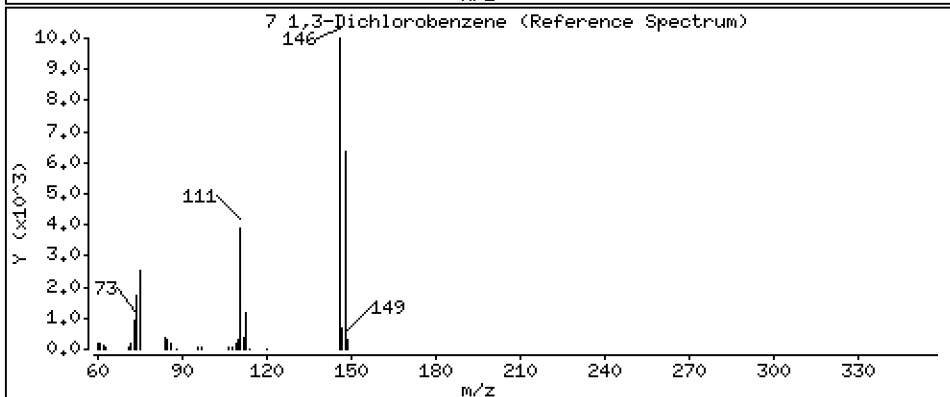
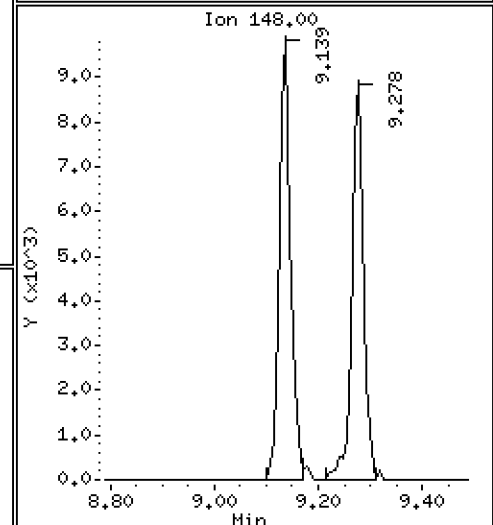
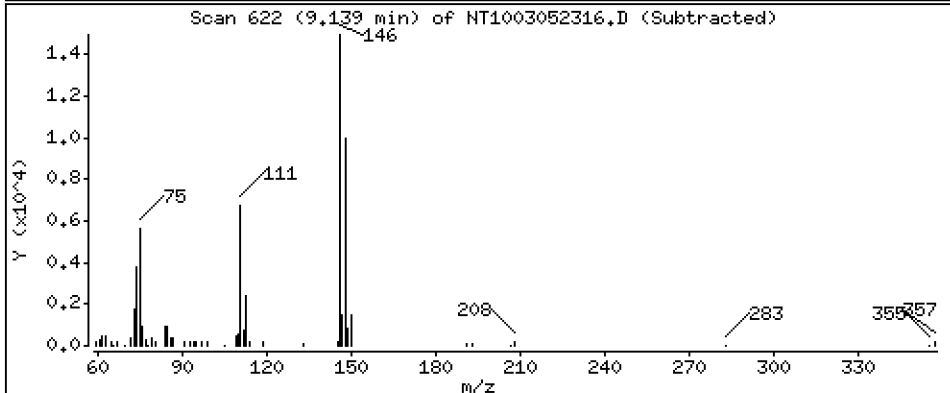
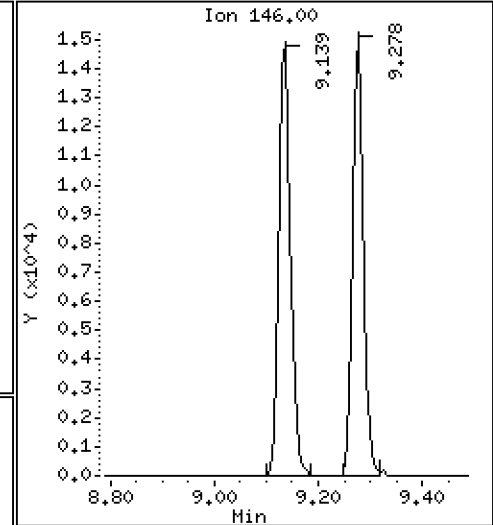
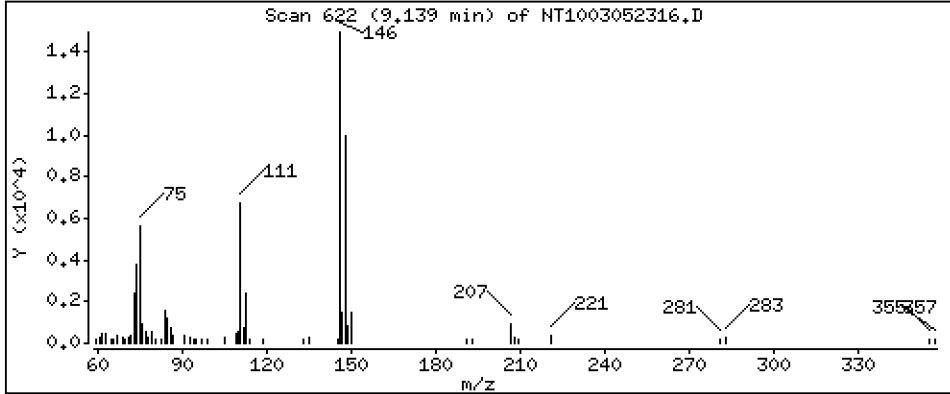
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2139 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

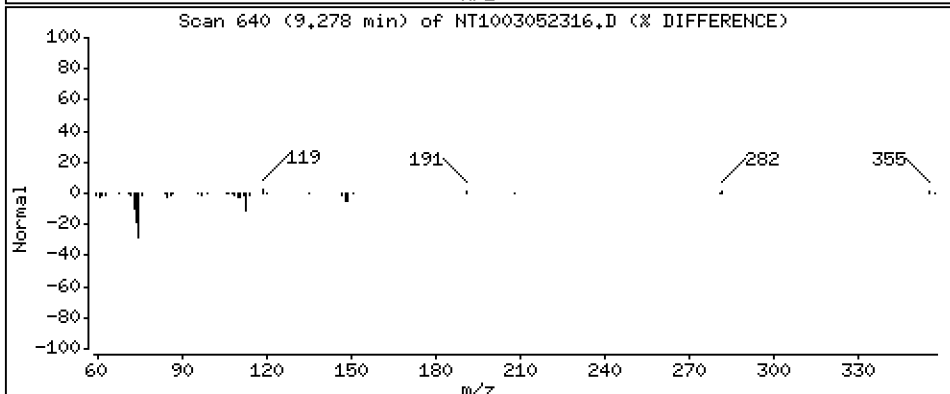
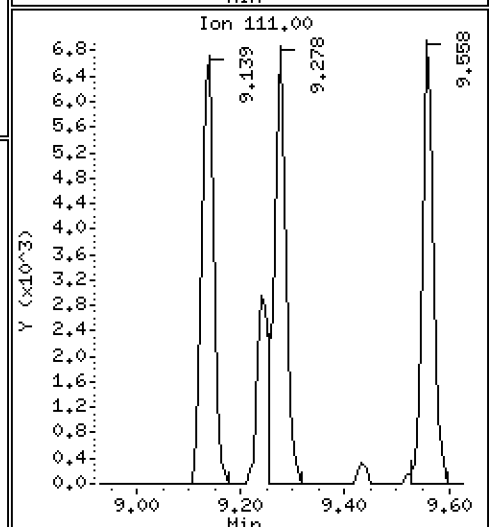
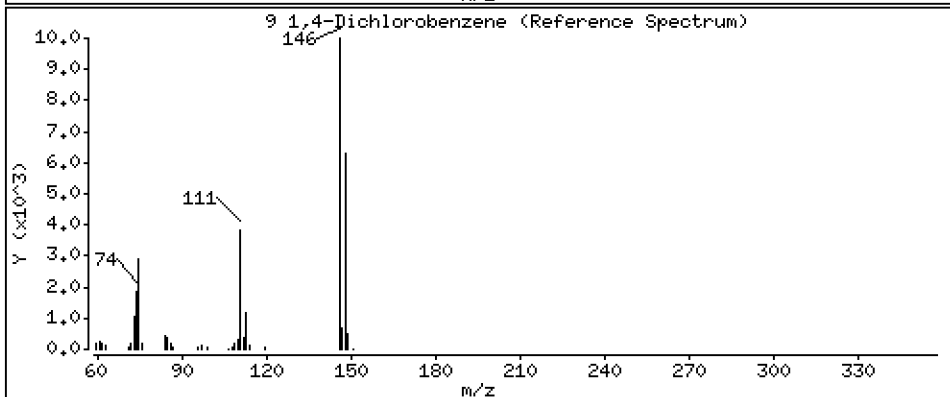
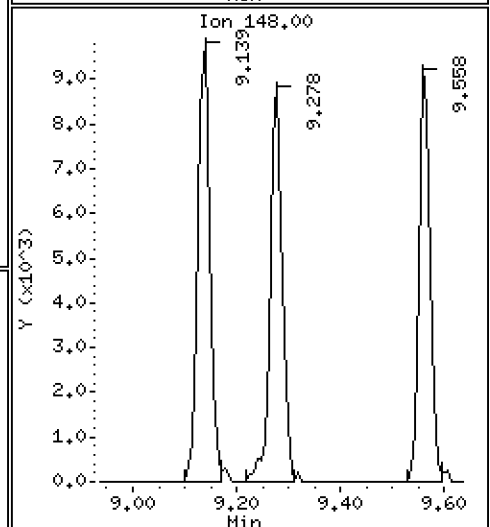
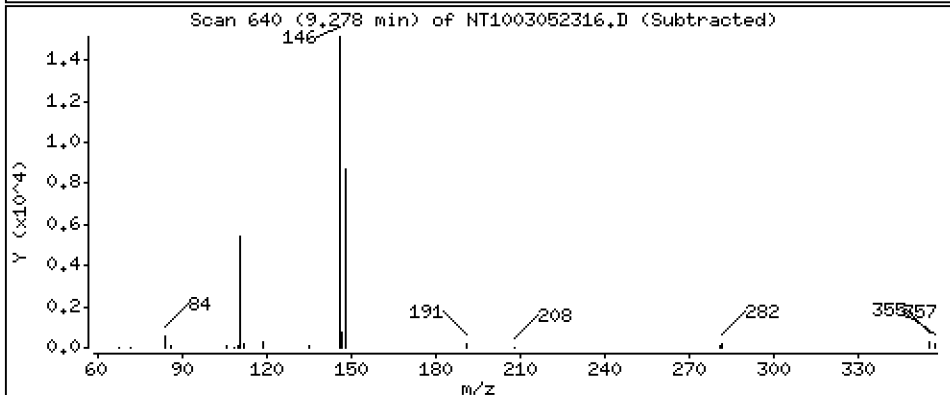
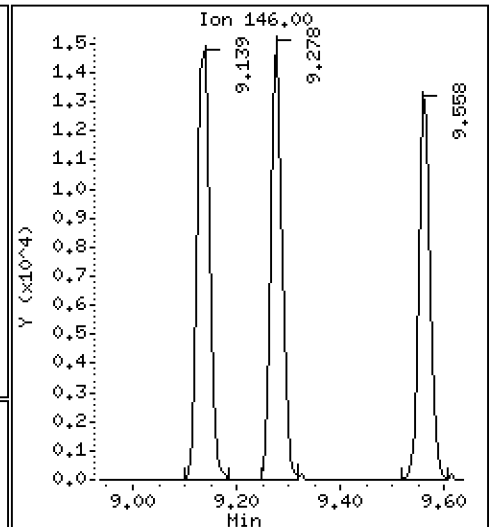
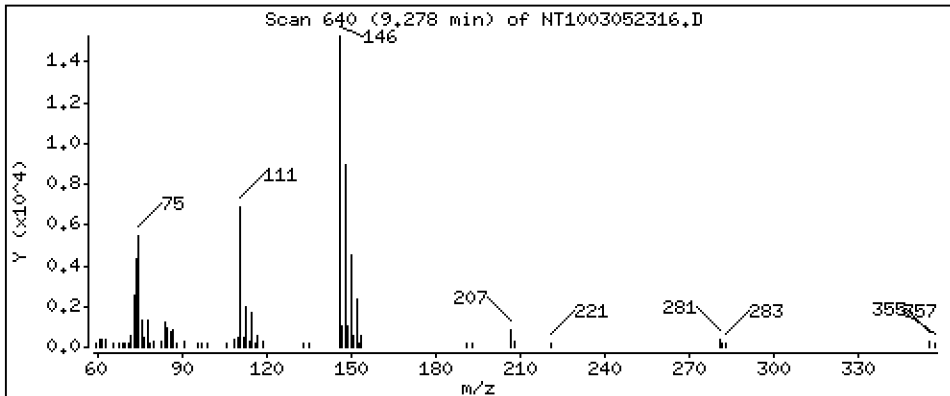
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.2076 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

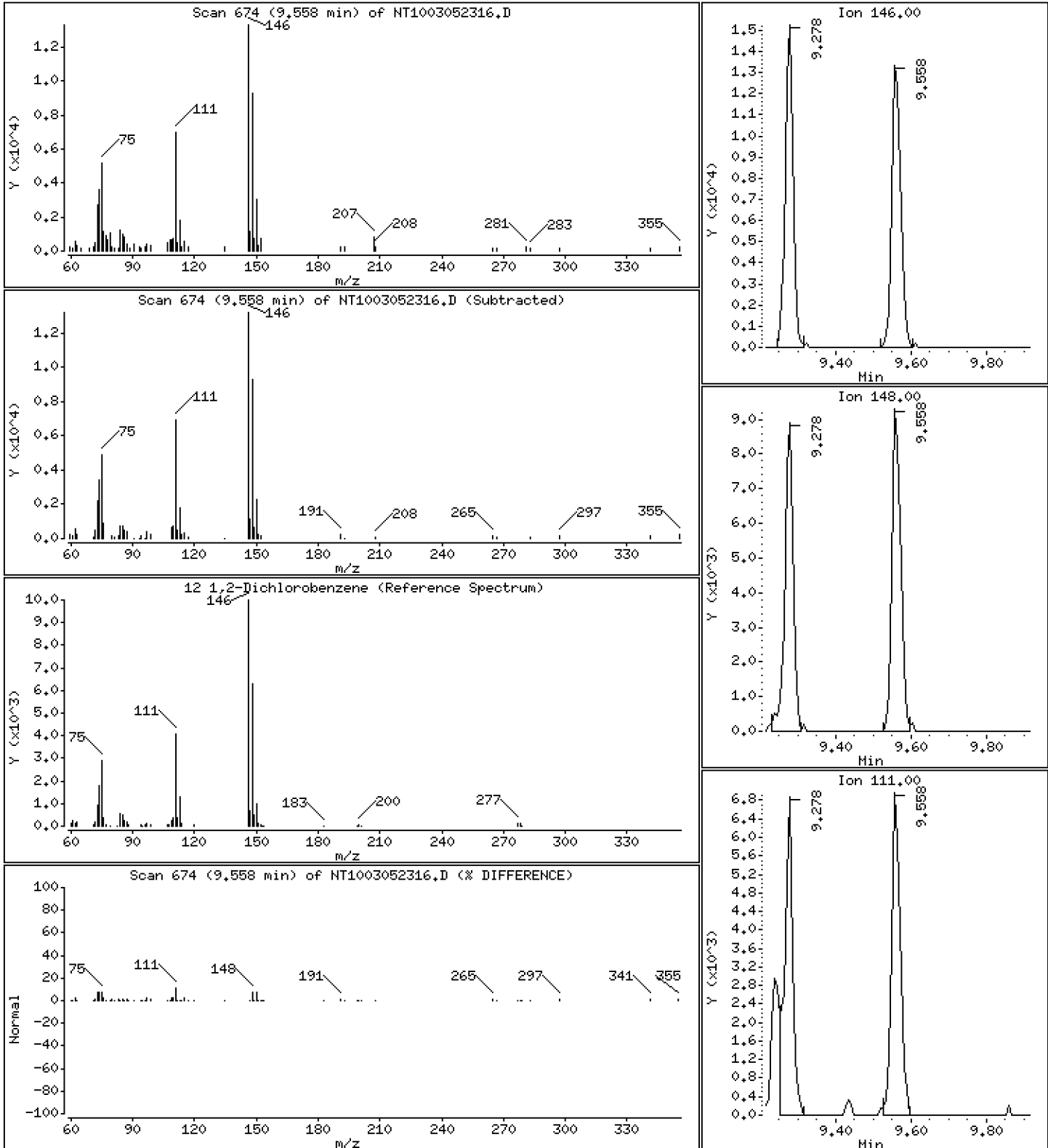
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.2019 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

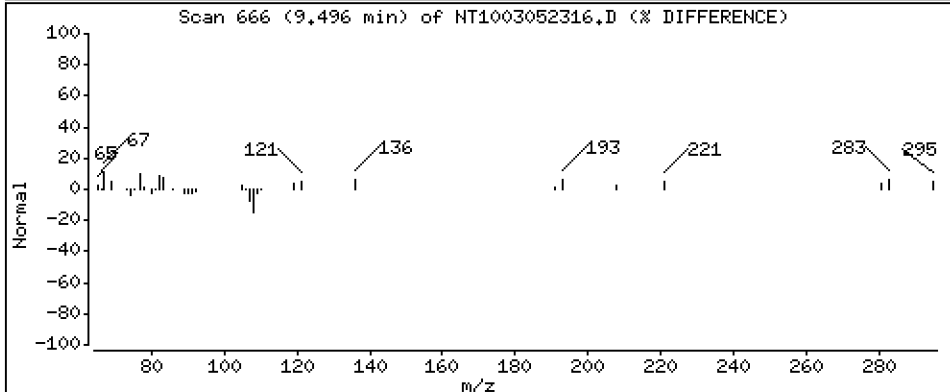
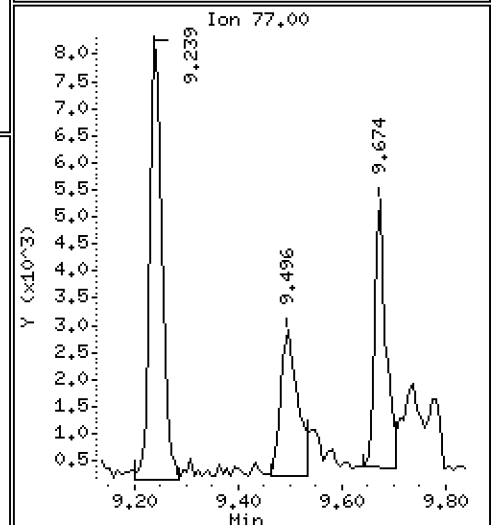
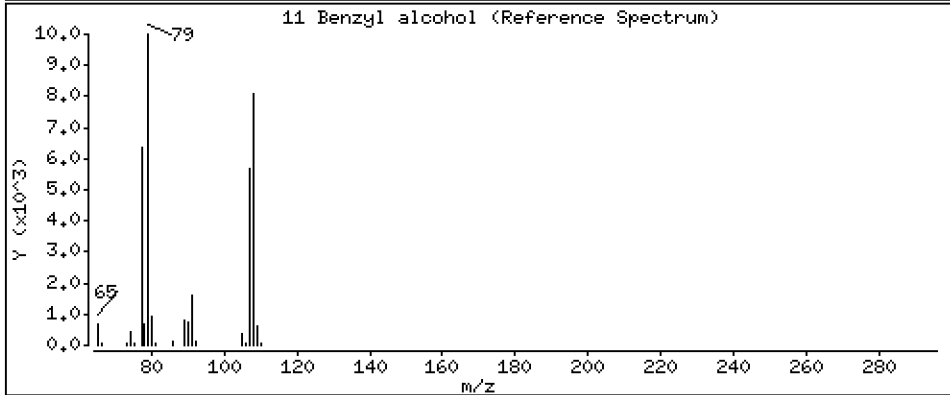
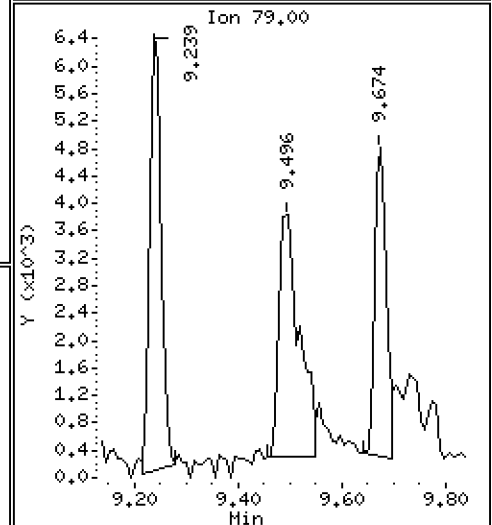
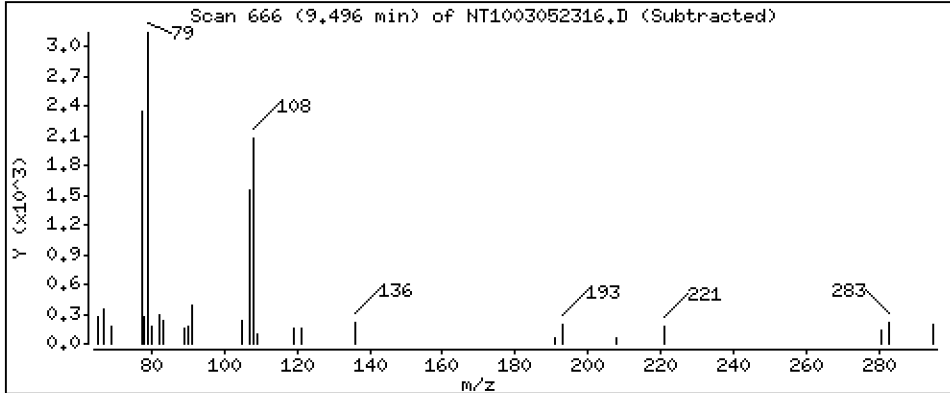
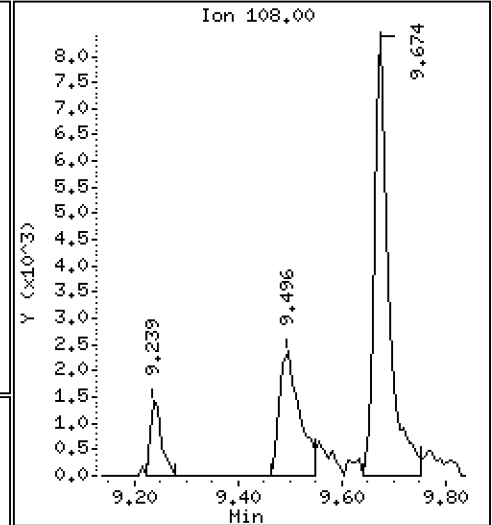
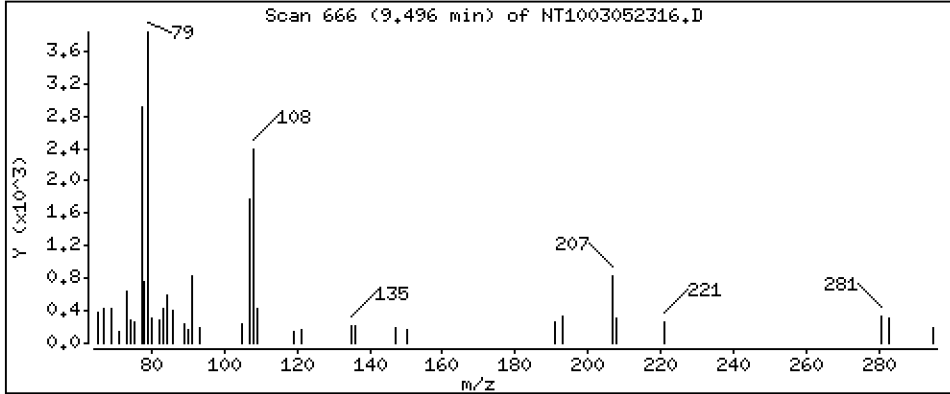
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1045 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

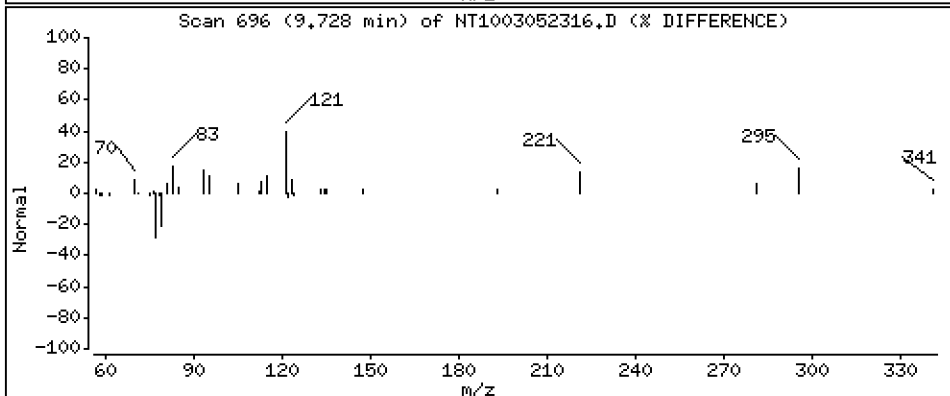
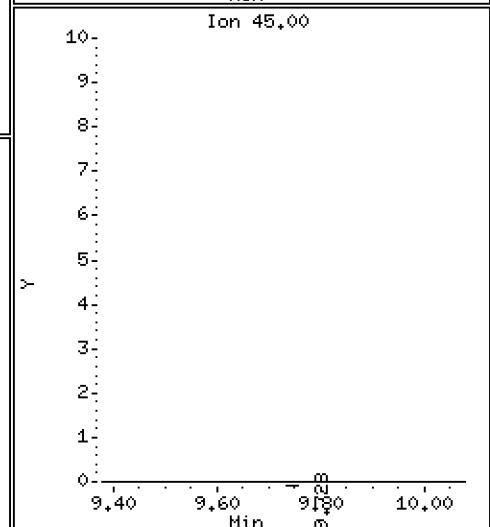
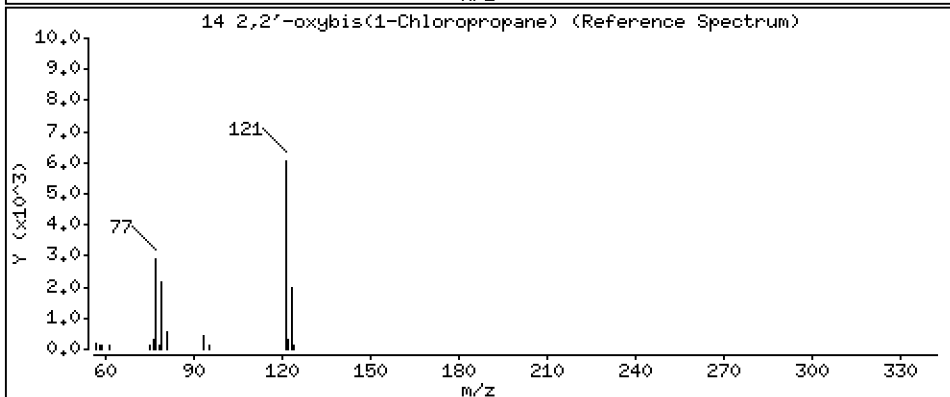
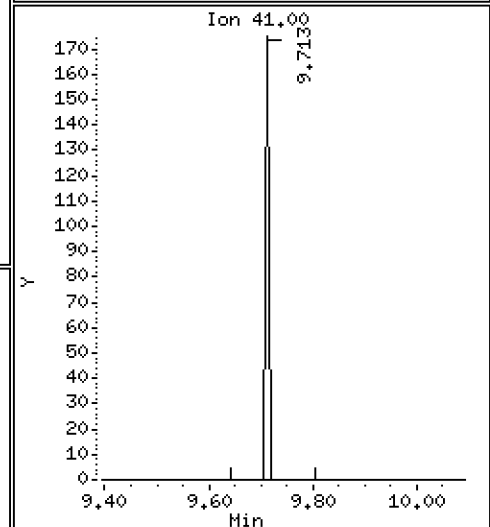
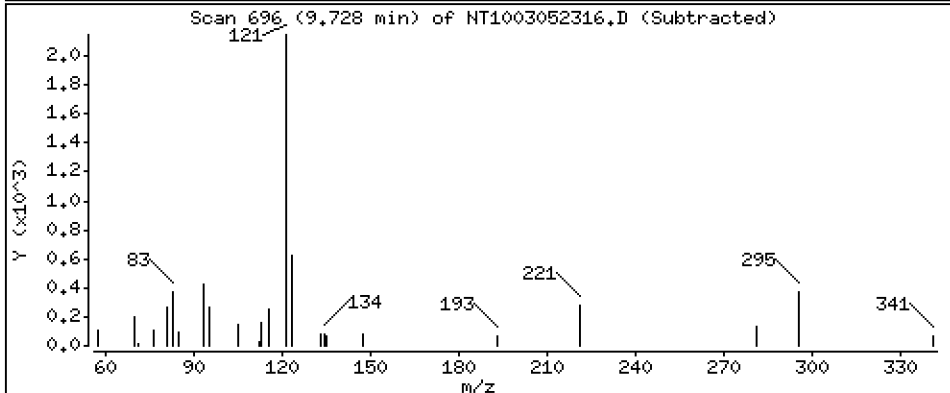
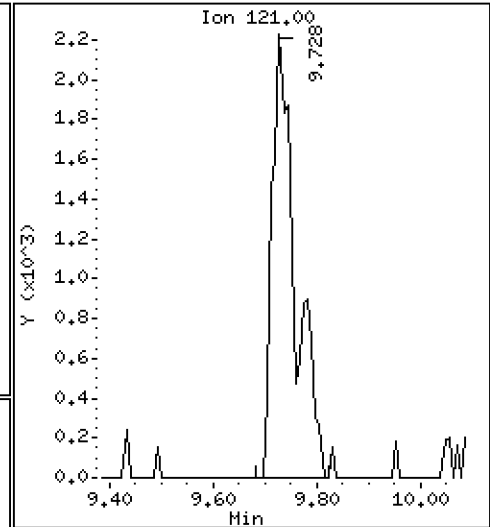
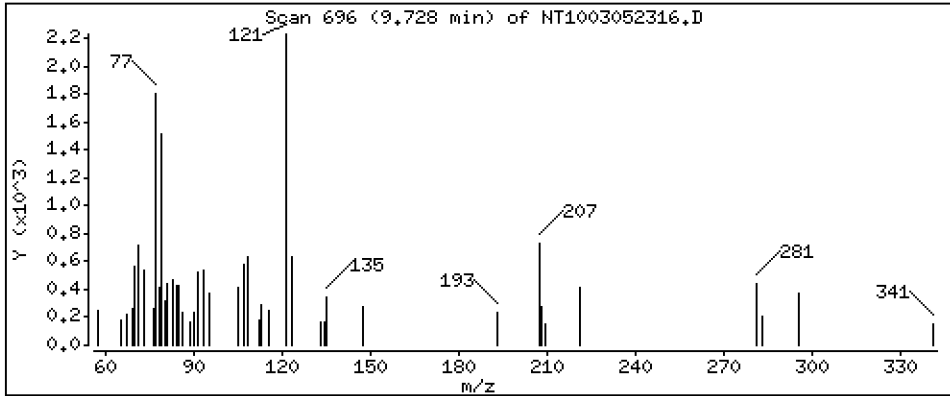
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2259 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

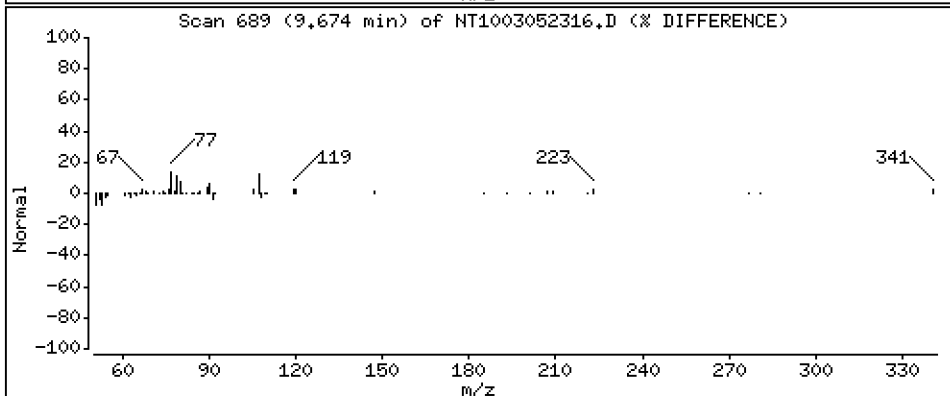
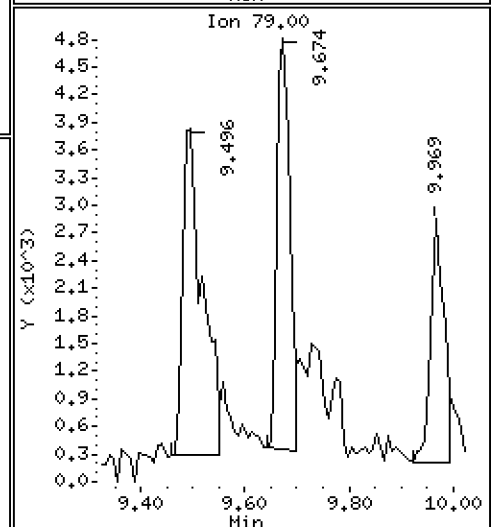
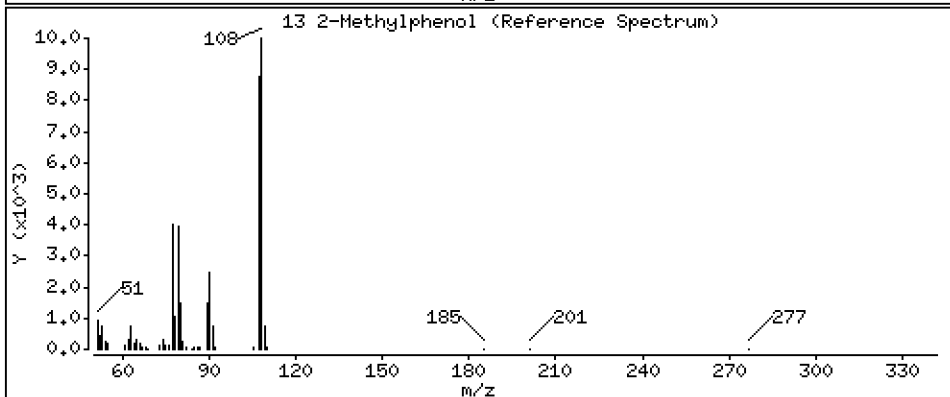
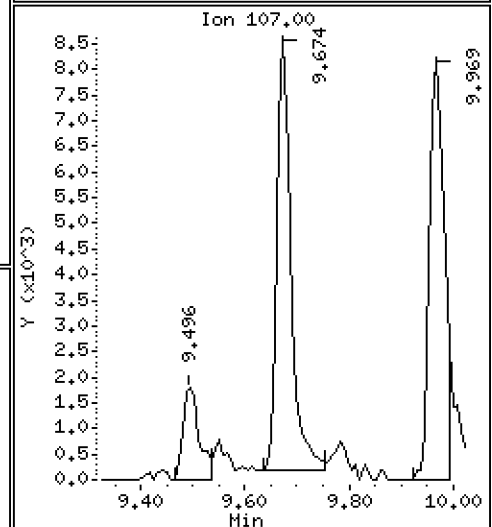
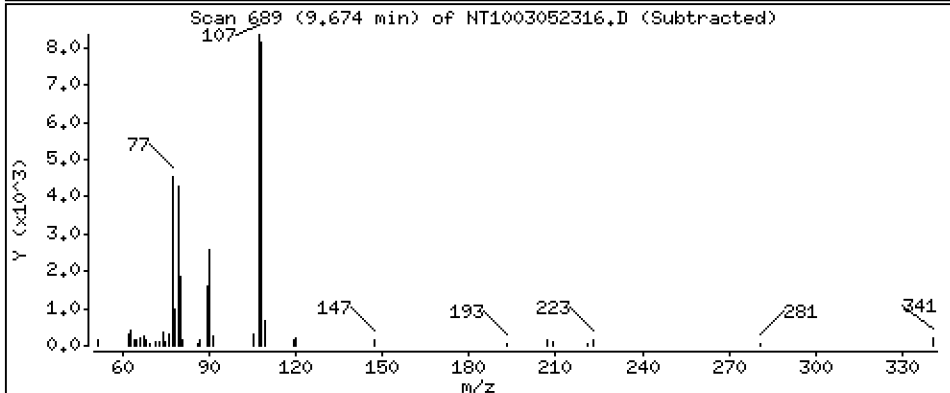
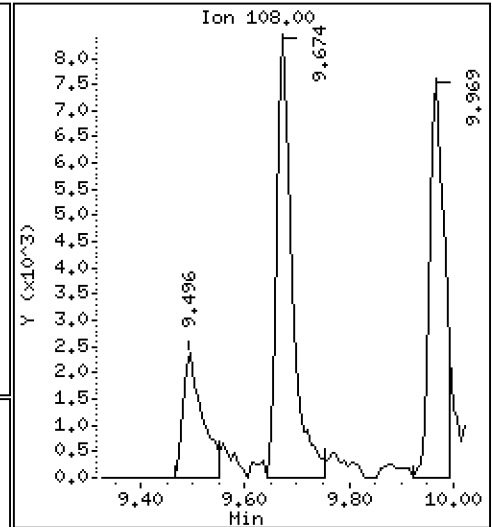
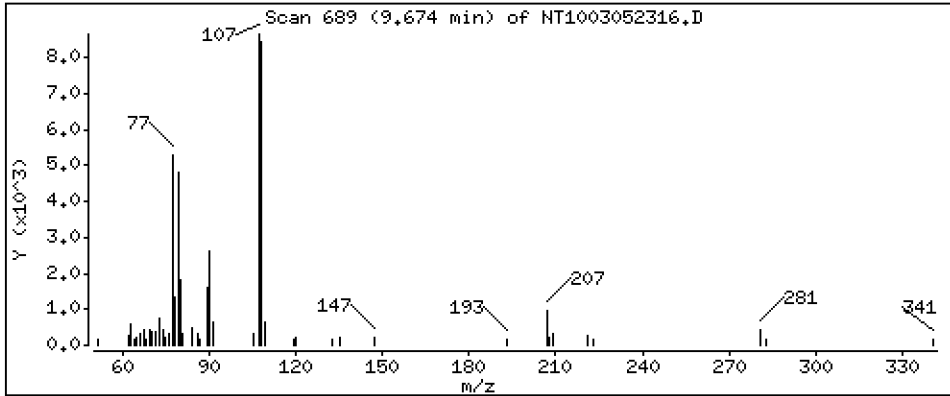
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,1827 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

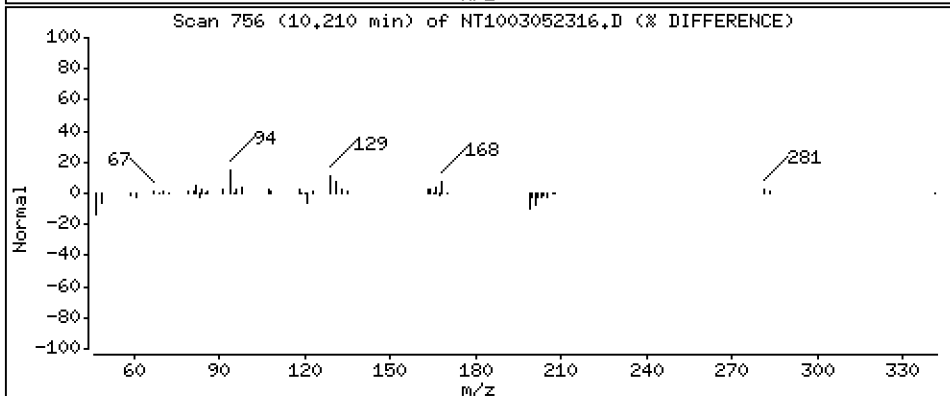
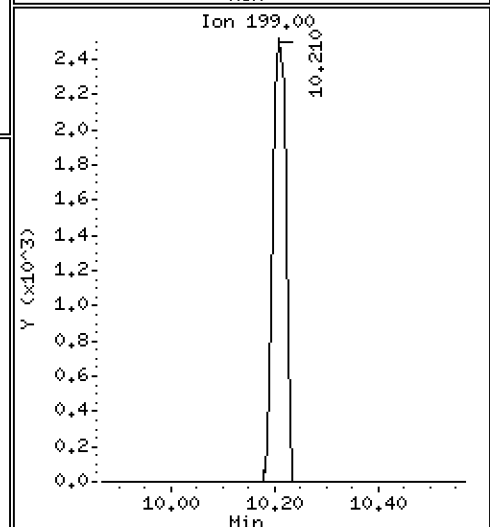
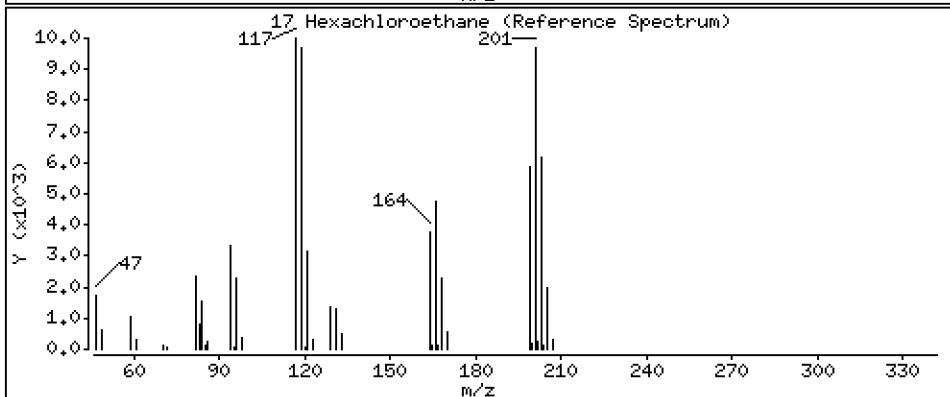
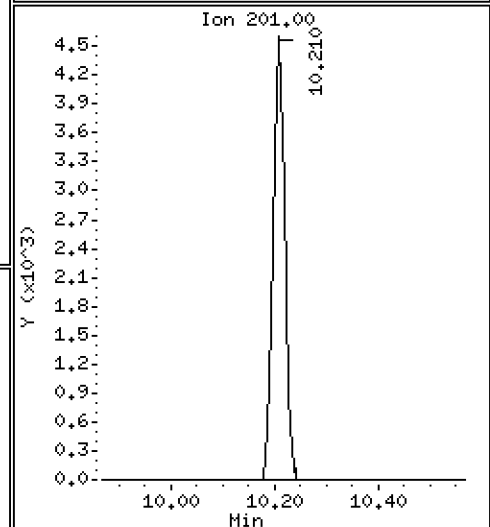
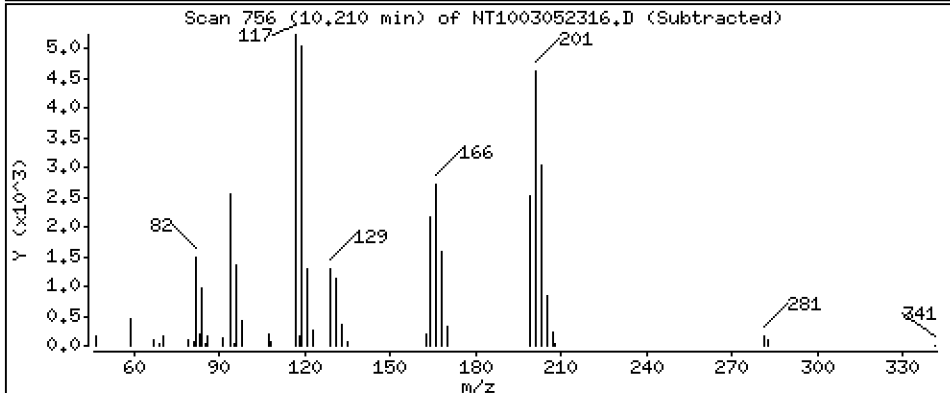
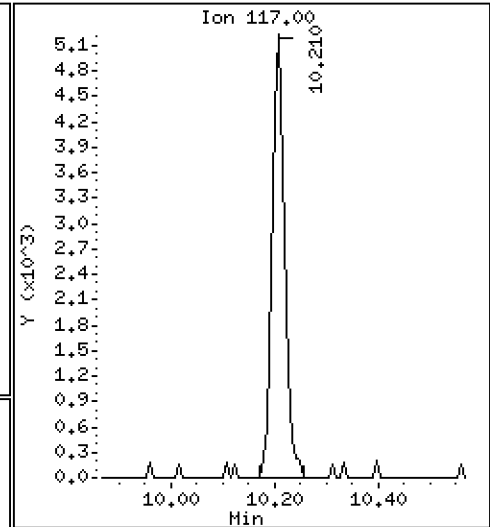
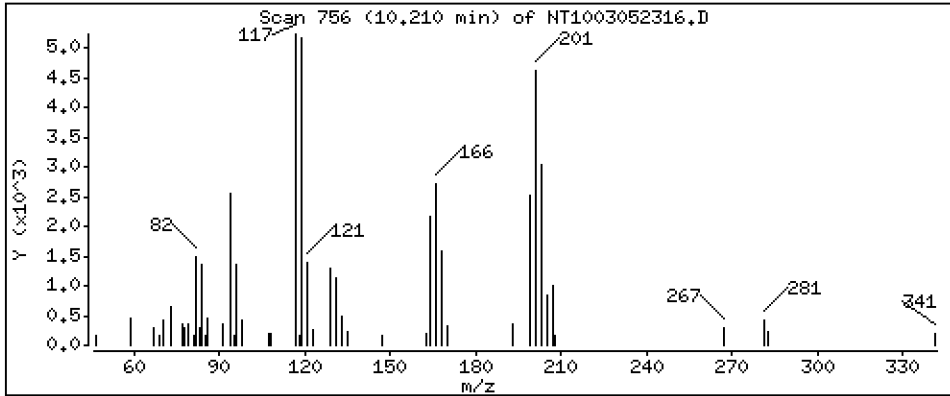
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,1872 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

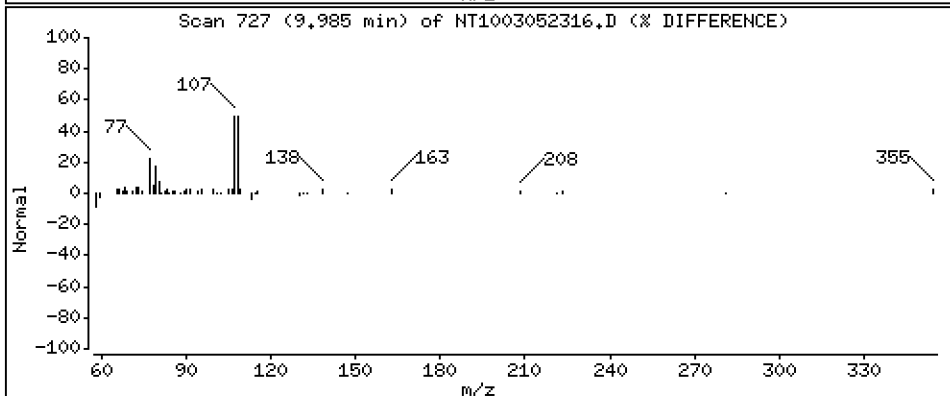
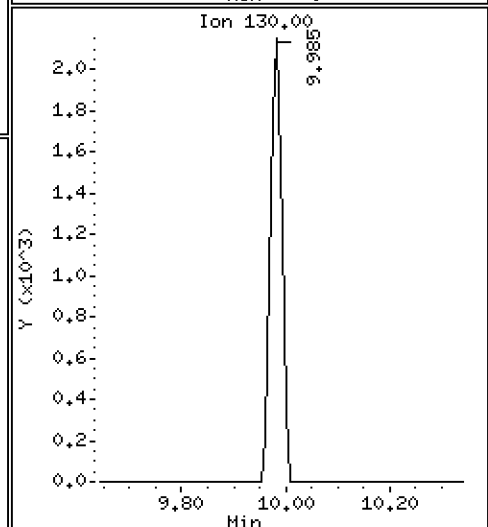
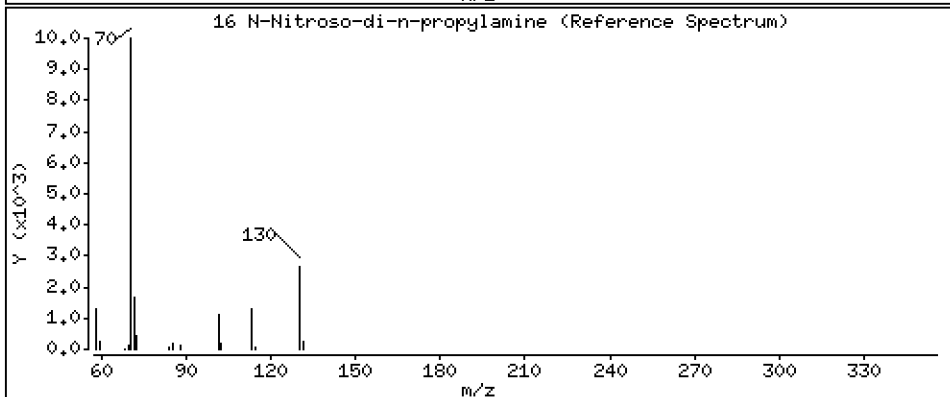
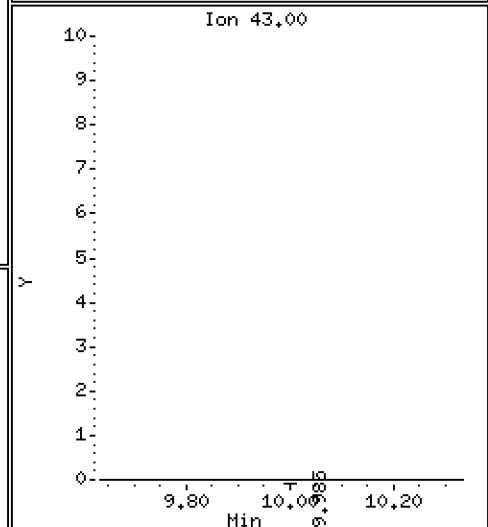
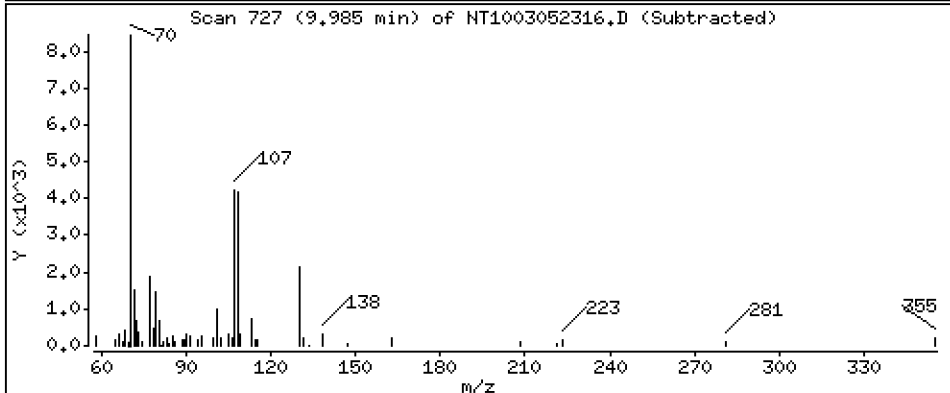
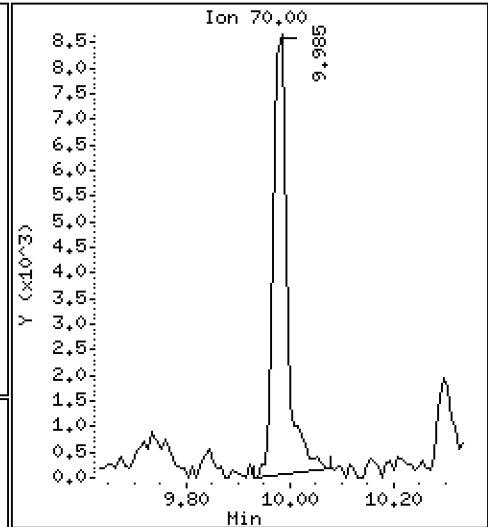
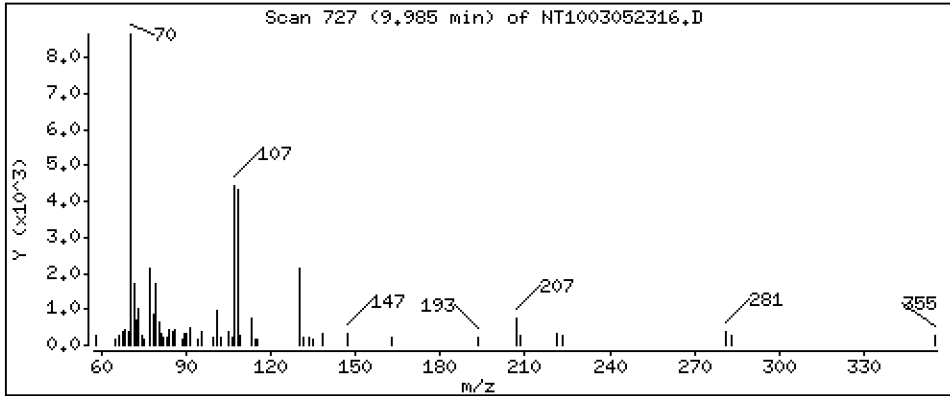
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.2130 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

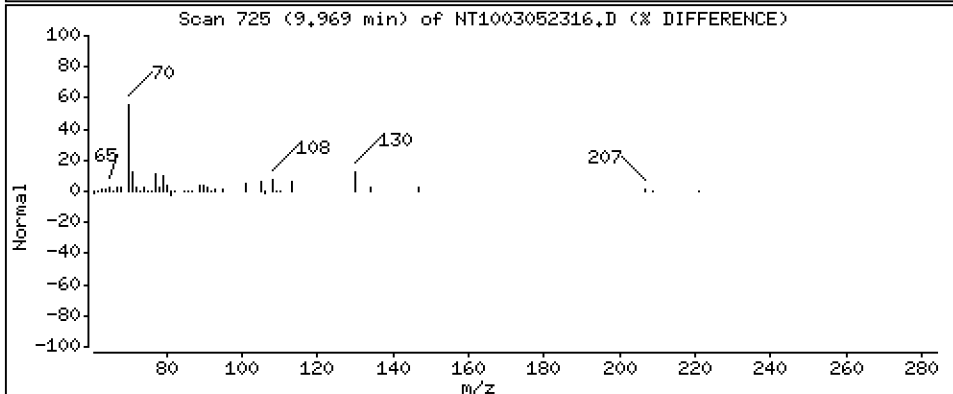
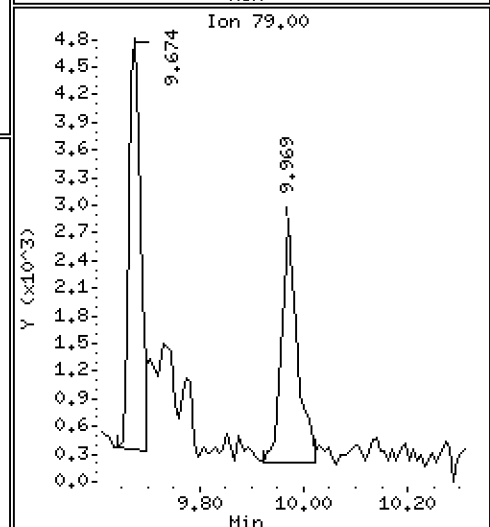
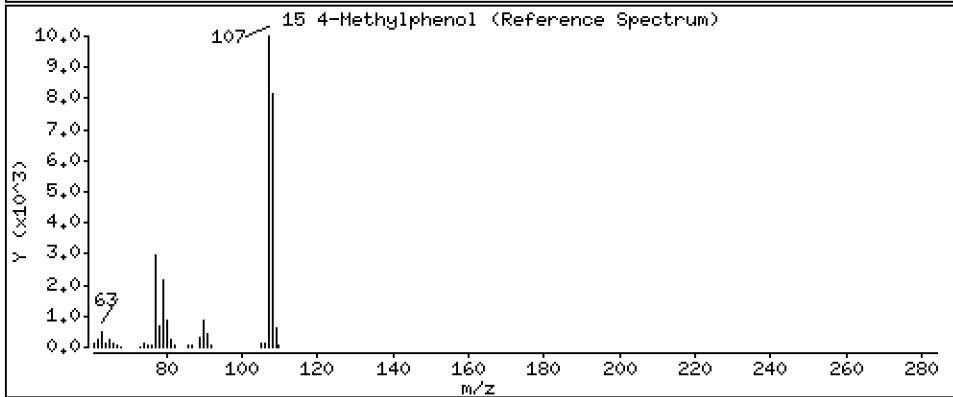
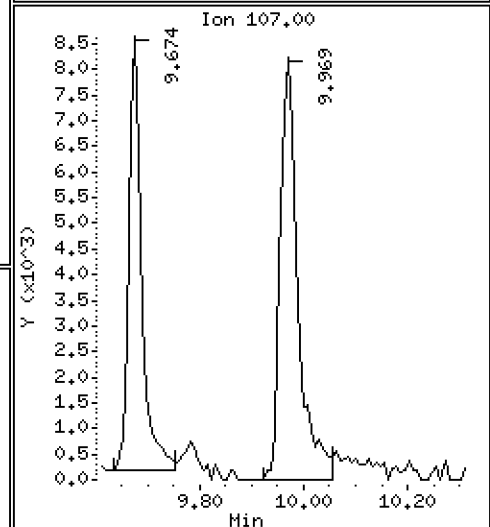
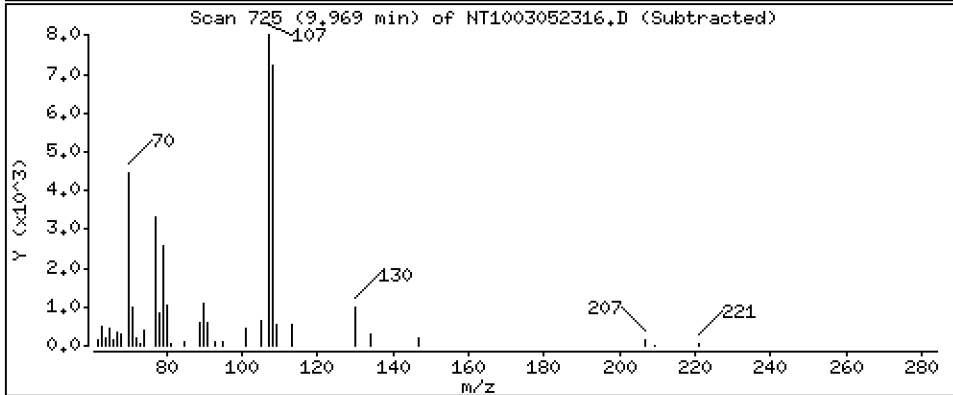
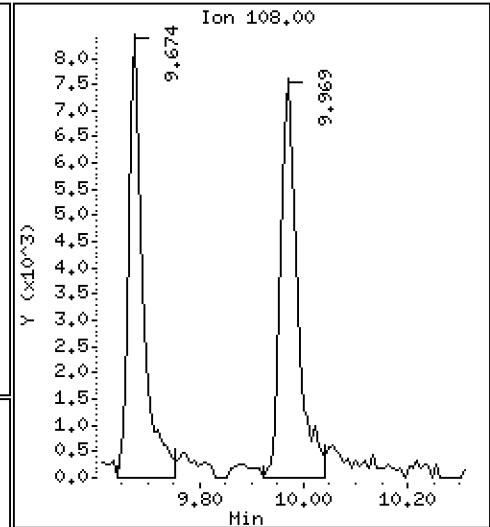
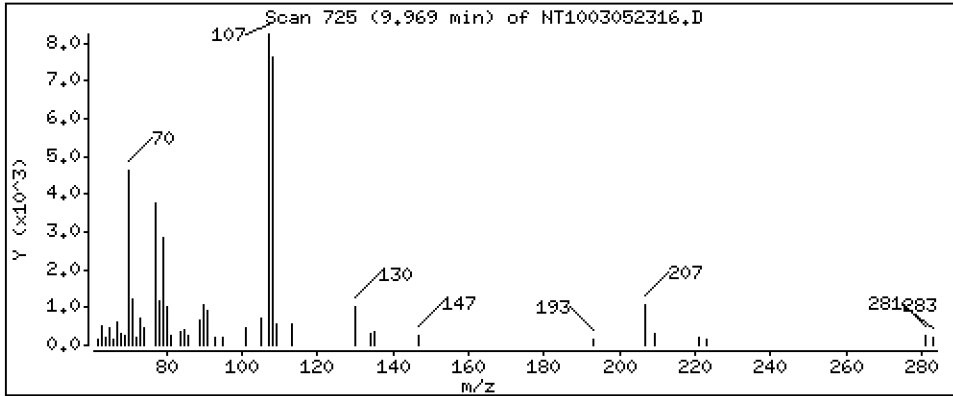
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1483 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

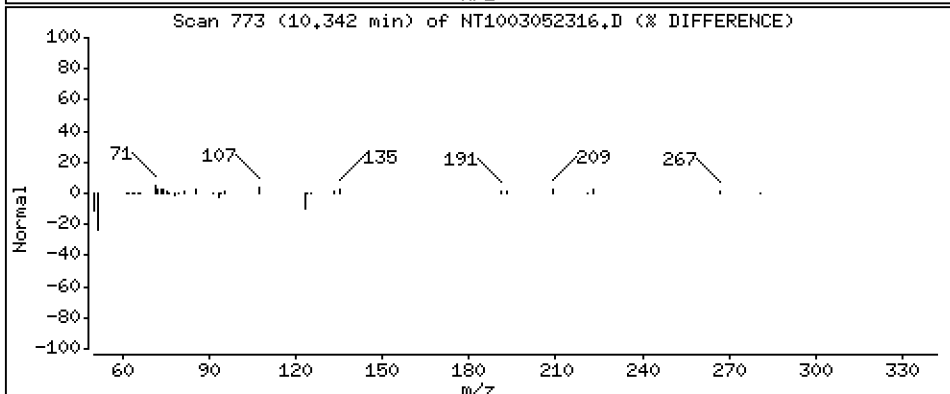
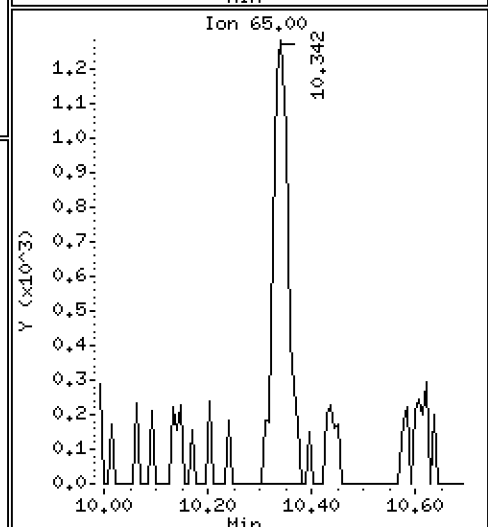
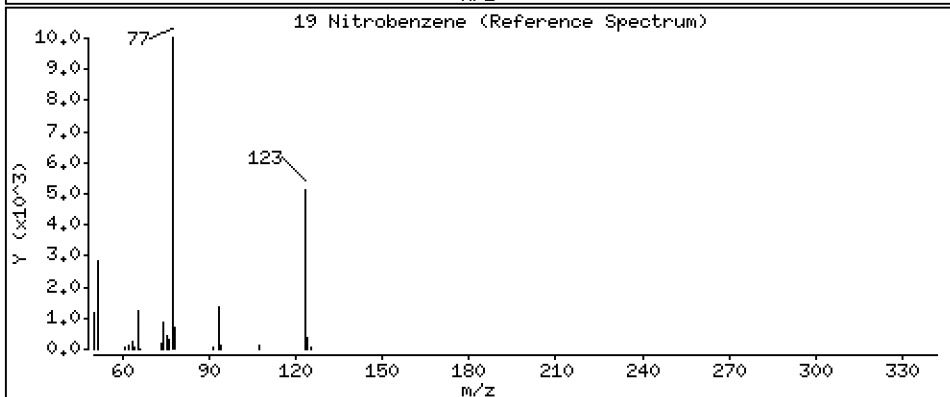
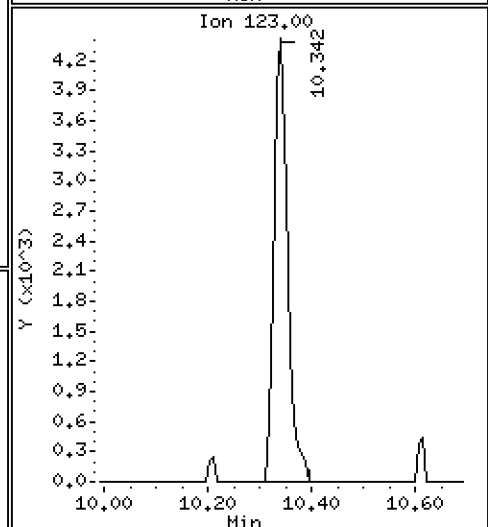
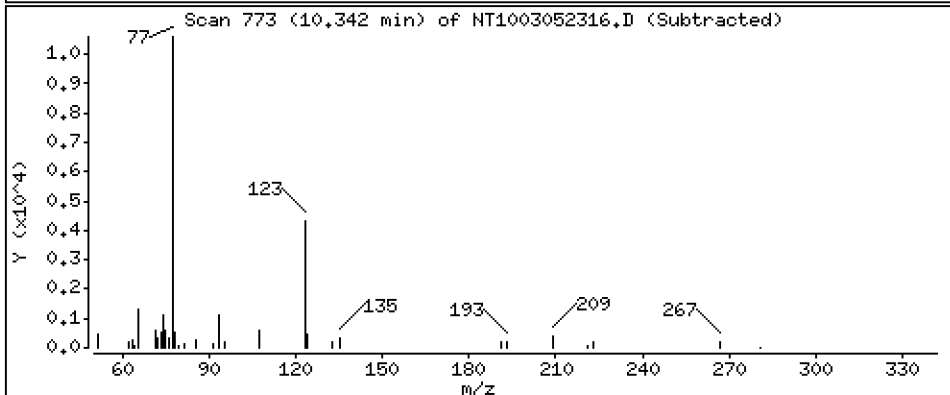
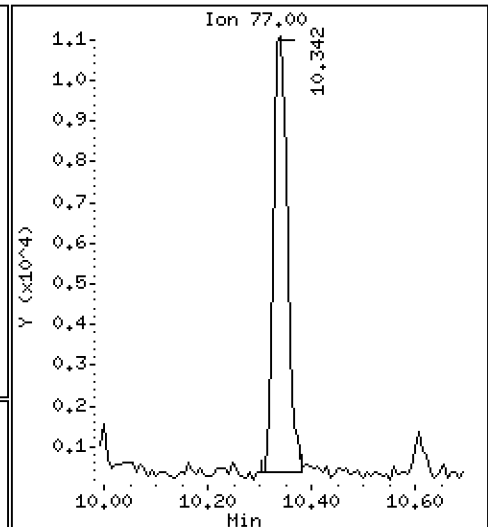
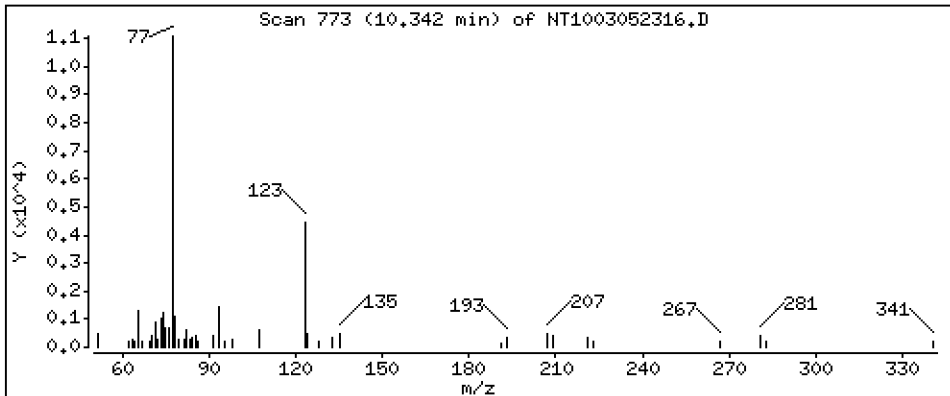
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,1752 ug/mL

19 Nitrobenzene



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

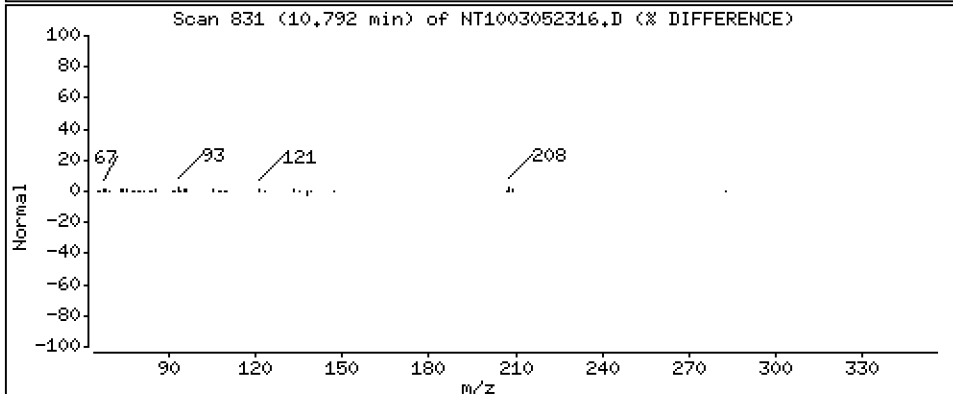
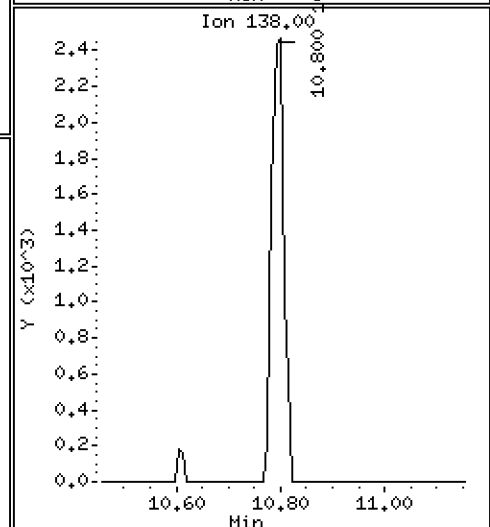
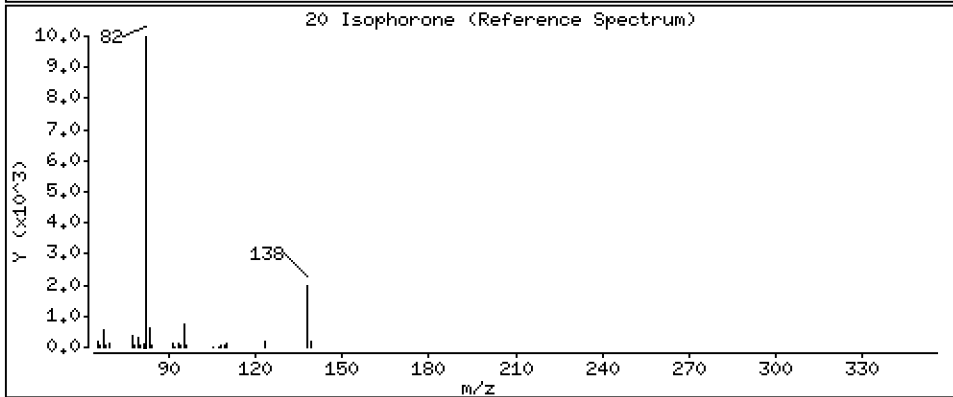
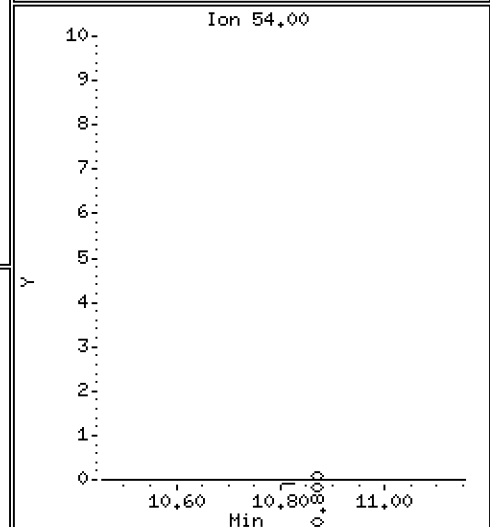
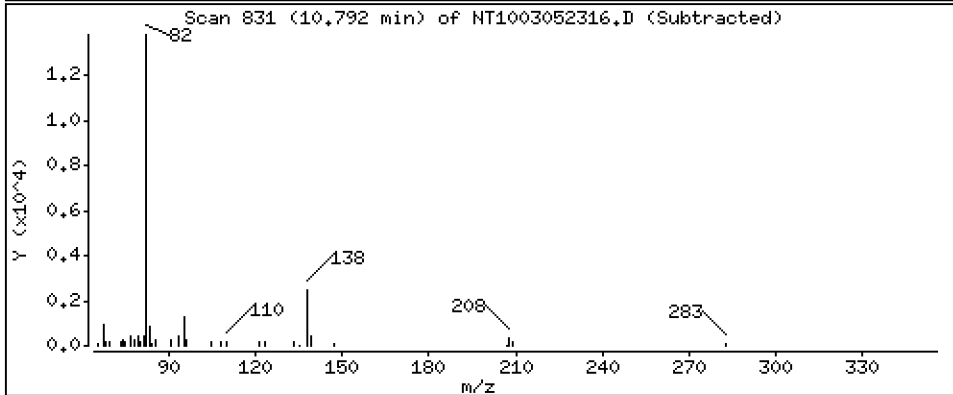
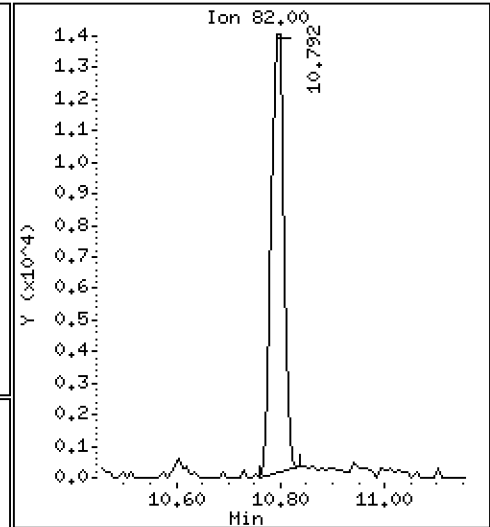
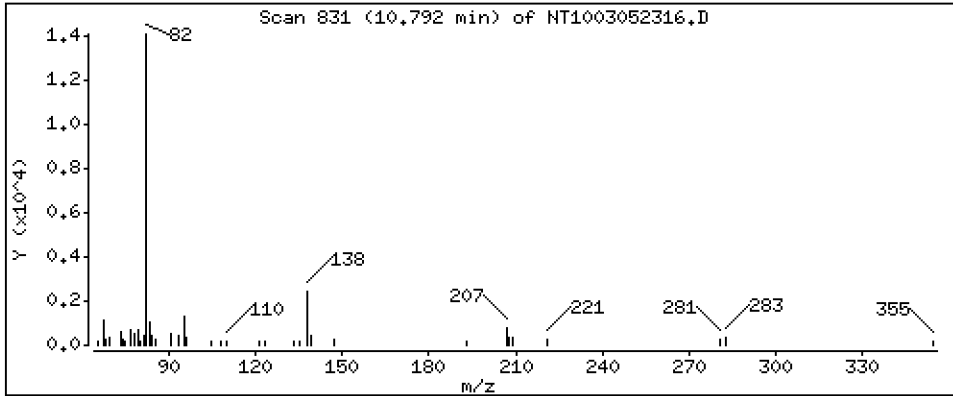
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

20 Isophorone

Concentration: 0.1613 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

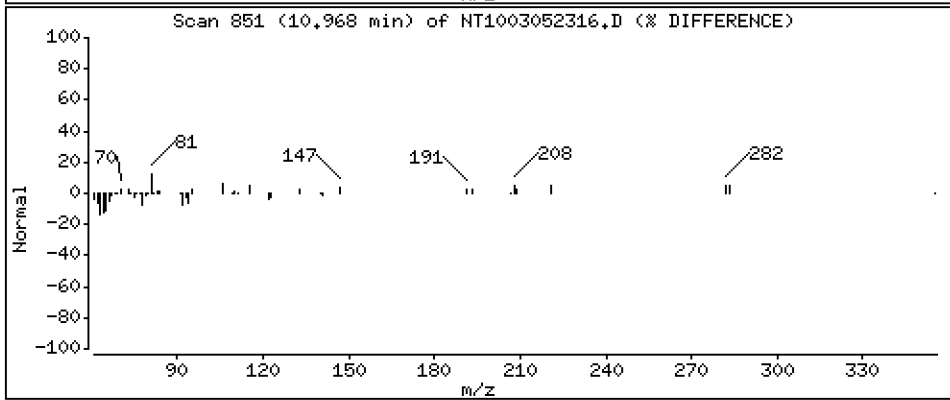
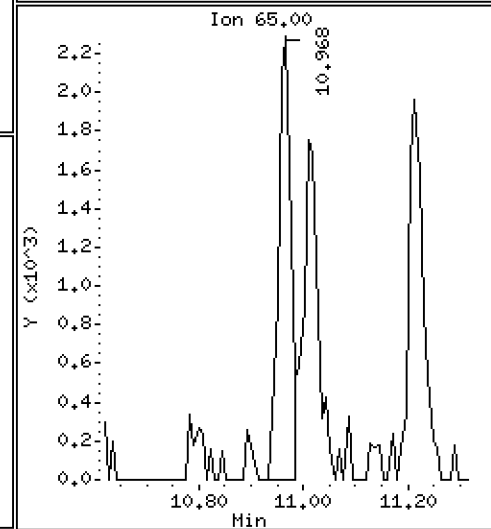
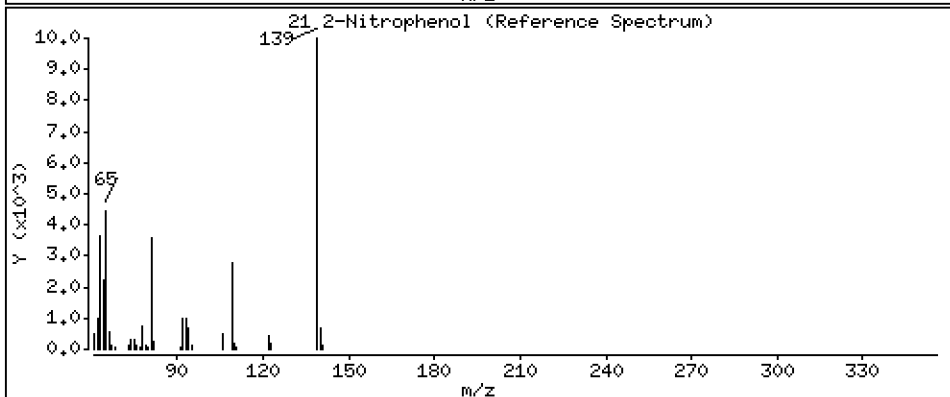
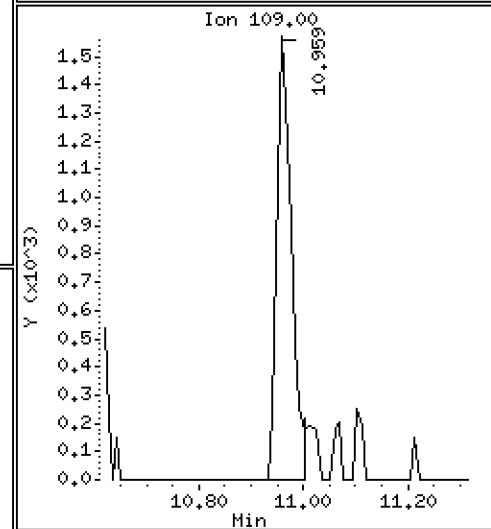
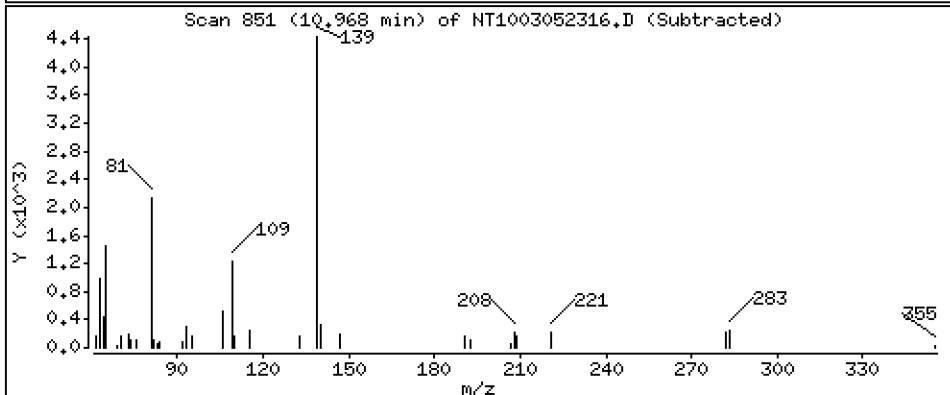
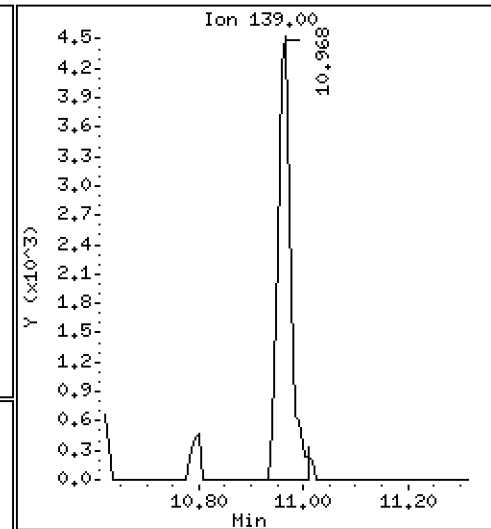
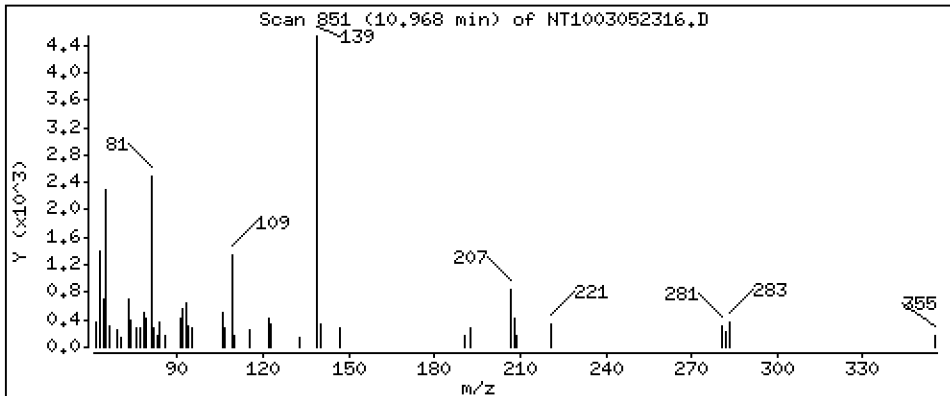
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1286 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

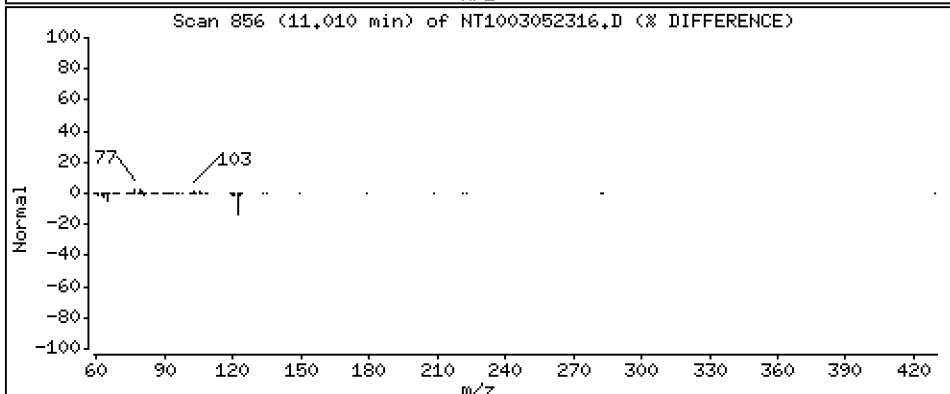
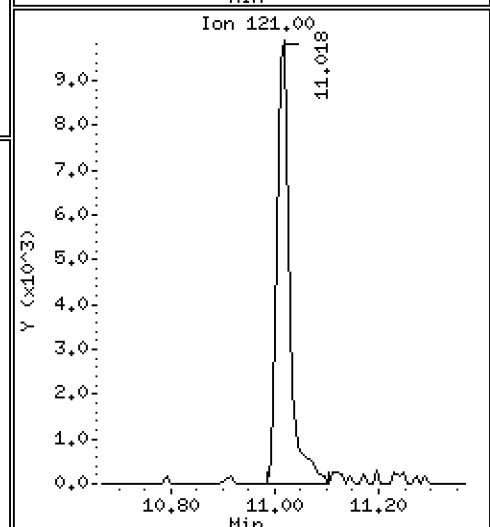
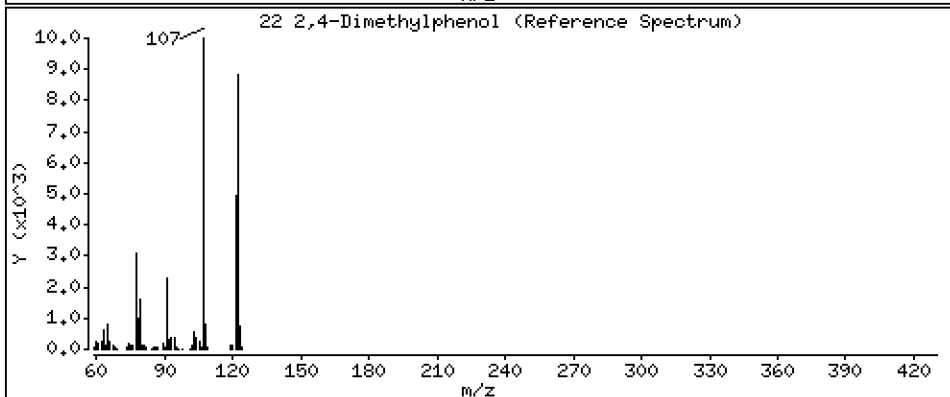
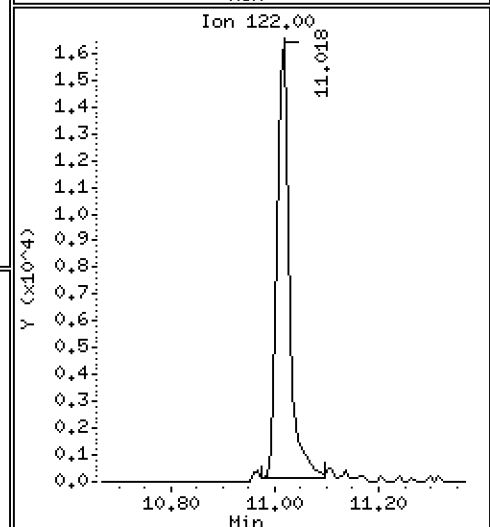
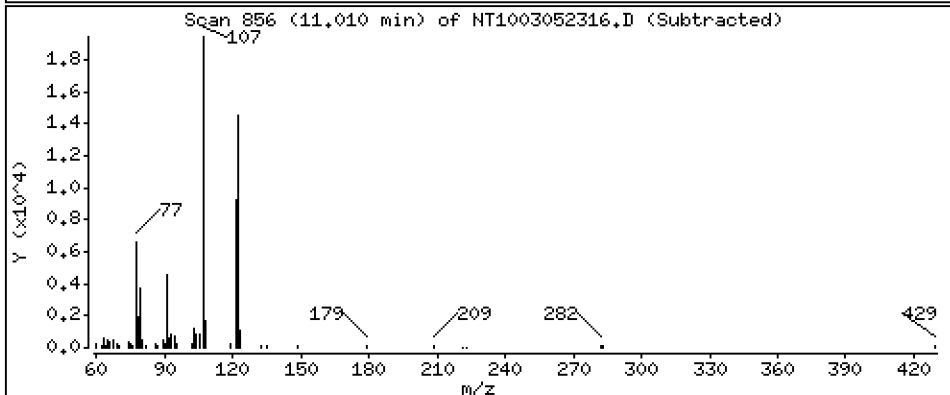
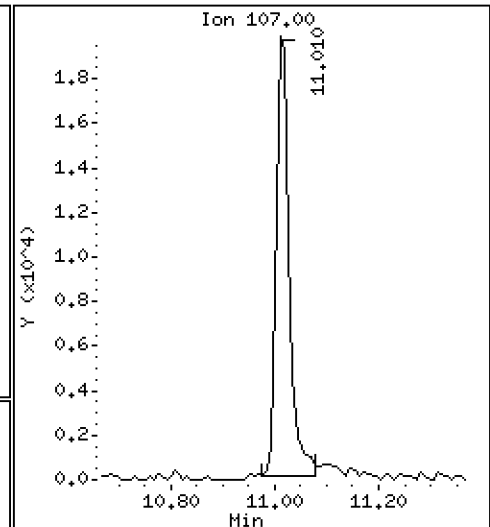
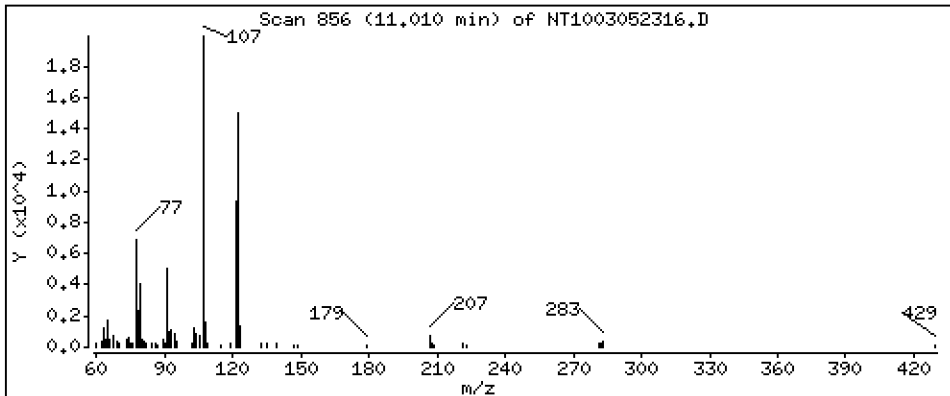
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.3387 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

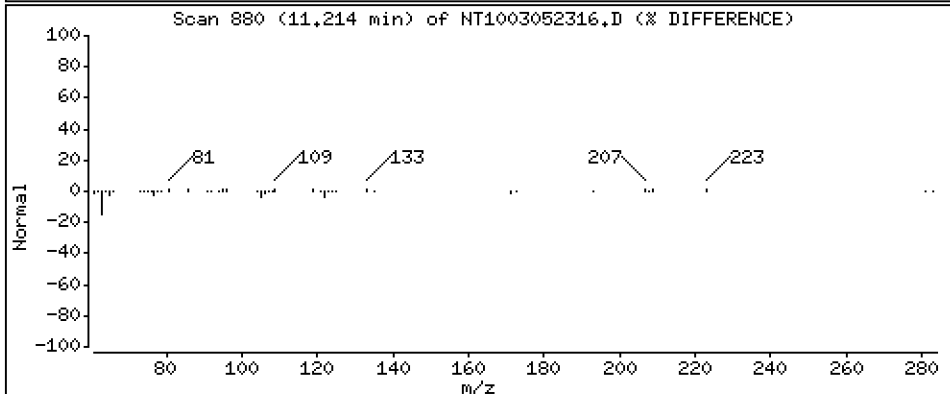
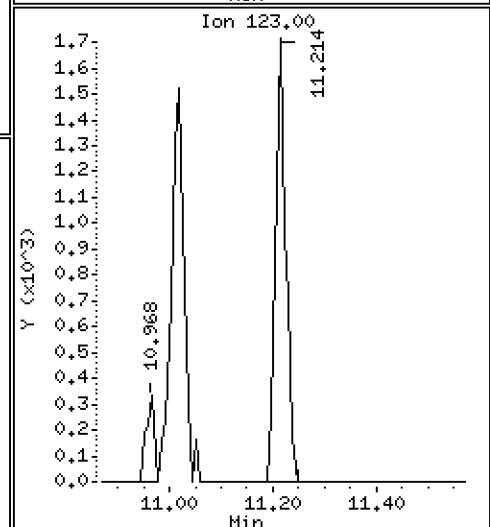
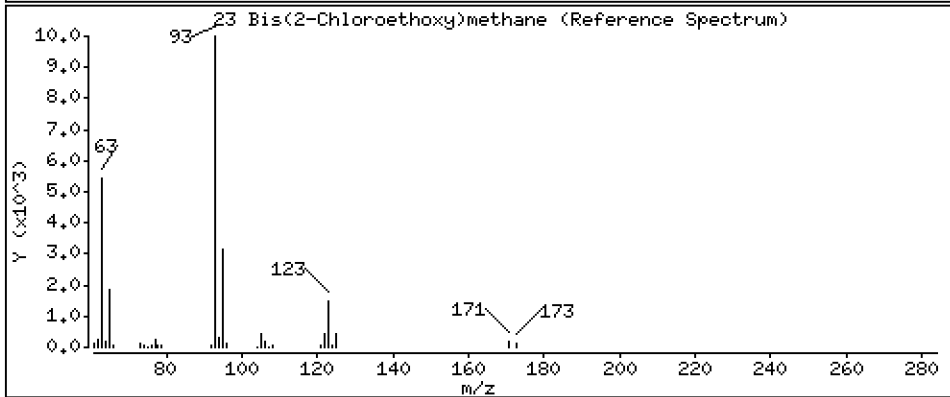
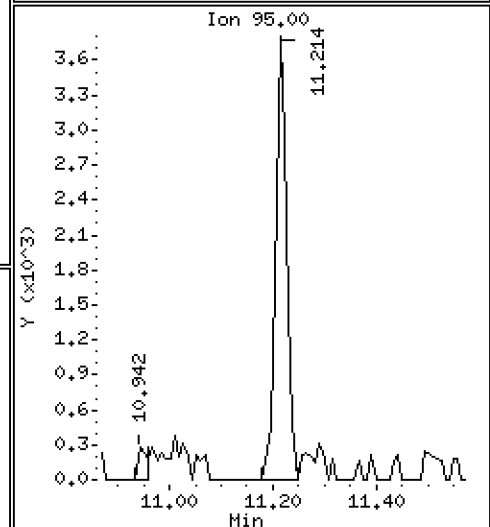
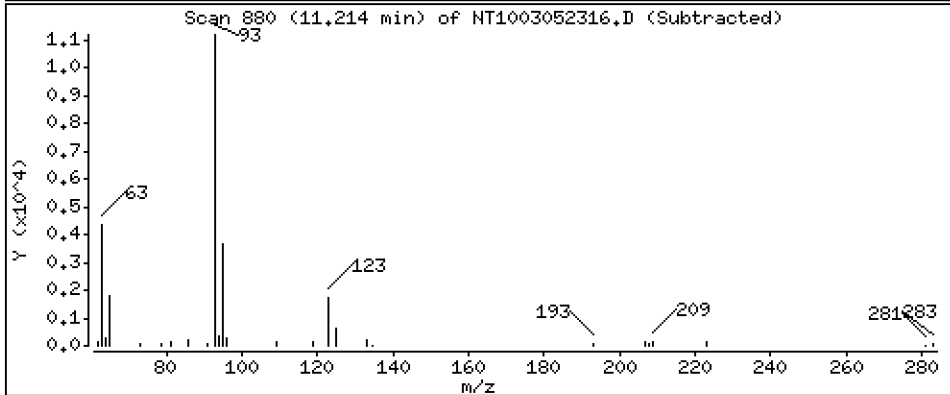
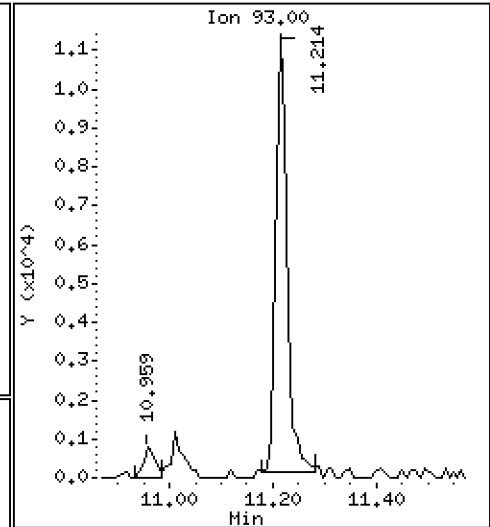
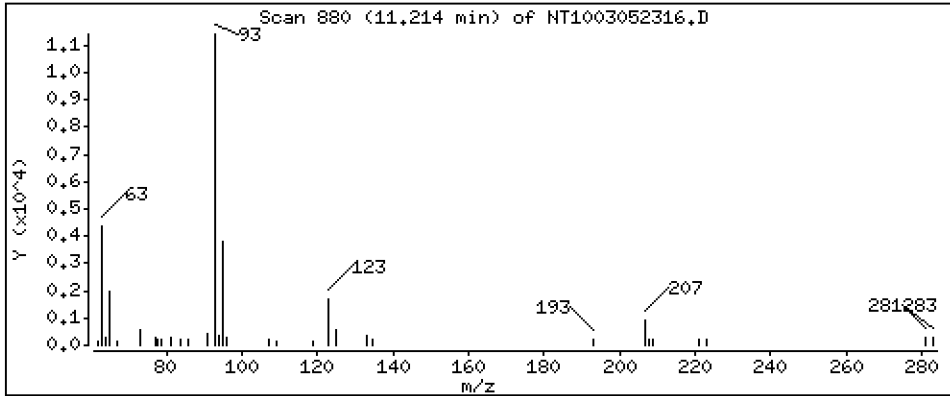
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

23 Bis(2-Chloroethoxy)methane

Concentration: 0.2003 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

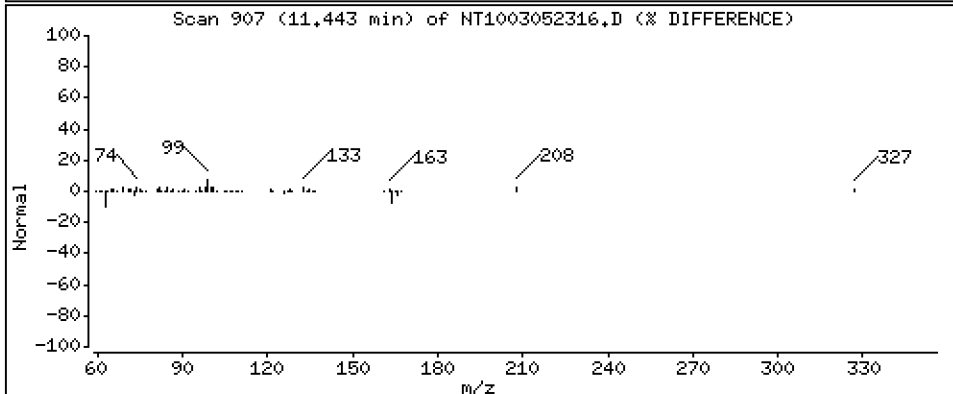
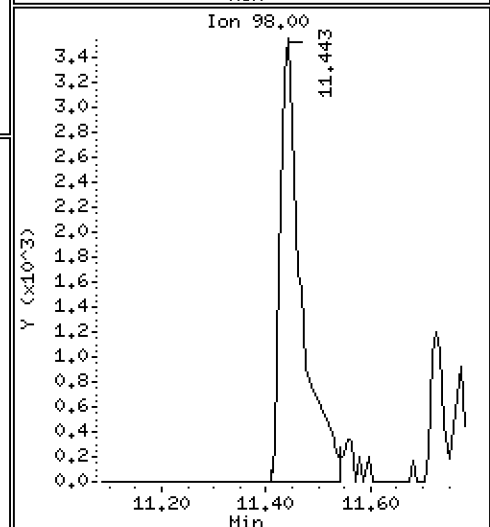
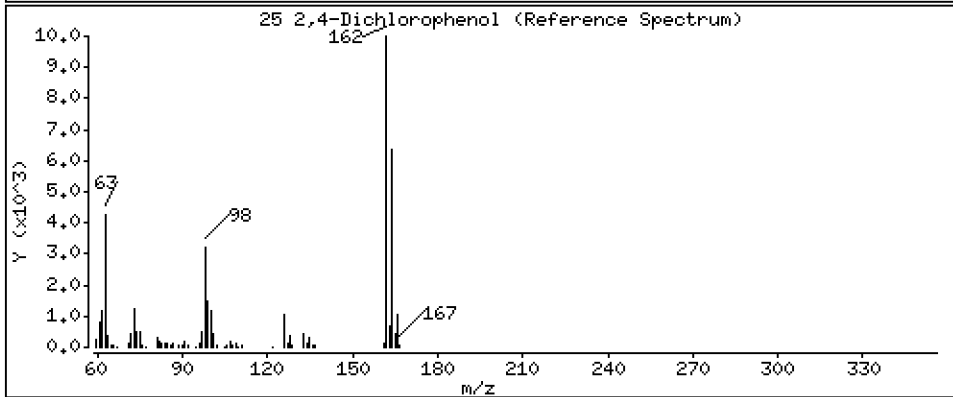
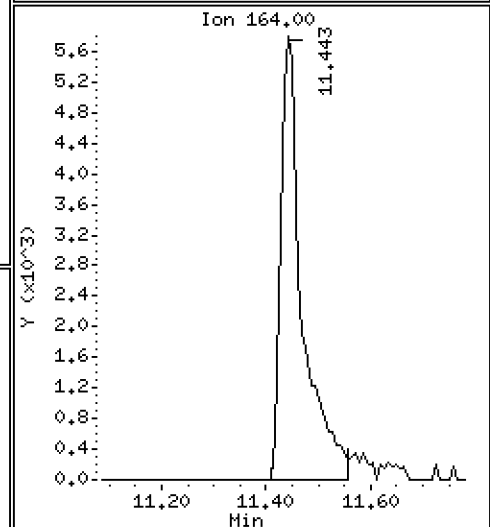
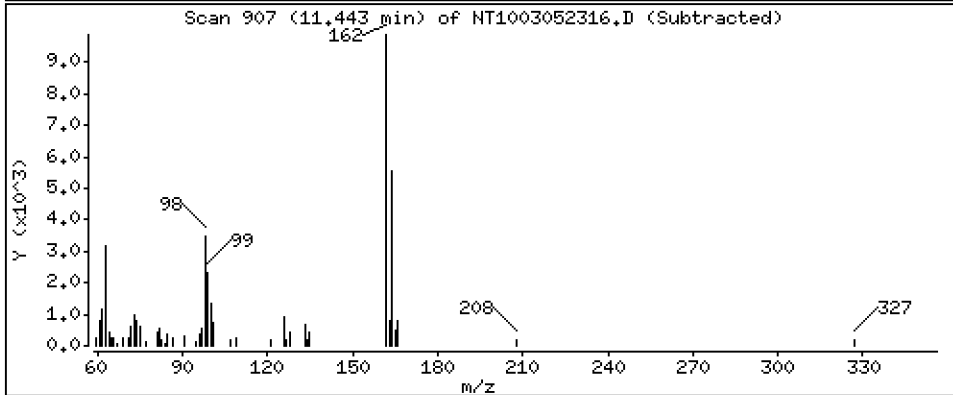
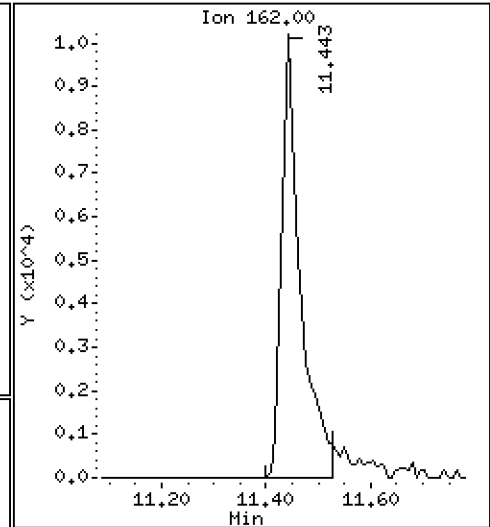
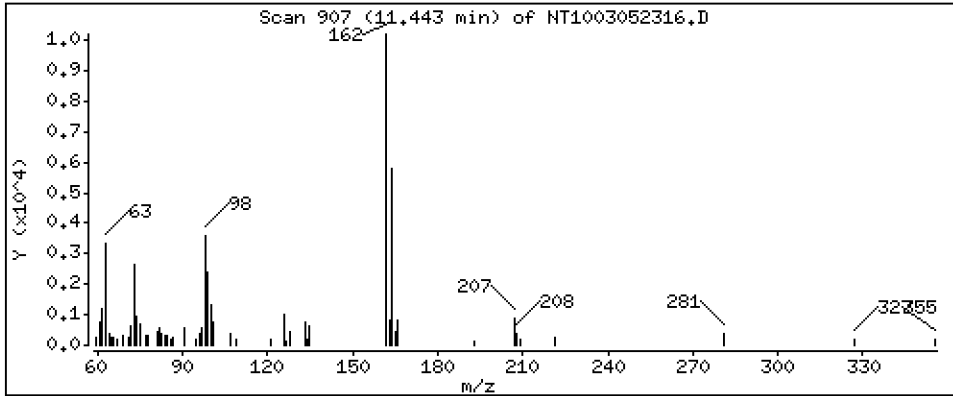
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

25 2,4-Dichlorophenol

Concentration: 0.3387 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

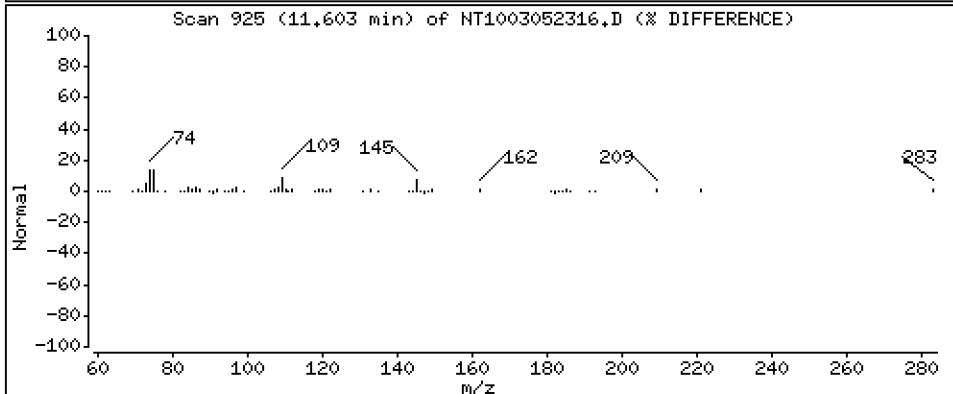
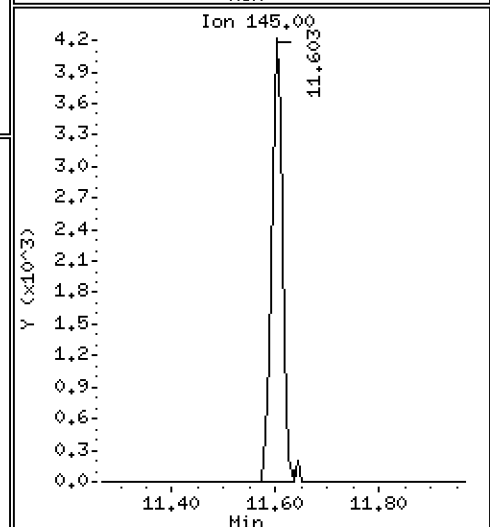
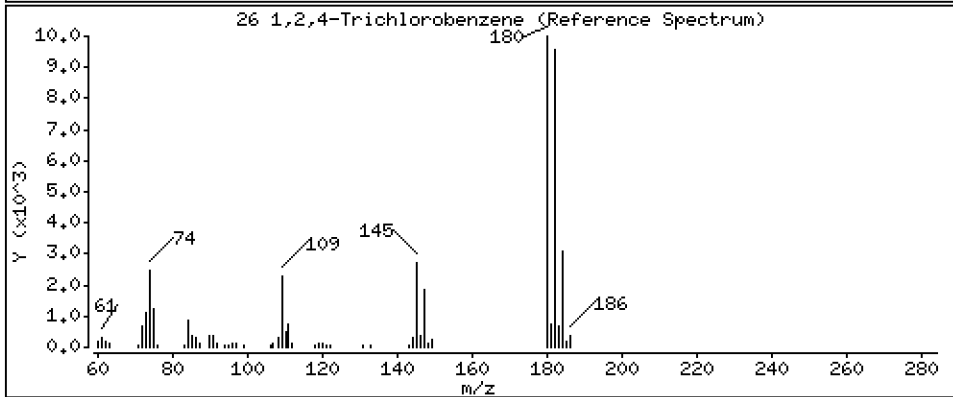
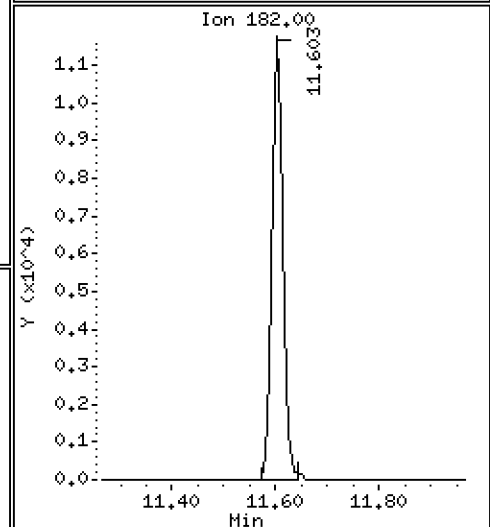
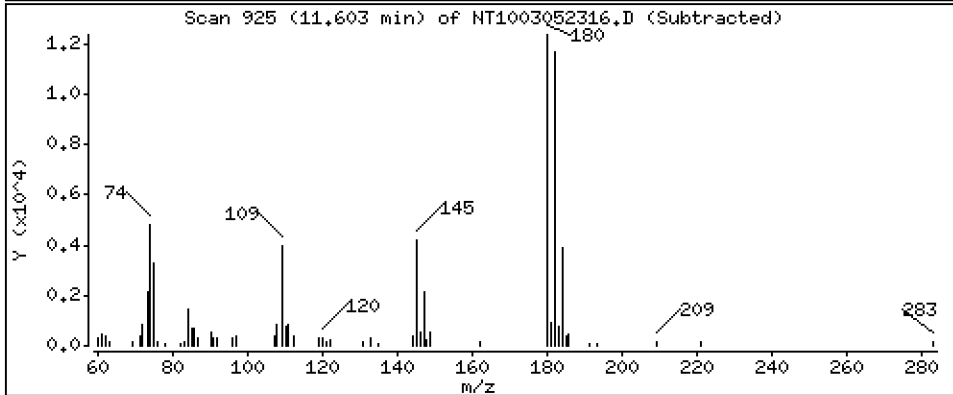
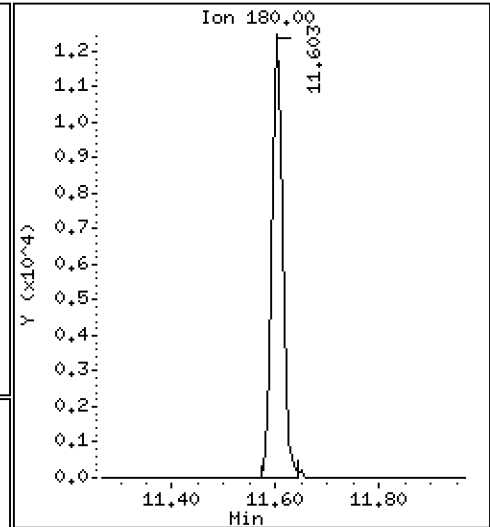
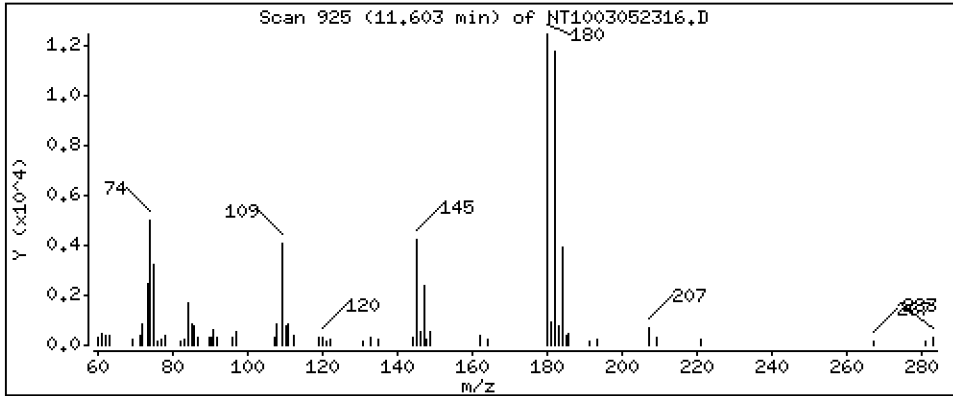
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 0.2309 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

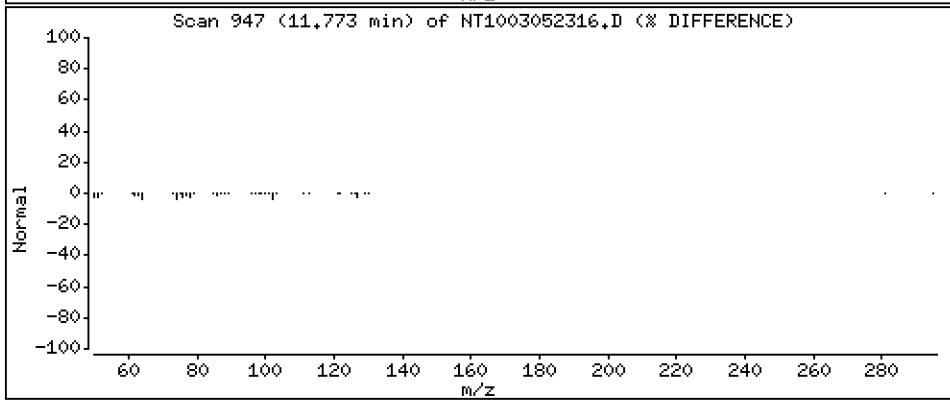
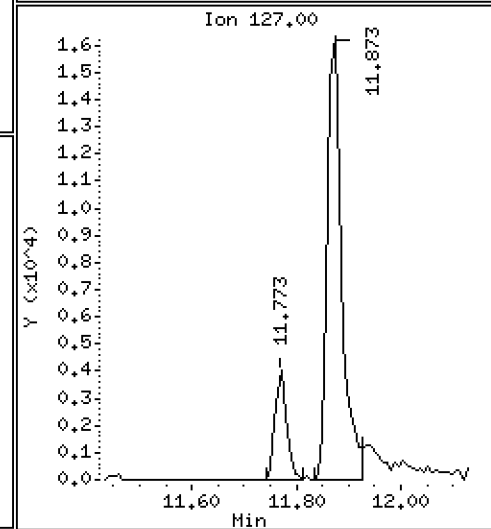
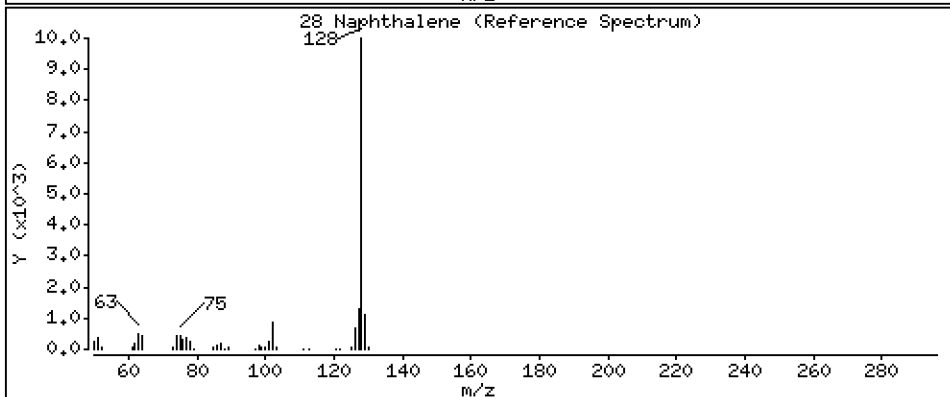
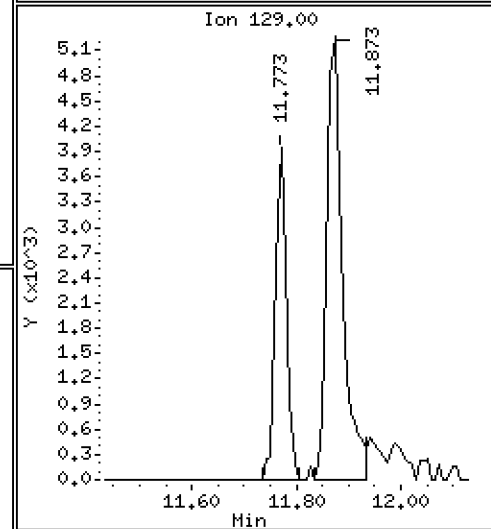
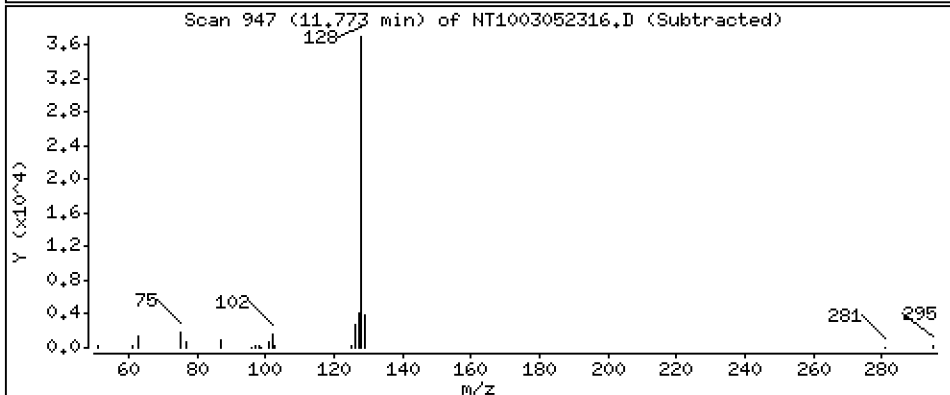
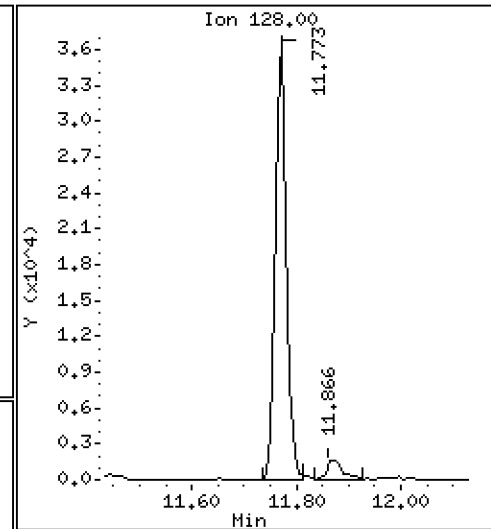
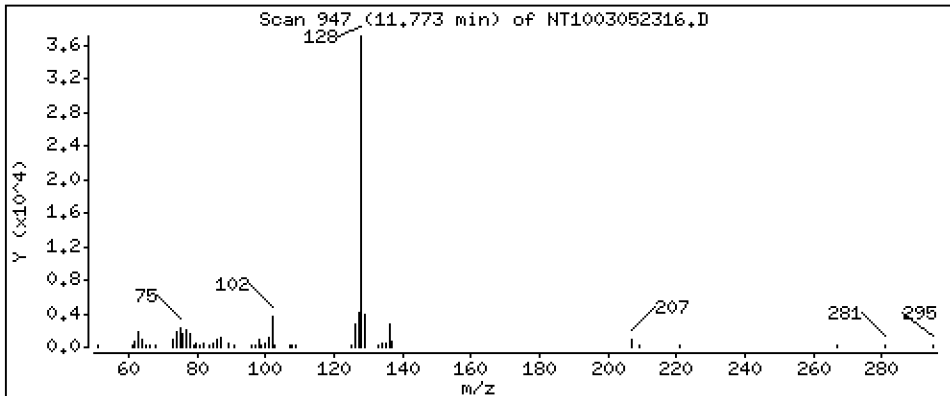
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2025 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

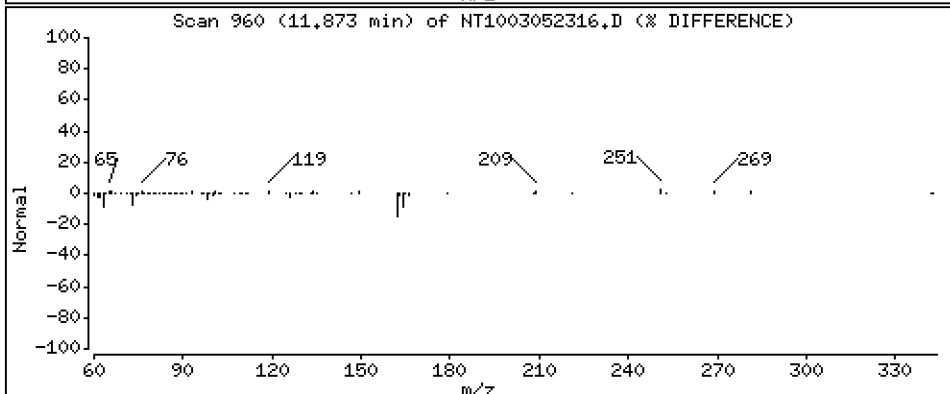
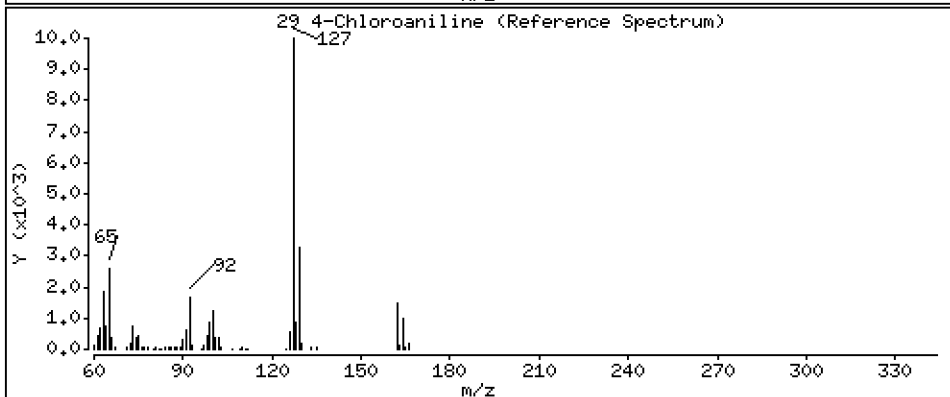
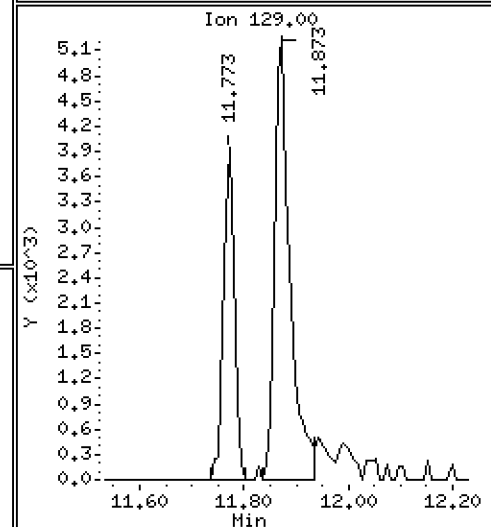
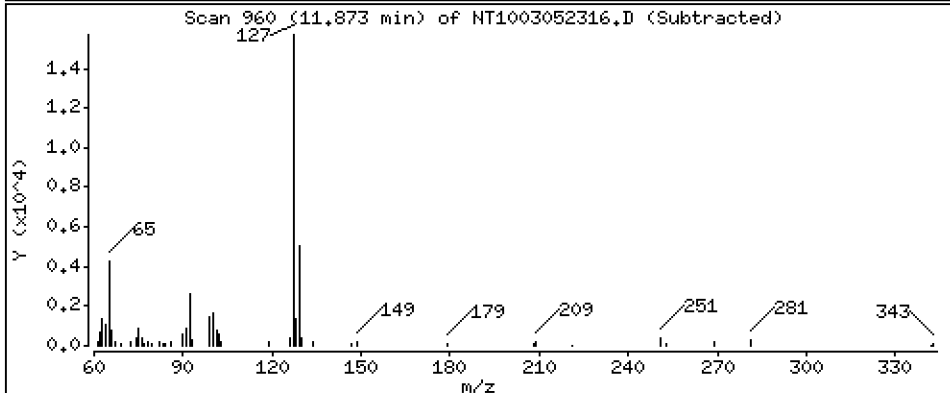
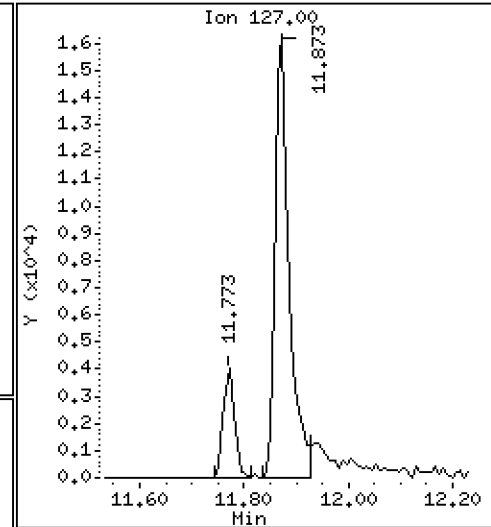
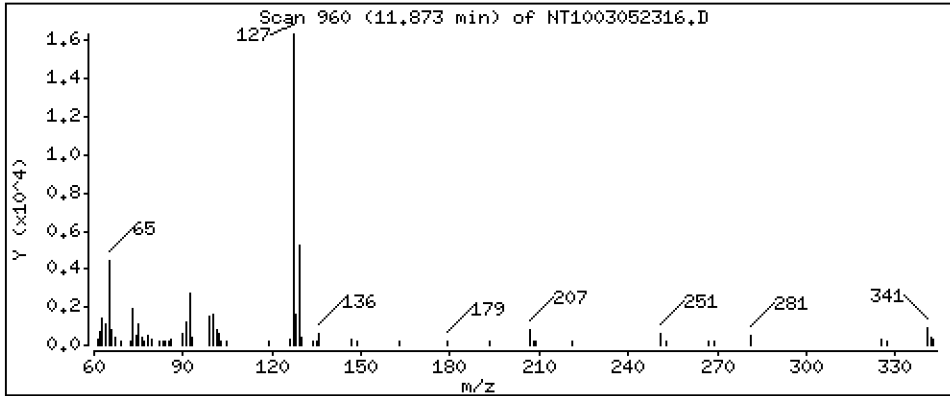
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,2560 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

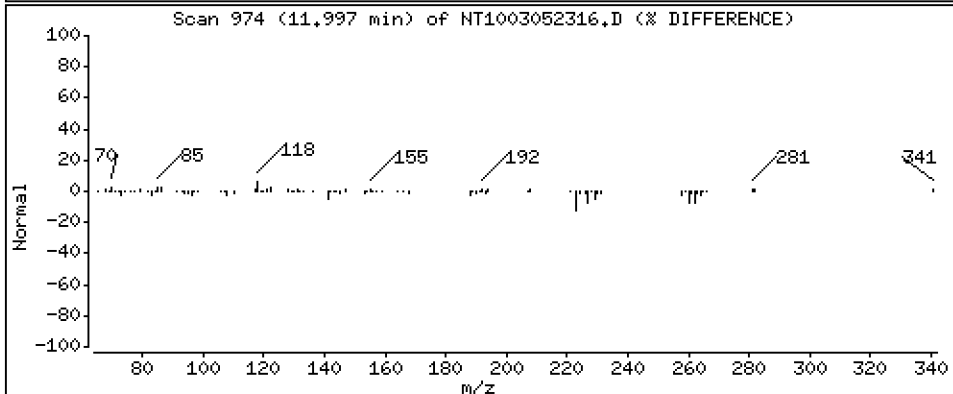
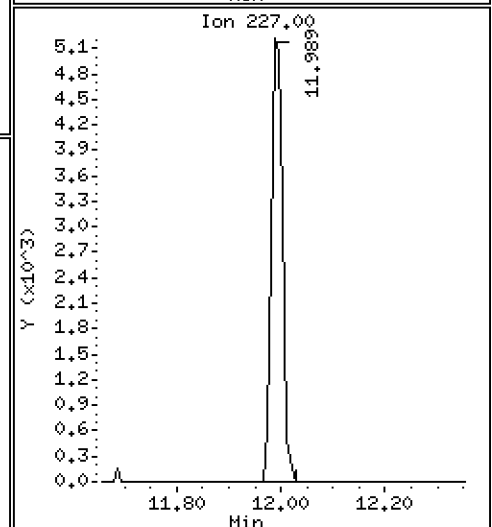
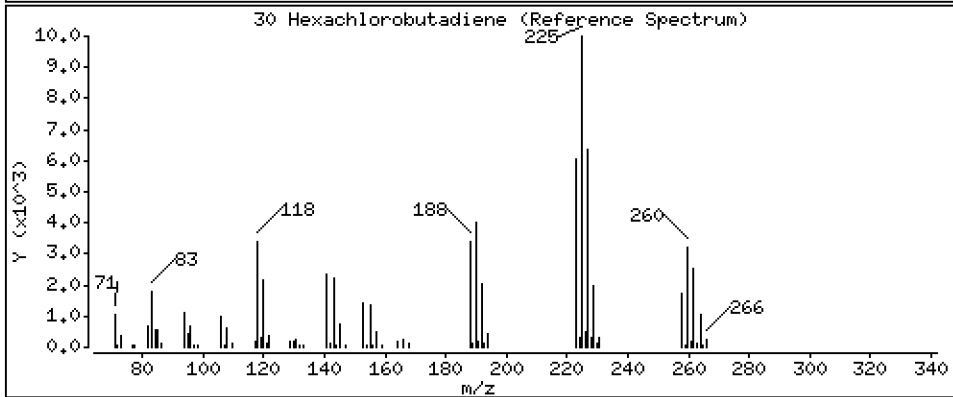
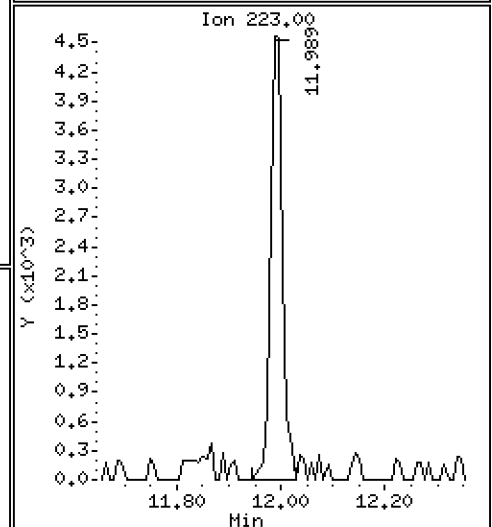
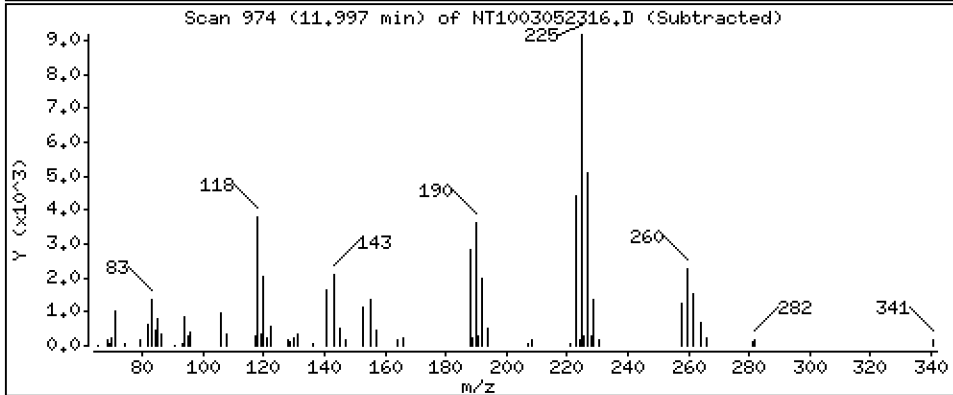
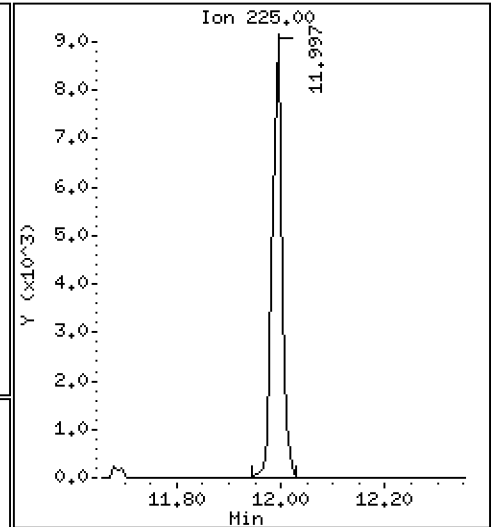
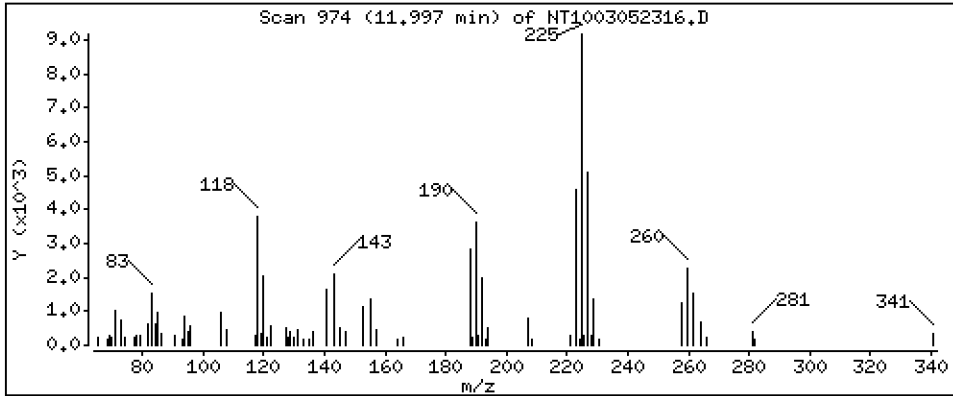
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2510 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

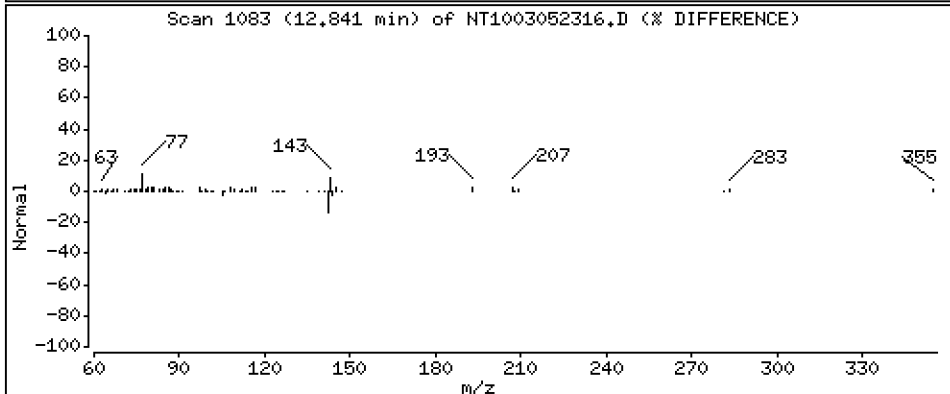
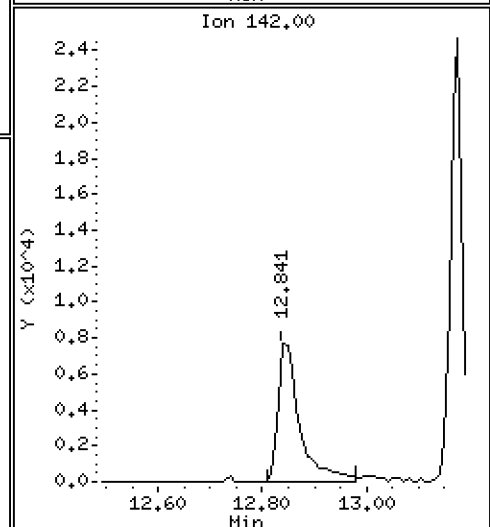
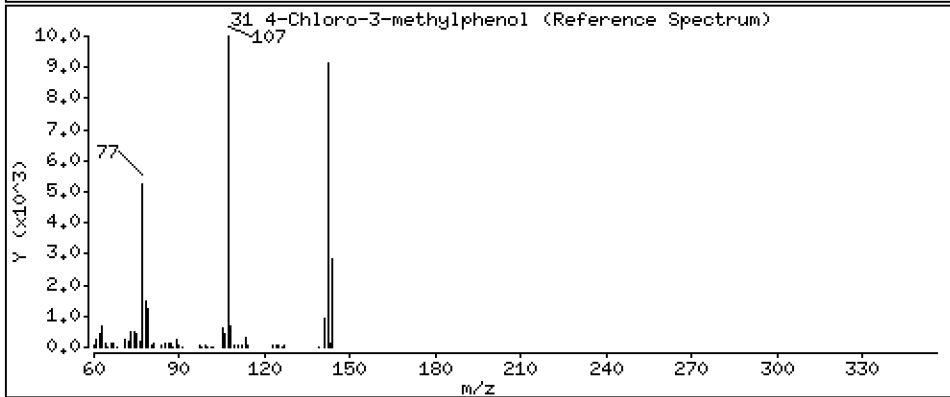
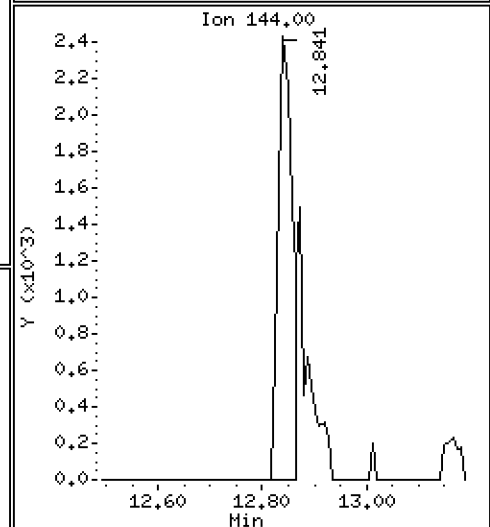
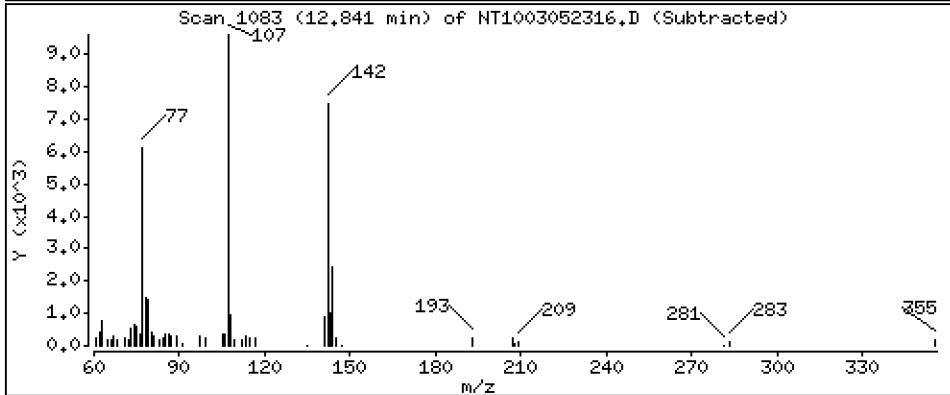
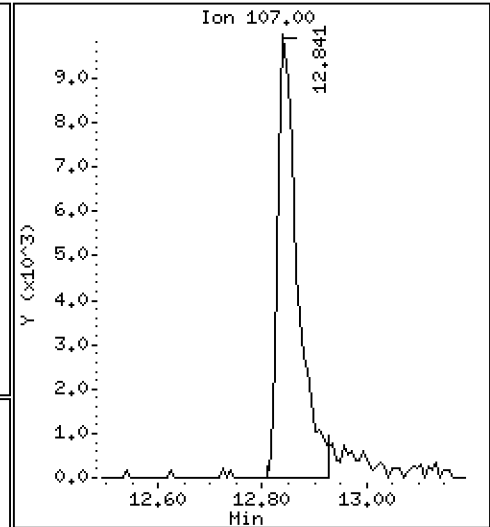
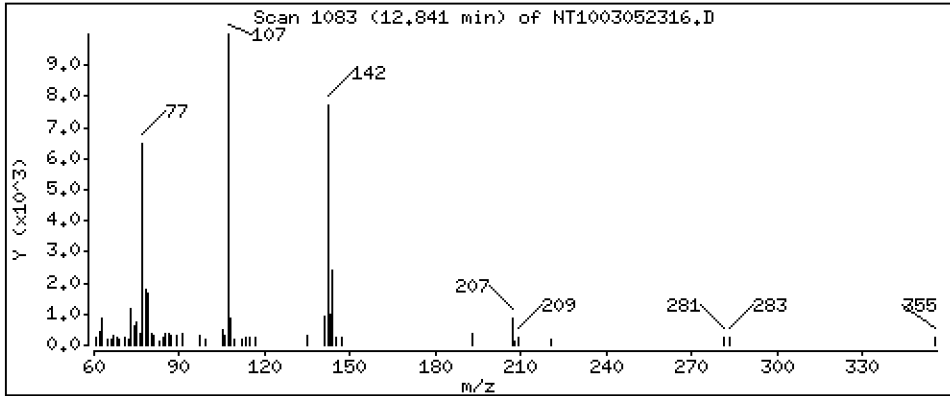
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 0,2986 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

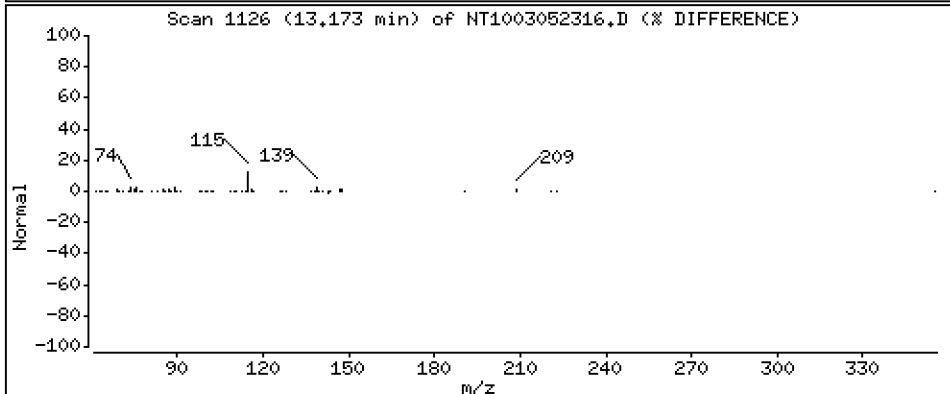
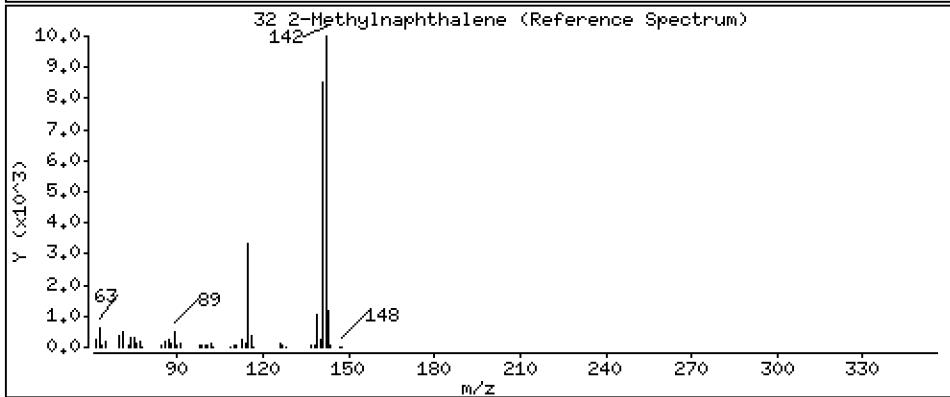
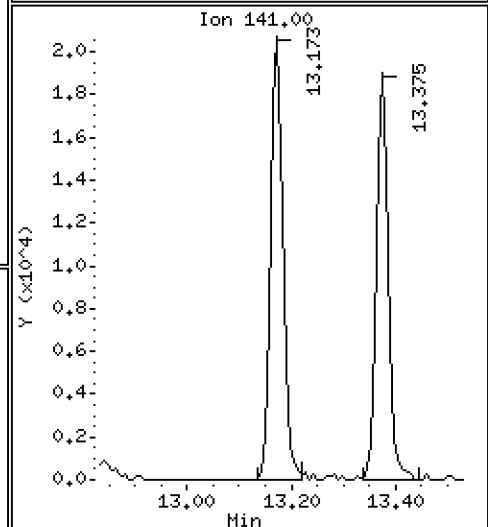
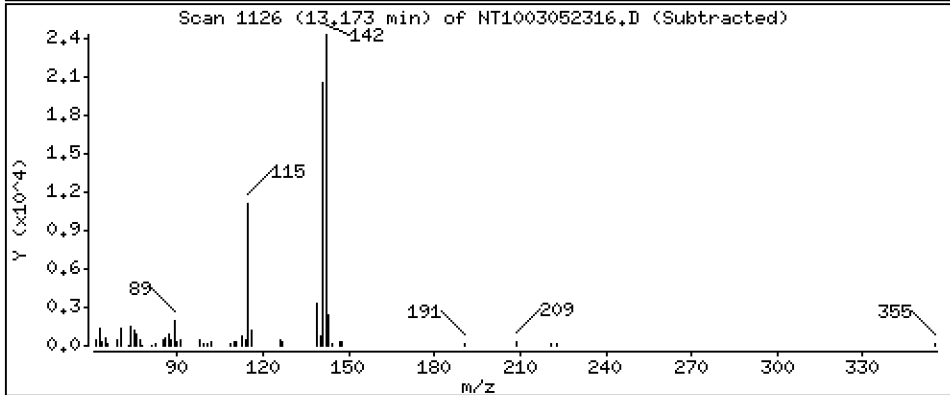
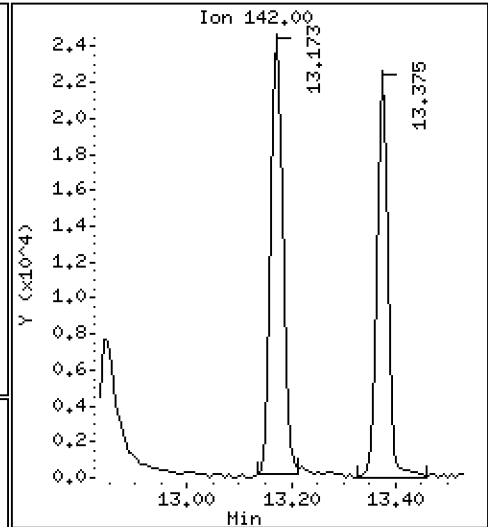
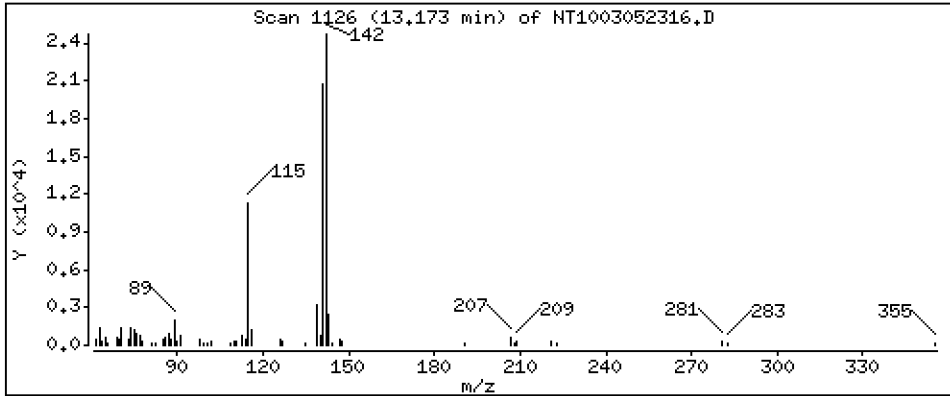
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1967 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

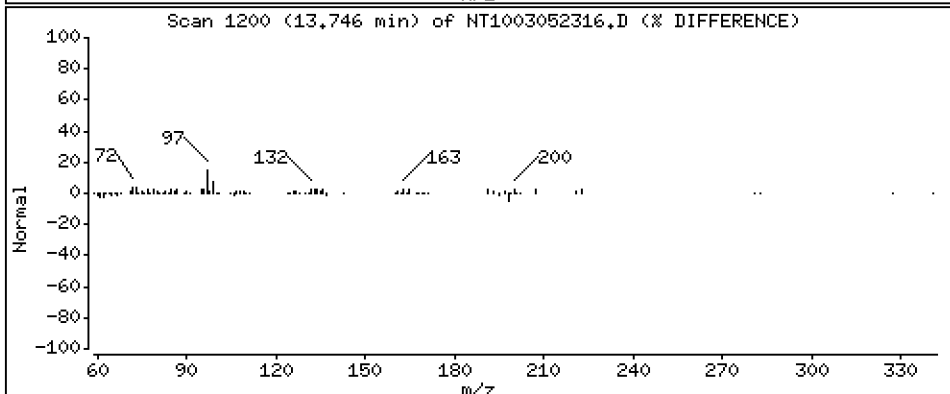
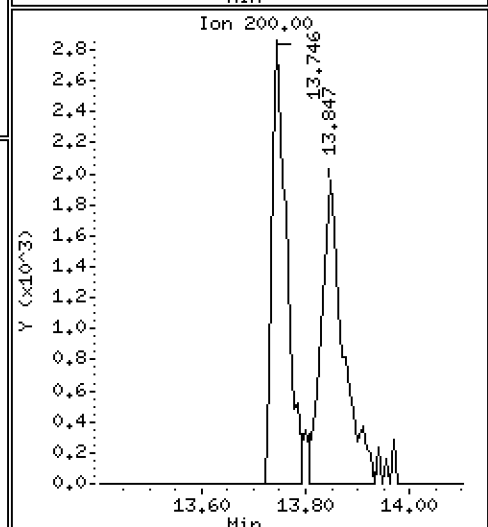
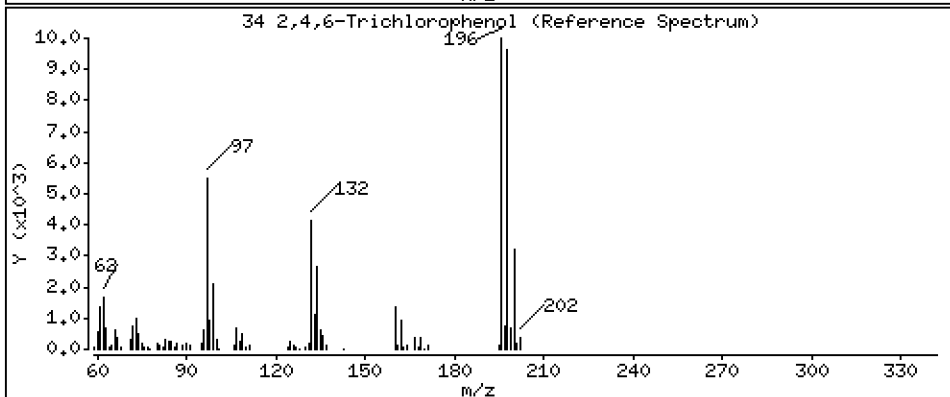
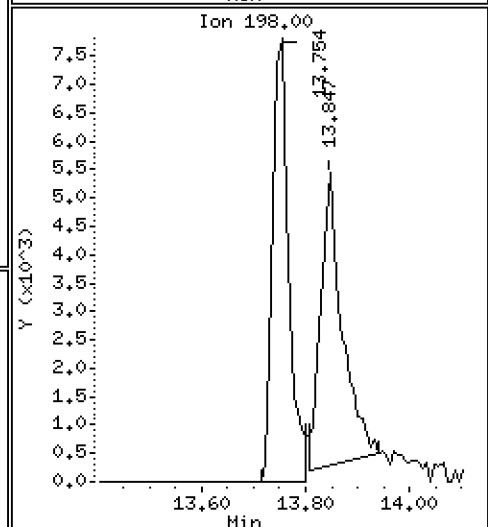
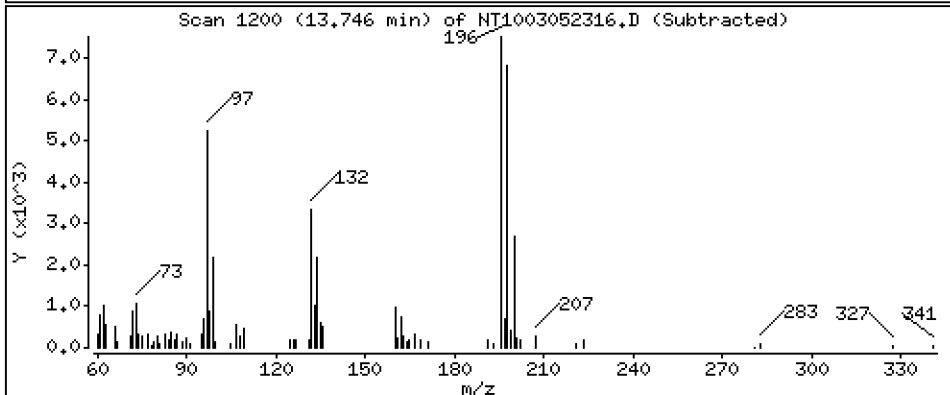
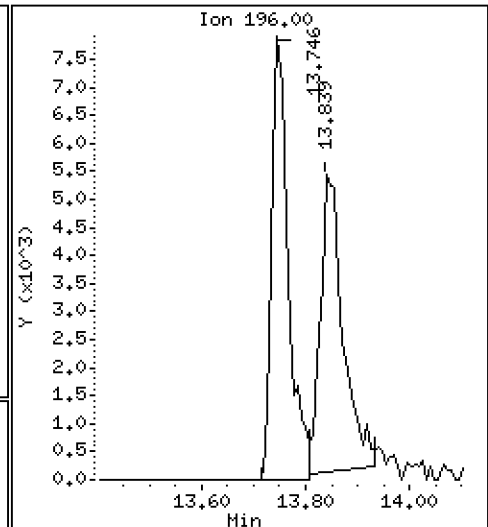
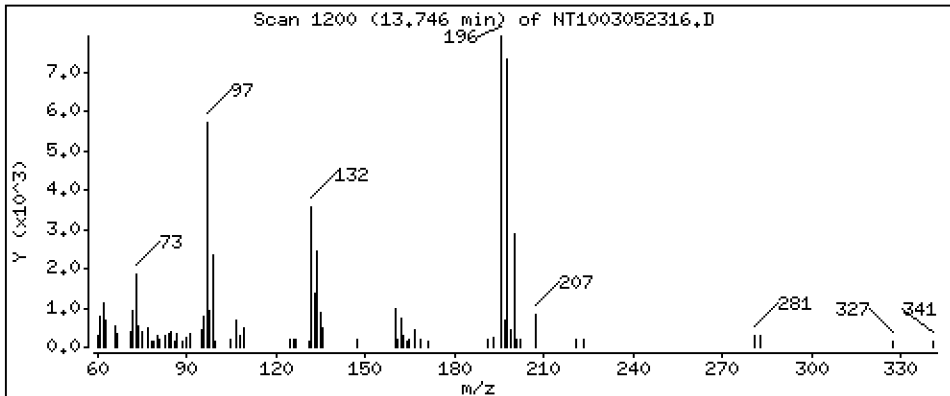
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

34 2,4,6-Trichlorophenol

Concentration: 0.3294 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

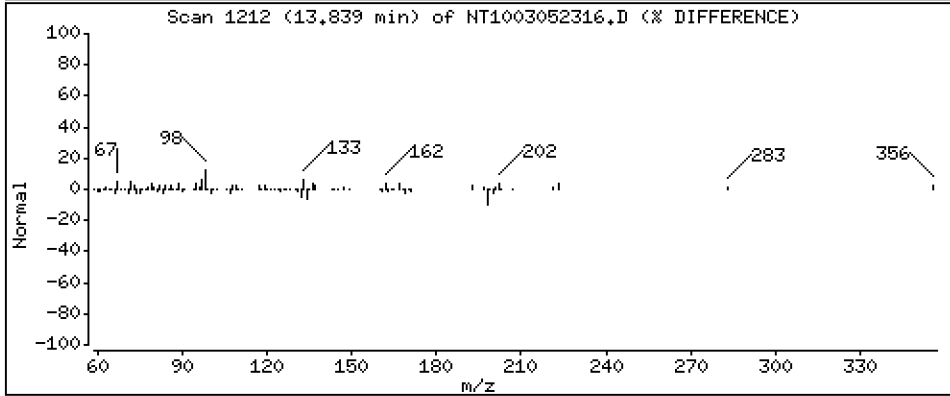
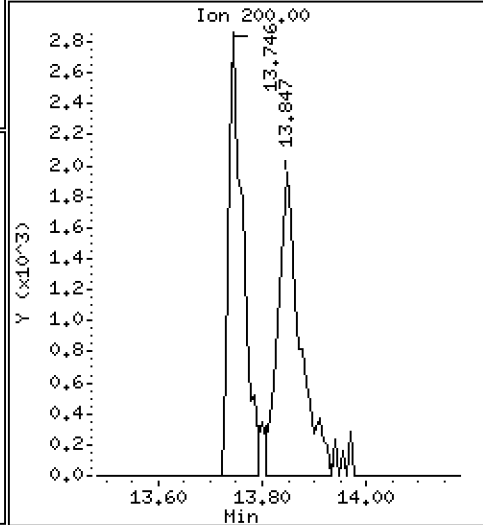
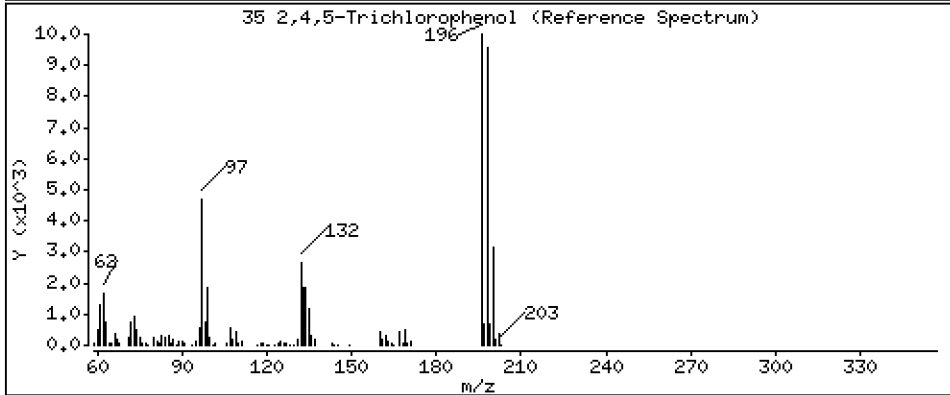
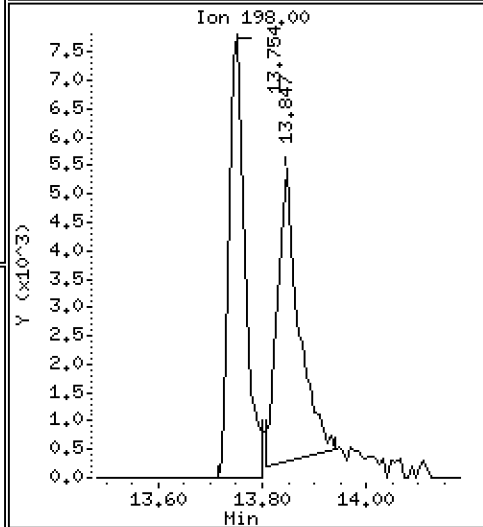
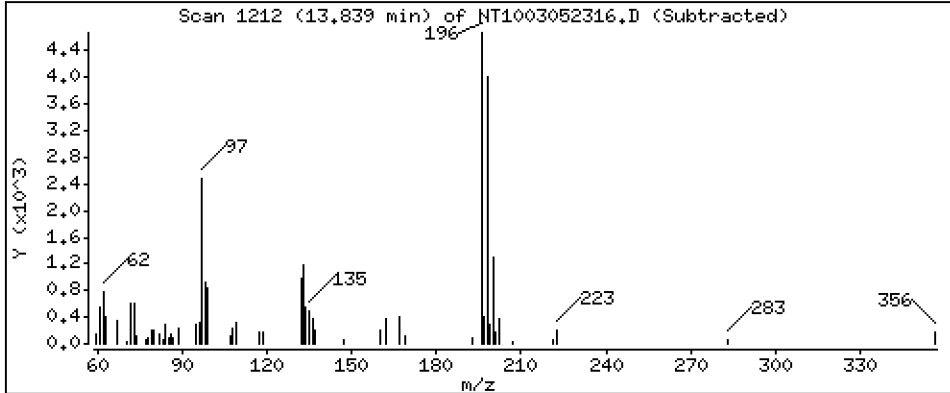
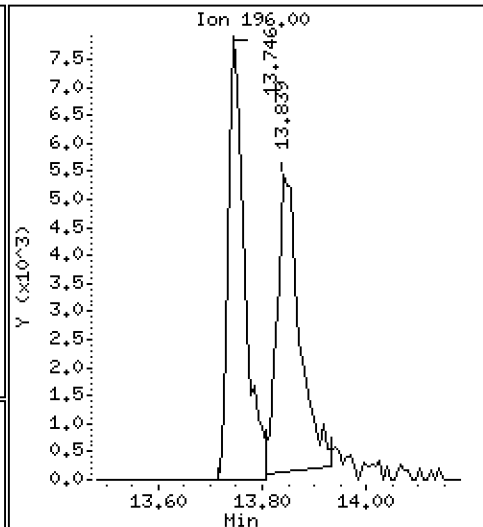
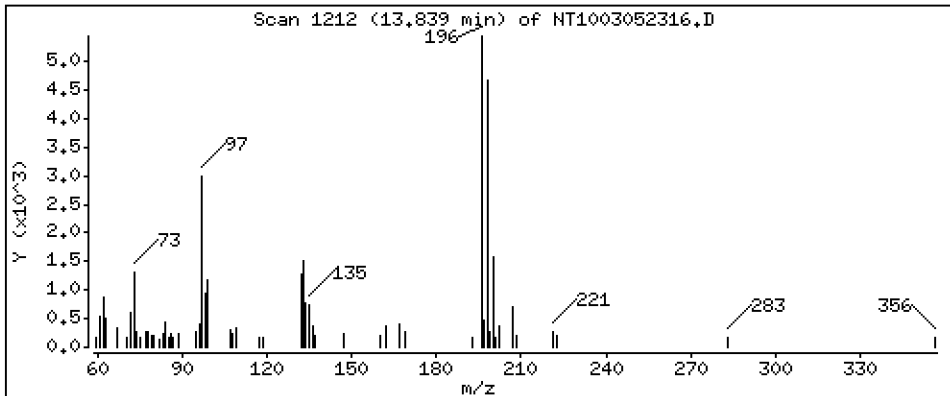
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2931 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

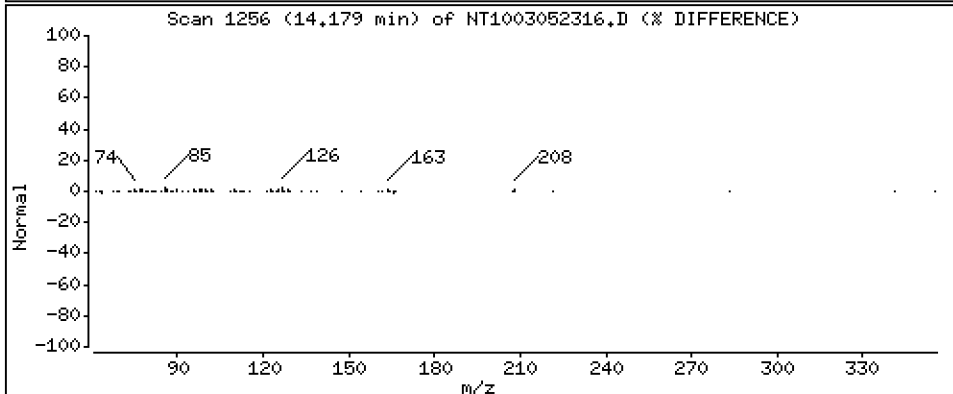
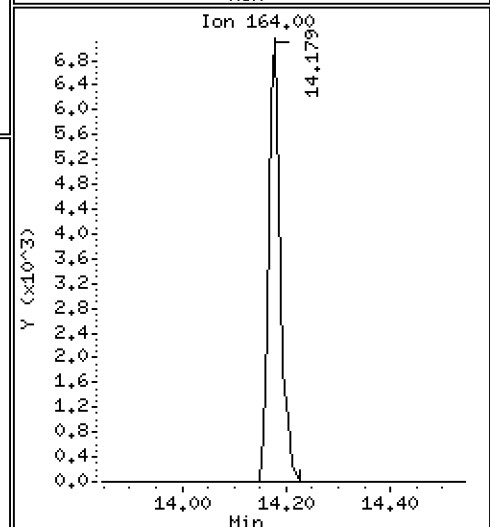
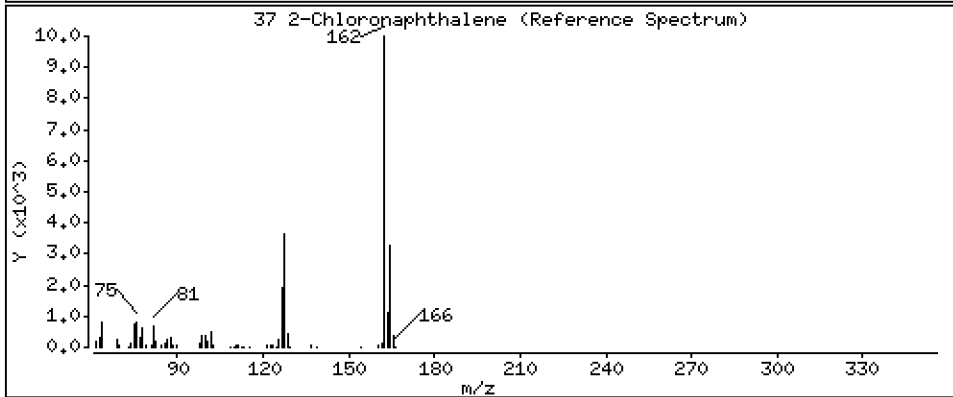
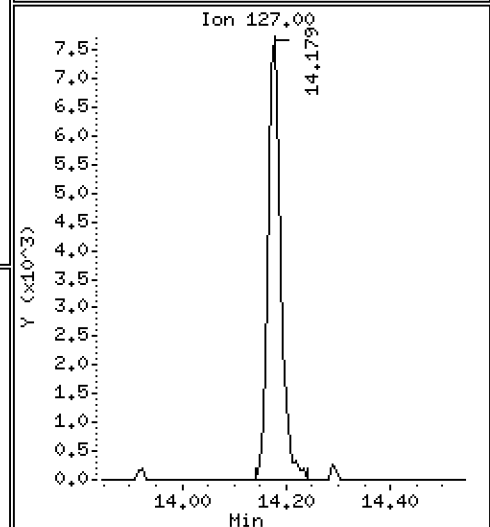
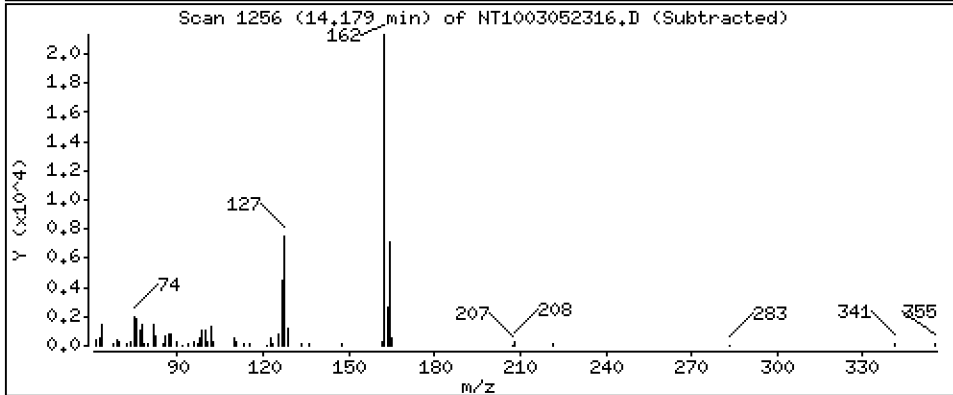
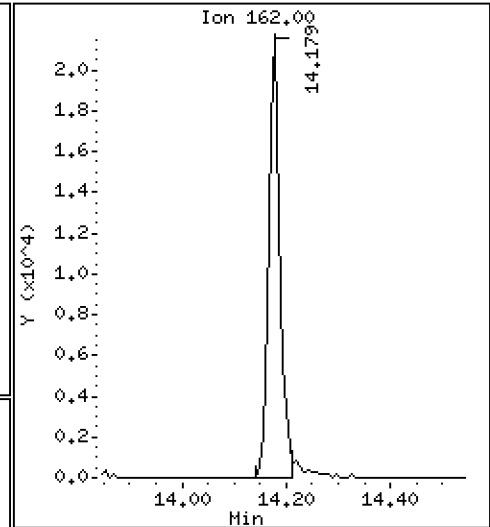
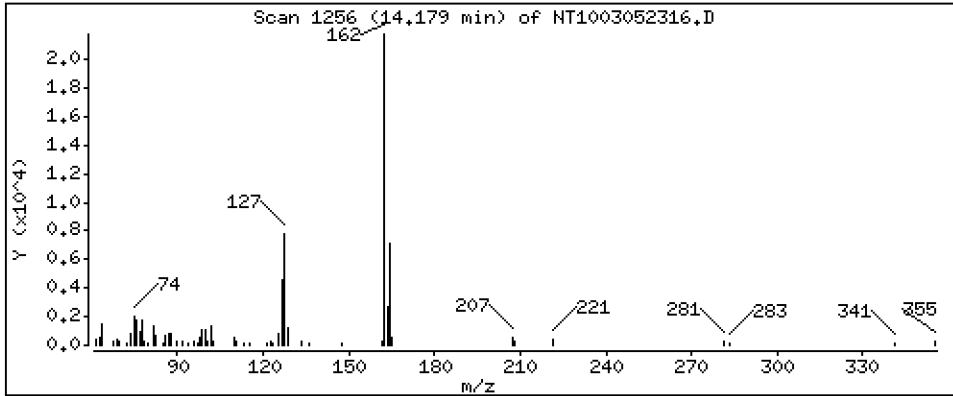
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2152 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

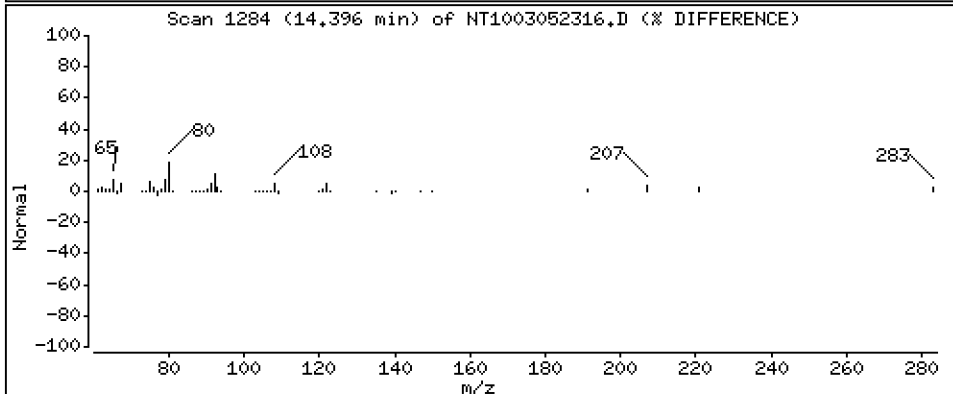
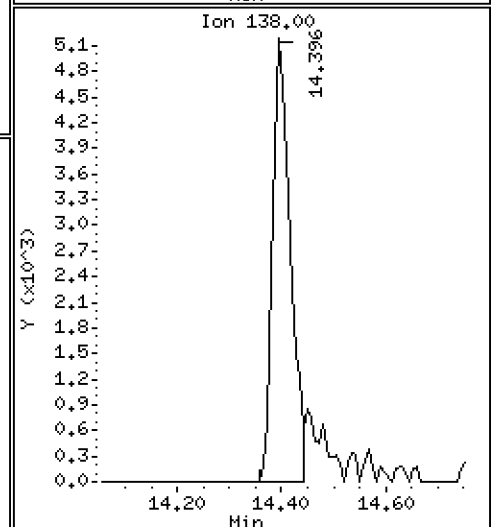
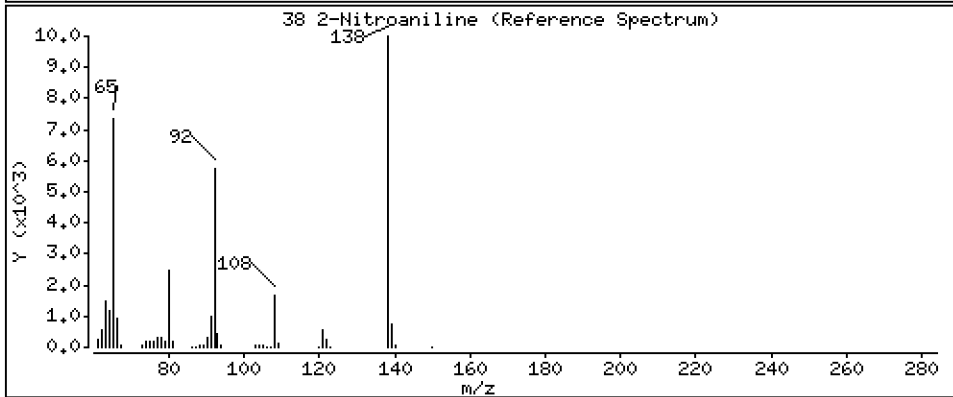
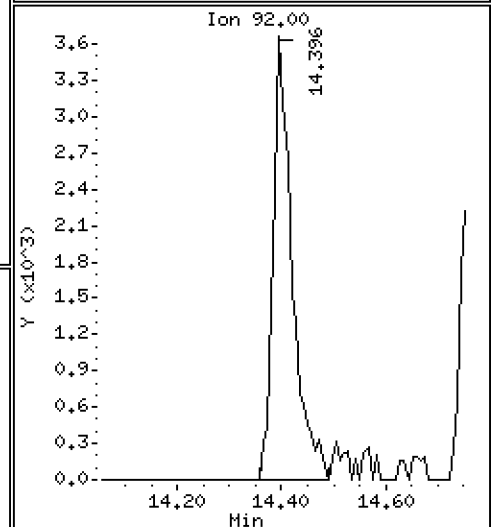
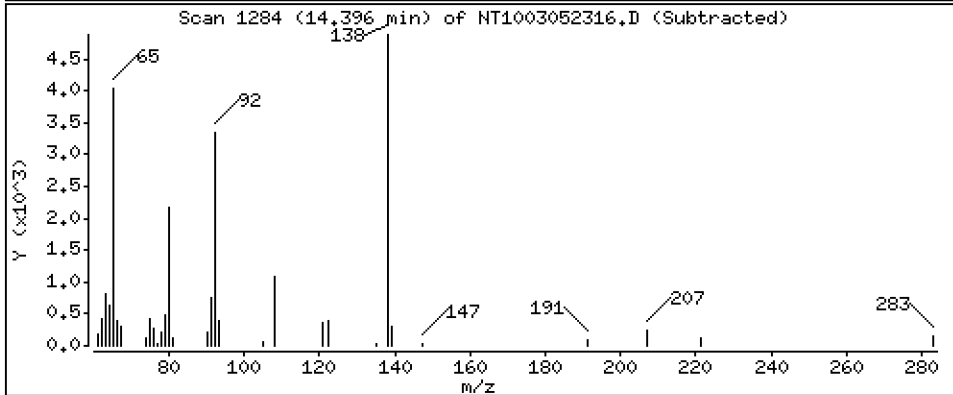
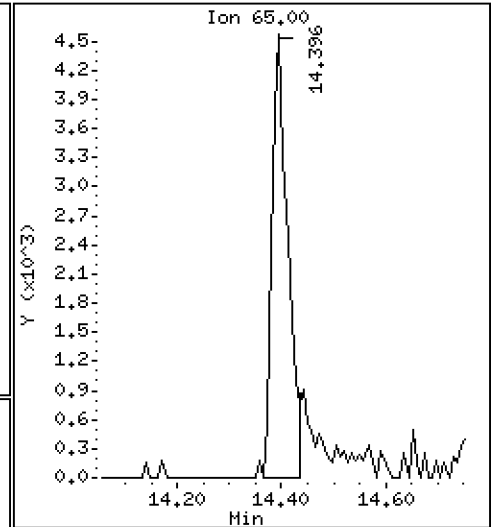
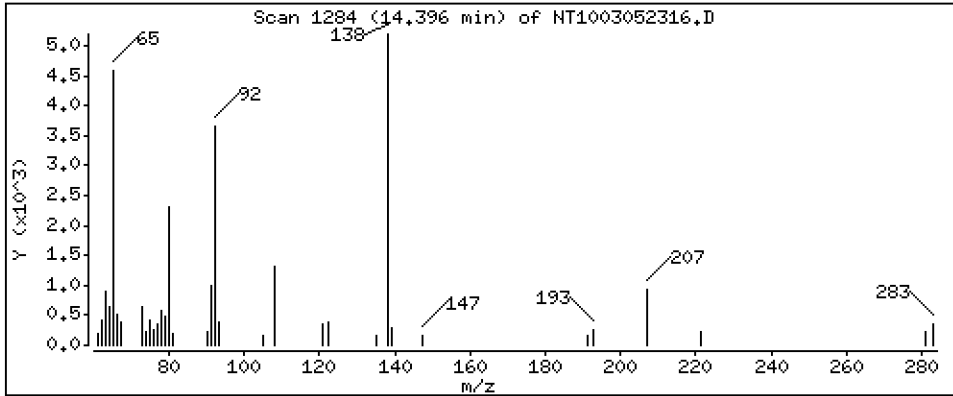
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2264 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

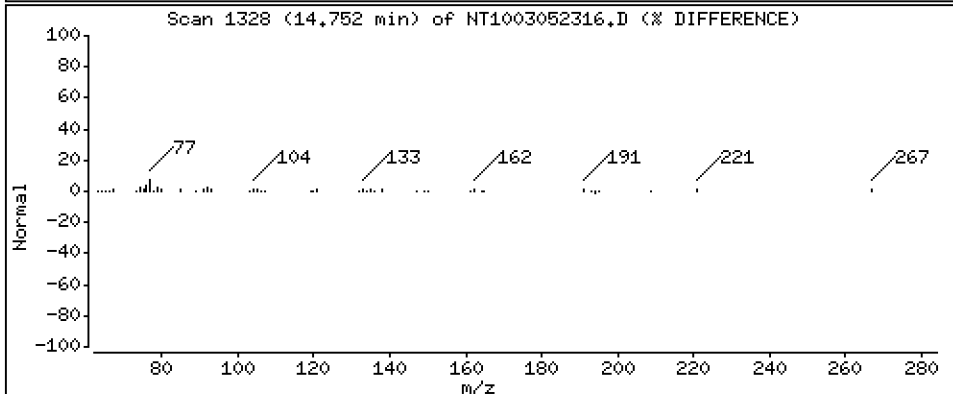
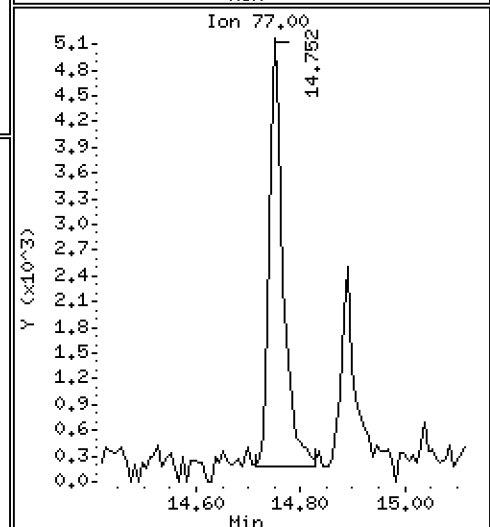
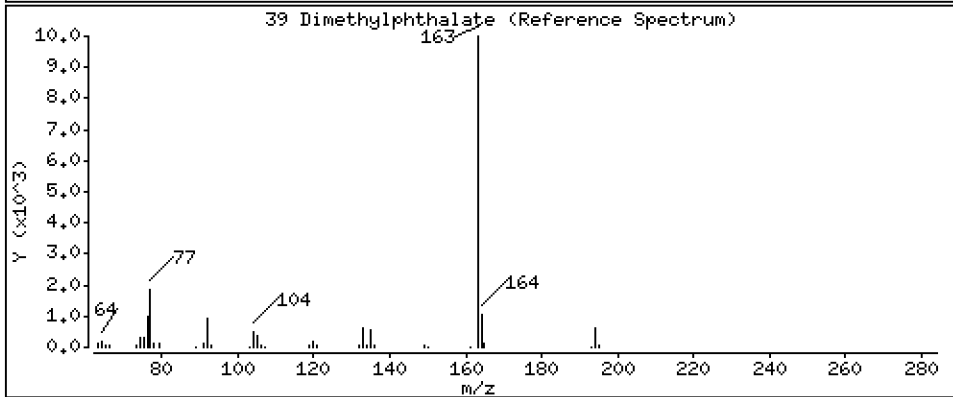
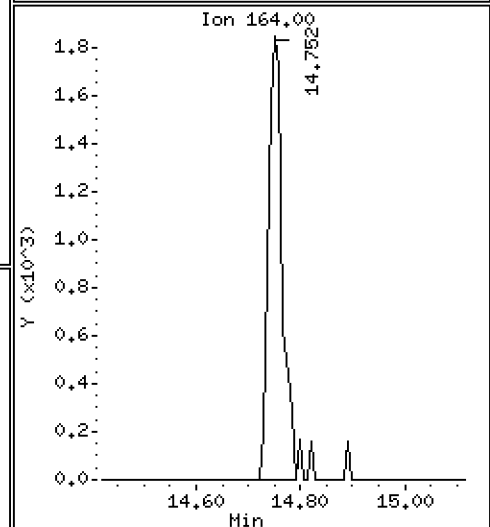
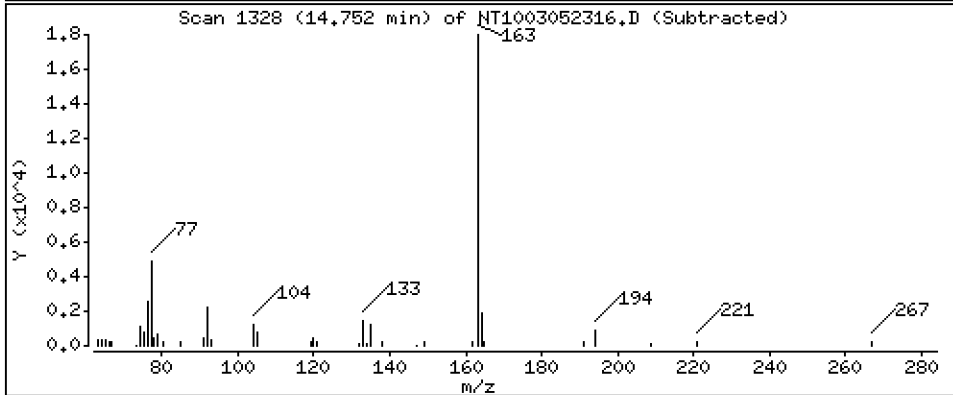
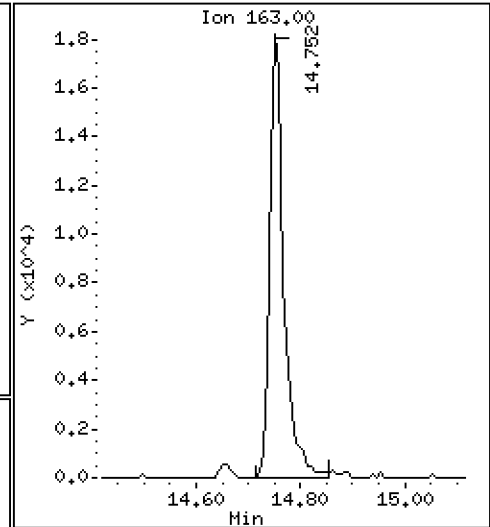
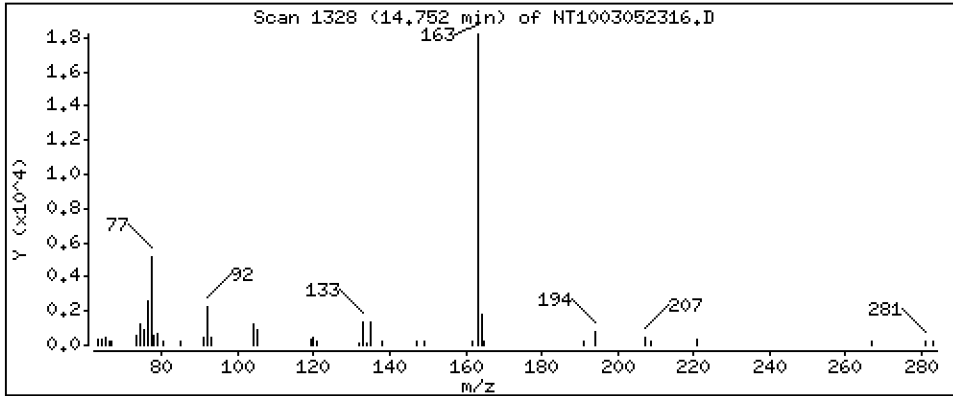
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1954 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

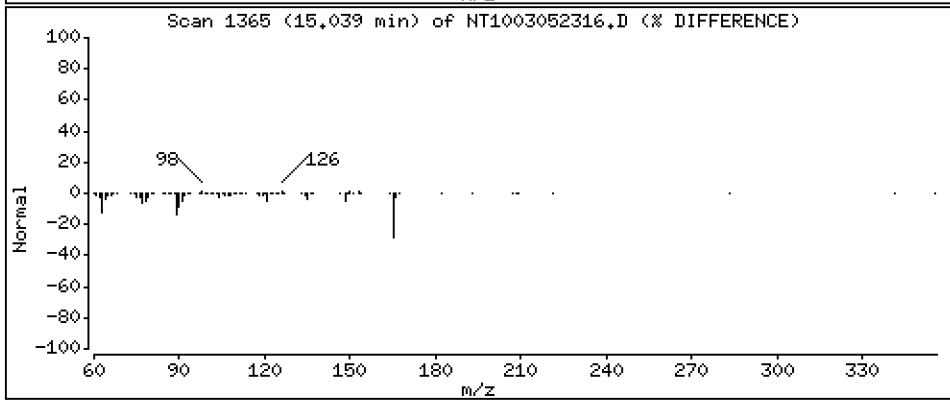
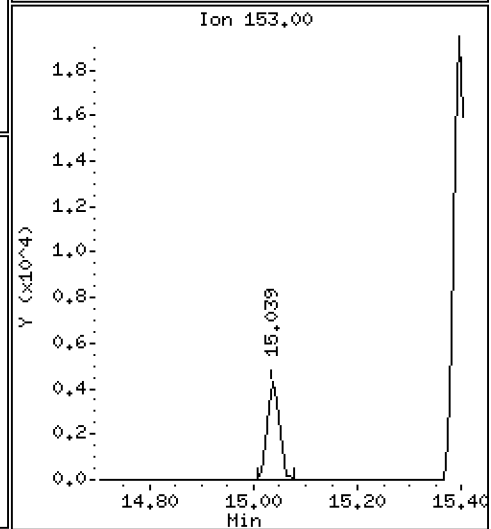
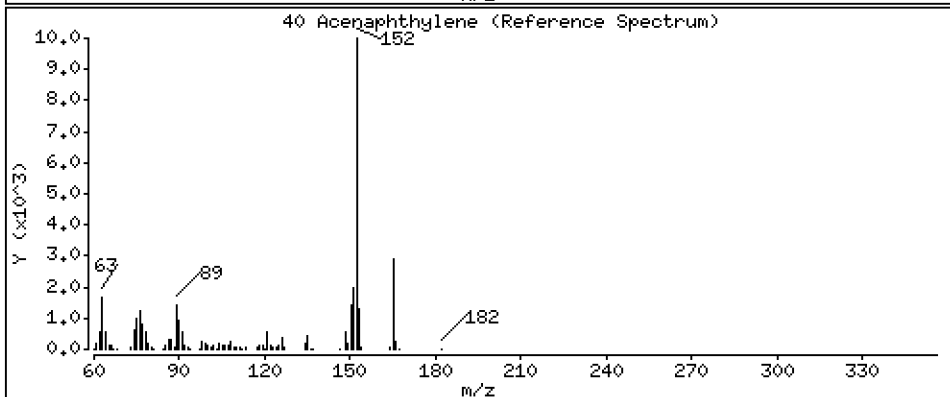
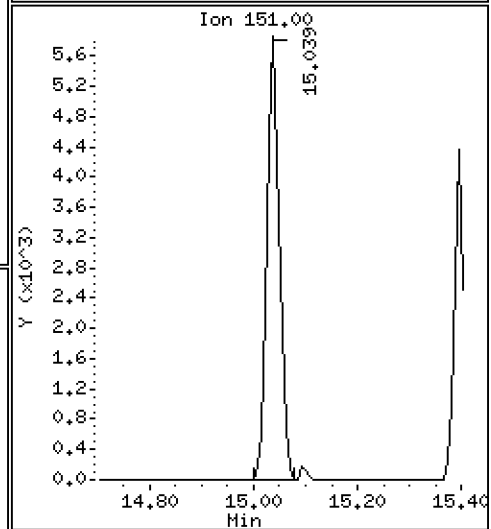
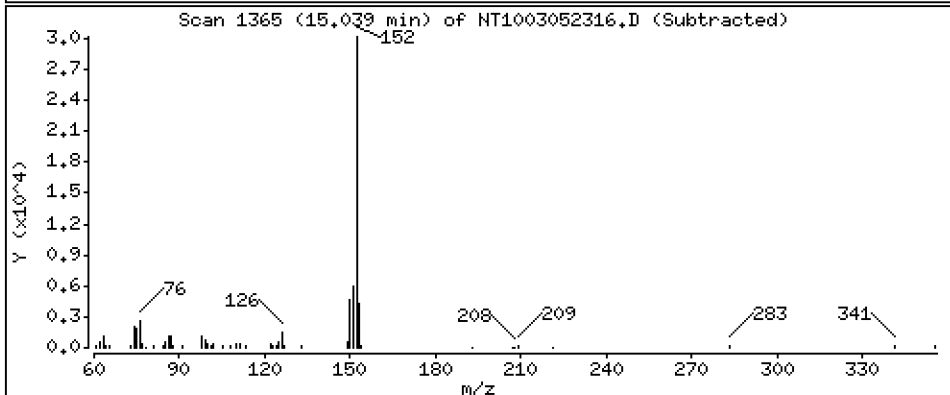
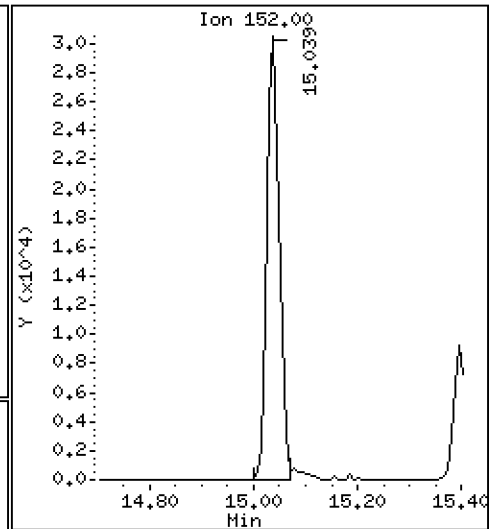
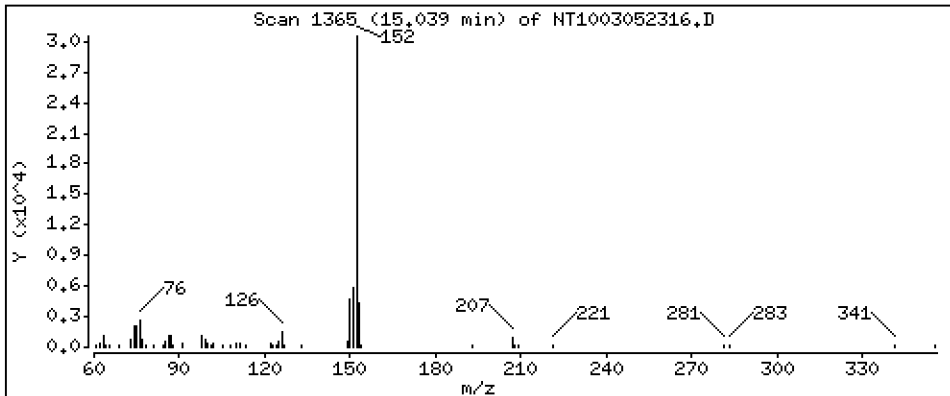
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1877 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

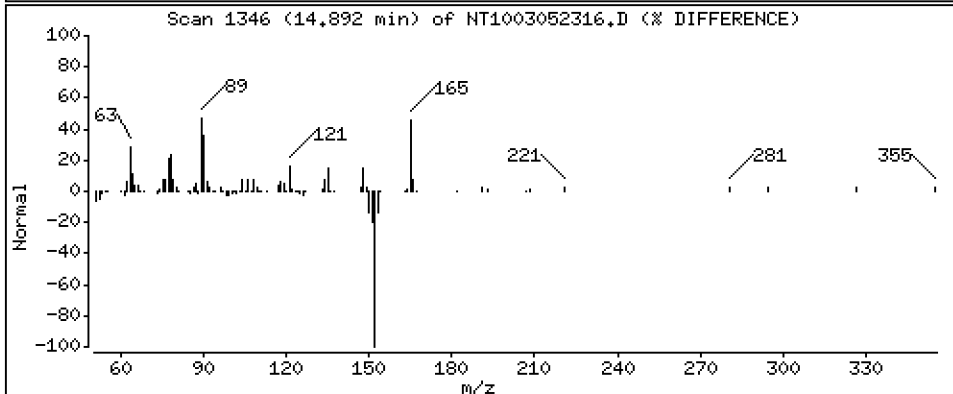
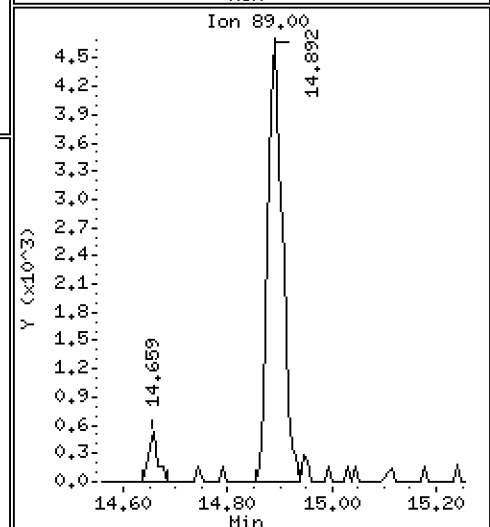
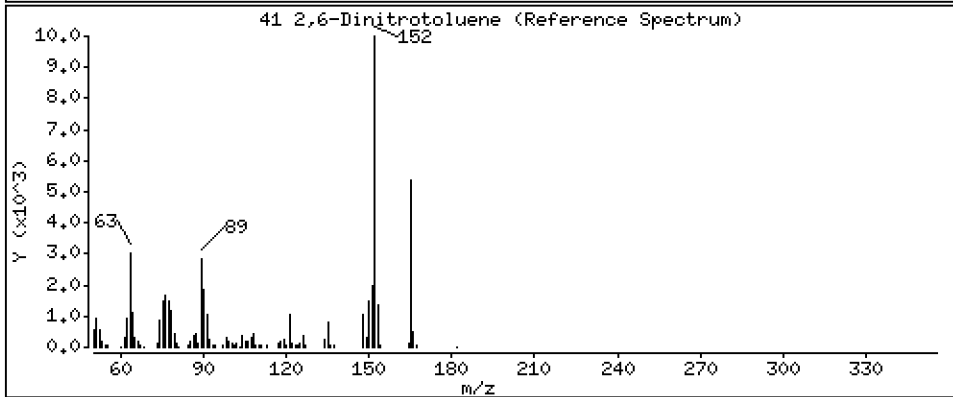
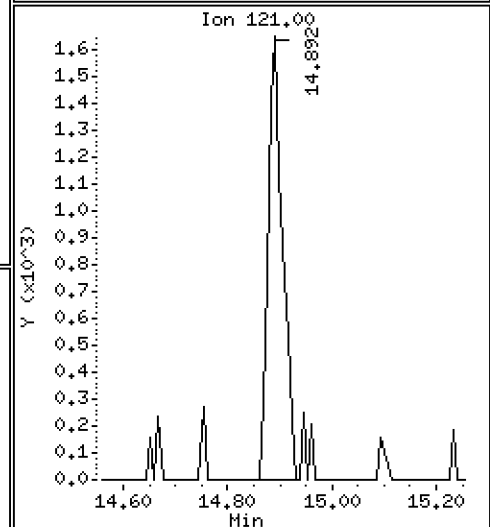
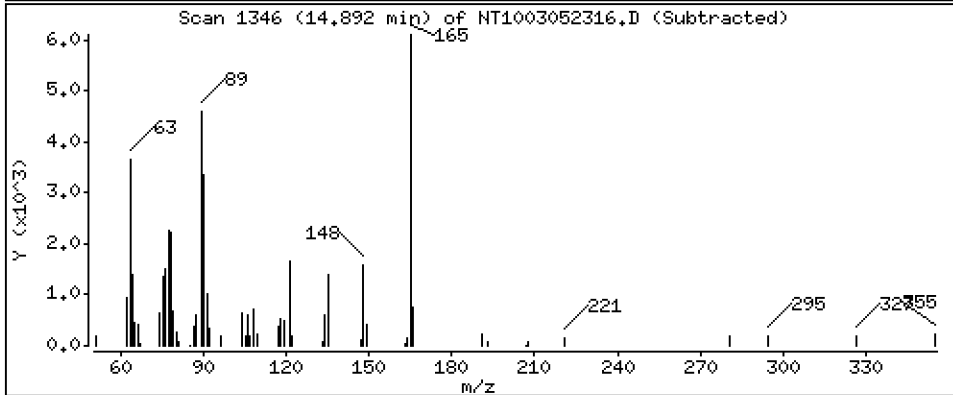
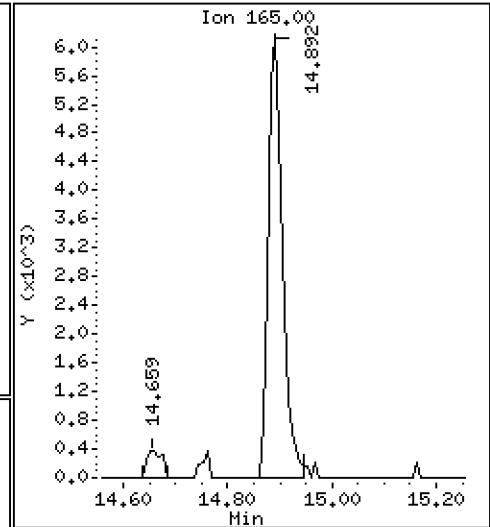
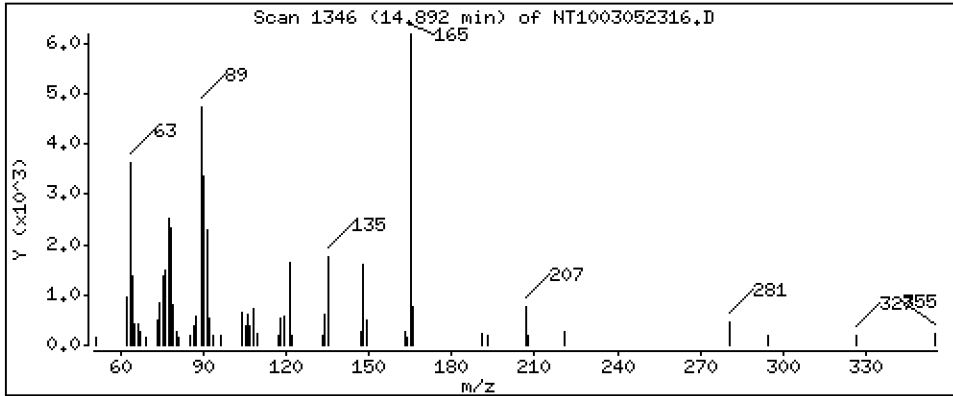
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,2957 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

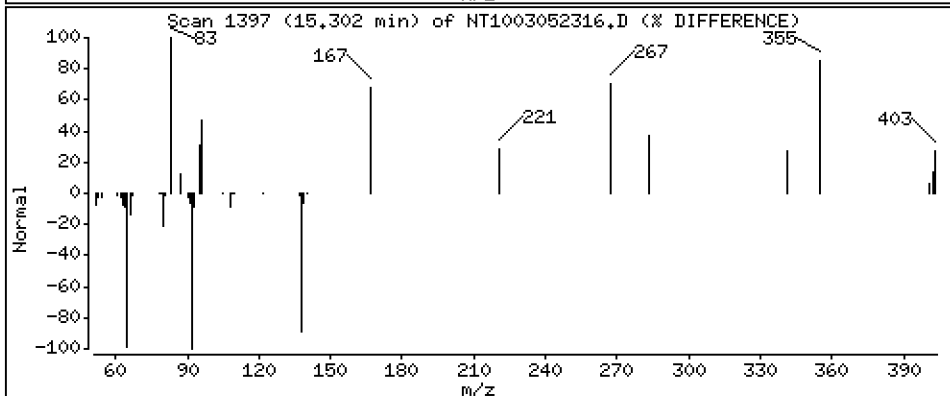
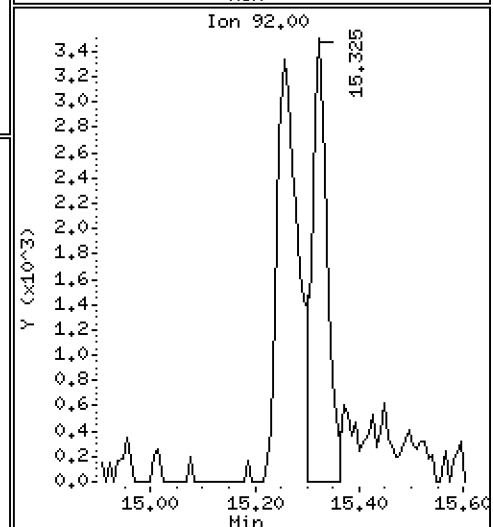
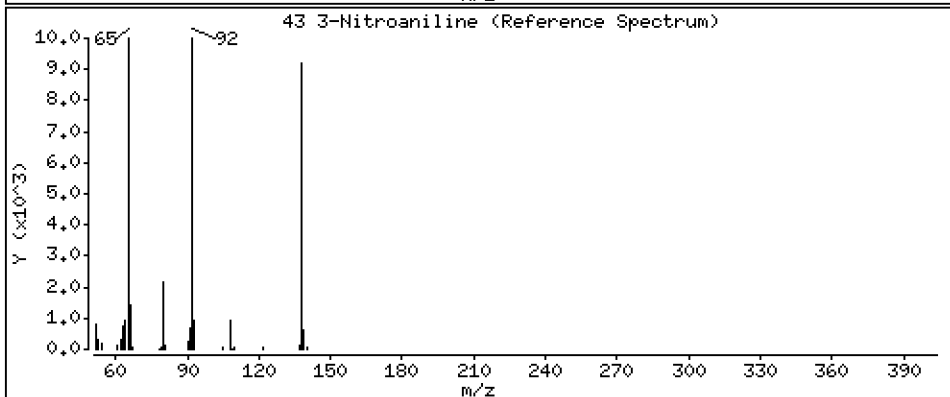
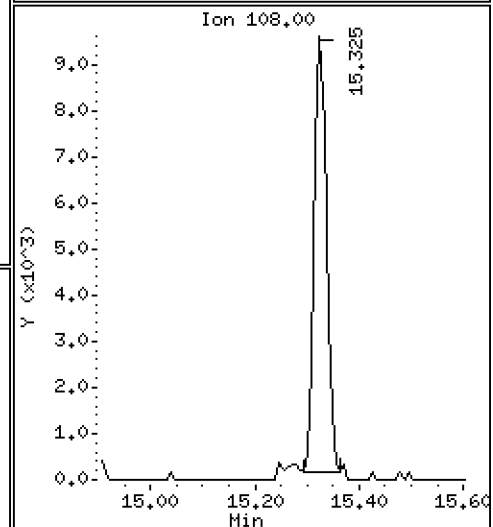
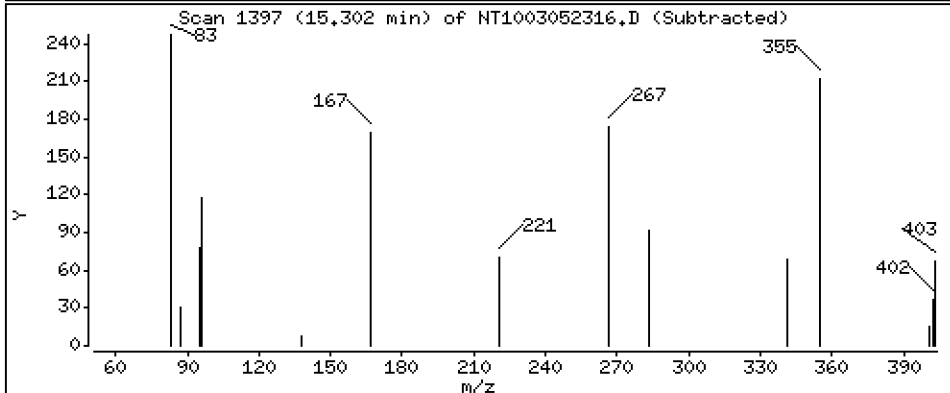
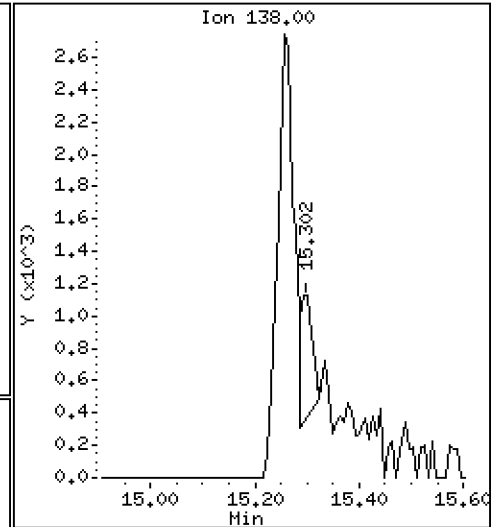
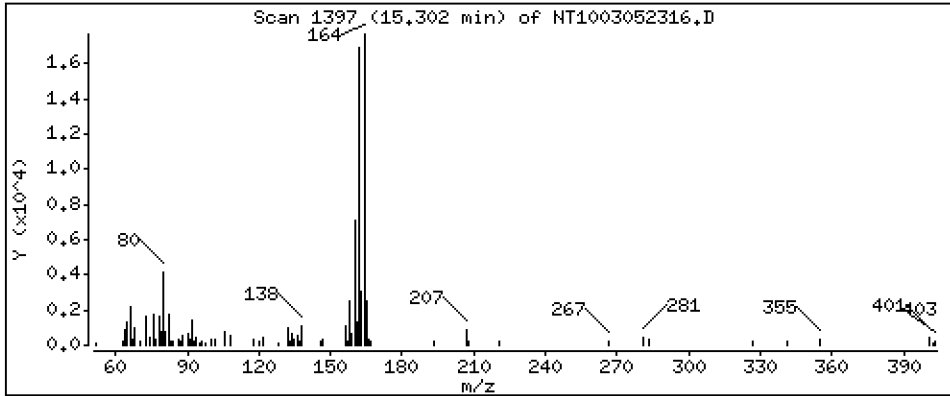
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 0,03059 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

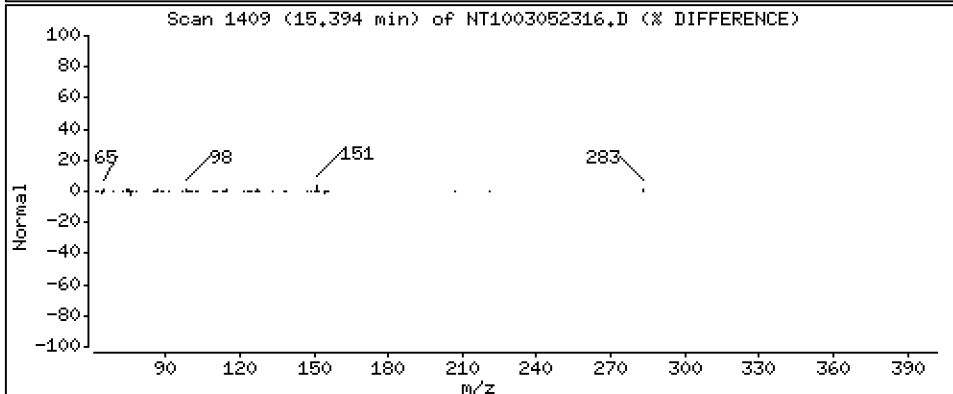
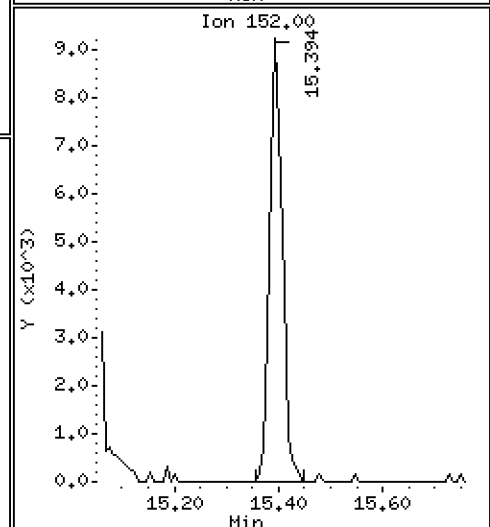
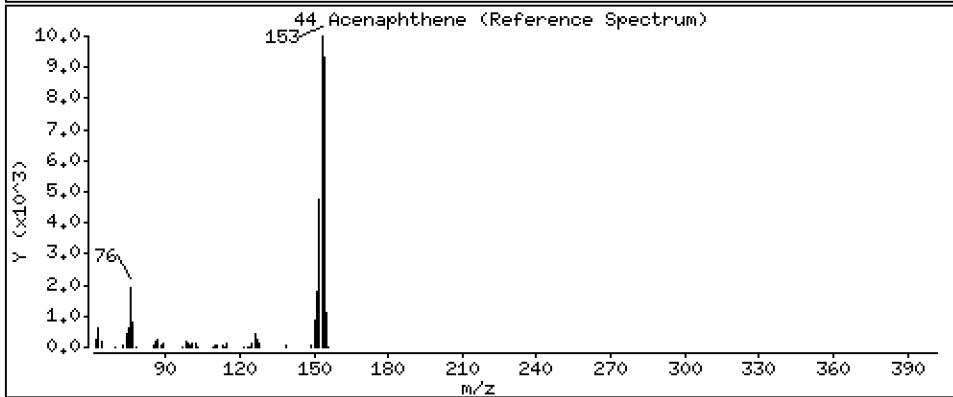
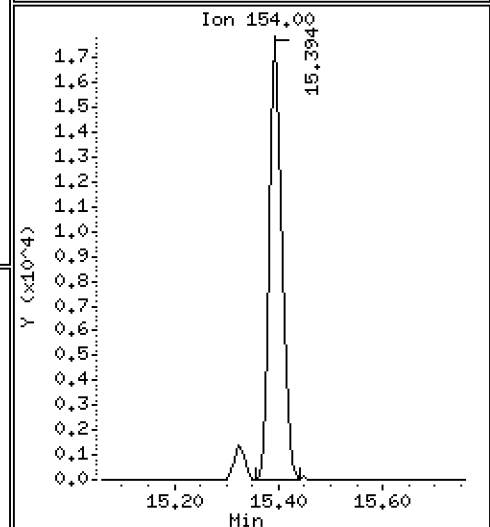
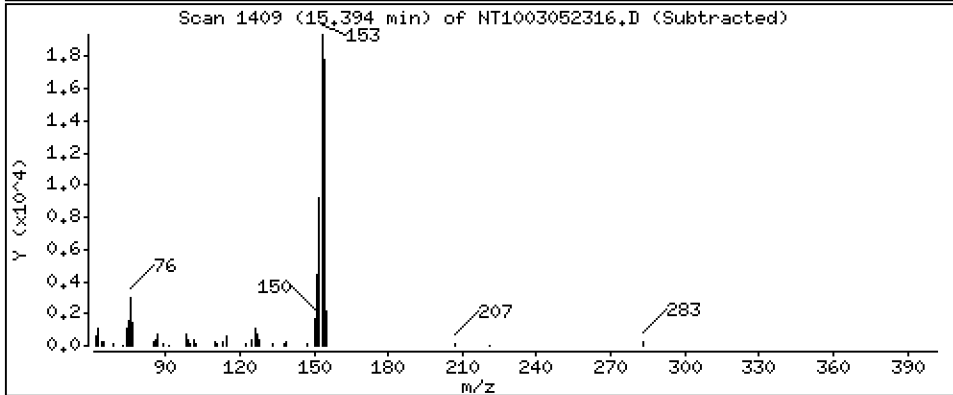
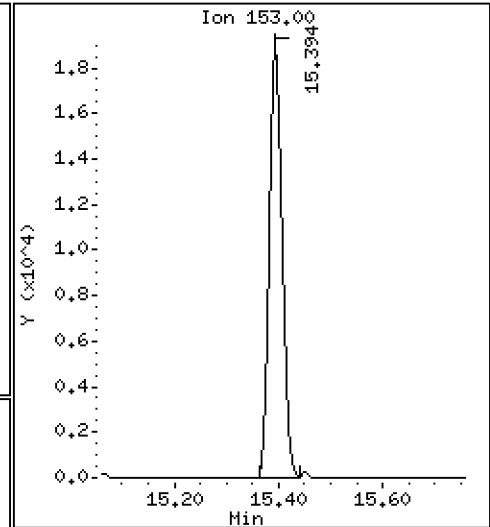
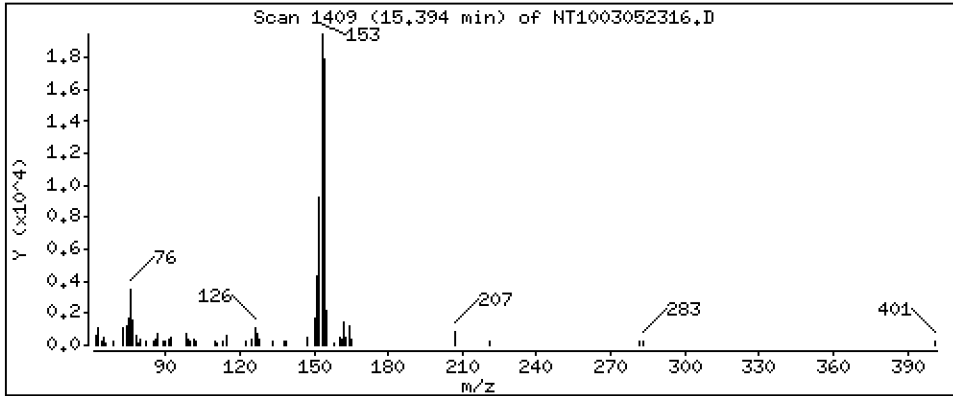
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1981 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

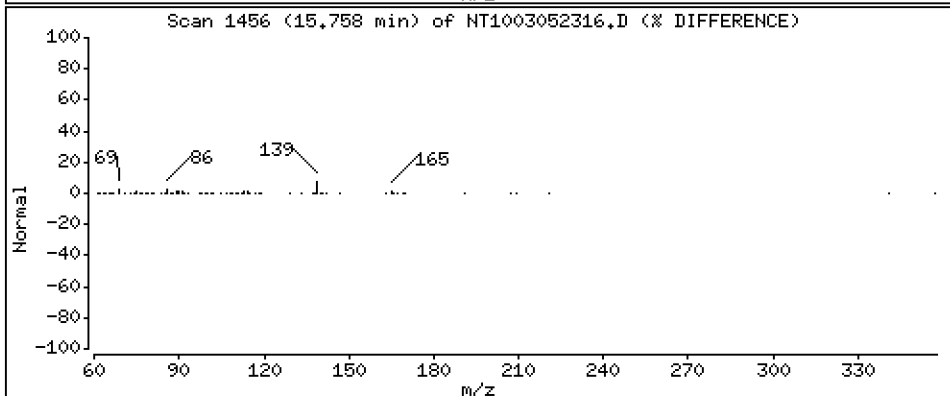
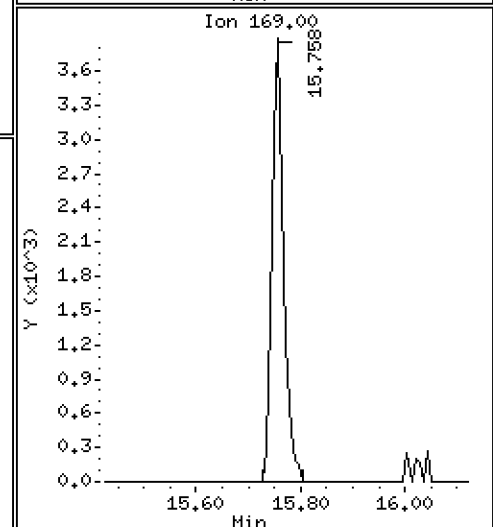
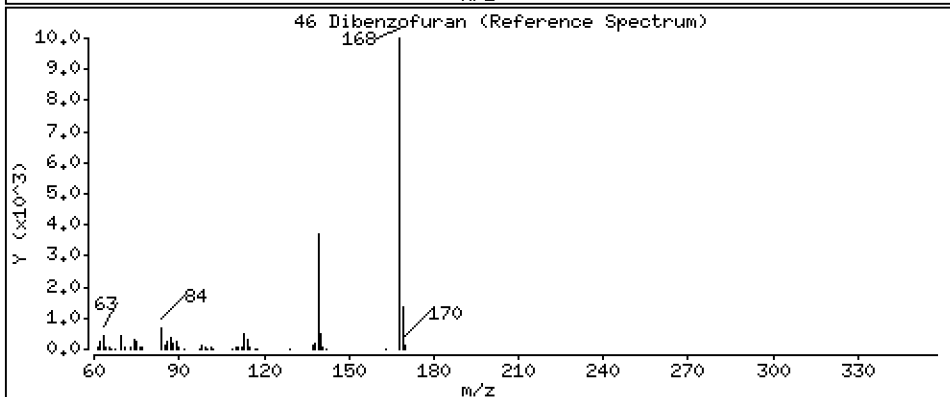
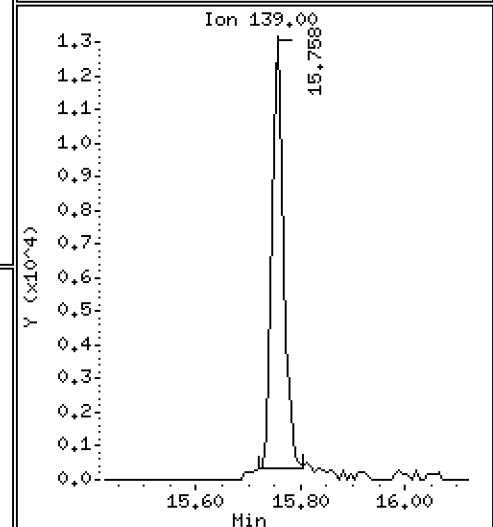
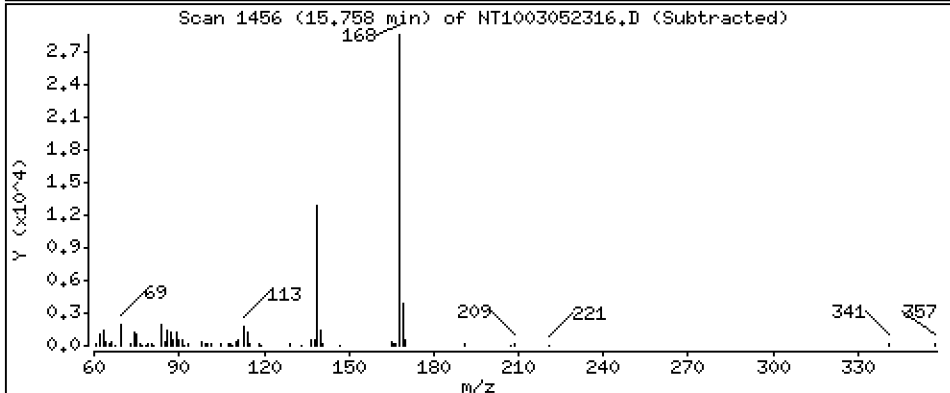
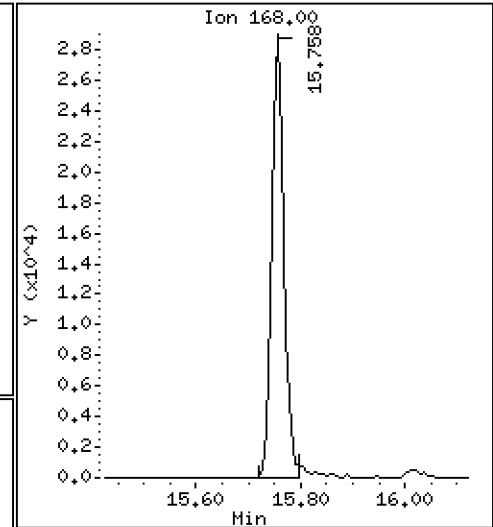
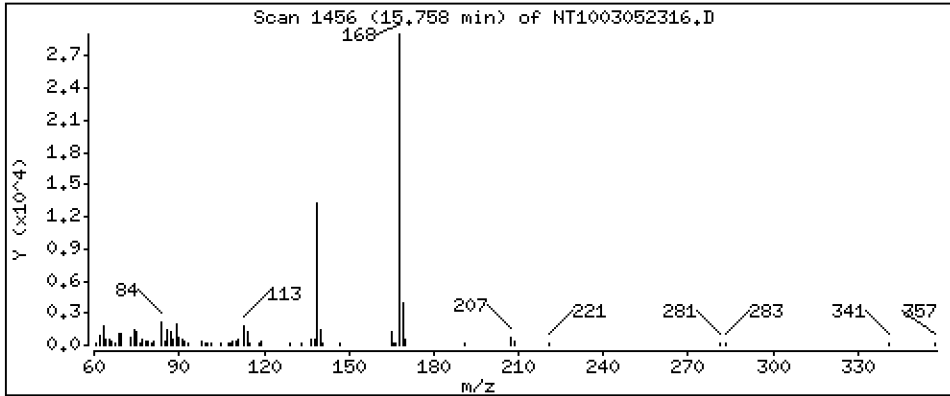
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2016 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

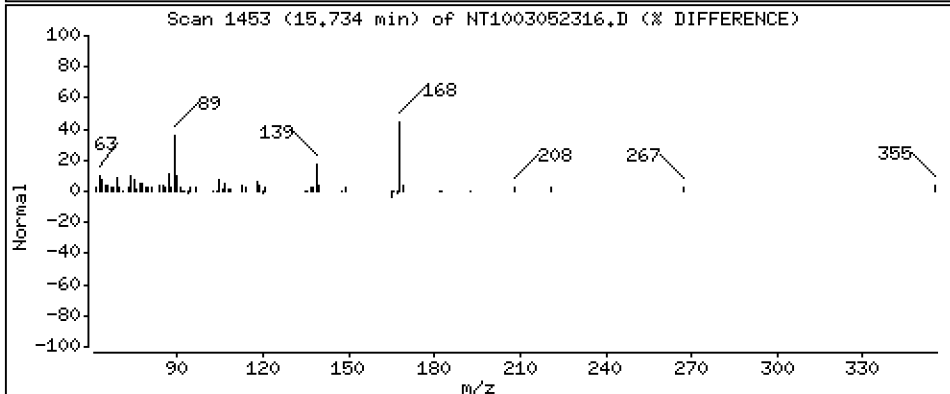
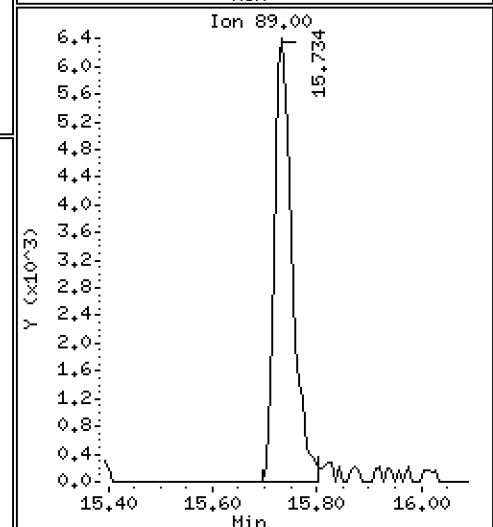
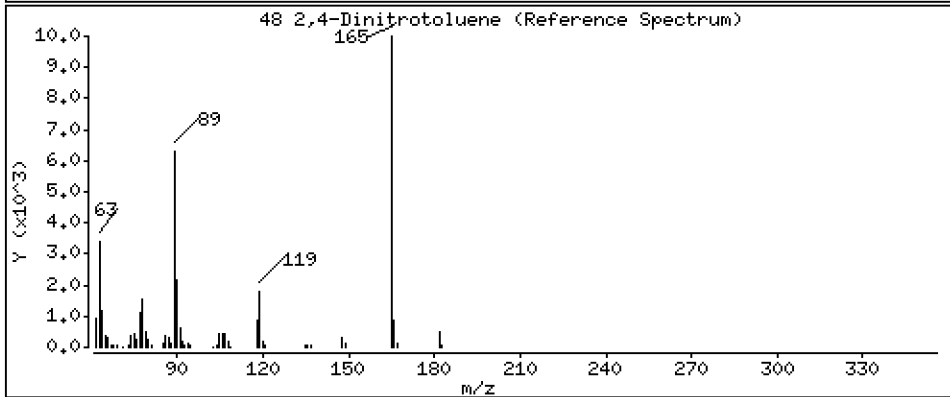
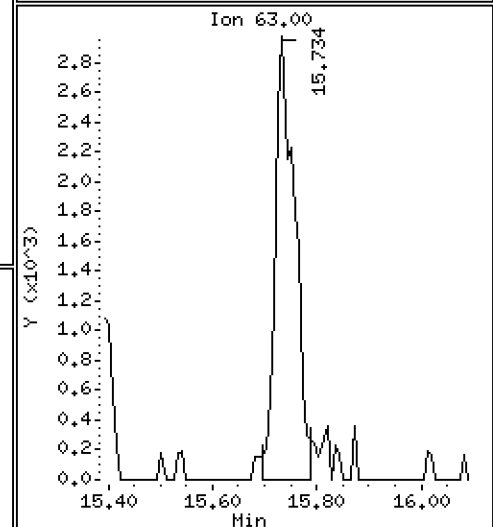
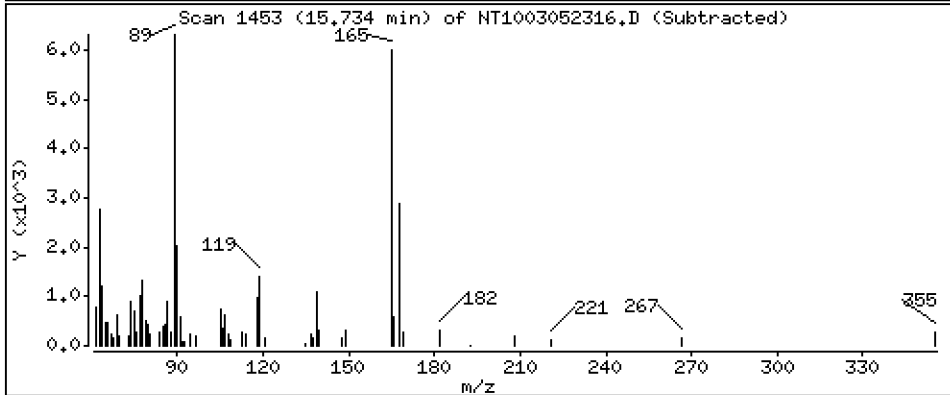
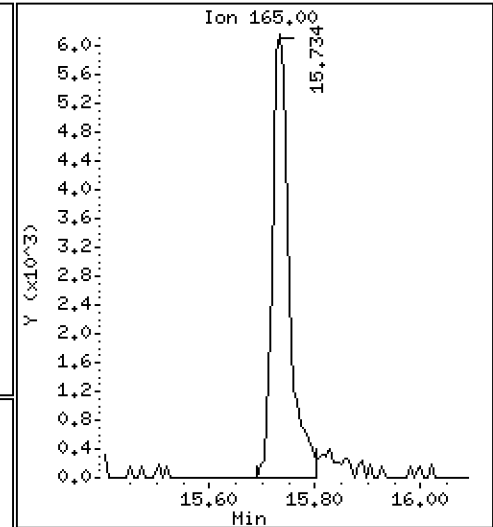
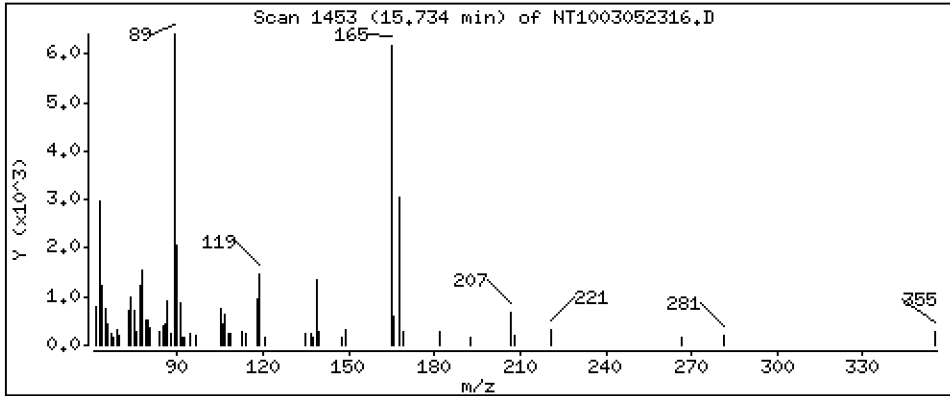
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2445 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

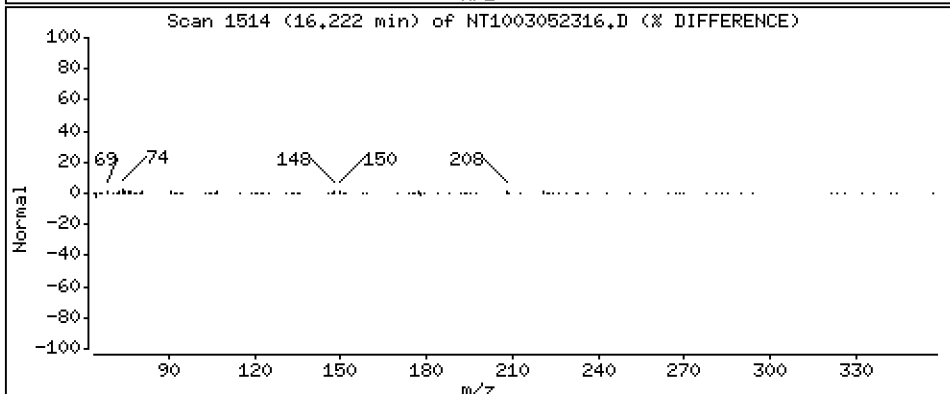
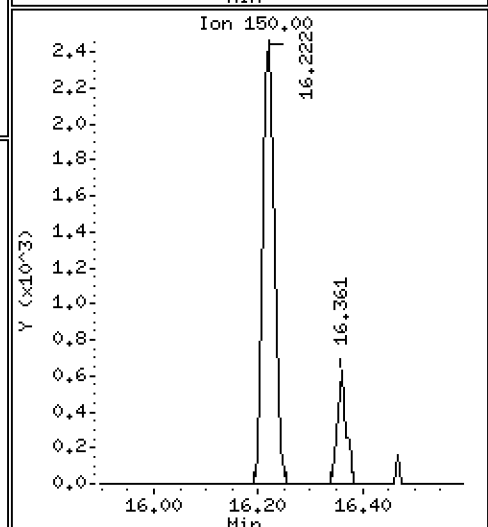
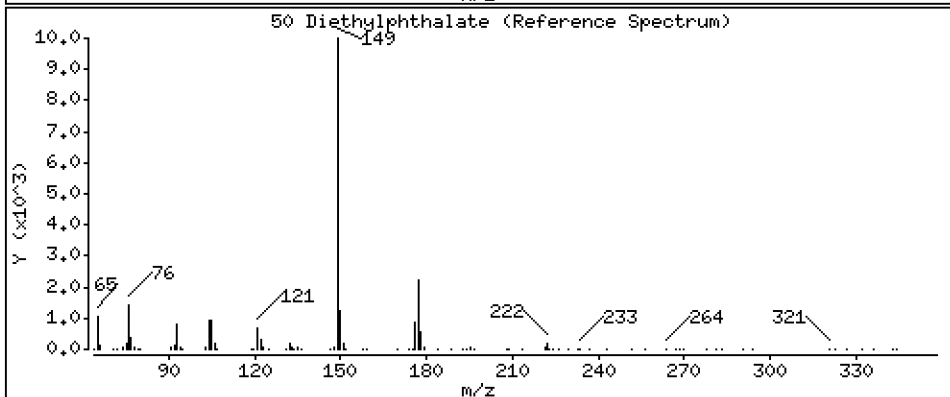
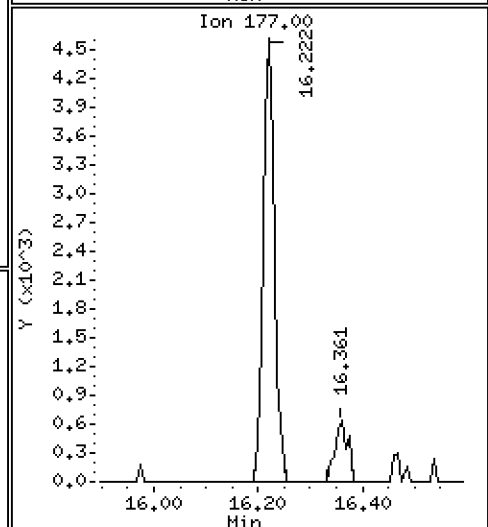
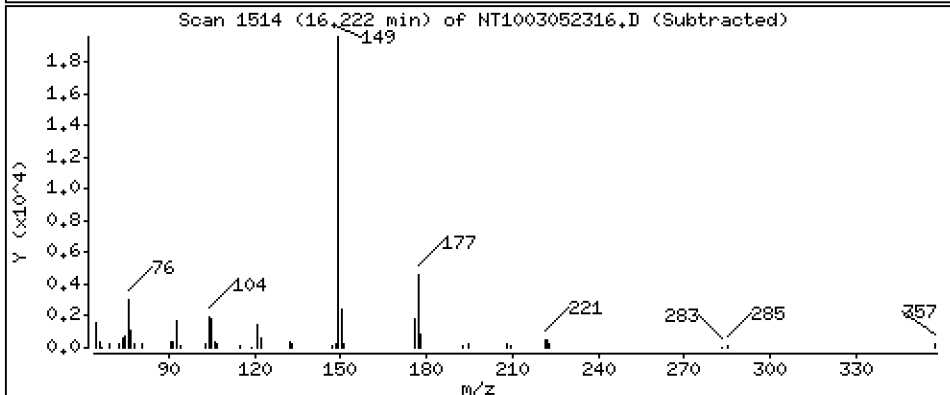
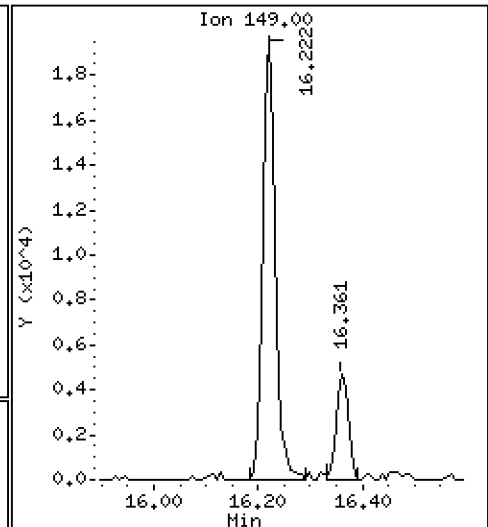
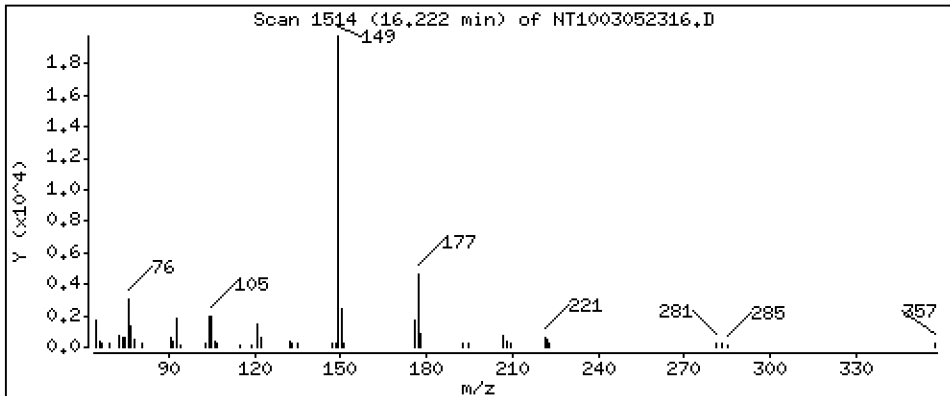
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1810 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

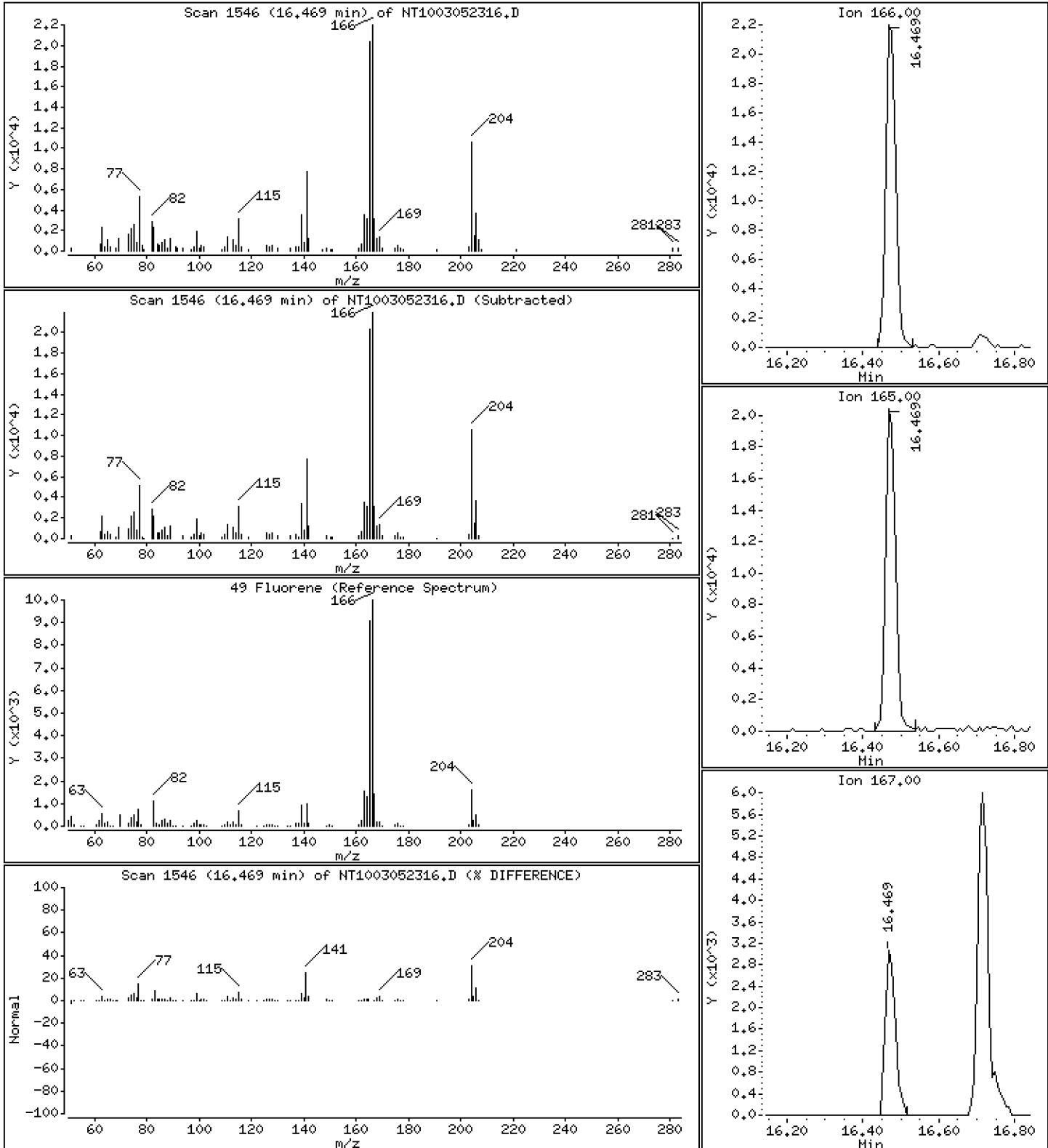
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1937 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

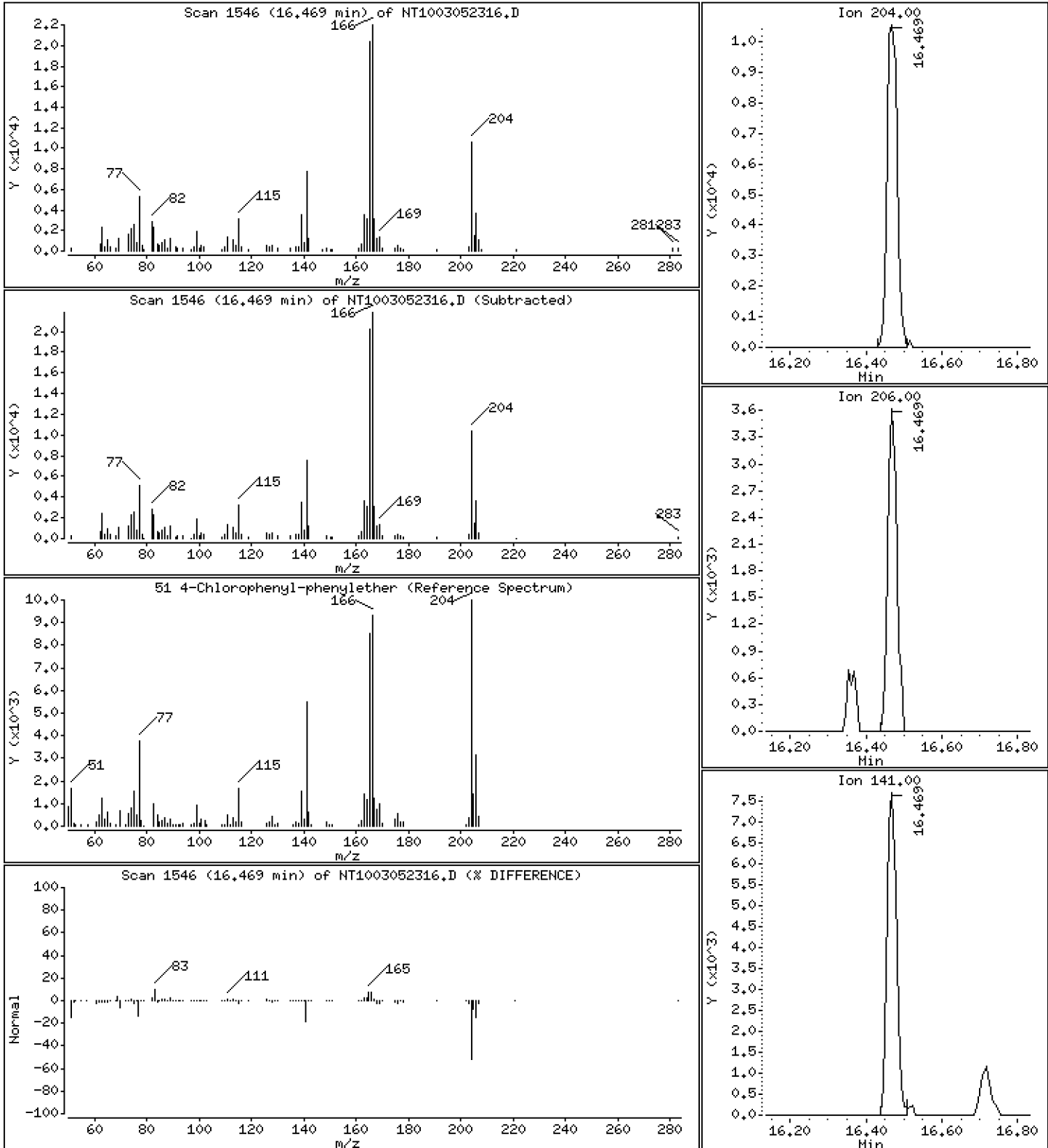
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2170 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

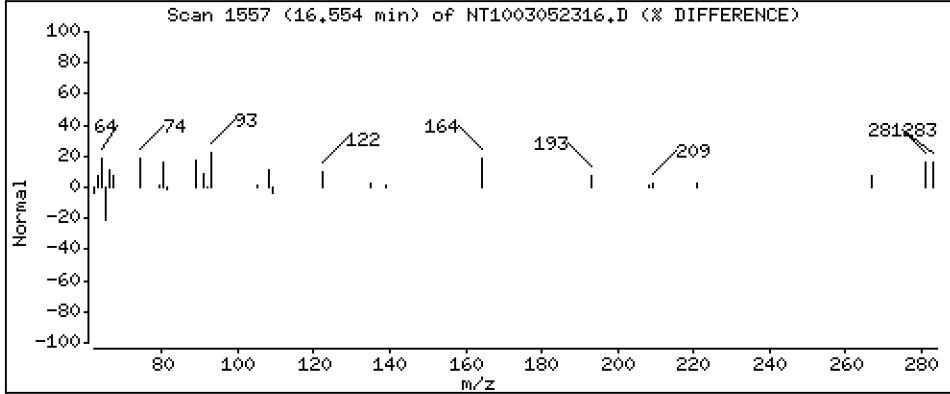
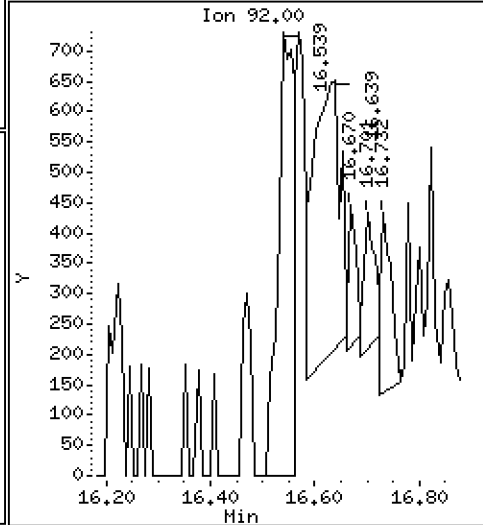
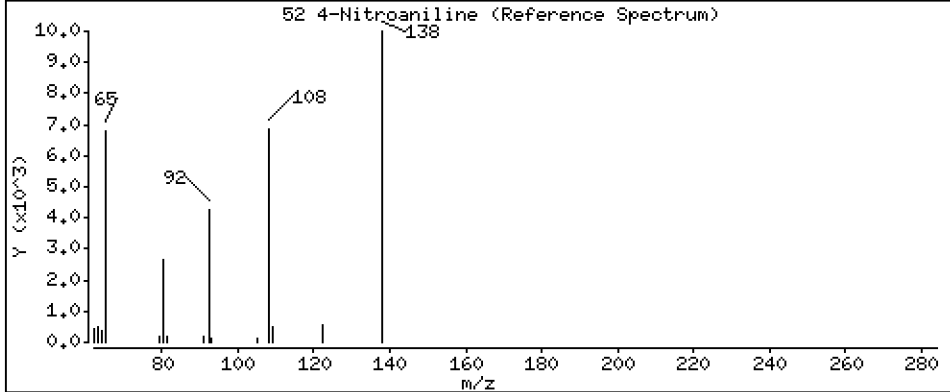
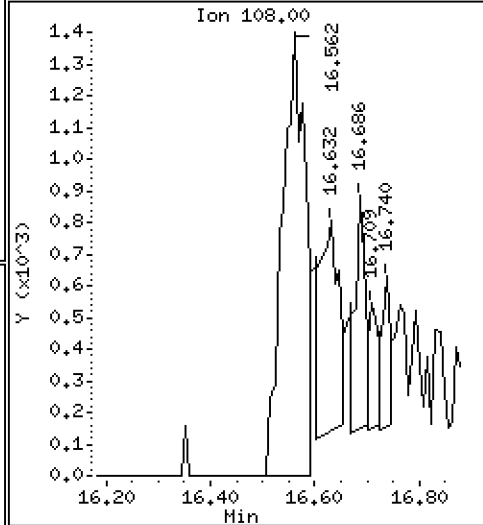
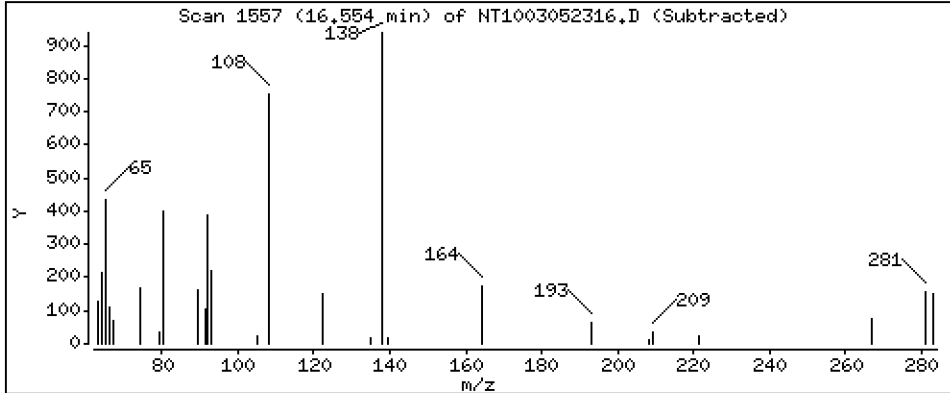
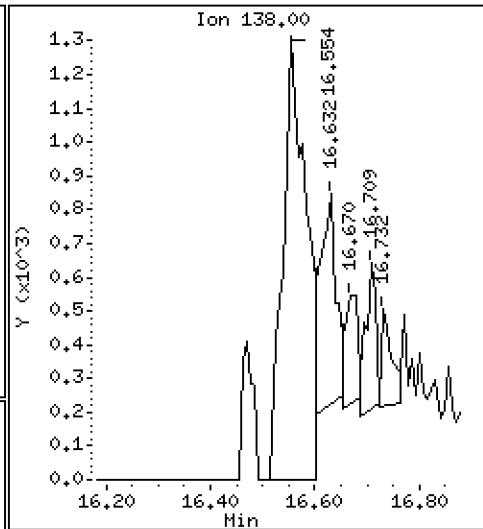
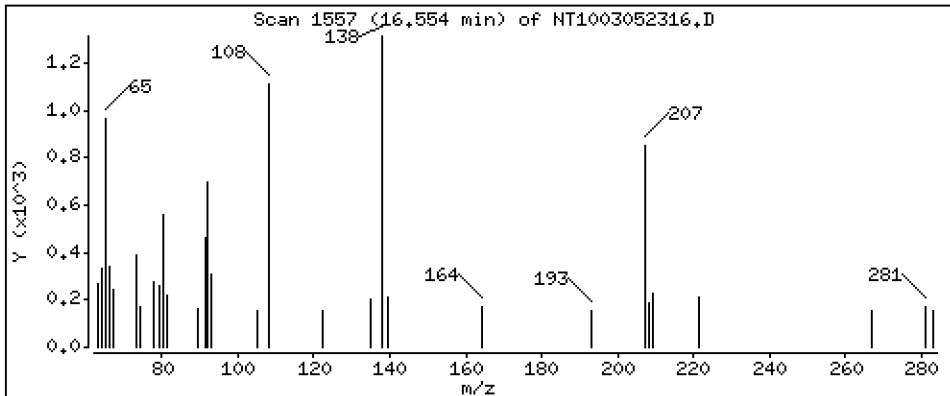
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.08725 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

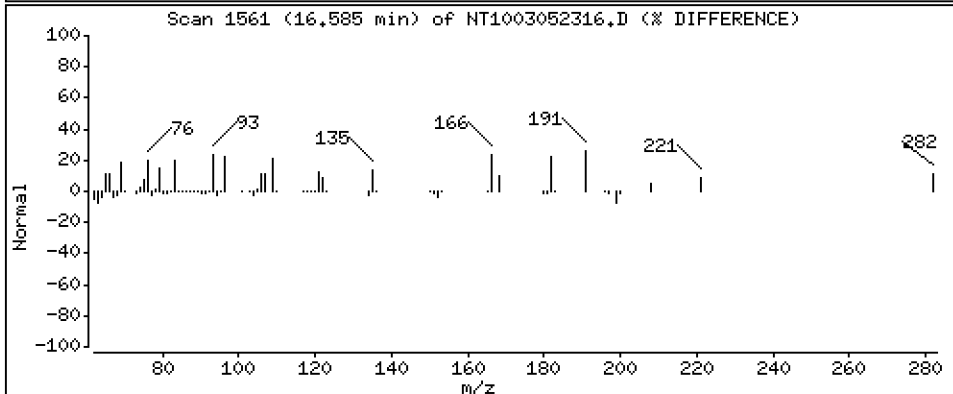
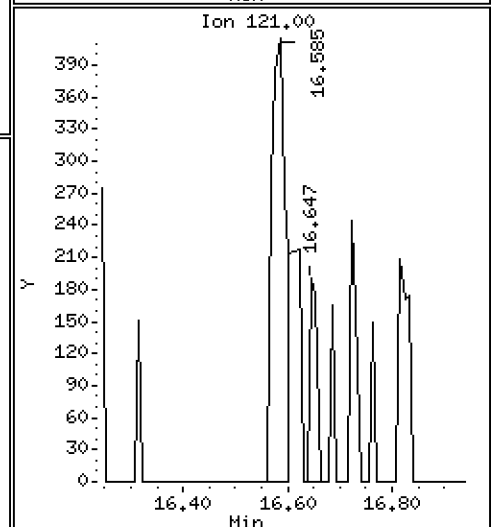
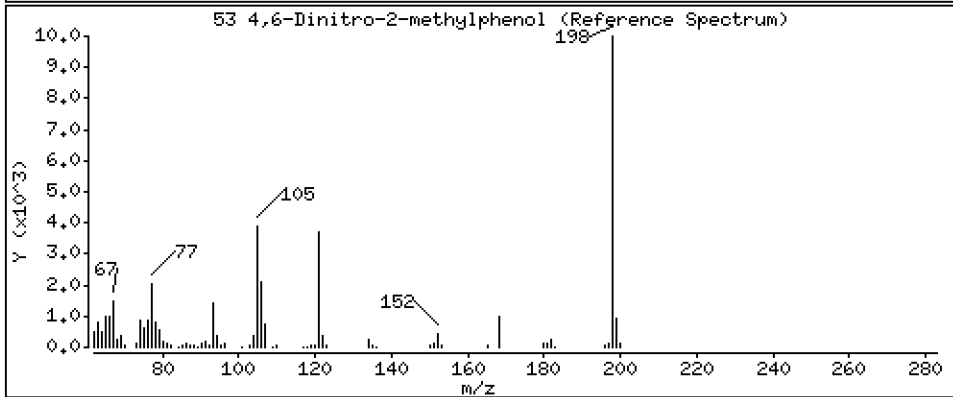
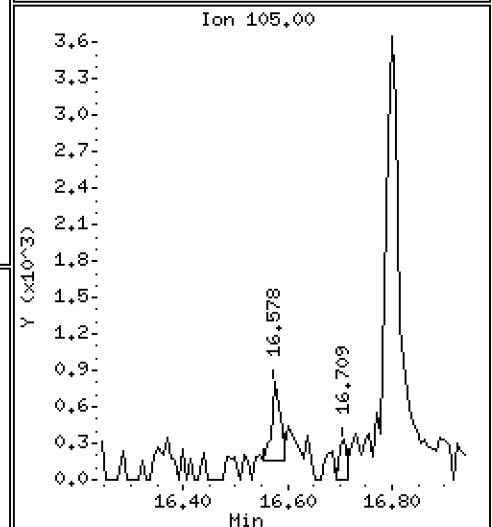
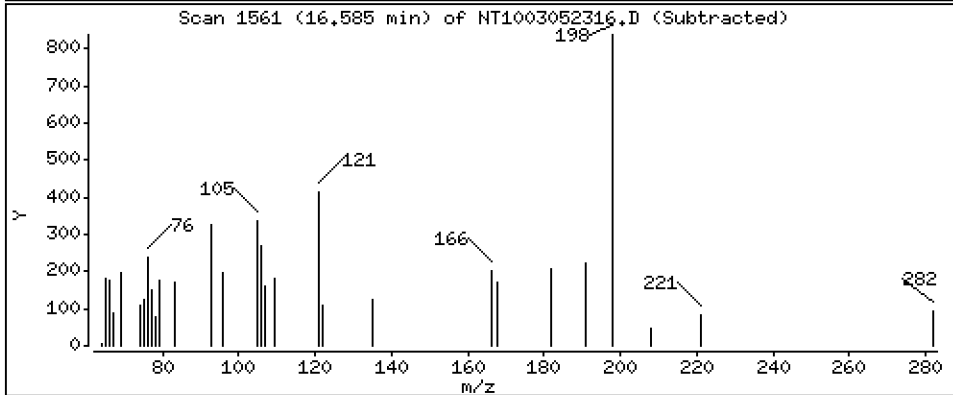
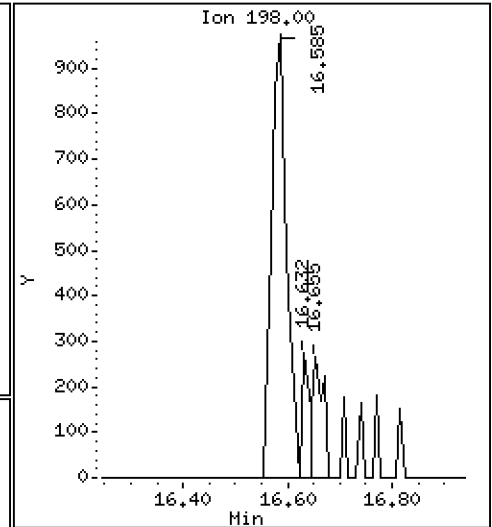
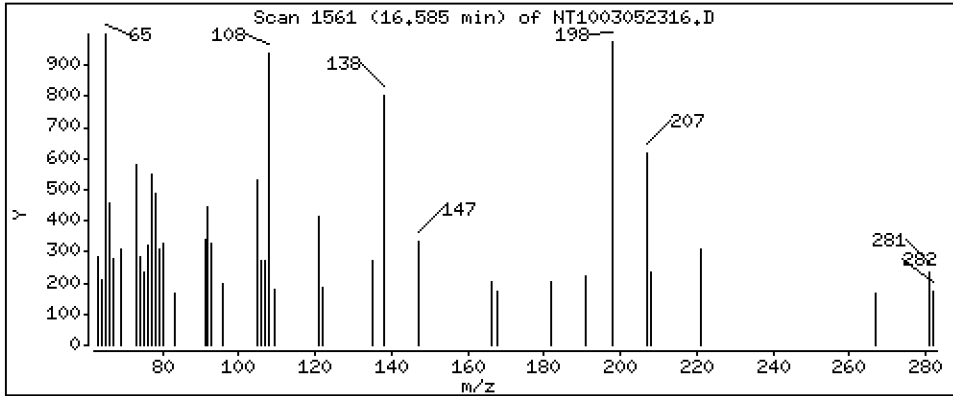
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.09412 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

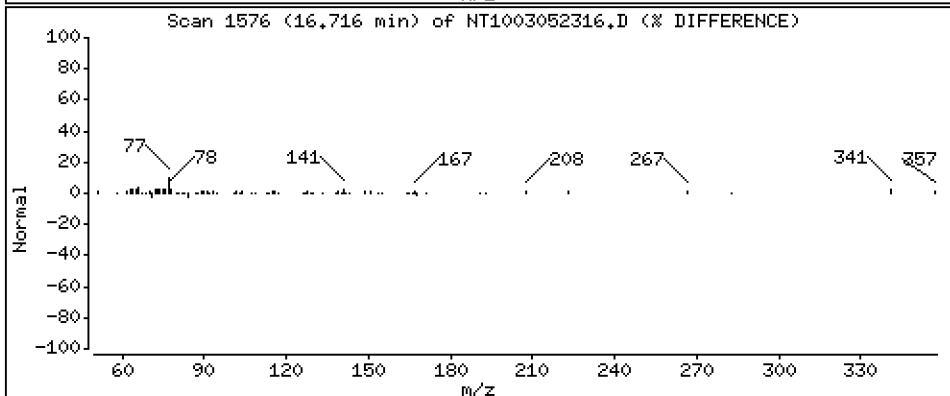
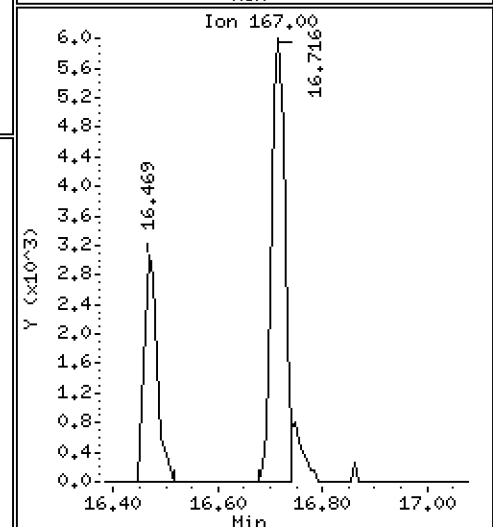
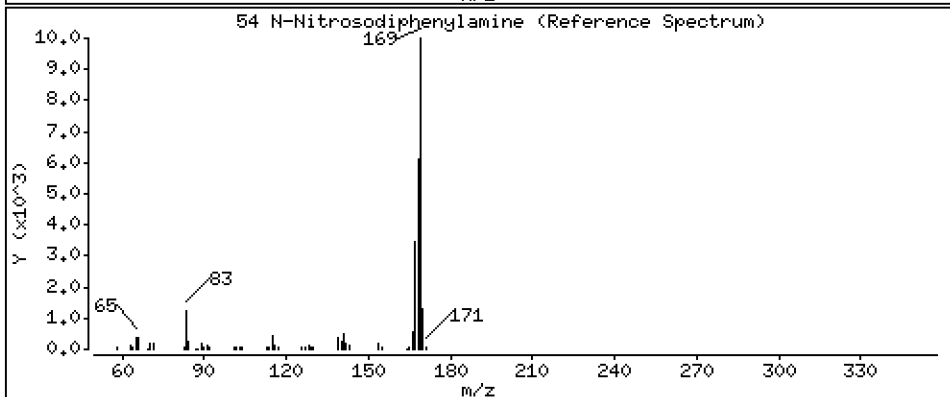
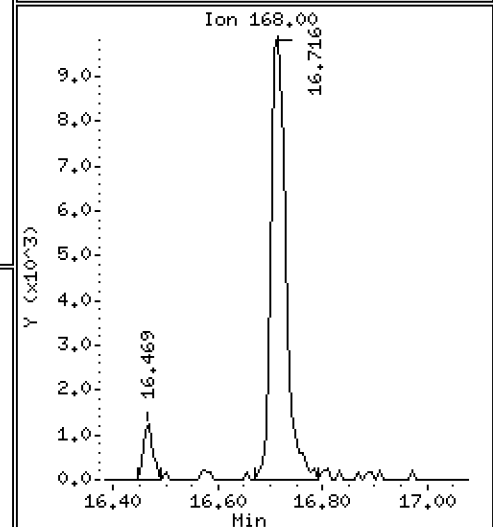
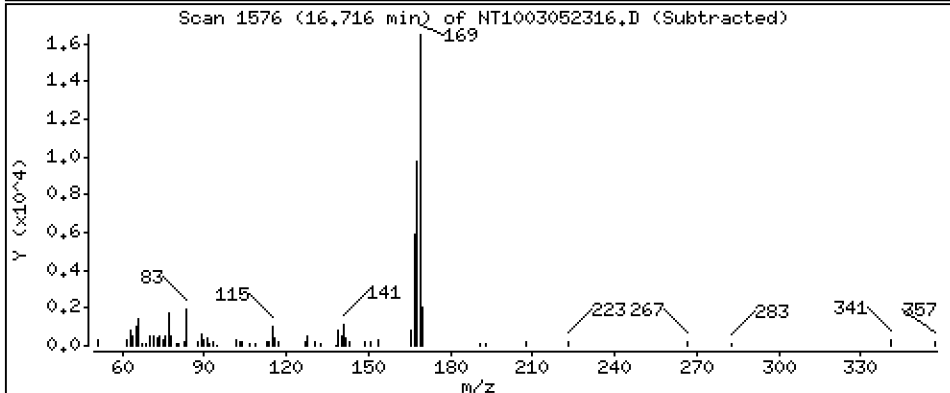
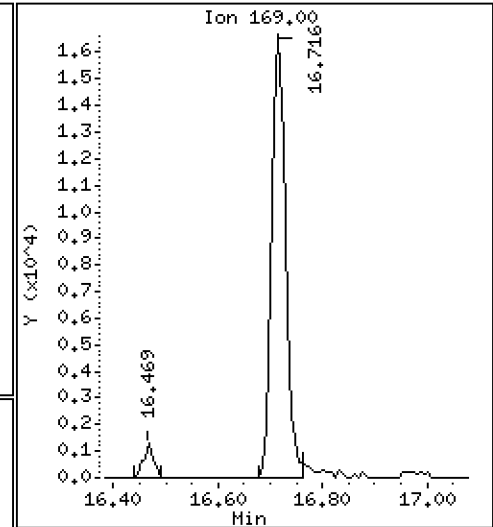
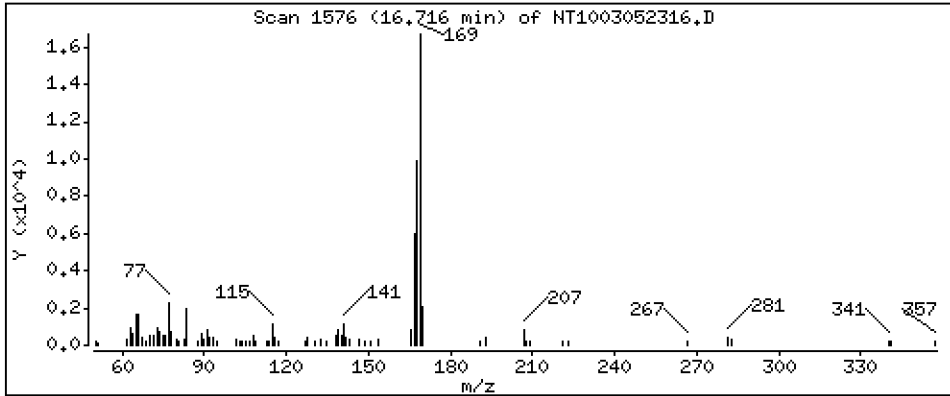
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,2028 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

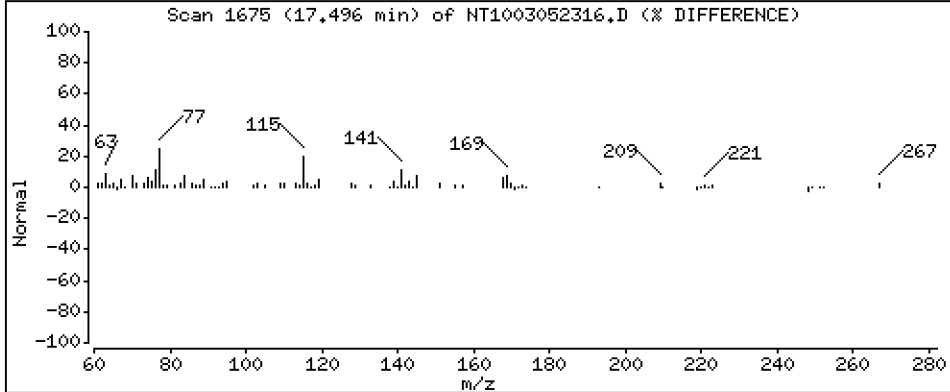
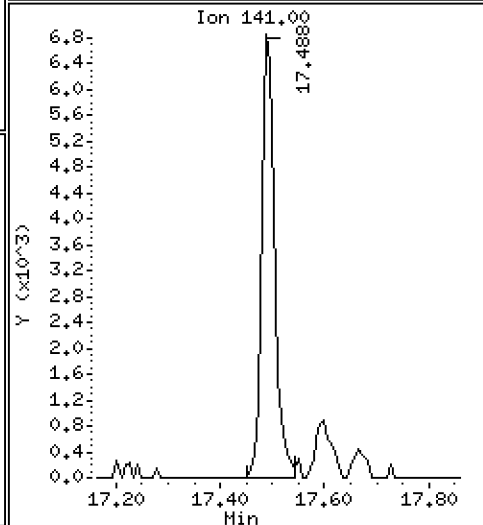
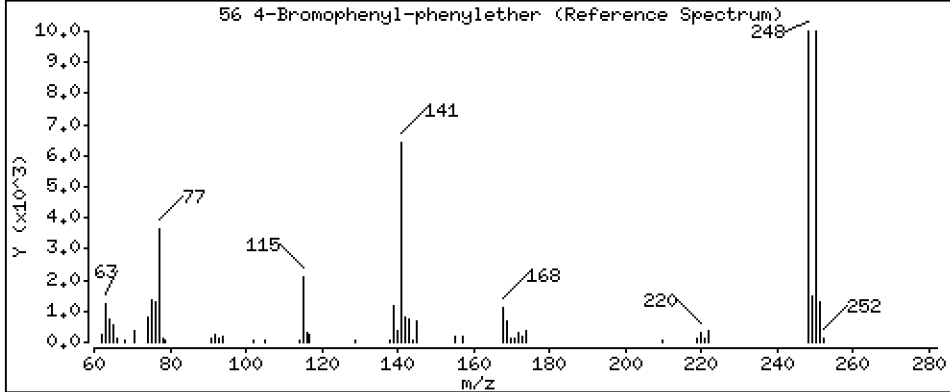
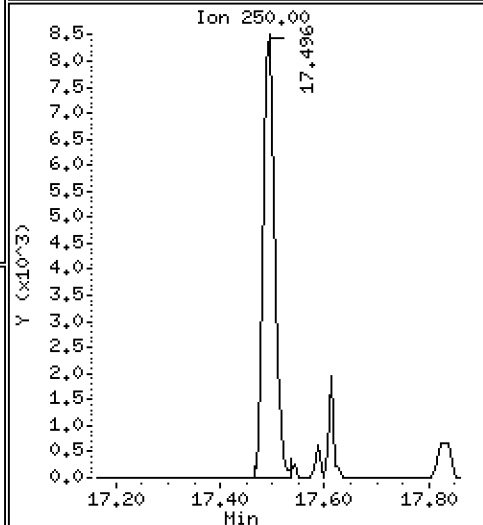
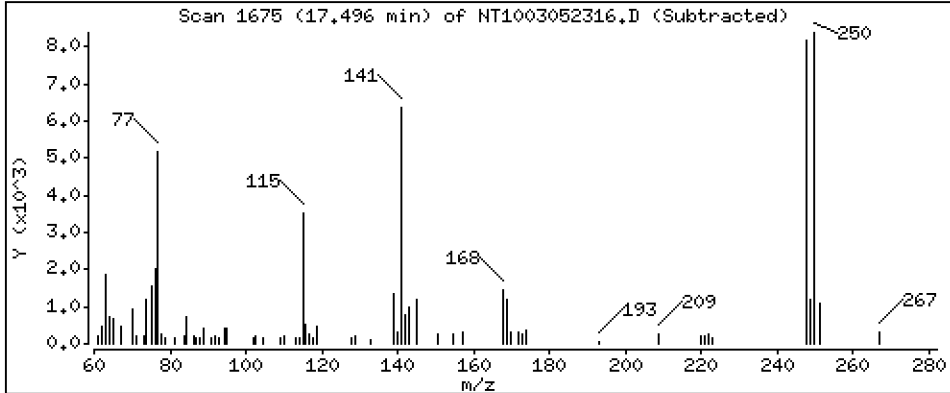
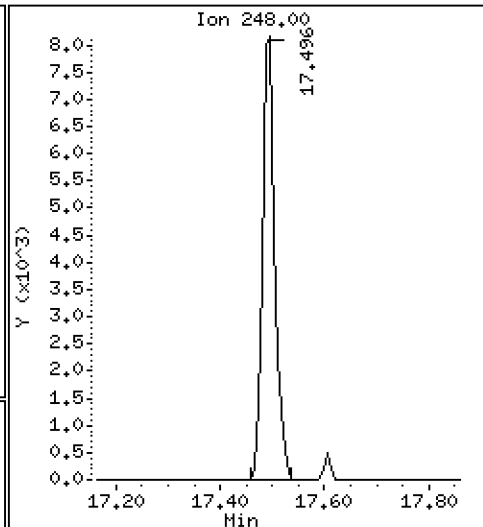
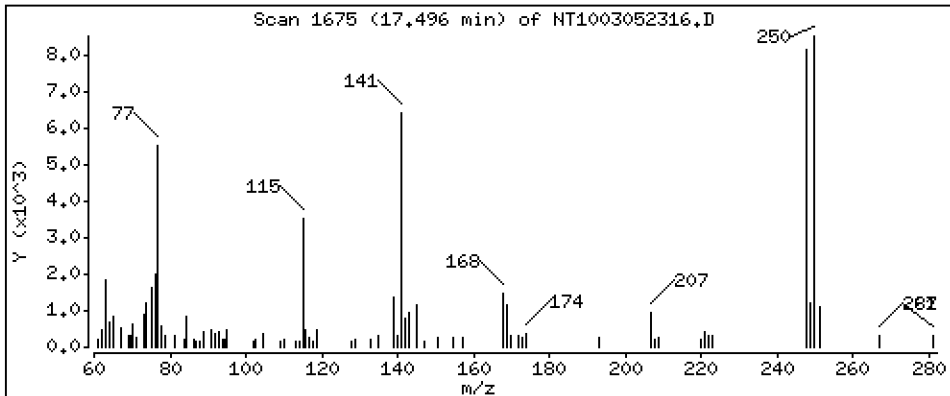
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,2320 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

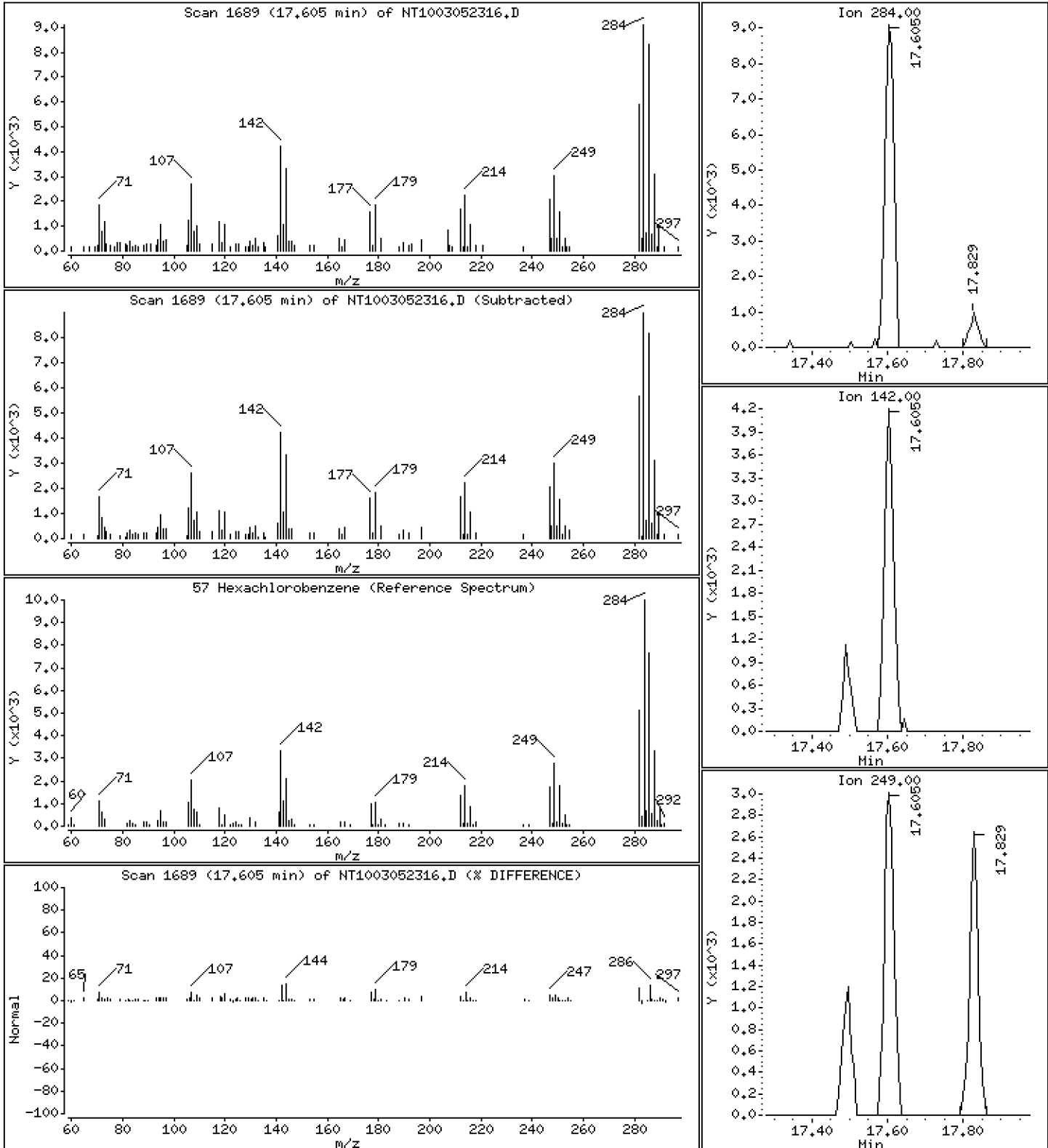
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2329 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

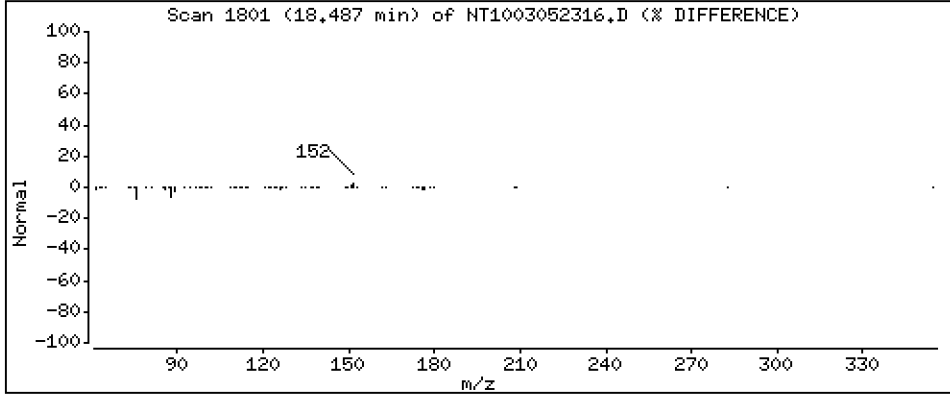
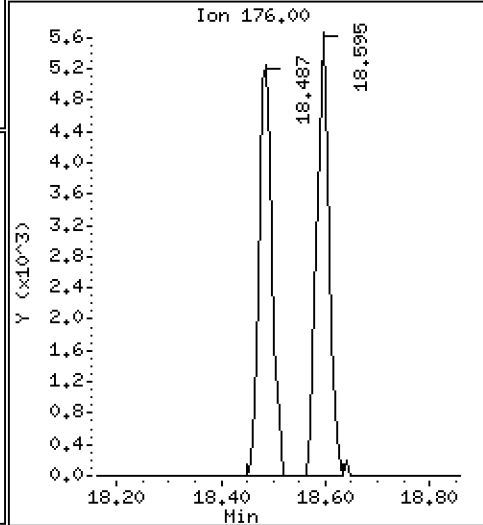
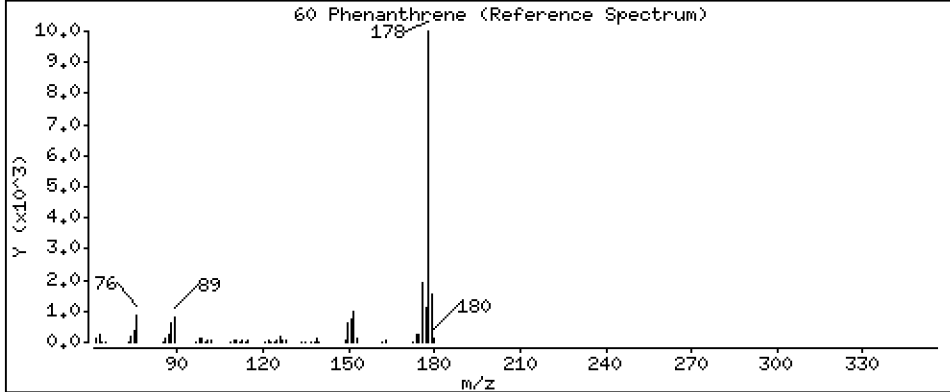
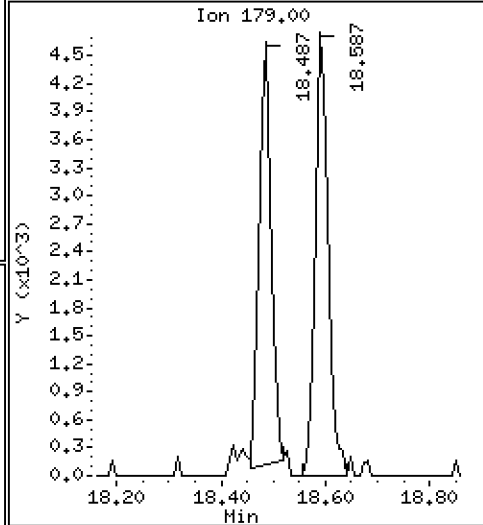
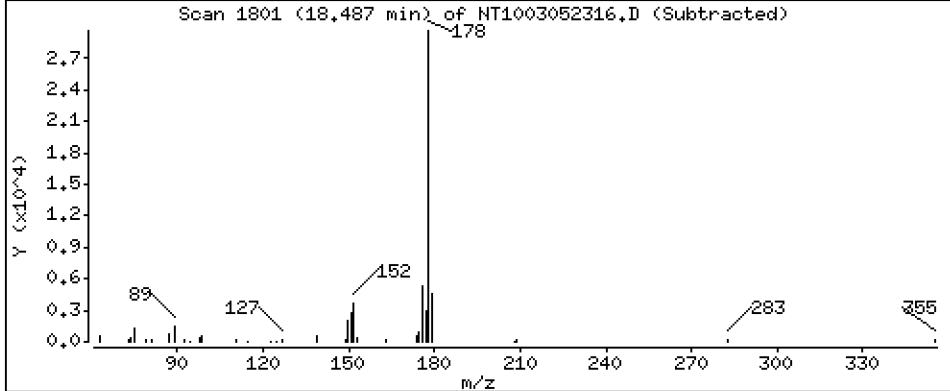
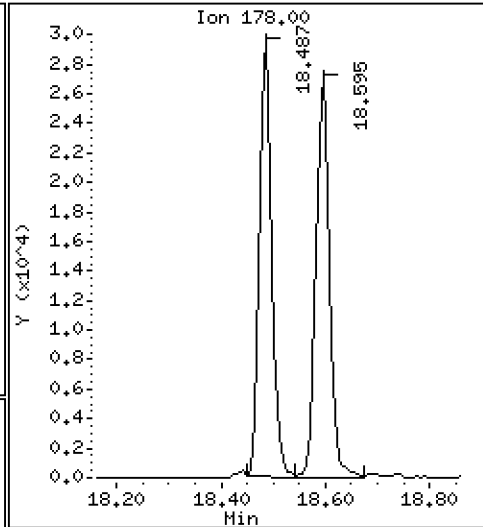
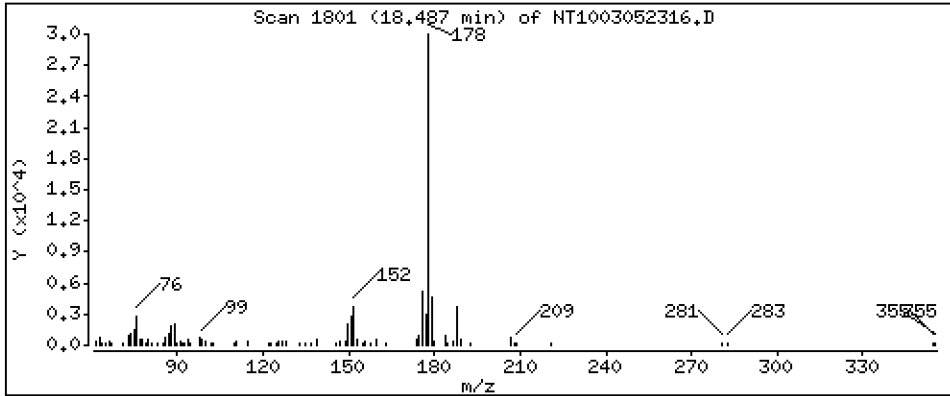
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1978 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

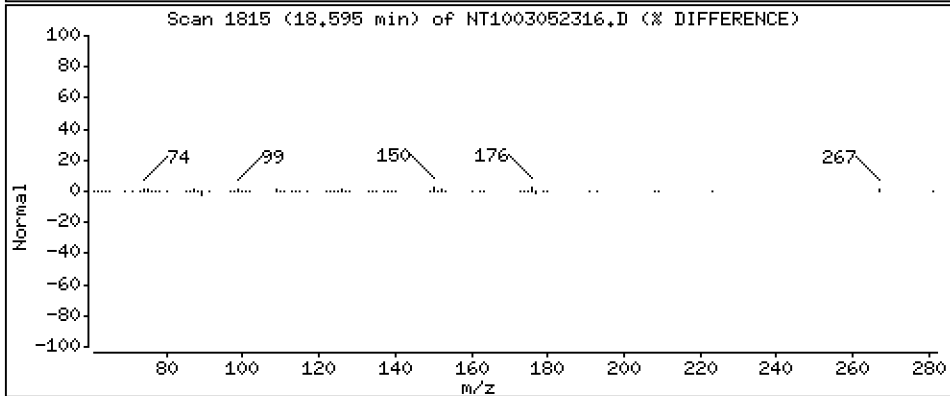
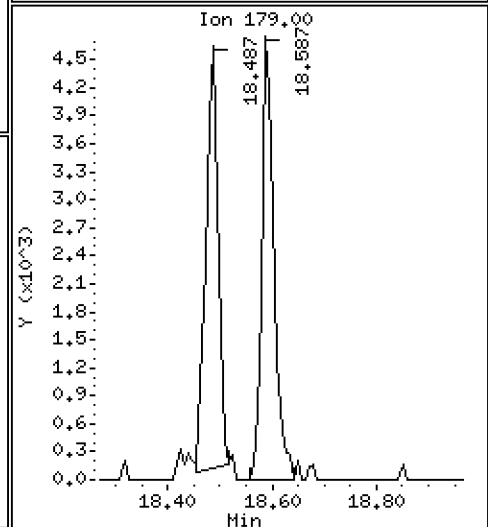
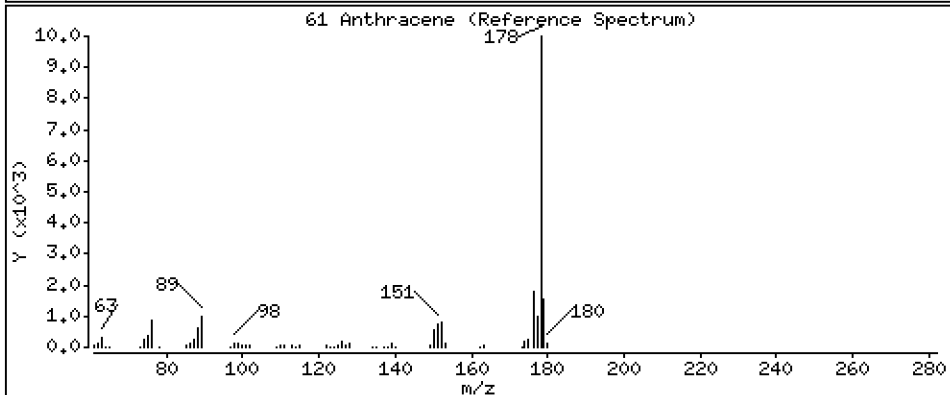
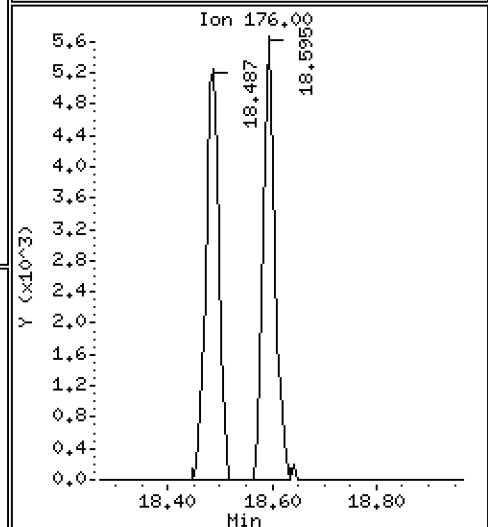
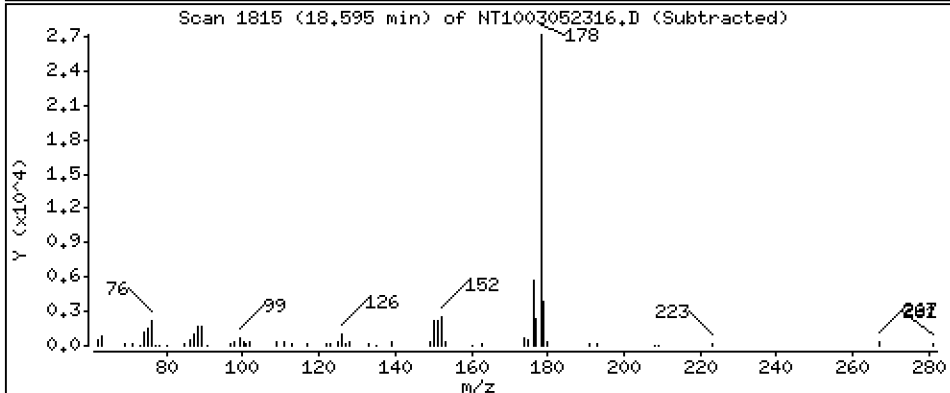
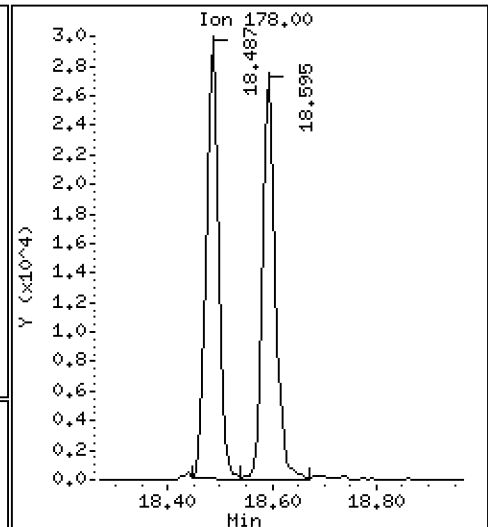
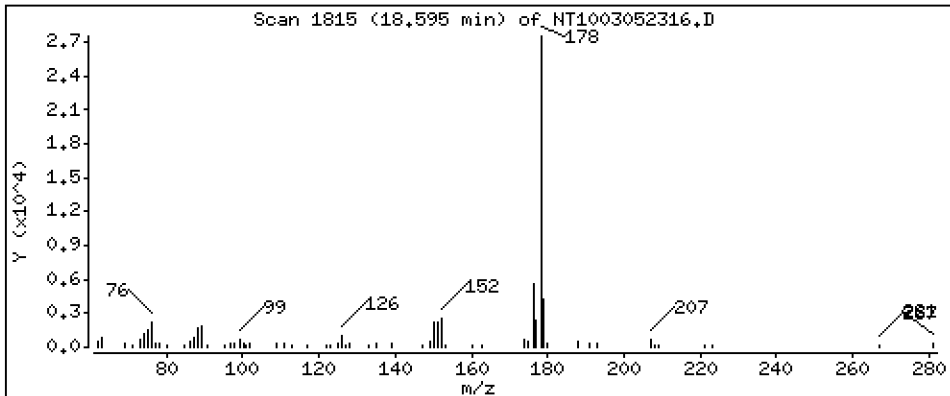
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1963 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

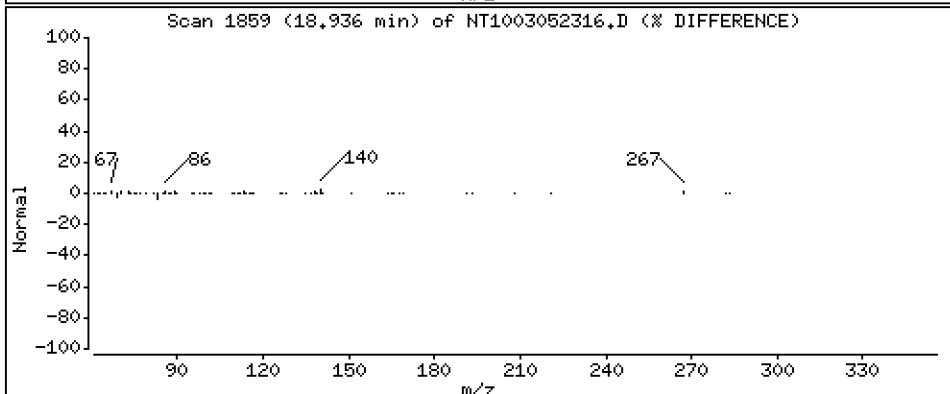
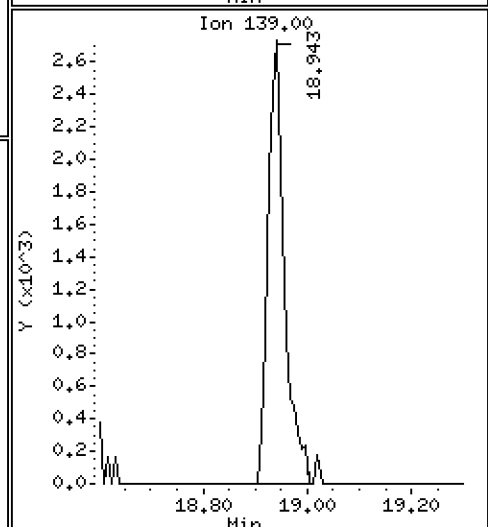
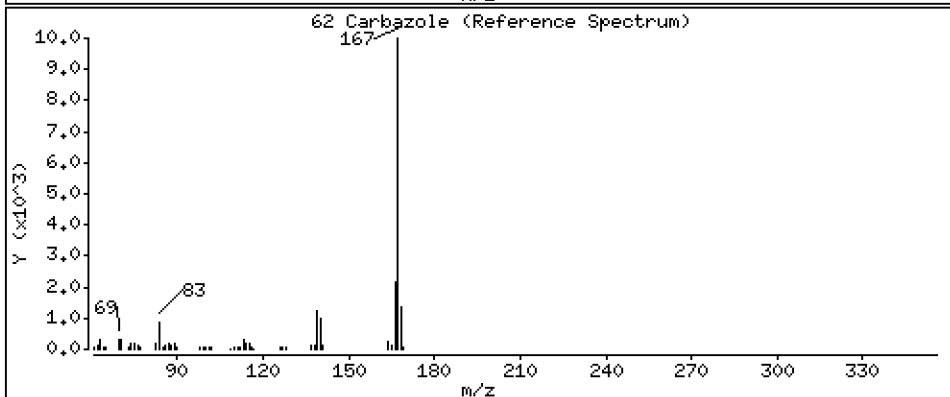
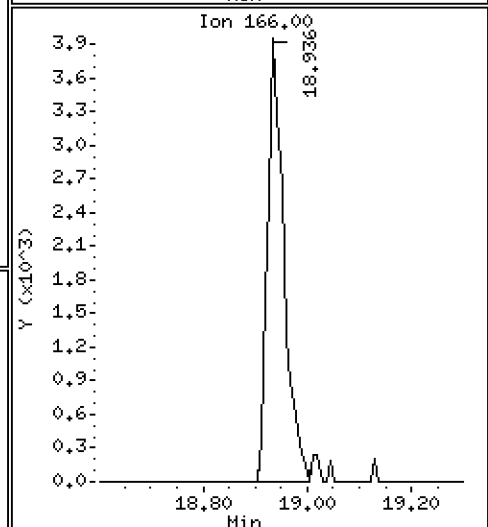
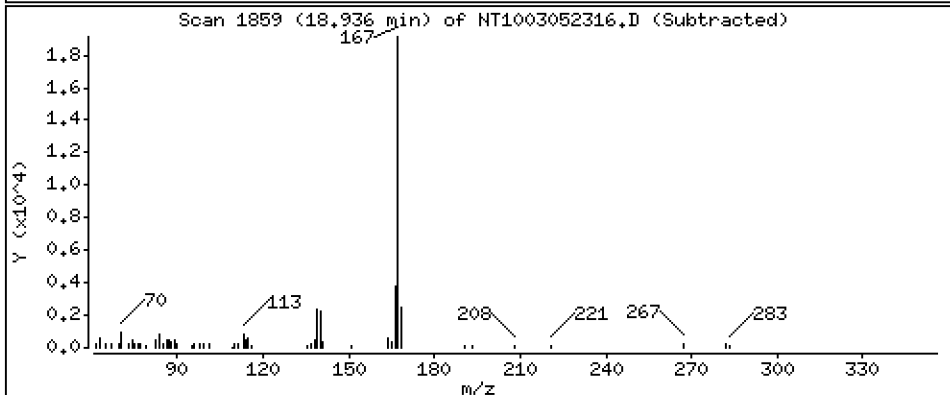
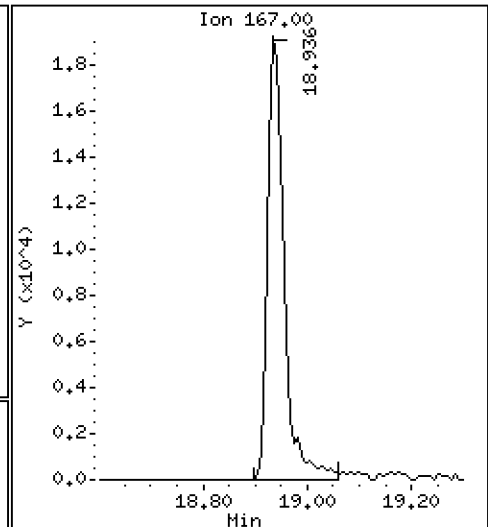
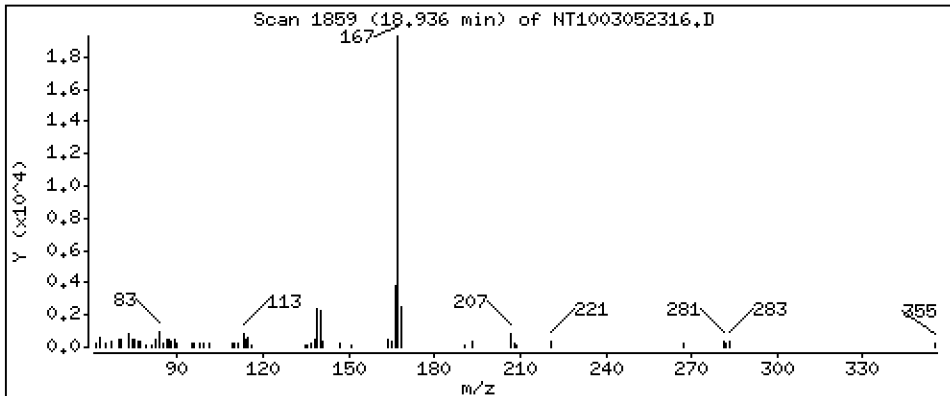
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1858 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

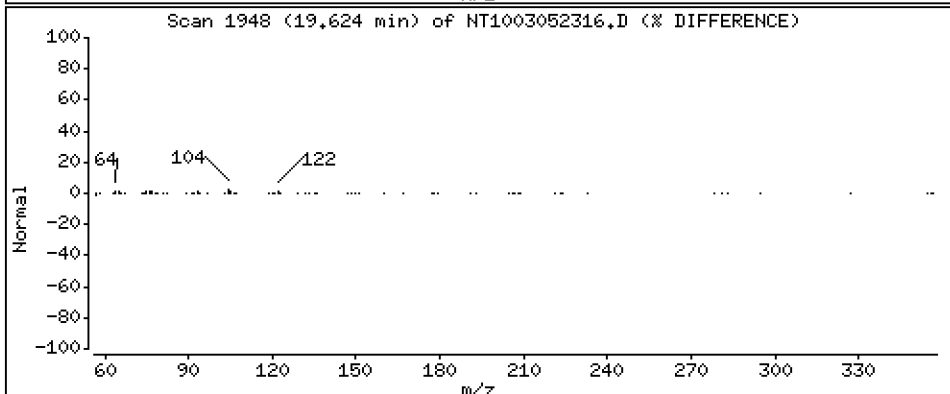
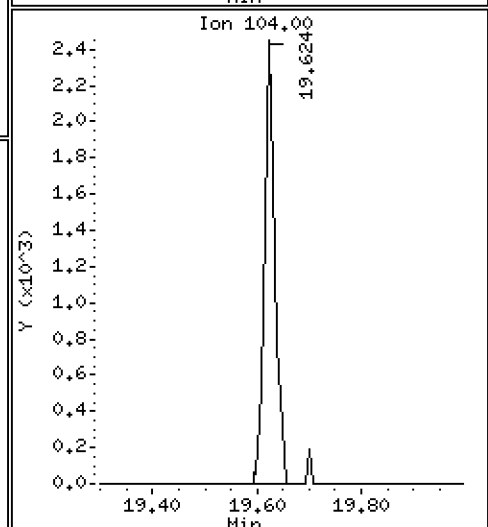
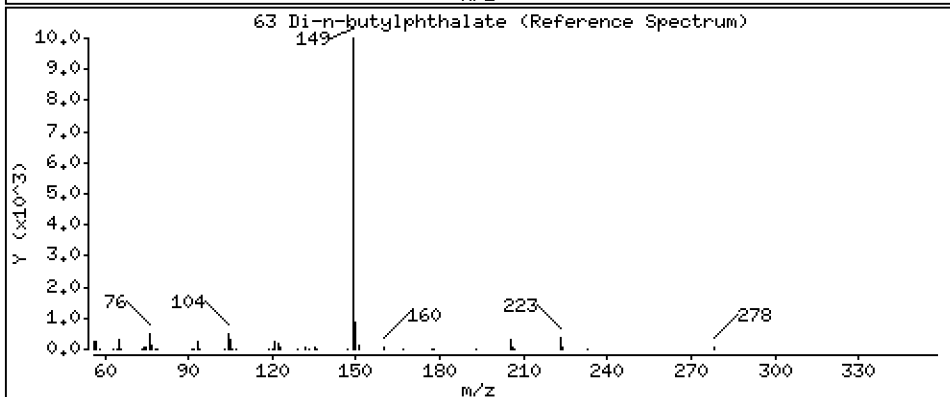
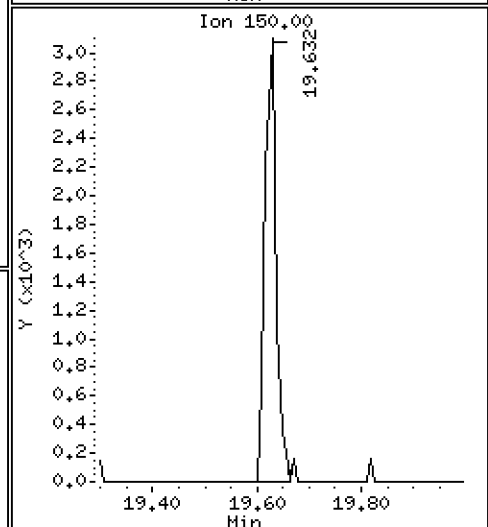
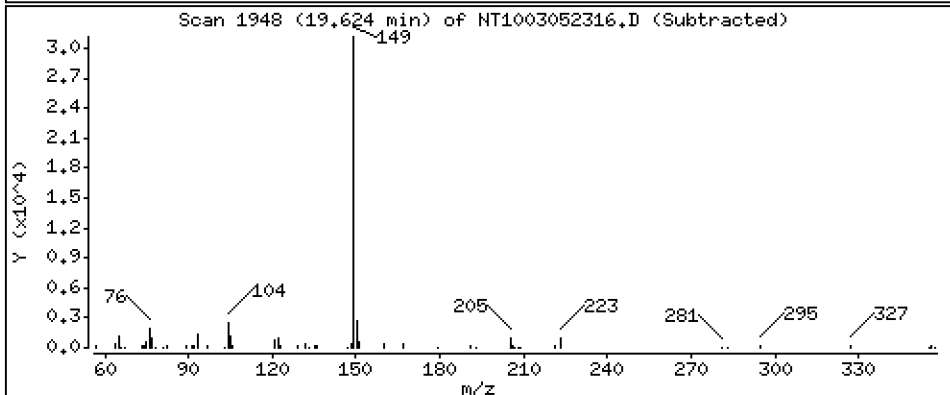
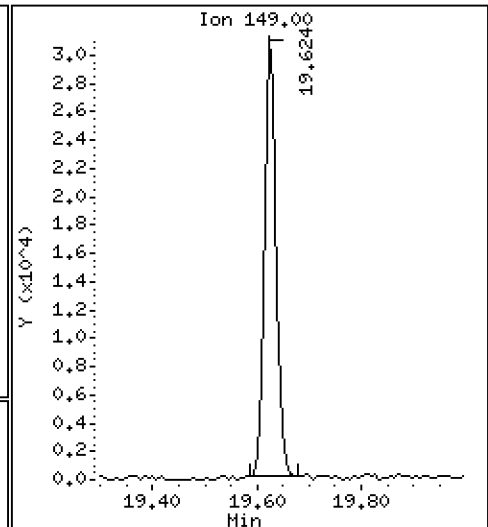
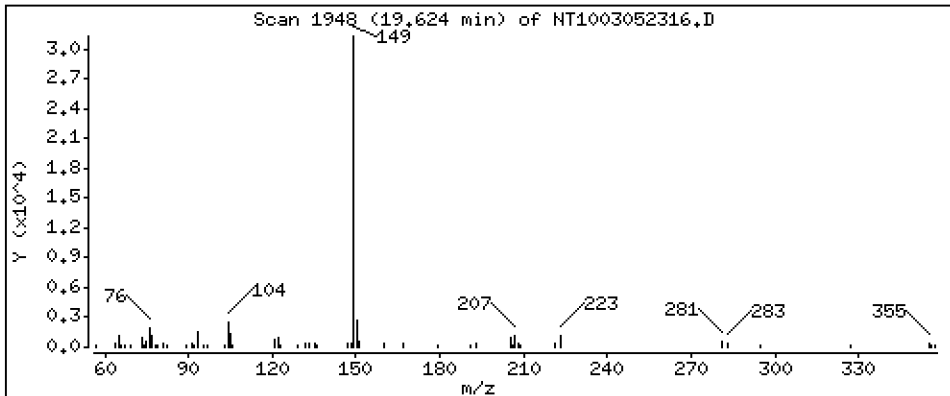
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1588 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

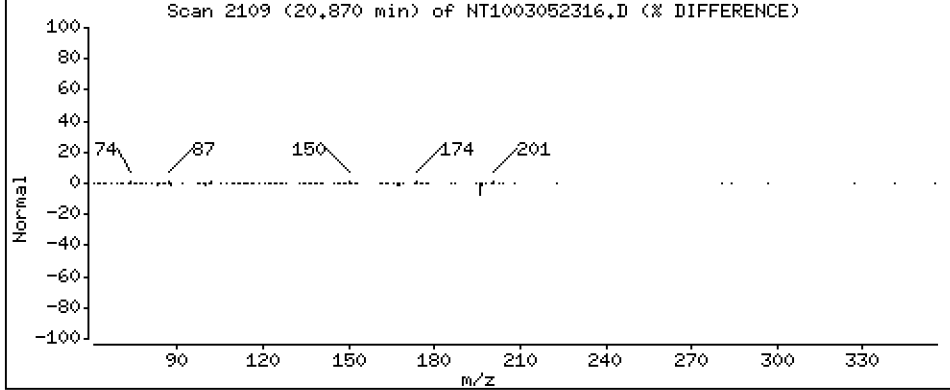
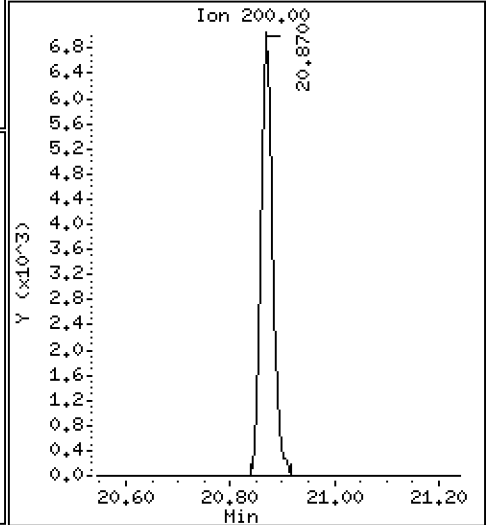
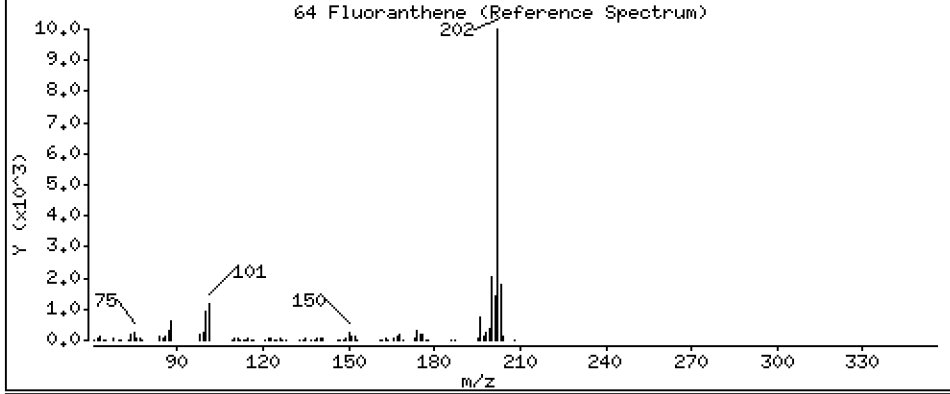
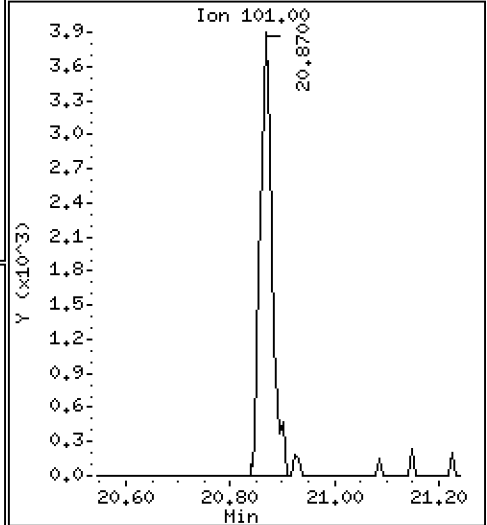
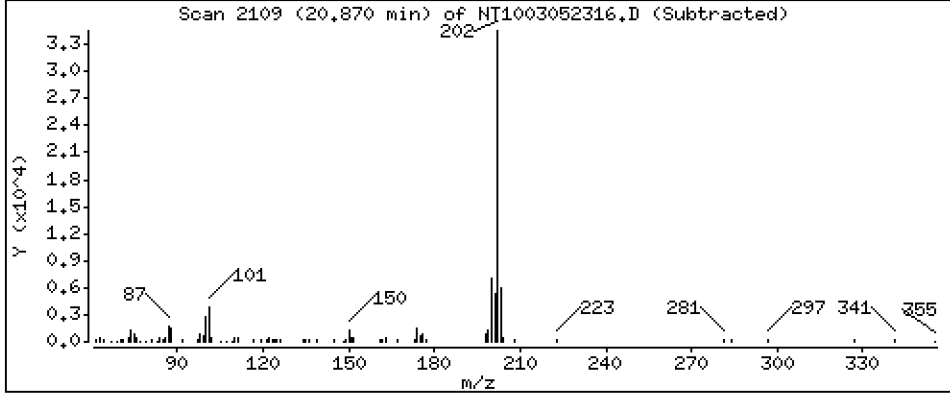
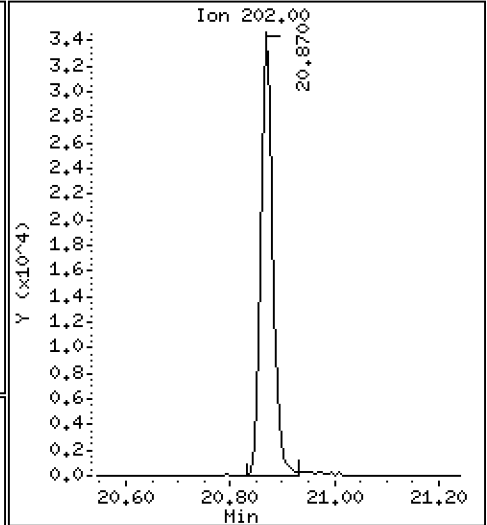
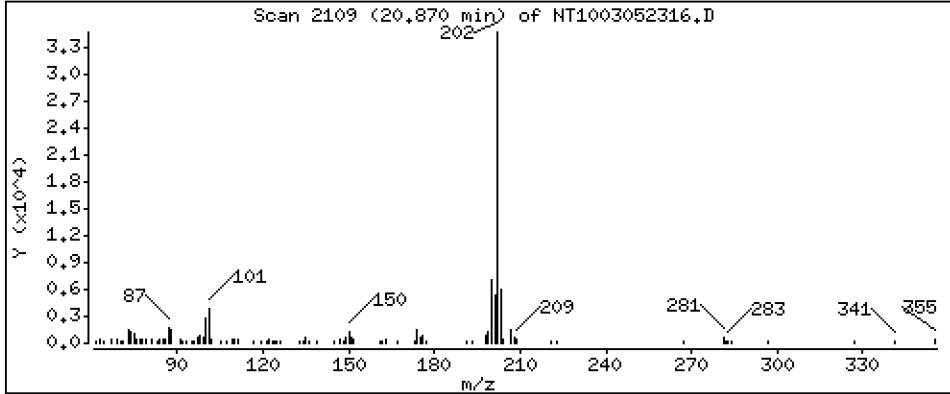
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

64 Fluoranthene

Concentration: 0.1832 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

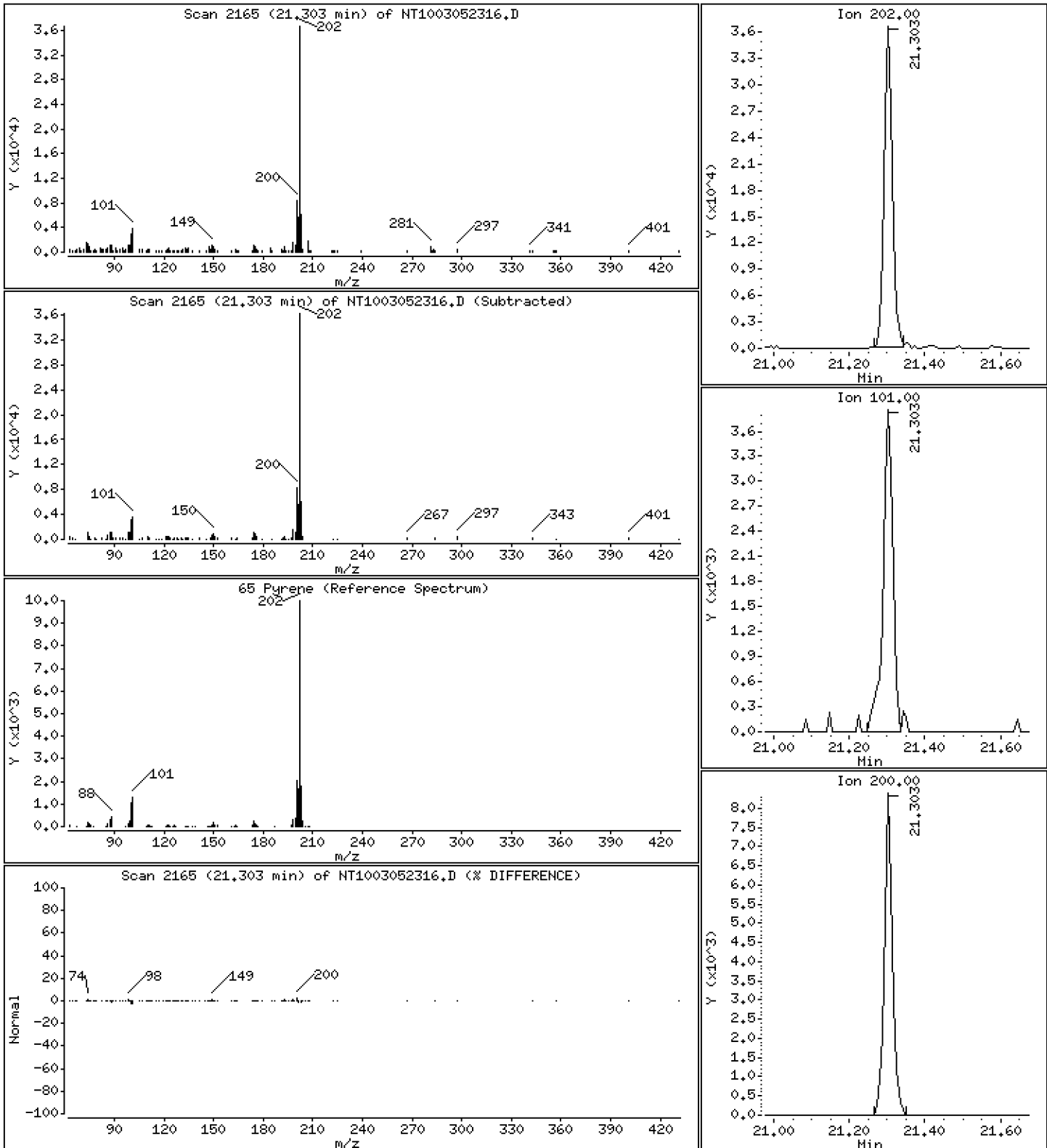
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,1817 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

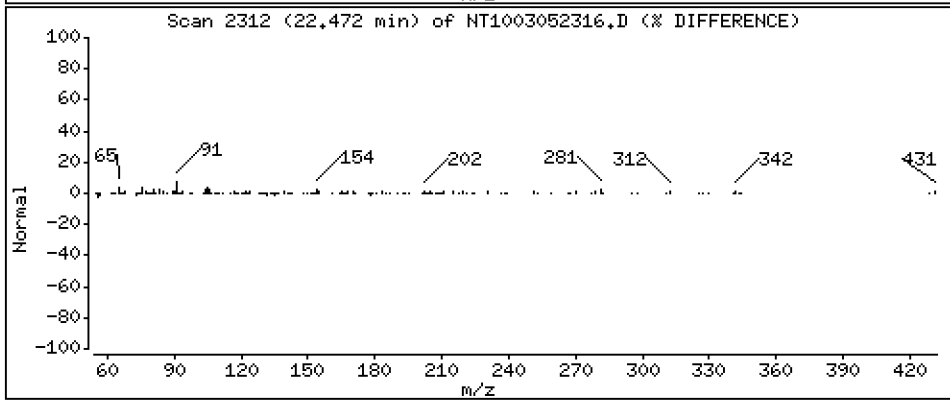
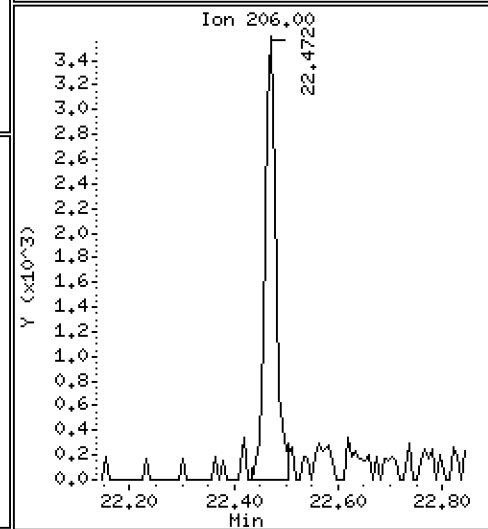
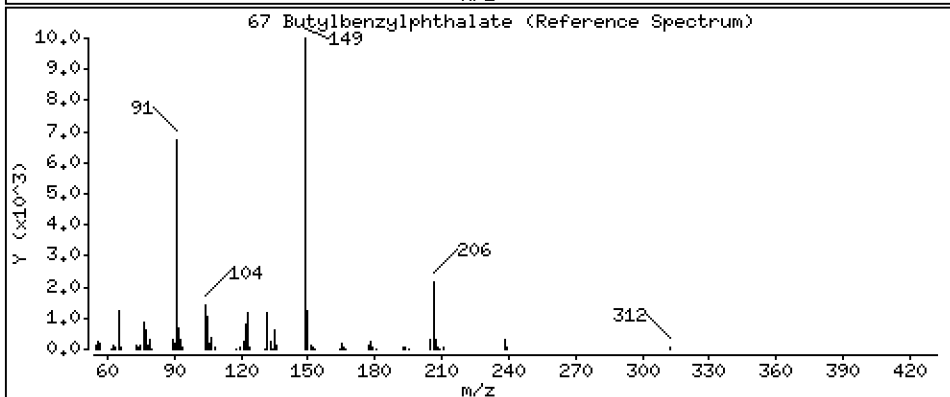
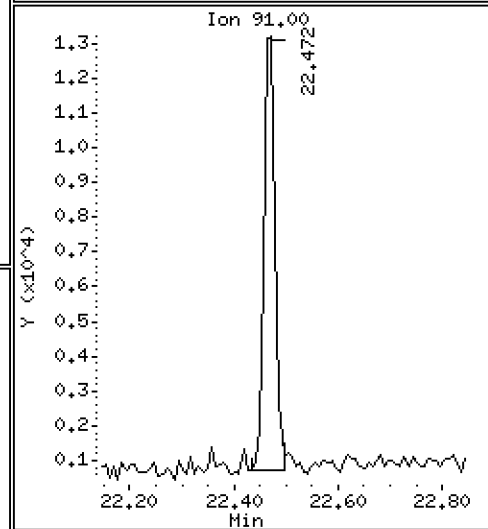
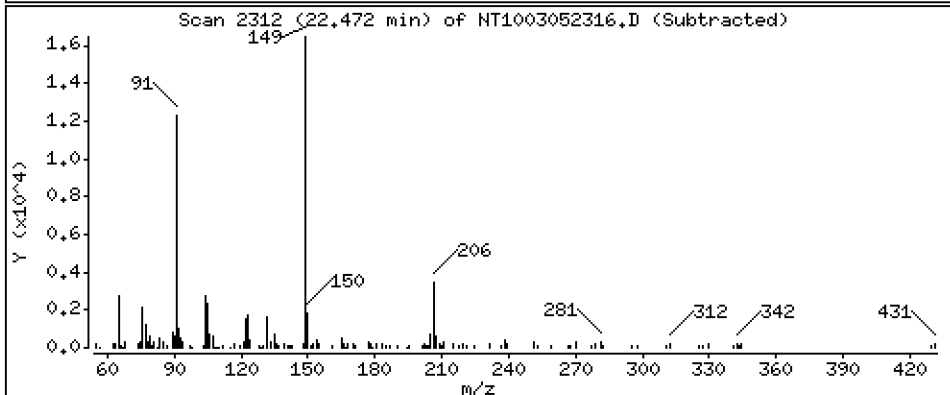
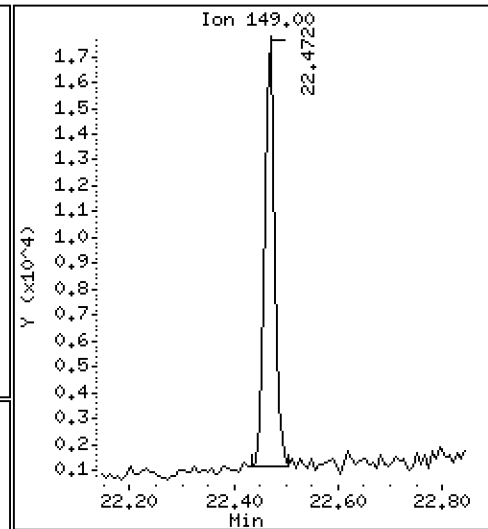
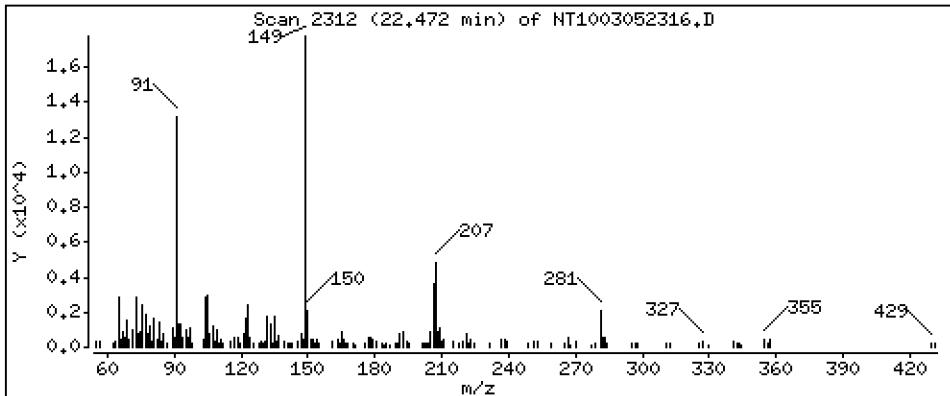
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1369 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

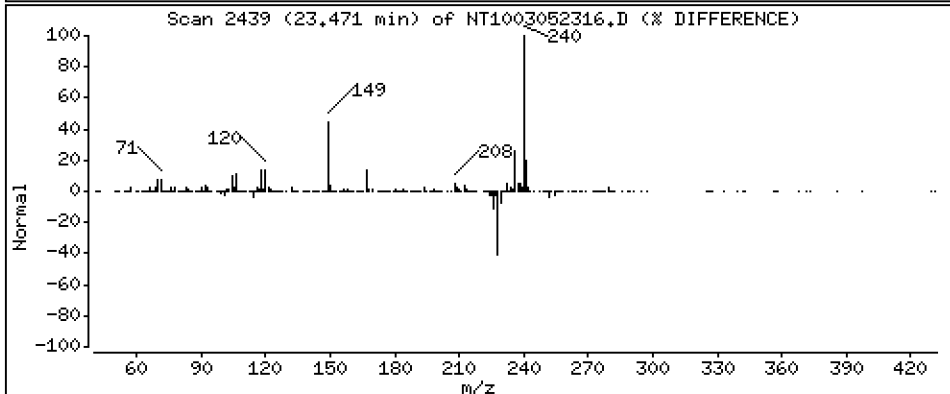
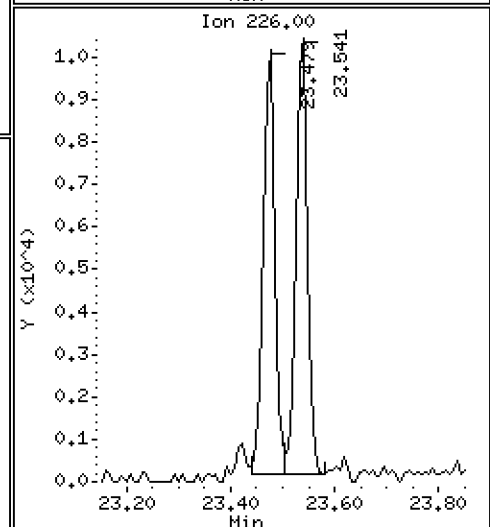
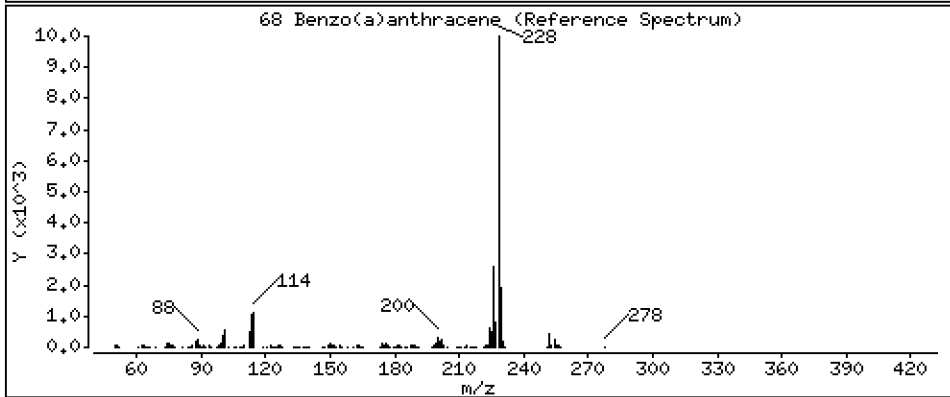
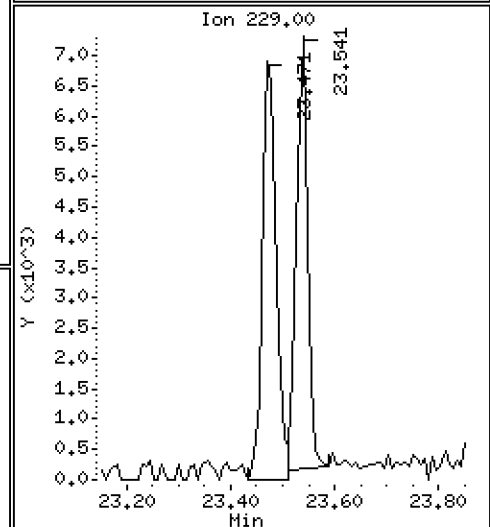
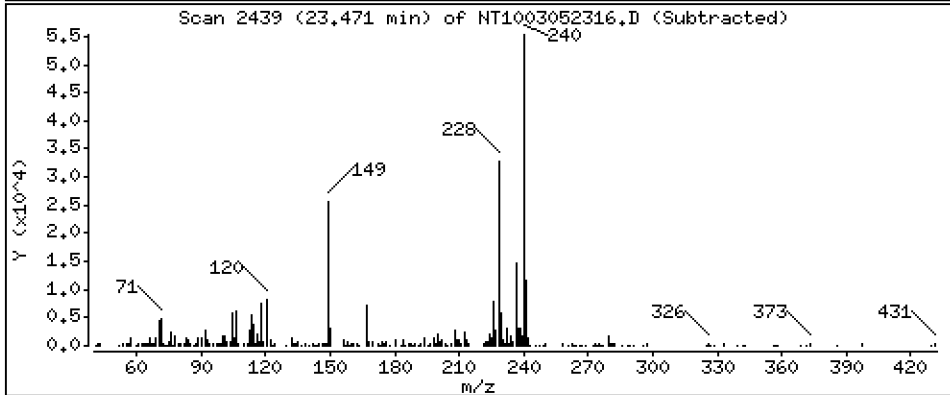
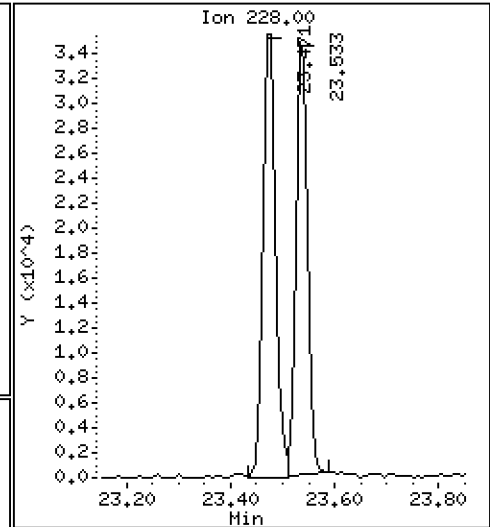
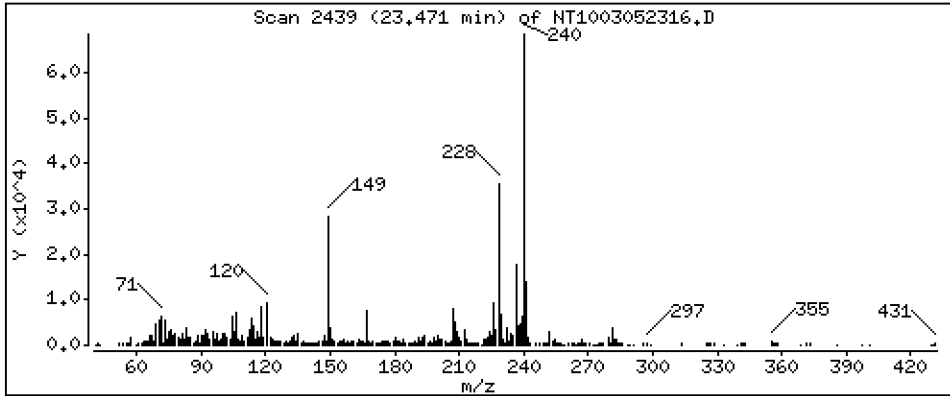
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,1995 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

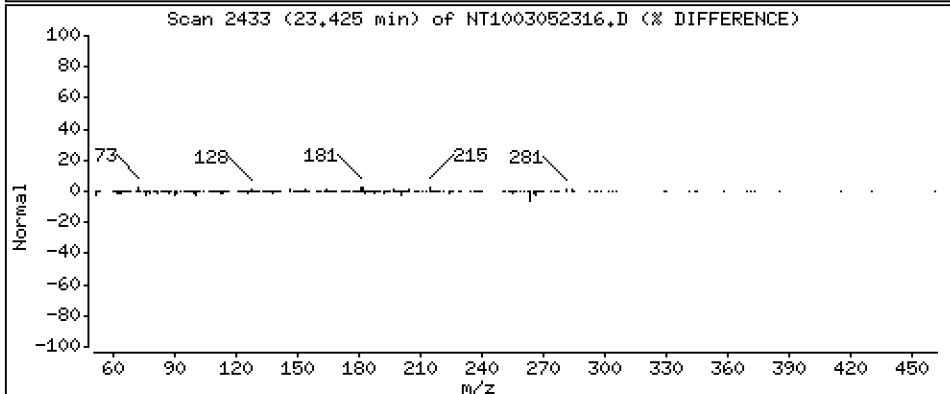
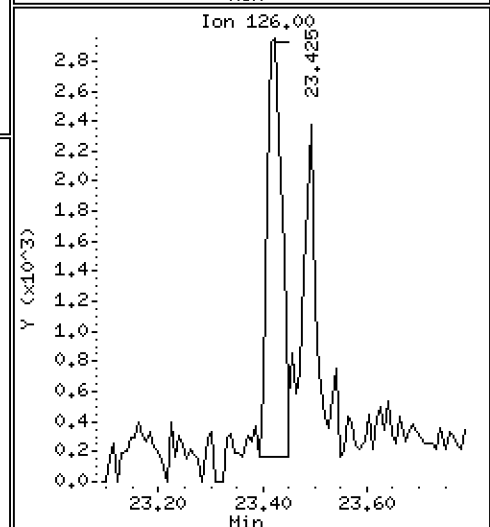
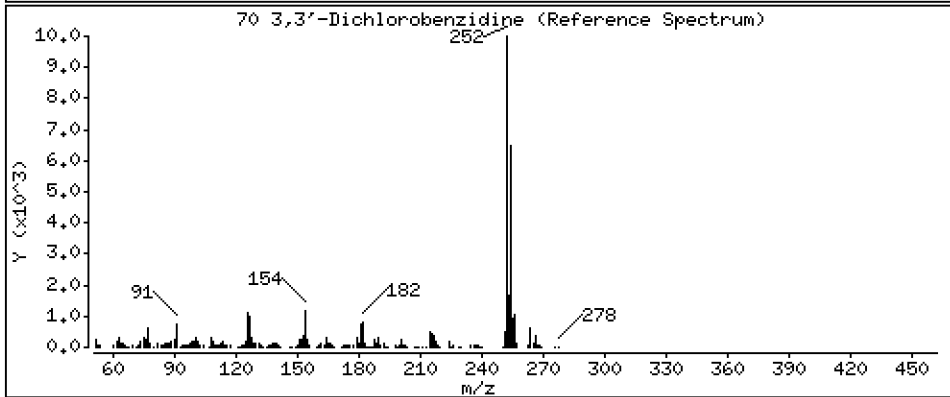
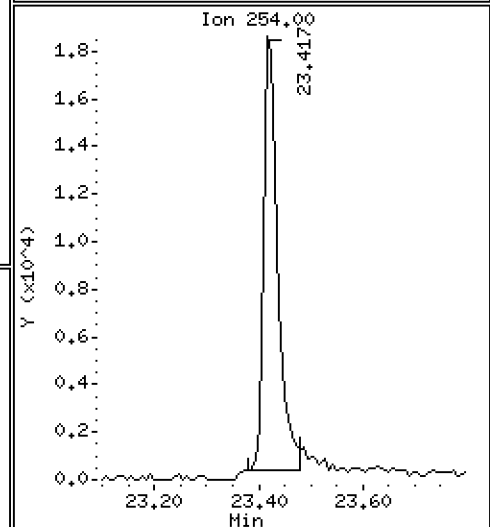
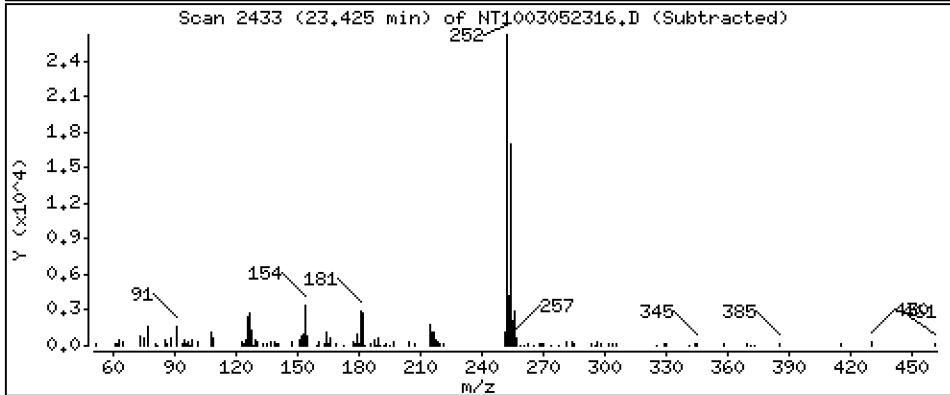
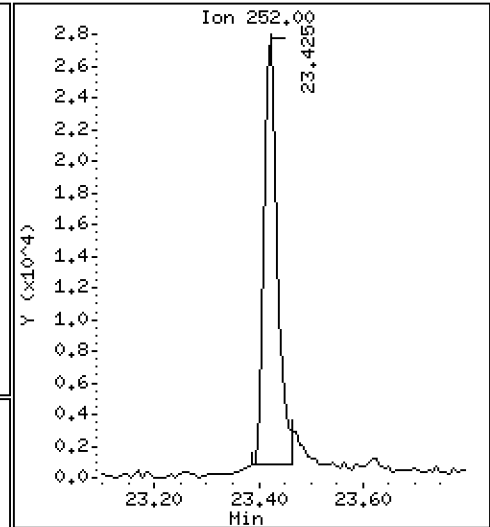
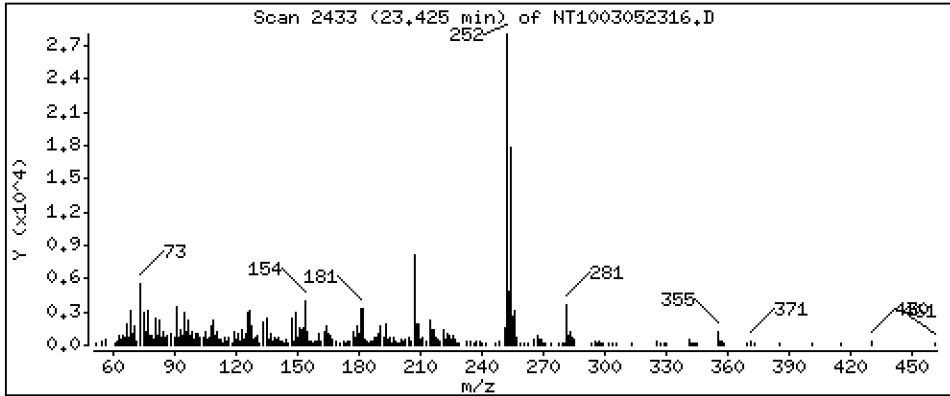
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,3521 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

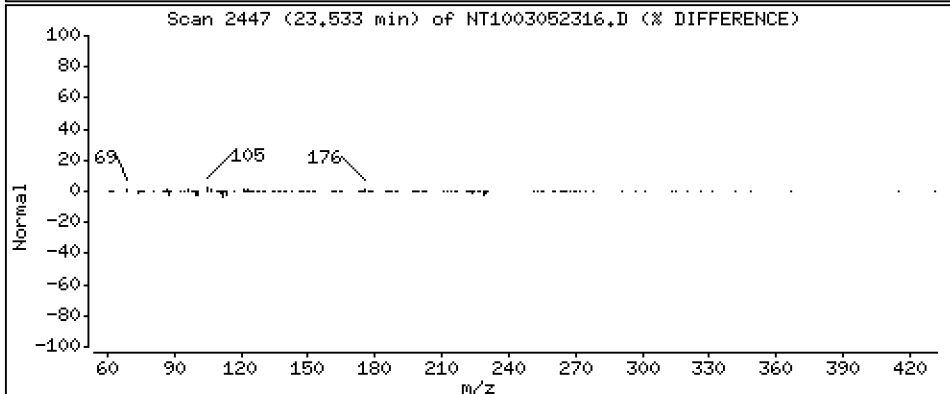
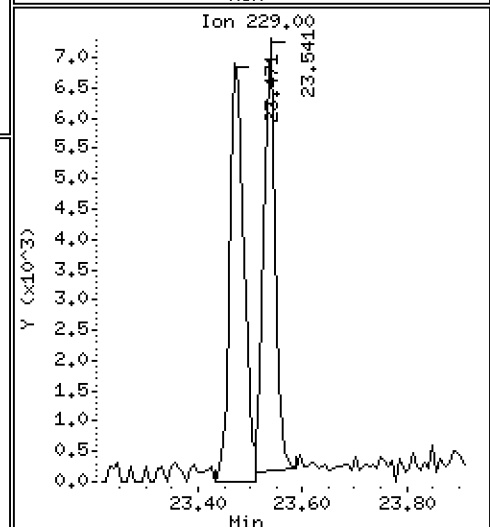
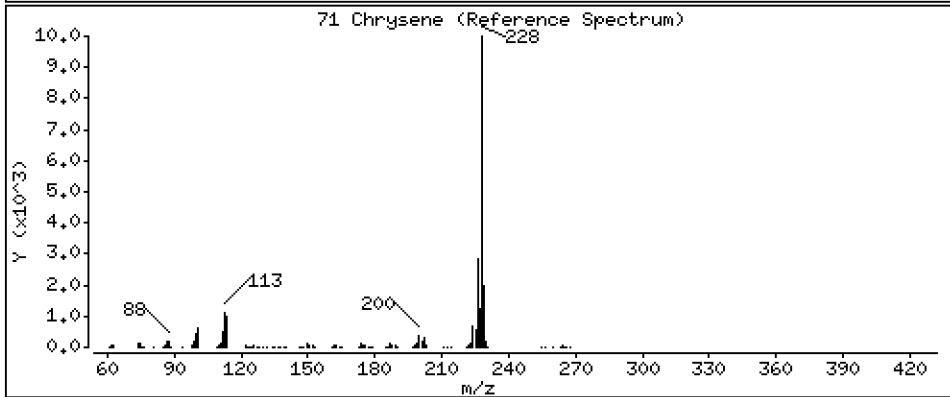
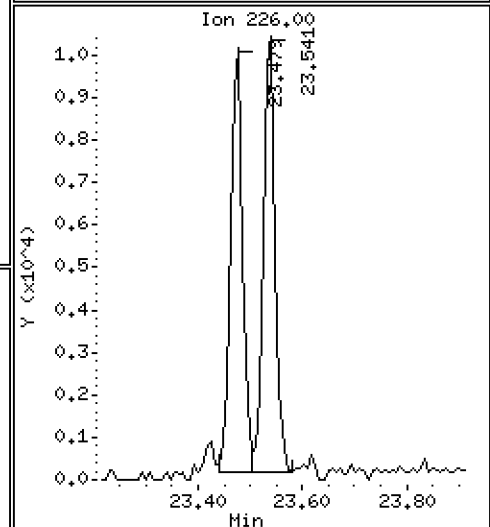
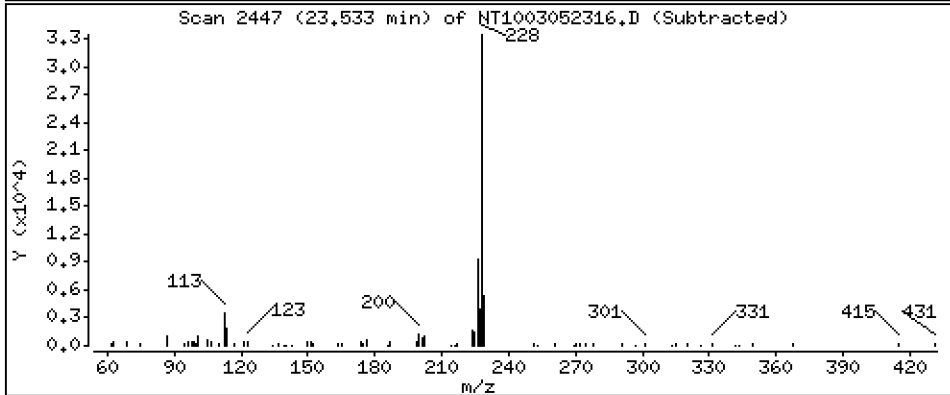
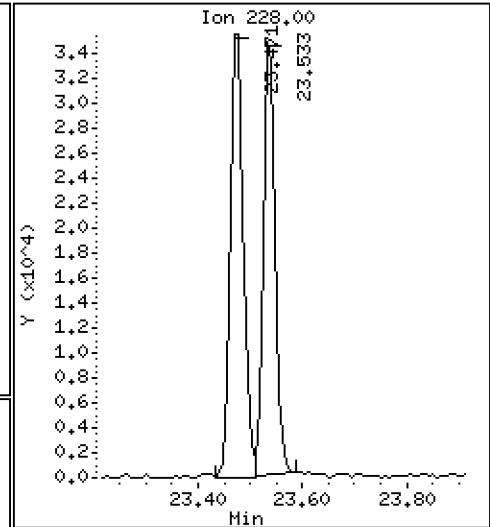
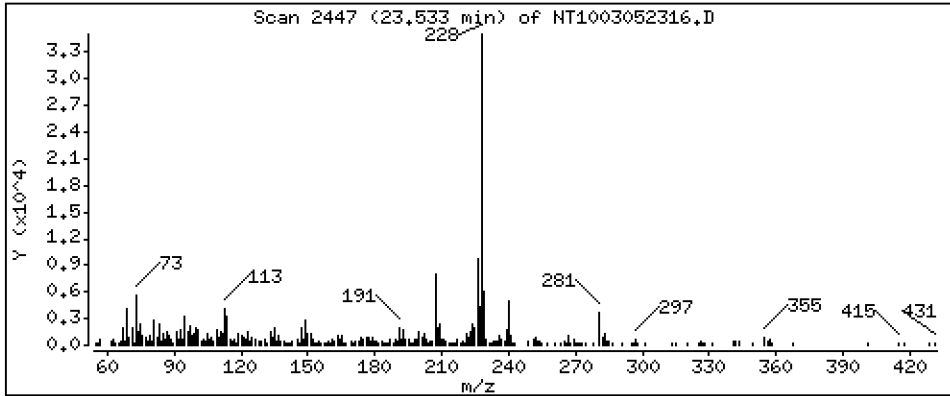
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2187 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

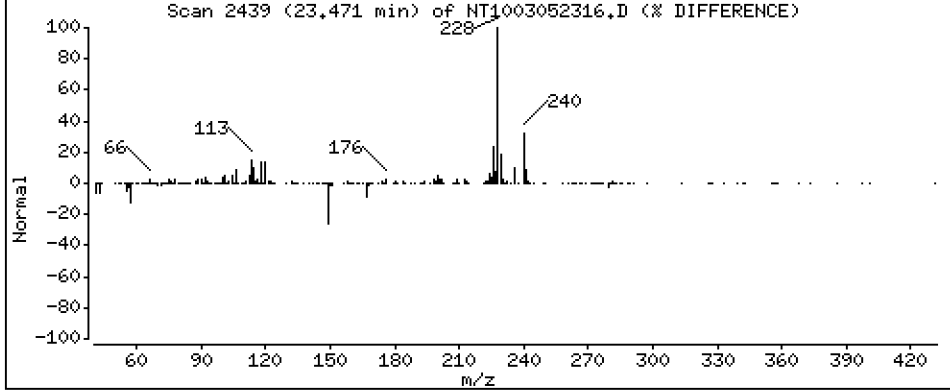
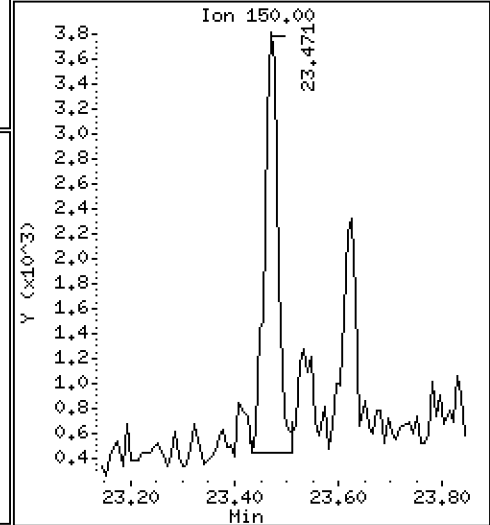
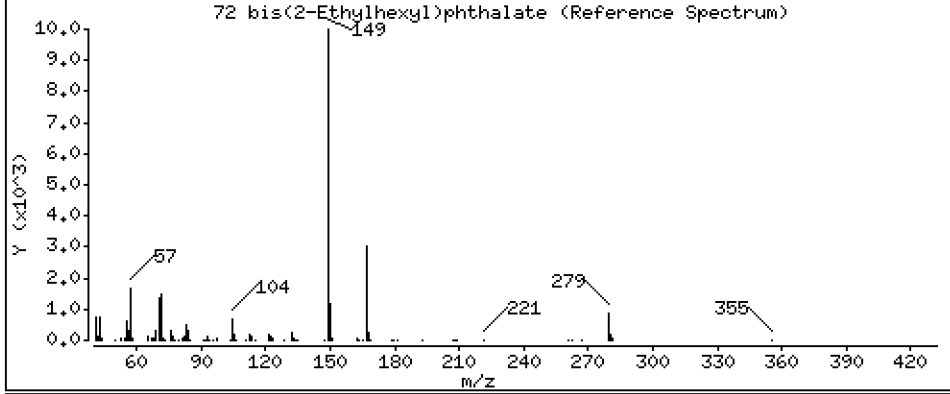
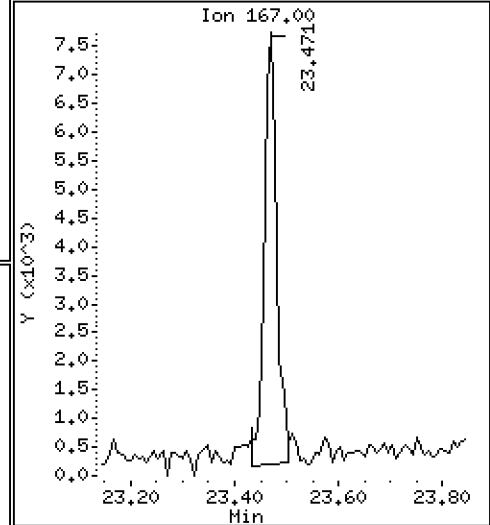
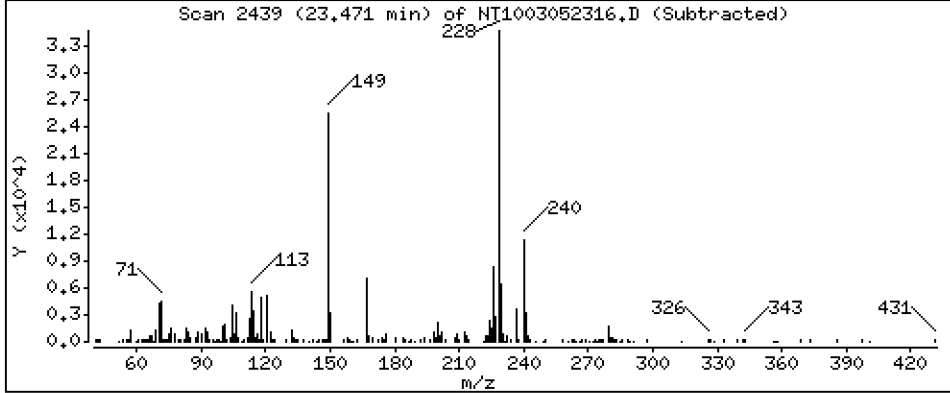
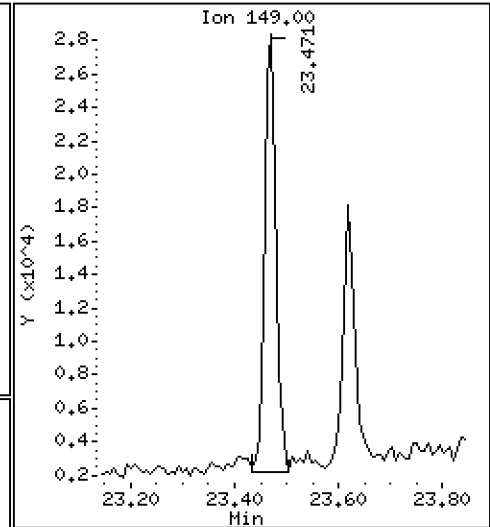
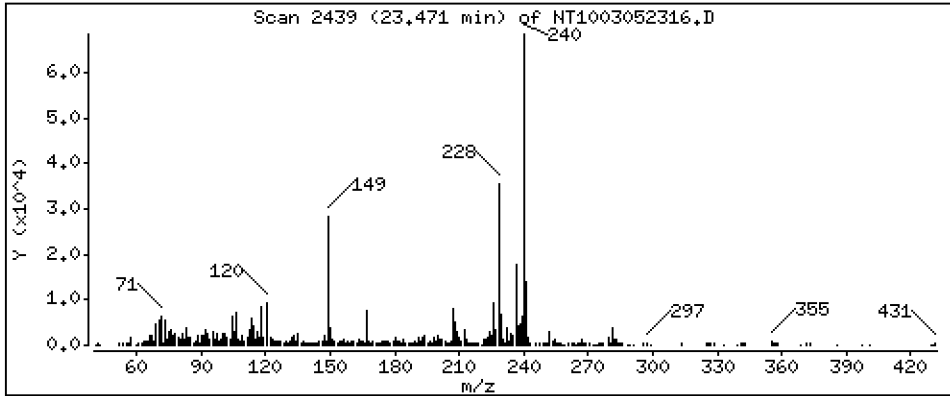
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,1865 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

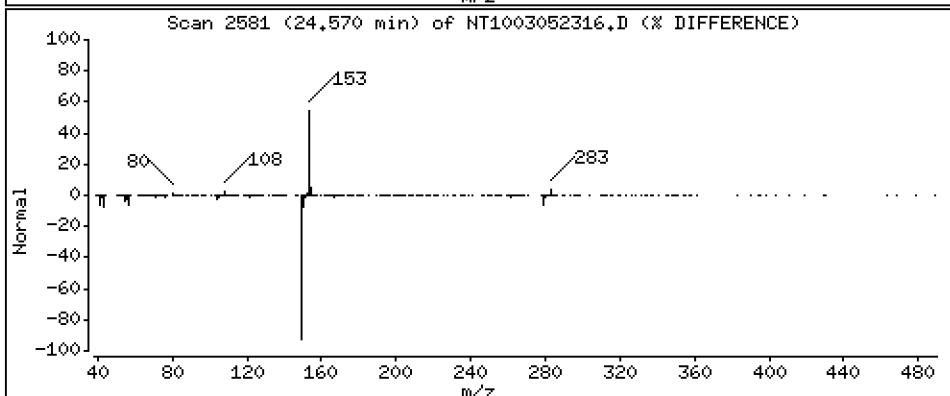
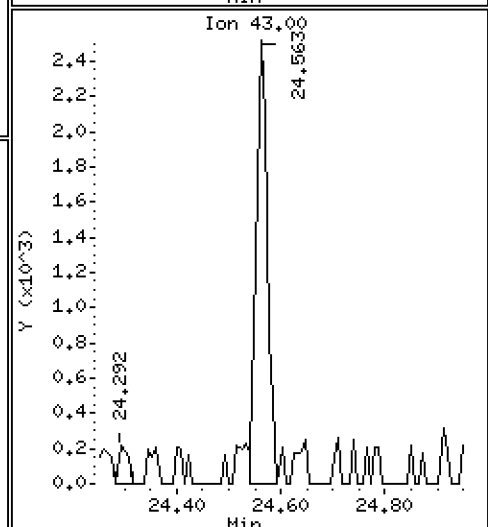
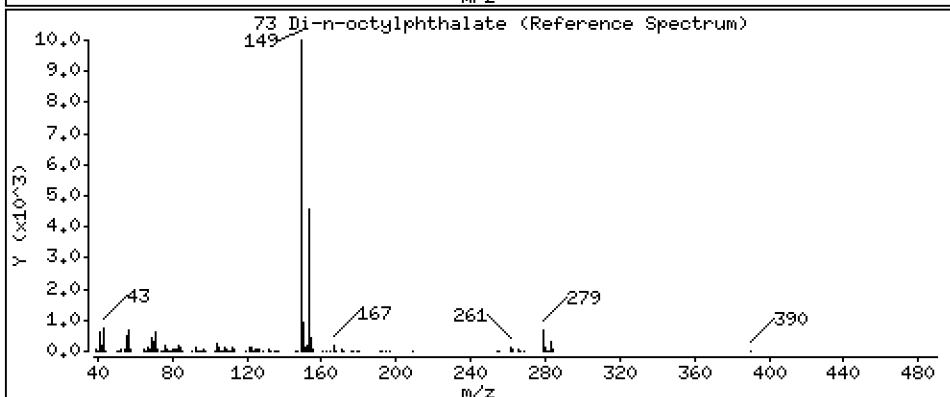
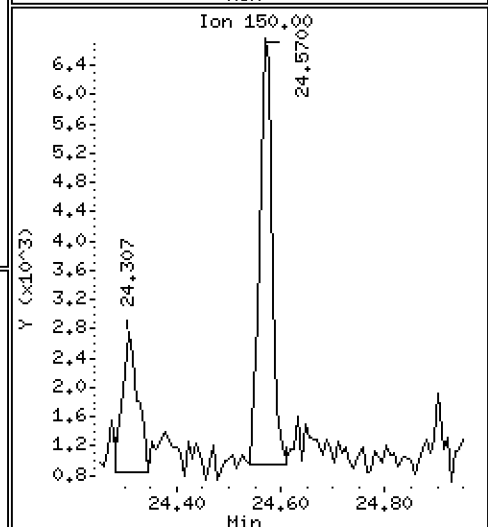
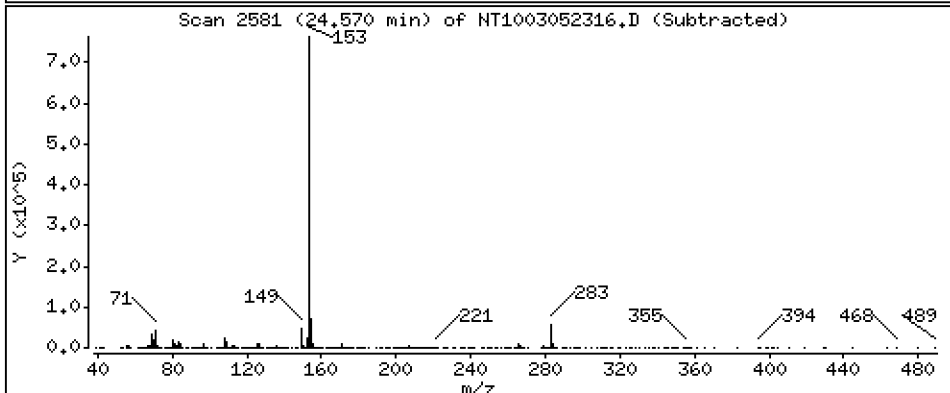
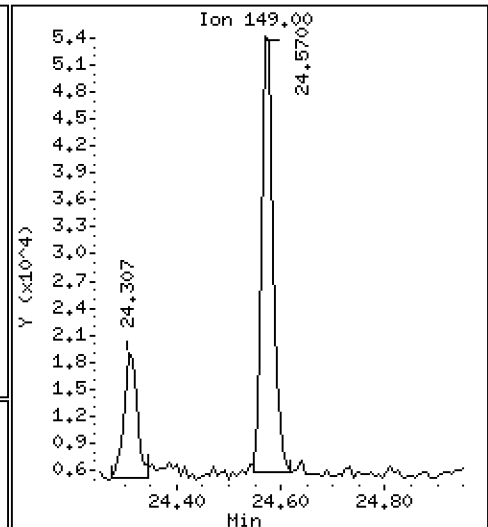
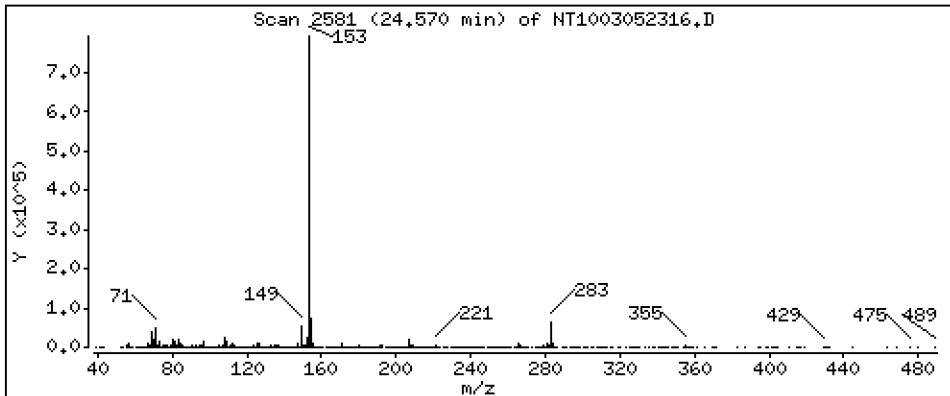
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2258 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

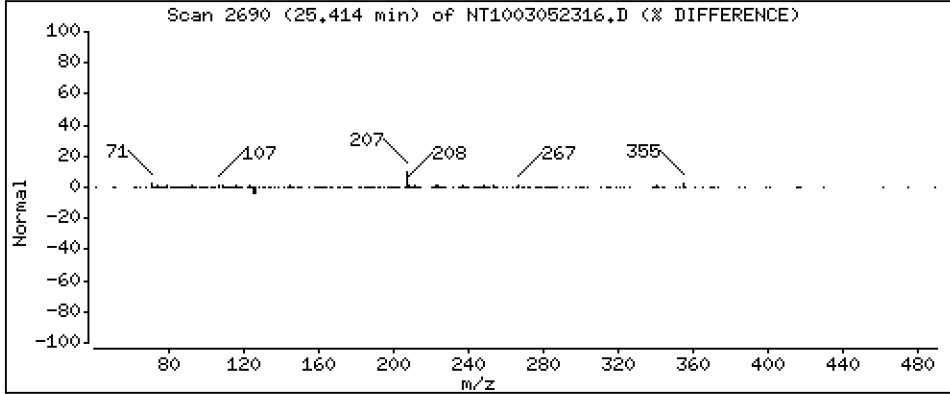
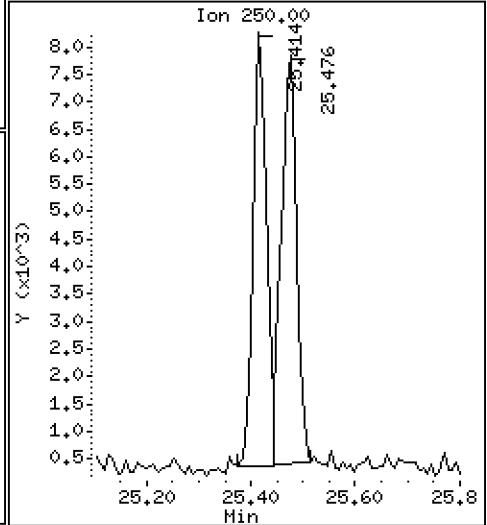
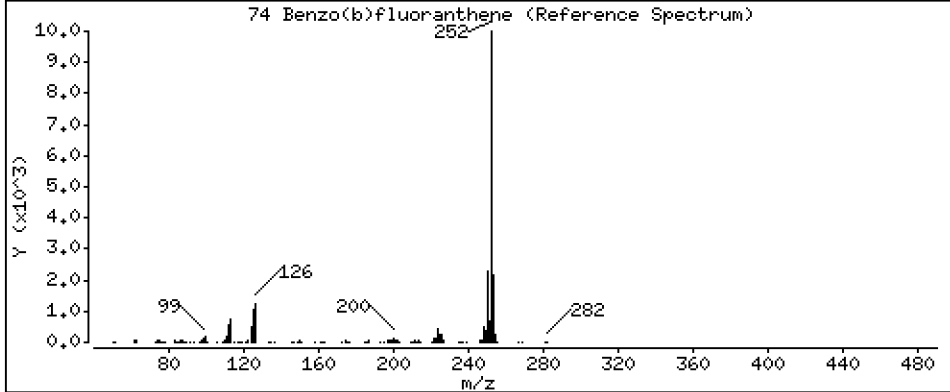
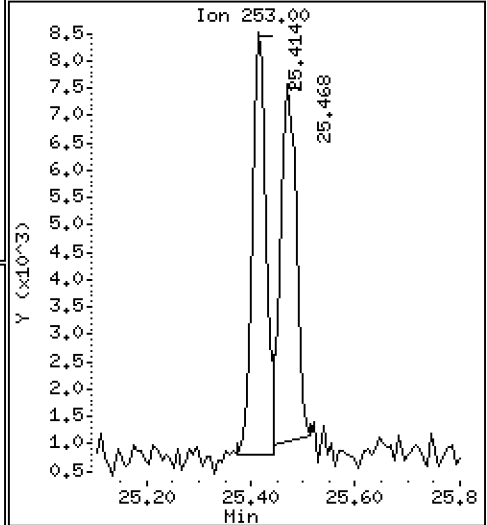
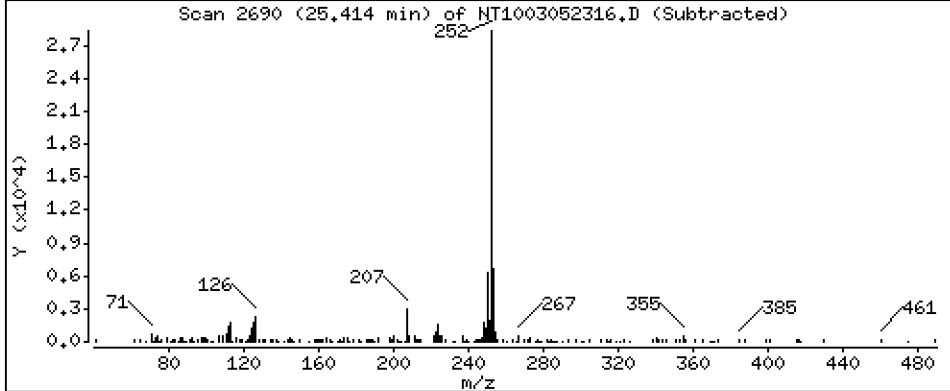
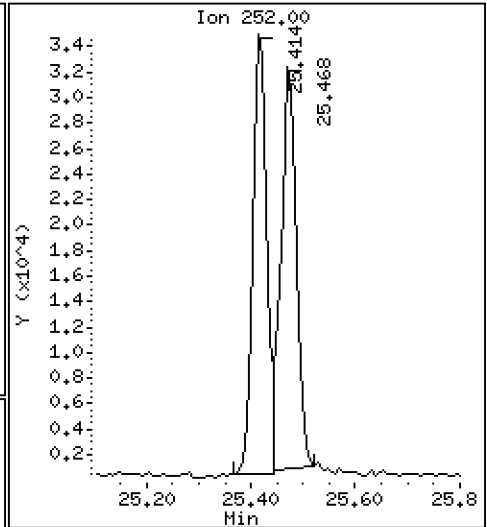
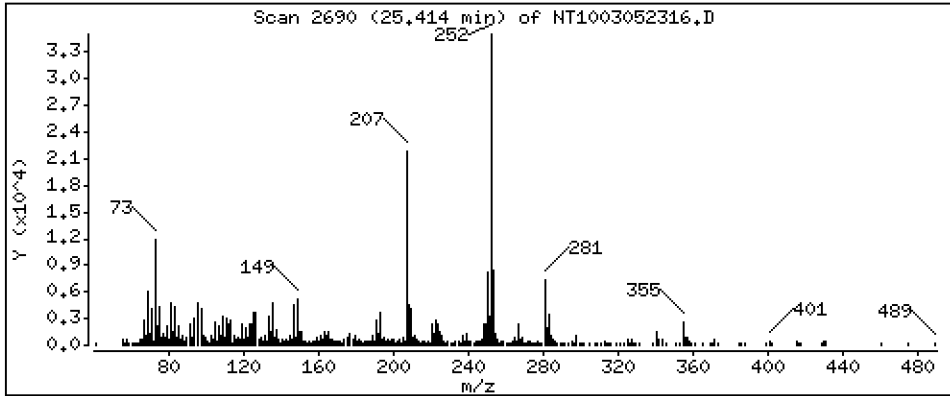
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1802 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

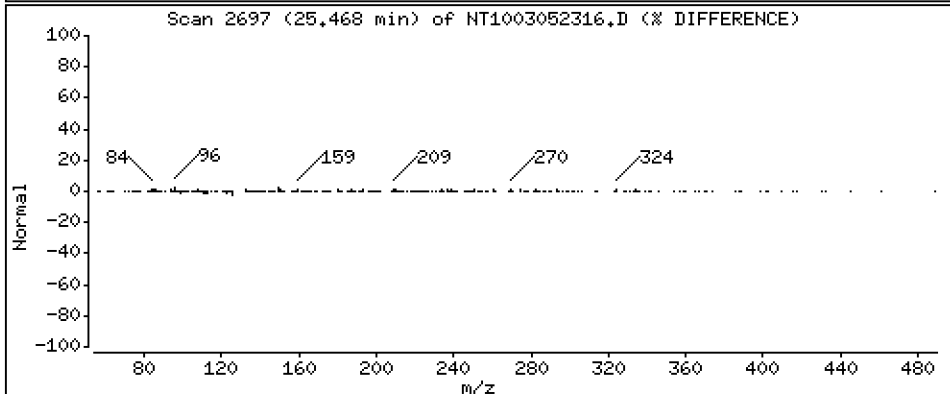
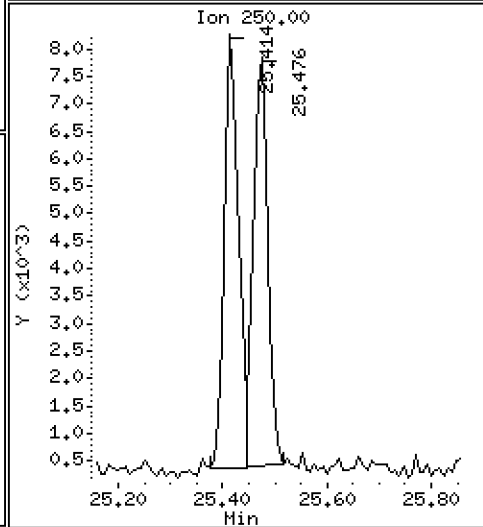
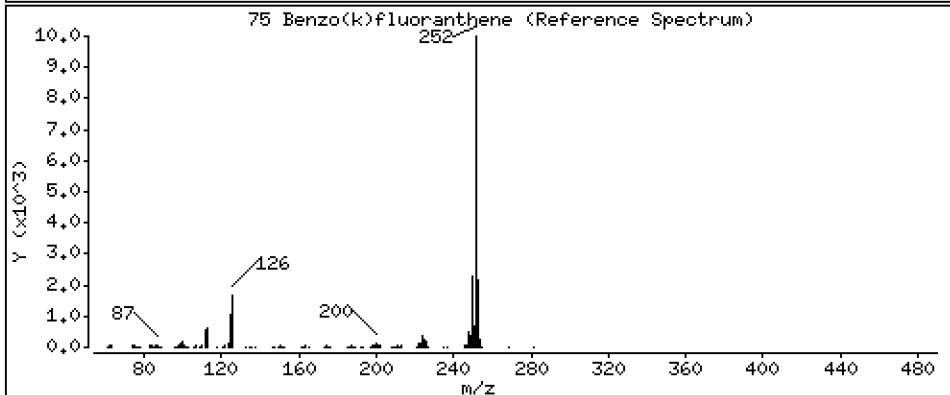
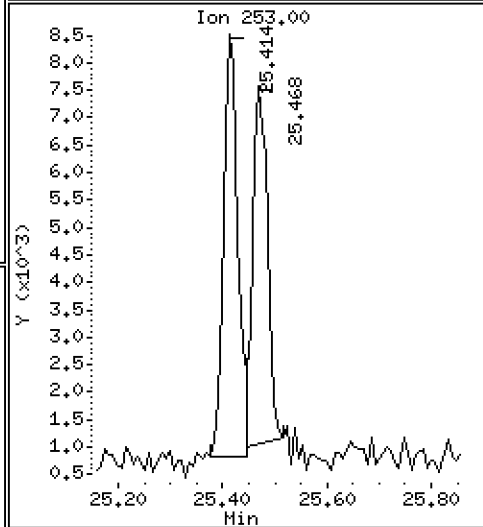
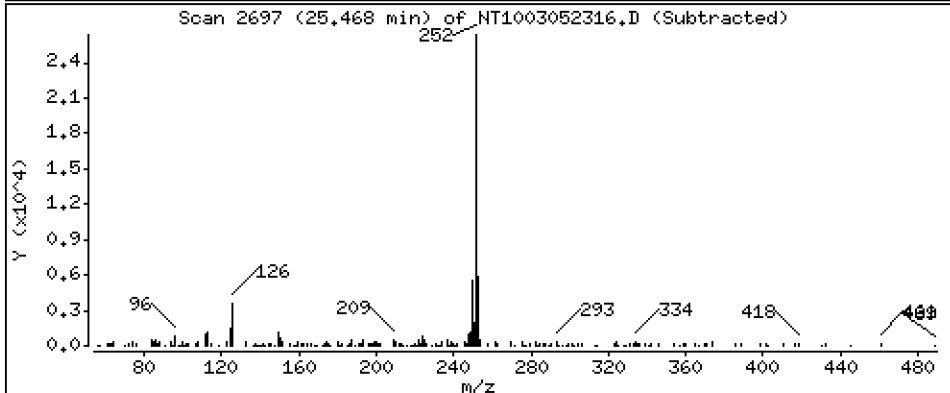
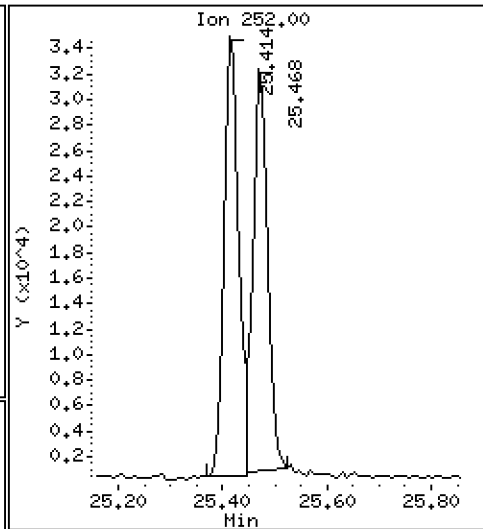
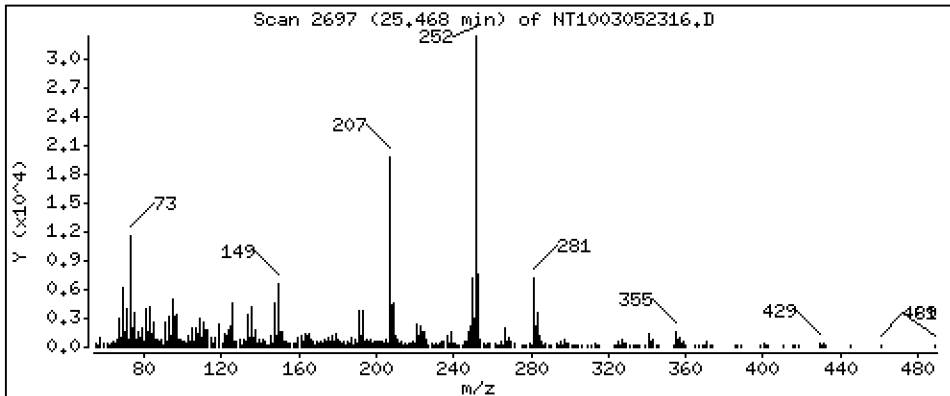
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,1792 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

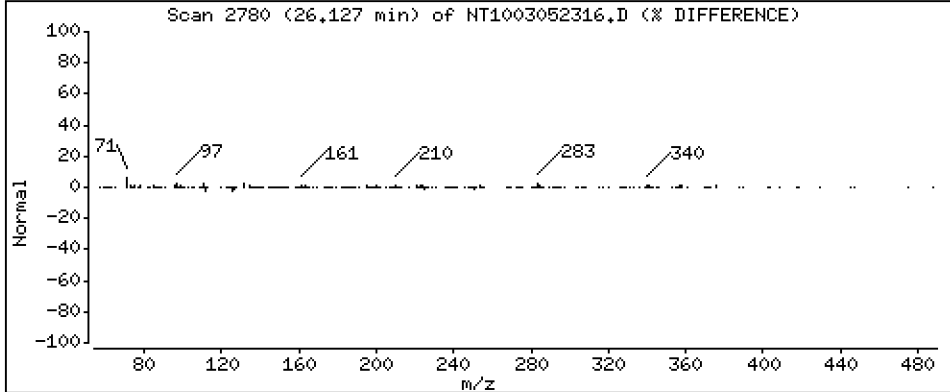
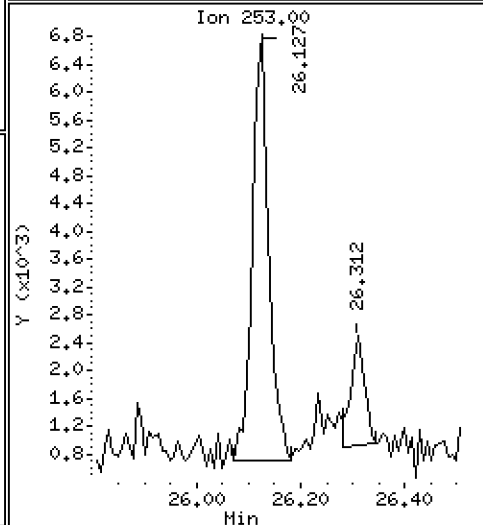
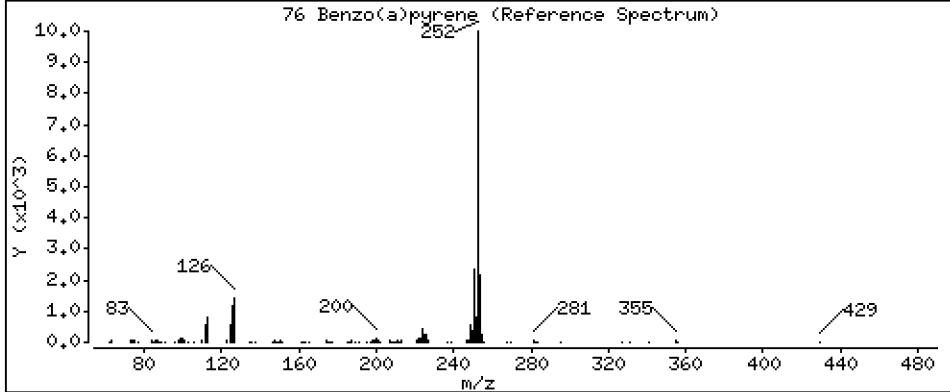
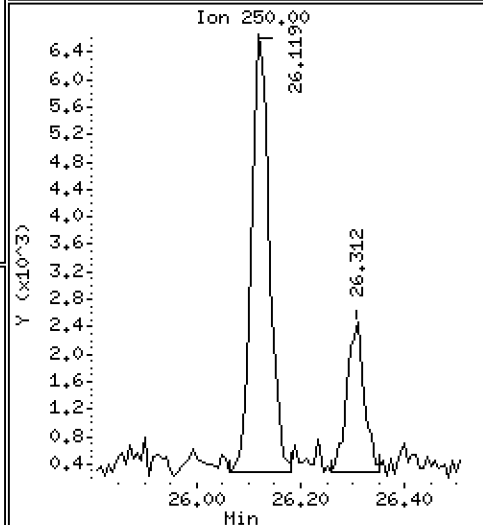
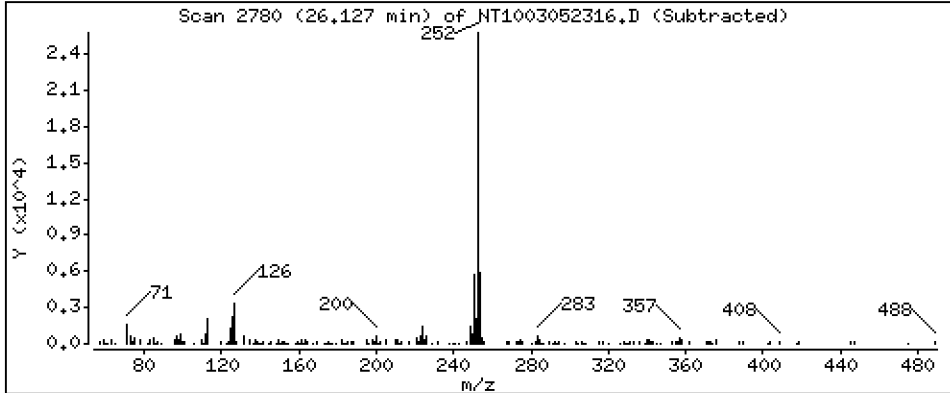
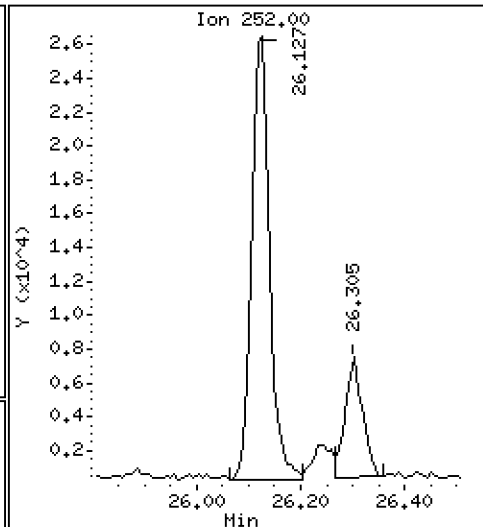
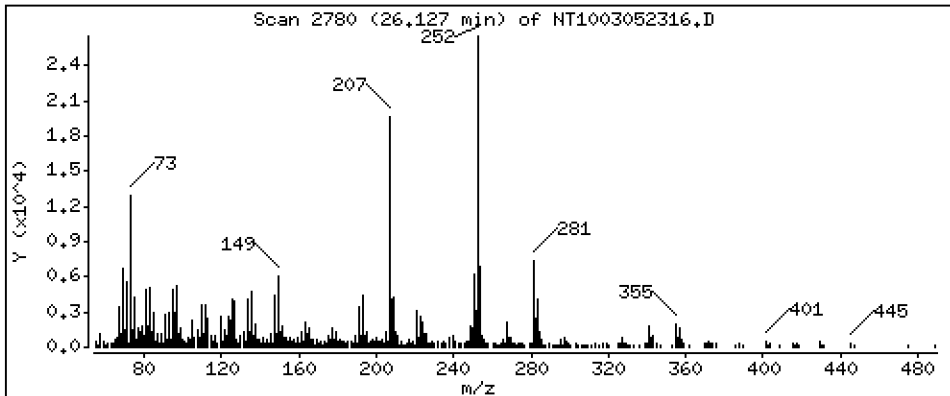
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1876 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

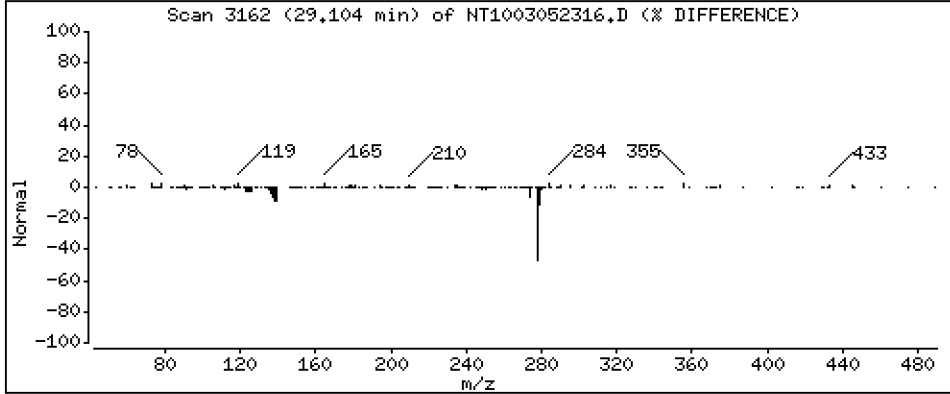
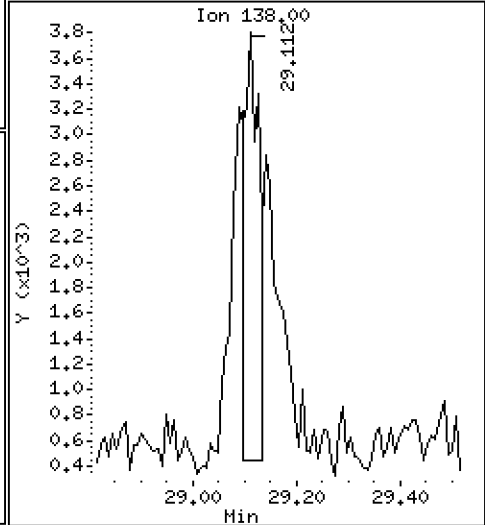
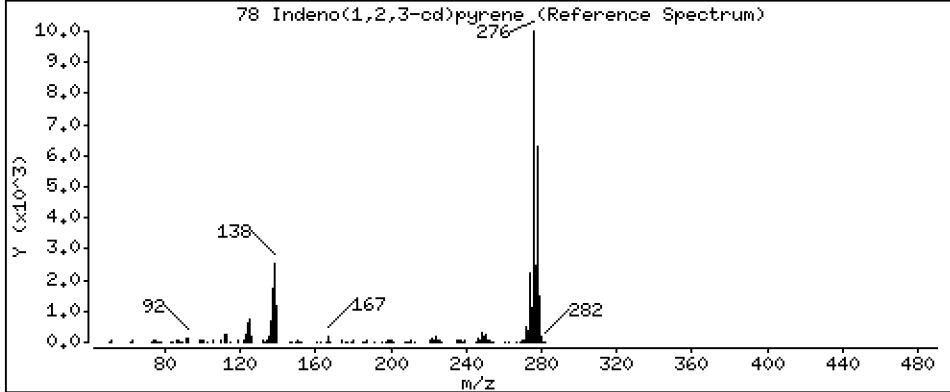
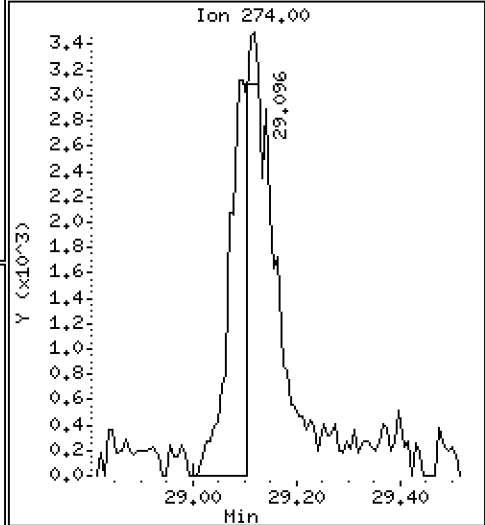
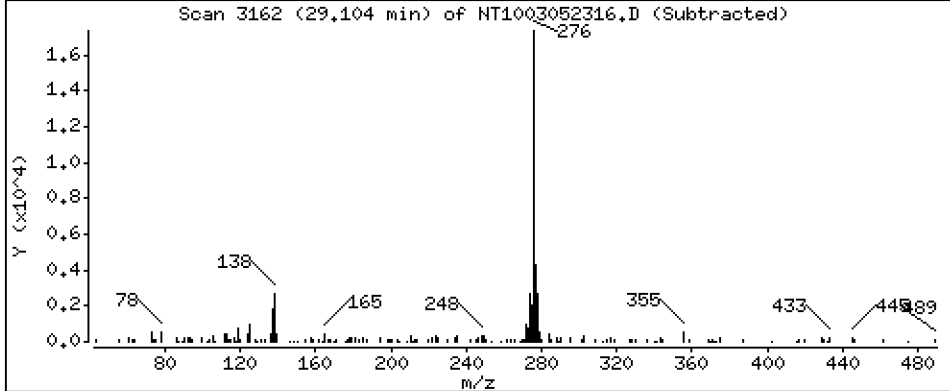
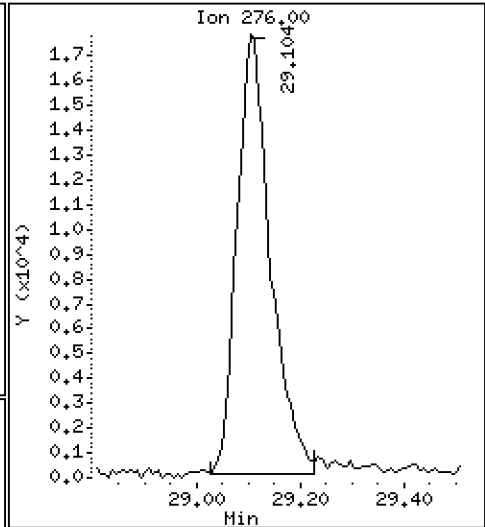
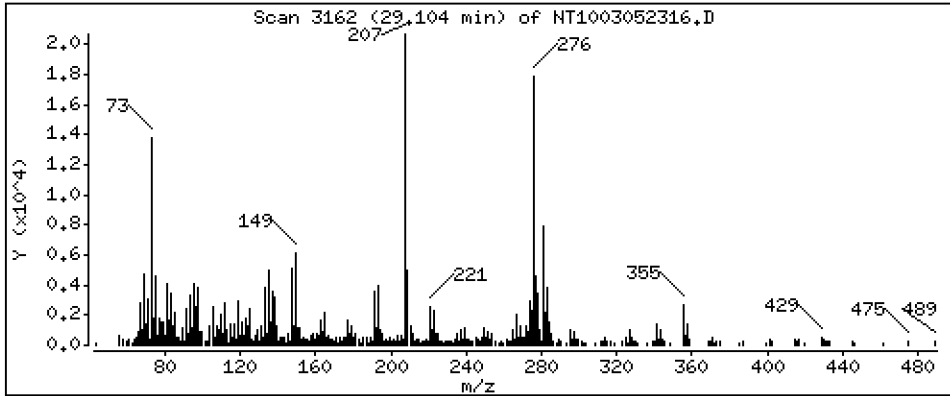
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1988 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

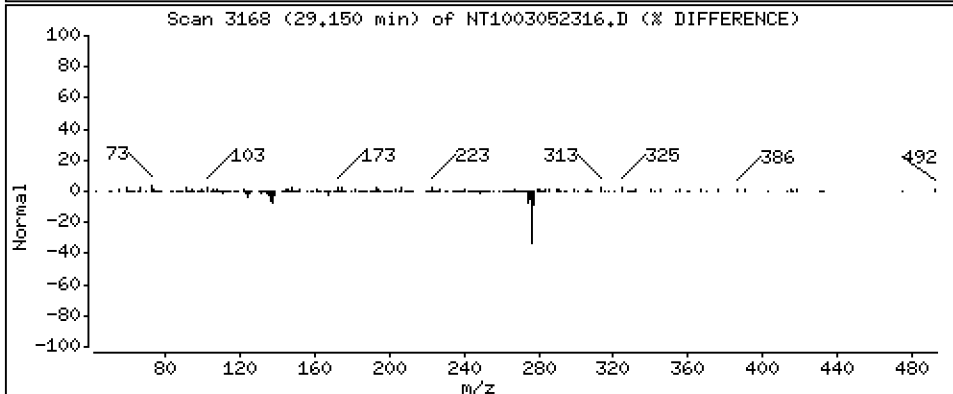
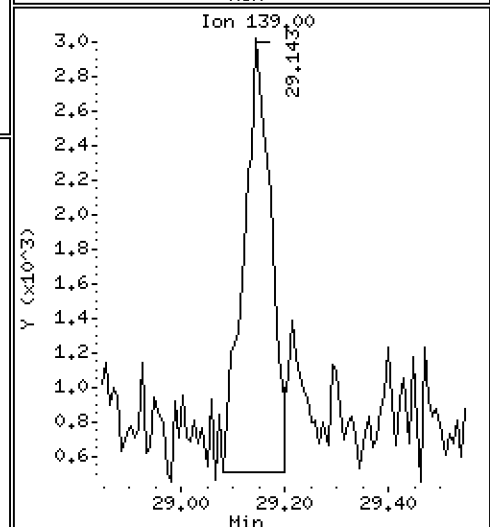
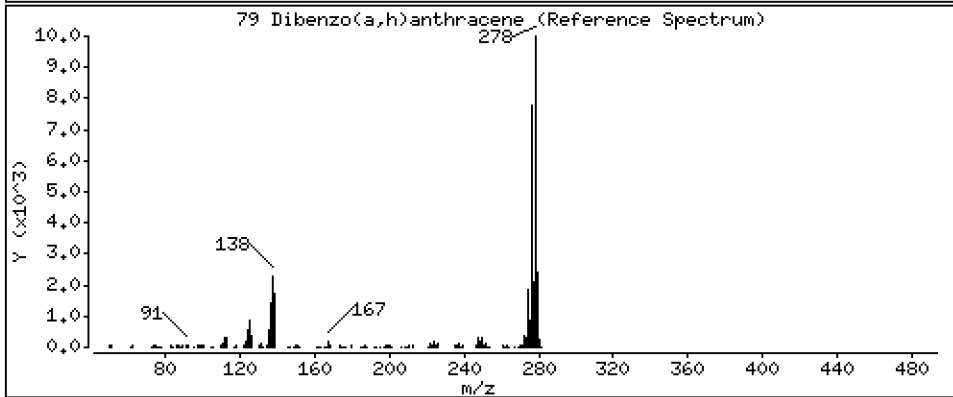
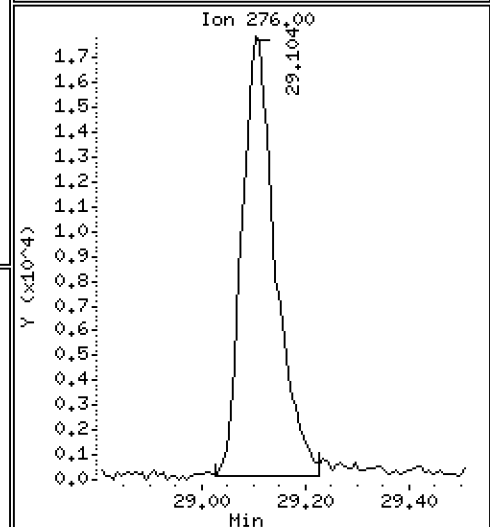
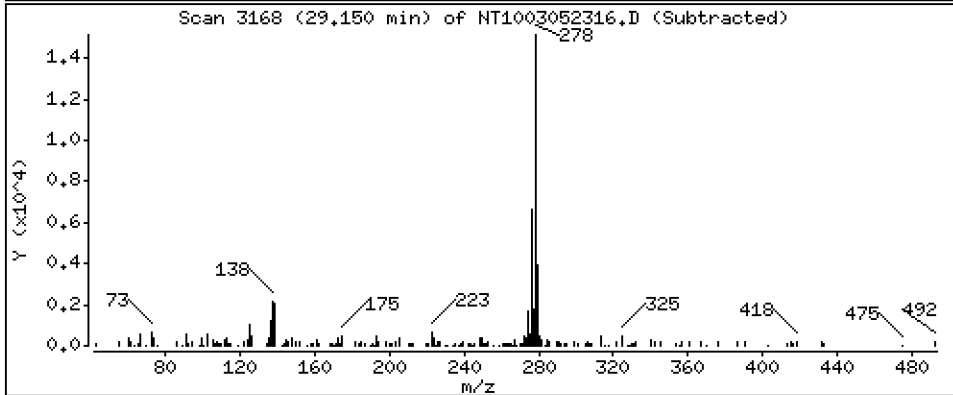
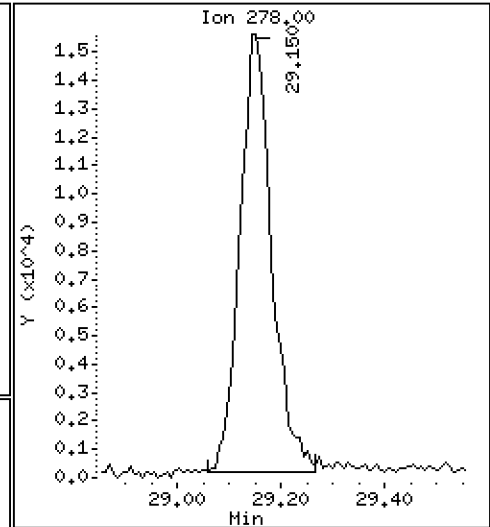
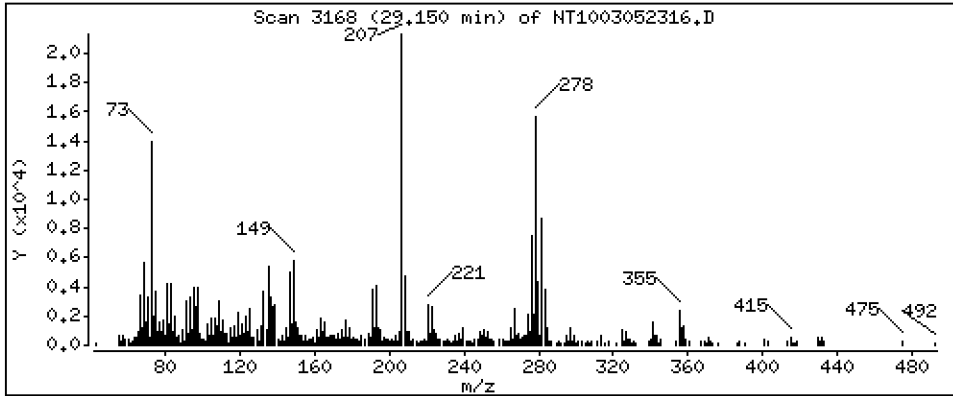
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2178 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

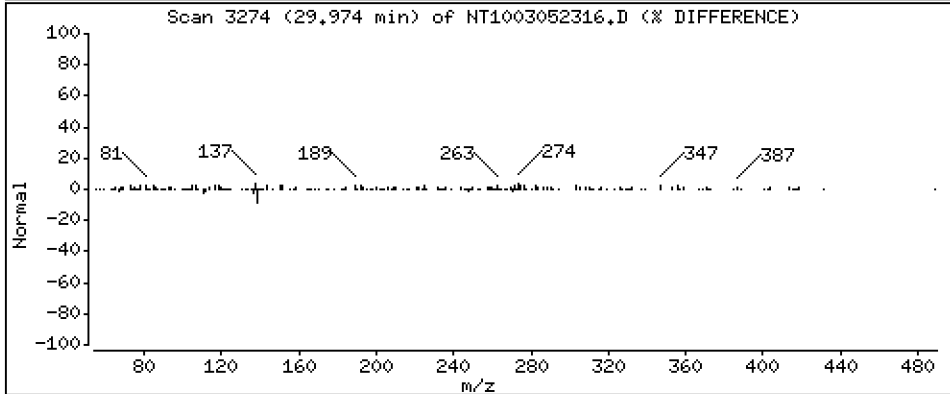
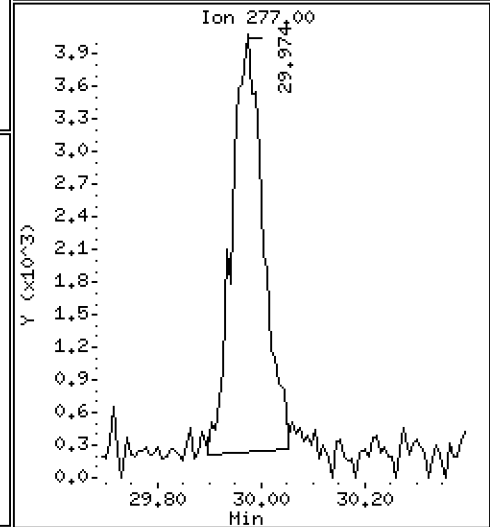
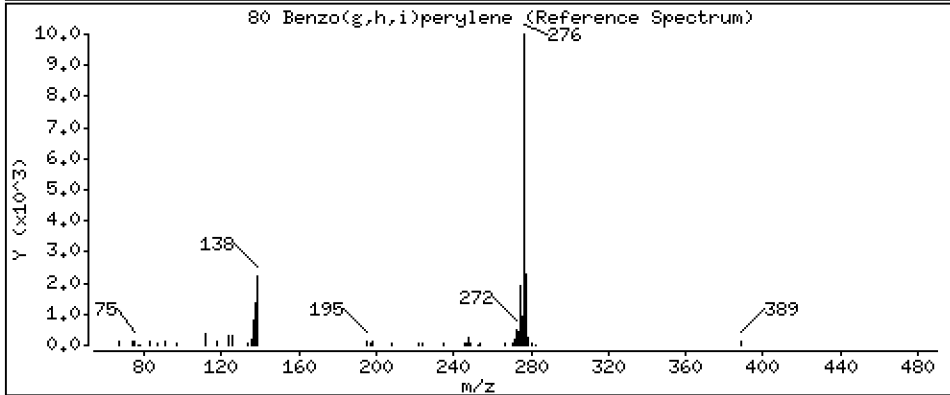
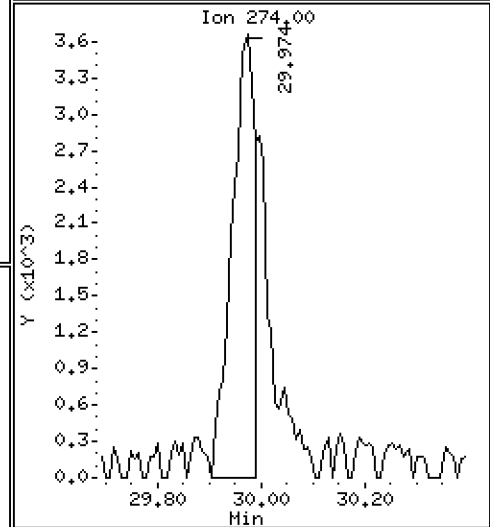
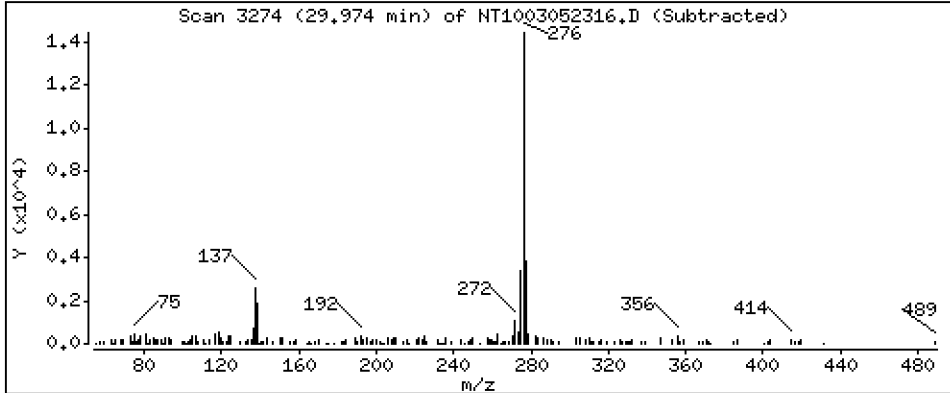
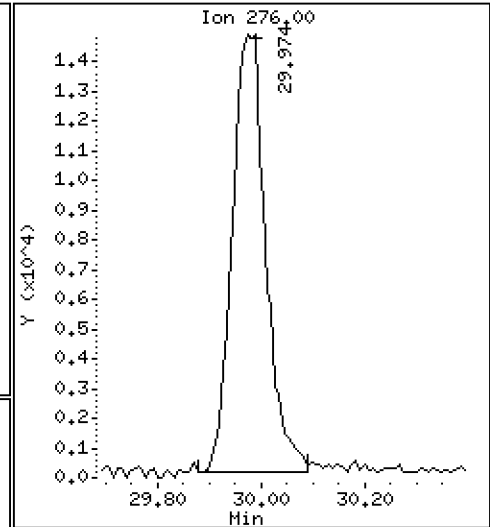
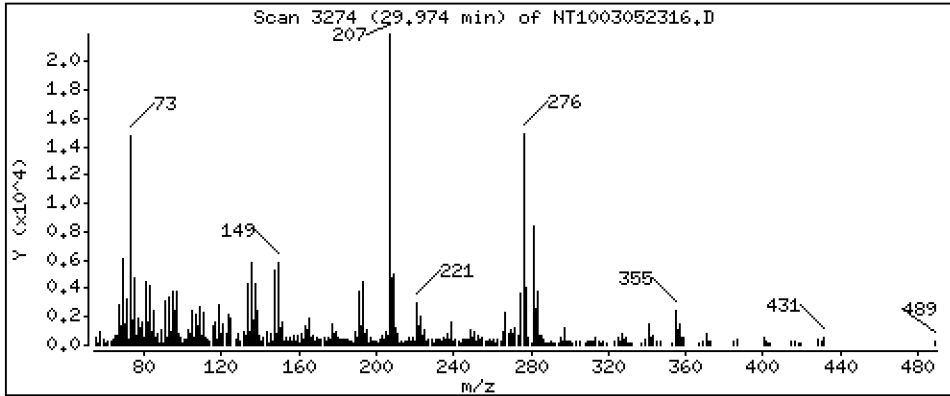
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,2069 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

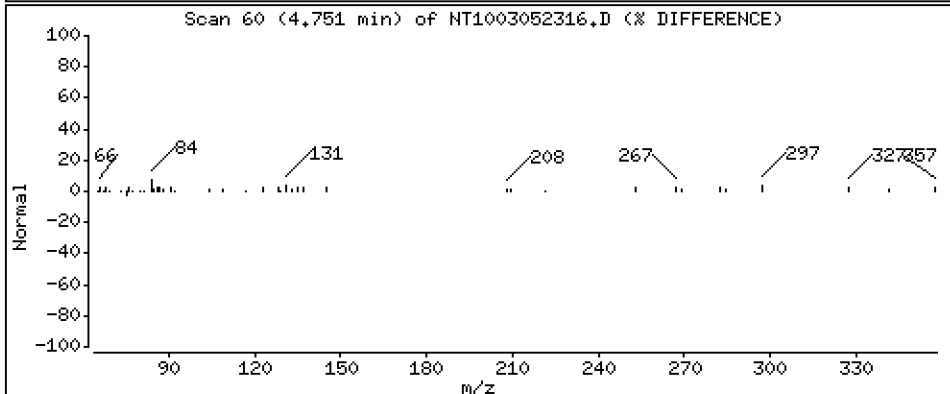
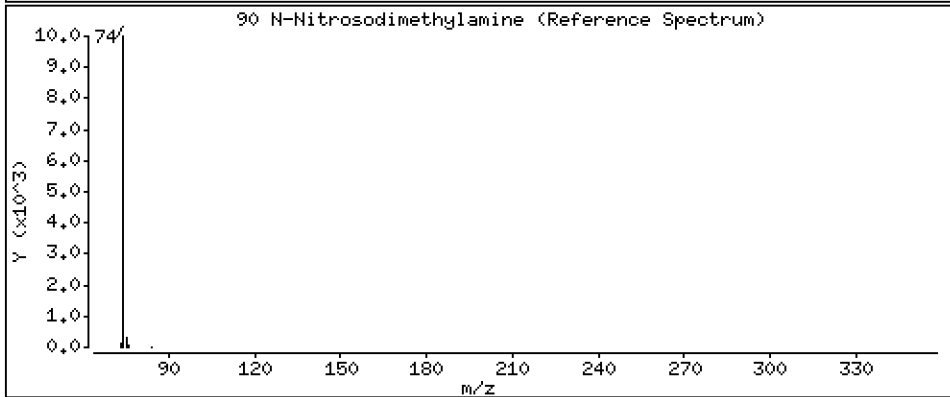
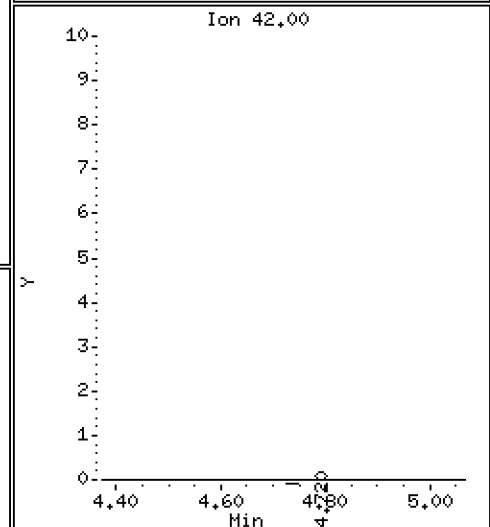
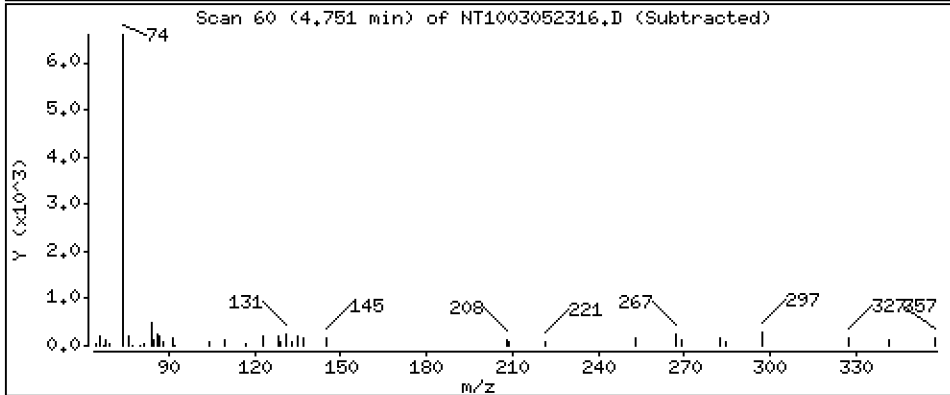
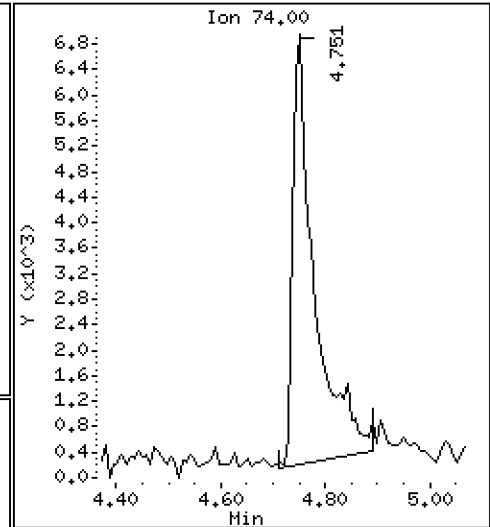
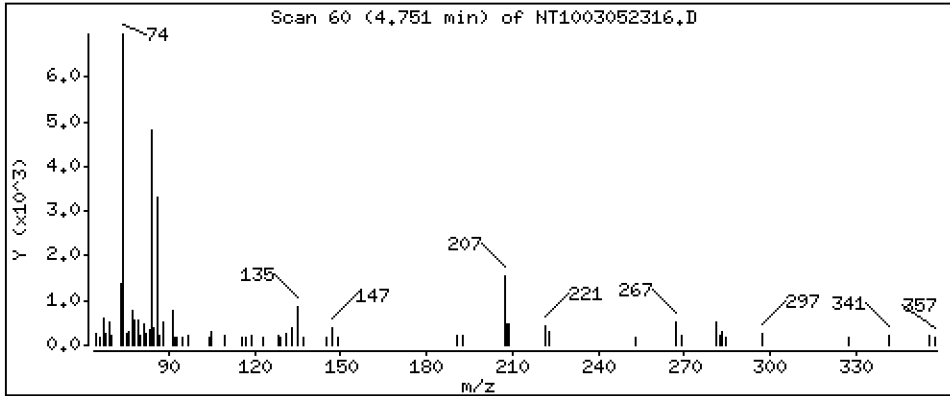
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,3262 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

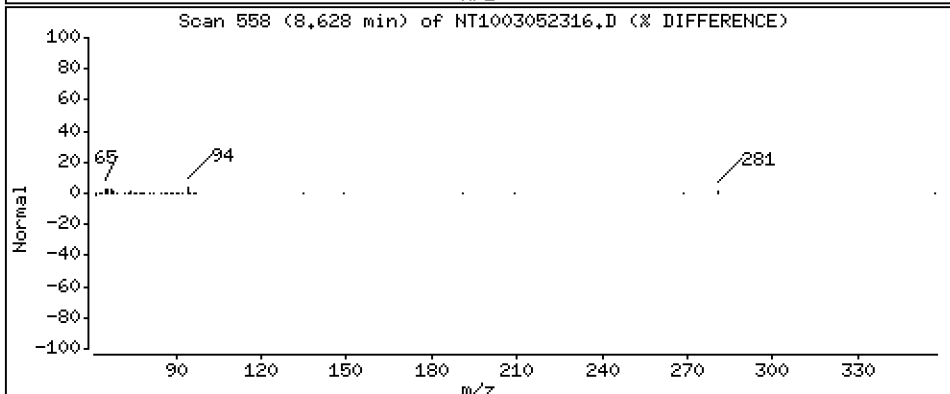
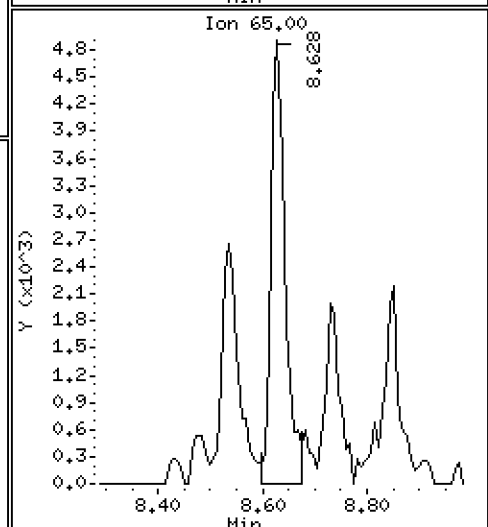
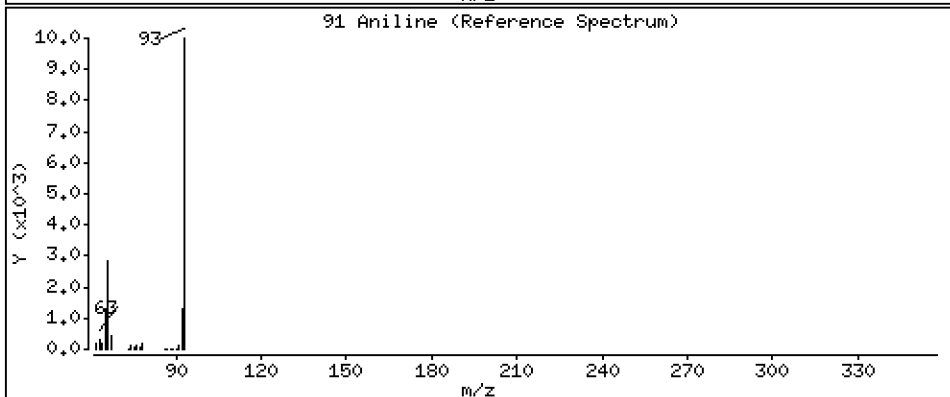
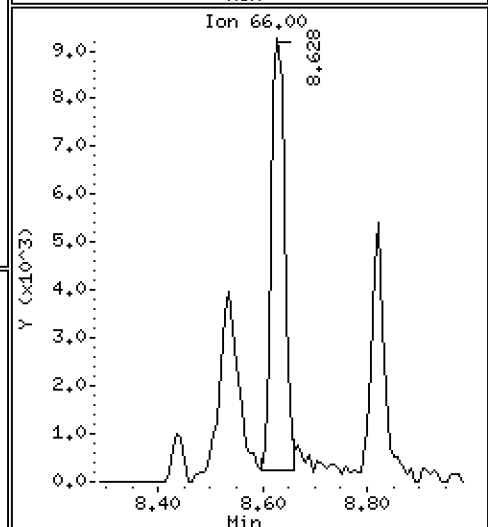
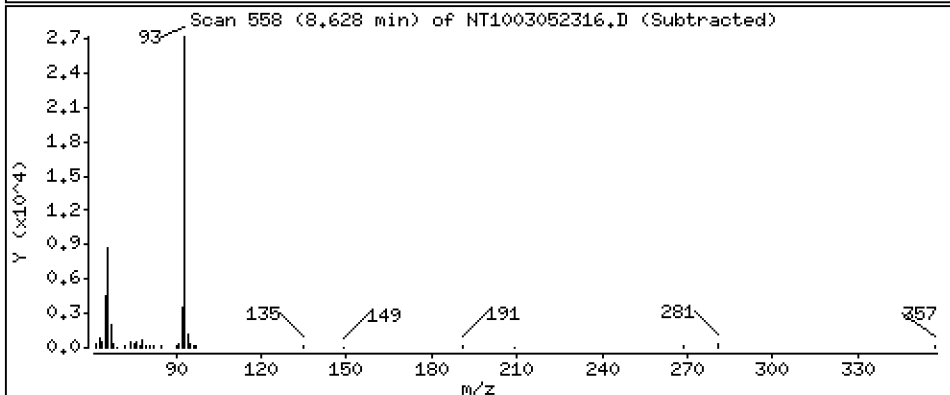
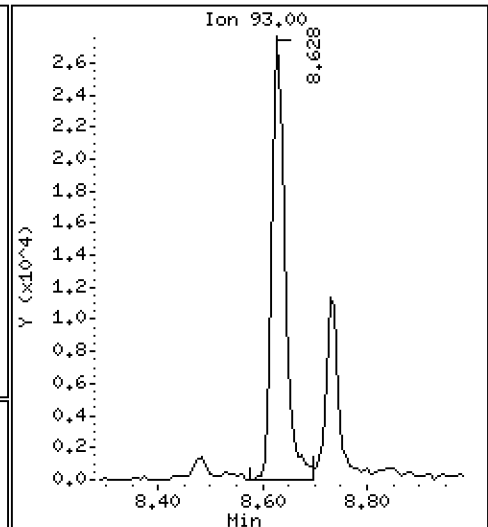
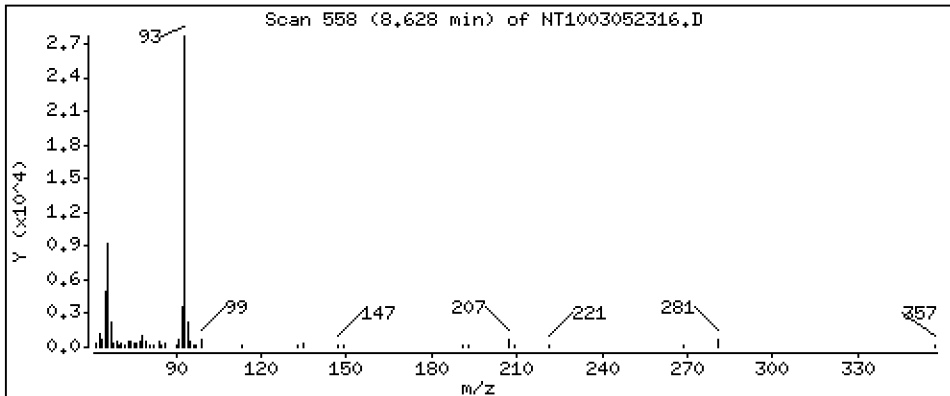
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3386 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

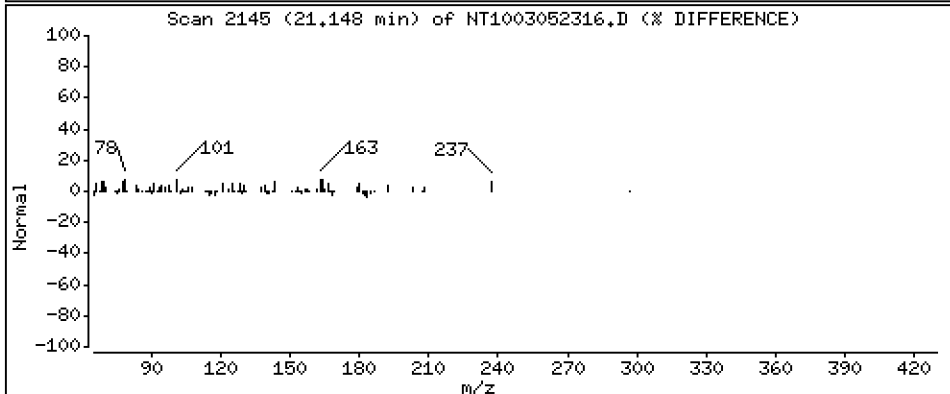
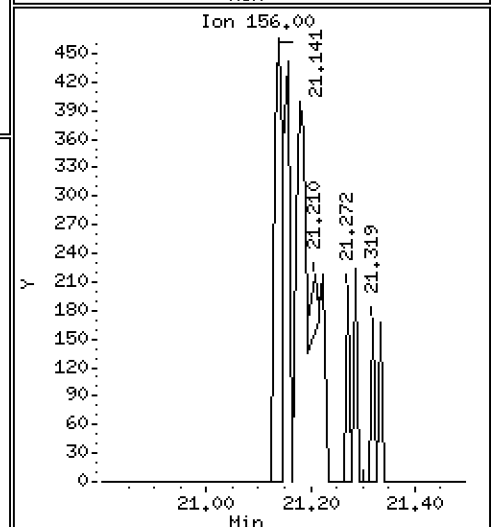
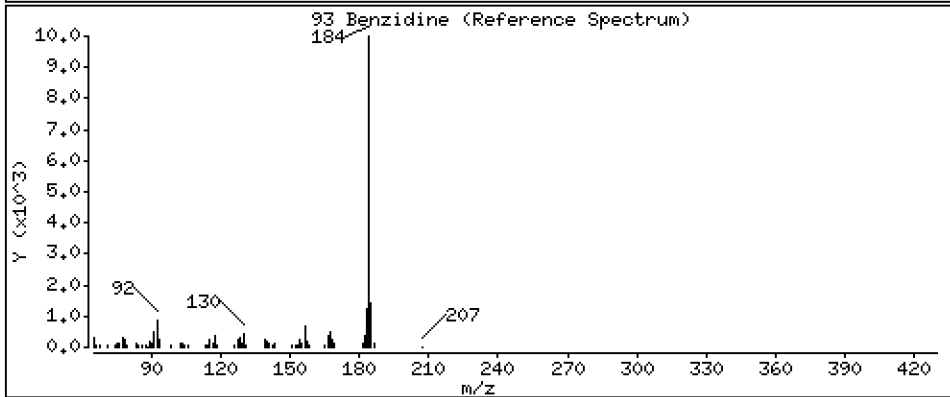
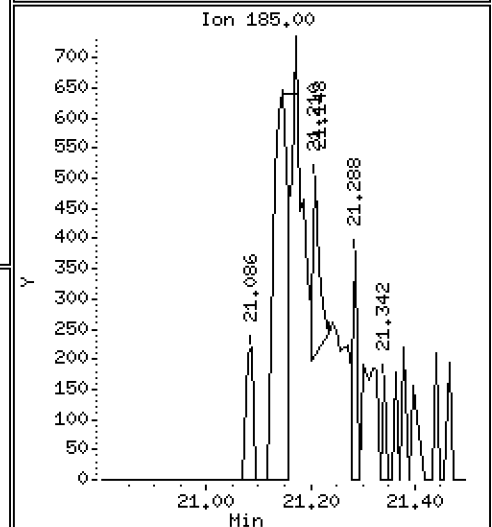
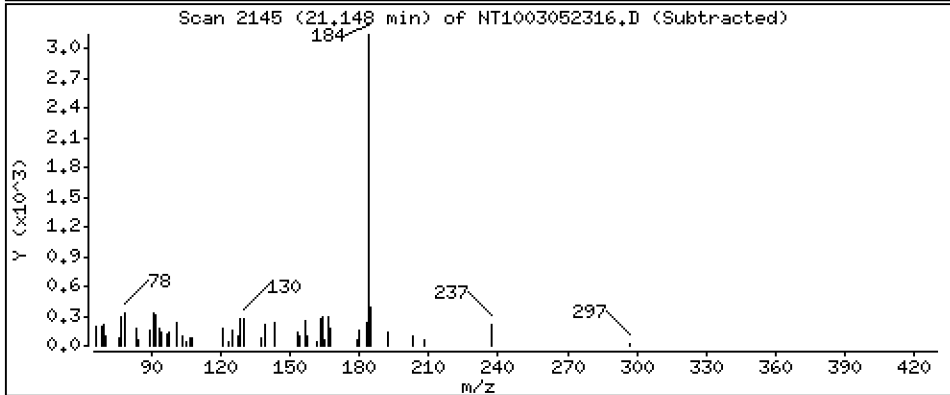
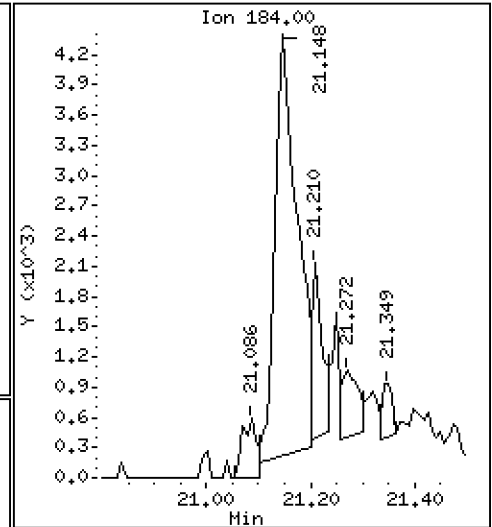
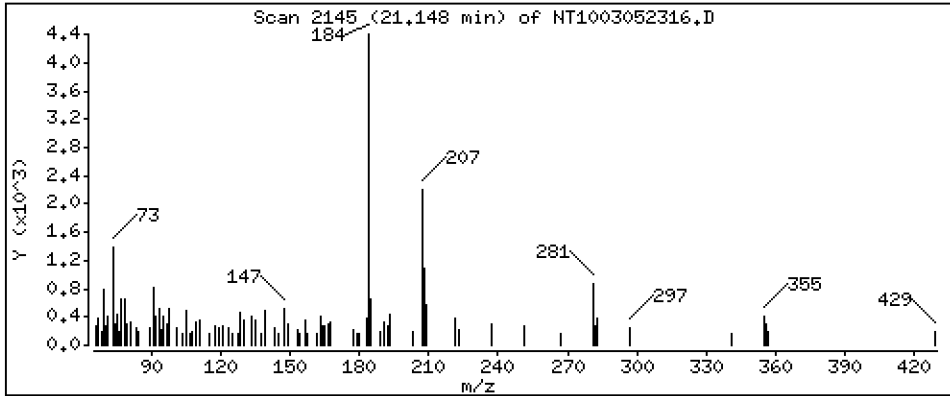
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,09219 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

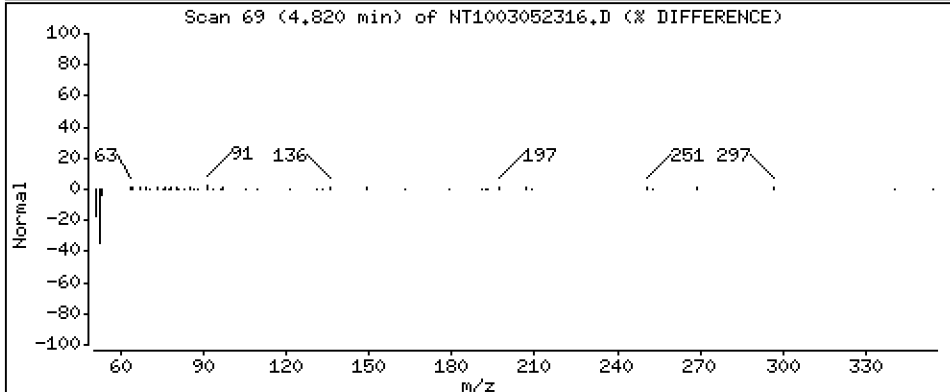
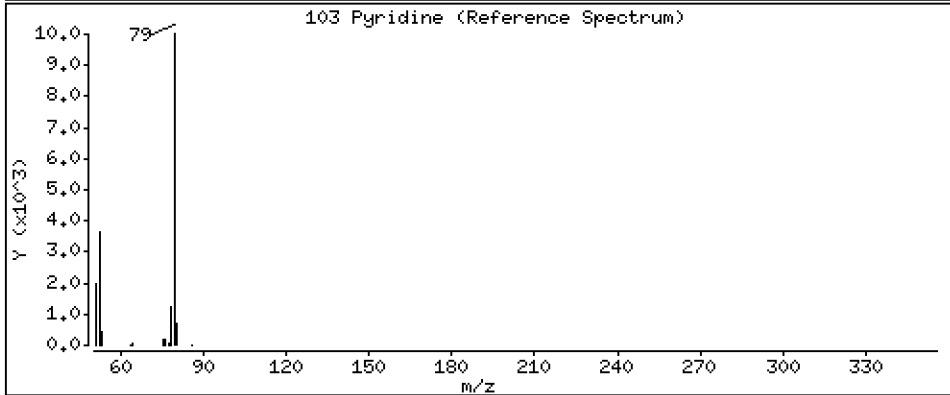
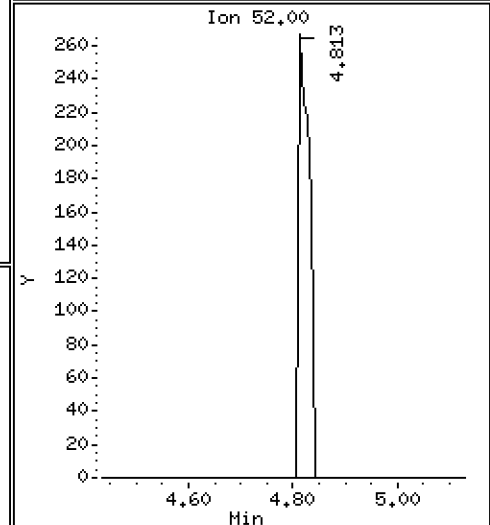
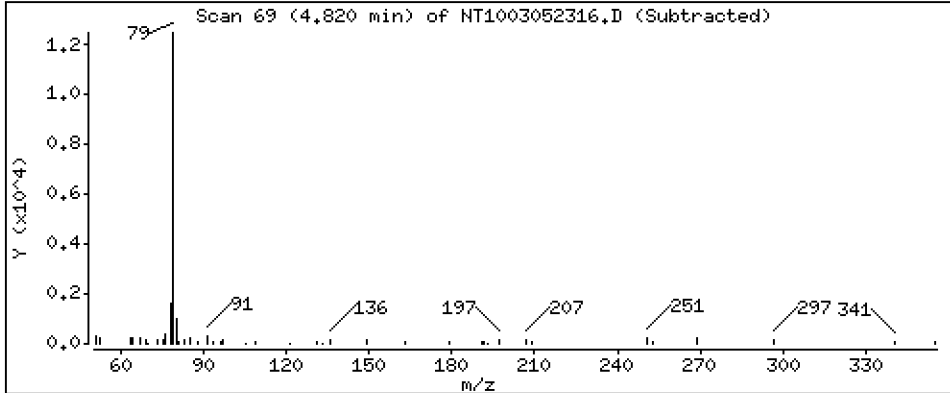
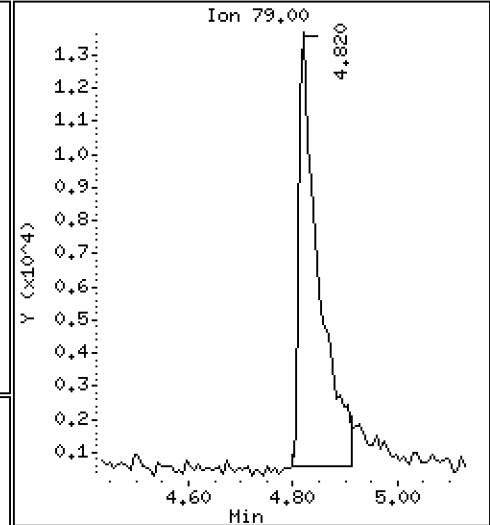
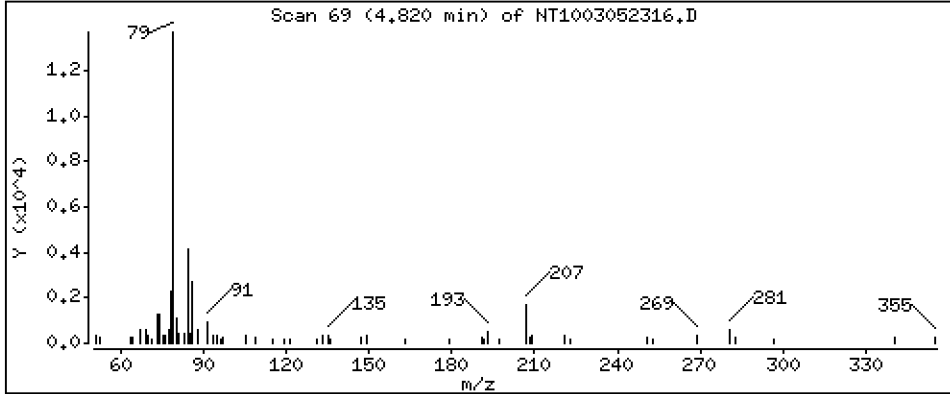
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,3228 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

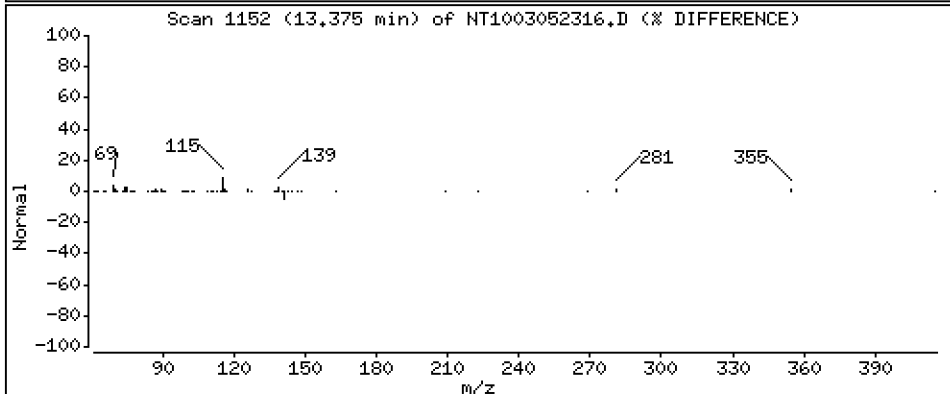
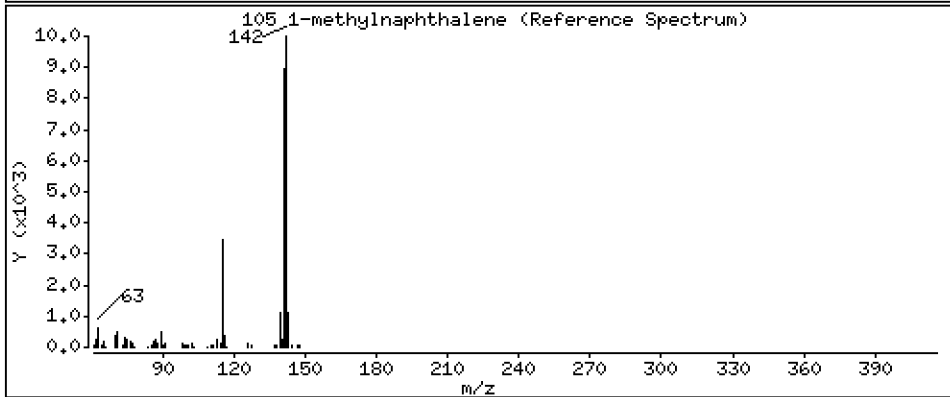
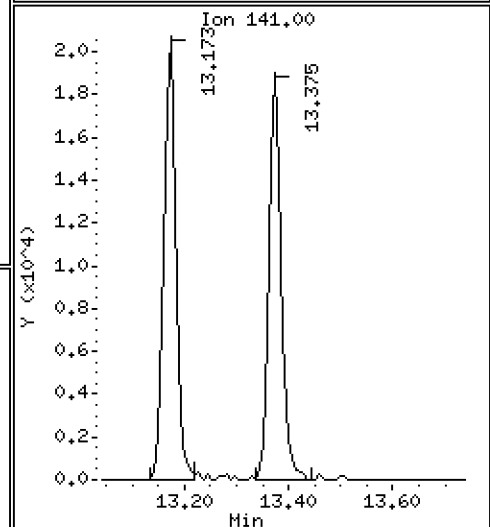
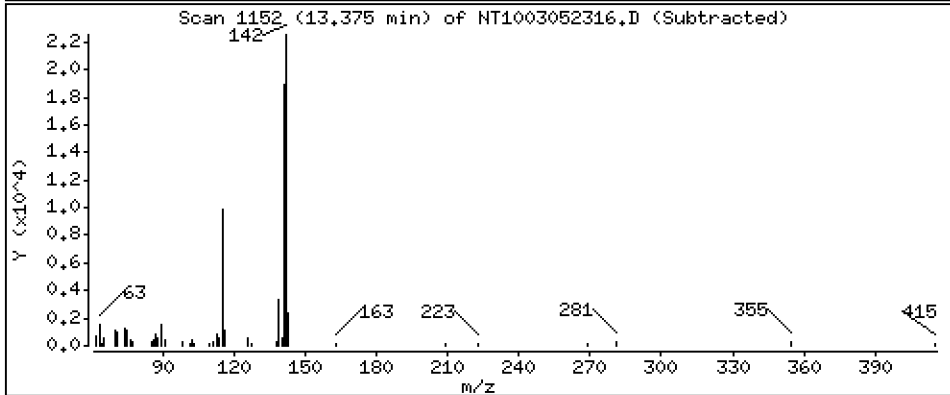
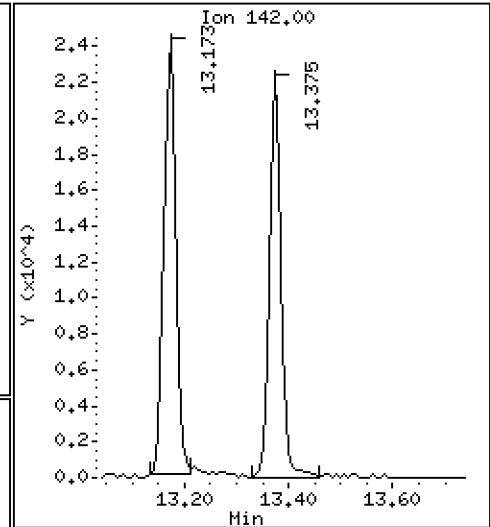
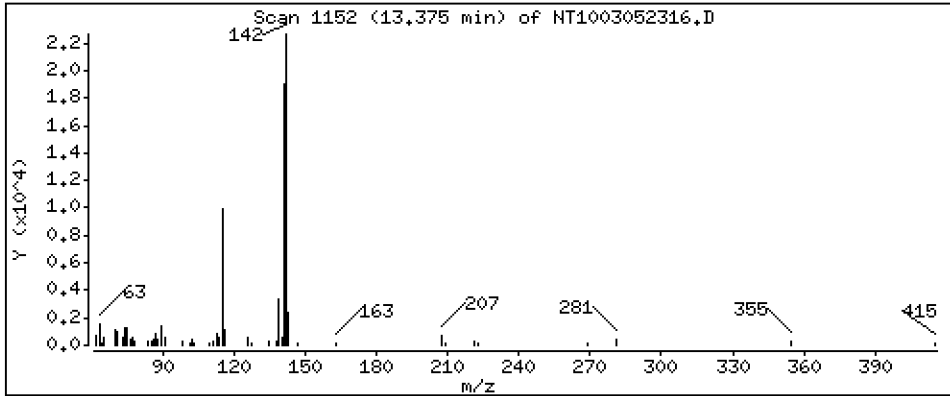
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2037 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

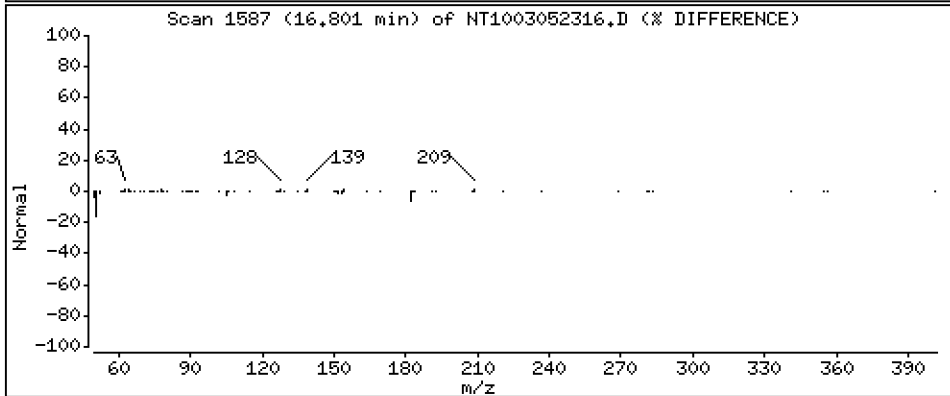
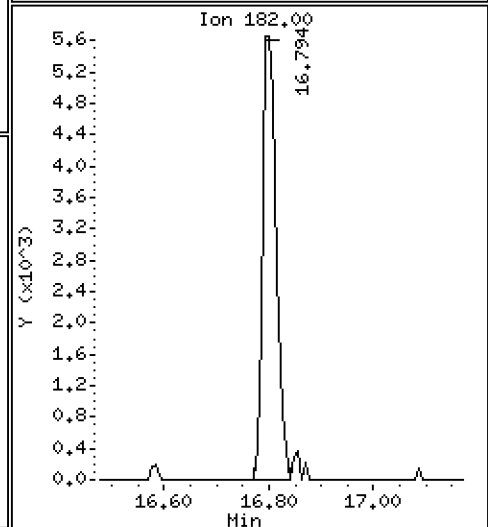
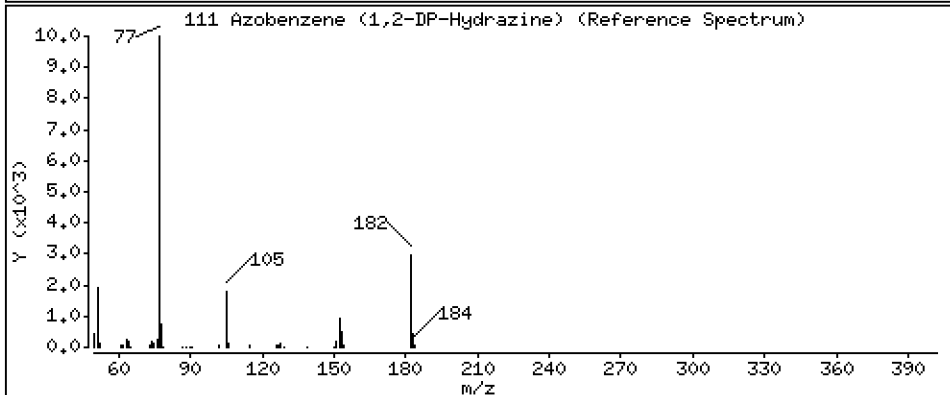
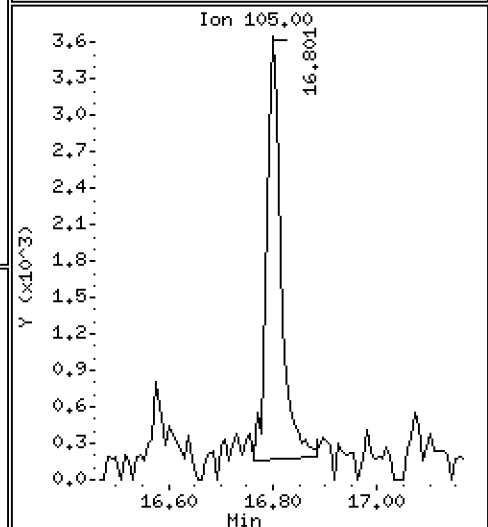
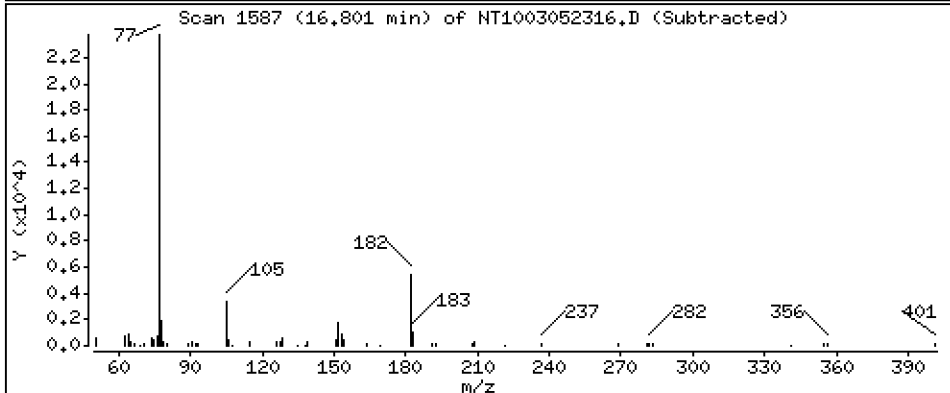
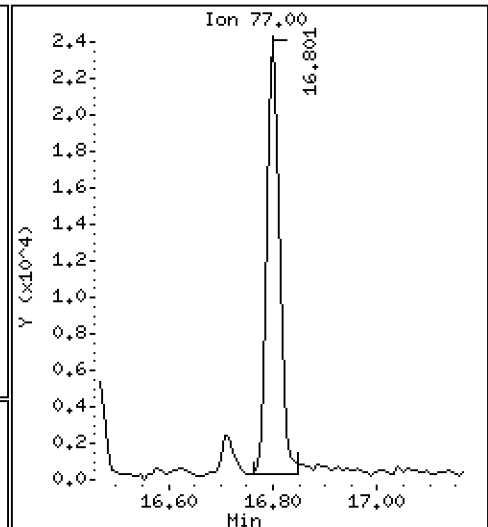
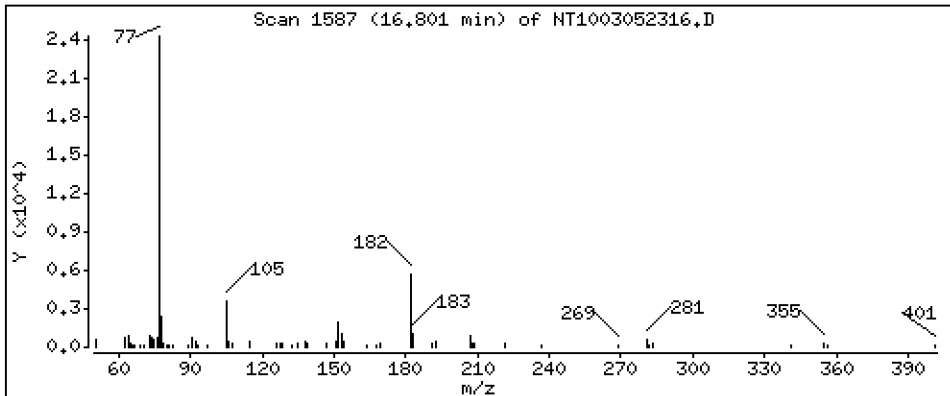
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1426 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

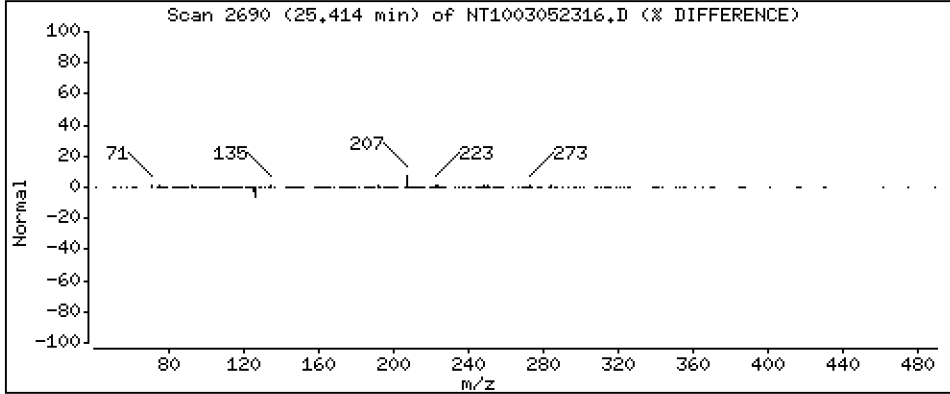
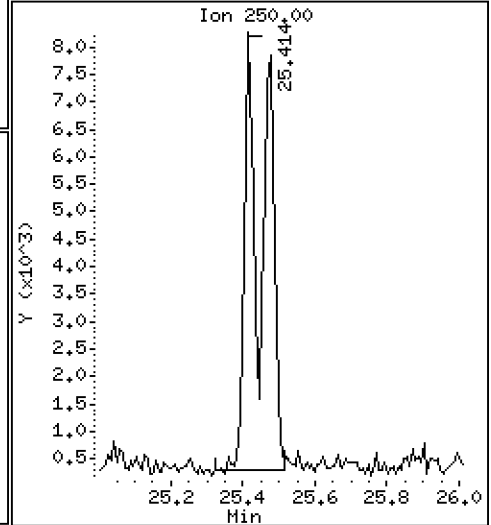
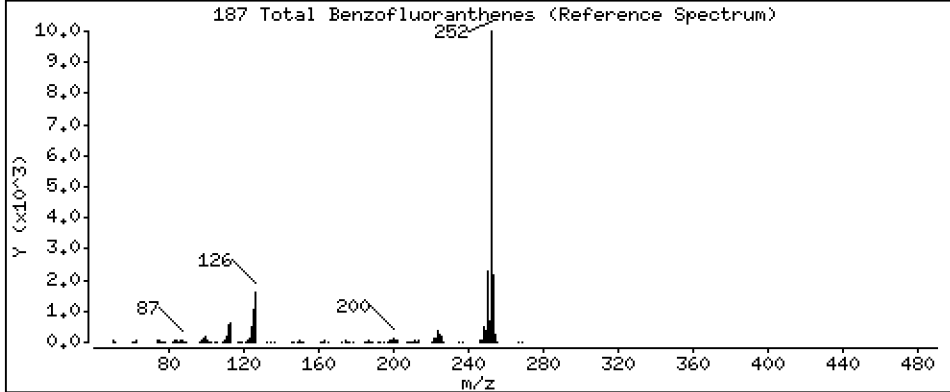
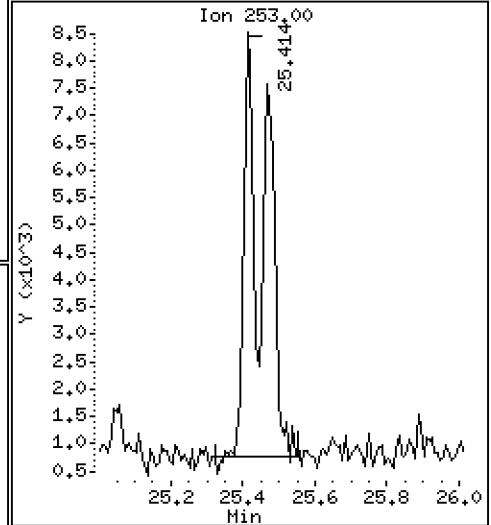
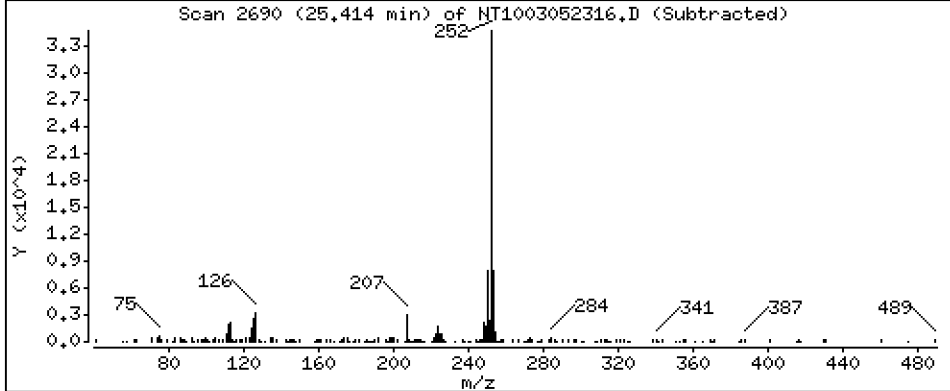
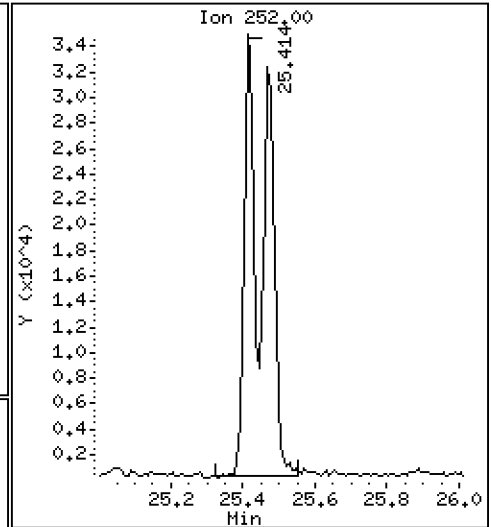
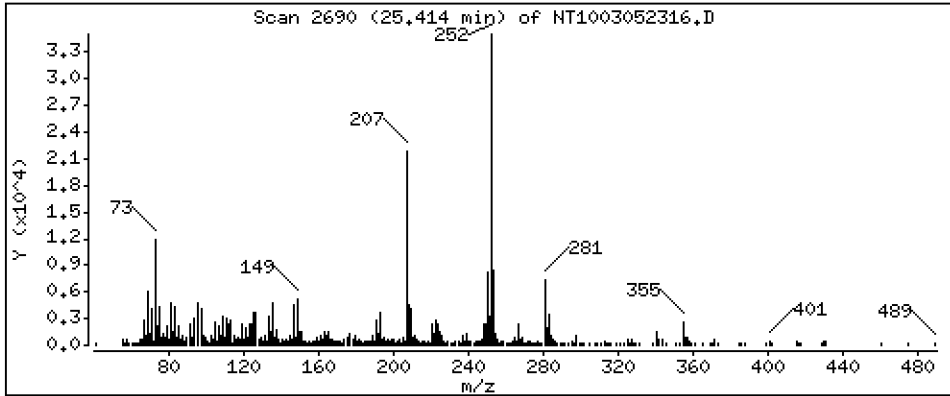
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3690 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

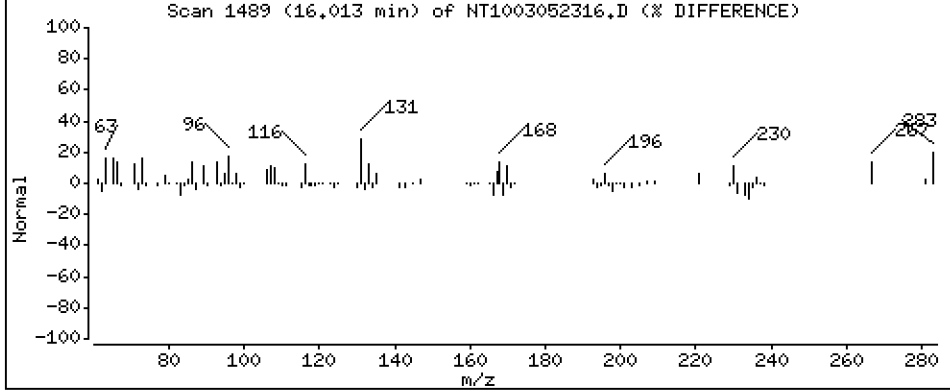
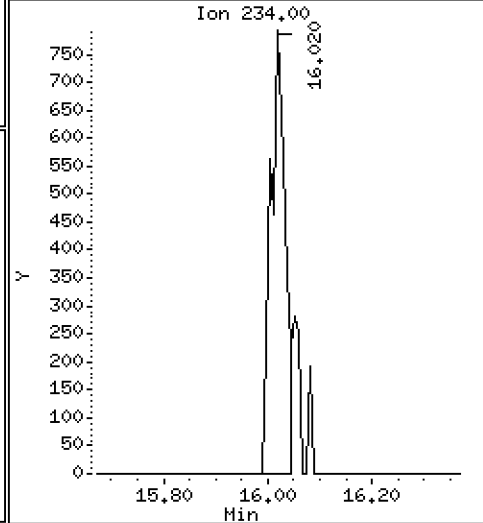
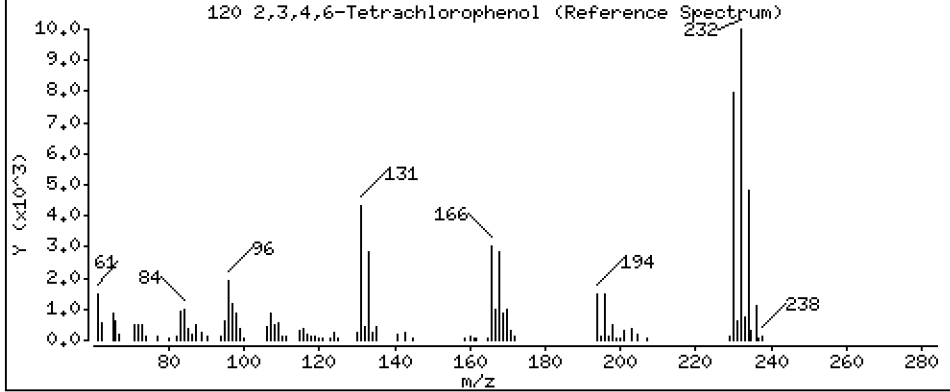
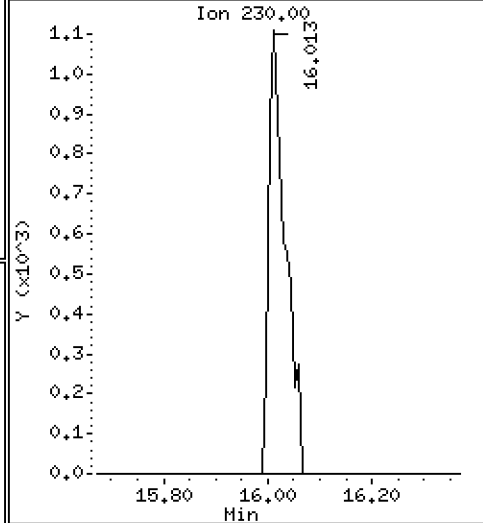
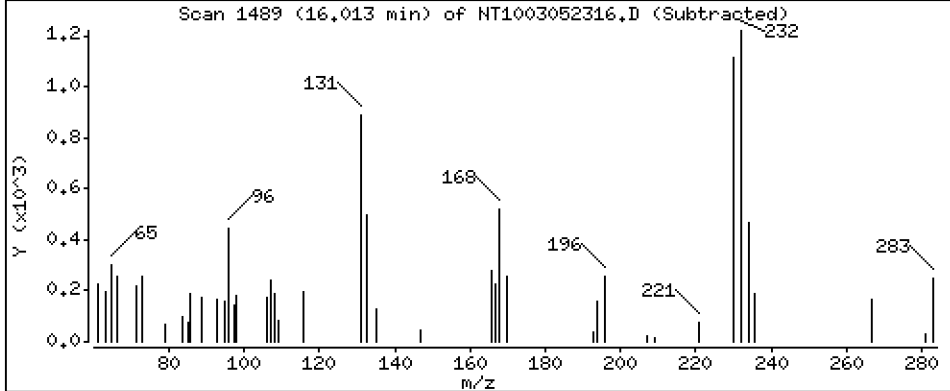
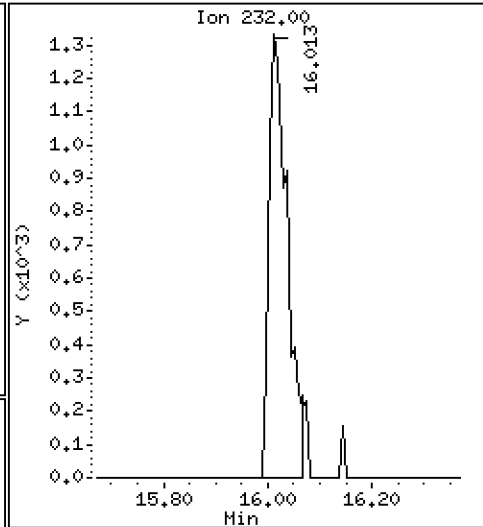
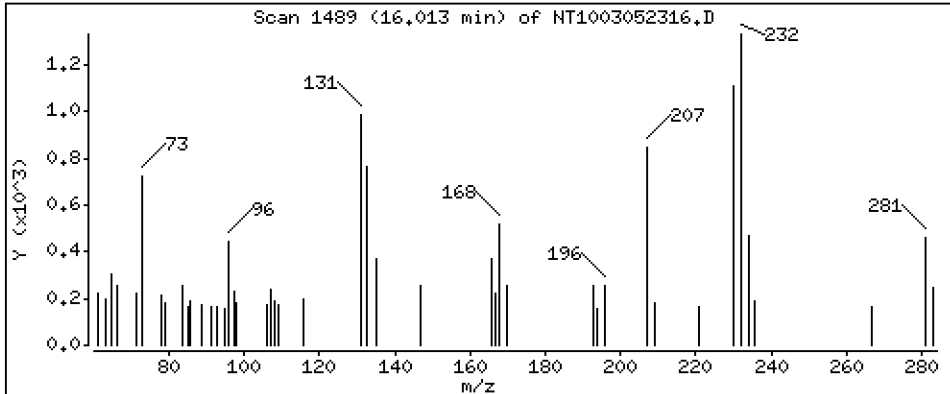
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,06265 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305A.b\NT1003052316.D
 Lab Smp Id: SLC0415-LCV1
 Inj Date : 05-MAR-2023 22:54
 Operator : VTS
 Smp Info : SLC0415-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Meth Date : 27-Mar-2023 13:49 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.905	(0.747)	24639	0.25732	0.2573
\$ 2 Phenol-d5	99		8.512	8.512	(0.921)	26840	0.24143	0.2414 (M)
3 Phenol	94		8.535	8.535	(0.923)	19934	0.16865	0.1687
\$ 5 2-Chlorophenol-d4	132		8.821	8.821	(0.954)	27998	0.29519	0.2952
4 Bis(2-Chloroethyl)ether	93		8.728	8.736	(0.944)	18111	0.20052	0.2005
6 2-Chlorophenol	128		8.844	8.852	(0.956)	18894	0.19175	0.1918
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	23235	0.21388	0.2139
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	304339	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.286	(1.003)	22403	0.20761	0.2076
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.542	(1.031)	13197	0.18624	0.1862 (MH)
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	21085	0.20187	0.2019
11 Benzyl alcohol	108		9.495	9.487	(1.027)	6331	0.10449	0.1045
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.736	(1.052)	6802	0.22589	0.2259 (M)
13 2-Methylphenol	108		9.674	9.674	(1.046)	16731	0.18271	0.1827
17 Hexachloroethane	117		10.209	10.217	(1.104)	8290	0.18717	0.1872
16 N-Nitroso-di-n-propylamine	70		9.984	9.984	(1.080)	15192	0.21300	0.2130 (M)
15 4-Methylphenol	108		9.969	9.961	(1.078)	17035	0.14834	0.1483
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.879)	22428	0.19364	0.1936
19 Nitrobenzene	77		10.341	10.341	(0.882)	19034	0.17519	0.1752
20 Isophorone	82		10.791	10.807	(0.920)	22364	0.16125	0.1613 (M)
21 2-Nitrophenol	139		10.967	10.967	(0.935)	7751	0.12860	0.1286
22 2,4-Dimethylphenol	107		11.009	11.018	(0.939)	35197	0.33865	0.3387
23 Bis(2-Chloroethoxy)methane	93		11.213	11.222	(0.956)	17168	0.20031	0.2003
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.442	11.434	(0.976)	27743	0.33870	0.3387
26 1,2,4-Trichlorobenzene	180		11.603	11.610	(0.989)	18827	0.23089	0.2309
* 27 Naphthalene-d8	136		11.726	11.734	(1.000)	1055141	4.00000	
28 Naphthalene	128		11.773	11.780	(1.004)	54840	0.20250	0.2025
29 4-Chloroaniline	127		11.873	11.881	(1.013)	30346	0.25602	0.2560
30 Hexachlorobutadiene	225		11.997	12.004	(1.023)	14901	0.25097	0.2510
31 4-Chloro-3-methylphenol	107		12.840	12.840	(1.095)	25733	0.29862	0.2986
32 2-Methylnaphthalene	142		13.173	13.181	(1.123)	37623	0.19665	0.1967
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.746	13.753	(0.897)	17060	0.32942	0.3294	
35 2,4,5-Trichlorophenol	196		13.838	13.831	(0.903)	16201	0.29311	0.2931	
§ 36 2-Fluorobiphenyl	172		13.916	13.931	(0.908)	43720	0.22388	0.2239	
37 2-Chloronaphthalene	162		14.179	14.194	(0.925)	32997	0.21524	0.2152	
38 2-Nitroaniline	65		14.396	14.403	(0.939)	9490	0.22640	0.2264	
39 Dimethylphthalate	163		14.752	14.767	(0.963)	34543	0.19536	0.1954	
40 Acenaphthylene	152		15.038	15.054	(0.981)	49617	0.18773	0.1877	
41 2,6-Dinitrotoluene	165		14.891	14.907	(0.972)	11477	0.29572	0.2957	
* 42 Acenaphthene-d10	164		15.324	15.340	(1.000)	547496	4.00000		
43 3-Nitroaniline	138		15.301	15.255	(0.998)	1364	0.03059	0.03059	
44 Acenaphthene	153		15.394	15.409	(1.005)	31569	0.19806	0.1981	
45 2,4-Dinitrophenol	184		Compound Not Detected.						
46 Dibenzofuran	168		15.757	15.773	(1.028)	47684	0.20157	0.2016	
47 4-Nitrophenol	109		Compound Not Detected.						
48 2,4-Dinitrotoluene	165		15.734	15.749	(1.027)	13756	0.24450	0.2445	
50 Diethylphthalate	149		16.221	16.244	(1.059)	33898	0.18097	0.1810	
49 Fluorene	166		16.469	16.492	(1.075)	38122	0.19369	0.1937	
51 4-Chlorophenyl-phenylether	204		16.469	16.484	(1.075)	18604	0.21700	0.2170	
52 4-Nitroaniline	138		16.554	16.531	(1.080)	4182	0.08725	0.08725	
53 4,6-Dinitro-2-methylphenol	198		16.585	16.593	(0.899)	2150	0.09412	0.09412	
54 N-Nitrosodiphenylamine	169		16.716	16.731	(0.907)	29423	0.20276	0.2028	
§ 55 2,4,6-Tribromophenol	330		16.978	16.994	(1.108)	4583	0.13635	0.1363	
56 4-Bromophenyl-phenylether	248		17.496	17.511	(0.949)	13639	0.23196	0.2320	
57 Hexachlorobenzene	284		17.604	17.627	(0.955)	15418	0.23286	0.2329	
58 Pentachlorophenol	266		Compound Not Detected.						
* 59 Phenanthrene-d10	188		18.440	18.455	(1.000)	980771	4.00000		
60 Phenanthrene	178		18.486	18.509	(1.003)	49659	0.19785	0.1978	
61 Anthracene	178		18.595	18.618	(1.008)	47785	0.19634	0.1963	
62 Carbazole	167		18.935	18.950	(1.027)	41438	0.18585	0.1858	
63 Di-n-butylphthalate	149		19.624	19.647	(1.064)	48037	0.15877	0.1588	
64 Fluoranthene	202		20.869	20.892	(0.888)	56258	0.18315	0.1832	
65 Pyrene	202		21.303	21.326	(0.907)	56818	0.18166	0.1817	
§ 66 Terphenyl-d14	244		21.581	21.604	(0.919)	49942	0.19734	0.1973	
67 Butylbenzylphthalate	149		22.472	22.495	(0.956)	23049	0.13685	0.1369	
68 Benzo(a)anthracene	228		23.470	23.501	(0.999)	62818	0.19952	0.1995	
* 69 Chrysene-d12	240		23.494	23.517	(1.000)	892900	4.00000		
70 3,3'-Dichlorobenzidine	252		23.424	23.447	(0.997)	49374	0.35208	0.3521	
71 Chrysene	228		23.532	23.563	(1.002)	55959	0.21870	0.2187	
72 bis(2-Ethylhexyl)phthalate	149		23.470	23.494	(0.956)	40516	0.18646	0.1865	
* 134 Di-n-octylphthalate-d4	153		24.562	24.593	(1.000)	1549553	4.00000		
73 Di-n-octylphthalate	149		24.570	24.601	(1.000)	77579	0.22577	0.2258	
74 Benzo(b)fluoranthene	252		25.414	25.452	(0.968)	69278	0.18022	0.1802	
75 Benzo(k)fluoranthene	252		25.468	25.507	(0.970)	66325	0.17922	0.1792	
76 Benzo(a)pyrene	252		26.126	26.157	(0.996)	64475	0.18763	0.1876	
* 77 Perylene-d12	264		26.242	26.289	(1.000)	1127057	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		29.103	29.158	(1.109)	79884	0.19876	0.1988	
79 Dibenzo(a,h)anthracene	278		29.150	29.204	(1.111)	66385	0.21777	0.2178	
80 Benzo(g,h,i)perylene	276		29.973	30.043	(1.142)	66257	0.20689	0.2069	
90 N-Nitrosodimethylamine	74		4.750	4.719	(0.514)	20166	0.32623	0.3262 (M)	
91 Aniline	93		8.628	8.636	(0.933)	46399	0.33857	0.3386	
93 Benzidine	184		21.148	21.148	(0.900)	12571	0.09219	0.09219	
103 Pyridine	79		4.820	4.781	(0.521)	35382	0.32275	0.3228	
105 1-methylnaphthalene	142		13.374	13.390	(1.141)	35278	0.20373	0.2037	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.801	16.816	(1.096)	39886	0.14260	0.1426	

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.414	25.507	(0.968)	136280	0.36905	0.3690
120 2,3,4,6-Tetrachlorophenol	232		16.012	16.020	(1.045)	3210	0.06265	0.06265

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052316.D Calibration Time: 21:38
 Lab Smp Id: SLC0415-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	264922	132461	529844	304339	14.88
27 Naphthalene-d8	947542	473771	1895084	1055141	11.36
42 Acenaphthene-d10	505666	252833	1011332	547496	8.27
59 Phenanthrene-d10	940283	470142	1880566	980771	4.31
69 Chrysene-d12	987952	493976	1975904	892900	-9.62
134 Di-n-octylphthala	1625017	812509	3250034	1549553	-4.64
77 Perylene-d12	1073798	536899	2147596	1127057	4.96

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.07
42 Acenaphthene-d10	15.34	14.84	15.84	15.32	-0.10
59 Phenanthrene-d10	18.46	17.96	18.96	18.44	-0.08
69 Chrysene-d12	23.52	23.02	24.02	23.49	-0.10
134 Di-n-octylphthala	24.59	24.09	25.09	24.56	-0.13
77 Perylene-d12	26.29	25.79	26.79	26.24	-0.18

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

REVIEW SUMMARY FOR FILE - NT1003052316.D

Lab ID: SLC0415-LCV1
nt10.i, 20230305A.b\ABN.m, 05-MAR-2023 22:54

RT CO-ELUTION COMPOUNDS

23.471 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

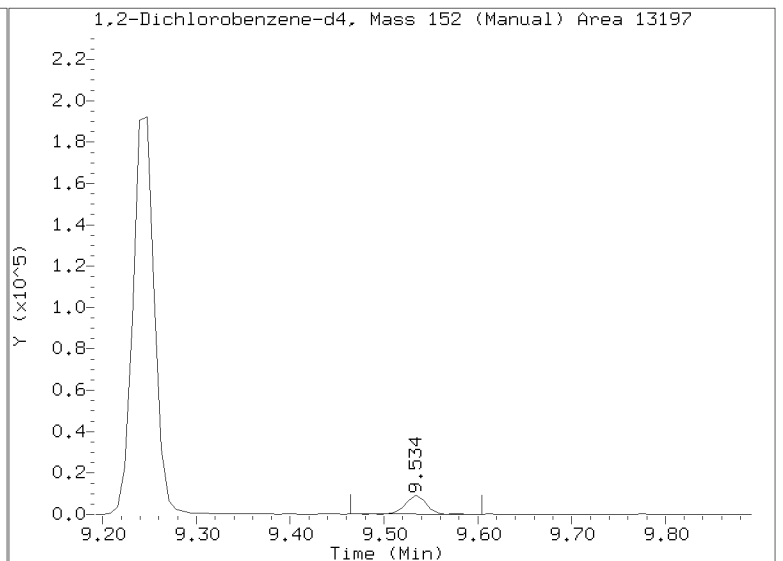
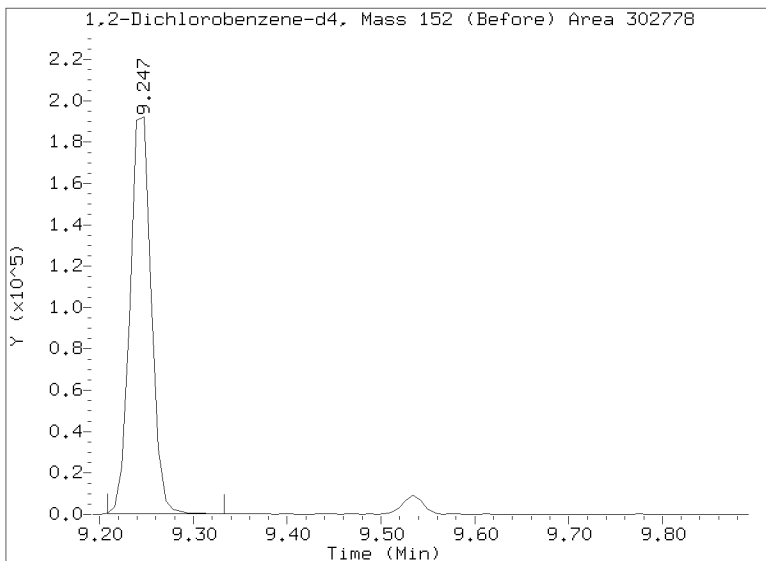
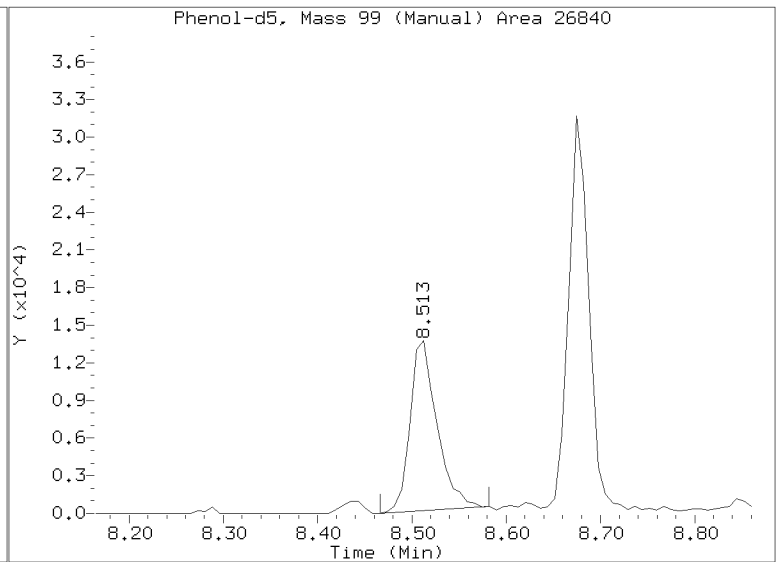
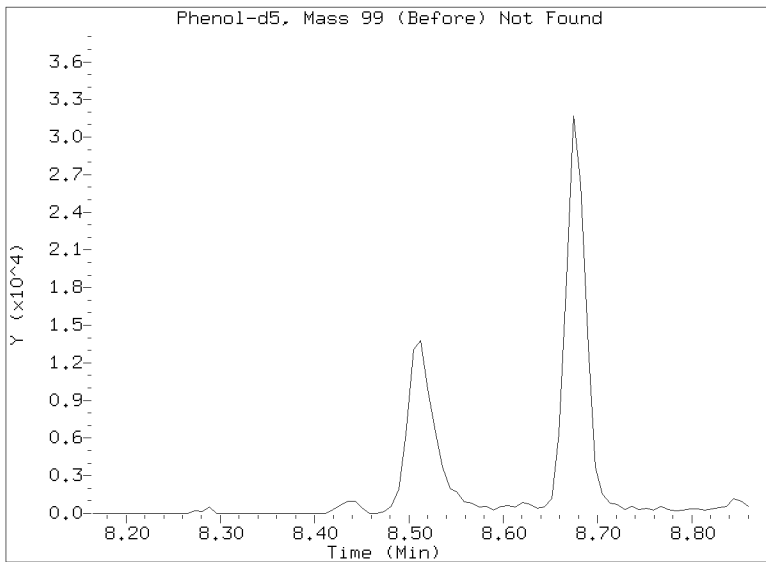
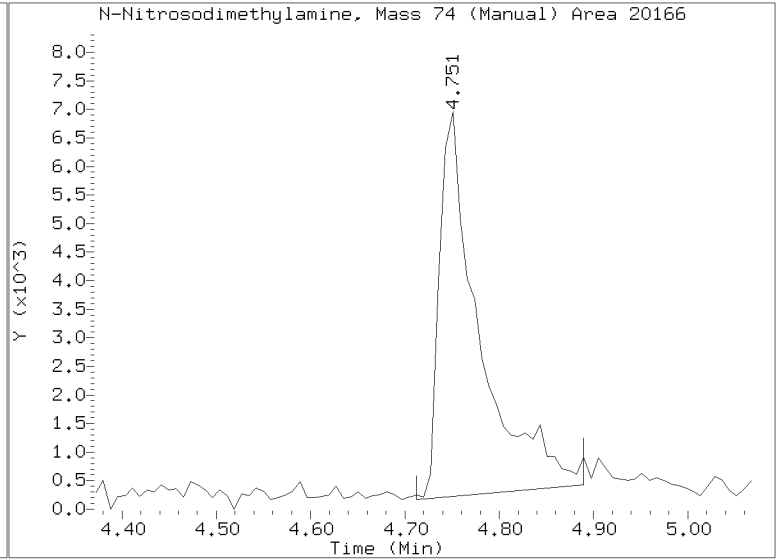
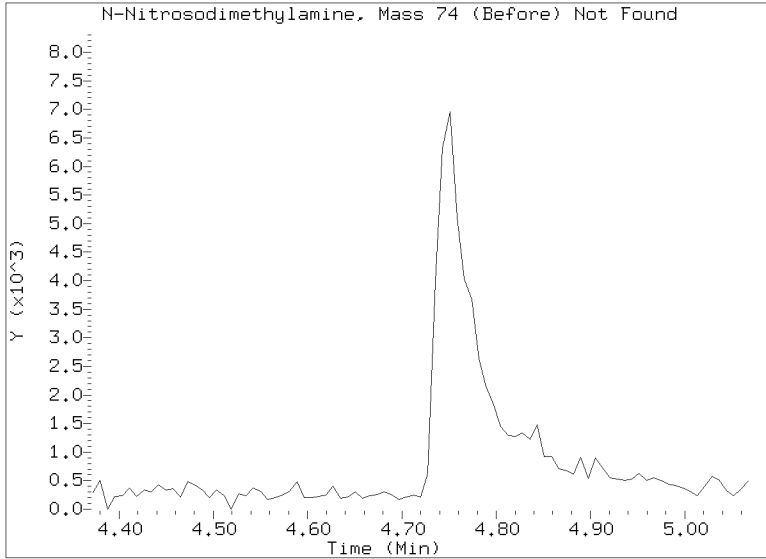
RRT check based on Ccal File: NT1003052314.D

On Column LOD for nt10.i, 20230305A.b\ABN.m, ICAL.sub = 0.0000

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

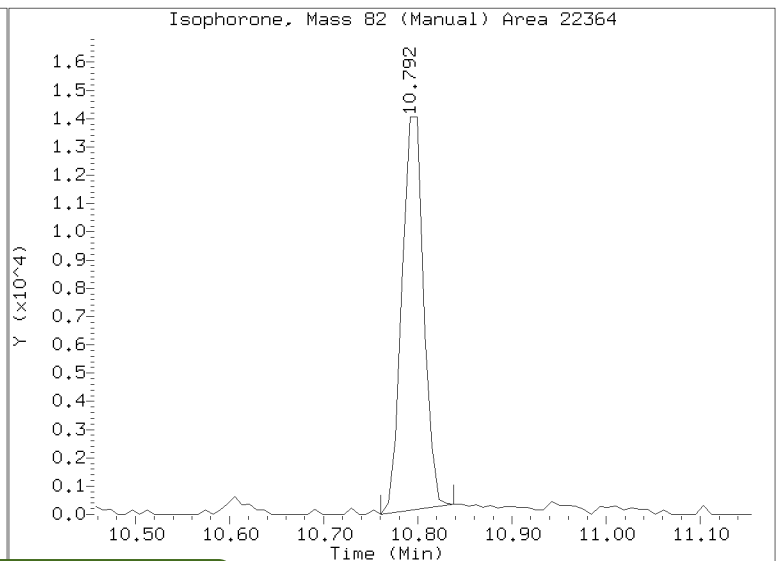
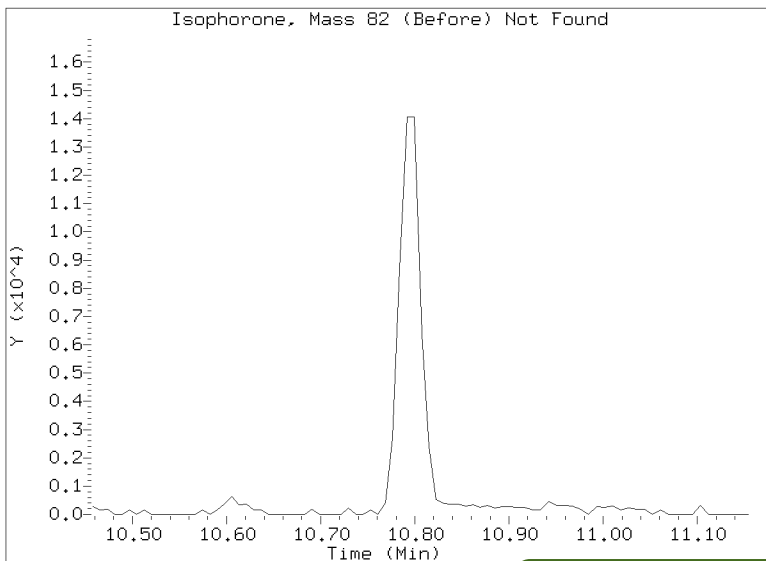
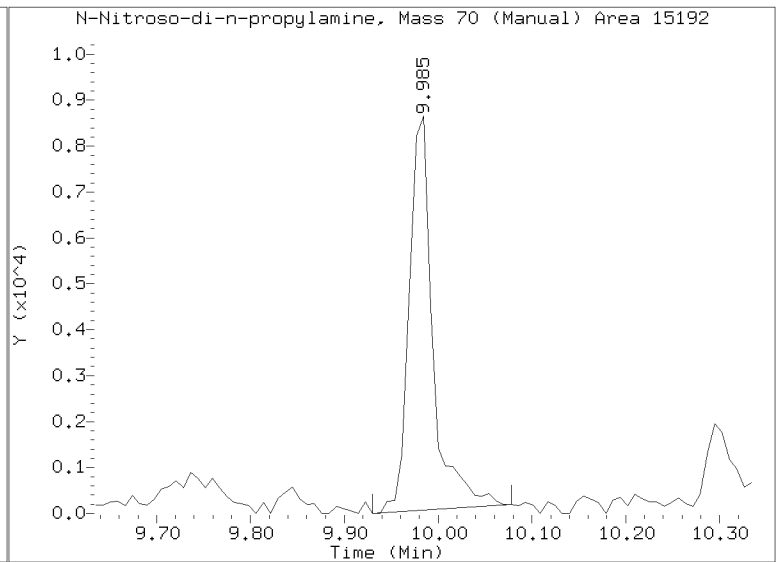
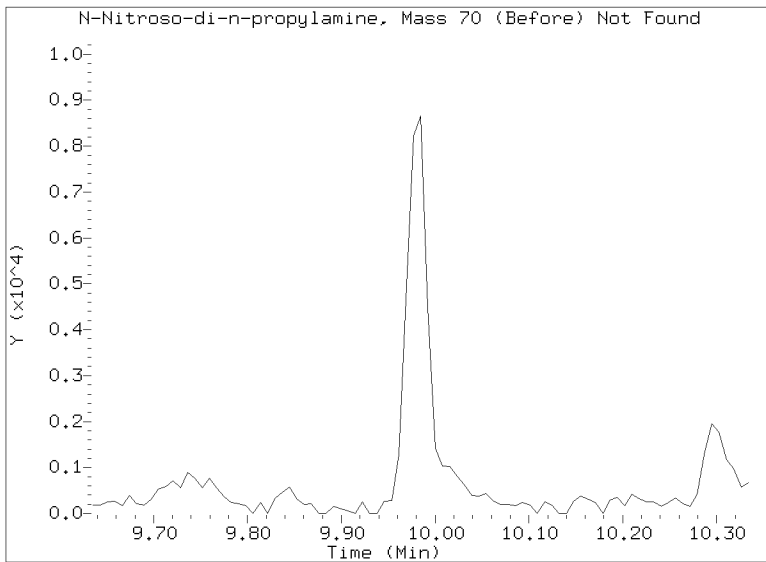
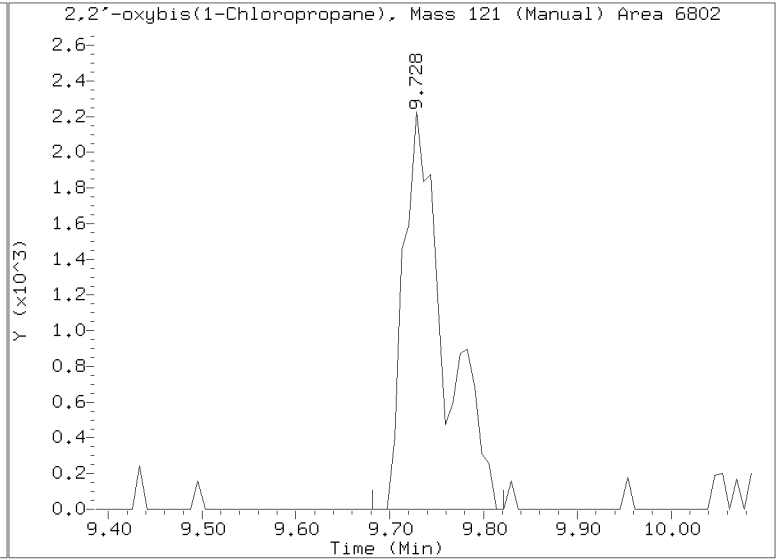
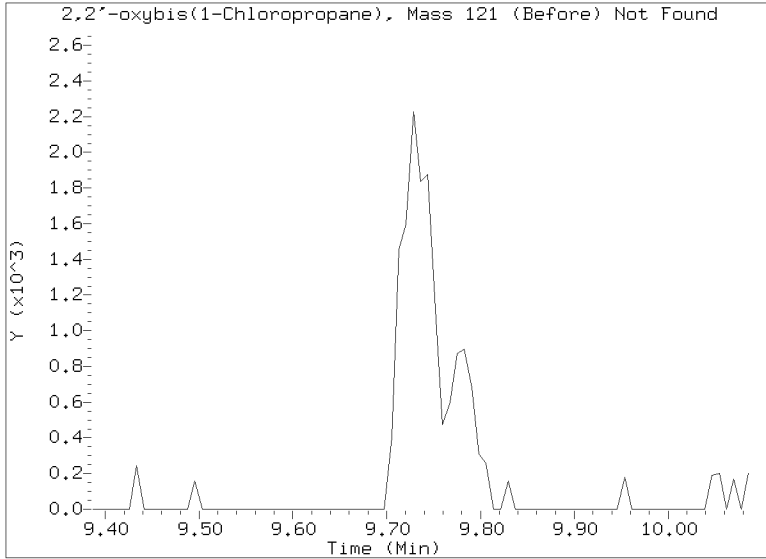
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052316.D
Injection Date: 05-MAR-2023 22:54
Lab ID:SLC0415-LCV1 Client ID:
Report Date: 03/27/2023 13:58



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052316.D
Injection Date: 05-MAR-2023 22:54
Lab ID:SLC0415-LCV1 Client ID:
Report Date: 03/27/2023 13:58



APPROVED

By Deenay Dunmore at 2:10 pm, Mar 27, 2023



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0415-LCV2

Sequence: SLC0415

Standard ID: K011107

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	1.0000	1.0	2.8	50.00
4-Methylphenol	1.0000	0.8	-19.0	50.00
Naphthalene	1.0000	1.0	-0.7	50.00
2-Methylnaphthalene	1.0000	1.0	2.8	50.00
Acenaphthylene	1.0000	1.1	9.0	50.00
Dimethylphthalate	1.0000	1.0	2.6	50.00
Acenaphthene	1.0000	1.0	-2.3	50.00
Dibenzofuran	1.0000	1.0	4.2	50.00
Fluorene	1.0000	1.0	-3.4	50.00
Pentachlorophenol	2.0000	0.2	-92.0 *	50.00
Phenanthrene	1.0000	1.0	-0.3	50.00
Anthracene	1.0000	1.0	3.3	50.00
Fluoranthene	1.0000	0.9	-9.6	50.00
Pyrene	1.0000	0.9	-9.2	50.00
Butylbenzylphthalate	1.0000	0.8	-21.4	50.00
Benzo(a)anthracene	1.0000	1.0	-3.2	50.00
Chrysene	1.0000	1.1	9.1	50.00
bis(2-Ethylhexyl)phthalate	1.0000	0.9	-10.6	50.00
Benzofluoranthenes, Total	2.0000	1.8	-8.2	50.00
Benzo(a)pyrene	1.0000	0.9	-6.3	50.00
Indeno(1,2,3-cd)pyrene	1.0000	1.0	-2.6	50.00
Dibenzo(a,h)anthracene	1.0000	1.1	7.3	50.00
Benzo(g,h,i)perylene	1.0000	1.0	3.5	50.00
2-Fluorophenol	1.5000	1.49	-0.3	50.00
Phenol-d5	1.5000	1.56	4.0	50.00
2-Chlorophenol-d4	1.5000	1.61	7.6	50.00
1,2-Dichlorobenzene-d4	1.0000	1.03	2.9	50.00
Nitrobenzene-d5	1.0000	1.10	9.8	50.00
2-Fluorobiphenyl	1.0000	1.09	8.6	50.00



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0415-LCV2

Sequence: SLC0415

Standard ID: K011107

2,4,6-Tribromophenol	1.5000	1.40	-6.5	50.00
p-Terphenyl-d14	1.0000	0.971	-2.9	50.00

* Values outside of QC limits



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0425-LCV1

Sequence: SLC0425

Standard ID: K011105

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-4.0	50.00
4-Methylphenol	0.20000	0.1	-27.9	50.00
Naphthalene	0.20000	0.2	2.1	50.00
2-Methylnaphthalene	0.20000	0.2	1.1	50.00
Acenaphthylene	0.20000	0.2	9.3	50.00
Dimethylphthalate	0.20000	0.2	-4.0	50.00
Acenaphthene	0.20000	0.2	-3.3	50.00
Dibenzofuran	0.20000	0.2	4.5	50.00
Fluorene	0.20000	0.2	-3.8	50.00
Pentachlorophenol	0.40000	0.0	*	50.00
Phenanthrene	0.20000	0.2	2.4	50.00
Anthracene	0.20000	0.2	-0.3	50.00
Fluoranthene	0.20000	0.2	-9.7	50.00
Pyrene	0.20000	0.2	-8.8	50.00
Butylbenzylphthalate	0.20000	0.1	-25.0	50.00
Benzo(a)anthracene	0.20000	0.2	2.1	50.00
Chrysene	0.20000	0.2	10.1	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	-5.7	50.00
Benzo(a)fluoranthene, Total	0.40000	0.4	-4.4	50.00
Benzo(a)pyrene	0.20000	0.2	-4.1	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-0.9	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	2.9	50.00
Benzo(g,h,i)perylene	0.20000	0.2	-3.7	50.00
2-Fluorophenol	0.30000	0.296	-1.4	50.00
Phenol-d5	0.30000	0.248	-17.4	50.00
2-Chlorophenol-d4	0.30000	0.310	3.4	50.00
1,2-Dichlorobenzene-d4	0.20000	0.205	2.3	50.00
Nitrobenzene-d5	0.20000	0.191	-4.5	50.00
2-Fluorobiphenyl	0.20000	0.214	7.1	50.00



**LOW-CONCENTRATION
CALIBRATION VERIFICATION
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00019

Laboratory ID: SLC0425-LCV1

Sequence: SLC0425

Standard ID: K011105

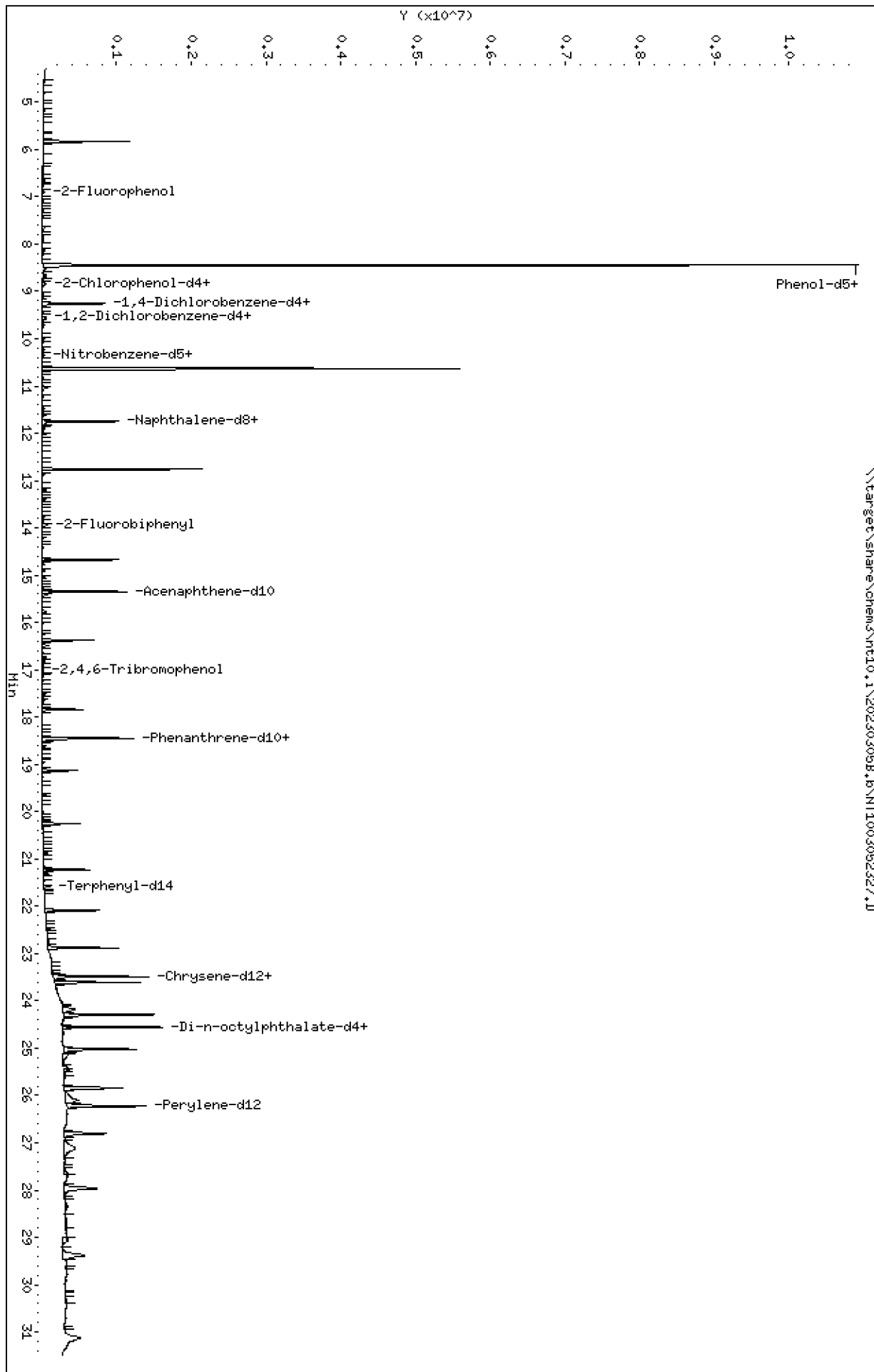
2,4,6-Tribromophenol	0.30000	0.100	-66.6 *	50.00
p-Terphenyl-d14	0.20000	0.200	0.2	50.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052327.D
Date: 06-HRR-2023 05:48
Client ID:
Sample Info: SLC0425-LCW1
Column phase: ZB-5msi

Instrument: nt10.1
Operator: VTS
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\NT1003052327.D



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

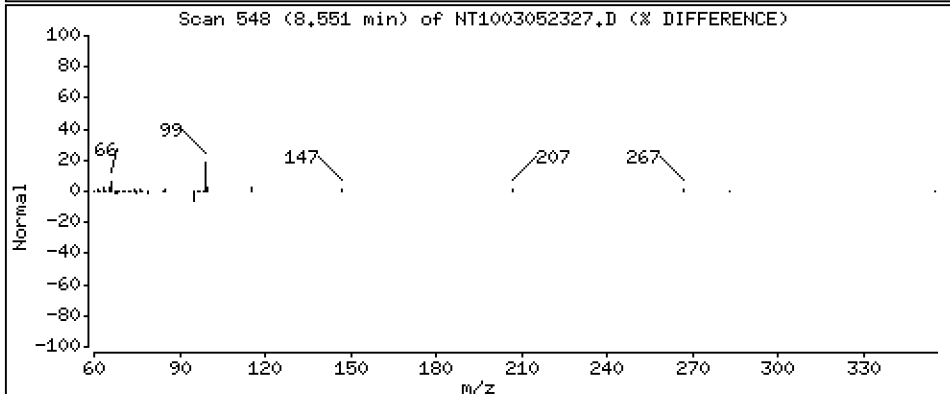
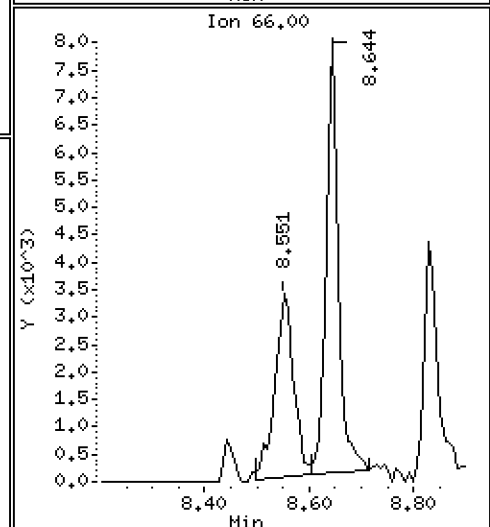
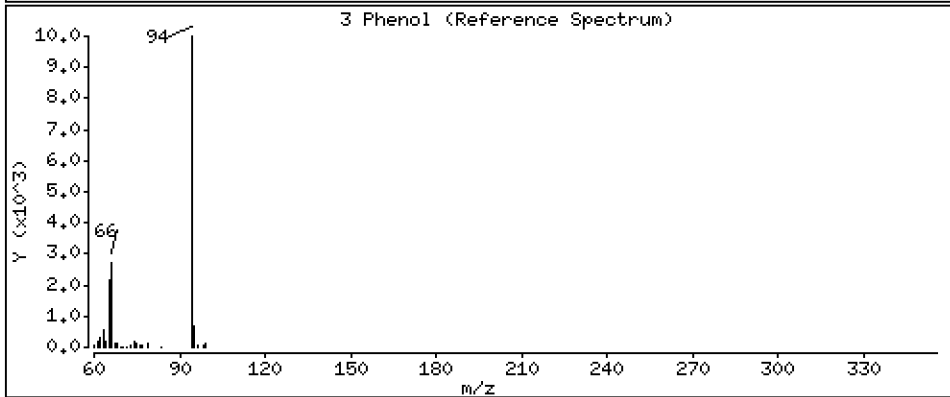
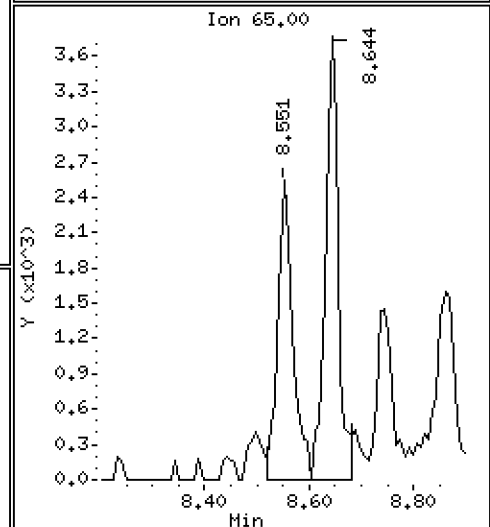
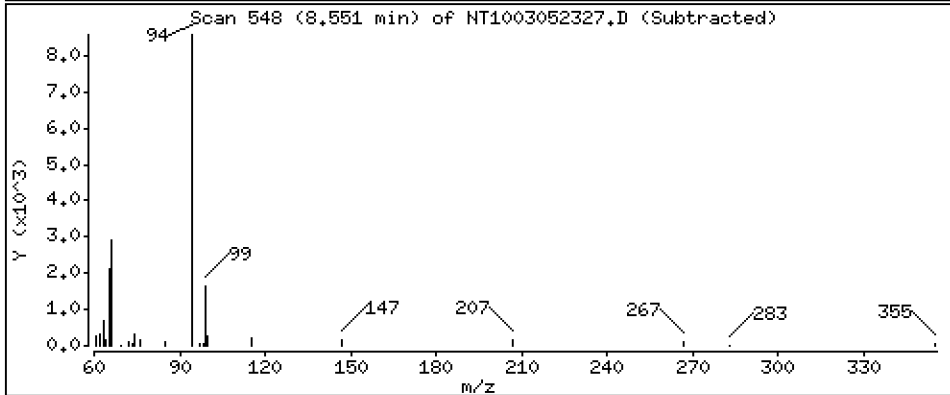
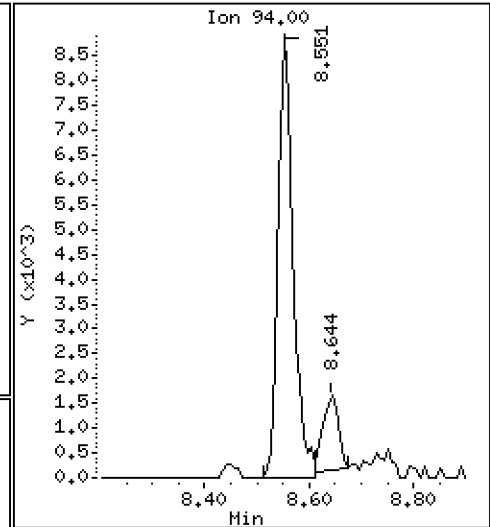
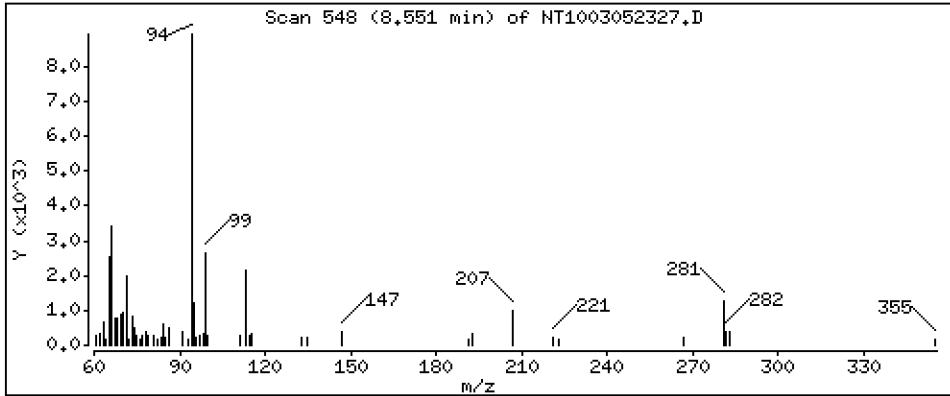
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1920 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

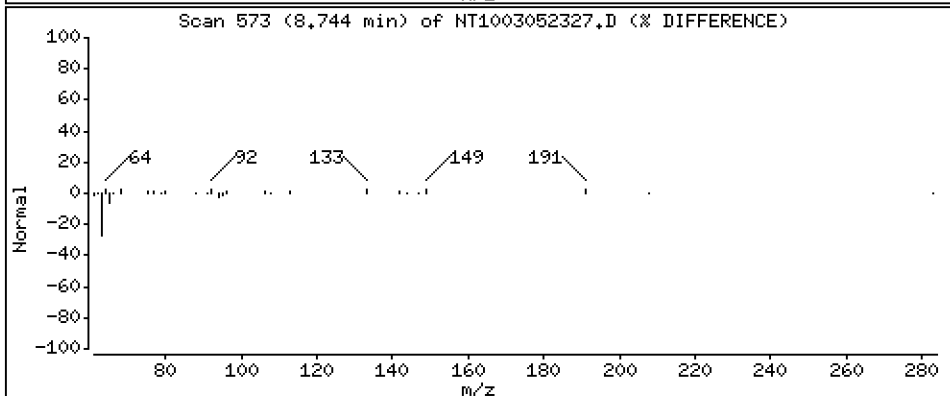
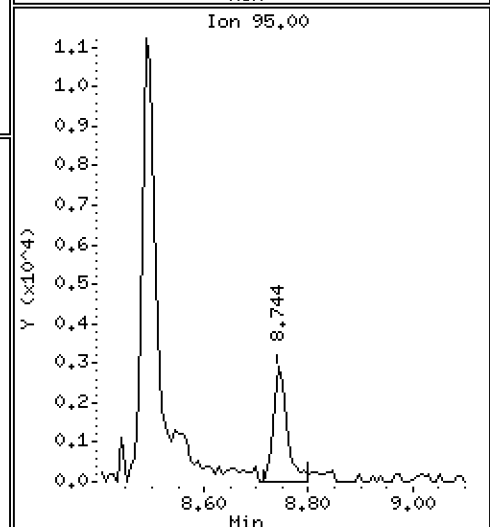
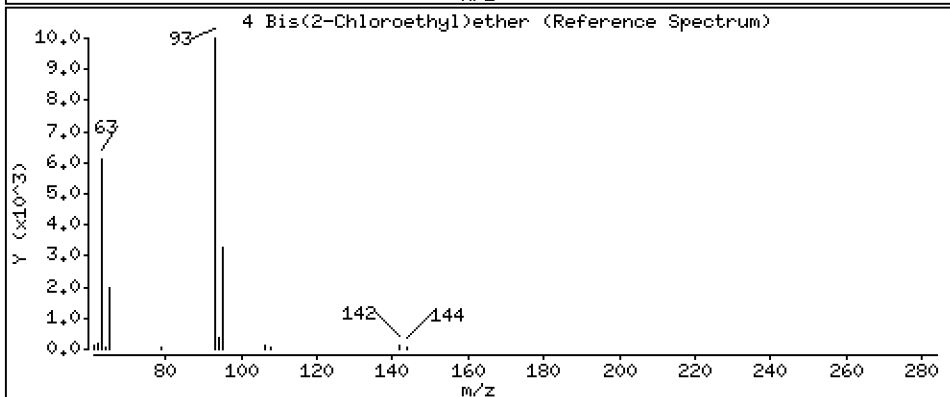
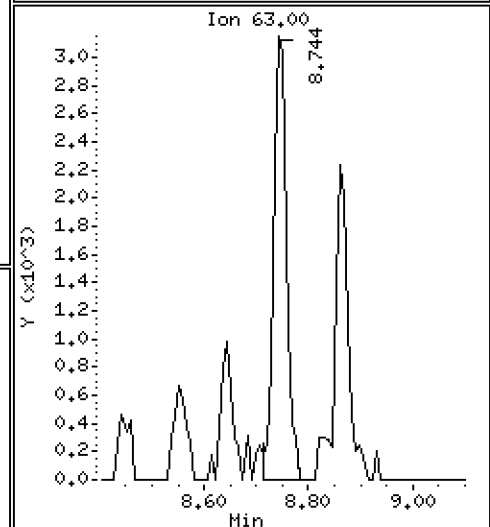
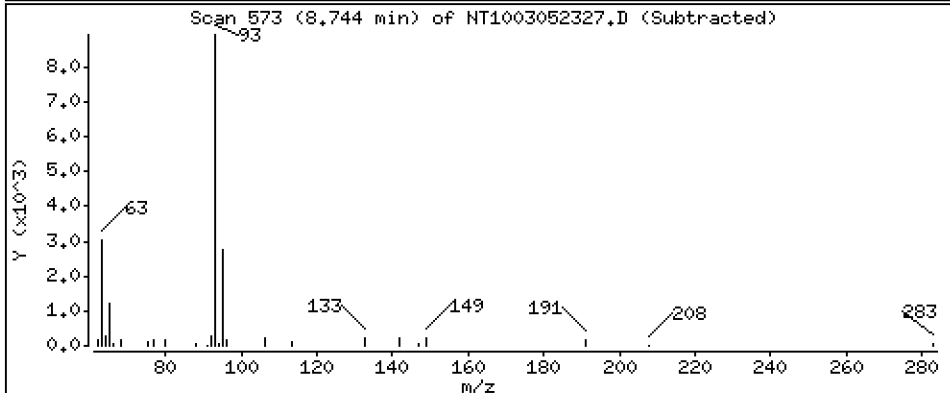
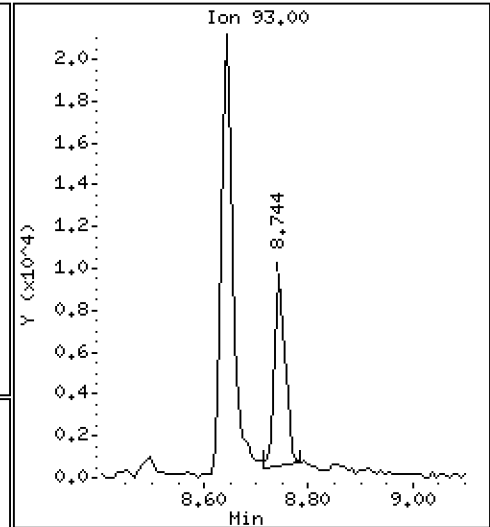
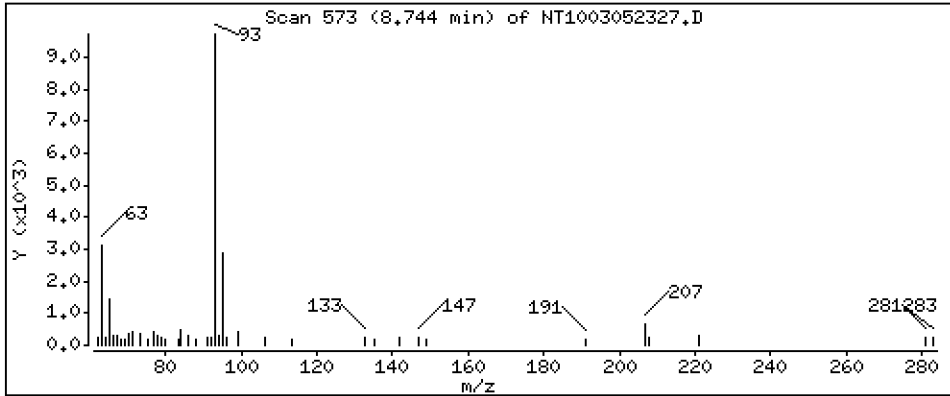
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,1849 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

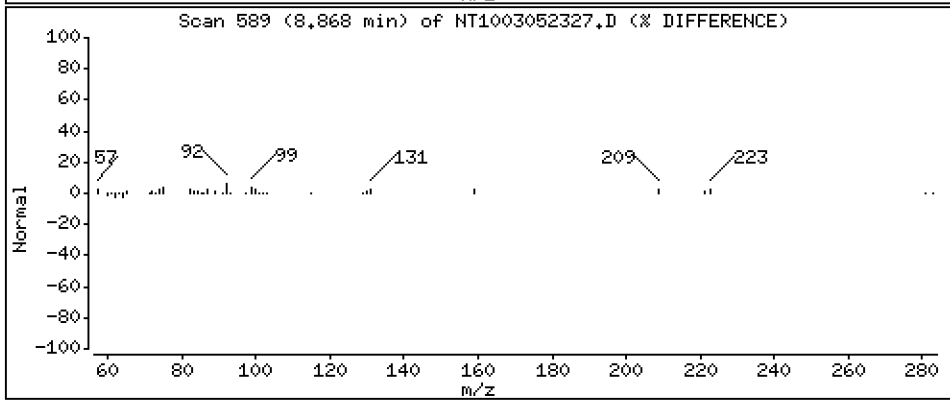
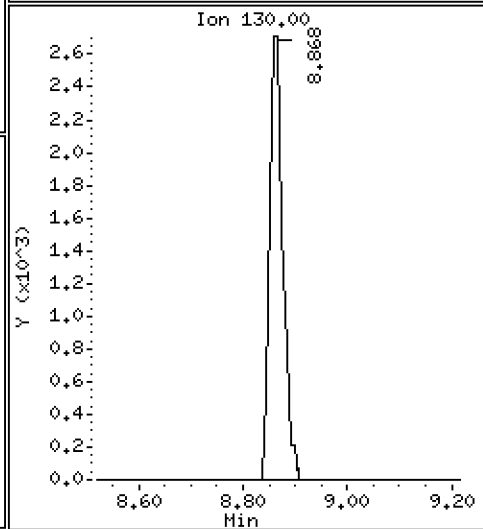
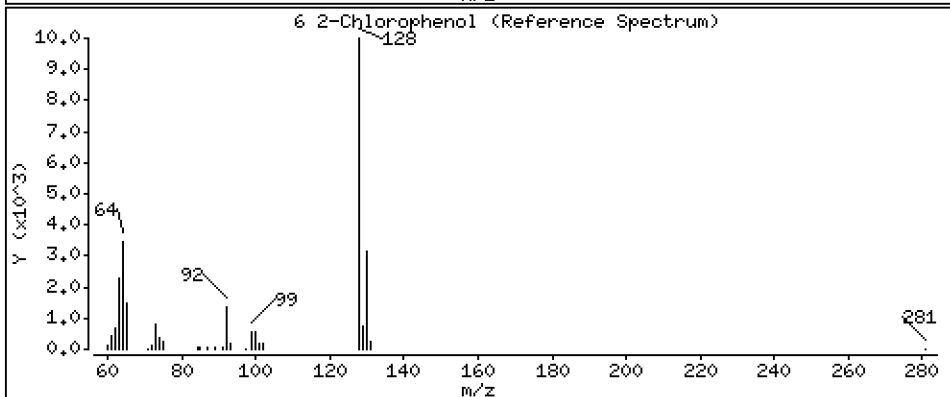
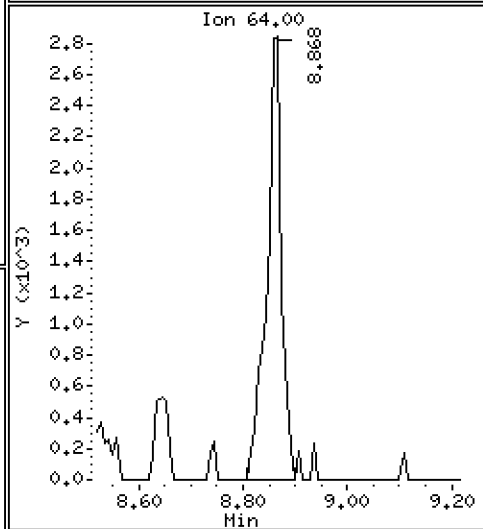
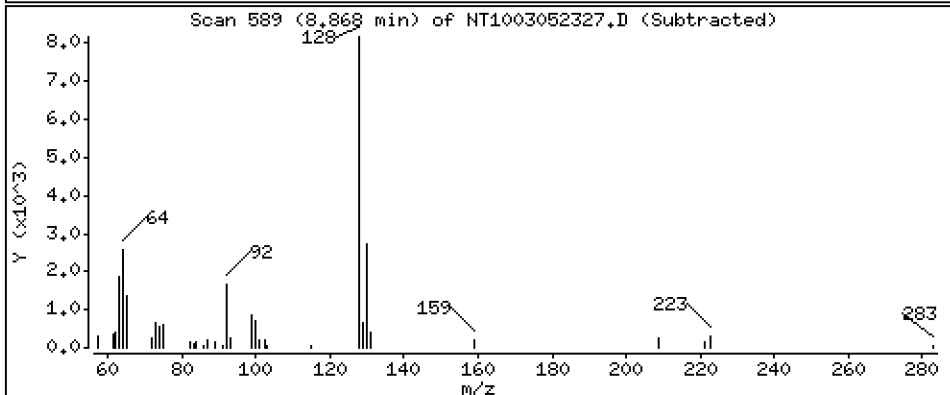
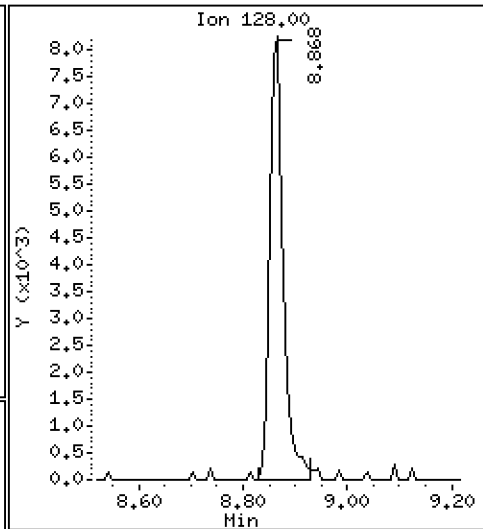
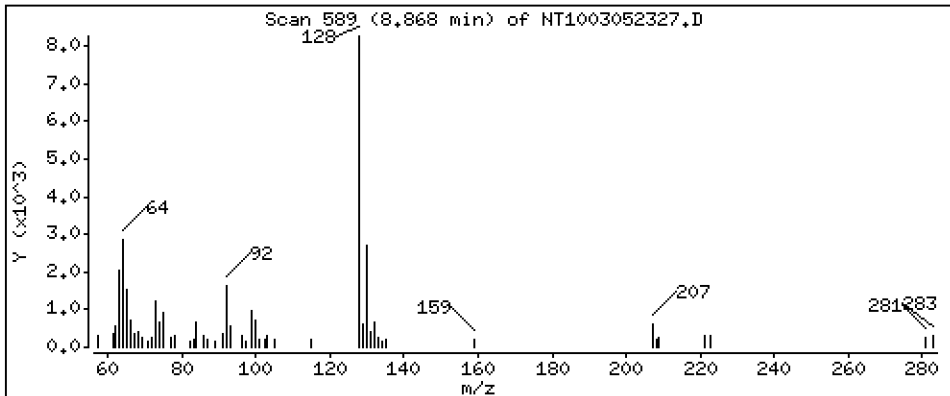
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1999 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

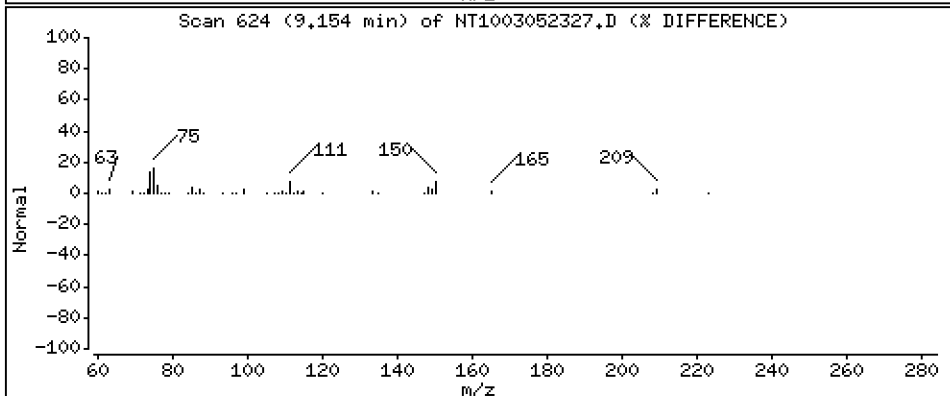
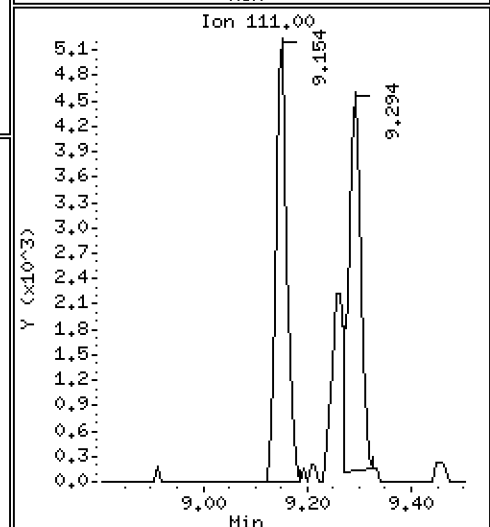
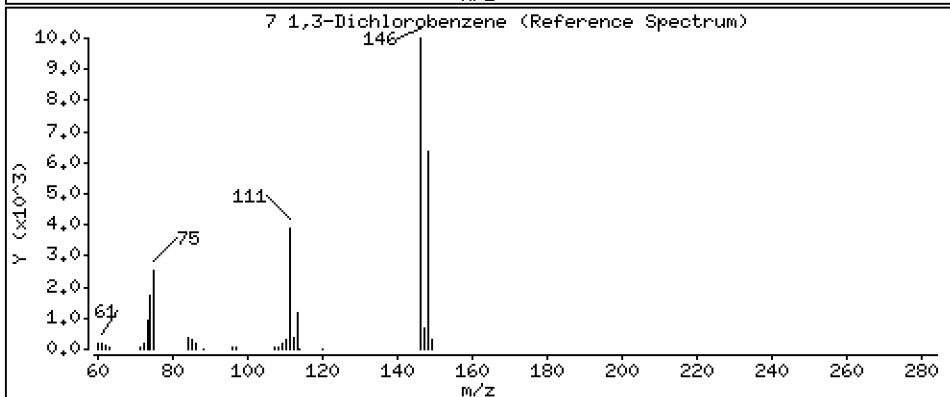
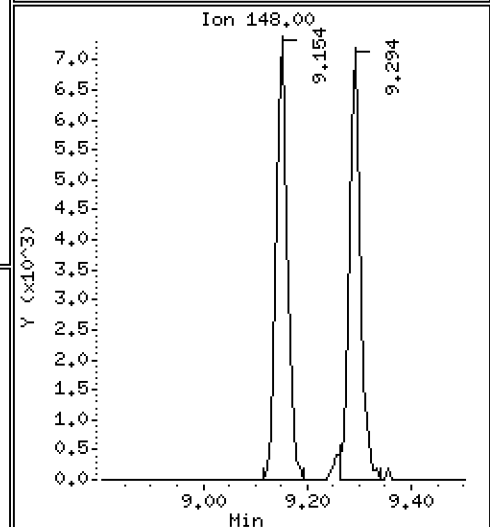
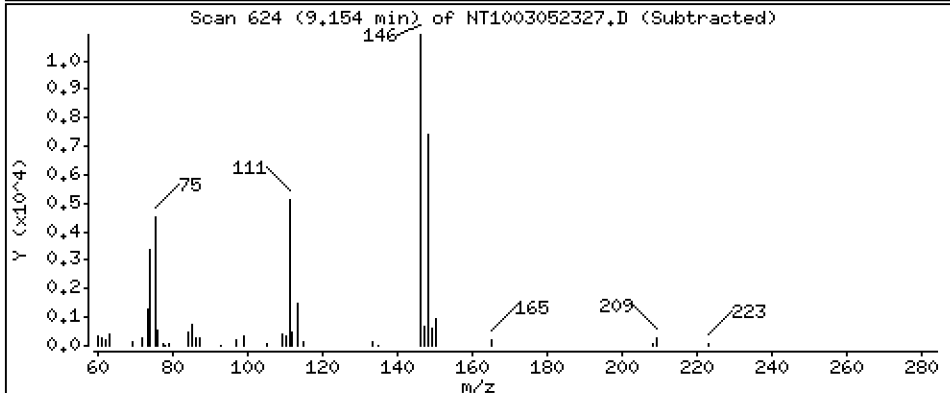
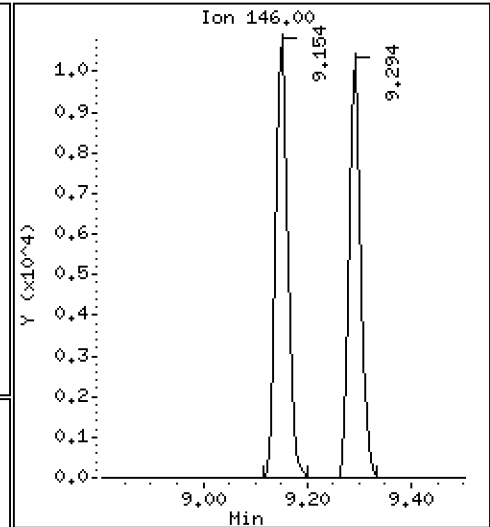
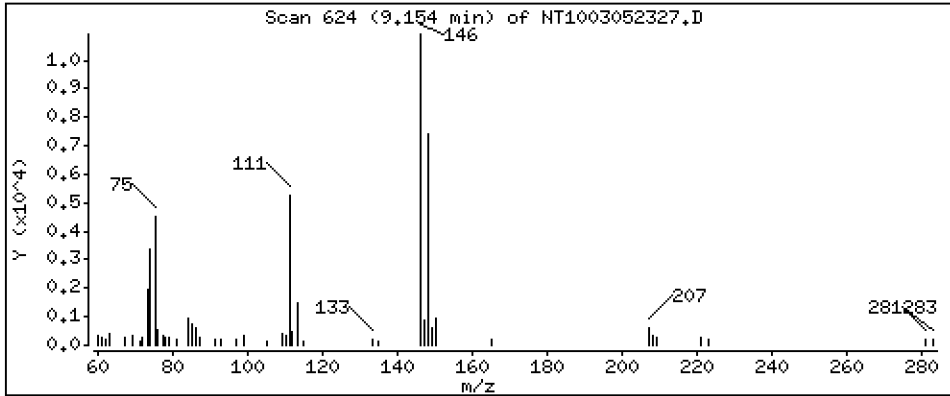
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2133 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

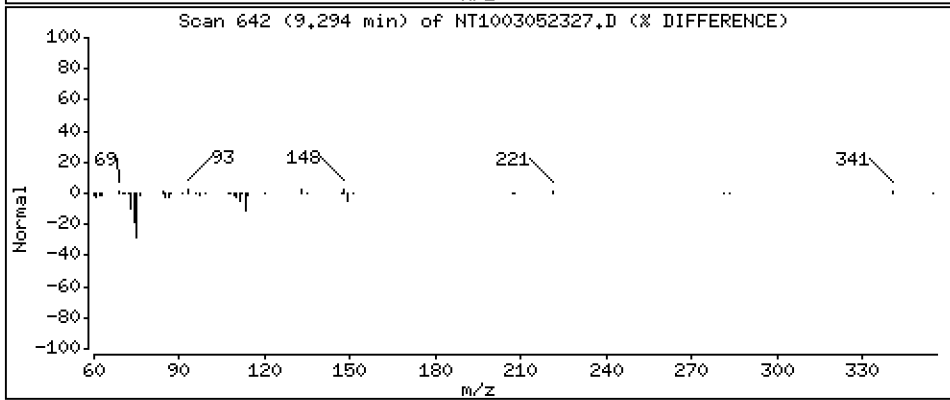
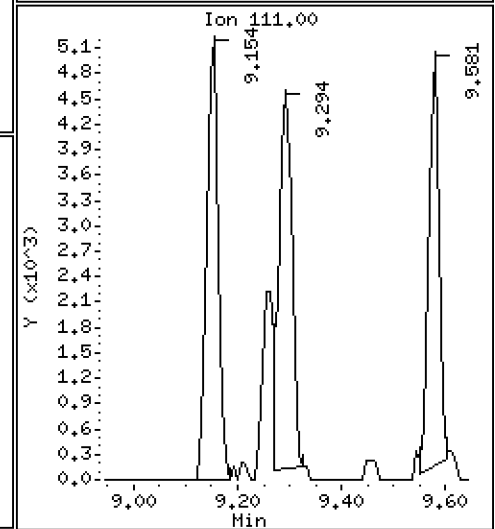
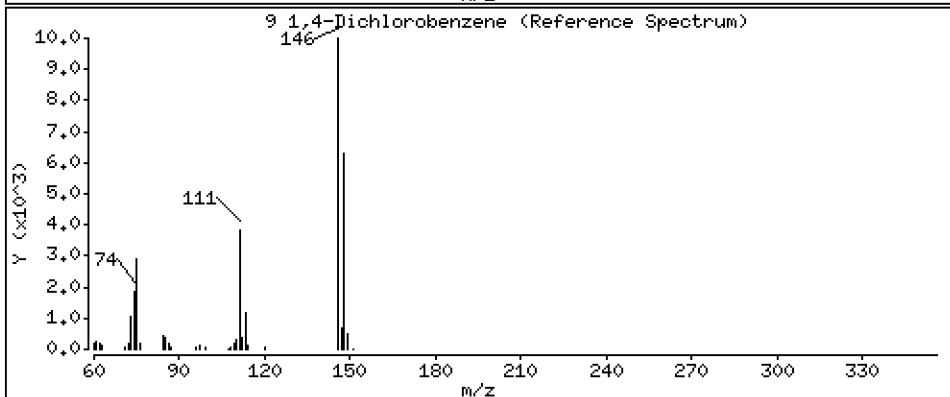
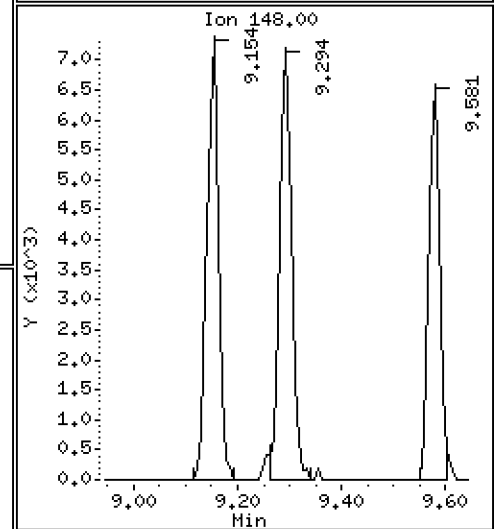
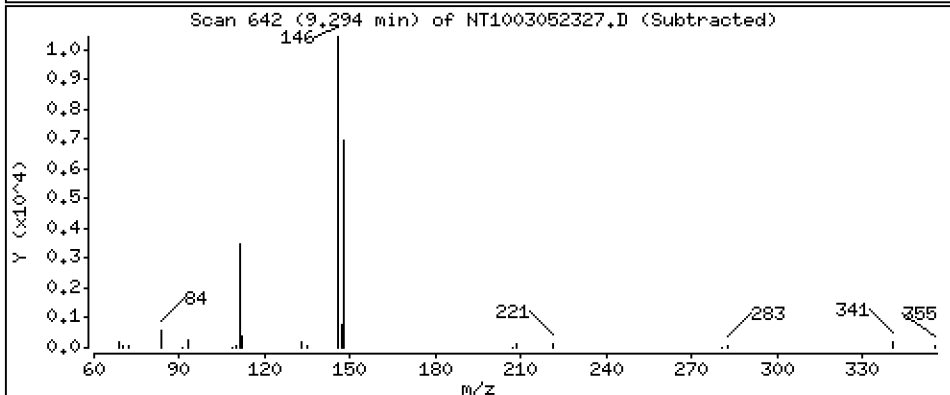
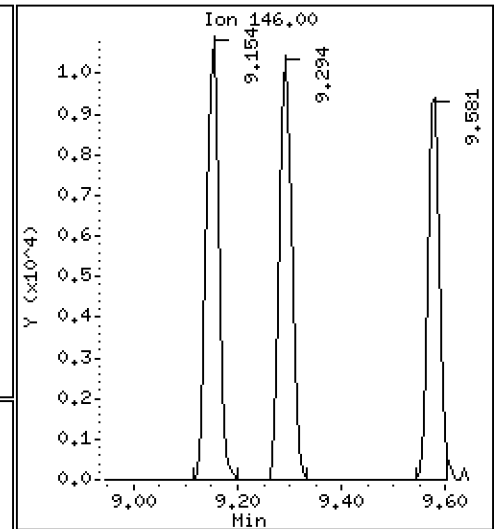
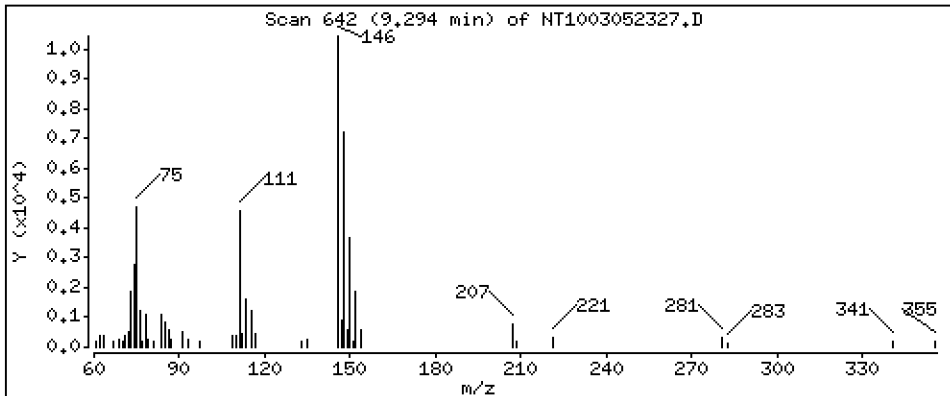
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.2008 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

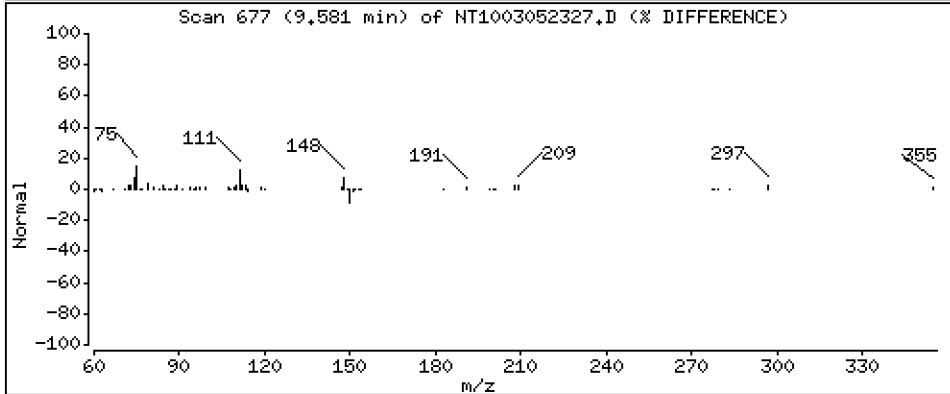
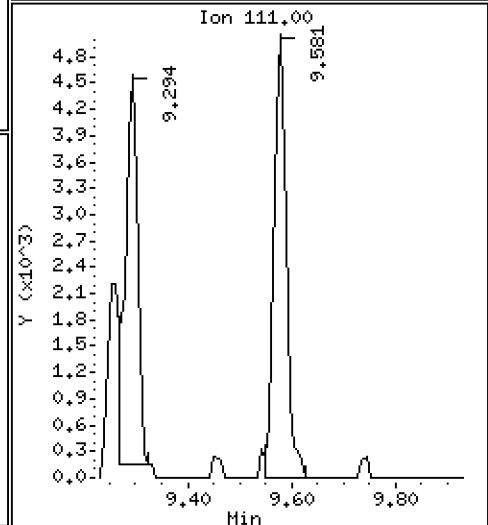
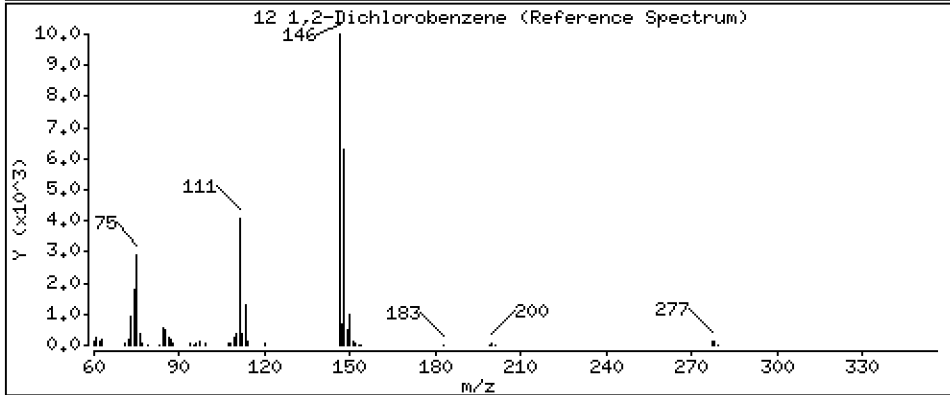
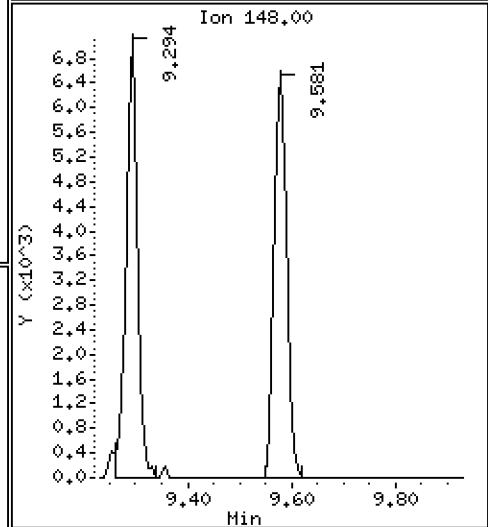
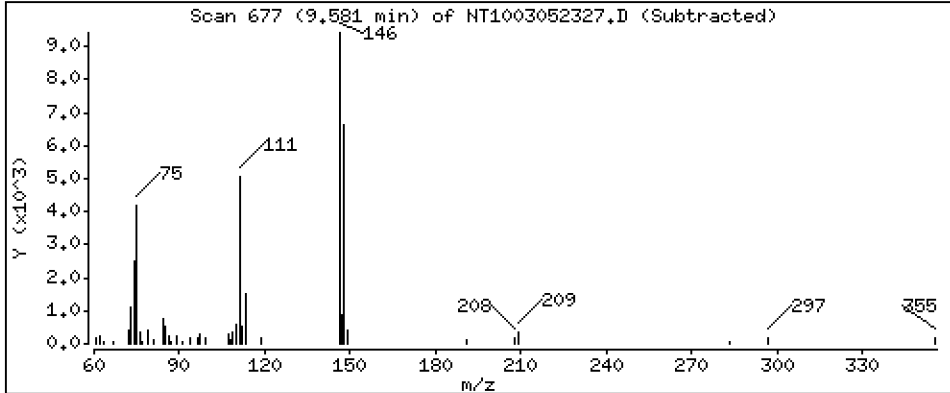
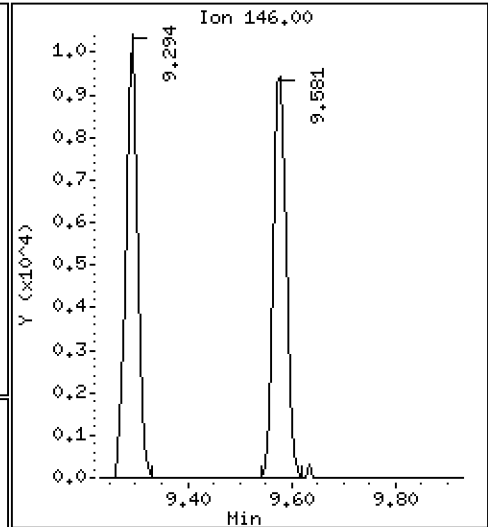
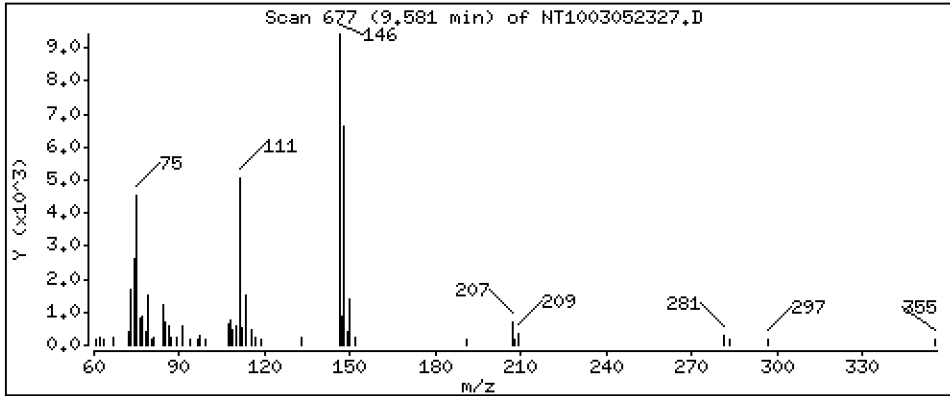
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.1976 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

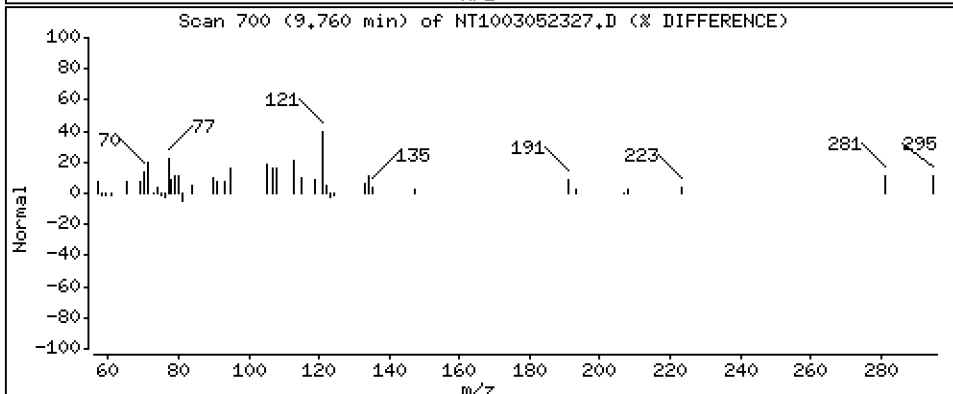
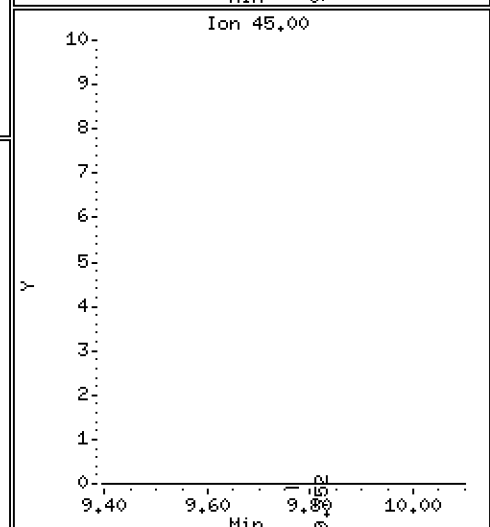
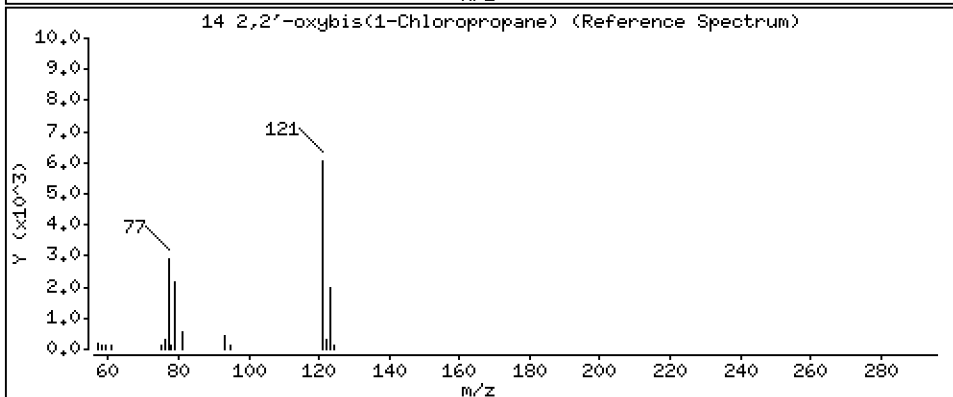
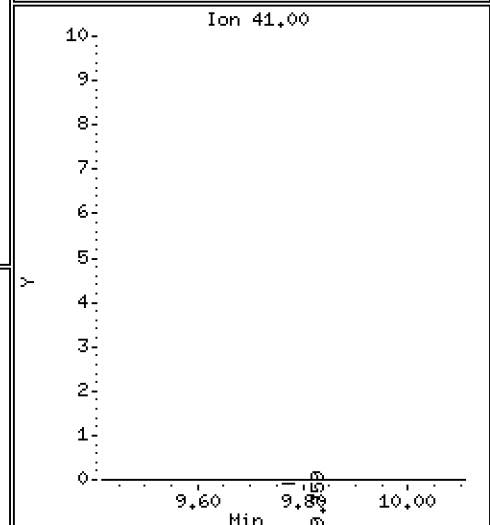
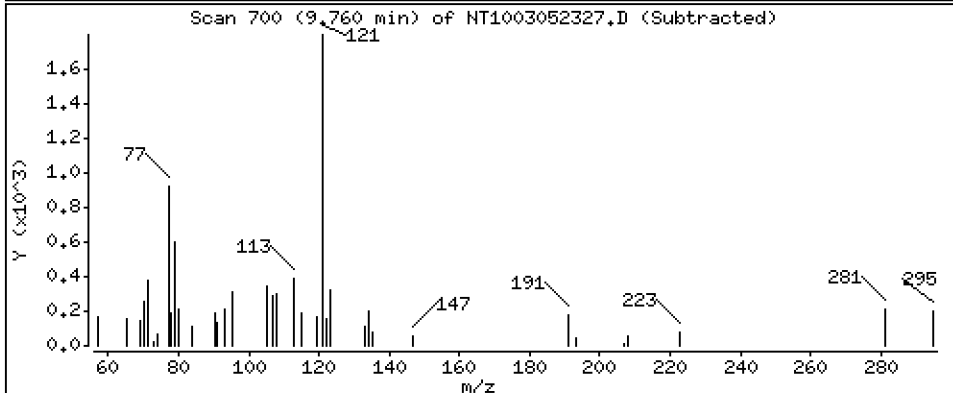
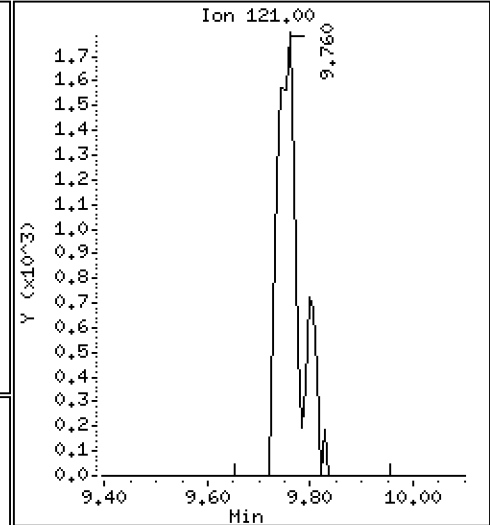
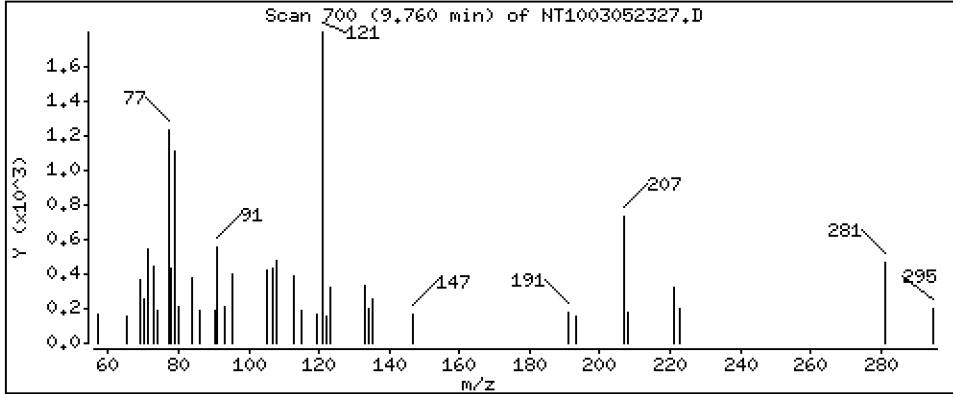
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2387 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

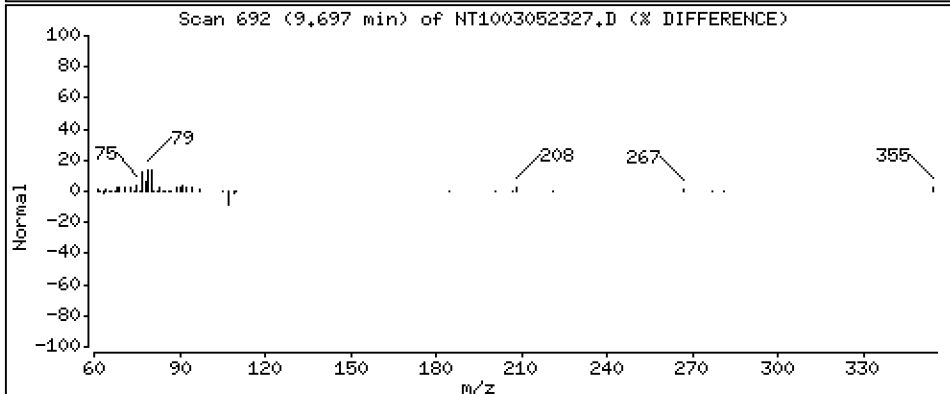
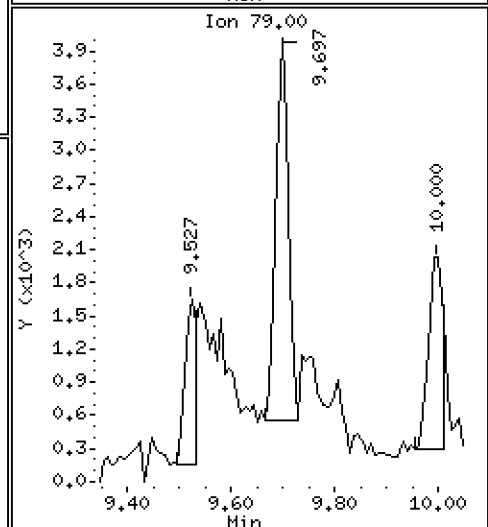
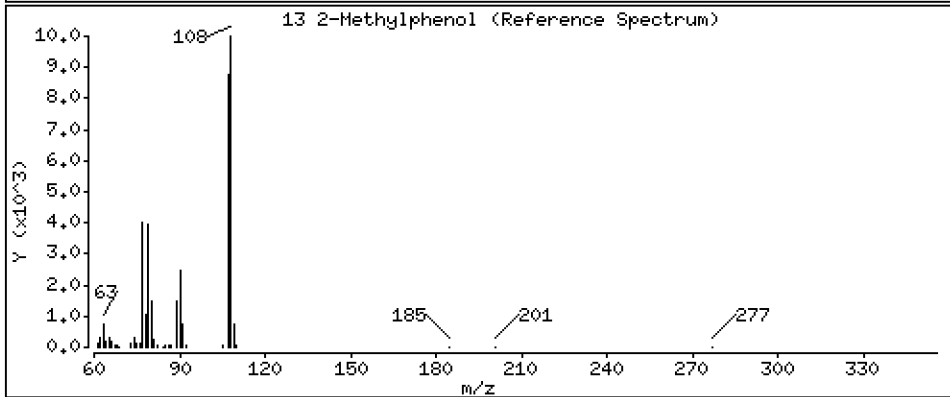
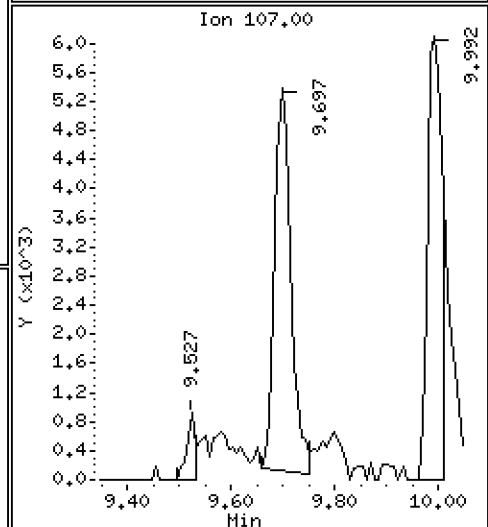
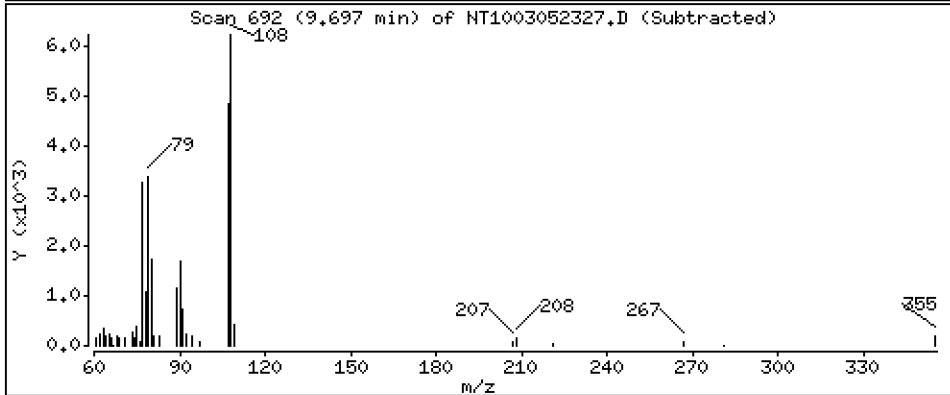
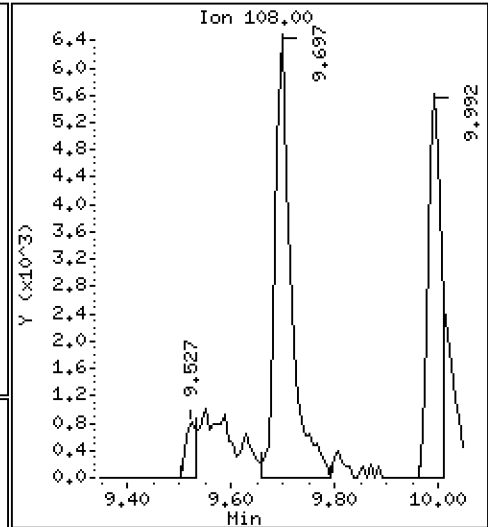
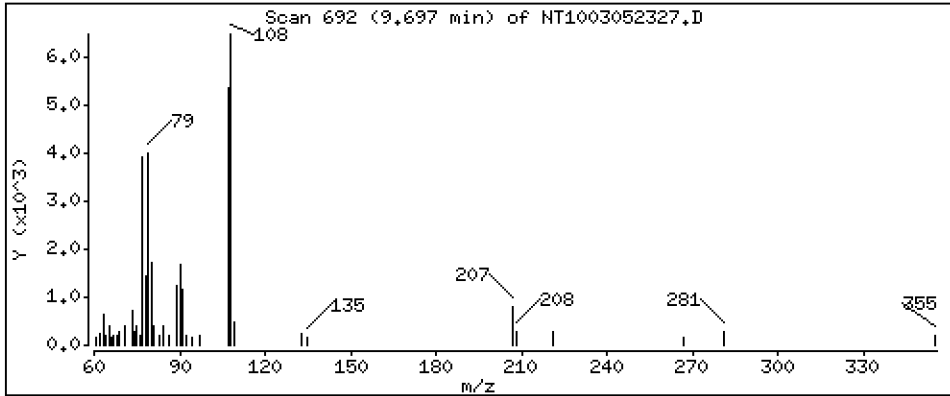
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1925 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

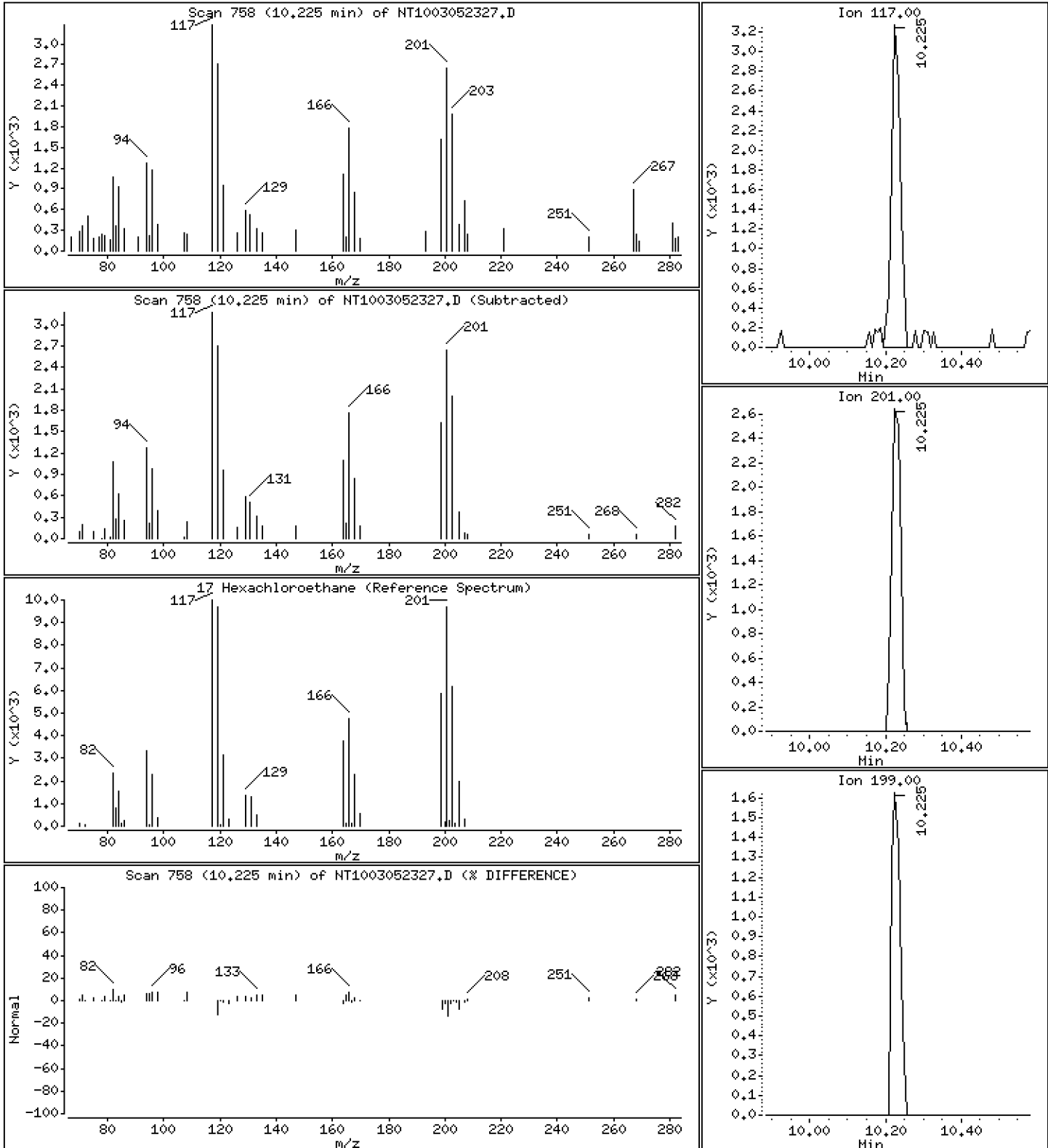
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,1482 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

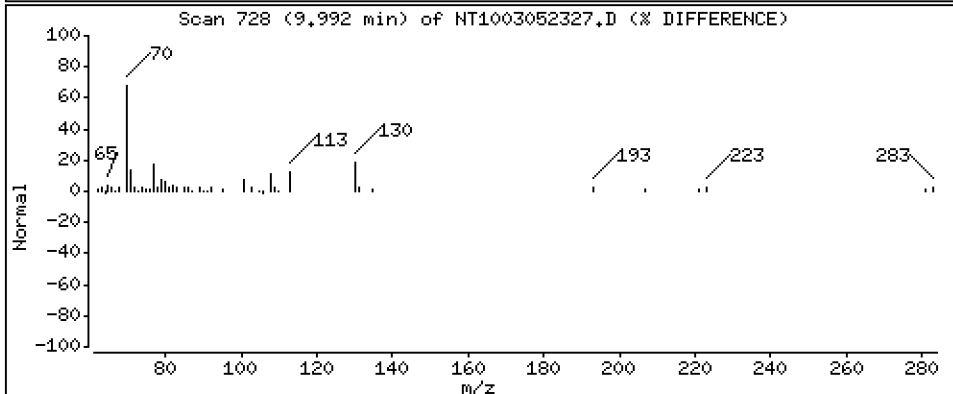
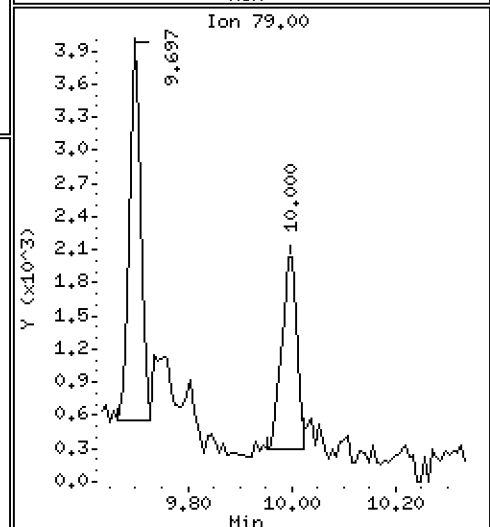
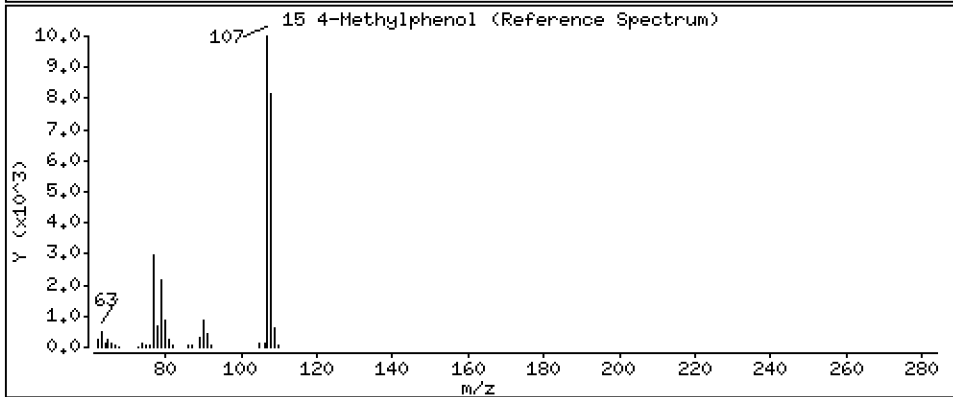
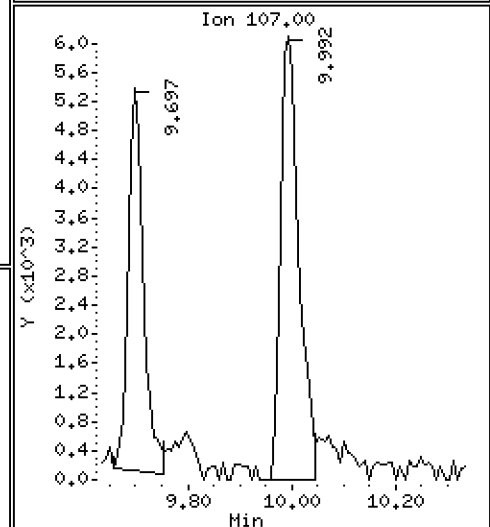
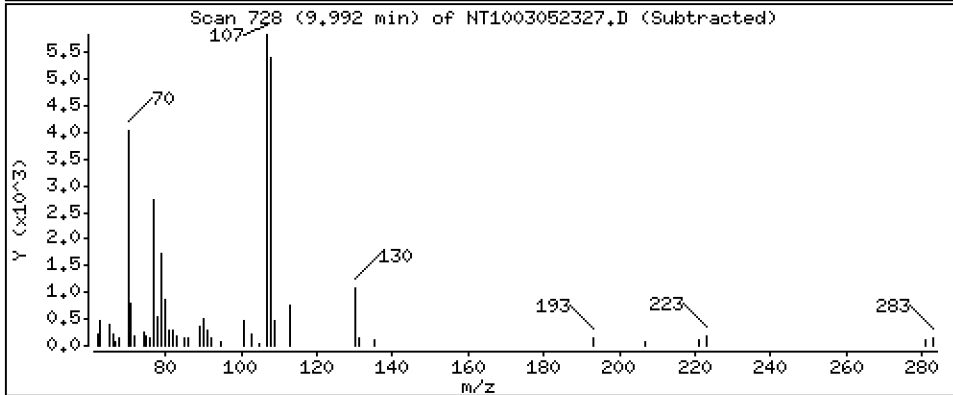
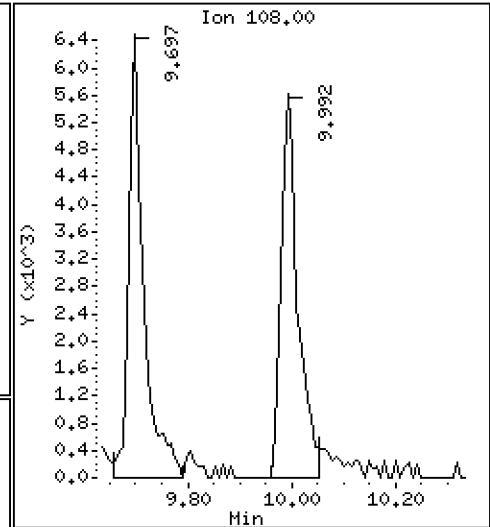
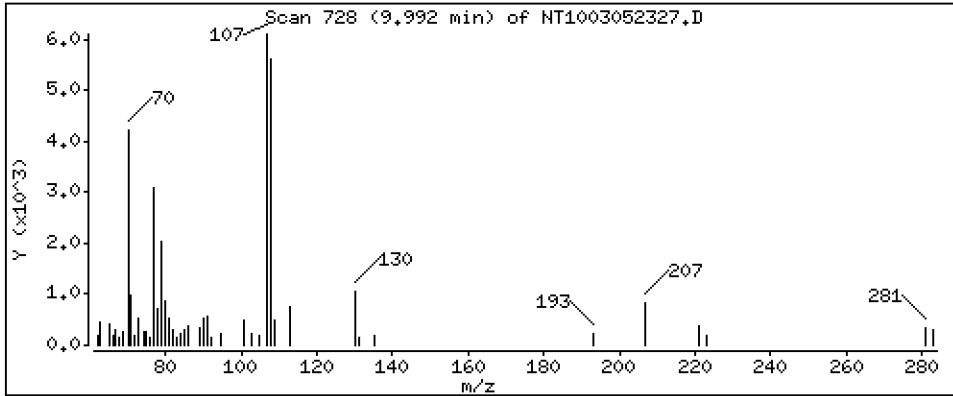
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1442 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

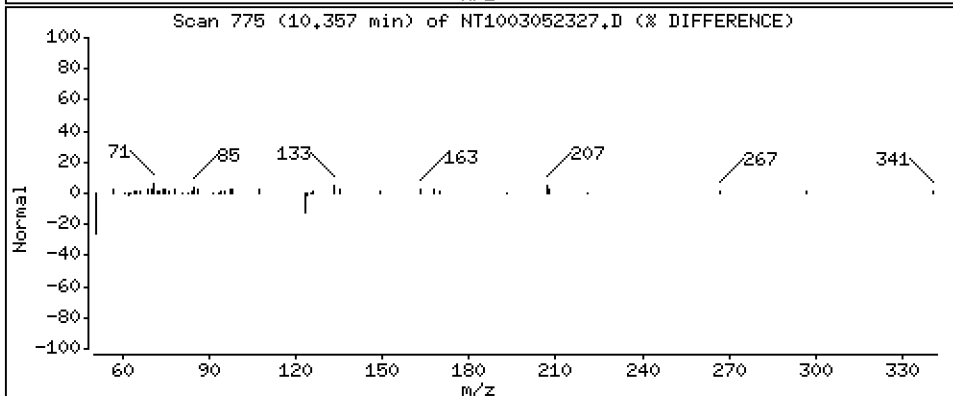
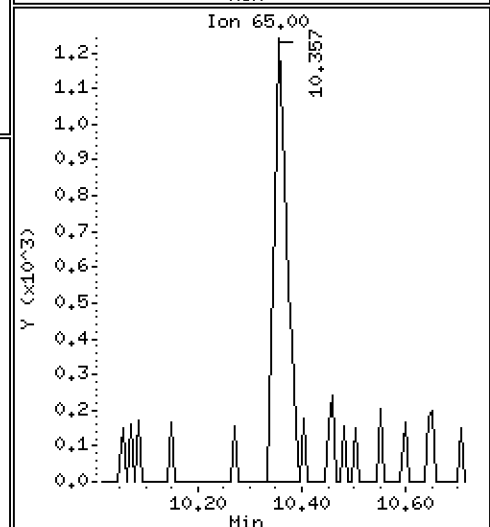
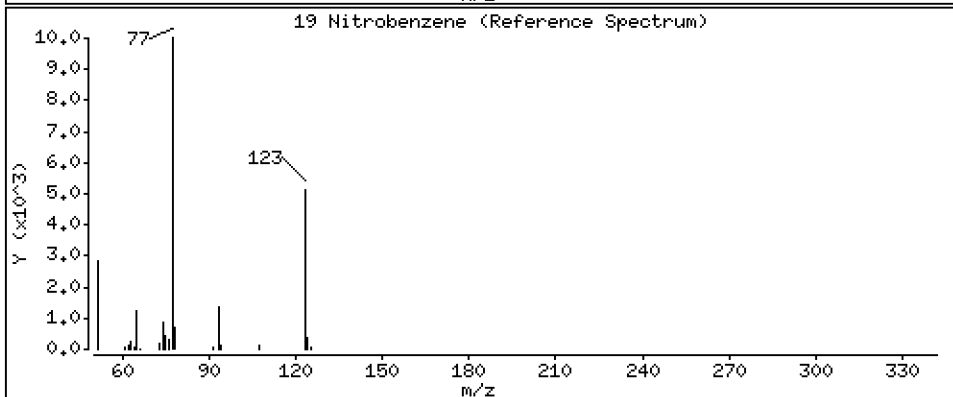
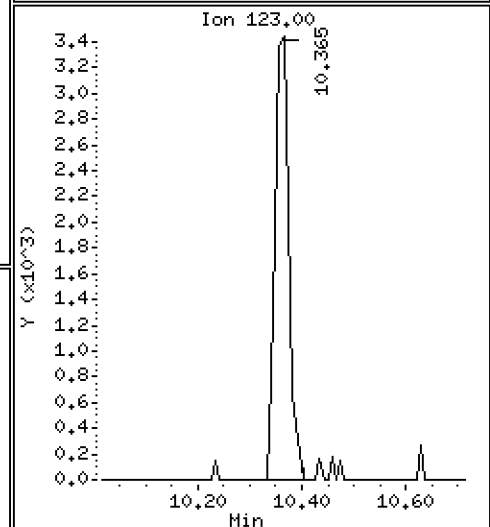
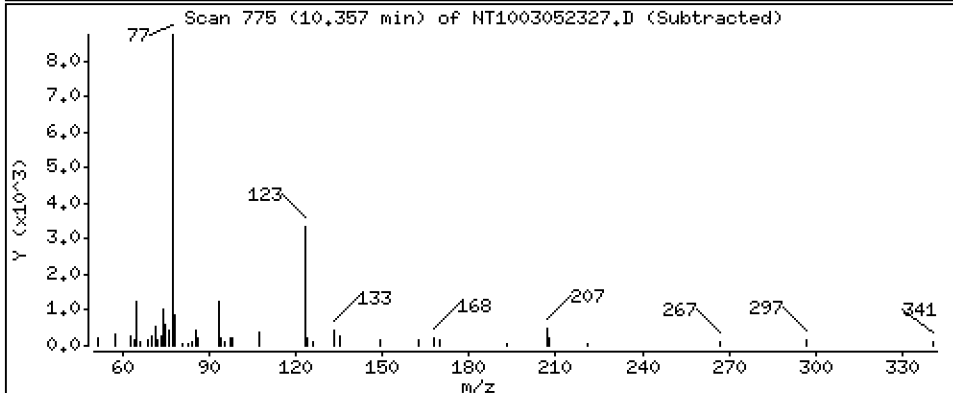
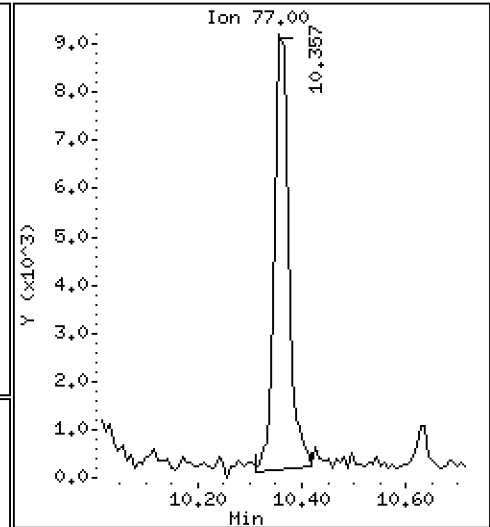
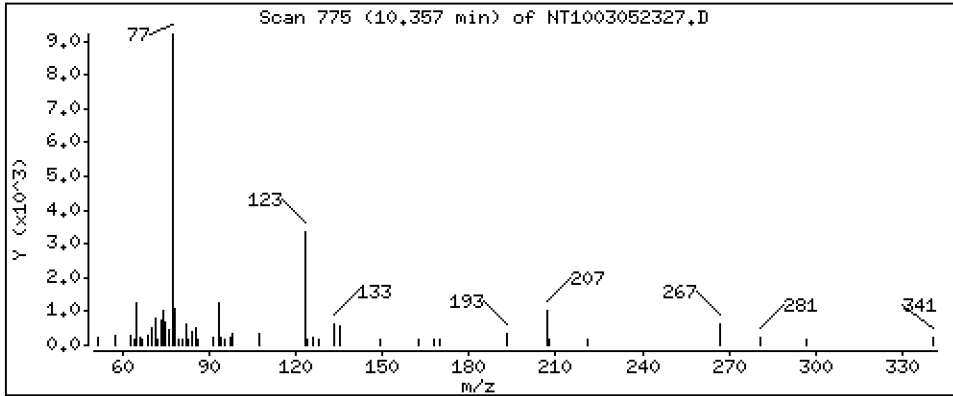
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,1990 ug/mL

19 Nitrobenzene



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

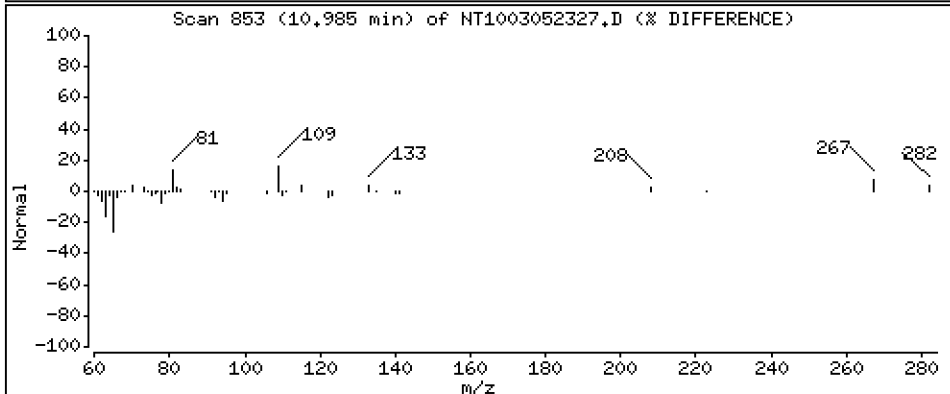
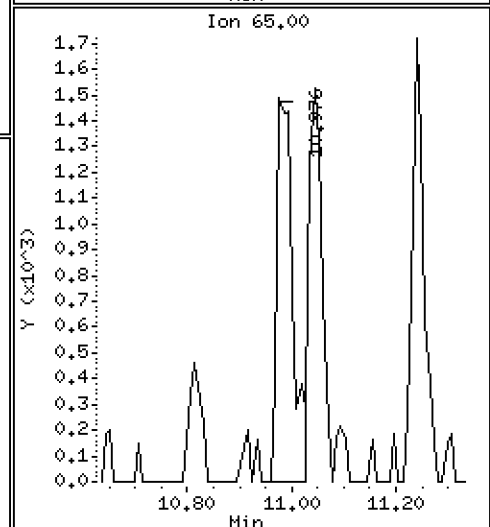
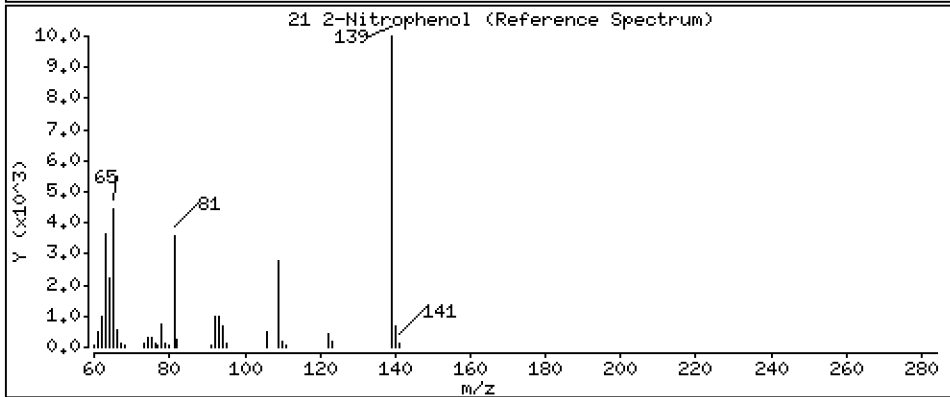
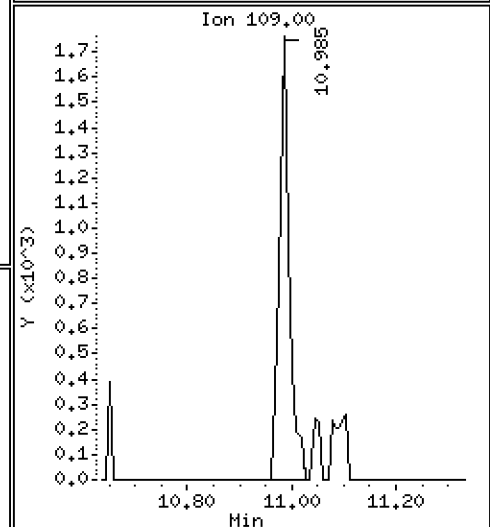
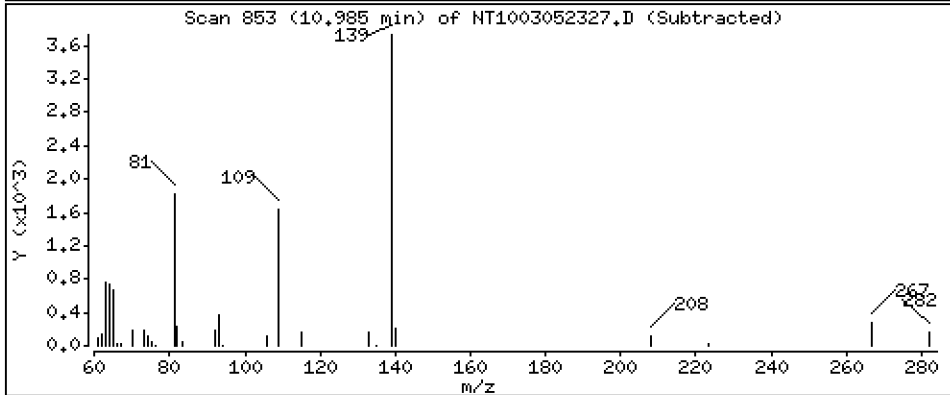
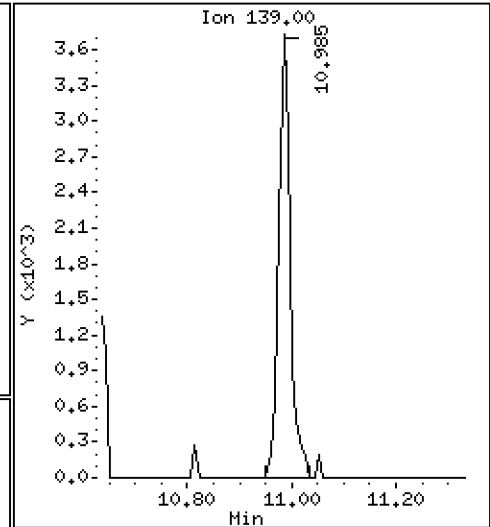
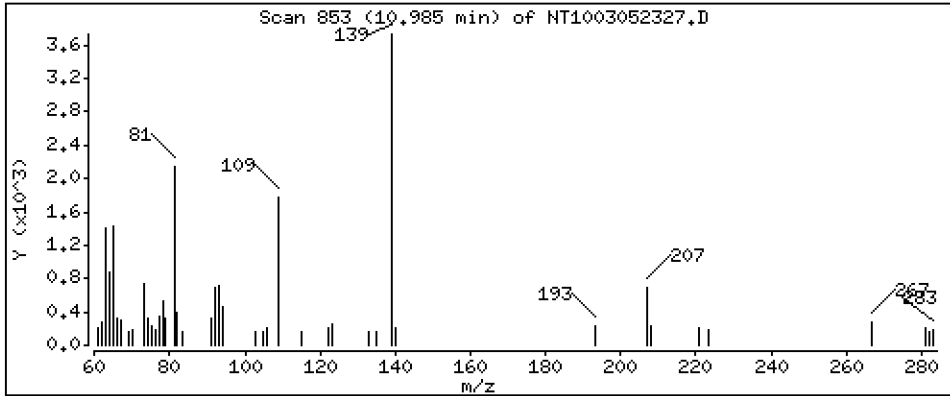
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1259 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

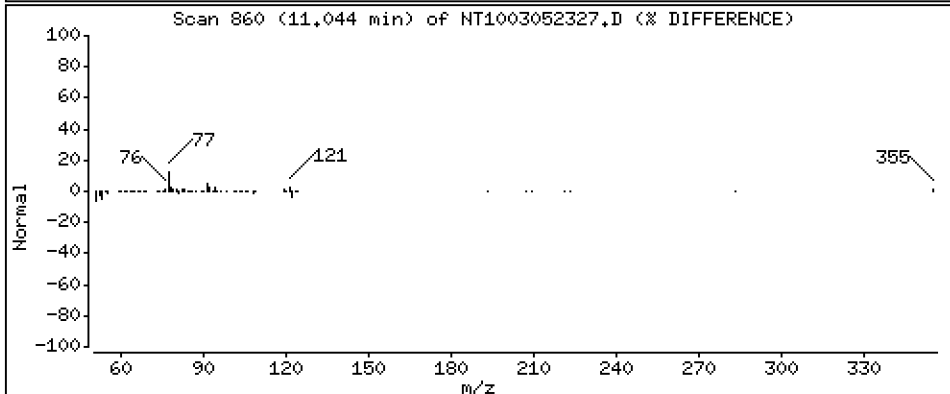
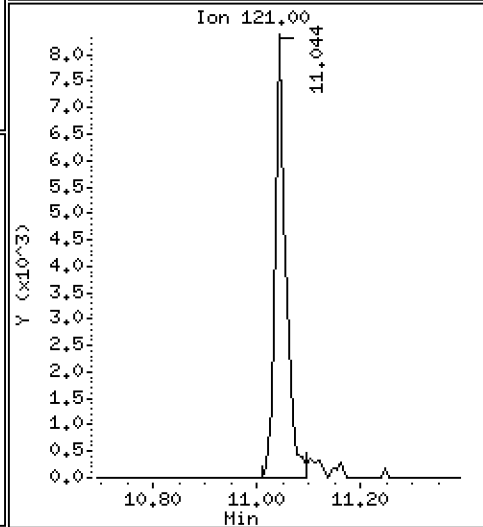
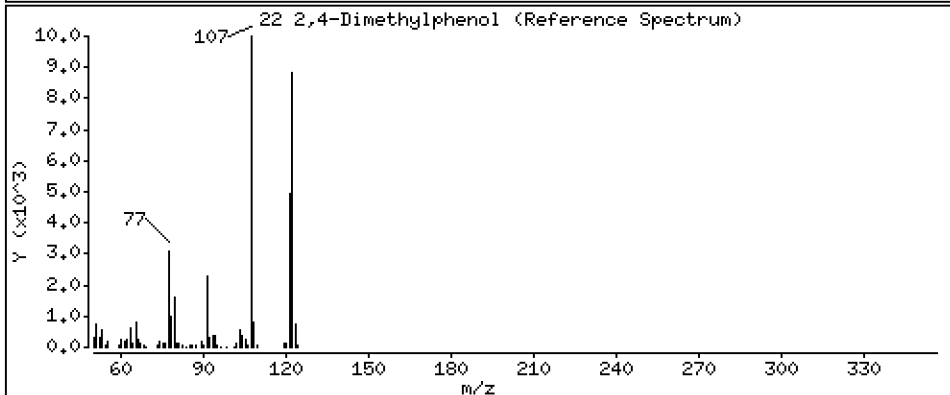
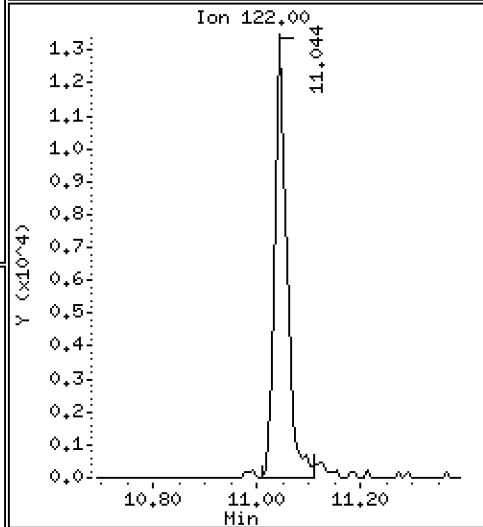
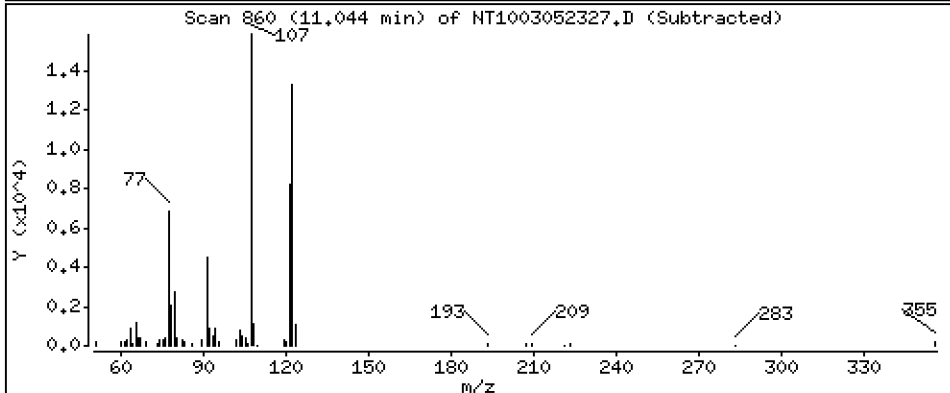
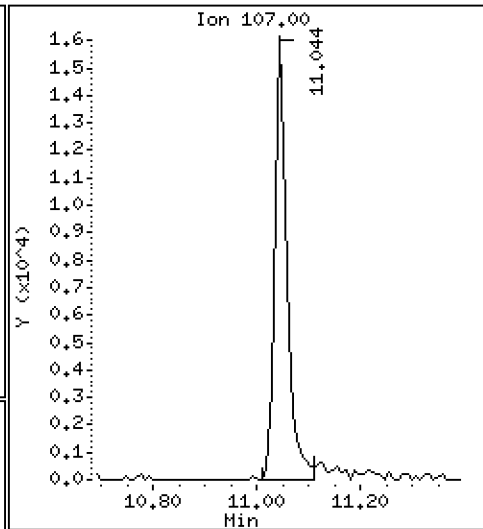
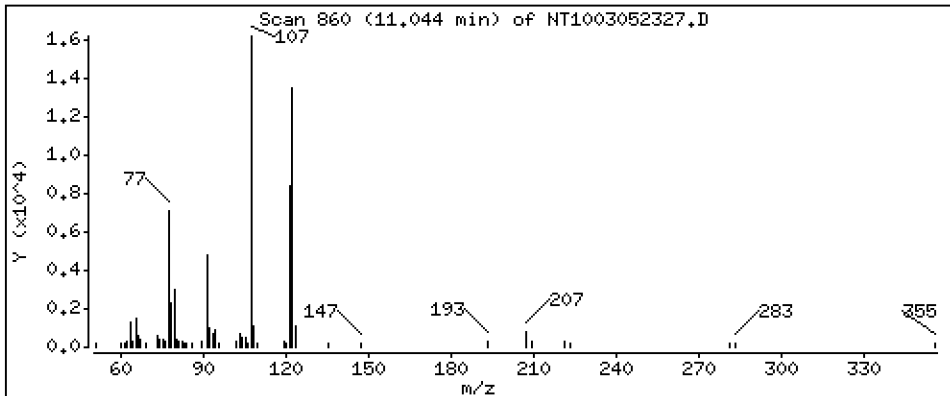
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3416 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

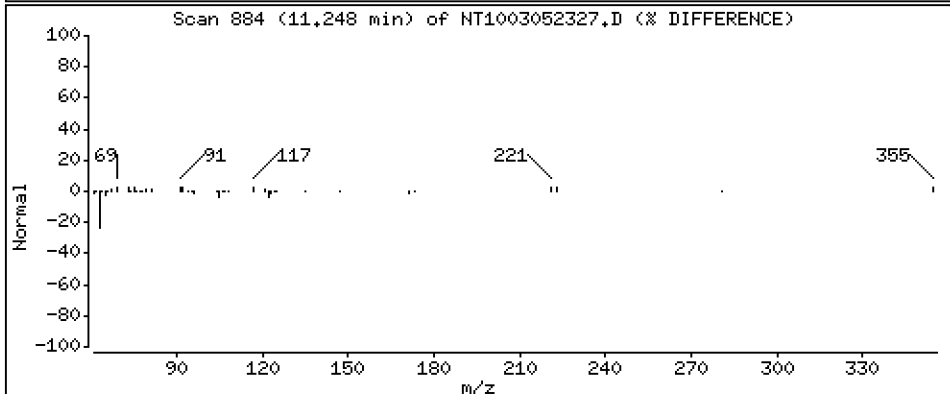
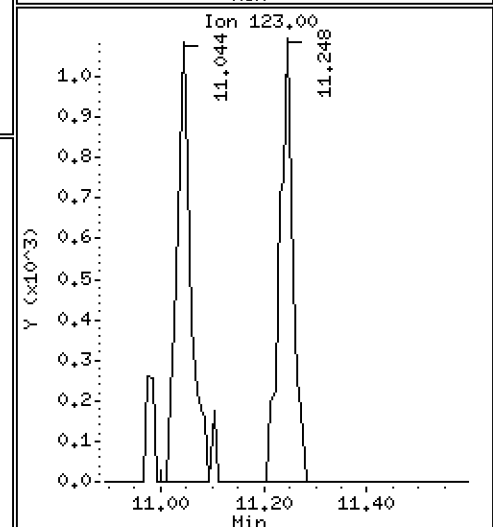
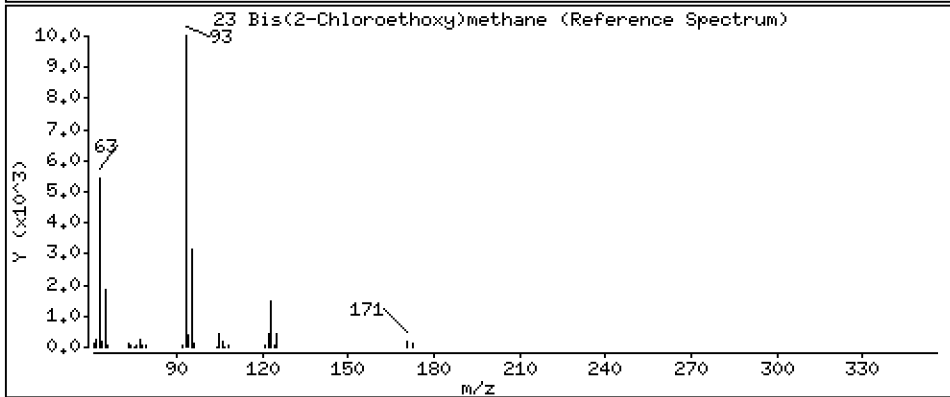
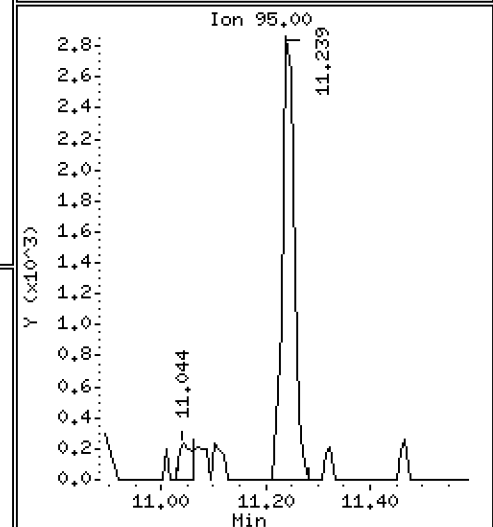
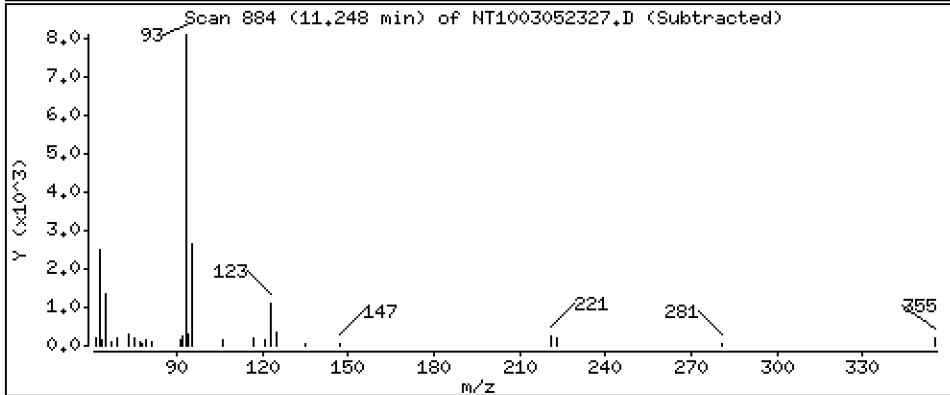
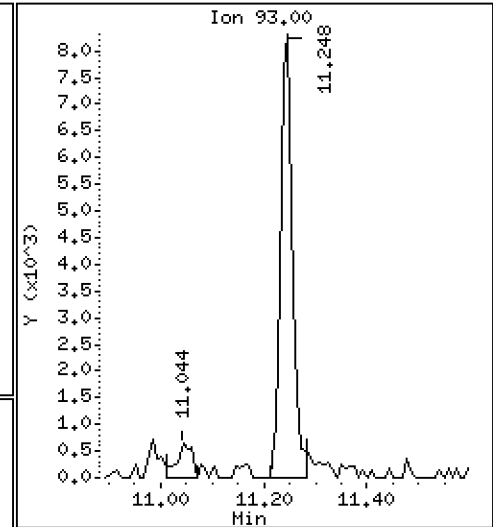
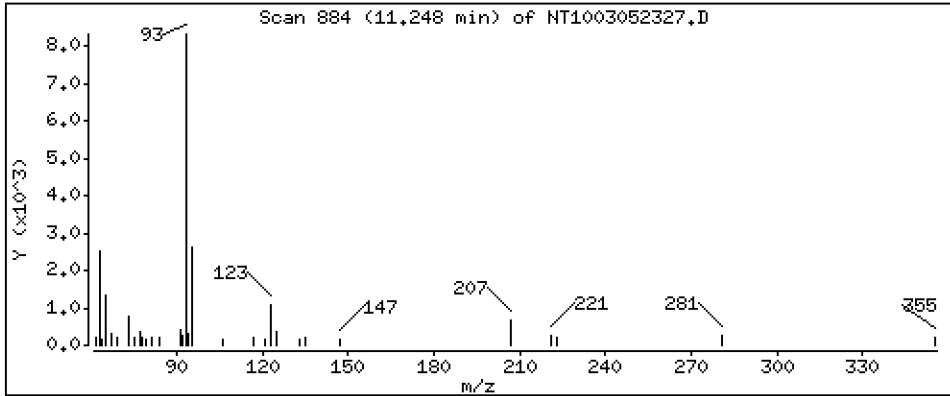
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 0,2053 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

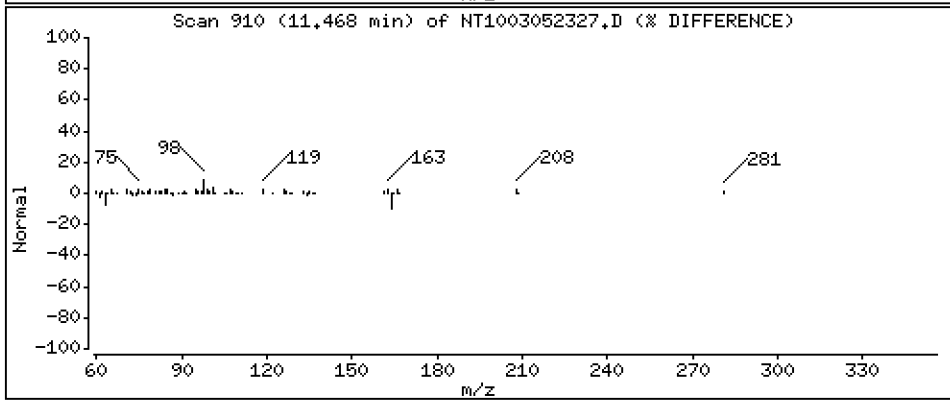
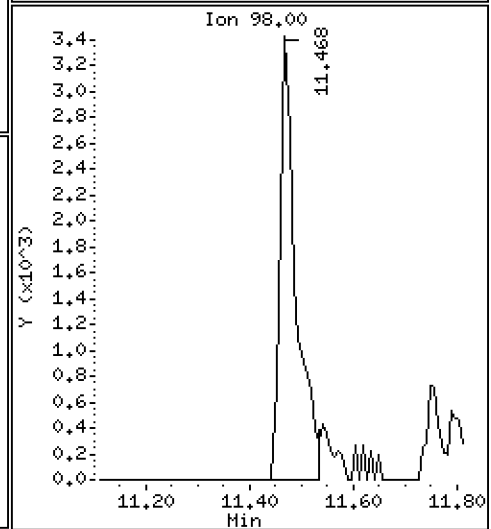
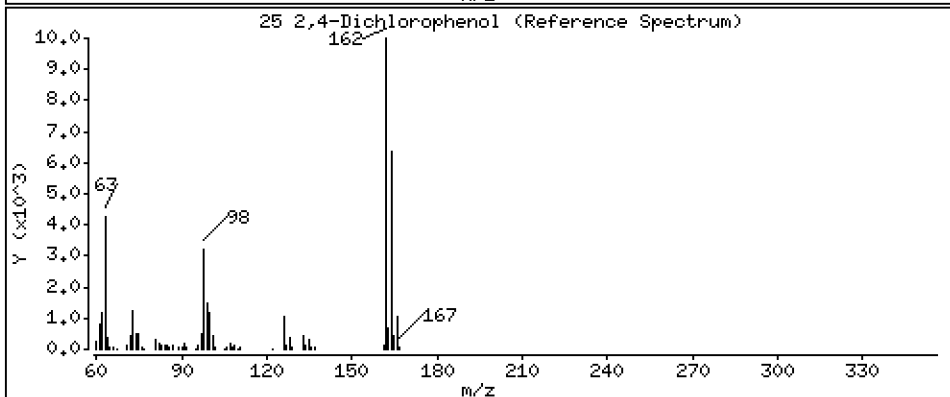
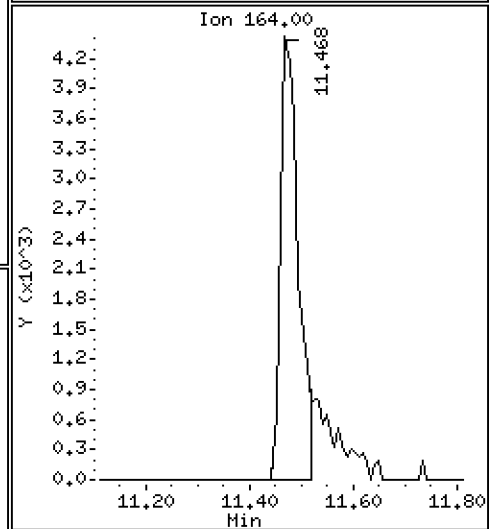
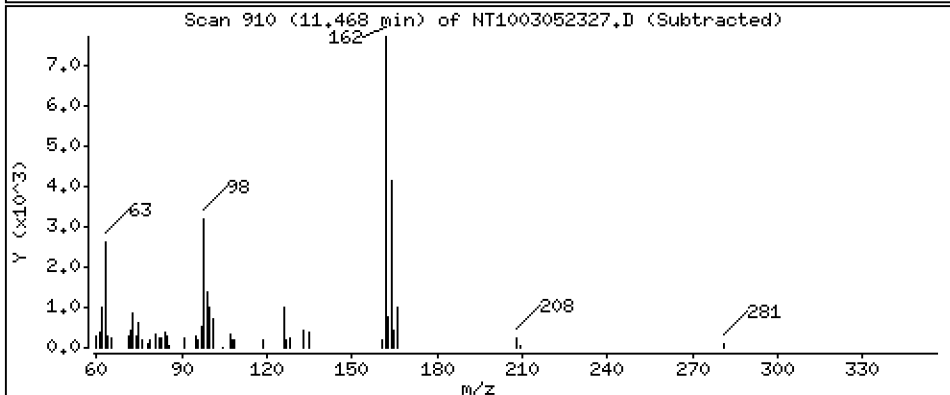
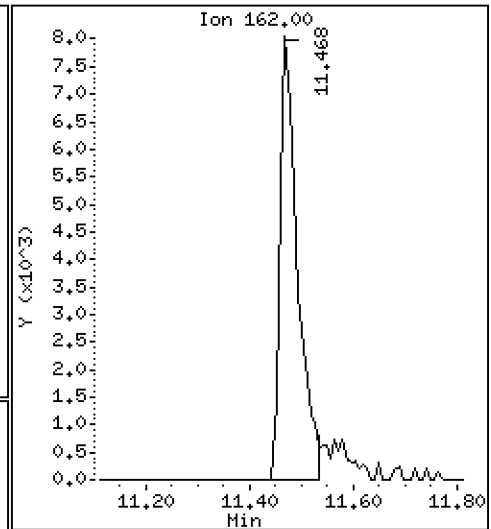
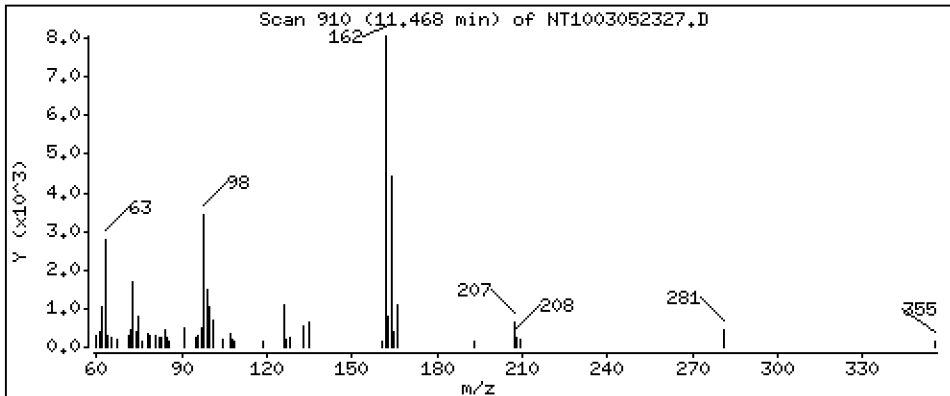
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3167 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

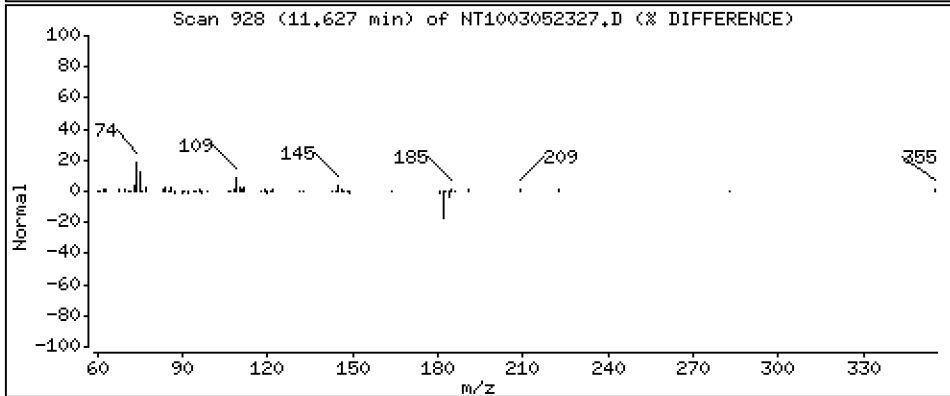
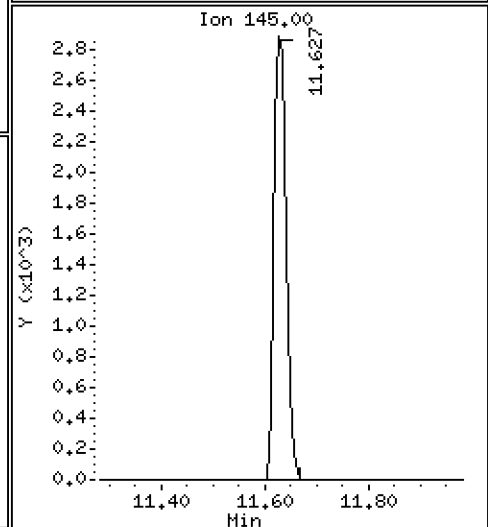
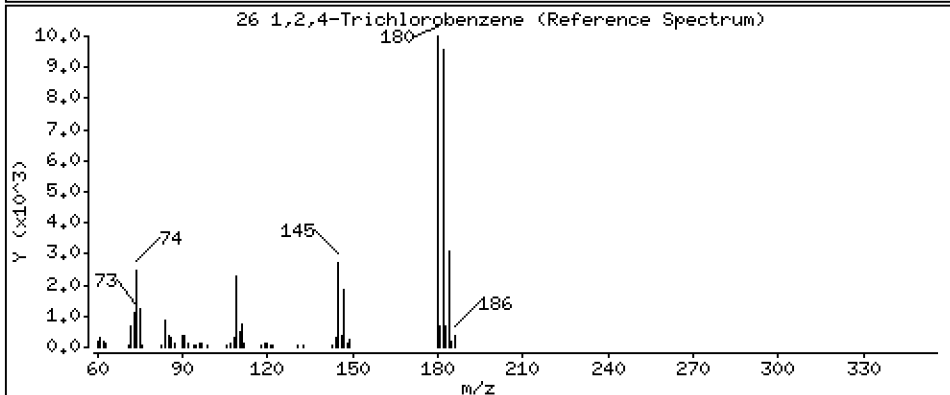
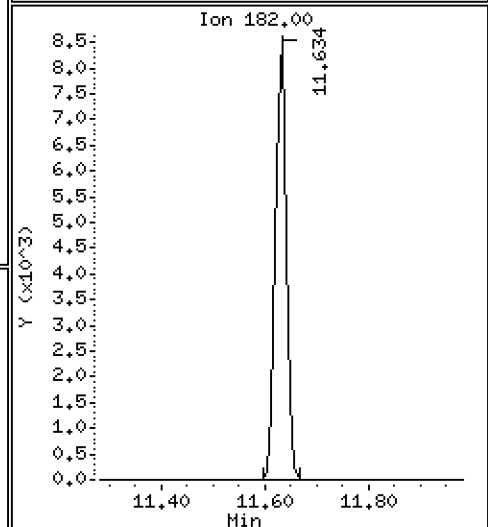
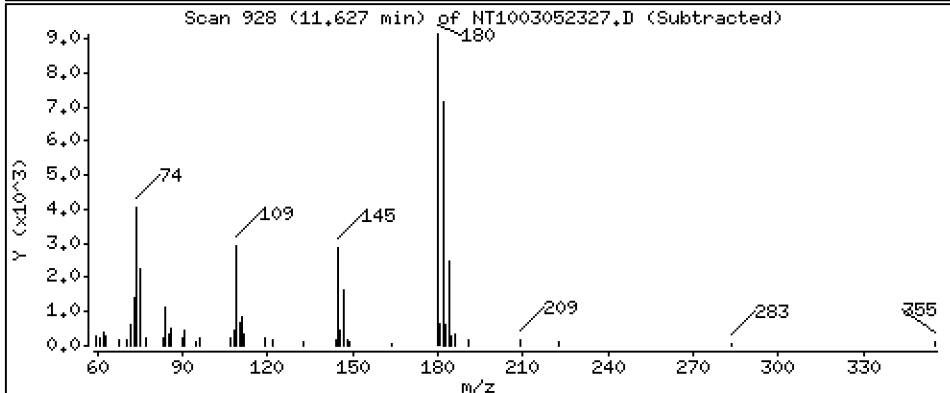
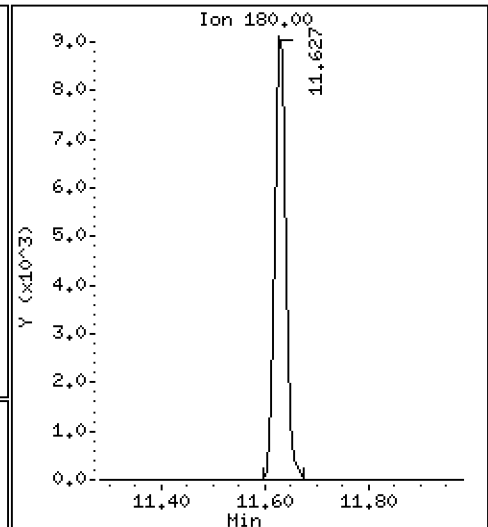
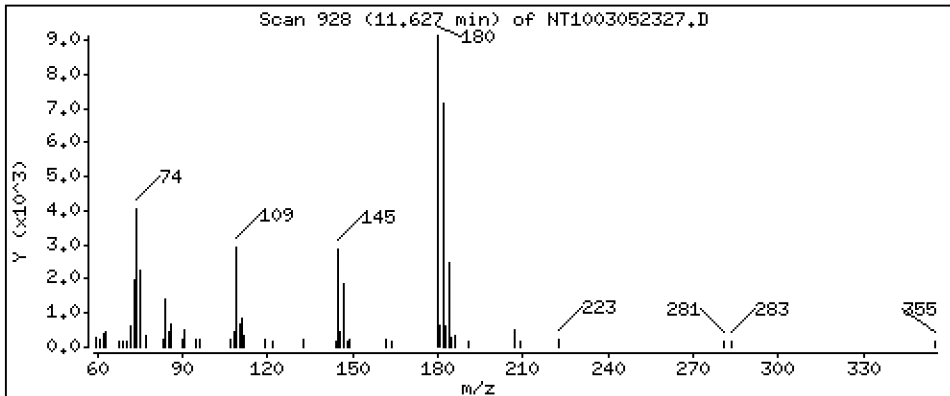
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2271 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

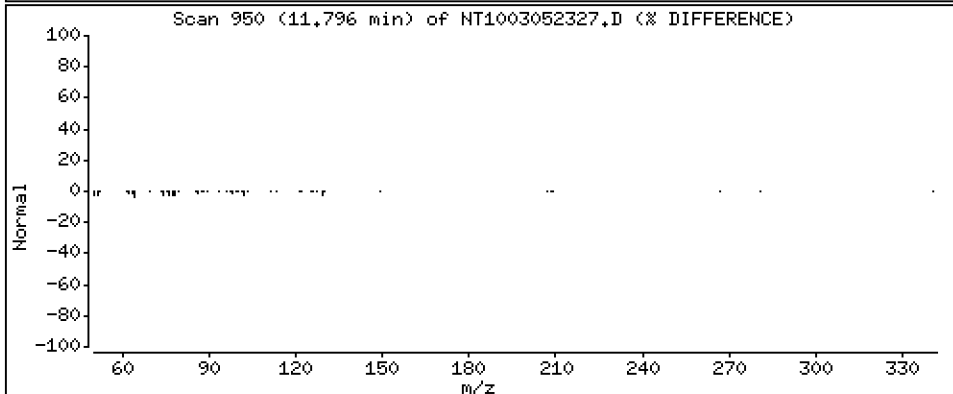
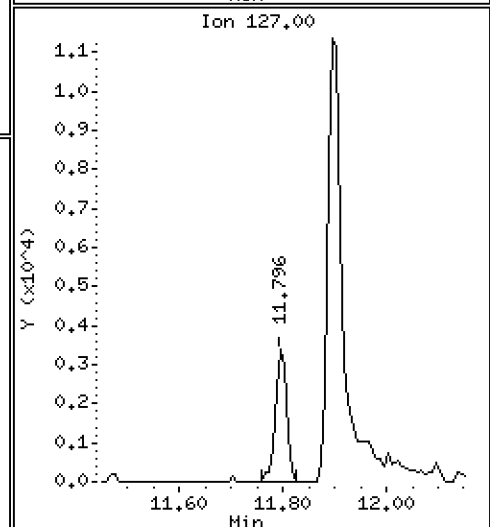
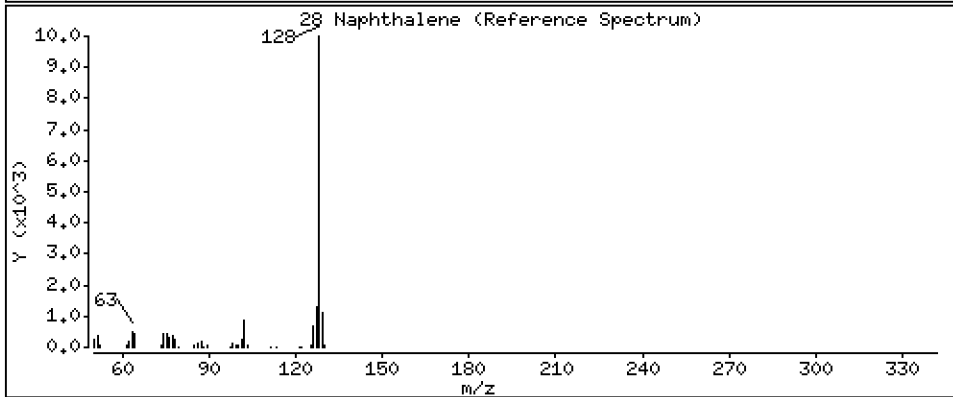
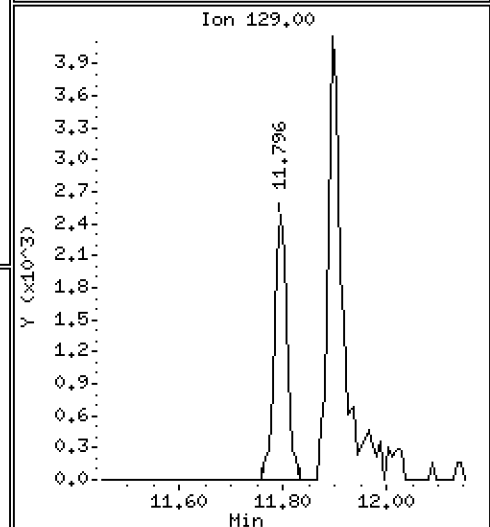
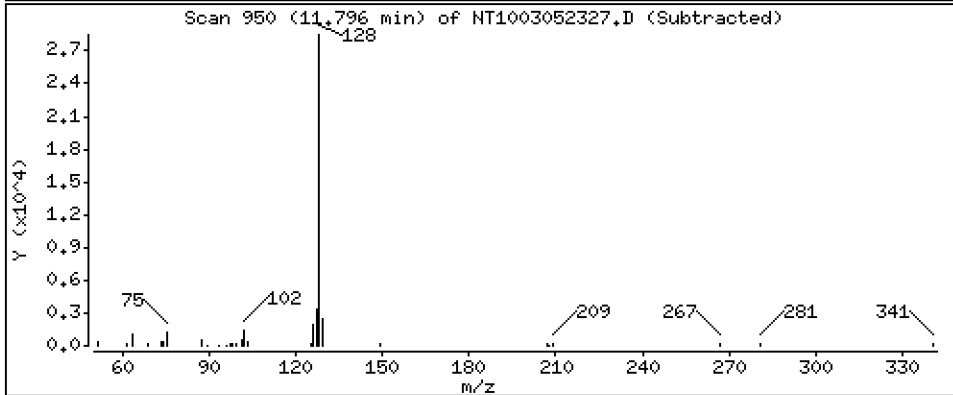
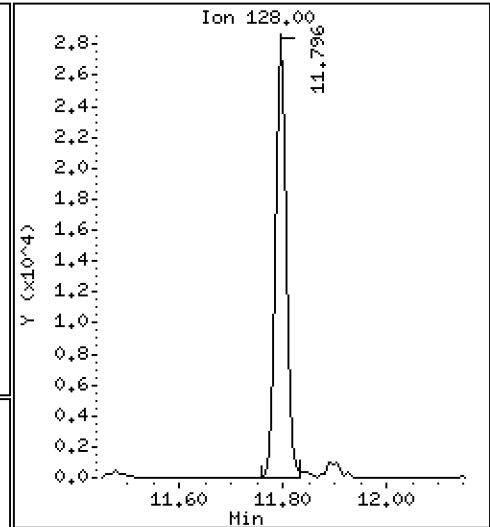
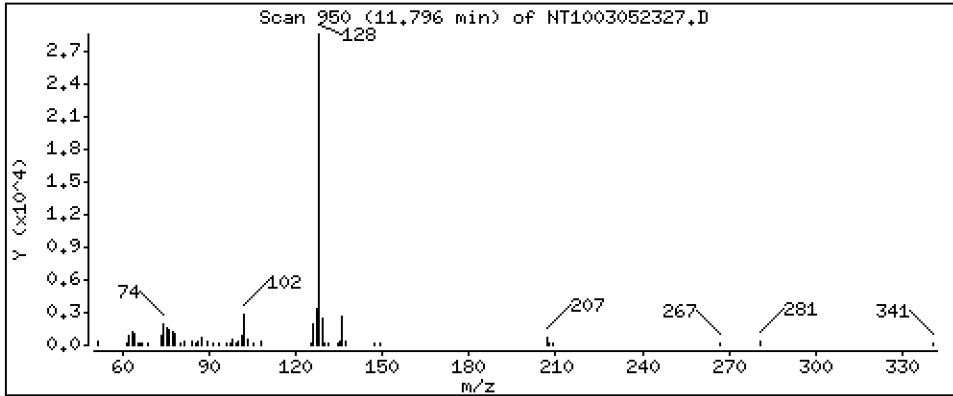
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2042 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

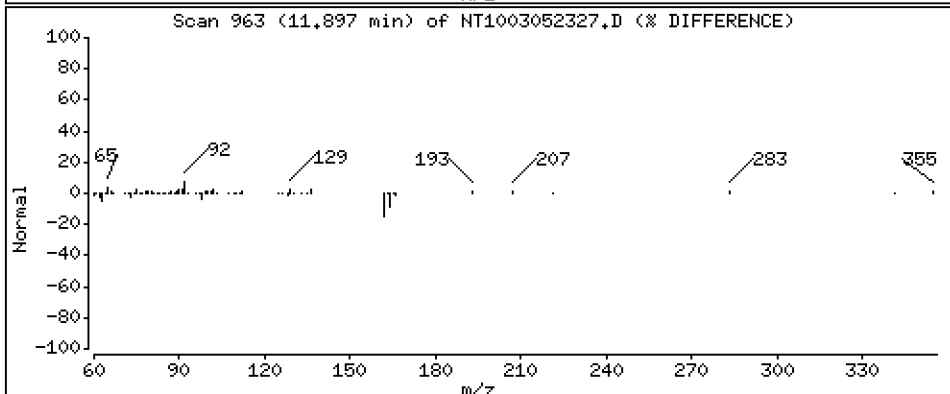
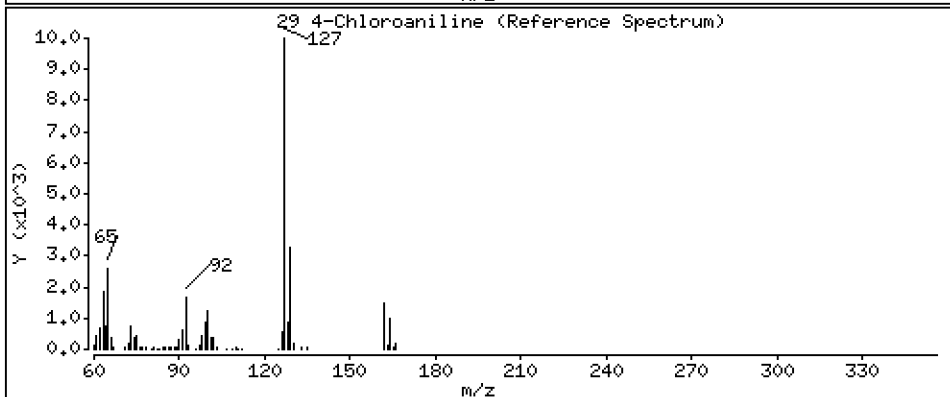
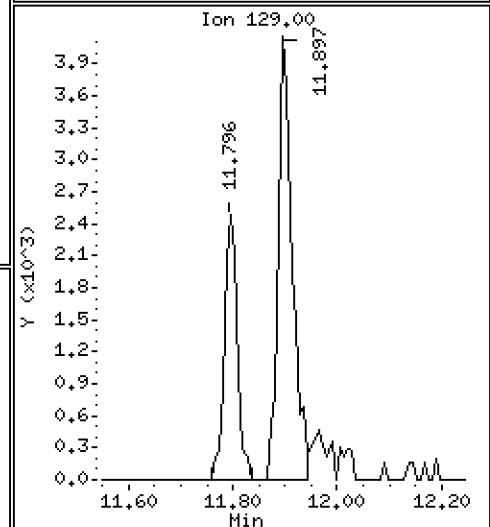
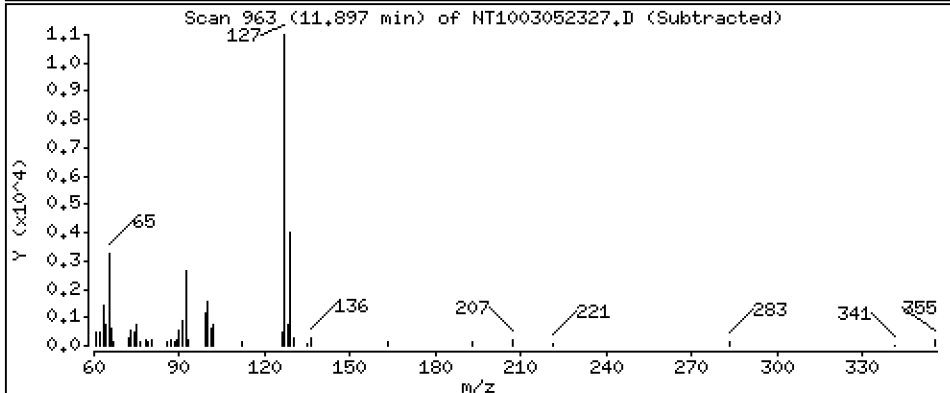
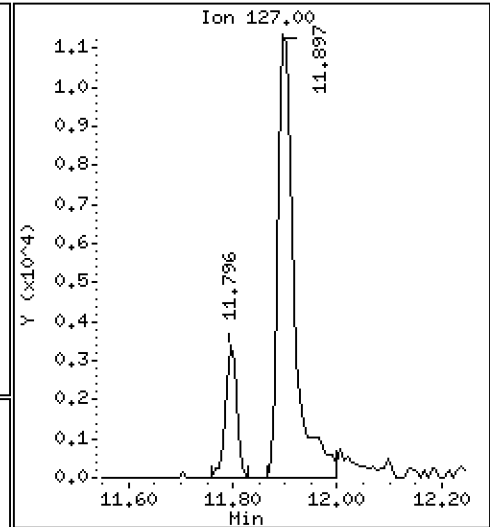
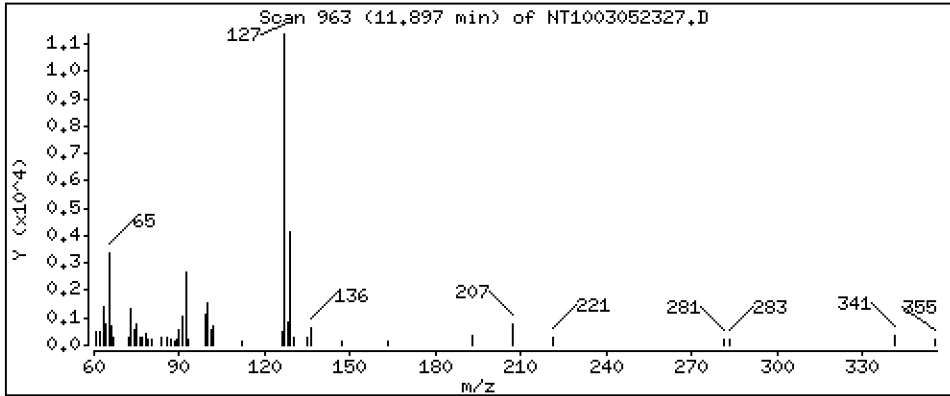
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,2916 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

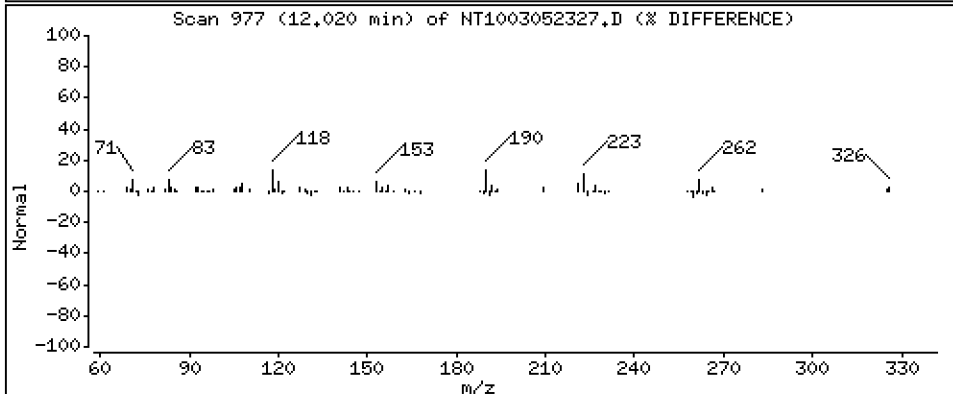
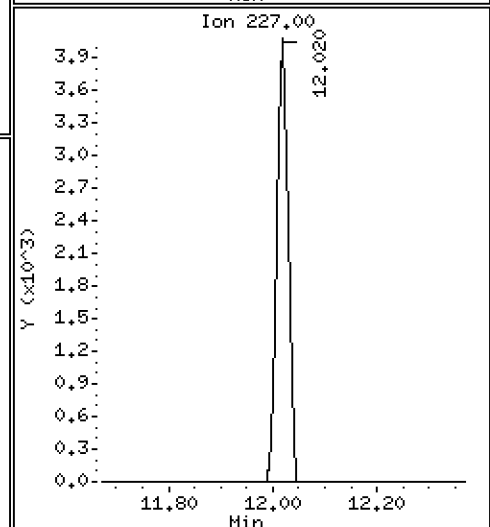
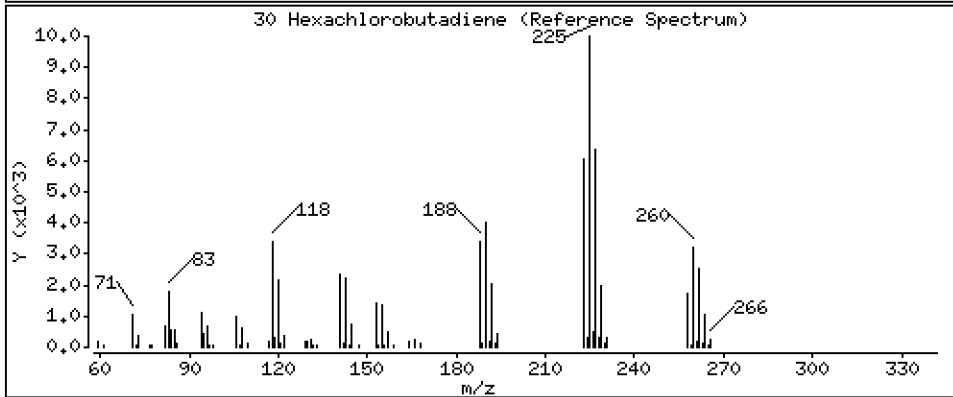
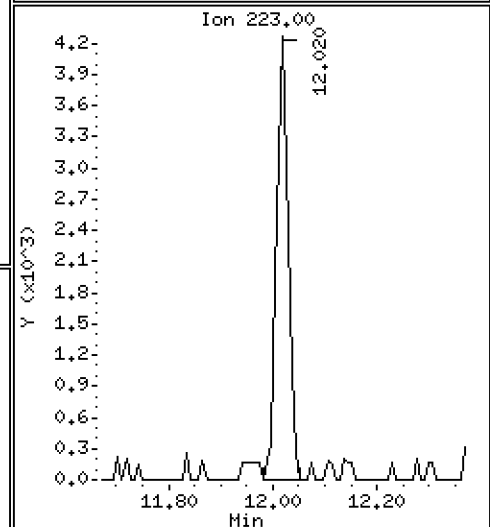
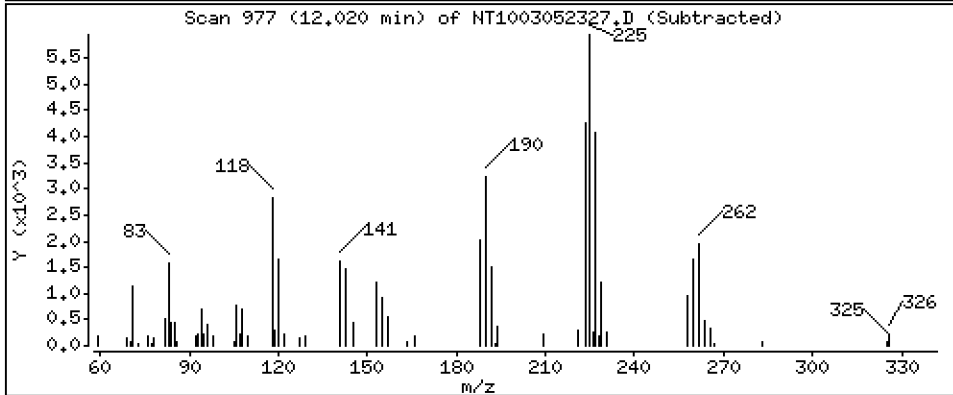
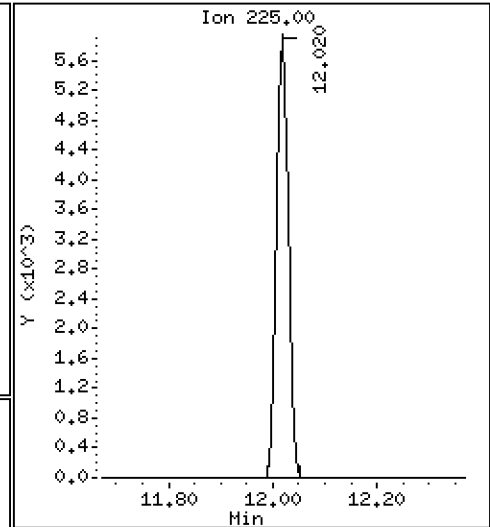
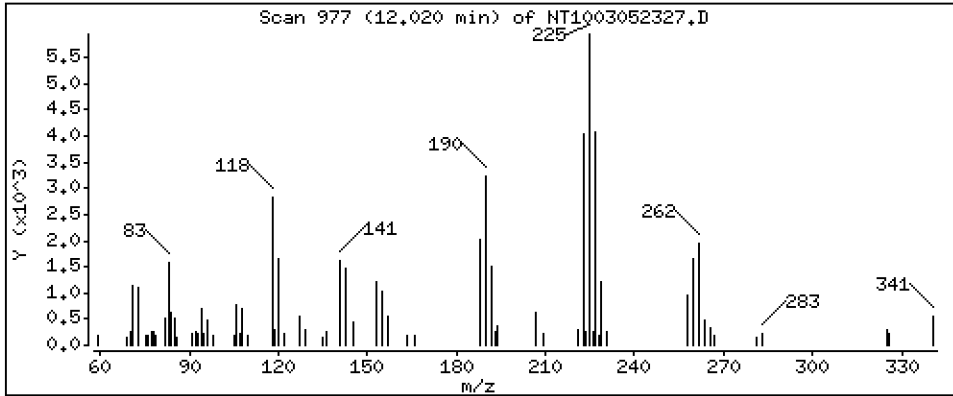
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1932 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

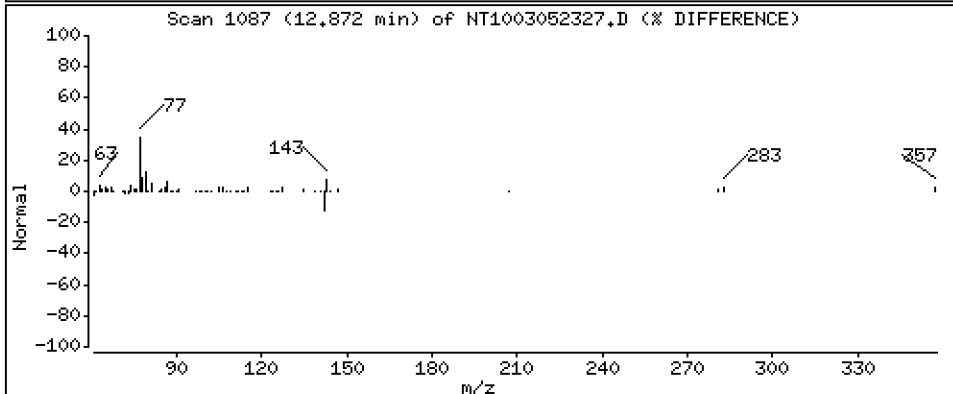
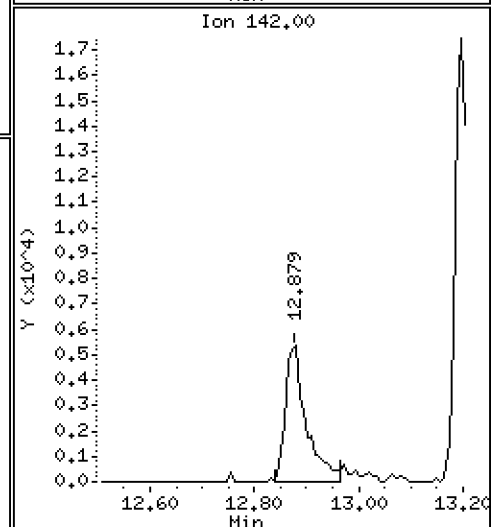
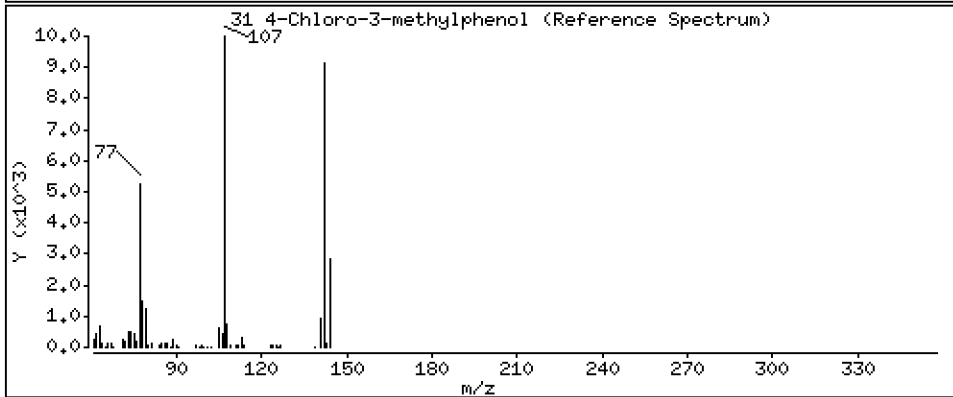
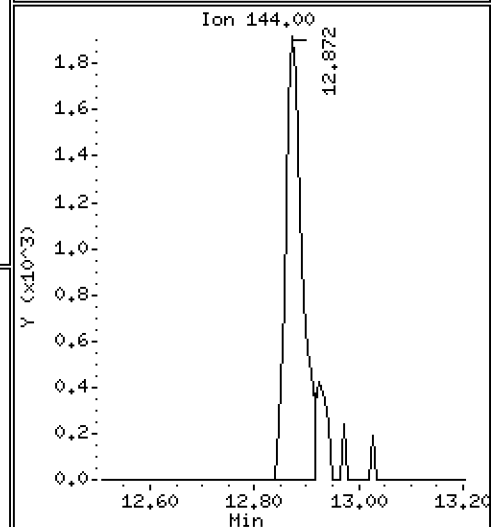
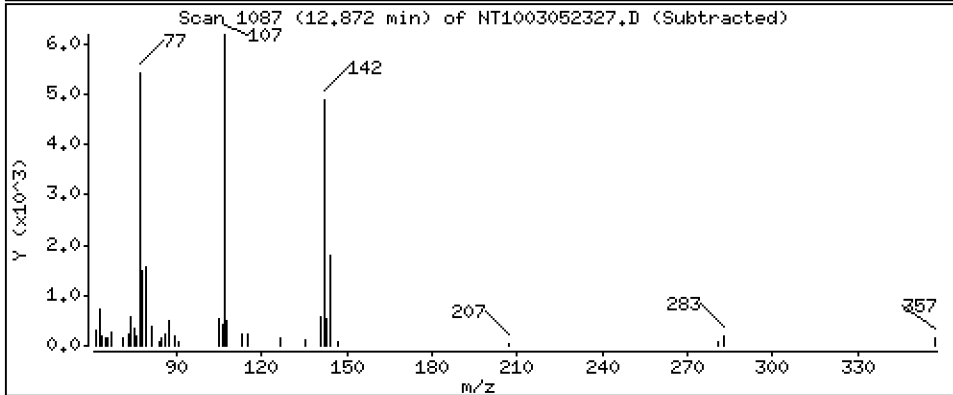
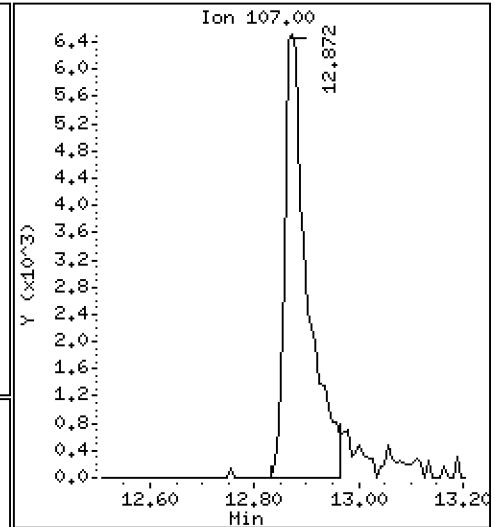
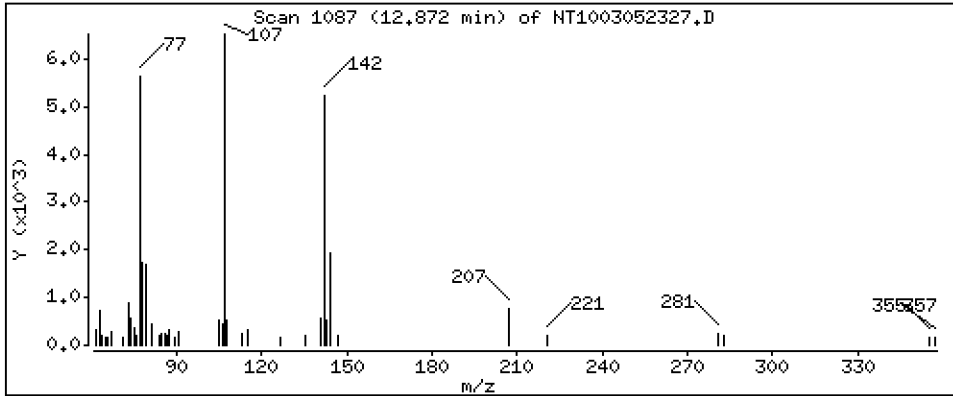
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.3034 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

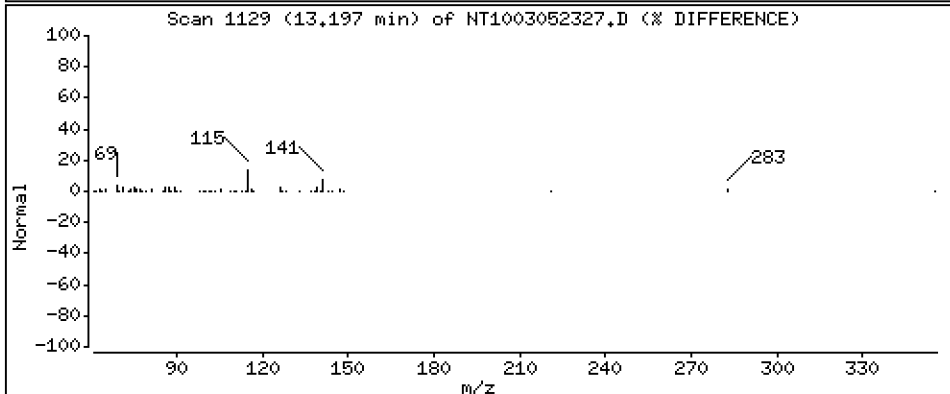
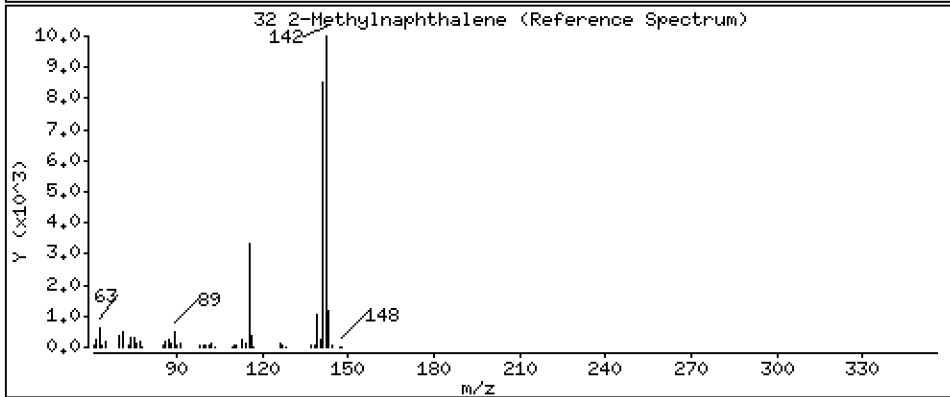
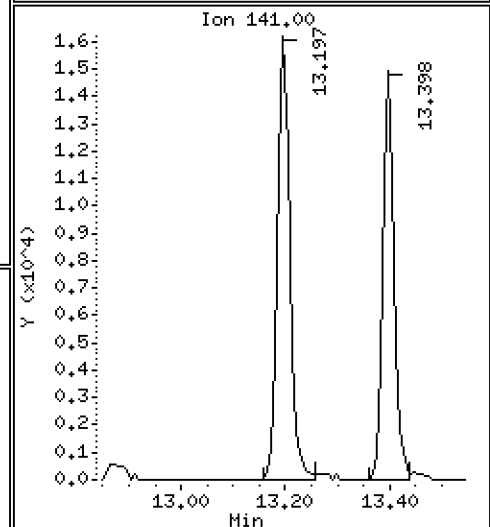
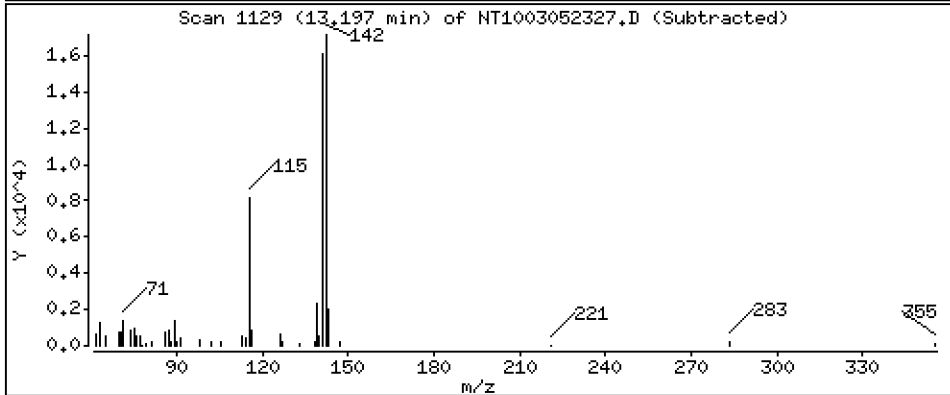
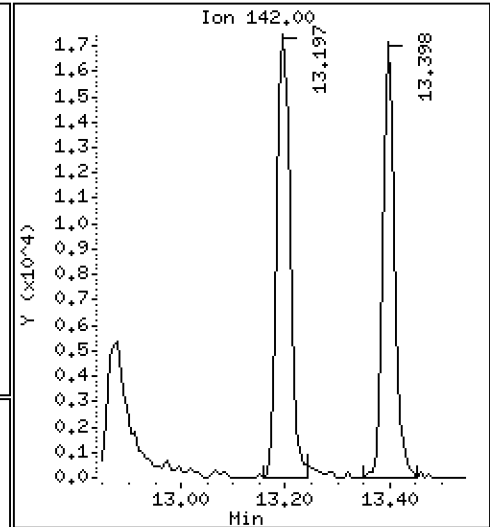
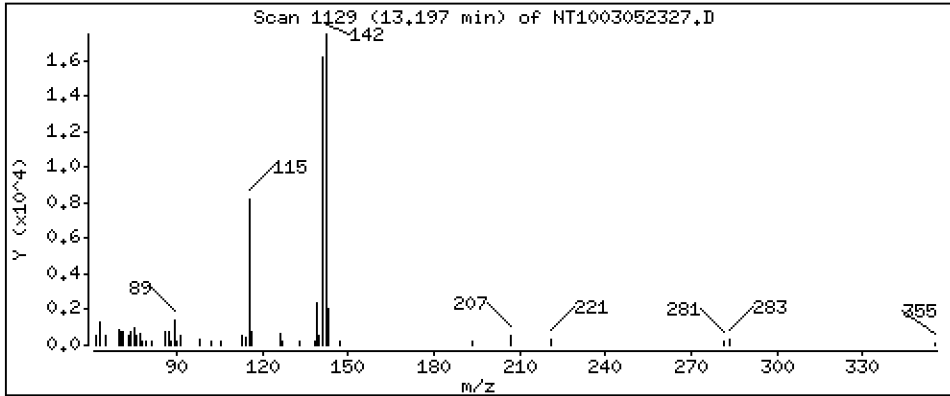
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,2022 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

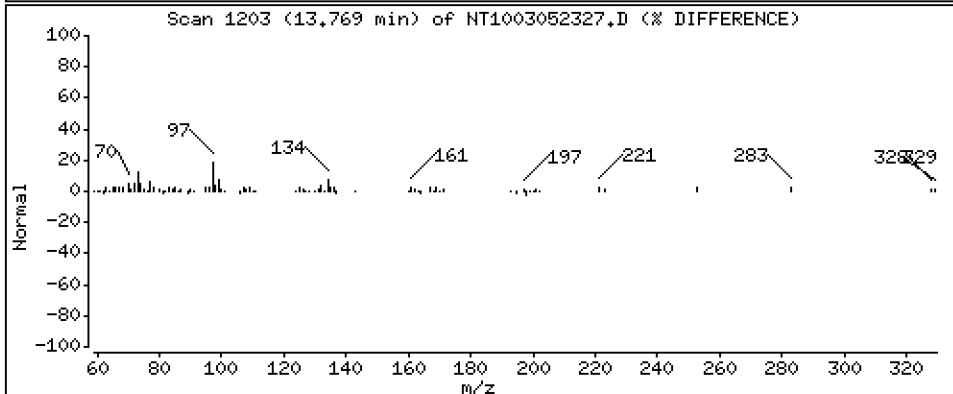
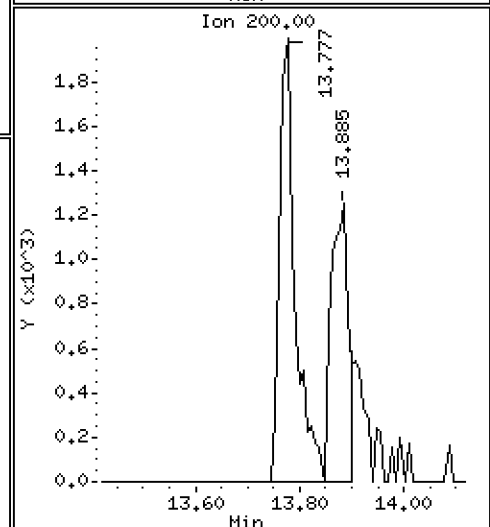
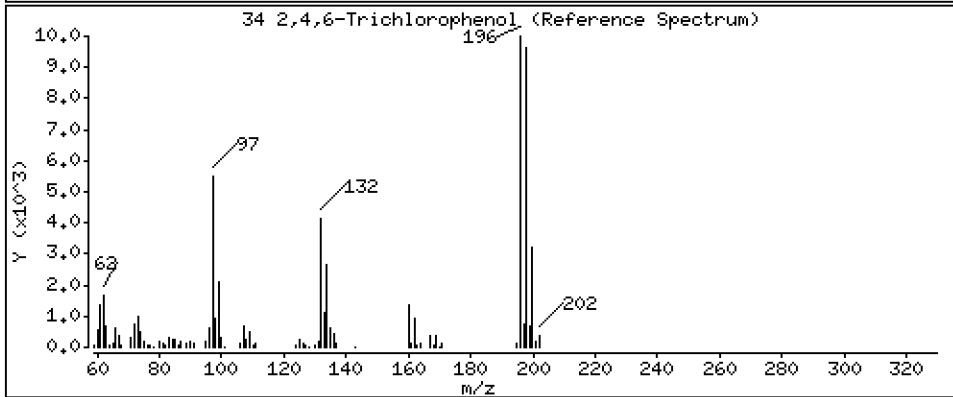
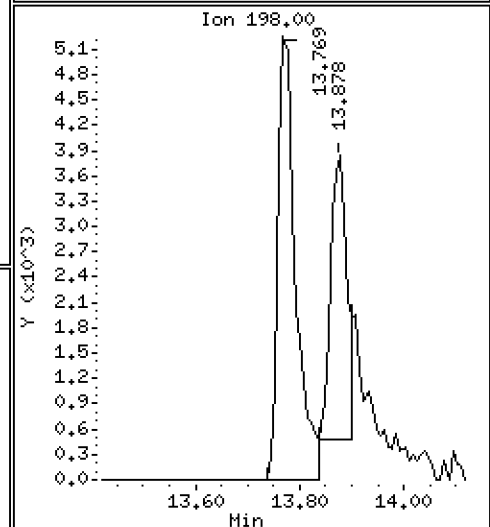
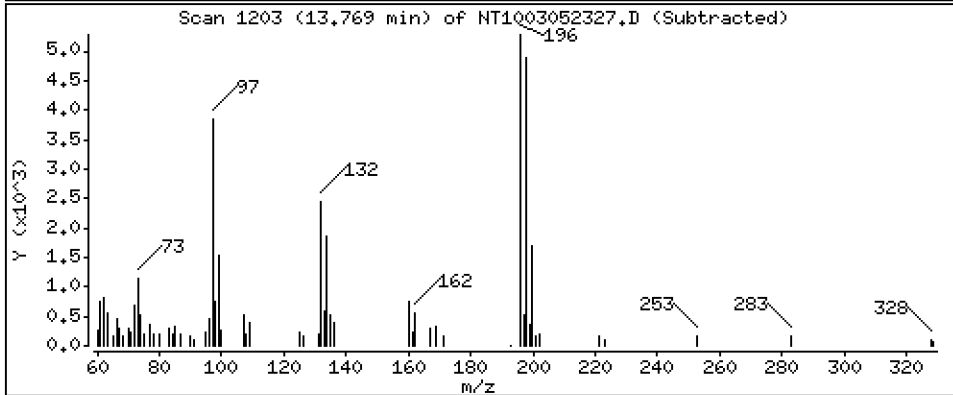
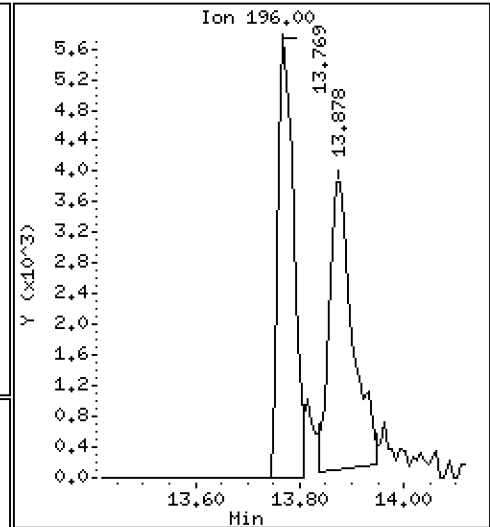
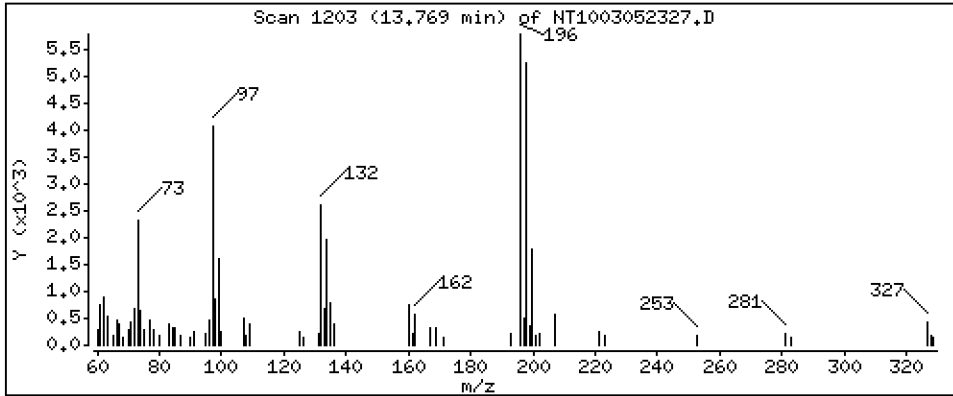
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,2887 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

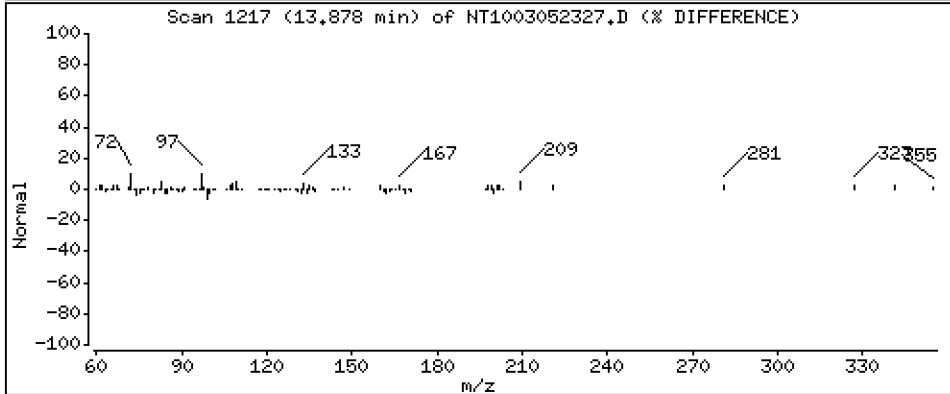
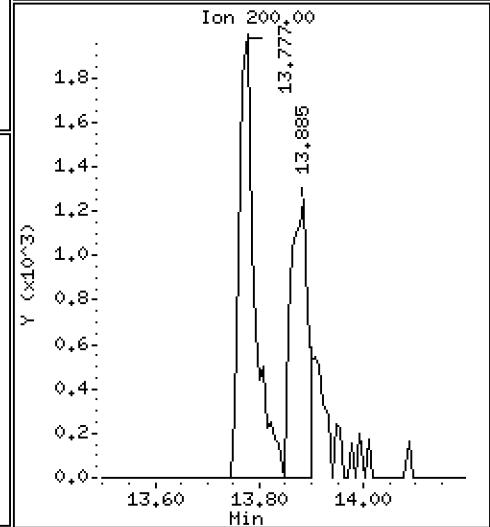
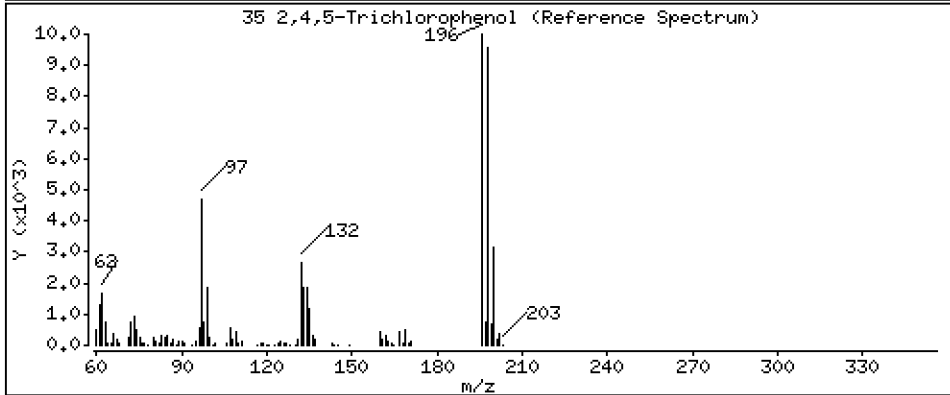
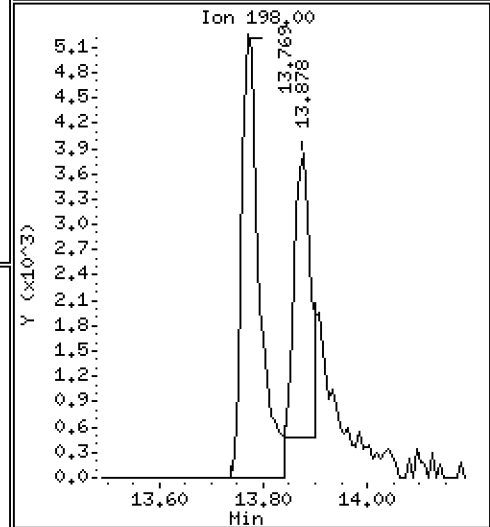
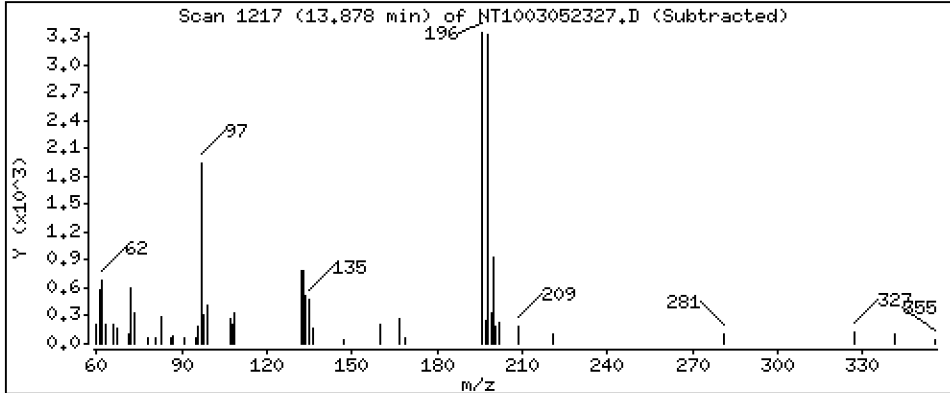
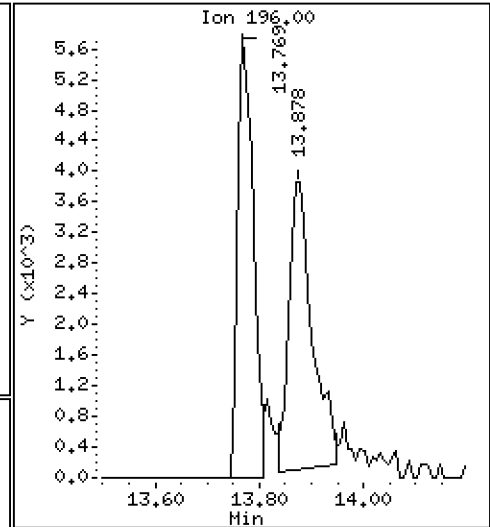
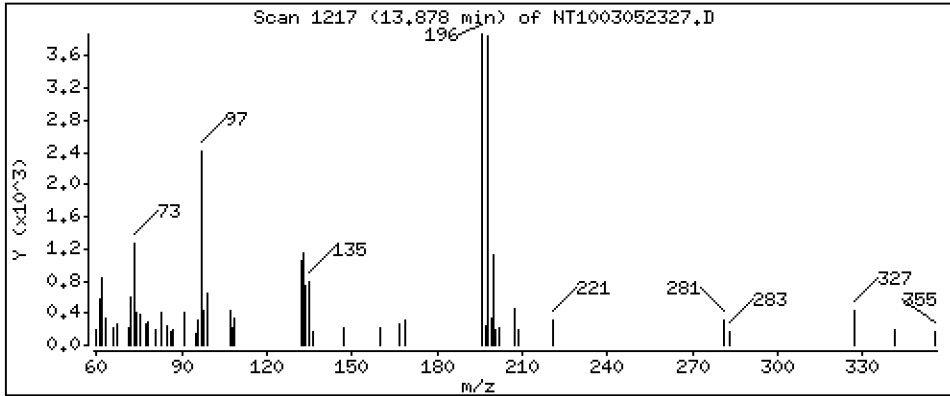
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2819 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

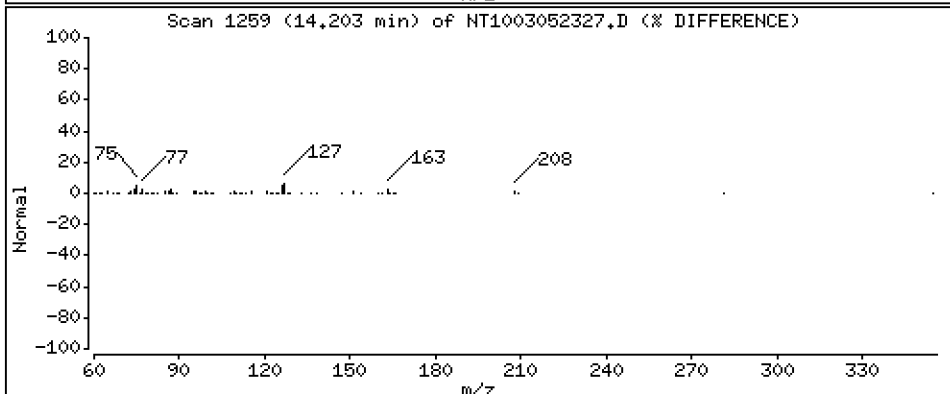
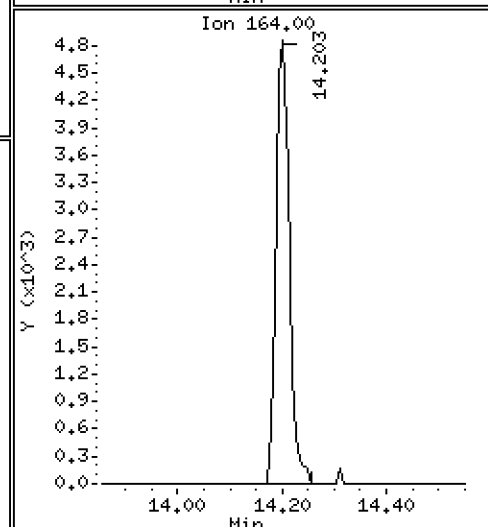
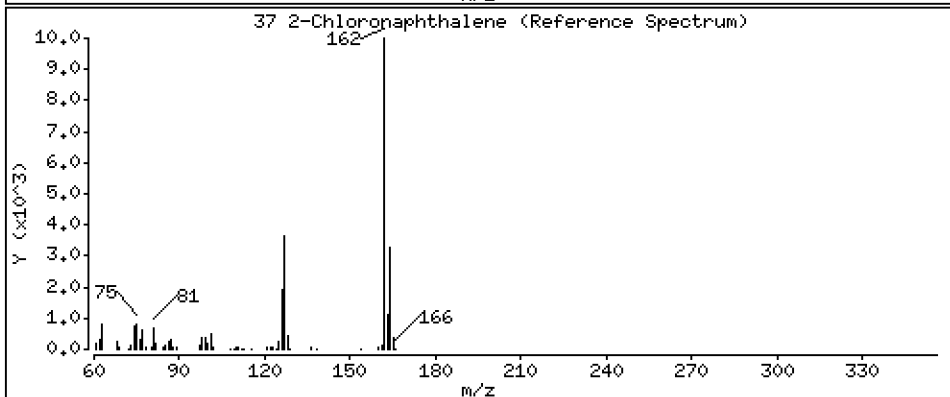
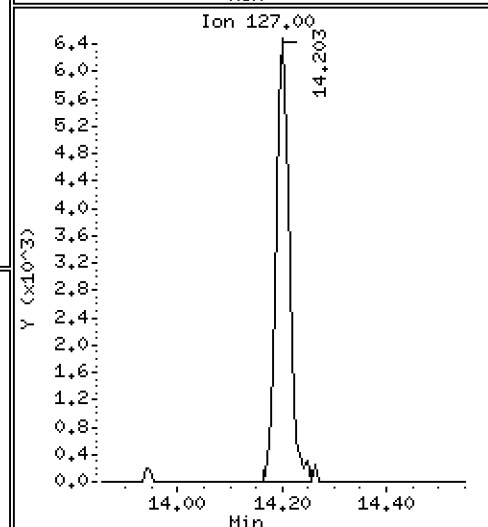
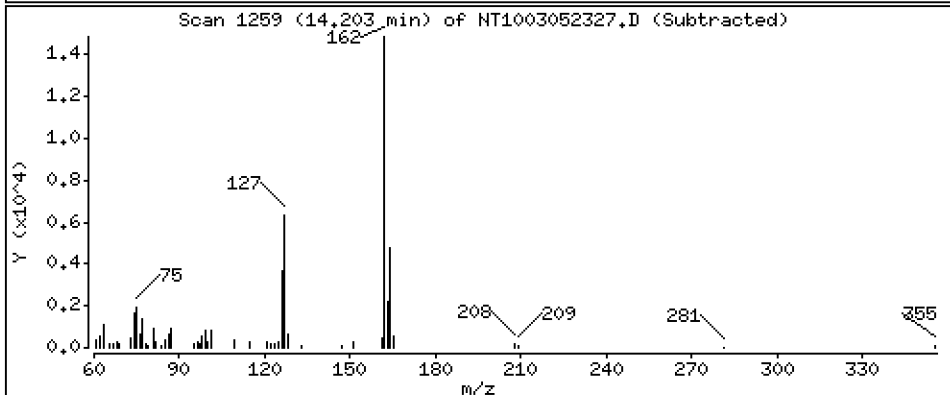
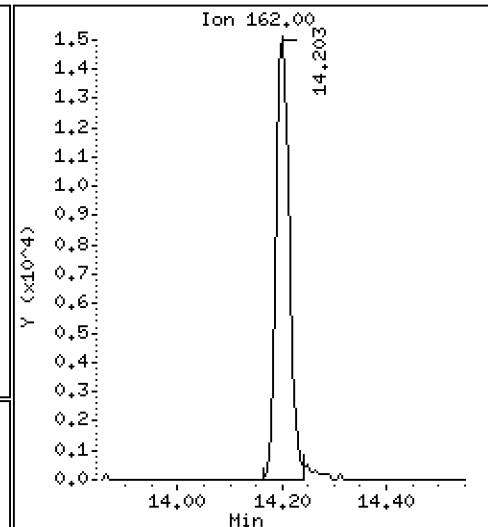
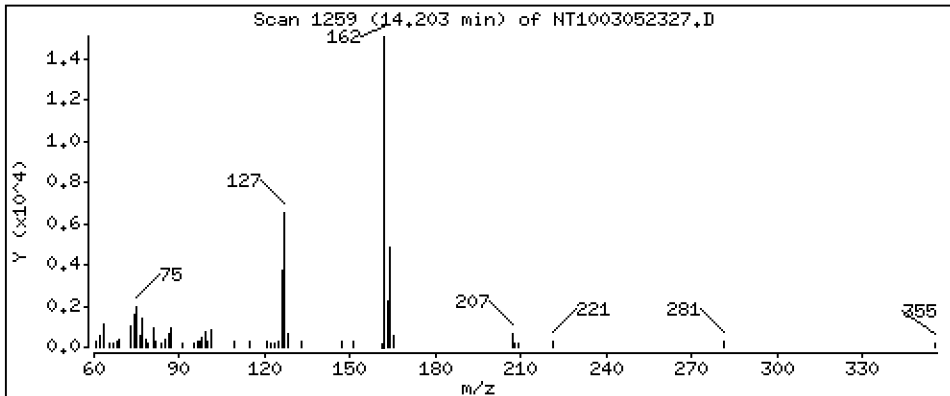
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2159 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

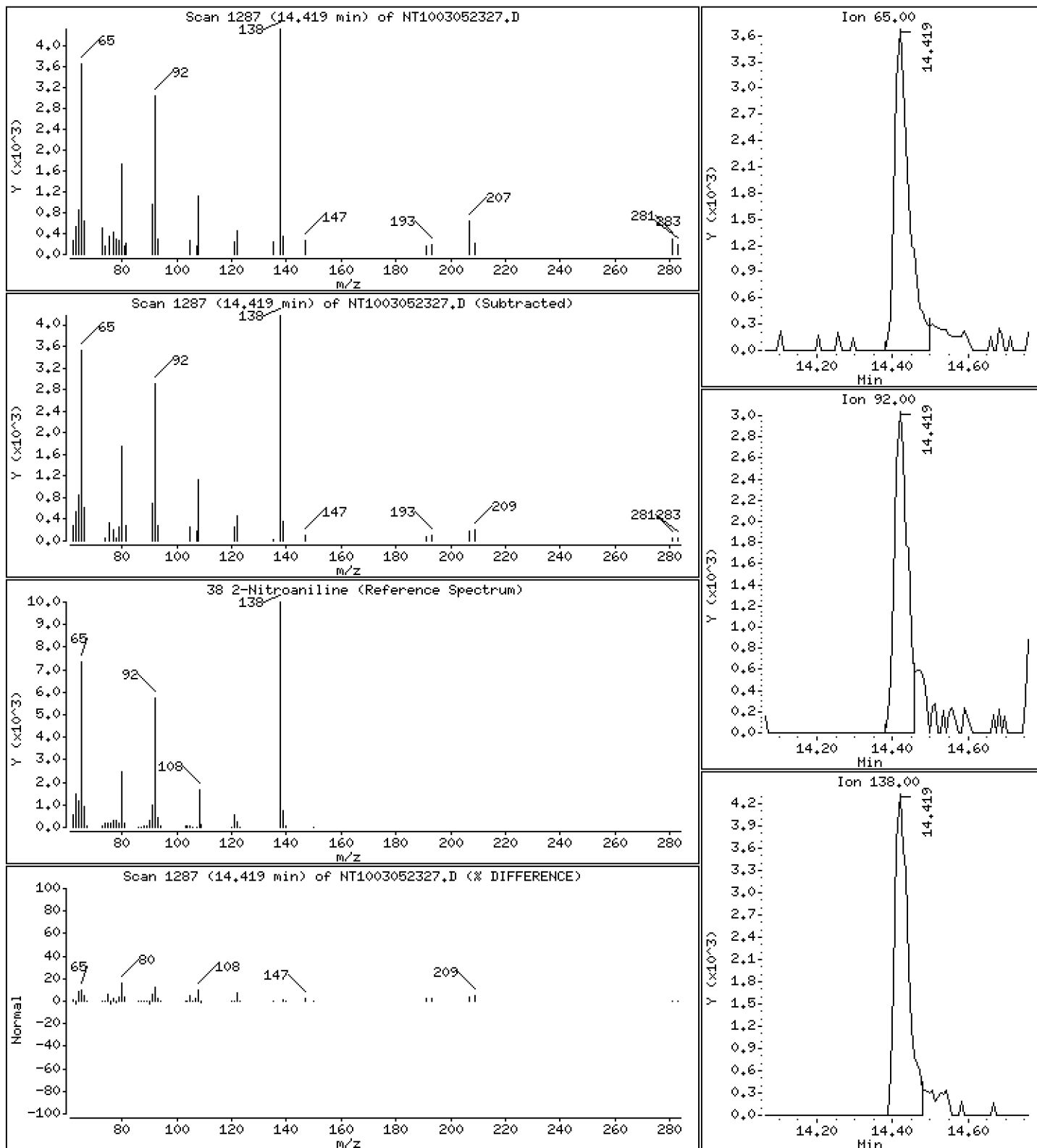
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2965 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

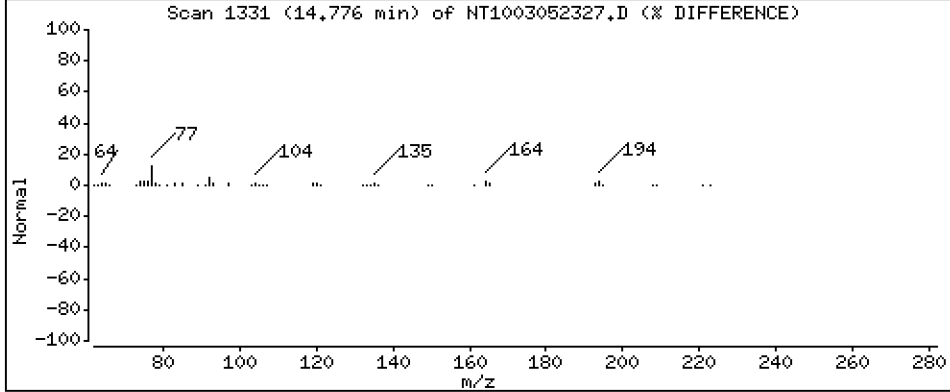
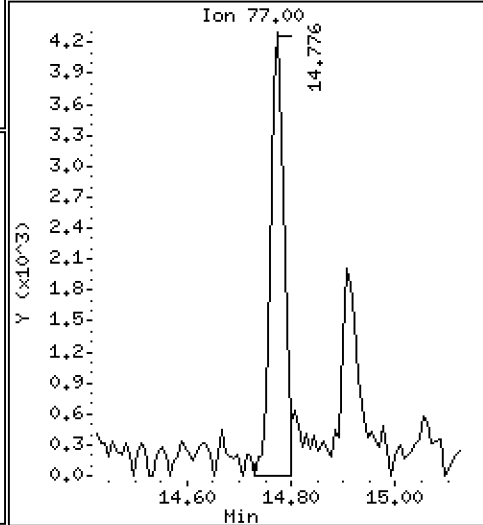
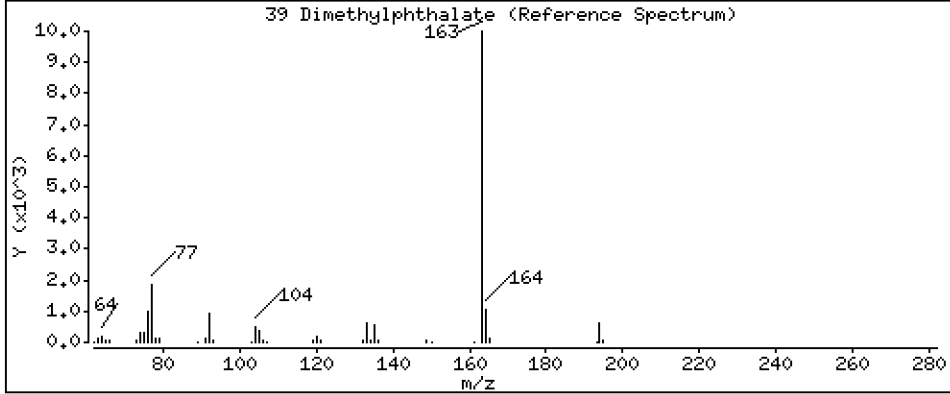
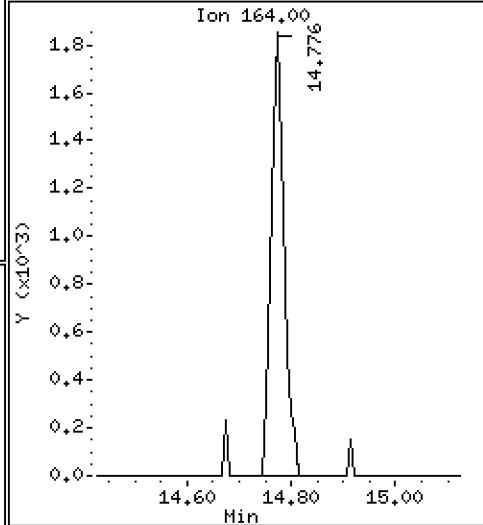
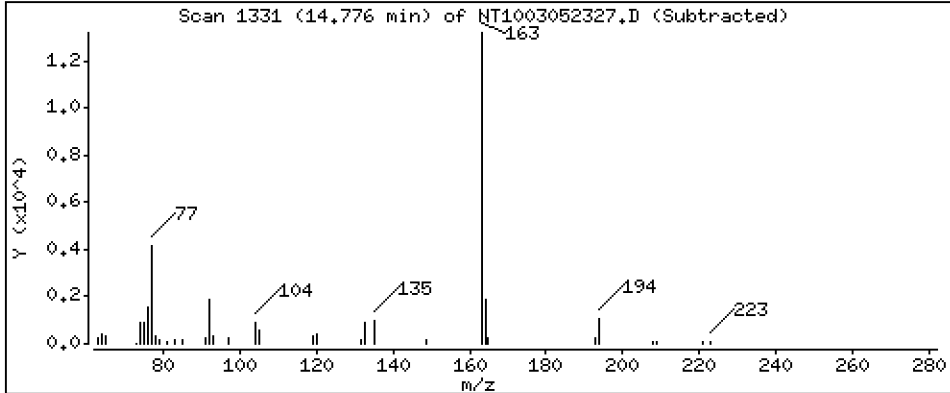
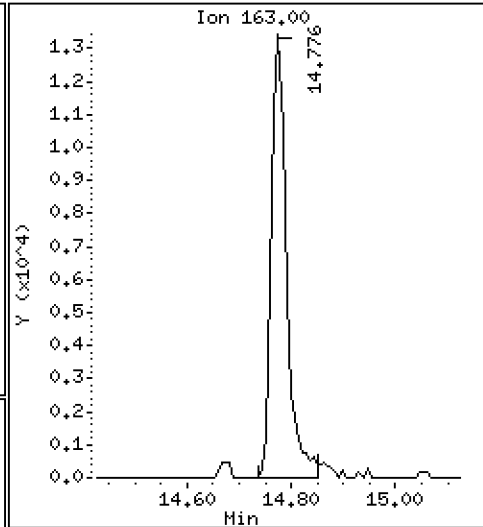
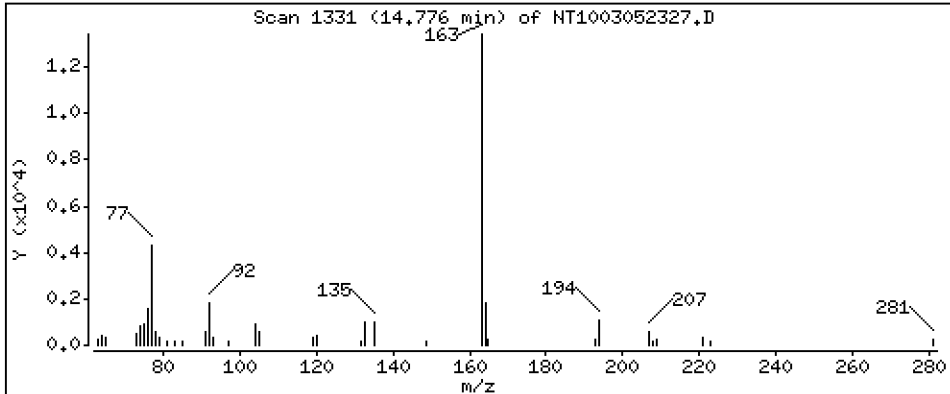
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1920 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

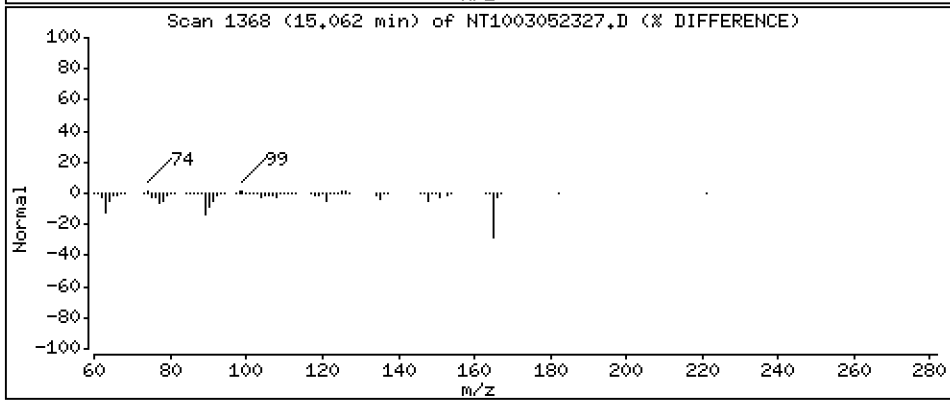
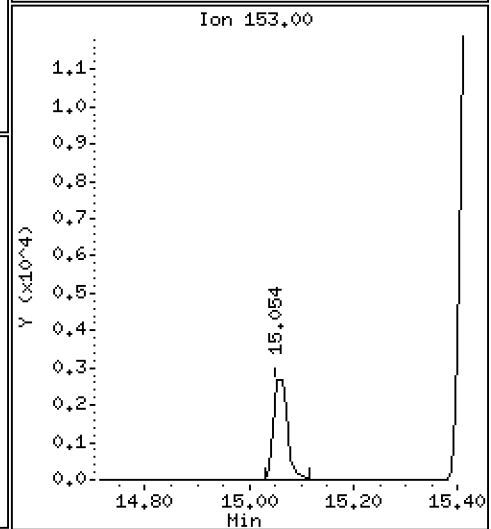
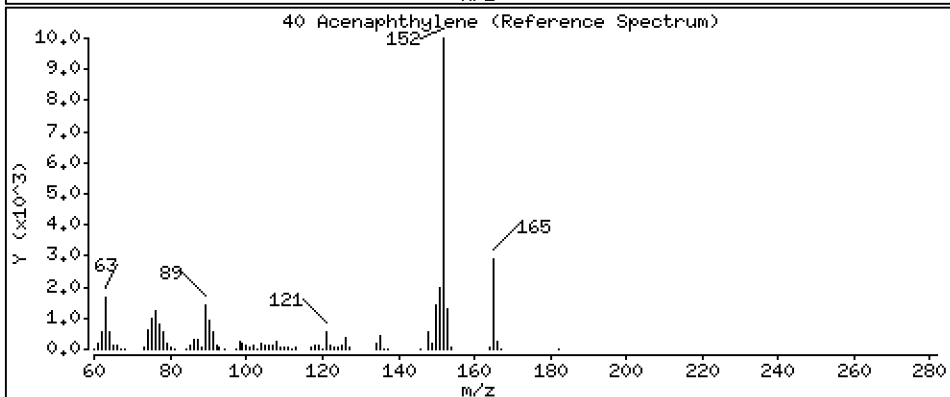
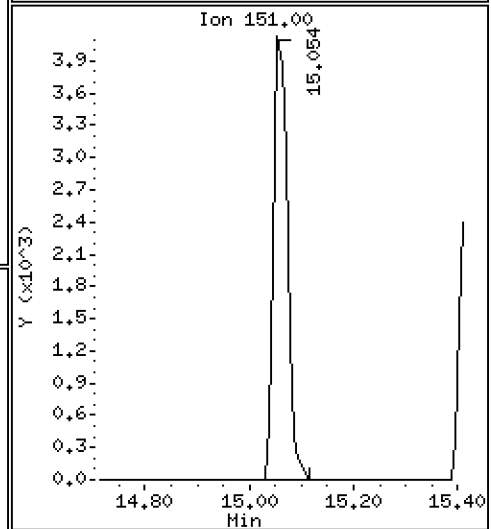
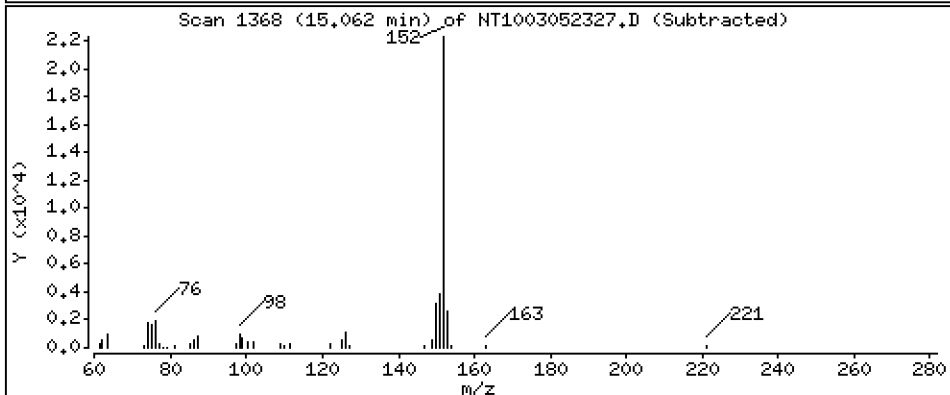
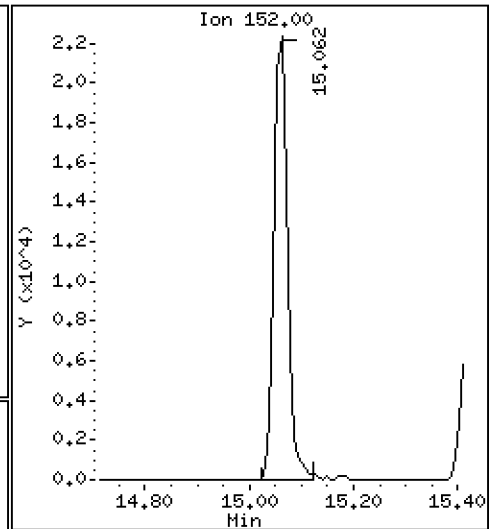
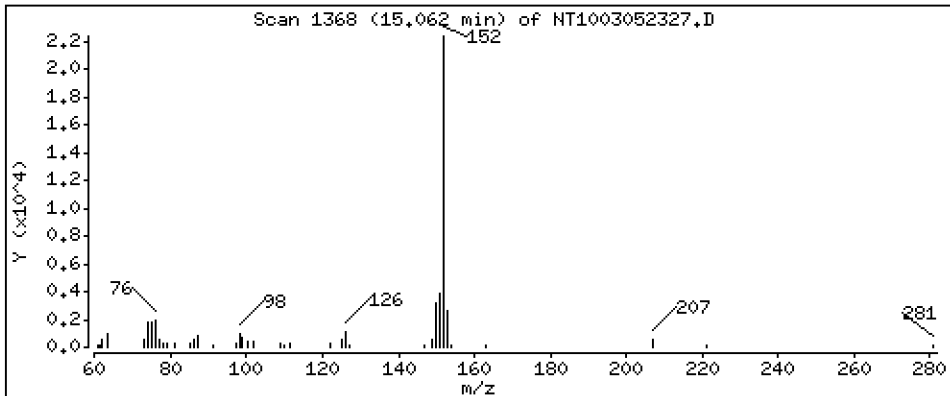
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,2186 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

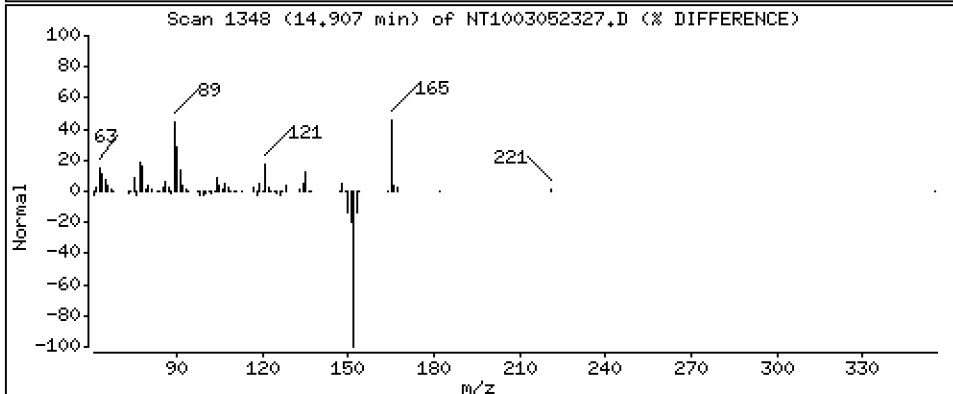
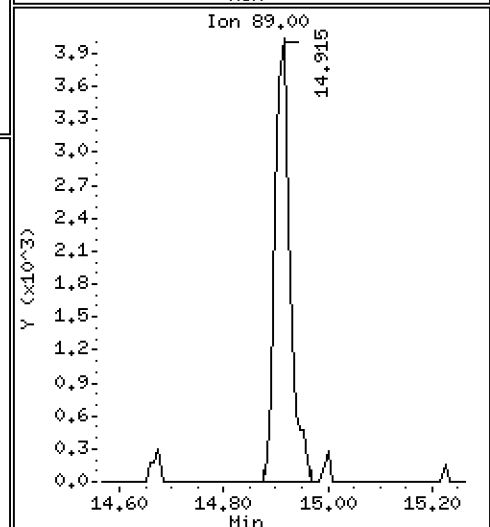
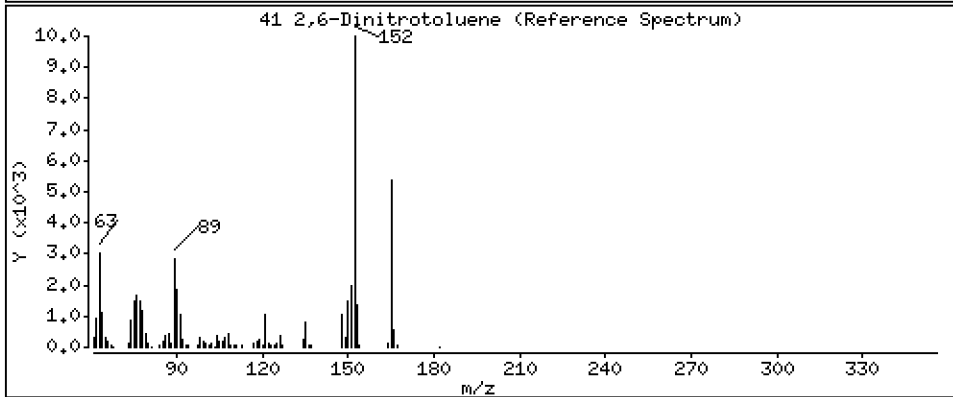
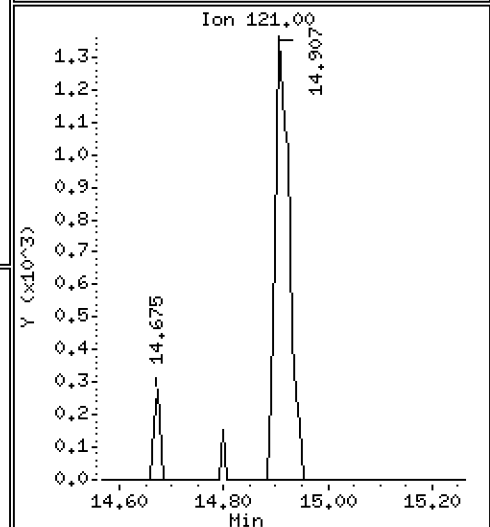
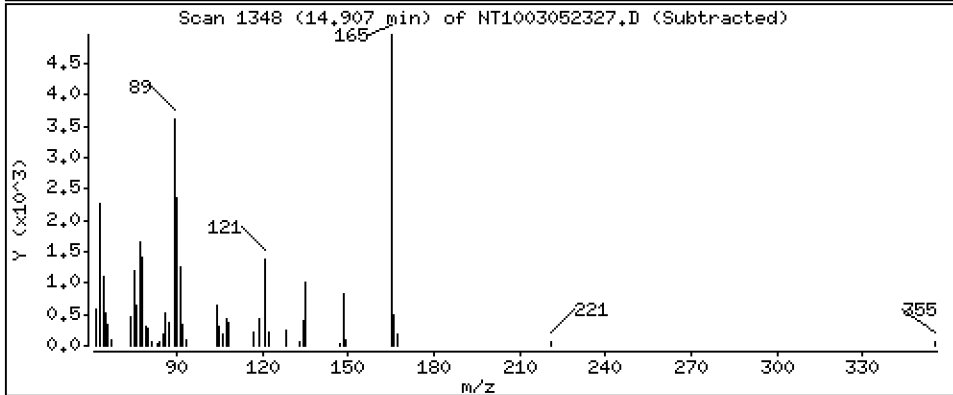
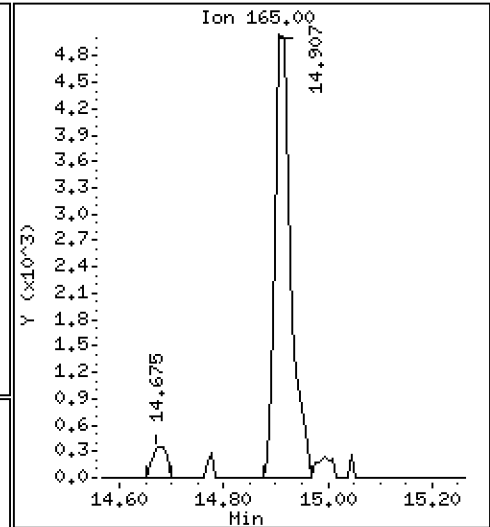
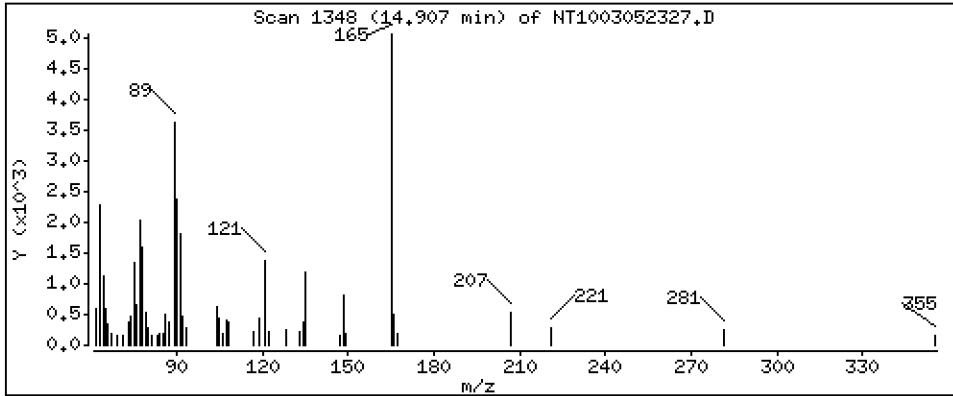
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,3414 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

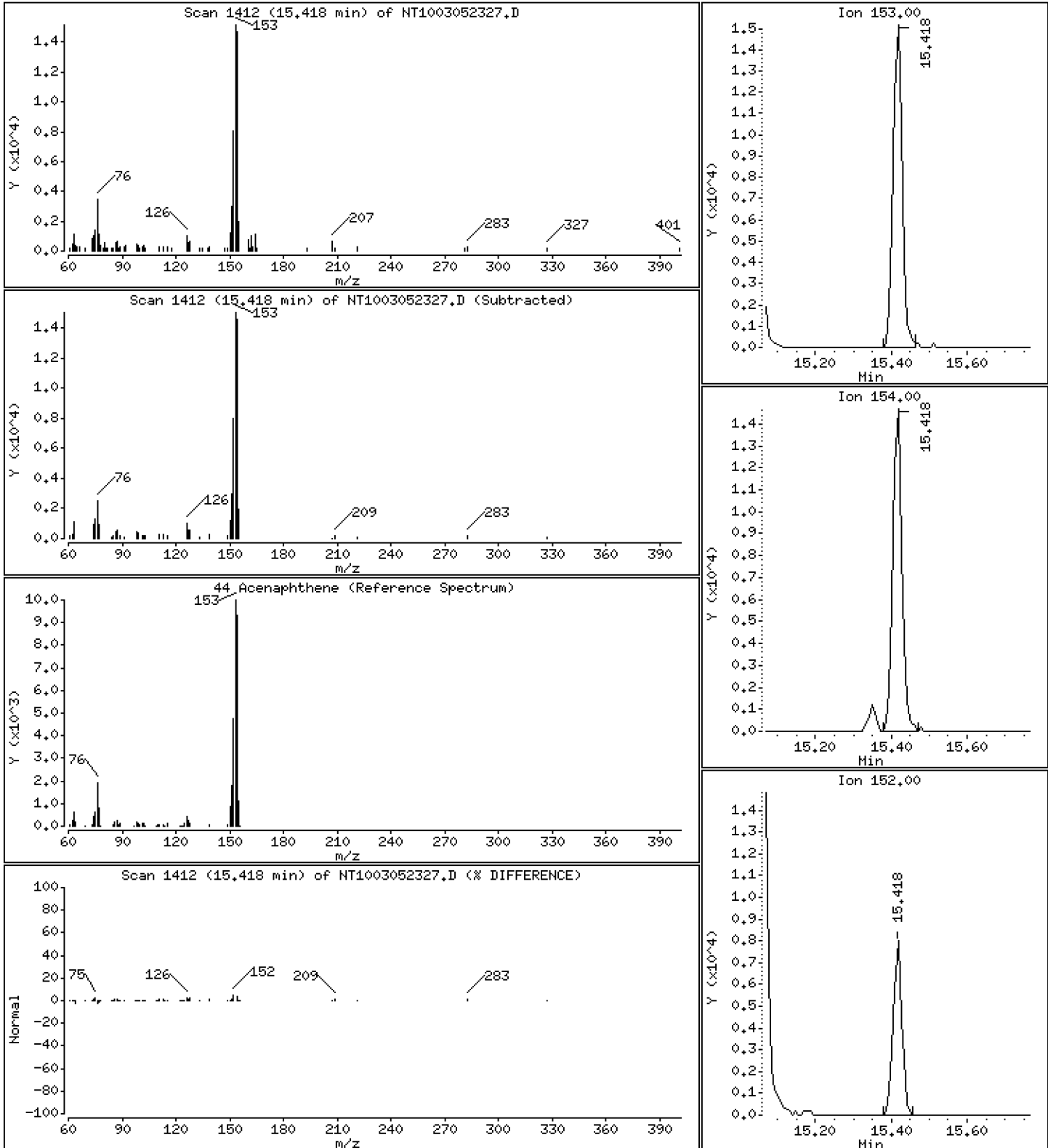
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.1934 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

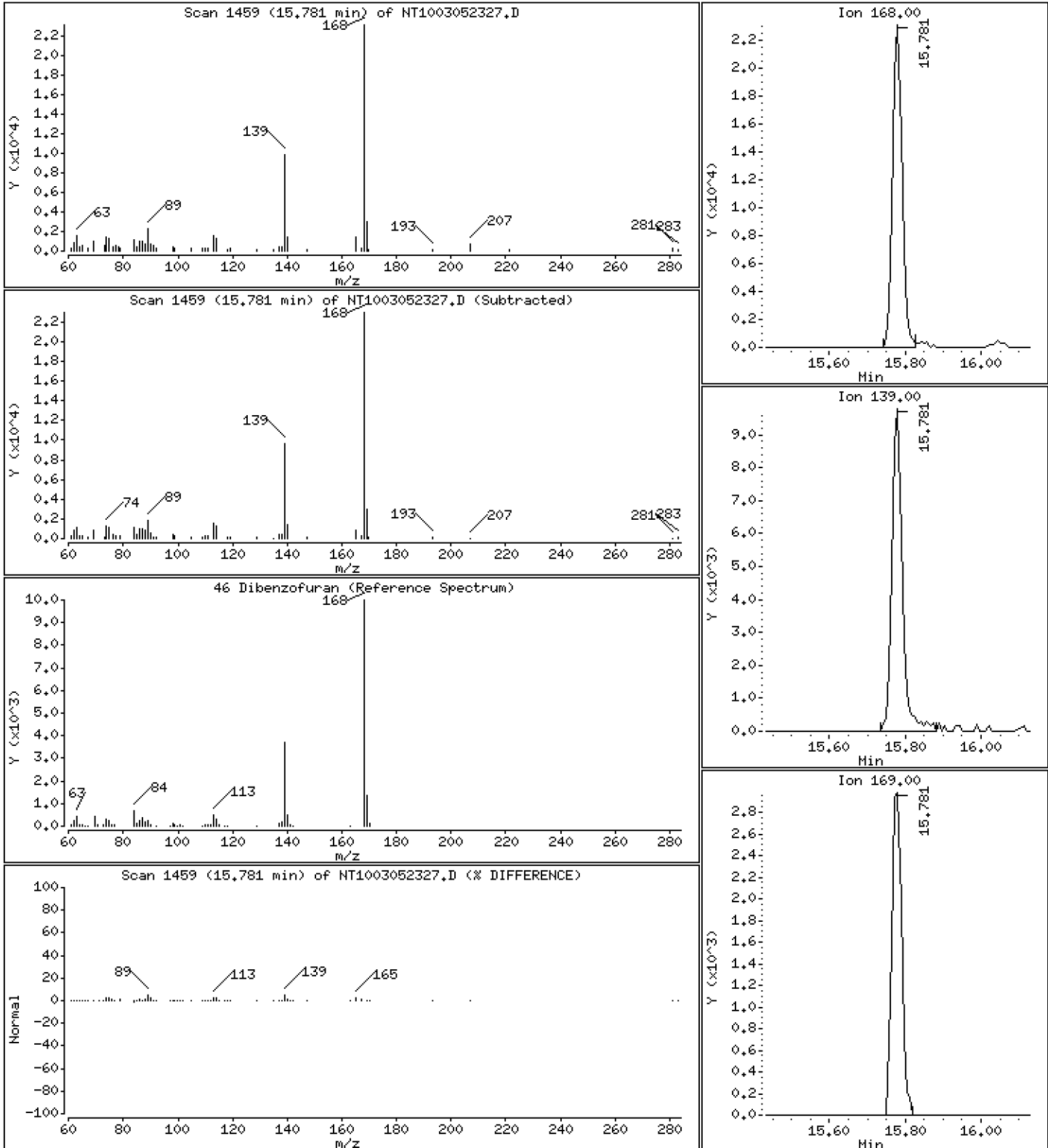
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2090 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

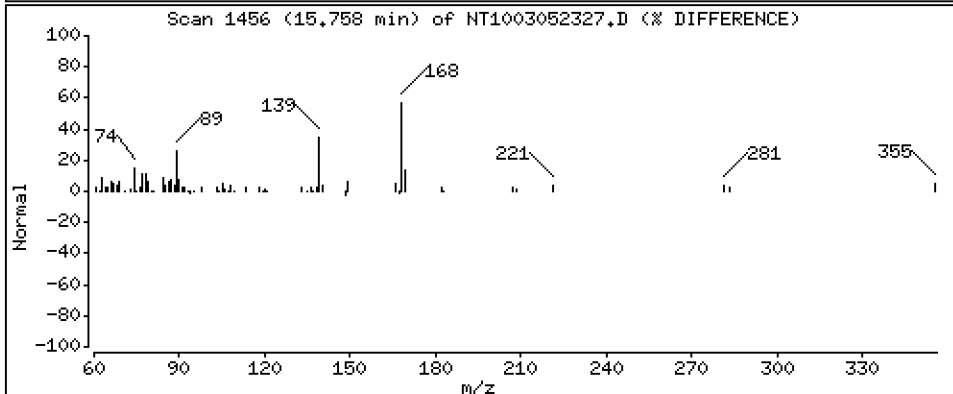
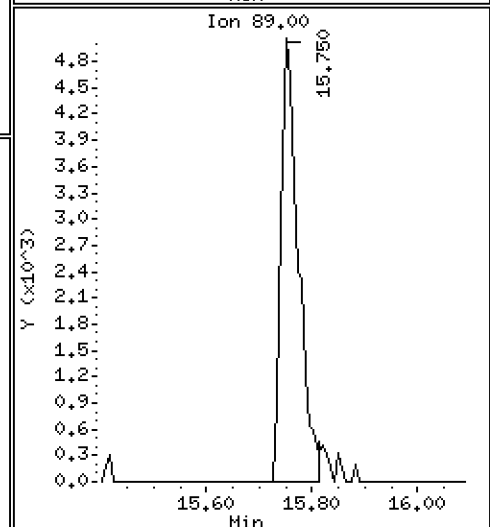
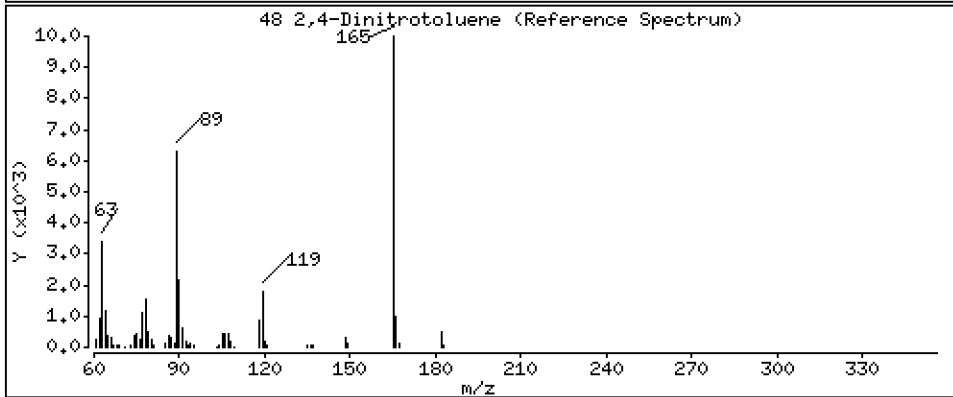
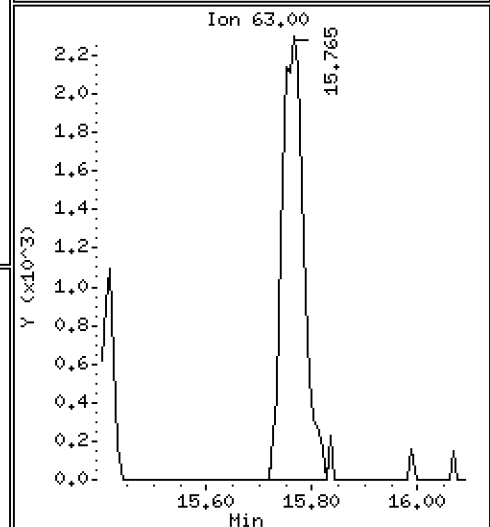
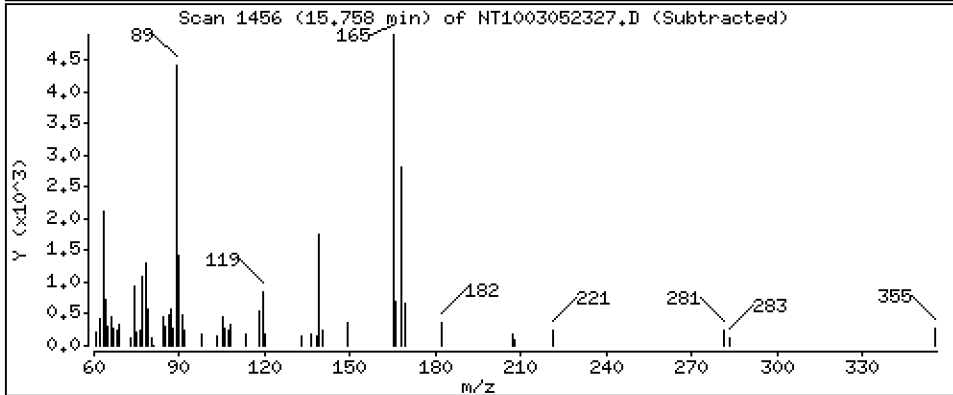
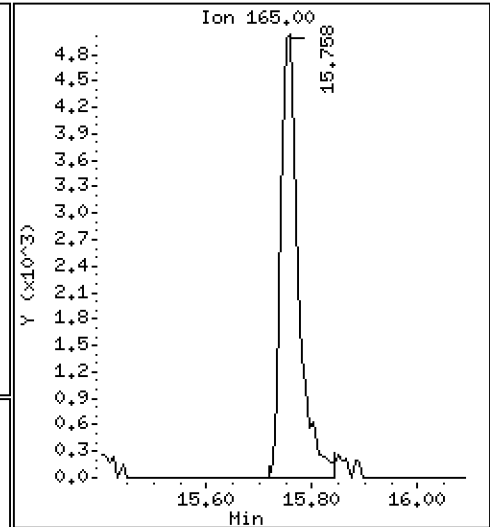
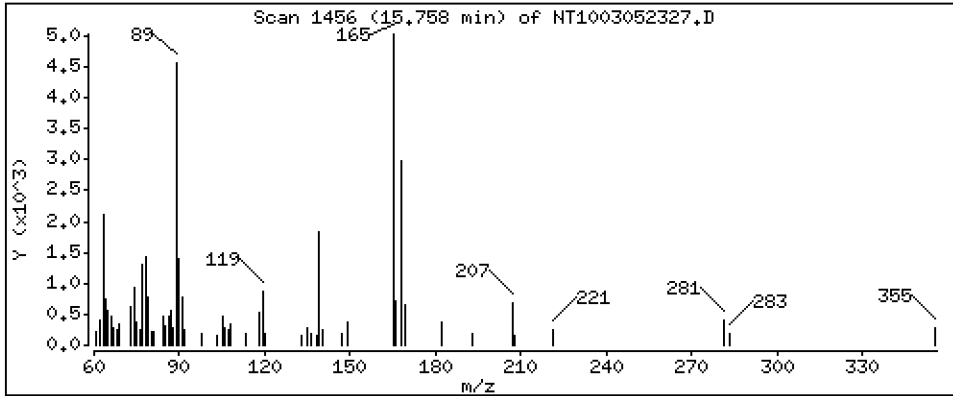
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2647 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

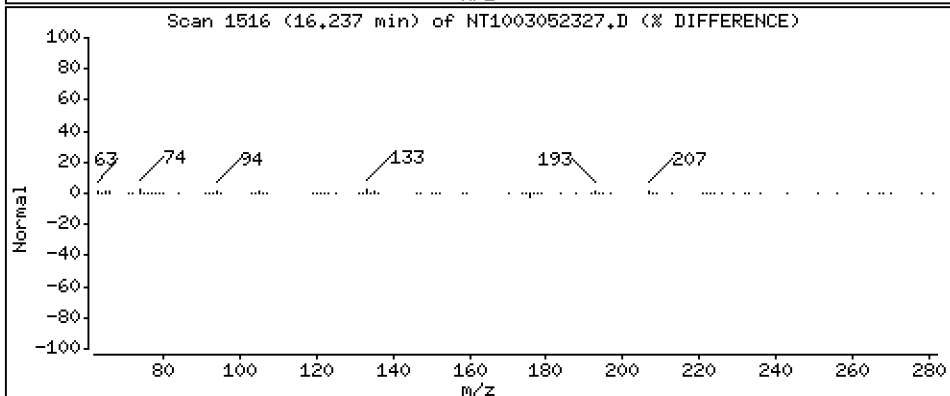
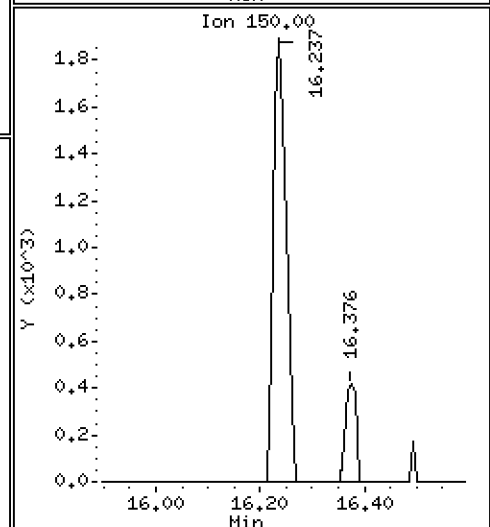
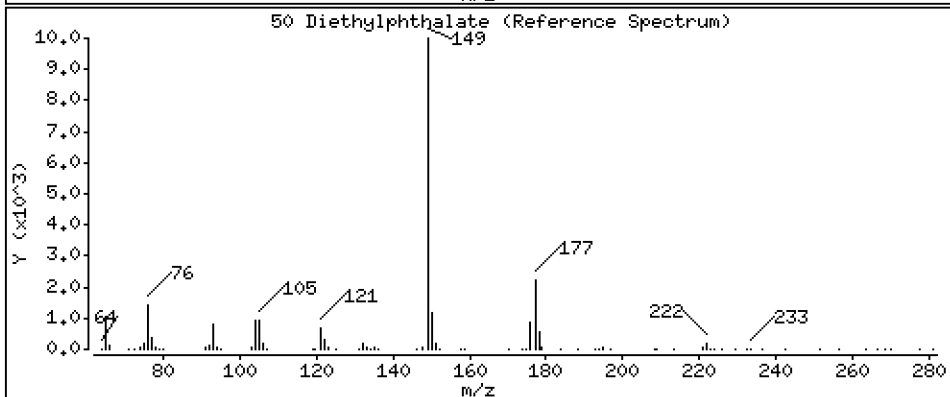
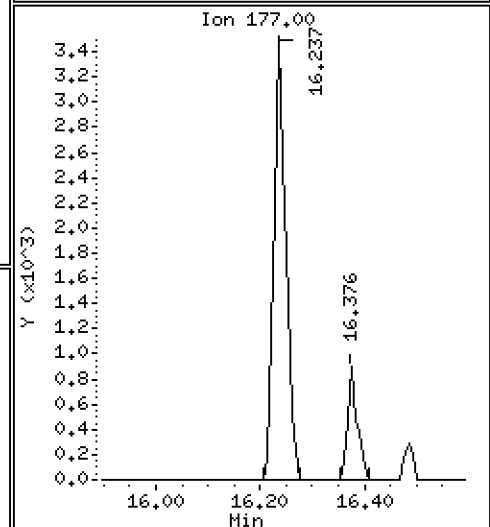
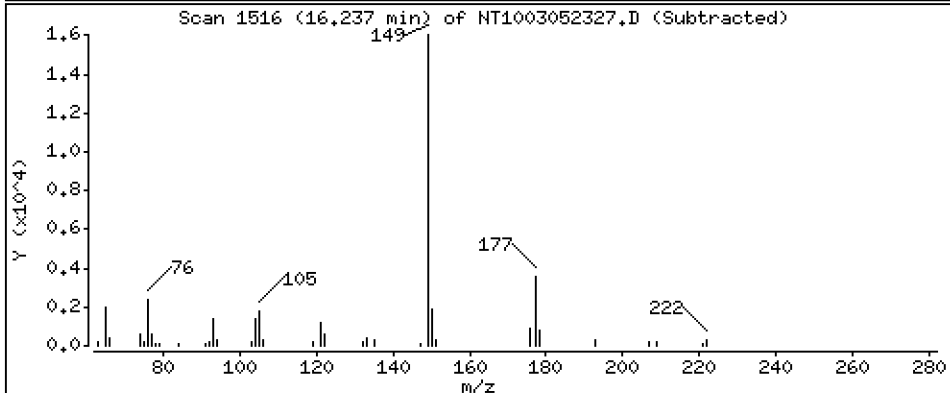
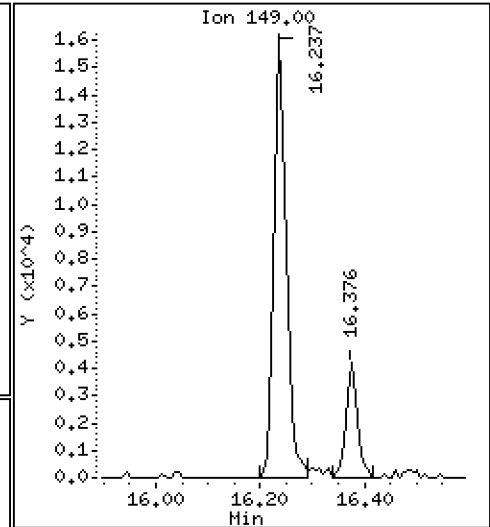
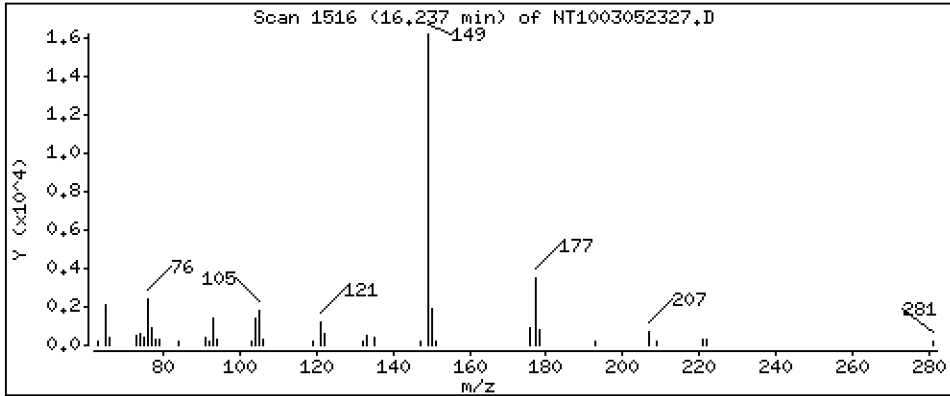
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1793 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

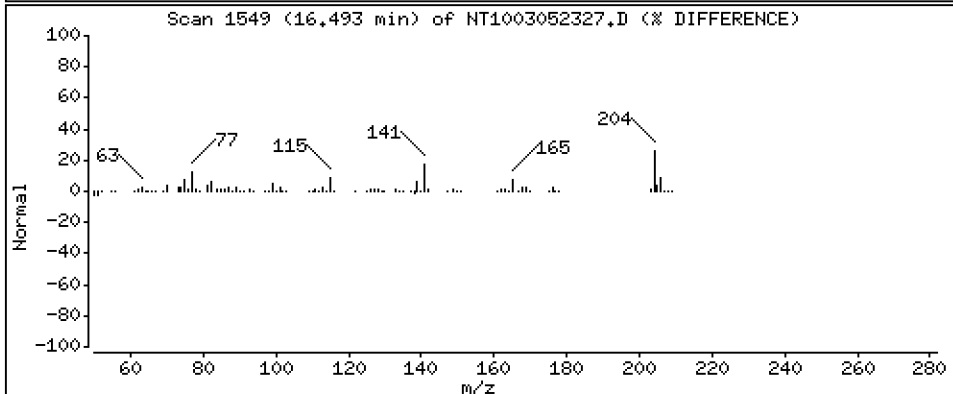
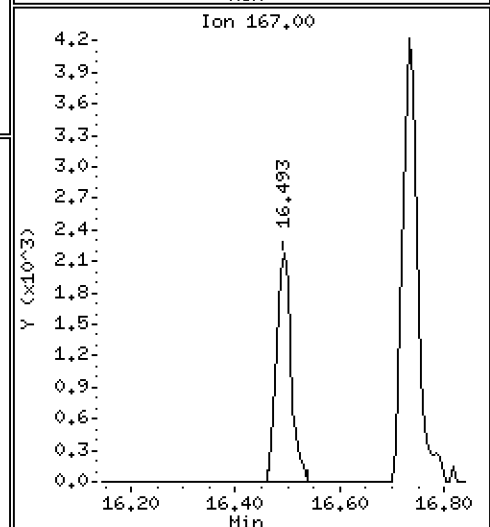
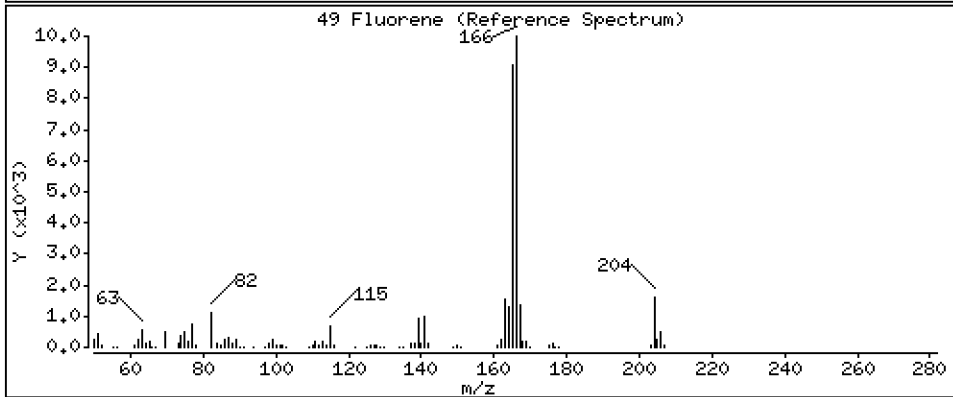
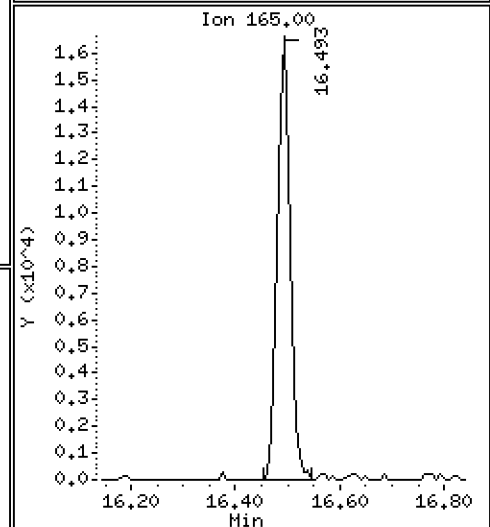
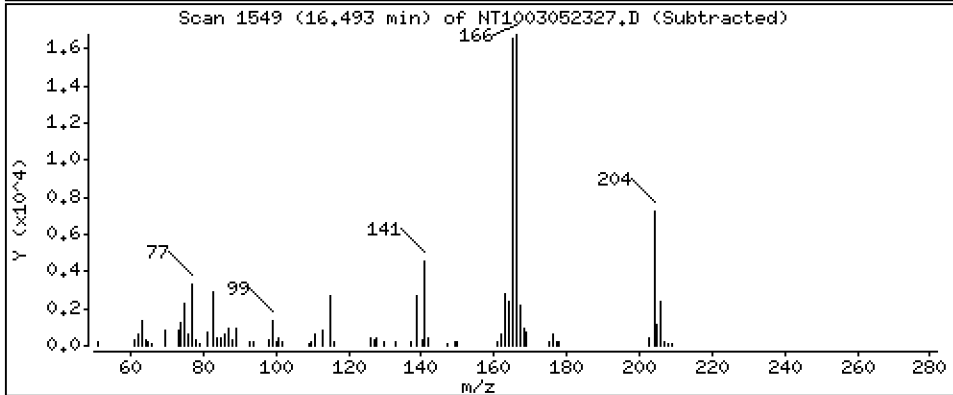
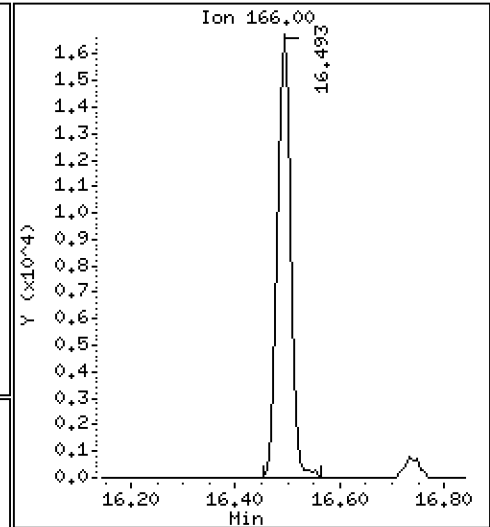
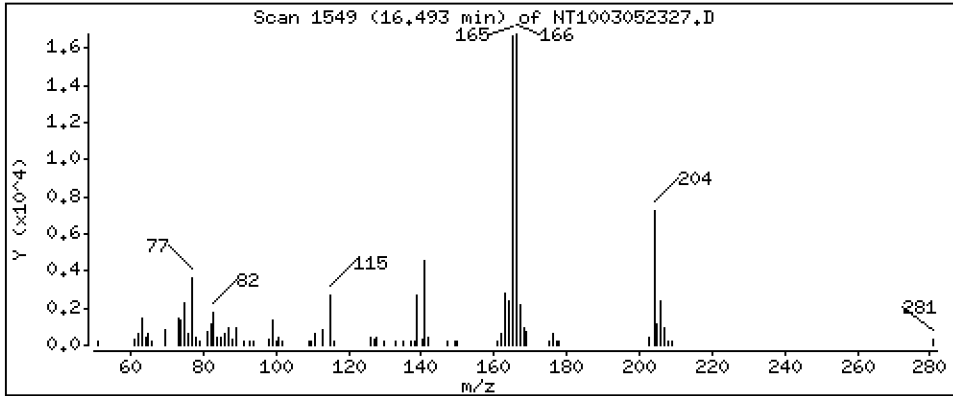
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1924 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

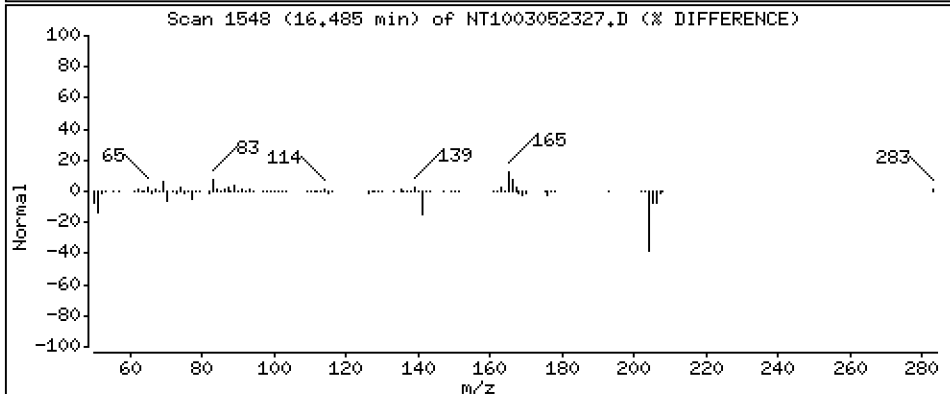
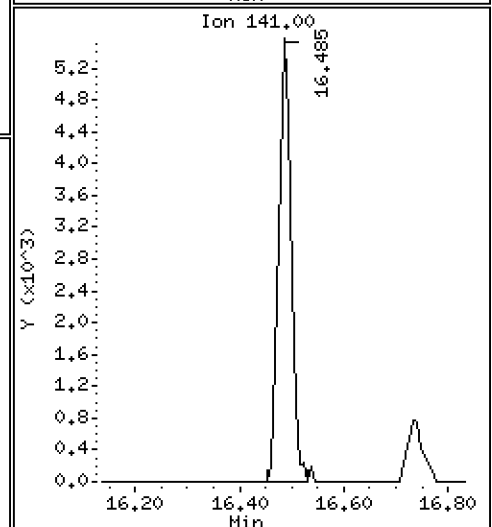
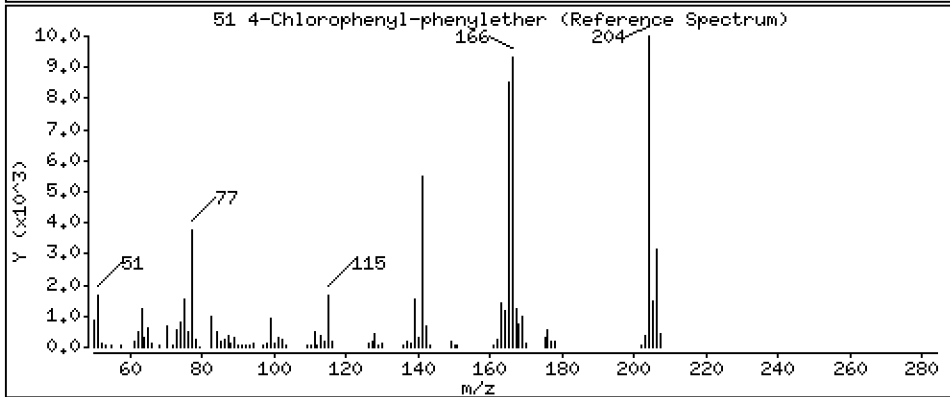
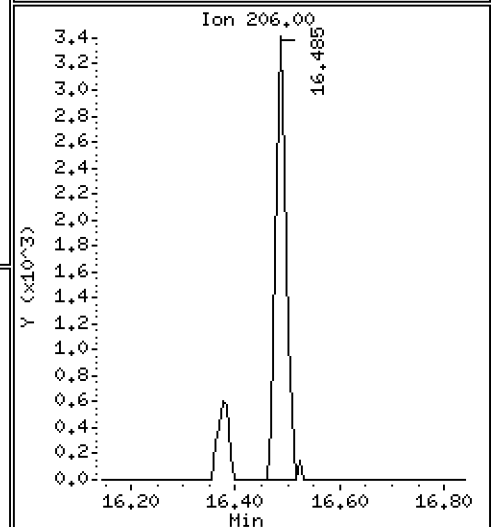
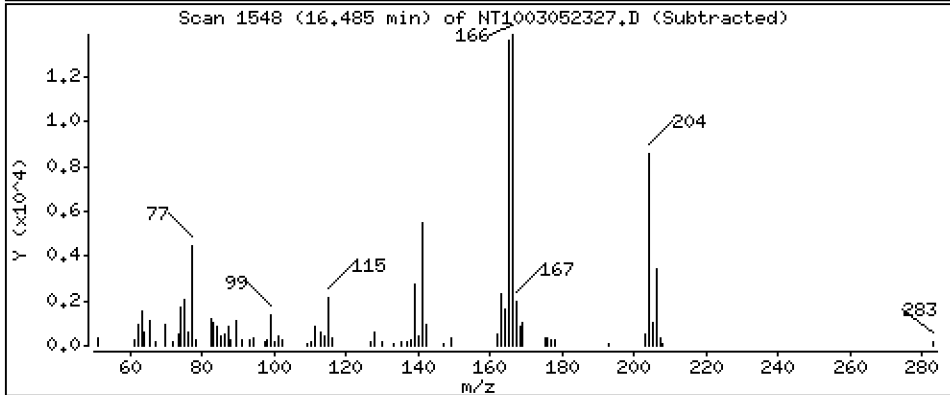
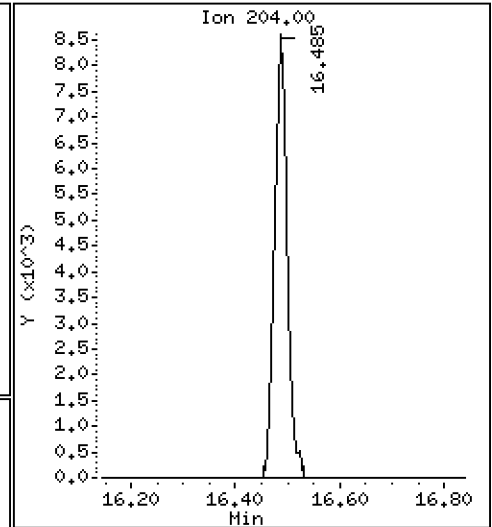
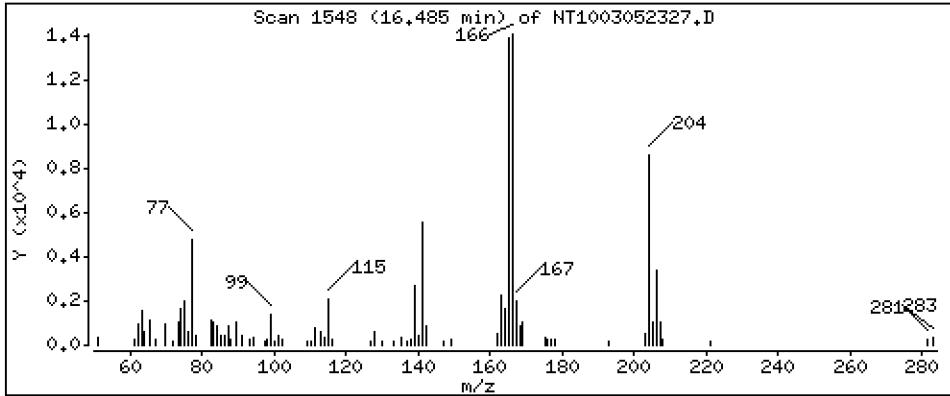
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2057 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

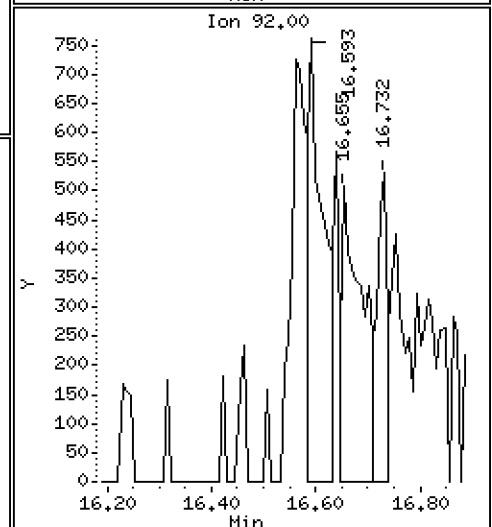
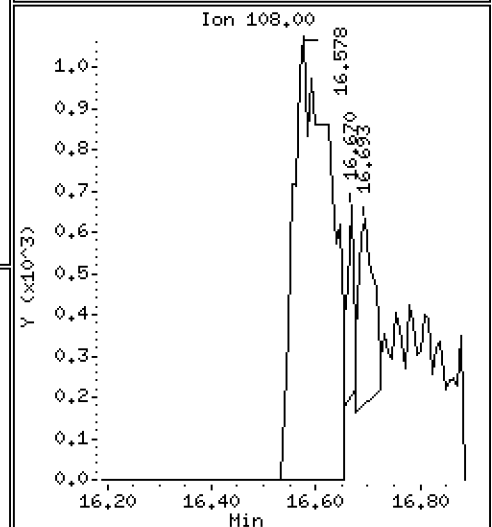
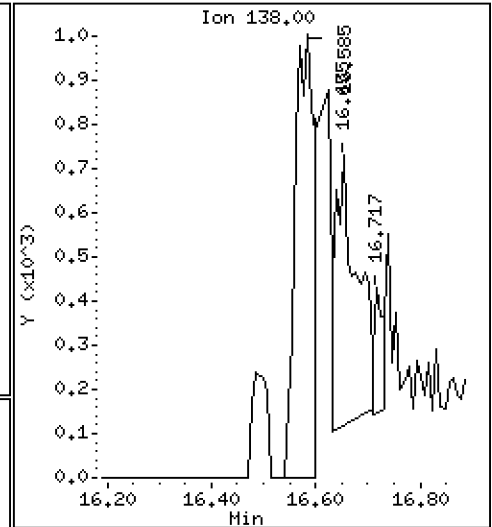
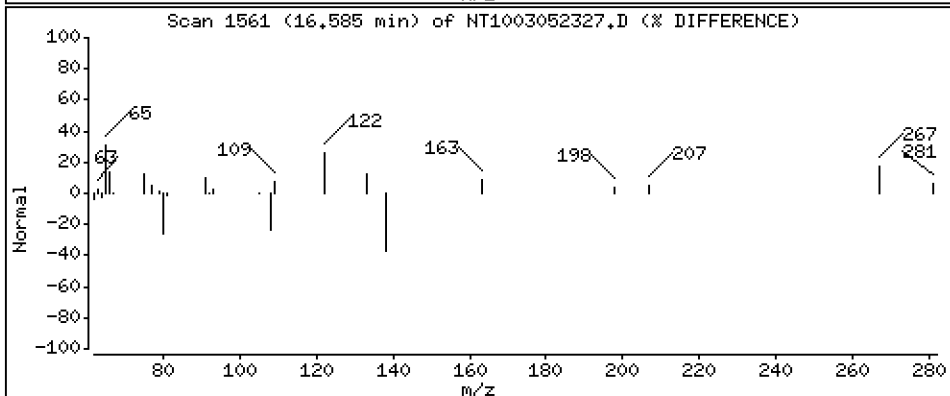
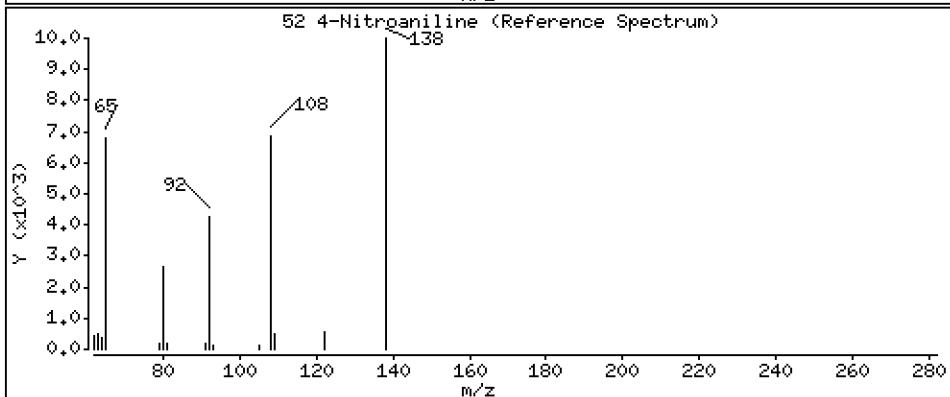
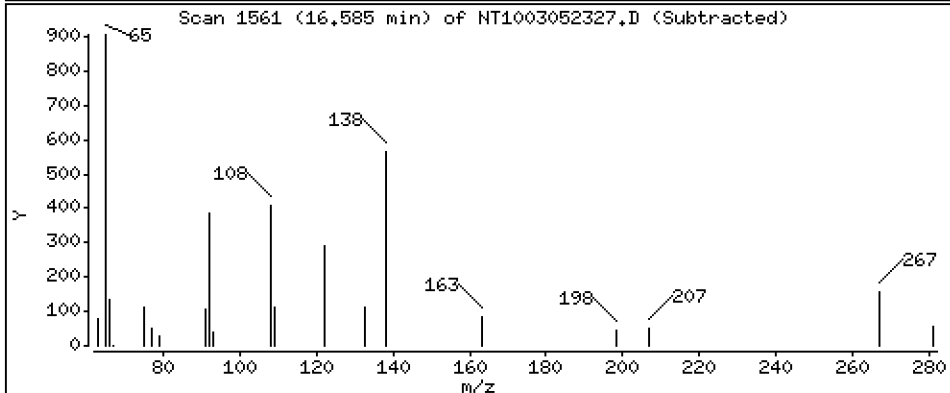
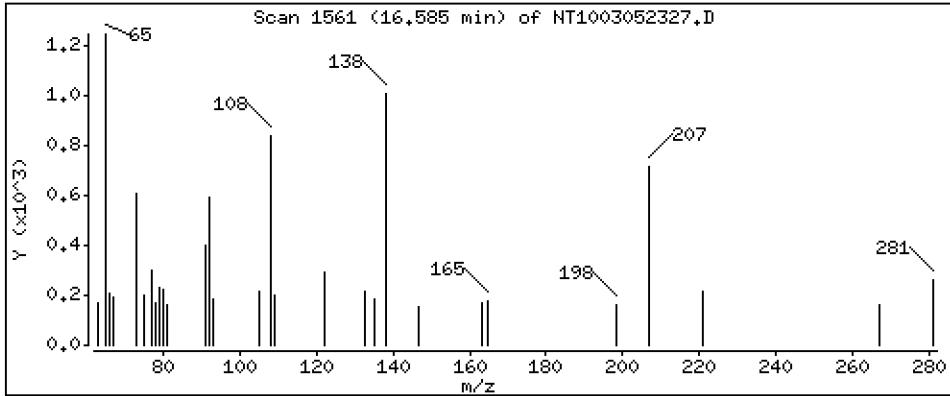
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.07164 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

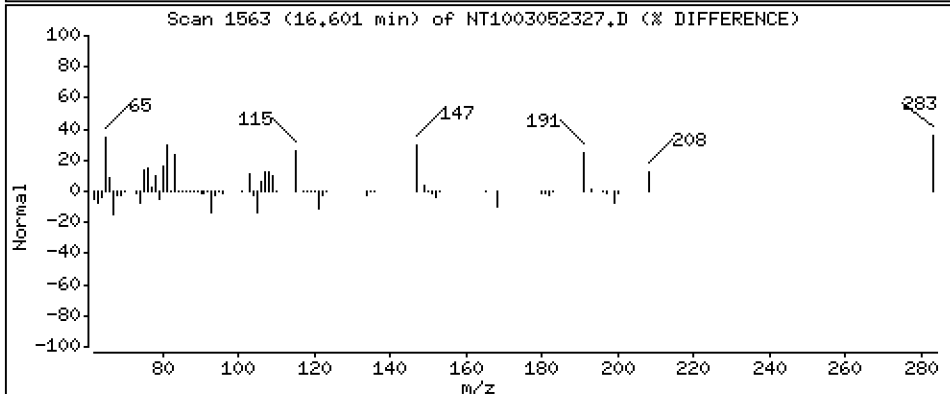
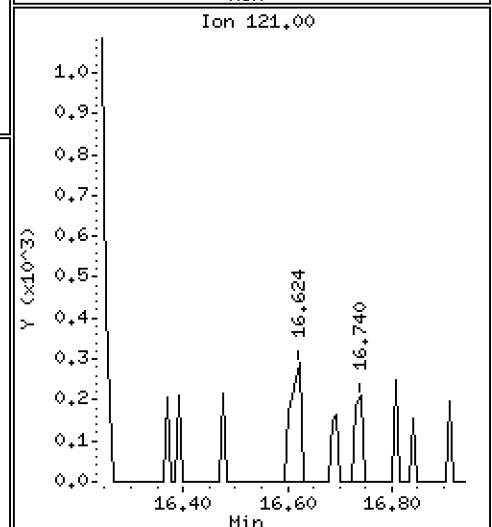
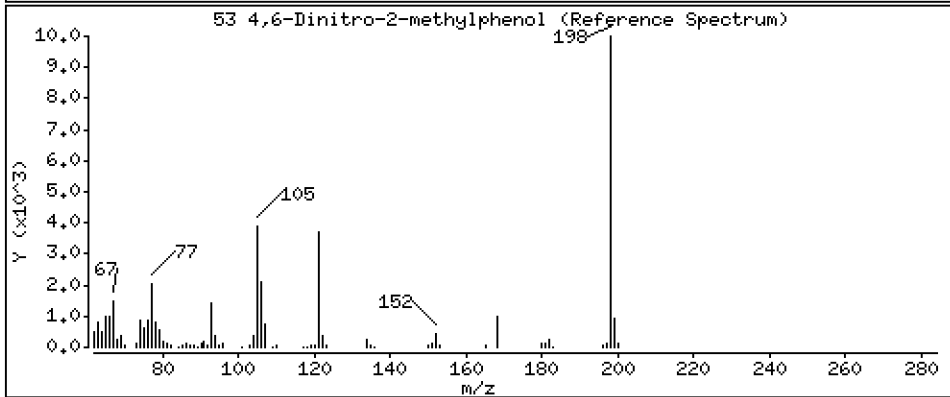
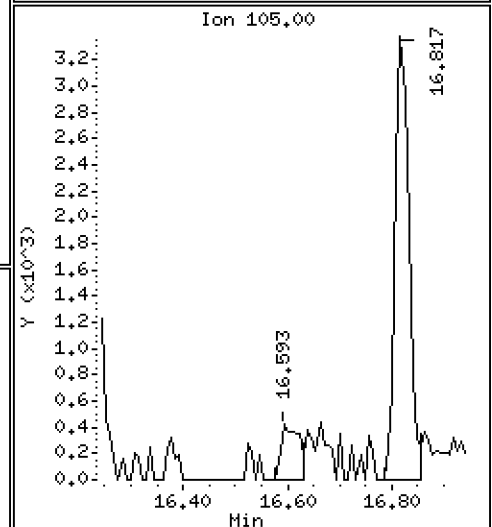
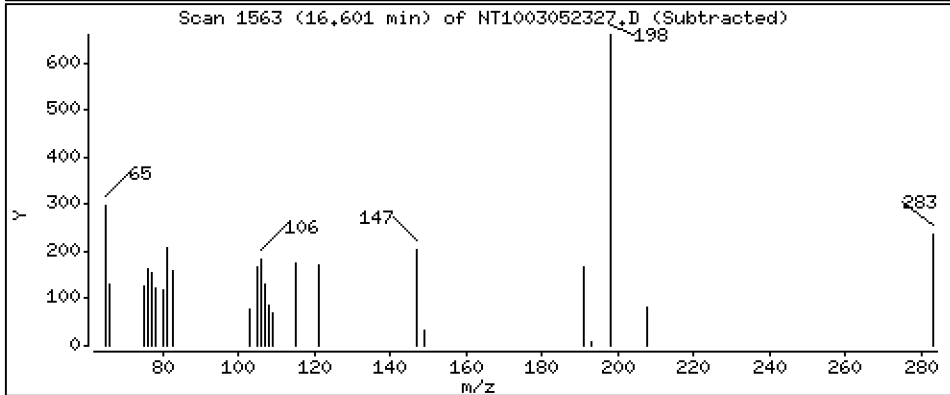
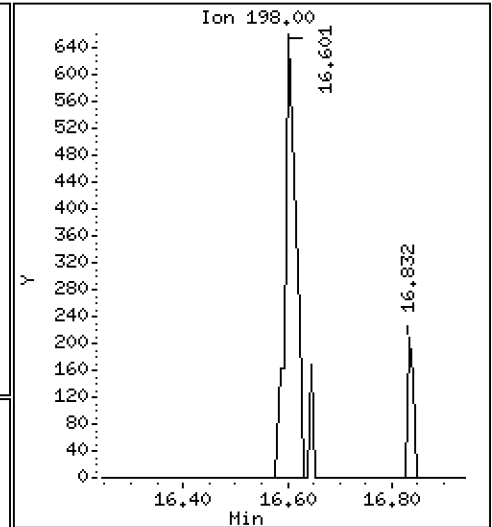
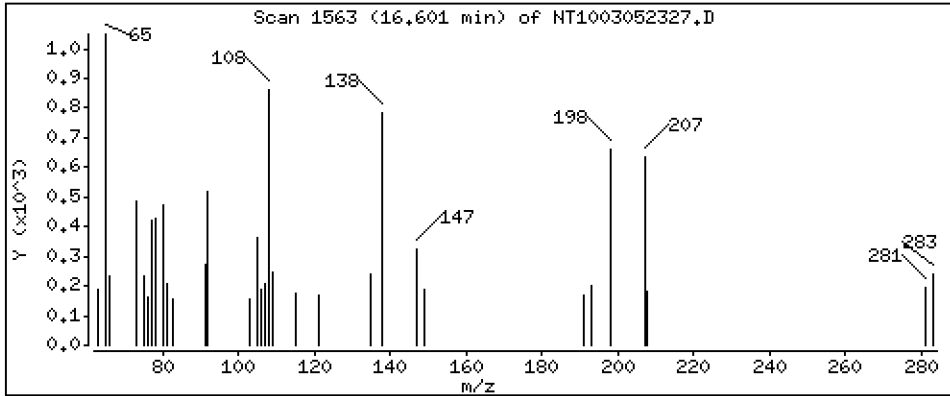
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 0,04366 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

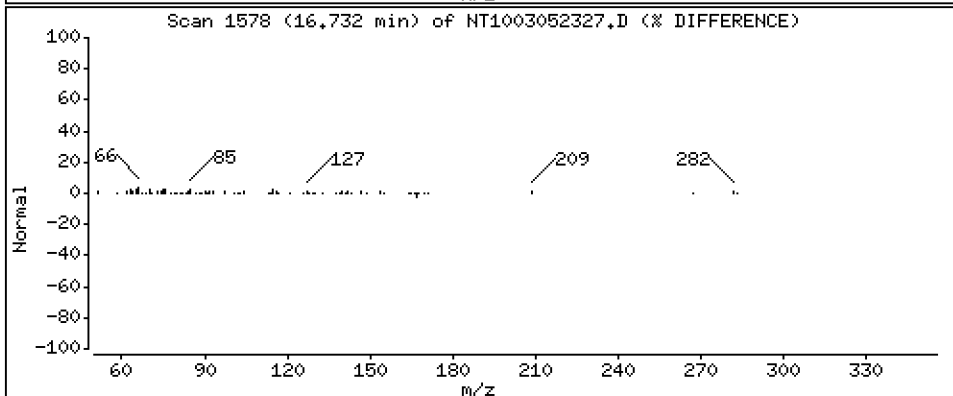
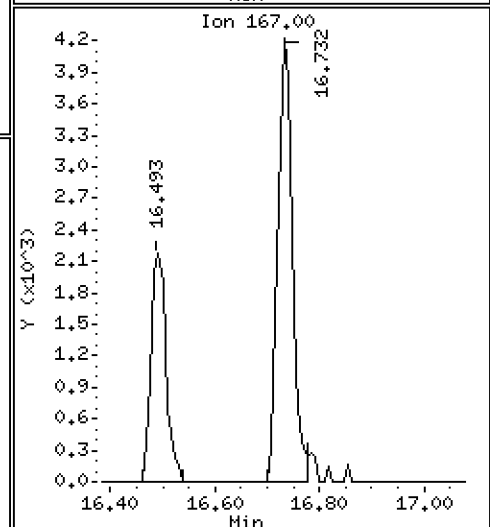
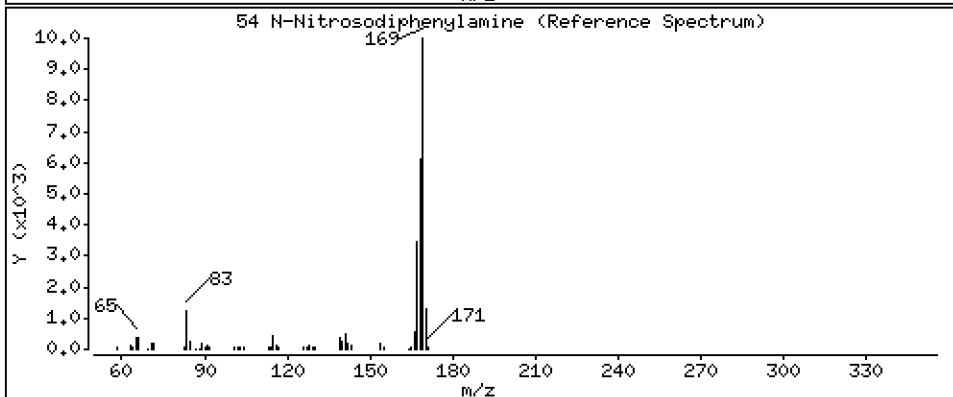
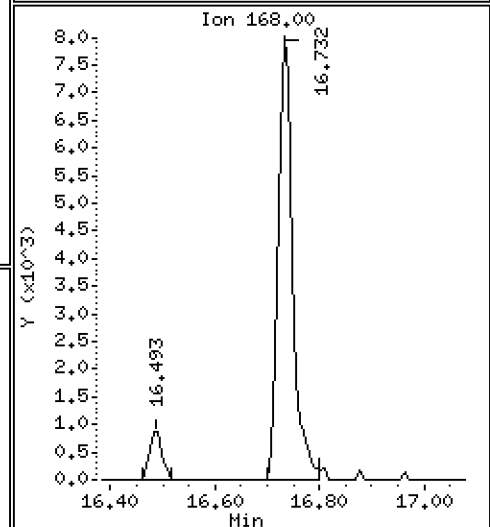
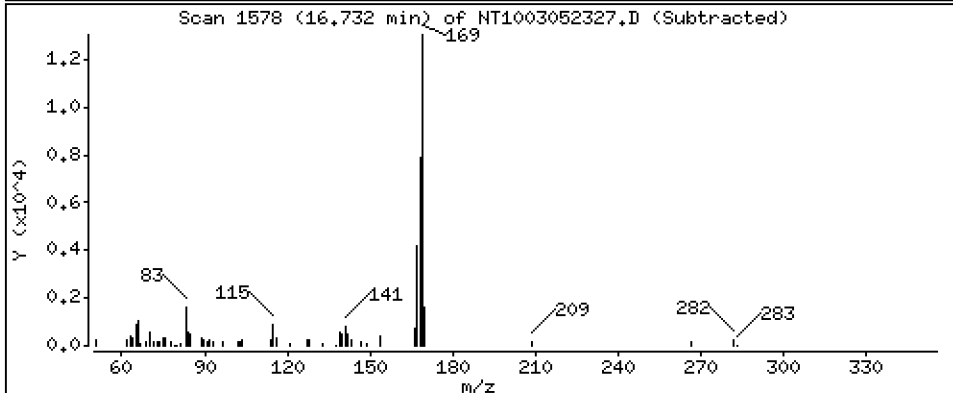
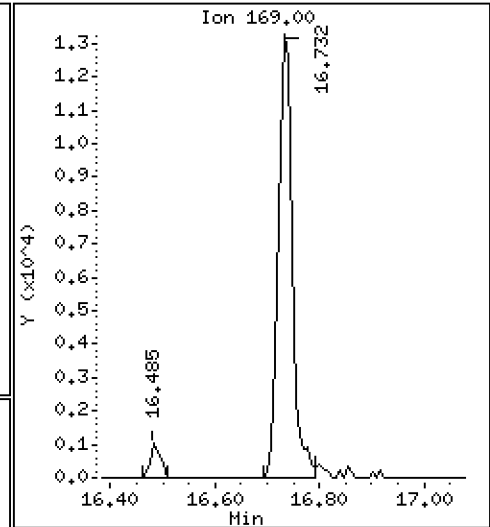
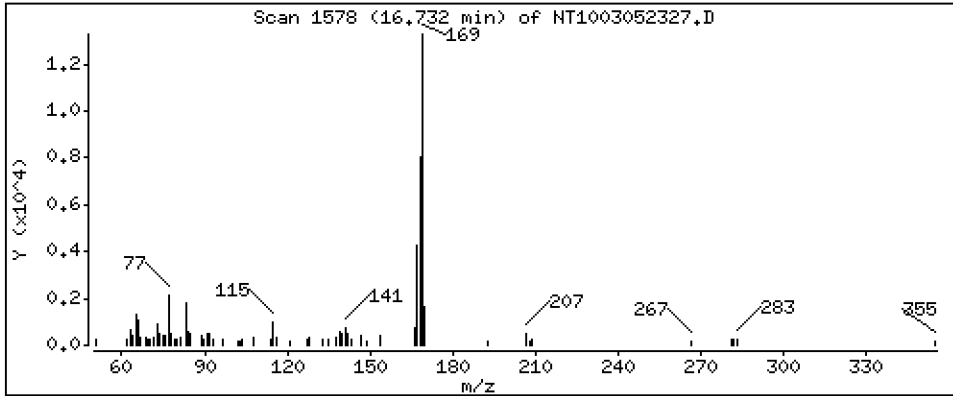
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,2132 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

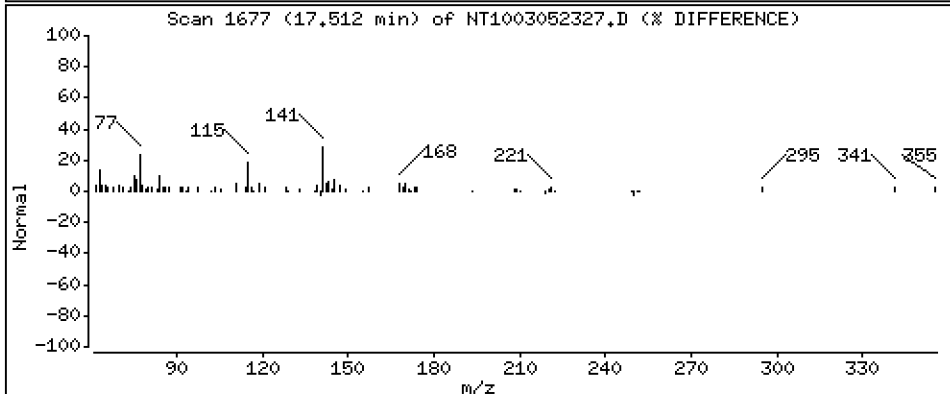
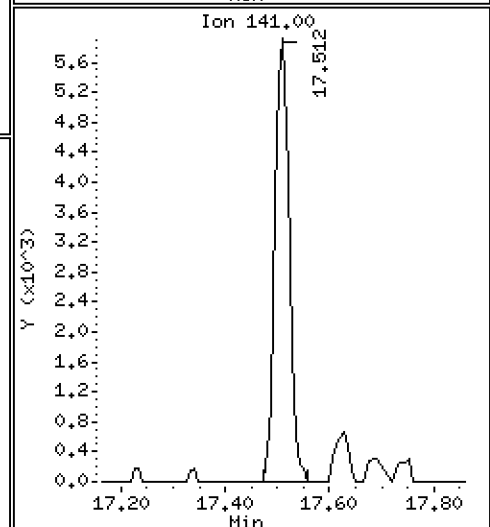
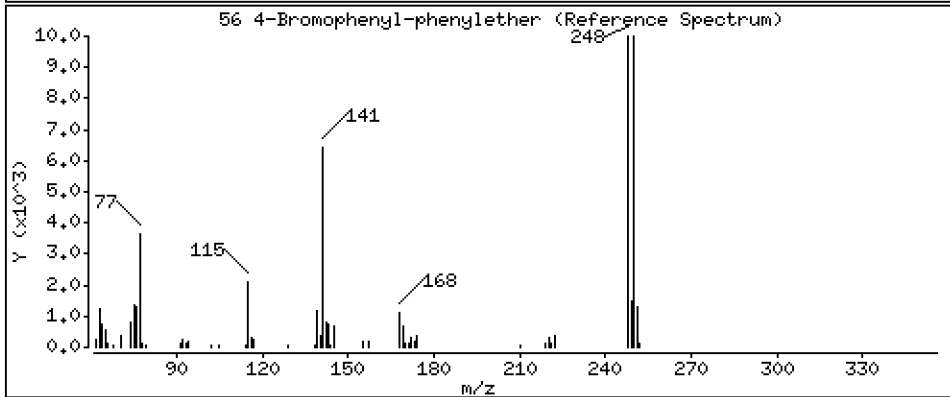
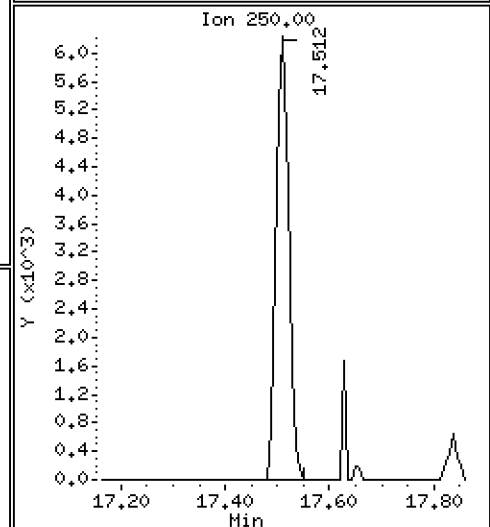
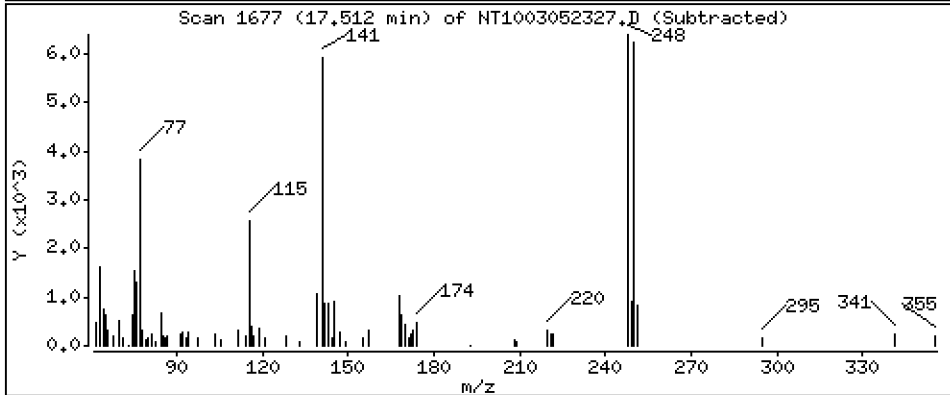
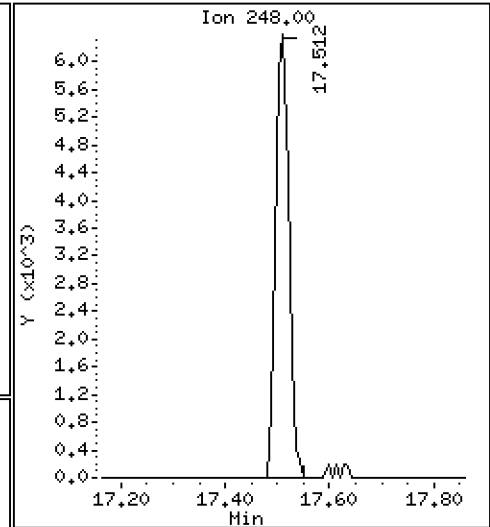
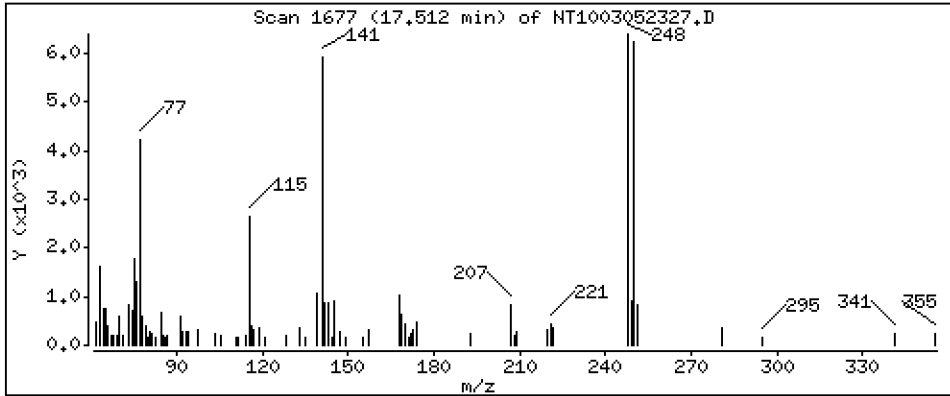
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

56 4-Bromophenyl-phenylether

Concentration: 0.2304 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

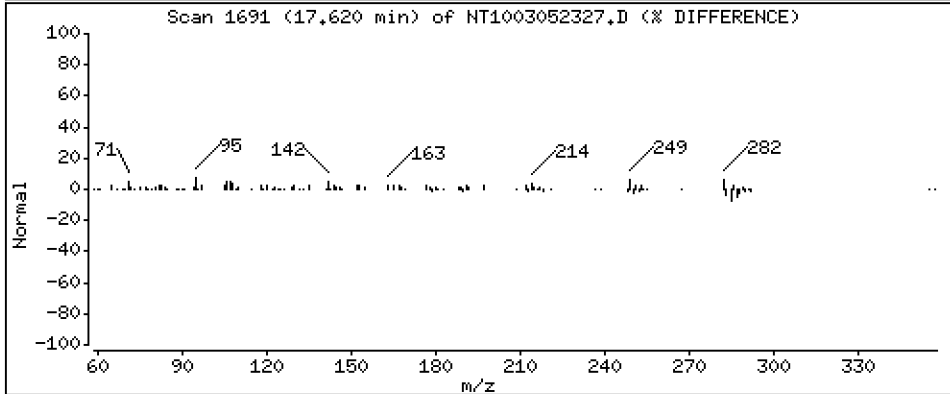
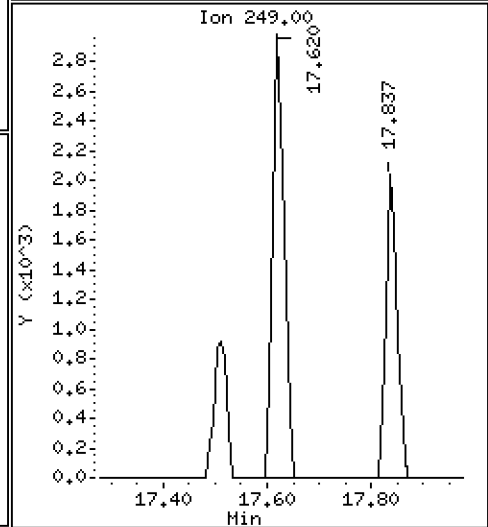
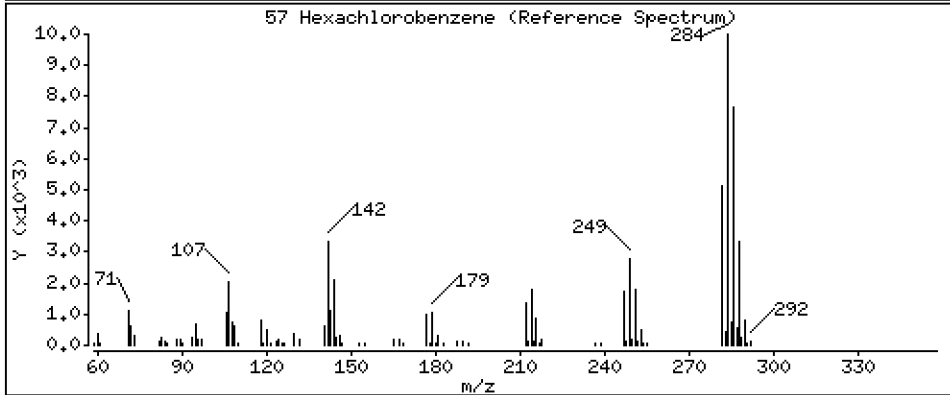
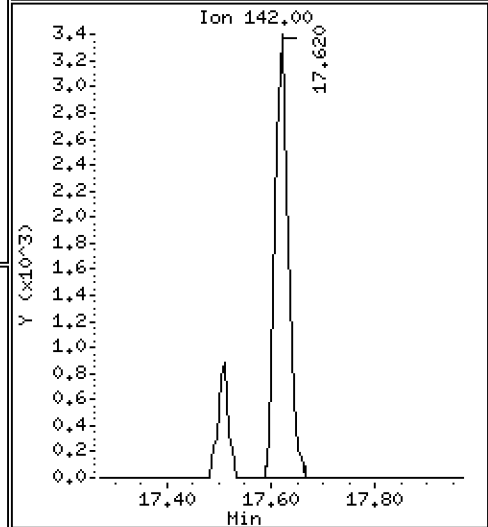
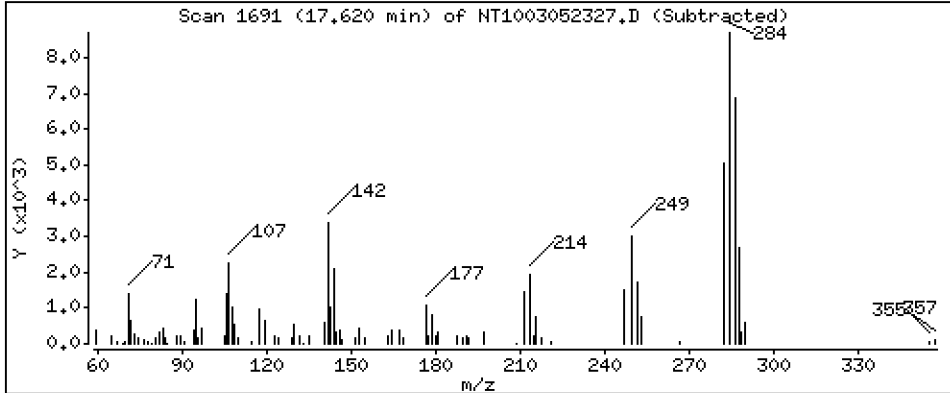
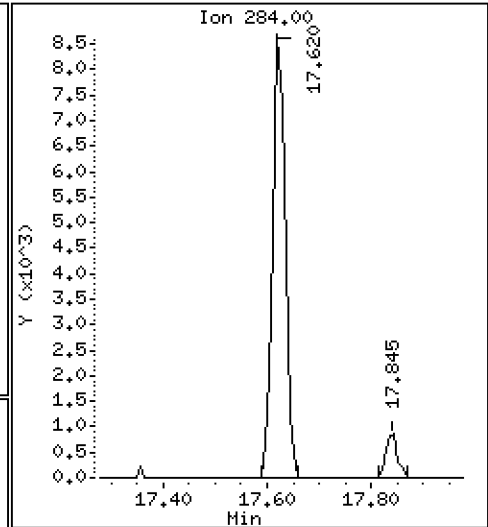
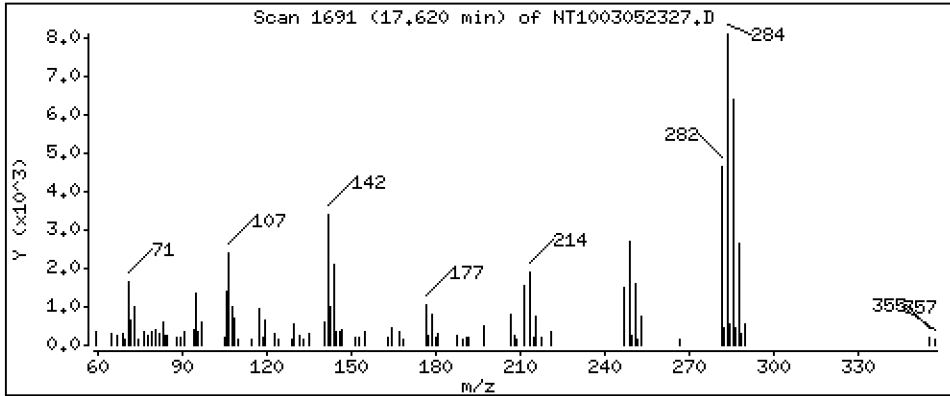
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2594 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

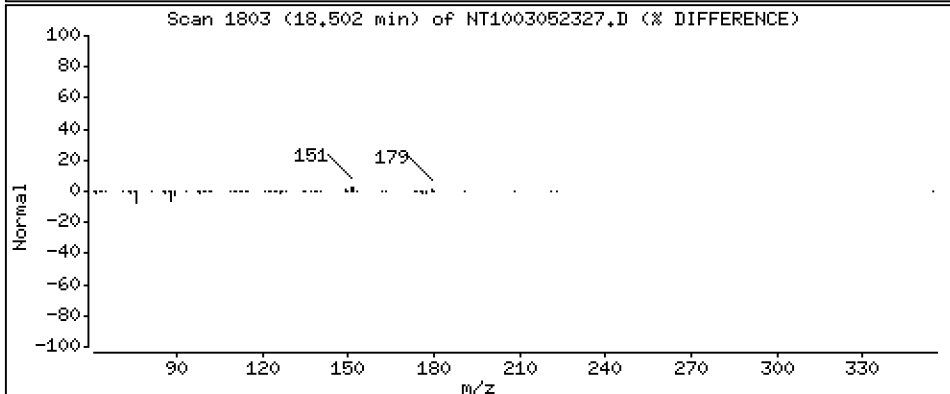
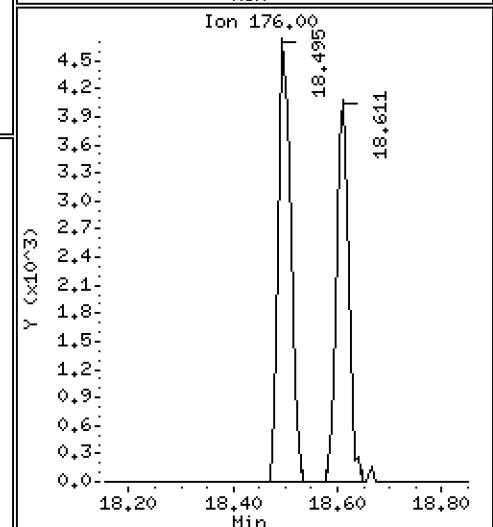
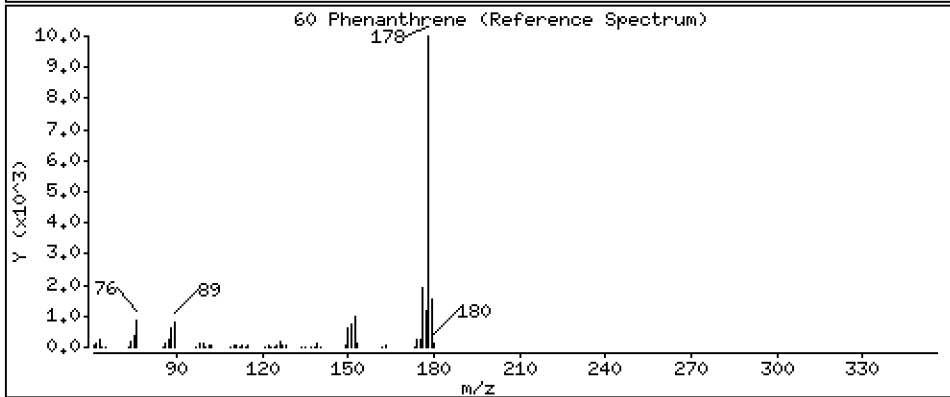
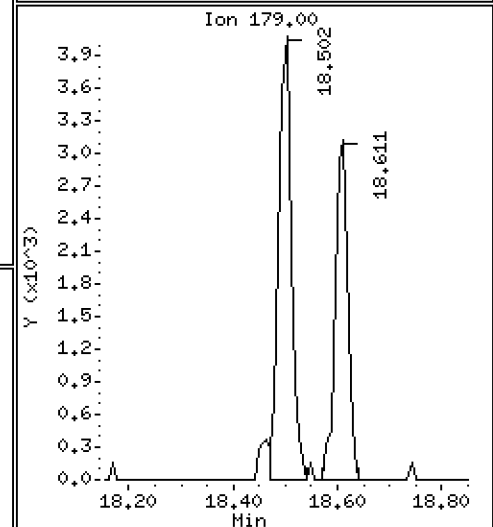
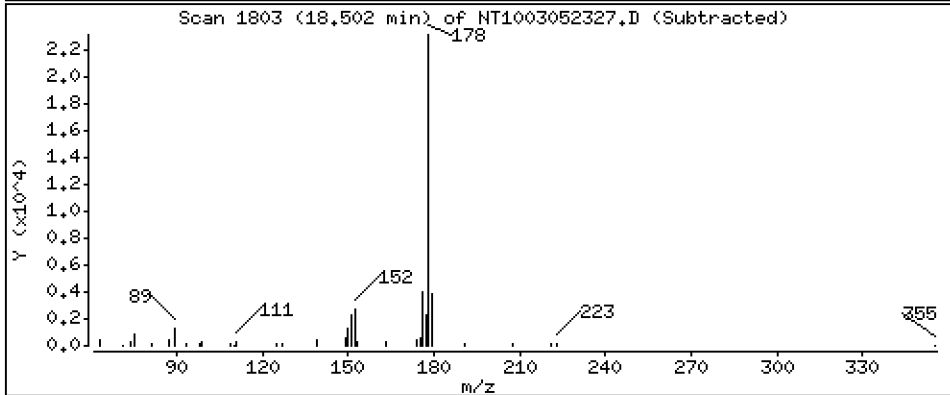
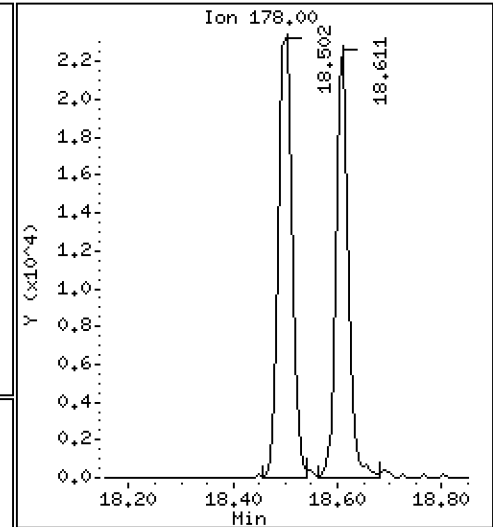
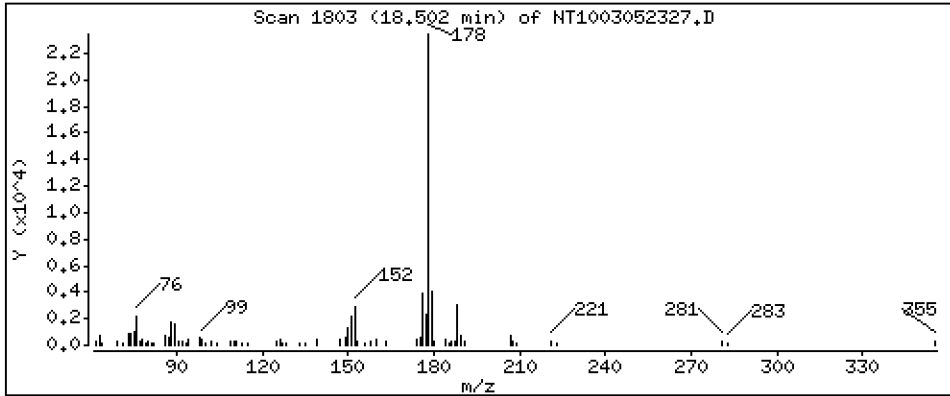
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,2048 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

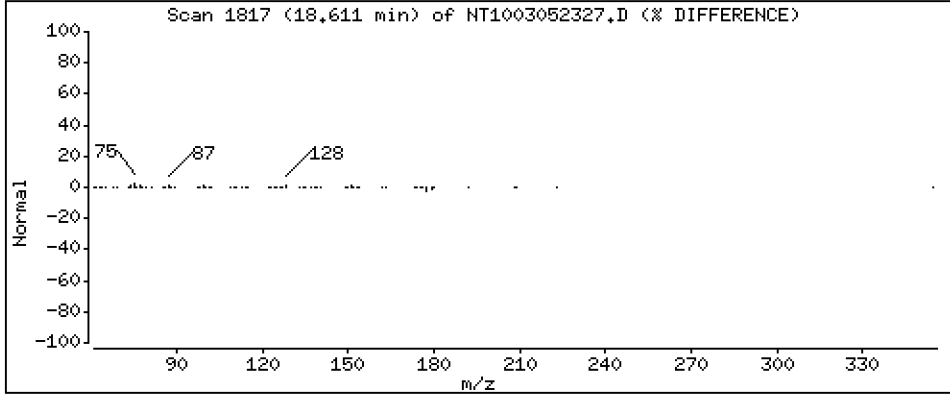
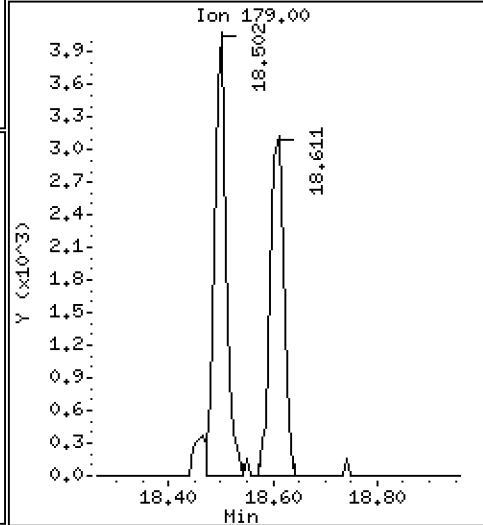
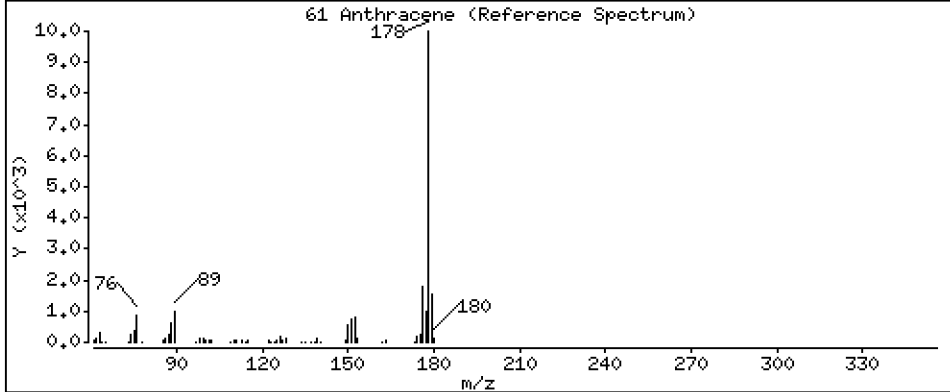
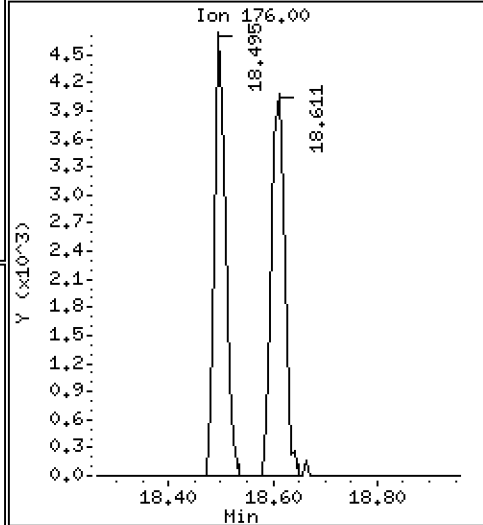
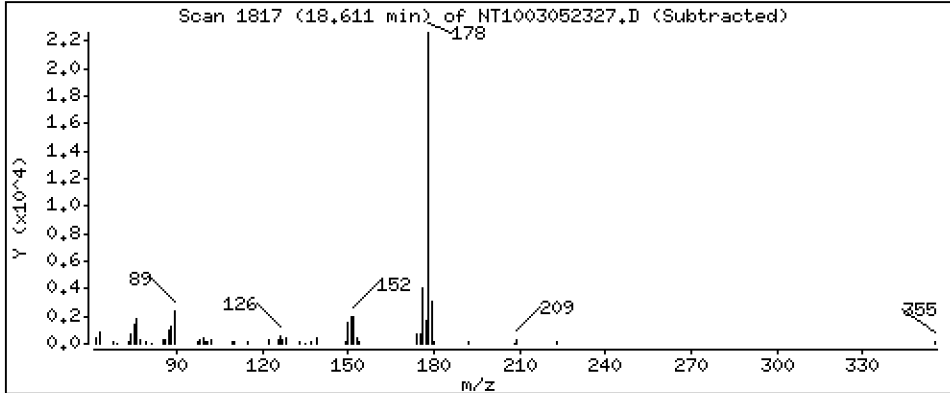
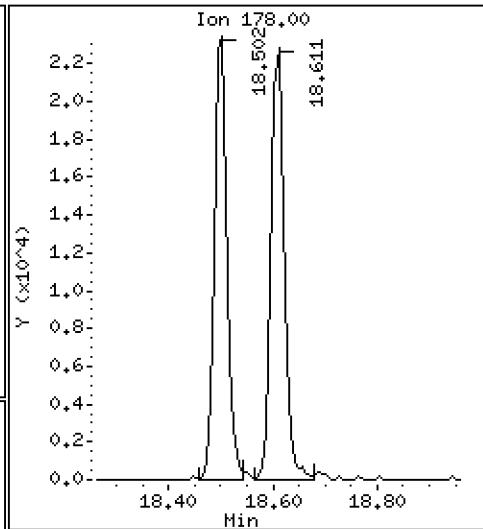
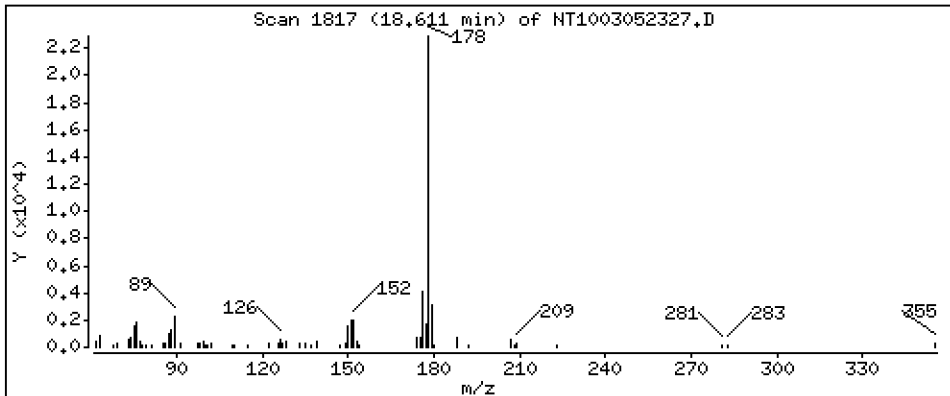
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1994 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

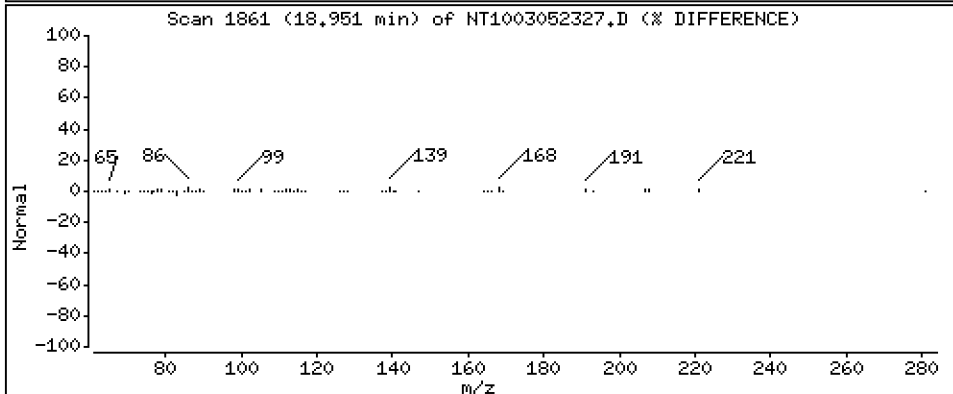
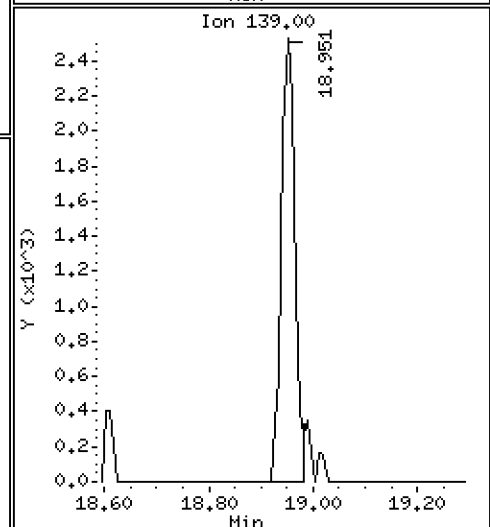
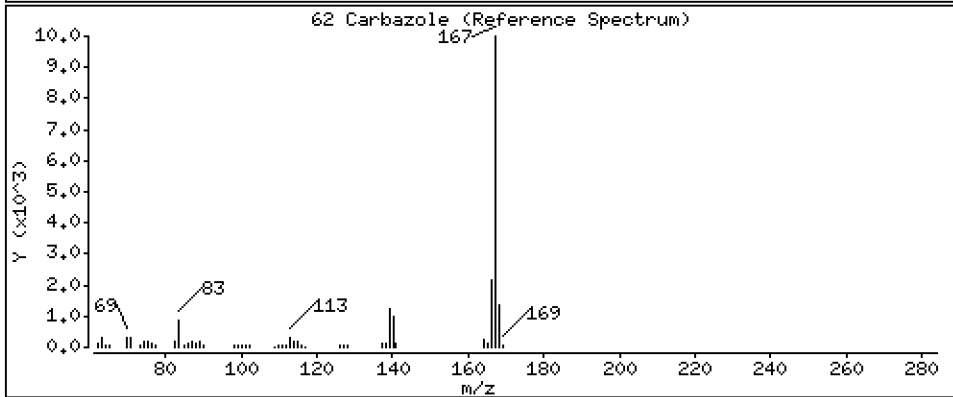
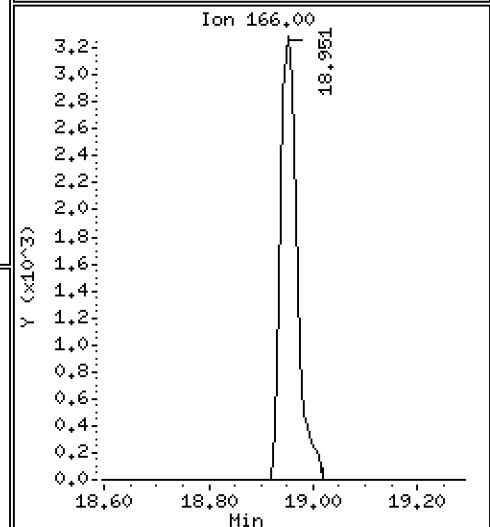
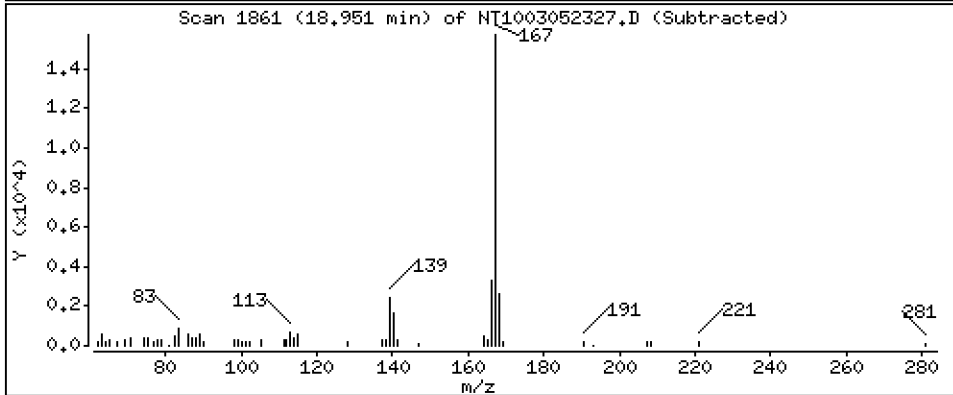
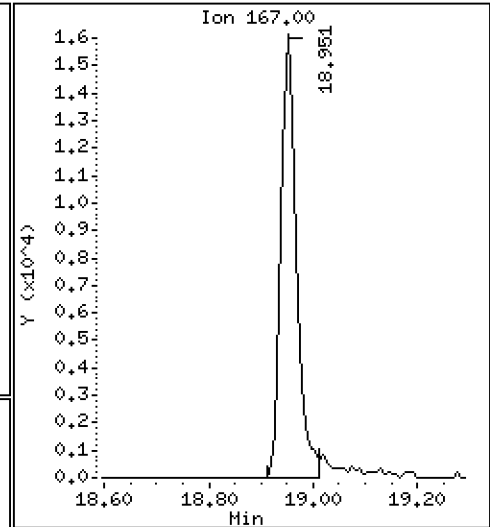
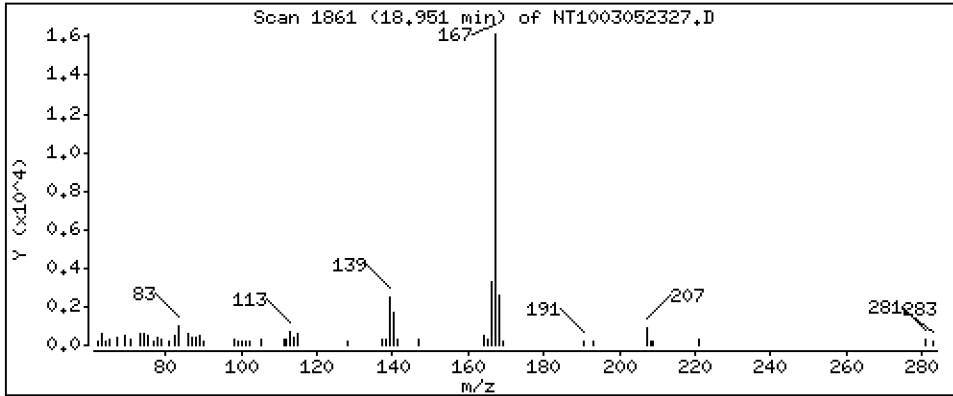
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1816 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

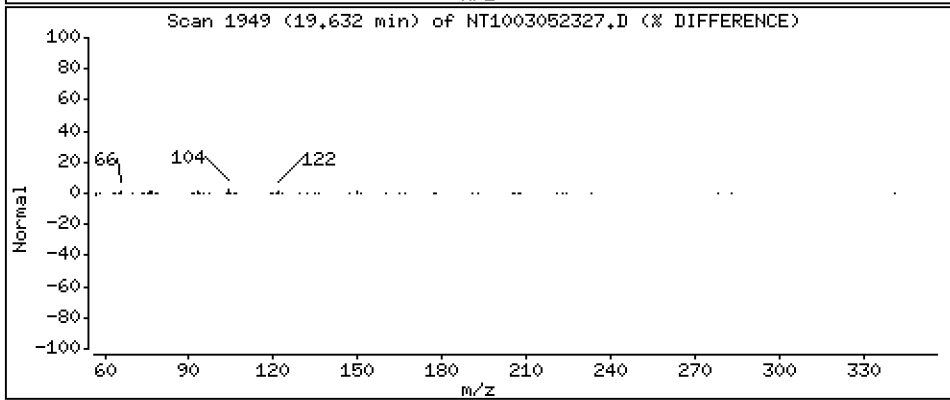
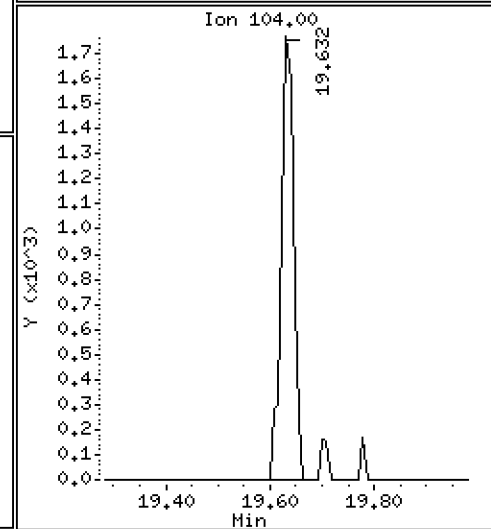
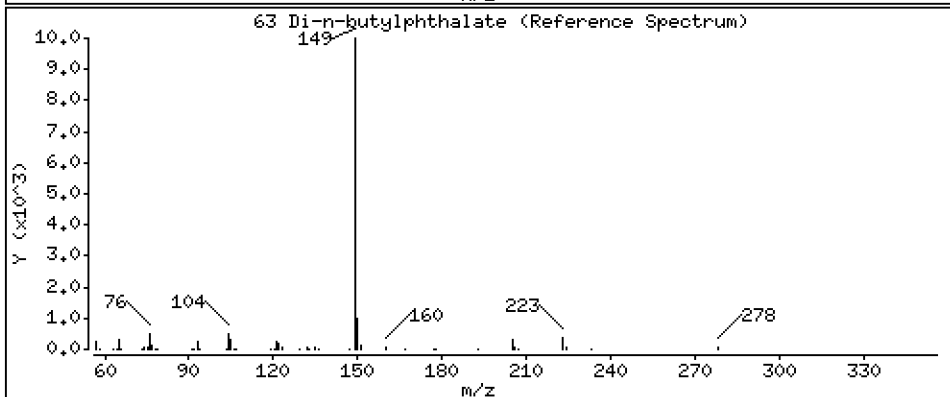
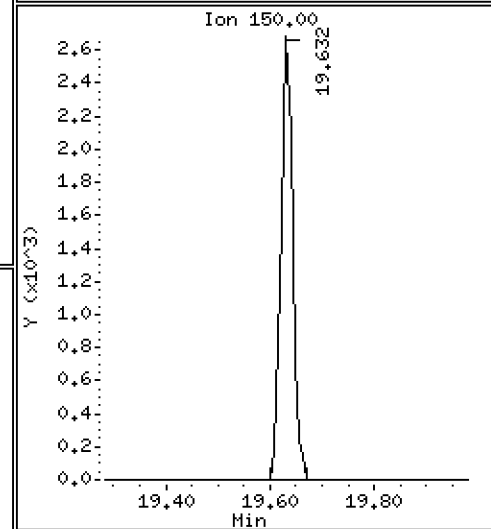
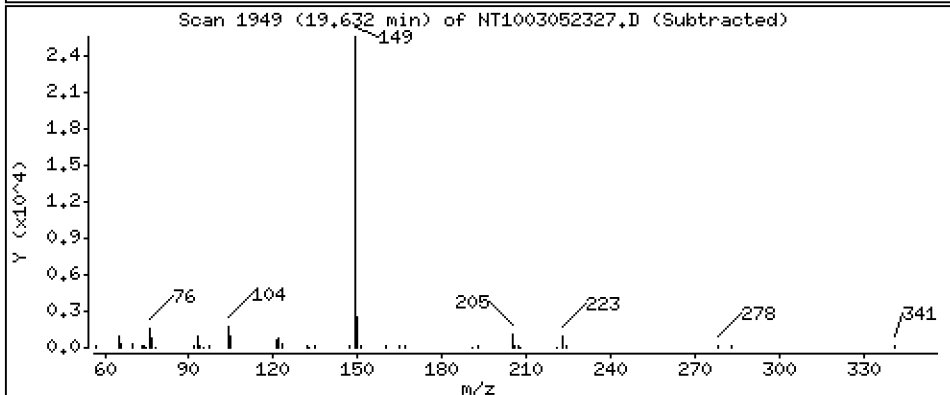
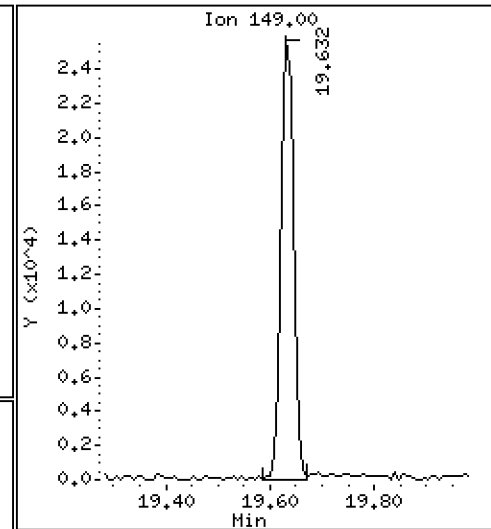
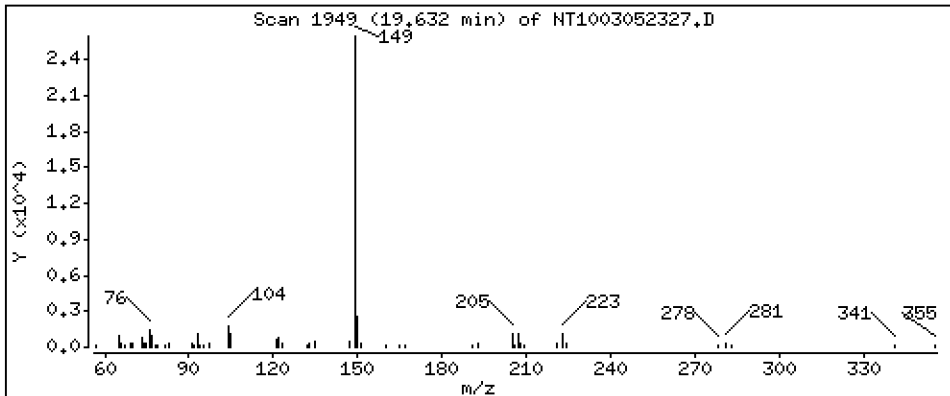
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1700 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

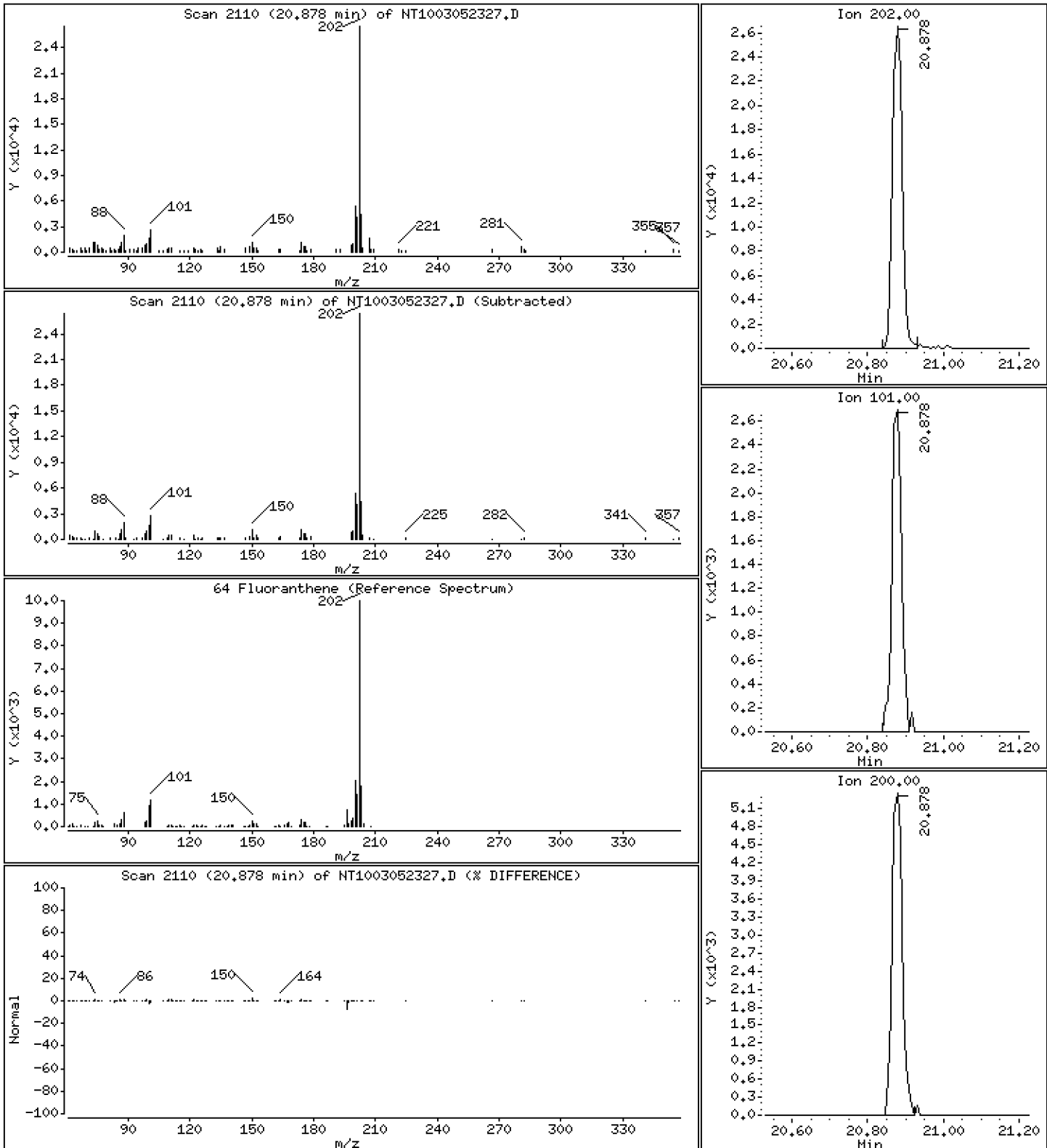
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,1807 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

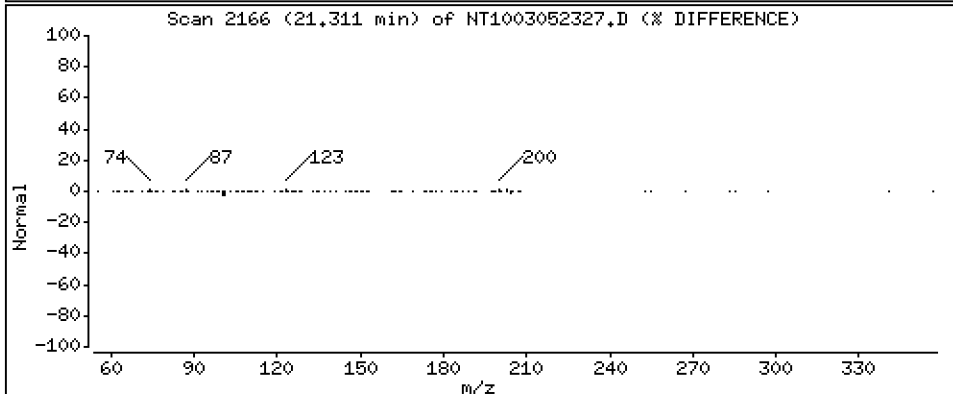
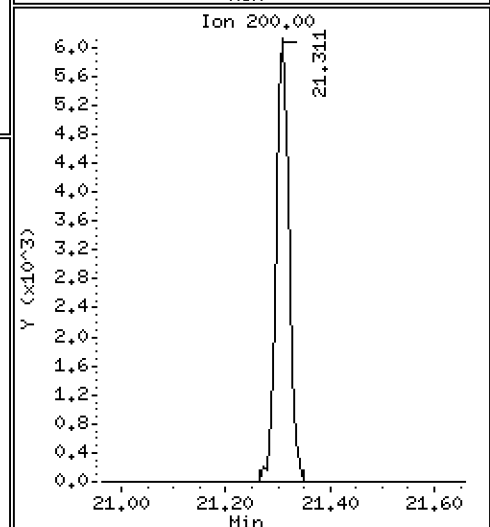
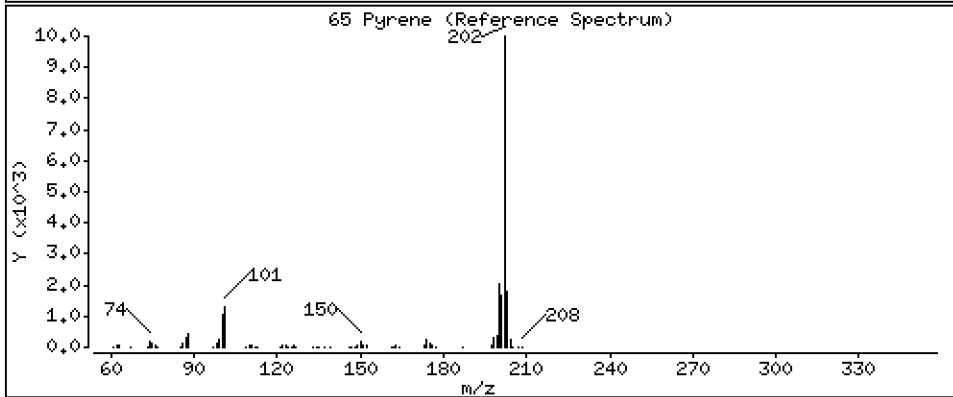
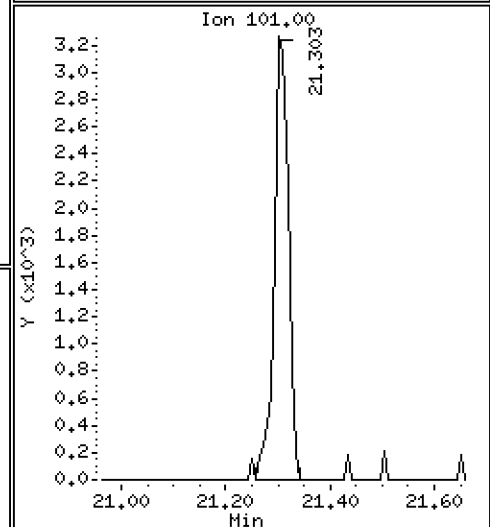
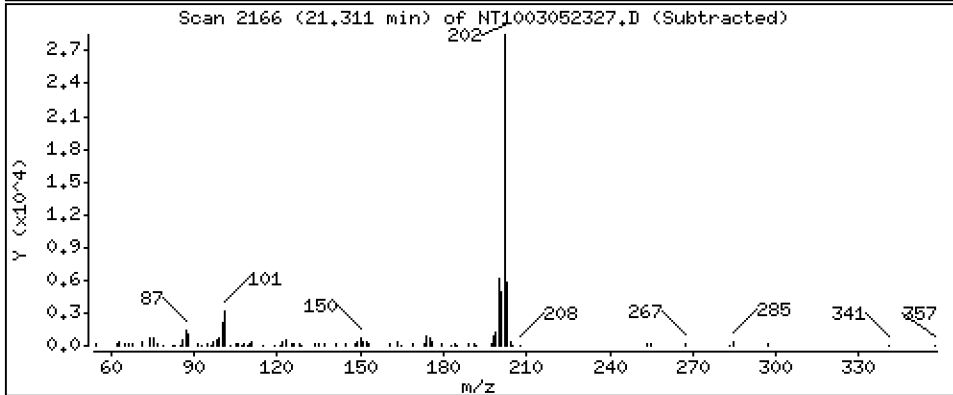
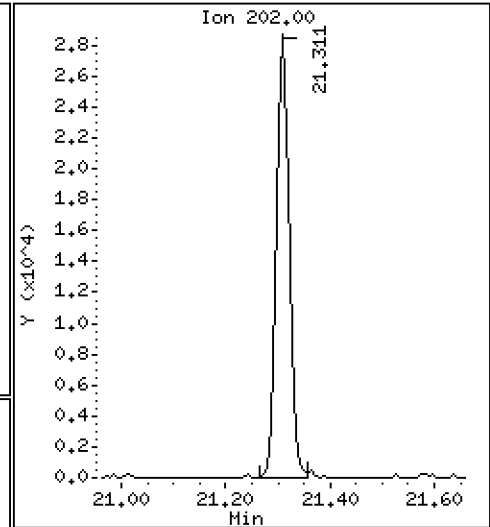
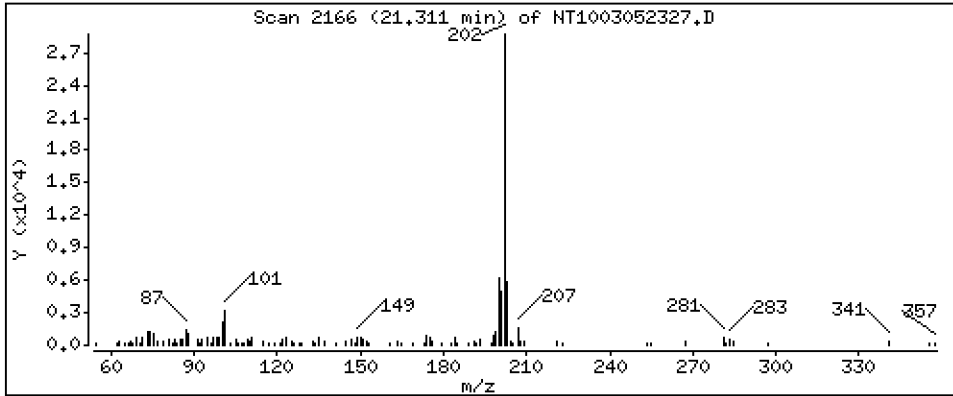
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,1824 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

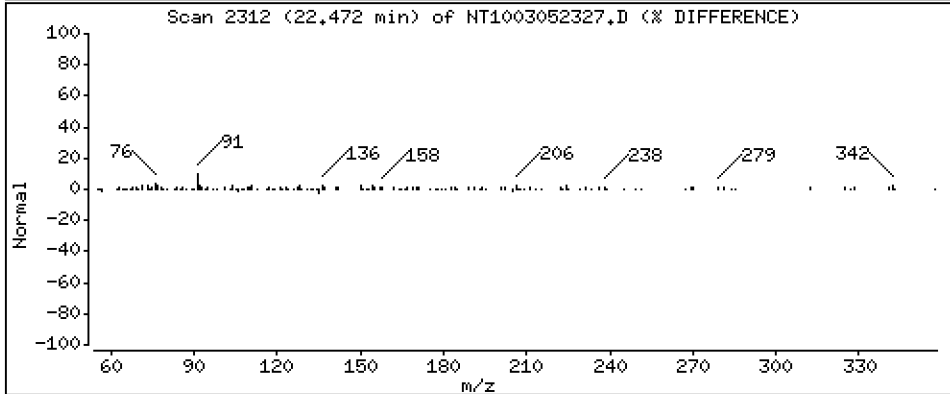
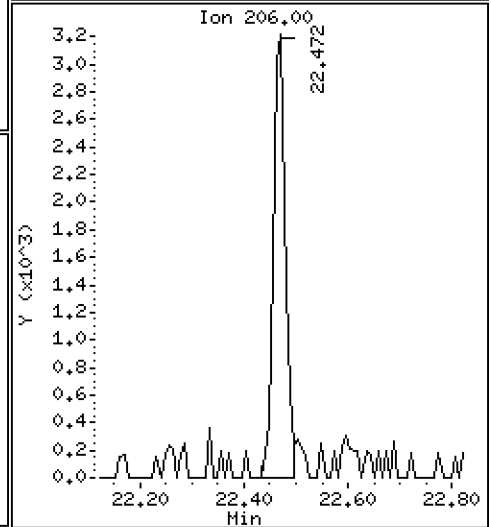
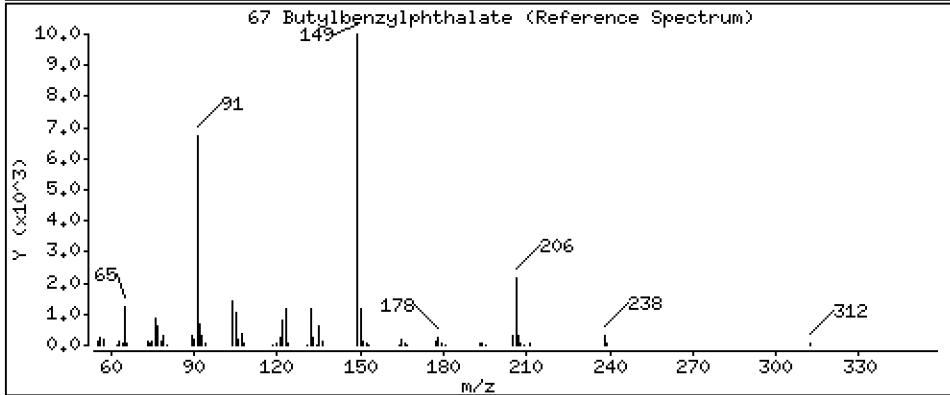
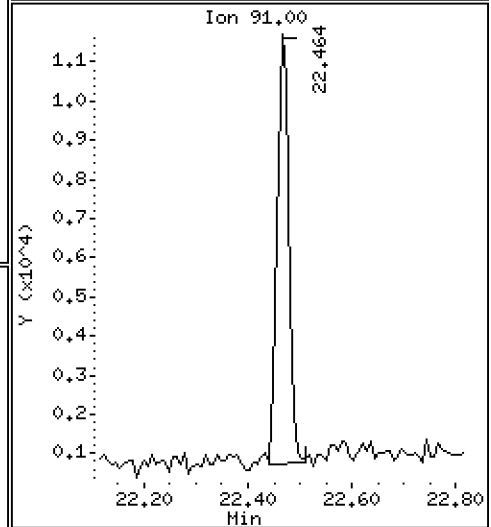
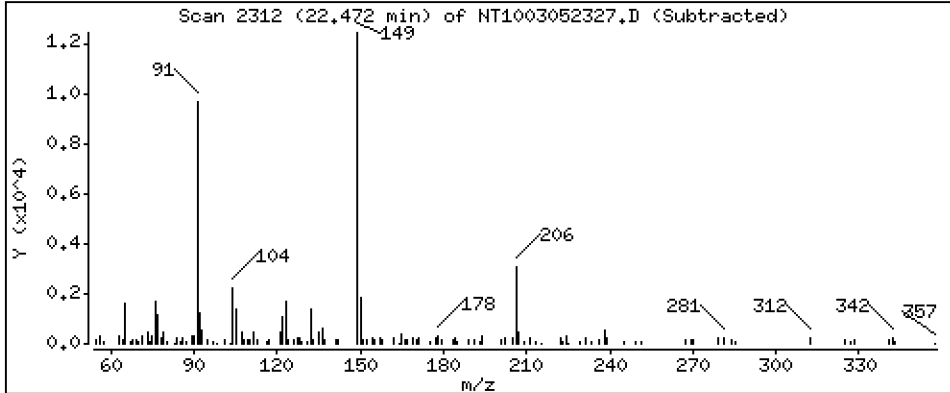
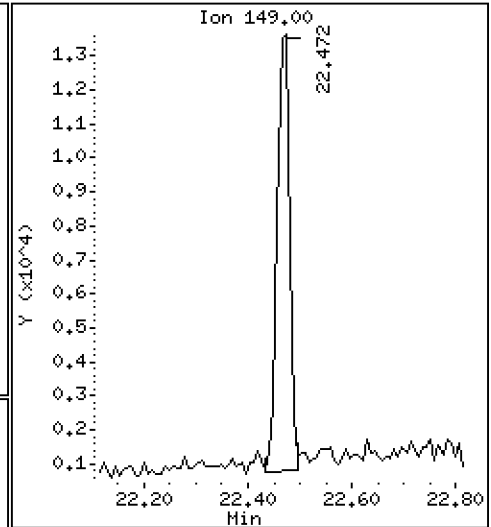
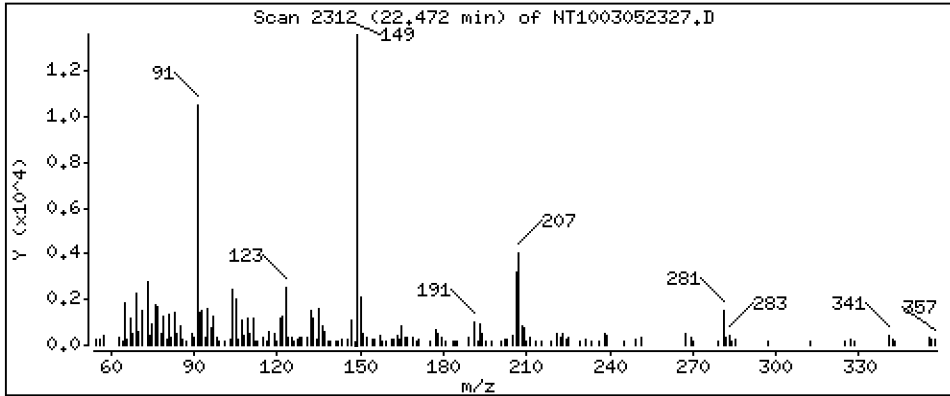
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1500 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

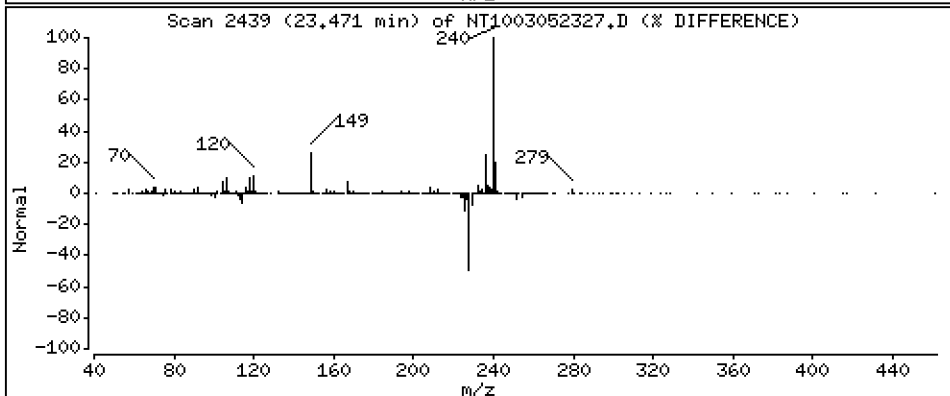
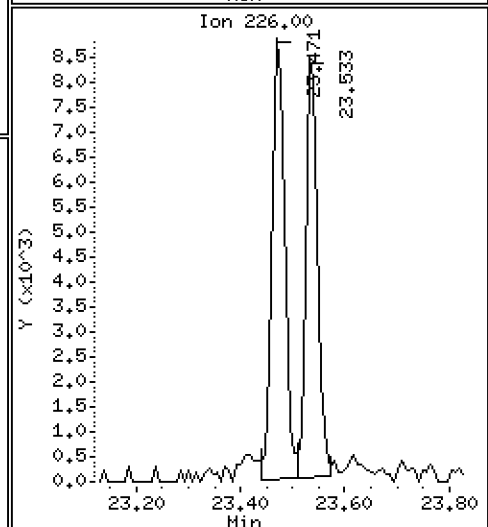
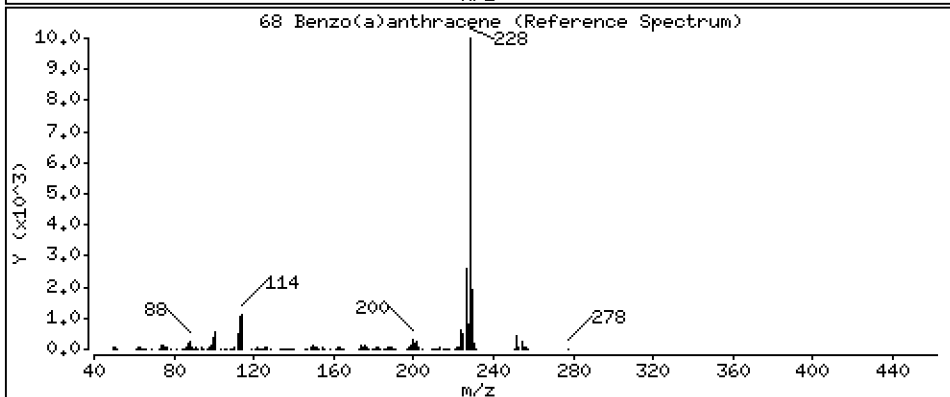
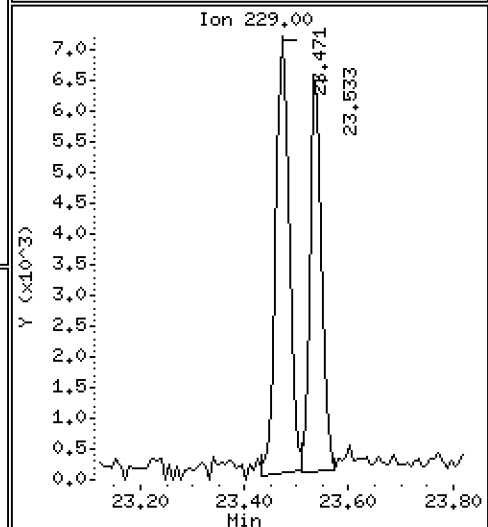
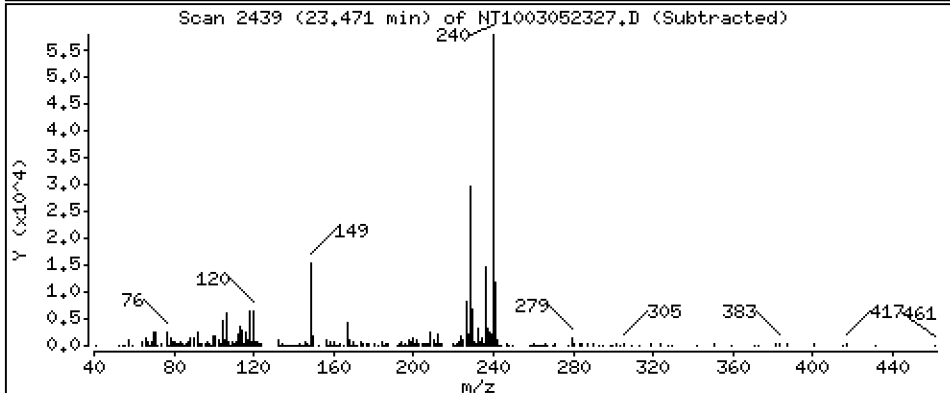
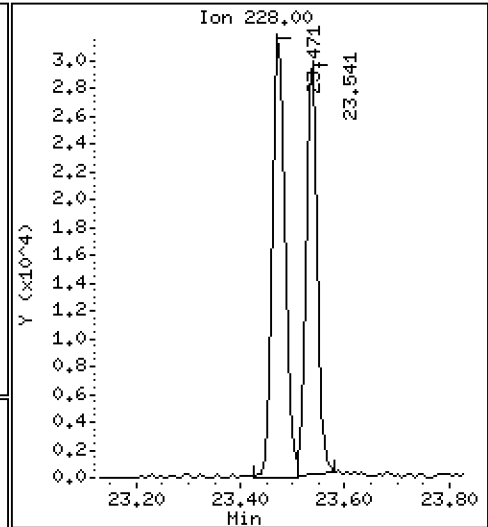
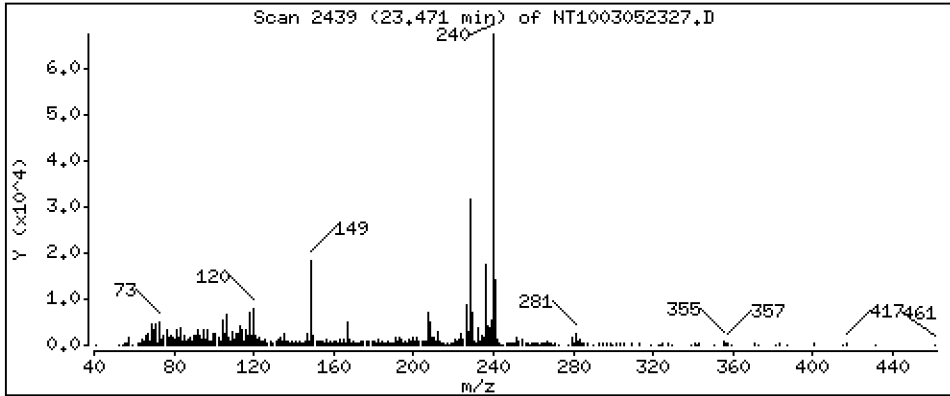
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,2043 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

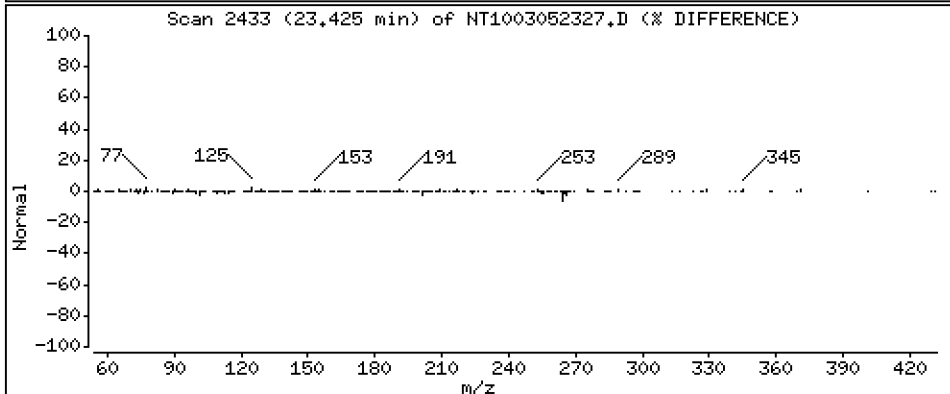
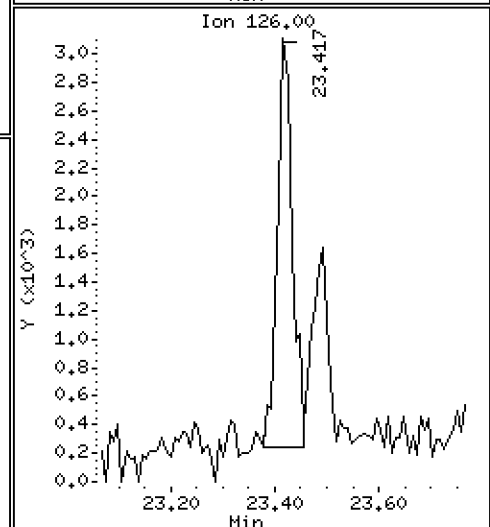
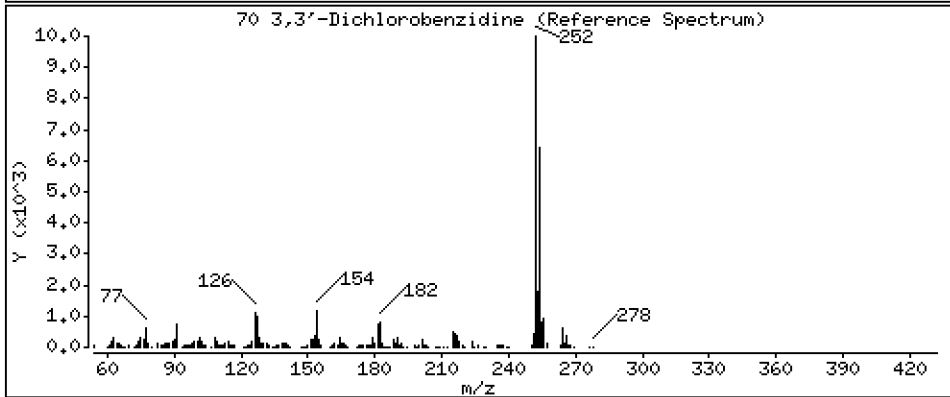
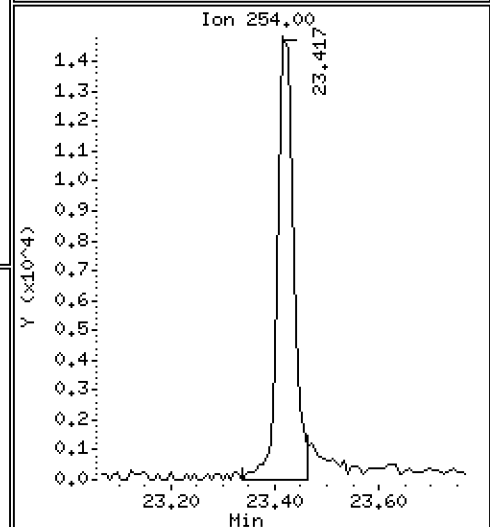
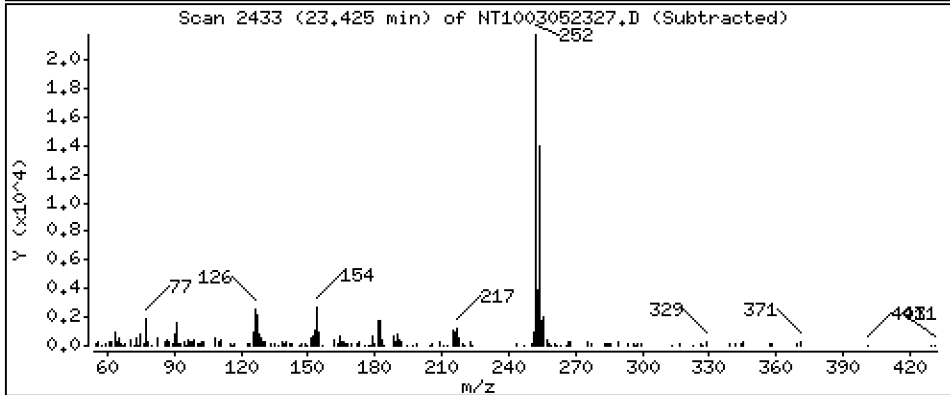
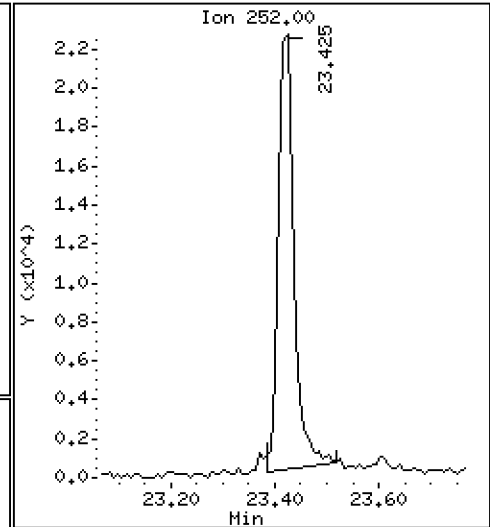
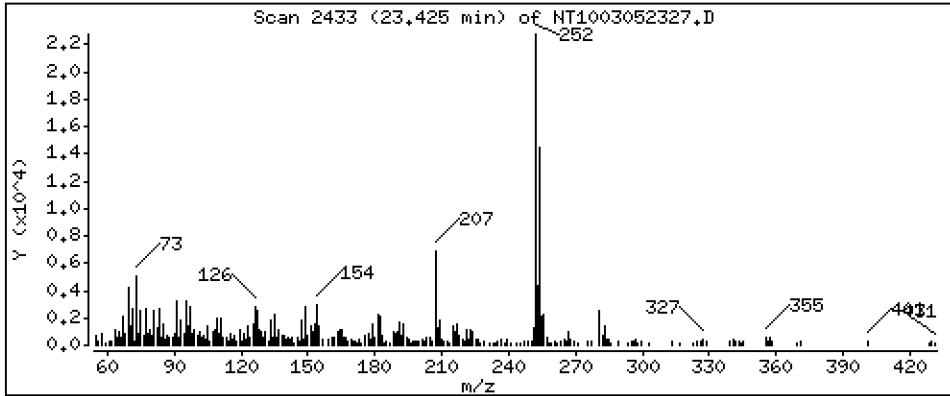
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,3940 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

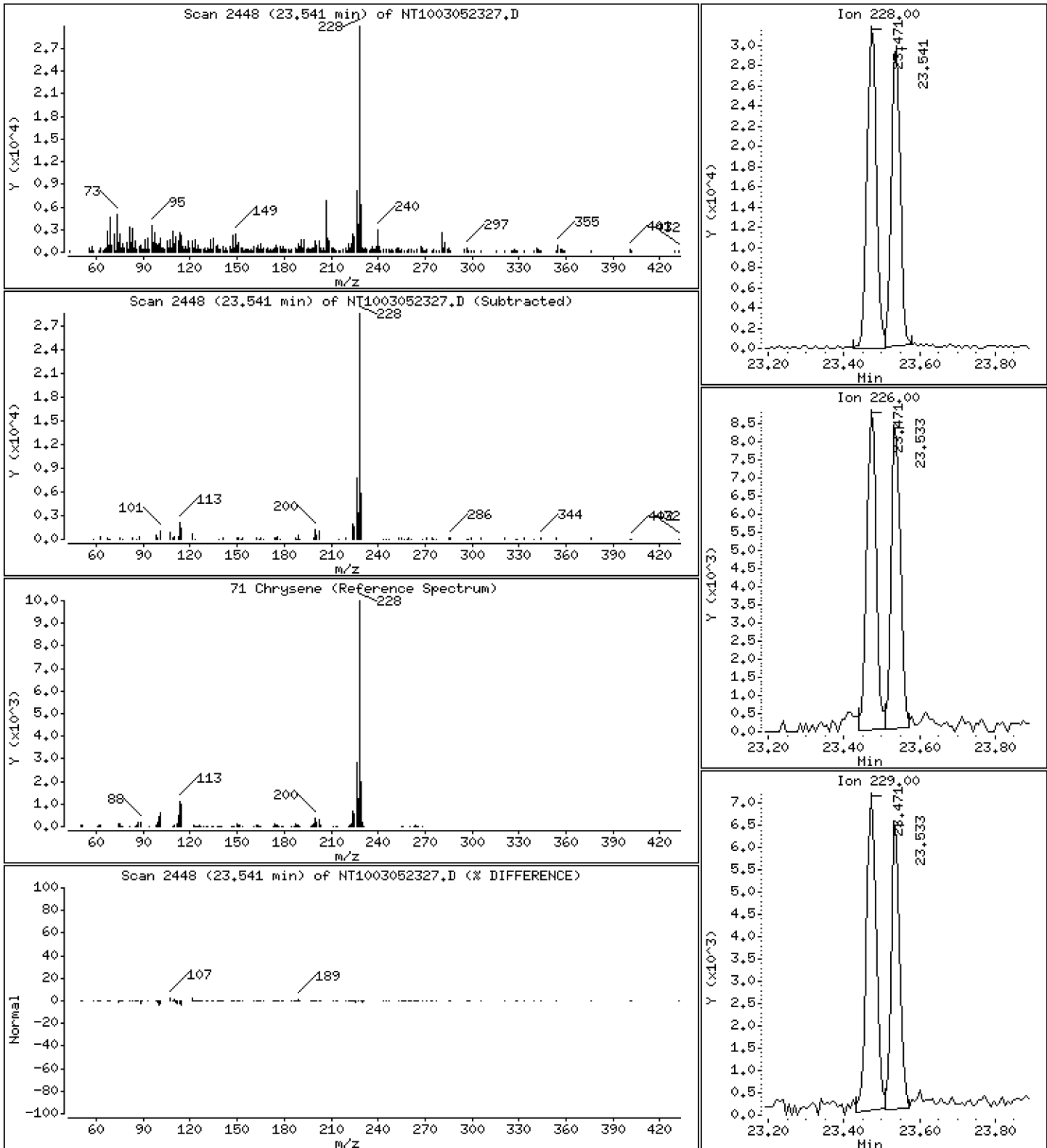
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2202 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

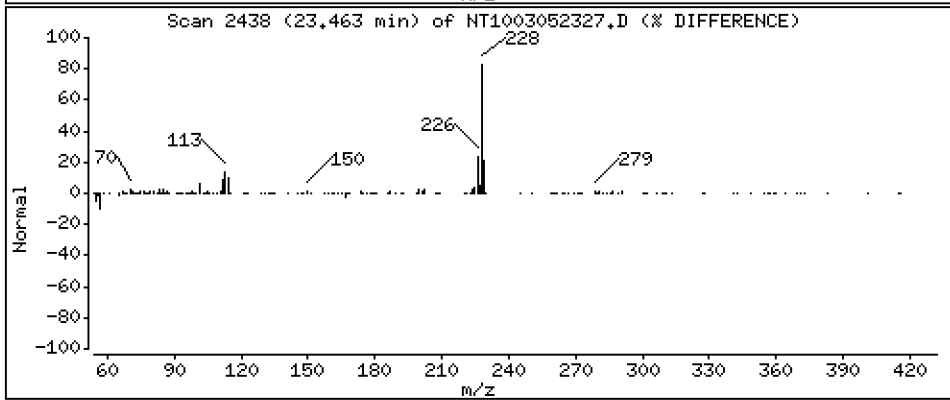
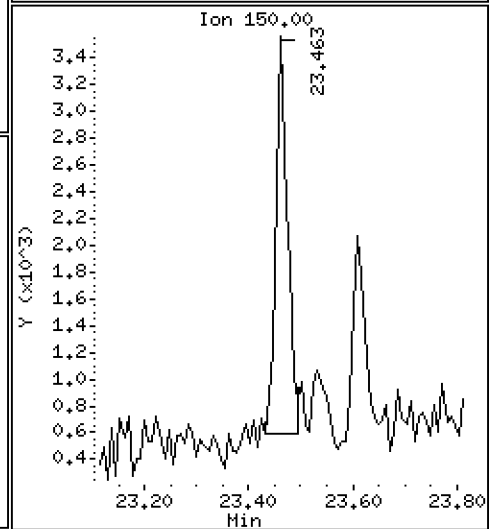
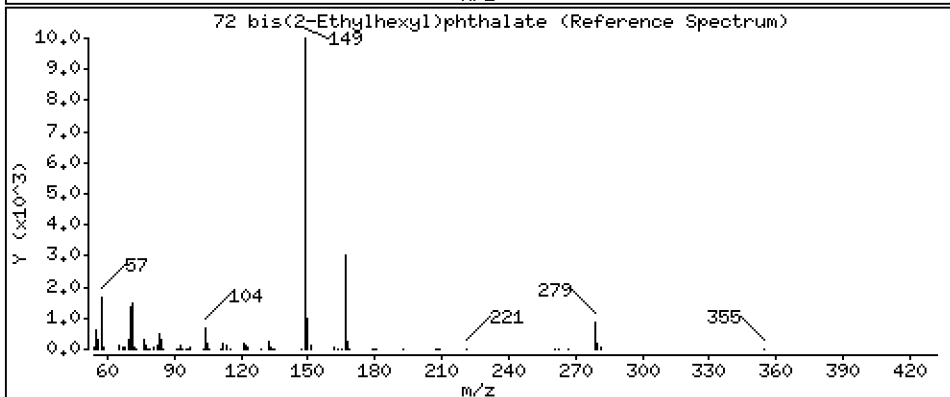
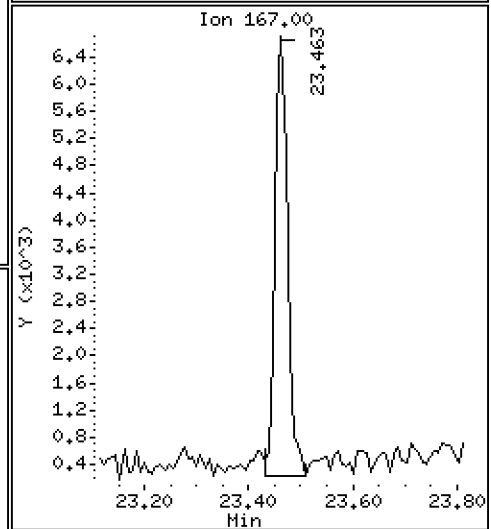
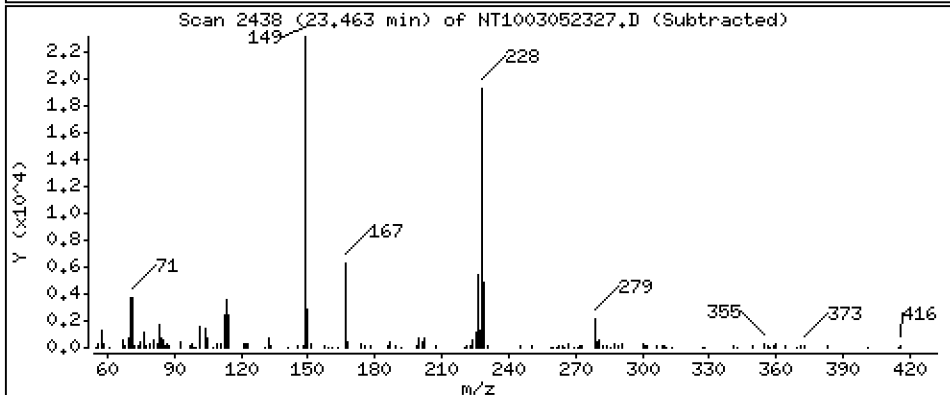
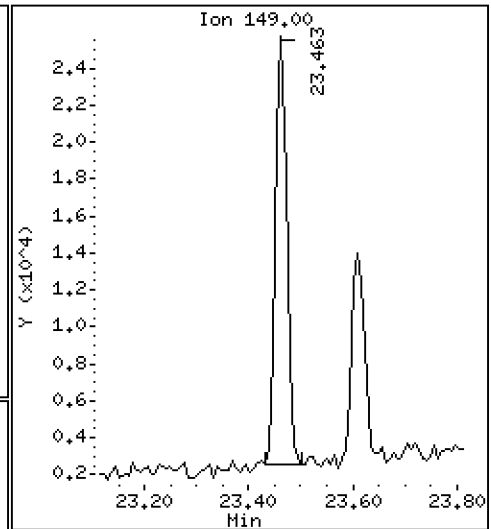
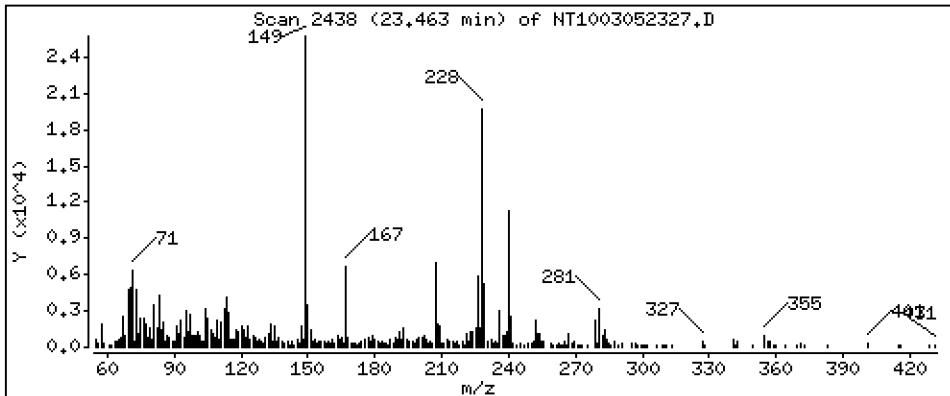
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0.1885 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

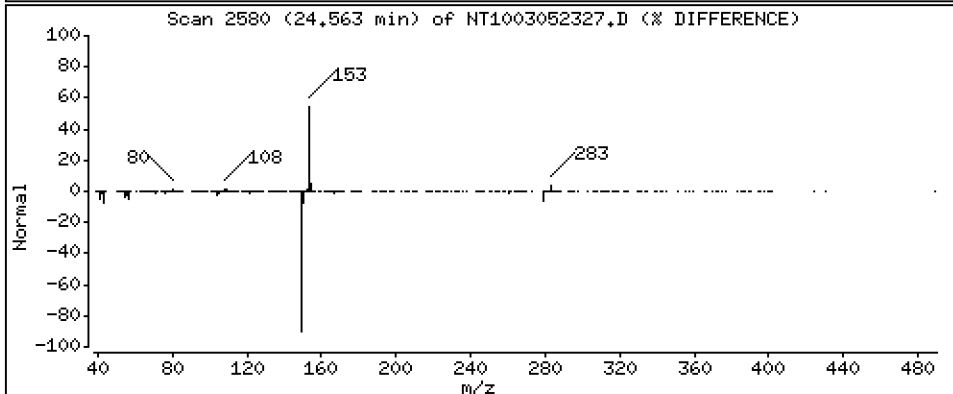
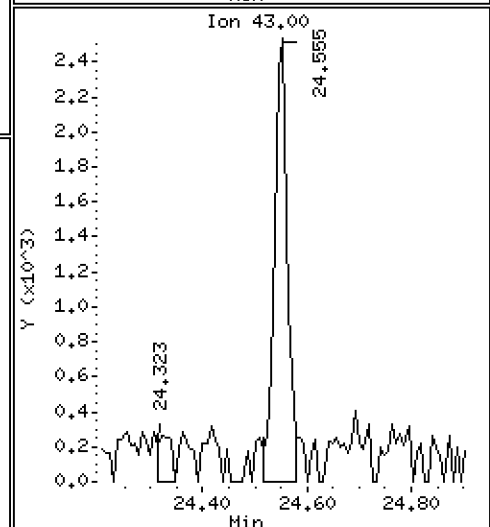
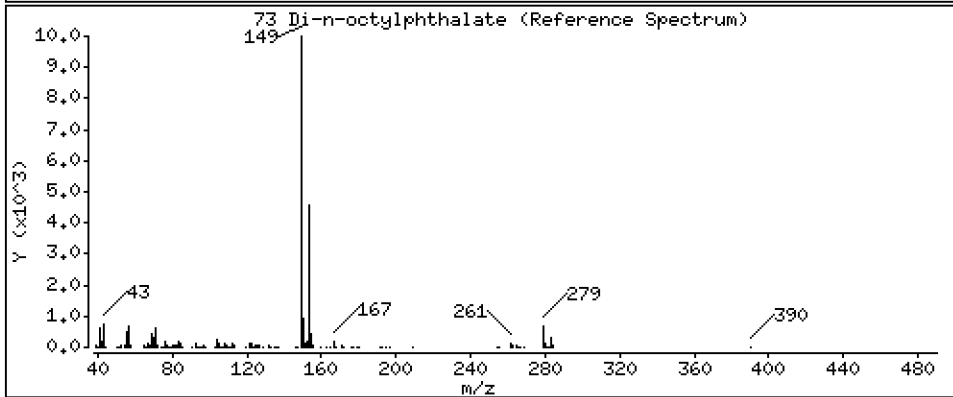
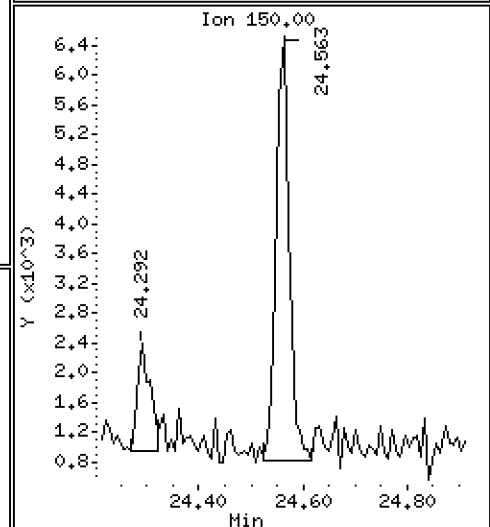
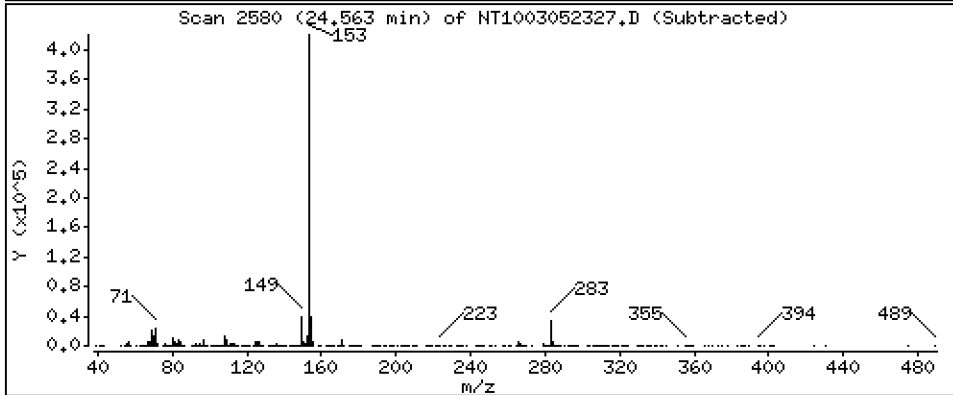
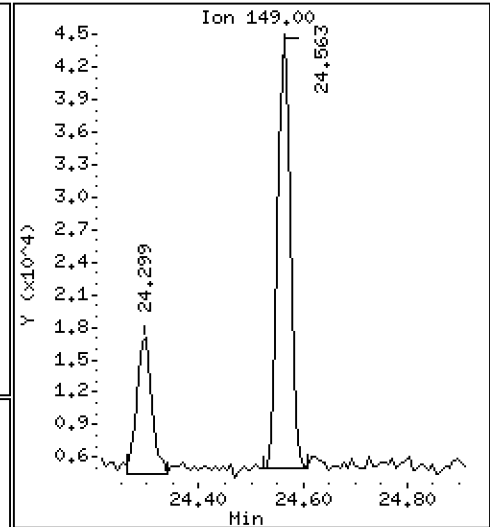
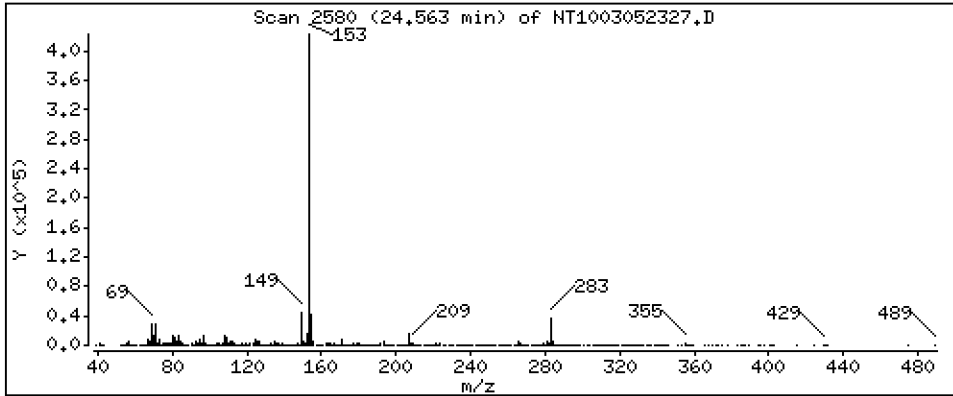
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2320 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

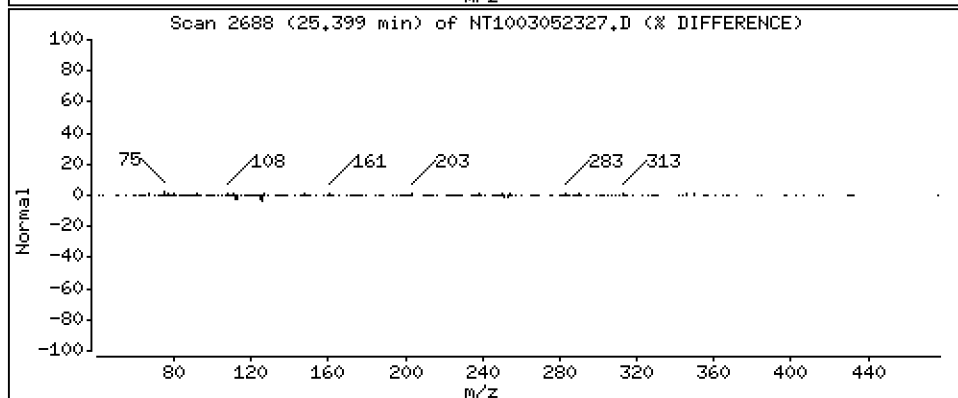
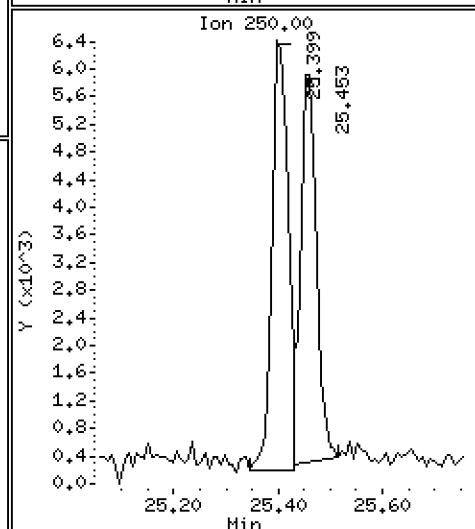
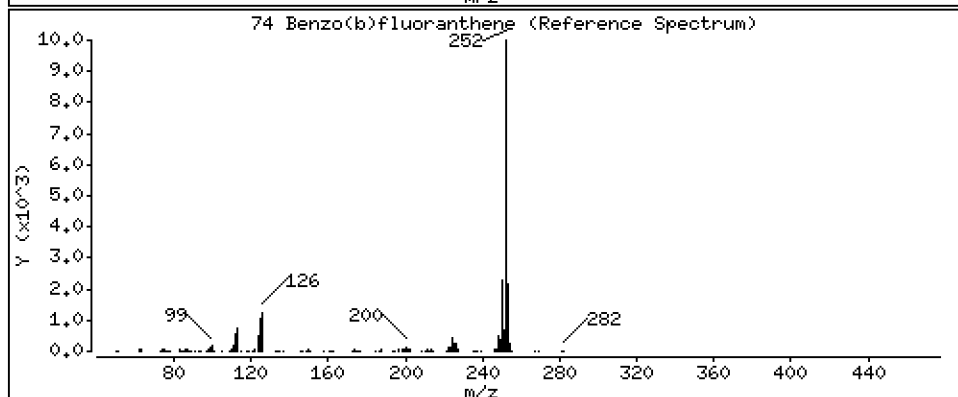
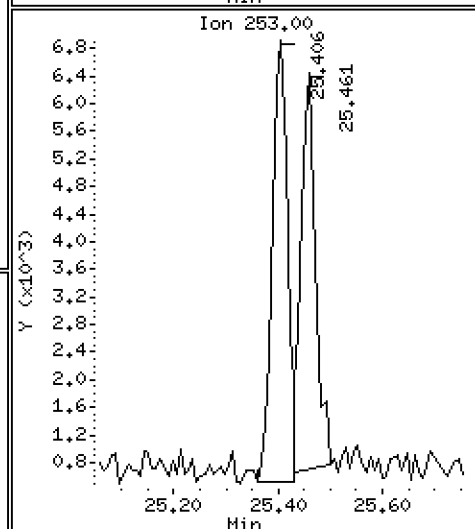
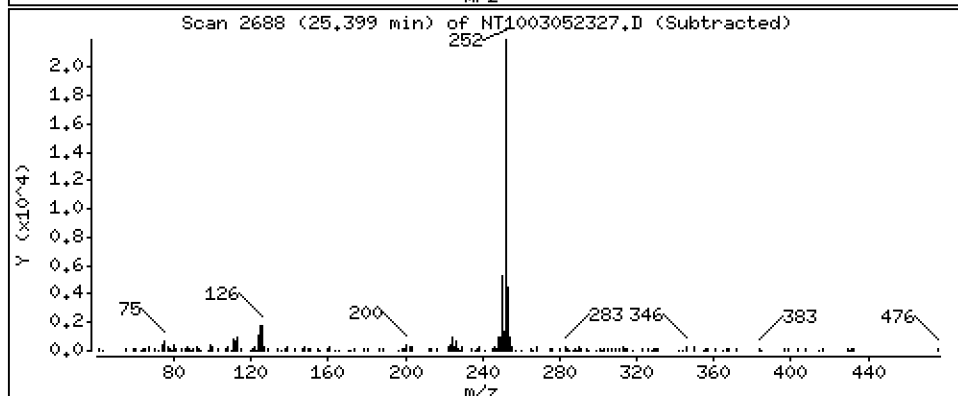
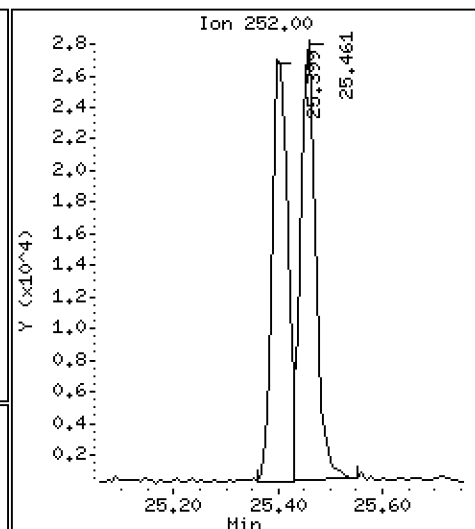
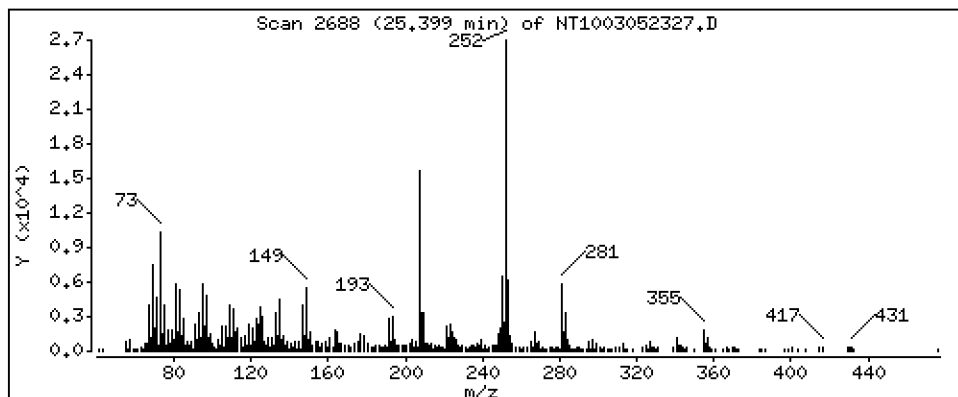
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1774 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

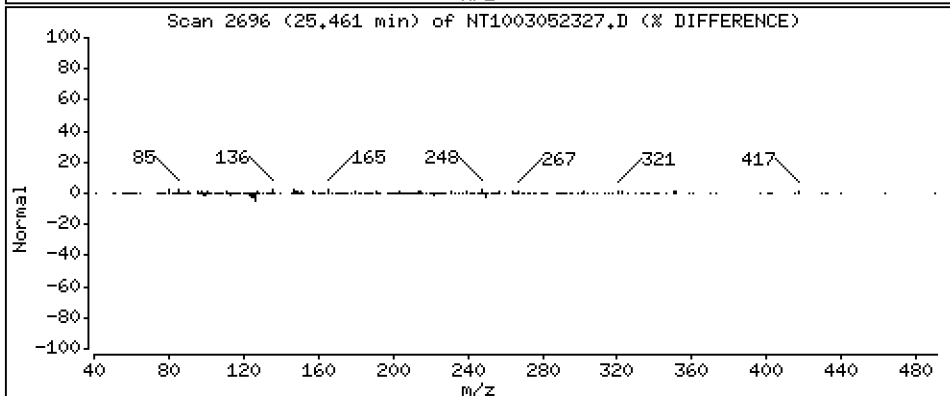
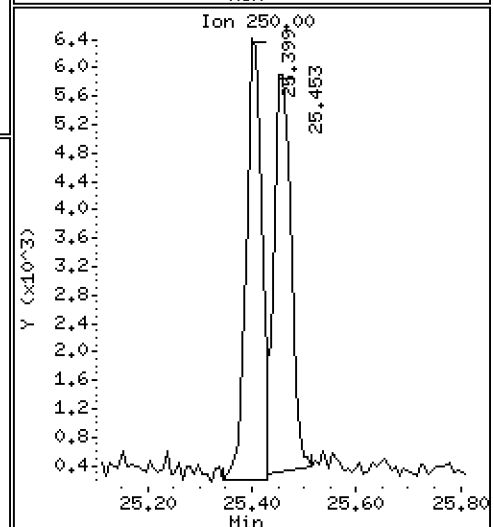
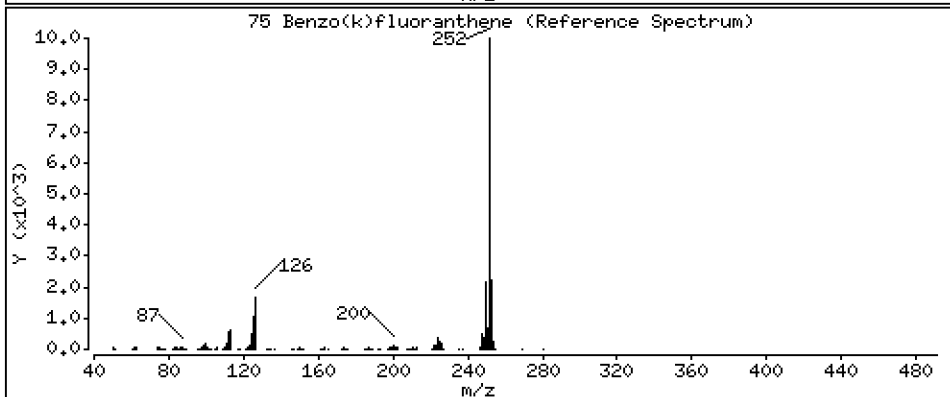
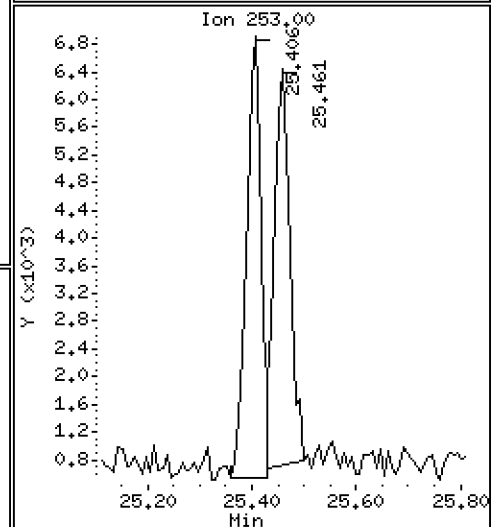
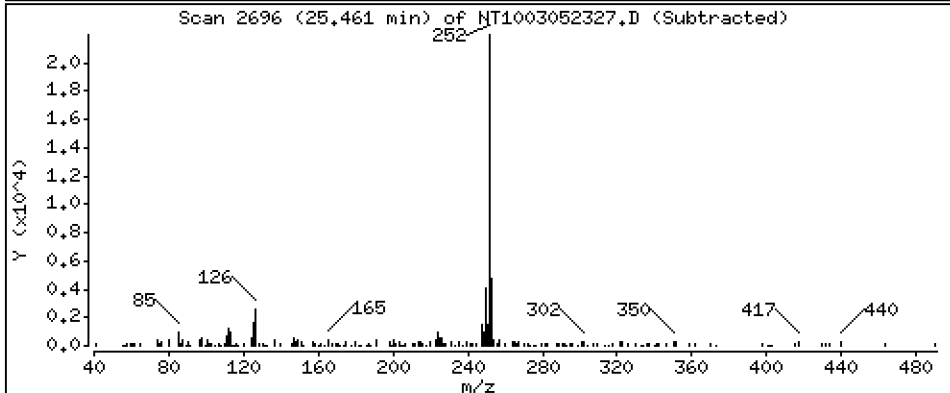
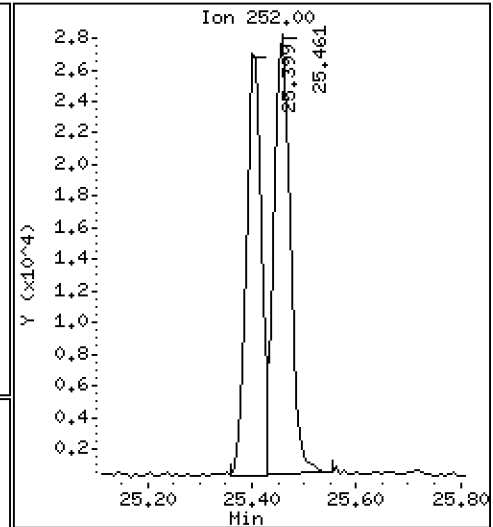
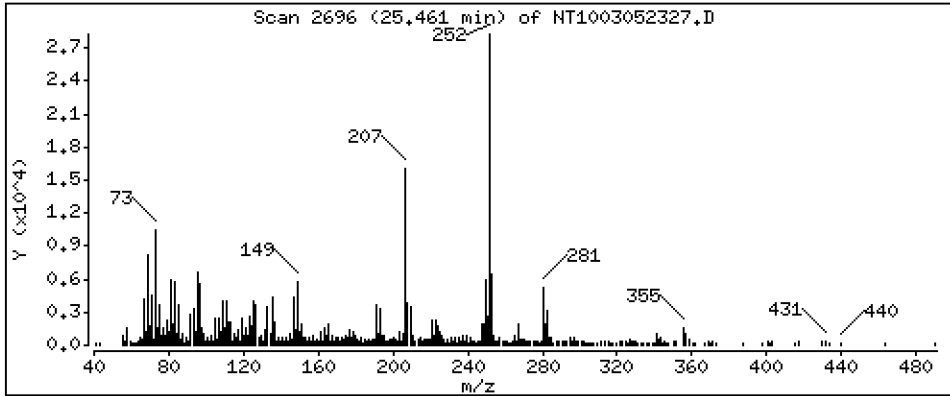
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,2045 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

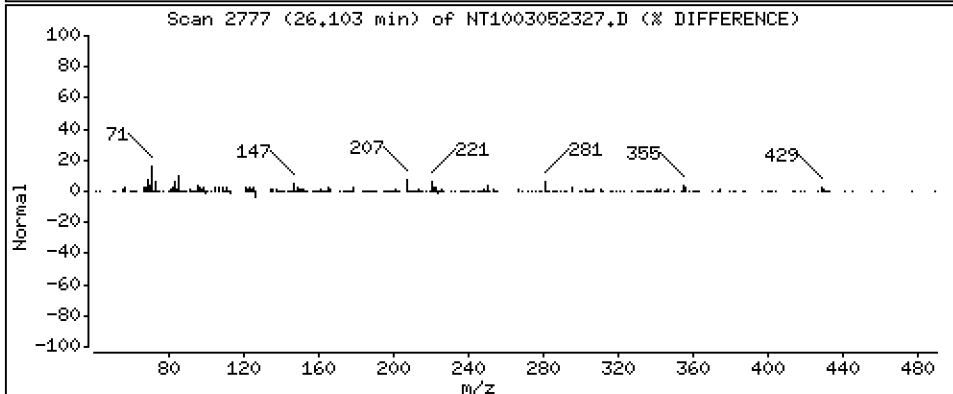
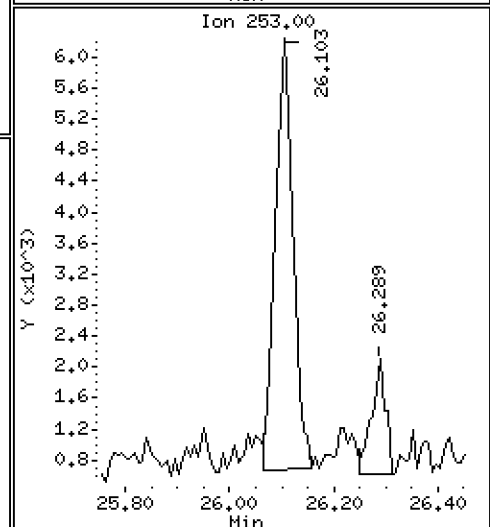
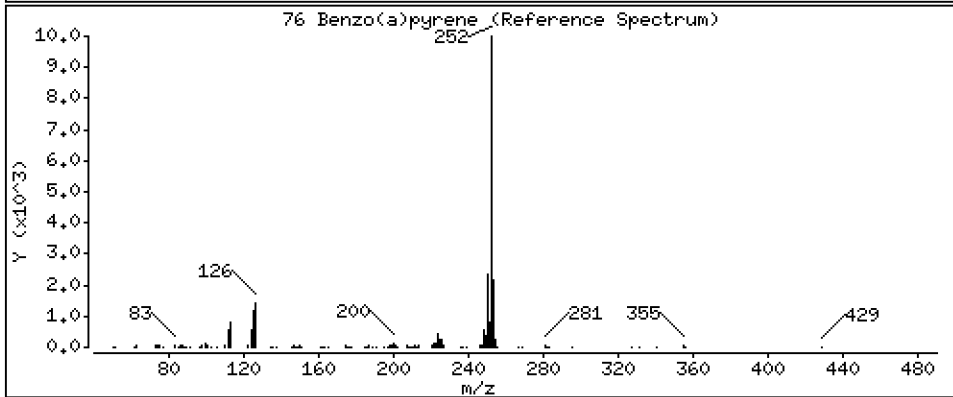
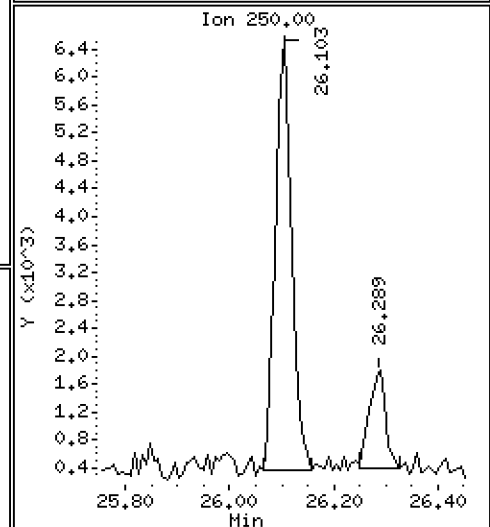
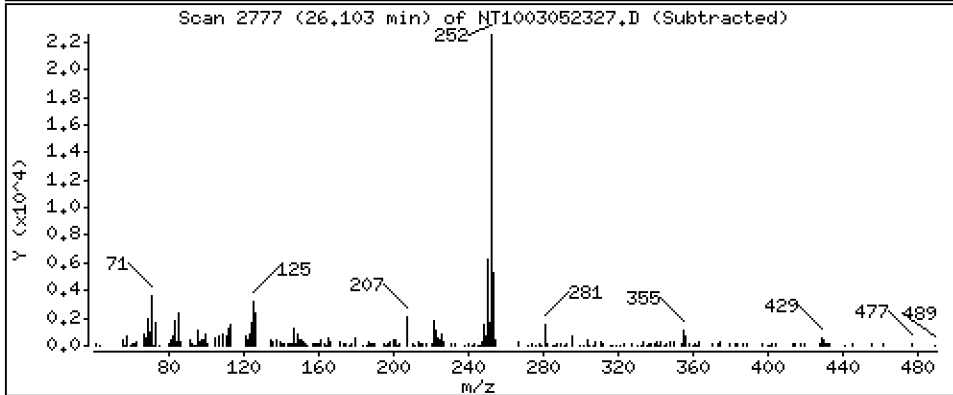
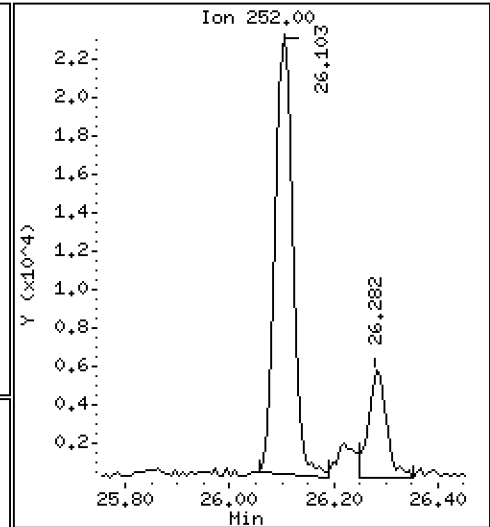
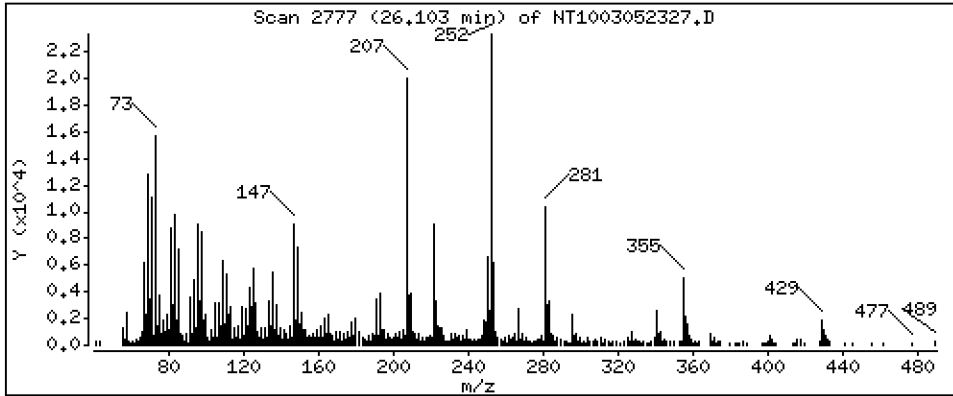
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1919 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

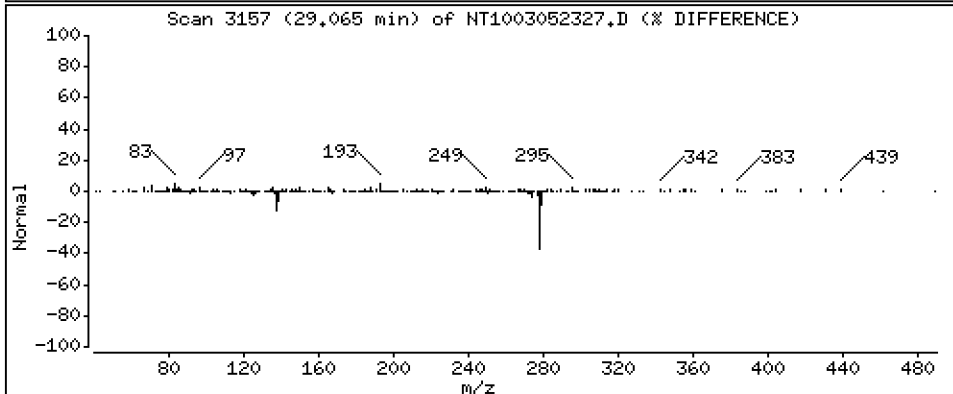
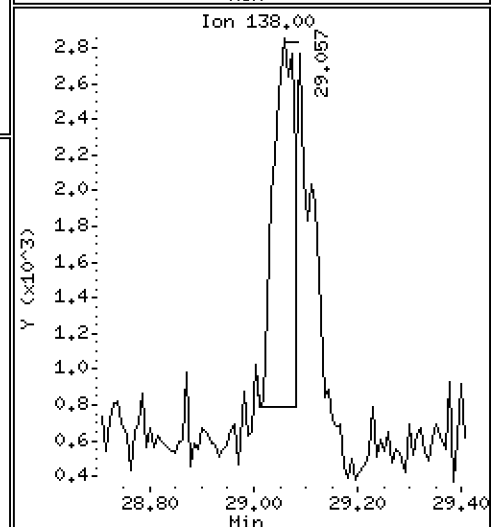
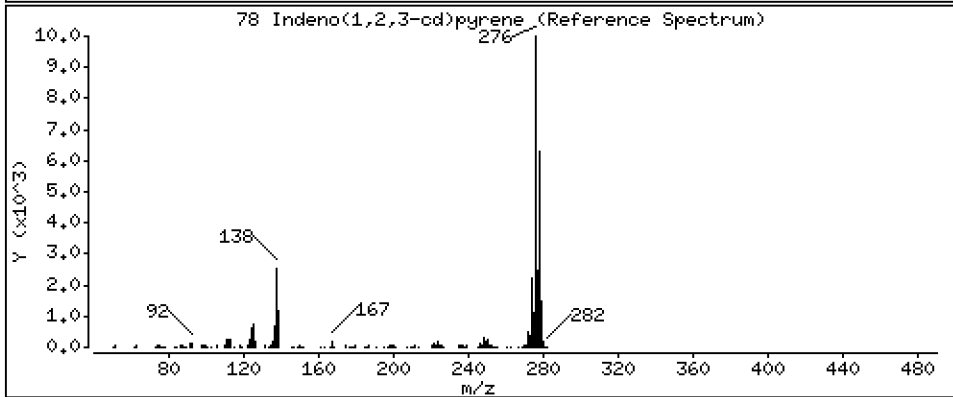
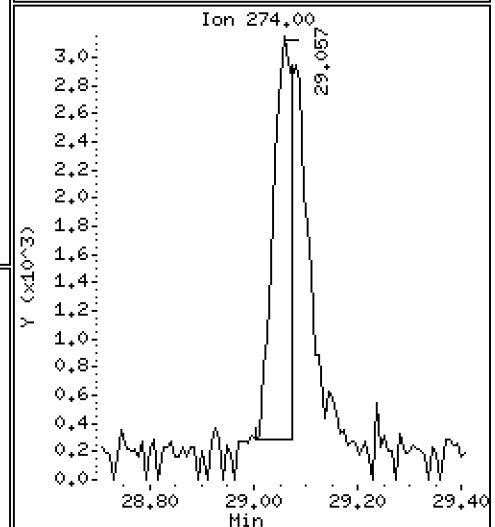
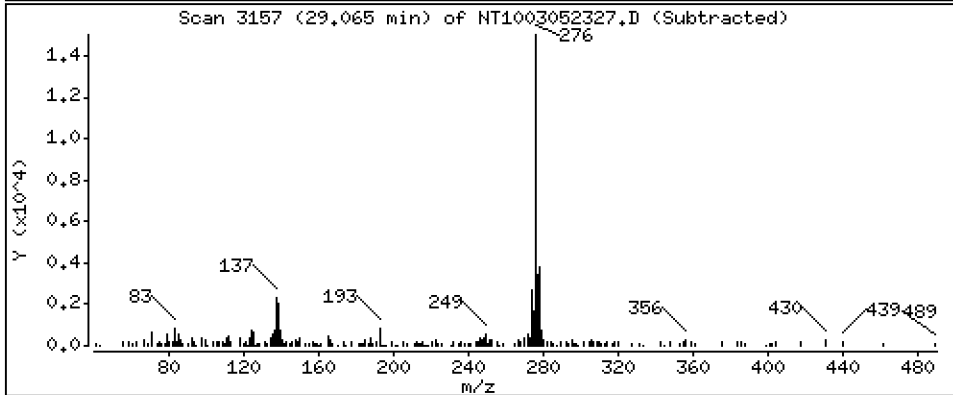
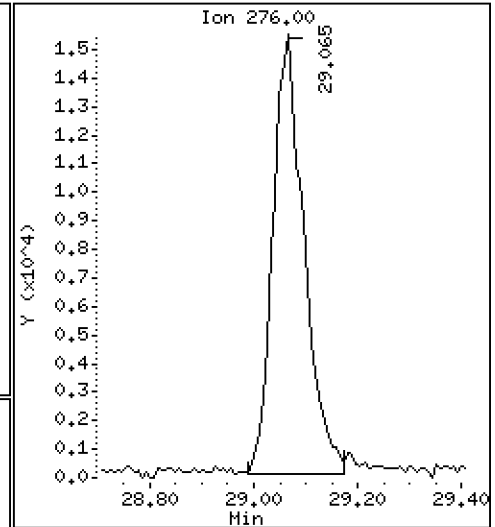
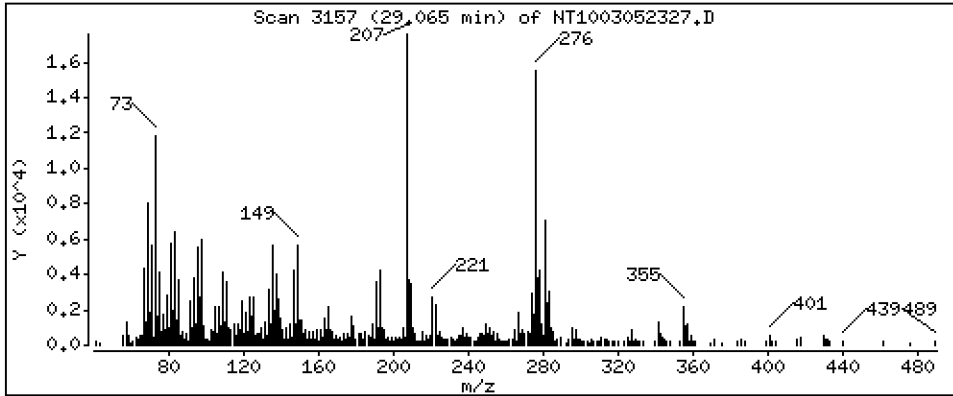
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1981 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

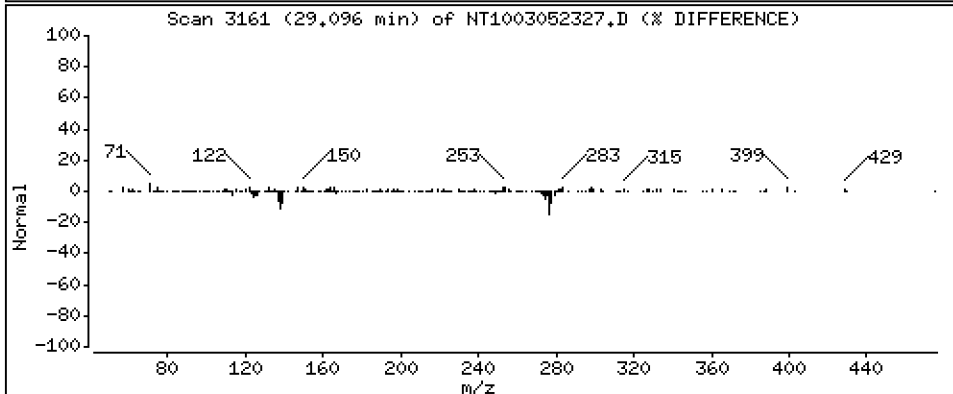
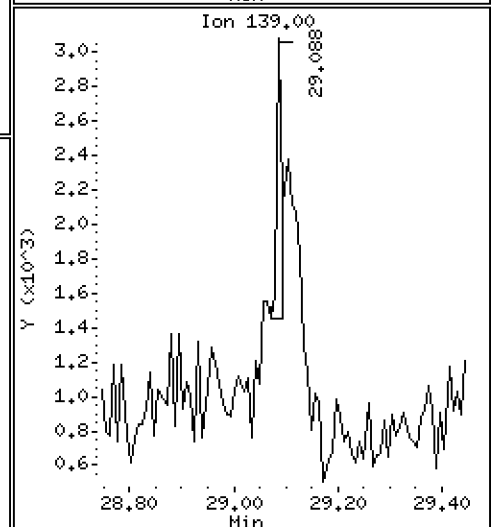
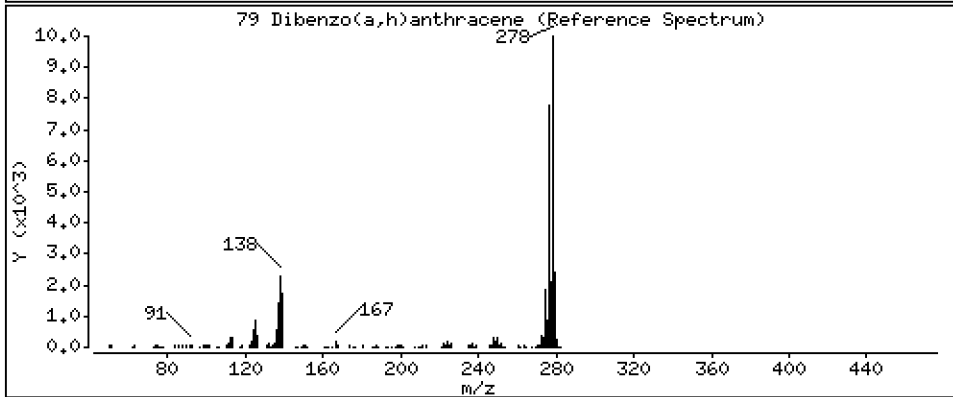
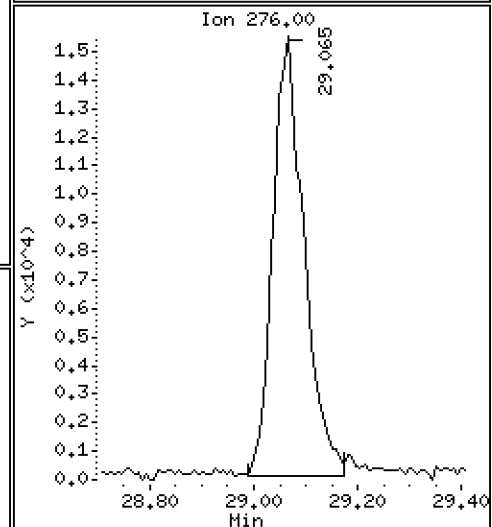
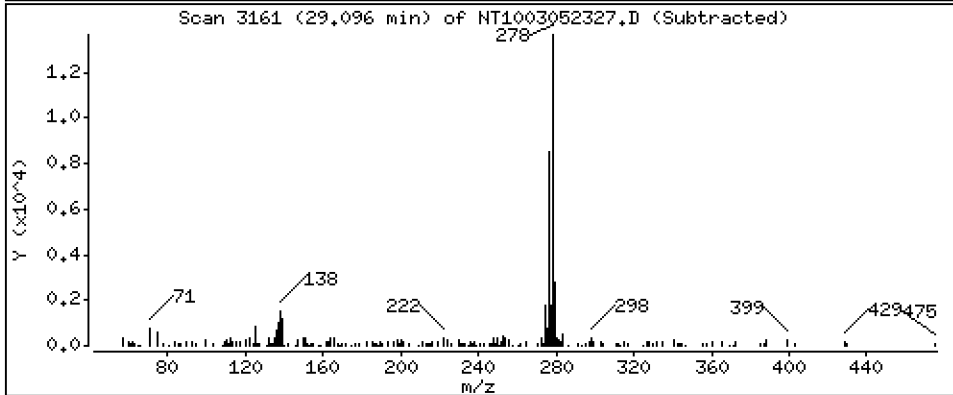
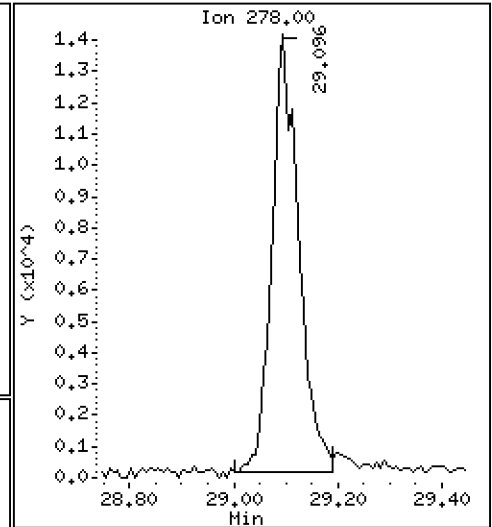
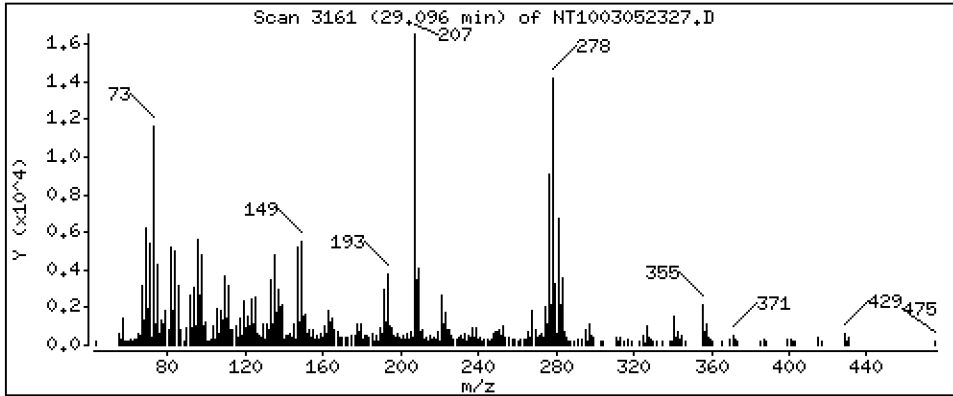
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2057 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

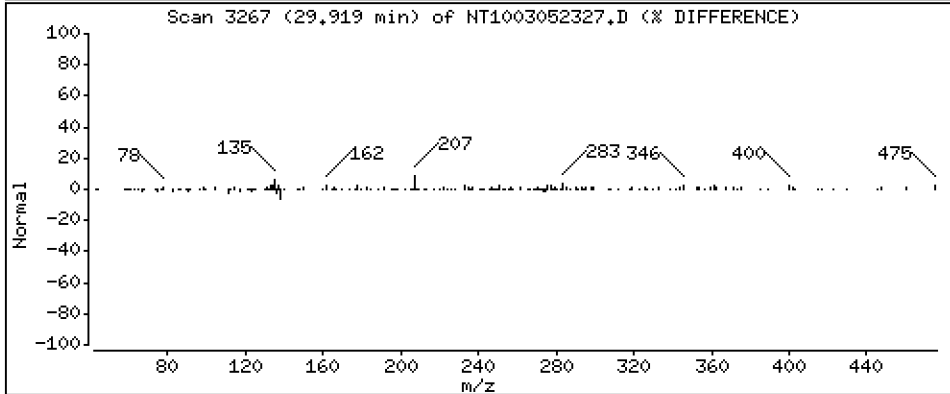
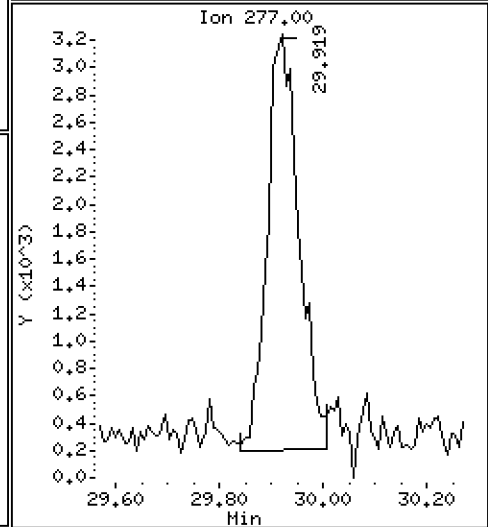
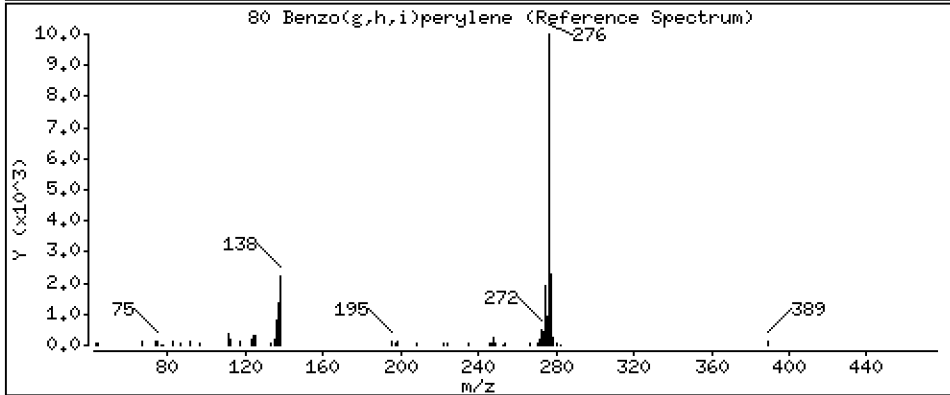
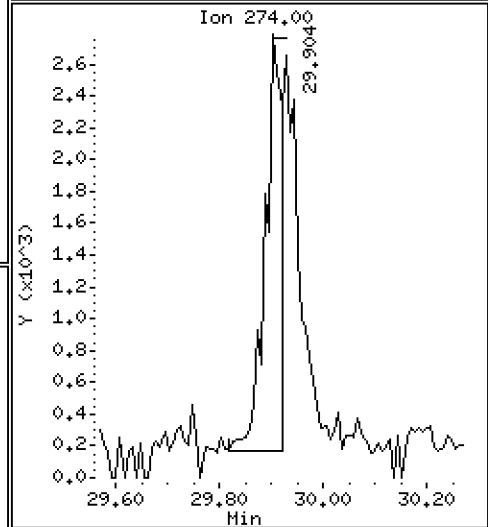
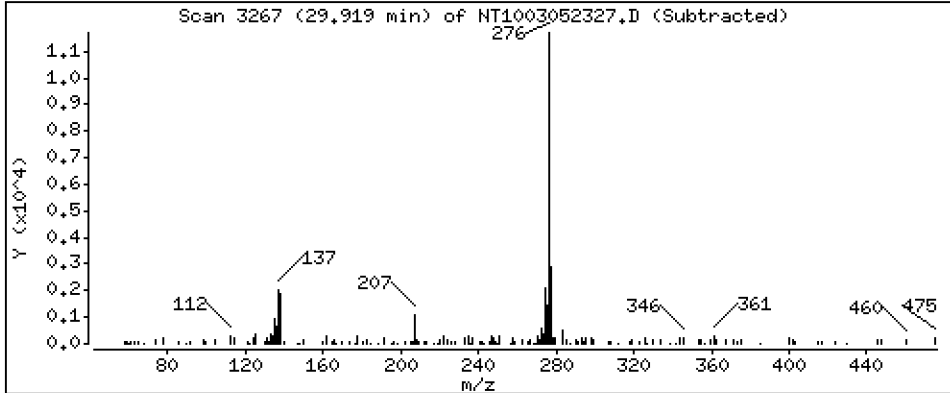
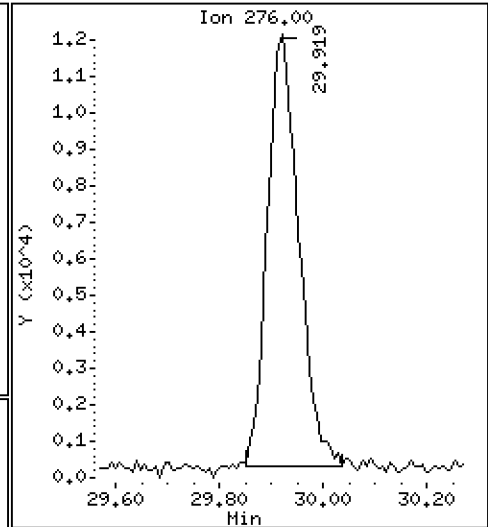
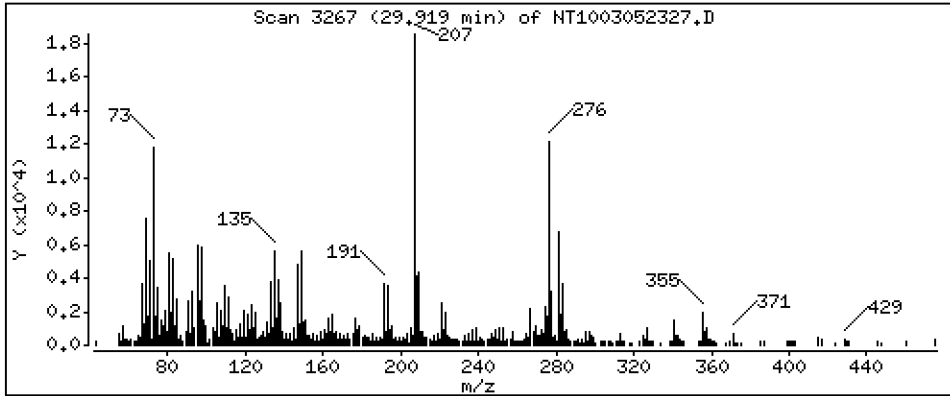
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1926 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

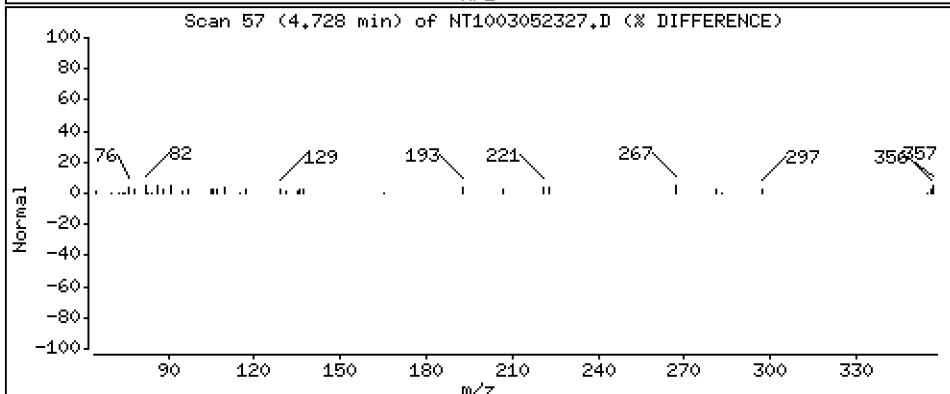
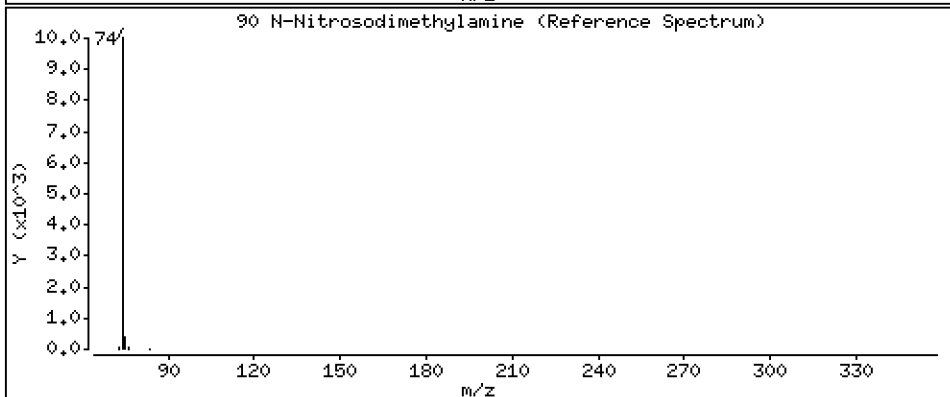
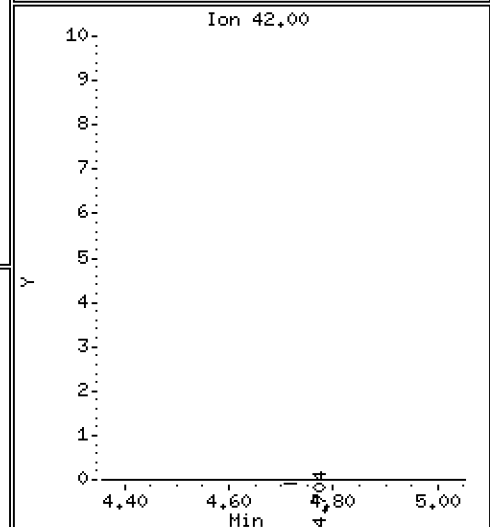
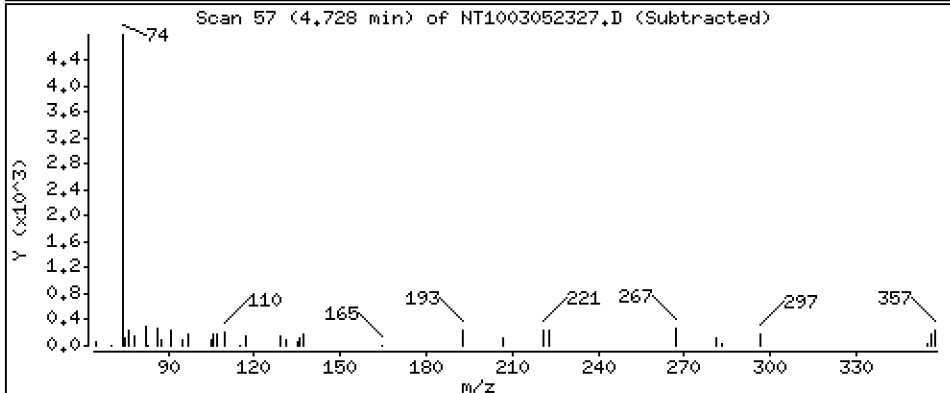
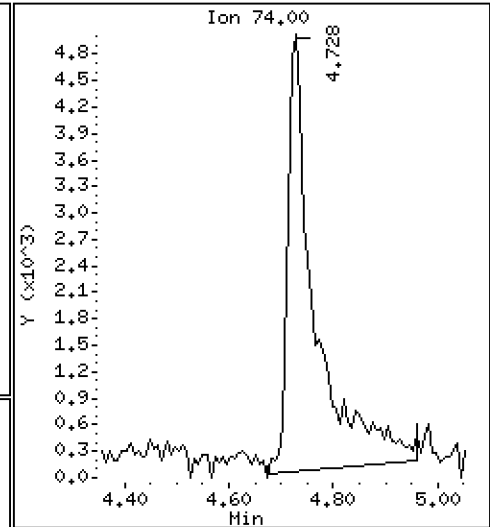
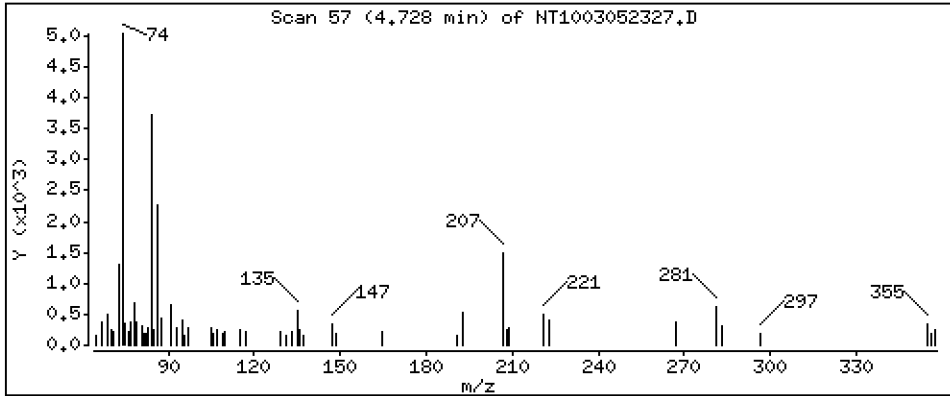
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,3880 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

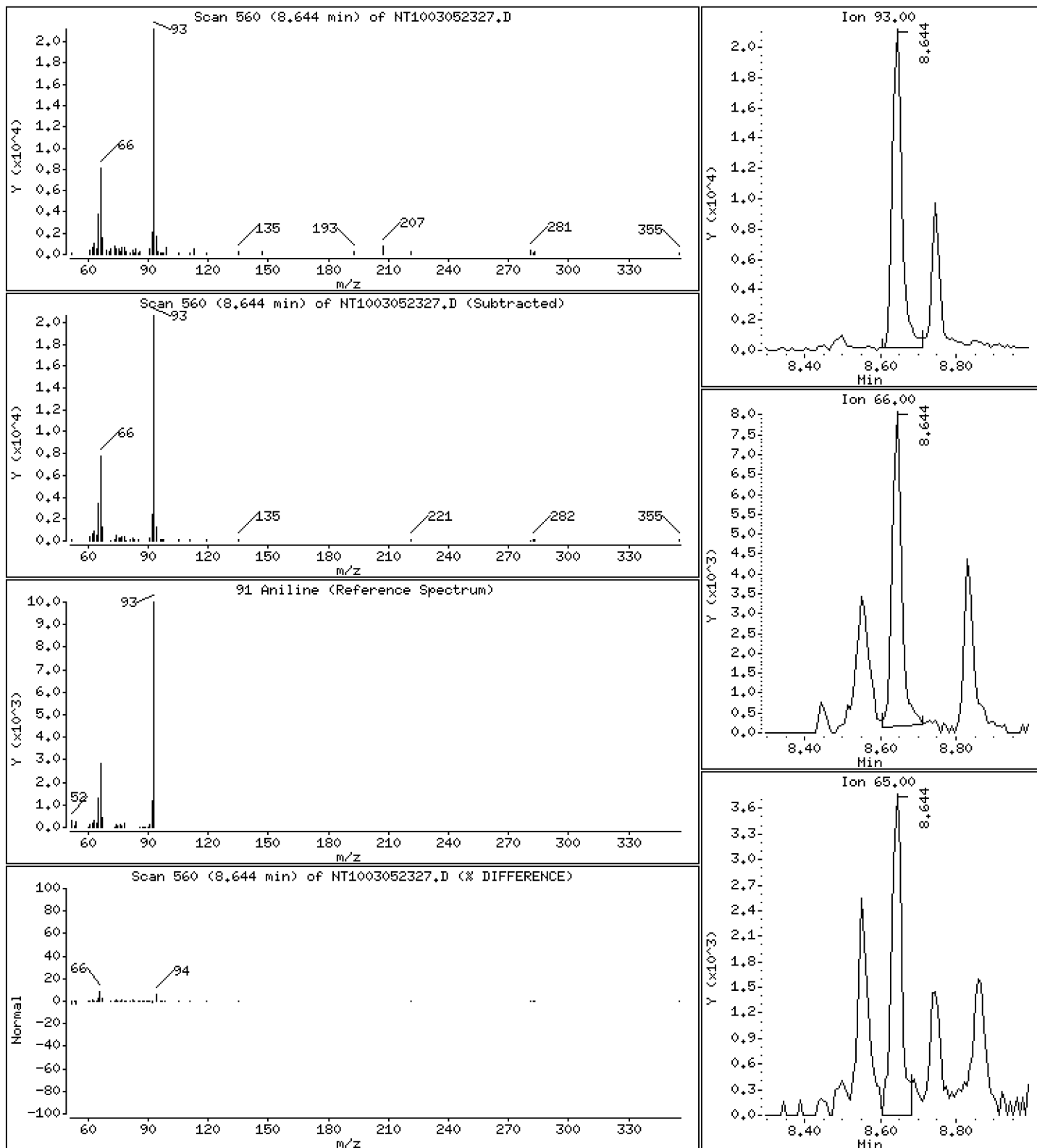
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3377 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

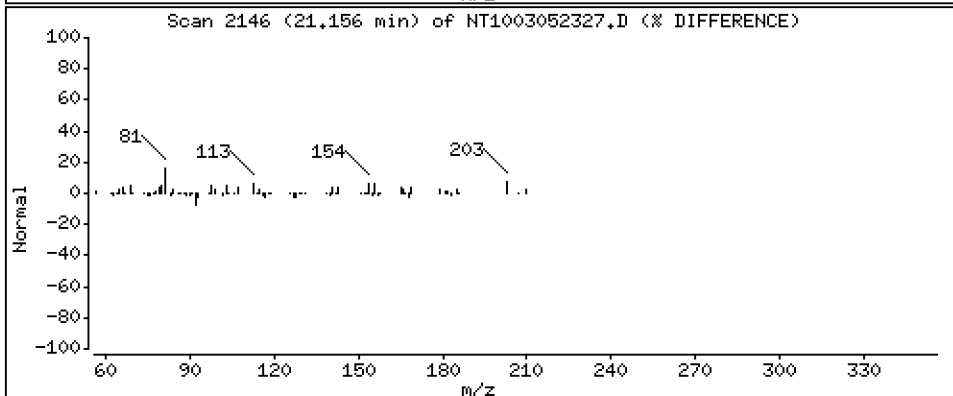
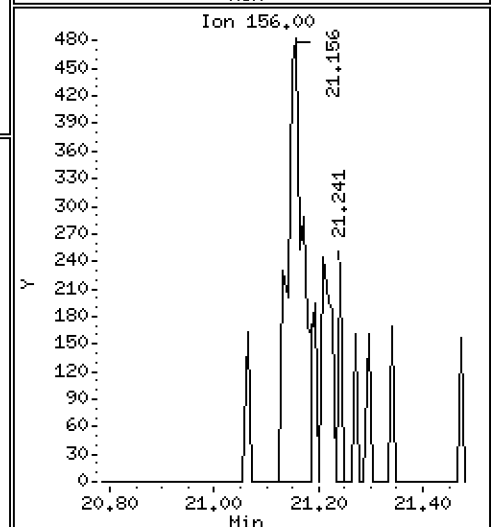
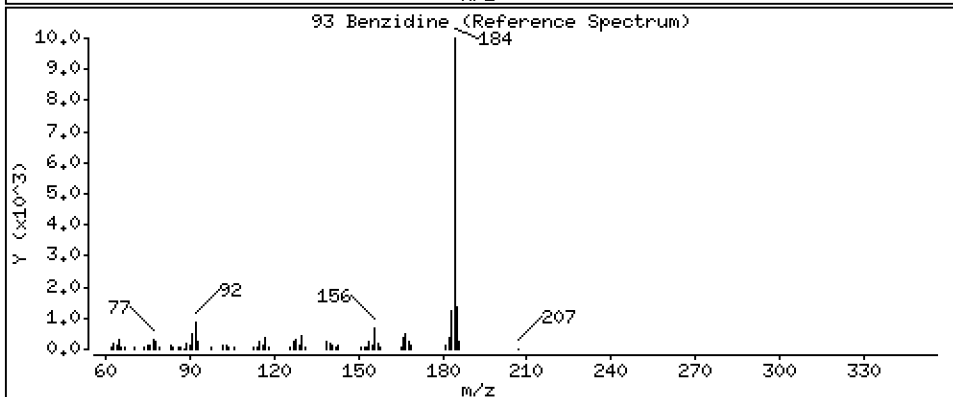
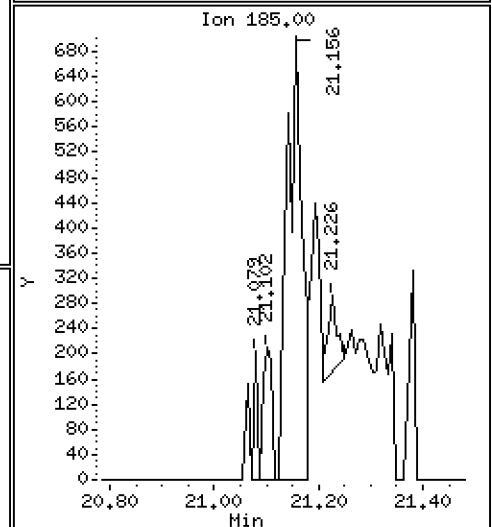
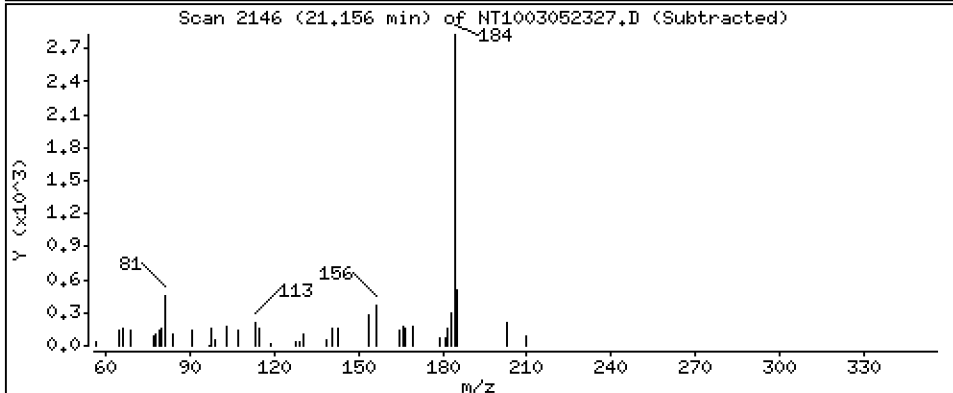
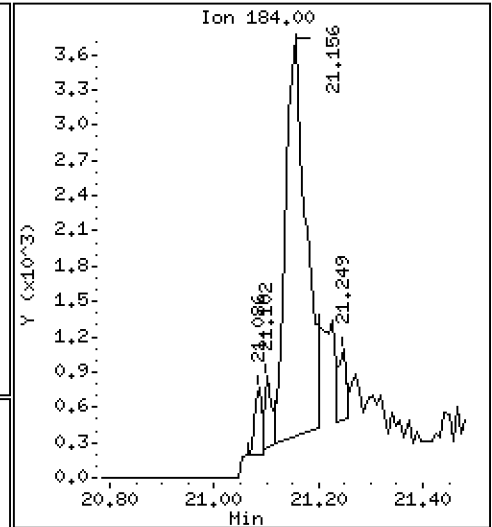
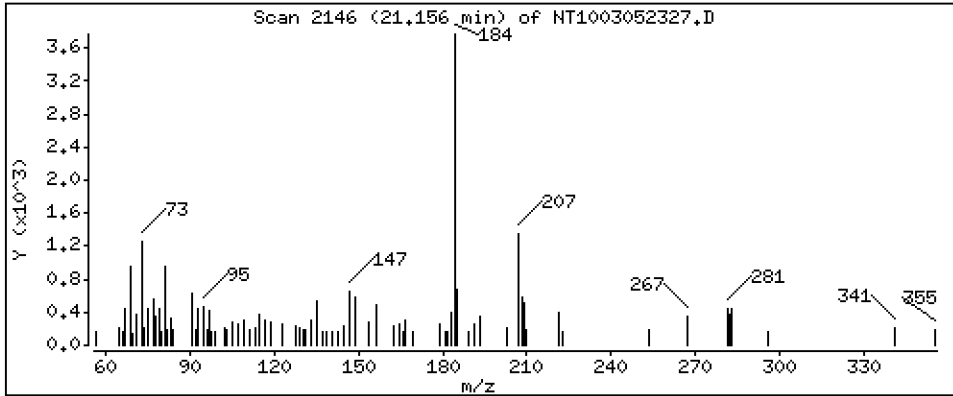
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,08480 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

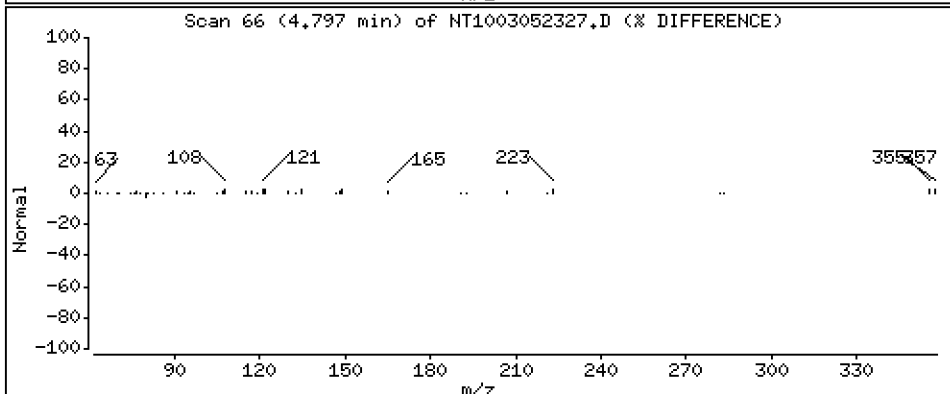
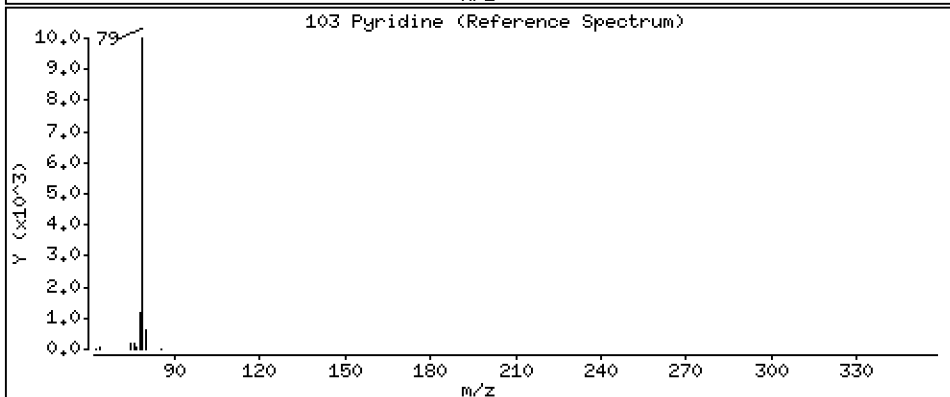
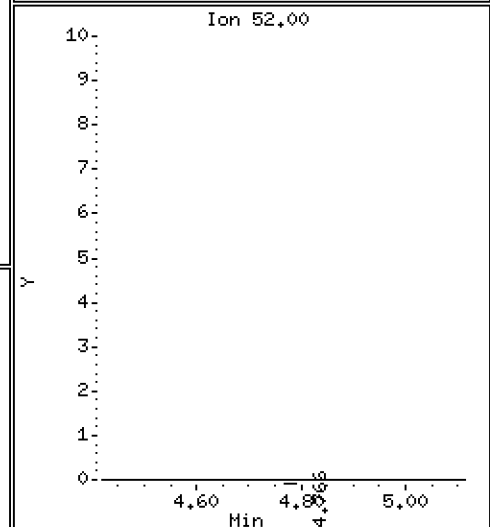
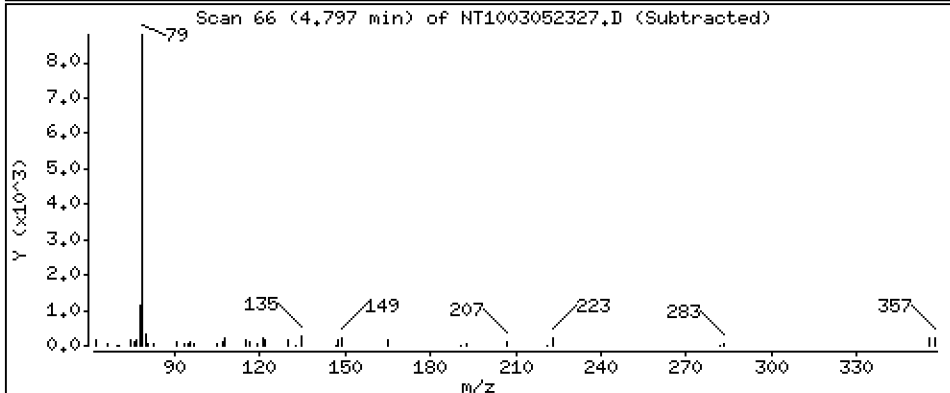
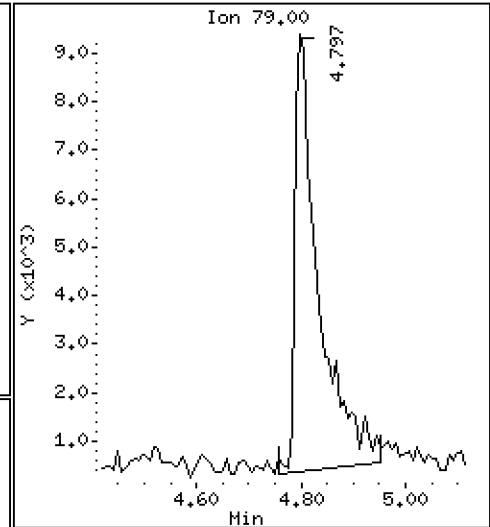
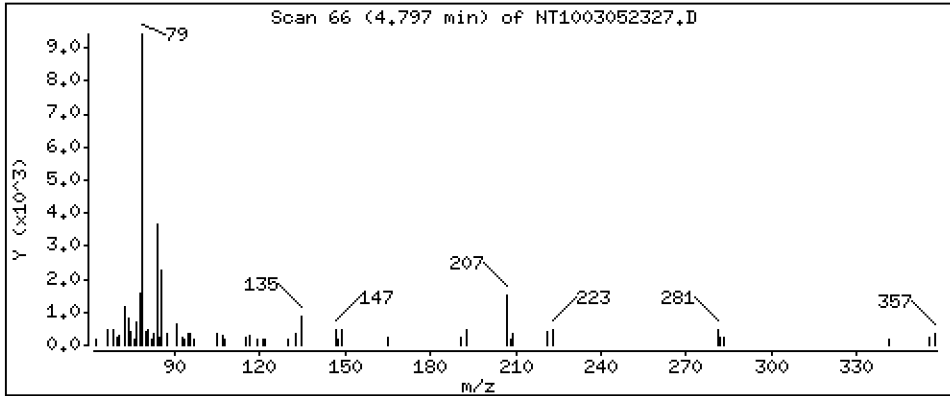
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,3528 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

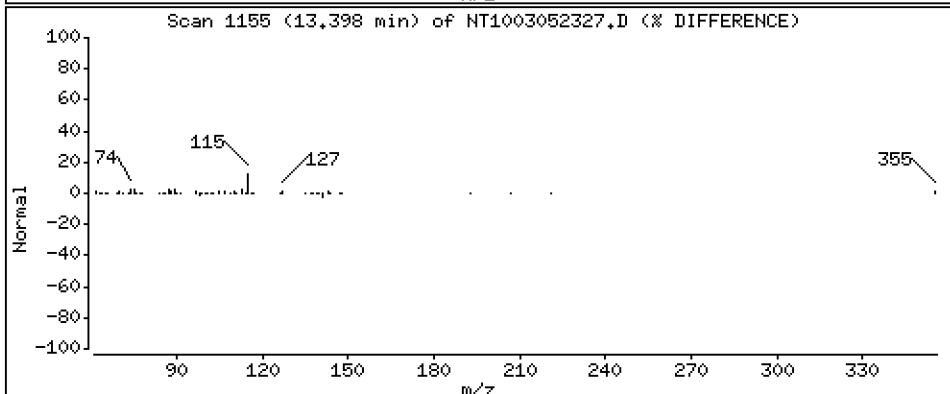
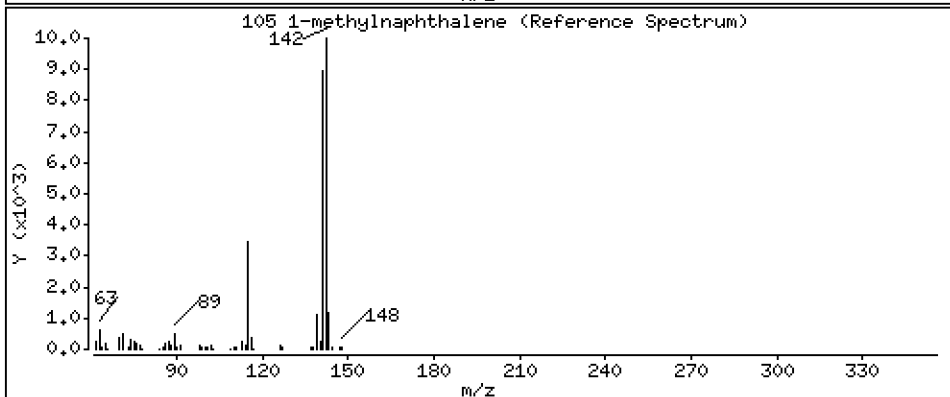
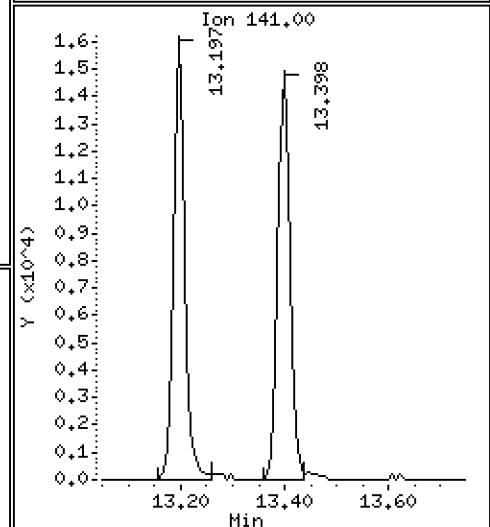
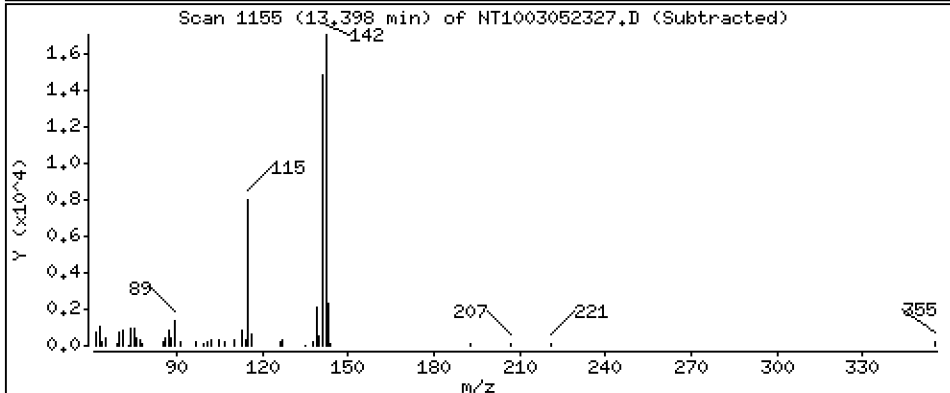
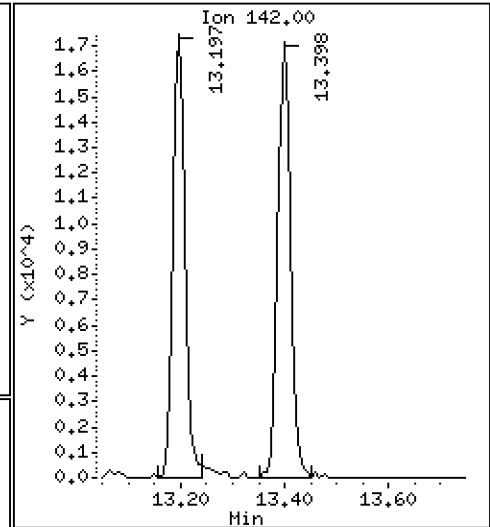
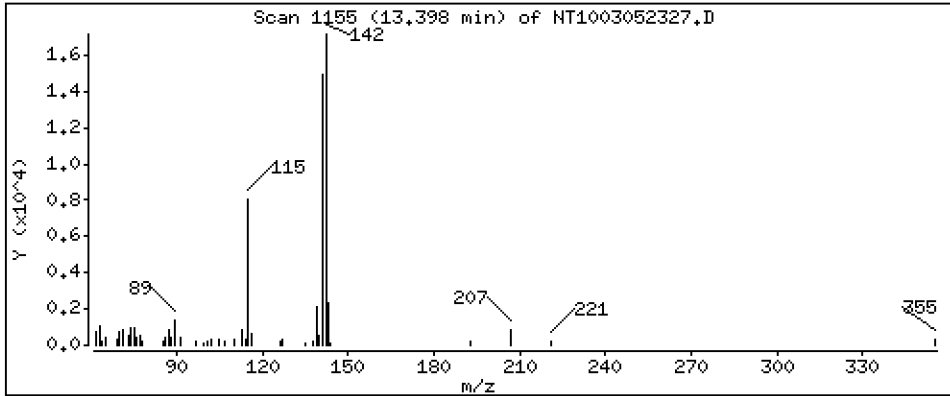
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2092 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

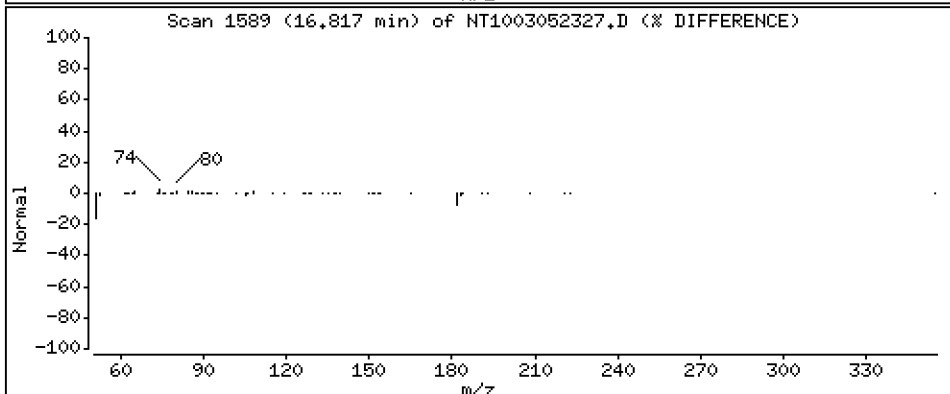
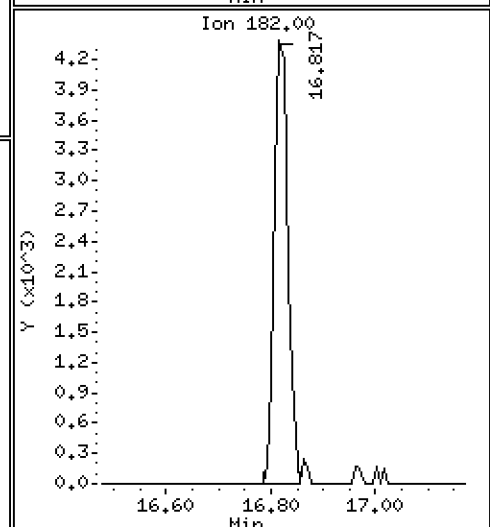
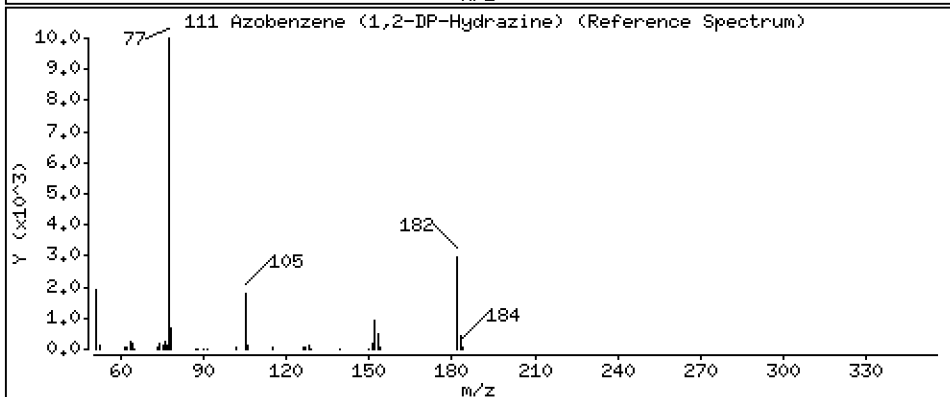
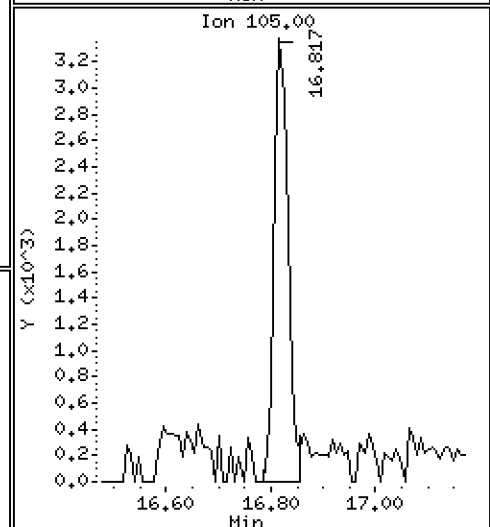
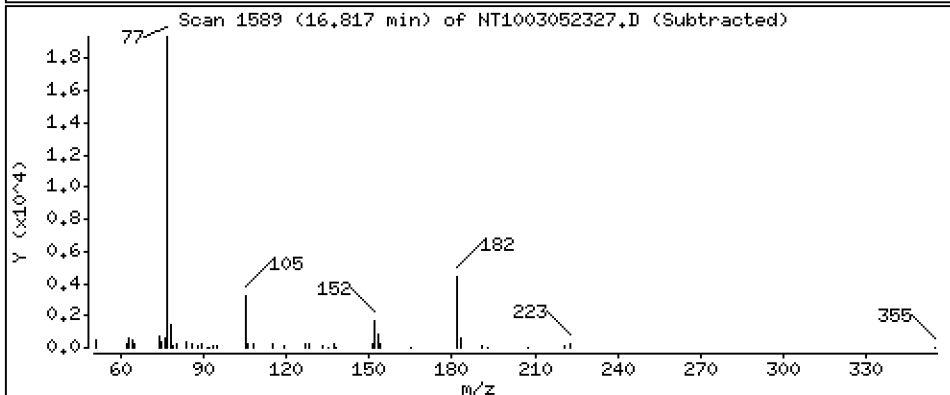
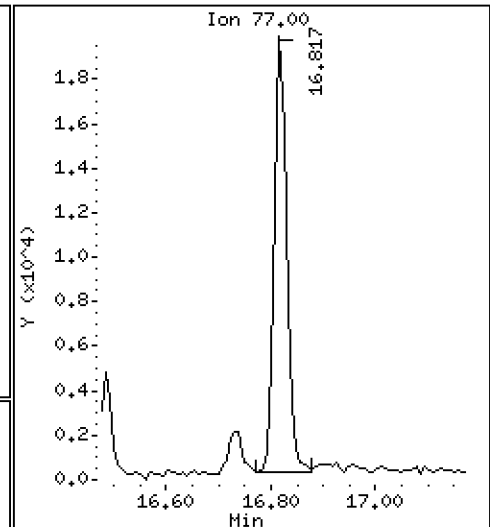
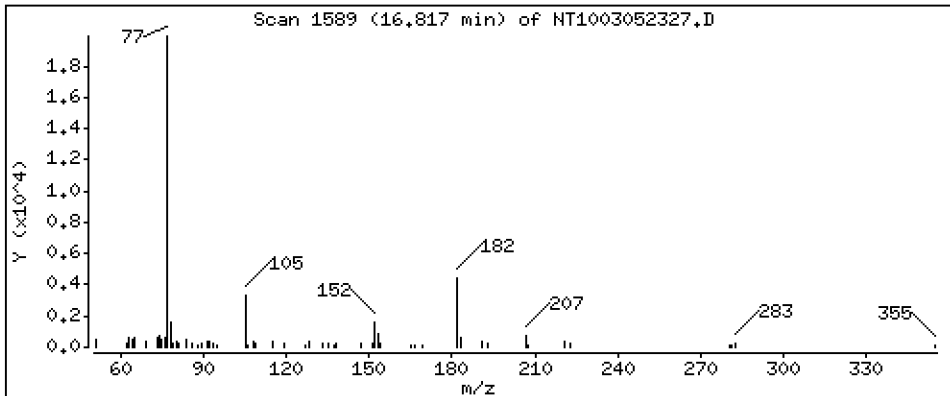
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0.1419 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

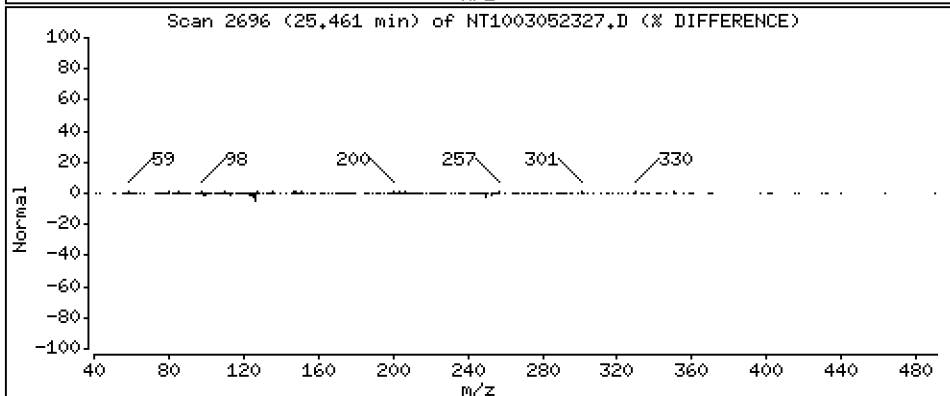
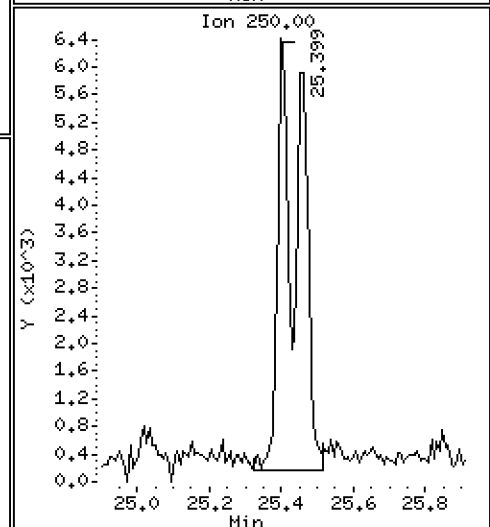
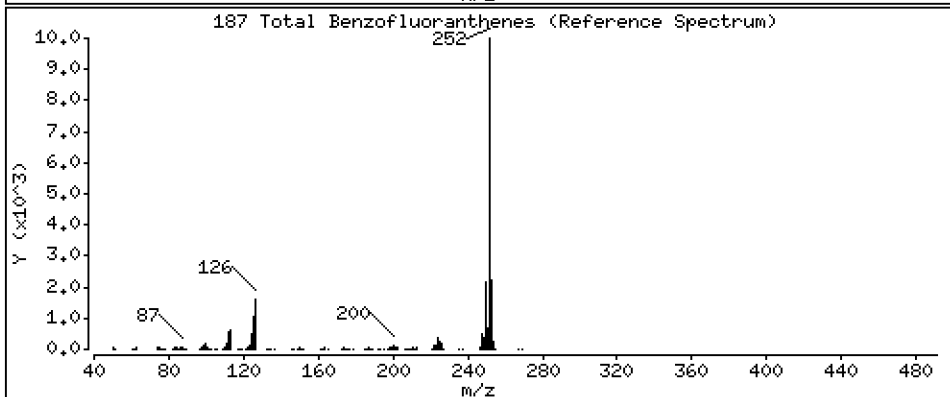
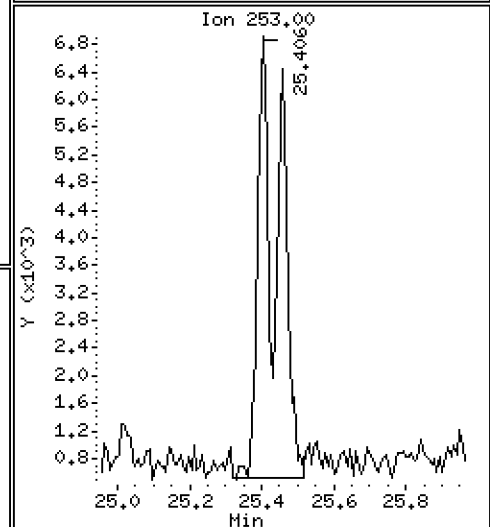
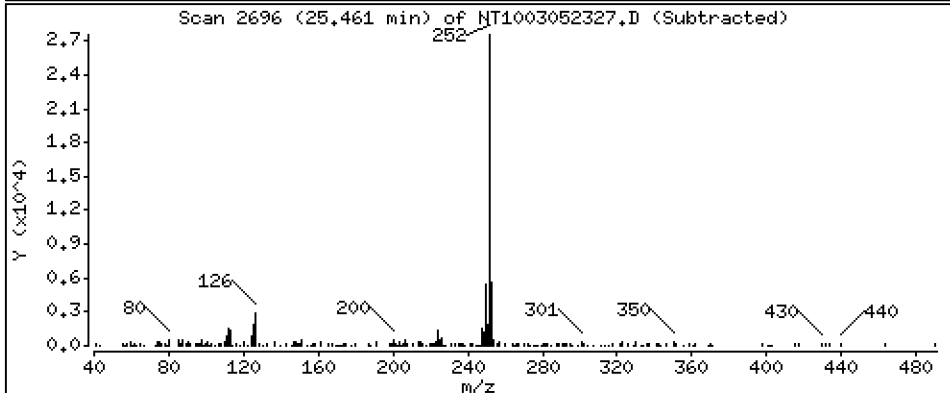
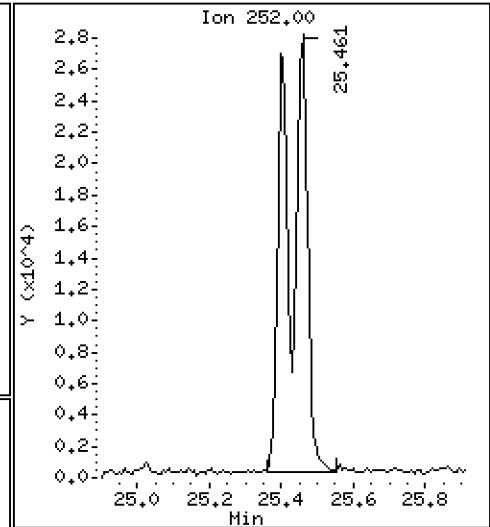
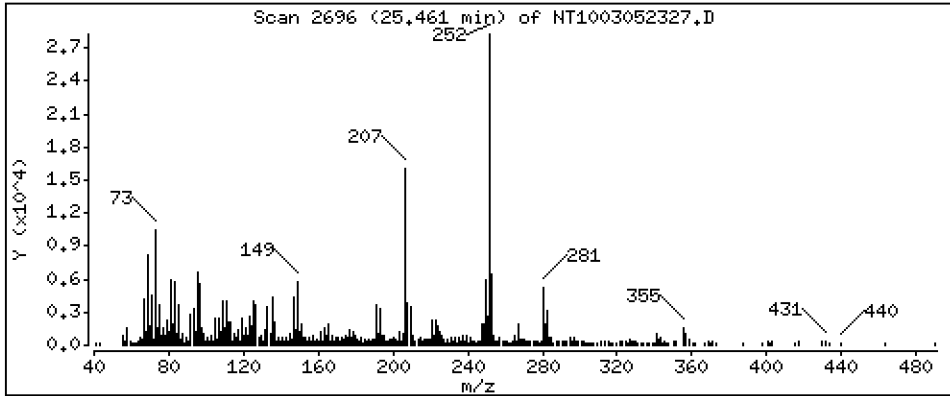
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3823 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

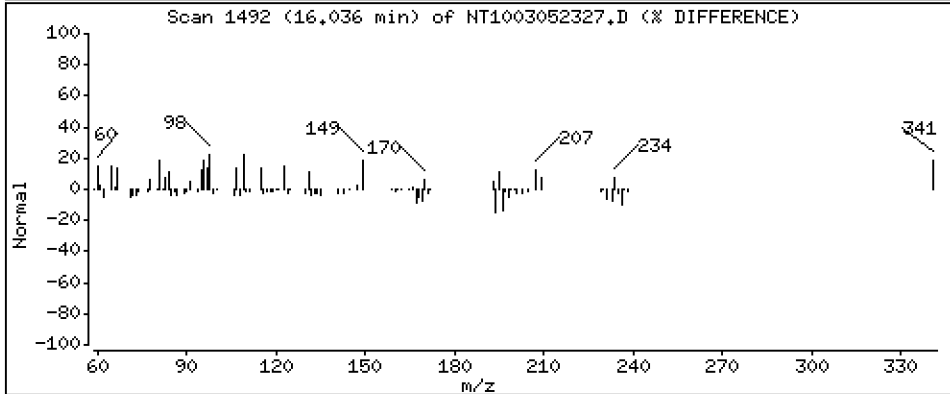
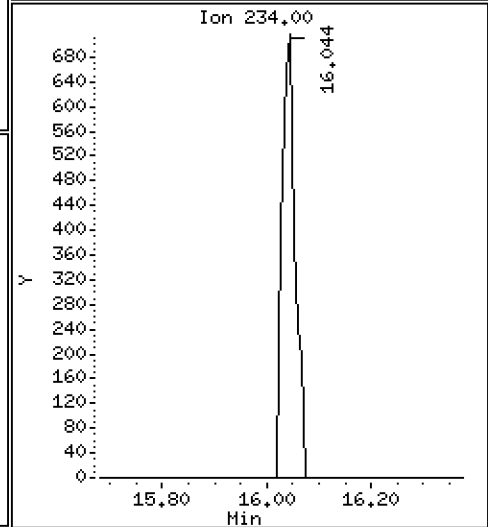
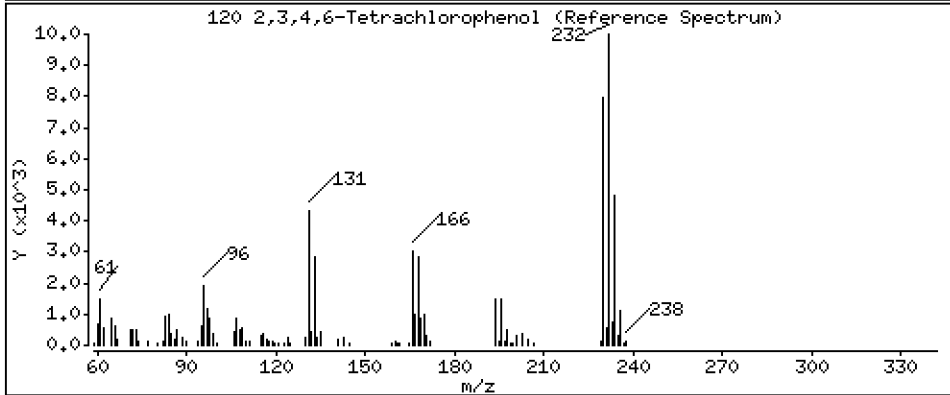
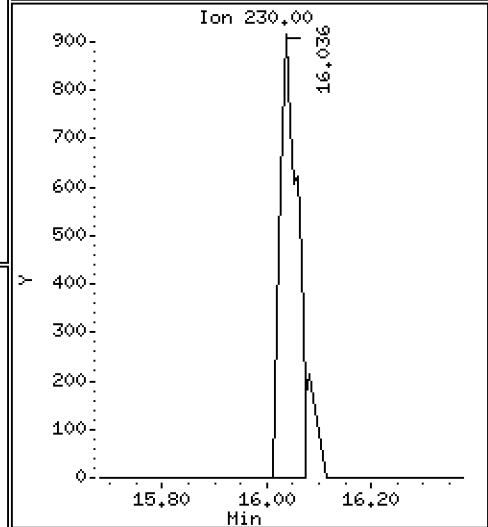
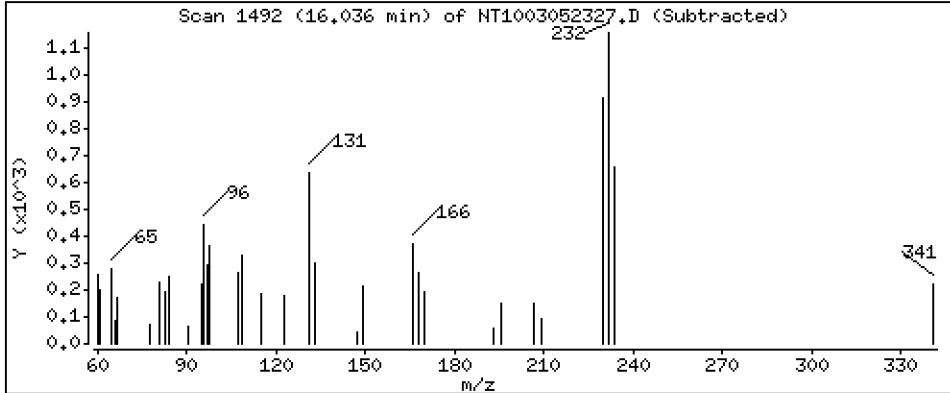
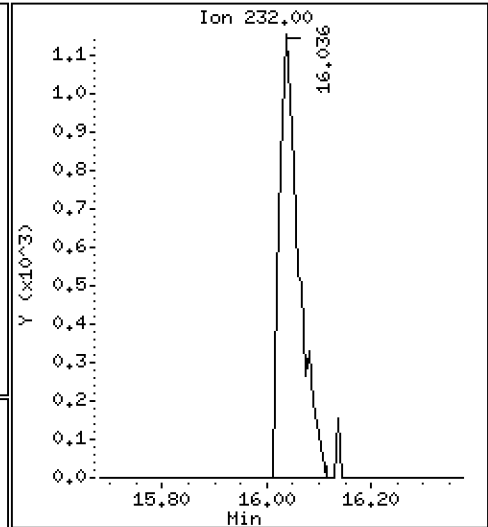
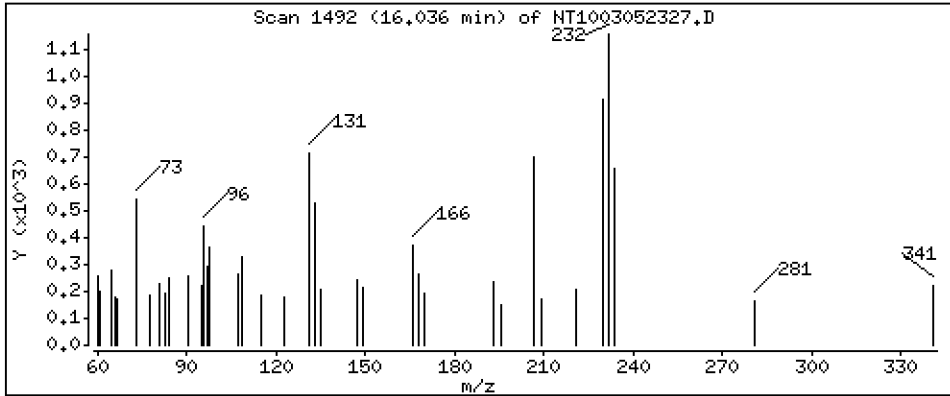
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,08443 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052327.D
 Lab Smp Id: SLC0425-LCV1
 Inj Date : 06-MAR-2023 05:48
 Operator : VTS
 Smp Info : SLC0425-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.905	(0.745)	21461	0.29592	0.2959
\$ 2 Phenol-d5	99		8.528	8.527	(0.921)	20861	0.24776	0.2478 (M)
3 Phenol	94		8.551	8.550	(0.924)	17189	0.19201	0.1920
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.955)	22273	0.31006	0.3101
4 Bis(2-Chloroethyl)ether	93		8.744	8.751	(0.945)	12646	0.18486	0.1849
6 2-Chlorophenol	128		8.867	8.867	(0.958)	14921	0.19994	0.1999
7 1,3-Dichlorobenzene	146		9.154	9.153	(0.989)	17547	0.21326	0.2133
* 8 1,4-Dichlorobenzene-d4	152		9.255	9.262	(1.000)	230503	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.293	(1.004)	16412	0.20081	0.2008
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.000)	10979	0.20456	0.2046 (MH)
12 1,2-Dichlorobenzene	146		9.581	9.580	(1.035)	15633	0.19762	0.1976
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.759	9.751	(1.055)	5444	0.23870	0.2387 (M)
13 2-Methylphenol	108		9.697	9.697	(1.048)	13350	0.19248	0.1925
17 Hexachloroethane	117		10.225	10.232	(1.105)	4971	0.14818	0.1482
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.080)	12543	0.14421	0.1442
\$ 18 Nitrobenzene-d5	82		10.318	10.325	(0.878)	17035	0.19096	0.1910
19 Nitrobenzene	77		10.357	10.364	(0.881)	16649	0.19895	0.1990
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		10.984	10.984	(0.935)	5843	0.12586	0.1259
22 2,4-Dimethylphenol	107		11.043	11.043	(0.940)	27348	0.34164	0.3416
23 Bis(2-Chloroethoxy)methane	93		11.247	11.247	(0.957)	13553	0.20531	0.2053
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.468	11.459	(0.976)	19981	0.31673	0.3167
26 1,2,4-Trichlorobenzene	180		11.626	11.633	(0.989)	14265	0.22714	0.2271
* 27 Naphthalene-d8	136		11.750	11.757	(1.000)	812678	4.00000	
28 Naphthalene	128		11.796	11.803	(1.004)	42589	0.20418	0.2042
29 4-Chloroaniline	127		11.896	11.896	(1.012)	26622	0.29158	0.2916
30 Hexachlorobutadiene	225		12.020	12.020	(1.023)	8836	0.19322	0.1932
31 4-Chloro-3-methylphenol	107		12.871	12.855	(1.095)	20136	0.30338	0.3034
32 2-Methylnaphthalene	142		13.196	13.196	(1.123)	29791	0.20217	0.2022
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.769	13.769	(0.897)	11579	0.28868	0.2887	
35 2,4,5-Trichlorophenol	196		13.877	13.846	(0.904)	12068	0.28187	0.2819	
§ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	32401	0.21419	0.2142	
37 2-Chloronaphthalene	162		14.202	14.202	(0.925)	25645	0.21595	0.2159	
38 2-Nitroaniline	65		14.419	14.411	(0.939)	9631	0.29654	0.2965	
39 Dimethylphthalate	163		14.775	14.775	(0.963)	26295	0.19198	0.1920	
40 Acenaphthylene	152		15.061	15.061	(0.981)	44761	0.21863	0.2186	
41 2,6-Dinitrotoluene	165		14.907	14.914	(0.971)	10266	0.34141	0.3414	
* 42 Acenaphthene-d10	164		15.348	15.347	(1.000)	424118	4.00000		
43 3-Nitroaniline	138		Compound Not Detected.						
44 Acenaphthene	153		15.417	15.417	(1.005)	23877	0.19338	0.1934	
45 2,4-Dinitrophenol	184		Compound Not Detected.						
46 Dibenzofuran	168		15.780	15.780	(1.028)	38301	0.20901	0.2090	
47 4-Nitrophenol	109		Compound Not Detected.						
48 2,4-Dinitrotoluene	165		15.757	15.749	(1.027)	11537	0.26469	0.2647	
50 Diethylphthalate	149		16.237	16.244	(1.058)	26018	0.17931	0.1793	
49 Fluorene	166		16.492	16.492	(1.075)	29337	0.19241	0.1924	
51 4-Chlorophenyl-phenylether	204		16.484	16.492	(1.074)	13660	0.20571	0.2057	
52 4-Nitroaniline	138		16.585	16.538	(1.081)	2660	0.07164	0.07164	
53 4,6-Dinitro-2-methylphenol	198		16.600	16.592	(0.900)	795	0.04366	0.04366	
54 N-Nitrosodiphenylamine	169		16.731	16.731	(0.907)	24662	0.21318	0.2132	
§ 55 2,4,6-Tribromophenol	330		17.009	16.993	(1.108)	2605	0.10007	0.1001	
56 4-Bromophenyl-phenylether	248		17.511	17.511	(0.949)	10802	0.23044	0.2304	
57 Hexachlorobenzene	284		17.620	17.627	(0.955)	13692	0.25939	0.2594	
58 Pentachlorophenol	266		Compound Not Detected.						
* 59 Phenanthrene-d10	188		18.448	18.455	(1.000)	781884	4.00000		
60 Phenanthrene	178		18.502	18.502	(1.003)	40971	0.20475	0.2048	
61 Anthracene	178		18.610	18.610	(1.009)	38684	0.19937	0.1994	
62 Carbazole	167		18.951	18.943	(1.027)	32283	0.18162	0.1816	
63 Di-n-butylphthalate	149		19.631	19.631	(1.064)	41013	0.17002	0.1700	
64 Fluoranthene	202		20.877	20.877	(0.889)	45188	0.18068	0.1807	
65 Pyrene	202		21.310	21.310	(0.907)	46440	0.18236	0.1824	
§ 66 Terphenyl-d14	244		21.581	21.581	(0.919)	41303	0.20045	0.2004	
67 Butylbenzylphthalate	149		22.472	22.464	(0.956)	20562	0.14995	0.1500	
68 Benzo(a)anthracene	228		23.471	23.478	(0.999)	52358	0.20425	0.2043	
* 69 Chrysene-d12	240		23.494	23.494	(1.000)	727000	4.00000		
70 3,3'-Dichlorobenzidine	252		23.424	23.416	(0.997)	44994	0.39404	0.3940	
71 Chrysene	228		23.540	23.540	(1.002)	45867	0.22016	0.2202	
72 bis(2-Ethylhexyl)phthalate	149		23.463	23.463	(0.956)	33017	0.18851	0.1885	
* 134 Di-n-octylphthalate-d4	153		24.554	24.554	(1.000)	1249015	4.00000		
73 Di-n-octylphthalate	149		24.562	24.562	(1.000)	64259	0.23201	0.2320	
74 Benzo(b)fluoranthene	252		25.398	25.406	(0.968)	54521	0.17738	0.1774	
75 Benzo(k)fluoranthene	252		25.460	25.460	(0.971)	60523	0.20448	0.2045	
76 Benzo(a)pyrene	252		26.103	26.103	(0.995)	52727	0.19189	0.1919	
* 77 Perylene-d12	264		26.227	26.227	(1.000)	901192	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		29.065	29.057	(1.108)	63674	0.19814	0.1981	
79 Dibenzo(a,h)anthracene	278		29.096	29.095	(1.109)	50136	0.20572	0.2057	
80 Benzo(g,h,i)perylene	276		29.919	29.919	(1.141)	49311	0.19259	0.1926	
90 N-Nitrosodimethylamine	74		4.727	4.704	(0.511)	18166	0.38802	0.3880 (M)	
91 Aniline	93		8.643	8.643	(0.934)	35052	0.33770	0.3377	
93 Benzidine	184		21.156	21.132	(0.900)	9415	0.08480	0.08480	
103 Pyridine	79		4.797	4.766	(0.518)	29293	0.35280	0.3528 (M)	
105 1-methylnaphthalene	142		13.397	13.397	(1.140)	27901	0.20920	0.2092	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.816	16.824	(1.096)	30745	0.14189	0.1419	

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.460	25.406	(0.971)	112879	0.38226	0.3823
120 2,3,4,6-Tetrachlorophenol	232		16.036	16.028	(1.045)	3352	0.08443	0.08443

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052327.D Calibration Time: 04:32
 Lab Smp Id: SLC0425-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	230503	7.80
27 Naphthalene-d8	756023	378012	1512046	812678	7.49
42 Acenaphthene-d10	411497	205749	822994	424118	3.07
59 Phenanthrene-d10	744396	372198	1488792	781884	5.04
69 Chrysene-d12	823005	411503	1646010	727000	-11.67
134 Di-n-octylphthala	1350476	675238	2700952	1249015	-7.51
77 Perylene-d12	894064	447032	1788128	901192	0.80

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.08
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.45	-0.04
69 Chrysene-d12	23.49	22.99	23.99	23.49	0.00
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	0.00
77 Perylene-d12	26.23	25.73	26.73	26.23	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052327.D

Lab ID: SLC0425-LCV1
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 05:48

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.032	-0.0318	1,2-Dichlorobenzene-d4

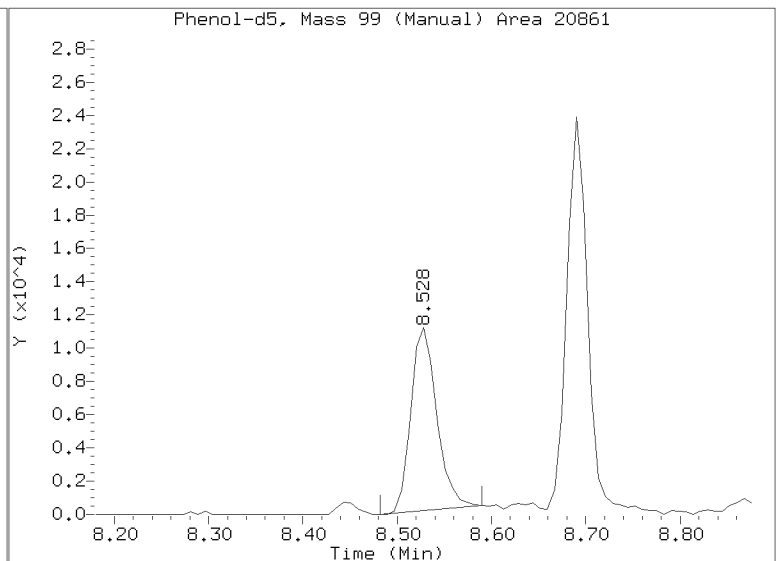
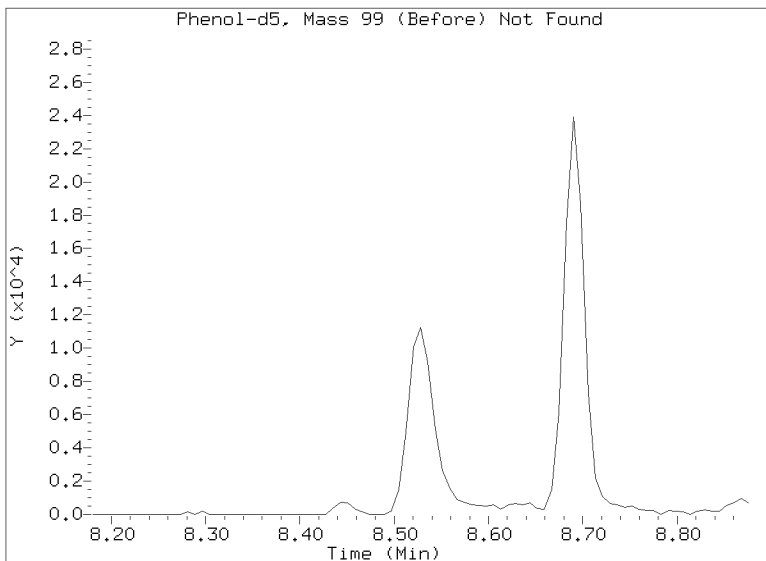
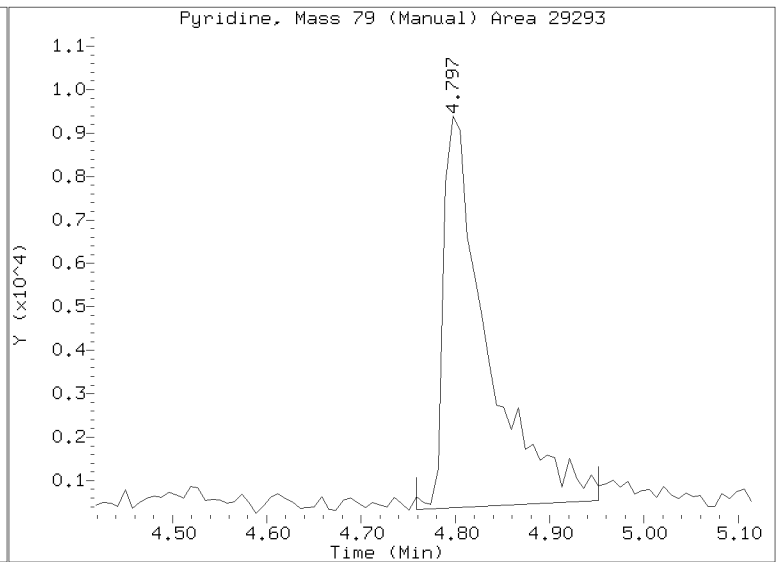
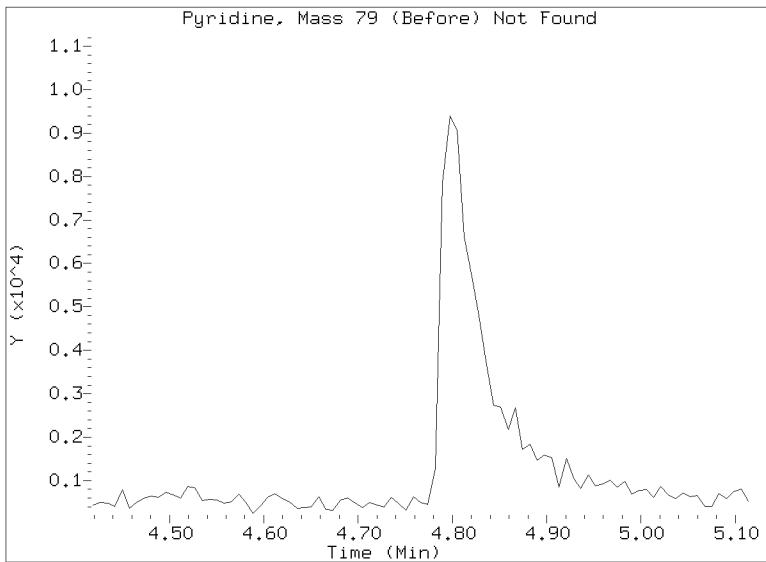
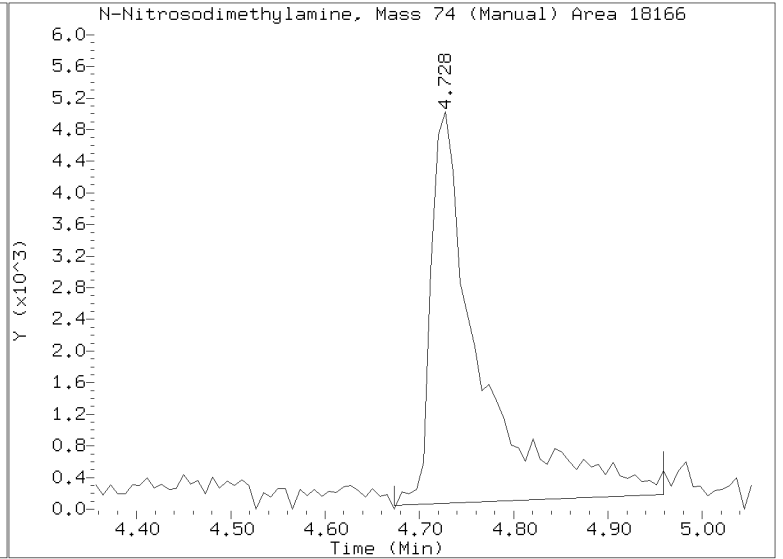
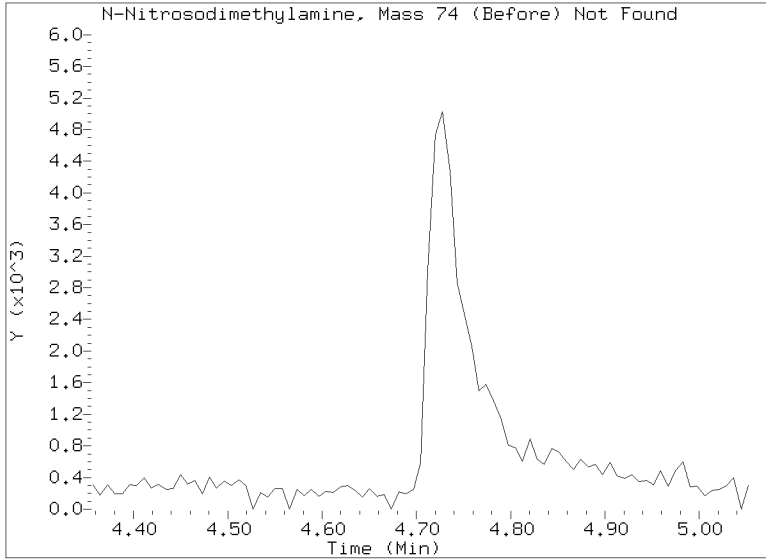
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

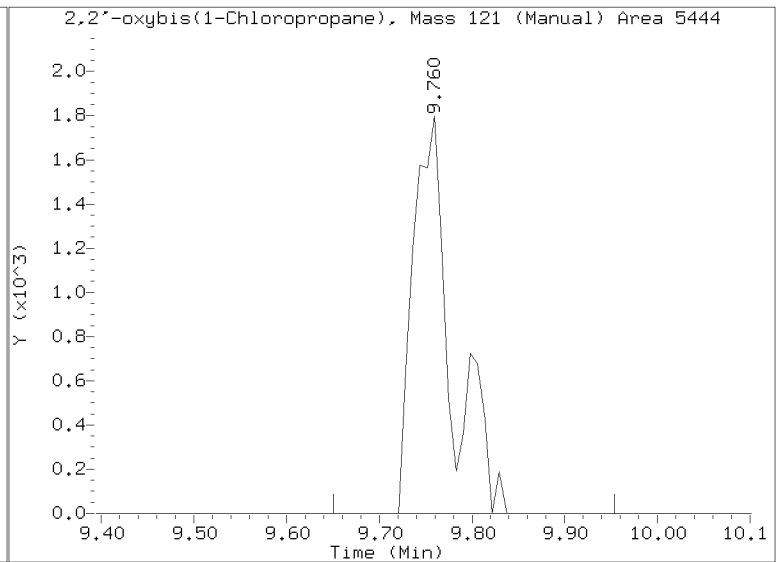
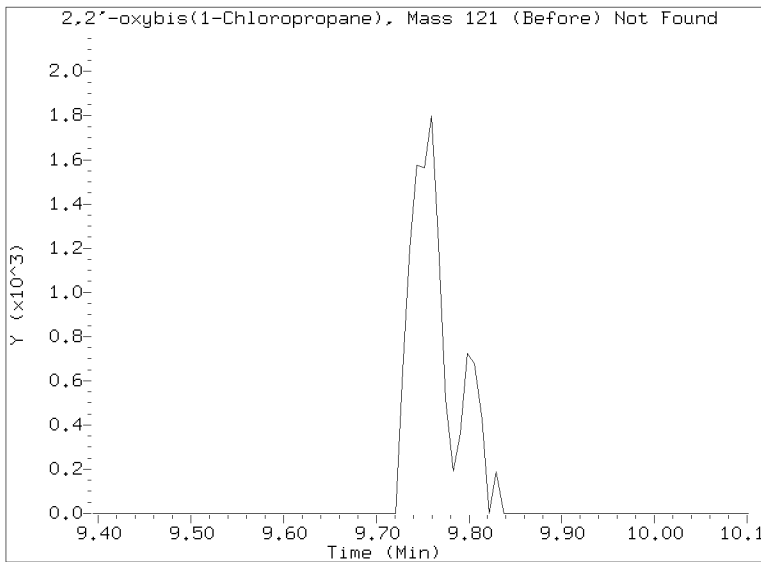
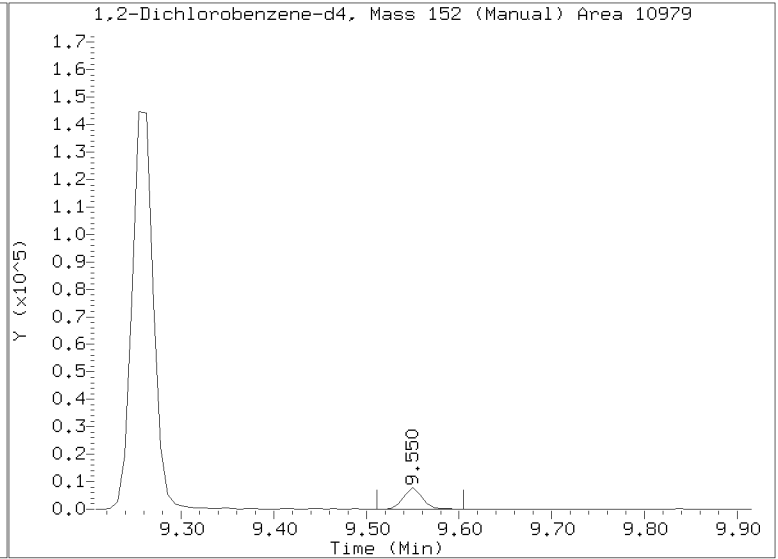
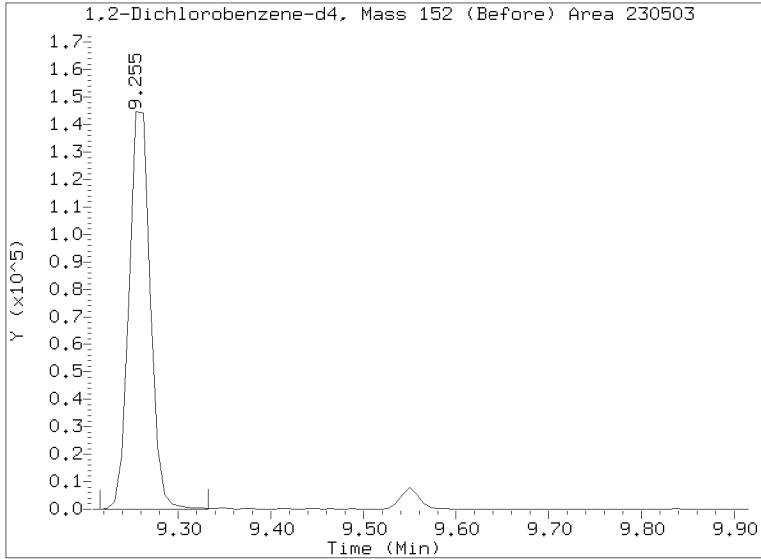
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052327.D
Injection Date: 06-MAR-2023 05:48
Lab ID:SLC0425-LCV1 Client ID:
Report Date: 03/27/2023 16:54



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052327.D
Injection Date: 06-MAR-2023 05:48
Lab ID:SLC0425-LCV1 Client ID:
Report Date: 03/27/2023 16:54



APPROVED
By Deenay Dunmore at 5:19 pm, Mar 27, 2023



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052302.D

Calibration Date: 03/01/2023

Sequence: SLC0401

Injection Date: 03/05/23

Lab Sample ID: SLC0401-ICV1

Injection Time: 14:03

Sequence Name: Initial Cal Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	5.1	1.5534590	1.5816410		1.8	+/-20
4-Methylphenol	A	5.0000	4.2	1.2087680	1.2638590		-15.4	+/-20
Naphthalene	A	5.0000	4.8	1.0266520	0.9885234		-3.7	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7304930		0.7	+/-20
Acenaphthylene	A	5.0000	5.5	1.9309320	2.1107320		9.3	+/-20
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2337910		-4.5	+/-20
Acenaphthene	A	5.0000	4.9	1.1645250	1.1300410		-3.0	+/-20
Dibenzofuran	A	5.0000	5.1	1.7283260	1.7770960		2.8	+/-20
Fluorene	A	5.0000	4.9	1.4379840	1.4219730		-1.1	+/-20
Pentachlorophenol	A	10.000	6.5	0.1145550	0.0845949		-34.6	+/-20 *
Phenanthrene	A	5.0000	5.0	1.0236730	1.0257500		0.2	+/-20
Anthracene	A	5.0000	5.1	0.9926226	1.0042030		1.2	+/-20
Fluoranthene	A	5.0000	4.5	1.3760330	1.2388470		-10.0	+/-20
Pyrene	A	5.0000	4.4	1.4011560	1.2377270		-11.7	+/-20
Butylbenzylphthalate	A	5.0000	3.5	0.6475451	0.5167809		-30.6	+/-20 *
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3392660		-5.0	+/-20
Chrysene	A	5.0000	5.3	1.1462500	1.2052660		5.1	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	4.6	0.5331838	0.5346001		-7.4	+/-20
Benzo(a)fluoranthene, Total	A	10.000	8.7	1.3383070	1.2007780		-12.6	+/-20
Benzo(a)pyrene	A	5.0000	4.5	1.2312020	1.1465860		-10.4	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.7	1.4033590	1.4077180		-6.1	+/-20
Dibenzo(a,h)anthracene	A	5.0000	5.1	1.1150690	1.1780240		2.5	+/-20
Benzo(g,h,i)perylene	A	5.0000	5.0	1.1245240	1.1949940		0.7	+/-20
2-Fluorophenol	A	7.5000	7.23	1.2585100	1.2123550		-3.7	+/-20
Phenol-d5	A	7.5000	7.93	1.4611190	1.5454710		5.8	+/-20
2-Chlorophenol-d4	A	7.5000	7.69	1.2465880	1.2784800		2.6	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.89	0.9313544	0.9100951		-2.3	+/-20
Nitrobenzene-d5	A	5.0000	5.11	0.4390871	0.4488527		2.2	+/-20
2-Fluorobiphenyl	A	5.0000	5.36	1.4267270	1.5285350		7.1	+/-20
2,4,6-Tribromophenol	A	7.5000	7.98	0.2287830	0.2769393		6.5	+/-20

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00019</u>
Lab File ID:	<u>NT1003052302.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0401</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0401-ICV1</u>	Injection Time:	<u>14:03</u>
Sequence Name:	<u>Initial Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
p-Terphenyl-d14	A	5.0000	4.54	1.1337350	1.0291580		-9.2	+/-20
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84410.2500	1.0000			
Naphthalene-d8	A	4.0000	4.0	316296.8000	1.0000			
Acenaphthene-d10	A	4.0000	4.0	173096.3000	1.0000			
Phenanthrene-d10	A	4.0000	4.0	344194.3000	1.0000			
Chrysene-d12	A	4.0000	4.0	254881.0000	1.0000			
Di-n-Octylphthalate-d4	A	4.0000	4.0	506777.8000	1.0000			
Perylene-d12	A	4.0000	4.0	256852.3000	1.0000			

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.1\NT1003052302.D

Date: 05-MAR-2023 14:03

Client ID:

Sample Info: SLC0401-ICW1

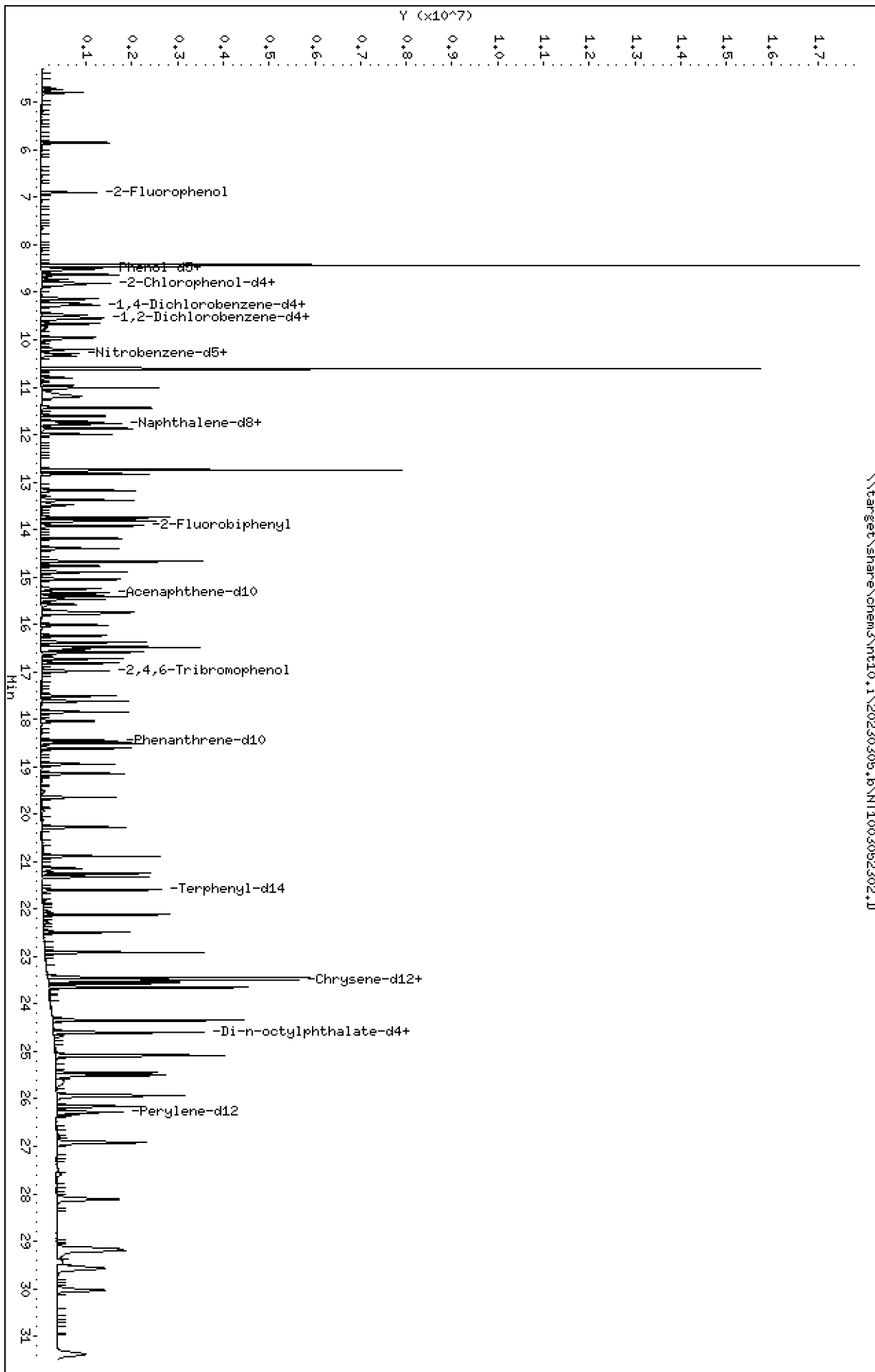
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.1\NT1003052302.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052302.D
 Lab Smp Id: SLC0401-ICV1
 Inj Date : 05-MAR-2023 14:03
 Operator : VTS
 Smp Info : SLC0401-ICV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Quant Type: ISTD

Cal File: NT1003012307.D

Continuing Calibration Sample

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.897	(0.747)	675728	7.50000	7.225
\$ 2 Phenol-d5	99		8.504	8.504	(0.920)	861396	7.50000	7.933
3 Phenol	94		8.528	8.528	(0.923)	587704	5.00000	5.091
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.954)	712584	7.50000	7.692
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.945)	434468	5.00000	4.925
6 2-Chlorophenol	128		8.844	8.844	(0.957)	485333	5.00000	5.043
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.989)	508248	5.00000	4.790
* 8 1,4-Dichlorobenzene-d4	152		9.239	9.239	(1.000)	297263	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.004)	497907	5.00000	4.724
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.534	(1.032)	338172	5.00000	4.886
12 1,2-Dichlorobenzene	146		9.557	9.557	(1.034)	475789	5.00000	4.664
11 Benzyl alcohol	108		9.480	9.480	(1.026)	264731	5.00000	4.373
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.728	(1.053)	137994	5.00000	4.692 (M)
13 2-Methylphenol	108		9.666	9.666	(1.046)	444529	5.00000	4.859
17 Hexachloroethane	117		10.209	10.209	(1.105)	222046	5.00000	5.133
16 N-Nitroso-di-n-propylamine	70		9.984	9.984	(1.081)	355559	5.00000	5.104
15 4-Methylphenol	108		9.953	9.953	(1.077)	469623	5.00000	4.230
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.879)	608945	5.00000	5.111
19 Nitrobenzene	77		10.341	10.341	(0.882)	567468	5.00000	5.078
20 Isophorone	82		10.799	10.799	(0.921)	674846	5.00000	4.730
21 2-Nitrophenol	139		10.959	10.959	(0.935)	264409	5.00000	4.389
22 2,4-Dimethylphenol	107		11.018	11.018	(0.940)	977900	10.0000	8.945
23 Bis(2-Chloroethoxy)methane	93		11.222	11.222	(0.957)	438956	5.00000	4.979
24 Benzoic acid	105		11.196	11.196	(0.955)	1056308	20.0000	16.08
25 2,4-Dichlorophenol	162		11.434	11.434	(0.975)	910813	10.0000	10.51
26 1,2,4-Trichlorobenzene	180		11.603	11.603	(0.989)	426978	5.00000	5.091
* 27 Naphthalene-d8	136		11.726	11.726	(1.000)	1085336	4.00000	
28 Naphthalene	128		11.773	11.773	(1.004)	1341100	5.00000	4.814
29 4-Chloroaniline	127		11.873	11.873	(1.013)	1184797	10.0000	9.415
30 Hexachlorobutadiene	225		11.997	11.997	(1.023)	324050	5.00000	5.306
31 4-Chloro-3-methylphenol	107		12.825	12.825	(1.094)	885140	10.0000	9.605
32 2-Methylnaphthalene	142		13.181	13.181	(1.124)	991038	5.00000	5.036
33 Hexachlorocyclopentadiene	237		13.483	13.483	(0.879)	158554	10.0000	8.090

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.746	13.746	(0.896)	604132	10.0000	10.76
35 2,4,5-Trichlorophenol	196	13.815	13.815	(0.901)	646789	10.0000	10.76
§ 36 2-Fluorobiphenyl	172	13.924	13.924	(0.908)	1076593	5.00000	5.357
37 2-Chloronaphthalene	162	14.187	14.187	(0.925)	855578	5.00000	5.423
38 2-Nitroaniline	65	14.396	14.396	(0.938)	479866	10.0000	10.72
39 Dimethylphthalate	163	14.767	14.767	(0.963)	868996	5.00000	4.775
40 Acenaphthylene	152	15.046	15.046	(0.981)	1486652	5.00000	5.466
41 2,6-Dinitrotoluene	165	14.899	14.899	(0.971)	415349	10.0000	10.06
* 42 Acenaphthene-d10	164	15.340	15.340	(1.000)	563464	4.00000	
43 3-Nitroaniline	138	15.255	15.255	(0.994)	445211	10.0000	9.702
44 Acenaphthene	153	15.409	15.409	(1.005)	795922	5.00000	4.852
45 2,4-Dinitrophenol	184	15.479	15.479	(1.009)	372599	20.0000	31.60
46 Dibenzofuran	168	15.765	15.765	(1.028)	1251662	5.00000	5.141
47 4-Nitrophenol	109	15.579	15.579	(1.016)	284331	10.0000	8.582
48 2,4-Dinitrotoluene	165	15.742	15.742	(1.026)	607732	10.0000	10.10
50 Diethylphthalate	149	16.237	16.237	(1.058)	893588	5.00000	4.635
49 Fluorene	166	16.484	16.484	(1.075)	1001538	5.00000	4.944
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.075)	458906	5.00000	4.946
52 4-Nitroaniline	138	16.523	16.523	(1.077)	461249	10.0000	9.351
53 4,6-Dinitro-2-methylphenol	198	16.585	16.585	(0.899)	726770	20.0000	27.35
54 N-Nitrosodiphenylamine	169	16.724	16.724	(0.907)	781501	5.00000	5.087
§ 55 2,4,6-Tribromophenol	330	16.986	16.986	(1.107)	292585	7.50000	7.984
56 4-Bromophenyl-phenylether	248	17.504	17.504	(0.949)	355239	5.00000	5.707
57 Hexachlorobenzene	284	17.620	17.620	(0.955)	386080	5.00000	5.508
58 Pentachlorophenol	266	18.038	18.038	(0.978)	219591	10.0000	6.540
* 59 Phenanthrene-d10	188	18.448	18.448	(1.000)	1038318	4.00000	
60 Phenanthrene	178	18.502	18.502	(1.003)	1331318	5.00000	5.010
61 Anthracene	178	18.610	18.610	(1.009)	1303352	5.00000	5.058
62 Carbazole	167	18.943	18.943	(1.027)	1186790	5.00000	5.028
63 Di-n-butylphthalate	149	19.647	19.647	(1.065)	1521963	5.00000	4.599
64 Fluoranthene	202	20.885	20.885	(0.888)	1568305	5.00000	4.502
65 Pyrene	202	21.318	21.318	(0.906)	1566887	5.00000	4.417
§ 66 Terphenyl-d14	244	21.597	21.597	(0.918)	1302851	5.00000	4.539
67 Butylbenzylphthalate	149	22.487	22.487	(0.956)	654213	5.00000	3.470
68 Benzo(a)anthracene	228	23.494	23.494	(0.999)	1695429	5.00000	4.748
* 69 Chrysene-d12	240	23.517	23.517	(1.000)	1012751	4.00000	
70 3,3'-Dichlorobenzidine	252	23.440	23.440	(0.997)	1927528	15.0000	11.94
71 Chrysene	228	23.563	23.563	(1.002)	1525793	5.00000	5.257
72 bis(2-Ethylhexyl)phthalate	149	23.494	23.494	(0.955)	1088506	5.00000	4.632
* 134 Di-n-octylphthalate-d4	153	24.593	24.593	(1.000)	1628890	4.00000	
73 Di-n-octylphthalate	149	24.609	24.609	(1.001)	1904818	5.00000	5.273
74 Benzo(b)fluoranthene	252	25.445	25.445	(0.968)	1732761	5.00000	4.215 (H)
75 Benzo(k)fluoranthene	252	25.507	25.507	(0.971)	1796990	5.00000	4.518
76 Benzo(a)pyrene	252	26.157	26.157	(0.995)	1651462	5.00000	4.481
* 77 Perylene-d12	264	26.281	26.281	(1.000)	1152264	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.158	29.158	(1.109)	2027578	5.00000	4.697
79 Dibenzo(a,h)anthracene	278	29.197	29.197	(1.111)	1696743	5.00000	5.123
80 Benzo(g,h,i)perylene	276	30.028	30.028	(1.143)	1721186	5.00000	5.033
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.511)	586992	10.0000	9.722
91 Aniline	93	8.628	8.628	(0.934)	1304290	10.0000	9.744
93 Benzidine	184	21.140	21.140	(0.899)	673754	10.0000	4.356
103 Pyridine	79	4.789	4.789	(0.518)	1049498	10.0000	9.801
105 1-methylnaphthalene	142	13.382	13.382	(1.141)	891005	5.00000	5.002
111 Azobenzene (1,2-DP-Hydrazine)	77	16.816	16.816	(1.096)	1355943	5.00000	4.710

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.507	25.507	(0.971)	3459034	10.0000	8.736
120 2,3,4,6-Tetrachlorophenol	232		16.012	16.012	(1.044)	312723	5.00000	5.557

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003052302.D Calibration Time: 17:21
 Lab Smp Id: SLC0401-ICV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	297263	-11.96
27 Naphthalene-d8	1265187	632594	2530374	1085336	-14.22
42 Acenaphthene-d10	692385	346193	1384770	563464	-18.62
59 Phenanthrene-d10	1376777	688389	2753554	1038318	-24.58
69 Chrysene-d12	1019524	509762	2039048	1012751	-0.66
134 Di-n-octylphthala	2027111	1013556	4054222	1628890	-19.64
77 Perylene-d12	1027409	513705	2054818	1152264	12.15

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.24	-0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.73	0.07
42 Acenaphthene-d10	15.31	14.81	15.81	15.34	0.21
59 Phenanthrene-d10	18.40	17.90	18.90	18.45	0.26
69 Chrysene-d12	23.42	22.92	23.92	23.52	0.43
134 Di-n-octylphthala	24.48	23.98	24.98	24.59	0.44
77 Perylene-d12	26.10	25.60	26.60	26.28	0.68

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

REVIEW SUMMARY FOR FILE - NT1003052302.D

Lab ID: SLC0401-ICV1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 14:03

RT CO-ELUTION COMPOUNDS

23.494 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

No RRT check. Ccal file.

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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

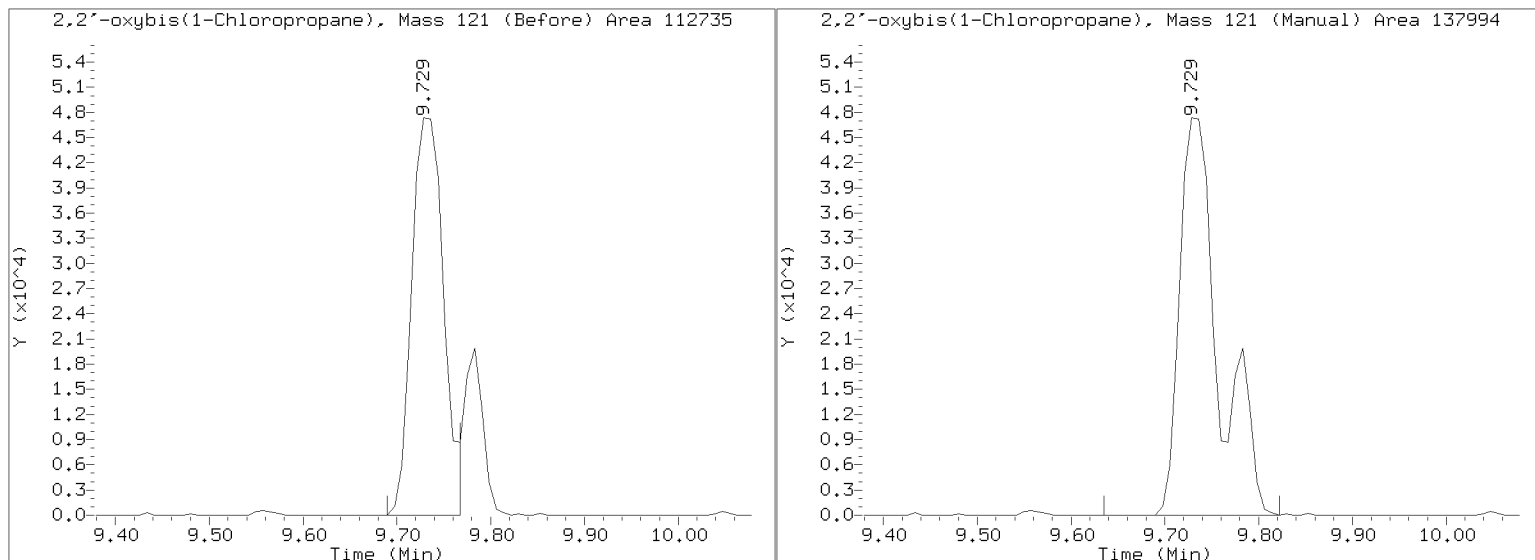
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/NT1003052302.D

Injection Date: 05-MAR-2023 14:03

Lab ID: SLC0401-ICV1 Client ID:

Report Date: 03/27/2023 11:22



APPROVED

By Deenay Dunmore at 2:09 pm, Mar 27, 2023

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305.b

Instrument: nt10.i Date: 05-MAR-2023 Method: 20230305.b\ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R ²
2,4-Dinitrophenol	0.989

ICV CAL: NT1003052302.D 05-MAR-2023 14:03

Compound	%D
2,4-Dinitrophenol	58.0
4,6-Dinitro-2-methylphenol	36.7
Pentachlorophenol	-34.6
Butylbenzylphthalate	-30.6
3,3'-Dichlorobenzidine	-20.4
Benzidine	-56.4



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052314A.D

Calibration Date: 03/01/2023

Sequence: SLC0415

Injection Date: 03/05/23

Lab Sample ID: SLC0415-ICV1

Injection Time: 21:38

Sequence Name: Initial Cal Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	5.2	1.5534590	1.6188800		4.2	+/-20
4-Methylphenol	A	5.0000	4.3	1.2087680	1.2744640		-14.7	+/-20
Naphthalene	A	5.0000	4.7	1.0266520	0.9624076		-6.3	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7190208		-0.9	+/-20
Acenaphthylene	A	5.0000	5.5	1.9309320	2.1082640		9.2	+/-20
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2345270		-4.4	+/-20
Acenaphthene	A	5.0000	4.9	1.1645250	1.1316320		-2.8	+/-20
Dibenzofuran	A	5.0000	5.1	1.7283260	1.7707780		2.5	+/-20
Fluorene	A	5.0000	4.8	1.4379840	1.3930440		-3.1	+/-20
Pentachlorophenol	A	10.000	4.6	0.1145550	0.0592775		-53.6	+/-20 *
Phenanthrene	A	5.0000	4.8	1.0236730	0.9865838		-3.6	+/-20
Anthracene	A	5.0000	5.2	0.9926226	1.0325820		4.0	+/-20
Fluoranthene	A	5.0000	4.2	1.3760330	1.1451070		-16.8	+/-20
Pyrene	A	5.0000	4.3	1.4011560	1.2004140		-14.3	+/-20
Butylbenzylphthalate	A	5.0000	3.7	0.6475451	0.5563039		-25.2	+/-20 *
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3244670		-6.1	+/-20
Chrysene	A	5.0000	5.1	1.1462500	1.1674650		1.9	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	4.7	0.5331838	0.5410252		-6.3	+/-20
Benzofluoranthenes, Total	A	10.000	8.8	1.3383070	1.2096380		-12.0	+/-20
Benzo(a)pyrene	A	5.0000	4.5	1.2312020	1.1412360		-10.8	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.6	1.4033590	1.3722900		-8.3	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.1150690	1.1351340		-1.0	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.8	1.1245240	1.1408660		-3.7	+/-20
2-Fluorophenol	A	7.5000	7.38	1.2585100	1.2383040		-1.6	+/-20
Phenol-d5	A	7.5000	8.22	1.4611190	1.6015740		9.6	+/-20
2-Chlorophenol-d4	A	7.5000	7.97	1.2465880	1.3246490		6.3	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.86	0.9313544	0.9044504		-2.9	+/-20
Nitrobenzene-d5	A	5.0000	5.35	0.4390871	0.4698152		7.0	+/-20
2-Fluorobiphenyl	A	5.0000	5.23	1.4267270	1.4928270		4.6	+/-20
2,4,6-Tribromophenol	A	7.5000	7.63	0.2287830	0.2638791		1.7	+/-20

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00019</u>
Lab File ID:	<u>NT1003052314A.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0415</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0415-ICV1</u>	Injection Time:	<u>21:38</u>
Sequence Name:	<u>Initial Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
p-Terphenyl-d14	A	5.0000	4.59	1.1337350	1.0405920		-8.2	+/-20
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84410.2500	1.0000			
Naphthalene-d8	A	4.0000	4.0	316296.8000	1.0000			
Acenaphthene-d10	A	4.0000	4.0	173096.3000	1.0000			
Phenanthrene-d10	A	4.0000	4.0	344194.3000	1.0000			
Chrysene-d12	A	4.0000	4.0	254881.0000	1.0000			
Di-n-Octylphthalate-d4	A	4.0000	4.0	506777.8000	1.0000			
Perylene-d12	A	4.0000	4.0	256852.3000	1.0000			

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A,B\NT1003052314A.D

Date: 05-MAR-2023 21:38

Client ID:

Sample Info: SLC04IS-ICW1

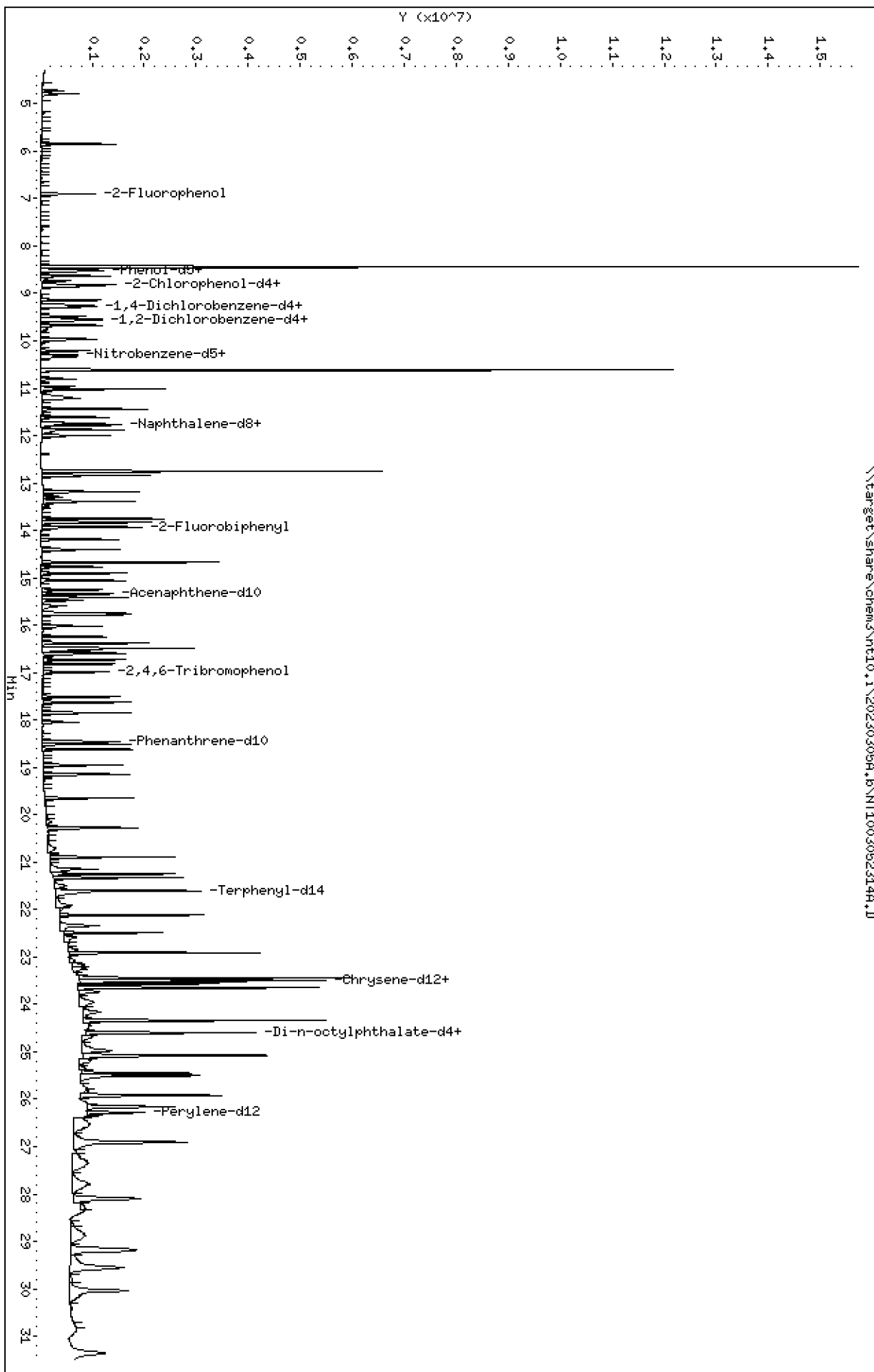
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305A,B\NT1003052314A.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305A.b\NT1003052314A.D
 Lab Smp Id: SLC0415-ICV1
 Inj Date : 05-MAR-2023 21:38
 Operator : VTS
 Smp Info : SLC0415-ICV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Meth Date : 27-Mar-2023 13:49 deenayd
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012307.D
 Continuing Calibration Sample

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.905	(0.747)	615101	7.50000	7.380
\$ 2 Phenol-d5	99		8.512	8.512	(0.921)	795548	7.50000	8.221
3 Phenol	94		8.535	8.535	(0.923)	536096	5.00000	5.211
\$ 5 2-Chlorophenol-d4	132		8.821	8.821	(0.954)	657991	7.50000	7.970
4 Bis(2-Chloroethyl)ether	93		8.736	8.736	(0.945)	393765	5.00000	5.008
6 2-Chlorophenol	128		8.852	8.852	(0.957)	452124	5.00000	5.271
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	454091	5.00000	4.802
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	264922	4.00000	
9 1,4-Dichlorobenzene	146		9.286	9.286	(1.004)	440157	5.00000	4.686
\$ 10 1,2-Dichlorobenzene-d4	152		9.542	9.542	(1.032)	299511	5.00000	4.856
12 1,2-Dichlorobenzene	146		9.565	9.565	(1.034)	428111	5.00000	4.709
11 Benzyl alcohol	108		9.487	9.487	(1.026)	228904	5.00000	4.246
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.736	(1.053)	120360	5.00000	4.592 (M)
13 2-Methylphenol	108		9.674	9.674	(1.046)	394803	5.00000	4.843
17 Hexachloroethane	117		10.217	10.217	(1.105)	183133	5.00000	4.750
16 N-Nitroso-di-n-propylamine	70		9.984	9.984	(1.080)	319576	5.00000	5.147
15 4-Methylphenol	108		9.961	9.961	(1.077)	422042	5.00000	4.266
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.878)	556462	5.00000	5.350
19 Nitrobenzene	77		10.341	10.341	(0.881)	502881	5.00000	5.154
20 Isophorone	82		10.807	10.807	(0.921)	607351	5.00000	4.876
21 2-Nitrophenol	139		10.967	10.967	(0.935)	234271	5.00000	4.456
22 2,4-Dimethylphenol	107		11.018	11.018	(0.939)	836721	10.0000	8.771
23 Bis(2-Chloroethoxy)methane	93		11.222	11.222	(0.956)	387079	5.00000	5.029
24 Benzoic acid	105		11.205	11.205	(0.955)	690083	20.0000	12.15
25 2,4-Dichlorophenol	162		11.434	11.434	(0.974)	802248	10.0000	10.60
26 1,2,4-Trichlorobenzene	180		11.610	11.610	(0.989)	380183	5.00000	5.192
* 27 Naphthalene-d8	136		11.734	11.734	(1.000)	947542	4.00000	
28 Naphthalene	128		11.780	11.780	(1.004)	1139902	5.00000	4.687
29 4-Chloroaniline	127		11.881	11.881	(1.012)	957026	10.0000	8.733
30 Hexachlorobutadiene	225		12.004	12.004	(1.023)	287413	5.00000	5.391
31 4-Chloro-3-methylphenol	107		12.840	12.840	(1.094)	770771	10.0000	9.582
32 2-Methylnaphthalene	142		13.181	13.181	(1.123)	851628	5.00000	4.957
33 Hexachlorocyclopentadiene	237		13.482	13.482	(0.879)	26882	10.0000	1.598

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.753	13.753	(0.897)	528333	10.0000	10.50
35 2,4,5-Trichlorophenol	196	13.831	13.831	(0.902)	552007	10.0000	10.27
§ 36 2-Fluorobiphenyl	172	13.931	13.931	(0.908)	943590	5.00000	5.232
37 2-Chloronaphthalene	162	14.194	14.194	(0.925)	759613	5.00000	5.365
38 2-Nitroaniline	65	14.403	14.403	(0.939)	431088	10.0000	10.73
39 Dimethylphthalate	163	14.767	14.767	(0.963)	780323	5.00000	4.778
40 Acenaphthylene	152	15.054	15.054	(0.981)	1332597	5.00000	5.459
41 2,6-Dinitrotoluene	165	14.907	14.907	(0.972)	376924	10.0000	10.17
* 42 Acenaphthene-d10	164	15.340	15.340	(1.000)	505666	4.00000	
43 3-Nitroaniline	138	15.255	15.255	(0.994)	390807	10.0000	9.490
44 Acenaphthene	153	15.409	15.409	(1.005)	715285	5.00000	4.859
45 2,4-Dinitrophenol	184	15.479	15.479	(1.009)	211324	20.0000	20.88
46 Dibenzofuran	168	15.773	15.773	(1.028)	1119278	5.00000	5.123
47 4-Nitrophenol	109	15.595	15.595	(1.017)	238701	10.0000	8.051
48 2,4-Dinitrotoluene	165	15.749	15.749	(1.027)	543213	10.0000	10.06
50 Diethylphthalate	149	16.244	16.244	(1.059)	808607	5.00000	4.674
49 Fluorene	166	16.492	16.492	(1.075)	880519	5.00000	4.844
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.075)	404773	5.00000	4.866
52 4-Nitroaniline	138	16.531	16.531	(1.078)	404772	10.0000	9.144
53 4,6-Dinitro-2-methylphenol	198	16.593	16.593	(0.899)	487517	20.0000	20.78
54 N-Nitrosodiphenylamine	169	16.731	16.731	(0.907)	707394	5.00000	5.085
§ 55 2,4,6-Tribromophenol	330	16.994	16.994	(1.108)	250190	7.50000	7.629
56 4-Bromophenyl-phenylether	248	17.511	17.511	(0.949)	317759	5.00000	5.637
57 Hexachlorobenzene	284	17.627	17.627	(0.955)	346958	5.00000	5.466
58 Pentachlorophenol	266	18.045	18.045	(0.978)	139344	10.0000	4.639
* 59 Phenanthrene-d10	188	18.455	18.455	(1.000)	940283	4.00000	
60 Phenanthrene	178	18.509	18.509	(1.003)	1159585	5.00000	4.819
61 Anthracene	178	18.618	18.618	(1.009)	1213649	5.00000	5.201
62 Carbazole	167	18.950	18.950	(1.027)	1083313	5.00000	5.068
63 Di-n-butylphthalate	149	19.647	19.647	(1.065)	1444373	5.00000	4.811
64 Fluoranthene	202	20.892	20.892	(0.888)	1414139	5.00000	4.161
65 Pyrene	202	21.326	21.326	(0.907)	1482439	5.00000	4.284
§ 66 Terphenyl-d14	244	21.604	21.604	(0.919)	1285069	5.00000	4.589
67 Butylbenzylphthalate	149	22.495	22.495	(0.957)	687002	5.00000	3.740
68 Benzo(a)anthracene	228	23.501	23.501	(0.999)	1635637	5.00000	4.695
* 69 Chrysene-d12	240	23.517	23.517	(1.000)	987952	4.00000	
70 3,3'-Dichlorobenzidine	252	23.447	23.447	(0.997)	1843312	15.0000	11.71
71 Chrysene	228	23.563	23.563	(1.002)	1441749	5.00000	5.093
72 bis(2-Ethylhexyl)phthalate	149	23.494	23.494	(0.955)	1098969	5.00000	4.686
* 134 Di-n-octylphthalate-d4	153	24.593	24.593	(1.000)	1625017	4.00000	
73 Di-n-octylphthalate	149	24.601	24.601	(1.000)	1872021	5.00000	5.195
74 Benzo(b)fluoranthene	252	25.452	25.452	(0.968)	1612424	5.00000	4.209
75 Benzo(k)fluoranthene	252	25.507	25.507	(0.970)	1704767	5.00000	4.595
76 Benzo(a)pyrene	252	26.157	26.157	(0.995)	1531821	5.00000	4.462
* 77 Perylene-d12	264	26.289	26.289	(1.000)	1073798	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.158	29.158	(1.109)	1841953	5.00000	4.585
79 Dibenzo(a,h)anthracene	278	29.204	29.204	(1.111)	1523631	5.00000	4.948
80 Benzo(g,h,i)perylene	276	30.043	30.043	(1.143)	1531325	5.00000	4.815
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.510)	557365	10.0000	10.36
91 Aniline	93	8.636	8.636	(0.934)	1135375	10.0000	9.517
93 Benzidine	184	21.148	21.148	(0.899)	637697	10.0000	4.227
103 Pyridine	79	4.781	4.781	(0.517)	946906	10.0000	9.923
105 1-methylnaphthalene	142	13.390	13.390	(1.141)	773355	5.00000	4.973
111 Azobenzene (1,2-DP-Hydrazine)	77	16.816	16.816	(1.096)	1177852	5.00000	4.559

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.507	25.507	(0.970)	3247268	10.0000	8.797
120 2,3,4,6-Tetrachlorophenol	232		16.020	16.020	(1.044)	257039	5.00000	5.119

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 30-DEC-2022
 Lab File ID: NT1003052314A.D Calibration Time: 08:06
 Lab Smp Id: SLC0415-ICV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	264922	-10.88
27 Naphthalene-d8	1085336	542668	2170672	947542	-12.70
42 Acenaphthene-d10	563464	281732	1126928	505666	-10.26
59 Phenanthrene-d10	1038318	519159	2076636	940283	-9.44
69 Chrysene-d12	1012751	506376	2025502	987952	-2.45
134 Di-n-octylphthala	1628890	814445	3257780	1625017	-0.24
77 Perylene-d12	1152264	576132	2304528	1073798	-6.81

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.06
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.52	23.02	24.02	23.52	-0.00
134 Di-n-octylphthala	24.59	24.09	25.09	24.59	-0.00
77 Perylene-d12	26.28	25.78	26.78	26.29	0.03

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

REVIEW SUMMARY FOR FILE - NT1003052314A.D

Lab ID: SLC0415-ICV1

nt10.i, 20230305A.b\ABN.m, 05-MAR-2023 21:38

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052325B.D

Calibration Date: 03/01/2023

Sequence: SLC0425

Injection Date: 03/06/23

Lab Sample ID: SLC0425-ICV1

Injection Time: 04:32

Sequence Name: Initial Cal Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	5.1	1.5534590	1.5972540		2.8	+/-20
4-Methylphenol	A	5.0000	4.2	1.2087680	1.2427800		-16.8	+/-20
Naphthalene	A	5.0000	4.8	1.0266520	0.9762232		-4.9	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7229156		-0.3	+/-20
Acenaphthylene	A	5.0000	5.5	1.9309320	2.1147470		9.5	+/-20
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2295940		-4.8	+/-20
Acenaphthene	A	5.0000	4.7	1.1645250	1.0886570		-6.5	+/-20
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7322310		0.2	+/-20
Fluorene	A	5.0000	4.8	1.4379840	1.3813860		-3.9	+/-20
Pentachlorophenol	A	10.000	4.3	0.1145550	0.0549041		-56.9	+/-20 *
Phenanthrene	A	5.0000	4.9	1.0236730	1.0085230		-1.5	+/-20
Anthracene	A	5.0000	5.3	0.9926226	1.0549600		6.3	+/-20
Fluoranthene	A	5.0000	4.1	1.3760330	1.1271120		-18.1	+/-20
Pyrene	A	5.0000	4.2	1.4011560	1.1872420		-15.3	+/-20
Butylbenzylphthalate	A	5.0000	3.6	0.6475451	0.5410213		-27.3	+/-20 *
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3267490		-5.9	+/-20
Chrysene	A	5.0000	5.2	1.1462500	1.1881060		3.7	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	4.6	0.5331838	0.5301781		-8.1	+/-20
Benzo(a)fluoranthene, Total	A	10.000	8.9	1.3383070	1.2247210		-11.0	+/-20
Benzo(a)pyrene	A	5.0000	4.5	1.2312020	1.1439840		-10.6	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.5	1.4033590	1.3554640		-9.4	+/-20
Dibenzo(a,h)anthracene	A	5.0000	5.0	1.1150690	1.1362700		-0.9	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.6	1.1245240	1.0839360		-8.3	+/-20
2-Fluorophenol	A	7.5000	7.59	1.2585100	1.2731630		1.2	+/-20
Phenol-d5	A	7.5000	8.18	1.4611190	1.5928210		9.0	+/-20
2-Chlorophenol-d4	A	7.5000	7.92	1.2465880	1.3167740		5.6	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	4.80	0.9313544	0.8938771		-4.0	+/-20
Nitrobenzene-d5	A	5.0000	5.46	0.4390871	0.4790405		9.1	+/-20
2-Fluorobiphenyl	A	5.0000	5.08	1.4267270	1.4491650		1.6	+/-20
2,4,6-Tribromophenol	A	7.5000	7.41	0.2287830	0.2559487		-1.2	+/-20

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00019</u>
Lab File ID:	<u>NT1003052325B.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0425</u>	Injection Date:	<u>03/06/23</u>
Lab Sample ID:	<u>SLC0425-ICV1</u>	Injection Time:	<u>04:32</u>
Sequence Name:	<u>Initial Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
p-Terphenyl-d14	A	5.0000	4.46	1.1337350	1.0103300		-10.9	+/-20
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84410.2500	1.0000			
Naphthalene-d8	A	4.0000	4.0	316296.8000	1.0000			
Acenaphthene-d10	A	4.0000	4.0	173096.3000	1.0000			
Phenanthrene-d10	A	4.0000	4.0	344194.3000	1.0000			
Chrysene-d12	A	4.0000	4.0	254881.0000	1.0000			
Di-n-Octylphthalate-d4	A	4.0000	4.0	506777.8000	1.0000			
Perylene-d12	A	4.0000	4.0	256852.3000	1.0000			

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.j\NT1003052325B.D

Date: 06-HRR-2023 04:32

Client ID:

Sample Info: SLC0425-ICW1

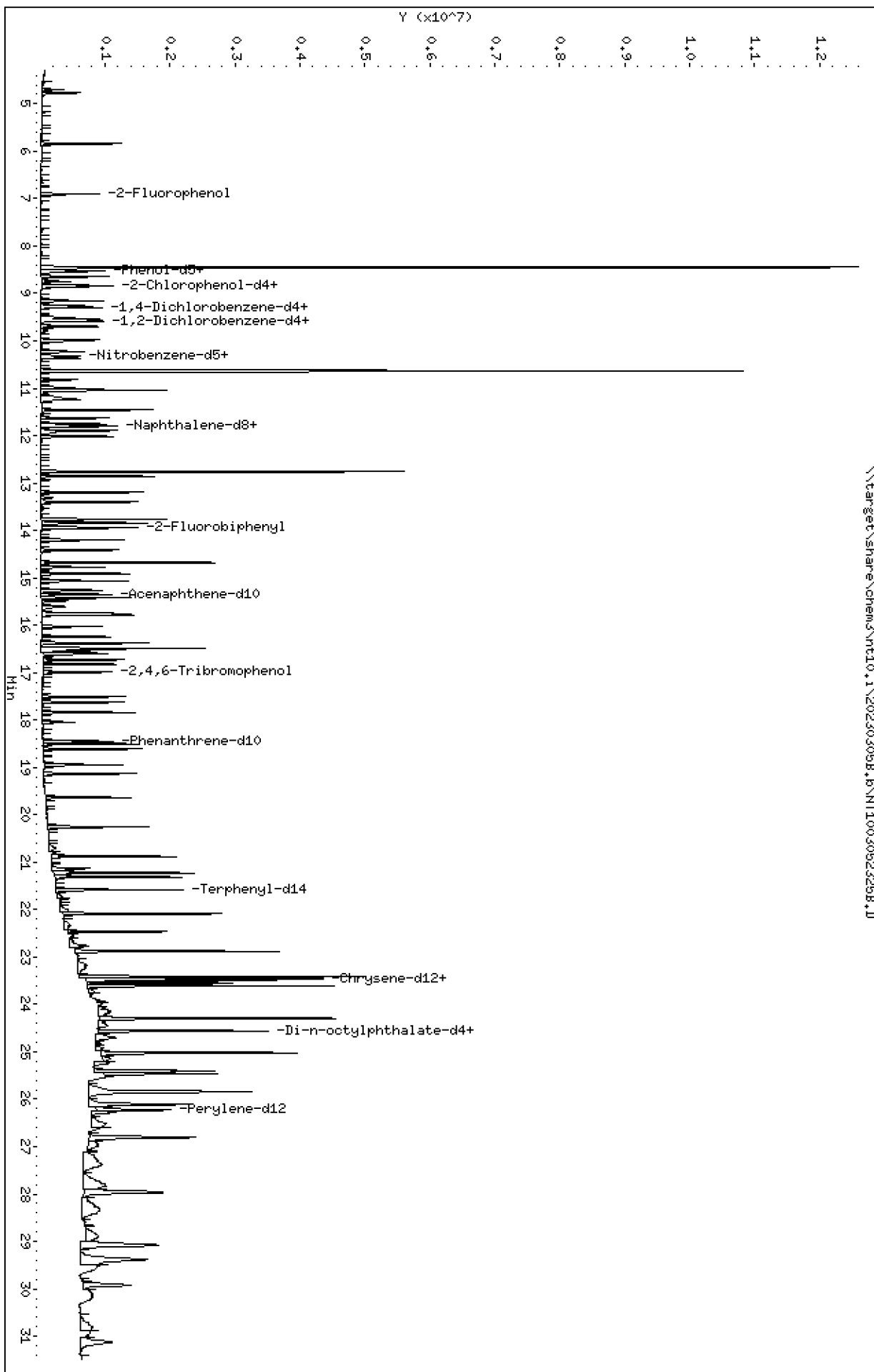
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.j\NT1003052325B.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052325B.D
 Lab Smp Id: SLC0425-ICV1
 Inj Date : 06-MAR-2023 04:32
 Operator : VTS
 Smp Info : SLC0425-ICV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Meth Date : 27-Mar-2023 17:23 deenayd
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Quant Type: ISTD

Cal File: NT1003012307.D

Continuing Calibration Sample

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.905	(0.745)	510427	7.50000	7.587
\$ 2 Phenol-d5	99		8.527	8.527	(0.921)	638582	7.50000	8.176
3 Phenol	94		8.550	8.550	(0.923)	426906	5.00000	5.141
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.954)	527911	7.50000	7.922
4 Bis(2-Chloroethyl)ether	93		8.751	8.751	(0.945)	328403	5.00000	5.175
6 2-Chlorophenol	128		8.867	8.867	(0.957)	362563	5.00000	5.237
7 1,3-Dichlorobenzene	146		9.153	9.153	(0.988)	366047	5.00000	4.796
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	213820	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.293	(1.003)	350249	5.00000	4.620
\$ 10 1,2-Dichlorobenzene-d4	152		9.557	9.557	(1.032)	238911	5.00000	4.799
12 1,2-Dichlorobenzene	146		9.580	9.580	(1.034)	339743	5.00000	4.630
11 Benzyl alcohol	108		9.510	9.510	(1.027)	188659	5.00000	4.334
14 2,2'-oxybis(1-Chloropropane)	121		9.751	9.751	(1.053)	105126	5.00000	4.969 (M)
13 2-Methylphenol	108		9.697	9.697	(1.047)	316228	5.00000	4.807
17 Hexachloroethane	117		10.232	10.232	(1.105)	131659	5.00000	4.231
16 N-Nitroso-di-n-propylamine	70		10.007	10.007	(1.080)	257585	5.00000	5.140
15 4-Methylphenol	108		9.984	9.984	(1.078)	332164	5.00000	4.159
\$ 18 Nitrobenzene-d5	82		10.325	10.325	(0.878)	452707	5.00000	5.455
19 Nitrobenzene	77		10.364	10.364	(0.882)	407518	5.00000	5.235
20 Isophorone	82		10.822	10.822	(0.920)	557077	5.00000	5.606
21 2-Nitrophenol	139		10.984	10.984	(0.934)	182875	5.00000	4.357
22 2,4-Dimethylphenol	107		11.043	11.043	(0.939)	684831	10.0000	8.992
23 Bis(2-Chloroethoxy)methane	93		11.247	11.247	(0.957)	312842	5.00000	5.094
24 Benzoic acid	105		11.221	11.221	(0.954)	499371	20.0000	11.05
25 2,4-Dichlorophenol	162		11.459	11.459	(0.975)	664679	10.0000	11.00
26 1,2,4-Trichlorobenzene	180		11.633	11.633	(0.989)	299307	5.00000	5.123
* 27 Naphthalene-d8	136		11.757	11.757	(1.000)	756023	4.00000	
28 Naphthalene	128		11.803	11.803	(1.004)	922559	5.00000	4.754
29 4-Chloroaniline	127		11.896	11.896	(1.012)	737596	10.0000	8.444
30 Hexachlorobutadiene	225		12.020	12.020	(1.022)	196611	5.00000	4.622
31 4-Chloro-3-methylphenol	107		12.855	12.855	(1.093)	620256	10.0000	9.660
32 2-Methylnaphthalene	142		13.196	13.196	(1.122)	683176	5.00000	4.984
33 Hexachlorocyclopentadiene	237		13.498	13.498	(0.879)	5211	10.0000	0.3836

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.769	13.769	(0.897)	425340	10.0000	10.39
35 2,4,5-Trichlorophenol	196	13.846	13.846	(0.902)	454938	10.0000	10.39
§ 36 2-Fluorobiphenyl	172	13.939	13.939	(0.908)	745409	5.00000	5.079
37 2-Chloronaphthalene	162	14.202	14.202	(0.925)	603674	5.00000	5.239
38 2-Nitroaniline	65	14.411	14.411	(0.939)	351662	10.0000	10.76
39 Dimethylphthalate	163	14.775	14.775	(0.963)	632468	5.00000	4.759
40 Acenaphthylene	152	15.061	15.061	(0.981)	1087765	5.00000	5.476
41 2,6-Dinitrotoluene	165	14.914	14.914	(0.972)	299253	10.0000	9.933
* 42 Acenaphthene-d10	164	15.347	15.347	(1.000)	411497	4.00000	
43 3-Nitroaniline	138	15.262	15.262	(0.994)	308338	10.0000	9.201
44 Acenaphthene	153	15.417	15.417	(1.005)	559974	5.00000	4.674
45 2,4-Dinitrophenol	184	15.486	15.486	(1.009)	112034	20.0000	13.96
46 Dibenzofuran	168	15.780	15.780	(1.028)	891010	5.00000	5.011
47 4-Nitrophenol	109	15.610	15.610	(1.017)	187589	10.0000	7.786
48 2,4-Dinitrotoluene	165	15.749	15.749	(1.026)	434240	10.0000	9.886 (H)
50 Diethylphthalate	149	16.244	16.244	(1.058)	649229	5.00000	4.612
49 Fluorene	166	16.492	16.492	(1.075)	710545	5.00000	4.803
51 4-Chlorophenyl-phenylether	204	16.492	16.492	(1.075)	332625	5.00000	4.911
52 4-Nitroaniline	138	16.538	16.538	(1.078)	303151	10.0000	8.415
53 4,6-Dinitro-2-methylphenol	198	16.592	16.592	(0.899)	292545	20.0000	16.02
54 N-Nitrosodiphenylamine	169	16.731	16.731	(0.907)	567880	5.00000	5.156
§ 55 2,4,6-Tribromophenol	330	16.993	16.993	(1.107)	197479	7.50000	7.413
56 4-Bromophenyl-phenylether	248	17.511	17.511	(0.949)	259346	5.00000	5.811
57 Hexachlorobenzene	284	17.627	17.627	(0.955)	283058	5.00000	5.632
58 Pentachlorophenol	266	18.045	18.045	(0.978)	102176	10.0000	4.306
* 59 Phenanthrene-d10	188	18.455	18.455	(1.000)	744396	4.00000	
60 Phenanthrene	178	18.502	18.502	(1.002)	938426	5.00000	4.926
61 Anthracene	178	18.610	18.610	(1.008)	981635	5.00000	5.314
62 Carbazole	167	18.943	18.943	(1.026)	867609	5.00000	5.127
63 Di-n-butylphthalate	149	19.631	19.631	(1.064)	1184741	5.00000	4.978
64 Fluoranthene	202	20.877	20.877	(0.889)	1159524	5.00000	4.096
65 Pyrene	202	21.310	21.310	(0.907)	1221383	5.00000	4.237
§ 66 Terphenyl-d14	244	21.581	21.581	(0.919)	1039383	5.00000	4.456
67 Butylbenzylphthalate	149	22.464	22.464	(0.956)	556579	5.00000	3.636
68 Benzo(a)anthracene	228	23.478	23.478	(0.999)	1364901	5.00000	4.703
* 69 Chrysene-d12	240	23.494	23.494	(1.000)	823005	4.00000	
70 3,3'-Dichlorobenzidine	252	23.416	23.416	(0.997)	1458047	15.0000	11.12
71 Chrysene	228	23.540	23.540	(1.002)	1222271	5.00000	5.183
72 bis(2-Ethylhexyl)phthalate	149	23.463	23.463	(0.956)	894991	5.00000	4.595
* 134 Di-n-octylphthalate-d4	153	24.554	24.554	(1.000)	1350476	4.00000	
73 Di-n-octylphthalate	149	24.562	24.562	(1.000)	1534343	5.00000	5.124
74 Benzo(b)fluoranthene	252	25.406	25.406	(0.969)	1361439	5.00000	4.266
75 Benzo(k)fluoranthene	252	25.460	25.460	(0.971)	1434523	5.00000	4.641
76 Benzo(a)pyrene	252	26.103	26.103	(0.995)	1278494	5.00000	4.472
* 77 Perylene-d12	264	26.227	26.227	(1.000)	894064	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.057	29.057	(1.108)	1514840	5.00000	4.531
79 Dibenzo(a,h)anthracene	278	29.095	29.095	(1.109)	1269873	5.00000	4.953
80 Benzo(g,h,i)perylene	276	29.919	29.919	(1.141)	1211385	5.00000	4.585
90 N-Nitrosodimethylamine	74	4.704	4.704	(0.508)	438193	10.0000	10.09
91 Aniline	93	8.643	8.643	(0.933)	864851	10.0000	8.982
93 Benzidine	184	21.132	21.132	(0.899)	415797	10.0000	3.308
103 Pyridine	79	4.766	4.766	(0.515)	747172	10.0000	9.701
105 1-methylnaphthalene	142	13.397	13.397	(1.139)	620266	5.00000	4.999
111 Azobenzene (1,2-DP-Hydrazine)	77	16.824	16.824	(1.096)	938445	5.00000	4.464

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
187 Total Benzofluoranthenes	252		25.406	25.406	(0.969)	2737448	10.0000	8.901
120 2,3,4,6-Tetrachlorophenol	232		16.028	16.028	(1.044)	209811	5.00000	5.133

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052325B.D Calibration Time: 04:32
 Lab Smp Id: SLC0425-ICV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	213820	0.00
27 Naphthalene-d8	756023	378012	1512046	756023	0.00
42 Acenaphthene-d10	411497	205749	822994	411497	0.00
59 Phenanthrene-d10	744396	372198	1488792	744396	0.00
69 Chrysene-d12	823005	411503	1646010	823005	0.00
134 Di-n-octylphthala	1350476	675238	2700952	1350476	0.00
77 Perylene-d12	894064	447032	1788128	894064	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.49	0.00
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	0.00
77 Perylene-d12	26.23	25.73	26.73	26.23	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052325B.D

Lab ID: SLC0425-ICV1

nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 04:32

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

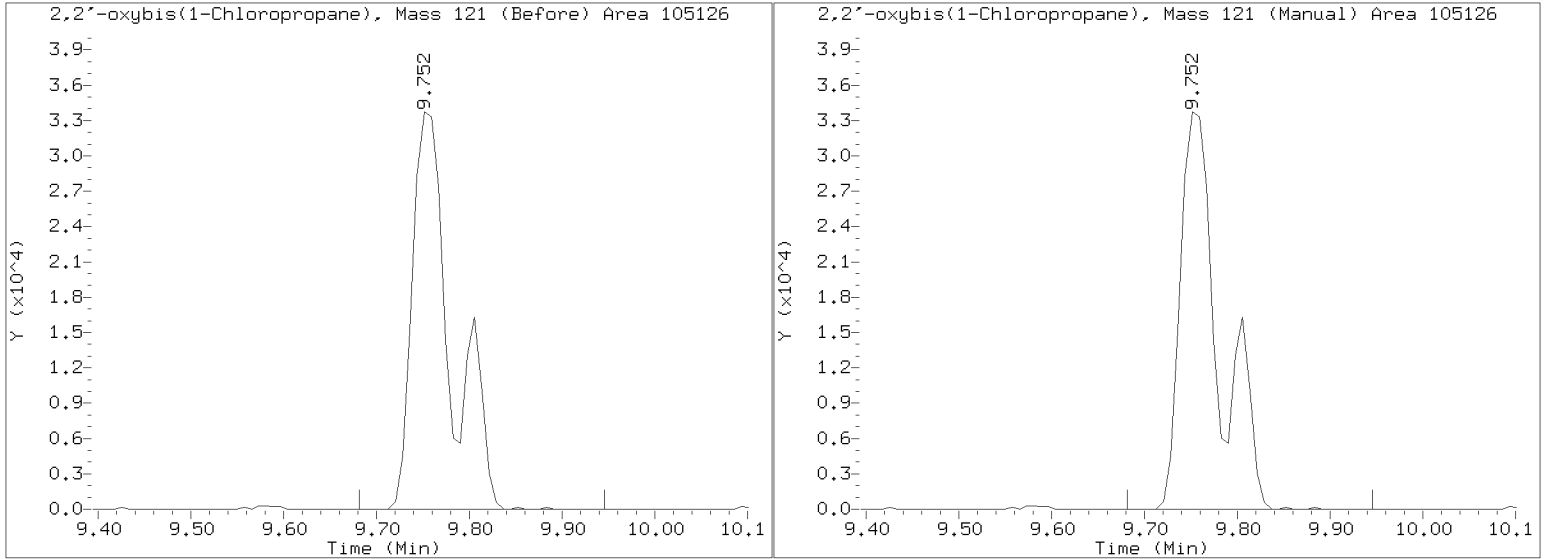
No RRT check. Ccal file.

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052325B.D
Injection Date: 06-MAR-2023 04:32
Lab ID:SLC0425-ICV1 Client ID:
Report Date: 03/27/2023 17:25



APPROVED
By Deenay Dunmore at 5:25 pm, Mar 27, 2023

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305B.b

Instrument: nt10.i Date: 06-MAR-2023 Method: 20230305B.b\ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R ²
2,4-Dinitrophenol	0.989

ICV CAL: NT1003052325B.D 06-MAR-2023 04:32

Compound	%D
Benzoic acid	-44.8
Hexachlorocyclopentadiene	-96.2
2,4-Dinitrophenol	-30.2
4-Nitrophenol	-22.1
Pentachlorophenol	-56.9
Butylbenzylphthalate	-27.3
3,3'-Dichlorobenzidine	-25.8
Benzidine	-66.9



SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003012311.D

Calibration Date: 03/01/2023

Sequence: SLC0084

Injection Date: 03/01/23

Lab Sample ID: SLC0084-SCV1

Injection Time: 21:46

Sequence Name: SCV 5.0

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.9	1.5534590	1.5075140		-3.0	+/-20
bis(2-chloroethyl) ether	A	5.0000	5.9	1.1870870	1.4074350		18.6	+/-20
2-Chlorophenol	A	5.0000	4.7	1.2950380	1.2153530		-6.2	+/-20
1,3-Dichlorobenzene	A	5.0000	5.3	1.4278260	1.5038770		5.3	+/-20
1,4-Dichlorobenzene	A	5.0000	5.2	1.4182650	1.4795020		4.3	+/-20
1,2-Dichlorobenzene	A	5.0000	5.2	1.3727590	1.4260290		3.9	+/-20
Benzyl Alcohol	A	5.0000	4.9	0.7104711	0.8002285		-2.0	+/-20
2,2'-Oxybis(1-chloropropane)	A	5.0000	6.2	0.3957681	0.4932577		24.6	+/-20 *
2-Methylphenol	A	5.0000	4.2	1.0954470	1.0287080		-16.2	+/-20
Hexachloroethane	A	5.0000	5.4	0.5821386	0.6336697		8.9	+/-20
N-Nitroso-di-n-Propylamine	A	5.0000	5.9	0.9374094	1.1070890		18.1	+/-20
4-Methylphenol	A	5.0000	4.2	1.2087680	1.2666790		-15.2	+/-20
Nitrobenzene	A	5.0000	5.6	0.4118860	0.4587792		11.4	+/-20
Isophorone	A	5.0000	7.7	0.5257709	0.8066960		53.4	+/-20 *
2-Nitrophenol	A	5.0000	3.2	0.1627036	0.1451285		-35.1	+/-20 *
2,4-Dimethylphenol	A	5.0000	3.5	0.3830403	0.2785662		-29.9	+/-20 *
Bis(2-Chloroethoxy)methane	A	5.0000	6.7	0.3249172	0.4371566		34.5	+/-20 *
2,4-Dichlorophenol	A	5.0000	4.4	0.2612827	0.2786176		-11.3	+/-20
1,2,4-Trichlorobenzene	A	5.0000	4.9	0.3091179	0.3034222		-1.8	+/-20
Naphthalene	A	5.0000	5.3	1.0266520	1.0790290		5.1	+/-20
Benzoic acid	A	10.000	5.6	0.1970511	0.1331005		-43.6	+/-20 *
4-Chloroaniline	A	5.0000	3.8	0.4009859	0.3447752		-24.2	+/-20 *
Hexachlorobutadiene	A	5.0000	5.0	0.2250808	0.2257331		0.3	+/-20
4-Chloro-3-Methylphenol	A	5.0000	4.5	0.3168628	0.2958278		-11.0	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7181482		-1.0	+/-20
Hexachlorocyclopentadiene	A	5.0000	2.6	0.1096304	0.0686178		-48.8	+/-20 *
2,4,6-Trichlorophenol	A	5.0000	4.1	0.3635155	0.3174533		-17.6	+/-20
2,4,5-Trichlorophenol	A	5.0000	4.1	0.3974340	0.3415557		-17.0	+/-20
2-Chloronaphthalene	A	5.0000	5.3	1.1200160	1.1792440		5.3	+/-20
2-Nitroaniline	A	5.0000	5.0	0.2857098	0.3129766		0.5	+/-20
Acenaphthylene	A	5.0000	5.8	1.9309320	2.2420970		16.1	+/-20
Dimethylphthalate	A	5.0000	5.4	1.2917940	1.3911230		7.7	+/-20
2,6-Dinitrotoluene	A	5.0000	5.2	0.2723393	0.2988779		3.7	+/-20

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003012311.D

Calibration Date: 03/01/2023

Sequence: SLC0084

Injection Date: 03/01/23

Lab Sample ID: SLC0084-SCV1

Injection Time: 21:46

Sequence Name: SCV 5.0

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Acenaphthene	A	5.0000	5.2	1.1645250	1.2003320		3.1	+/-20
3-Nitroaniline	A	5.0000	5.2	0.3257650	0.3369711		3.4	+/-20
2,4-Dinitrophenol	A	5.0000	0.3	0.0558713	0.0039765		-94.7	+/-20 *
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7261300		-0.1	+/-20
4-Nitrophenol	A	5.0000	3.8	0.2049826	0.1754079		-23.6	+/-20 *
2,4-Dinitrotoluene	A	5.0000	4.7	0.3852197	0.3955023		-5.4	+/-20
Fluorene	A	5.0000	5.3	1.4379840	1.5256380		6.1	+/-20
4-Chlorophenylphenyl ether	A	5.0000	5.3	0.6424026	0.6943814		5.1	+/-20
Diethyl phthalate	A	5.0000	5.6	1.3684860	1.5432660		12.8	+/-20
4-Nitroaniline	A	5.0000	5.2	0.3501692	0.3664427		4.6	+/-20
4,6-Dinitro-2-methylphenol	A	5.0000	1.3	0.0712506	0.0241548		-74.2	+/-20 *
N-Nitrosodiphenylamine	A	5.0000	5.4	0.5918253	0.6410493		8.3	+/-20
4-Bromophenyl phenyl ether	A	5.0000	5.5	0.2398060	0.2618590		9.2	+/-20
Hexachlorobenzene	A	5.0000	4.8	0.2700430	0.2595304		-3.9	+/-20
Pentachlorophenol	A	5.0000	3.5	0.1145550	0.0886055		-30.2	+/-20 *
Phenanthrene	A	5.0000	5.1	1.0236730	1.0409810		1.7	+/-20
Anthracene	A	5.0000	4.6	0.9926226	0.9101788		-8.3	+/-20
Carbazole	A	5.0000	5.3	0.9093581	0.9702244		6.7	+/-20
Di-n-Butylphthalate	A	5.0000	5.5	1.1818970	1.4025400		9.3	+/-20
Fluoranthene	A	5.0000	4.5	1.3760330	1.2499020		-9.2	+/-20
Pyrene	A	5.0000	4.6	1.4011560	1.2963060		-7.5	+/-20
Butylbenzylphthalate	A	5.0000	4.5	0.6475451	0.6710971		-9.5	+/-20
Benzo(a)anthracene	A	5.0000	4.6	1.4104100	1.2914460		-8.4	+/-20
3,3'-Dichlorobenzidine	A	10.0000	7.4	0.5458244	0.4679806		-26.2	+/-20 *
Chrysene	A	5.0000	5.0	1.1462500	1.1386240		-0.7	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.0	0.5331838	0.5732313		-0.9	+/-20
Di-n-Octylphthalate	A	5.0000	5.8	0.8870063	1.0367270		16.9	+/-20
Benzo(a)fluoranthene, Total	A	10.0000	8.9	1.3383070	1.2252050		-11.0	+/-20
Benzo(a)pyrene	A	5.0000	4.4	1.2312020	1.1368210		-11.1	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.3	1.4033590	1.2968100		-13.1	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.6	1.1150690	1.0521910		-7.8	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.6	1.1245240	1.0882170		-8.0	+/-20
1-Methylnaphthalene	A	5.0000	5.2	0.6564478	0.6851418		4.4	+/-20
2-Fluorophenol	A	7.5000	0.00	1.2585100				+/-20 *

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00019</u>
Lab File ID:	<u>NT1003012311.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0084</u>	Injection Date:	<u>03/01/23</u>
Lab Sample ID:	<u>SLC0084-SCV1</u>	Injection Time:	<u>21:46</u>
Sequence Name:	<u>SCV 5.0</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol-d5	A	7.5000	0.00	1.4611190				+/-20 *
2-Chlorophenol-d4	A	7.5000	0.00	1.2465880				+/-20 *
1,2-Dichlorobenzene-d4	A	5.0000	4.29	0.9313544	0.8000000		-14.1	+/-20
Nitrobenzene-d5	A	5.0000	0.00	0.4390871				+/-20 *
2-Fluorobiphenyl	A	5.0000	0.00	1.4267270				+/-20 *
2,4,6-Tribromophenol	A	7.5000	0.00	0.2287830				+/-20 *
p-Terphenyl-d14	A	5.0000	0.0196	1.1337350	0.0044473		-99.6	+/-20 *

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230301.1\NT1003012311.D

Date: 01-HRR-2023 21:46

Client ID:

Sample Info: SEQ-SCV1

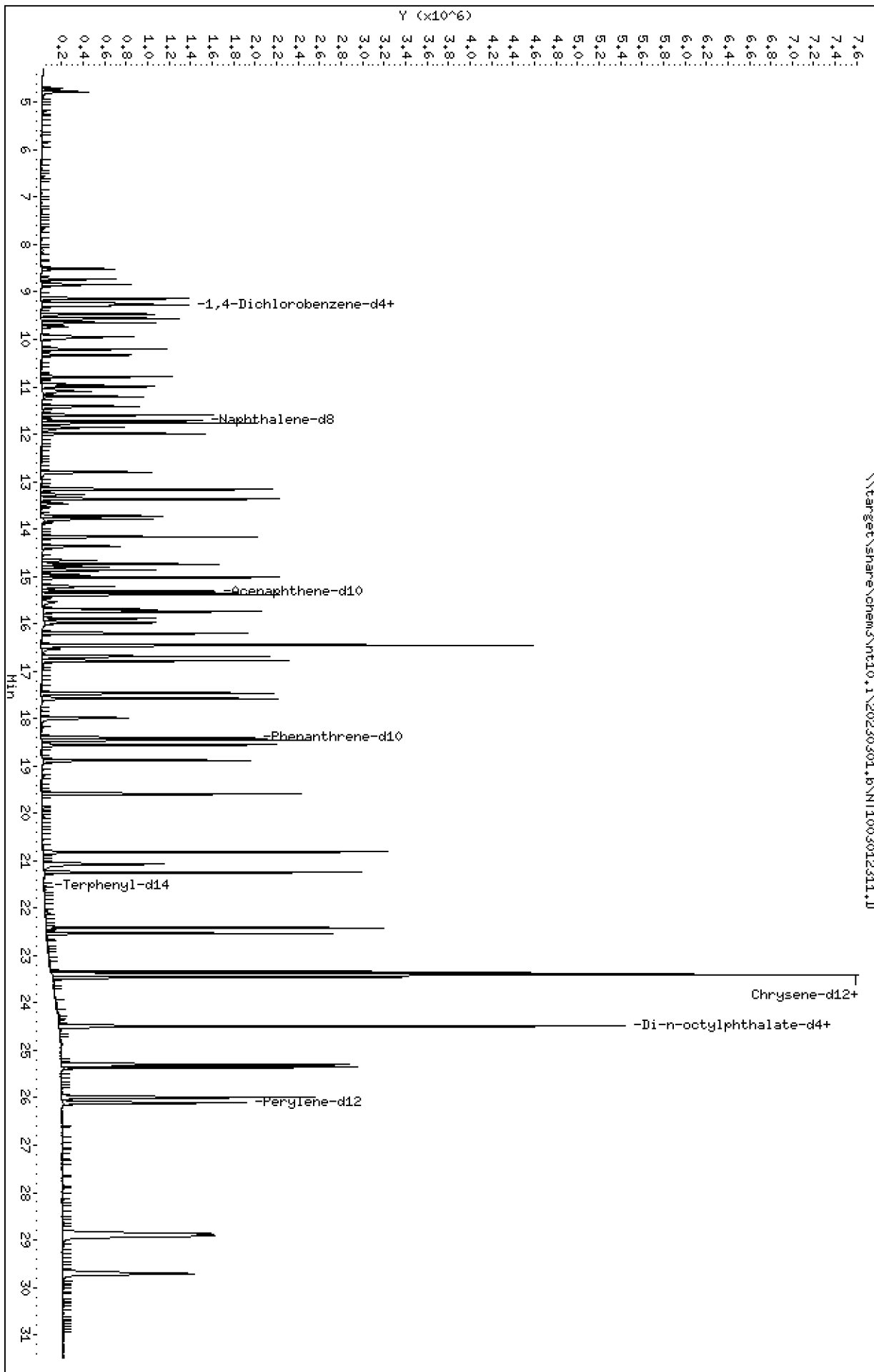
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

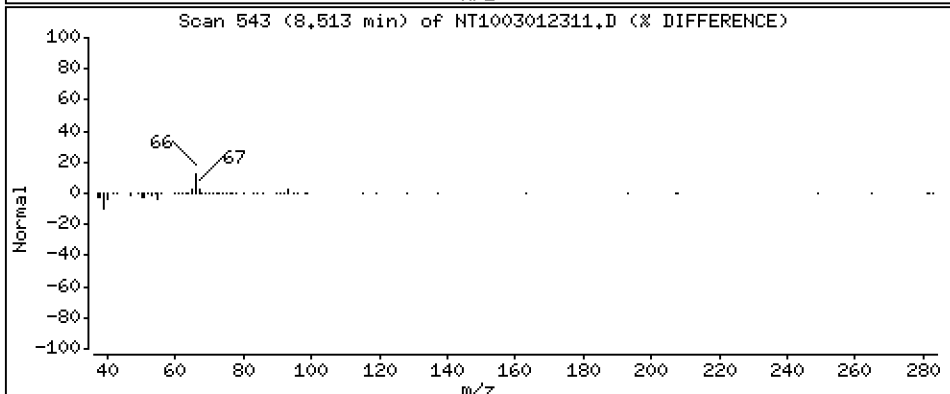
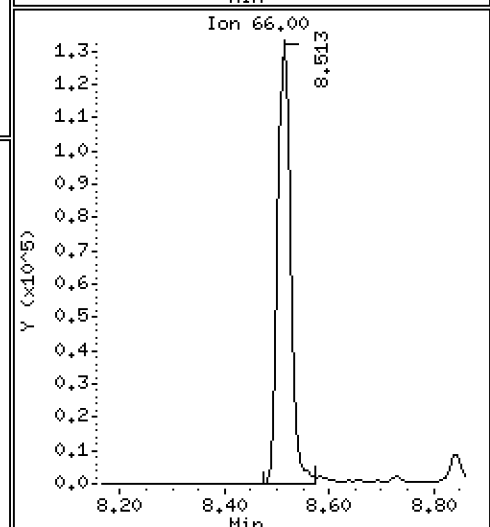
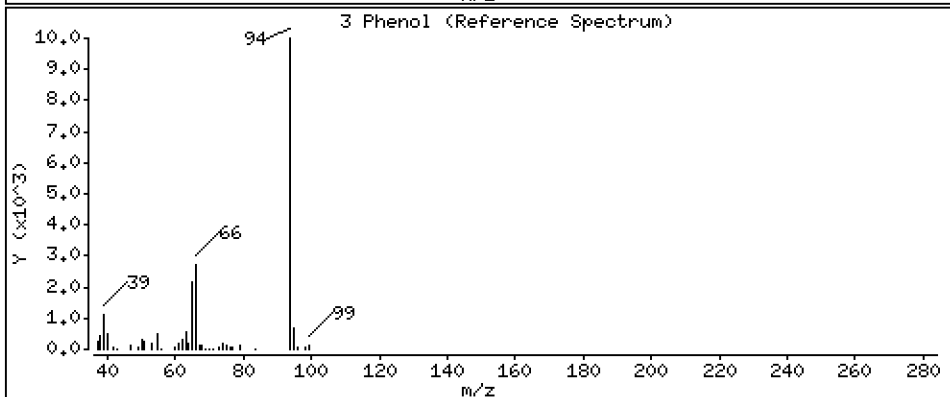
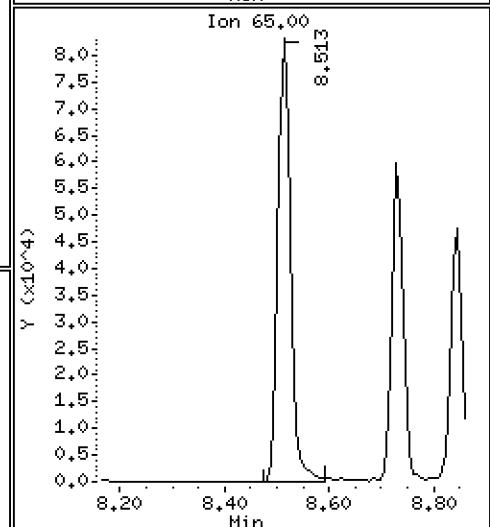
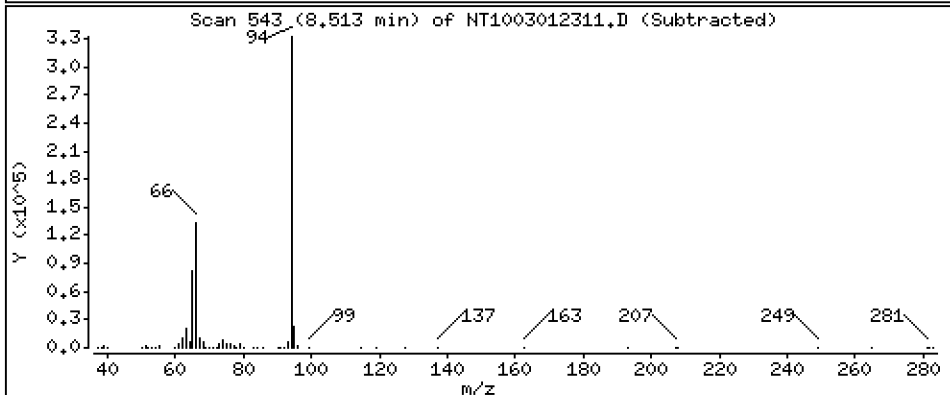
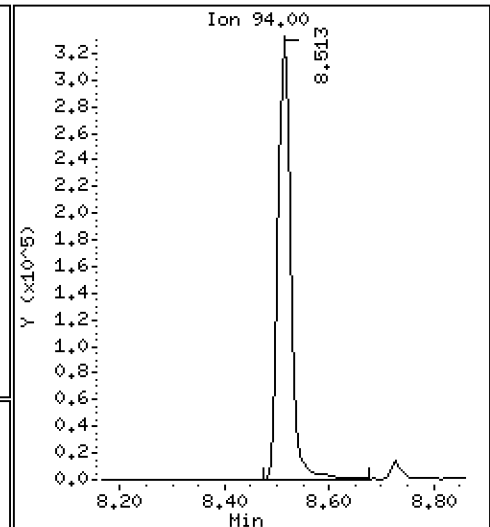
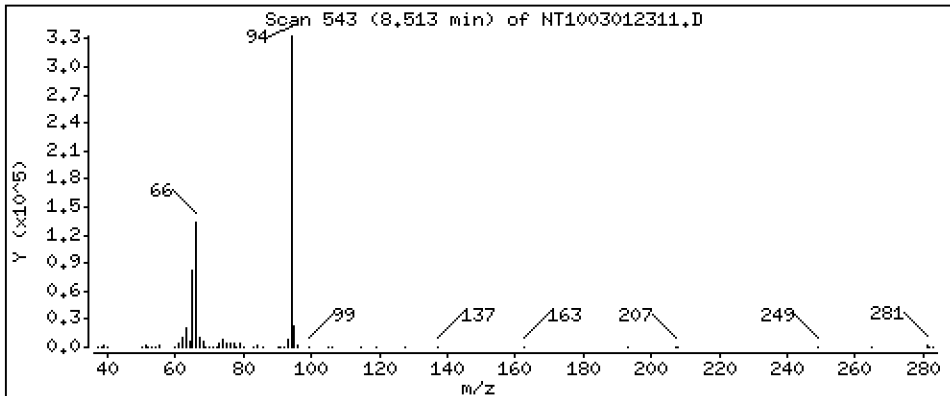
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,852 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

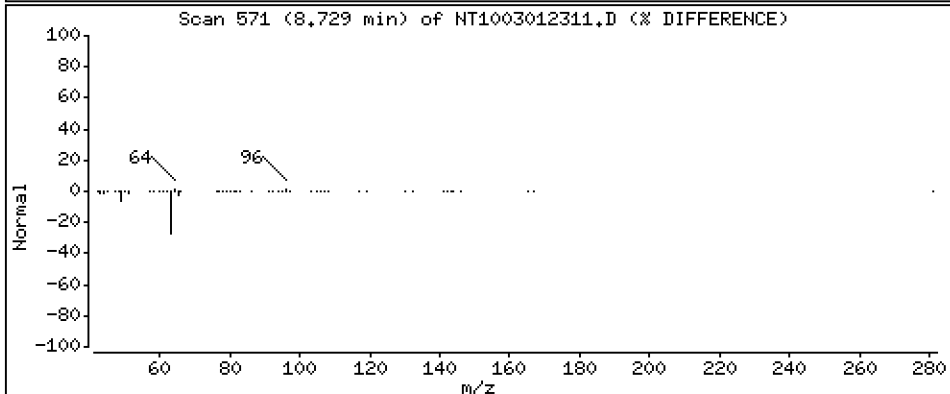
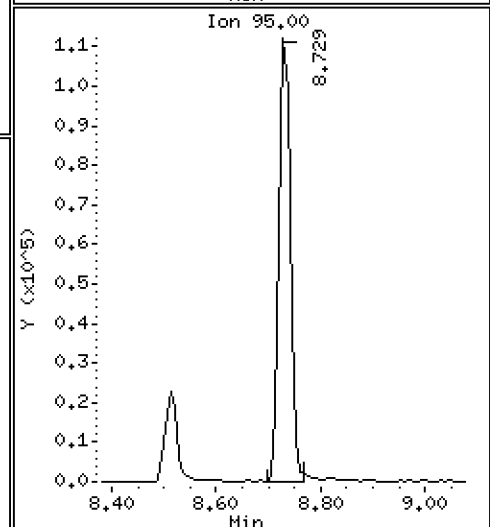
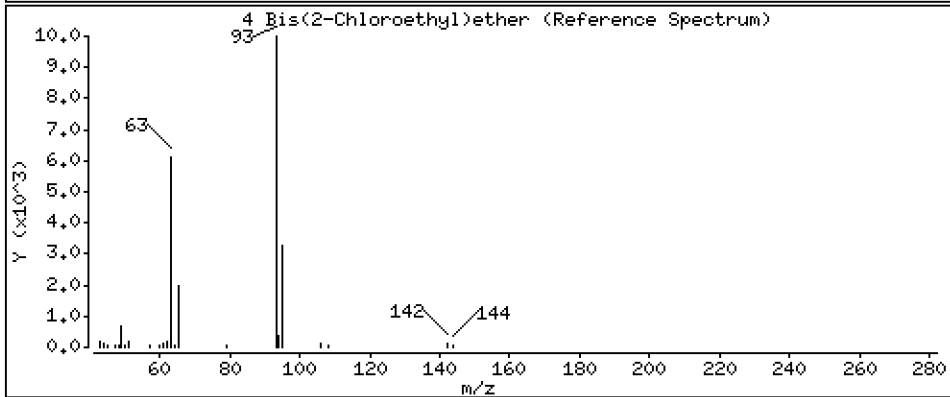
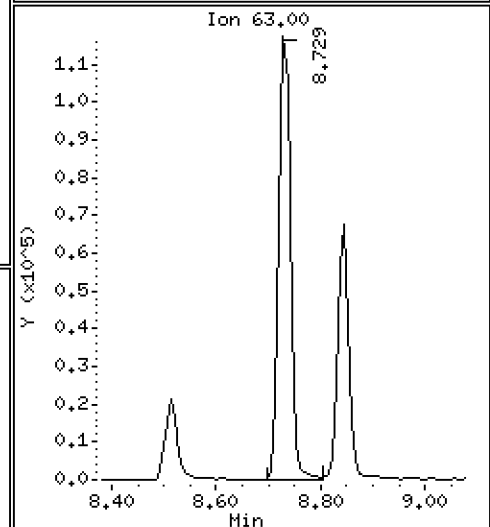
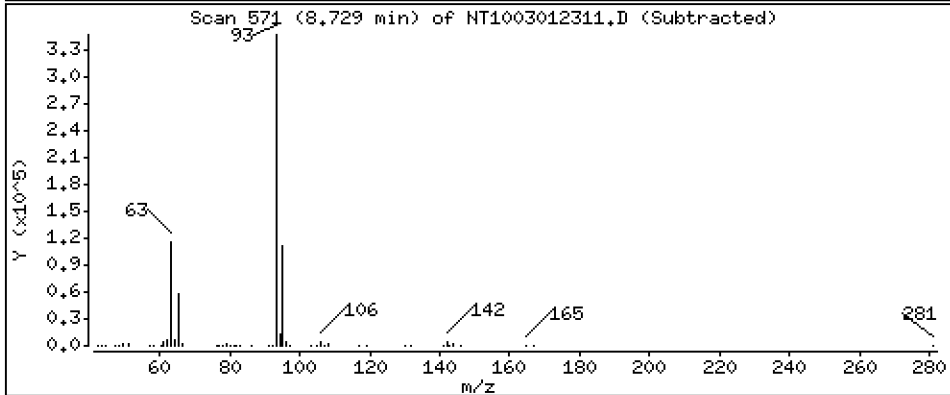
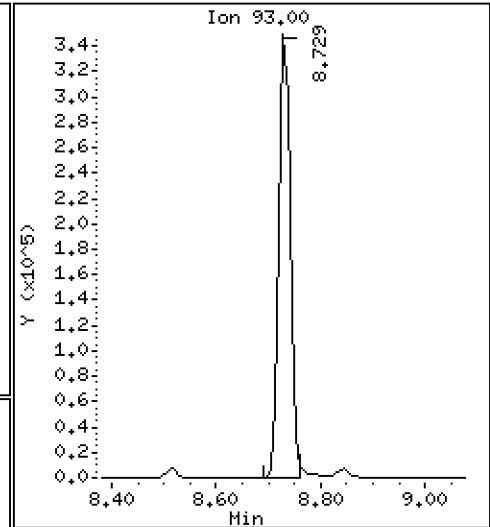
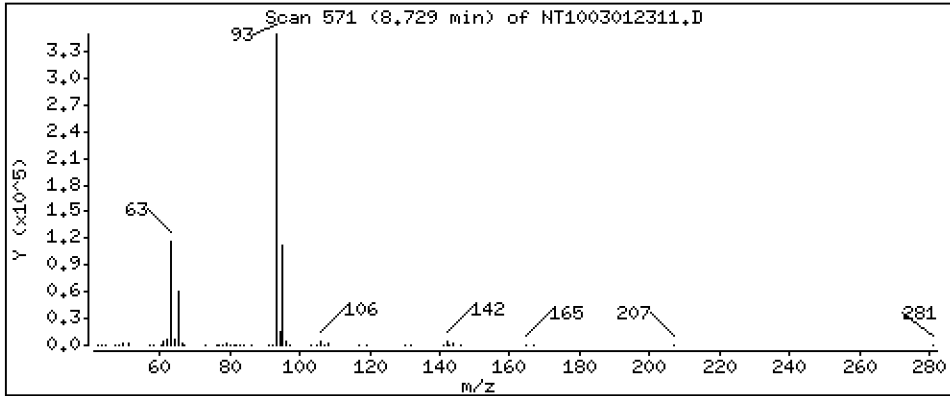
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,928 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

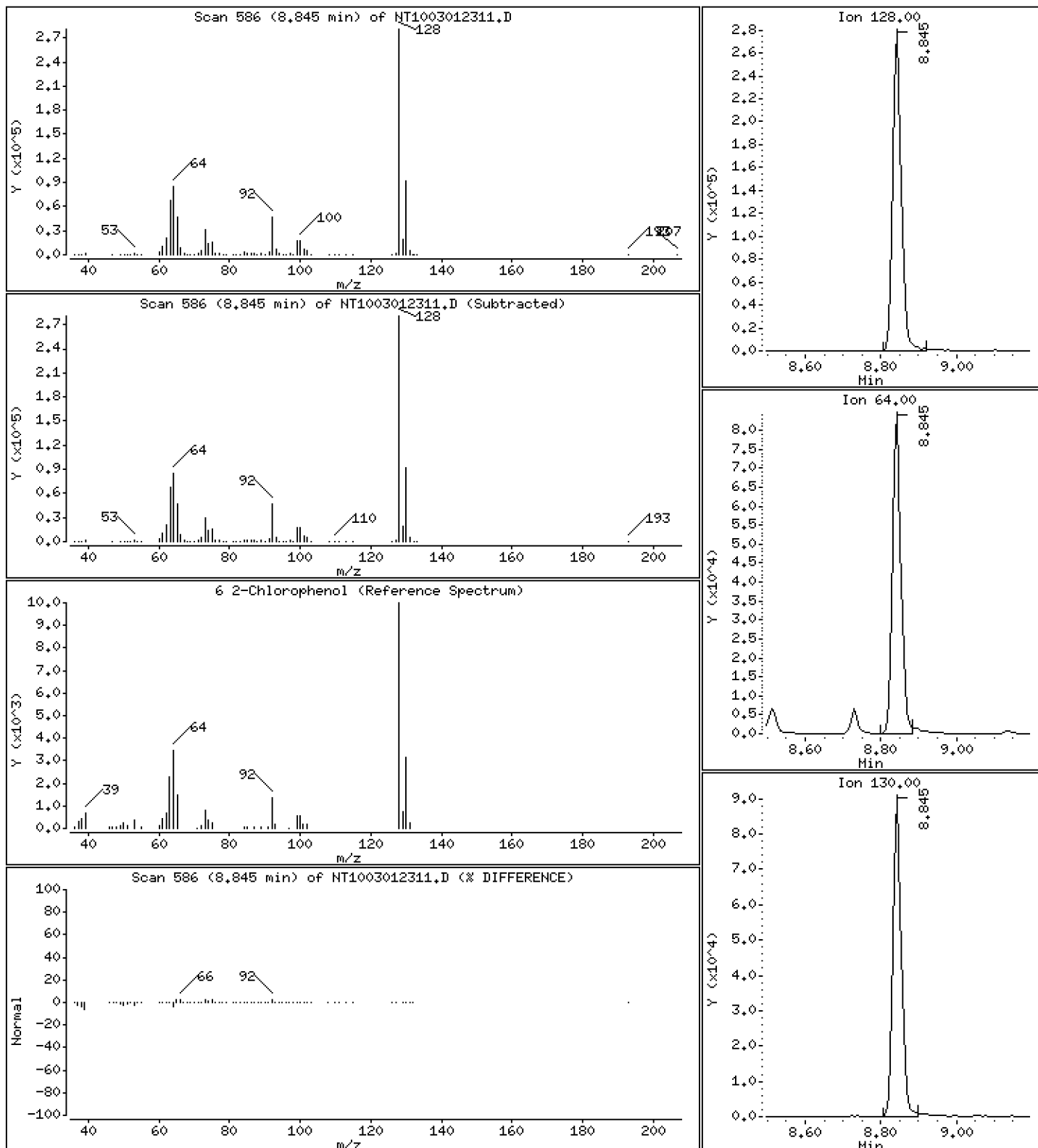
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 4.692 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

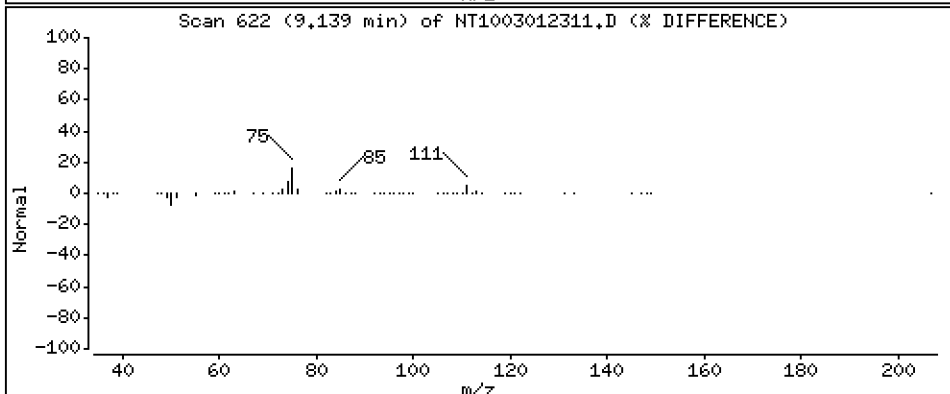
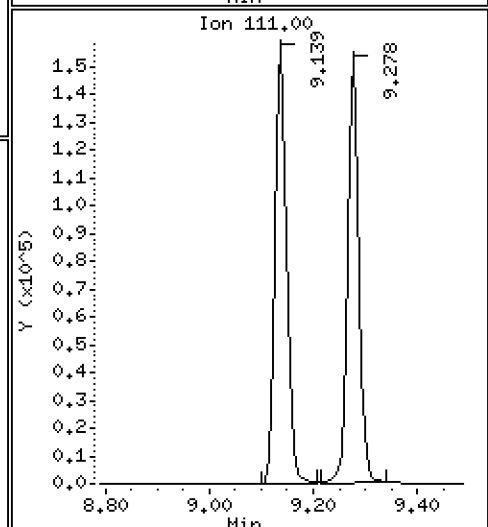
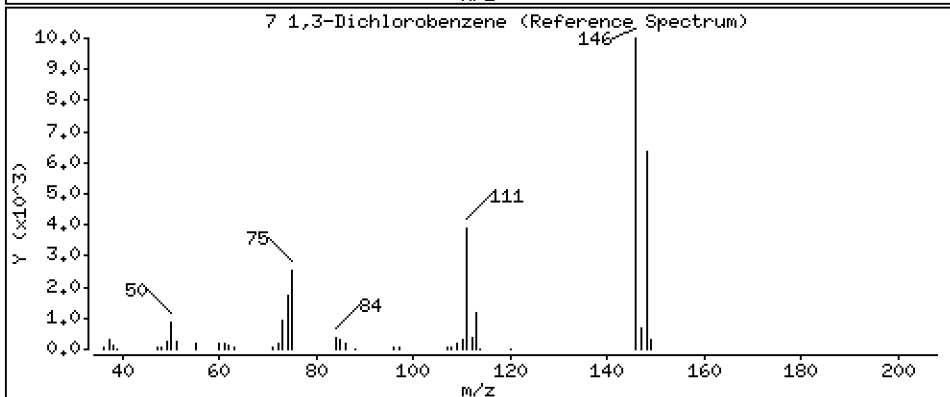
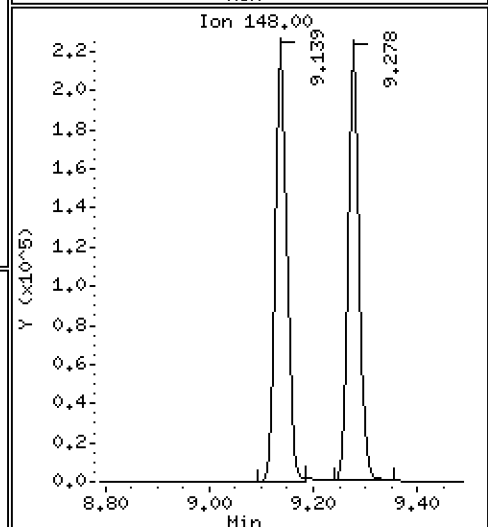
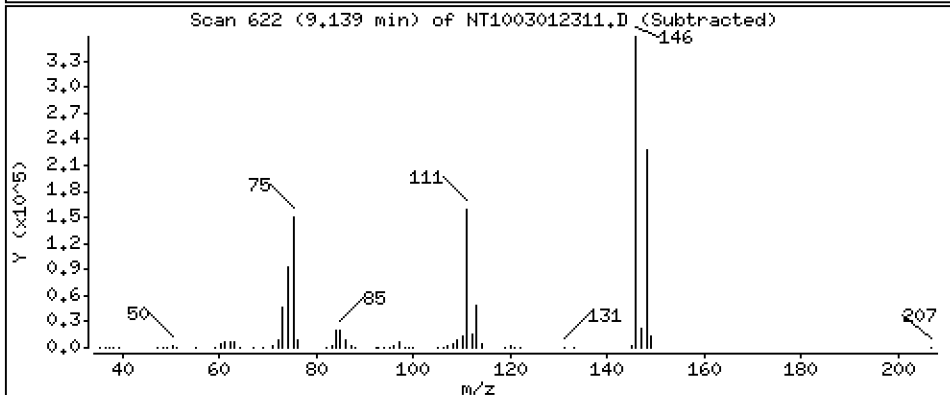
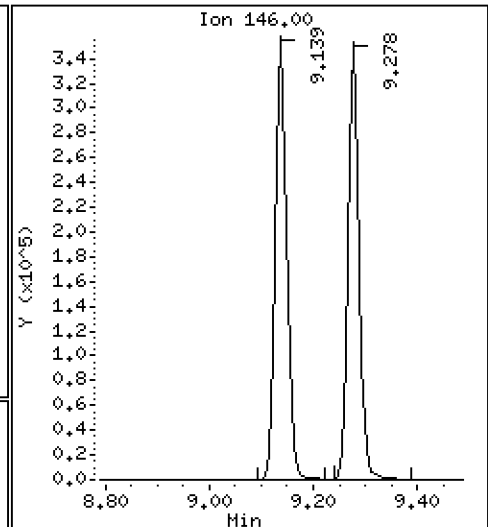
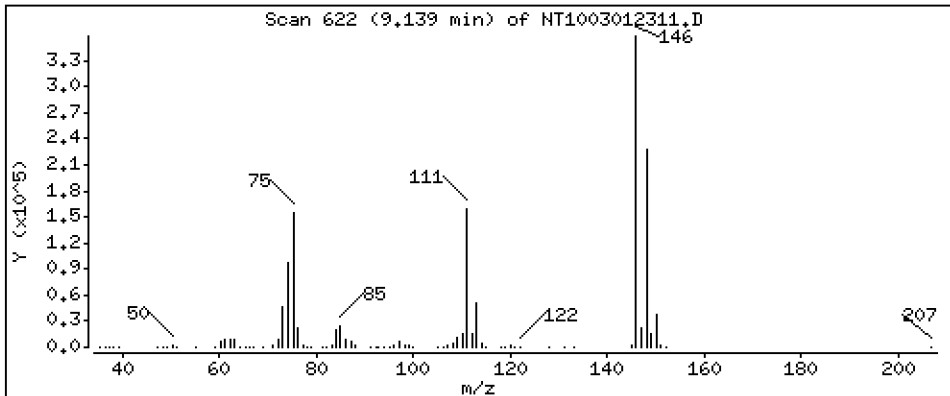
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 5,266 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

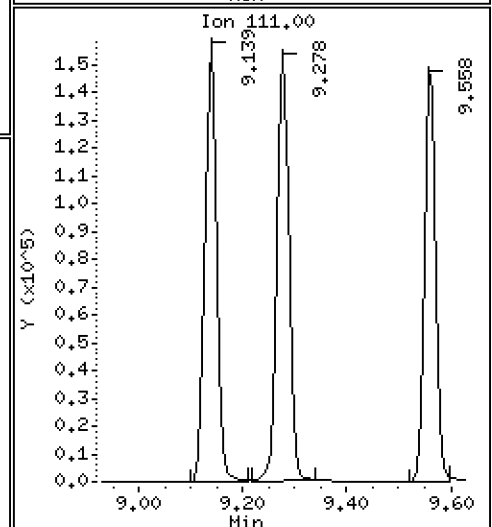
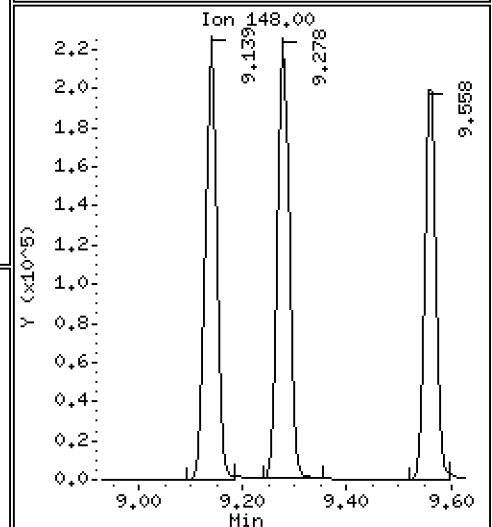
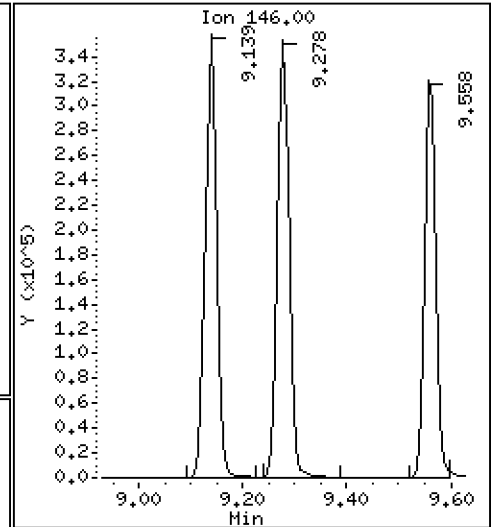
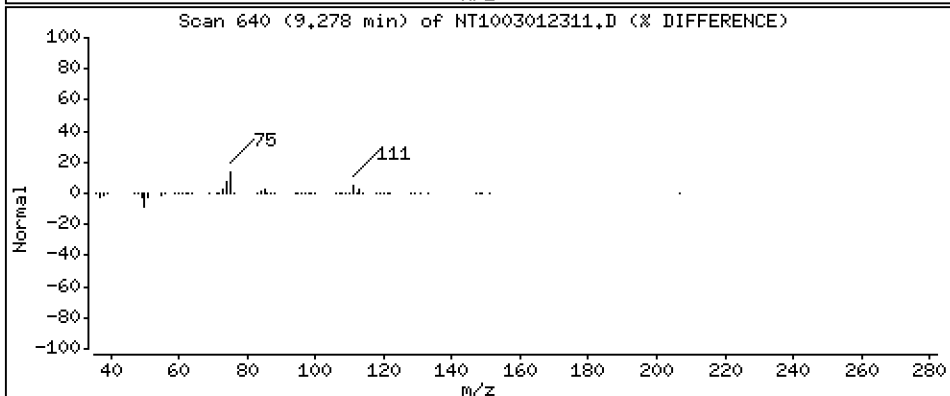
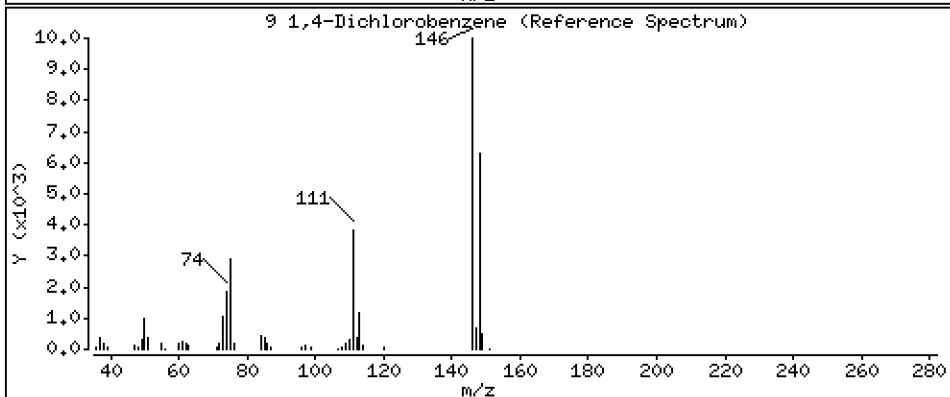
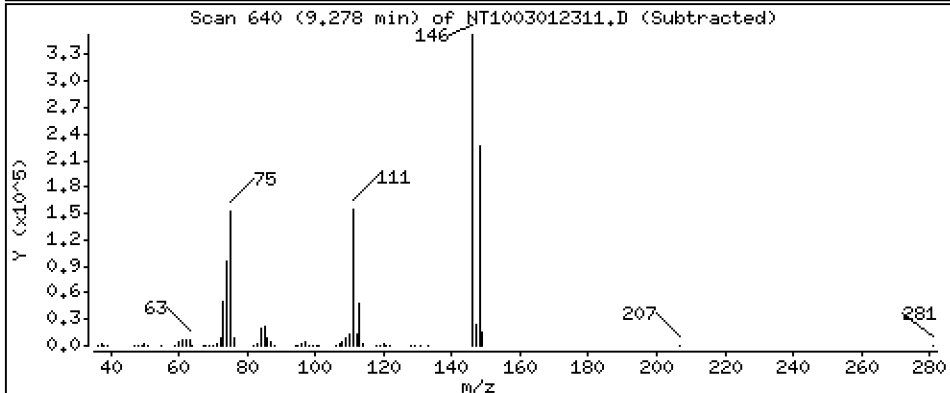
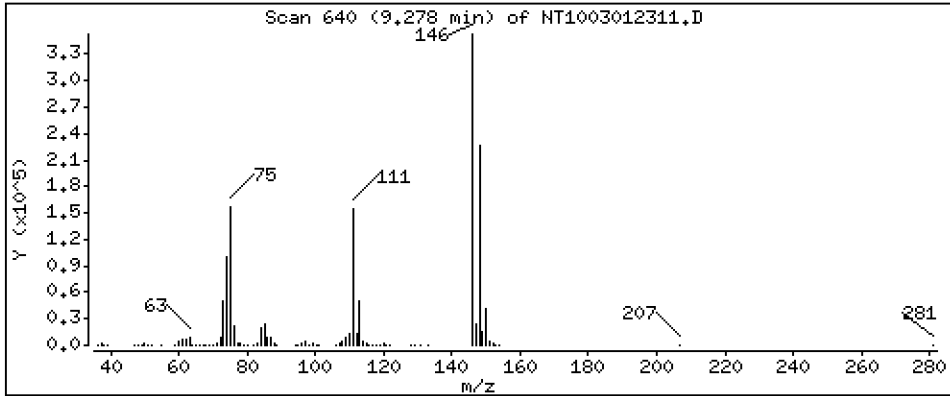
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 5,216 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

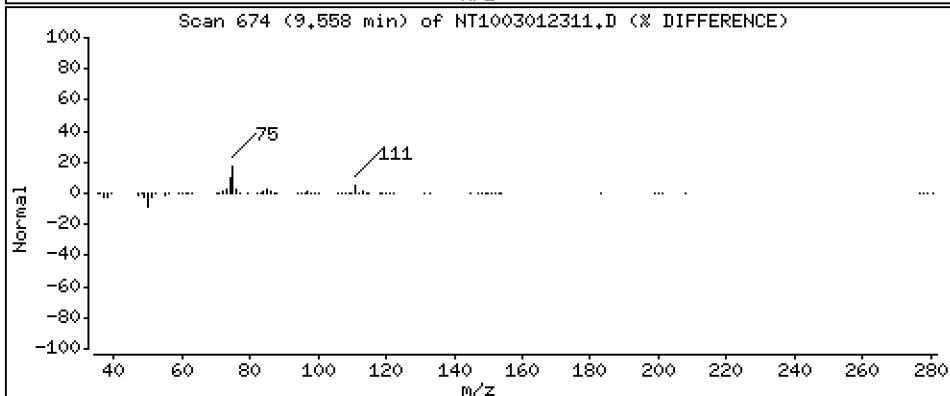
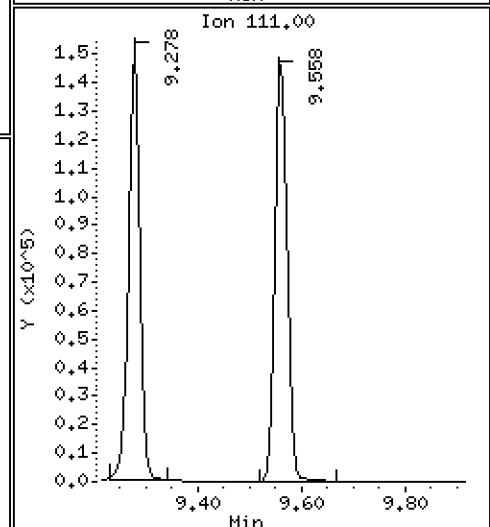
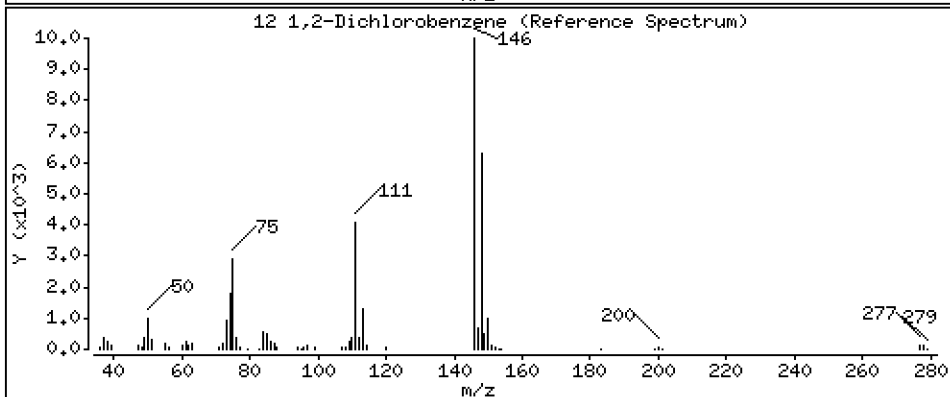
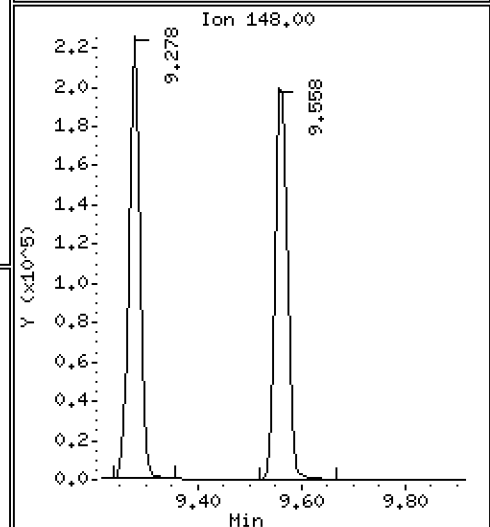
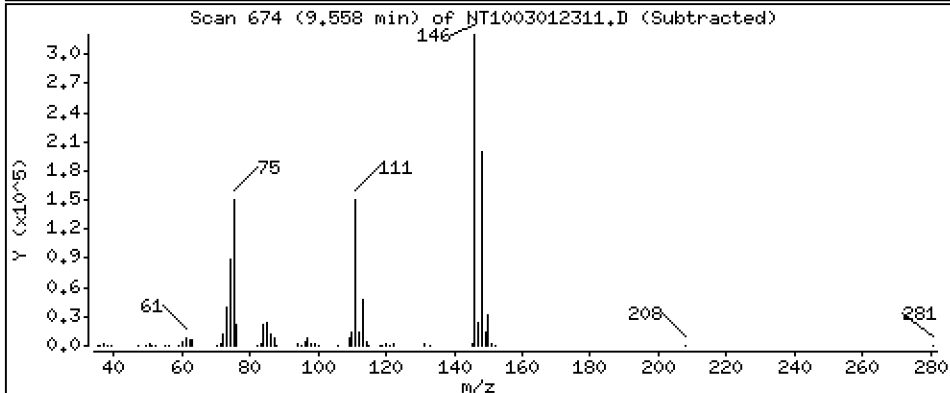
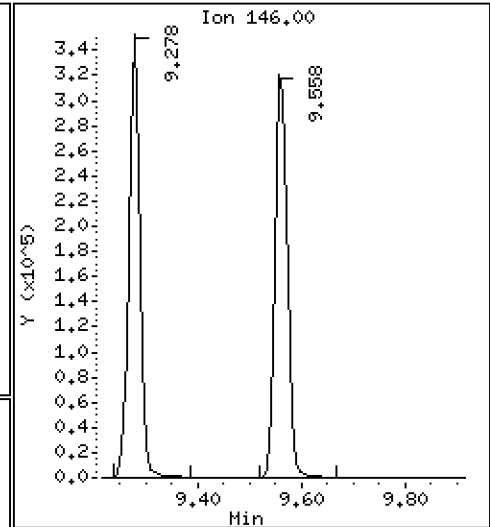
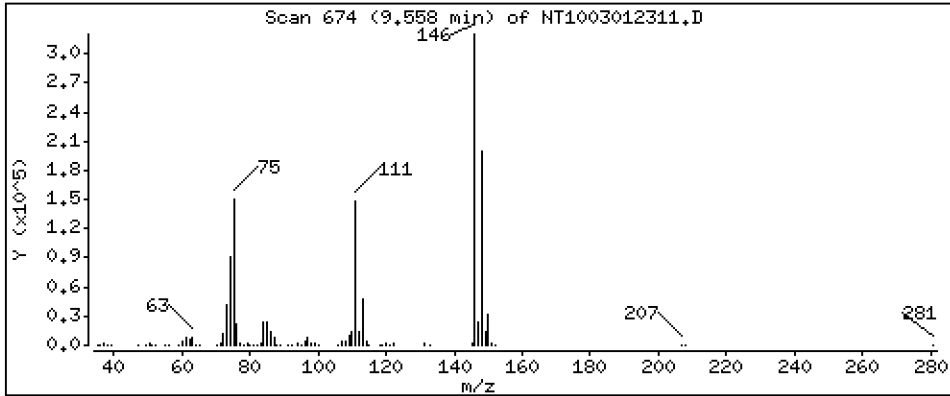
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5.194 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

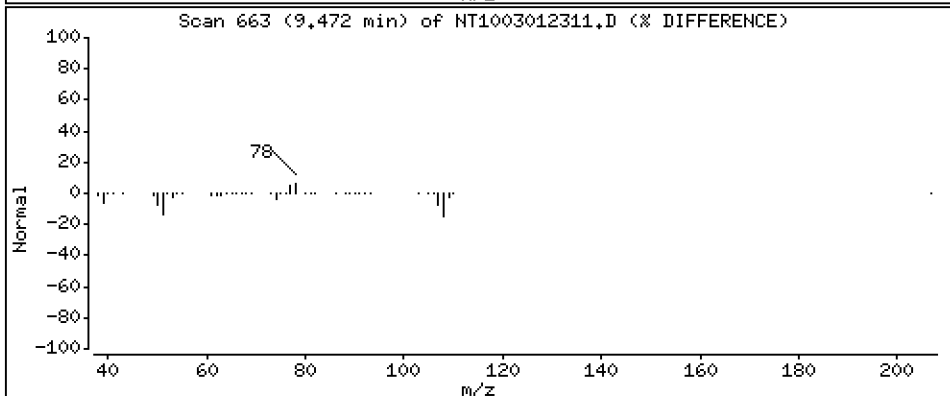
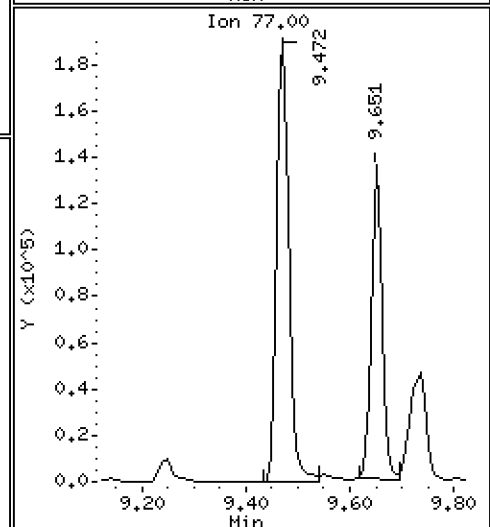
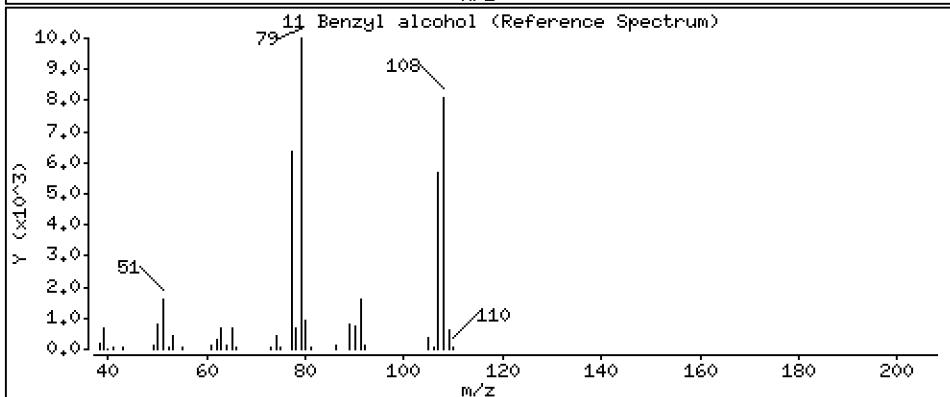
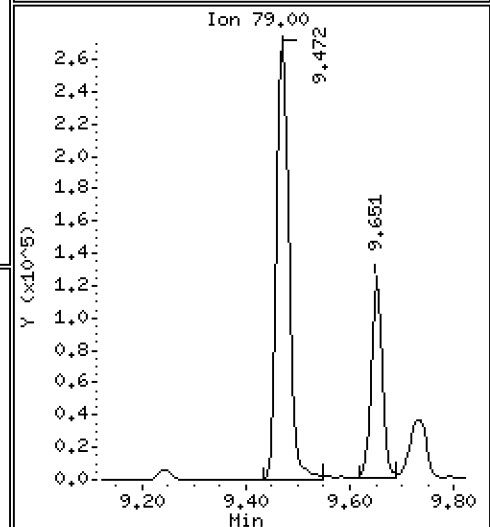
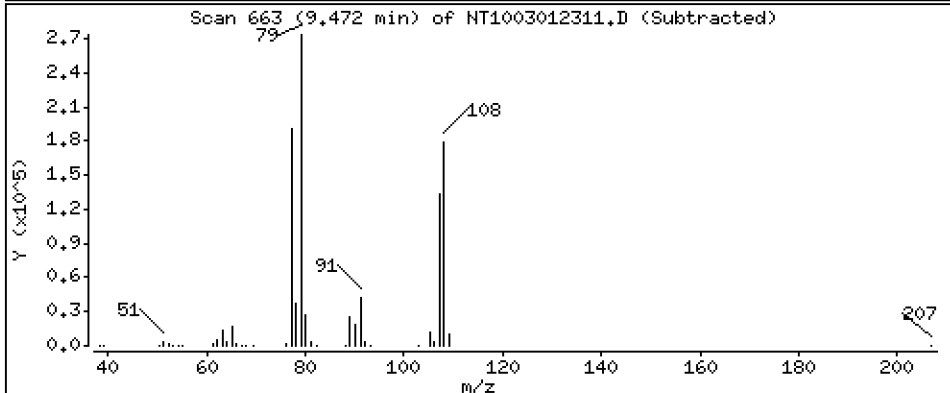
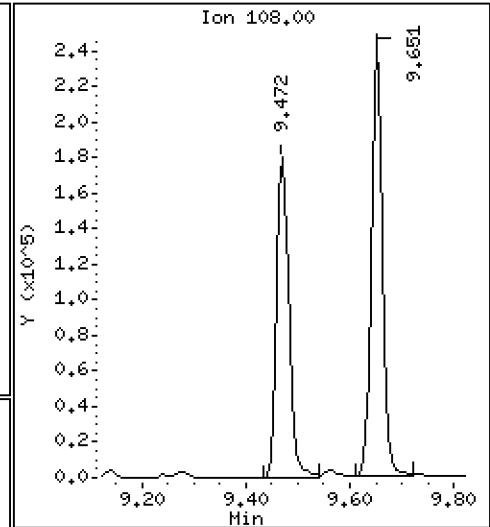
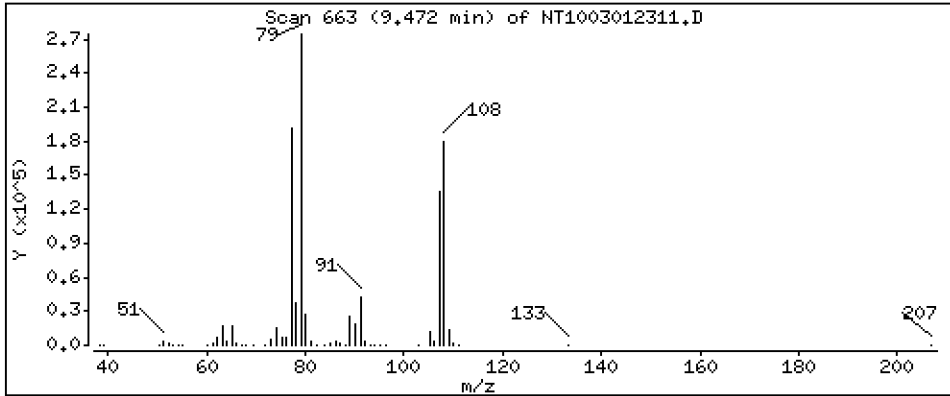
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.898 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

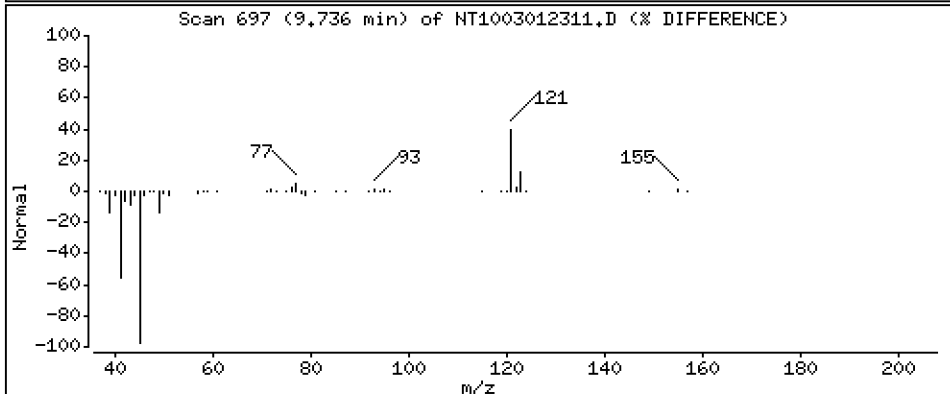
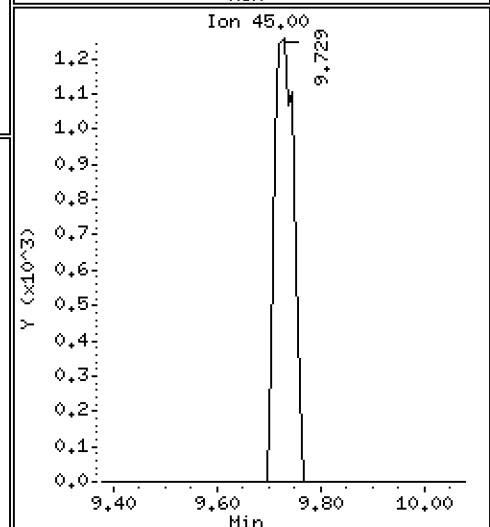
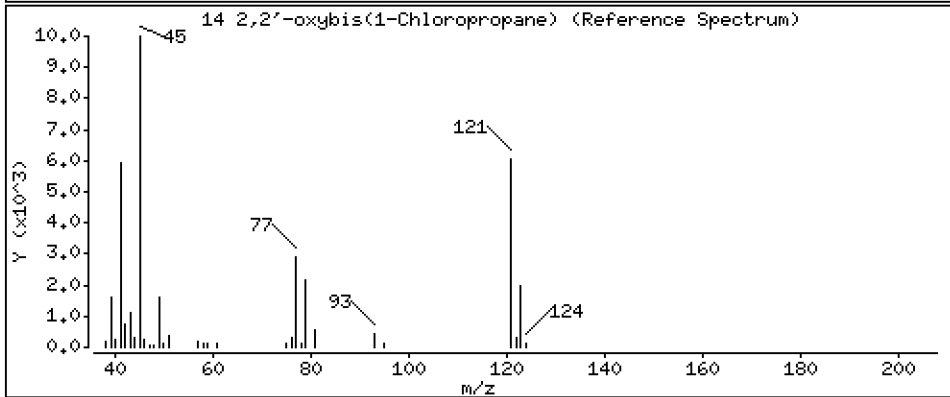
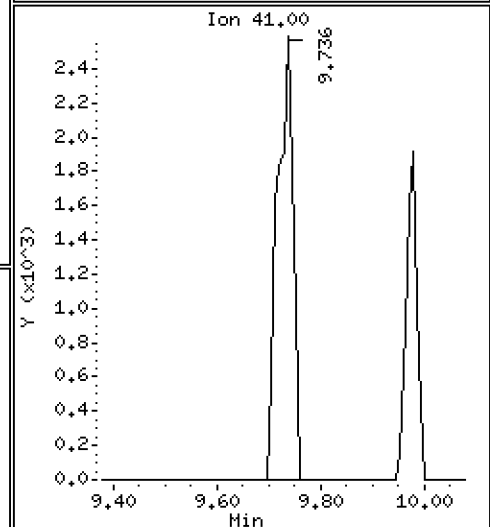
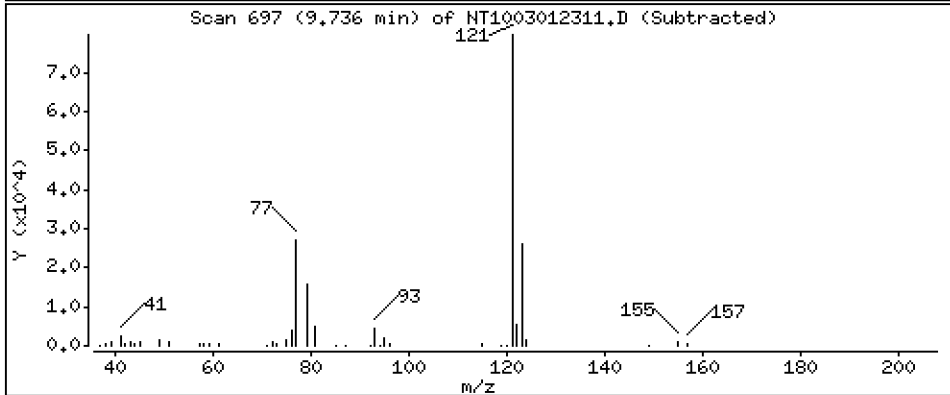
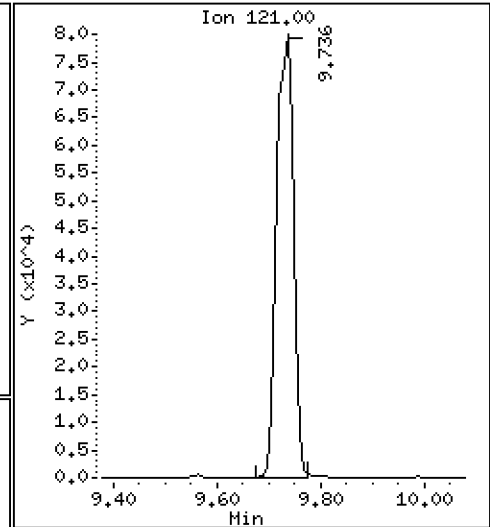
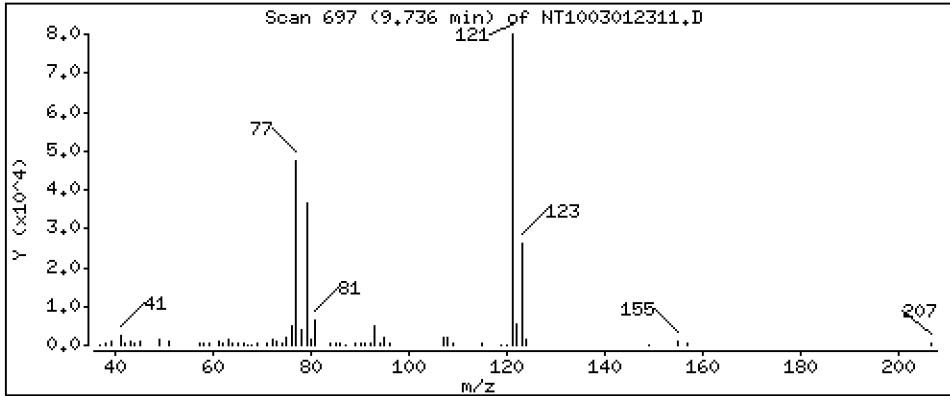
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 6,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

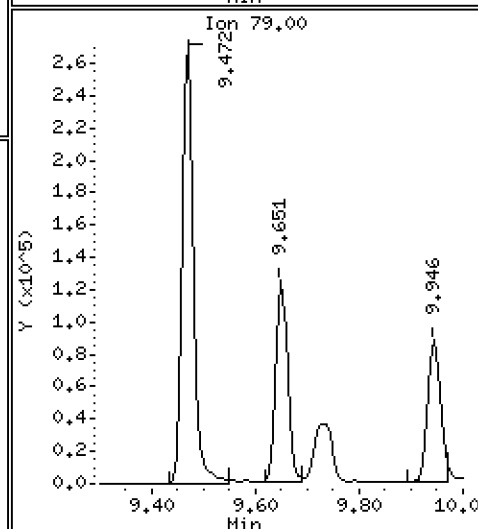
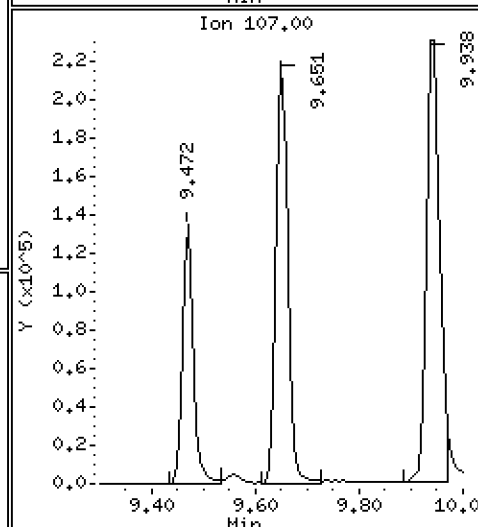
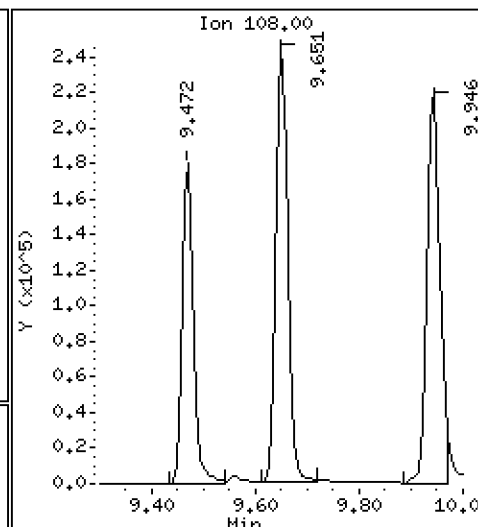
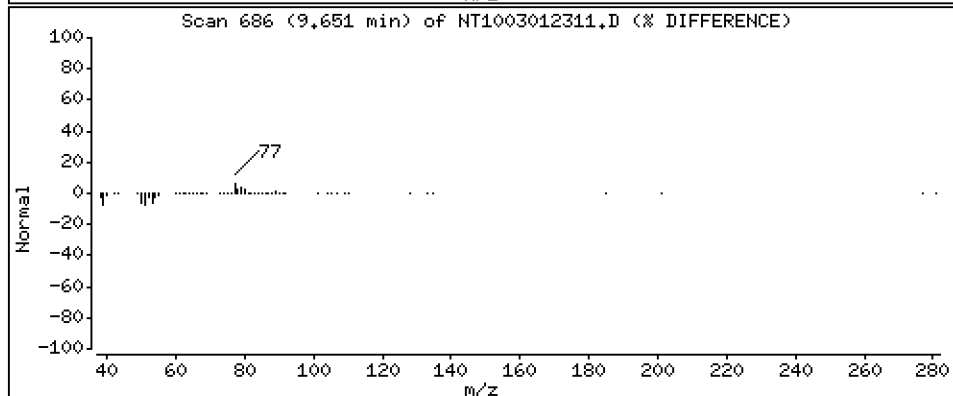
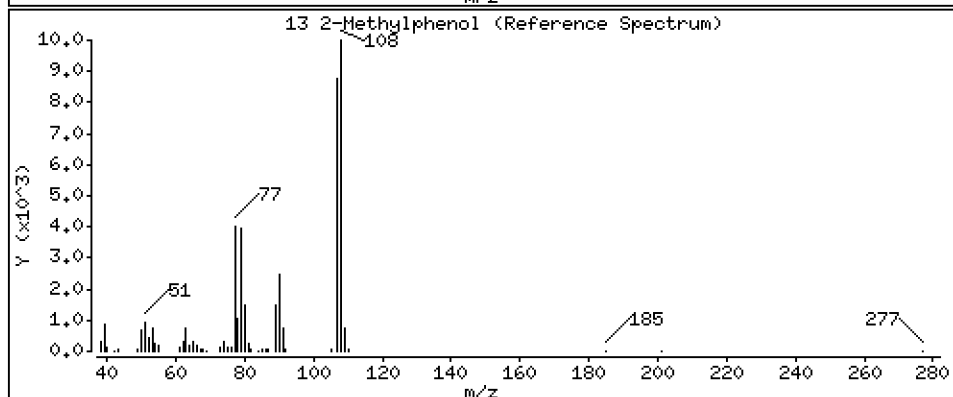
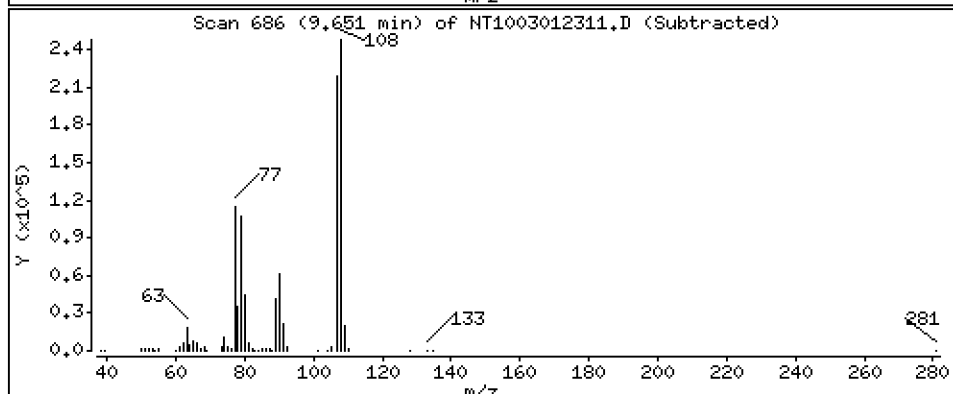
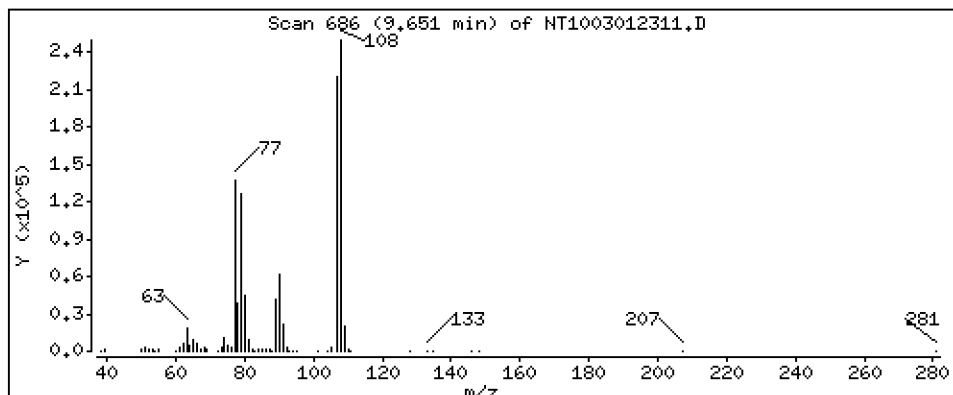
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.192 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

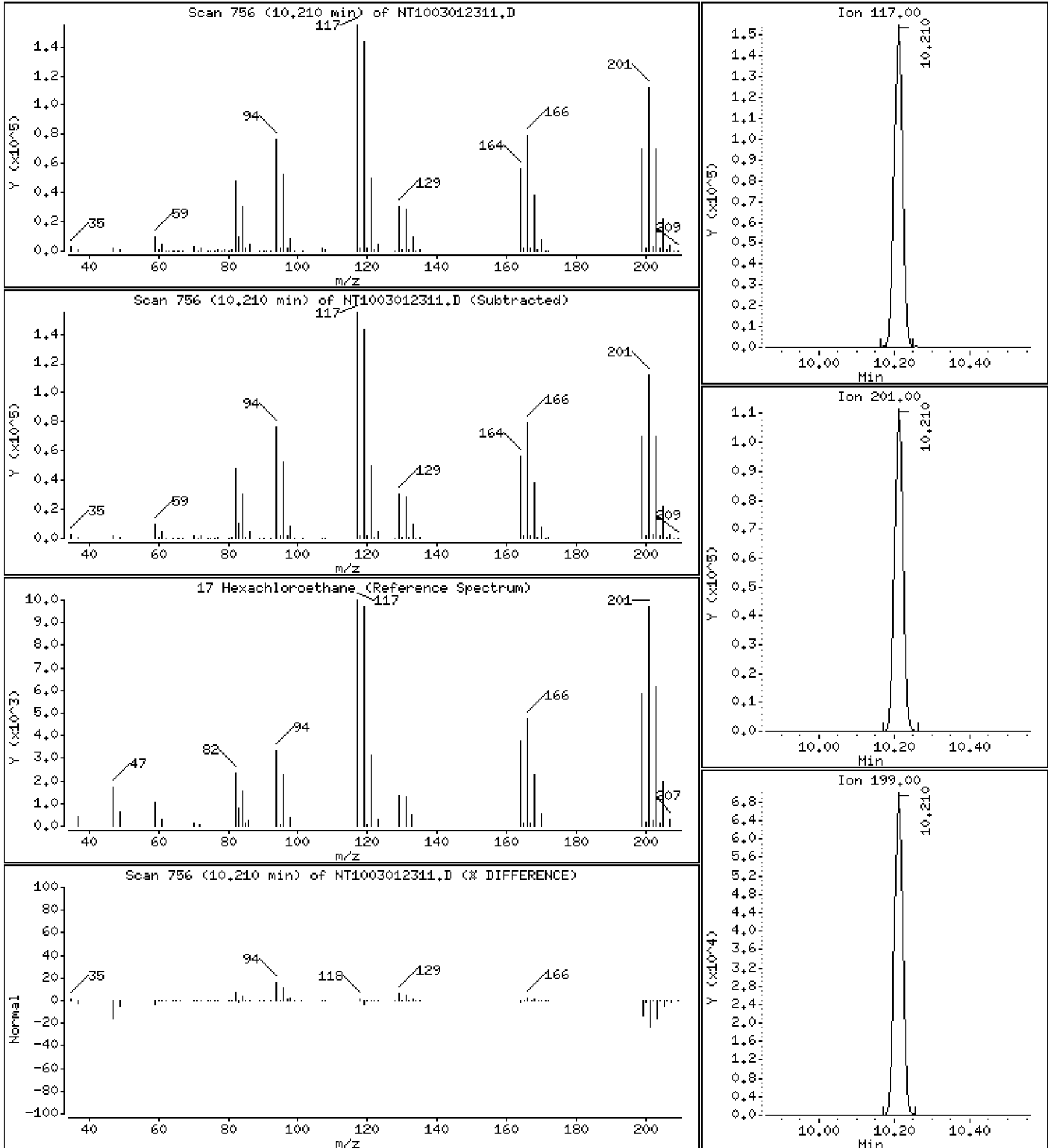
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 5,443 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

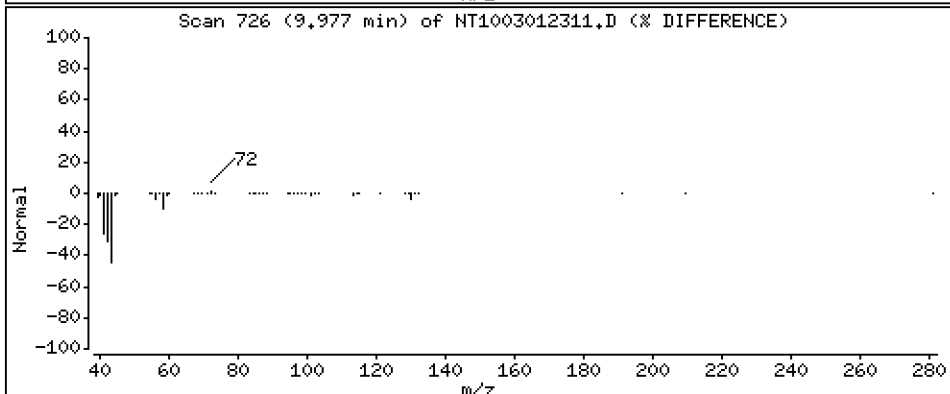
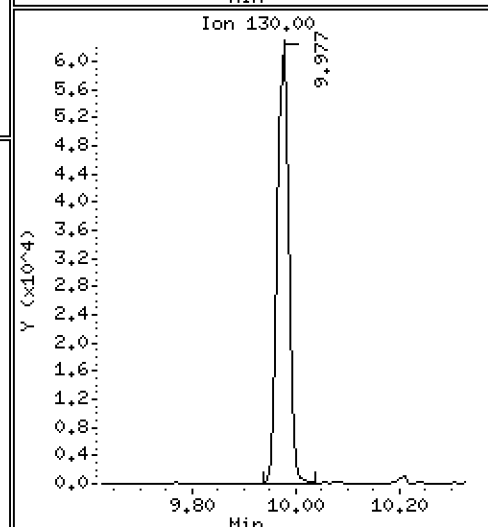
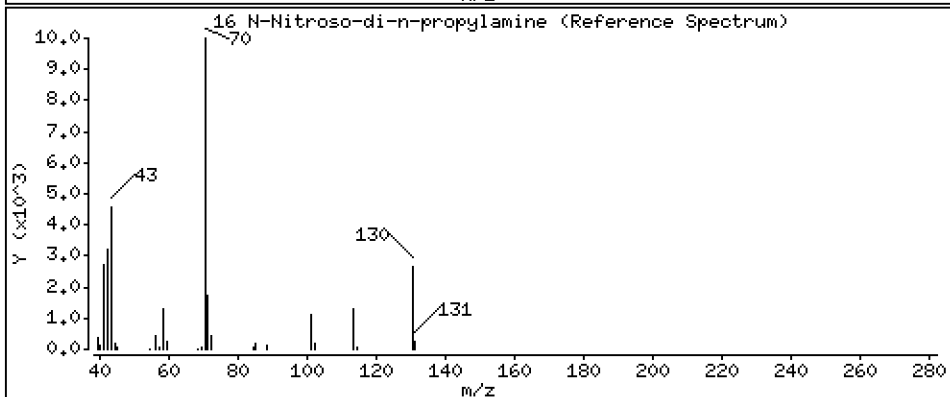
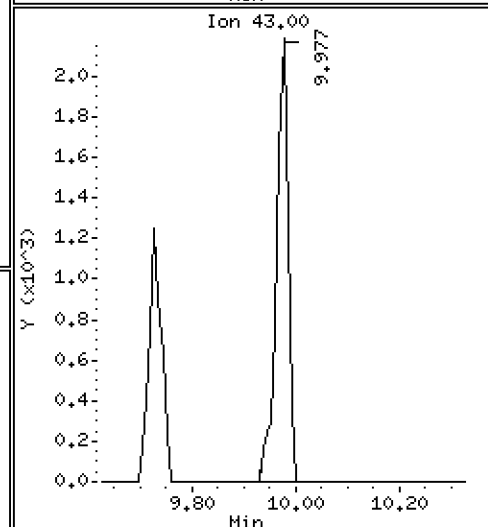
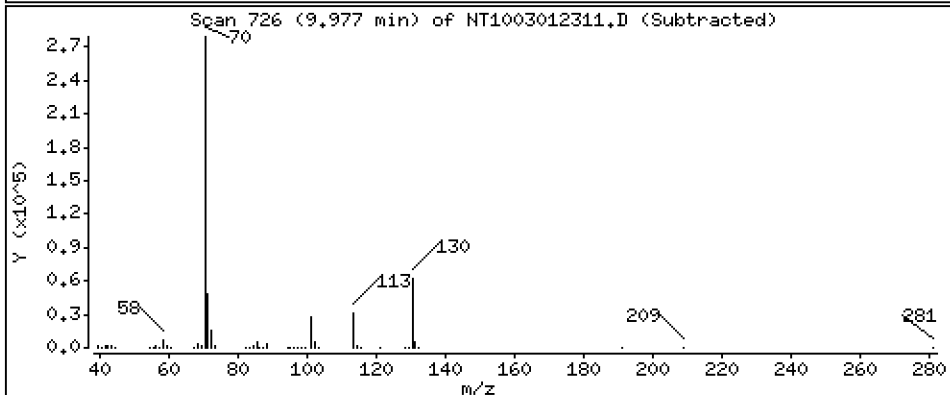
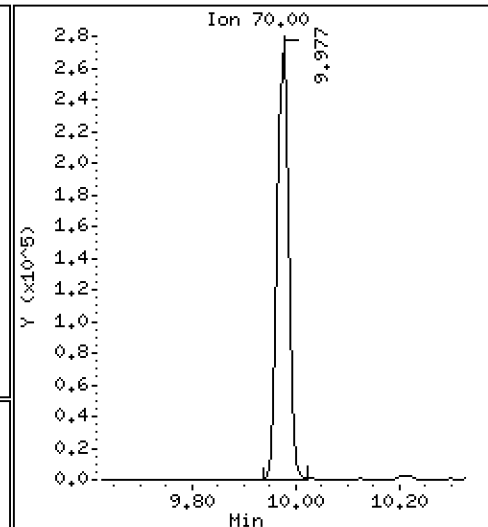
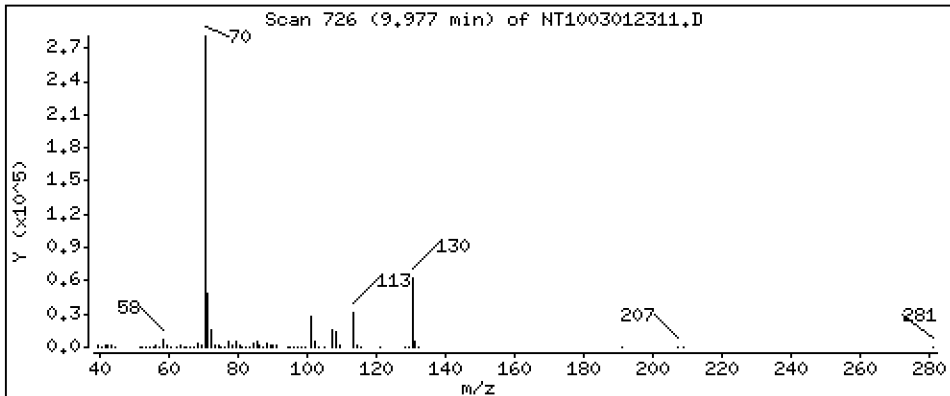
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

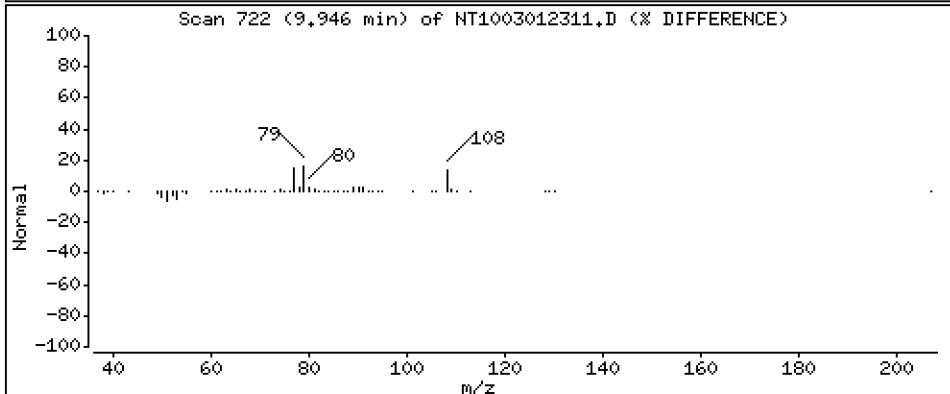
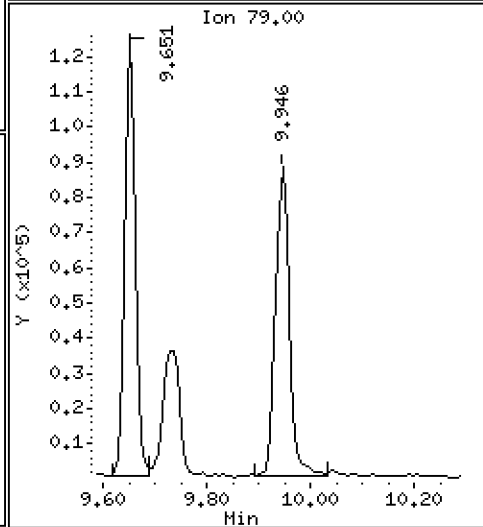
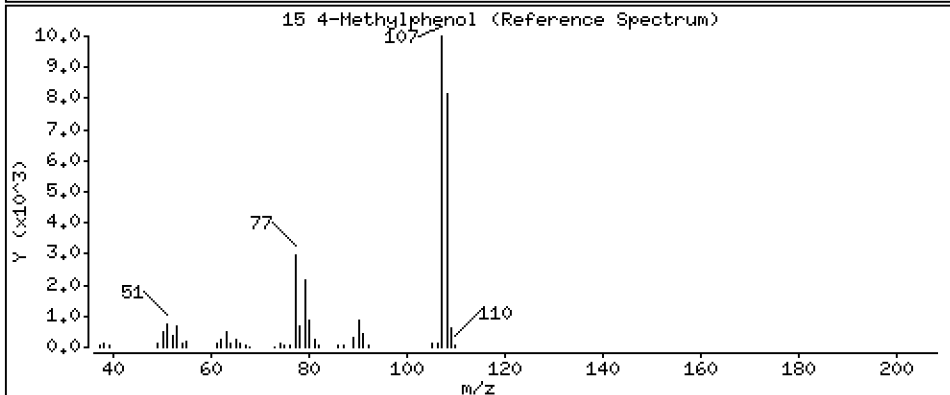
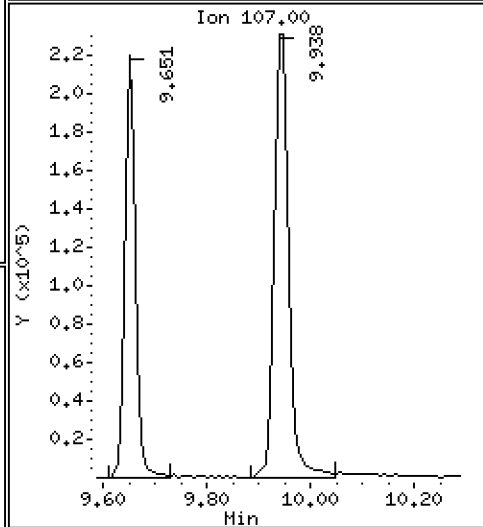
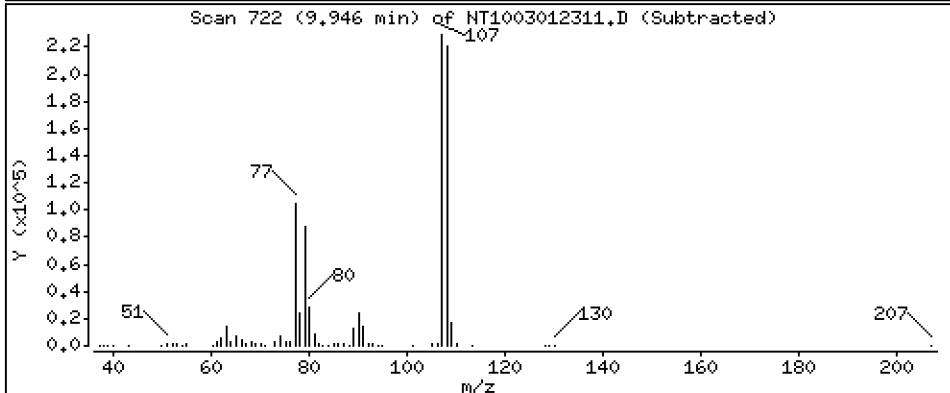
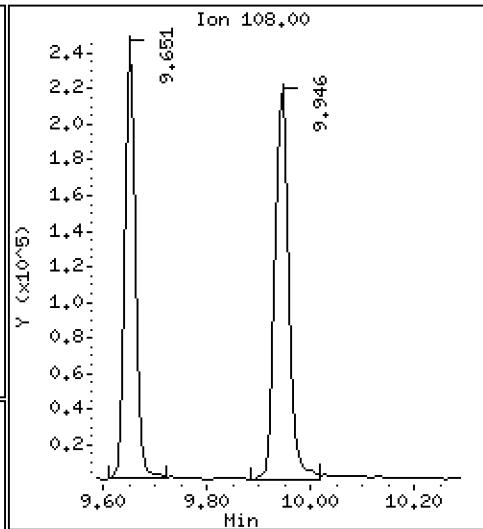
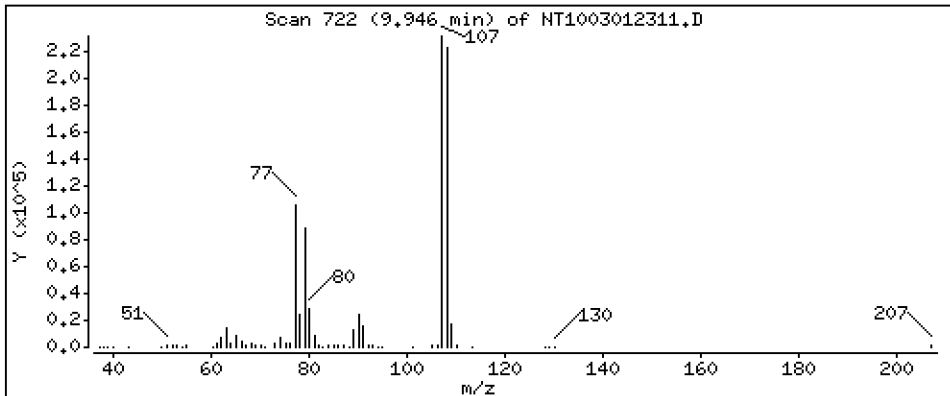
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.239 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

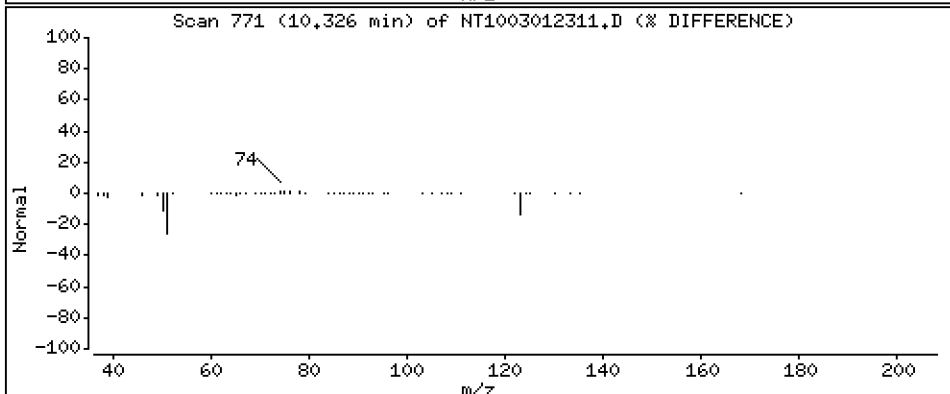
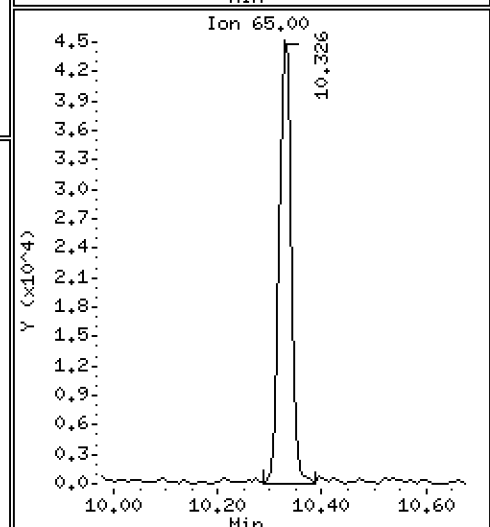
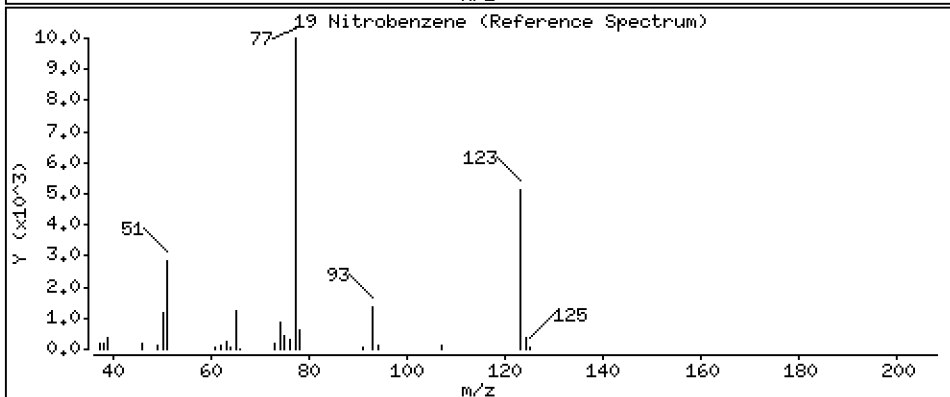
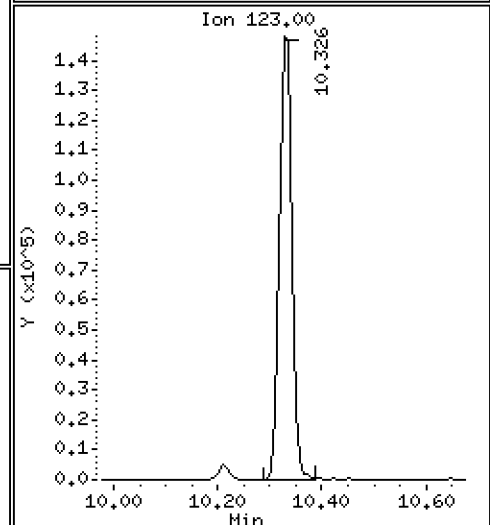
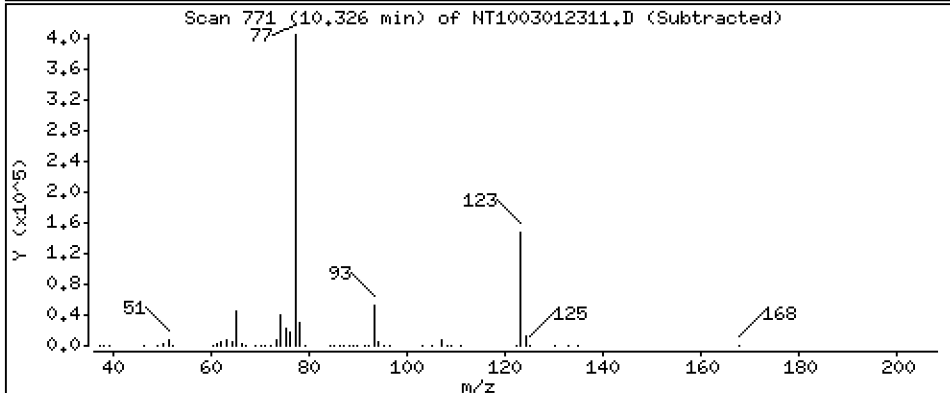
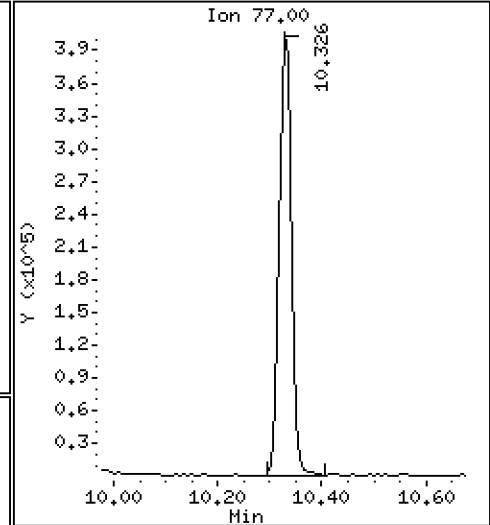
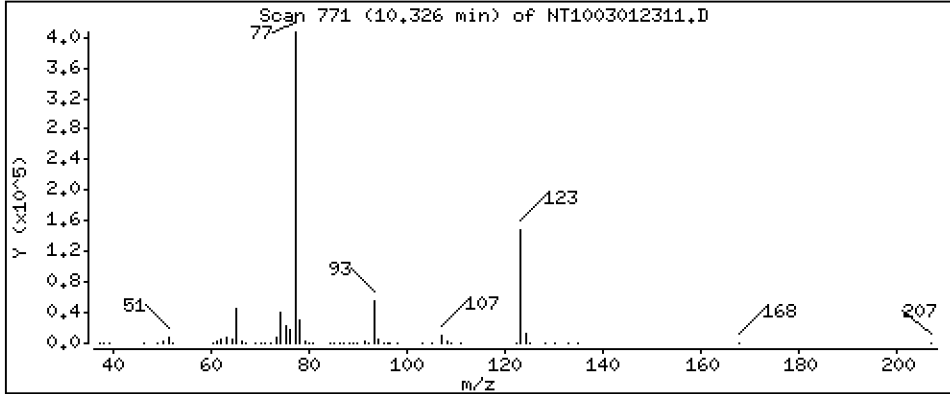
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,569 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

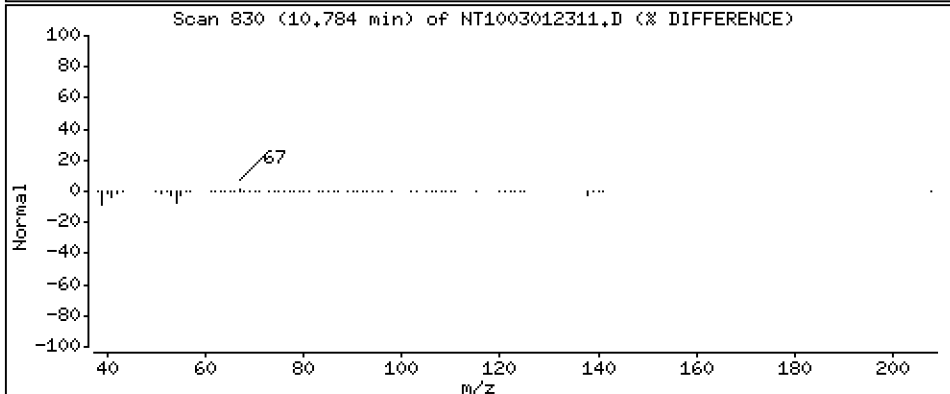
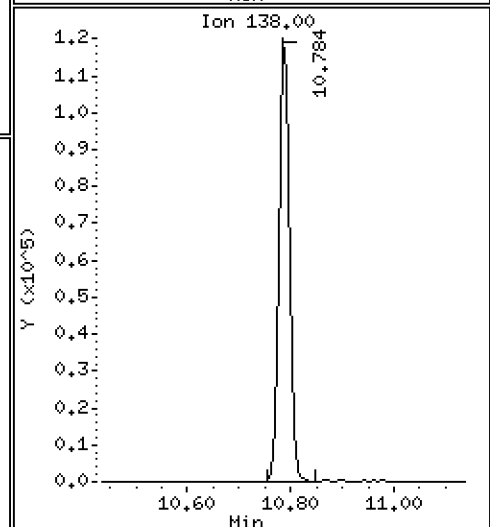
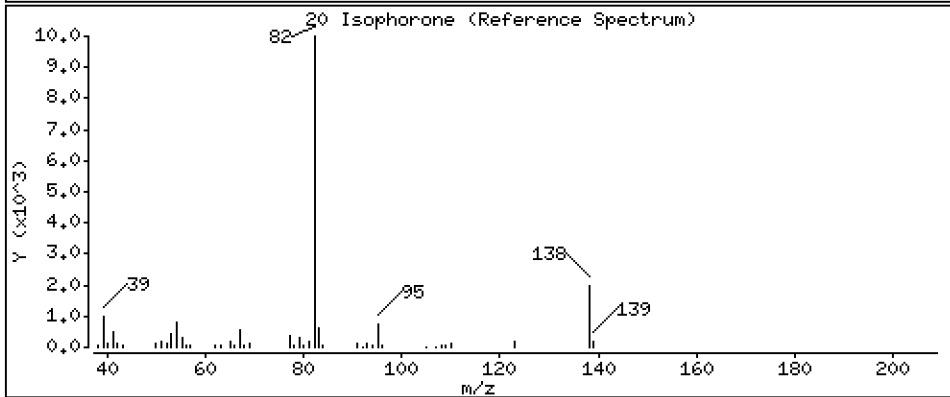
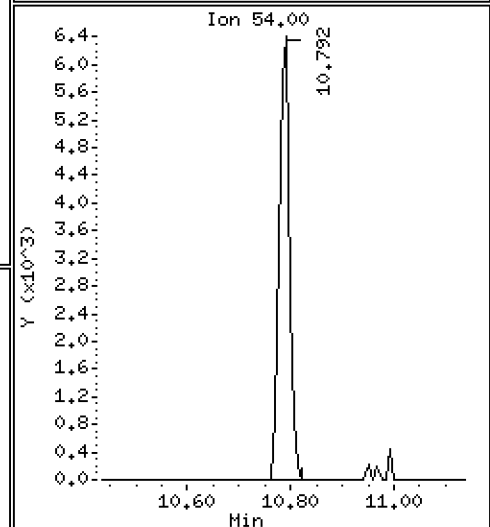
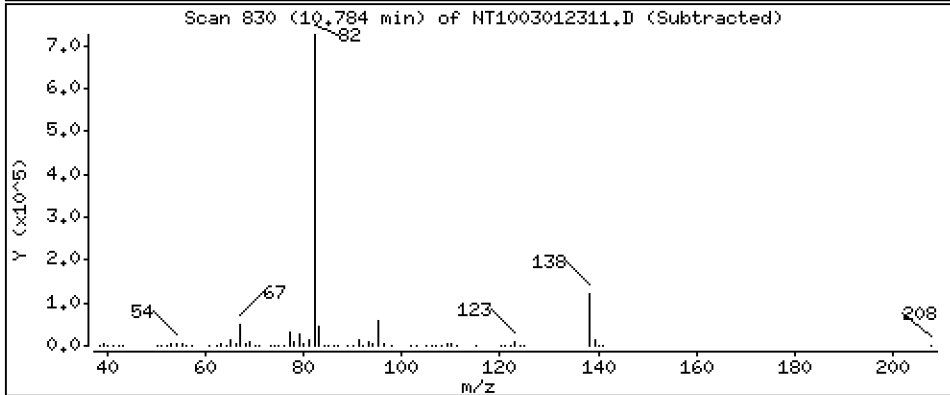
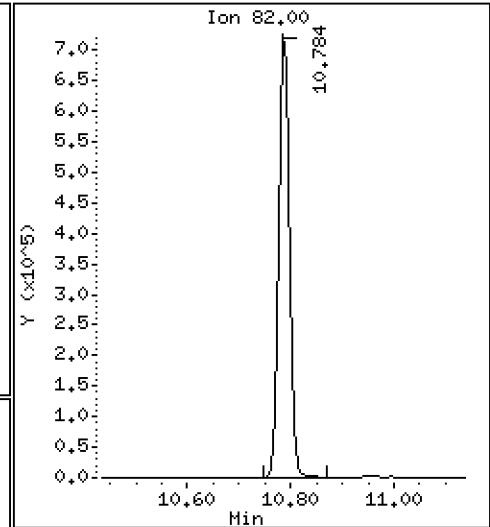
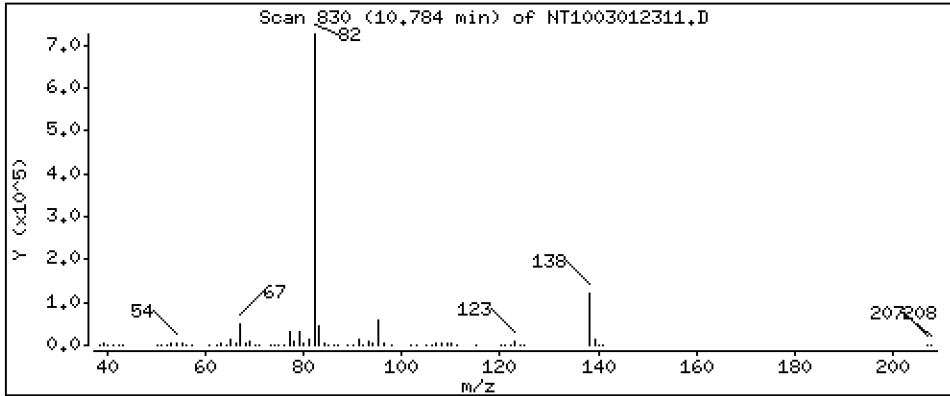
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 7,672 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

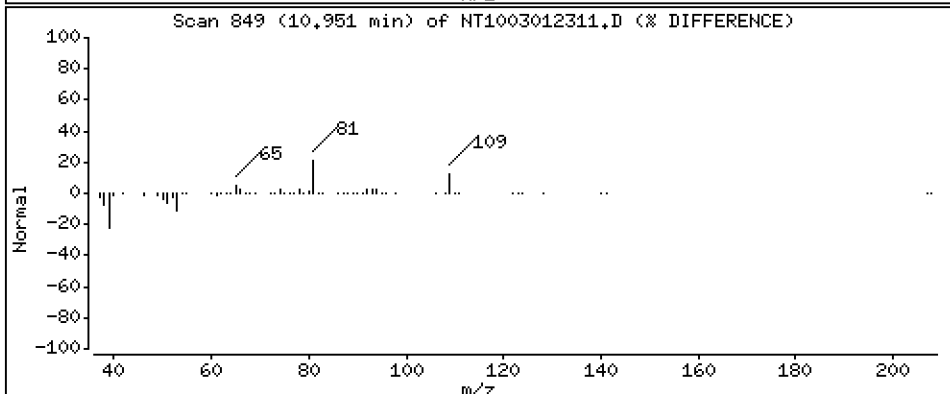
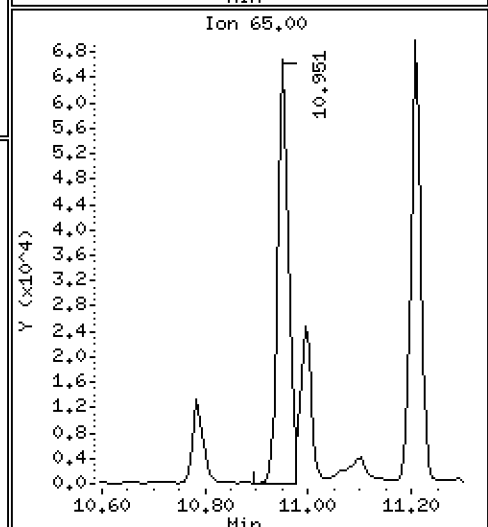
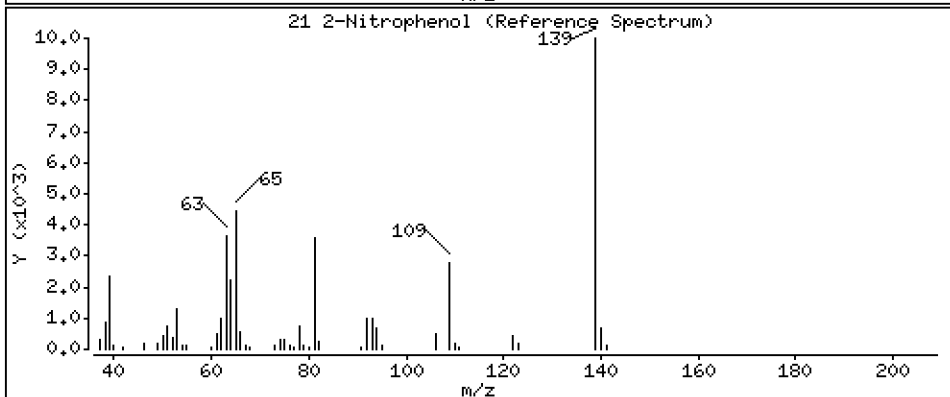
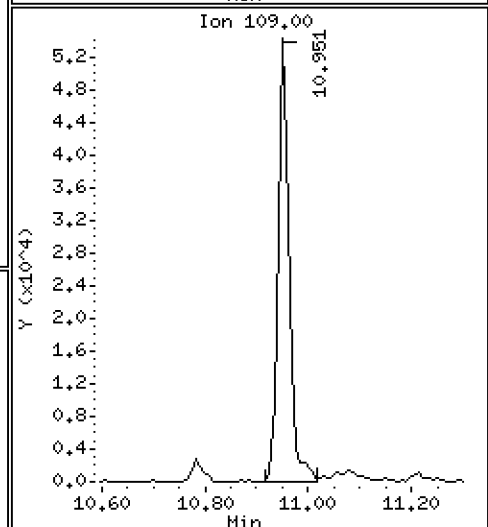
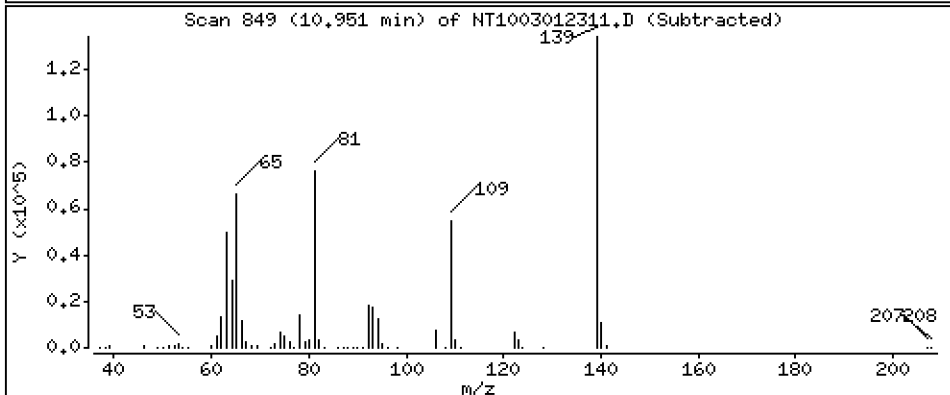
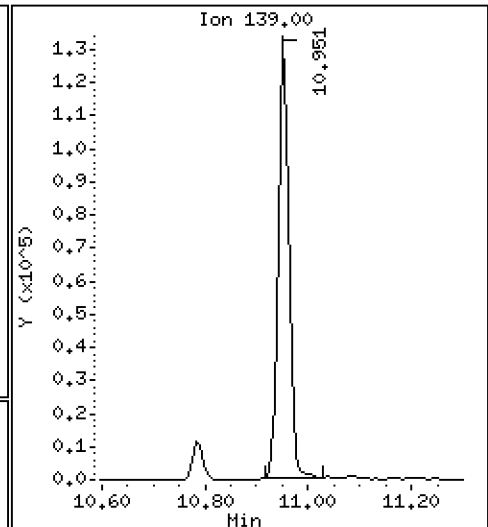
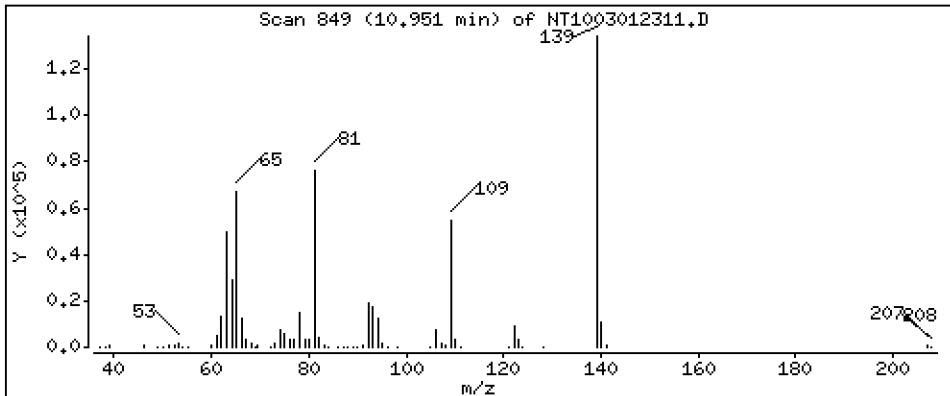
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 3,244 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

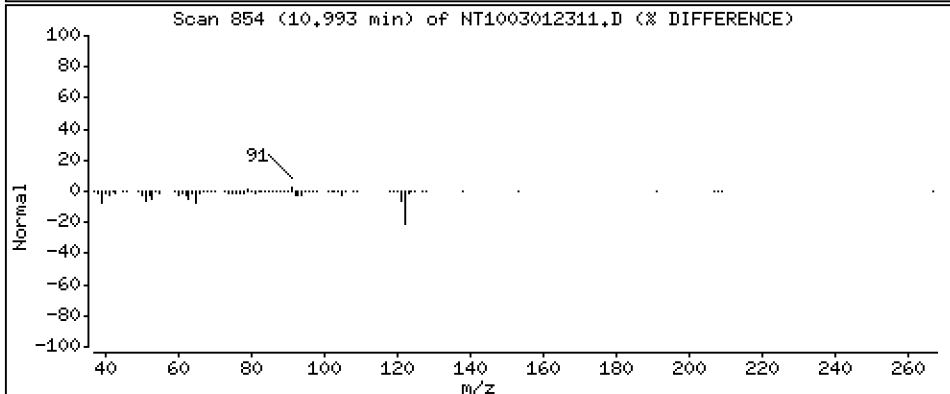
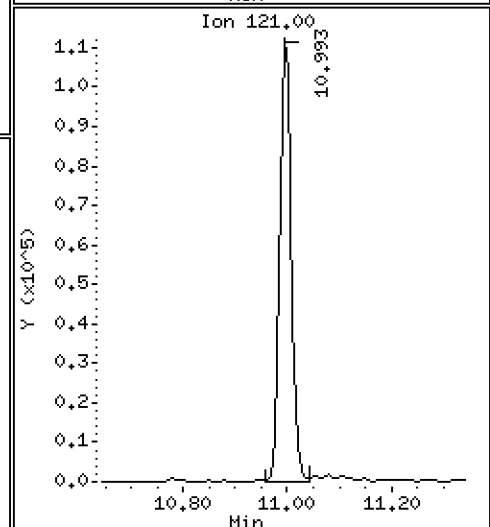
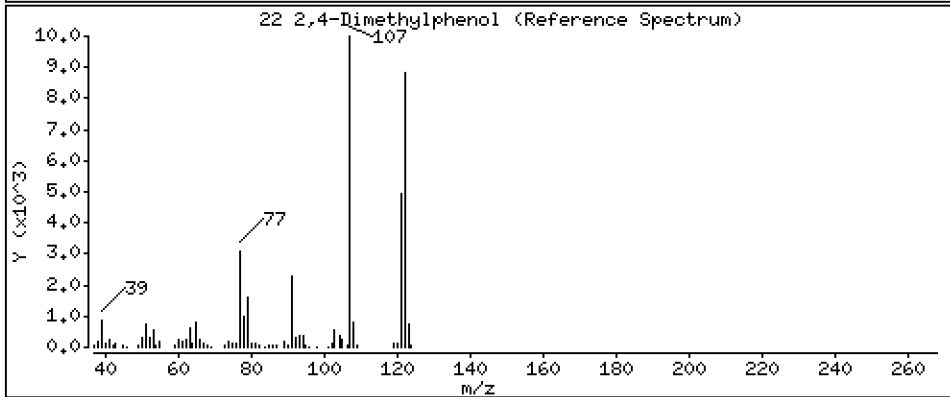
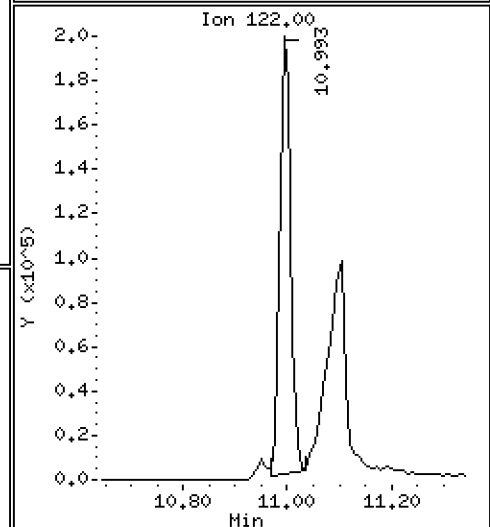
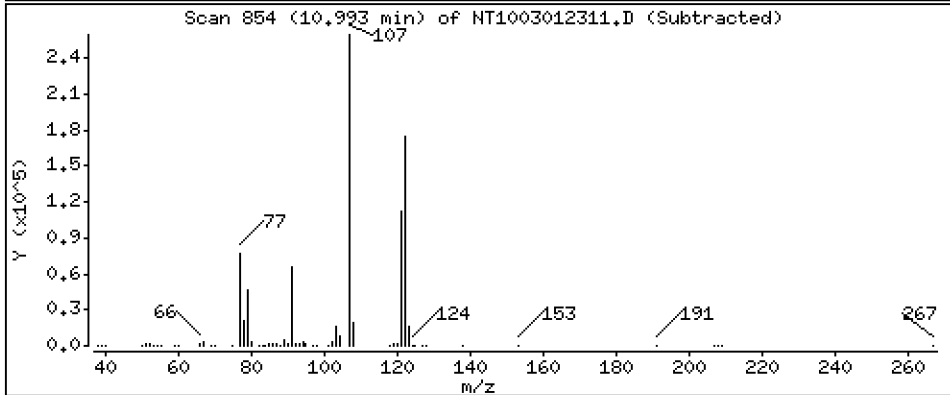
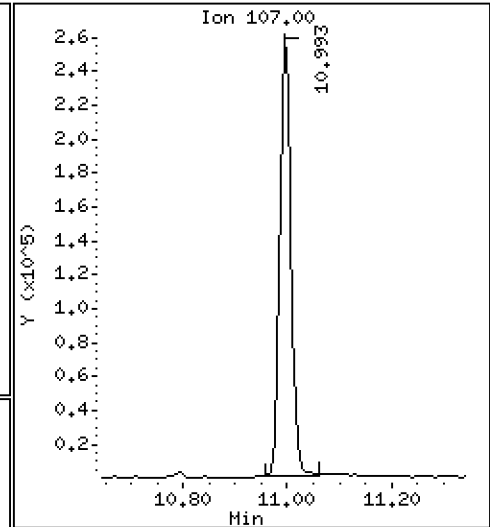
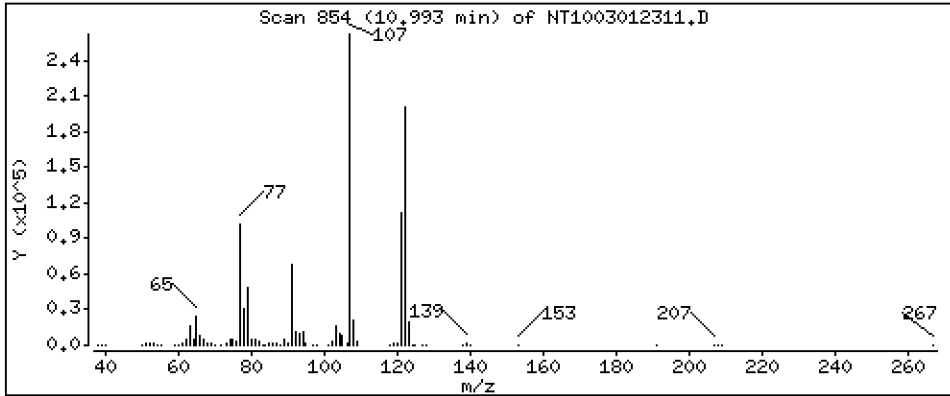
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 3,507 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

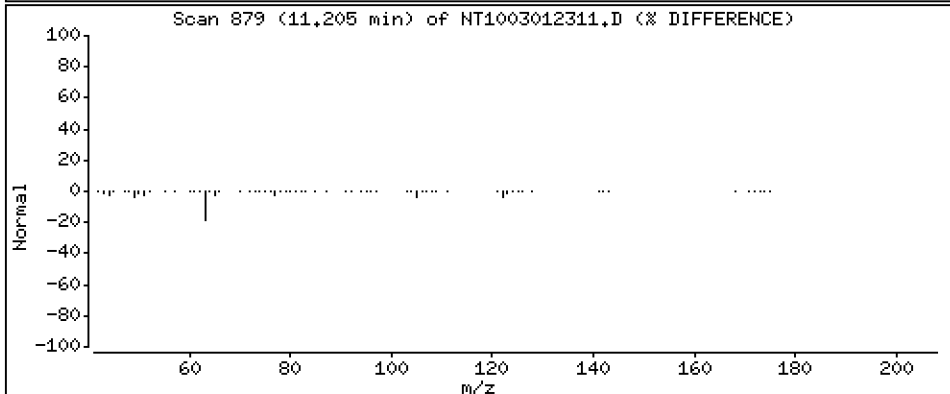
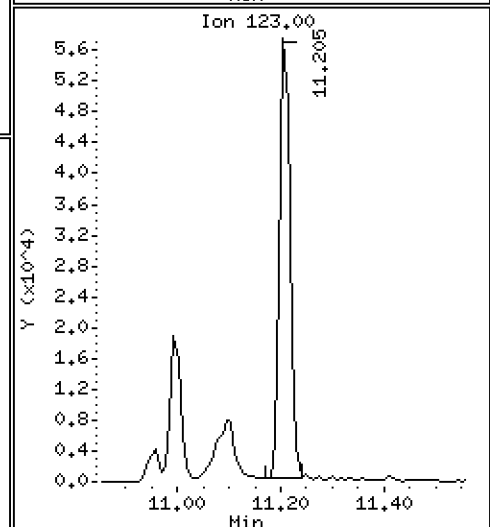
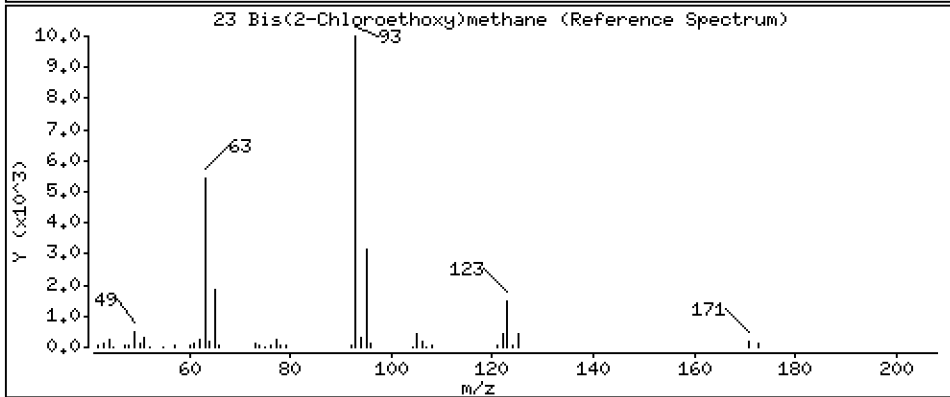
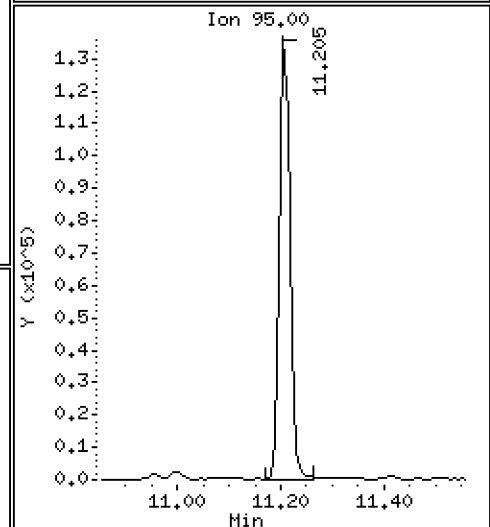
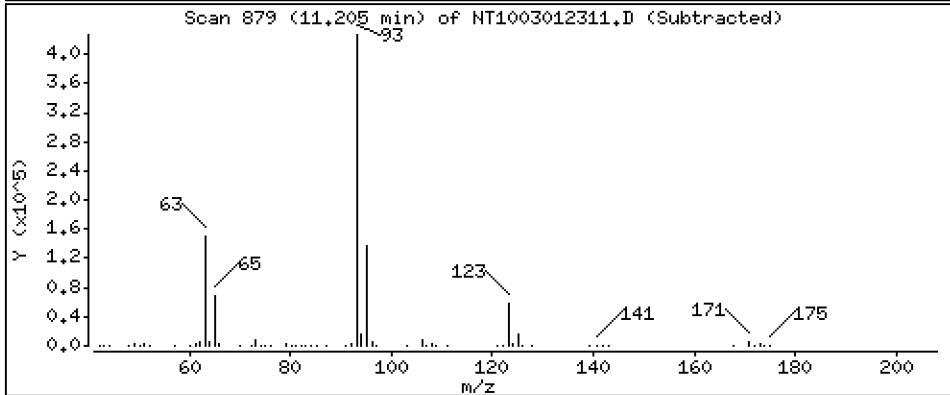
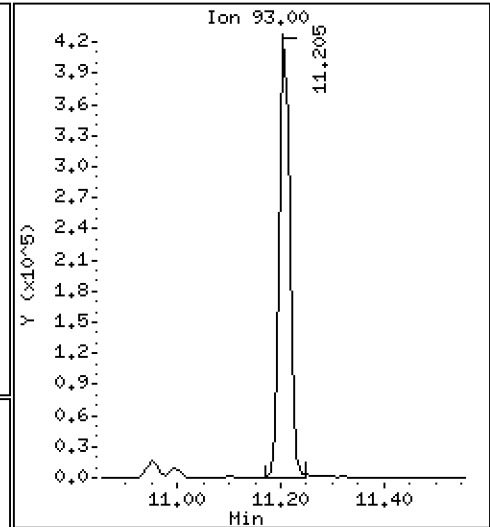
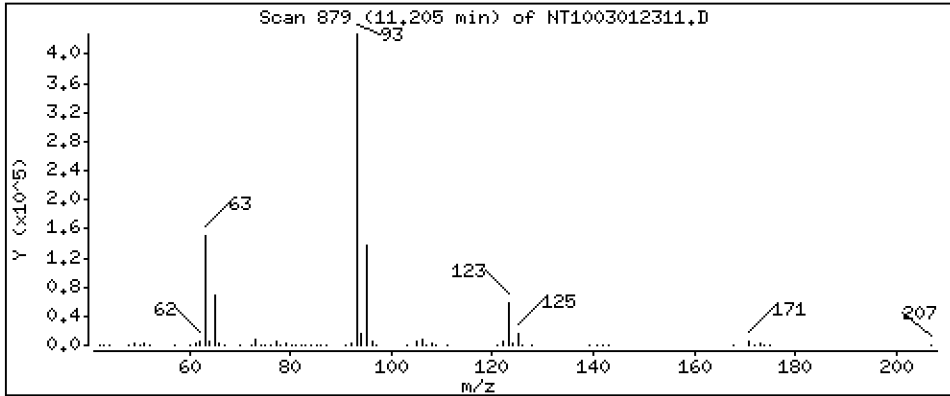
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 6,727 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

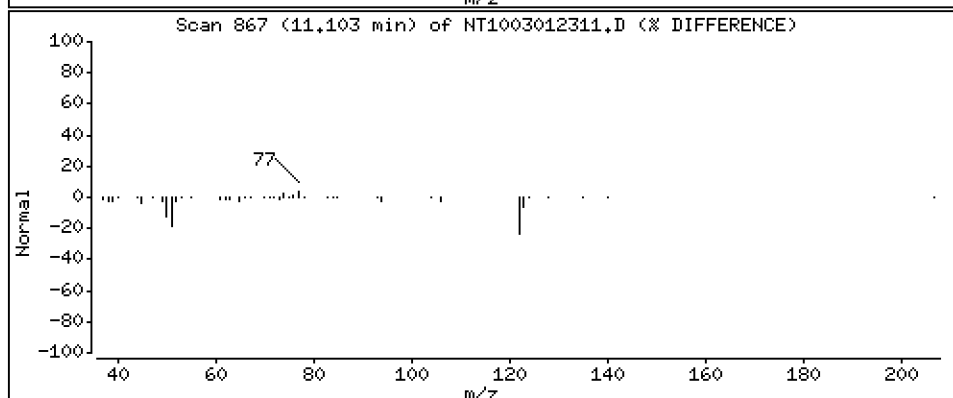
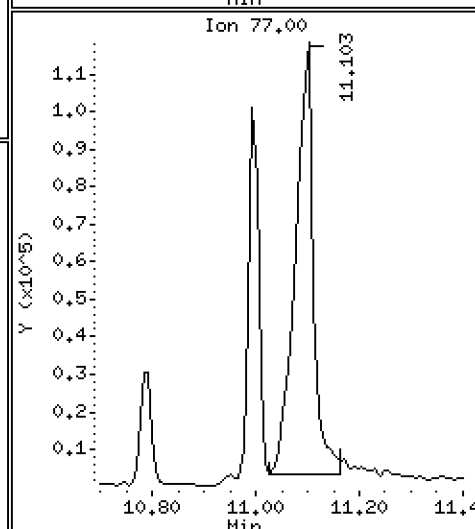
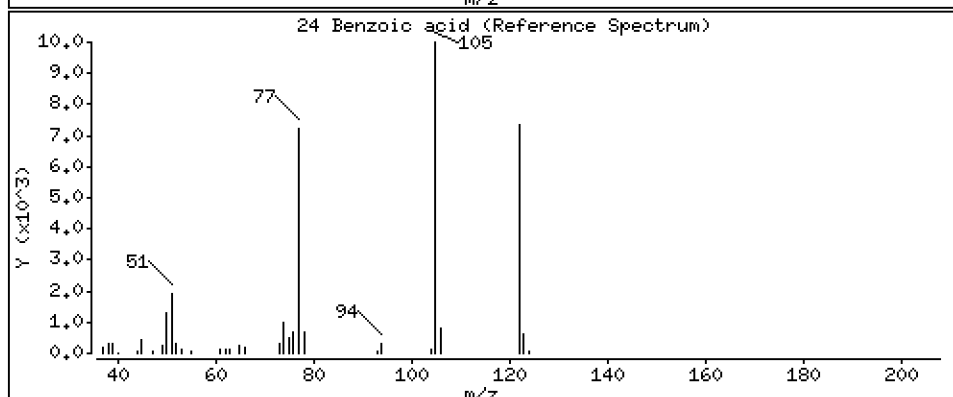
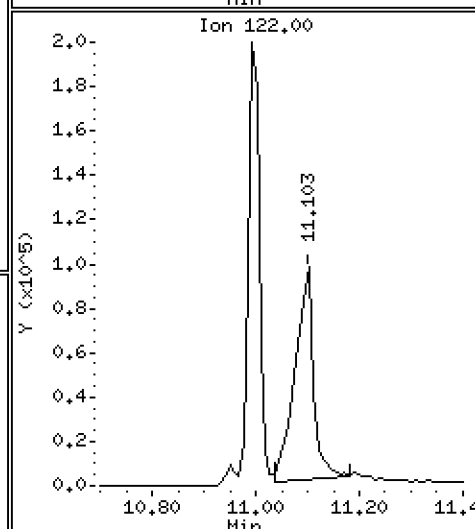
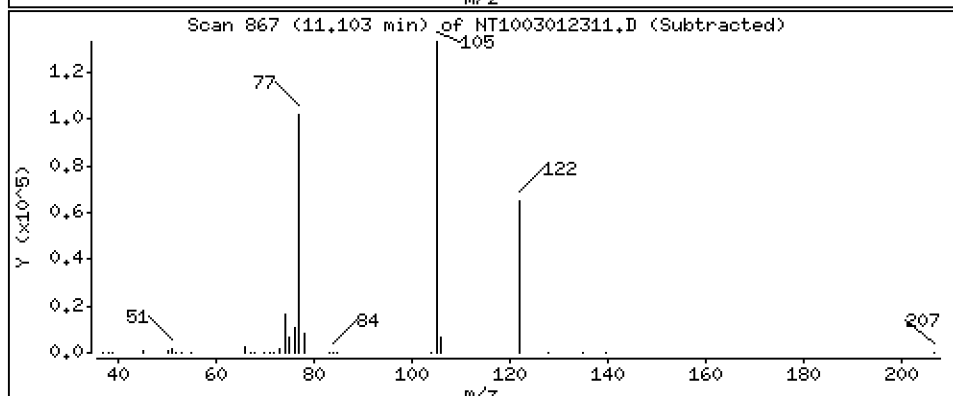
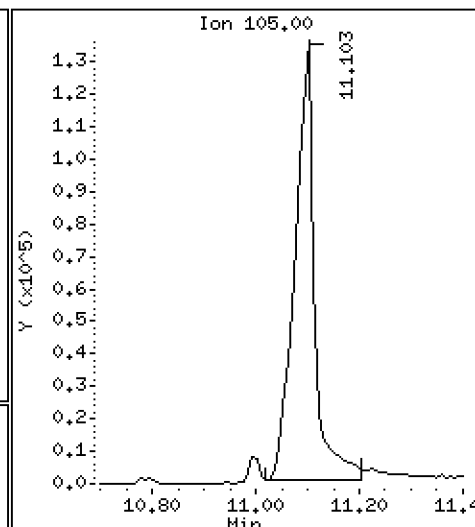
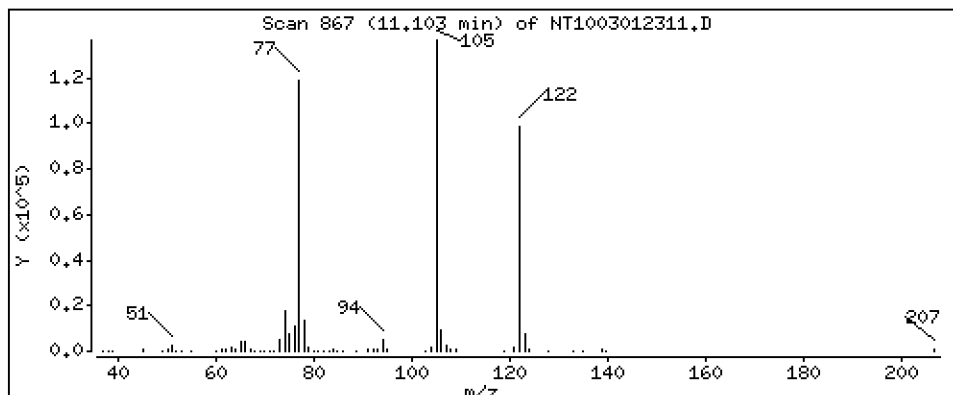
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 5,635 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

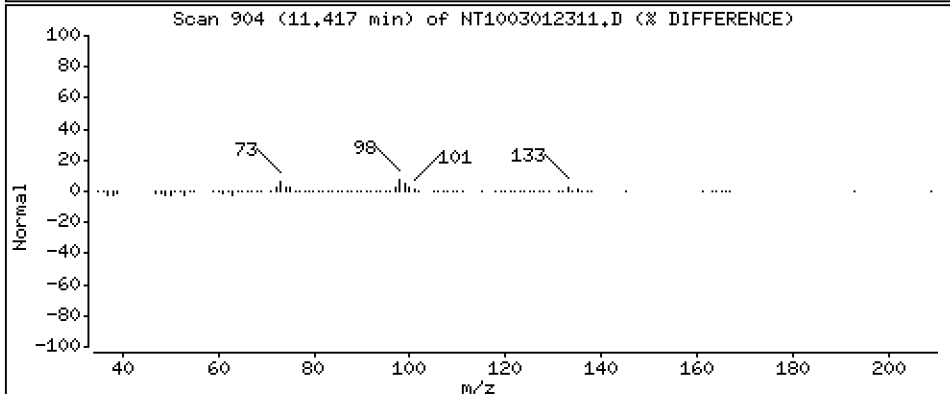
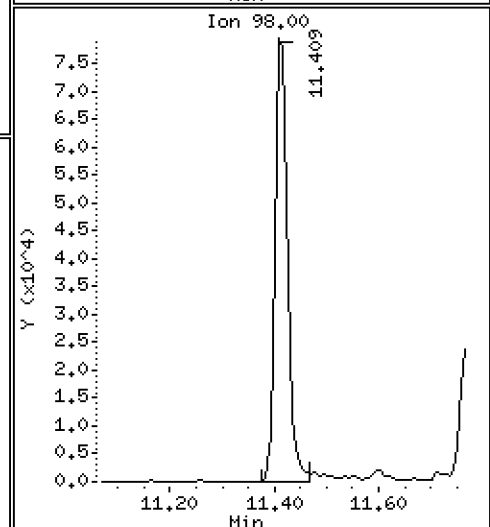
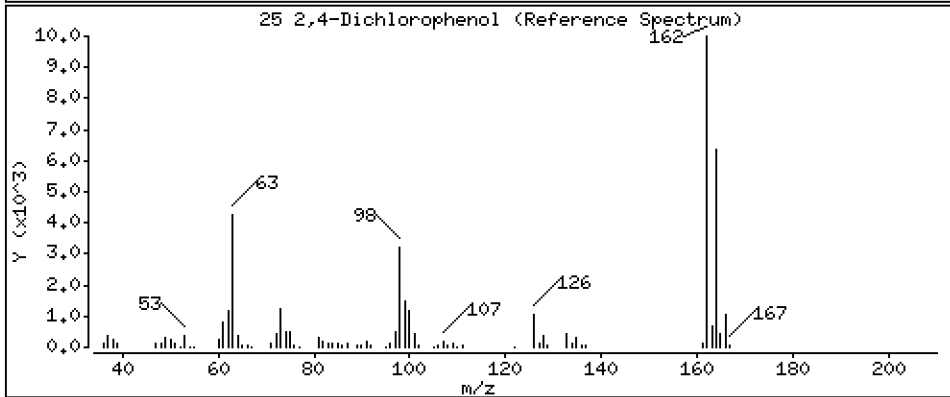
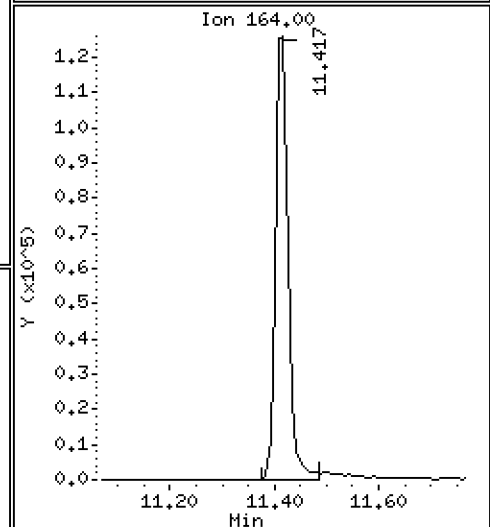
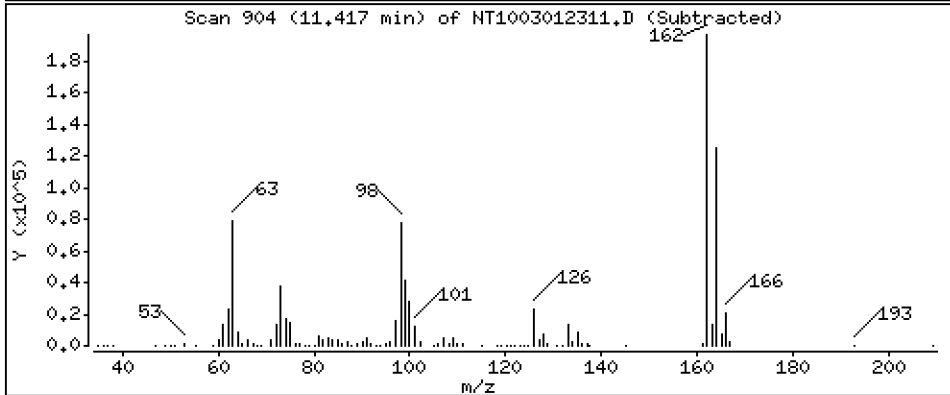
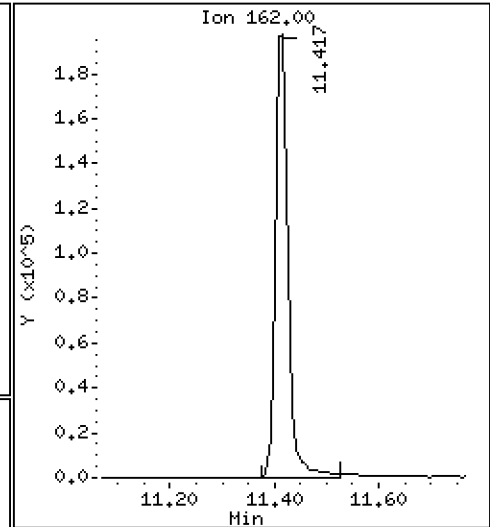
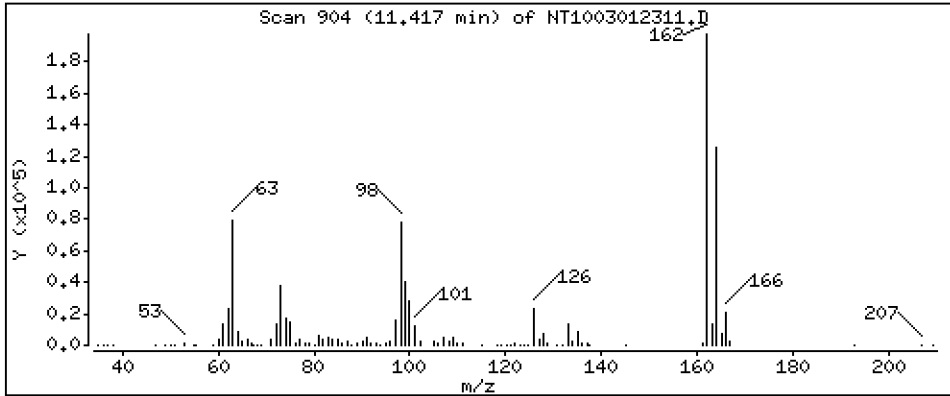
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 4,437 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

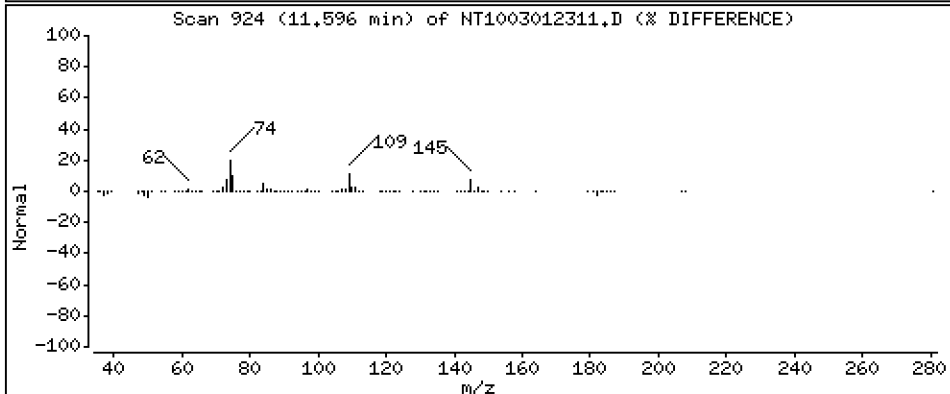
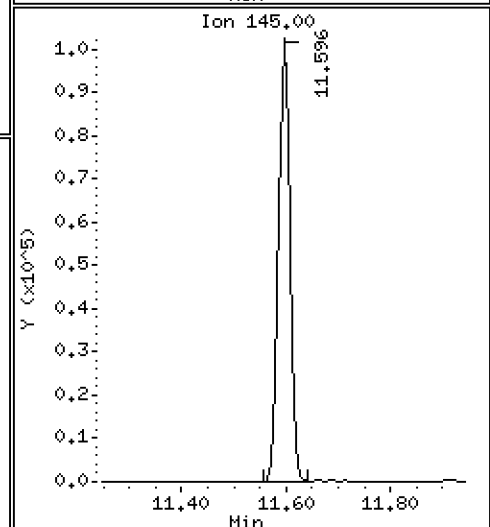
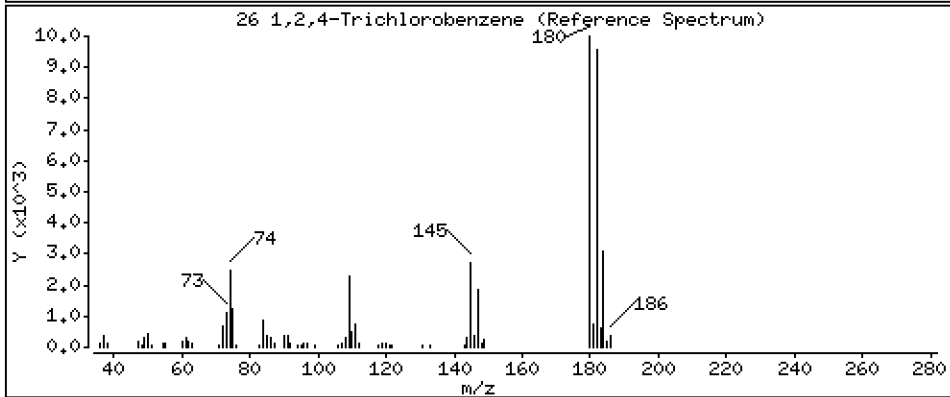
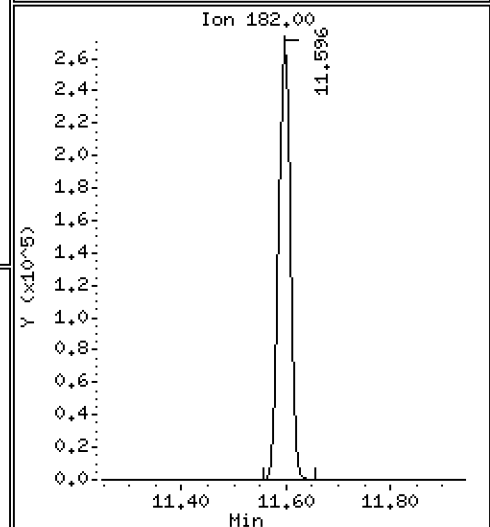
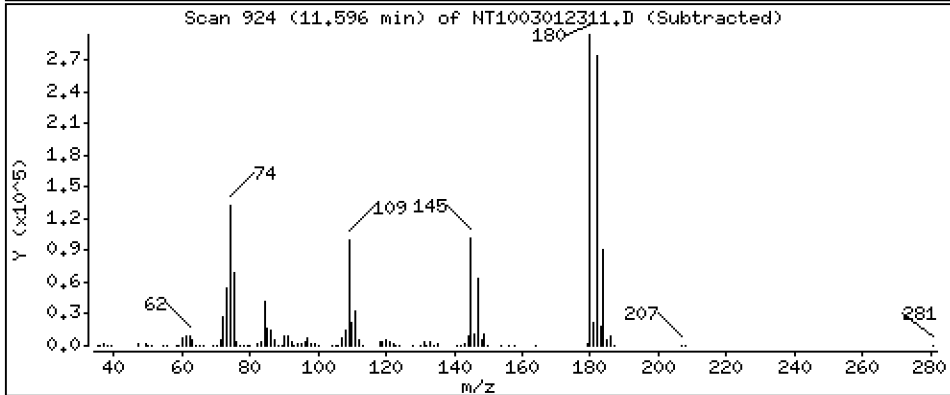
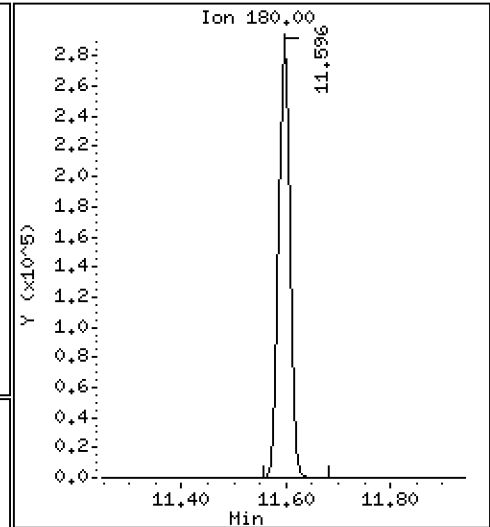
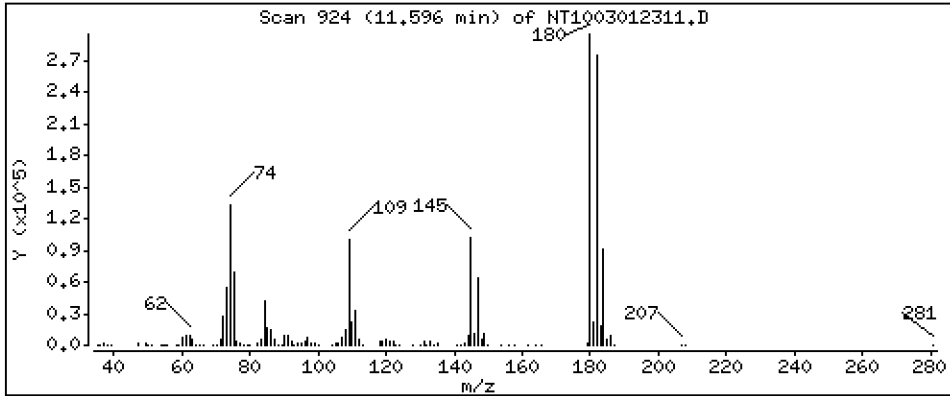
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,908 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

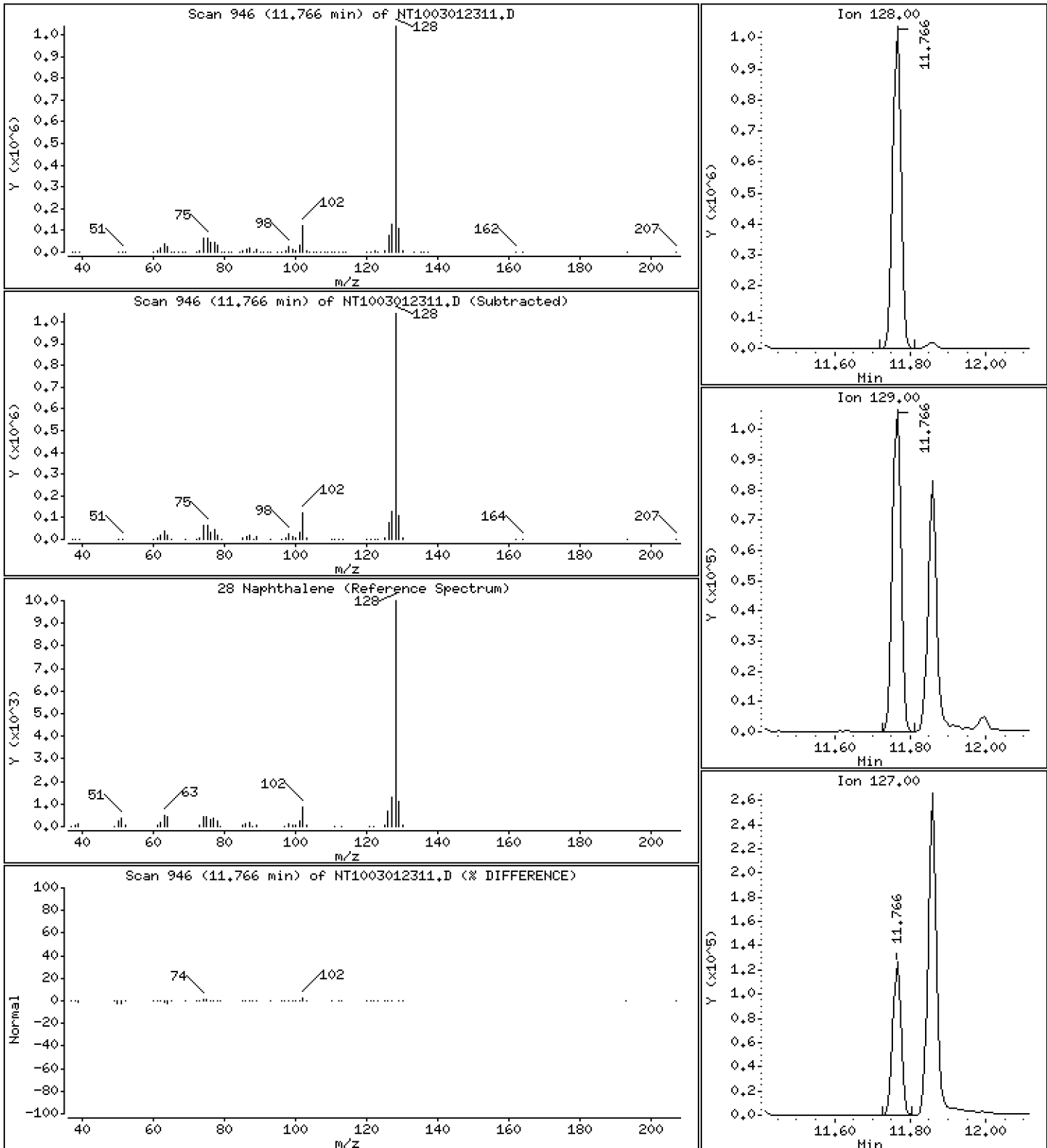
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 5,255 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

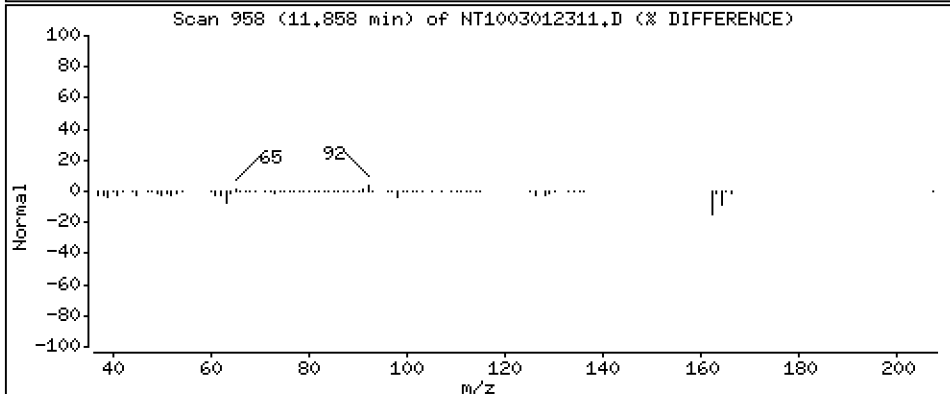
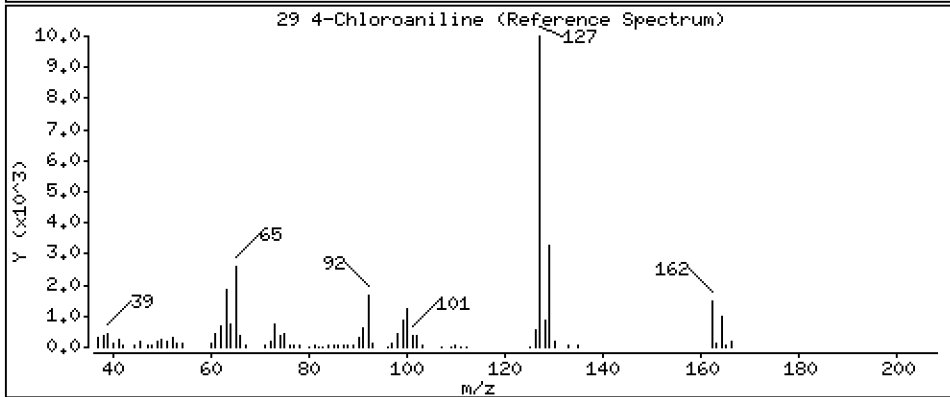
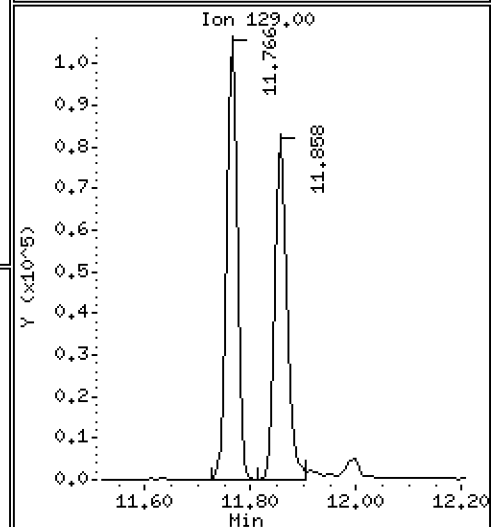
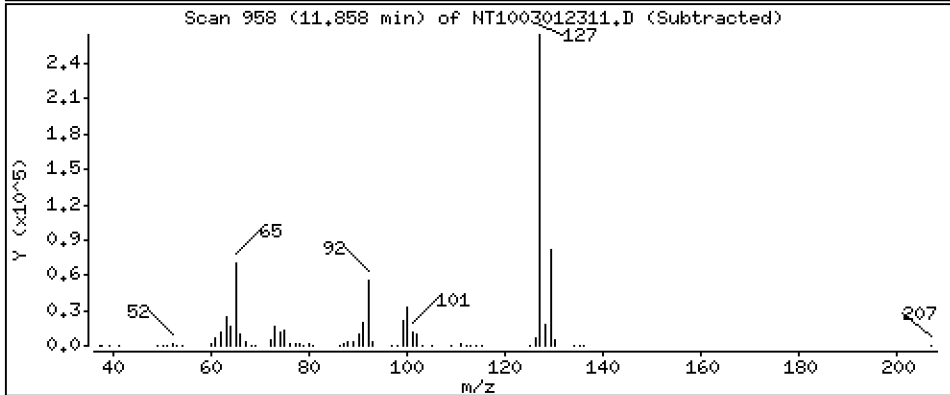
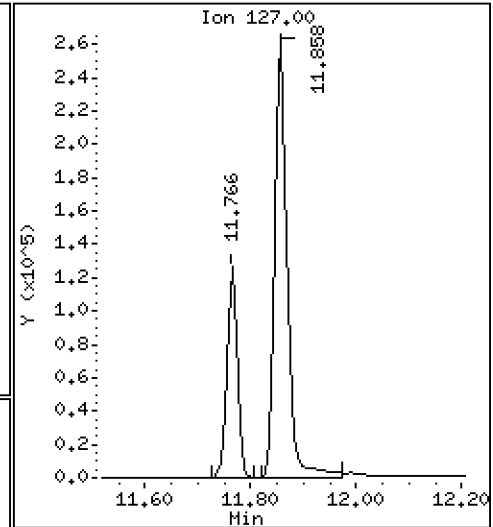
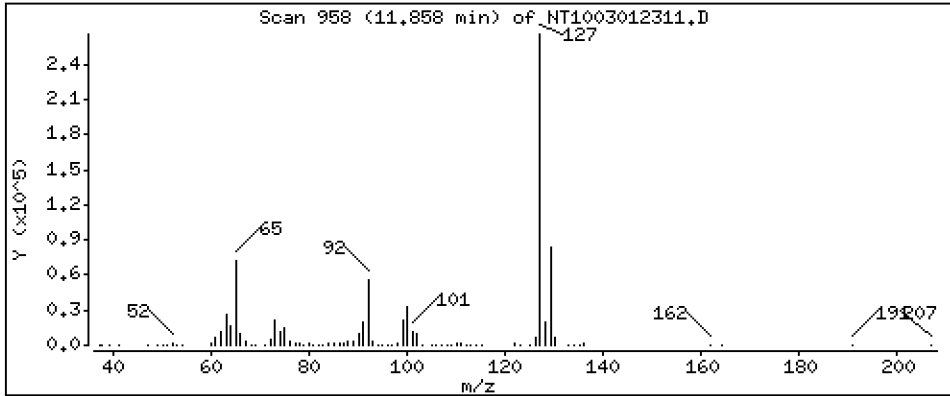
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 3,791 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

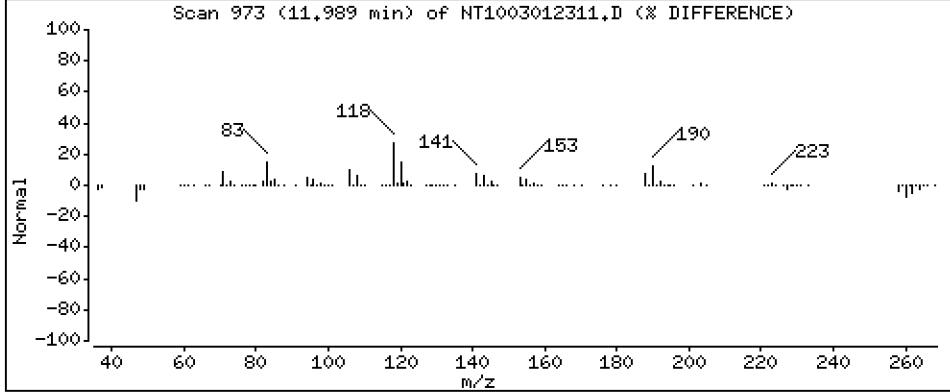
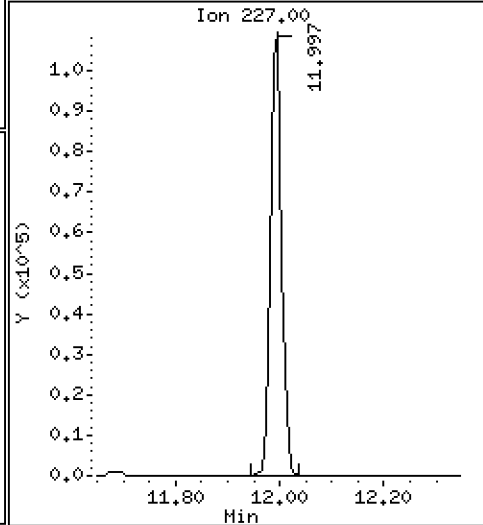
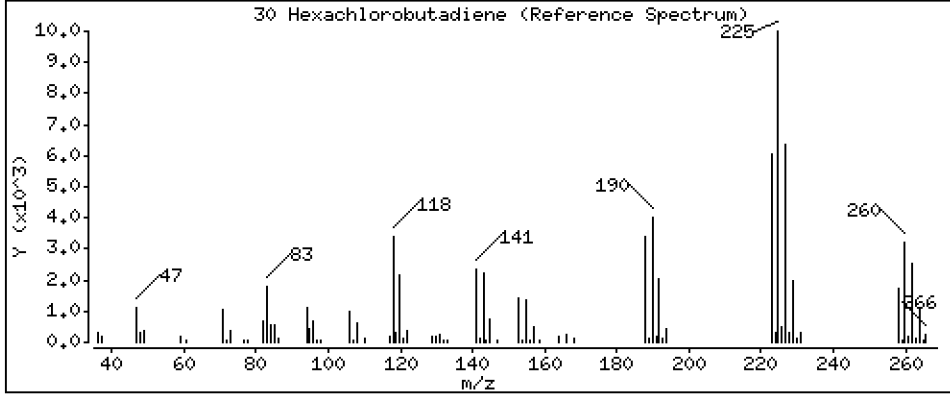
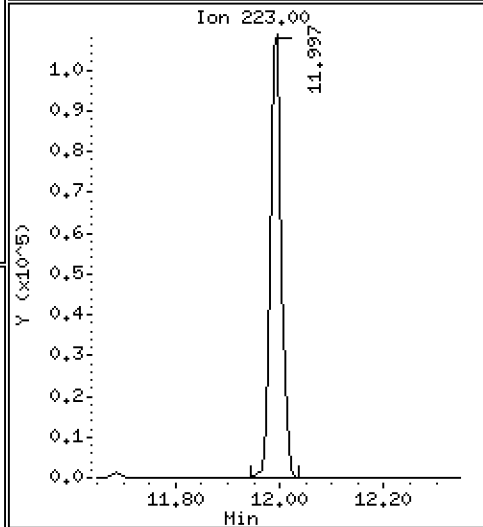
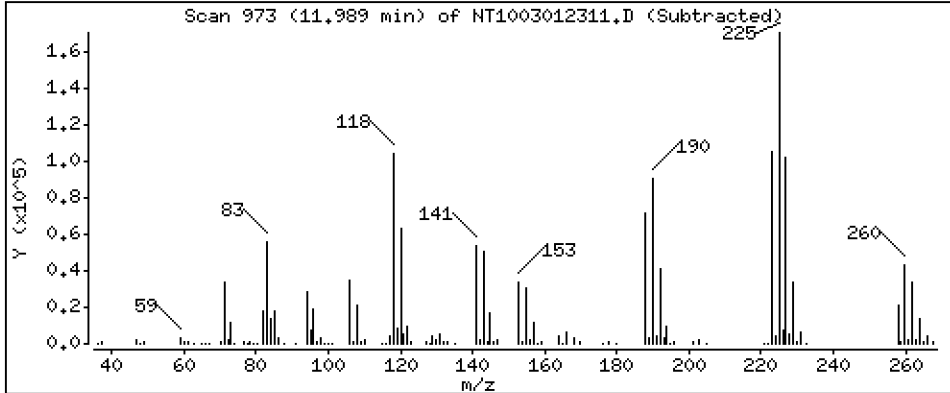
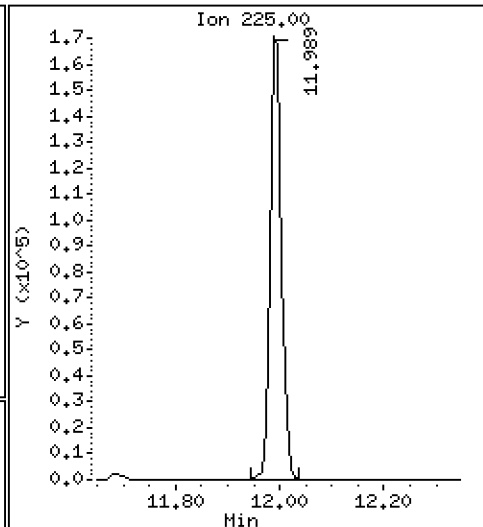
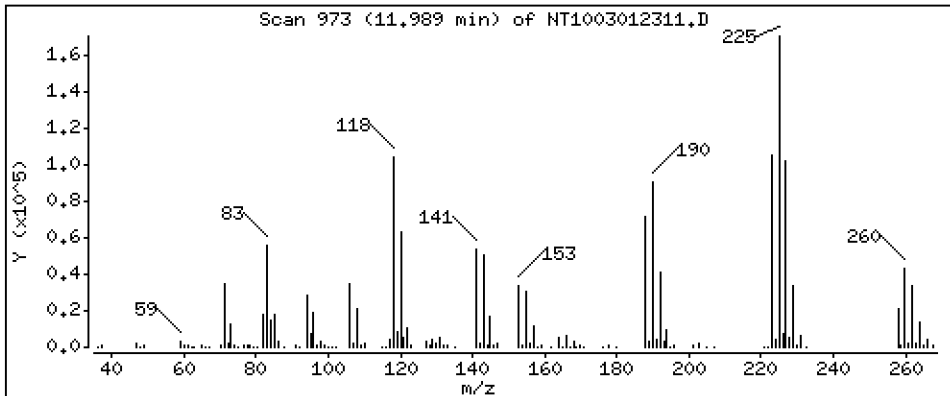
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,014 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

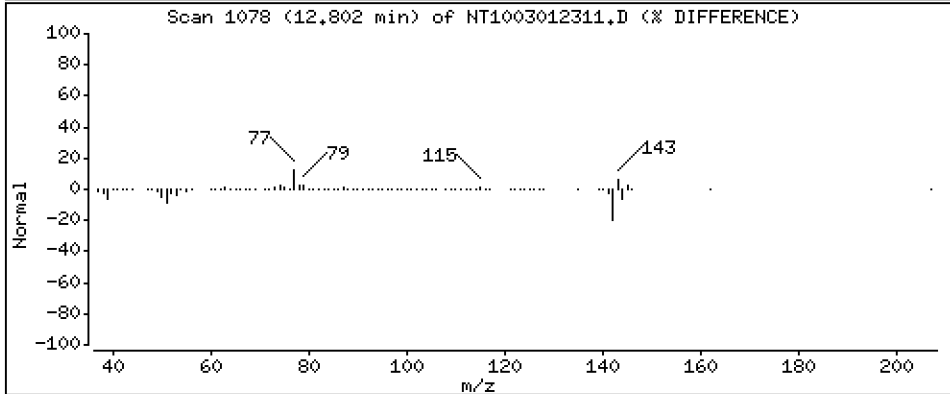
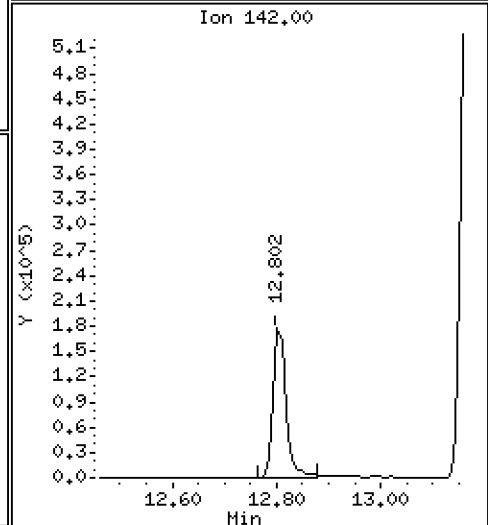
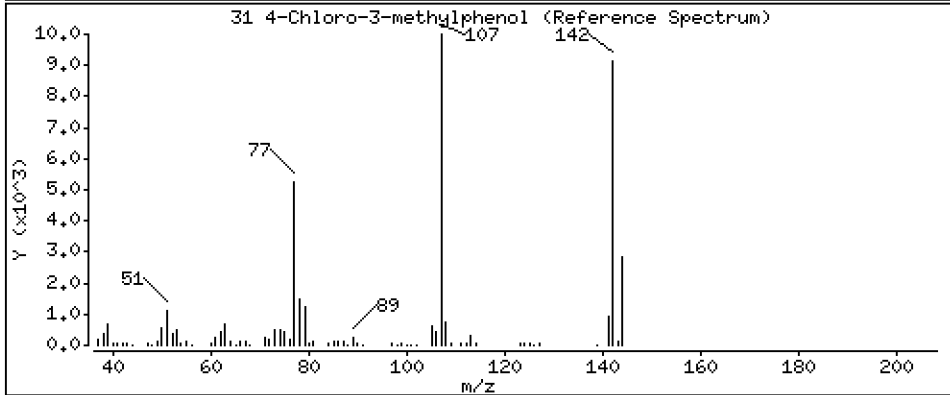
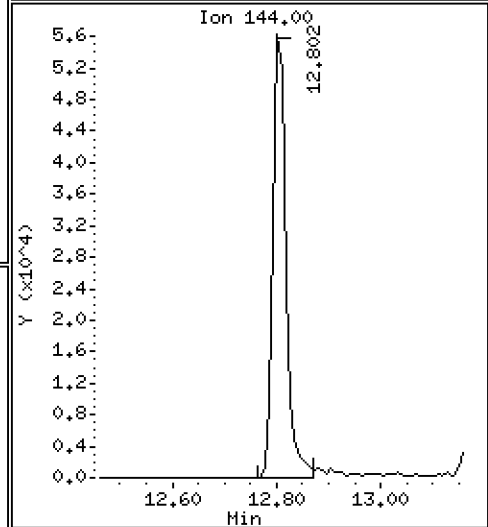
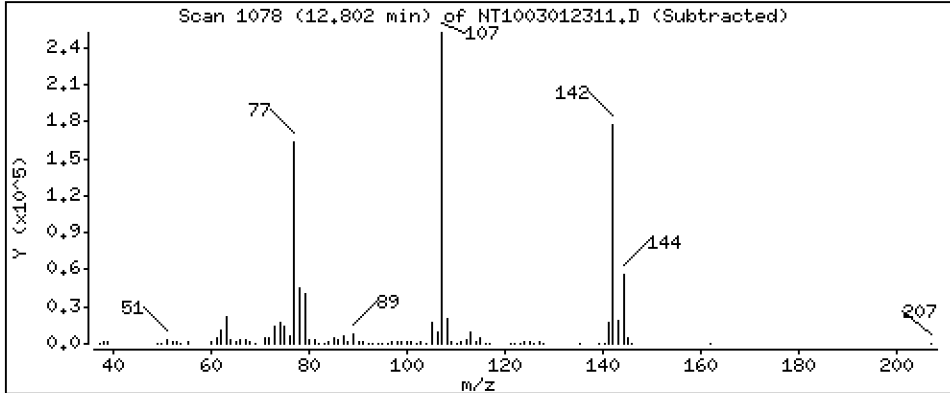
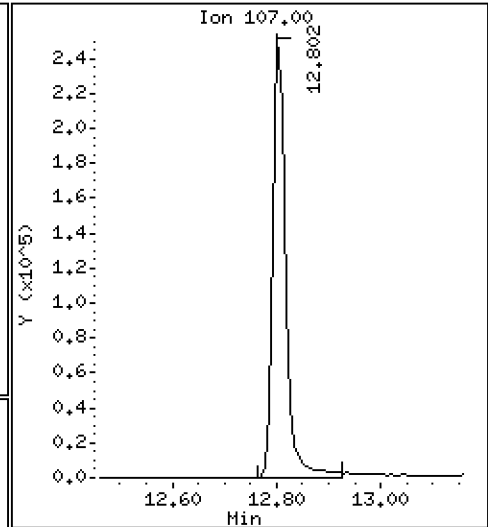
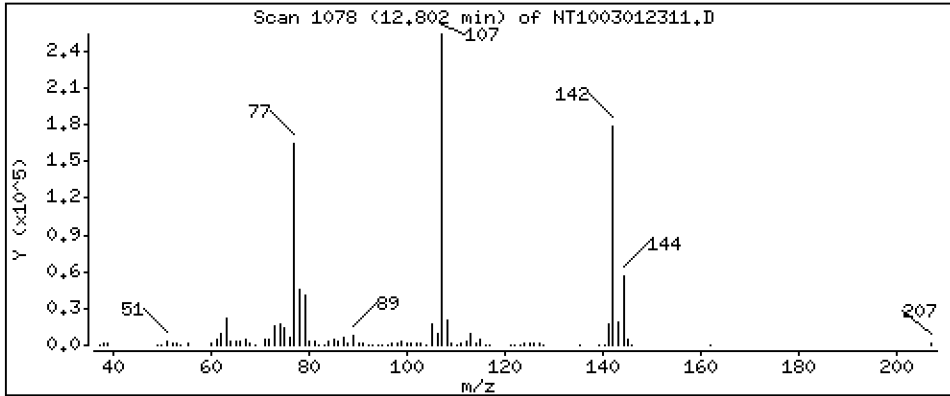
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 4,452 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

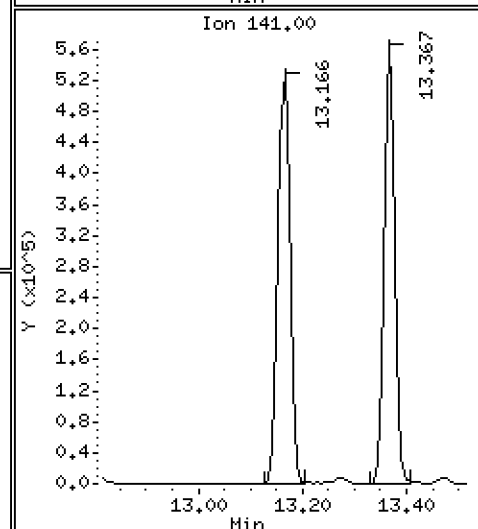
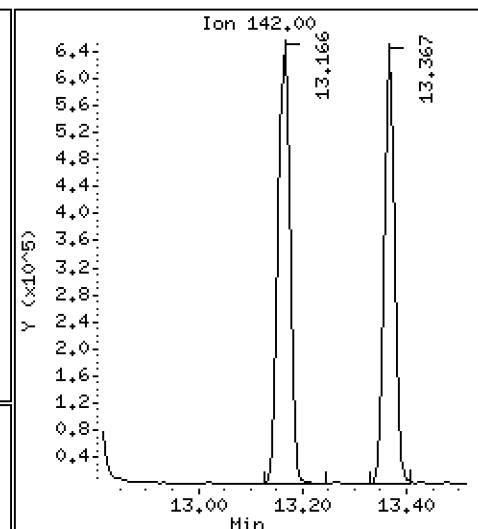
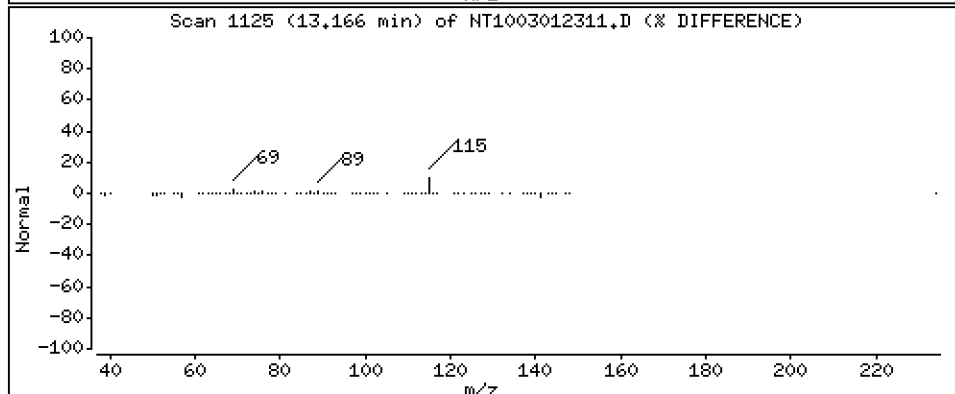
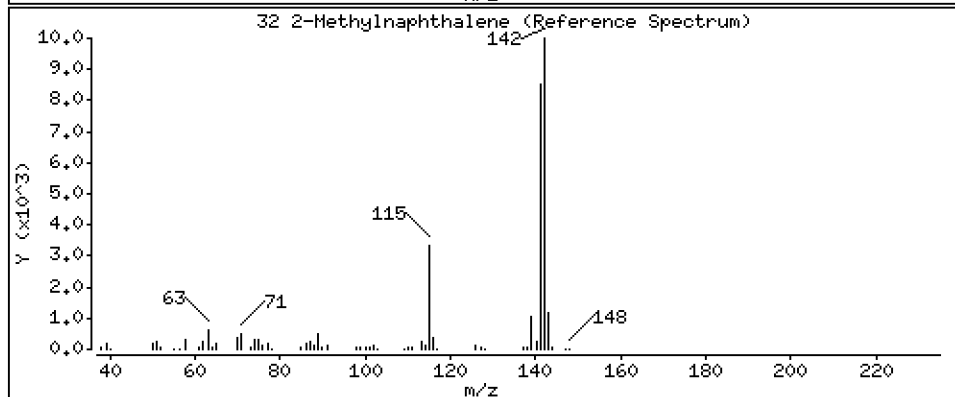
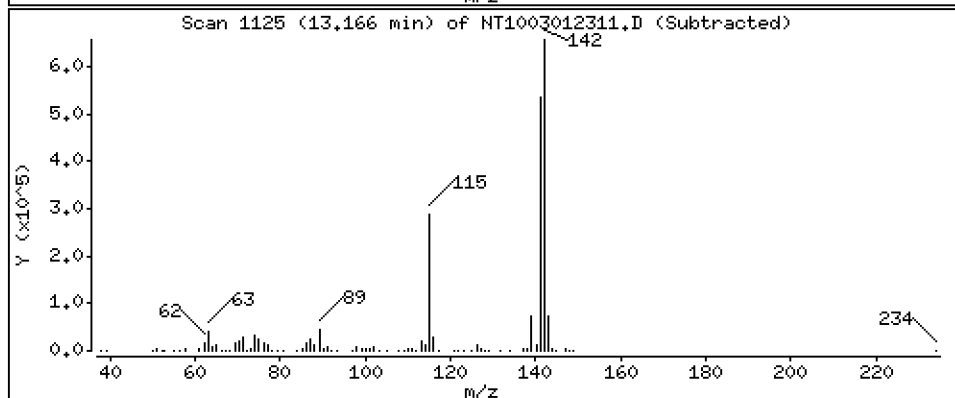
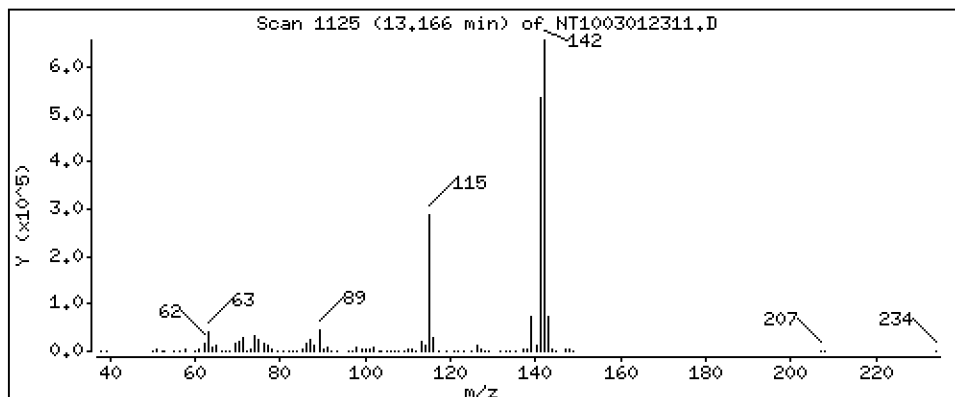
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,951 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

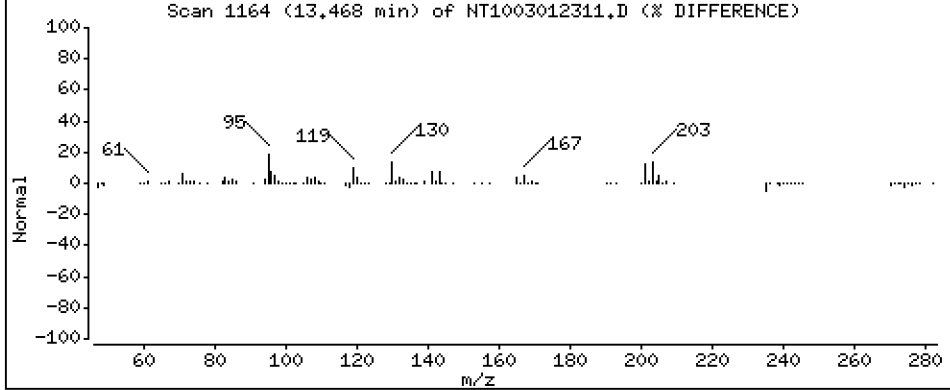
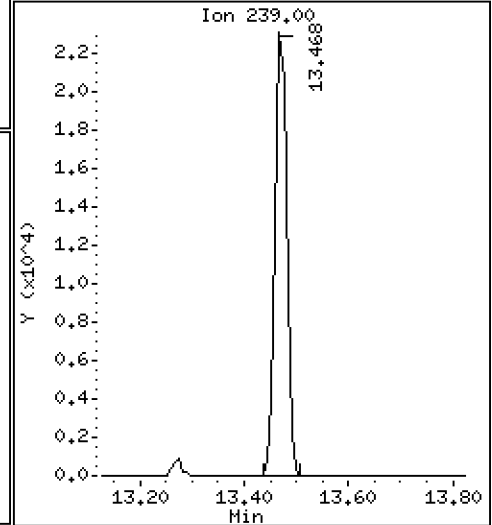
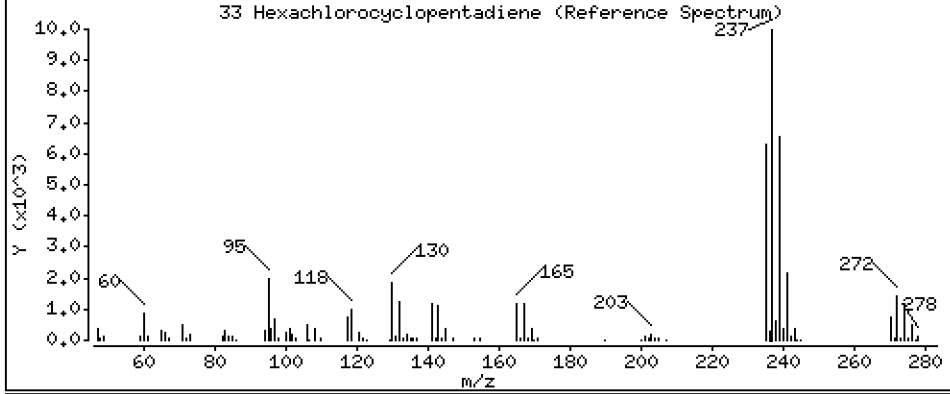
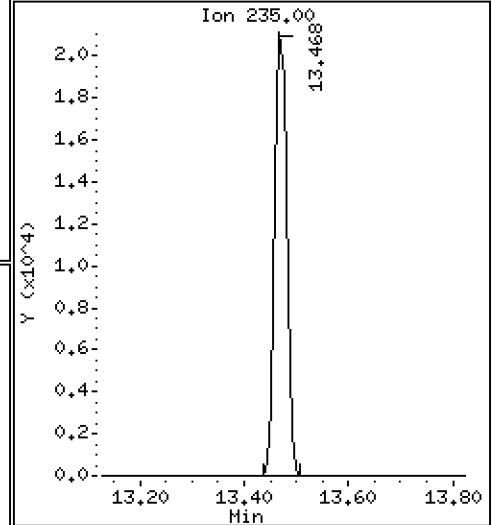
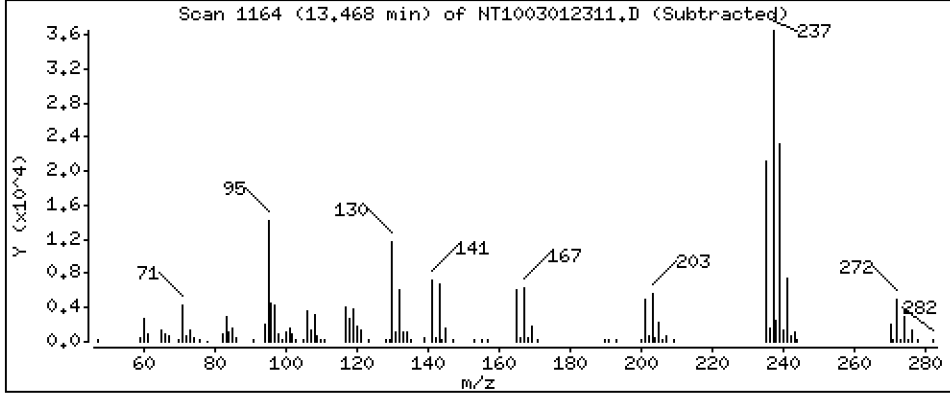
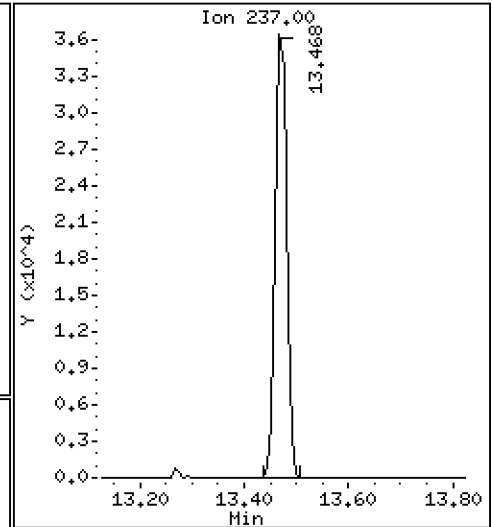
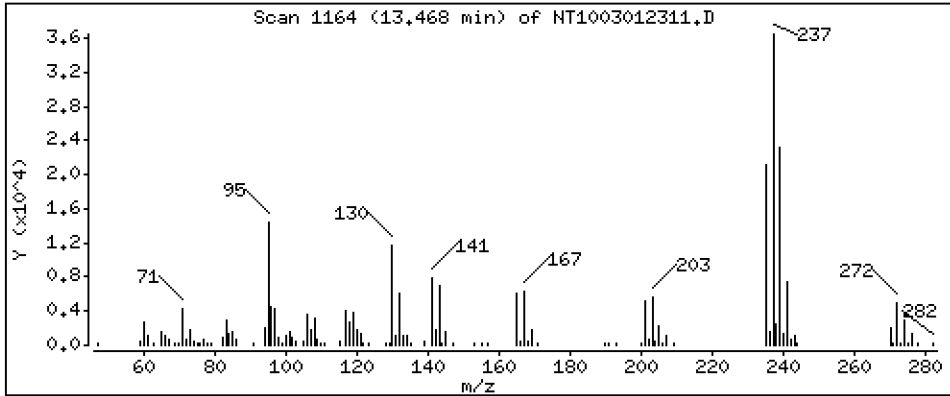
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 2,562 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

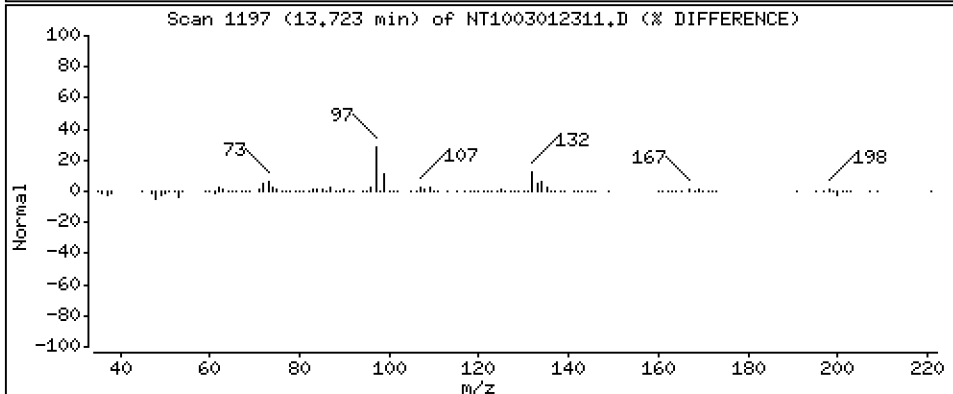
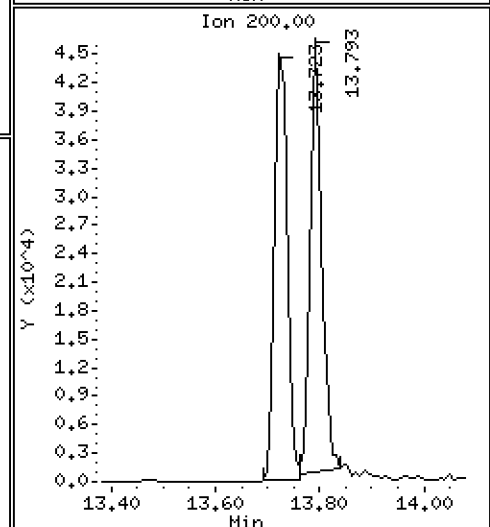
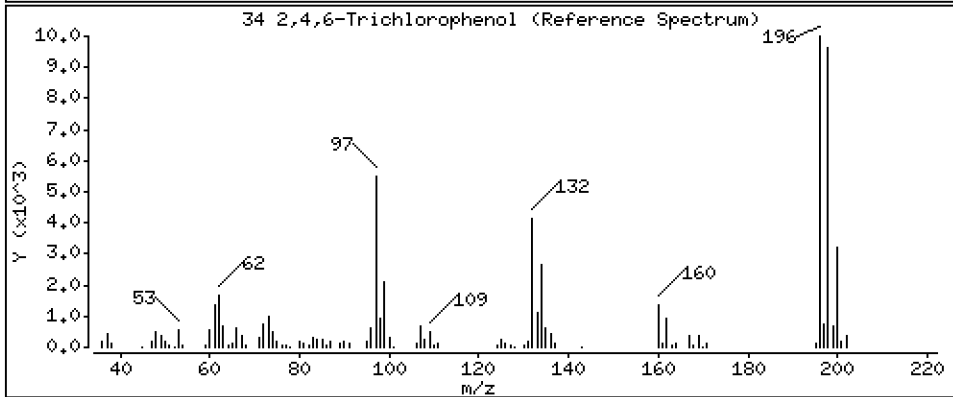
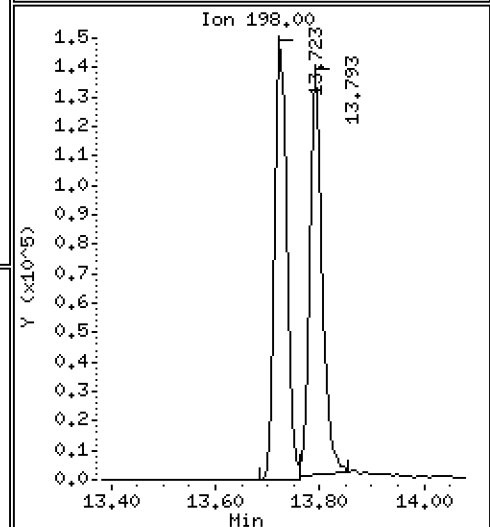
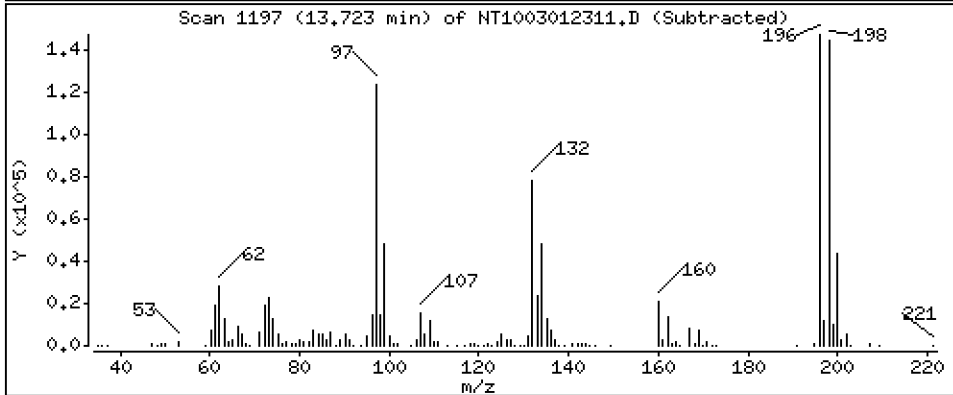
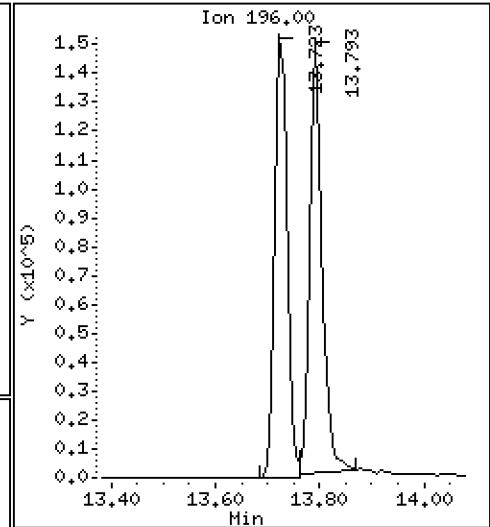
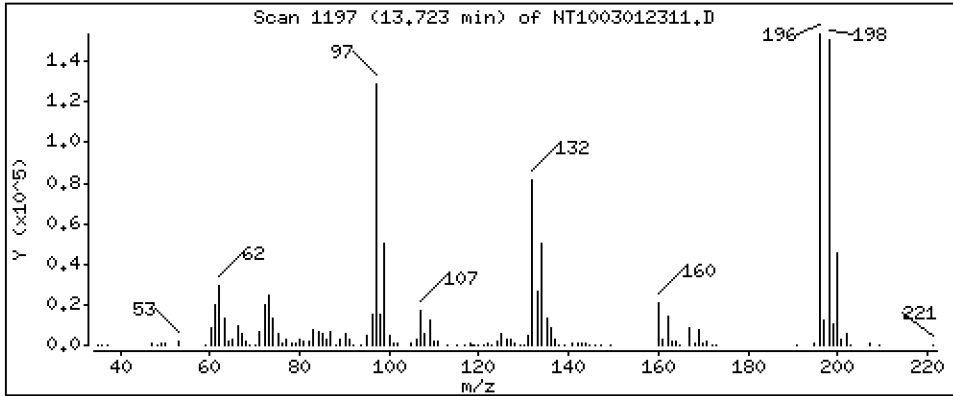
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

34 2,4,6-Trichlorophenol

Concentration: 4.120 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

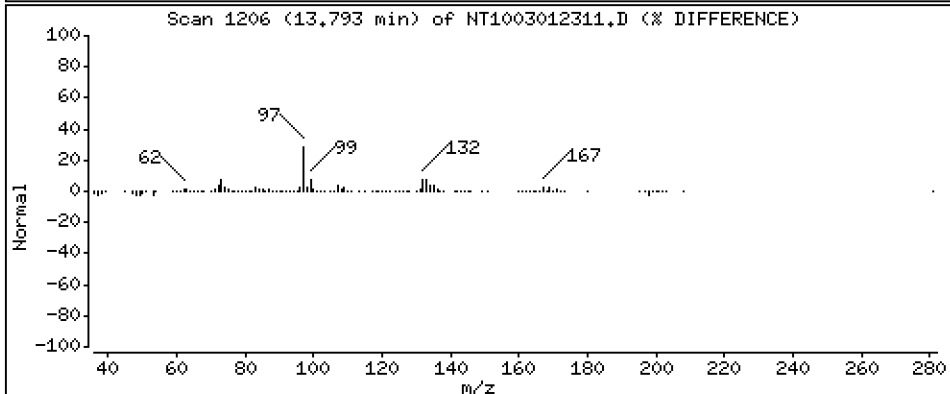
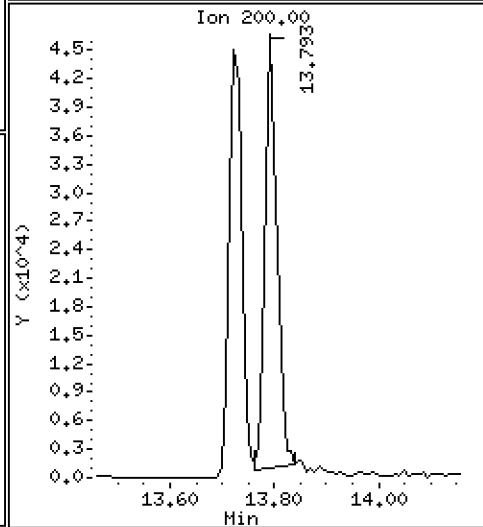
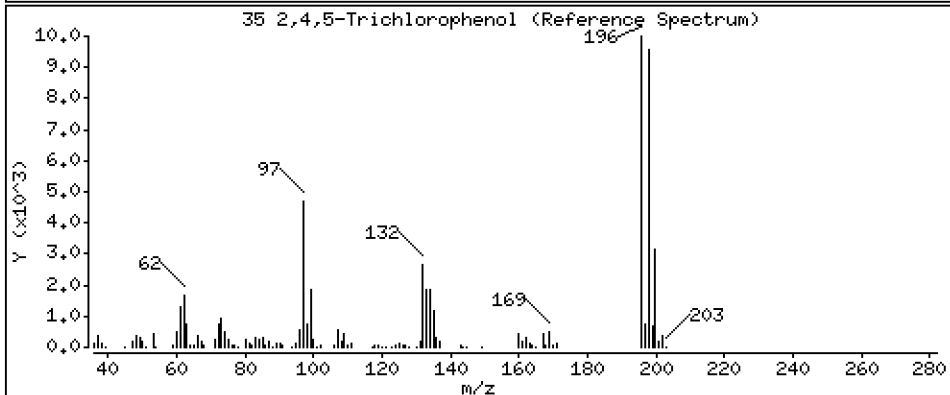
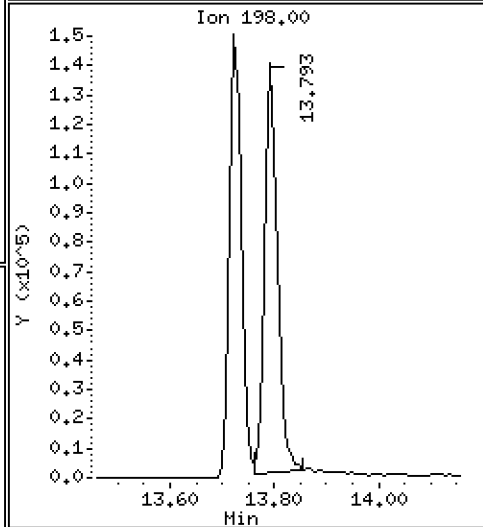
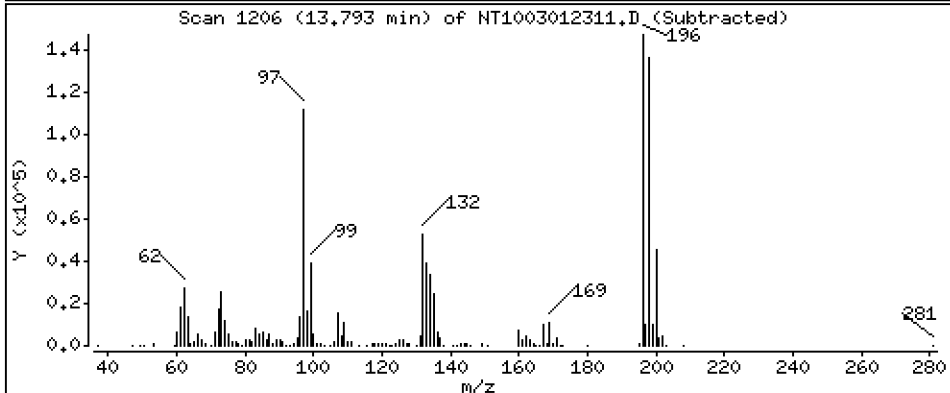
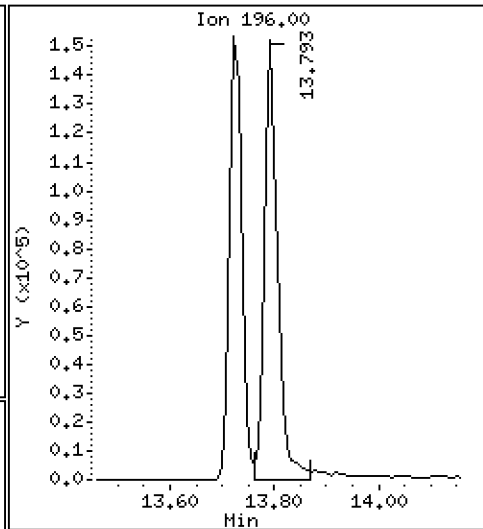
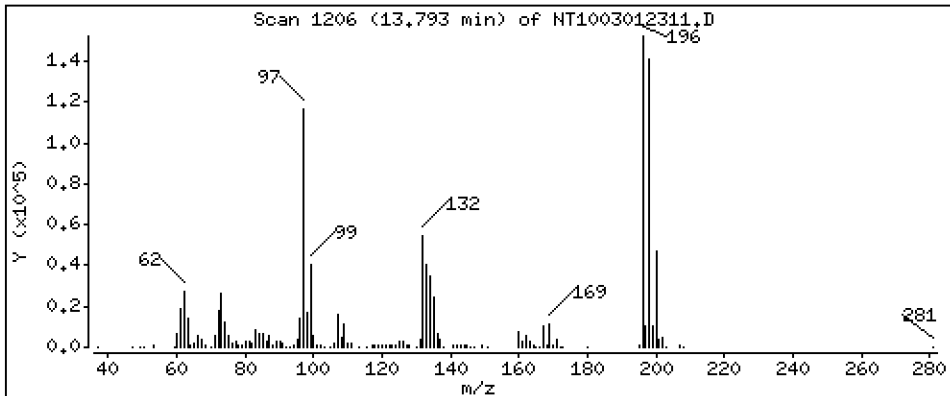
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 4,149 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

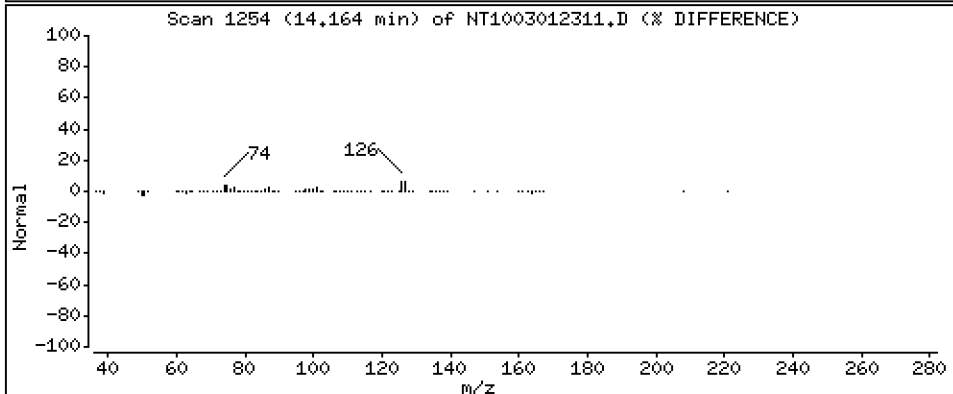
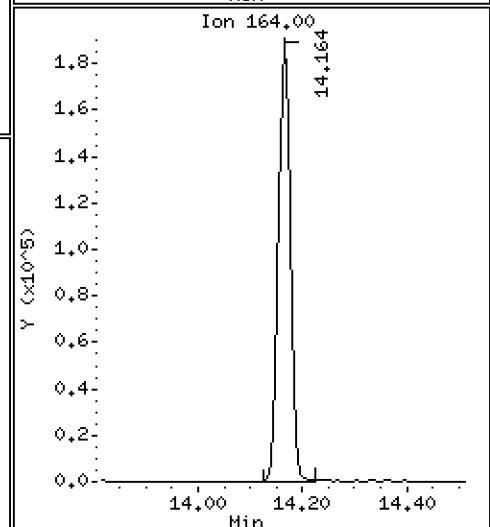
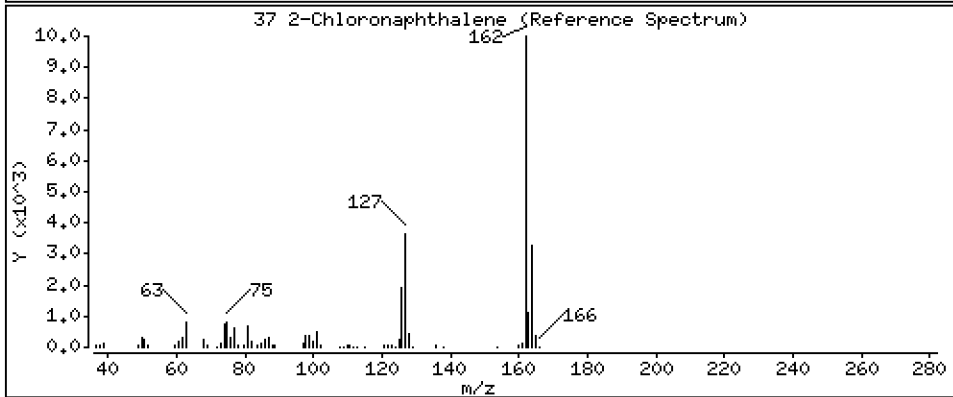
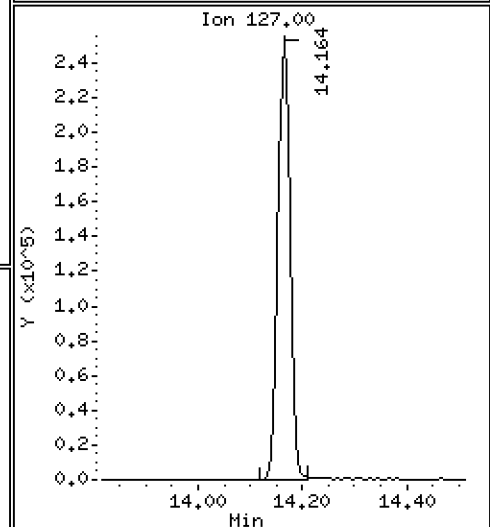
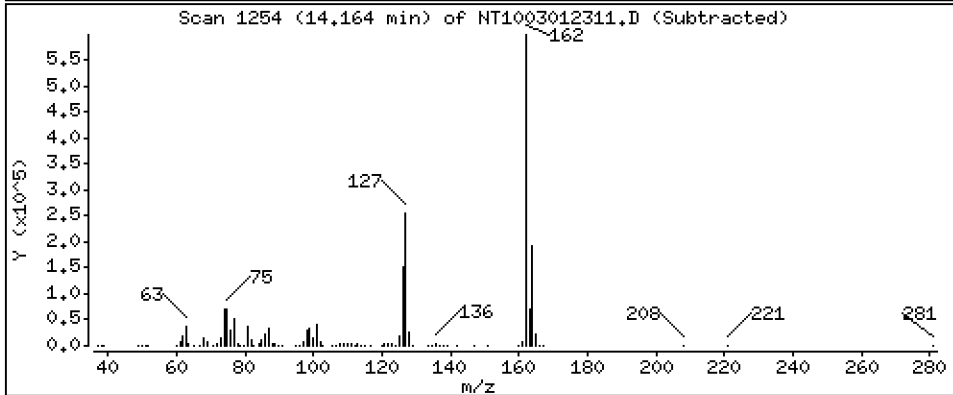
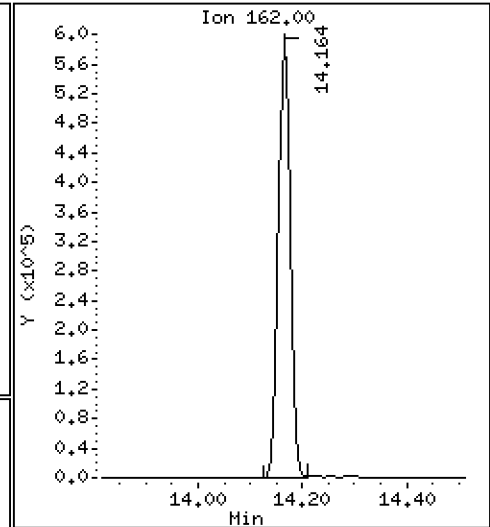
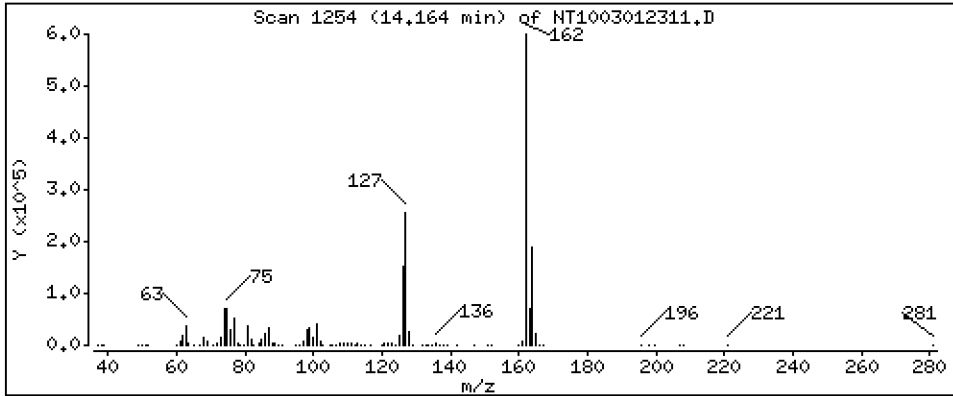
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,264 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

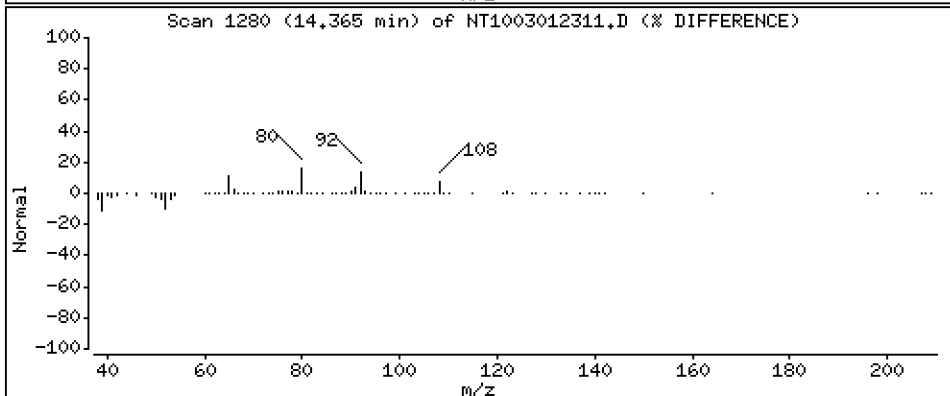
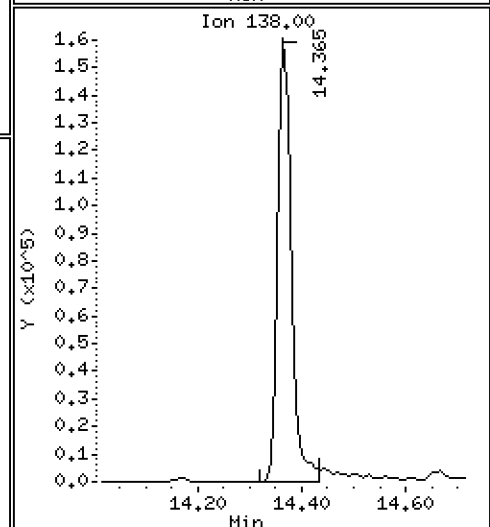
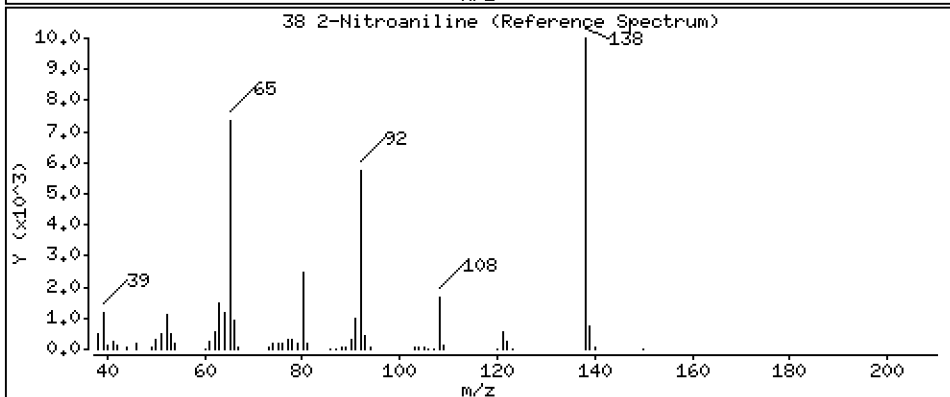
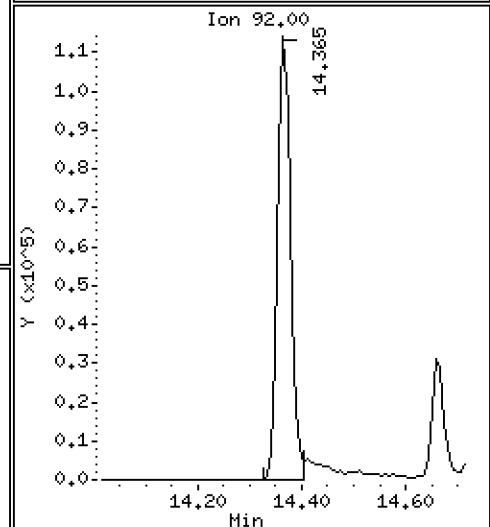
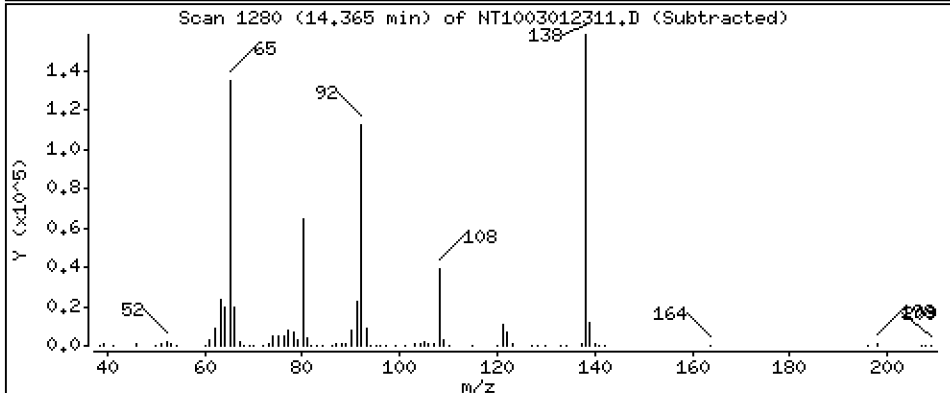
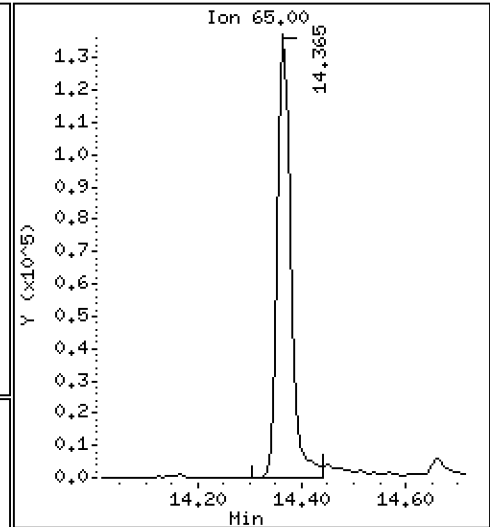
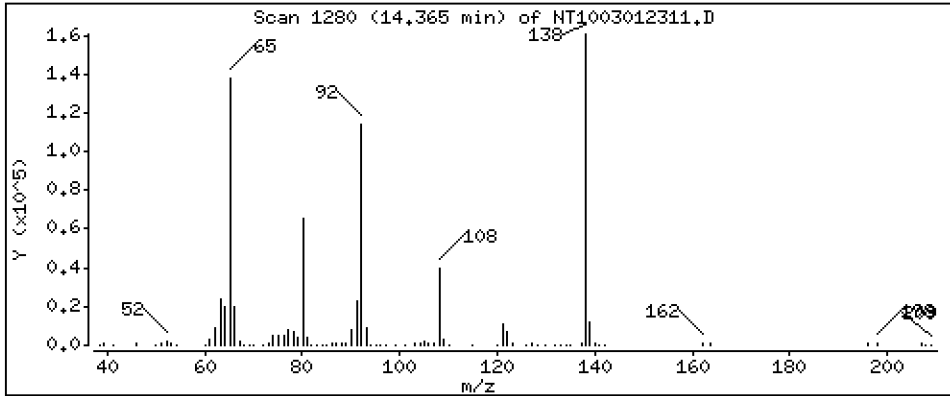
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 5,027 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

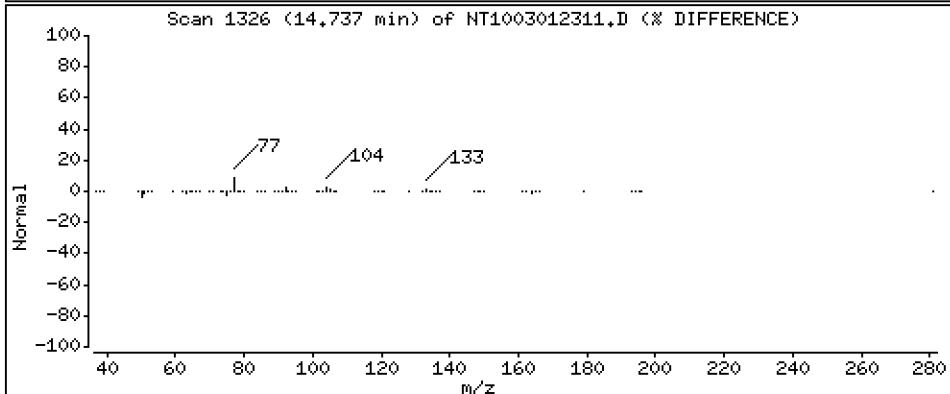
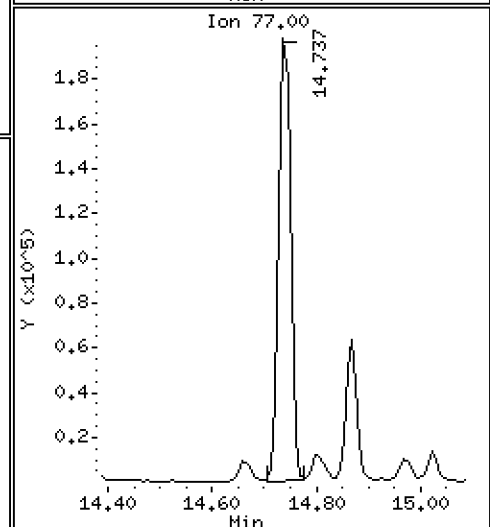
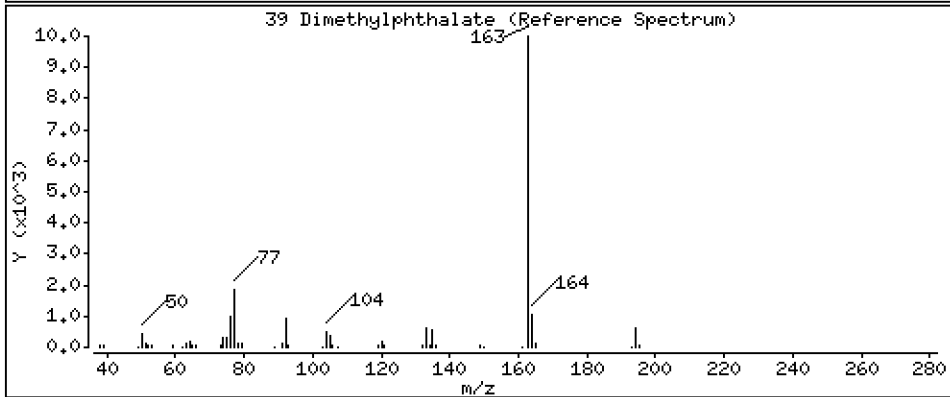
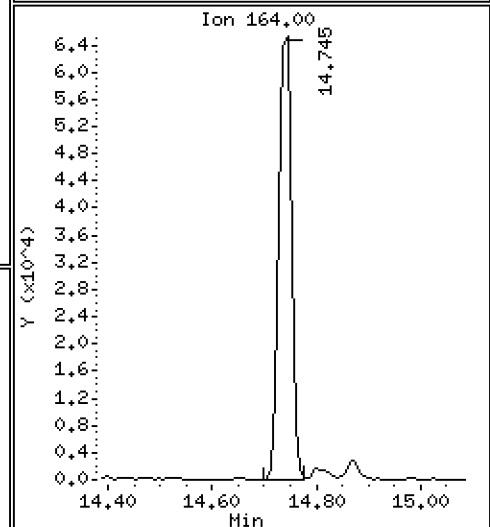
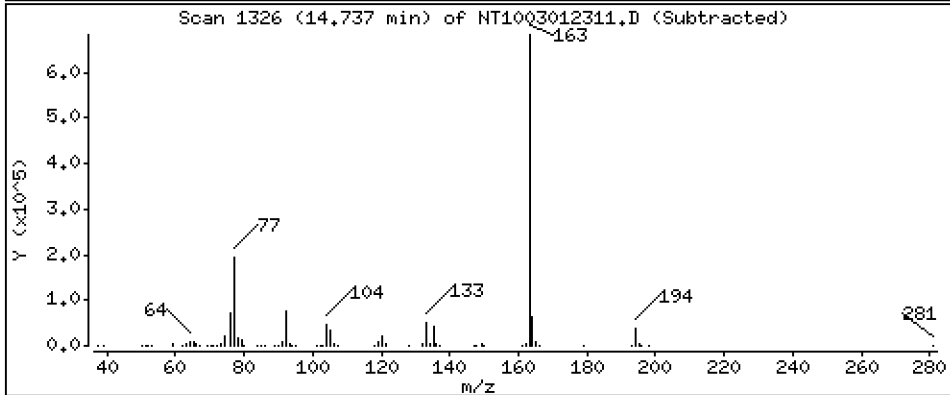
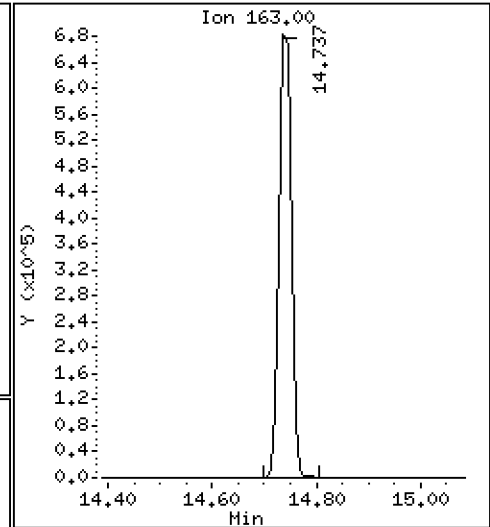
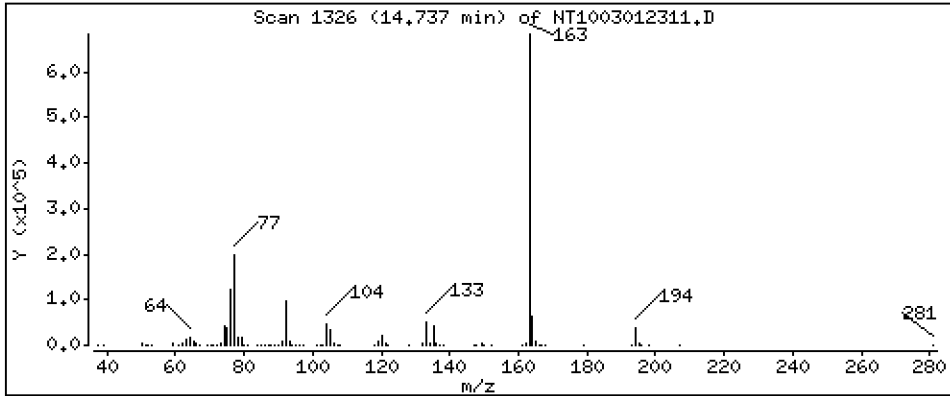
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,384 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

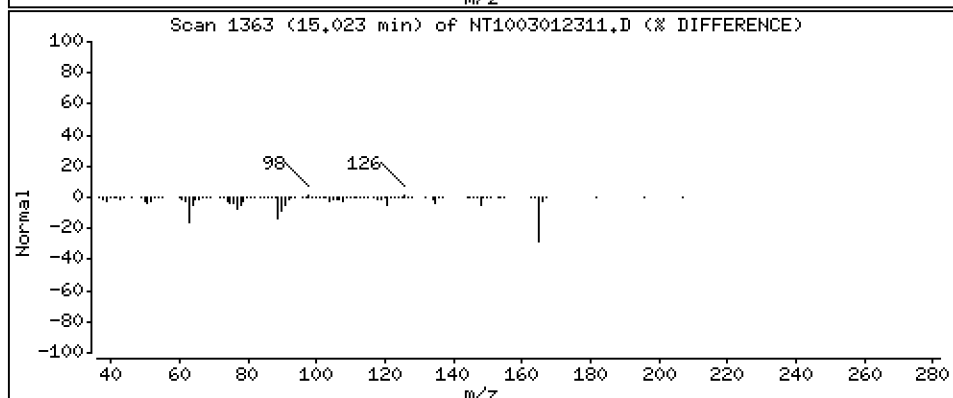
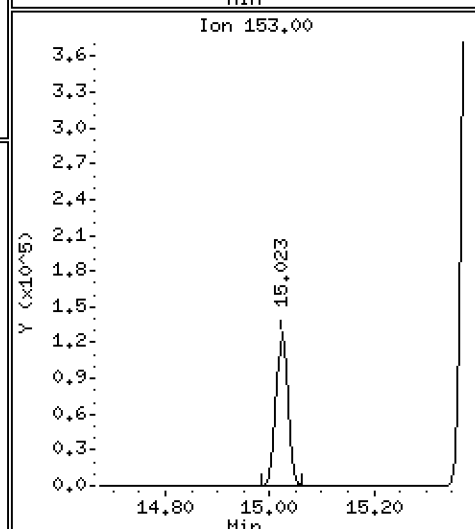
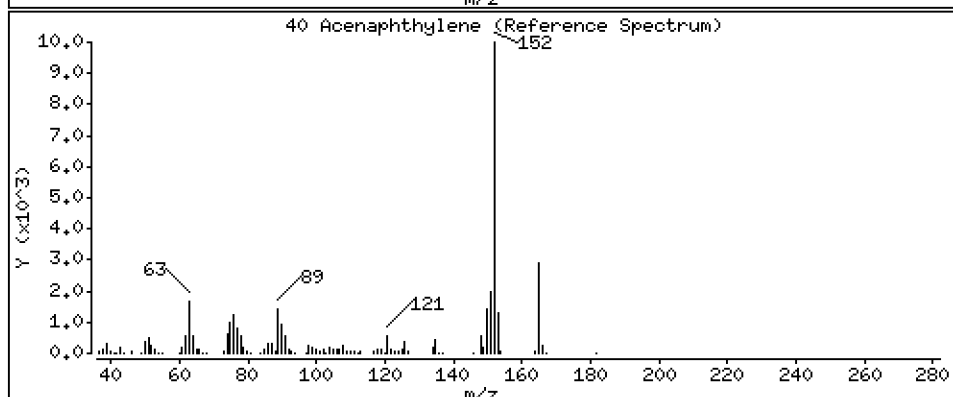
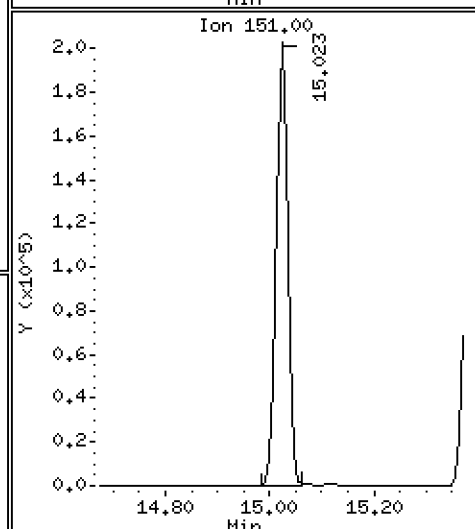
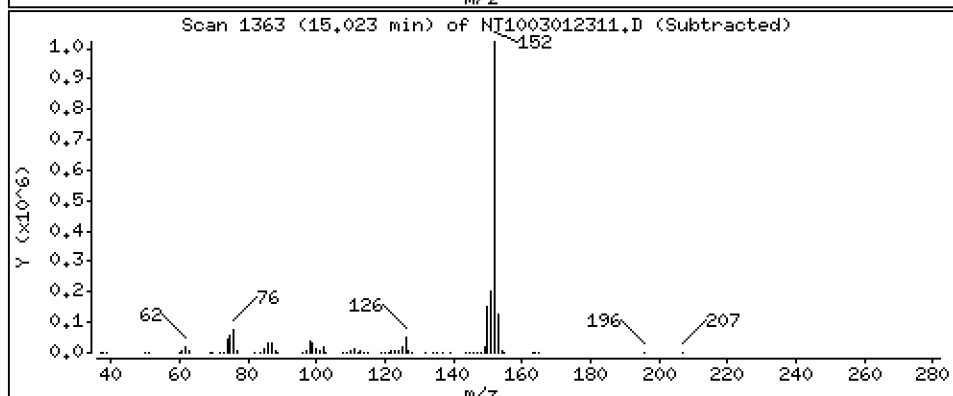
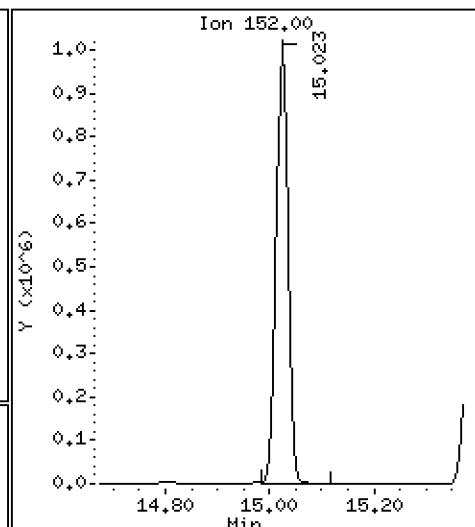
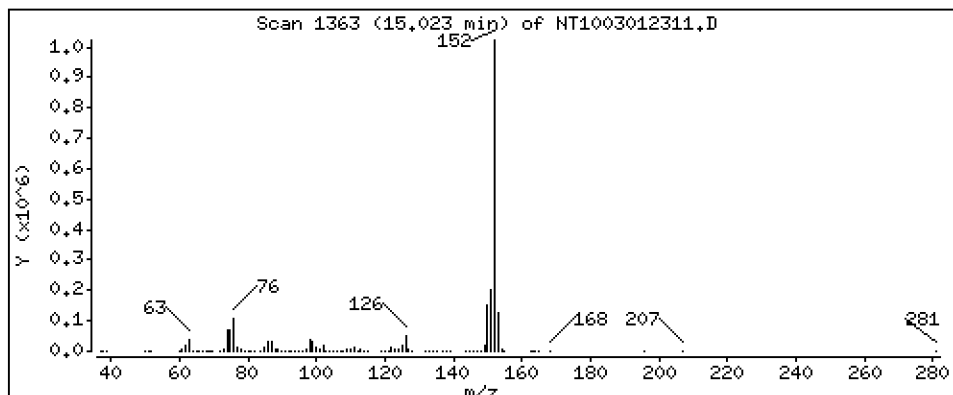
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,806 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

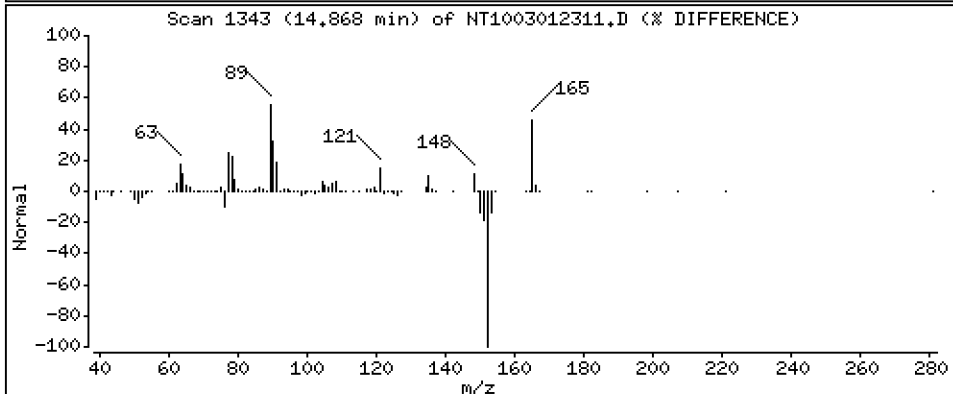
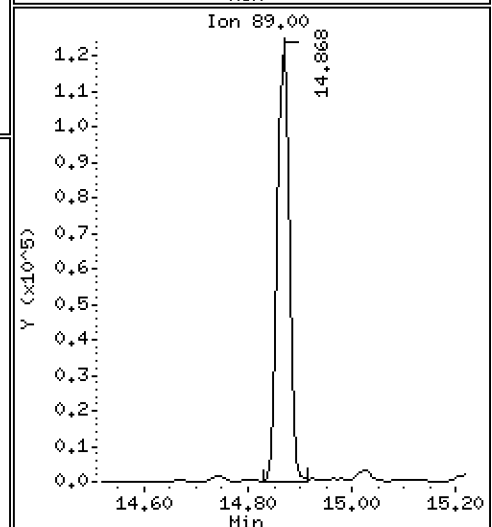
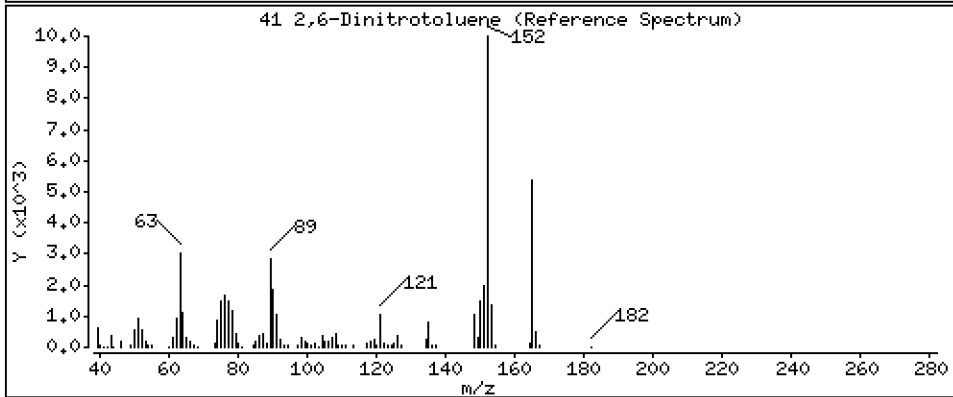
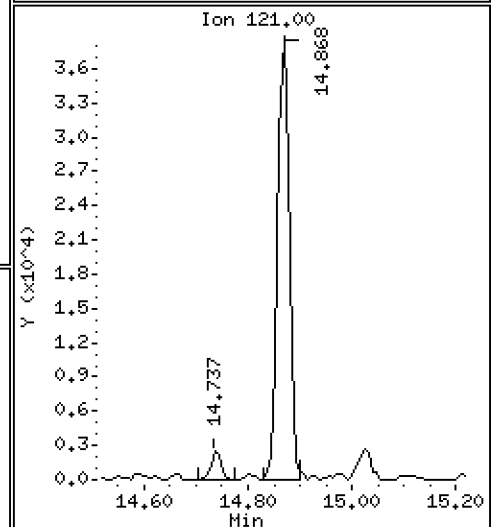
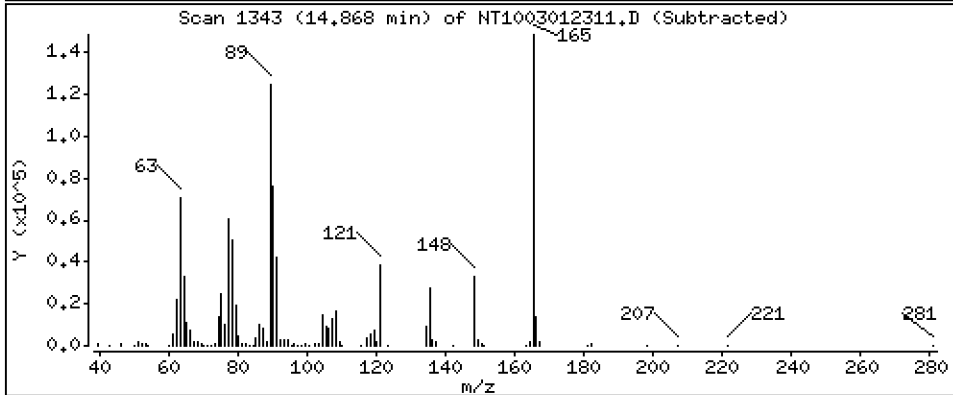
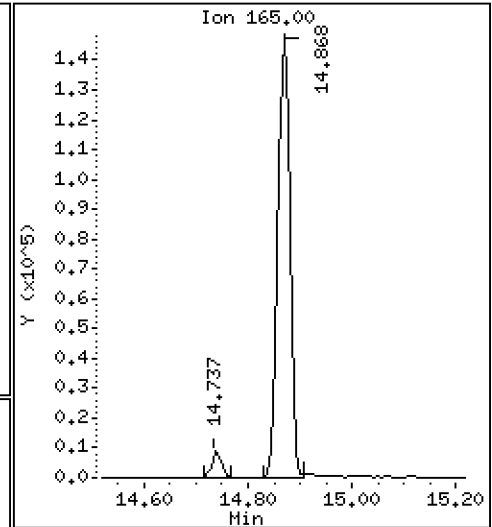
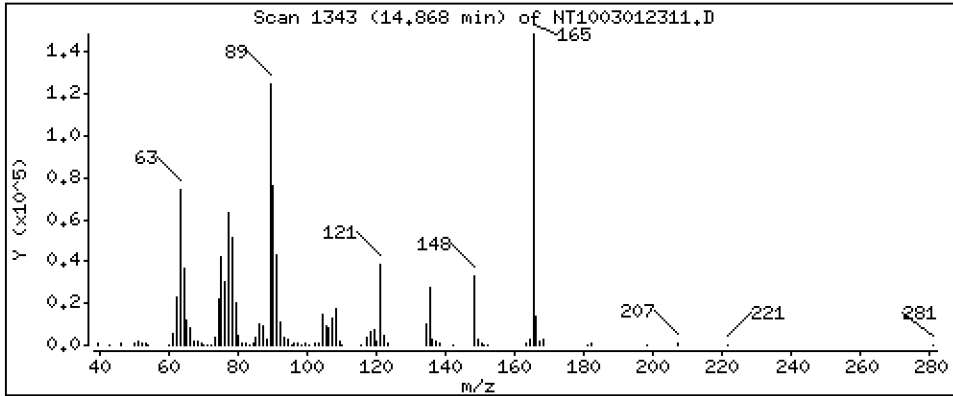
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 5.187 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

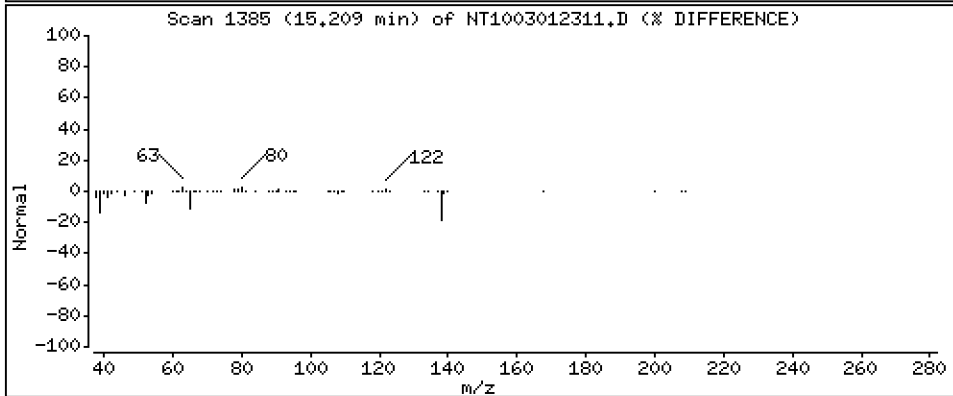
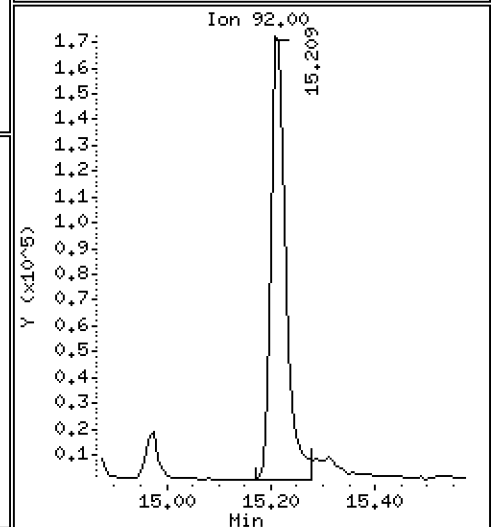
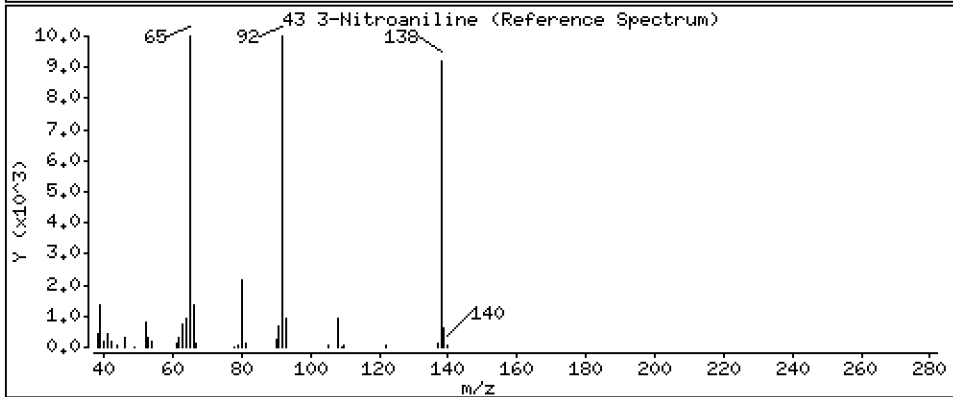
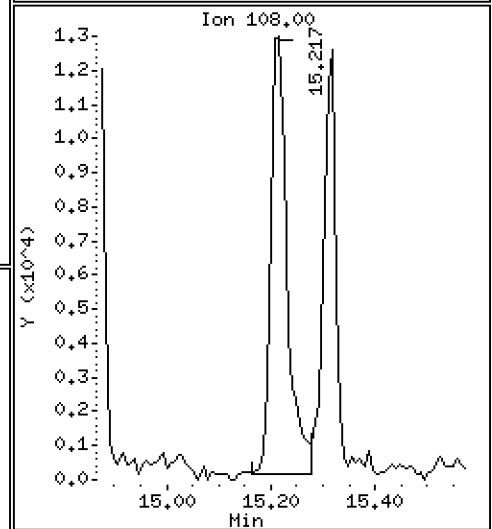
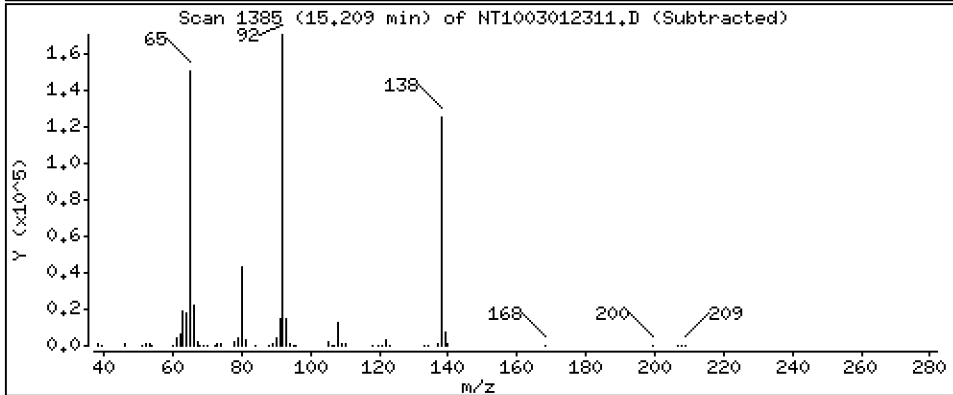
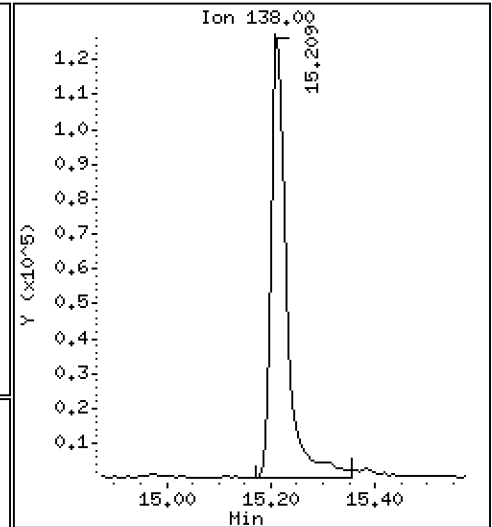
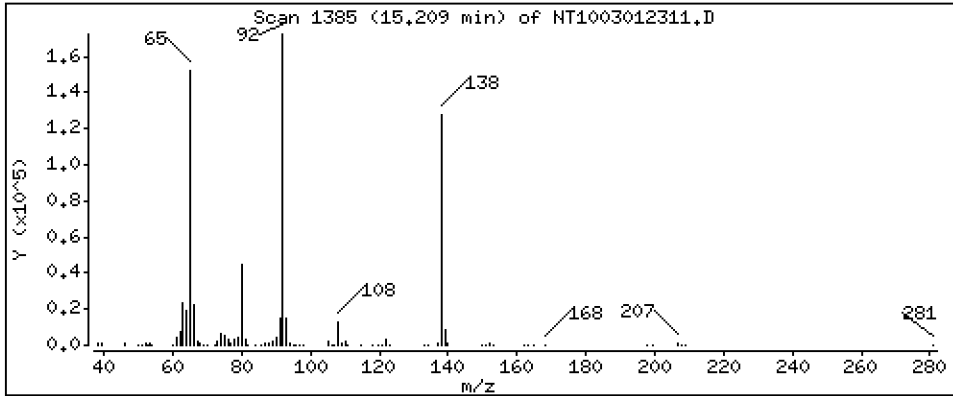
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

43 3-Nitroaniline

Concentration: 5.172 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

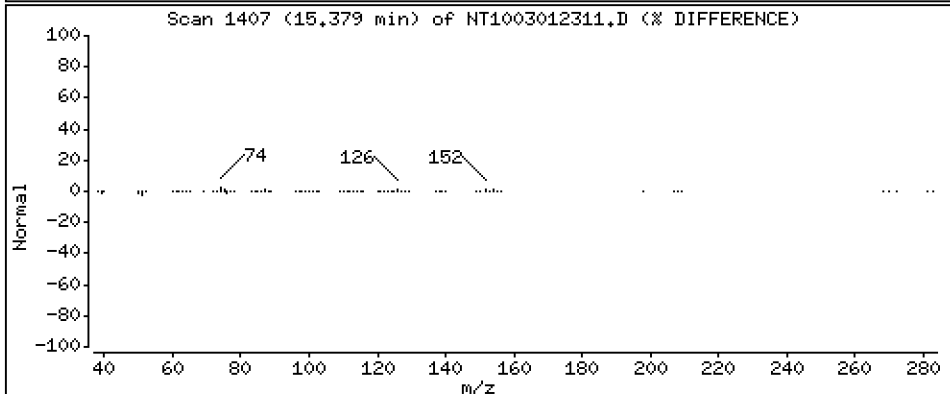
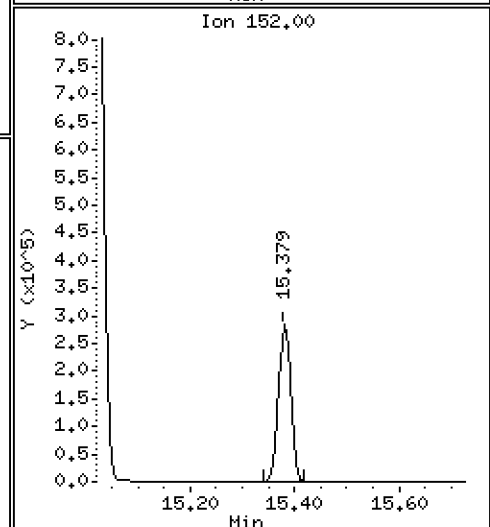
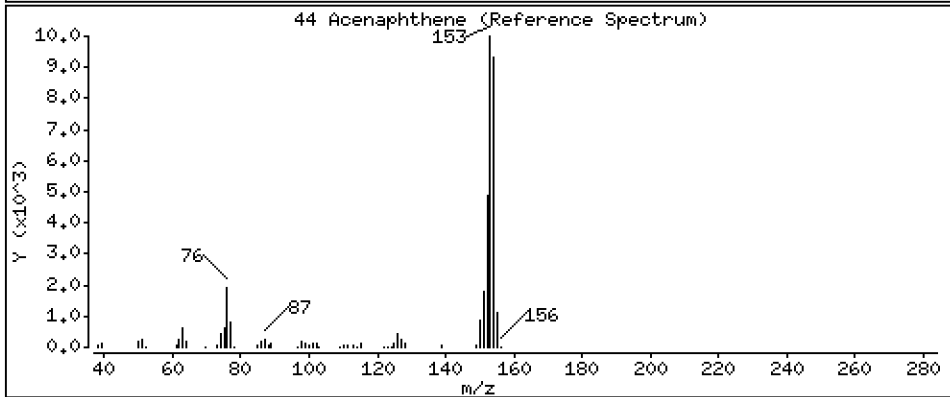
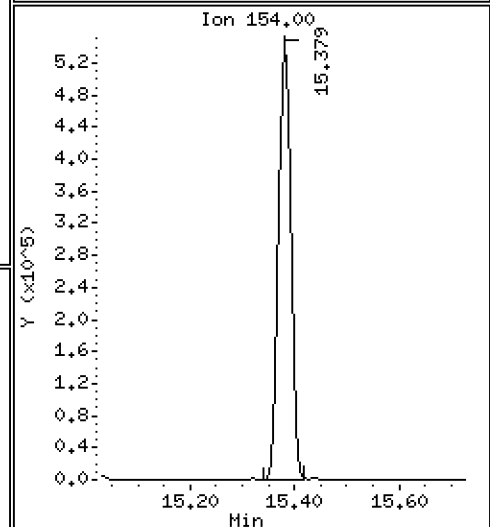
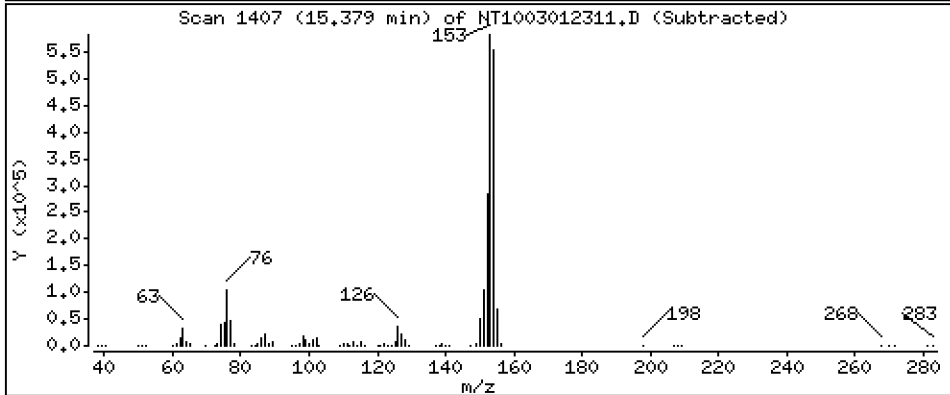
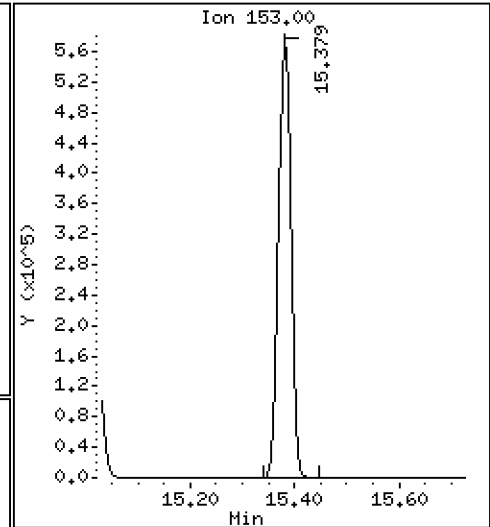
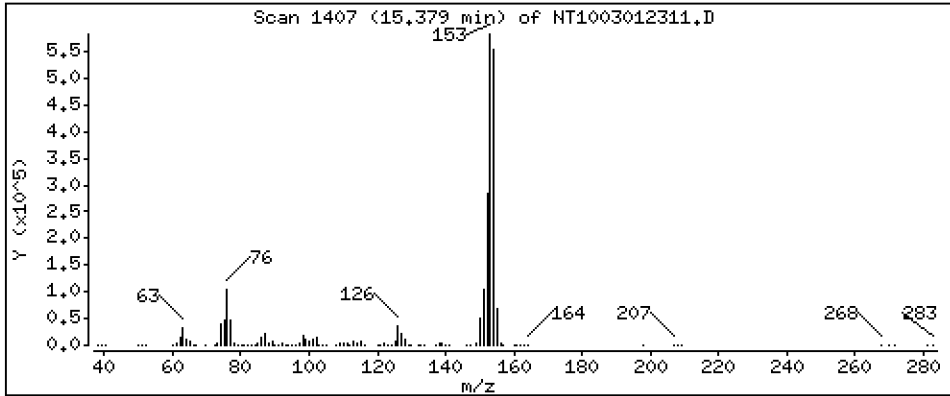
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 5,154 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

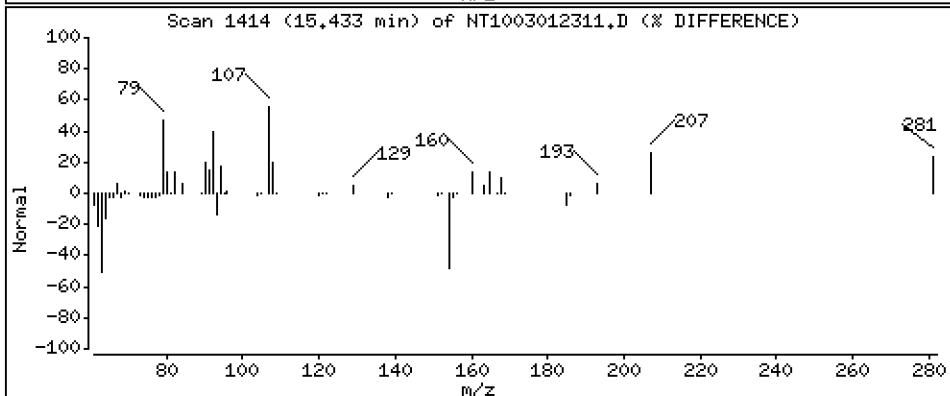
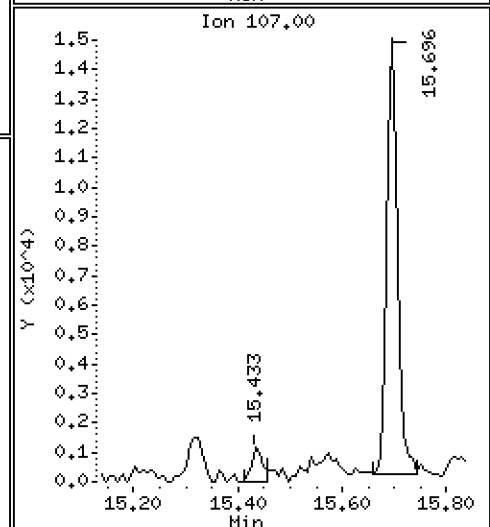
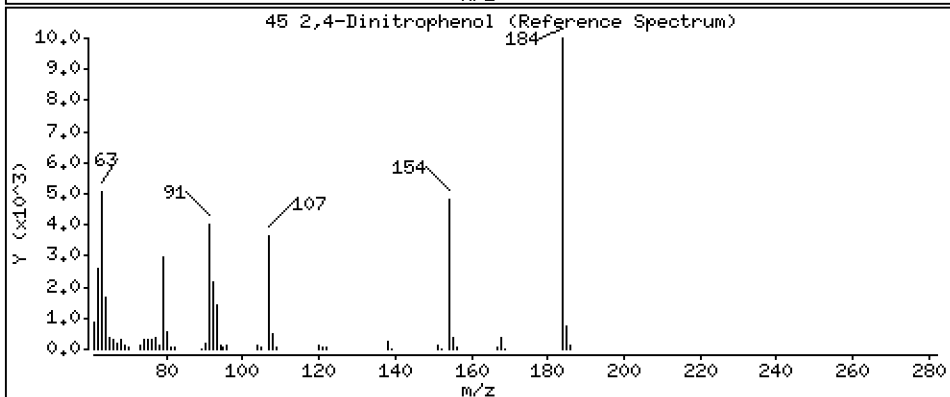
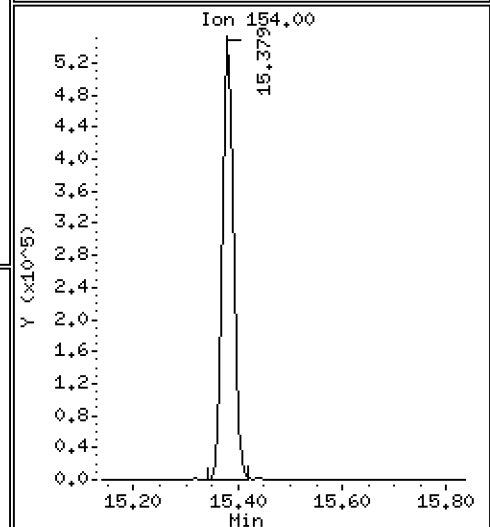
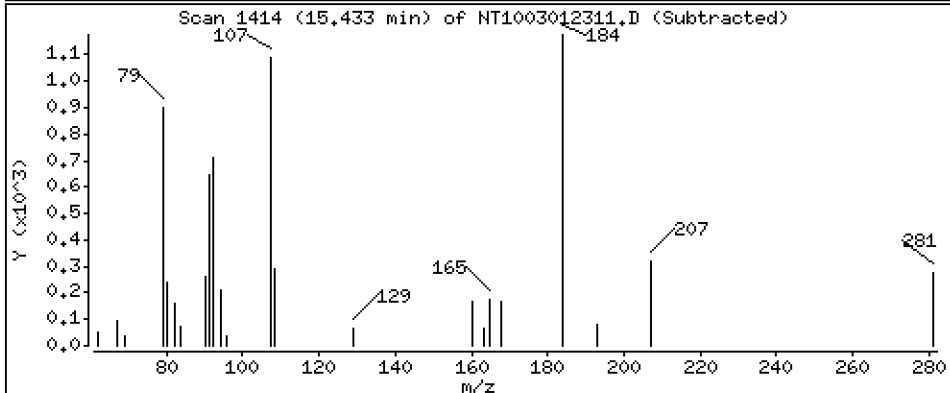
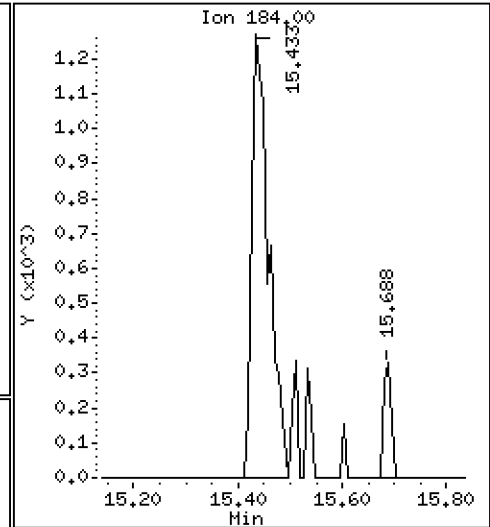
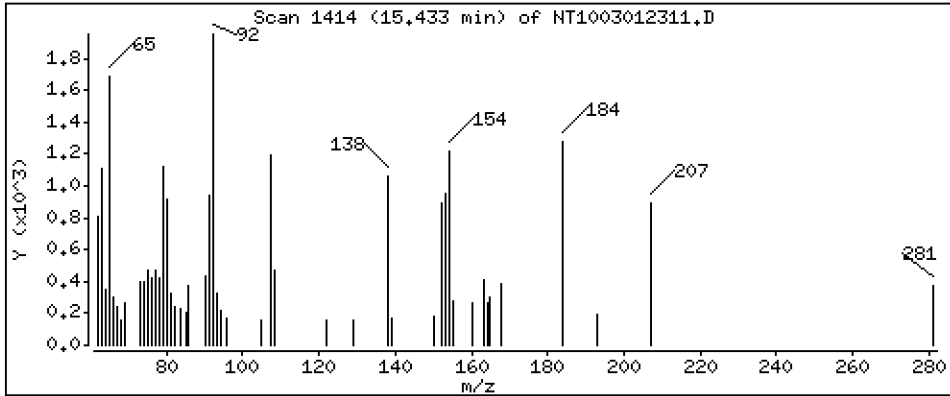
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 0,2667 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

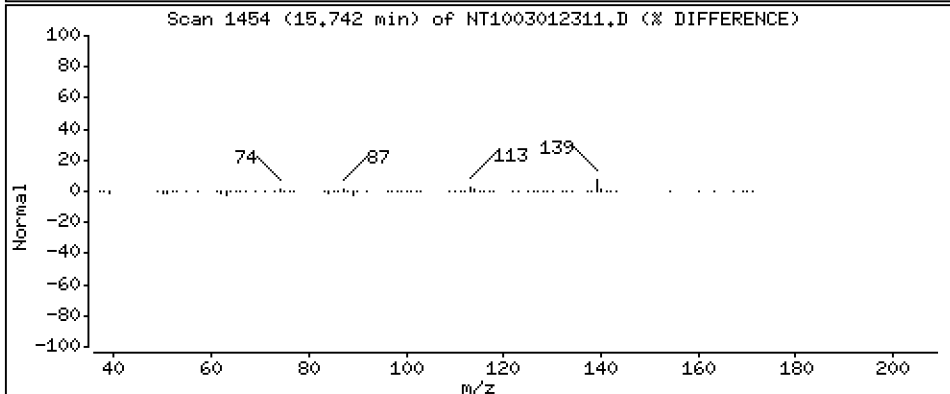
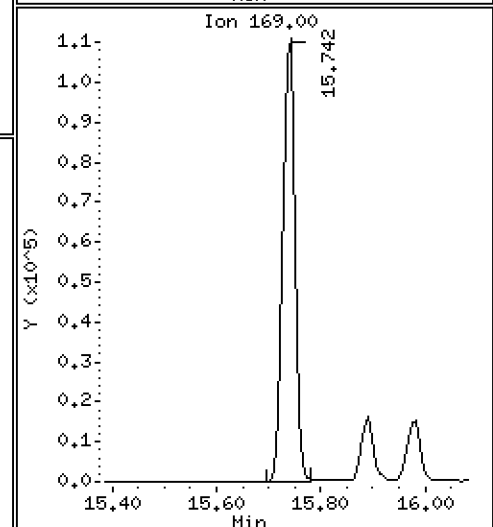
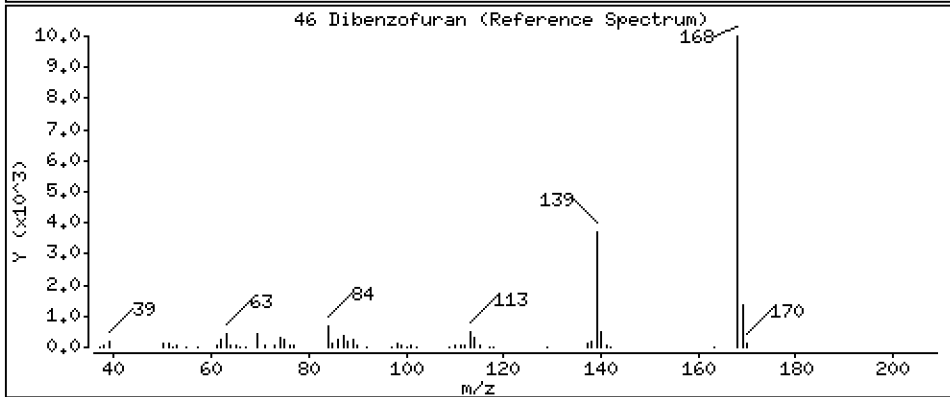
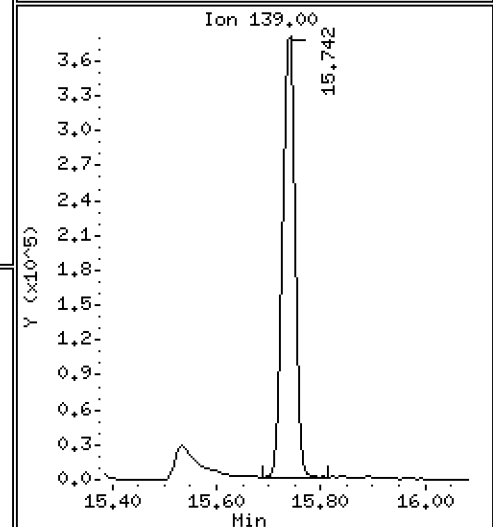
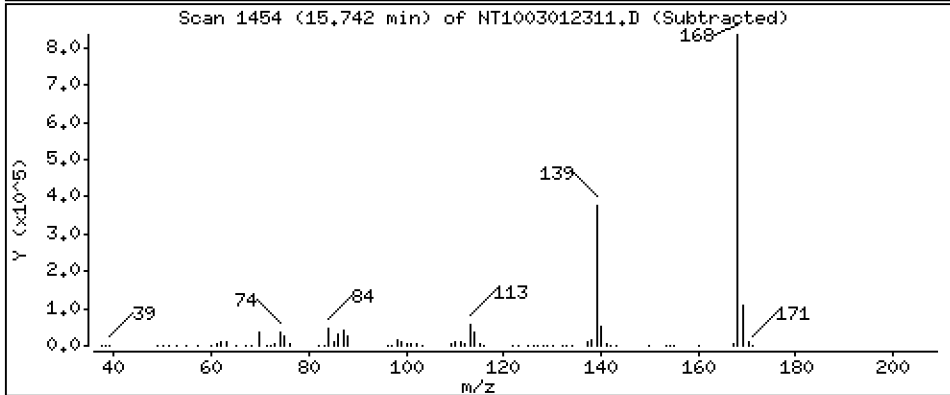
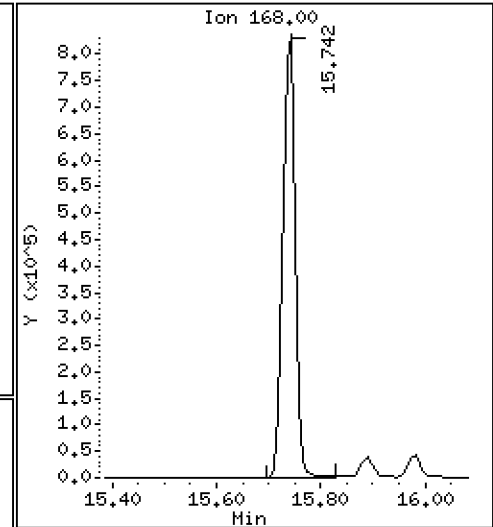
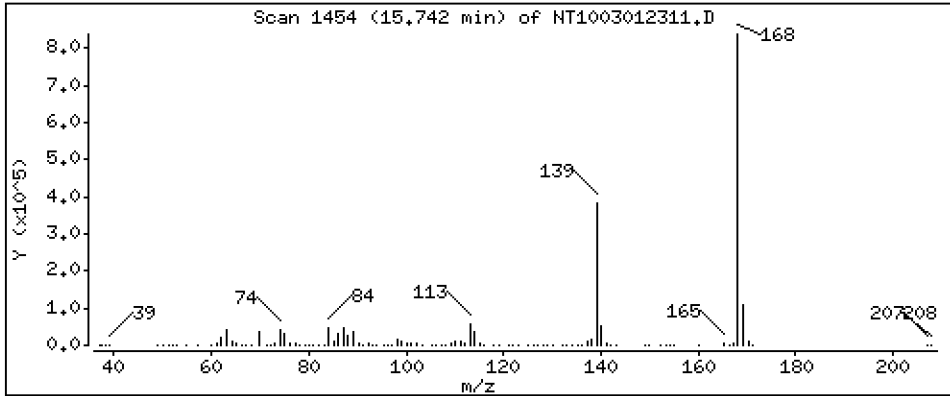
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 4,994 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

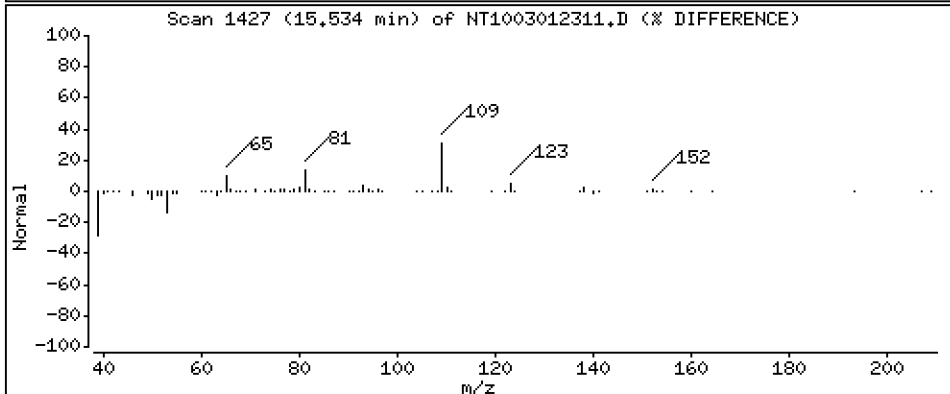
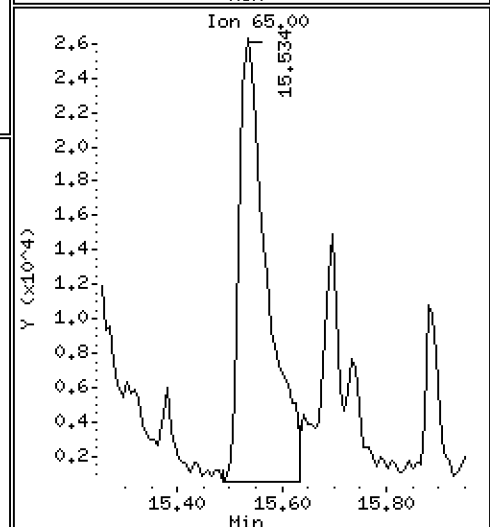
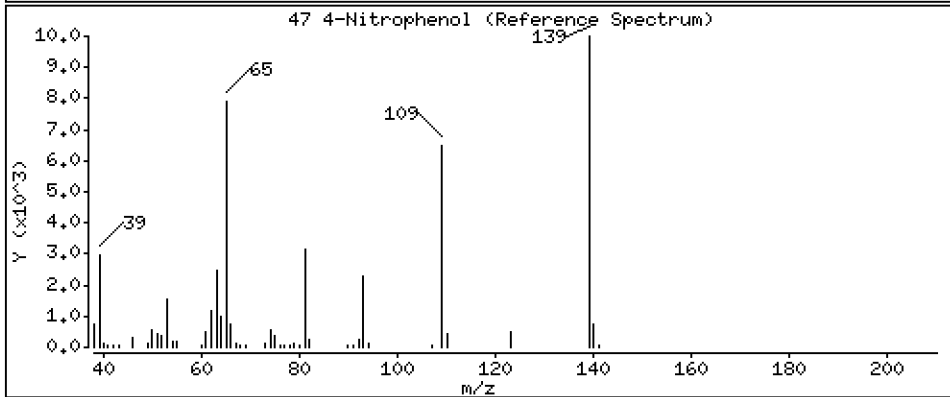
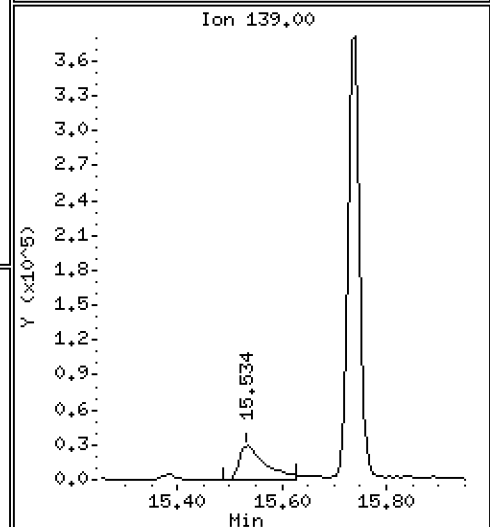
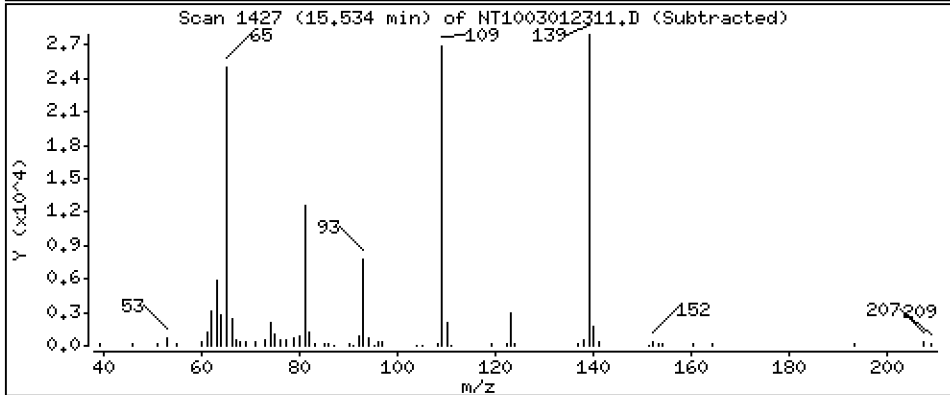
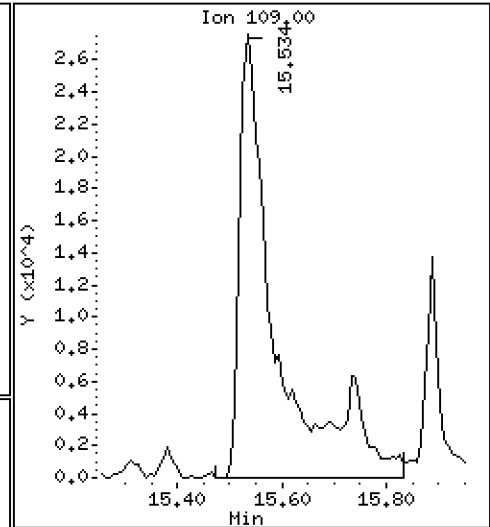
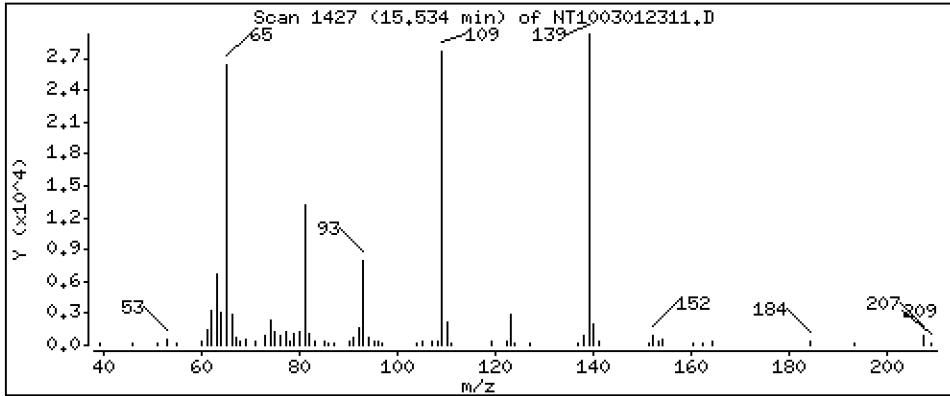
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

47 4-Nitrophenol

Concentration: 3,822 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

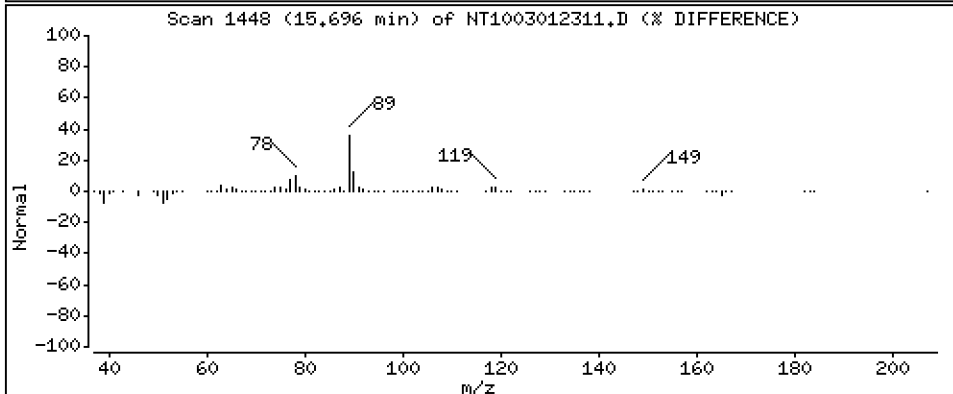
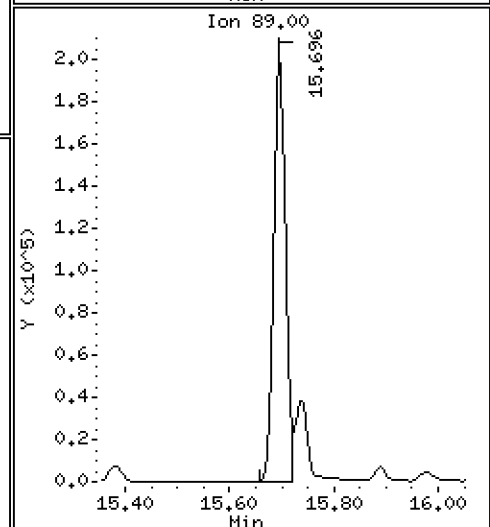
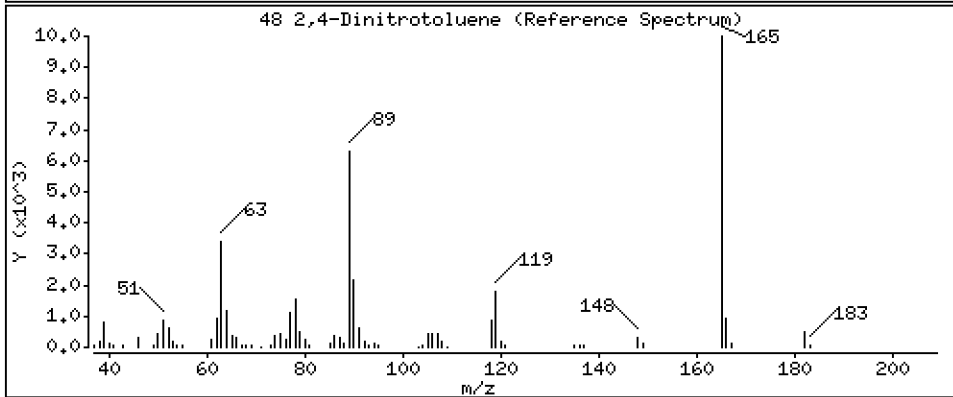
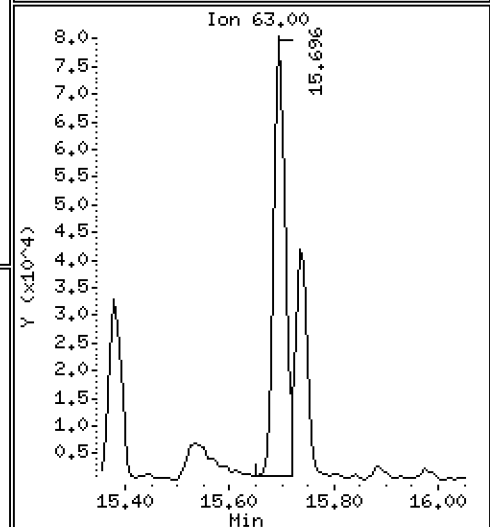
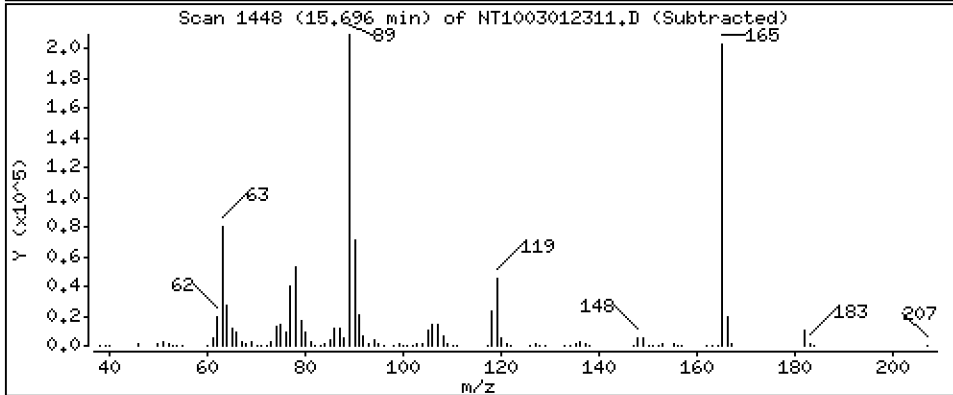
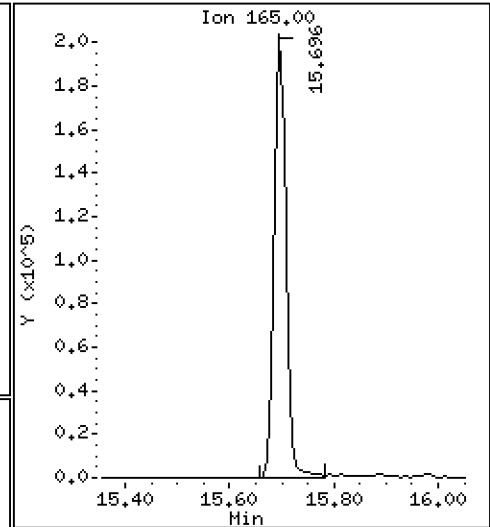
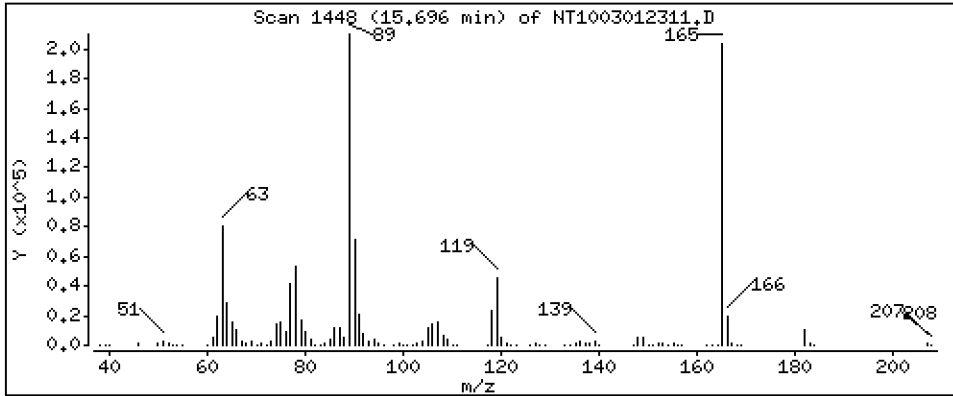
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

48 2,4-Dinitrotoluene

Concentration: 4.729 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

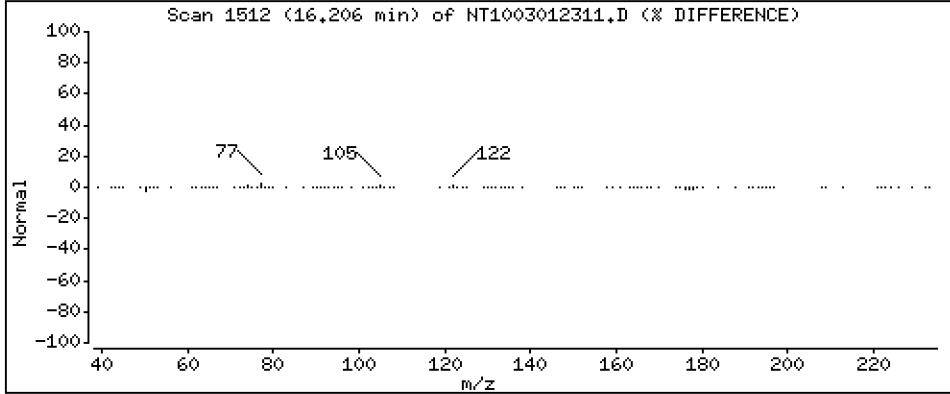
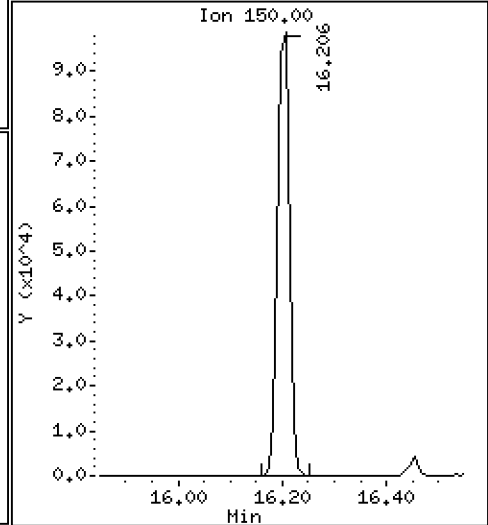
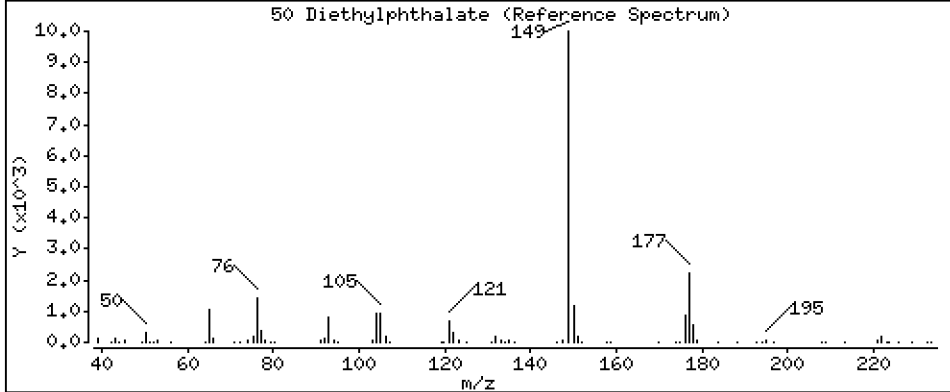
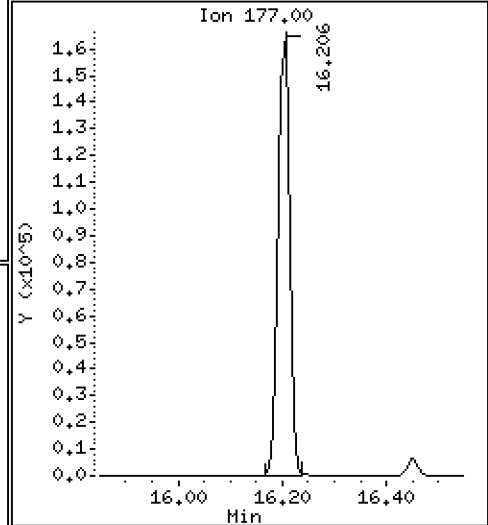
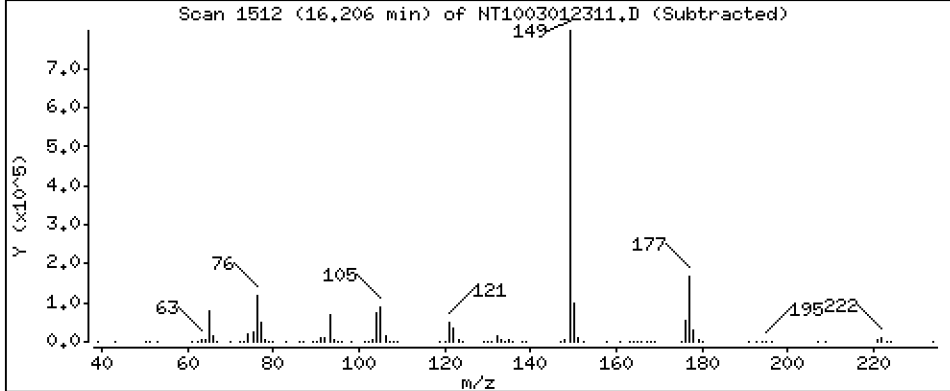
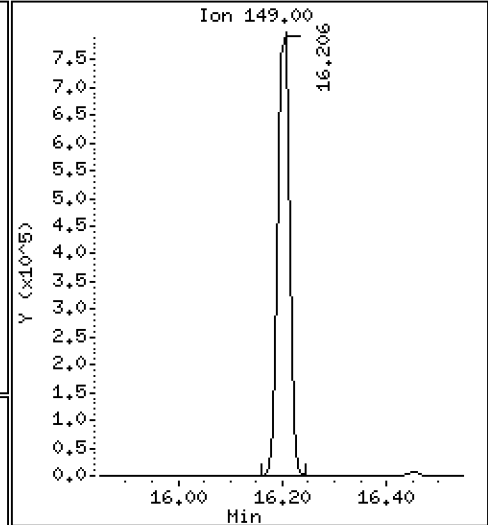
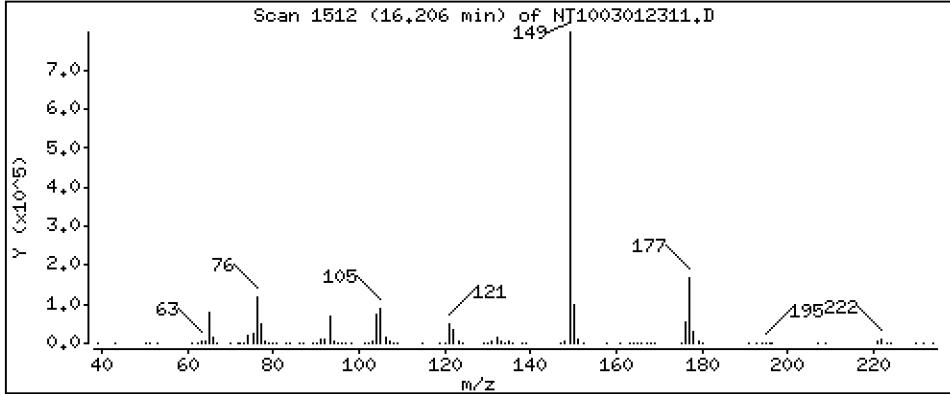
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,639 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

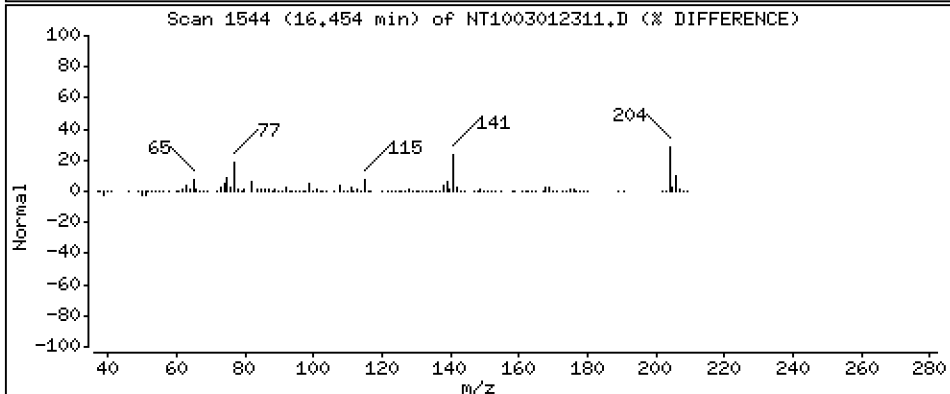
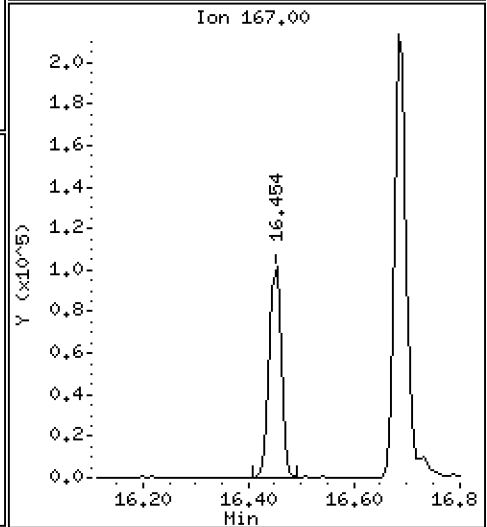
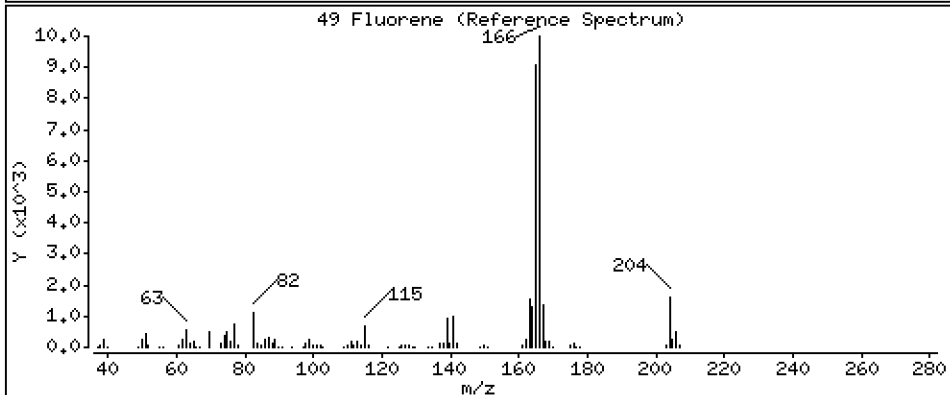
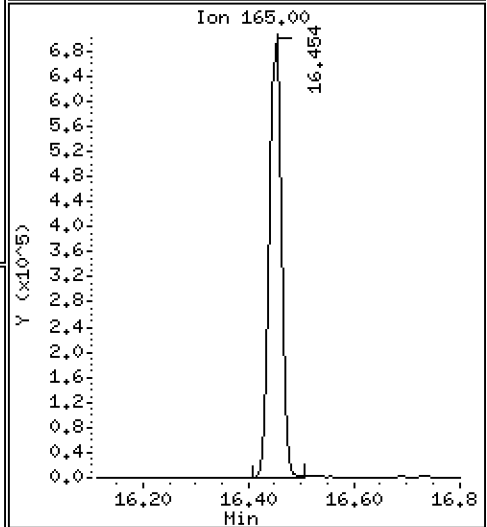
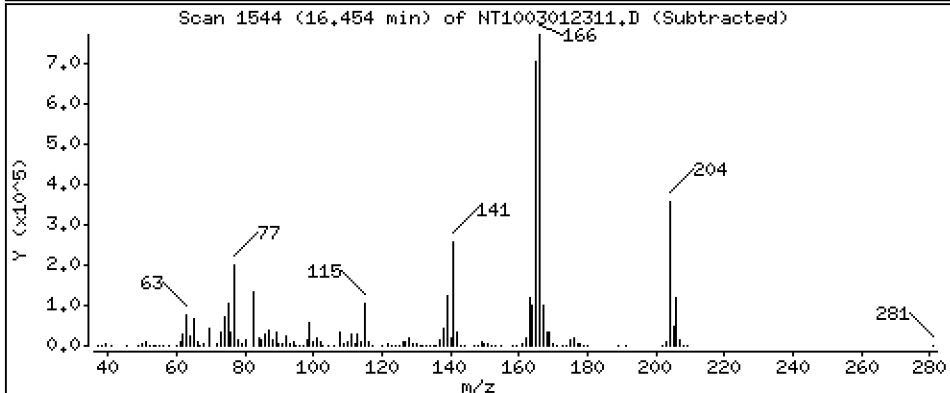
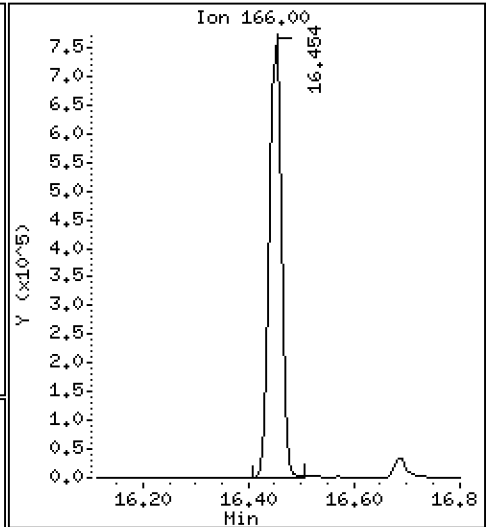
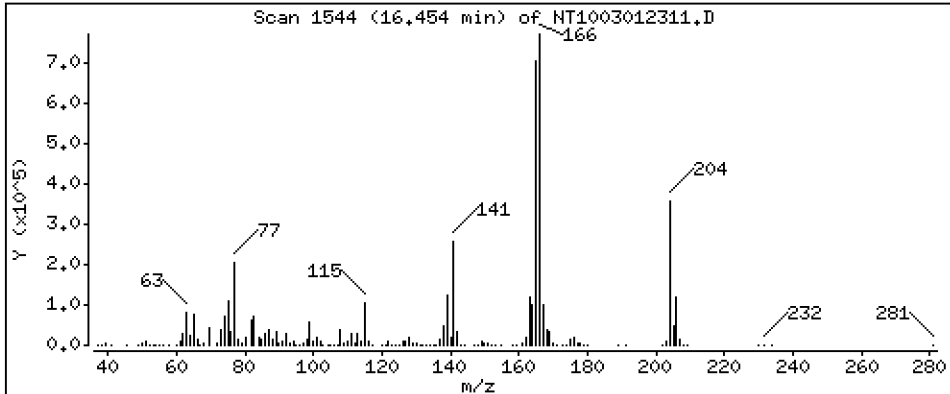
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 5,305 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

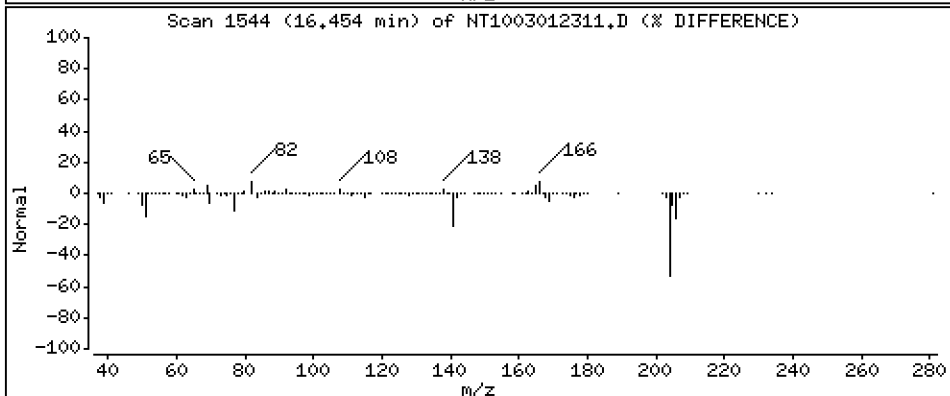
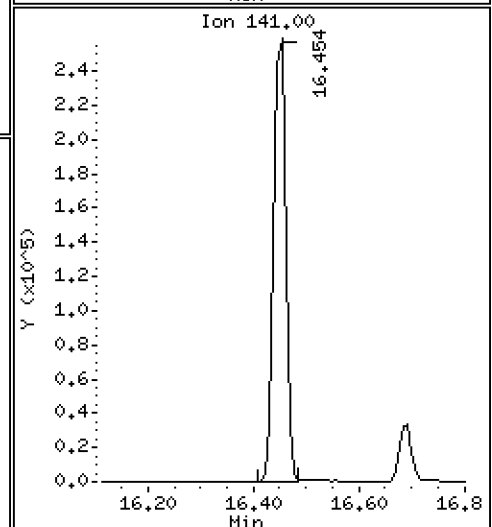
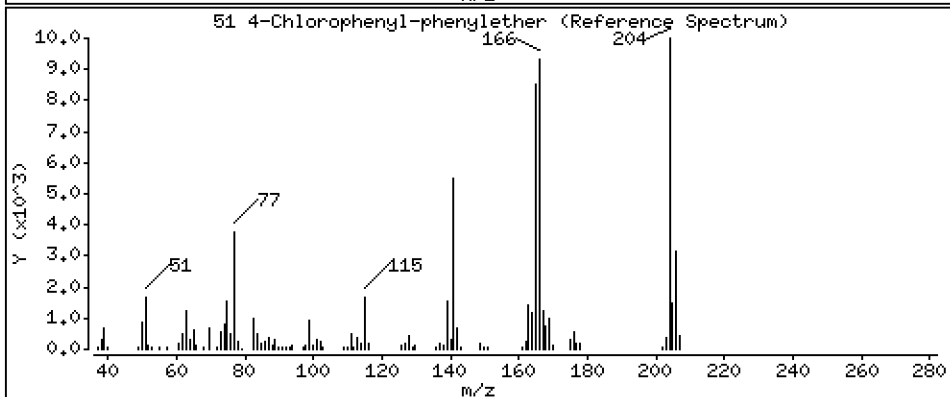
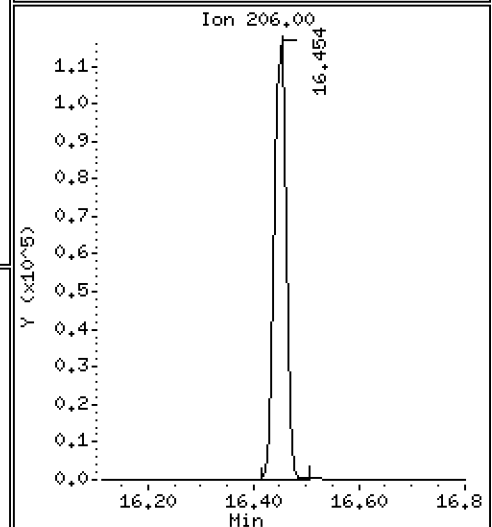
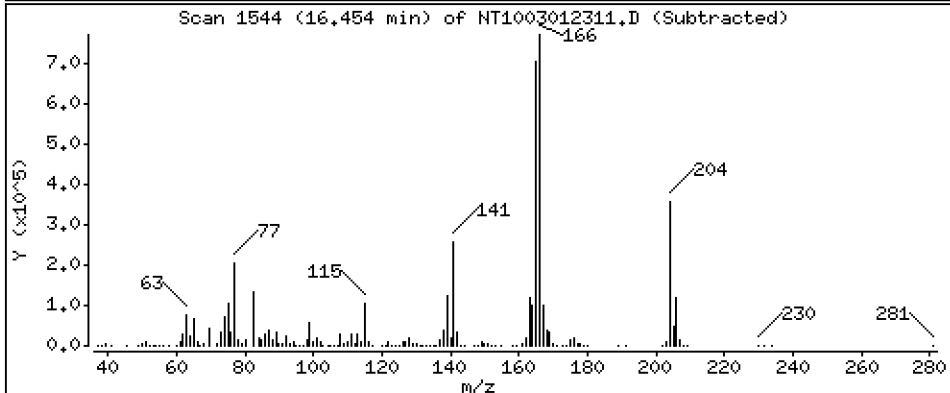
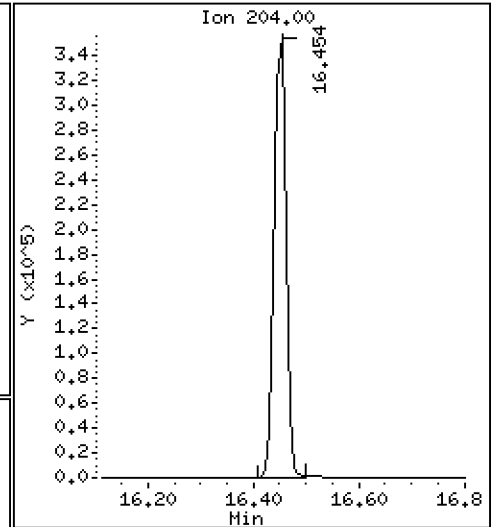
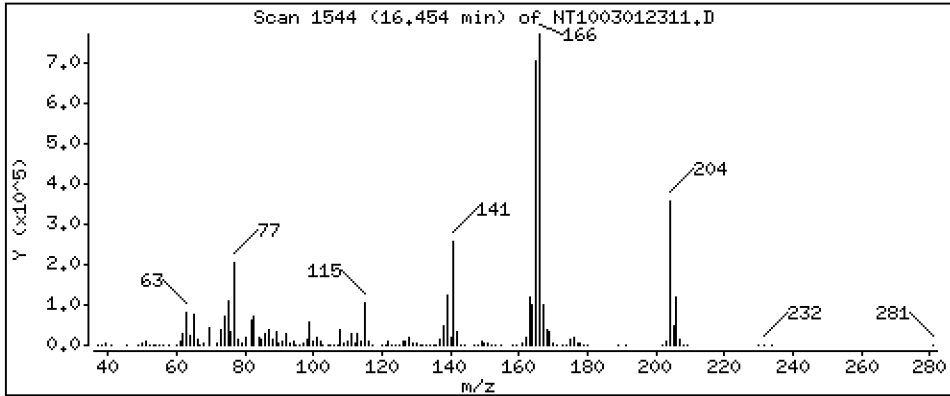
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 5,253 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

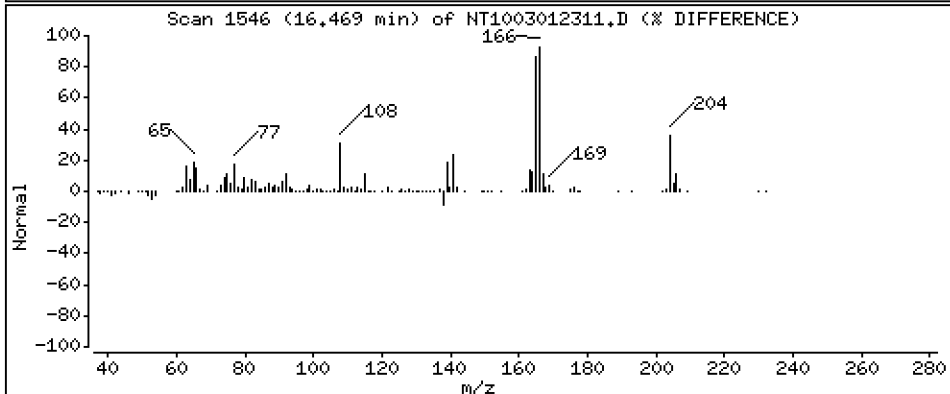
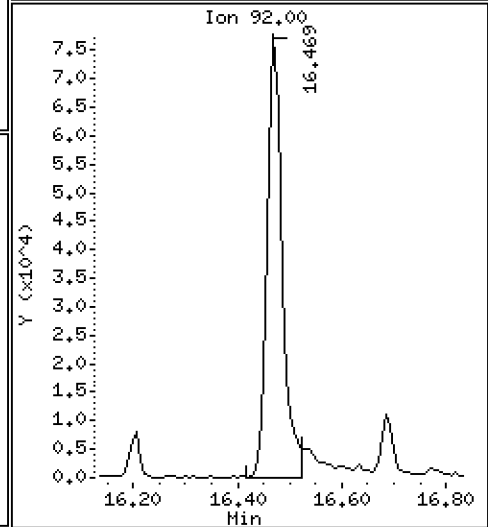
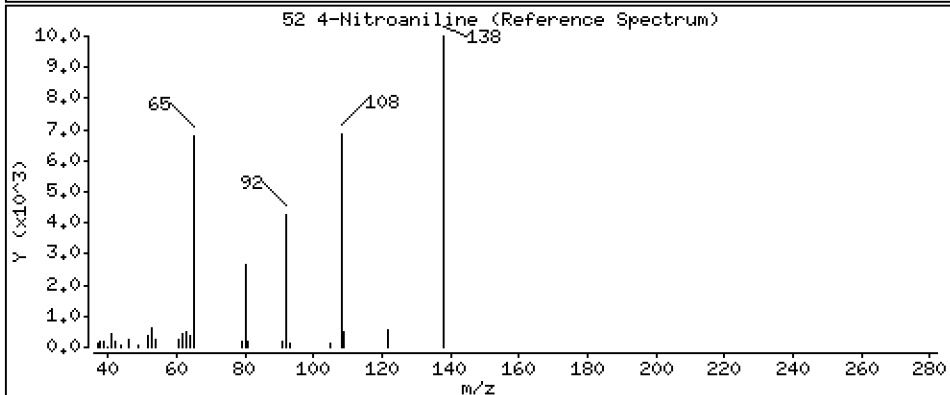
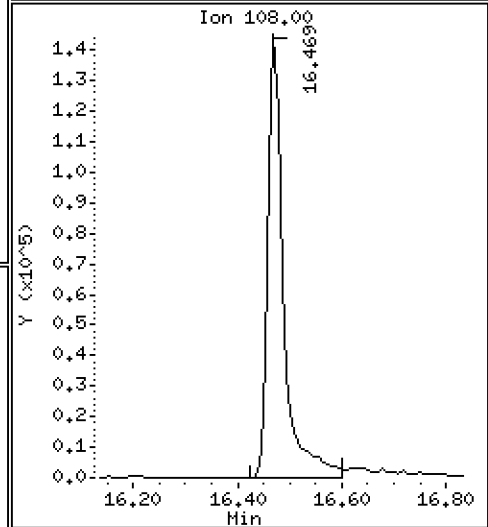
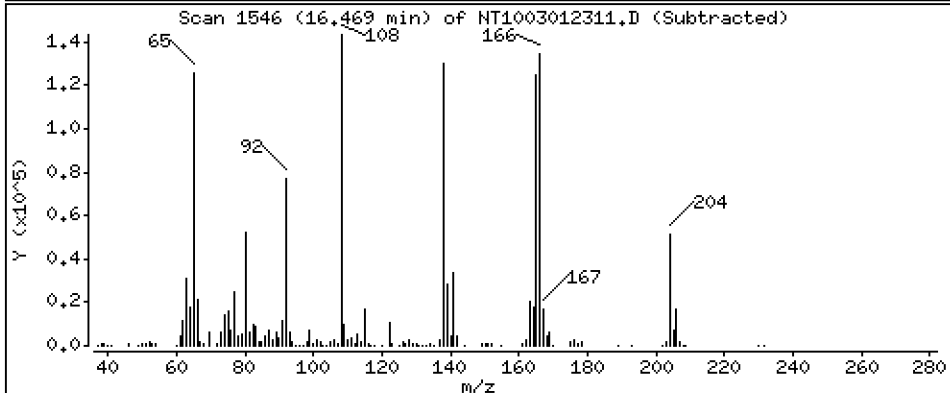
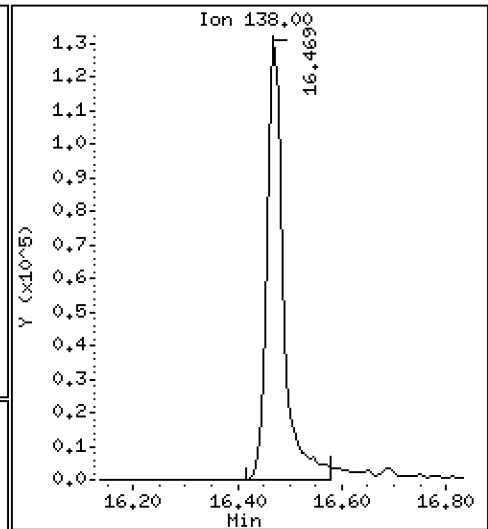
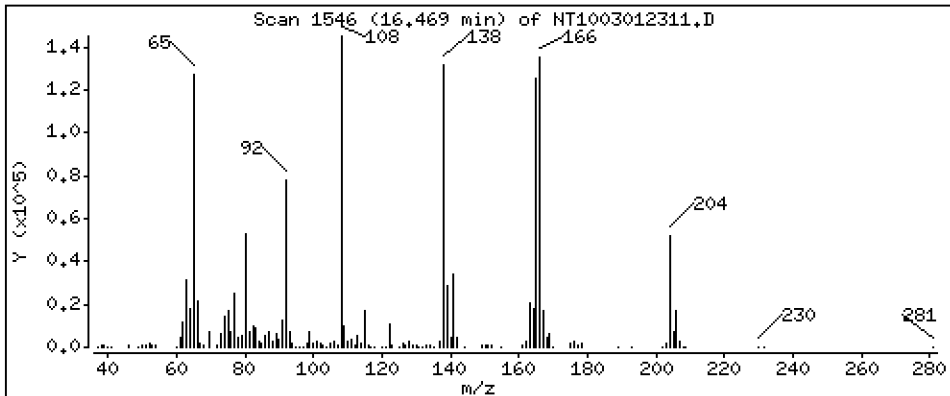
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 5,232 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

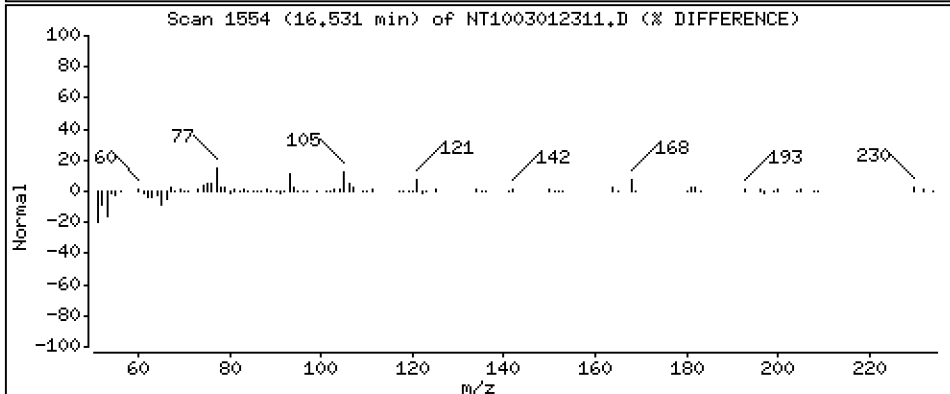
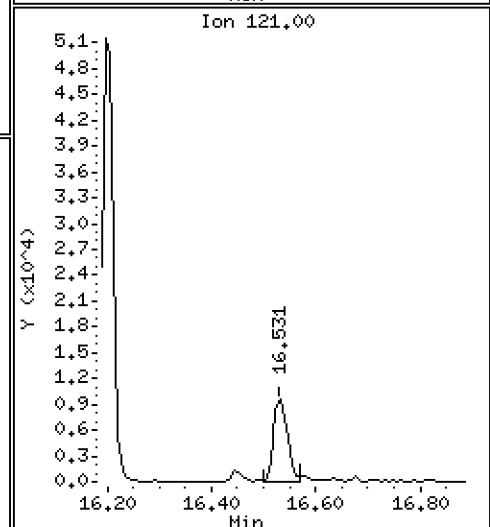
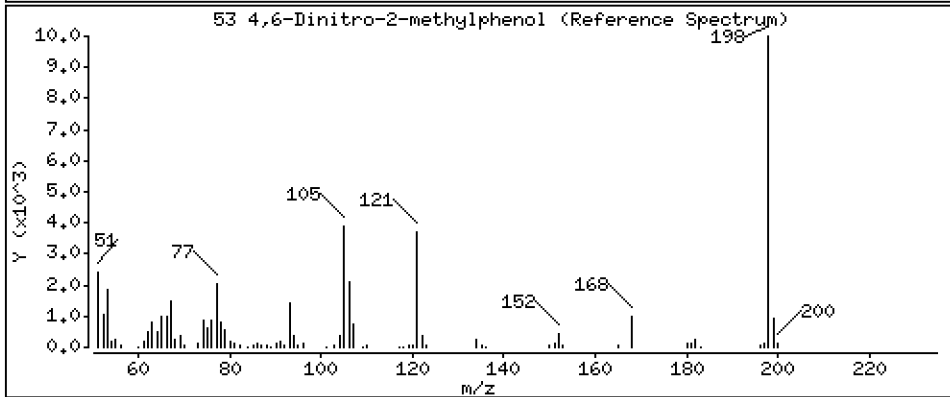
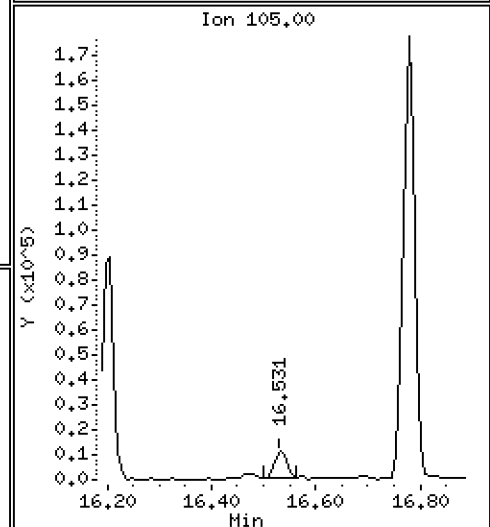
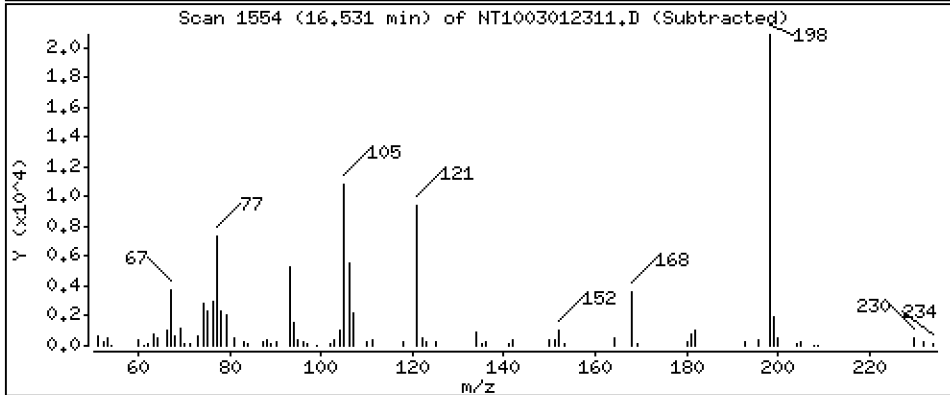
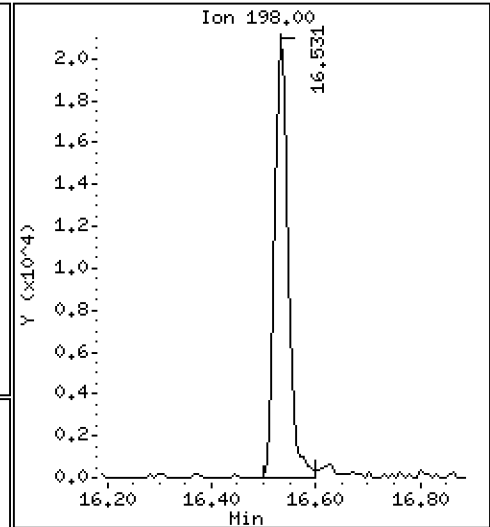
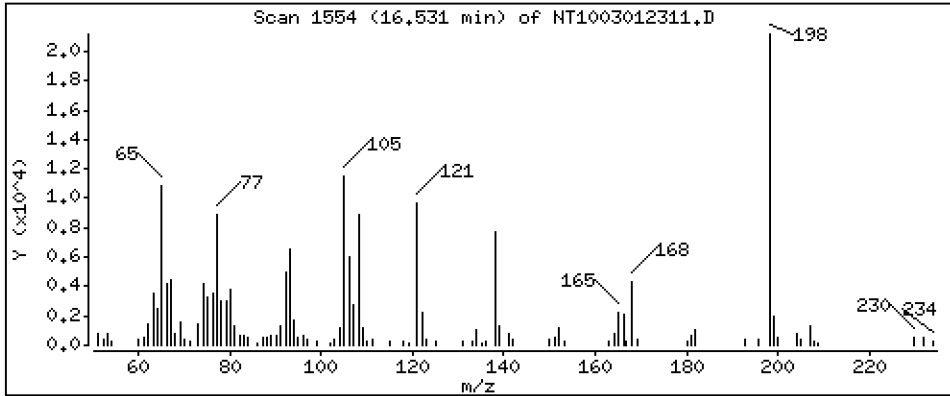
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 1,292 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

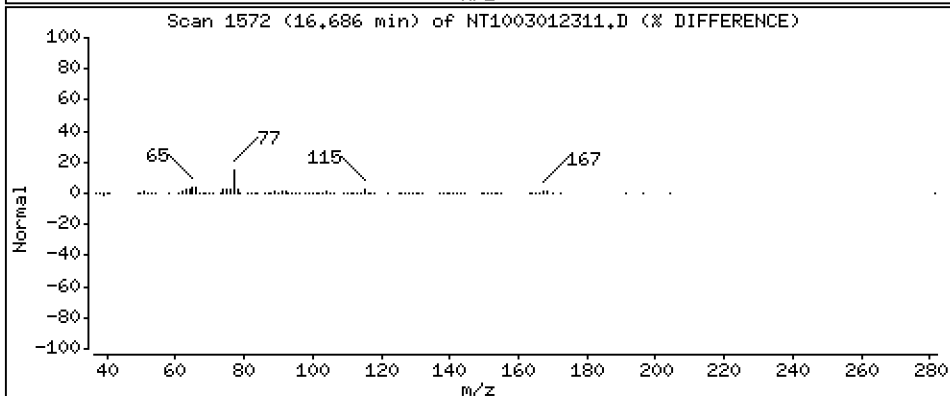
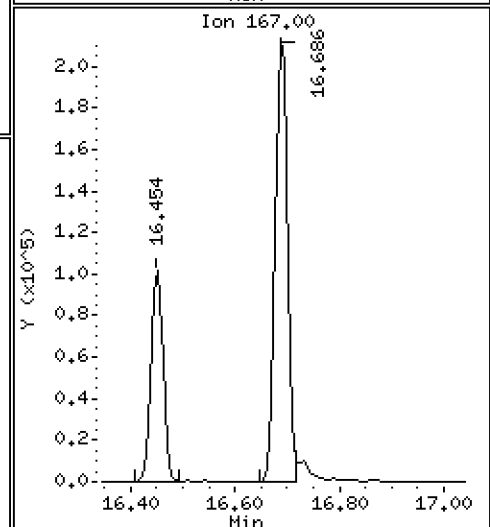
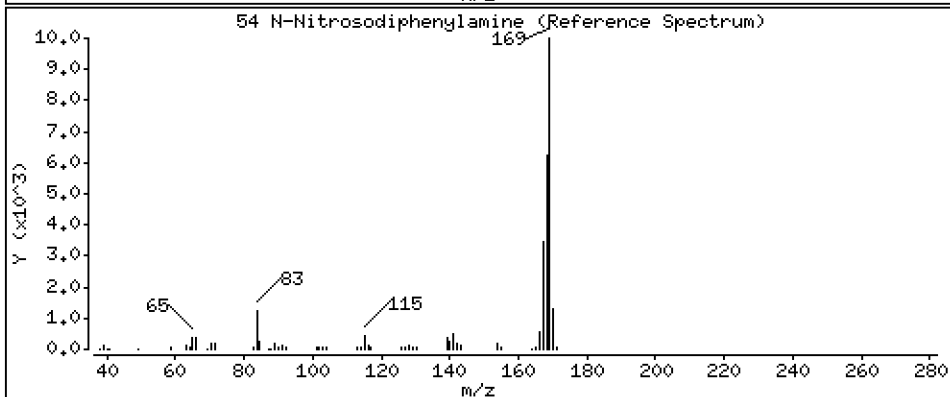
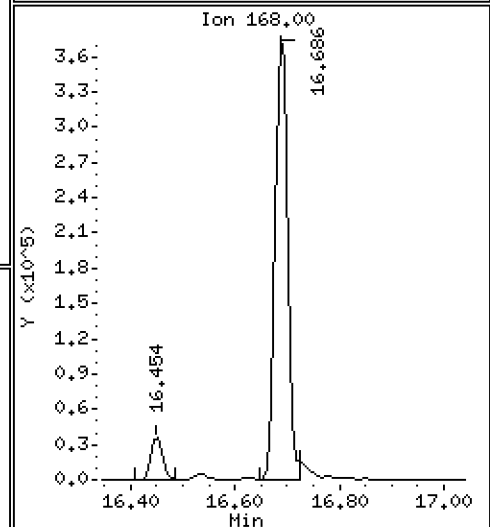
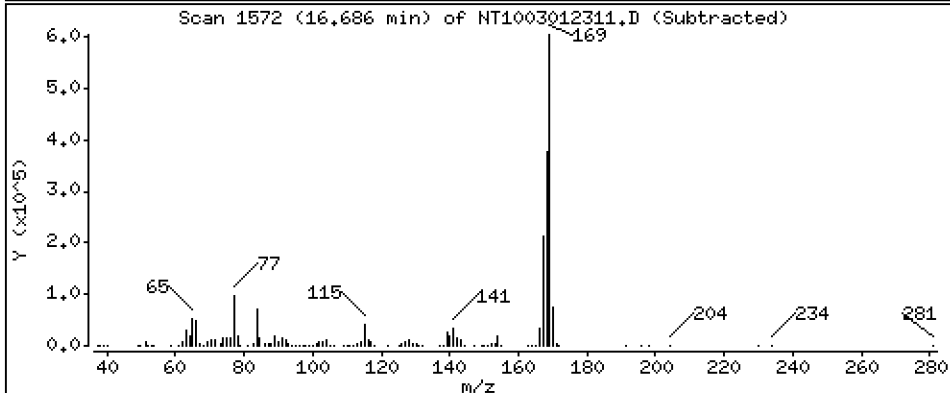
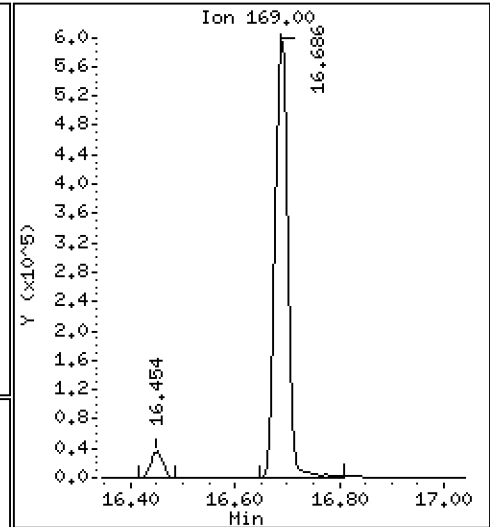
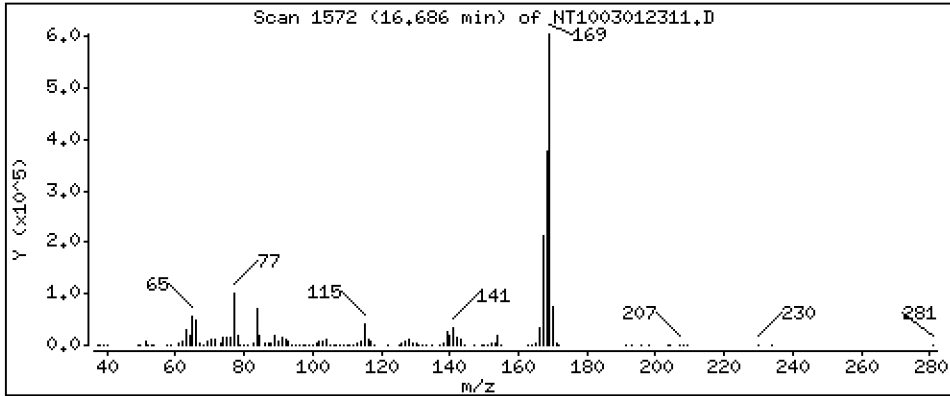
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,416 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

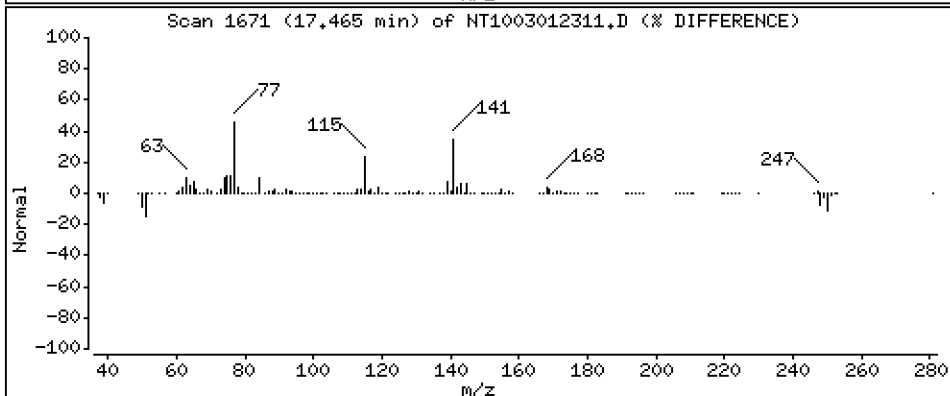
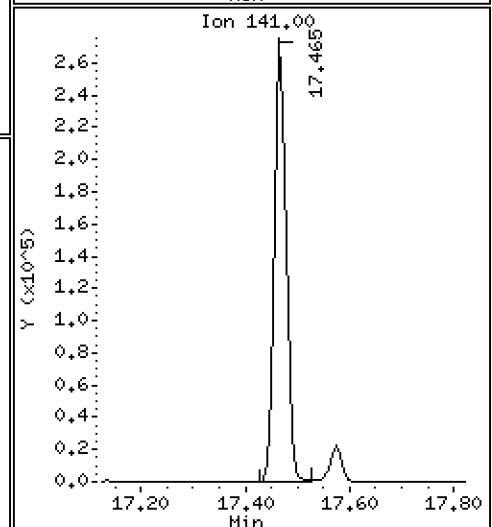
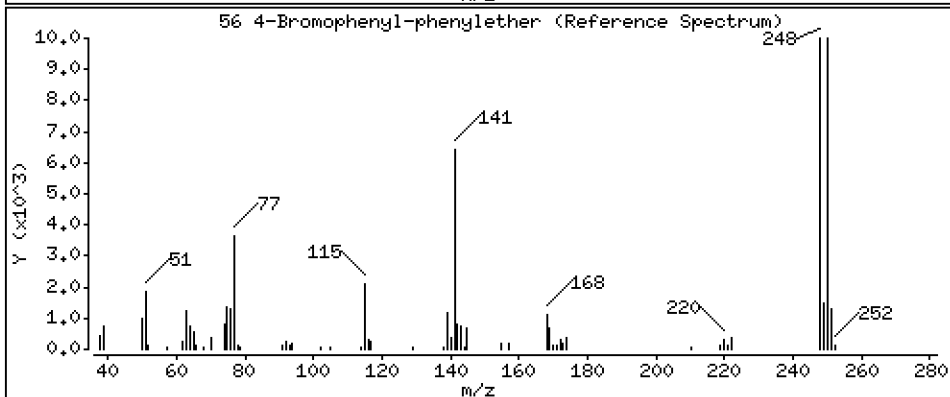
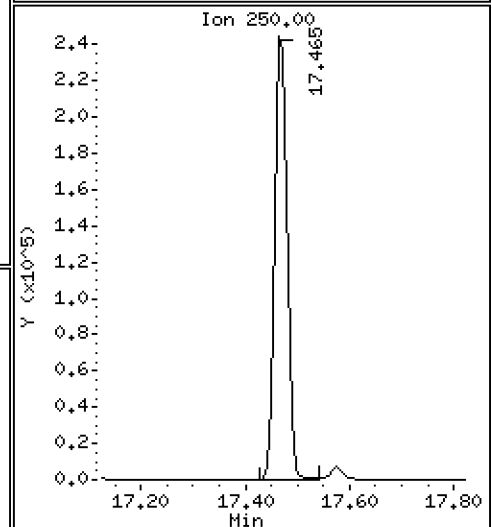
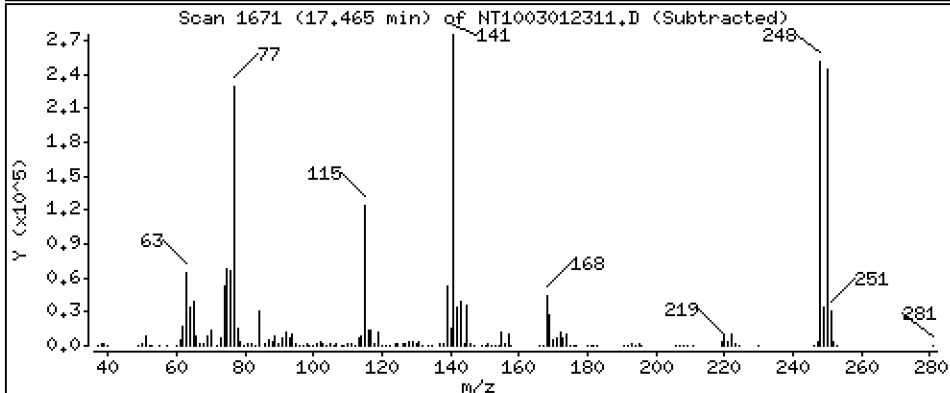
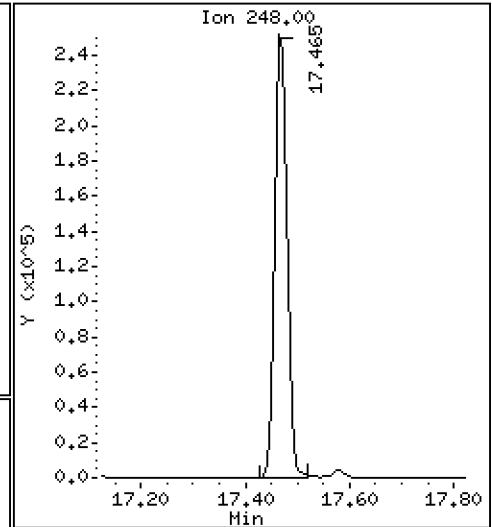
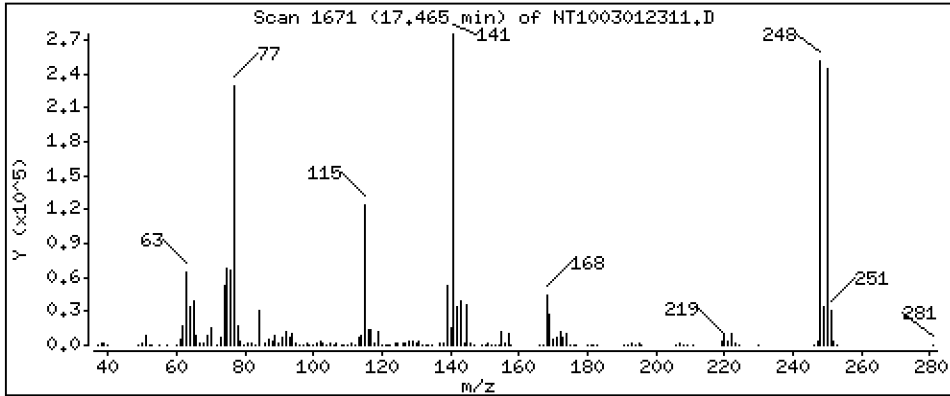
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,460 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

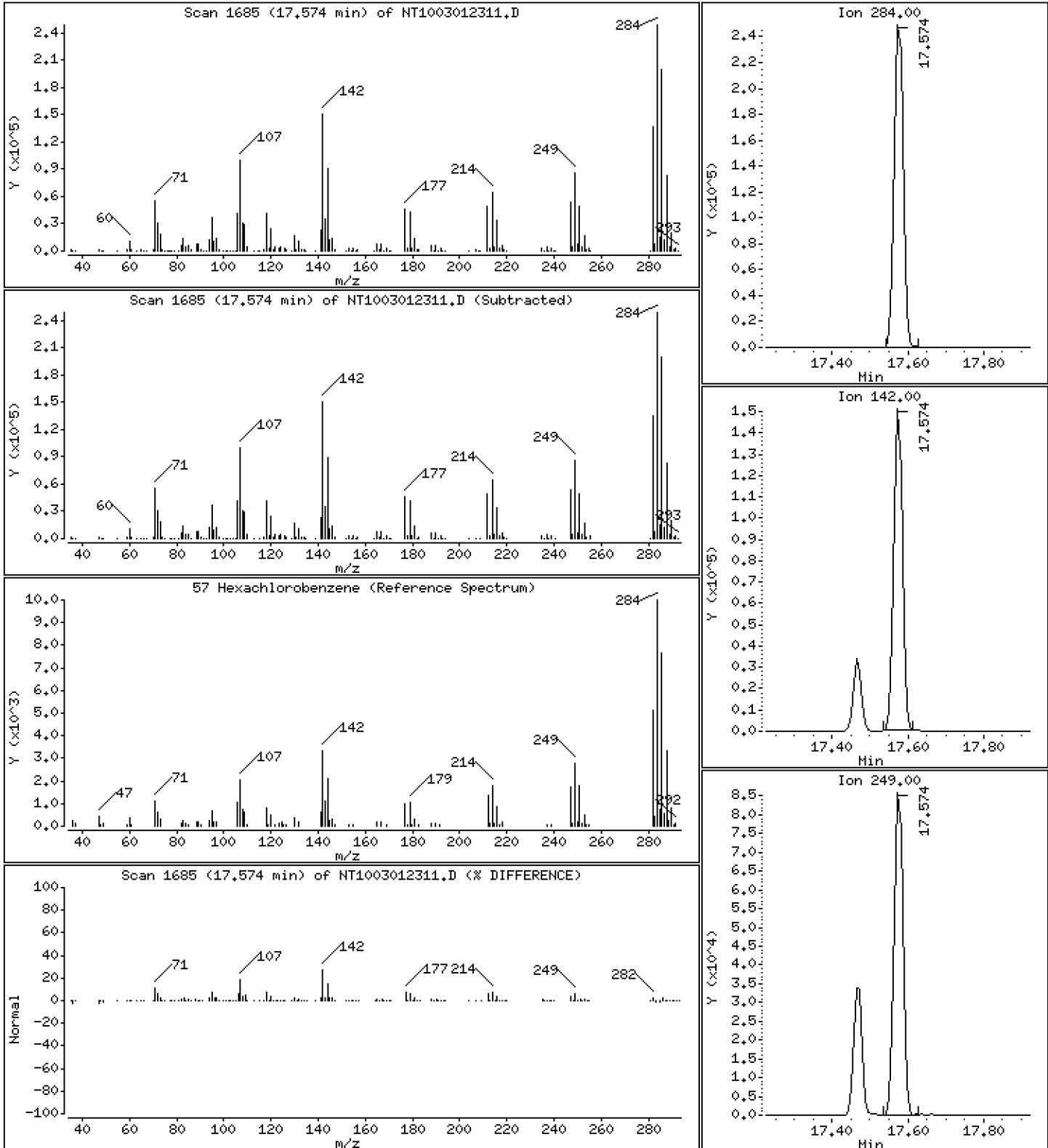
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,805 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

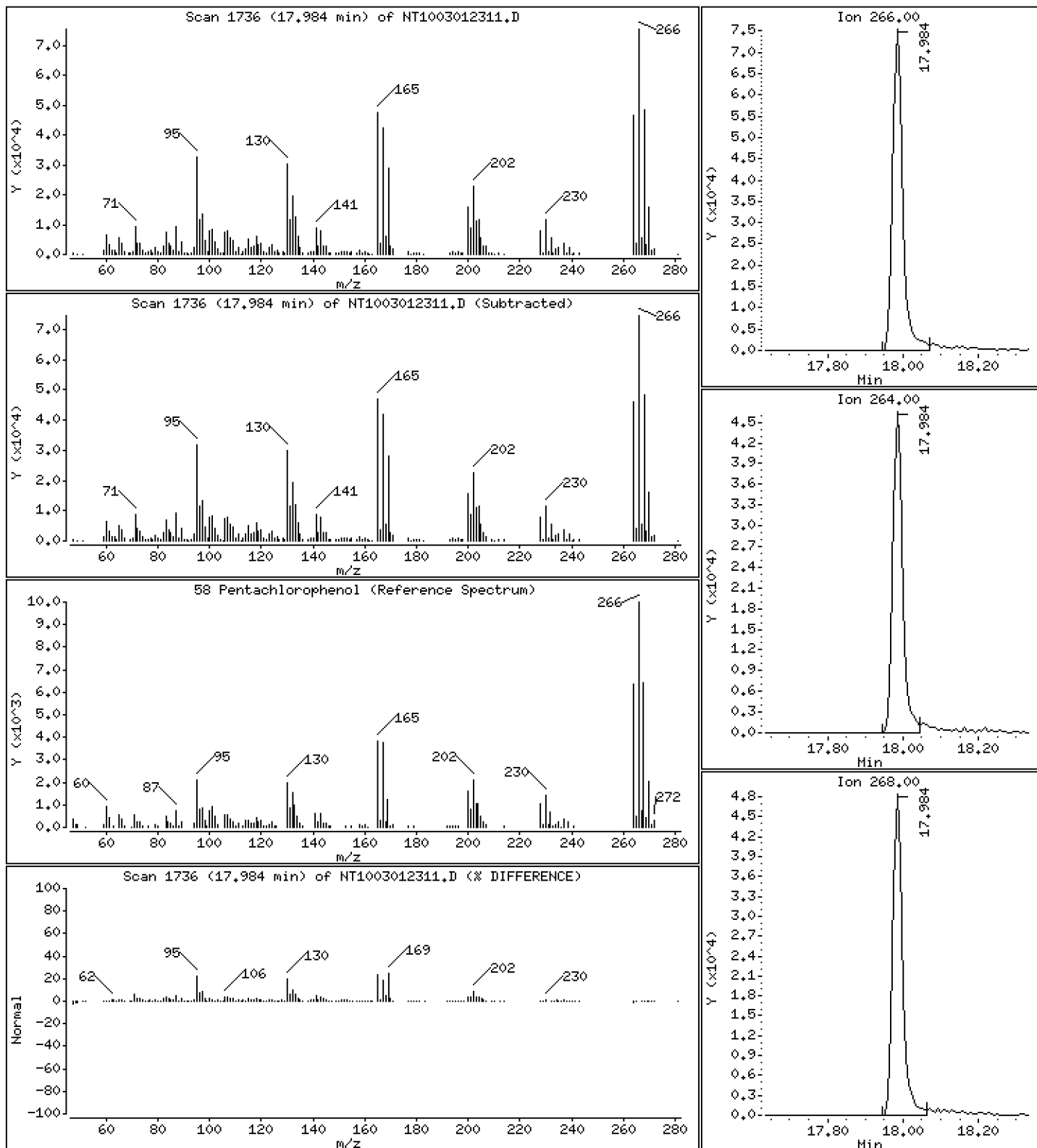
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,492 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

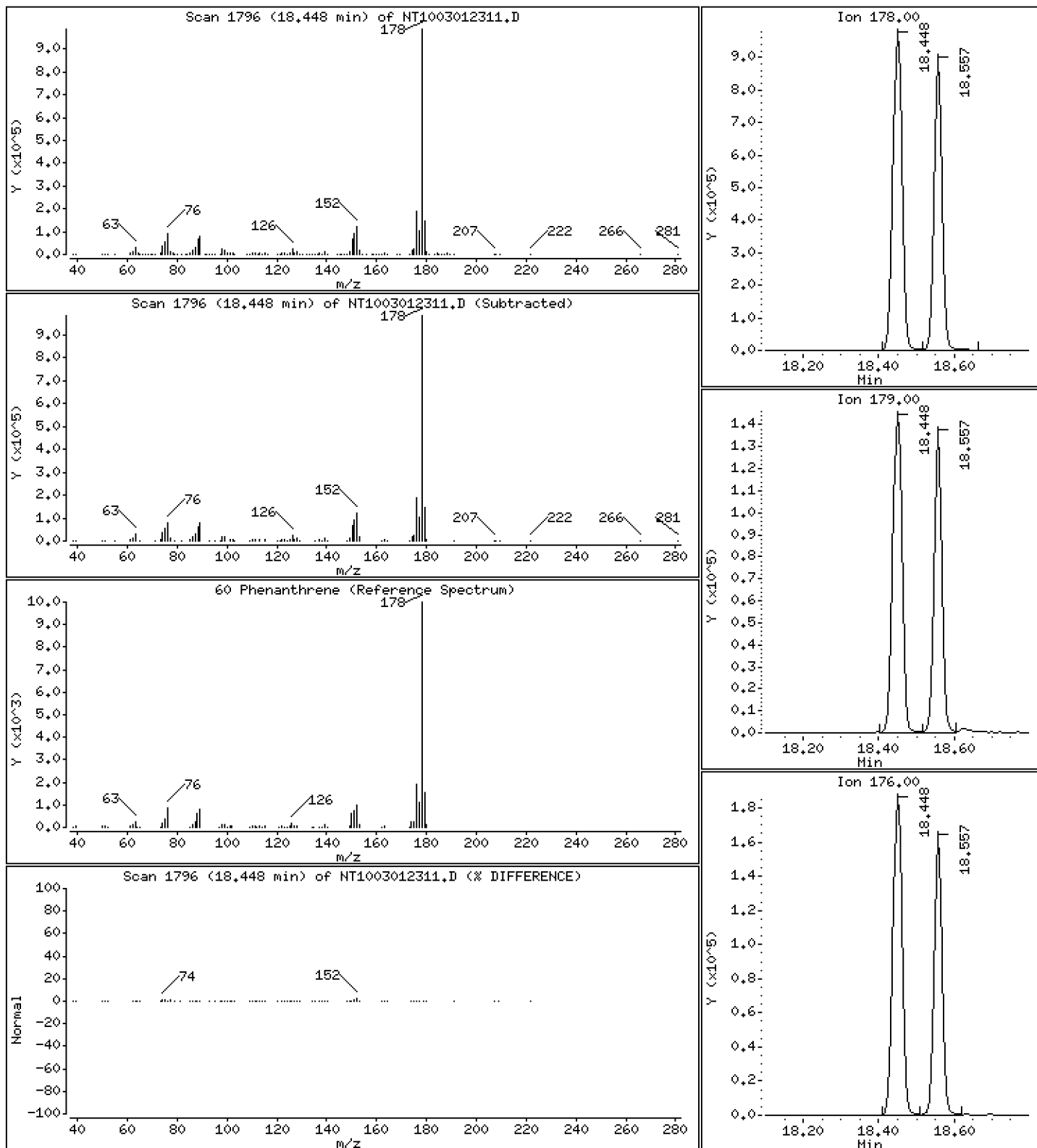
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 5,085 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

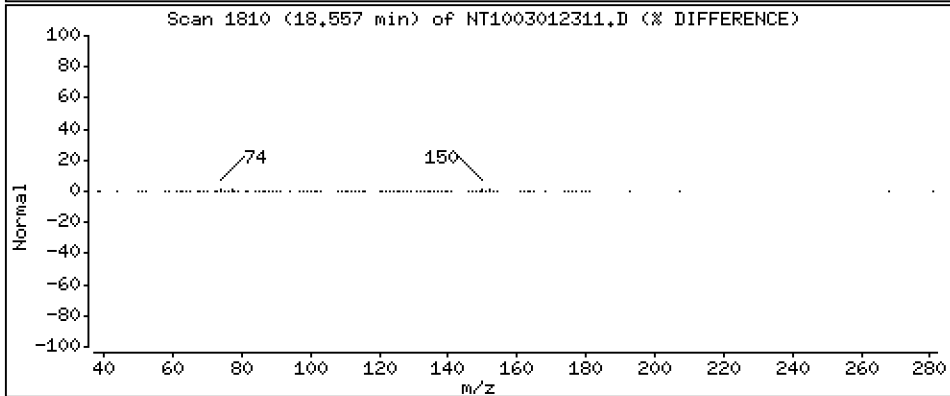
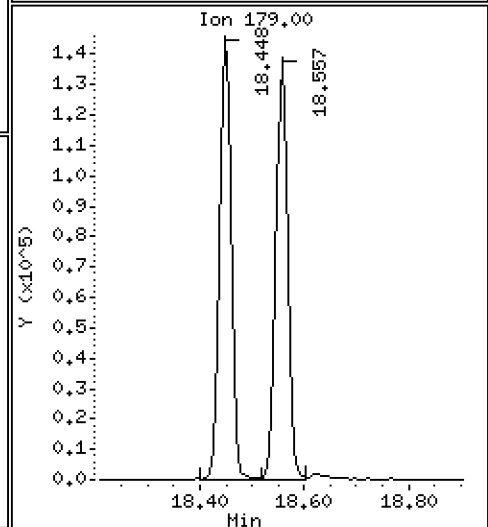
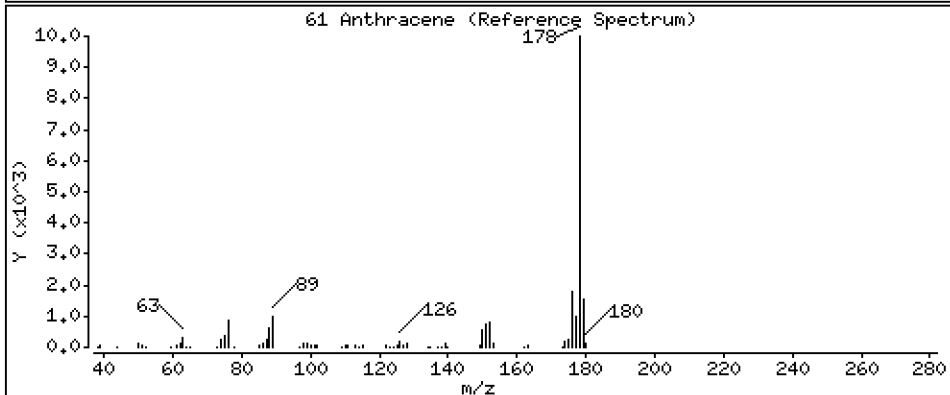
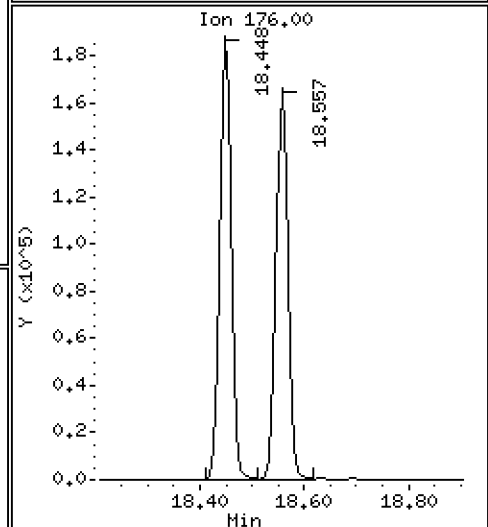
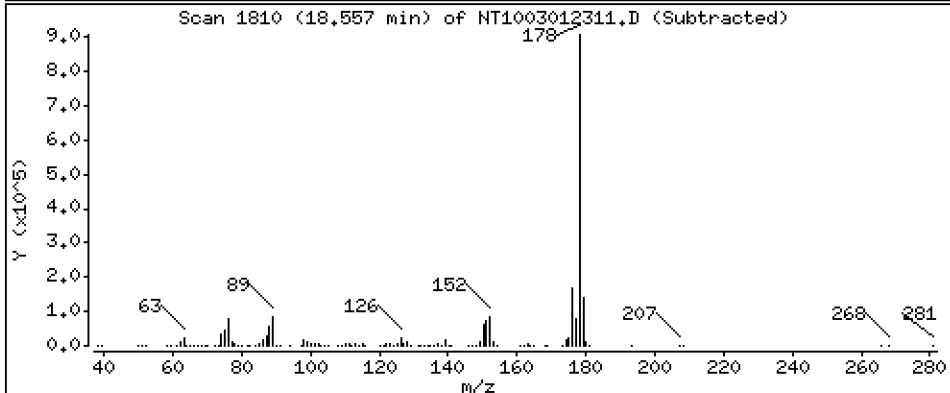
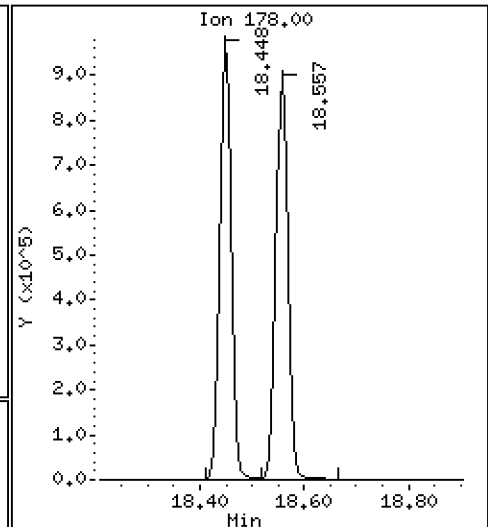
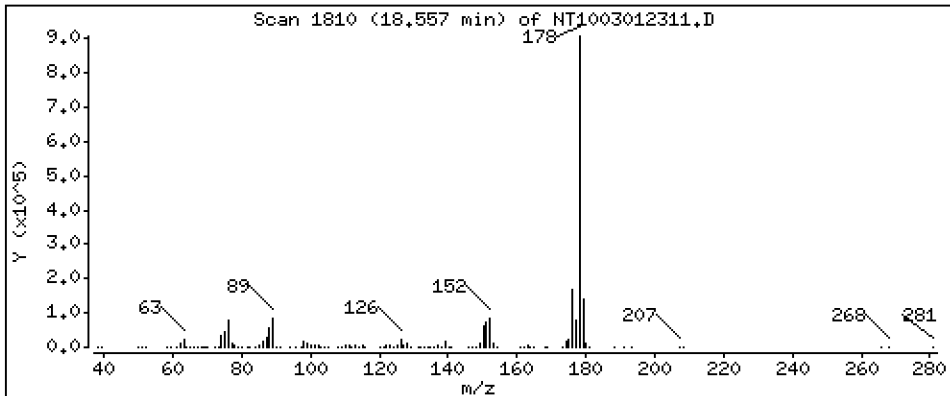
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 4,585 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

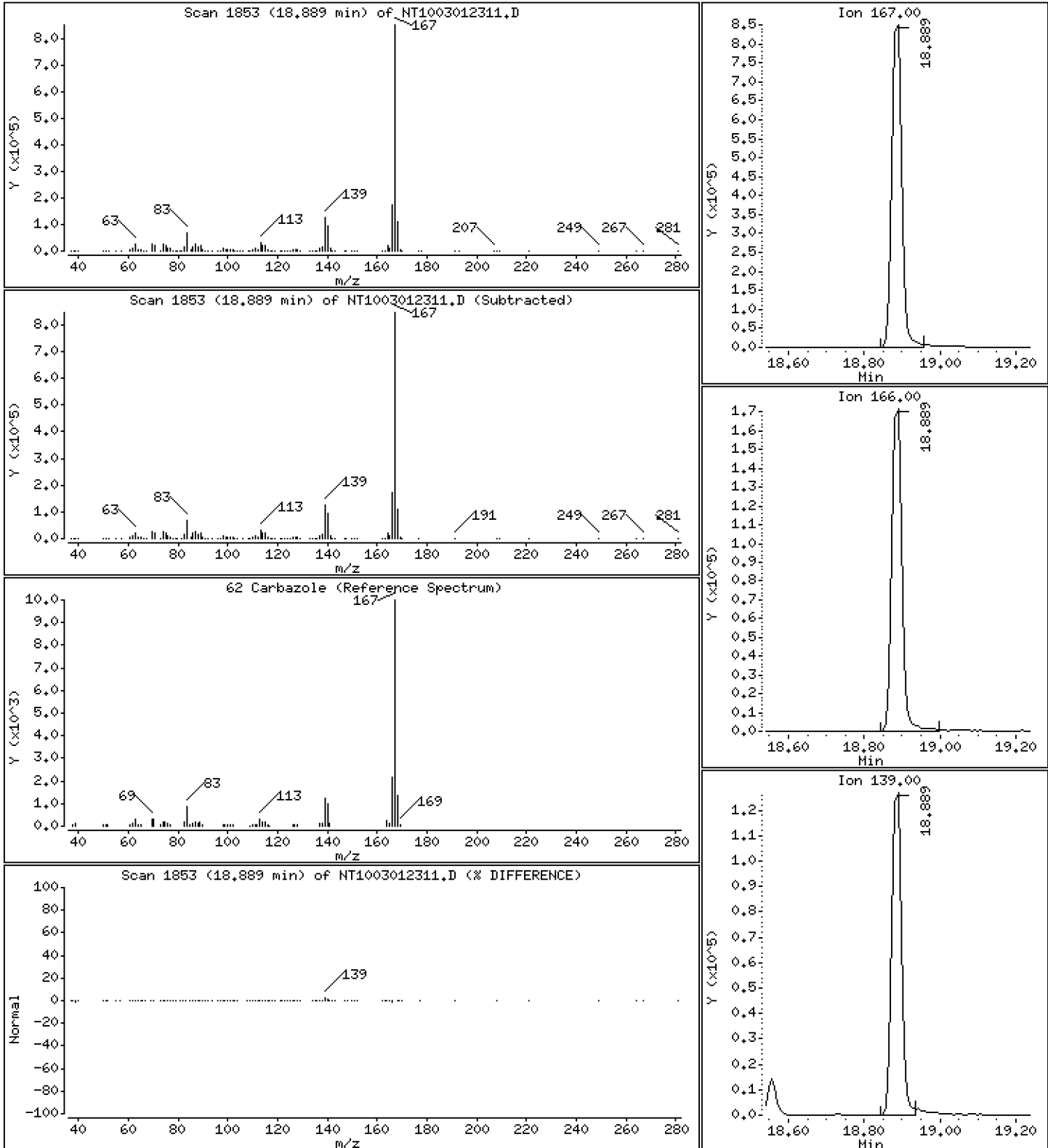
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,335 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

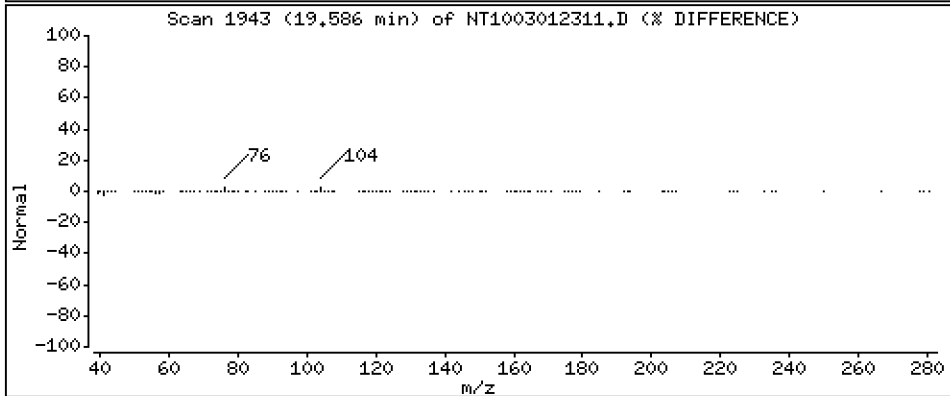
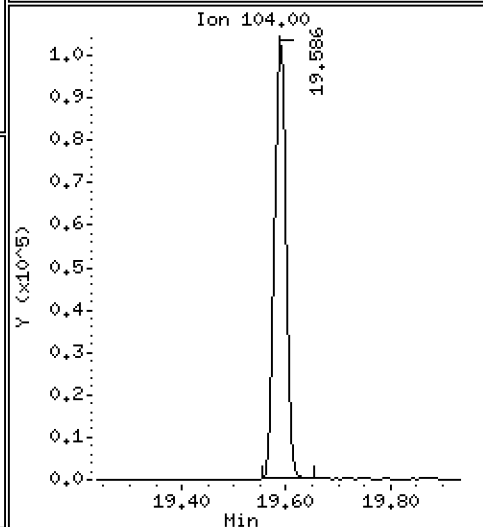
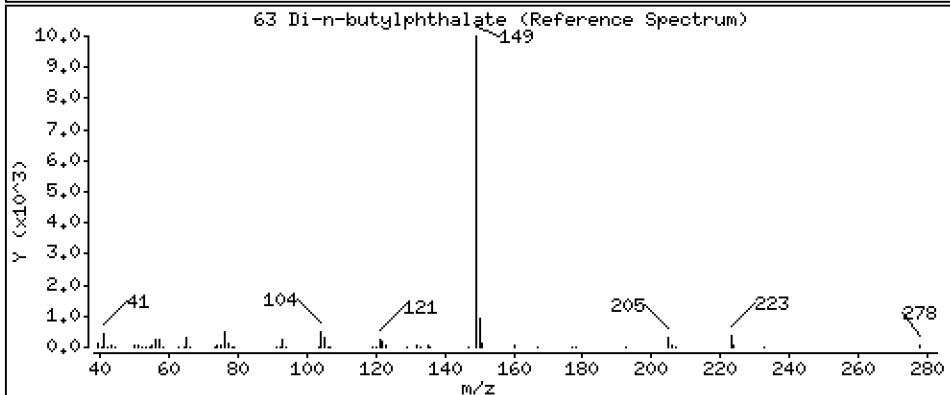
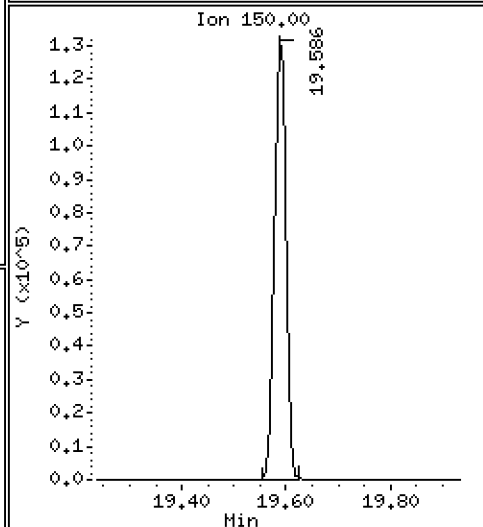
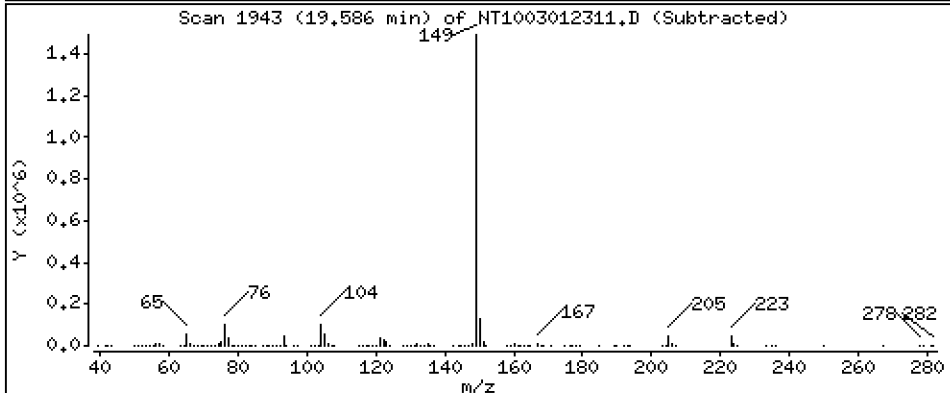
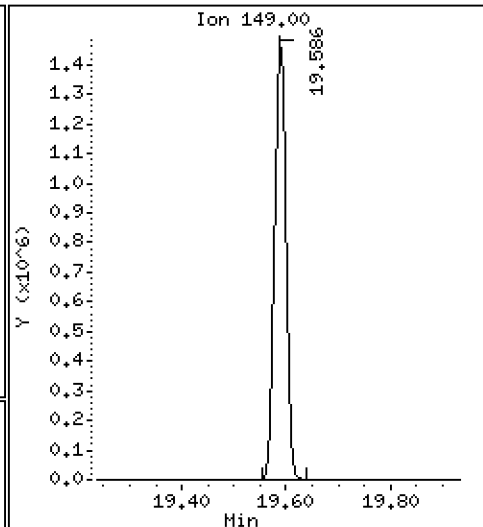
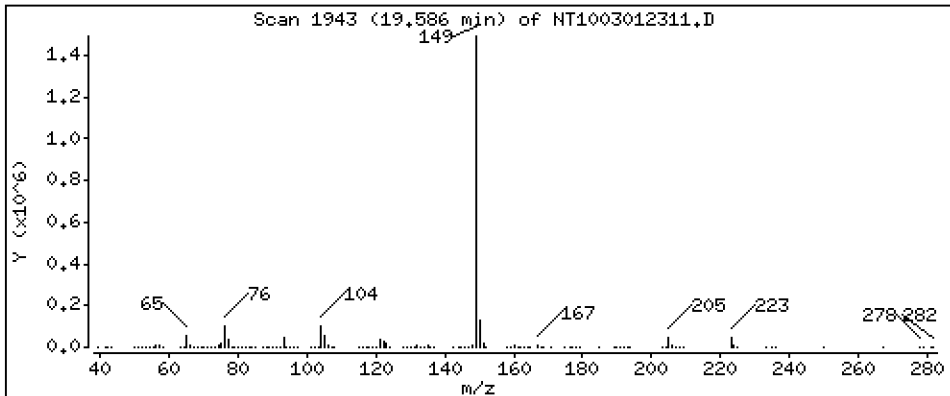
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 5,463 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

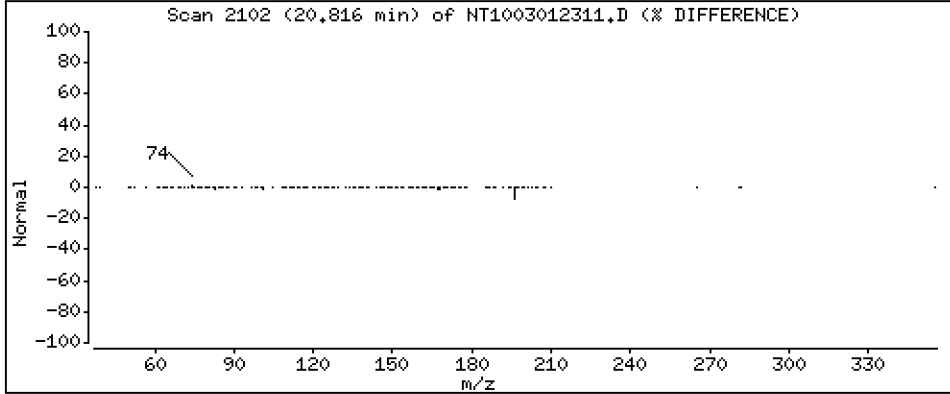
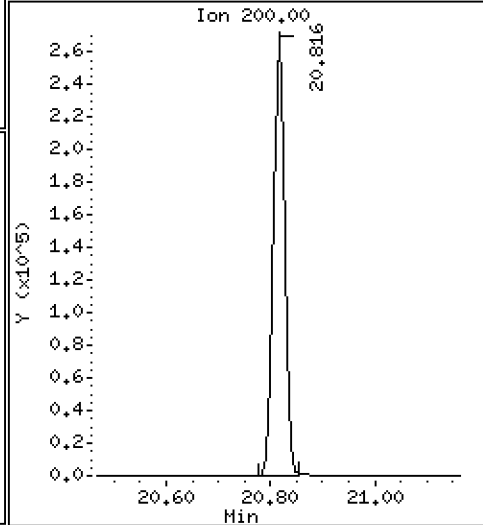
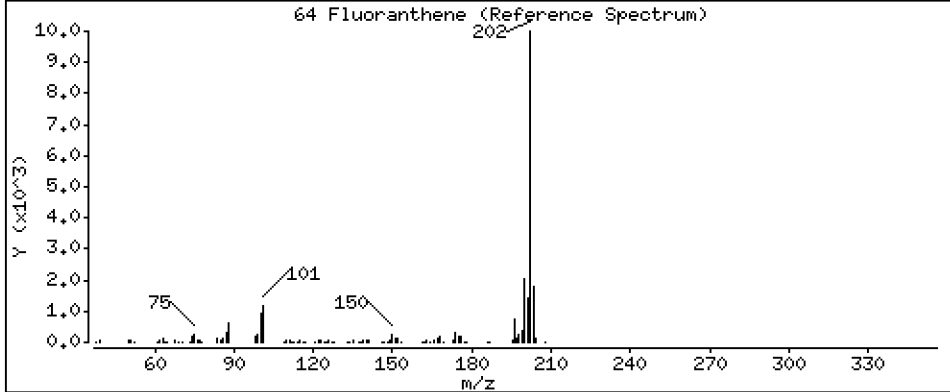
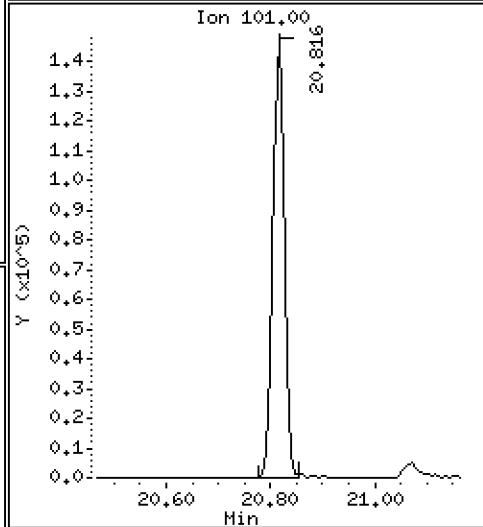
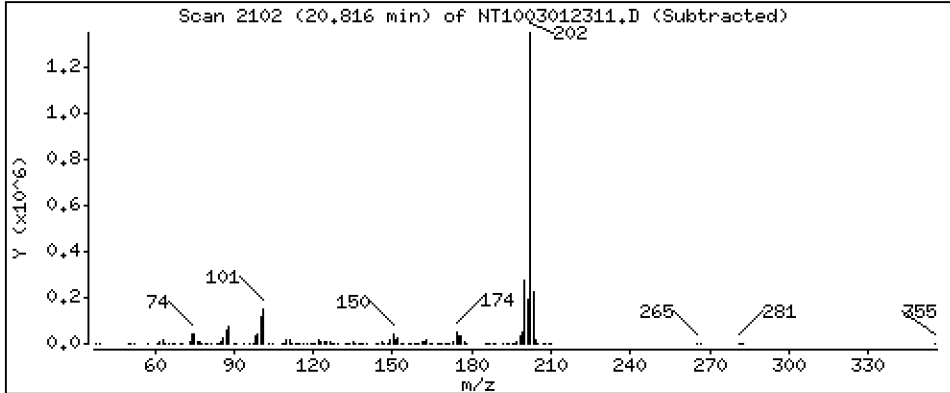
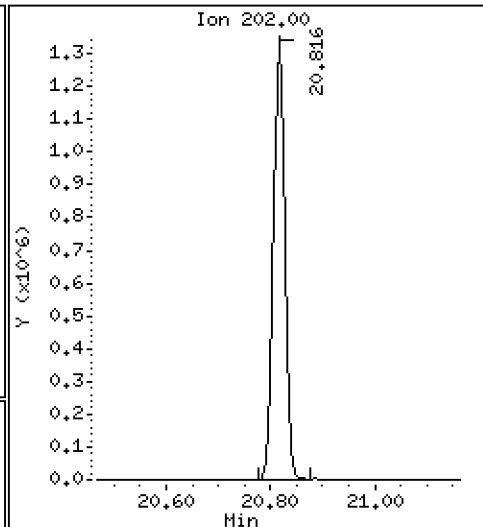
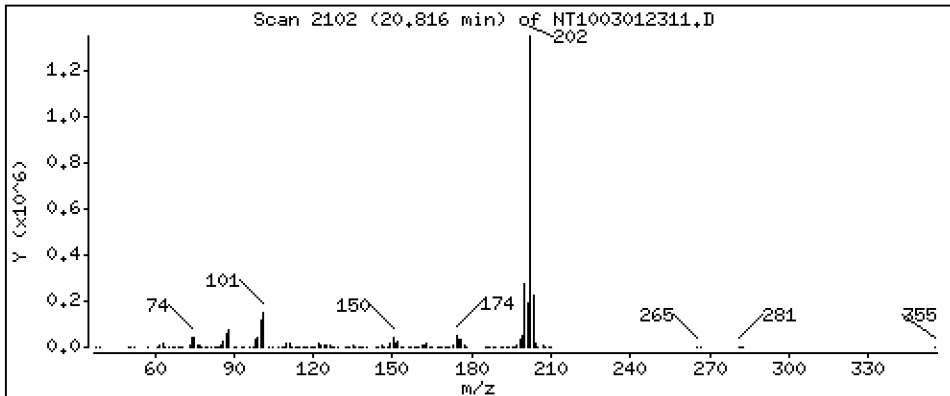
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,542 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

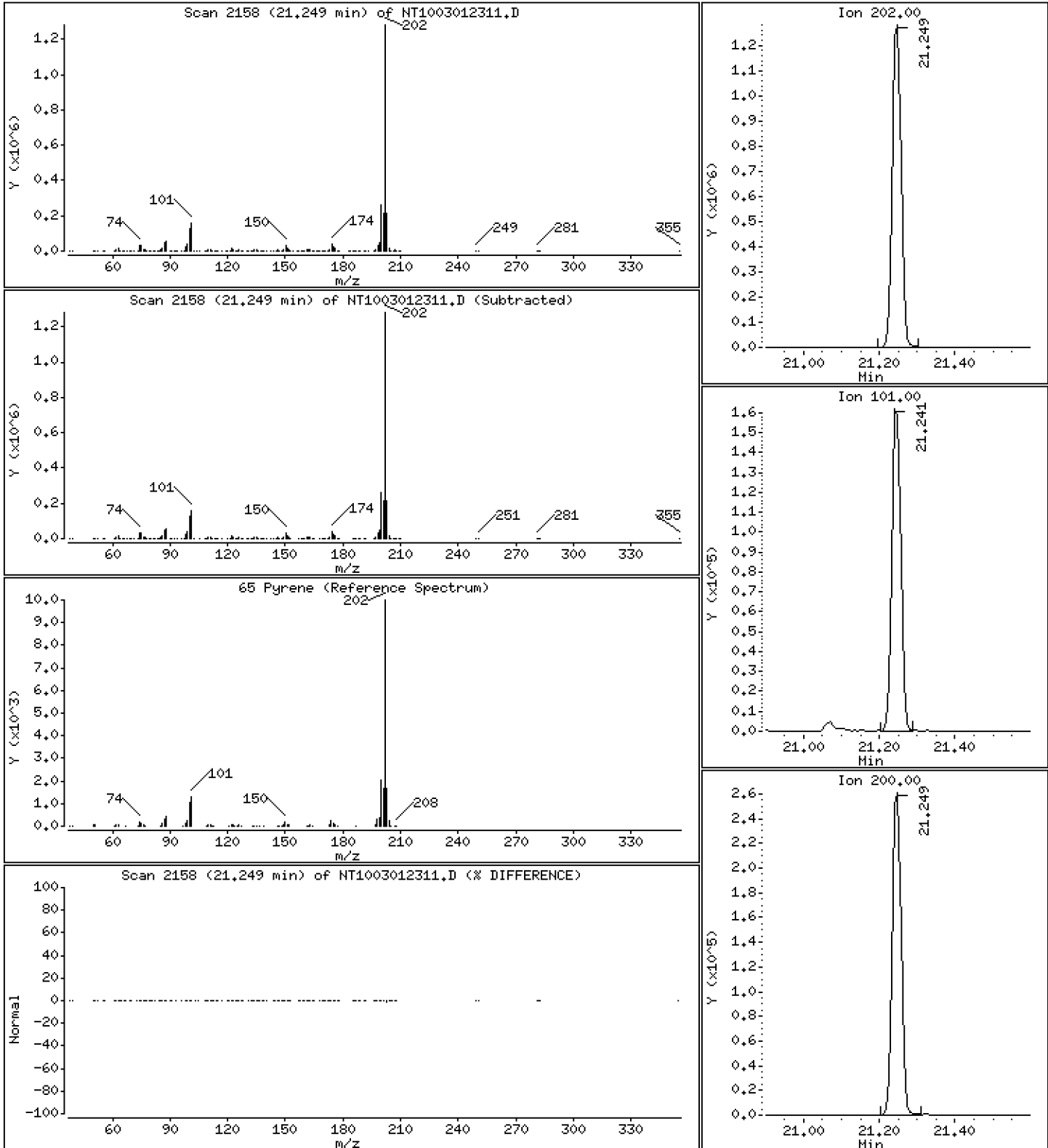
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,626 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

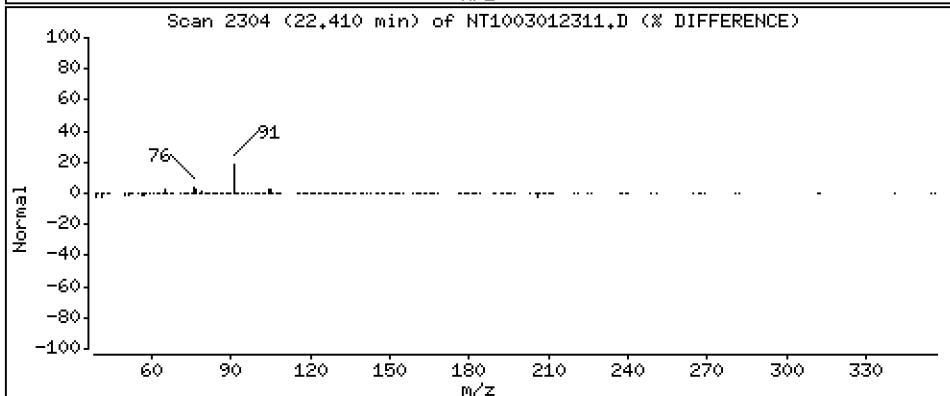
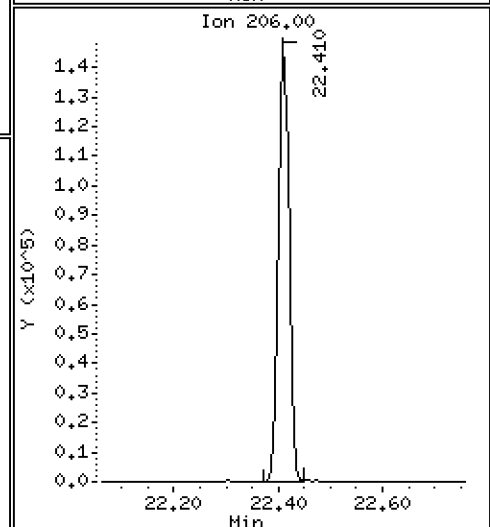
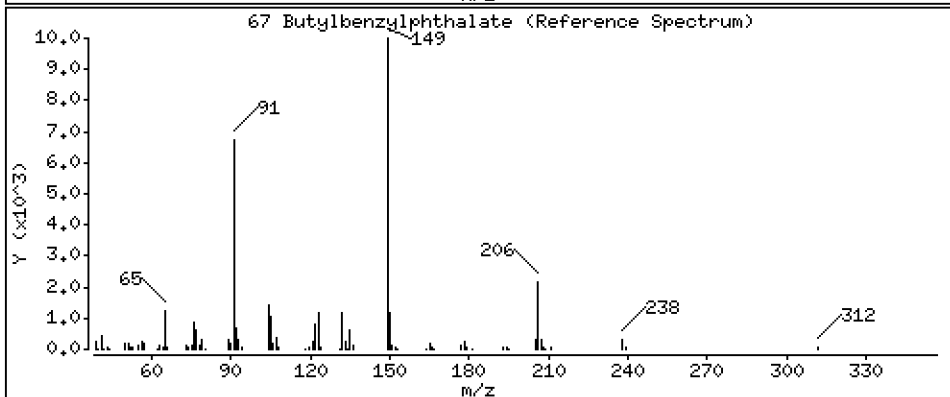
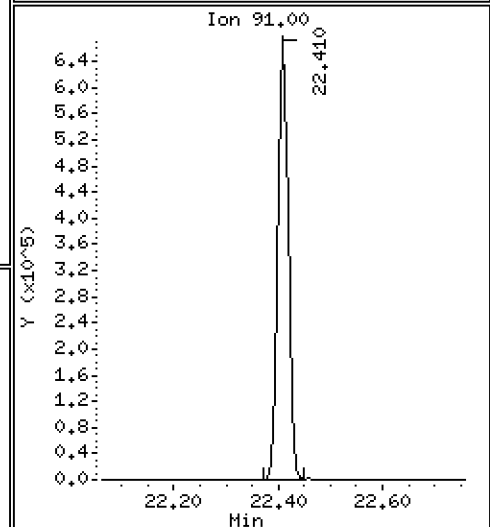
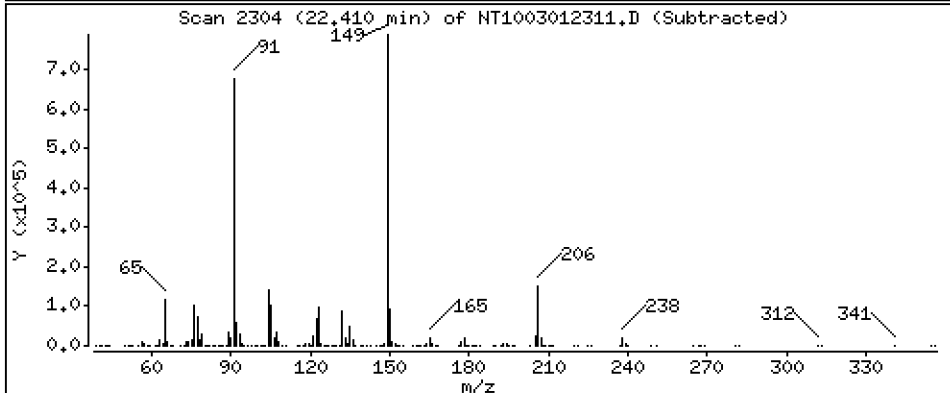
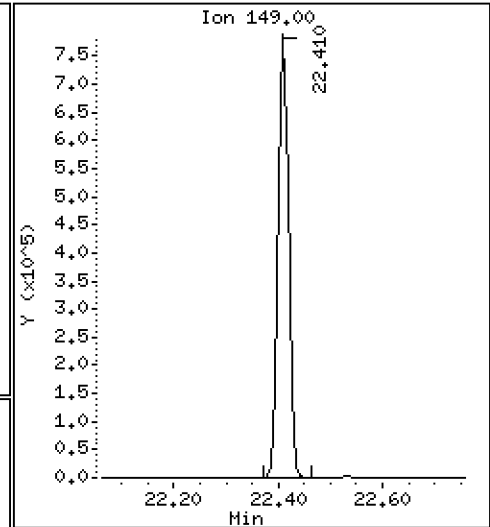
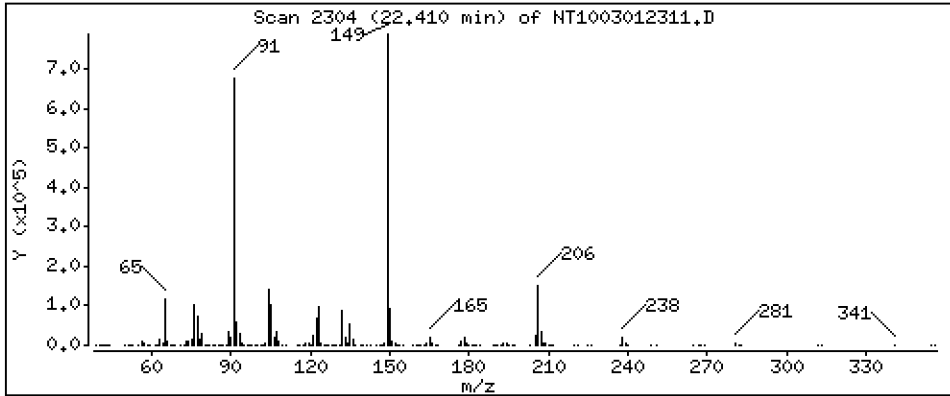
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,525 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

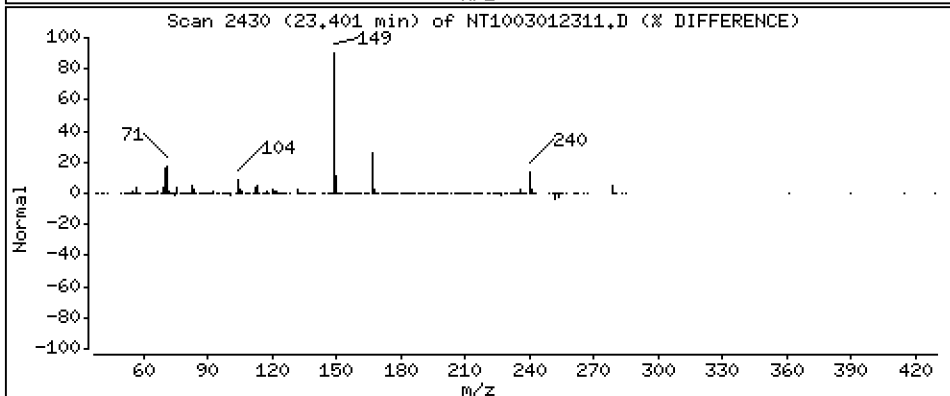
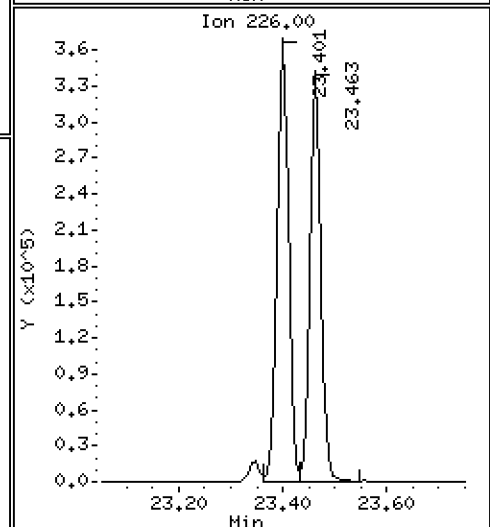
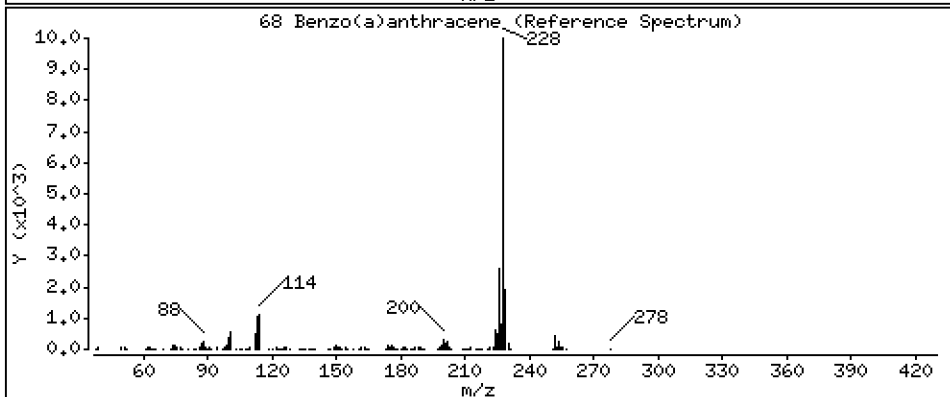
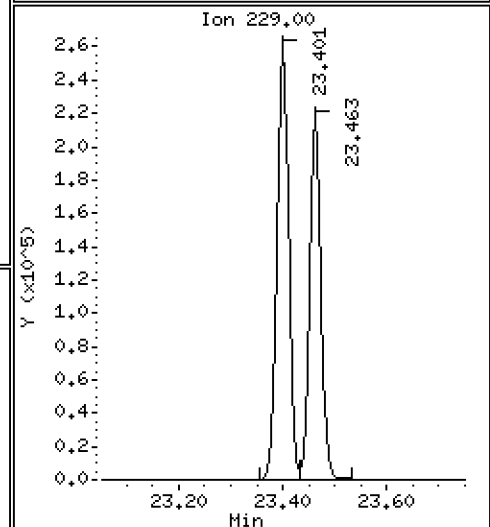
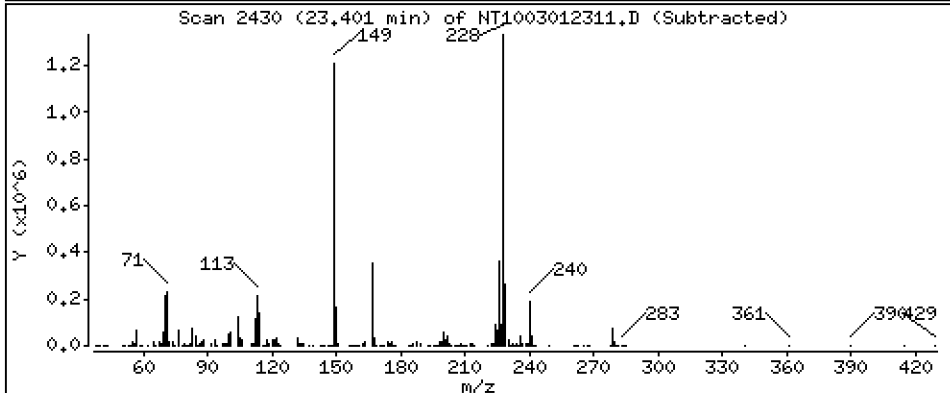
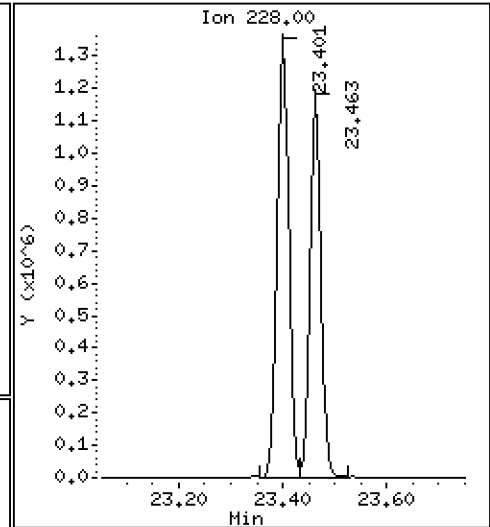
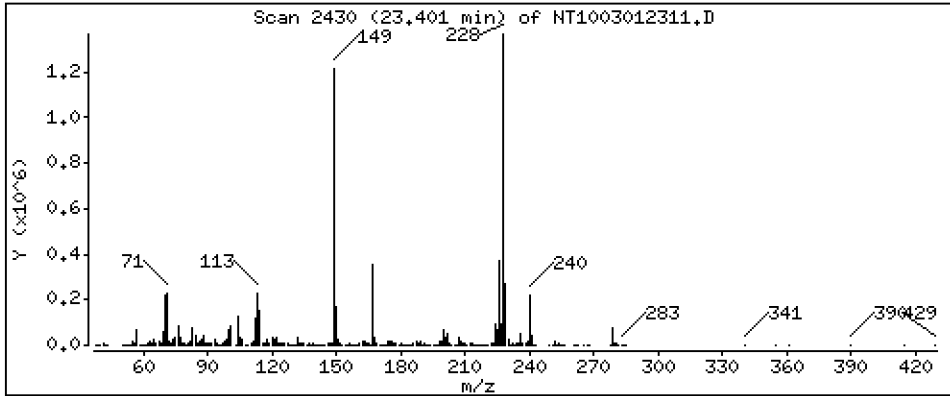
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,578 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

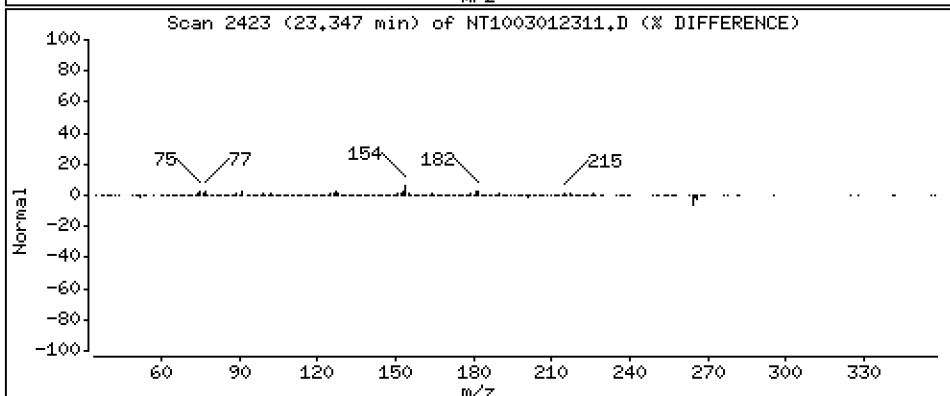
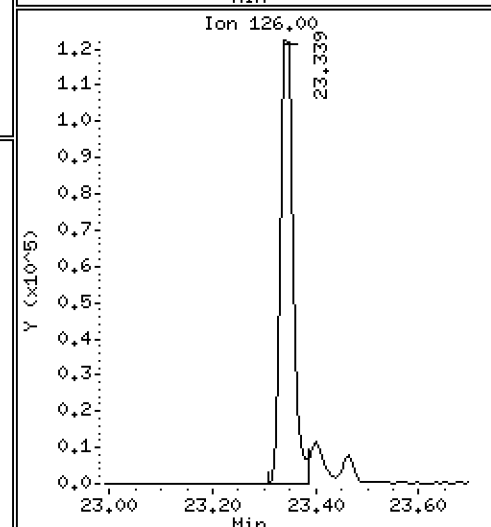
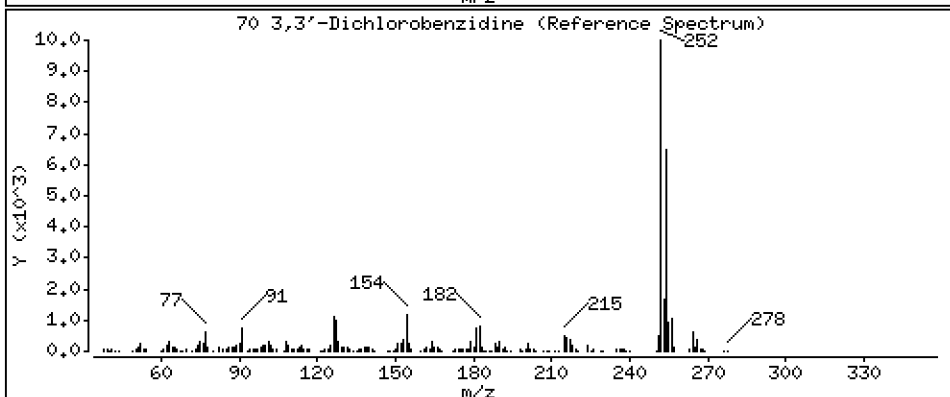
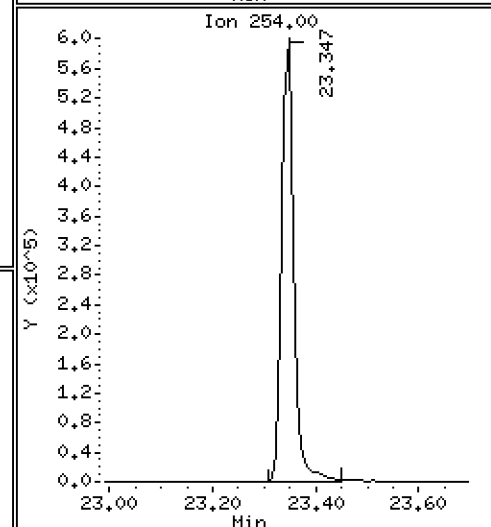
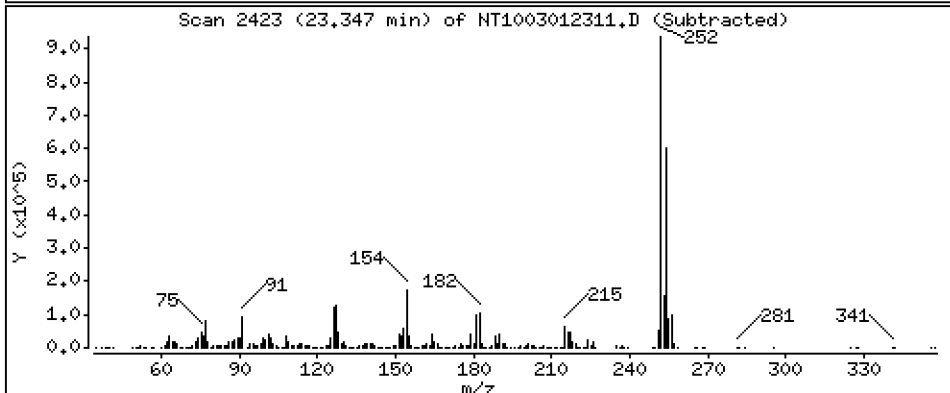
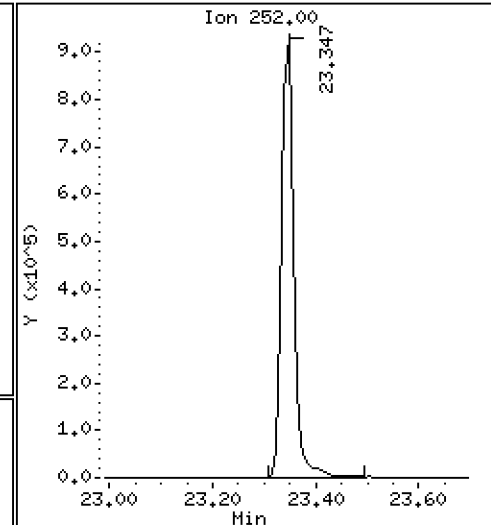
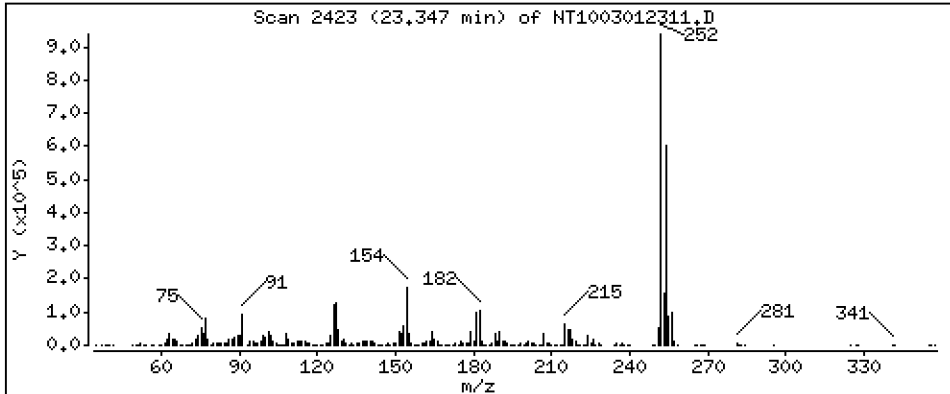
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 7,383 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

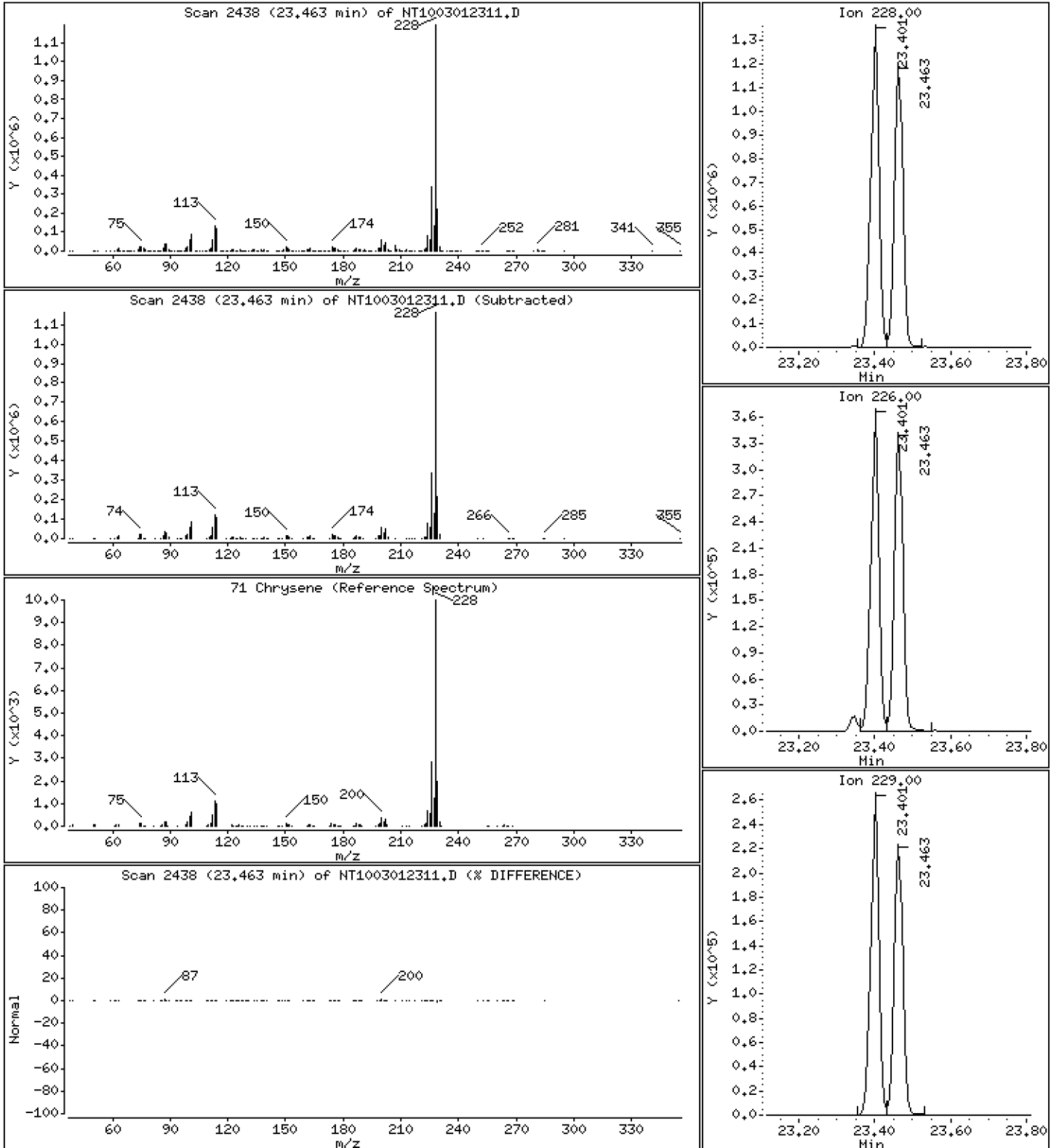
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 4,967 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

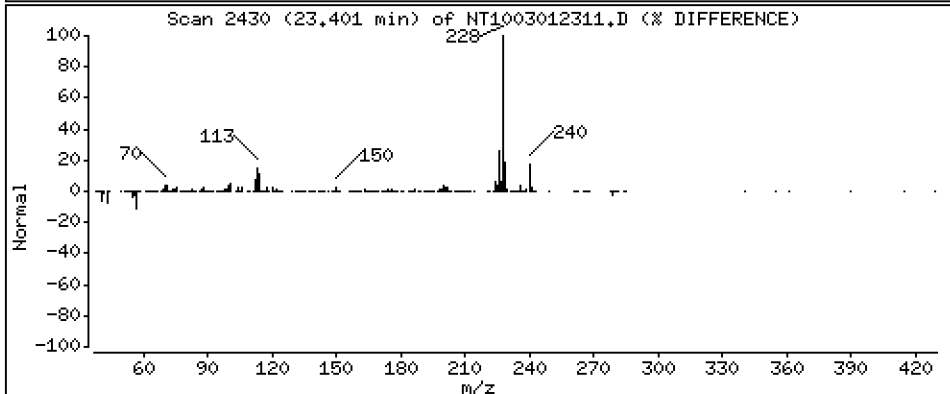
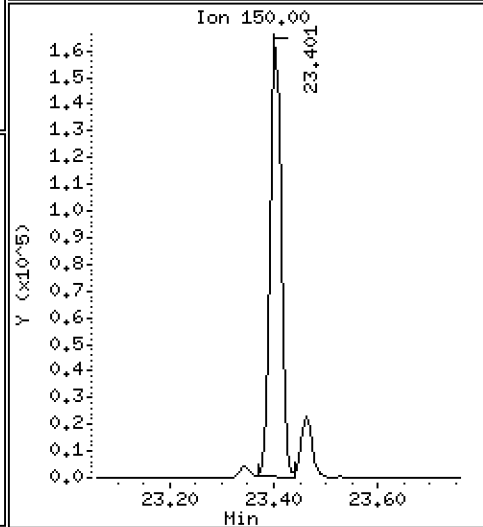
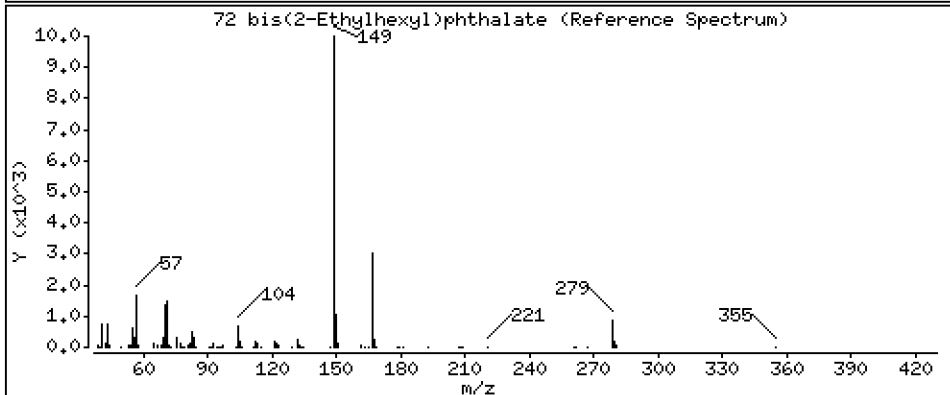
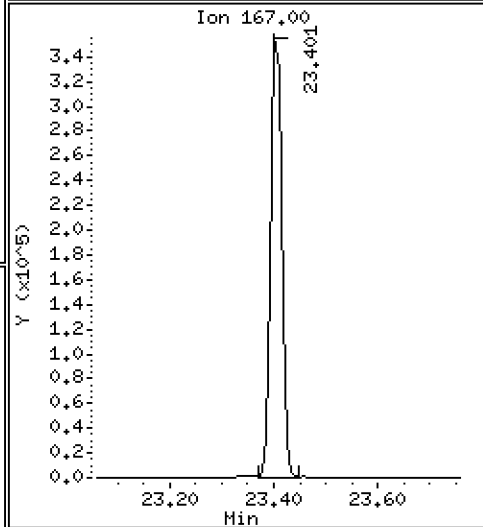
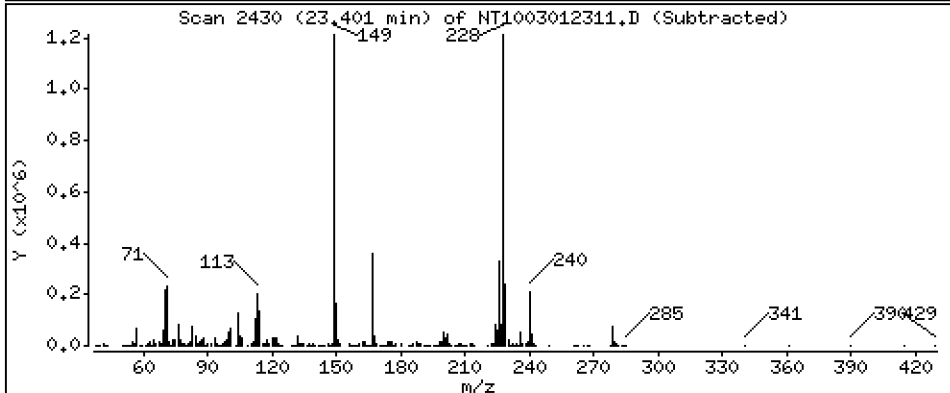
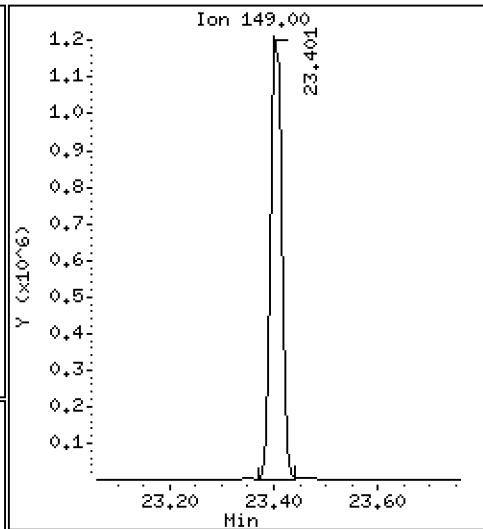
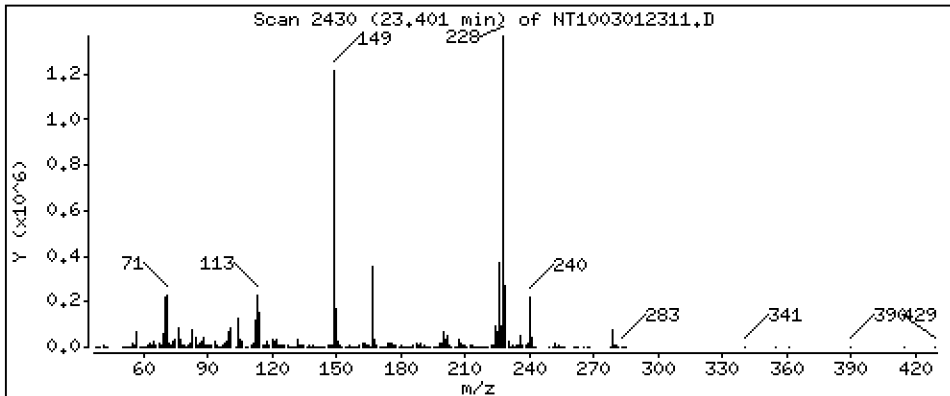
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,956 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

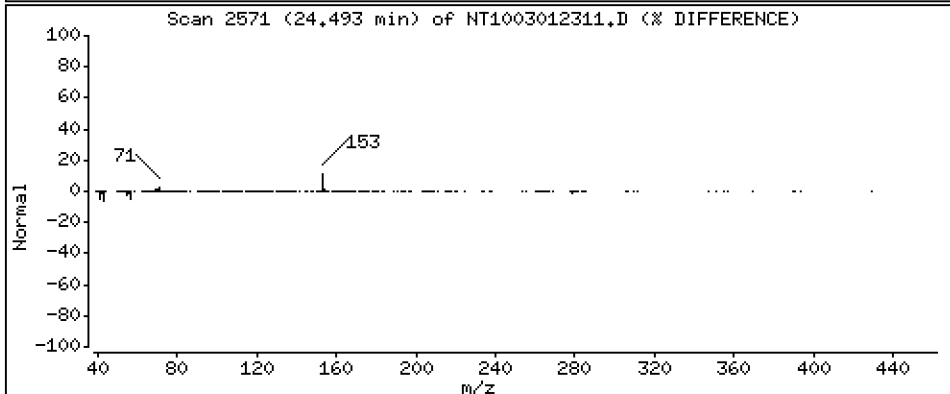
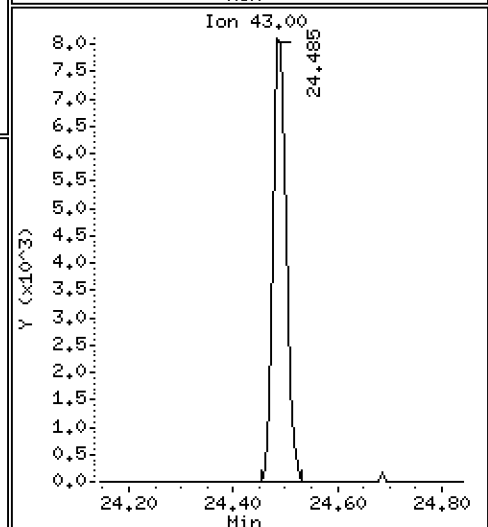
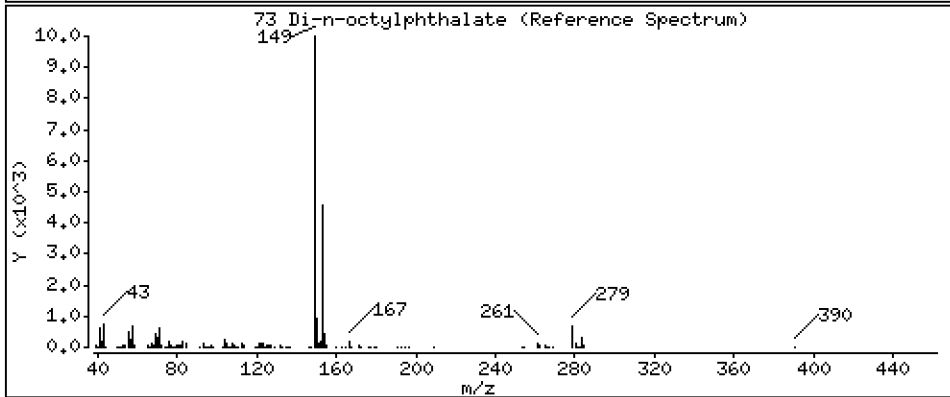
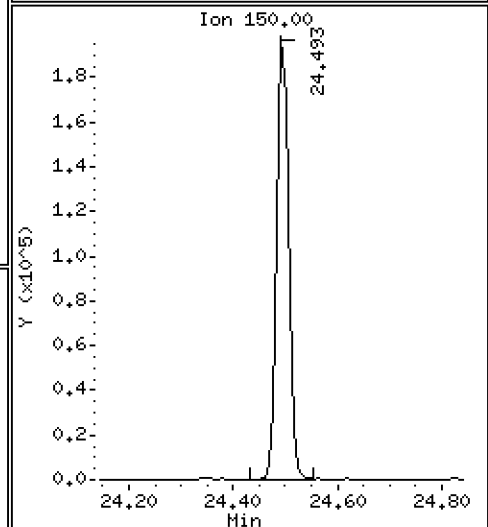
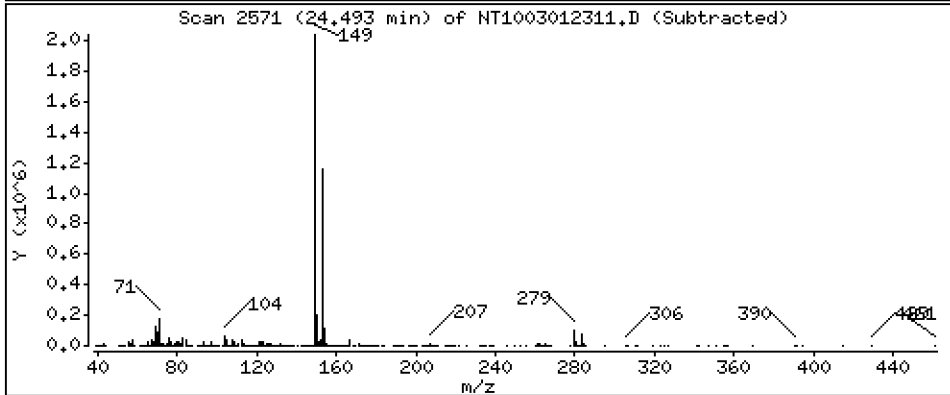
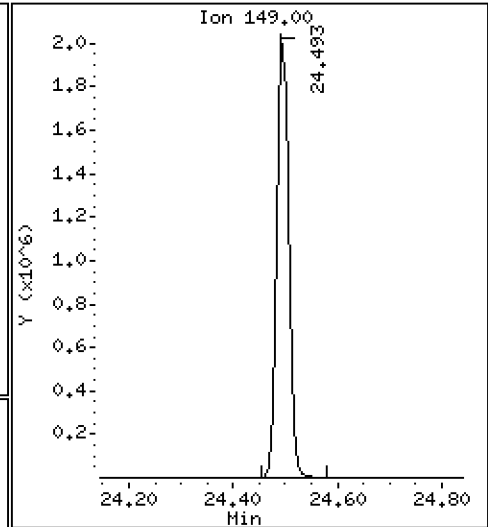
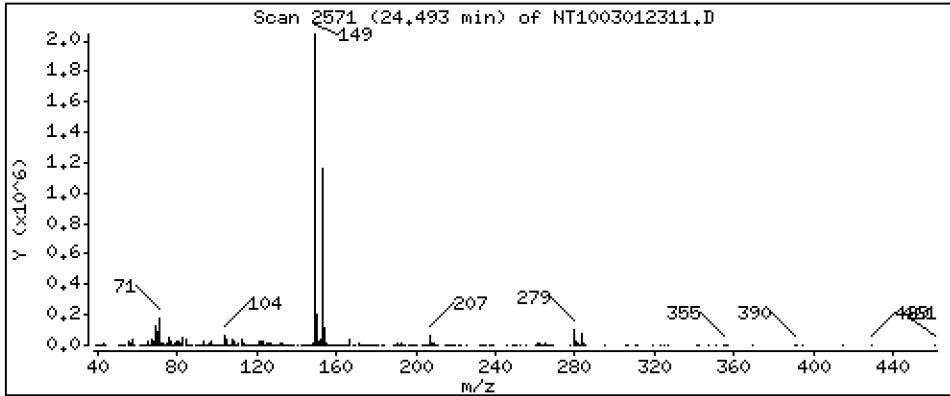
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,844 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

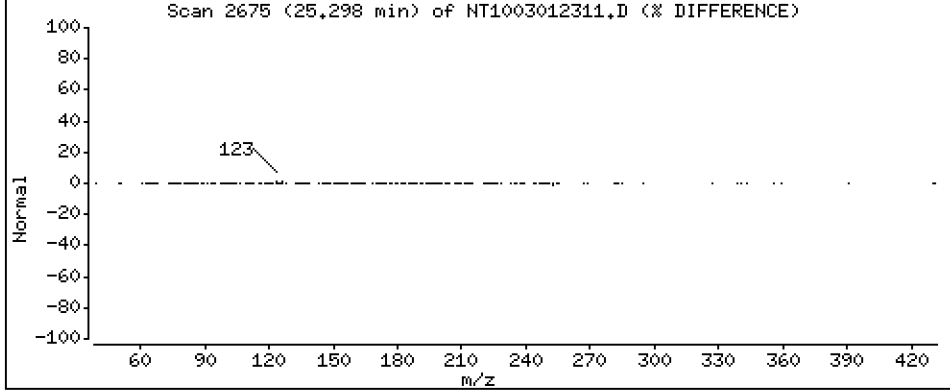
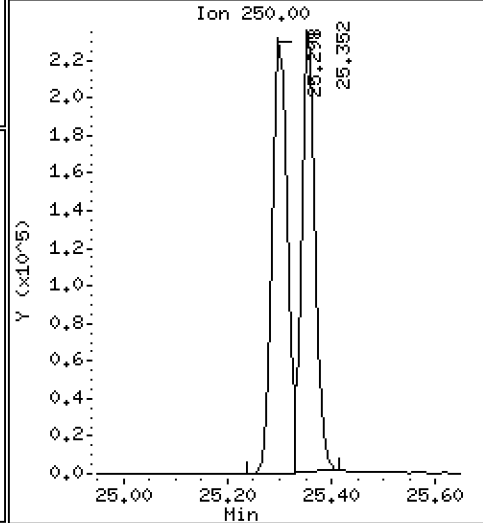
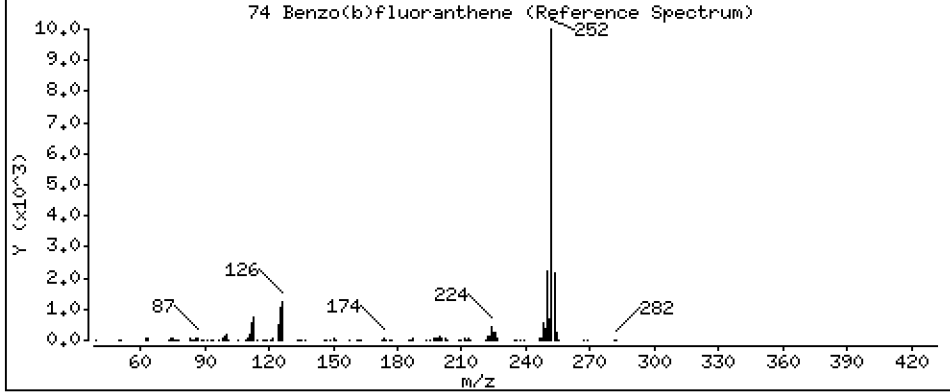
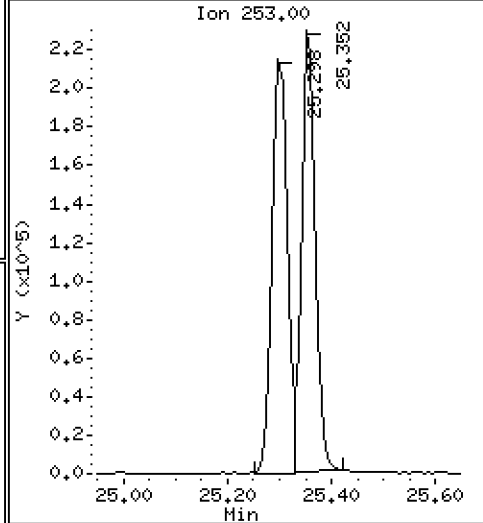
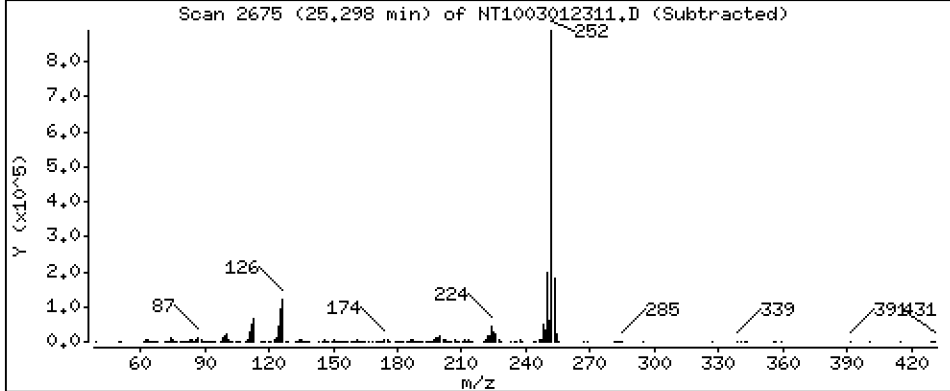
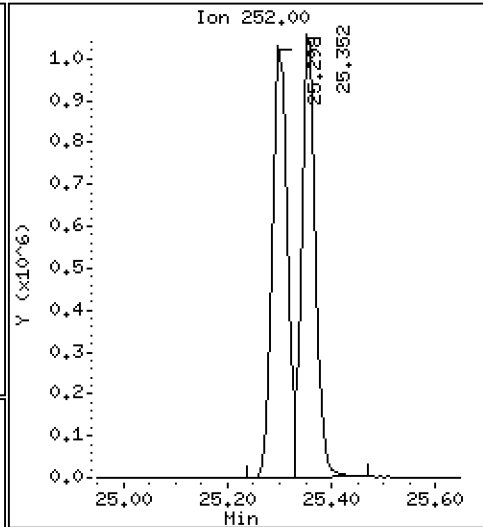
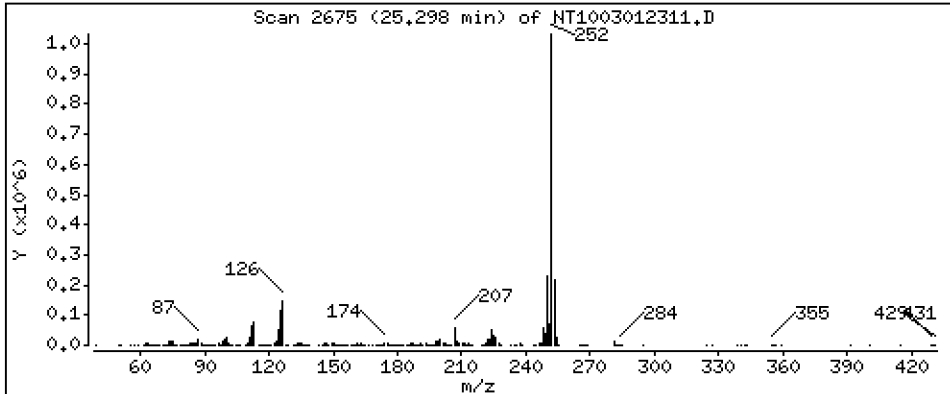
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,319 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

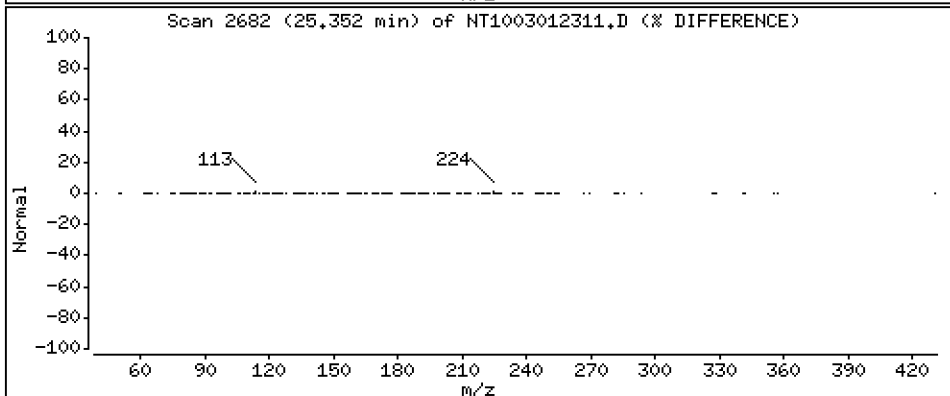
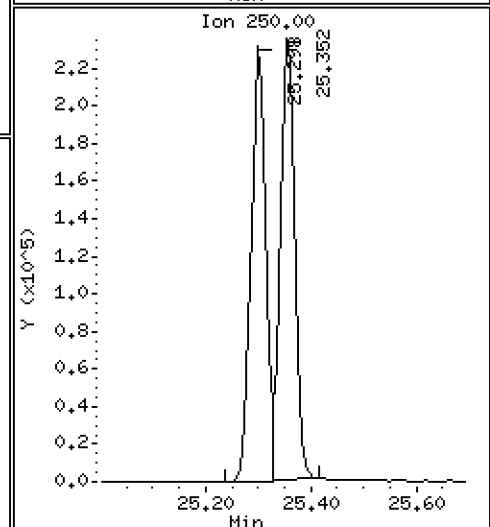
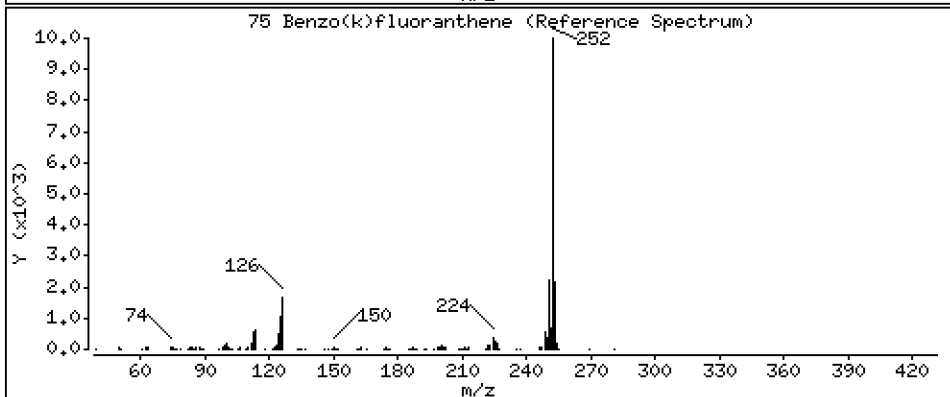
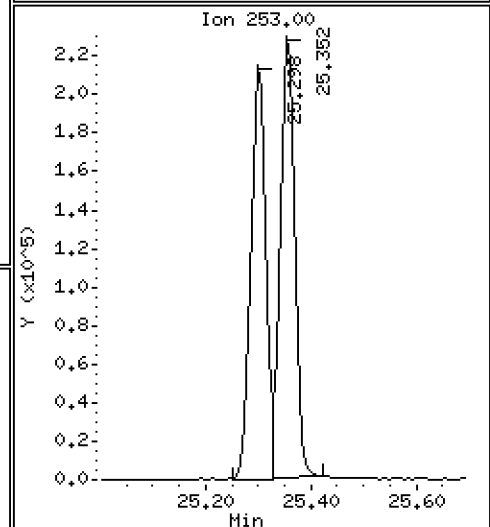
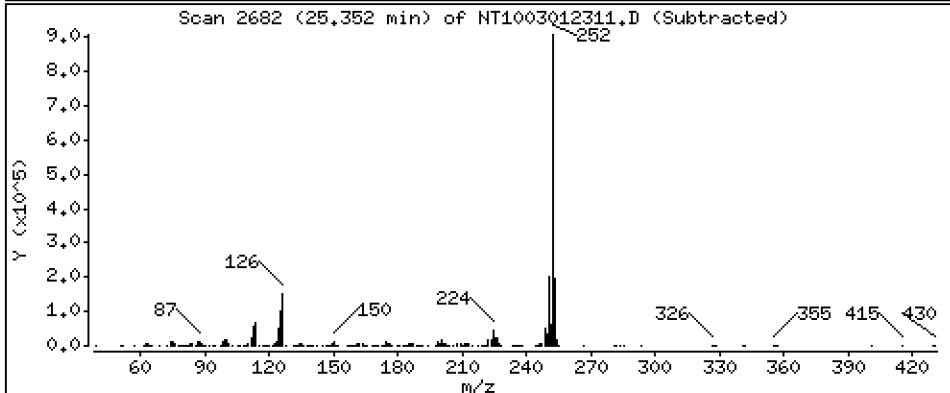
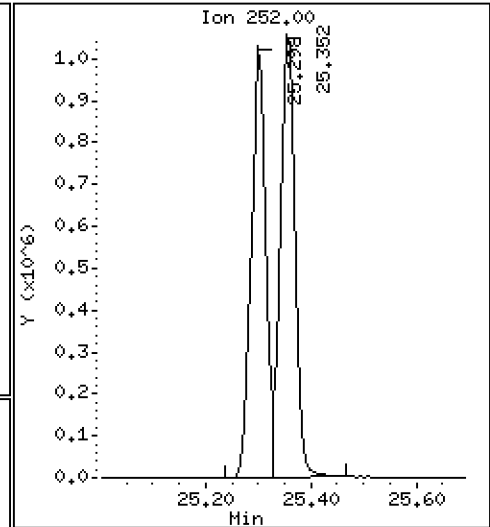
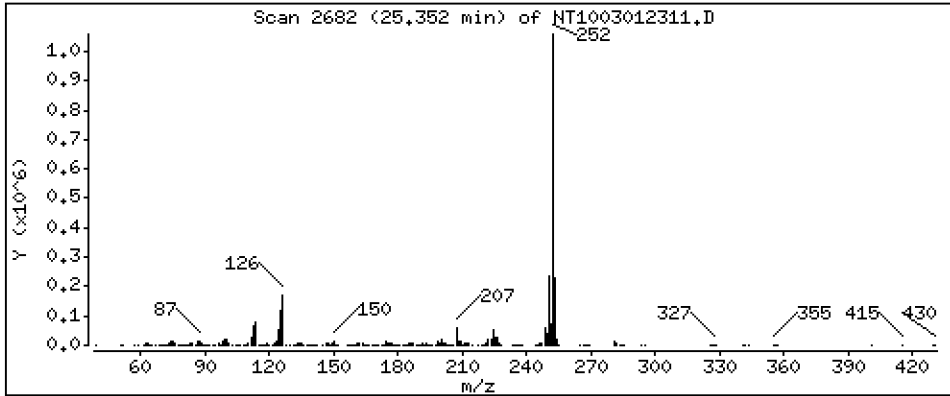
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,563 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

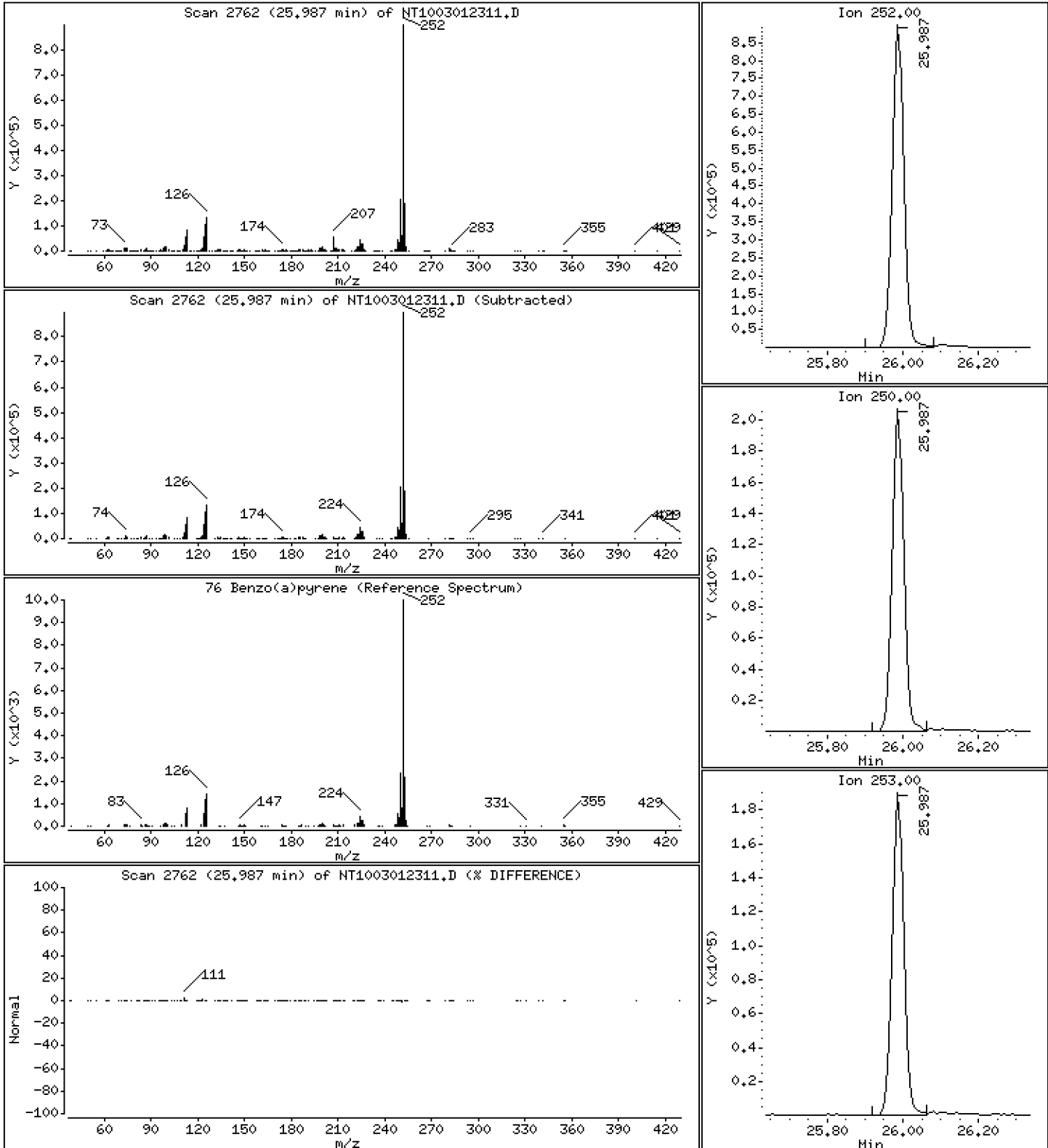
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,445 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

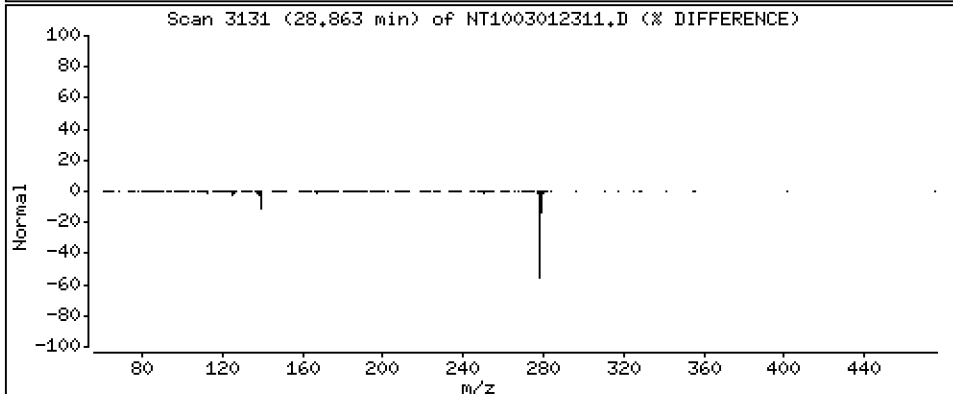
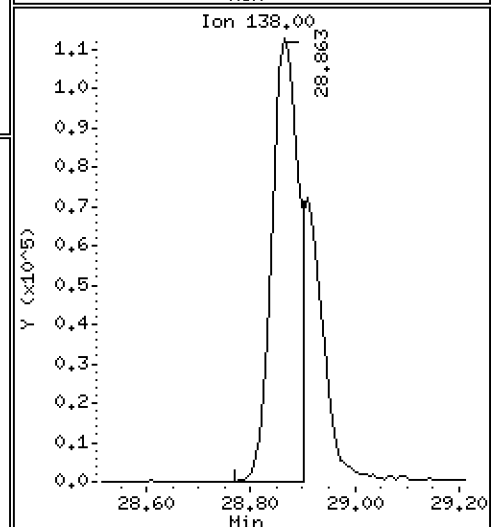
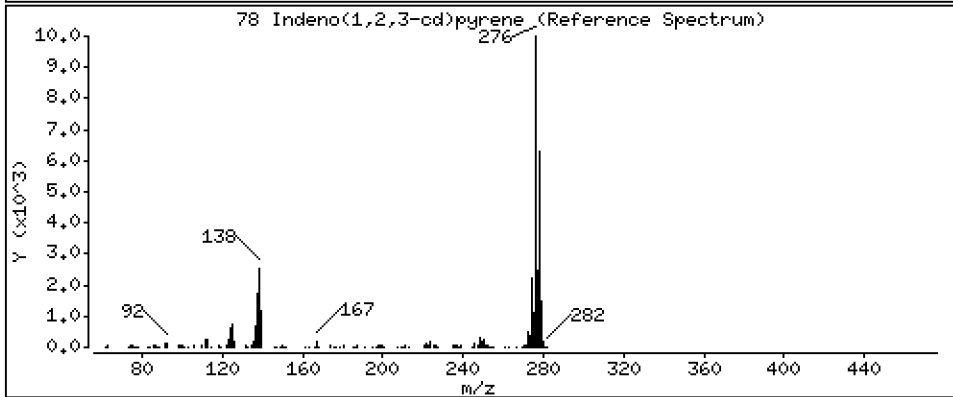
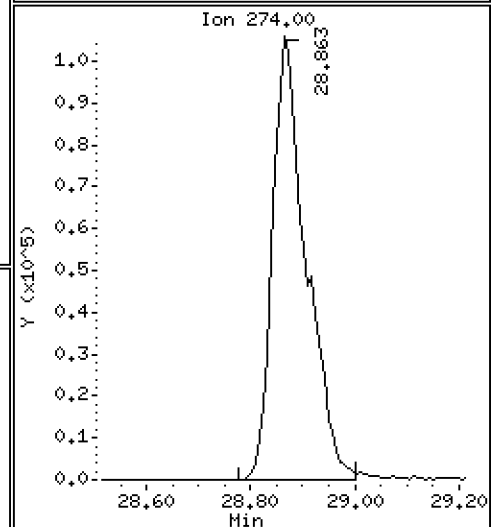
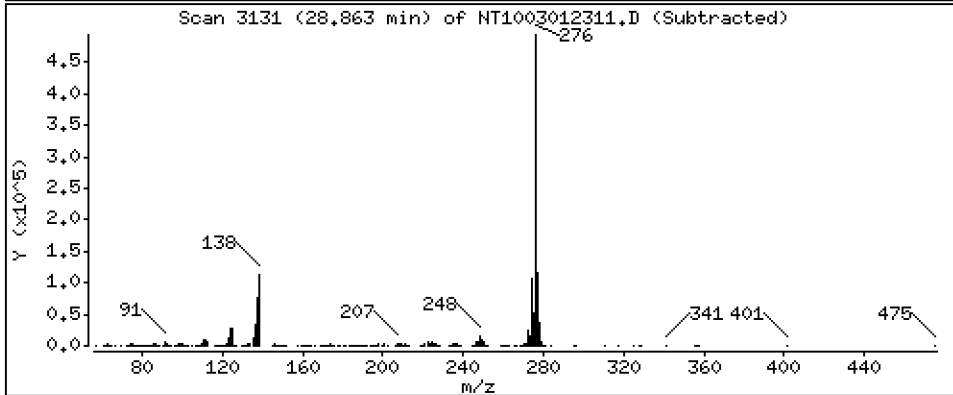
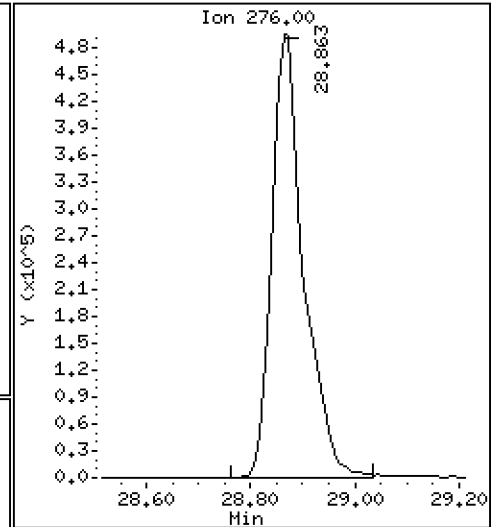
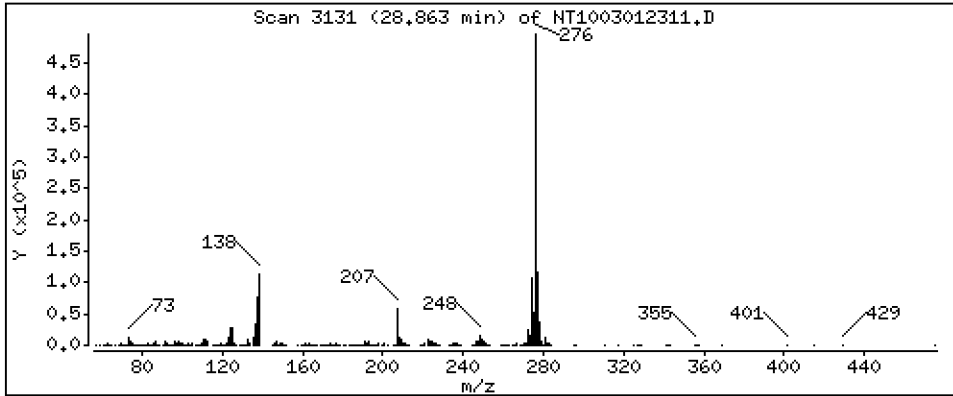
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,345 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

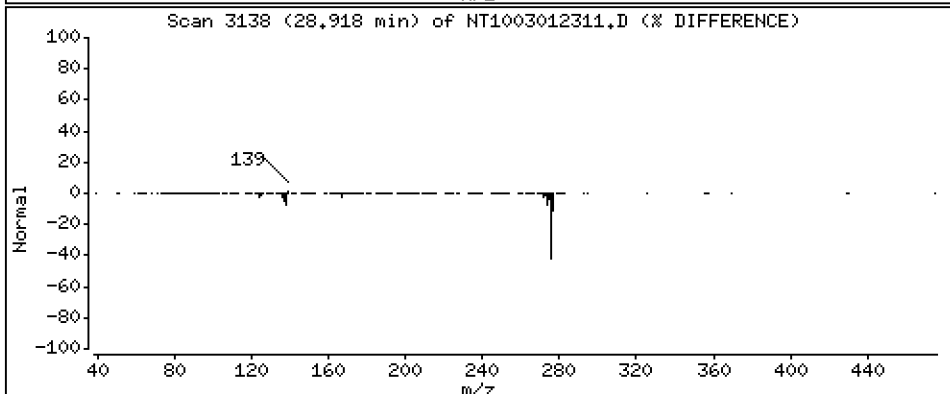
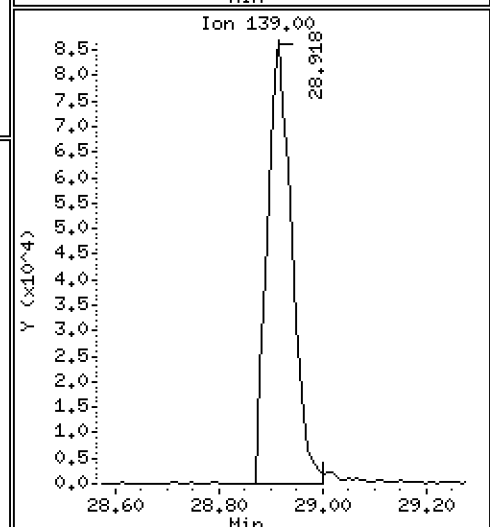
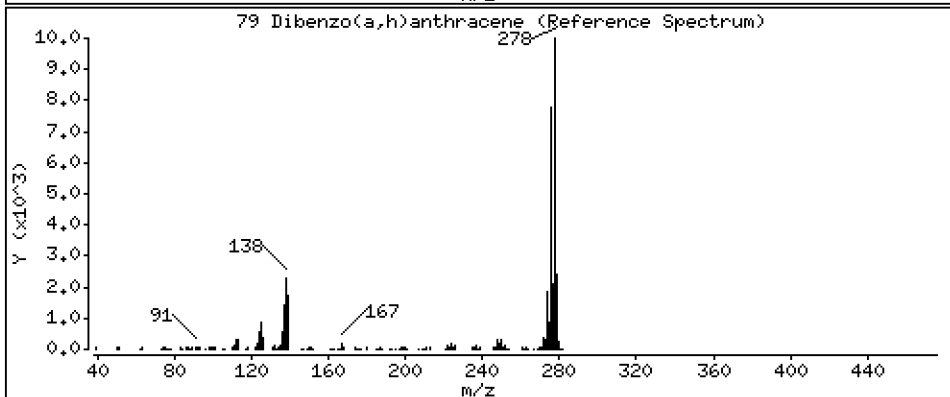
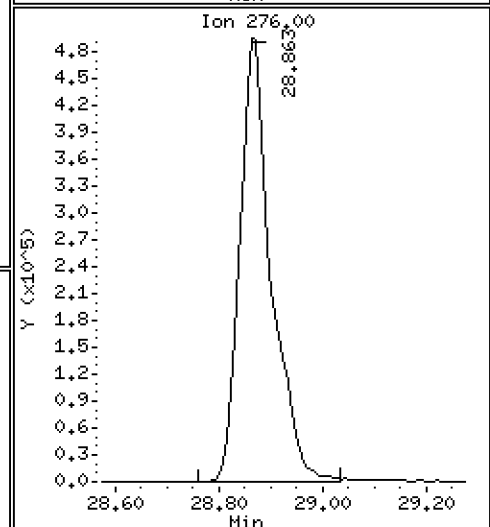
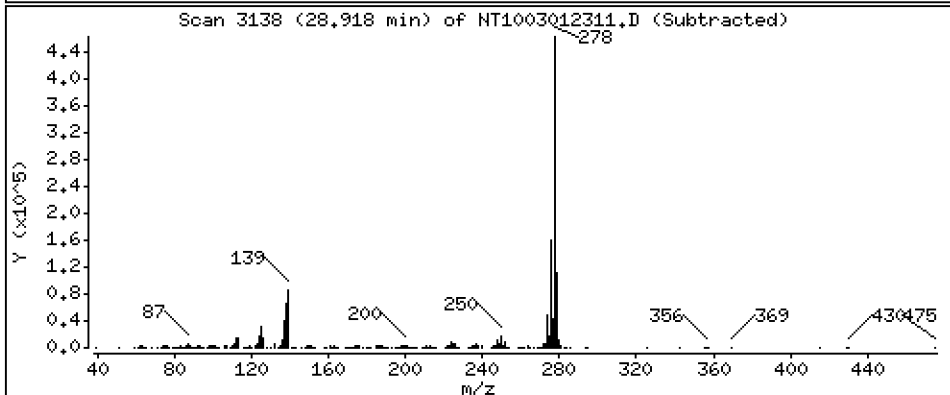
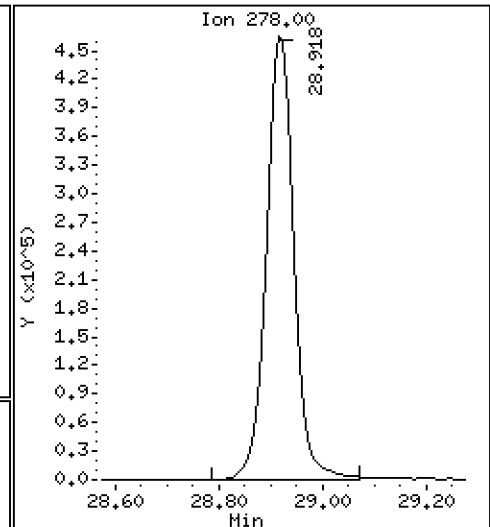
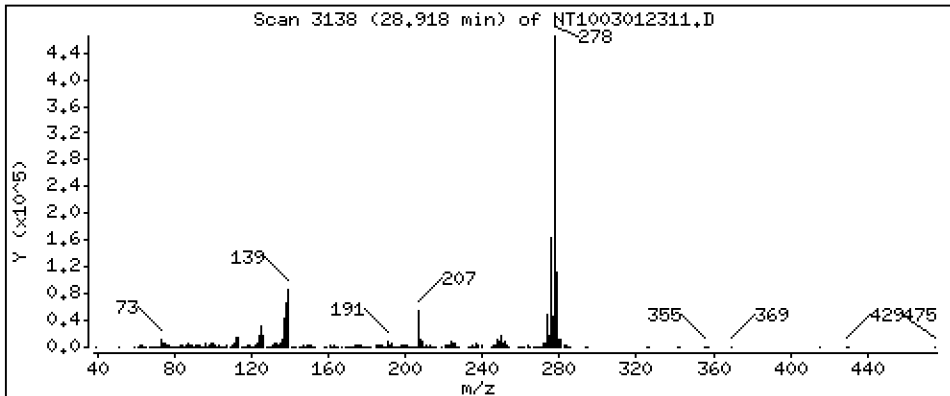
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,608 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

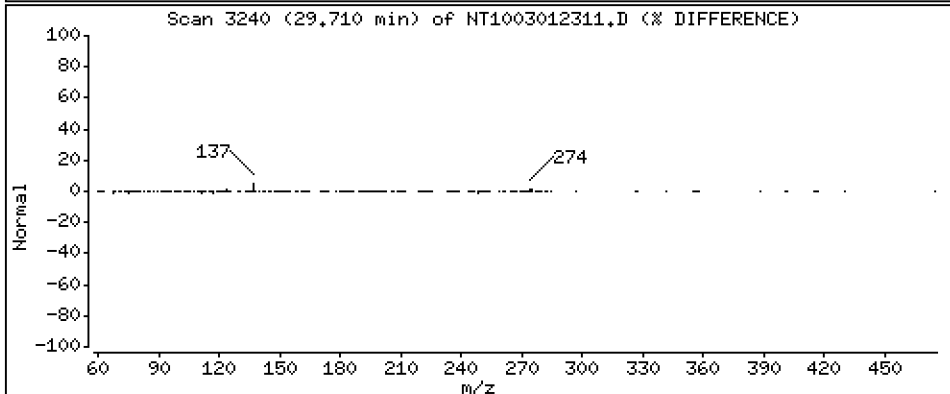
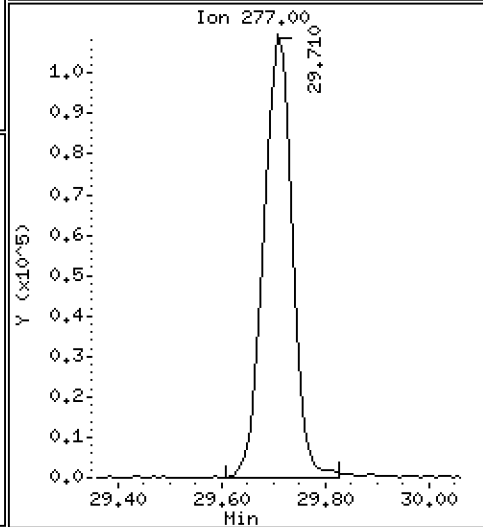
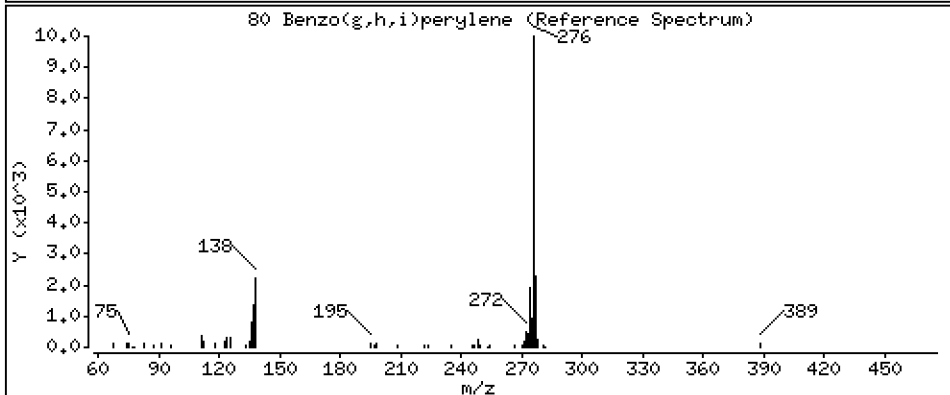
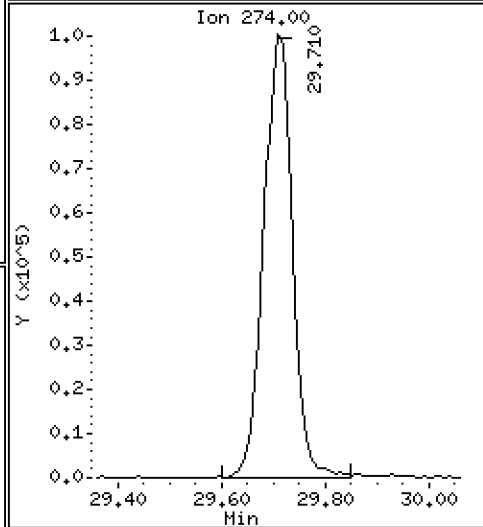
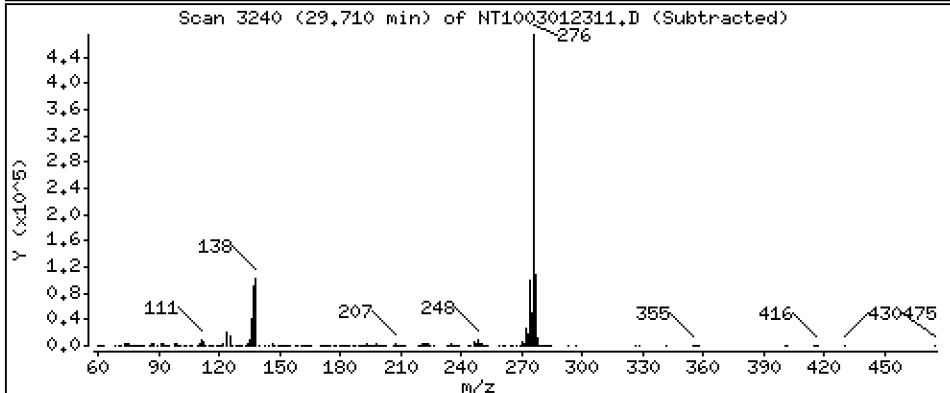
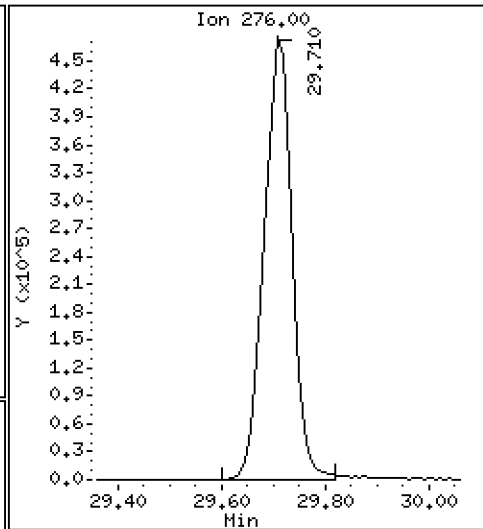
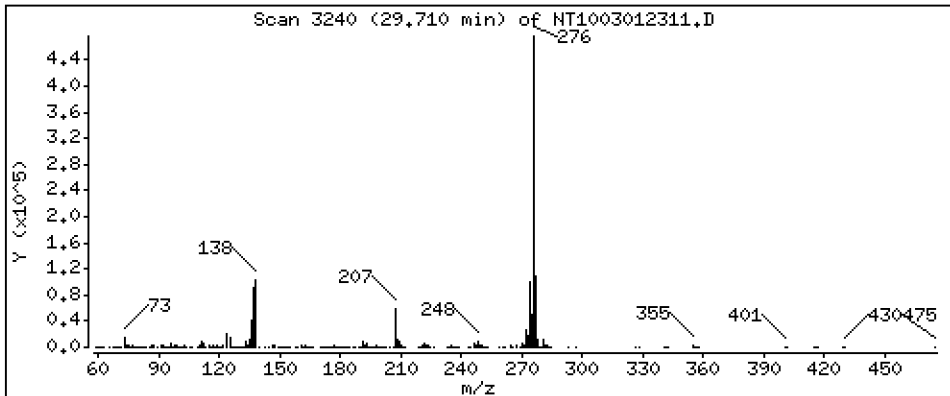
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,602 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

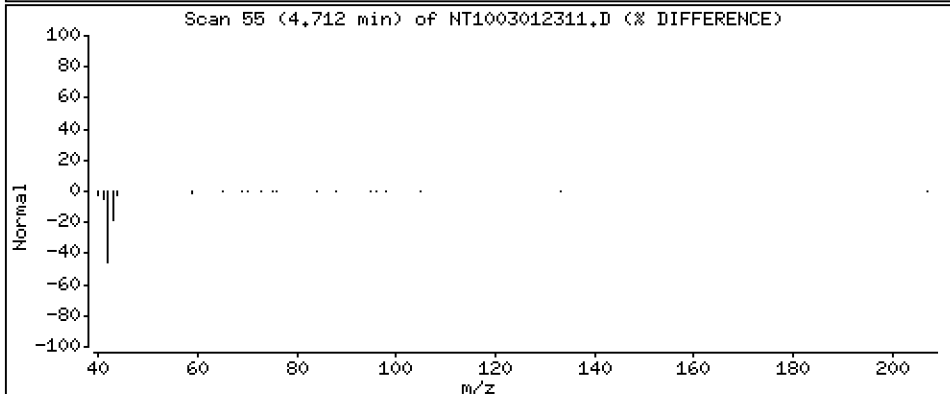
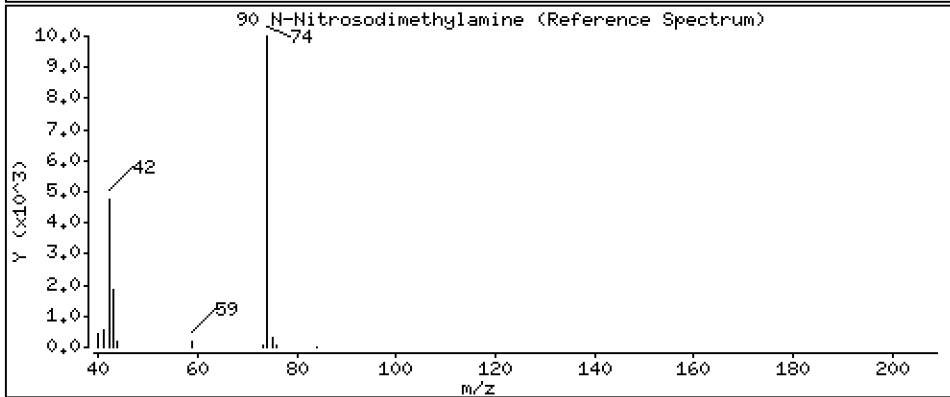
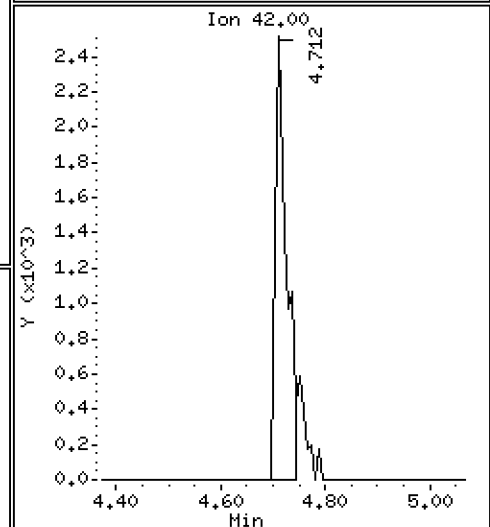
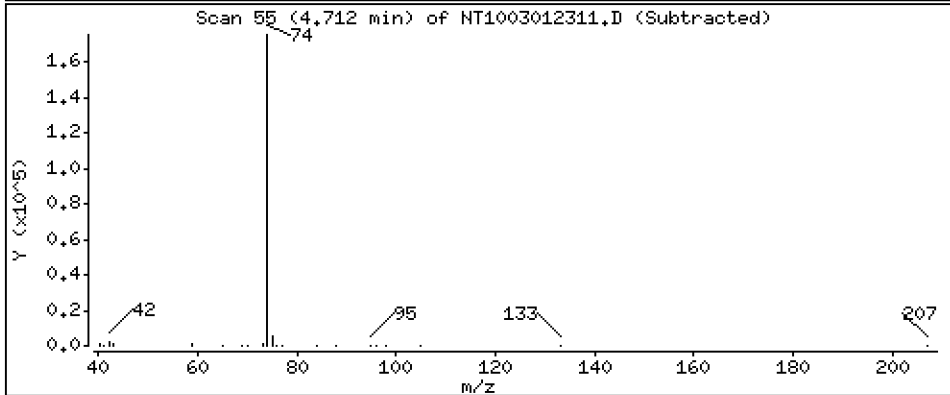
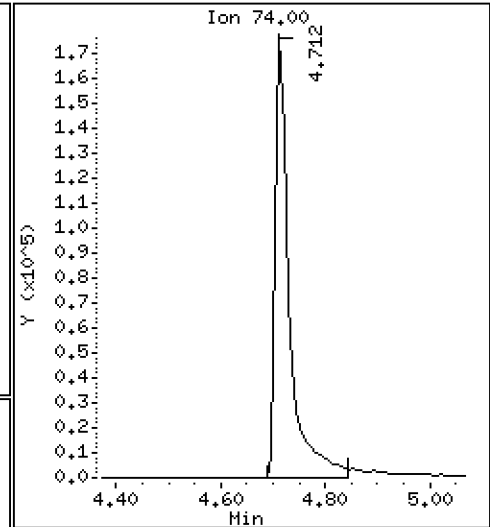
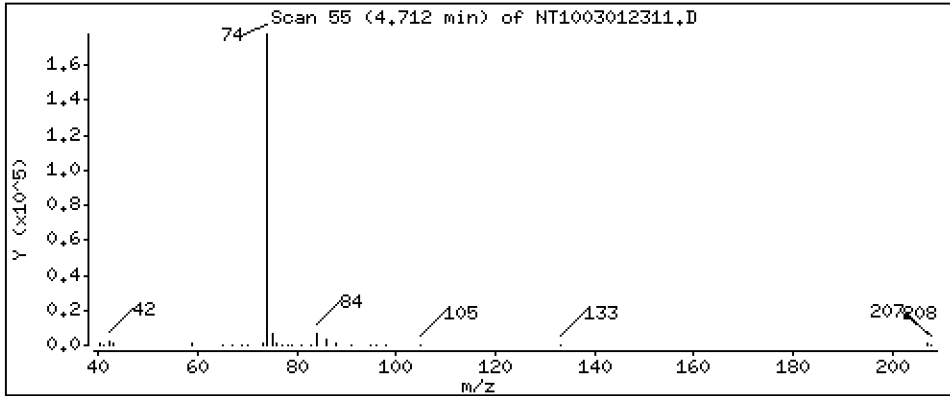
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 5.491 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

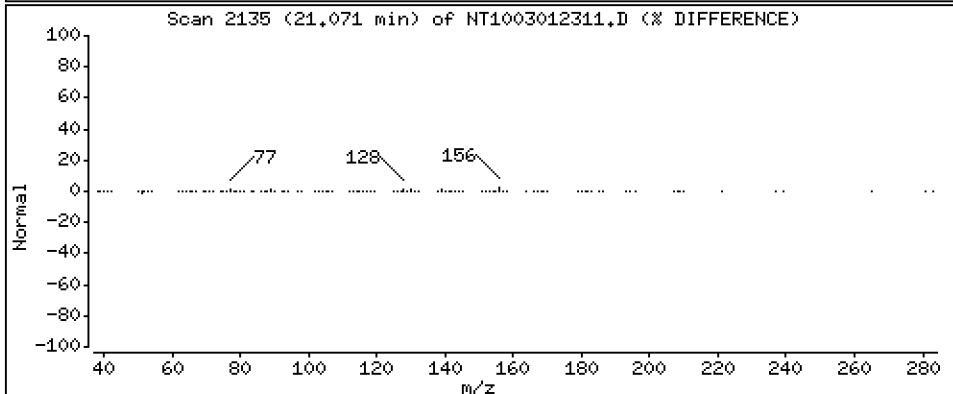
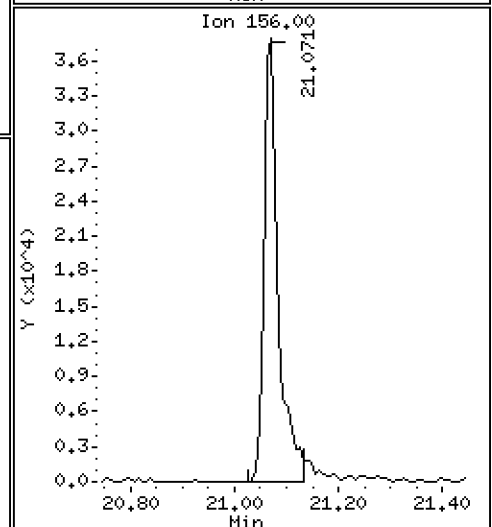
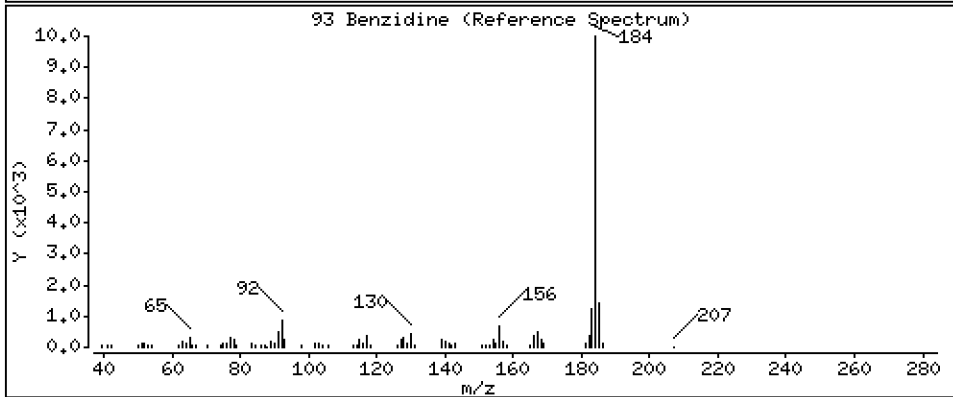
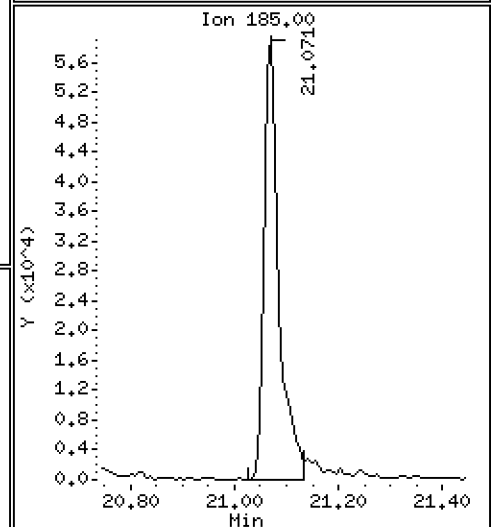
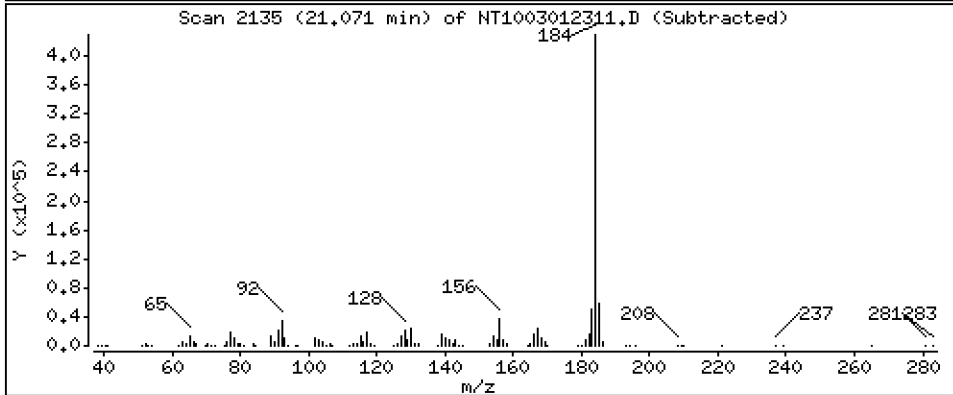
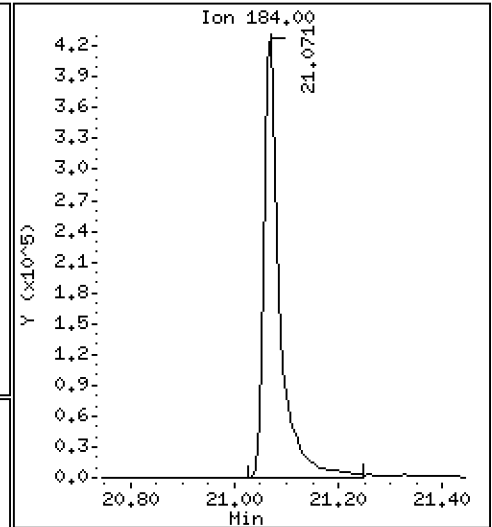
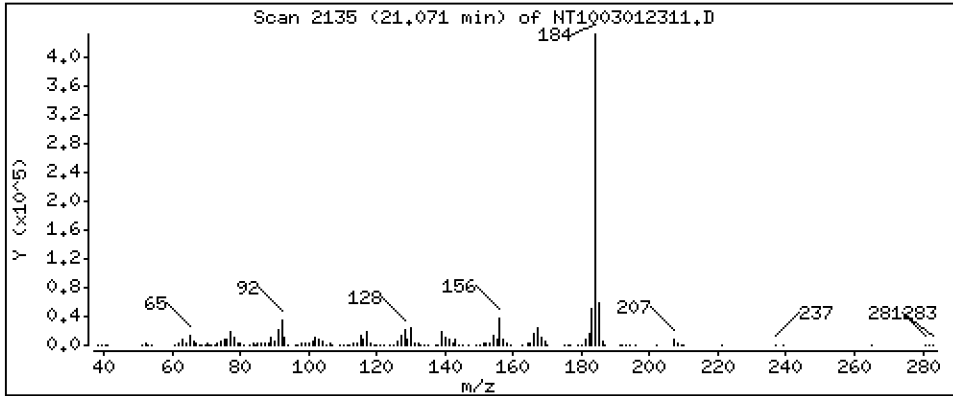
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 5,007 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

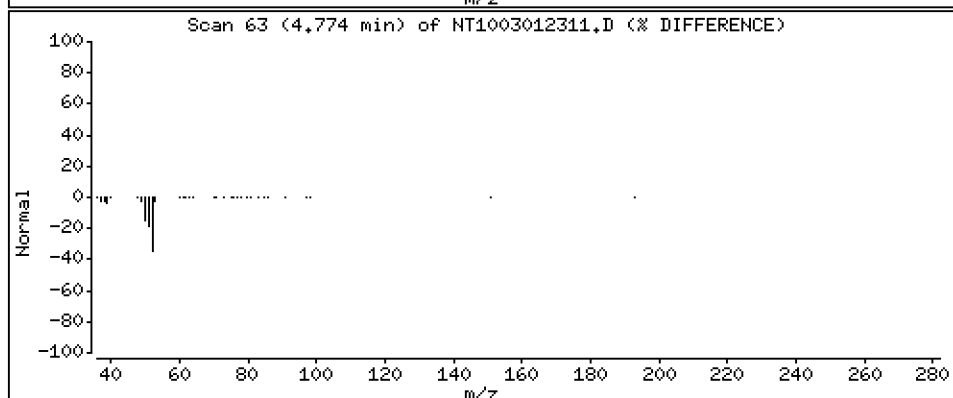
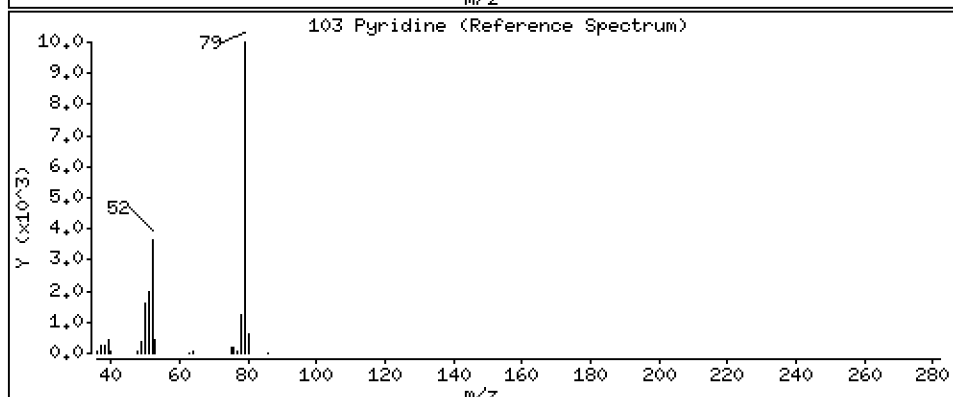
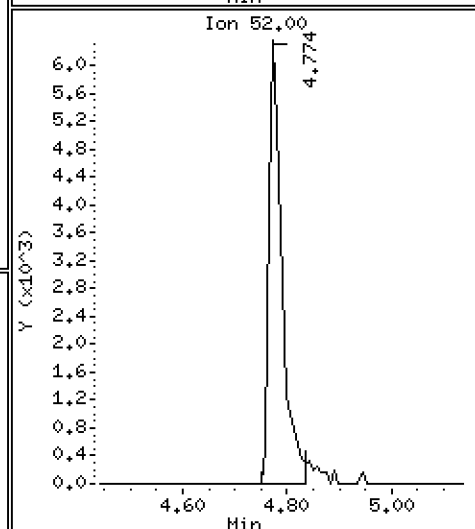
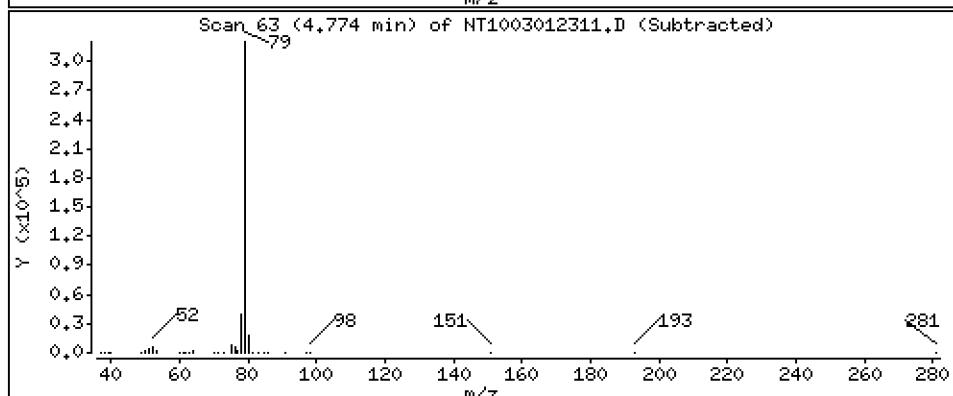
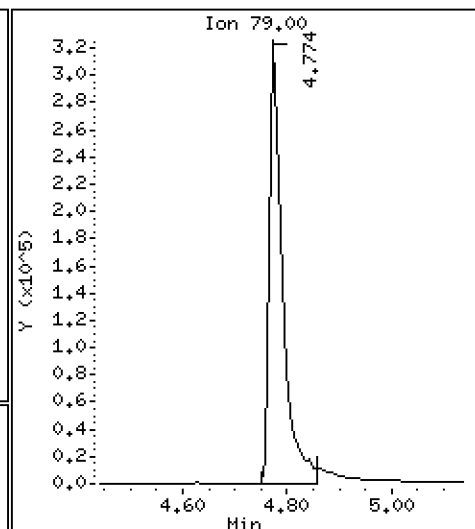
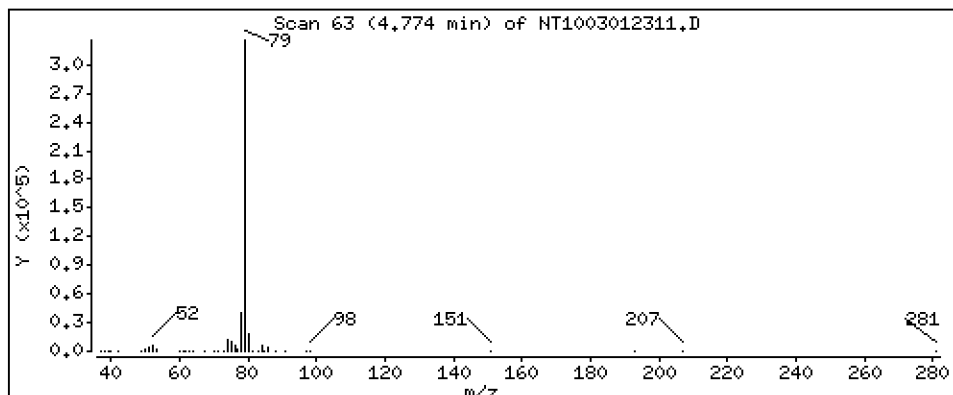
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 5,430 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

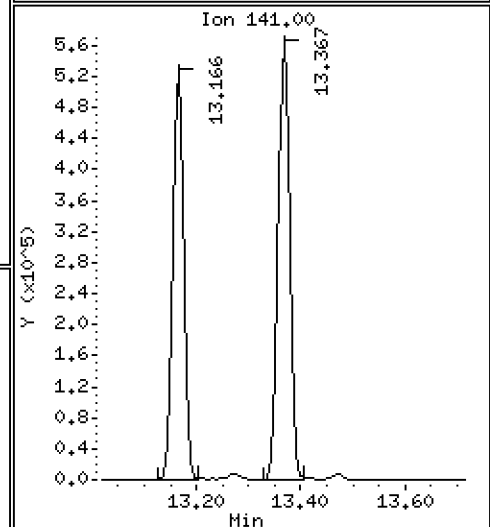
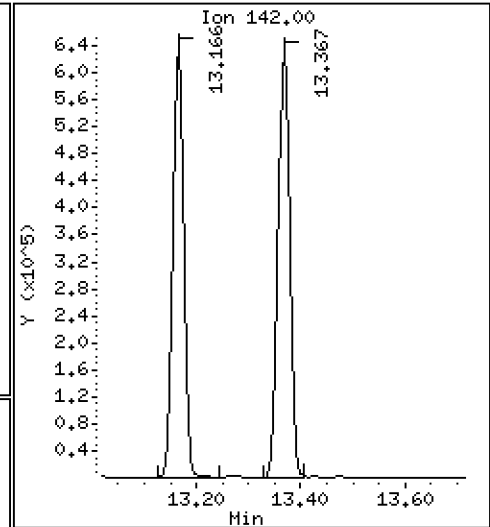
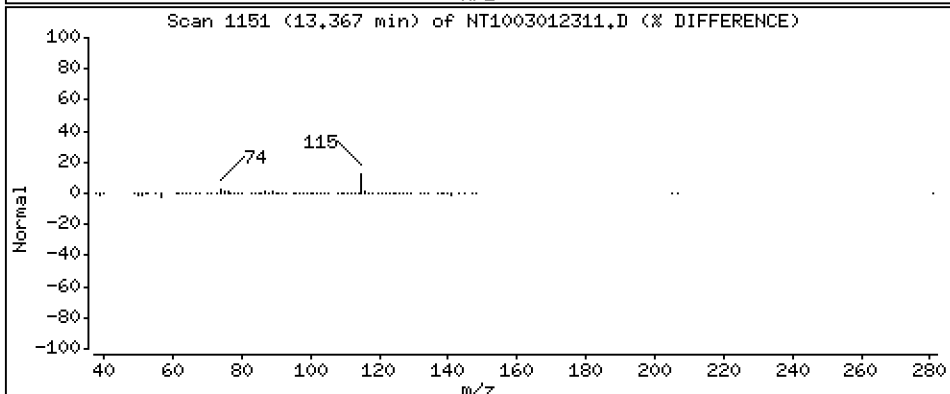
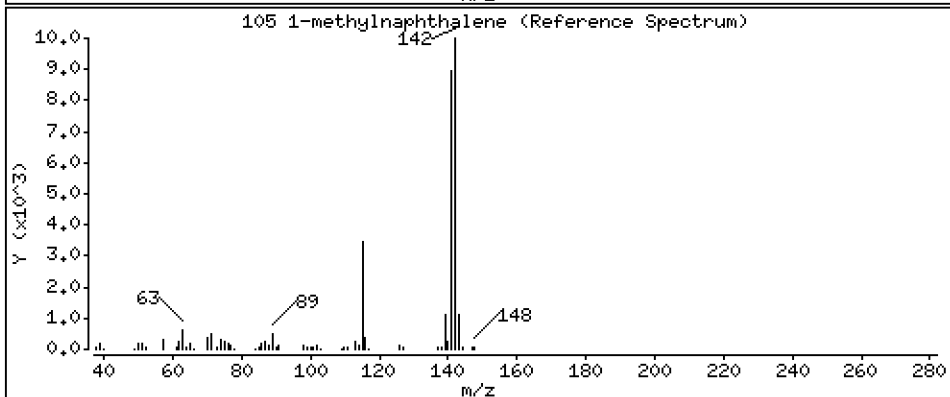
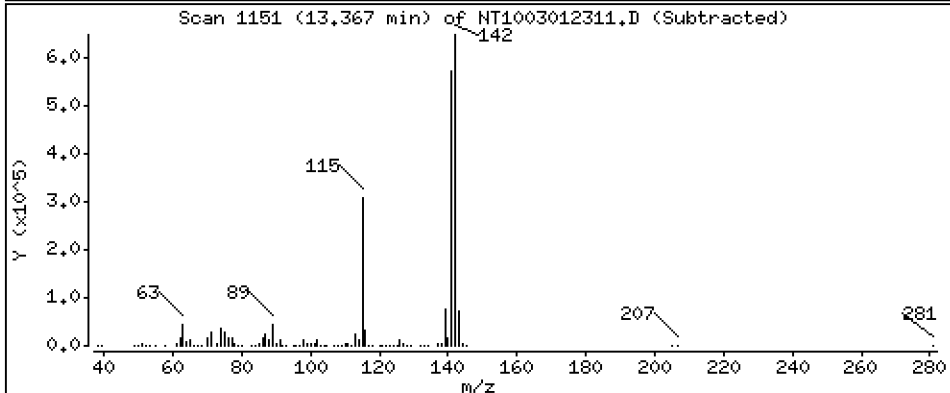
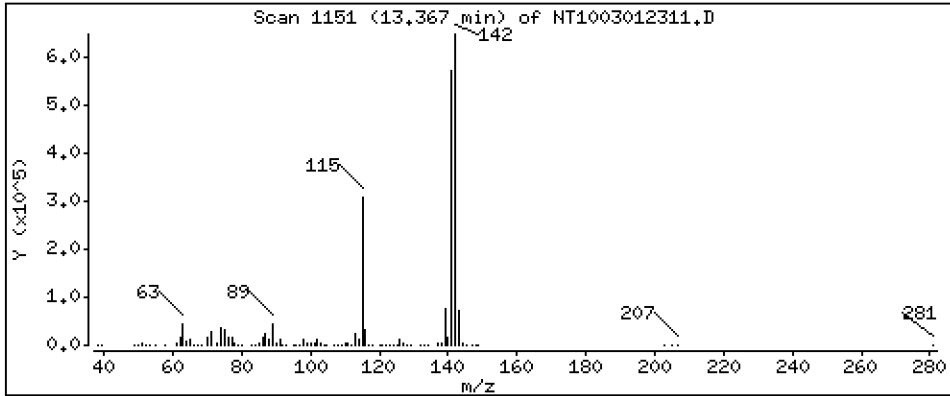
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 5,219 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

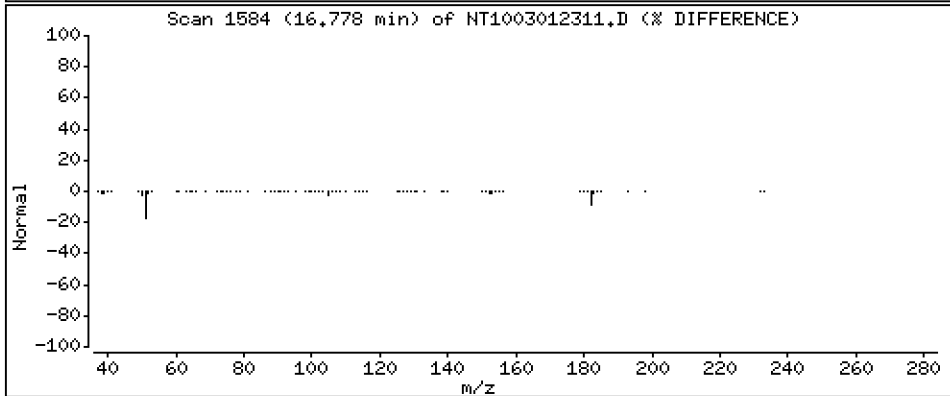
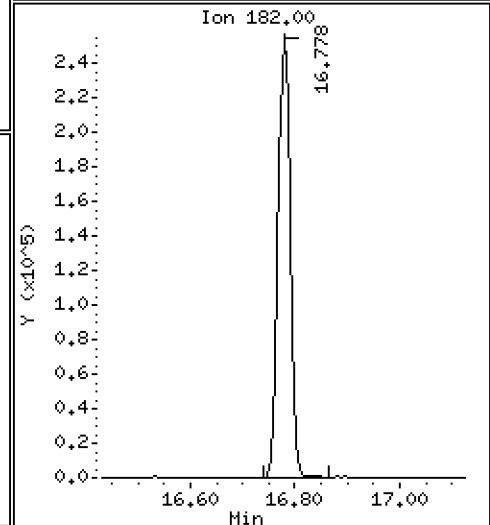
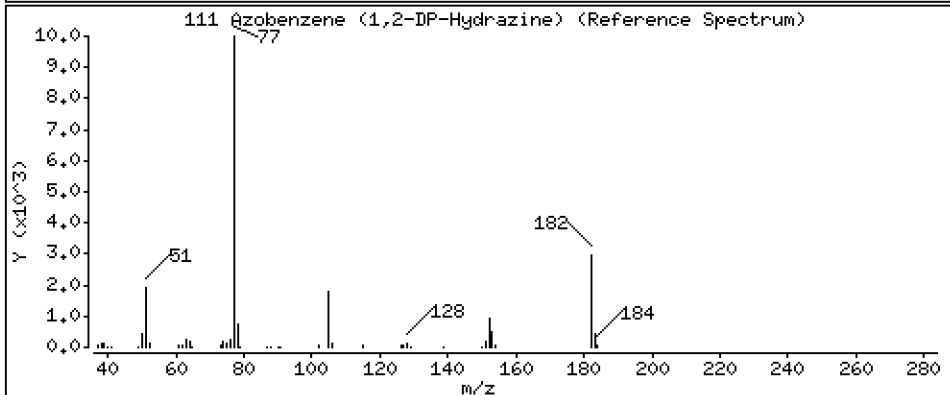
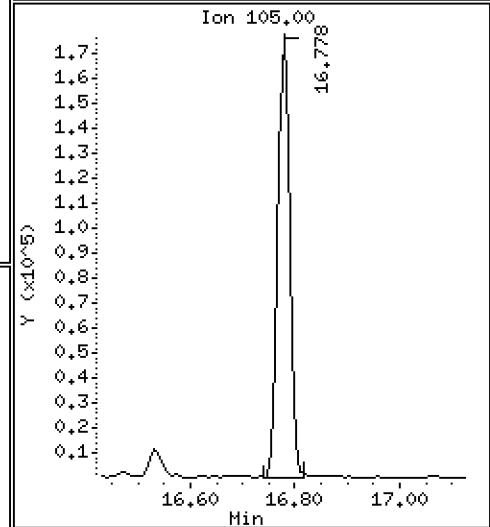
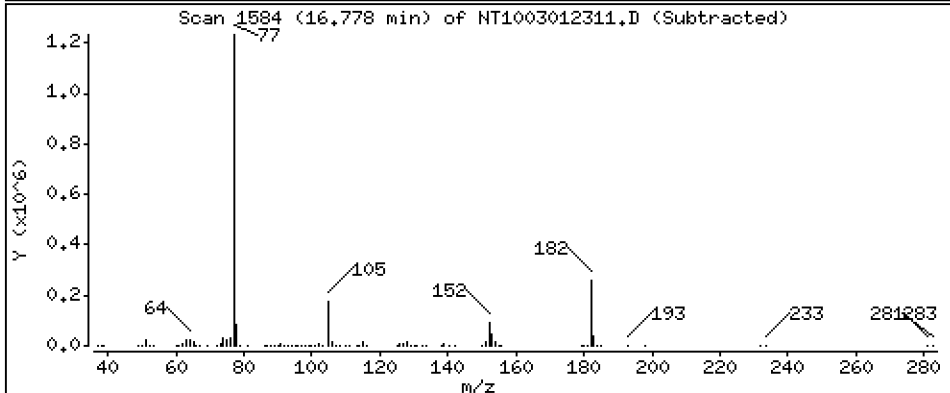
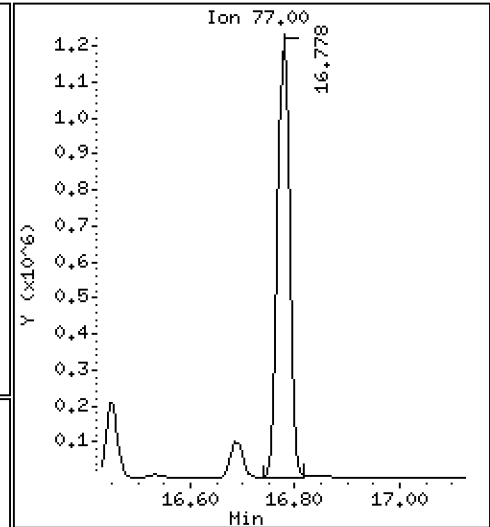
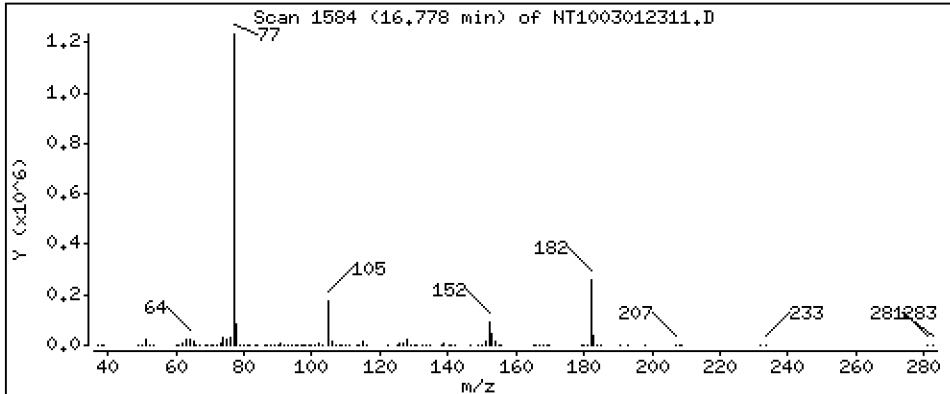
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 5,953 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

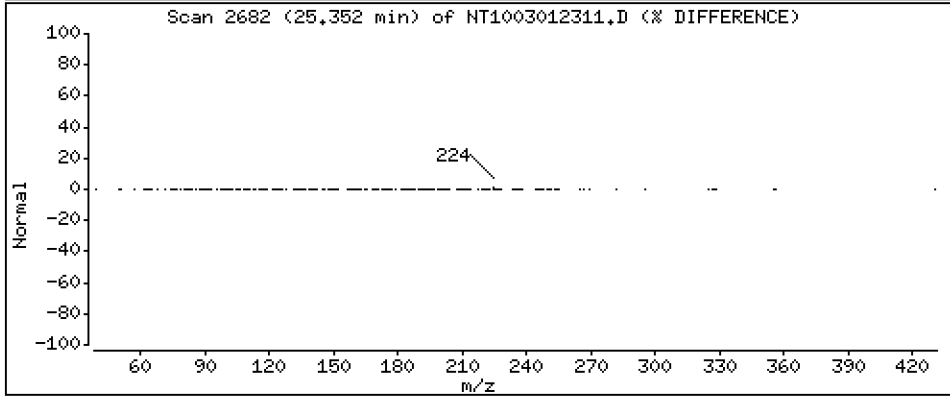
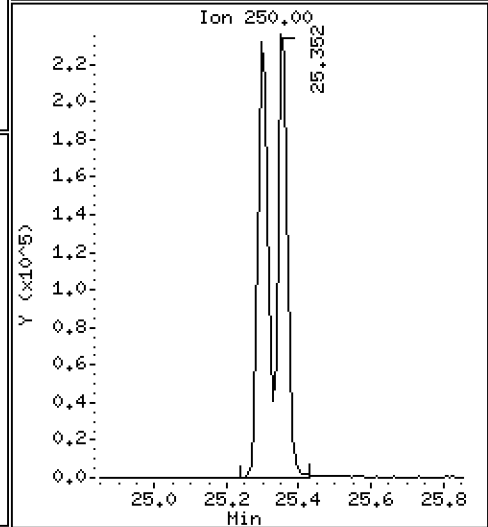
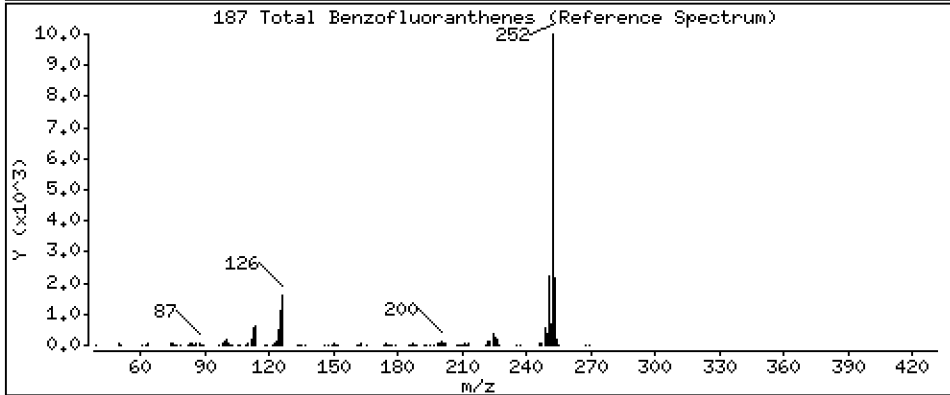
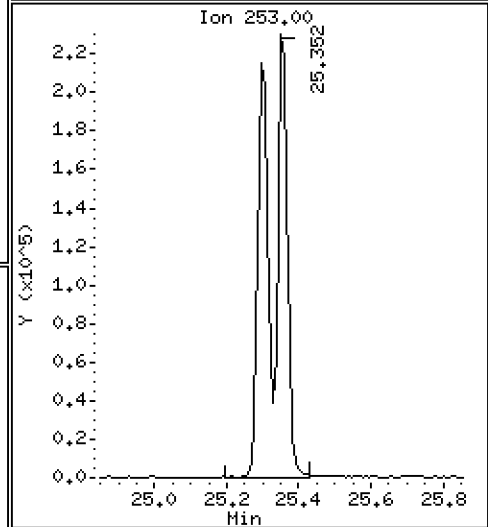
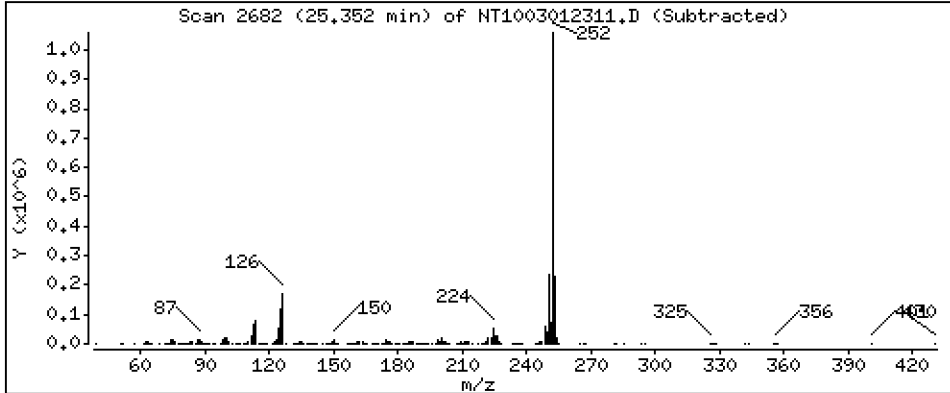
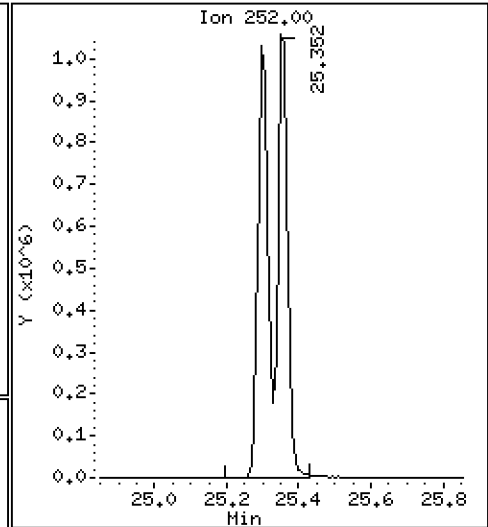
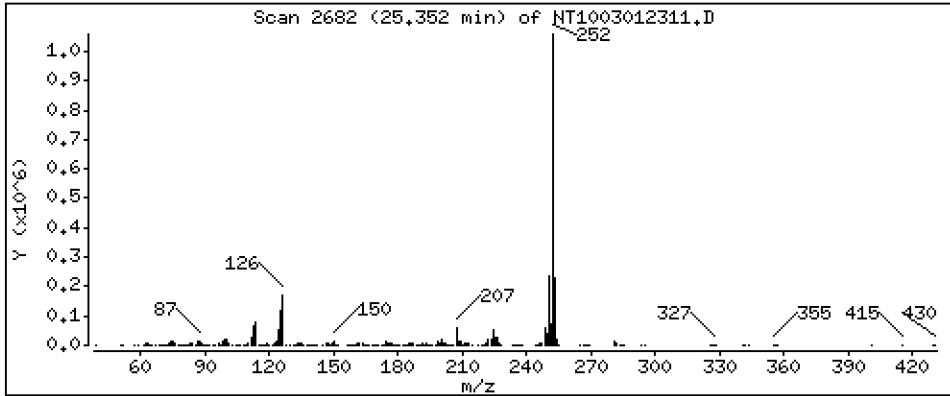
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,905 ug/mL



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

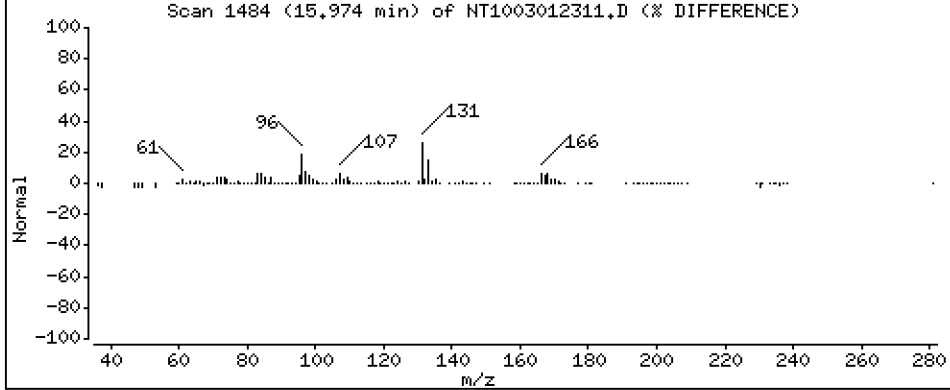
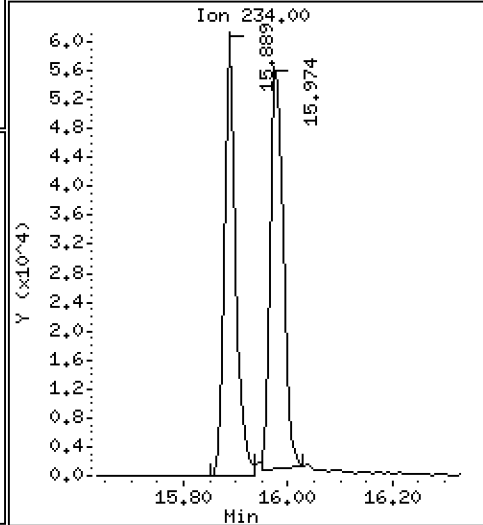
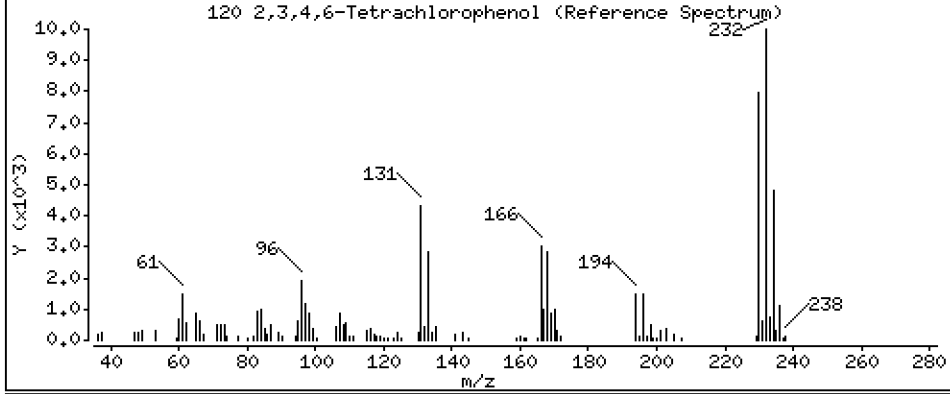
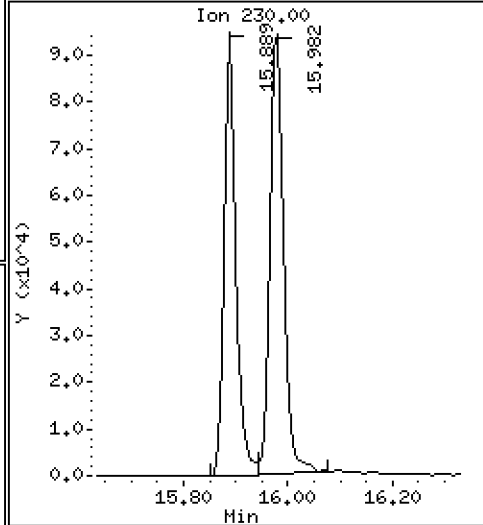
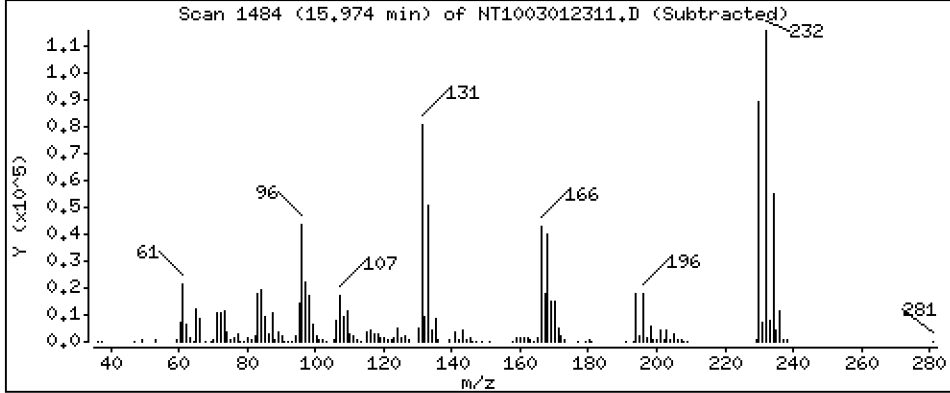
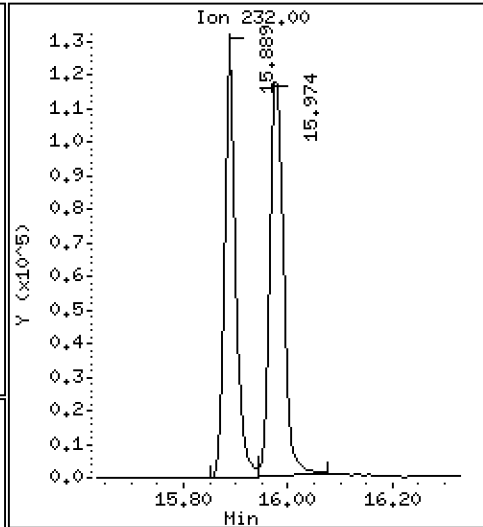
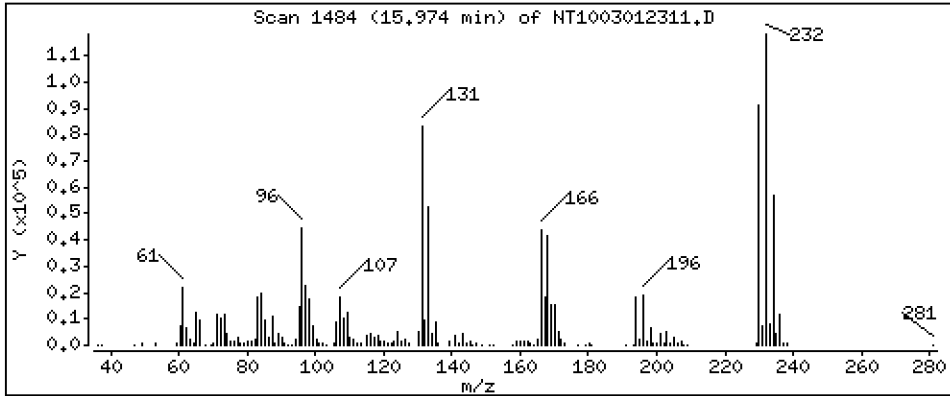
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 3,534 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
 Lab Smp Id: SLC0084-SCV1
 Inj Date : 01-MAR-2023 21:46
 Operator : VTS
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Meth Date : 07-Mar-2023 12:44 yev
 Cal Date : 01-MAR-2023 19:15
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: ORGDATA102

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012307.D

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		Compound Not Detected.					
\$ 2 Phenol-d5	99		Compound Not Detected.					
3 Phenol	94		8.512	8.512	(0.921)	534295	4.85212	4.852
\$ 5 2-Chlorophenol-d4	132		Compound Not Detected.					
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.944)	498825	5.92811	5.928 (M)
6 2-Chlorophenol	128		8.844	8.844	(0.956)	430747	4.69234	4.692
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	533006	5.26632	5.266
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	283537	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.278	(1.003)	524367	5.21589	5.216
\$ 10 1,2-Dichlorobenzene-d4	152		9.247	9.534	(1.000)	283537	4.29482	4.295
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	505415	5.19402	5.194
11 Benzyl alcohol	108		9.472	9.472	(1.024)	283618	4.89779	4.898
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728	(1.053)	174821	6.23165	6.232
13 2-Methylphenol	108		9.650	9.650	(1.044)	364596	4.19238	4.192
17 Hexachloroethane	117		10.209	10.209	(1.104)	224586	5.44260	5.443
16 N-Nitroso-di-n-propylamine	70		9.977	9.976	(1.079)	392376	5.90505	5.905
15 4-Methylphenol	108		9.945	9.938	(1.076)	448938	4.23938	4.239
\$ 18 Nitrobenzene-d5	82		Compound Not Detected.					
19 Nitrobenzene	77		10.326	10.326	(0.881)	624582	5.56925	5.569
20 Isophorone	82		10.784	10.784	(0.920)	1098236	7.67155	7.672
21 2-Nitrophenol	139		10.950	10.951	(0.934)	197578	3.24407	3.244
22 2,4-Dimethylphenol	107		10.993	10.993	(0.938)	379240	3.50675	3.507
23 Bis(2-Chloroethoxy)methane	93		11.205	11.205	(0.956)	595145	6.72720	6.727
24 Benzoic acid	105		11.103	11.052	(0.947)	362406	5.63546	5.635
25 2,4-Dichlorophenol	162		11.417	11.417	(0.974)	379310	4.43743	4.437
26 1,2,4-Trichlorobenzene	180		11.595	11.595	(0.989)	413079	4.90787	4.908
* 27 Naphthalene-d8	136		11.719	11.719	(1.000)	1089120	4.00000	
28 Naphthalene	128		11.765	11.765	(1.004)	1468990	5.25508	5.255
29 4-Chloroaniline	127		11.858	11.858	(1.012)	469377	3.79133	3.791
30 Hexachlorobutadiene	225		11.989	11.997	(1.023)	307313	5.01449	5.014
31 4-Chloro-3-methylphenol	107		12.802	12.809	(1.092)	402740	4.45246	4.452
32 2-Methylnaphthalene	142		13.165	13.165	(1.123)	977687	4.95082	4.951
33 Hexachlorocyclopentadiene	237		13.467	13.475	(0.879)	52130	2.56222	2.562

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.722	13.730	(0.896)	241174	4.12027	4.120	
35 2,4,5-Trichlorophenol	196		13.792	13.808	(0.900)	259485	4.14893	4.149 (M)	
§ 36 2-Fluorobiphenyl	172		Compound Not Detected.						
37 2-Chloronaphthalene	162		14.164	14.164	(0.925)	895889	5.26440	5.264	
38 2-Nitroaniline	65		14.365	14.365	(0.938)	237773	5.02711	5.027	
39 Dimethylphthalate	163		14.736	14.736	(0.962)	1056857	5.38446	5.384	
40 Acenaphthylene	152		15.023	15.023	(0.981)	1703355	5.80574	5.806	
41 2,6-Dinitrotoluene	165		14.868	14.868	(0.971)	227062	5.18679	5.187	
* 42 Acenaphthene-d10	164		15.317	15.309	(1.000)	607772	4.00000		
43 3-Nitroaniline	138		15.208	15.224	(0.993)	256002	5.17200	5.172	
44 Acenaphthene	153		15.379	15.378	(1.004)	911910	5.15374	5.154	
45 2,4-Dinitrophenol	184		15.433	15.487	(1.008)	3021	0.26673	0.2667	
46 Dibenzofuran	168		15.742	15.734	(1.028)	1311367	4.99365	4.994	
47 4-Nitrophenol	109		15.533	15.603	(1.014)	133260	3.82233	3.822 (M)	
48 2,4-Dinitrotoluene	165		15.695	15.703	(1.025)	300469	4.72923	4.729	
50 Diethylphthalate	149		16.206	16.198	(1.058)	1172442	5.63859	5.639	
49 Fluorene	166		16.453	16.453	(1.074)	1159050	5.30478	5.305	
51 4-Chlorophenyl-phenylether	204		16.453	16.453	(1.074)	527532	5.25262	5.253	
52 4-Nitroaniline	138		16.469	16.484	(1.075)	278392	5.23237	5.232	
53 4,6-Dinitro-2-methylphenol	198		16.531	16.538	(0.898)	36409	1.29161	1.292	
54 N-Nitrosodiphenylamine	169		16.685	16.693	(0.907)	966268	5.41587	5.416	
§ 55 2,4,6-Tribromophenol	330		Compound Not Detected.						
56 4-Bromophenyl-phenylether	248		17.465	17.472	(0.949)	394706	5.45981	5.460	
57 Hexachlorobenzene	284		17.573	17.573	(0.955)	391196	4.80535	4.805	
58 Pentachlorophenol	266		17.984	17.983	(0.977)	133557	3.49178	3.492	
* 59 Phenanthrene-d10	188		18.401	18.401	(1.000)	1205858	4.00000		
60 Phenanthrene	178		18.448	18.448	(1.003)	1569094	5.08454	5.085	
61 Anthracene	178		18.556	18.556	(1.008)	1371933	4.58472	4.585	
62 Carbazole	167		18.889	18.889	(1.026)	1462441	5.33467	5.335	
63 Di-n-butylphthalate	149		19.585	19.585	(1.064)	2114080	5.46304	5.463	
64 Fluoranthene	202		20.815	20.815	(0.889)	1905220	4.54169	4.542	
65 Pyrene	202		21.248	21.248	(0.907)	1975953	4.62585	4.626	
§ 66 Terphenyl-d14	244		21.519	21.527	(0.919)	6779	0.01961	0.01961	
67 Butylbenzylphthalate	149		22.410	22.410	(0.957)	1022950	4.52520	4.525	
68 Benzo(a)anthracene	228		23.401	23.401	(0.999)	1968545	4.57826	4.578	
* 69 Chrysene-d12	240		23.416	23.416	(1.000)	1219436	4.00000		
70 3,3'-Dichlorobenzidine	252		23.347	23.347	(0.997)	1426681	7.38255	7.383	
71 Chrysene	228		23.463	23.463	(1.002)	1735599	4.96674	4.967	
72 bis(2-Ethylhexyl)phthalate	149		23.401	23.409	(0.956)	1660477	4.95568	4.956	
* 134 Di-n-octylphthalate-d4	153		24.485	24.485	(1.000)	2317357	4.00000		
73 Di-n-octylphthalate	149		24.492	24.492	(1.000)	3003083	5.84397	5.844	
74 Benzo(b)fluoranthene	252		25.298	25.298	(0.969)	1988643	4.31882	4.319	
75 Benzo(k)fluoranthene	252		25.352	25.352	(0.971)	2031546	4.56297	4.563	
76 Benzo(a)pyrene	252		25.987	25.987	(0.996)	1831856	4.44514	4.445	
* 77 Perylene-d12	264		26.103	26.103	(1.000)	1289108	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		28.863	28.863	(1.106)	2089660	4.34488	4.345	
79 Dibenzo(a,h)anthracene	278		28.917	28.925	(1.108)	1695484	4.60754	4.608	
80 Benzo(g,h,i)perylene	276		29.709	29.709	(1.138)	1753537	4.60249	4.602	
90 N-Nitrosodimethylamine	74		4.712	4.719	(0.510)	316213	5.49082	5.491	
91 Aniline	93		Compound Not Detected.						
93 Benzidine	184		21.071	21.094	(0.900)	932502	5.00739	5.007	
103 Pyridine	79		4.774	4.789	(0.516)	554573	5.42989	5.430	
105 1-methylnaphthalene	142		13.366	13.366	(1.141)	932752	5.21855	5.219	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.778	16.778	(1.095)	1848373	5.95279	5.953	

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.352	25.352	(0.971)	3948555	8.90452	8.905
120 2,3,4,6-Tetrachlorophenol	232	15.974	15.982	(1.043)	209122	3.53394	3.534

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
 Lab File ID: NT1003012311.D Calibration Time: 17:21
 Lab Smp Id: SLC0084-SCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	337641	168821	675282	283537	-16.02
27 Naphthalene-d8	1265187	632594	2530374	1089120	-13.92
42 Acenaphthene-d10	692385	346193	1384770	607772	-12.22
59 Phenanthrene-d10	1376777	688389	2753554	1205858	-12.41
69 Chrysene-d12	1019524	509762	2039048	1219436	19.61
134 Di-n-octylphthala	2027111	1013556	4054222	2317357	14.32
77 Perylene-d12	1027409	513705	2054818	1289108	25.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.01
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
134 Di-n-octylphthala	24.48	23.98	24.98	24.49	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

Lab ID: SLC0084-SCV1
nt10.i, 20230301.b\ABN.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

23.401 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.014	1.019	-0.0051	4-Nitrophenol
1.000	1.031	-0.0310	1,2-Dichlorobenzene-d4

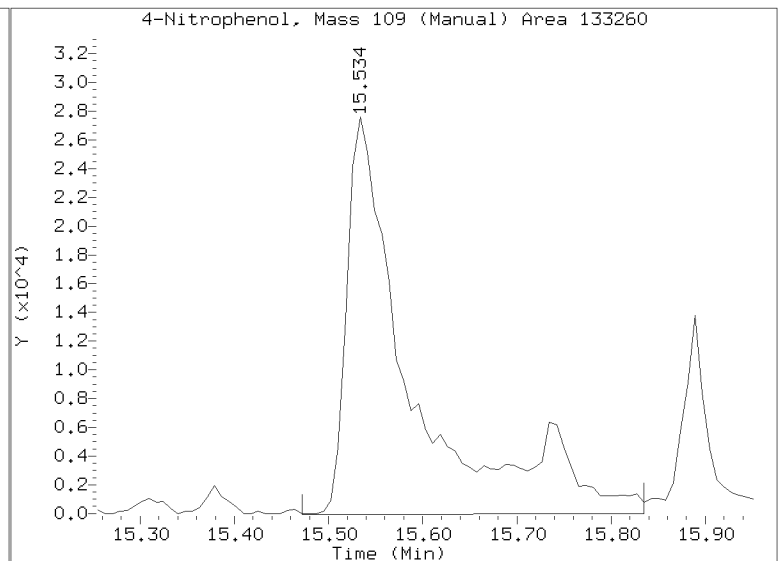
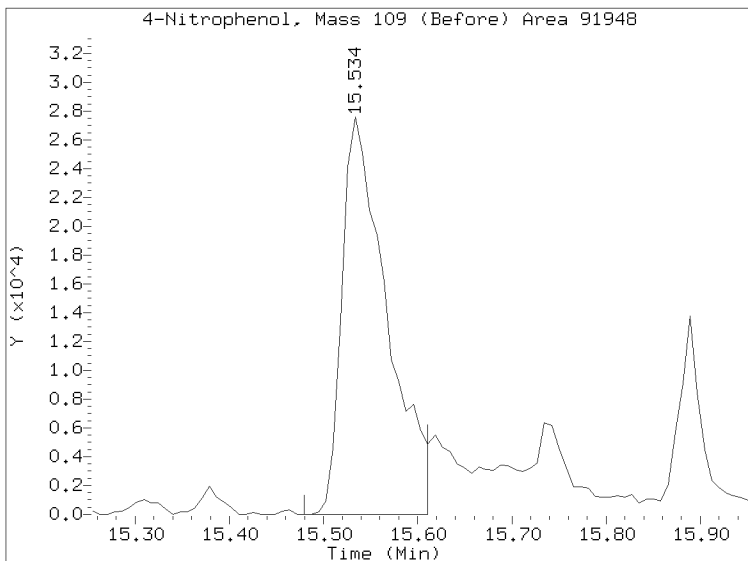
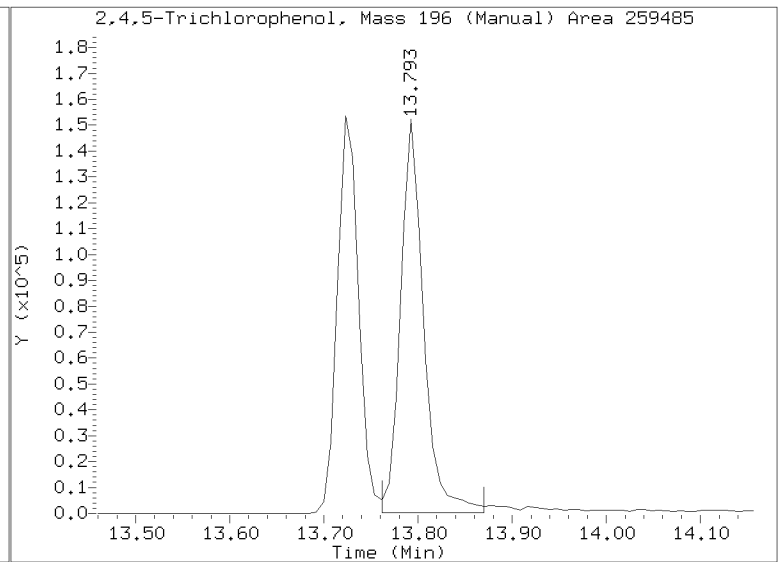
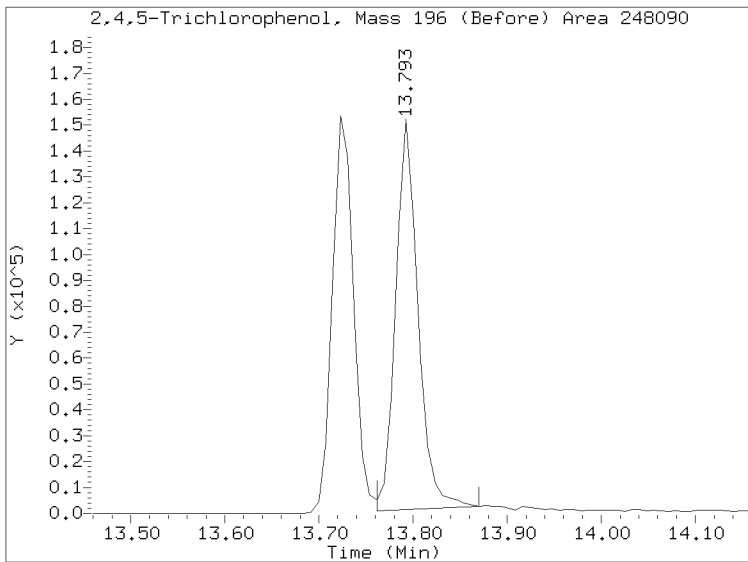
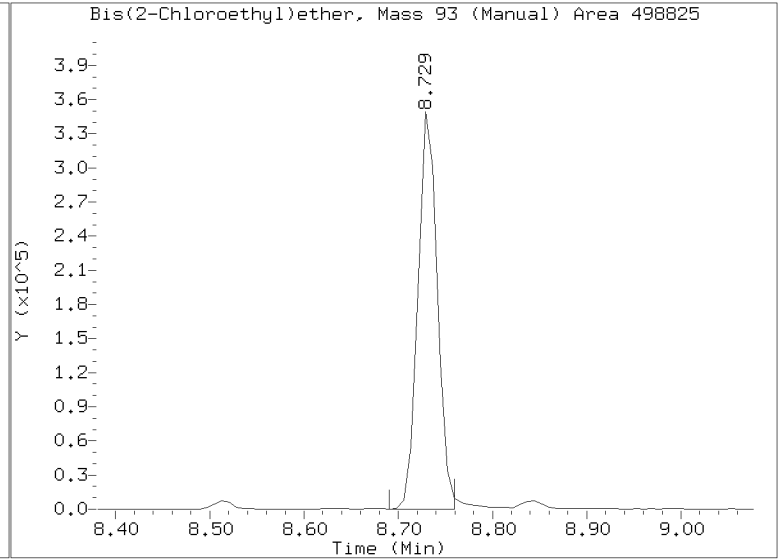
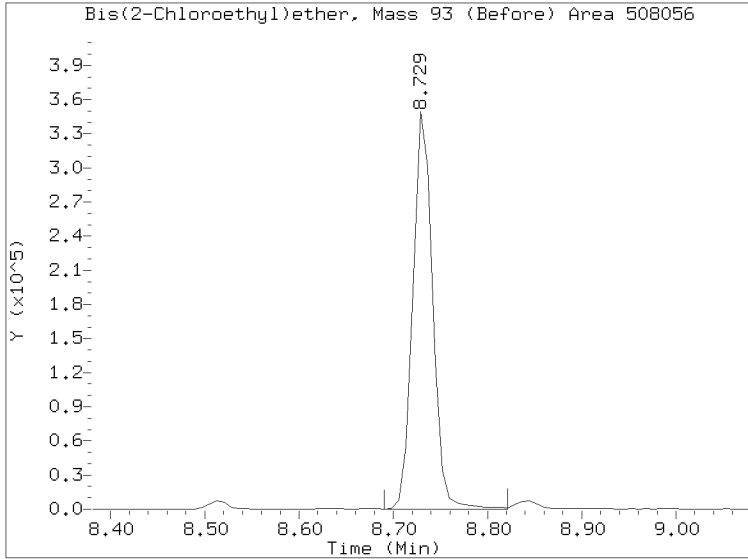
RRT check based on Ccal File: NT1003012307.D

On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID: SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48





CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052314.D

Calibration Date: 03/01/2023

Sequence: SLC0401

Injection Date: 03/05/23

Lab Sample ID: SLC0401-CCV1

Injection Time: 21:38

Sequence Name: Calibration Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.2	1.5534590	1.6188800		4.2	+/-50
4-Methylphenol	A	5.0000	4.3	1.2087680	1.2744640		-14.7	+/-50
Naphthalene	A	5.0000	4.7	1.0266520	0.9624076		-6.3	+/-50
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7190208		-0.9	+/-50
Acenaphthylene	A	5.0000	5.5	1.9309320	2.1082640		9.2	+/-50
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2345270		-4.4	+/-50
Acenaphthene	A	5.0000	4.9	1.1645250	1.1316320		-2.8	+/-50
Dibenzofuran	A	5.0000	5.1	1.7283260	1.7707780		2.5	+/-50
Fluorene	A	5.0000	4.8	1.4379840	1.3930440		-3.1	+/-50
Pentachlorophenol	A	10.000	4.6	0.1145550	0.0592775		-53.6	+/-50 *
Phenanthrene	A	5.0000	4.8	1.0236730	0.9865838		-3.6	+/-50
Anthracene	A	5.0000	5.2	0.9926226	1.0325820		4.0	+/-50
Fluoranthene	A	5.0000	4.2	1.3760330	1.1451070		-16.8	+/-50
Pyrene	A	5.0000	4.3	1.4011560	1.2004140		-14.3	+/-50
Butylbenzylphthalate	A	5.0000	3.7	0.6475451	0.5563039		-25.2	+/-50
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3244670		-6.1	+/-50
Chrysene	A	5.0000	5.1	1.1462500	1.1674650		1.9	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.7	0.5331838	0.5410252		-6.3	+/-50
Benzo(a)fluoranthene, Total	A	10.000	8.8	1.3383070	1.2096380		-12.0	+/-50
Benzo(a)pyrene	A	5.0000	4.5	1.2312020	1.1412360		-10.8	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.6	1.4033590	1.3722900		-8.3	+/-50
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.1150690	1.1351340		-1.0	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.8	1.1245240	1.1408660		-3.7	+/-50
2-Fluorophenol	A	7.5000	7.38	1.2585100	1.2383040		-1.6	+/-50
Phenol-d5	A	7.5000	8.22	1.4611190	1.6015740		9.6	+/-50
2-Chlorophenol-d4	A	7.5000	7.97	1.2465880	1.3246490		6.3	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.86	0.9313544	0.9044504		-2.9	+/-50
Nitrobenzene-d5	A	5.0000	5.35	0.4390871	0.4698152		7.0	+/-50
2-Fluorobiphenyl	A	5.0000	5.23	1.4267270	1.4928270		4.6	+/-50
2,4,6-Tribromophenol	A	7.5000	7.63	0.2287830	0.2638791		1.7	+/-50
p-Terphenyl-d14	A	5.0000	4.59	1.1337350	1.0405920		-8.2	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.6\NT1003052314.D

Date: 05-HR-2023 21:38

Client ID:

Sample Info: SLC0401-CCW1

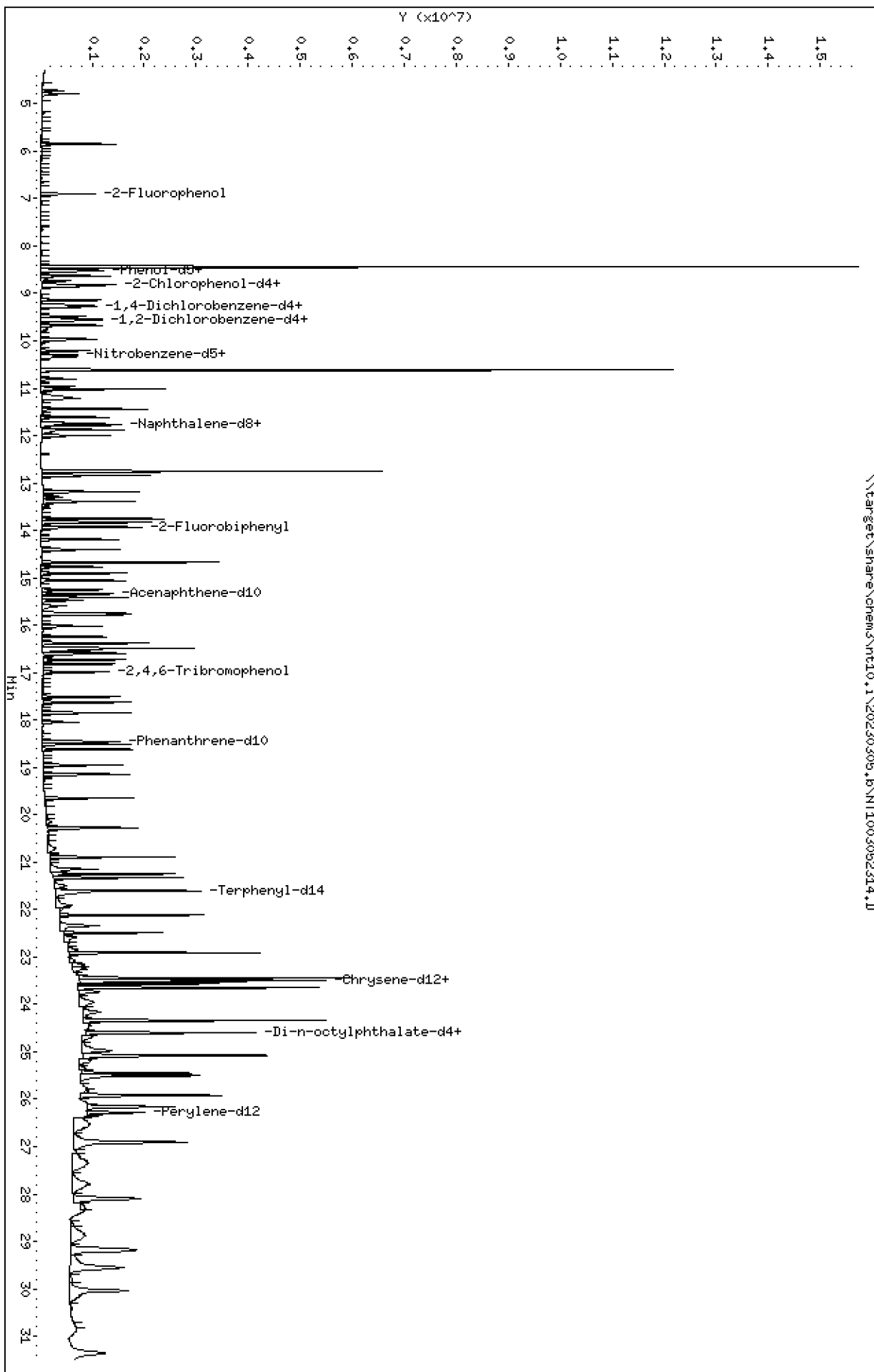
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.6\NT1003052314.D



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

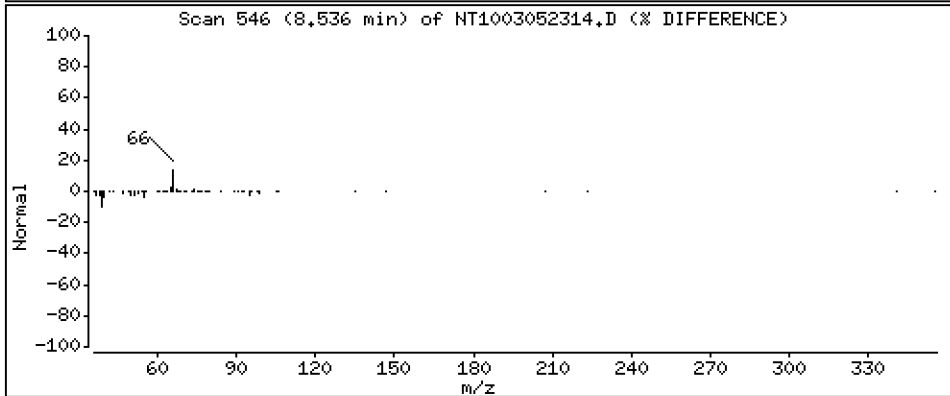
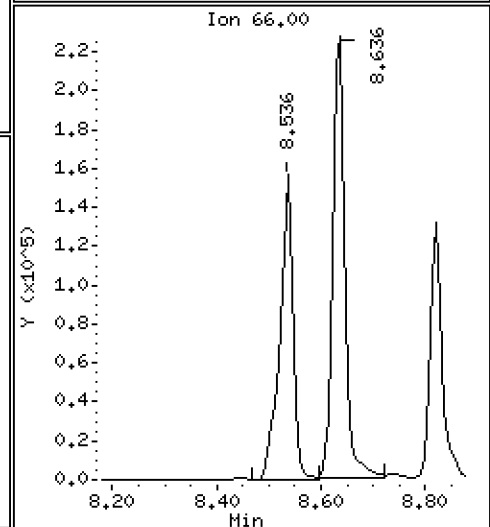
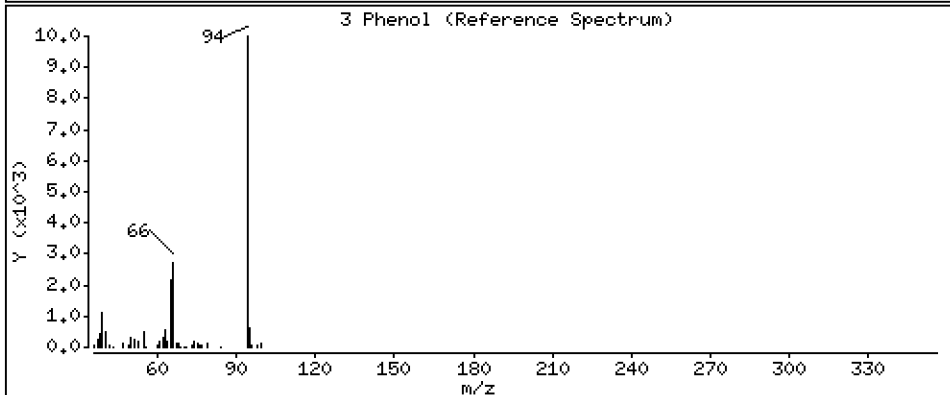
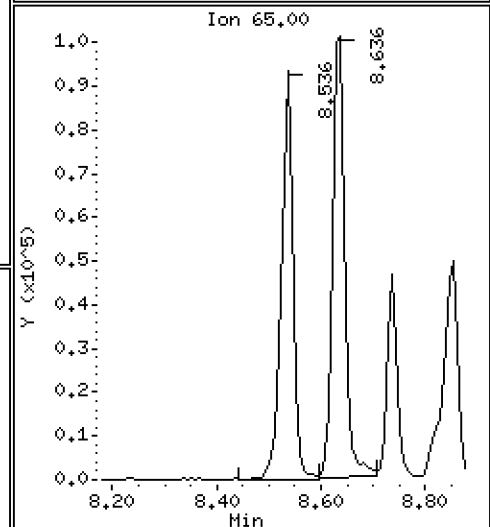
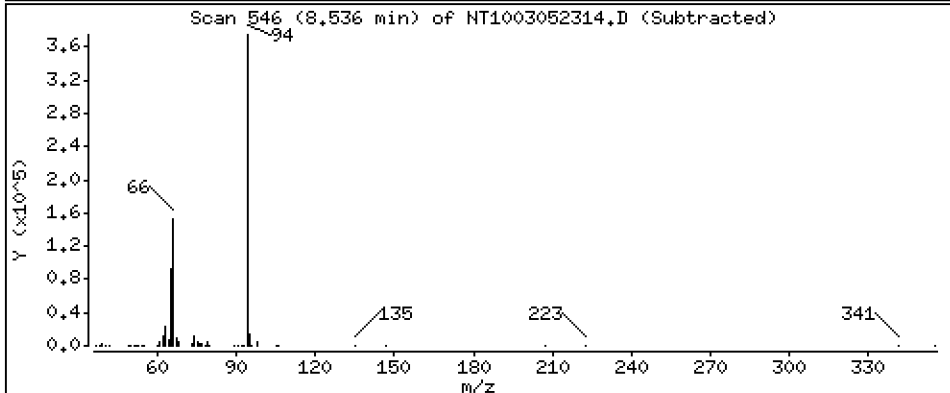
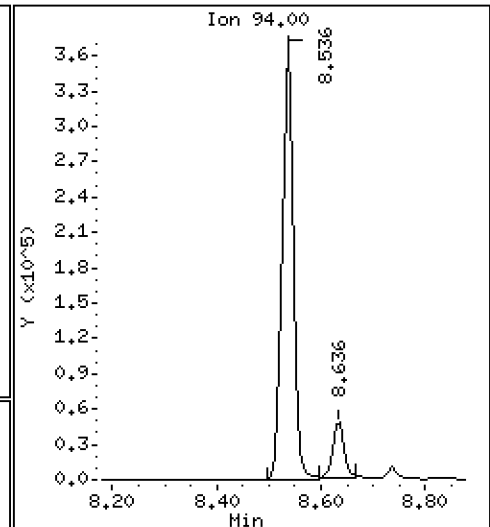
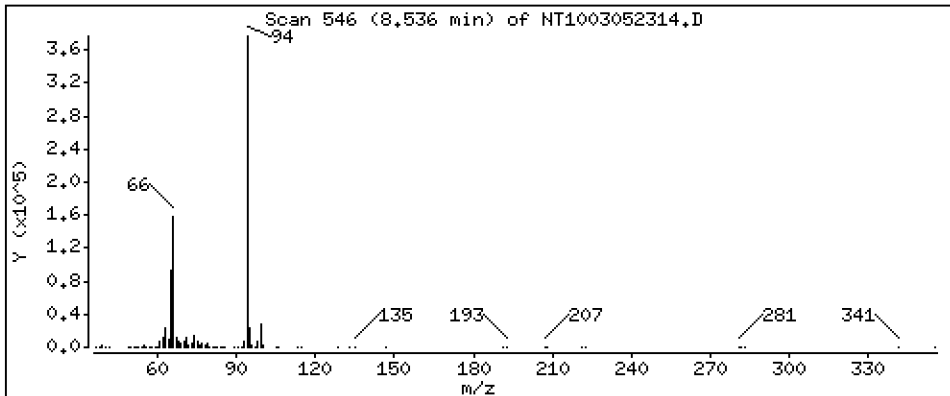
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 5,211 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

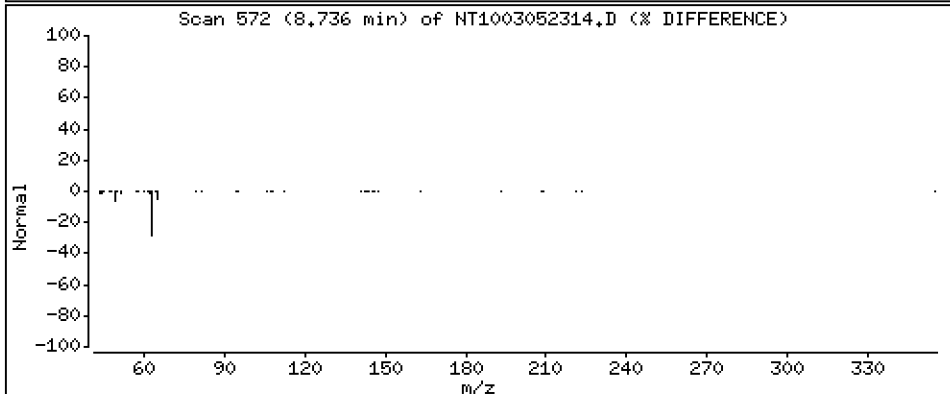
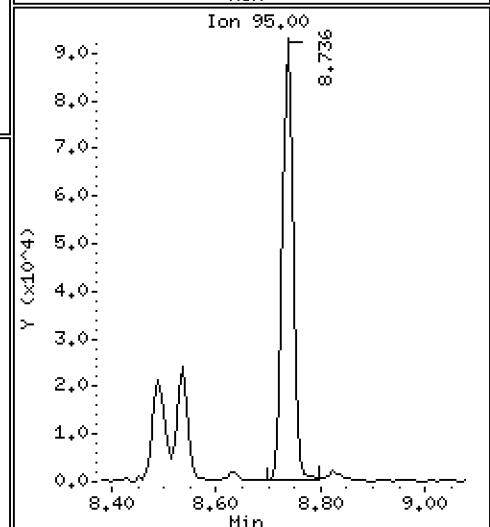
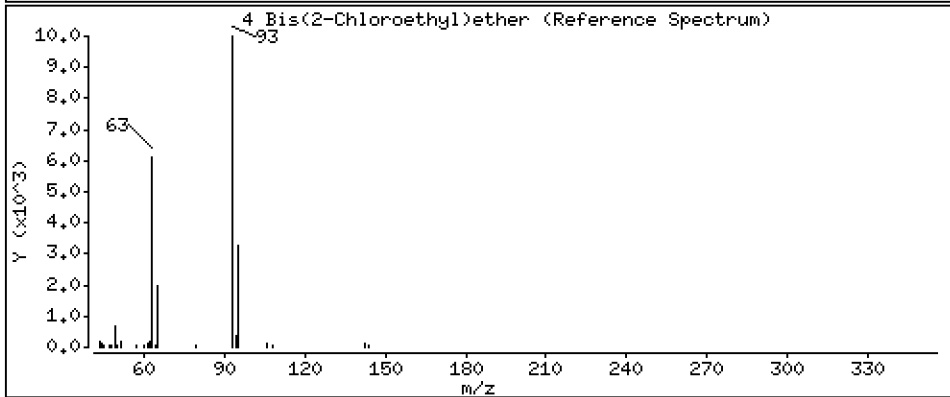
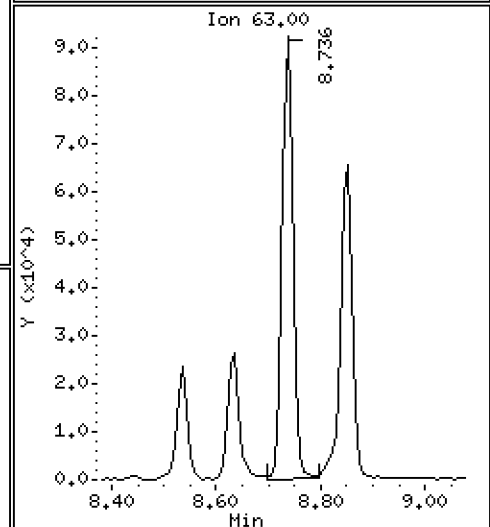
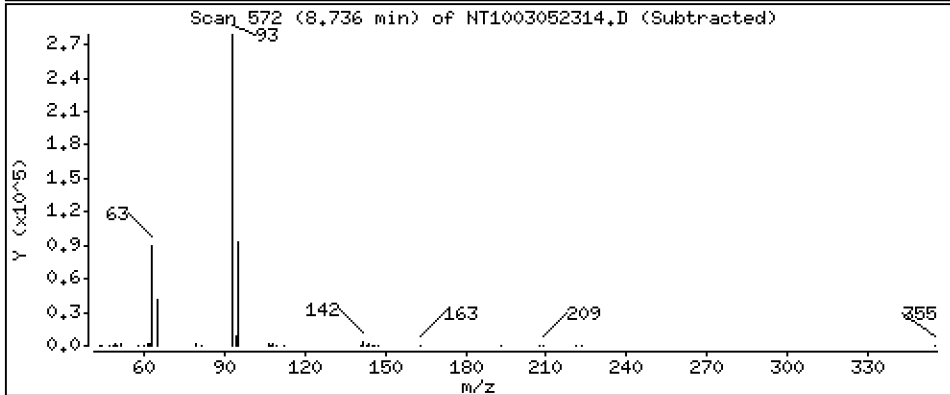
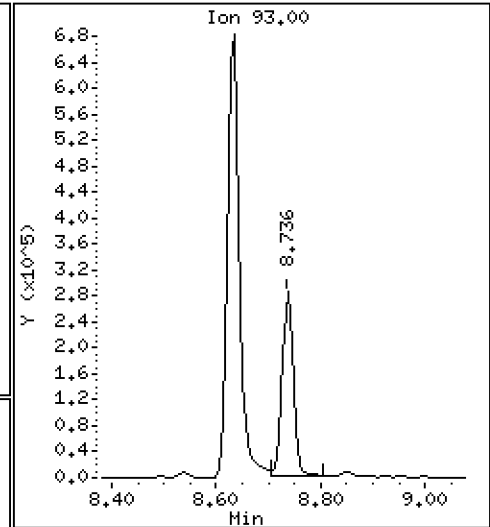
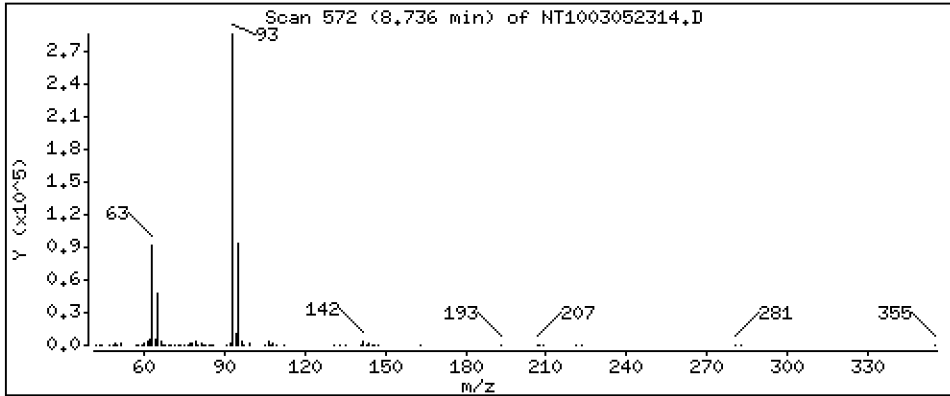
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,008 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

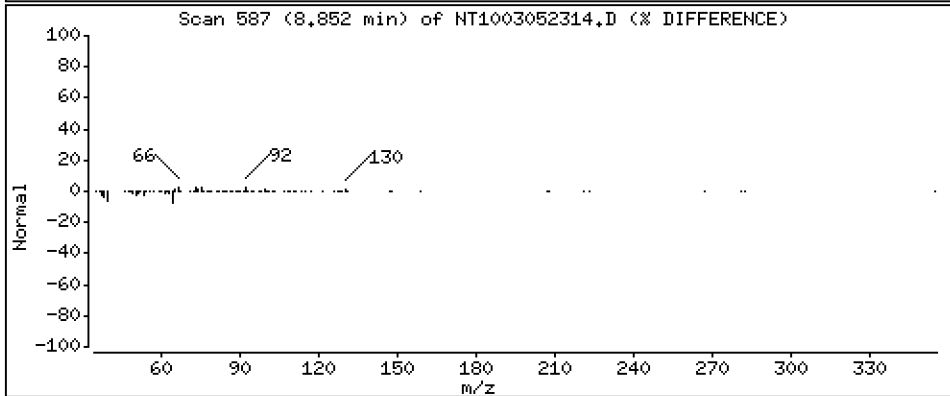
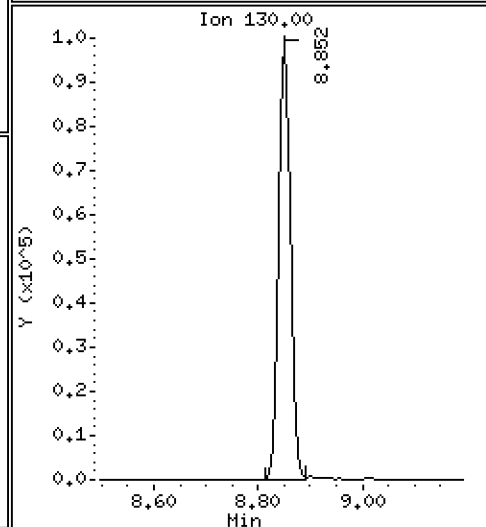
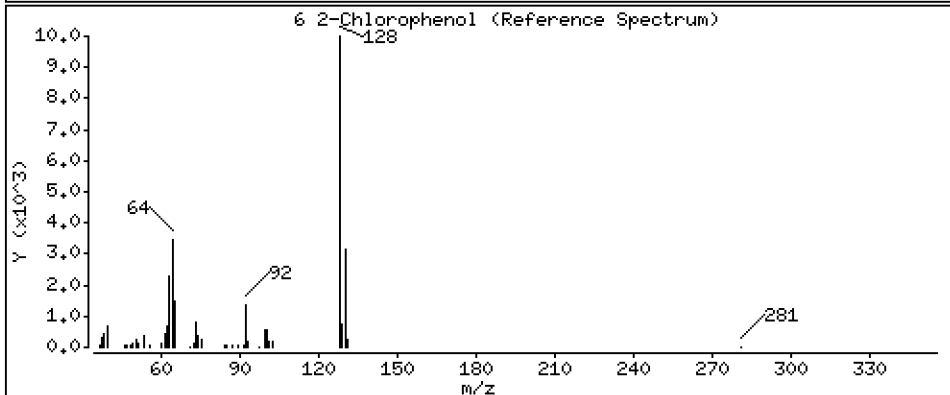
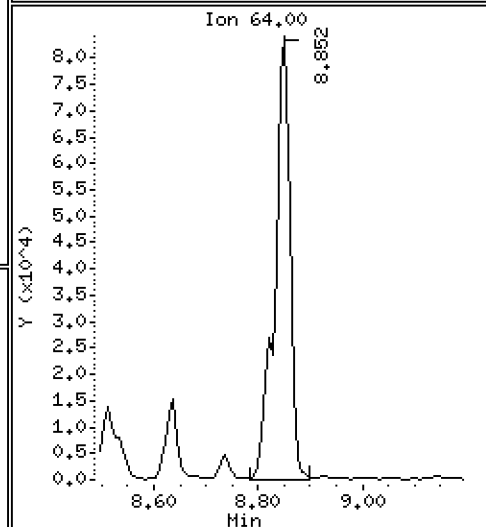
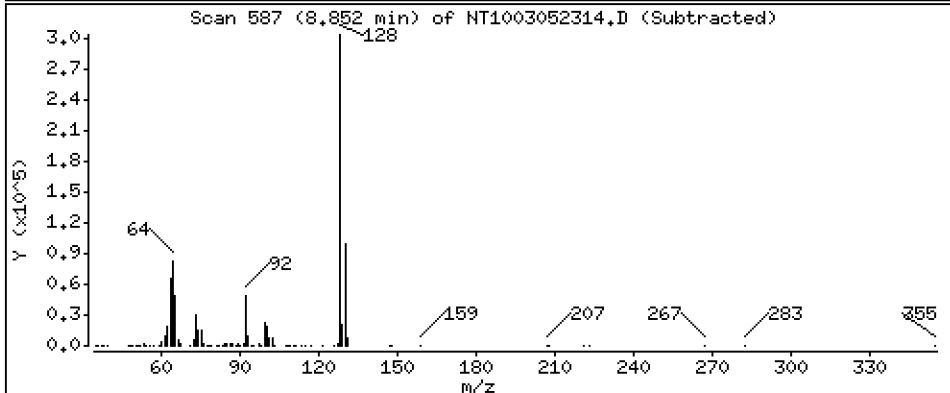
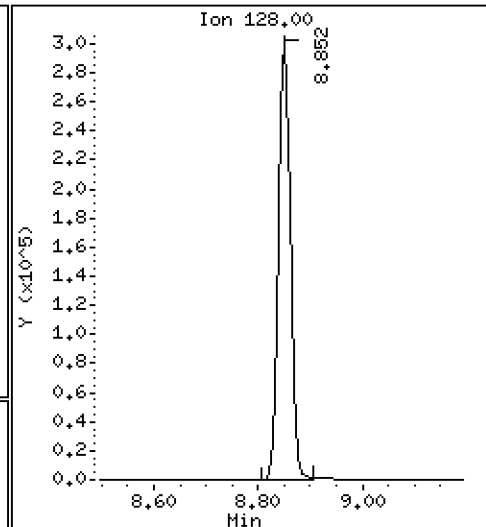
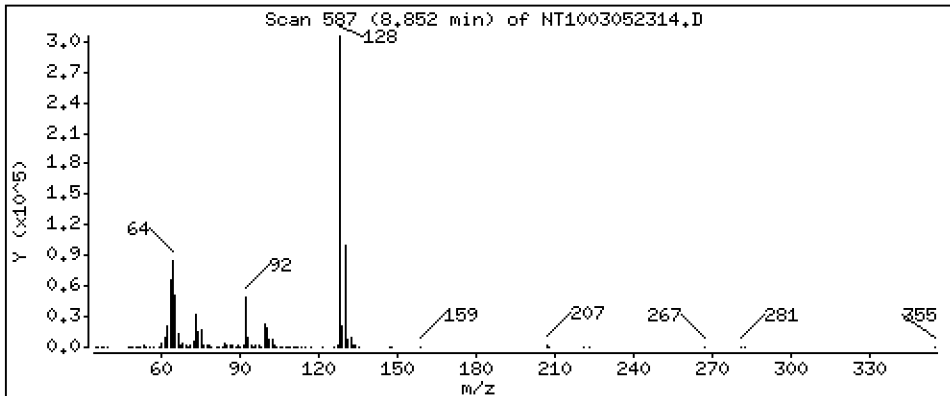
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 5,271 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

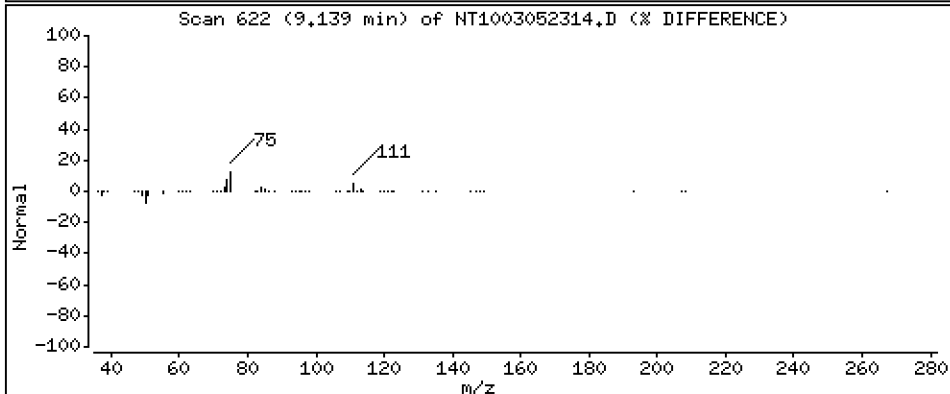
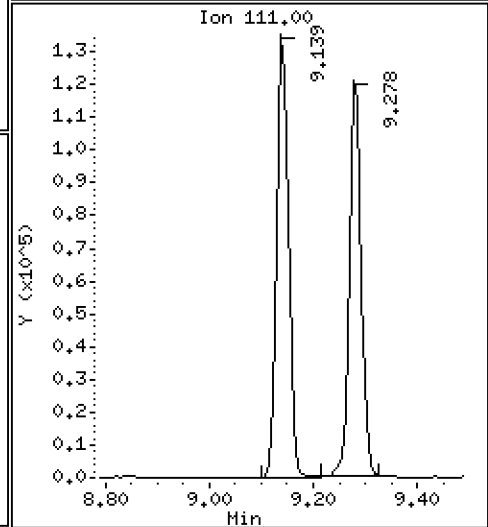
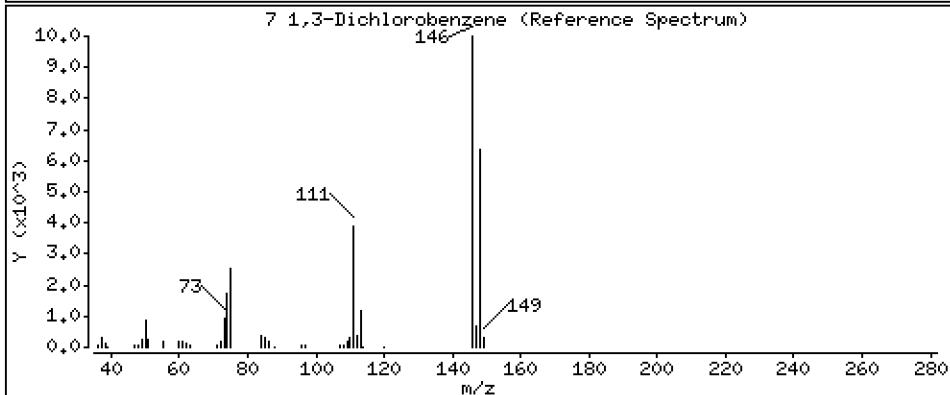
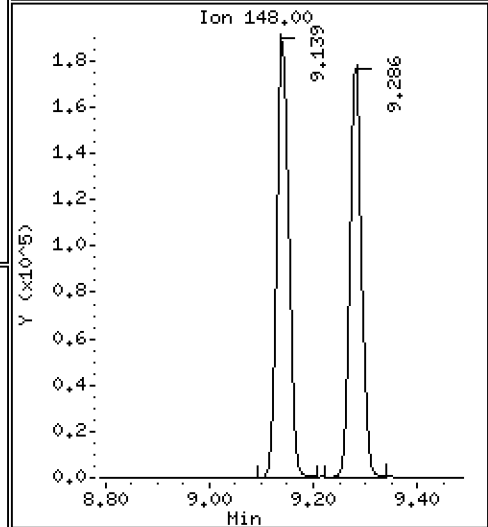
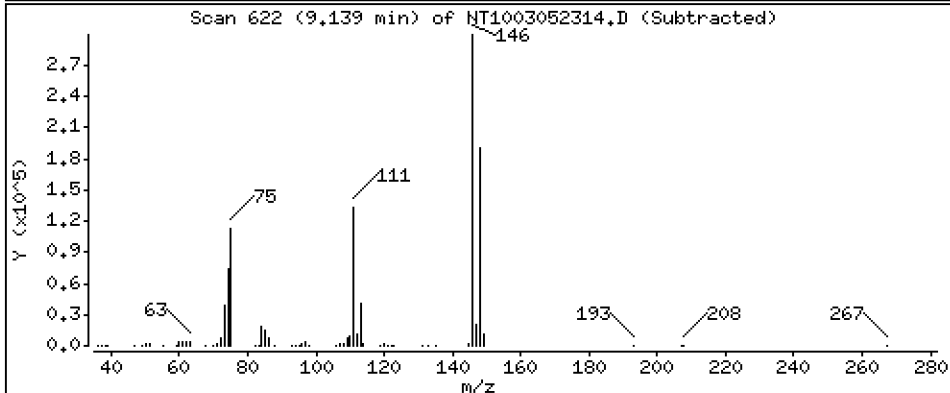
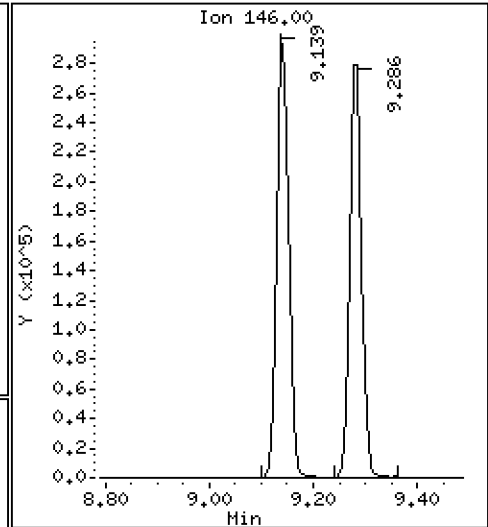
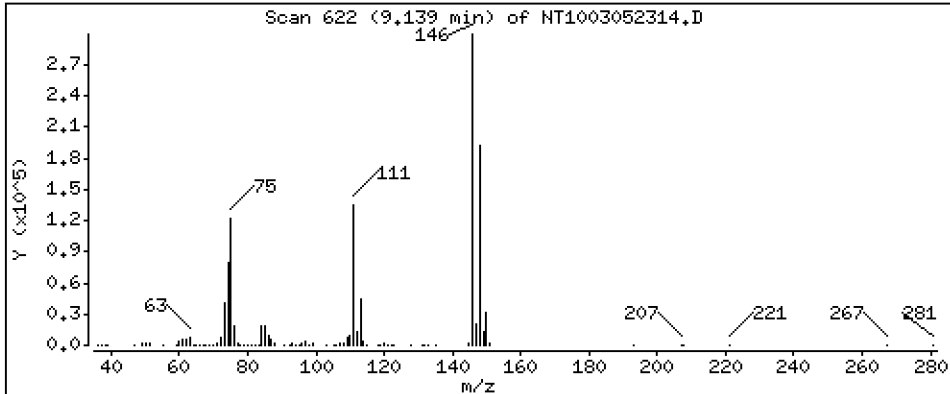
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,802 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

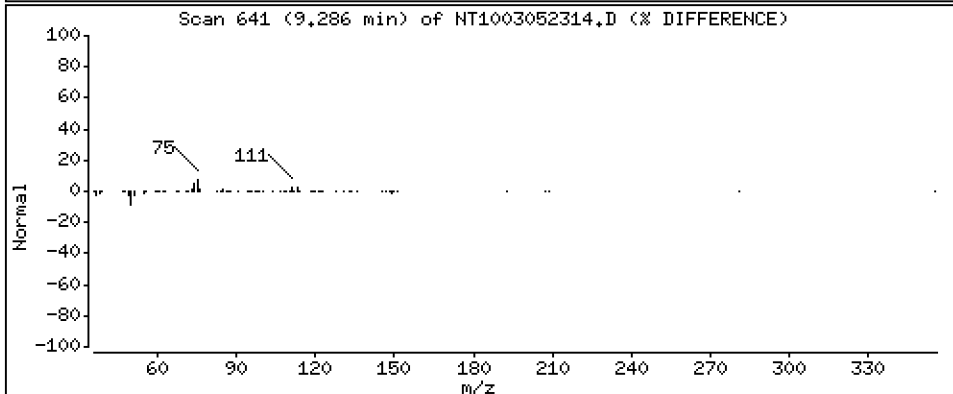
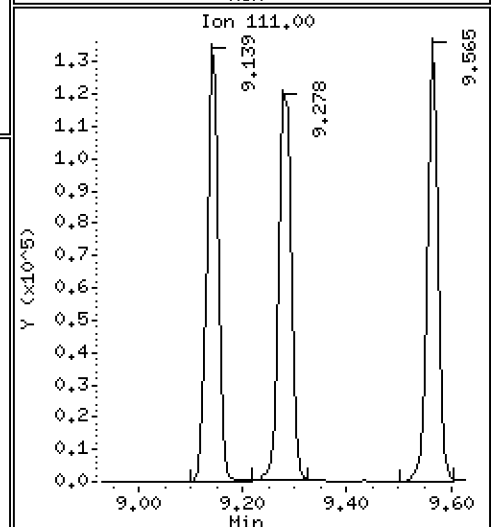
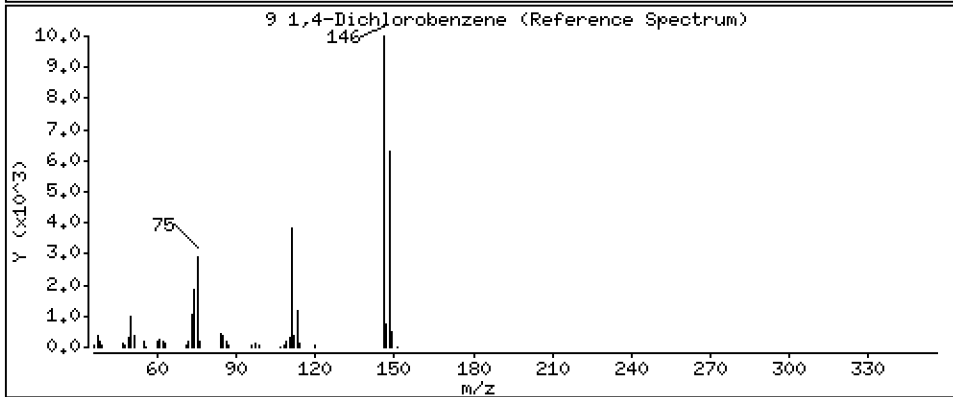
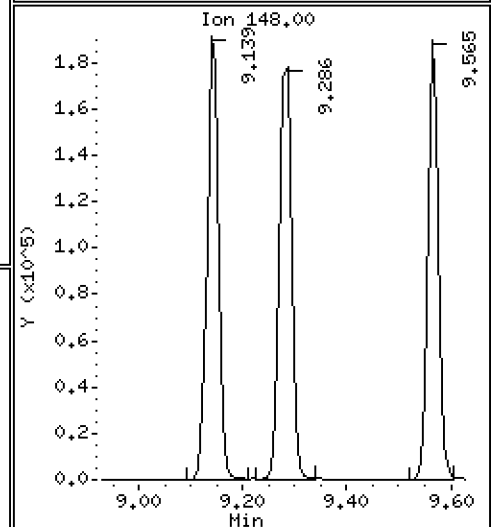
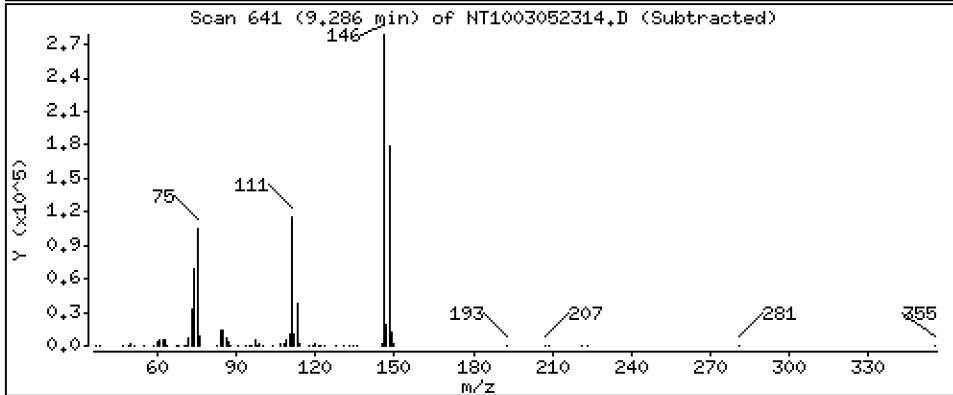
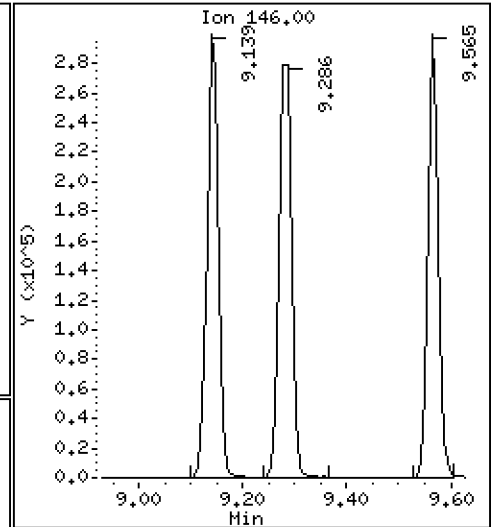
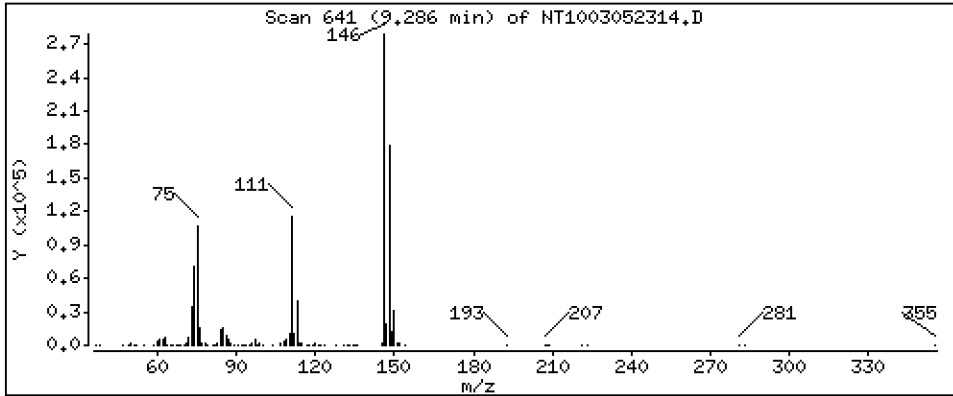
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,686 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

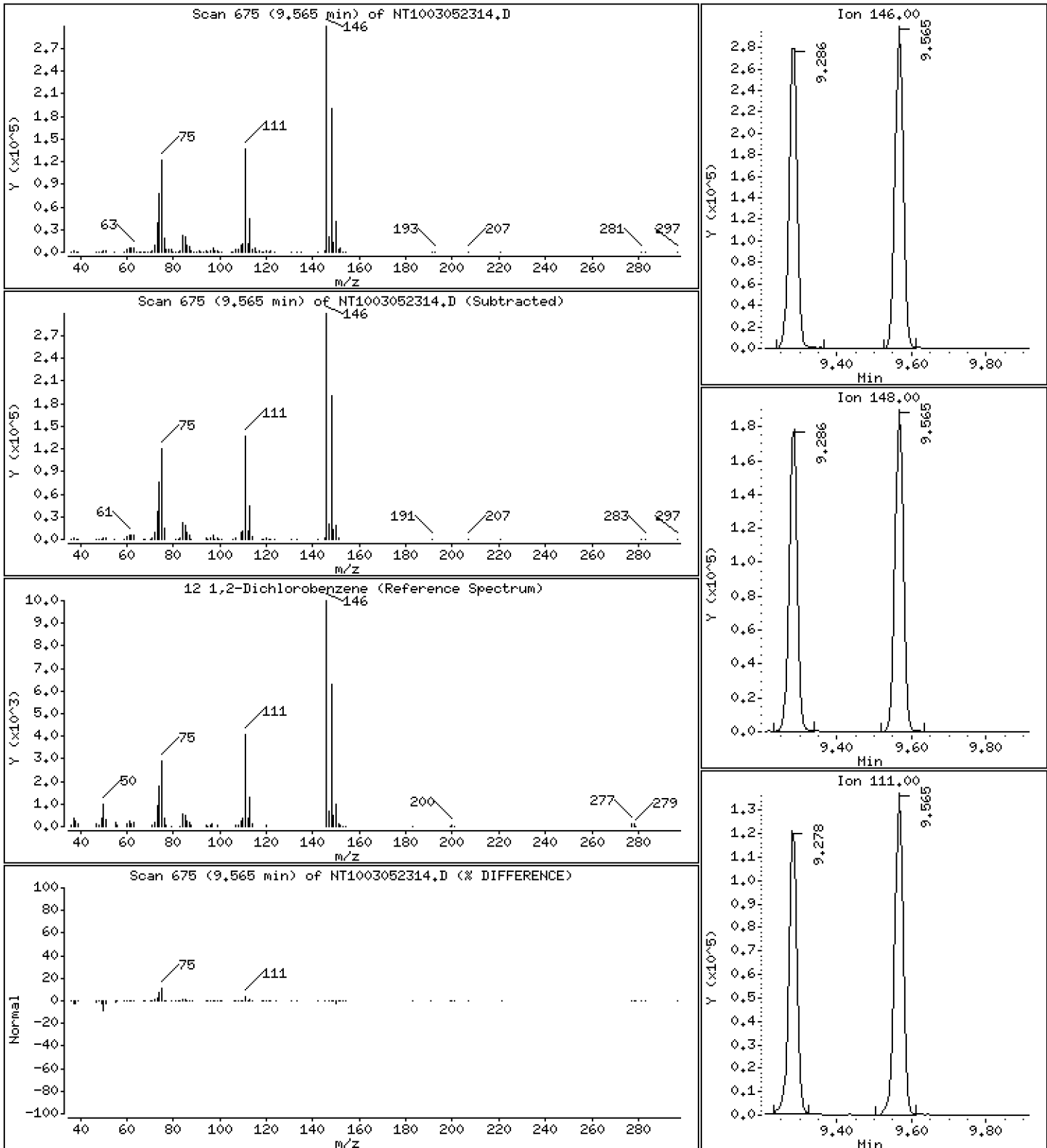
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,709 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

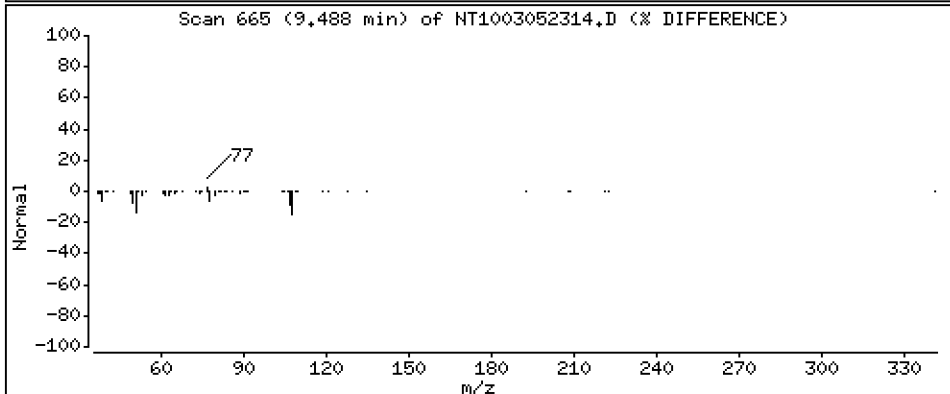
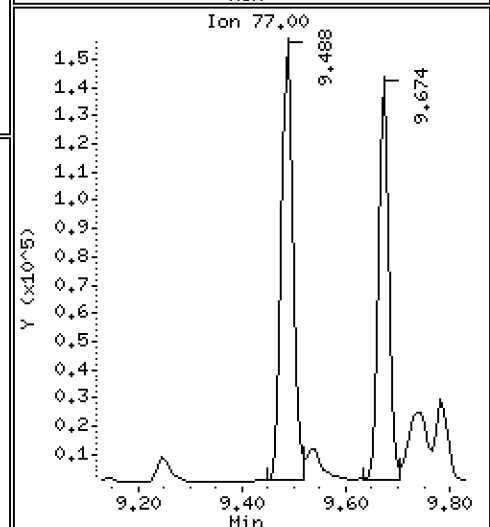
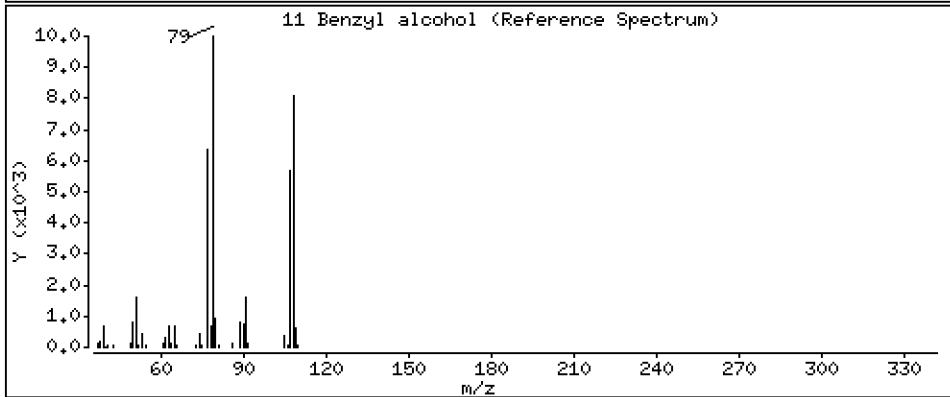
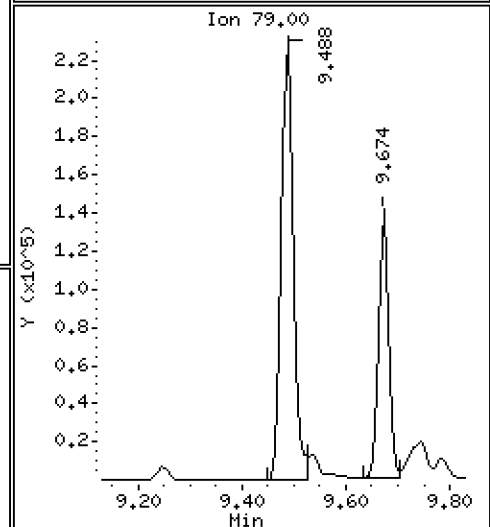
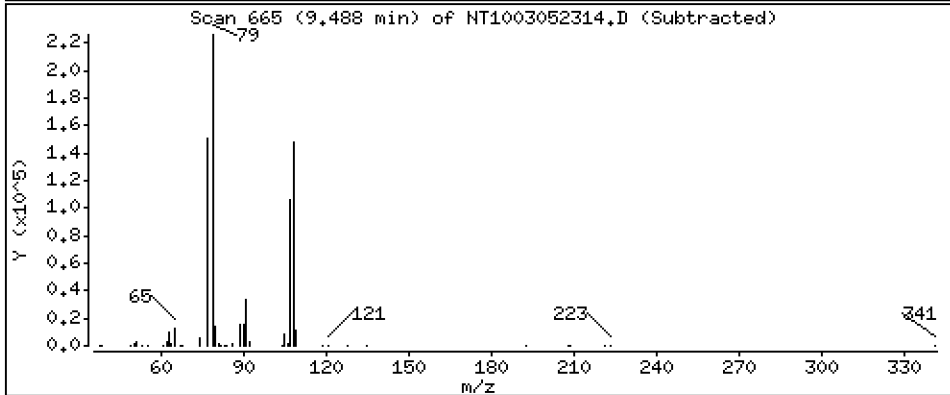
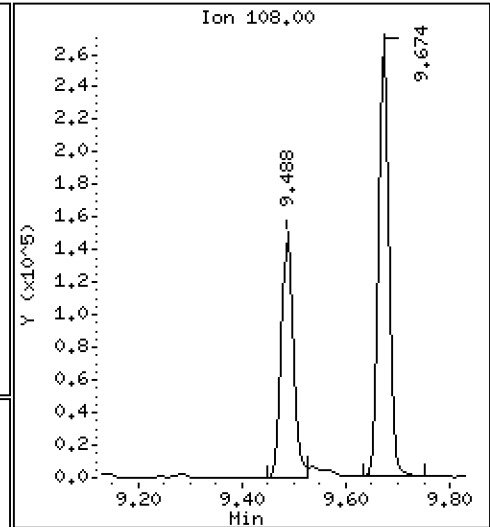
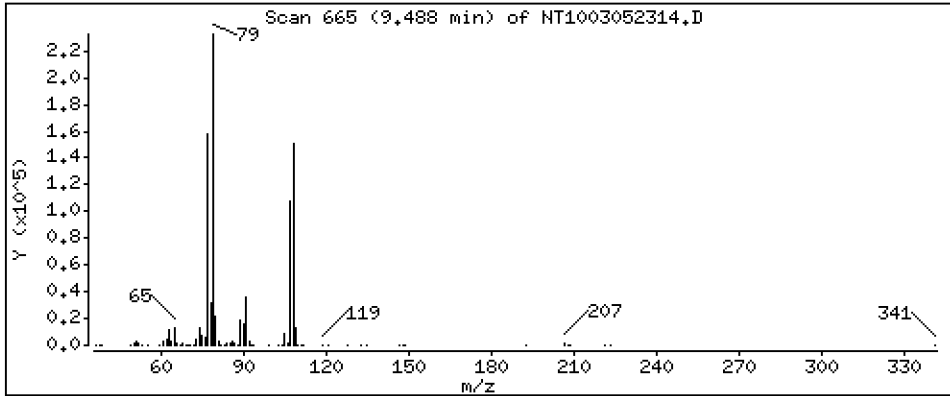
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,246 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

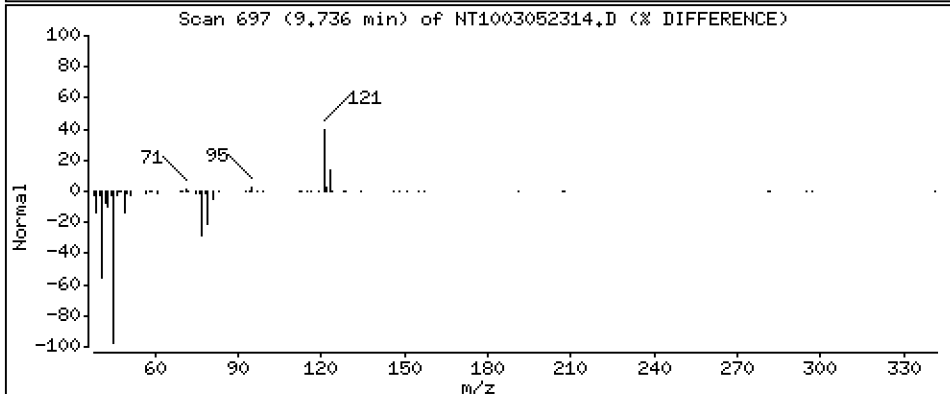
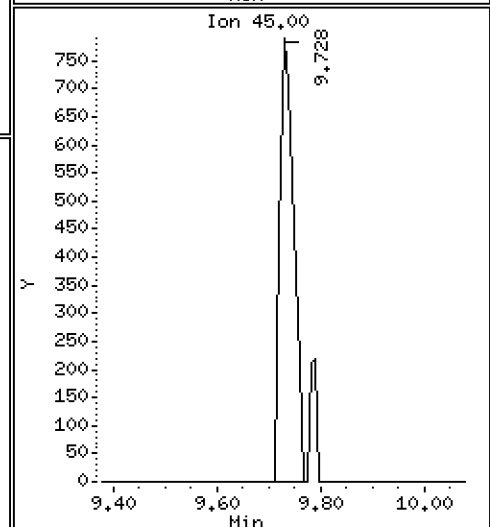
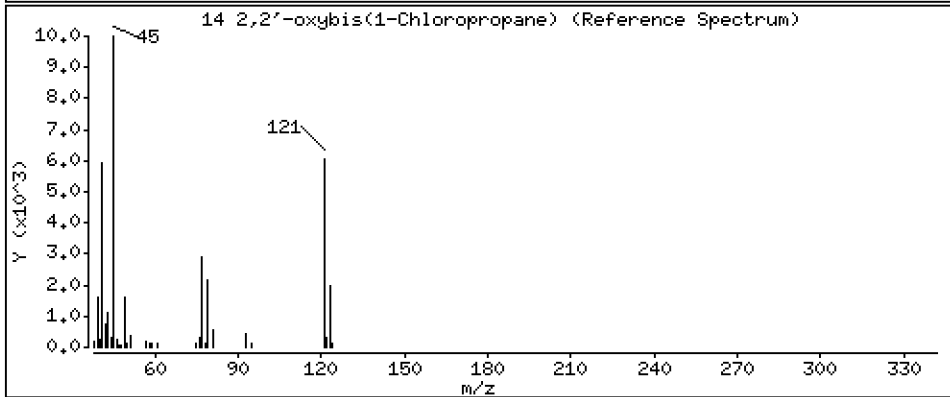
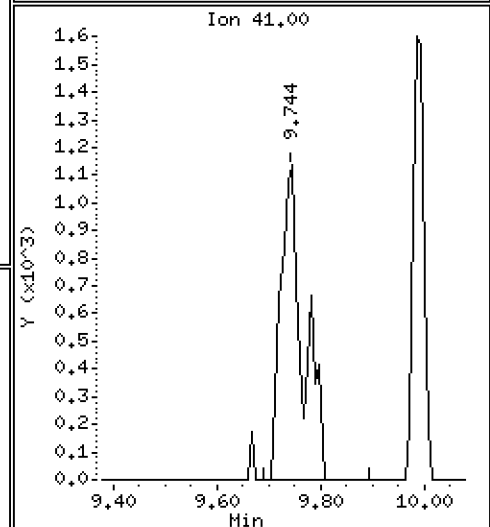
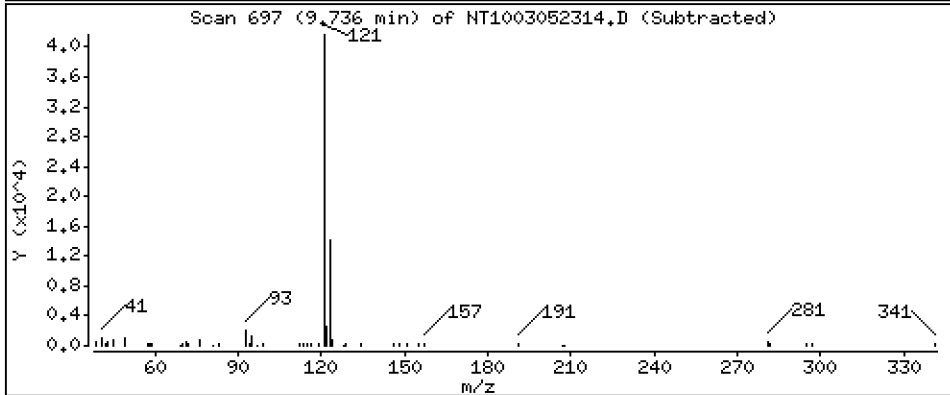
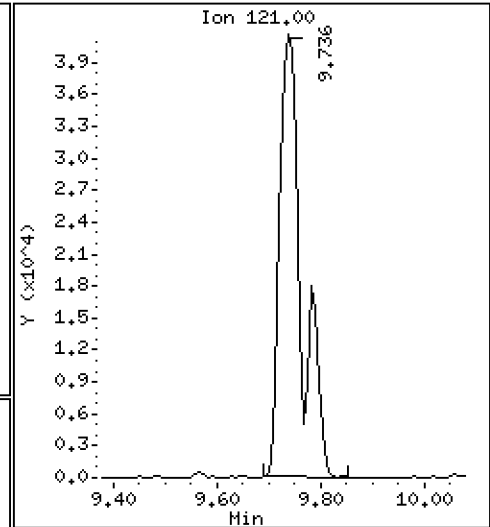
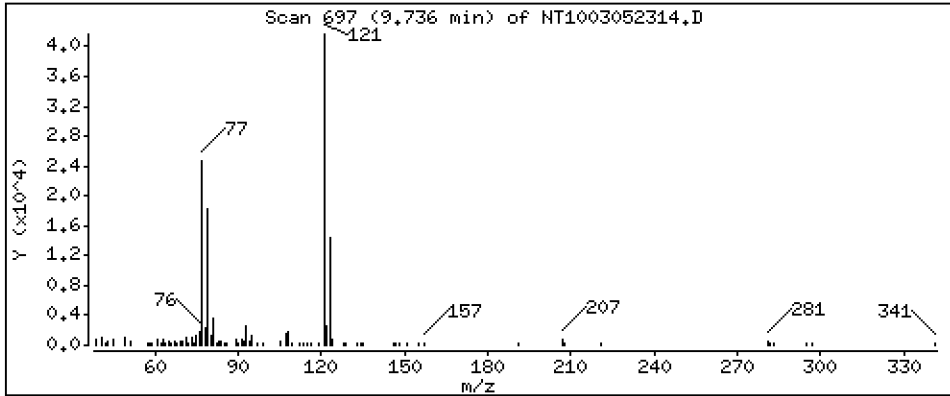
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,600 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

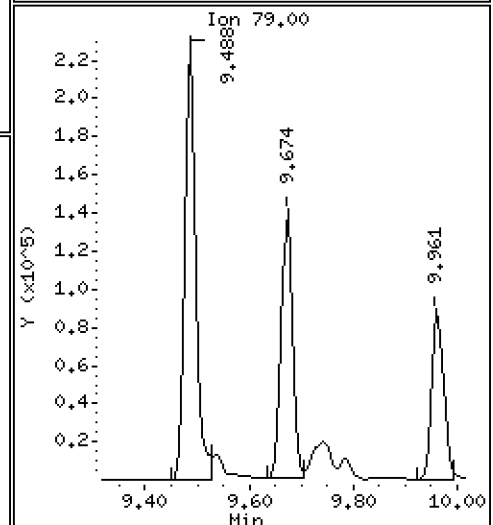
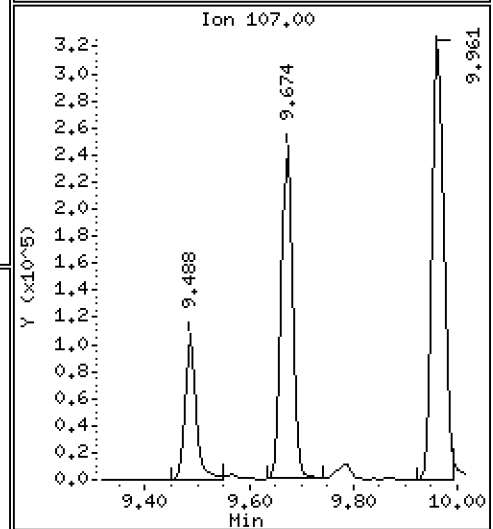
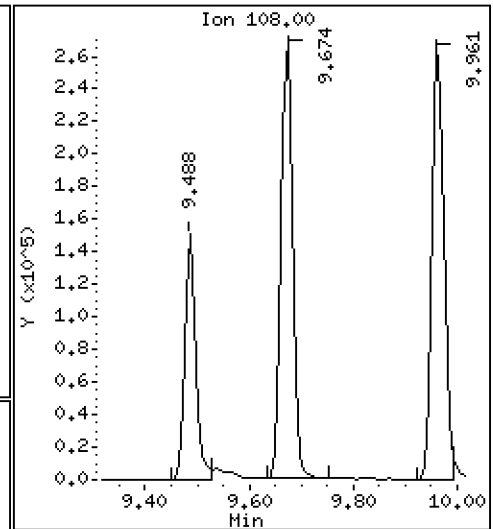
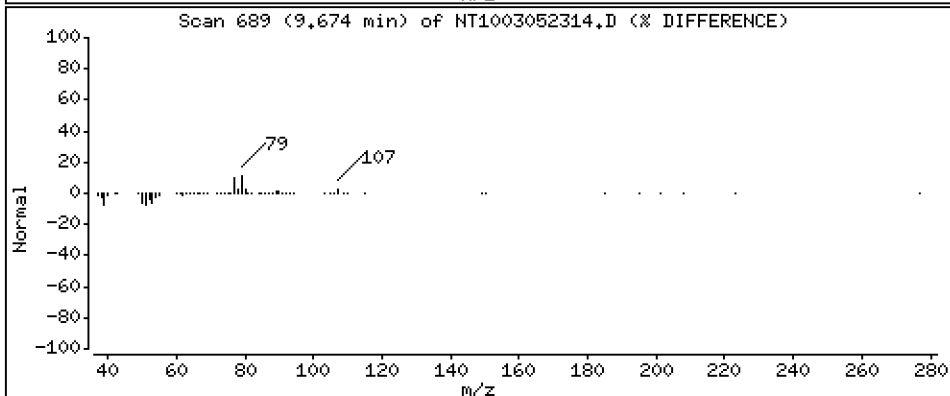
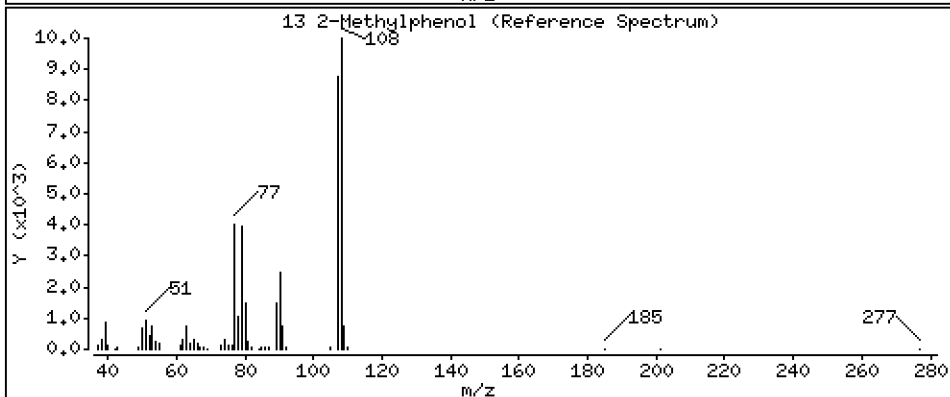
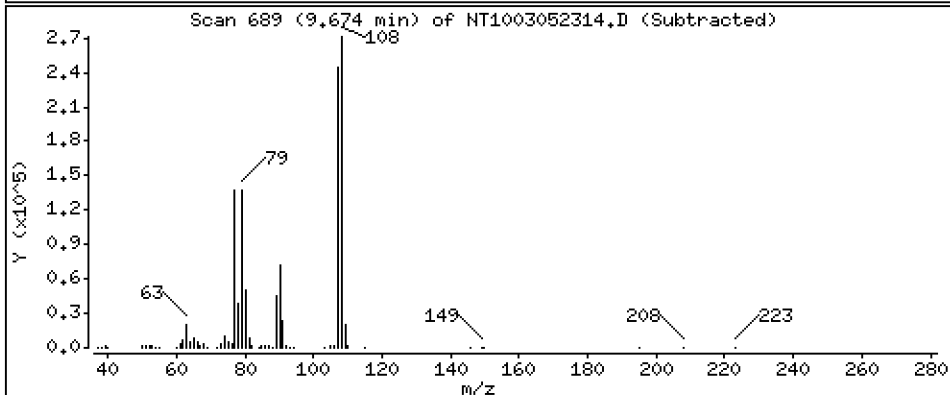
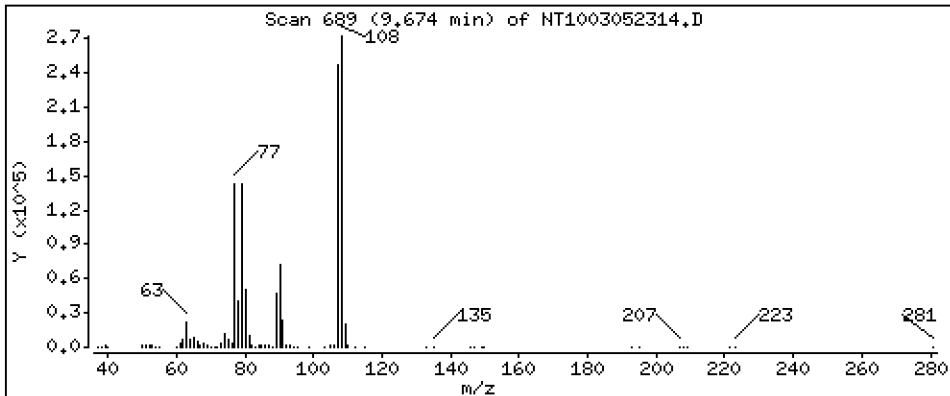
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 4,843 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

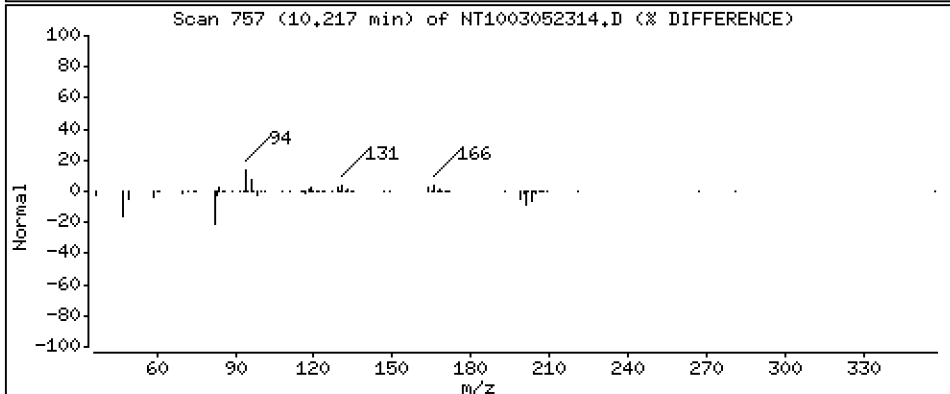
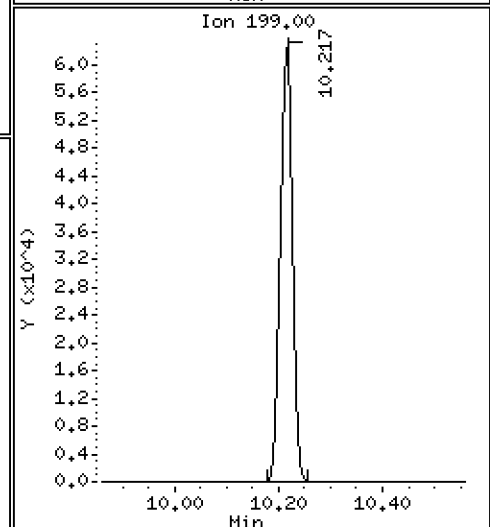
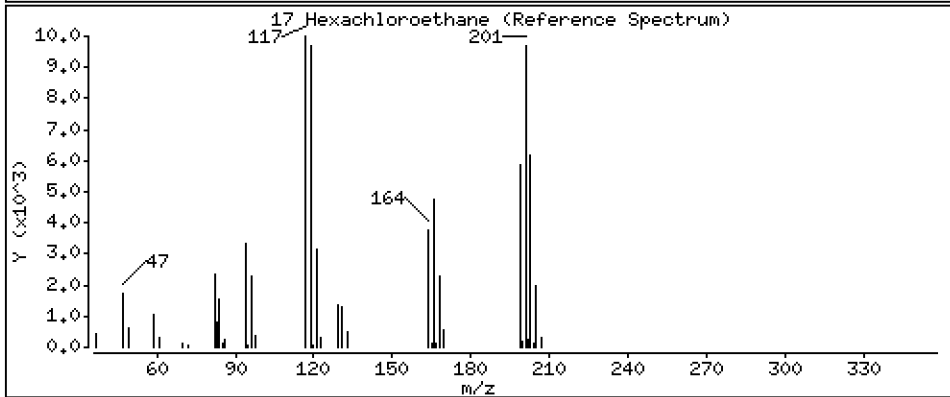
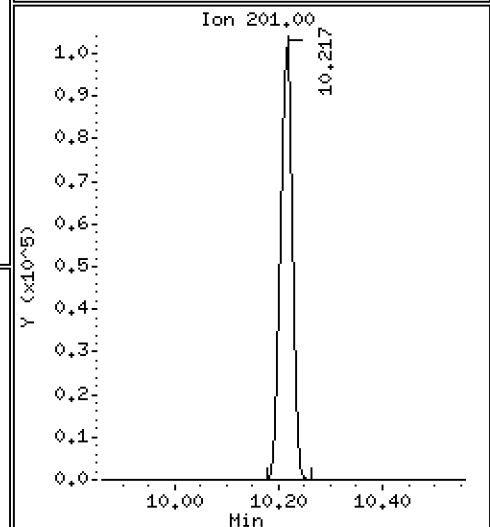
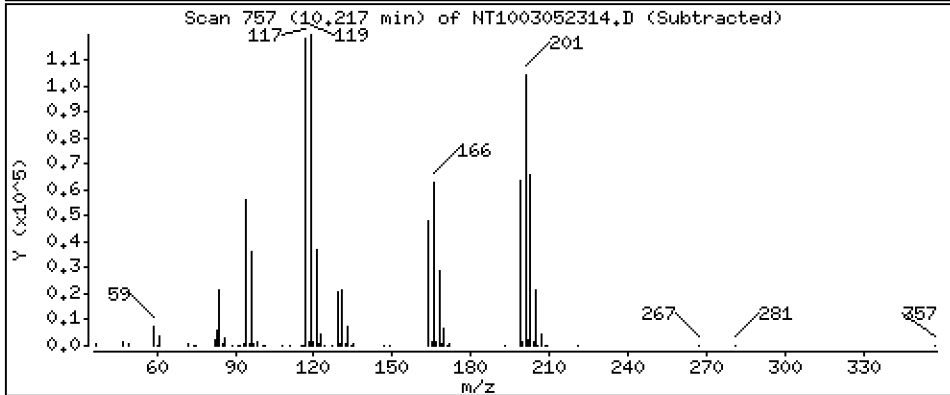
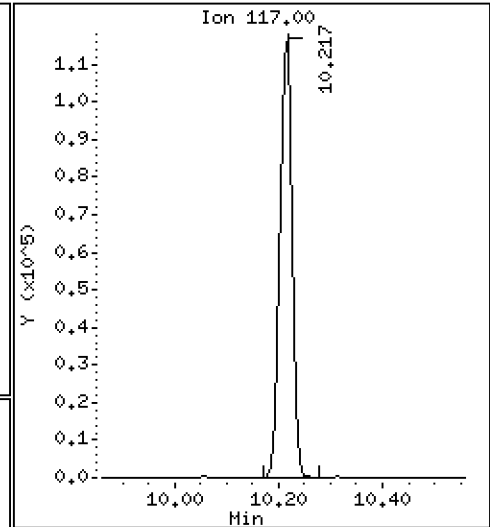
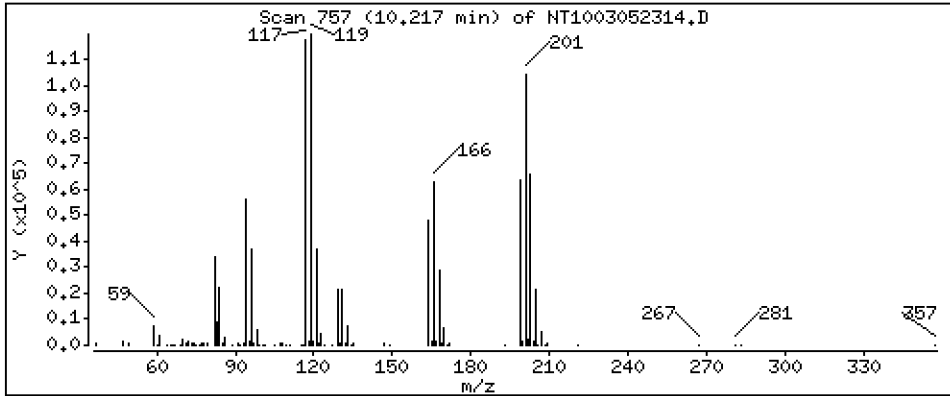
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,750 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

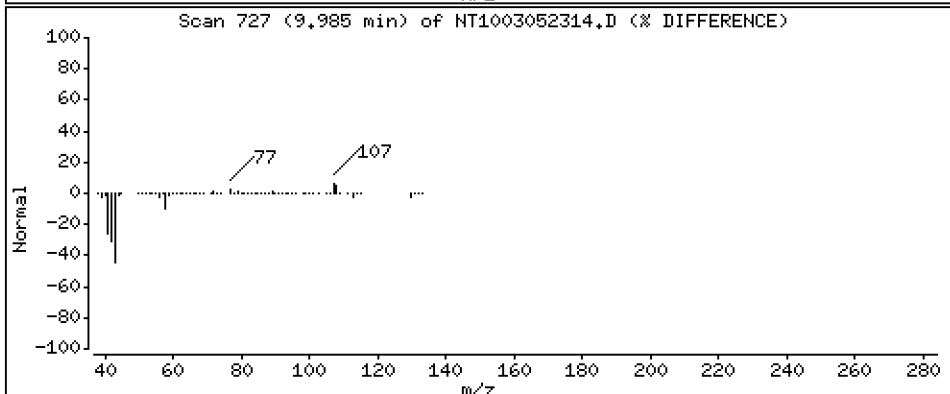
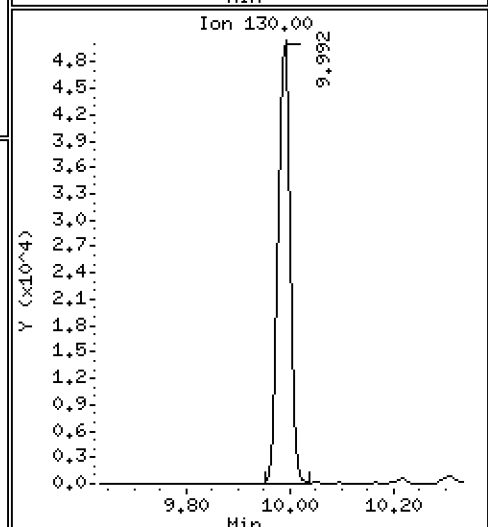
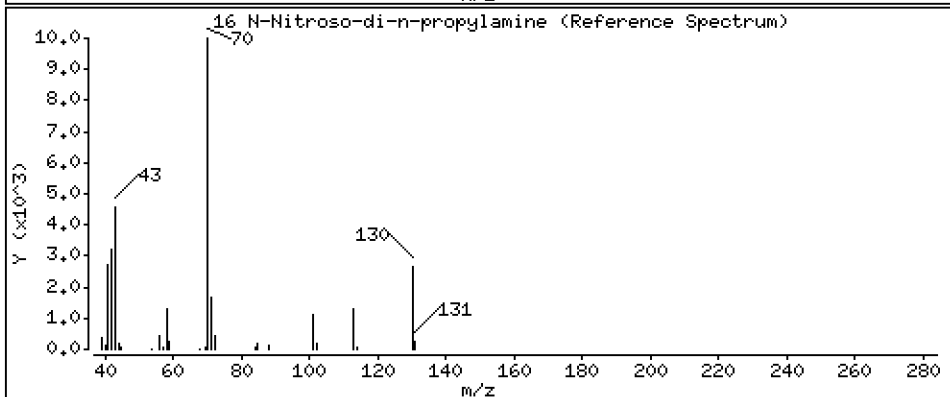
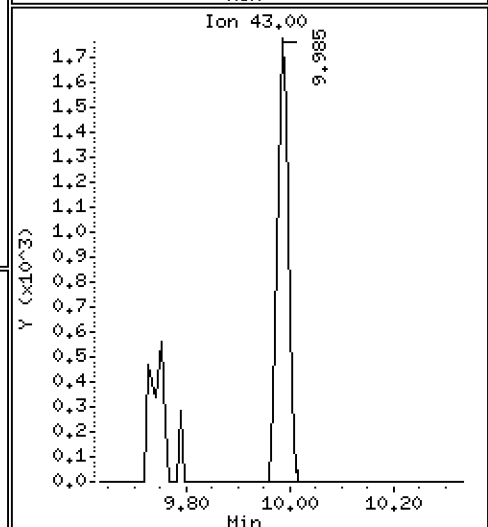
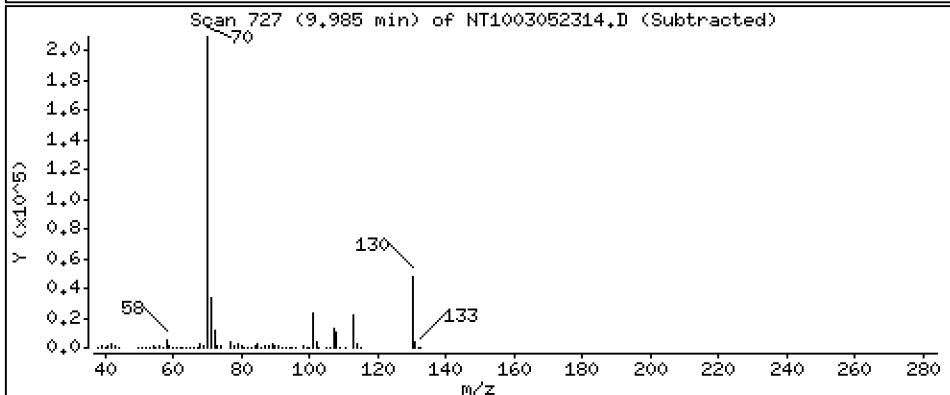
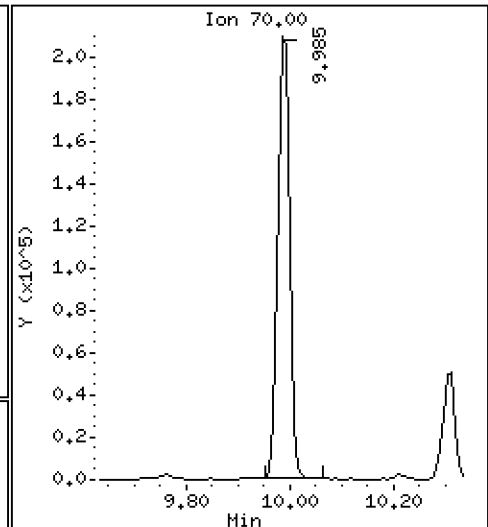
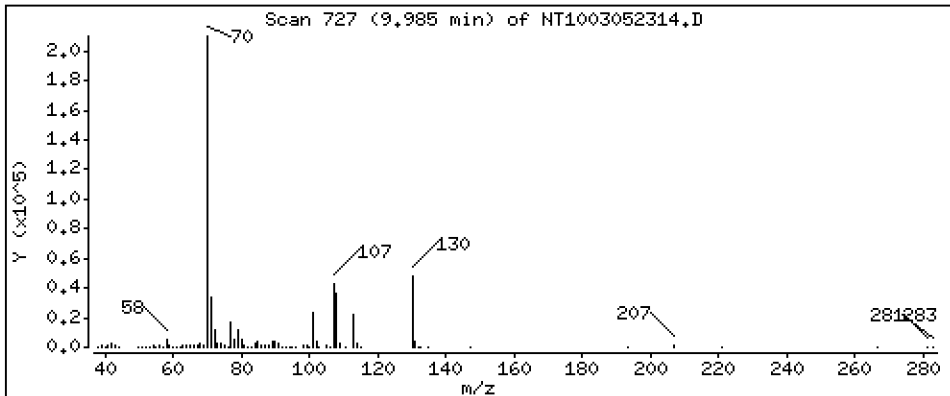
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,147 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

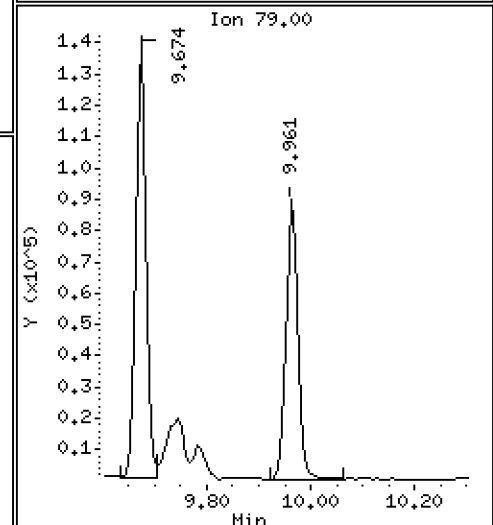
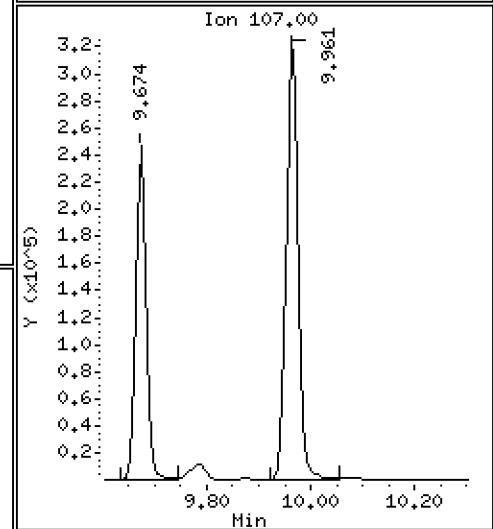
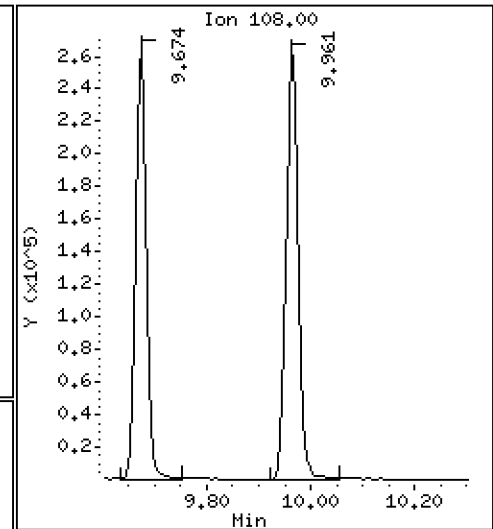
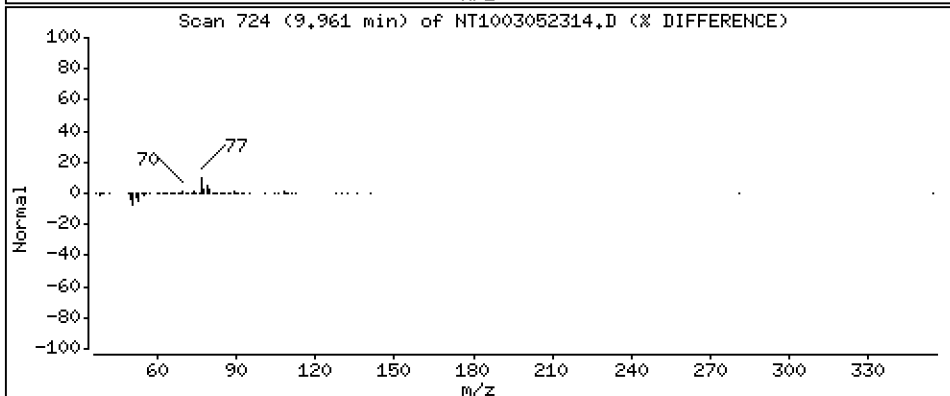
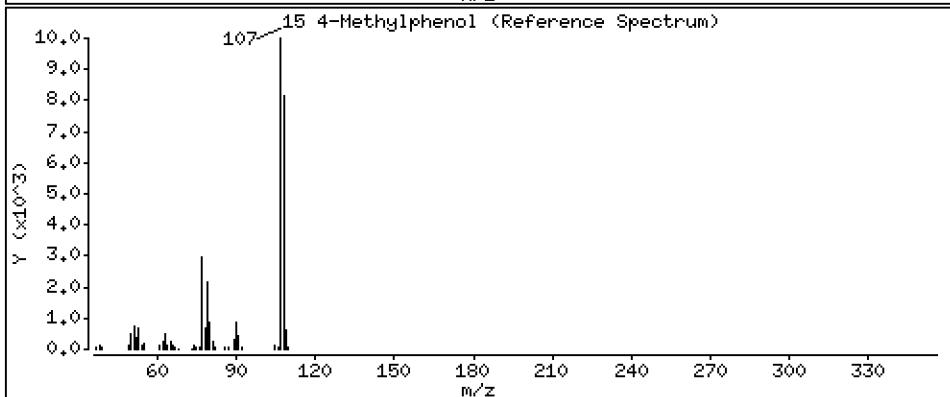
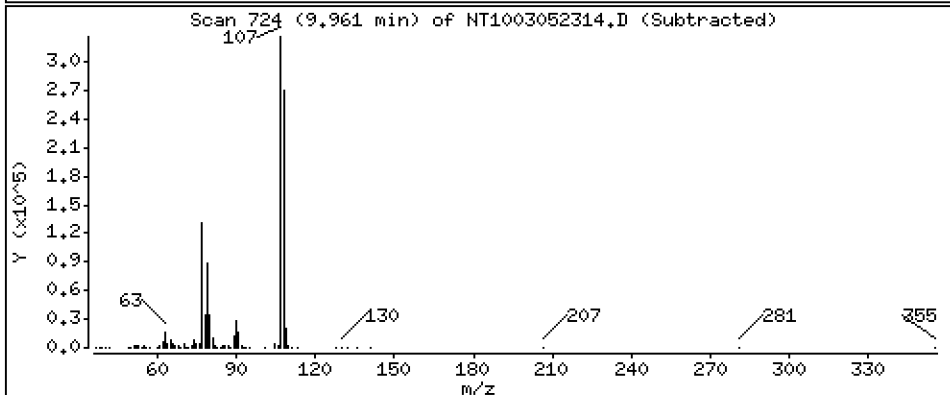
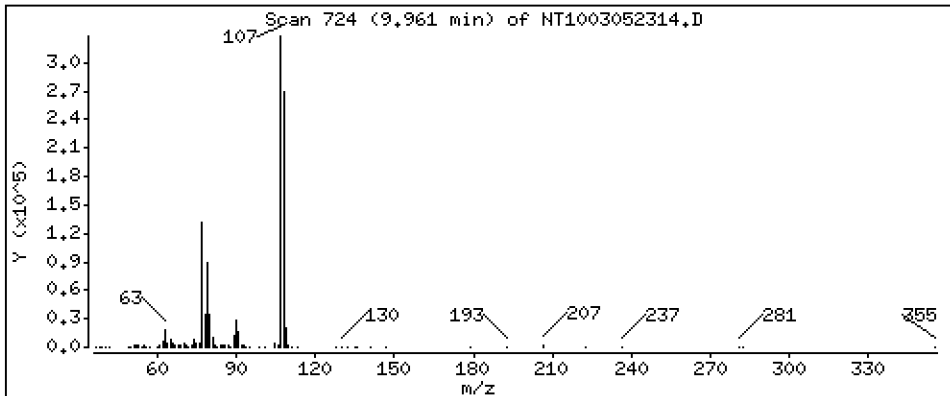
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,266 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

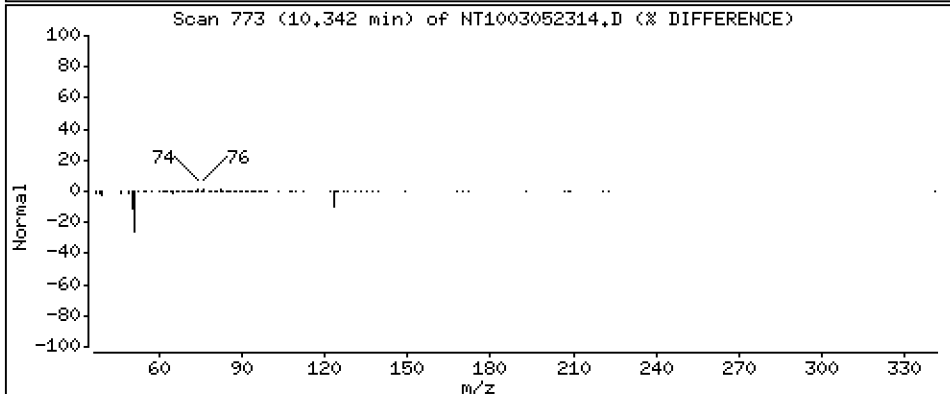
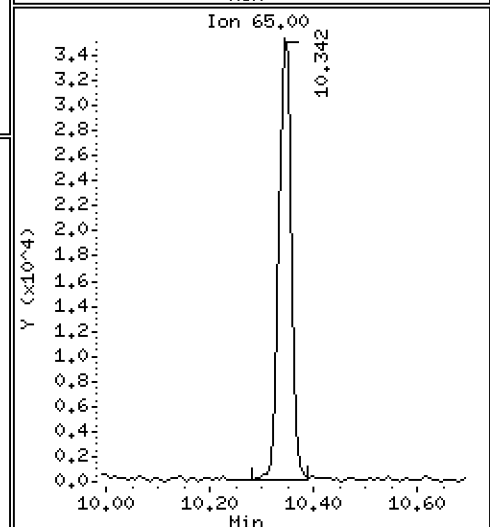
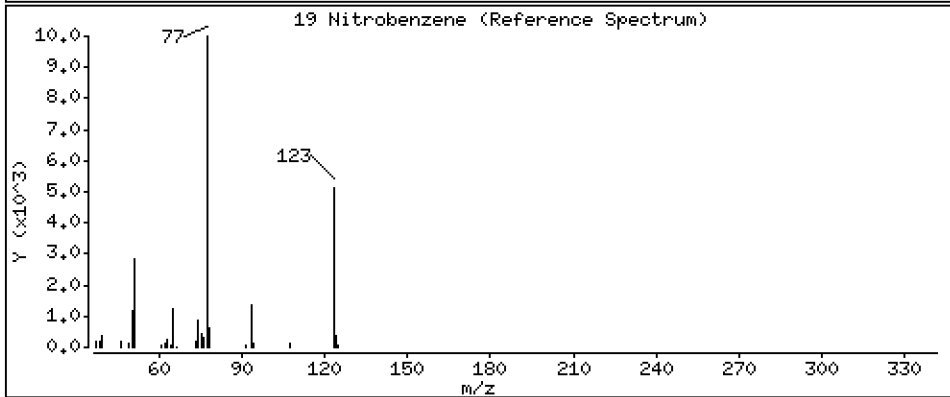
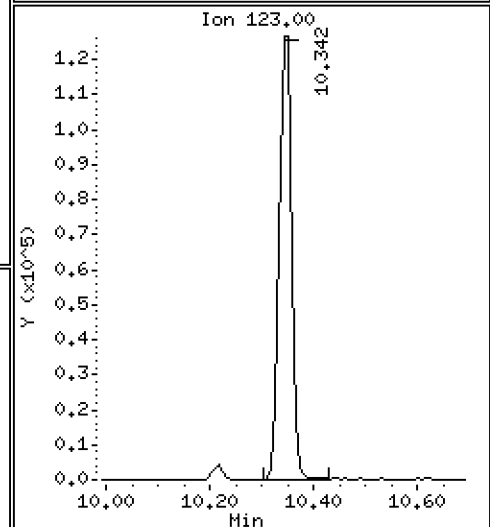
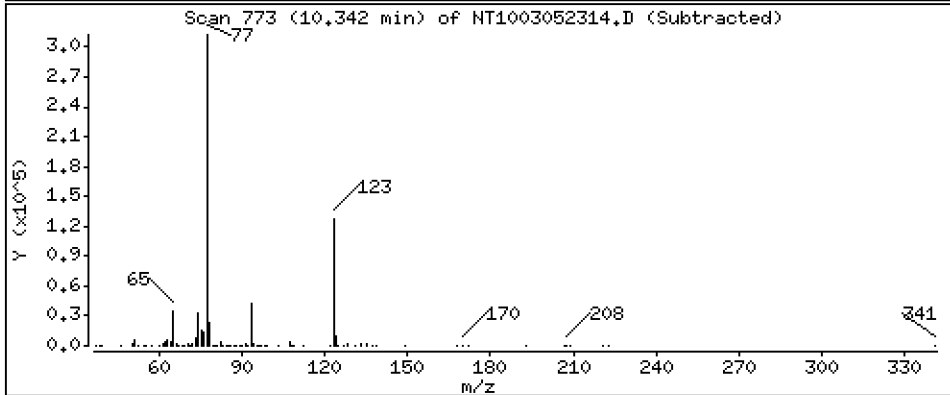
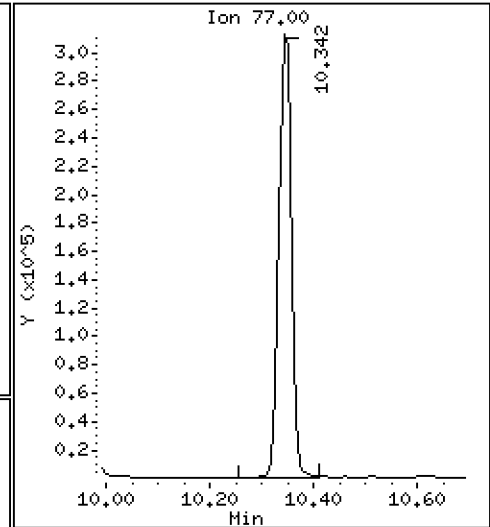
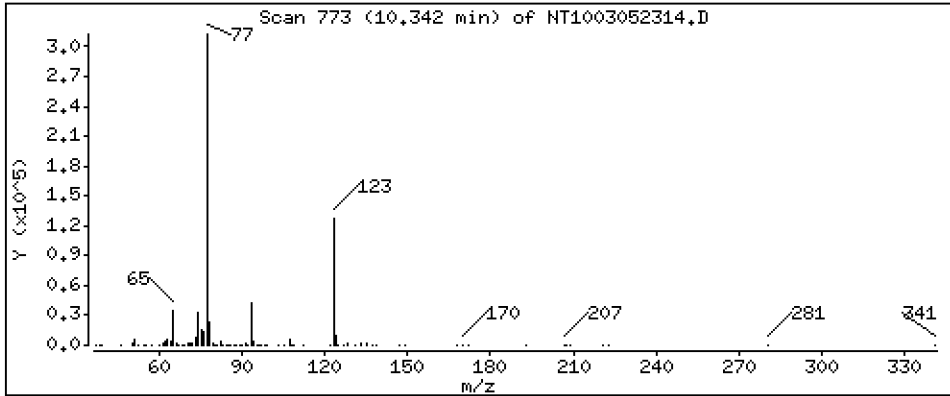
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,154 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

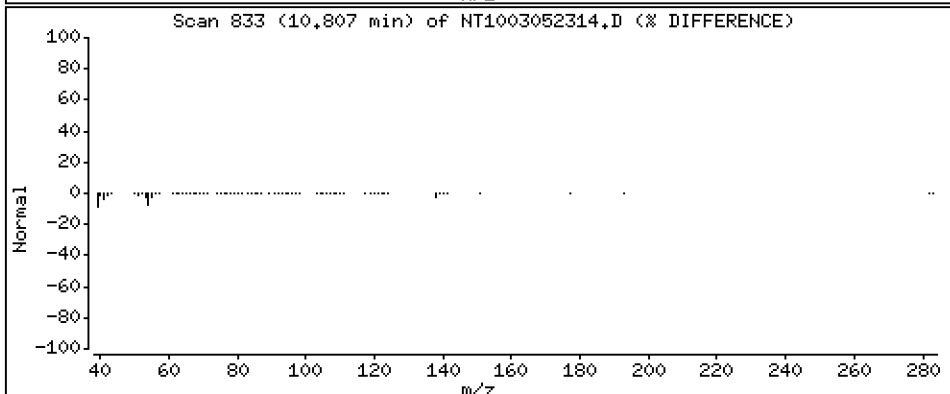
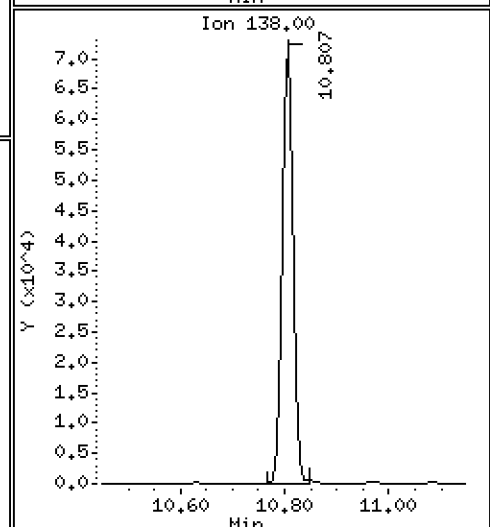
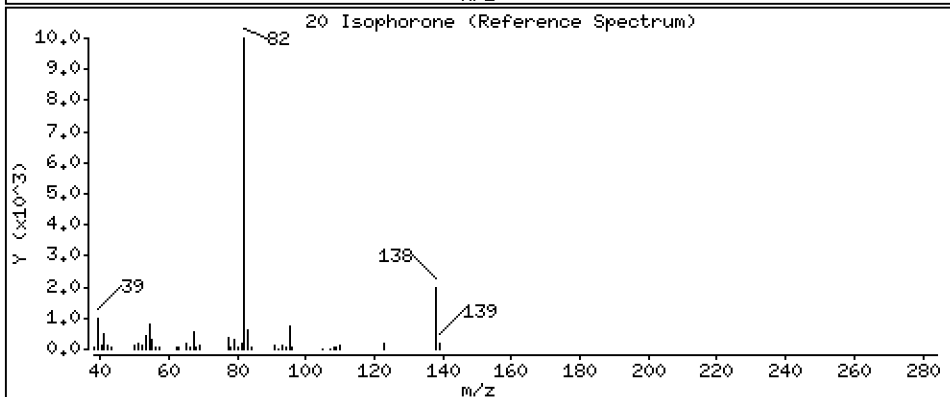
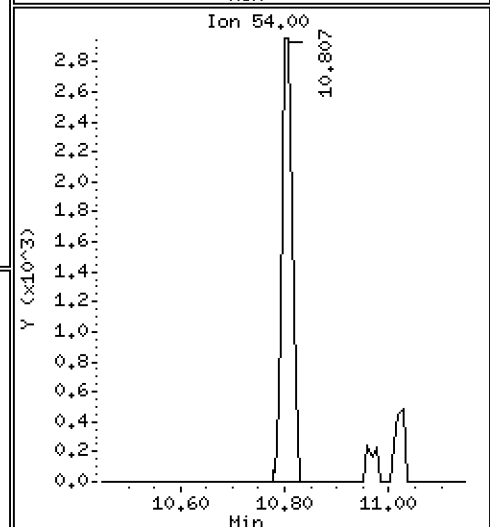
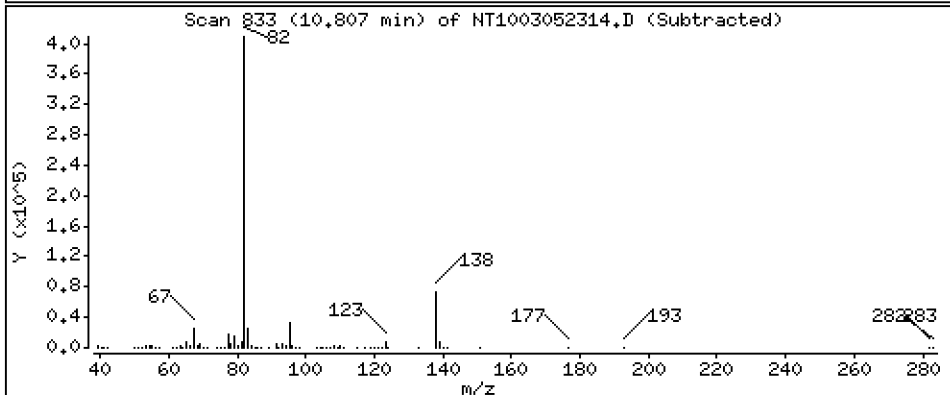
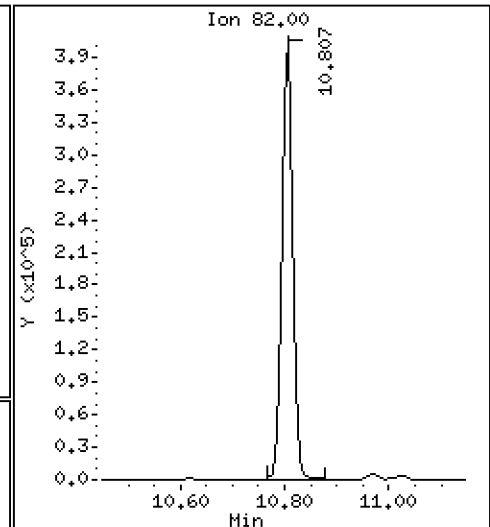
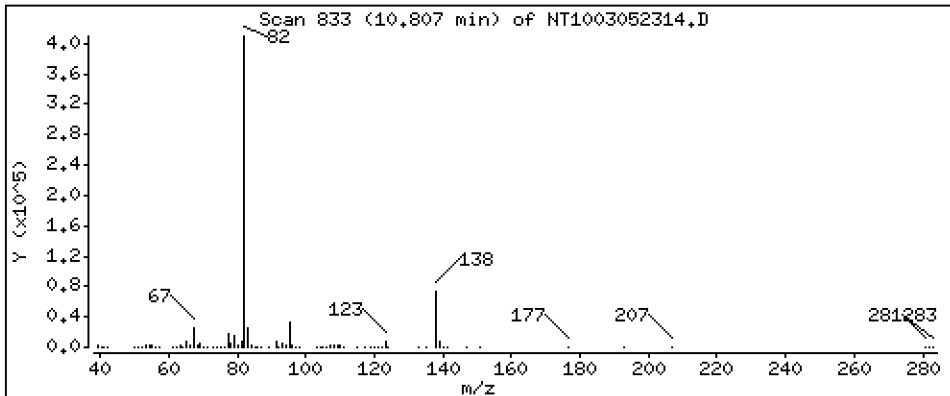
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 4,876 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

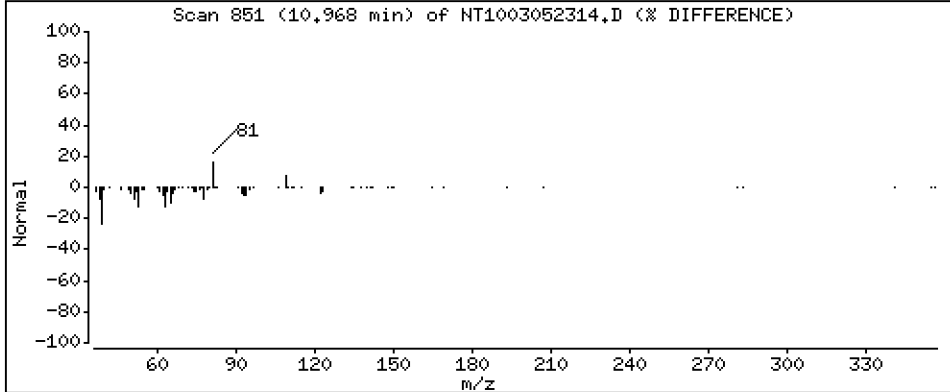
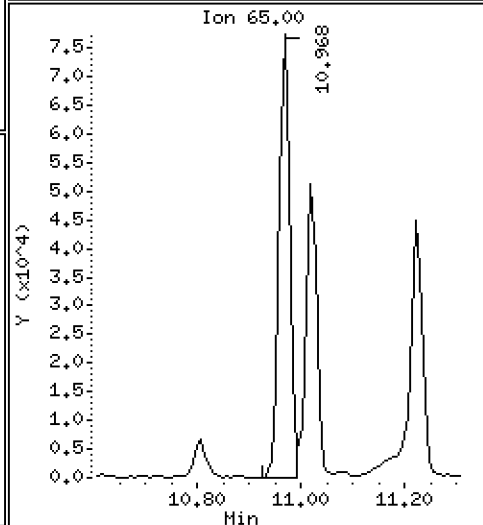
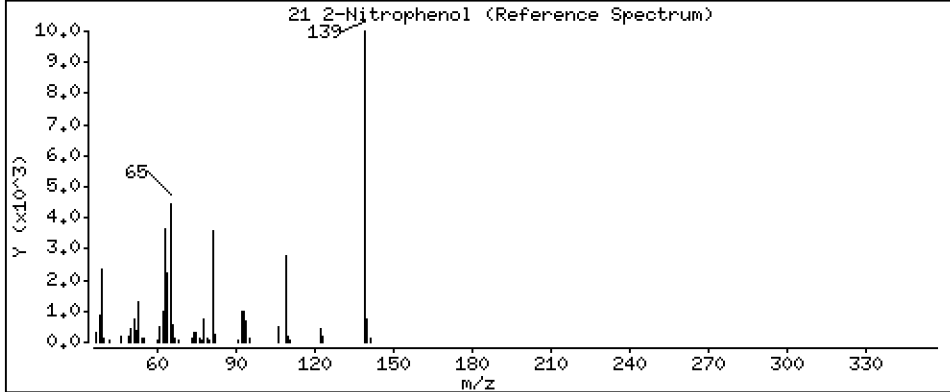
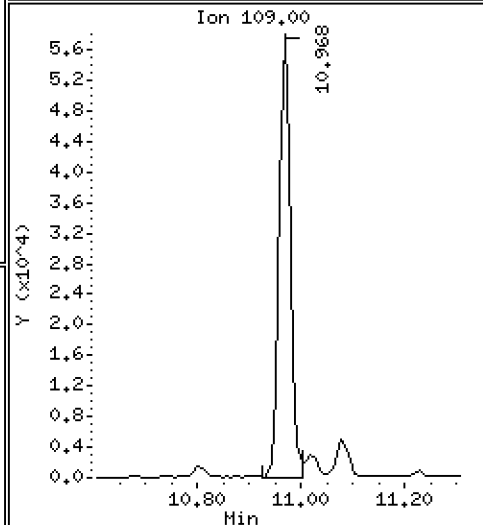
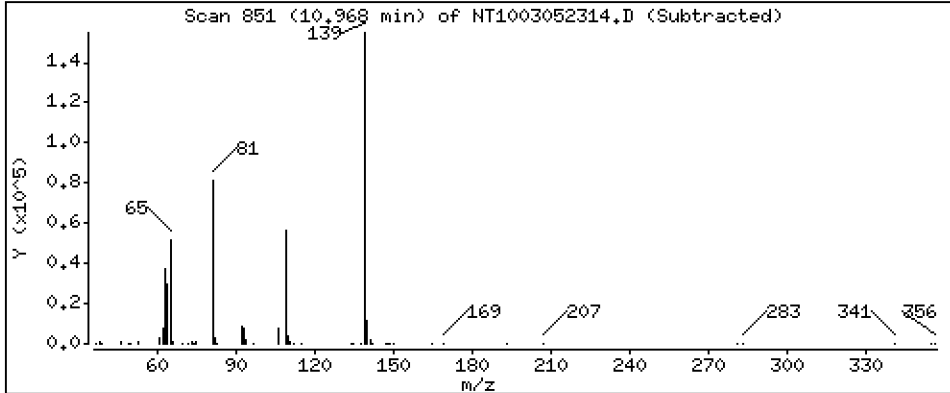
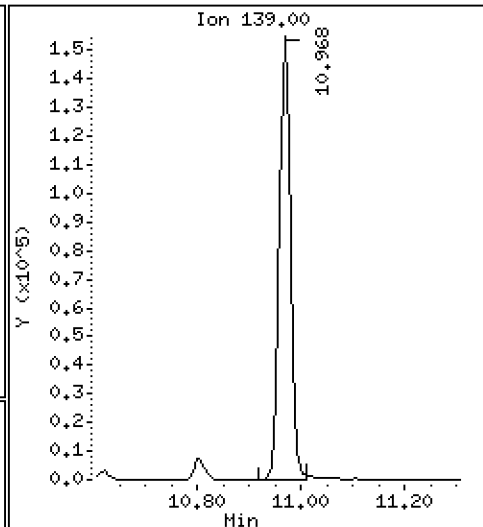
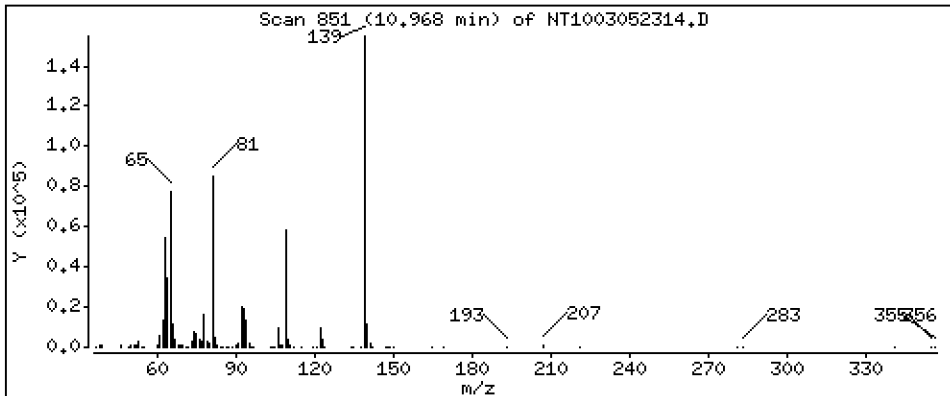
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,456 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

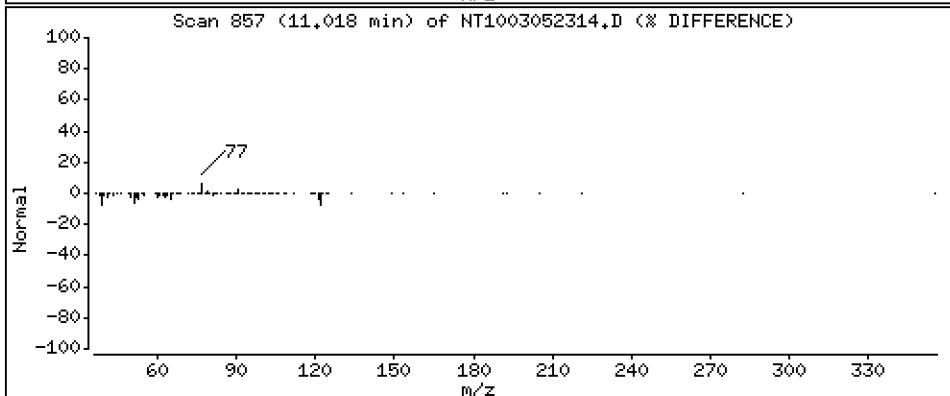
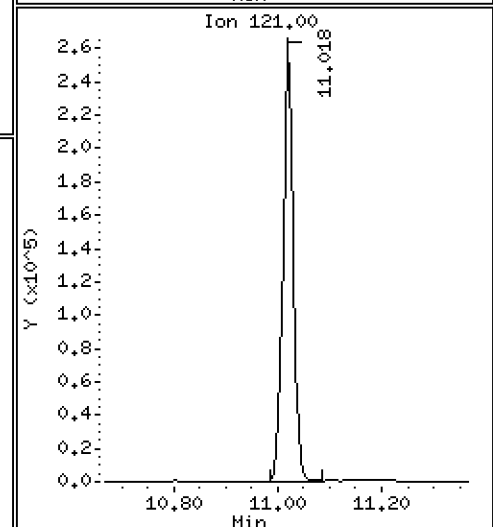
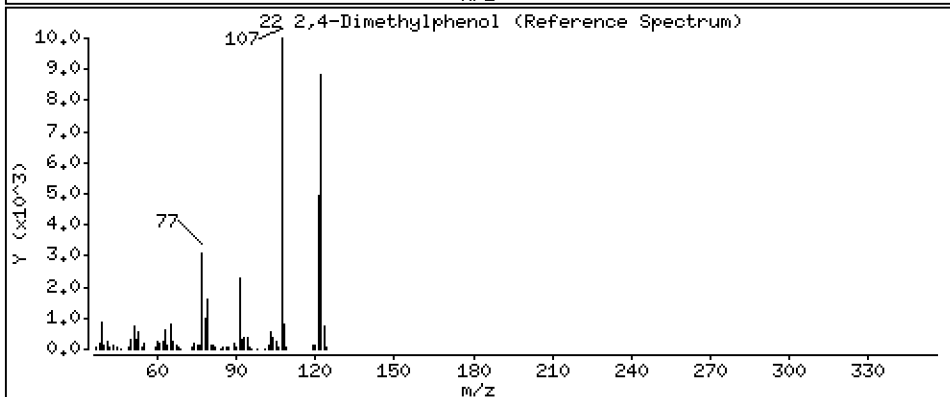
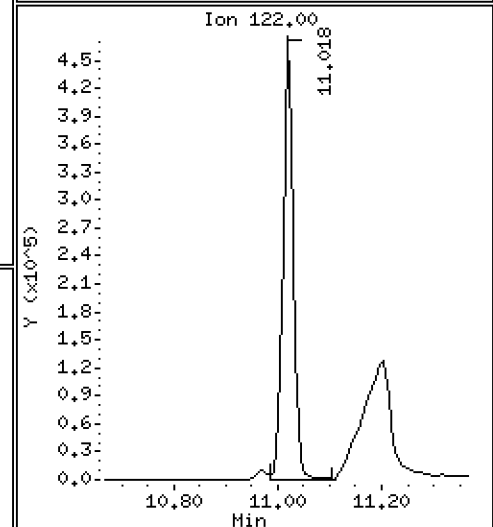
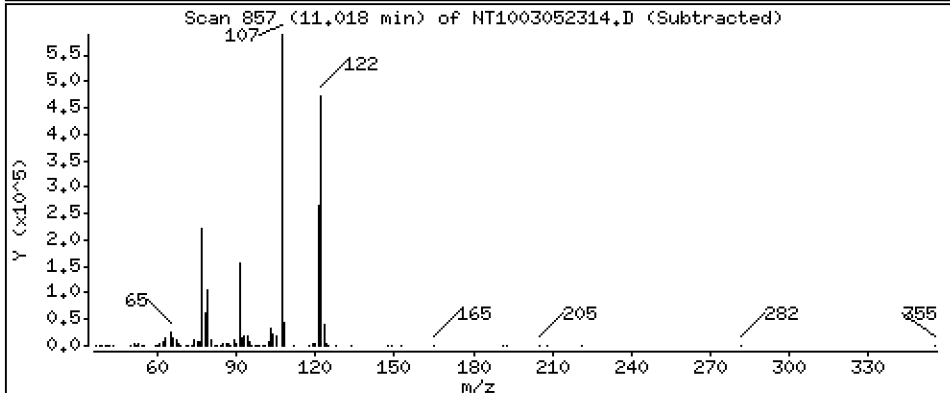
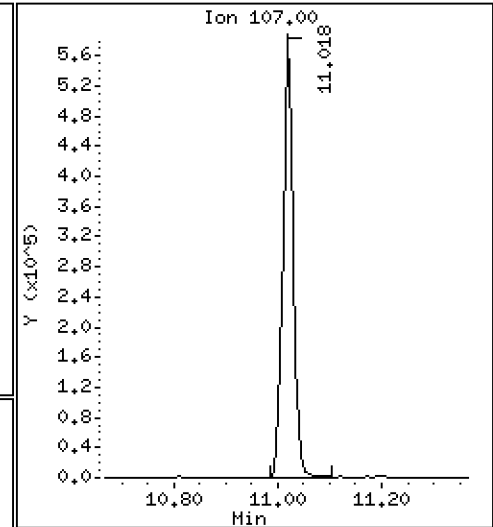
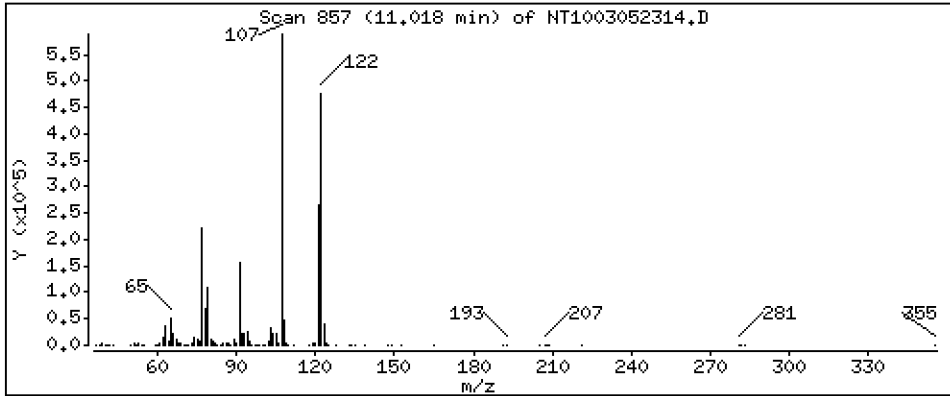
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 8,771 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

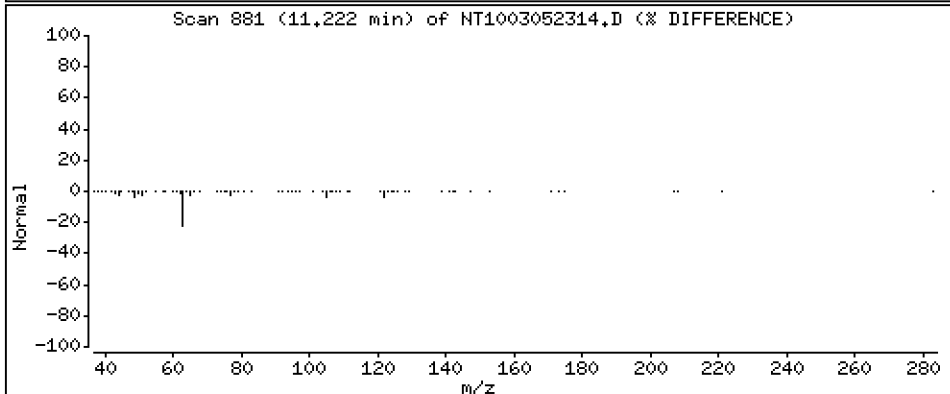
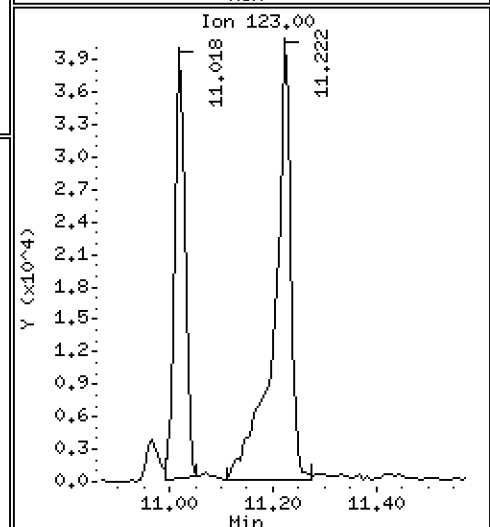
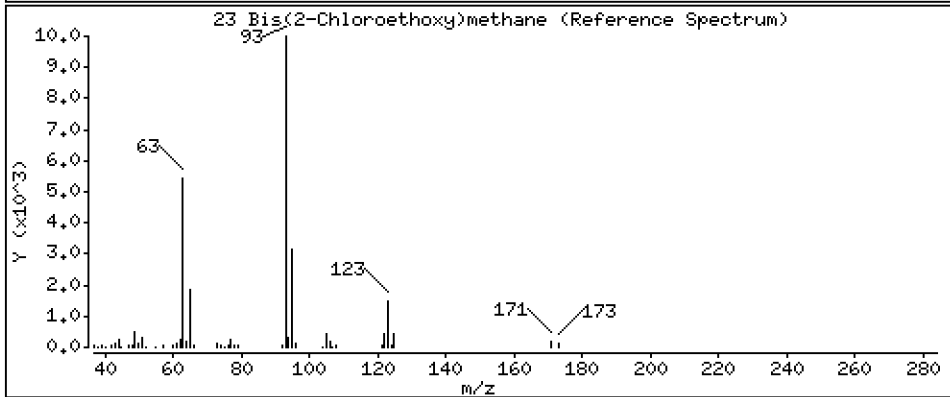
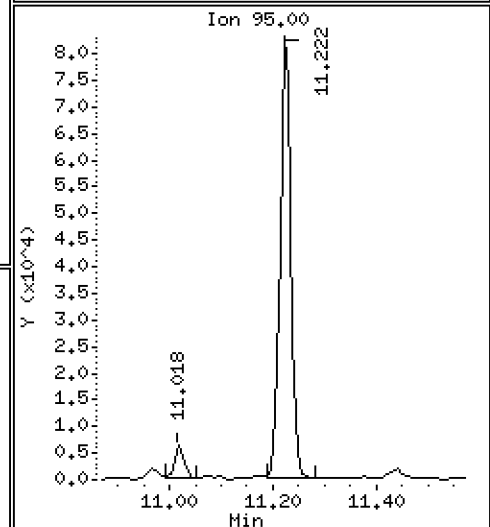
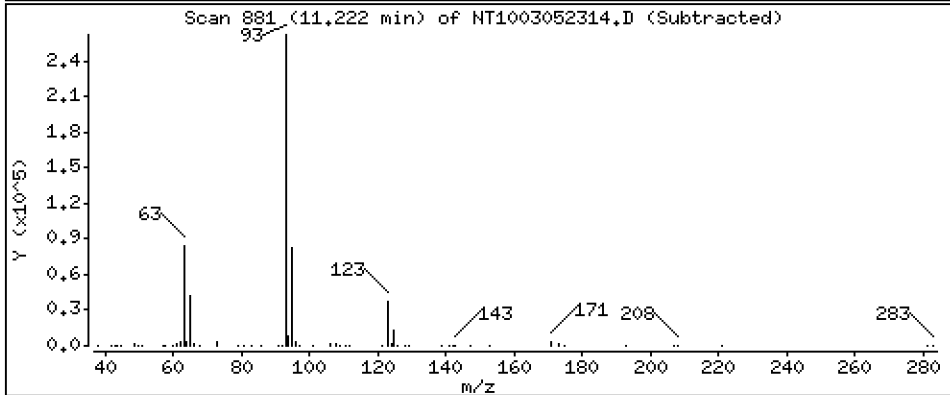
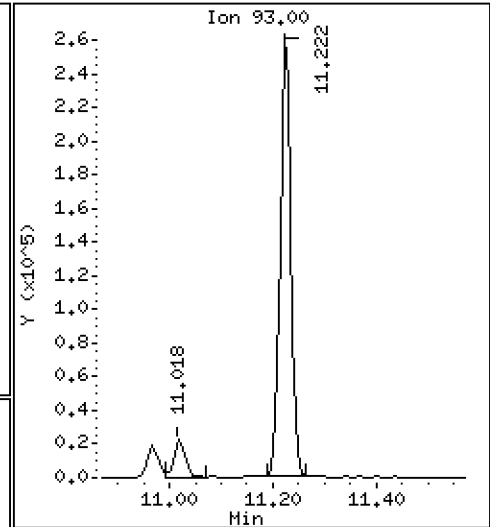
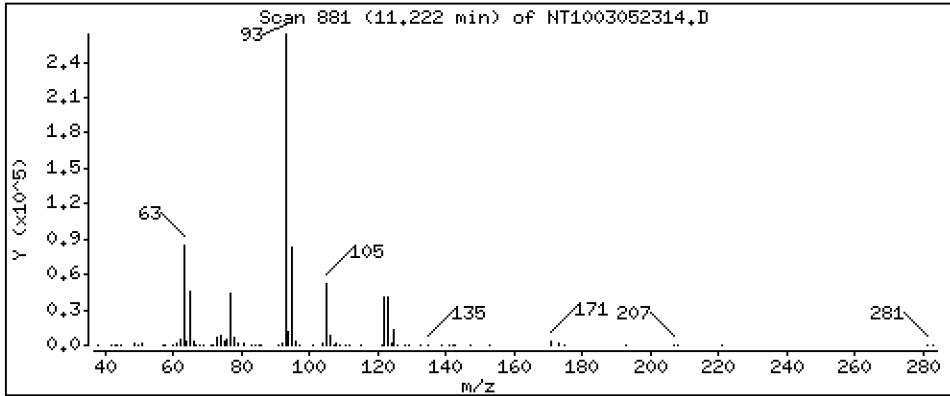
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,029 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

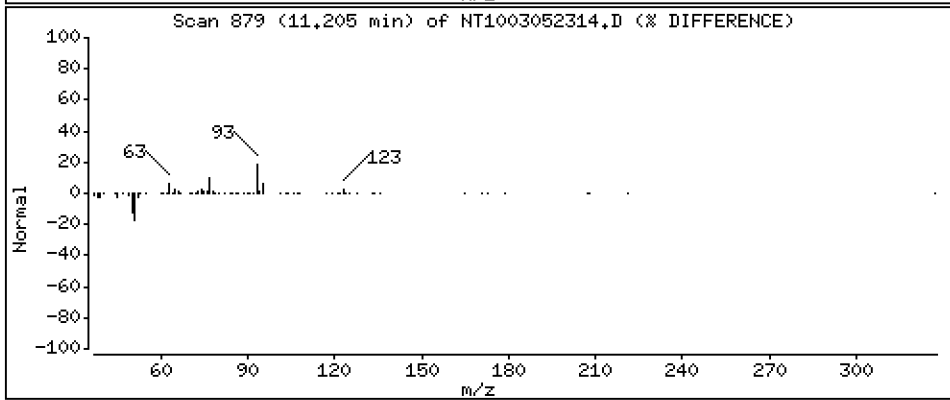
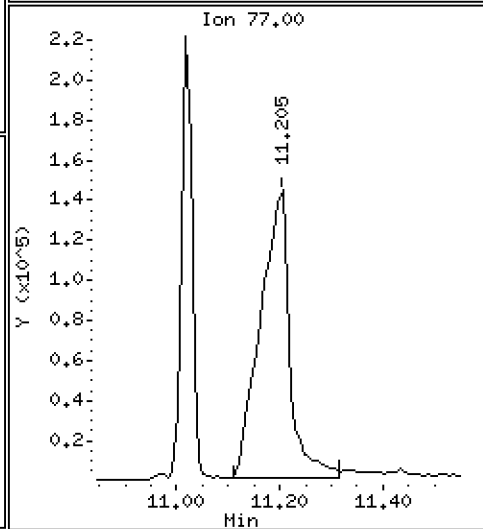
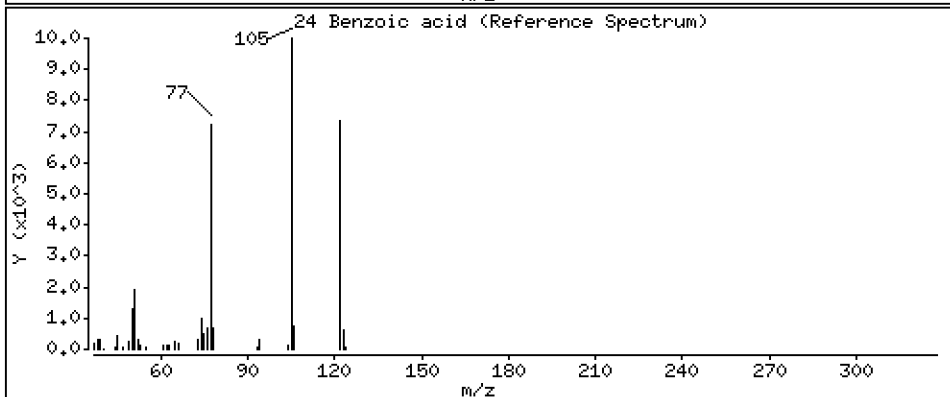
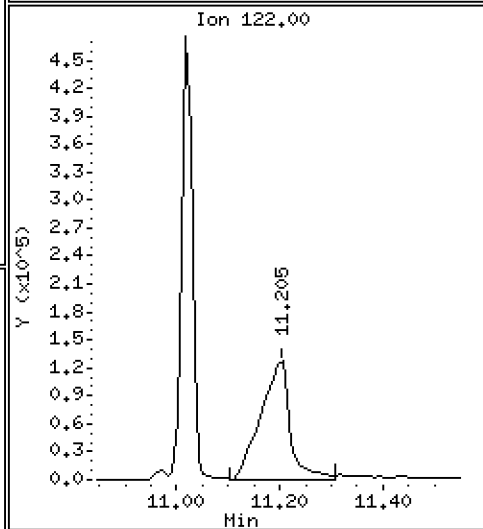
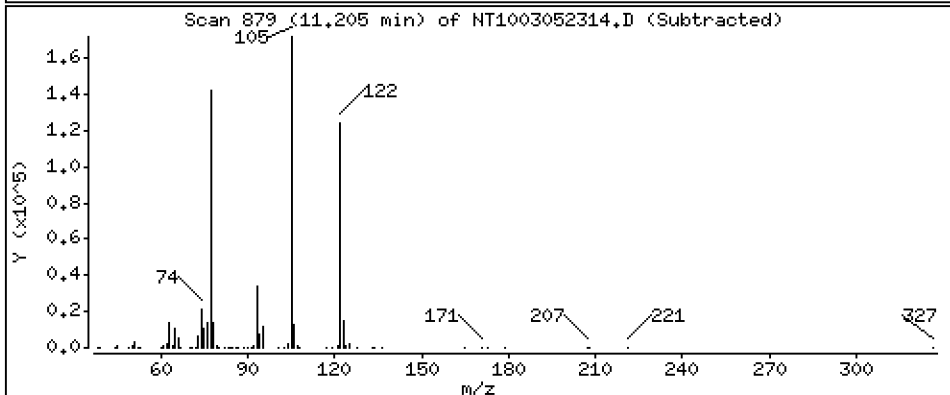
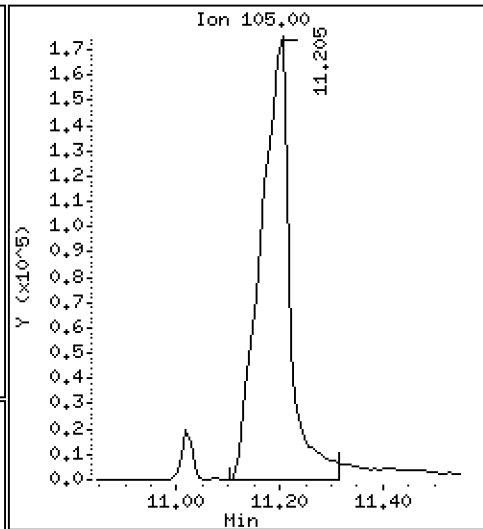
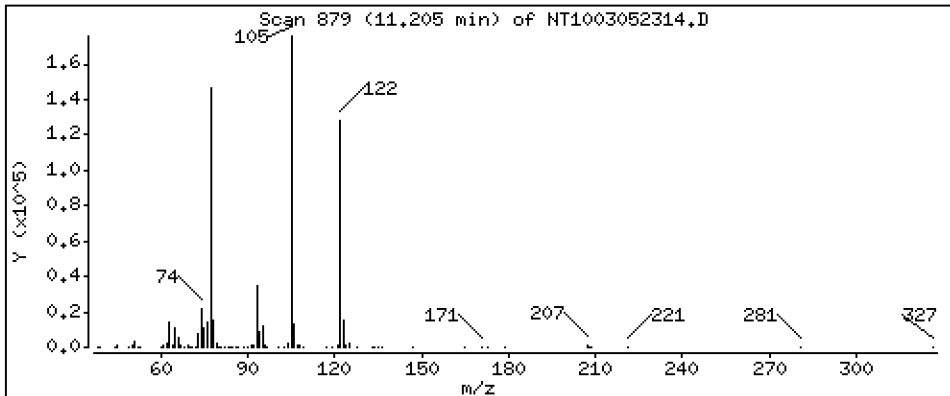
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 12,15 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

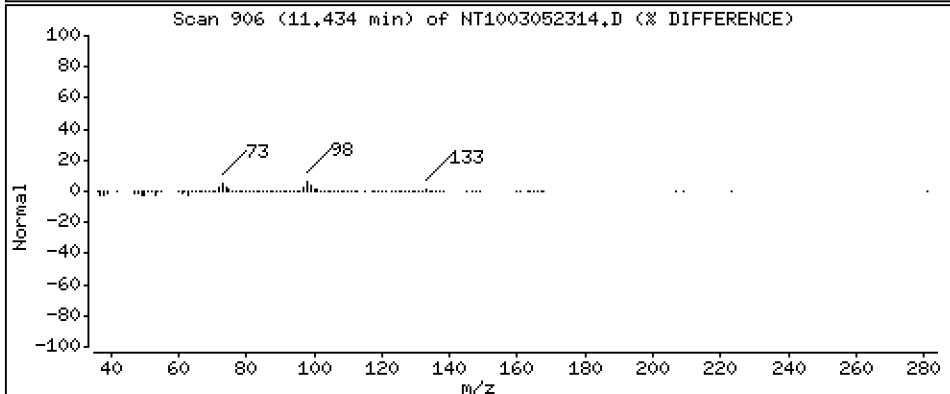
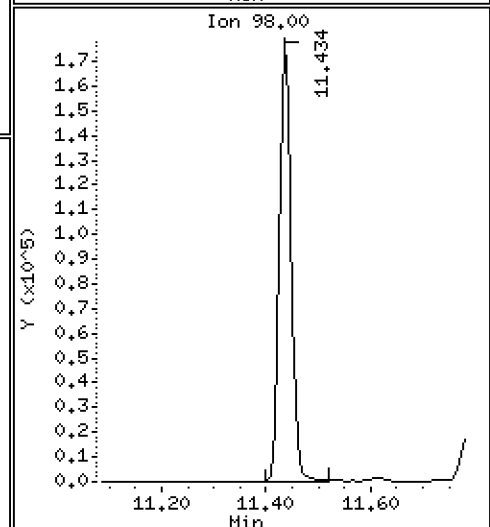
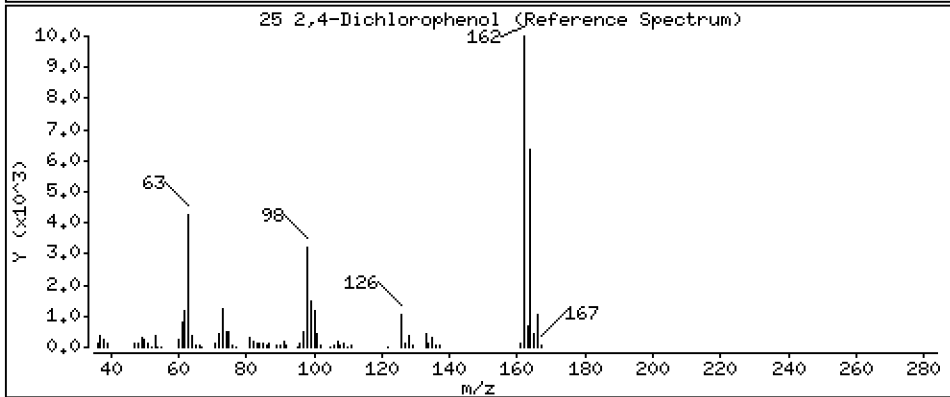
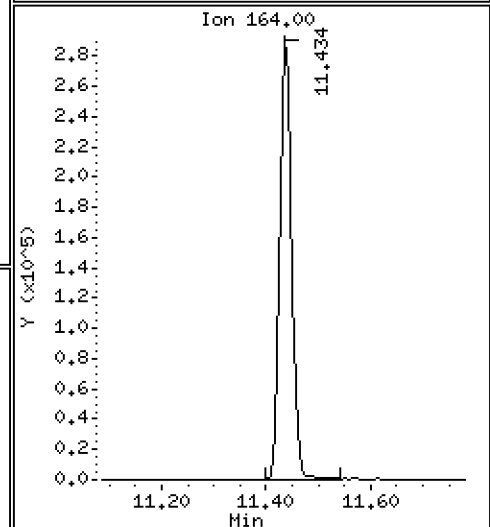
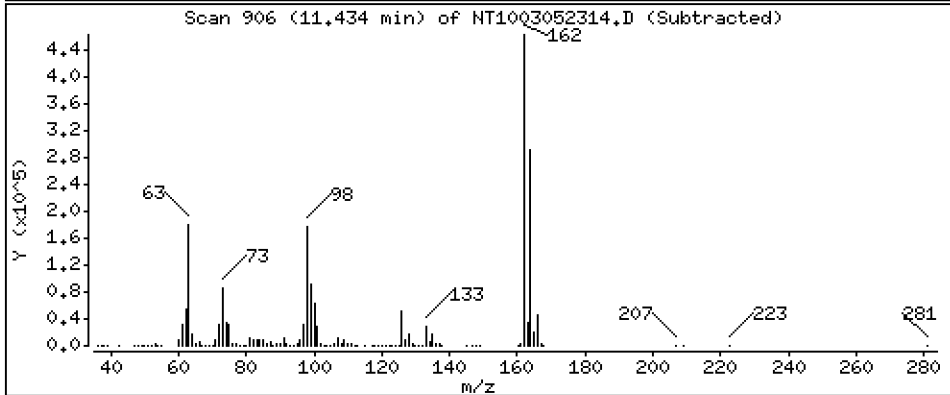
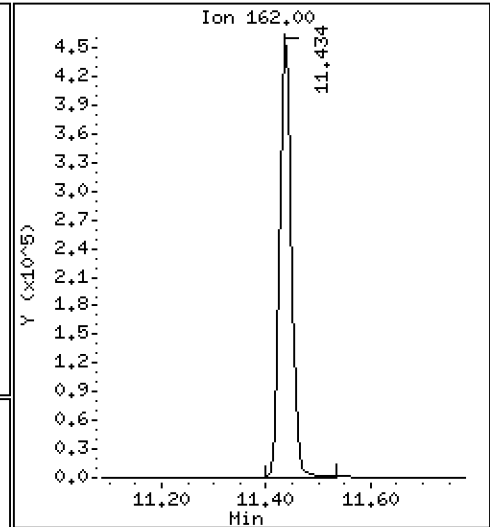
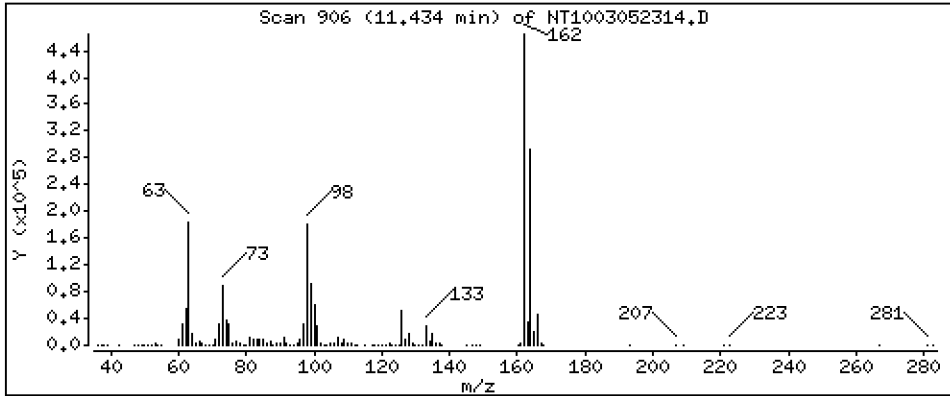
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 10,60 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

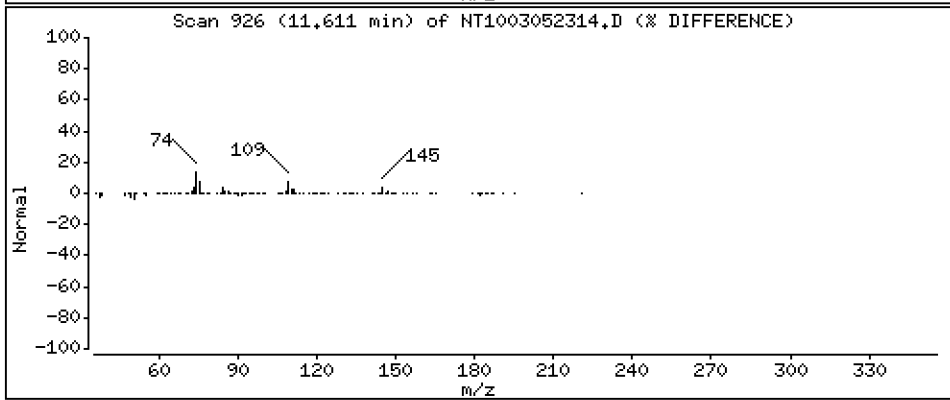
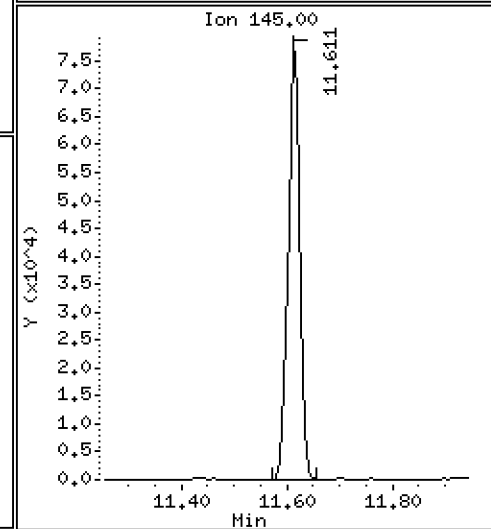
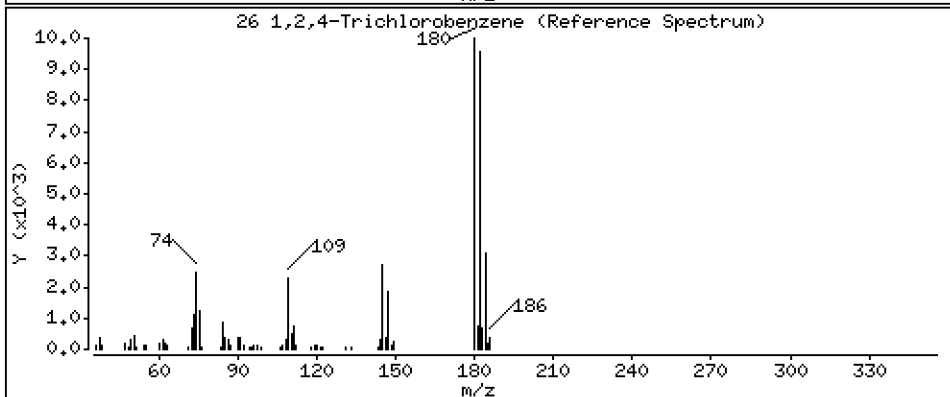
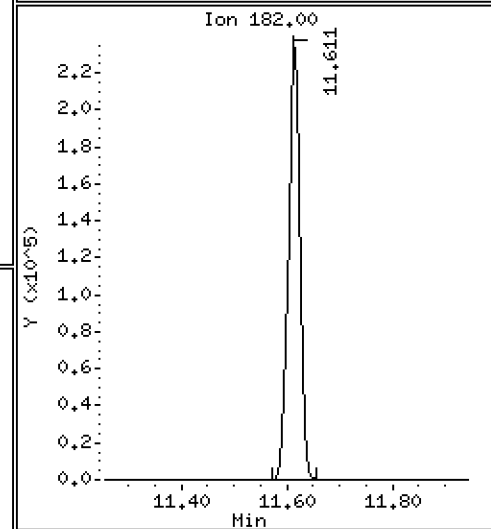
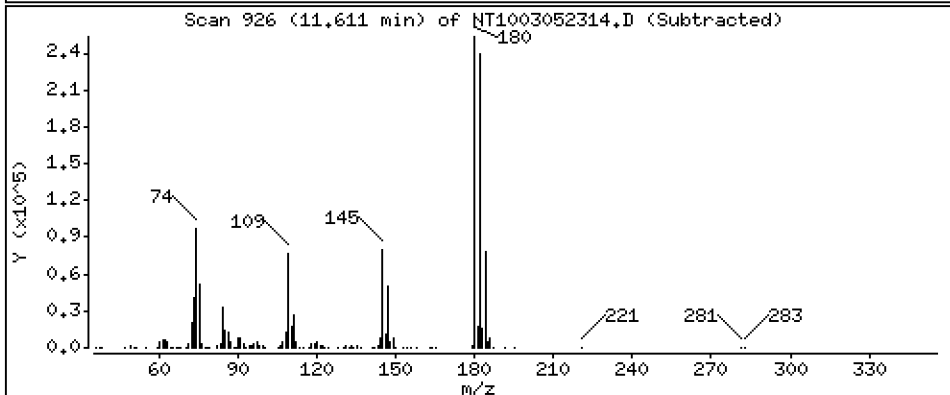
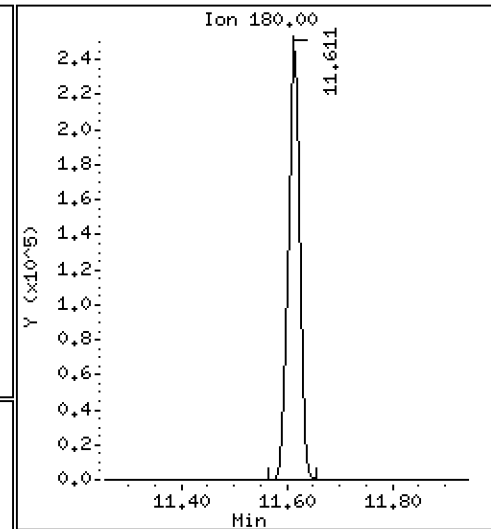
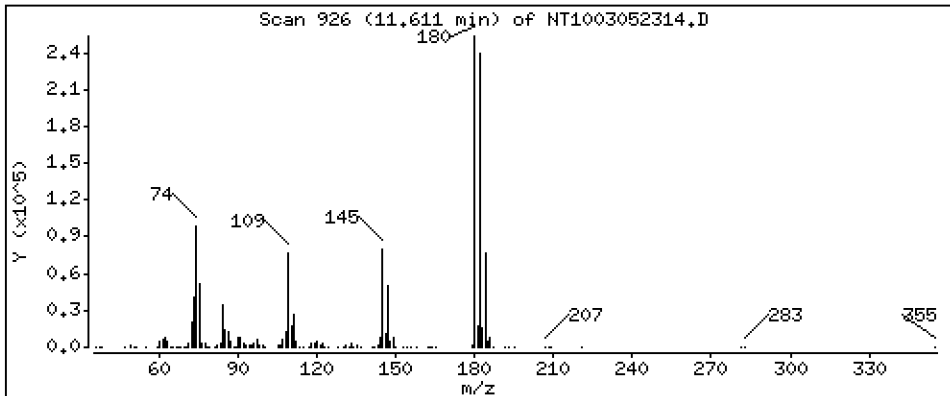
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,192 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

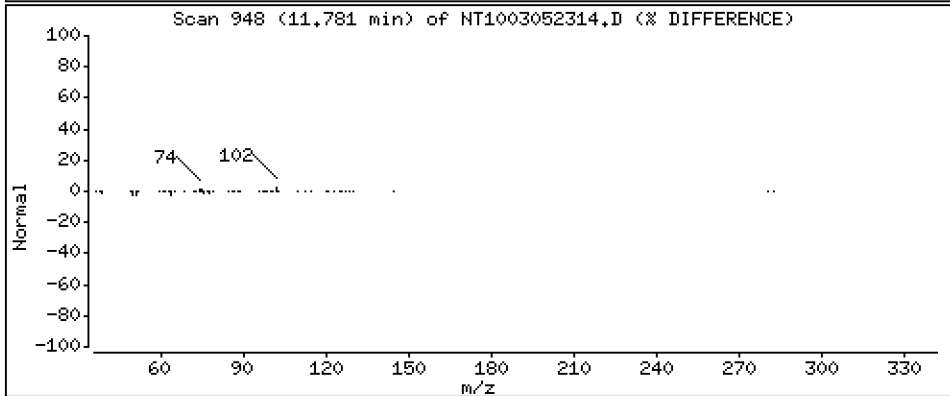
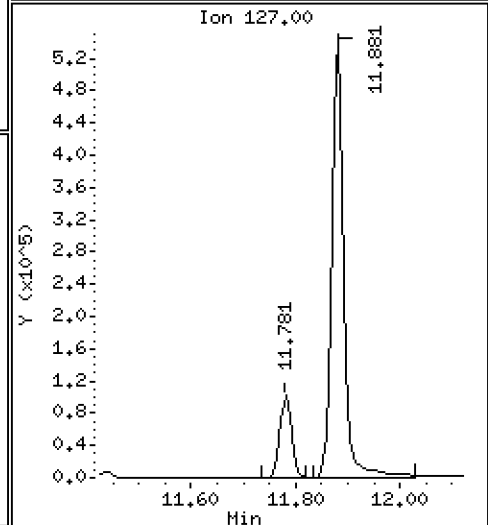
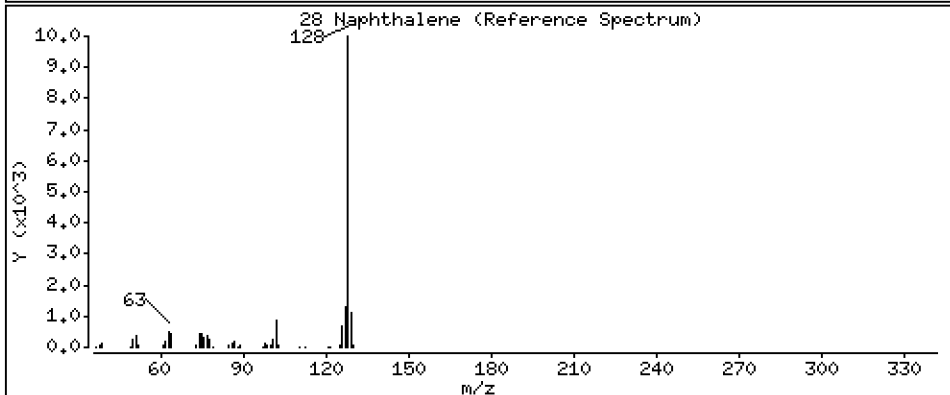
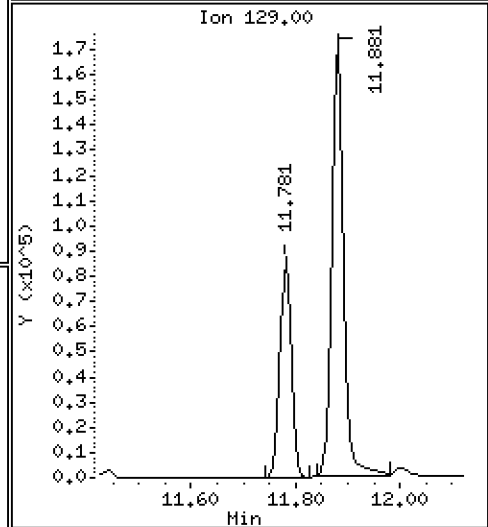
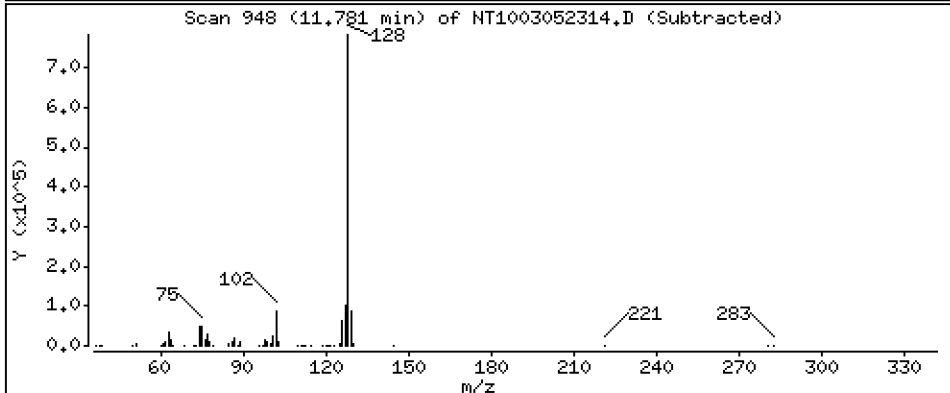
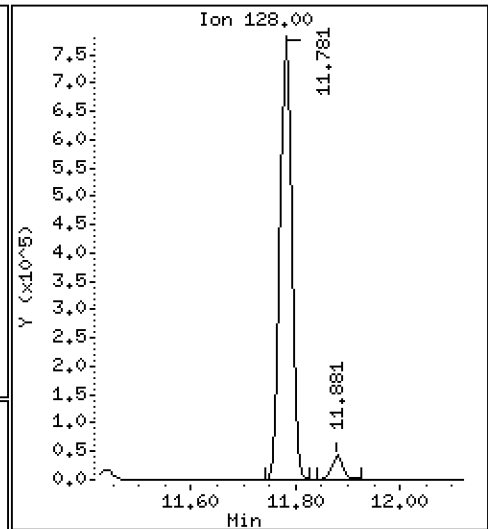
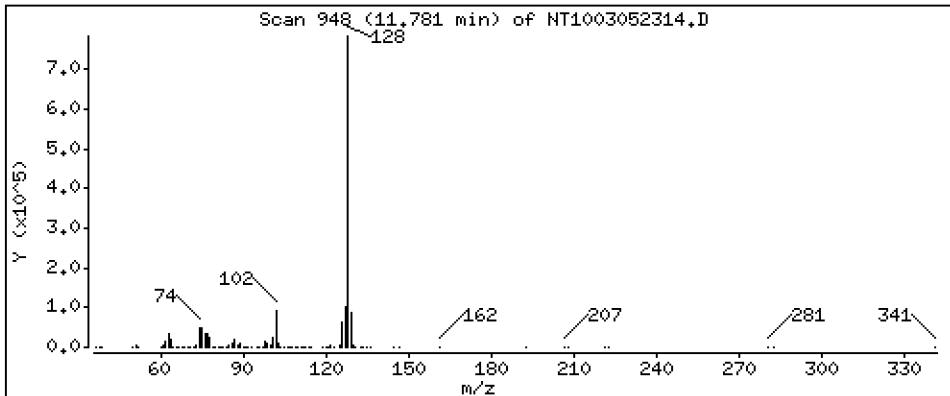
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,687 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

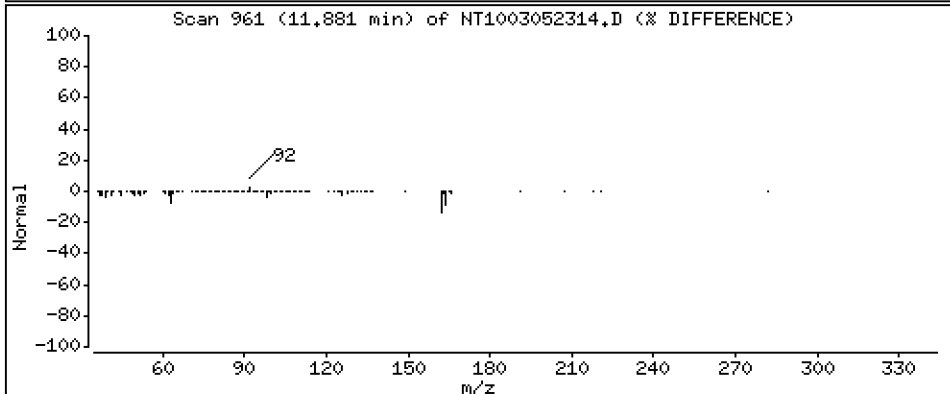
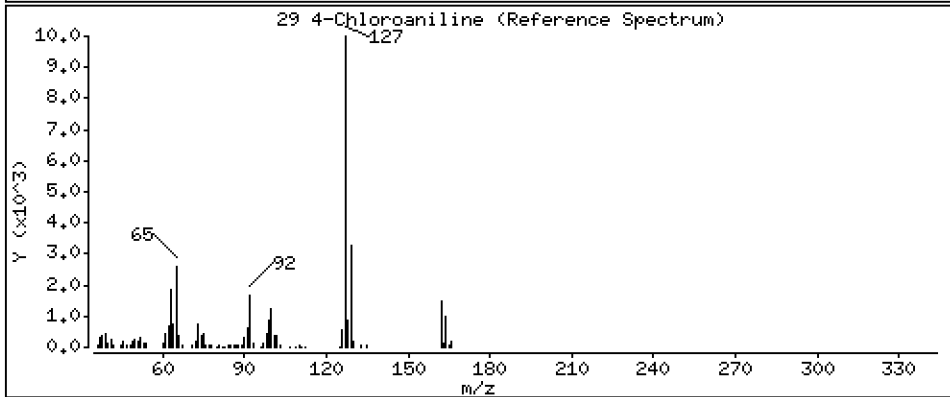
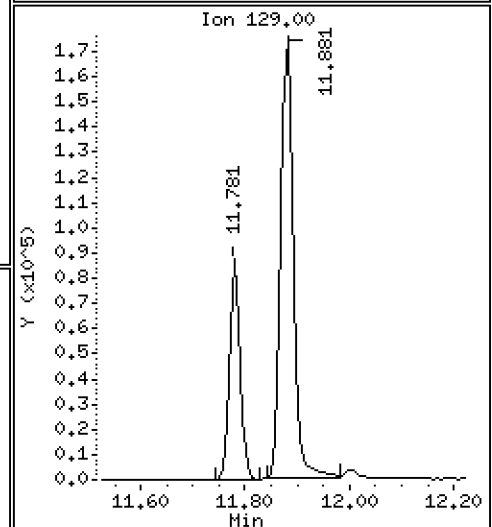
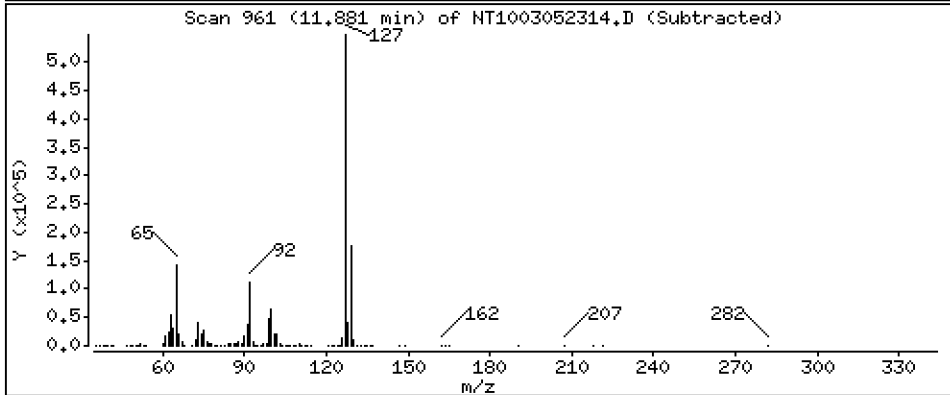
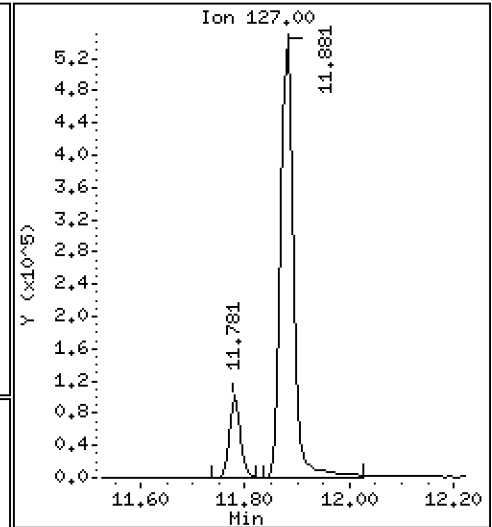
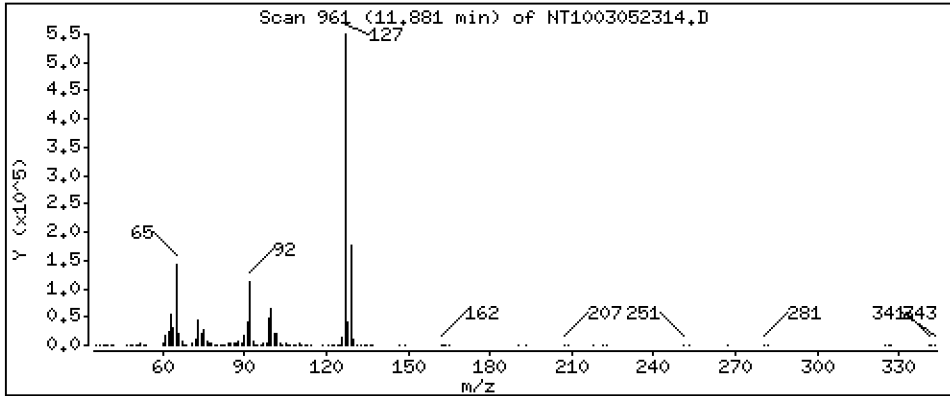
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 8,733 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

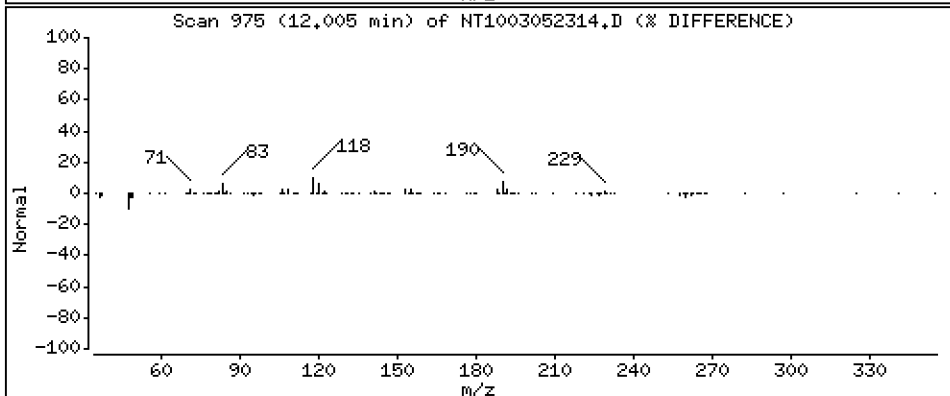
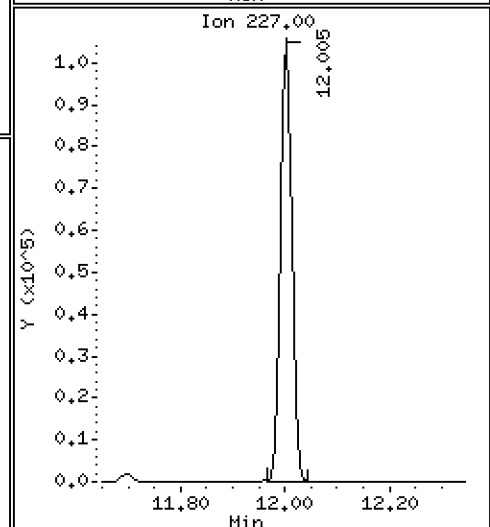
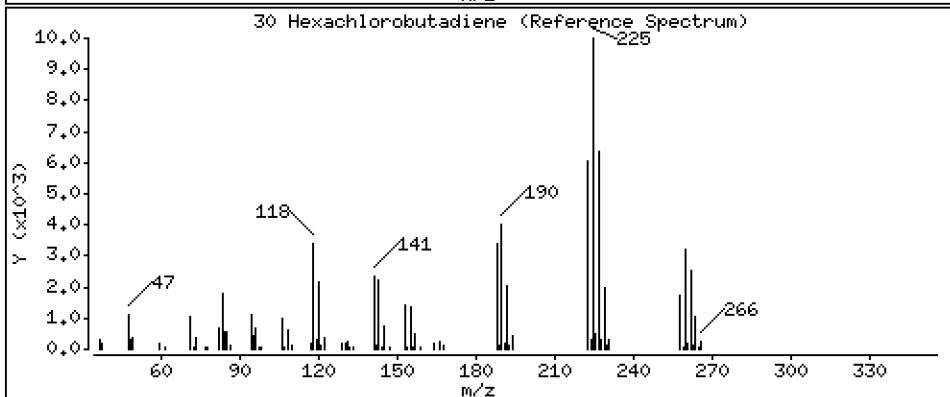
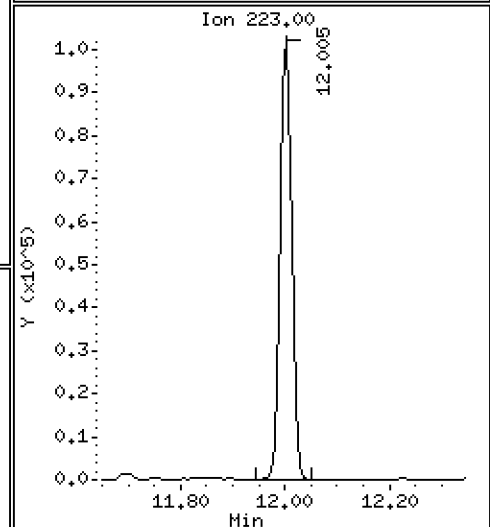
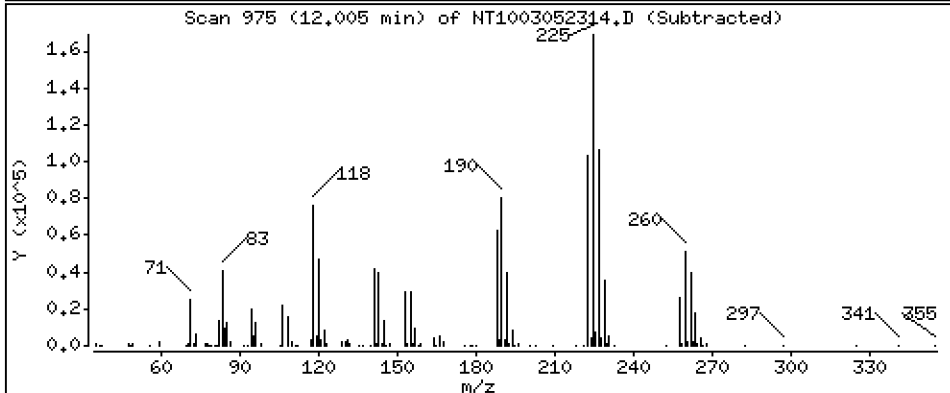
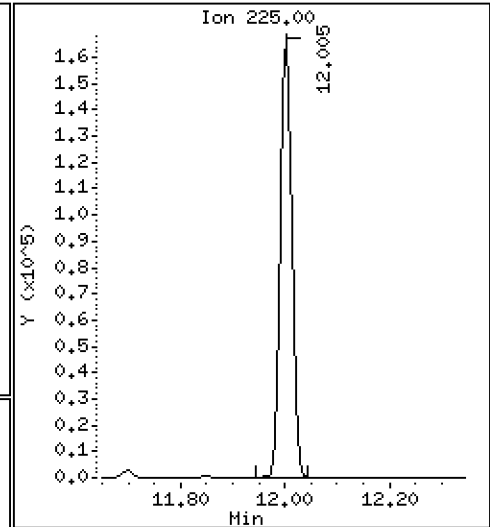
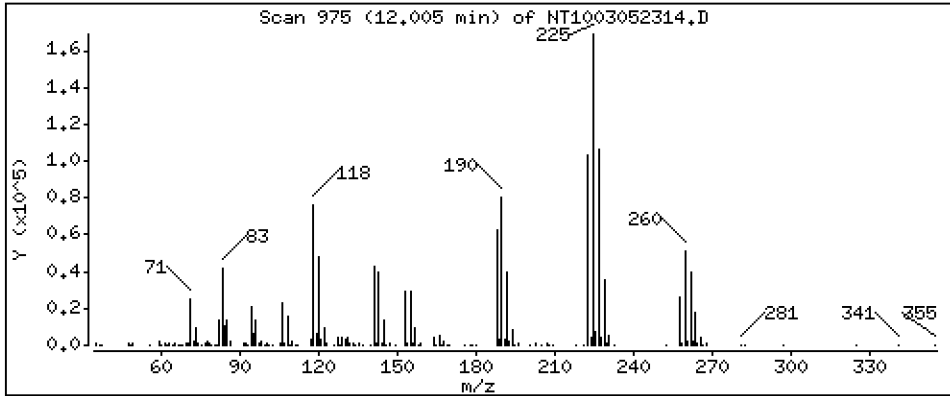
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 5,391 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

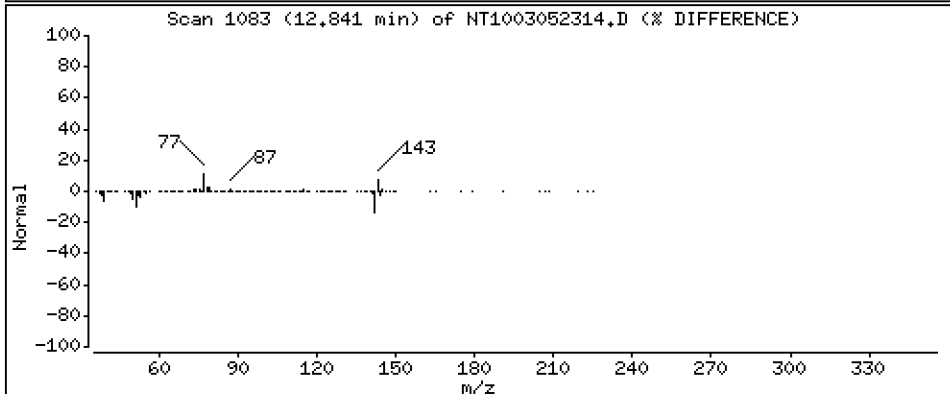
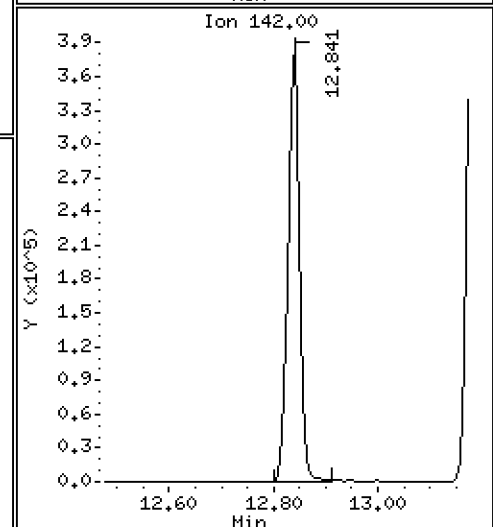
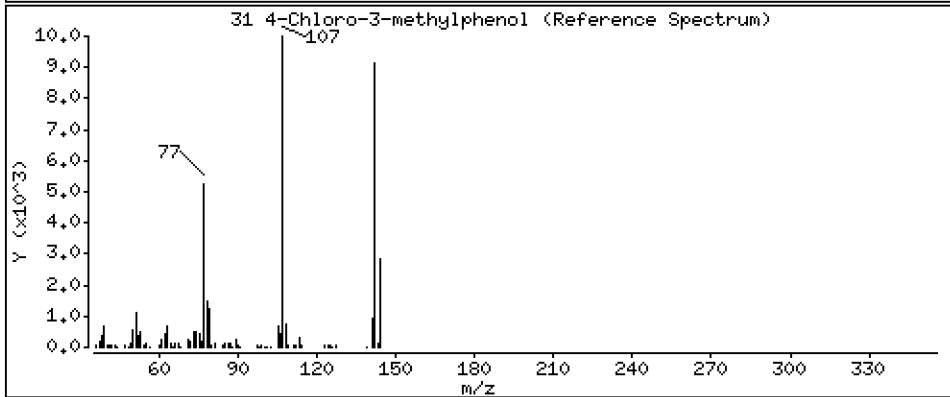
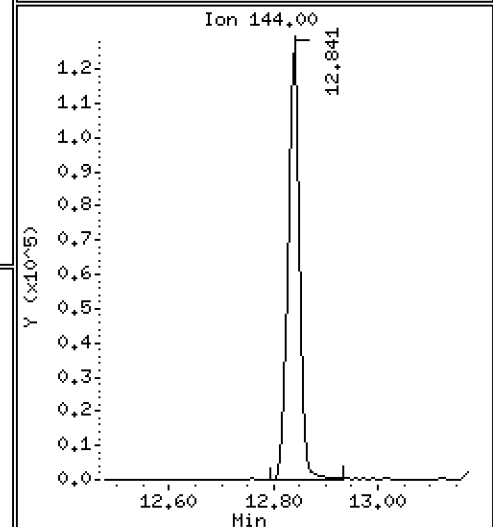
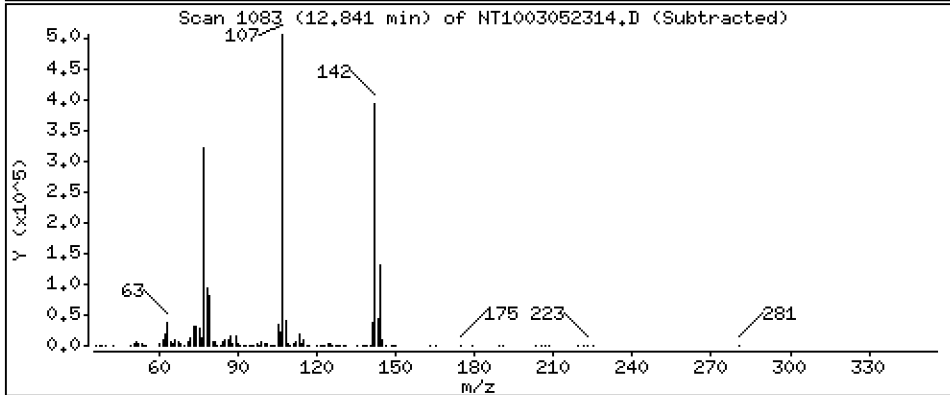
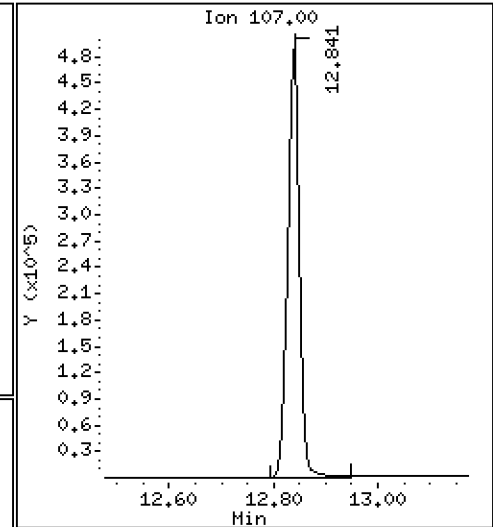
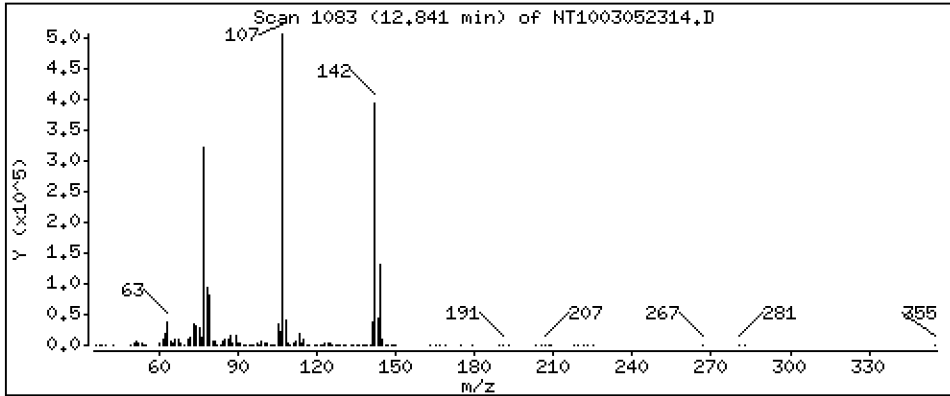
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 9,582 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

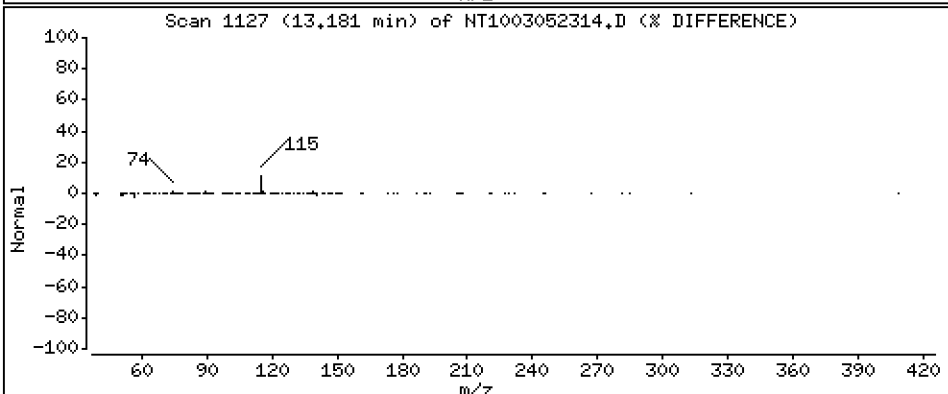
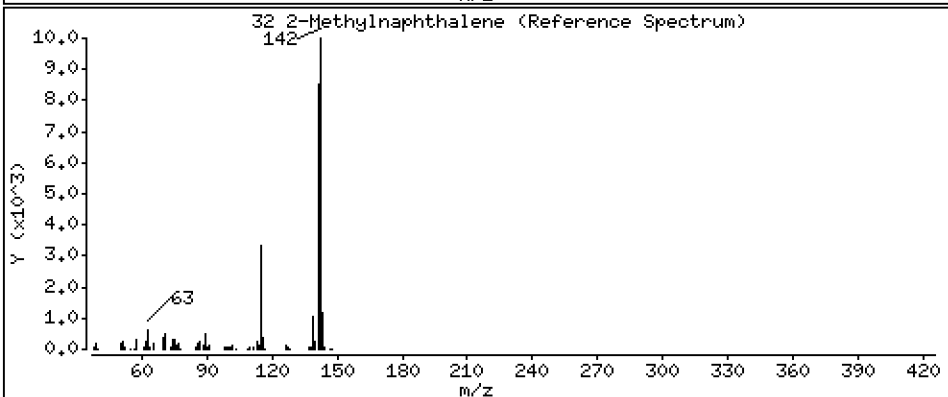
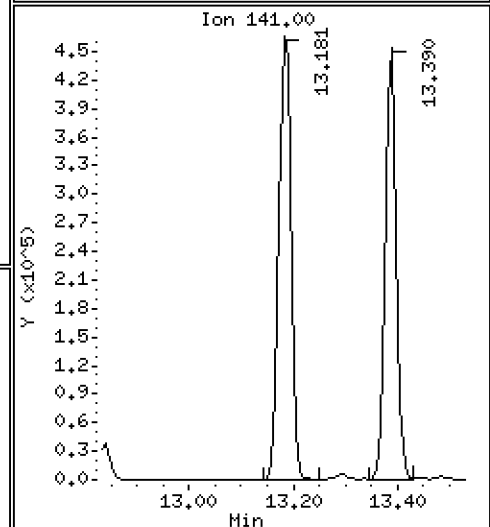
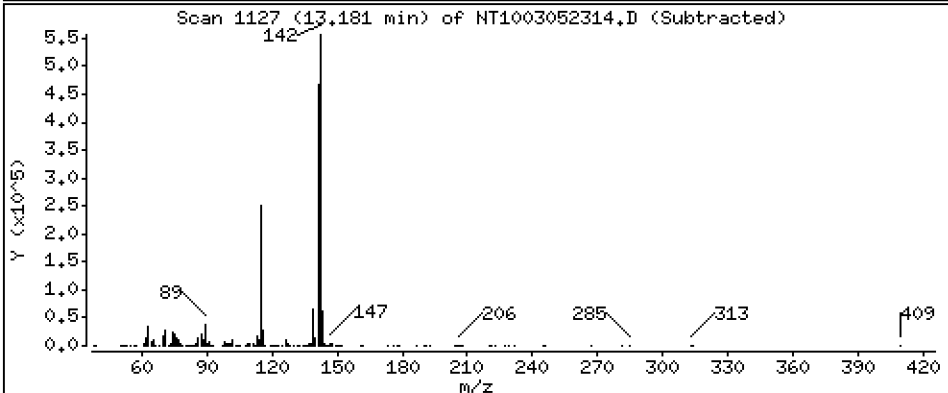
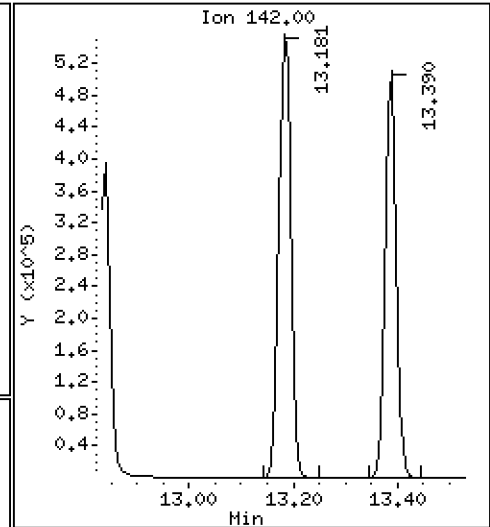
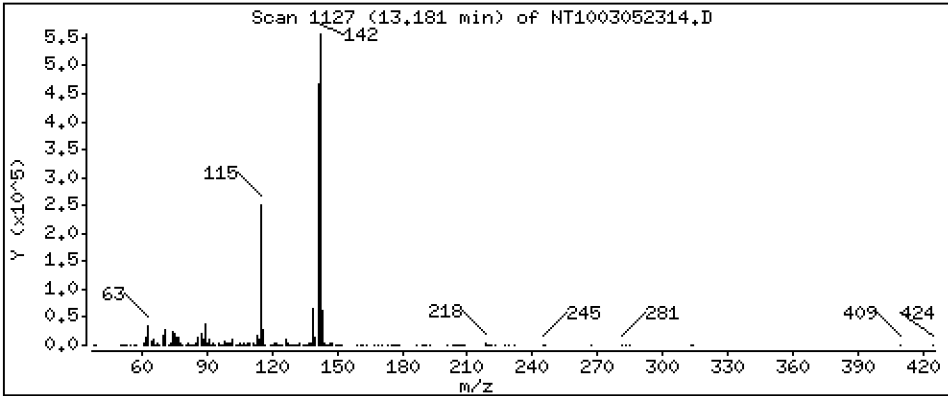
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,957 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

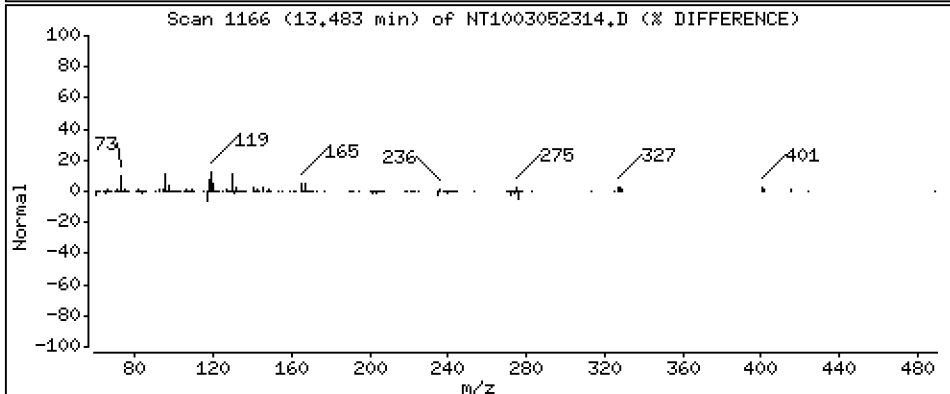
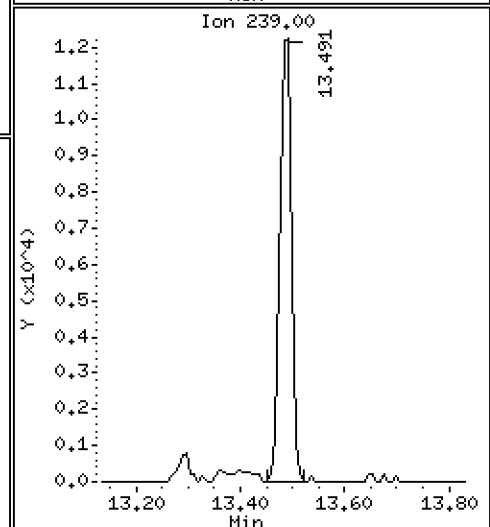
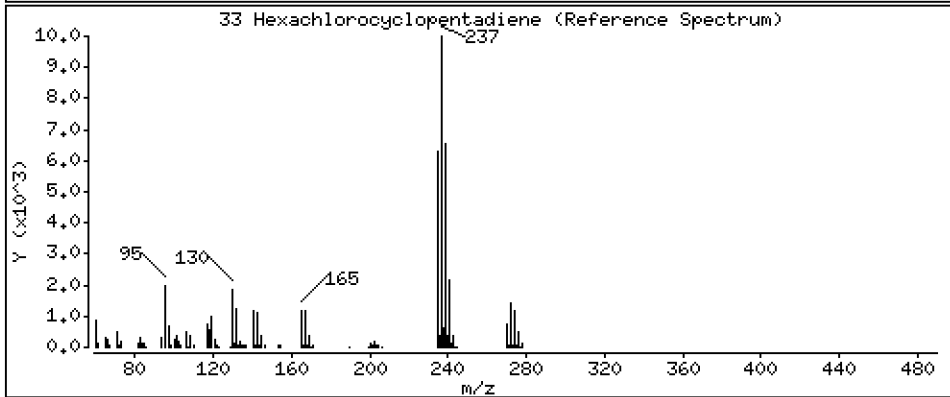
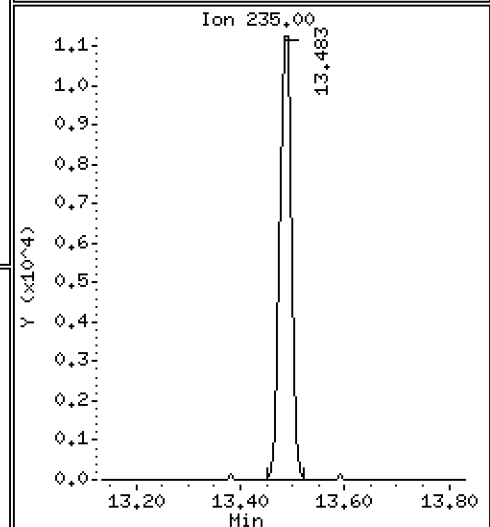
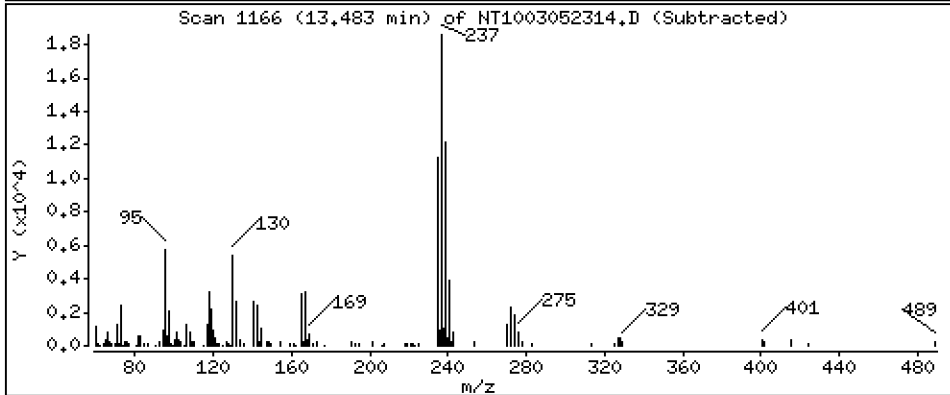
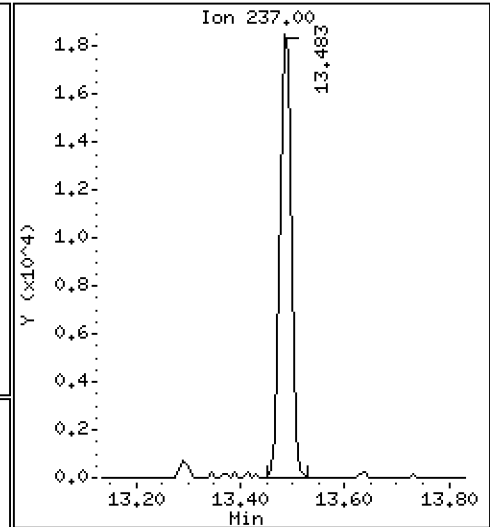
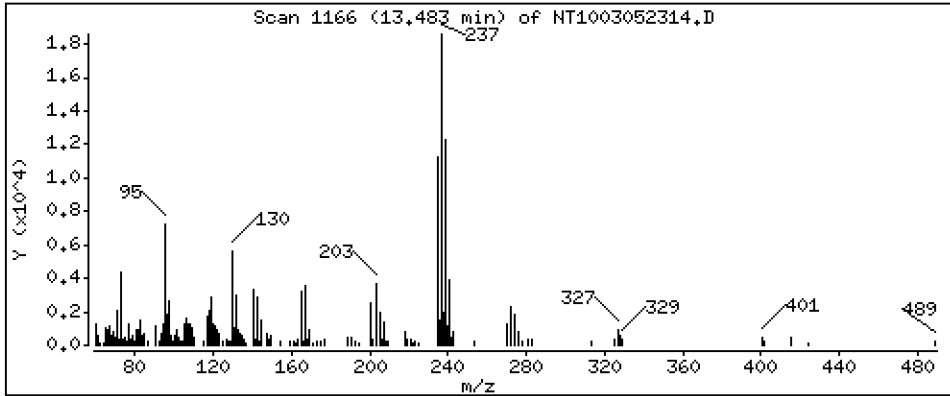
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 1,598 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

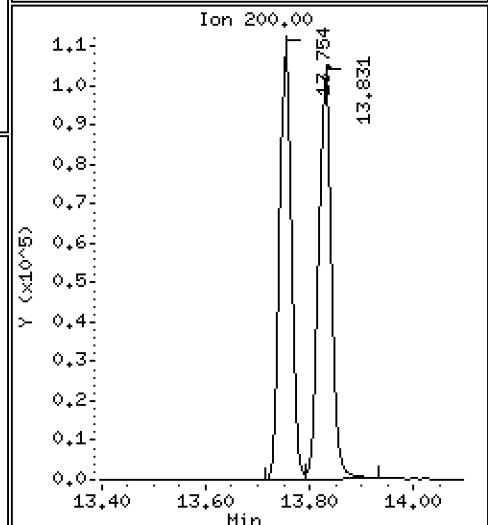
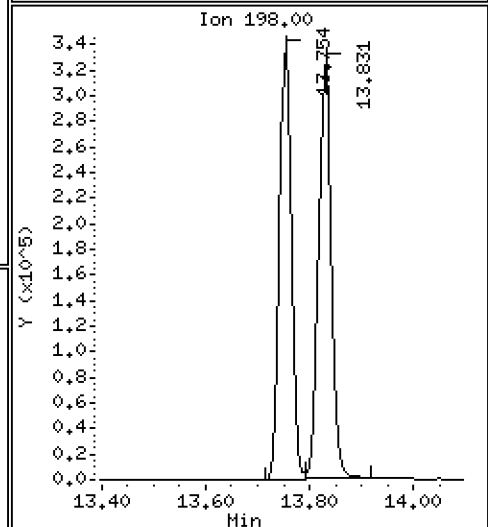
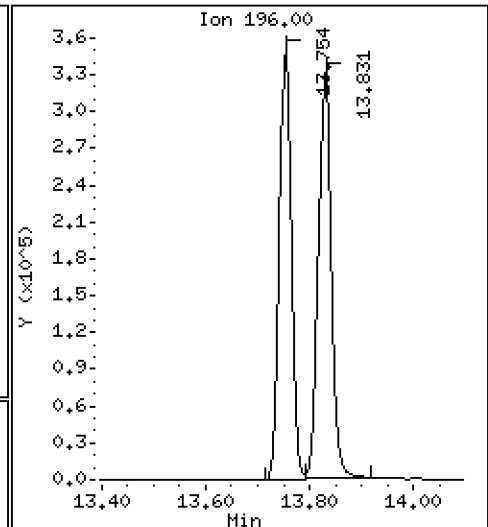
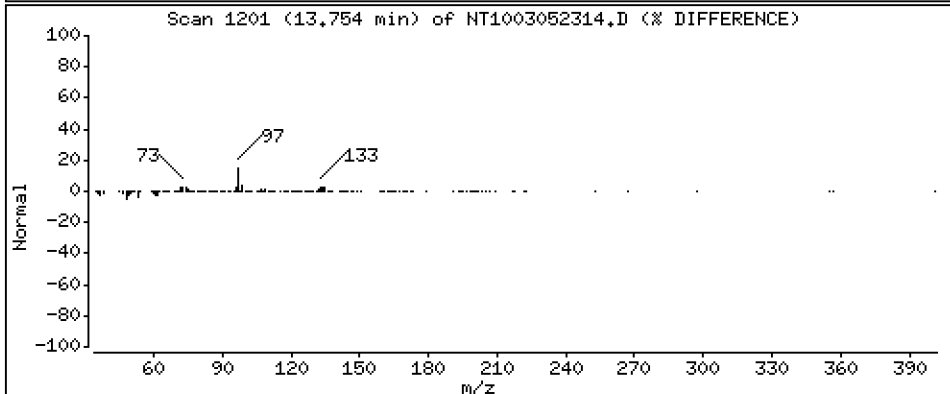
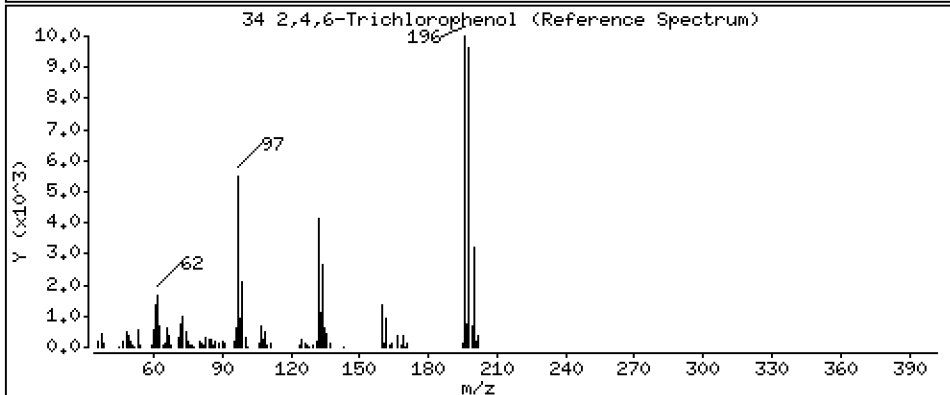
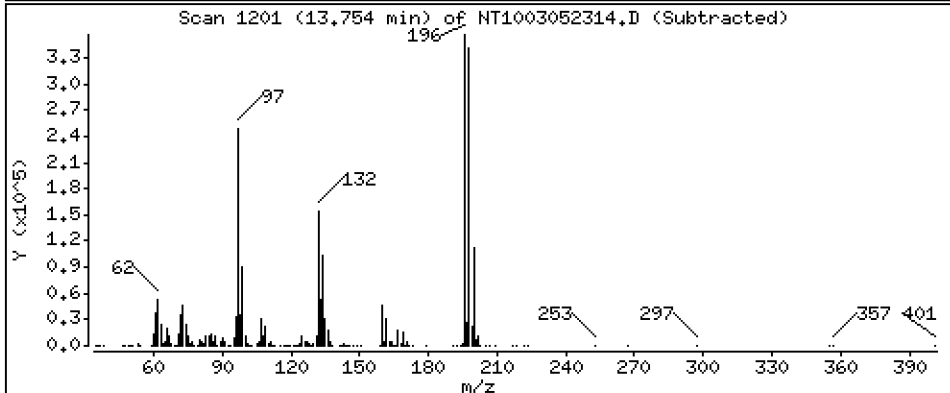
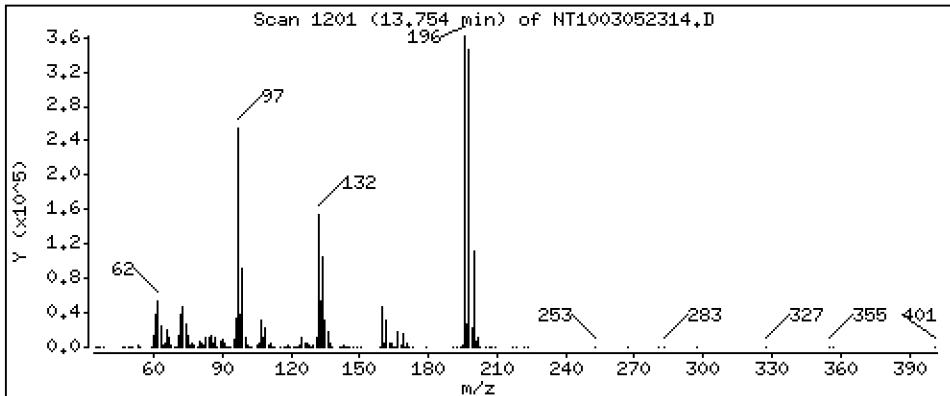
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 10,50 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

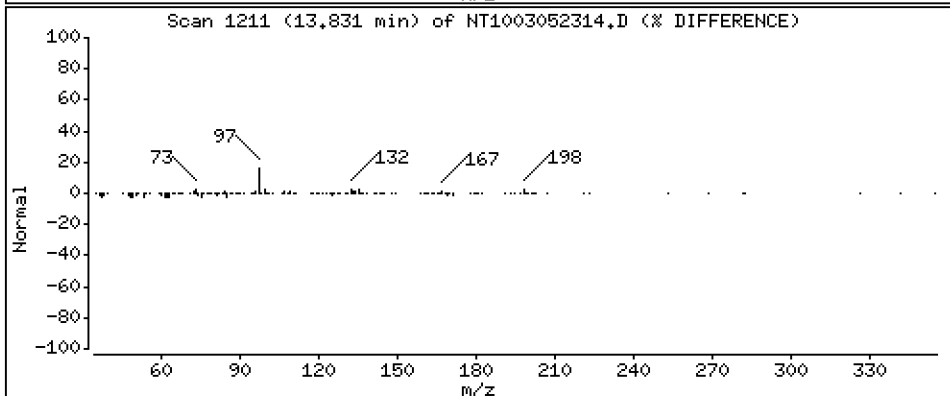
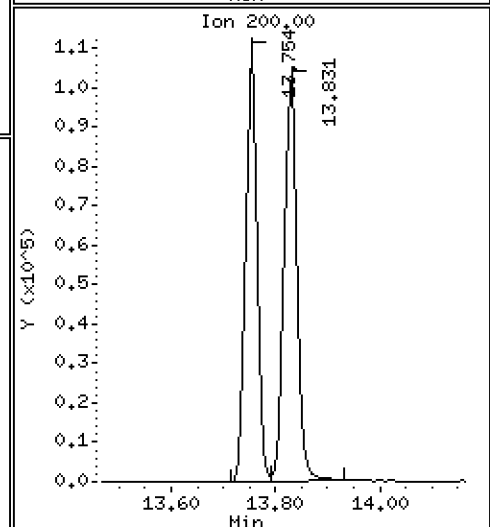
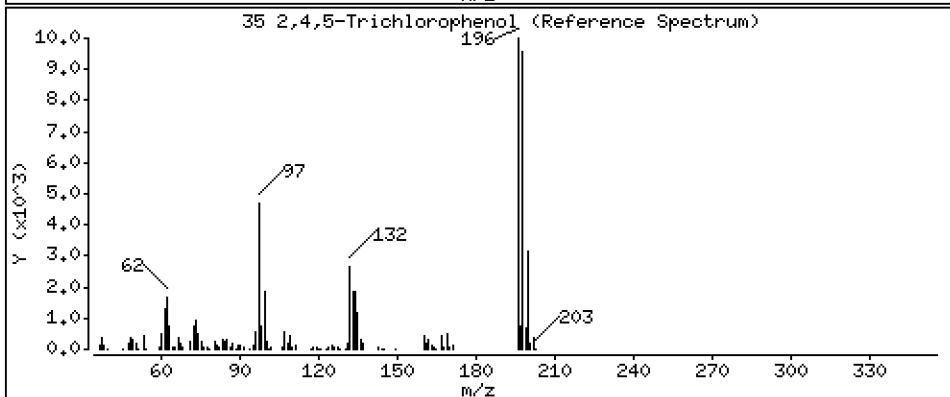
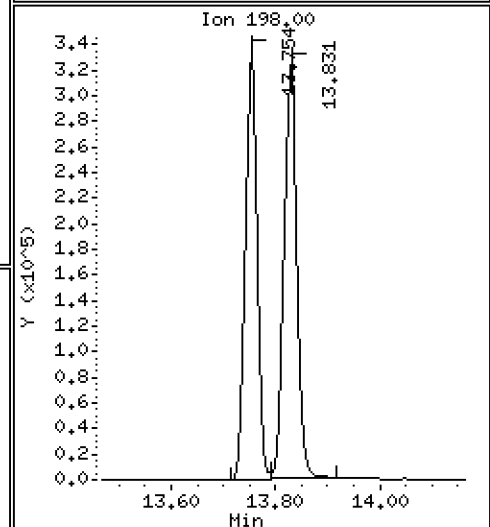
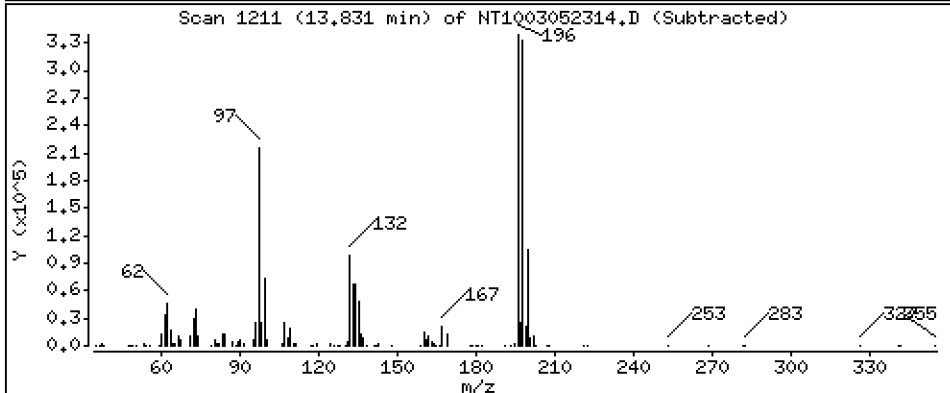
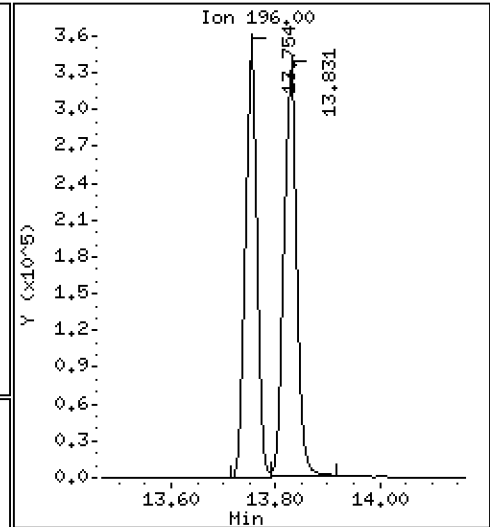
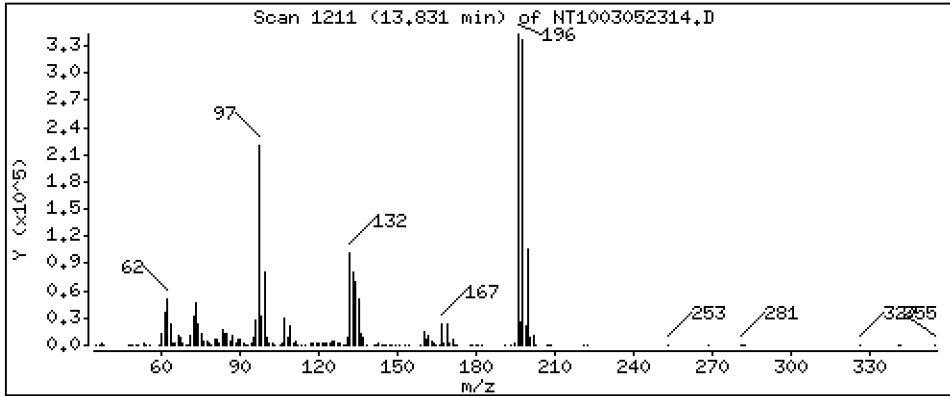
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 10,27 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

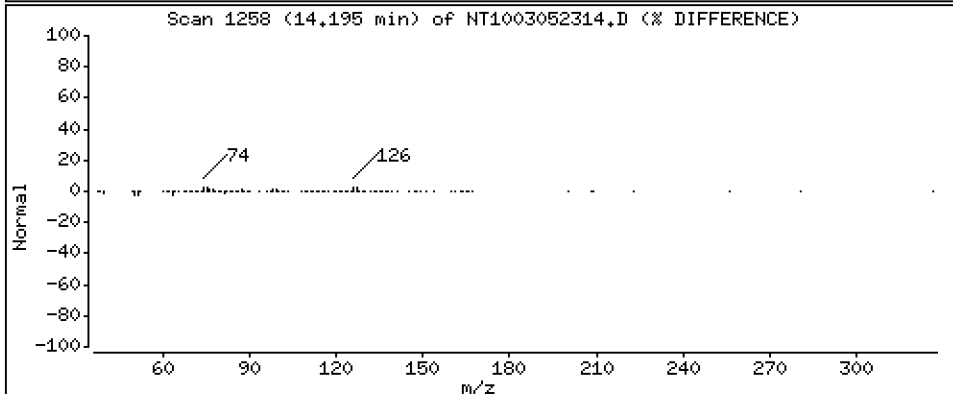
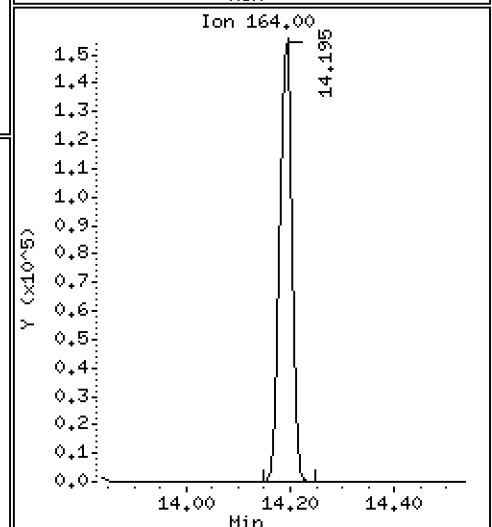
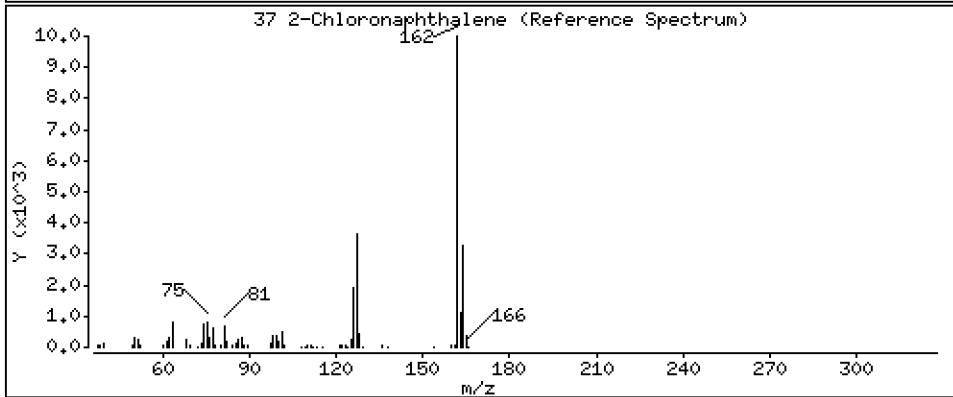
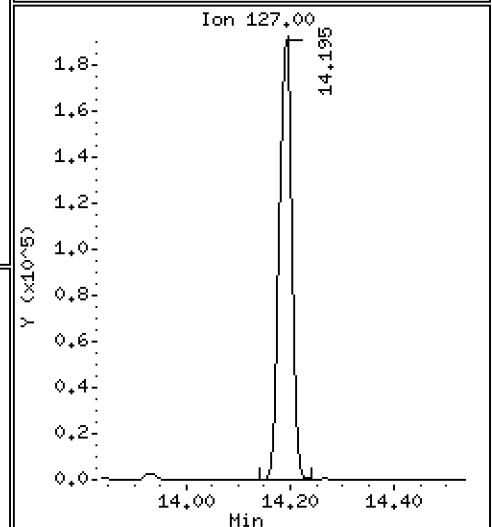
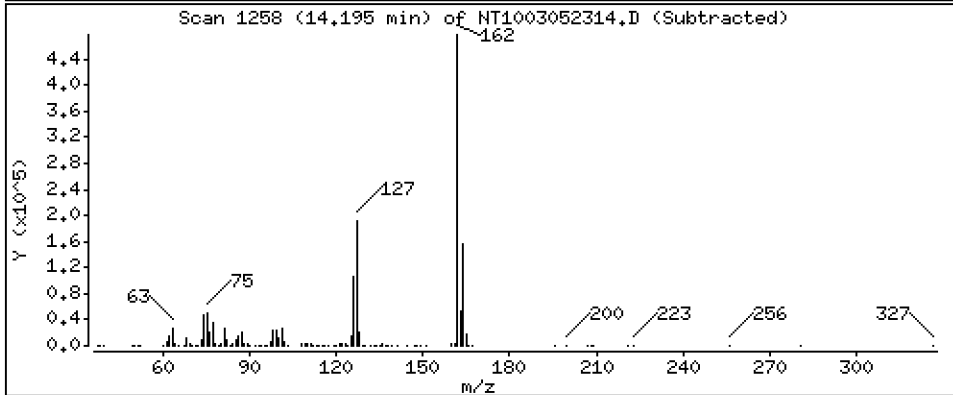
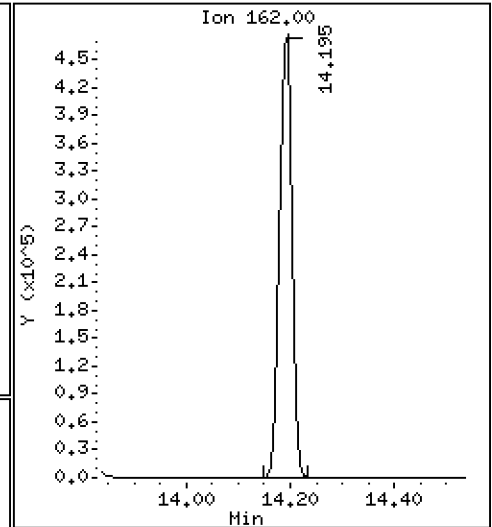
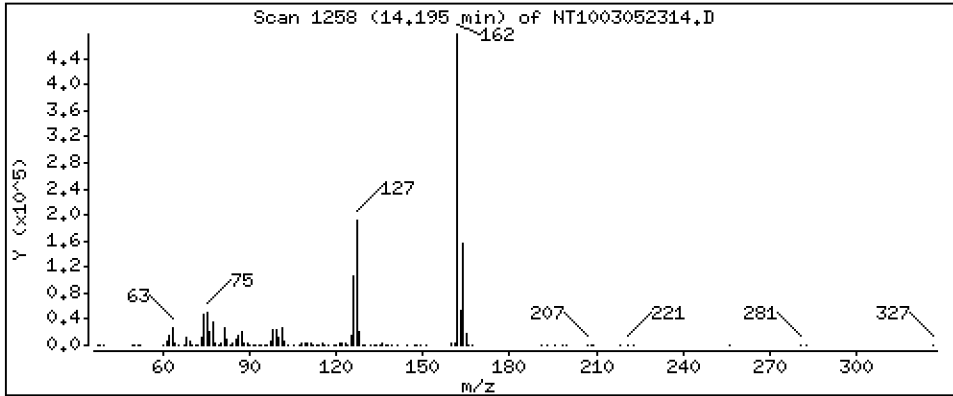
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,365 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

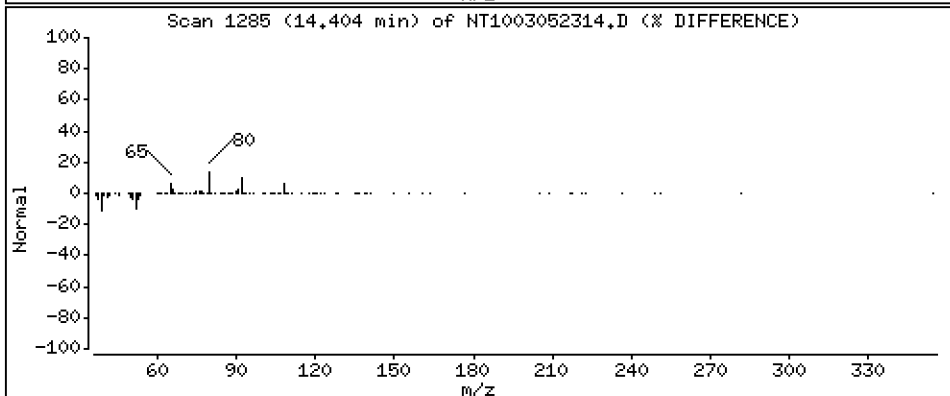
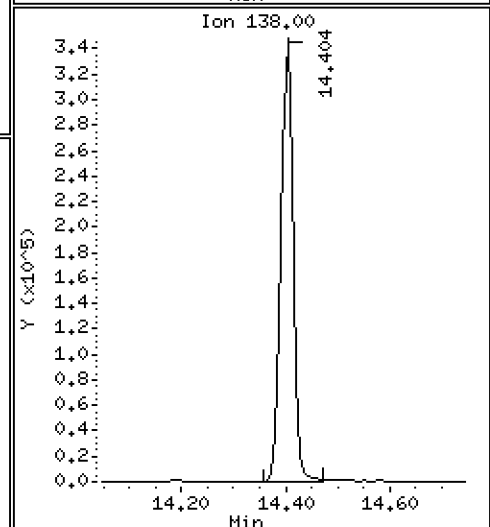
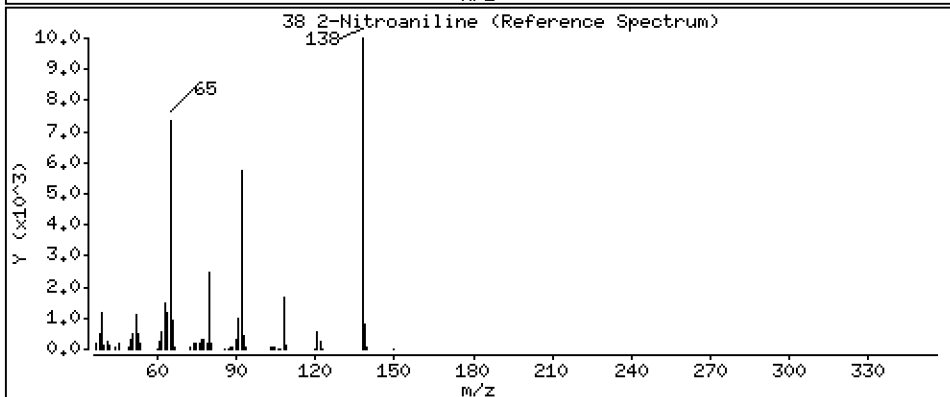
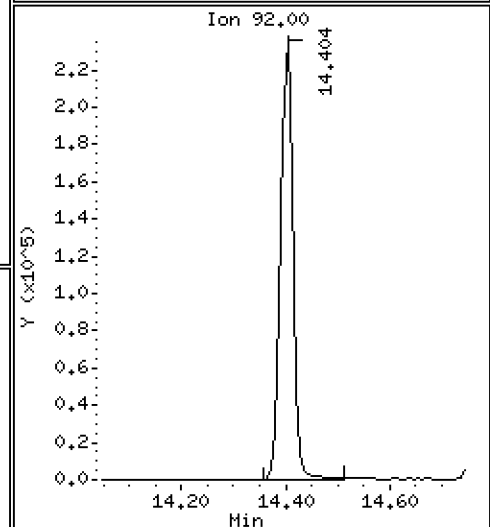
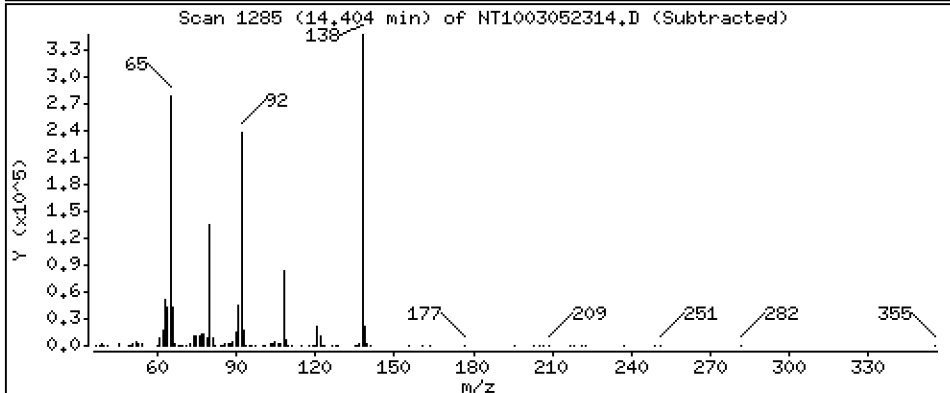
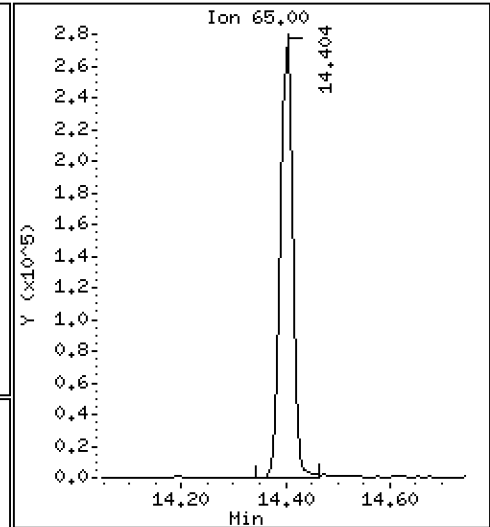
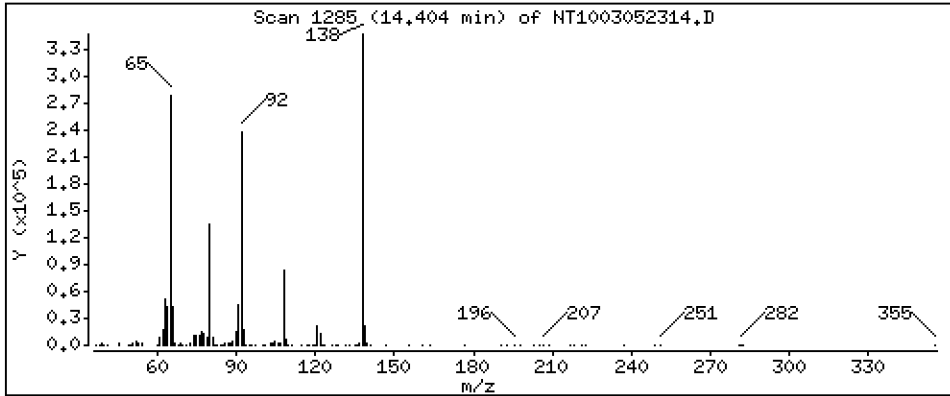
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 10,73 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

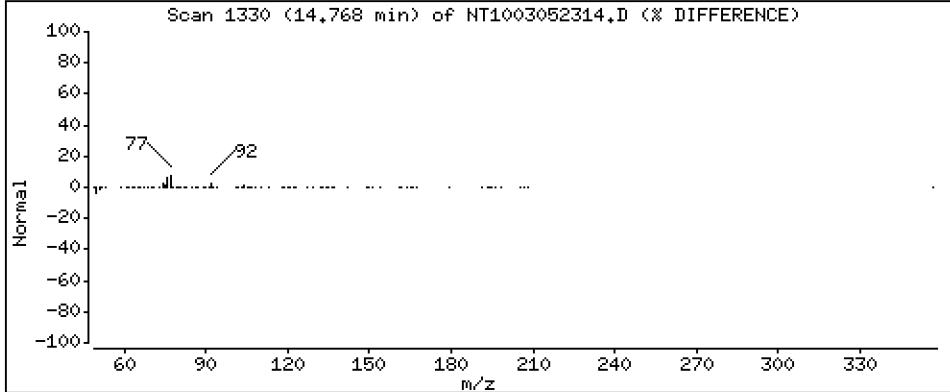
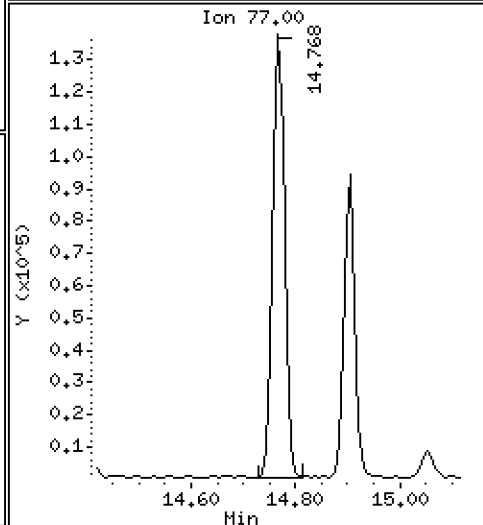
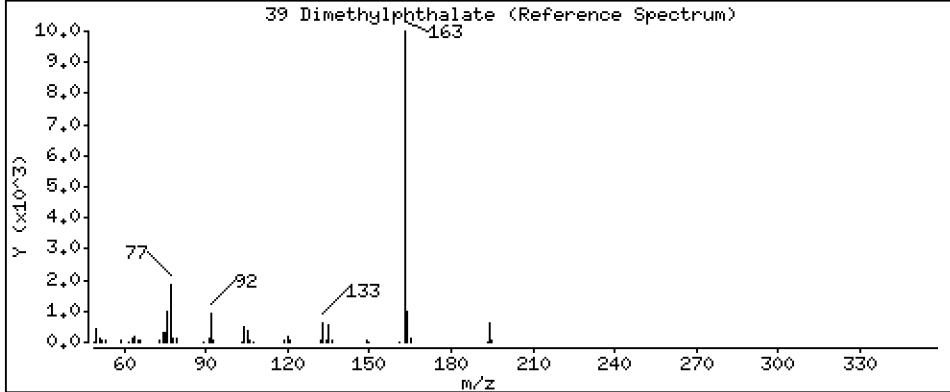
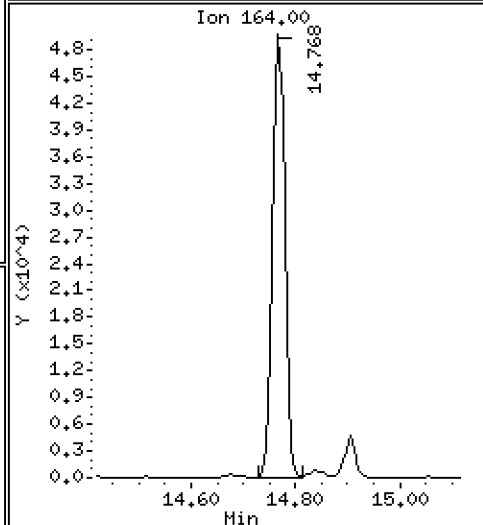
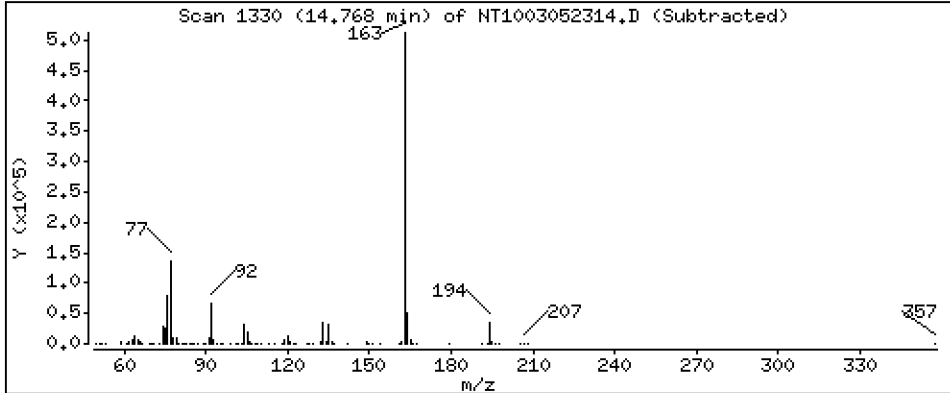
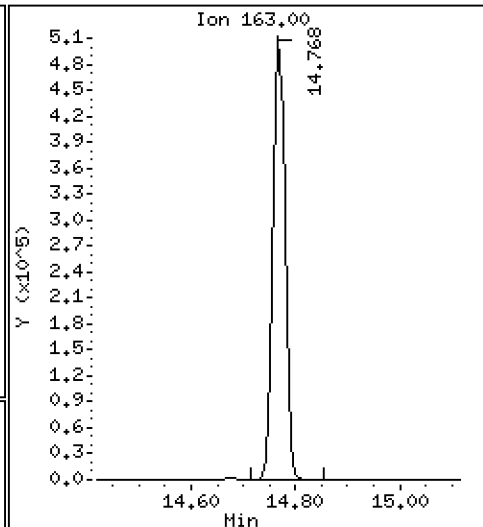
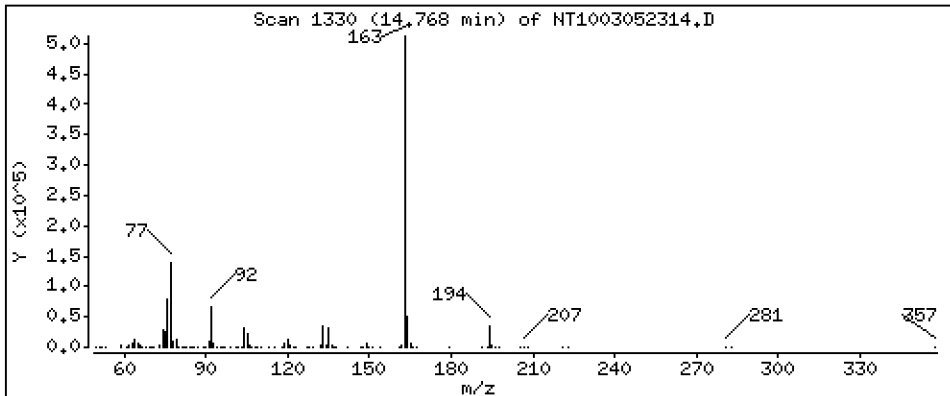
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,778 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

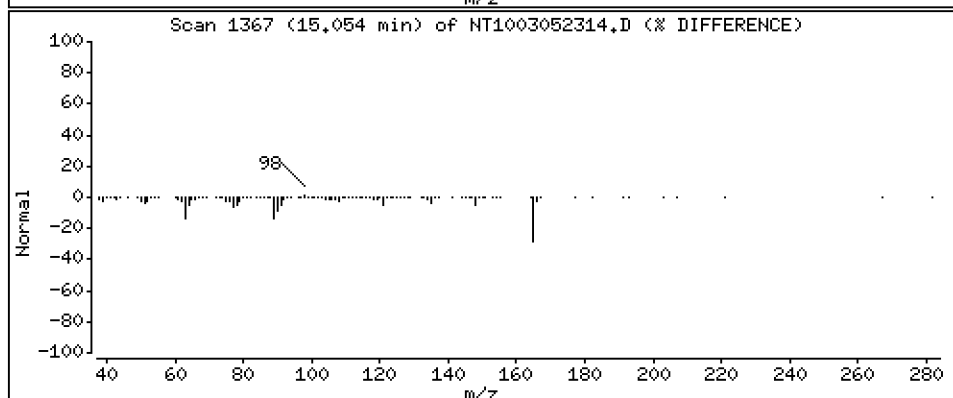
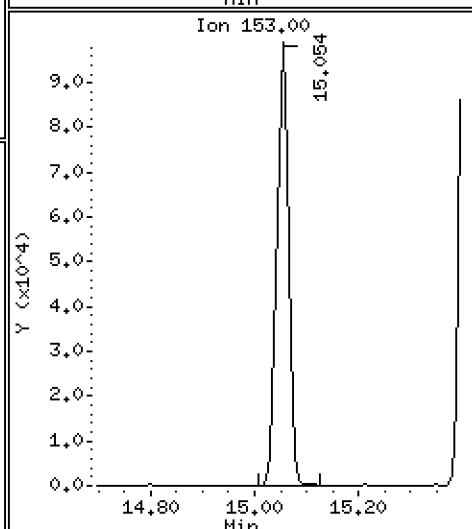
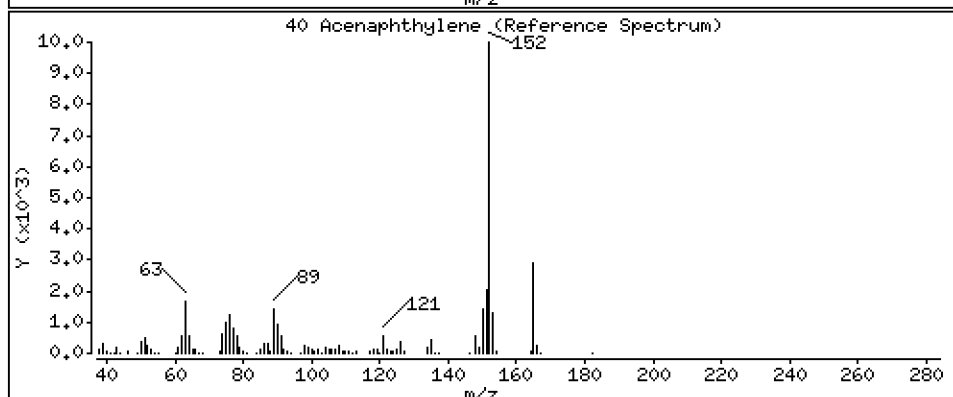
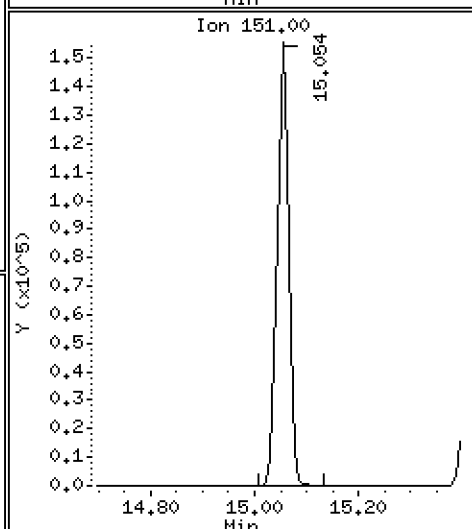
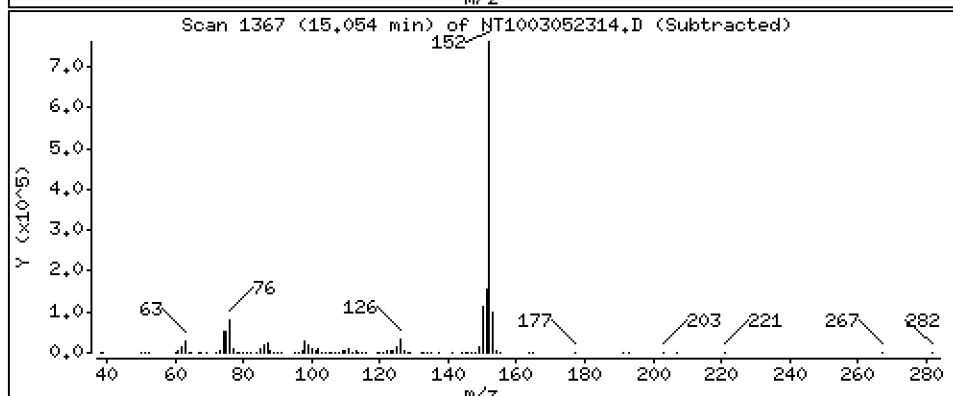
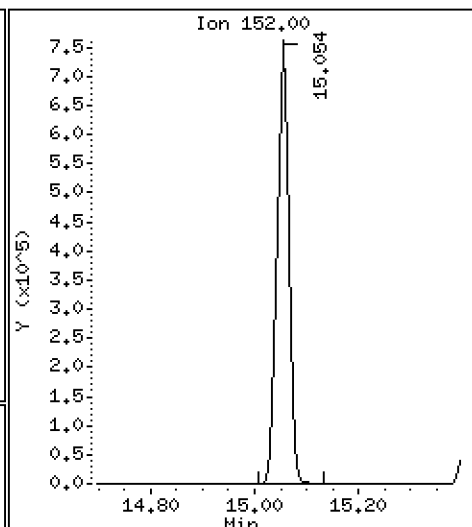
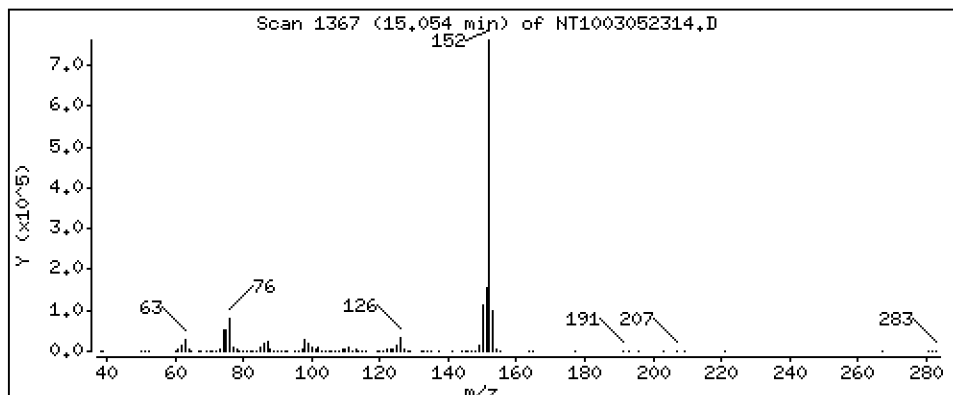
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,459 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

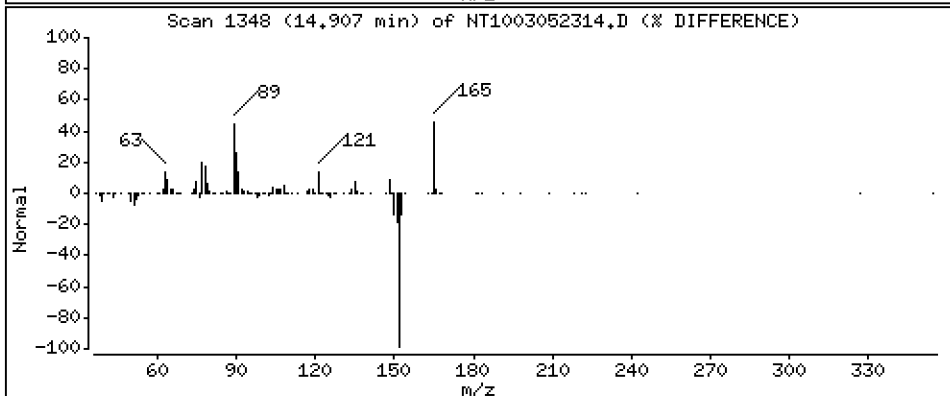
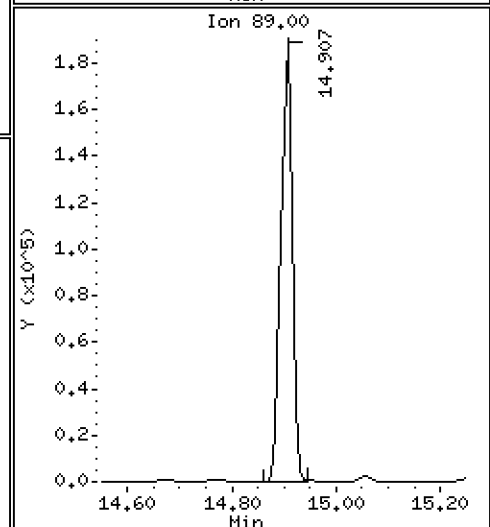
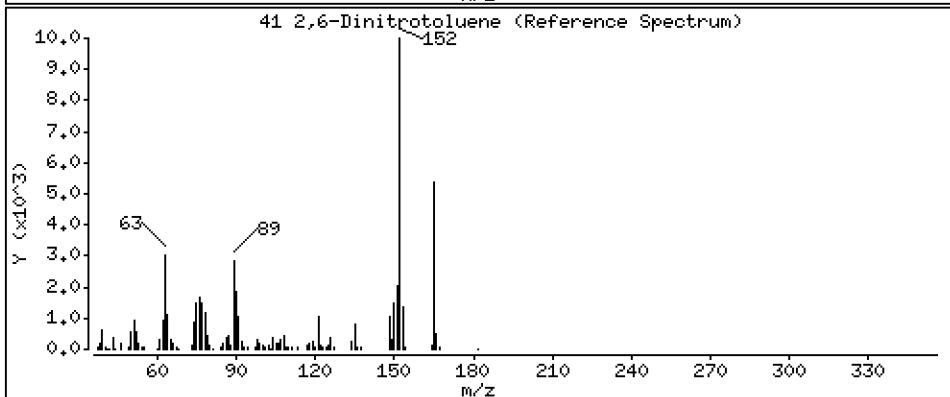
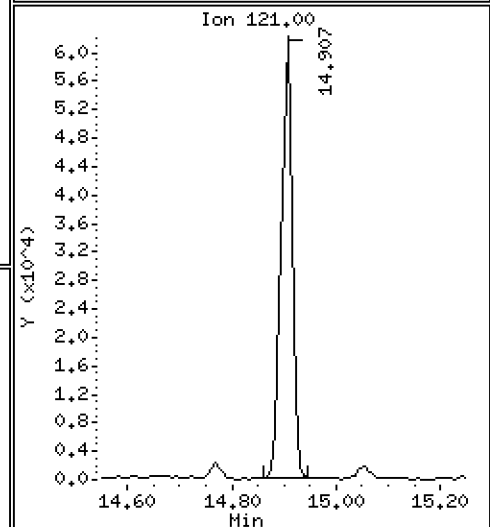
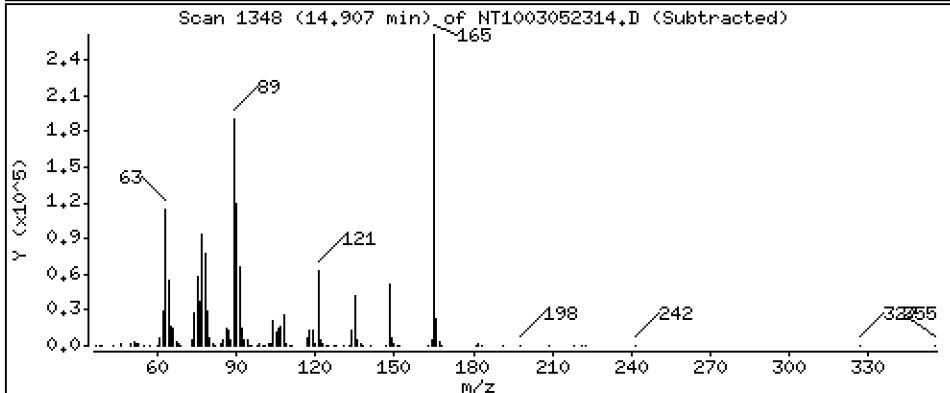
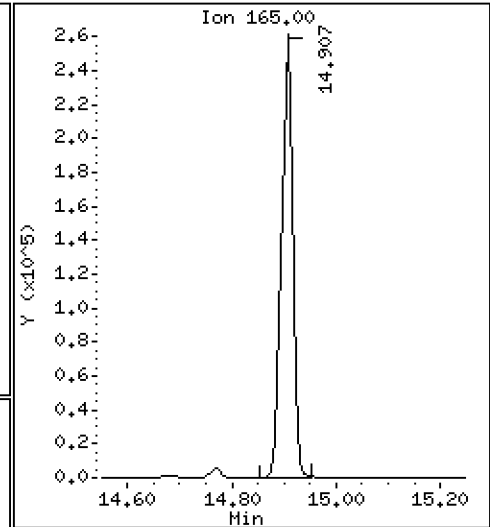
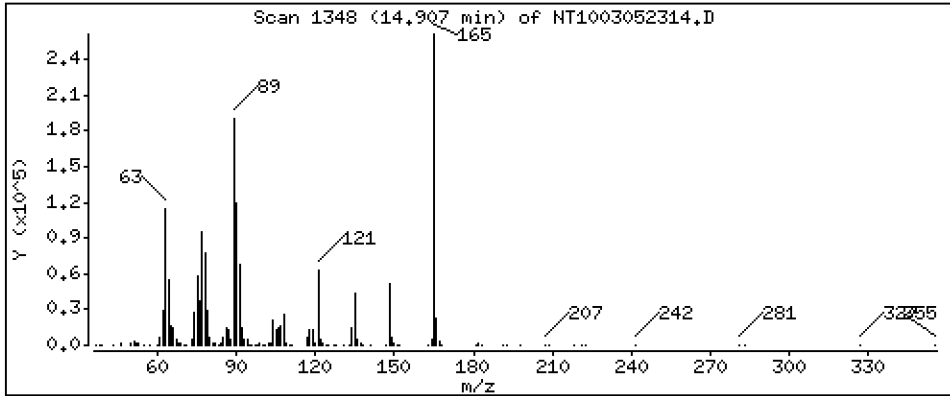
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 10,17 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

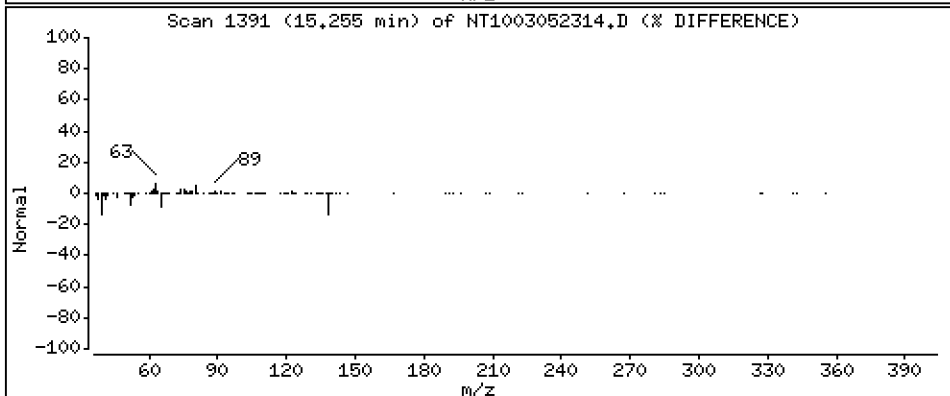
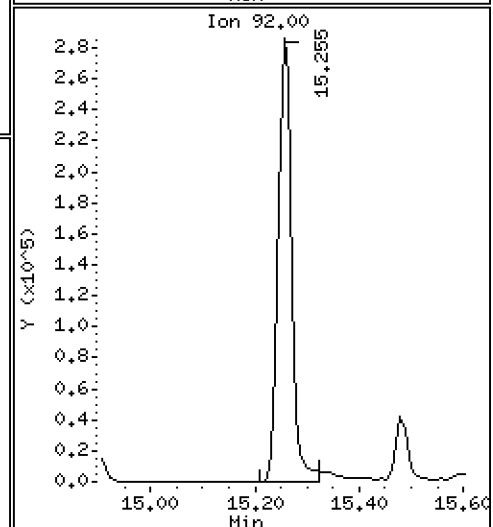
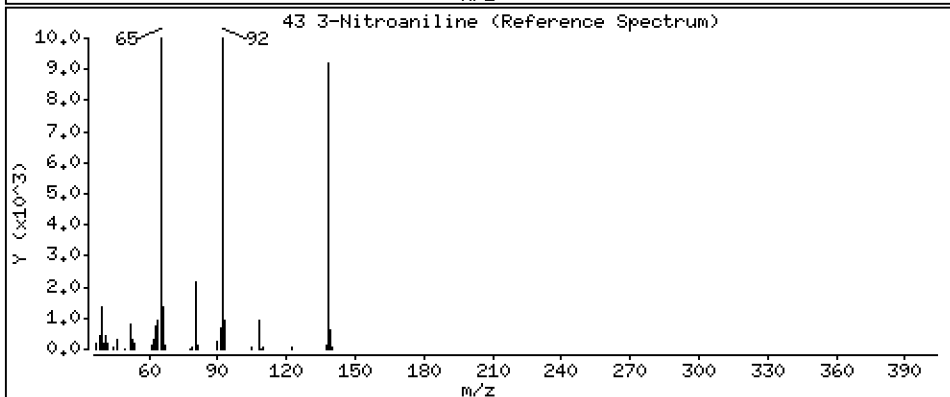
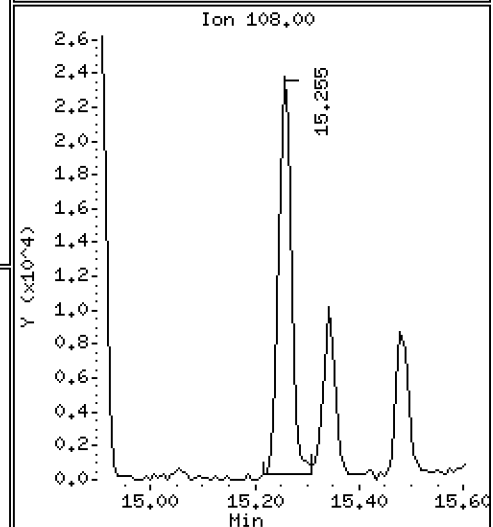
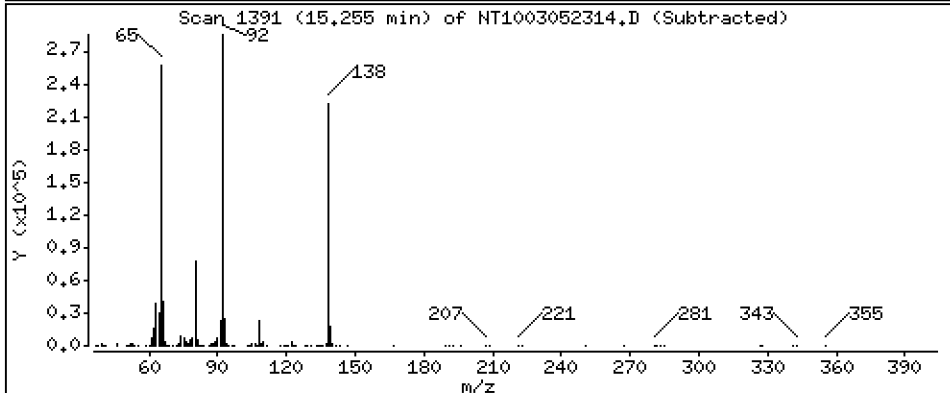
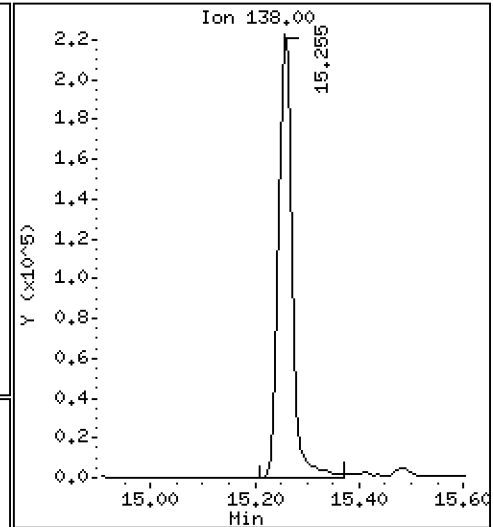
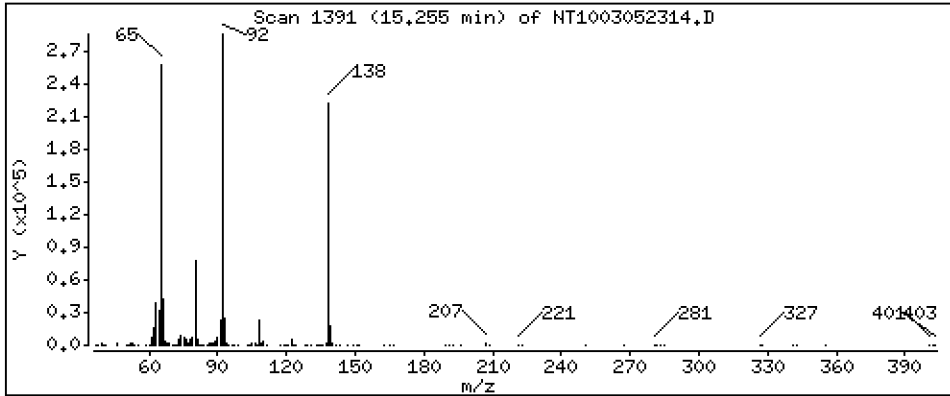
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 9,490 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

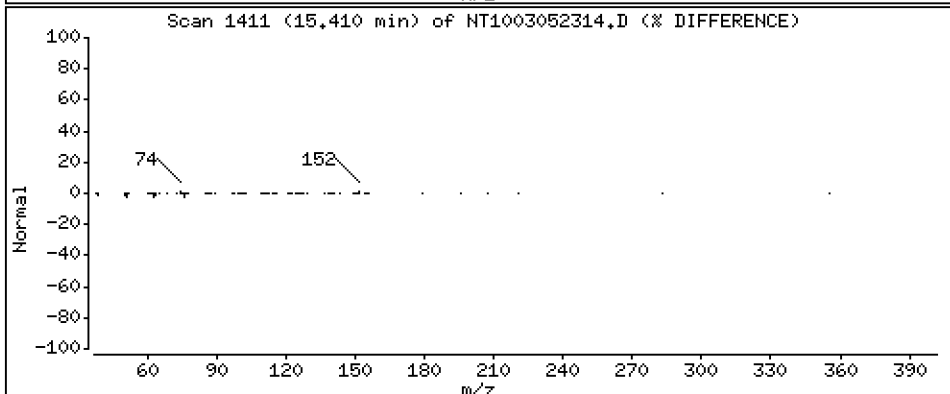
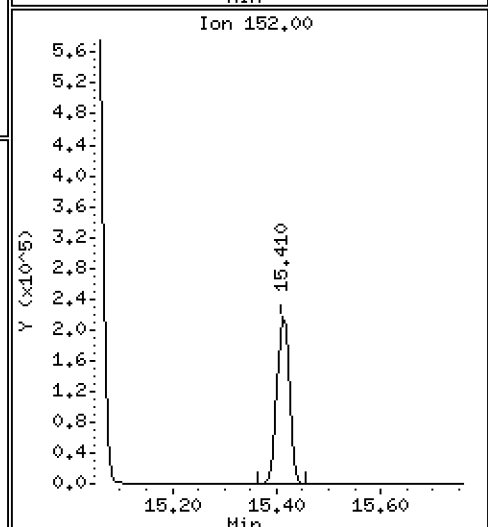
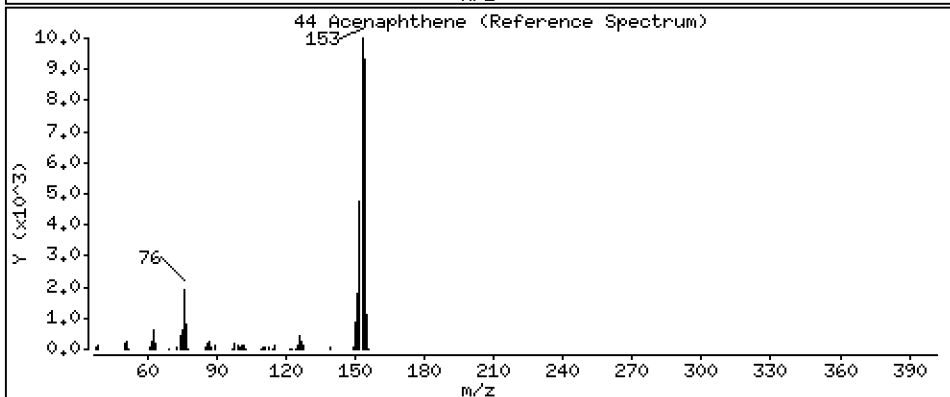
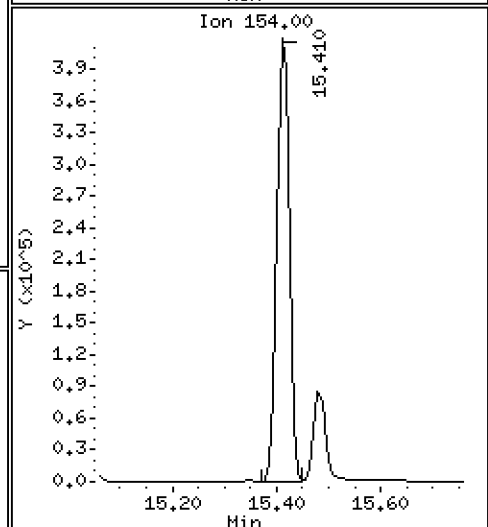
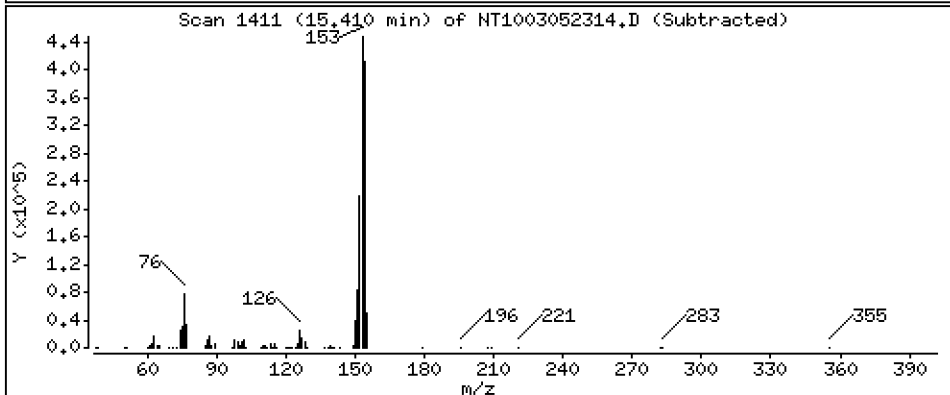
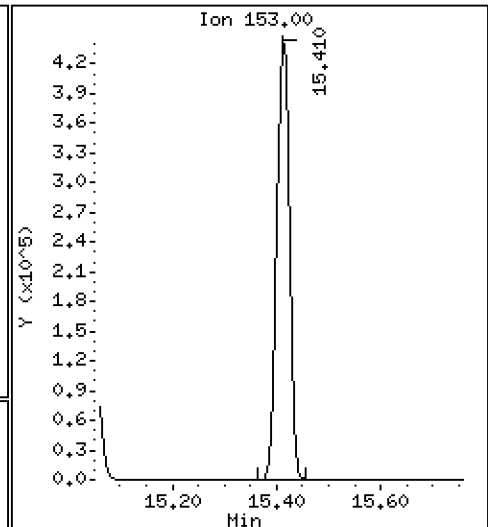
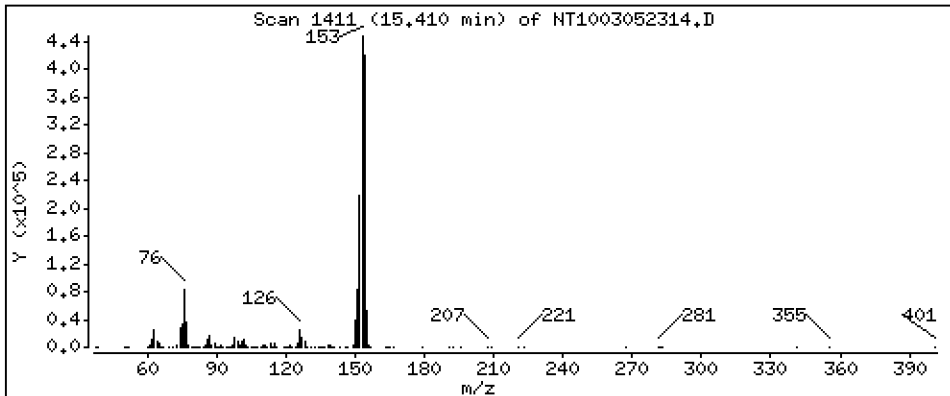
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,859 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

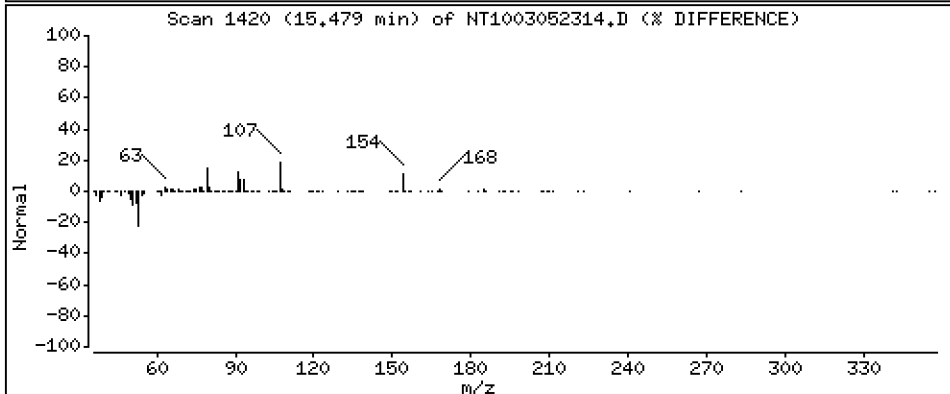
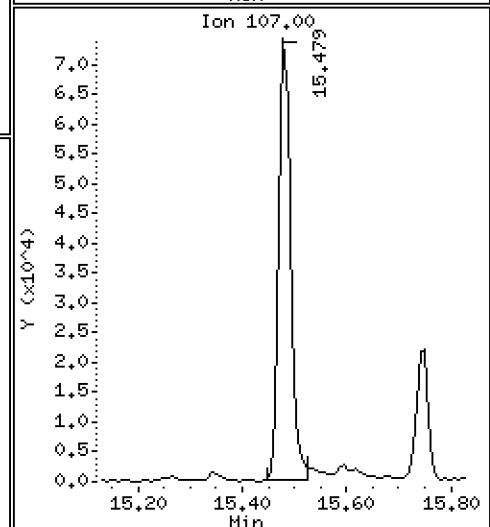
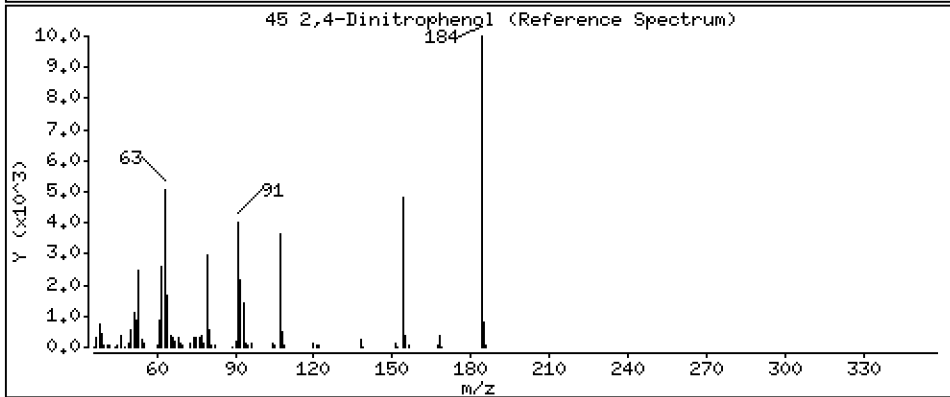
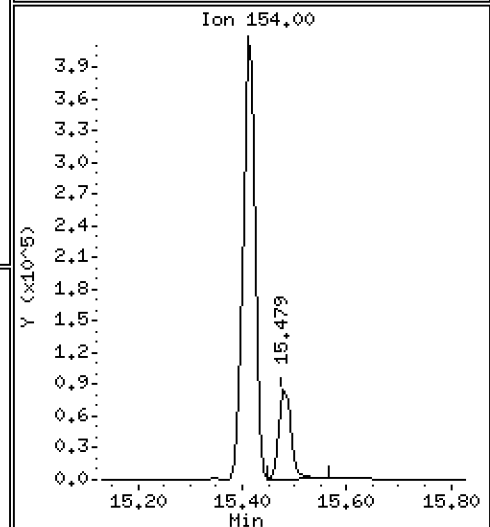
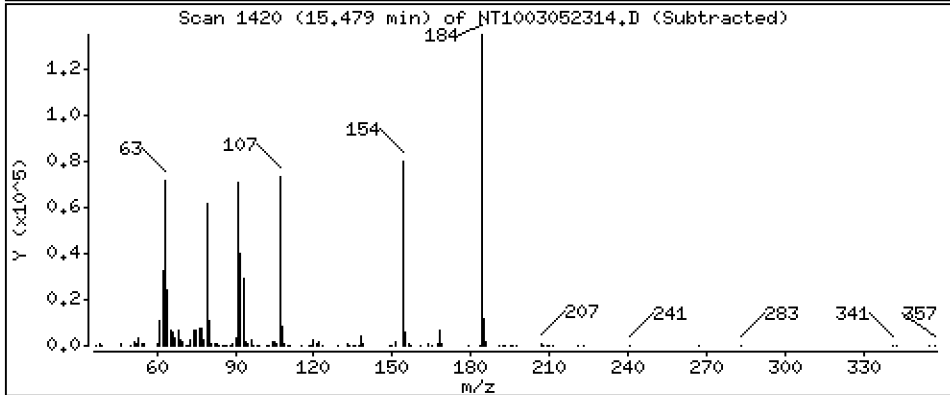
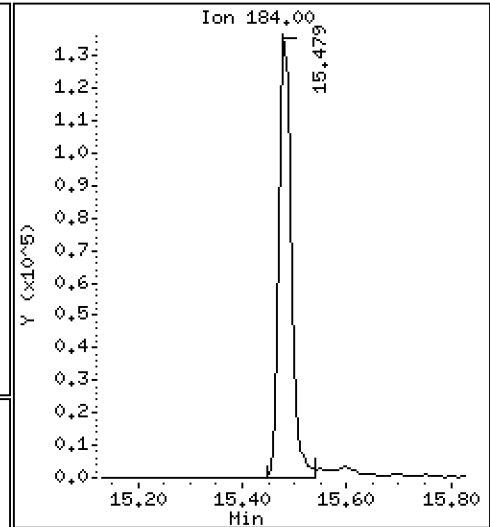
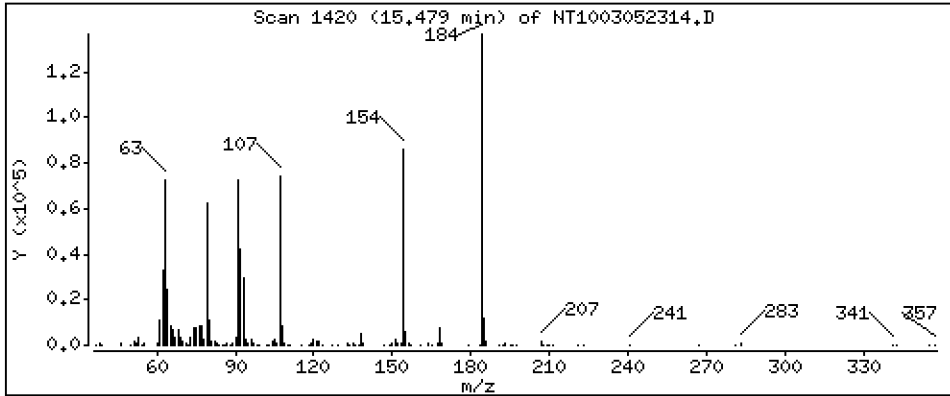
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 20,88 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

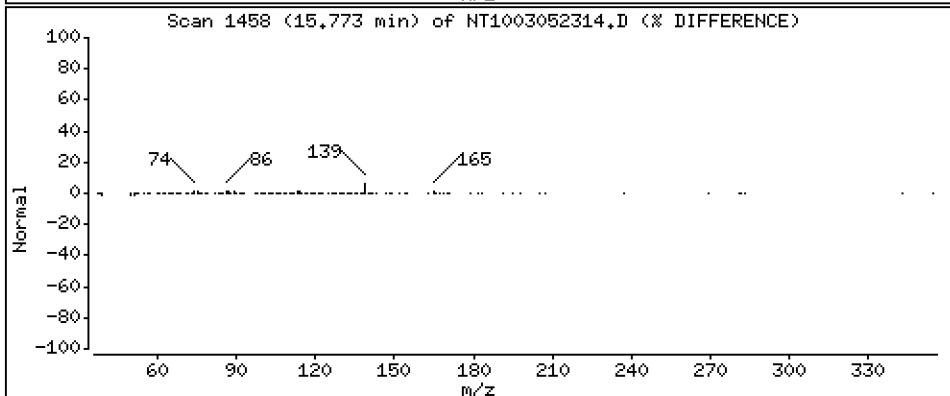
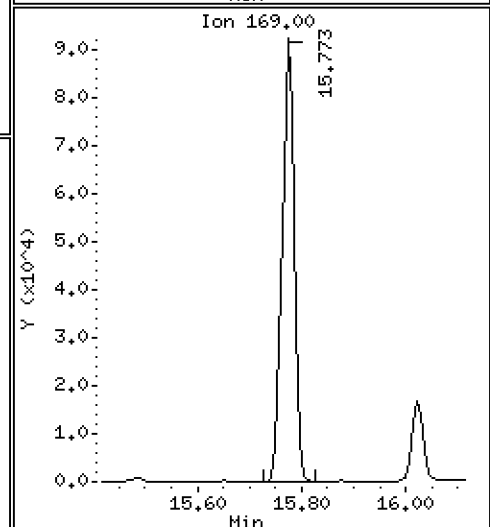
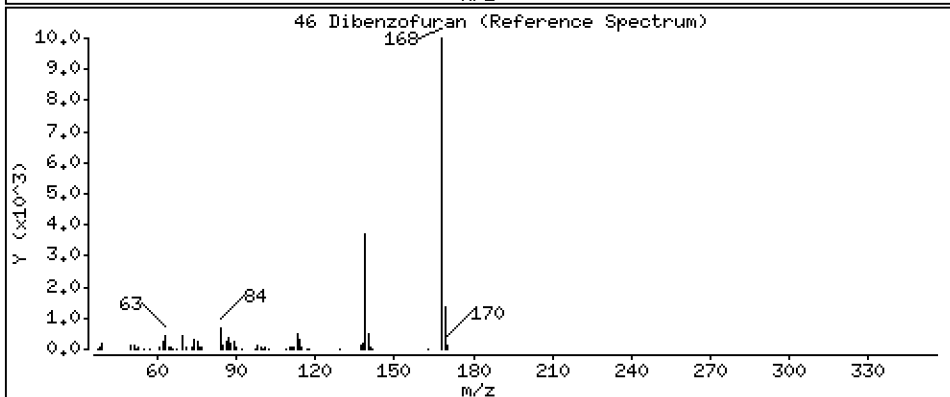
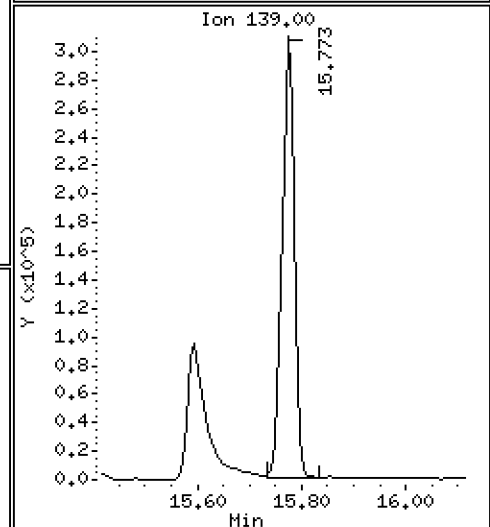
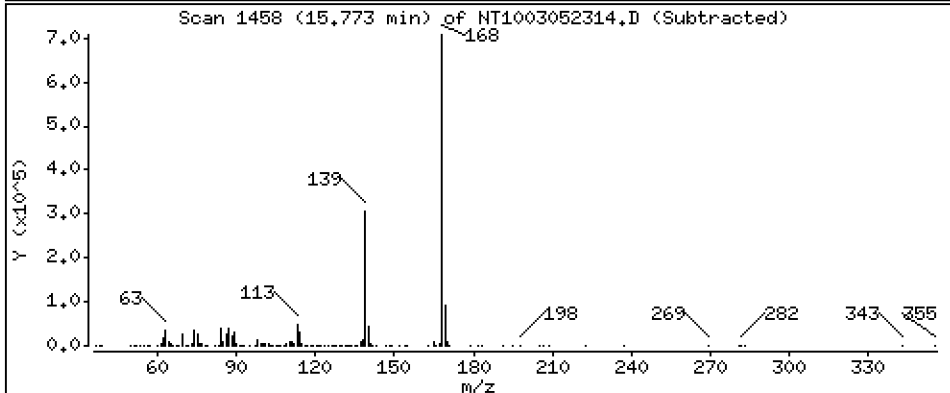
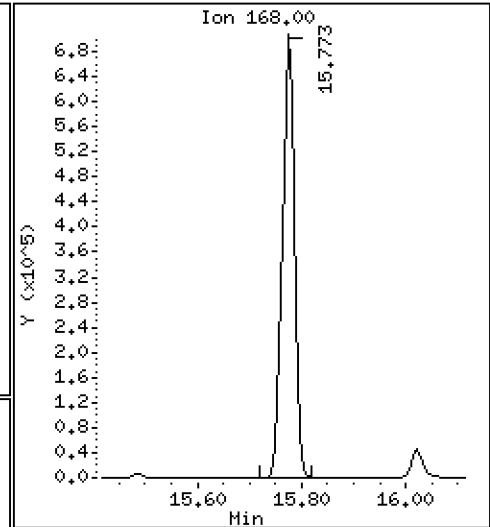
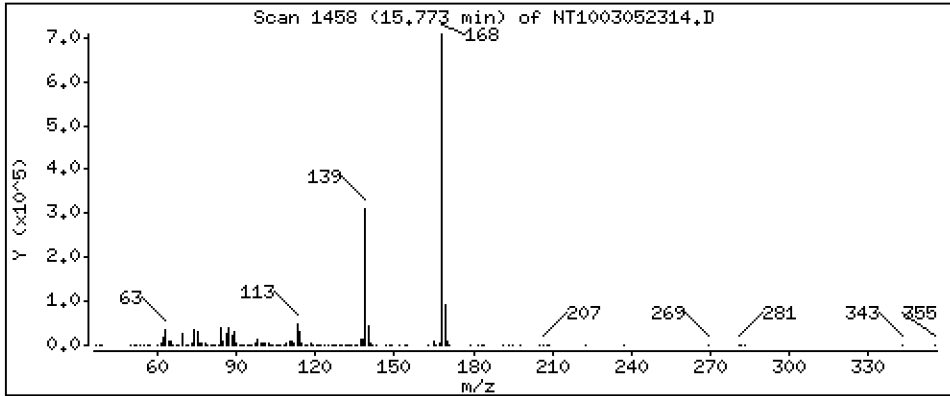
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 5,123 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

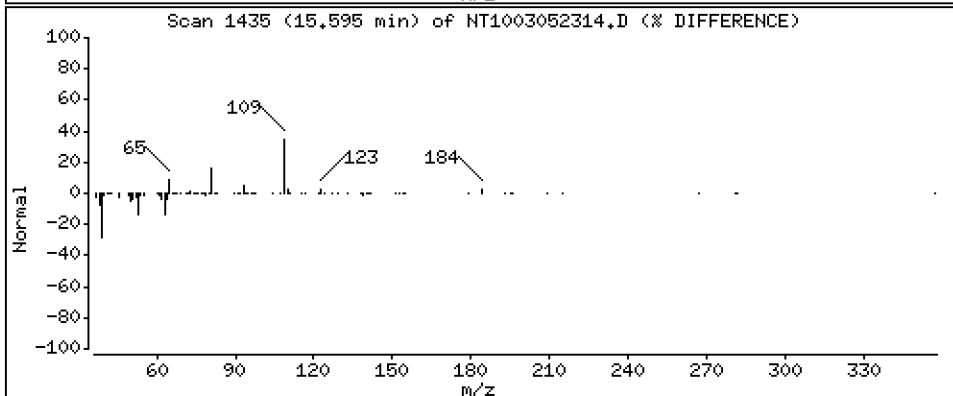
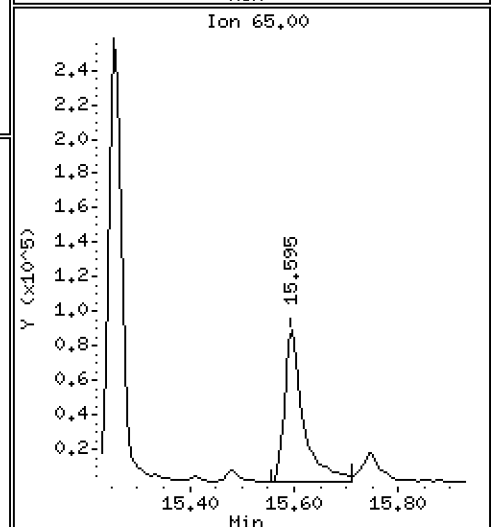
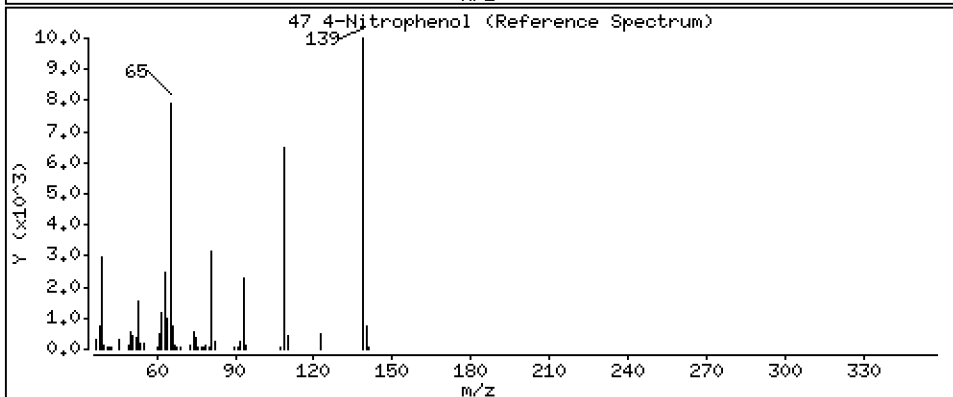
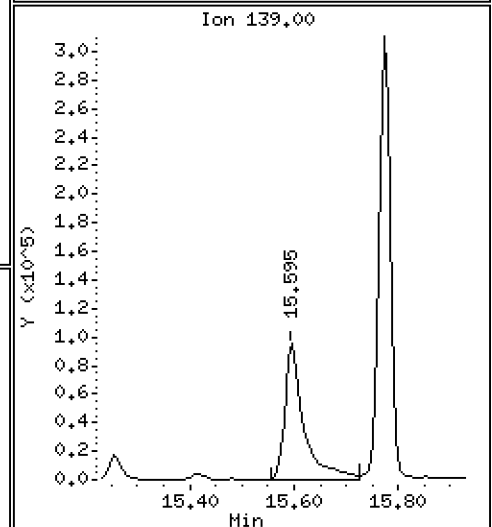
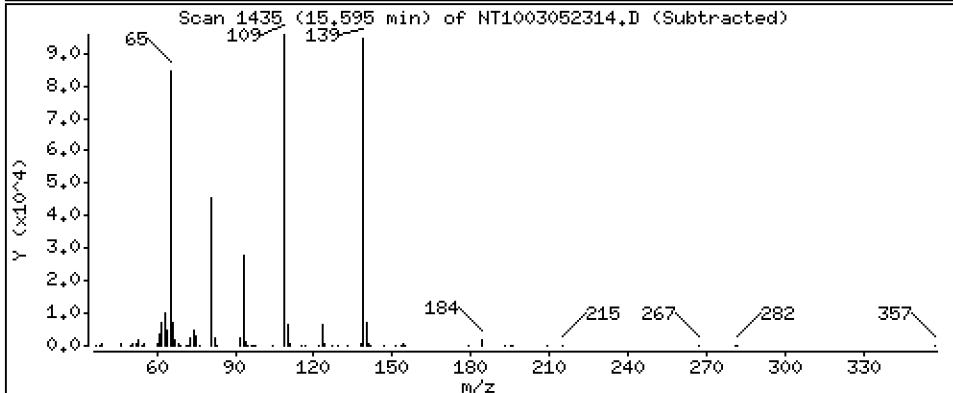
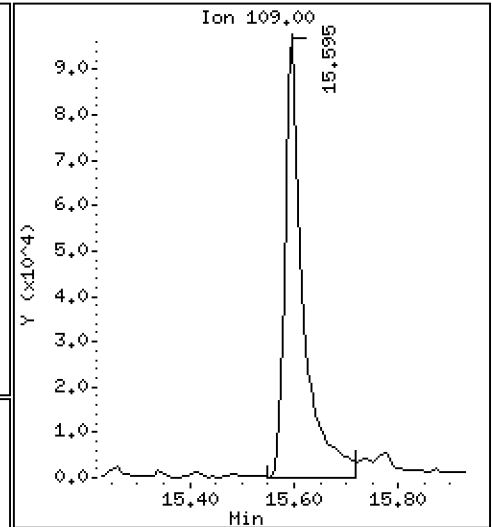
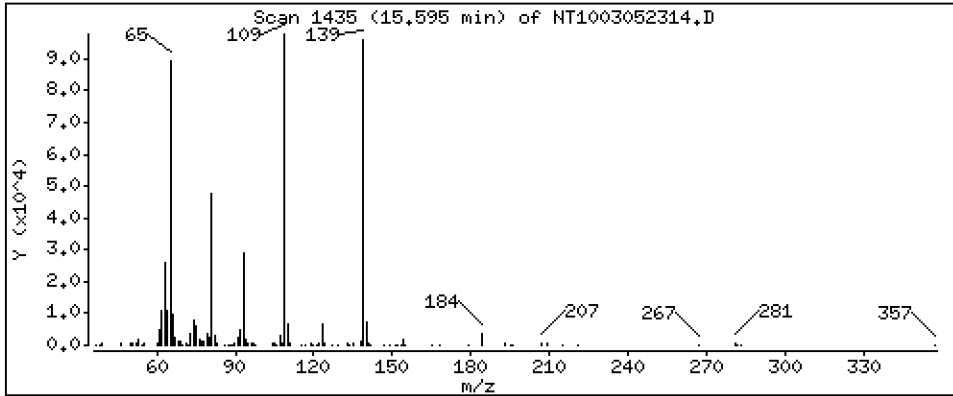
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 8,051 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

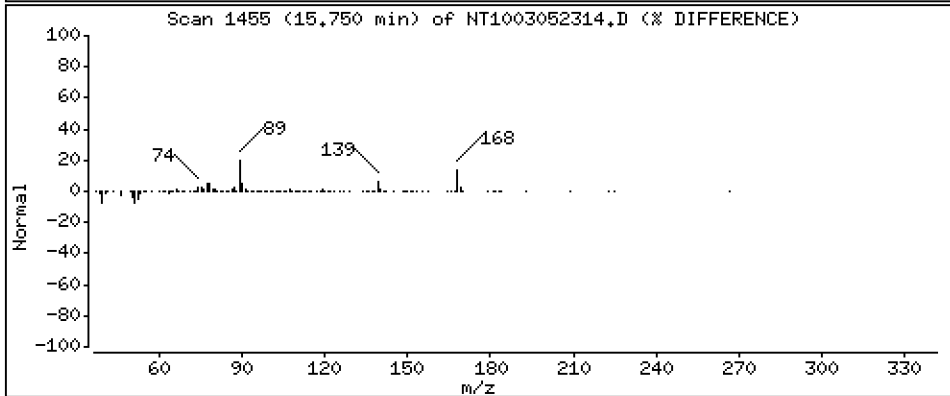
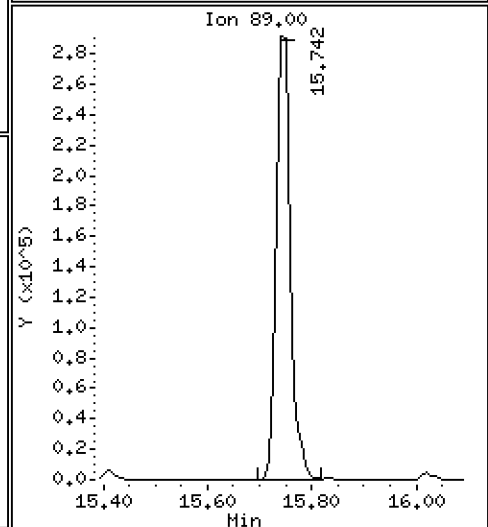
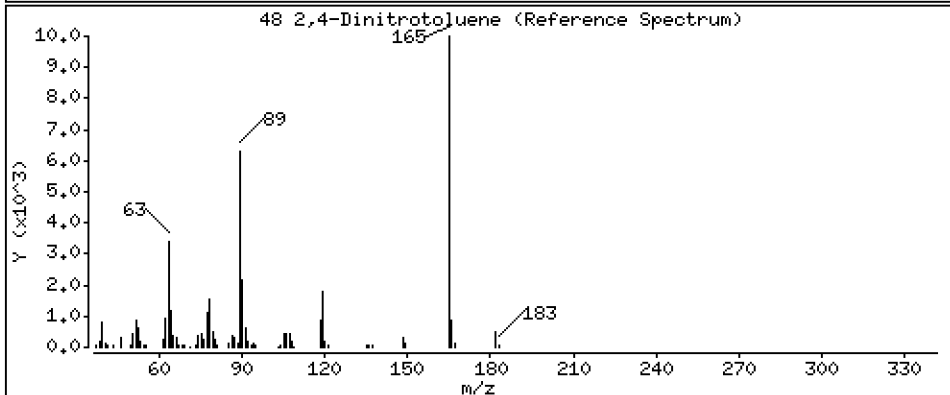
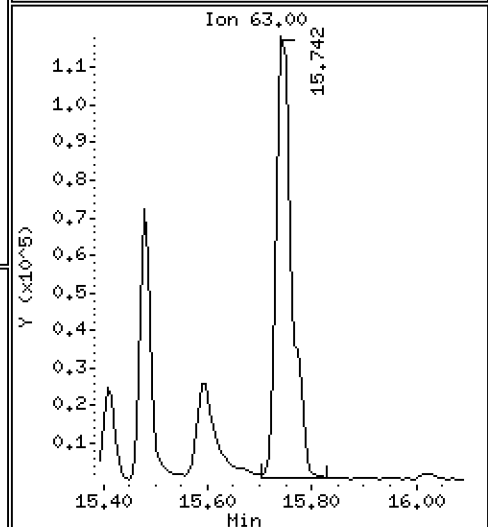
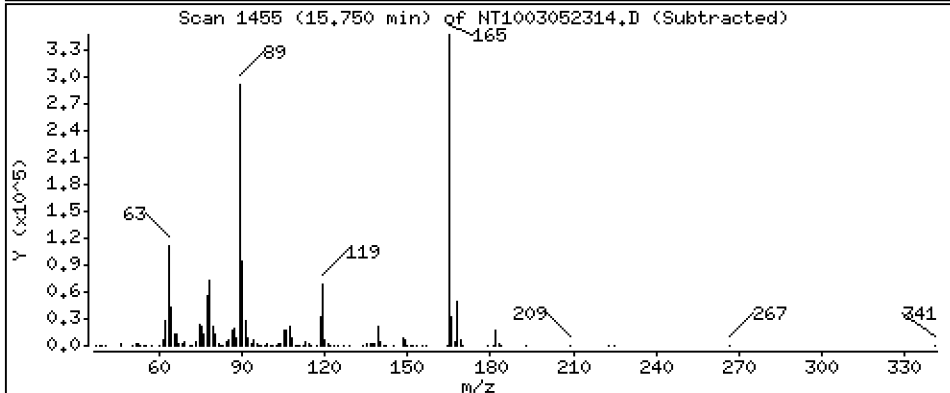
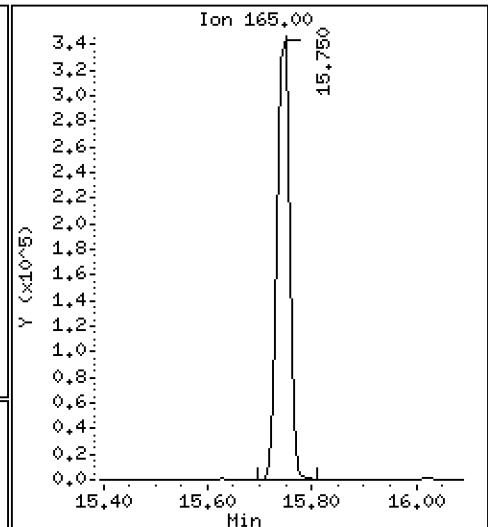
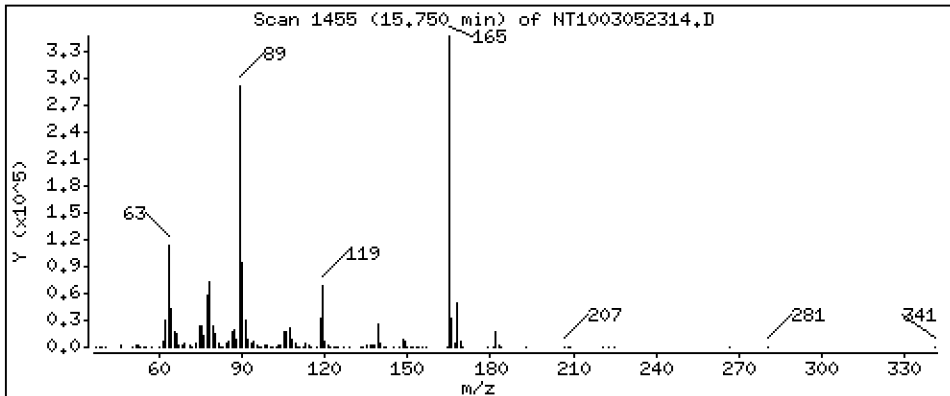
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 10,06 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

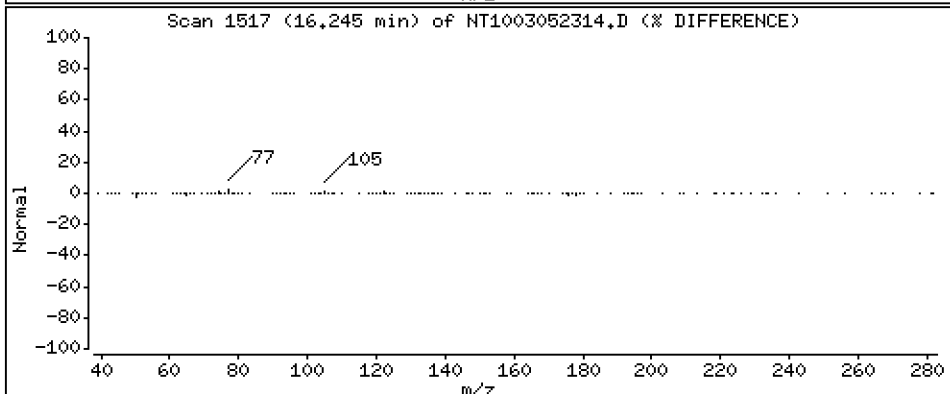
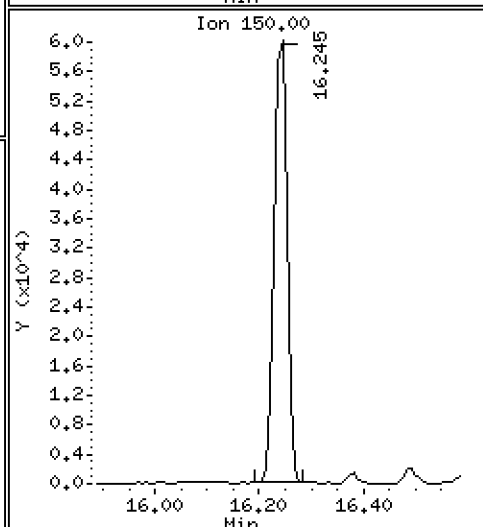
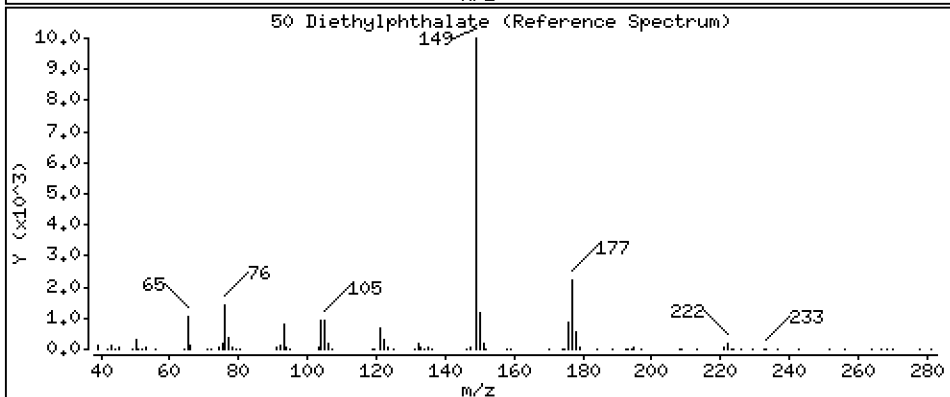
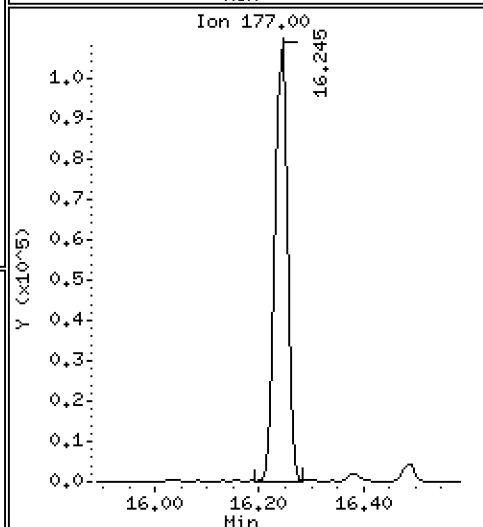
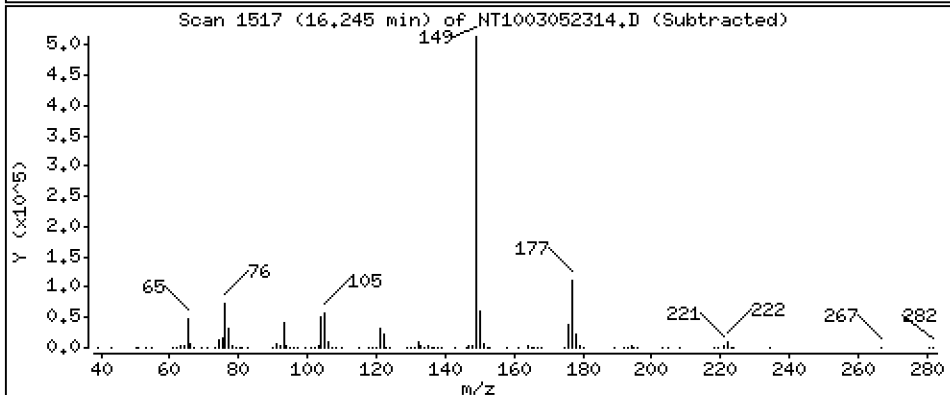
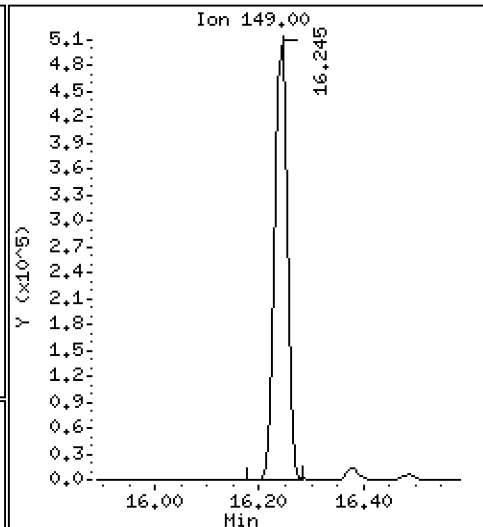
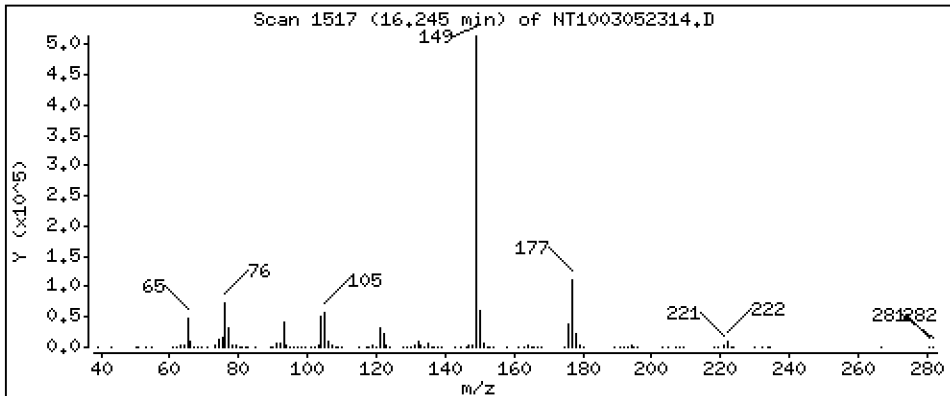
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 4,674 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

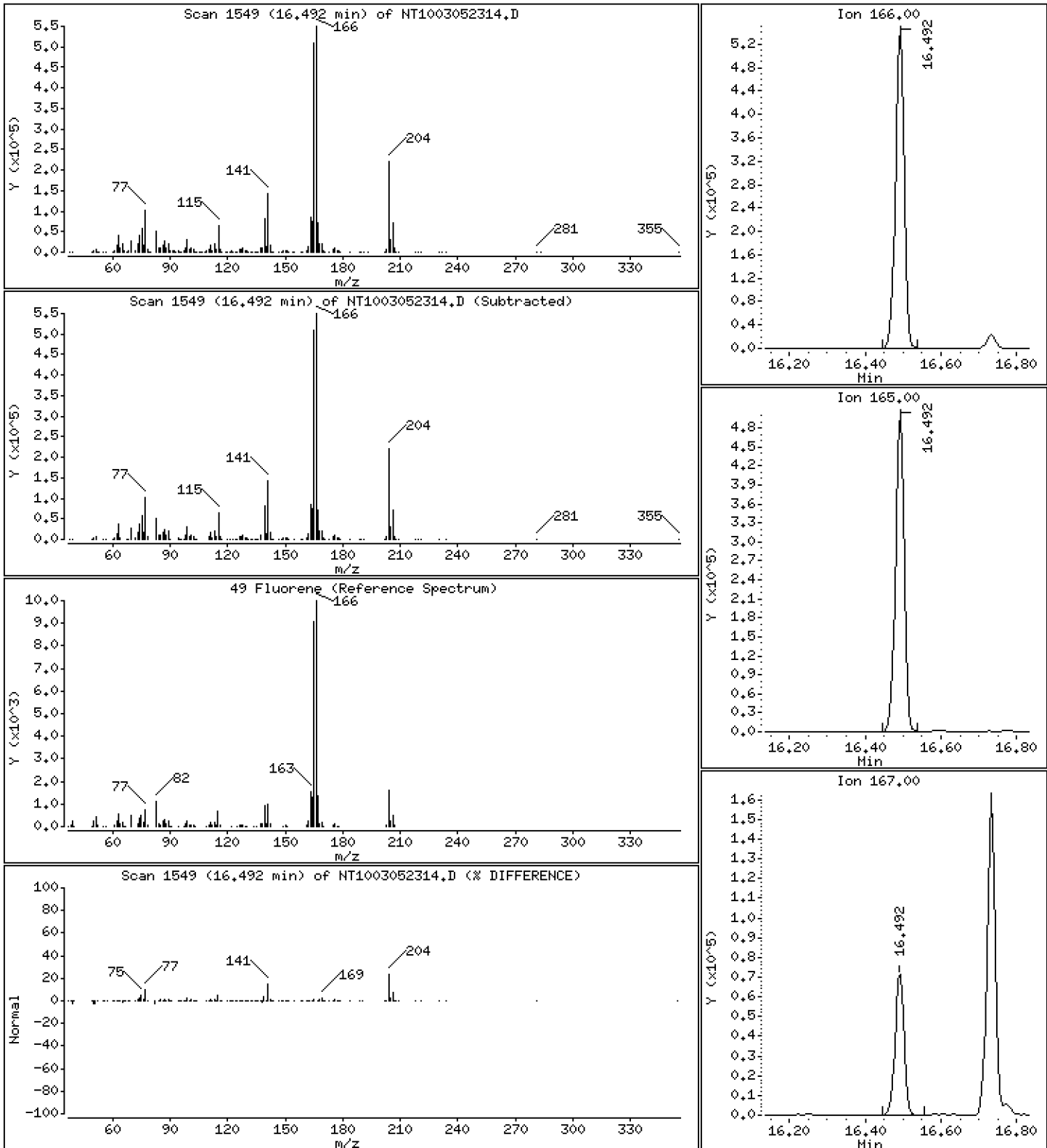
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,844 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

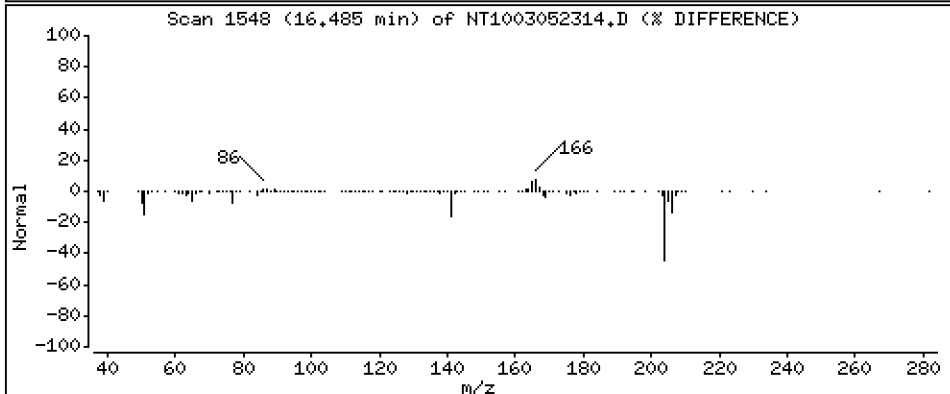
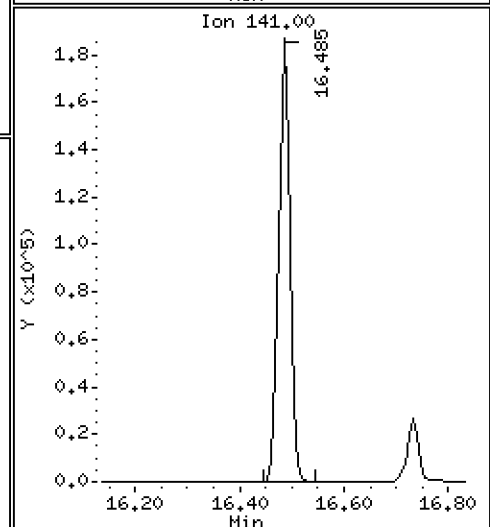
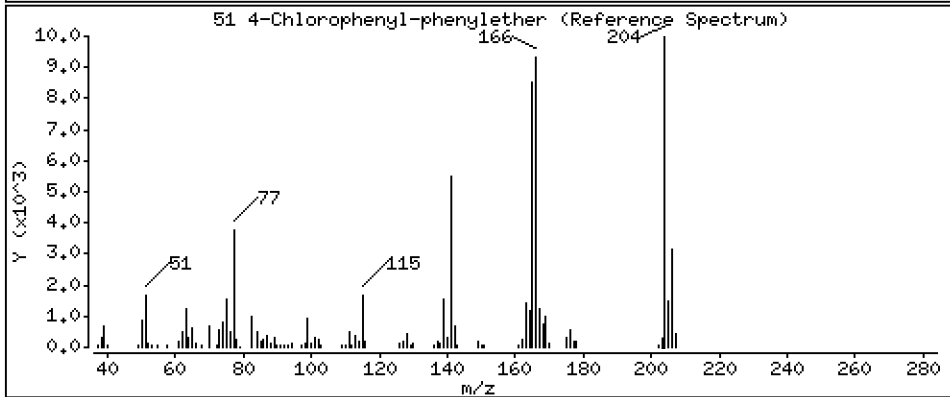
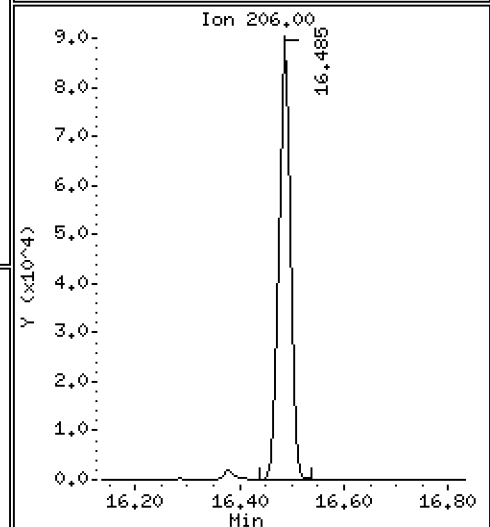
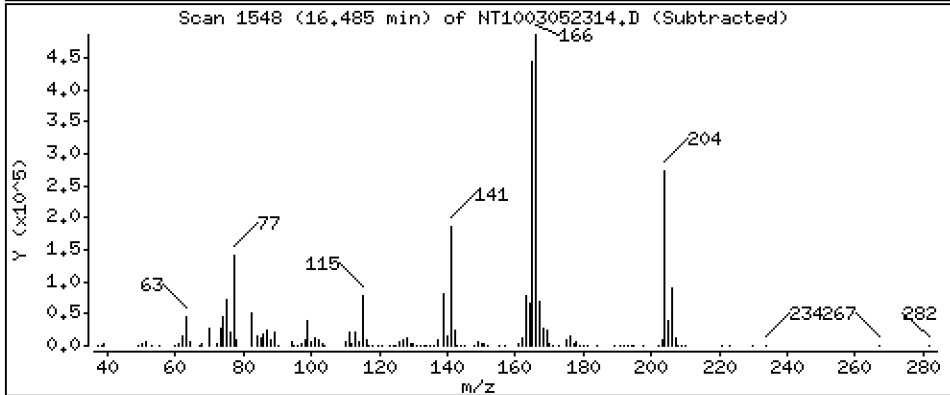
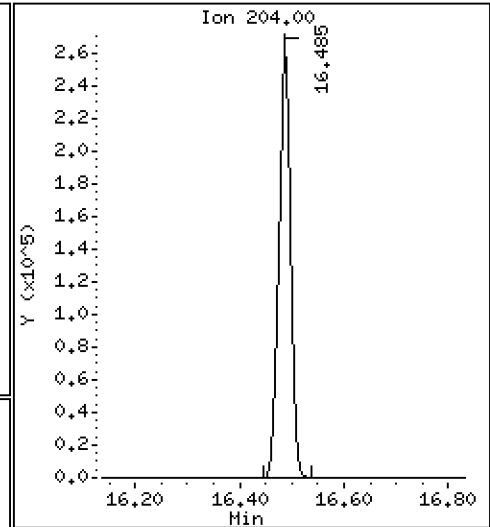
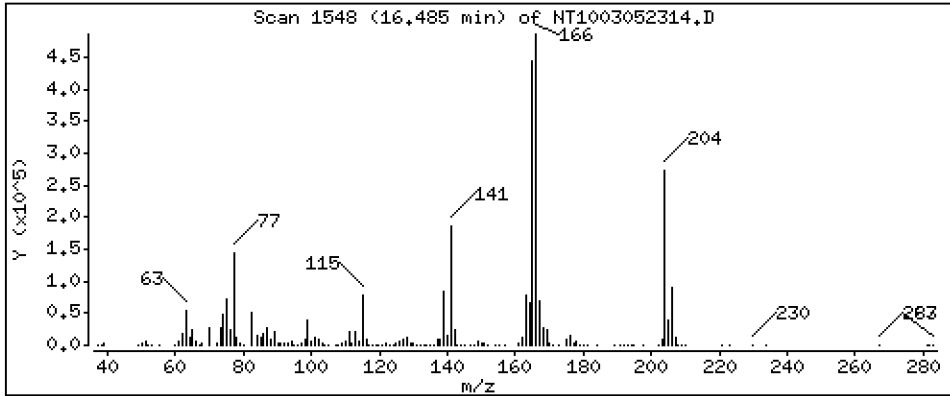
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,866 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

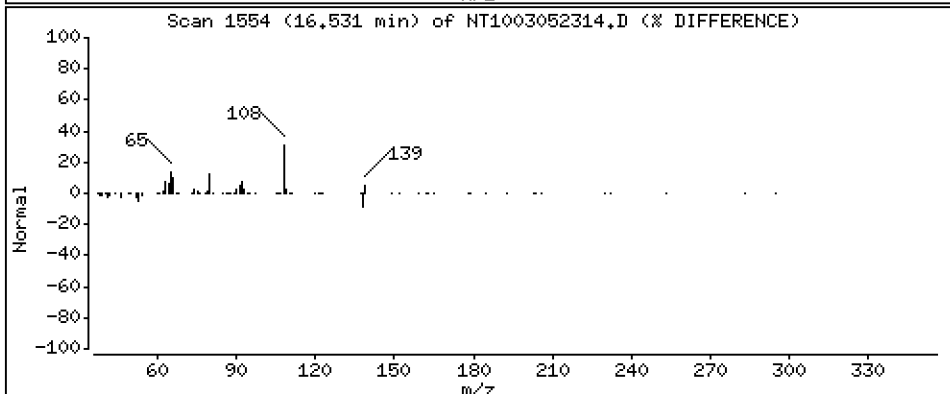
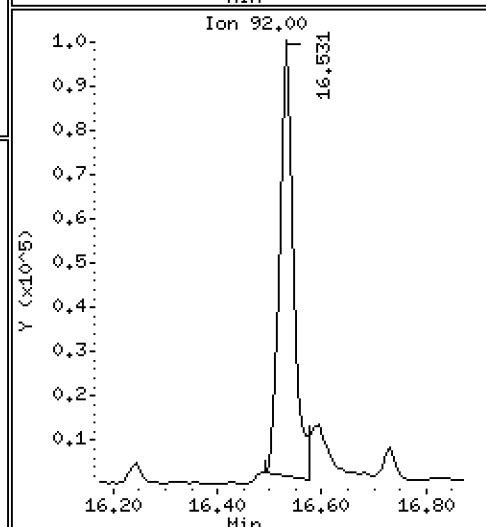
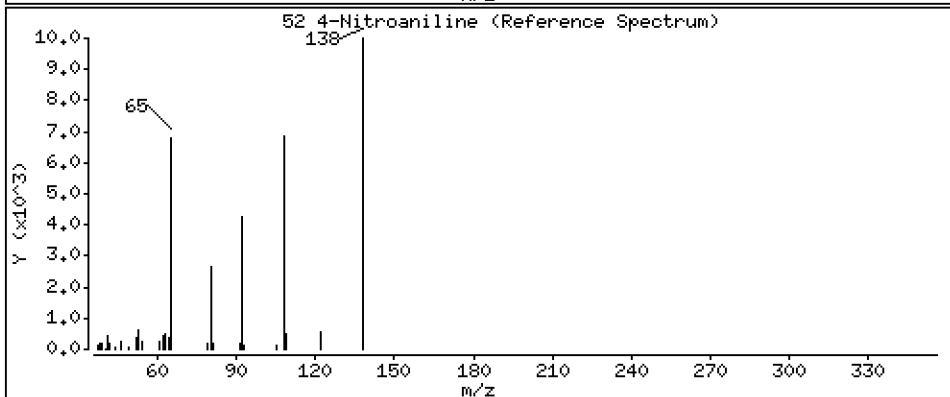
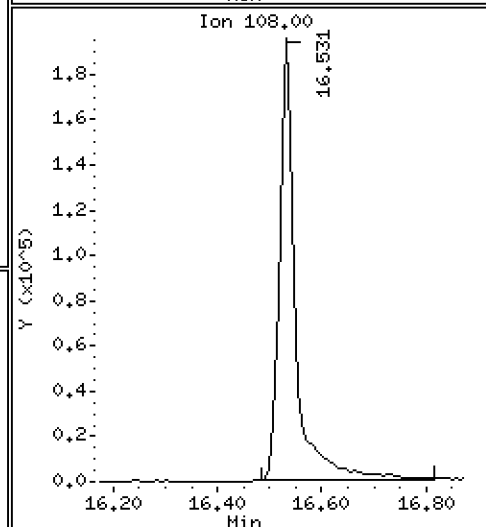
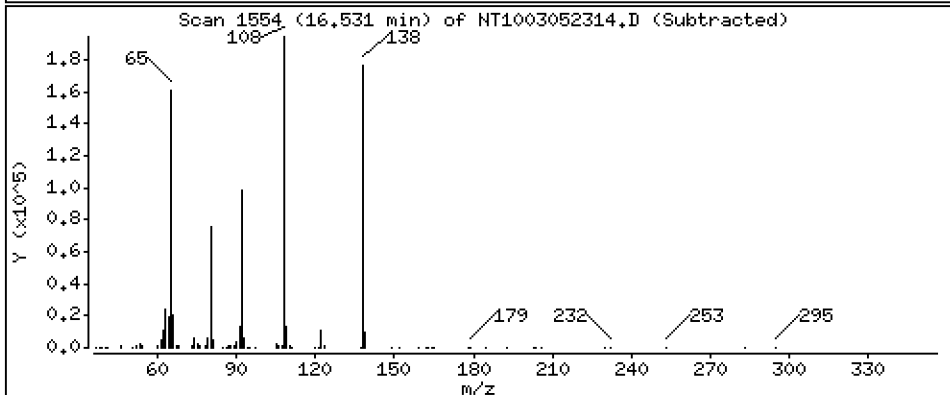
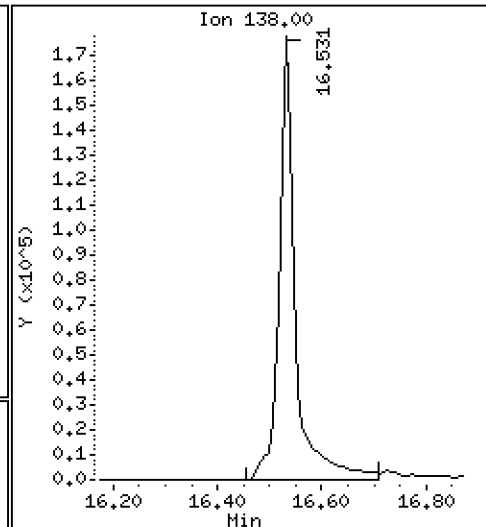
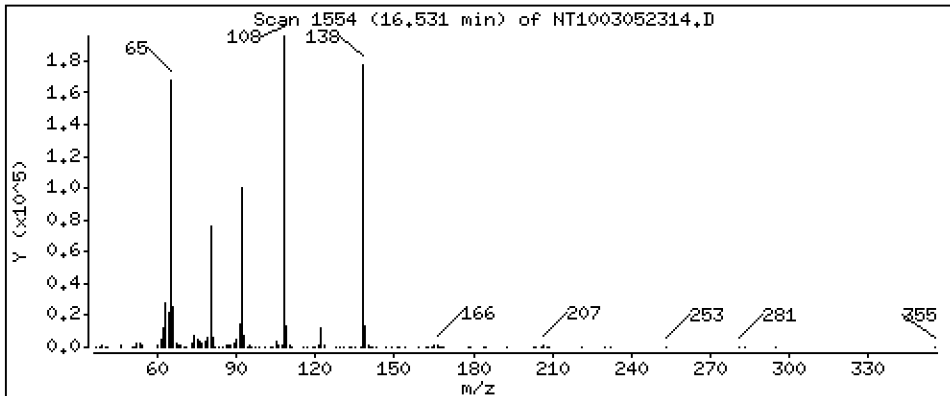
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 9,144 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

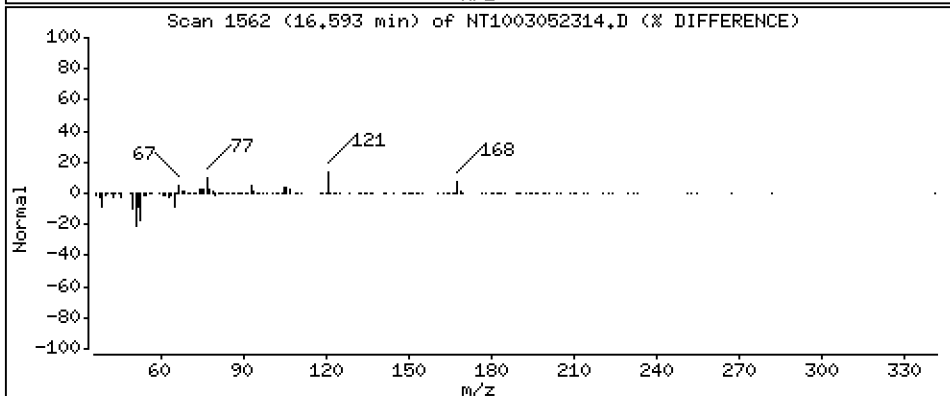
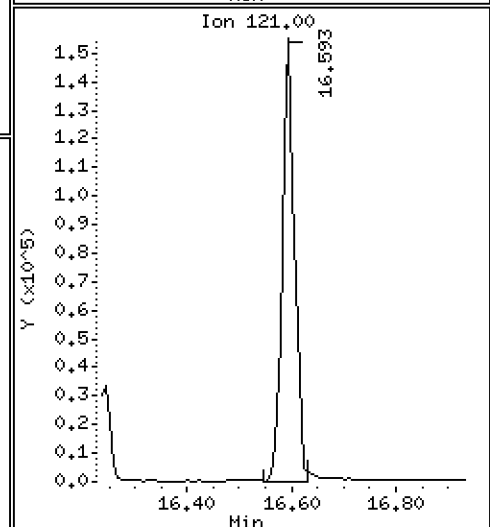
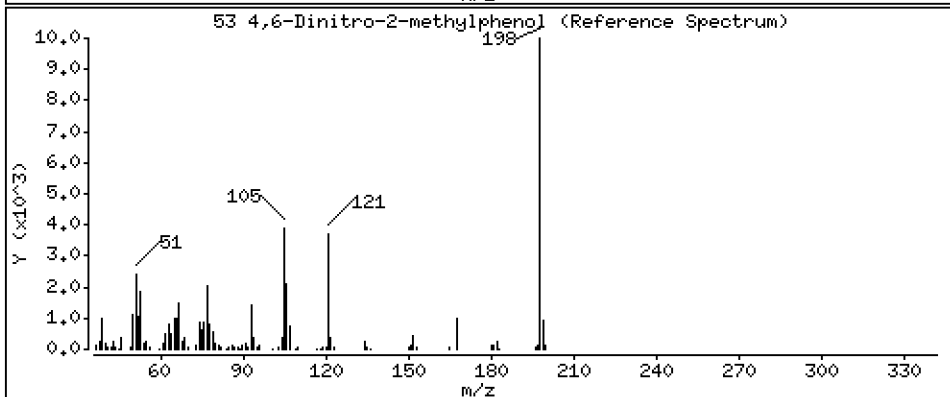
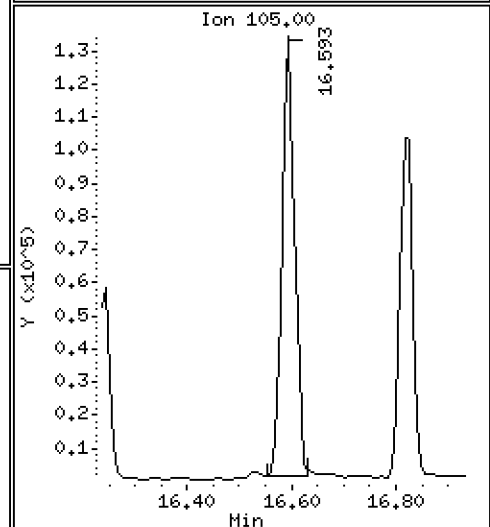
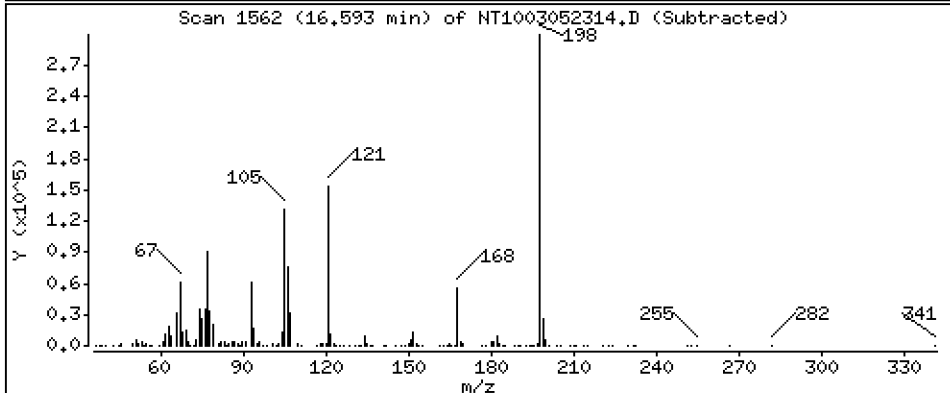
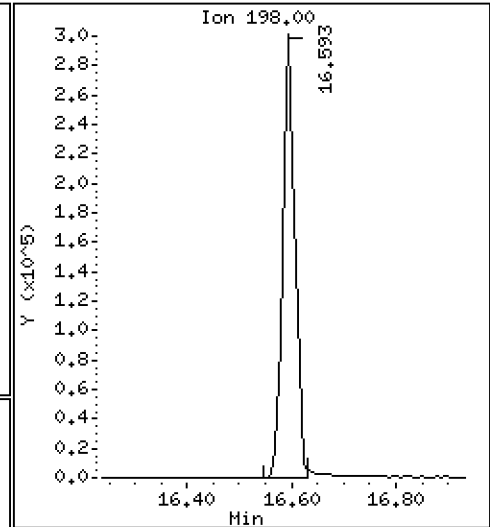
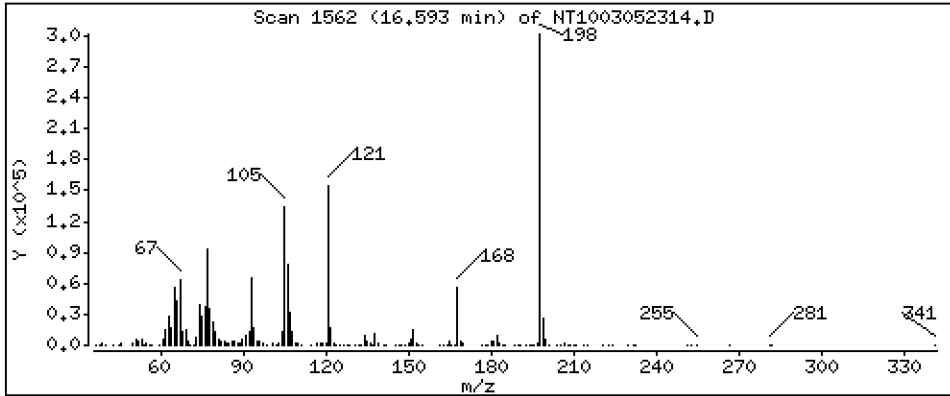
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 20,78 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

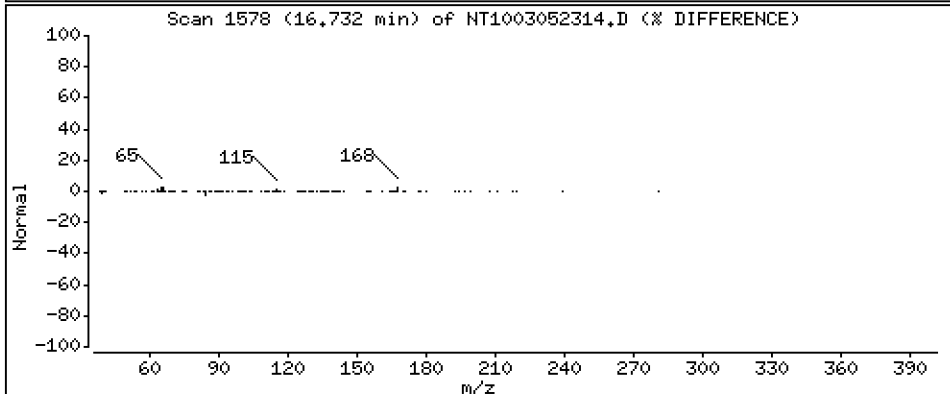
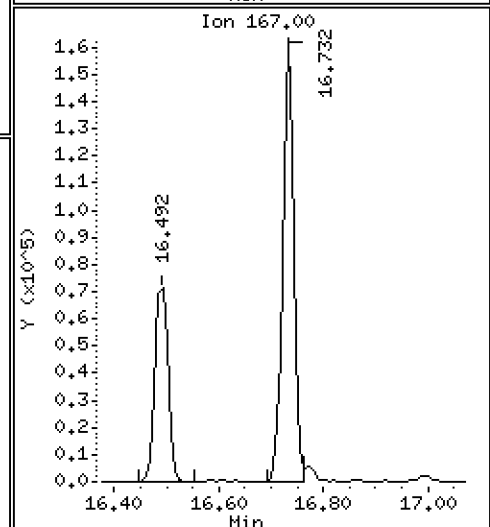
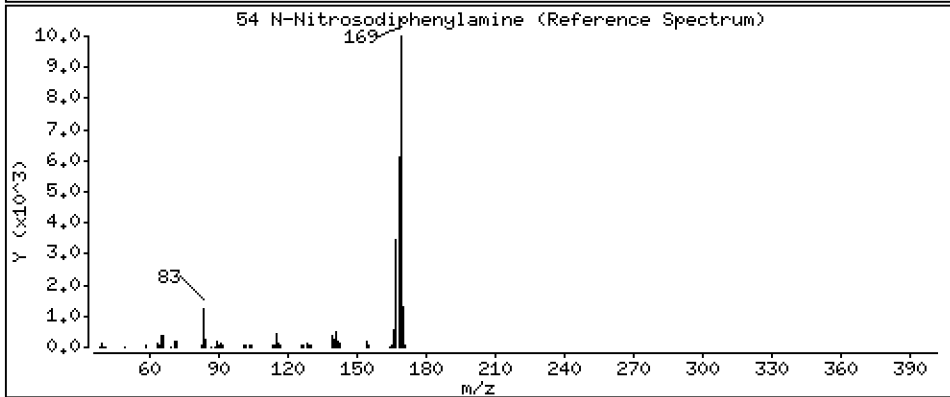
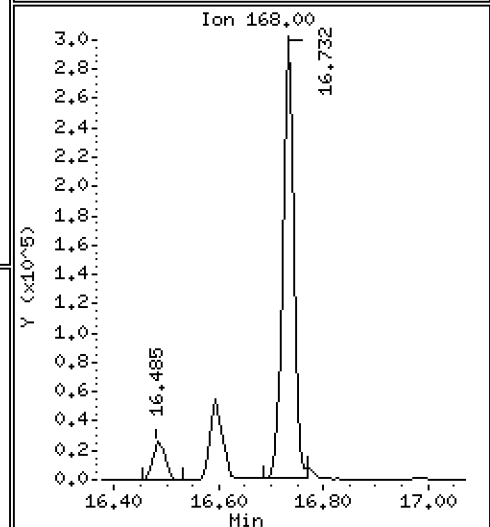
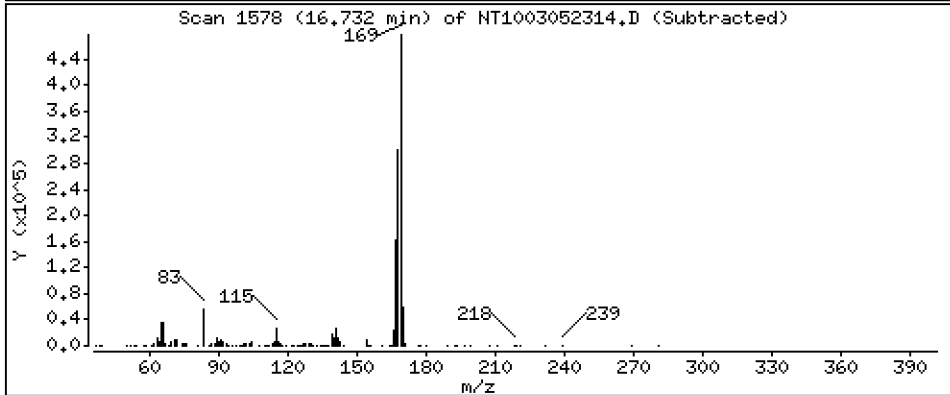
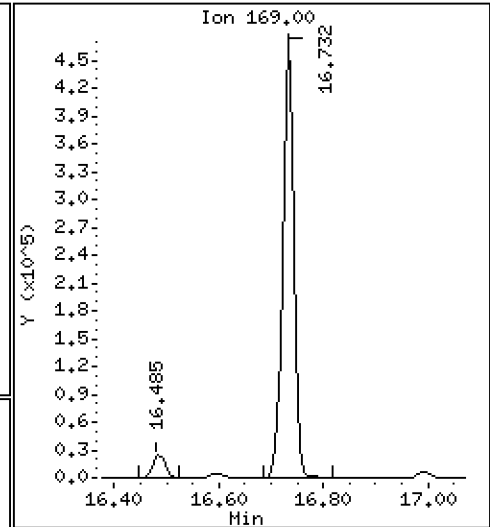
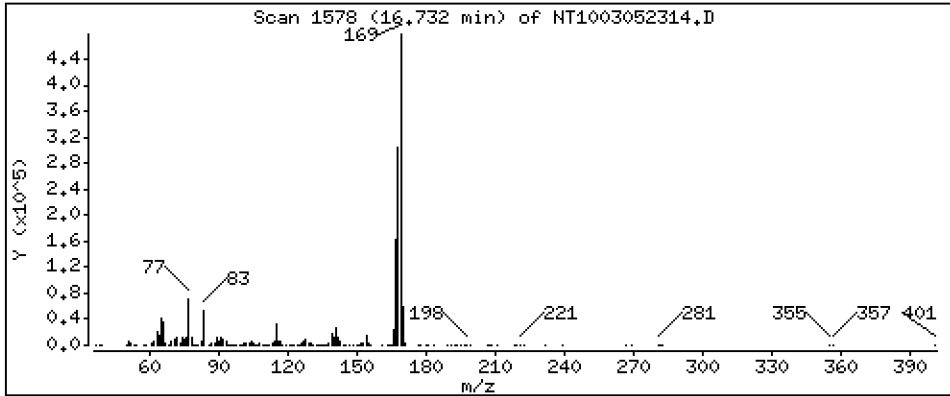
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,085 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

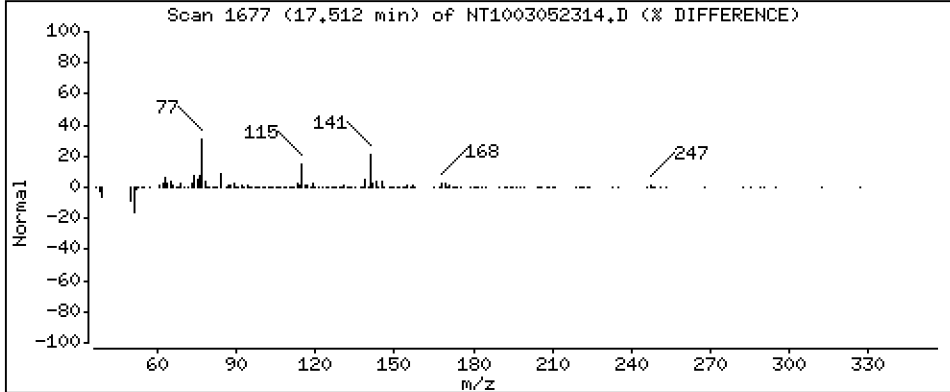
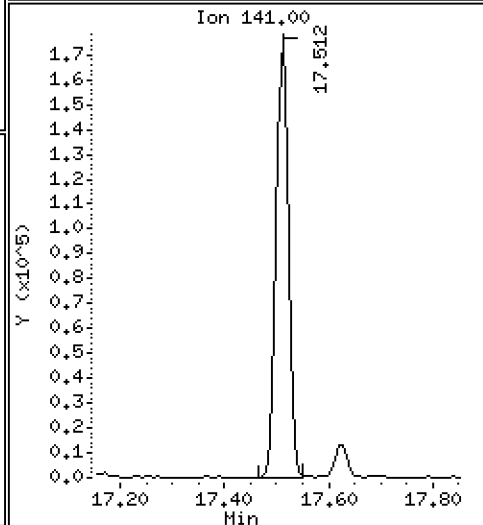
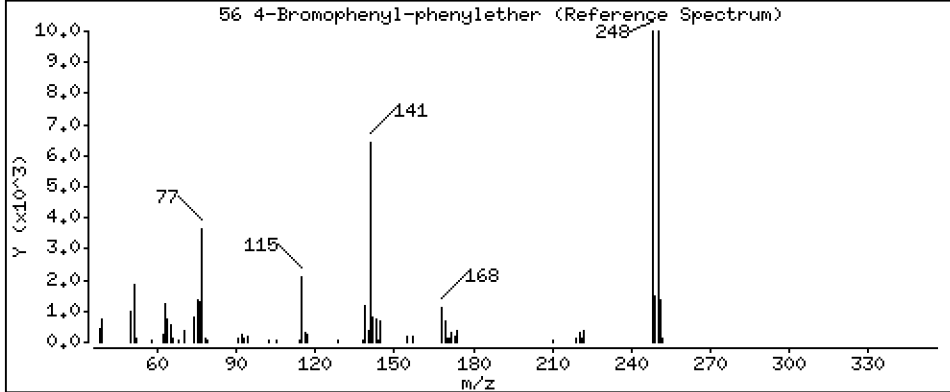
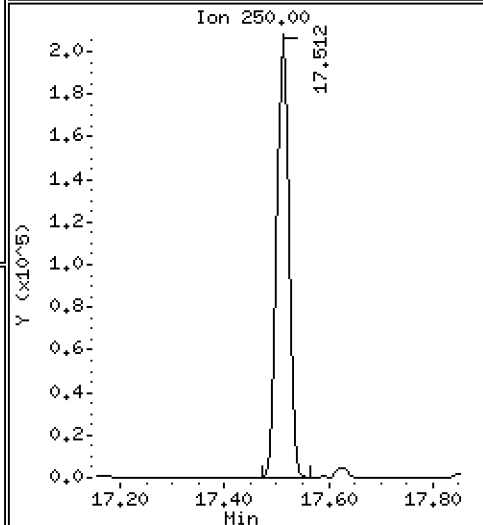
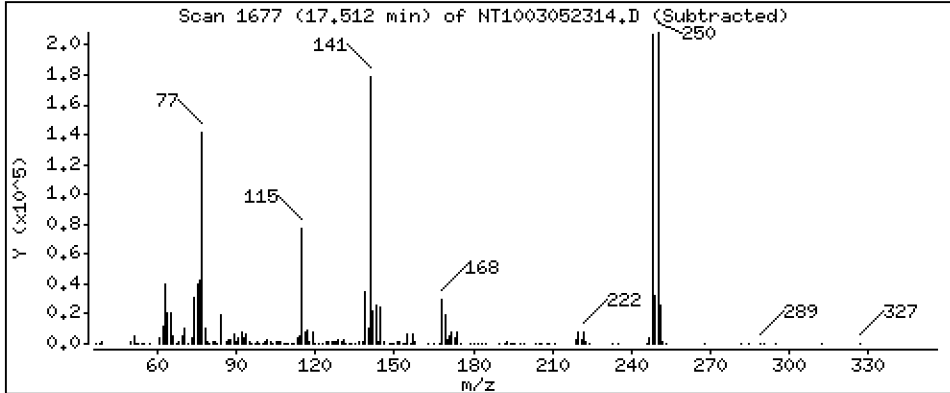
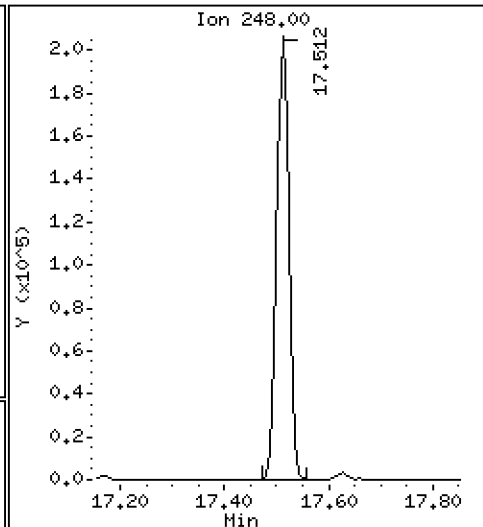
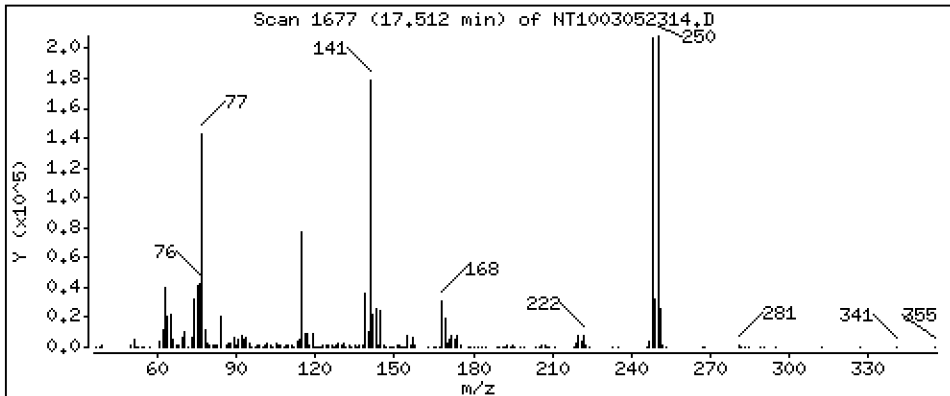
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,637 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

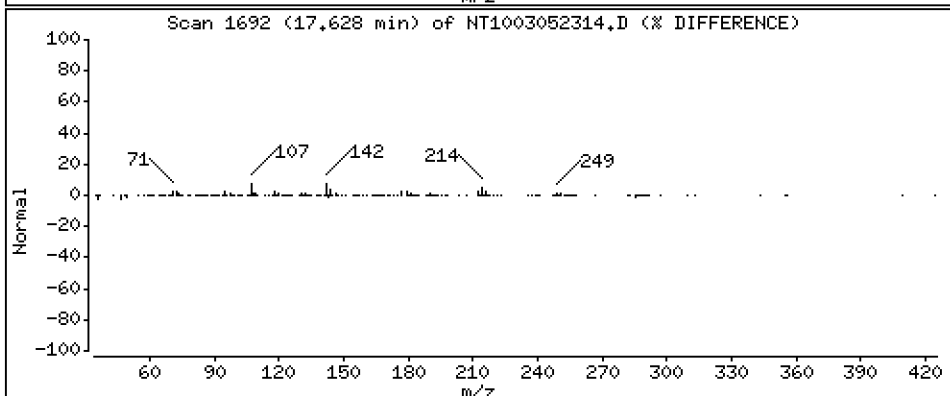
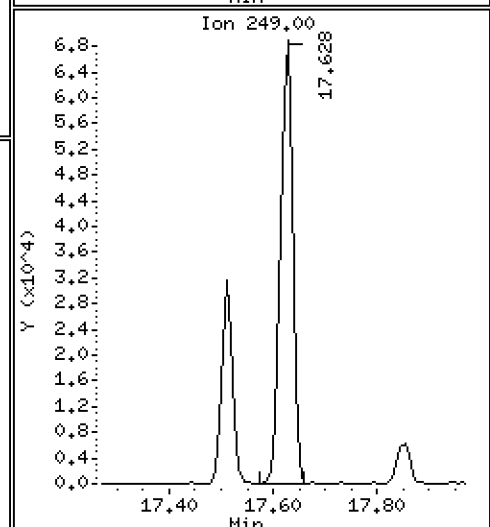
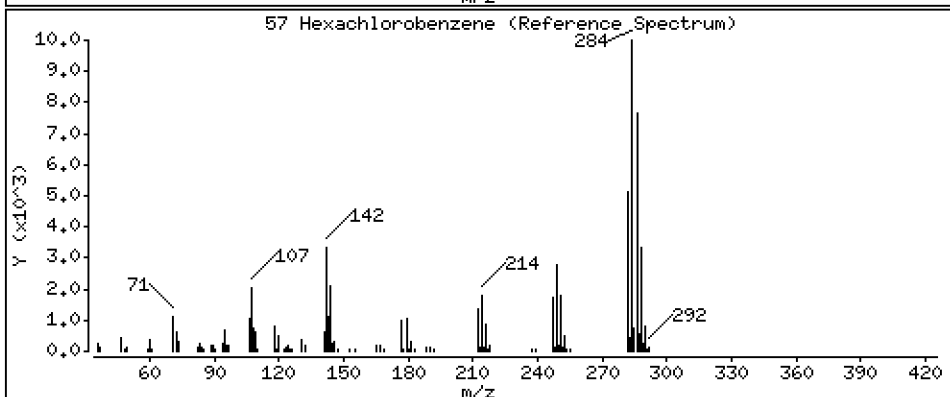
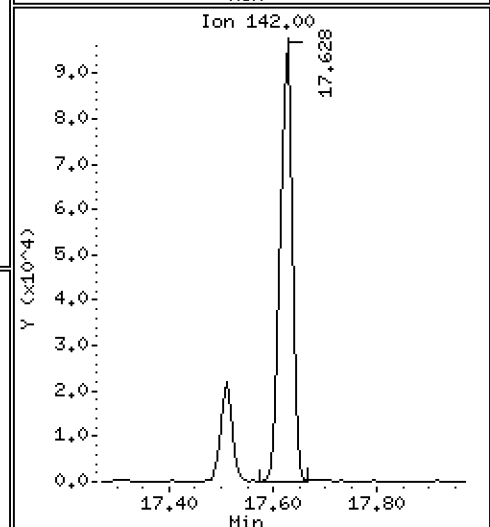
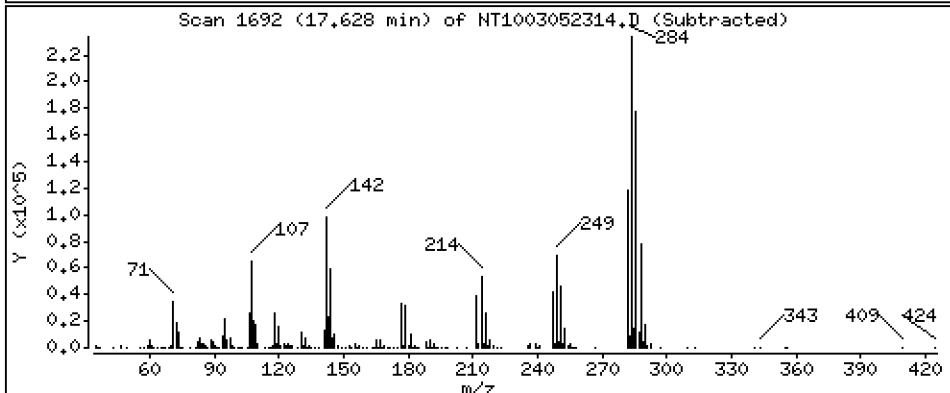
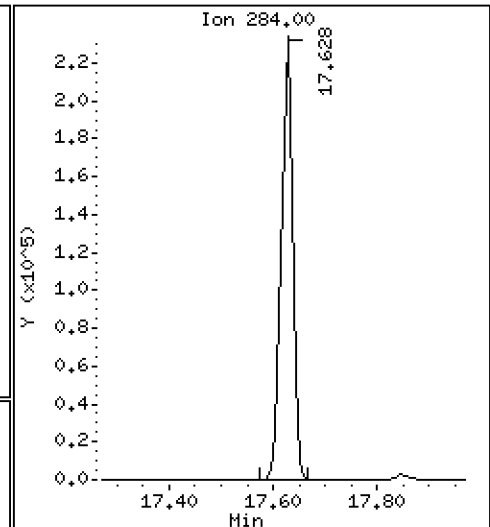
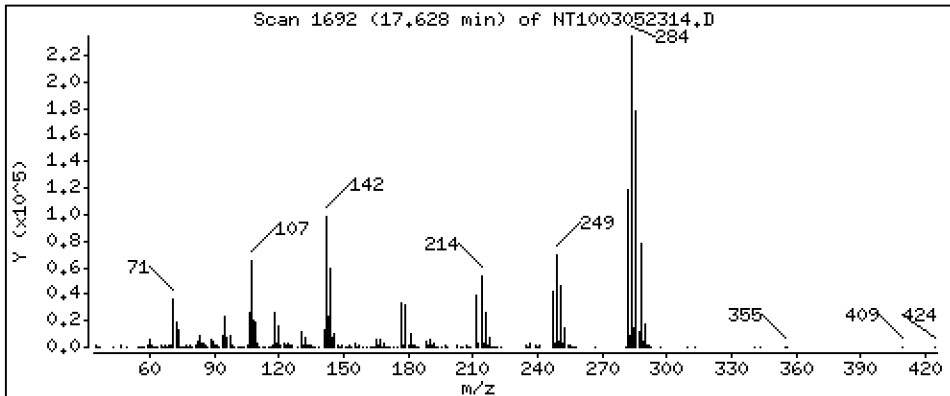
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,466 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

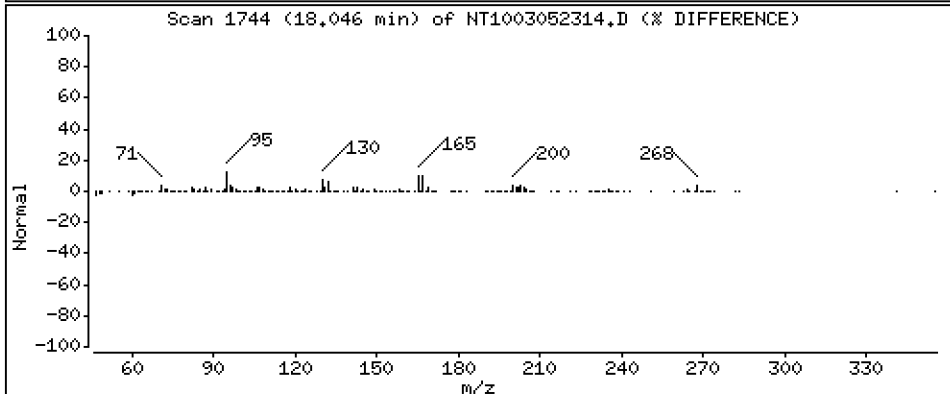
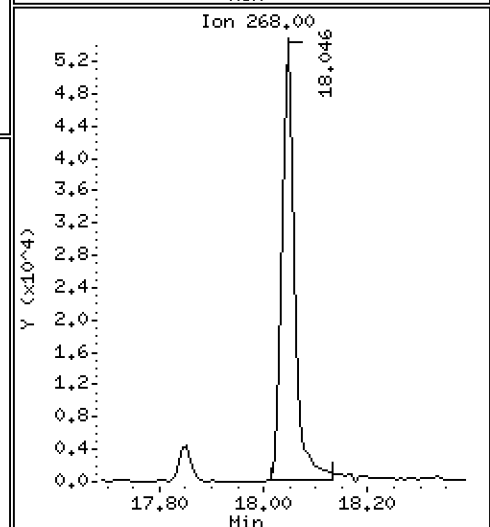
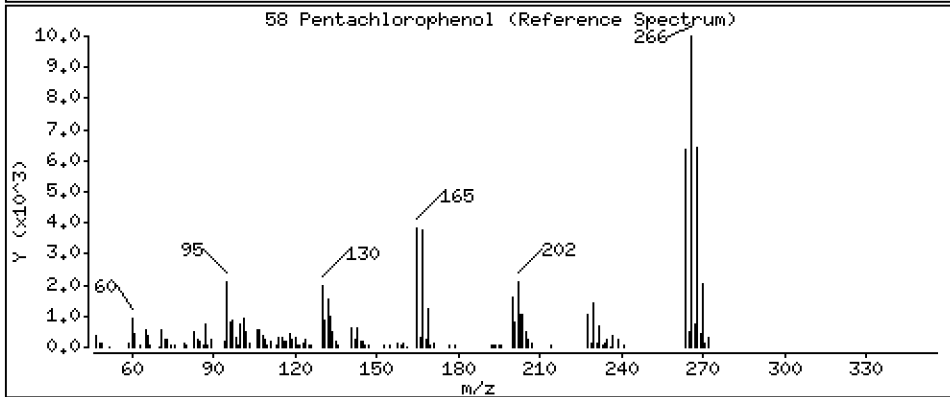
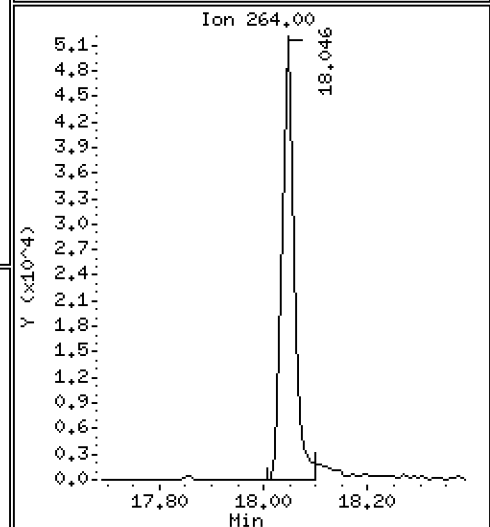
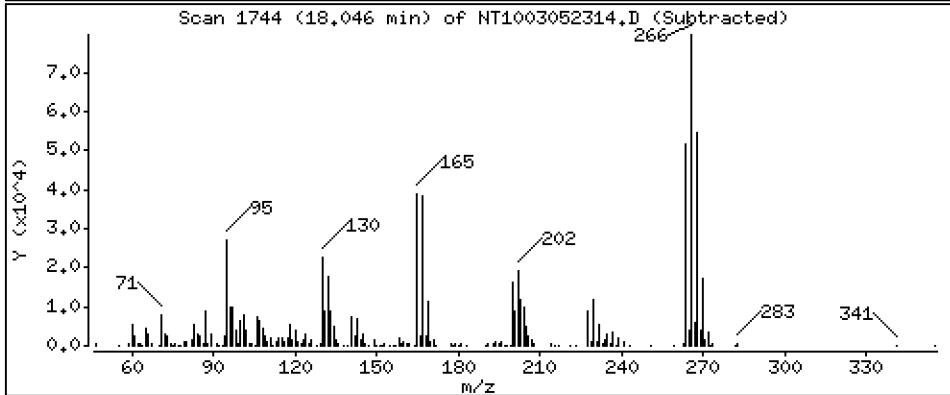
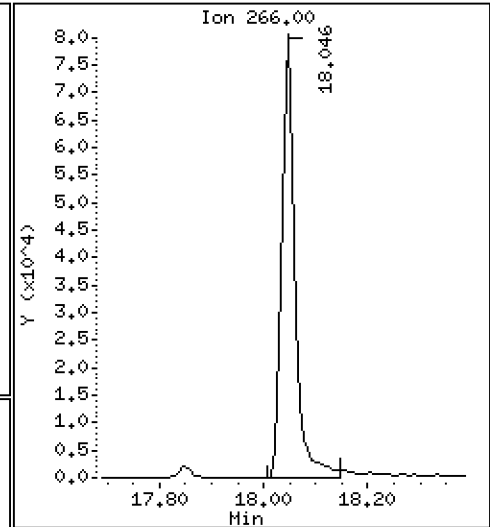
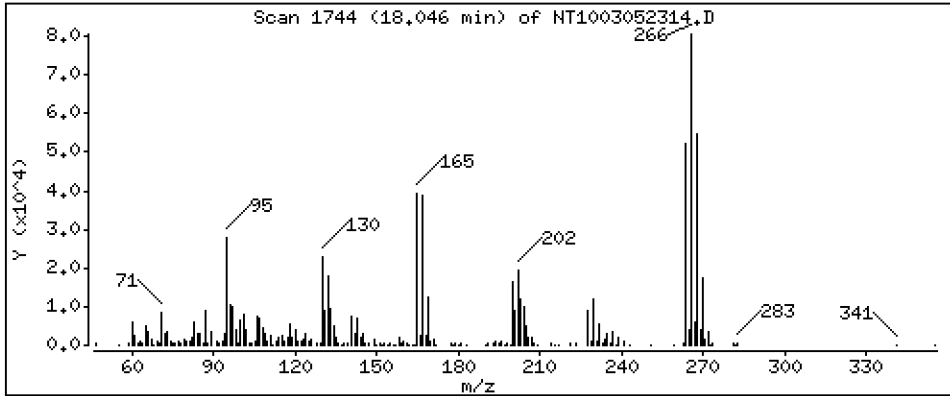
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,639 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

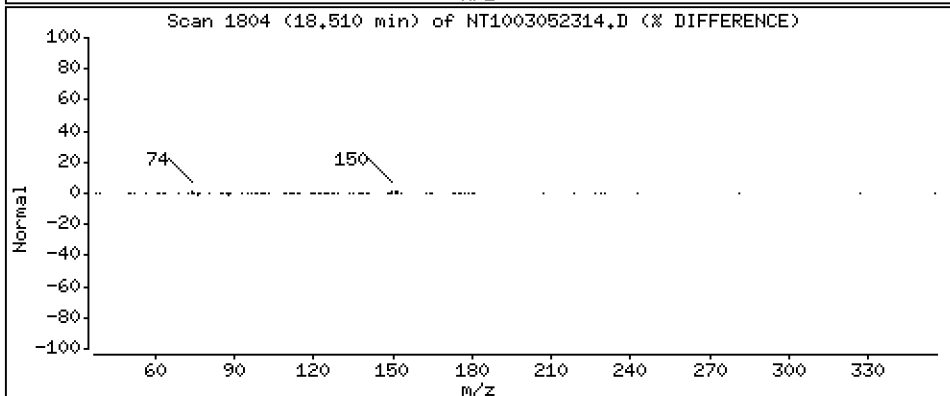
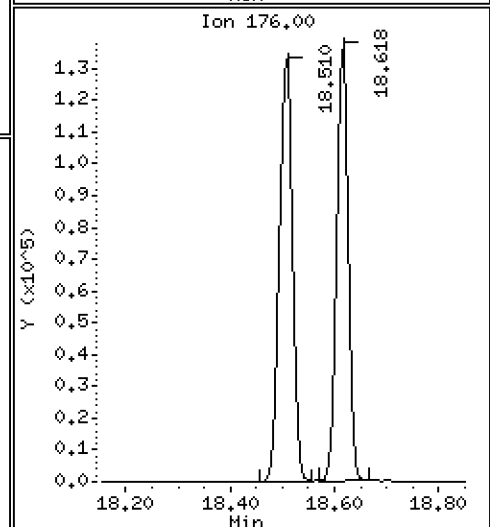
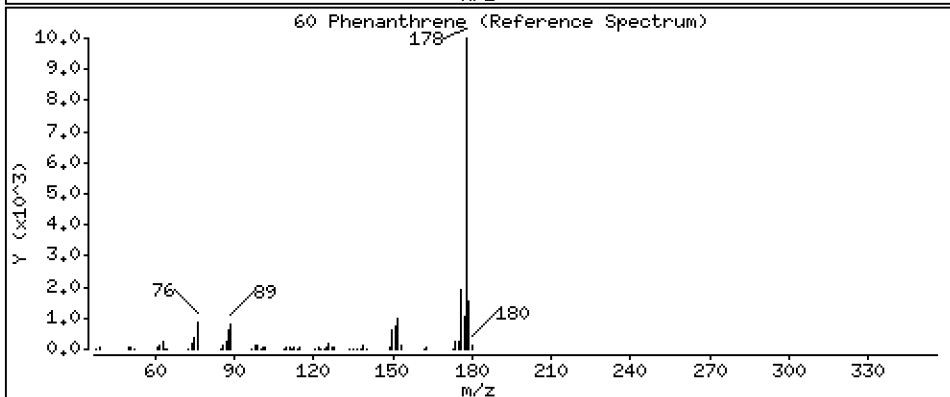
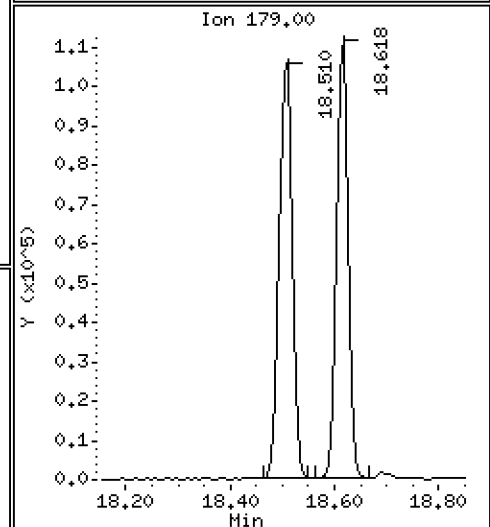
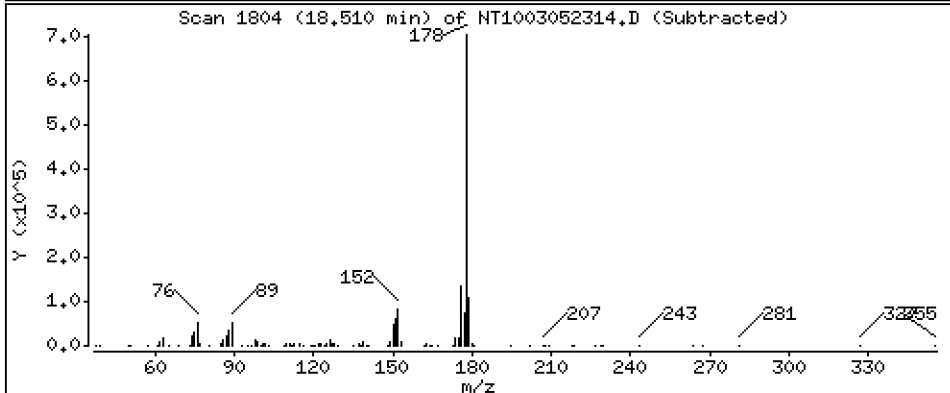
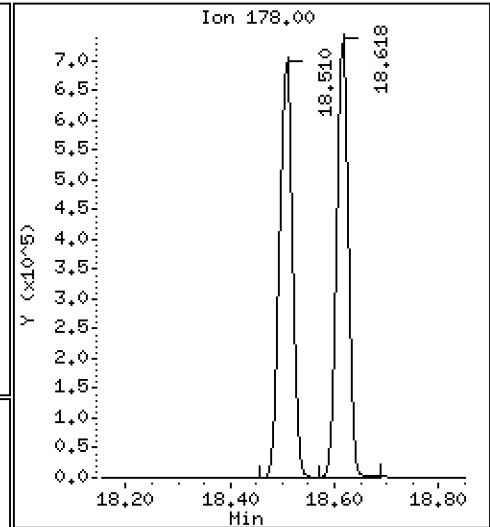
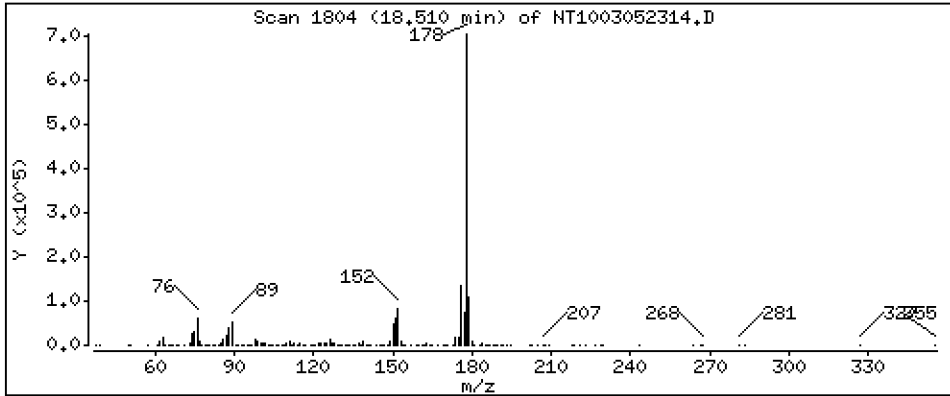
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,819 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

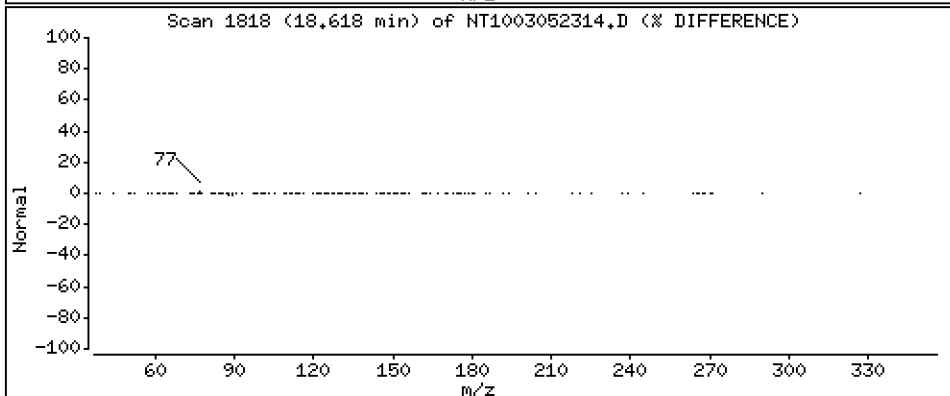
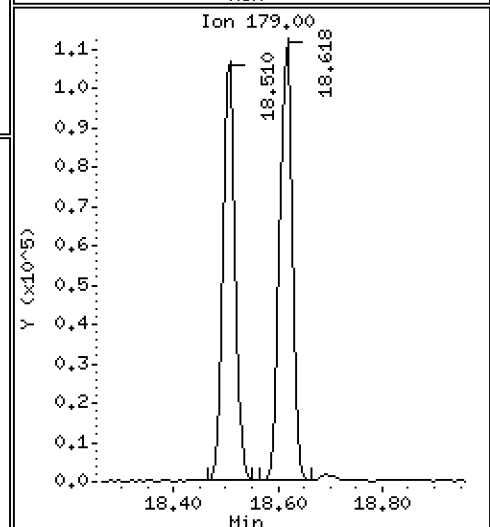
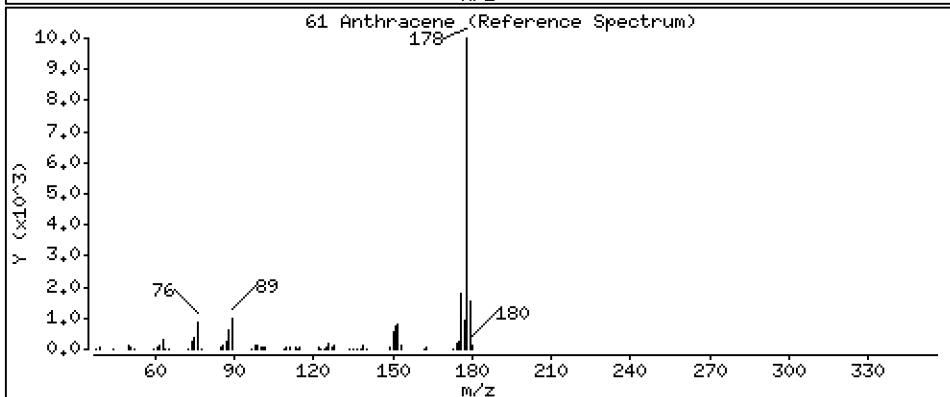
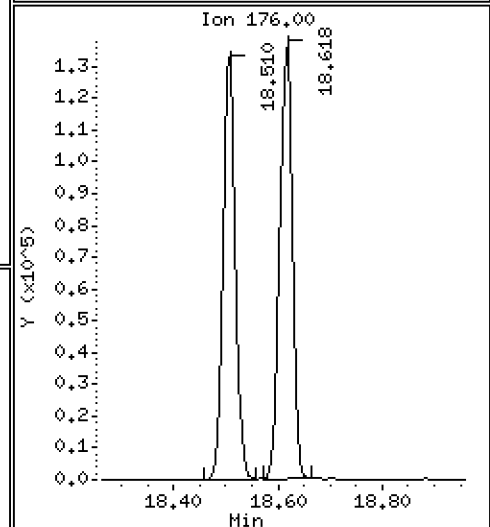
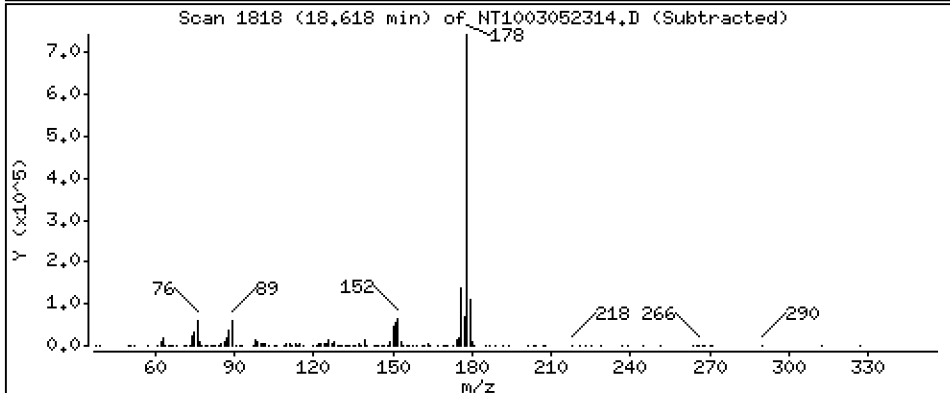
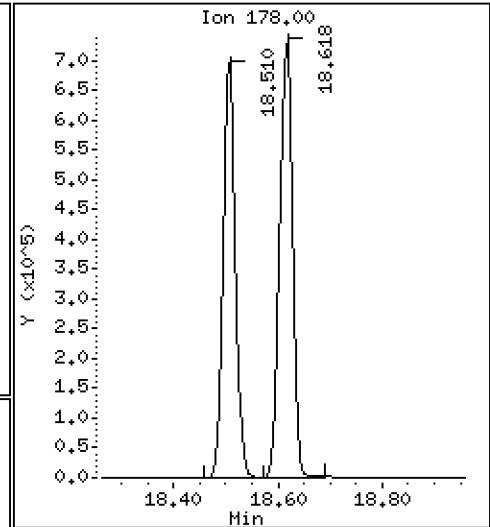
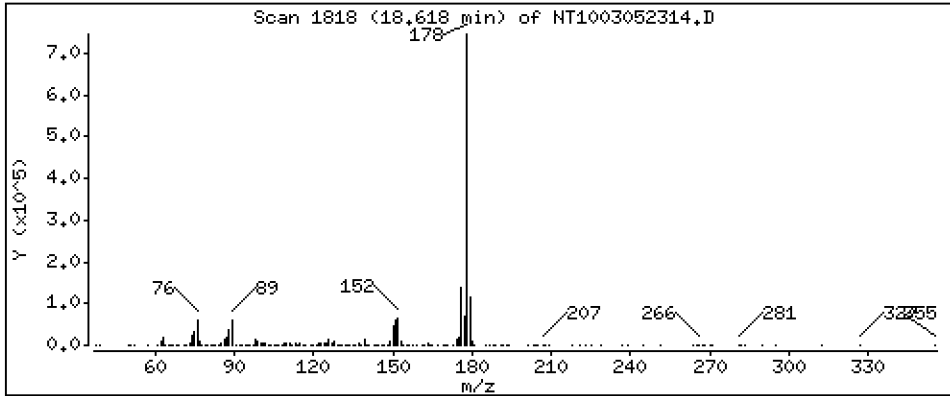
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 5,201 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

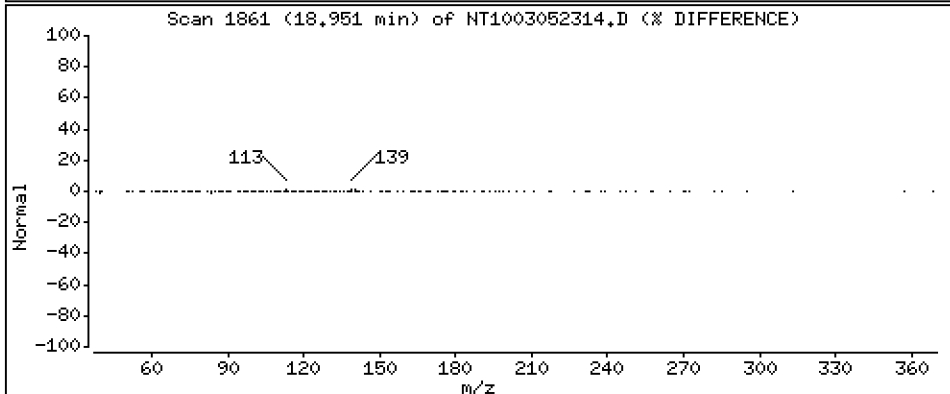
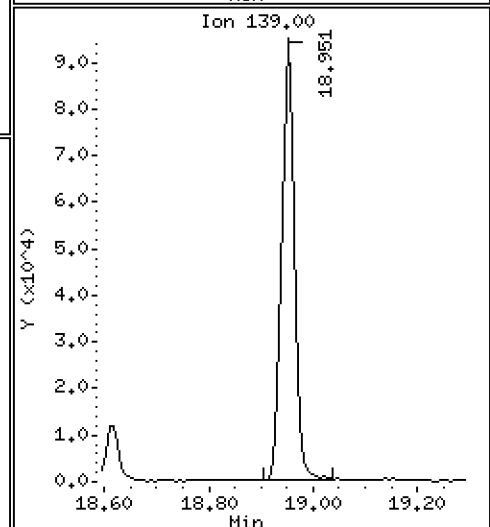
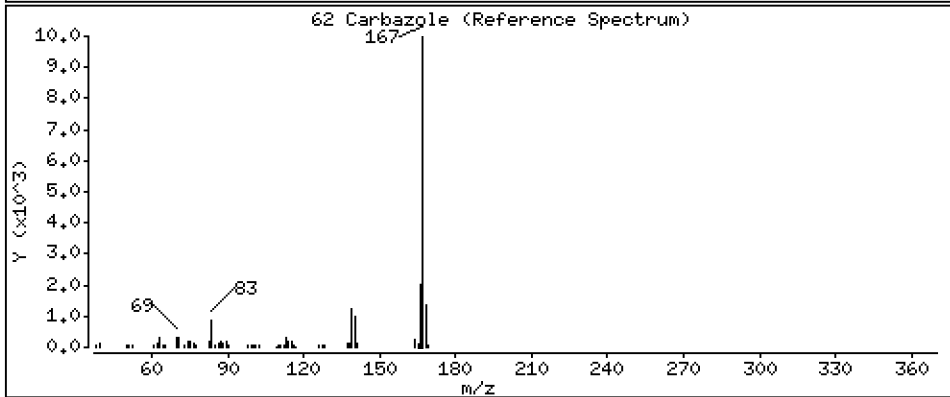
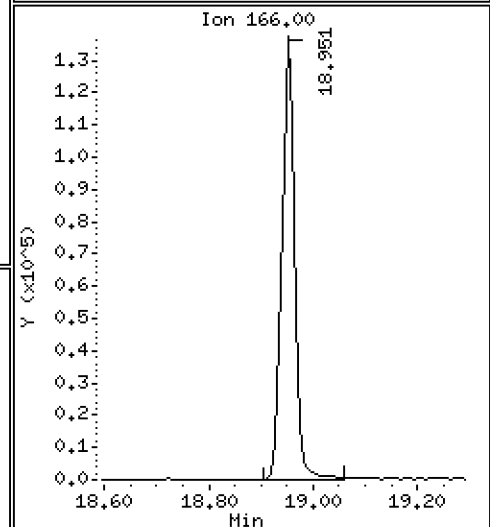
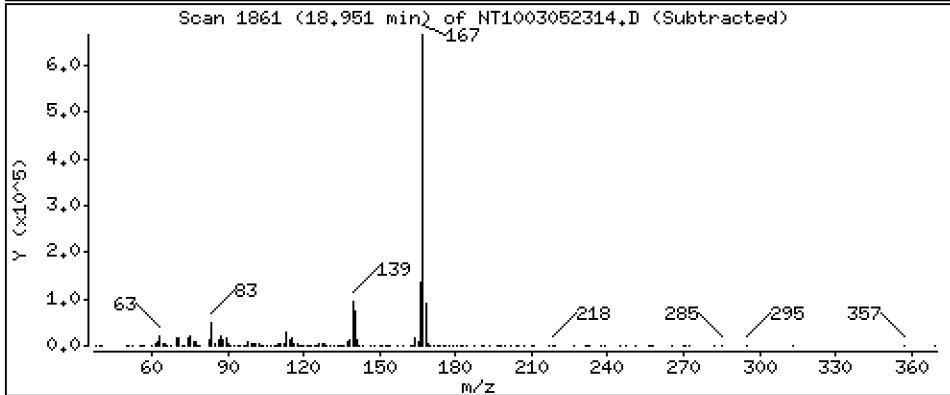
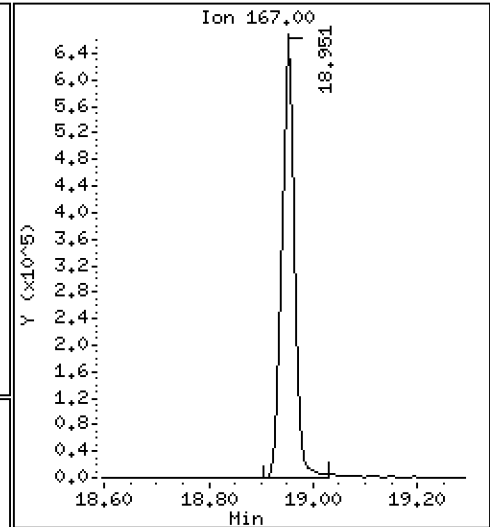
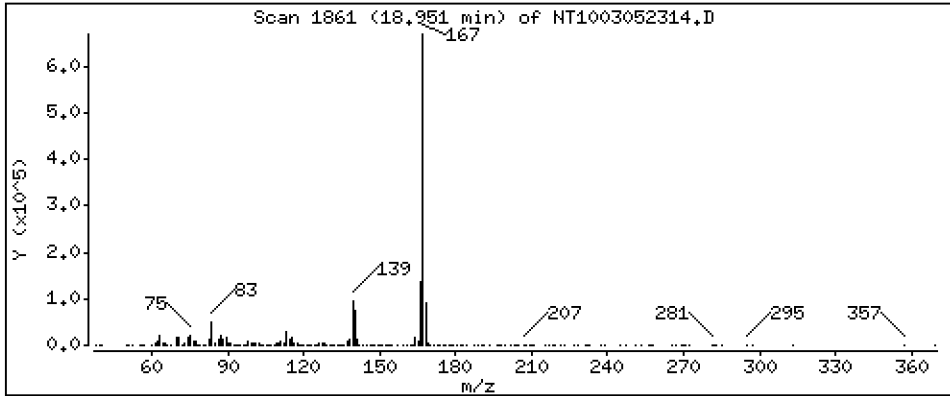
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,068 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

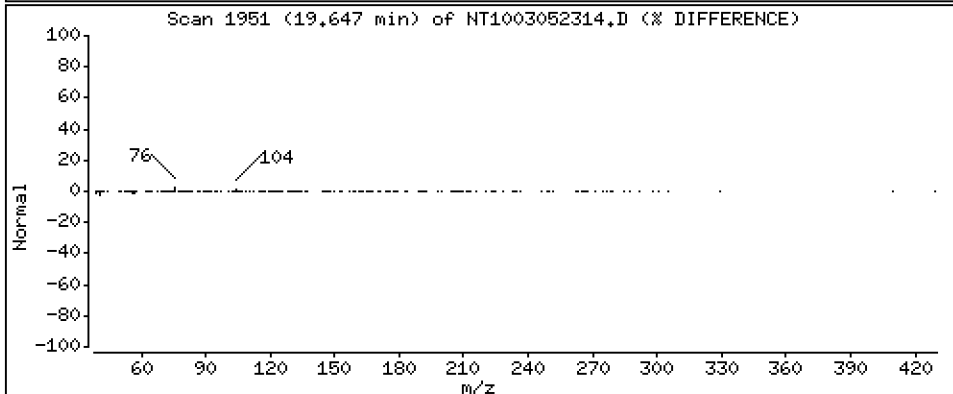
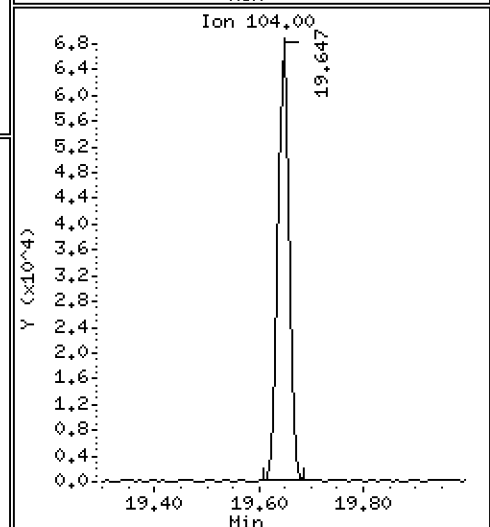
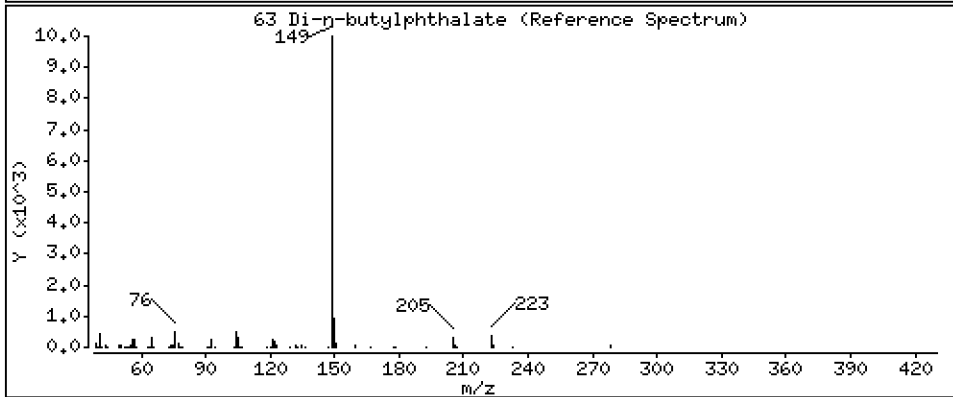
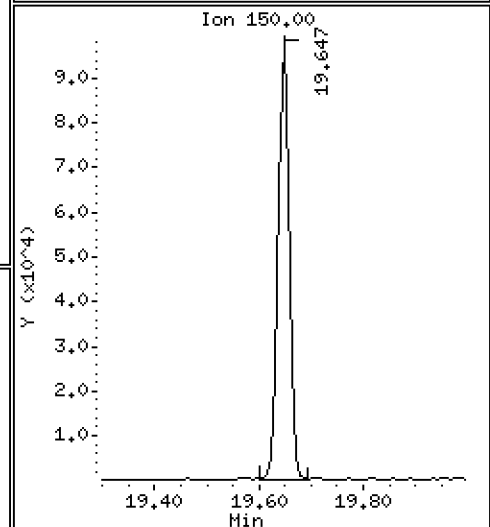
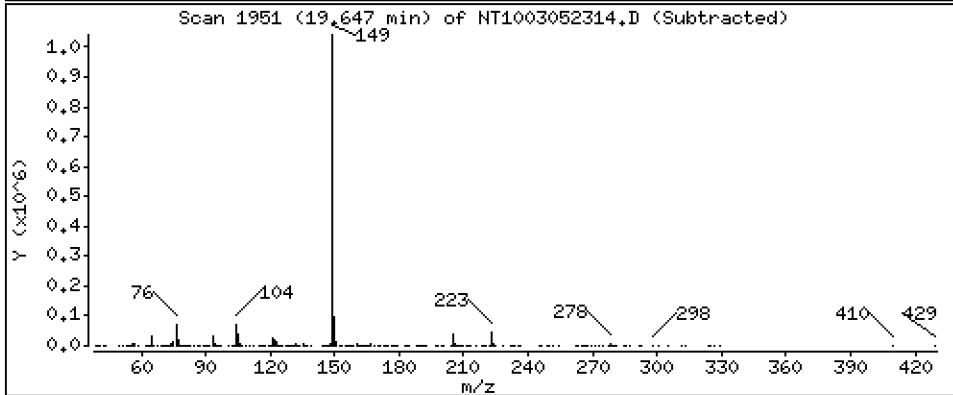
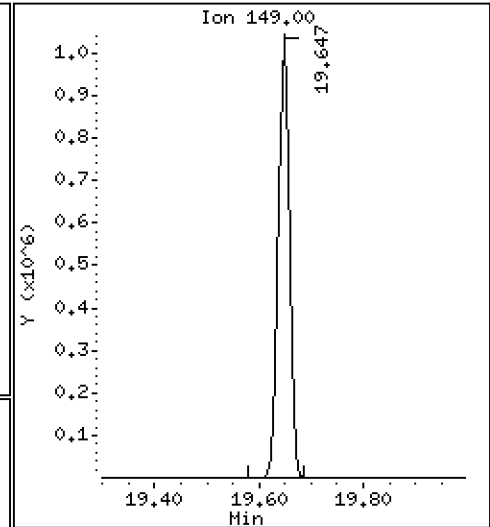
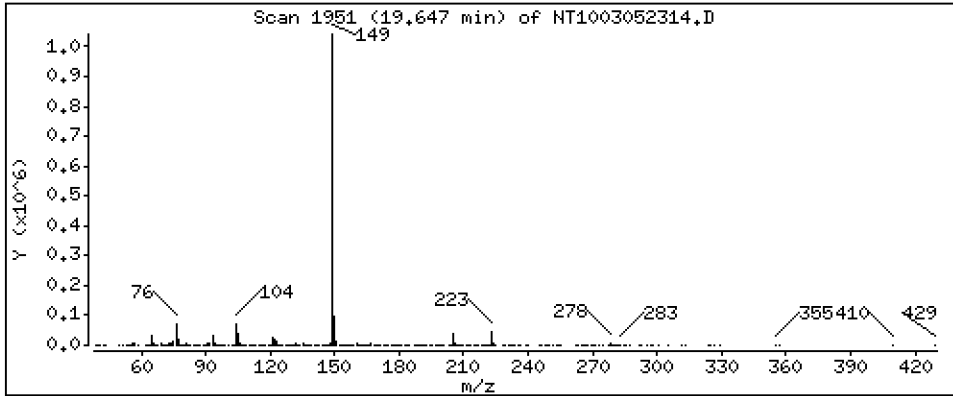
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 4,811 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

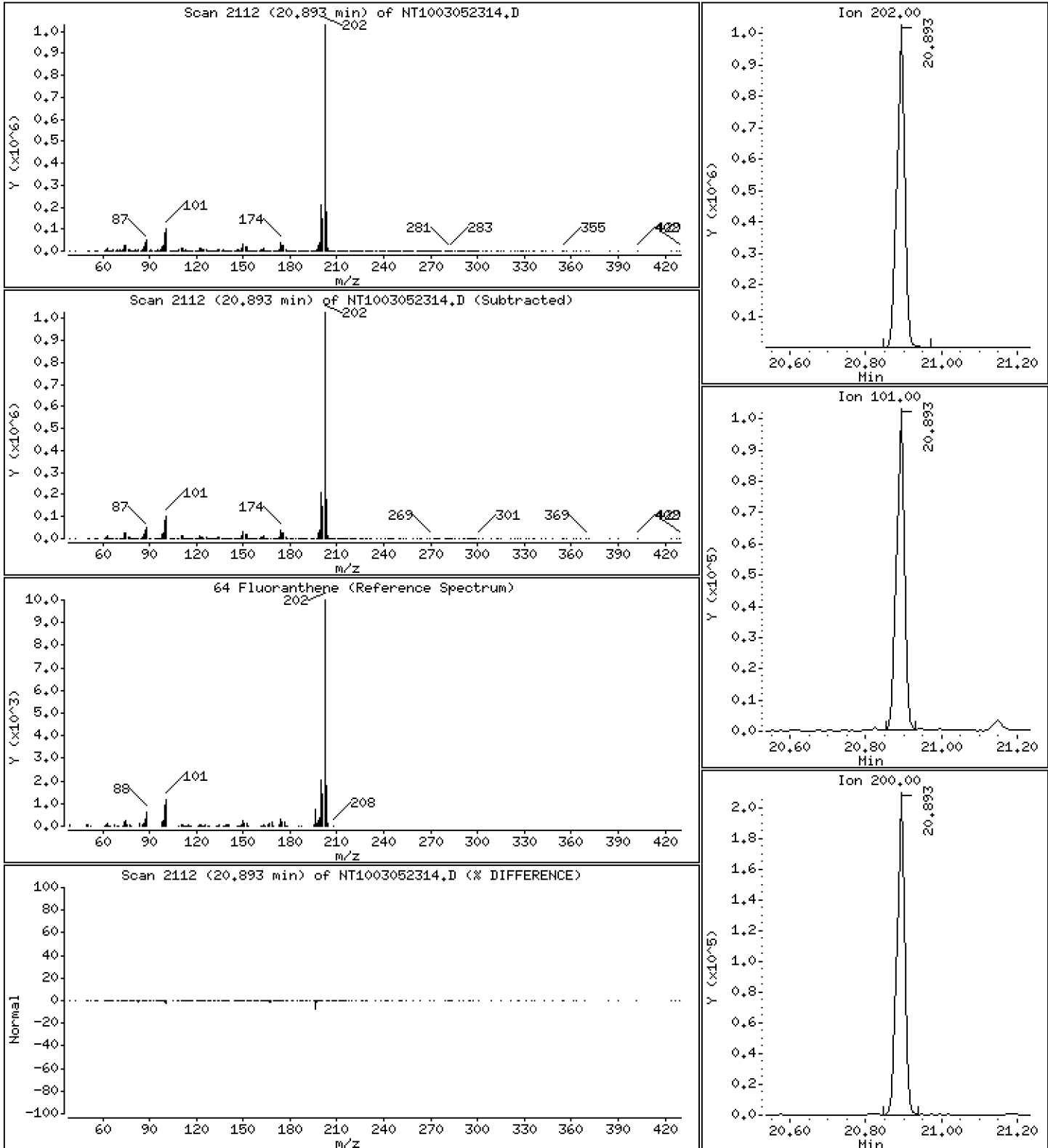
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,161 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

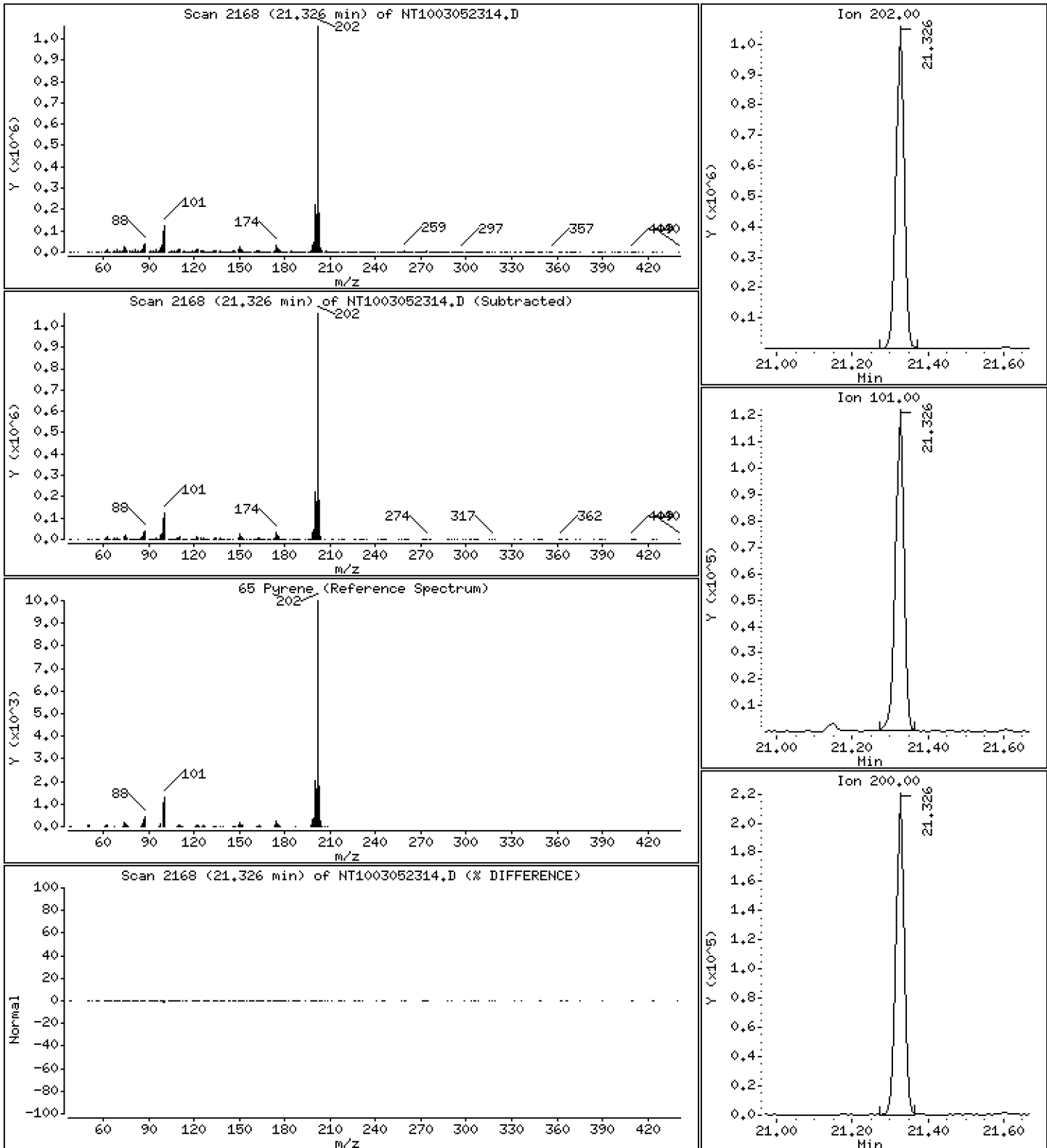
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,284 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

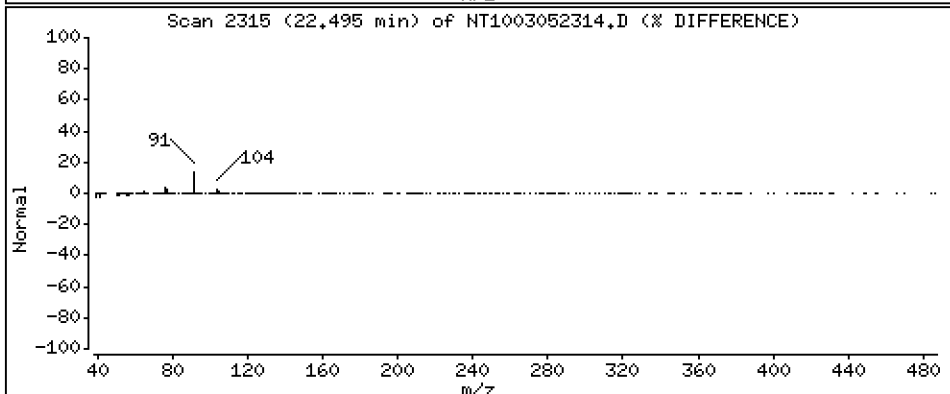
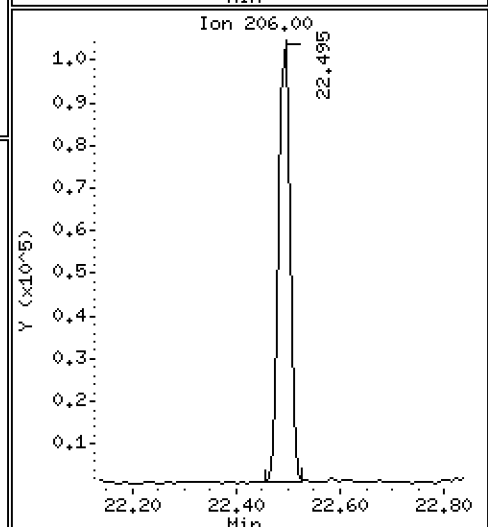
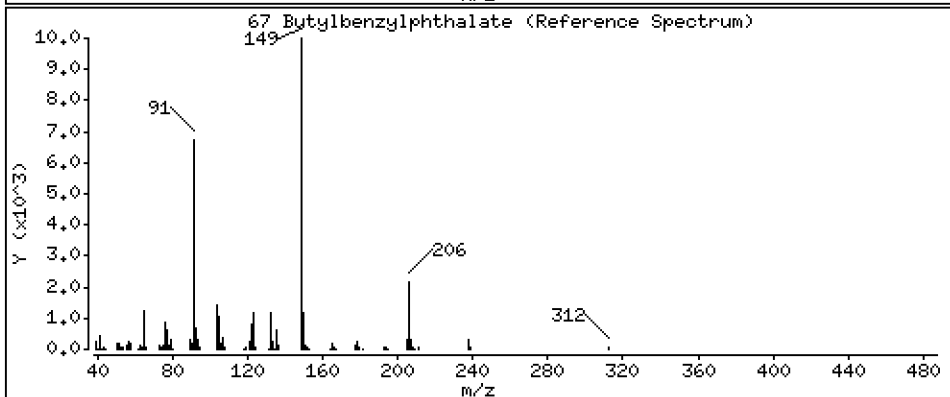
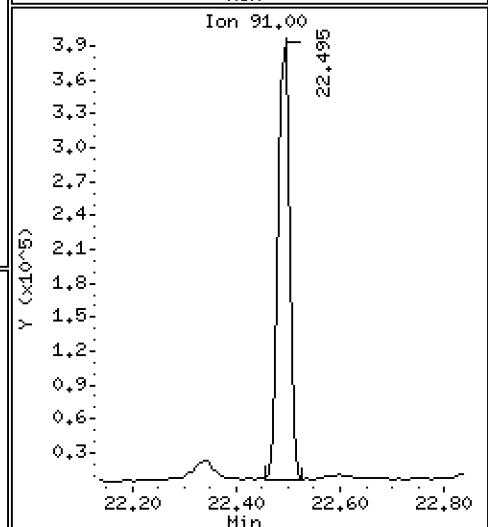
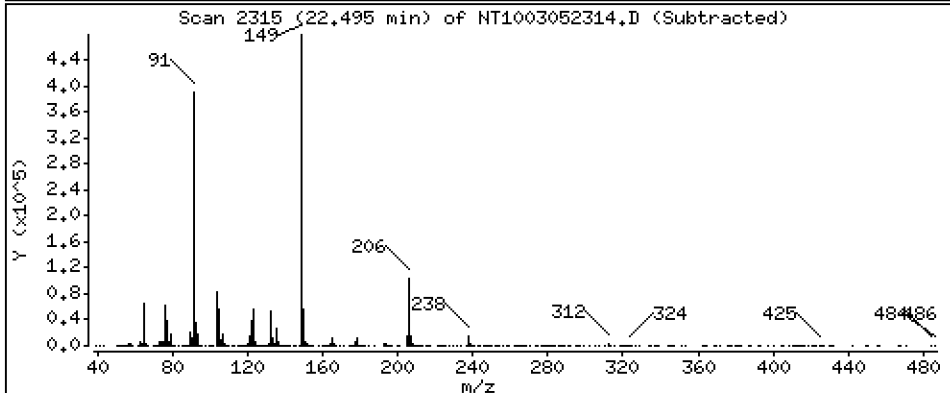
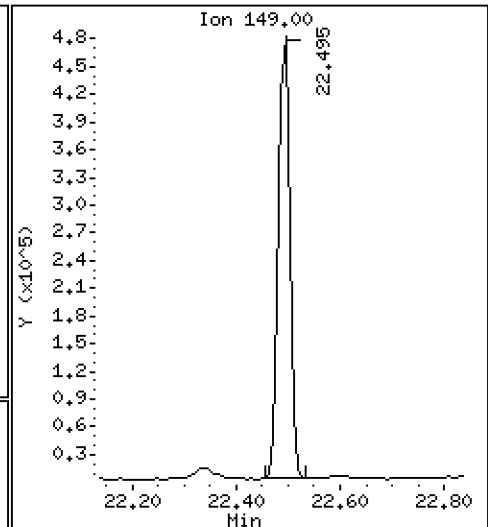
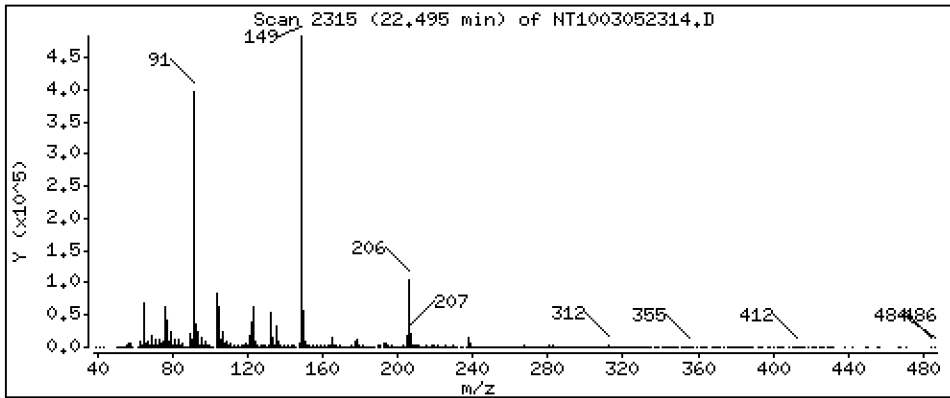
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,740 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

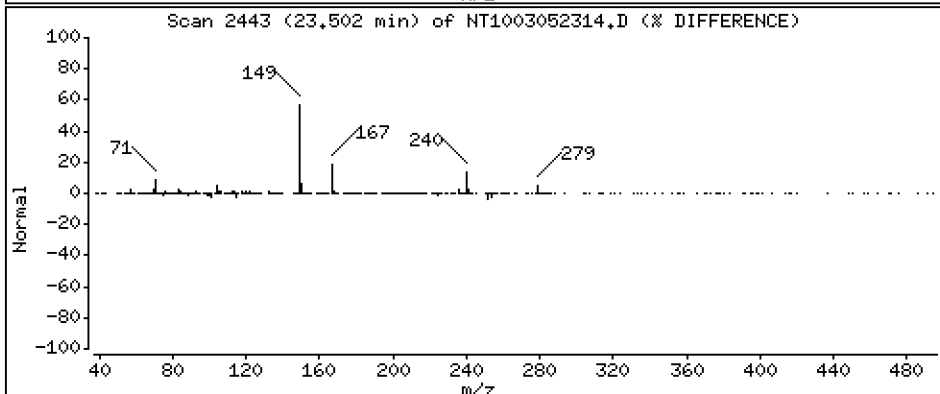
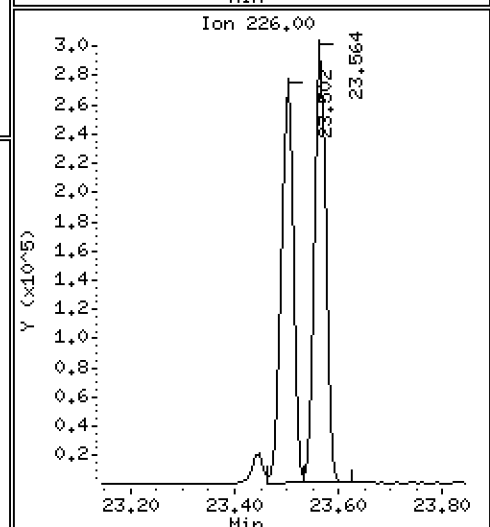
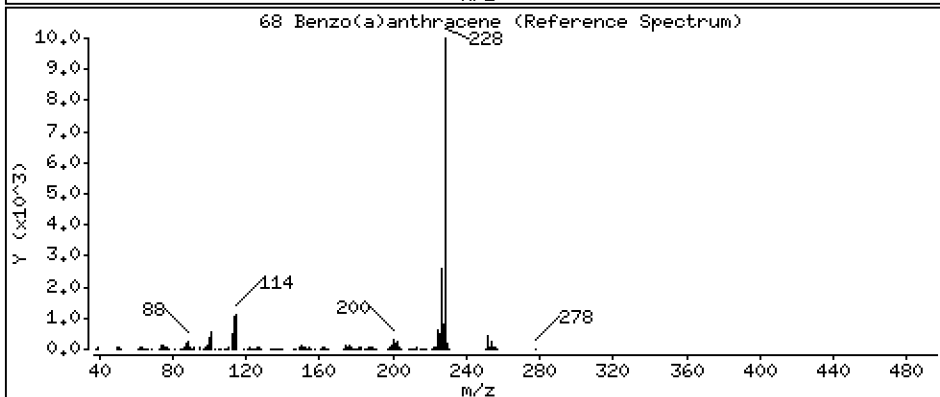
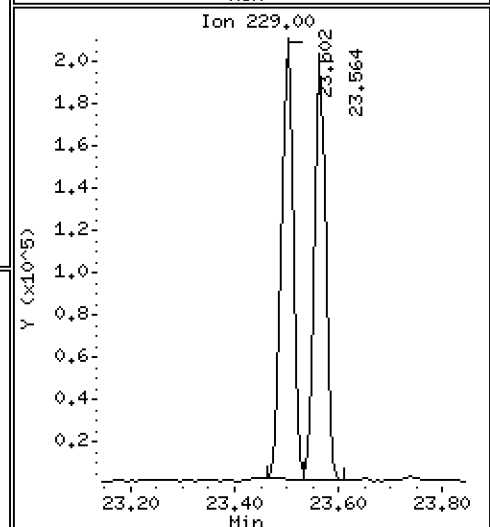
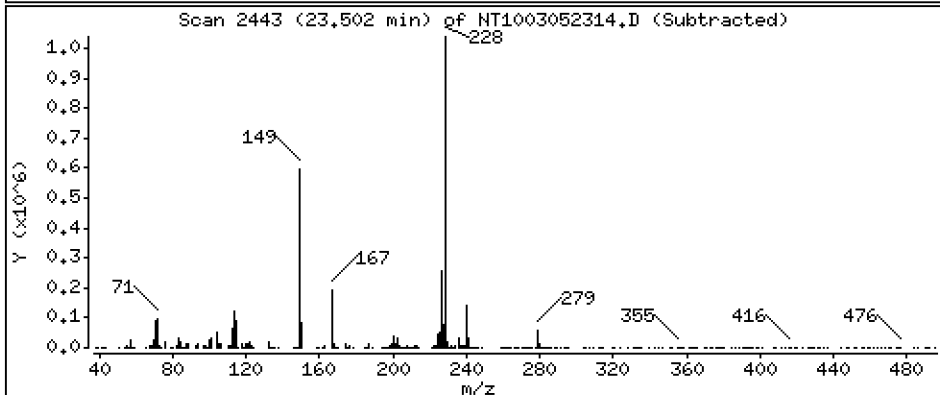
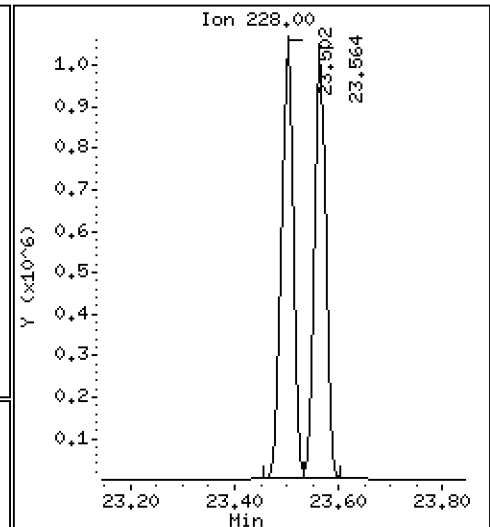
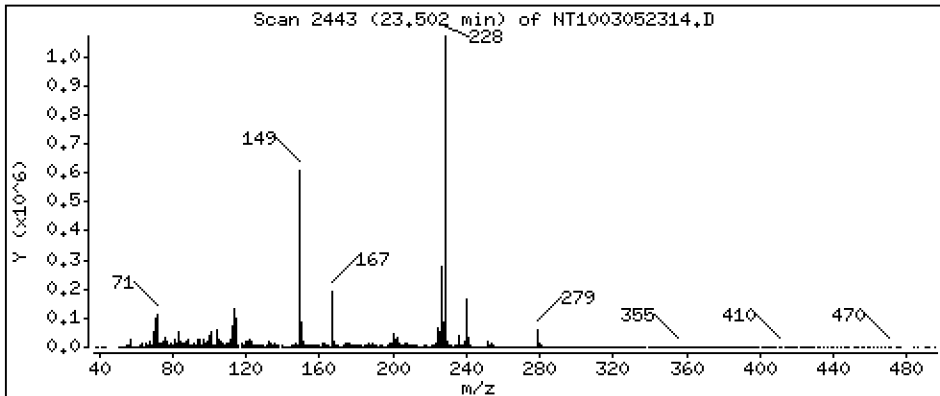
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,695 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

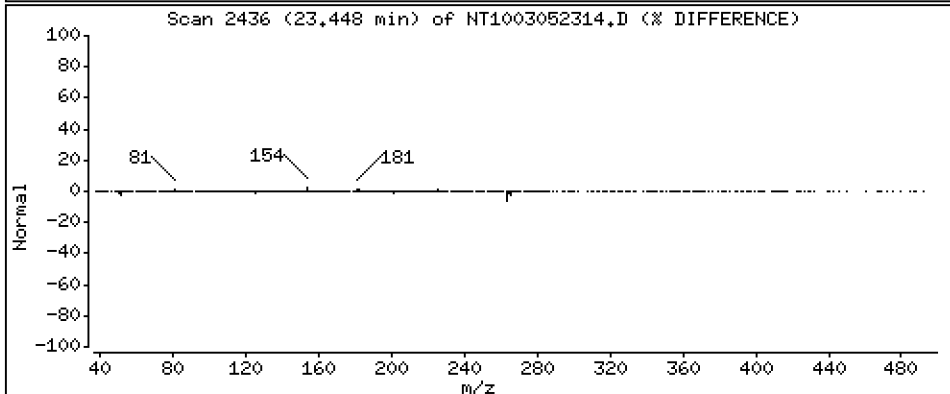
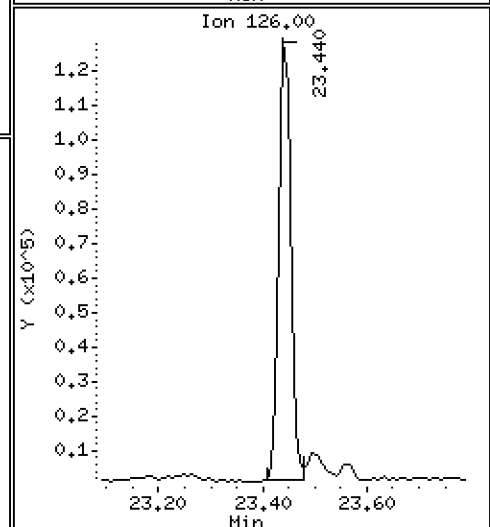
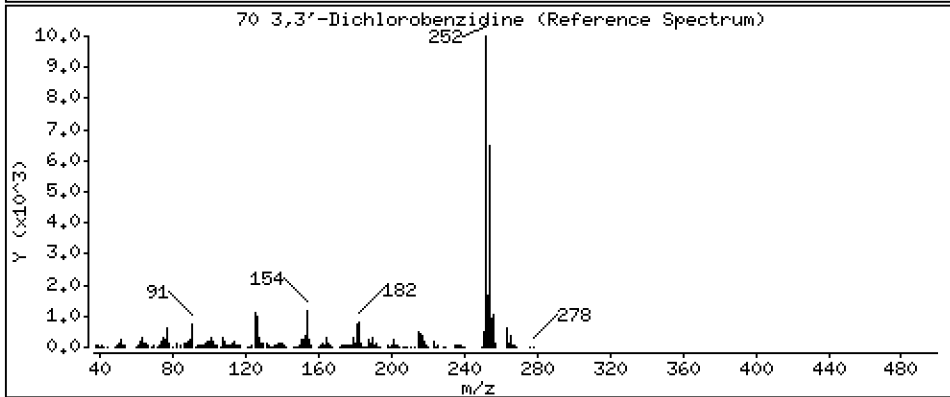
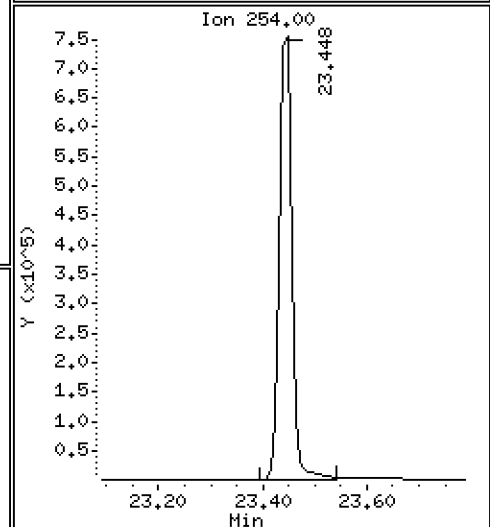
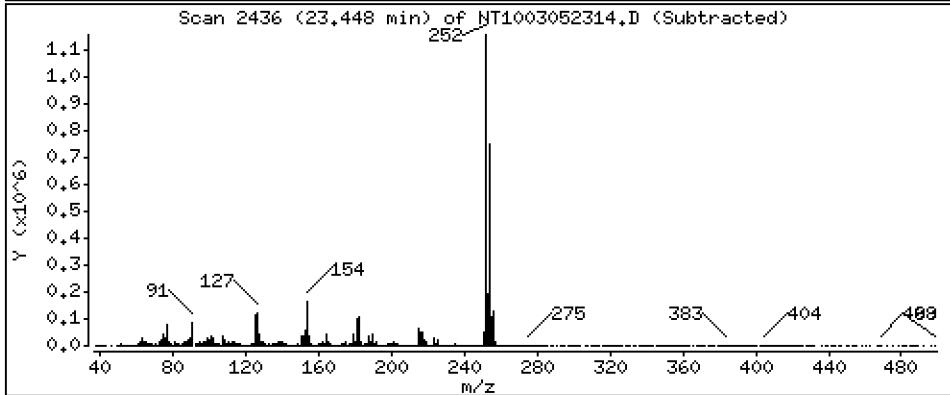
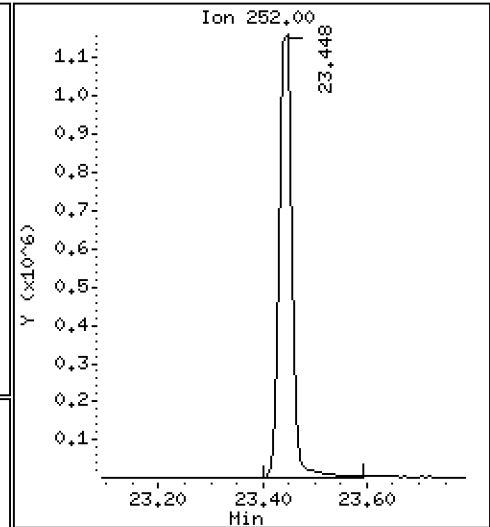
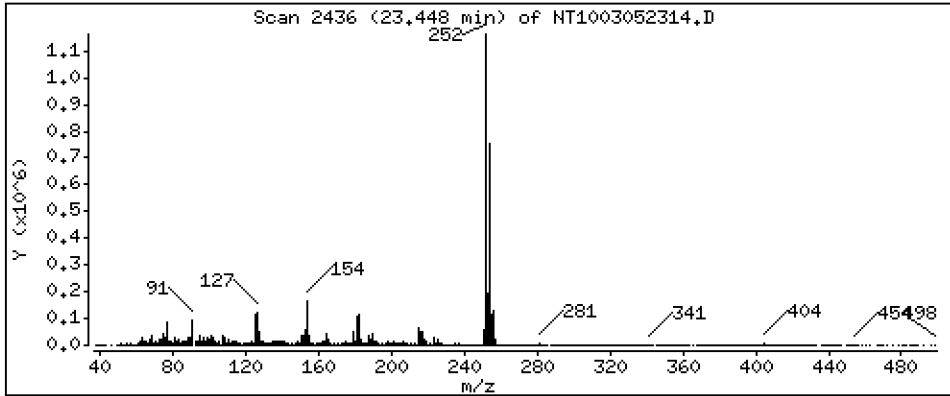
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 11,71 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

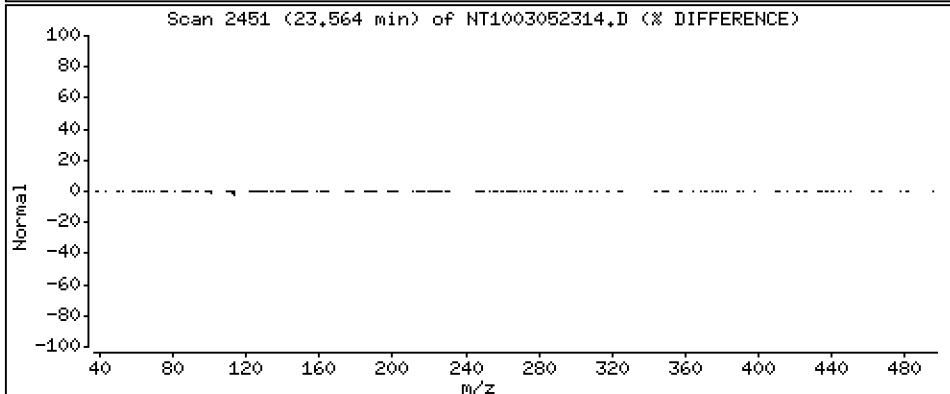
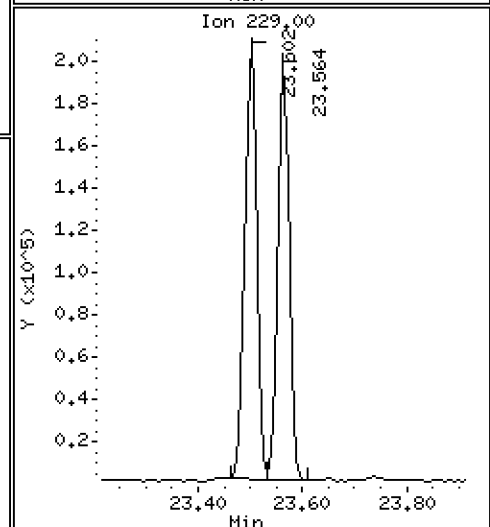
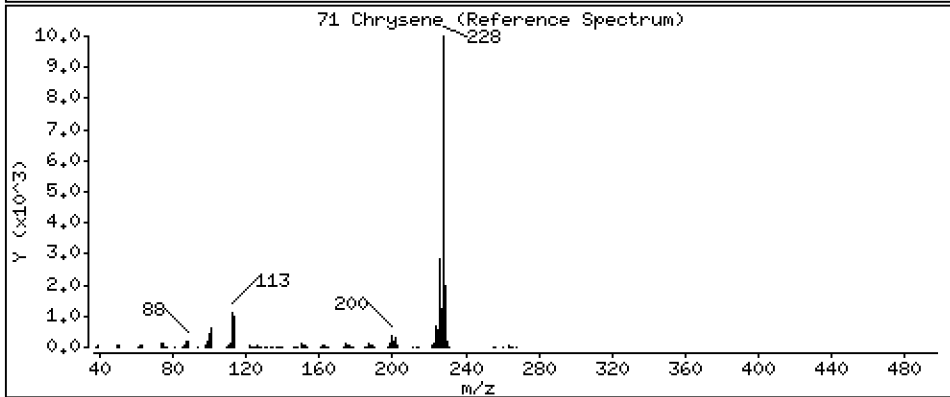
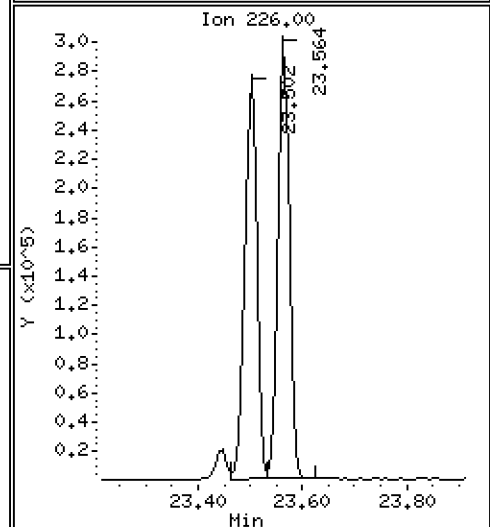
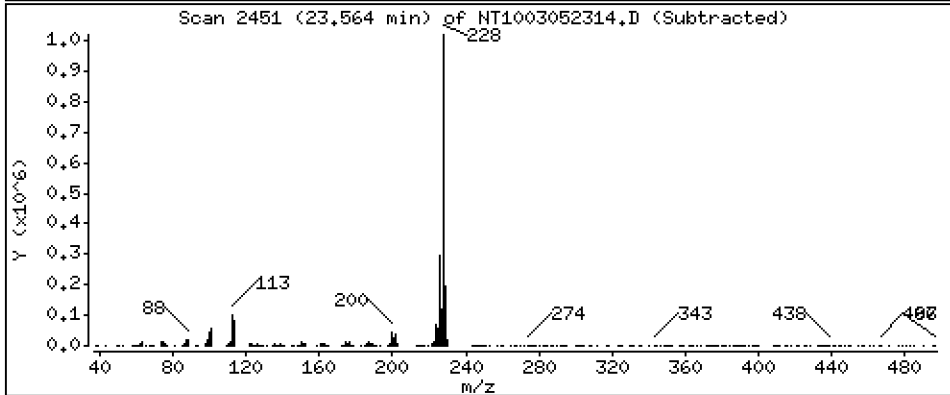
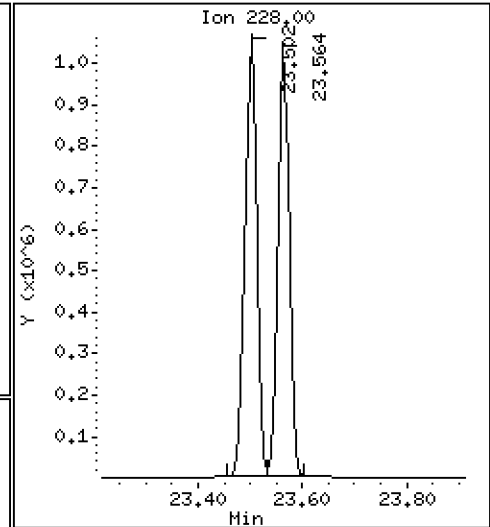
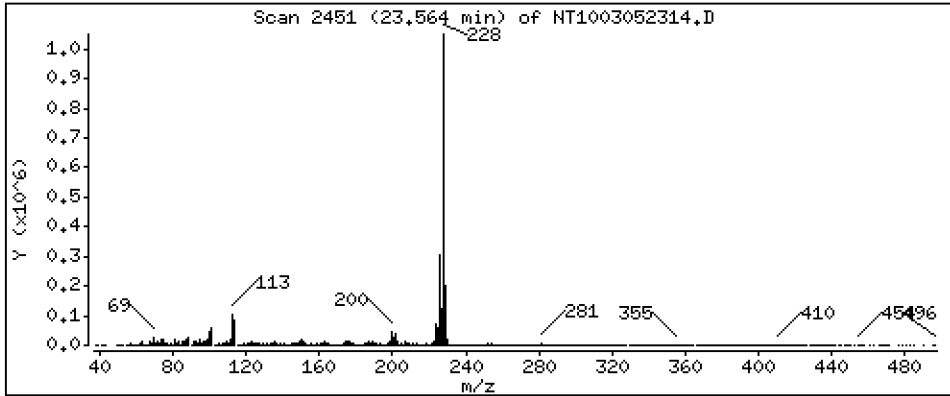
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 5,093 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

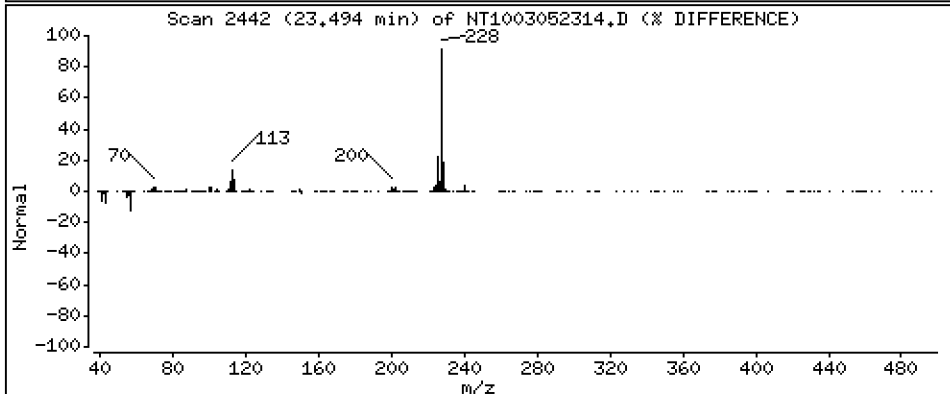
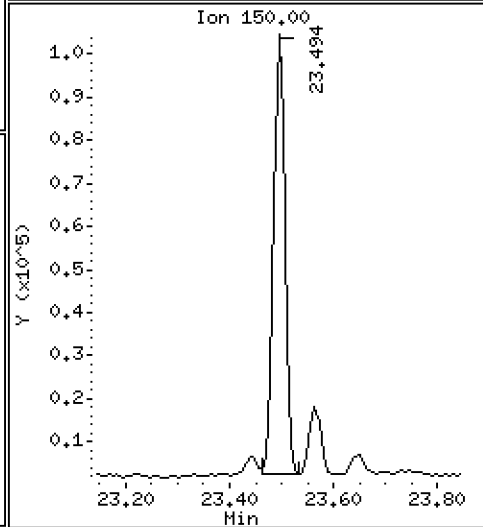
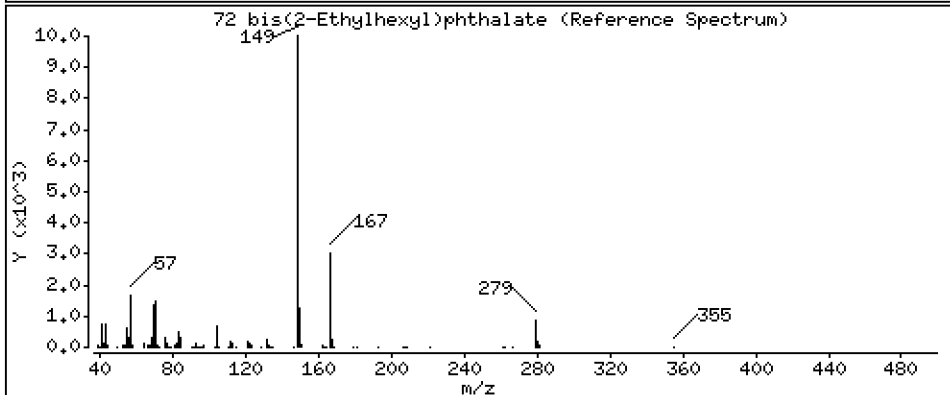
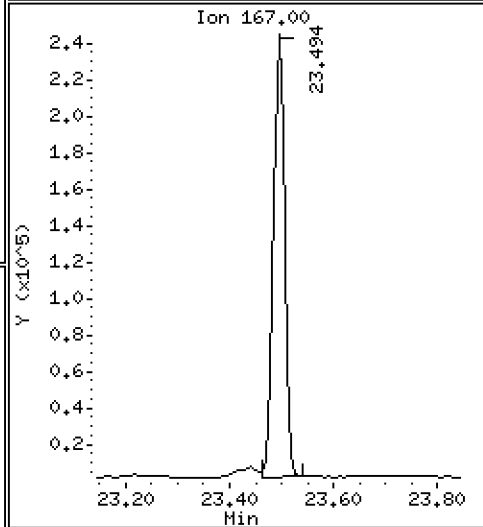
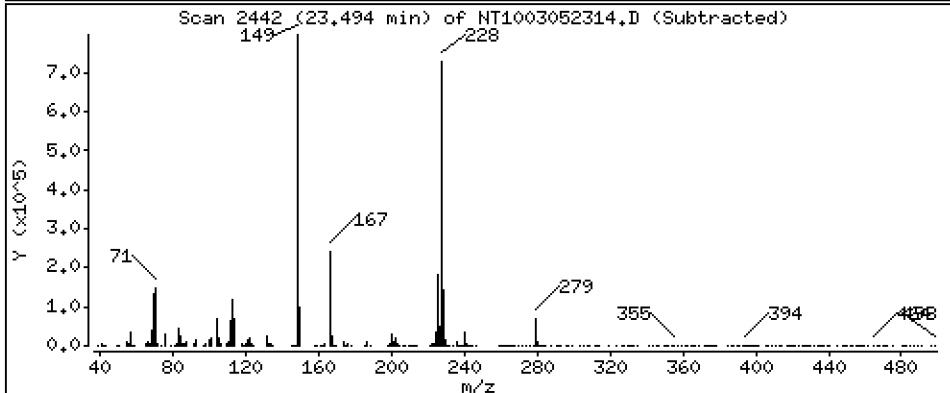
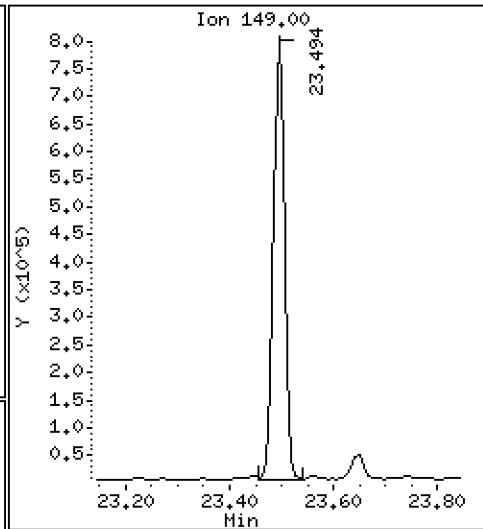
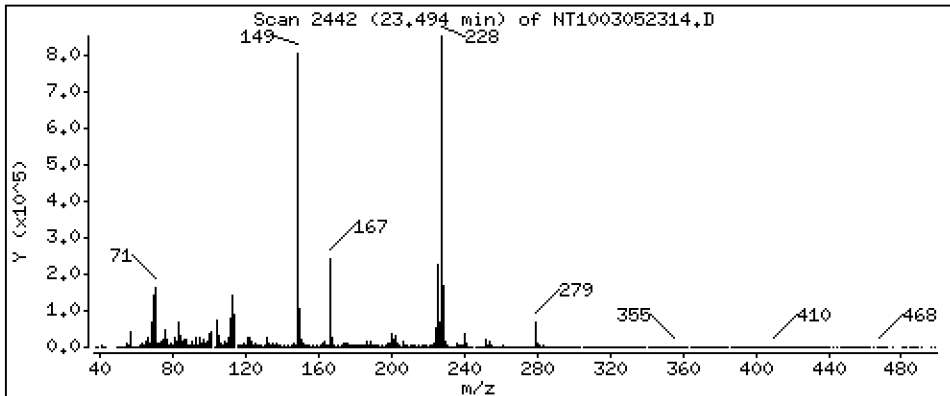
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,686 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

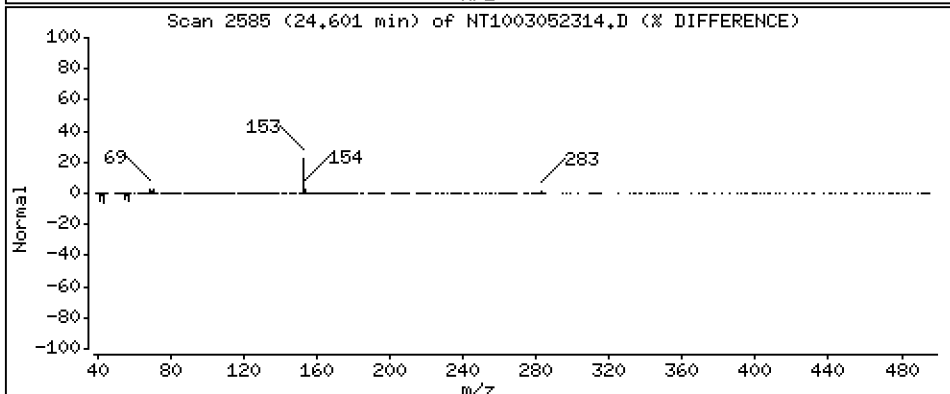
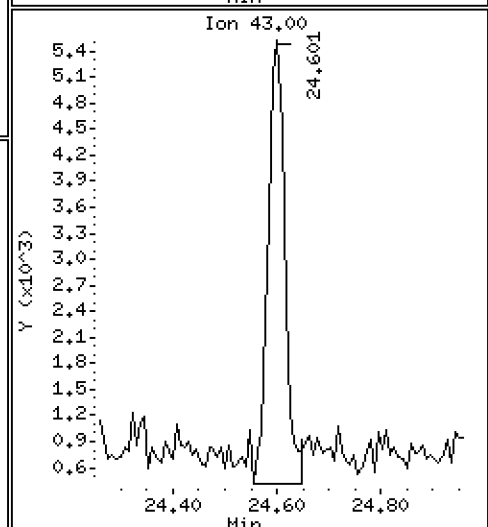
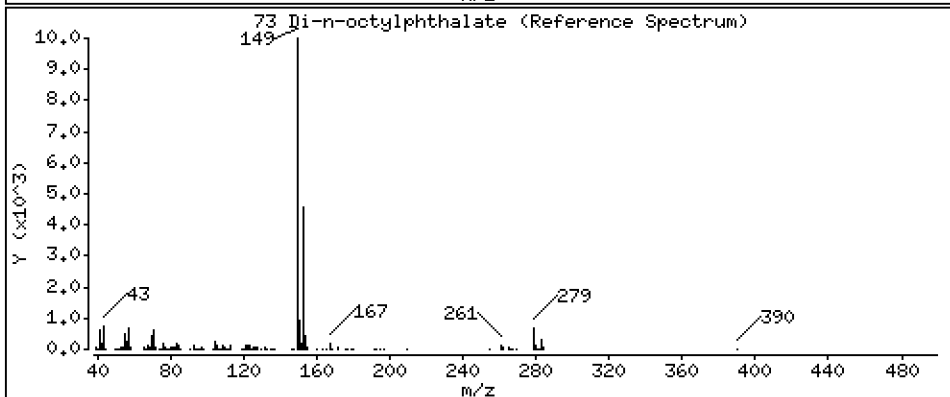
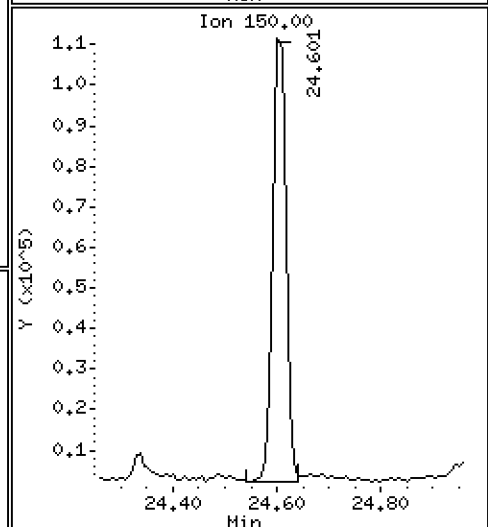
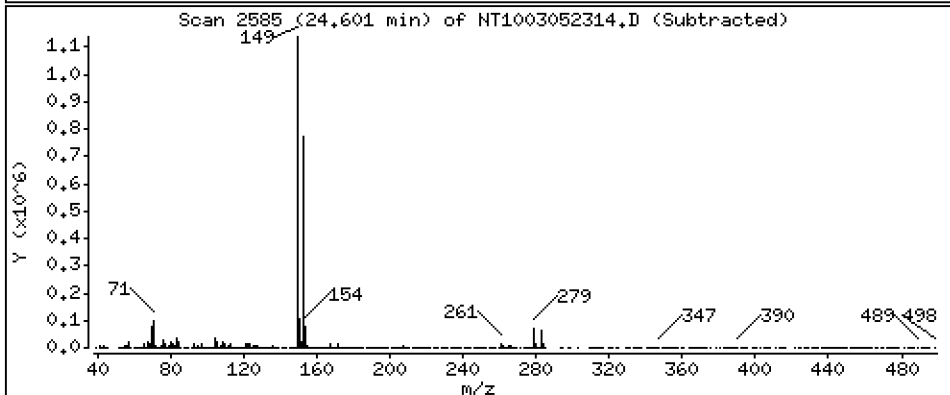
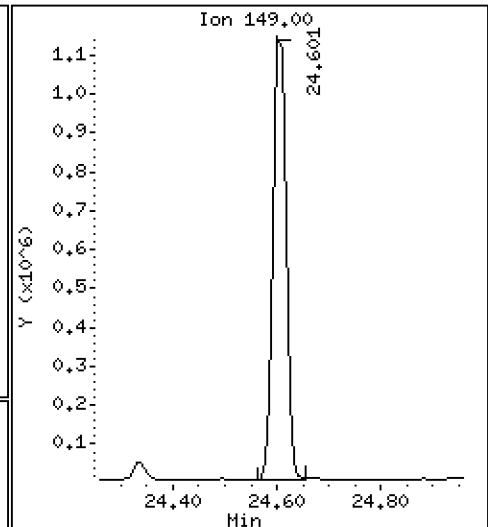
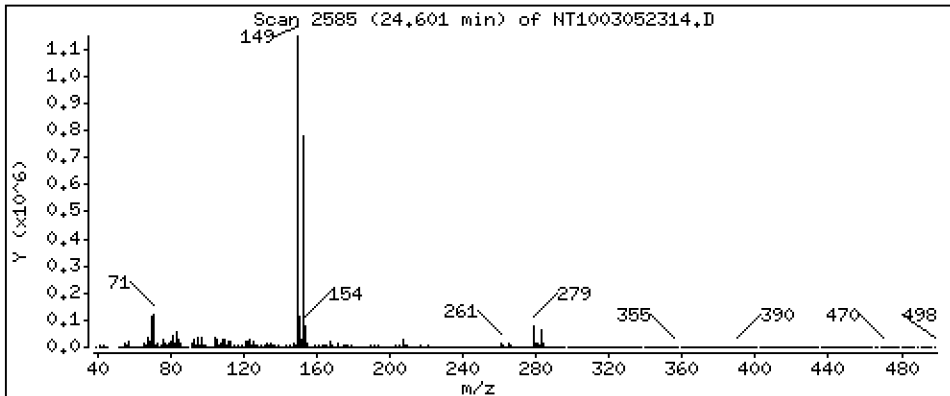
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

73 Di-n-octylphthalate

Concentration: 5.195 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

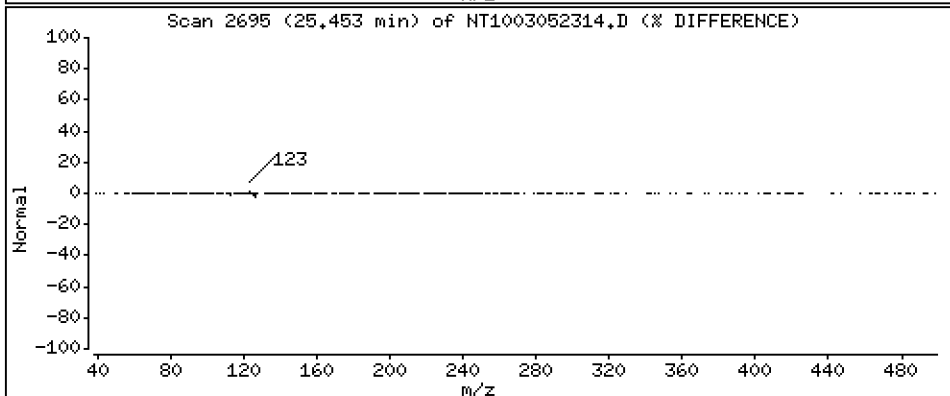
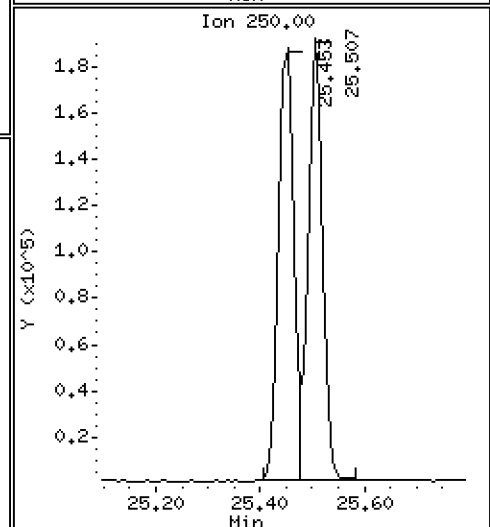
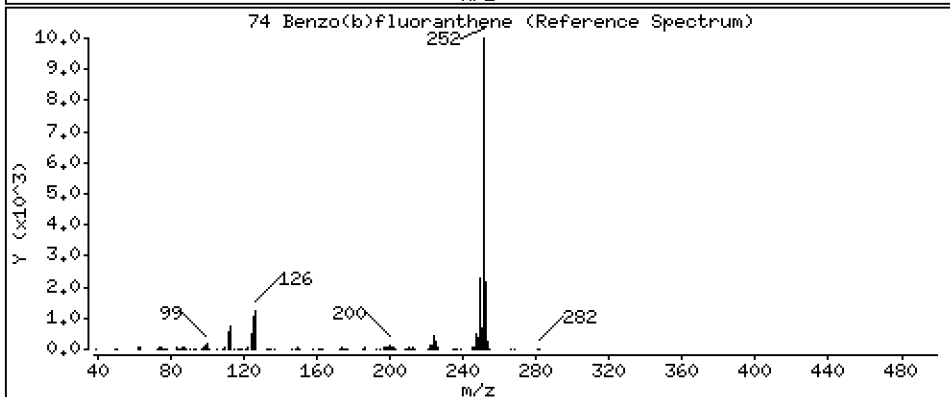
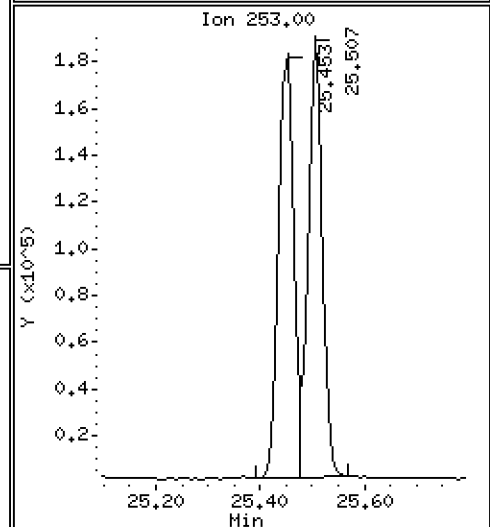
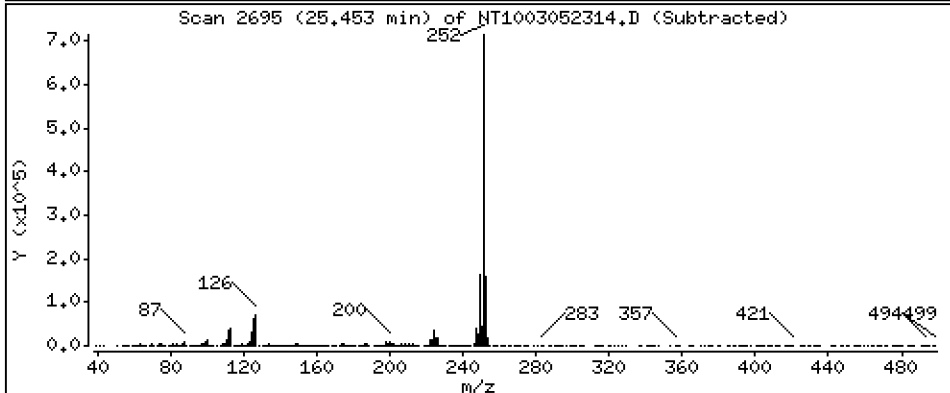
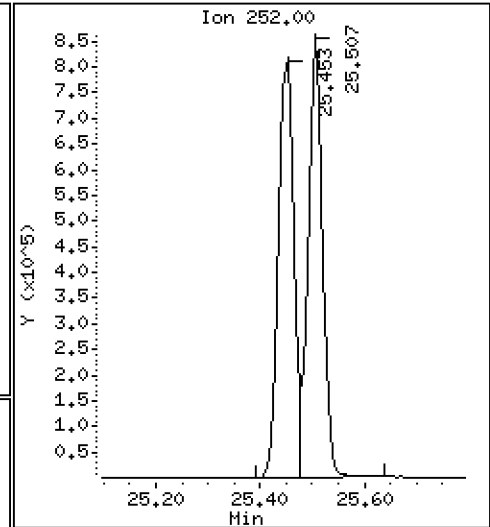
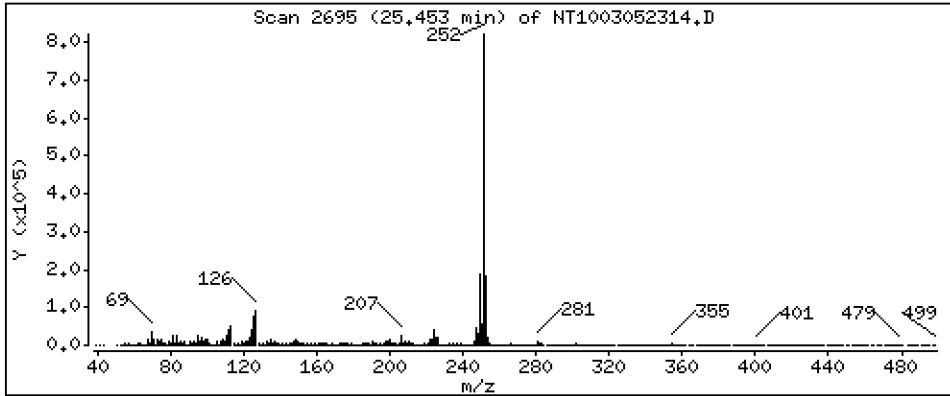
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,209 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

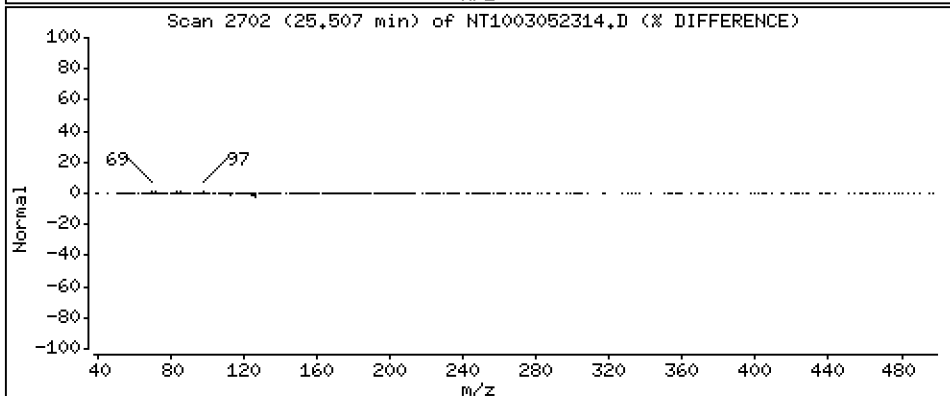
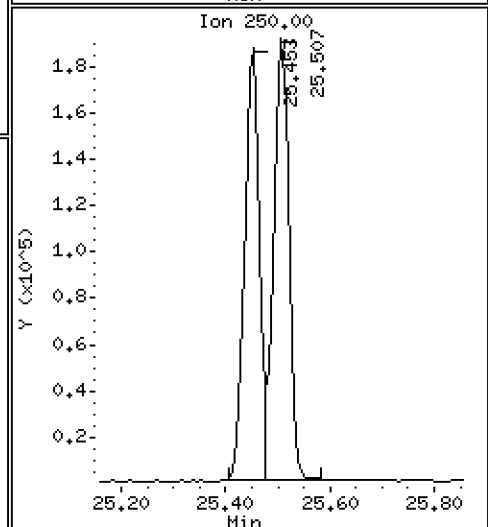
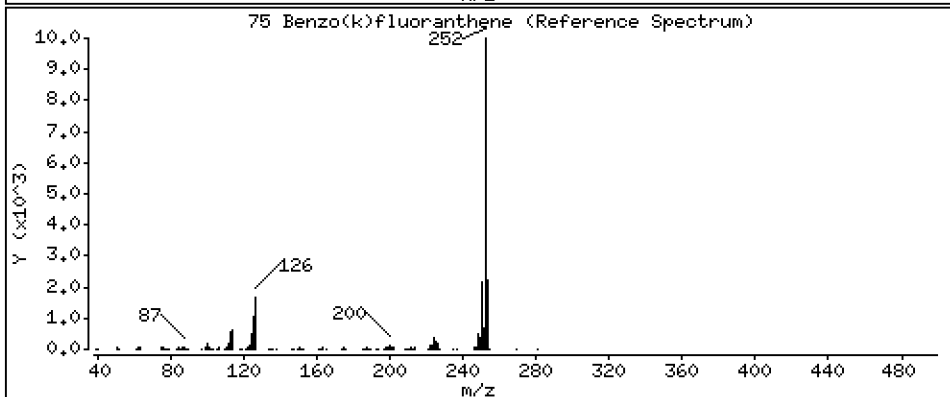
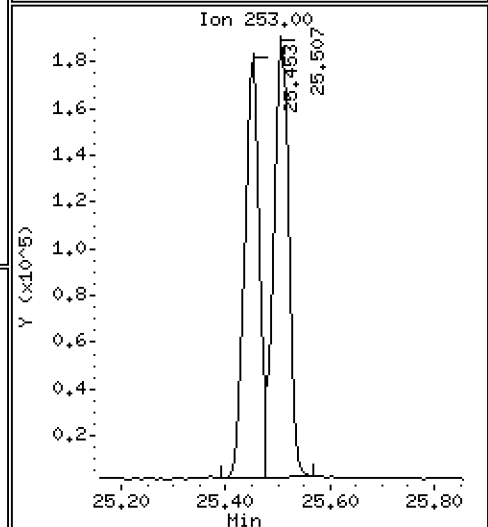
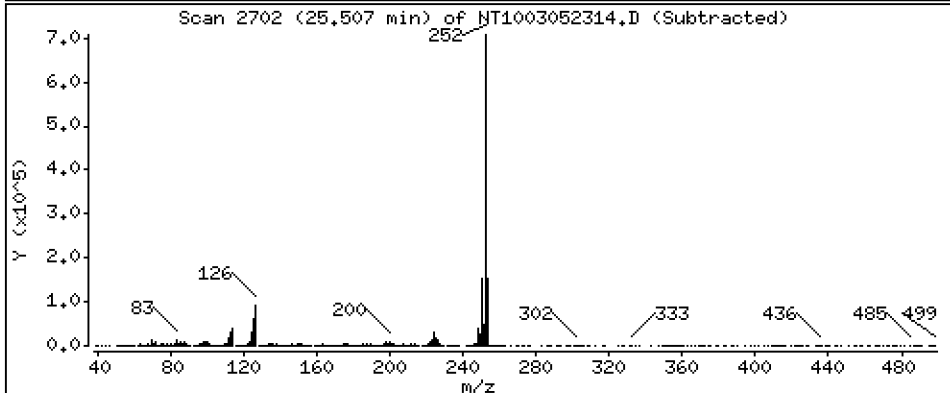
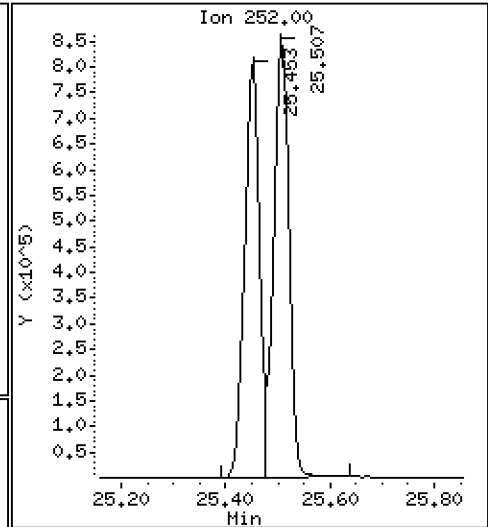
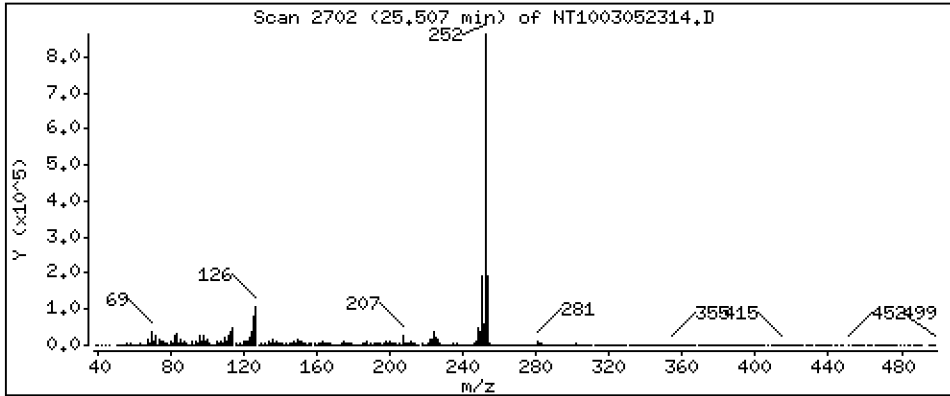
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,595 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

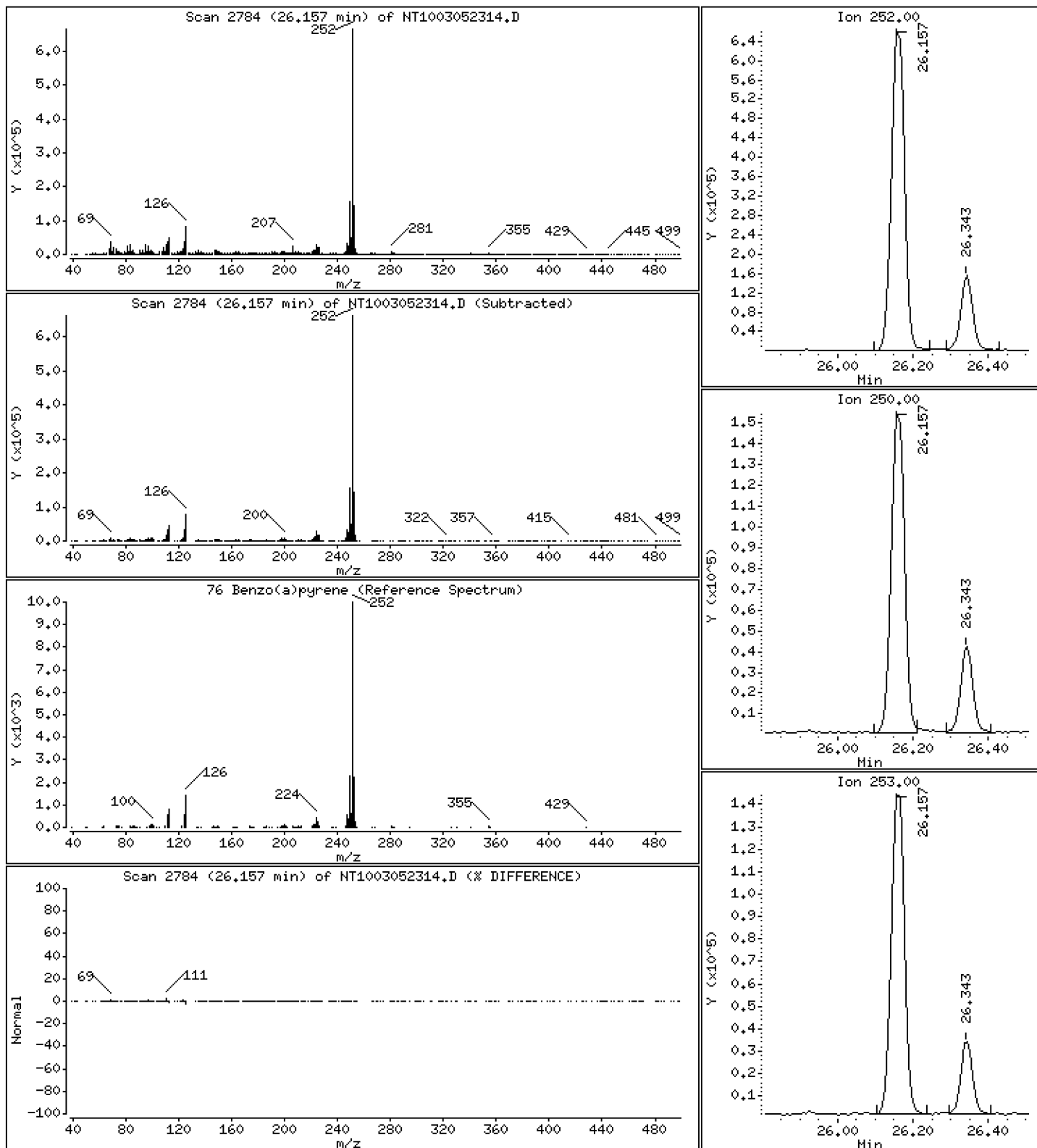
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,462 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

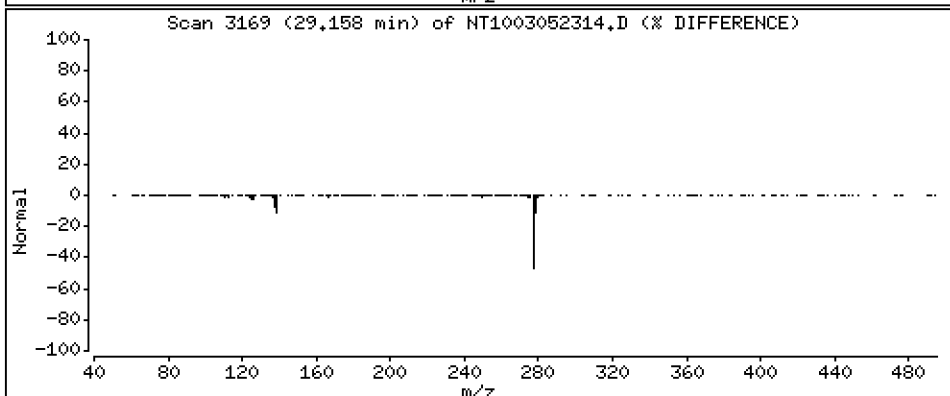
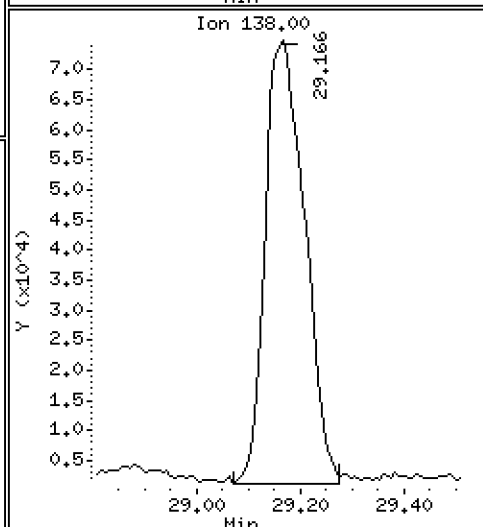
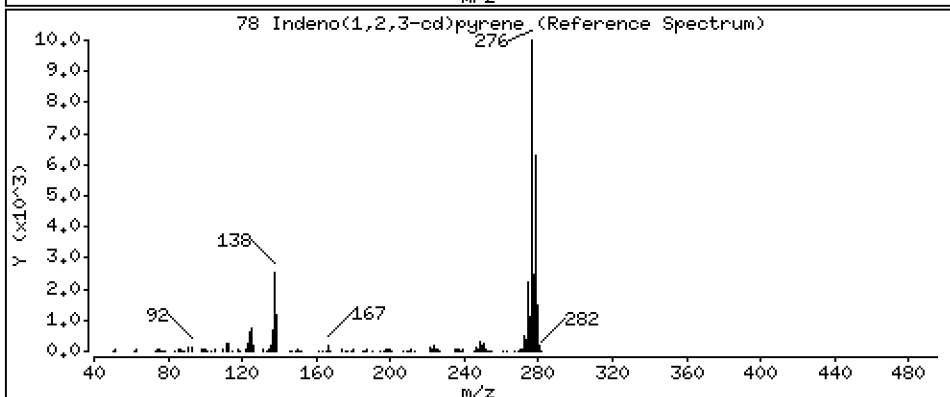
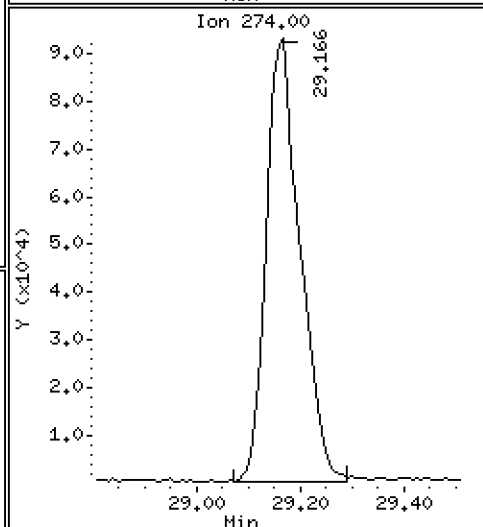
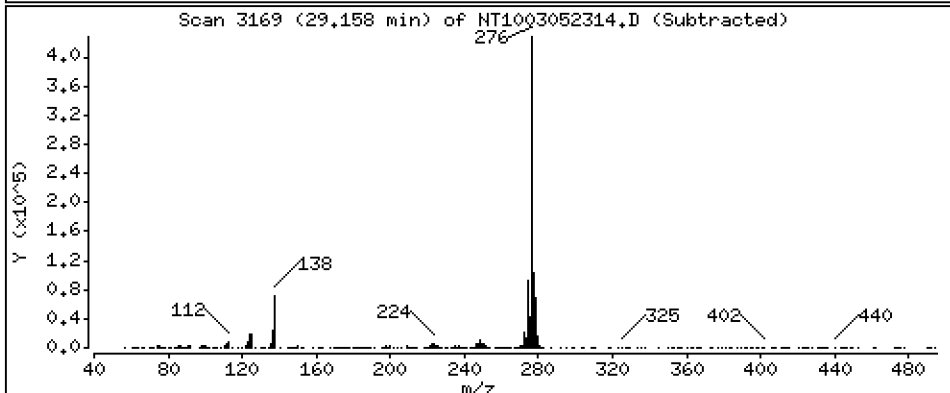
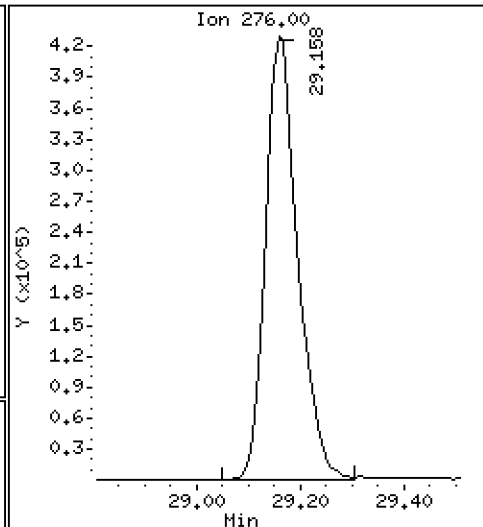
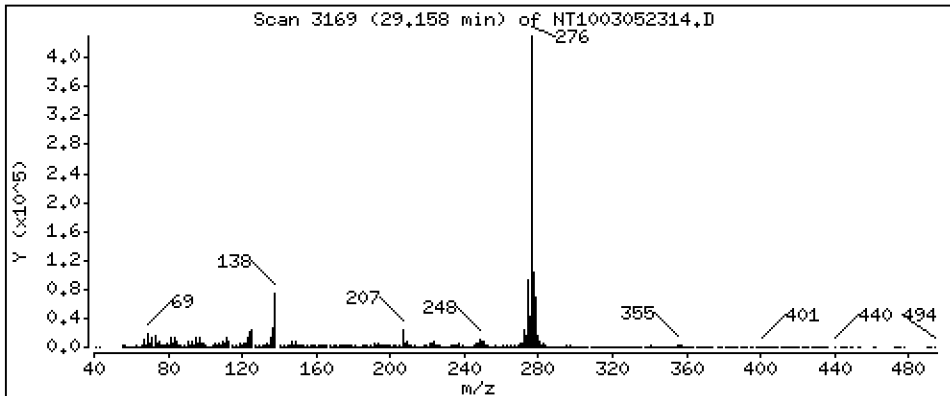
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,585 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

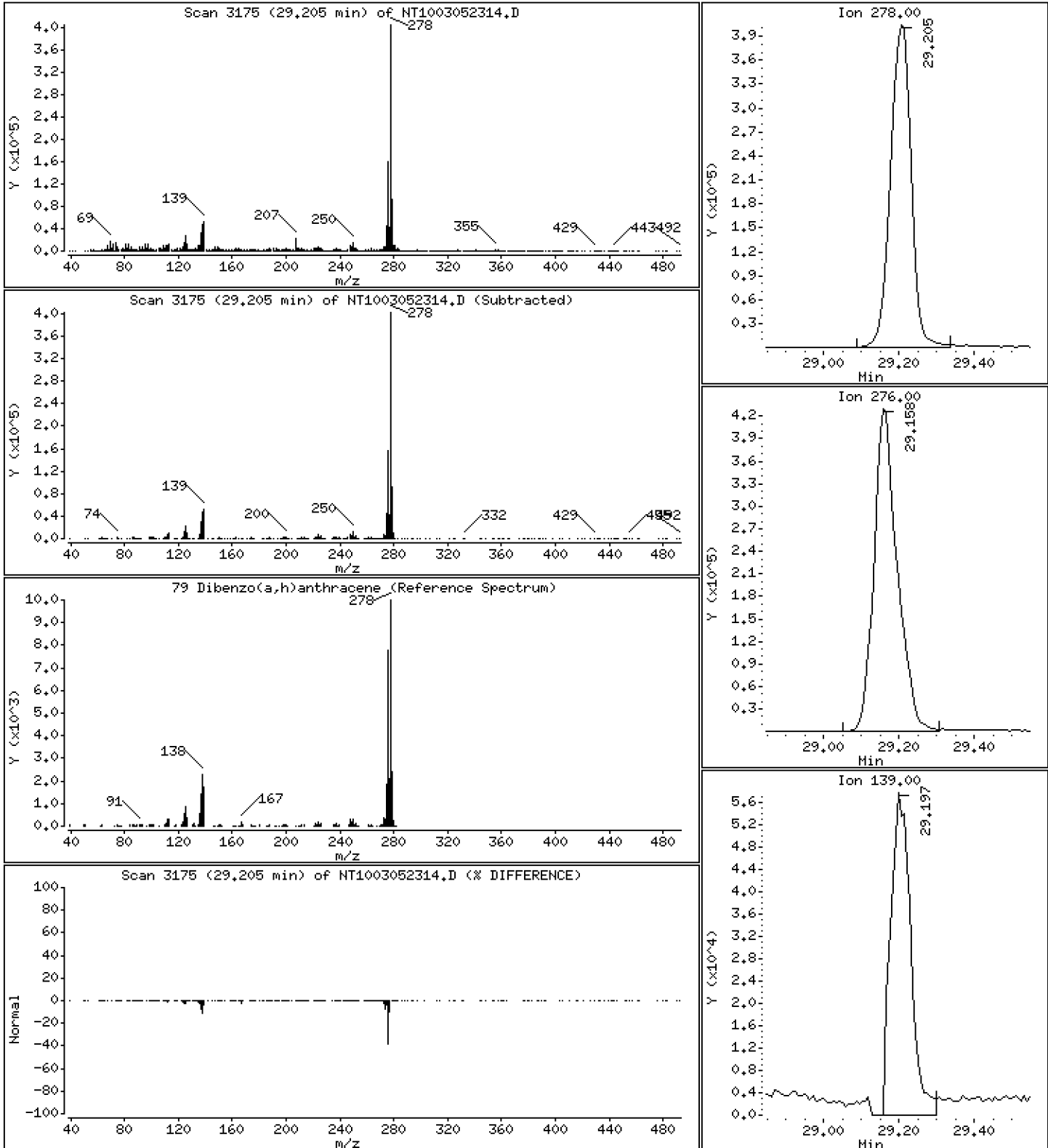
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,948 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

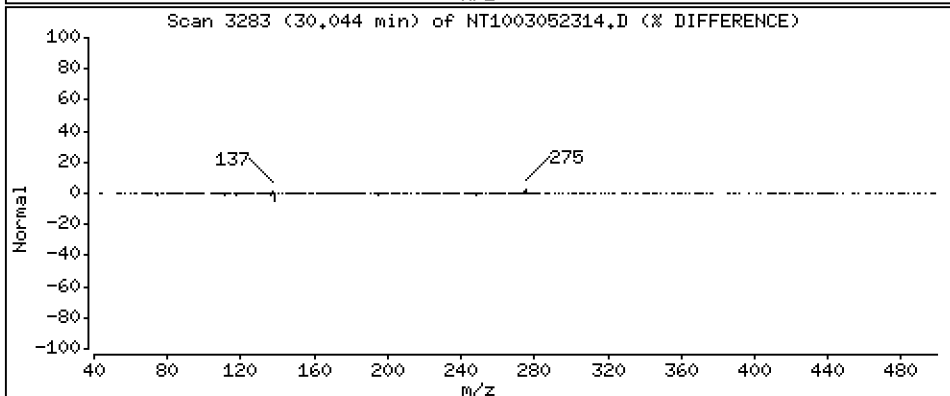
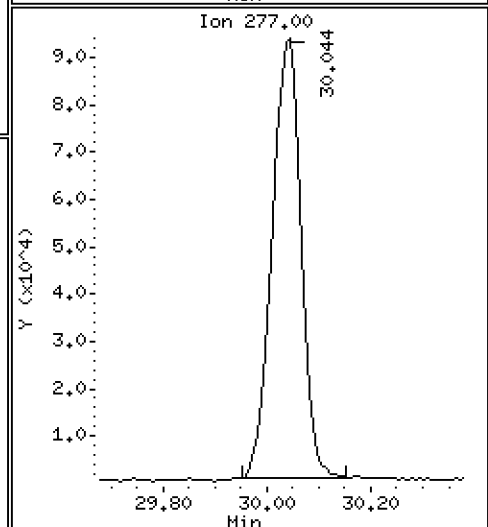
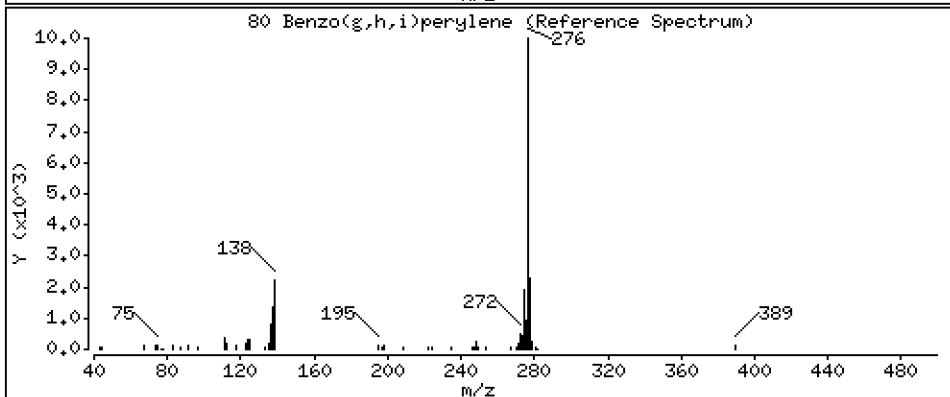
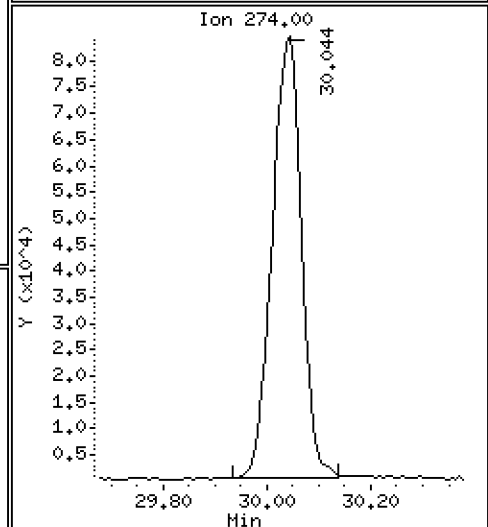
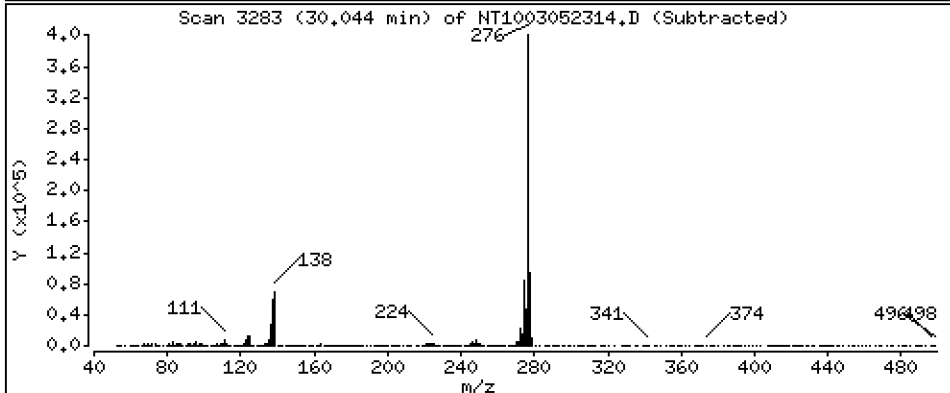
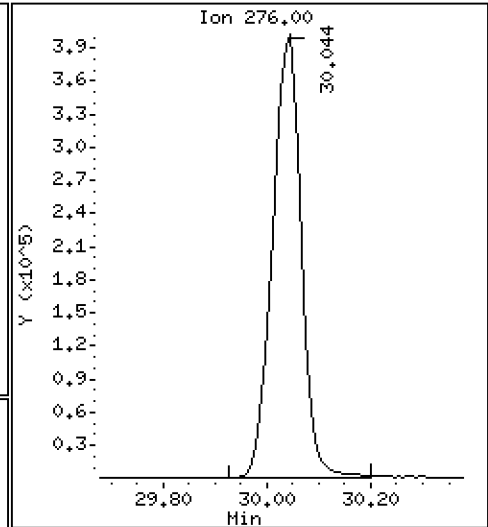
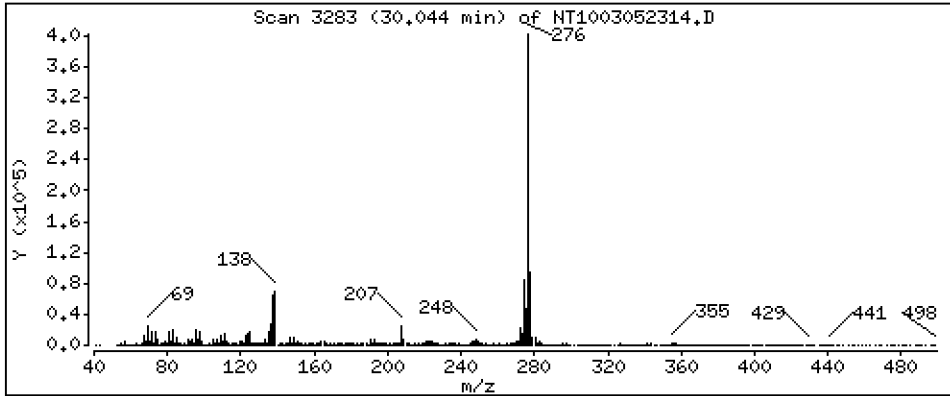
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,815 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

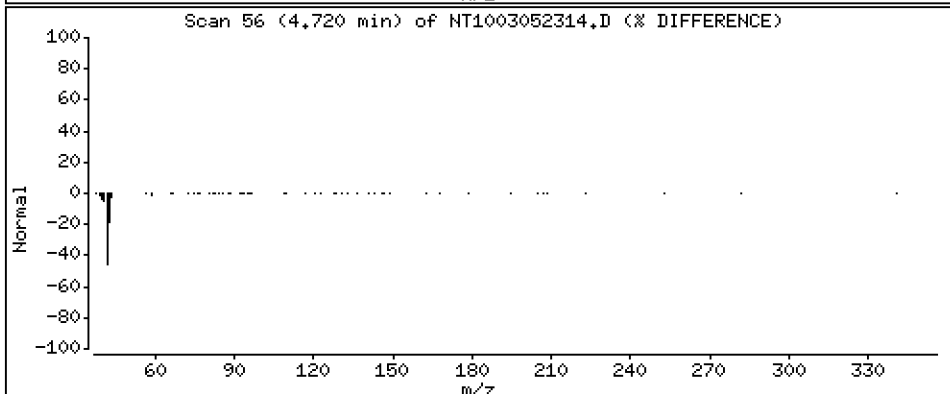
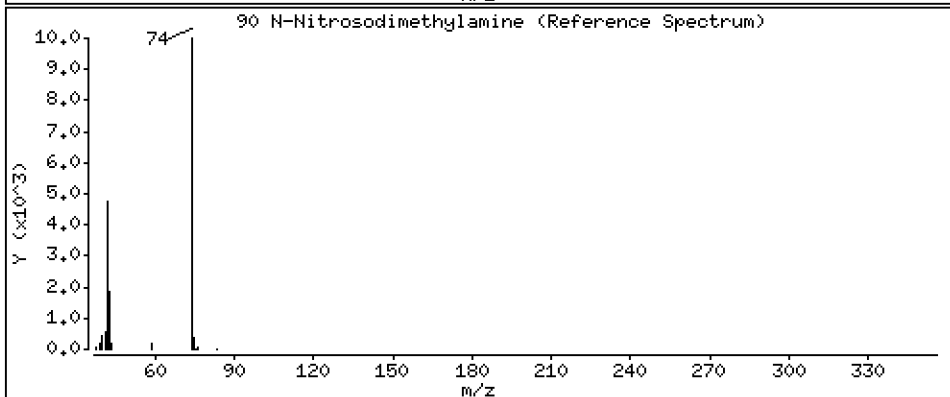
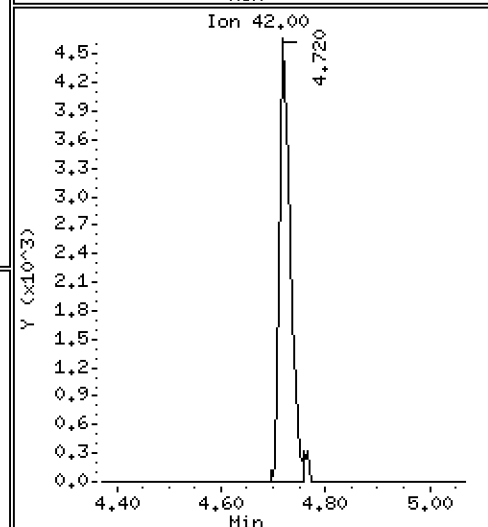
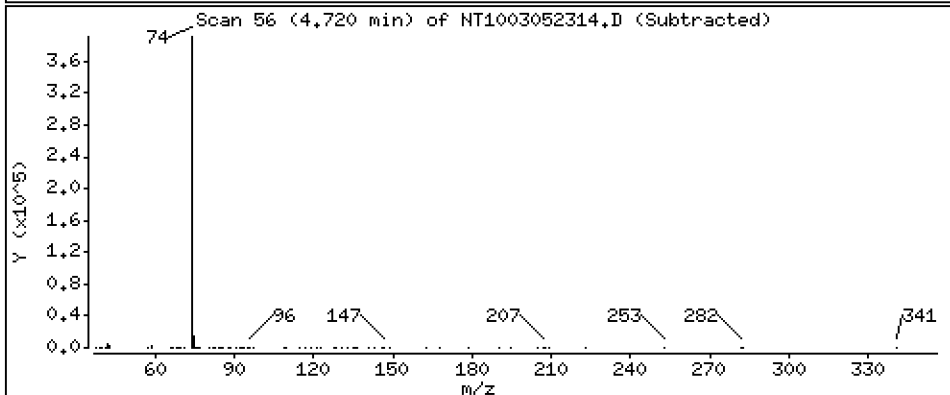
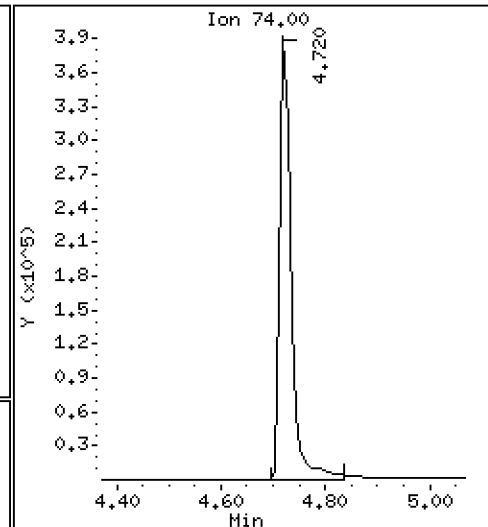
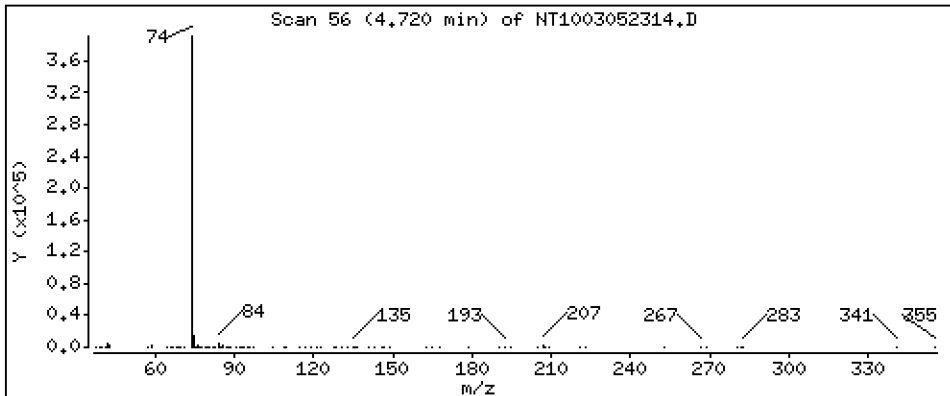
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 10,36 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

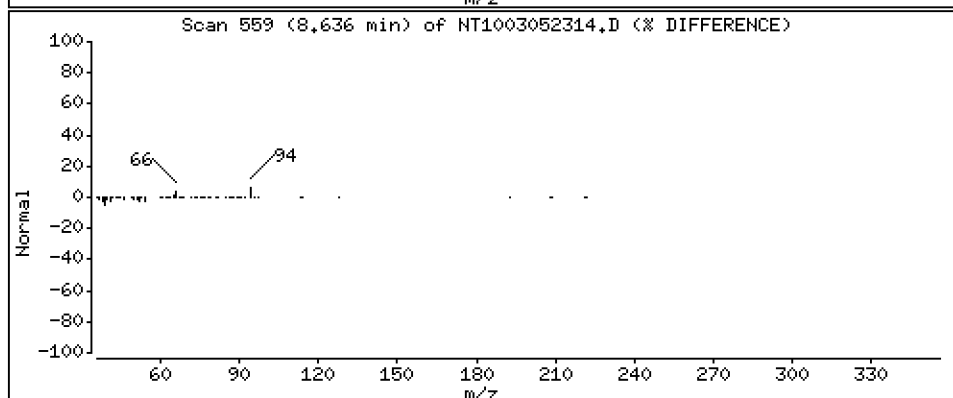
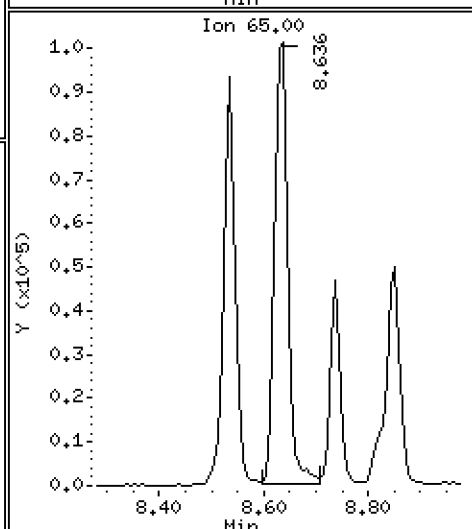
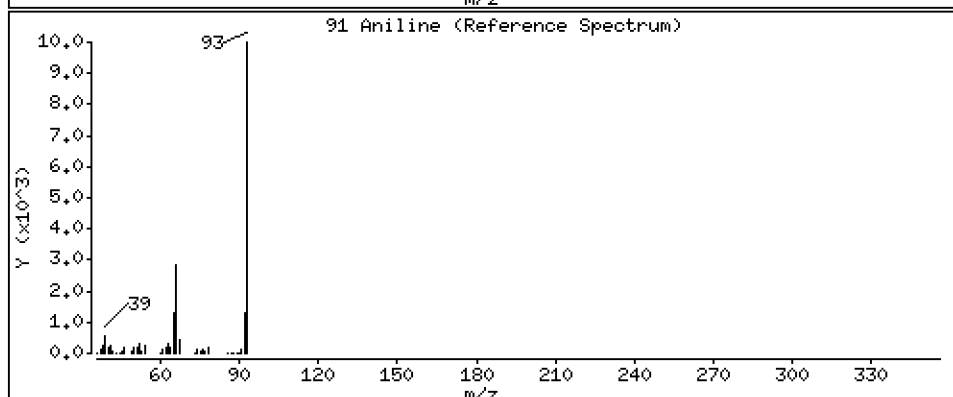
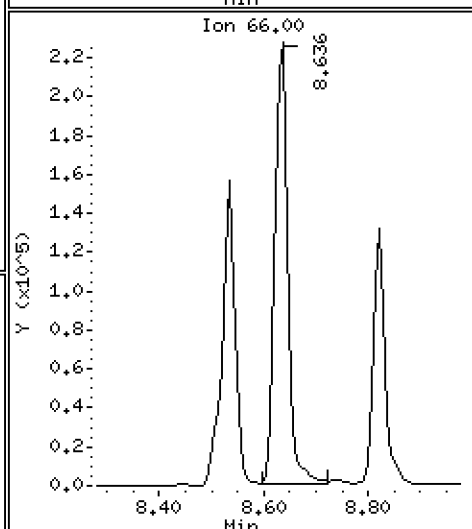
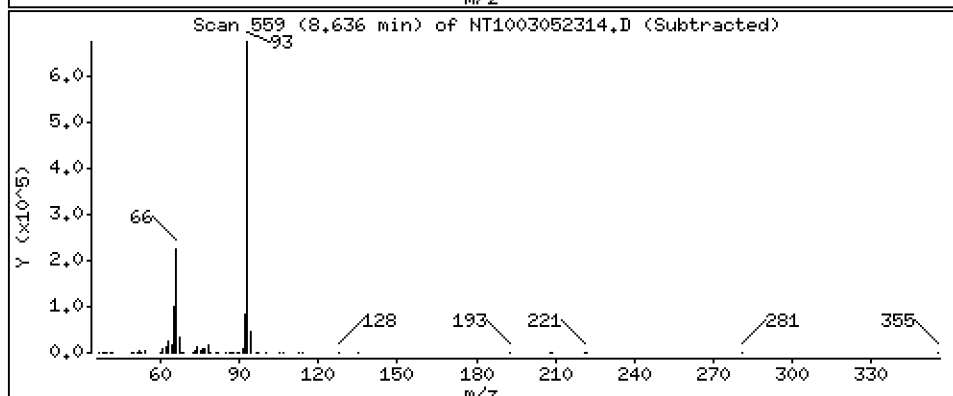
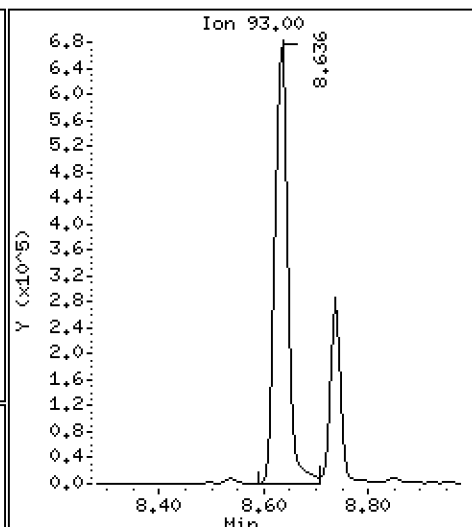
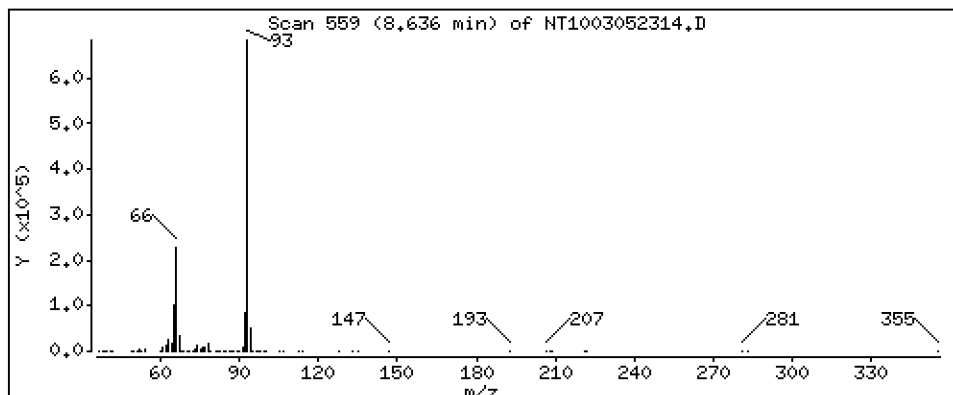
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 9,517 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

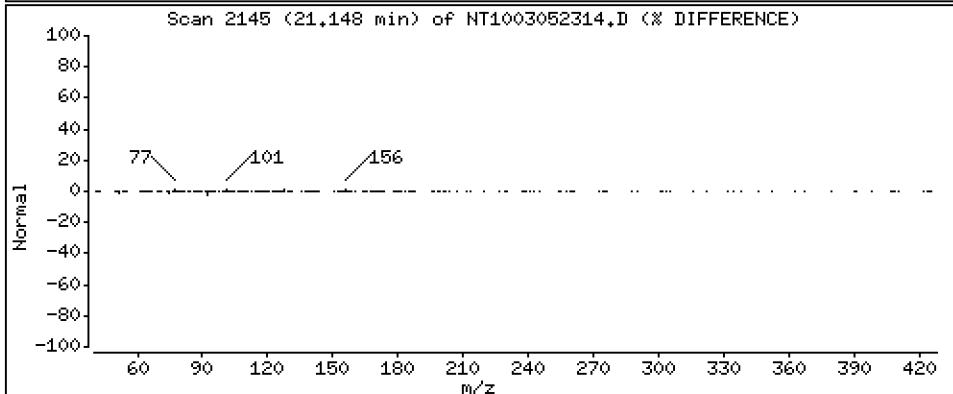
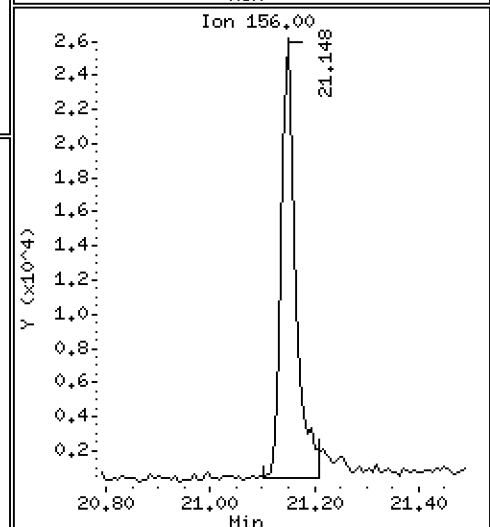
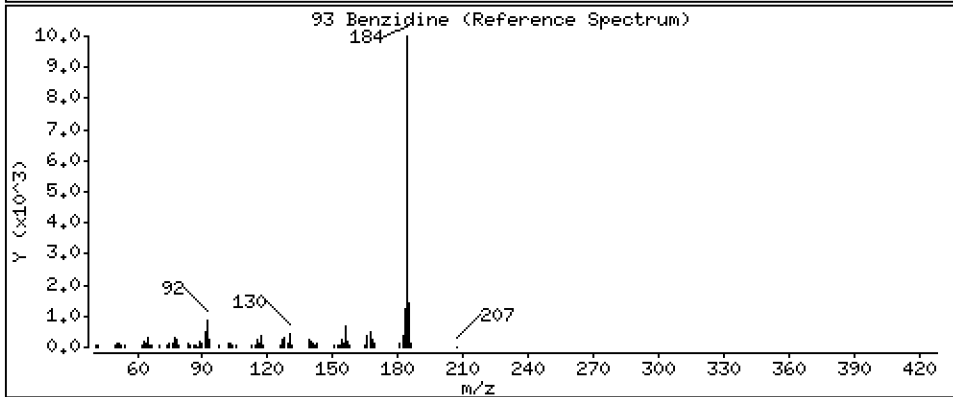
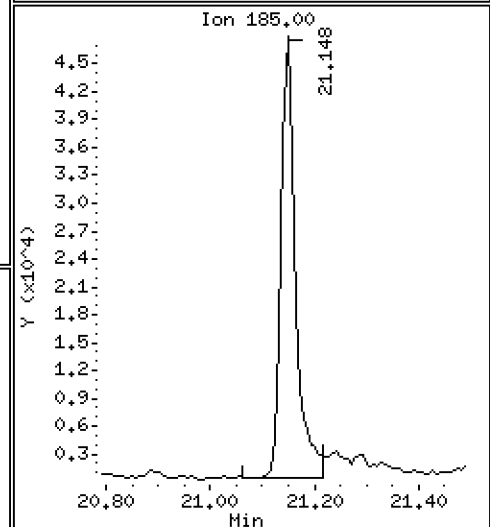
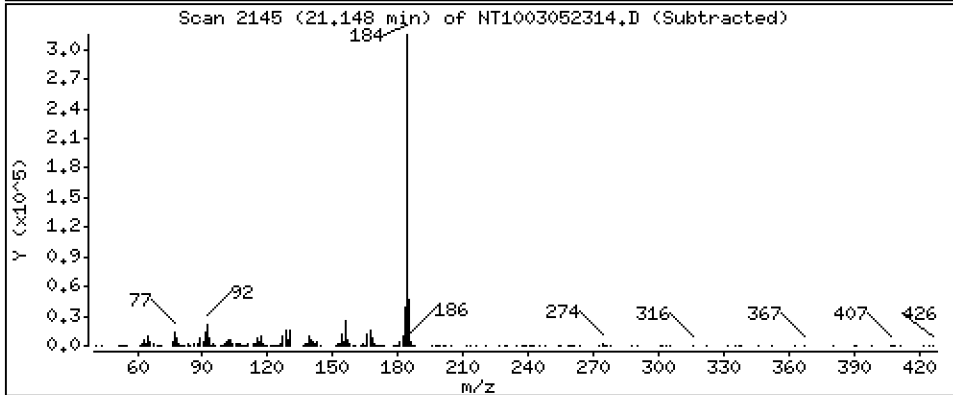
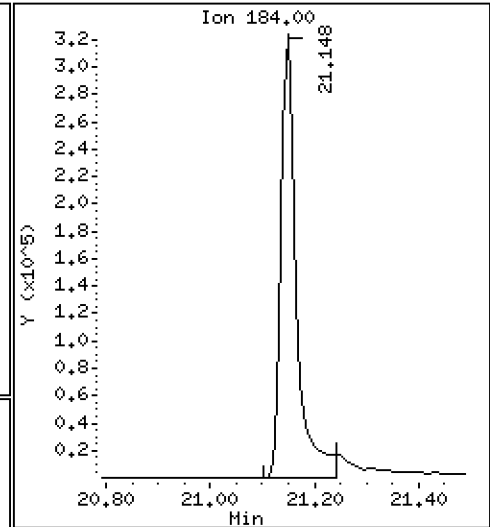
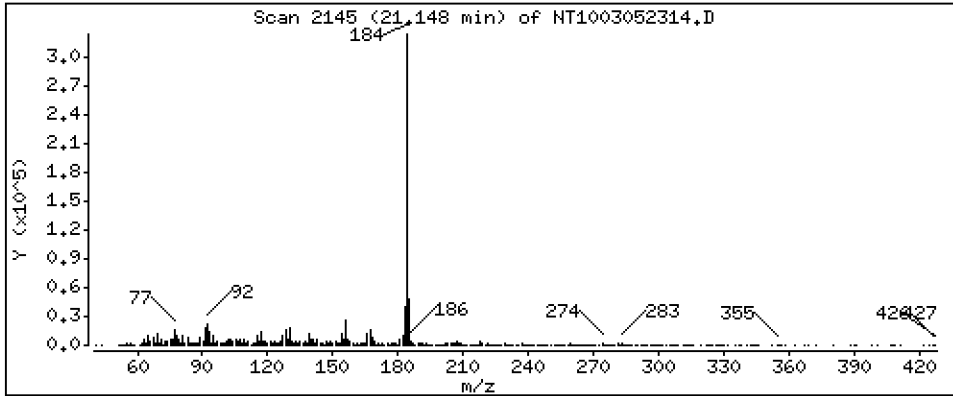
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 4,227 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

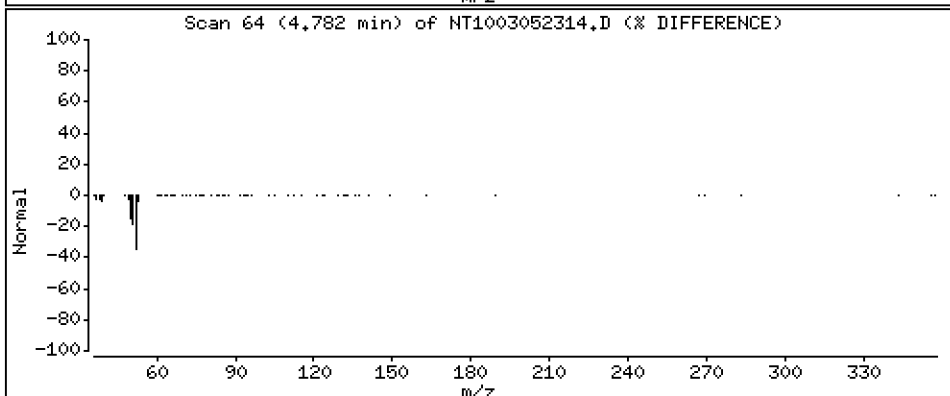
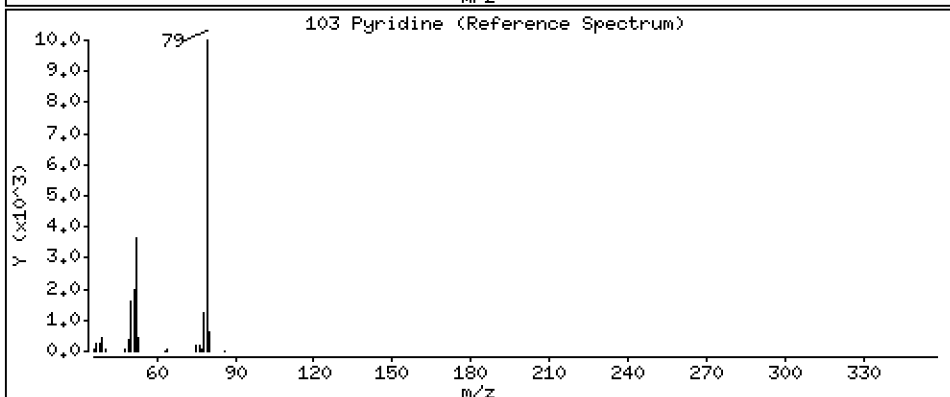
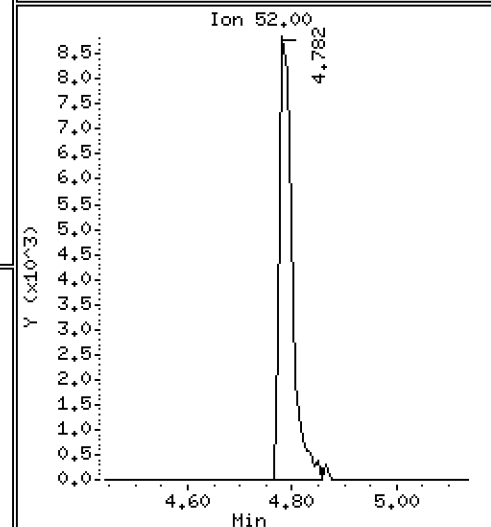
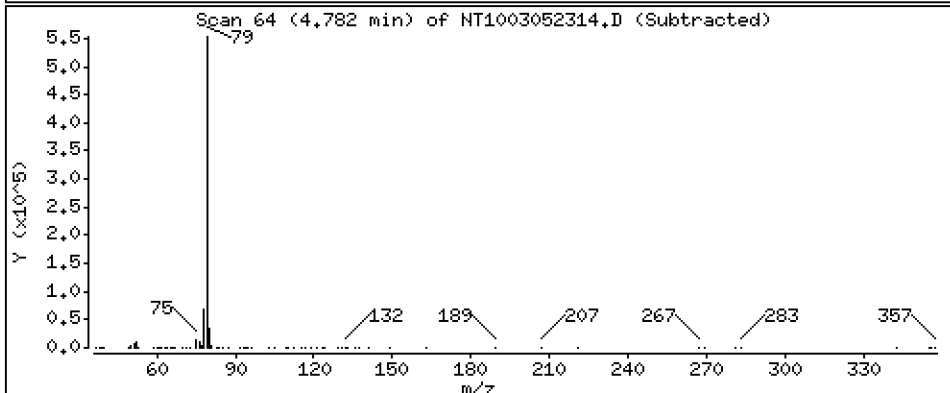
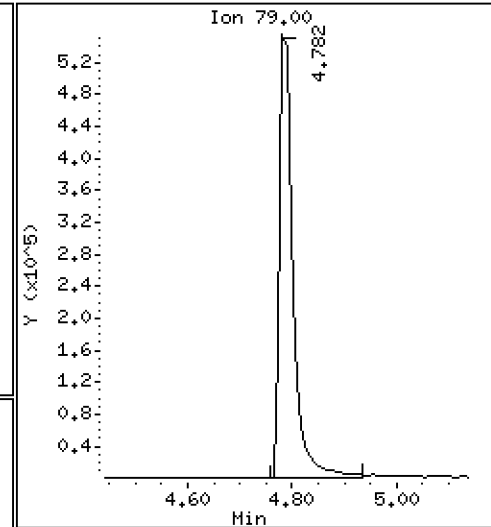
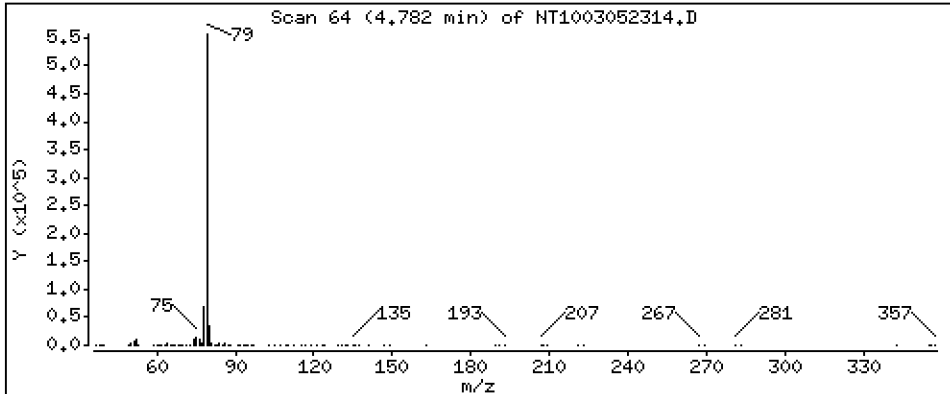
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 9,923 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

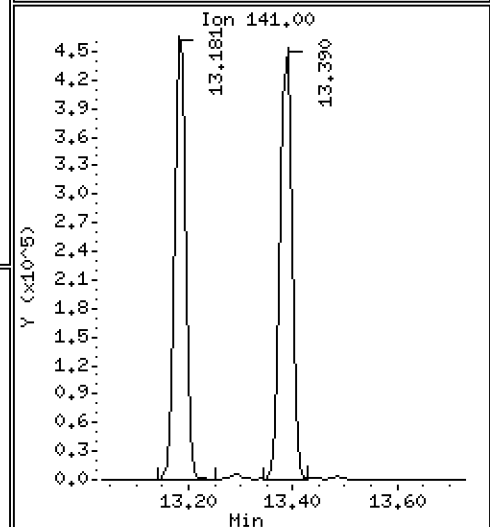
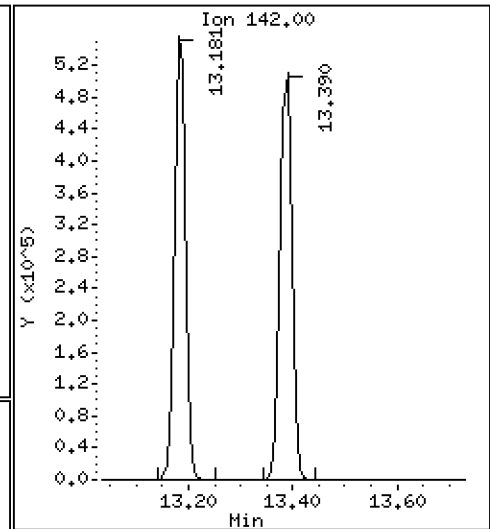
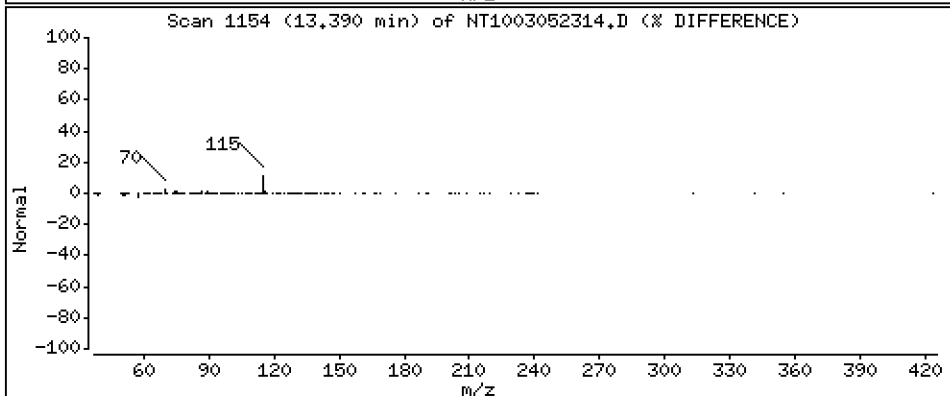
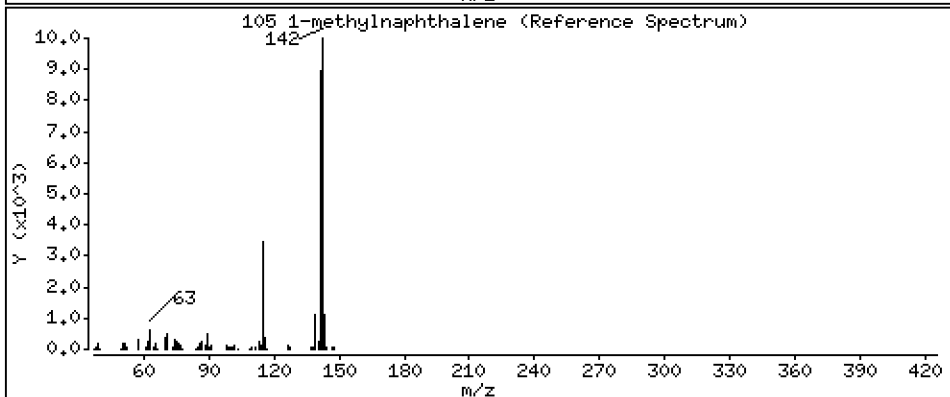
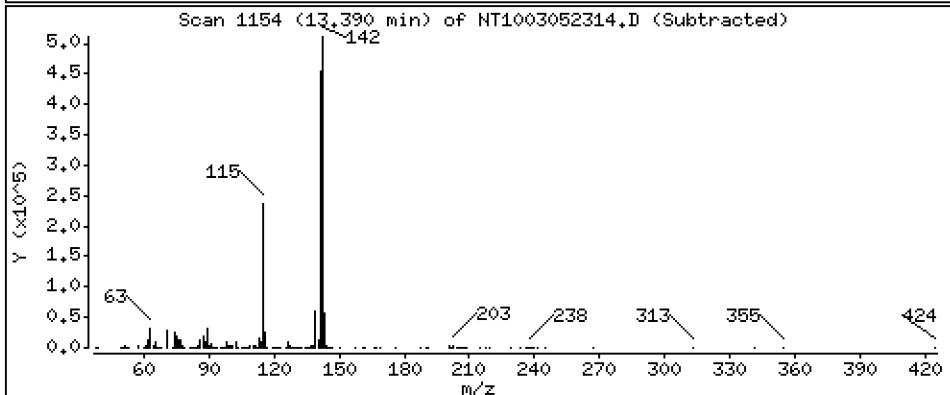
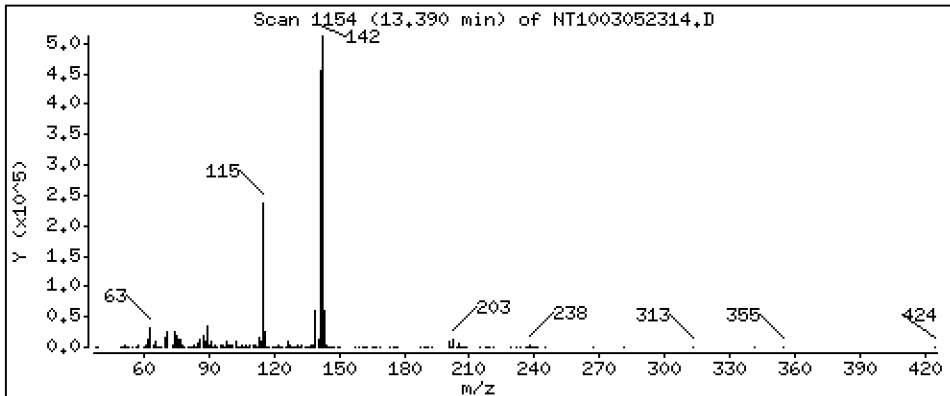
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,973 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

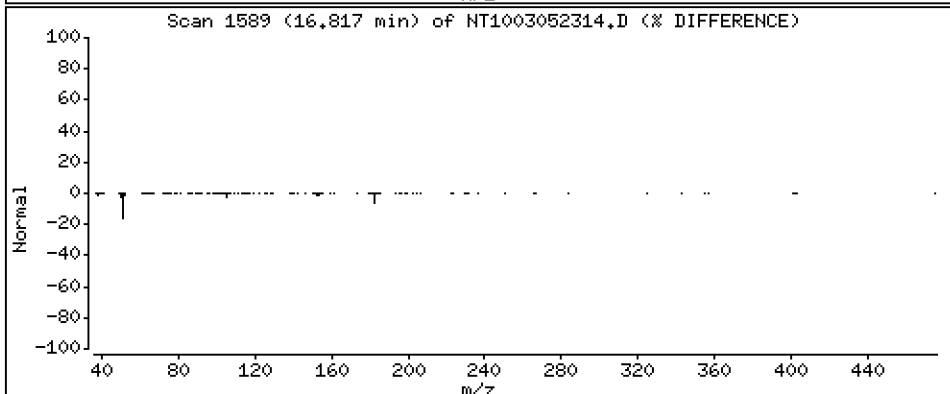
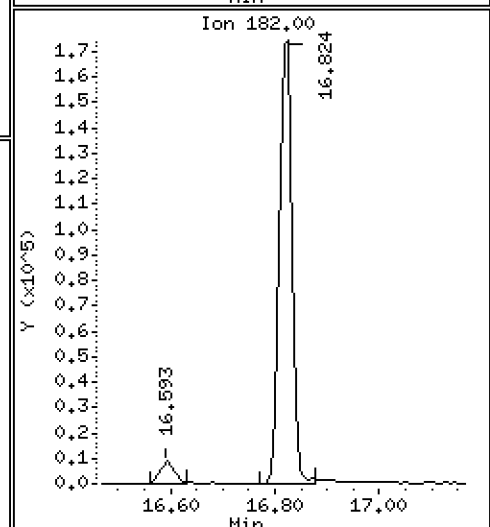
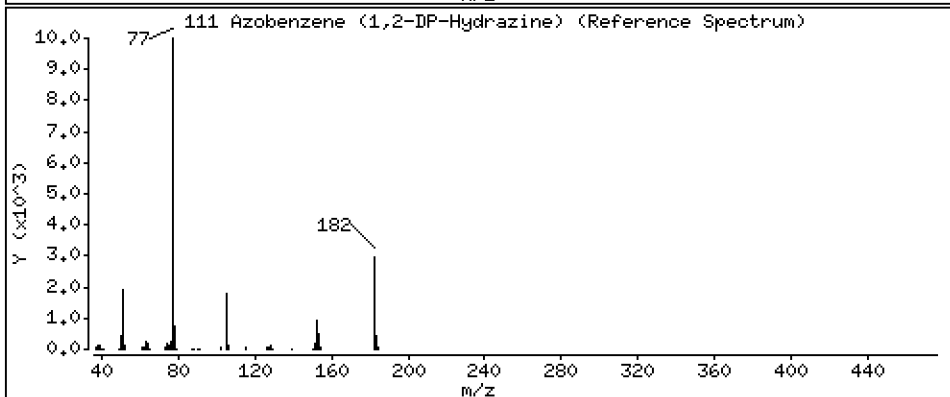
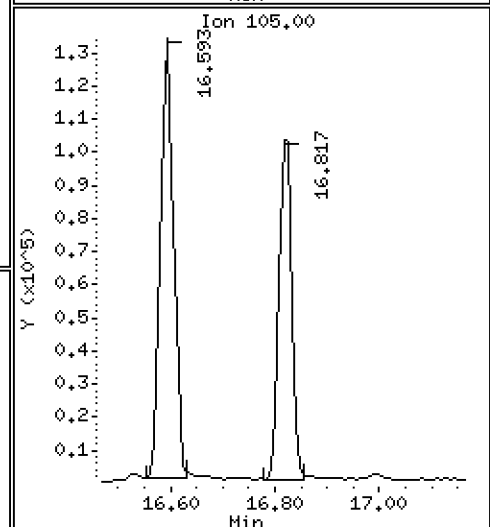
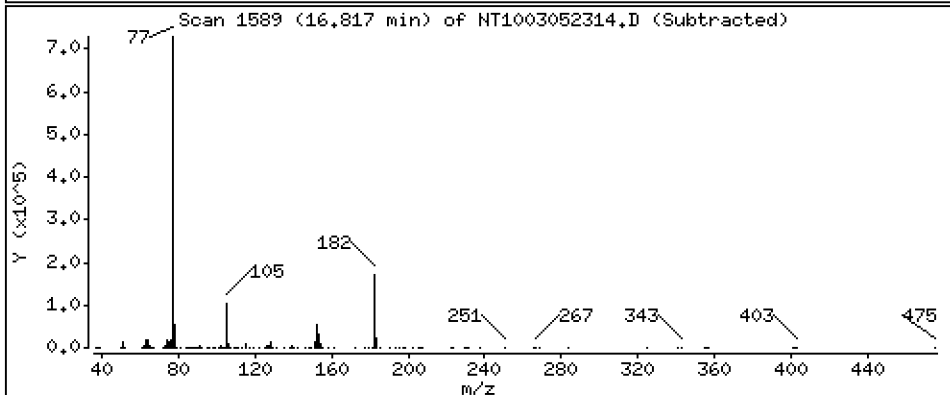
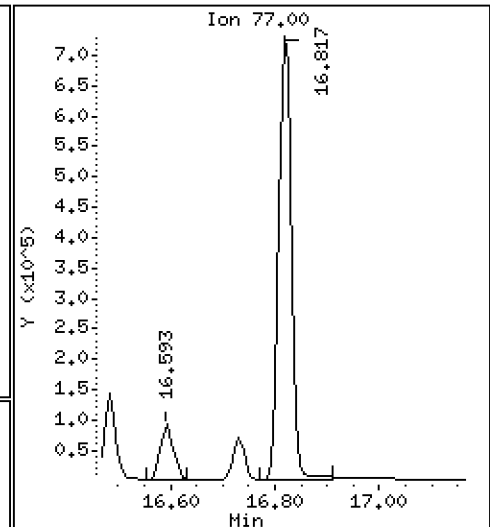
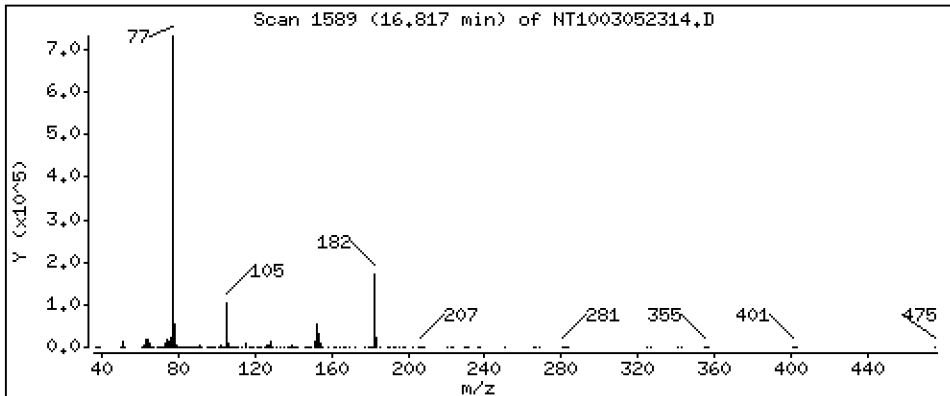
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,559 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

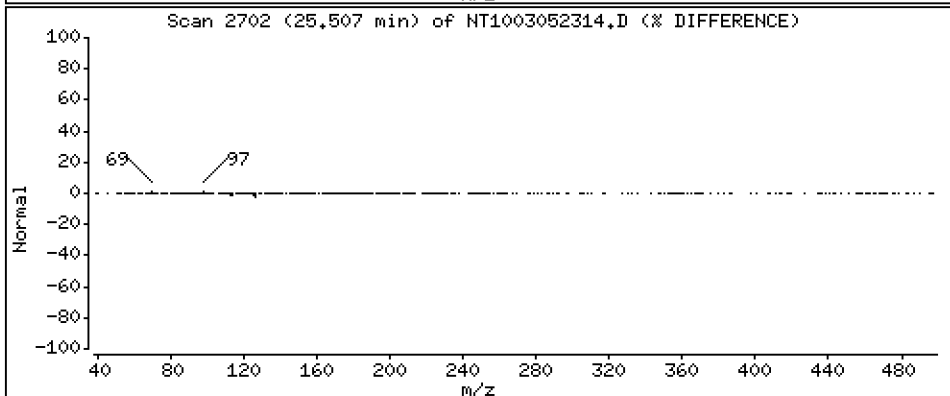
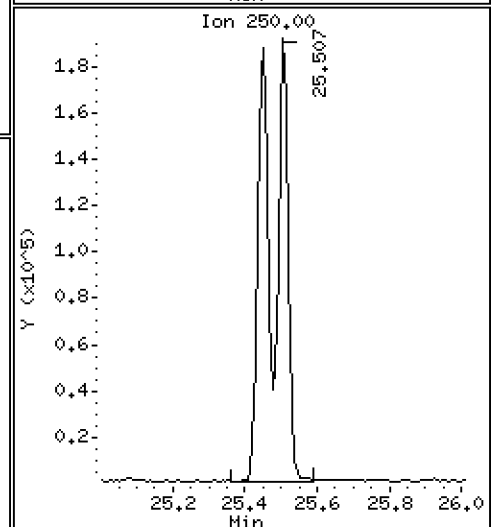
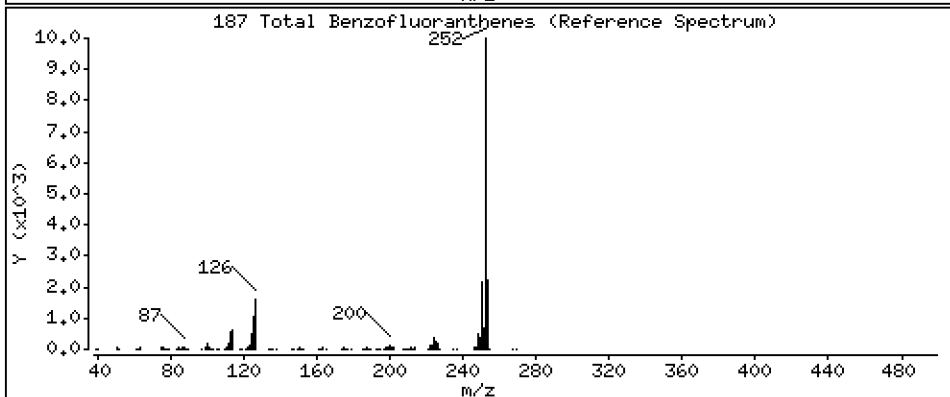
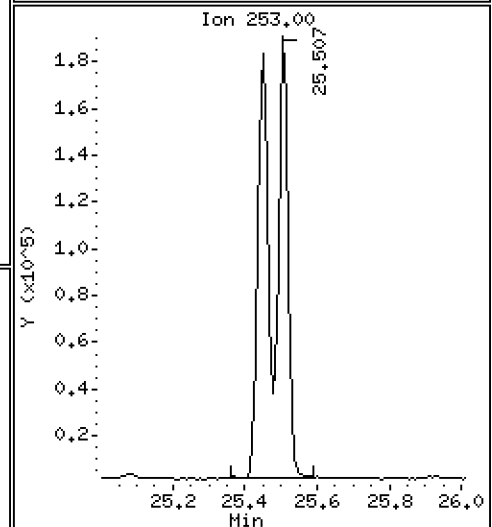
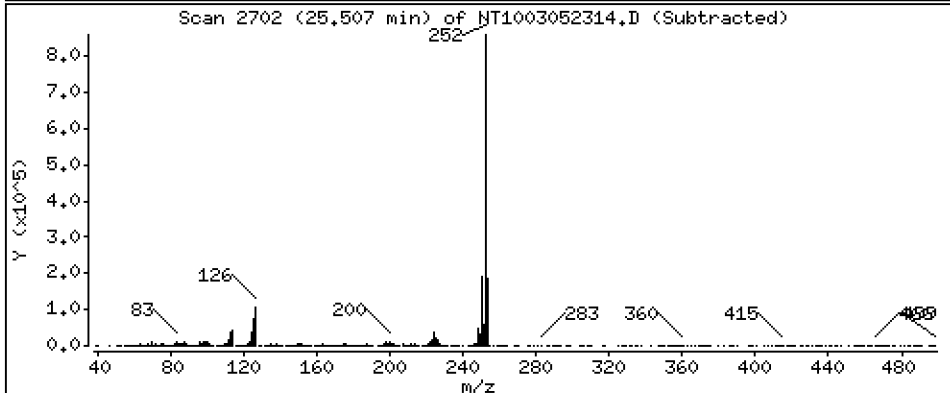
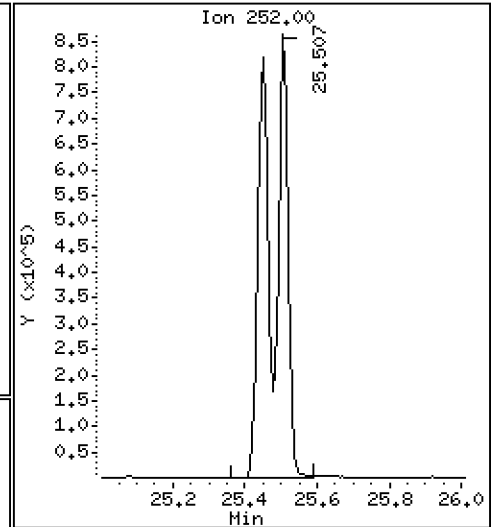
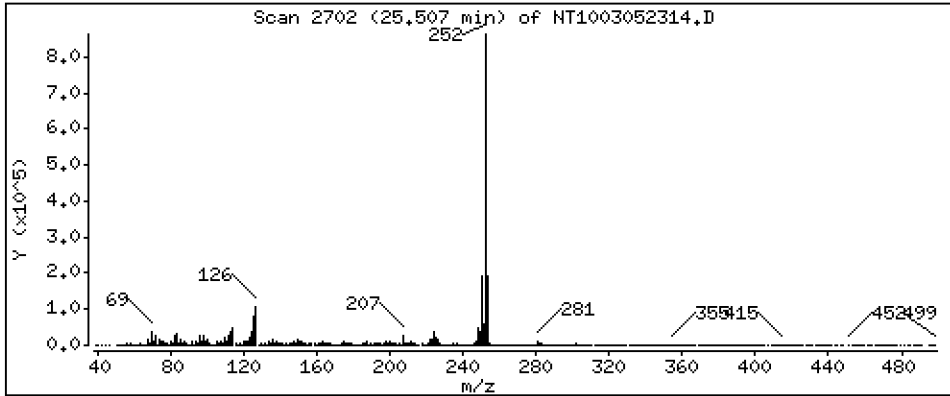
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,797 ug/mL



Date : 05-MAR-2023 21:38

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-CCV1

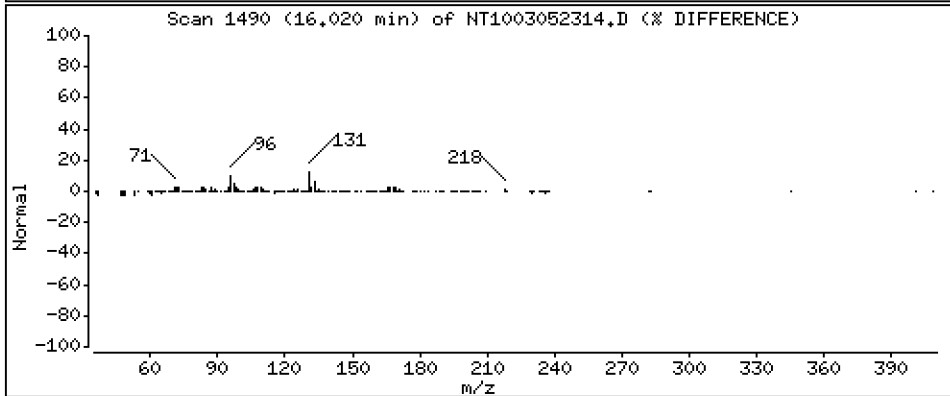
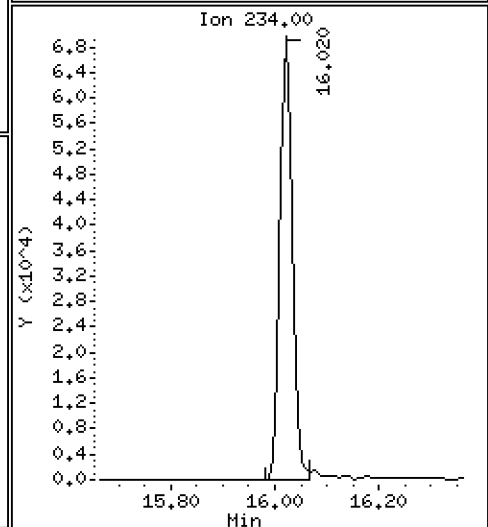
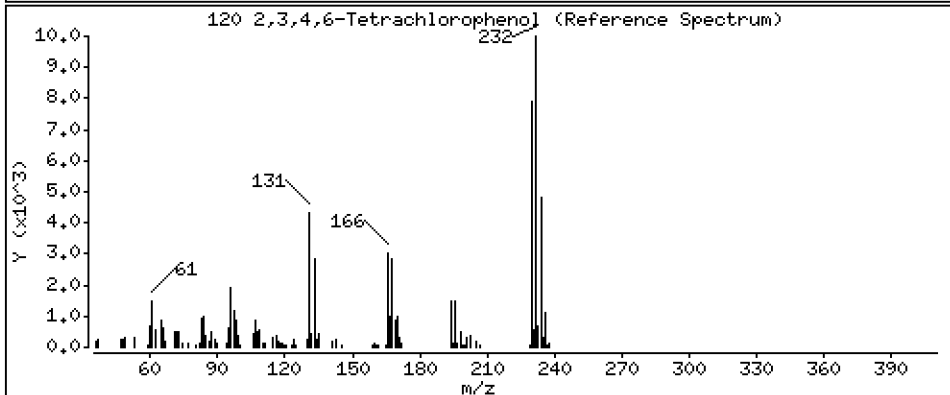
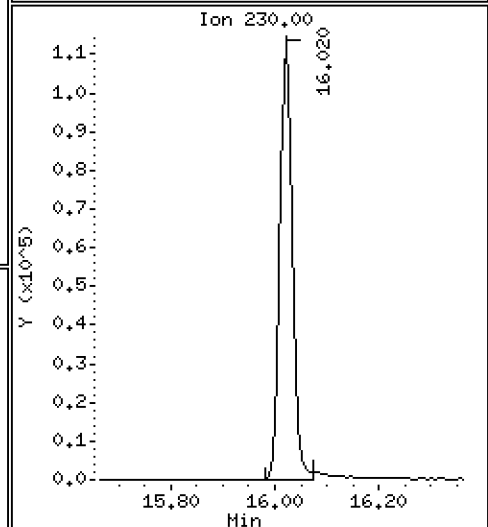
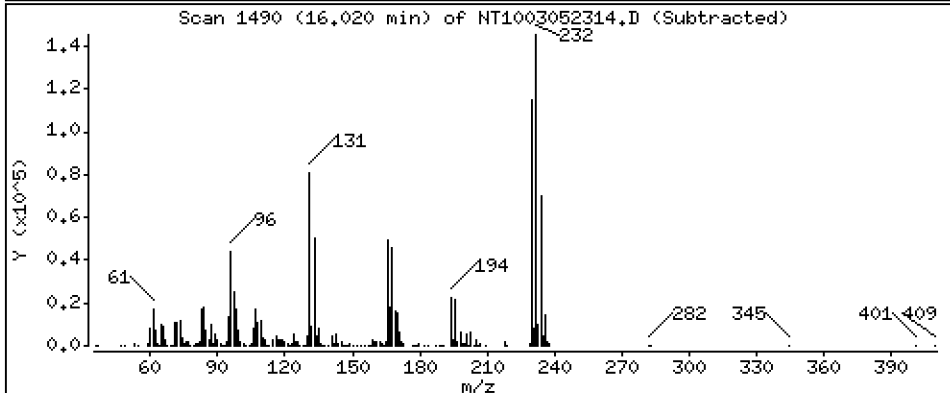
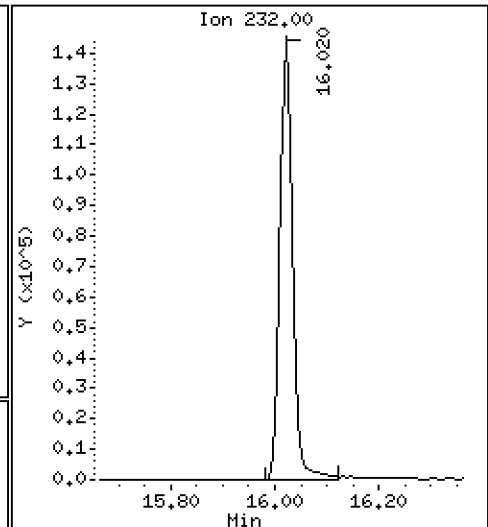
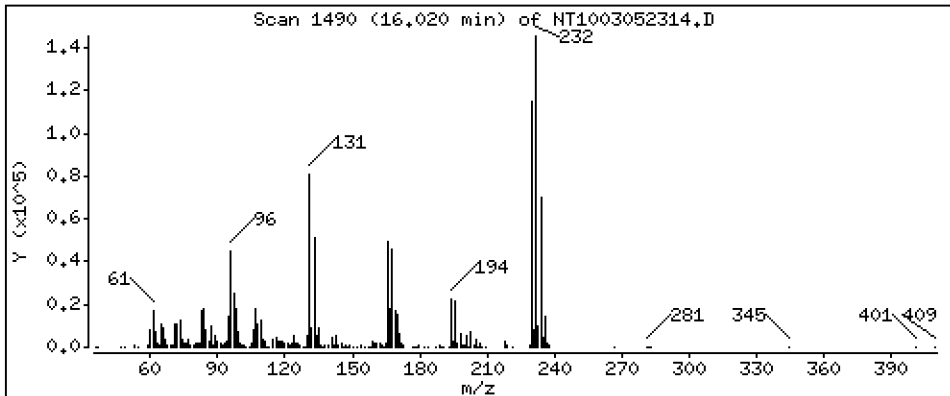
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 5,119 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052314.D
 Lab Smp Id: SLC0401-CCV1
 Inj Date : 05-MAR-2023 21:38
 Operator : VTS
 Smp Info : SLC0401-CCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 12:21 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.897 (0.747)		615101	7.37958	7.380
\$ 2 Phenol-d5	99		8.512	8.504 (0.921)		795548	8.22096	8.221
3 Phenol	94		8.535	8.528 (0.923)		536096	5.21056	5.211
\$ 5 2-Chlorophenol-d4	132		8.821	8.813 (0.954)		657991	7.96964	7.970
4 Bis(2-Chloroethyl)ether	93		8.736	8.728 (0.945)		393765	5.00837	5.008
6 2-Chlorophenol	128		8.852	8.844 (0.957)		452124	5.27129	5.271
7 1,3-Dichlorobenzene	146		9.138	9.138 (0.988)		454091	4.80186	4.802
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.239 (1.000)		264922	4.00000	
9 1,4-Dichlorobenzene	146		9.286	9.278 (1.004)		440157	4.68589	4.686
\$ 10 1,2-Dichlorobenzene-d4	152		9.542	9.534 (1.032)		299511	4.85557	4.856
12 1,2-Dichlorobenzene	146		9.565	9.557 (1.034)		428111	4.70873	4.709
11 Benzyl alcohol	108		9.487	9.480 (1.026)		228904	4.24590	4.246
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728 (1.053)		120587	4.60046	4.600 (M)
13 2-Methylphenol	108		9.674	9.666 (1.046)		394803	4.84308	4.843
17 Hexachloroethane	117		10.217	10.209 (1.105)		183133	4.74987	4.750
16 N-Nitroso-di-n-propylamine	70		9.984	9.984 (1.080)		319576	5.14739	5.147
15 4-Methylphenol	108		9.961	9.953 (1.077)		422042	4.26572	4.266
\$ 18 Nitrobenzene-d5	82		10.302	10.302 (0.878)		556462	5.34991	5.350
19 Nitrobenzene	77		10.341	10.341 (0.881)		502881	5.15406	5.154
20 Isophorone	82		10.807	10.799 (0.921)		607351	4.87646	4.876
21 2-Nitrophenol	139		10.967	10.959 (0.935)		234271	4.45649	4.456
22 2,4-Dimethylphenol	107		11.018	11.018 (0.939)		836721	8.77098	8.771
23 Bis(2-Chloroethoxy)methane	93		11.222	11.222 (0.956)		387079	5.02908	5.029
24 Benzoic acid	105		11.205	11.196 (0.955)		690083	12.1487	12.15
25 2,4-Dichlorophenol	162		11.434	11.434 (0.974)		802248	10.6036	10.60
26 1,2,4-Trichlorobenzene	180		11.610	11.603 (0.989)		380183	5.19195	5.192
* 27 Naphthalene-d8	136		11.734	11.726 (1.000)		947542	4.00000	
28 Naphthalene	128		11.780	11.773 (1.004)		1139902	4.68712	4.687
29 4-Chloroaniline	127		11.881	11.873 (1.012)		957026	8.73281	8.733
30 Hexachlorobutadiene	225		12.004	11.997 (1.023)		287413	5.39051	5.391
31 4-Chloro-3-methylphenol	107		12.840	12.825 (1.094)		770771	9.58155	9.582
32 2-Methylnaphthalene	142		13.181	13.181 (1.123)		851628	4.95684	4.957
33 Hexachlorocyclopentadiene	237		13.482	13.483 (0.879)		26882	1.59800	1.598

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.753	13.746	(0.897)	528333	10.4999	10.50
35 2,4,5-Trichlorophenol	196	13.831	13.815	(0.902)	552007	10.2657	10.27
§ 36 2-Fluorobiphenyl	172	13.931	13.924	(0.908)	943590	5.23165	5.232
37 2-Chloronaphthalene	162	14.194	14.187	(0.925)	759613	5.36493	5.365
38 2-Nitroaniline	65	14.403	14.396	(0.939)	431088	10.7319	10.73
39 Dimethylphthalate	163	14.767	14.767	(0.963)	780323	4.77834	4.778
40 Acenaphthylene	152	15.054	15.046	(0.981)	1332597	5.45919	5.459
41 2,6-Dinitrotoluene	165	14.907	14.899	(0.972)	376924	10.1731	10.17
* 42 Acenaphthene-d10	164	15.340	15.340	(1.000)	505666	4.00000	
43 3-Nitroaniline	138	15.255	15.255	(0.994)	390807	9.48974	9.490
44 Acenaphthene	153	15.409	15.409	(1.005)	715285	4.85877	4.859
45 2,4-Dinitrophenol	184	15.479	15.479	(1.009)	211324	20.8821	20.88
46 Dibenzofuran	168	15.773	15.765	(1.028)	1119278	5.12281	5.123
47 4-Nitrophenol	109	15.595	15.579	(1.017)	238701	8.05129	8.051
48 2,4-Dinitrotoluene	165	15.749	15.742	(1.027)	543213	10.0570	10.06
50 Diethylphthalate	149	16.244	16.237	(1.059)	808607	4.67405	4.674
49 Fluorene	166	16.492	16.484	(1.075)	880519	4.84374	4.844
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.075)	404773	4.86581	4.866
52 4-Nitroaniline	138	16.531	16.523	(1.078)	404772	9.14384	9.144
53 4,6-Dinitro-2-methylphenol	198	16.593	16.585	(0.899)	487517	20.7779	20.78
54 N-Nitrosodiphenylamine	169	16.731	16.724	(0.907)	707394	5.08475	5.085
§ 55 2,4,6-Tribromophenol	330	16.994	16.986	(1.108)	250190	7.62903	7.629
56 4-Bromophenyl-phenylether	248	17.511	17.504	(0.949)	317759	5.63689	5.637
57 Hexachlorobenzene	284	17.627	17.620	(0.955)	346958	5.46569	5.466
58 Pentachlorophenol	266	18.045	18.038	(0.978)	139344	4.63876	4.639
* 59 Phenanthrene-d10	188	18.455	18.448	(1.000)	940283	4.00000	
60 Phenanthrene	178	18.509	18.502	(1.003)	1159585	4.81884	4.819
61 Anthracene	178	18.618	18.610	(1.009)	1213649	5.20128	5.201
62 Carbazole	167	18.950	18.943	(1.027)	1083313	5.06781	5.068
63 Di-n-butylphthalate	149	19.647	19.647	(1.065)	1444373	4.81119	4.811
64 Fluoranthene	202	20.892	20.885	(0.888)	1414139	4.16090	4.161
65 Pyrene	202	21.326	21.318	(0.907)	1482439	4.28366	4.284
§ 66 Terphenyl-d14	244	21.604	21.597	(0.919)	1285069	4.58922	4.589
67 Butylbenzylphthalate	149	22.495	22.487	(0.957)	687002	3.73975	3.740
68 Benzo(a)anthracene	228	23.501	23.494	(0.999)	1635637	4.69532	4.695
* 69 Chrysene-d12	240	23.517	23.517	(1.000)	987952	4.00000	
70 3,3'-Dichlorobenzidine	252	23.447	23.440	(0.997)	1843312	11.7070	11.71
71 Chrysene	228	23.563	23.563	(1.002)	1441749	5.09254	5.093
72 bis(2-Ethylhexyl)phthalate	149	23.494	23.494	(0.955)	1098969	4.68573	4.686
* 134 Di-n-octylphthalate-d4	153	24.593	24.593	(1.000)	1625017	4.00000	
73 Di-n-octylphthalate	149	24.601	24.609	(1.000)	1872021	5.19501	5.195
74 Benzo(b)fluoranthene	252	25.452	25.445	(0.968)	1612424	4.20942	4.209 (H)
75 Benzo(k)fluoranthene	252	25.507	25.507	(0.970)	1704767	4.59493	4.595
76 Benzo(a)pyrene	252	26.157	26.157	(0.995)	1531821	4.46152	4.462
* 77 Perylene-d12	264	26.289	26.281	(1.000)	1073798	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.158	29.158	(1.109)	1841953	4.58483	4.585
79 Dibenzo(a,h)anthracene	278	29.204	29.197	(1.111)	1523631	4.94802	4.948
80 Benzo(g,h,i)perylene	276	30.043	30.028	(1.143)	1531325	4.81537	4.815
90 N-Nitrosodimethylamine	74	4.719	4.719	(0.510)	557365	10.3583	10.36
91 Aniline	93	8.636	8.628	(0.934)	1135375	9.51739	9.517
93 Benzidine	184	21.148	21.140	(0.899)	637697	4.22668	4.227
103 Pyridine	79	4.781	4.789	(0.517)	946906	9.92273	9.923
105 1-methylnaphthalene	142	13.390	13.382	(1.141)	773355	4.97325	4.973
111 Azobenzene (1,2-DP-Hydrazine)	77	16.816	16.816	(1.096)	1177852	4.55930	4.559

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.507	25.507	(0.970)	3247268	8.79719	8.797
120 2,3,4,6-Tetrachlorophenol	232		16.020	16.012	(1.044)	257039	5.11850	5.119

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052314.D Calibration Time: 14:03
 Lab Smp Id: SLC0401-CCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	264922	-10.88
27 Naphthalene-d8	1085336	542668	2170672	947542	-12.70
42 Acenaphthene-d10	563464	281732	1126928	505666	-10.26
59 Phenanthrene-d10	1038318	519159	2076636	940283	-9.44
69 Chrysene-d12	1012751	506376	2025502	987952	-2.45
134 Di-n-octylphthala	1628890	814445	3257780	1625017	-0.24
77 Perylene-d12	1152264	576132	2304528	1073798	-6.81

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.06
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.52	23.02	24.02	23.52	-0.00
134 Di-n-octylphthala	24.59	24.09	25.09	24.59	-0.00
77 Perylene-d12	26.28	25.78	26.78	26.29	0.03

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

REVIEW SUMMARY FOR FILE - NT1003052314.D

Lab ID: SLC0401-CCV1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 21:38

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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

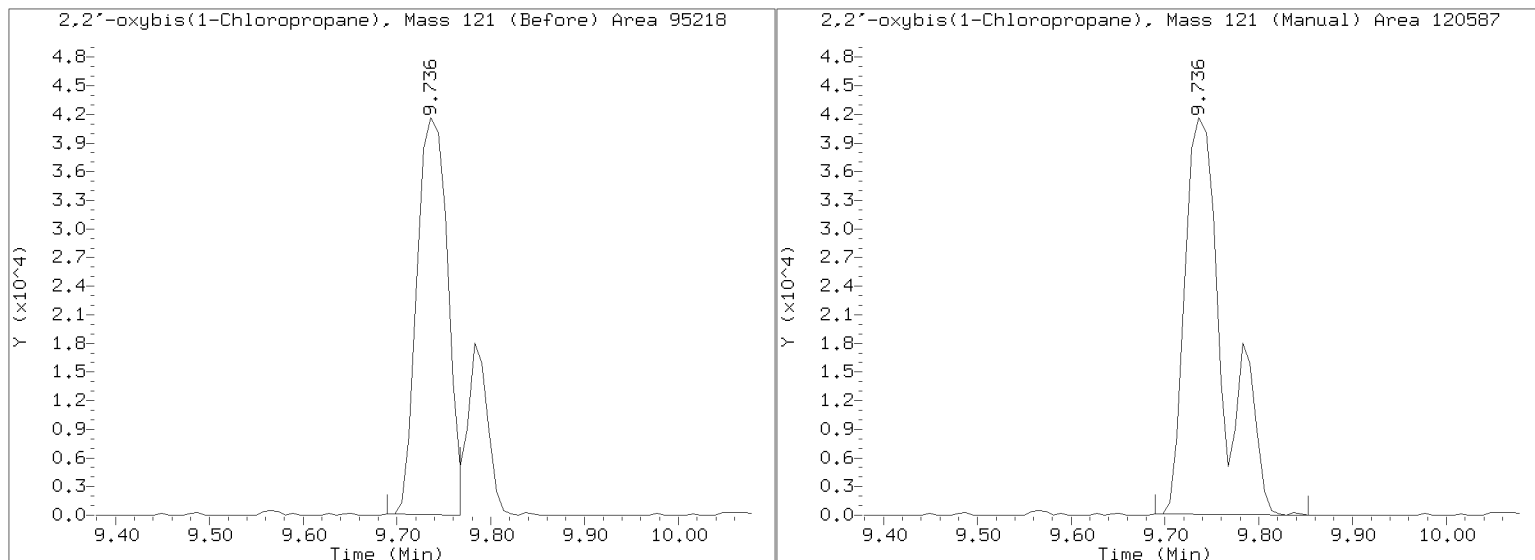
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/NT1003052314.D

Injection Date: 05-MAR-2023 21:38

Lab ID: SLC0401-CCV1 Client ID:

Report Date: 03/27/2023 14:39



APPROVED

By Deenay Dunmore at 2:40 pm, Mar 27, 2023



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052304.D

Calibration Date: 03/01/2023

Sequence: SLC0401

Injection Date: 03/05/23

Lab Sample ID: SLC0401-LCV1

Injection Time: 15:18

Sequence Name: ABN 0.2

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.1	1.5534590	1.1047010		-28.9	+/-50
4-Methylphenol	A	0.20000	0.1	1.2087680	0.9482317		-37.2	+/-50
Naphthalene	A	0.20000	0.2	1.0266520	1.0524390		2.5	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7252818	0.7050019		-2.8	+/-50
Acenaphthylene	A	0.20000	0.2	1.9309320	1.8152270		-6.0	+/-50
Dimethylphthalate	A	0.20000	0.2	1.2917940	1.0742520		-16.8	+/-50
Acenaphthene	A	0.20000	0.2	1.1645250	1.1447860		-1.7	+/-50
Dibenzofuran	A	0.20000	0.2	1.7283260	1.7730860		2.6	+/-50
Fluorene	A	0.20000	0.2	1.4379840	1.4209420		-1.2	+/-50
Pentachlorophenol	A	0.40000	0.0	0.1145550				+/-50 *
Phenanthrene	A	0.20000	0.2	1.0236730	0.9811991		-4.2	+/-50
Anthracene	A	0.20000	0.2	0.9926226	0.8619449		-13.2	+/-50
Fluoranthene	A	0.20000	0.2	1.3760330	1.2253120		-11.0	+/-50
Pyrene	A	0.20000	0.2	1.4011560	1.2577370		-10.2	+/-50
Butylbenzylphthalate	A	0.20000	0.09	0.6475451	0.3415815		-54.7	+/-50 *
Benzo(a)anthracene	A	0.20000	0.2	1.4104100	1.3197650		-6.4	+/-50
Chrysene	A	0.20000	0.2	1.1462500	1.1622120		1.4	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.1	0.5331838	0.4076073		-27.3	+/-50
Benzo(a)fluoranthene, Total	A	0.40000	0.4	1.3383070	1.2053400		-8.0	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2312020	1.0647960		-12.7	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.4033590	1.3158250		-7.7	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.1150690	1.1212030		3.7	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.1245240	1.2043440		6.0	+/-50
2-Fluorophenol	A	0.30000	0.219	1.2585100	0.9177441		-27.1	+/-50
Phenol-d5	A	0.30000	0.187	1.4611190	0.9095438		-37.8	+/-50
2-Chlorophenol-d4	A	0.30000	0.241	1.2465880	1.0008460		-19.7	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.220	0.9313544	1.0238210		9.9	+/-50
Nitrobenzene-d5	A	0.20000	0.156	0.4390871	0.3421860		-22.1	+/-50
2-Fluorobiphenyl	A	0.20000	0.216	1.4267270	1.5426200		8.1	+/-50
2,4,6-Tribromophenol	A	0.30000	0.0217	0.2287830	0.0177828		-92.8	+/-50 *
p-Terphenyl-d14	A	0.20000	0.191	1.1337350	1.0846960		-4.3	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.6\NT1003052304.D

Date: 05-HR-2023 15:18

Client ID:

Sample Info: SLC0401-LCW1

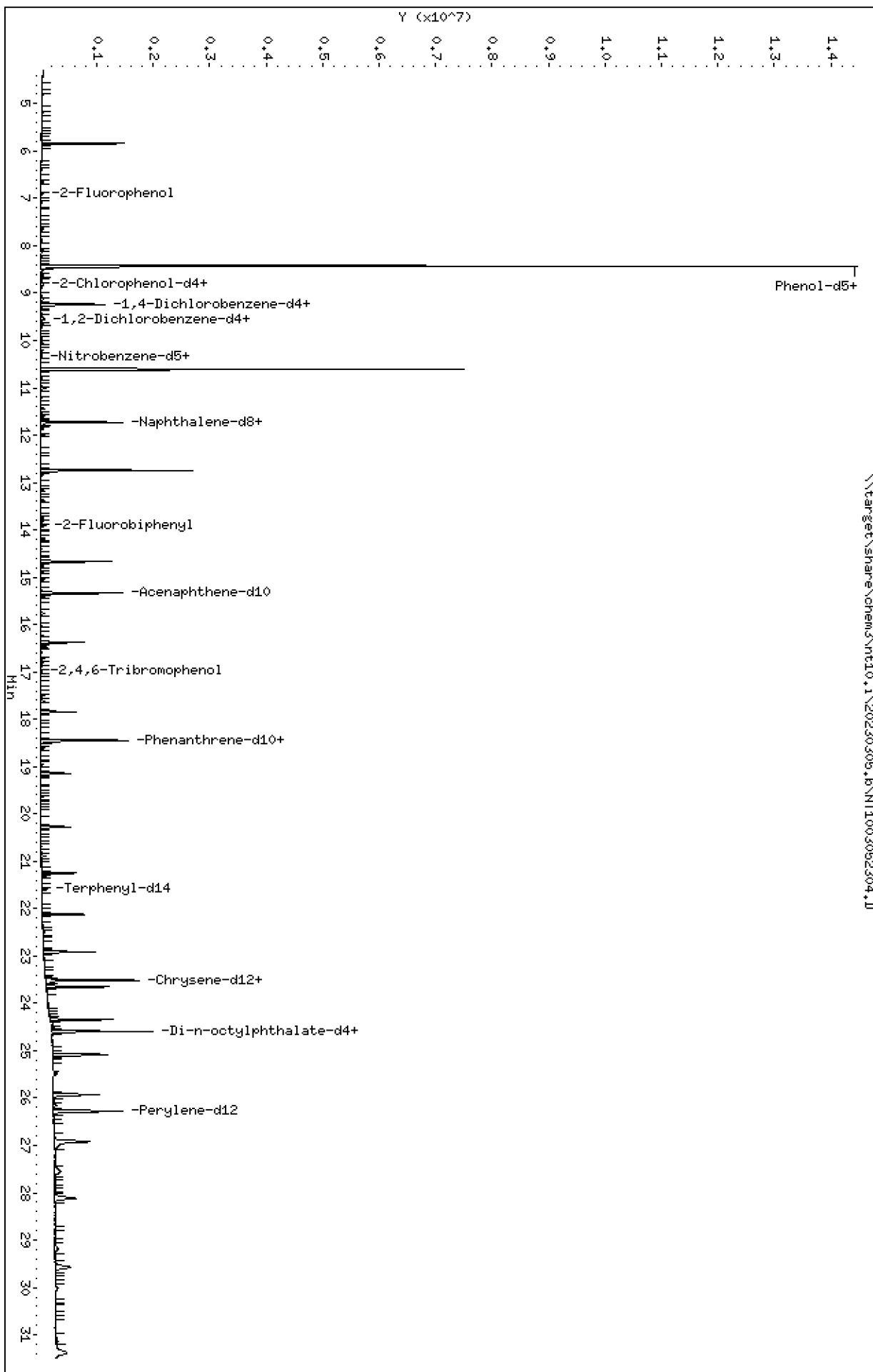
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

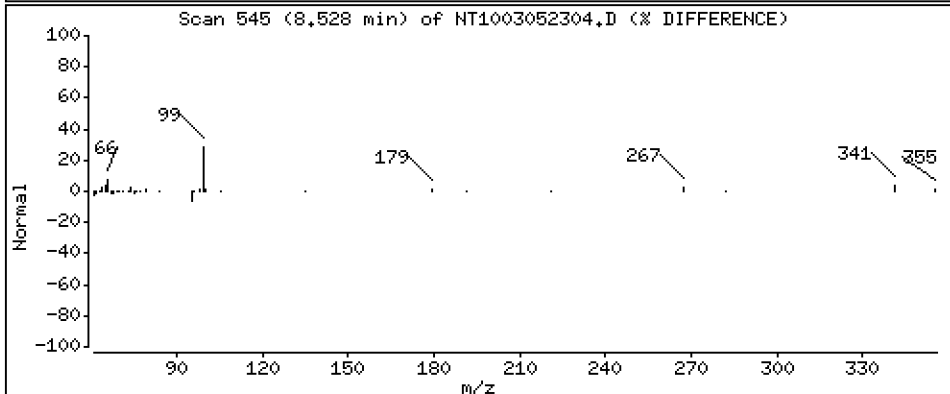
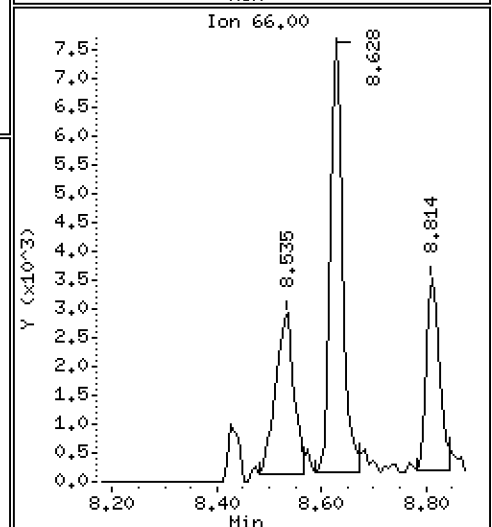
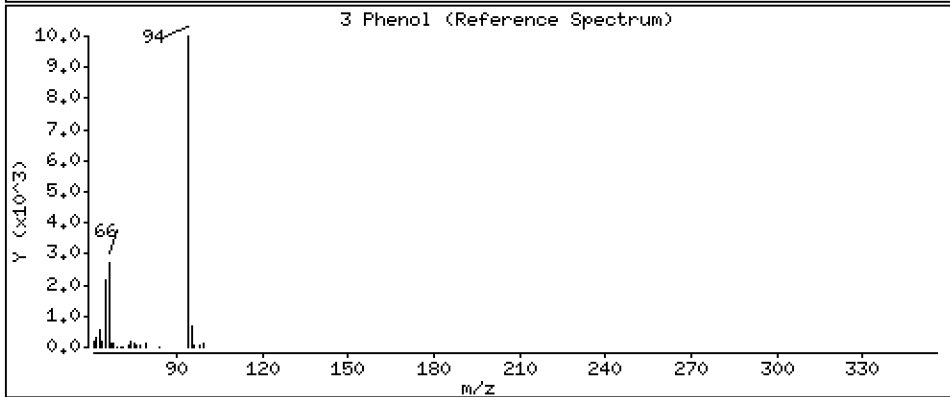
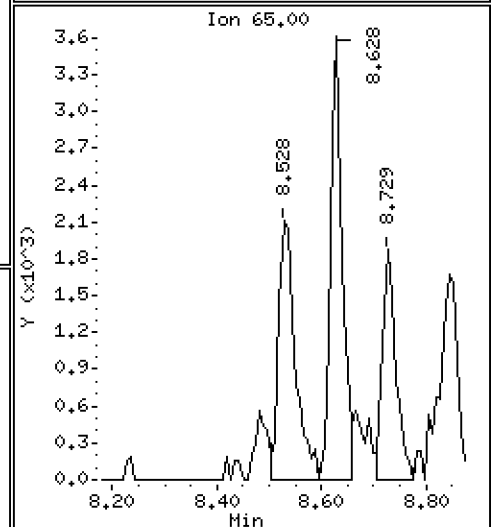
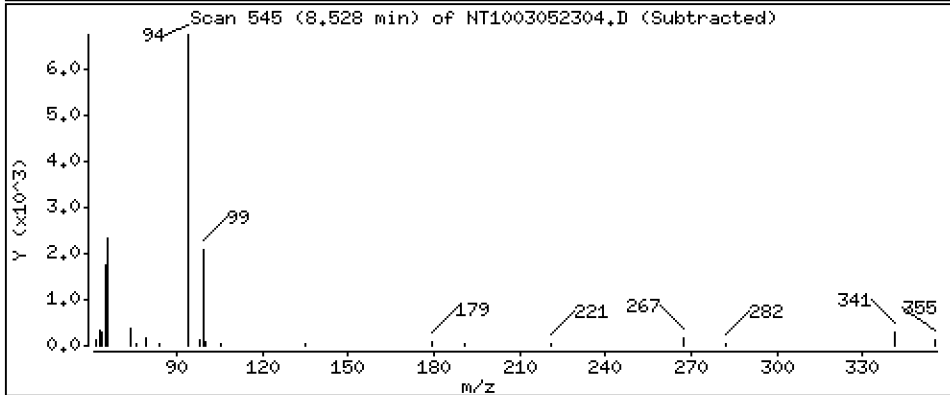
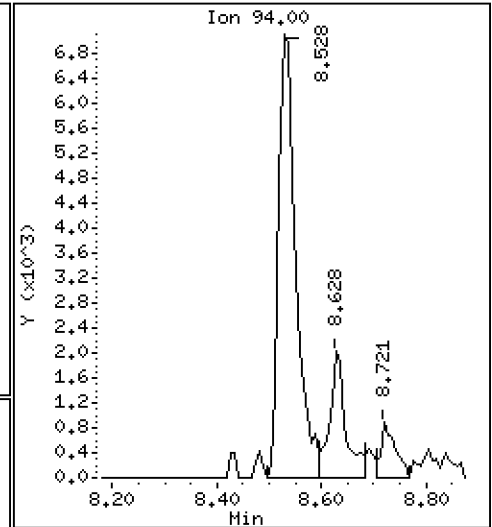
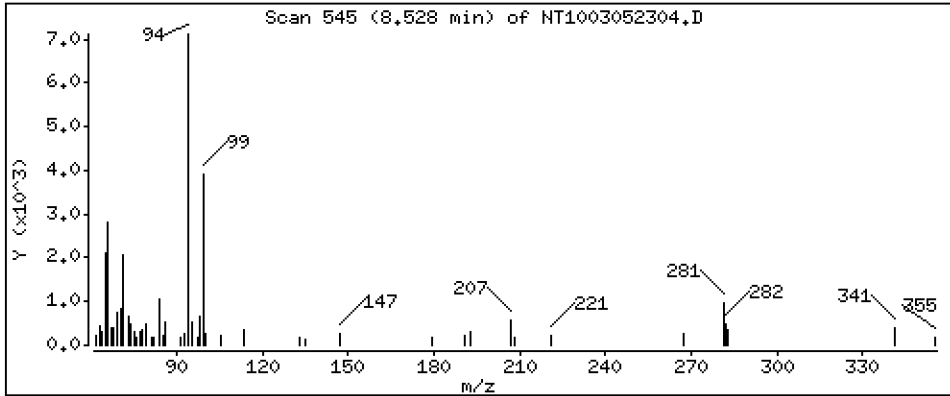
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1422 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

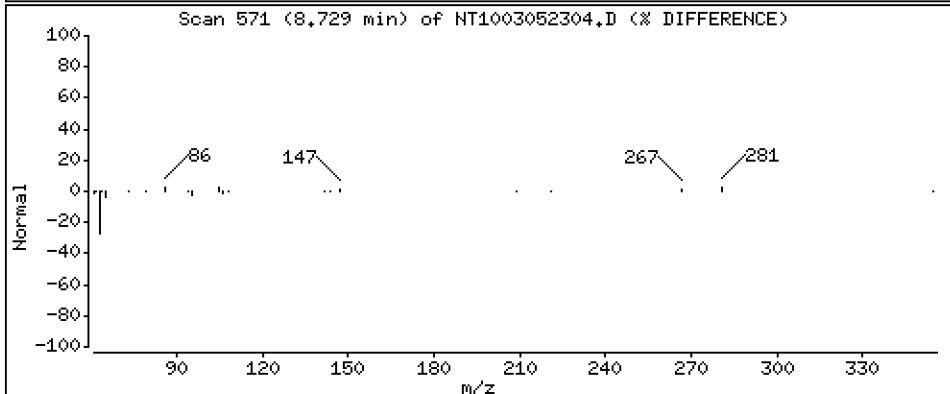
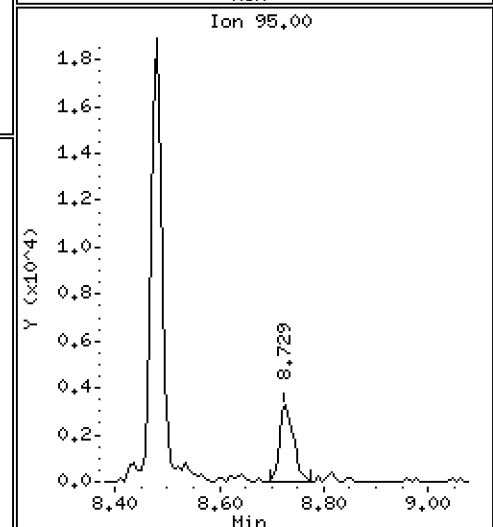
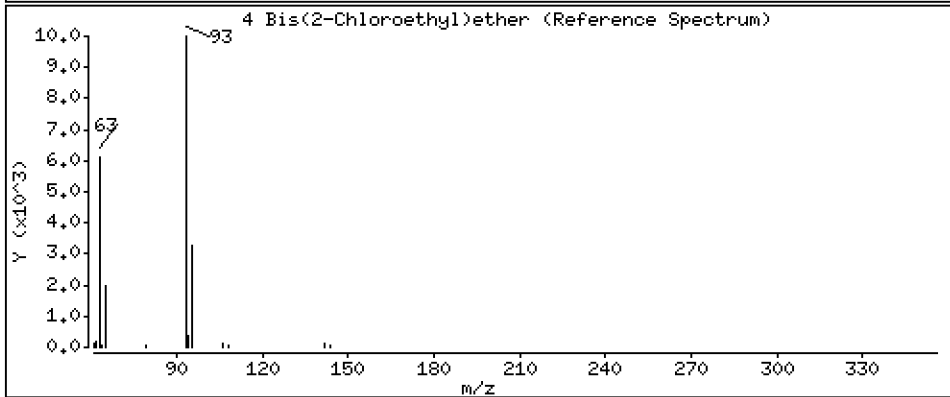
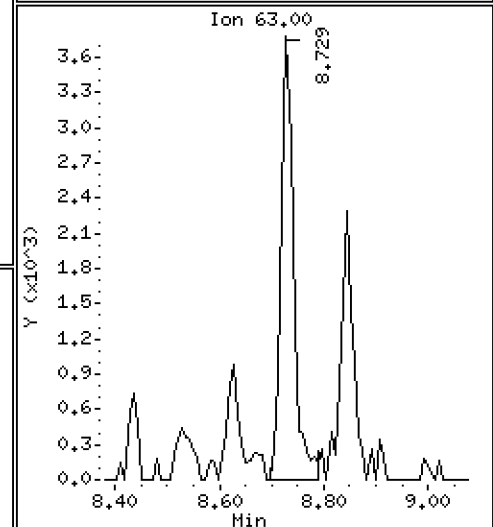
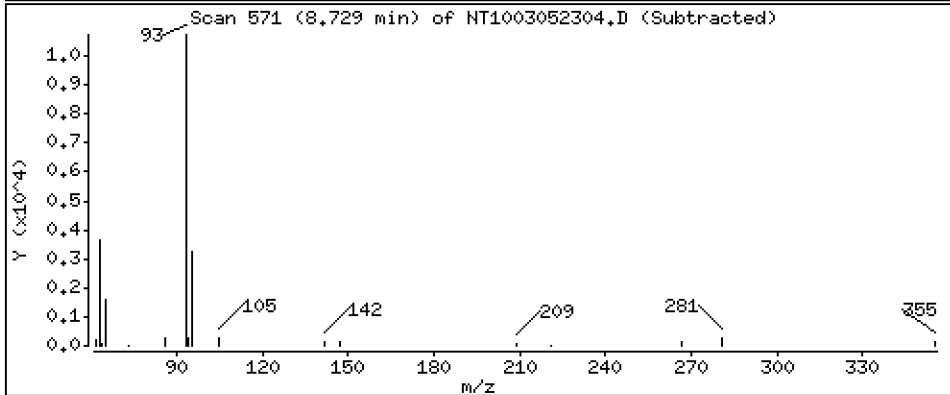
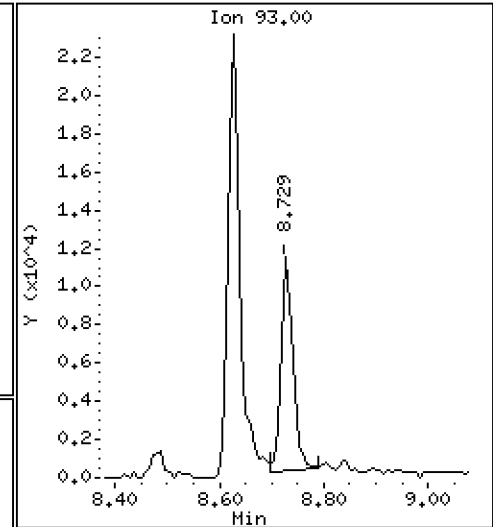
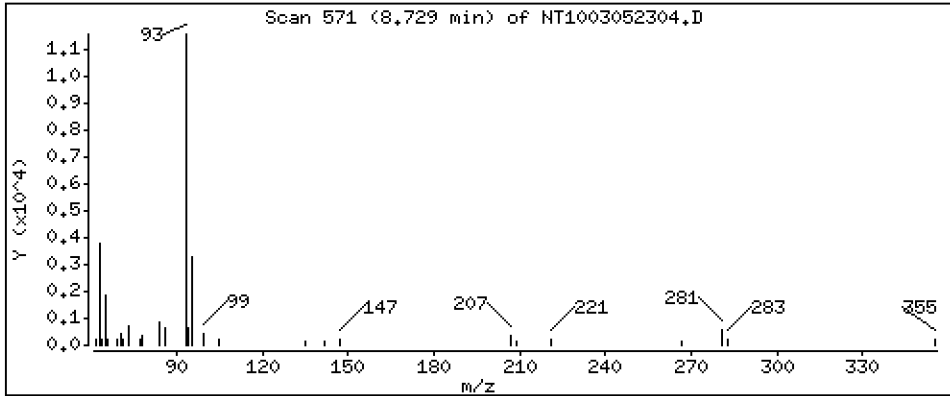
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,1911 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

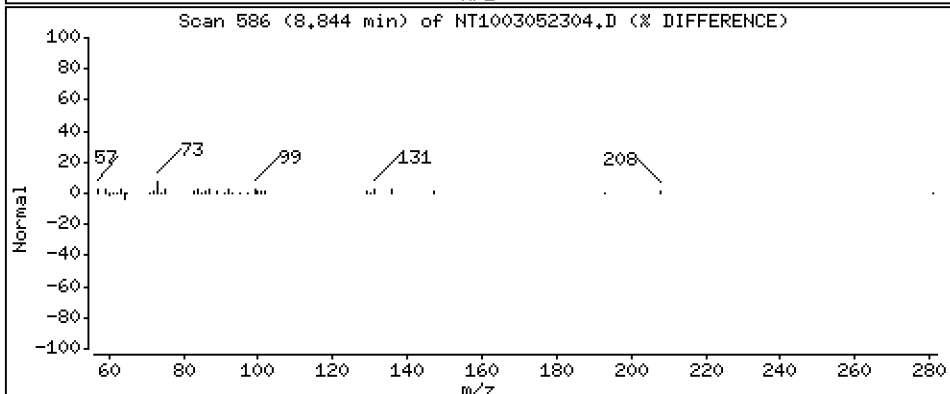
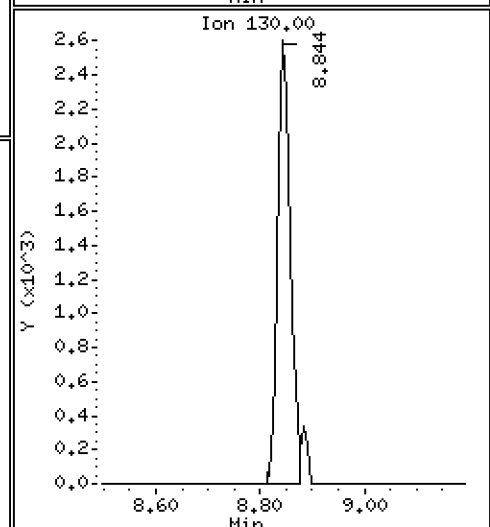
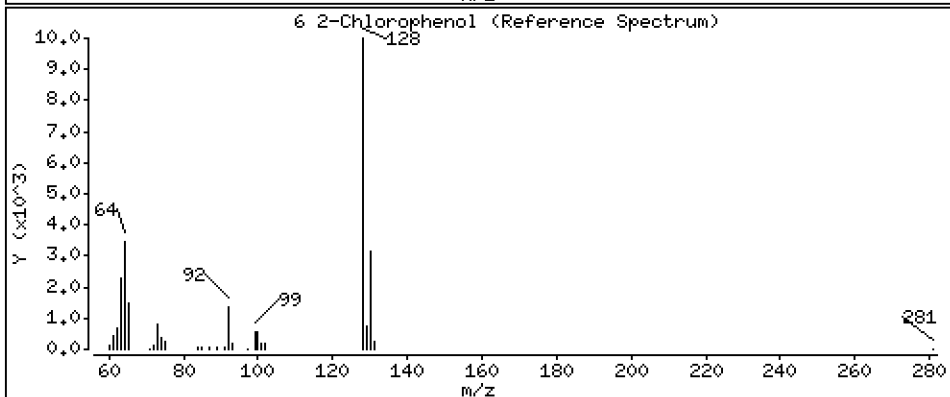
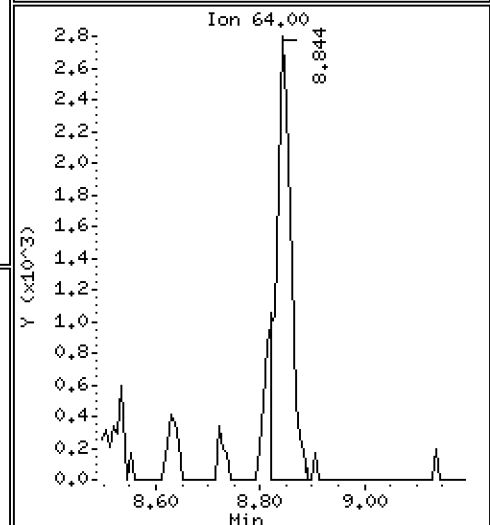
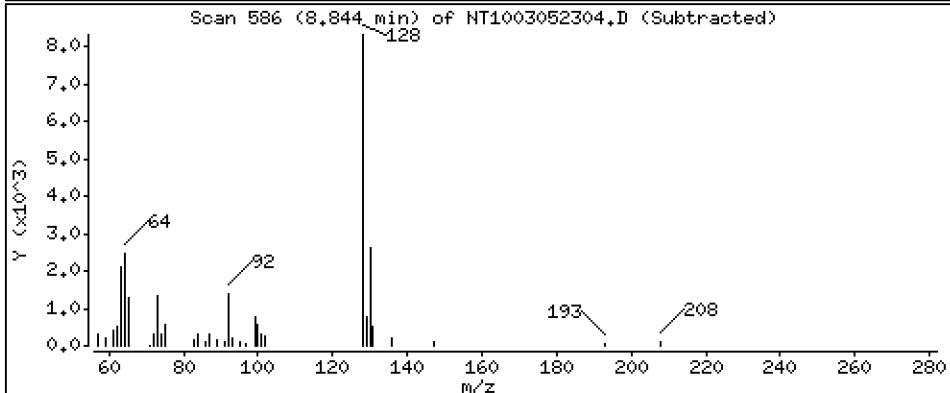
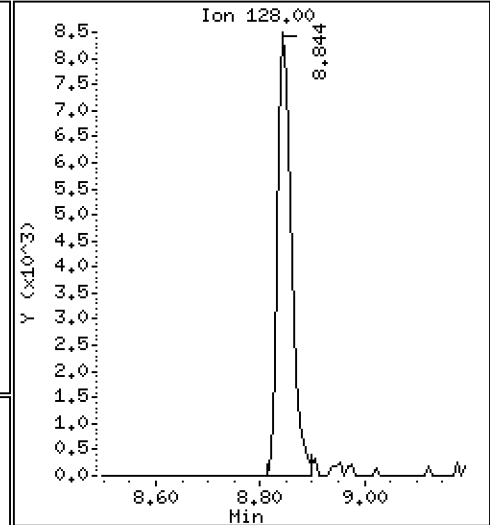
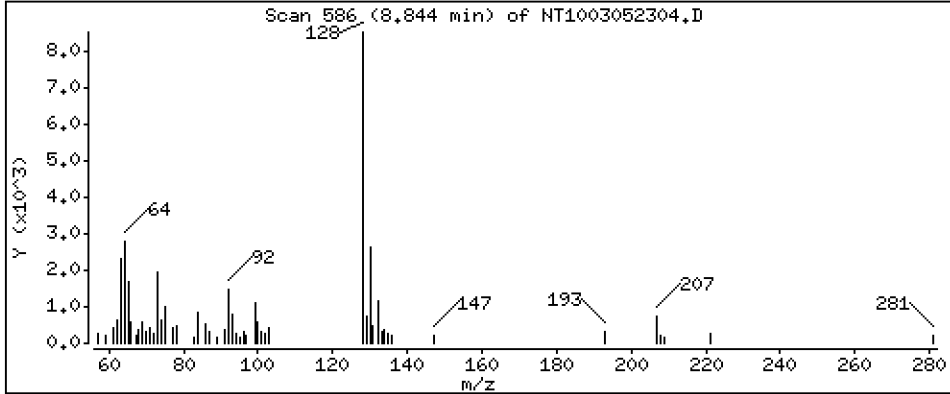
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1636 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

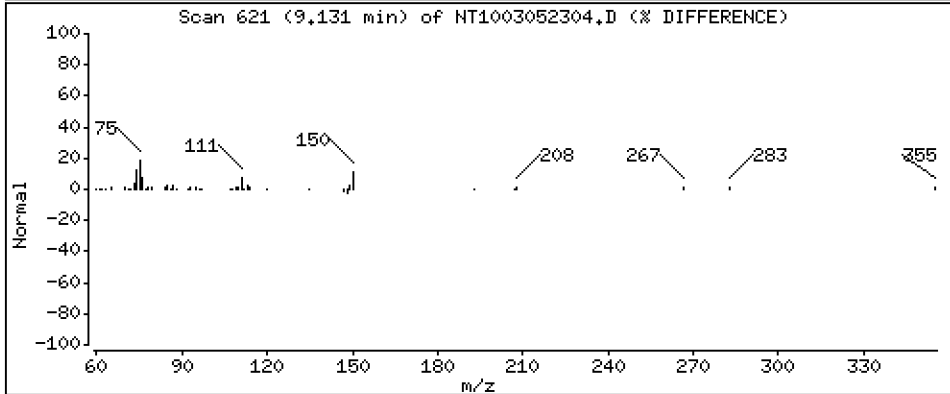
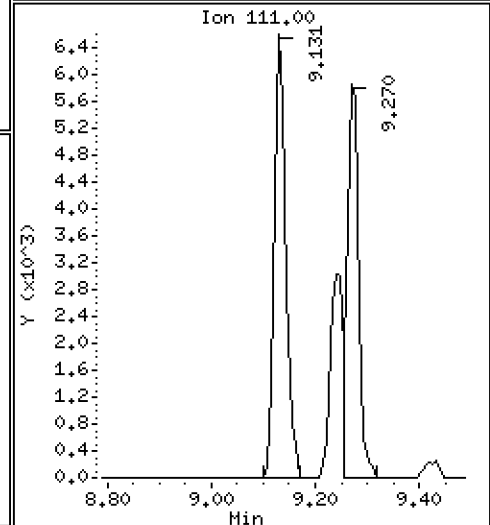
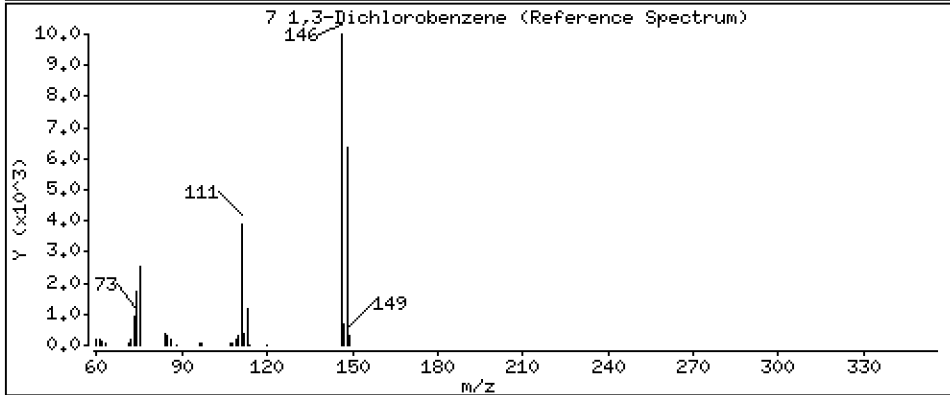
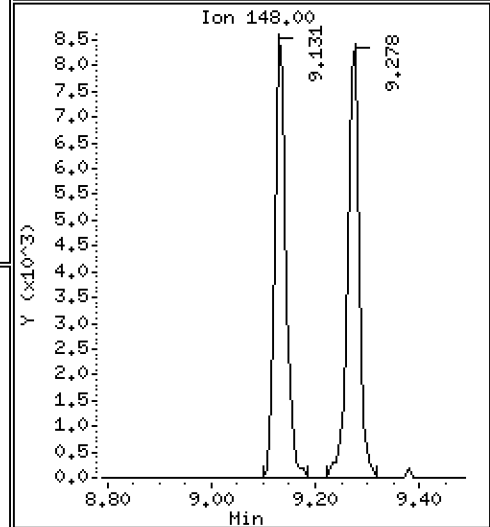
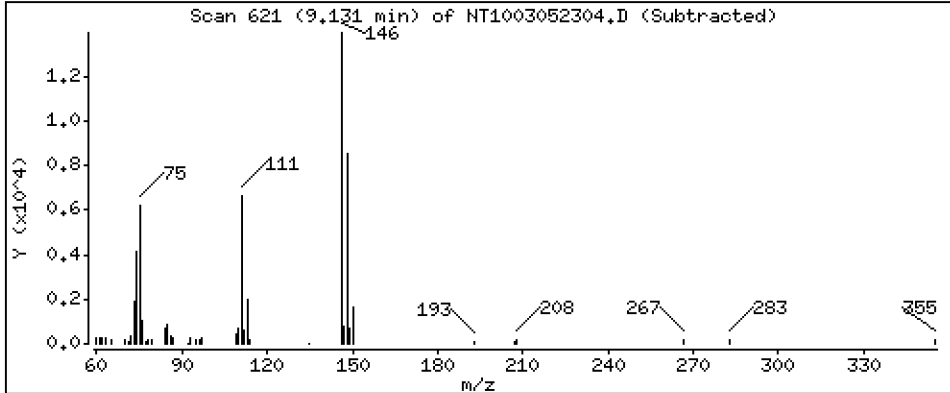
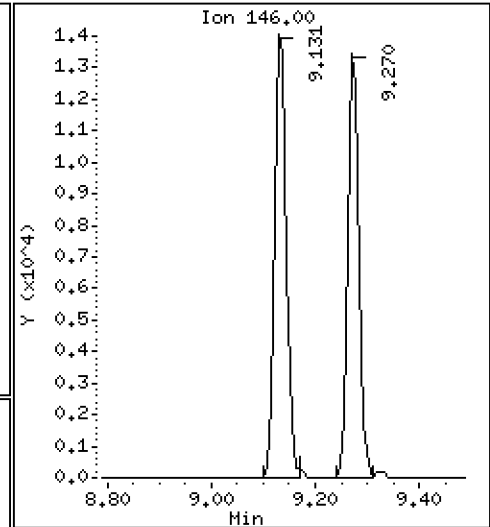
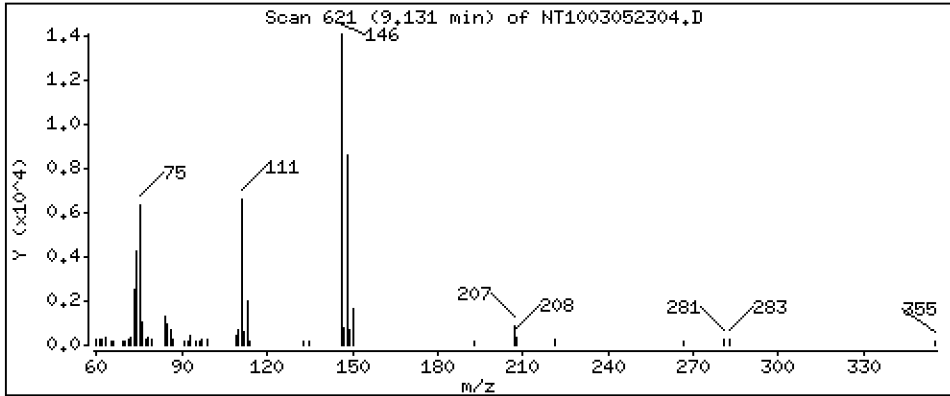
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2131 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

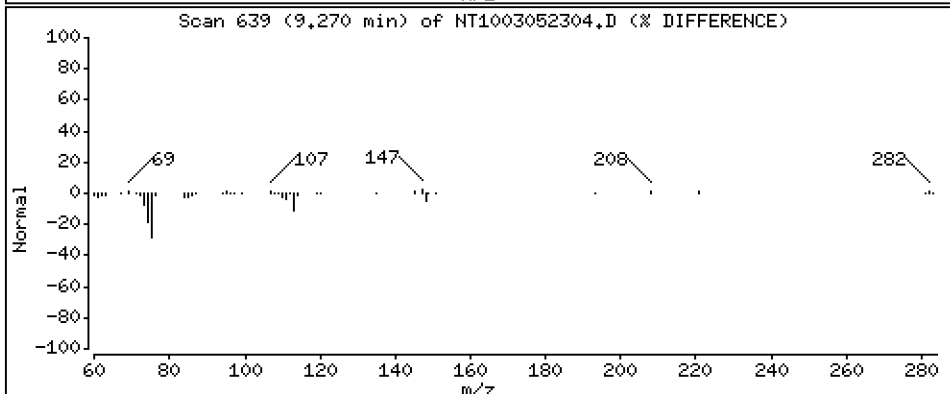
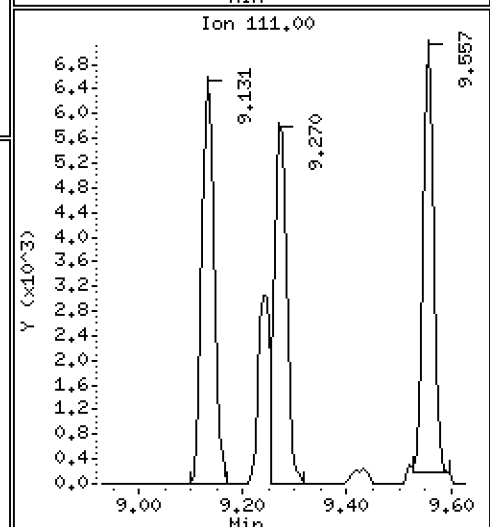
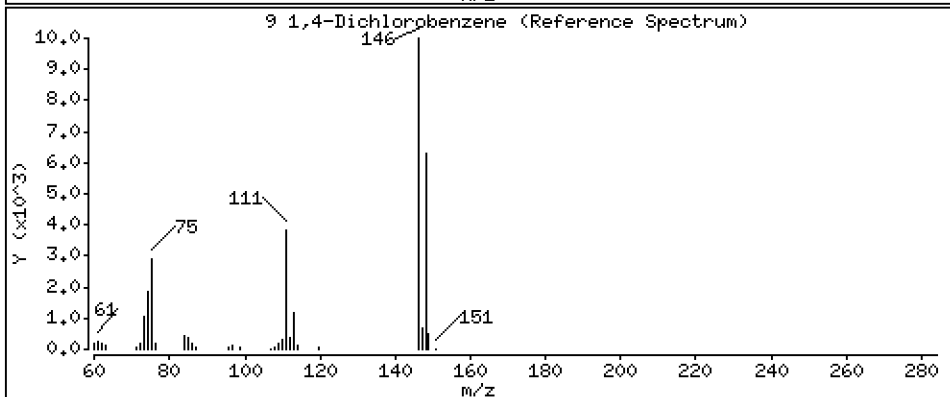
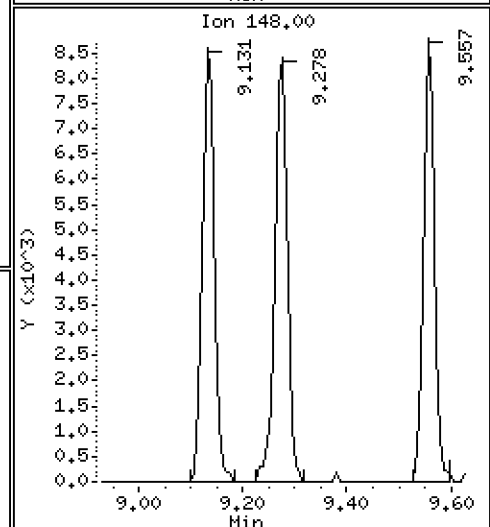
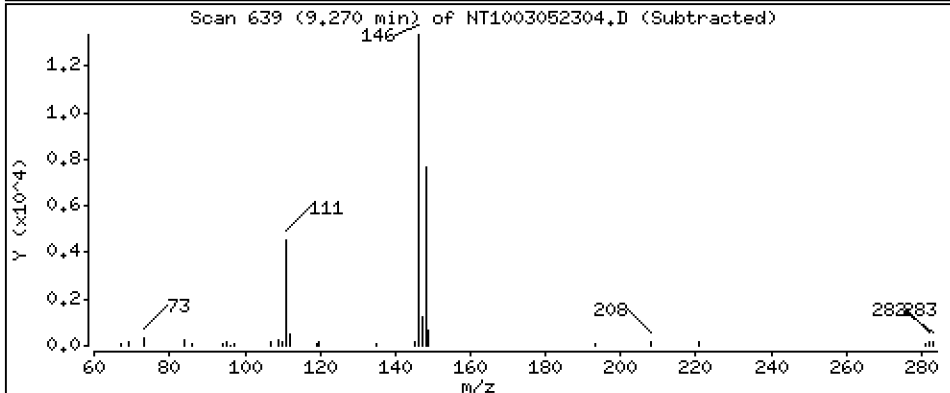
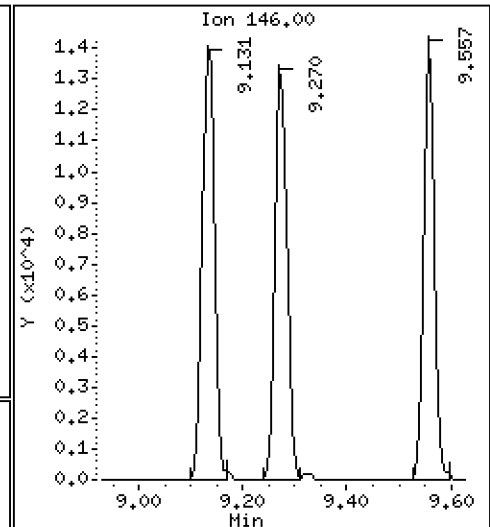
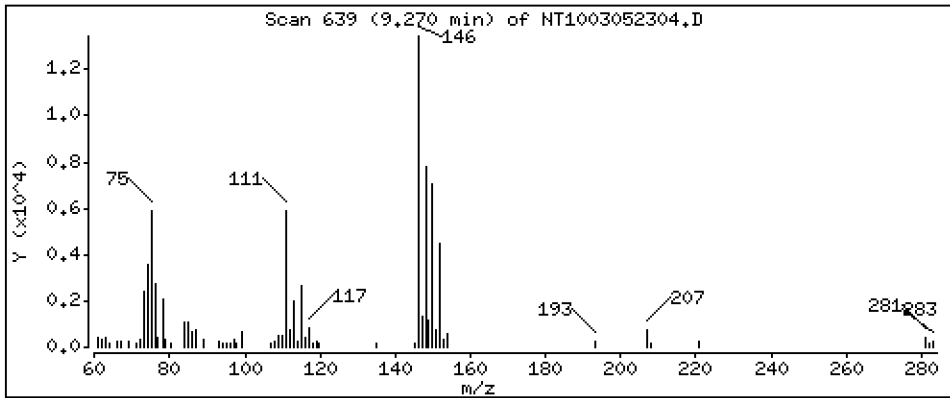
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1992 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

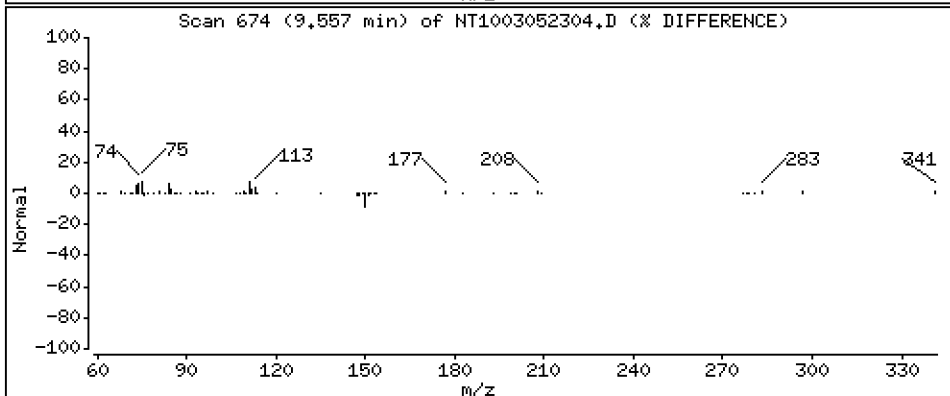
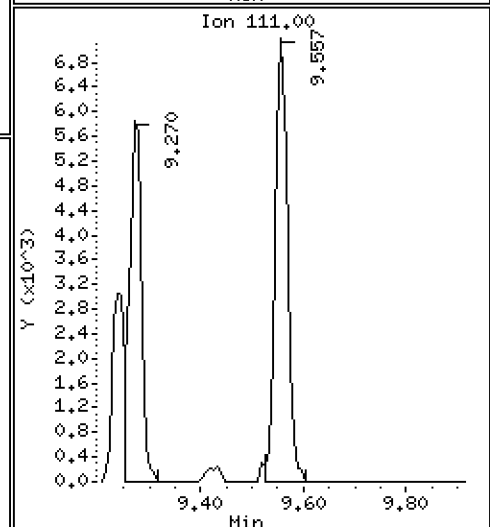
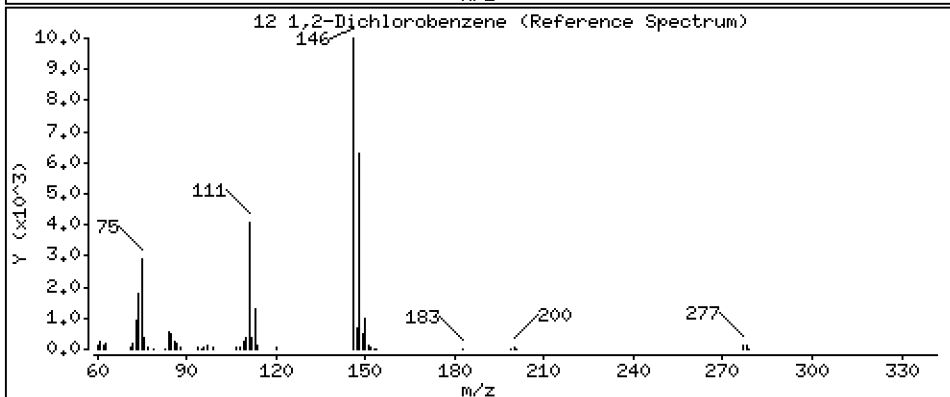
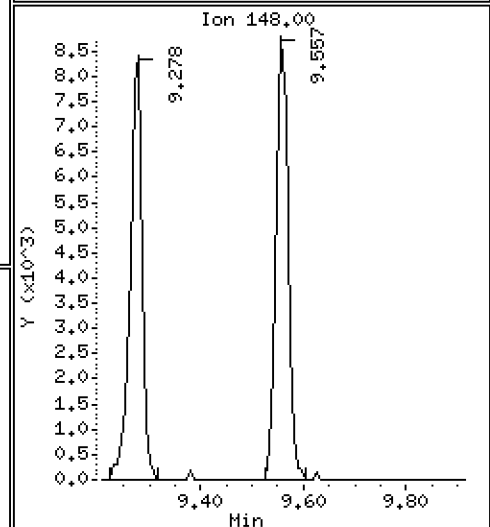
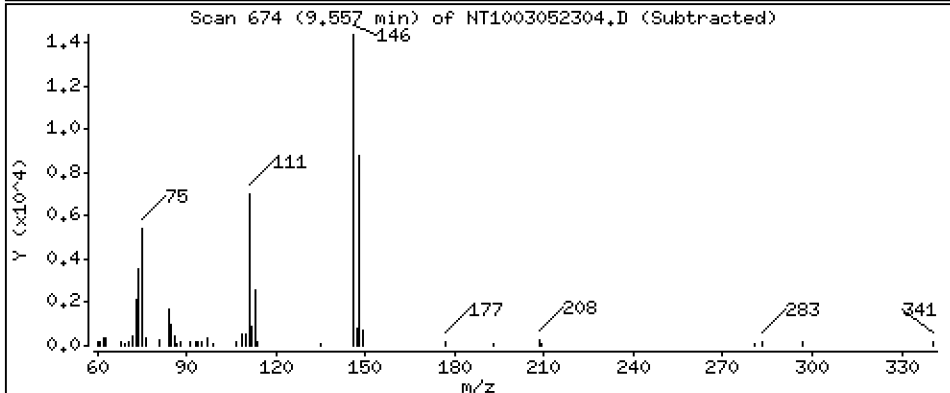
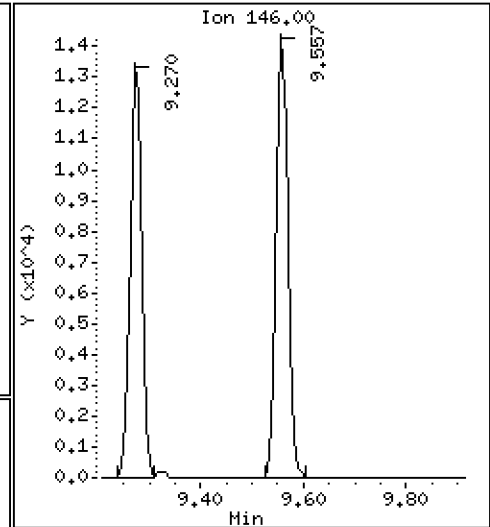
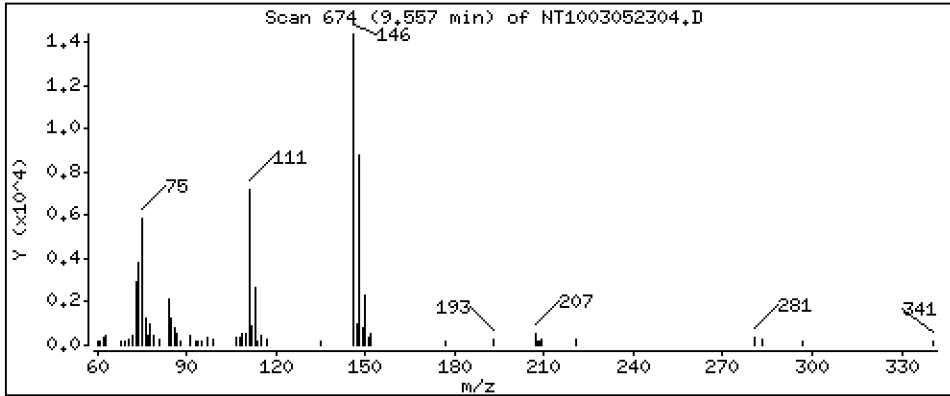
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.2113 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

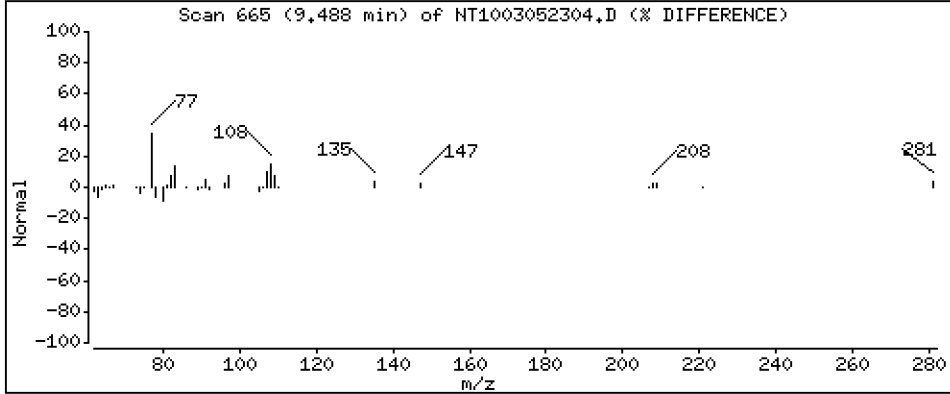
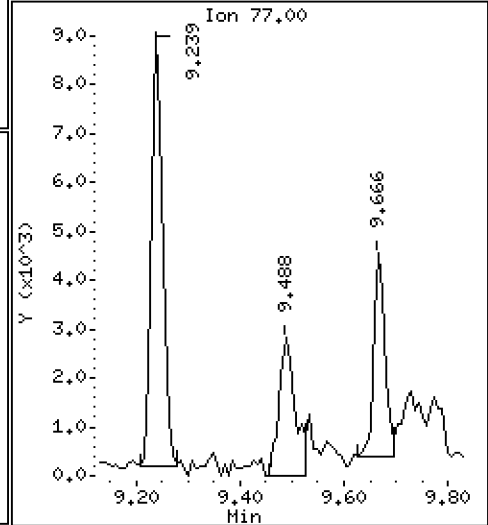
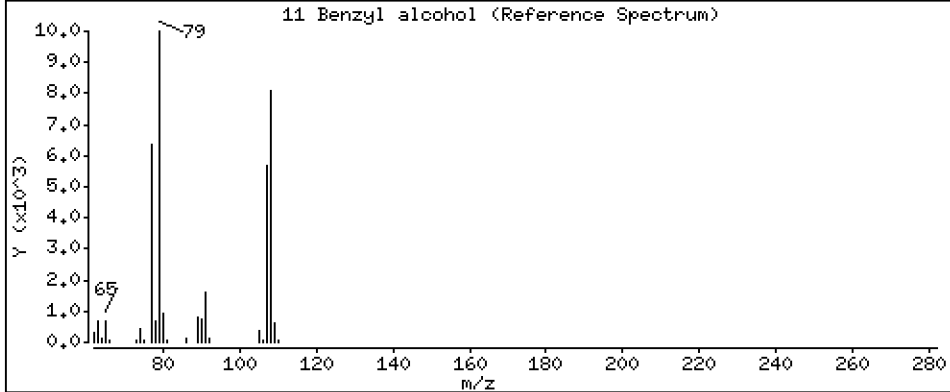
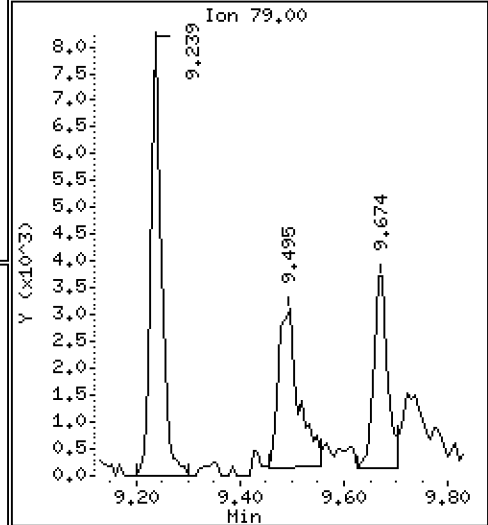
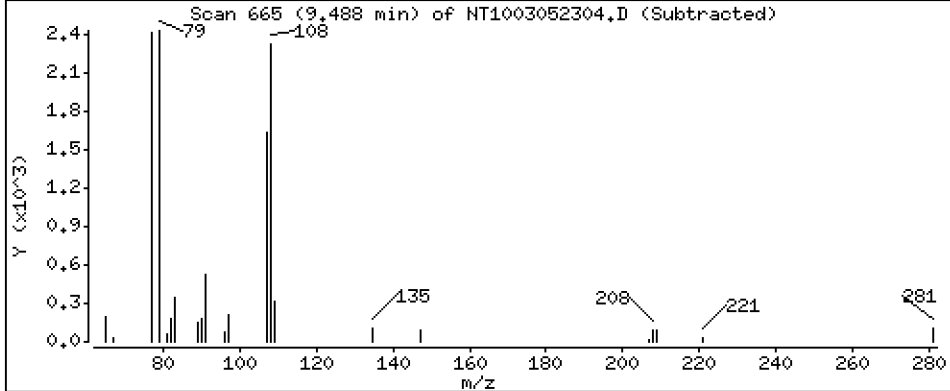
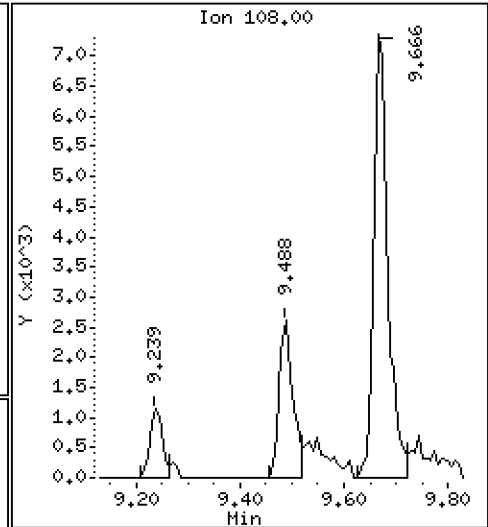
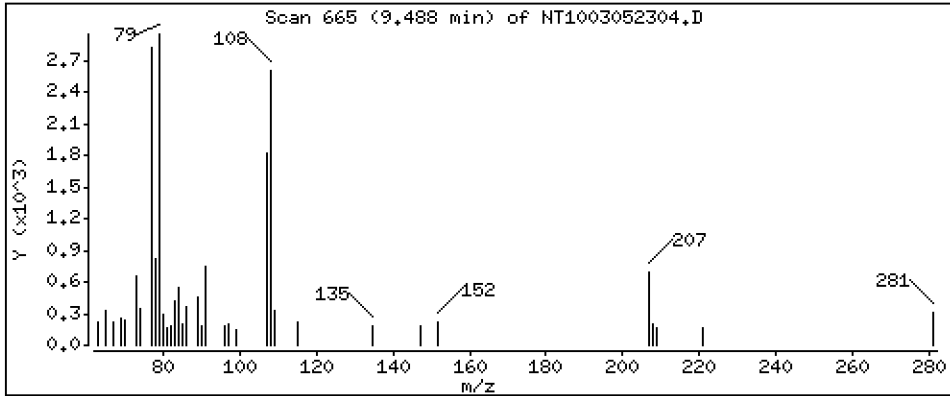
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.07919 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

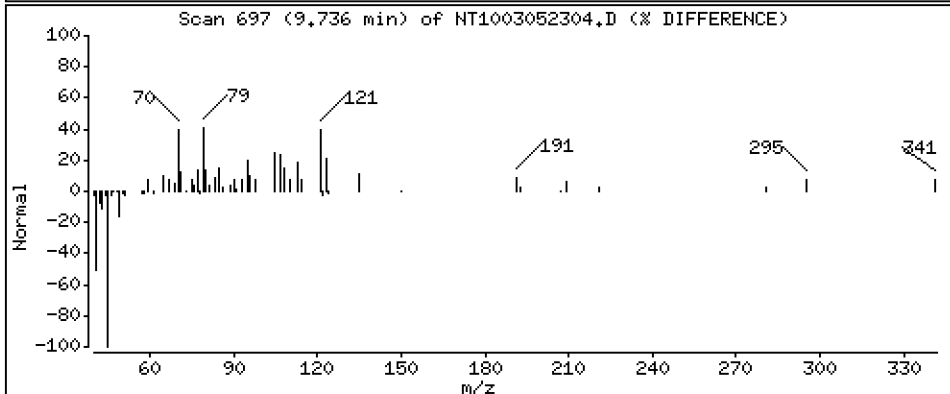
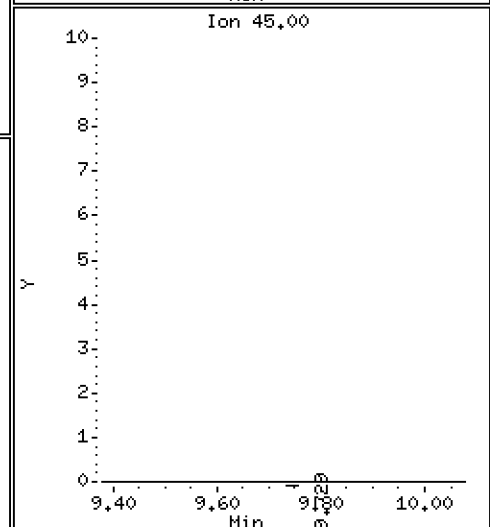
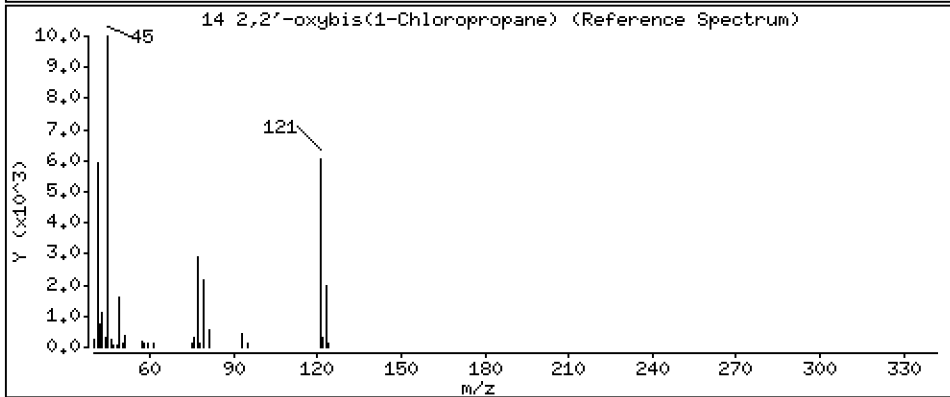
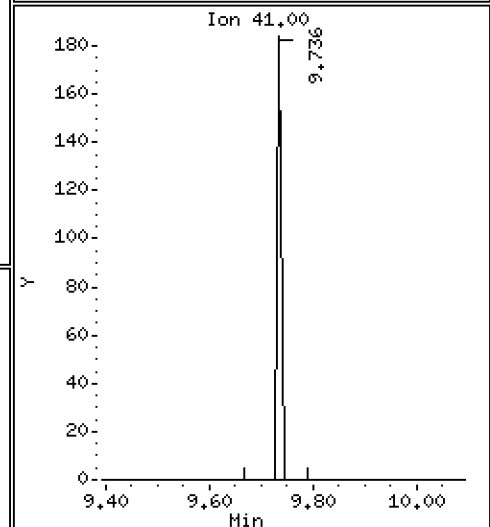
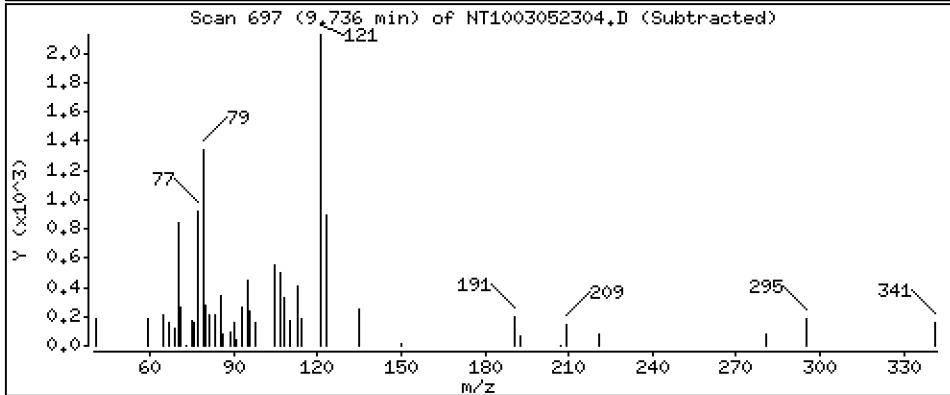
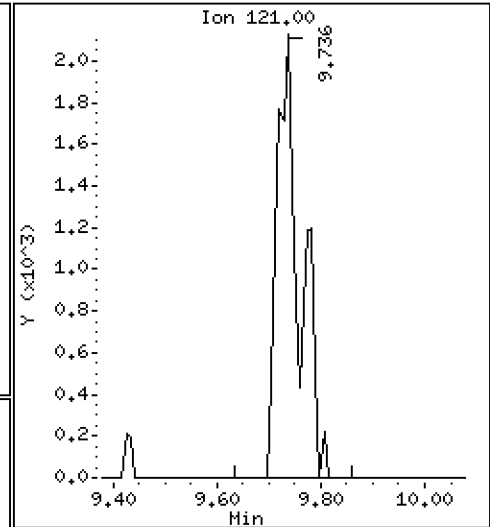
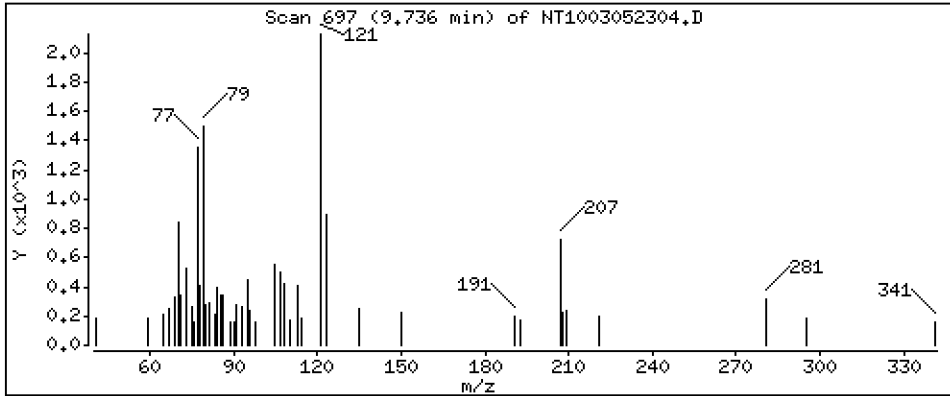
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2239 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

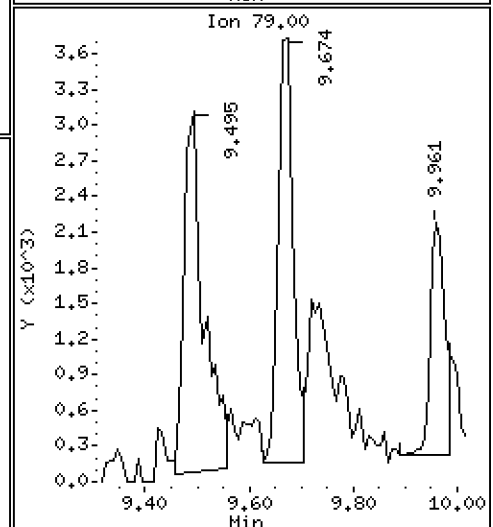
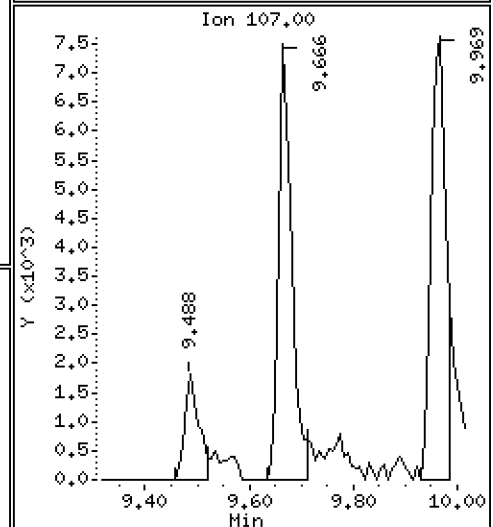
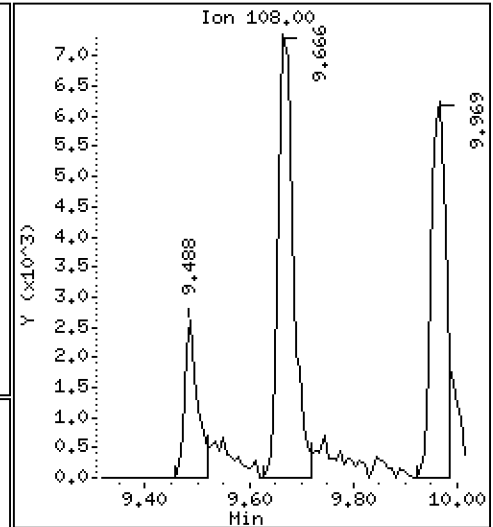
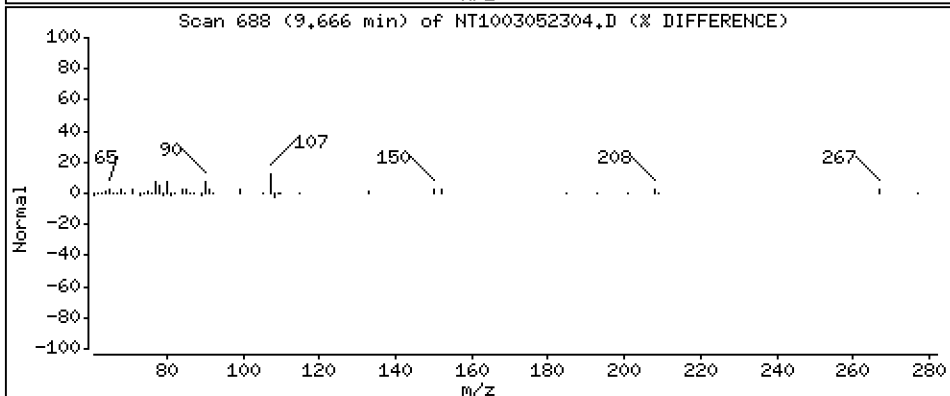
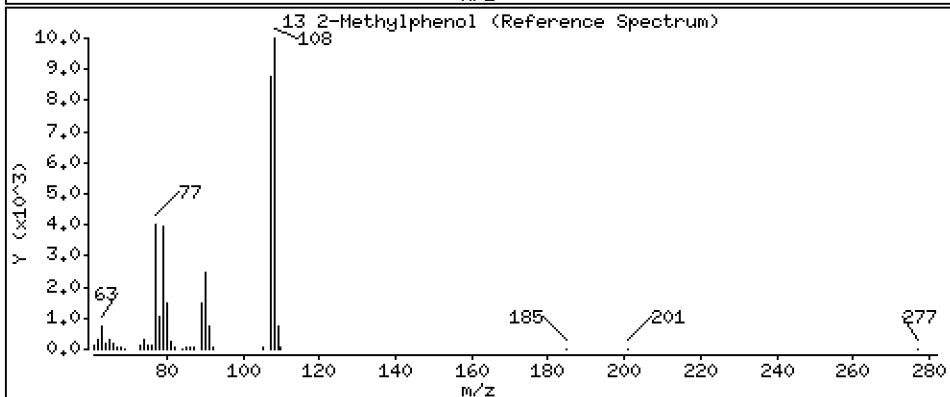
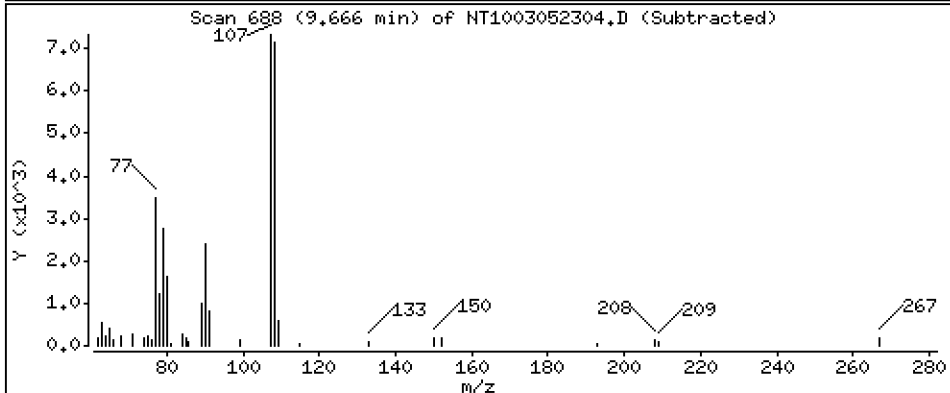
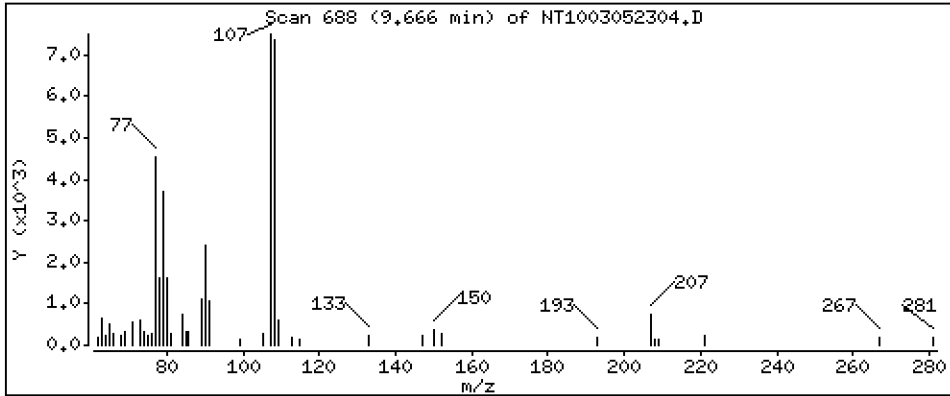
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,1660 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

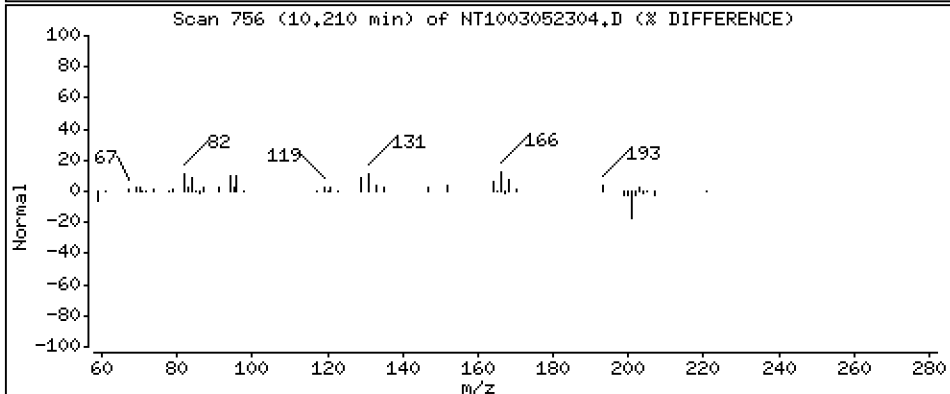
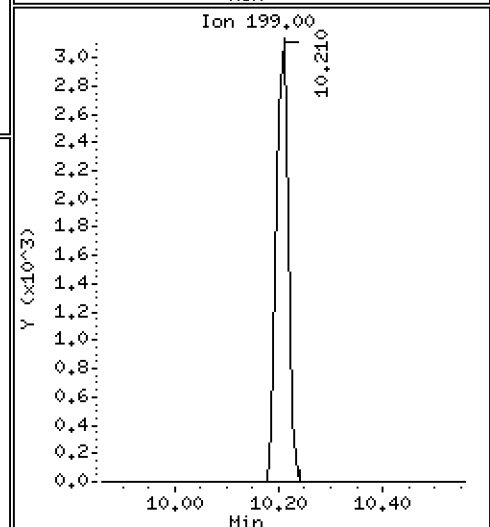
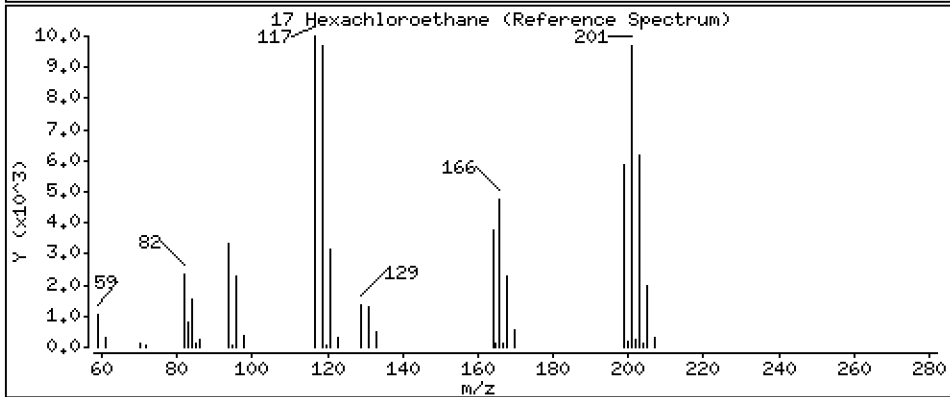
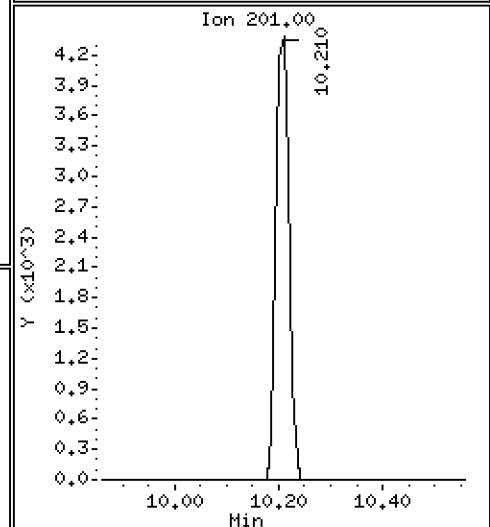
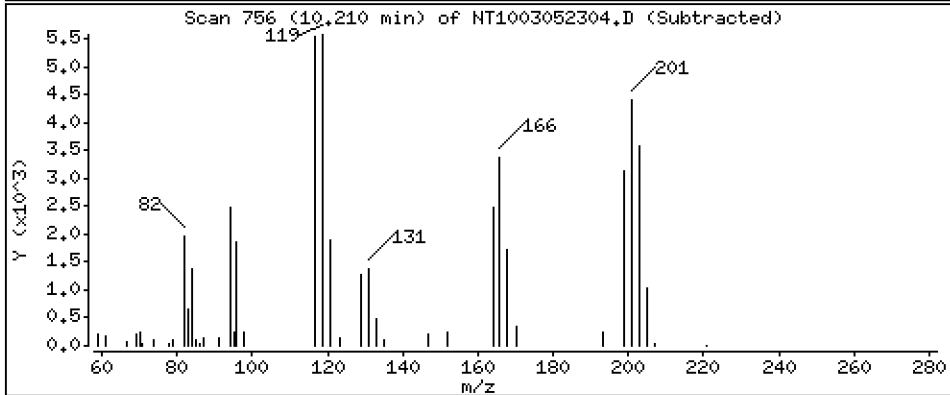
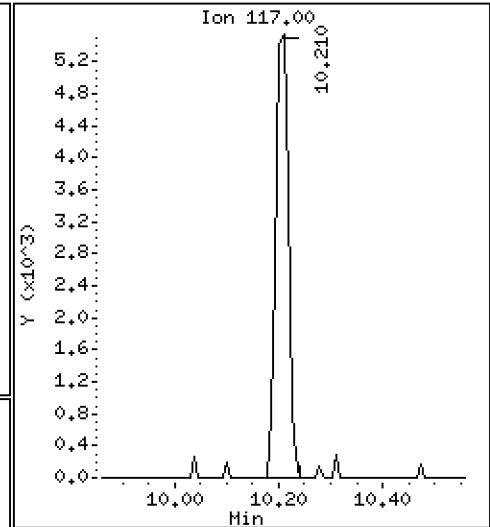
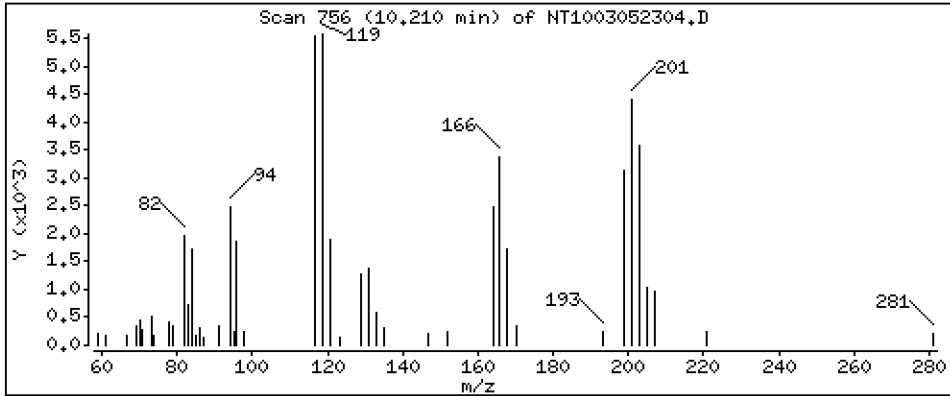
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,2085 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

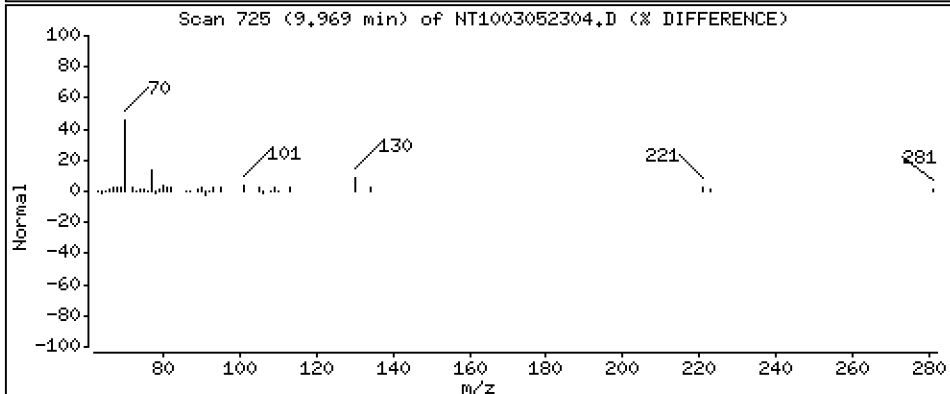
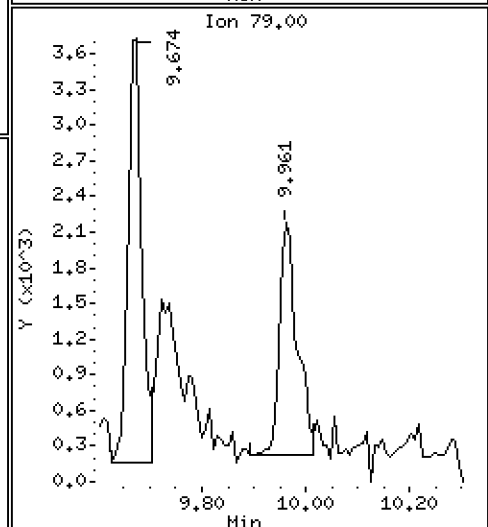
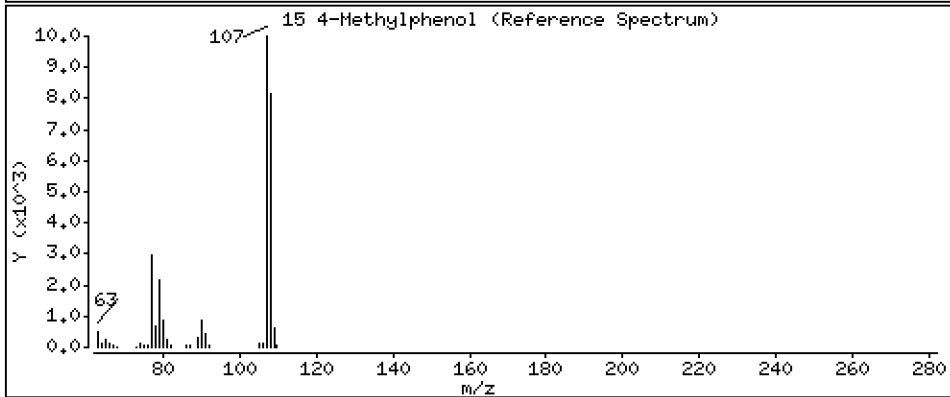
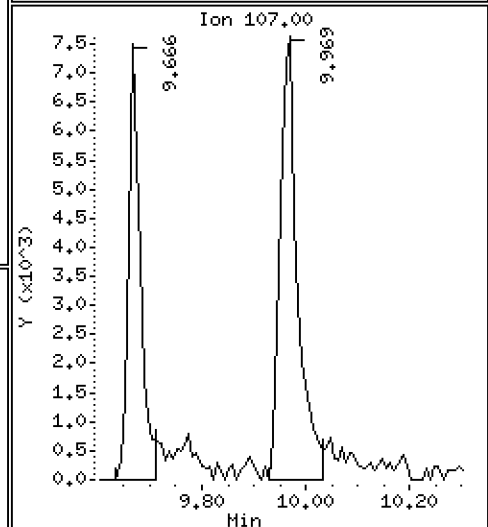
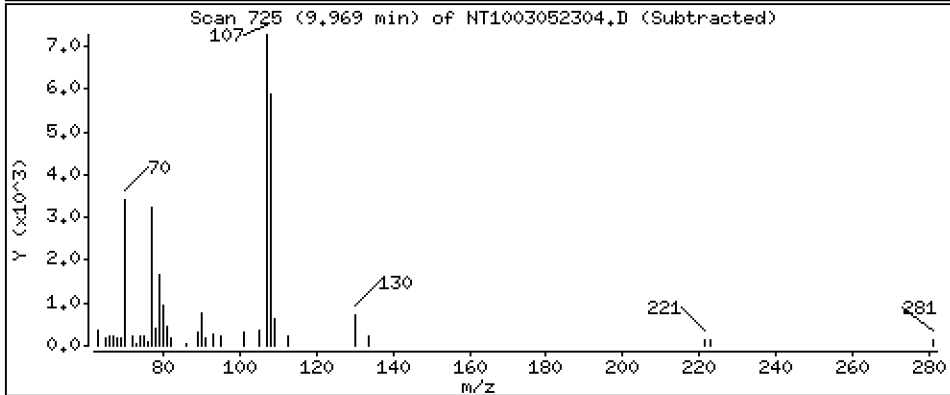
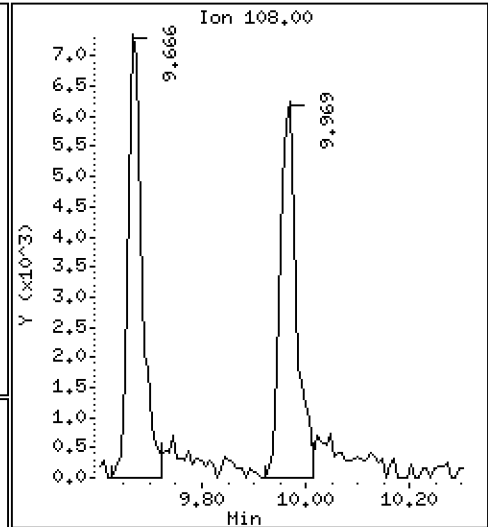
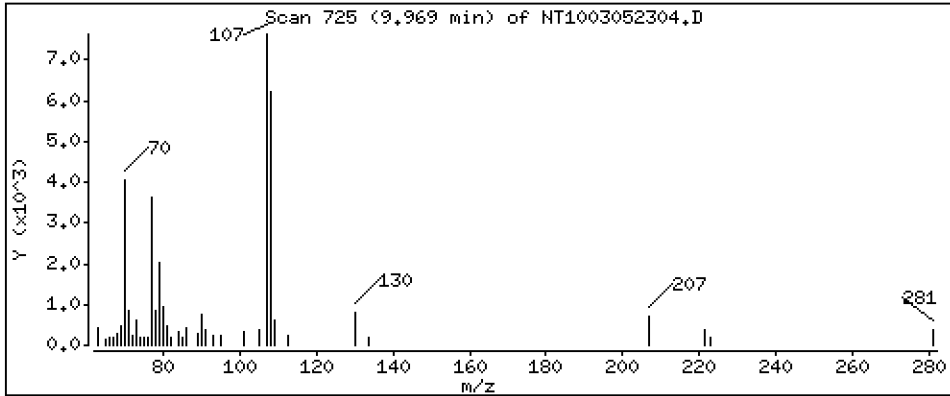
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,1256 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

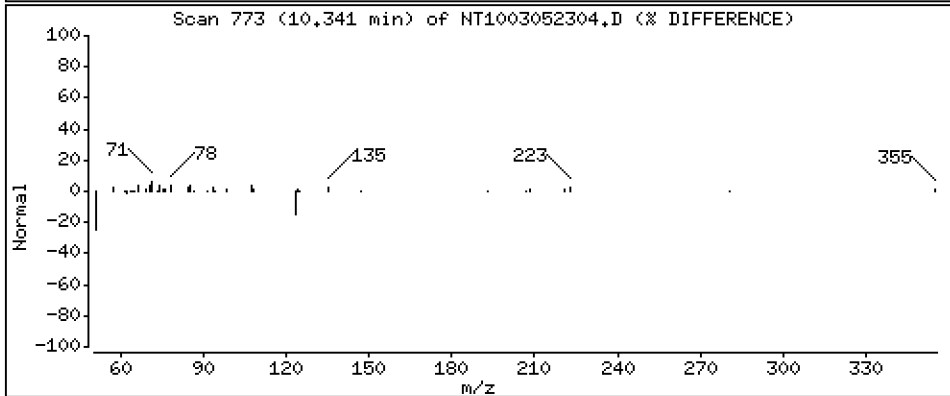
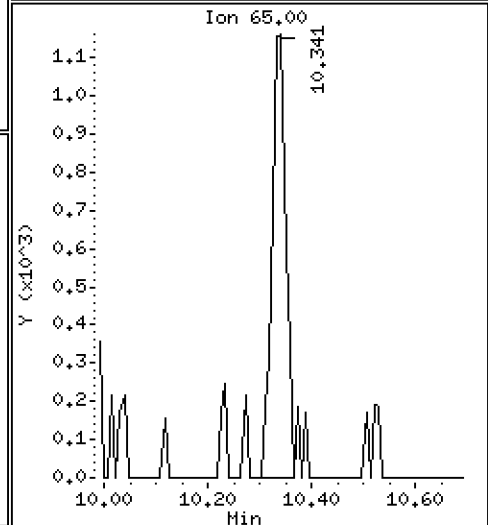
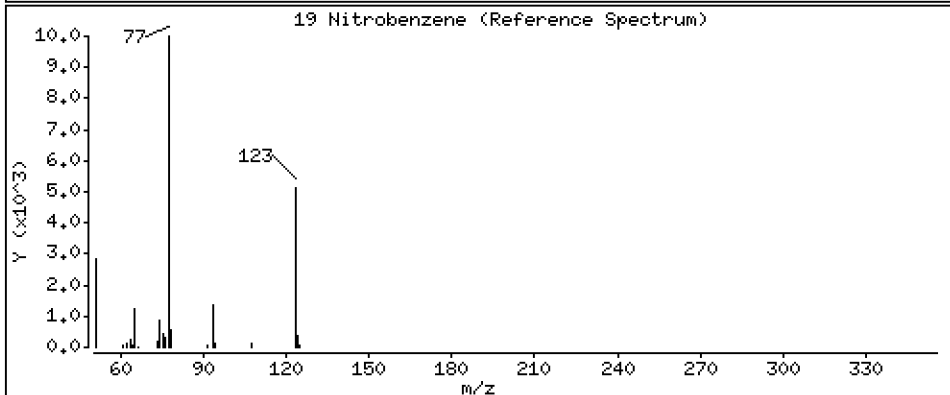
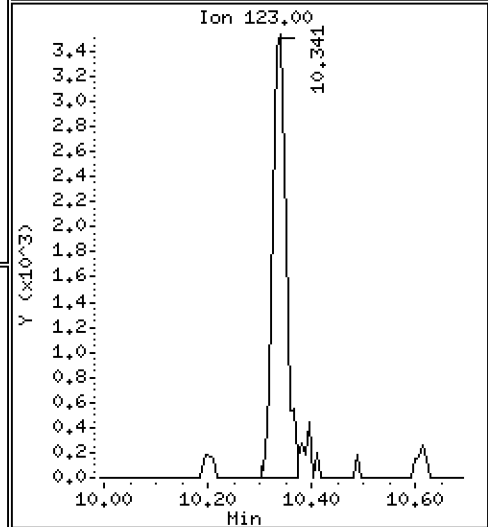
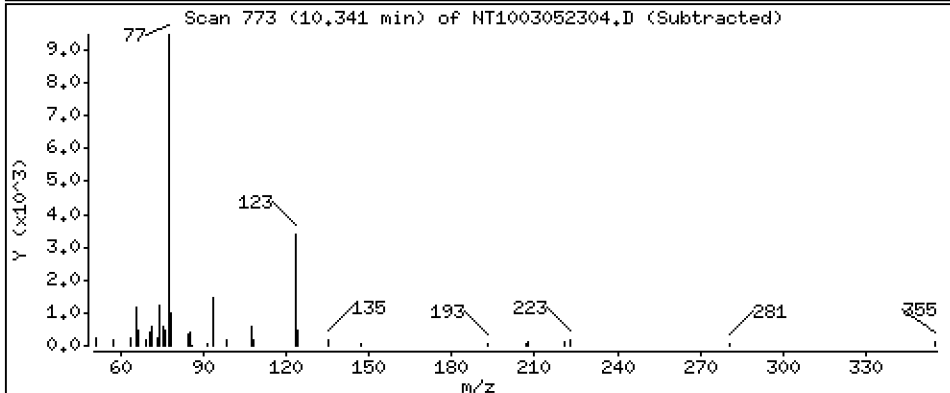
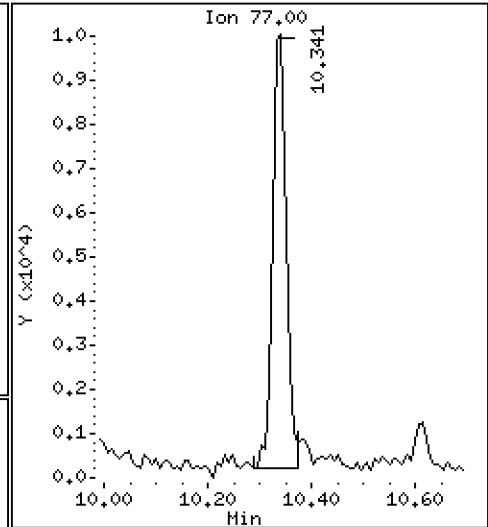
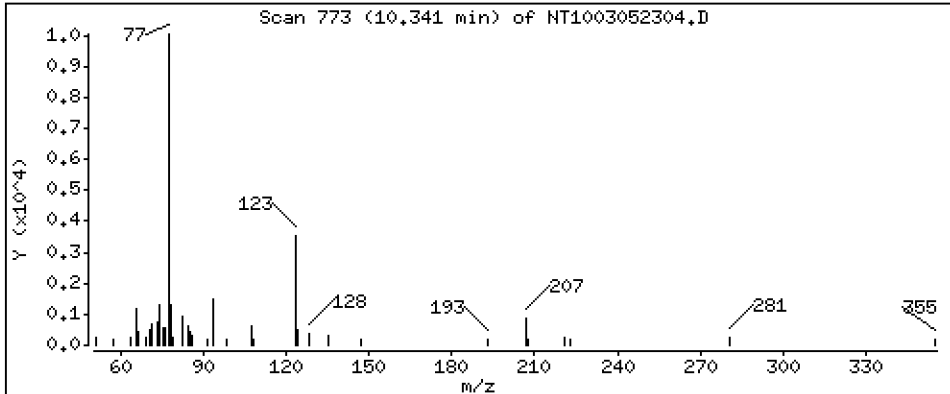
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,1566 ug/mL

19 Nitrobenzene



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

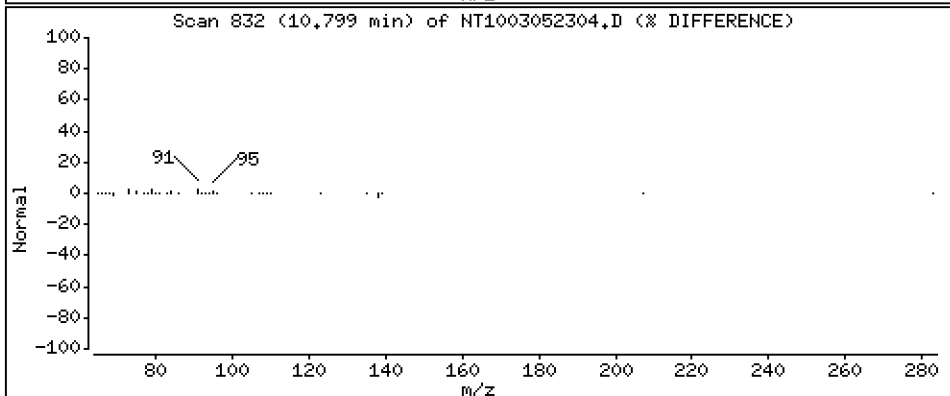
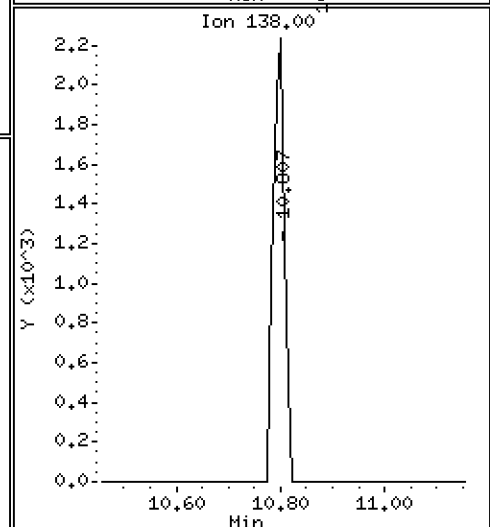
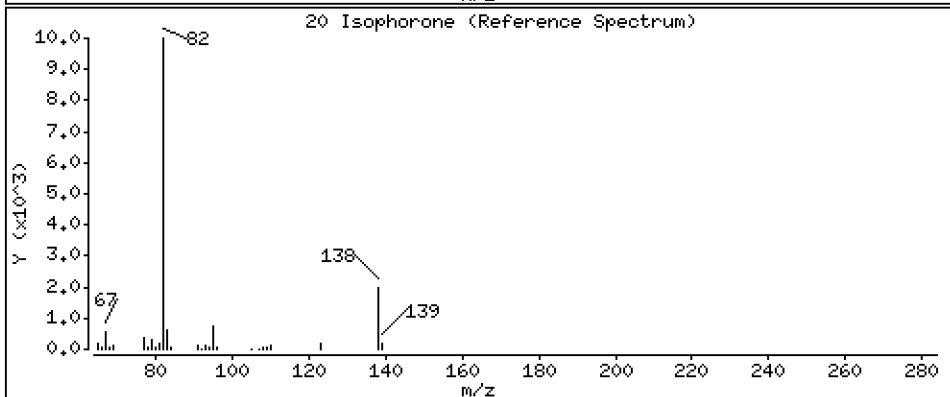
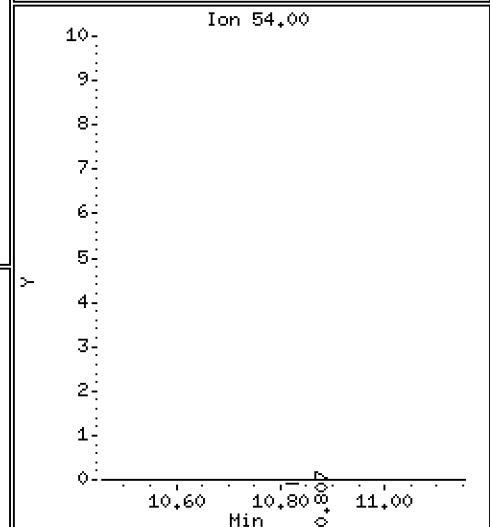
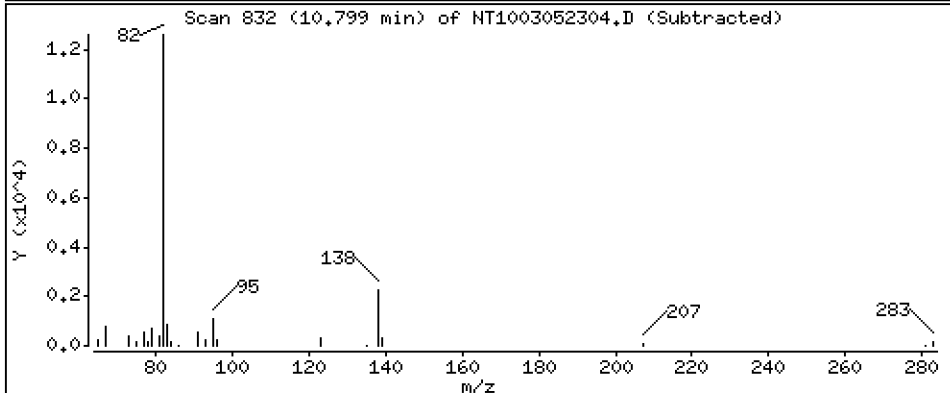
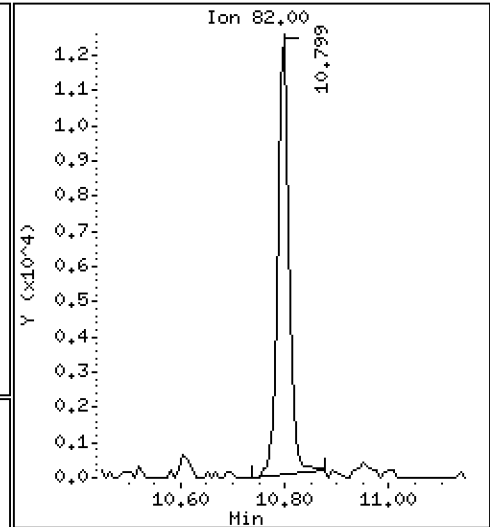
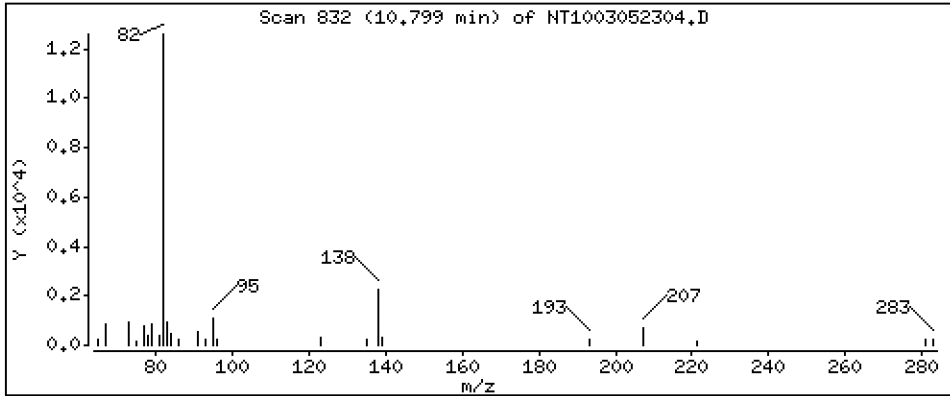
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 0,1386 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

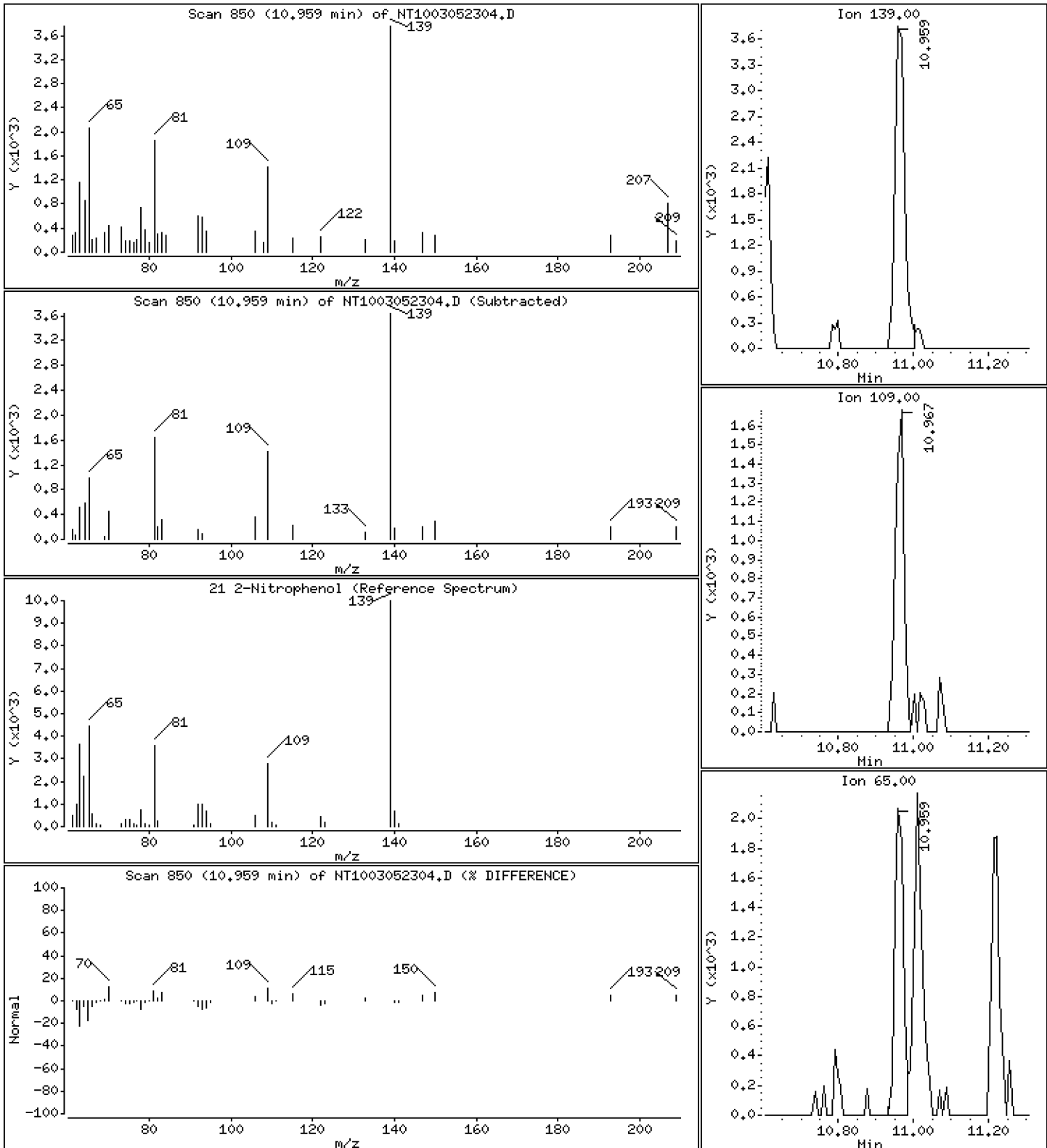
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1110 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

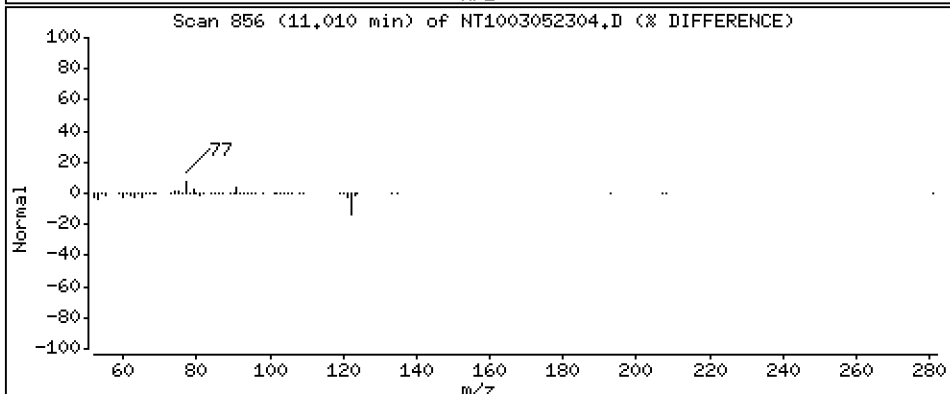
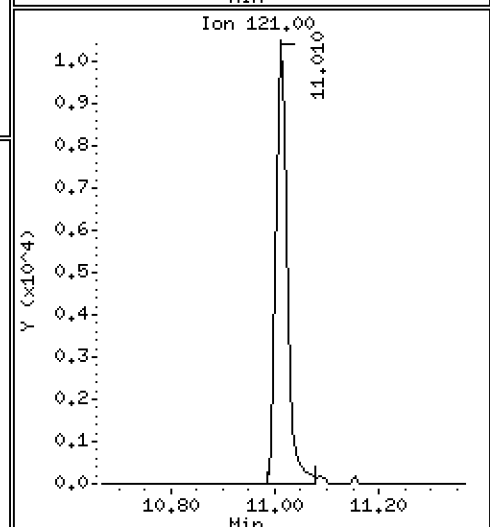
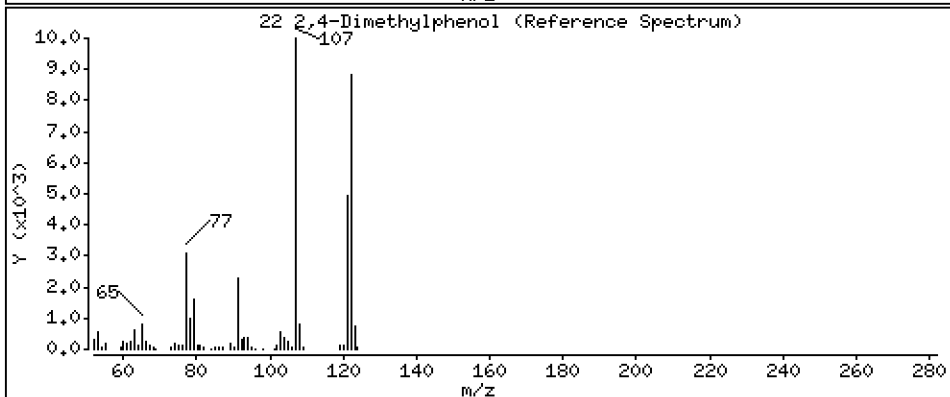
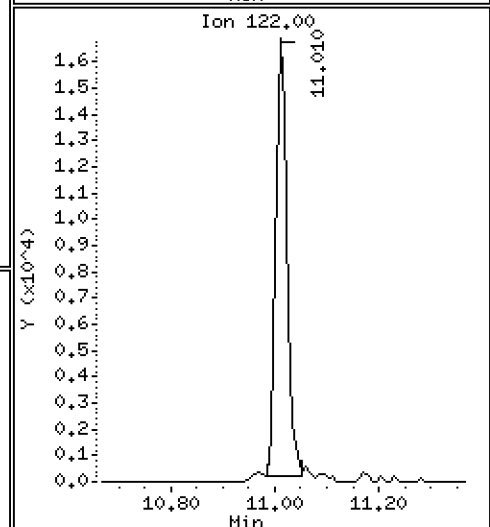
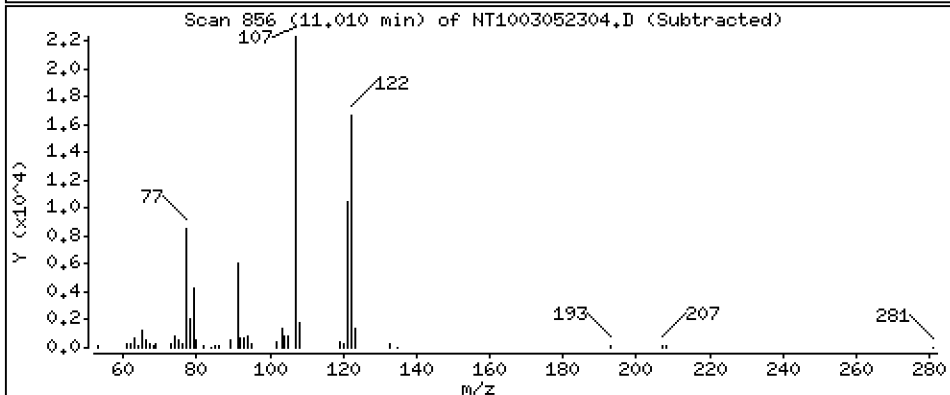
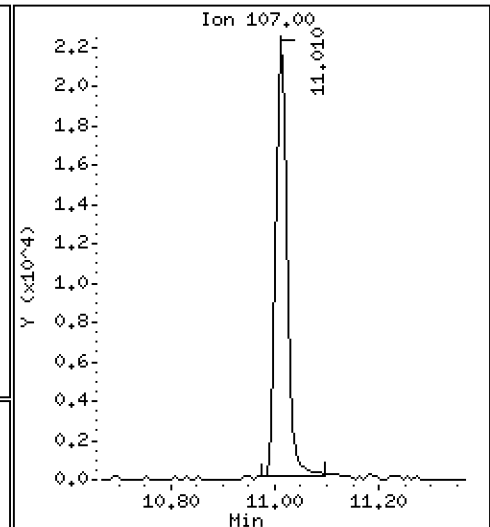
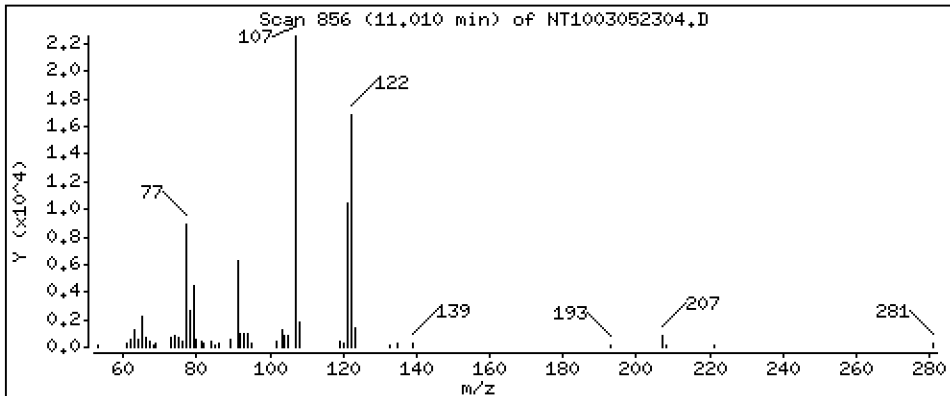
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3287 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

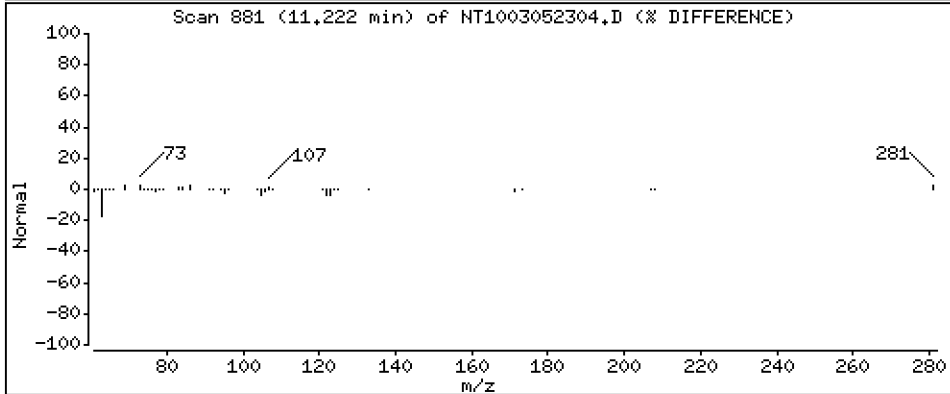
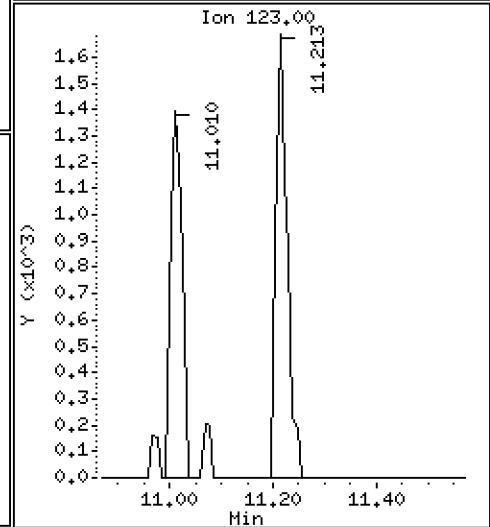
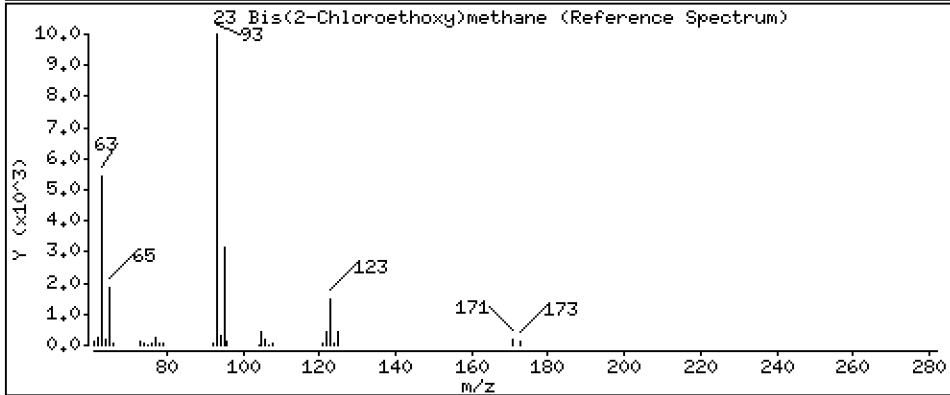
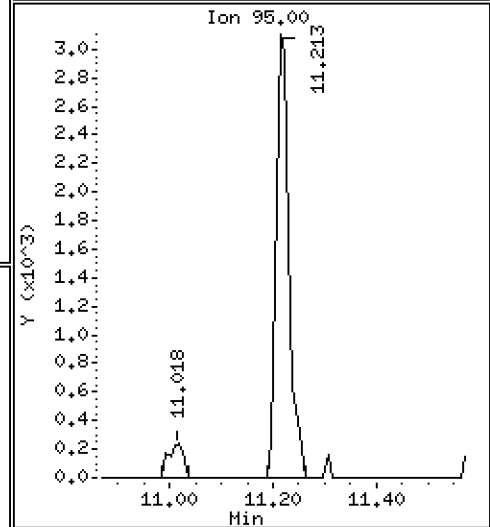
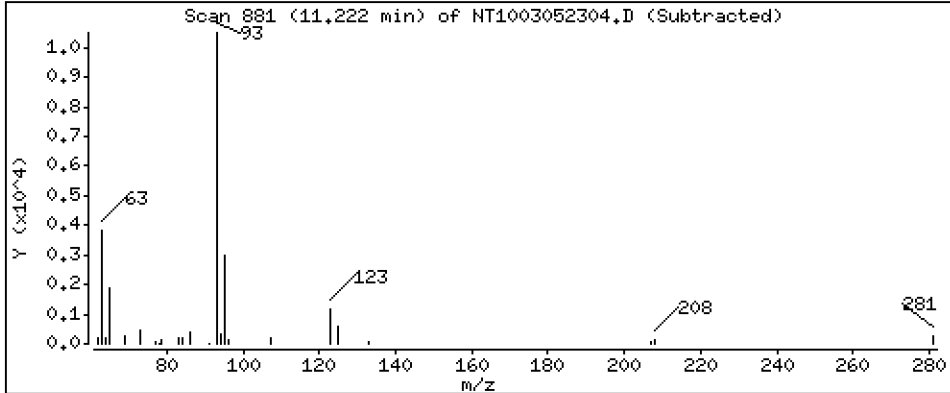
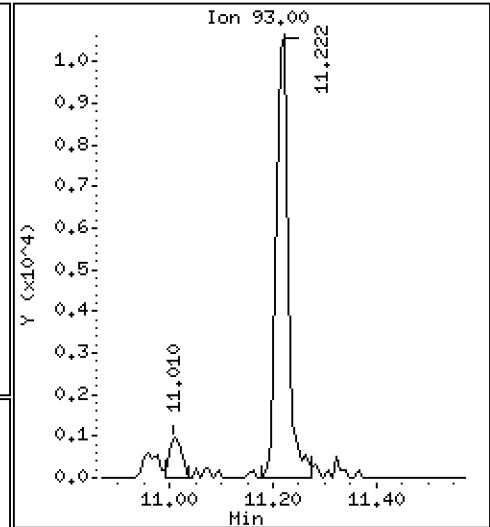
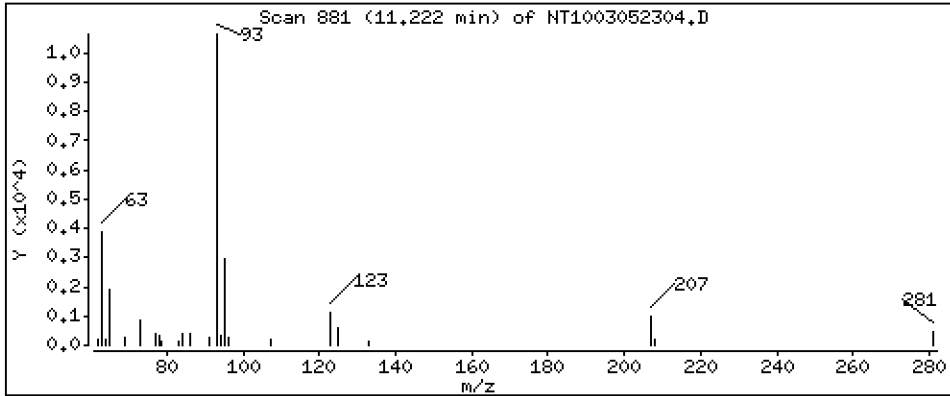
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 0,2050 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

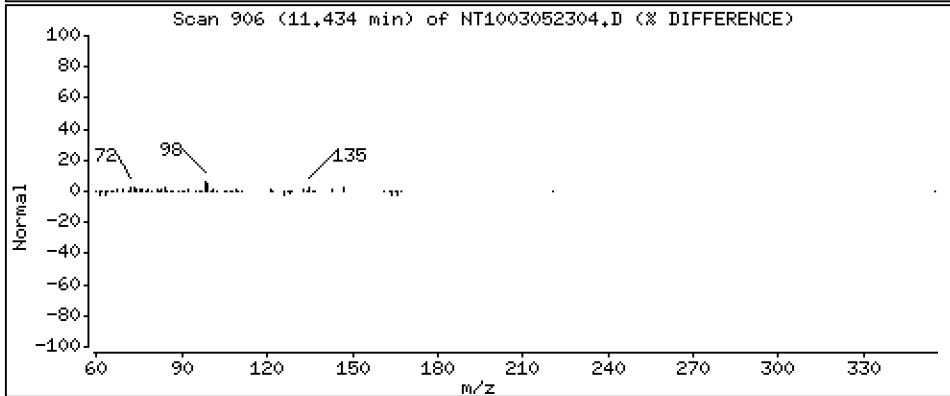
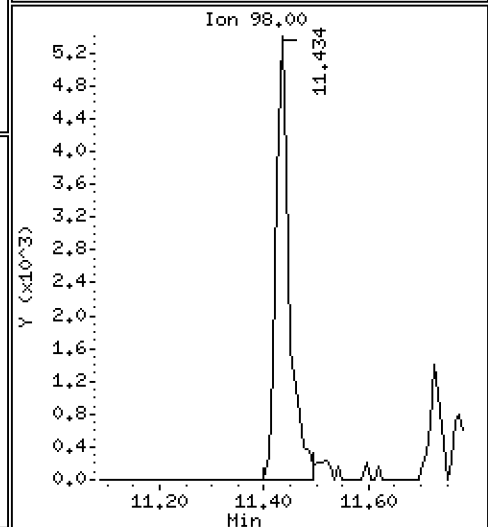
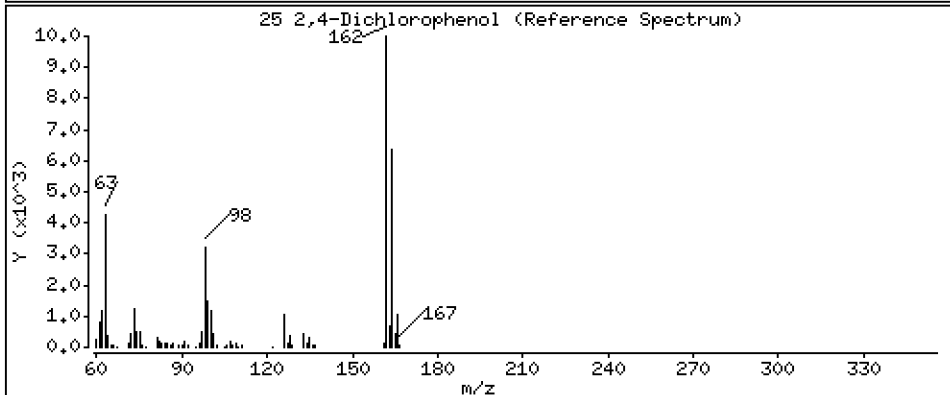
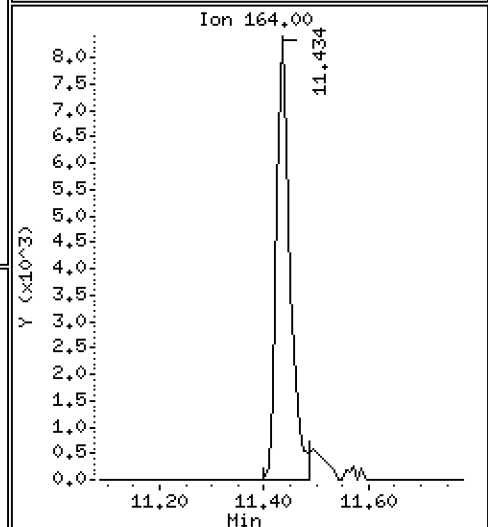
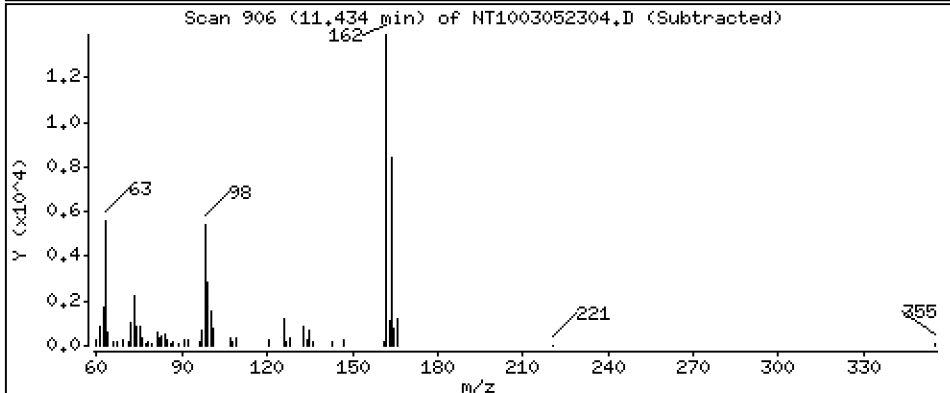
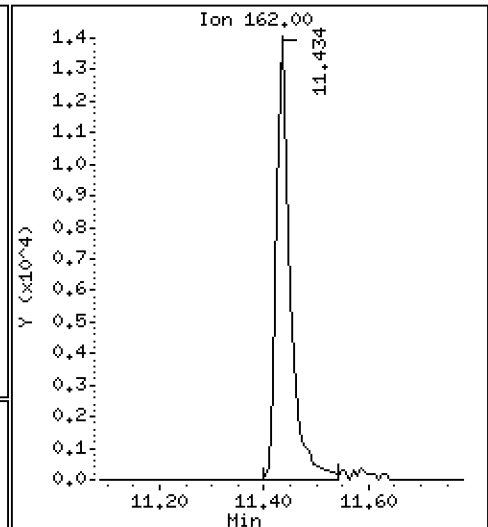
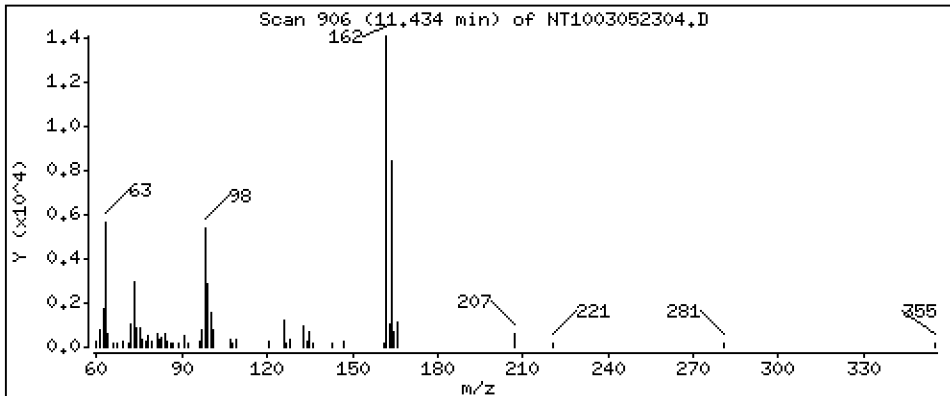
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3393 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

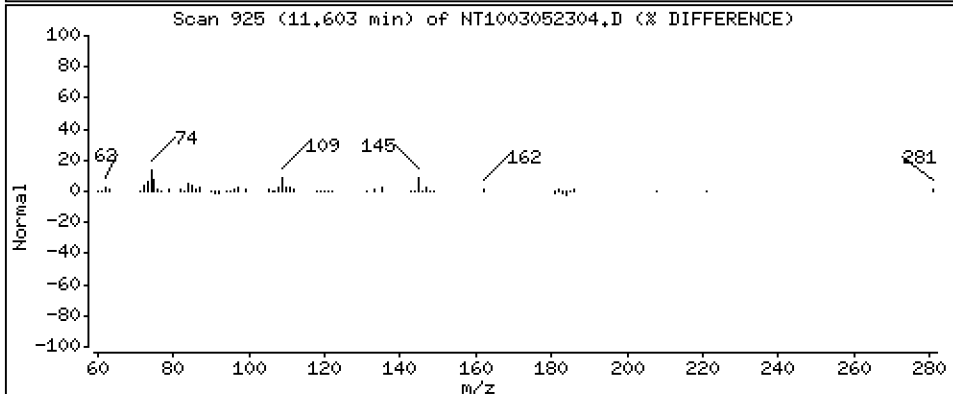
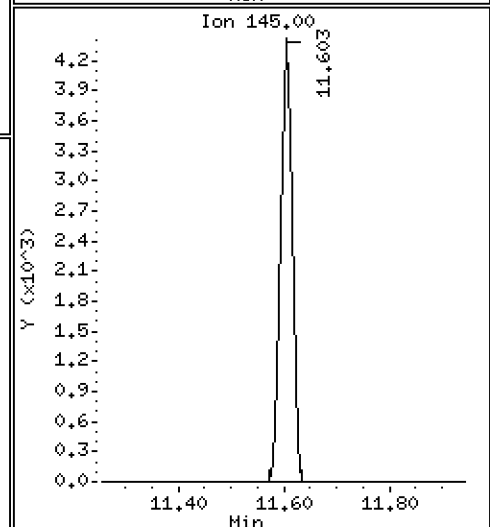
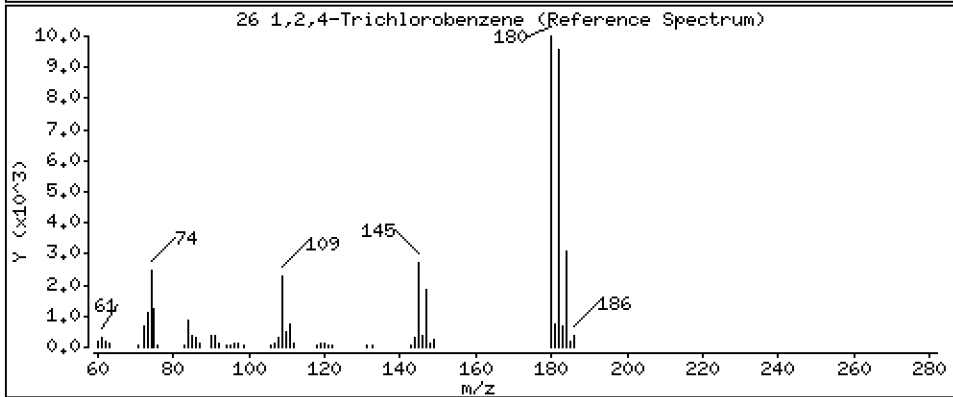
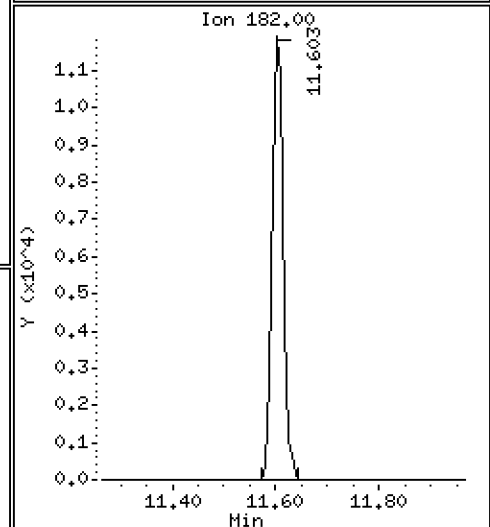
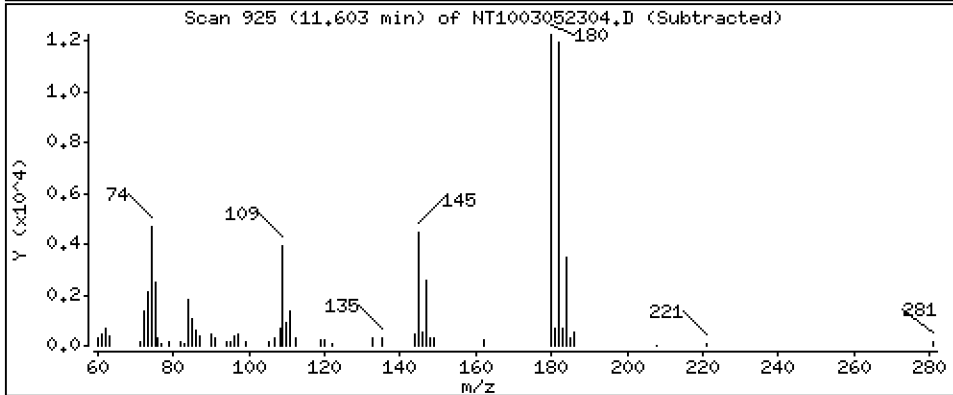
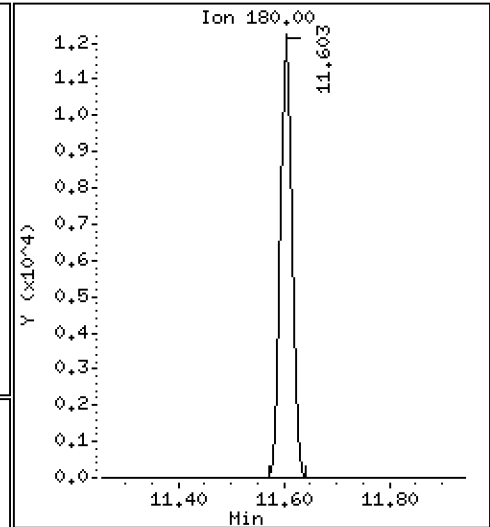
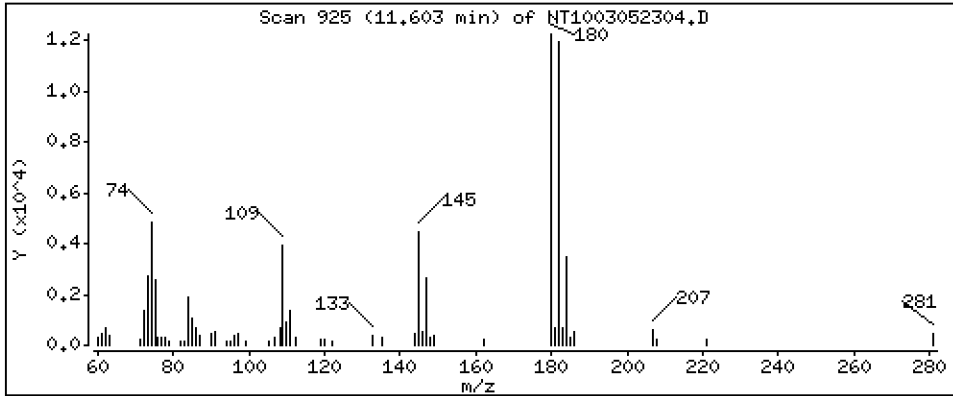
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2133 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

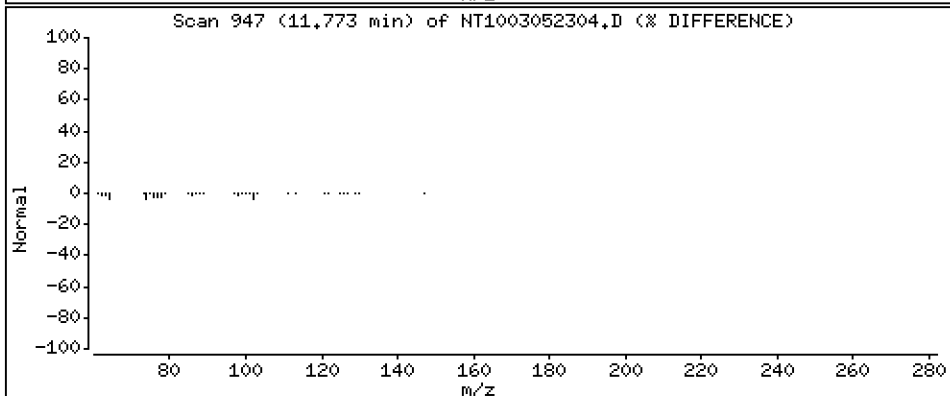
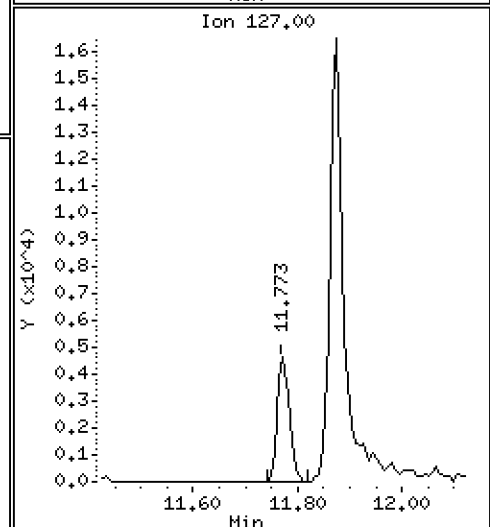
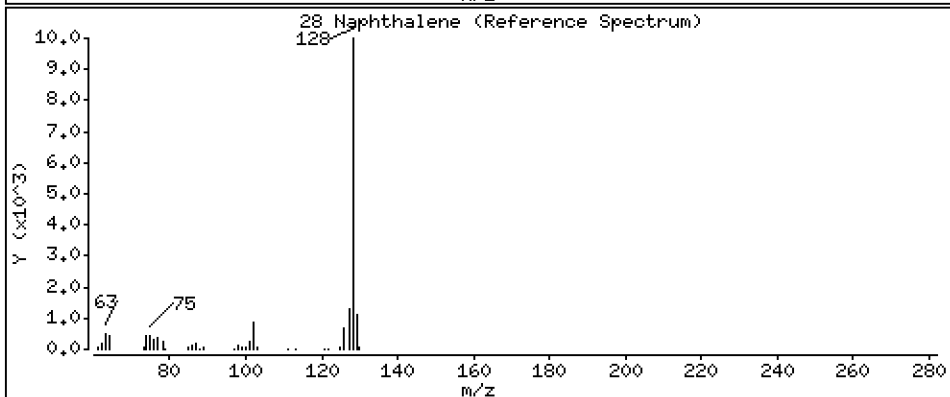
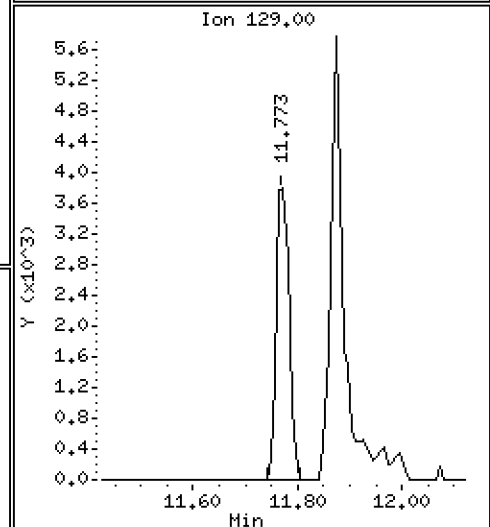
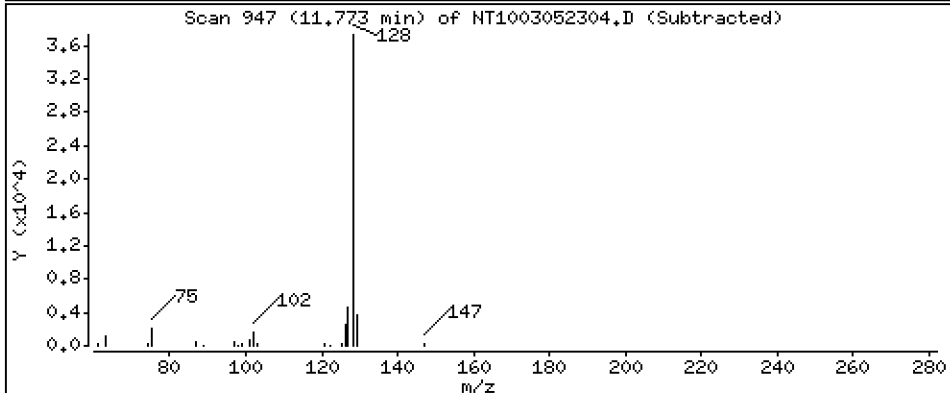
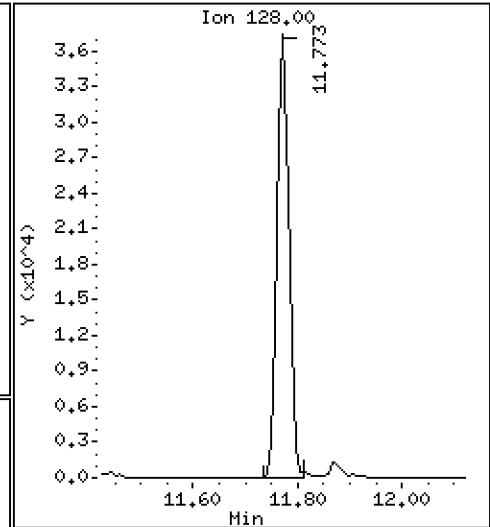
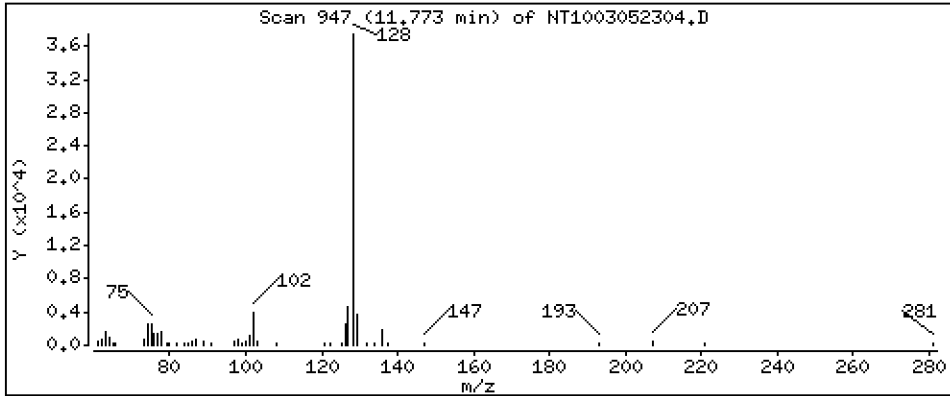
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2050 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

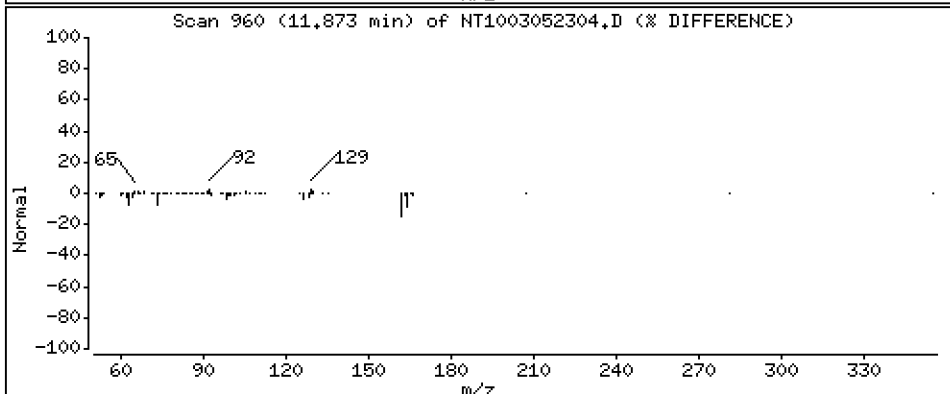
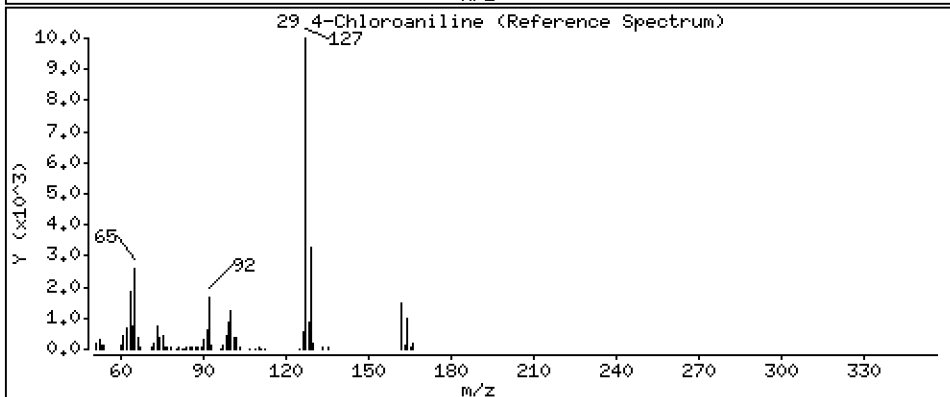
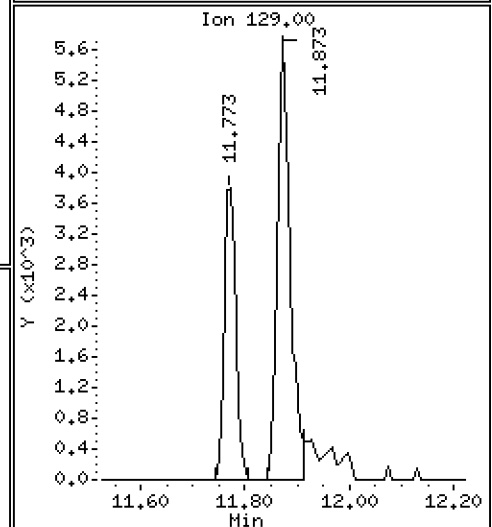
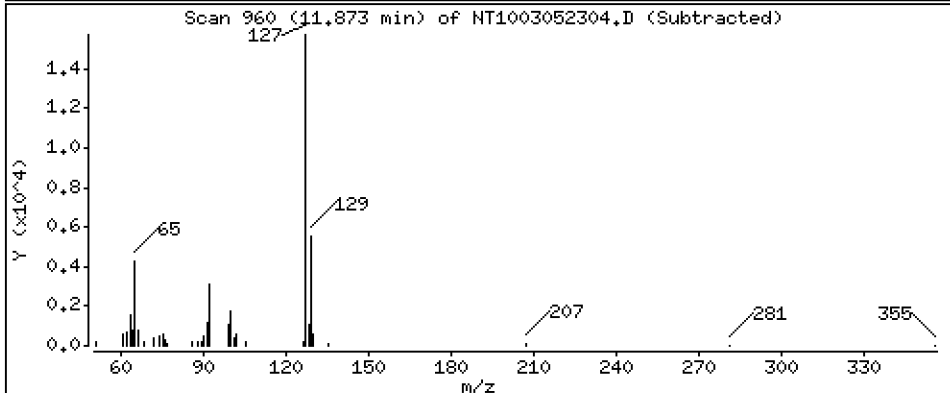
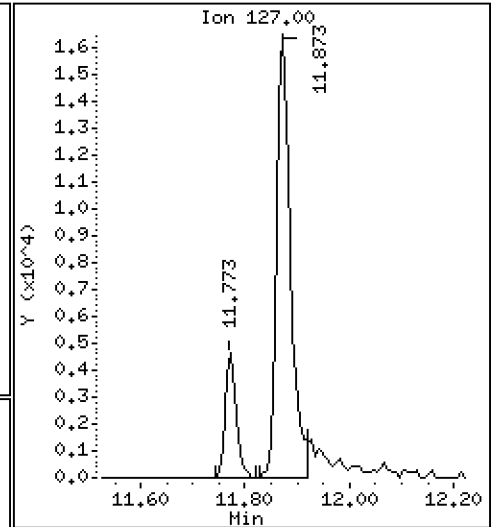
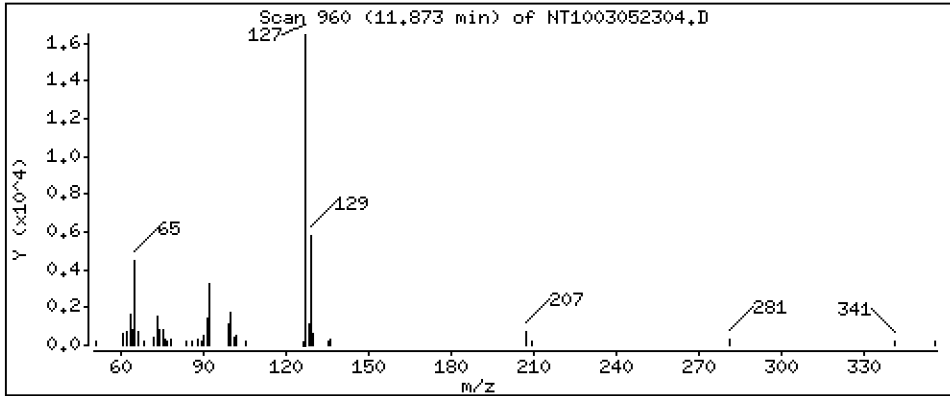
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,2422 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

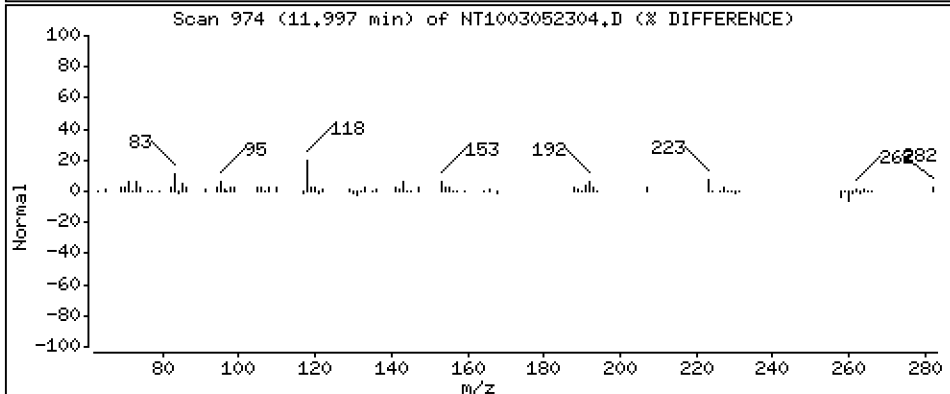
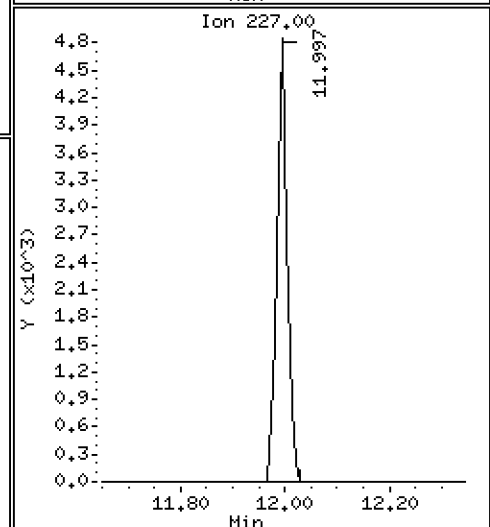
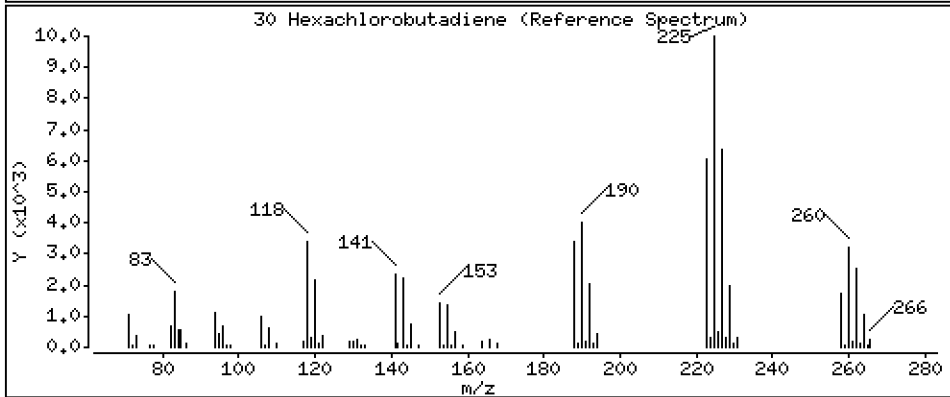
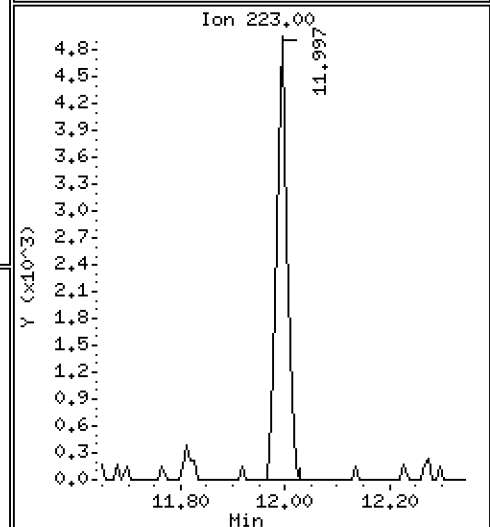
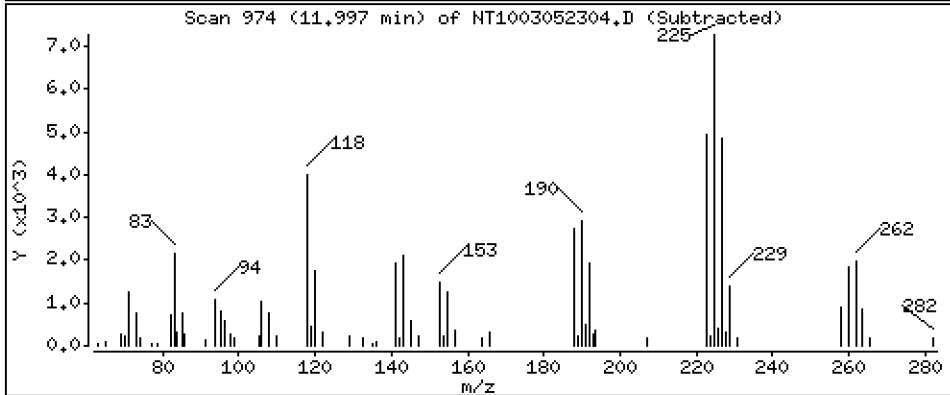
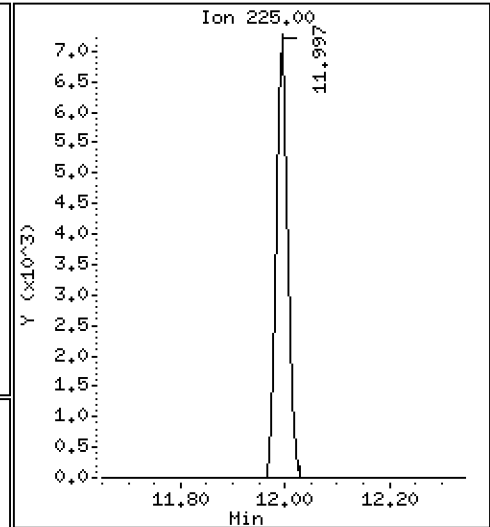
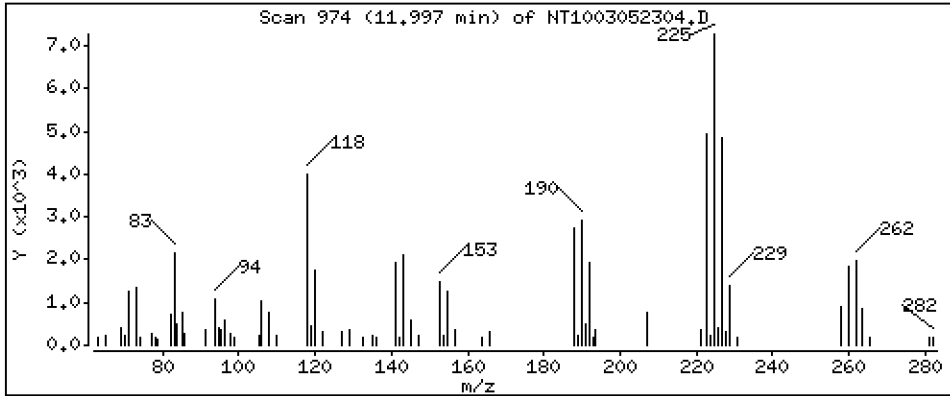
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1815 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

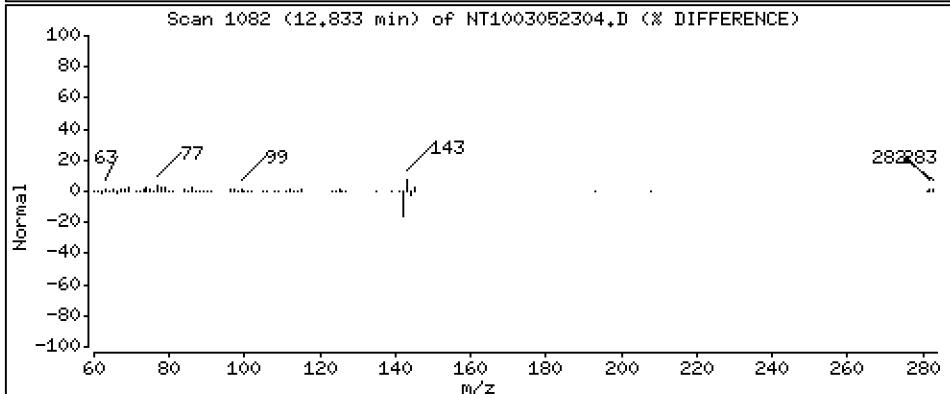
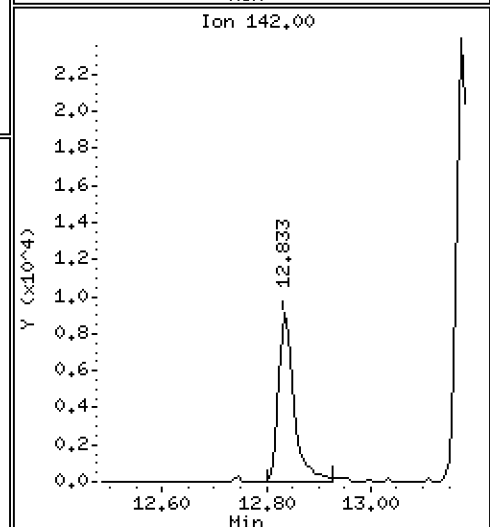
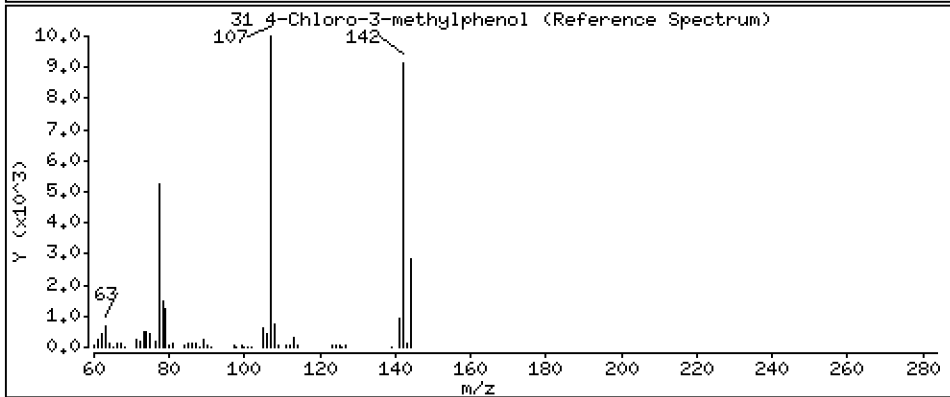
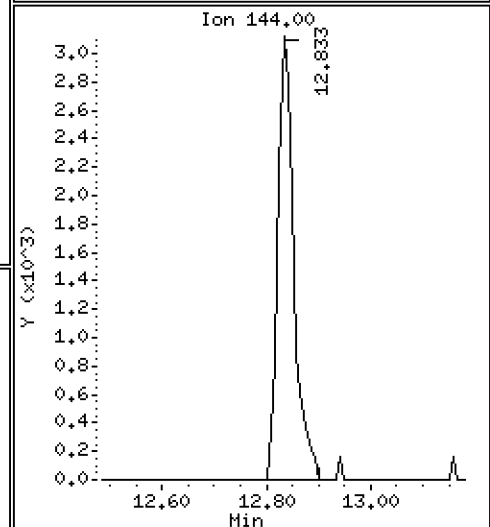
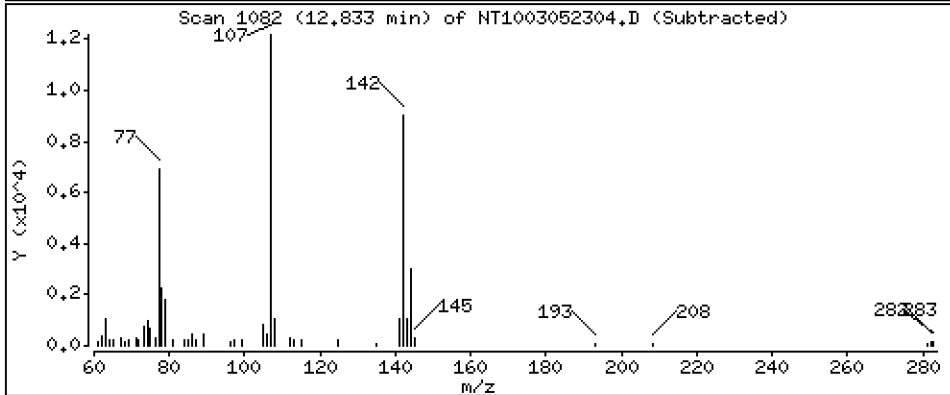
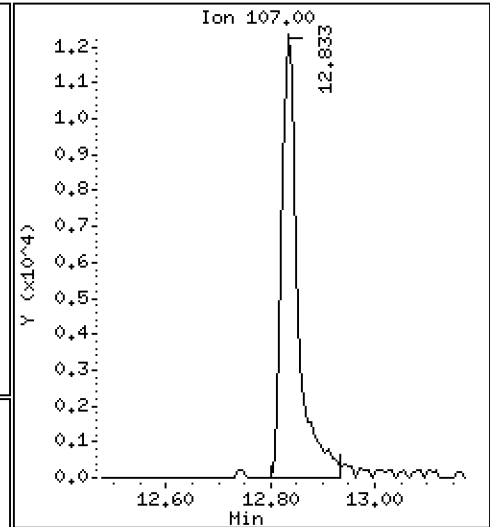
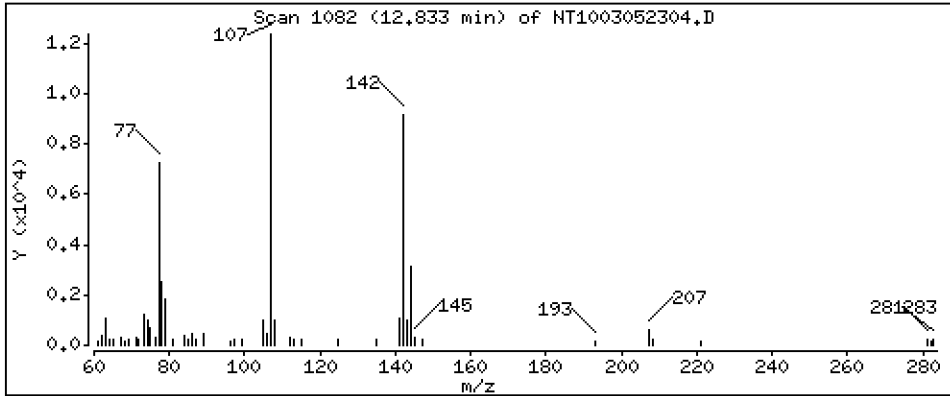
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 0,2973 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

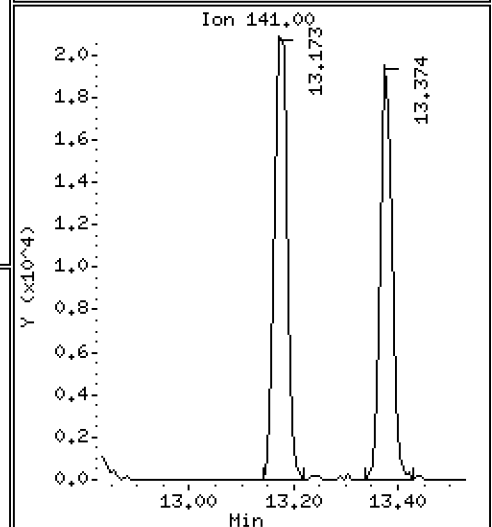
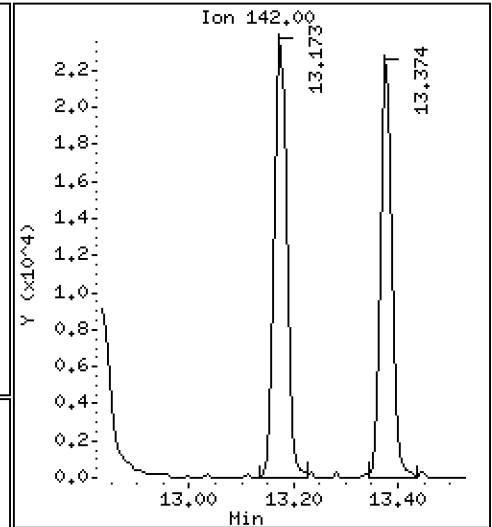
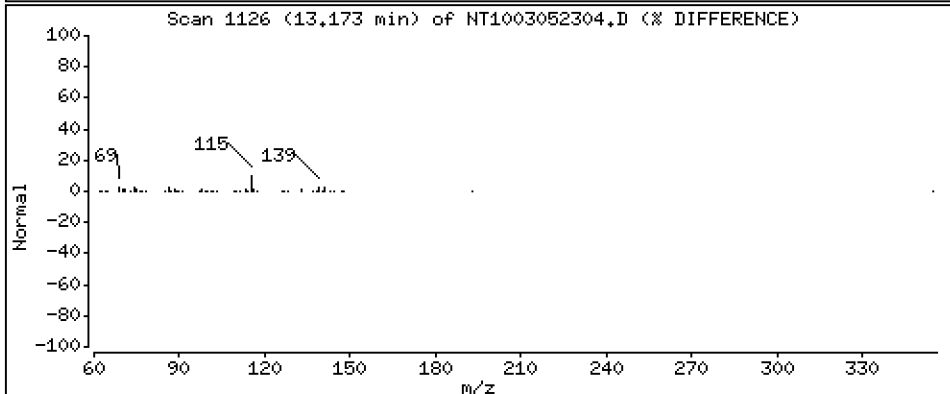
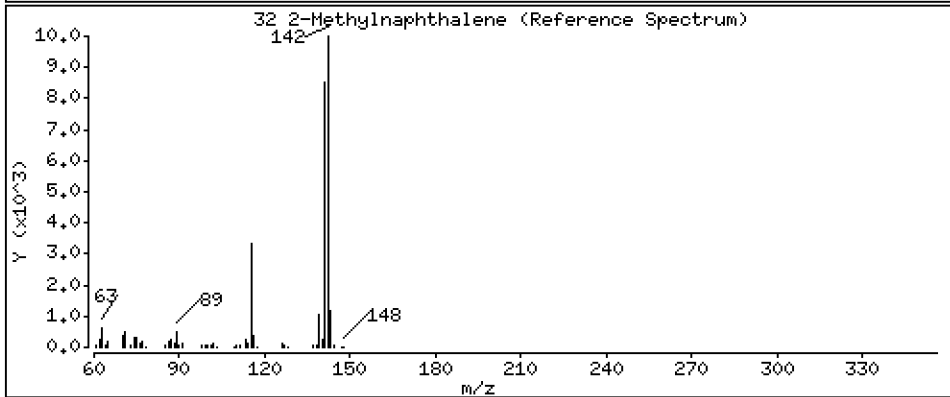
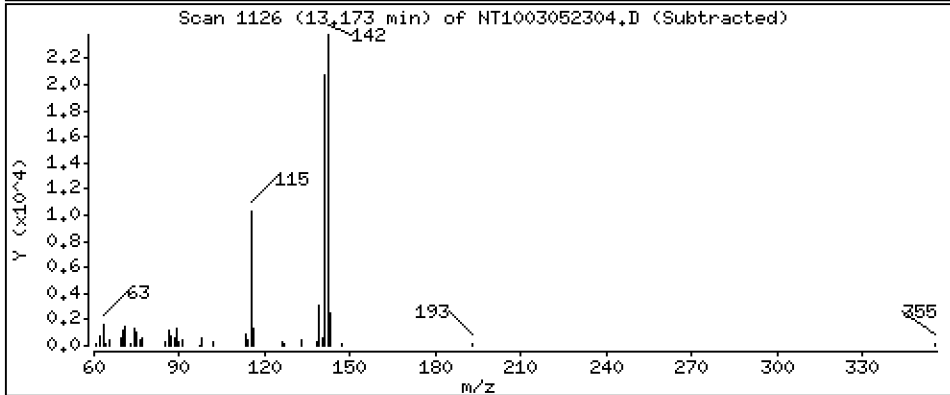
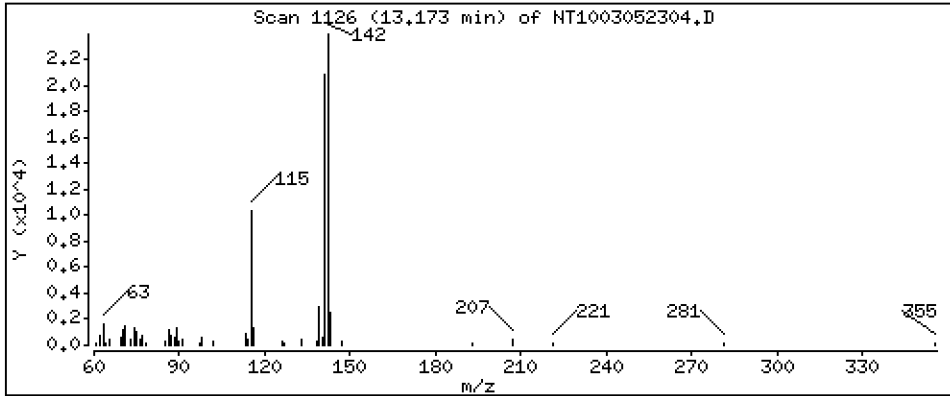
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1944 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

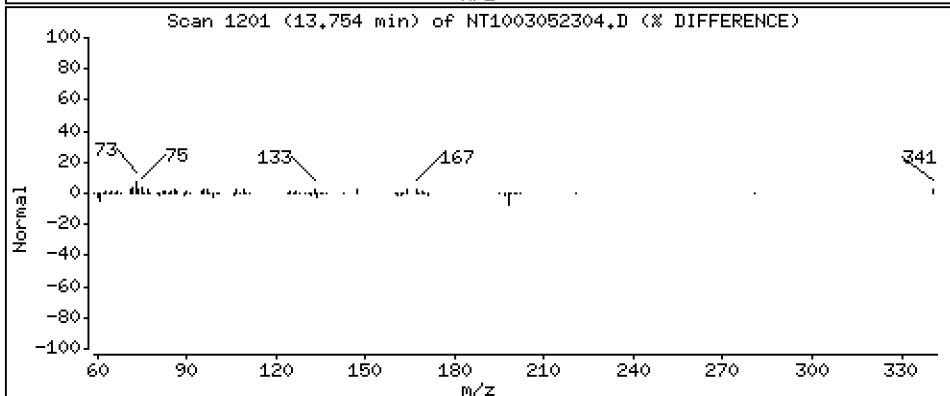
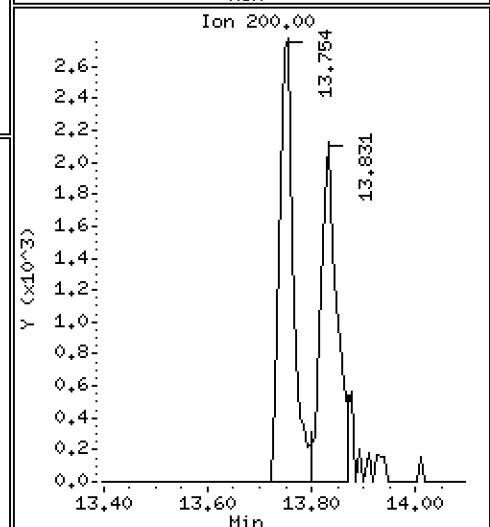
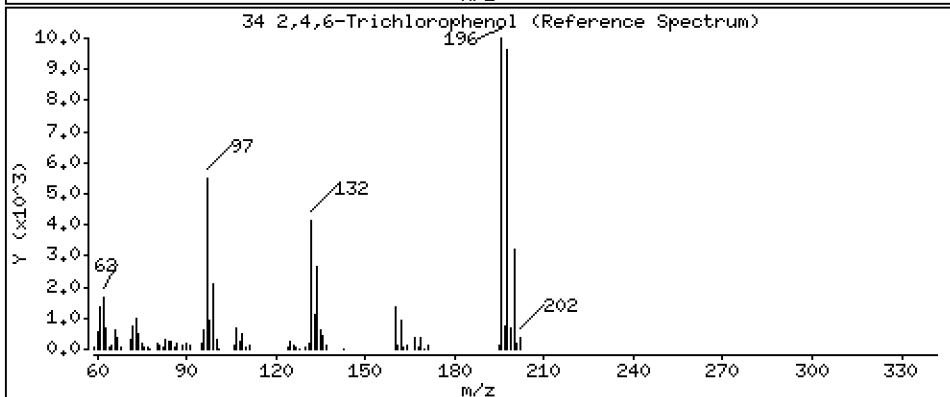
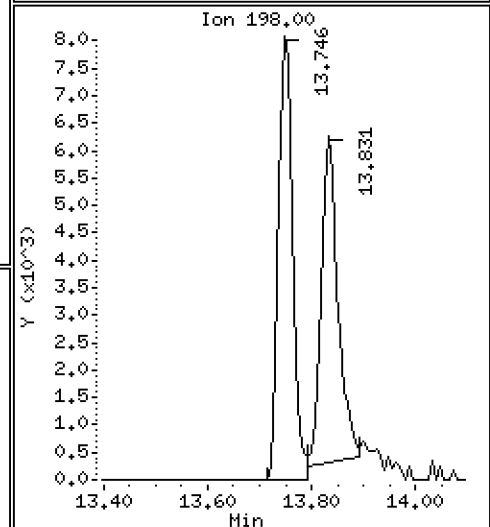
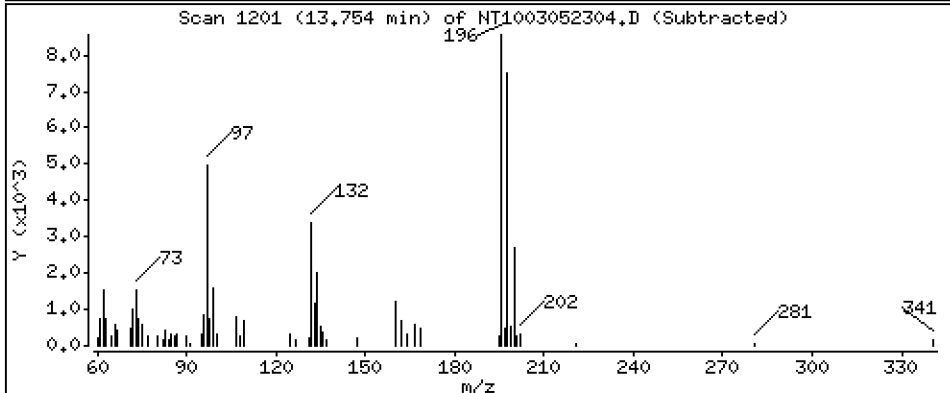
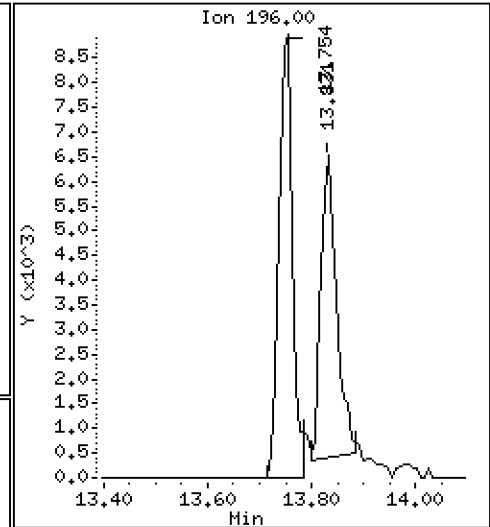
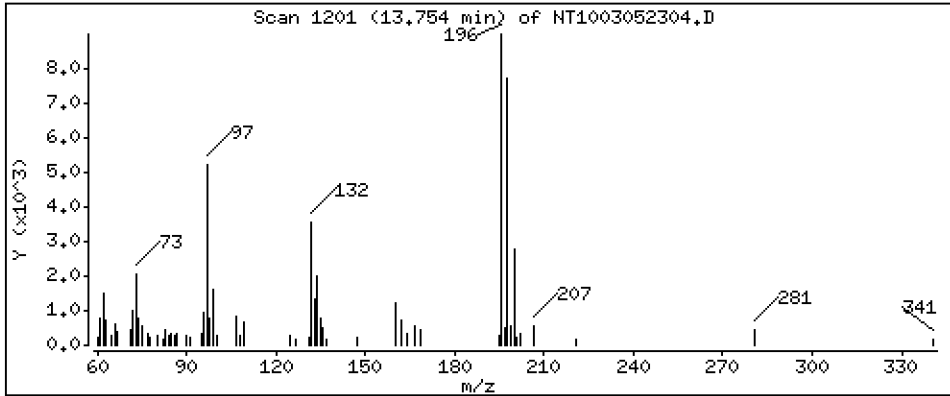
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,3094 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

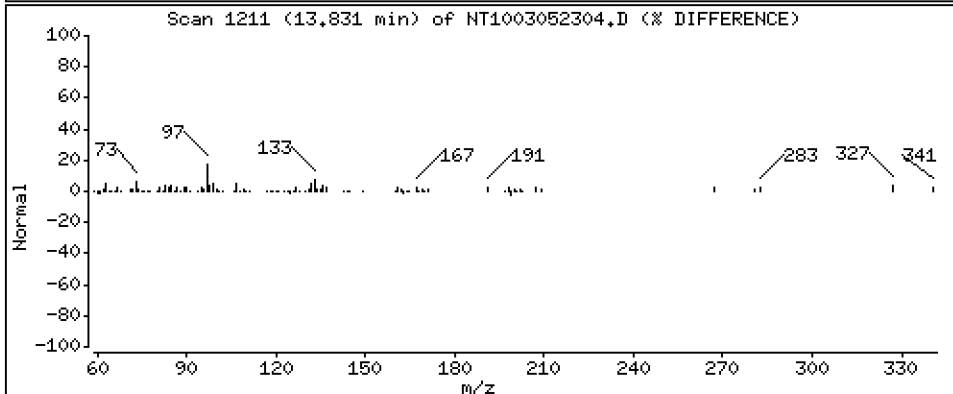
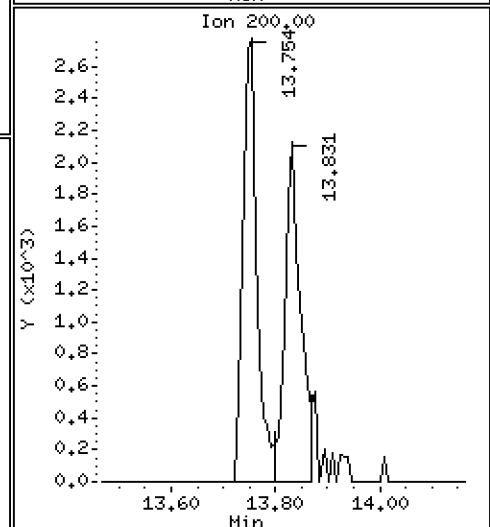
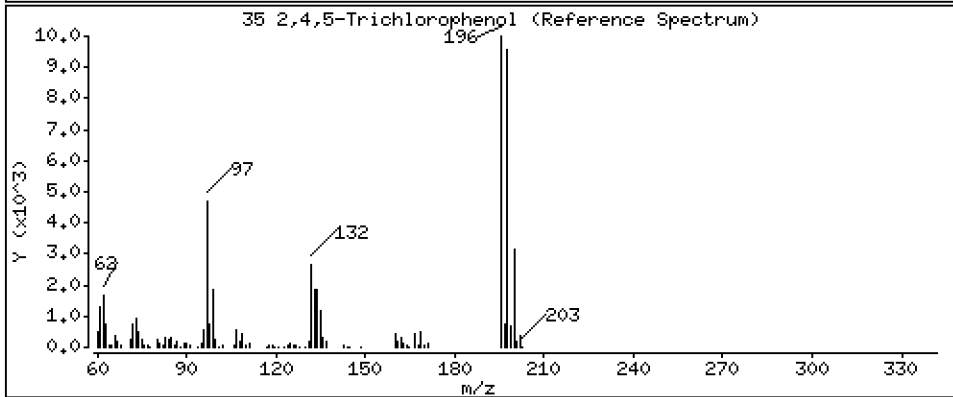
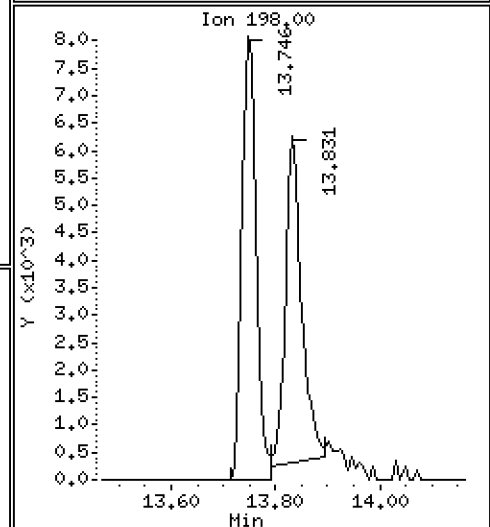
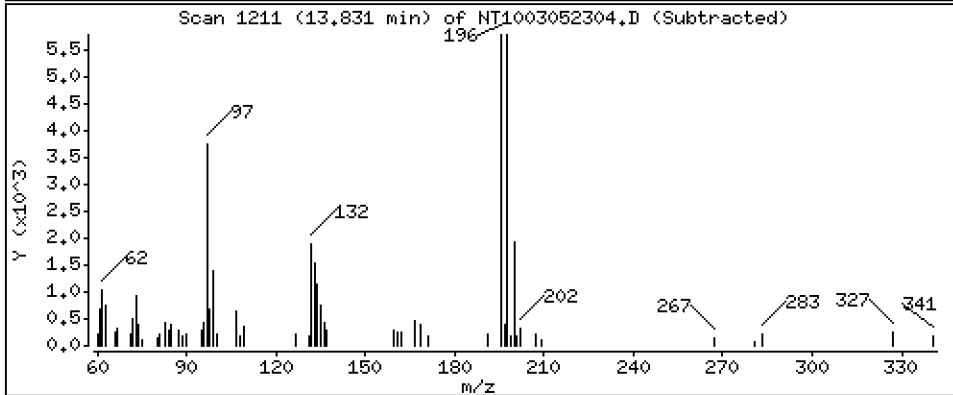
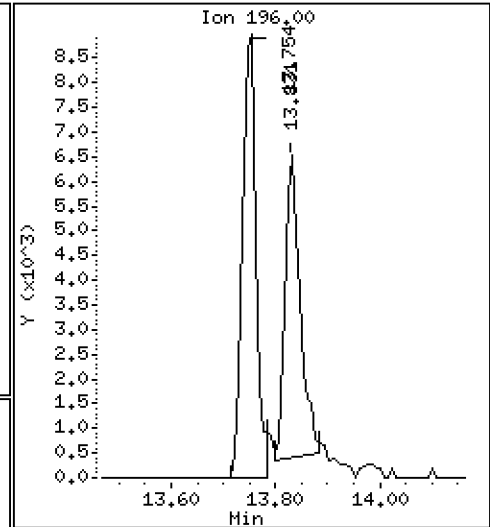
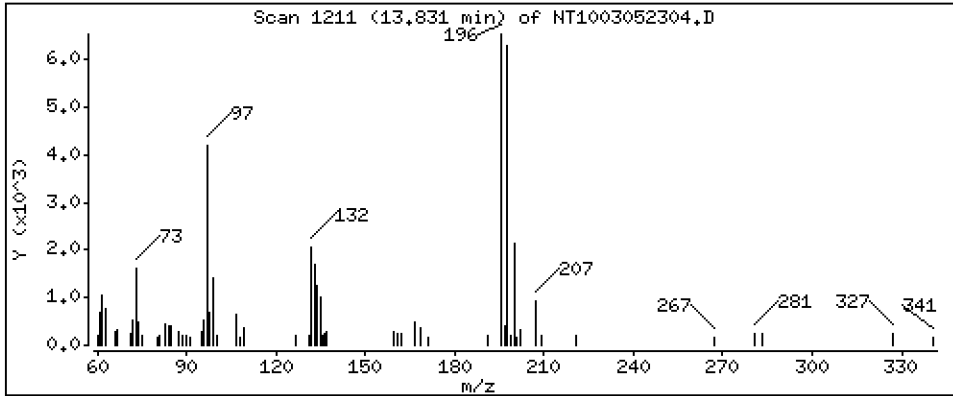
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2335 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

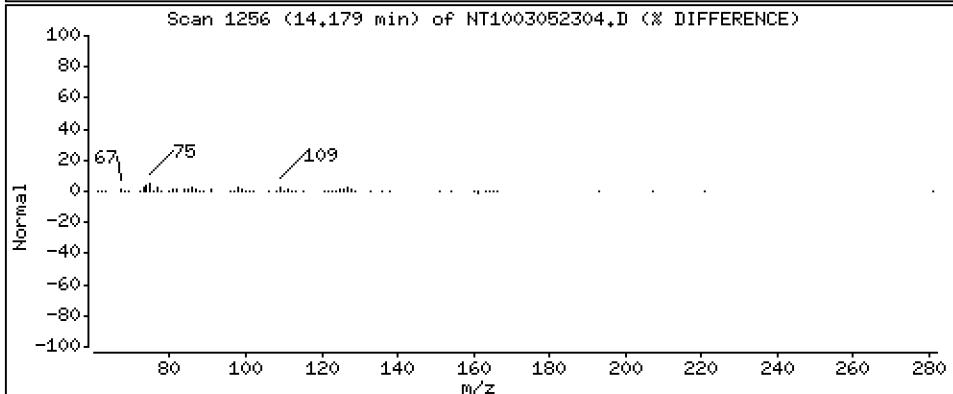
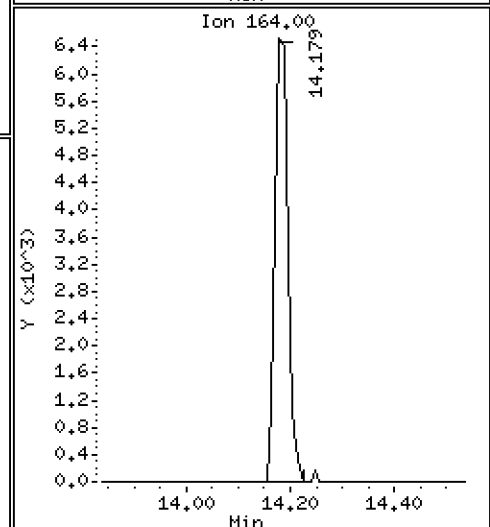
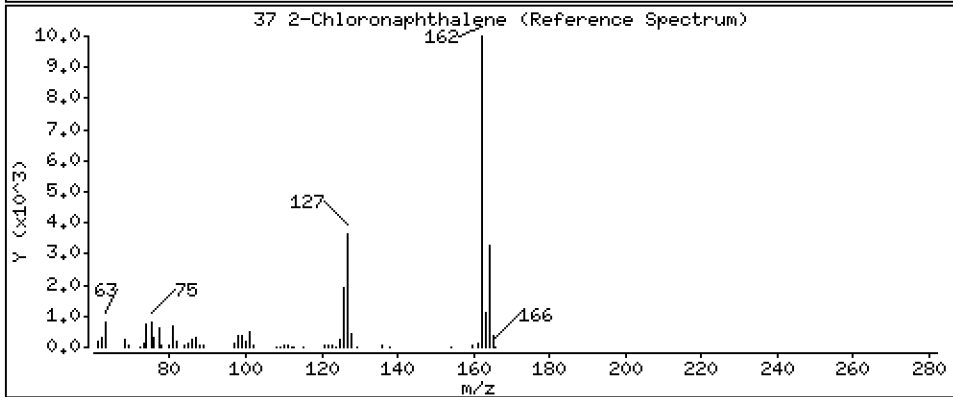
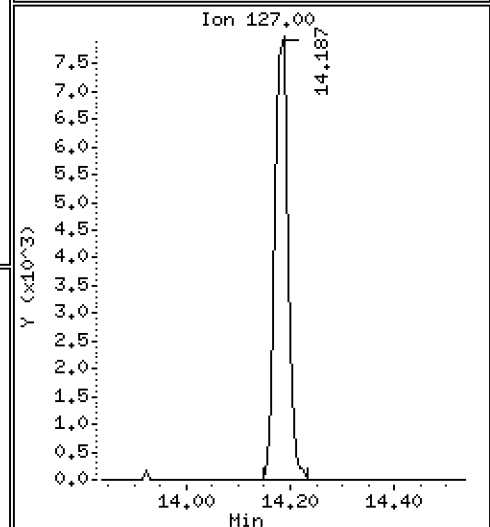
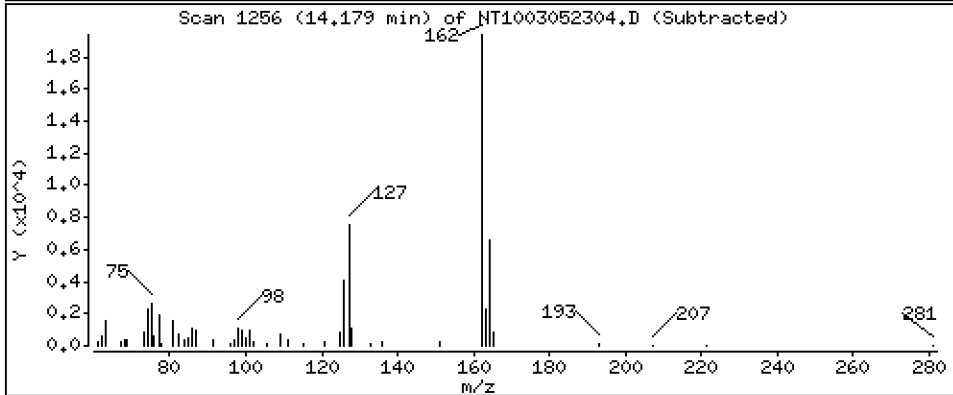
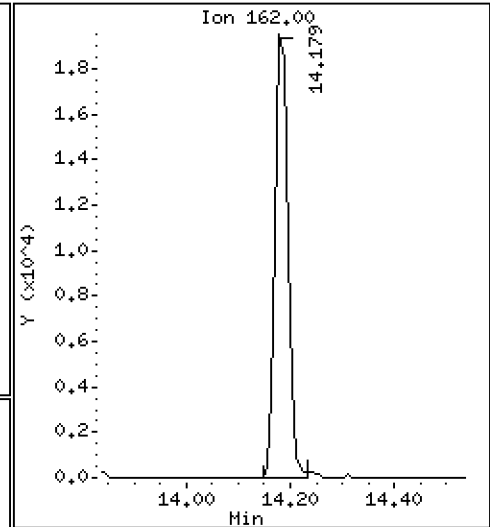
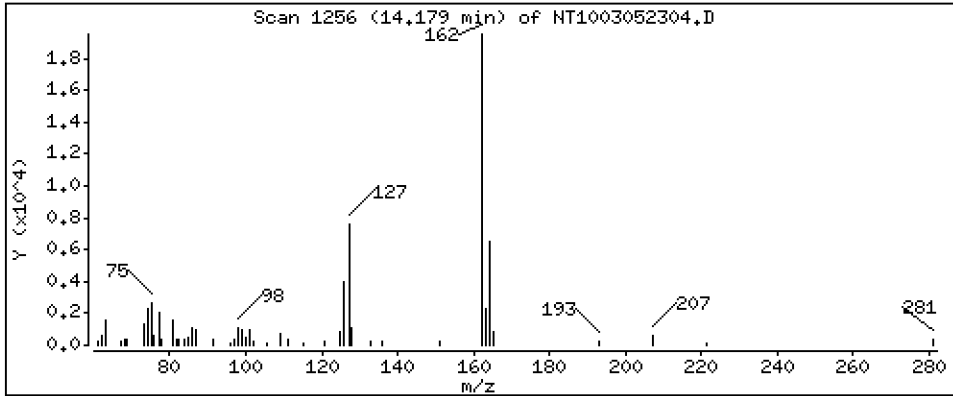
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2133 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

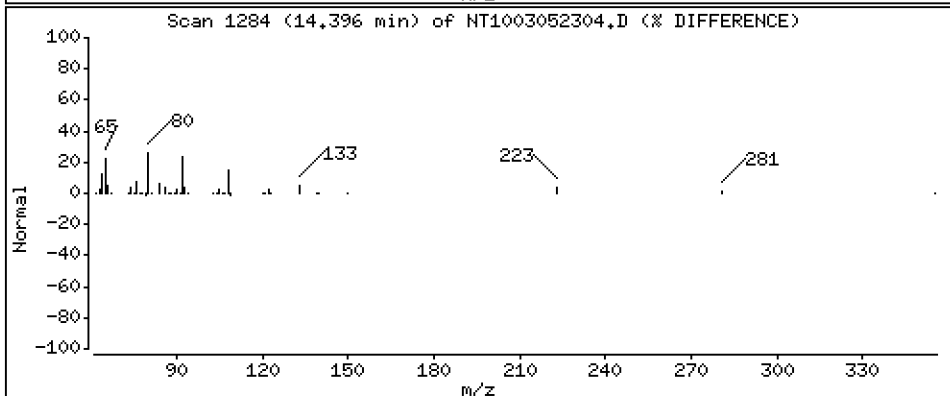
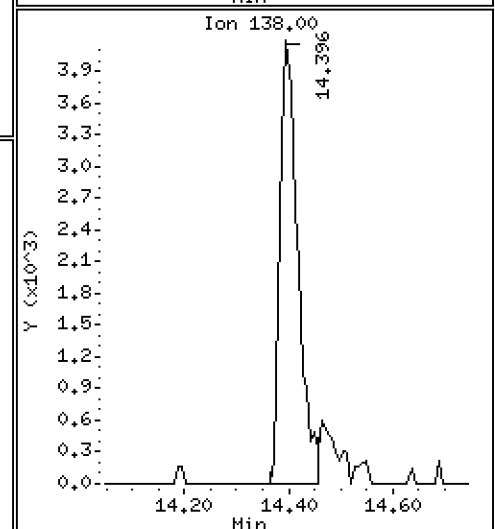
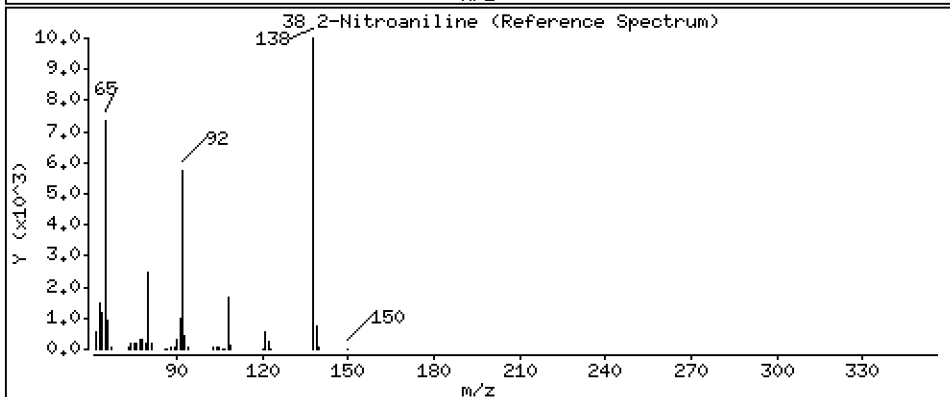
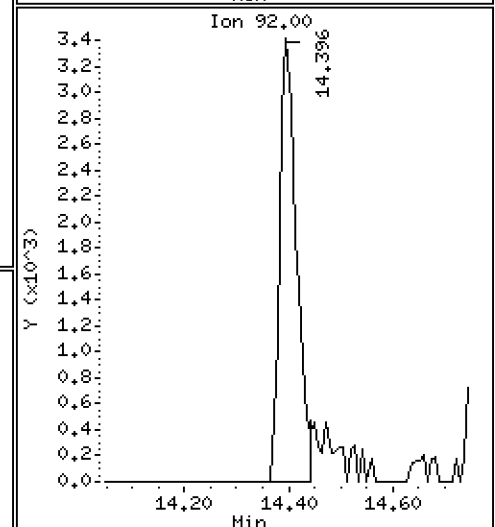
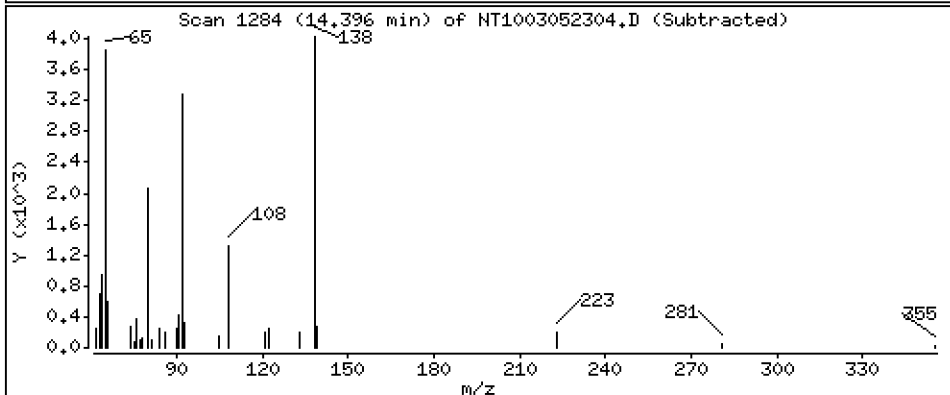
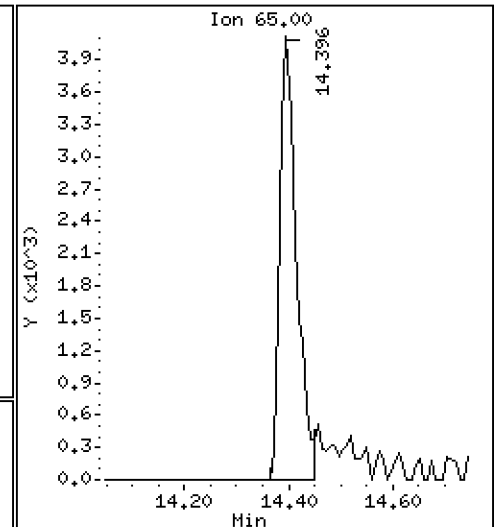
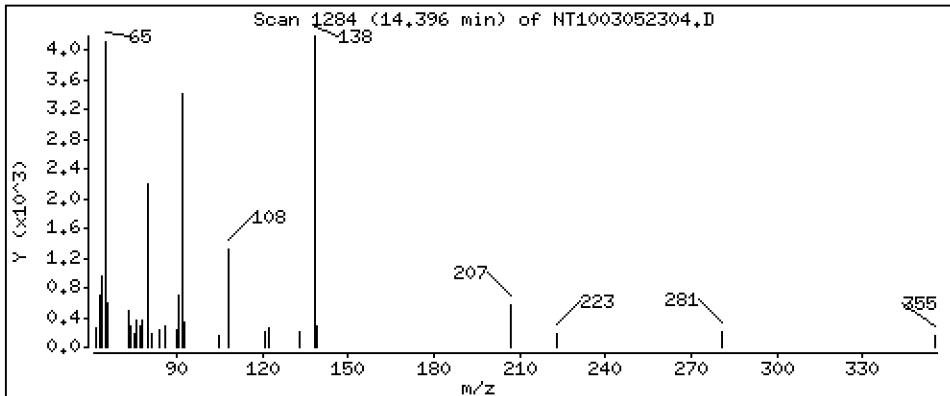
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2160 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

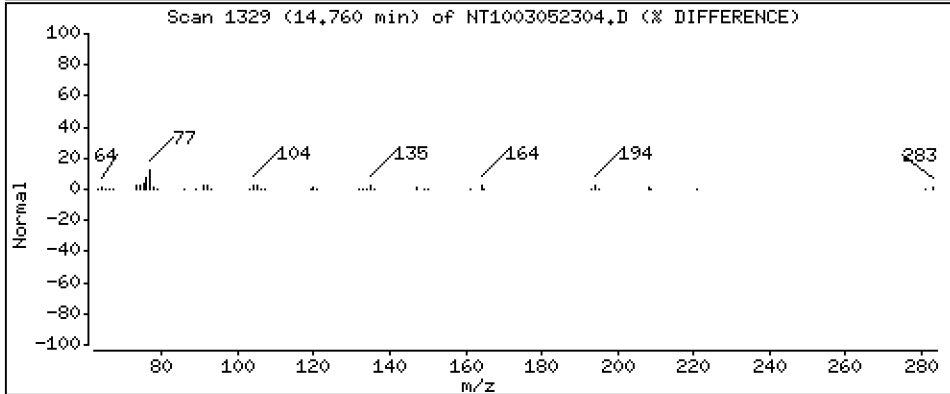
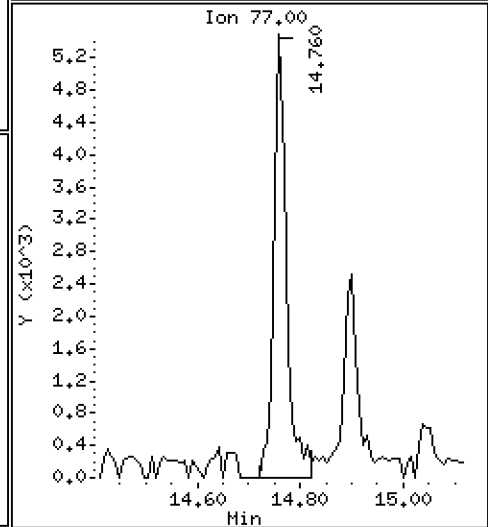
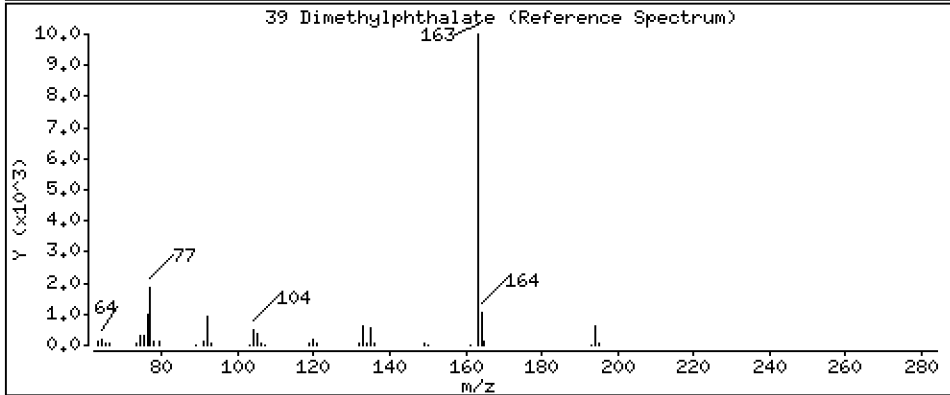
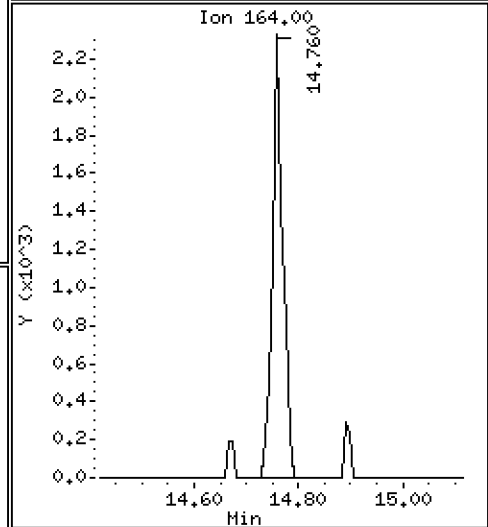
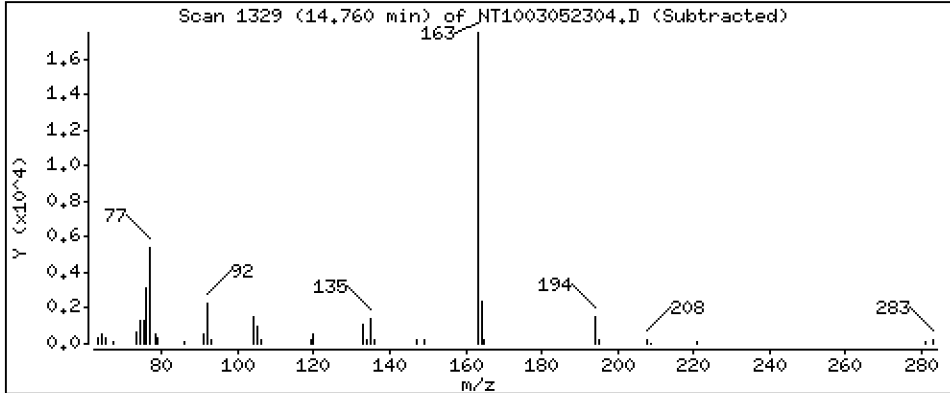
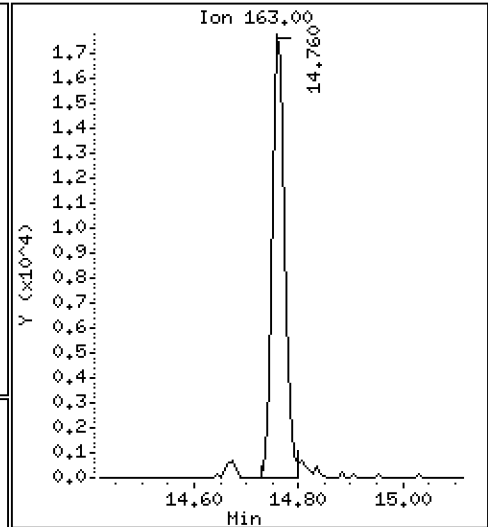
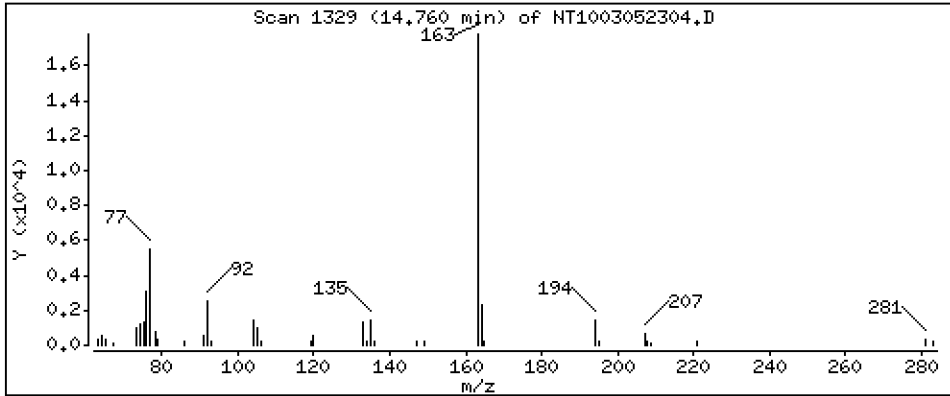
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1663 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

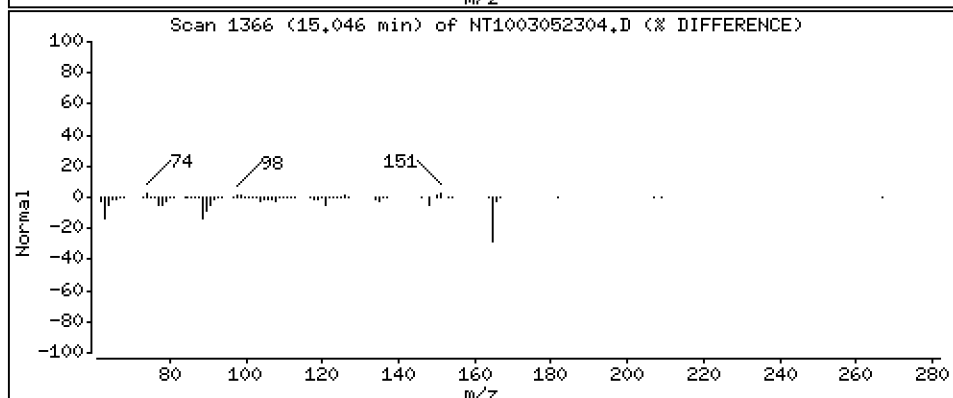
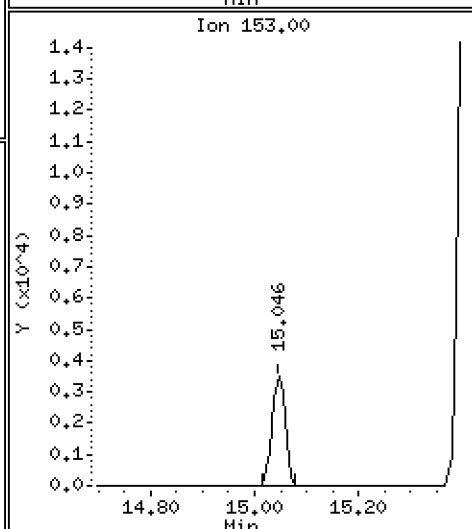
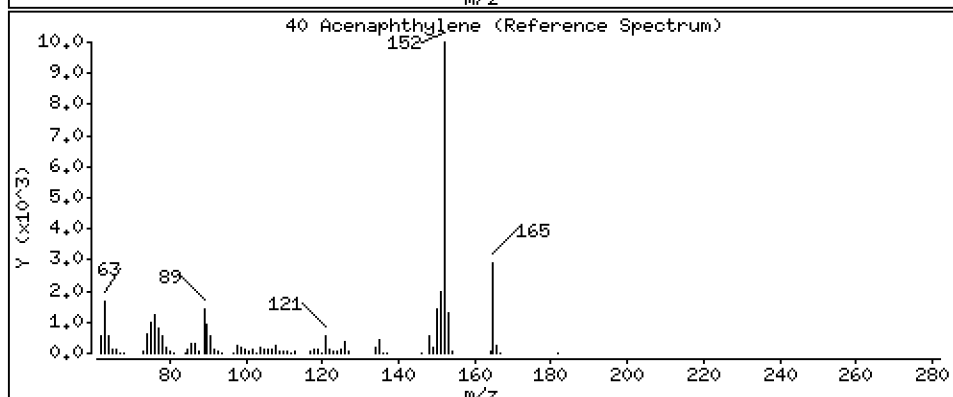
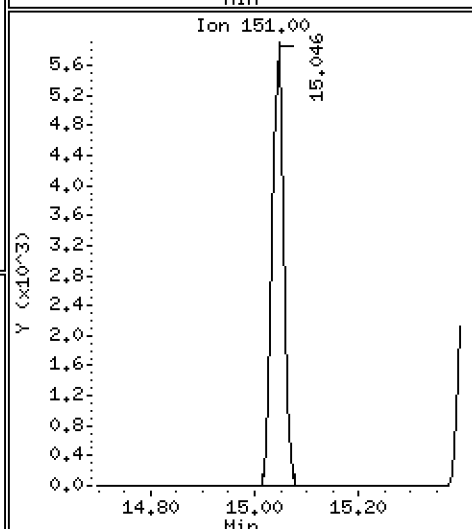
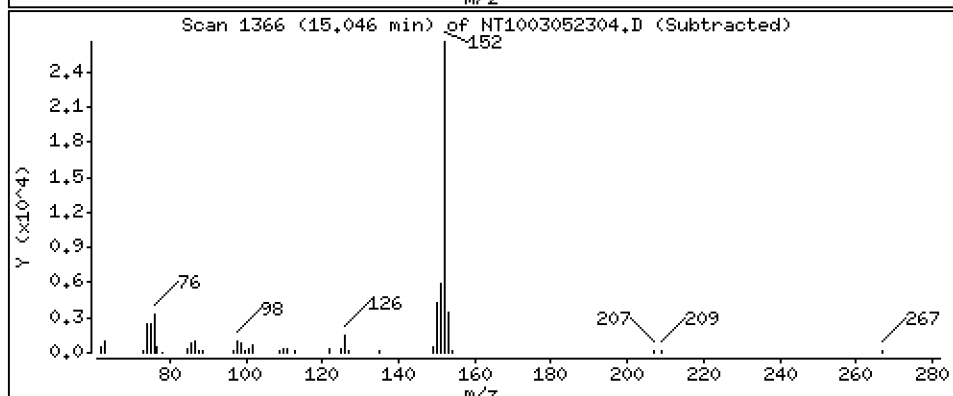
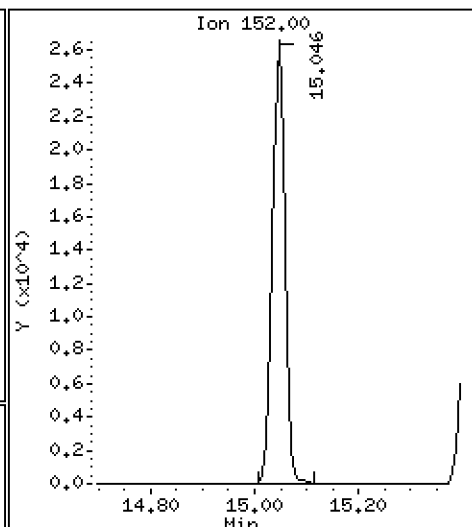
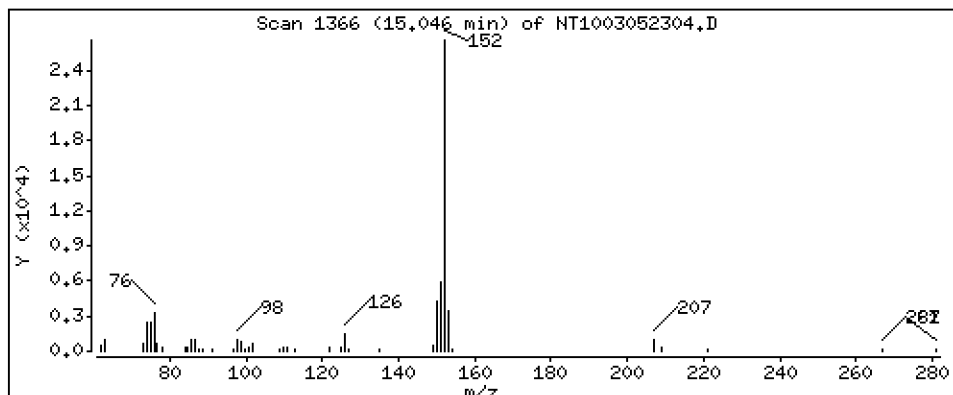
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1880 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

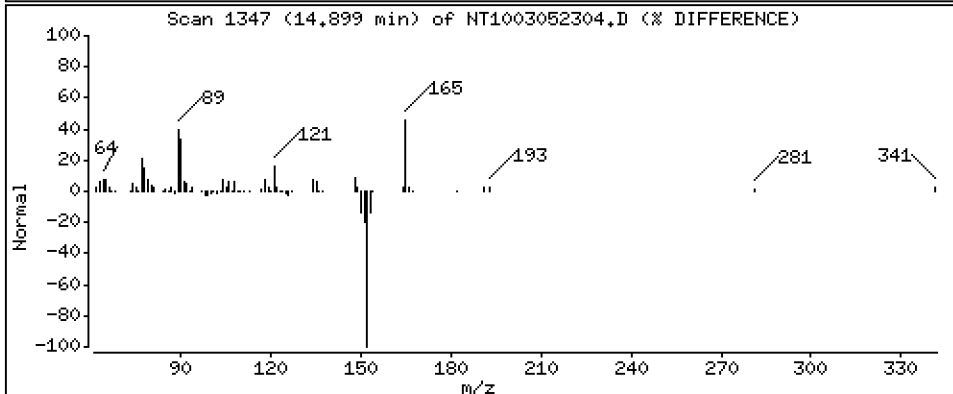
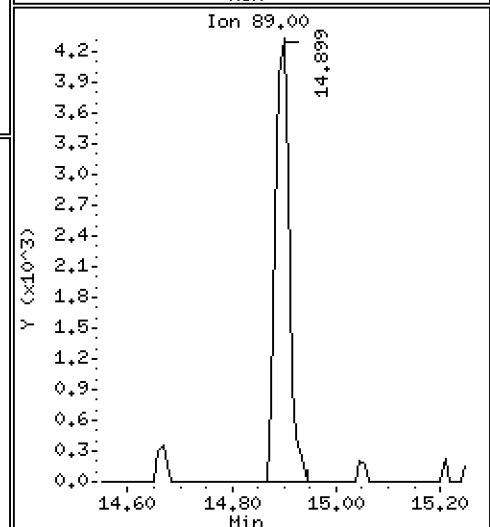
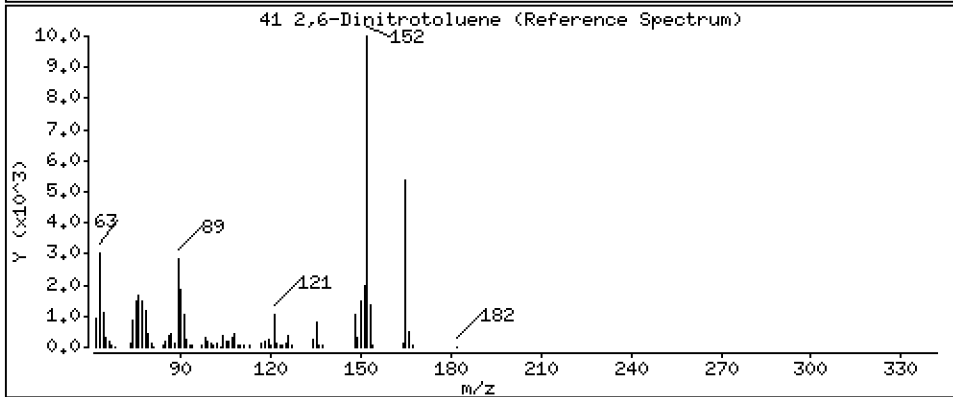
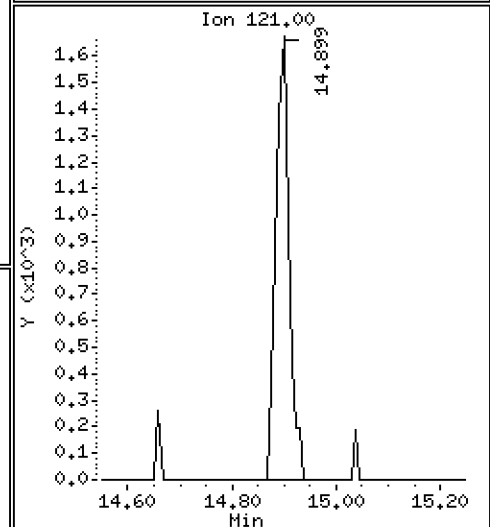
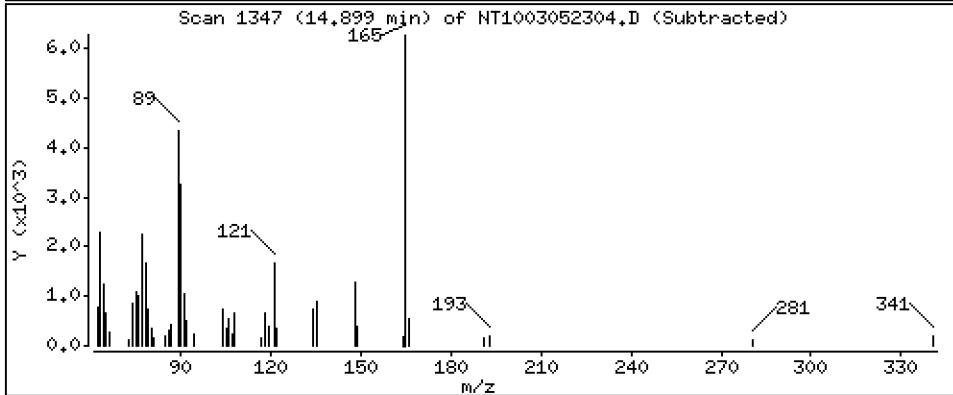
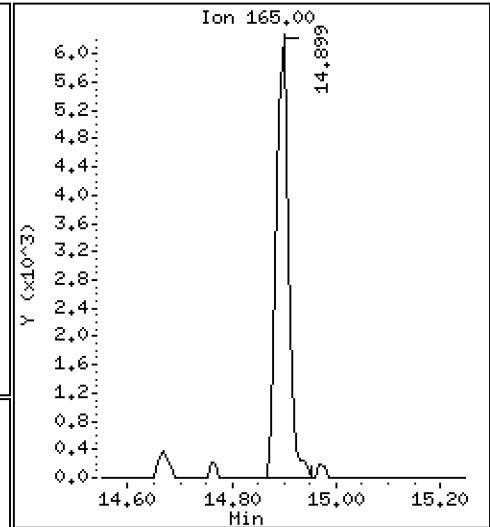
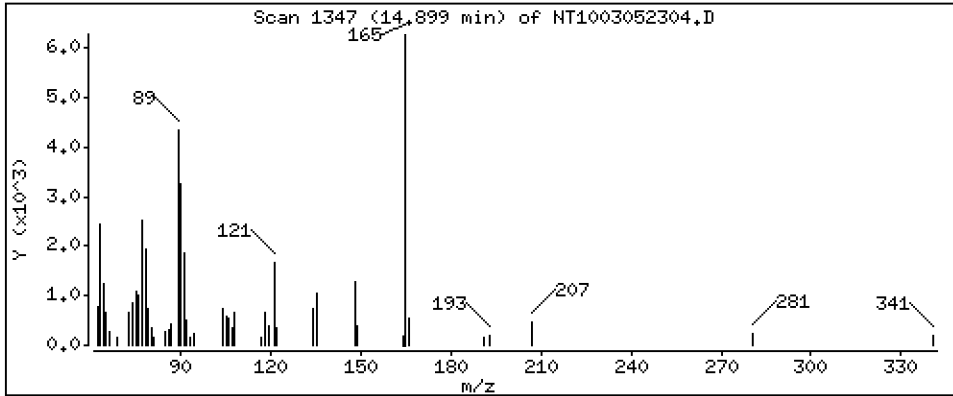
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 0.2545 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

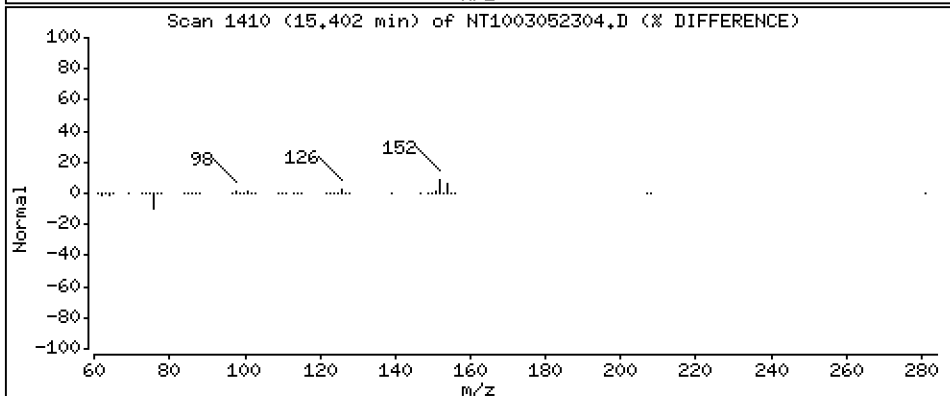
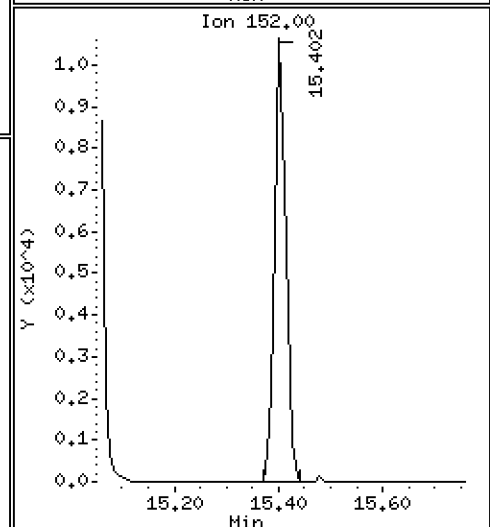
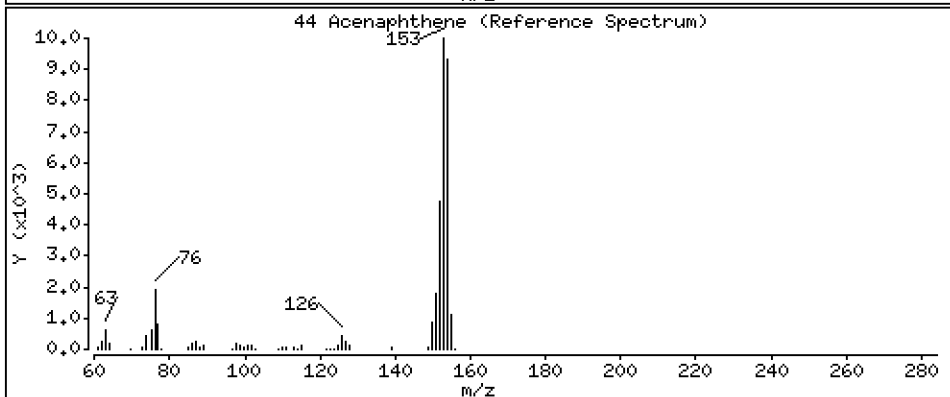
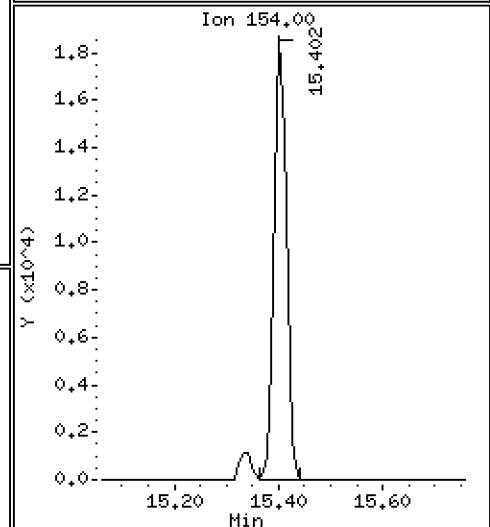
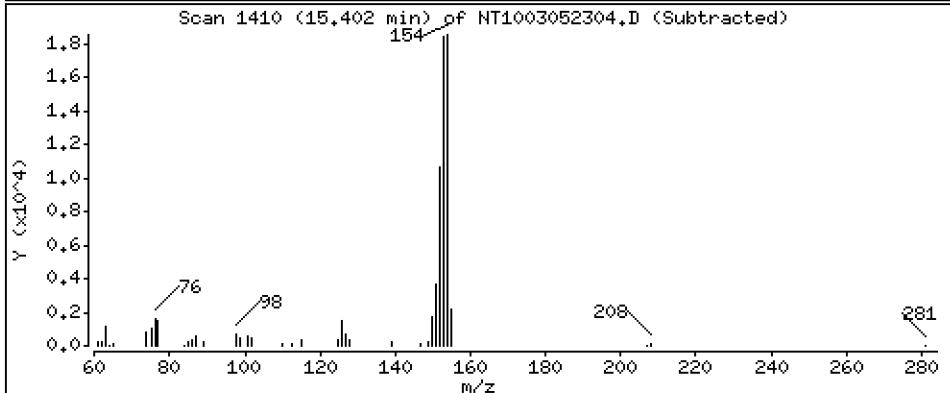
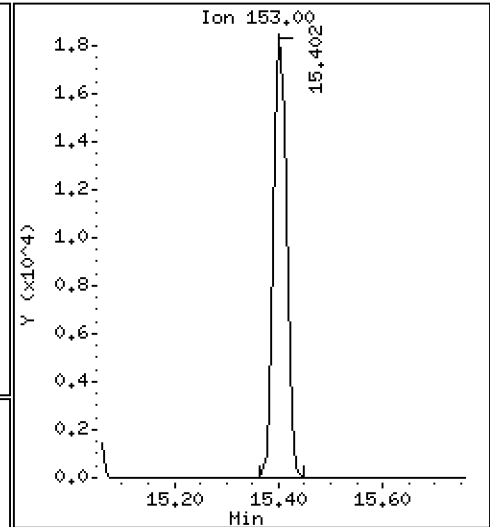
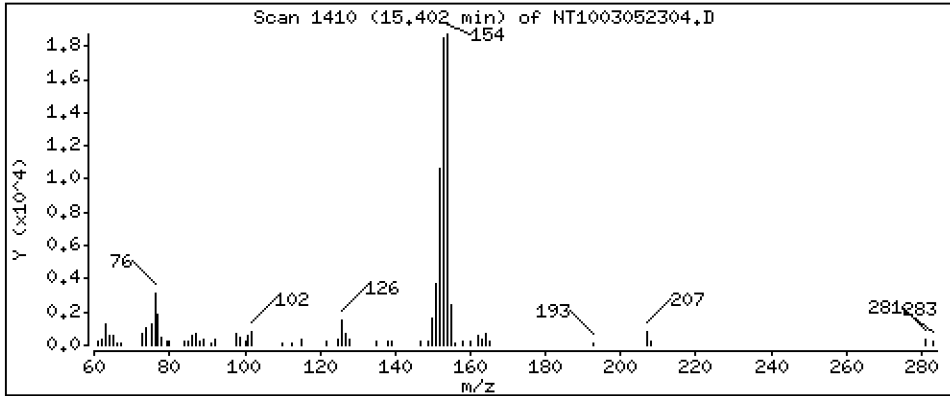
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 0,1966 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

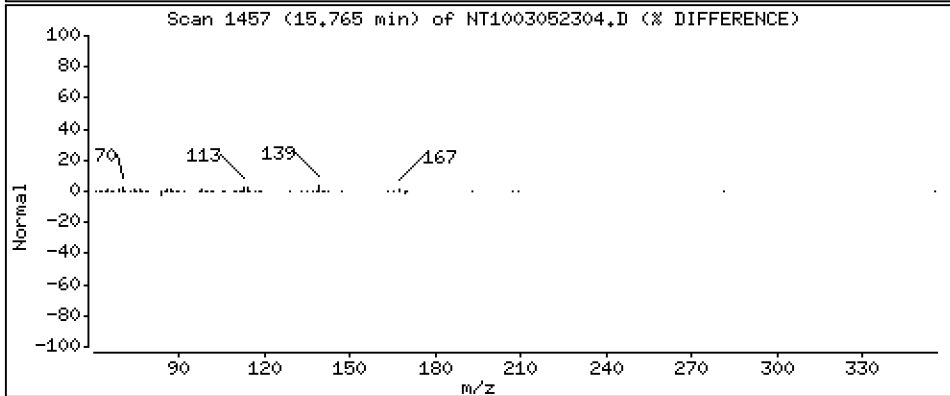
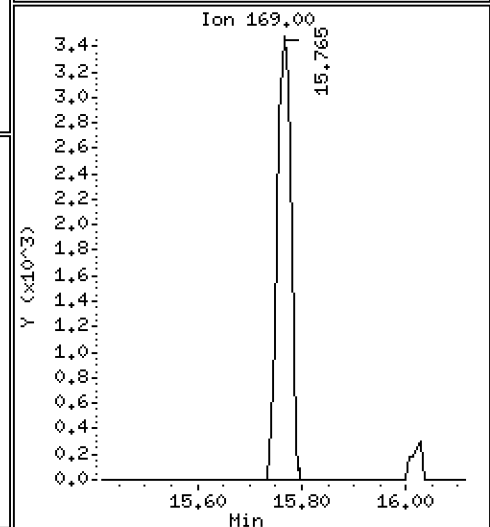
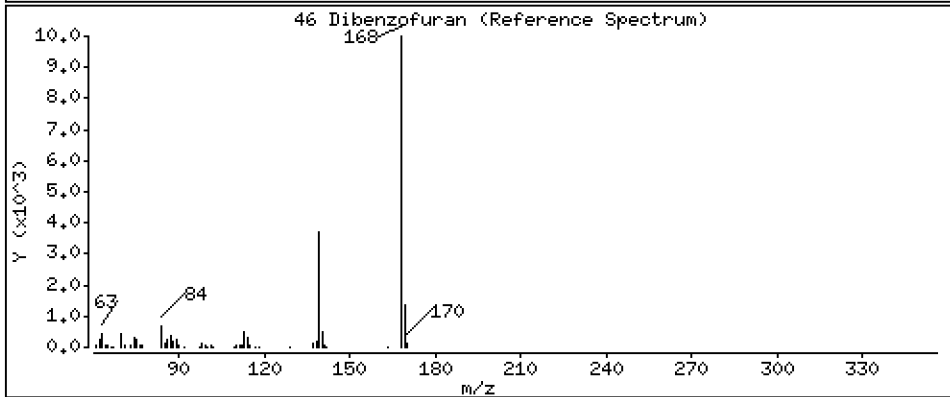
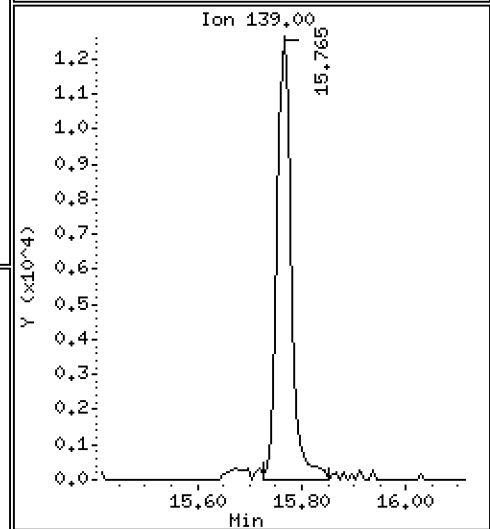
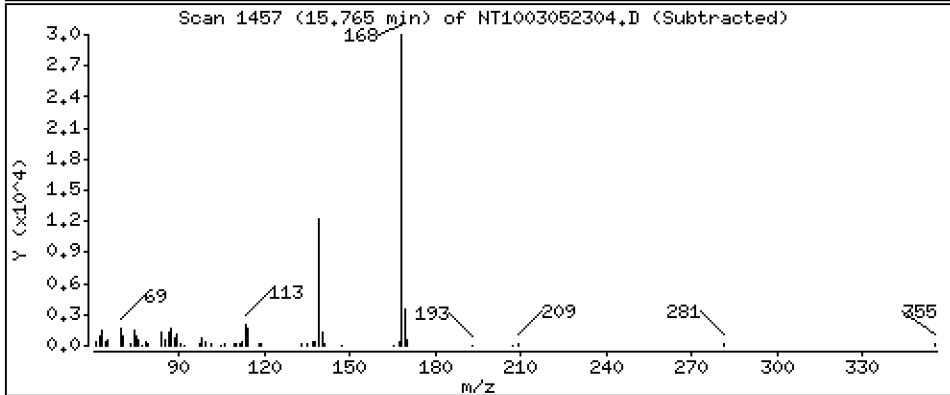
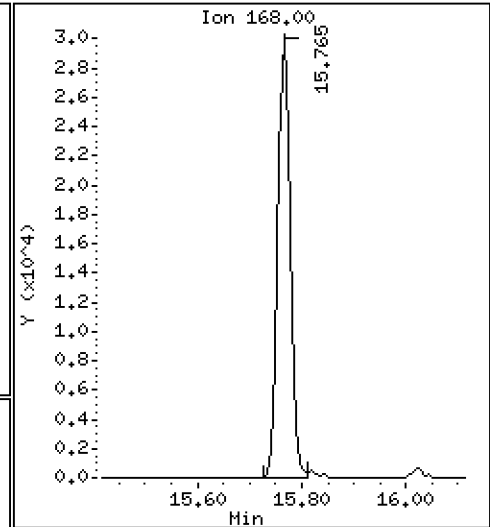
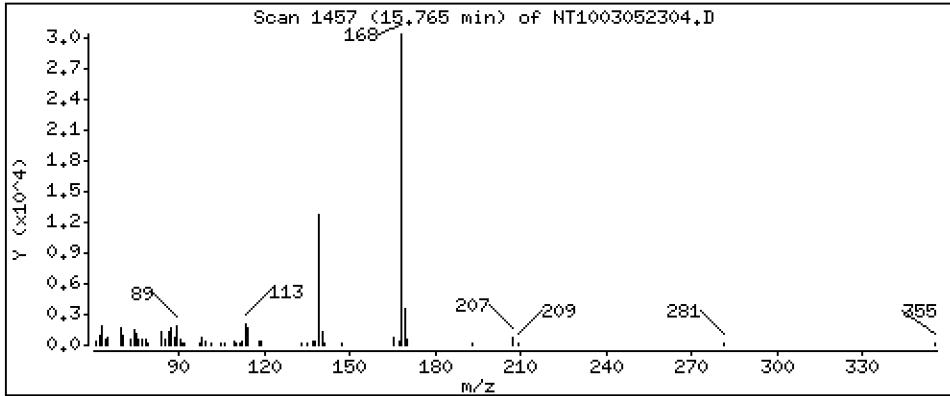
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2052 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

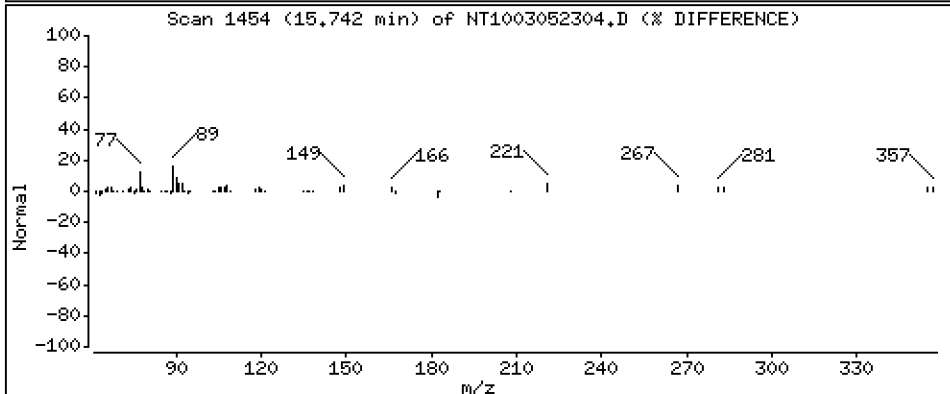
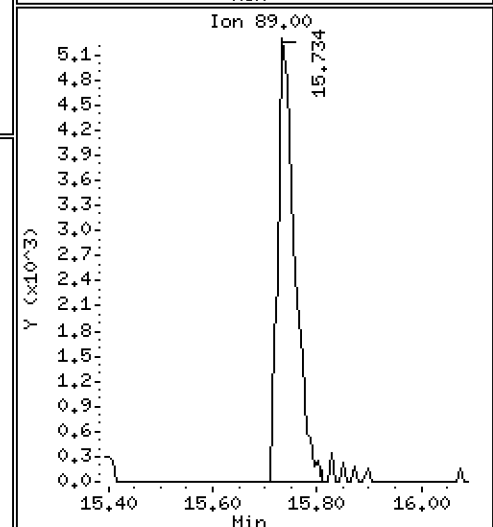
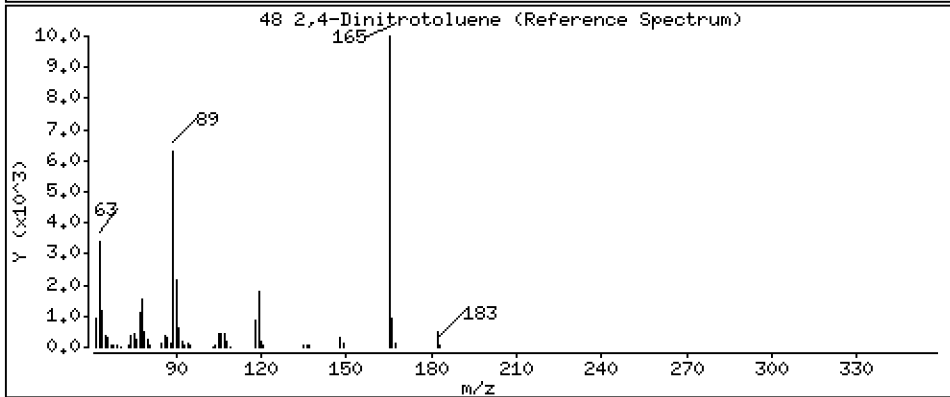
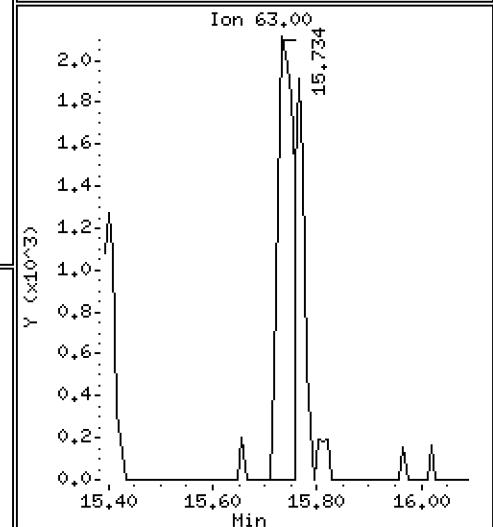
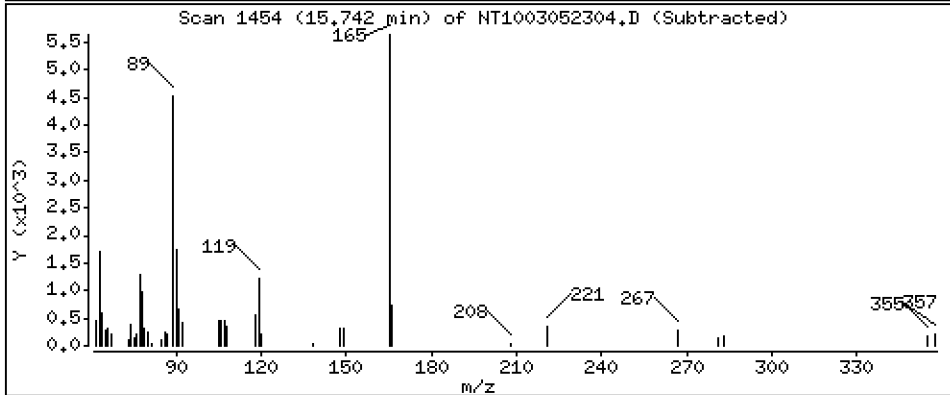
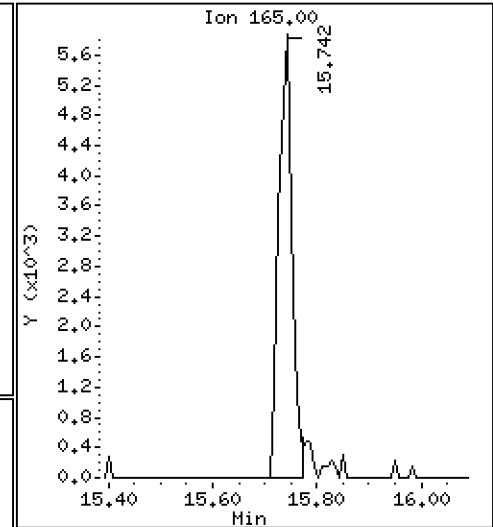
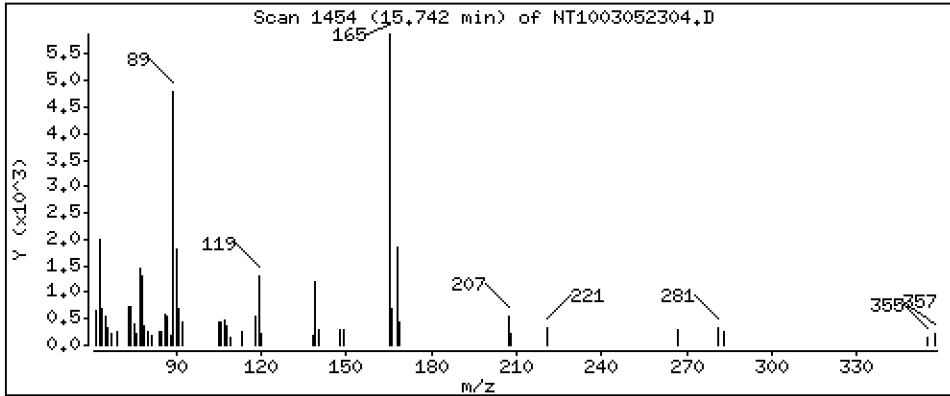
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,1793 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

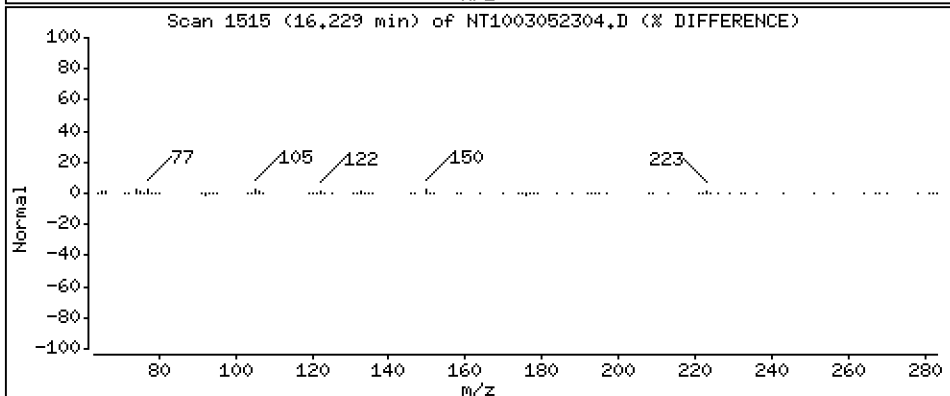
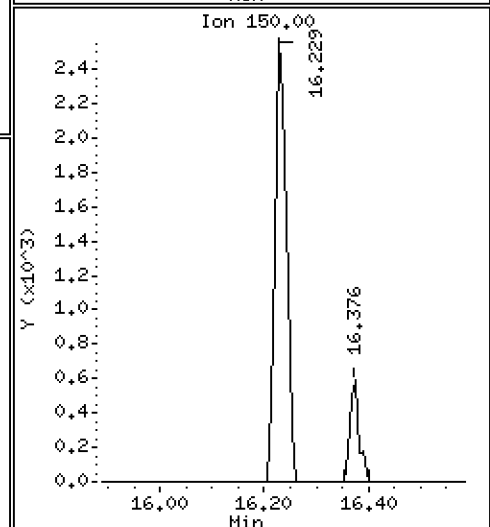
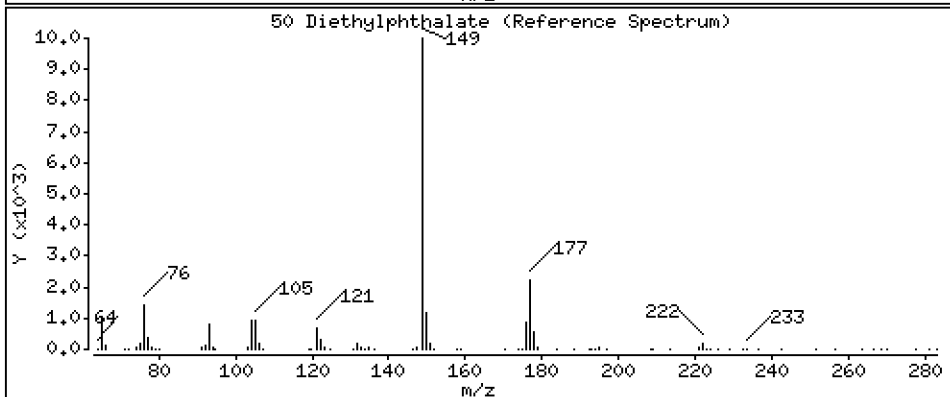
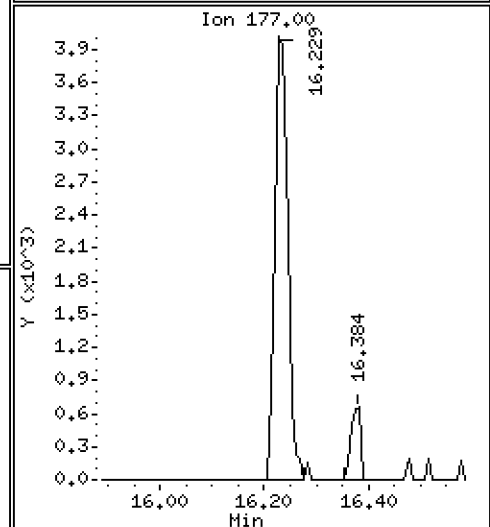
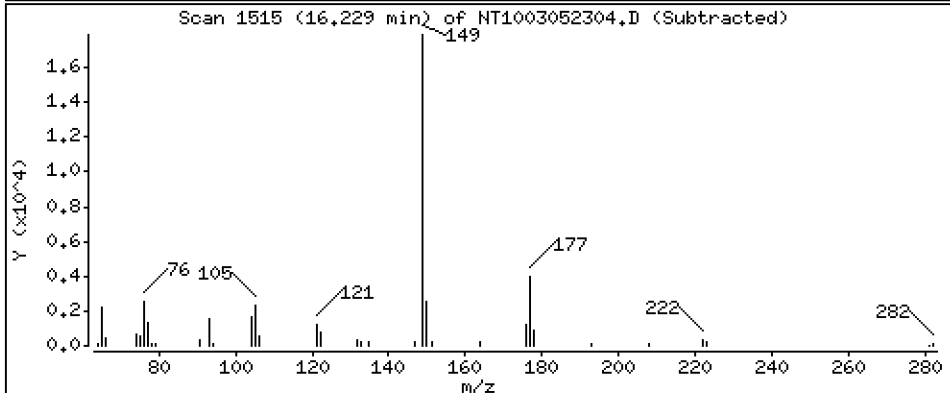
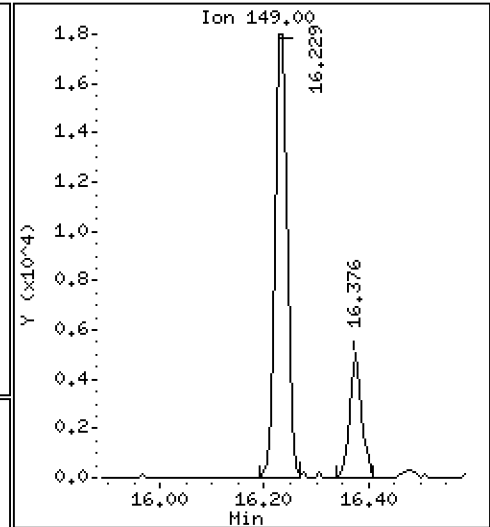
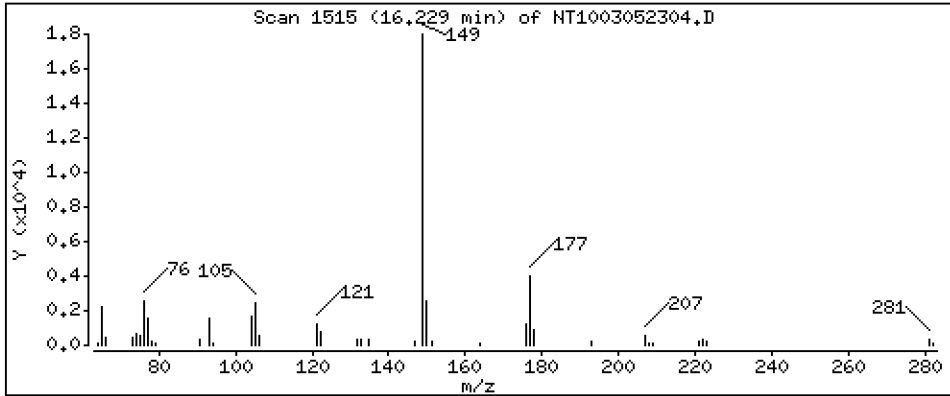
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1525 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

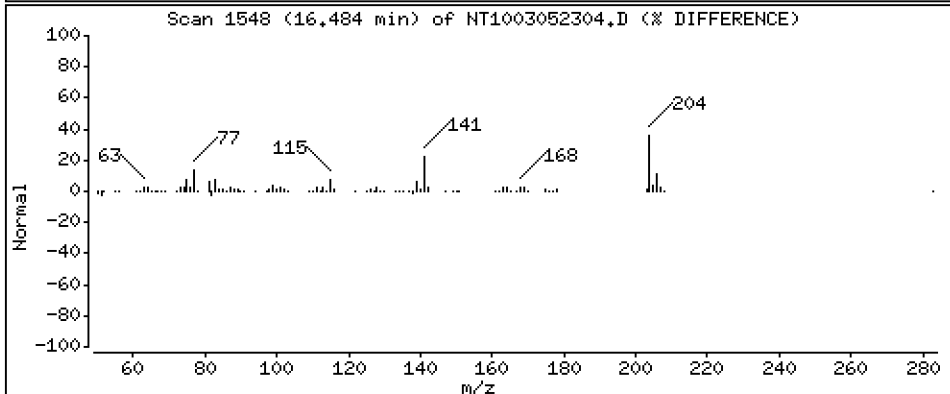
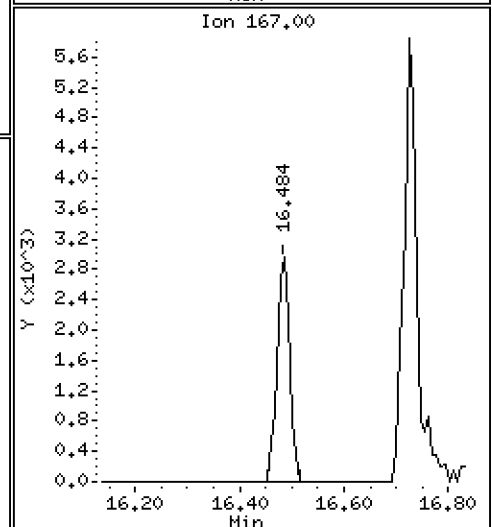
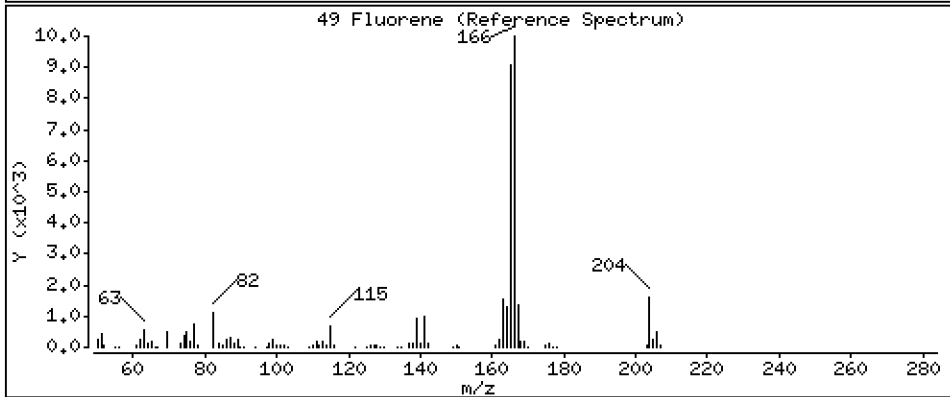
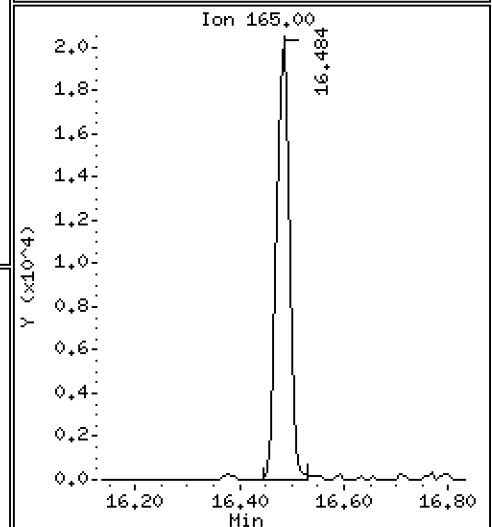
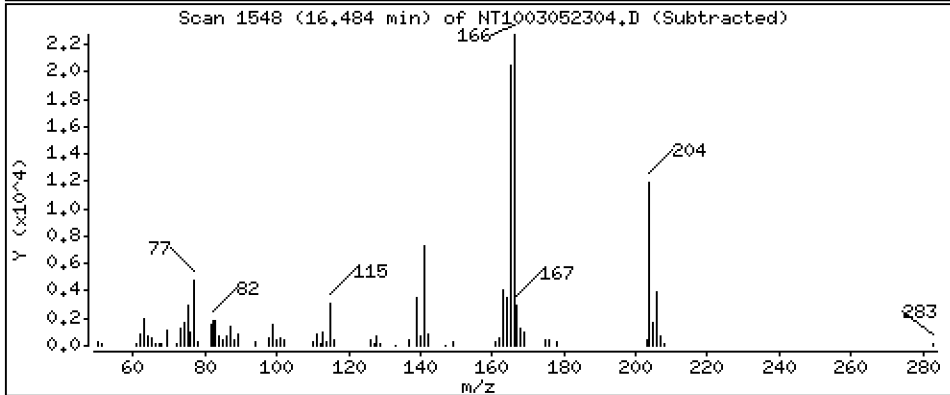
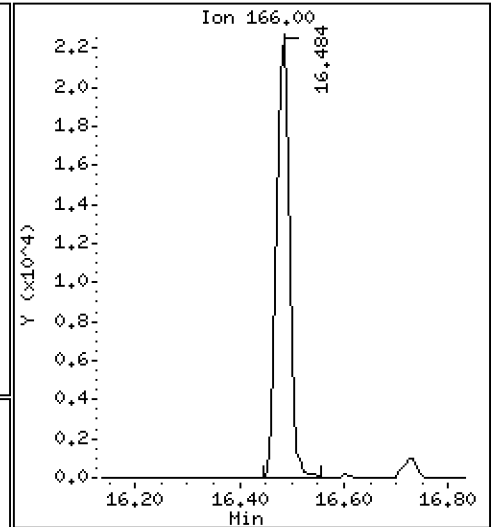
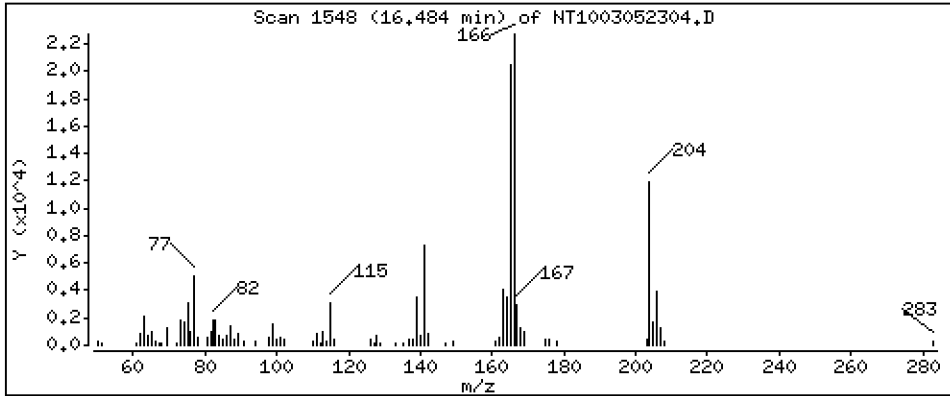
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1976 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

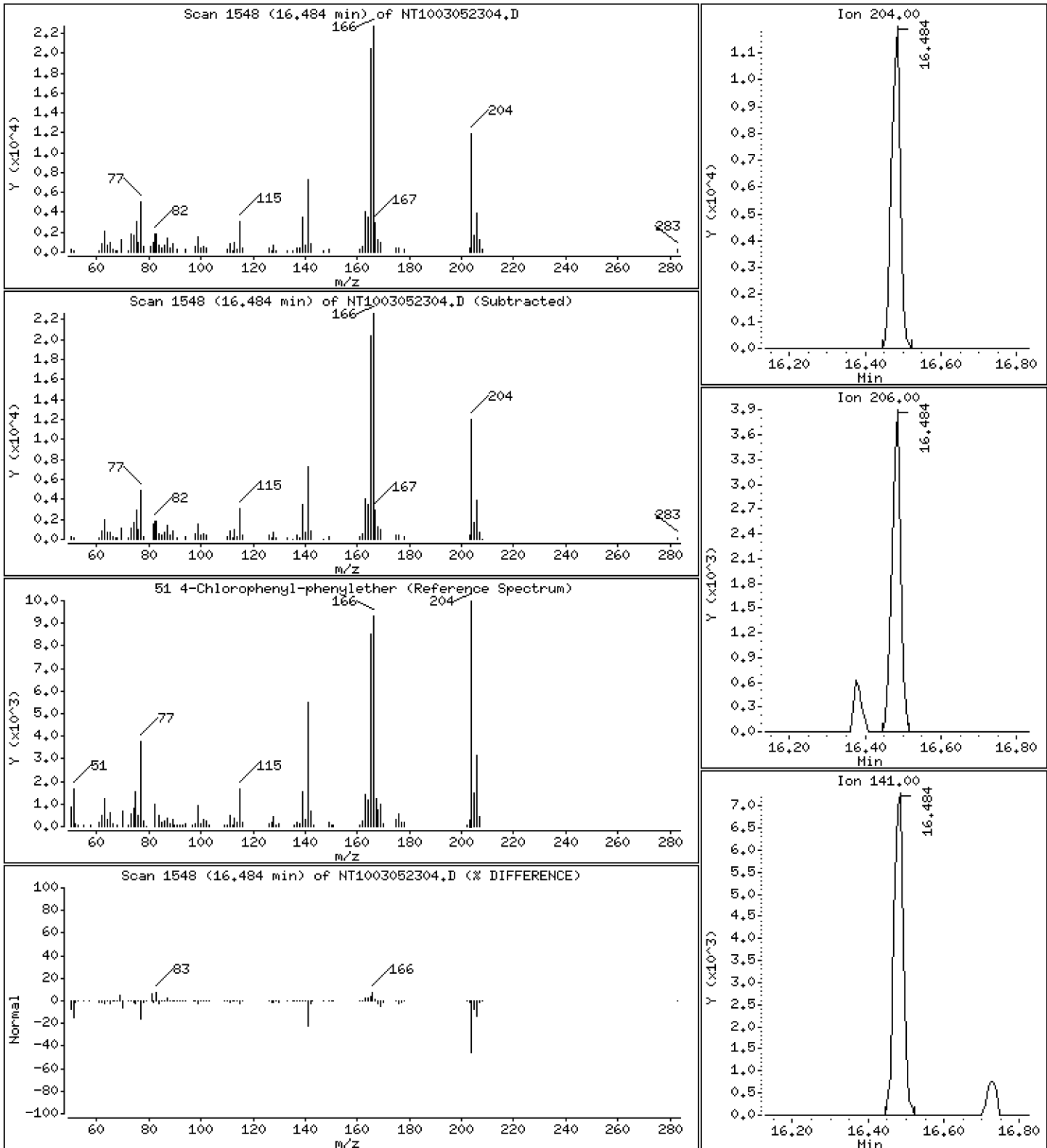
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2177 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

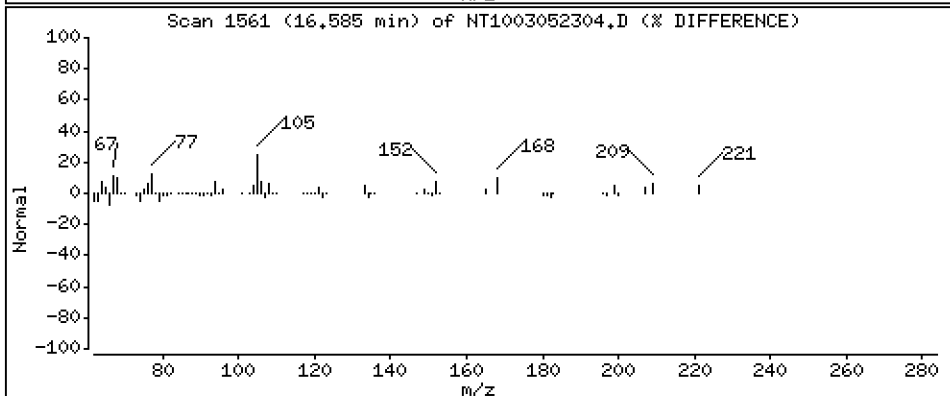
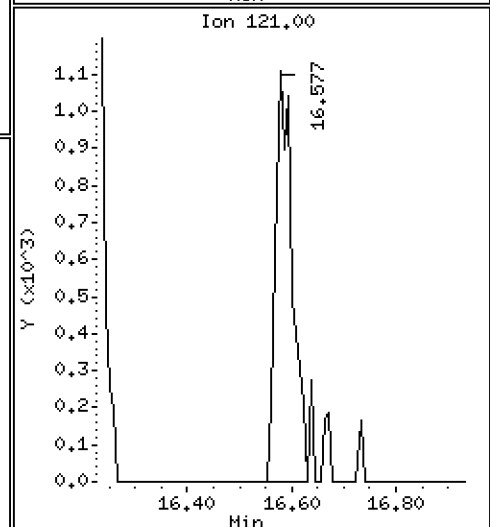
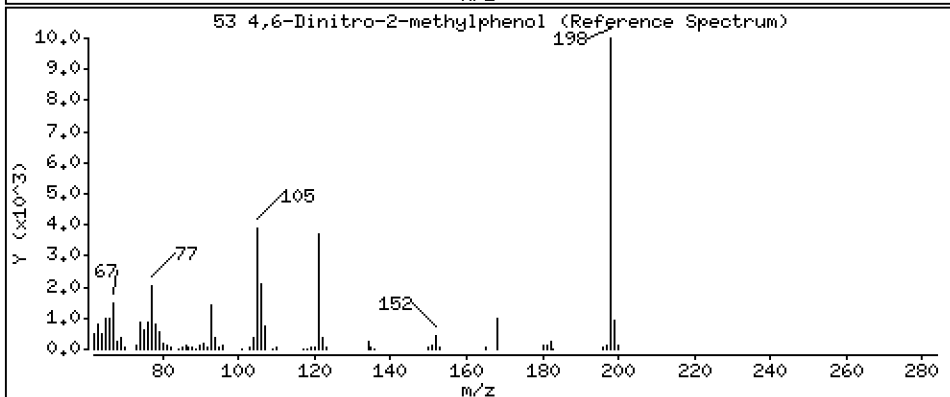
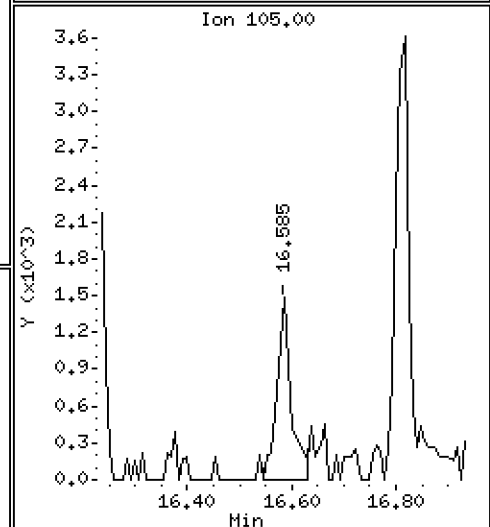
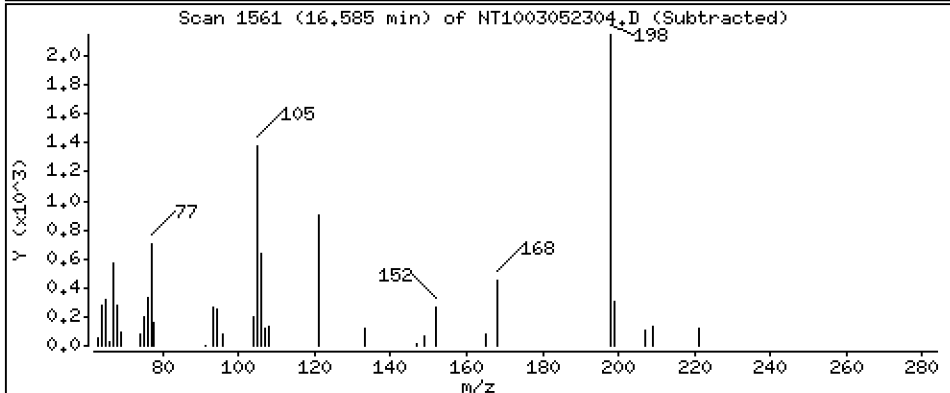
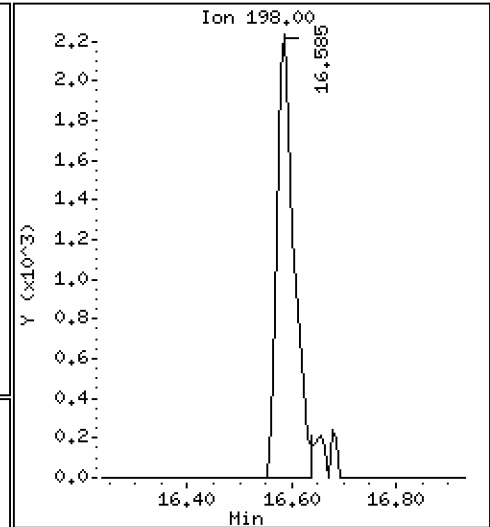
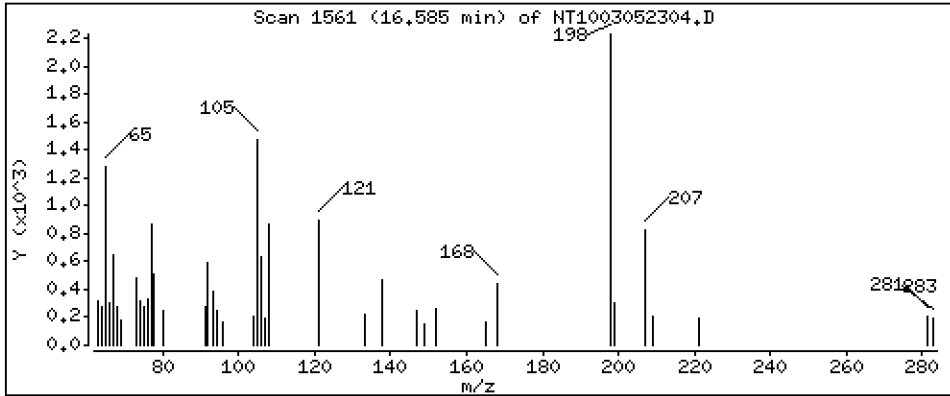
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

53 4,6-Dinitro-2-methylphenol

Concentration: 0.2329 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

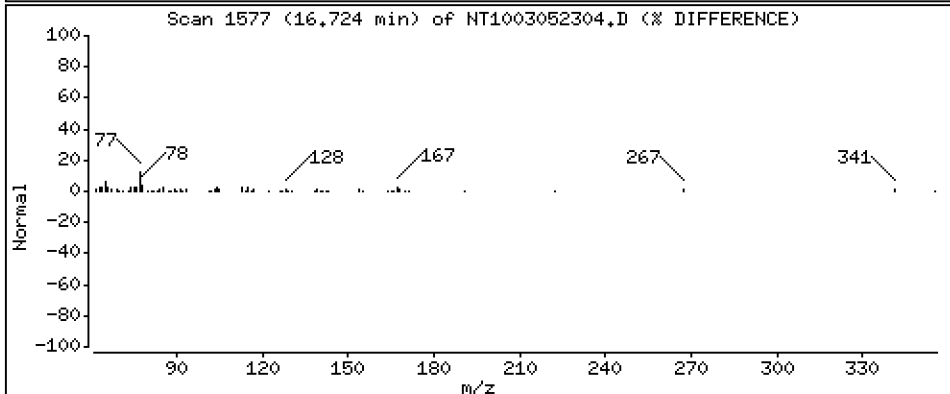
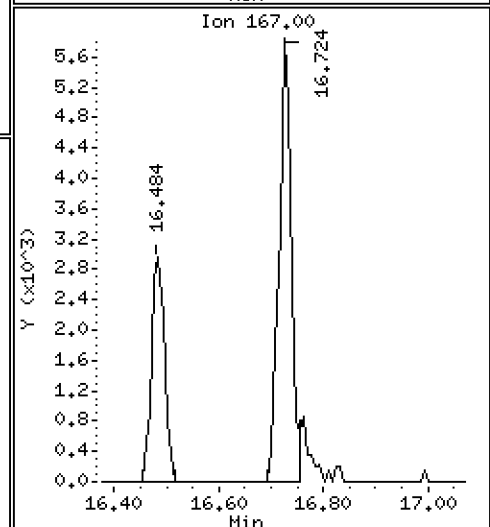
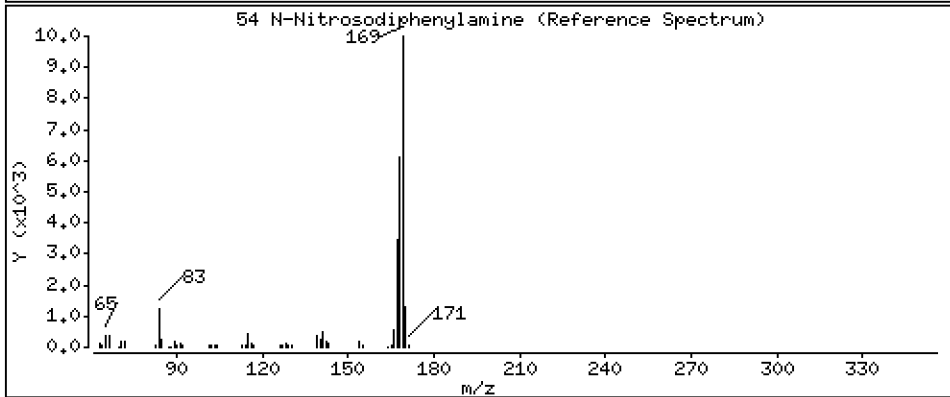
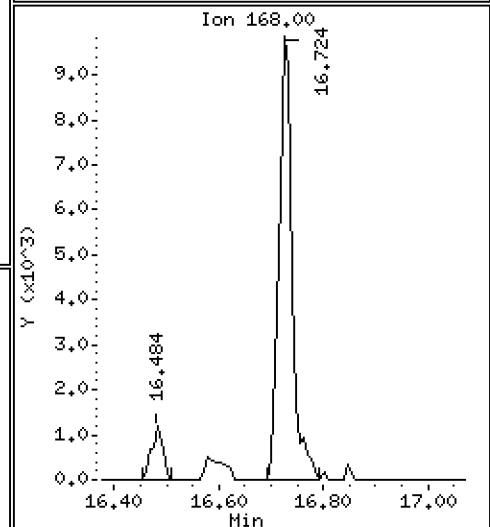
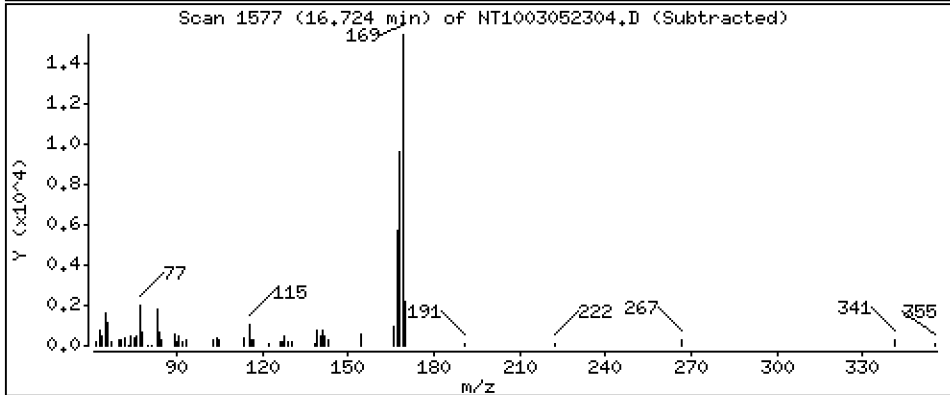
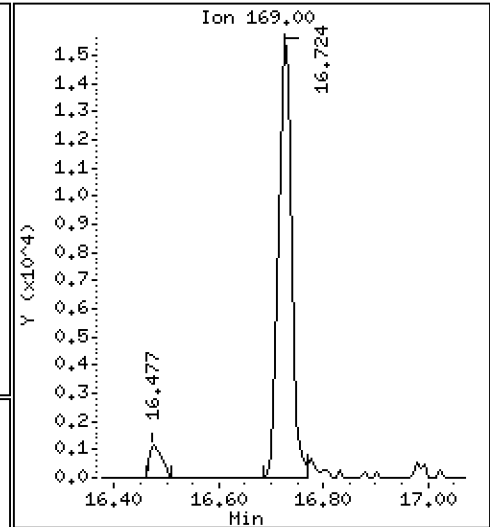
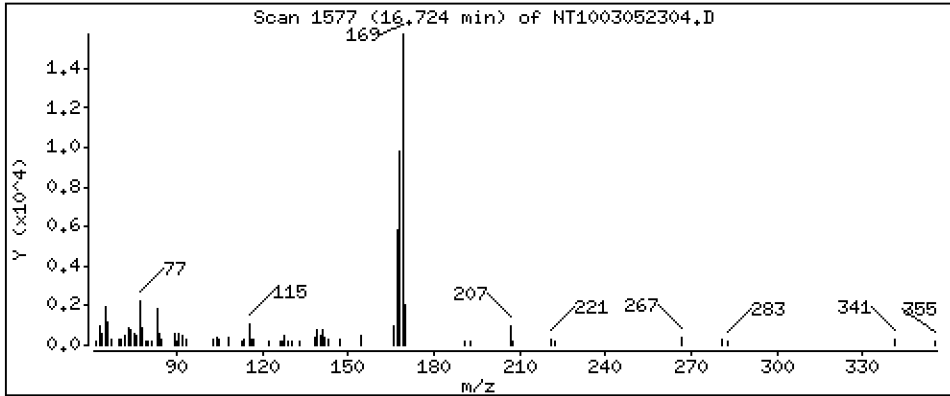
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.1900 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

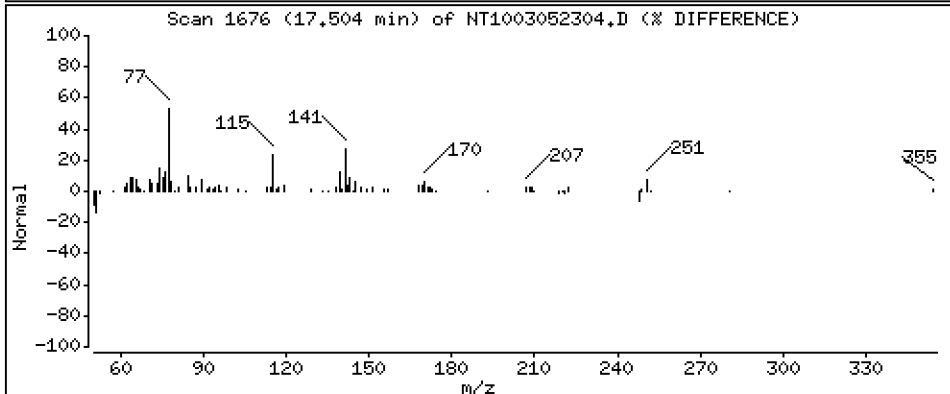
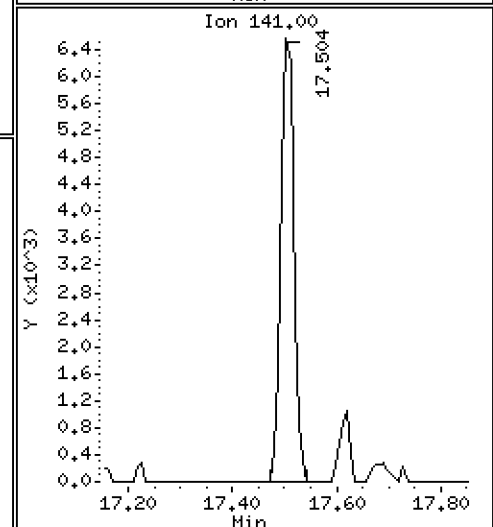
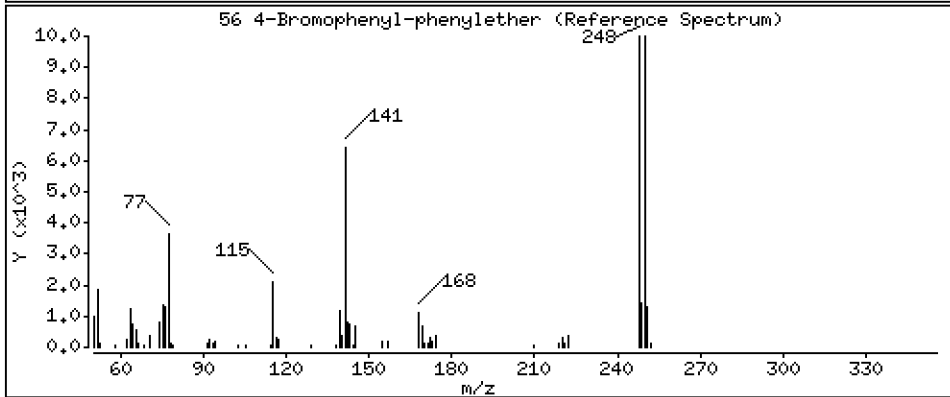
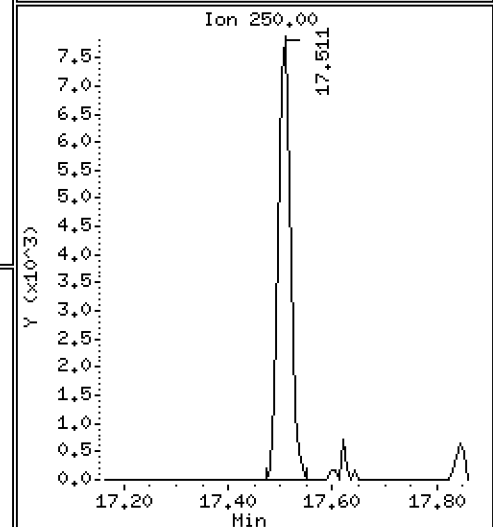
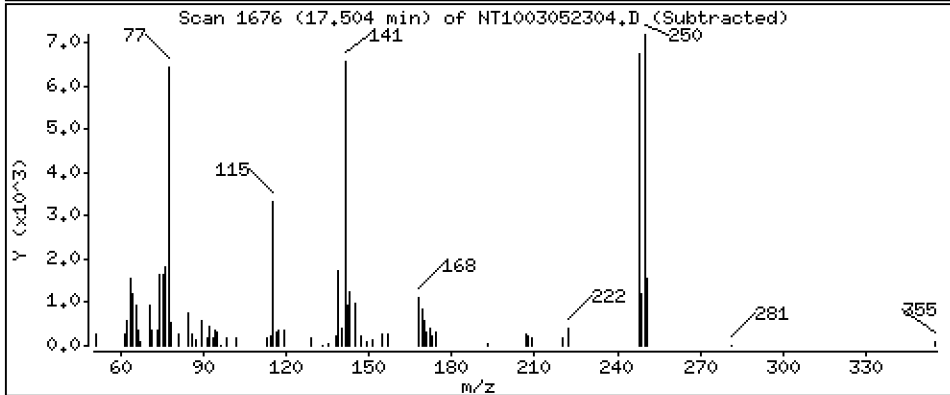
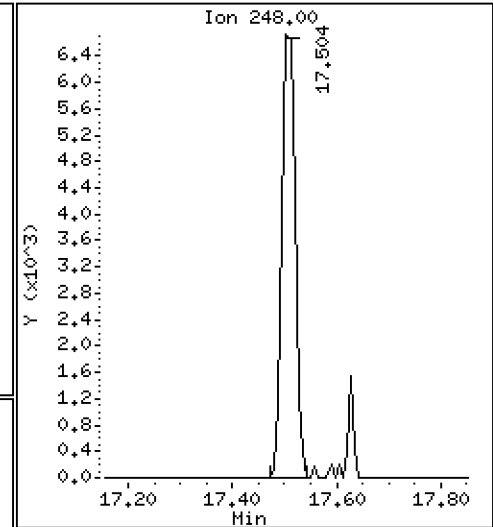
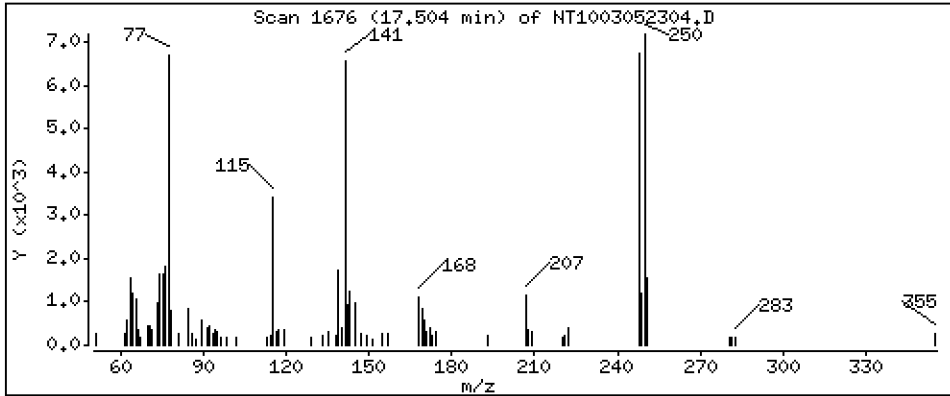
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,1965 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

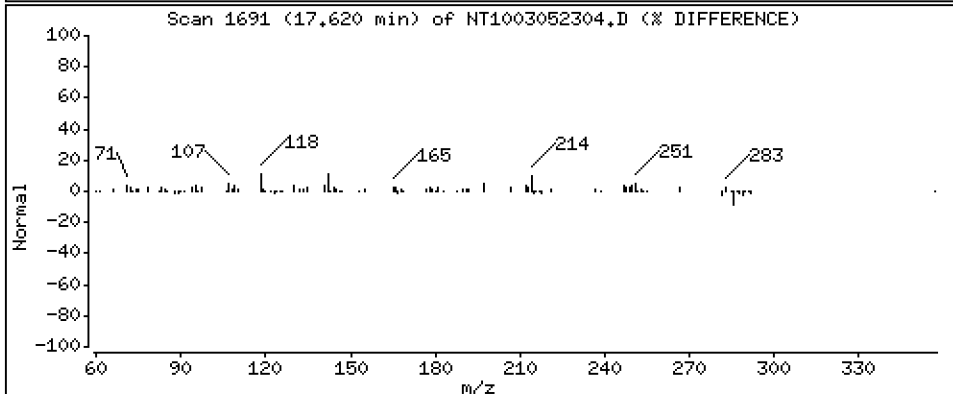
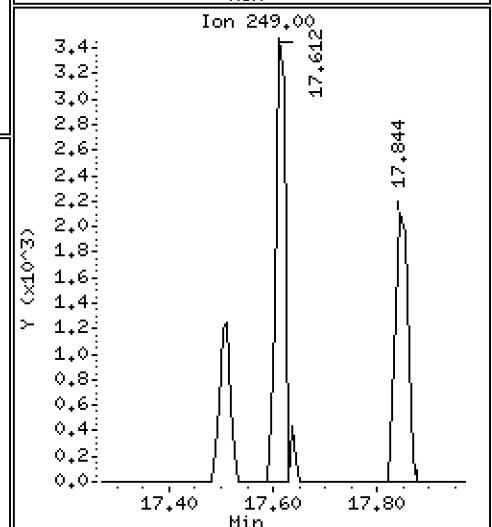
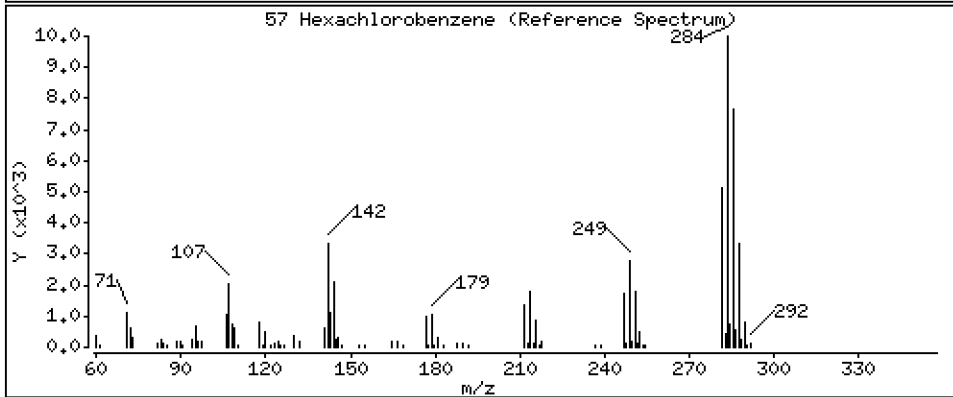
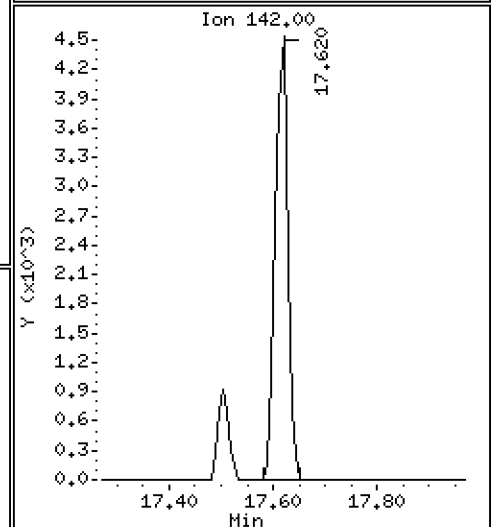
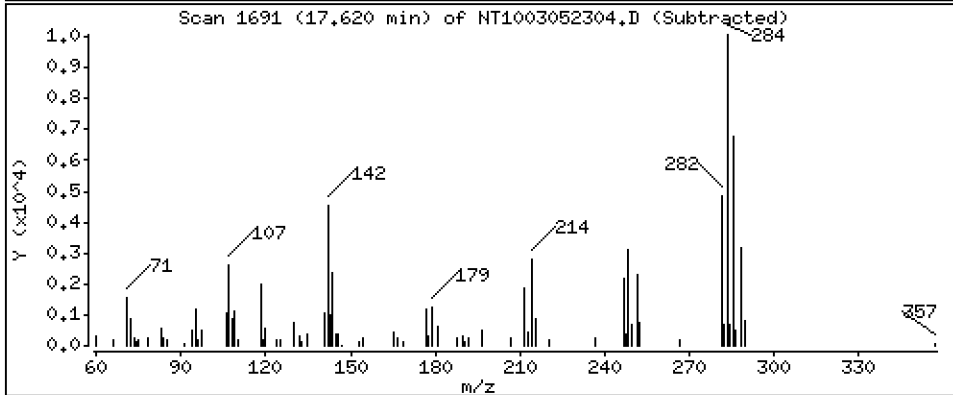
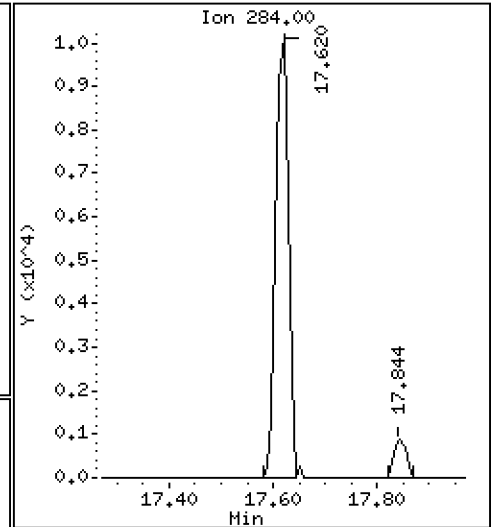
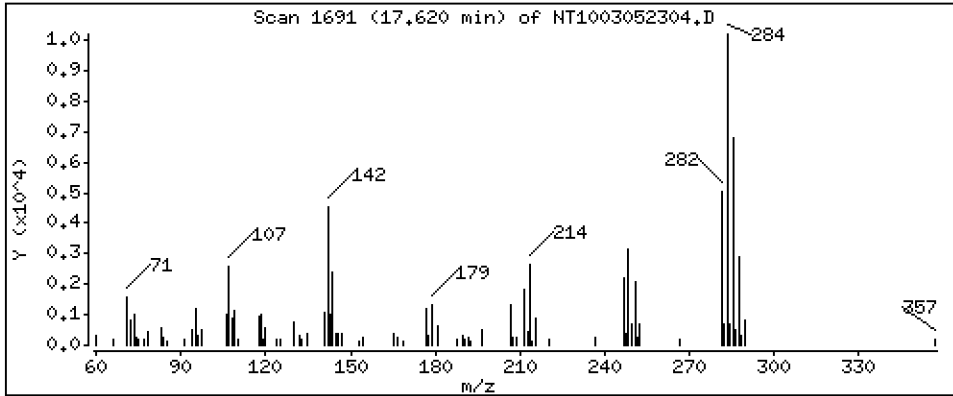
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2515 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

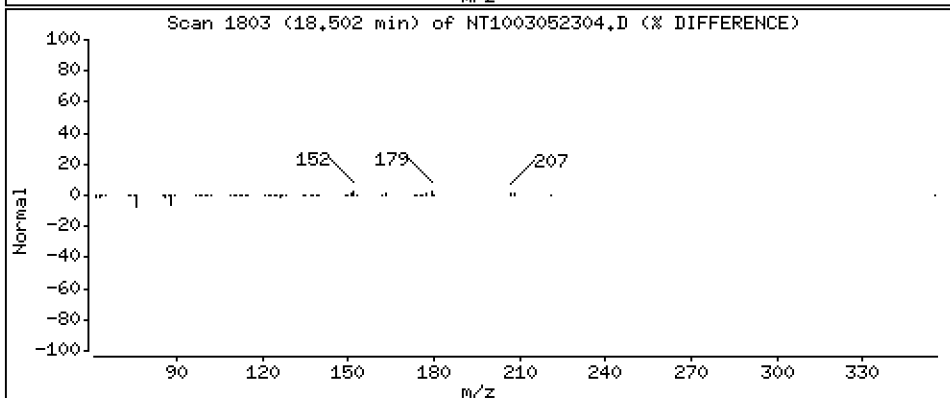
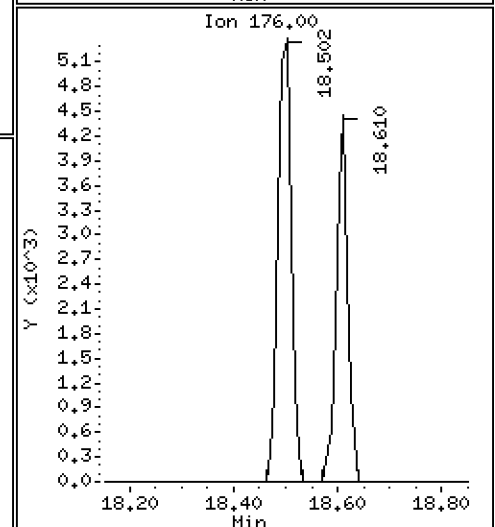
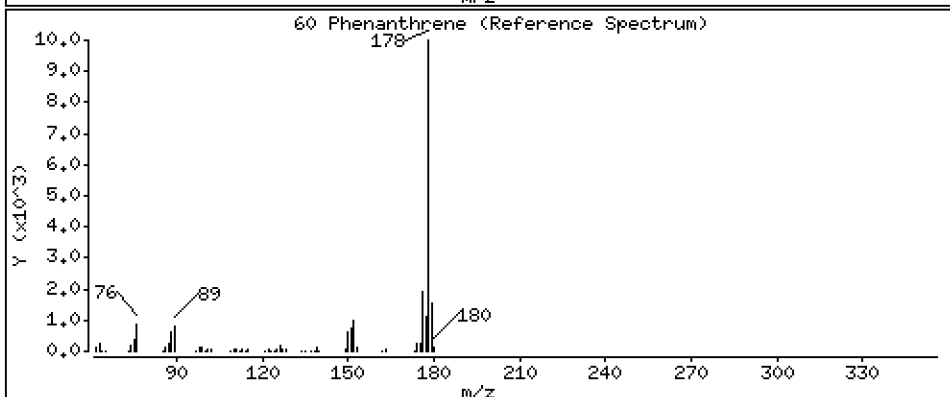
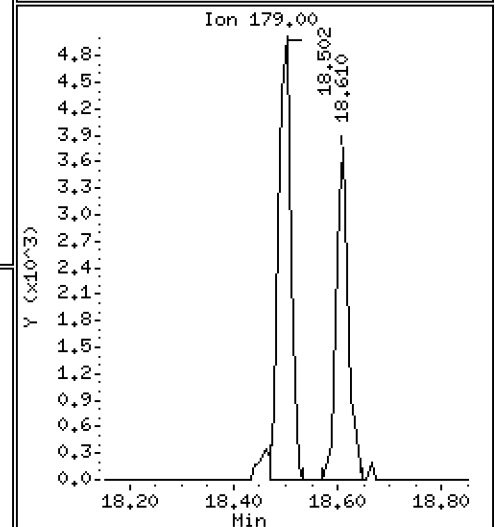
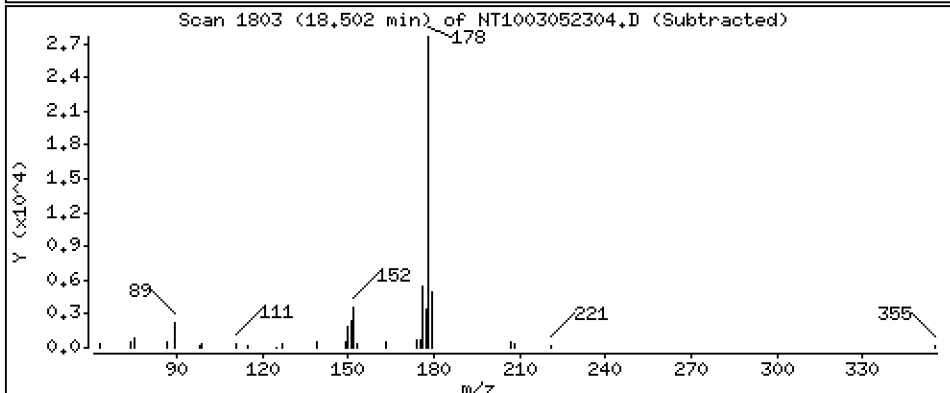
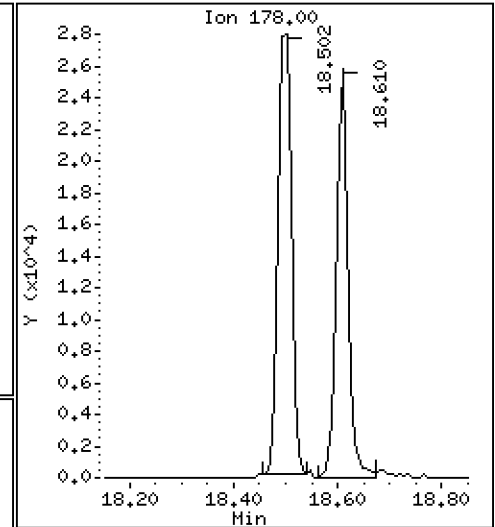
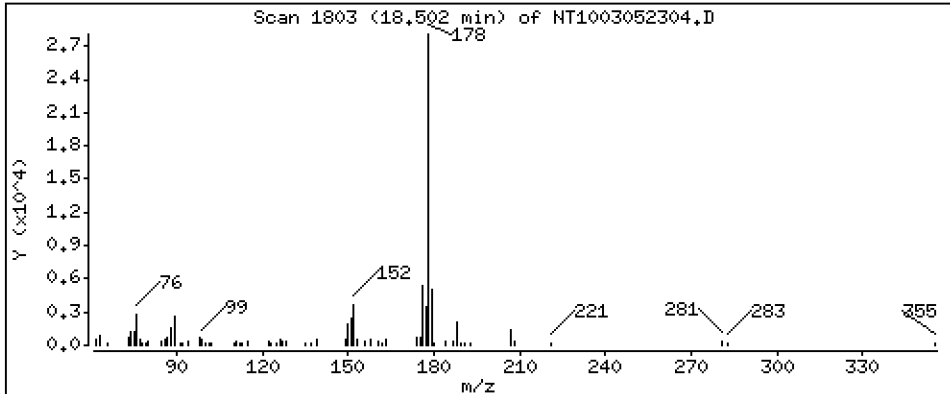
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1917 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

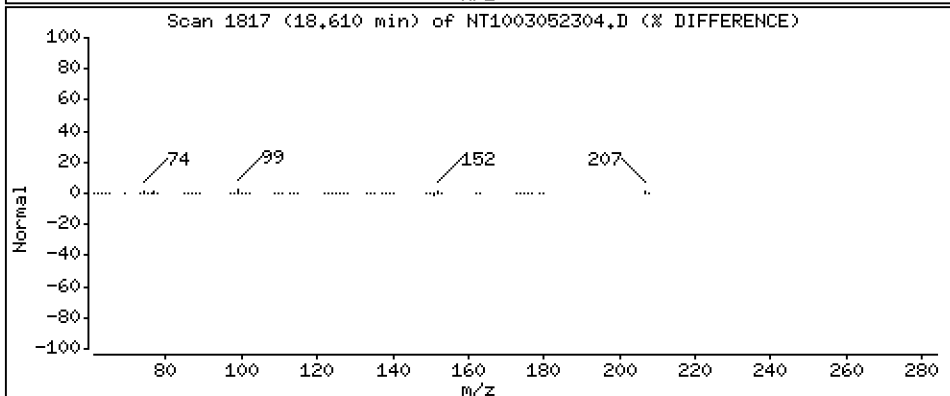
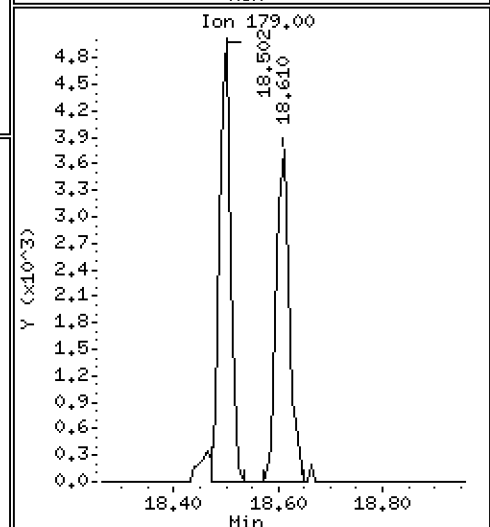
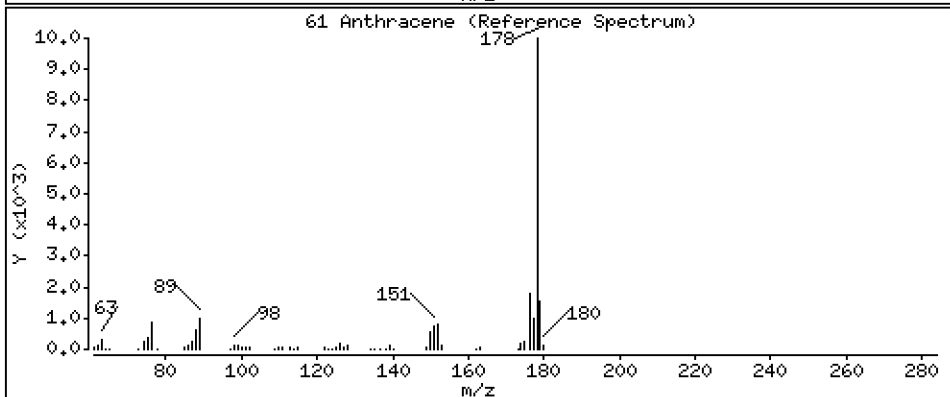
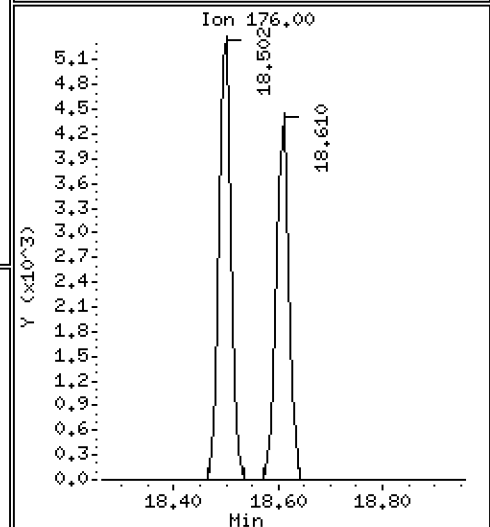
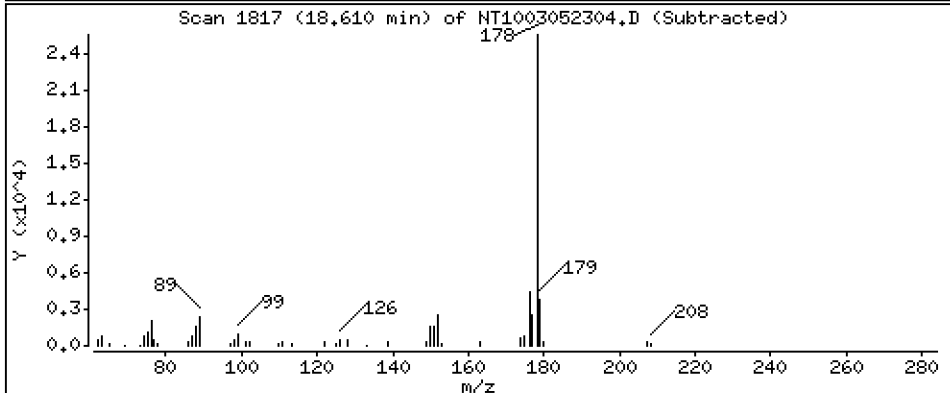
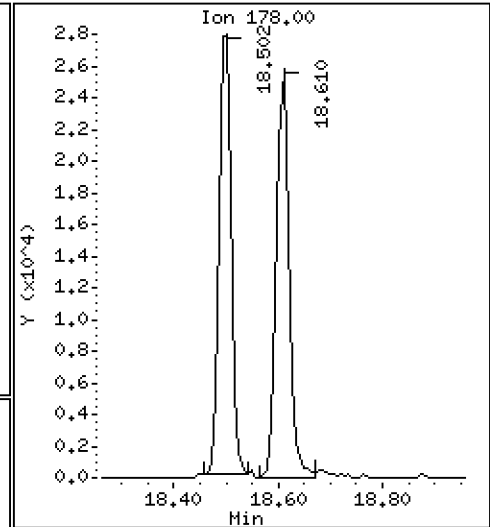
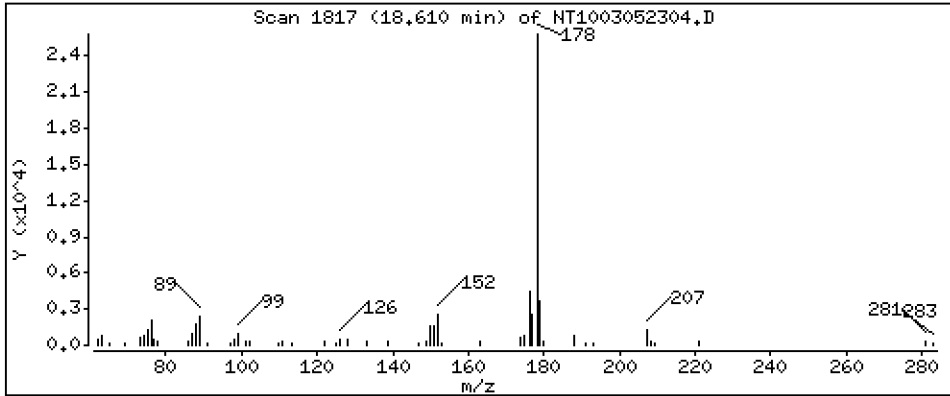
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1737 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

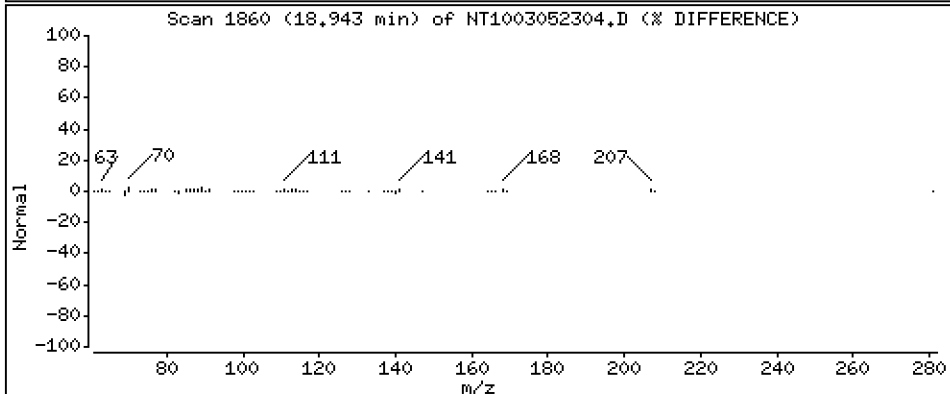
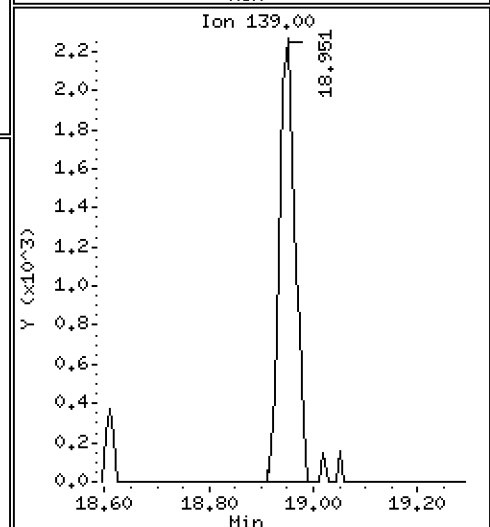
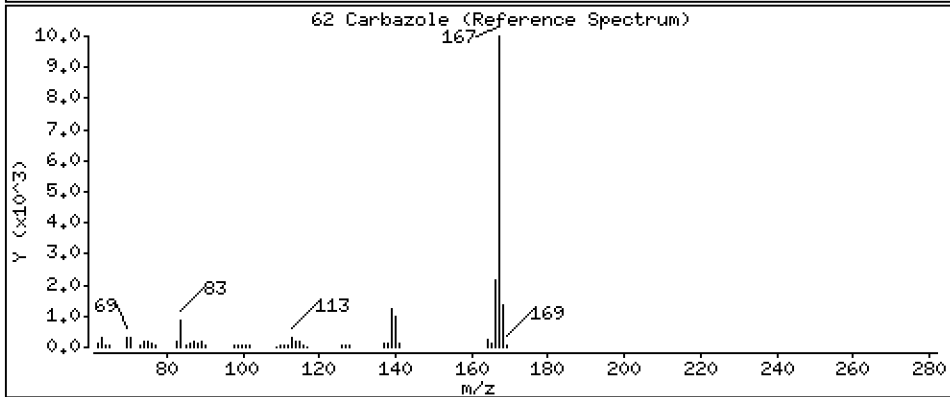
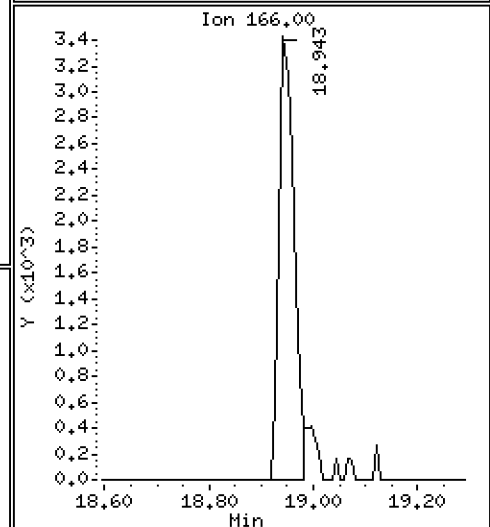
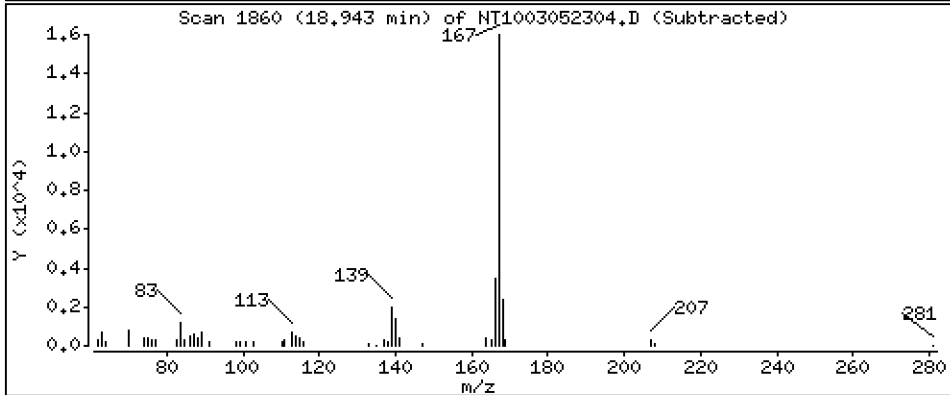
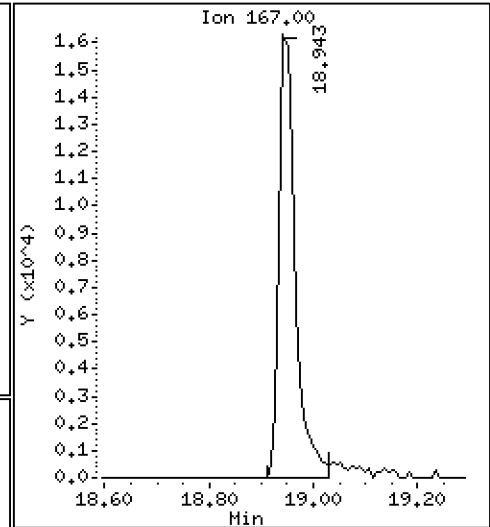
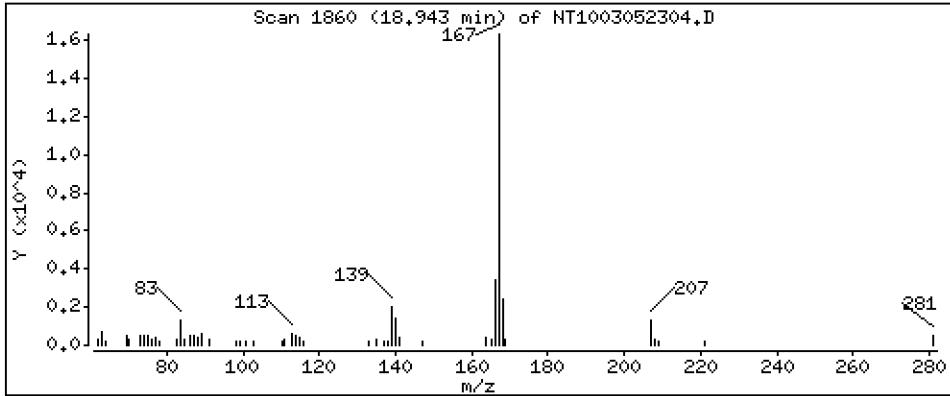
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1563 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

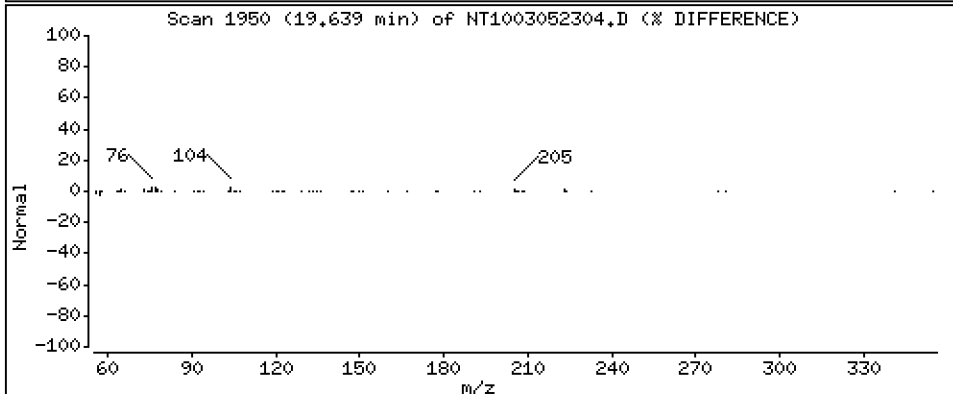
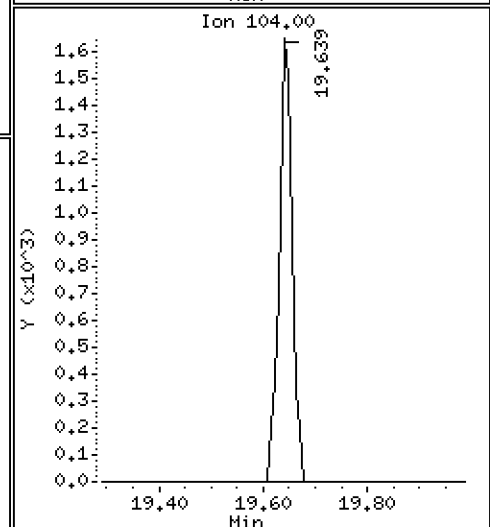
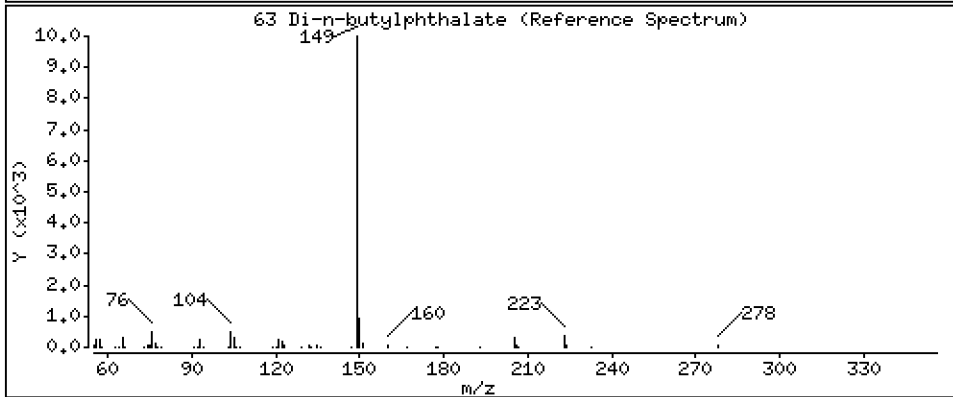
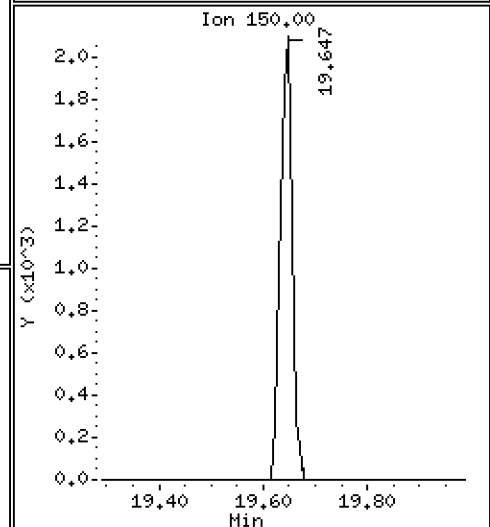
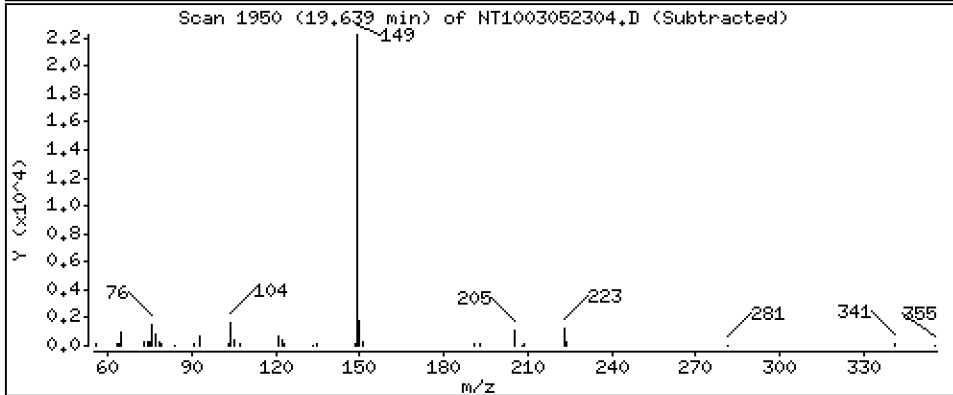
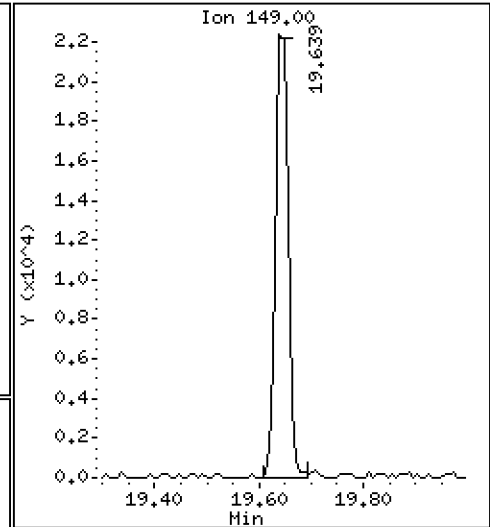
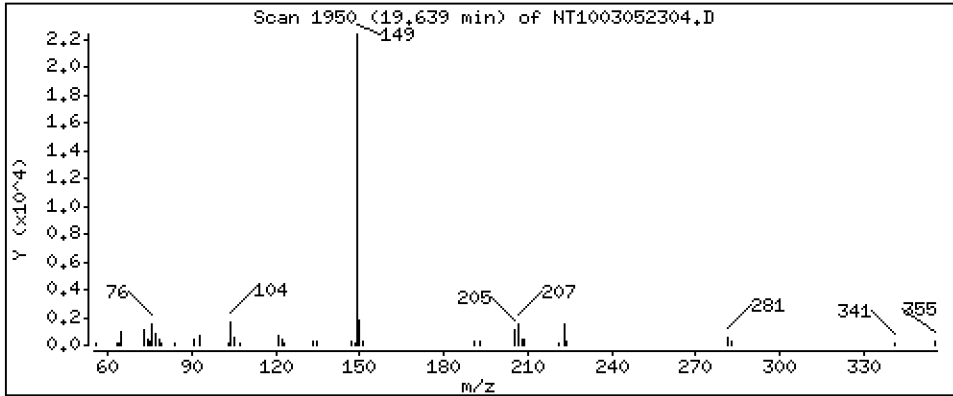
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1206 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

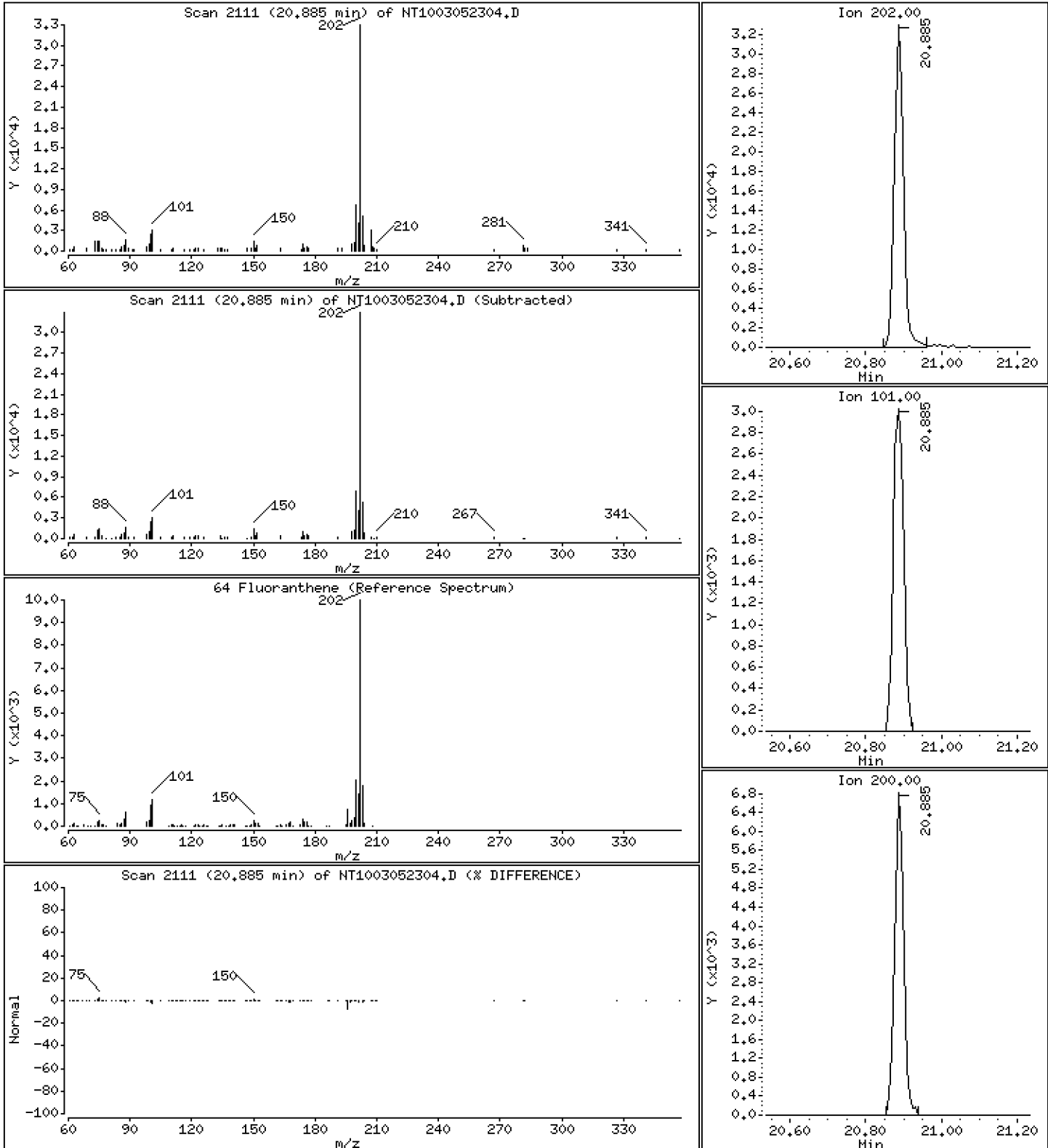
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,1781 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

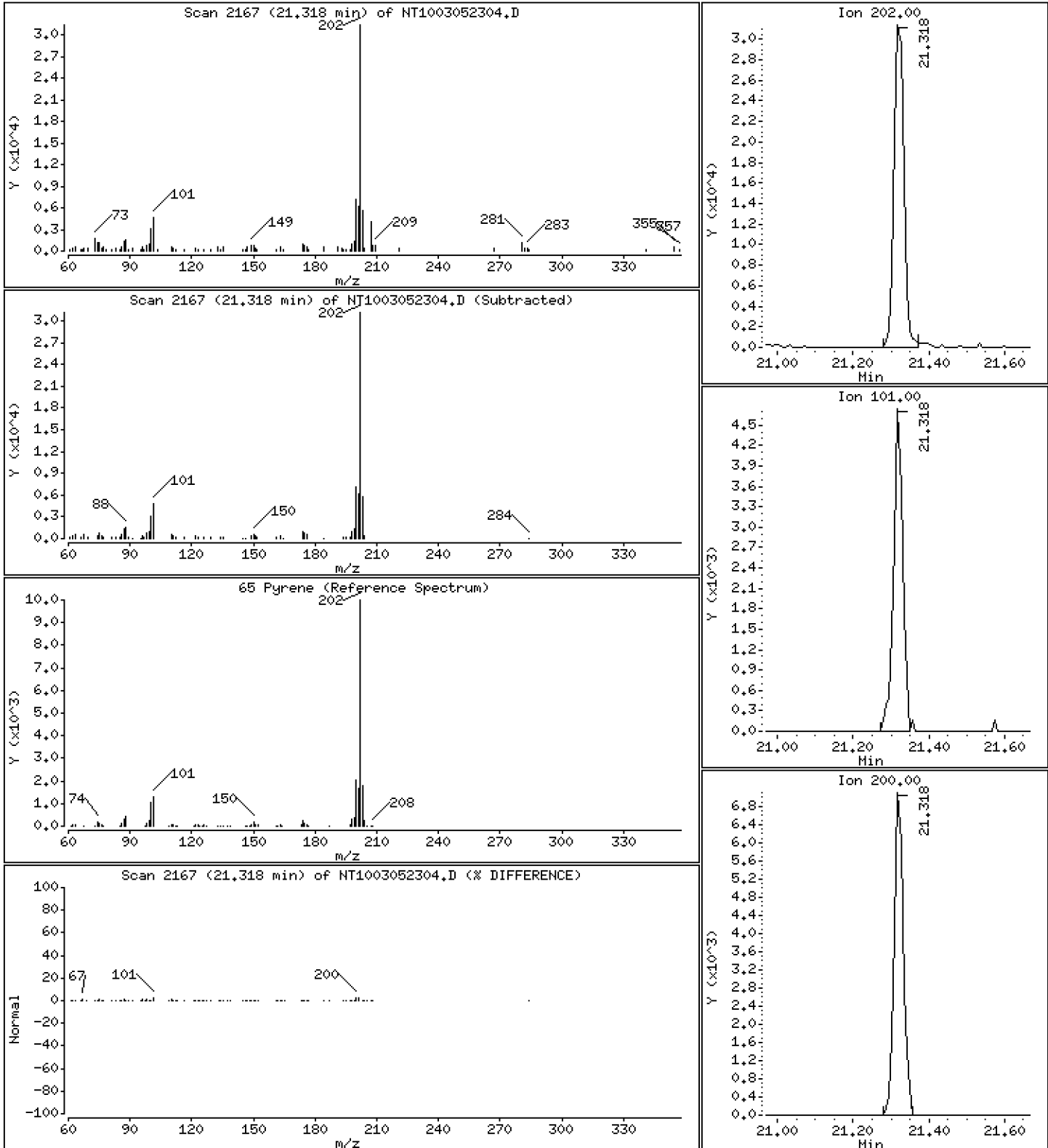
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 0.1795 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

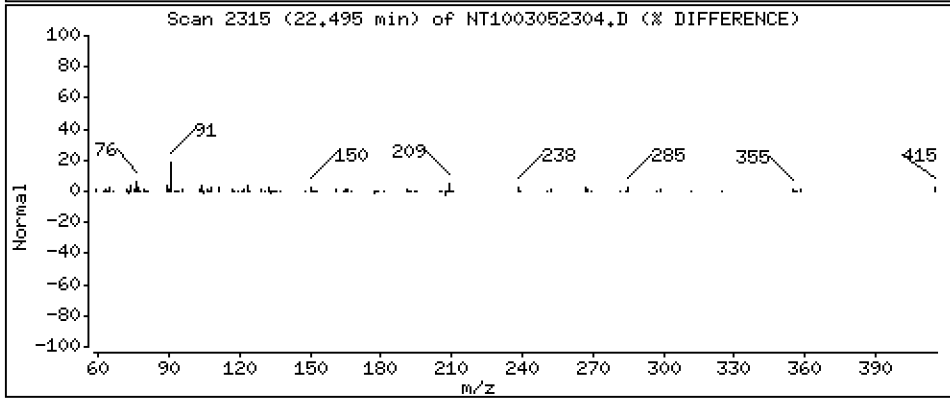
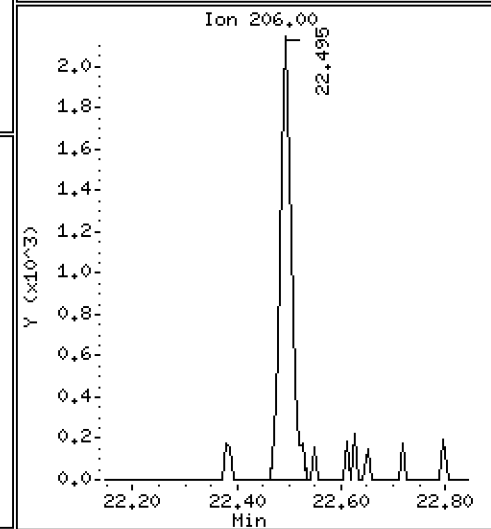
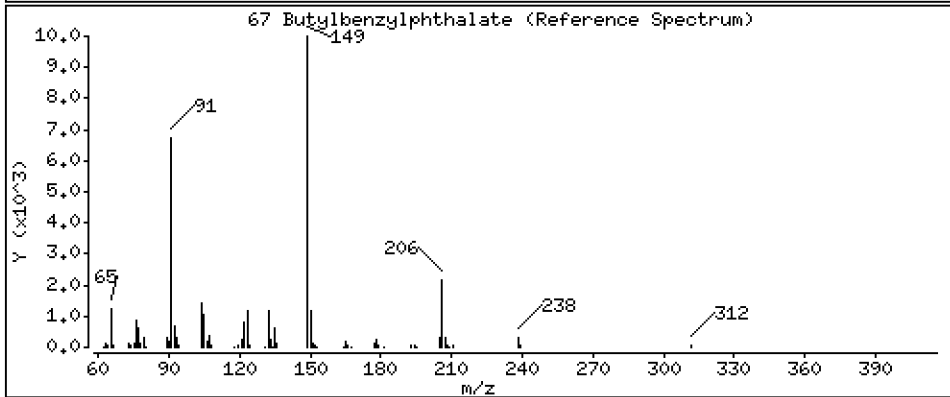
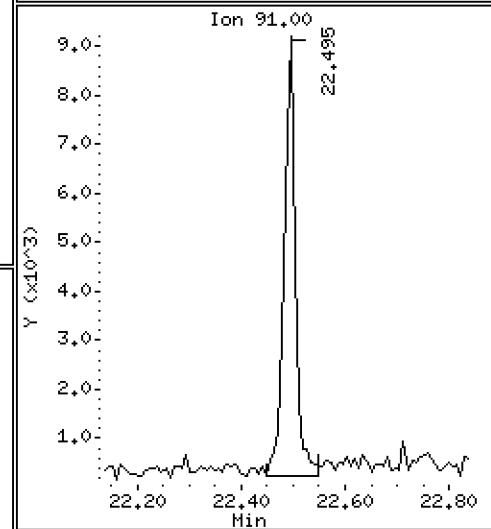
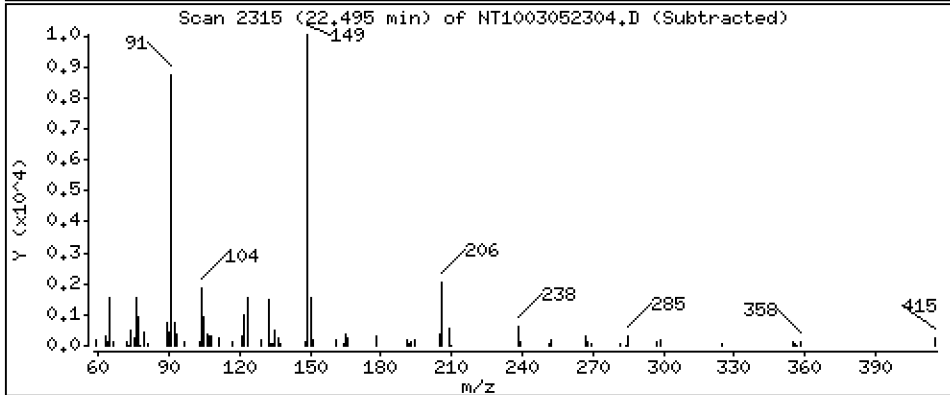
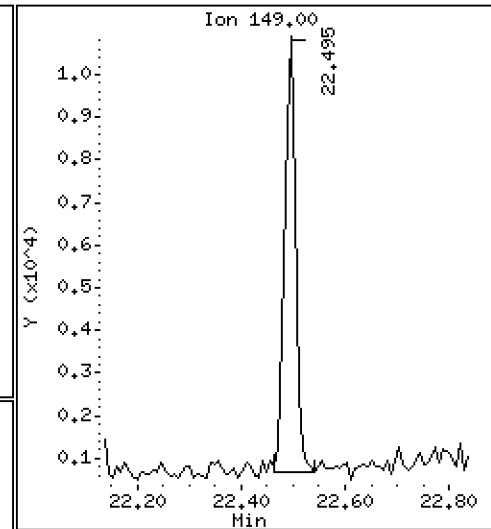
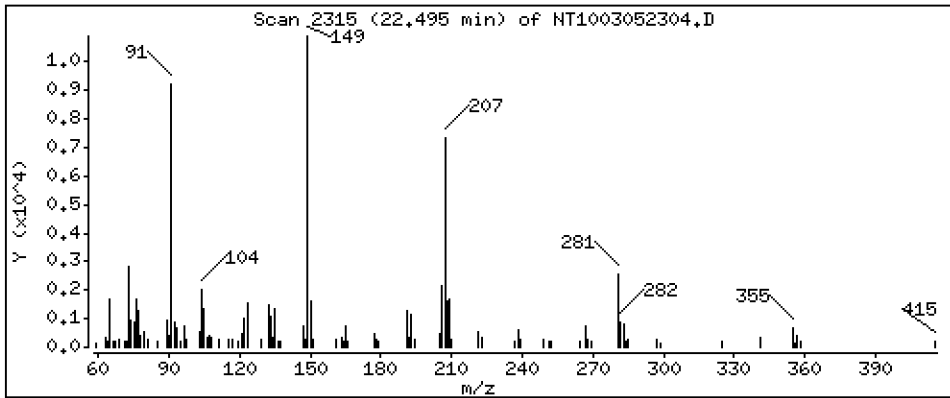
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.09053 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

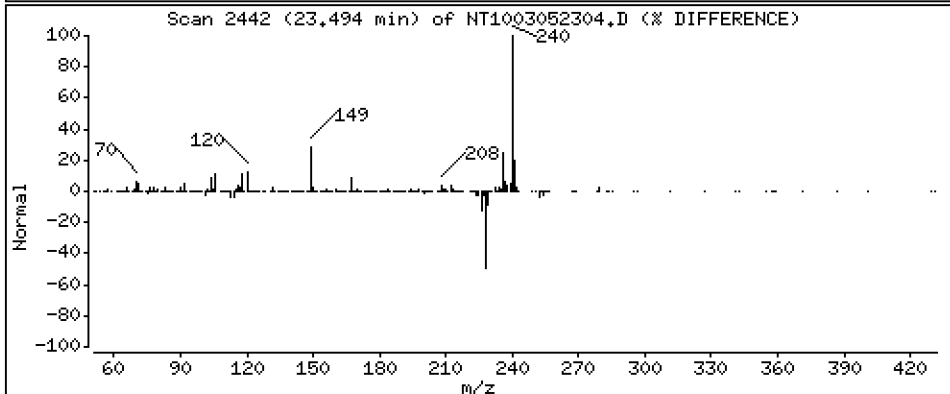
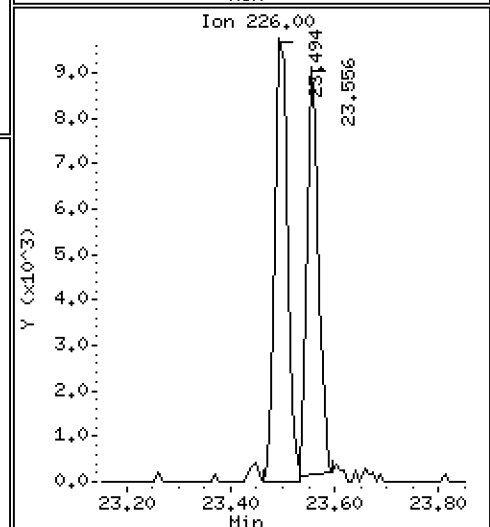
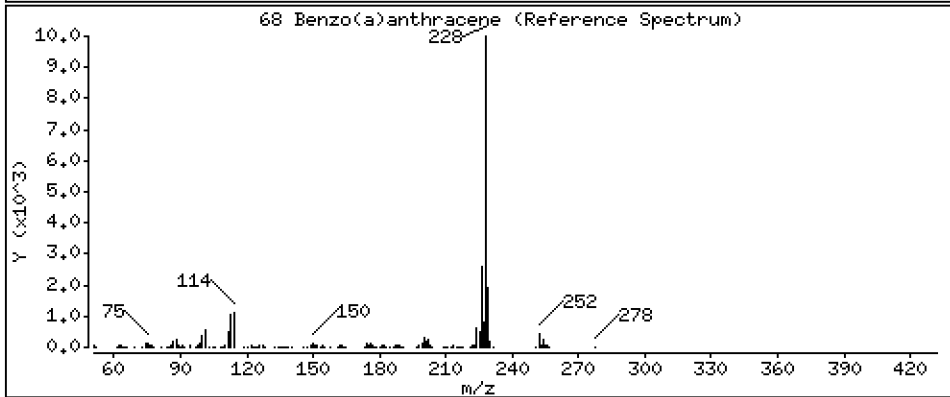
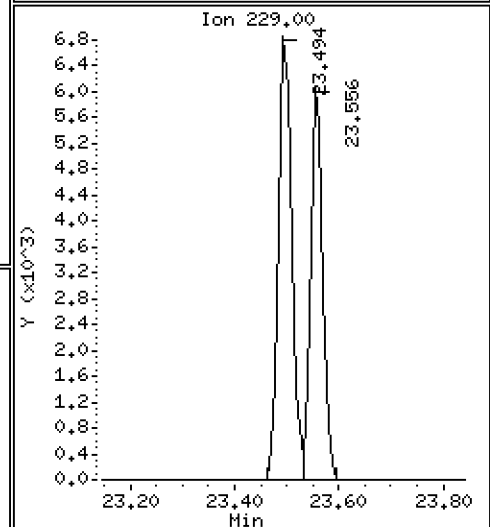
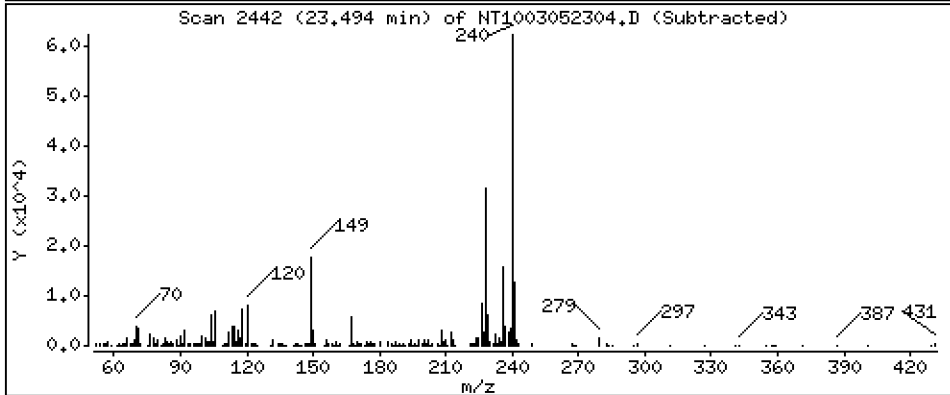
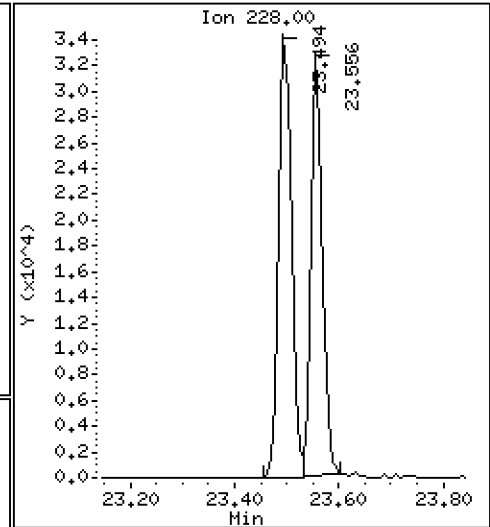
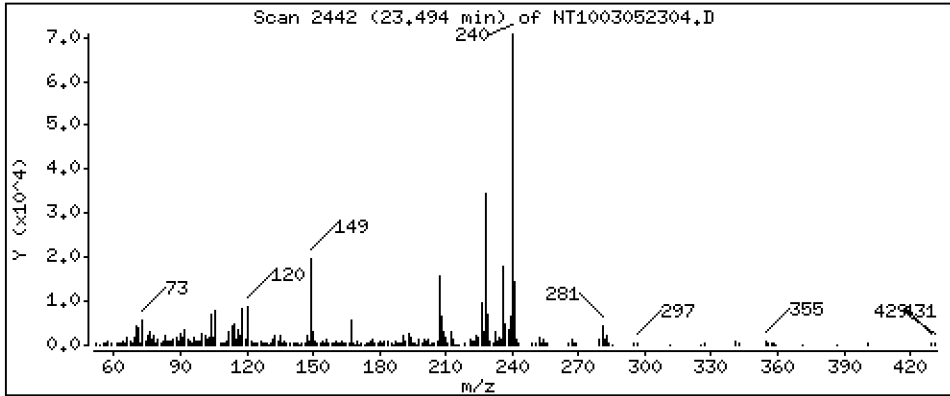
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,1871 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

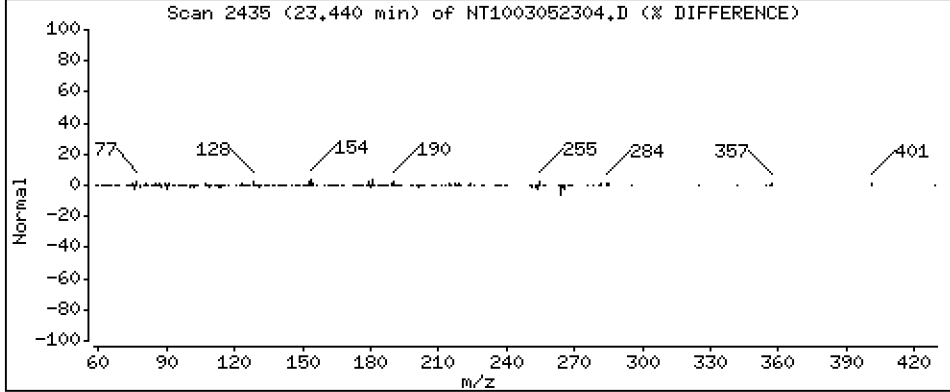
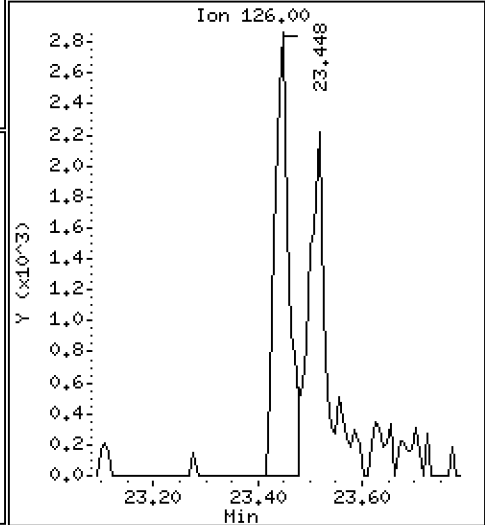
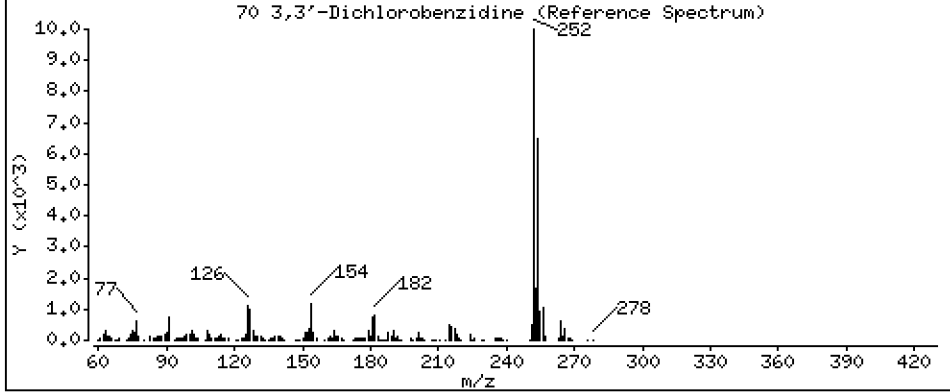
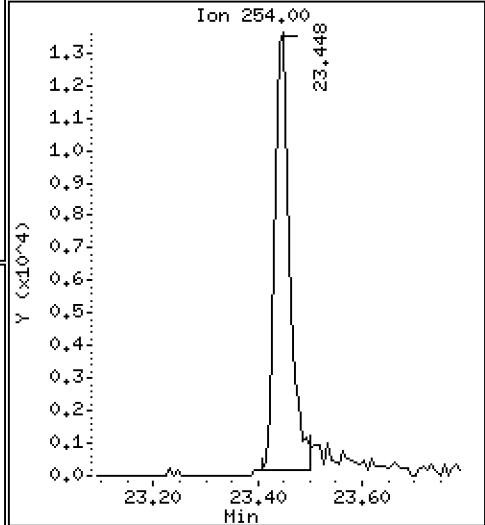
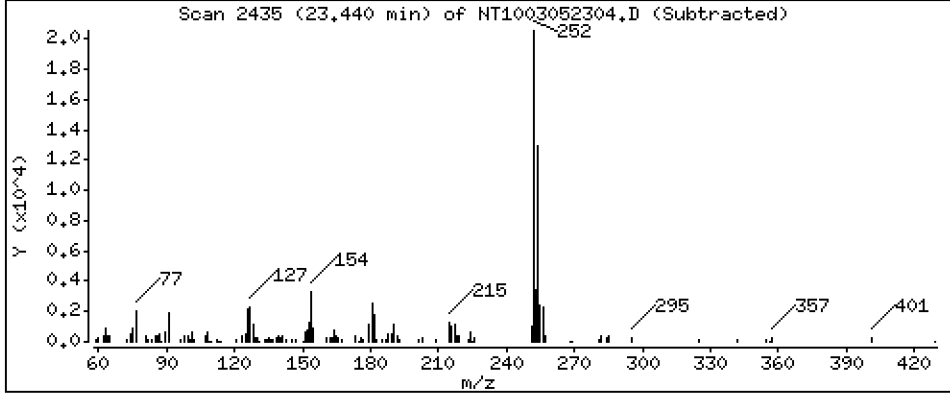
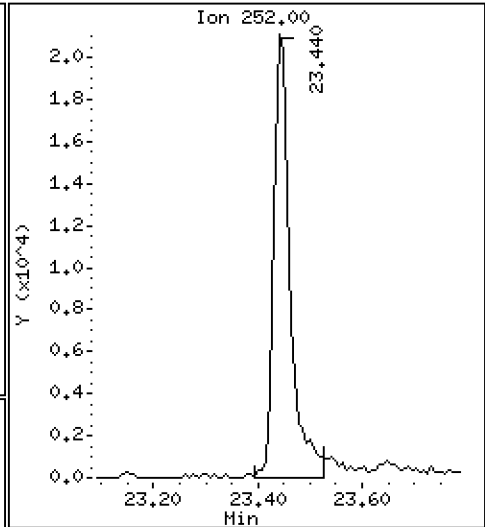
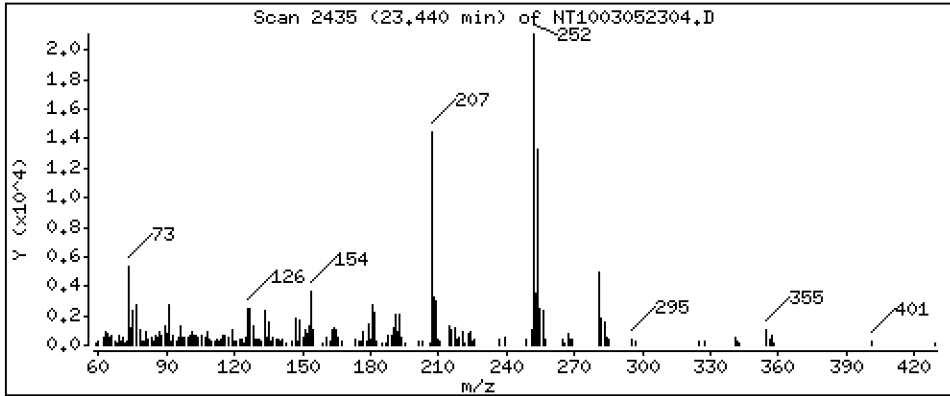
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,3333 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

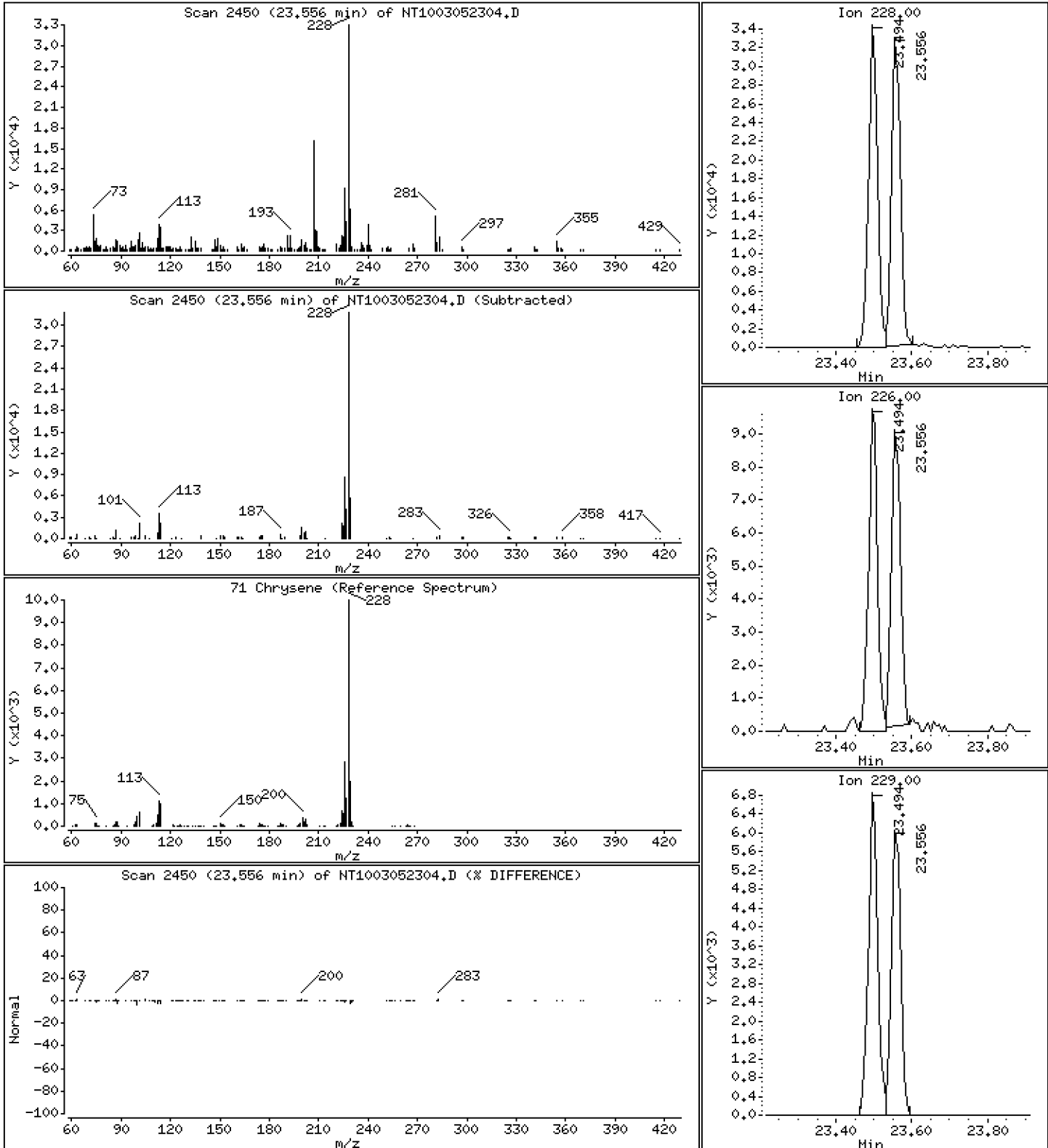
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2028 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

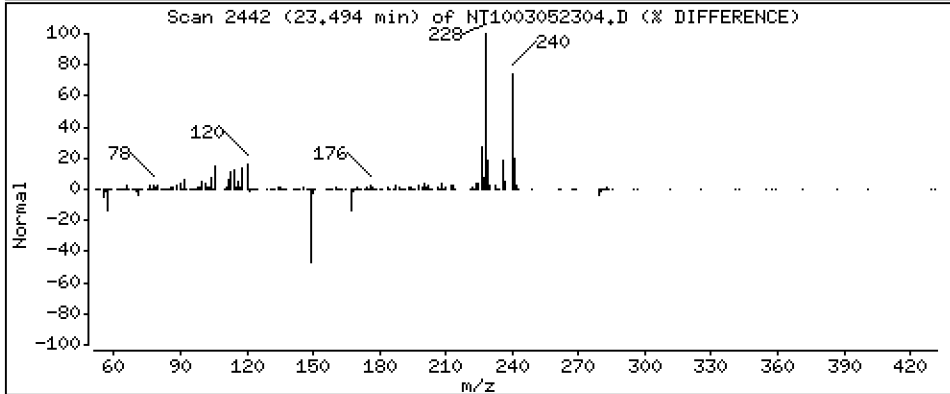
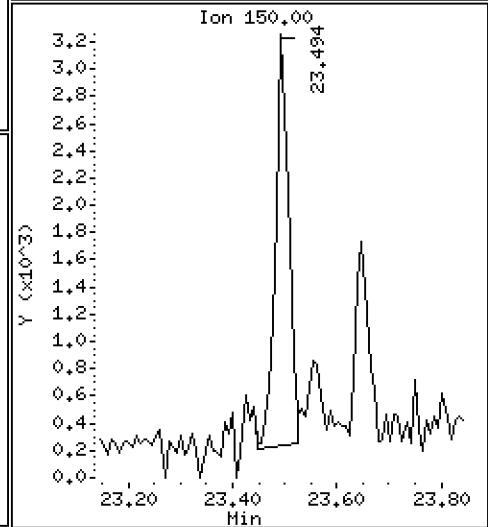
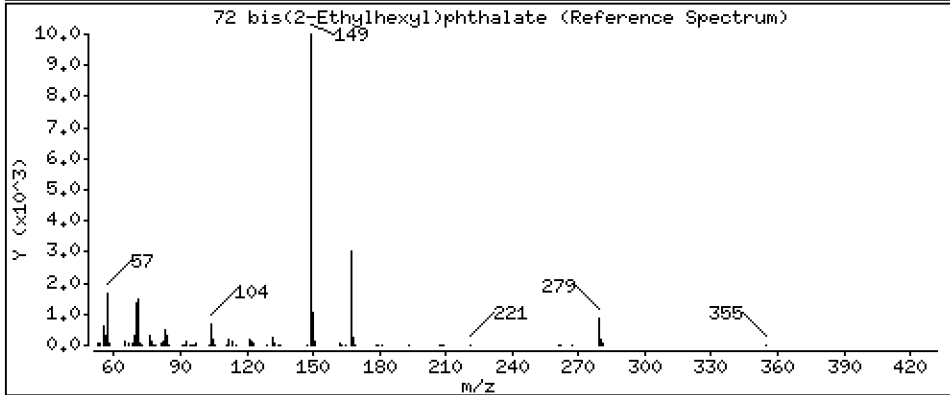
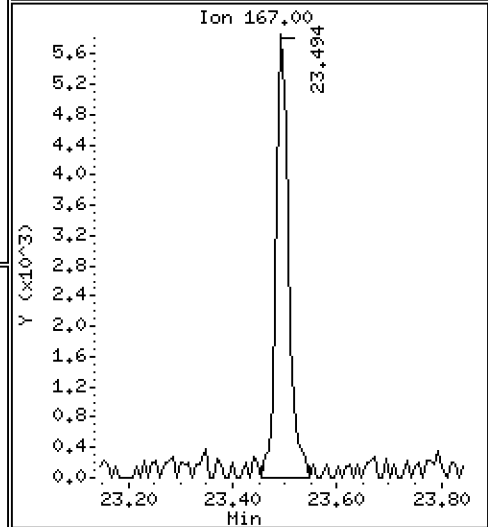
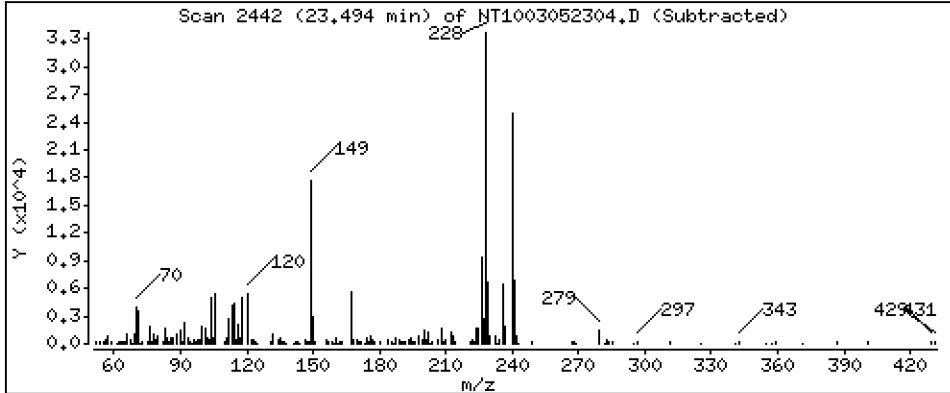
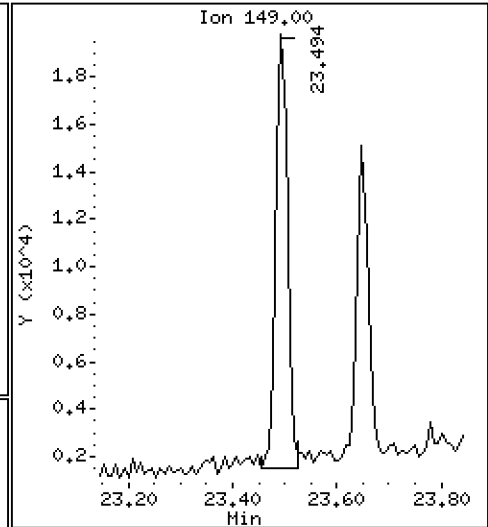
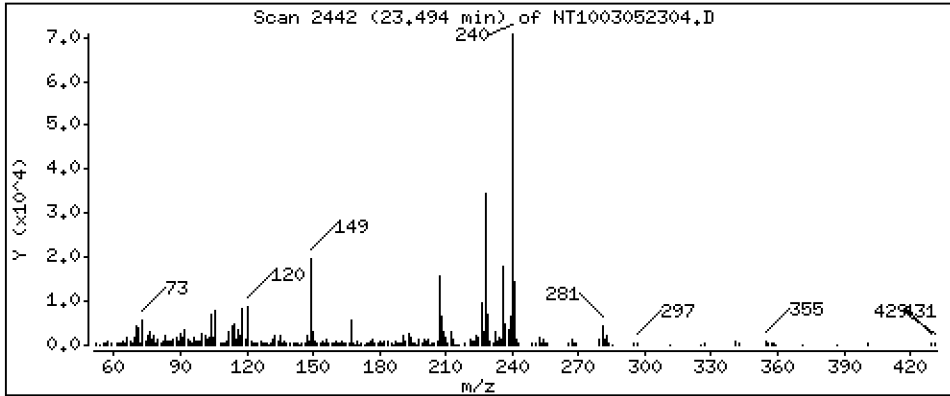
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,1454 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

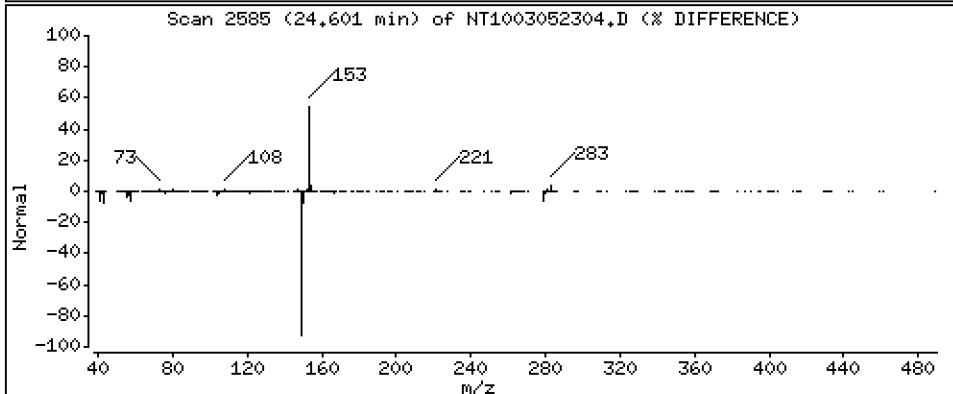
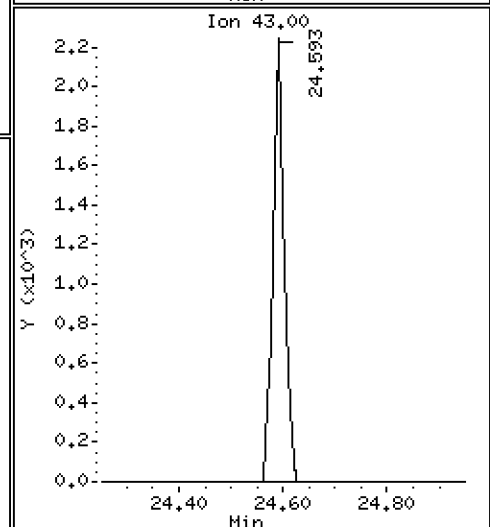
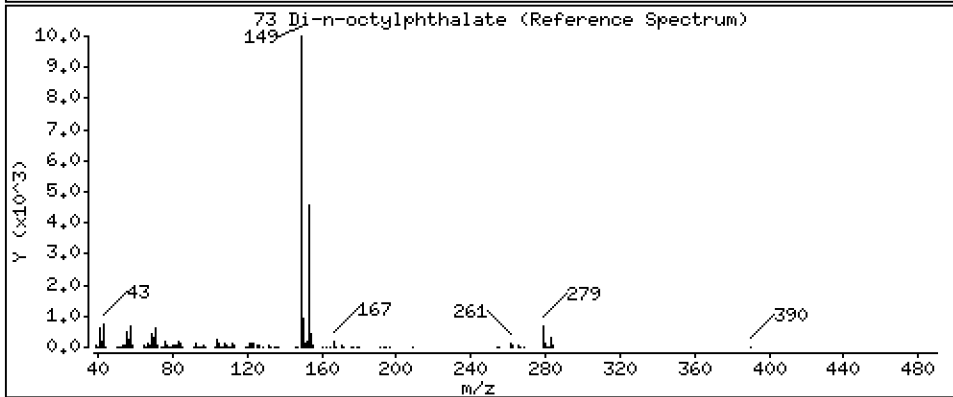
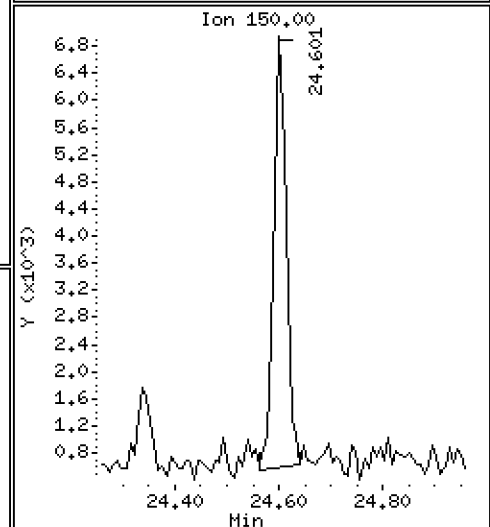
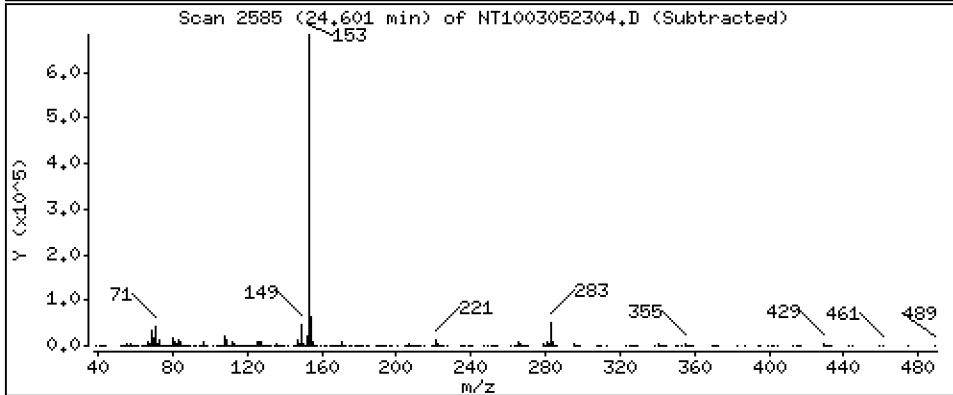
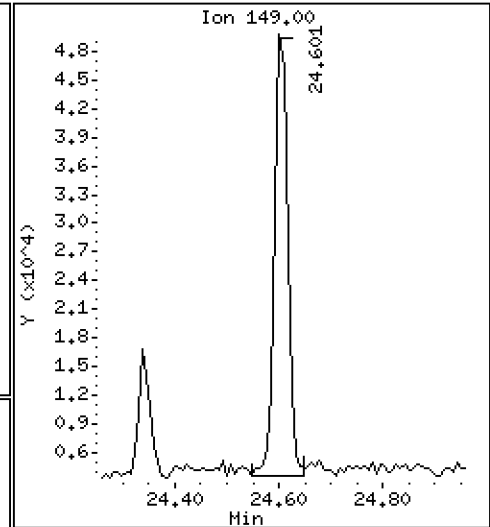
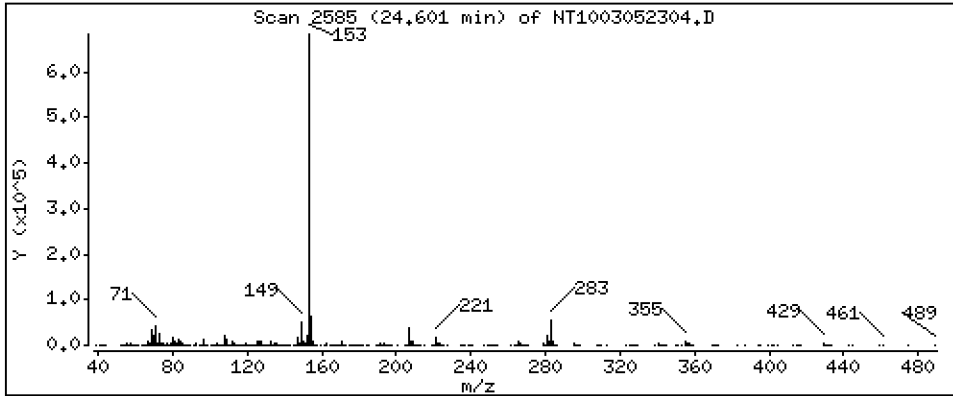
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2618 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

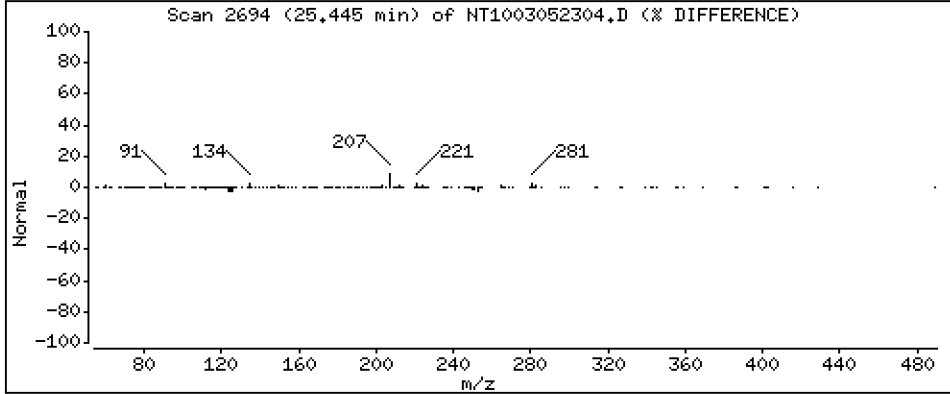
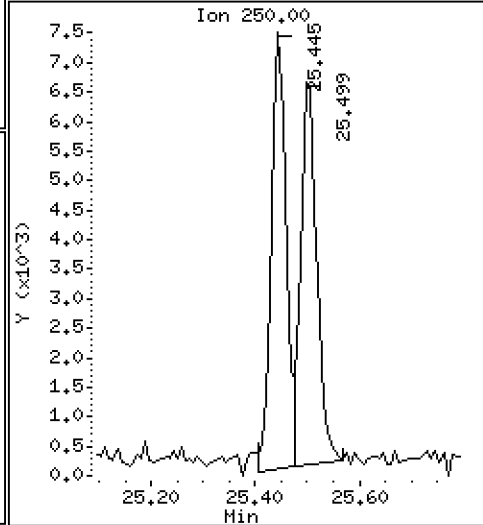
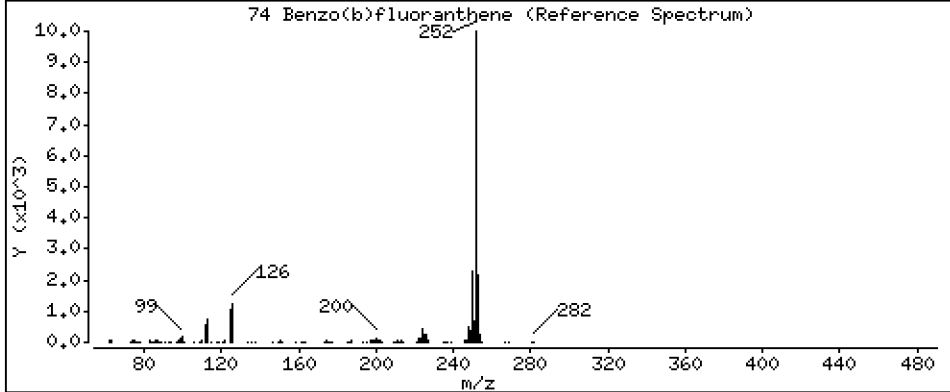
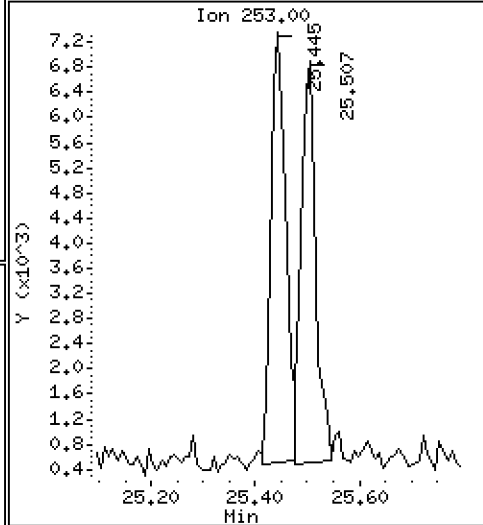
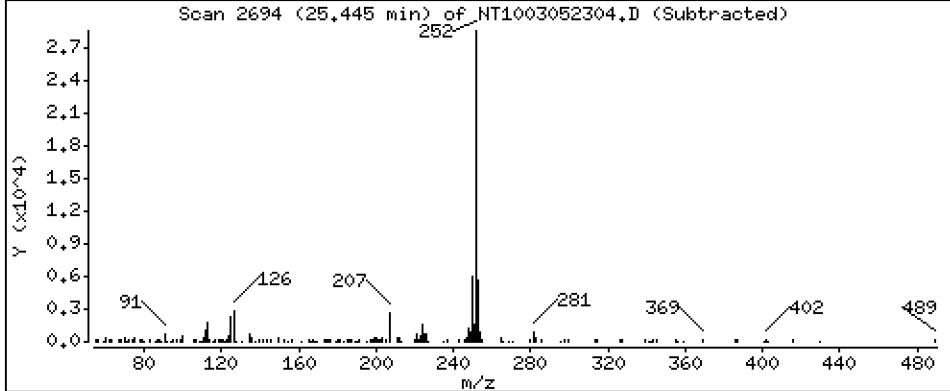
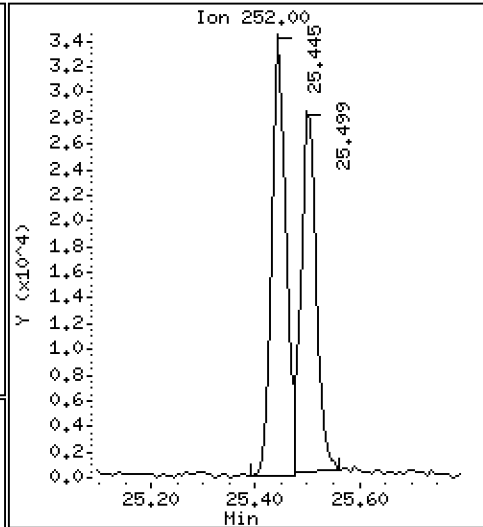
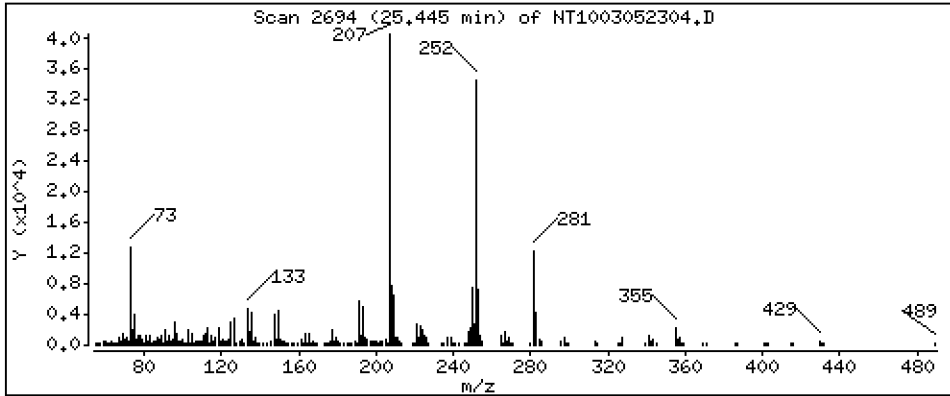
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1779 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

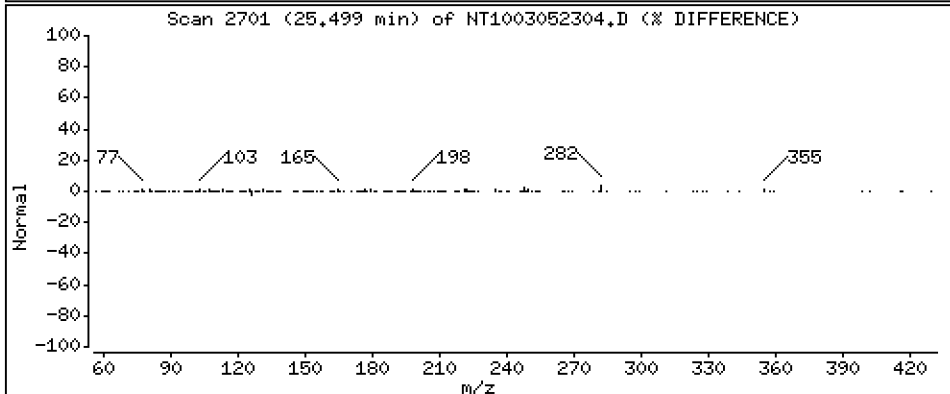
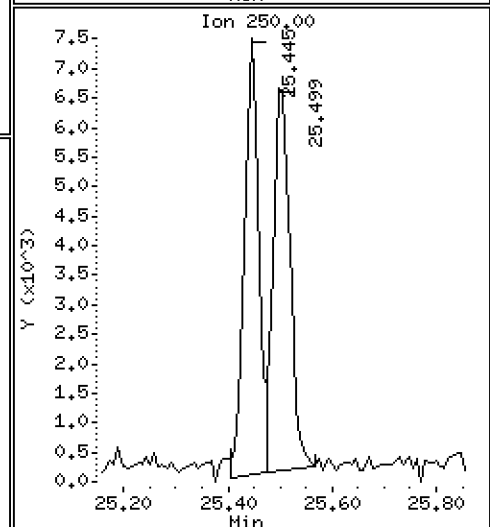
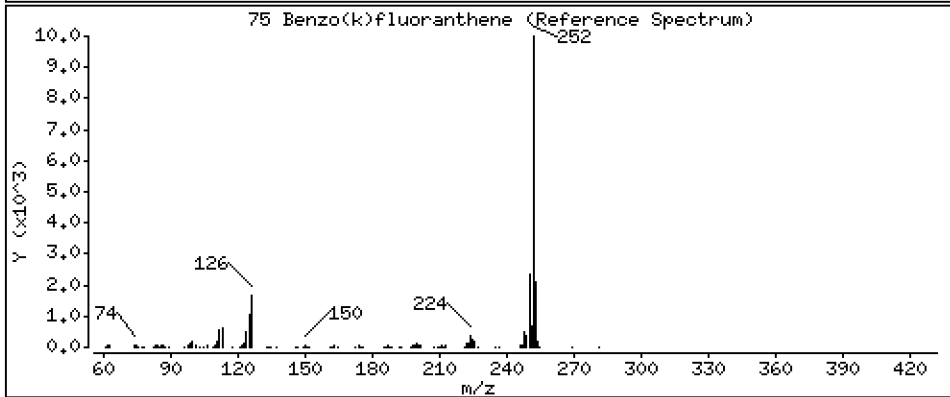
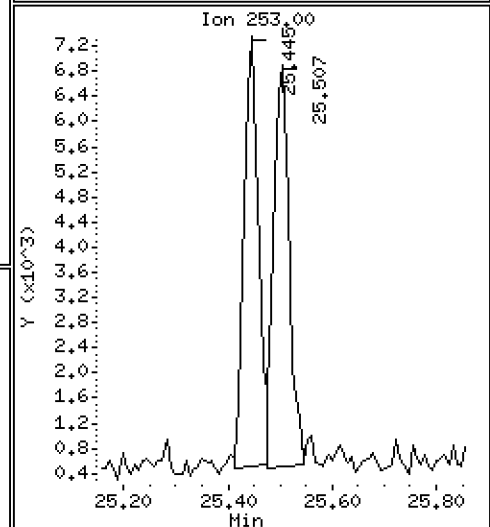
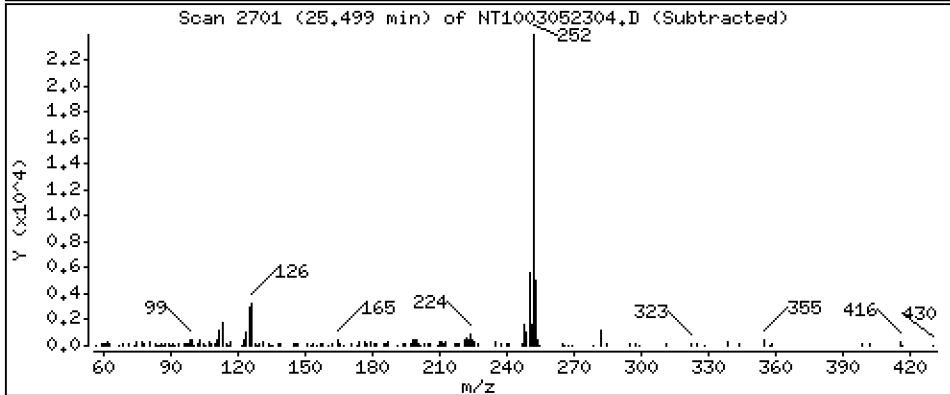
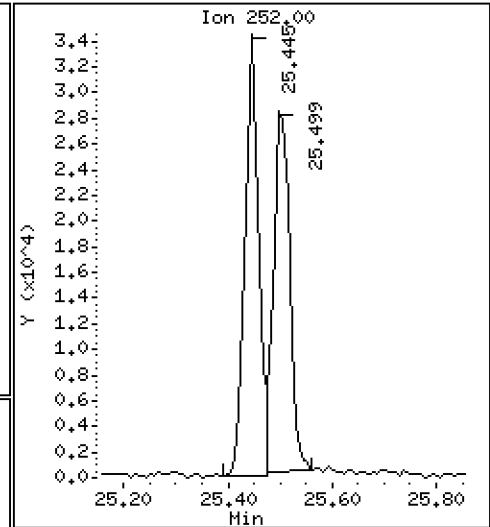
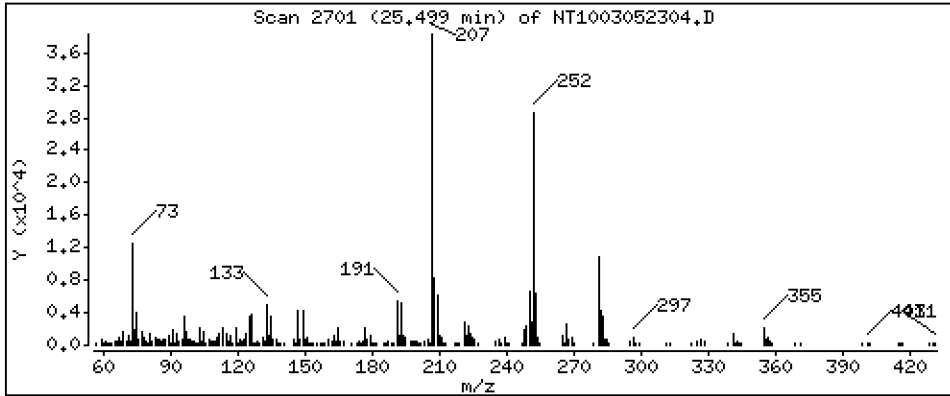
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,1763 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

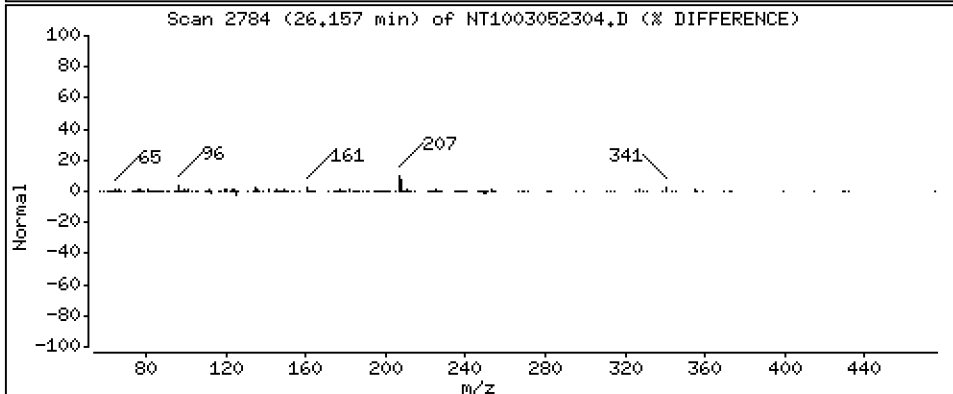
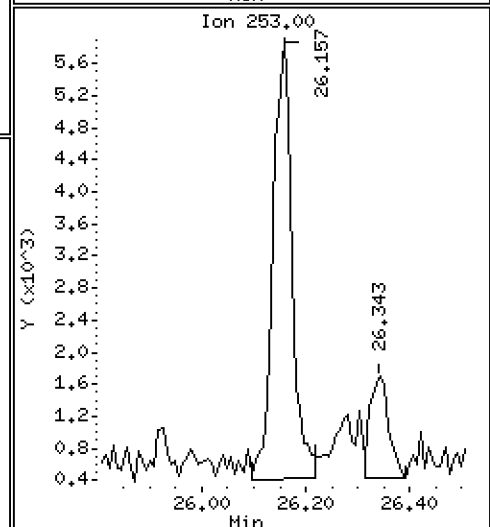
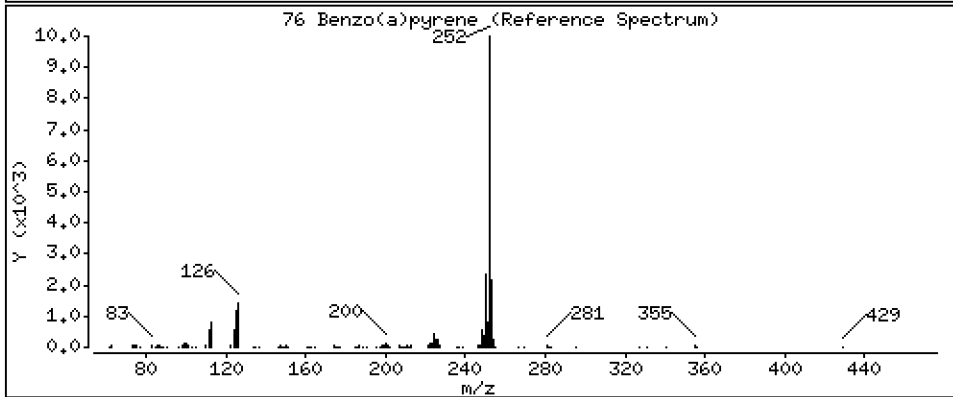
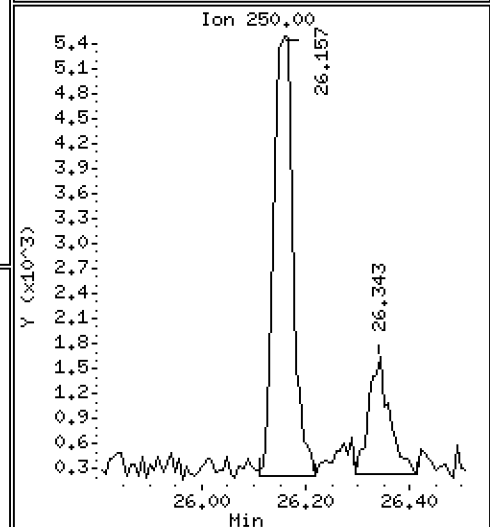
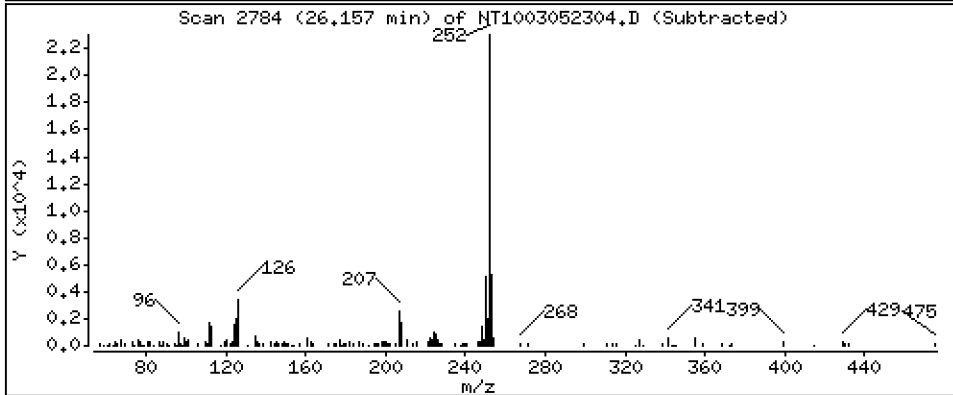
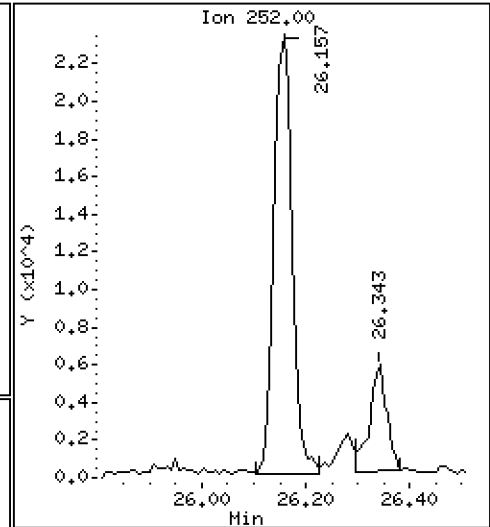
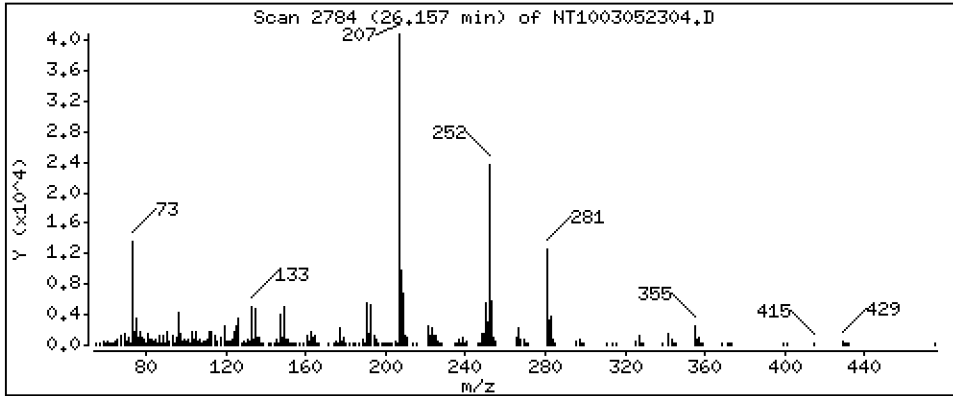
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1746 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

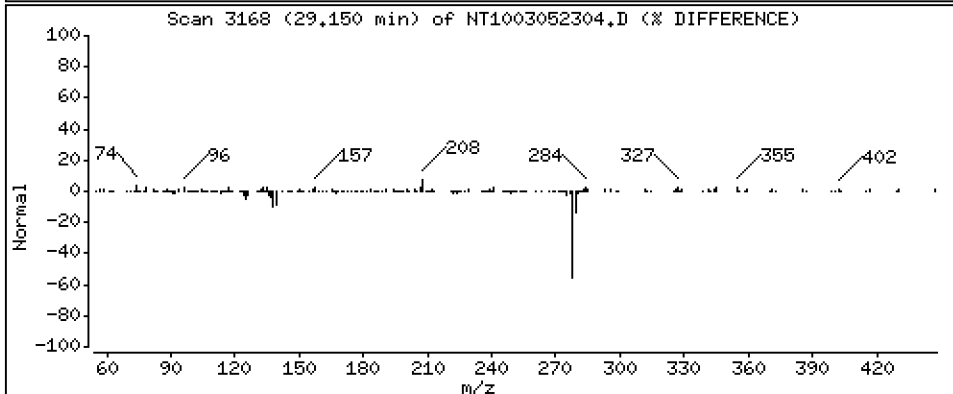
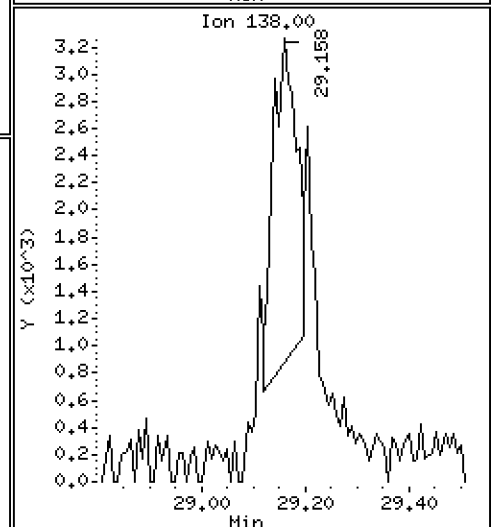
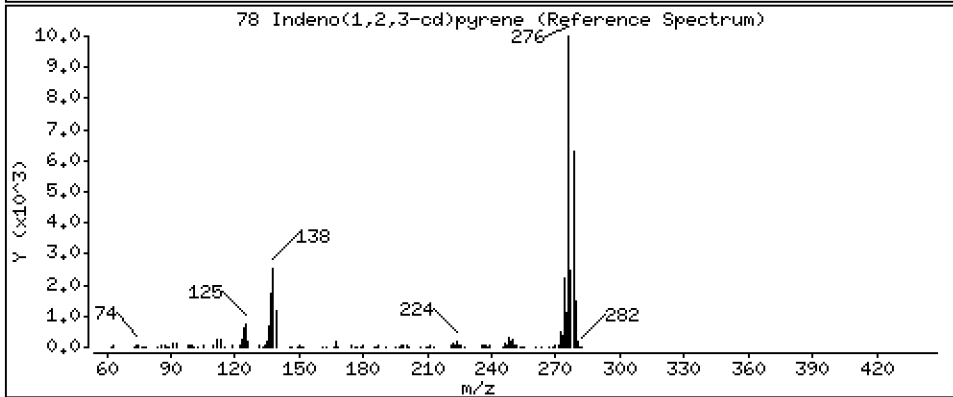
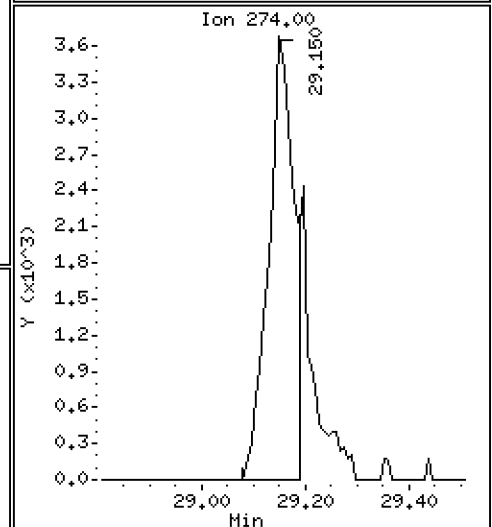
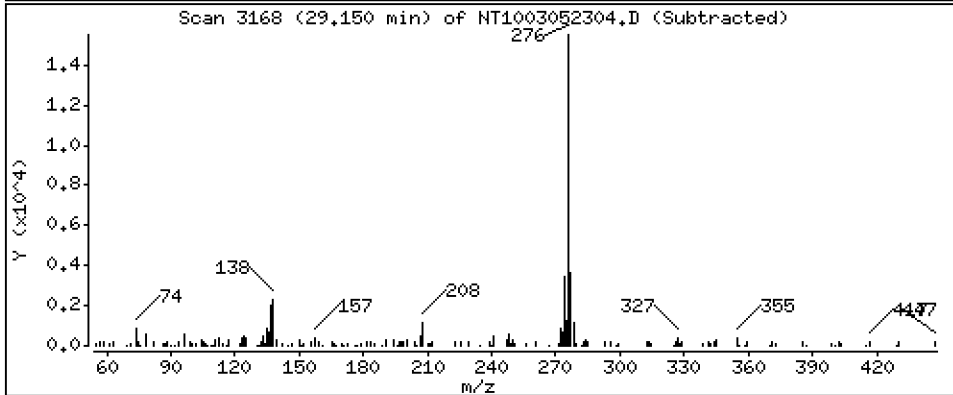
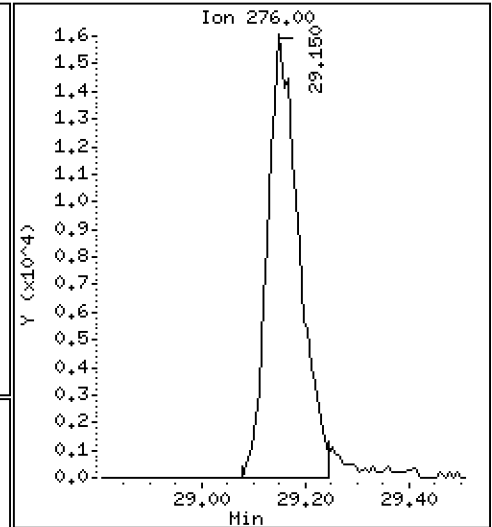
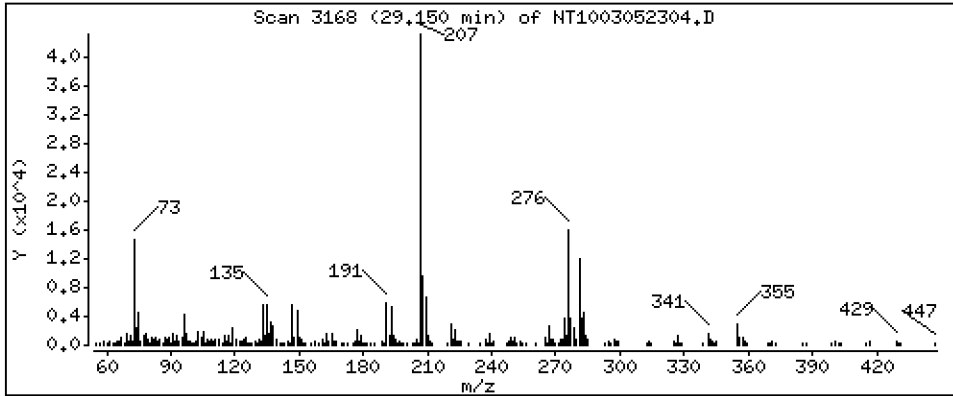
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1845 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

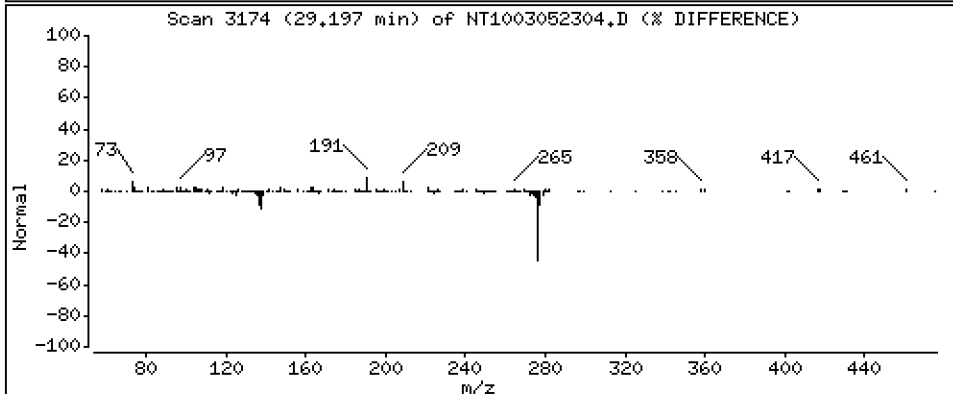
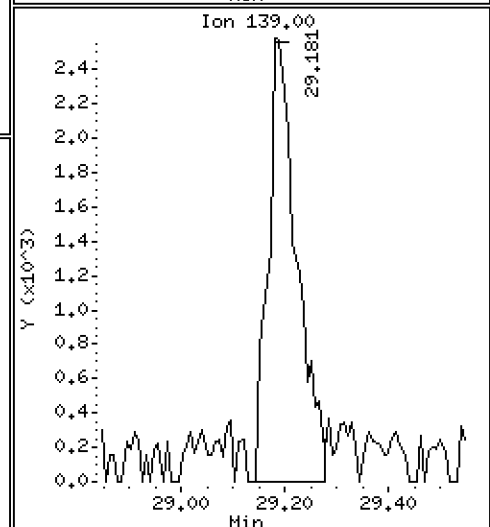
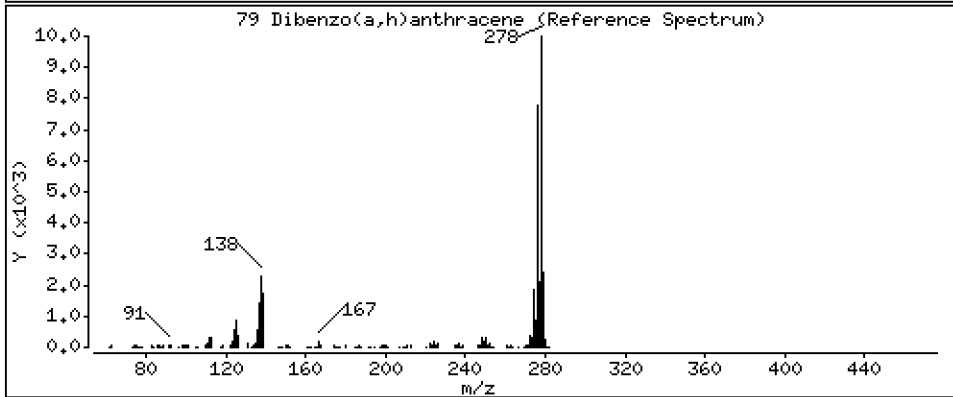
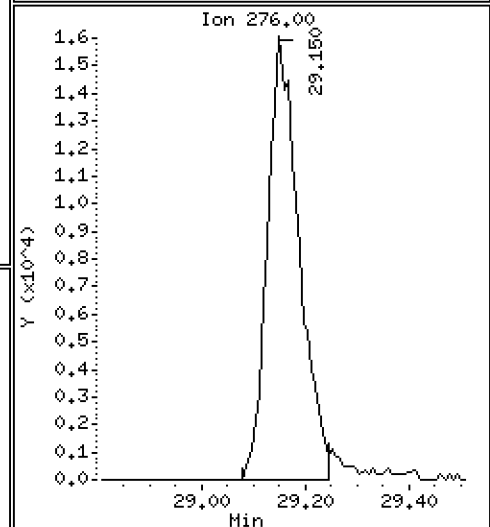
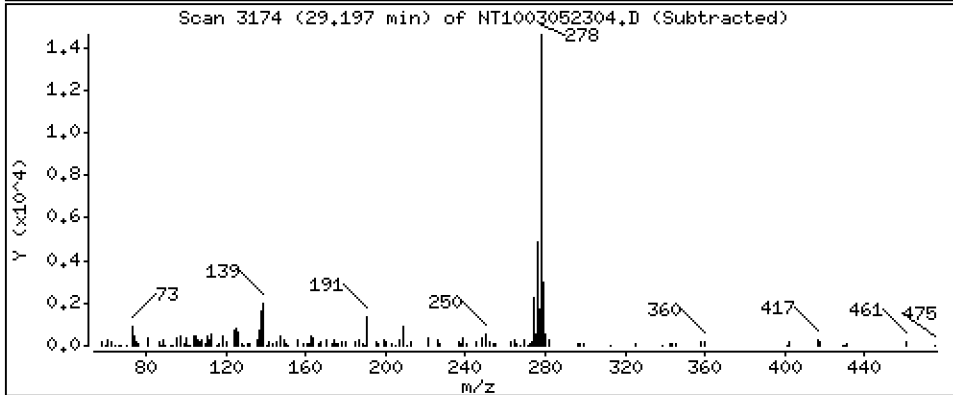
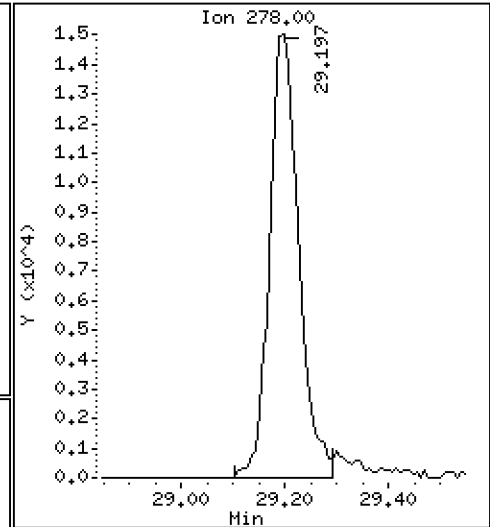
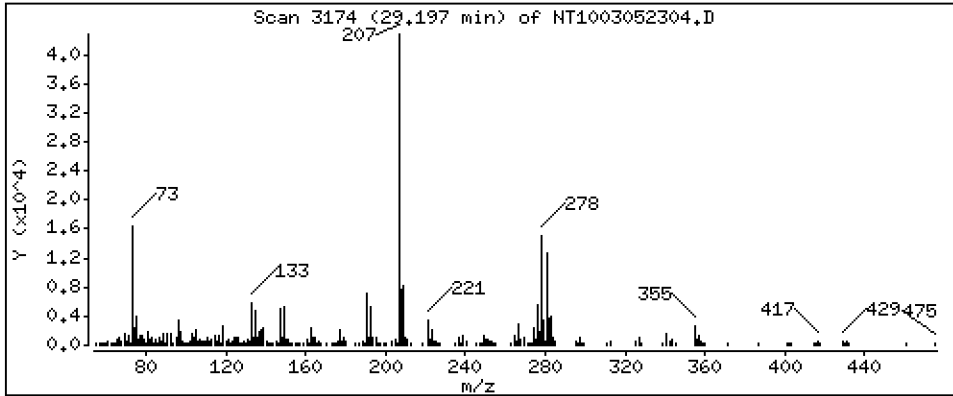
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2073 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

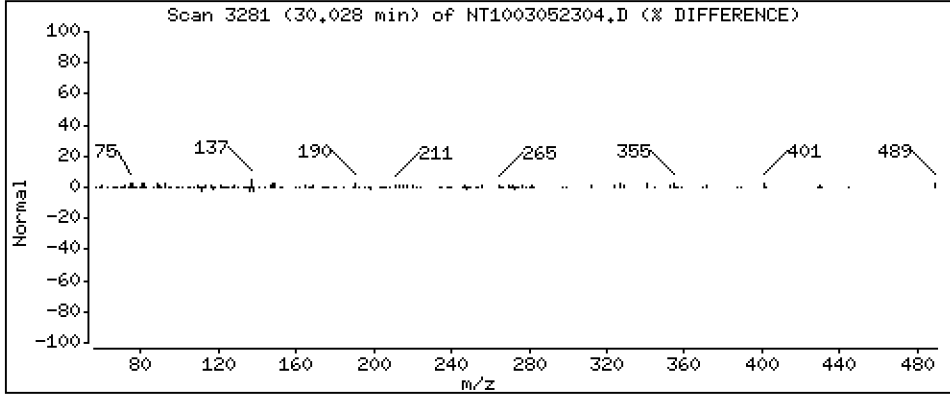
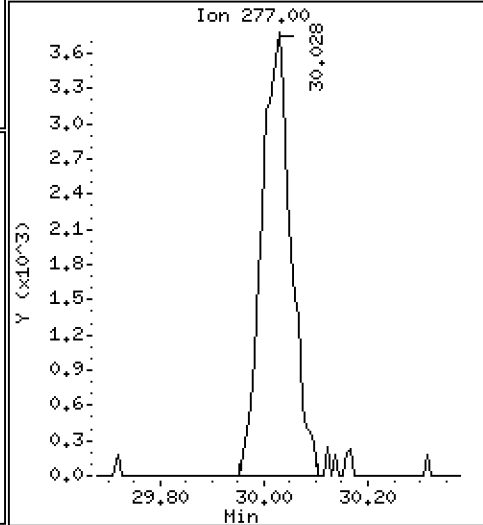
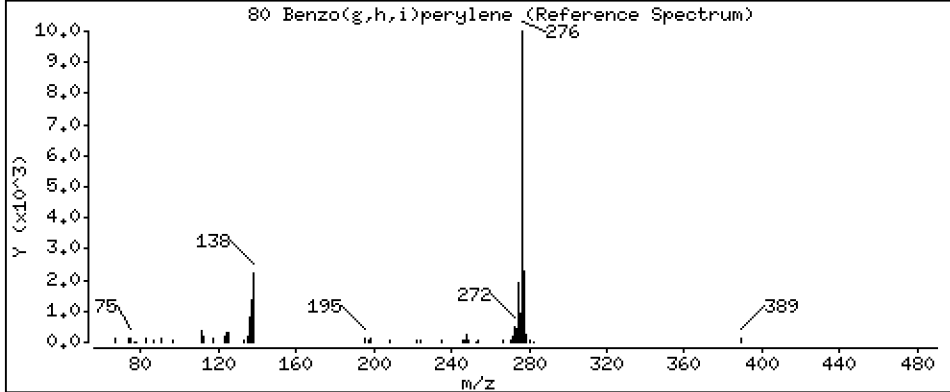
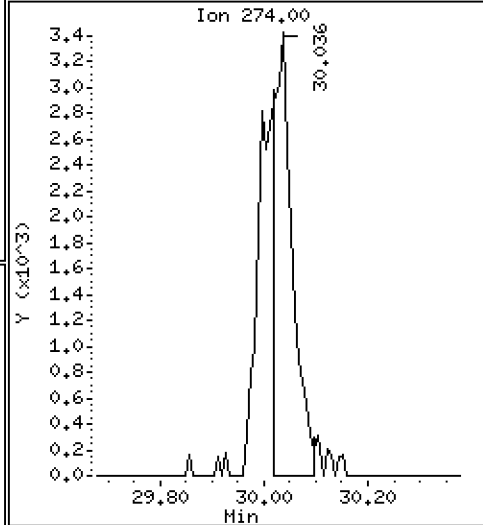
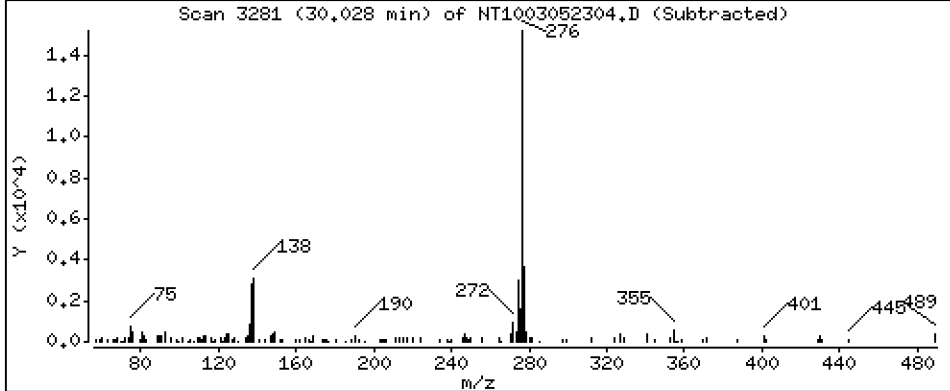
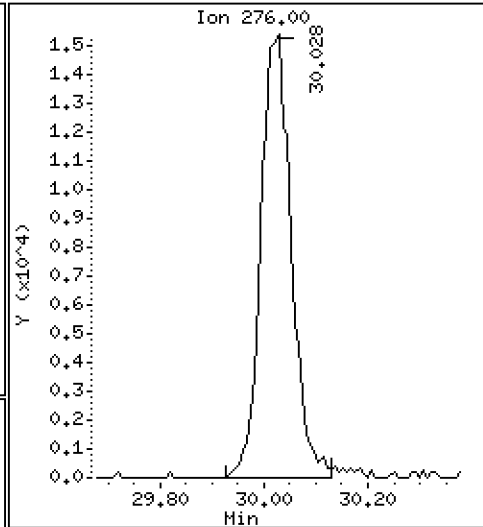
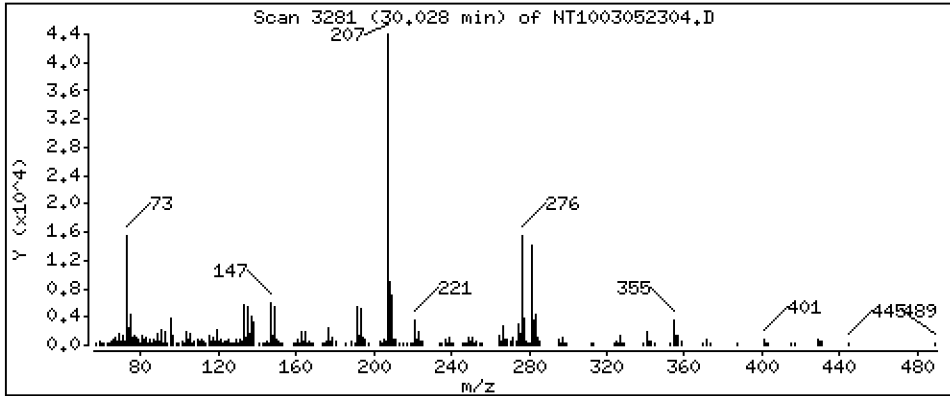
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,2119 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

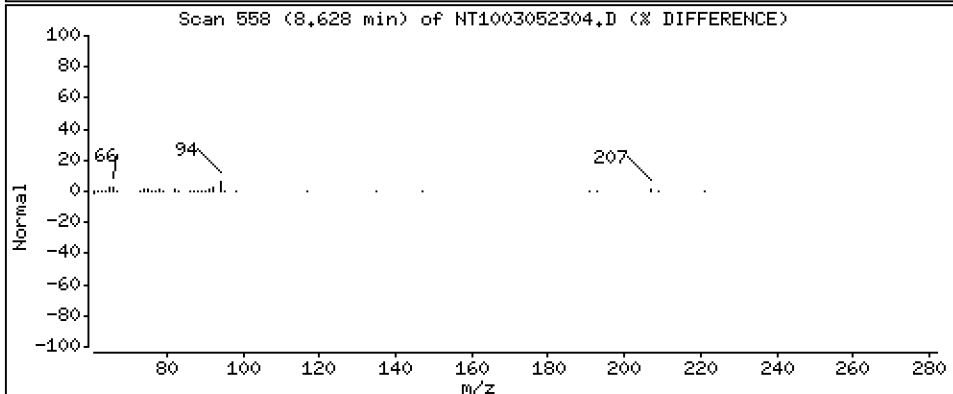
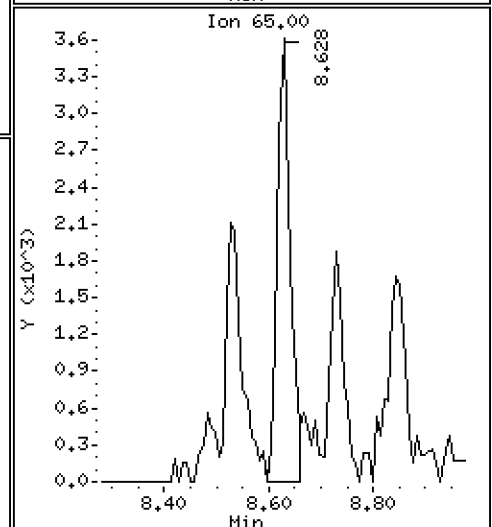
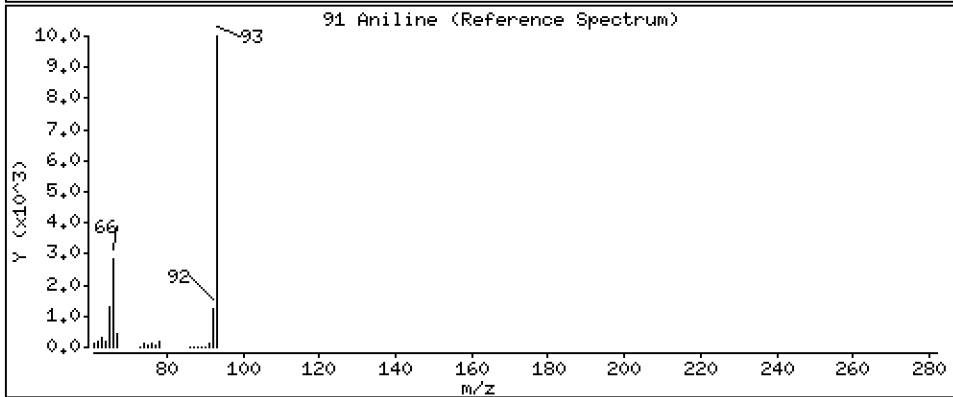
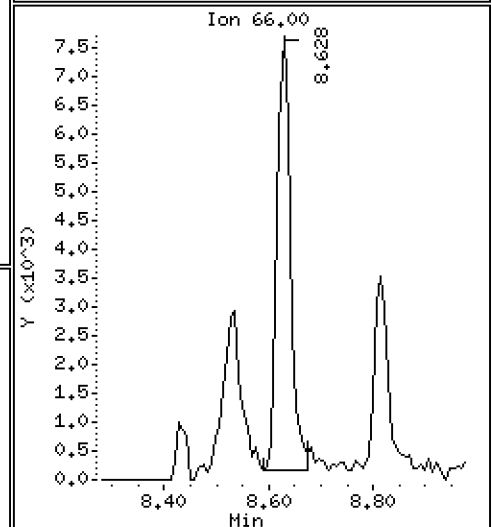
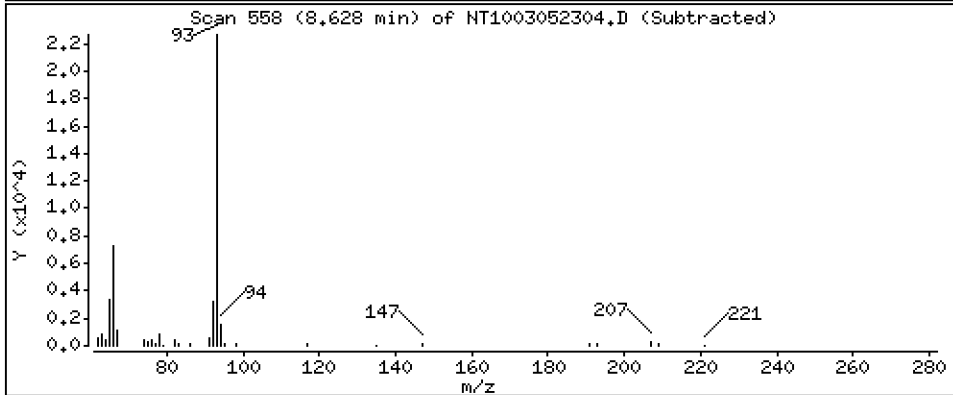
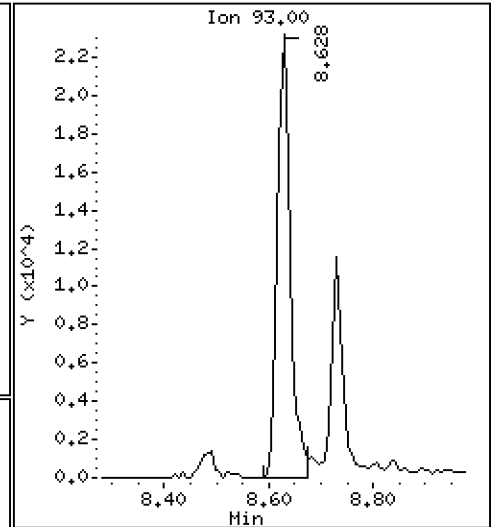
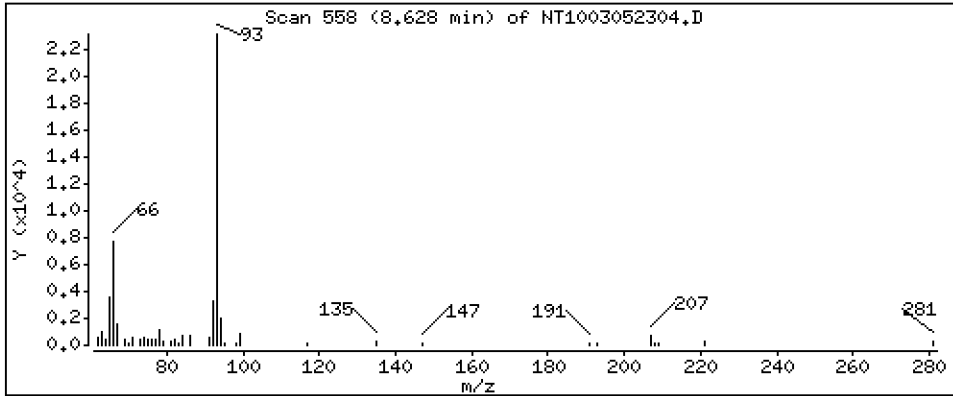
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,2915 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

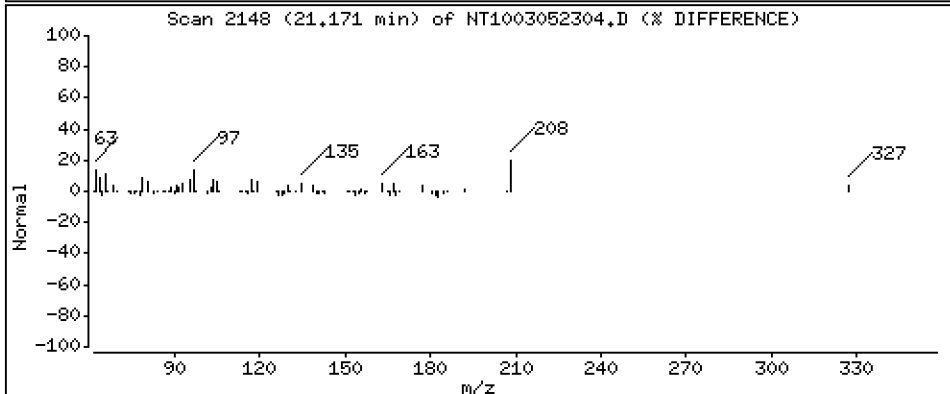
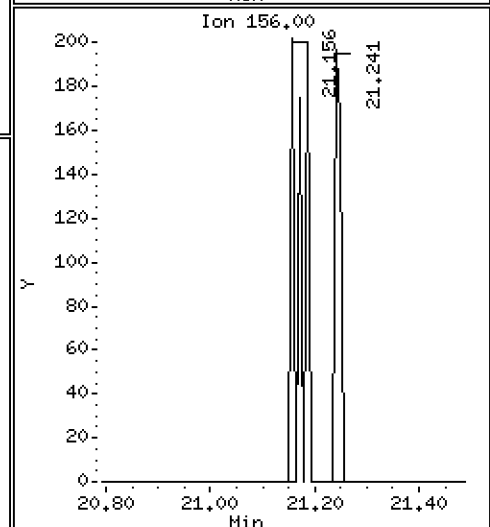
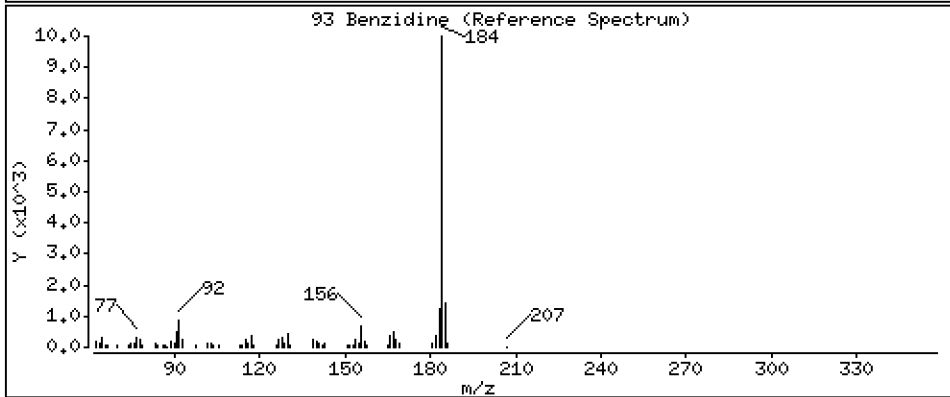
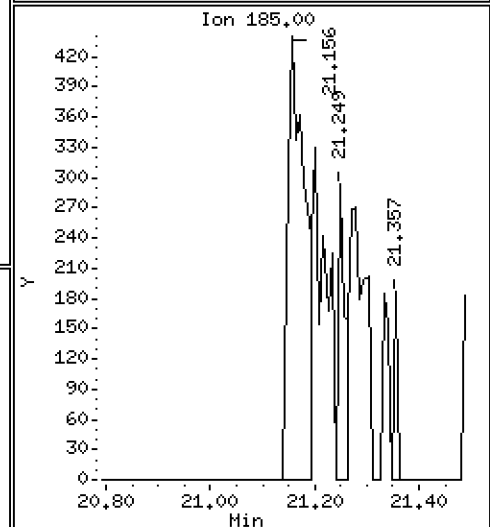
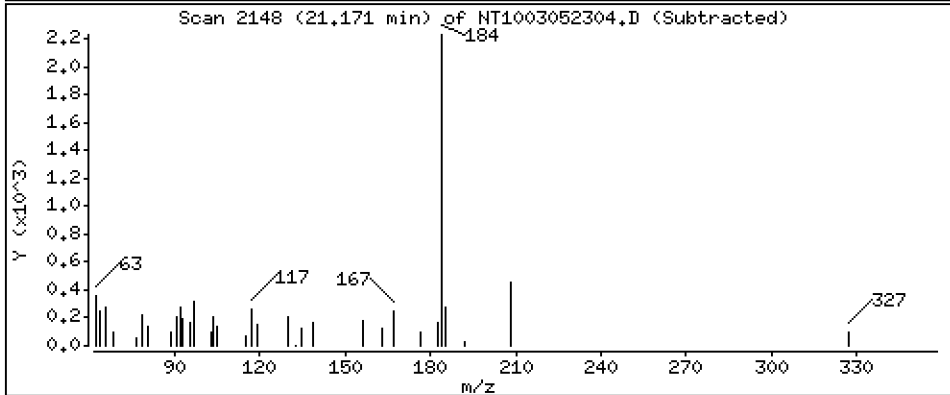
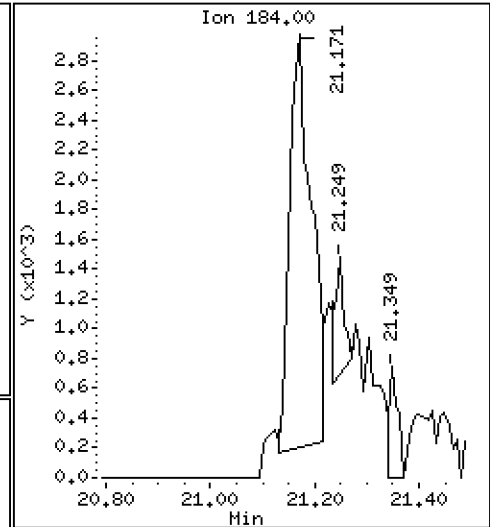
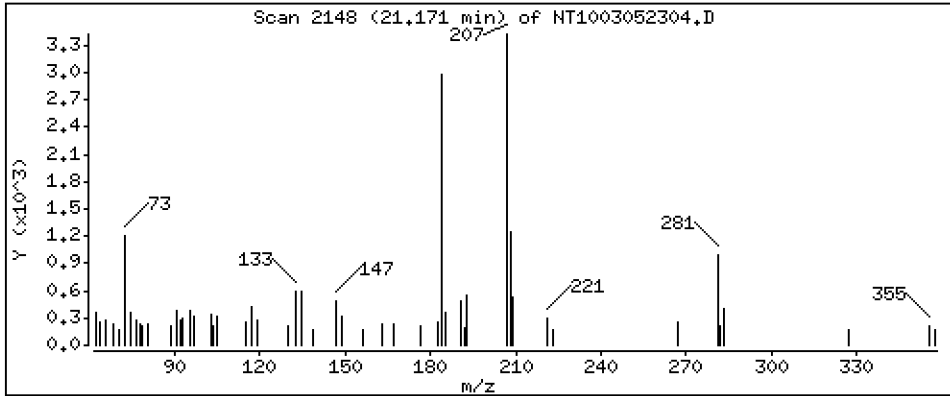
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,06408 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

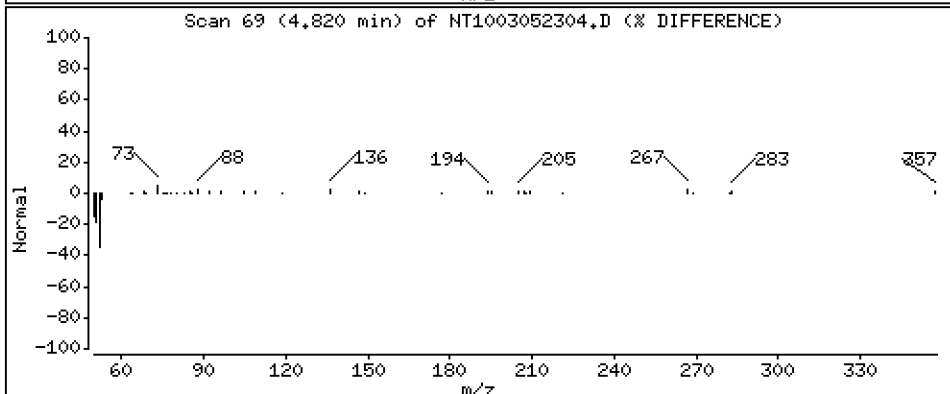
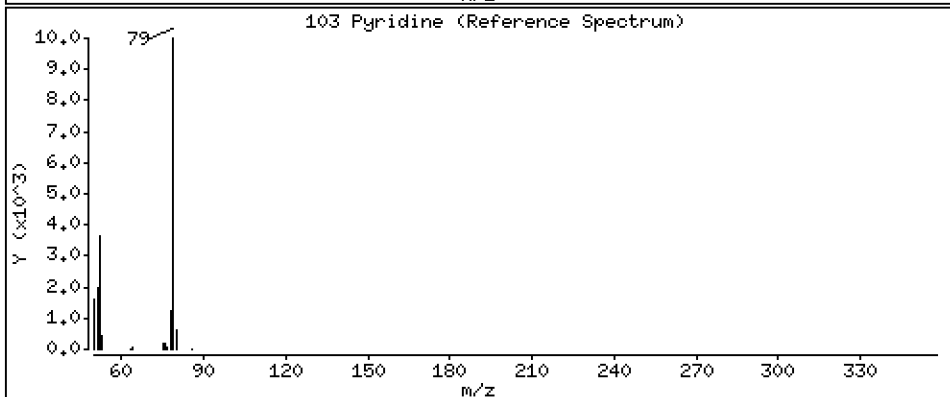
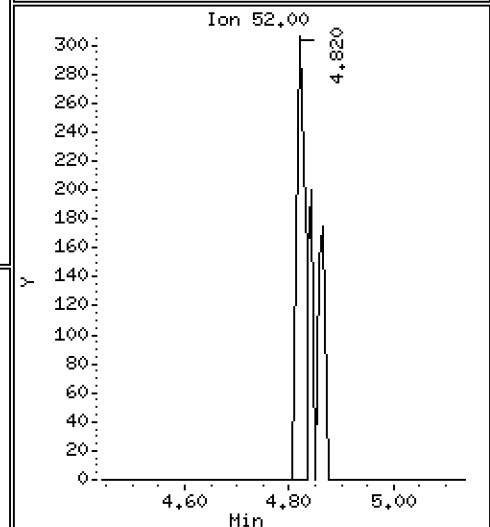
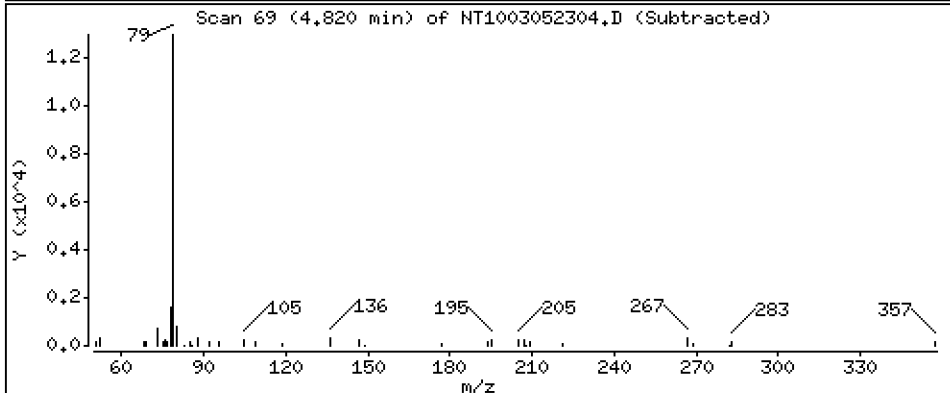
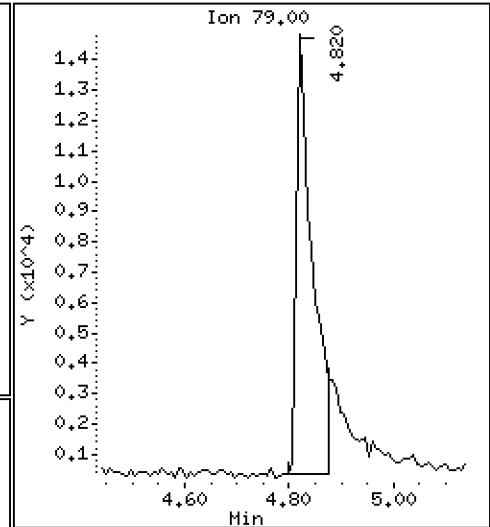
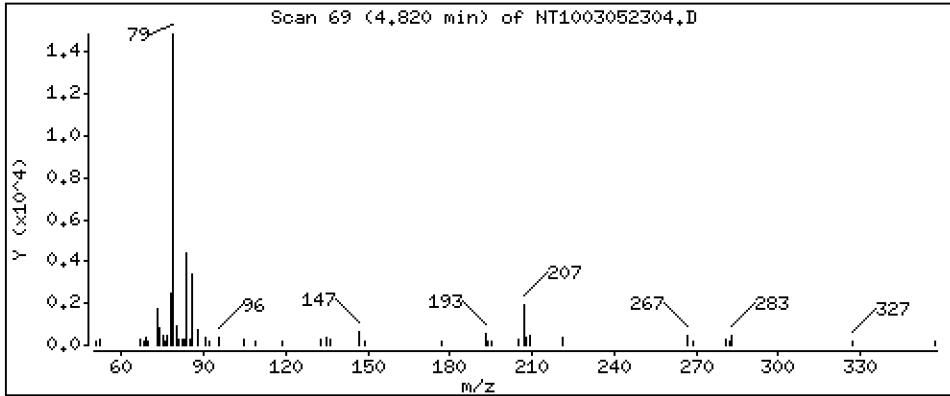
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,3047 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

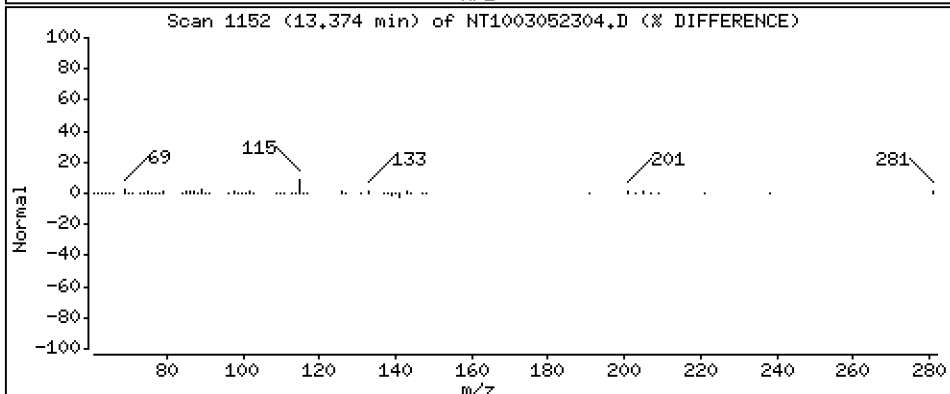
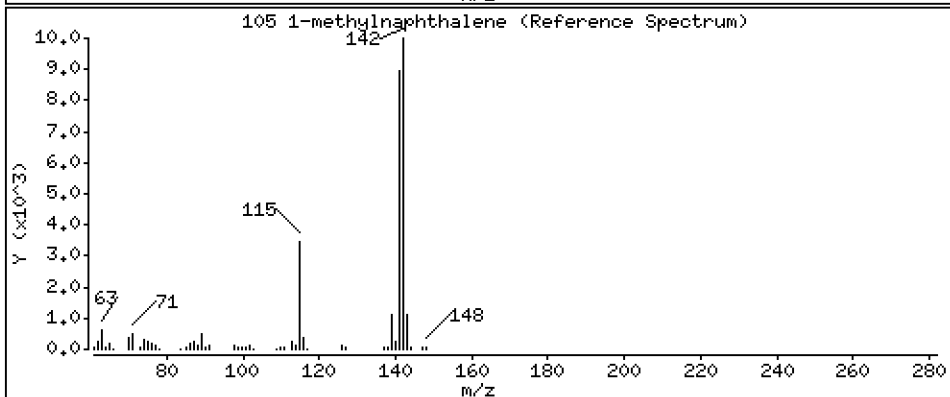
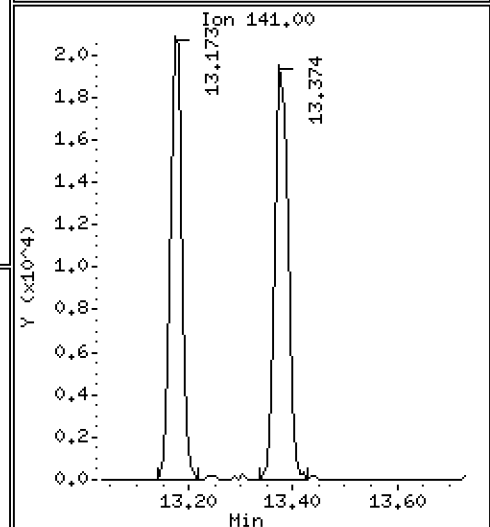
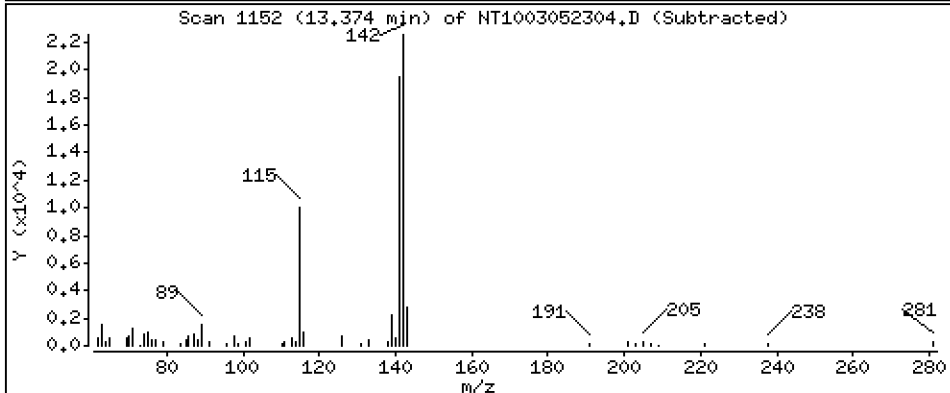
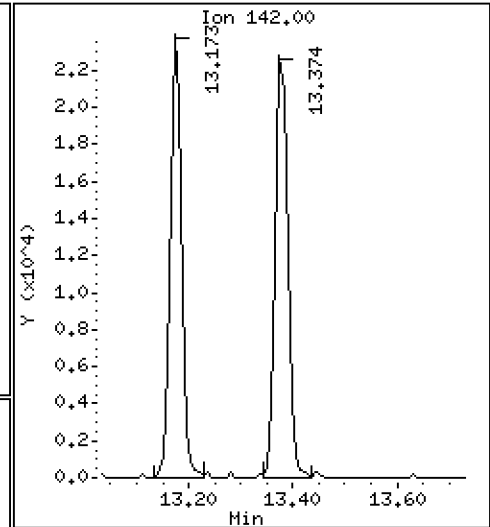
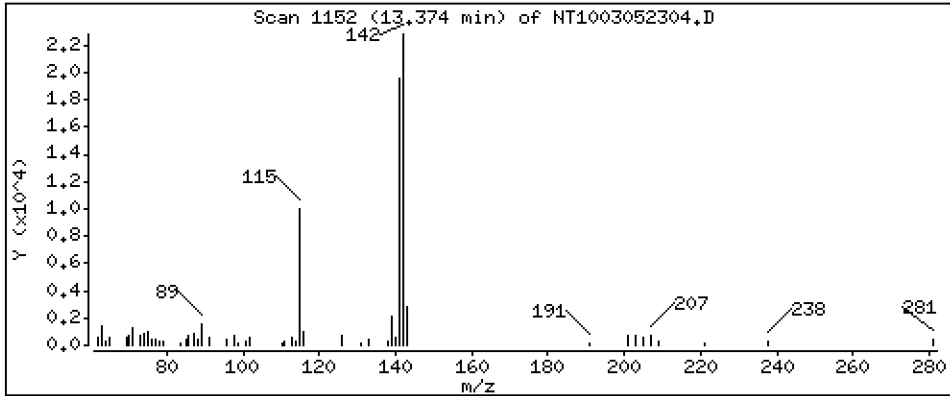
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2064 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

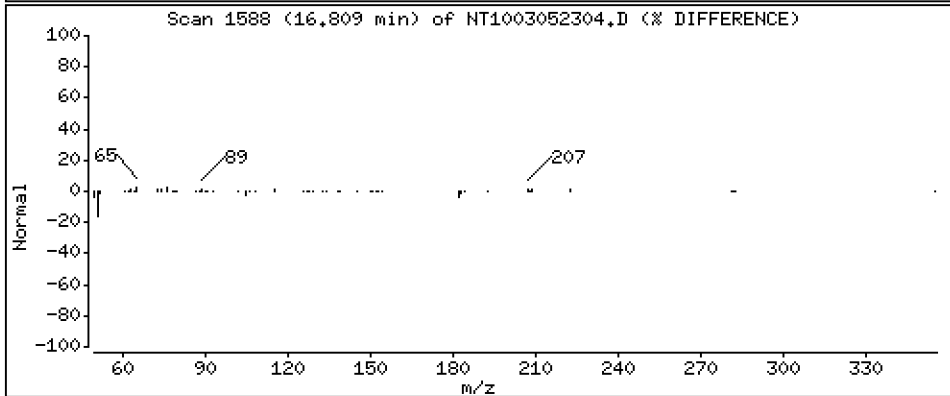
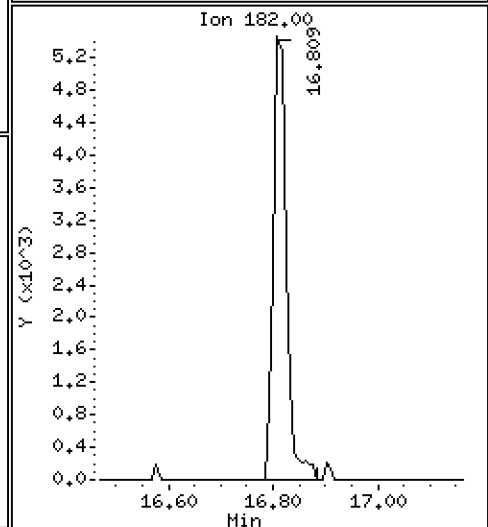
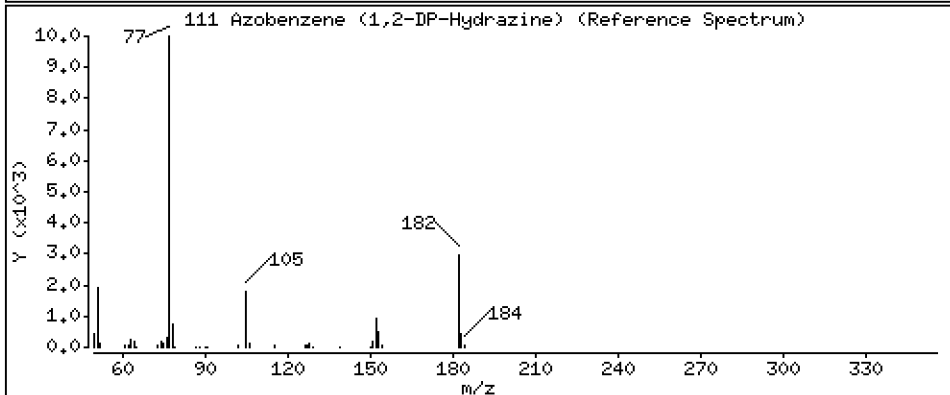
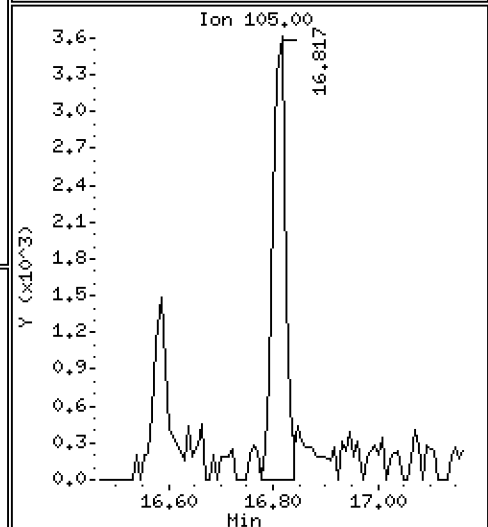
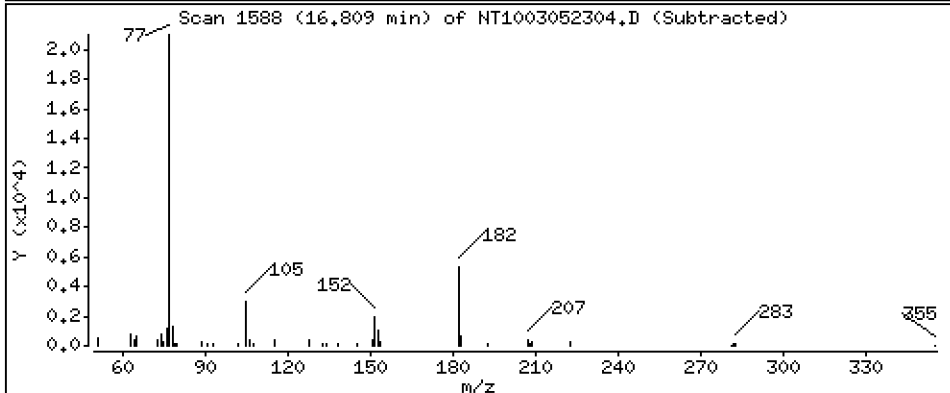
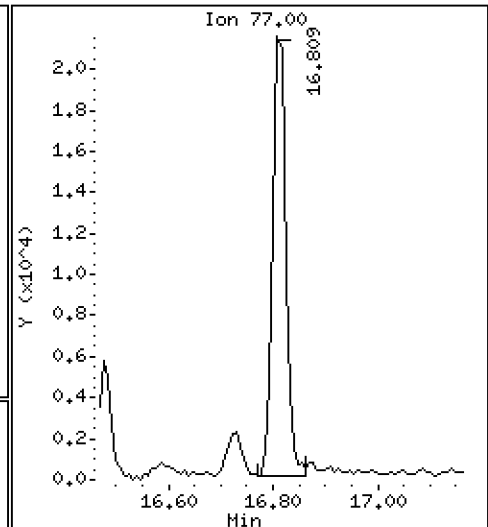
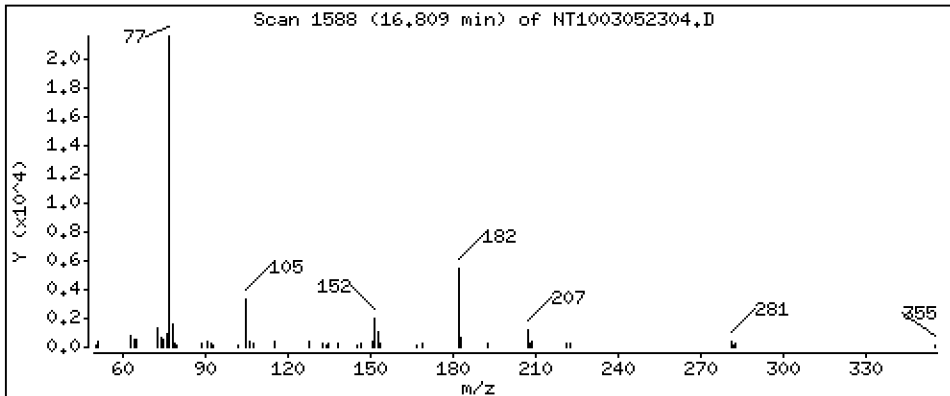
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1298 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

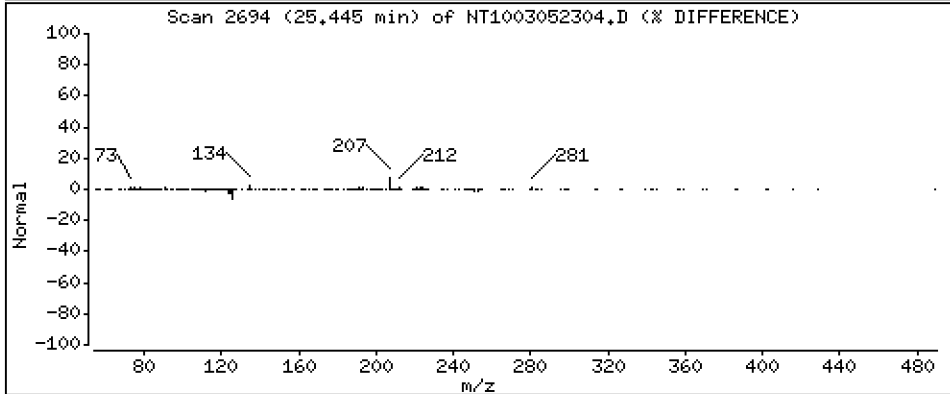
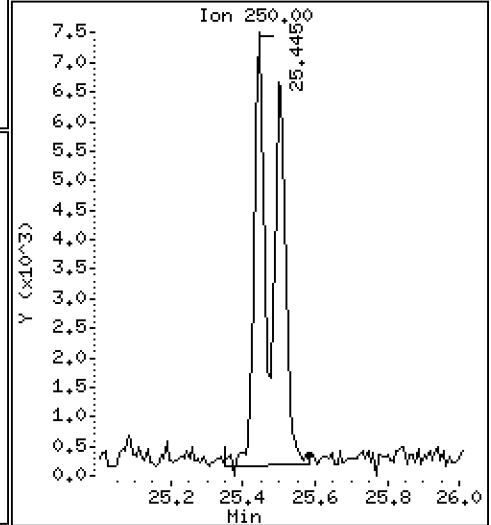
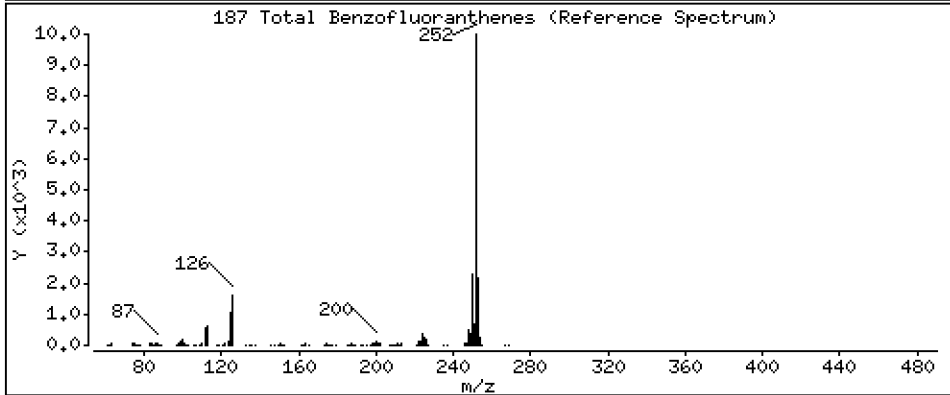
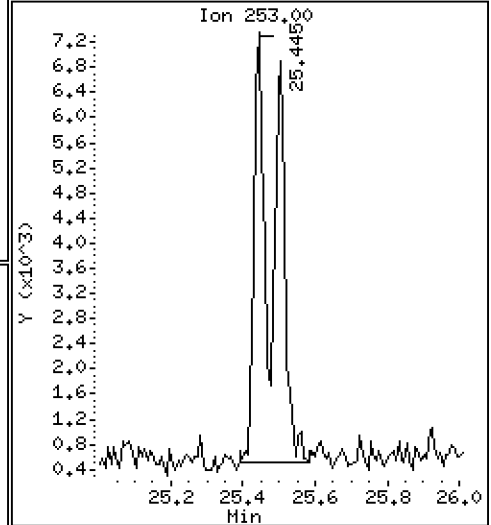
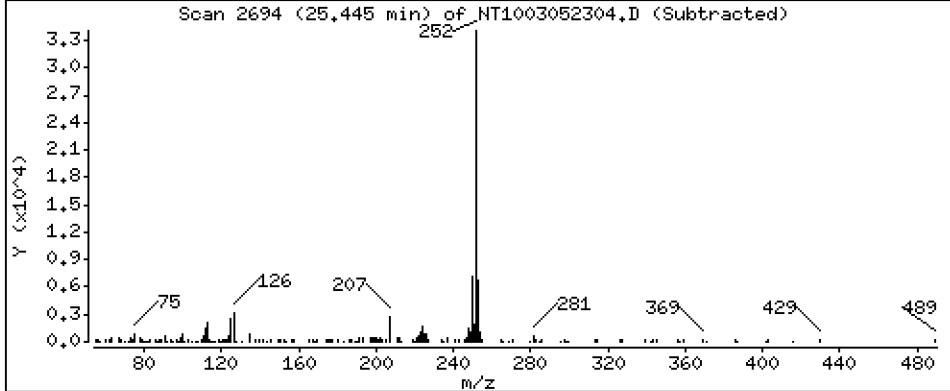
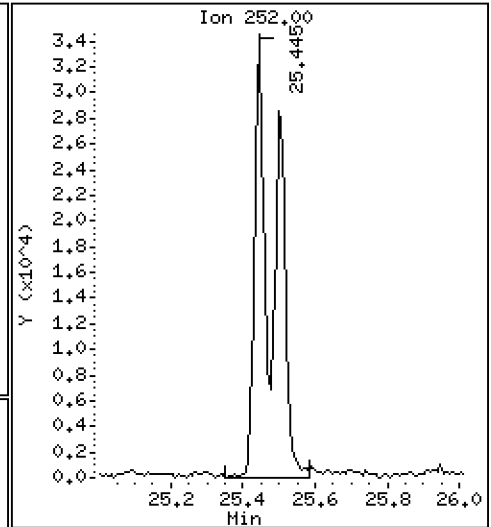
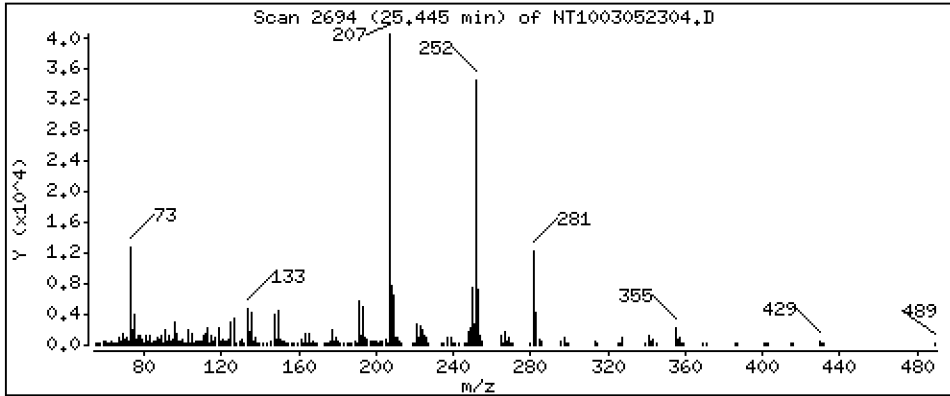
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3679 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0401-LCV1

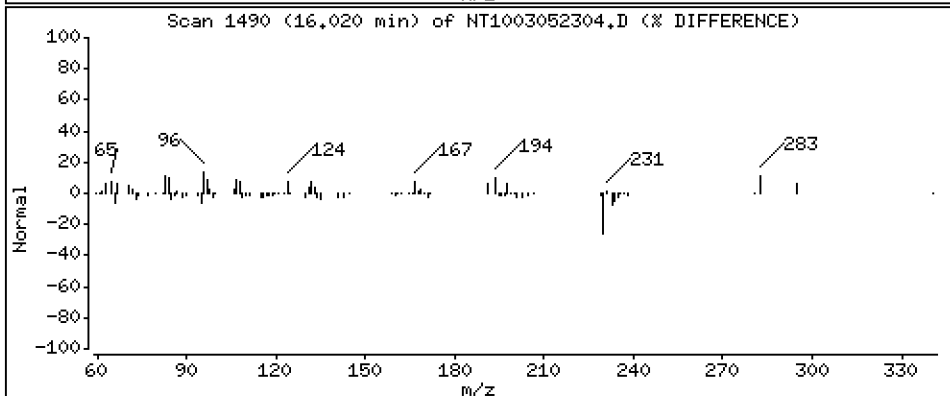
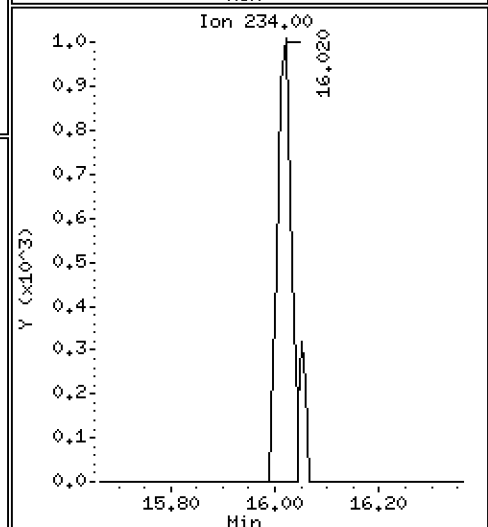
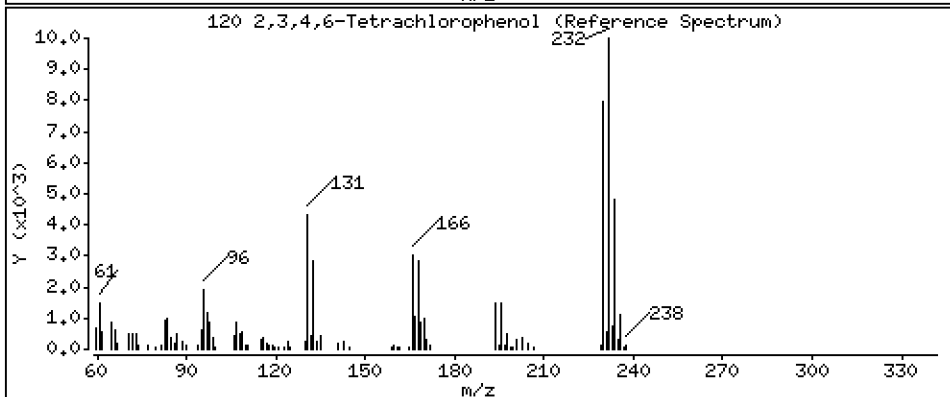
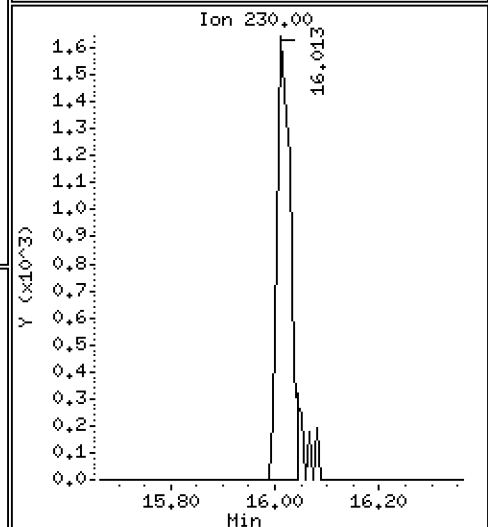
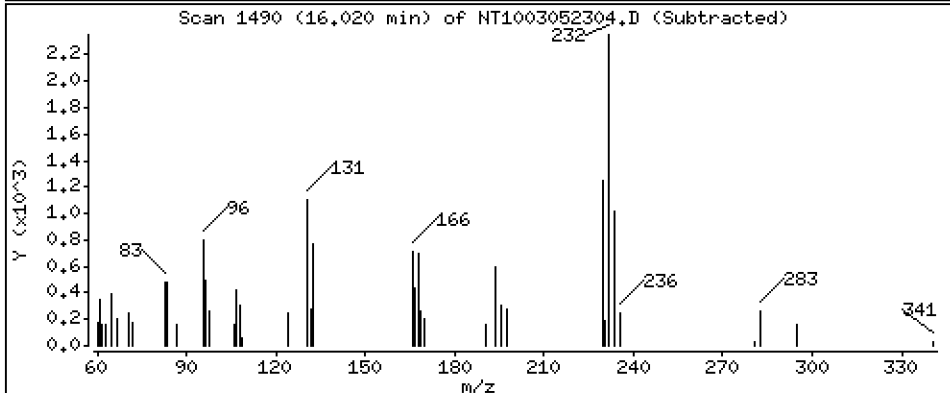
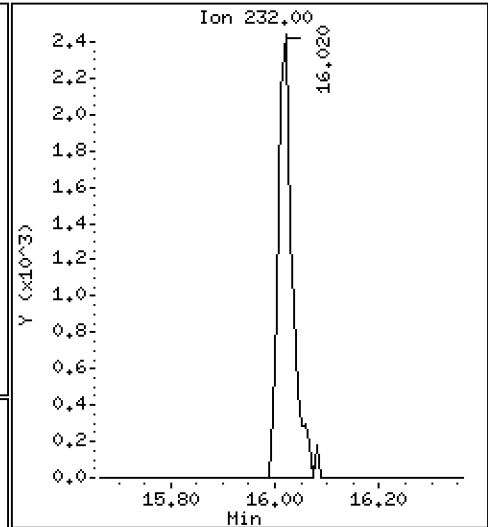
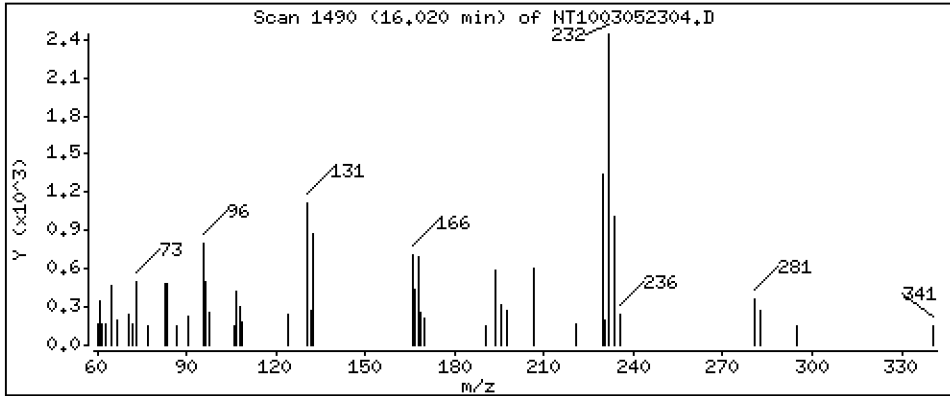
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,08686 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305.b\NT1003052304.D
 Lab Smp Id: SLC0401-LCV1
 Inj Date : 05-MAR-2023 15:18
 Operator : VTS
 Smp Info : SLC0401-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Meth Date : 27-Mar-2023 11:22 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.897	(0.747)	20033	0.21877	0.2188
\$ 2 Phenol-d5	99		8.504	8.504	(0.920)	19854	0.18675	0.1867 (M)
3 Phenol	94		8.527	8.528	(0.923)	16076	0.14222	0.1422
\$ 5 2-Chlorophenol-d4	132		8.813	8.813	(0.954)	21847	0.24086	0.2409
4 Bis(2-Chloroethyl)ether	93		8.728	8.728	(0.945)	16507	0.19111	0.1911
6 2-Chlorophenol	128		8.844	8.844	(0.957)	15414	0.16358	0.1636
7 1,3-Dichlorobenzene	146		9.130	9.138	(0.988)	22137	0.21308	0.2131
* 8 1,4-Dichlorobenzene-d4	152		9.239	9.239	(1.000)	291047	4.00000	
9 1,4-Dichlorobenzene	146		9.270	9.278	(1.003)	20559	0.19922	0.1992
\$ 10 1,2-Dichlorobenzene-d4	152		9.526	9.534	(1.031)	14899	0.21986	0.2199
12 1,2-Dichlorobenzene	146		9.557	9.557	(1.034)	21110	0.21134	0.2113
11 Benzyl alcohol	108		9.487	9.480	(1.027)	4588	0.07919	0.07919
14 2,2'-oxybis(1-Chloropropane)	121		9.736	9.728	(1.054)	6447	0.22388	0.2239 (M)
13 2-Methylphenol	108		9.666	9.666	(1.046)	14535	0.16599	0.1660
17 Hexachloroethane	117		10.209	10.209	(1.105)	8831	0.20849	0.2085
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.968	9.953	(1.079)	13799	0.12564	0.1256
\$ 18 Nitrobenzene-d5	82		10.294	10.302	(0.878)	18312	0.15586	0.1559
19 Nitrobenzene	77		10.341	10.341	(0.882)	17256	0.15657	0.1566
20 Isophorone	82		10.799	10.799	(0.921)	19501	0.13862	0.1386 (M)
21 2-Nitrophenol	139		10.958	10.959	(0.935)	6786	0.11098	0.1110
22 2,4-Dimethylphenol	107		11.009	11.018	(0.939)	34653	0.32871	0.3287
23 Bis(2-Chloroethoxy)methane	93		11.221	11.222	(0.957)	17820	0.20497	0.2050
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.434	11.434	(0.975)	28189	0.33927	0.3393
26 1,2,4-Trichlorobenzene	180		11.603	11.603	(0.989)	17643	0.21331	0.2133
* 27 Naphthalene-d8	136		11.726	11.726	(1.000)	1070295	4.00000	
28 Naphthalene	128		11.772	11.773	(1.004)	56321	0.20502	0.2050
29 4-Chloroaniline	127		11.873	11.873	(1.013)	29121	0.24222	0.2422
30 Hexachlorobutadiene	225		11.996	11.997	(1.023)	10931	0.18150	0.1815
31 4-Chloro-3-methylphenol	107		12.832	12.825	(1.094)	25987	0.29730	0.2973
32 2-Methylnaphthalene	142		13.173	13.181	(1.123)	37728	0.19441	0.1944
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.753	13.746	(0.897)	15665	0.30937	0.3094
35 2,4,5-Trichlorophenol	196	13.831	13.815	(0.902)	12614	0.23346	0.2335
§ 36 2-Fluorobiphenyl	172	13.923	13.924	(0.908)	41292	0.21625	0.2162
37 2-Chloronaphthalene	162	14.179	14.187	(0.925)	31977	0.21332	0.2133
38 2-Nitroaniline	65	14.395	14.396	(0.939)	8851	0.21596	0.2160
39 Dimethylphthalate	163	14.759	14.767	(0.963)	28755	0.16632	0.1663
40 Acenaphthylene	152	15.046	15.046	(0.981)	48589	0.18802	0.1880
41 2,6-Dinitrotoluene	165	14.899	14.899	(0.972)	9657	0.25450	0.2545
* 42 Acenaphthene-d10	164	15.332	15.340	(1.000)	535349	4.00000	
43 3-Nitroaniline	138	Compound Not Detected.					
44 Acenaphthene	153	15.401	15.409	(1.005)	30643	0.19661	0.1966
45 2,4-Dinitrophenol	184	Compound Not Detected.					
46 Dibenzofuran	168	15.765	15.765	(1.028)	47461	0.20518	0.2052
47 4-Nitrophenol	109	Compound Not Detected.					
48 2,4-Dinitrotoluene	165	15.742	15.742	(1.027)	9863	0.17933	0.1793
50 Diethylphthalate	149	16.229	16.237	(1.058)	27937	0.15253	0.1525
49 Fluorene	166	16.484	16.484	(1.075)	38035	0.19763	0.1976
51 4-Chlorophenyl-phenylether	204	16.484	16.484	(1.075)	18253	0.21774	0.2177
52 4-Nitroaniline	138	Compound Not Detected.					
53 4,6-Dinitro-2-methylphenol	198	16.585	16.585	(0.899)	5226	0.23289	0.2329
54 N-Nitrosodiphenylamine	169	16.723	16.724	(0.907)	27067	0.18997	0.1900
§ 55 2,4,6-Tribromophenol	330	16.970	16.986	(1.107)	714	0.02174	0.02174
56 4-Bromophenyl-phenylether	248	17.503	17.504	(0.949)	11347	0.19654	0.1965
57 Hexachlorobenzene	284	17.619	17.620	(0.955)	16352	0.25152	0.2515
58 Pentachlorophenol	266	Compound Not Detected.					
* 59 Phenanthrene-d10	188	18.447	18.448	(1.000)	962985	4.00000	
60 Phenanthrene	178	18.502	18.502	(1.003)	47244	0.19170	0.1917
61 Anthracene	178	18.610	18.610	(1.009)	41502	0.17367	0.1737
62 Carbazole	167	18.943	18.943	(1.027)	34213	0.15628	0.1563
63 Di-n-butylphthalate	149	19.639	19.647	(1.065)	35815	0.12059	0.1206
64 Fluoranthene	202	20.885	20.885	(0.888)	52527	0.17809	0.1781
65 Pyrene	202	21.318	21.318	(0.906)	53917	0.17953	0.1795
§ 66 Terphenyl-d14	244	21.596	21.597	(0.918)	46499	0.19135	0.1913
67 Butylbenzylphthalate	149	22.495	22.487	(0.957)	14643	0.09053	0.09053
68 Benzo(a)anthracene	228	23.493	23.494	(0.999)	56576	0.18715	0.1871
* 69 Chrysene-d12	240	23.517	23.517	(1.000)	857365	4.00000	
70 3,3'-Dichlorobenzidine	252	23.439	23.440	(0.997)	44875	0.33327	0.3333
71 Chrysene	228	23.555	23.563	(1.002)	49822	0.20279	0.2028
72 bis(2-Ethylhexyl)phthalate	149	23.493	23.494	(0.955)	27381	0.14537	0.1454
* 134 Di-n-octylphthalate-d4	153	24.593	24.593	(1.000)	1343499	4.00000	
73 Di-n-octylphthalate	149	24.601	24.609	(1.000)	77989	0.26178	0.2618
74 Benzo(b)fluoranthene	252	25.444	25.445	(0.968)	62792	0.17794	0.1779 (H)
75 Benzo(k)fluoranthene	252	25.499	25.507	(0.970)	59902	0.17633	0.1763
76 Benzo(a)pyrene	252	26.157	26.157	(0.995)	55083	0.17465	0.1746
* 77 Perylene-d12	264	26.281	26.281	(1.000)	1034621	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.150	29.158	(1.109)	68069	0.18452	0.1845
79 Dibenzo(a,h)anthracene	278	29.196	29.197	(1.111)	58001	0.20730	0.2073
80 Benzo(g,h,i)perylene	276	30.027	30.028	(1.143)	62302	0.21192	0.2119
90 N-Nitrosodimethylamine	74	Compound Not Detected.					
91 Aniline	93	8.628	8.628	(0.934)	38208	0.29153	0.2915
93 Benzidine	184	21.171	21.140	(0.900)	8390	0.06408	0.06408
103 Pyridine	79	4.820	4.789	(0.522)	31948	0.30474	0.3047
105 1-methylnaphthalene	142	13.374	13.382	(1.141)	36246	0.20636	0.2064
111 Azobenzene (1,2-DP-Hydrazine)	77	16.808	16.816	(1.096)	35500	0.12980	0.1298

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.444	25.507	(0.968)	124707	0.36788	0.3679
120 2,3,4,6-Tetrachlorophenol	232		16.020	16.012	(1.045)	4353	0.08686	0.08686

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052304.D Calibration Time: 14:03
 Lab Smp Id: SLC0401-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	297263	148632	594526	291047	-2.09
27 Naphthalene-d8	1085336	542668	2170672	1070295	-1.39
42 Acenaphthene-d10	563464	281732	1126928	535349	-4.99
59 Phenanthrene-d10	1038318	519159	2076636	962985	-7.26
69 Chrysene-d12	1012751	506376	2025502	857365	-15.34
134 Di-n-octylphthala	1628890	814445	3257780	1343499	-17.52
77 Perylene-d12	1152264	576132	2304528	1034621	-10.21

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.33	-0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.52	23.02	24.02	23.52	-0.00
134 Di-n-octylphthala	24.59	24.09	25.09	24.59	-0.00
77 Perylene-d12	26.28	25.78	26.78	26.28	-0.00

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

REVIEW SUMMARY FOR FILE - NT1003052304.D

Lab ID: SLC0401-LCV1
nt10.i, 20230305.b\ABN.m, 05-MAR-2023 15:18

RT CO-ELUTION COMPOUNDS

23.494 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

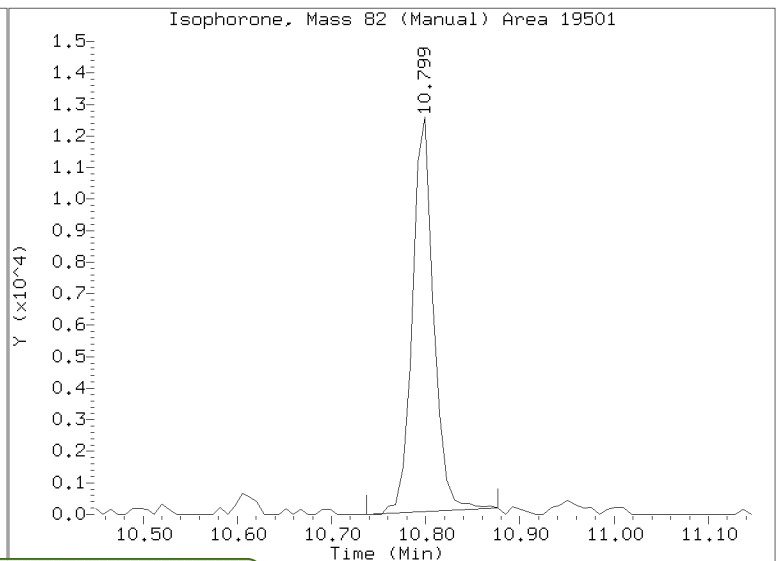
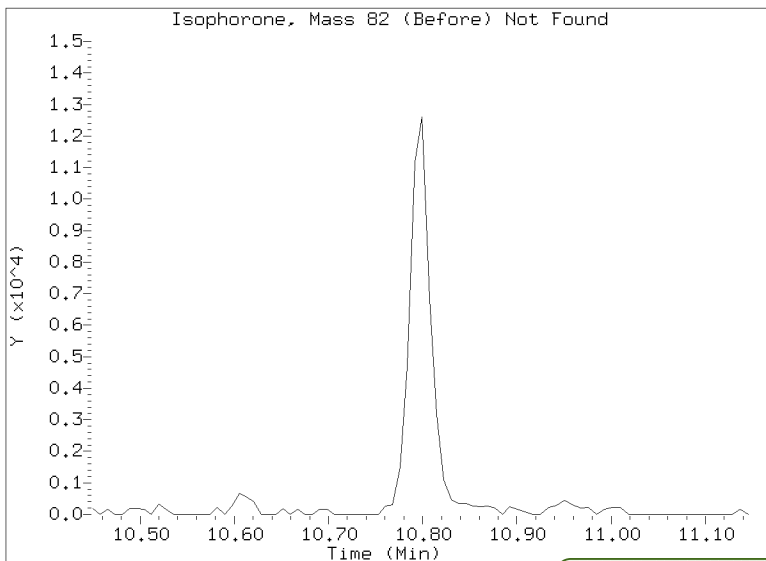
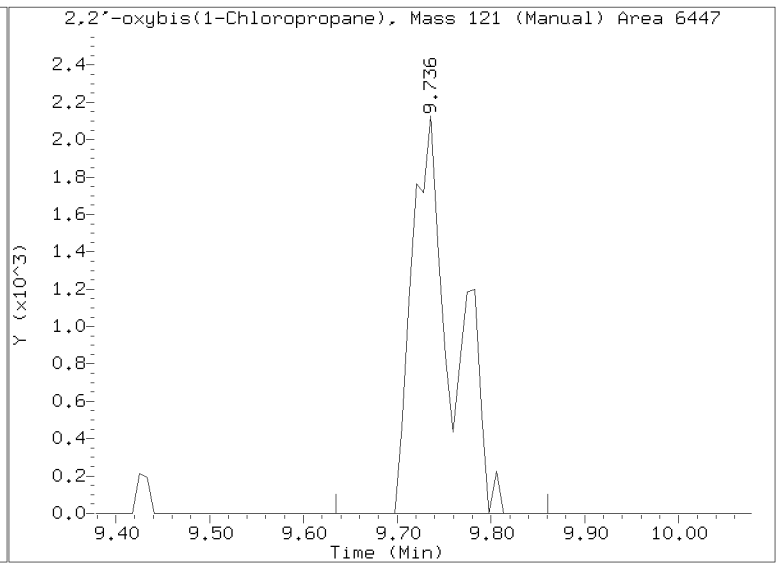
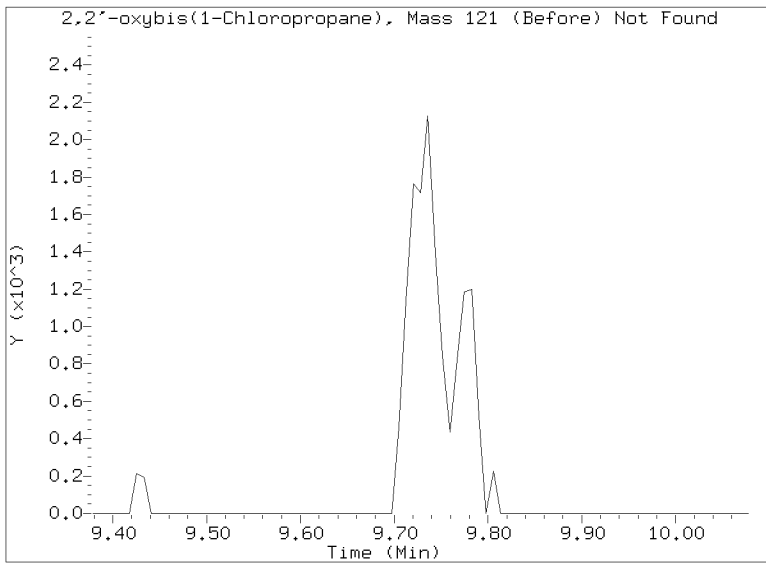
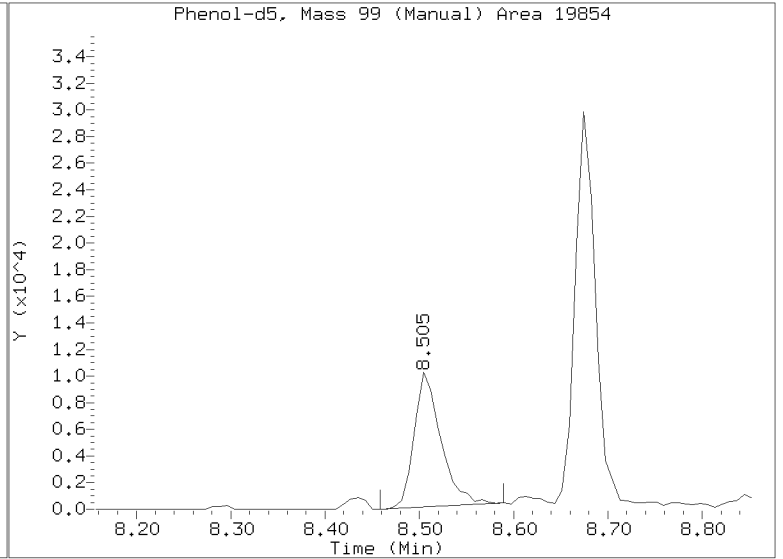
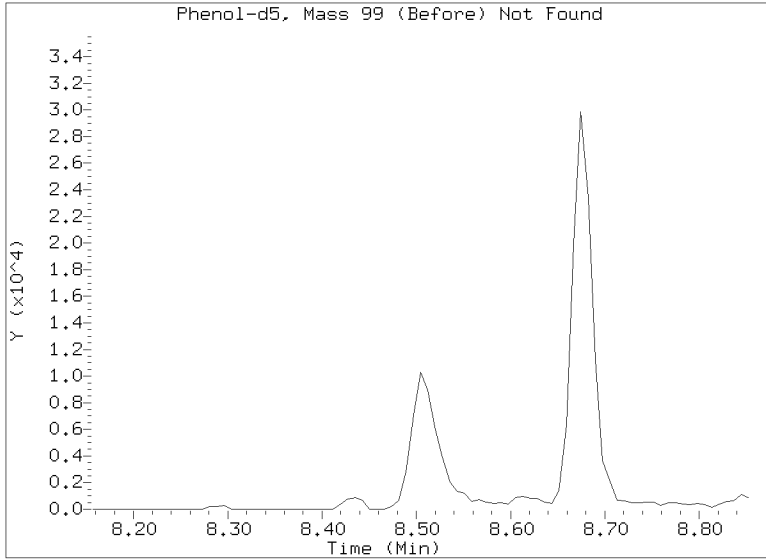
RRT check based on Ccal File: NT1003052302.D

On Column LOD for nt10.i, 20230305.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/NT1003052304.D
Injection Date: 05-MAR-2023 15:18
Lab ID:SLC0401-LCV1 Client ID:
Report Date: 03/27/2023 11:22



APPROVED

By Deenay Dunmore at 2:07 pm, Mar 27, 2023



CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052325.D

Calibration Date: 03/01/2023

Sequence: SLC0415

Injection Date: 03/06/23

Lab Sample ID: SLC0415-CCV1

Injection Time: 04:32

Sequence Name: Calibration Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.1	1.5534590	1.5972540		2.8	+/-50
4-Methylphenol	A	5.0000	4.2	1.2087680	1.2427800		-16.8	+/-50
Naphthalene	A	5.0000	4.8	1.0266520	0.9762232		-4.9	+/-50
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7229156		-0.3	+/-50
Acenaphthylene	A	5.0000	5.5	1.9309320	2.1147470		9.5	+/-50
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2295940		-4.8	+/-50
Acenaphthene	A	5.0000	4.7	1.1645250	1.0886570		-6.5	+/-50
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7322310		0.2	+/-50
Fluorene	A	5.0000	4.8	1.4379840	1.3813860		-3.9	+/-50
Pentachlorophenol	A	10.000	4.3	0.1145550	0.0549041		-56.9	+/-50 *
Phenanthrene	A	5.0000	4.9	1.0236730	1.0085230		-1.5	+/-50
Anthracene	A	5.0000	5.3	0.9926226	1.0549600		6.3	+/-50
Fluoranthene	A	5.0000	4.1	1.3760330	1.1271120		-18.1	+/-50
Pyrene	A	5.0000	4.2	1.4011560	1.1872420		-15.3	+/-50
Butylbenzylphthalate	A	5.0000	3.6	0.6475451	0.5410213		-27.3	+/-50
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3267490		-5.9	+/-50
Chrysene	A	5.0000	5.2	1.1462500	1.1881060		3.7	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.6	0.5331838	0.5301781		-8.1	+/-50
Benzo(a)fluoranthene, Total	A	10.000	8.9	1.3383070	1.2247210		-11.0	+/-50
Benzo(a)pyrene	A	5.0000	4.5	1.2312020	1.1439840		-10.6	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.5	1.4033590	1.3554640		-9.4	+/-50
Dibenzo(a,h)anthracene	A	5.0000	5.0	1.1150690	1.1362700		-0.9	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.6	1.1245240	1.0839360		-8.3	+/-50
2-Fluorophenol	A	7.5000	7.59	1.2585100	1.2731630		1.2	+/-50
Phenol-d5	A	7.5000	8.18	1.4611190	1.5928210		9.0	+/-50
2-Chlorophenol-d4	A	7.5000	7.92	1.2465880	1.3167740		5.6	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.80	0.9313544	0.8938771		-4.0	+/-50
Nitrobenzene-d5	A	5.0000	5.45	0.4390871	0.4790405		9.1	+/-50
2-Fluorobiphenyl	A	5.0000	5.08	1.4267270	1.4491650		1.6	+/-50
2,4,6-Tribromophenol	A	7.5000	7.41	0.2287830	0.2559487		-1.2	+/-50
p-Terphenyl-d14	A	5.0000	4.46	1.1337350	1.0103300		-10.9	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A.B\NT1003052325.D

Date: 06-HRR-2023 04:32

Client ID:

Sample Info: SLC0415-CCW1

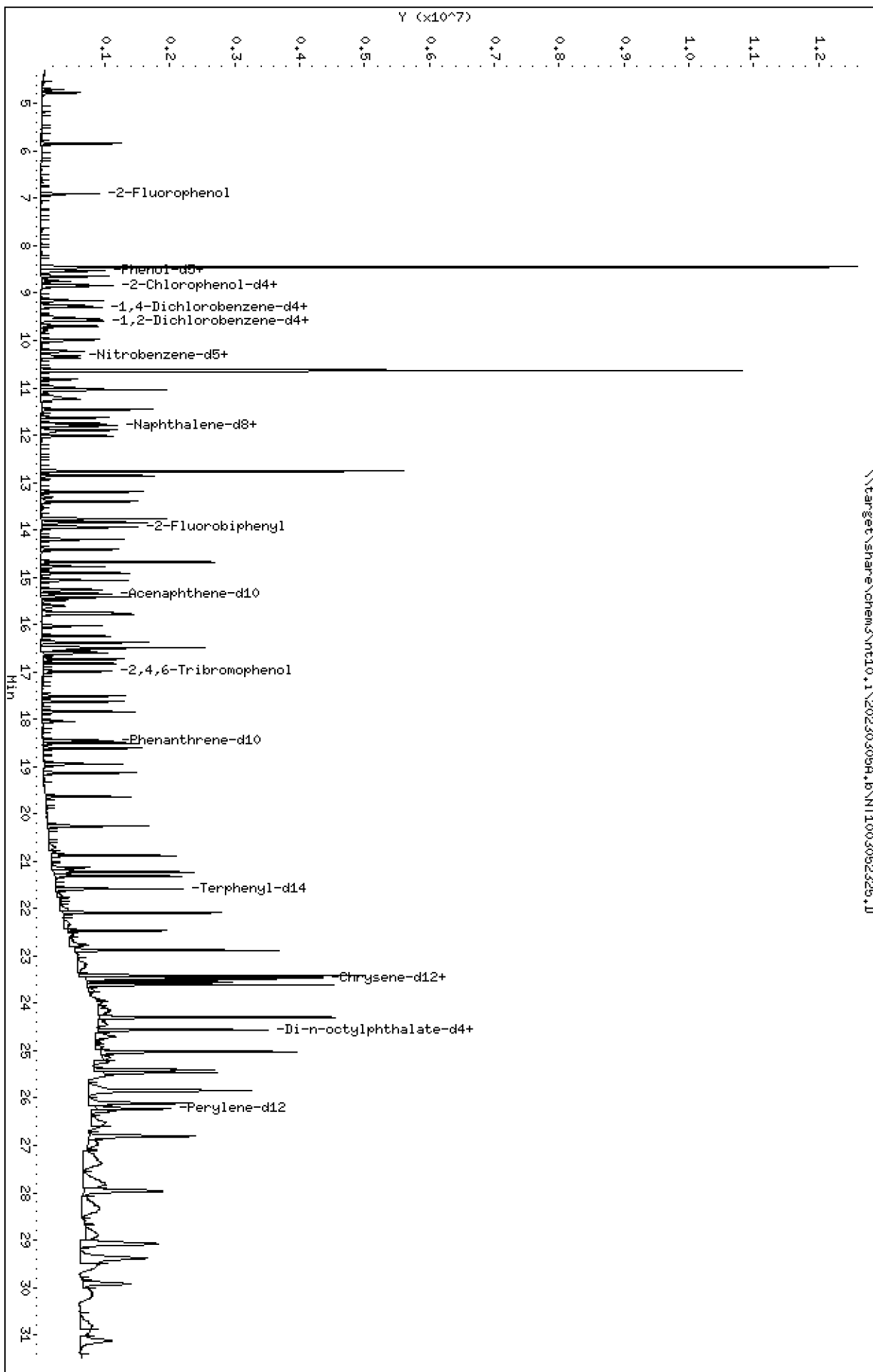
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

Page 1



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

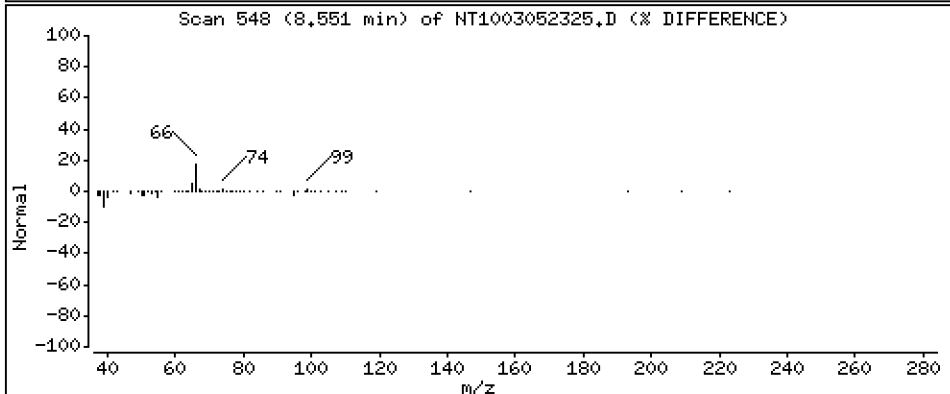
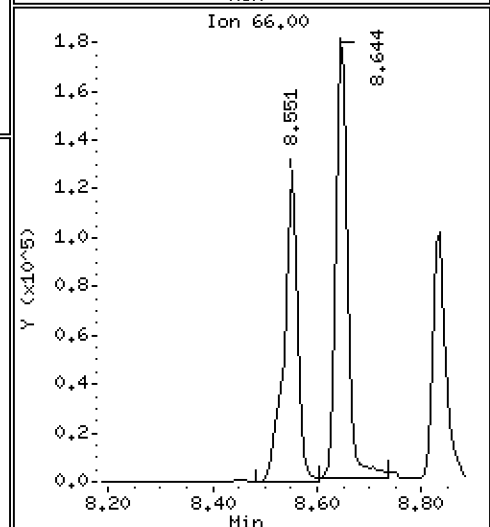
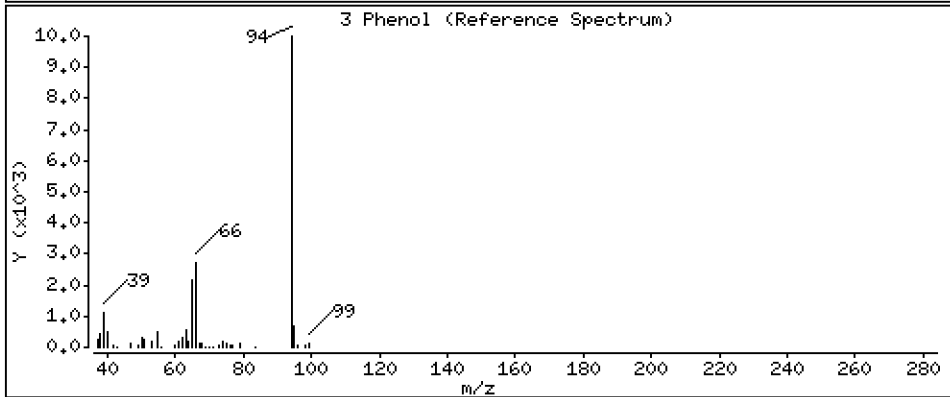
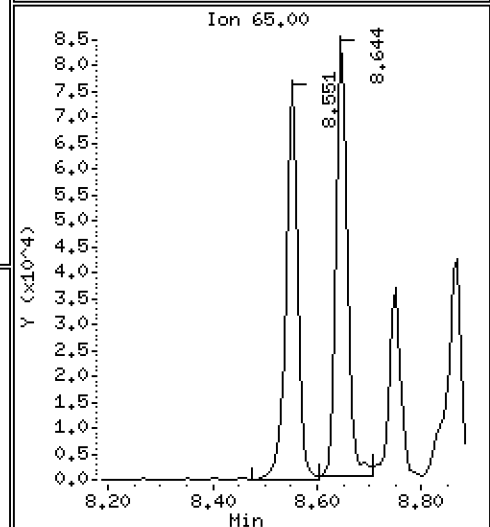
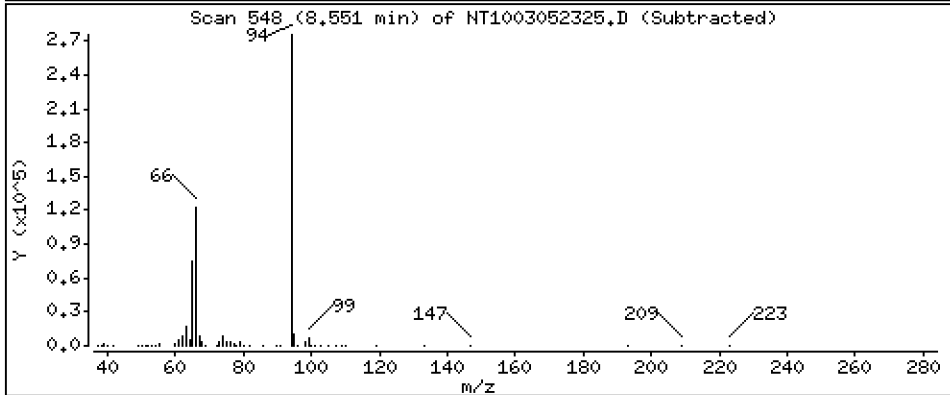
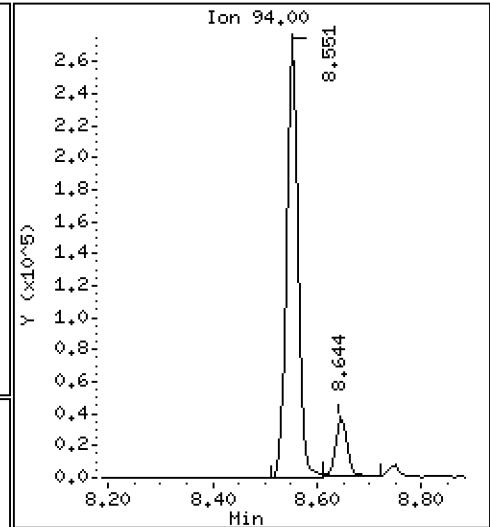
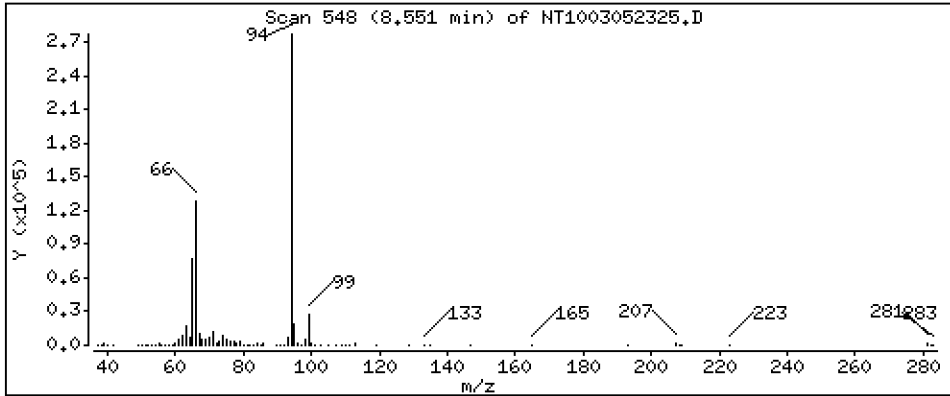
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 5,141 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

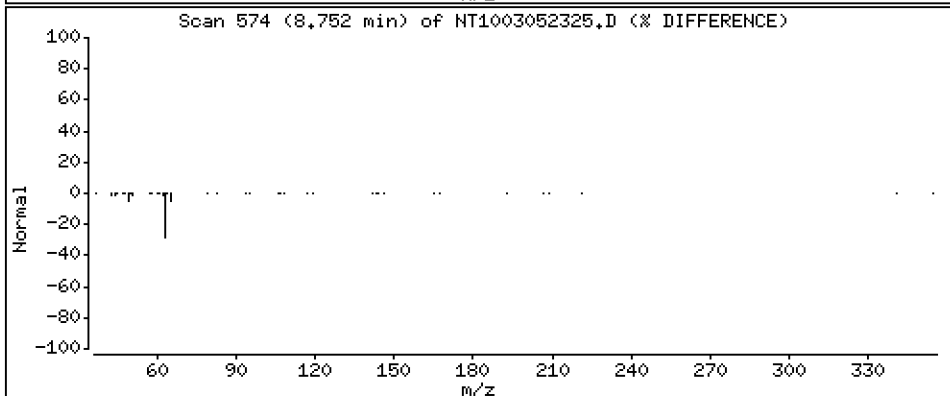
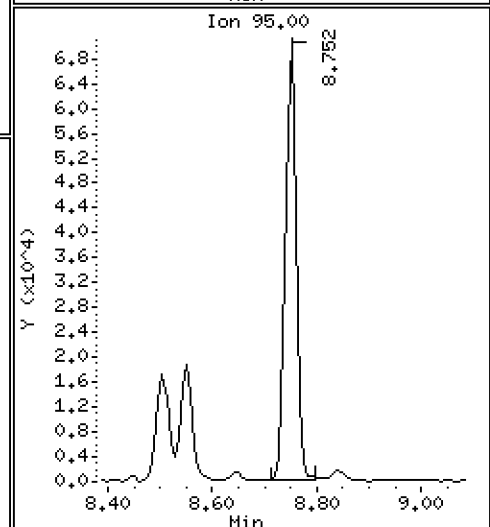
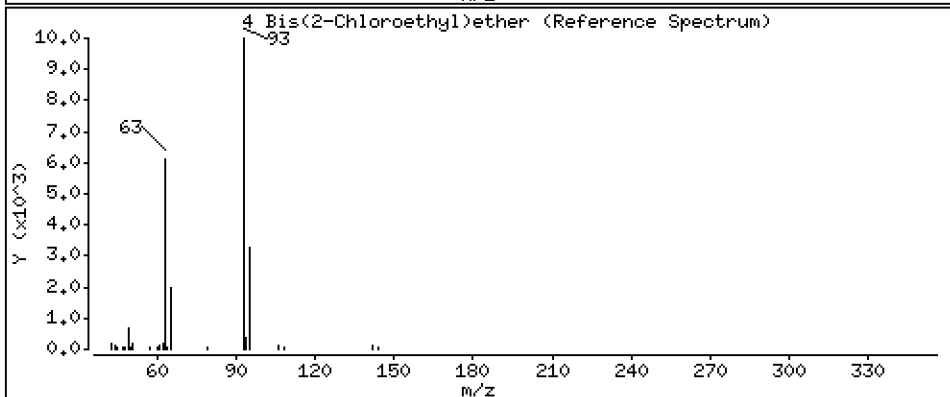
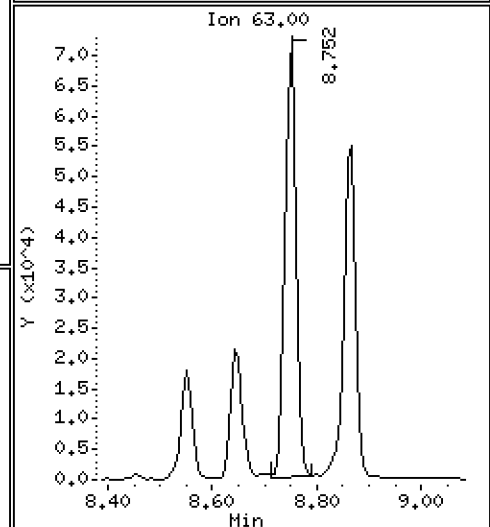
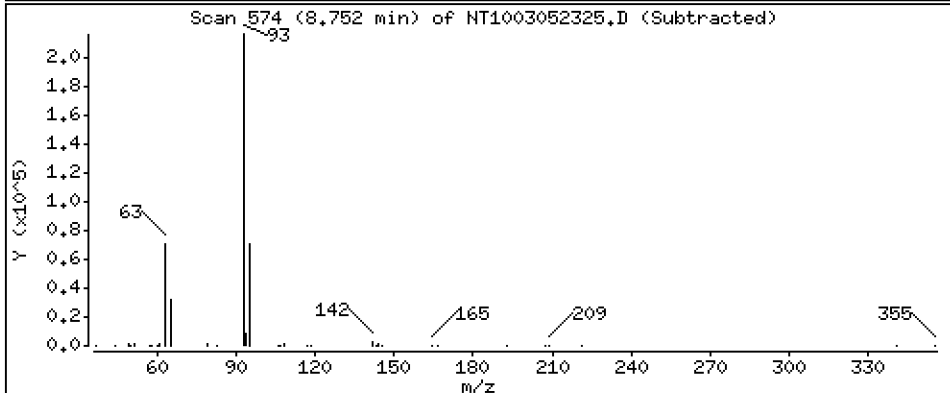
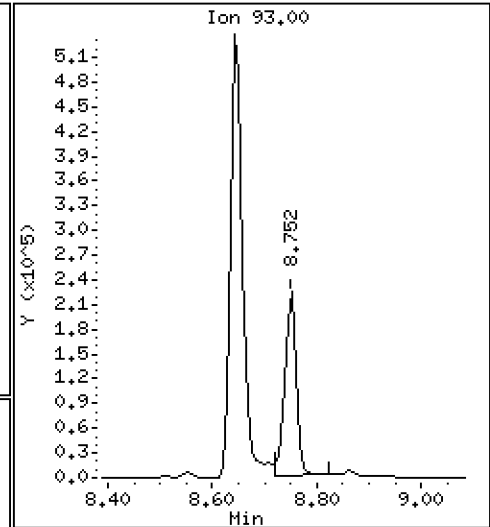
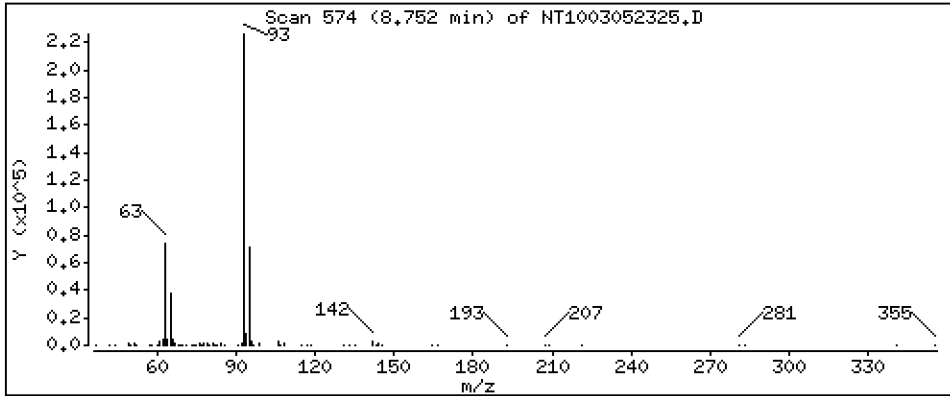
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 5,175 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

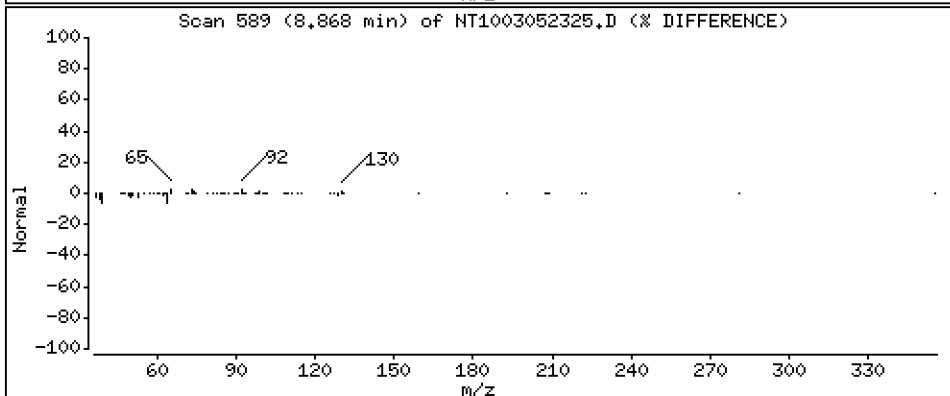
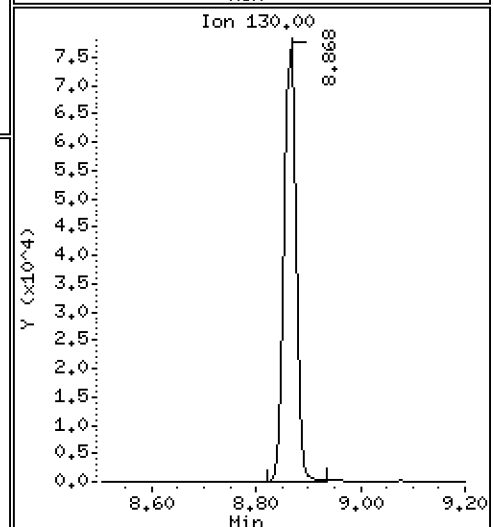
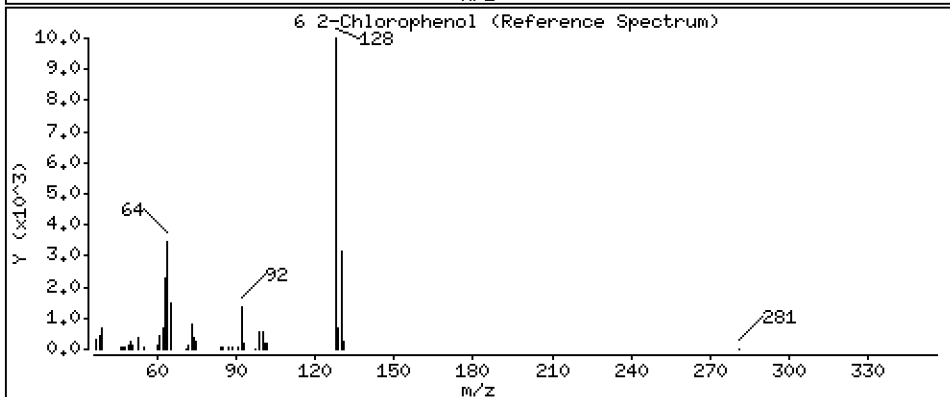
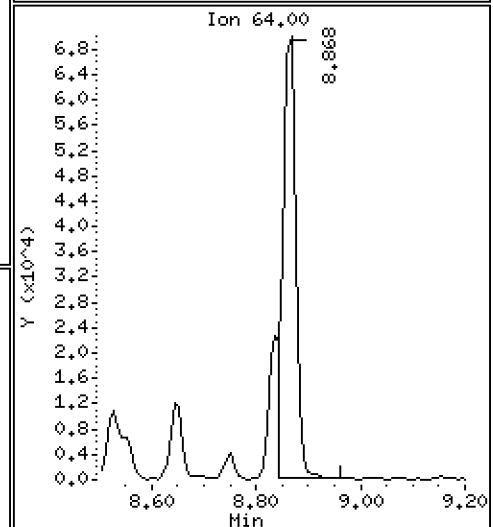
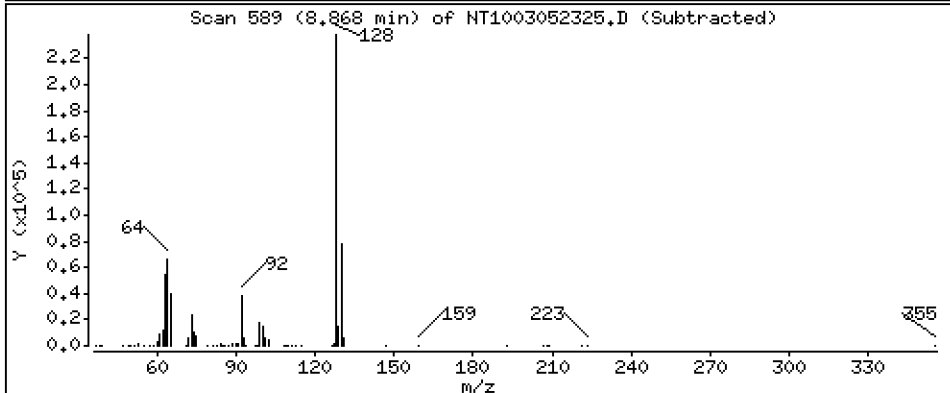
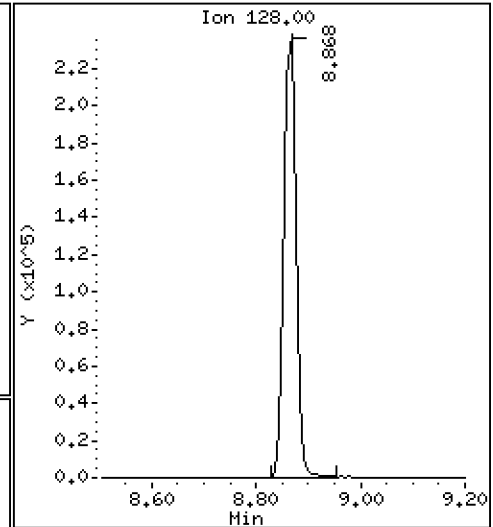
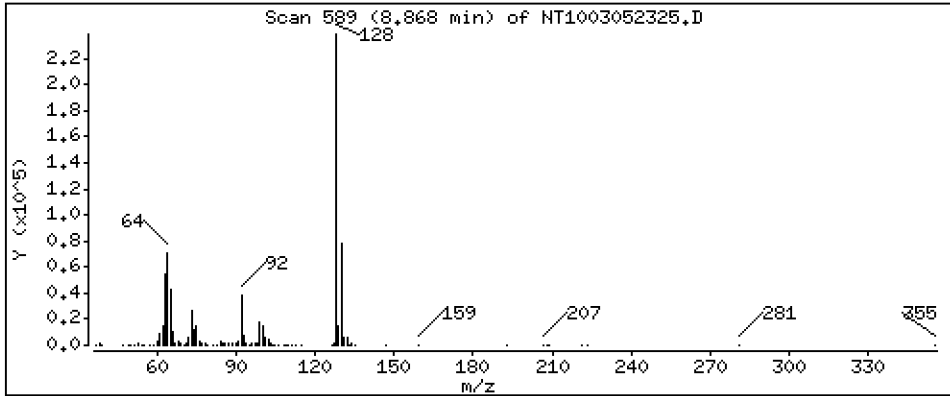
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 5,237 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

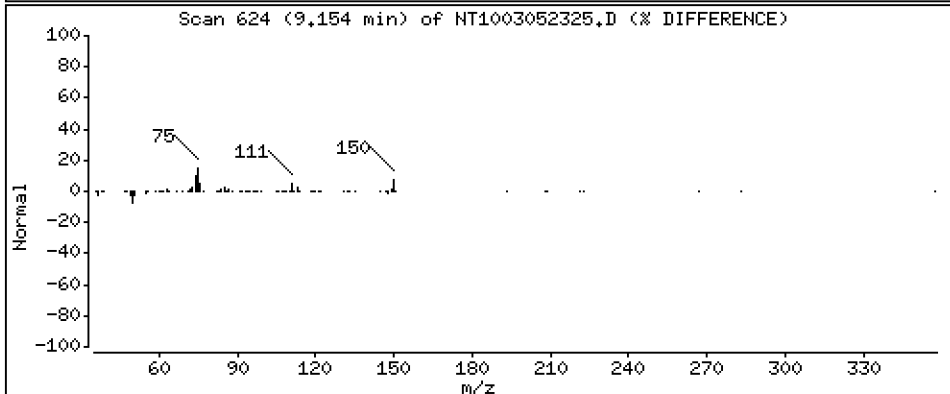
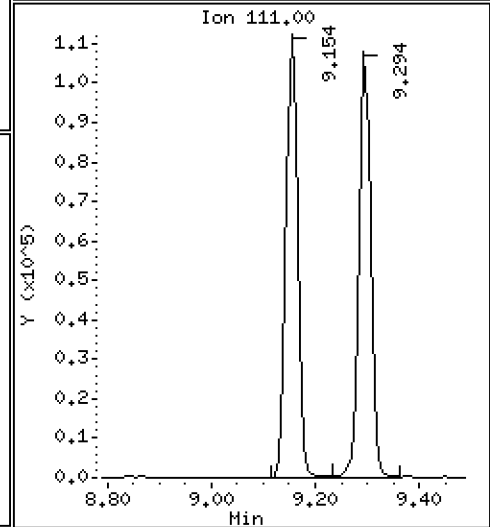
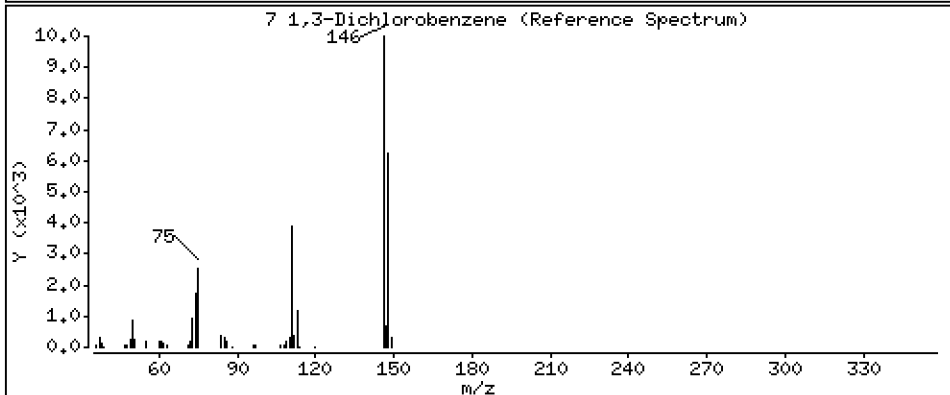
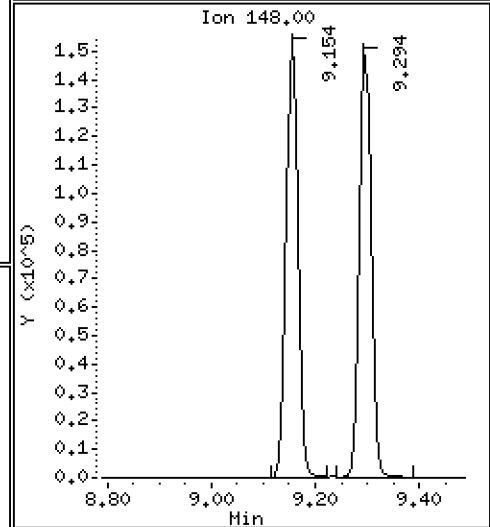
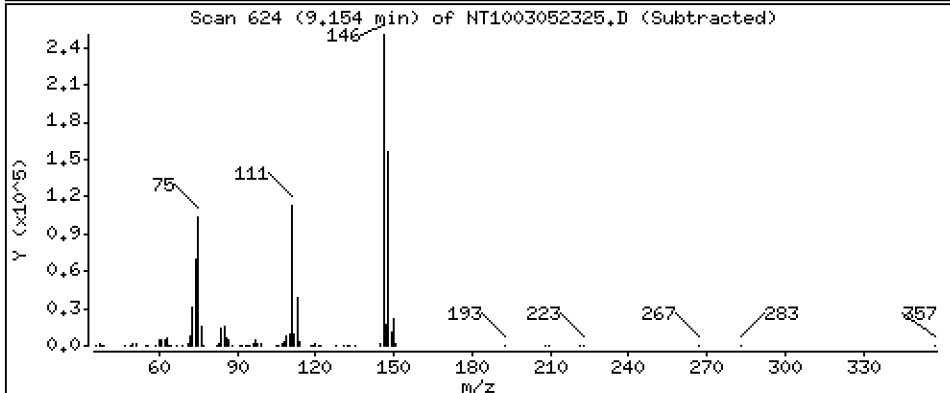
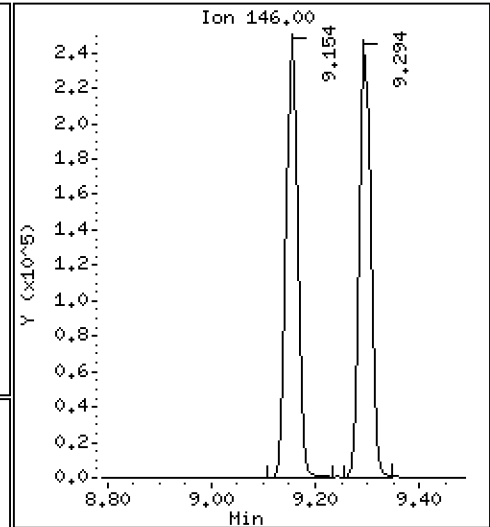
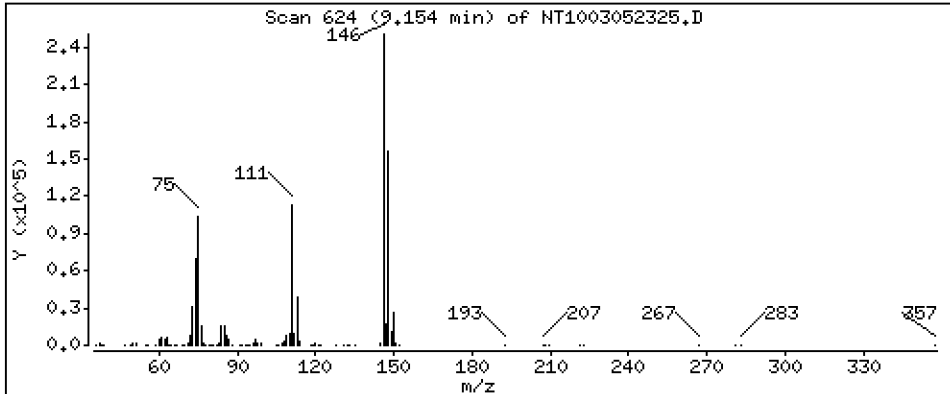
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,796 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

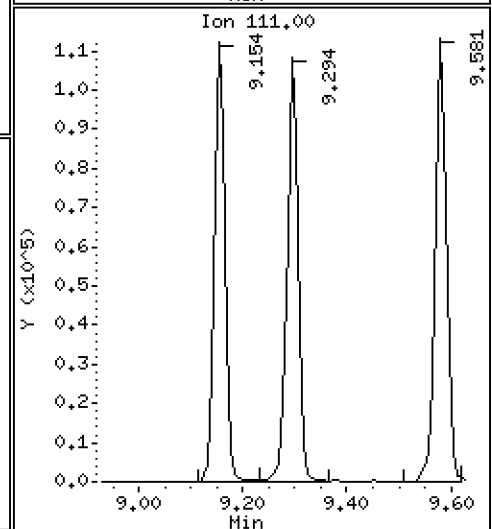
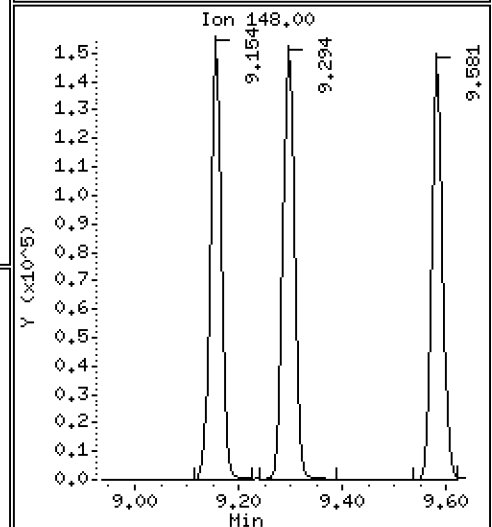
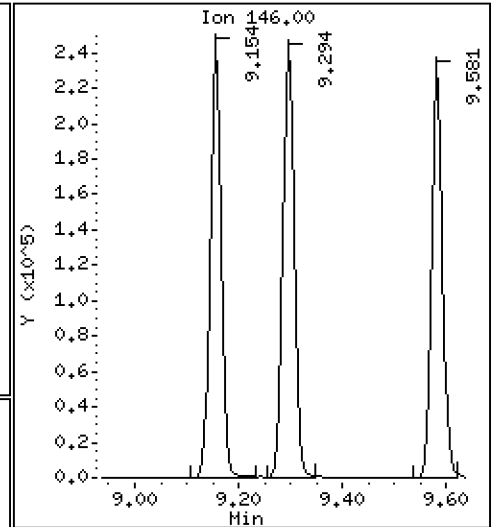
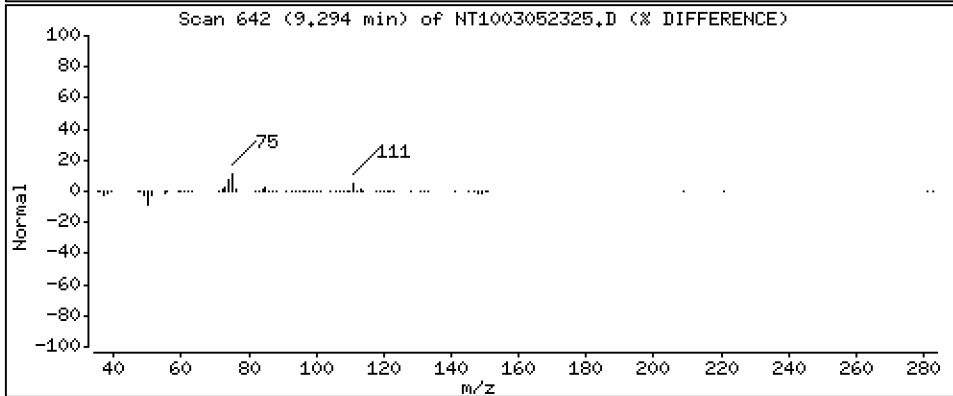
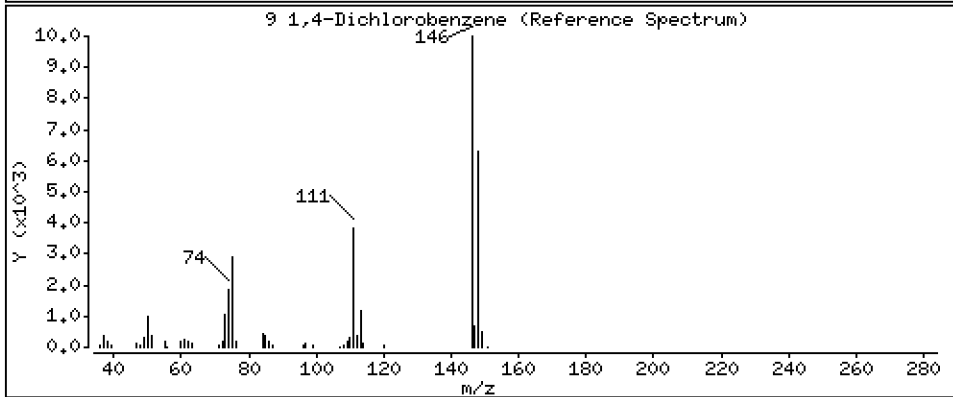
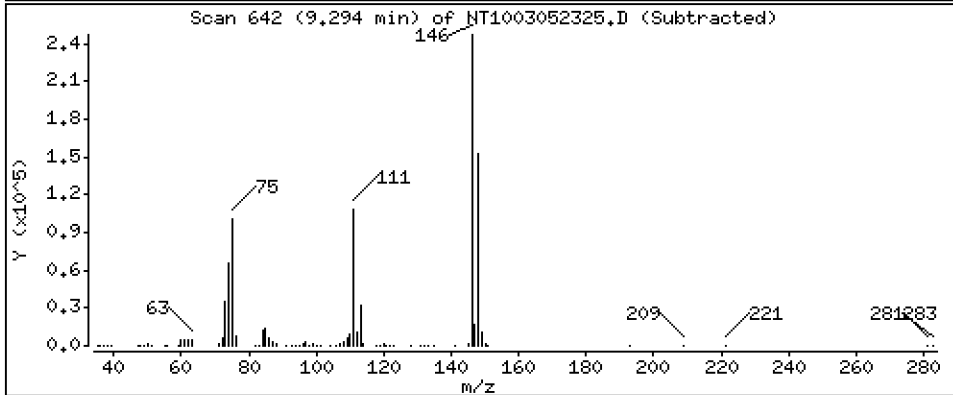
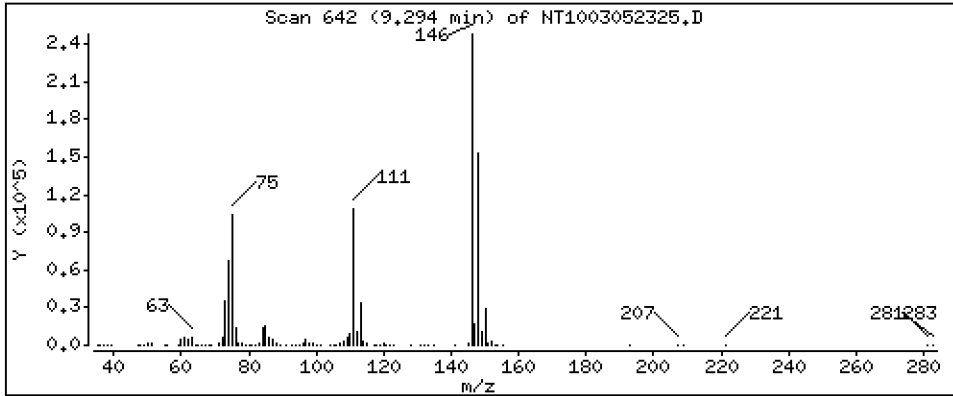
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.620 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

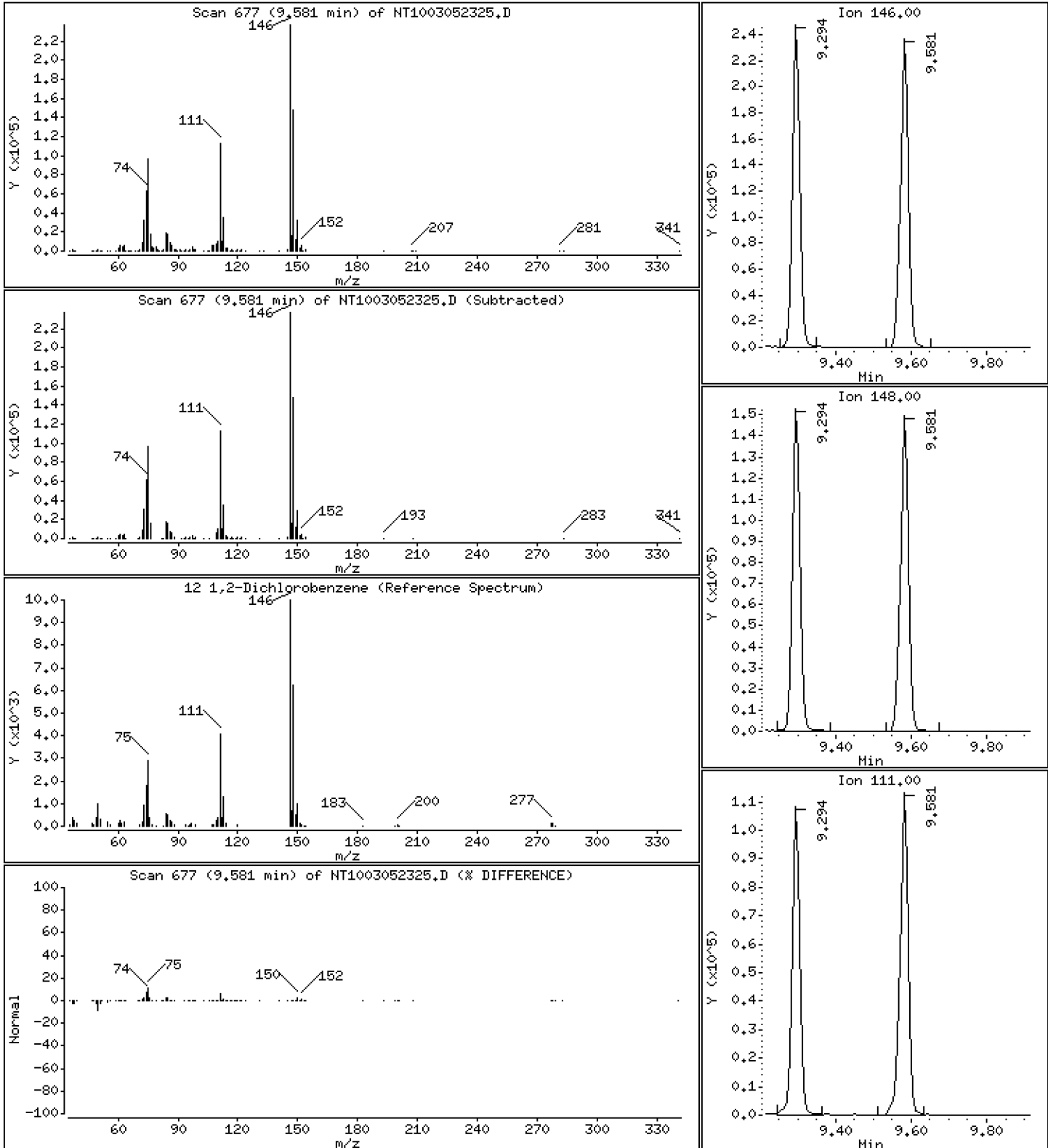
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4.630 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

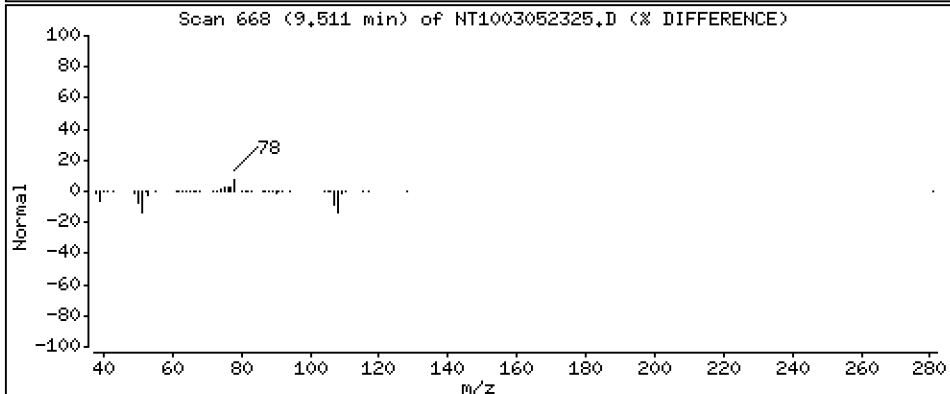
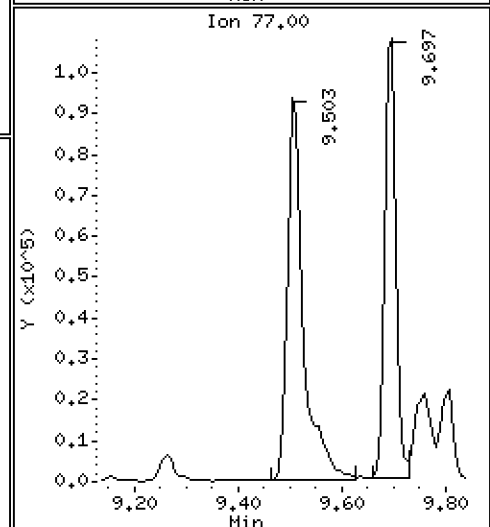
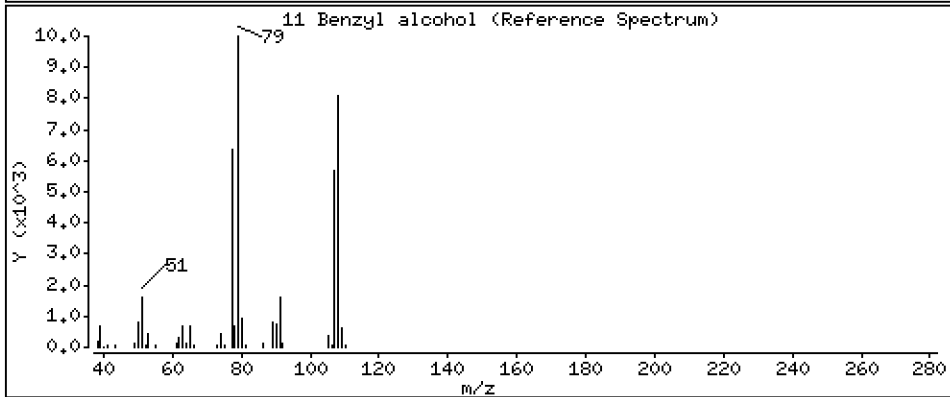
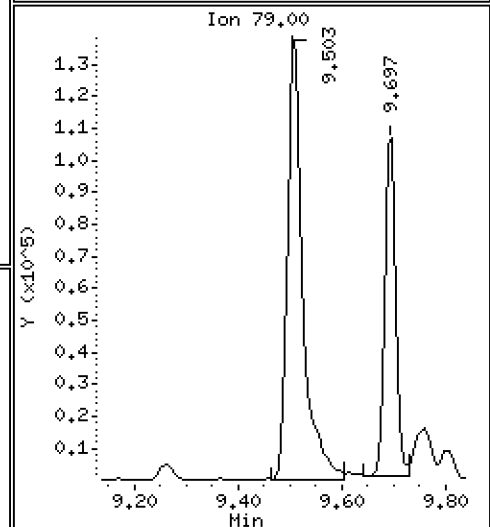
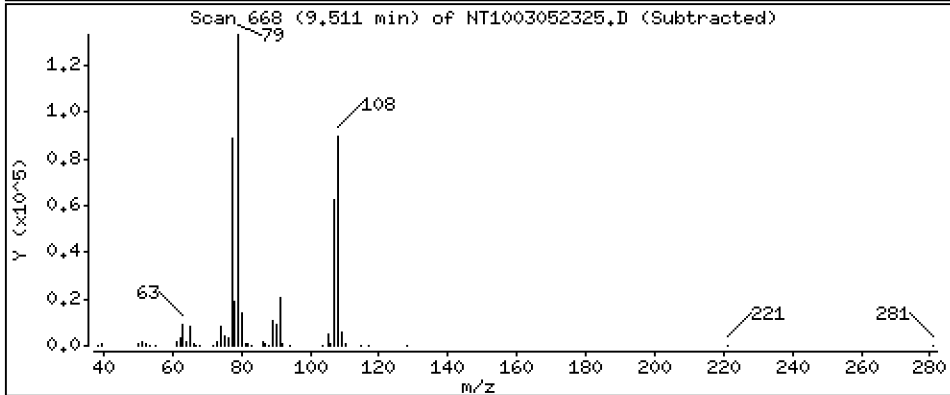
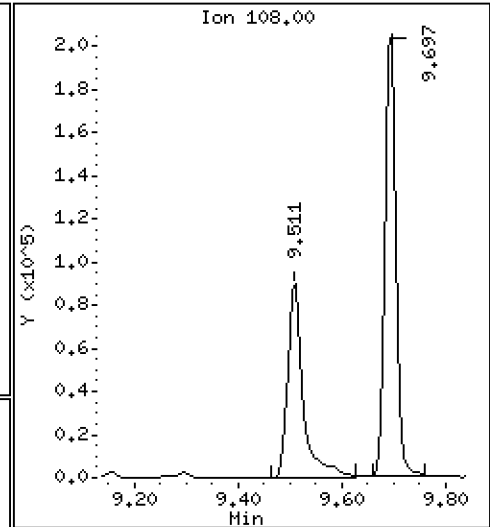
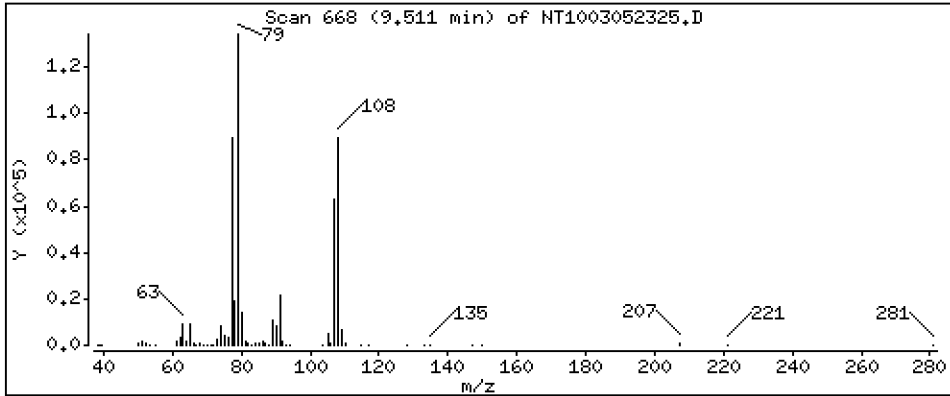
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,334 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

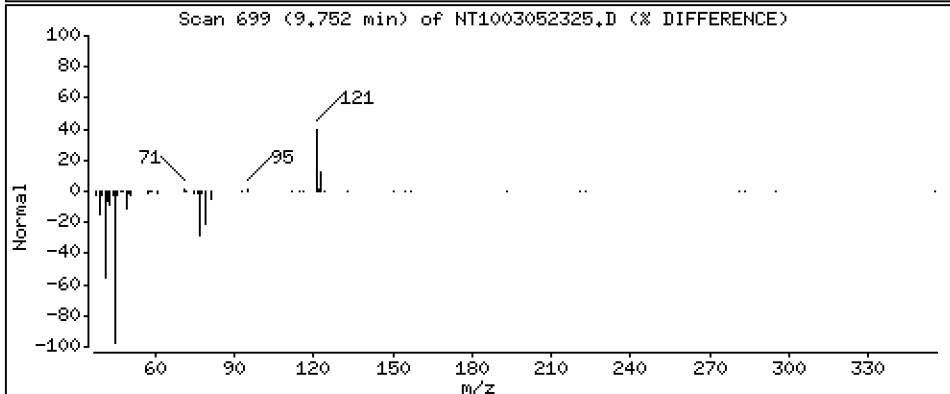
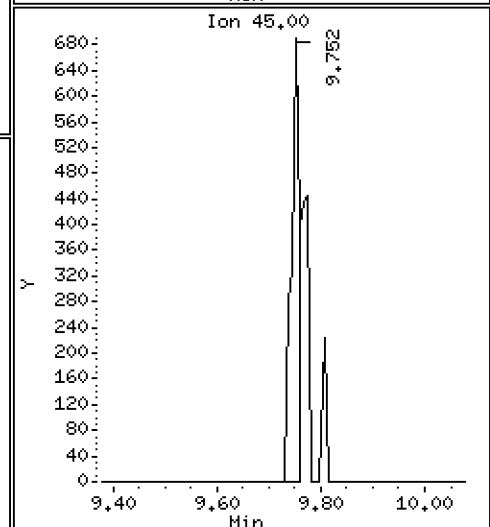
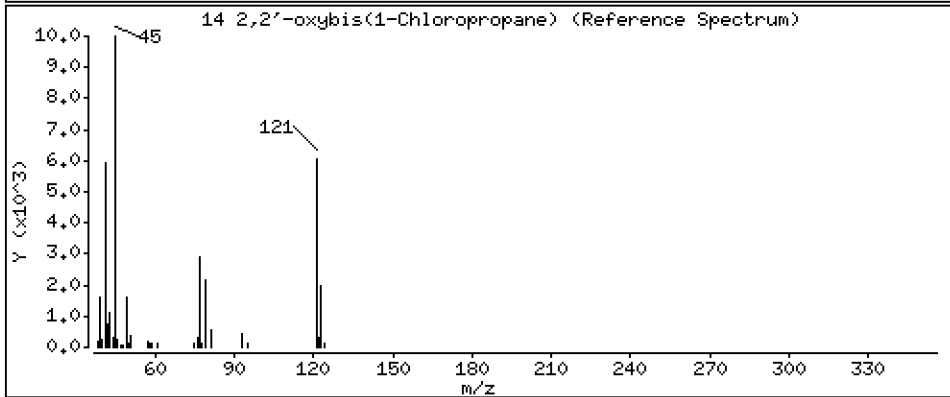
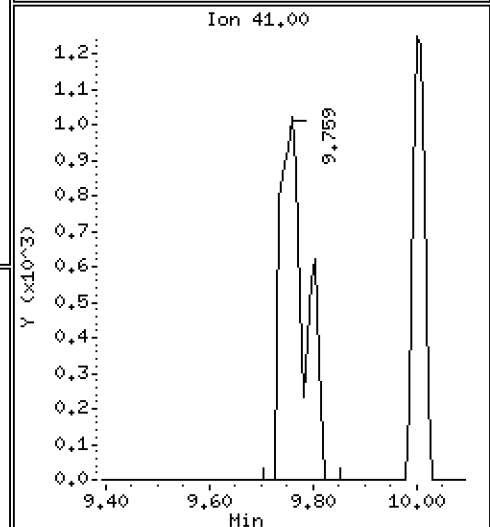
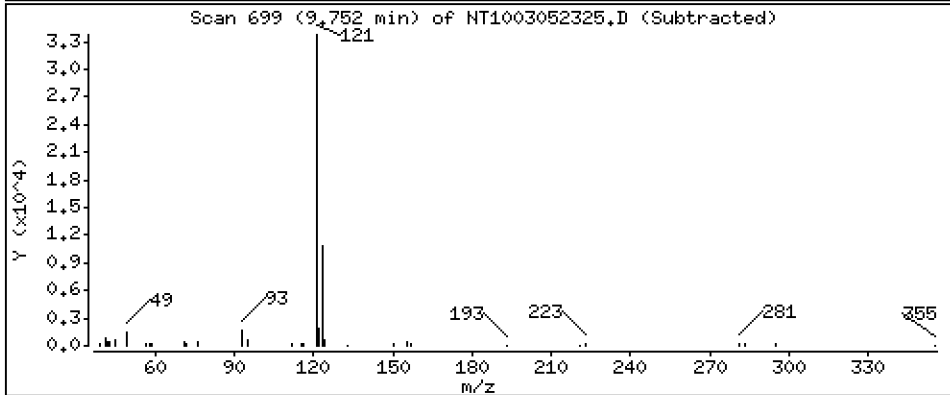
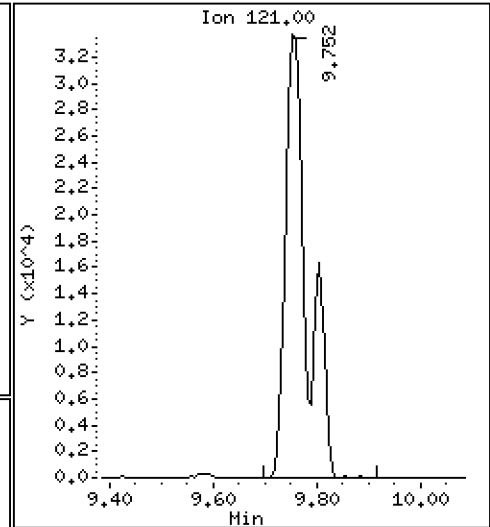
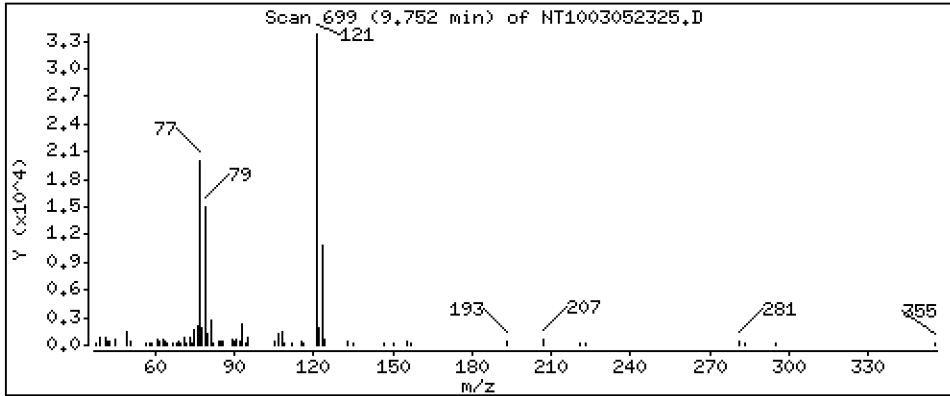
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 5,037 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

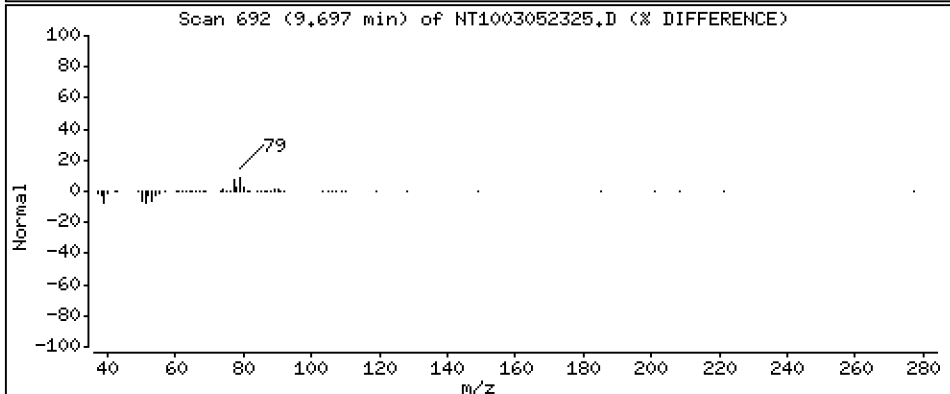
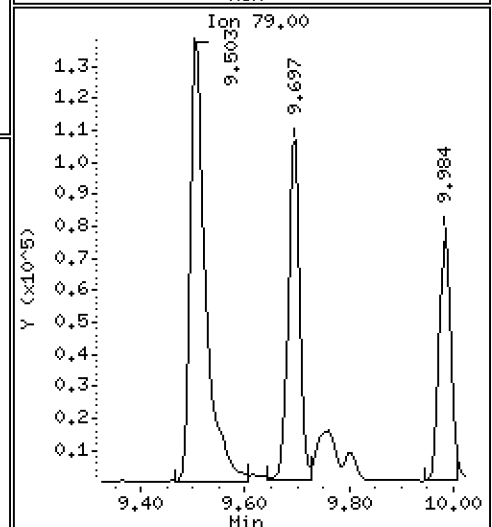
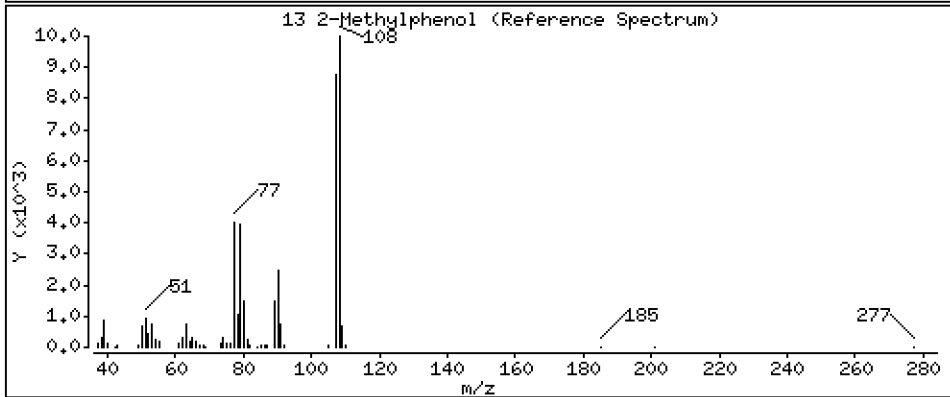
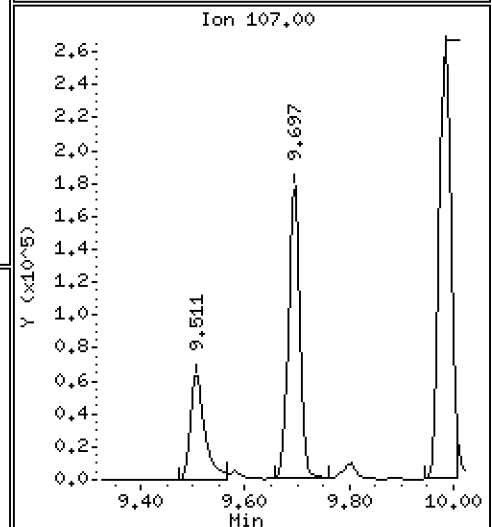
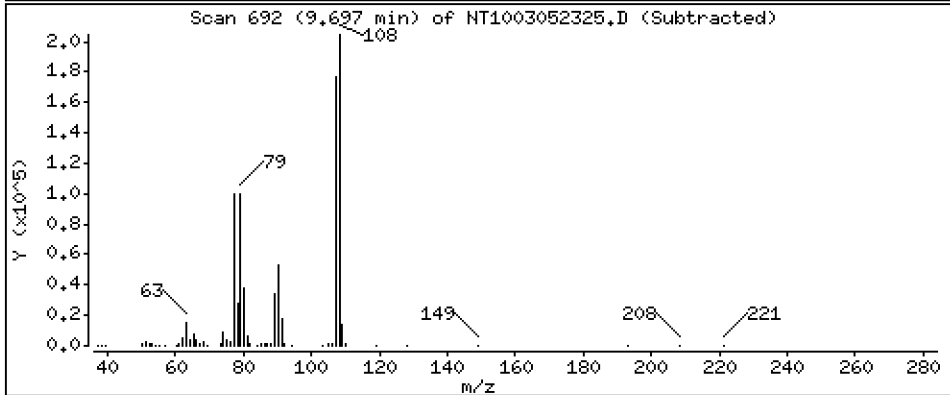
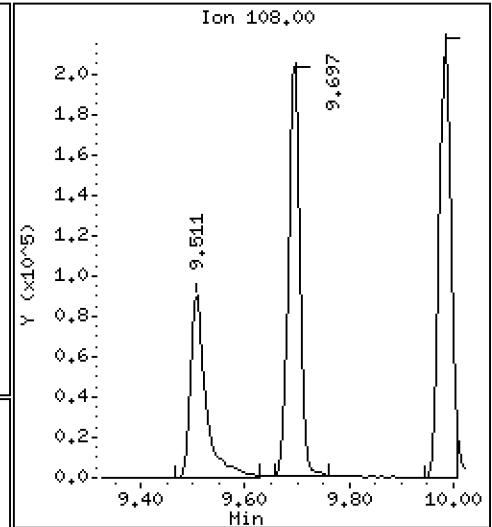
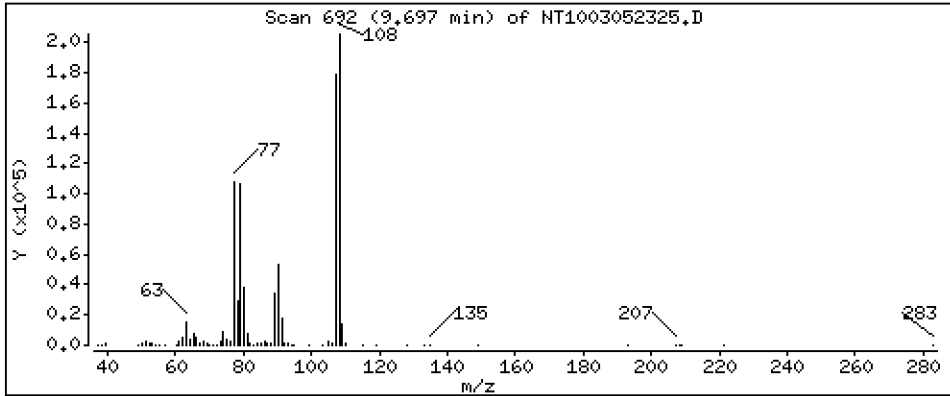
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 4,807 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

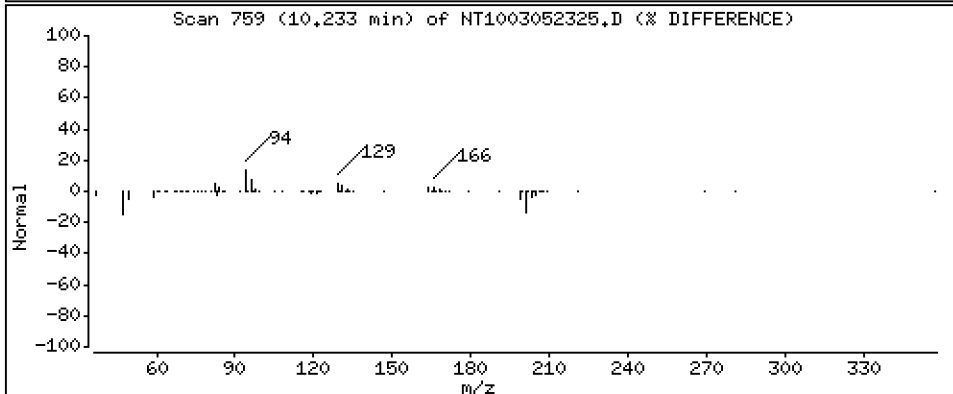
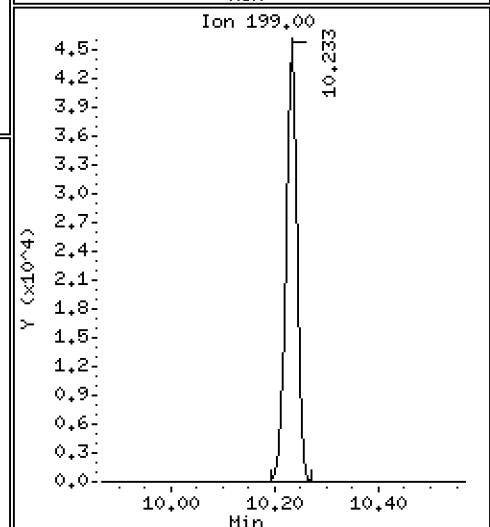
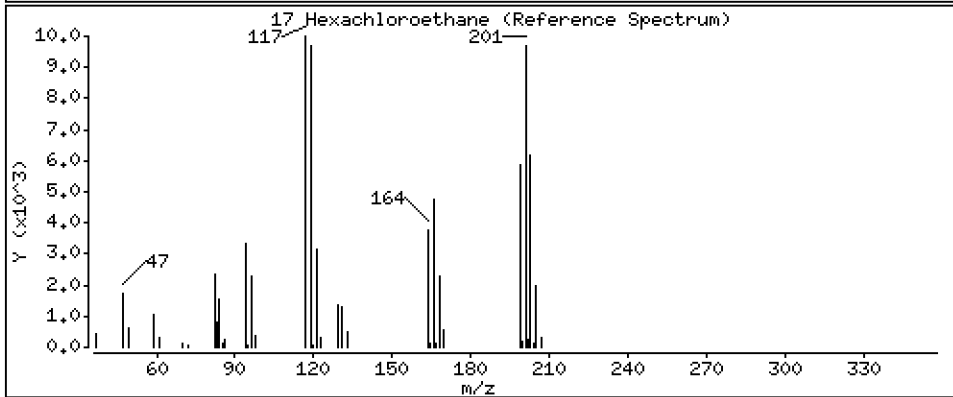
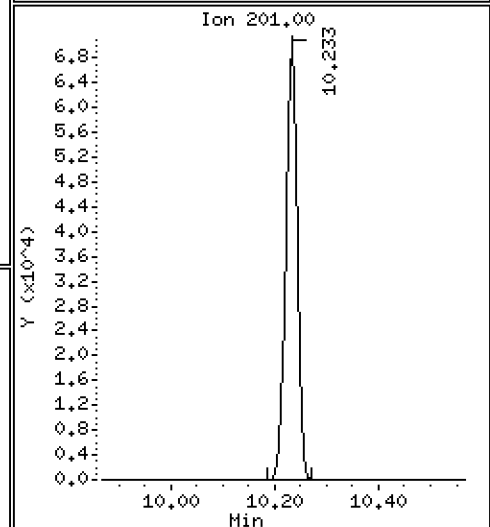
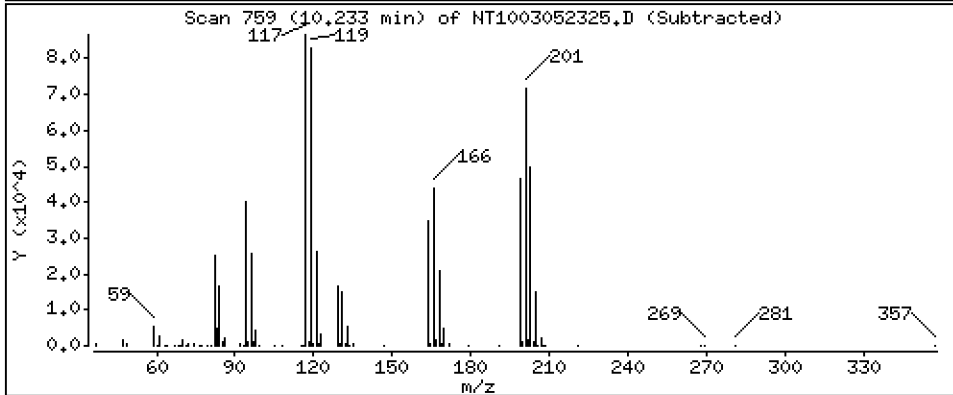
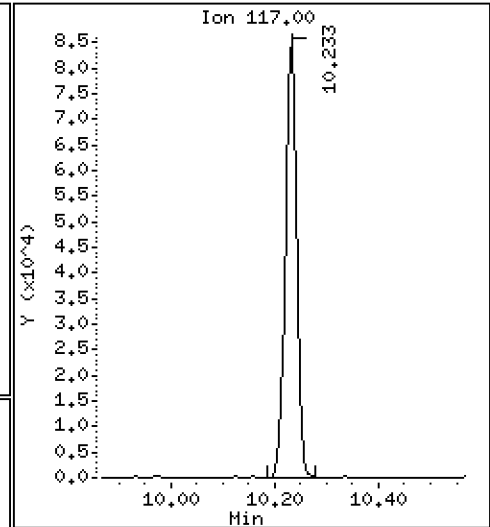
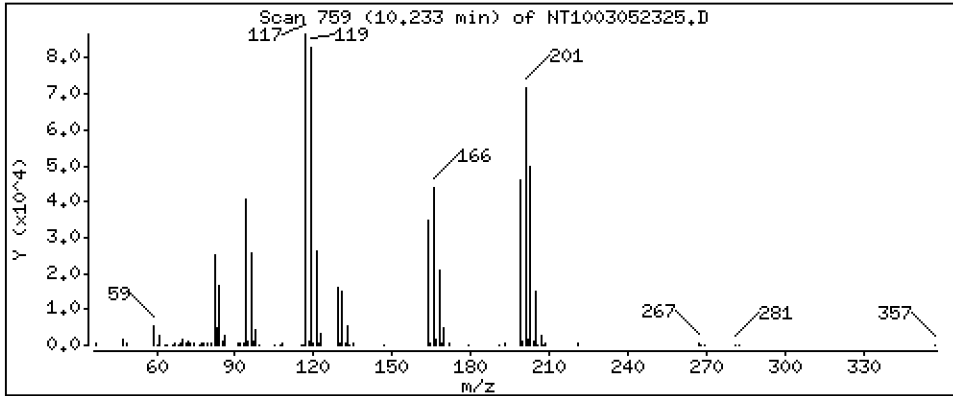
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,231 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

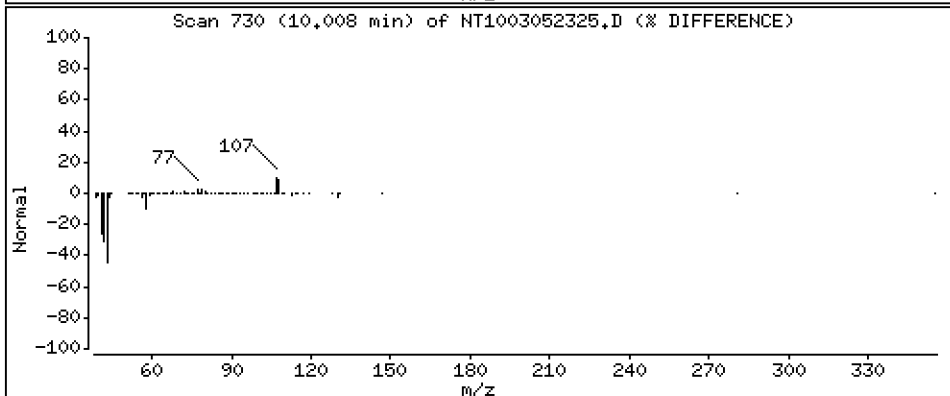
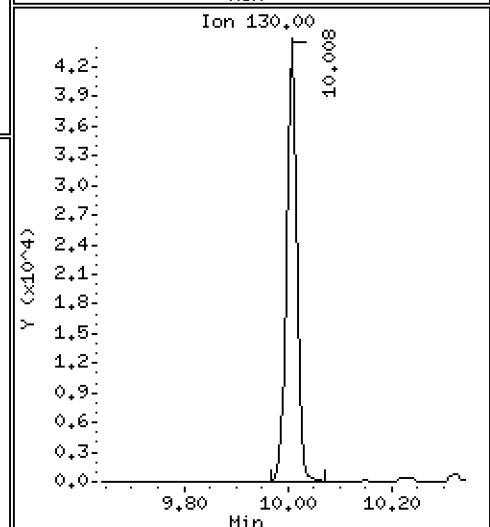
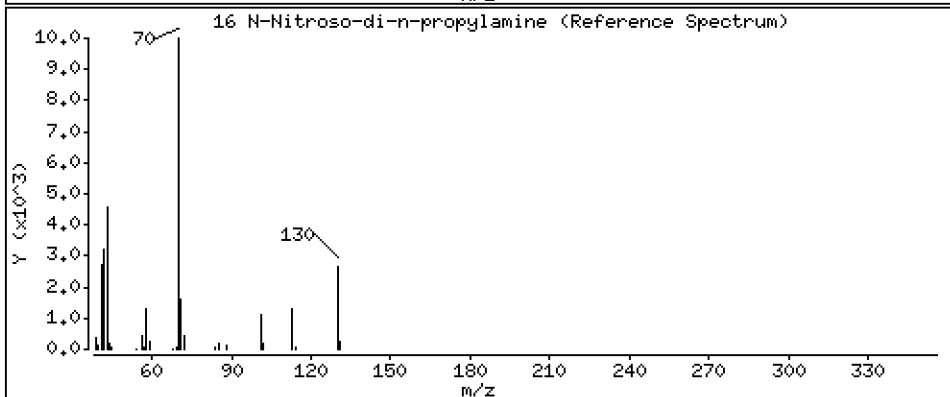
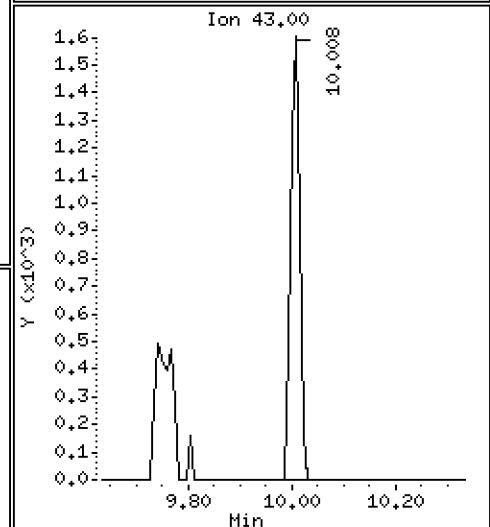
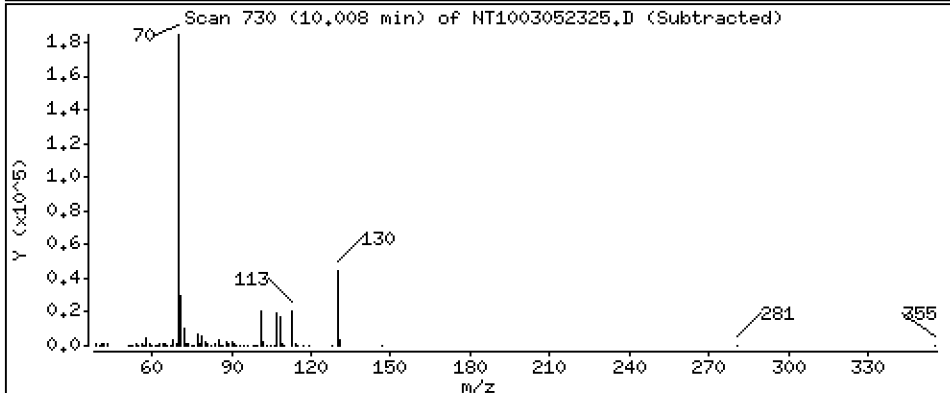
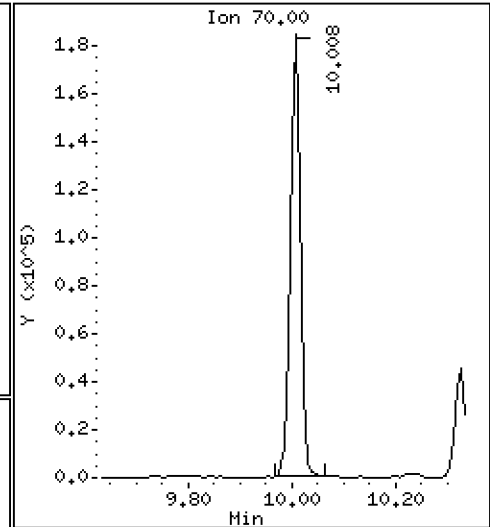
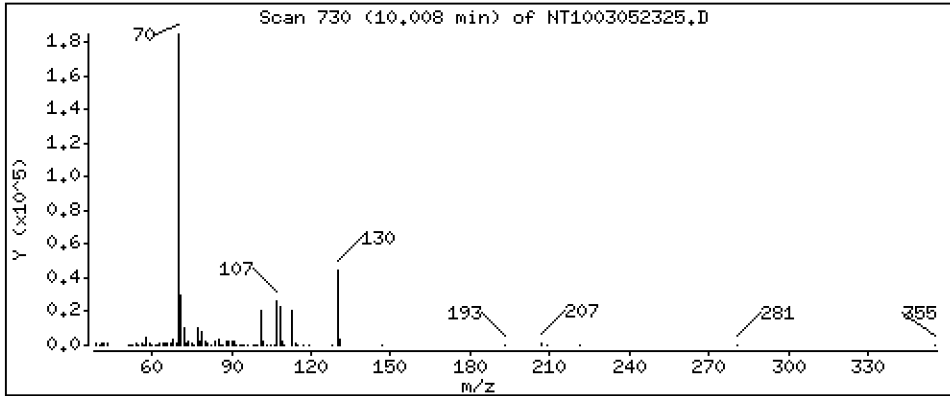
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,140 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

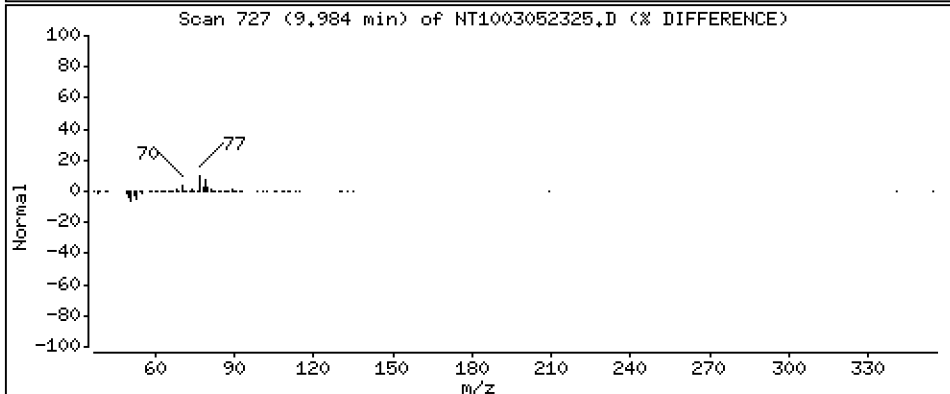
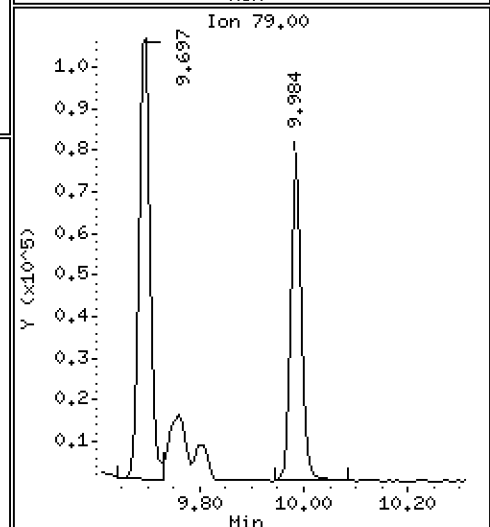
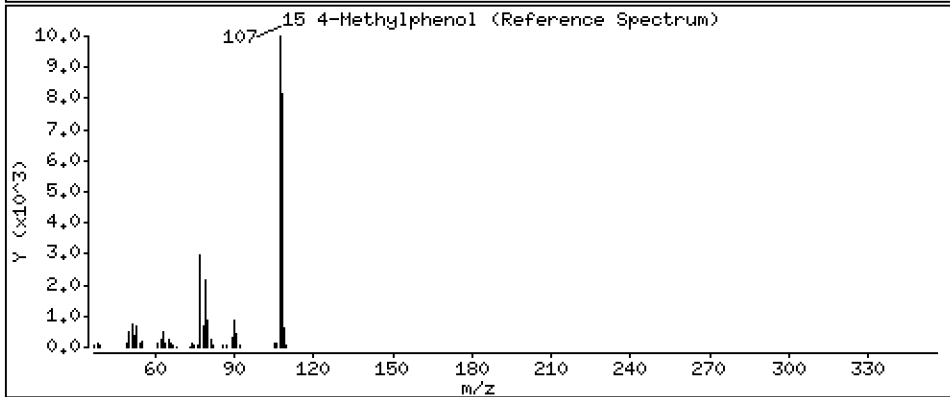
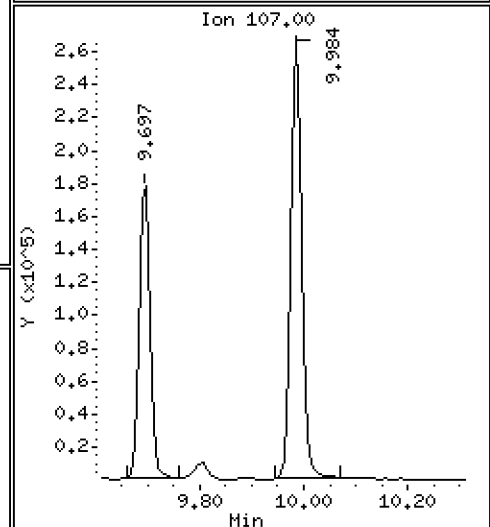
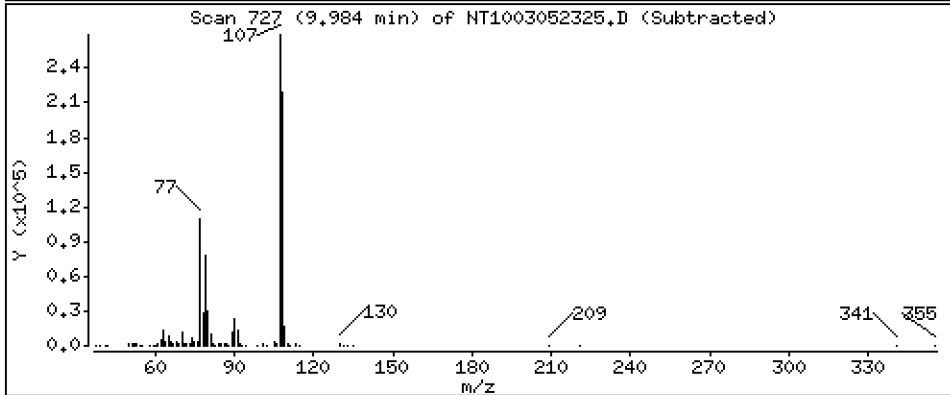
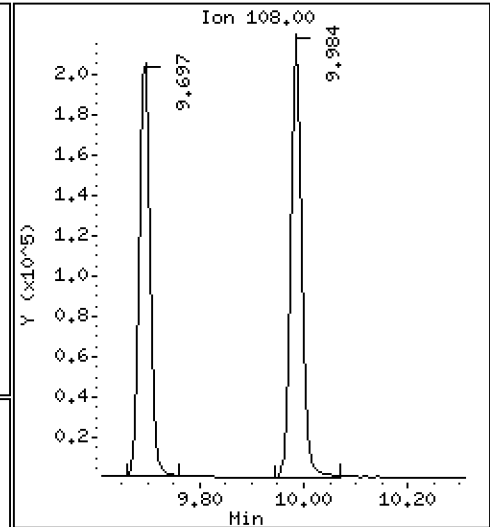
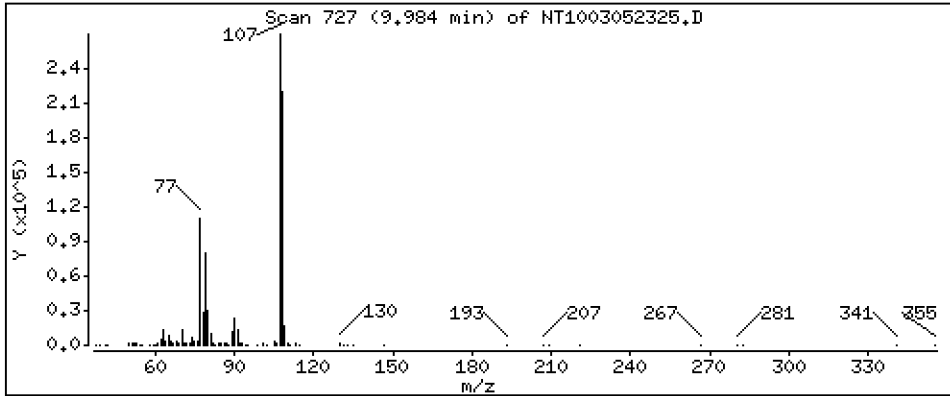
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,159 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

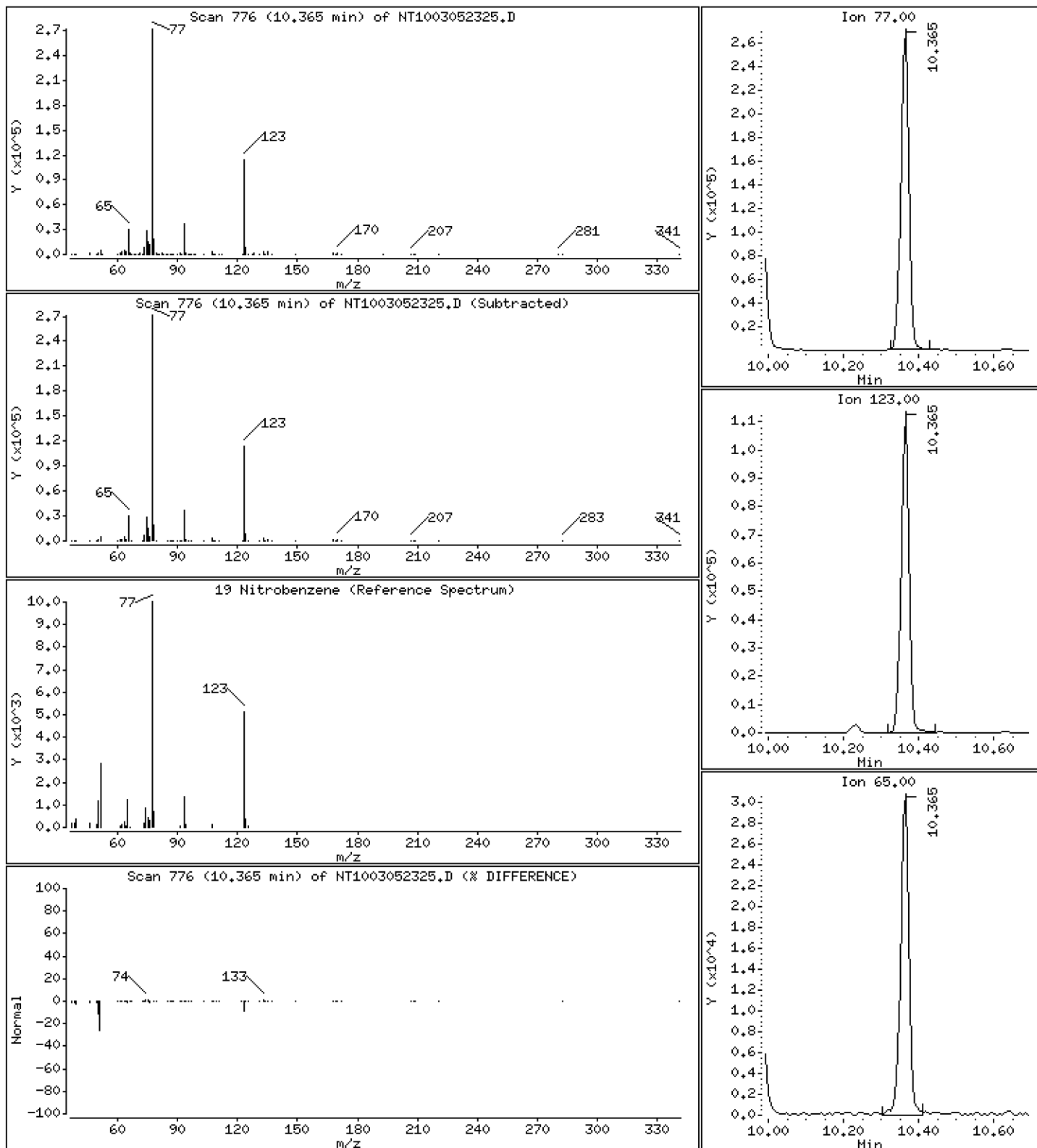
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,235 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

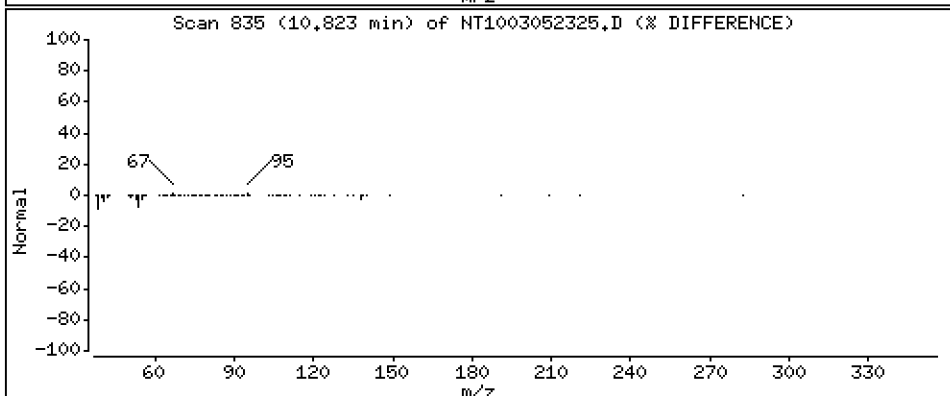
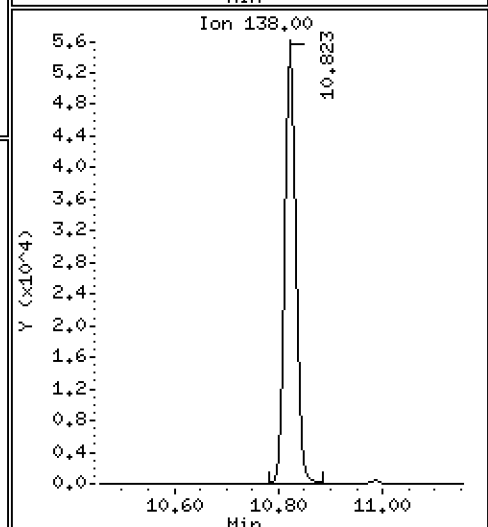
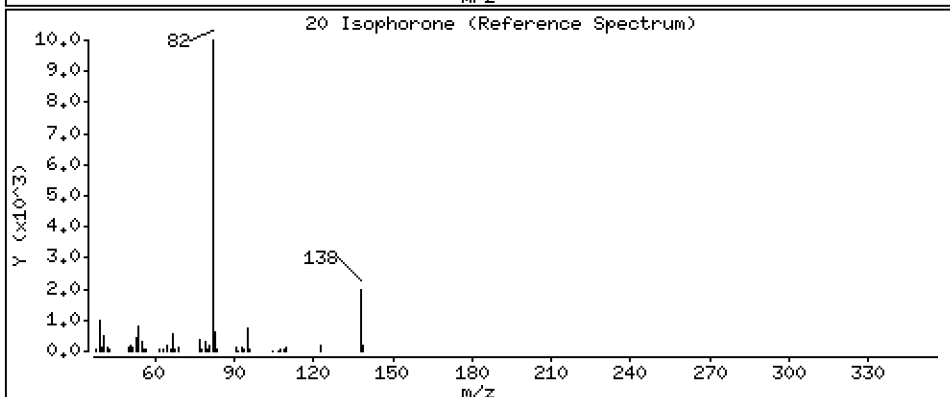
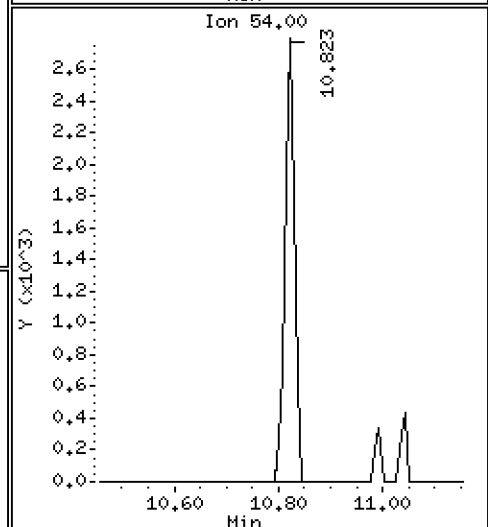
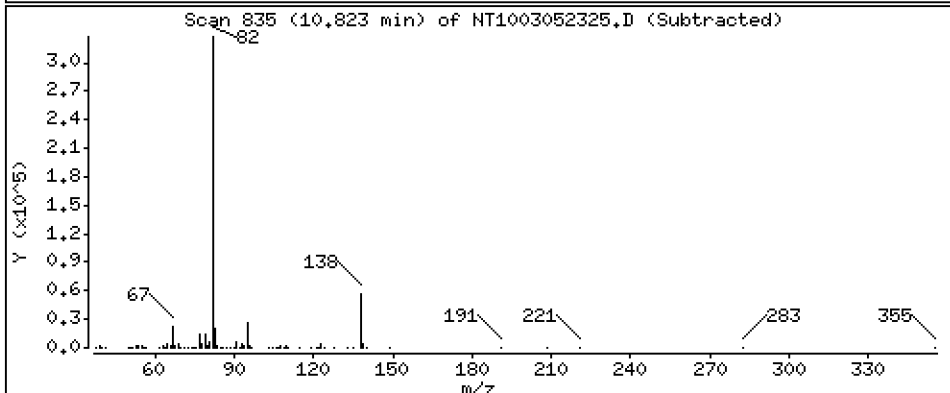
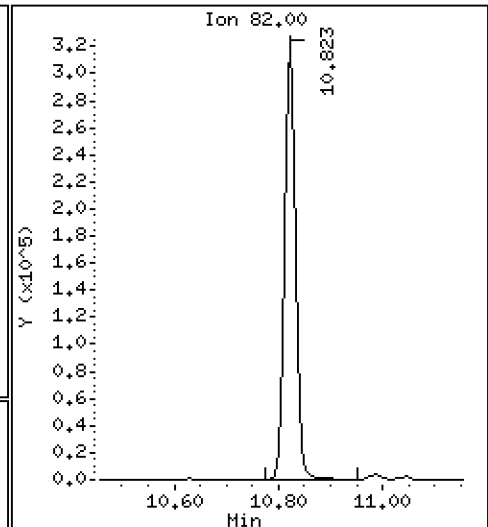
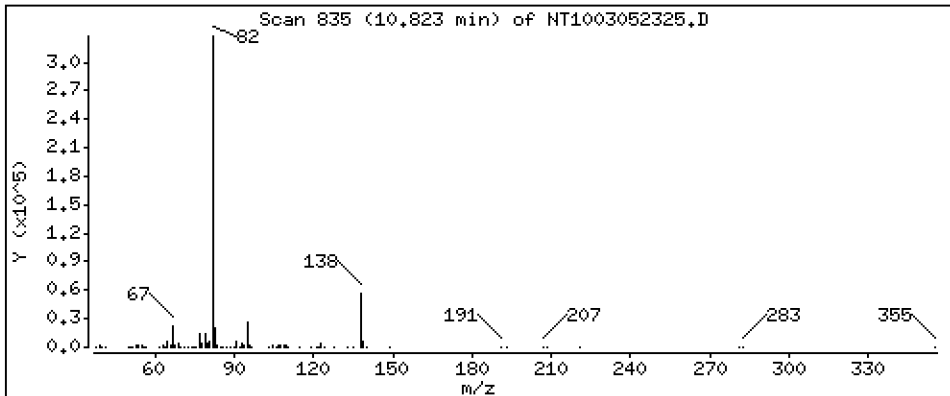
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 5,606 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

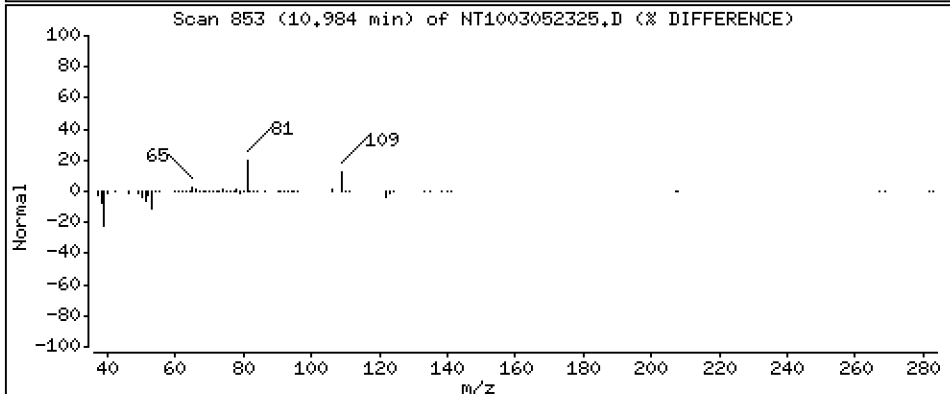
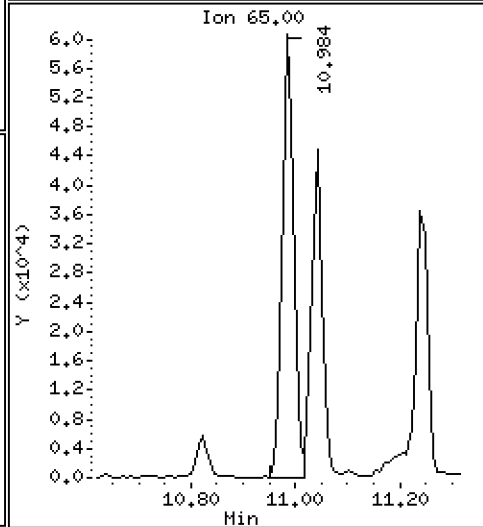
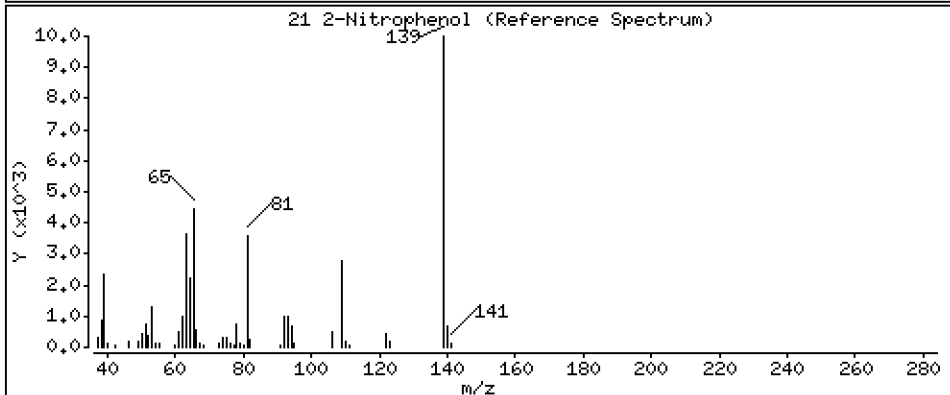
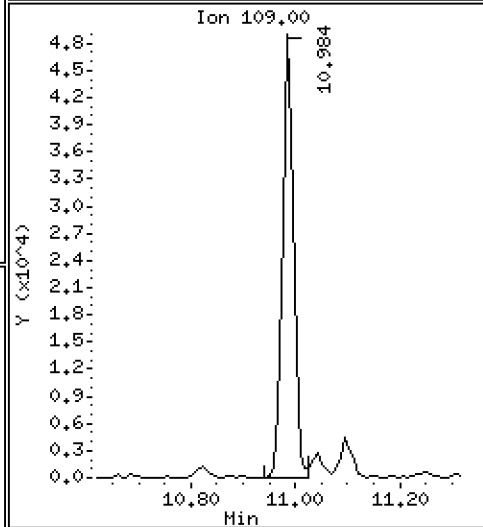
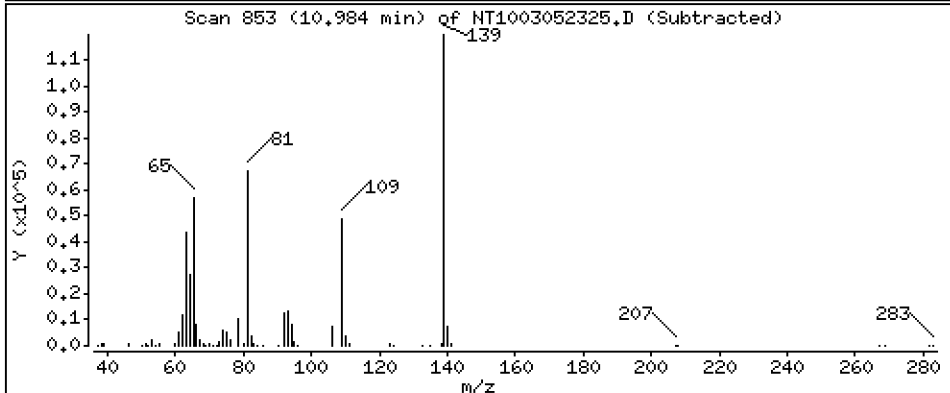
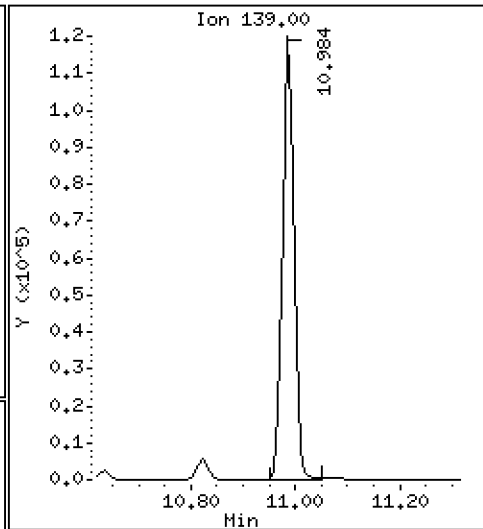
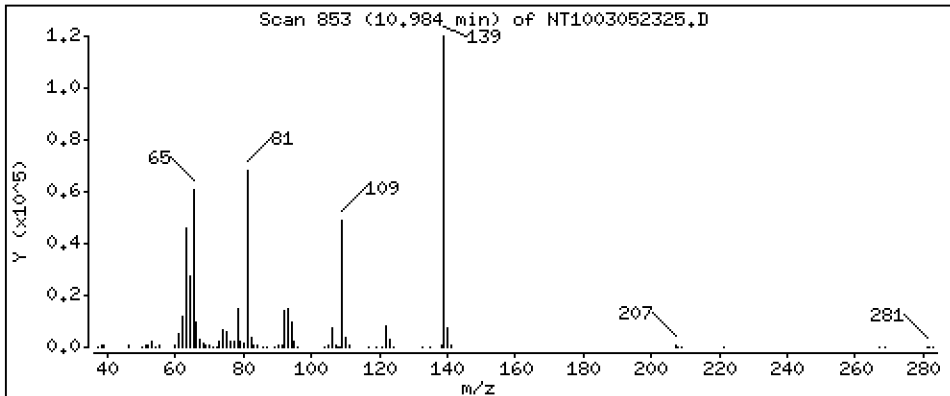
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,357 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

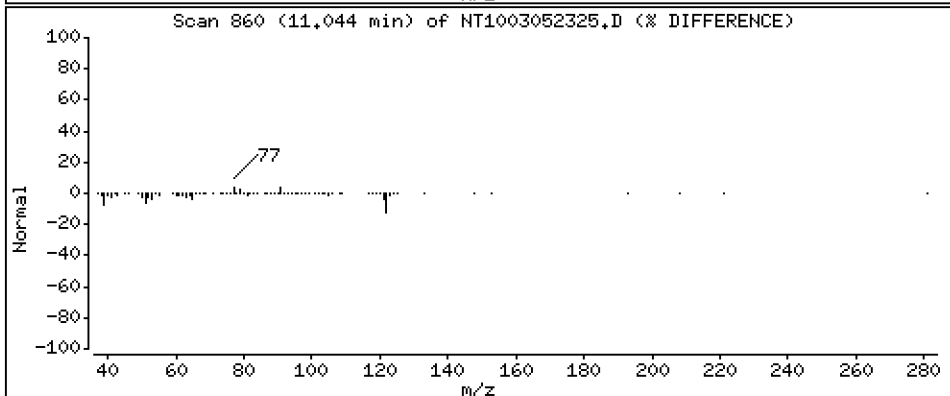
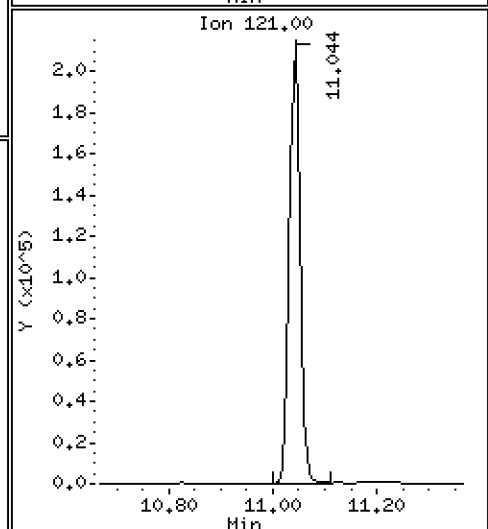
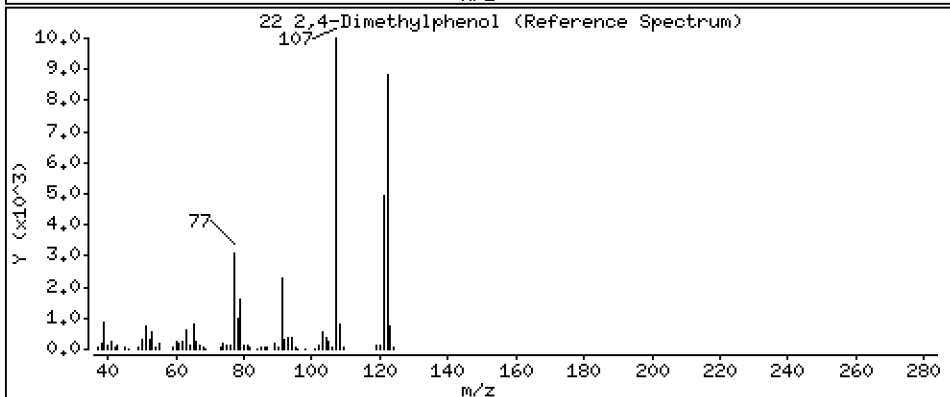
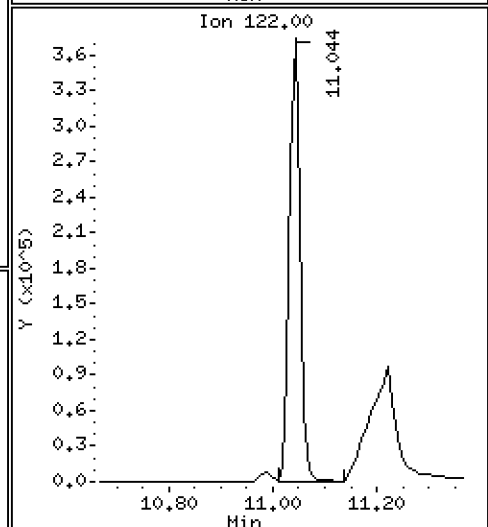
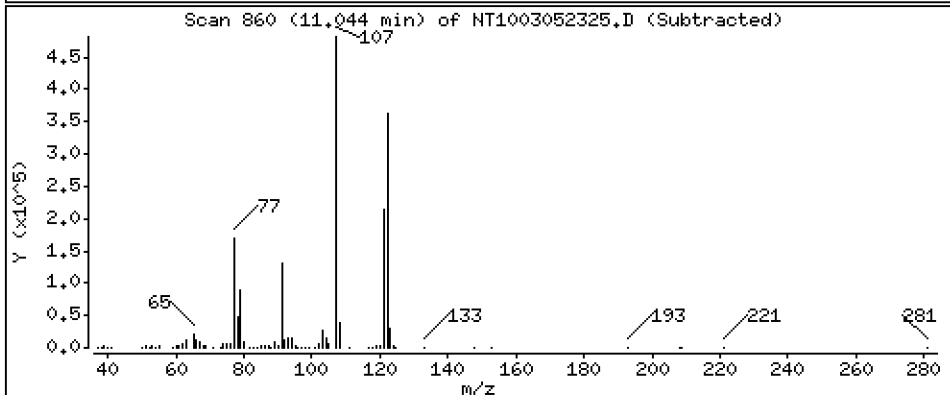
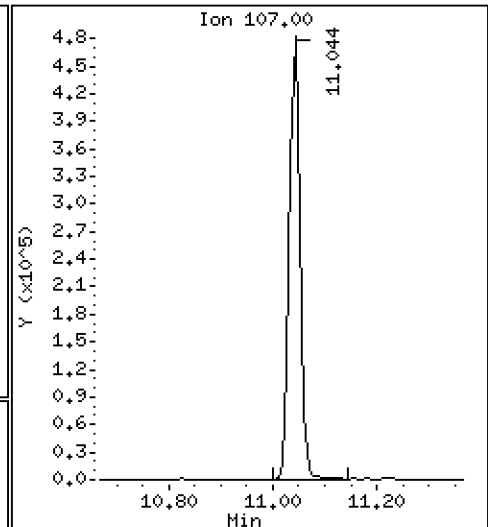
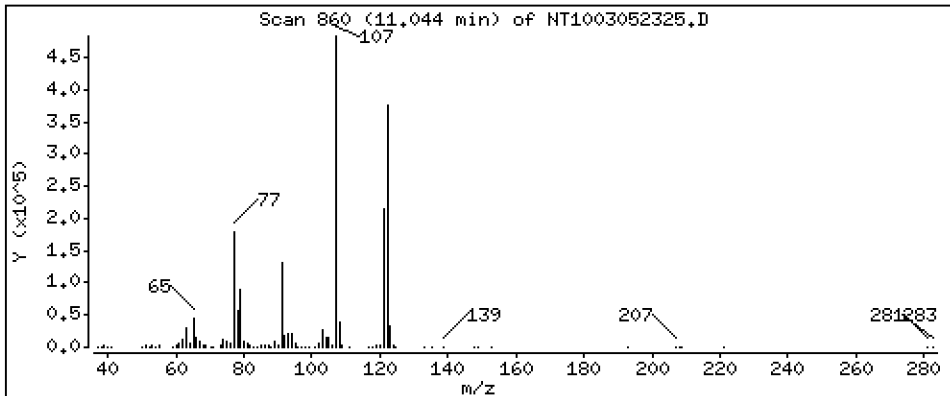
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 8,992 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

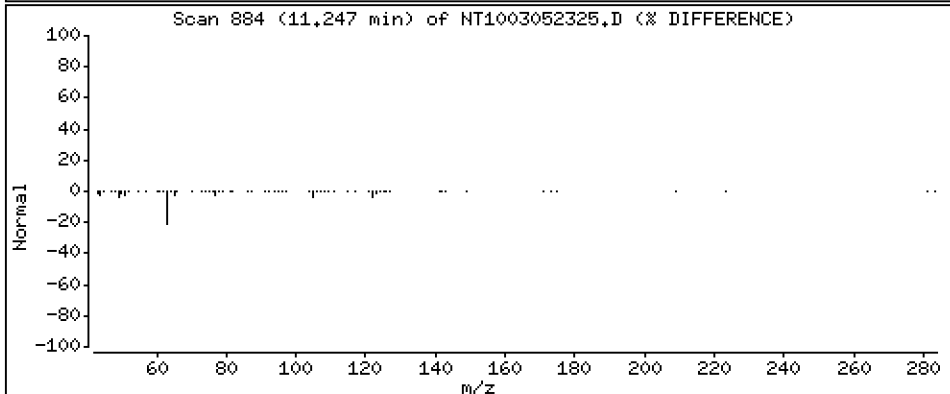
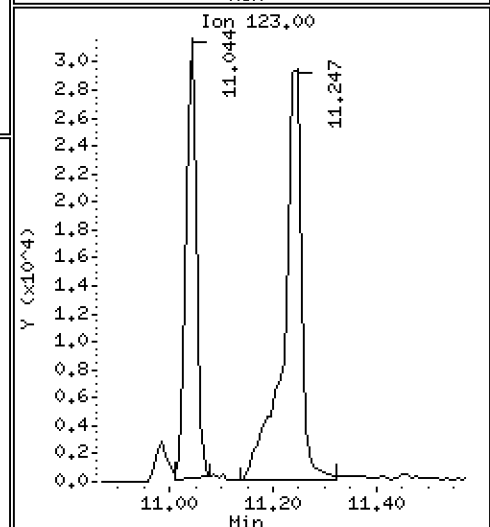
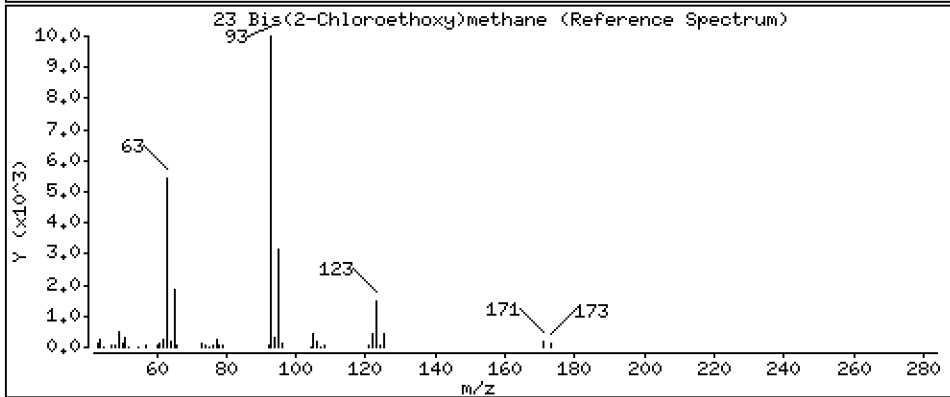
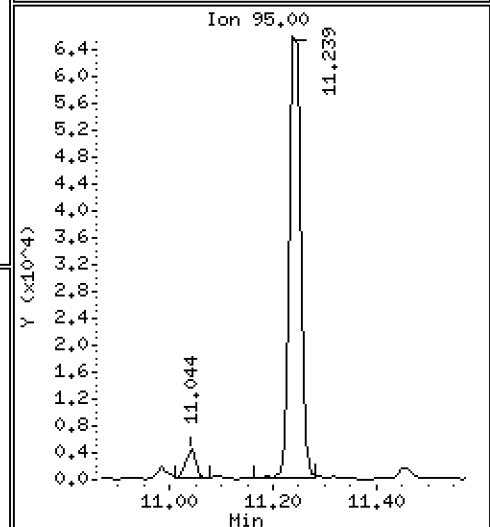
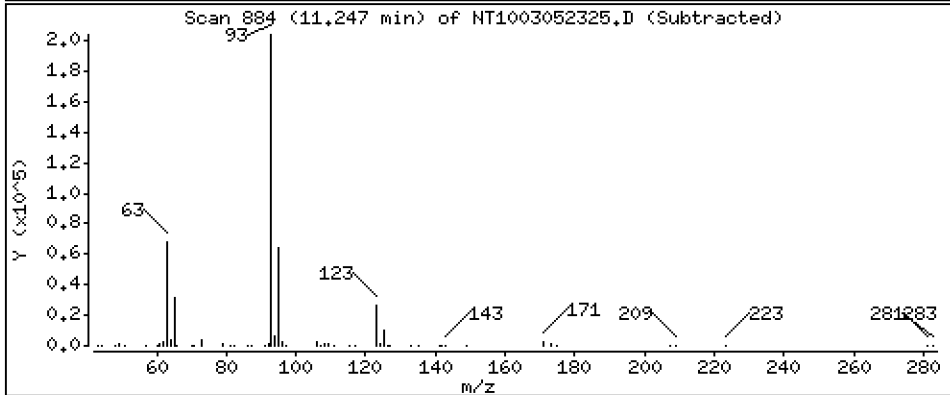
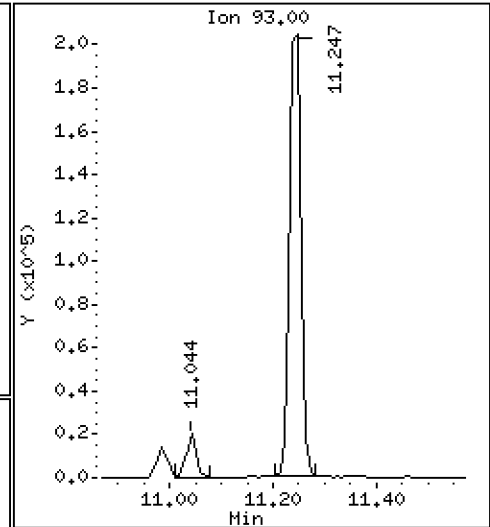
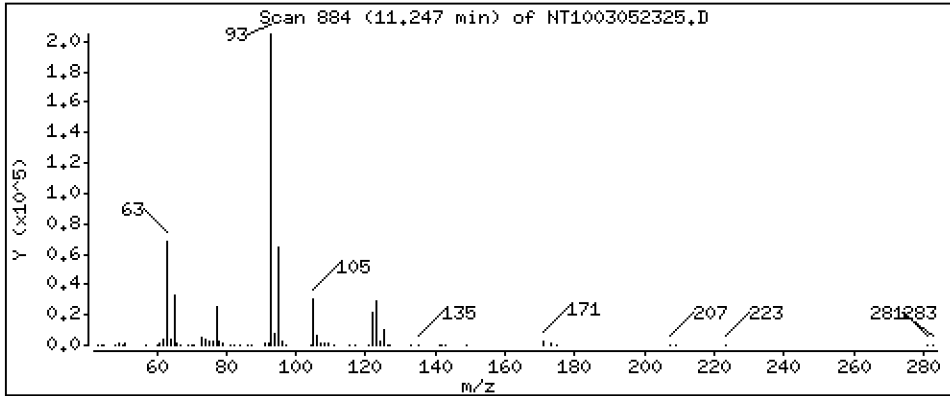
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 5,094 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

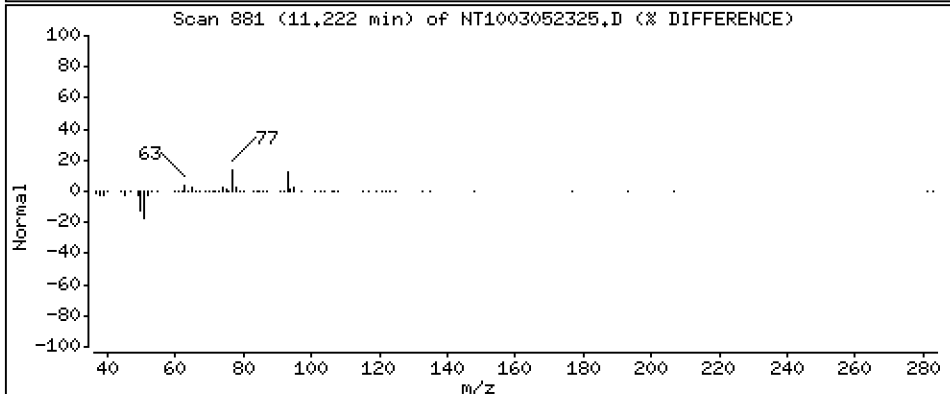
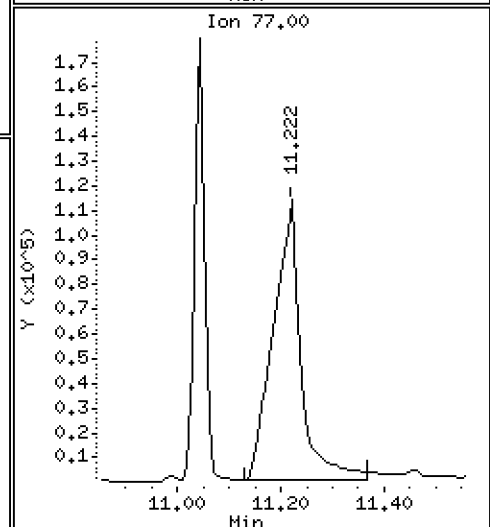
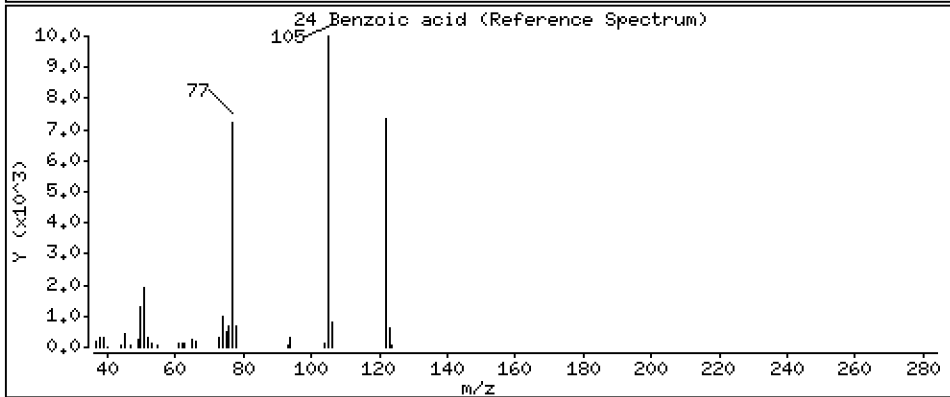
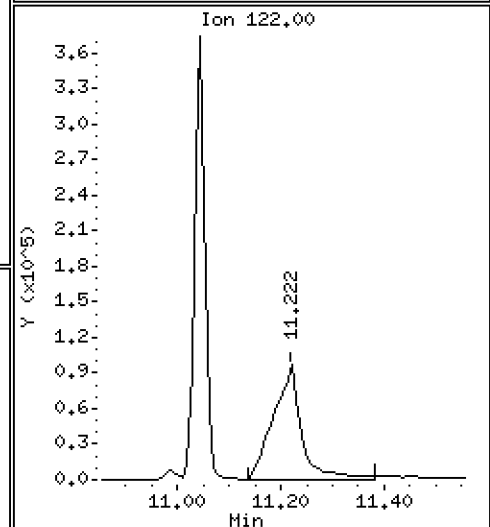
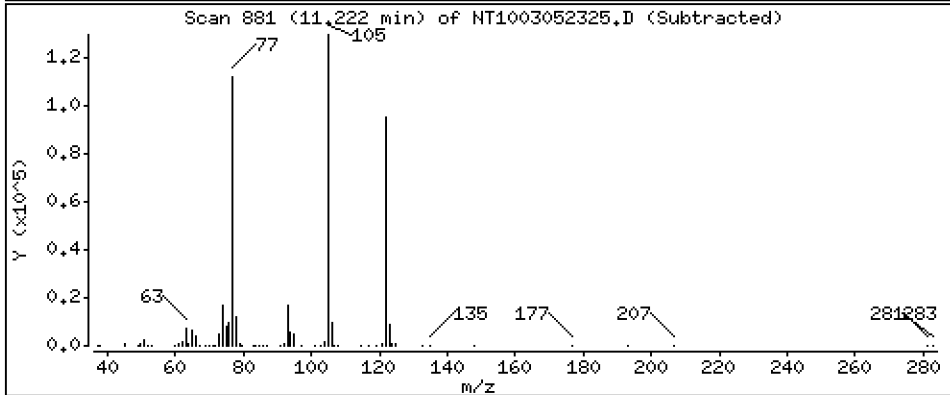
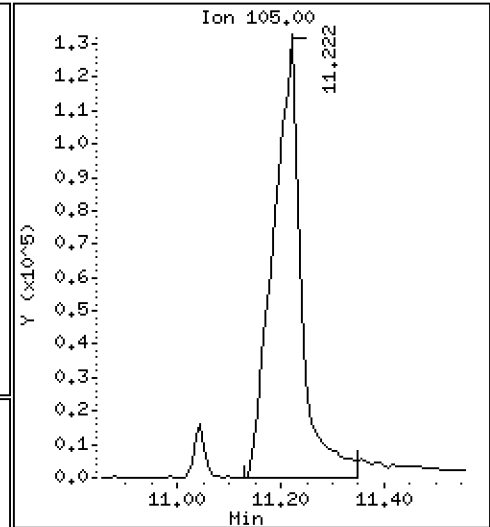
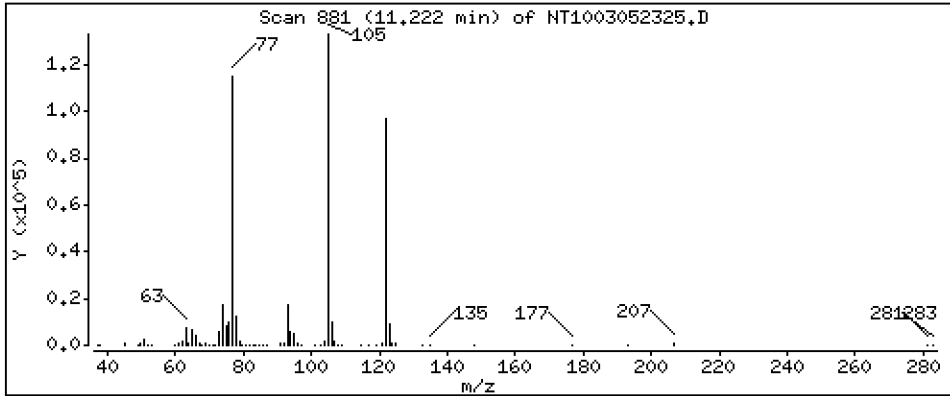
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 11,05 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

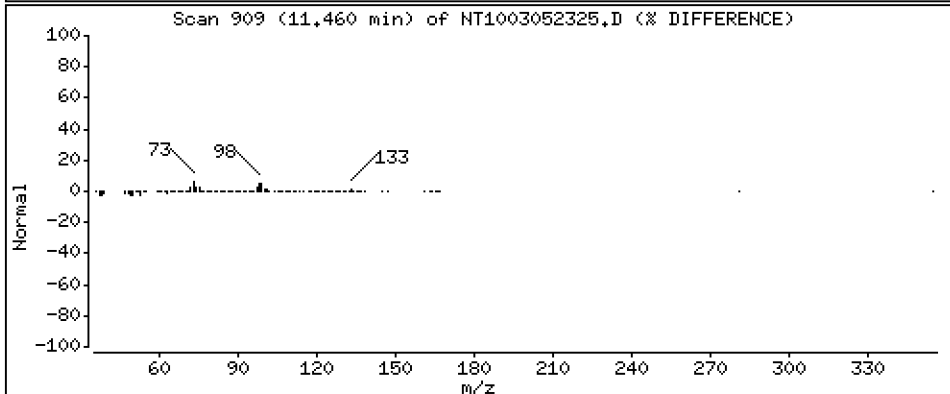
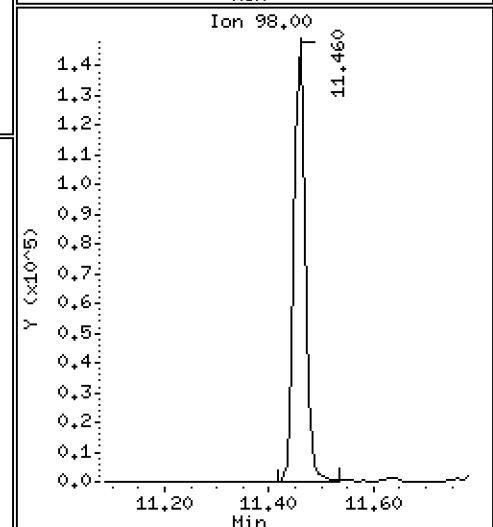
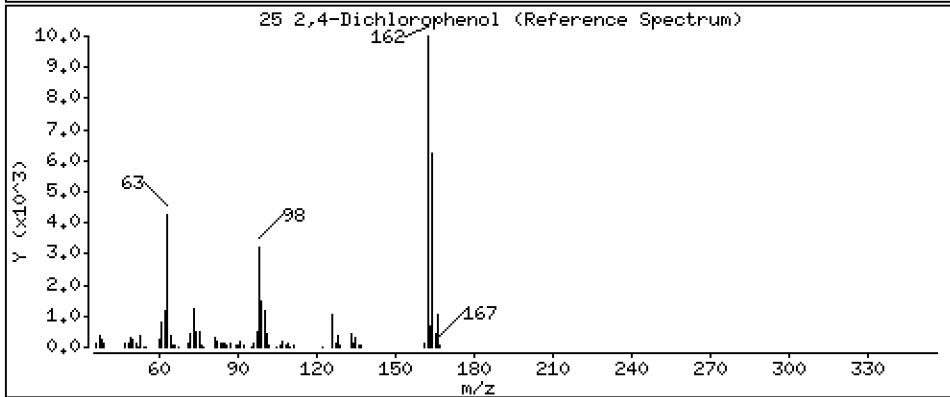
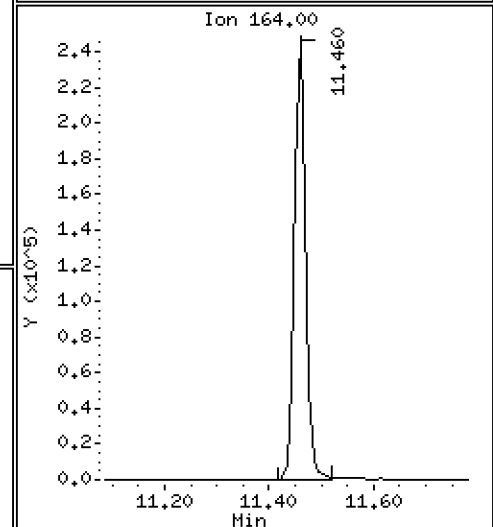
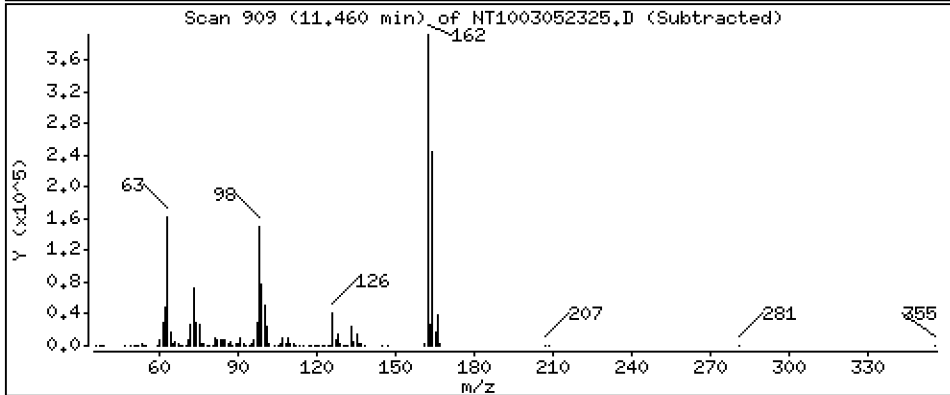
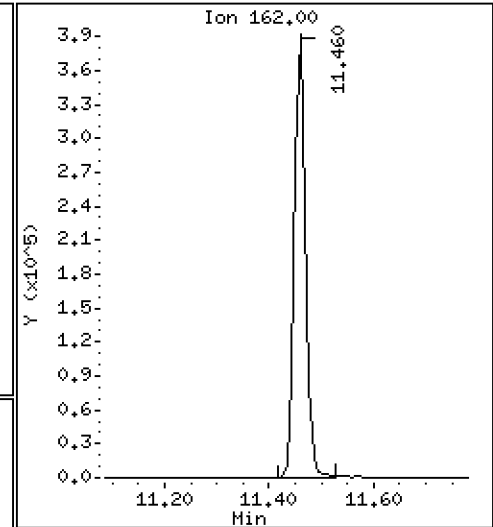
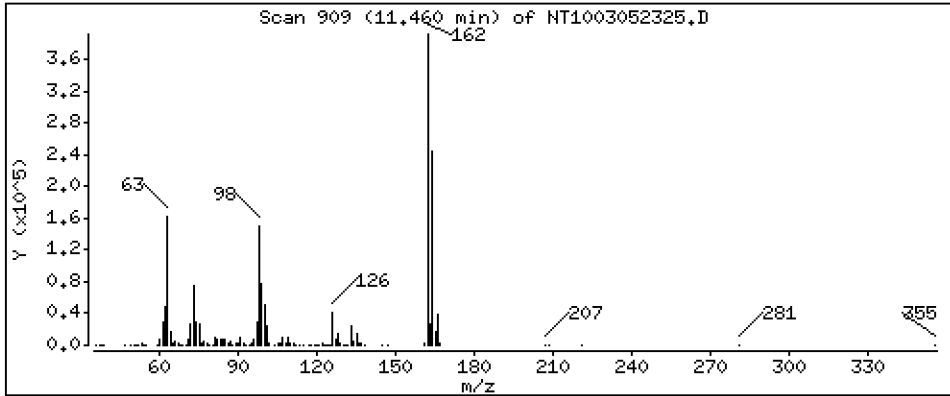
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 11,00 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

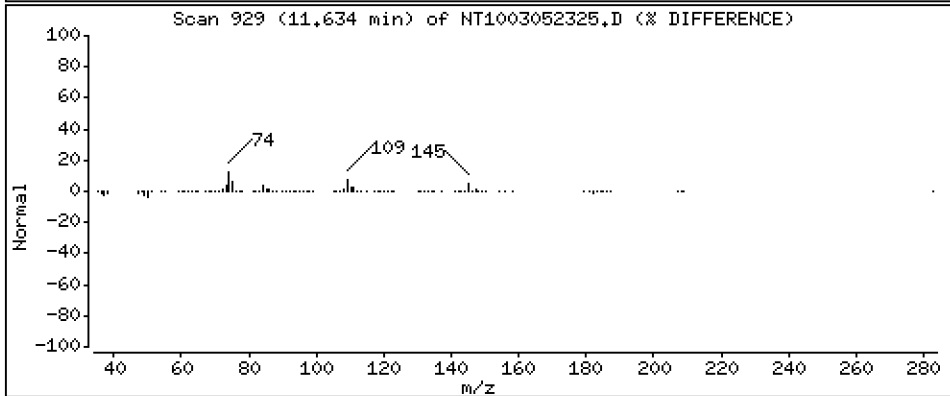
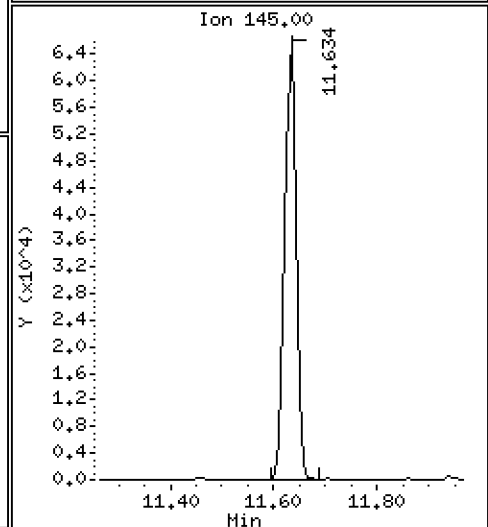
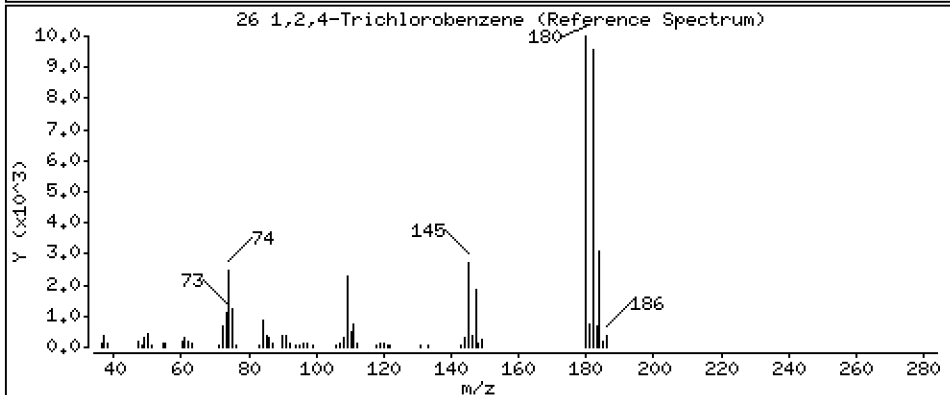
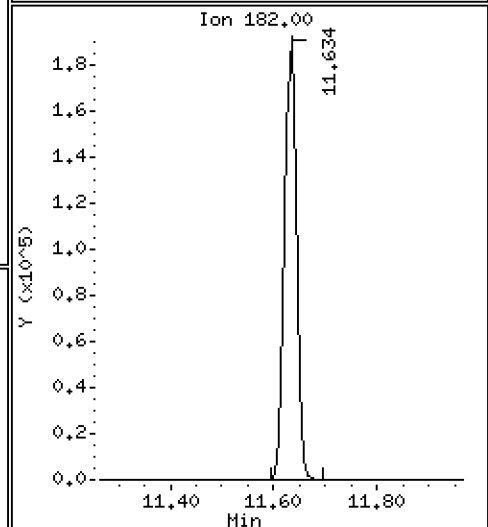
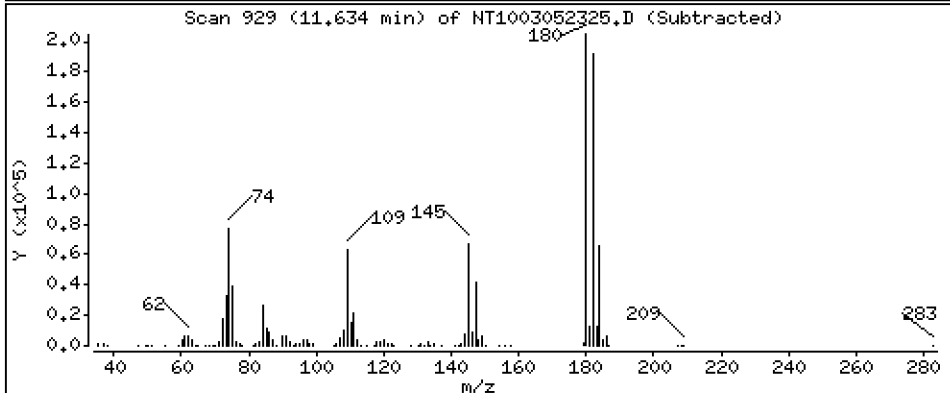
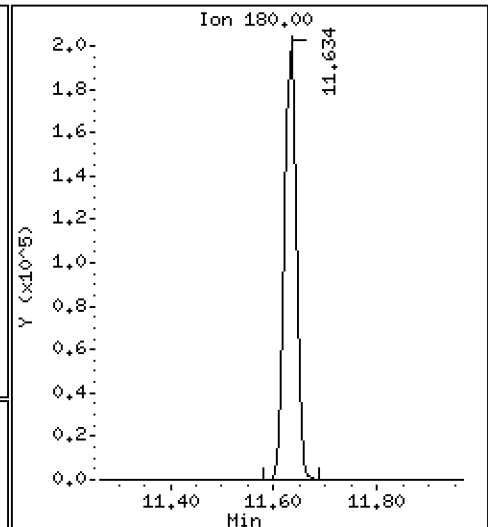
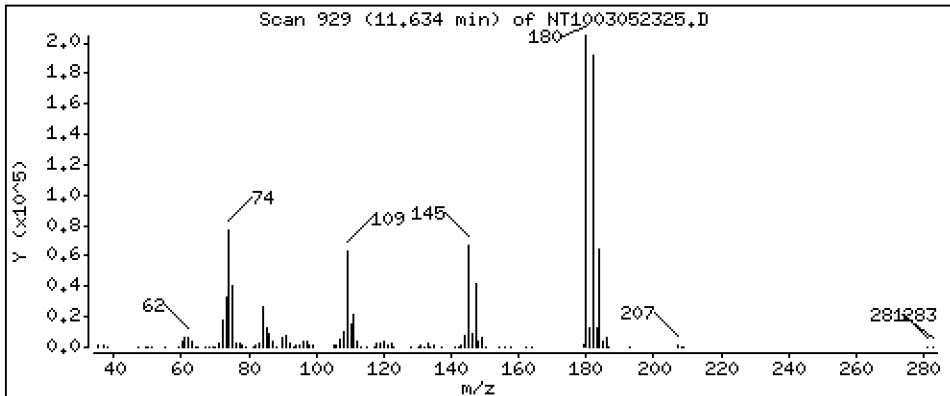
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,123 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

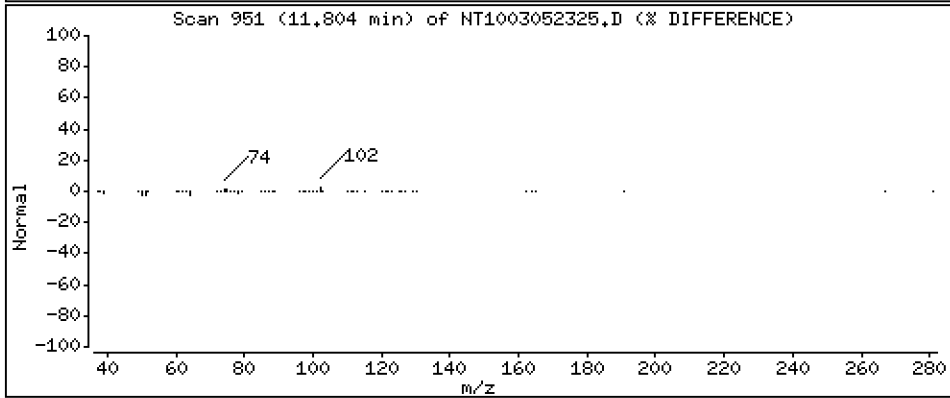
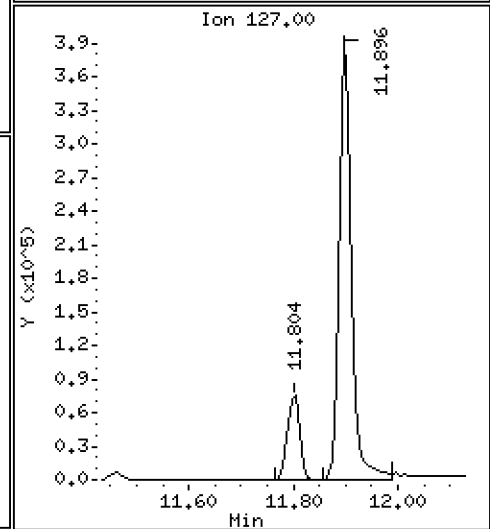
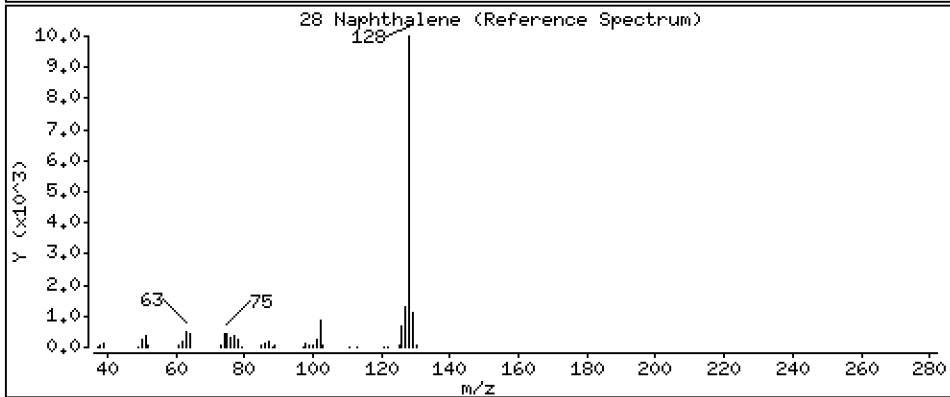
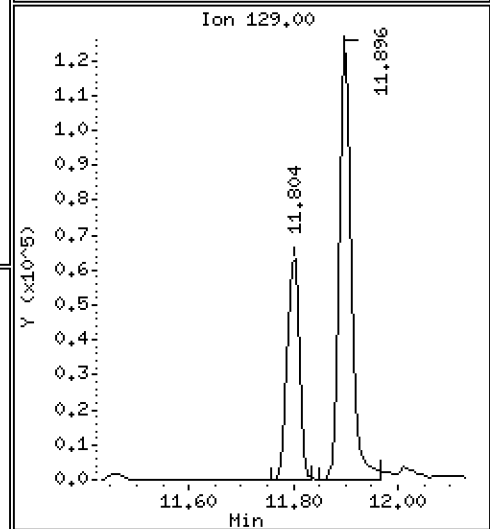
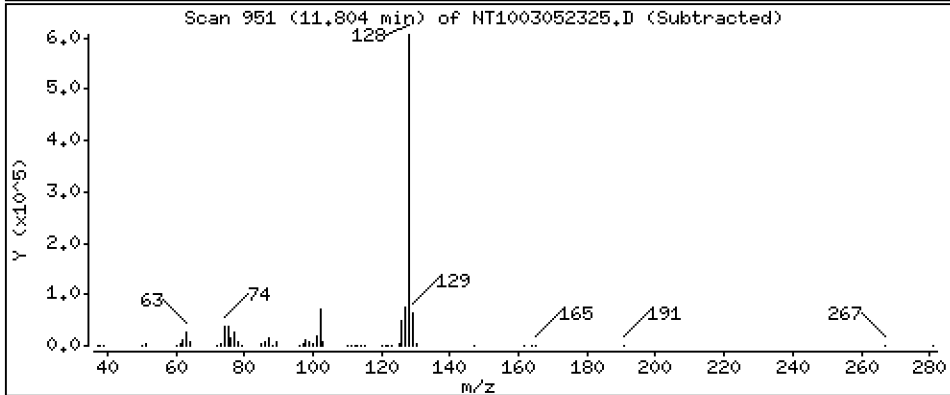
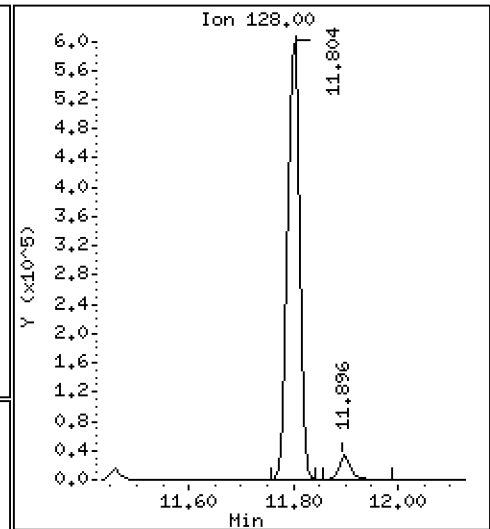
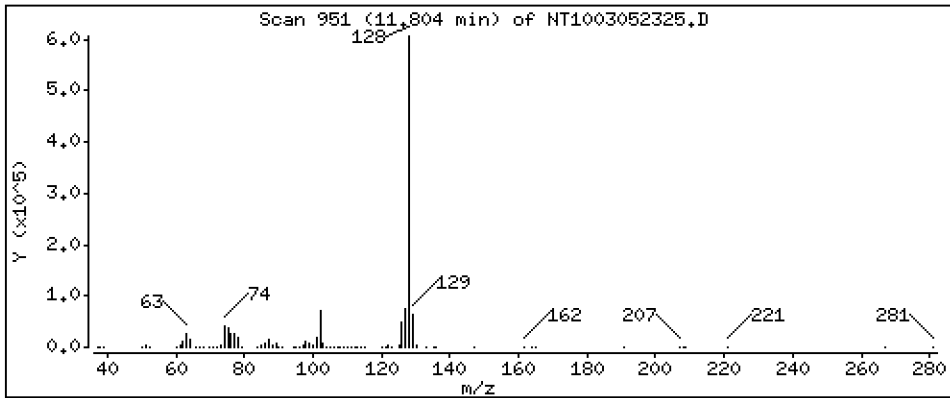
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

28 Naphthalene

Concentration: 4.754 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

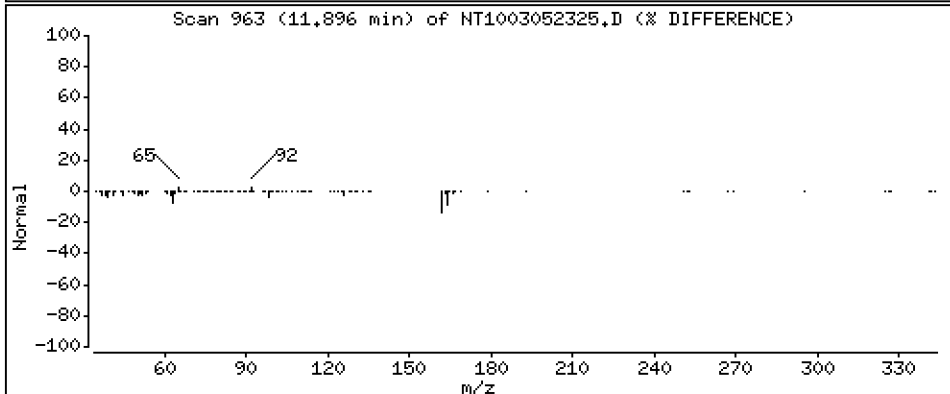
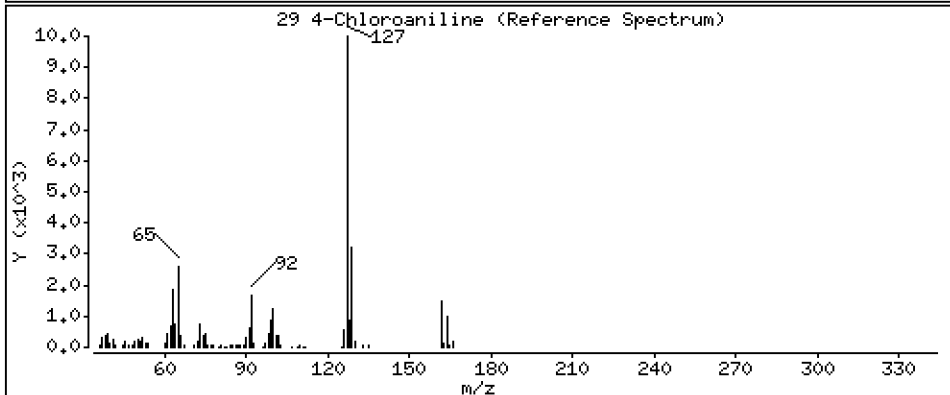
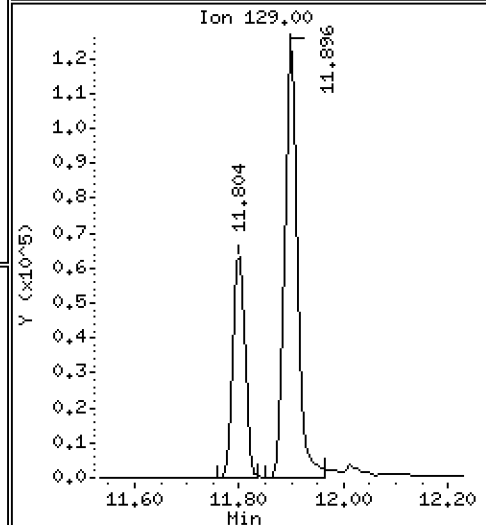
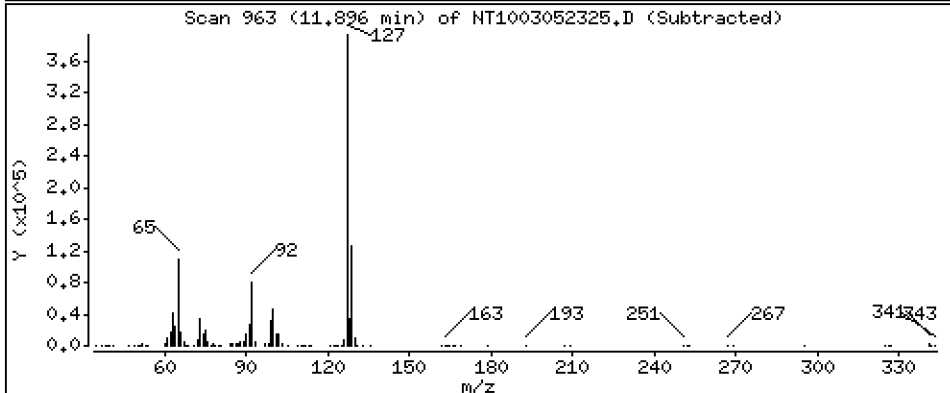
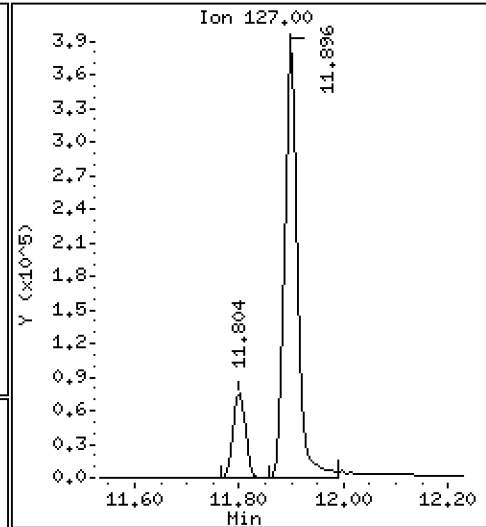
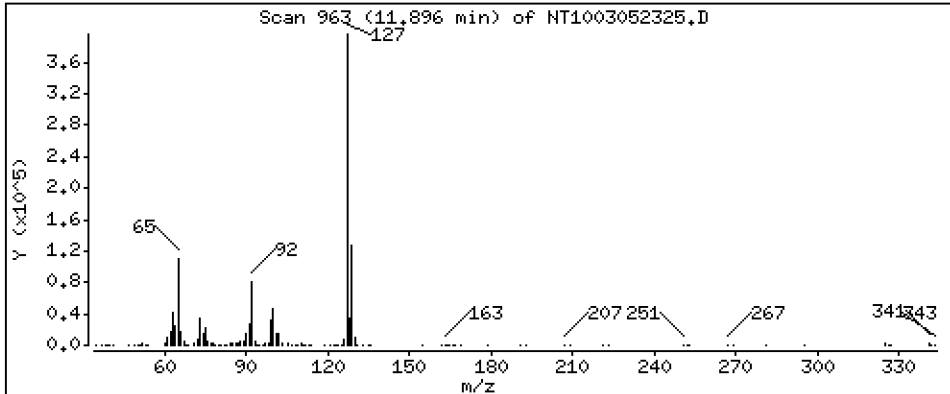
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 8,444 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

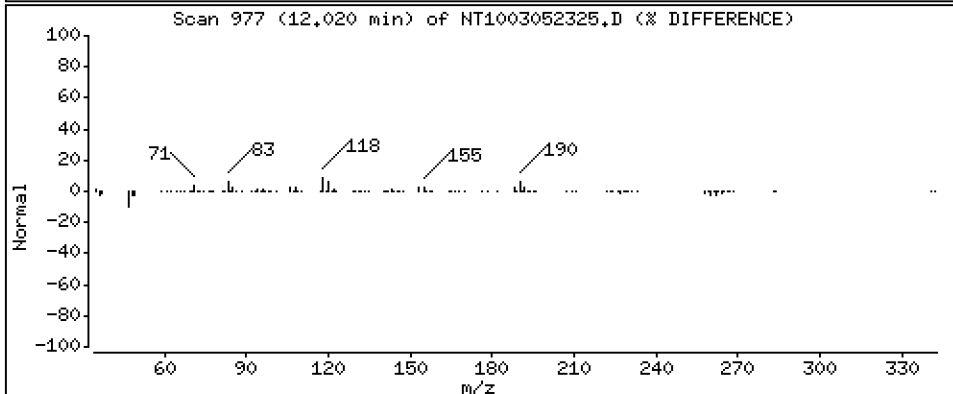
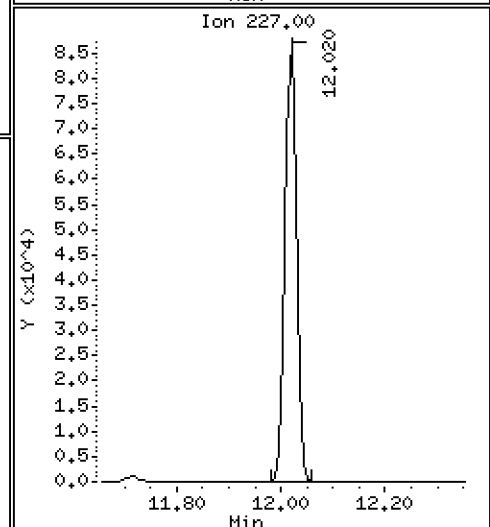
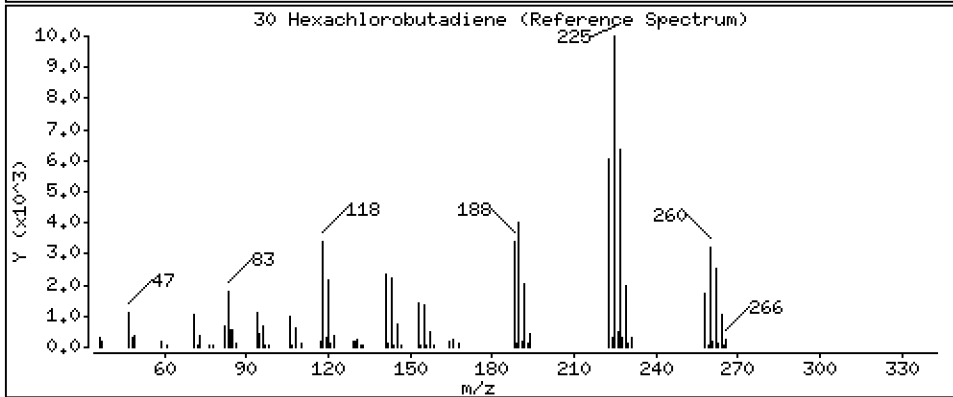
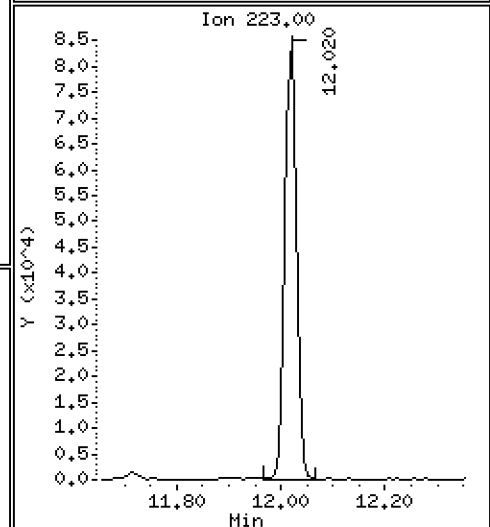
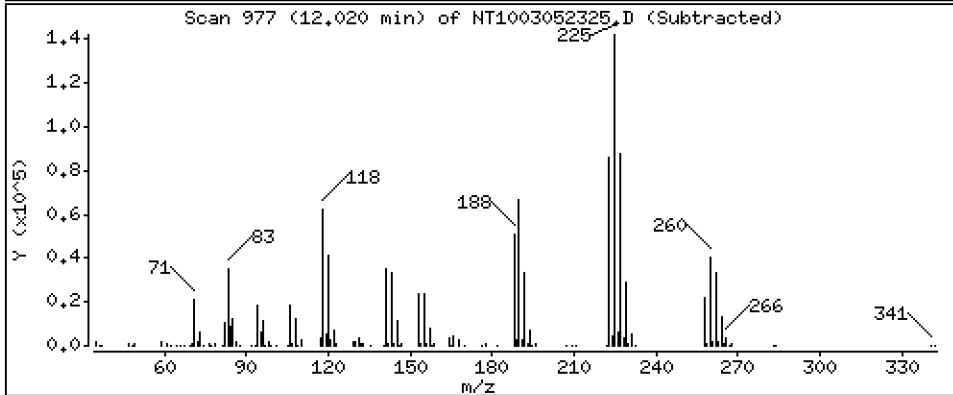
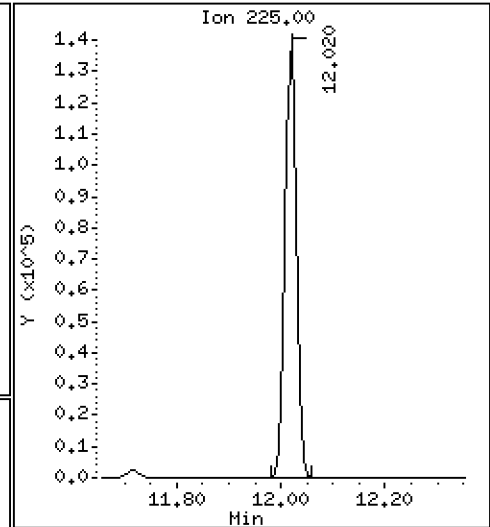
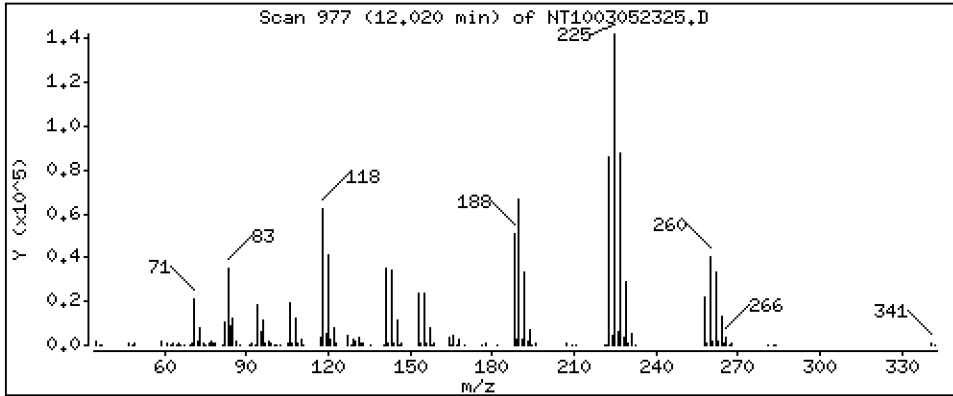
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,622 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

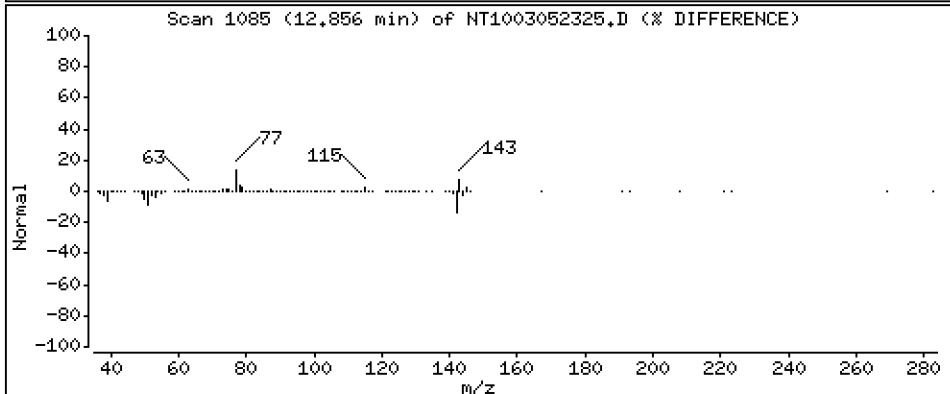
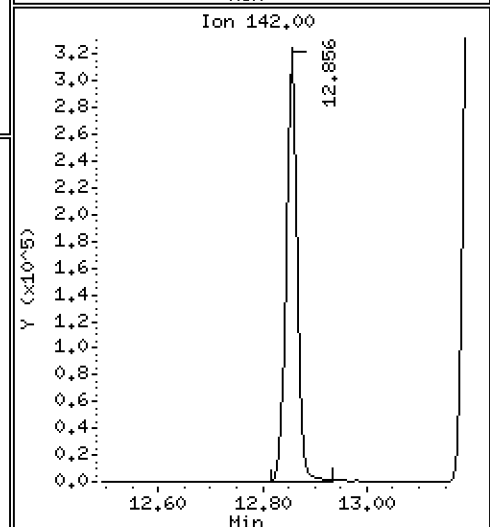
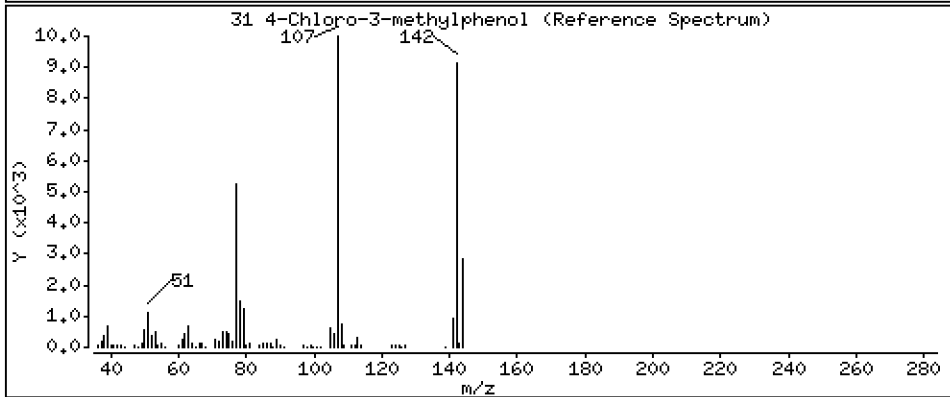
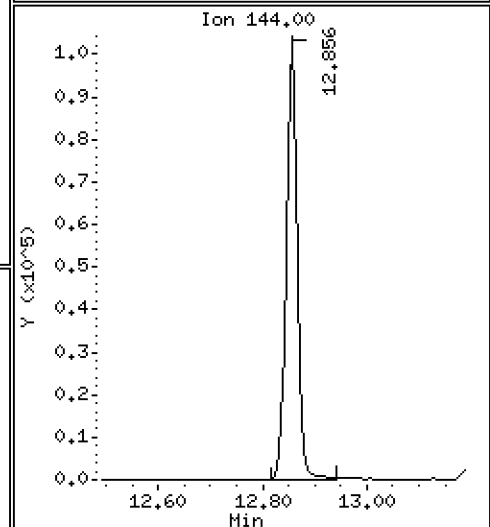
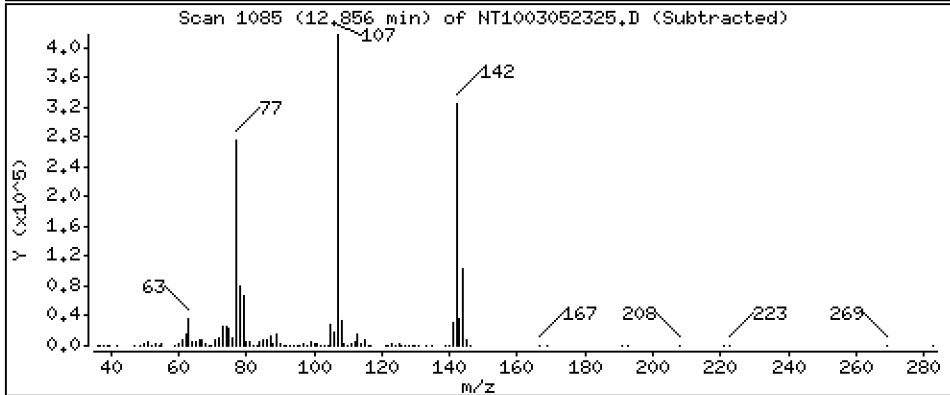
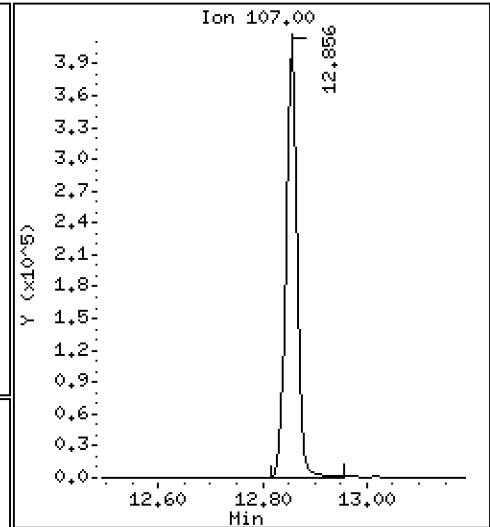
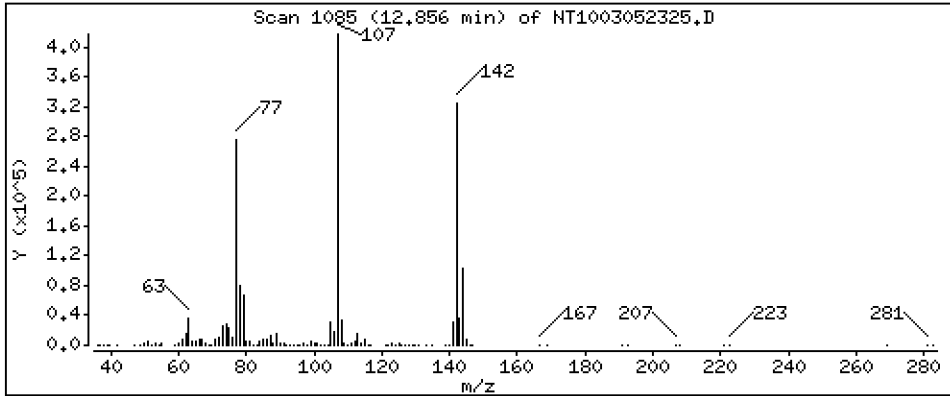
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 9,660 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

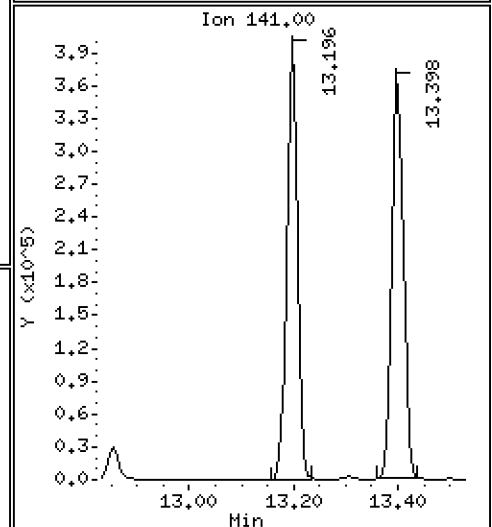
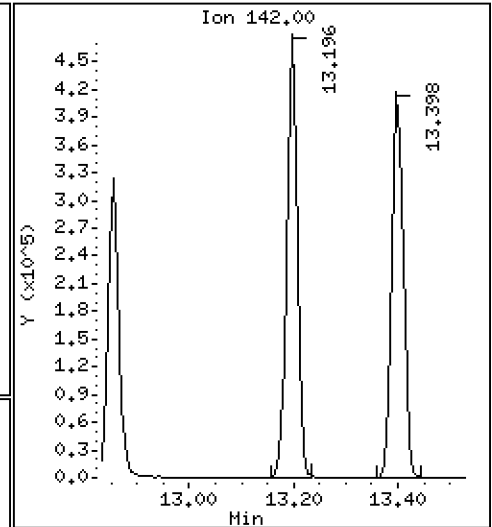
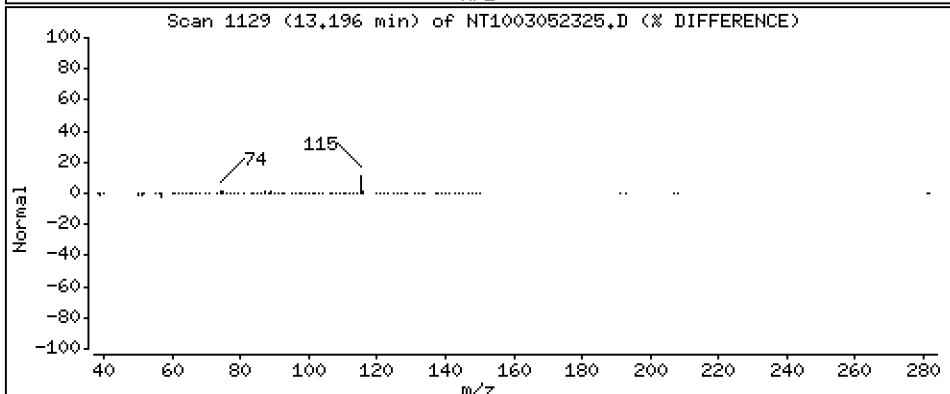
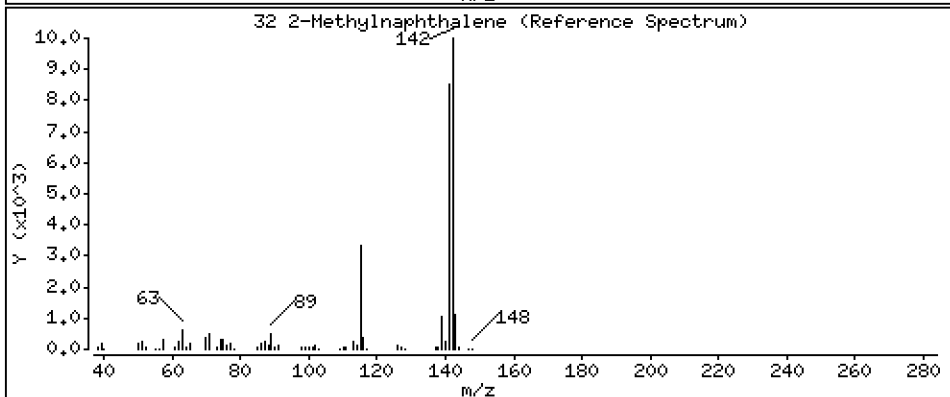
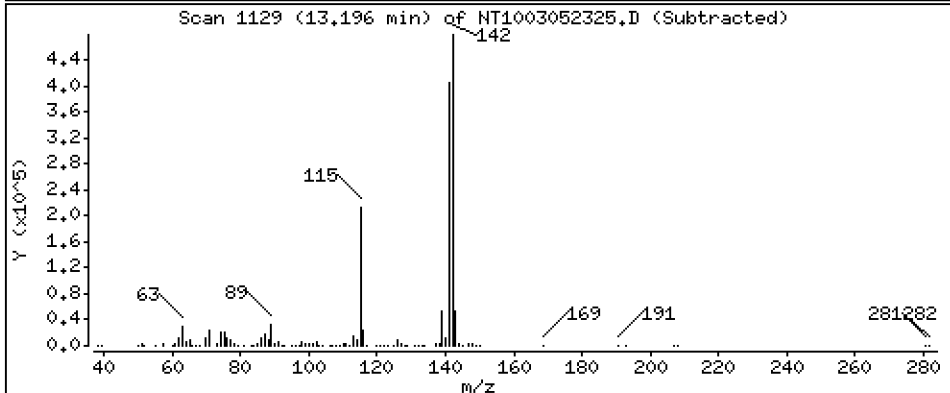
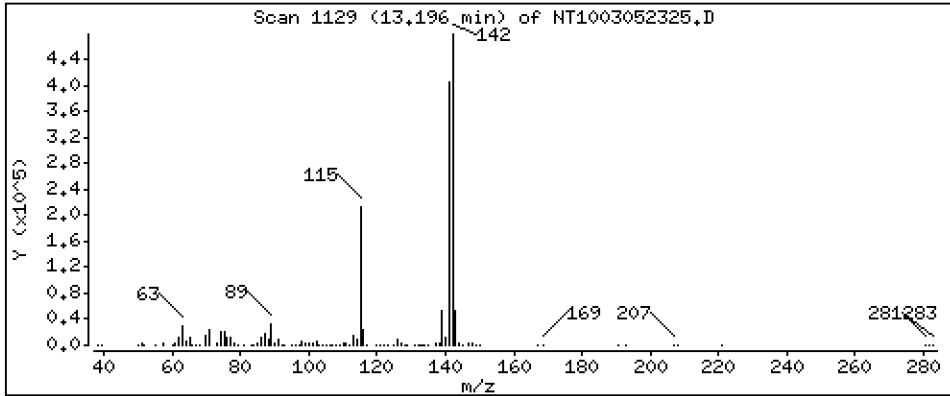
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 4,984 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

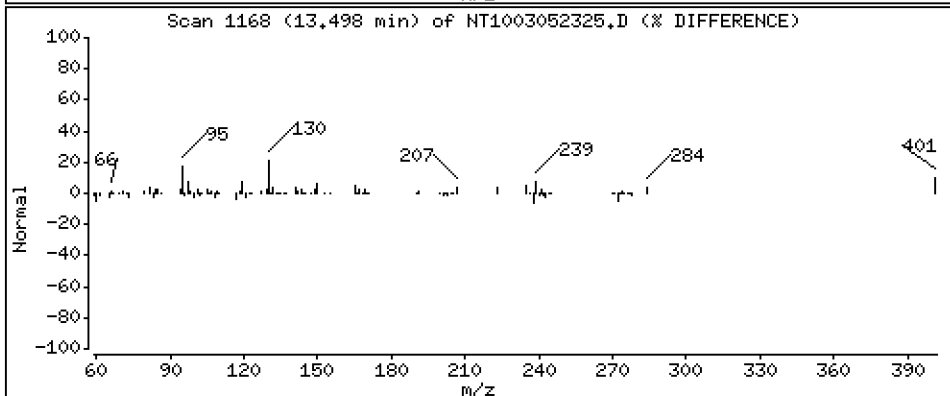
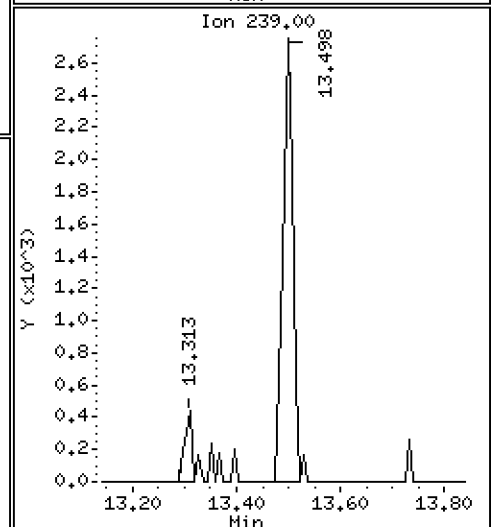
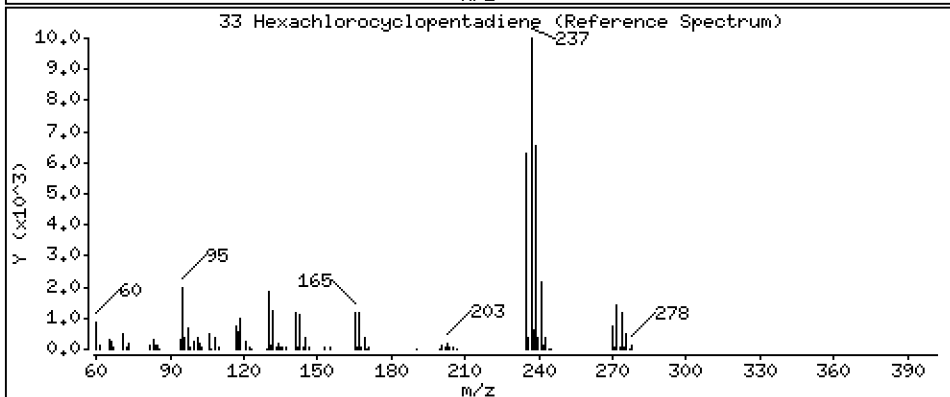
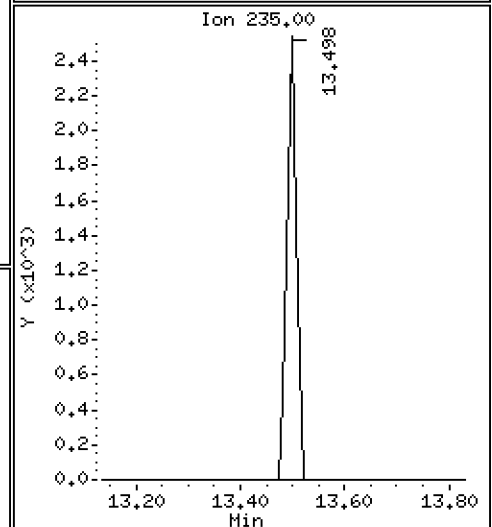
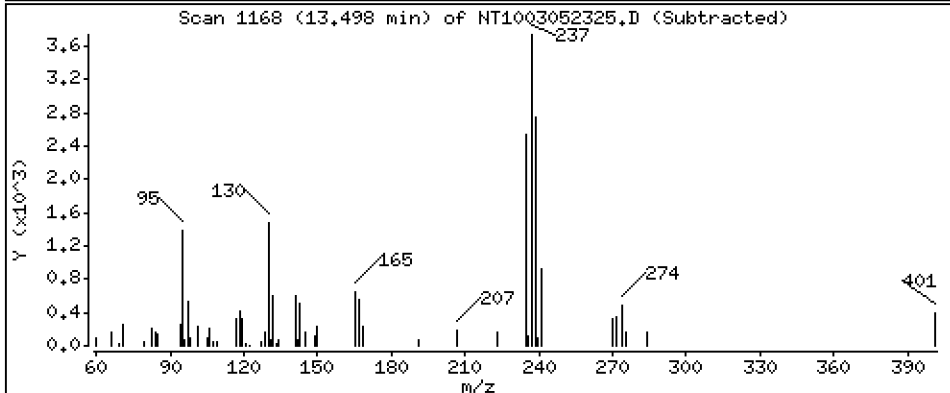
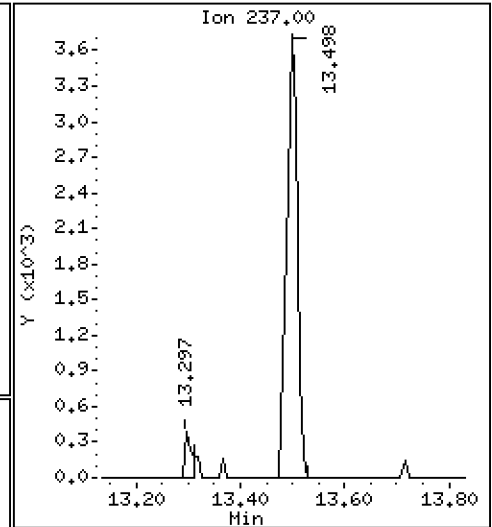
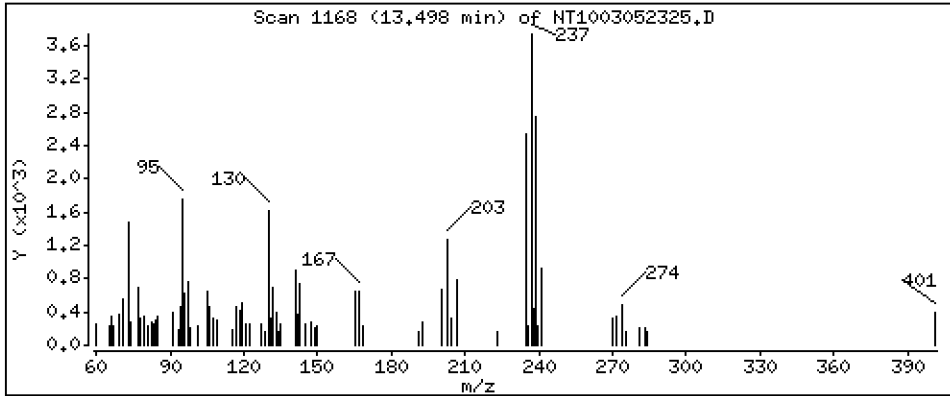
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

33 Hexachlorocyclopentadiene

Concentration: 0,3836 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

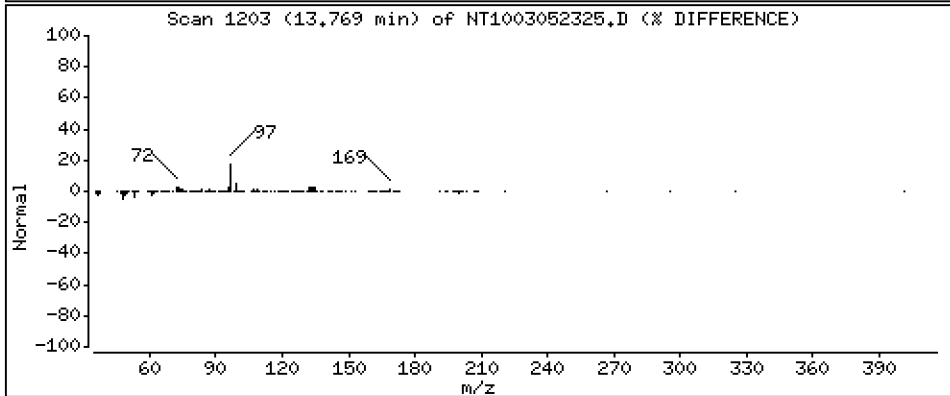
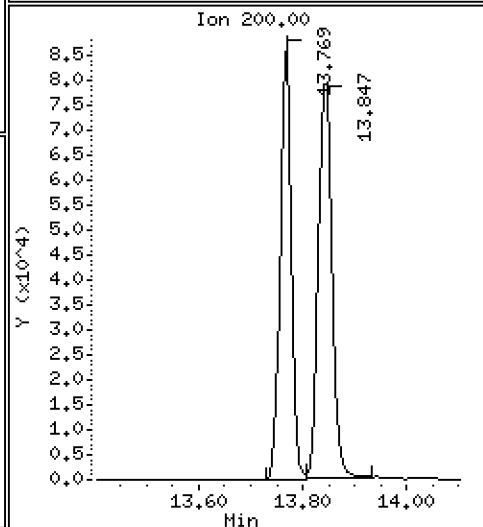
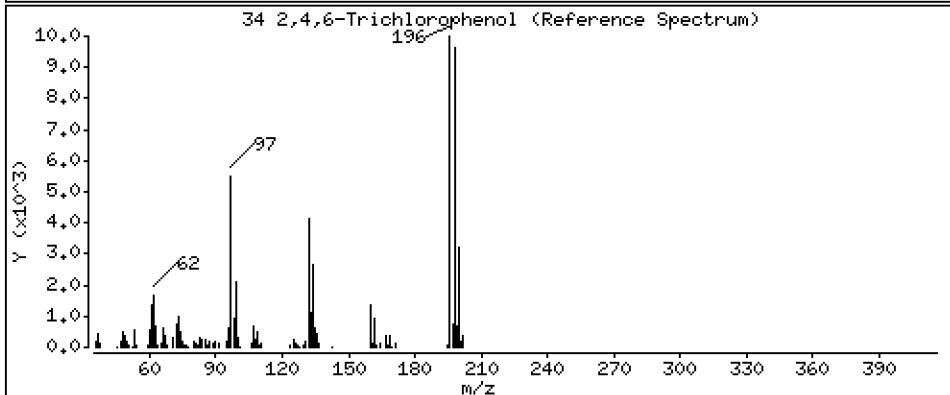
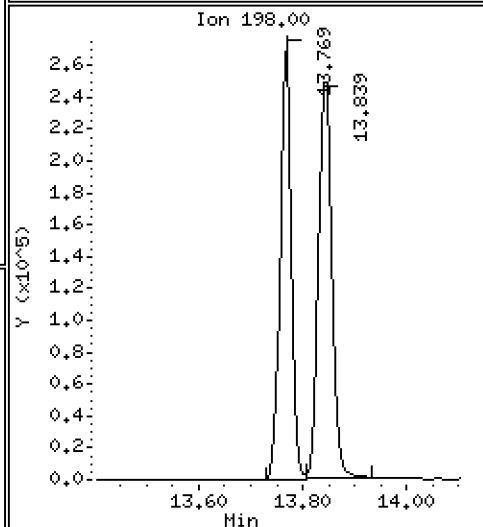
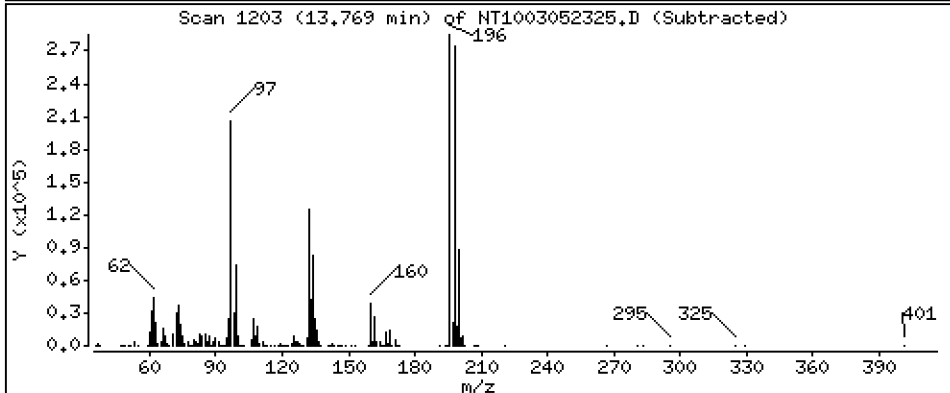
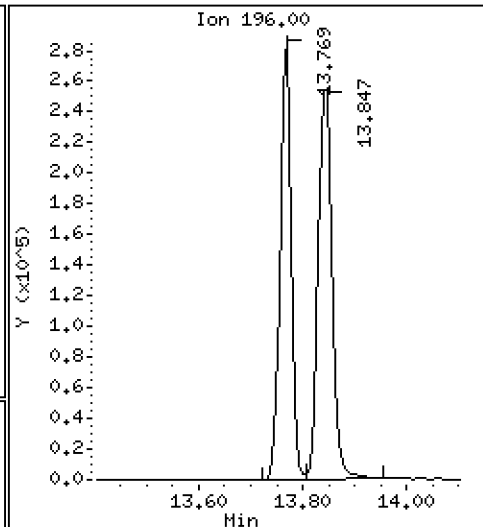
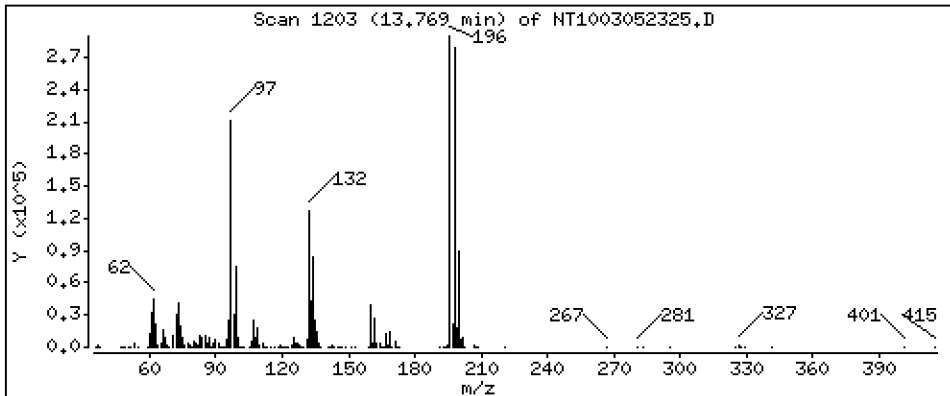
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 10,39 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

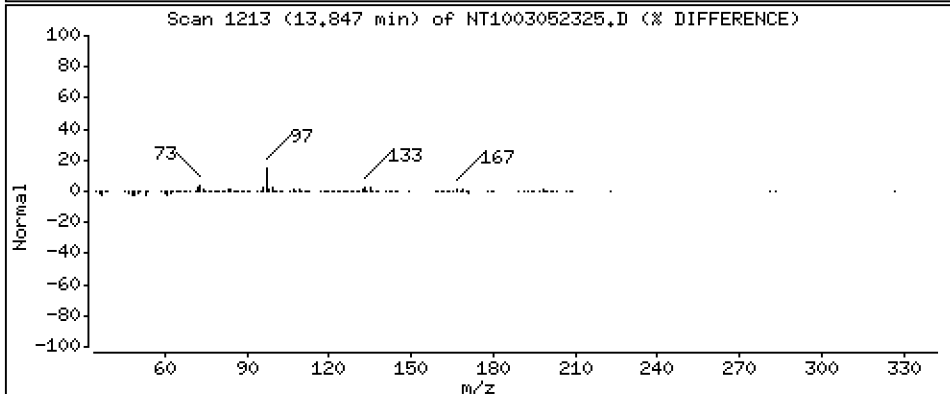
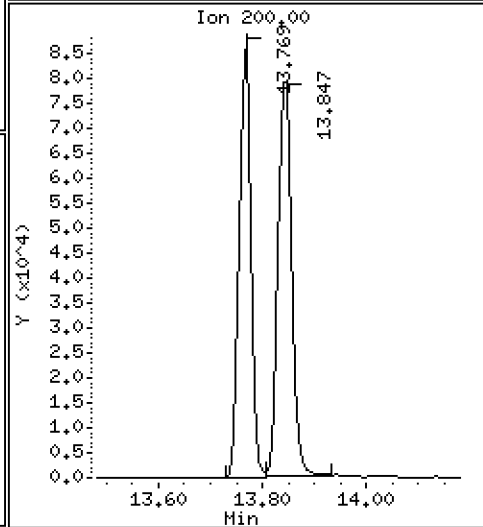
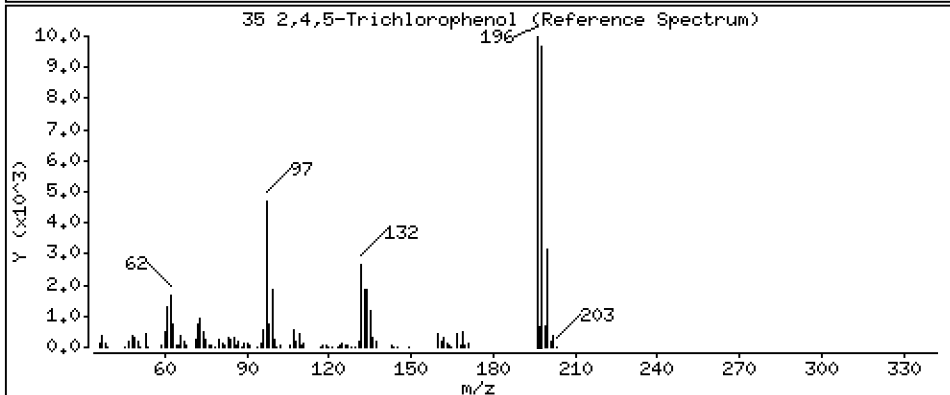
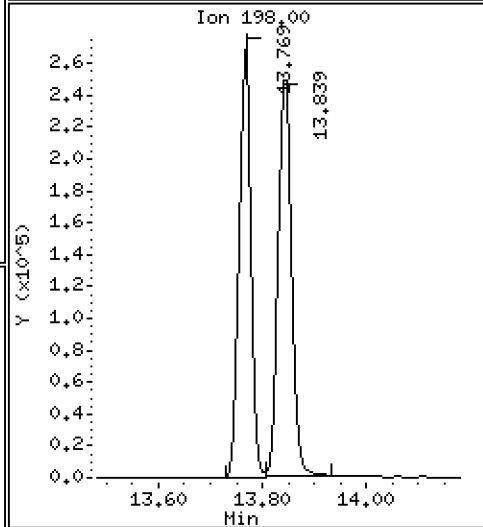
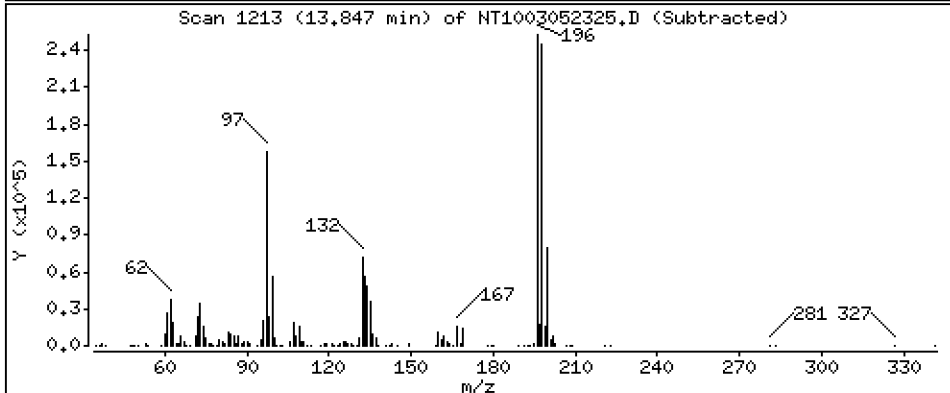
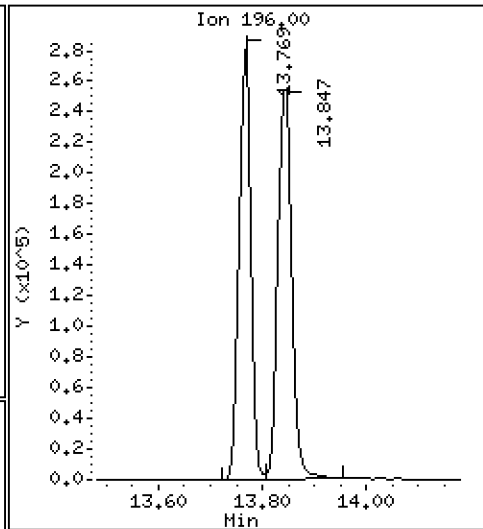
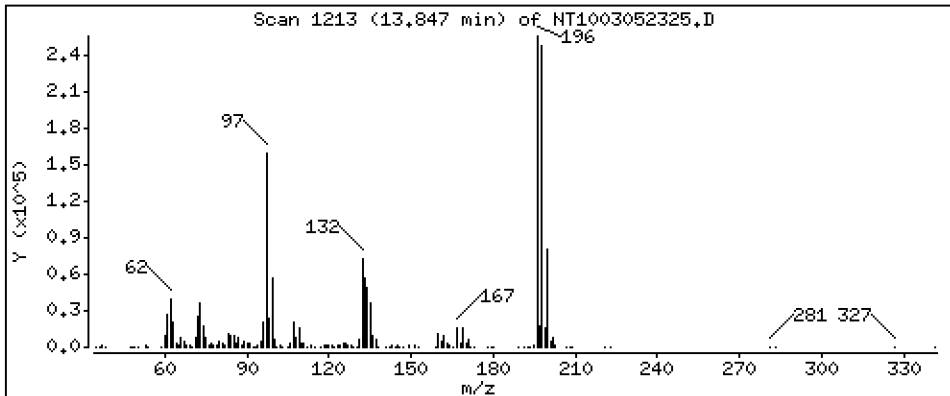
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 10,39 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

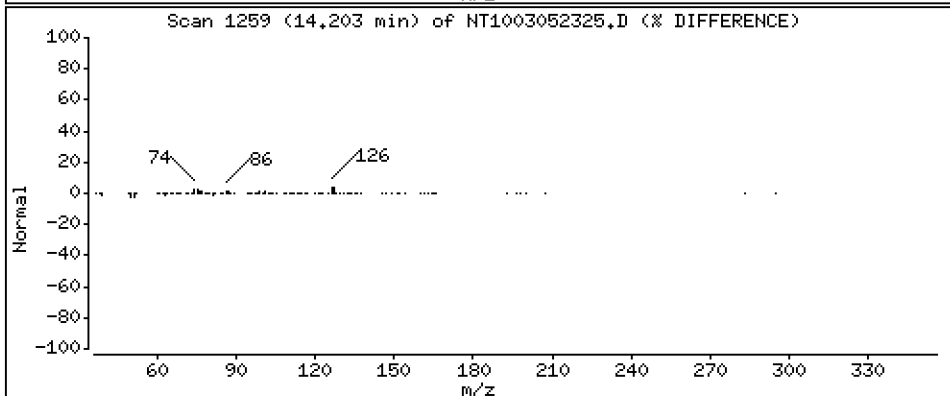
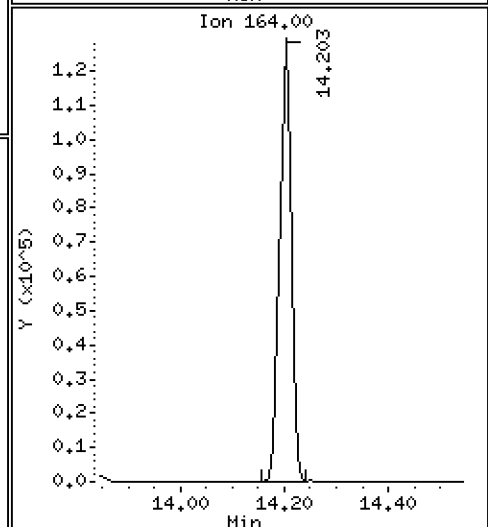
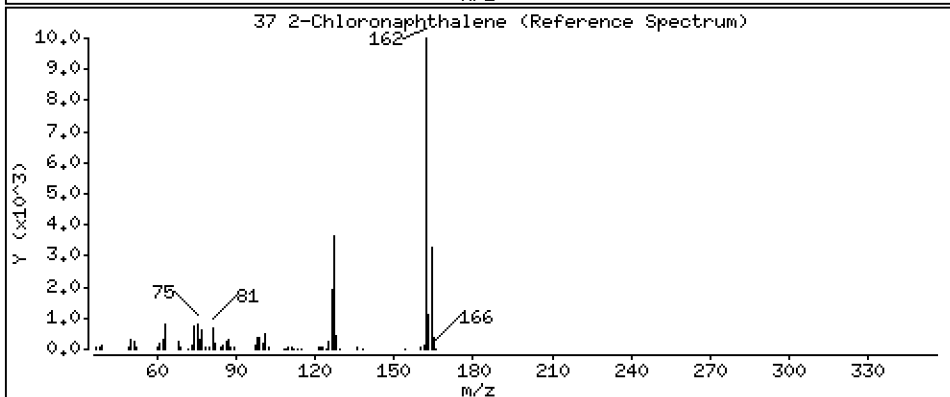
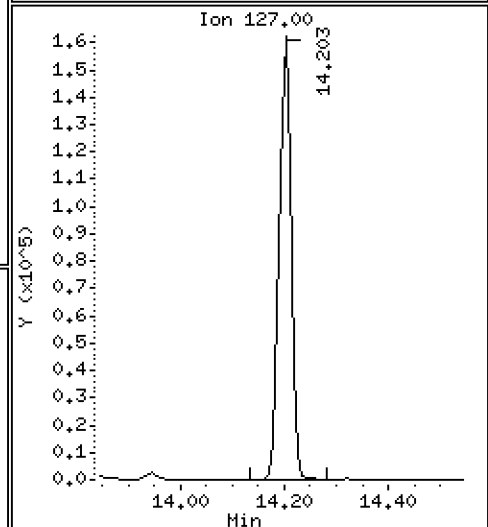
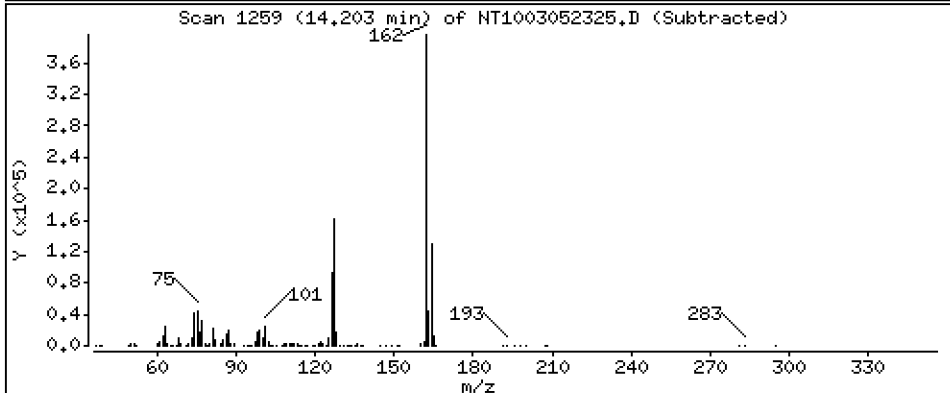
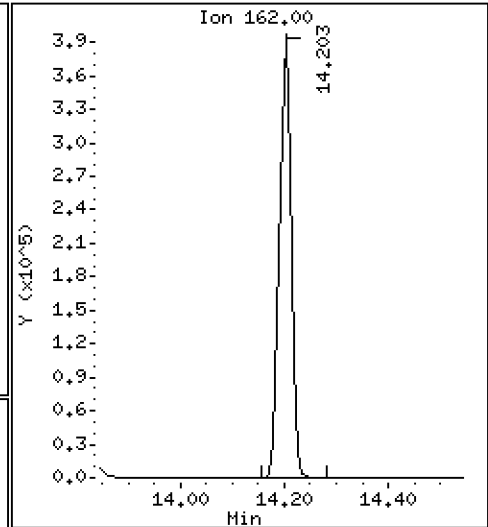
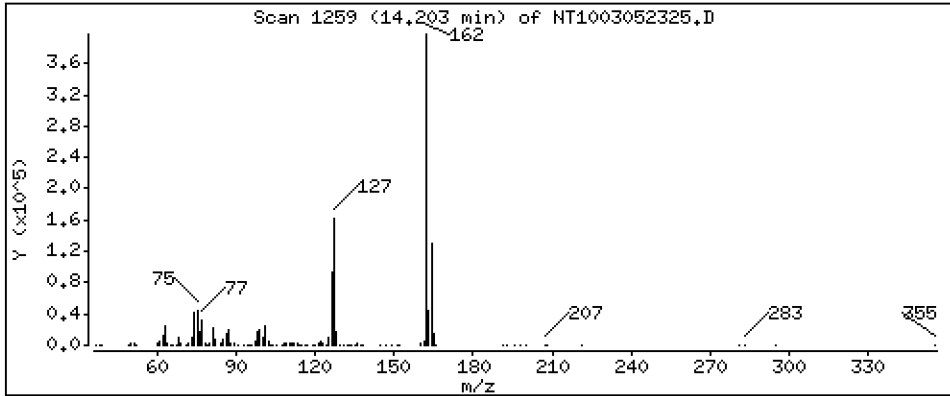
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,239 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

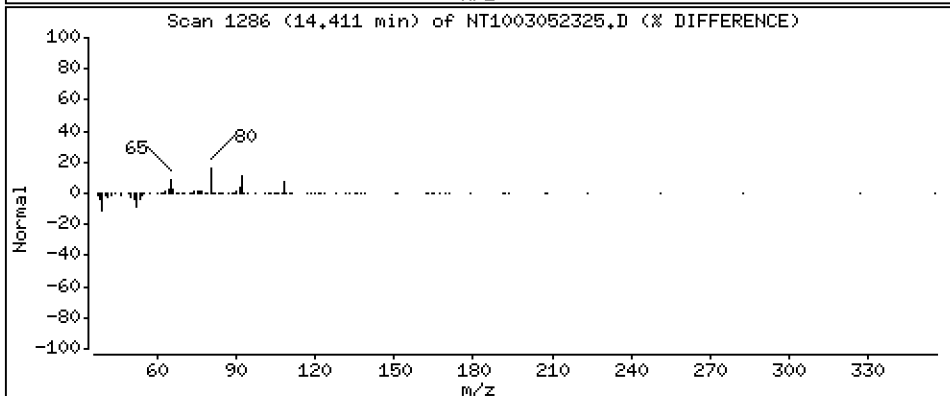
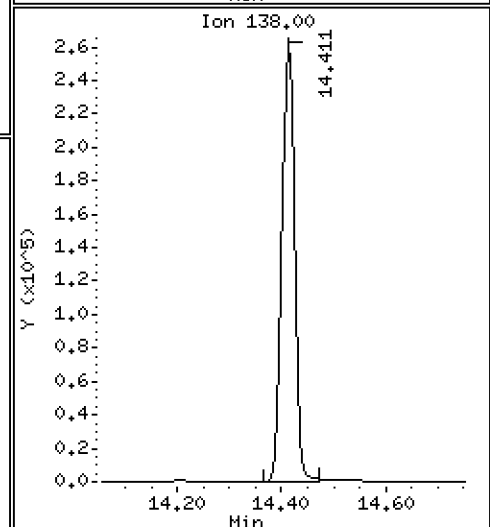
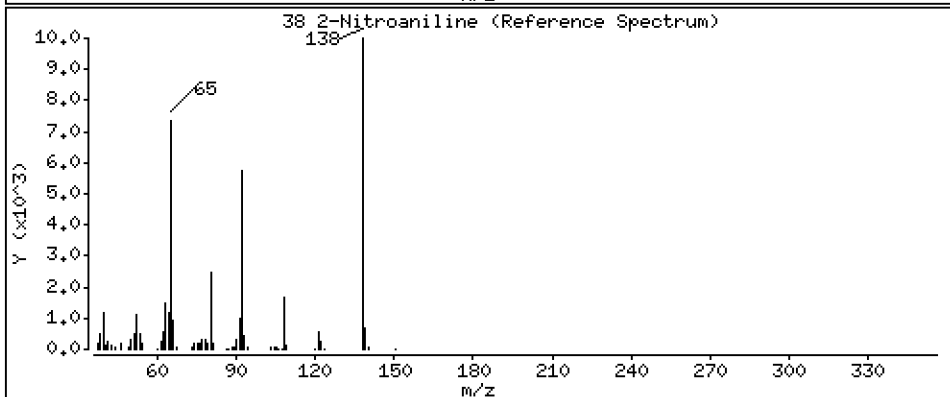
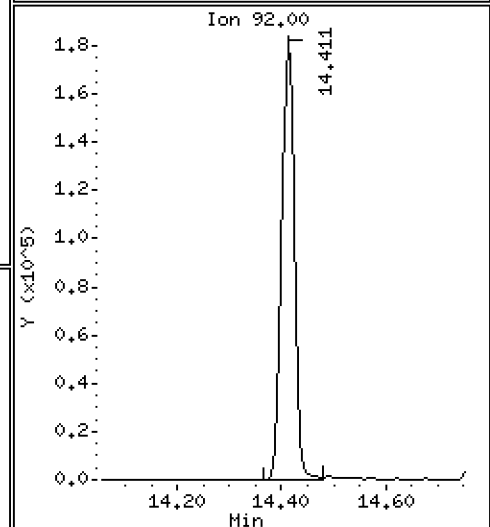
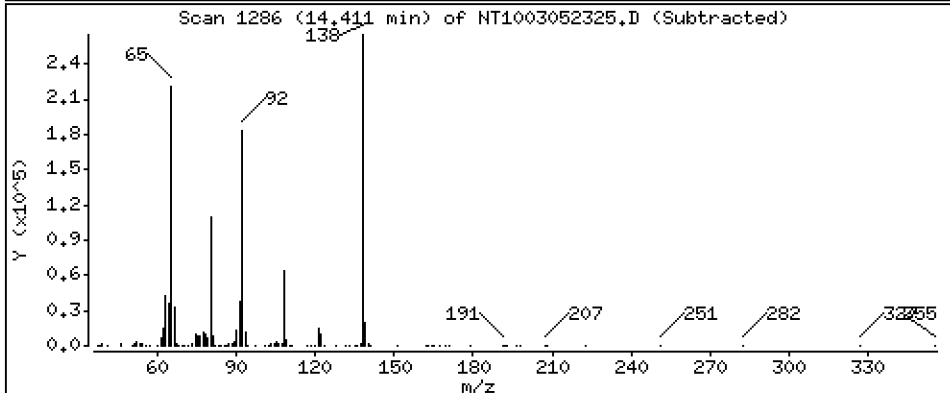
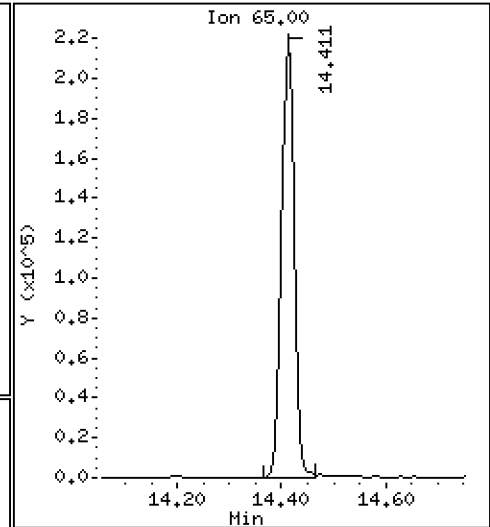
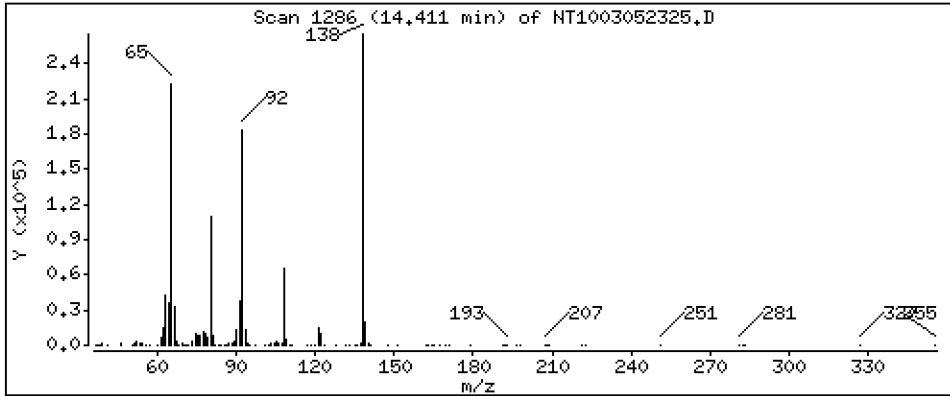
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 10,76 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

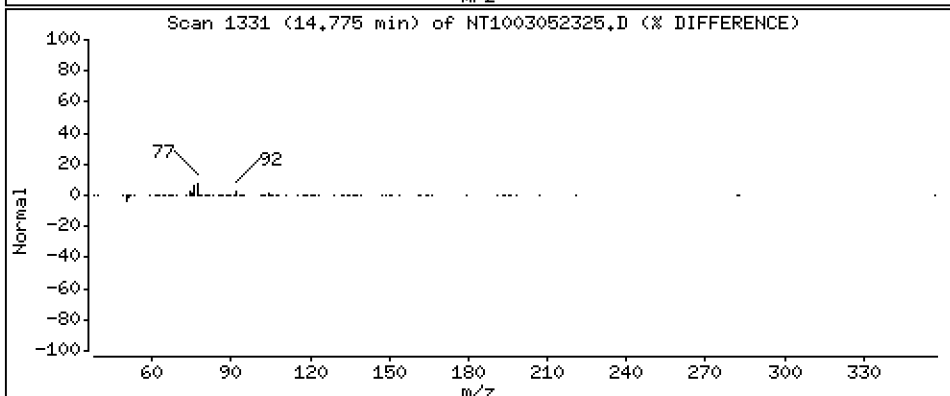
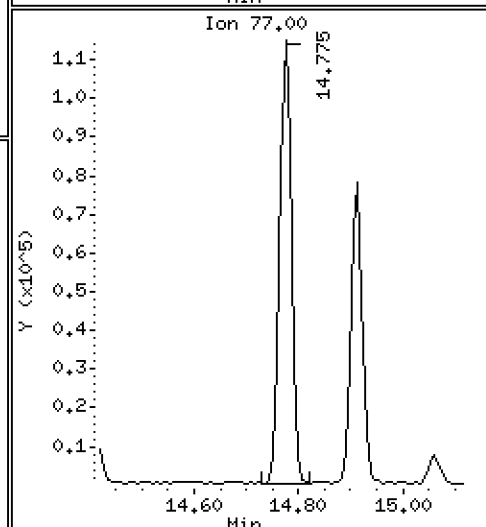
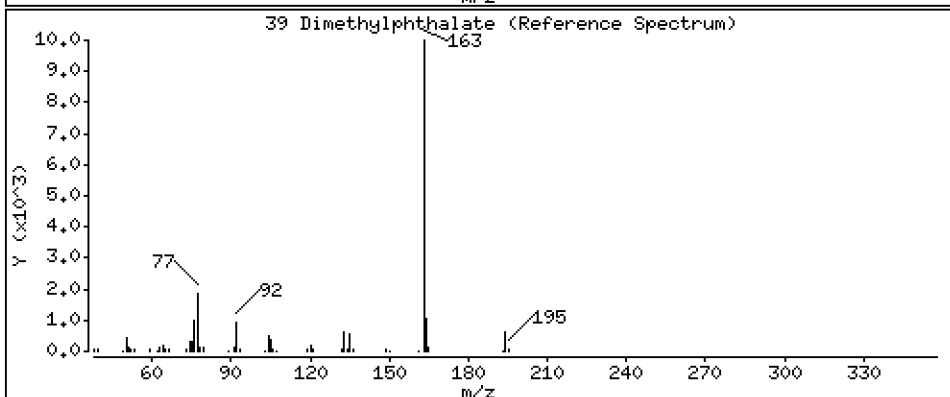
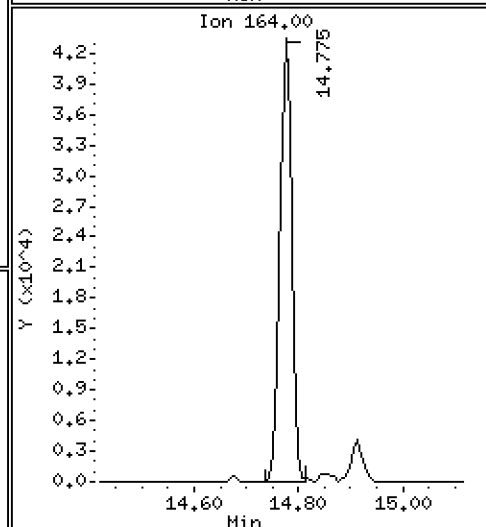
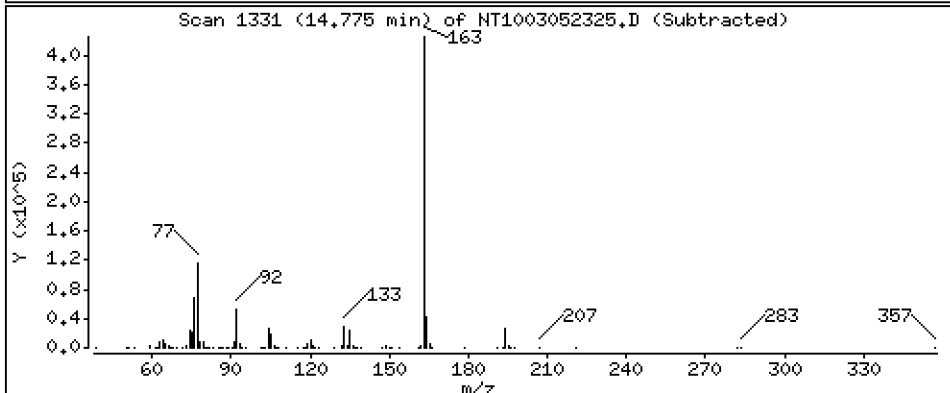
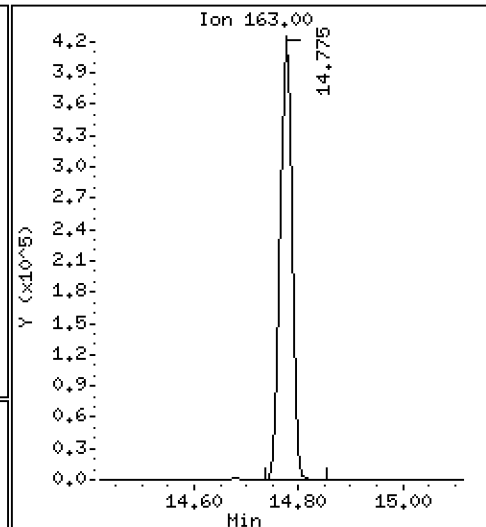
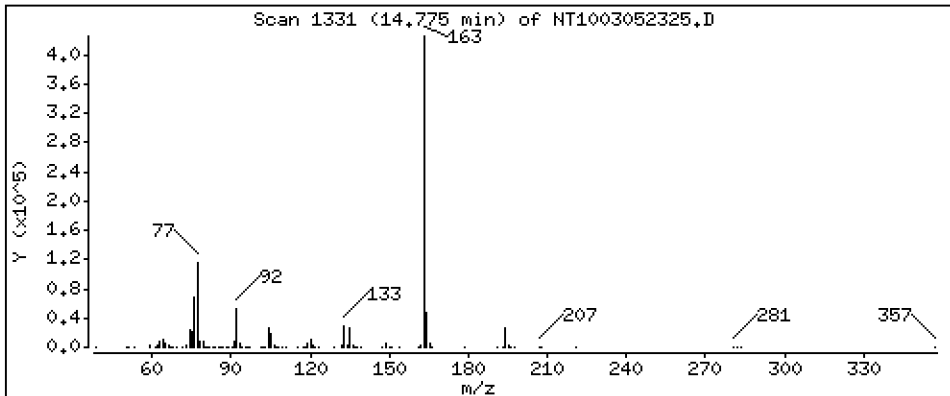
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,759 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

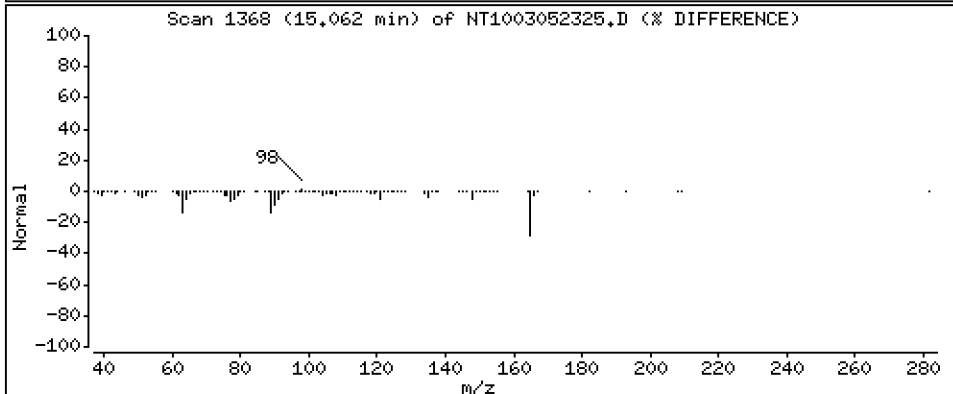
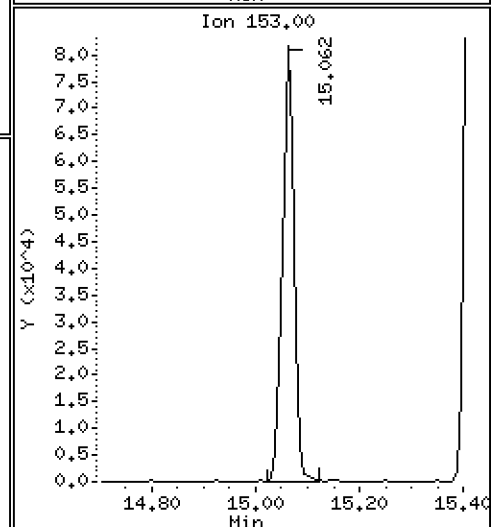
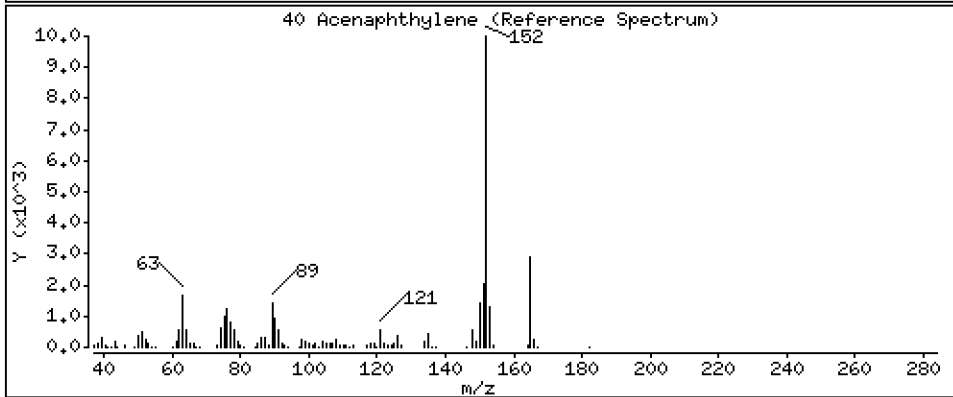
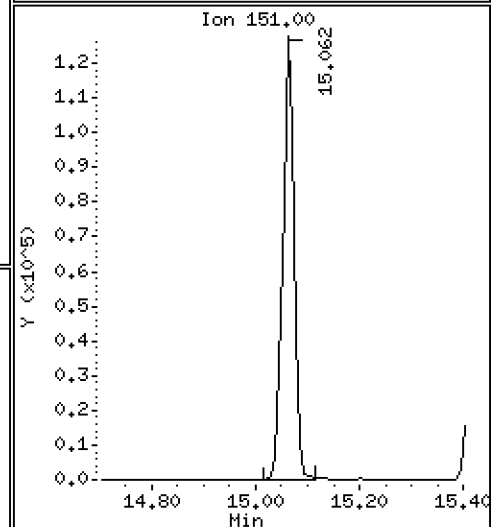
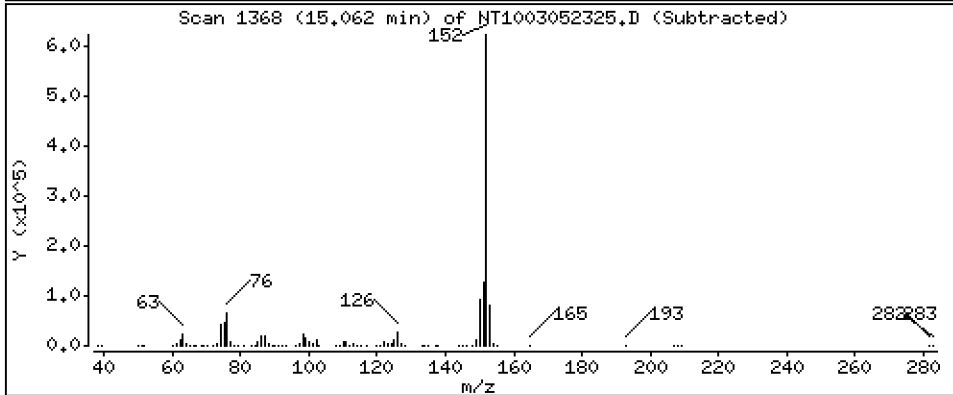
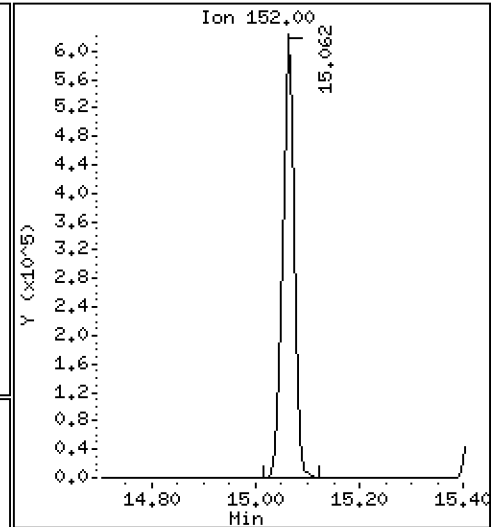
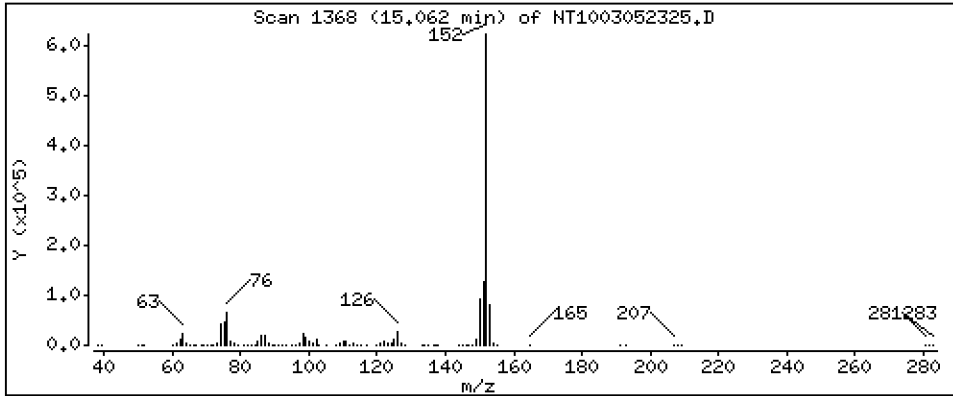
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,476 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

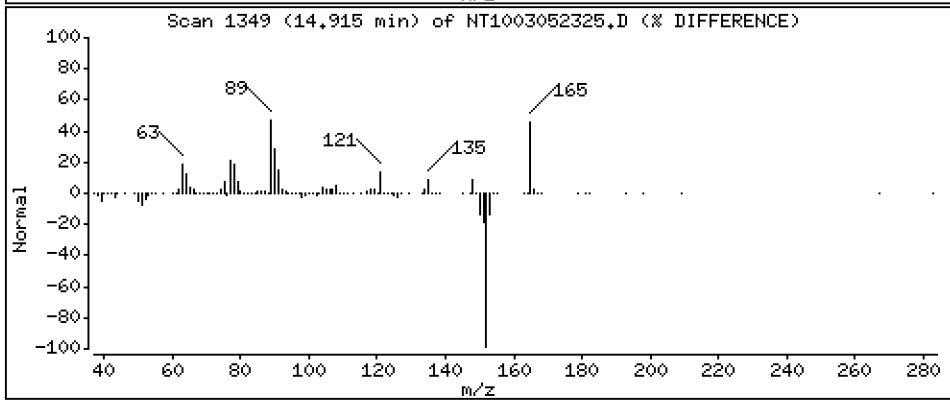
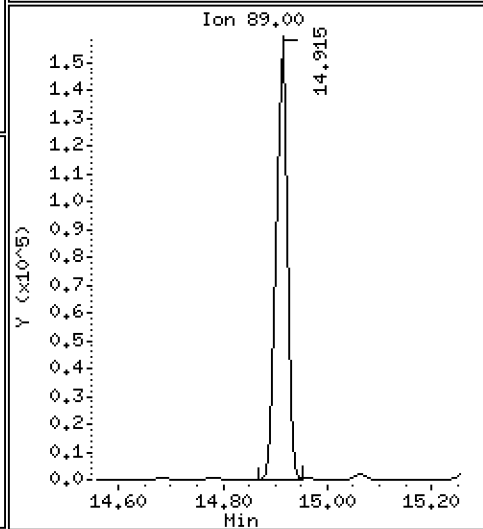
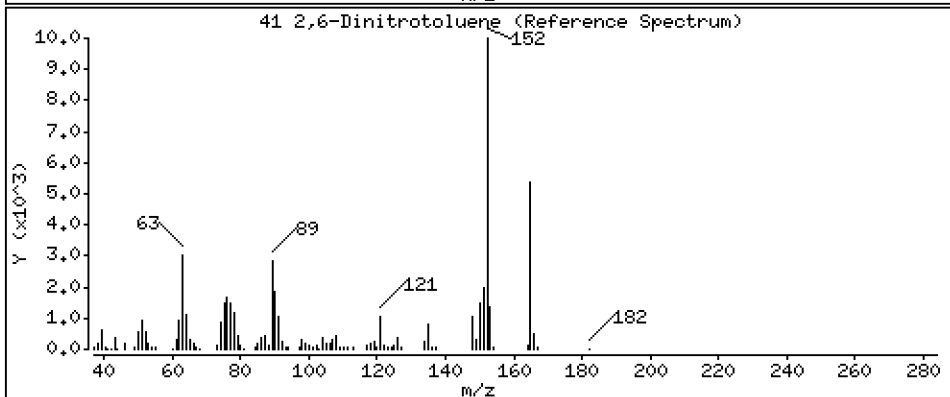
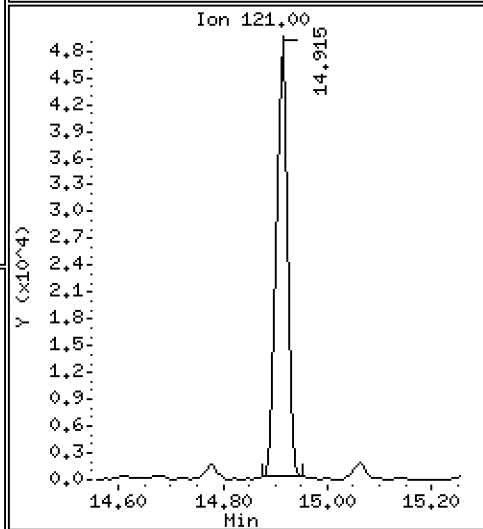
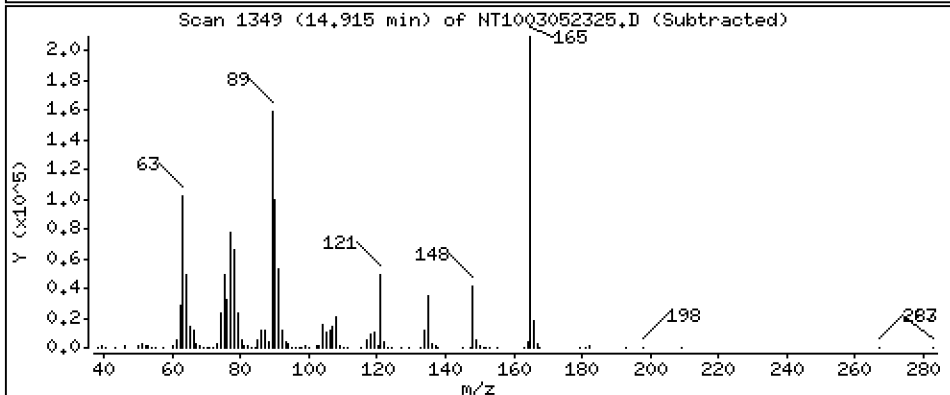
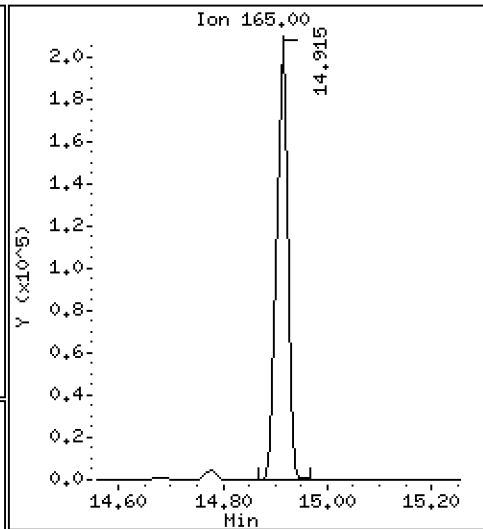
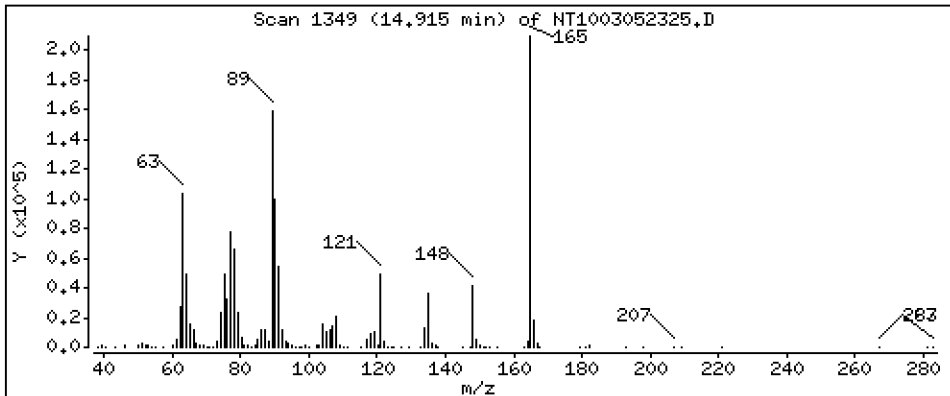
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 9,933 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

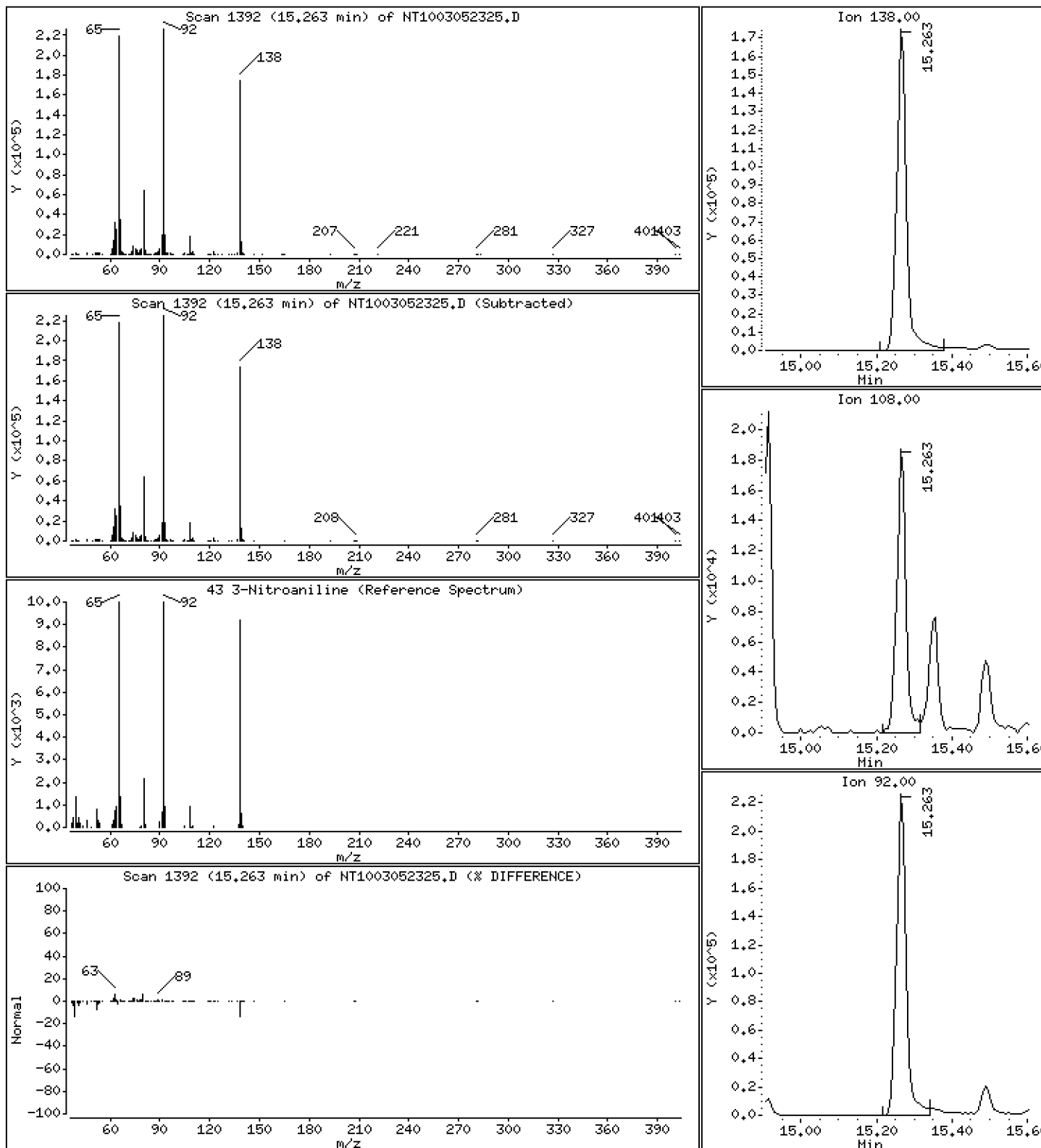
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 9,201 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

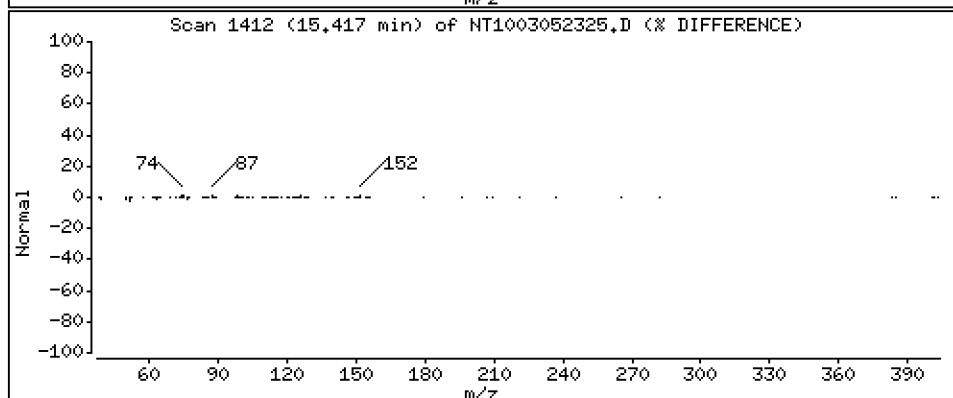
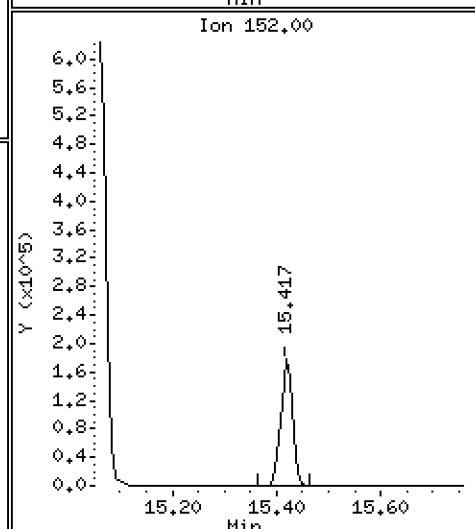
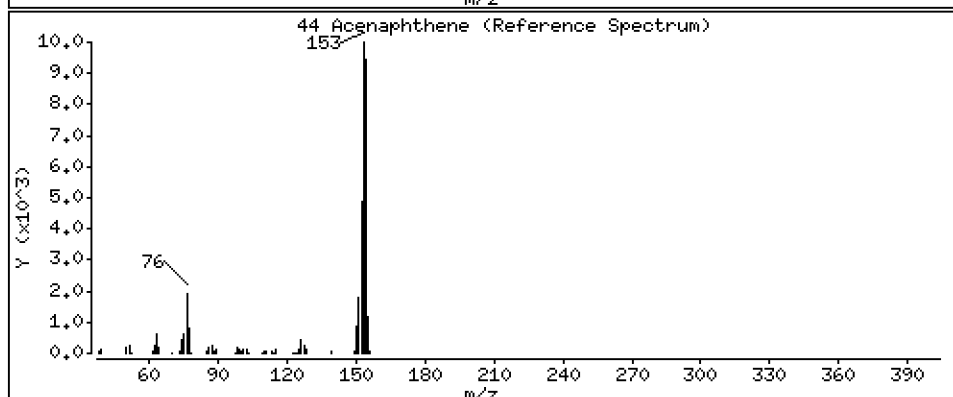
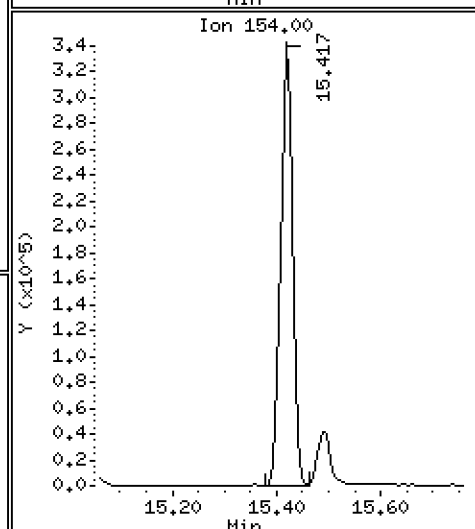
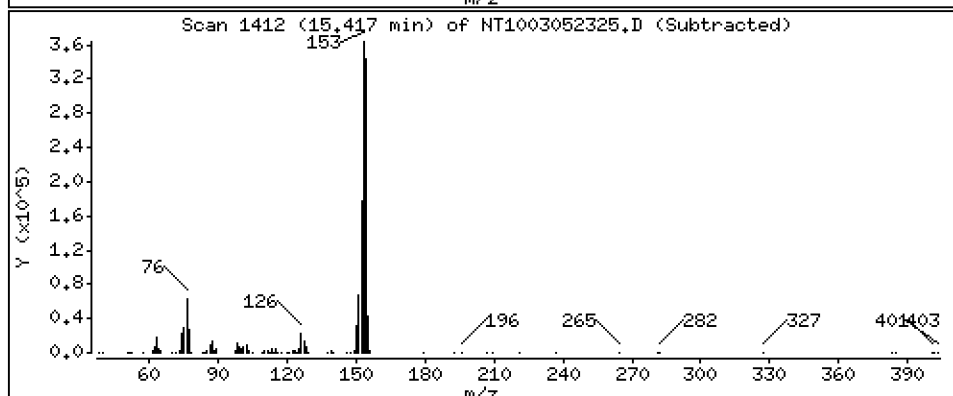
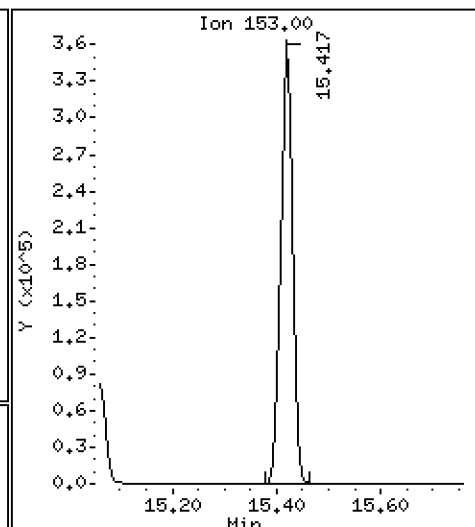
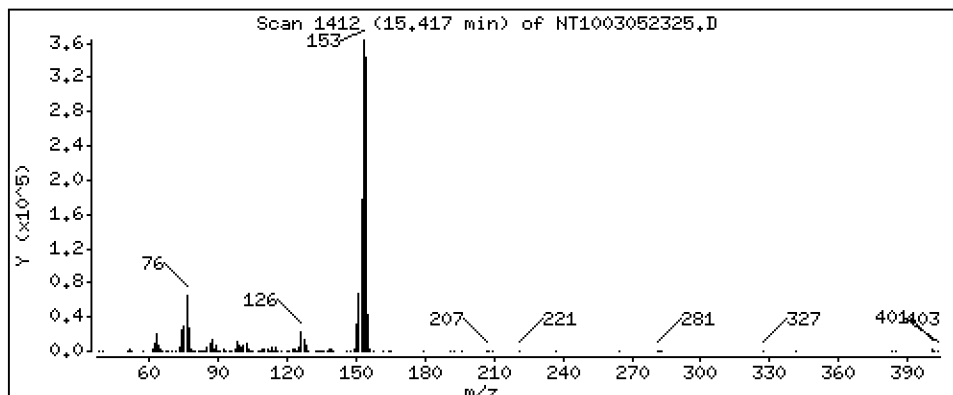
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,674 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

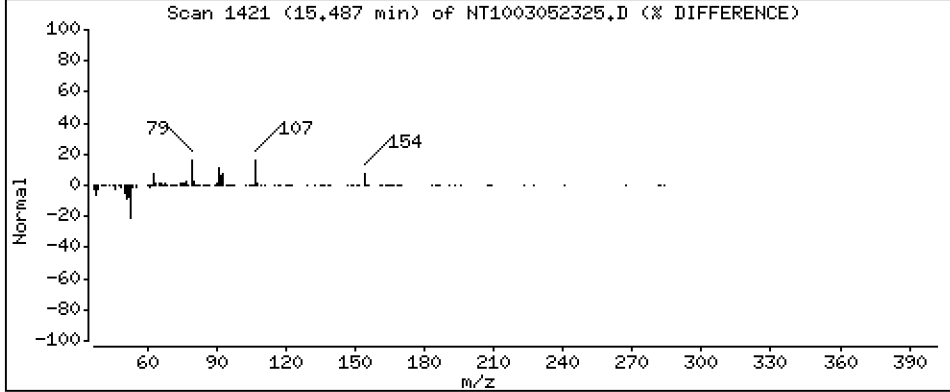
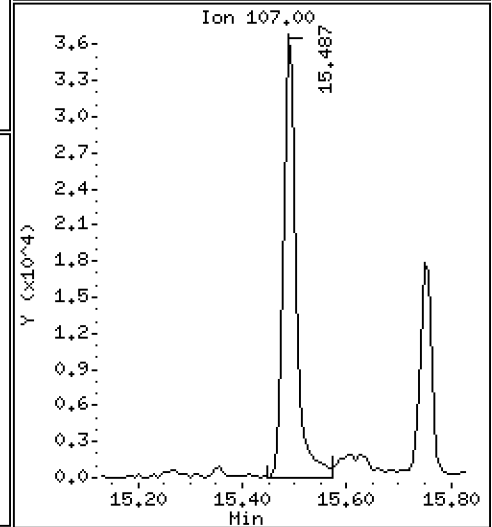
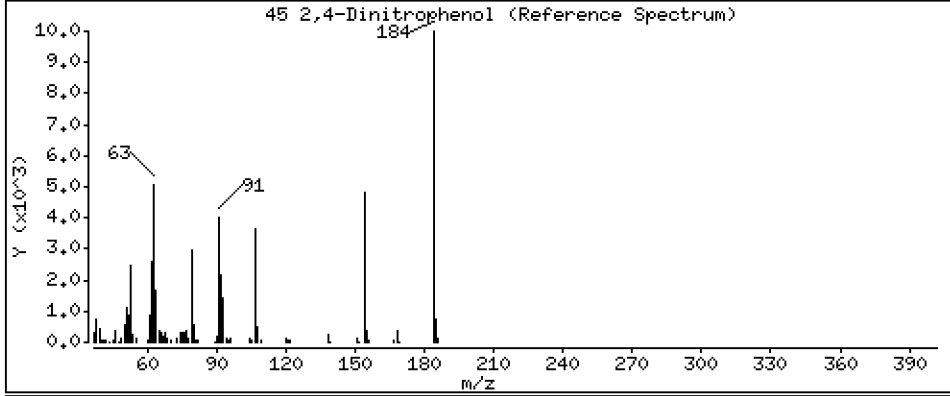
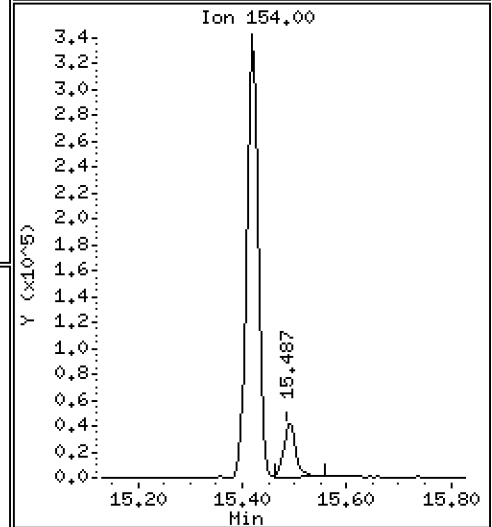
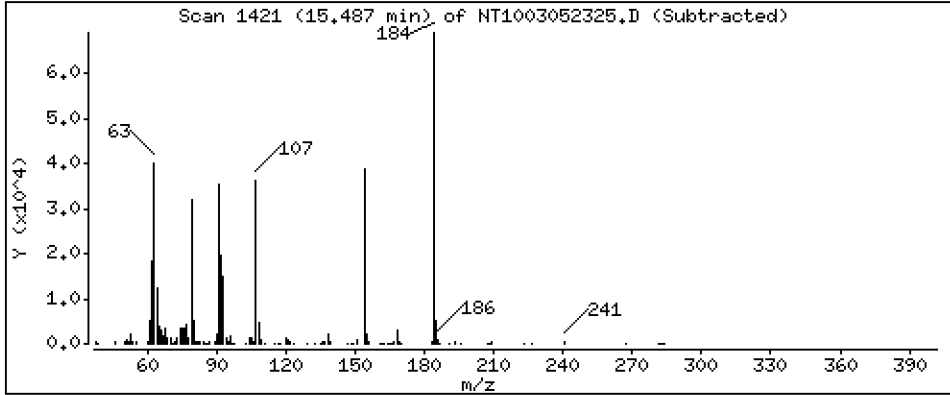
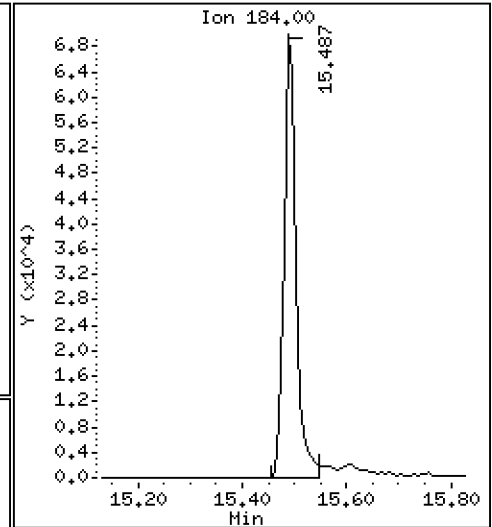
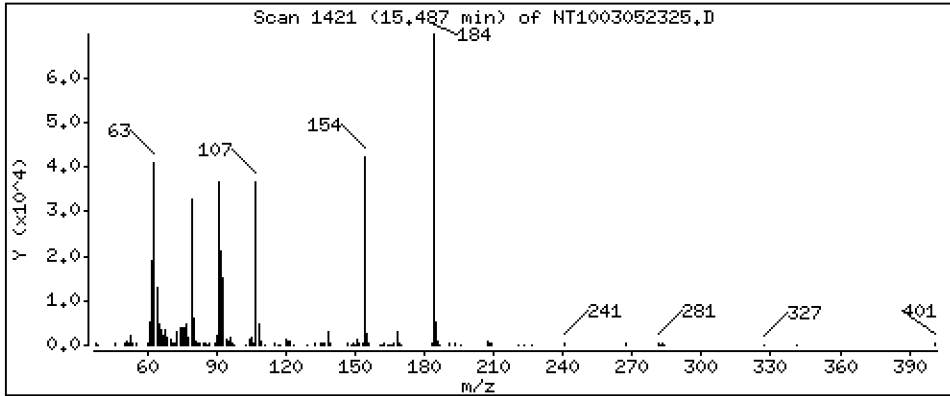
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 13,96 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

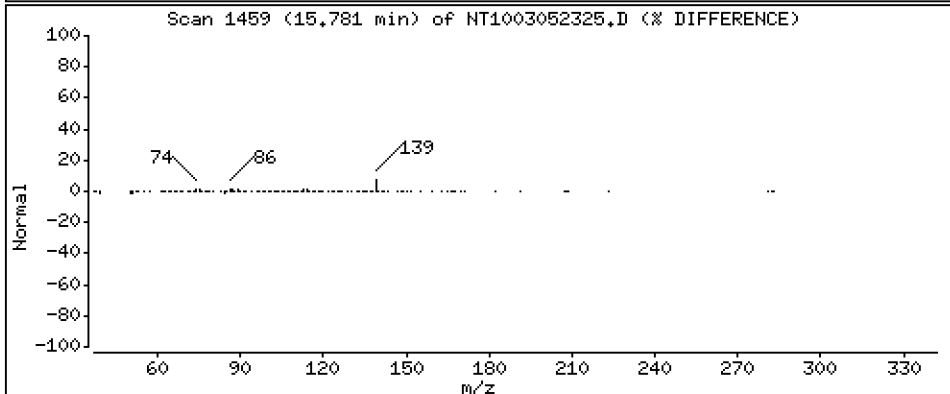
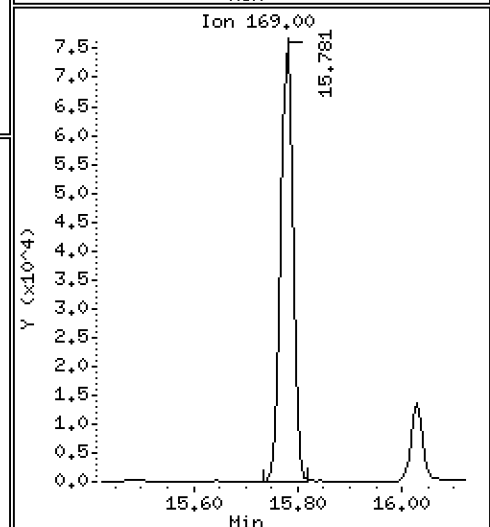
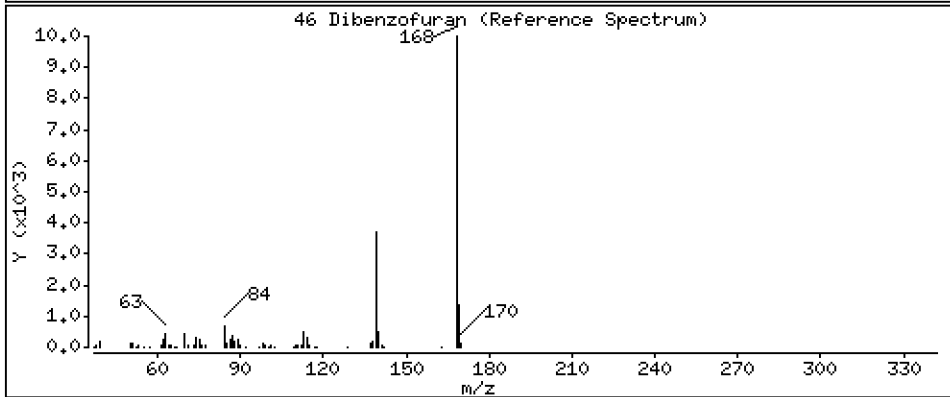
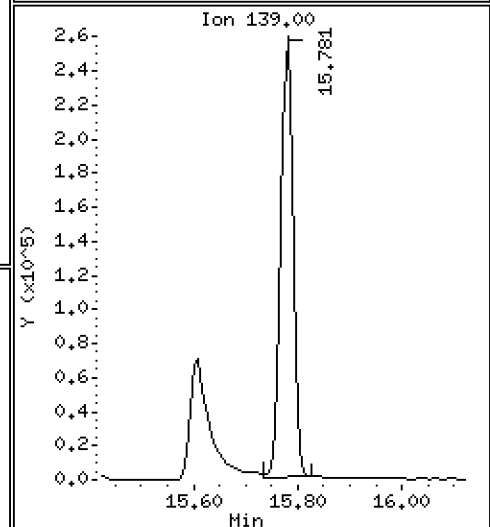
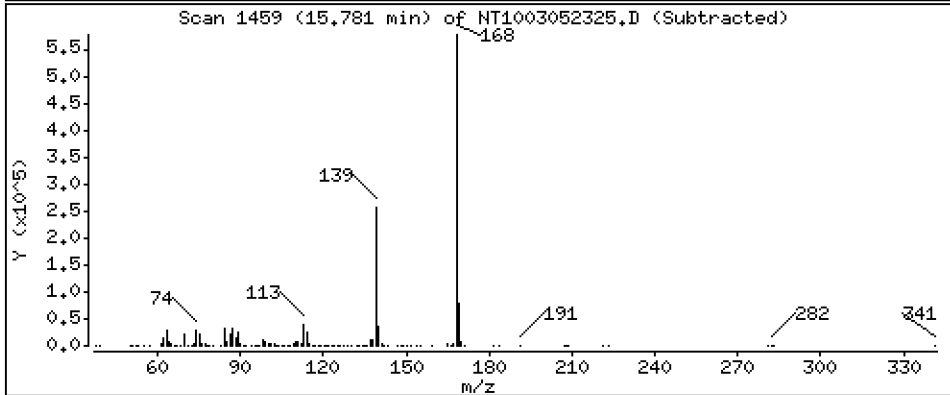
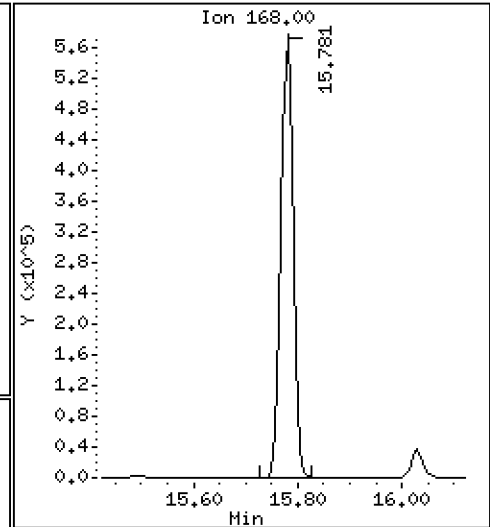
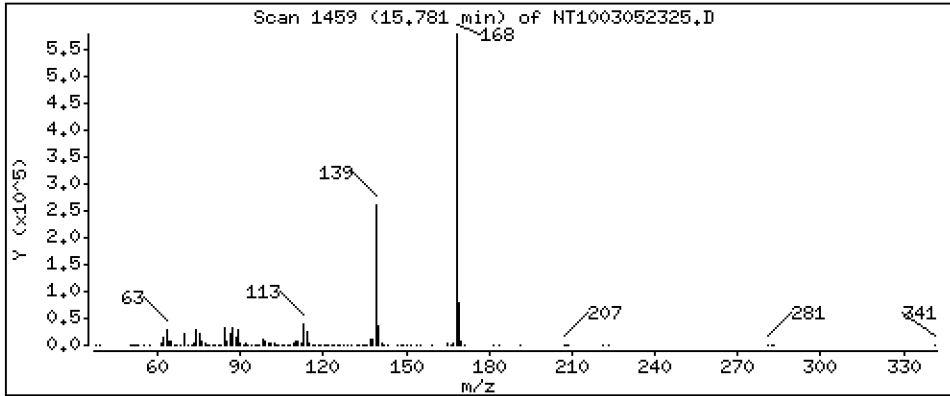
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 5,011 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

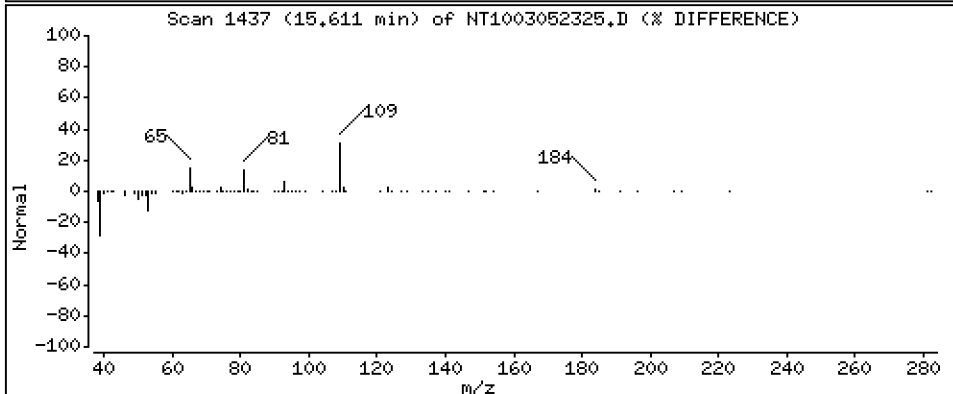
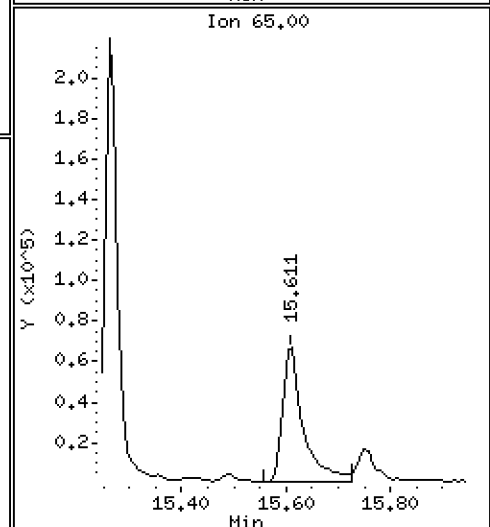
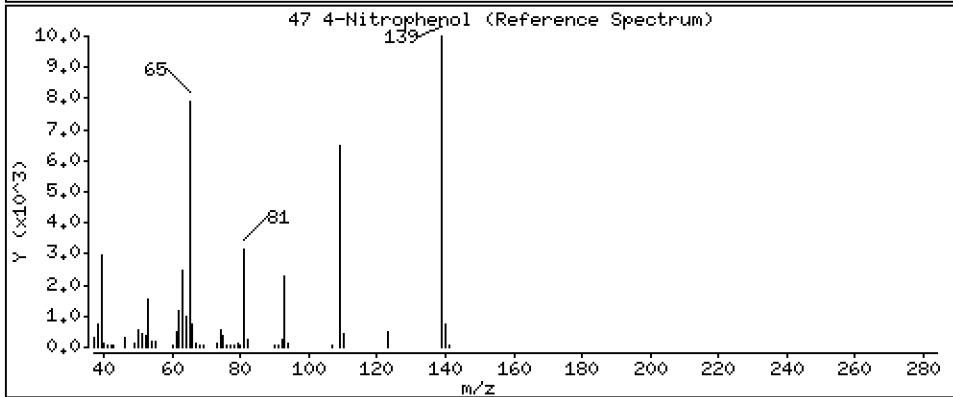
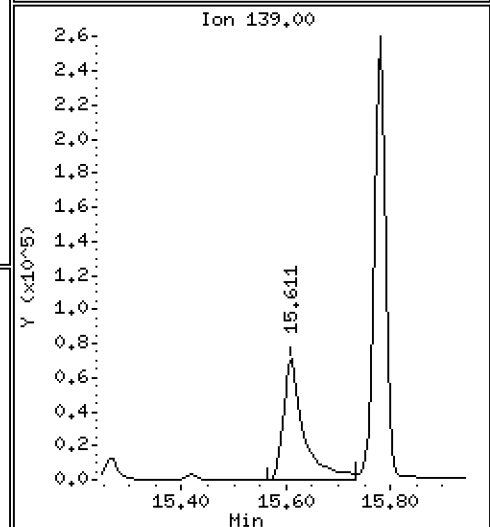
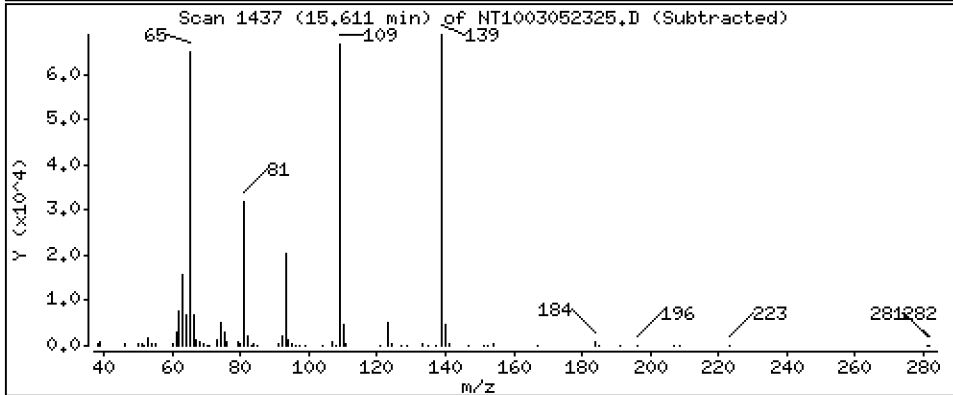
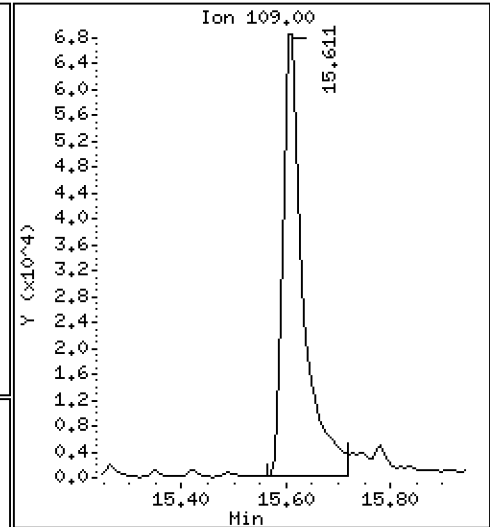
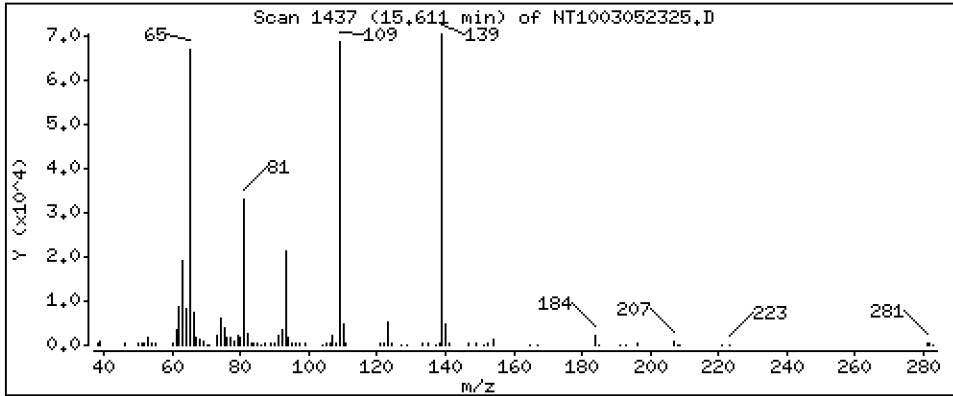
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 7,786 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

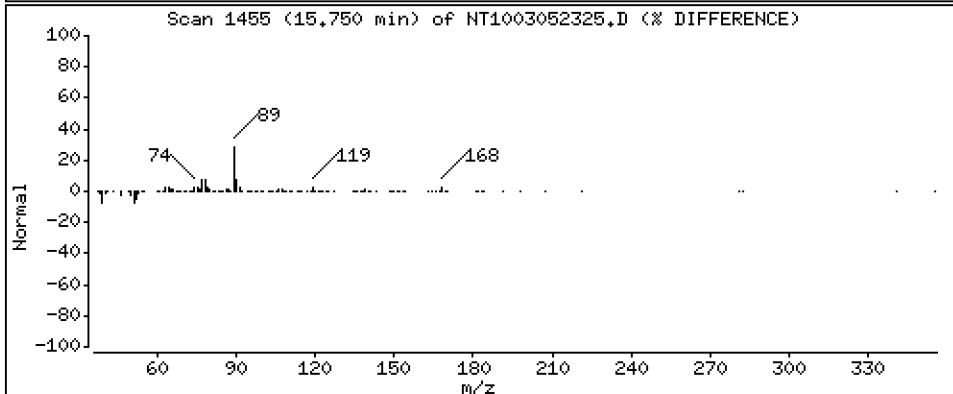
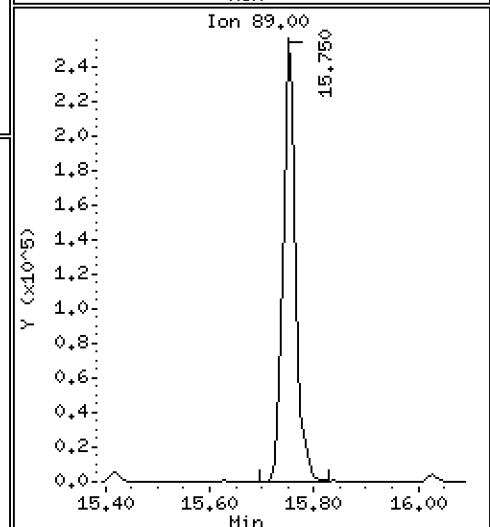
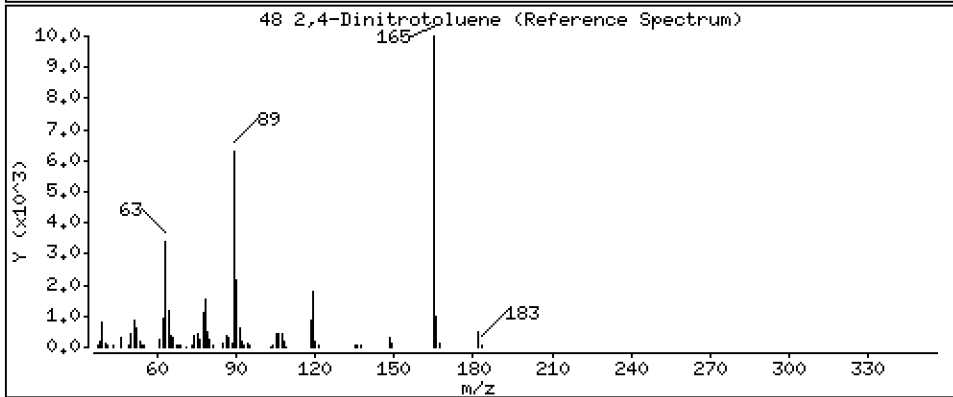
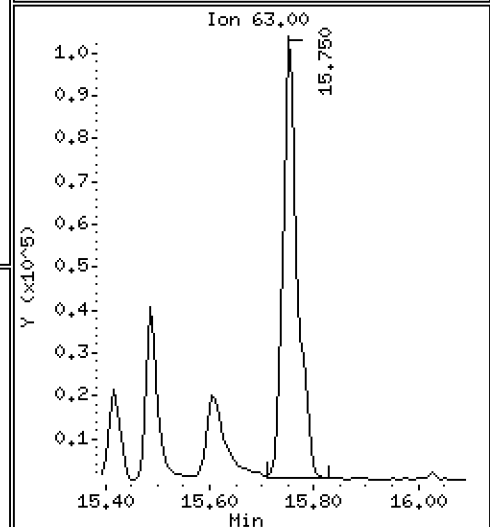
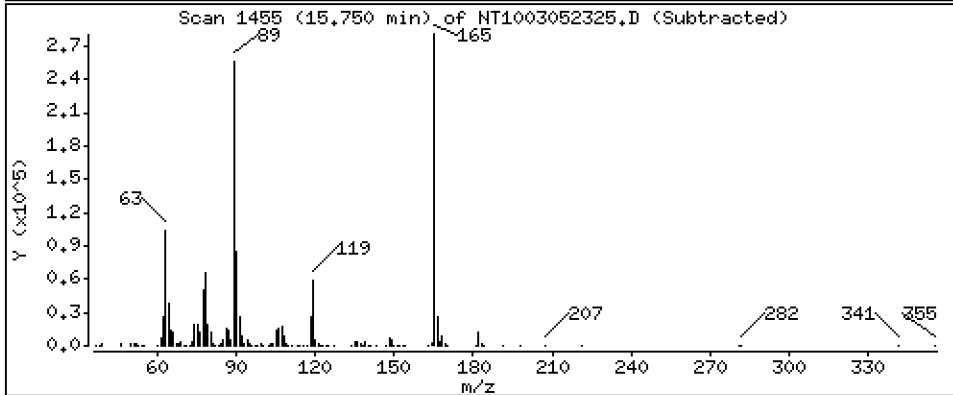
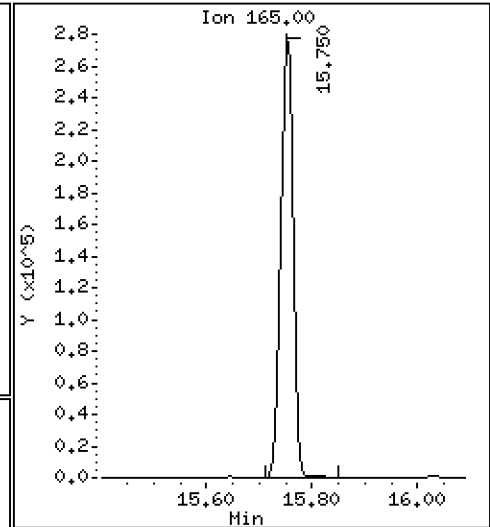
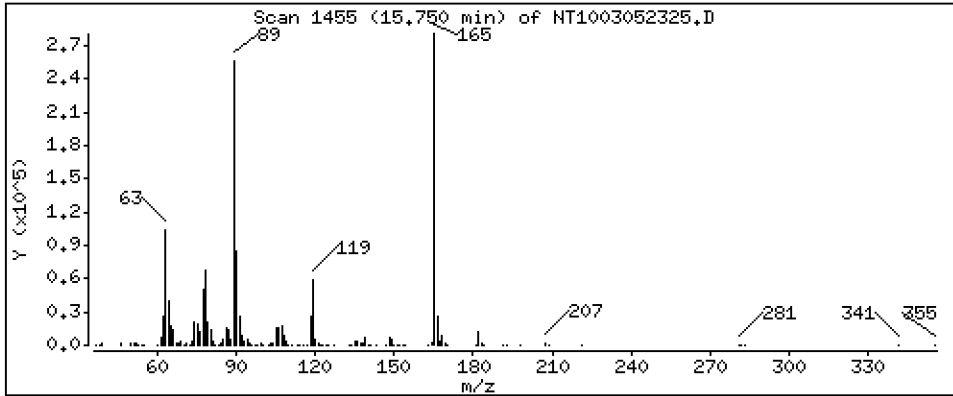
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 9,886 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

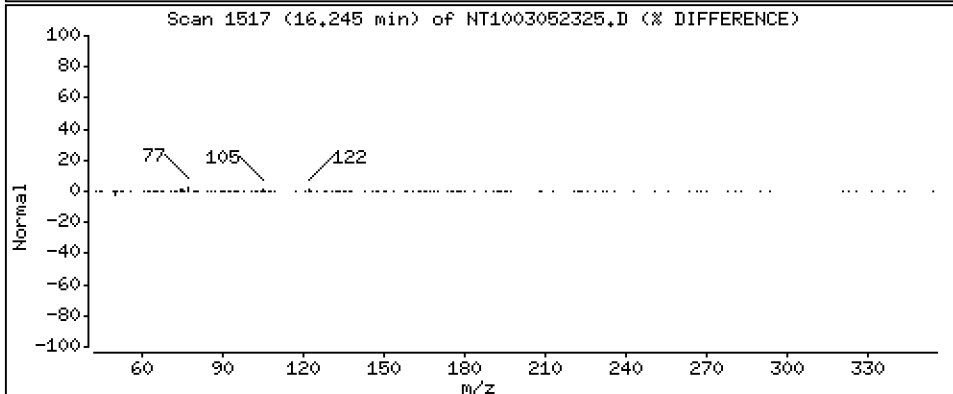
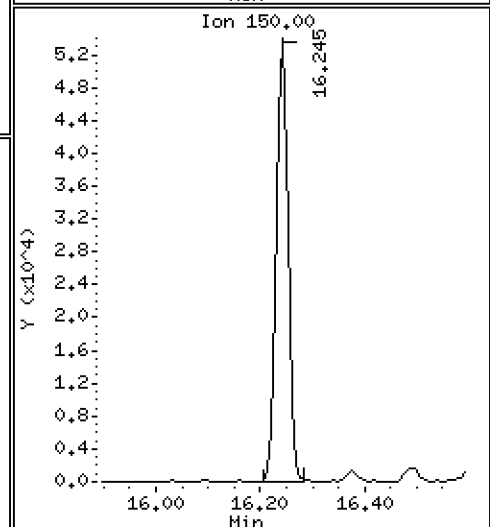
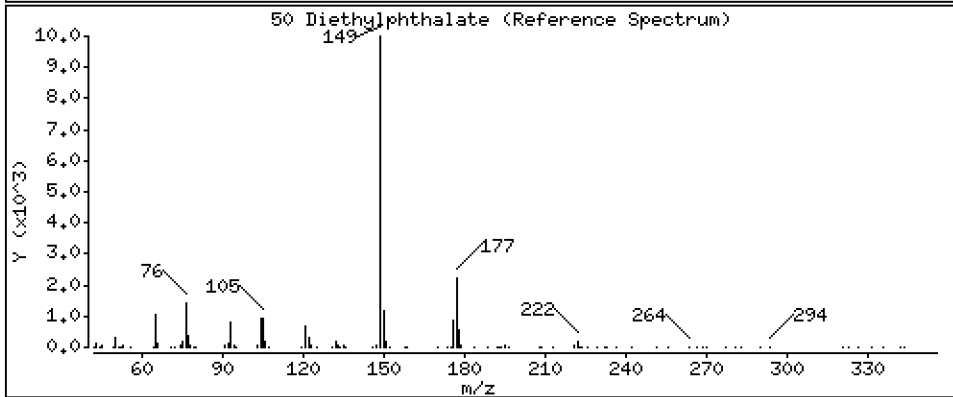
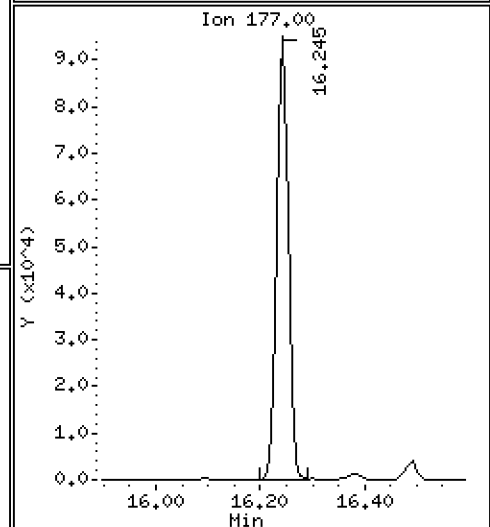
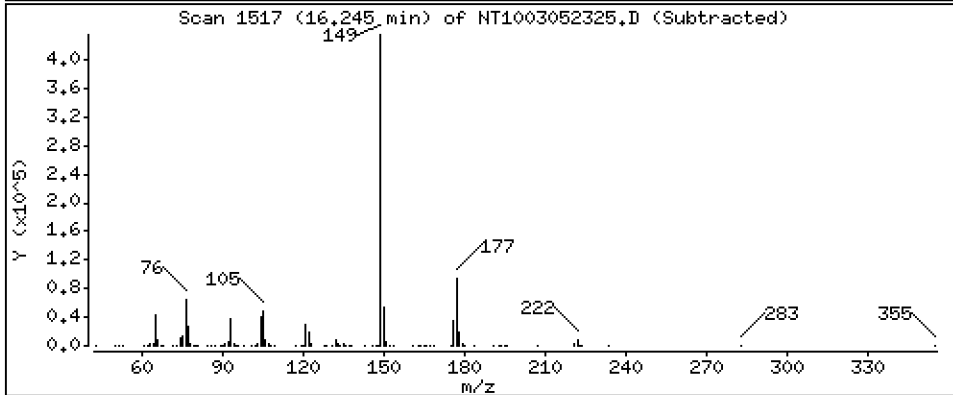
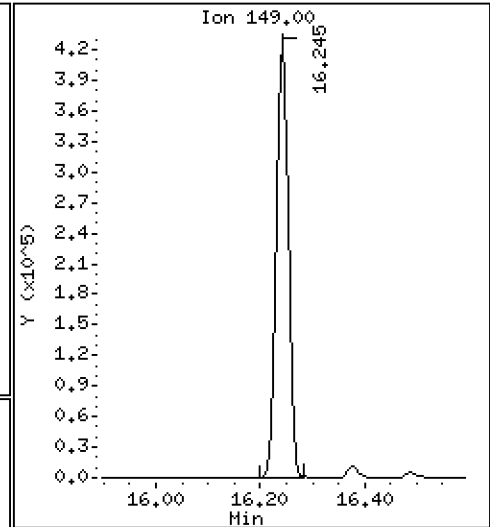
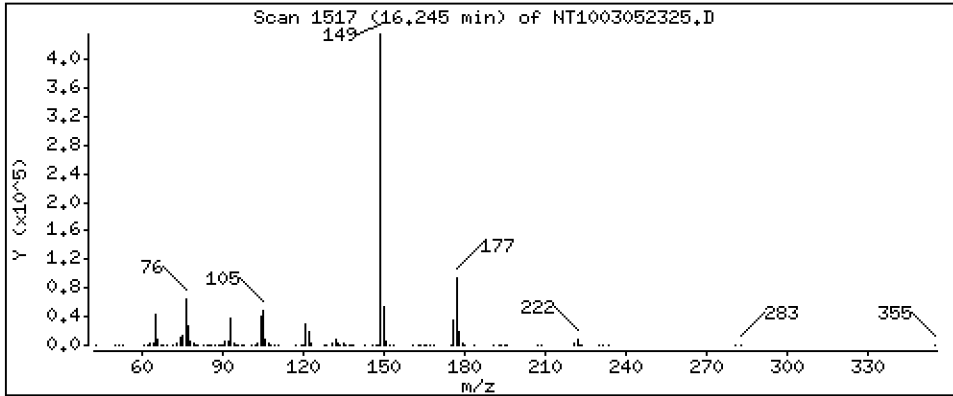
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 4,612 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

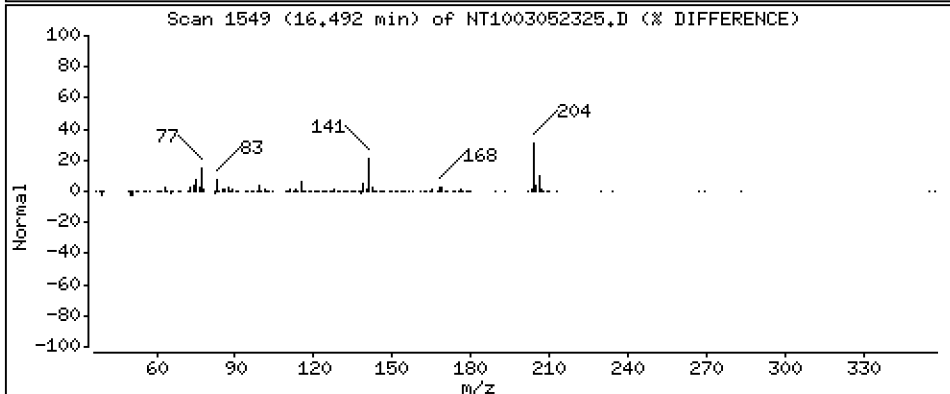
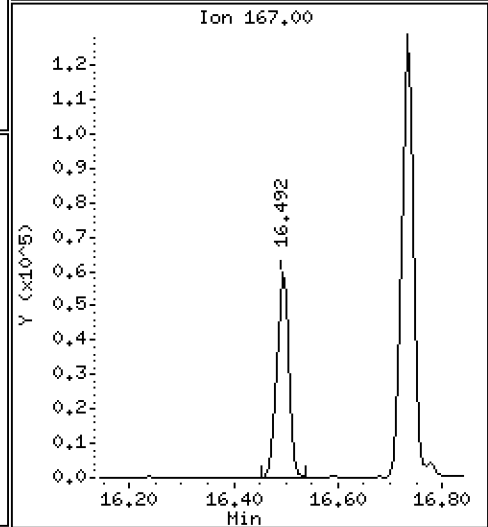
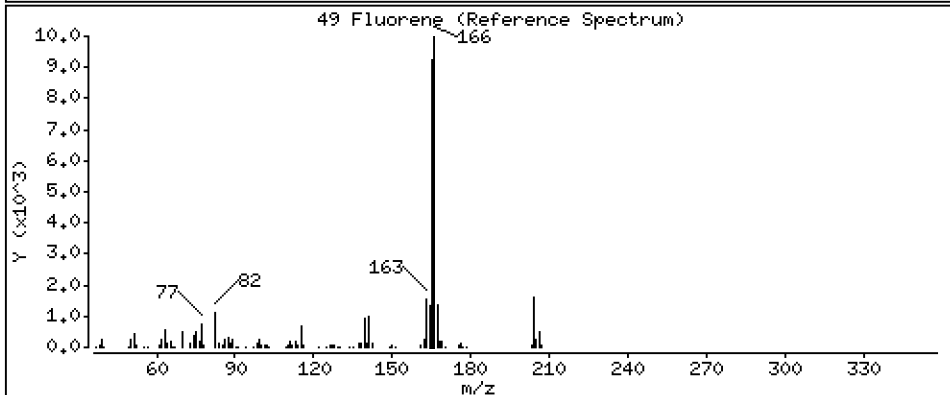
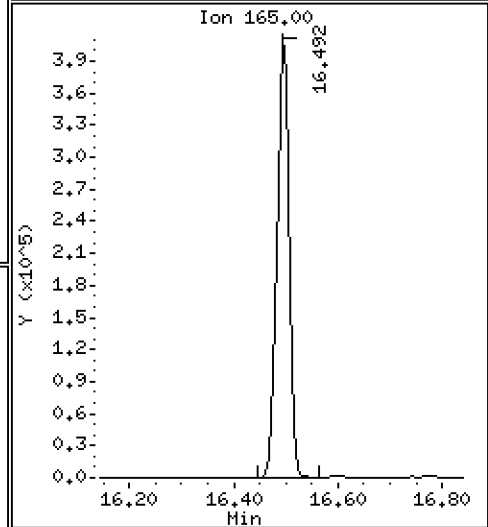
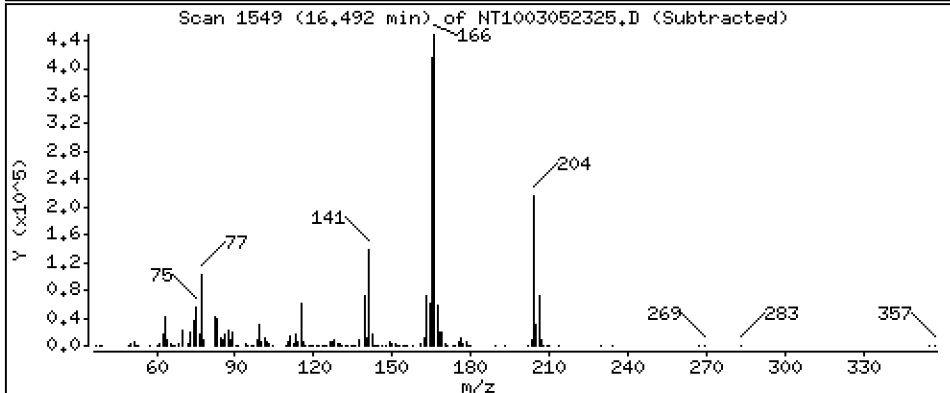
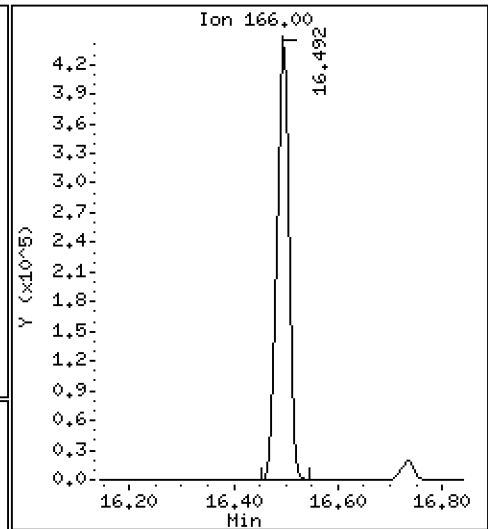
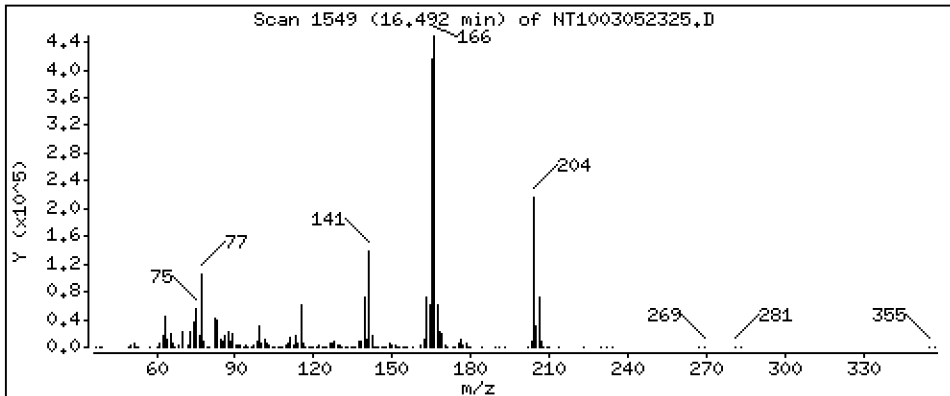
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,803 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

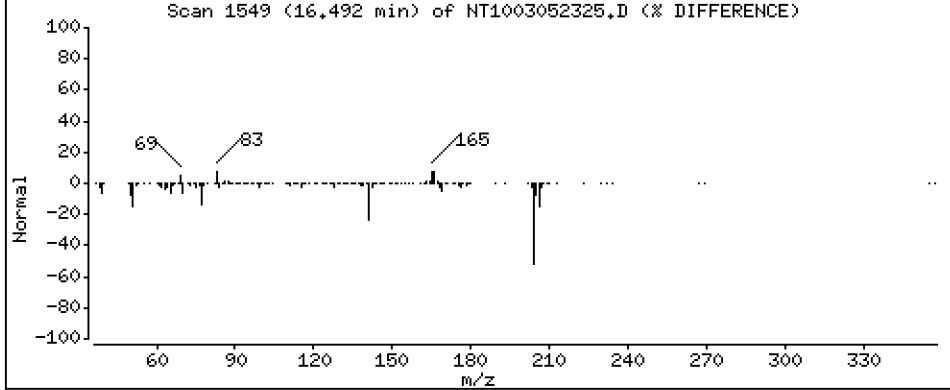
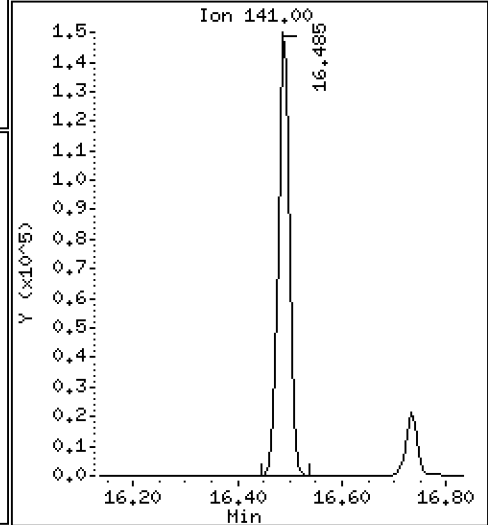
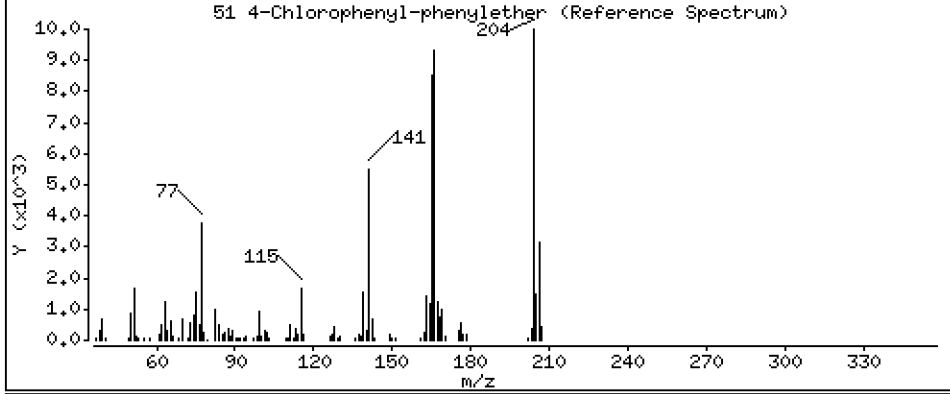
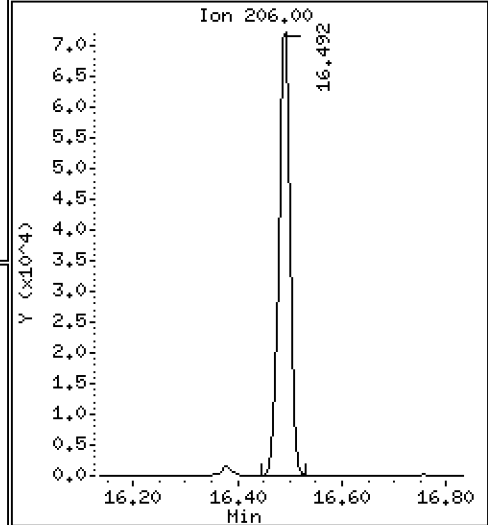
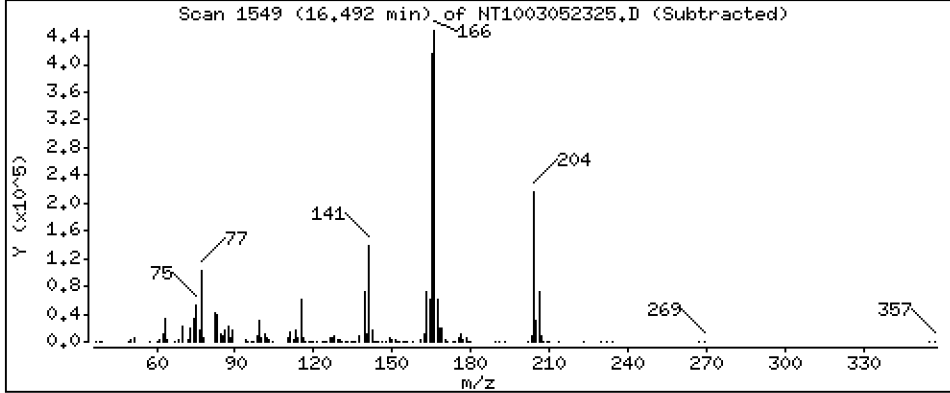
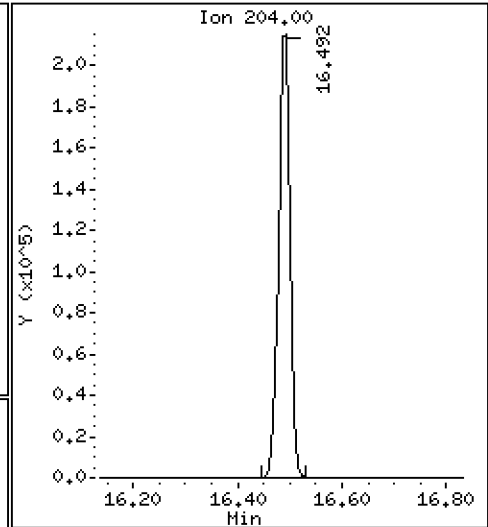
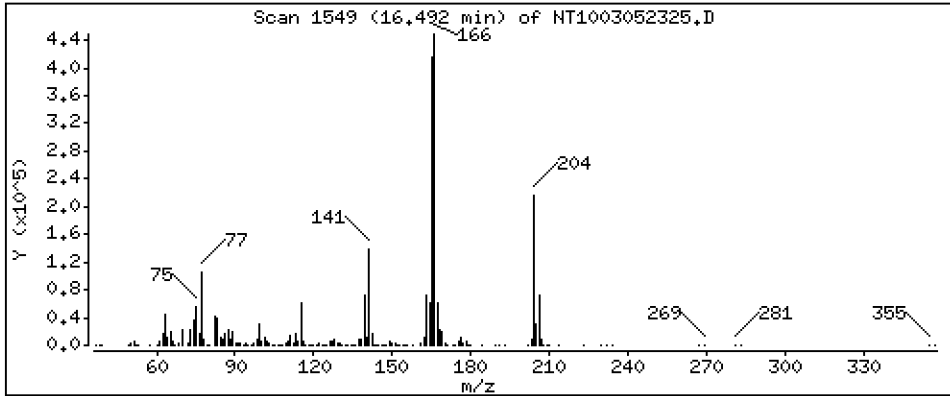
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,911 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

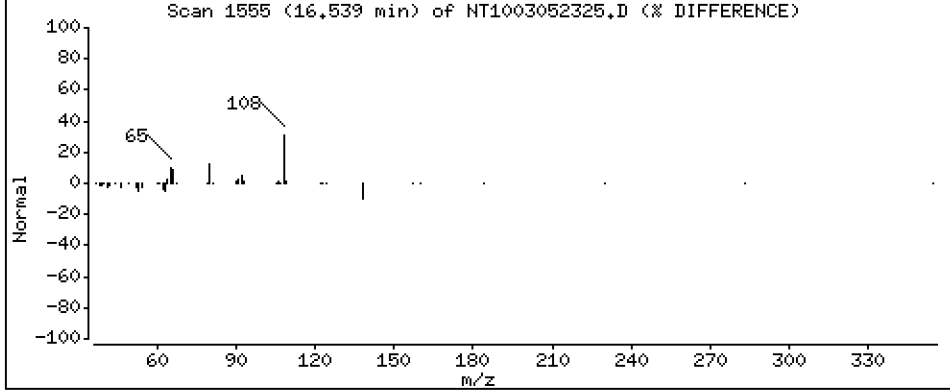
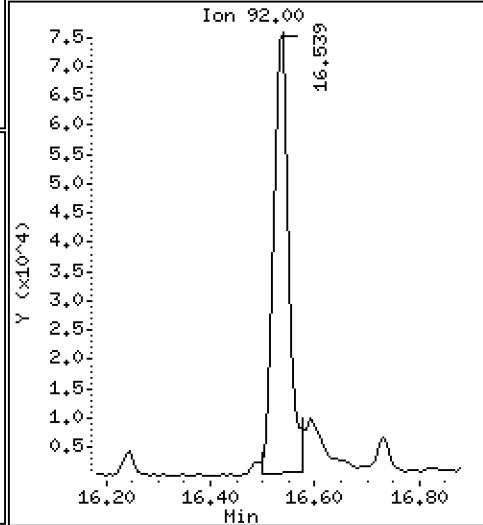
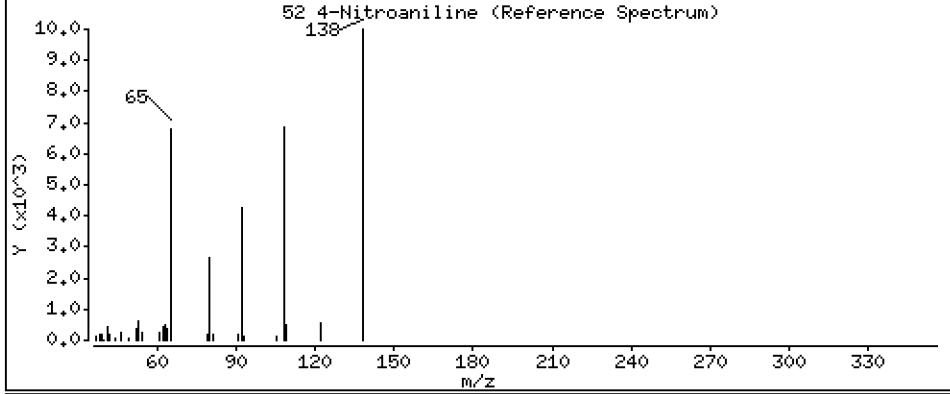
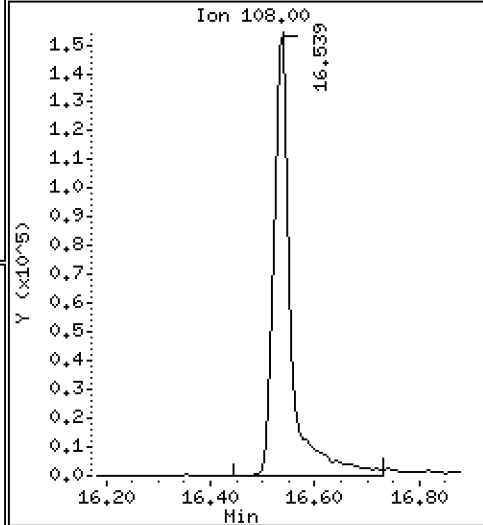
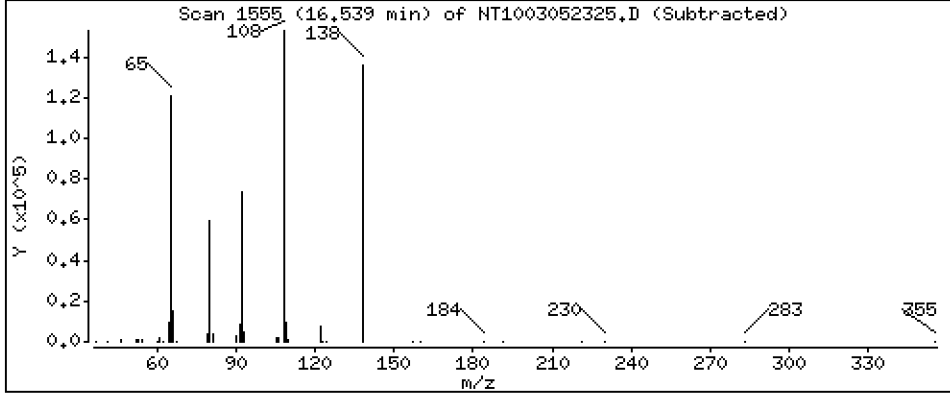
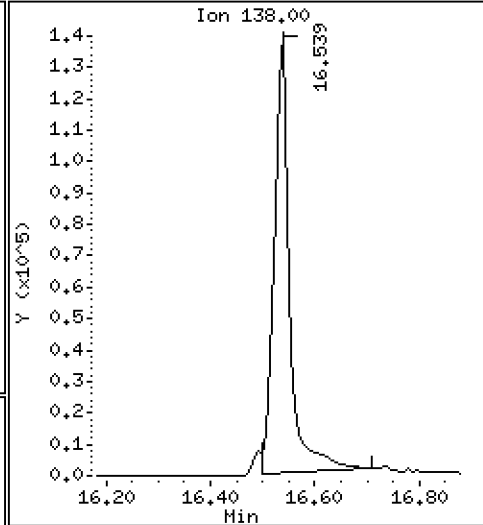
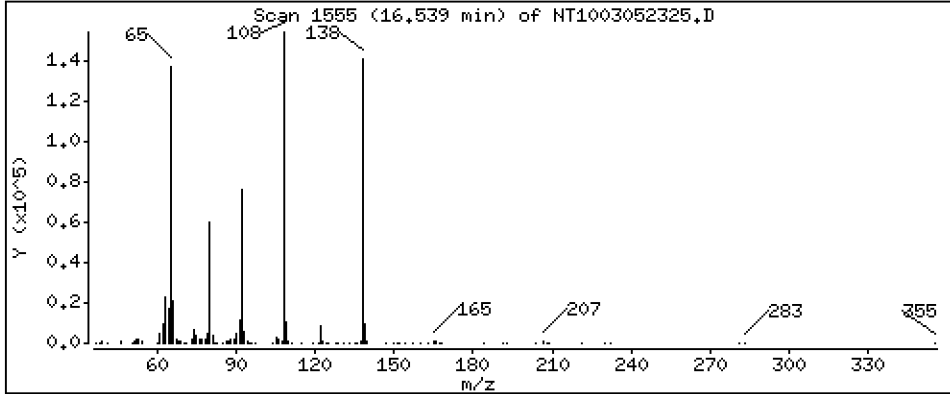
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 8,415 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

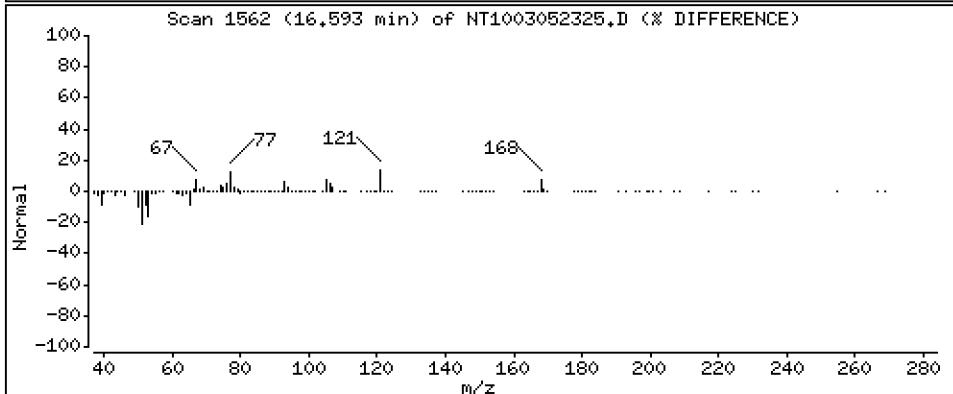
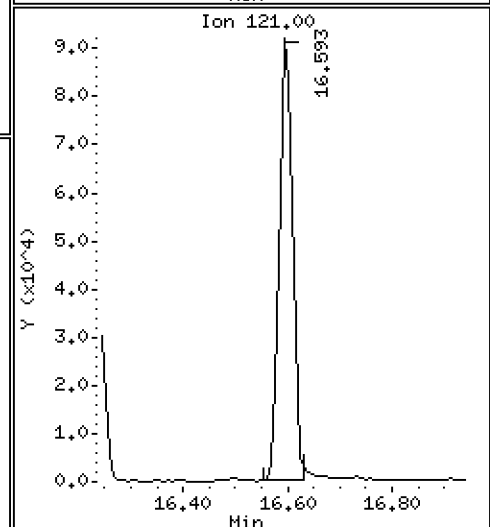
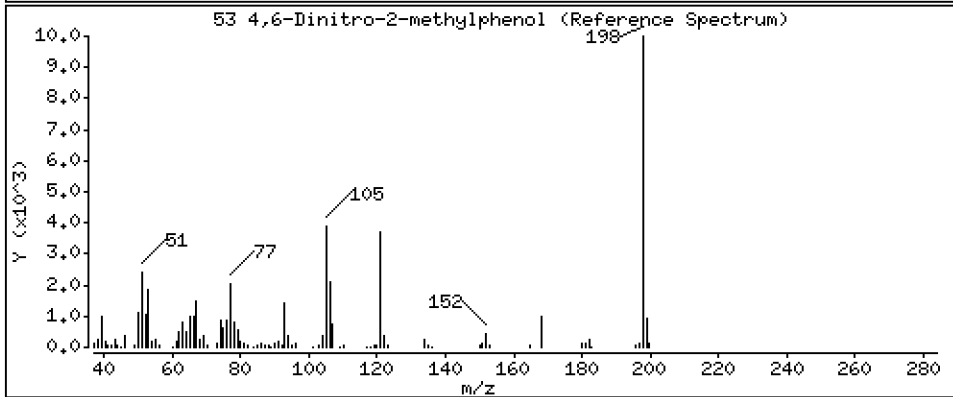
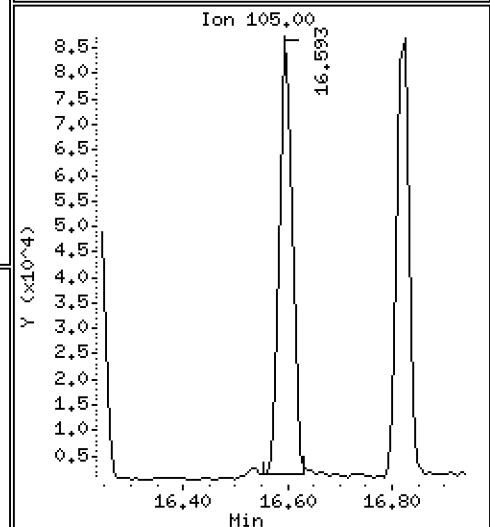
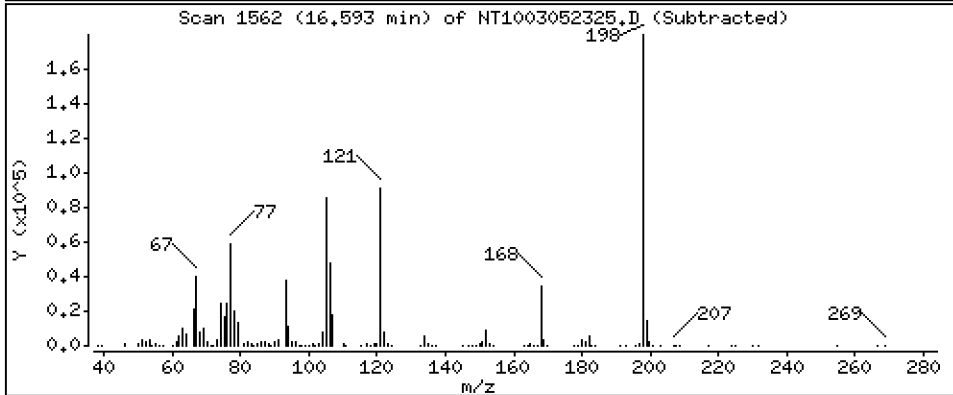
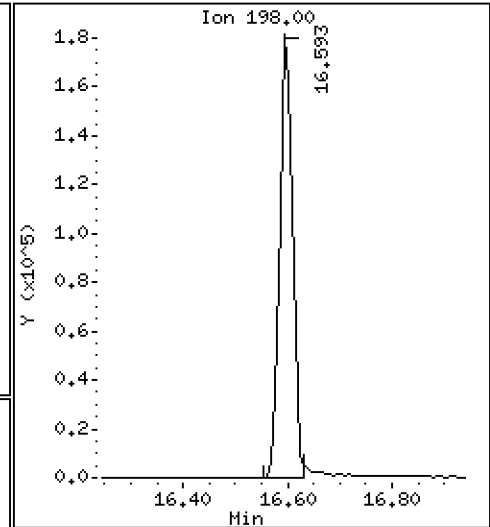
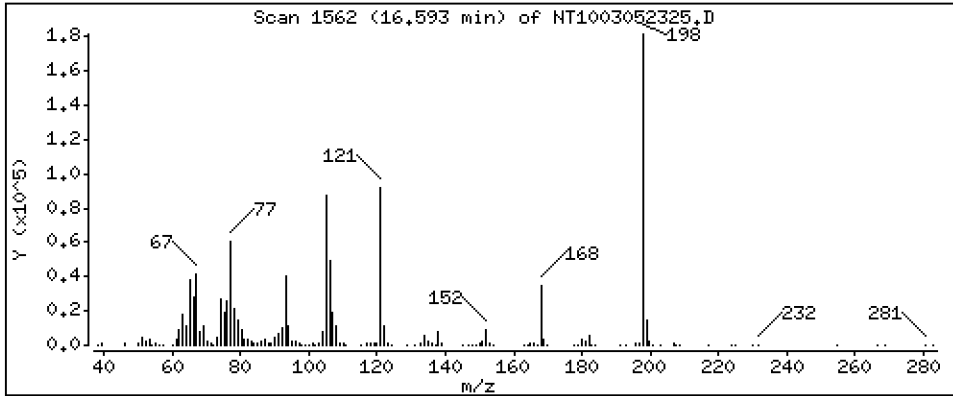
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 16,02 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

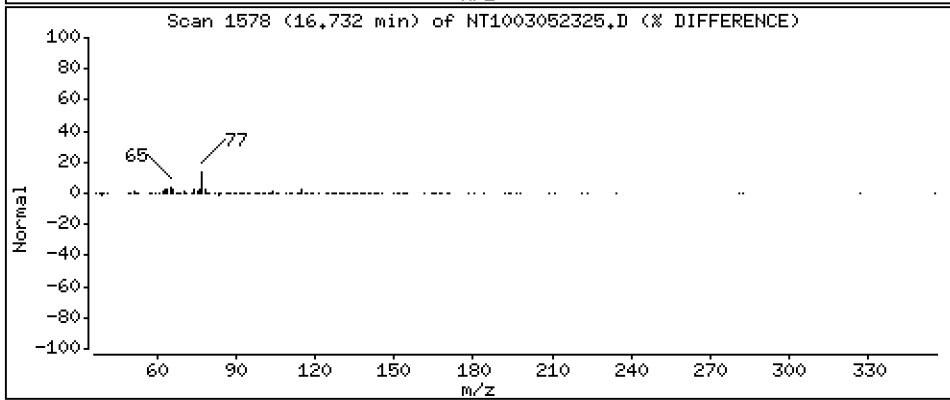
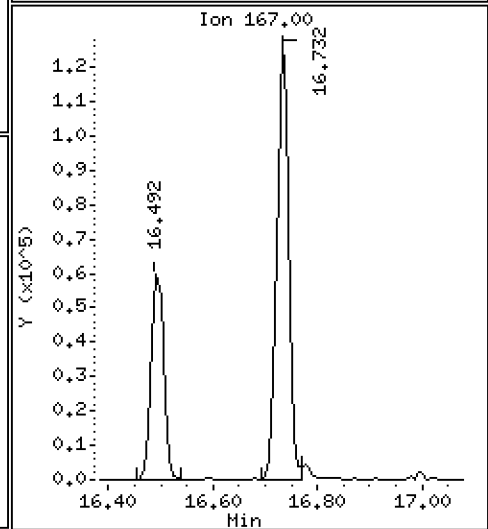
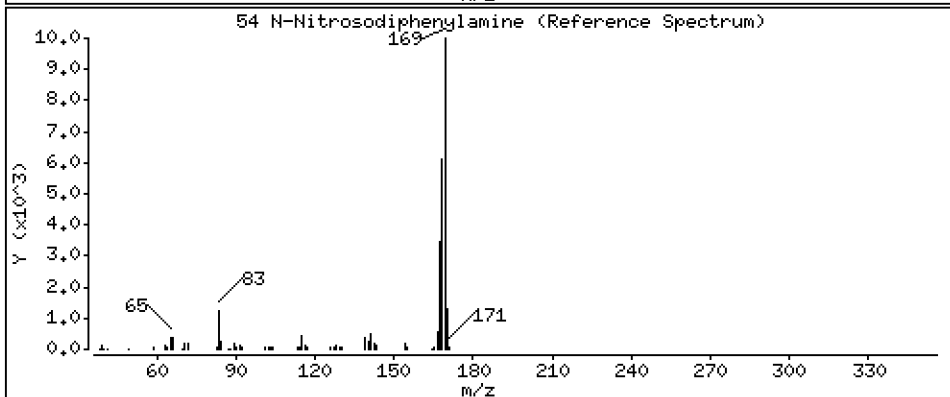
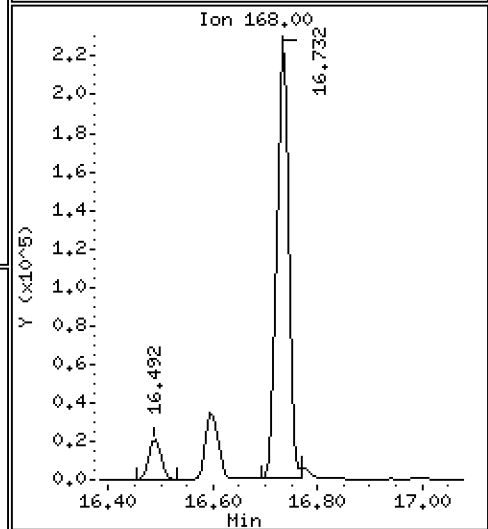
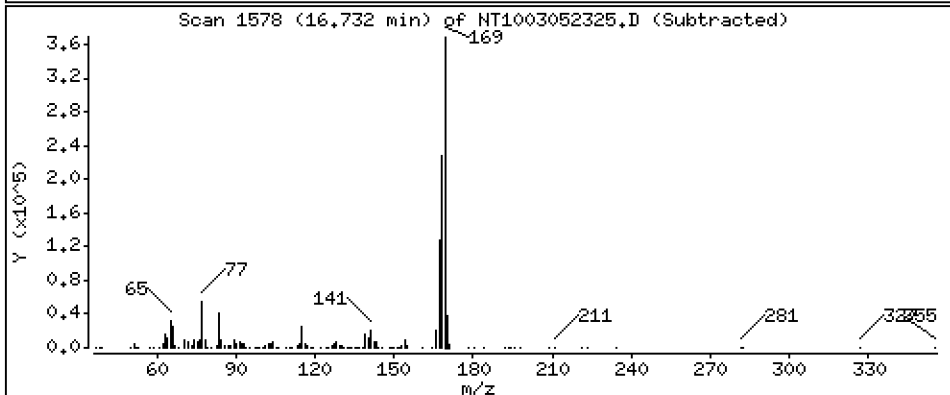
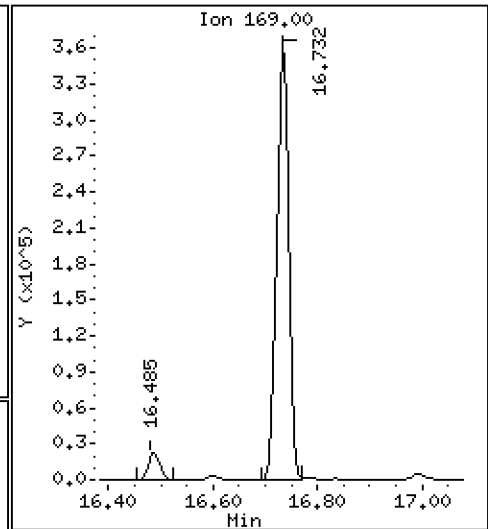
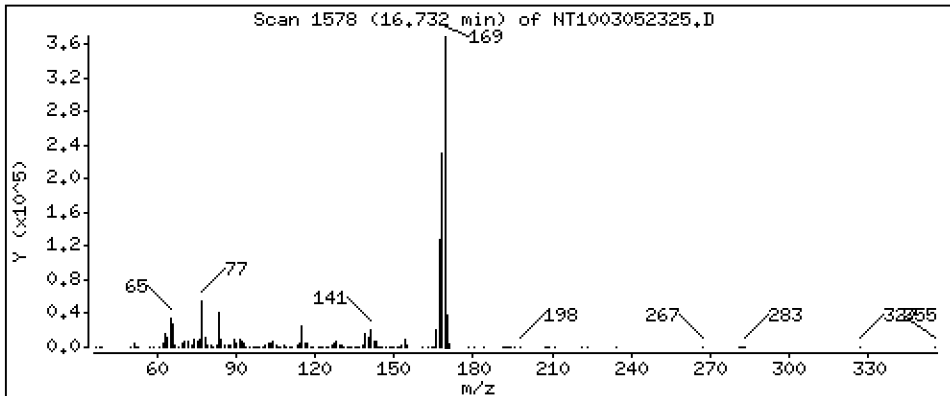
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 5,156 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

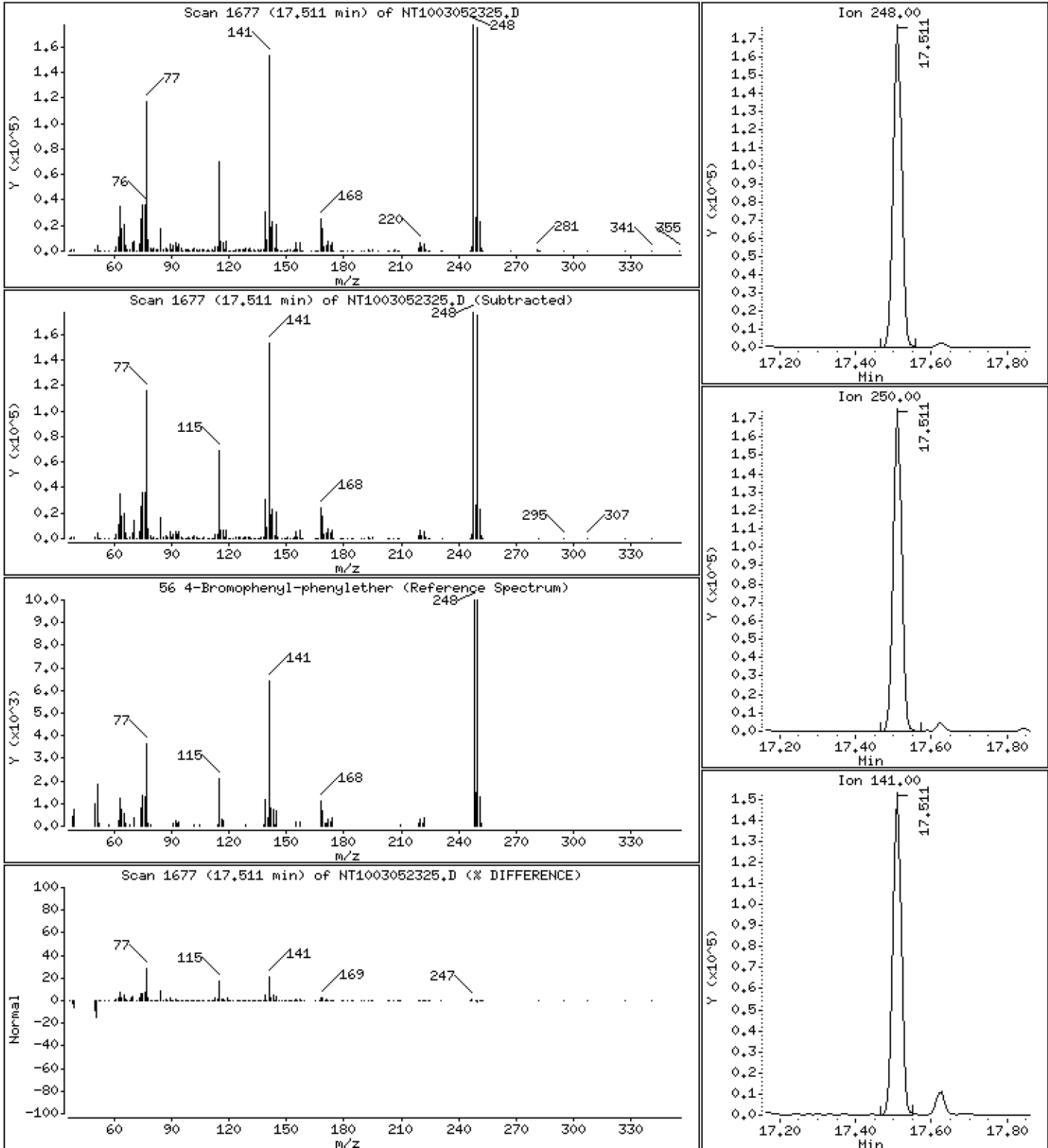
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,811 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

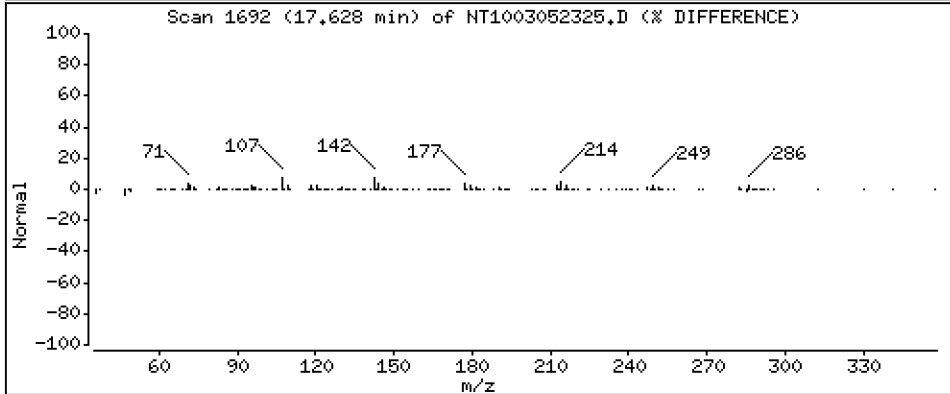
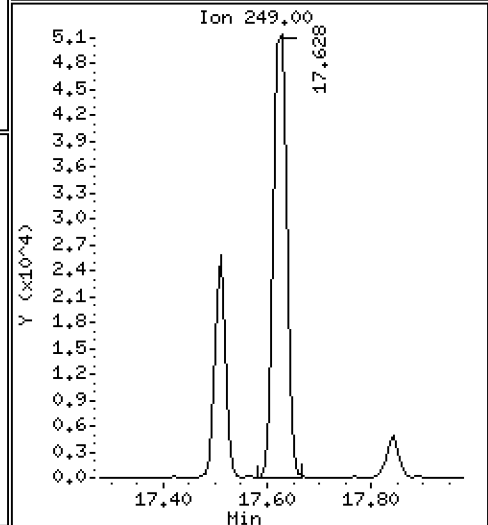
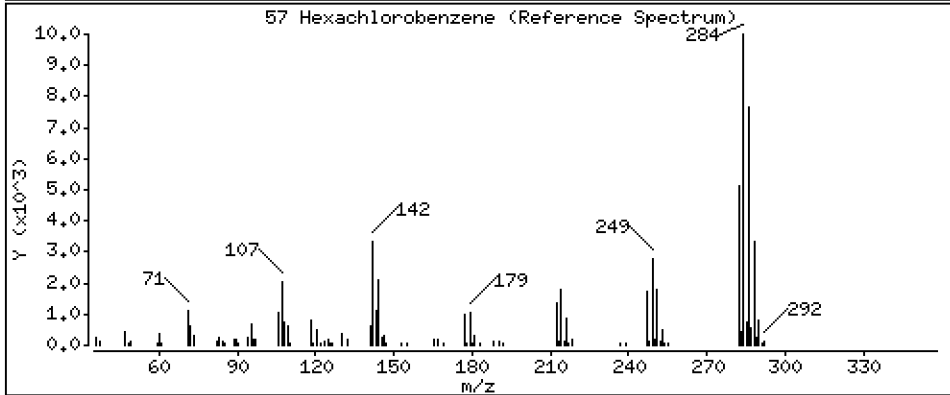
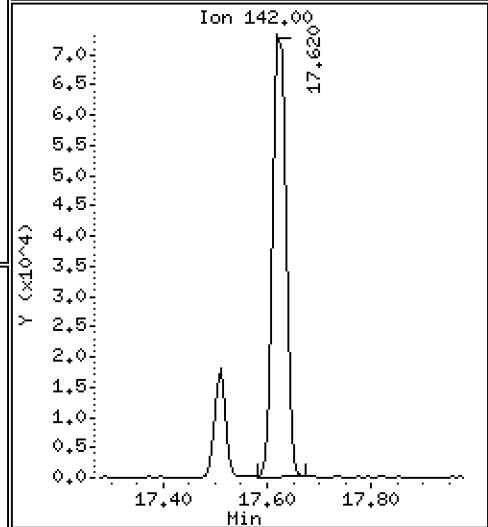
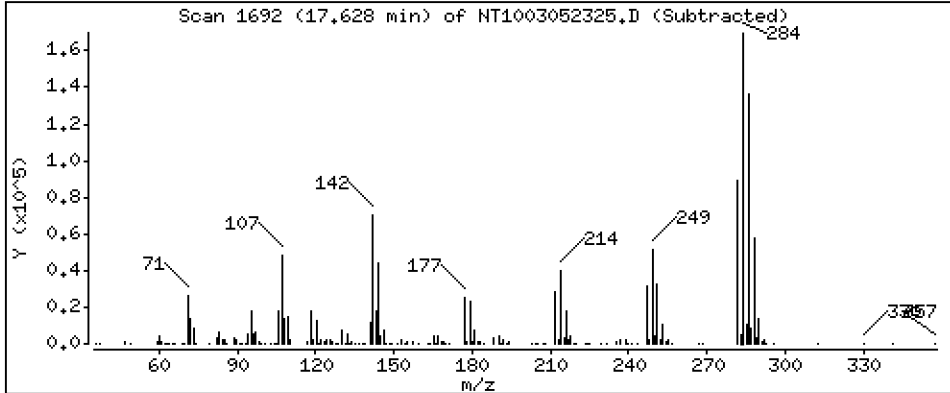
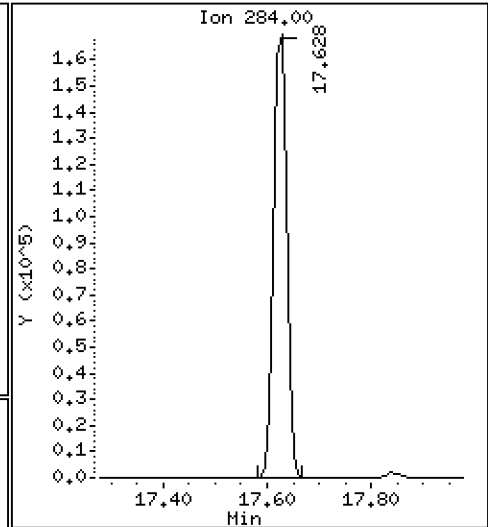
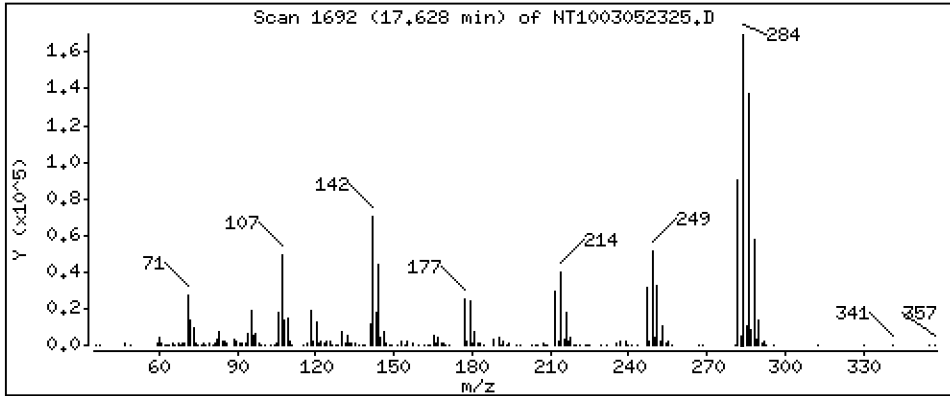
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,632 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

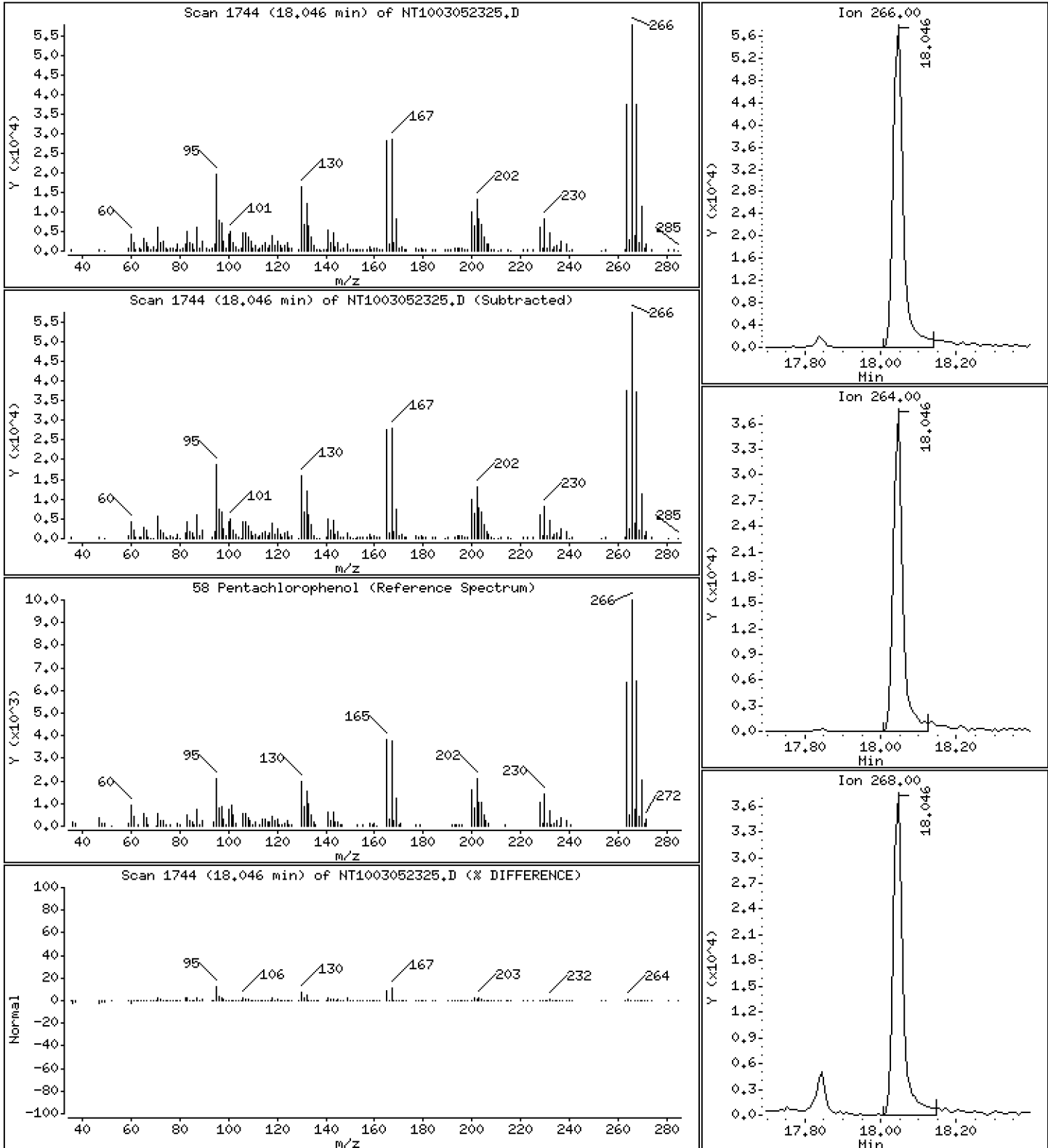
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,306 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

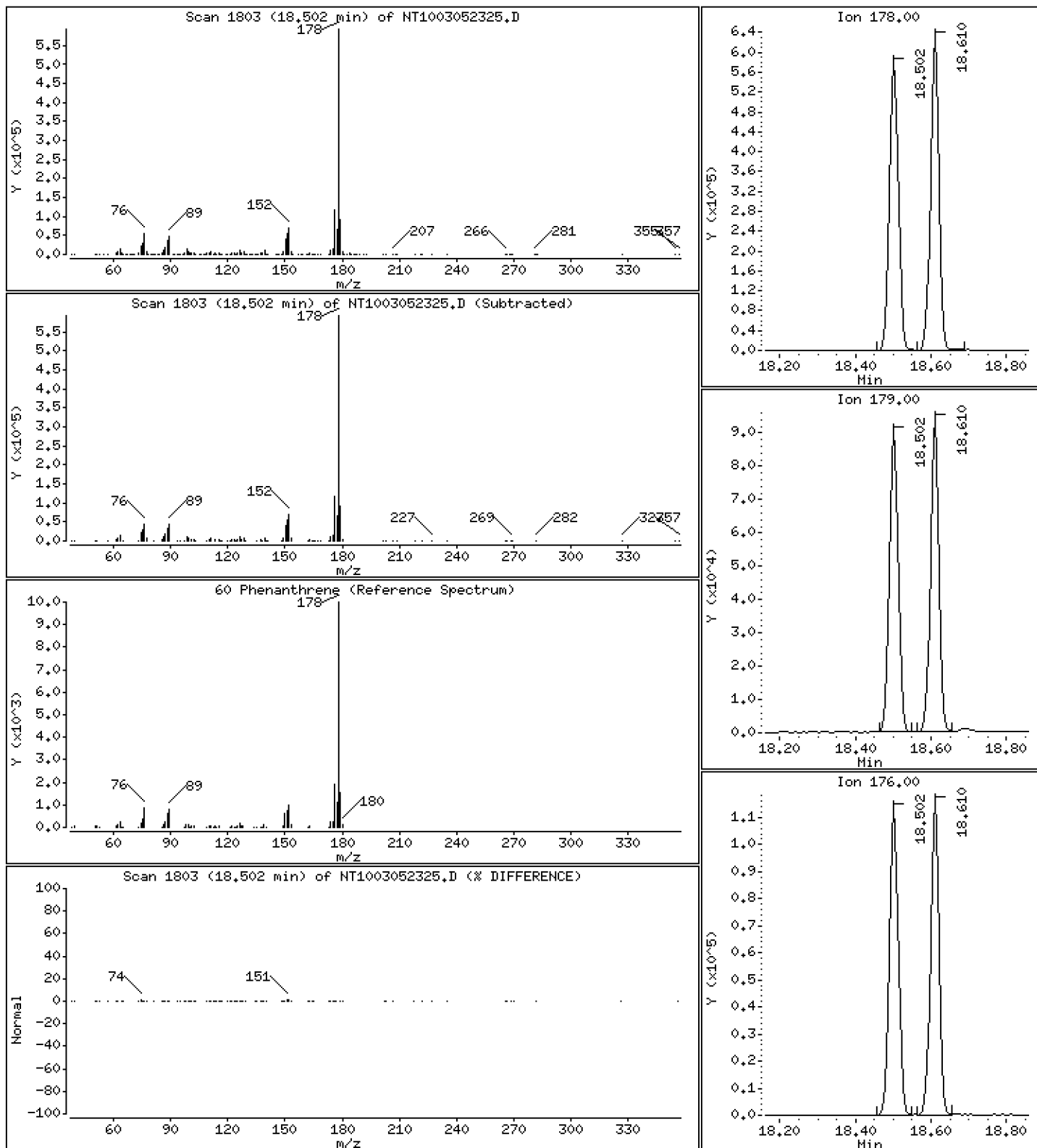
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,926 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

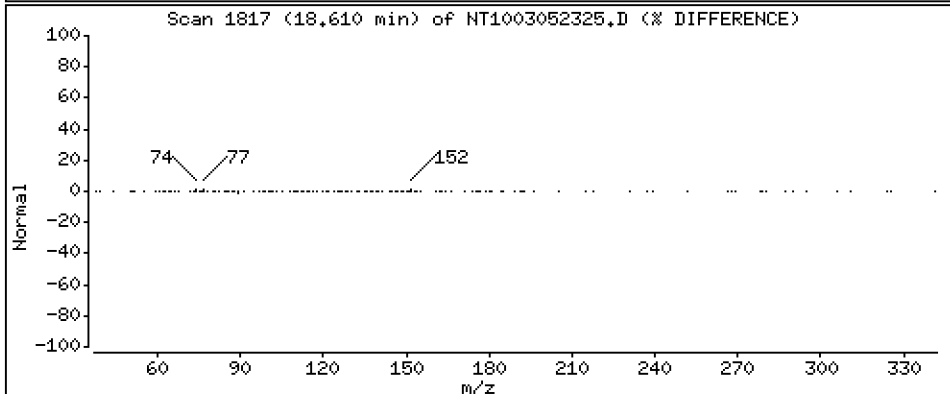
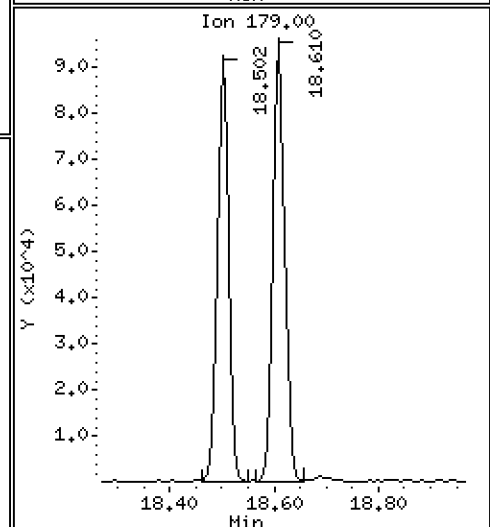
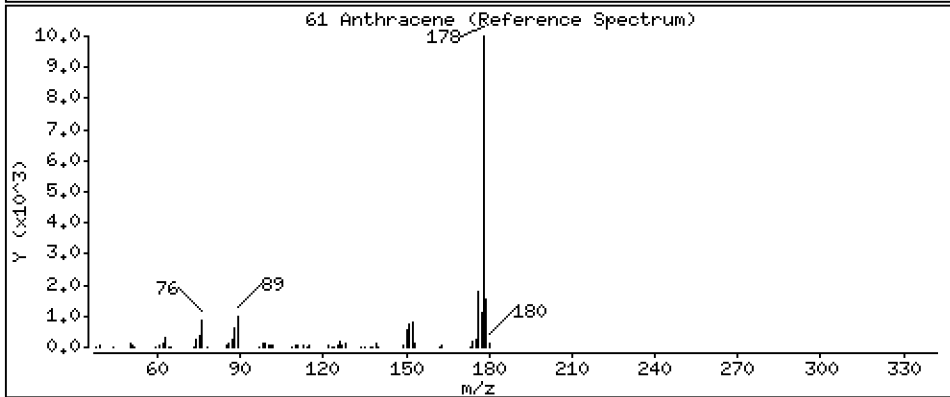
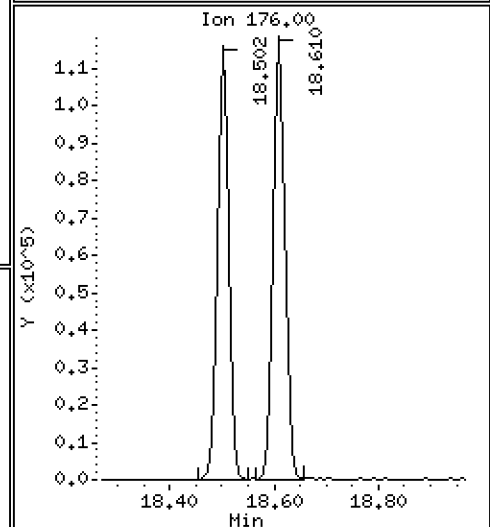
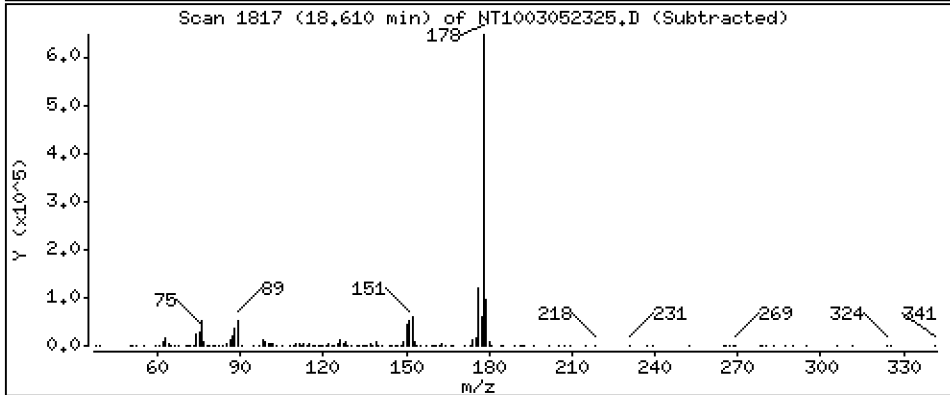
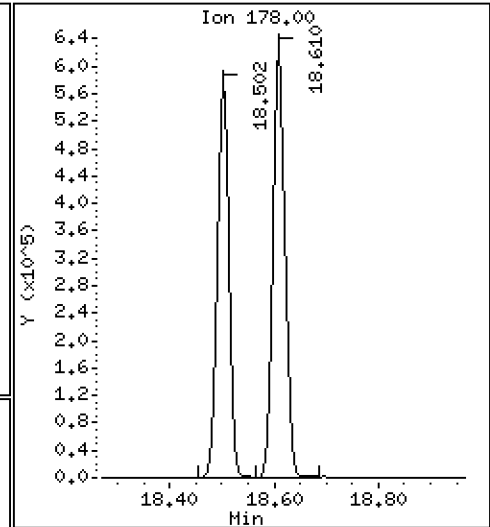
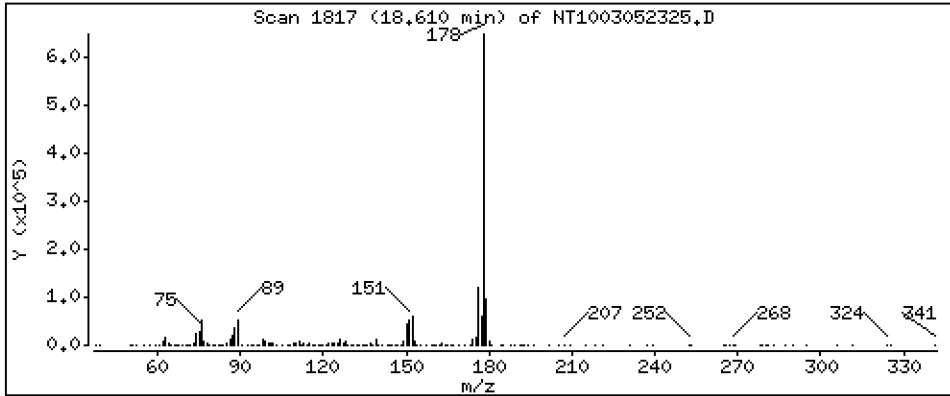
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 5,314 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

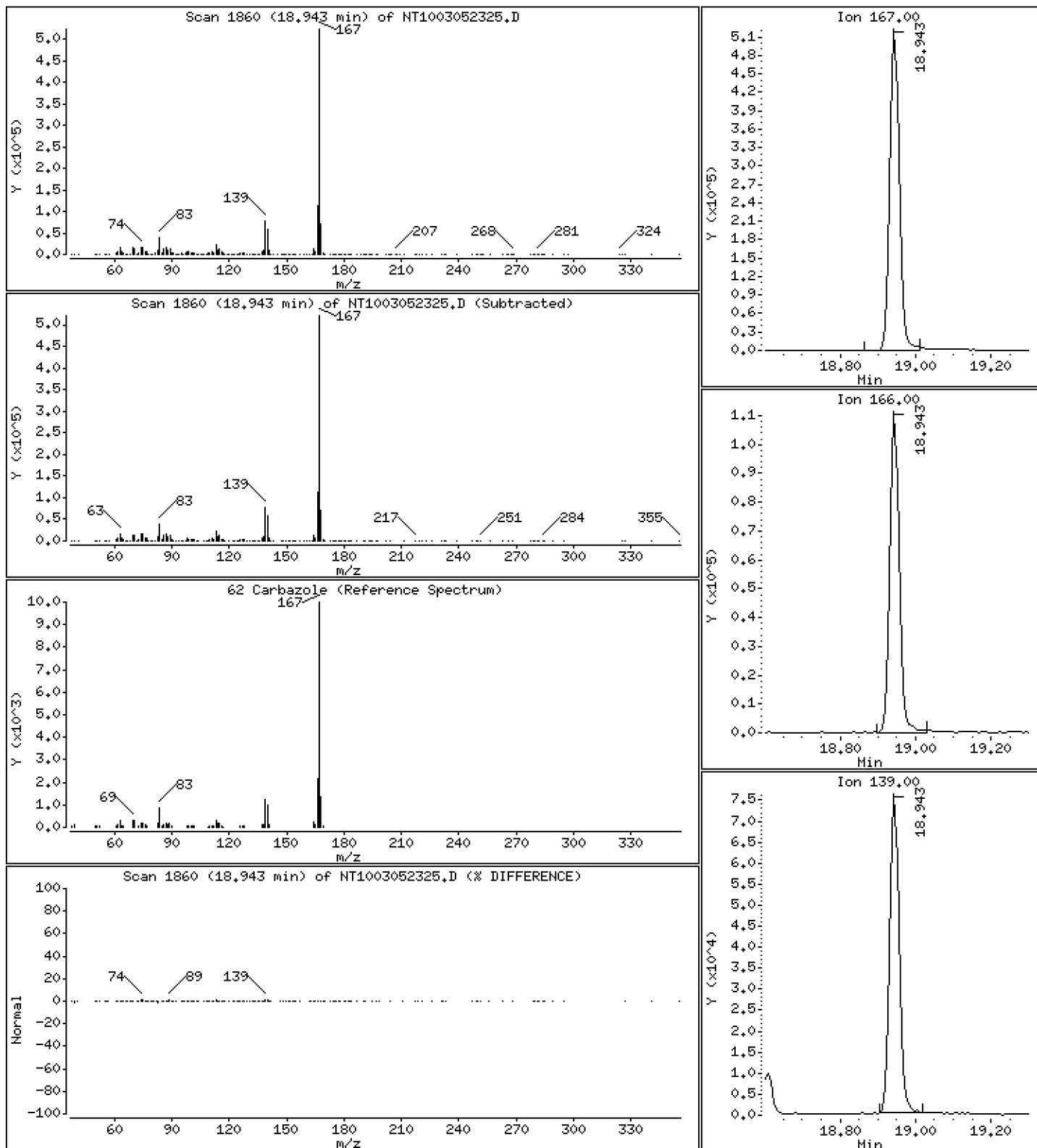
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 5,127 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

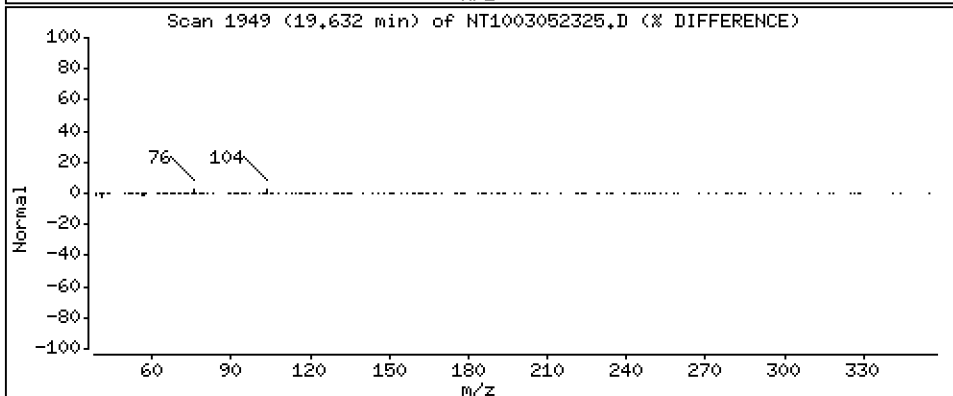
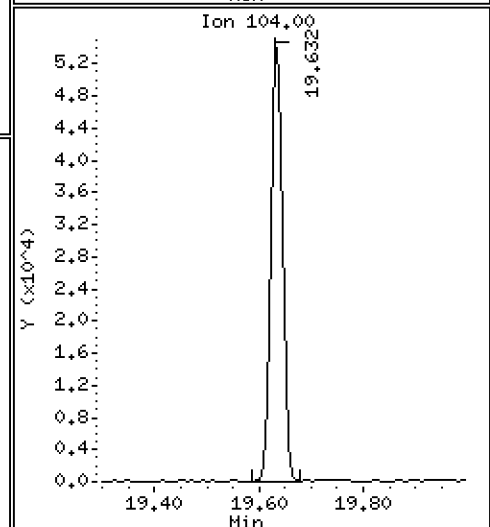
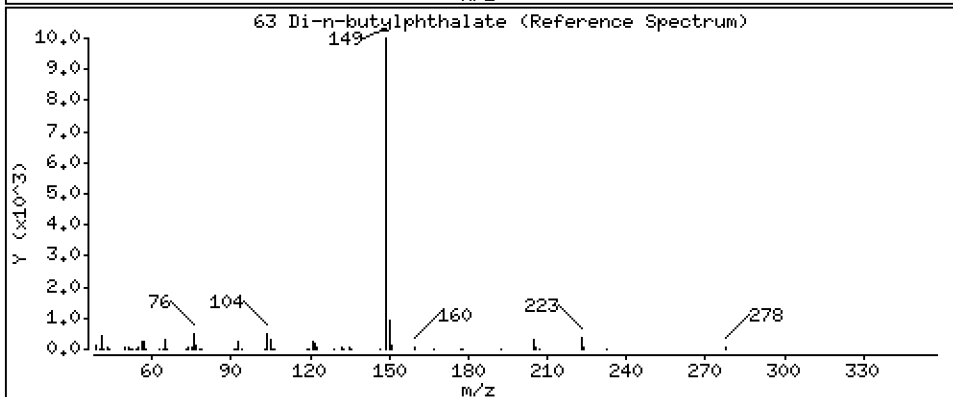
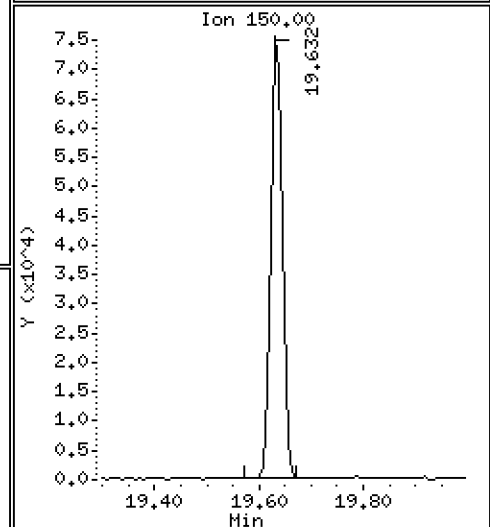
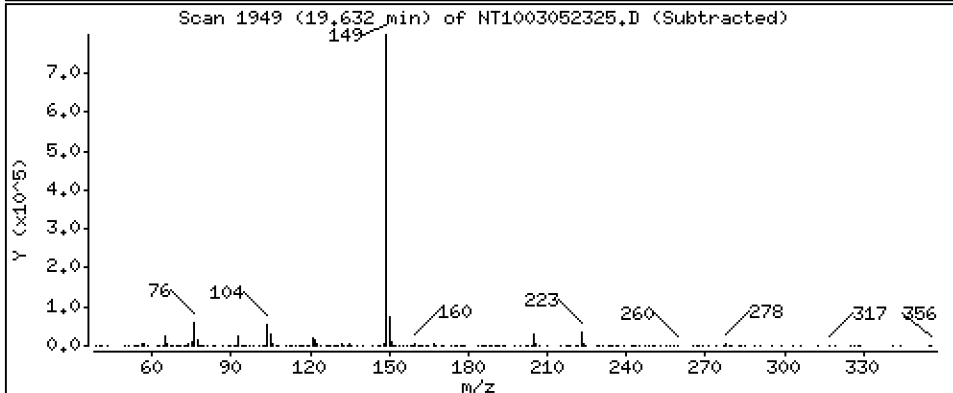
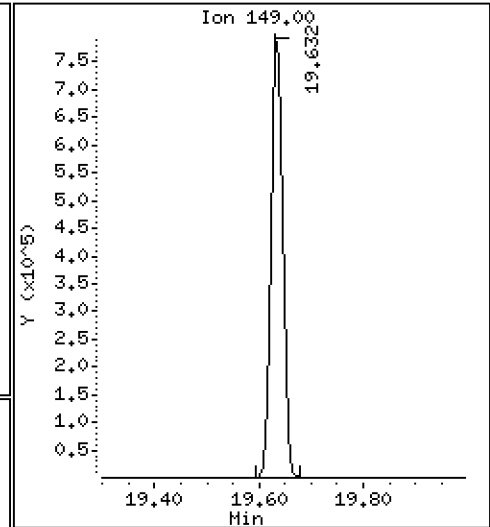
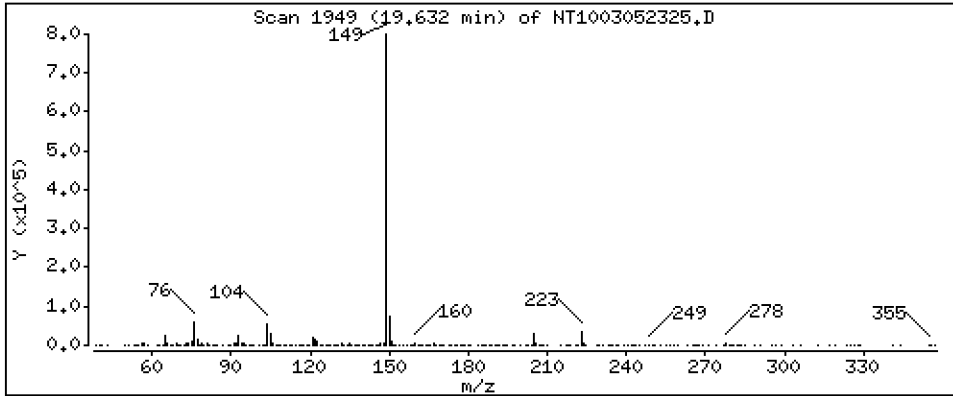
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 4,978 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

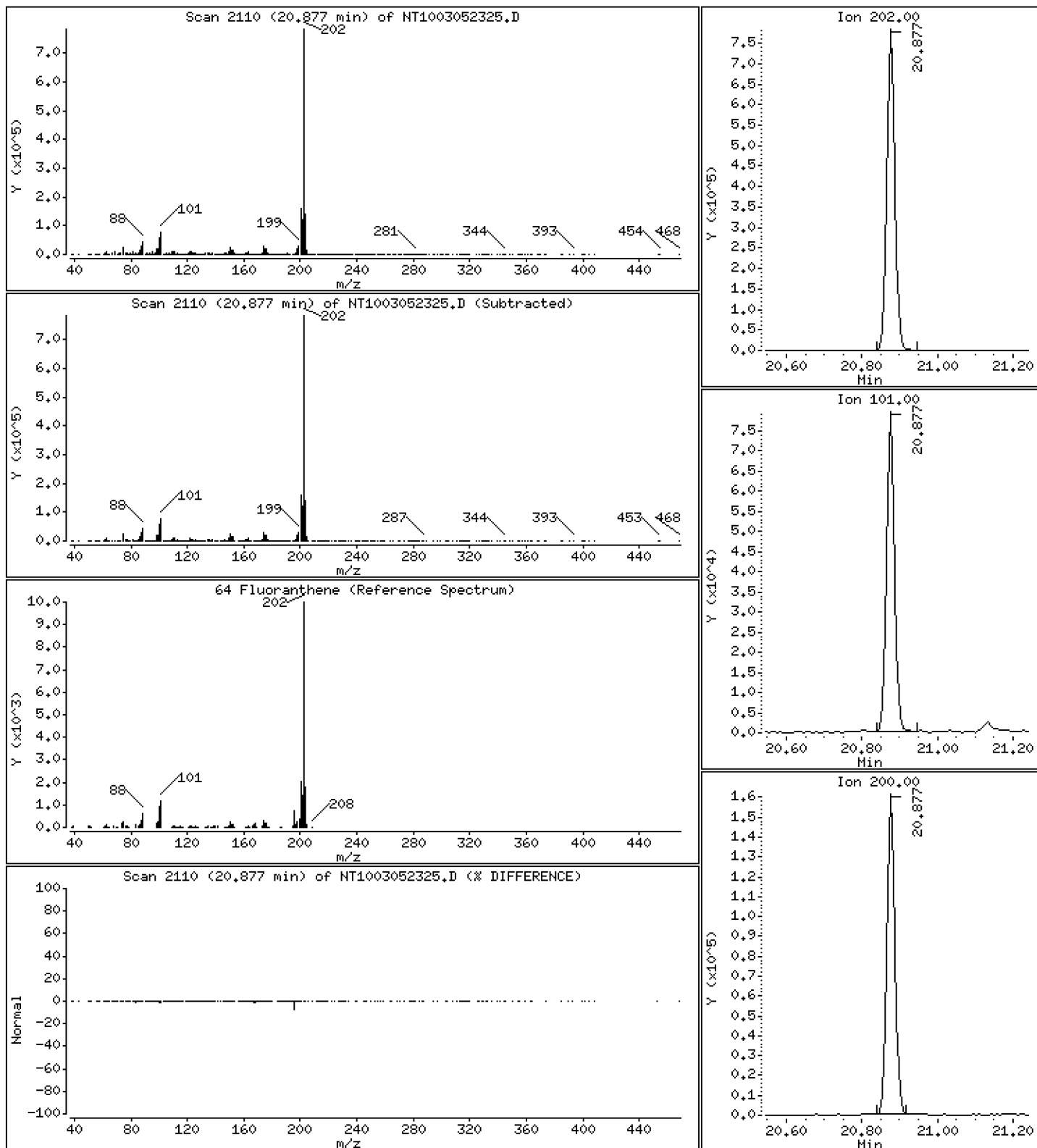
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,096 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

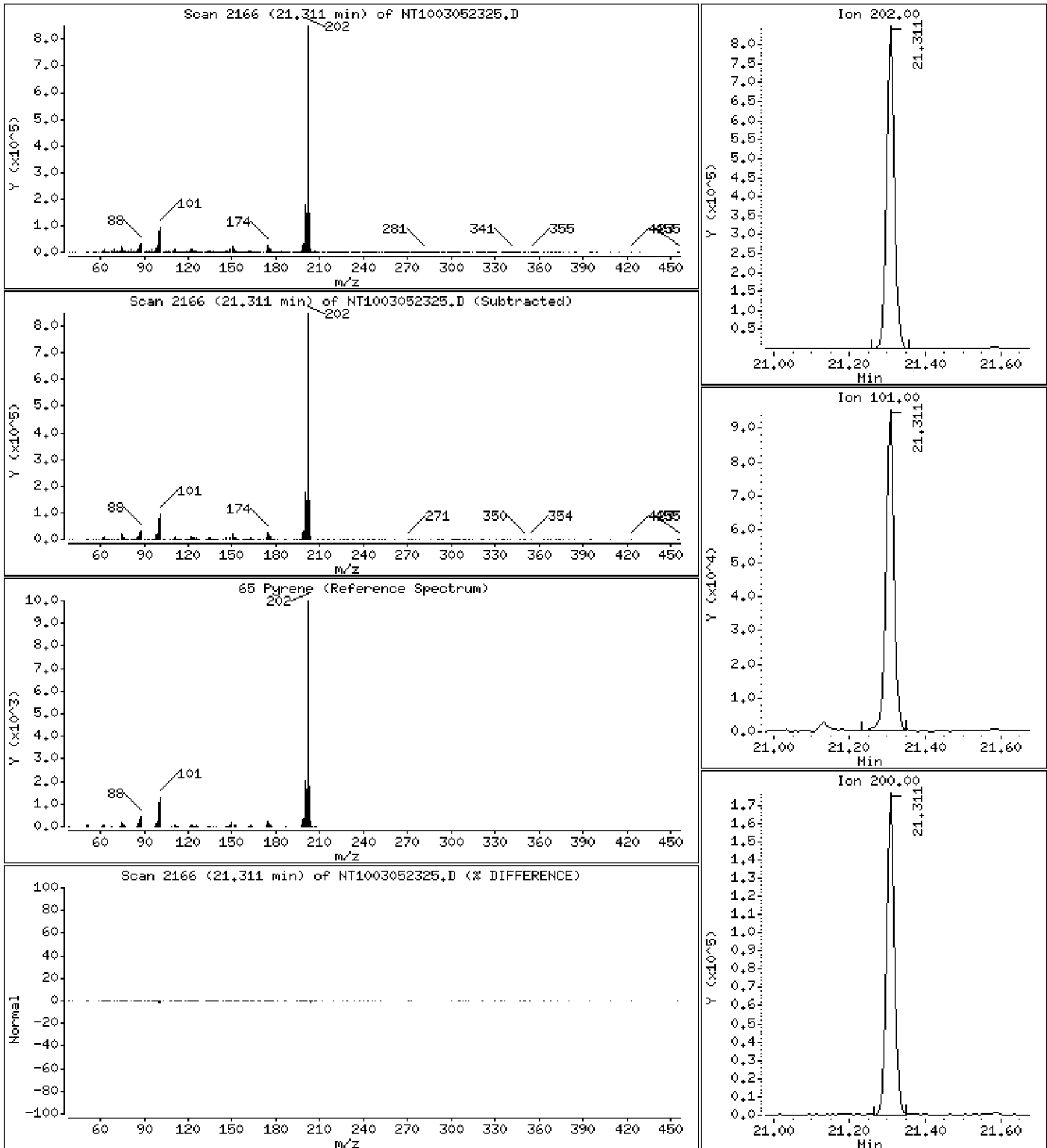
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,237 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

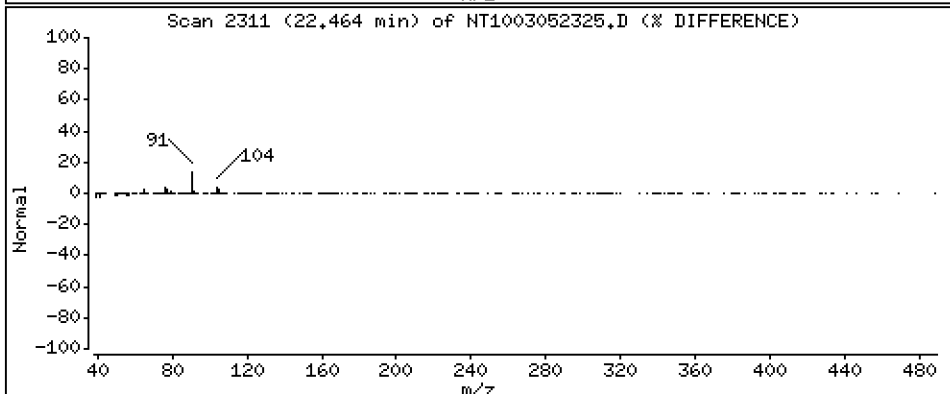
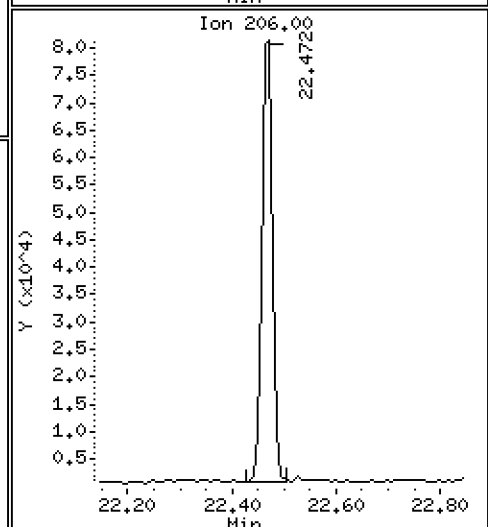
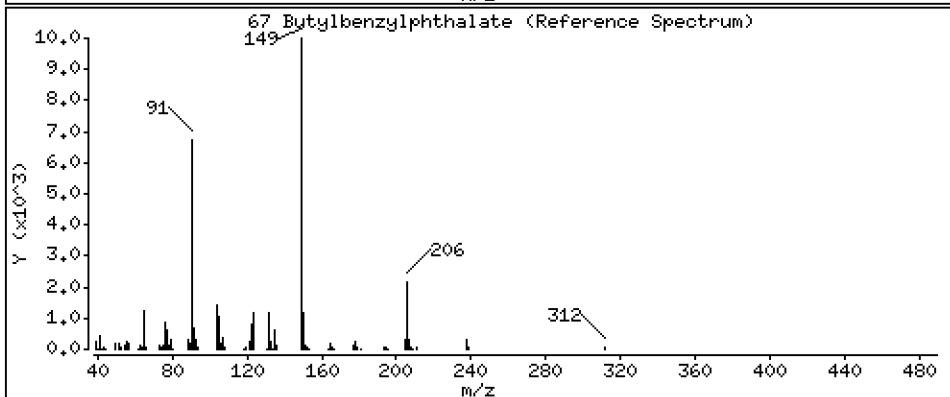
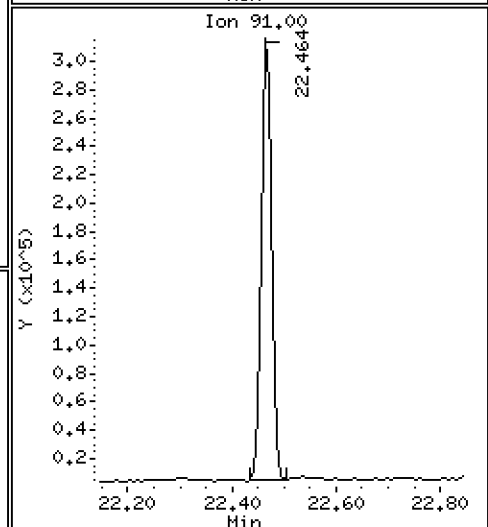
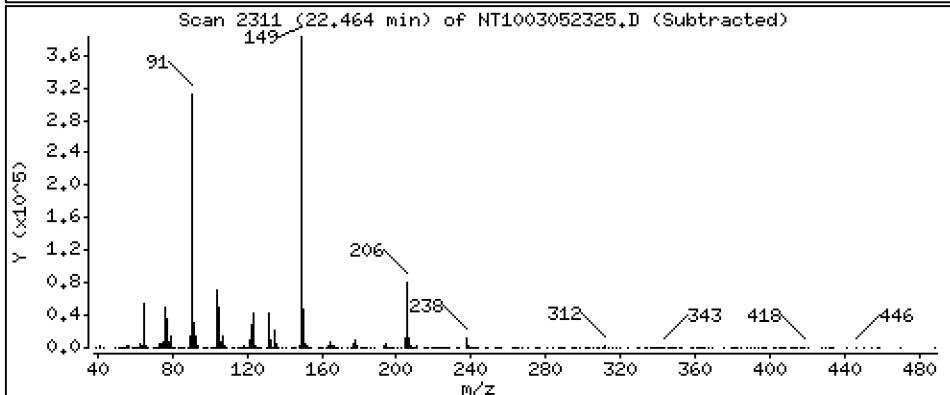
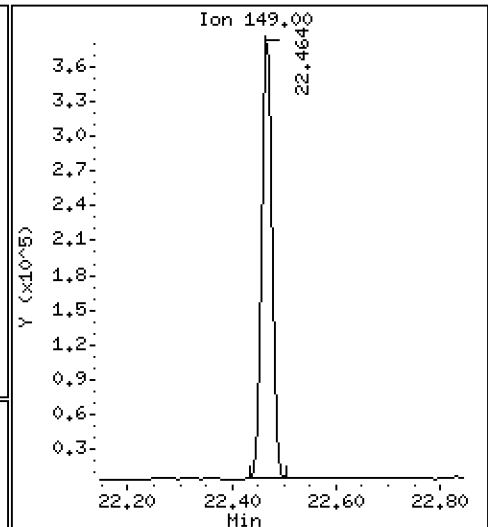
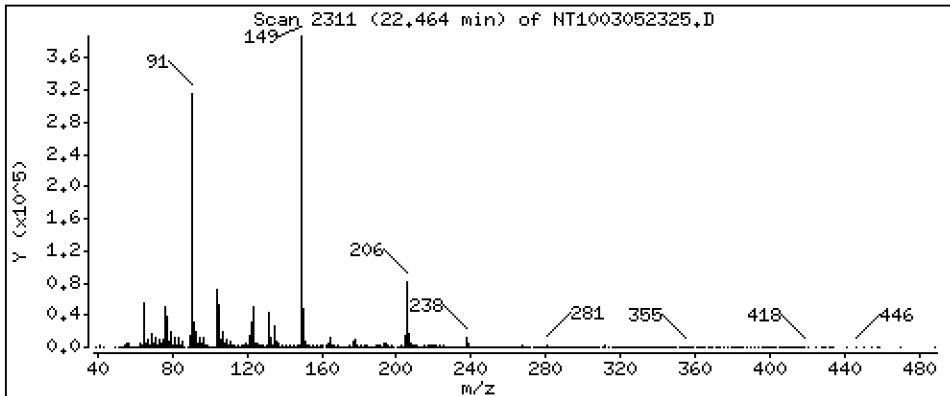
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,636 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

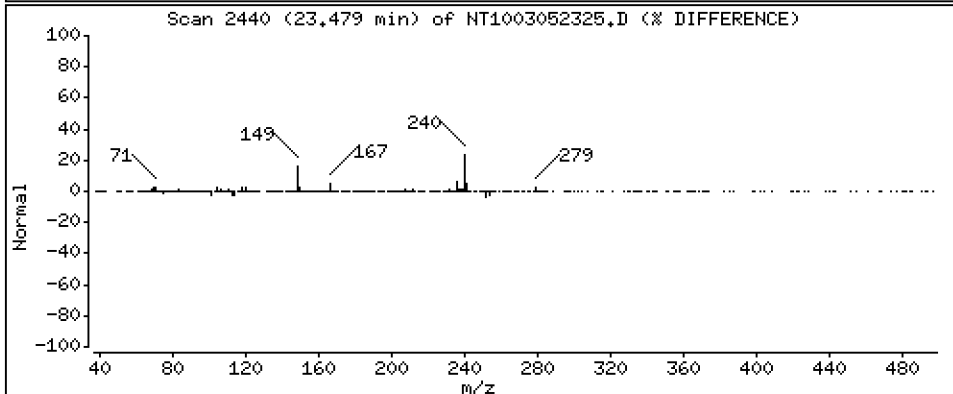
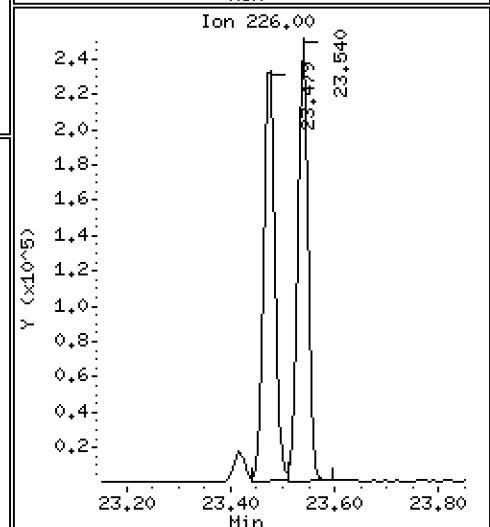
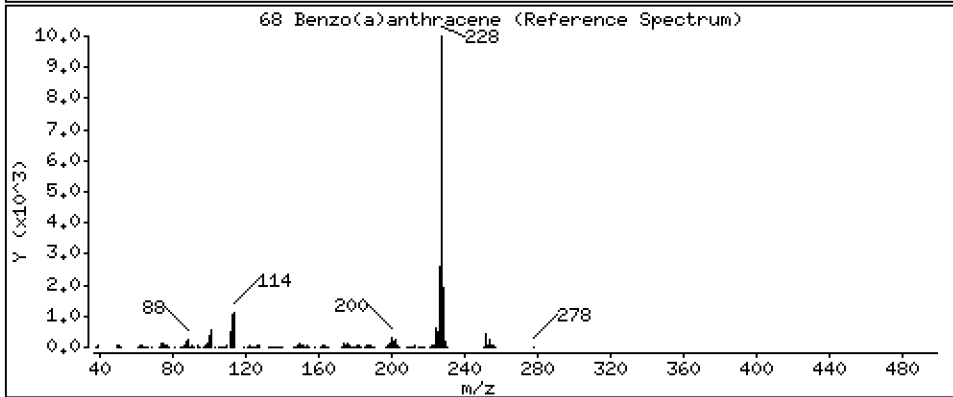
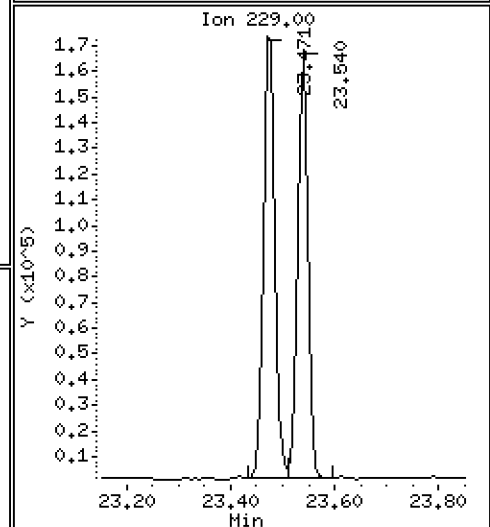
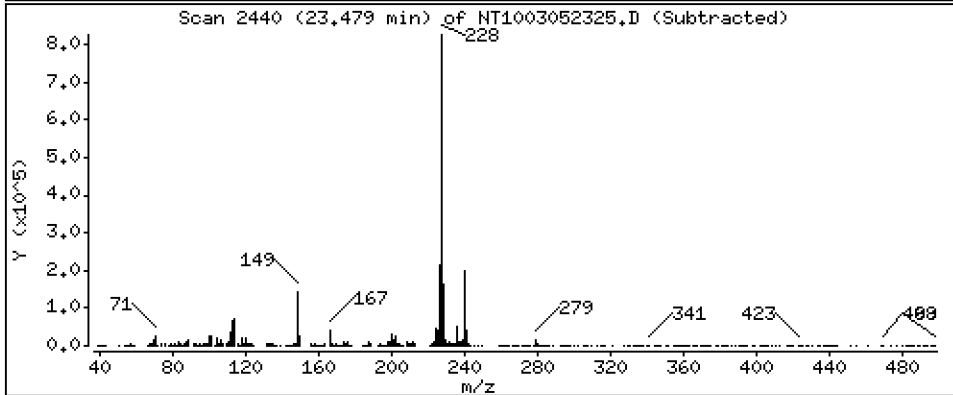
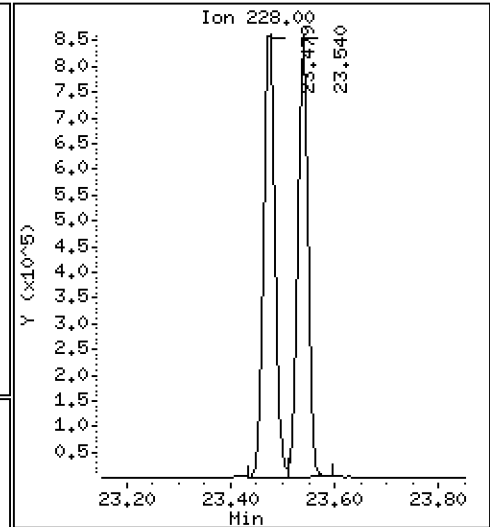
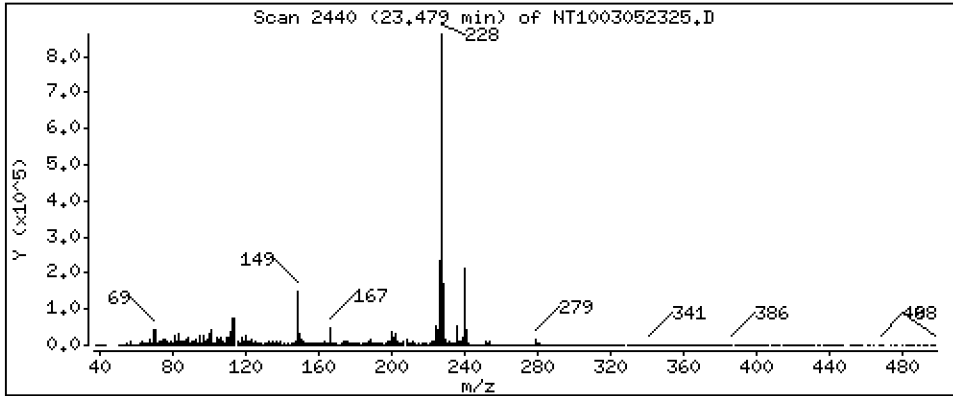
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,703 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

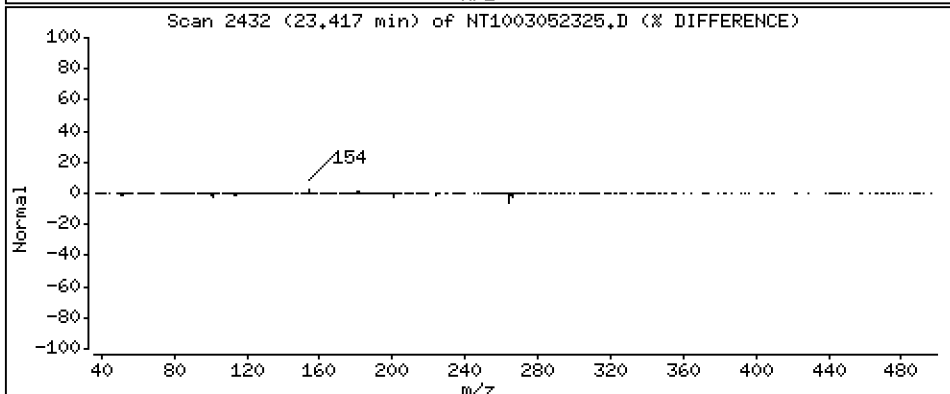
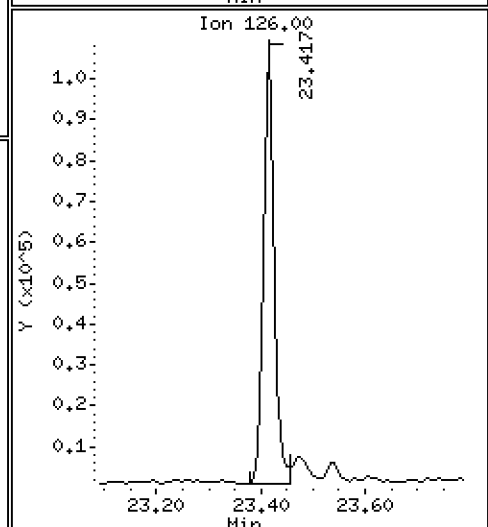
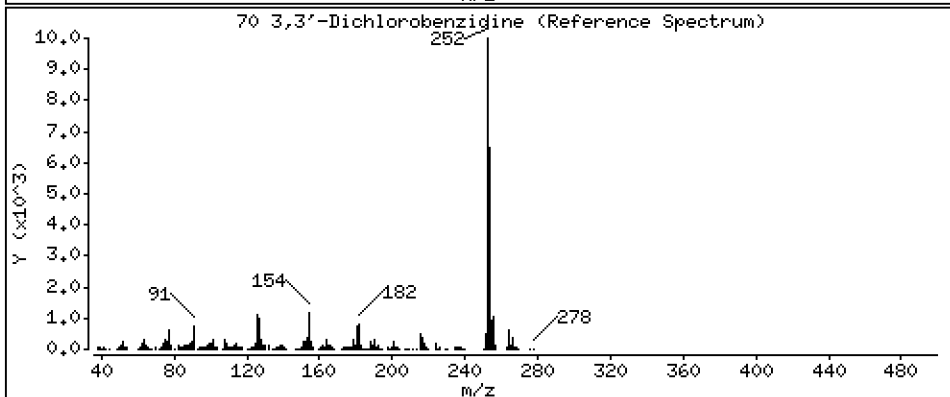
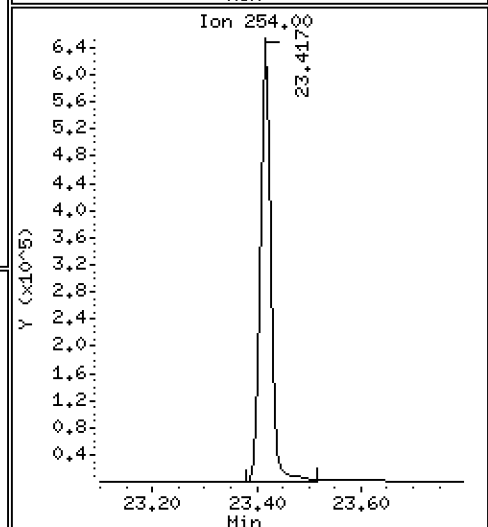
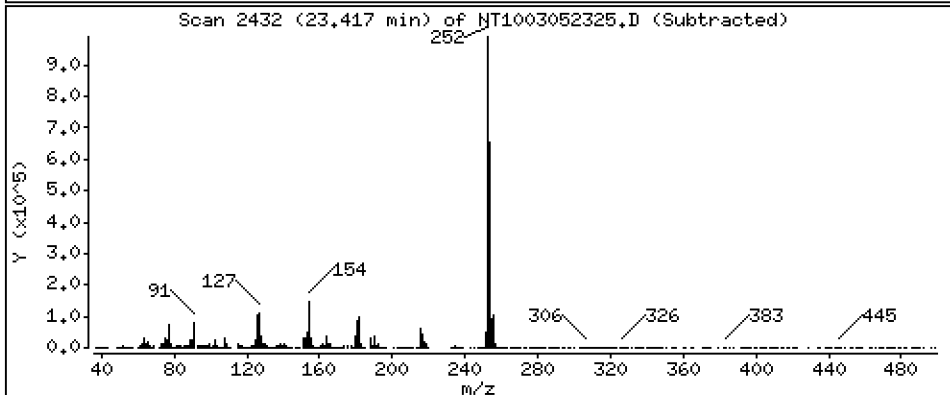
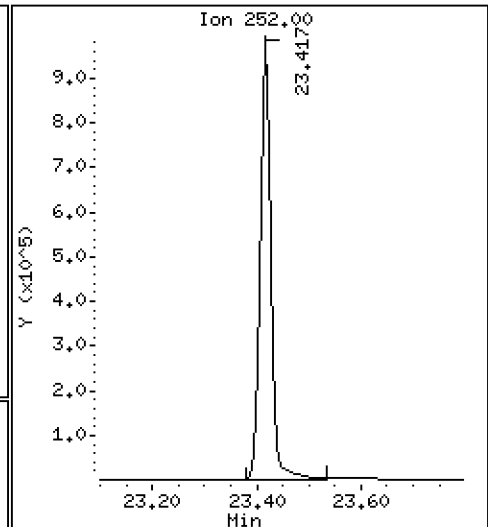
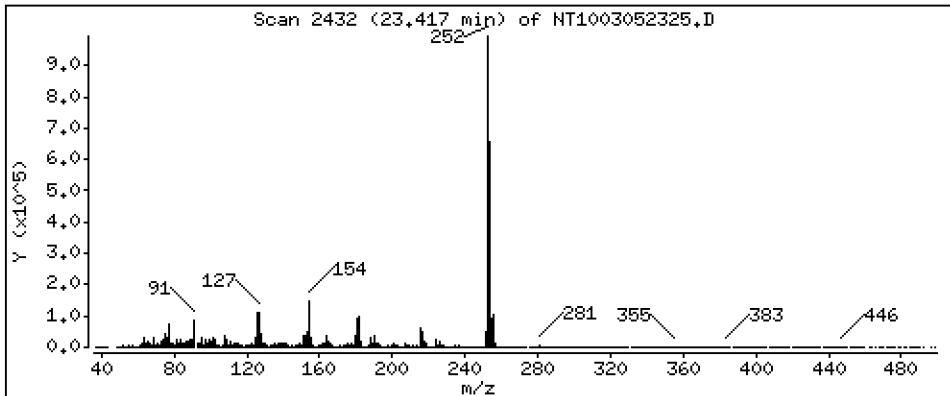
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 11,12 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

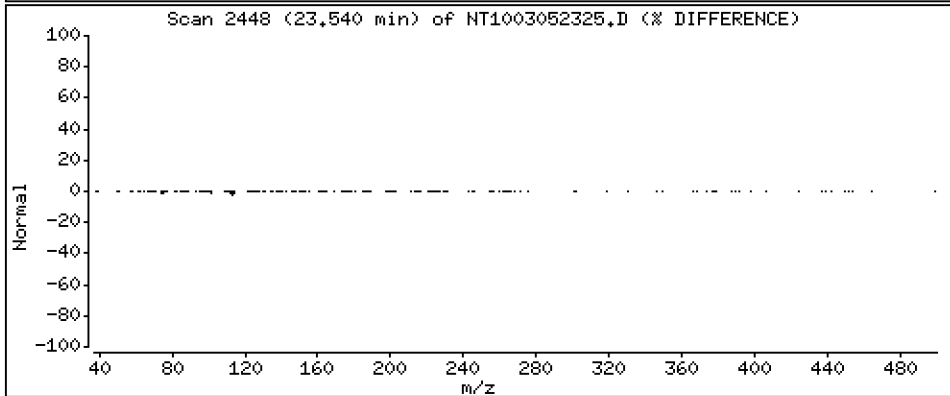
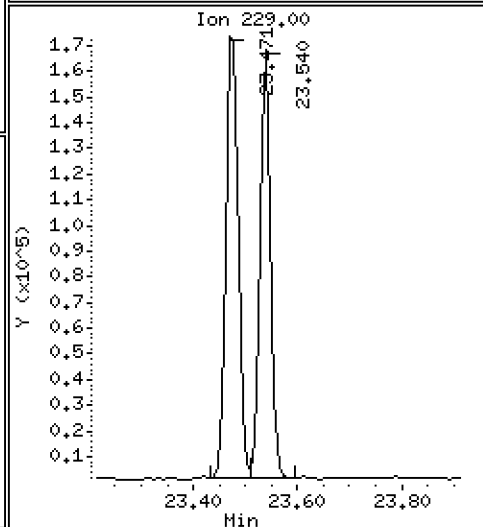
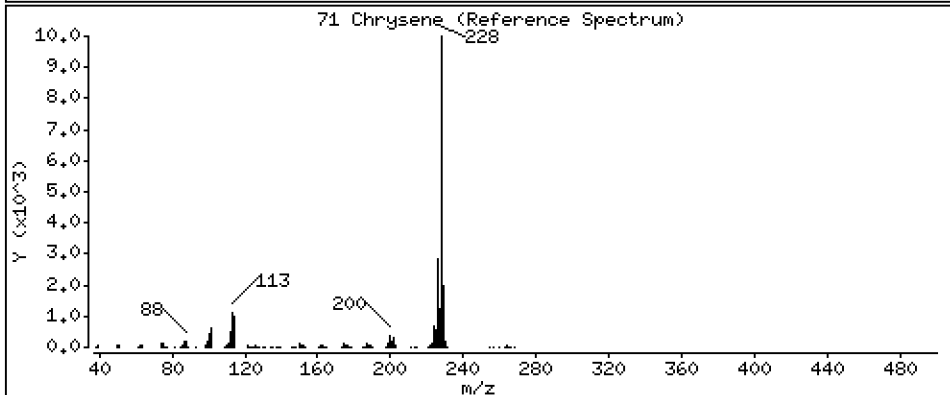
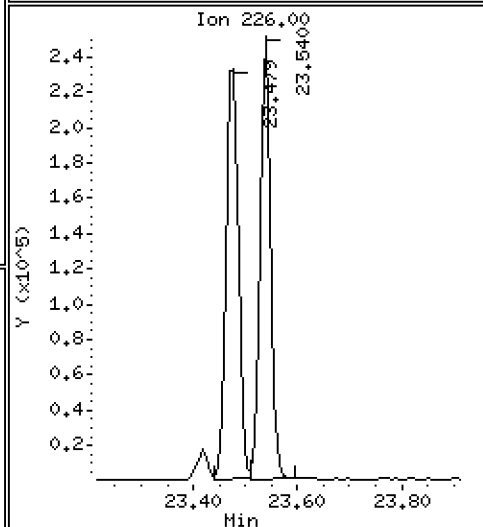
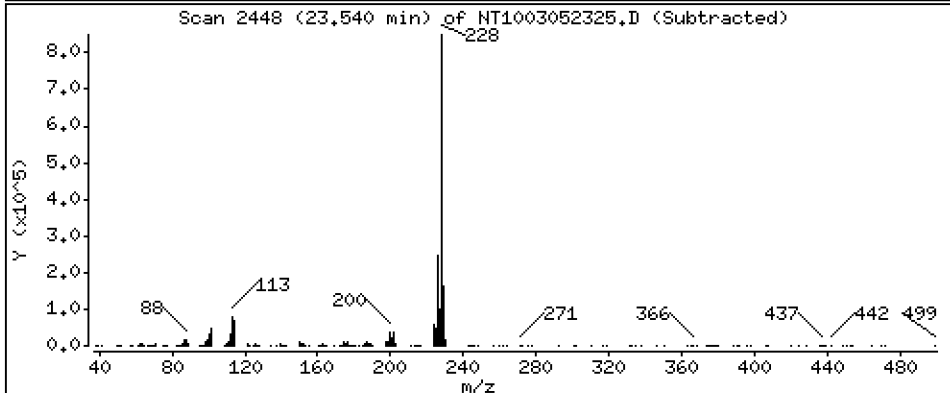
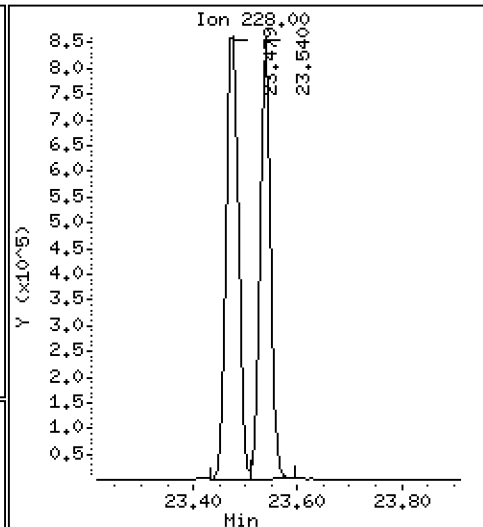
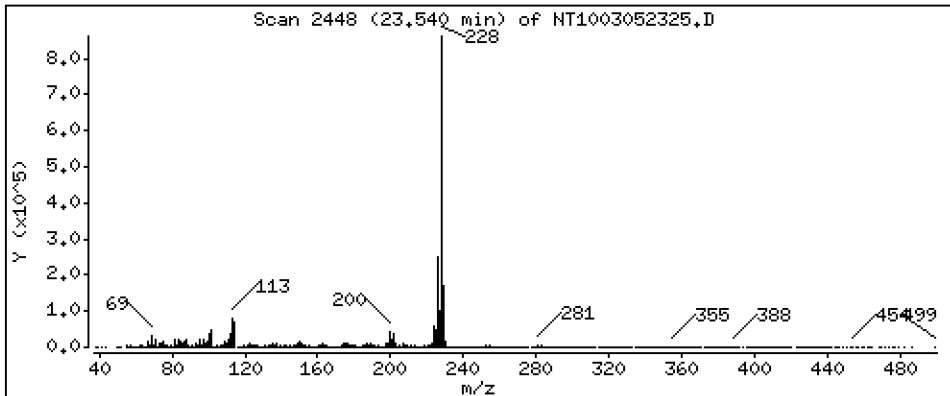
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 5,183 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

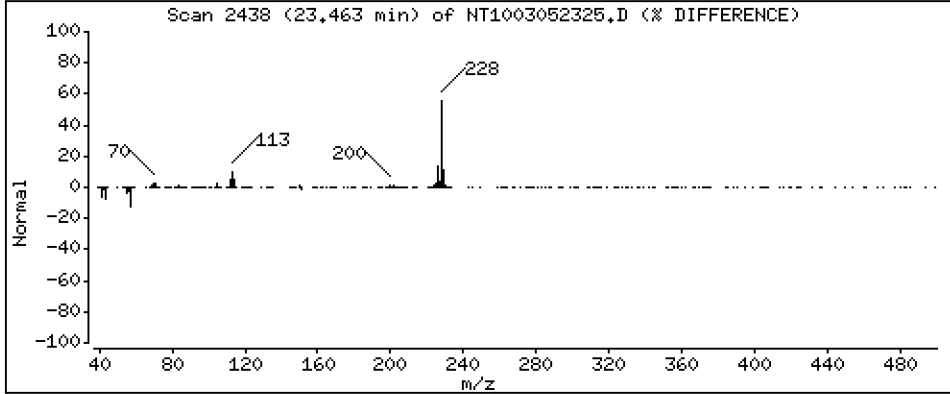
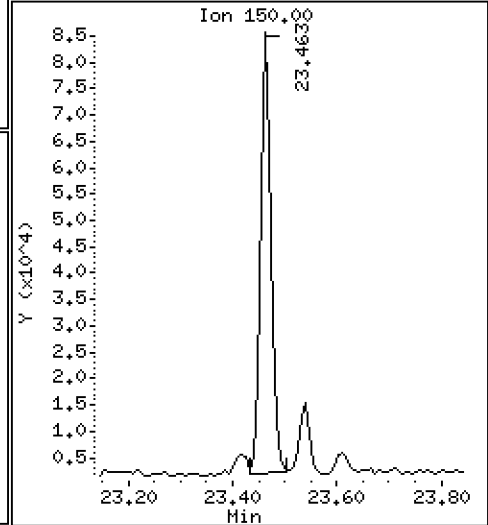
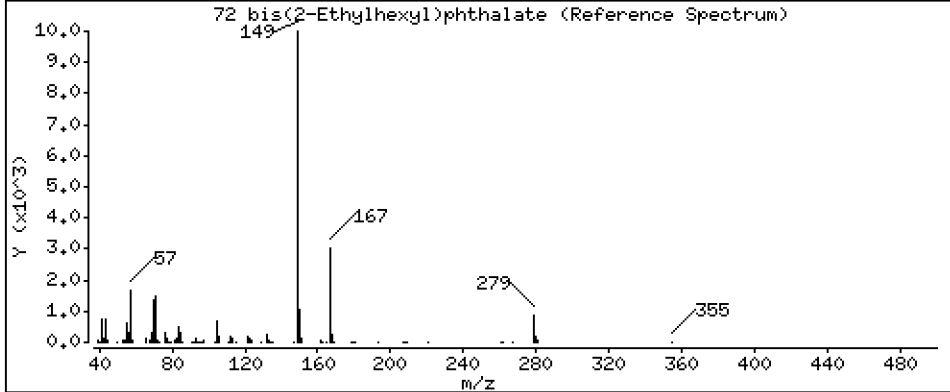
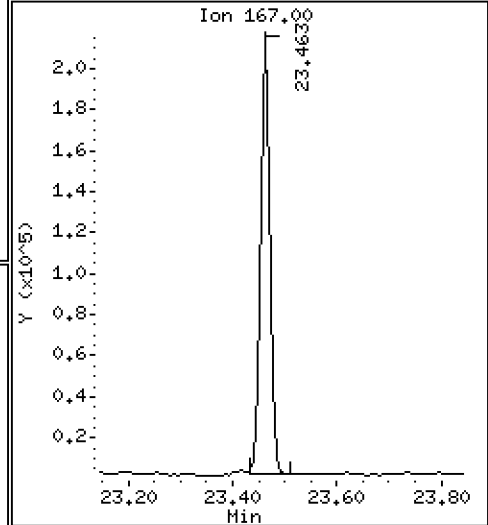
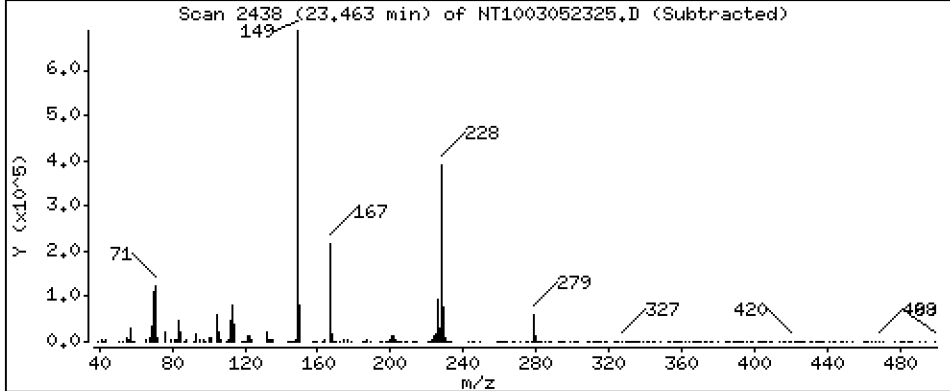
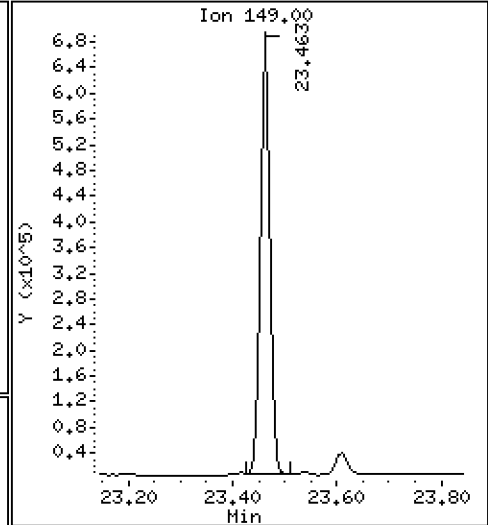
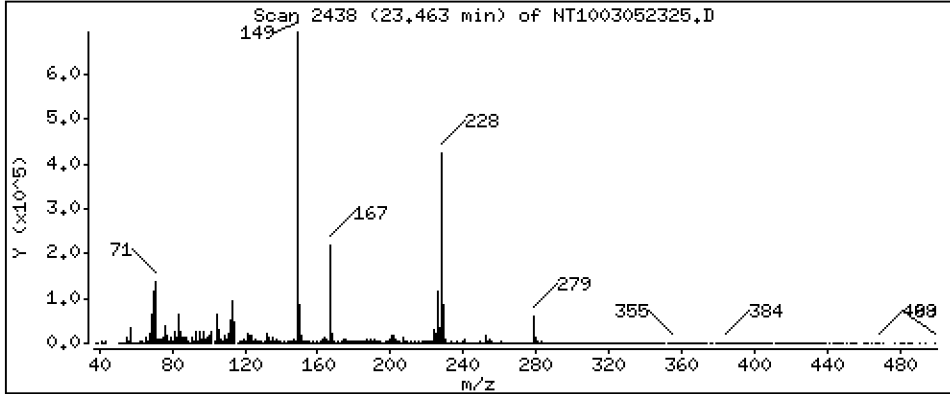
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,595 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

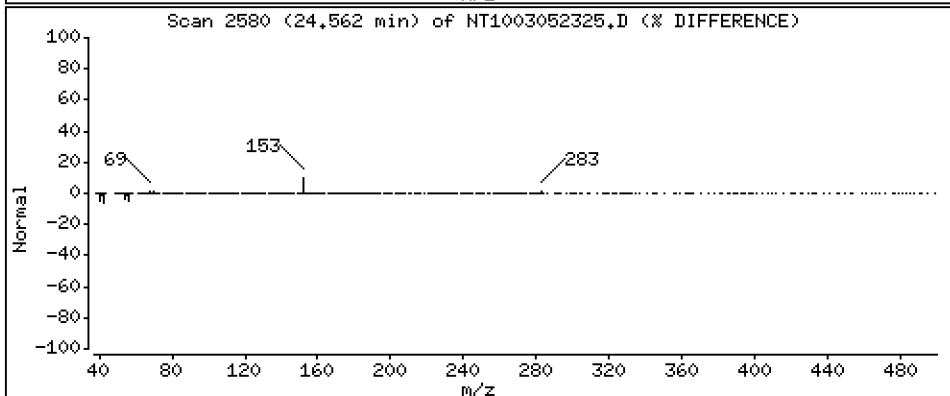
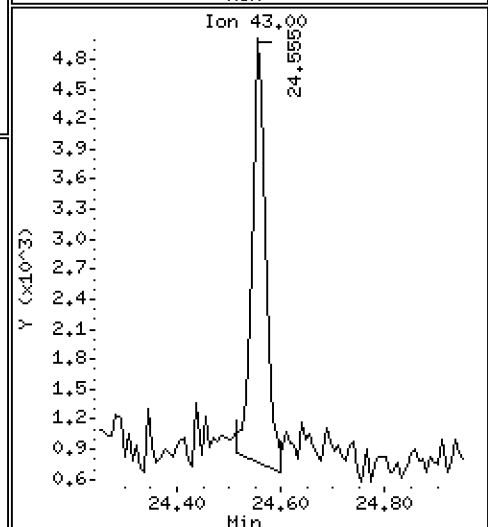
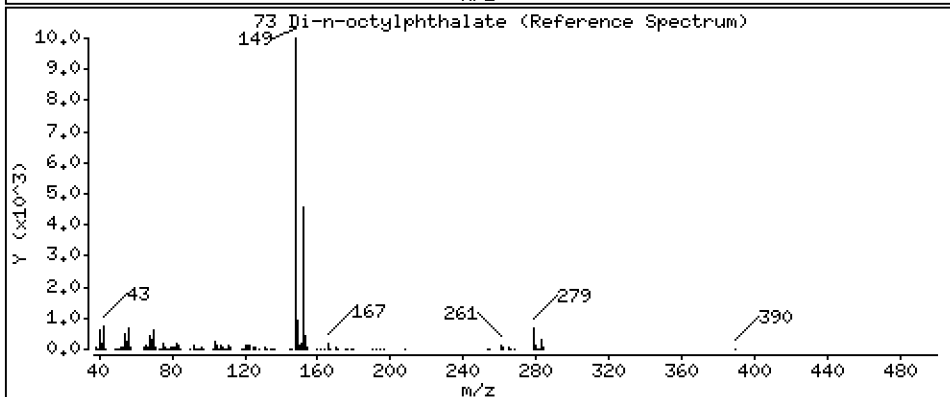
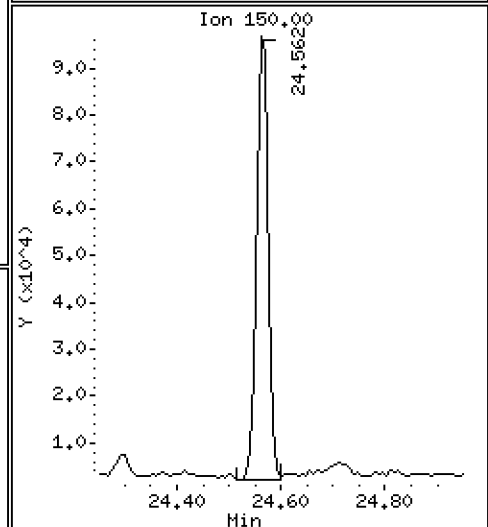
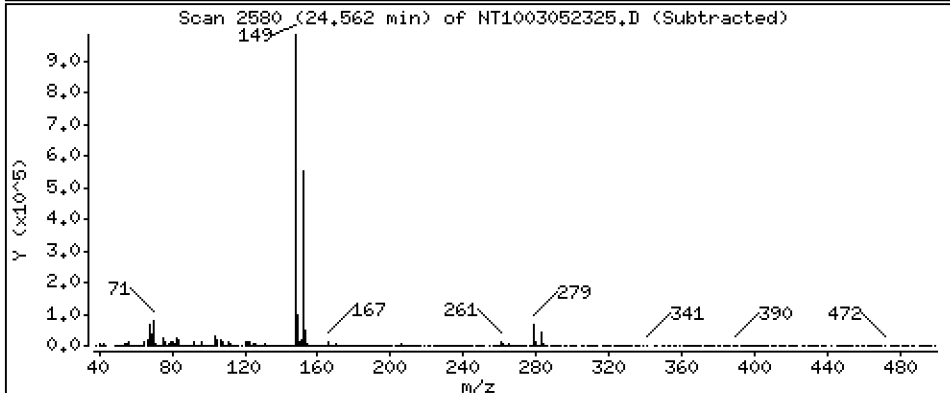
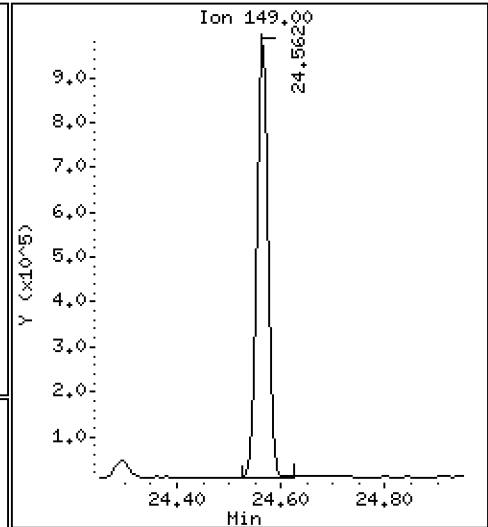
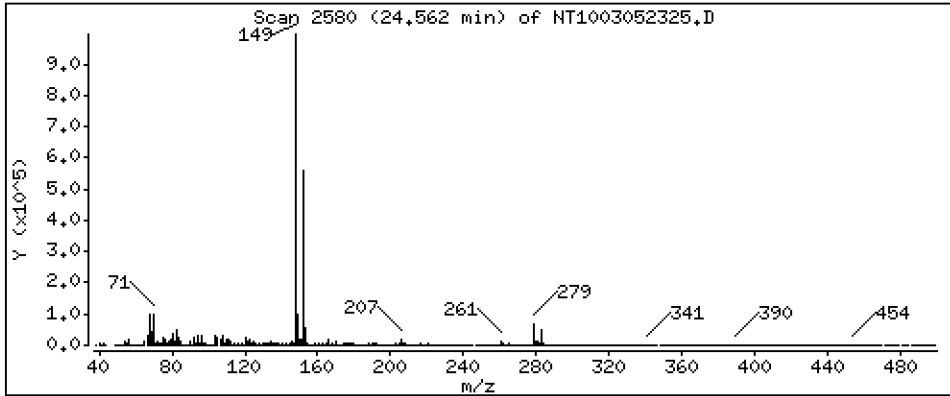
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,124 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

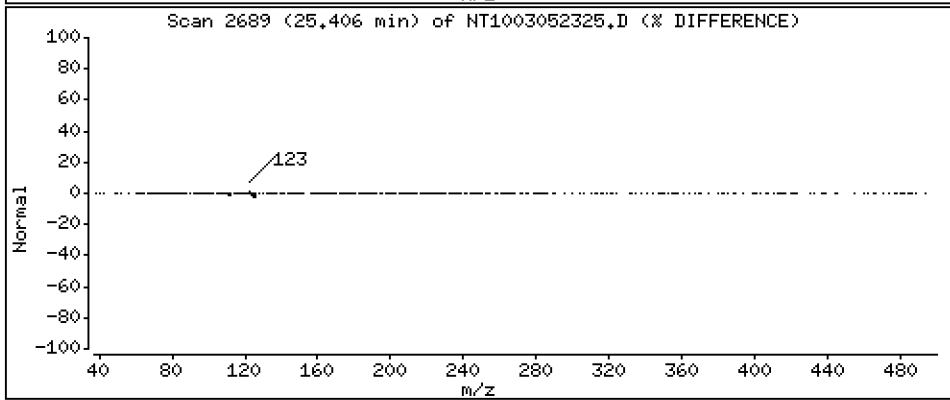
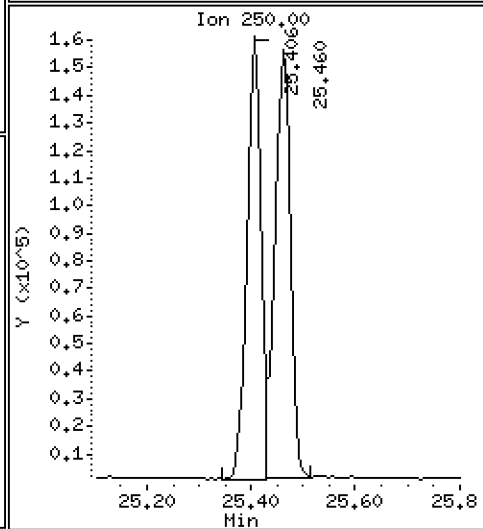
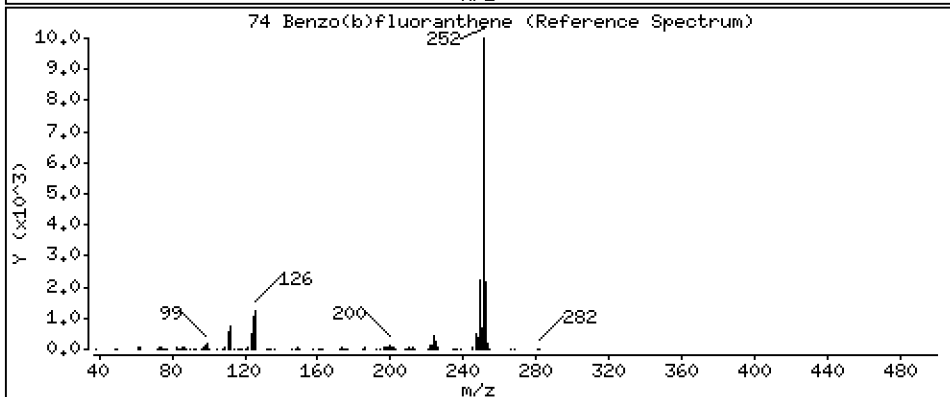
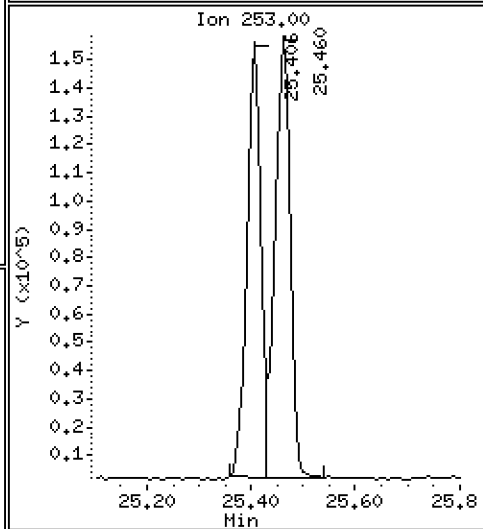
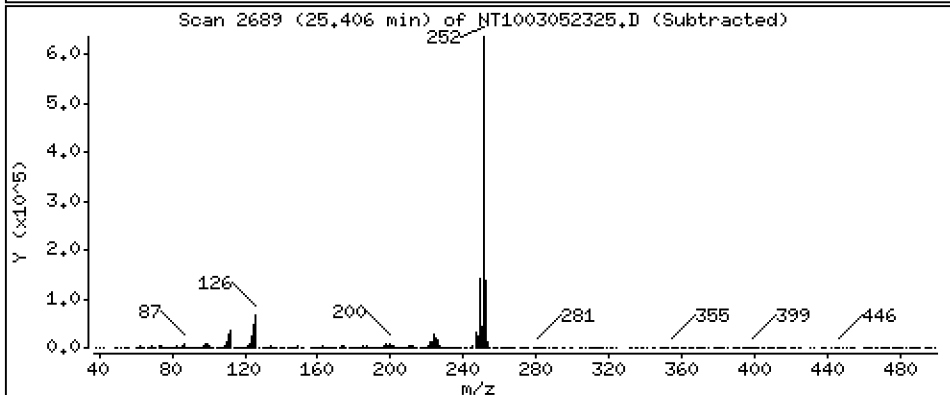
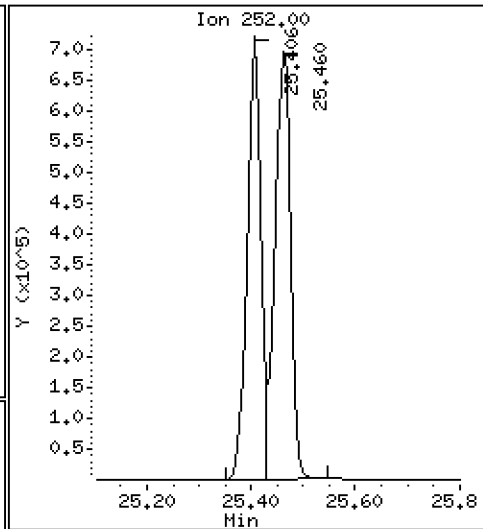
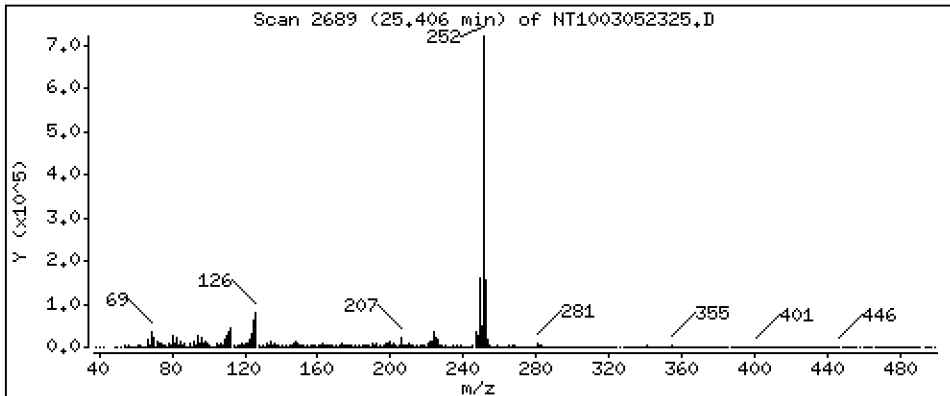
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,266 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

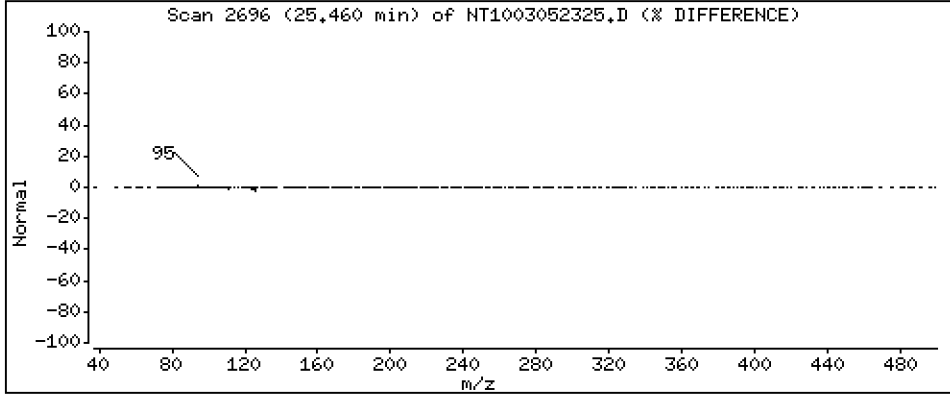
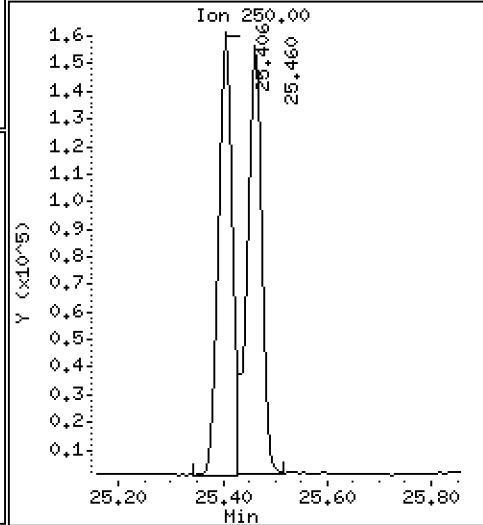
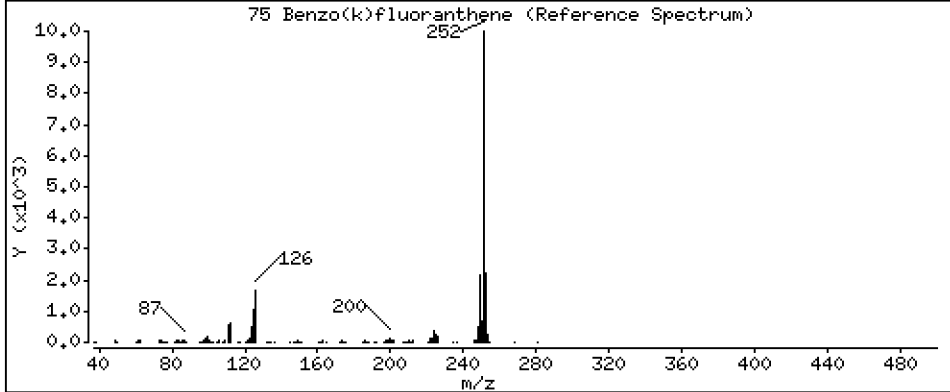
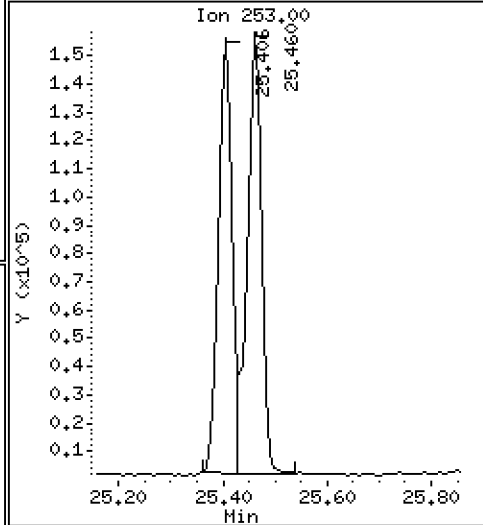
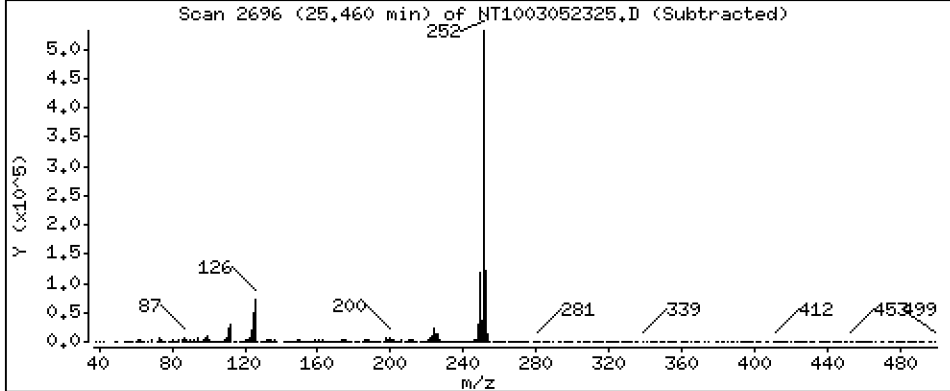
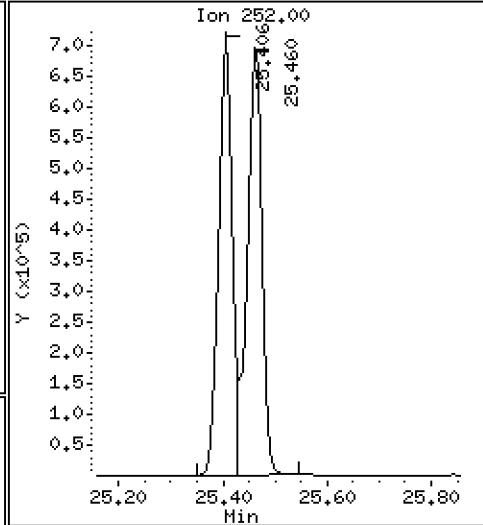
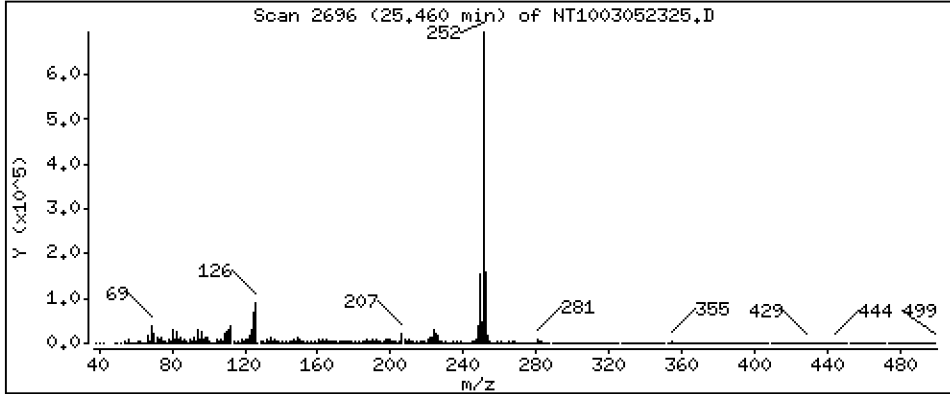
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,641 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

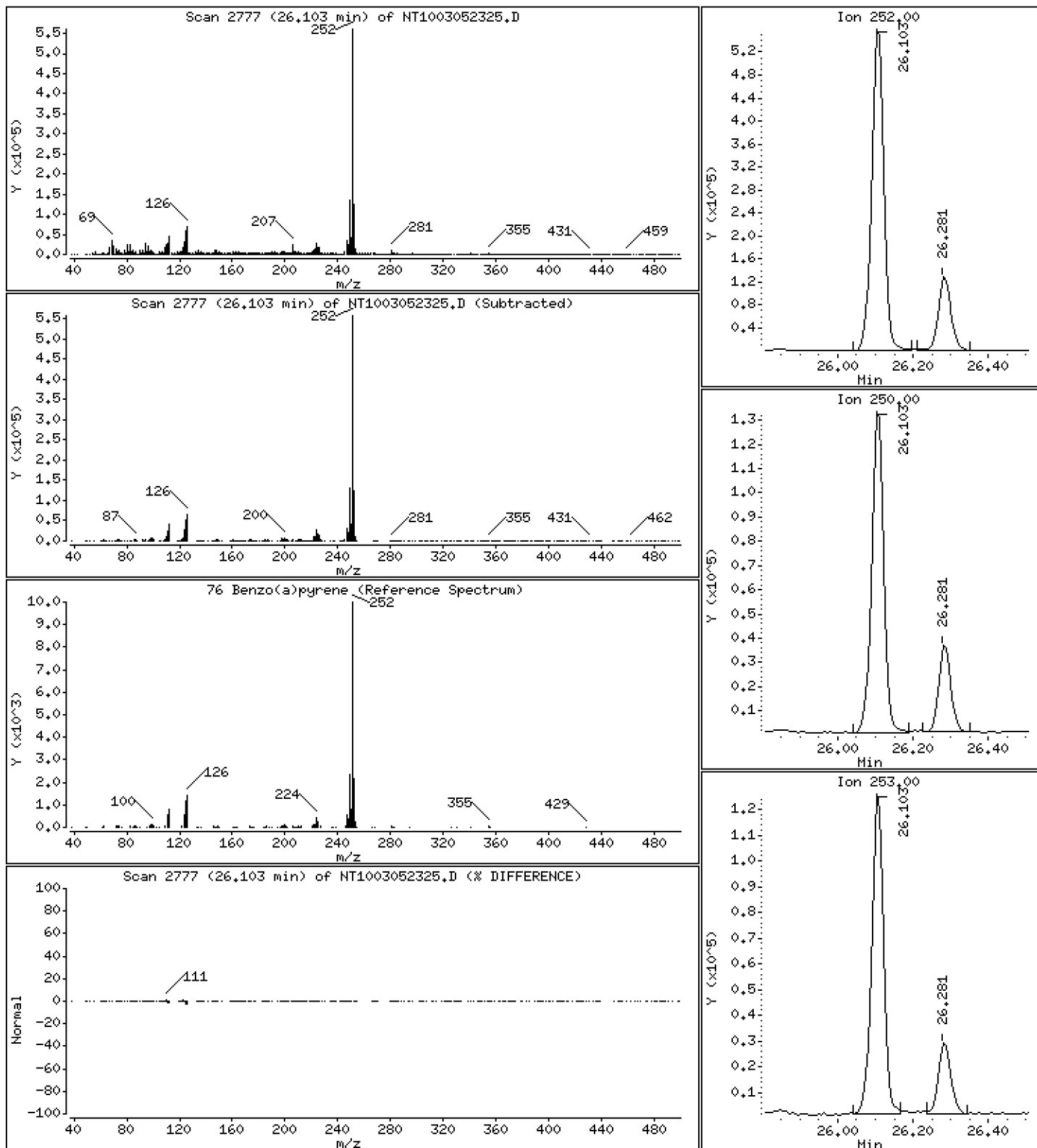
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,472 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

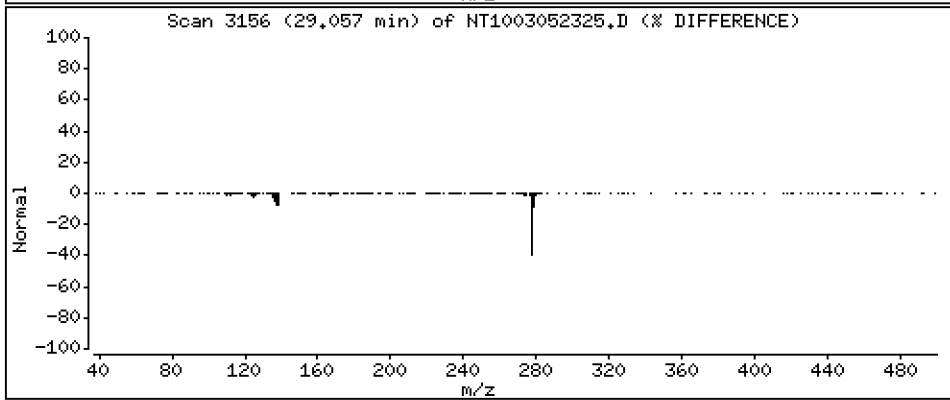
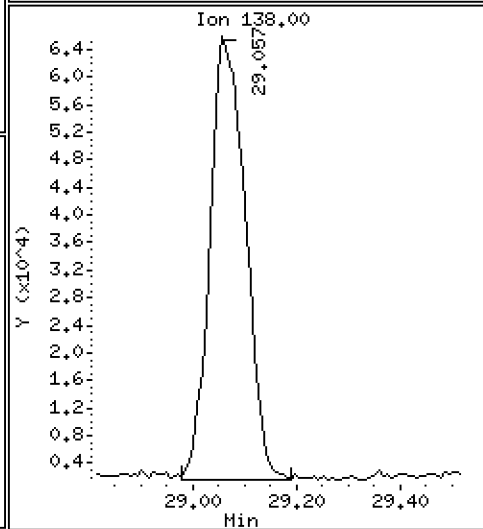
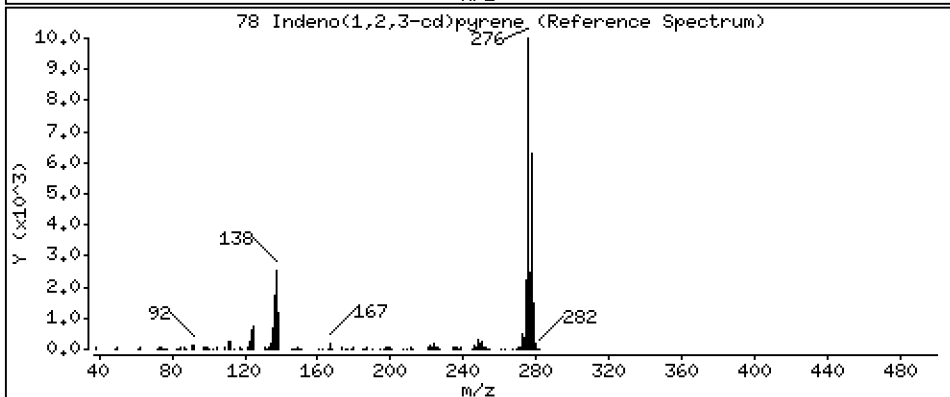
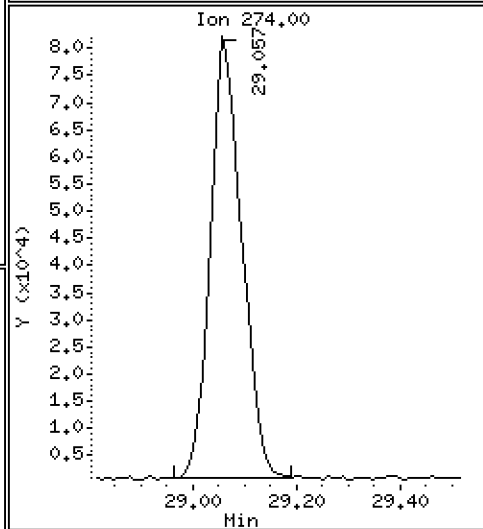
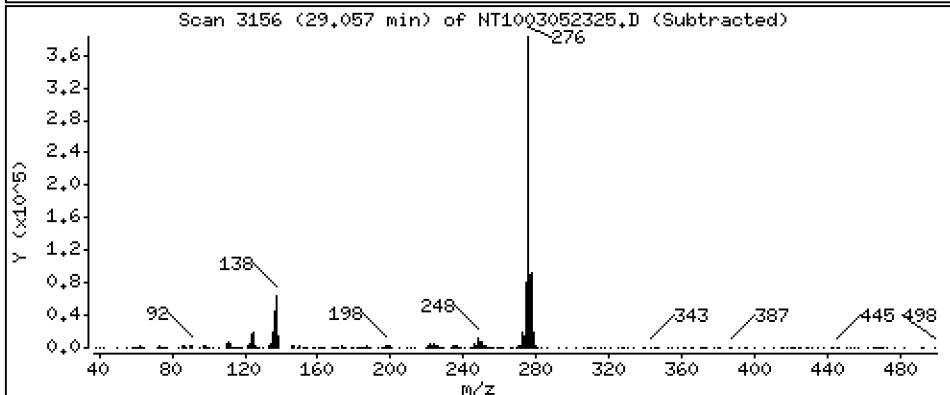
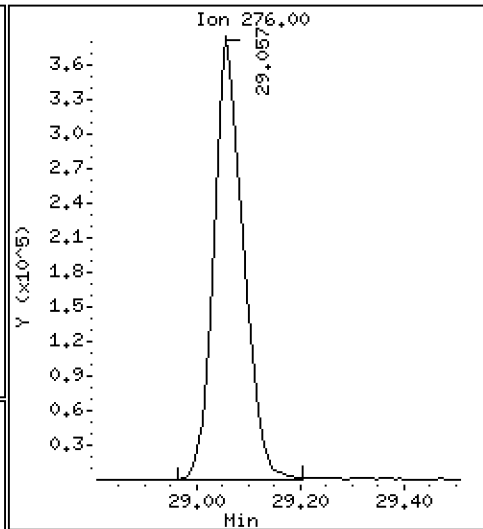
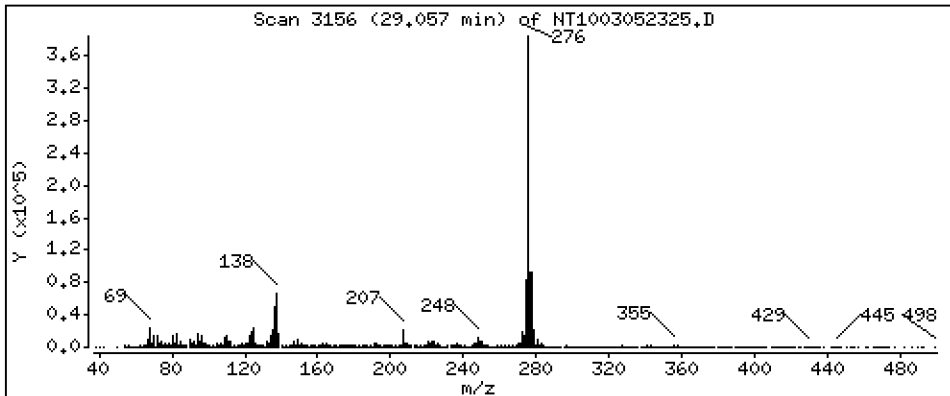
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,531 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

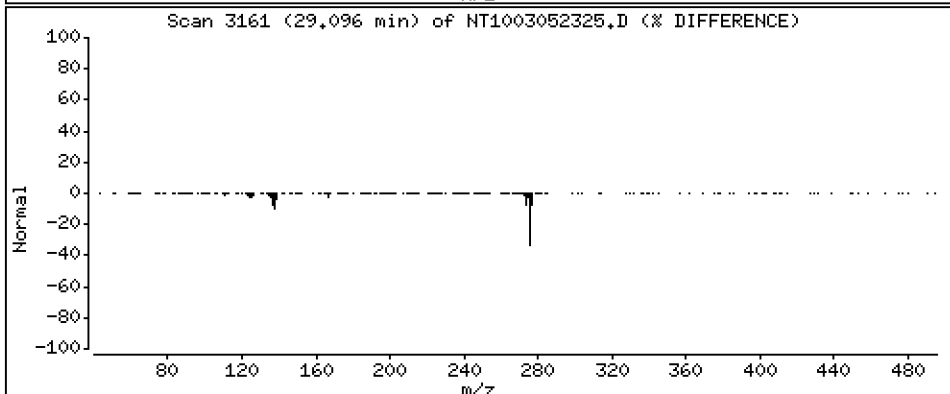
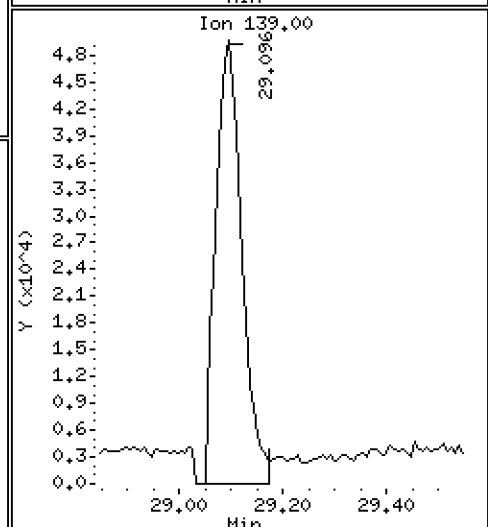
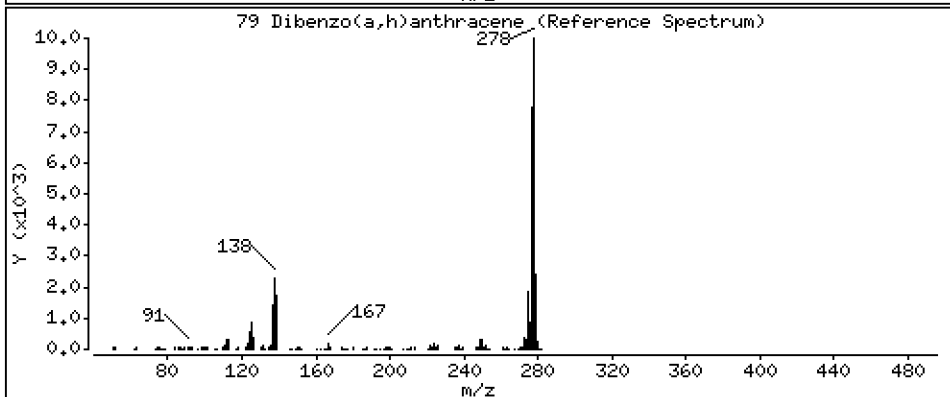
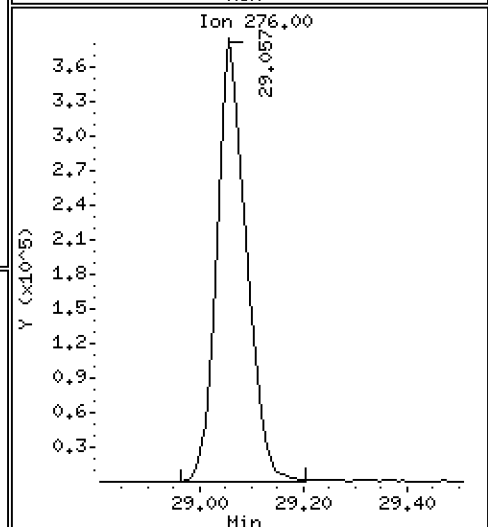
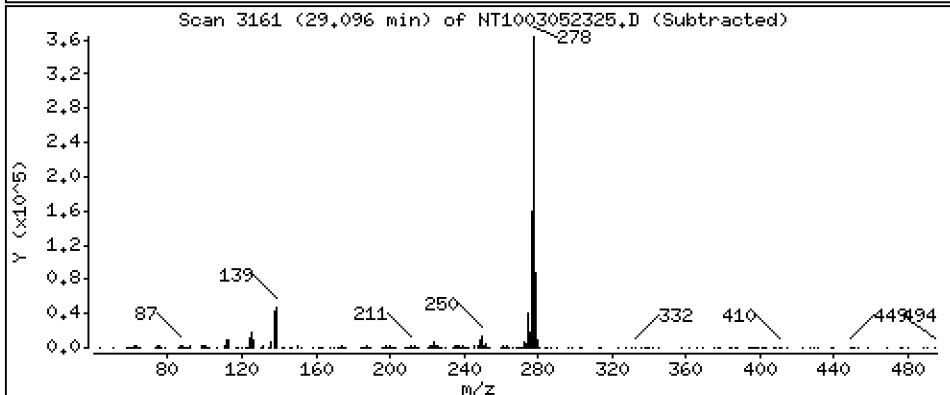
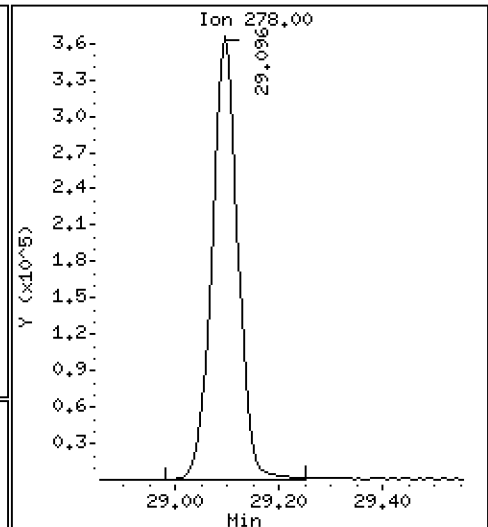
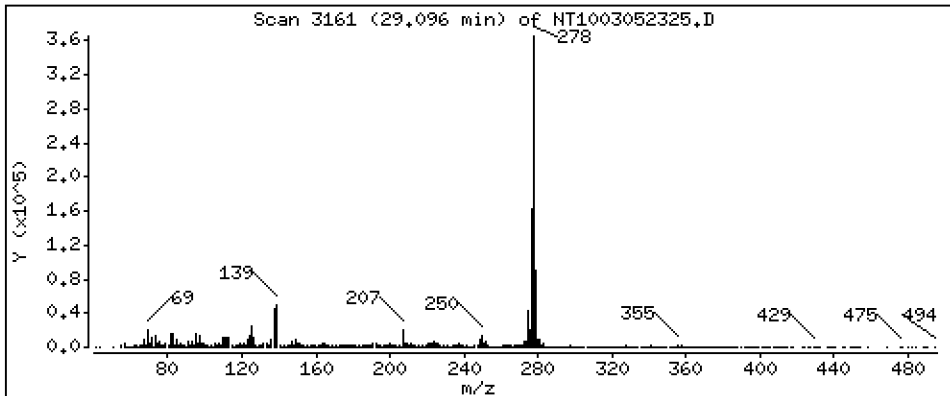
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,953 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

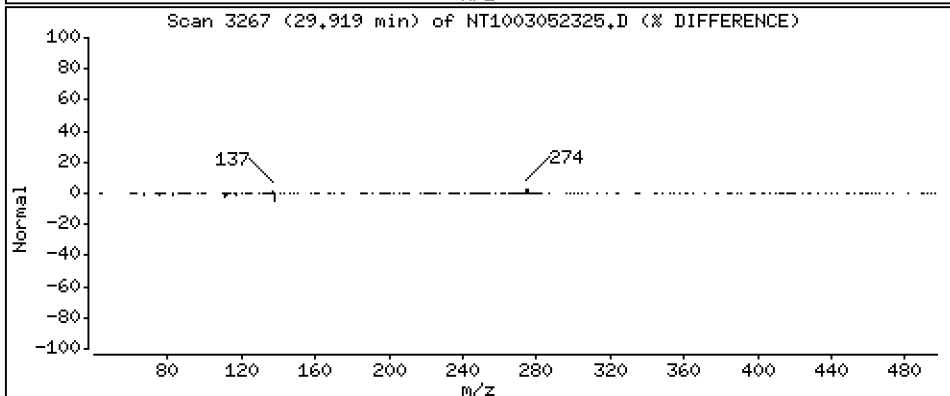
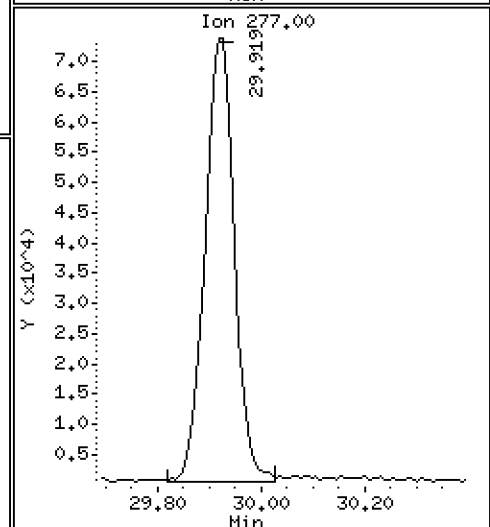
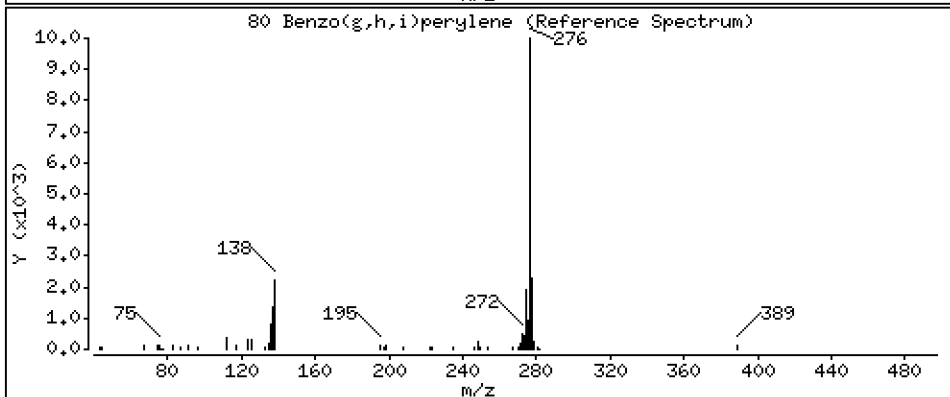
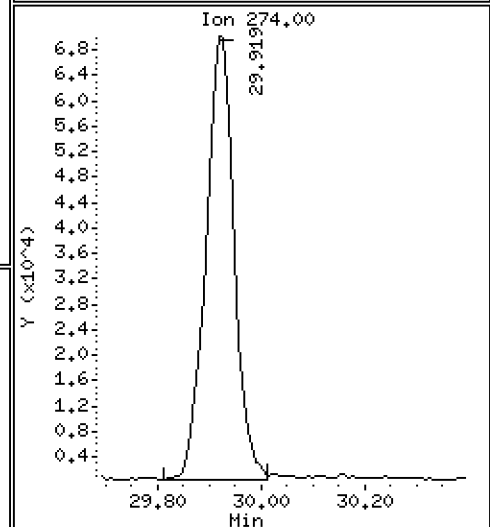
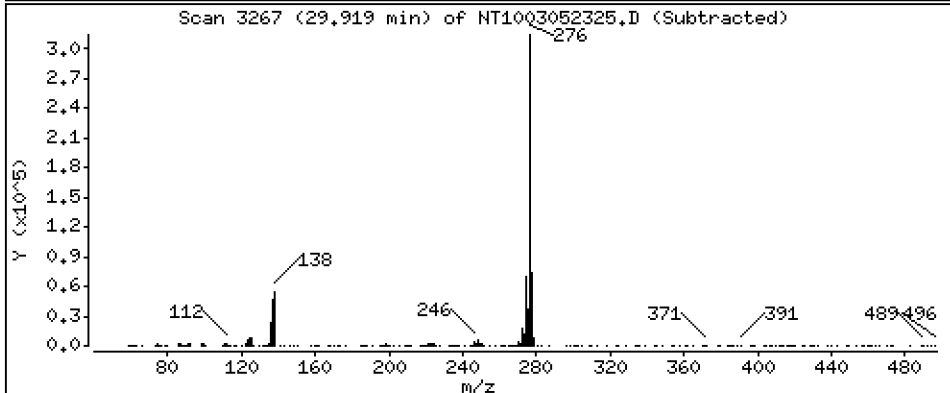
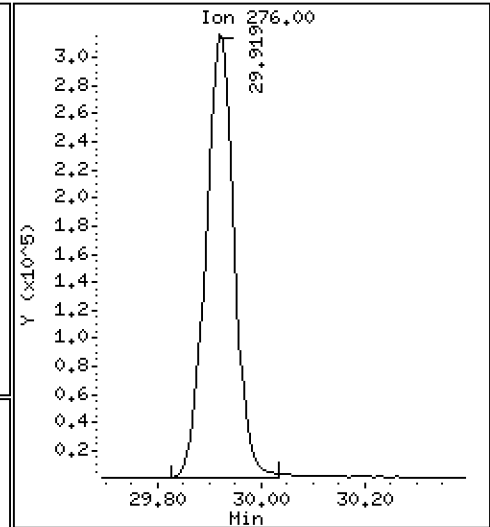
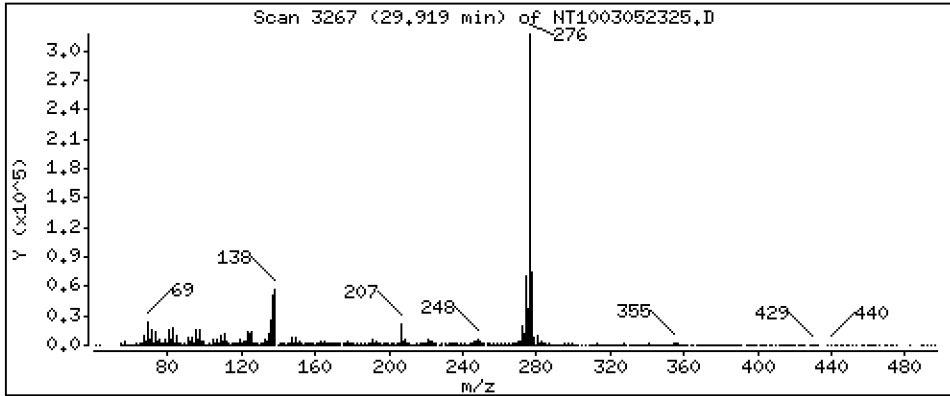
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,585 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

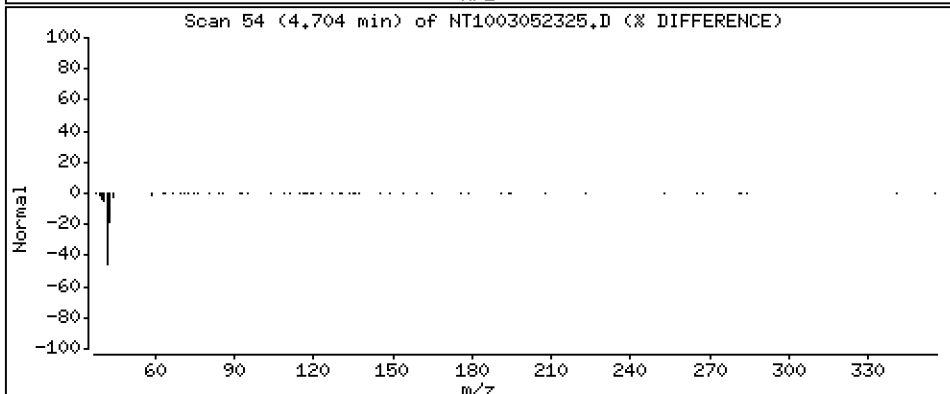
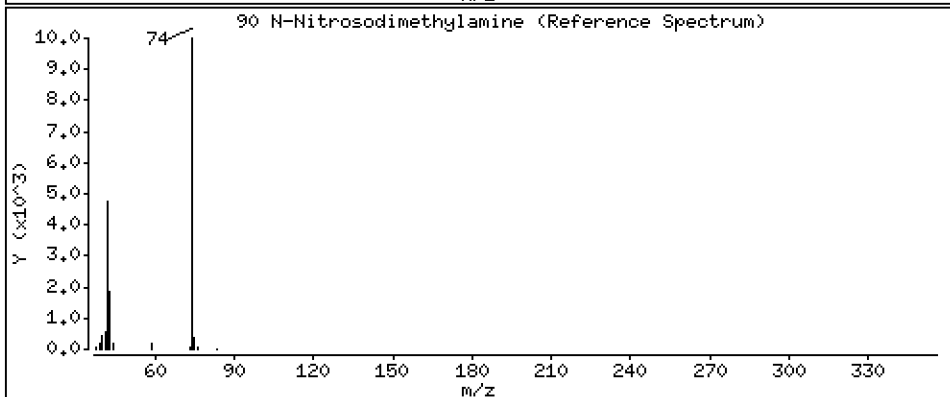
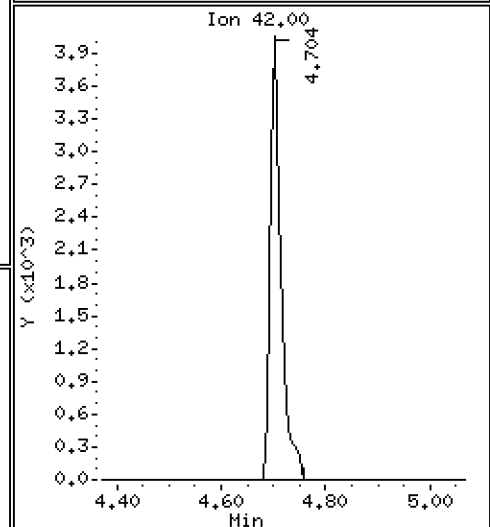
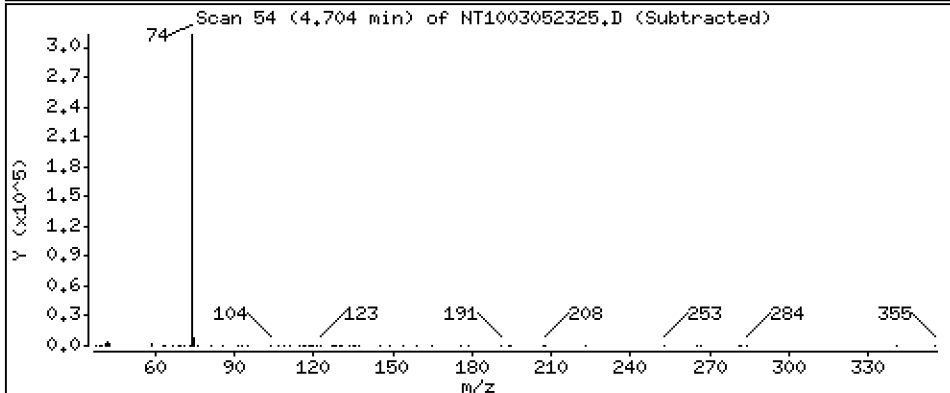
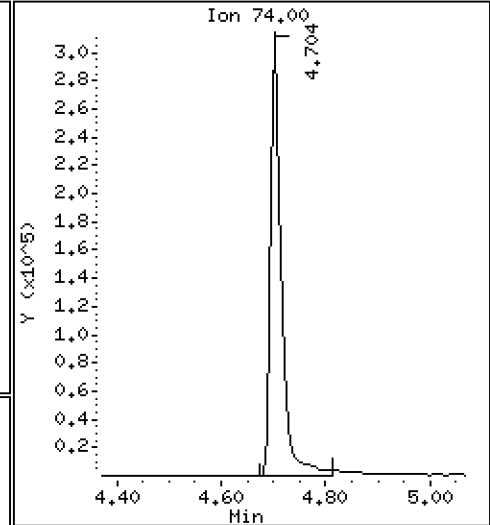
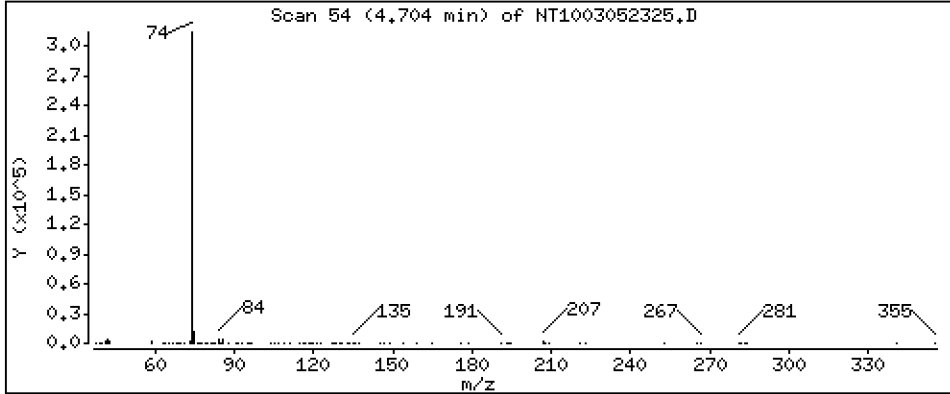
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 10,09 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

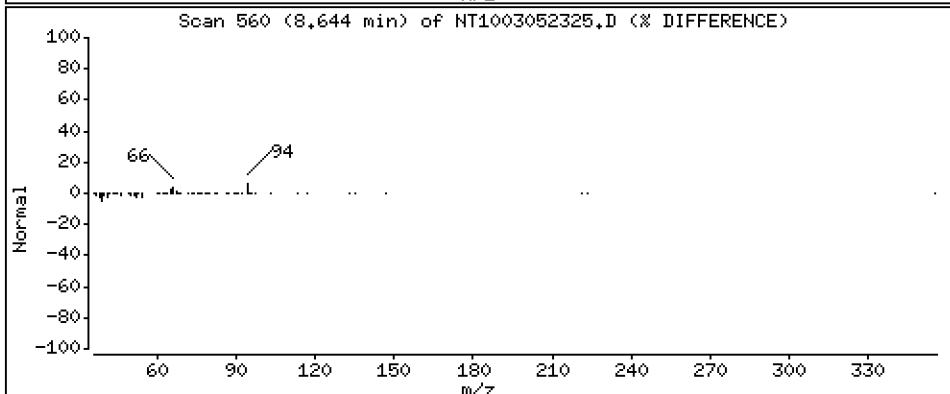
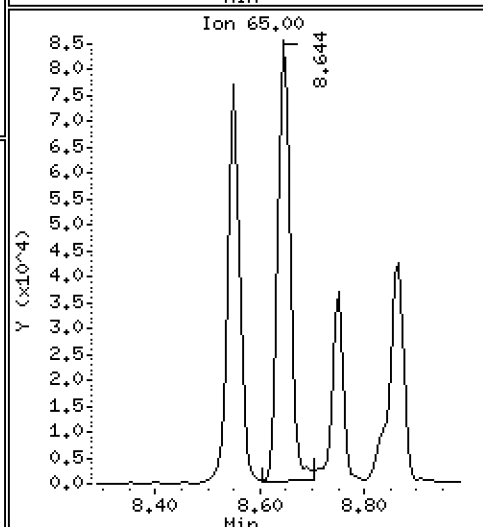
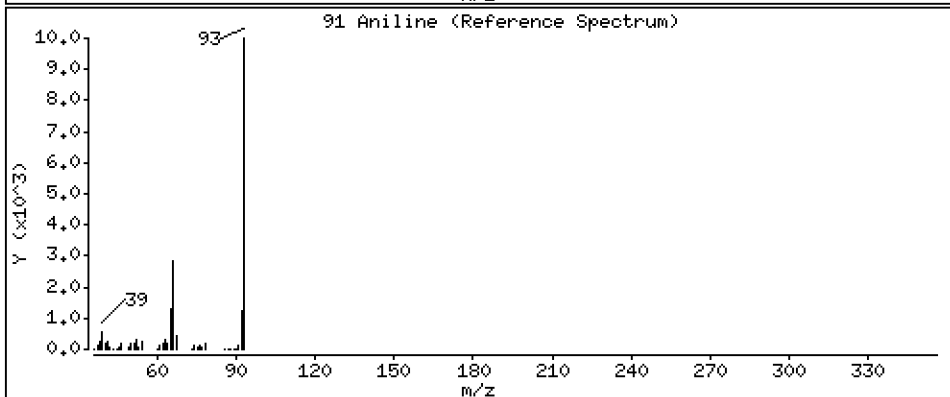
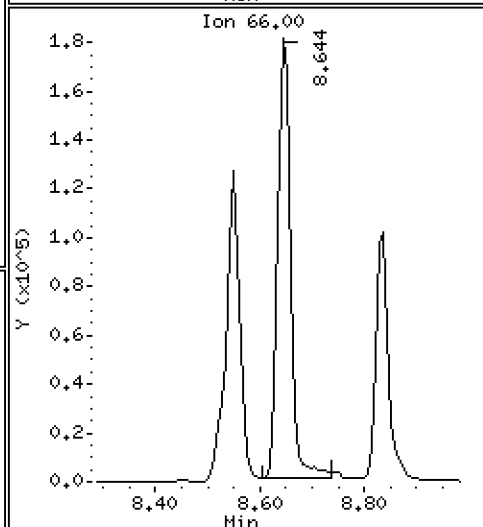
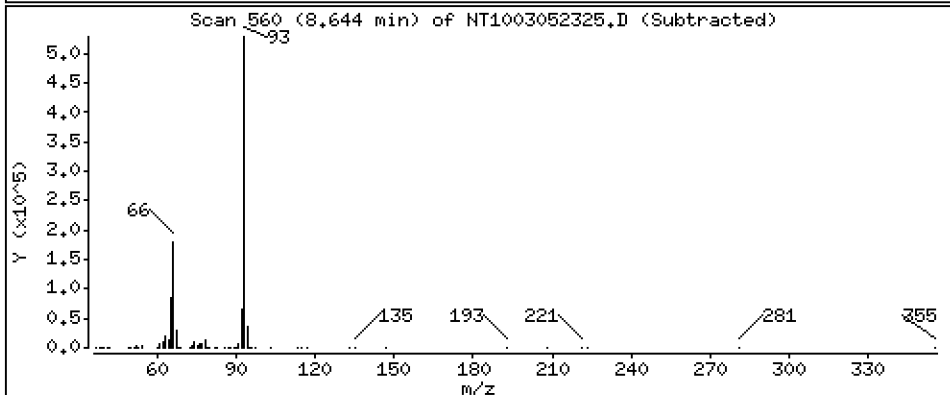
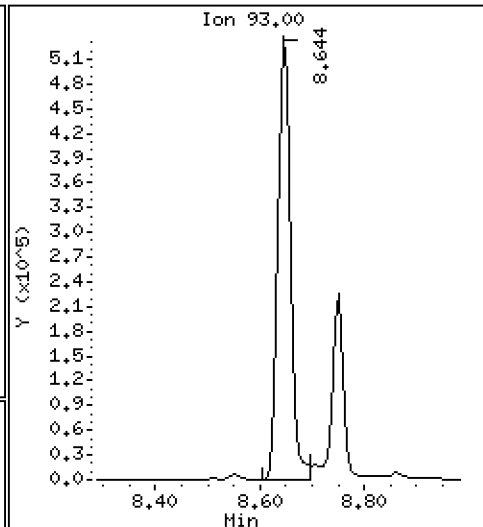
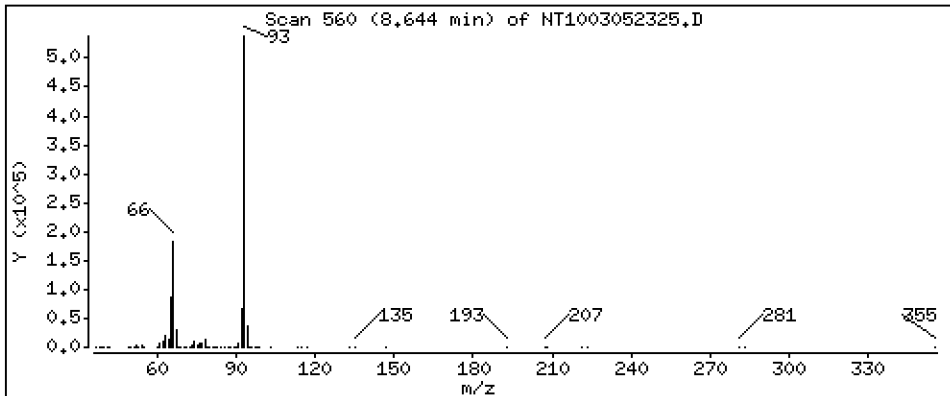
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 8,982 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

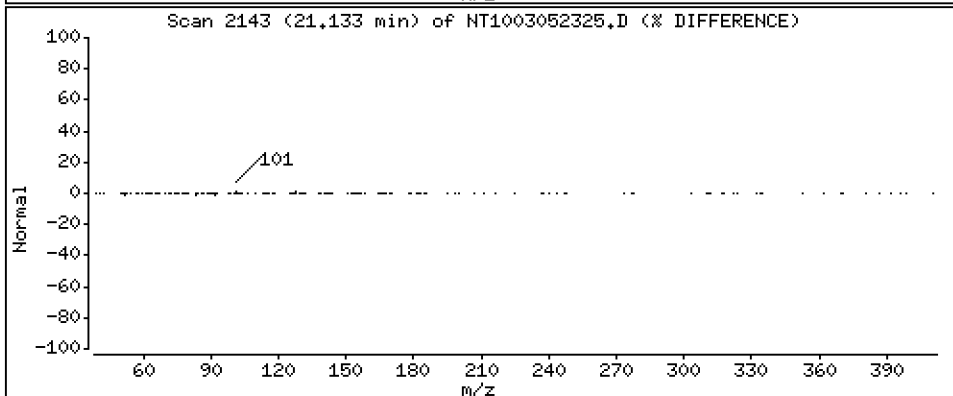
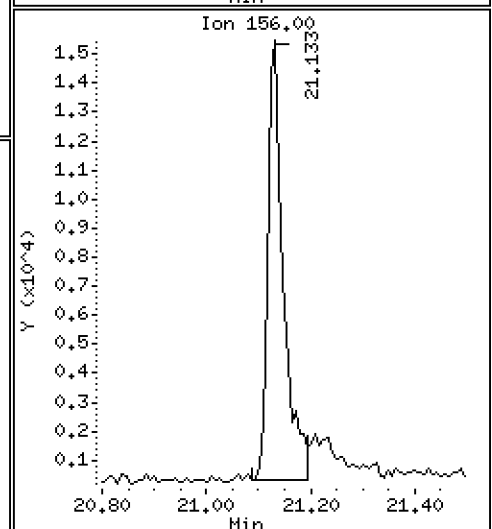
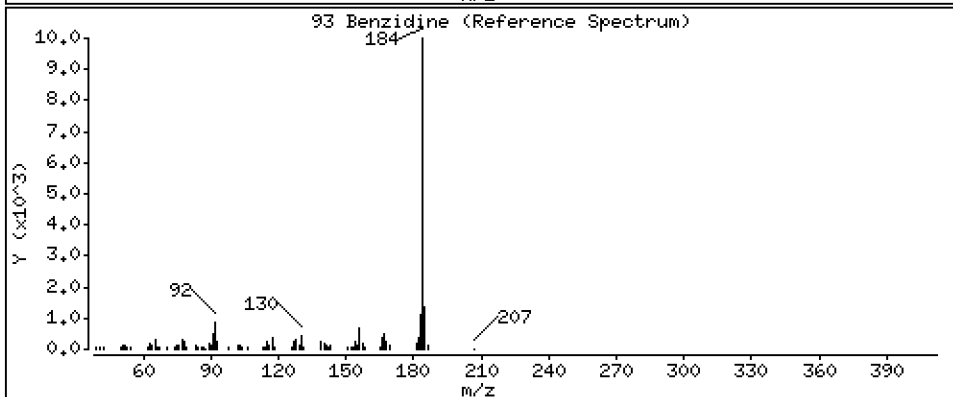
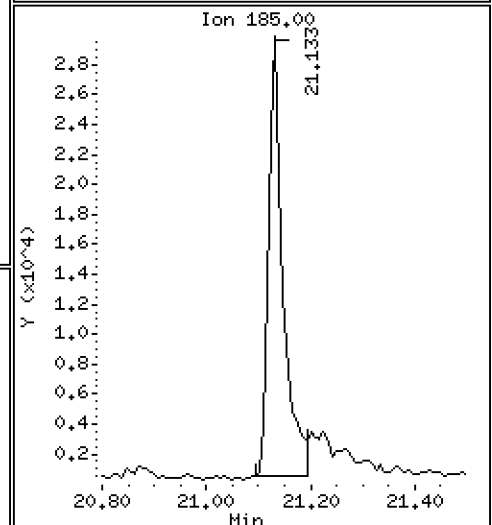
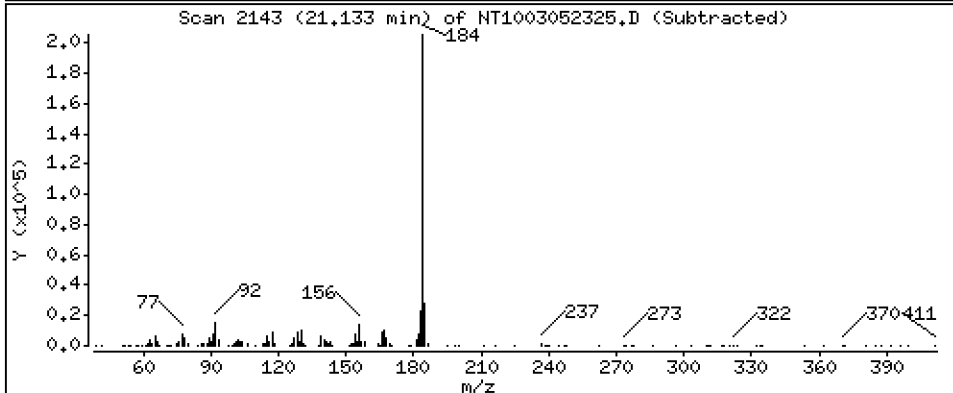
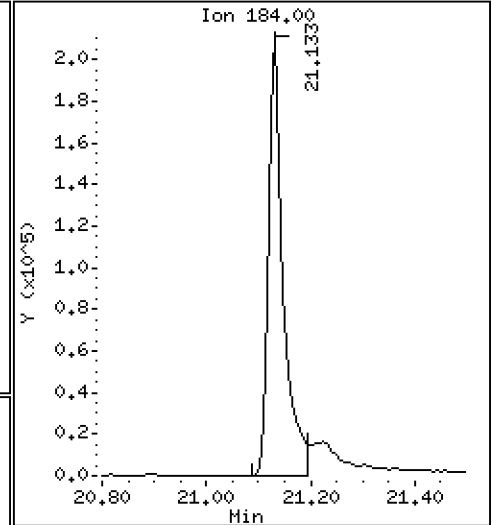
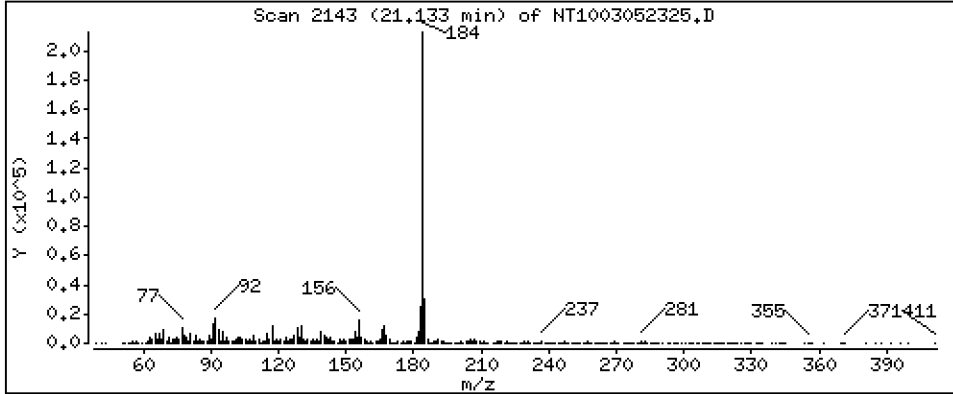
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 3,308 ug/mL

93 Benzidine



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

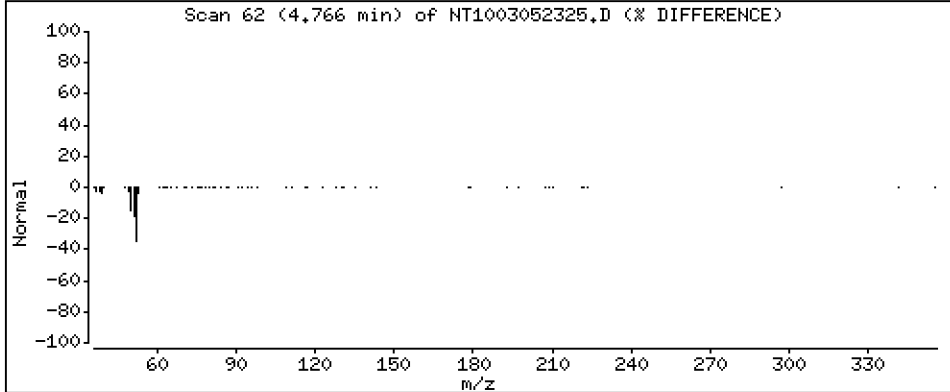
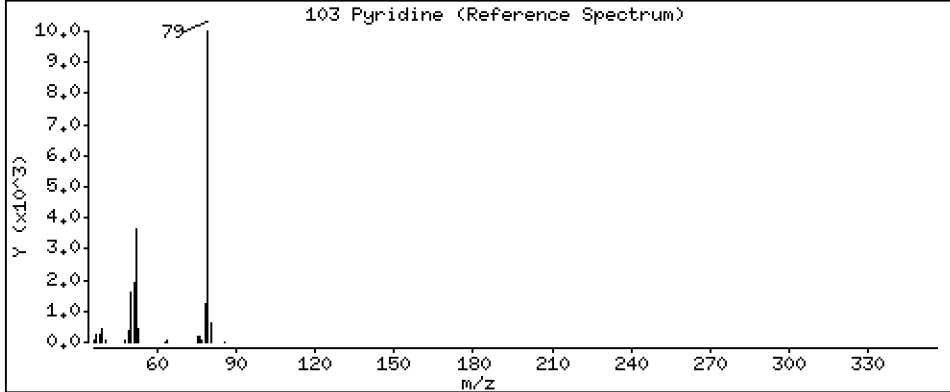
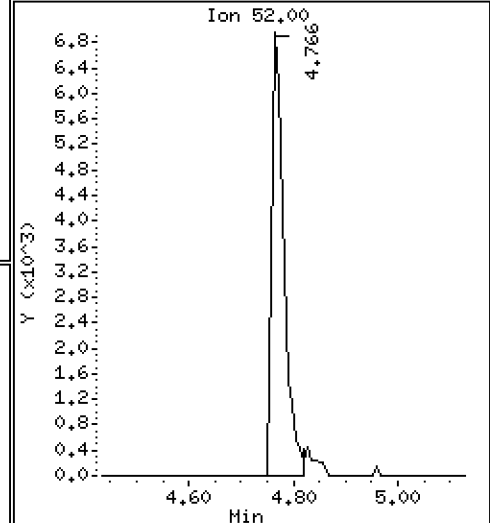
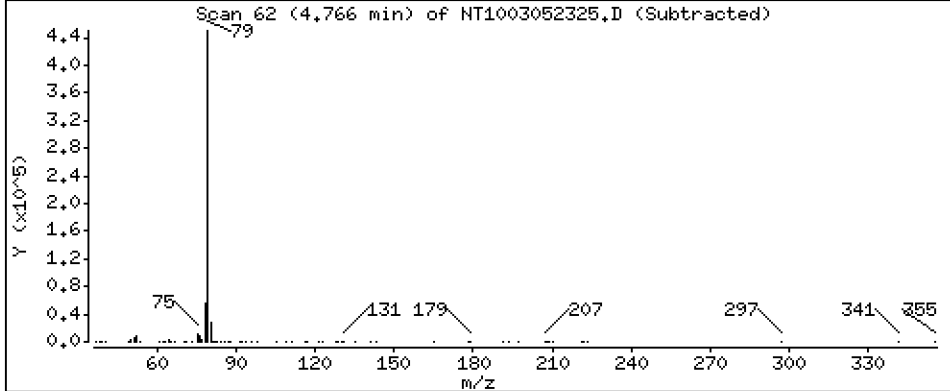
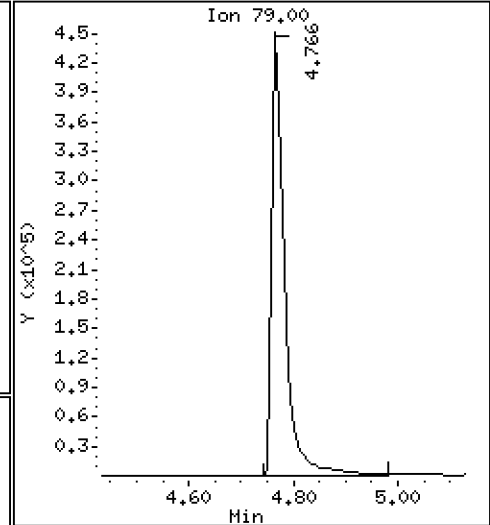
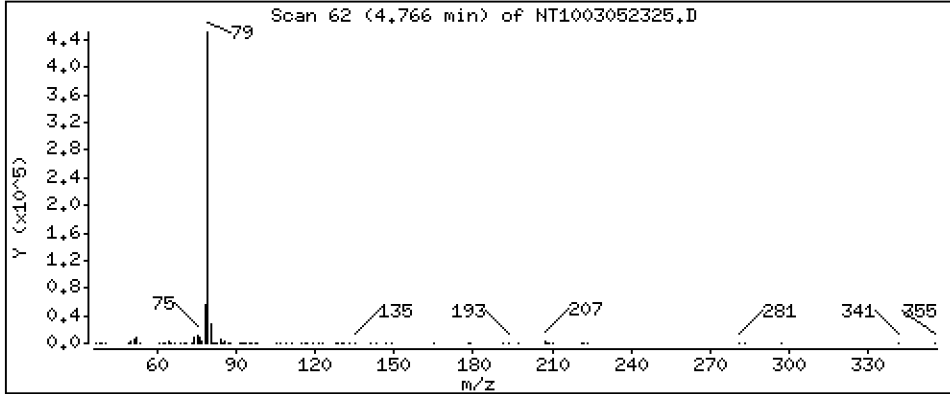
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 9,701 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

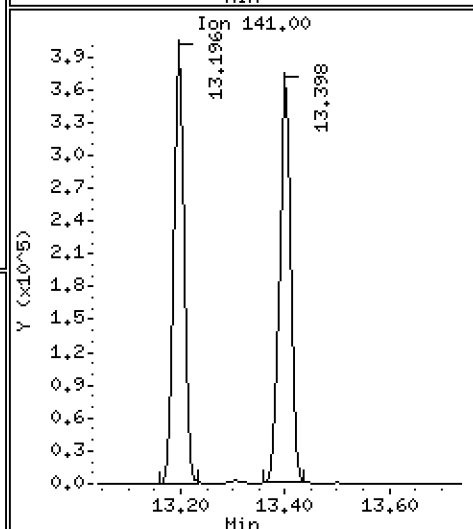
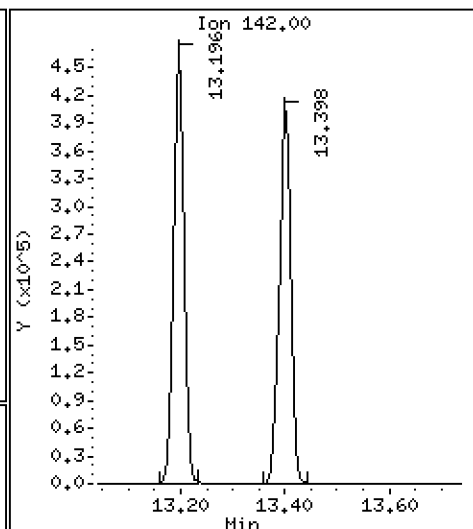
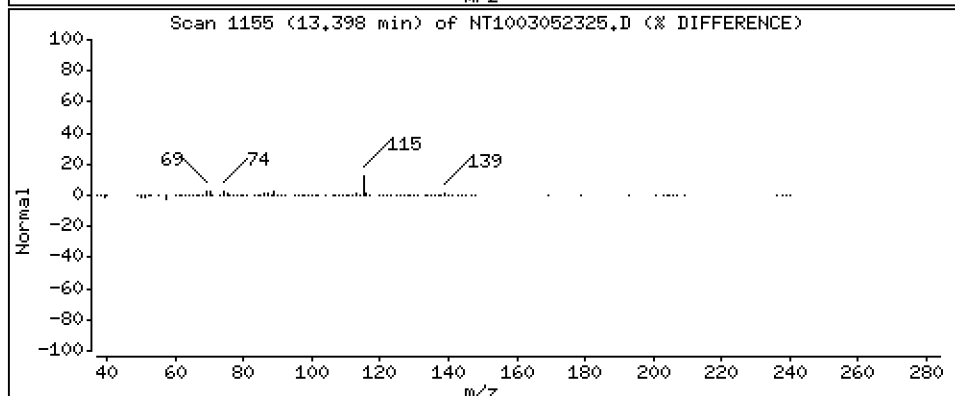
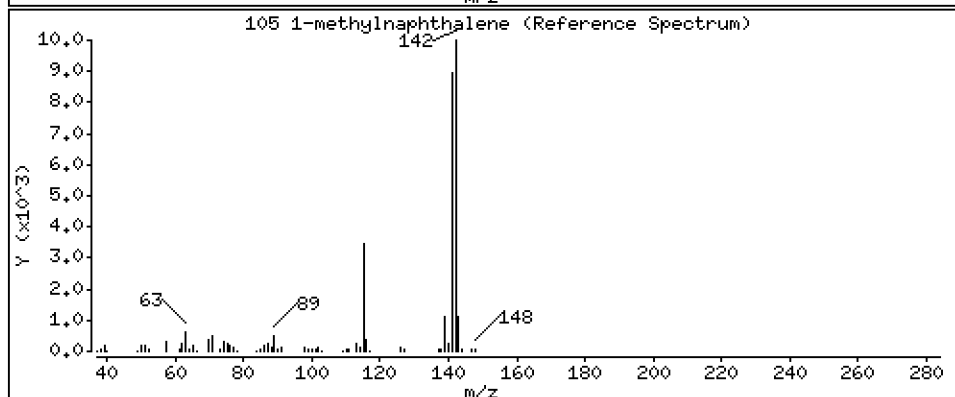
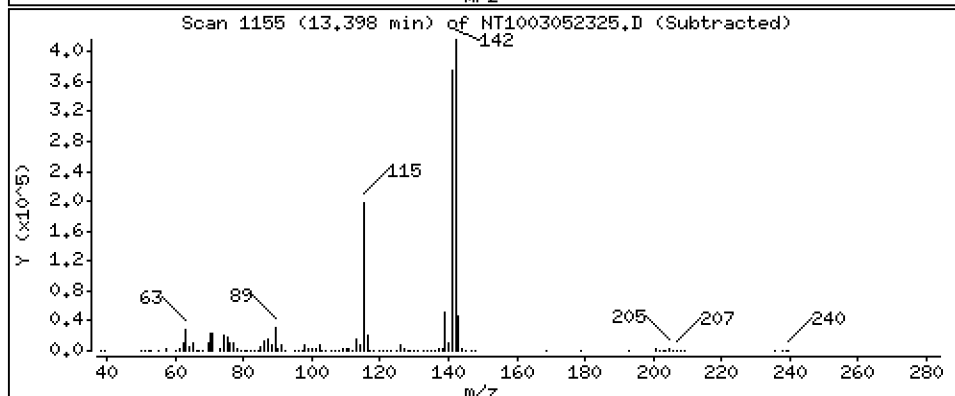
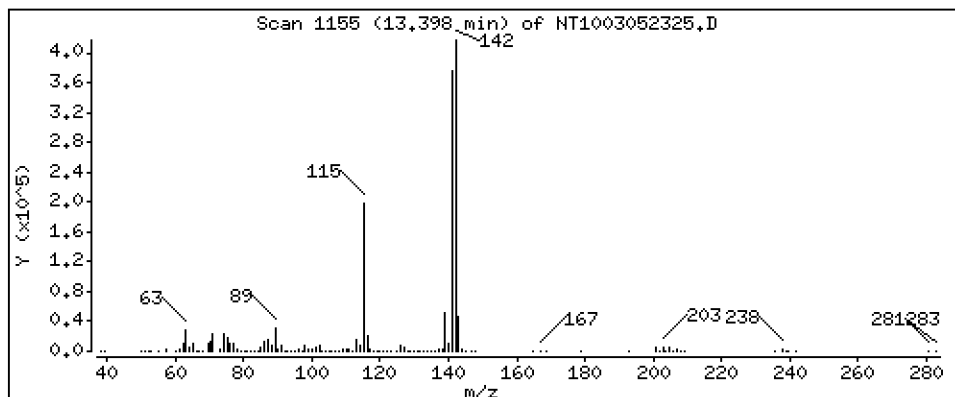
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,999 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

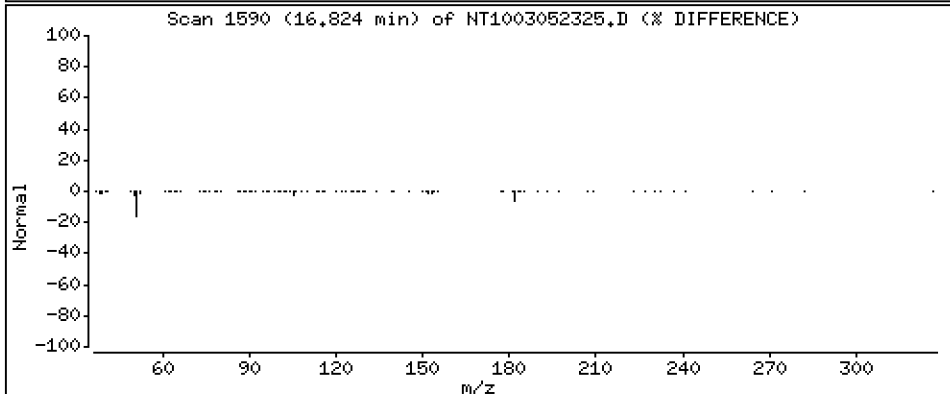
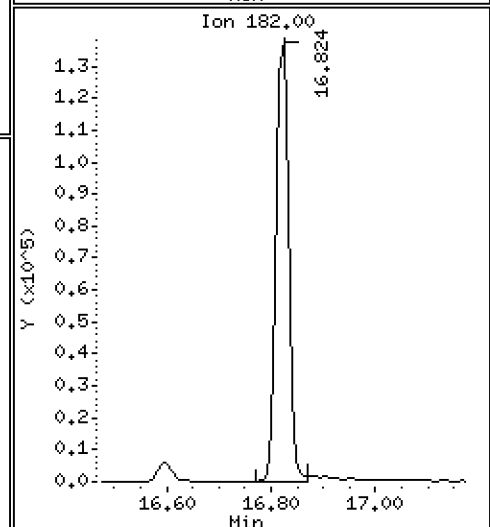
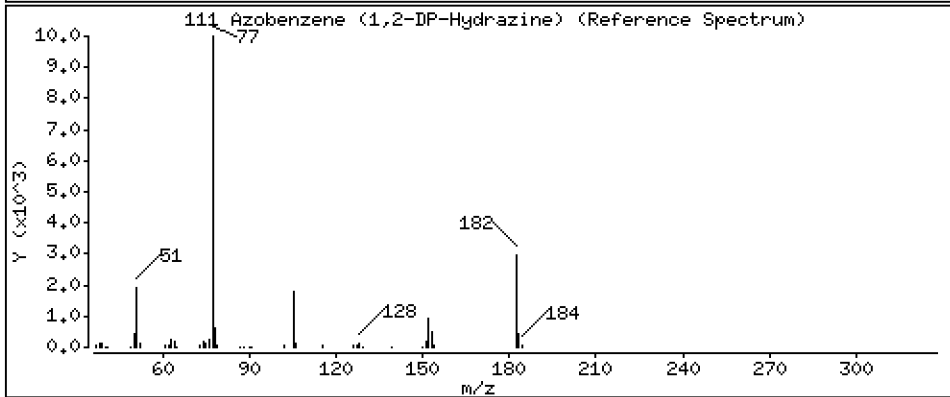
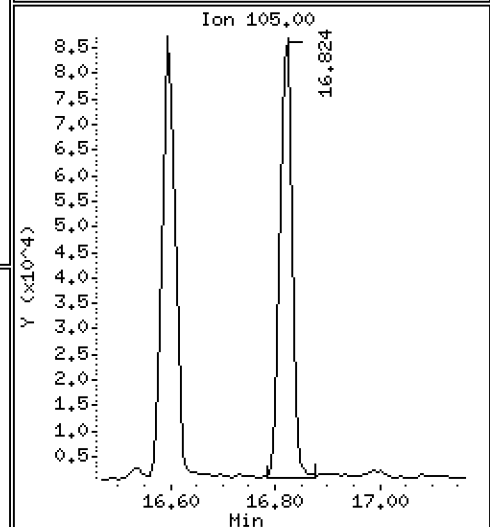
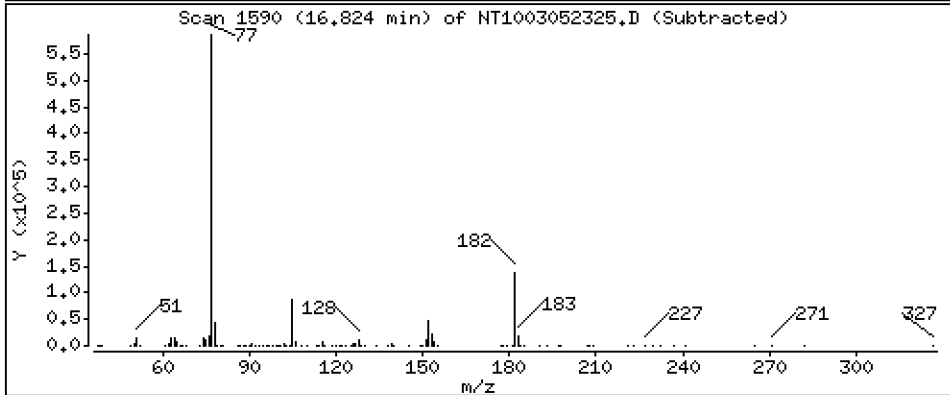
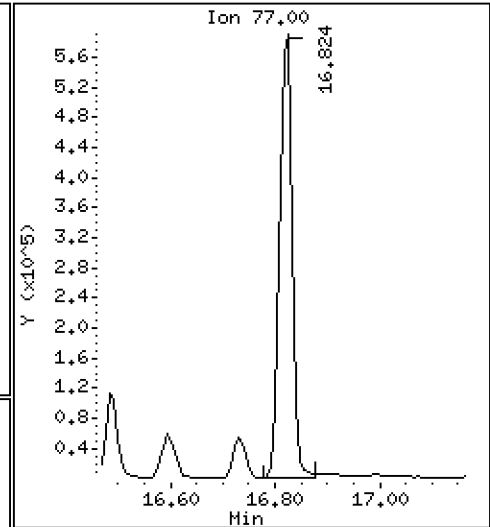
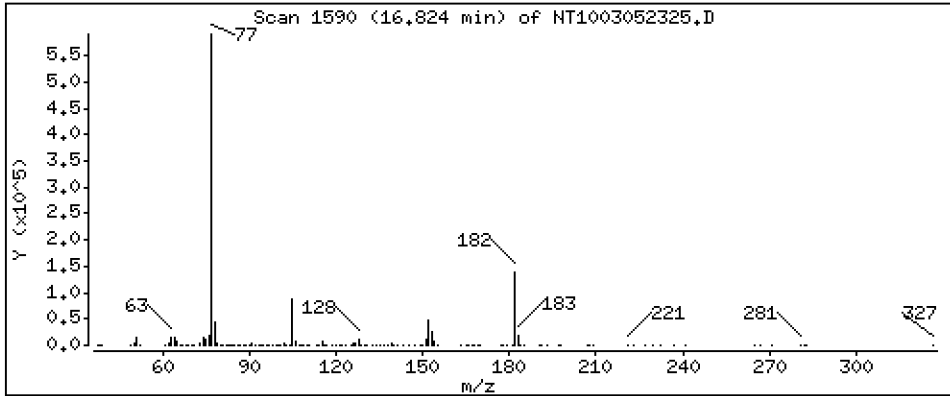
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,464 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

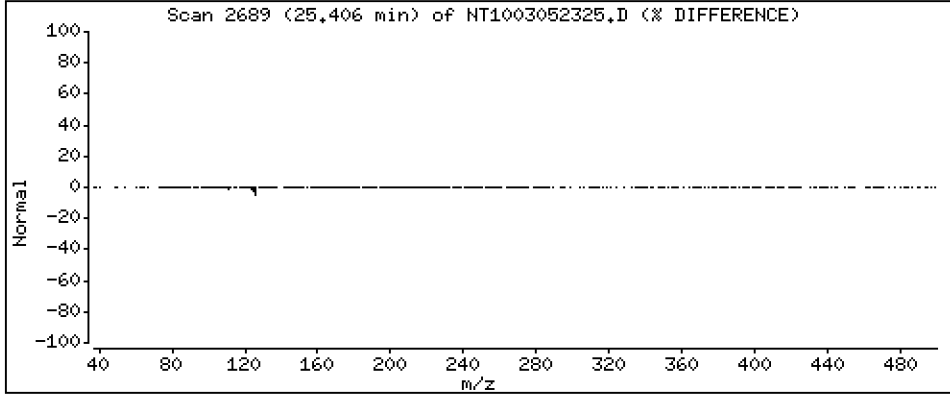
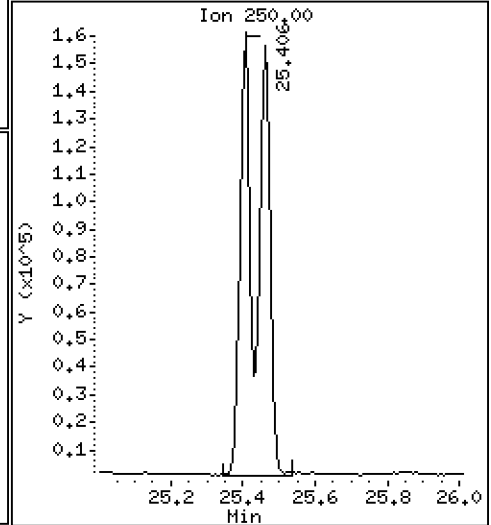
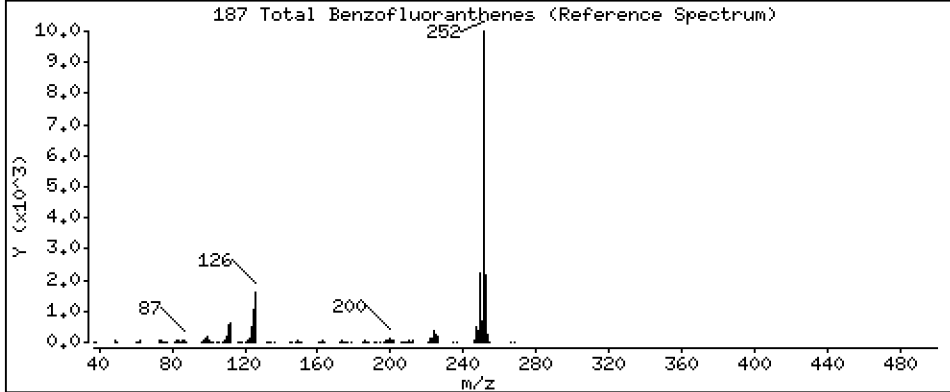
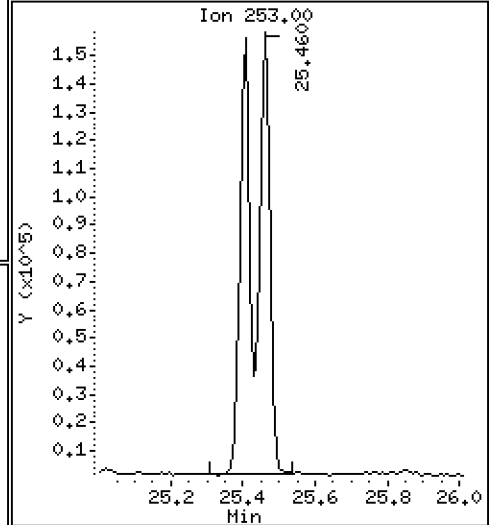
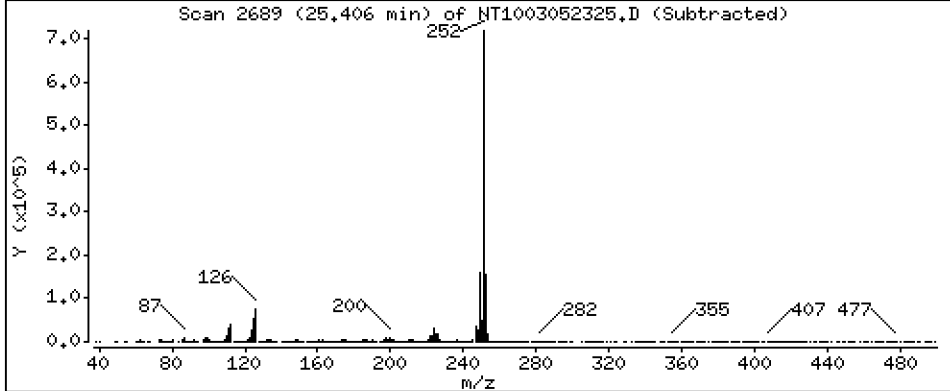
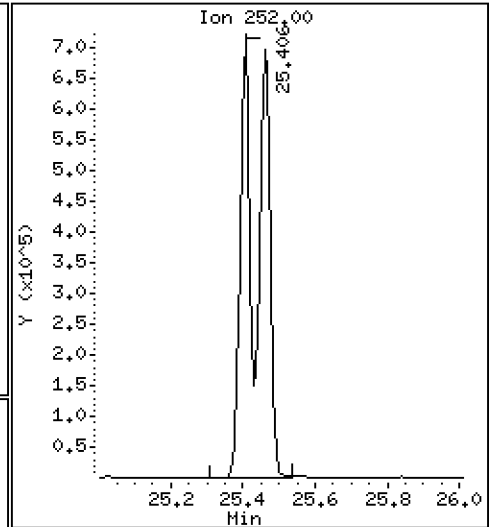
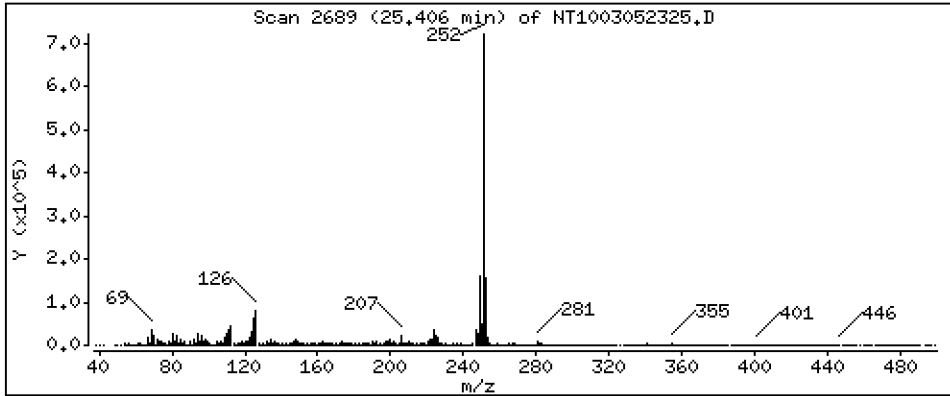
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,901 ug/mL



Date : 06-MAR-2023 04:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-CCV1

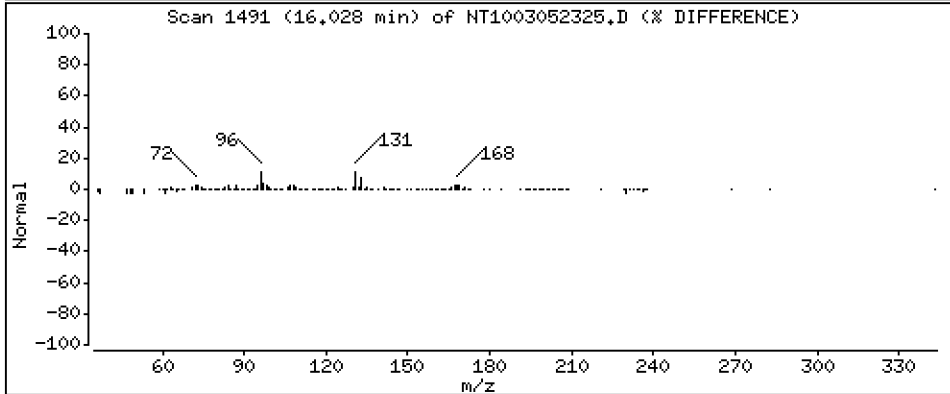
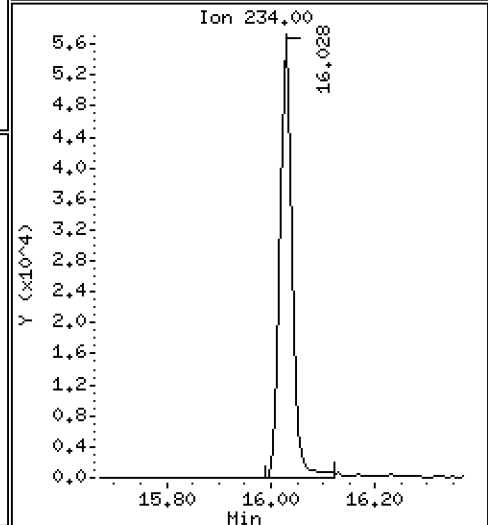
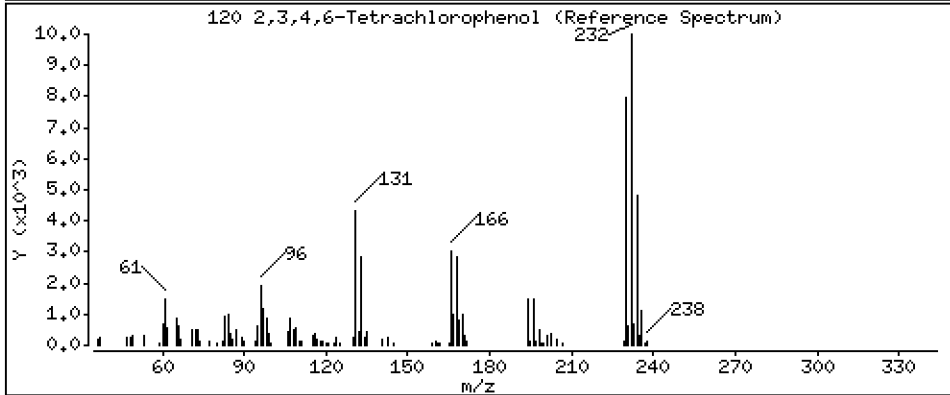
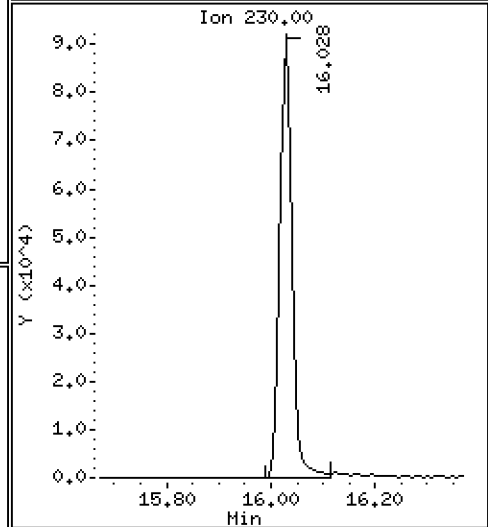
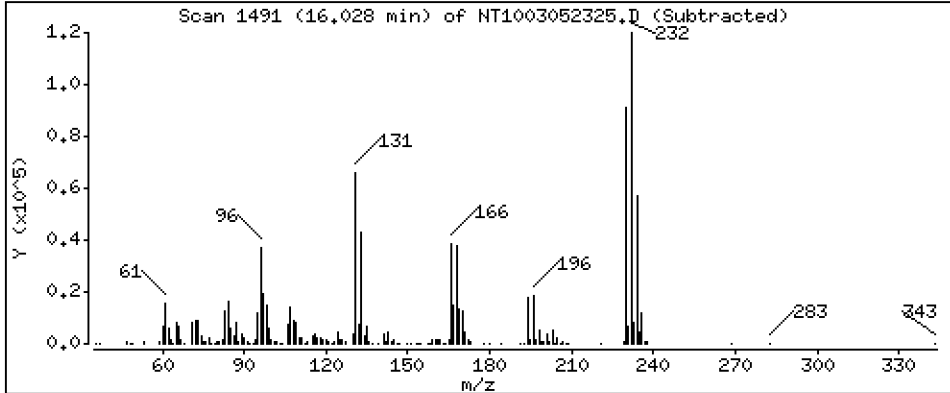
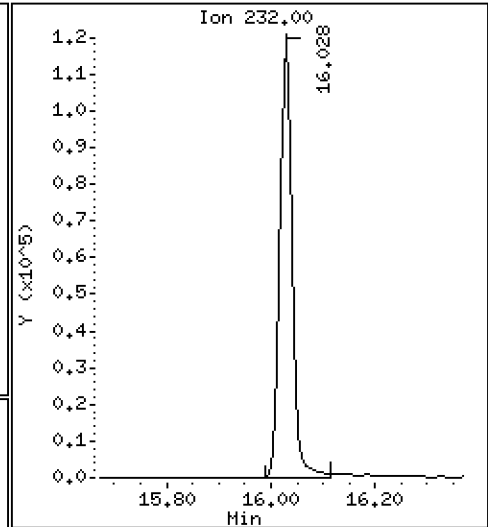
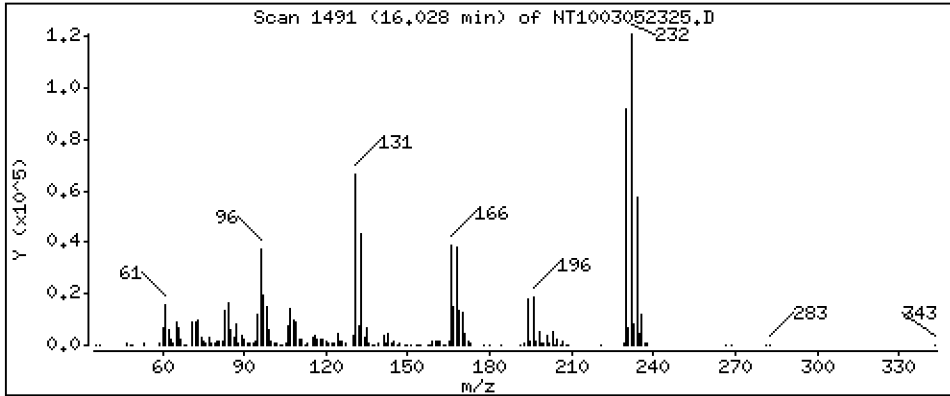
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 5,133 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305A.b\NT1003052325.D
 Lab Smp Id: SLC0415-CCV1
 Inj Date : 06-MAR-2023 04:32
 Operator : VTS
 Smp Info : SLC0415-CCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Meth Date : 27-Mar-2023 13:49 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.905	(0.745)	510427	7.58732	7.587
\$ 2 Phenol-d5	99		8.527	8.512	(0.921)	638582	8.17603	8.176
3 Phenol	94		8.550	8.535	(0.923)	426906	5.14096	5.141
\$ 5 2-Chlorophenol-d4	132		8.836	8.821	(0.954)	527911	7.92226	7.922
4 Bis(2-Chloroethyl)ether	93		8.751	8.736	(0.945)	328403	5.17531	5.175
6 2-Chlorophenol	128		8.867	8.852	(0.957)	362563	5.23736	5.237
7 1,3-Dichlorobenzene	146		9.153	9.138	(0.988)	366047	4.79593	4.796
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.247	(1.000)	213820	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.286	(1.003)	350249	4.61989	4.620
\$ 10 1,2-Dichlorobenzene-d4	152		9.557	9.542	(1.032)	238911	4.79880	4.799
12 1,2-Dichlorobenzene	146		9.580	9.565	(1.034)	339743	4.62986	4.630
11 Benzyl alcohol	108		9.510	9.487	(1.027)	188659	4.33366	4.334
14 2,2'-oxybis(1-Chloropropane)	121		9.751	9.736	(1.053)	106563	5.03706	5.037 (M)
13 2-Methylphenol	108		9.697	9.674	(1.047)	316228	4.80716	4.807
17 Hexachloroethane	117		10.232	10.217	(1.105)	131659	4.23093	4.231
16 N-Nitroso-di-n-propylamine	70		10.007	9.984	(1.080)	257585	5.14047	5.140
15 4-Methylphenol	108		9.984	9.961	(1.078)	332164	4.15857	4.159
\$ 18 Nitrobenzene-d5	82		10.325	10.302	(0.878)	452707	5.45496	5.455
19 Nitrobenzene	77		10.364	10.341	(0.882)	407518	5.23474	5.235
20 Isophorone	82		10.822	10.807	(0.920)	557077	5.60588	5.606
21 2-Nitrophenol	139		10.984	10.967	(0.934)	182875	4.35726	4.357
22 2,4-Dimethylphenol	107		11.043	11.018	(0.939)	684831	8.99201	8.992 (H)
23 Bis(2-Chloroethoxy)methane	93		11.247	11.222	(0.957)	312842	5.09422	5.094
24 Benzoic acid	105		11.221	11.205	(0.954)	499371	11.0471	11.05
25 2,4-Dichlorophenol	162		11.459	11.434	(0.975)	664679	10.9983	11.00
26 1,2,4-Trichlorobenzene	180		11.633	11.610	(0.989)	299307	5.12292	5.123
* 27 Naphthalene-d8	136		11.757	11.734	(1.000)	756023	4.00000	
28 Naphthalene	128		11.803	11.780	(1.004)	922559	4.75440	4.754
29 4-Chloroaniline	127		11.896	11.881	(1.012)	737596	8.44427	8.444
30 Hexachlorobutadiene	225		12.020	12.004	(1.022)	196611	4.62162	4.622
31 4-Chloro-3-methylphenol	107		12.855	12.840	(1.093)	620256	9.66036	9.660
32 2-Methylnaphthalene	142		13.196	13.181	(1.122)	683176	4.98369	4.984
33 Hexachlorocyclopentadiene	237		13.498	13.482	(0.879)	5211	0.38360	0.3836

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.769	13.753	(0.897)	425340	10.3934	10.39
35 2,4,5-Trichlorophenol	196	13.846	13.831	(0.902)	454938	10.3893	10.39
§ 36 2-Fluorobiphenyl	172	13.939	13.931	(0.908)	745409	5.07864	5.079
37 2-Chloronaphthalene	162	14.202	14.194	(0.925)	603674	5.23928	5.239
38 2-Nitroaniline	65	14.411	14.403	(0.939)	351662	10.7571	10.76
39 Dimethylphthalate	163	14.775	14.767	(0.963)	632468	4.75925	4.759
40 Acenaphthylene	152	15.061	15.054	(0.981)	1087765	5.47597	5.476
41 2,6-Dinitrotoluene	165	14.914	14.907	(0.972)	299253	9.93349	9.933
* 42 Acenaphthene-d10	164	15.347	15.340	(1.000)	411497	4.00000	
43 3-Nitroaniline	138	15.262	15.255	(0.994)	308338	9.20060	9.201
44 Acenaphthene	153	15.417	15.409	(1.005)	559974	4.67426	4.674
45 2,4-Dinitrophenol	184	15.486	15.479	(1.009)	112034	13.9588	13.96
46 Dibenzofuran	168	15.780	15.773	(1.028)	891010	5.01130	5.011
47 4-Nitrophenol	109	15.610	15.595	(1.017)	187589	7.78627	7.786
48 2,4-Dinitrotoluene	165	15.749	15.749	(1.026)	434240	9.88632	9.886
50 Diethylphthalate	149	16.244	16.244	(1.058)	649229	4.61159	4.612
49 Fluorene	166	16.492	16.492	(1.075)	710545	4.80320	4.803
51 4-Chlorophenyl-phenylether	204	16.492	16.484	(1.075)	332625	4.91100	4.911
52 4-Nitroaniline	138	16.538	16.531	(1.078)	303151	8.41539	8.415
53 4,6-Dinitro-2-methylphenol	198	16.592	16.593	(0.899)	292545	16.0222	16.02
54 N-Nitrosodiphenylamine	169	16.731	16.731	(0.907)	567880	5.15607	5.156
§ 55 2,4,6-Tribromophenol	330	16.993	16.994	(1.107)	197479	7.41250	7.413
56 4-Bromophenyl-phenylether	248	17.511	17.511	(0.949)	259346	5.81133	5.811
57 Hexachlorobenzene	284	17.627	17.627	(0.955)	283058	5.63246	5.632
58 Pentachlorophenol	266	18.045	18.045	(0.978)	102176	4.30552	4.306
* 59 Phenanthrene-d10	188	18.455	18.455	(1.000)	744396	4.00000	
60 Phenanthrene	178	18.502	18.509	(1.002)	938426	4.92600	4.926
61 Anthracene	178	18.610	18.618	(1.008)	981635	5.31400	5.314
62 Carbazole	167	18.943	18.950	(1.026)	867609	5.12678	5.127
63 Di-n-butylphthalate	149	19.631	19.647	(1.064)	1184741	4.97834	4.978
64 Fluoranthene	202	20.877	20.892	(0.889)	1159524	4.09551	4.096
65 Pyrene	202	21.310	21.326	(0.907)	1221383	4.23665	4.237
§ 66 Terphenyl-d14	244	21.581	21.604	(0.919)	1039383	4.45576	4.456
67 Butylbenzylphthalate	149	22.464	22.495	(0.956)	556579	3.63553	3.636
68 Benzo(a)anthracene	228	23.478	23.501	(0.999)	1364901	4.70341	4.703
* 69 Chrysene-d12	240	23.494	23.517	(1.000)	823005	4.00000	
70 3,3'-Dichlorobenzidine	252	23.416	23.447	(0.997)	1458047	11.1246	11.12
71 Chrysene	228	23.540	23.563	(1.002)	1222271	5.18258	5.183
72 bis(2-Ethylhexyl)phthalate	149	23.463	23.494	(0.956)	894991	4.59459	4.595
* 134 Di-n-octylphthalate-d4	153	24.554	24.593	(1.000)	1350476	4.00000	
73 Di-n-octylphthalate	149	24.562	24.601	(1.000)	1534343	5.12353	5.124
74 Benzo(b)fluoranthene	252	25.406	25.452	(0.969)	1361439	4.26582	4.266
75 Benzo(k)fluoranthene	252	25.460	25.507	(0.971)	1434523	4.64114	4.641
76 Benzo(a)pyrene	252	26.103	26.157	(0.995)	1278494	4.47172	4.472
* 77 Perylene-d12	264	26.227	26.289	(1.000)	894064	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.057	29.158	(1.108)	1514840	4.53147	4.531
79 Dibenzo(a,h)anthracene	278	29.095	29.204	(1.109)	1269873	4.95266	4.953
80 Benzo(g,h,i)perylene	276	29.919	30.043	(1.141)	1211385	4.58514	4.585
90 N-Nitrosodimethylamine	74	4.704	4.719	(0.508)	438193	10.0898	10.09
91 Aniline	93	8.643	8.636	(0.933)	864851	8.98235	8.982
93 Benzidine	184	21.132	21.148	(0.899)	415797	3.30826	3.308
103 Pyridine	79	4.766	4.781	(0.515)	747172	9.70095	9.701
105 1-methylnaphthalene	142	13.397	13.390	(1.139)	620266	4.99923	4.999
111 Azobenzene (1,2-DP-Hydrazine)	77	16.824	16.816	(1.096)	938445	4.46389	4.464

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252		25.406	25.507	(0.969)	2737448	8.90119	8.901
120 2,3,4,6-Tetrachlorophenol	232		16.028	16.020	(1.044)	209811	5.13319	5.133

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052325.D Calibration Time: 21:38
 Lab Smp Id: SLC0415-CCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	264922	132461	529844	213820	-19.29
27 Naphthalene-d8	947542	473771	1895084	756023	-20.21
42 Acenaphthene-d10	505666	252833	1011332	411497	-18.62
59 Phenanthrene-d10	940283	470142	1880566	744396	-20.83
69 Chrysene-d12	987952	493976	1975904	823005	-16.70
134 Di-n-octylphthala	1625017	812509	3250034	1350476	-16.89
77 Perylene-d12	1073798	536899	2147596	894064	-16.74

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.17
27 Naphthalene-d8	11.73	11.23	12.23	11.76	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.52	23.02	24.02	23.49	-0.10
134 Di-n-octylphthala	24.59	24.09	25.09	24.55	-0.16
77 Perylene-d12	26.29	25.79	26.79	26.23	-0.24

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

REVIEW SUMMARY FOR FILE - NT1003052325.D

Lab ID: SLC0415-CCV1
nt10.i, 20230305A.b\ABN.m, 06-MAR-2023 04:32

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

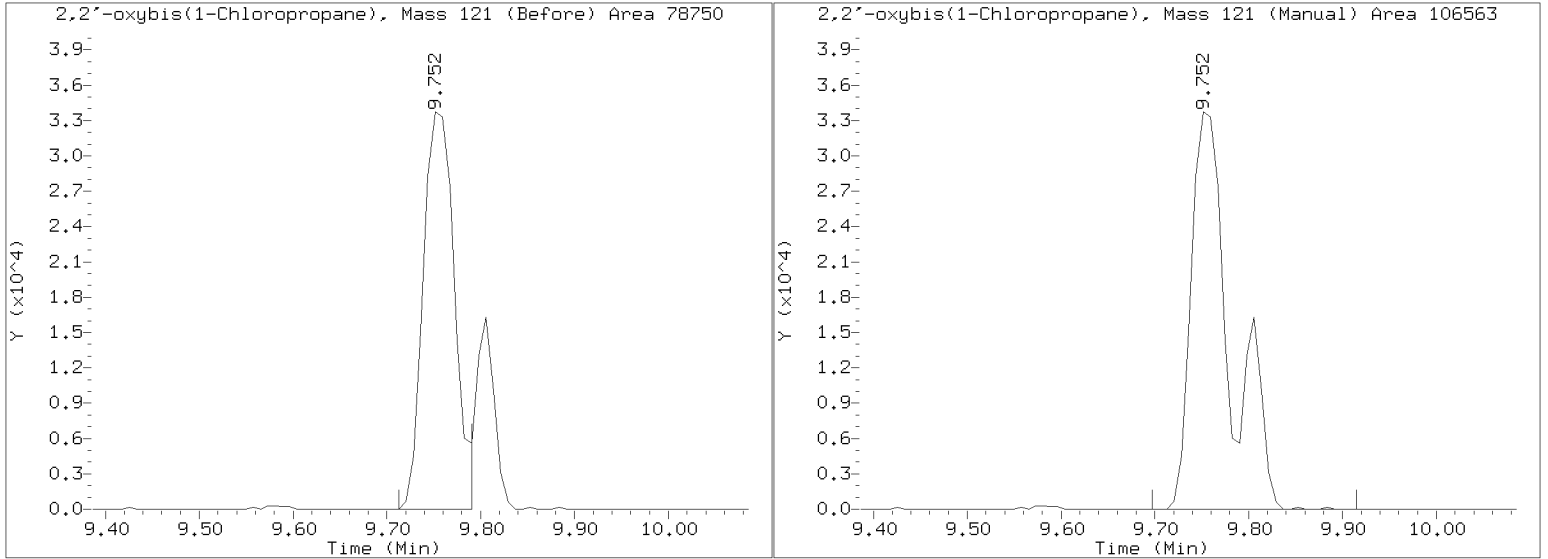
RRT check based on Ccal File: NT1003052314.D

On Column LOD for nt10.i, 20230305A.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052325.D
Injection Date: 06-MAR-2023 04:32
Lab ID:SLC0415-CCV1 Client ID:
Report Date: 03/27/2023 13:58



APPROVED
By Deenay Dunmore at 2:08 pm, Mar 27, 2023



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052316.D

Calibration Date: 03/01/2023

Sequence: SLC0415

Injection Date: 03/05/23

Lab Sample ID: SLC0415-LCV1

Injection Time: 22:54

Sequence Name: ABN 0.2

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.5534590	1.3099870		-15.7	+/-50
4-Methylphenol	A	0.20000	0.1	1.2087680	1.1194750		-25.8	+/-50
Naphthalene	A	0.20000	0.2	1.0266520	1.0394820		1.3	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7252818	0.7131369		-1.7	+/-50
Acenaphthylene	A	0.20000	0.2	1.9309320	1.8125060		-6.1	+/-50
Dimethylphthalate	A	0.20000	0.2	1.2917940	1.2618540		-2.3	+/-50
Acenaphthene	A	0.20000	0.2	1.1645250	1.1532140		-1.0	+/-50
Dibenzofuran	A	0.20000	0.2	1.7283260	1.7418940		0.8	+/-50
Fluorene	A	0.20000	0.2	1.4379840	1.3925950		-3.2	+/-50
Pentachlorophenol	A	0.40000	0.0	0.1145550				+/-50 *
Phenanthrene	A	0.20000	0.2	1.0236730	1.0126520		-1.1	+/-50
Anthracene	A	0.20000	0.2	0.9926226	0.9744375		-1.8	+/-50
Fluoranthene	A	0.20000	0.2	1.3760330	1.2601190		-8.4	+/-50
Pyrene	A	0.20000	0.2	1.4011560	1.2726620		-9.2	+/-50
Butylbenzylphthalate	A	0.20000	0.1	0.6475451	0.5162728		-31.6	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4104100	1.4070560		-0.2	+/-50
Chrysene	A	0.20000	0.2	1.1462500	1.2534210		9.4	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5331838	0.5229379		-6.8	+/-50
Benzo(a)fluoranthene, Total	A	0.40000	0.4	1.3383070	1.2091670		-7.7	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2312020	1.1441300		-6.2	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.4033590	1.4175680		-0.6	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.1150690	1.1780240		8.9	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.1245240	1.1757520		3.4	+/-50
2-Fluorophenol	A	0.30000	0.257	1.2585100	1.0794540		-14.2	+/-50
Phenol-d5	A	0.30000	0.241	1.4611190	1.1758820		-19.5	+/-50
2-Chlorophenol-d4	A	0.30000	0.295	1.2465880	1.2266150		-1.6	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.186	0.9313544	0.8672566		-6.9	+/-50
Nitrobenzene-d5	A	0.20000	0.194	0.4390871	0.4251185		-3.2	+/-50
2-Fluorobiphenyl	A	0.20000	0.224	1.4267270	1.5970890		11.9	+/-50
2,4,6-Tribromophenol	A	0.30000	0.136	0.2287830	0.1116112		-54.6	+/-50 *
p-Terphenyl-d14	A	0.20000	0.197	1.1337350	1.1186470		-1.3	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A.B\NT1003052316.D

Date: 05-HR-2023 22:54

Client ID:

Sample Info: SLC0415-LCW1

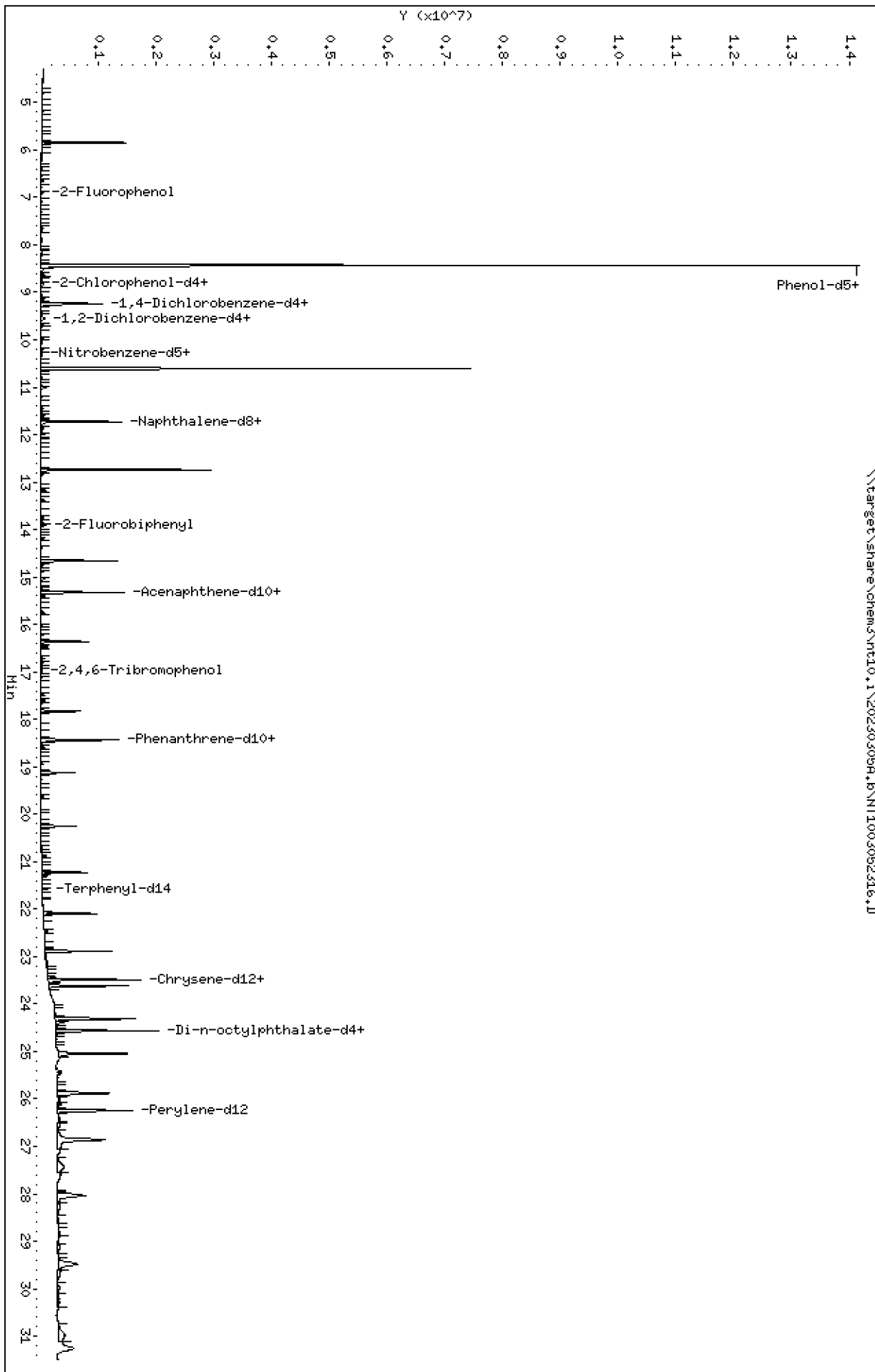
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305A.B\NT1003052316.D



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

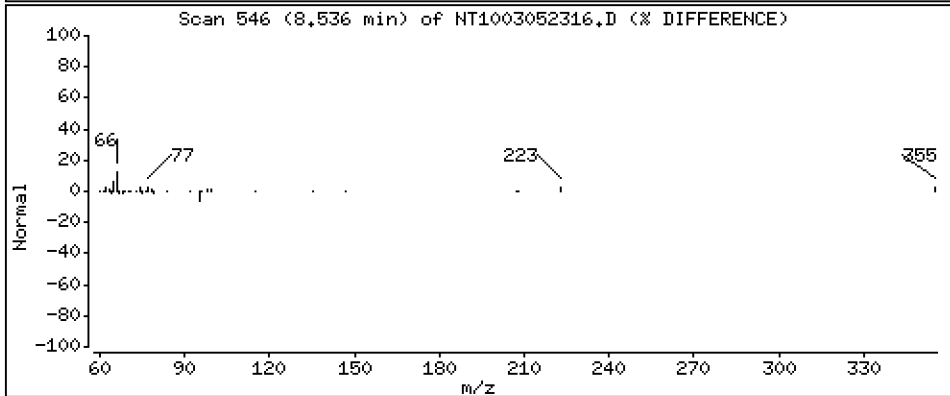
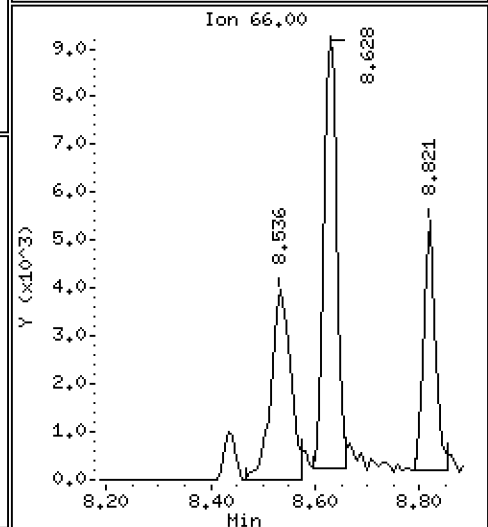
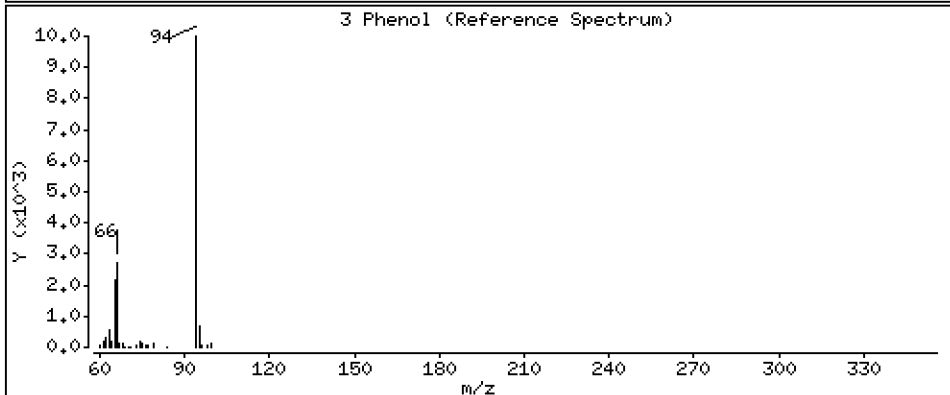
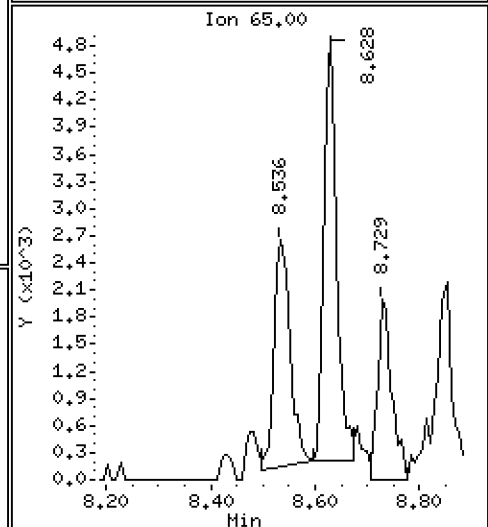
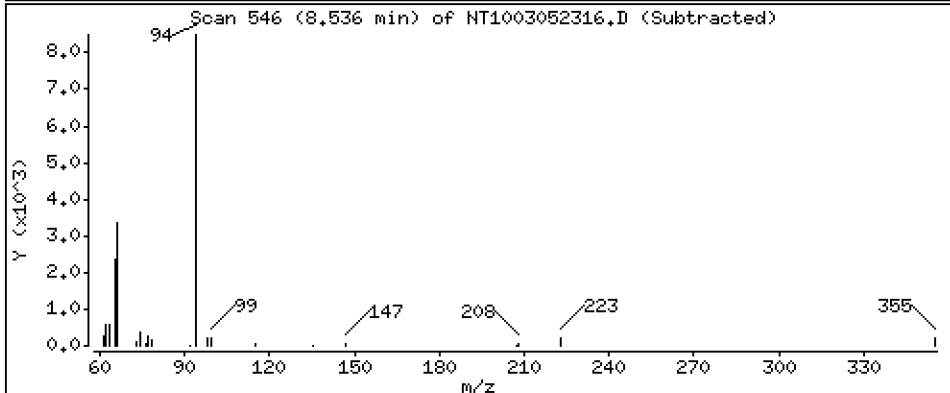
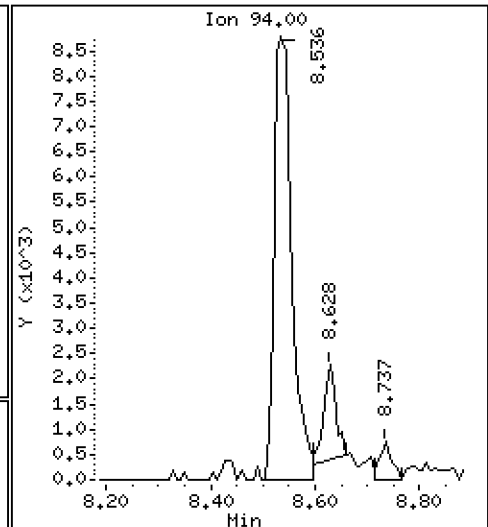
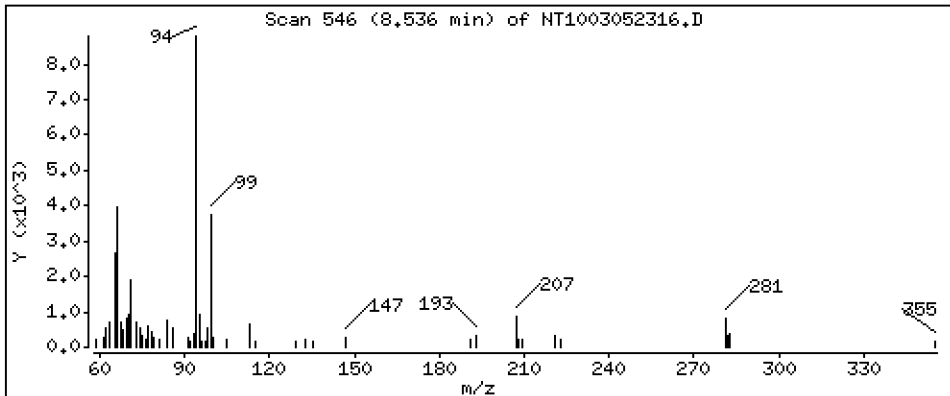
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1687 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

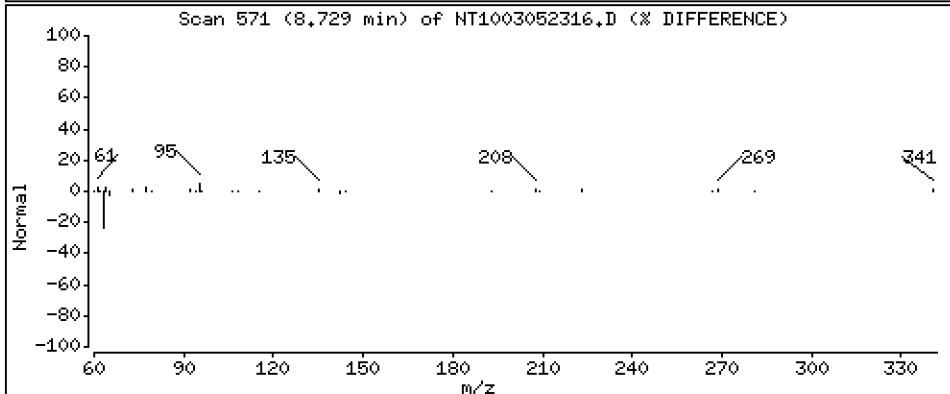
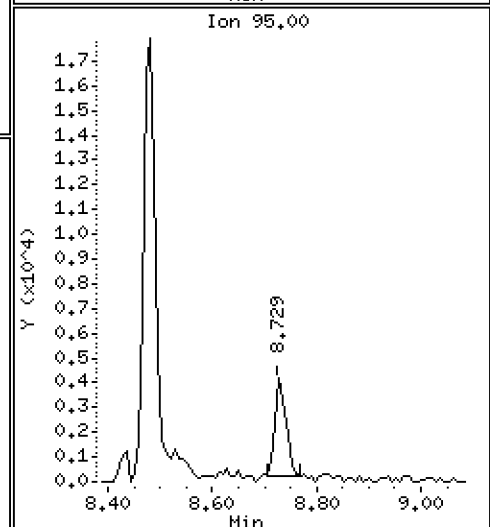
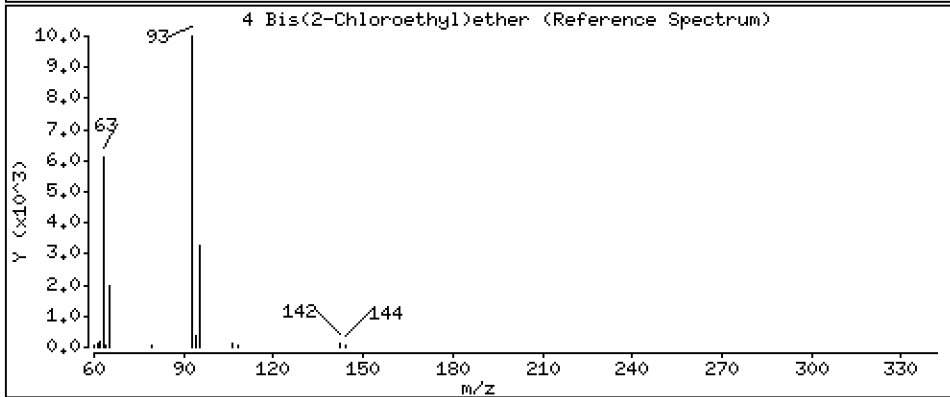
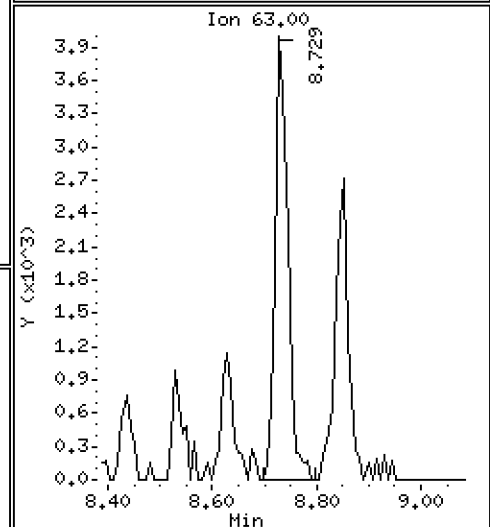
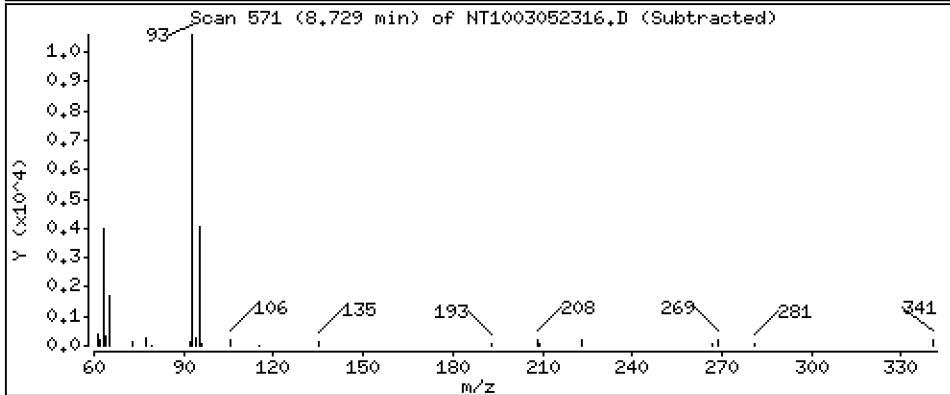
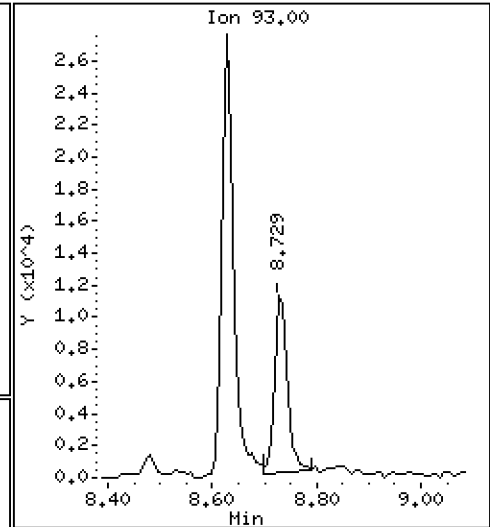
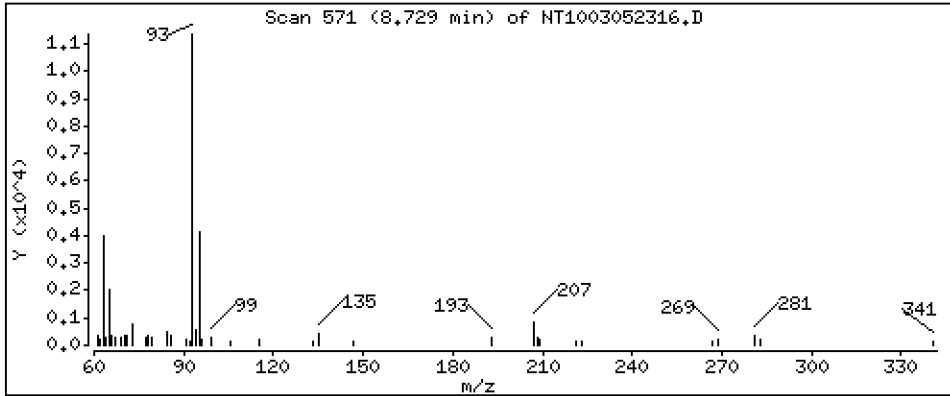
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,2005 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

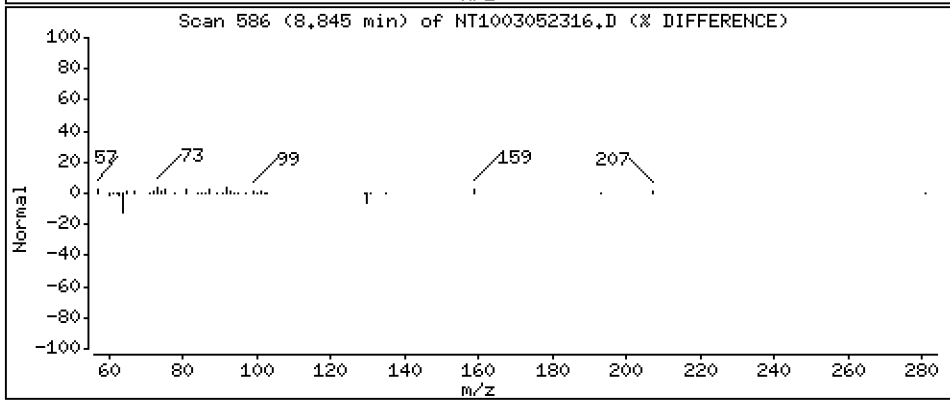
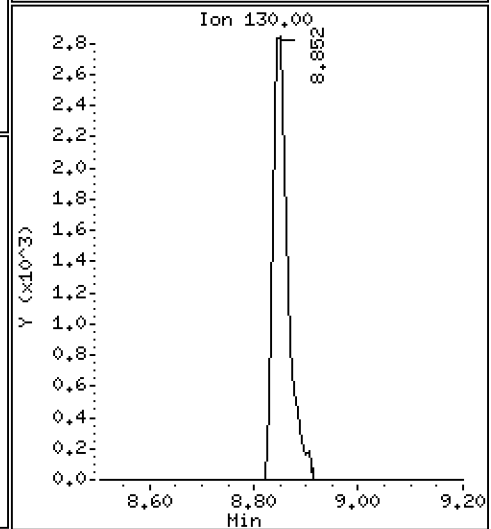
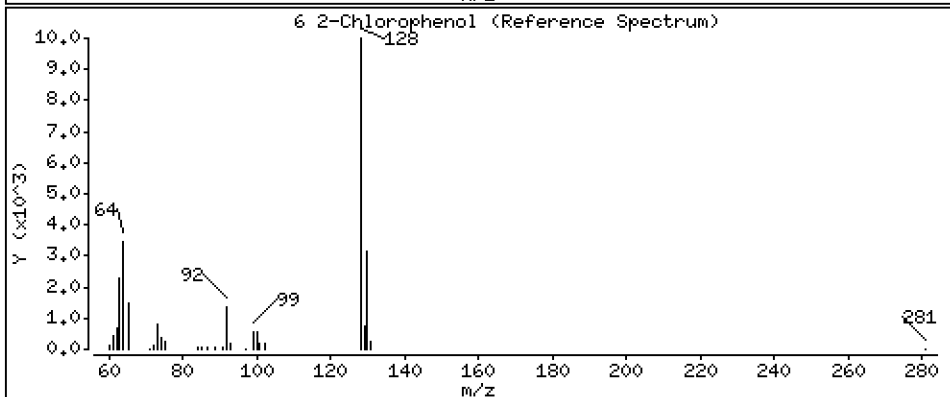
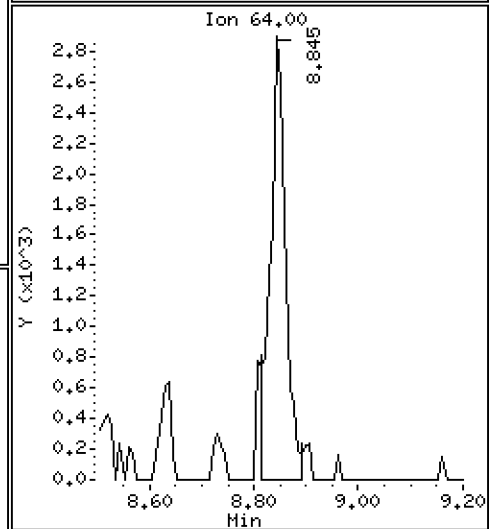
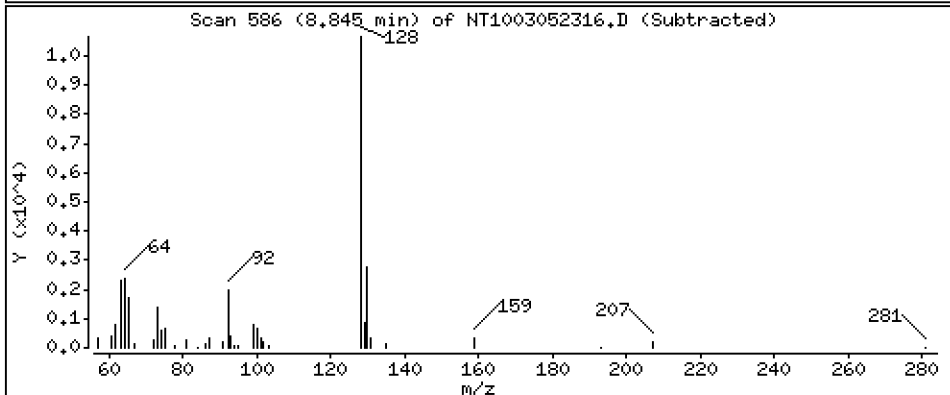
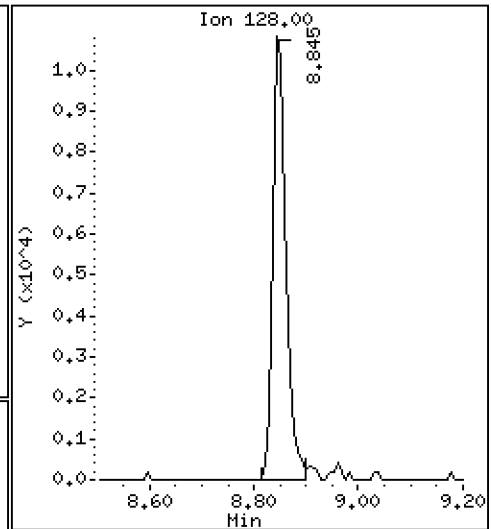
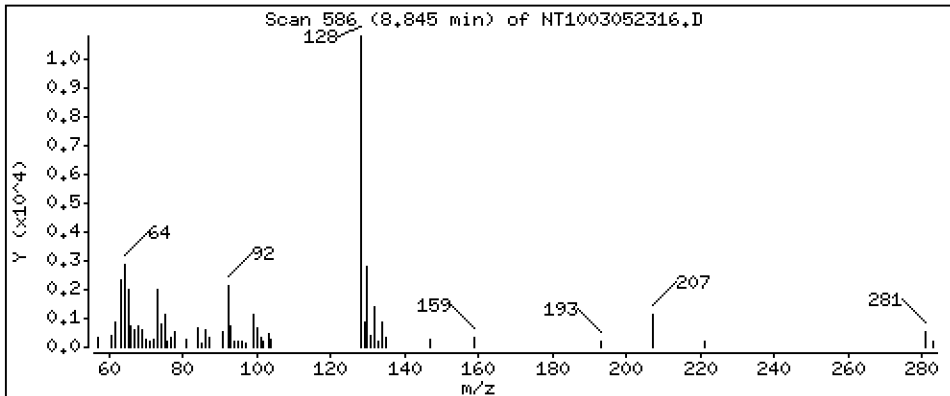
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

6 2-Chlorophenol

Concentration: 0.1918 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

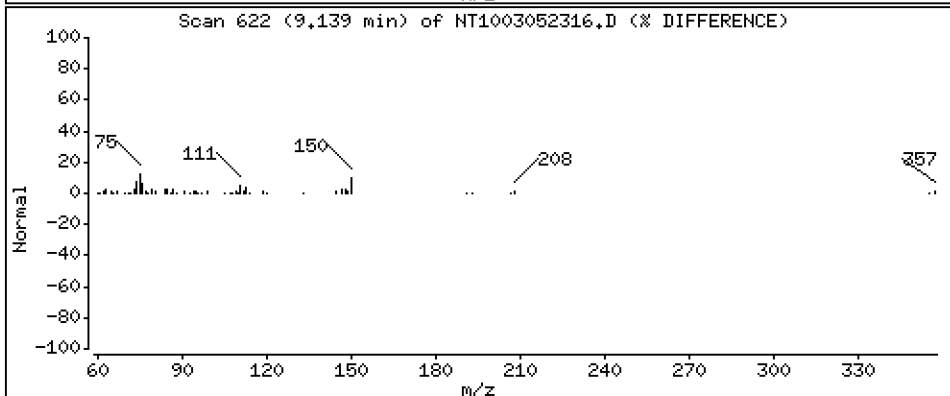
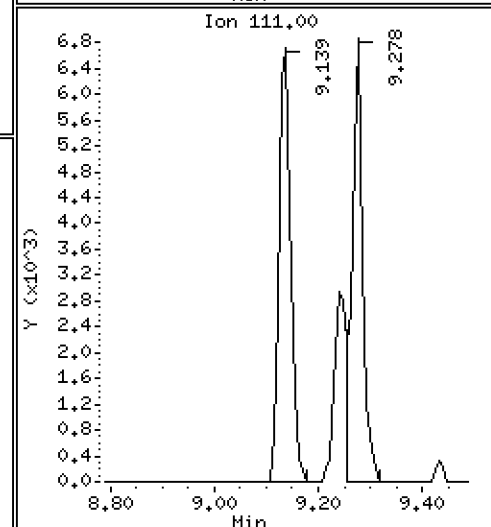
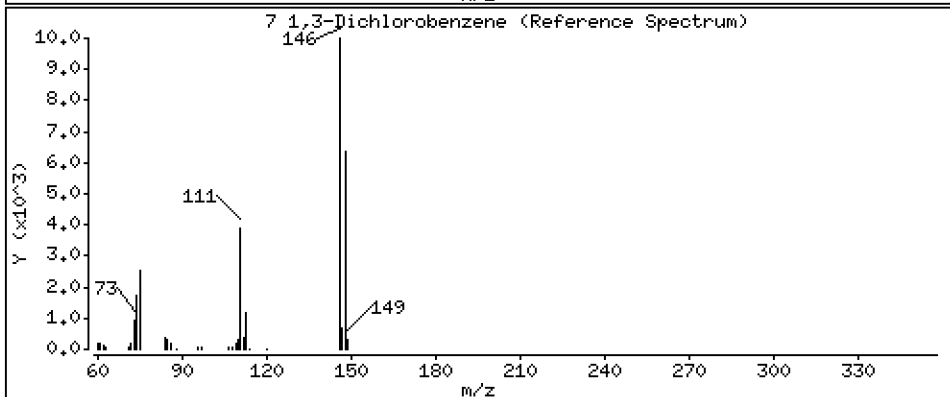
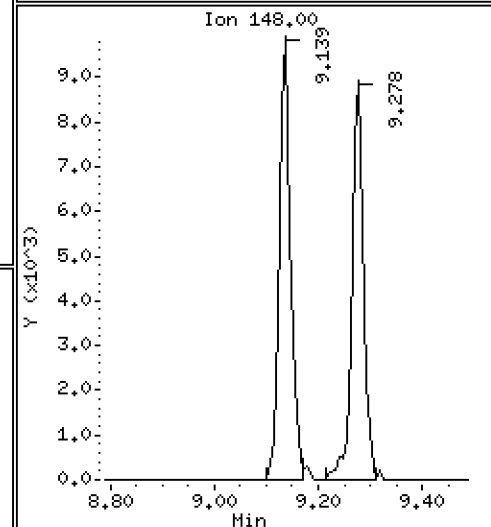
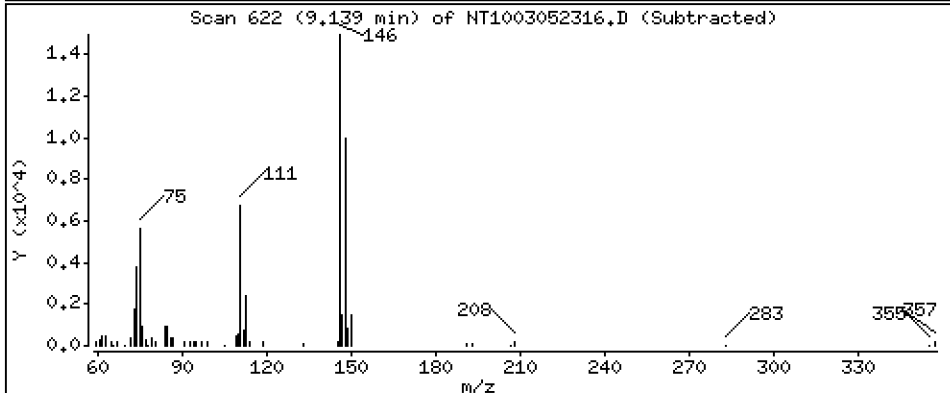
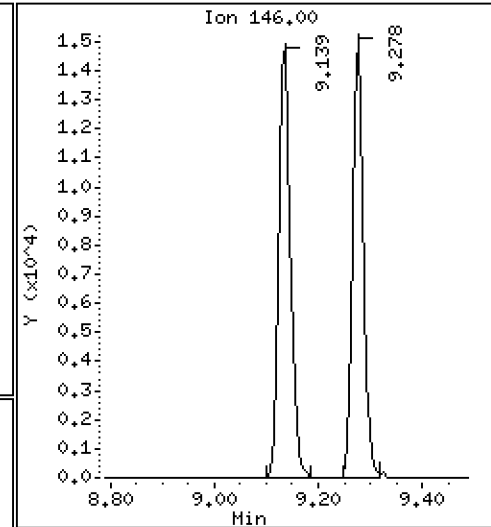
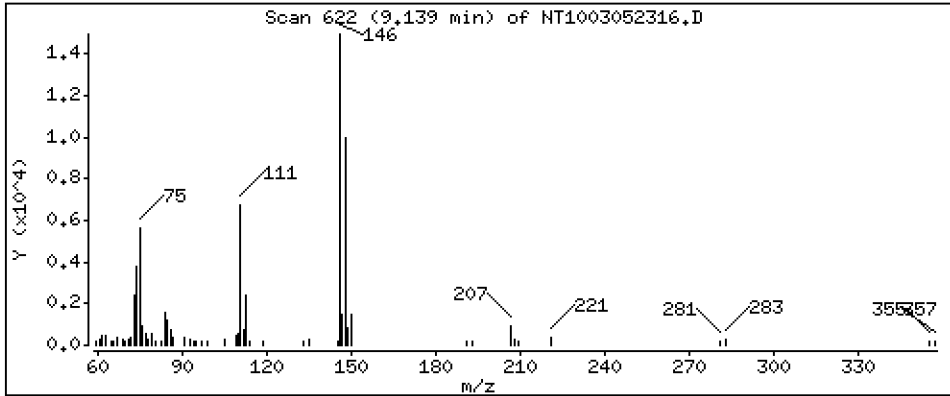
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2139 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

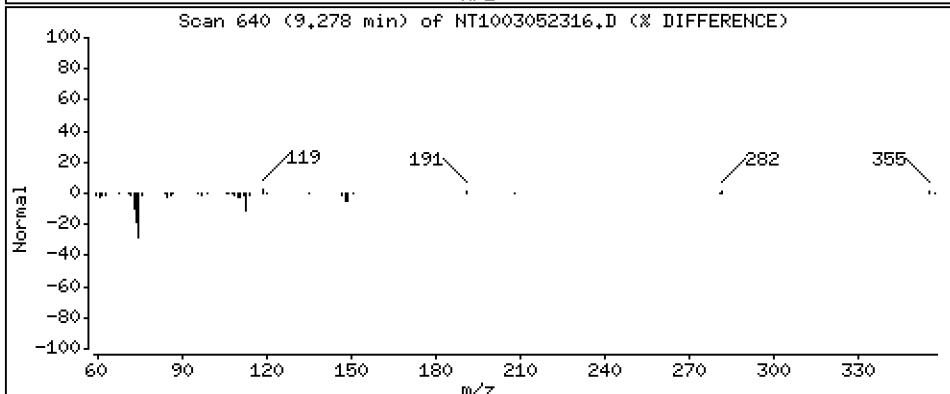
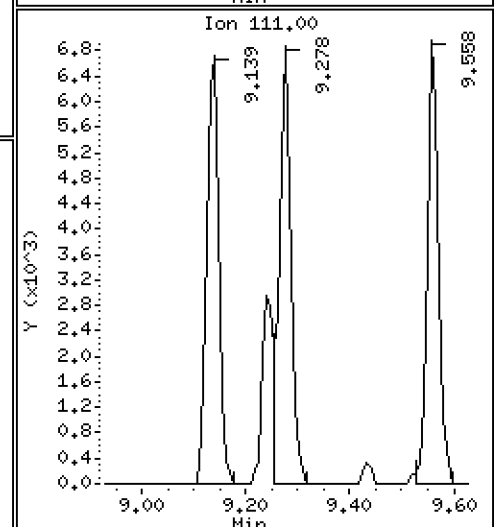
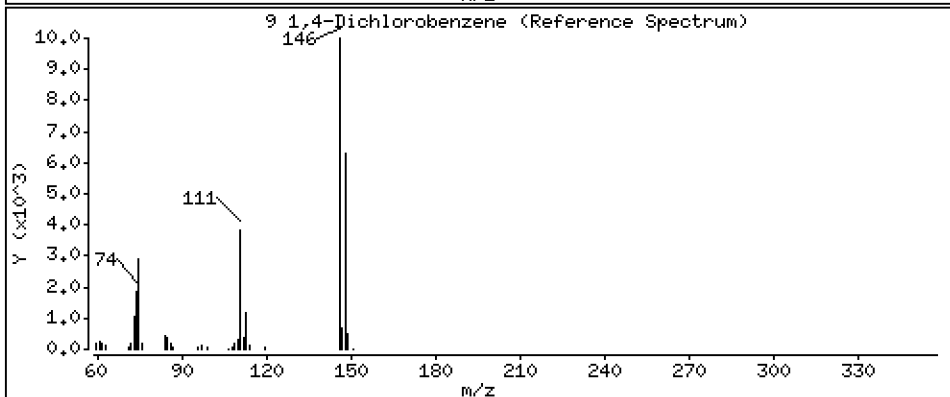
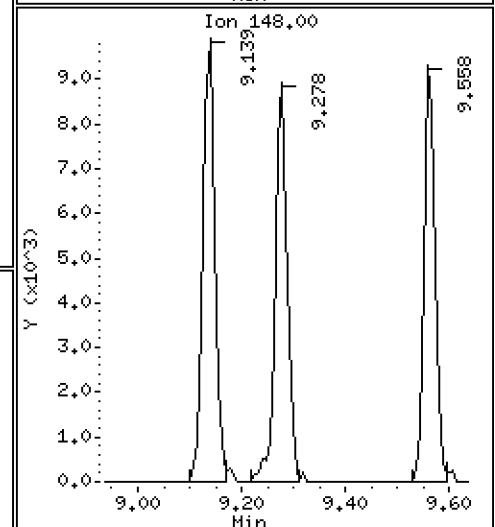
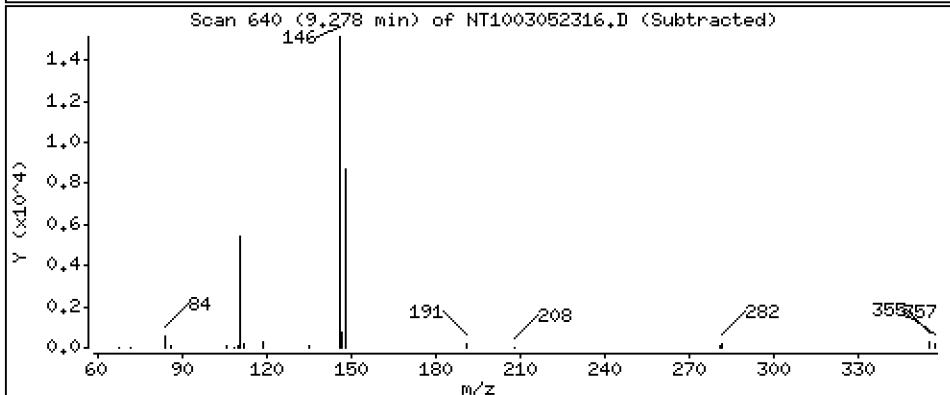
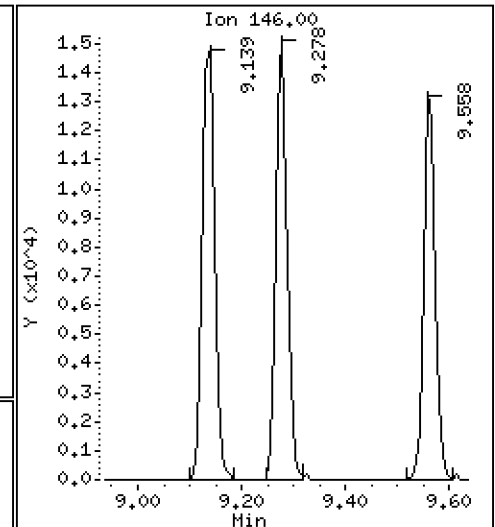
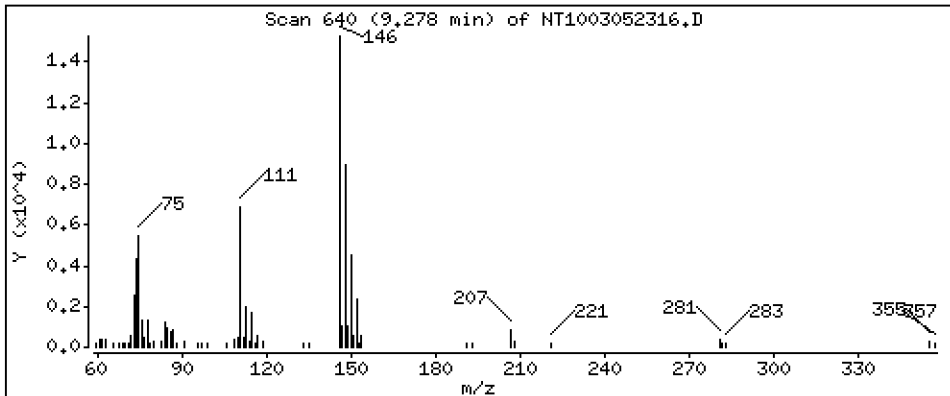
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.2076 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

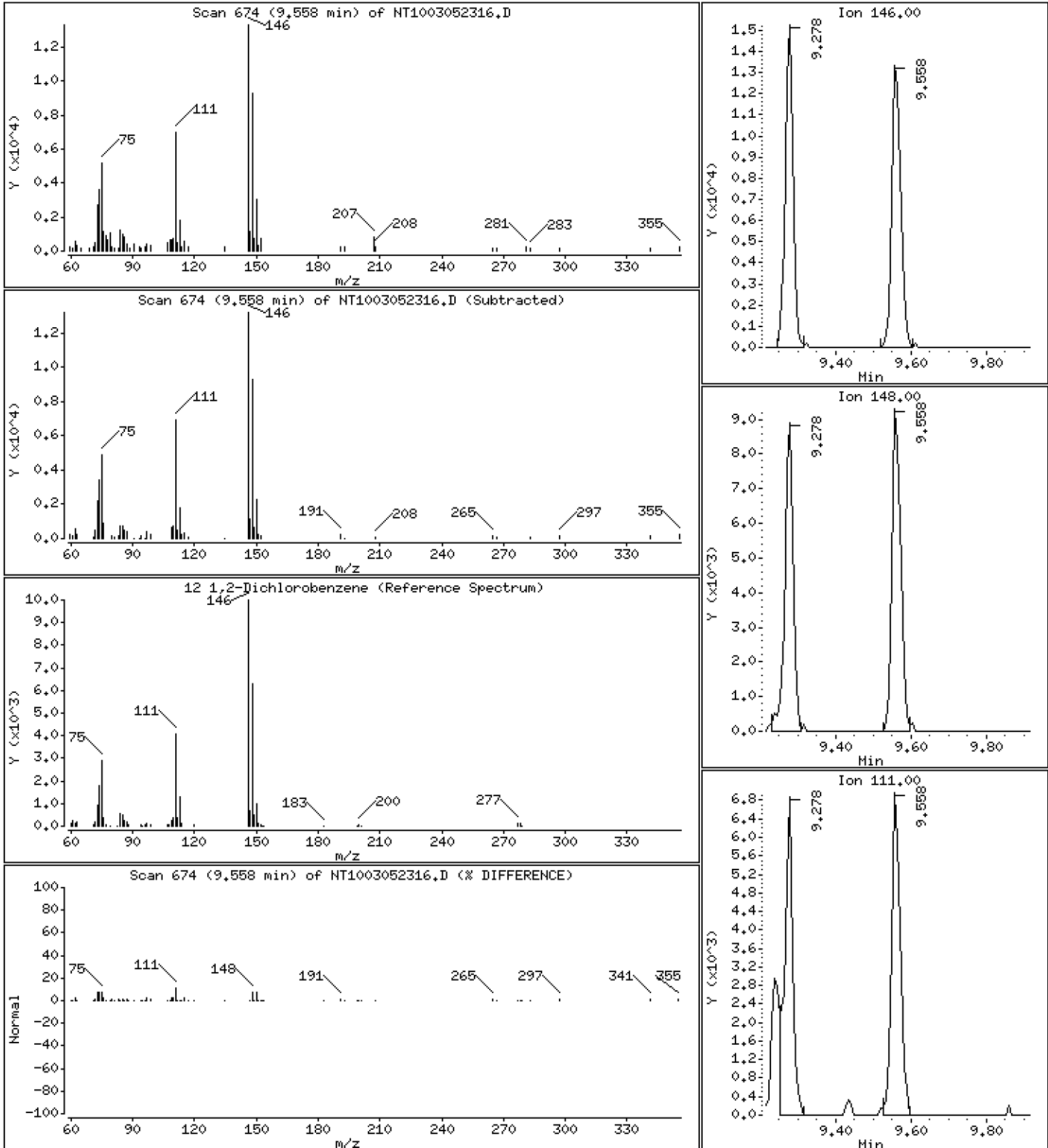
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.2019 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

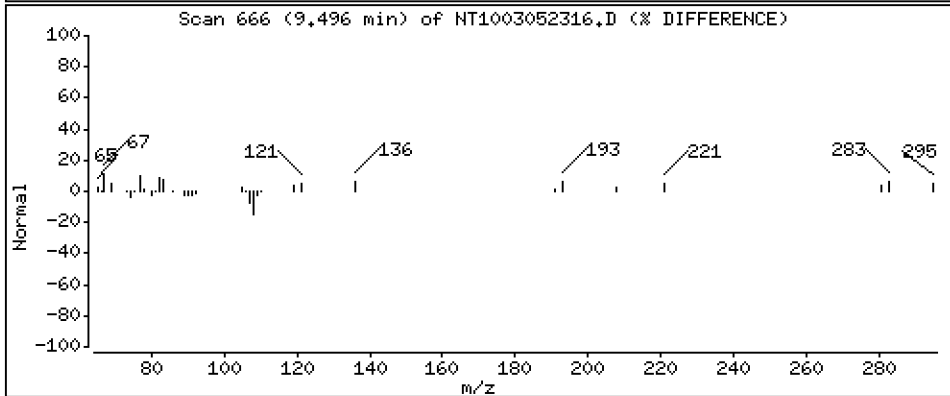
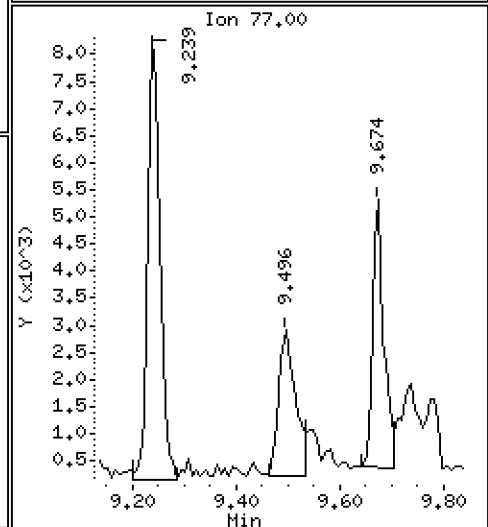
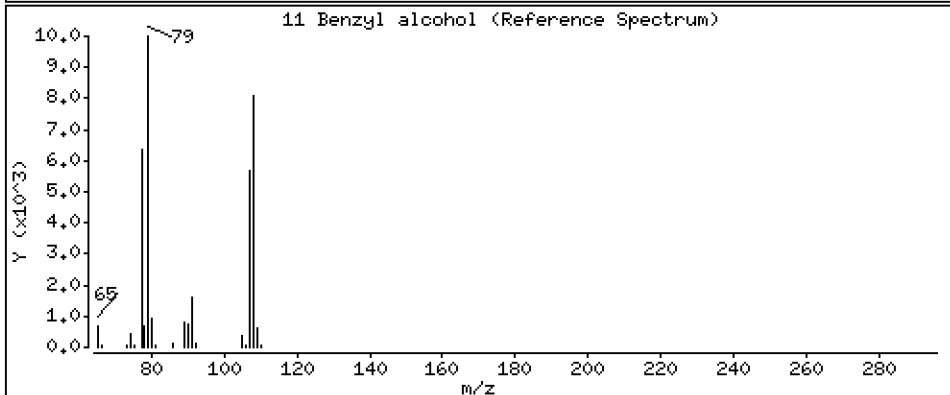
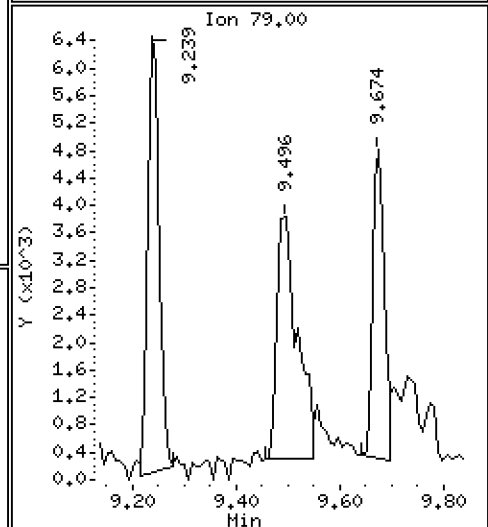
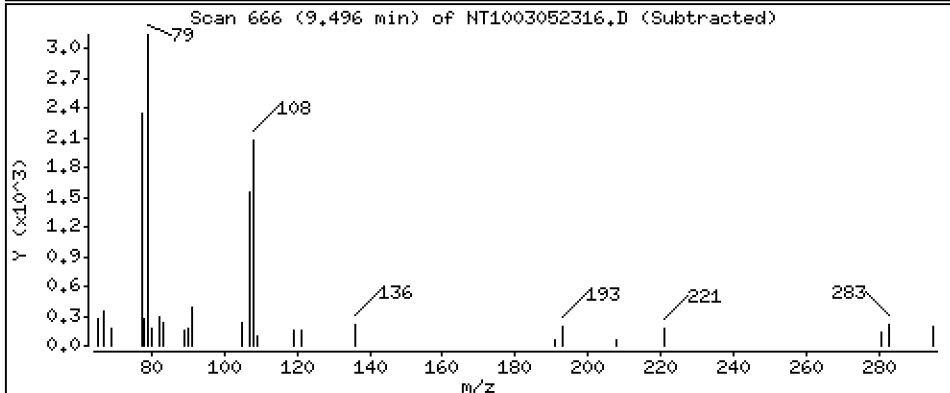
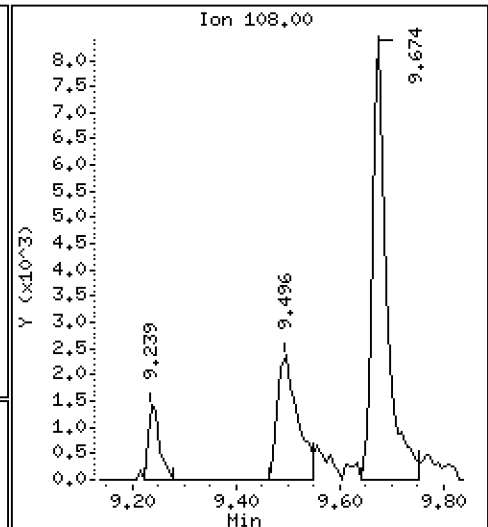
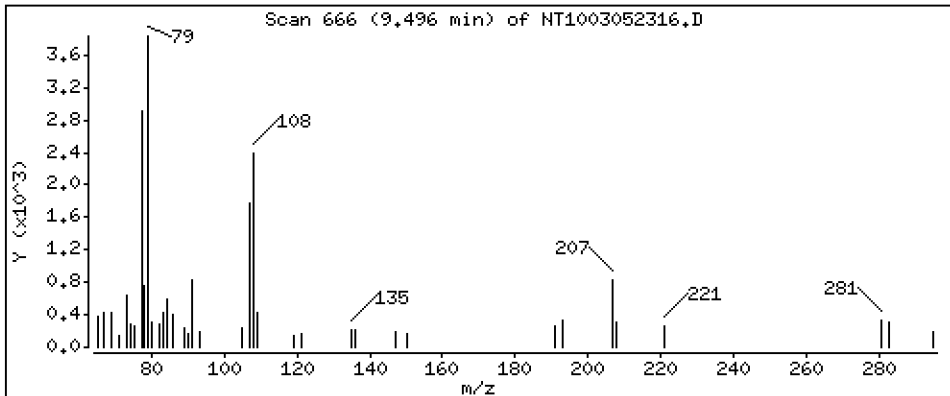
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1045 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

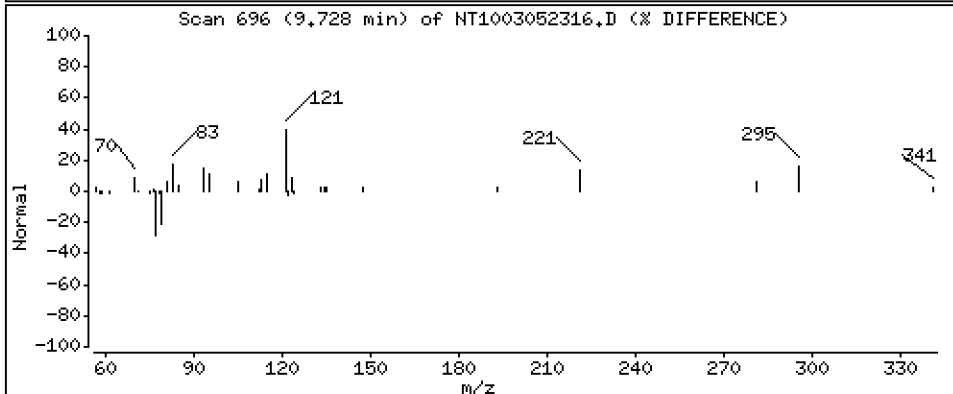
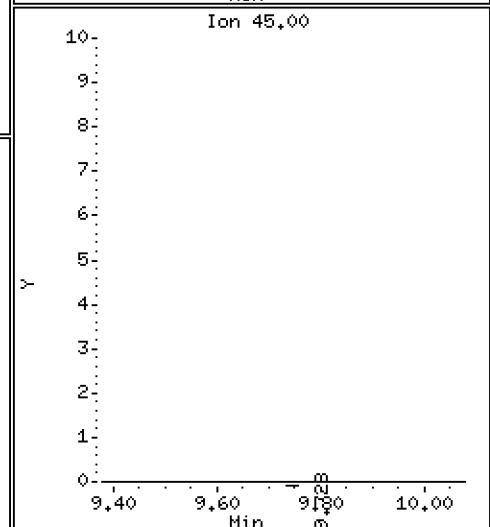
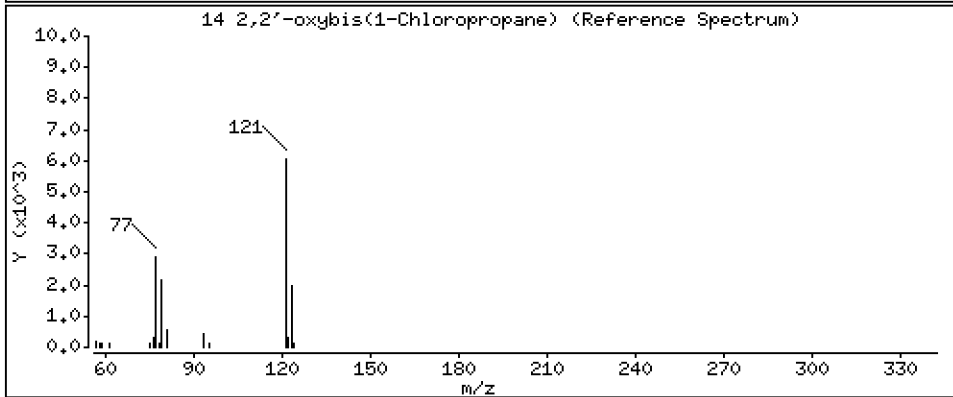
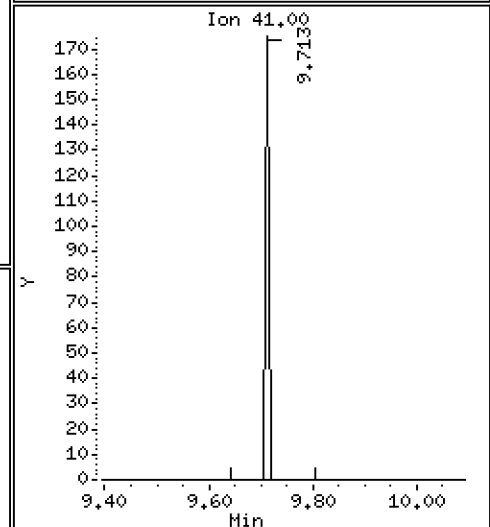
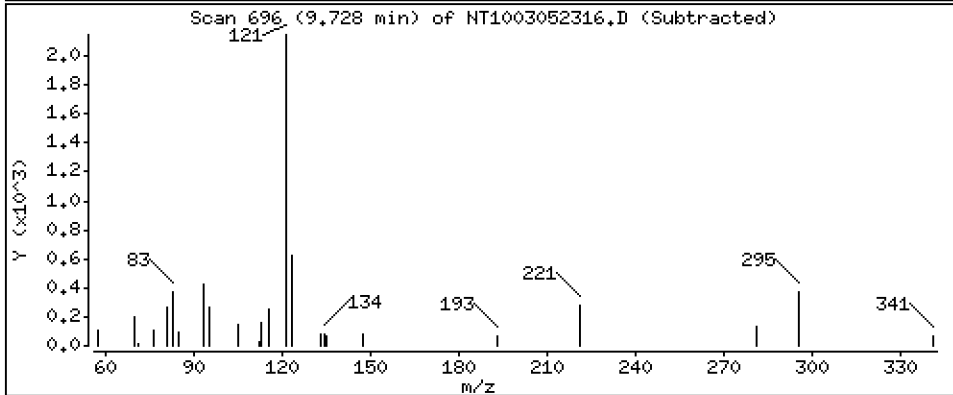
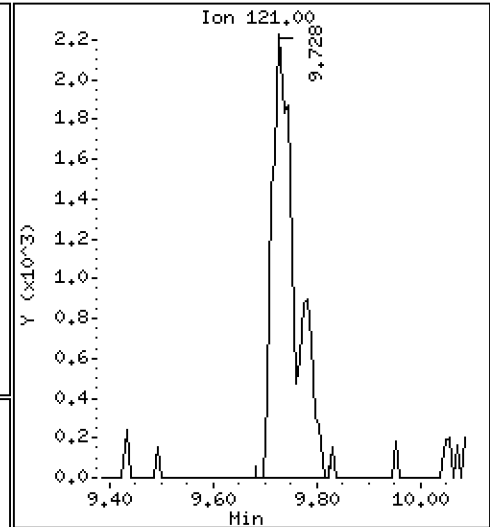
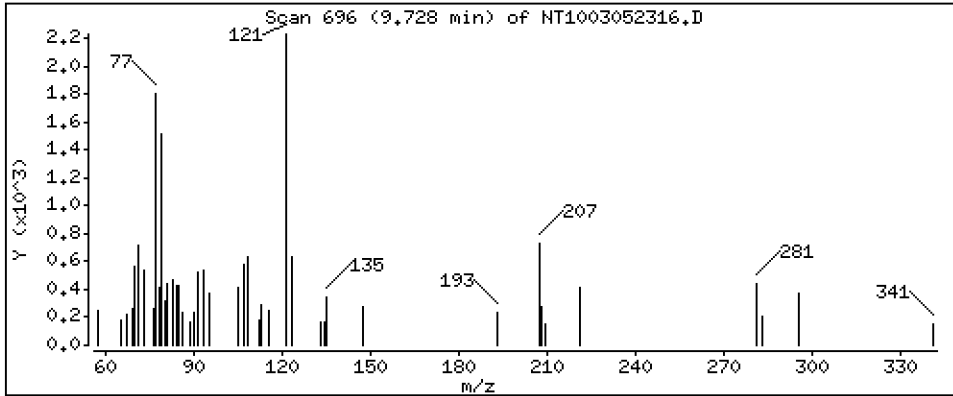
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2259 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

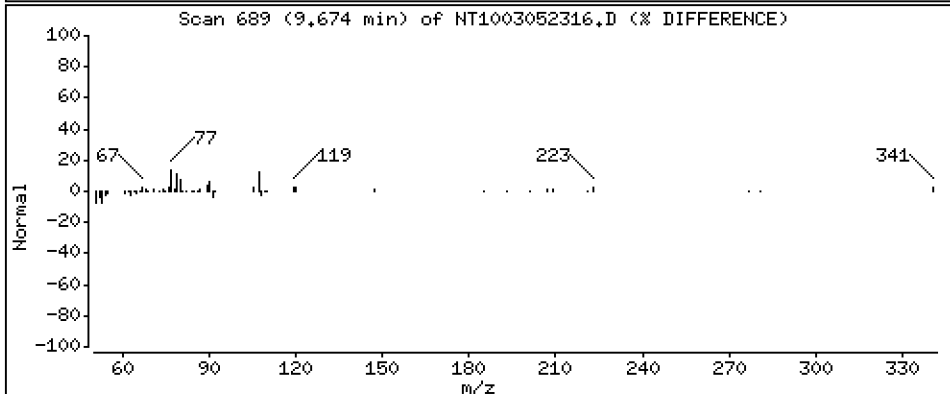
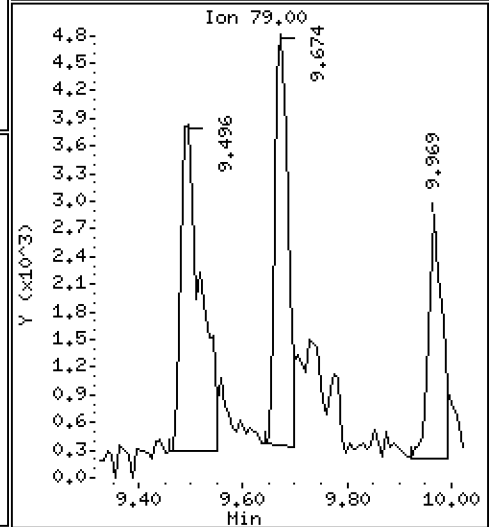
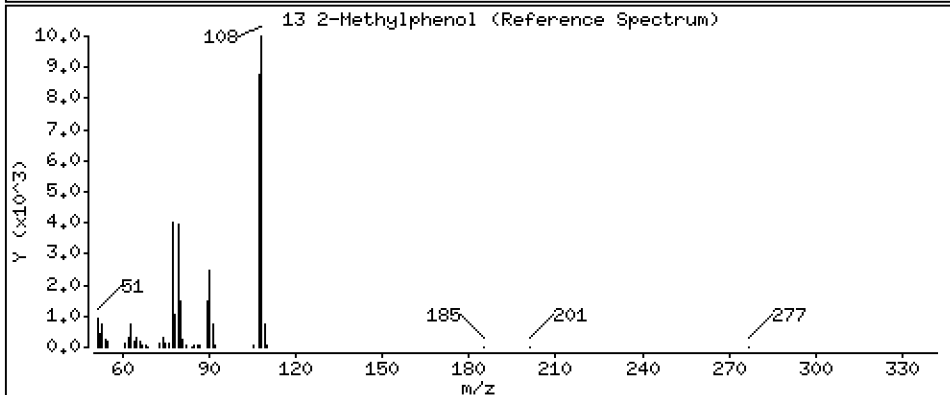
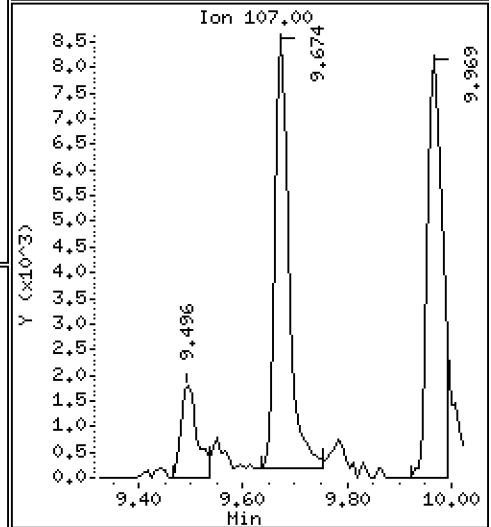
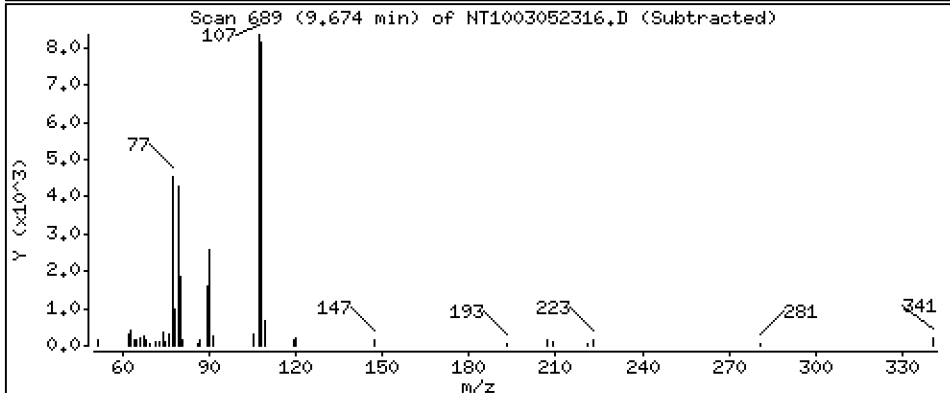
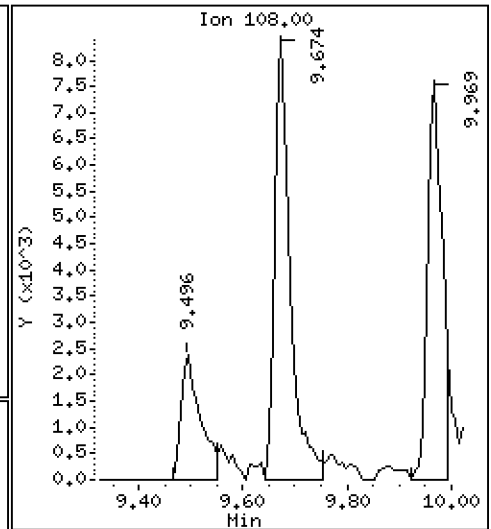
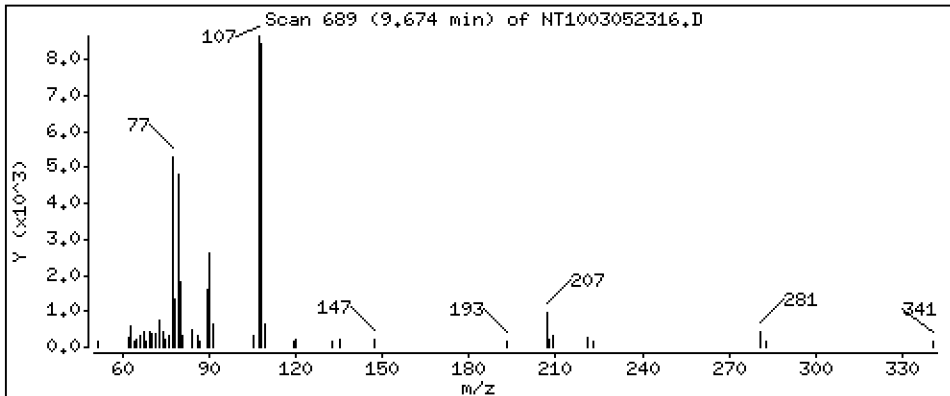
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1827 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

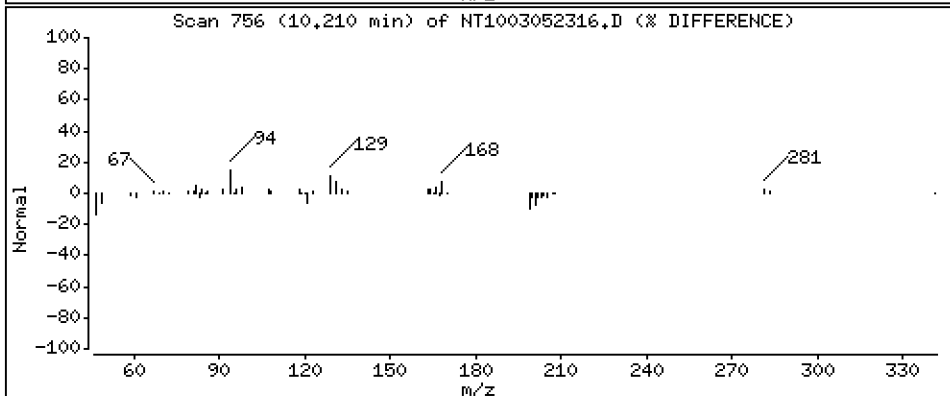
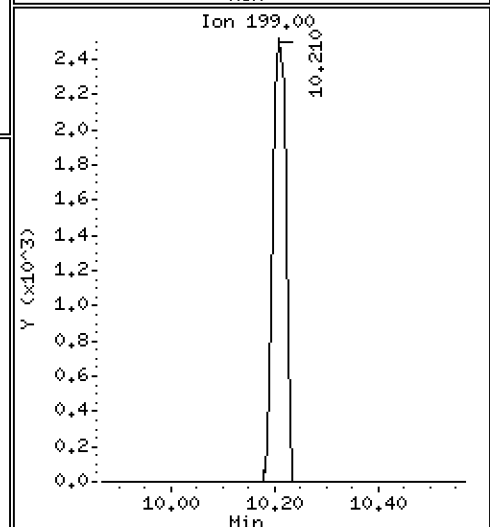
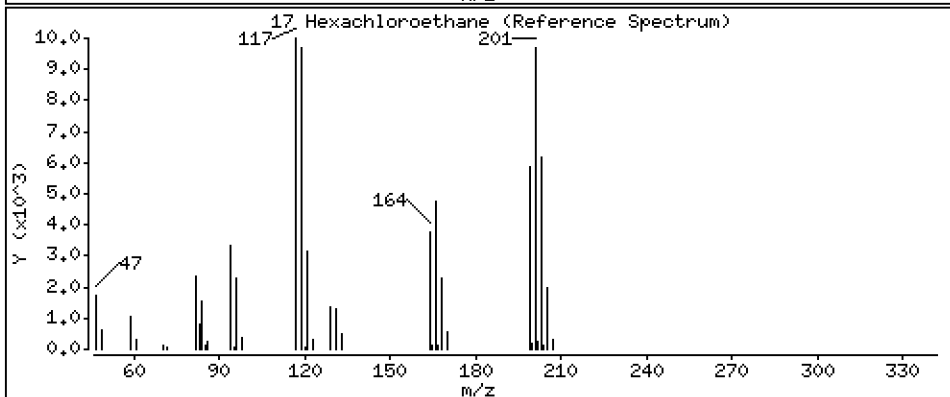
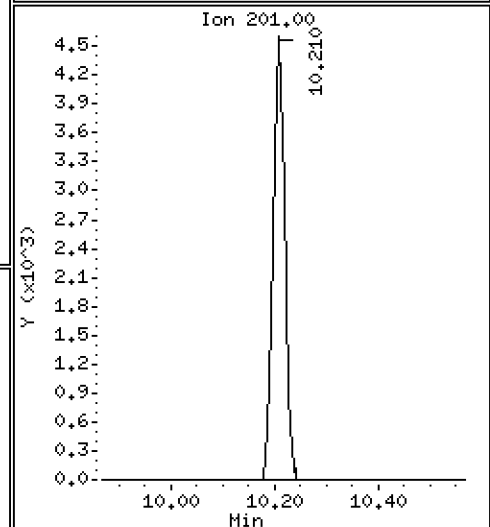
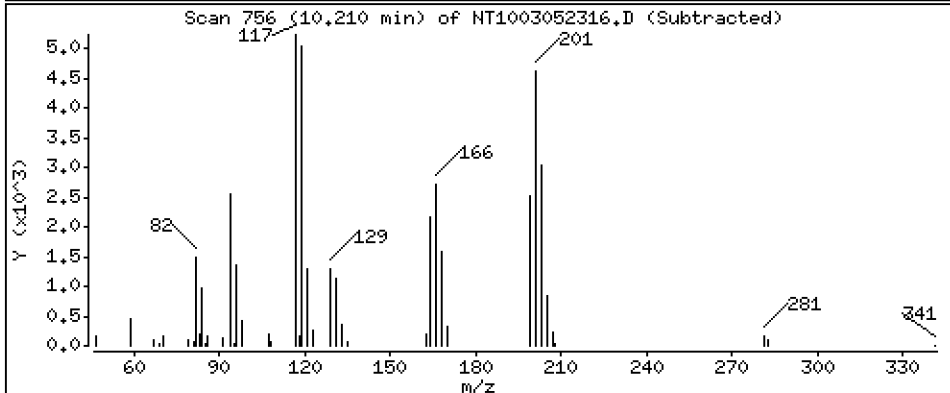
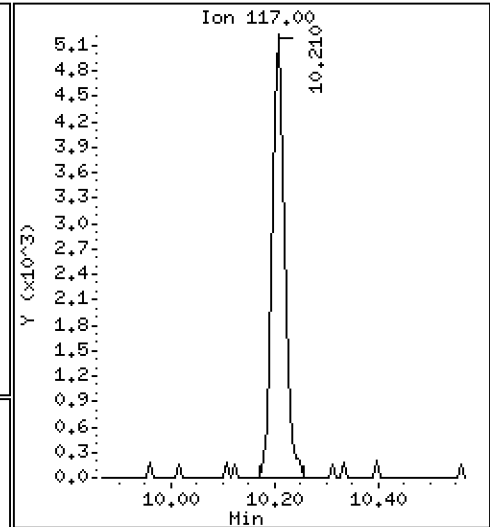
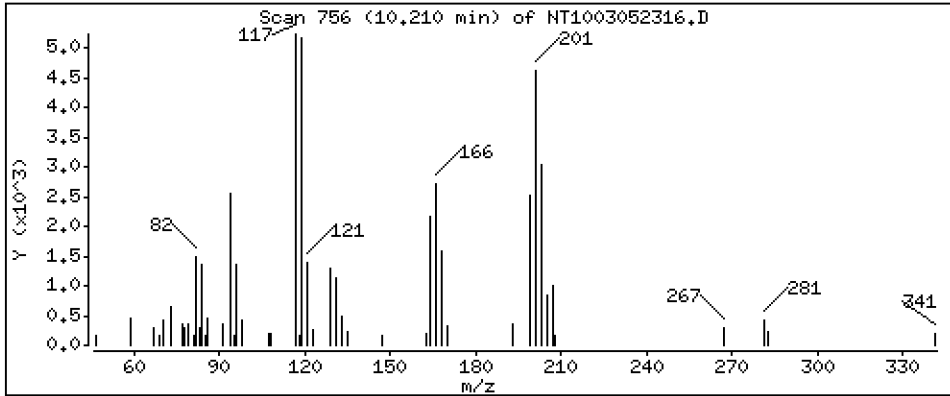
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,1872 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

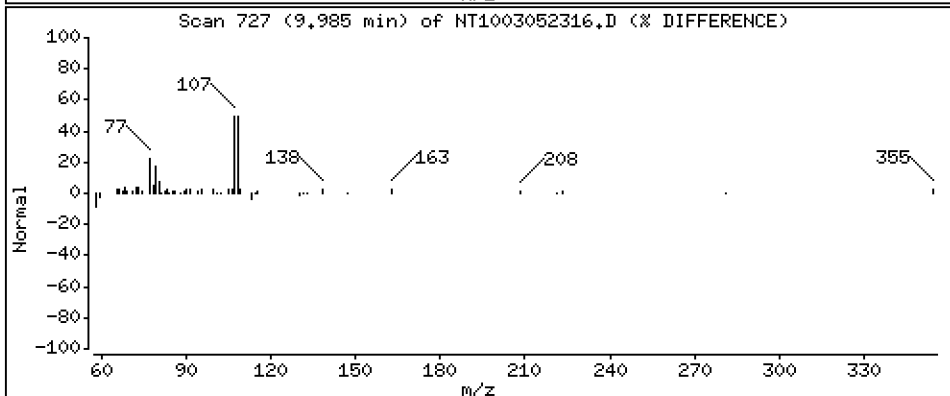
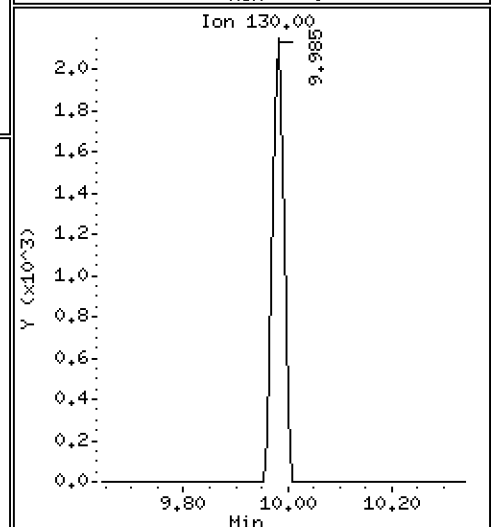
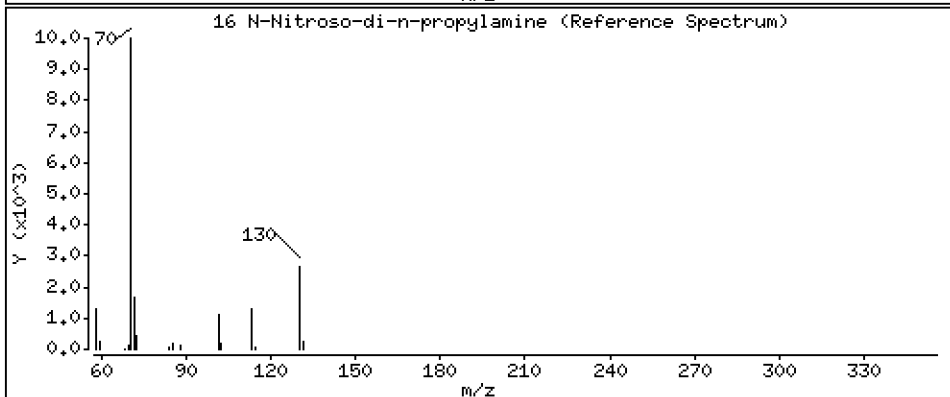
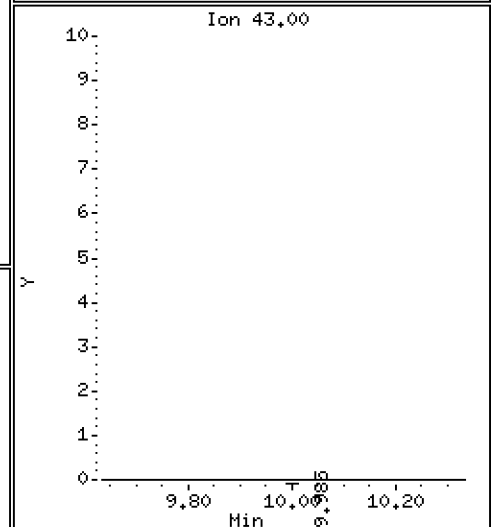
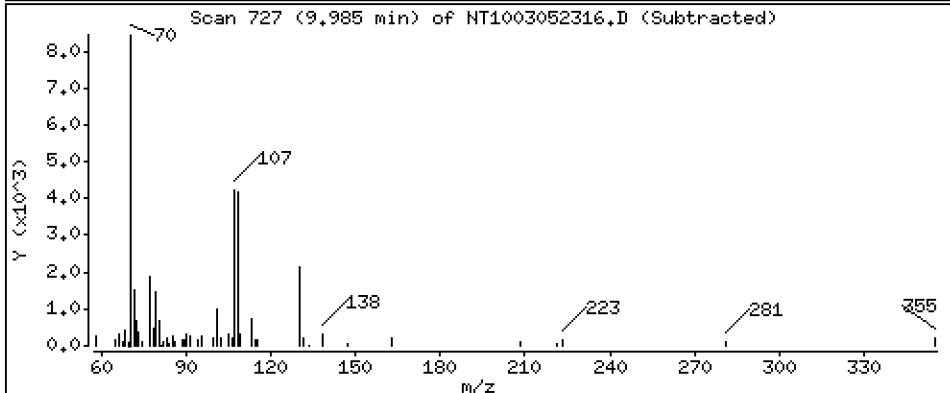
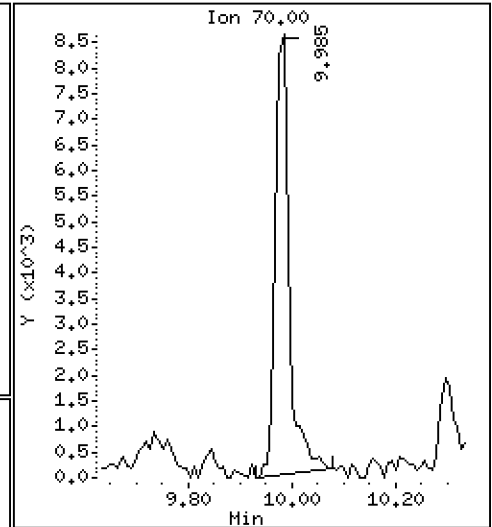
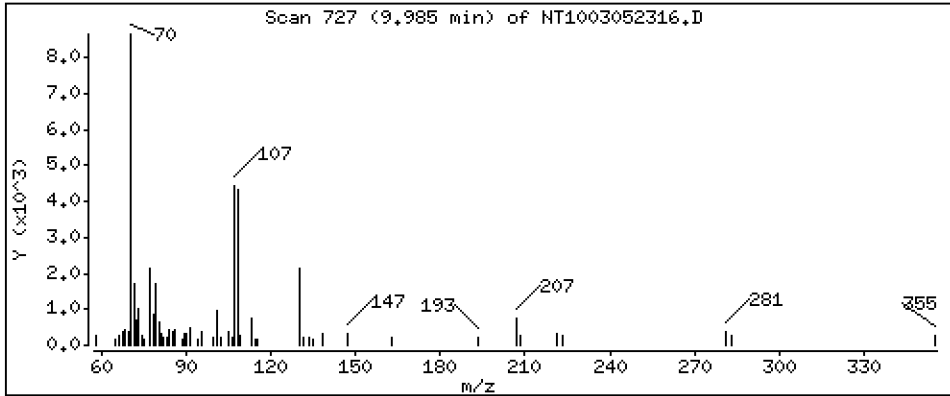
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.2130 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

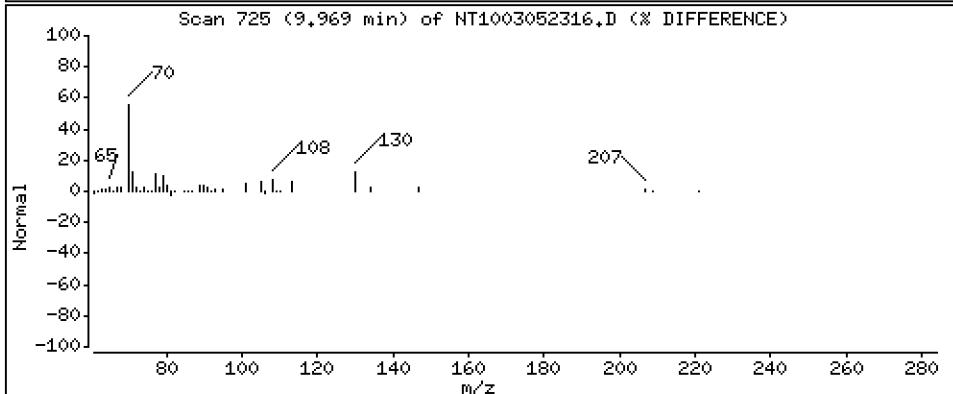
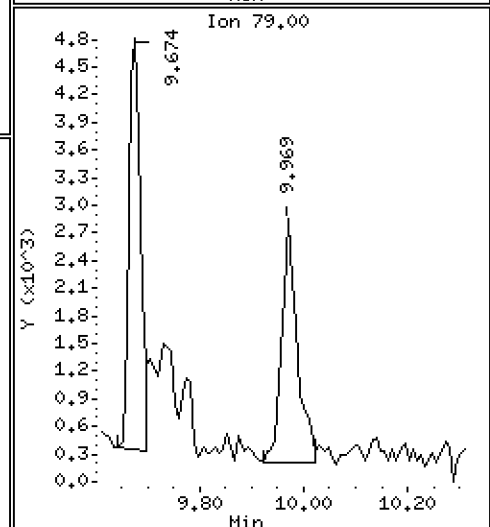
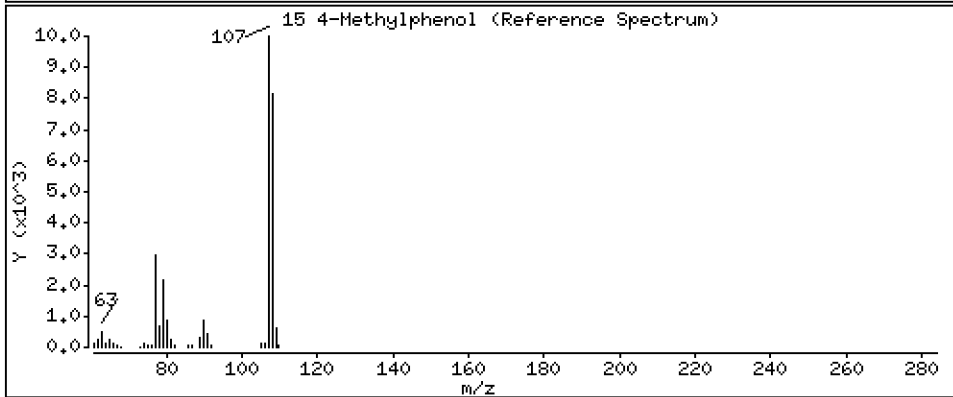
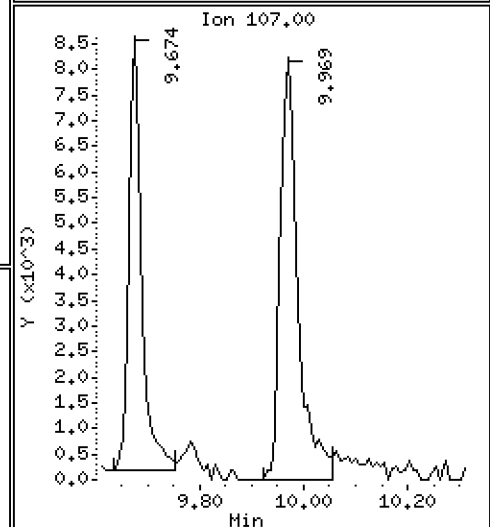
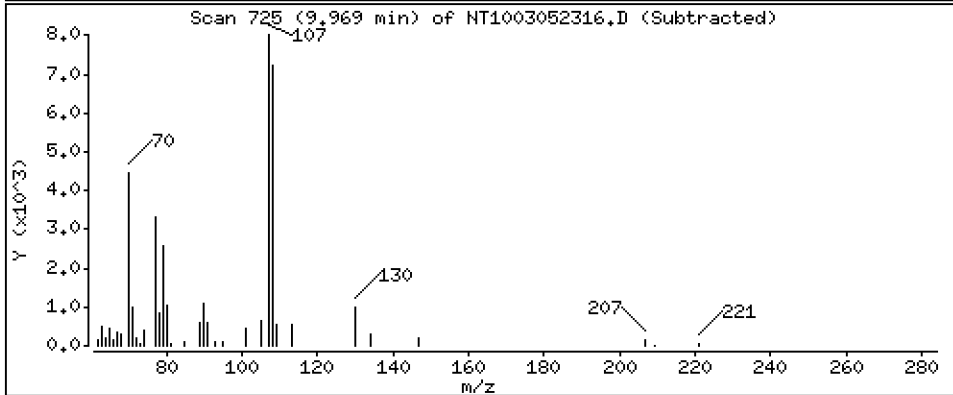
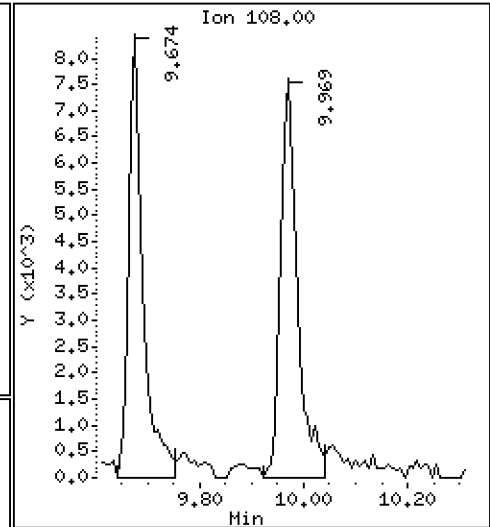
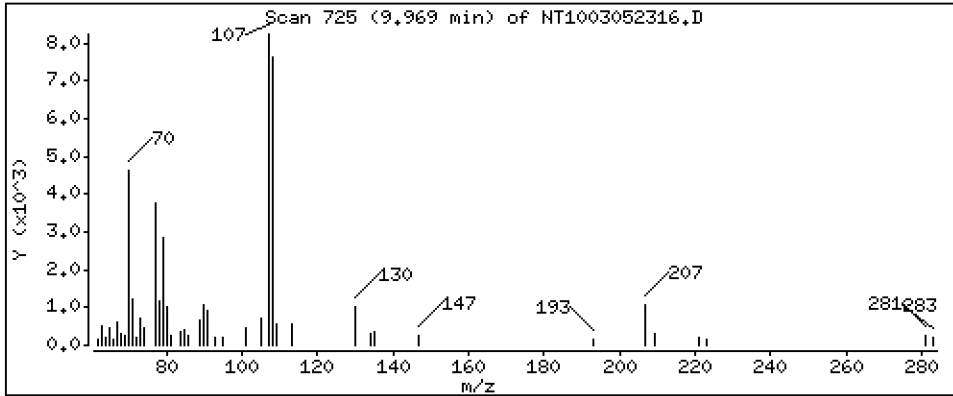
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1483 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

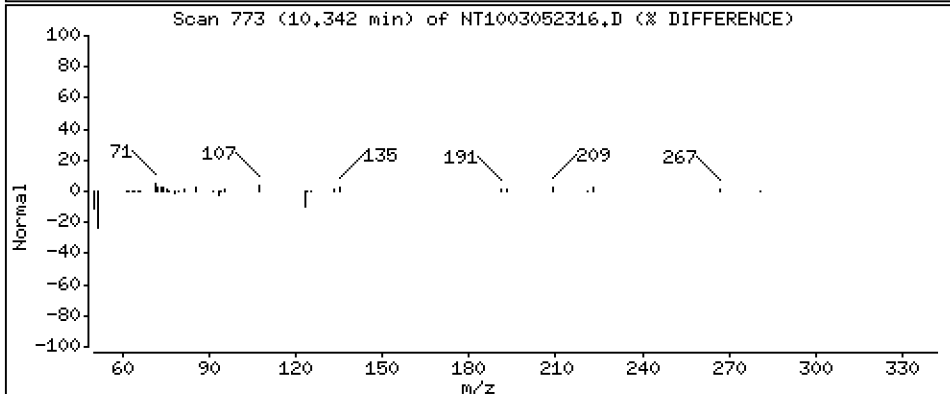
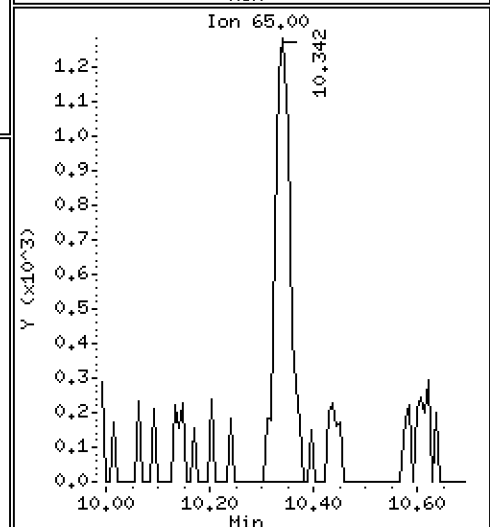
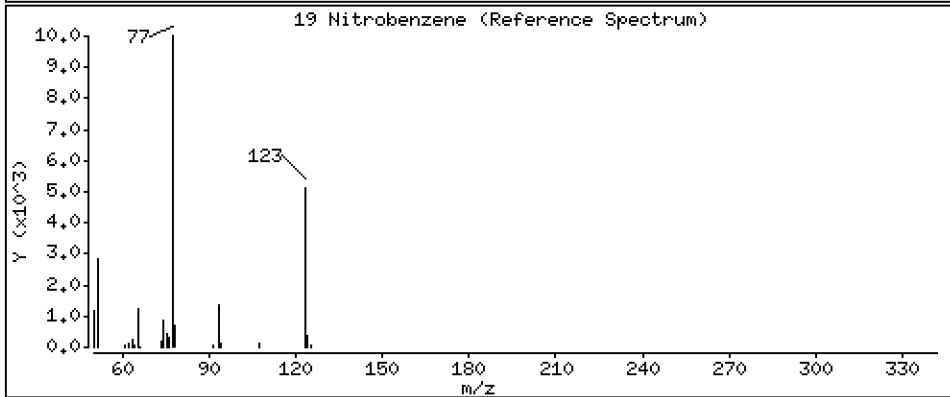
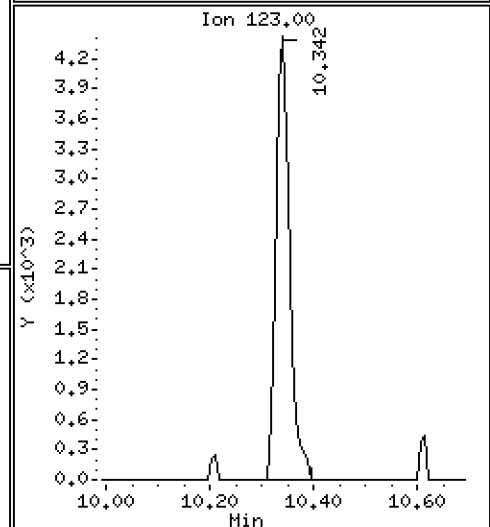
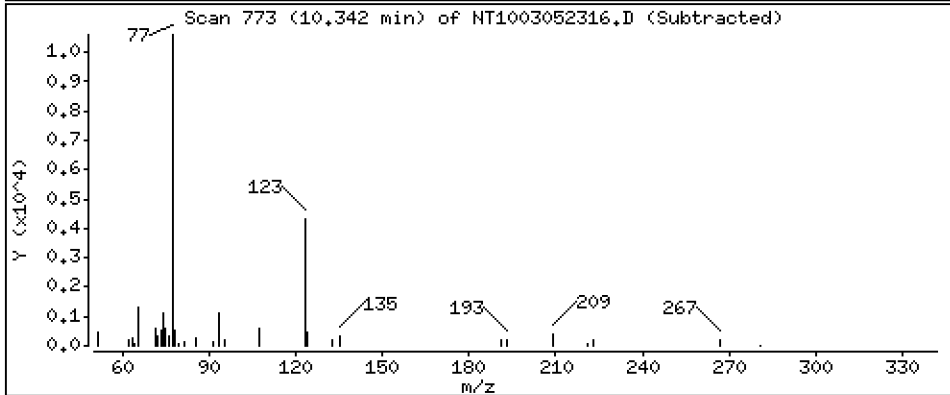
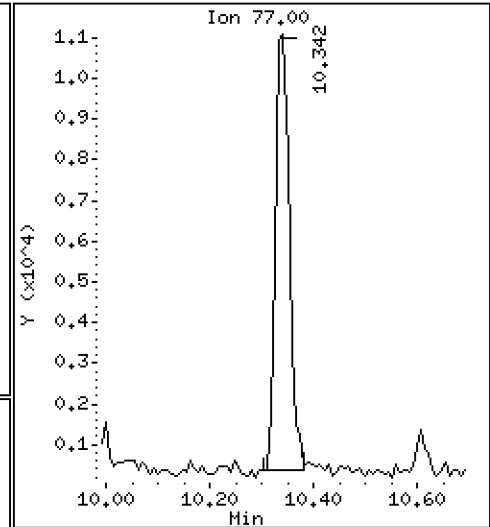
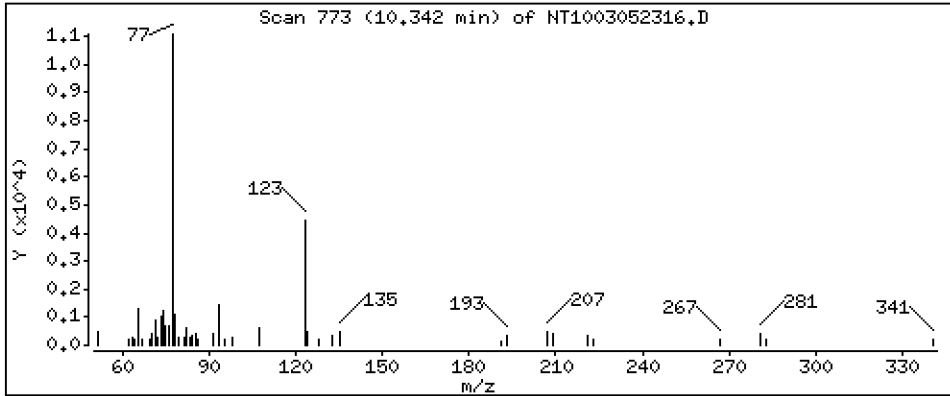
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,1752 ug/mL

19 Nitrobenzene



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

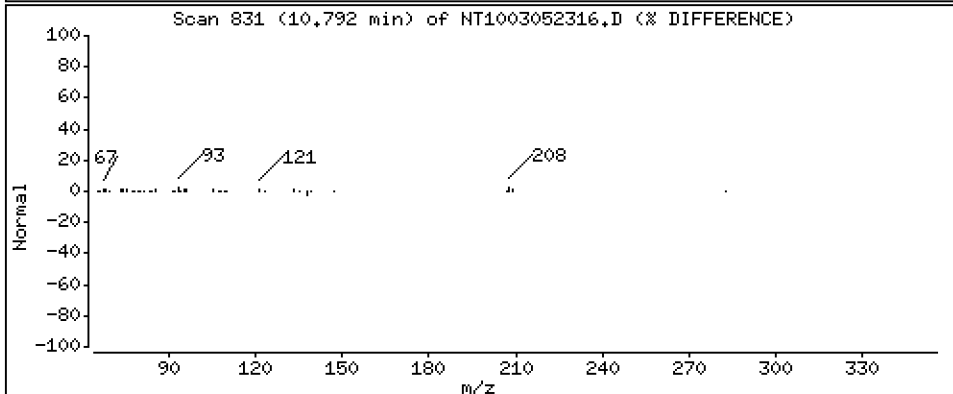
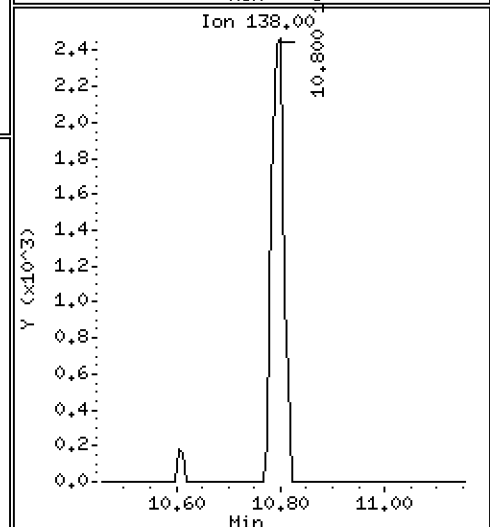
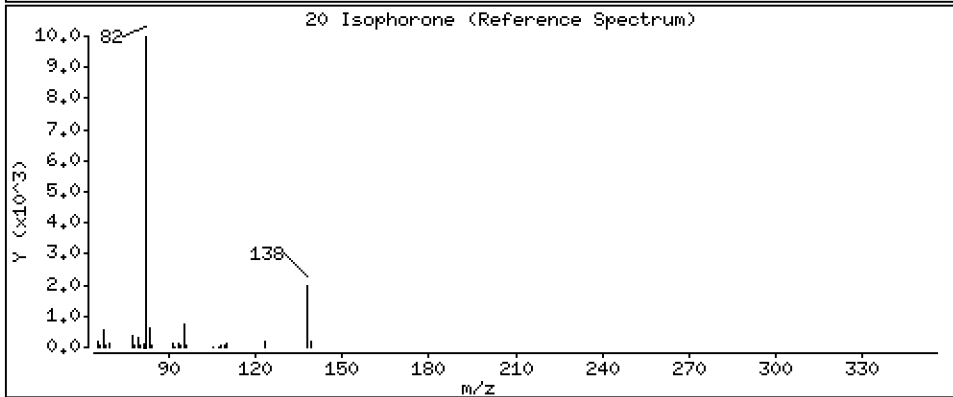
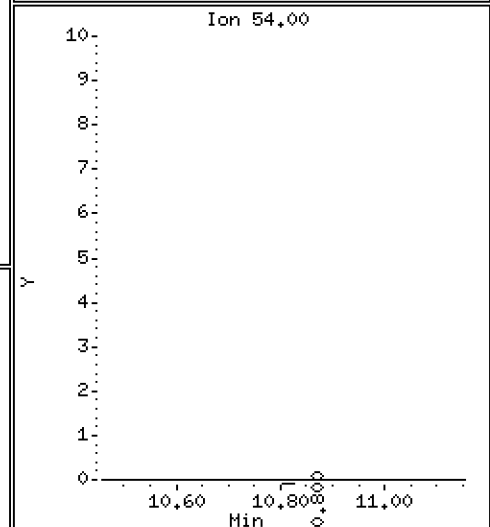
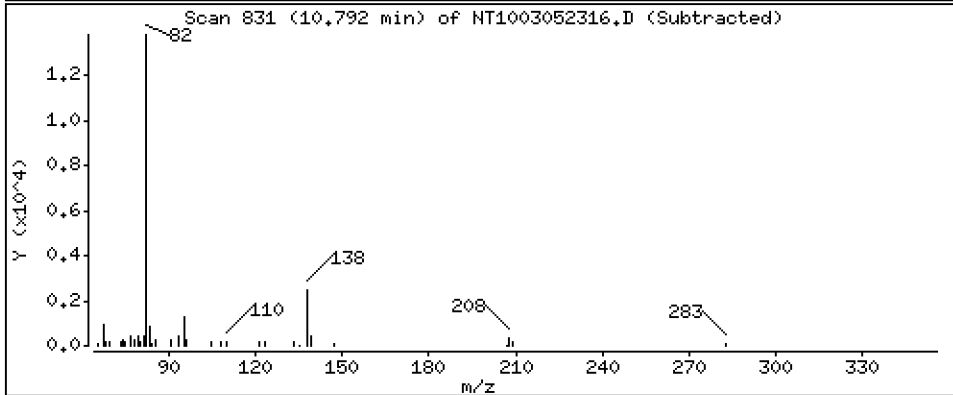
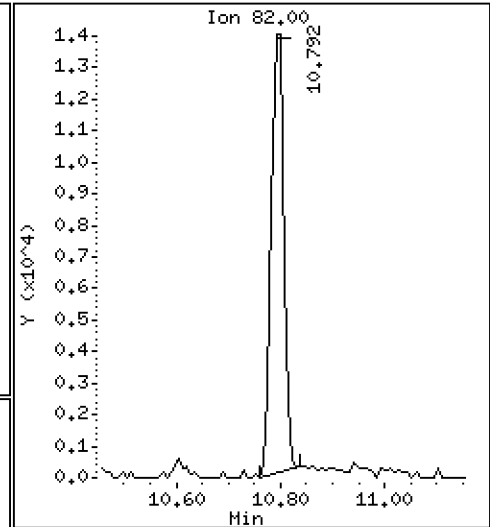
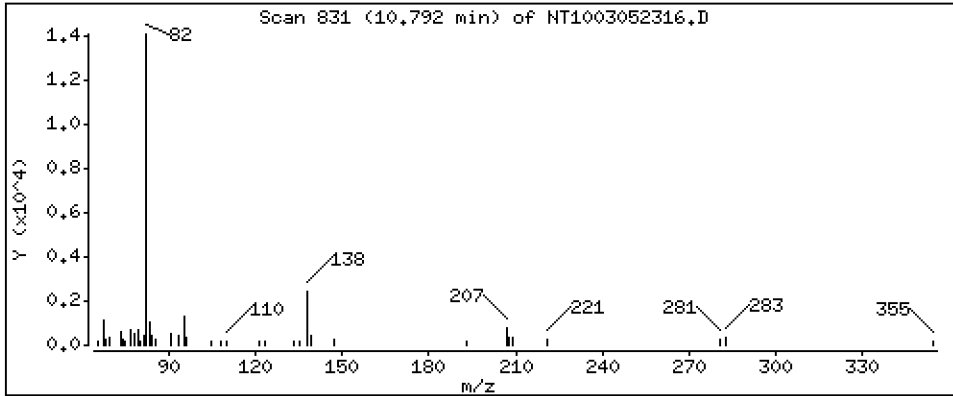
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

20 Isophorone

Concentration: 0.1613 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

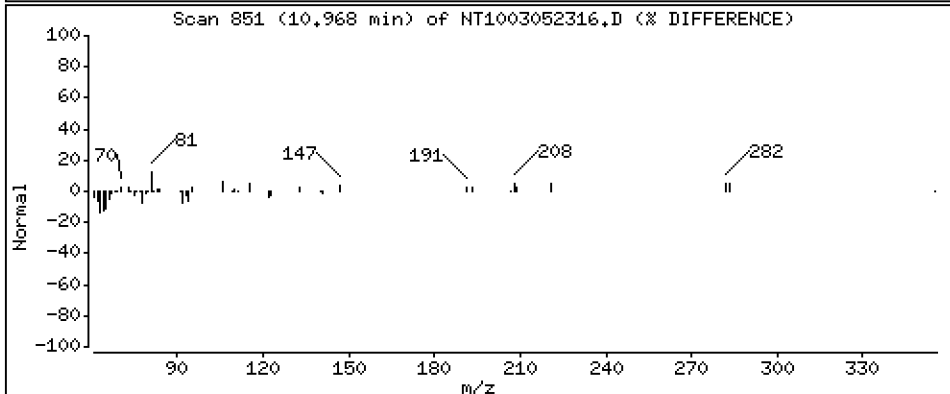
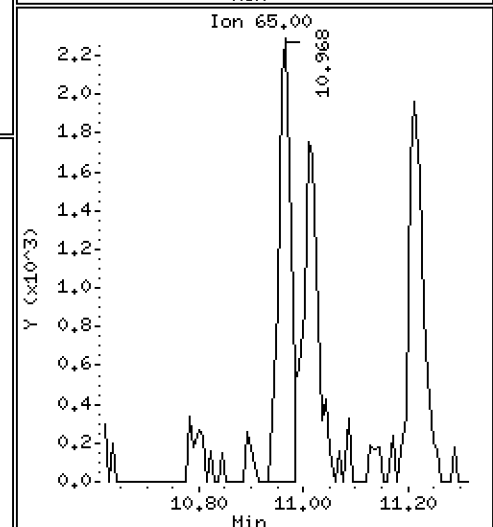
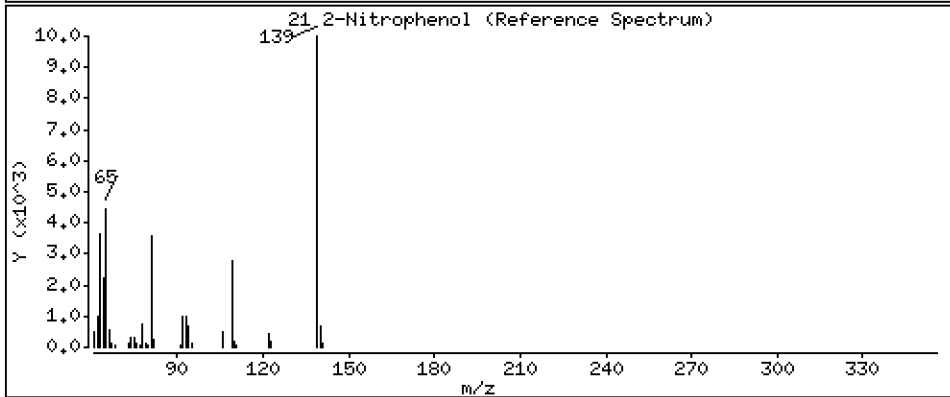
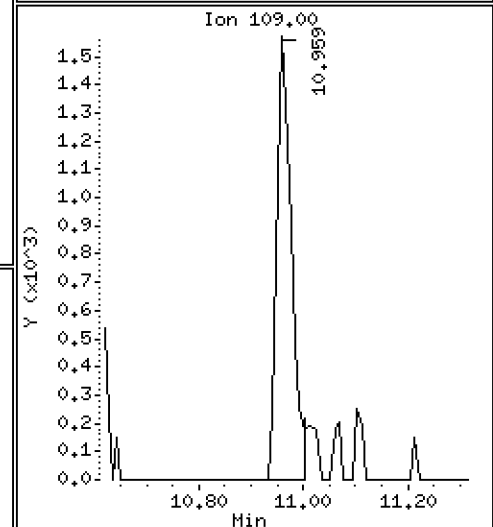
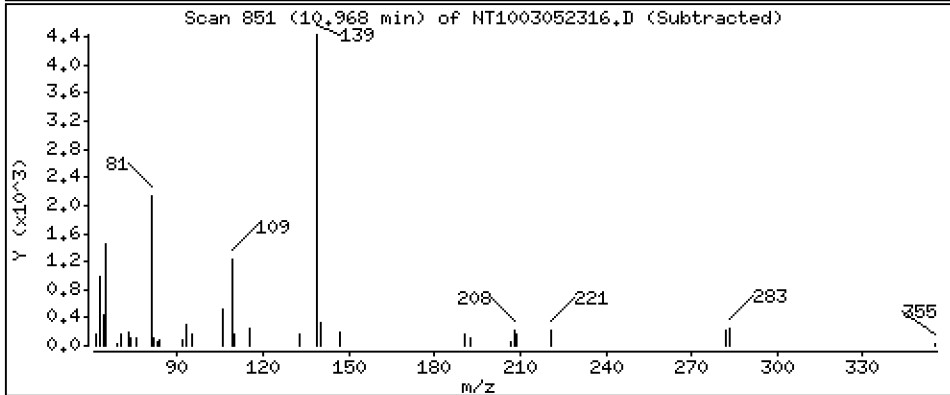
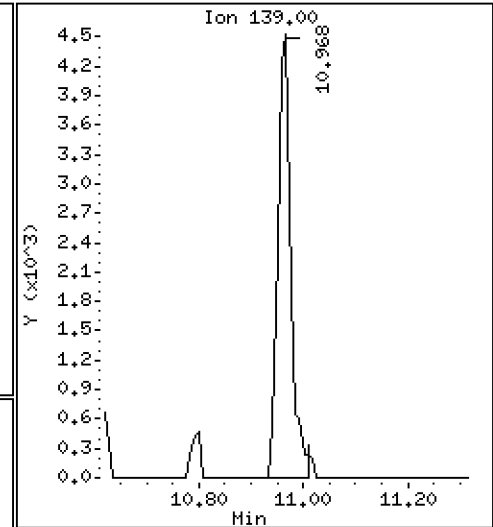
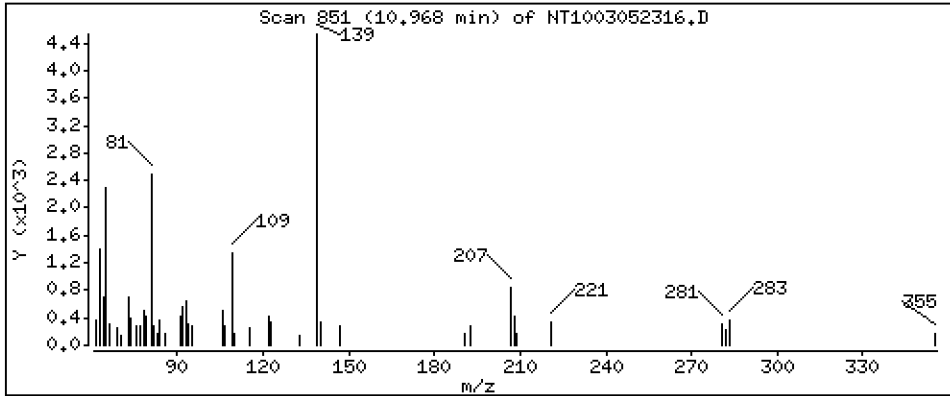
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1286 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

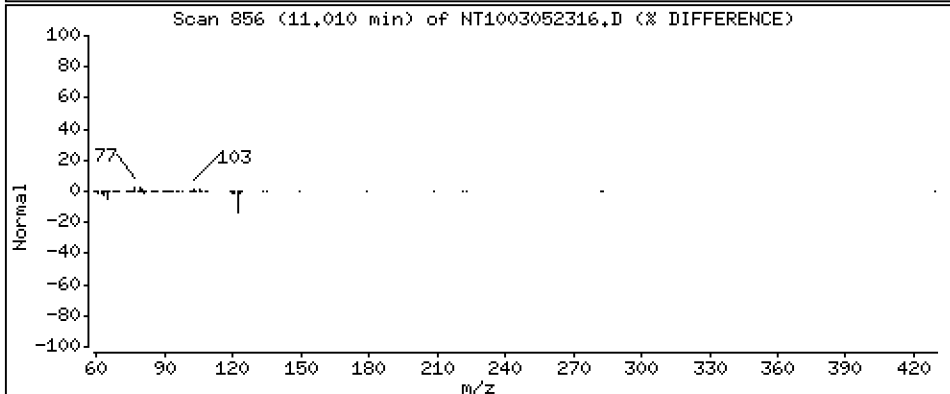
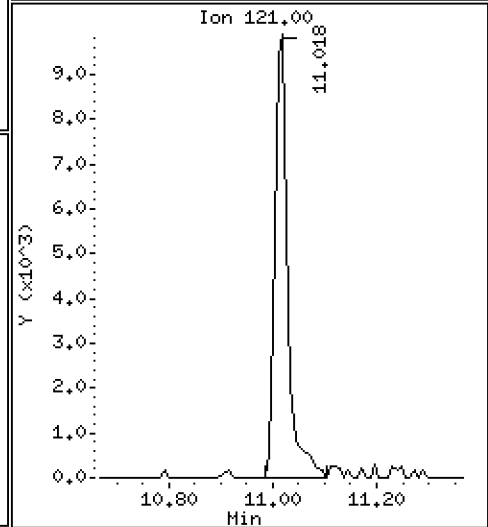
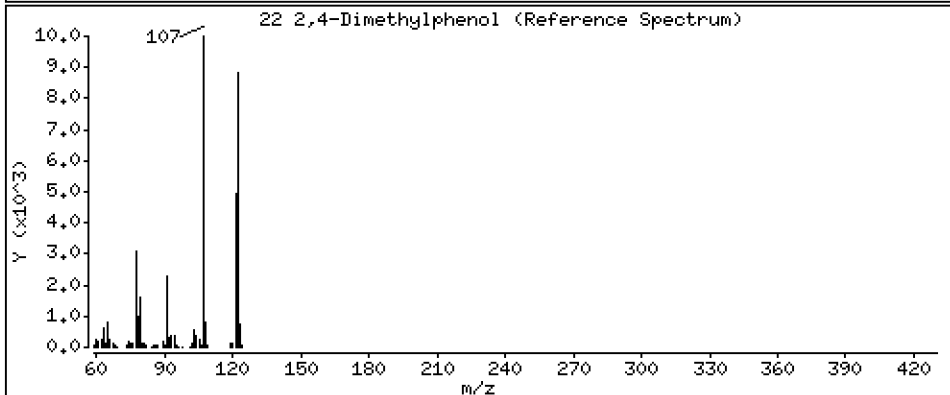
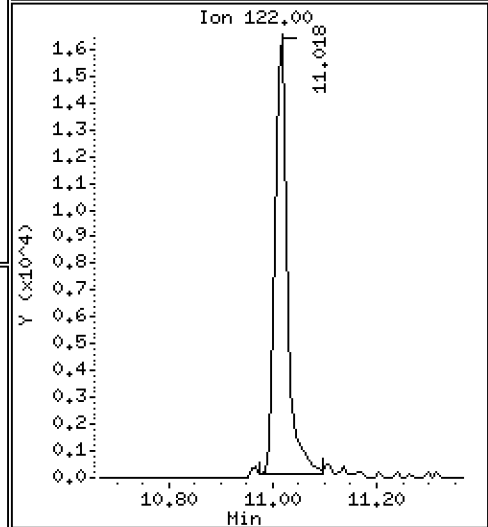
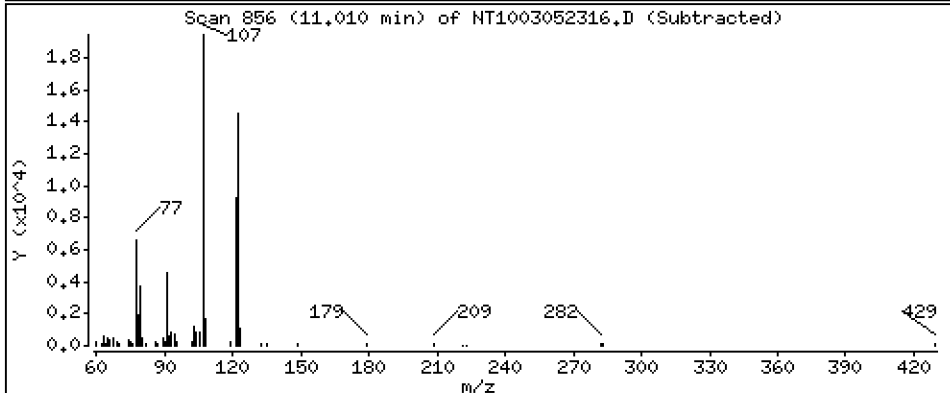
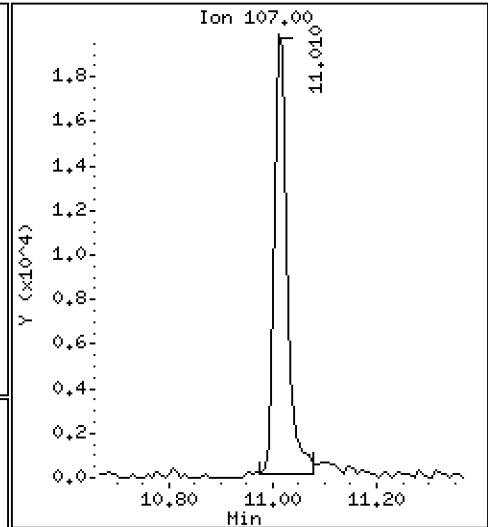
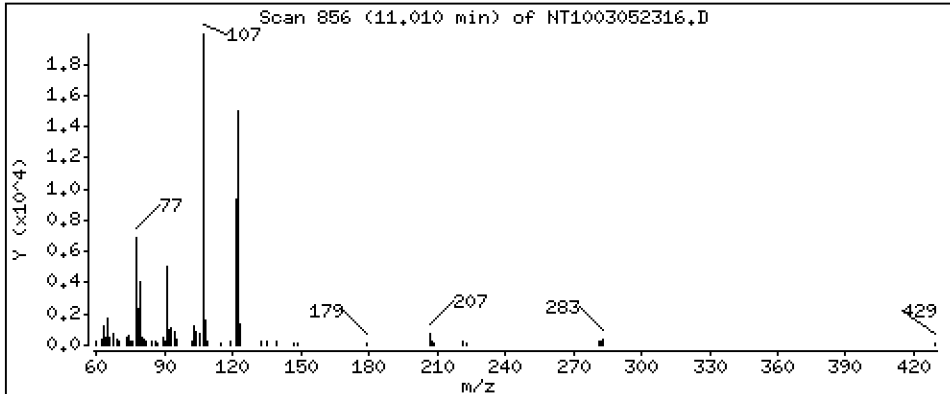
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.3387 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

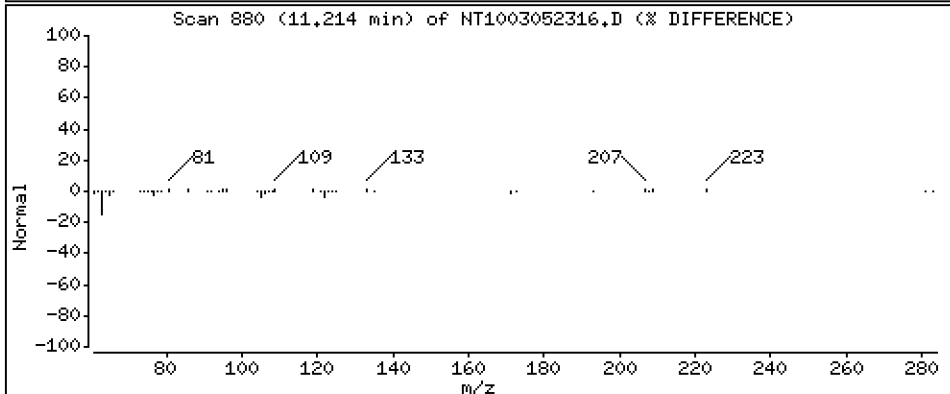
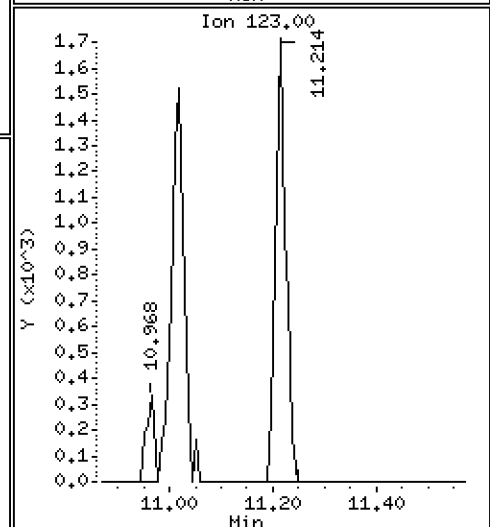
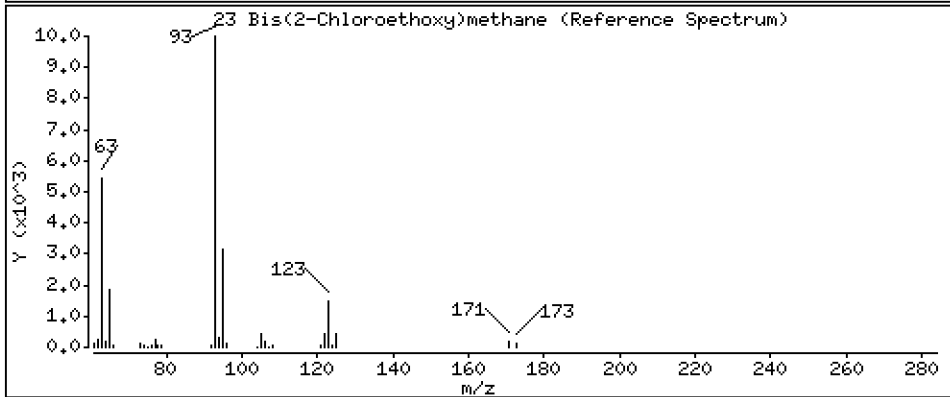
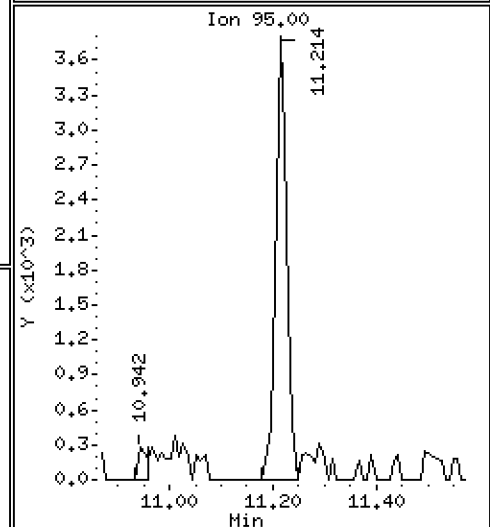
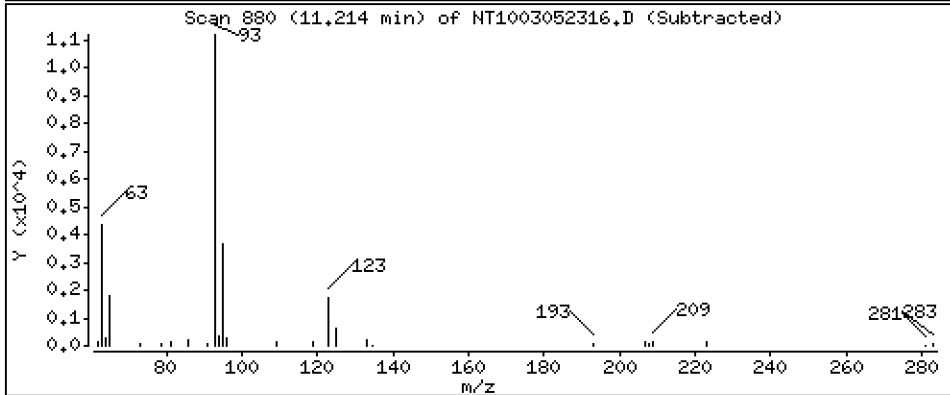
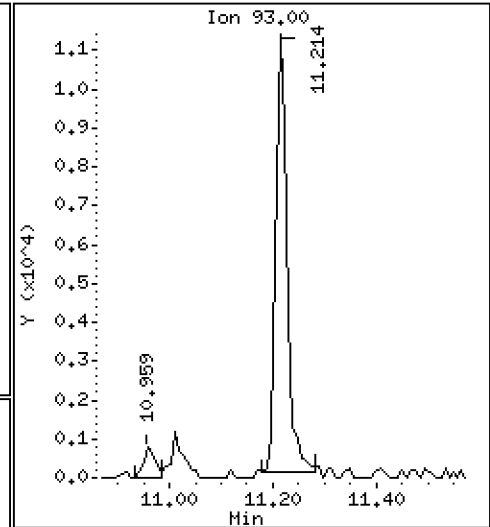
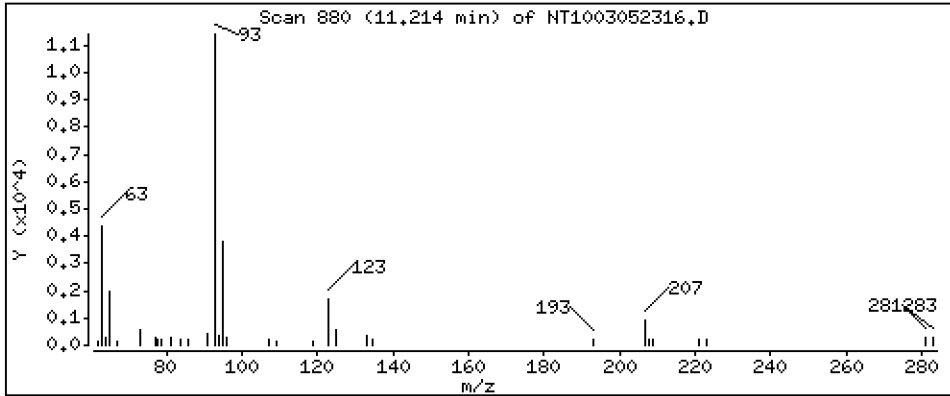
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 0,2003 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

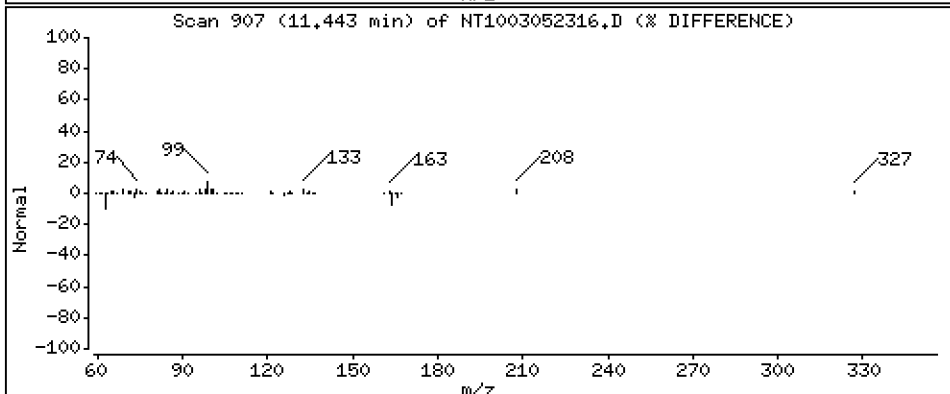
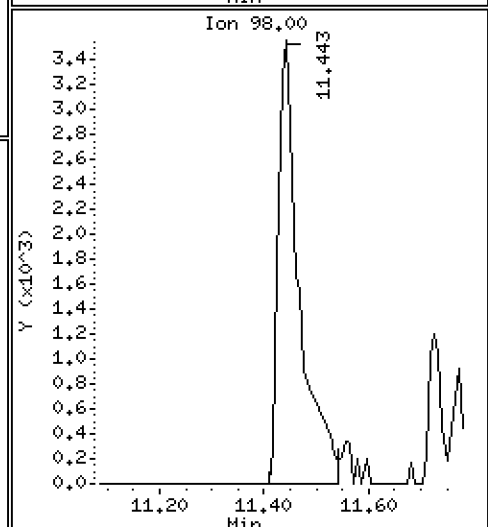
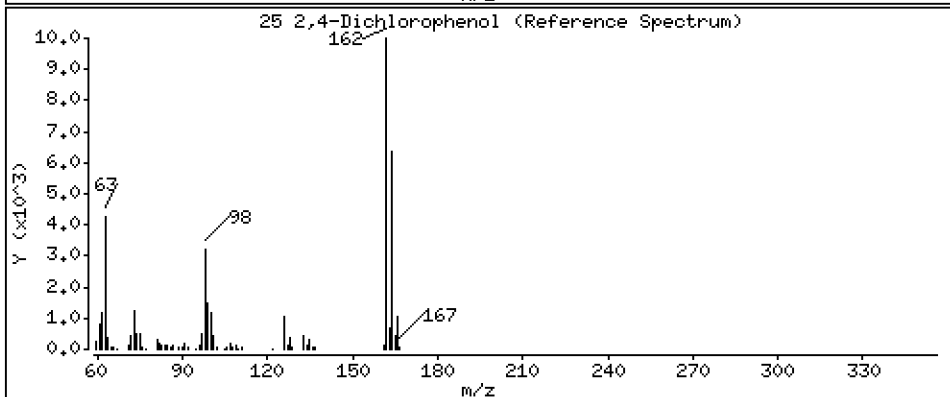
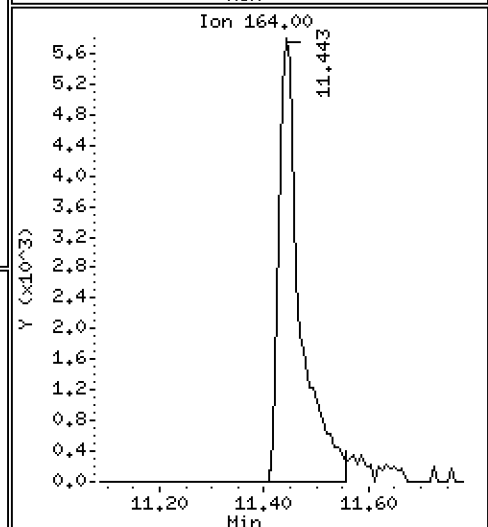
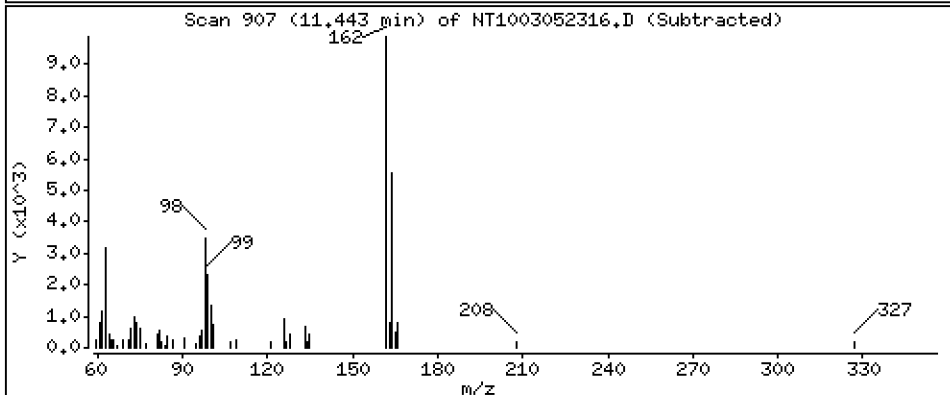
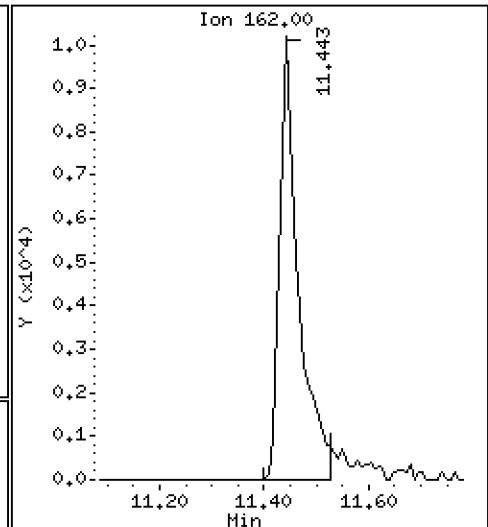
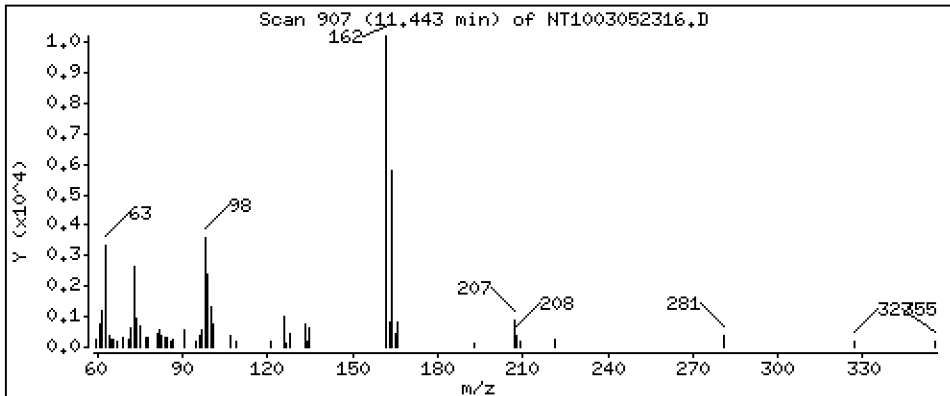
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

25 2,4-Dichlorophenol

Concentration: 0.3387 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

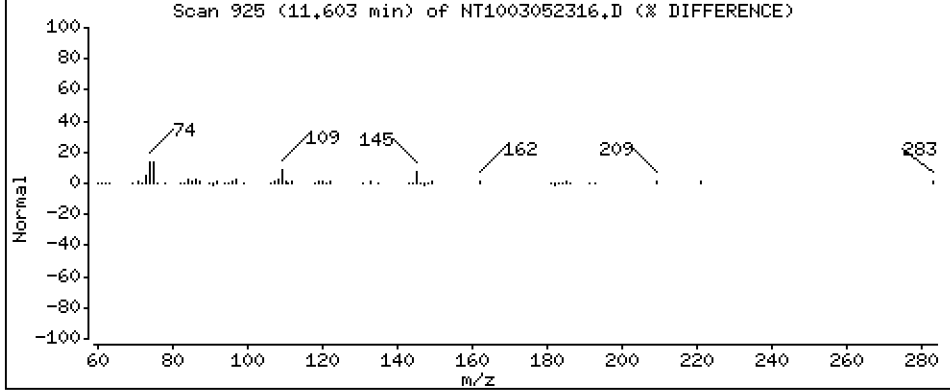
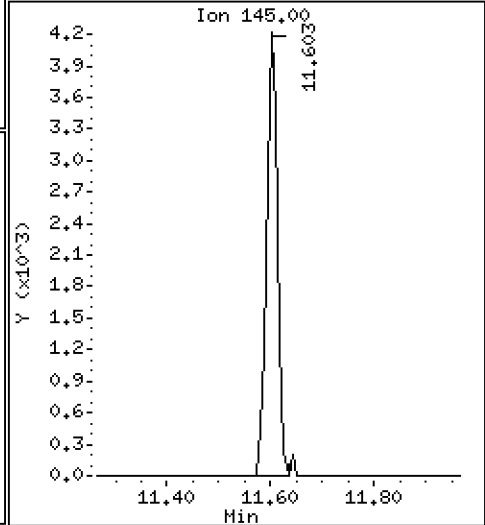
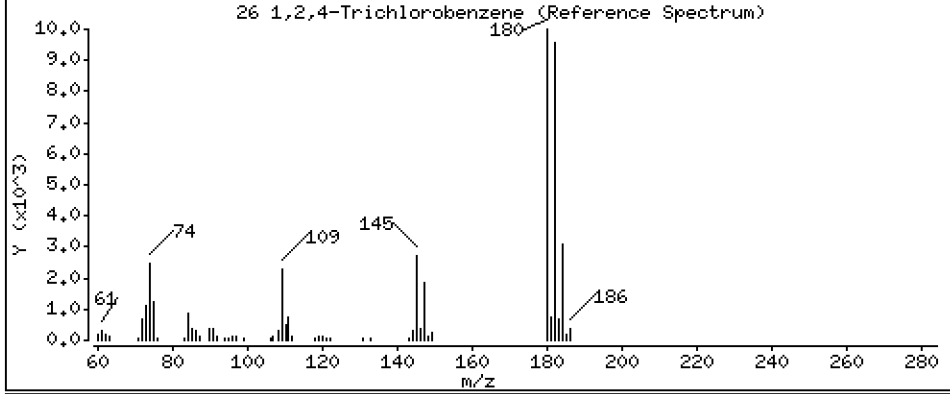
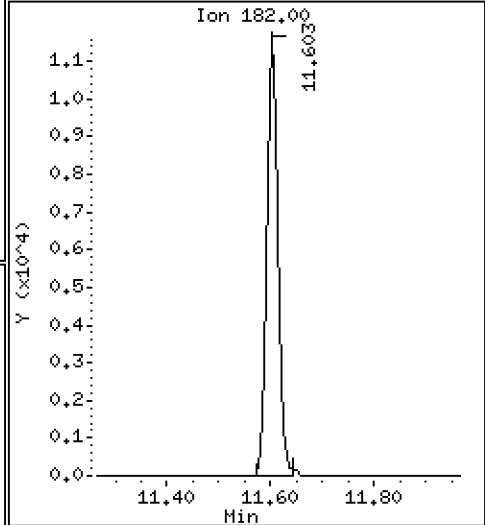
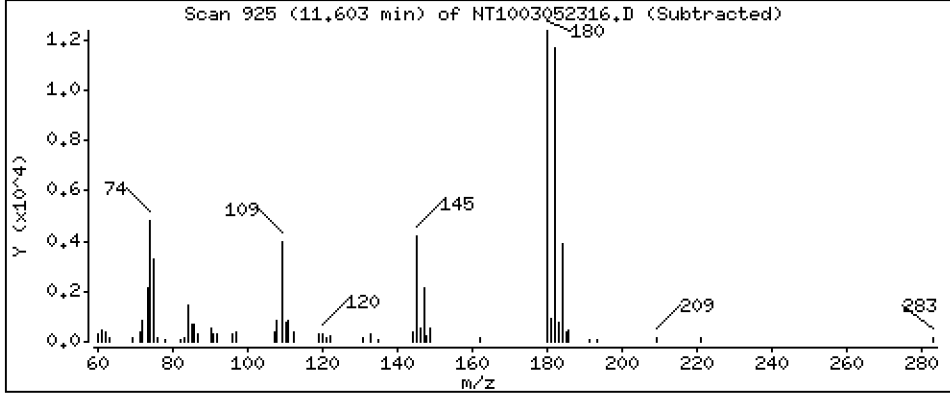
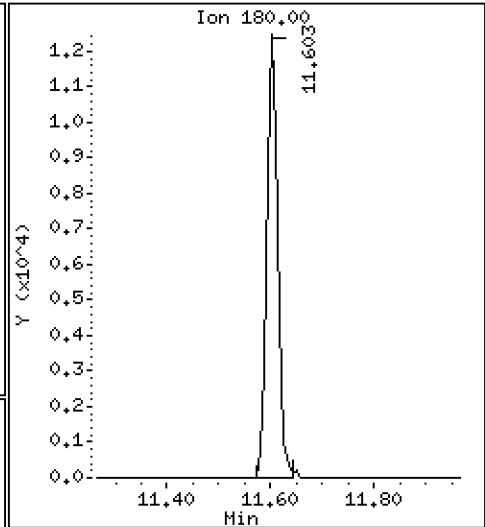
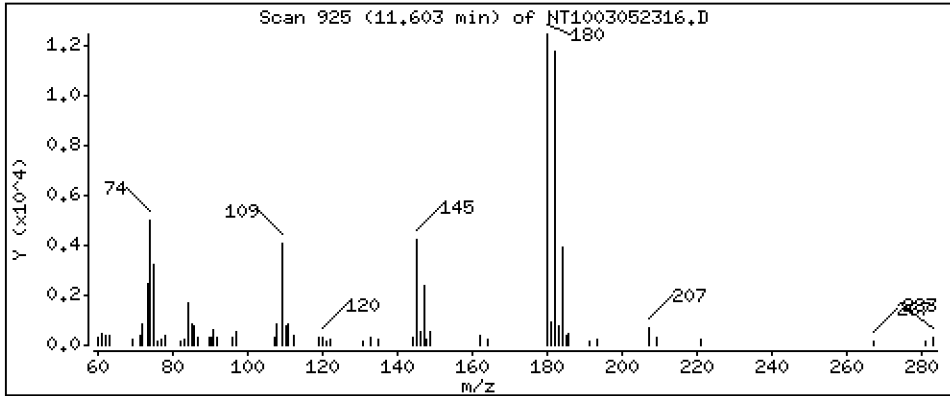
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2309 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

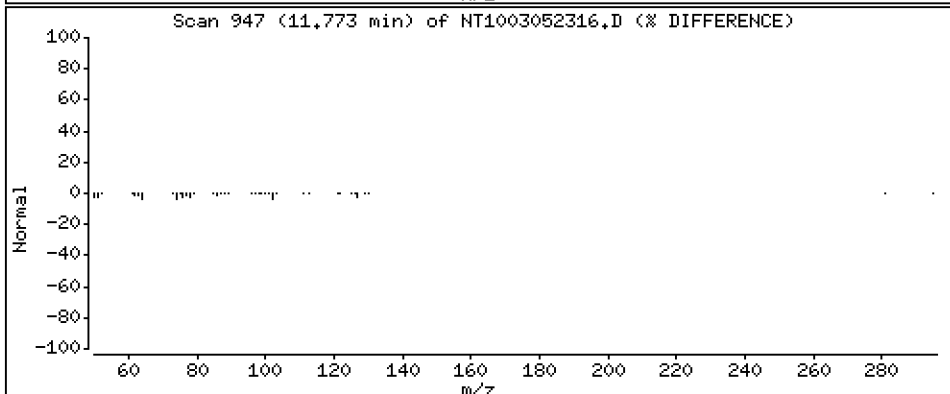
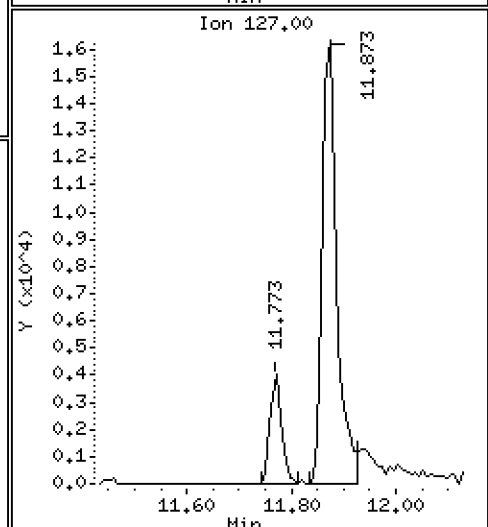
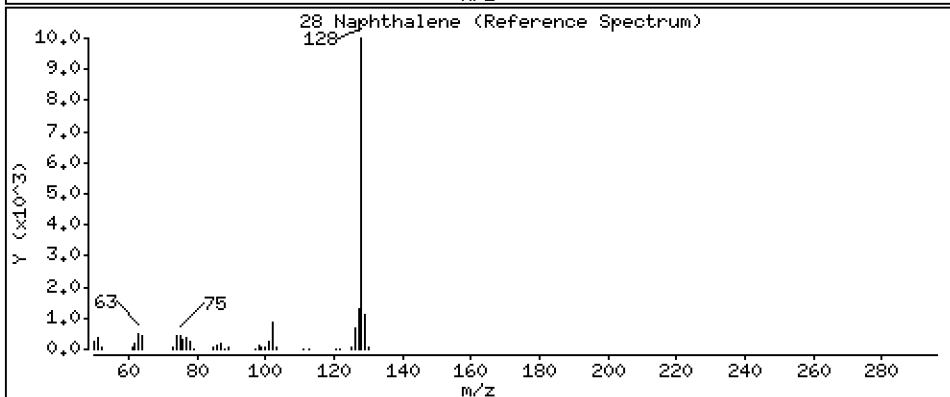
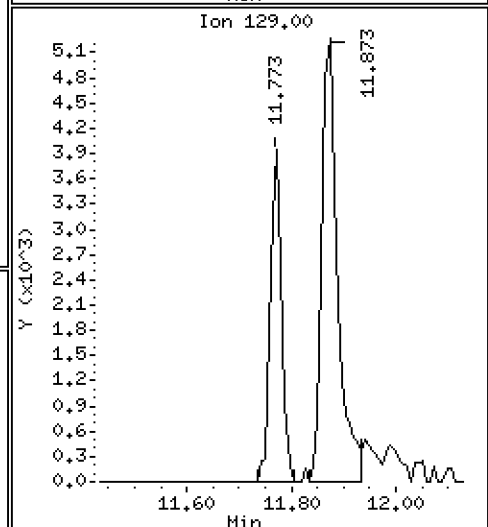
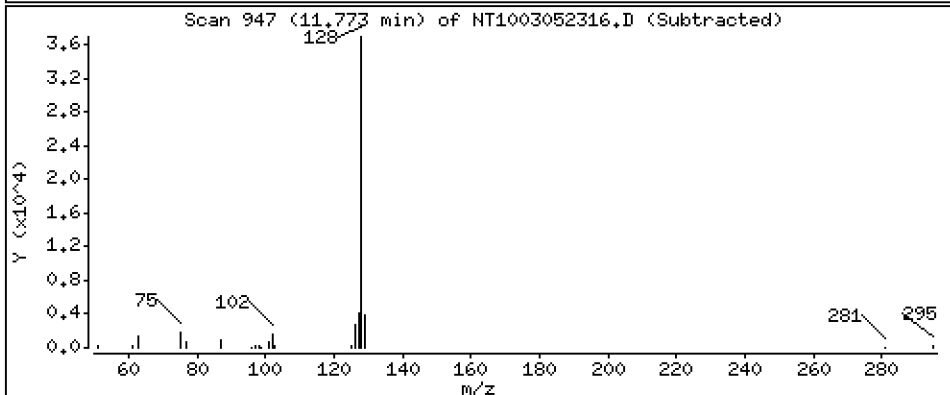
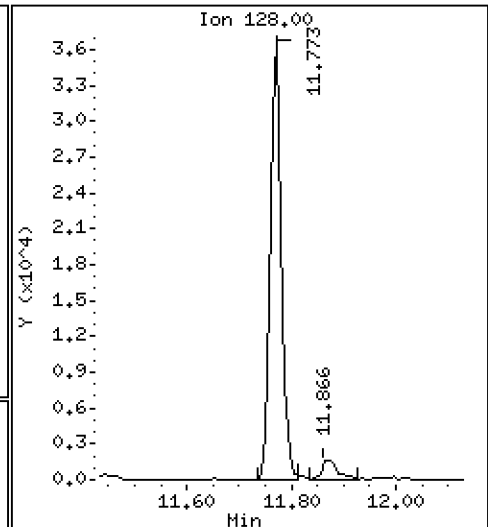
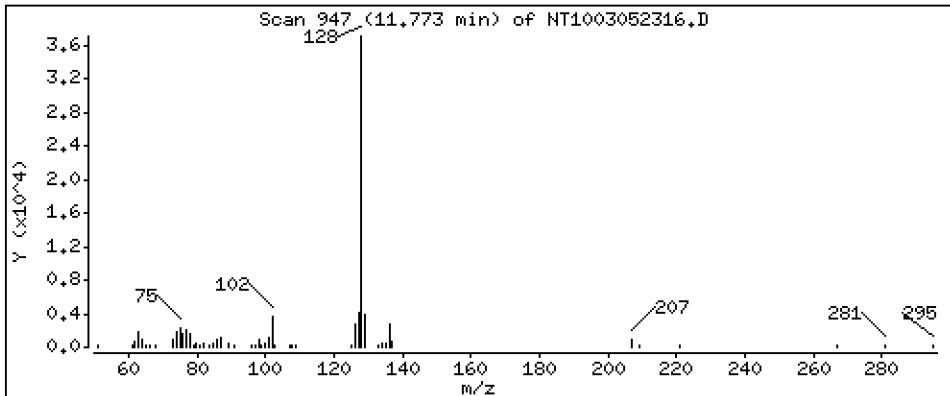
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2025 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

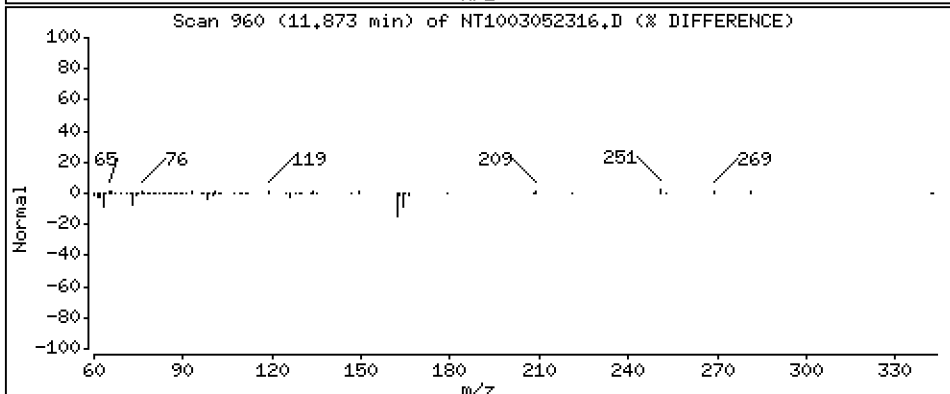
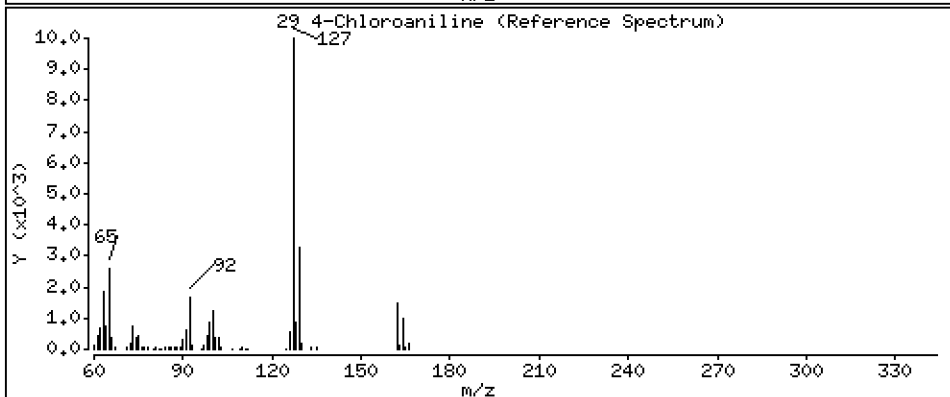
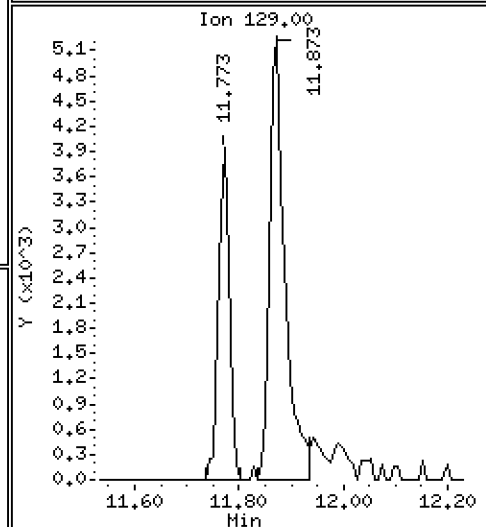
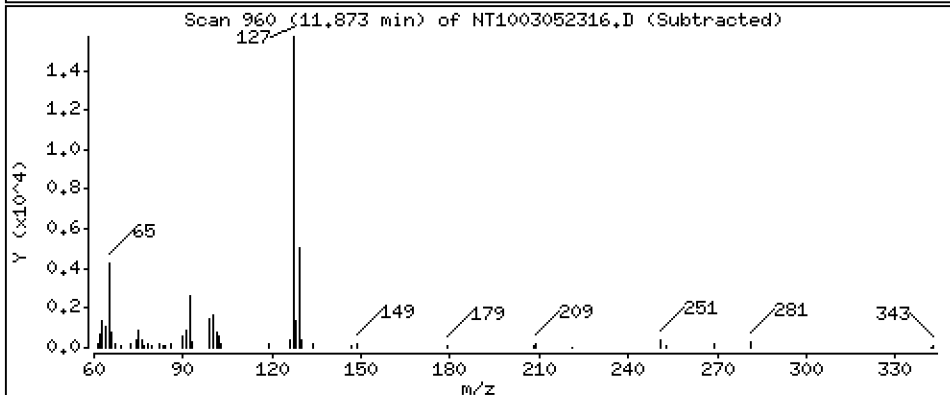
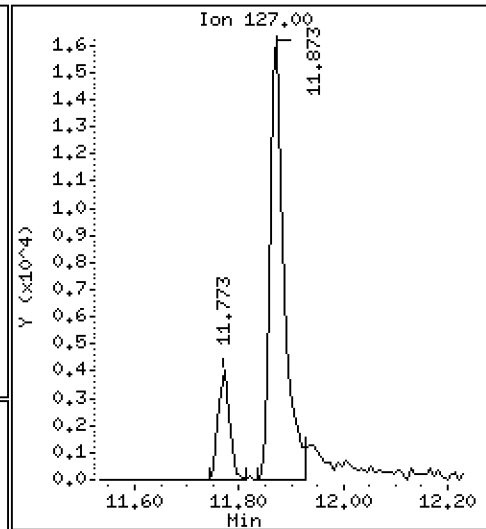
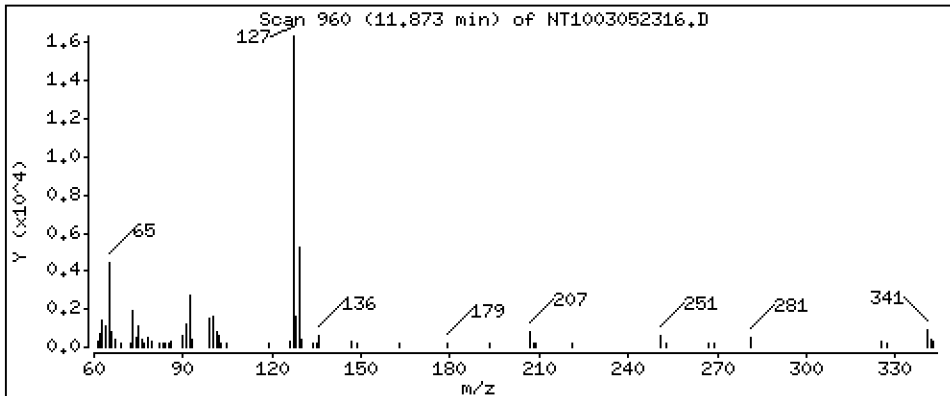
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,2560 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

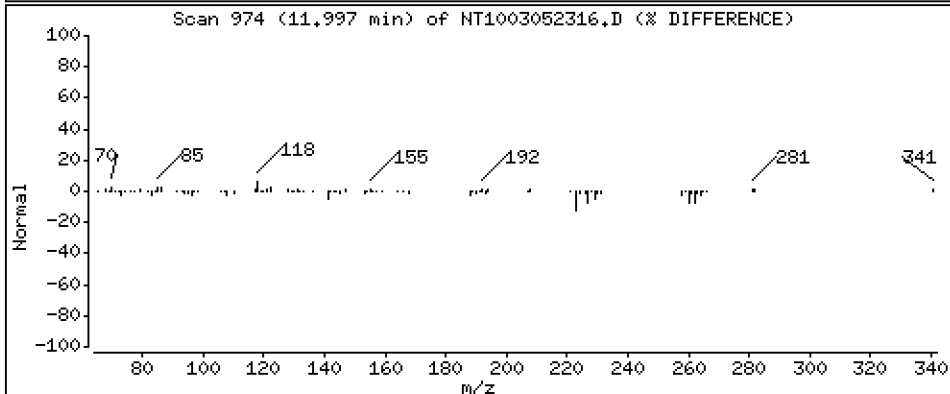
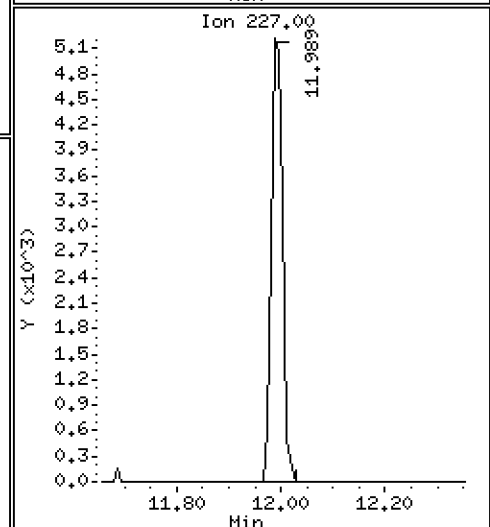
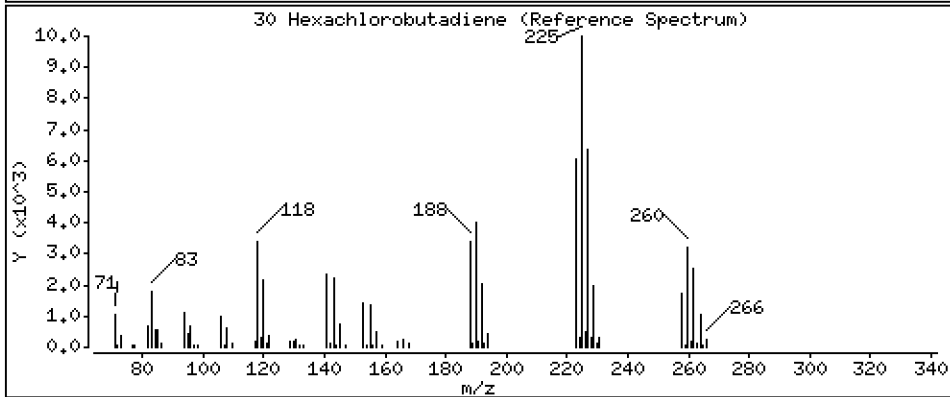
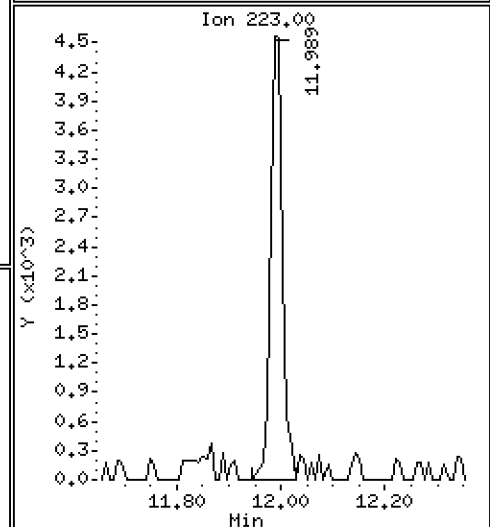
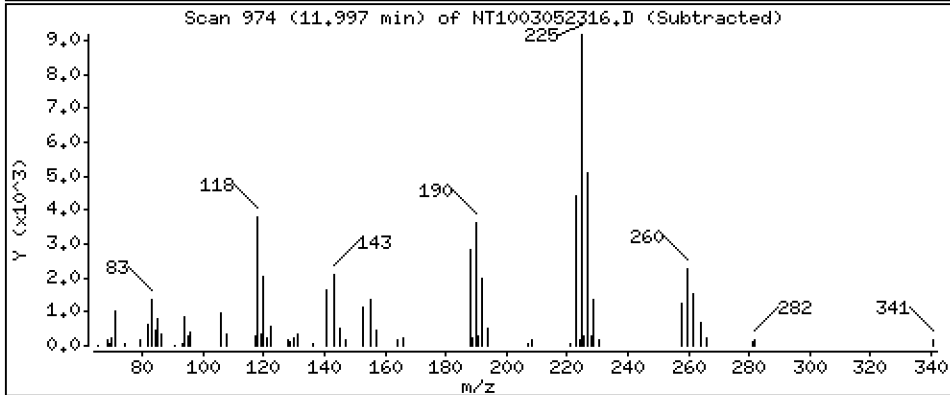
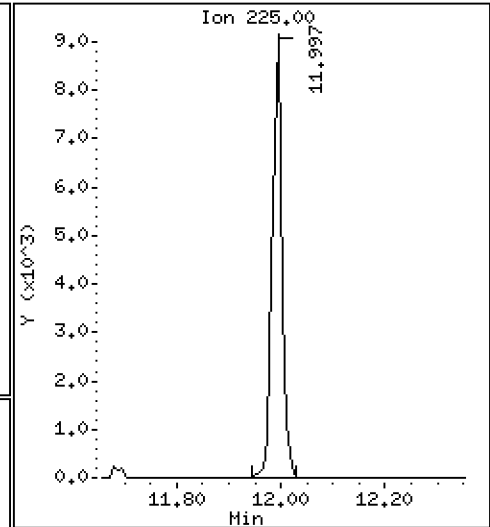
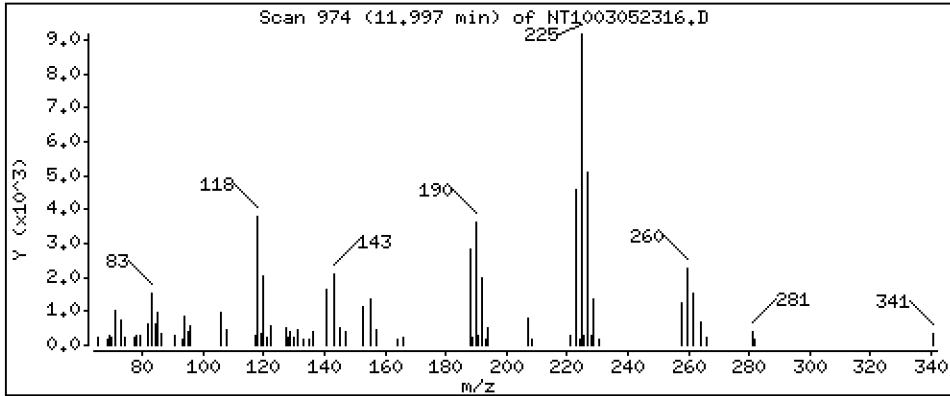
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2510 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

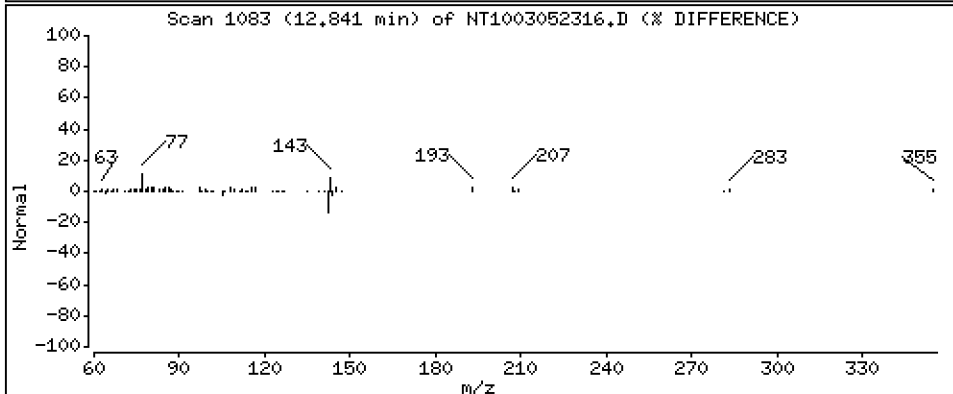
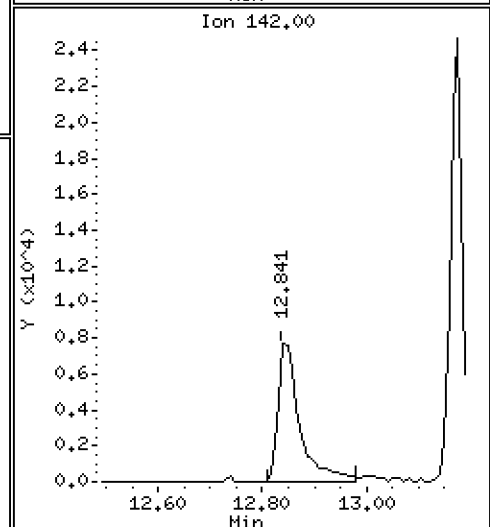
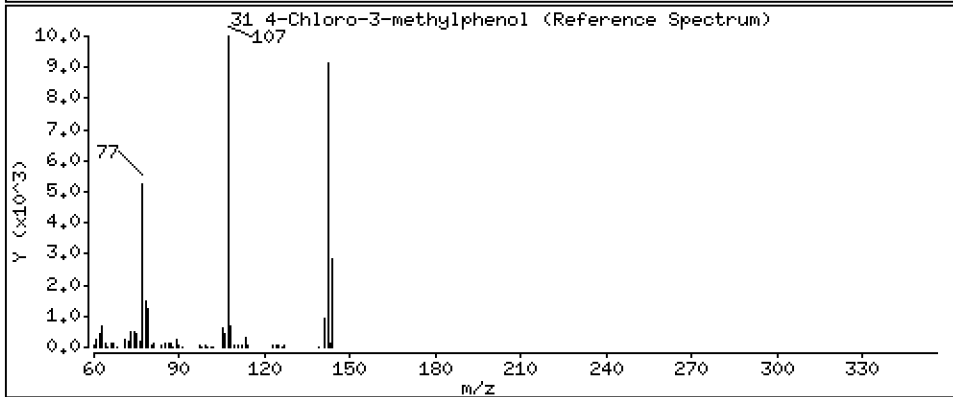
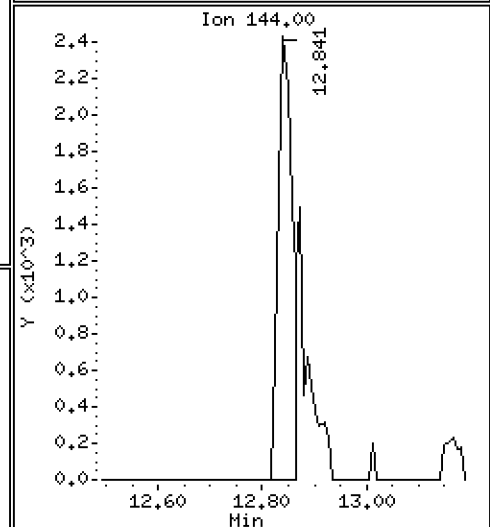
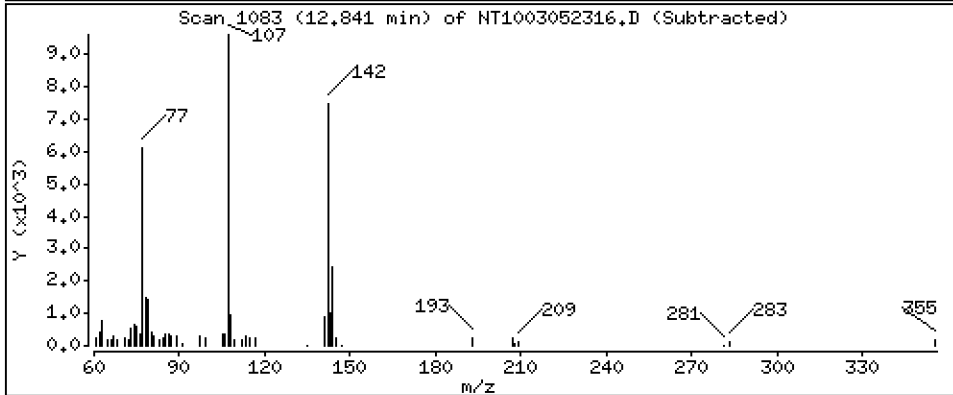
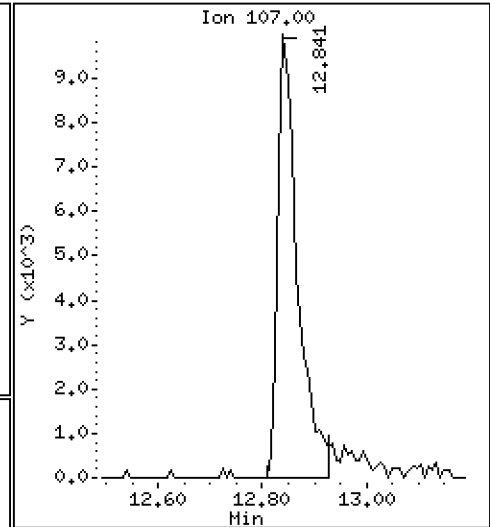
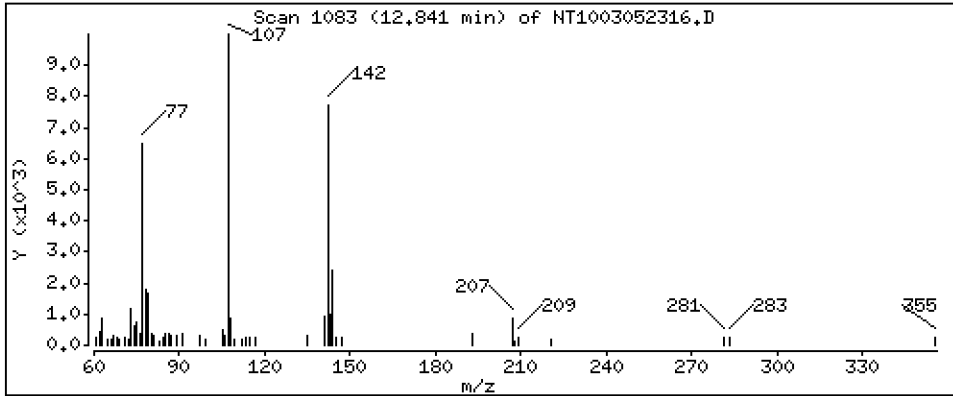
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 0,2986 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

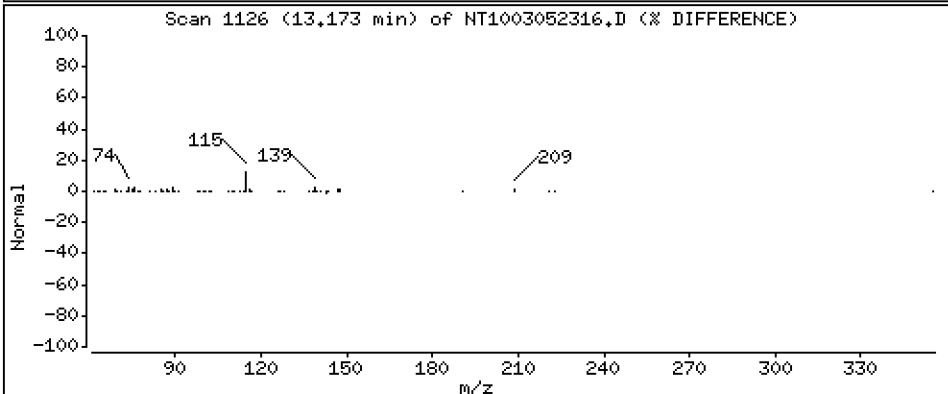
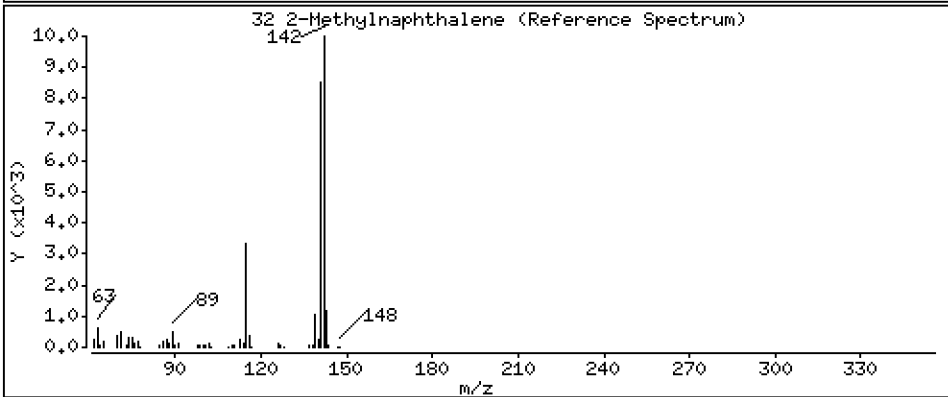
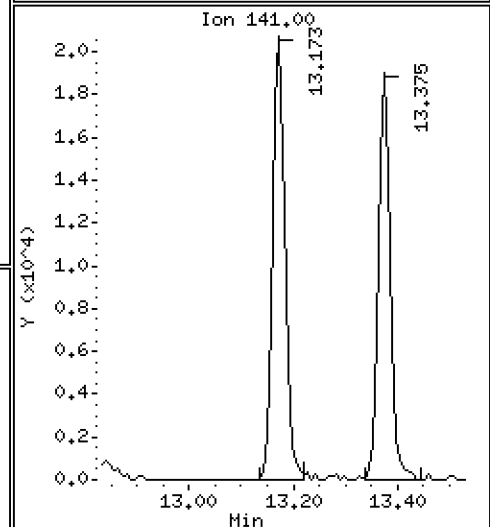
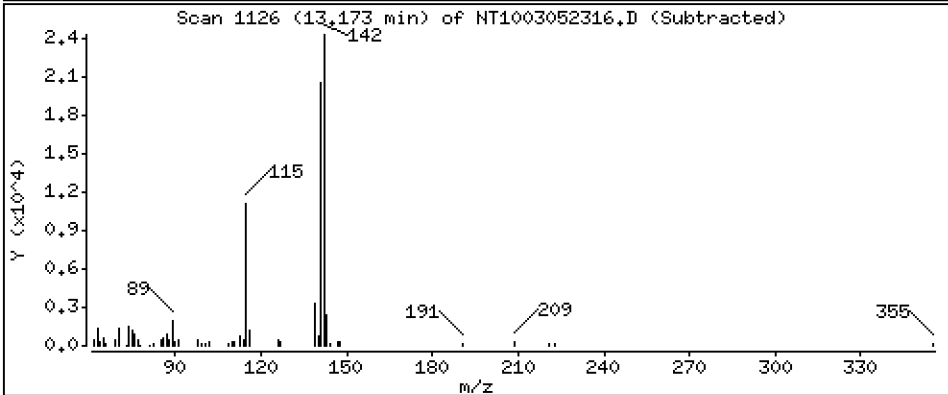
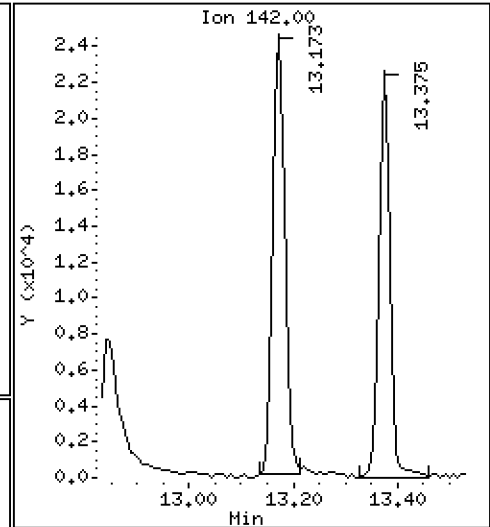
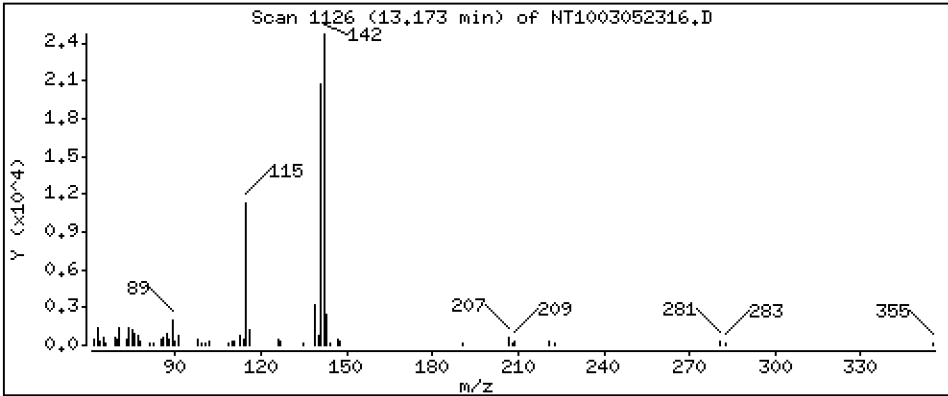
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,1967 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

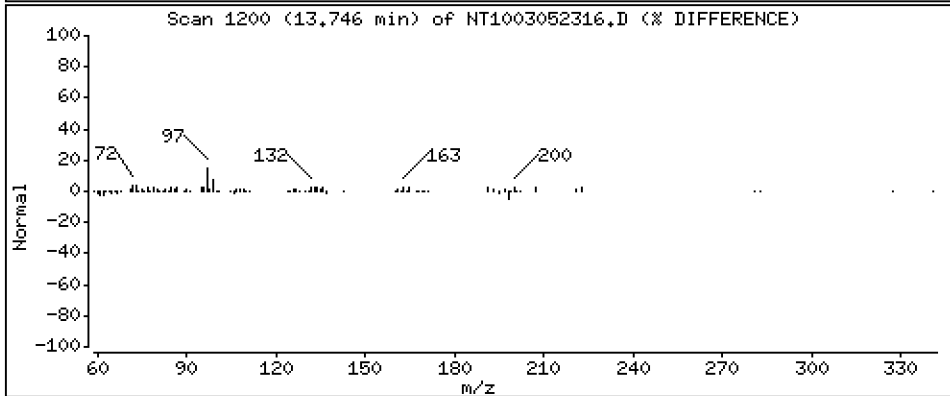
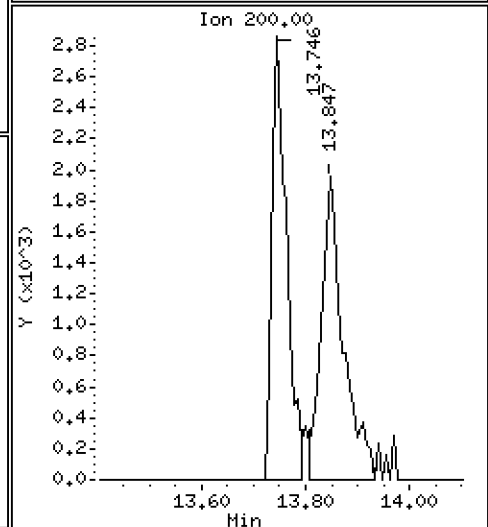
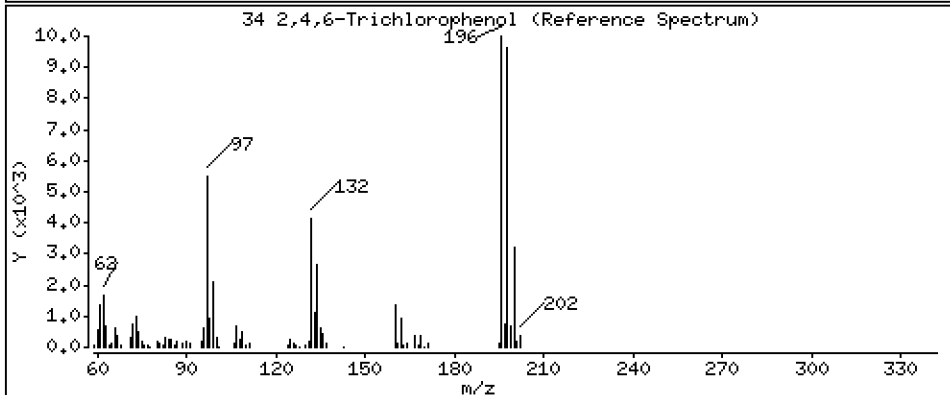
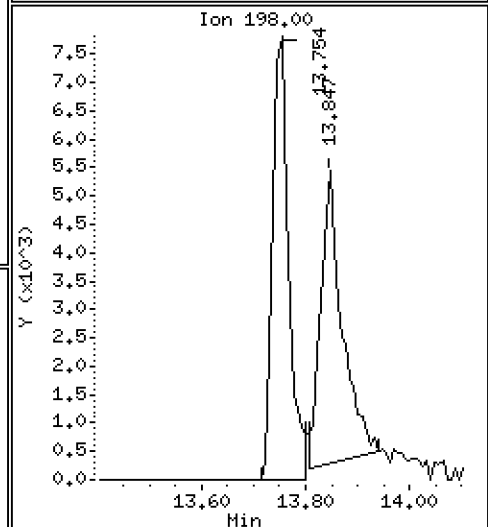
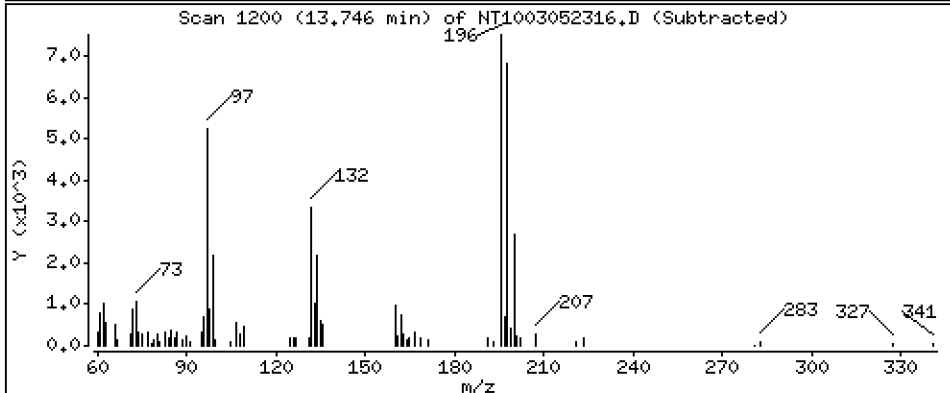
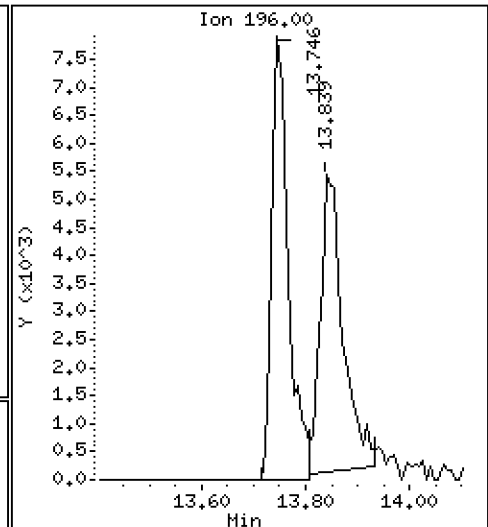
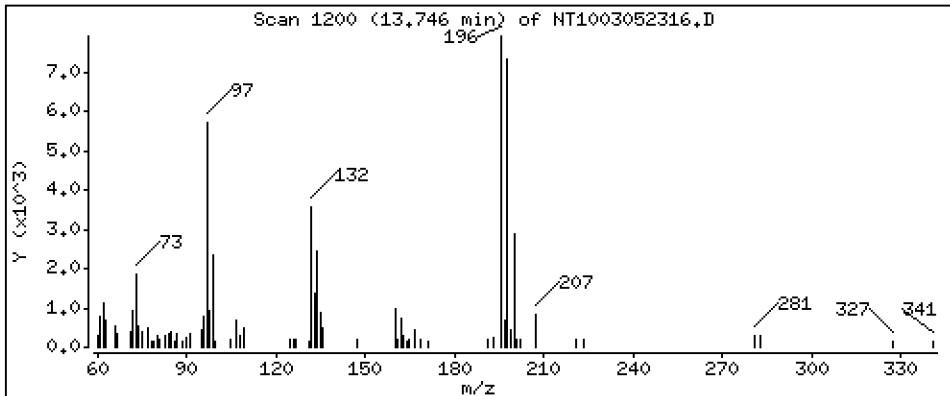
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

34 2,4,6-Trichlorophenol

Concentration: 0.3294 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

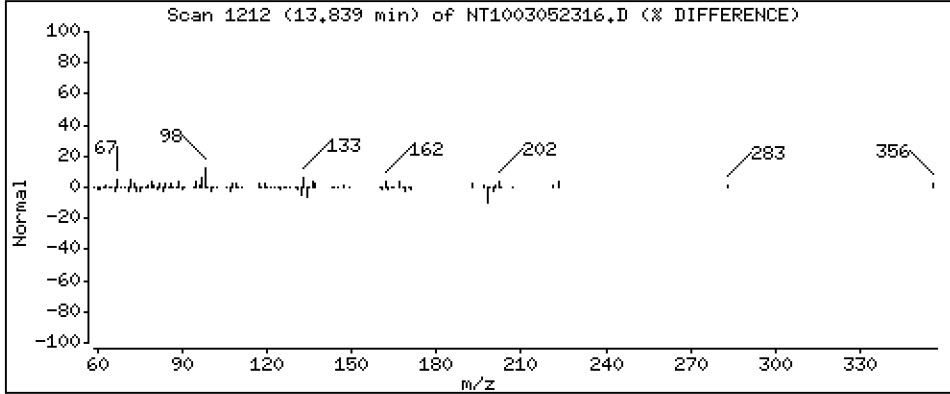
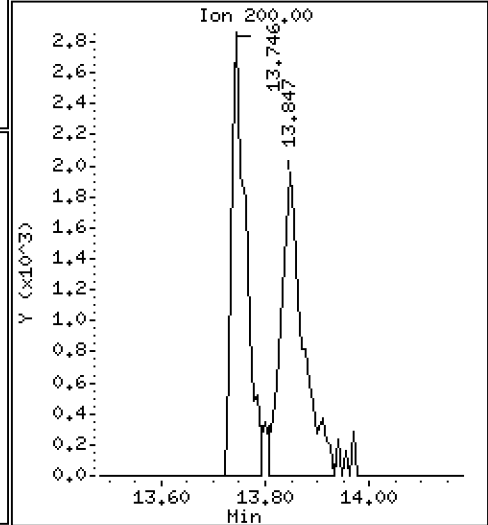
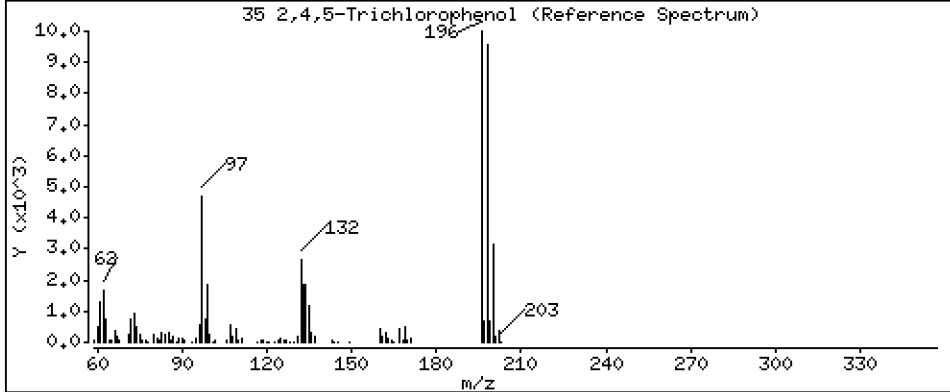
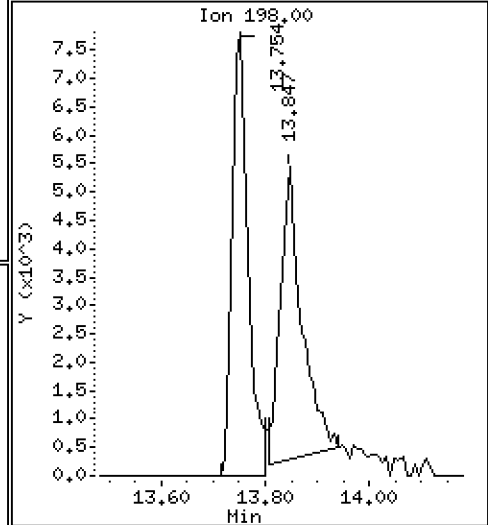
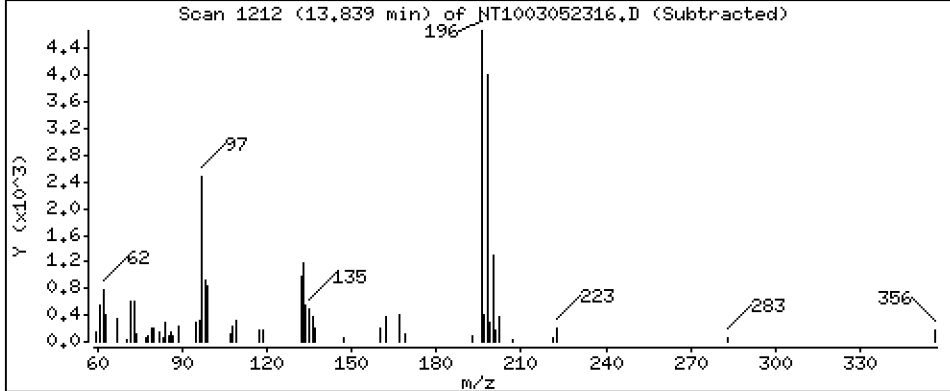
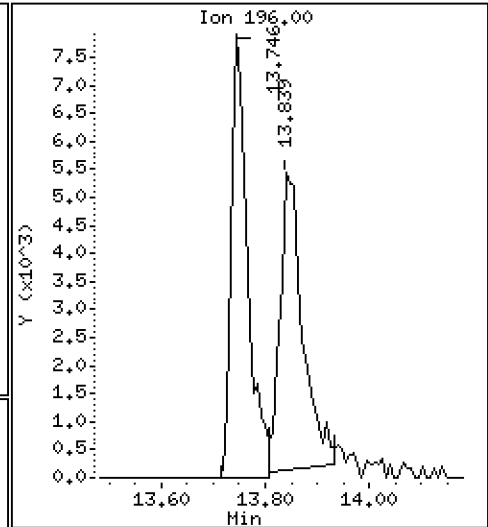
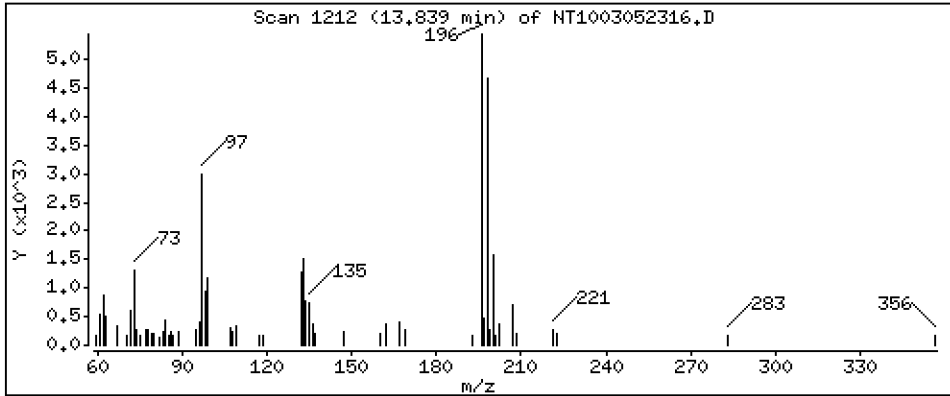
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2931 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

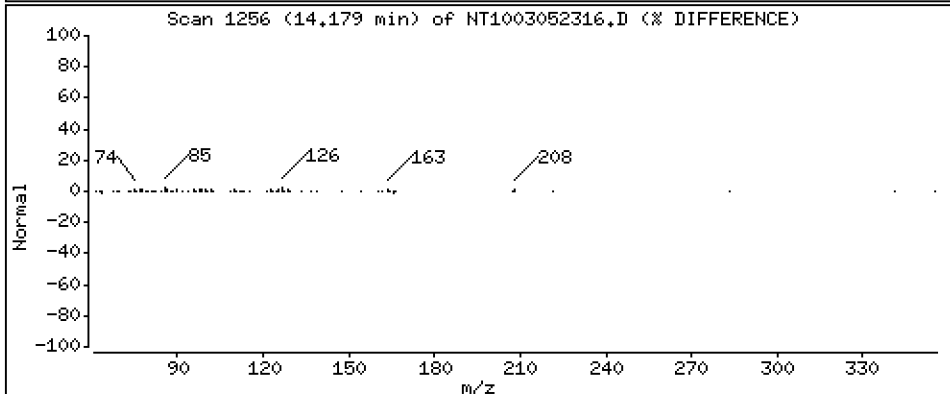
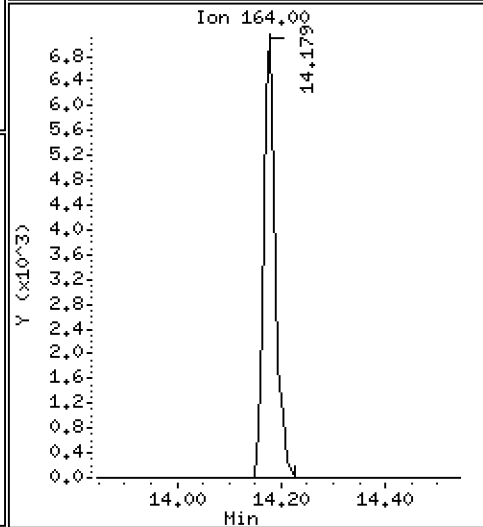
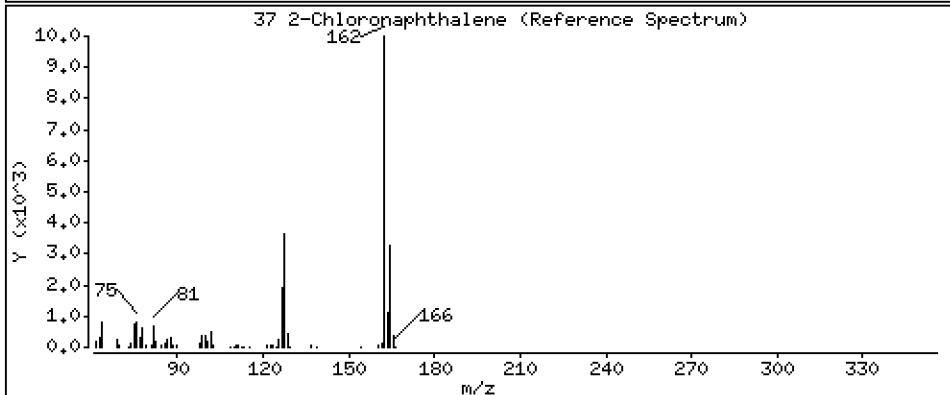
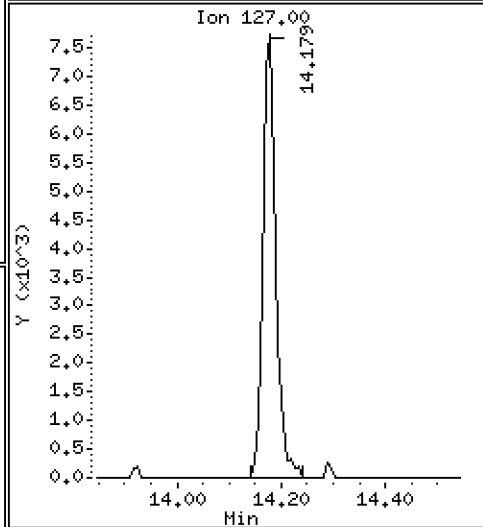
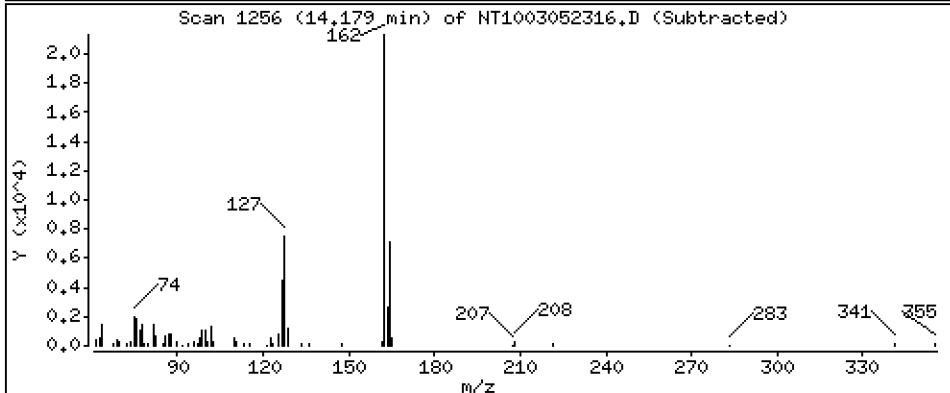
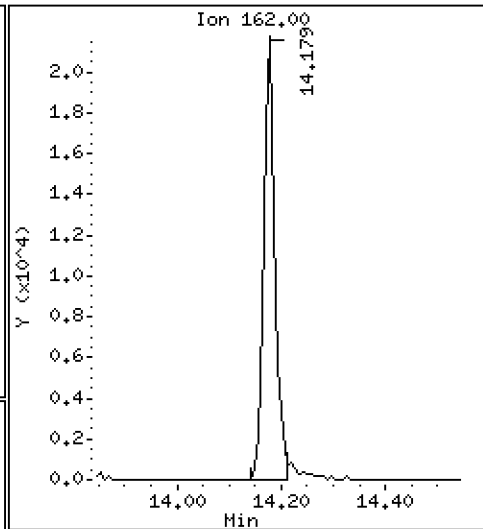
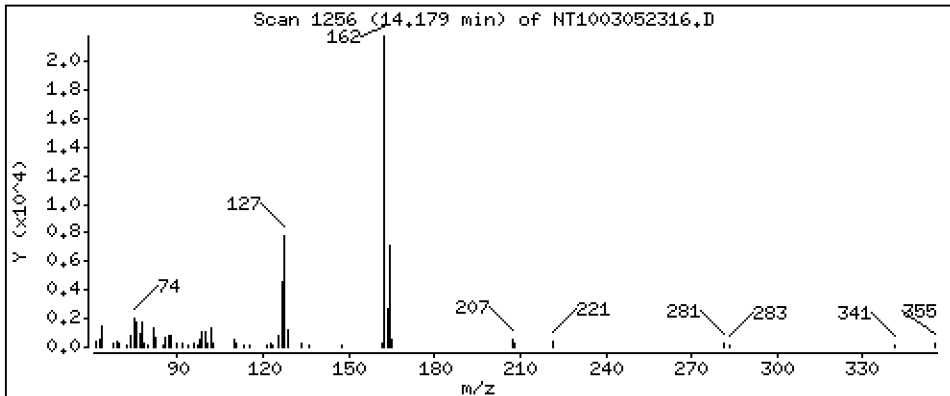
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2152 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

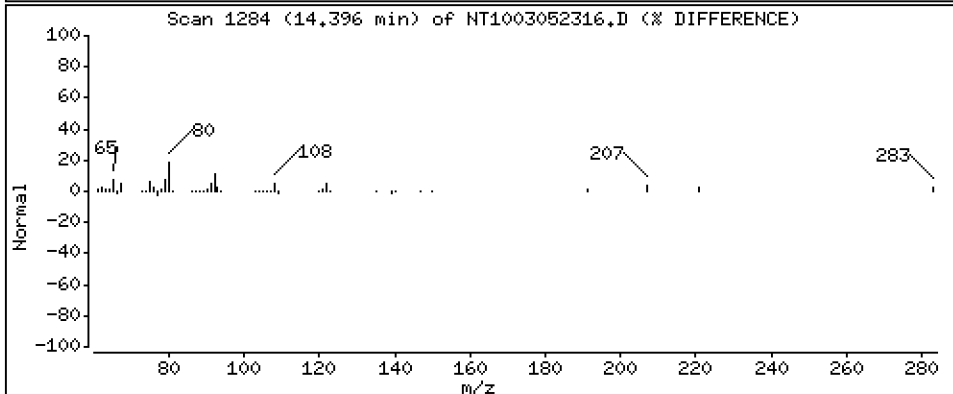
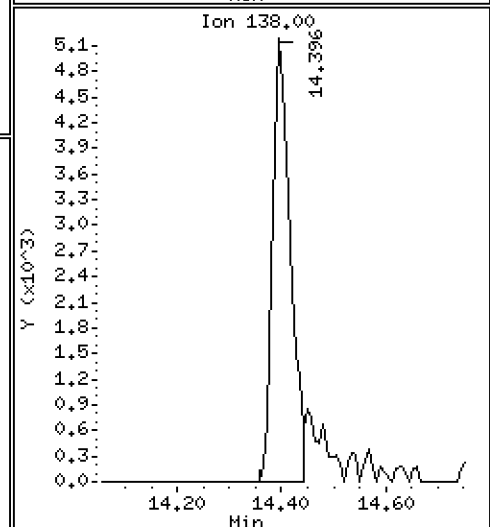
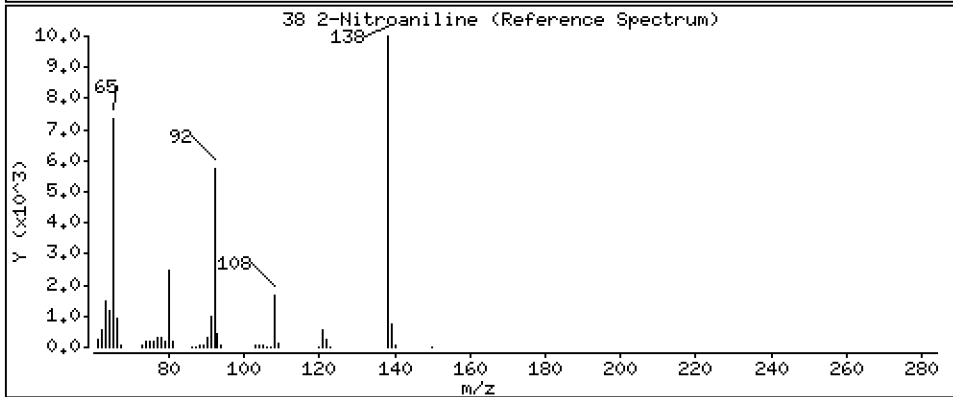
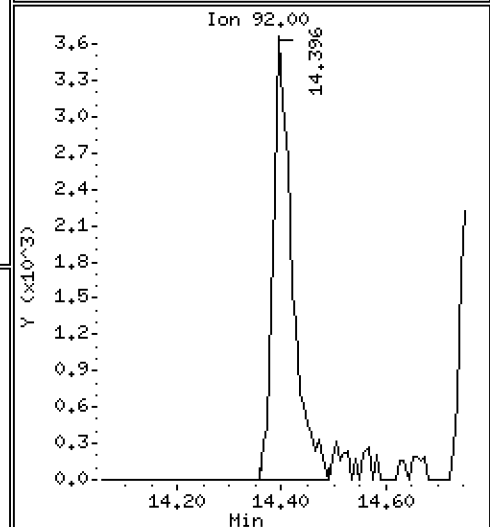
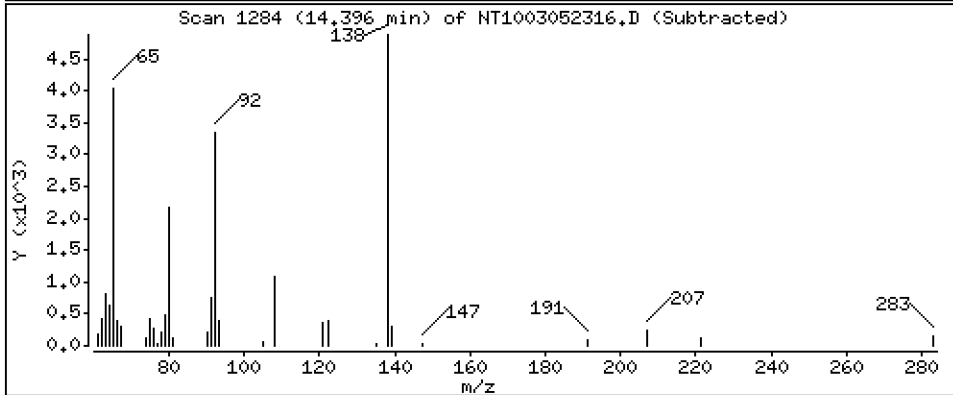
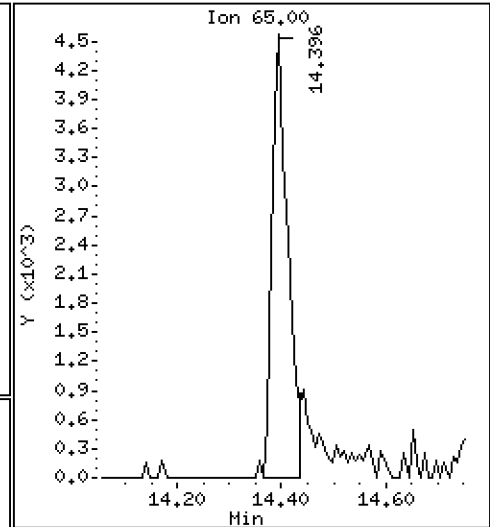
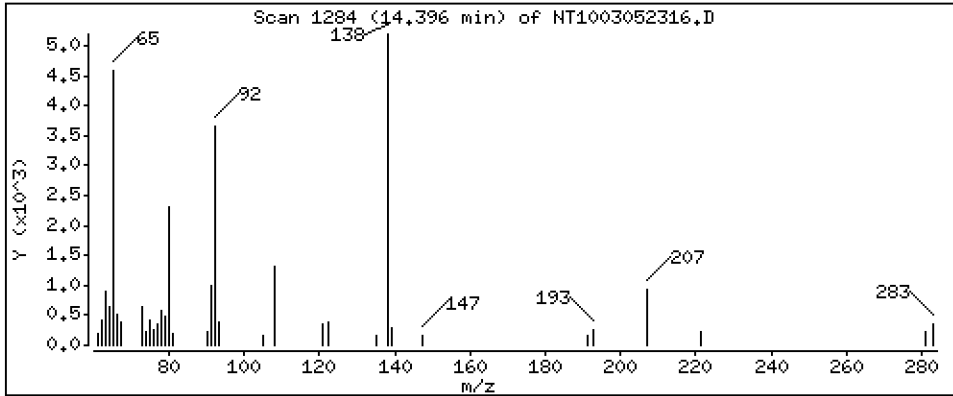
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2264 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

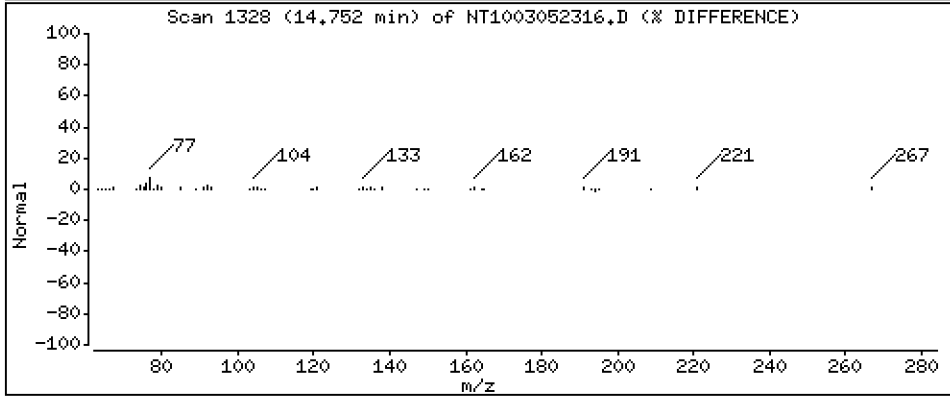
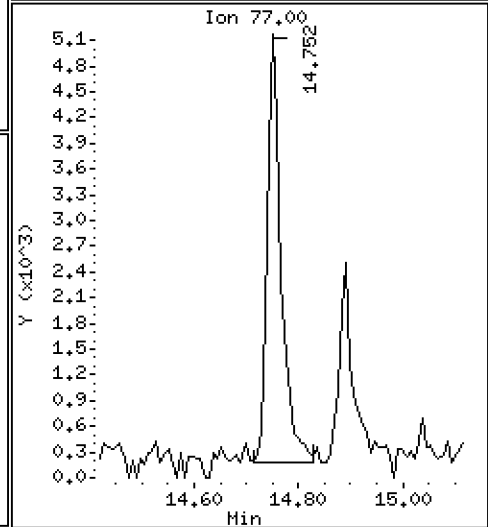
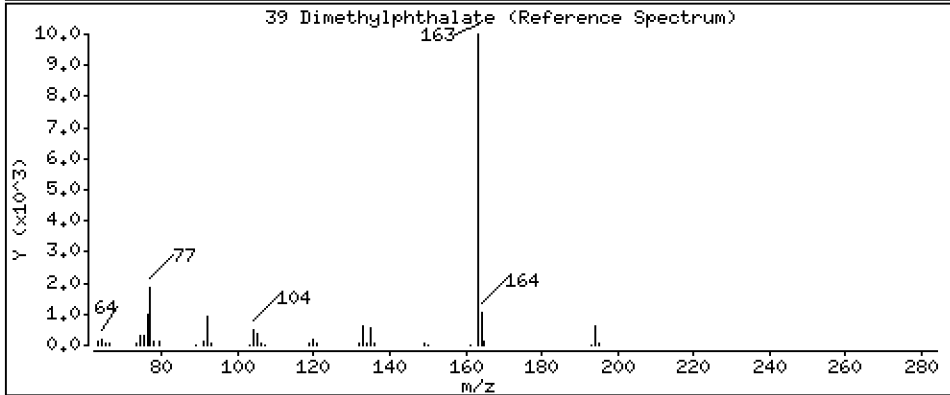
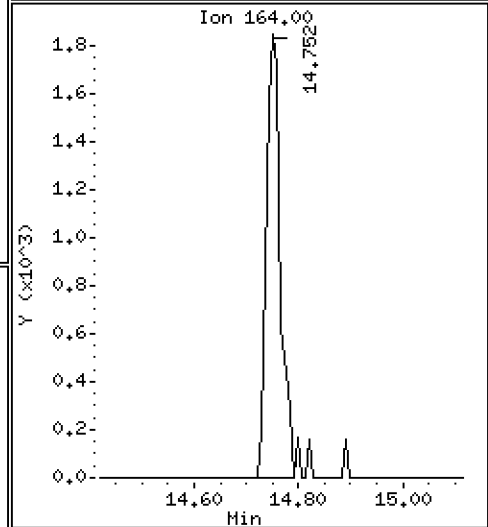
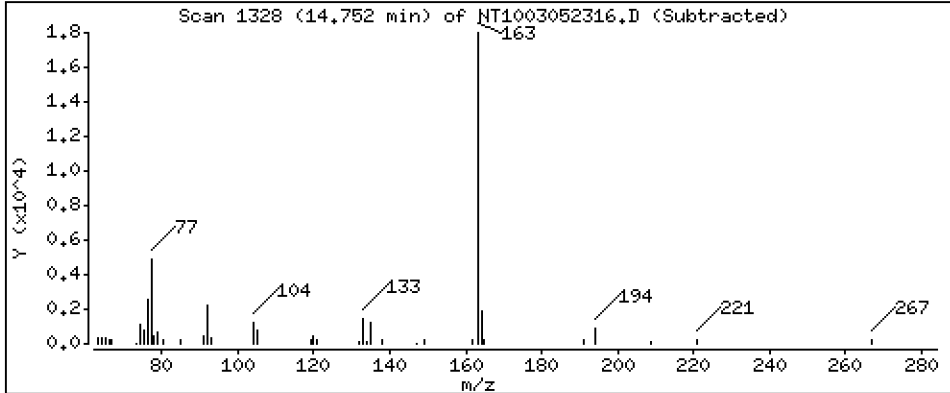
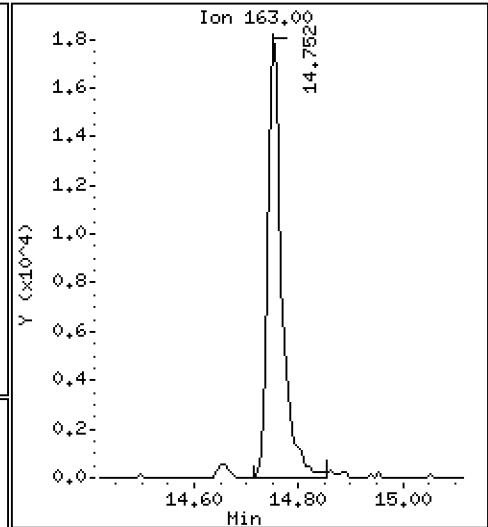
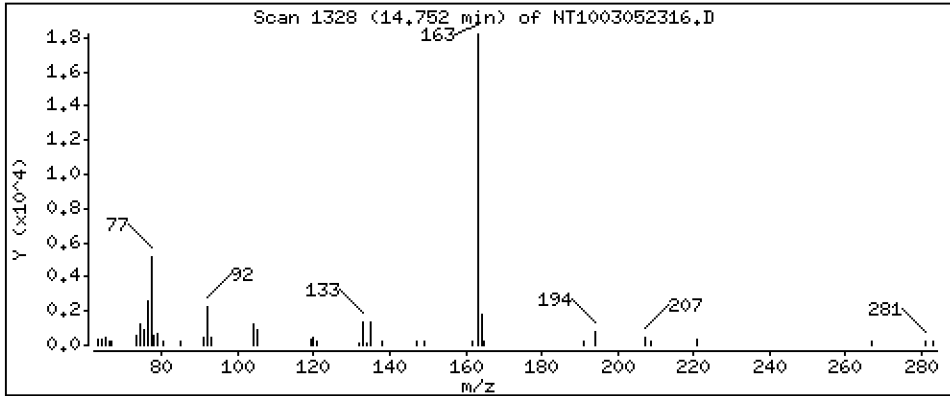
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1954 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

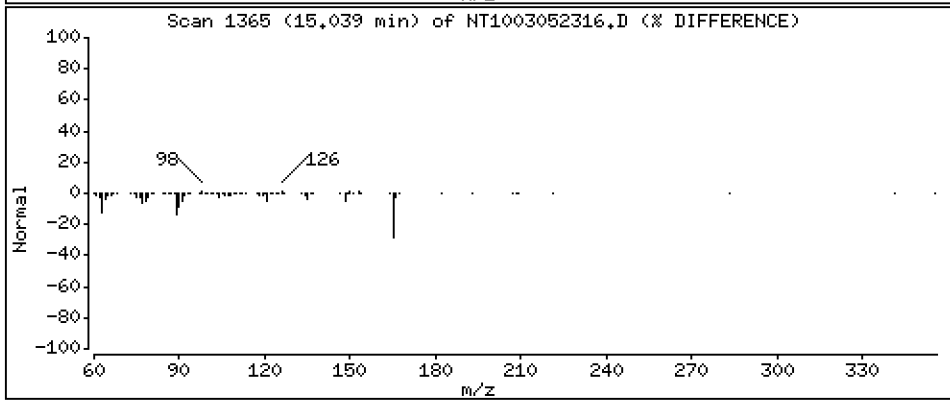
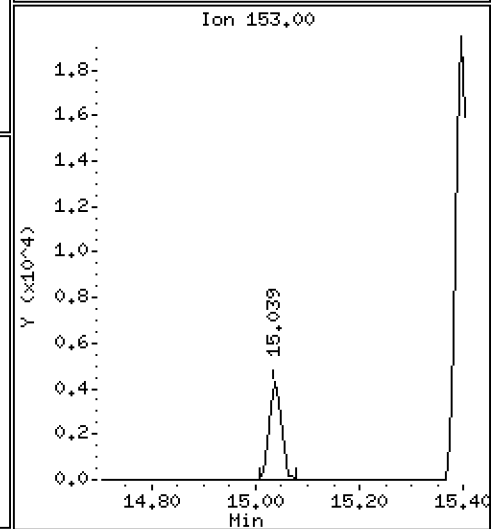
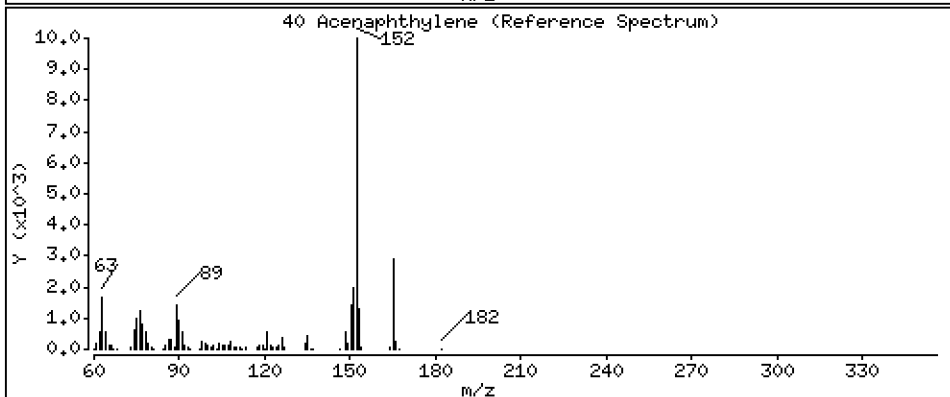
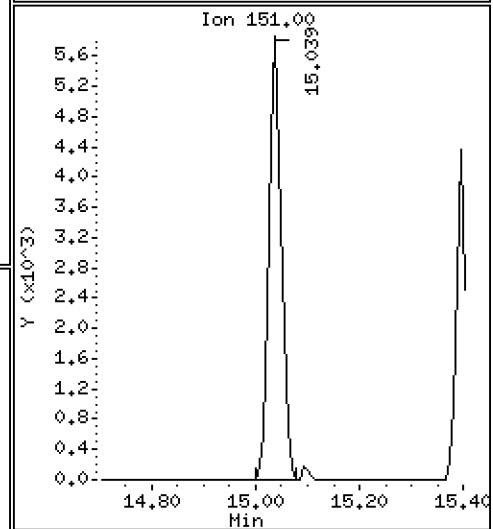
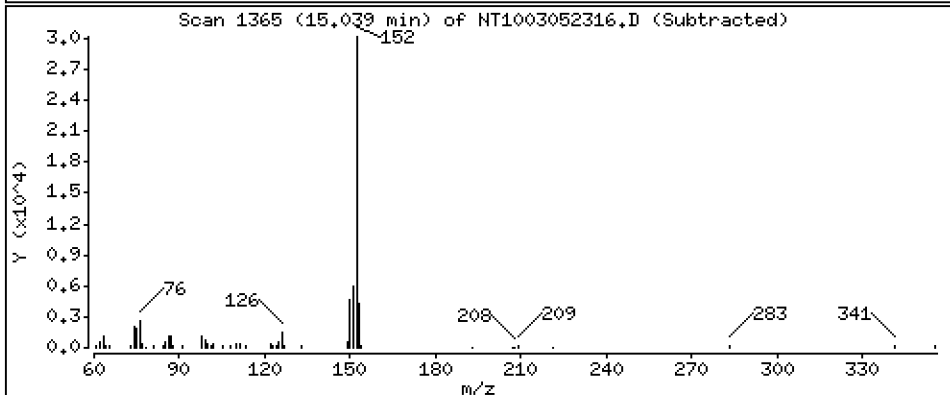
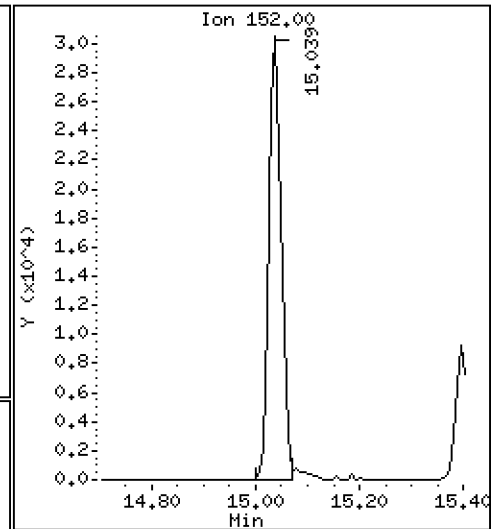
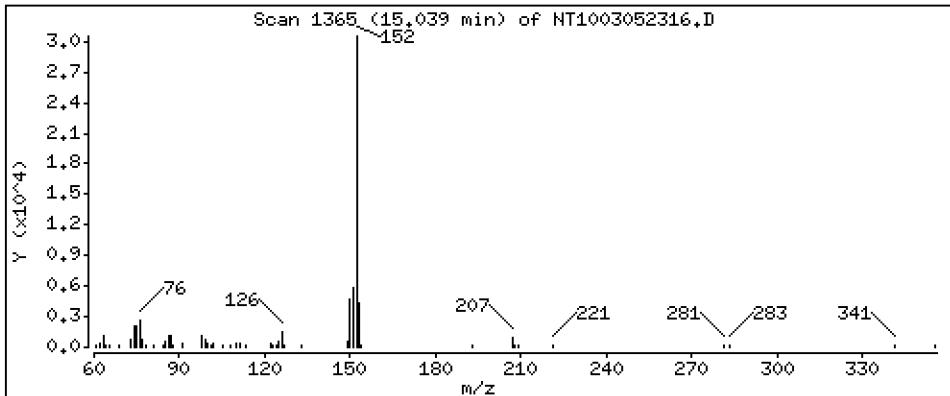
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,1877 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

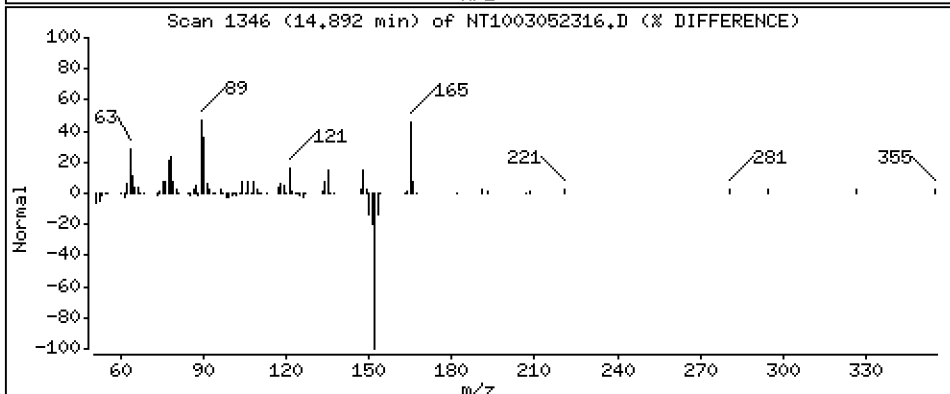
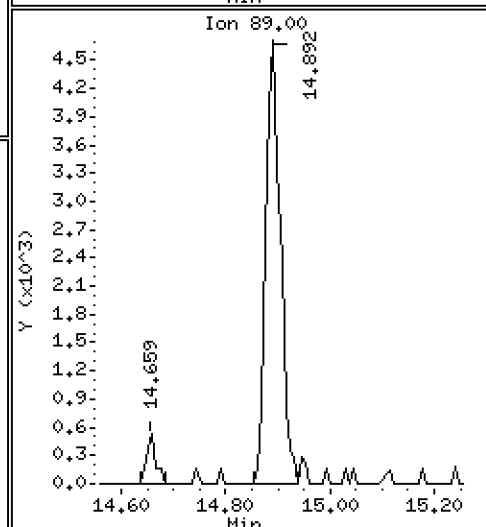
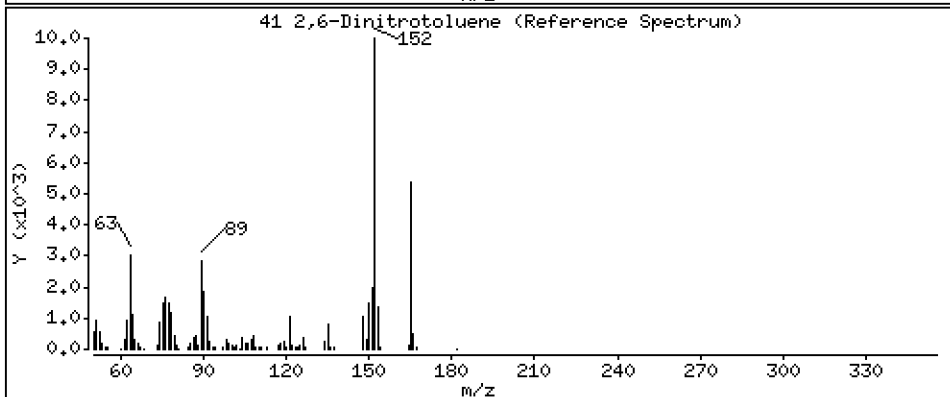
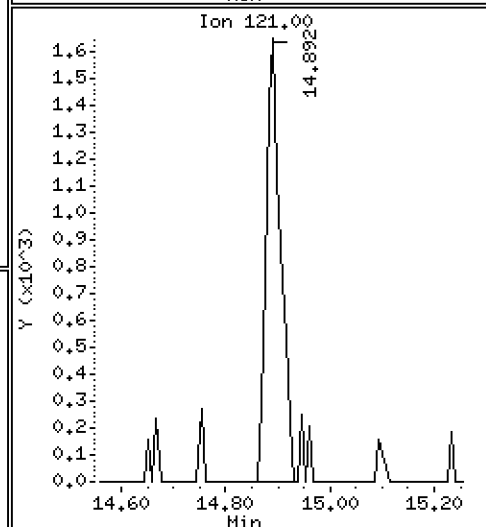
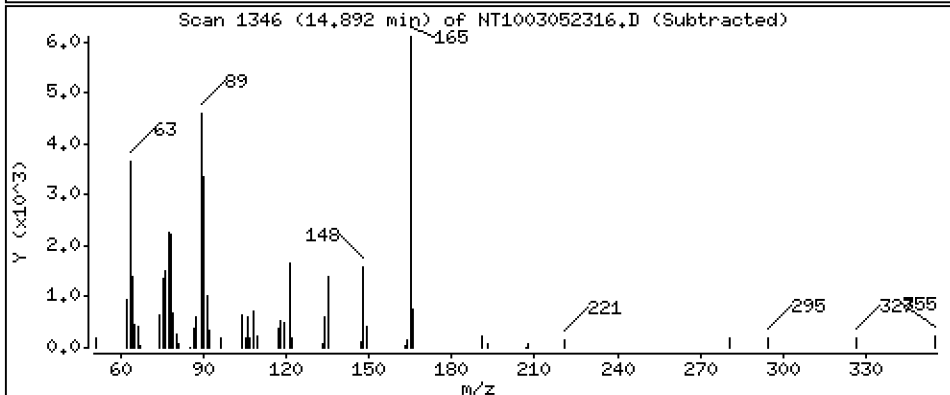
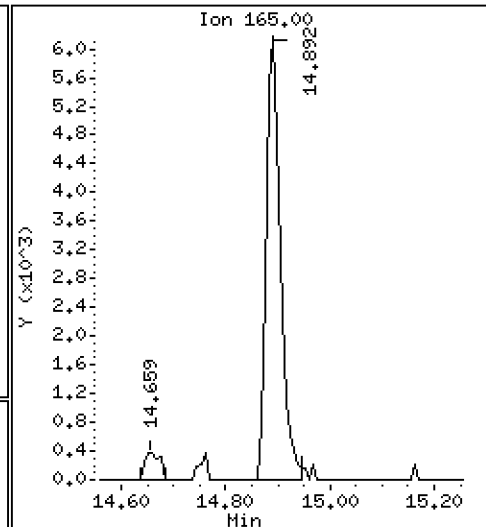
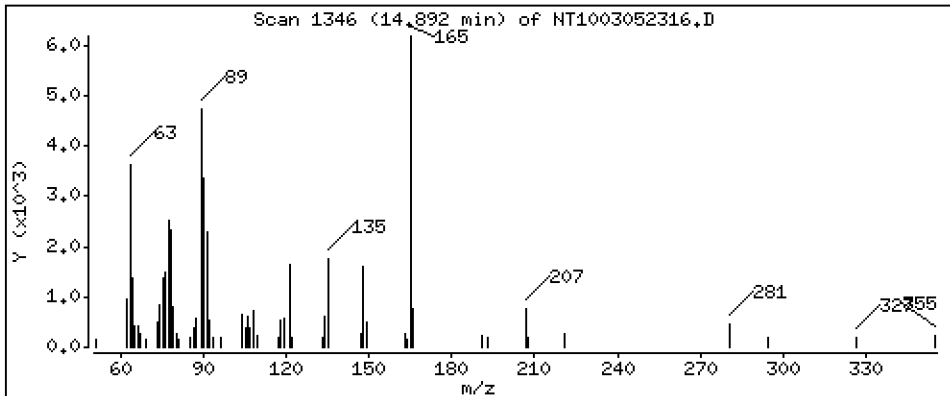
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,2957 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

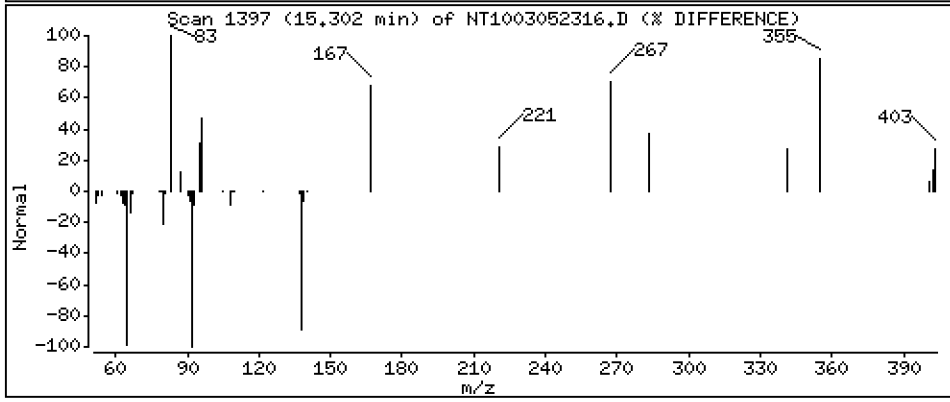
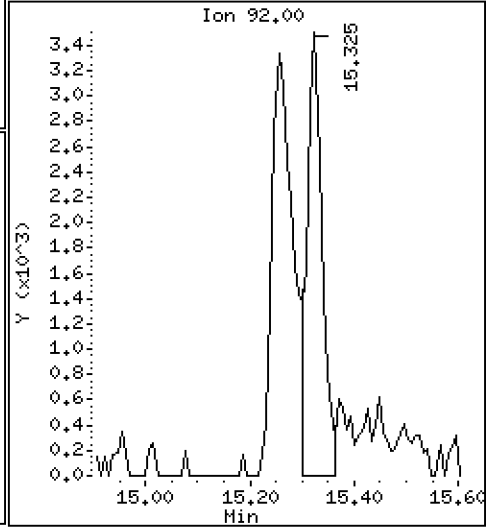
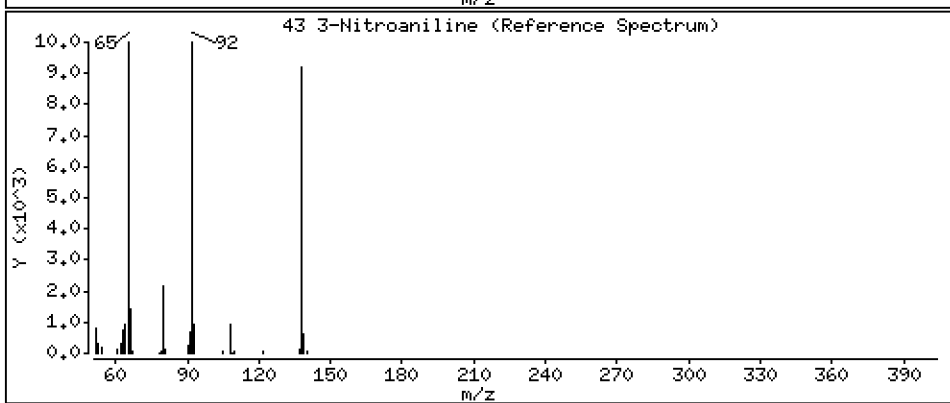
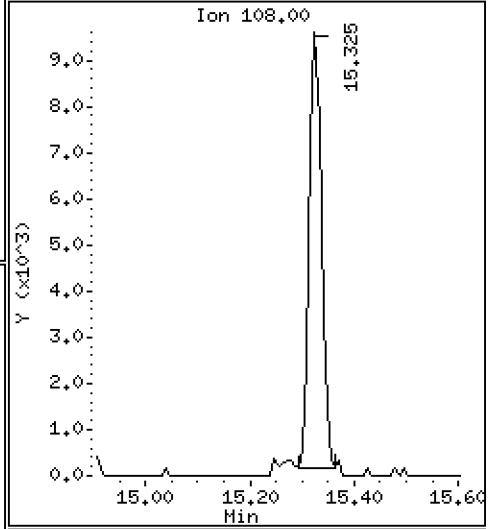
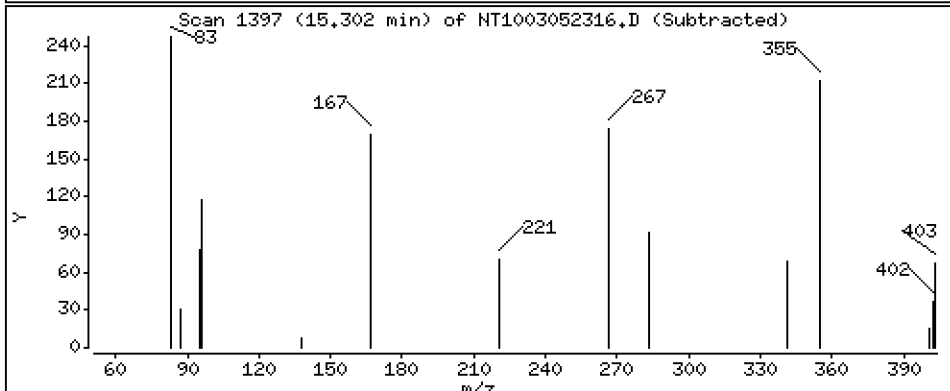
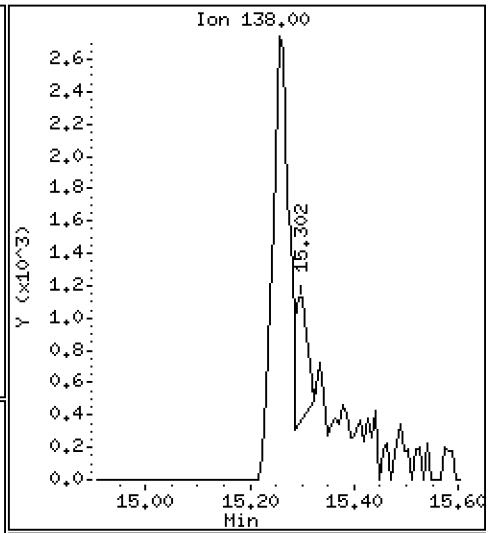
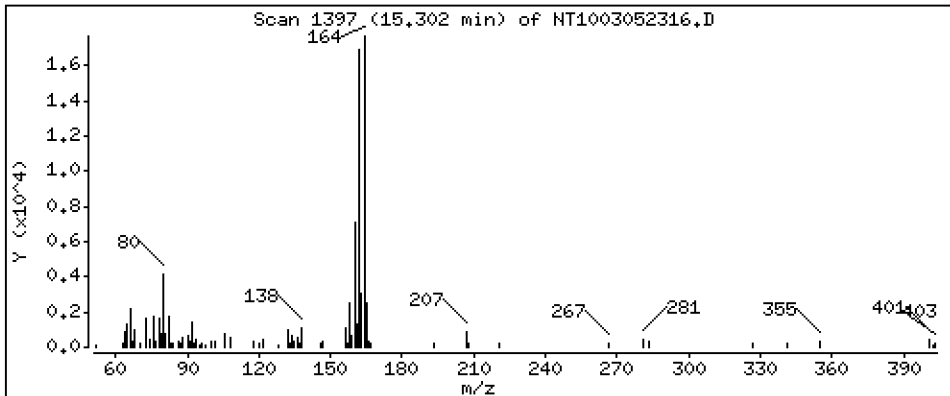
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

43 3-Nitroaniline

Concentration: 0.03059 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

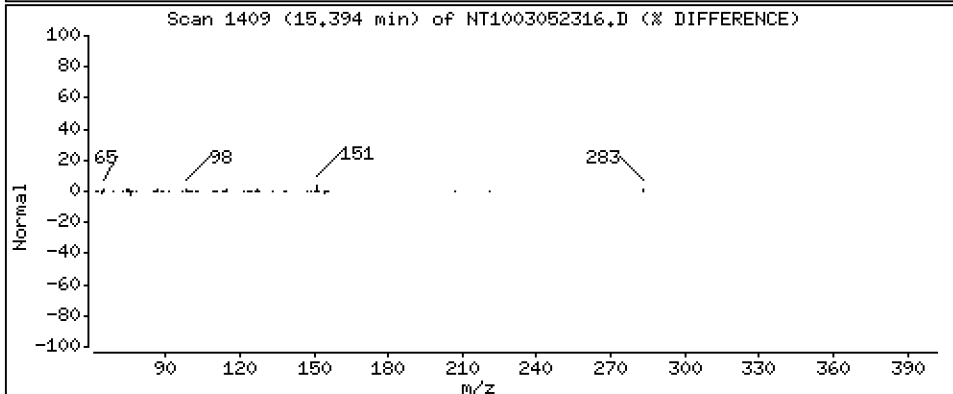
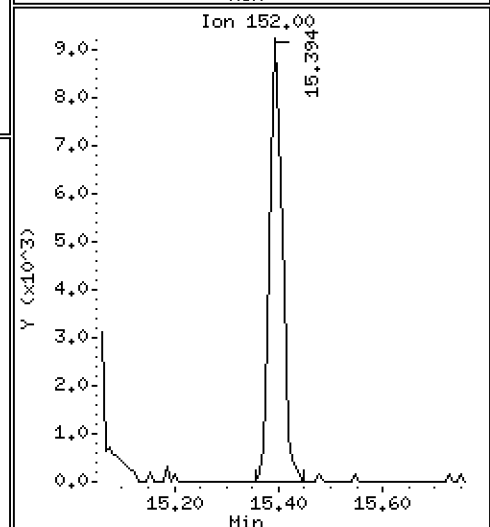
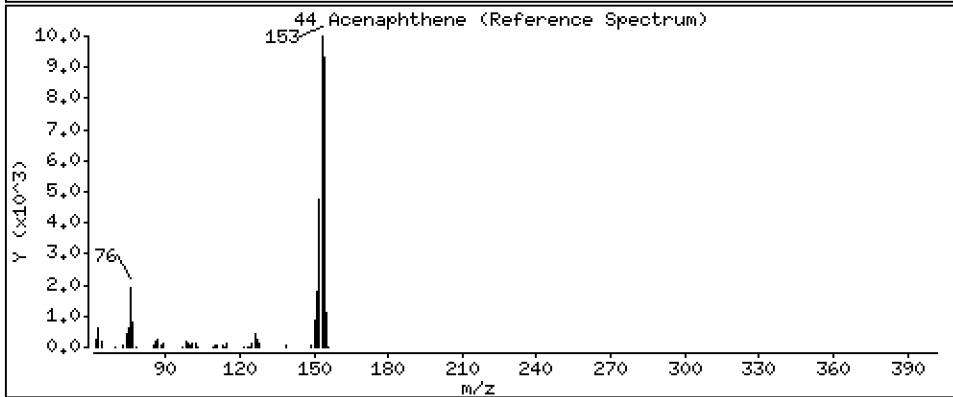
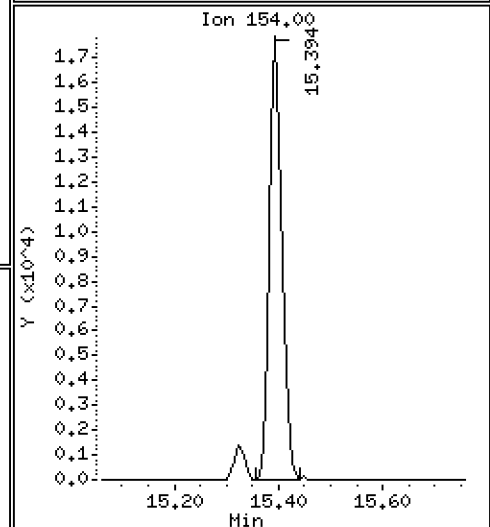
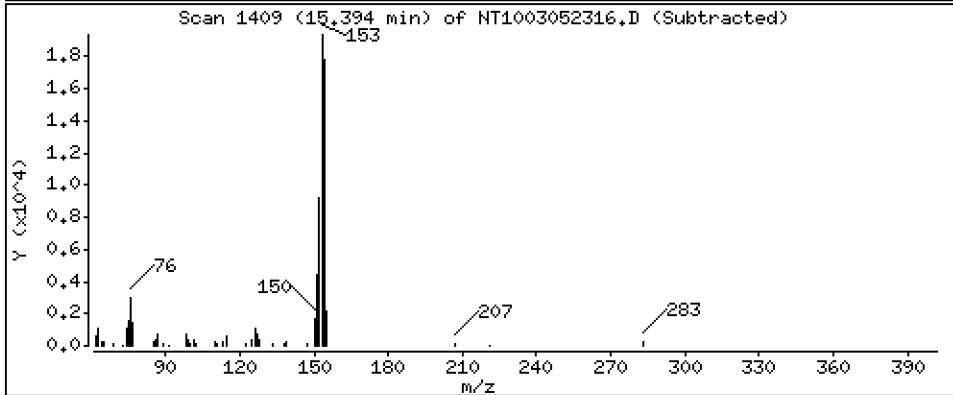
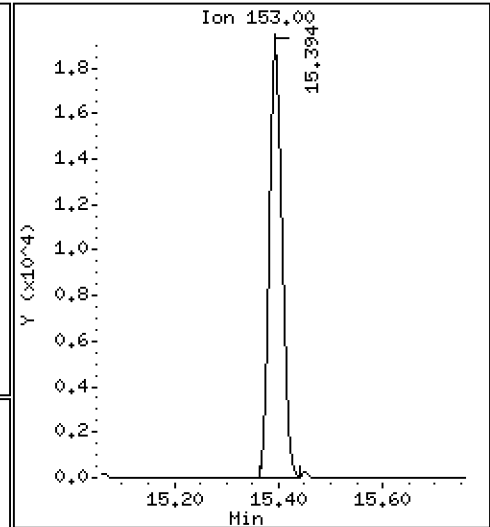
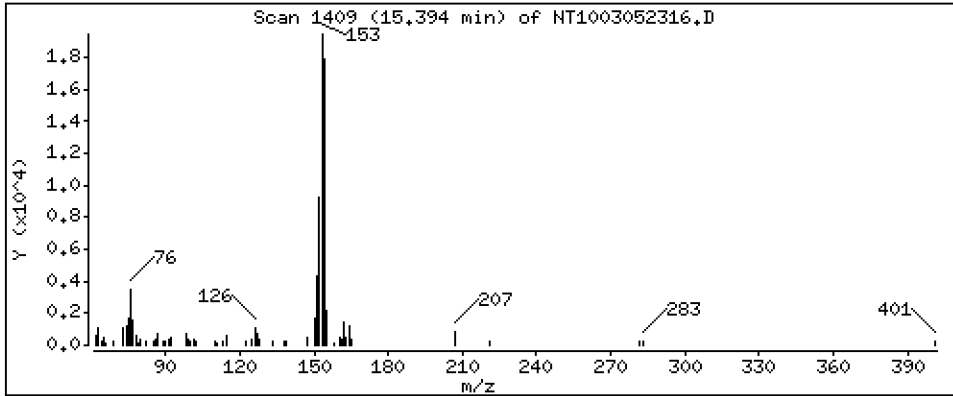
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.1981 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

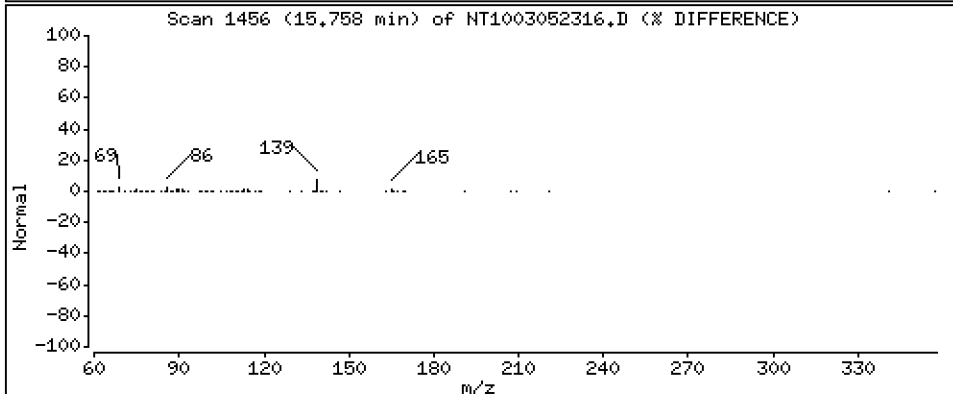
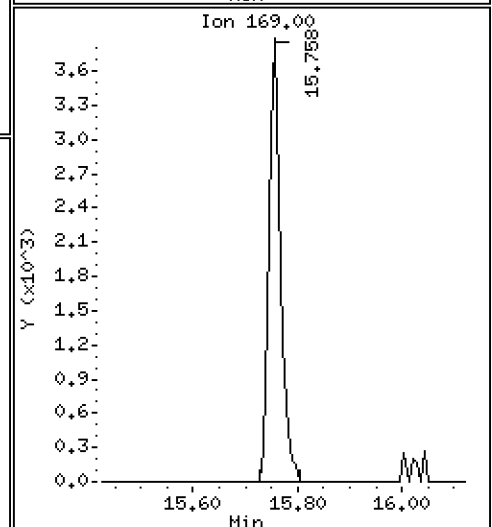
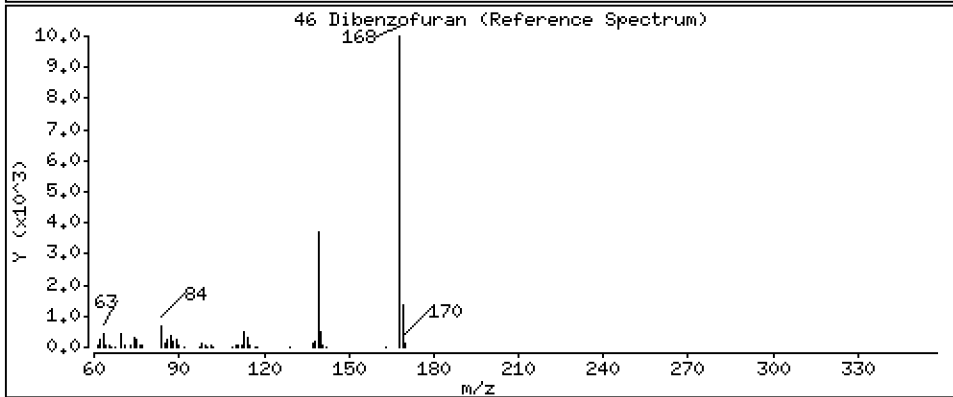
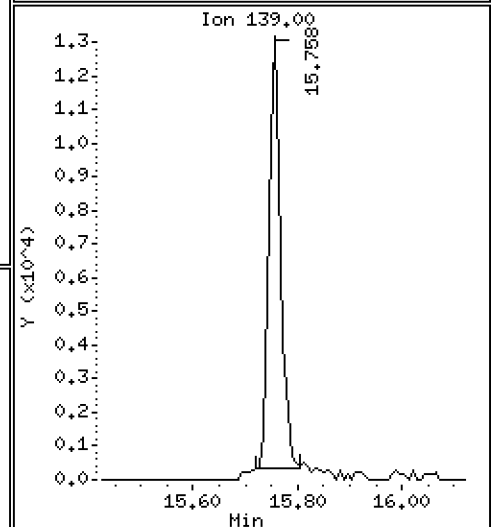
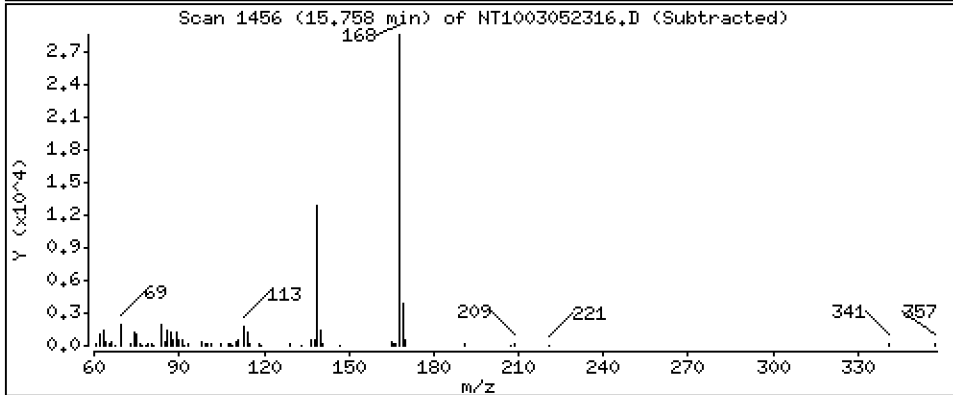
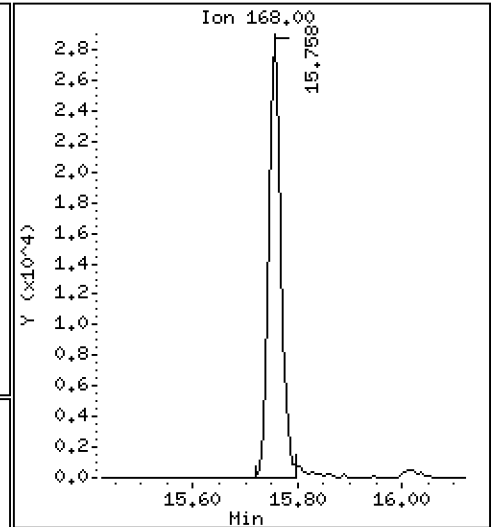
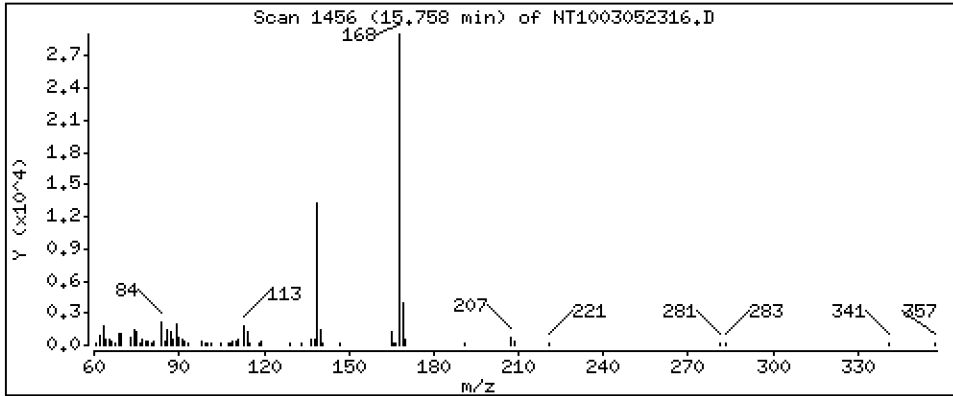
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2016 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

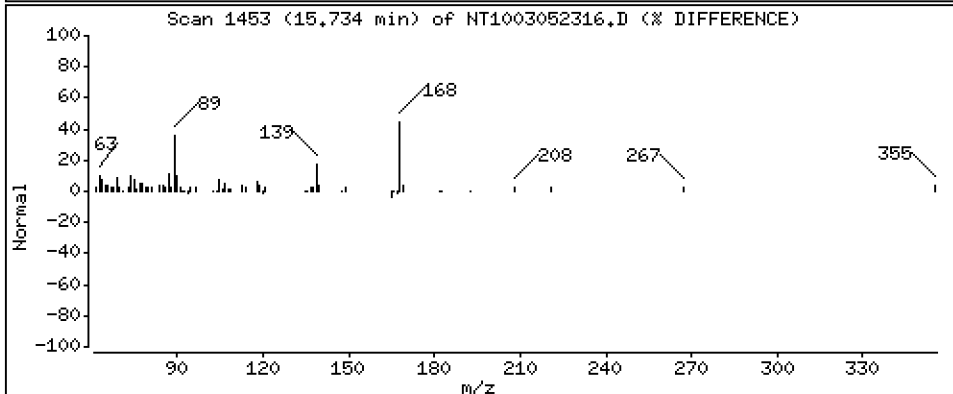
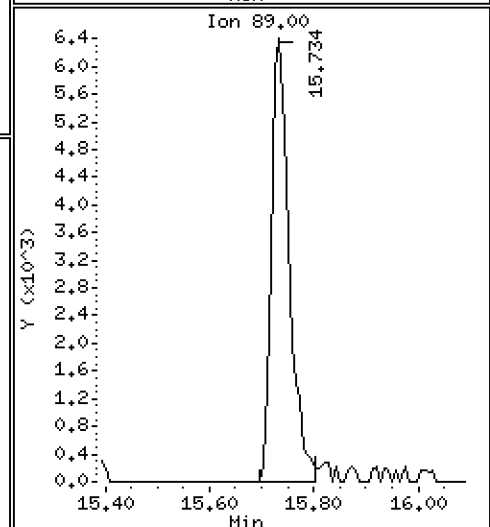
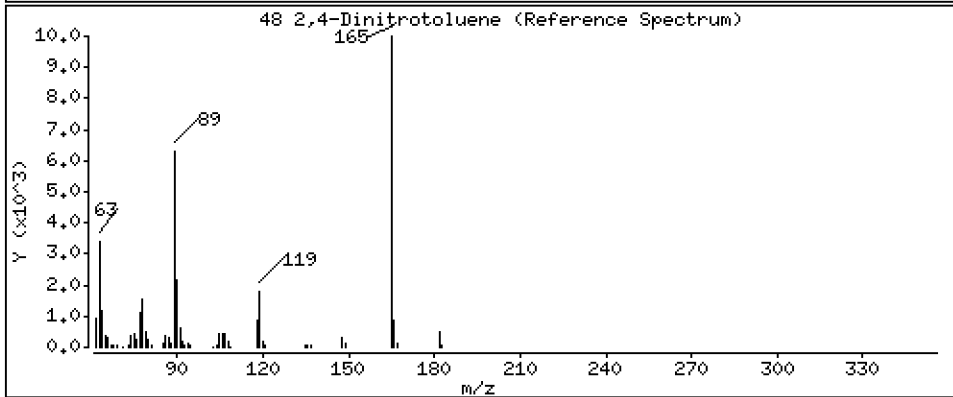
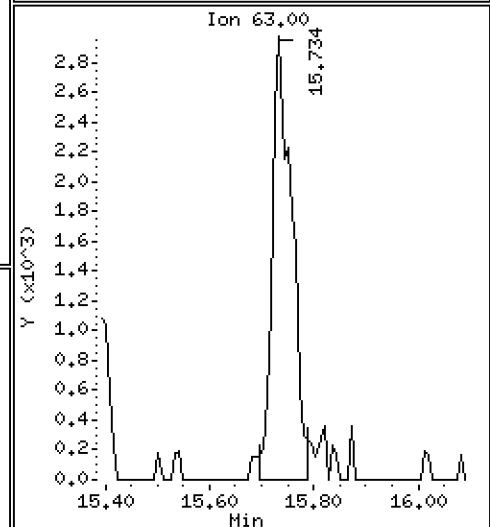
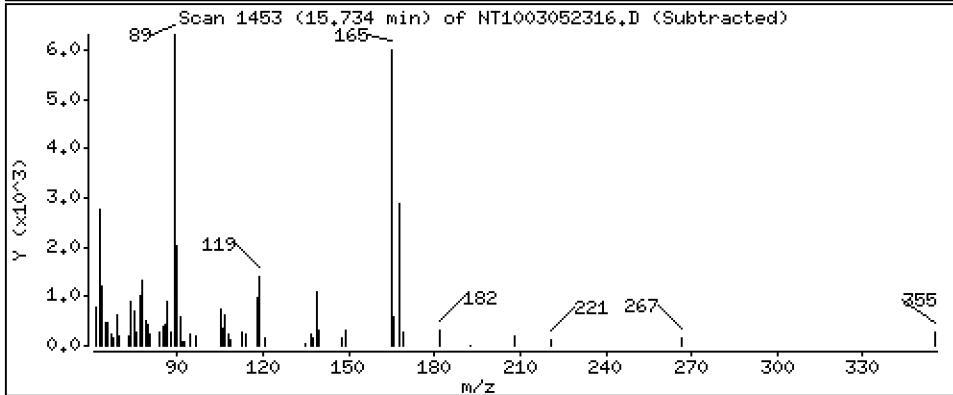
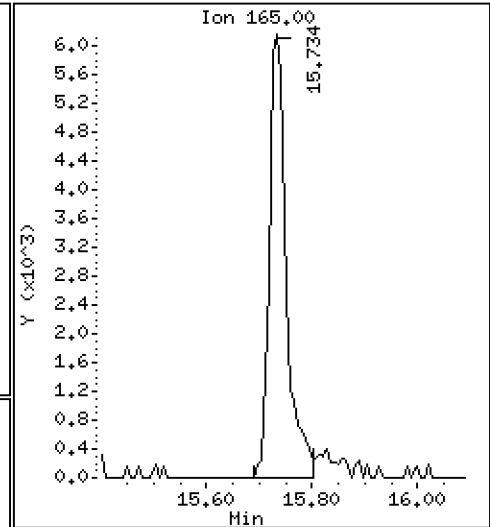
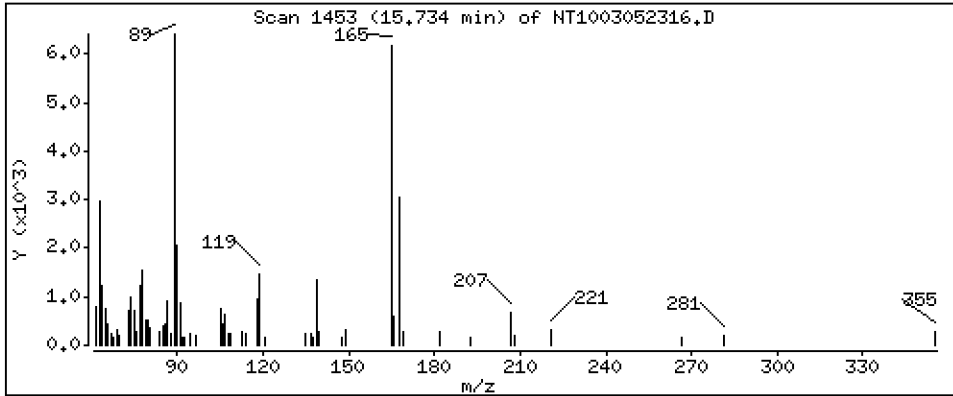
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2445 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

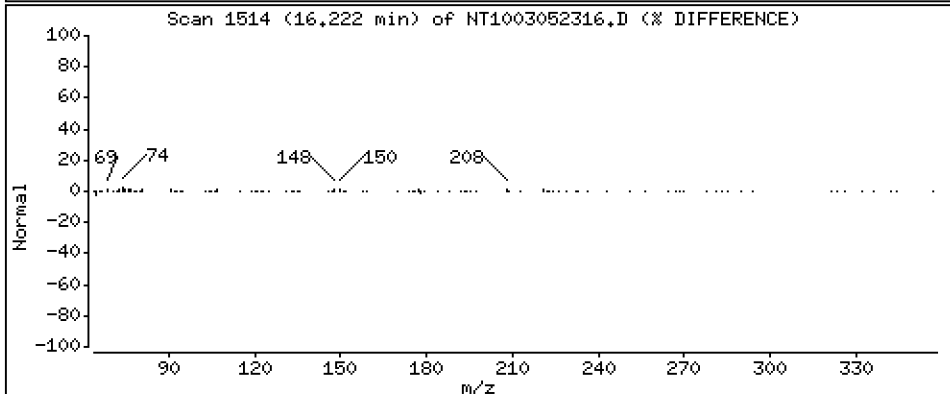
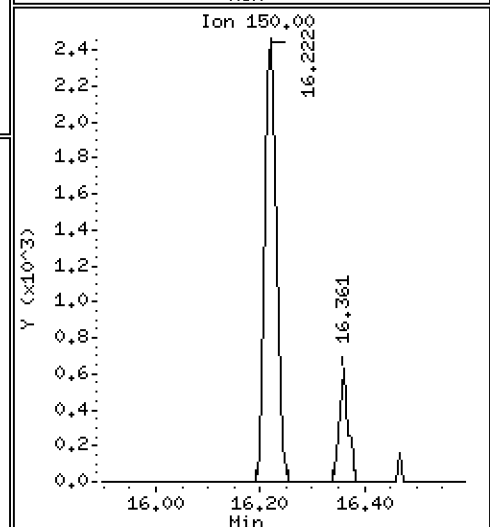
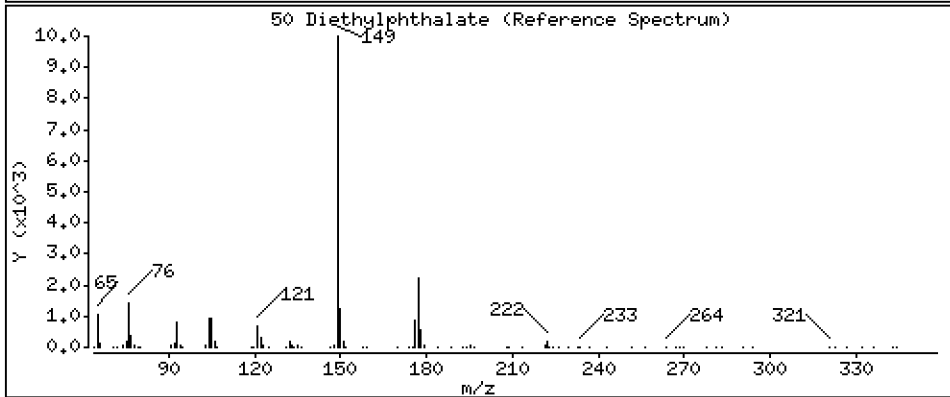
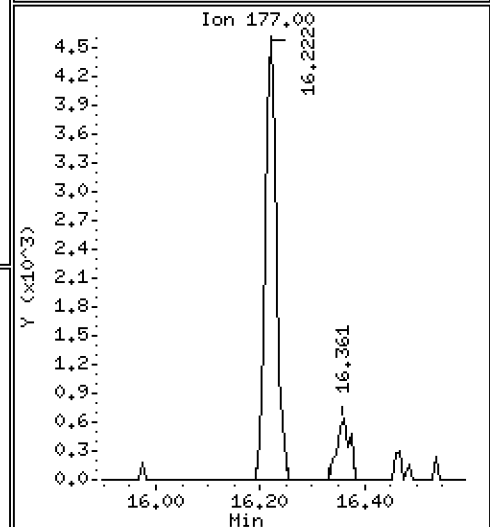
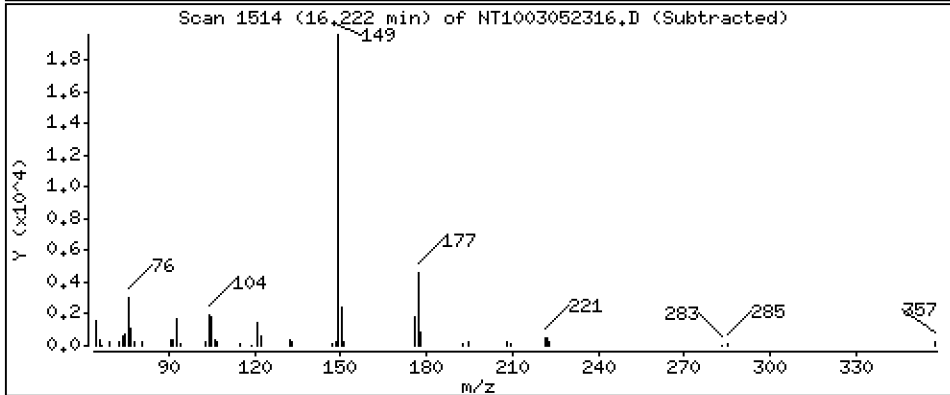
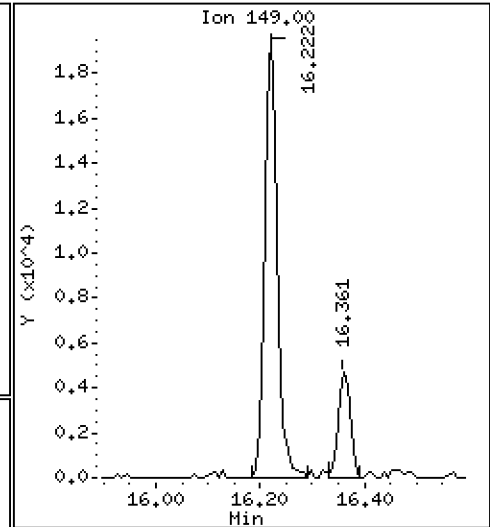
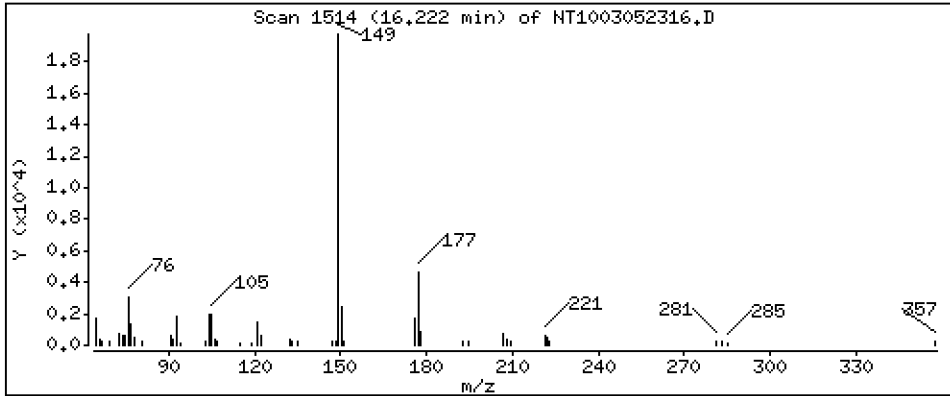
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1810 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

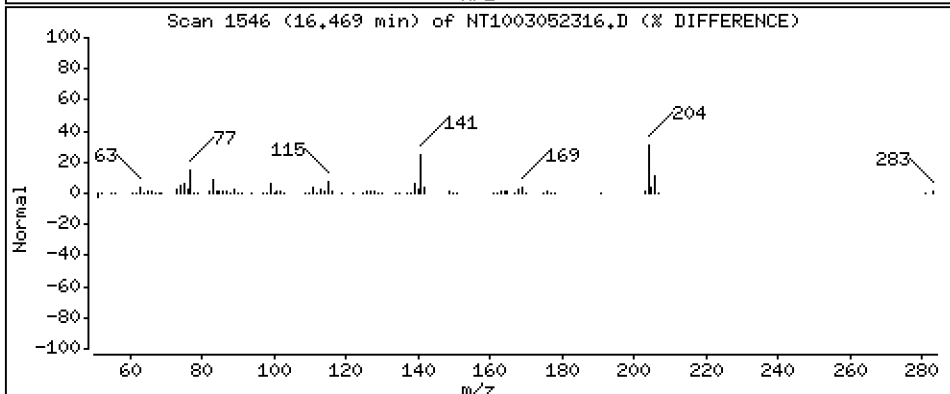
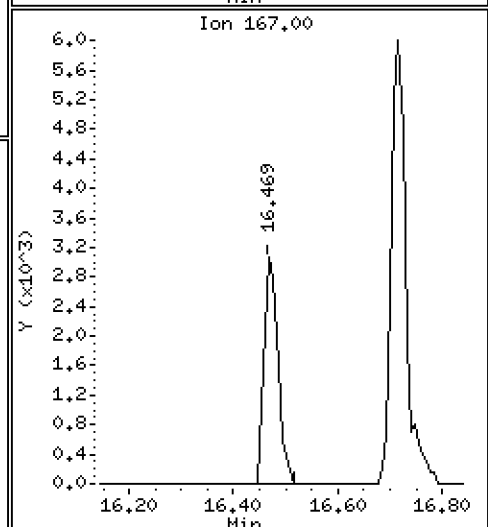
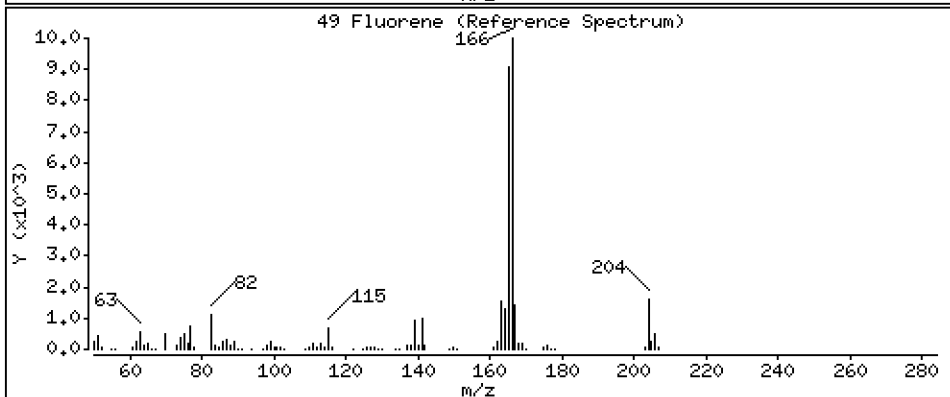
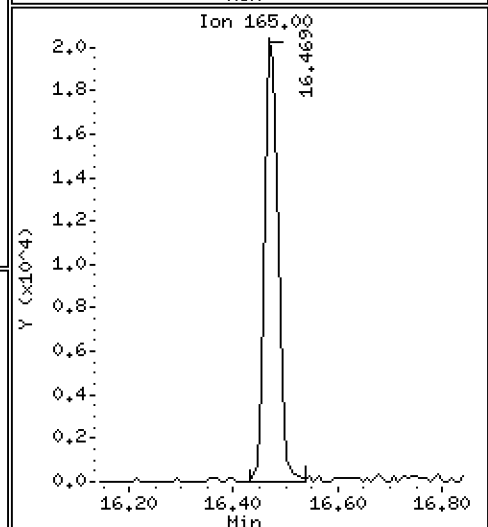
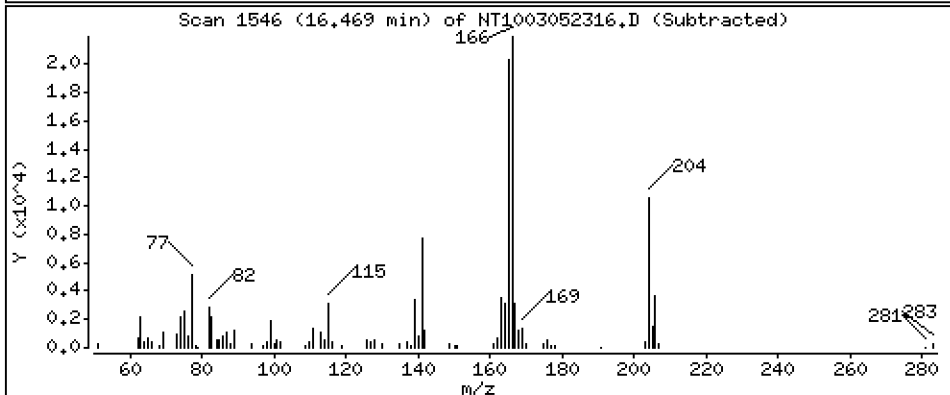
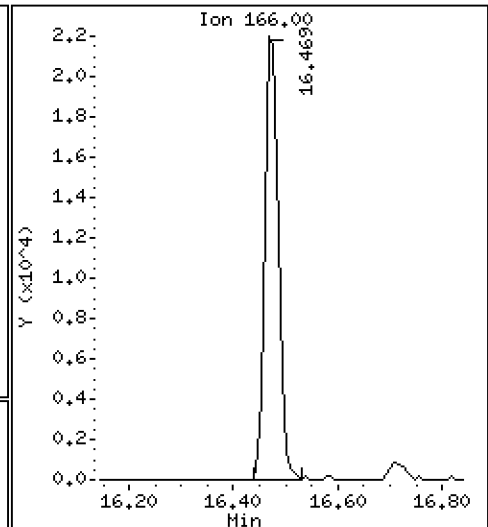
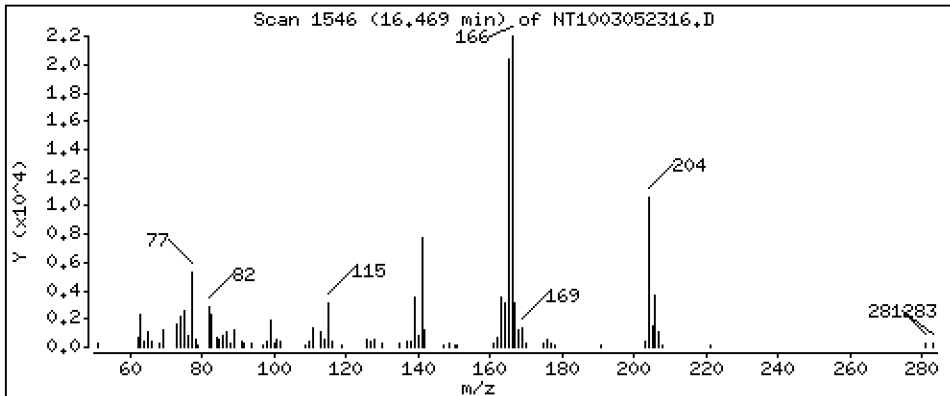
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 0,1937 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

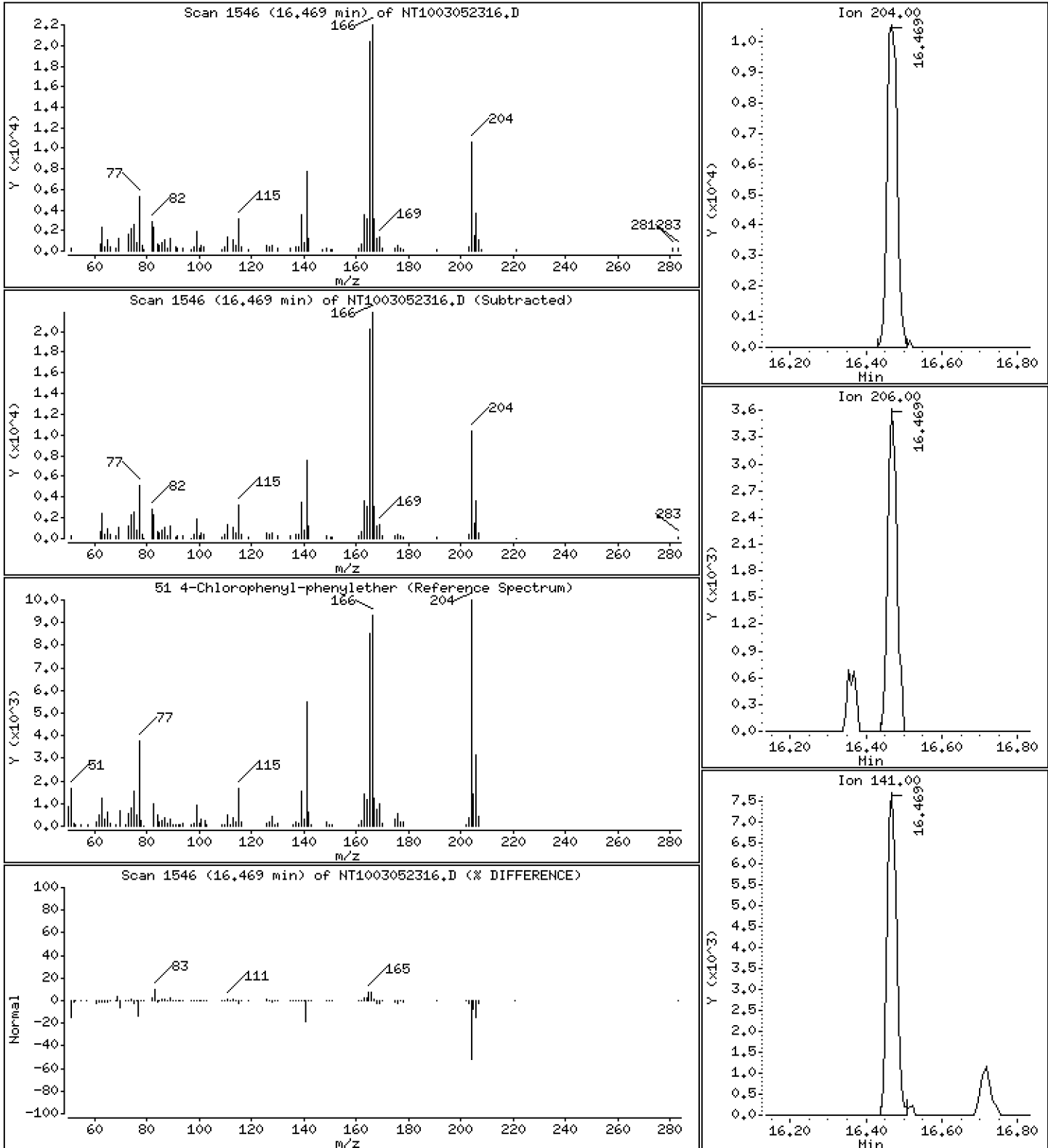
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

51 4-Chlorophenyl-phenylether

Concentration: 0.2170 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

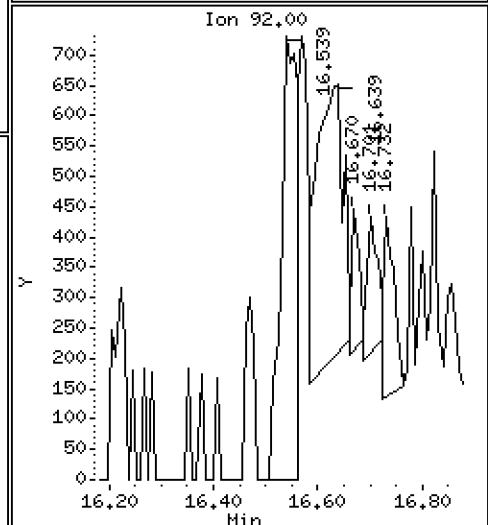
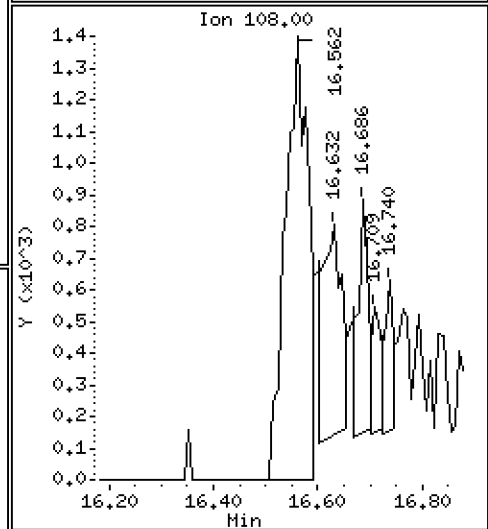
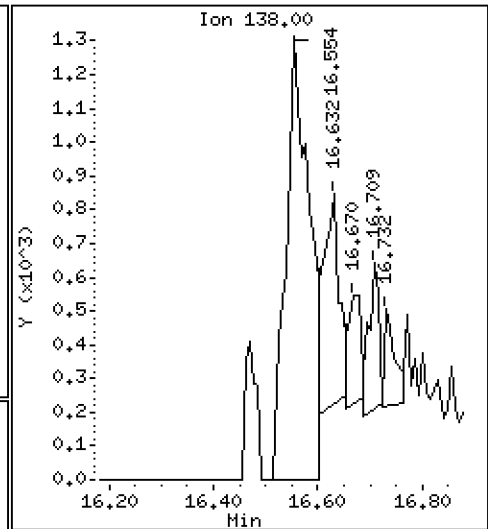
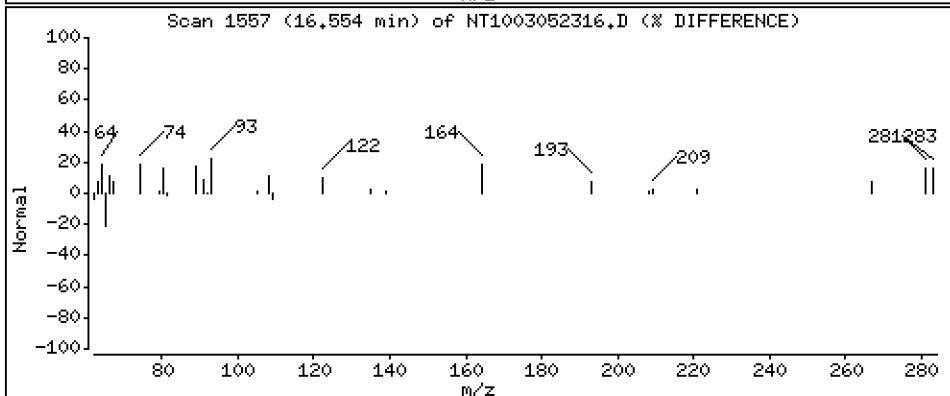
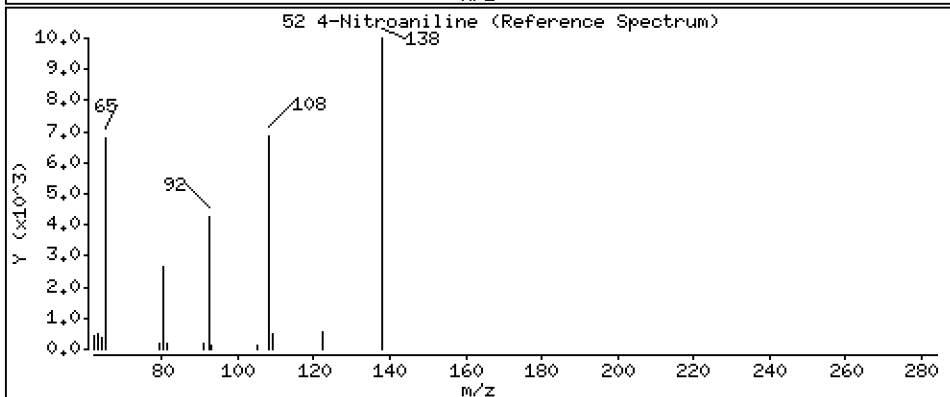
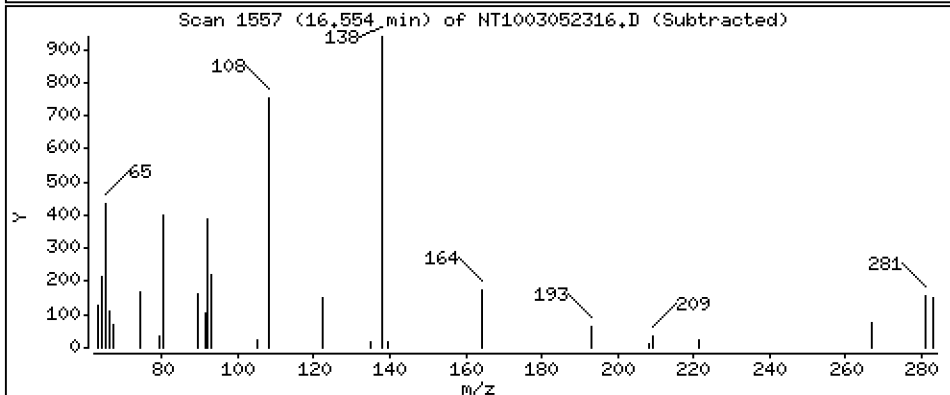
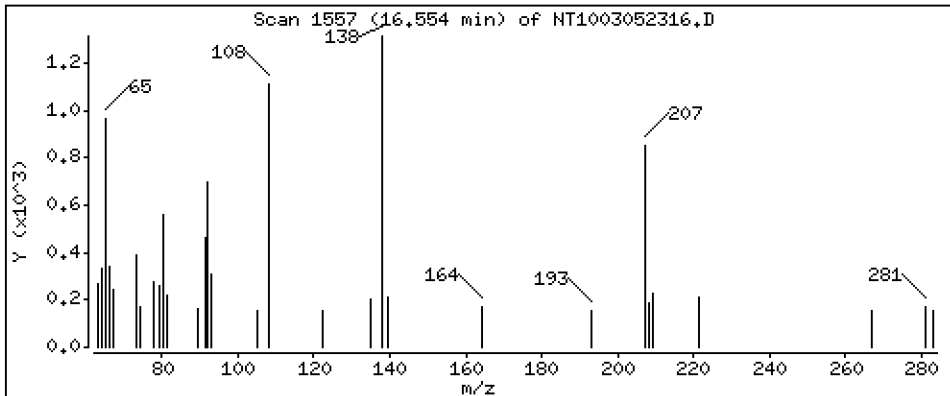
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.08725 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

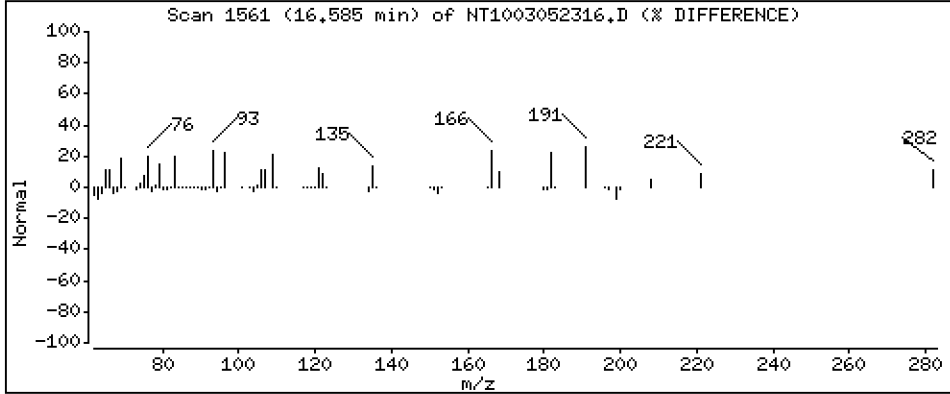
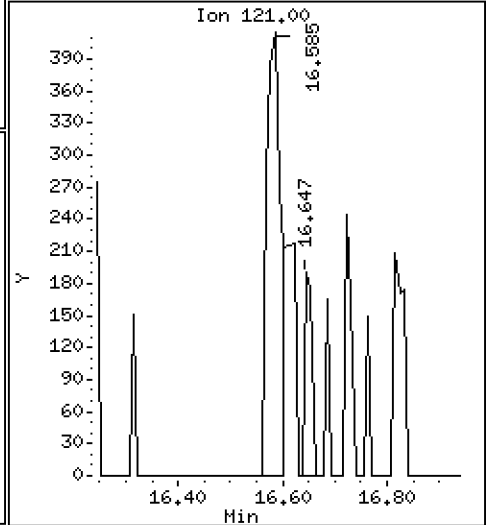
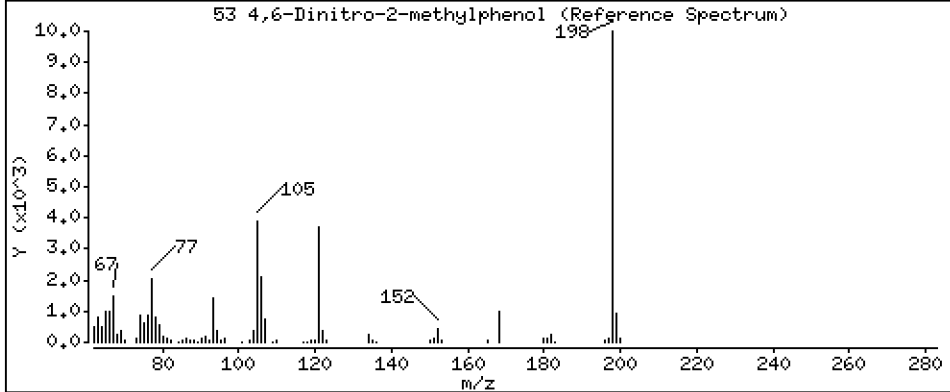
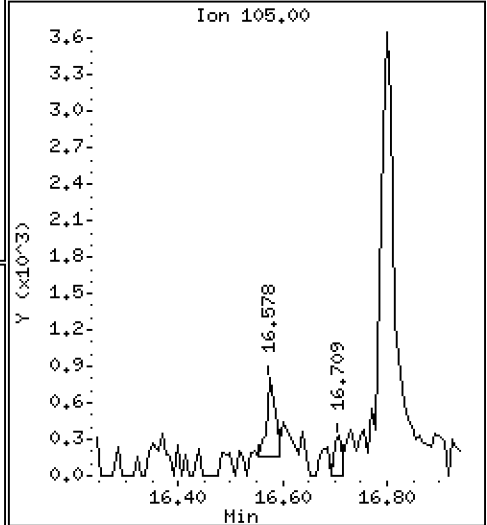
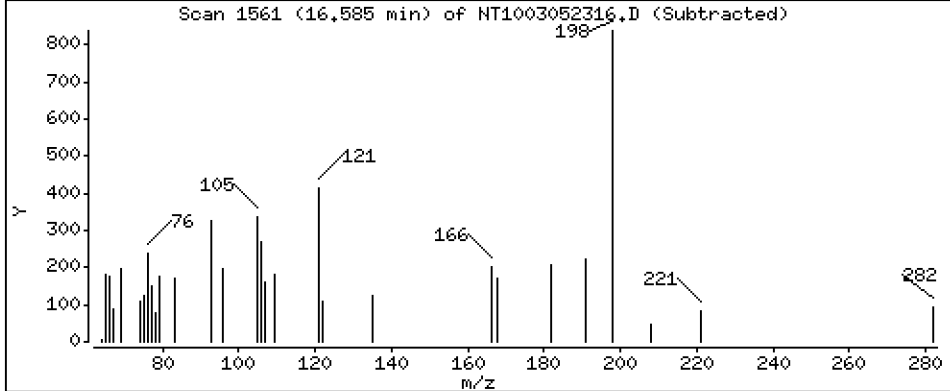
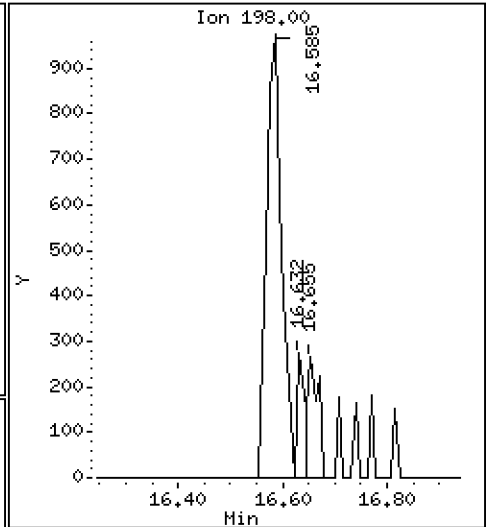
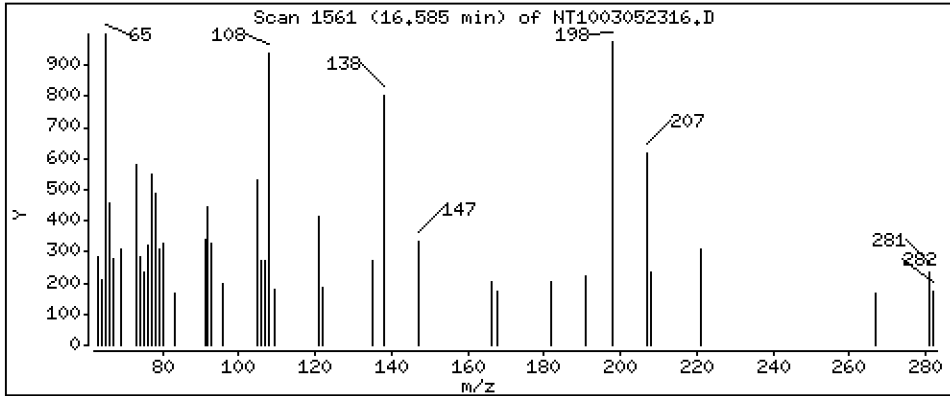
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 0,09412 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

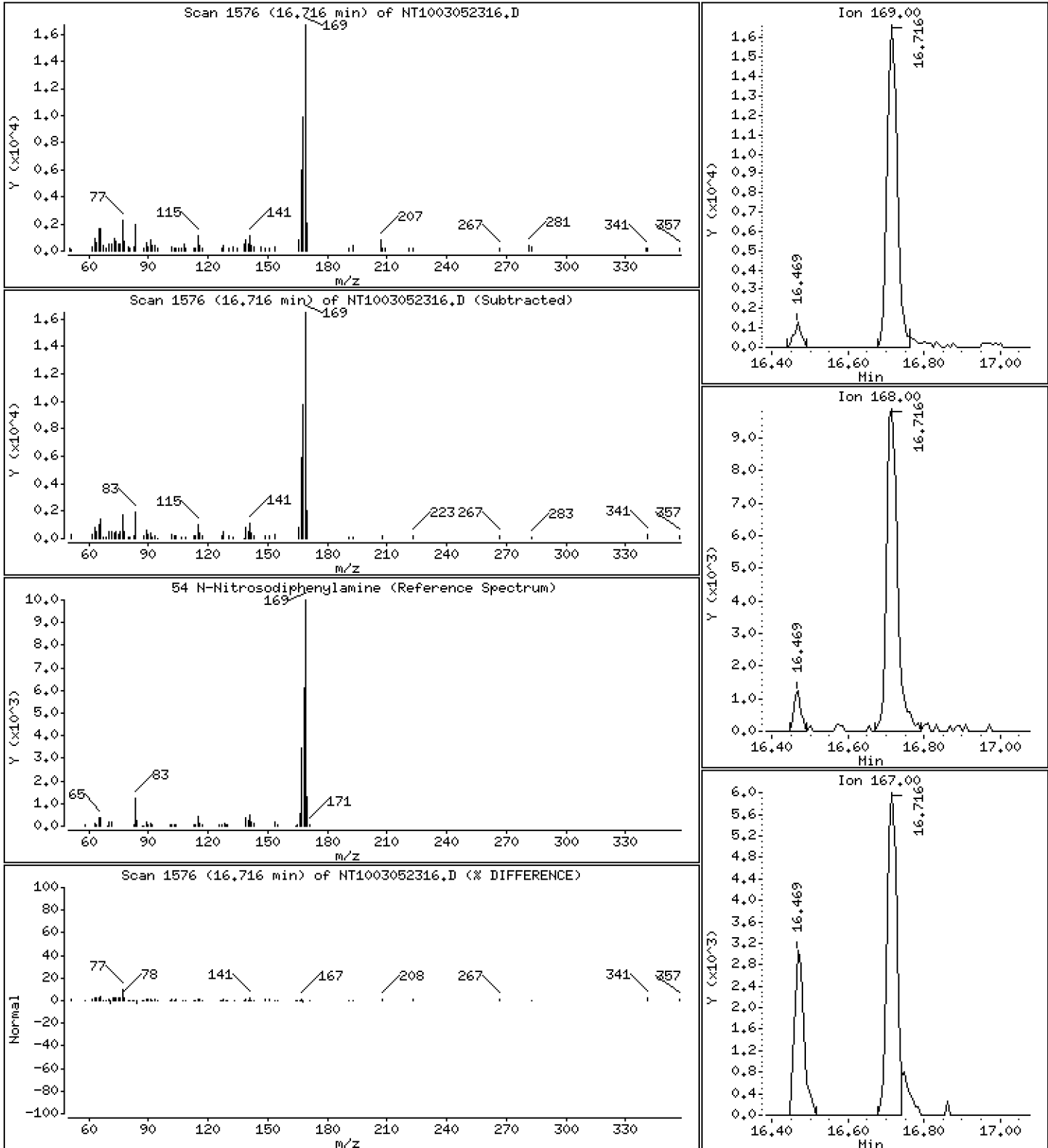
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.2028 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

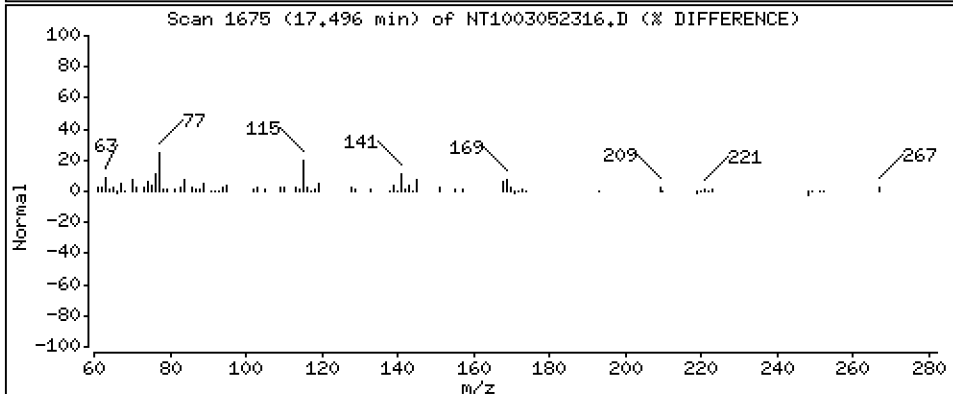
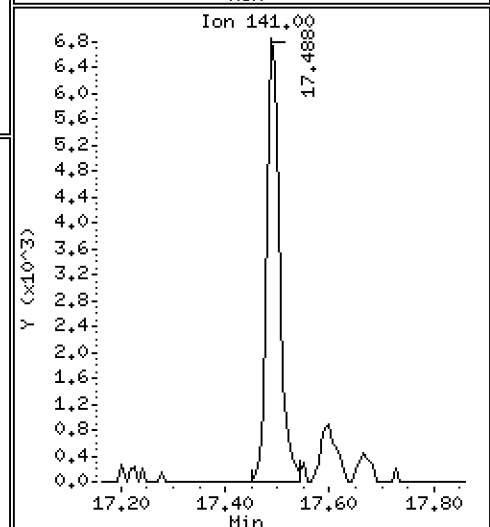
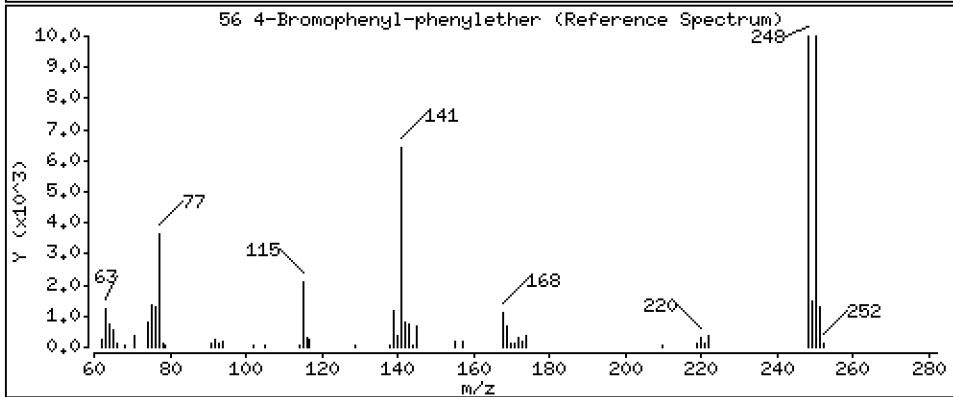
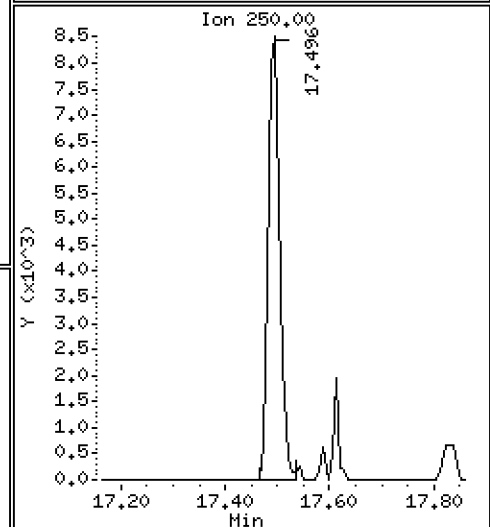
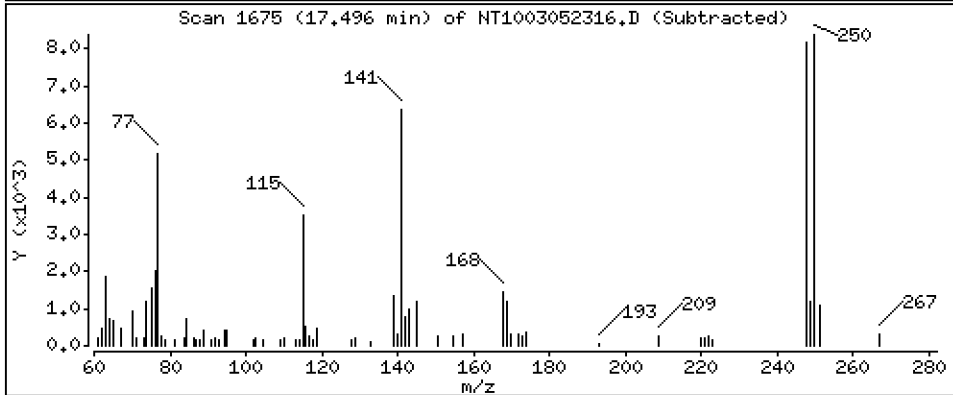
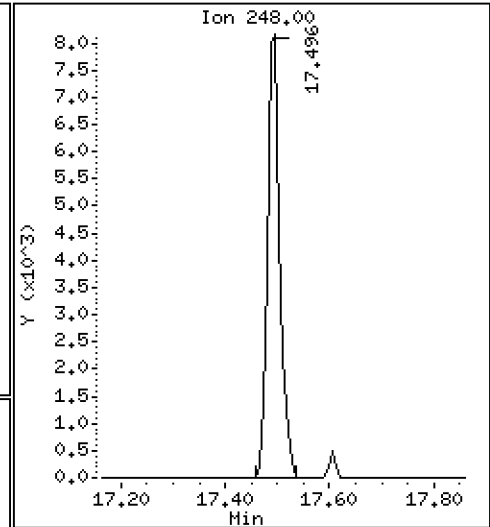
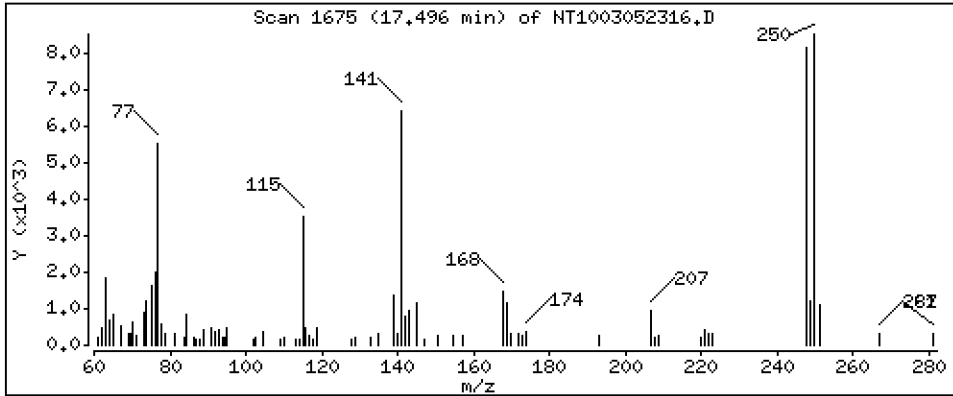
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 0,2320 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

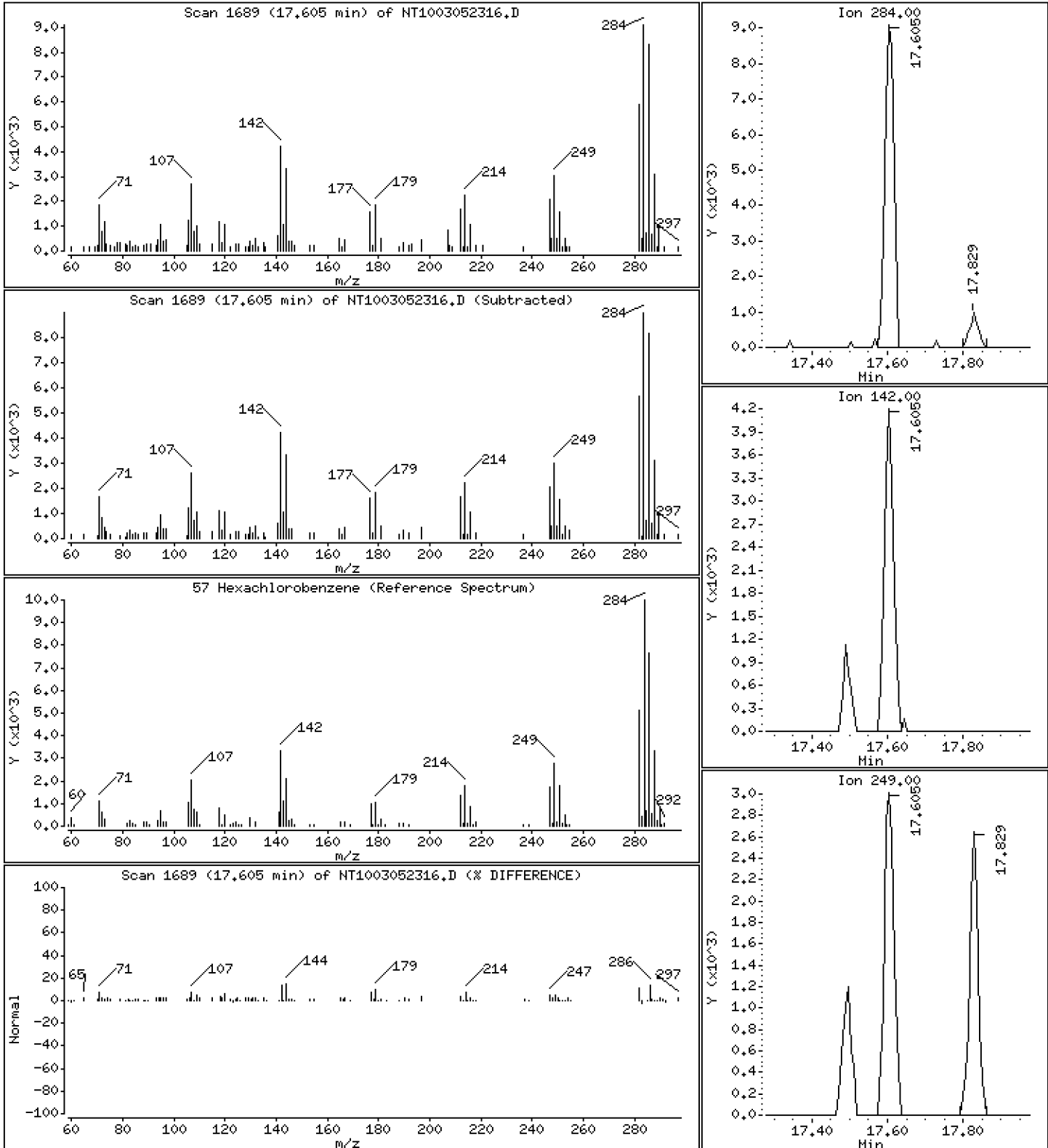
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2329 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

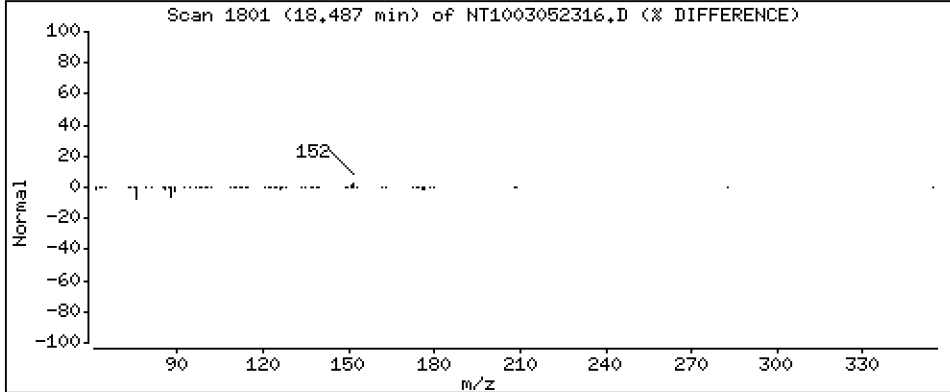
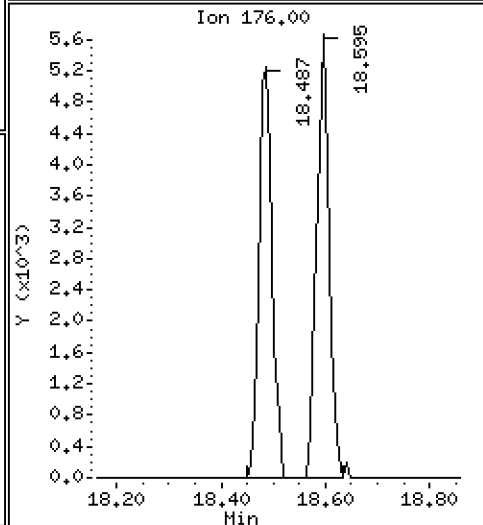
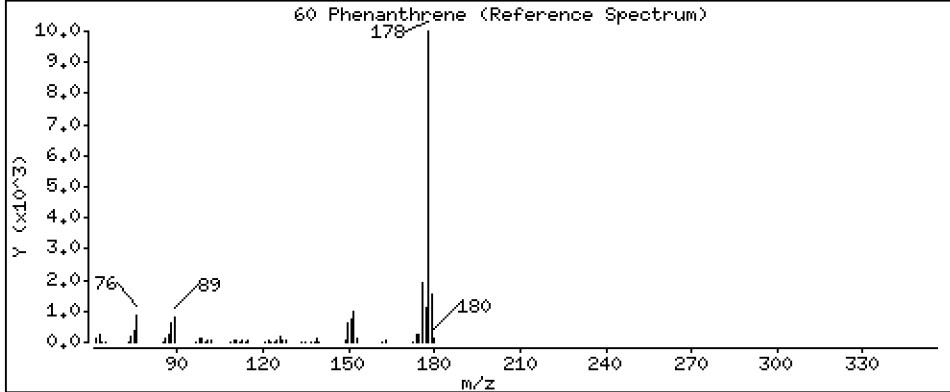
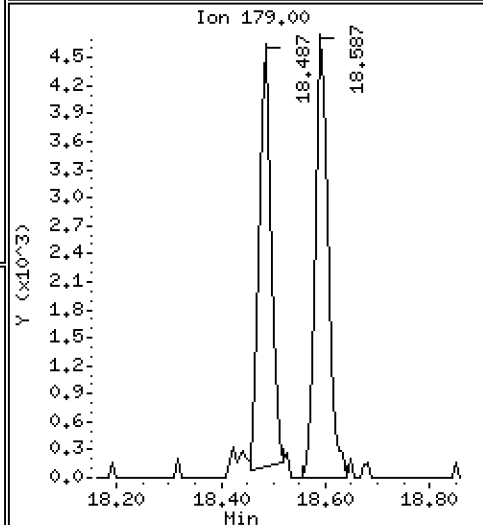
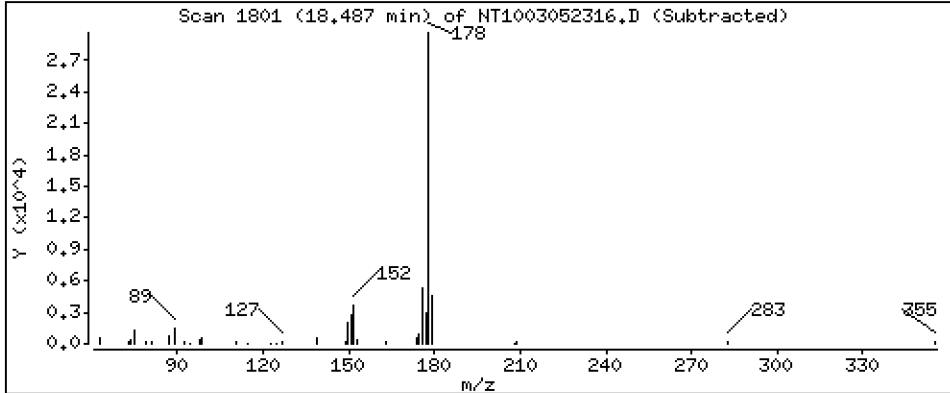
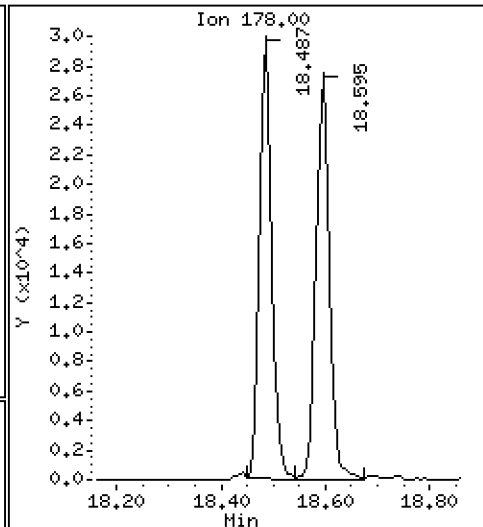
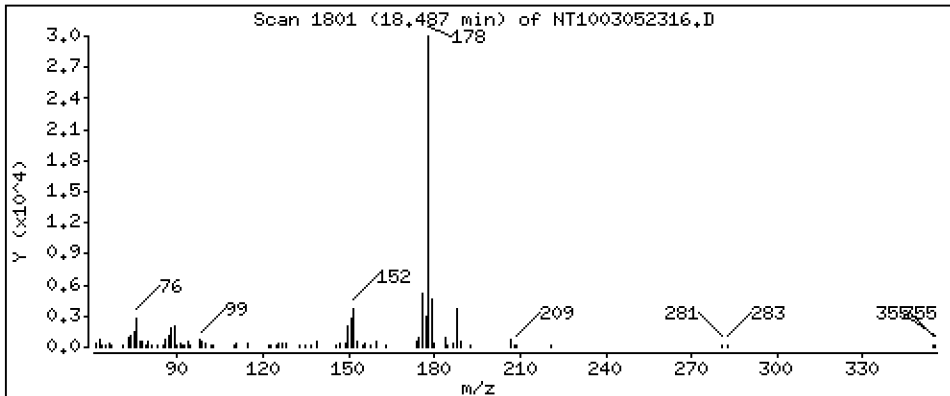
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

60 Phenanthrene

Concentration: 0.1978 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

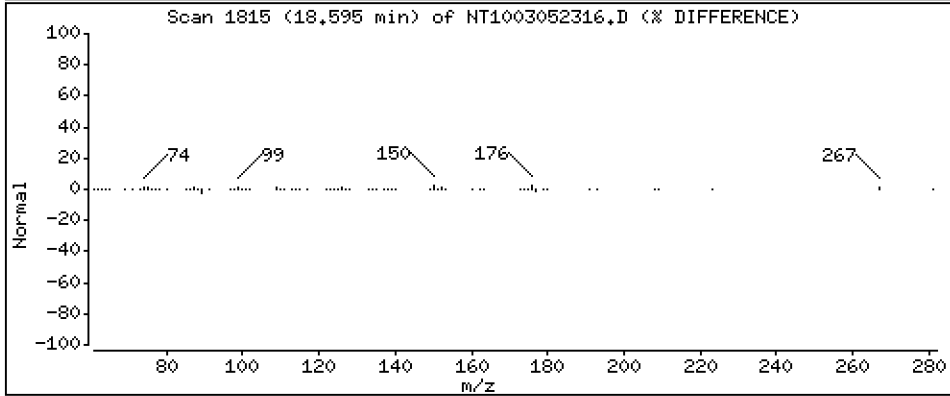
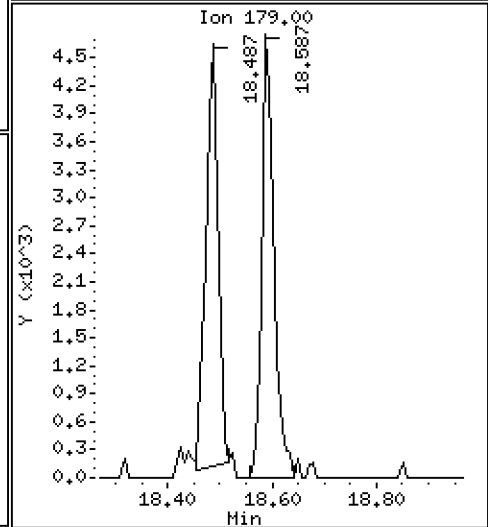
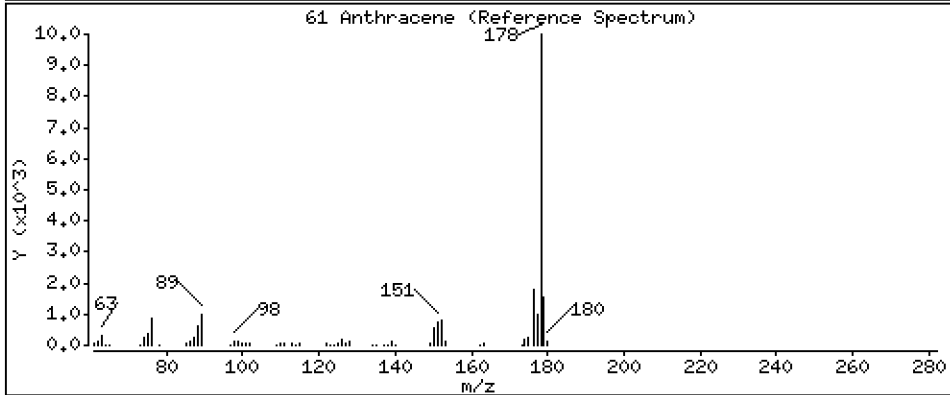
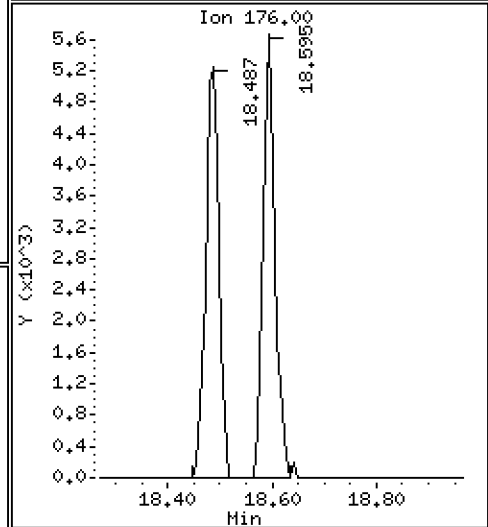
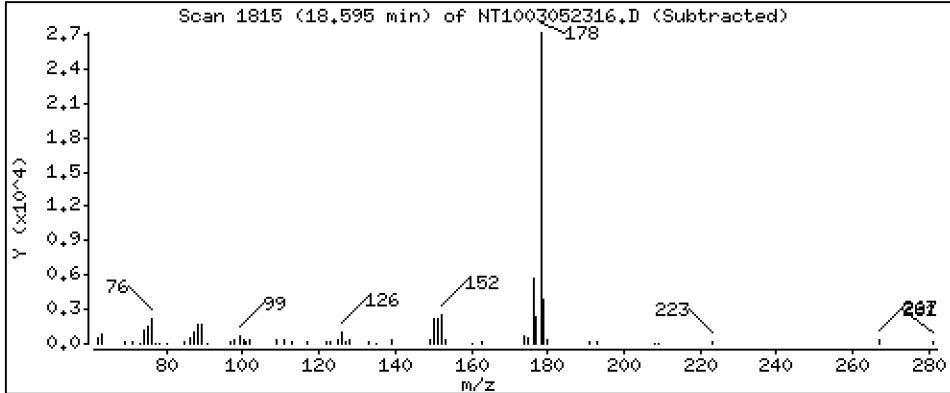
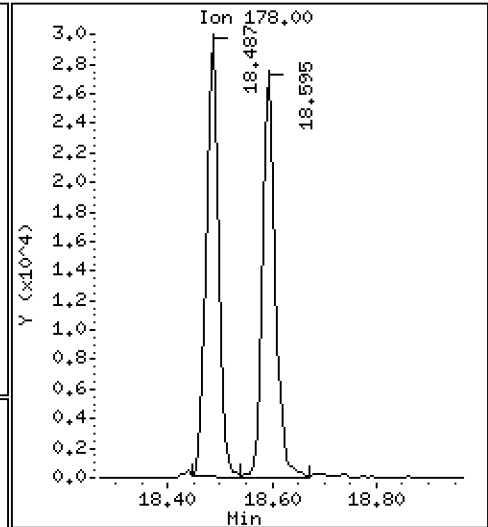
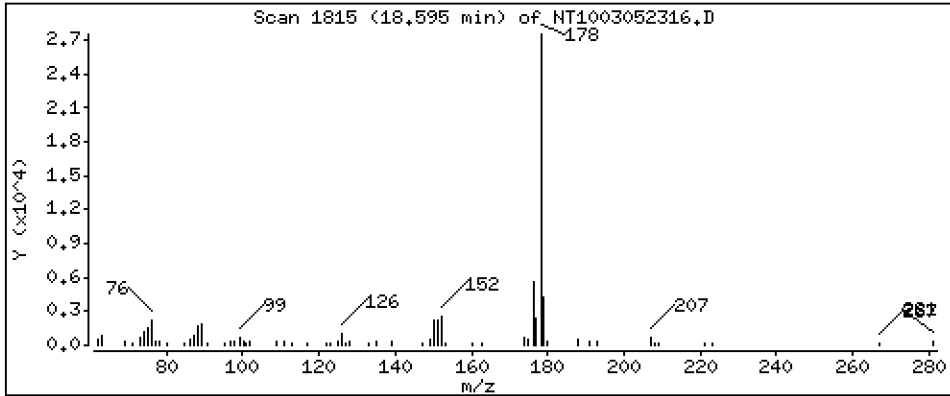
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1963 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

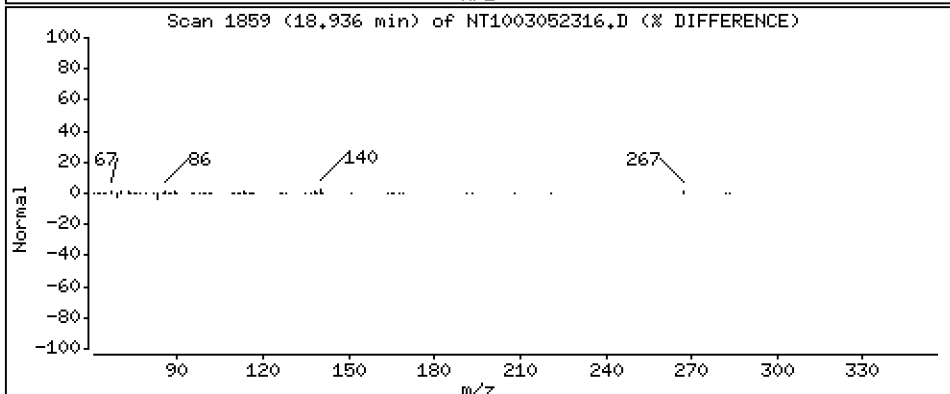
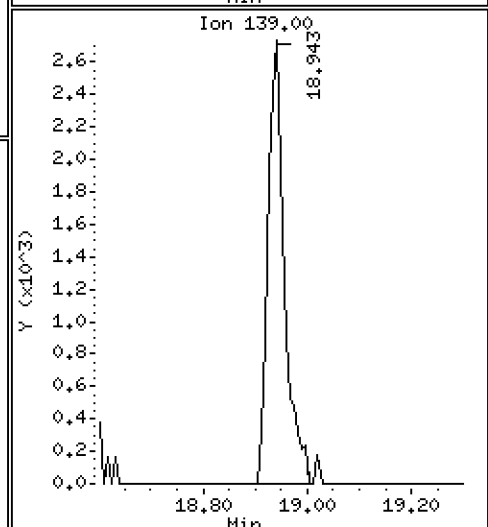
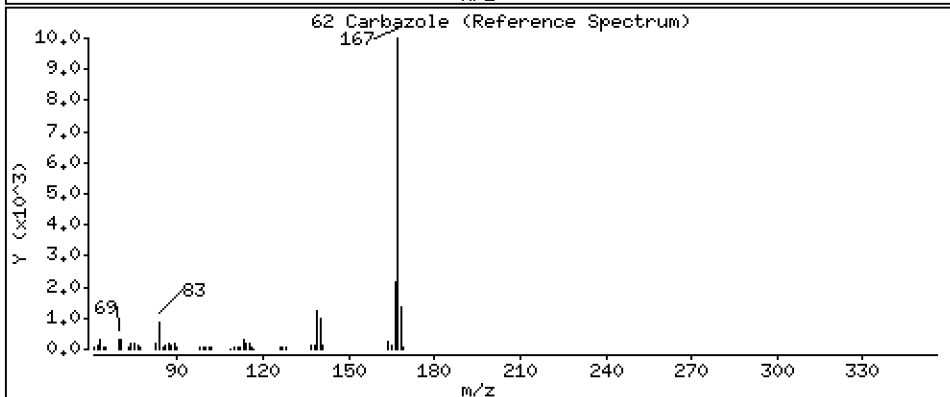
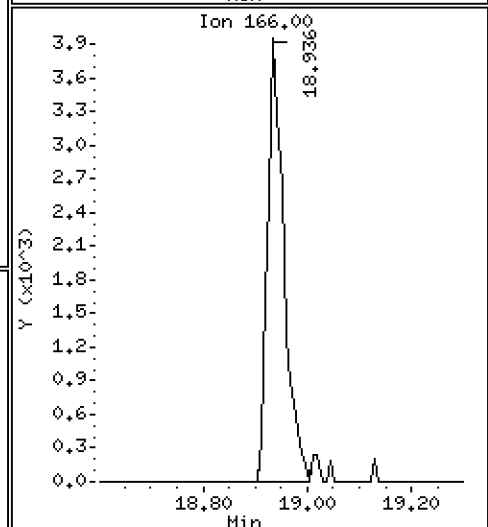
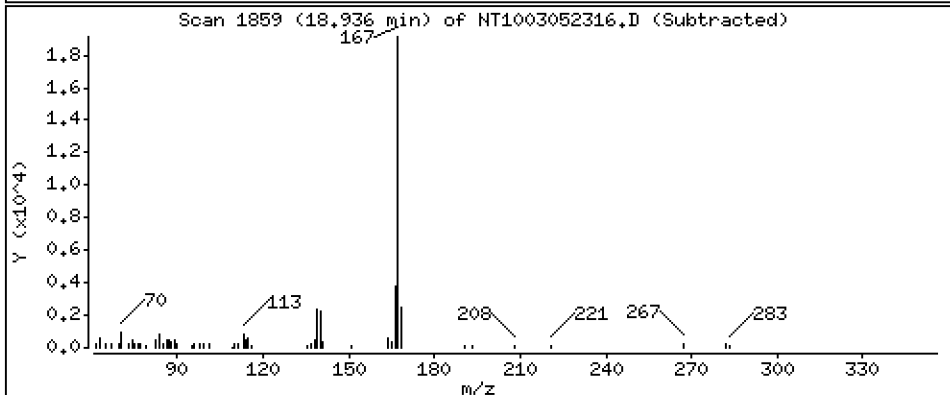
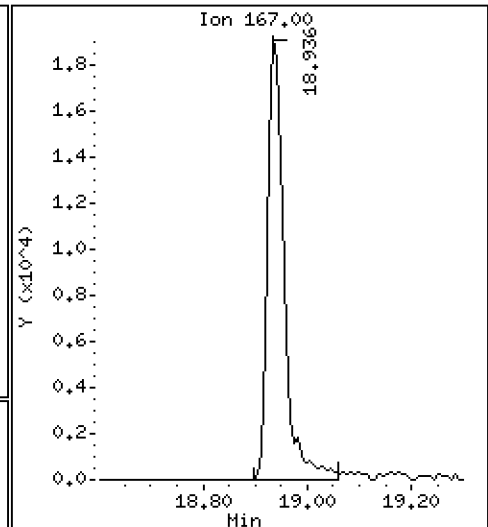
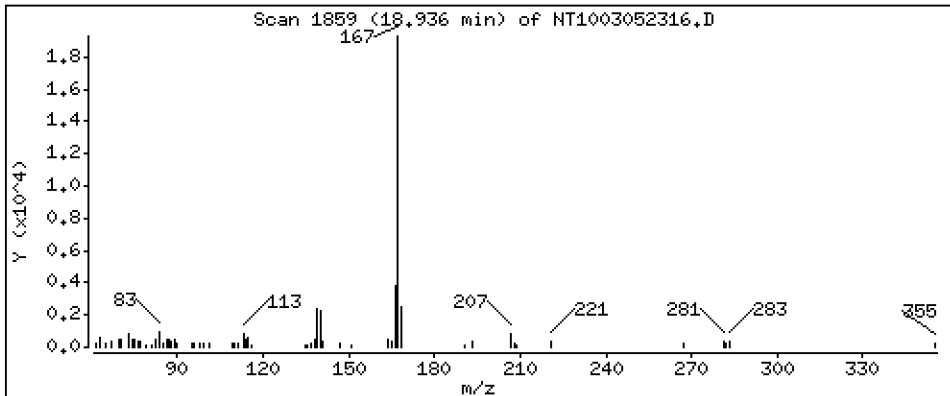
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 0,1858 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

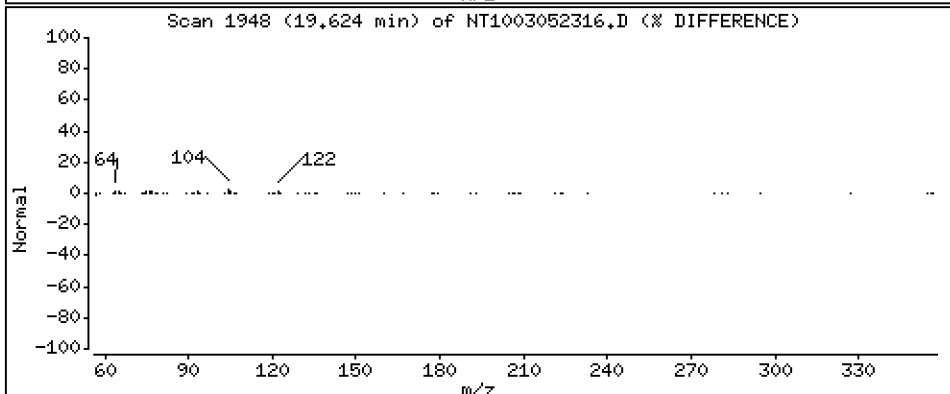
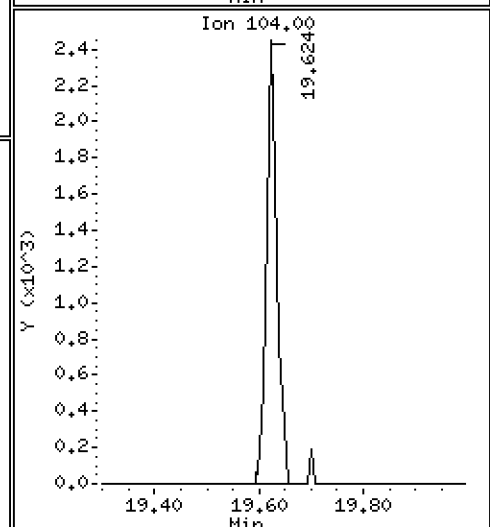
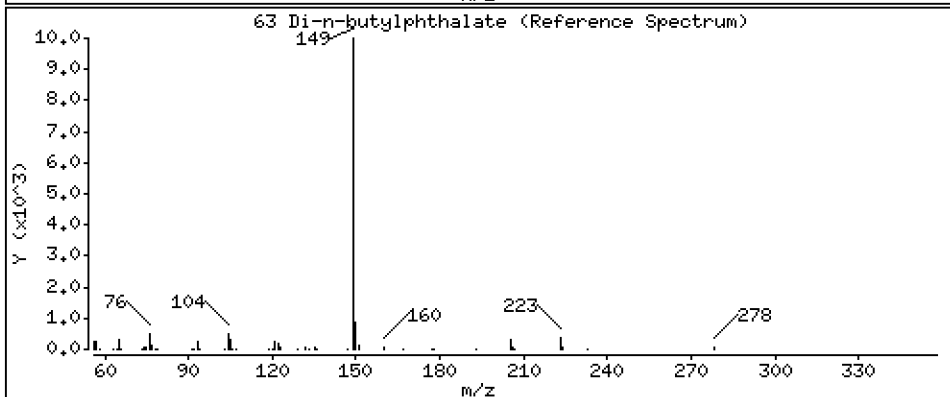
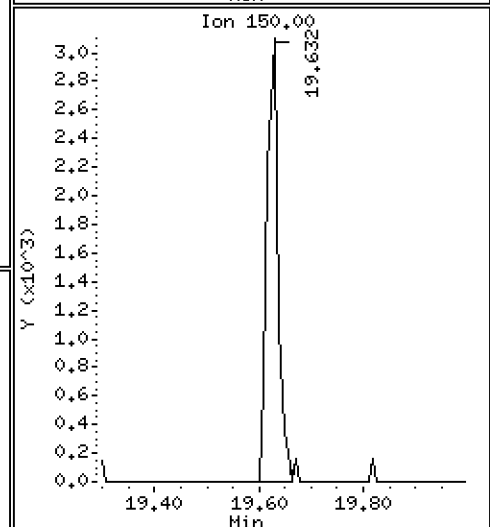
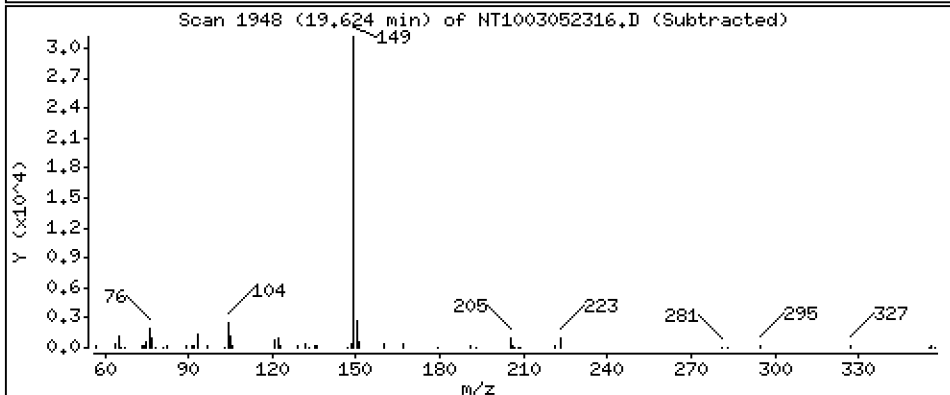
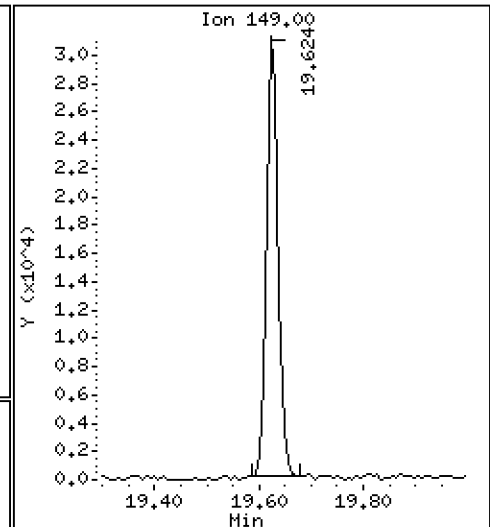
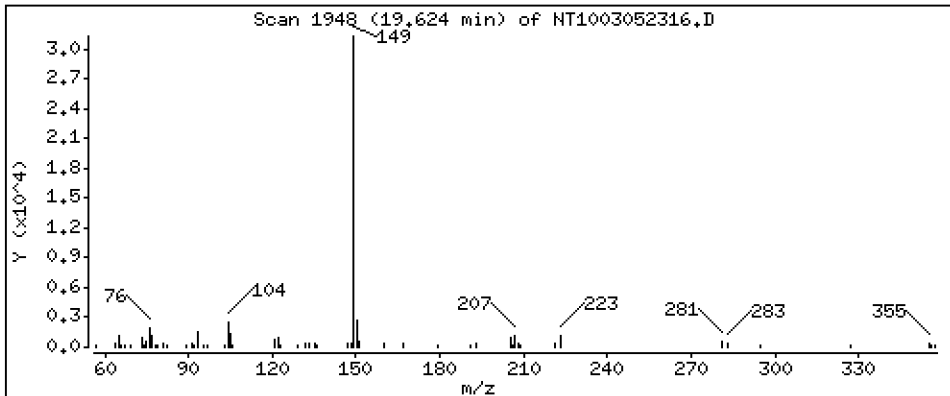
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1588 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

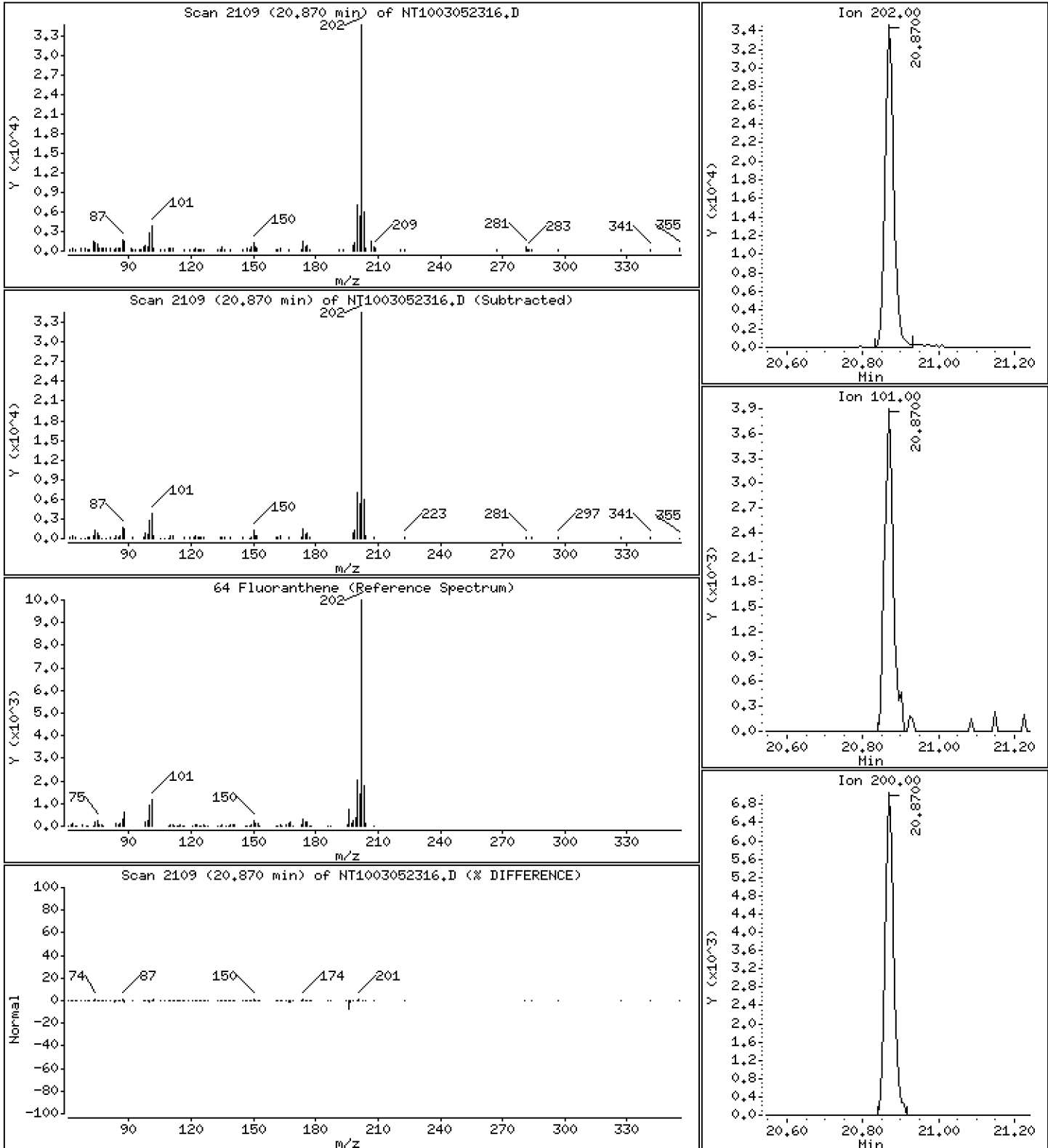
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

64 Fluoranthene

Concentration: 0.1832 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

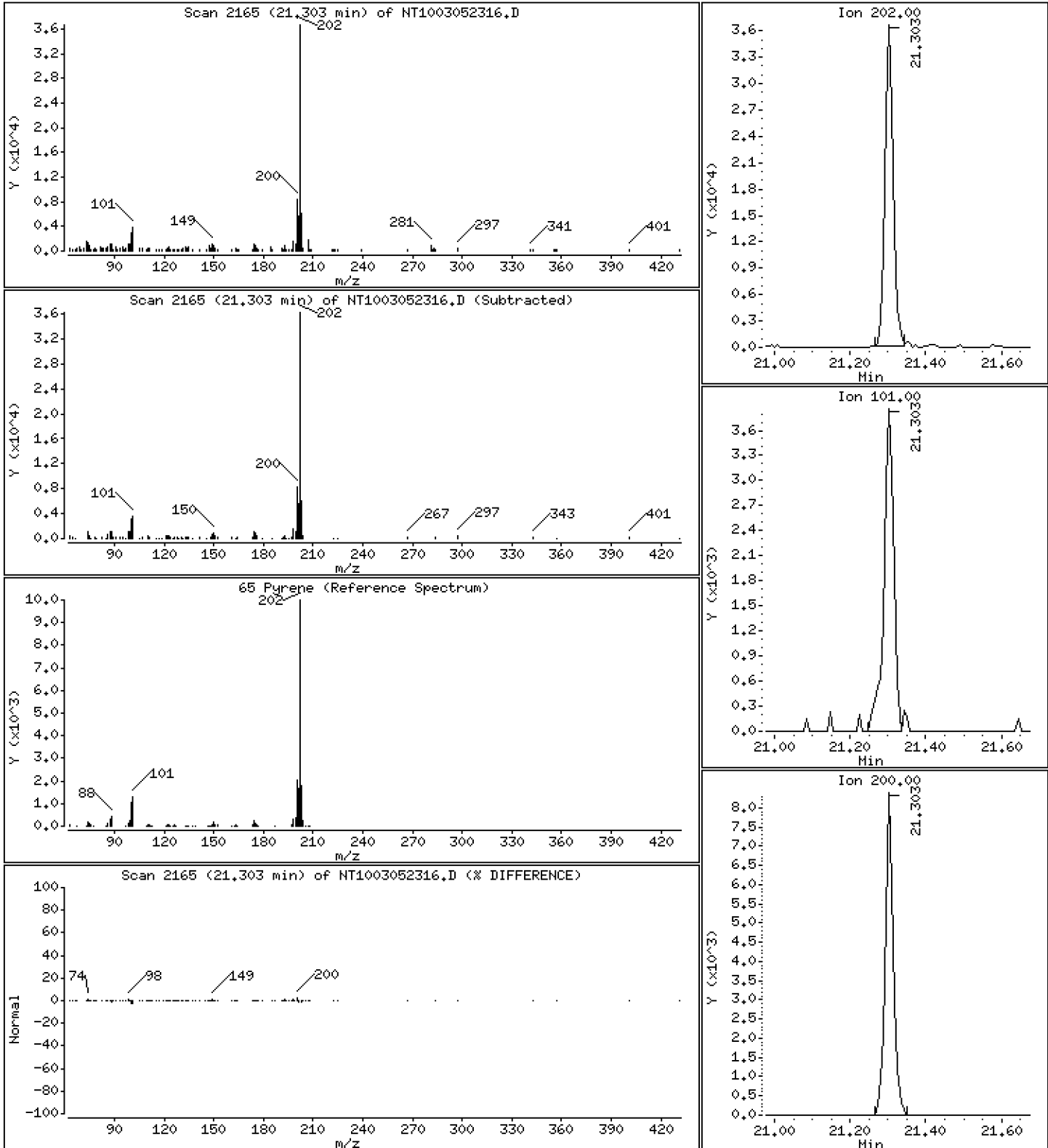
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 0,1817 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

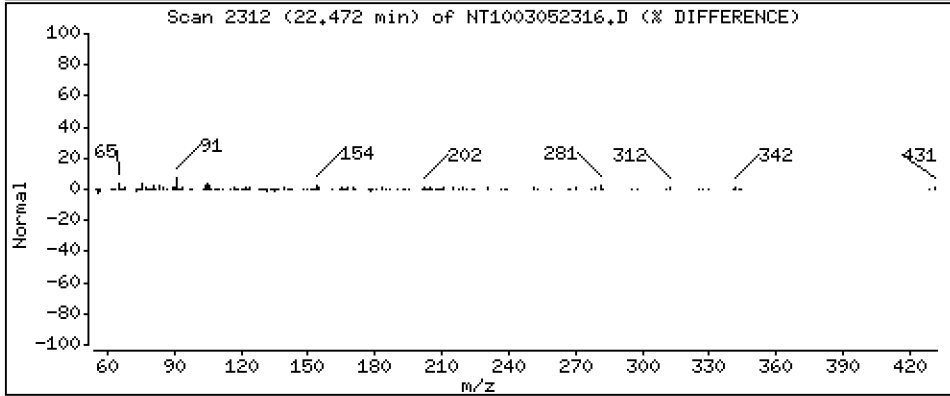
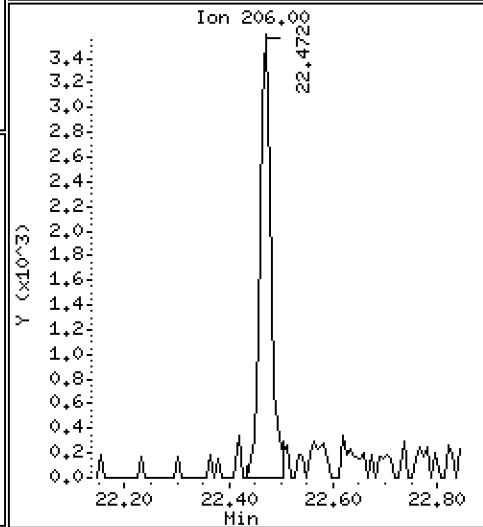
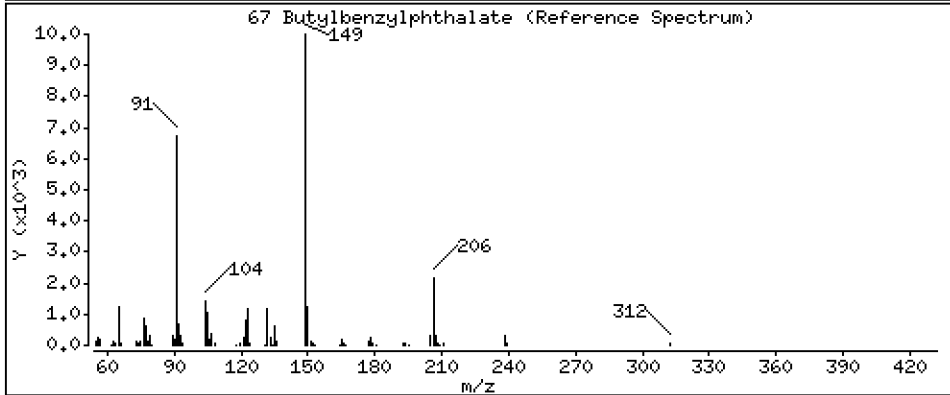
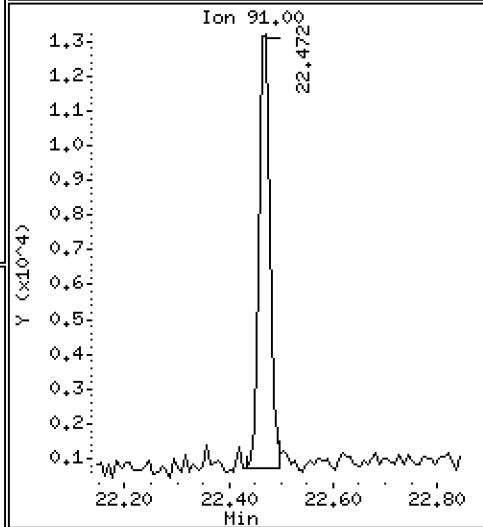
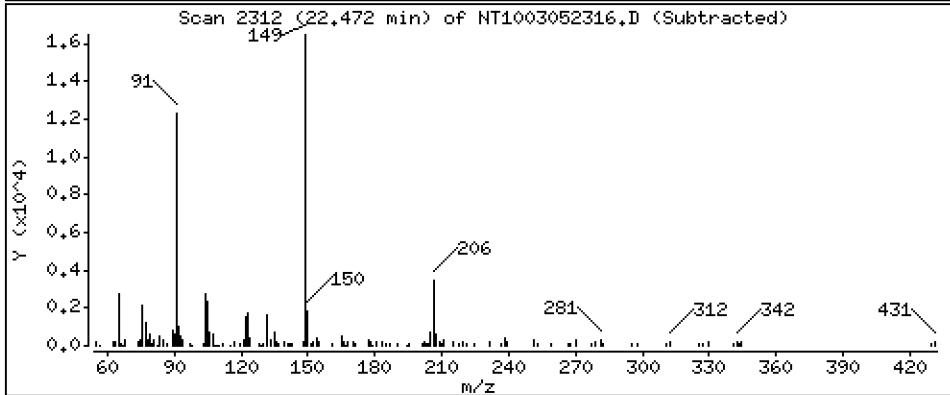
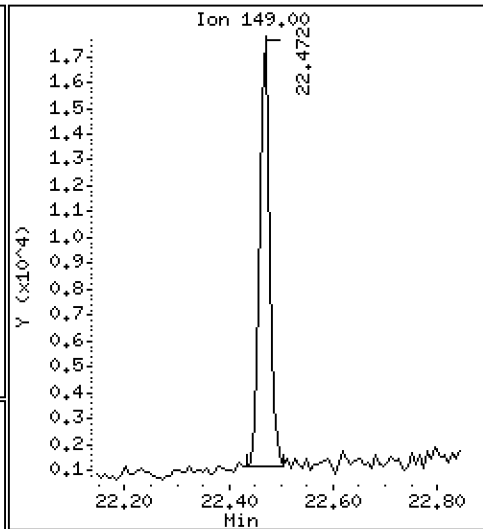
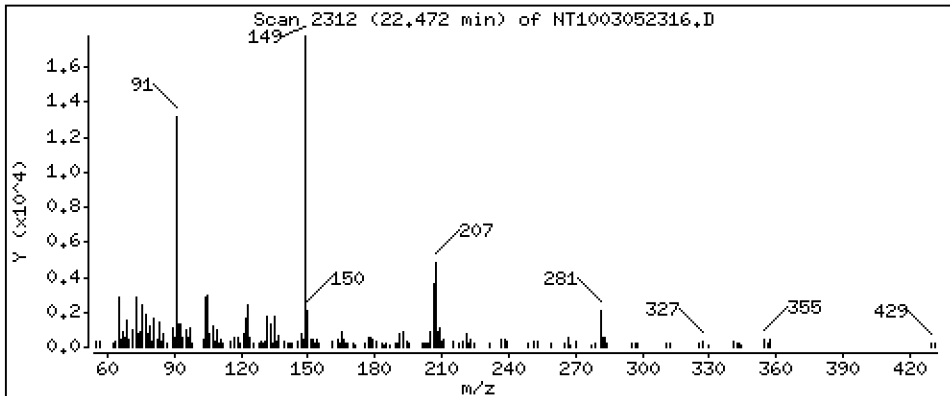
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1369 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

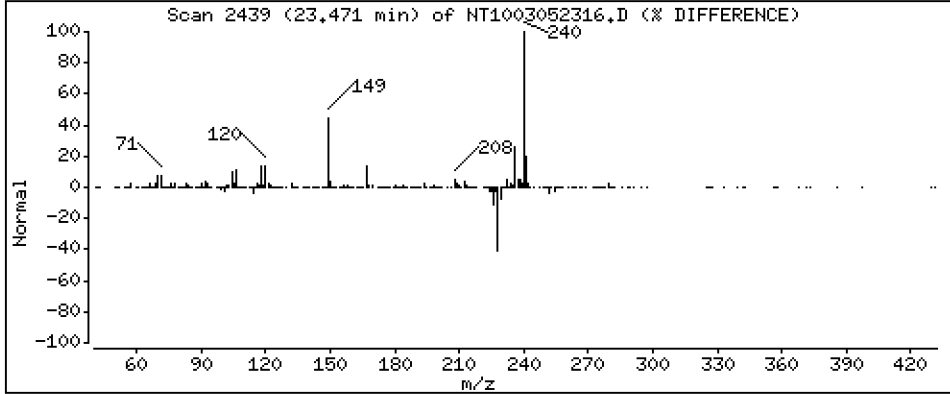
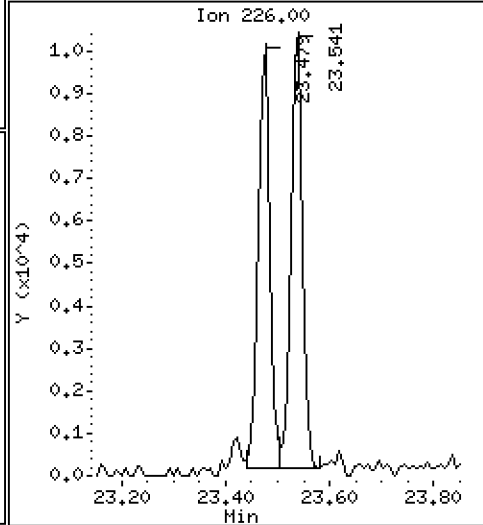
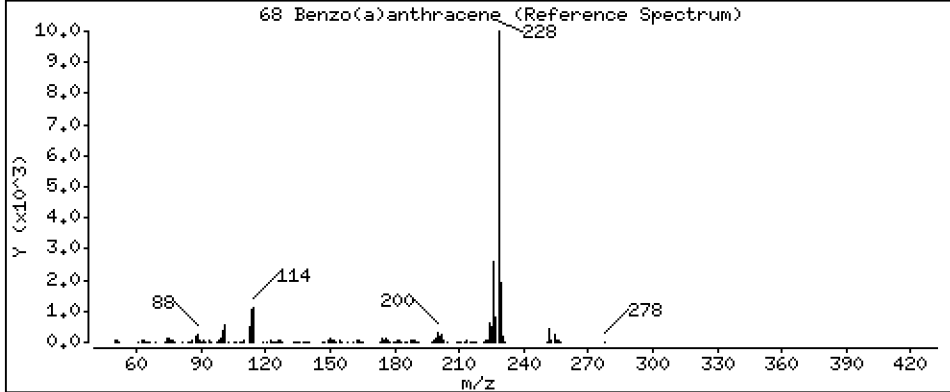
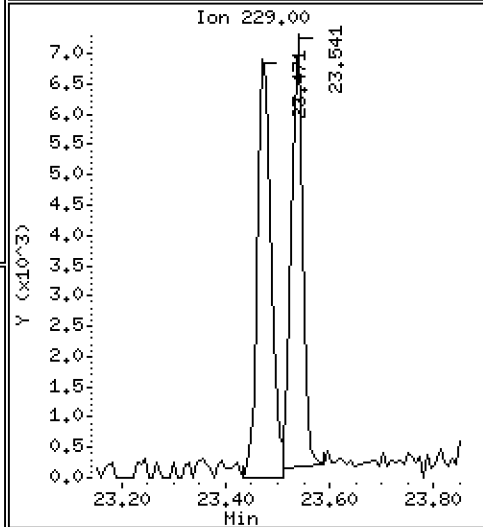
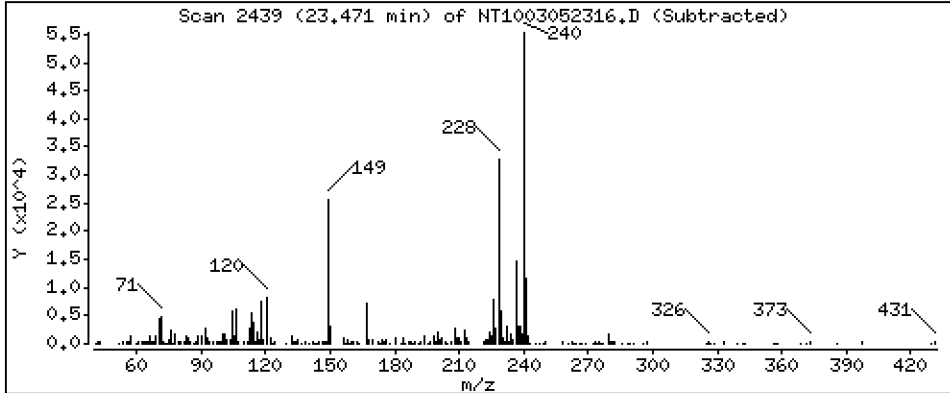
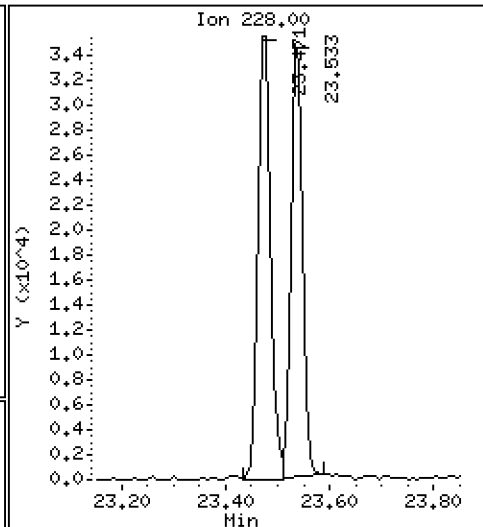
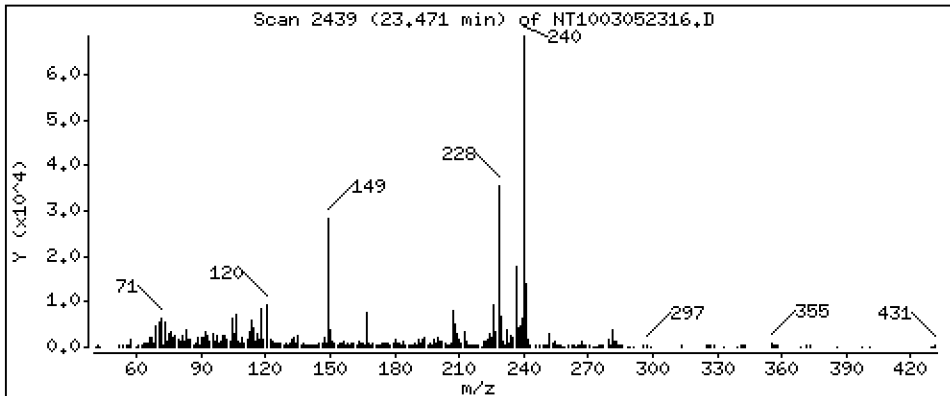
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,1995 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

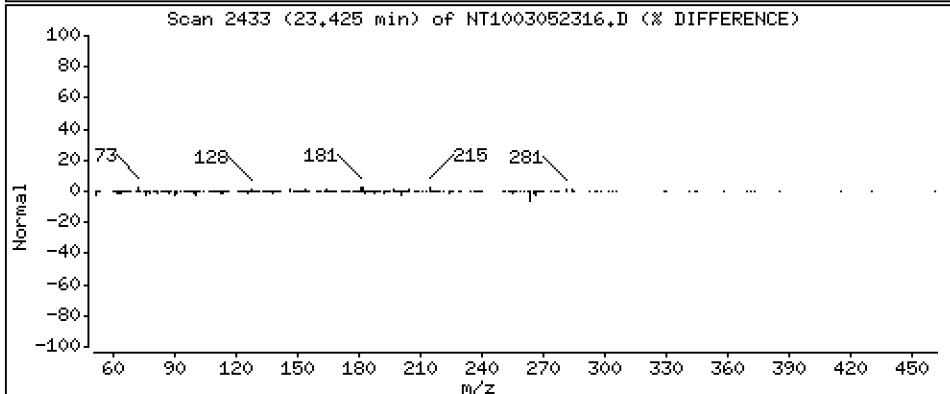
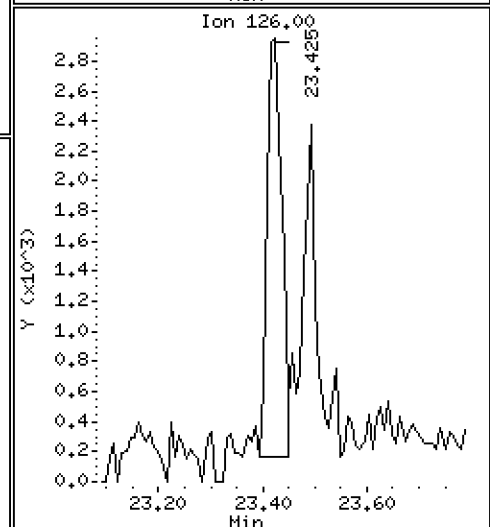
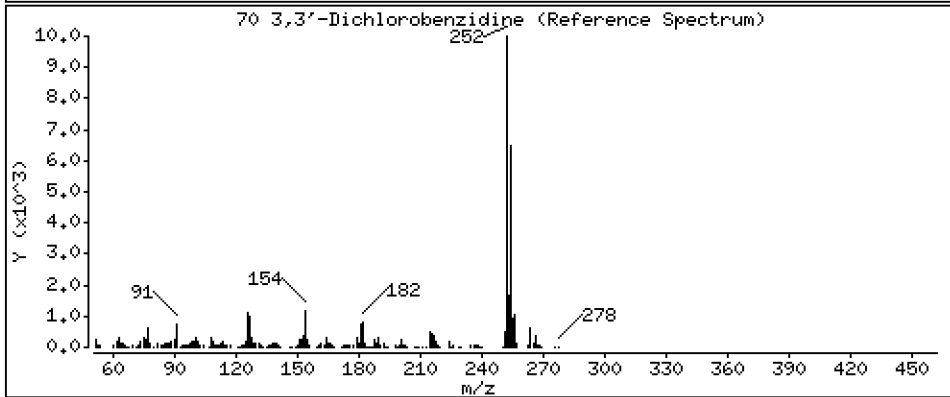
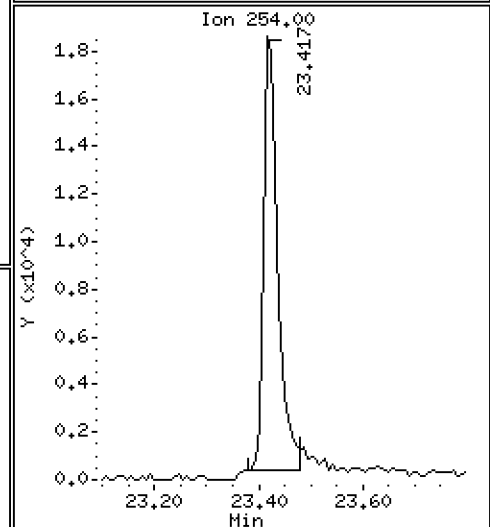
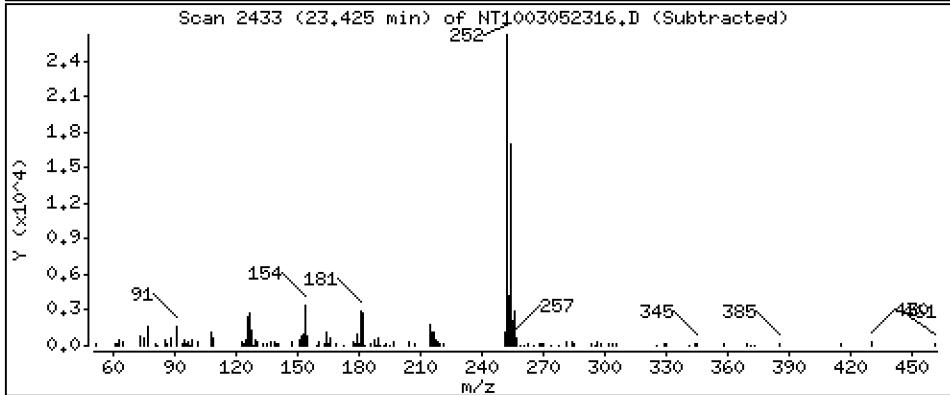
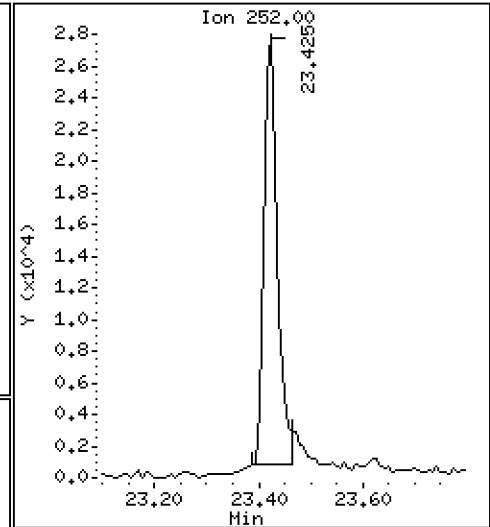
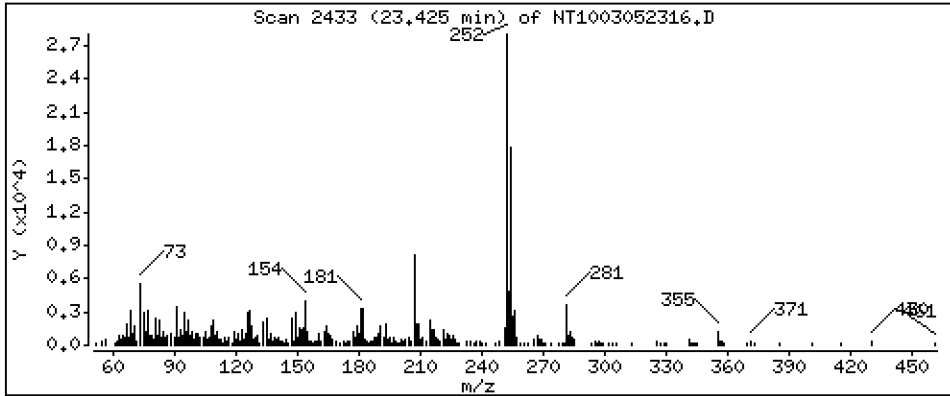
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,3521 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

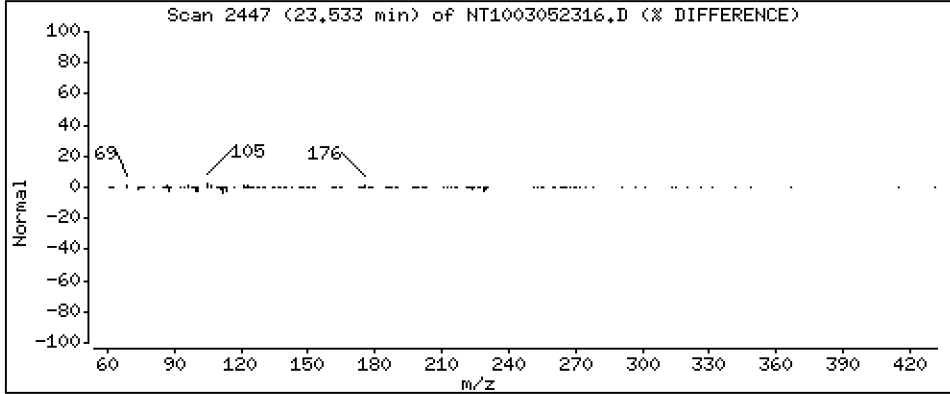
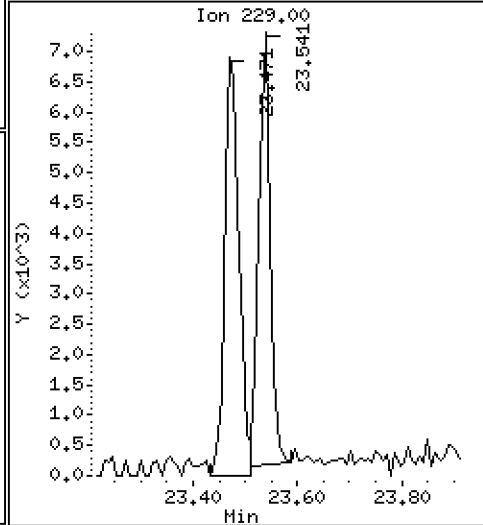
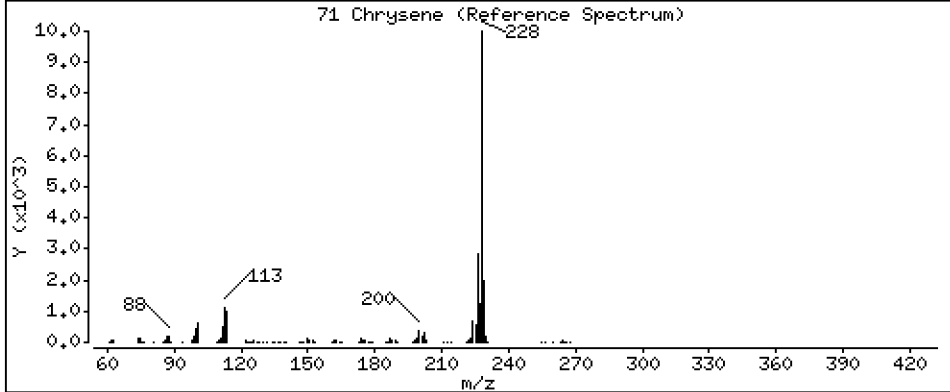
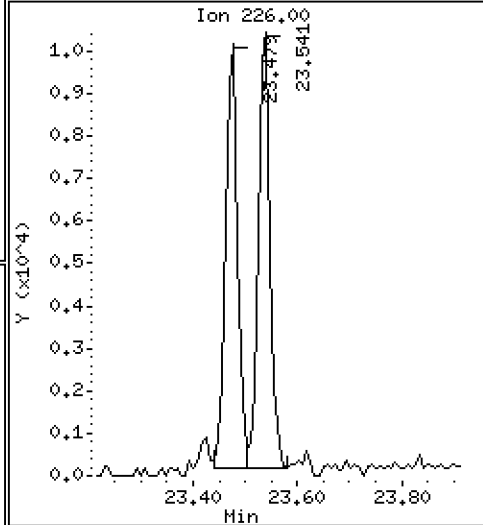
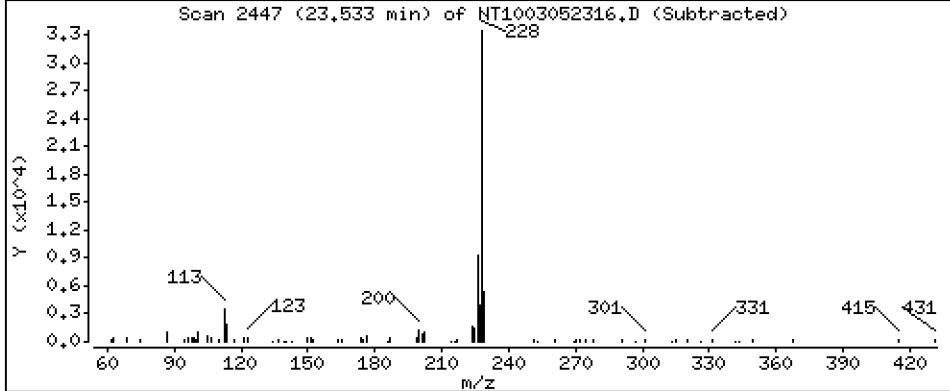
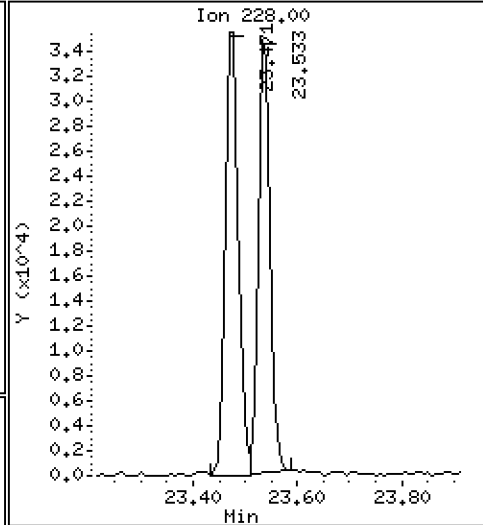
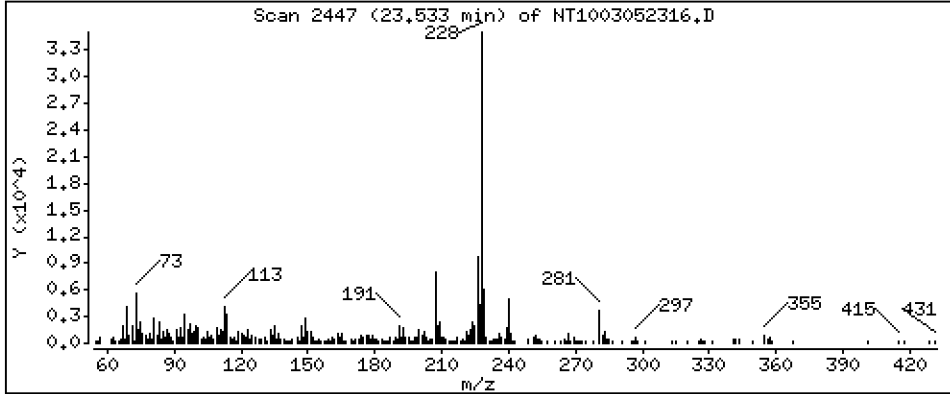
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2187 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

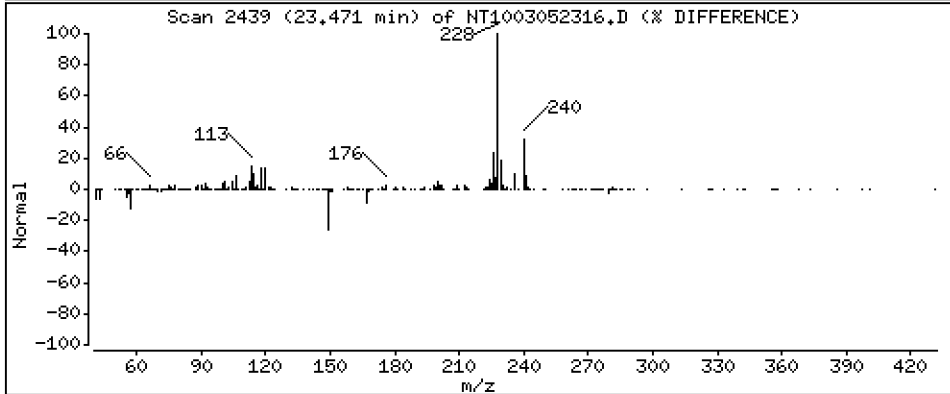
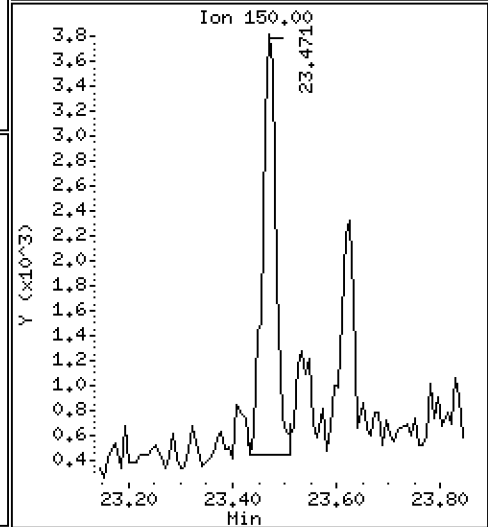
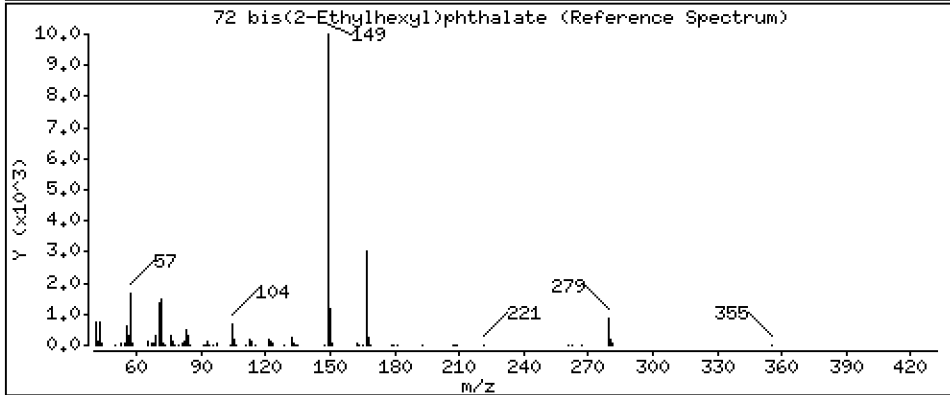
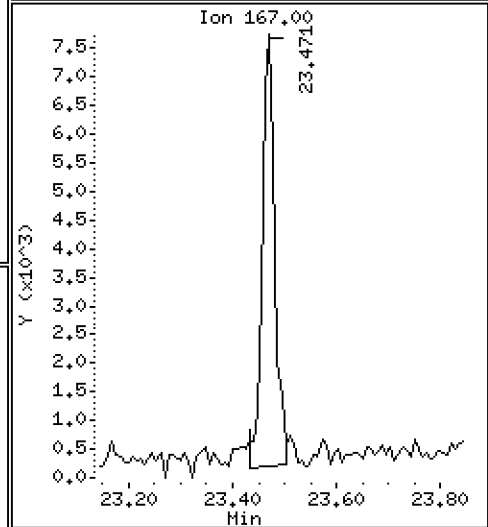
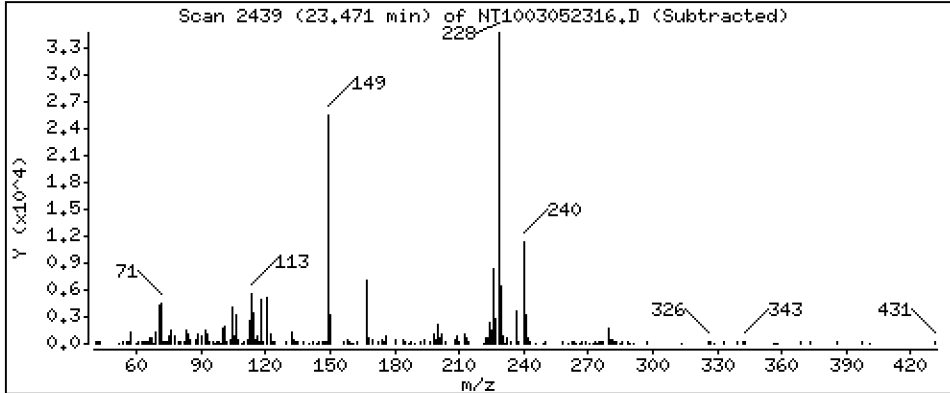
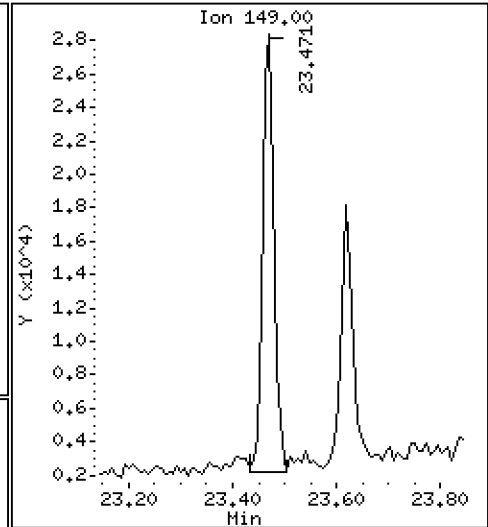
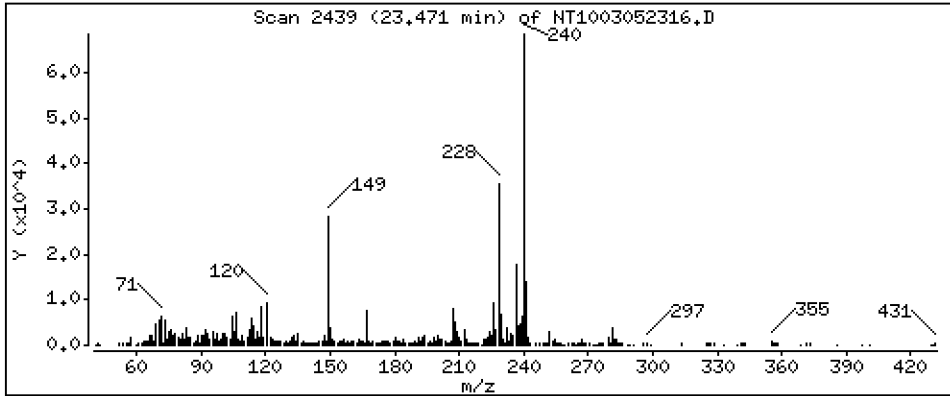
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0,1865 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

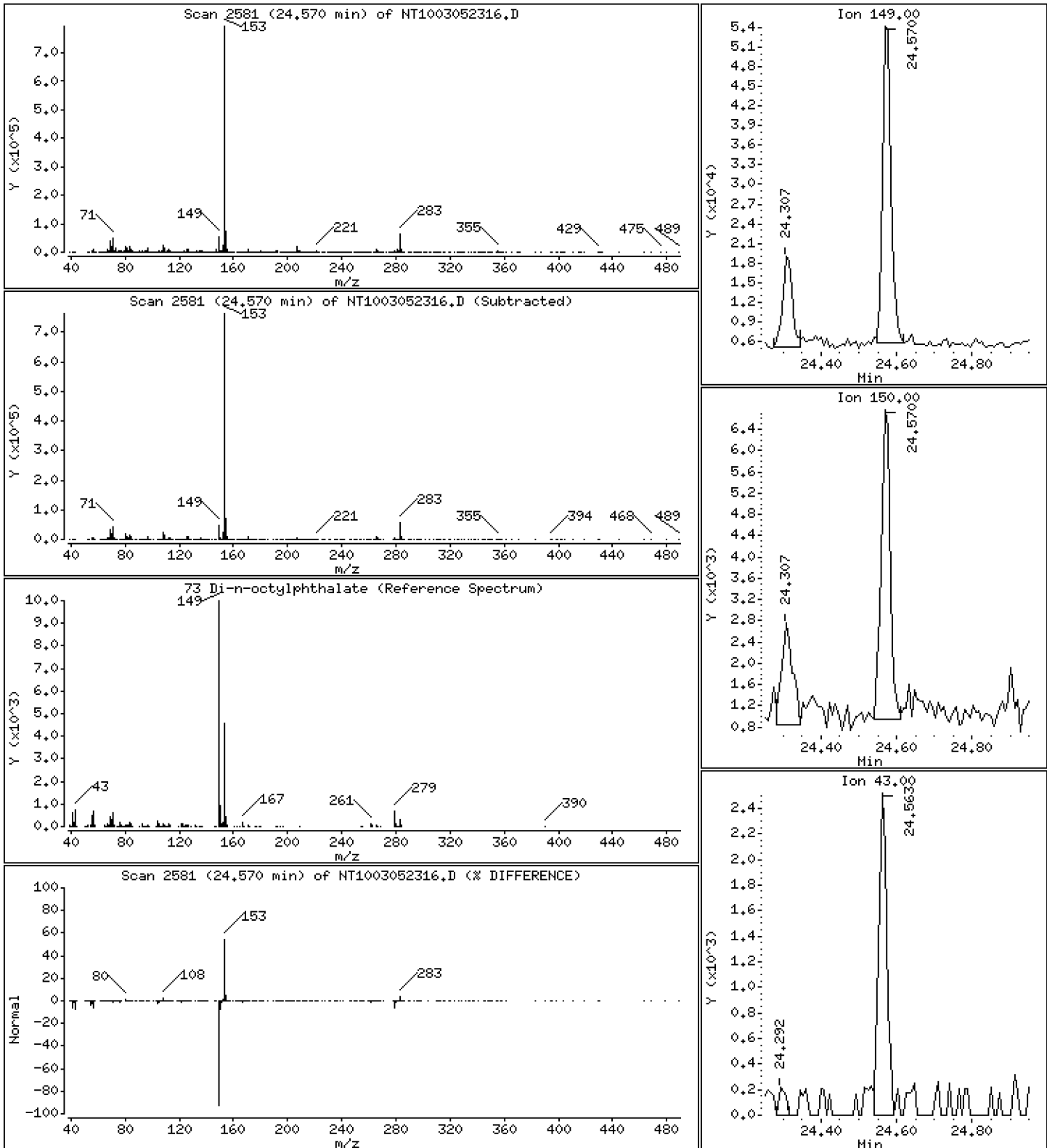
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 0,2258 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

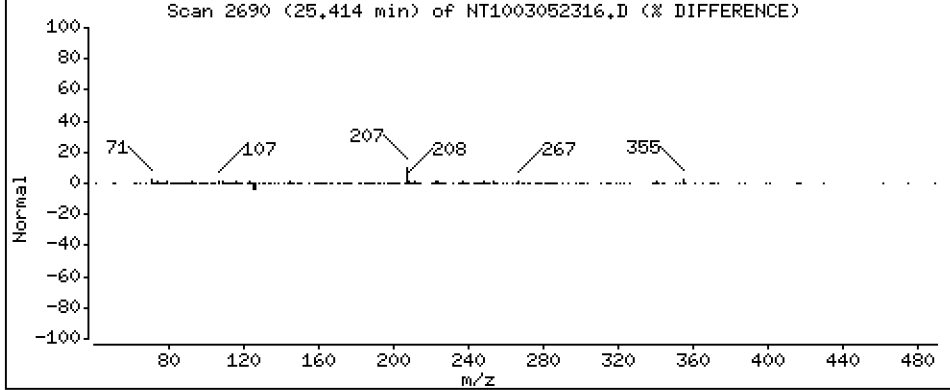
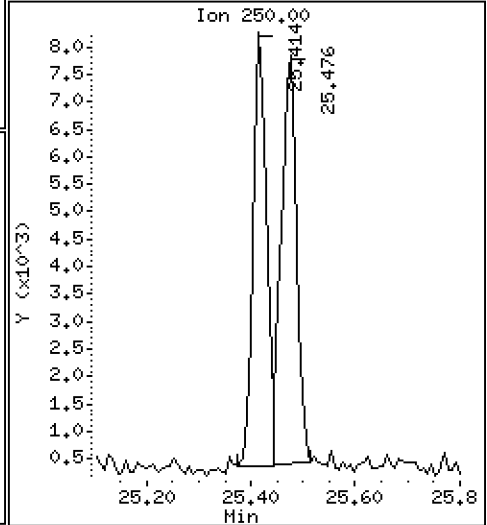
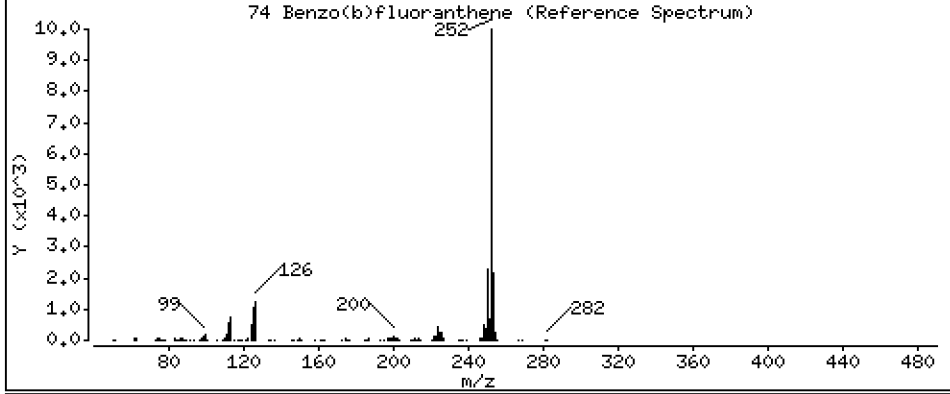
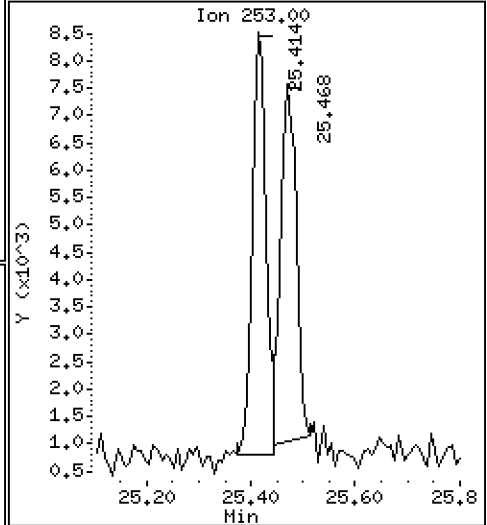
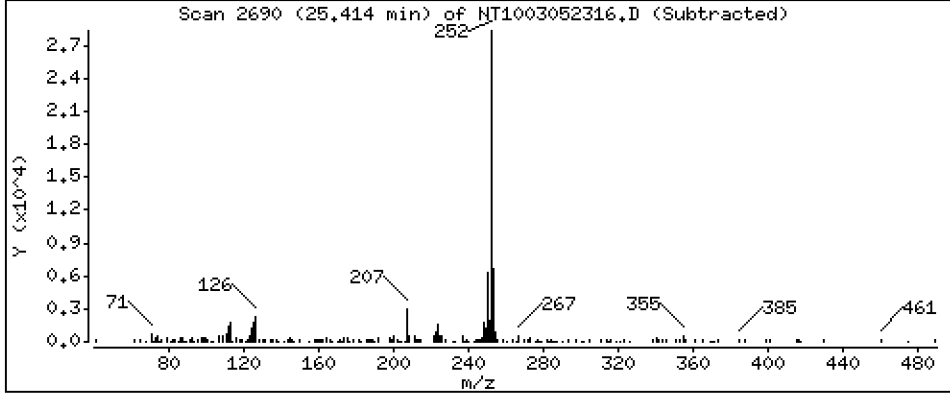
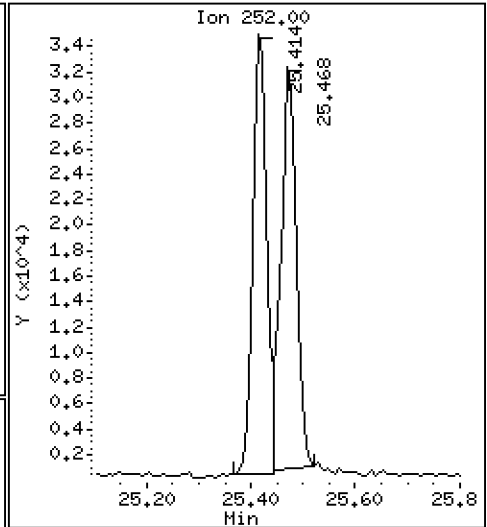
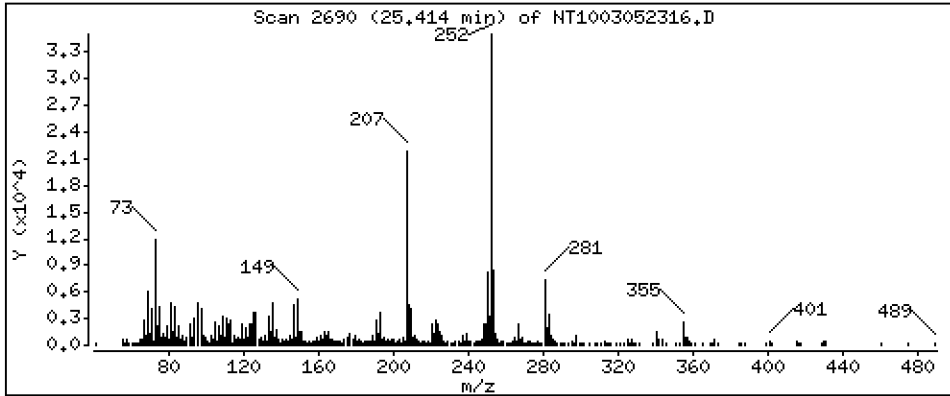
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1802 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

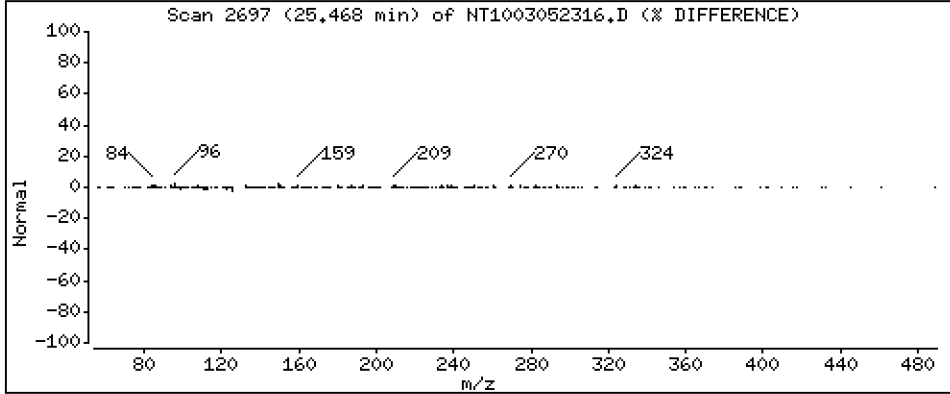
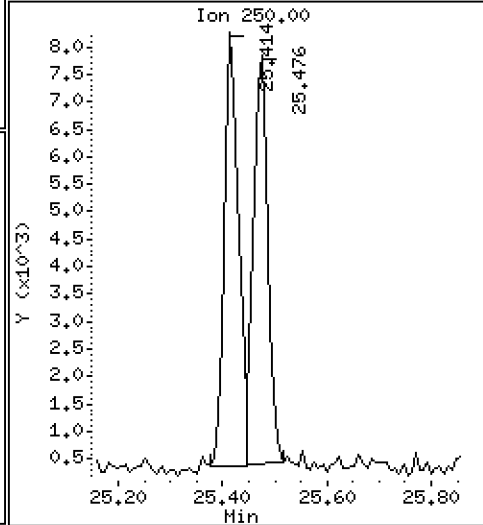
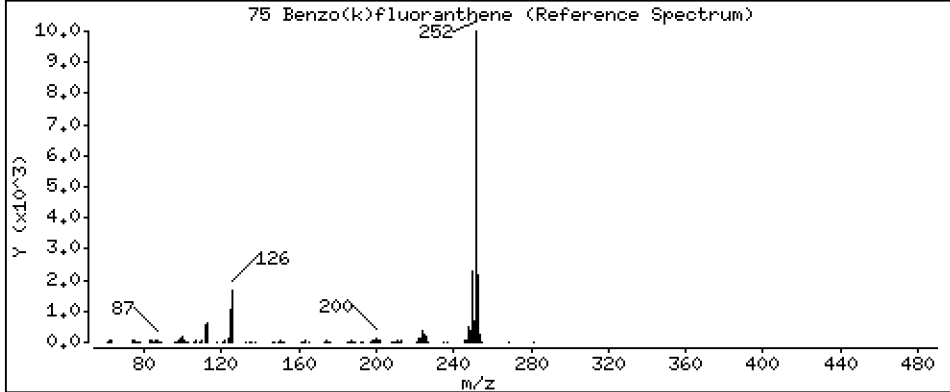
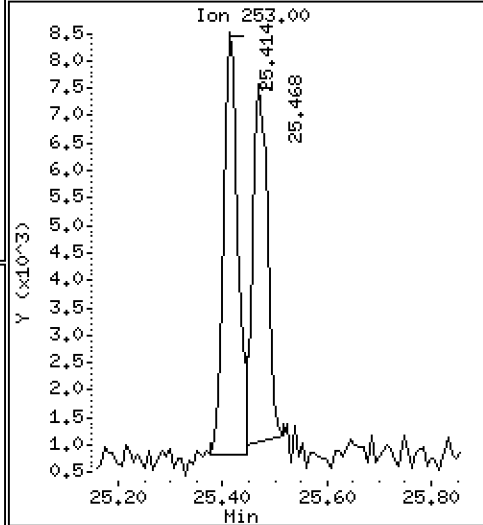
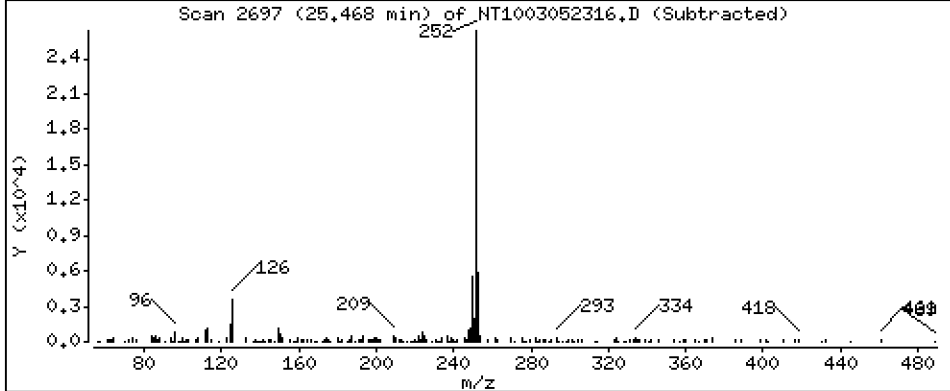
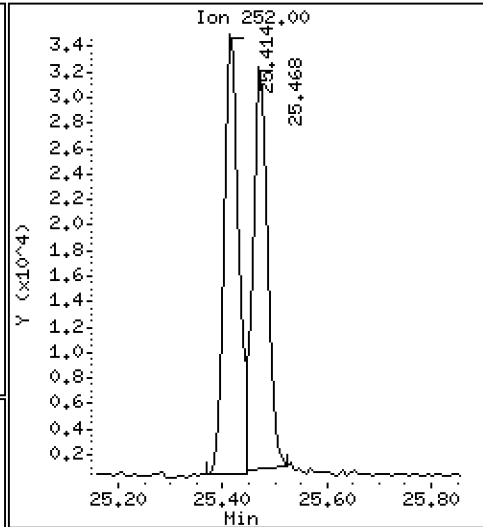
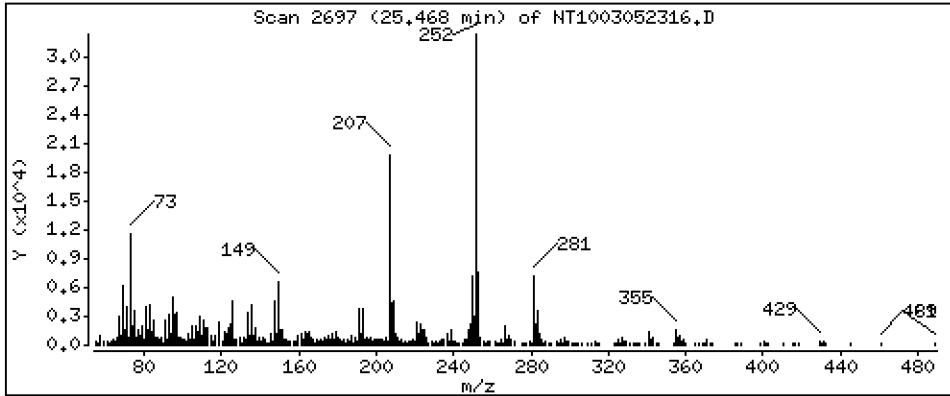
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,1792 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

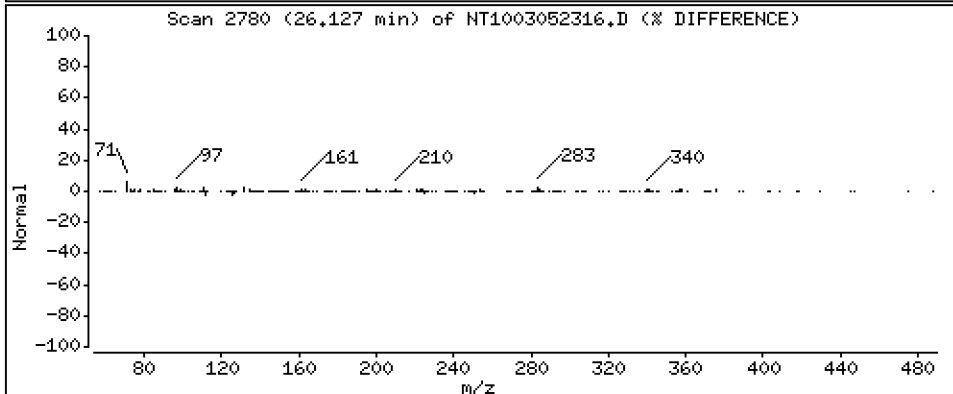
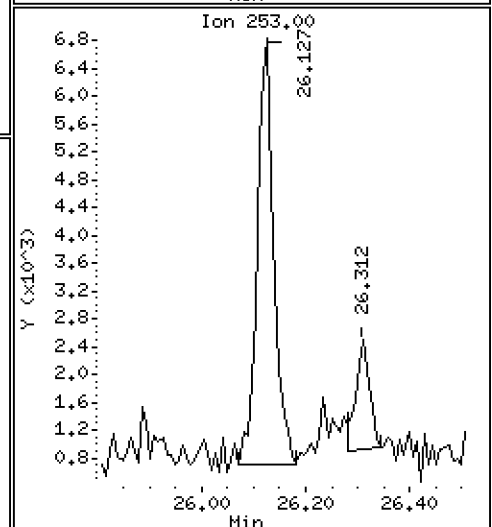
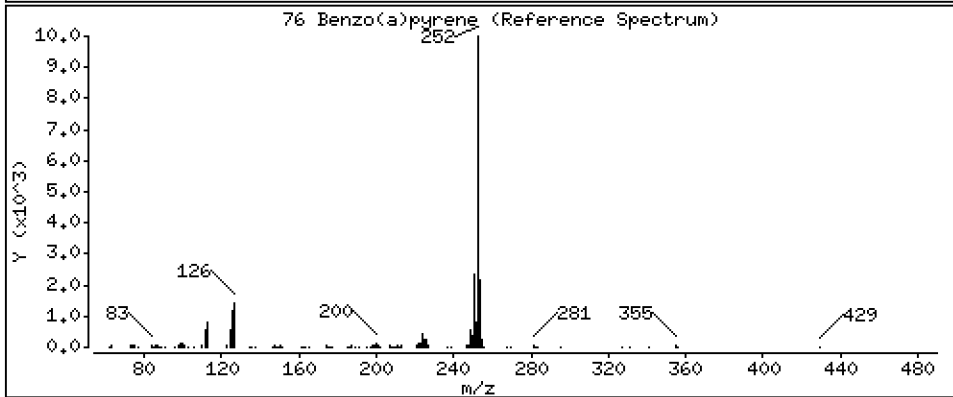
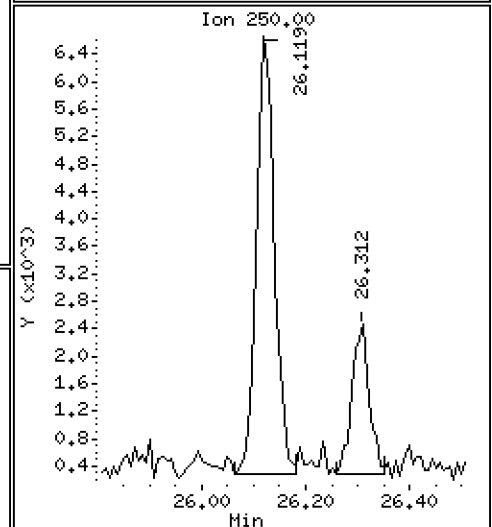
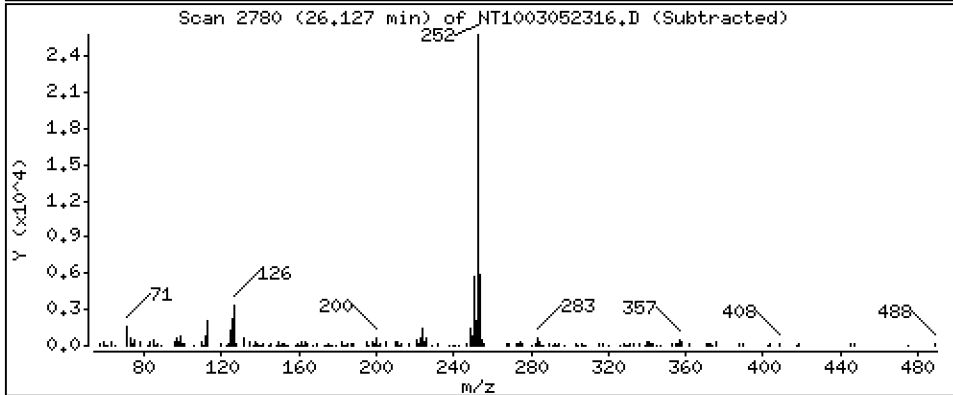
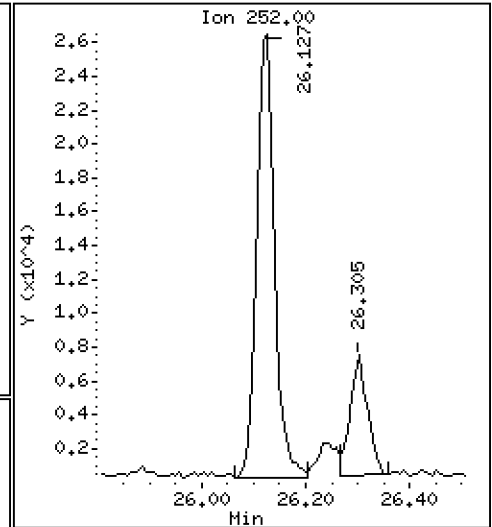
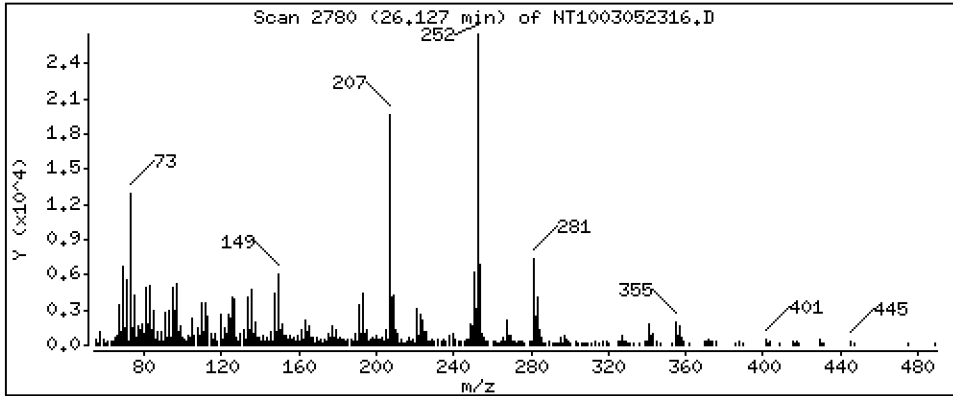
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1876 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

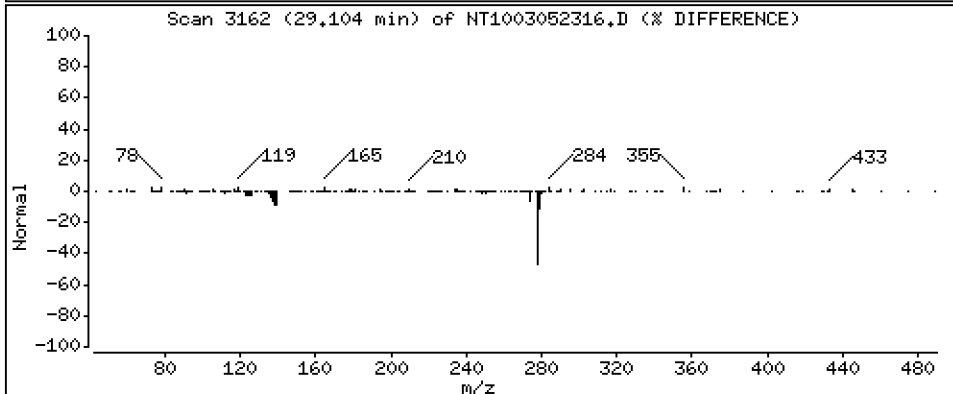
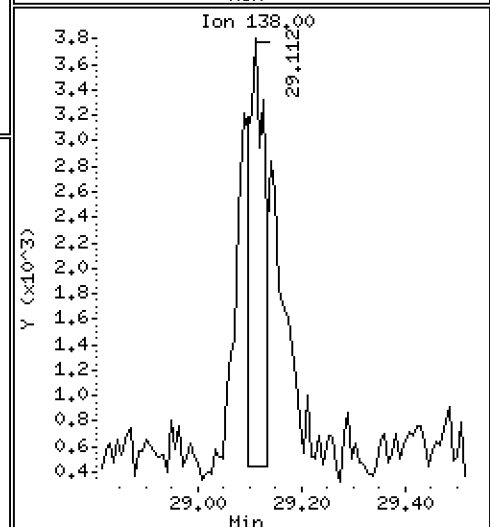
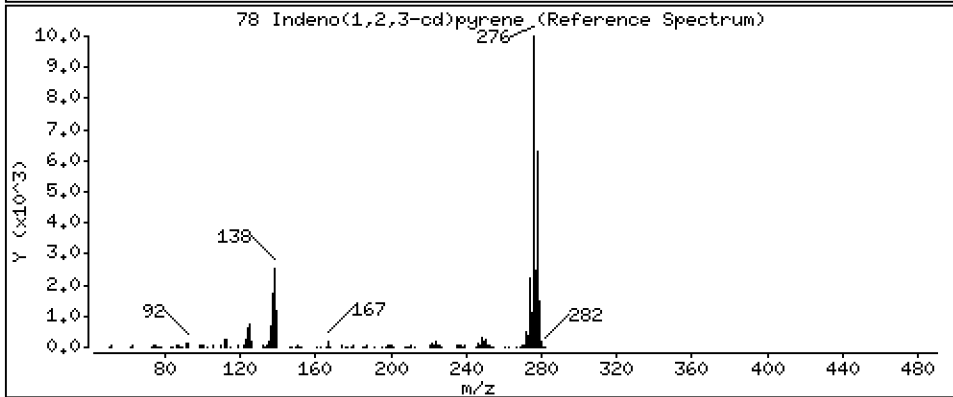
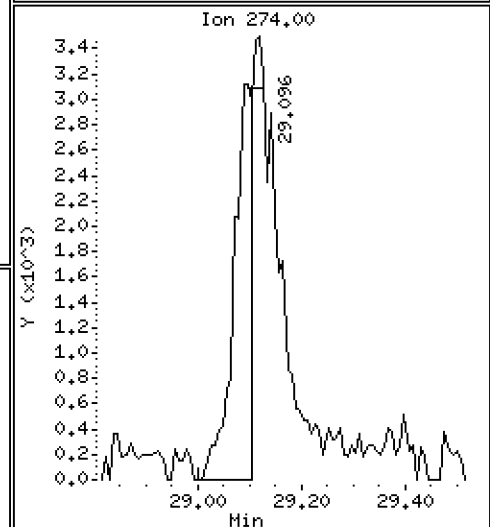
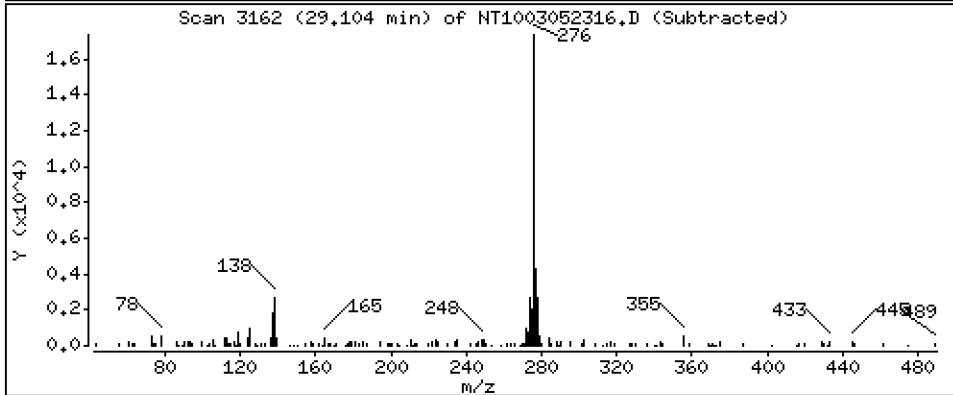
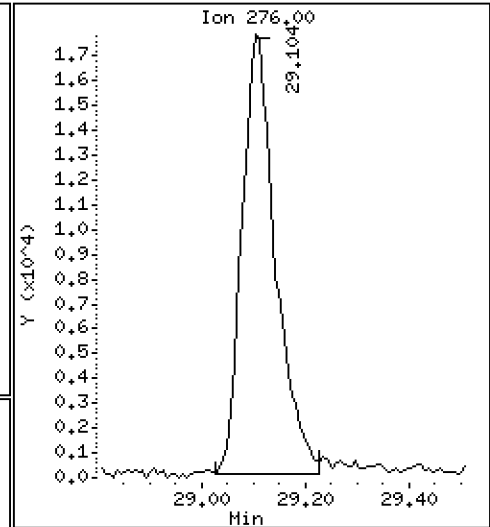
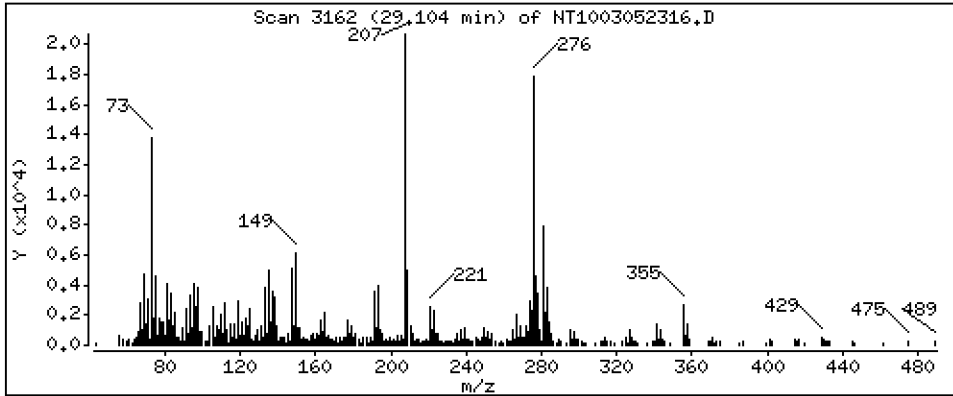
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1988 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

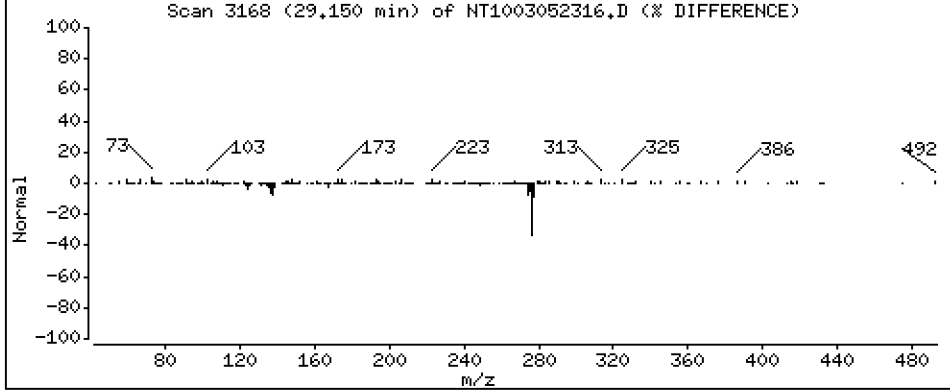
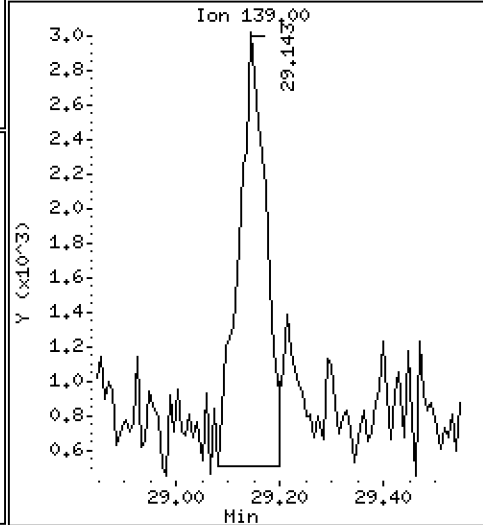
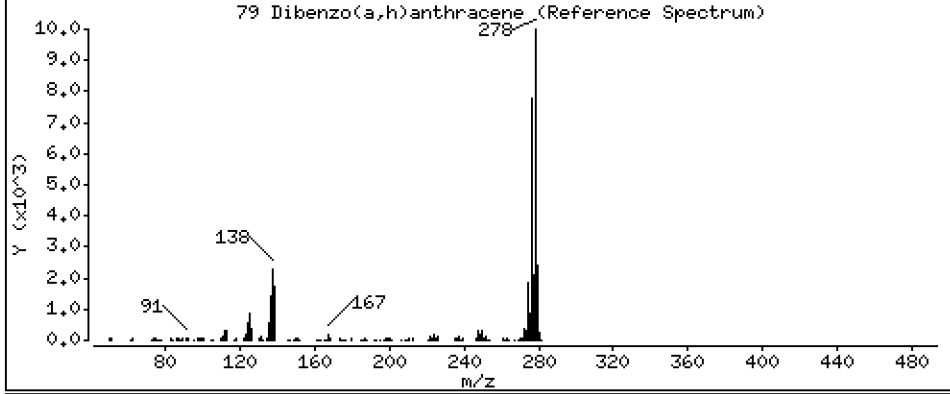
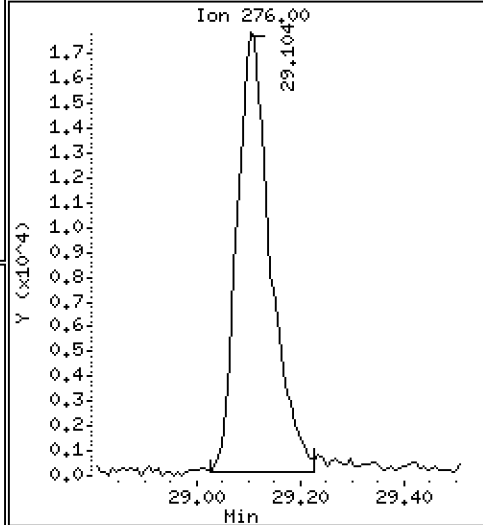
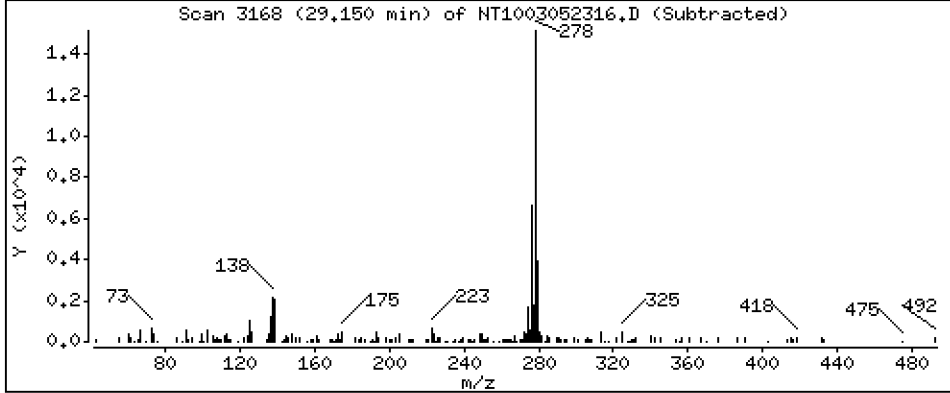
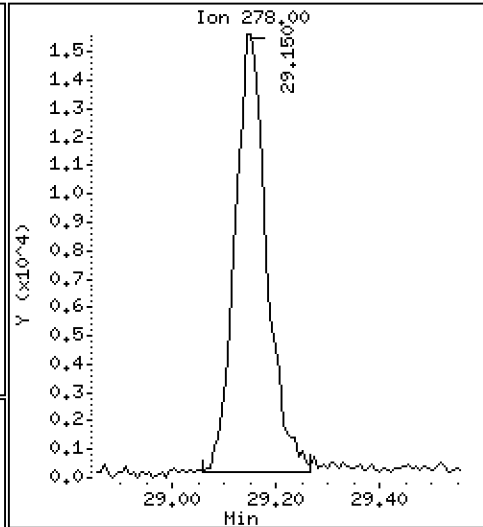
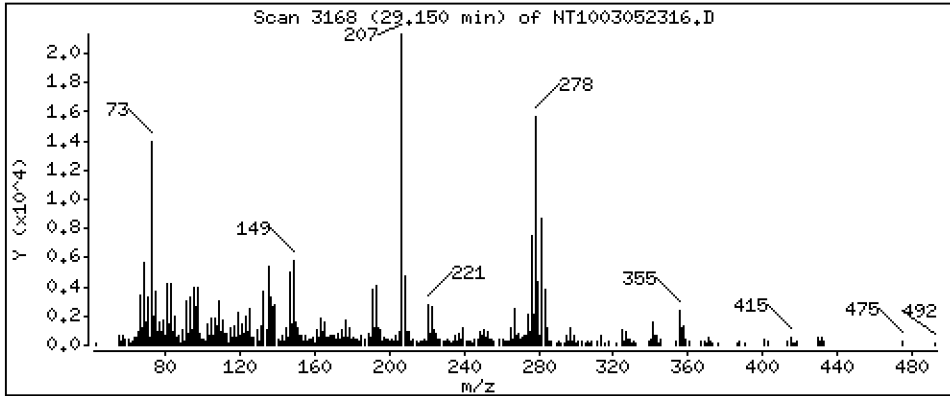
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2178 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

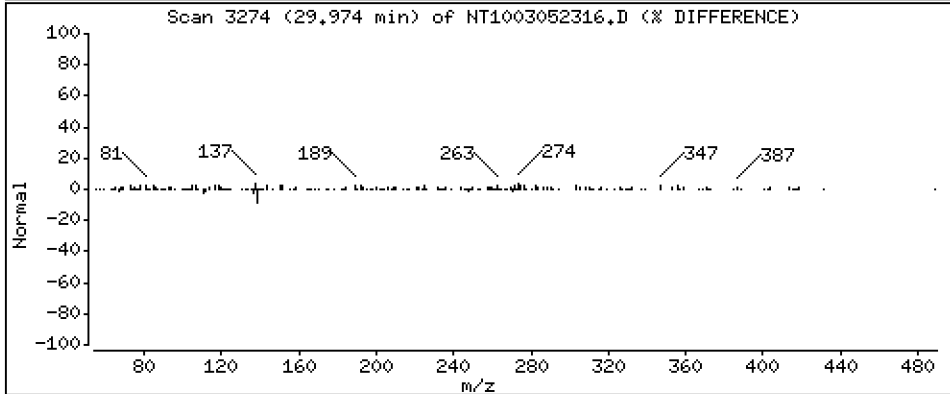
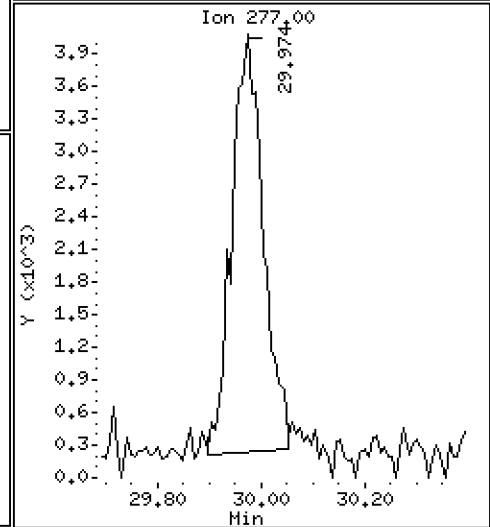
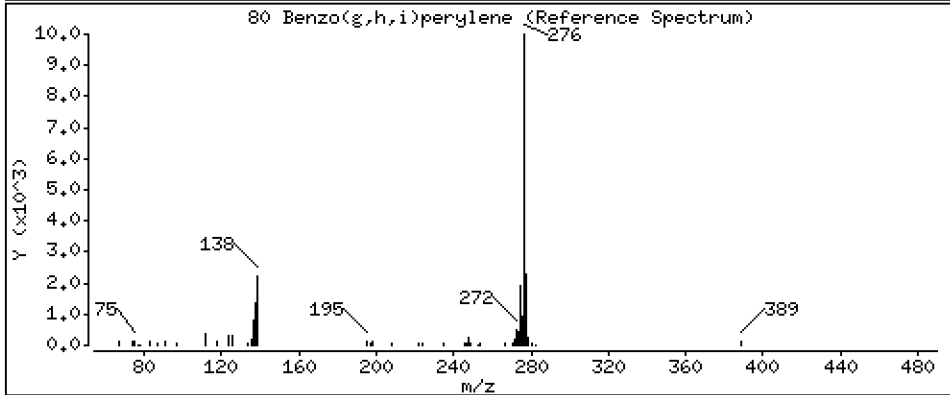
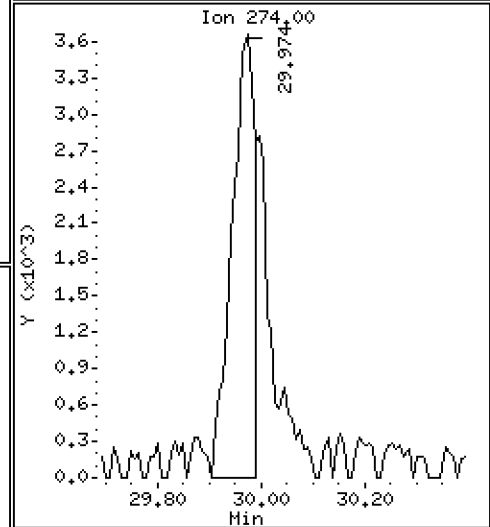
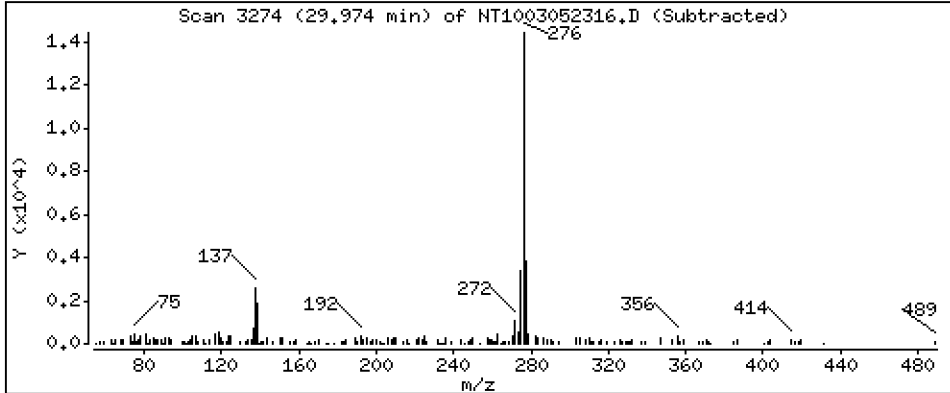
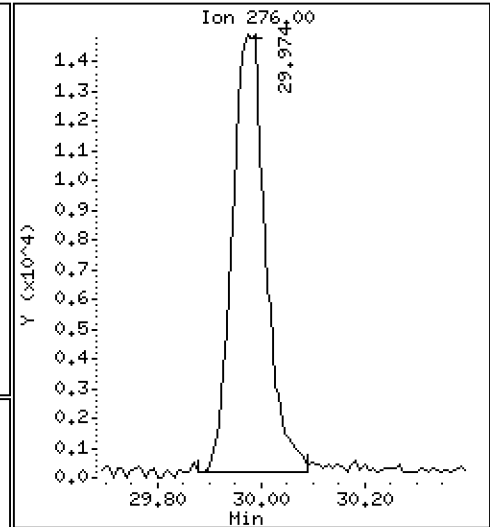
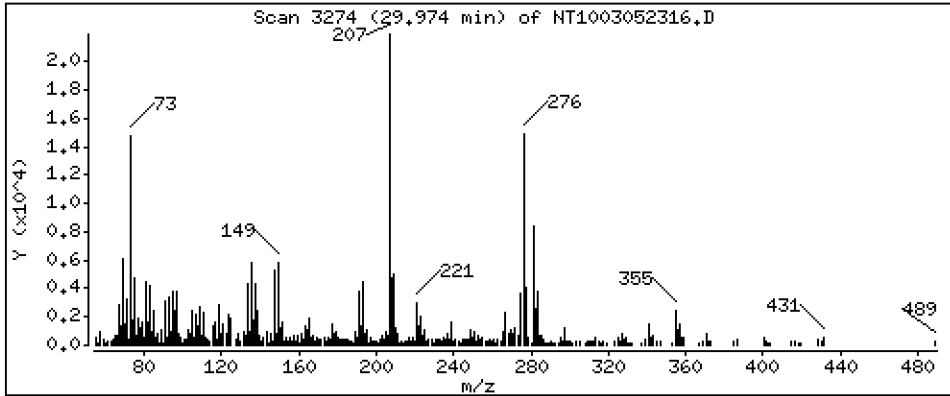
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,2069 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

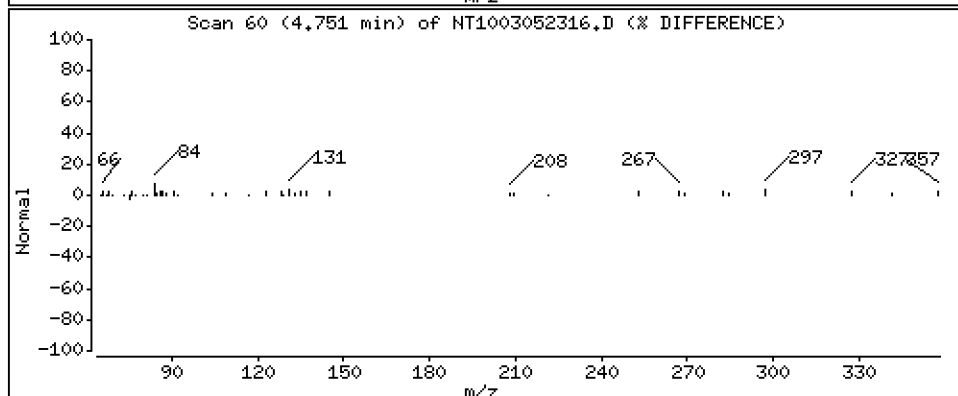
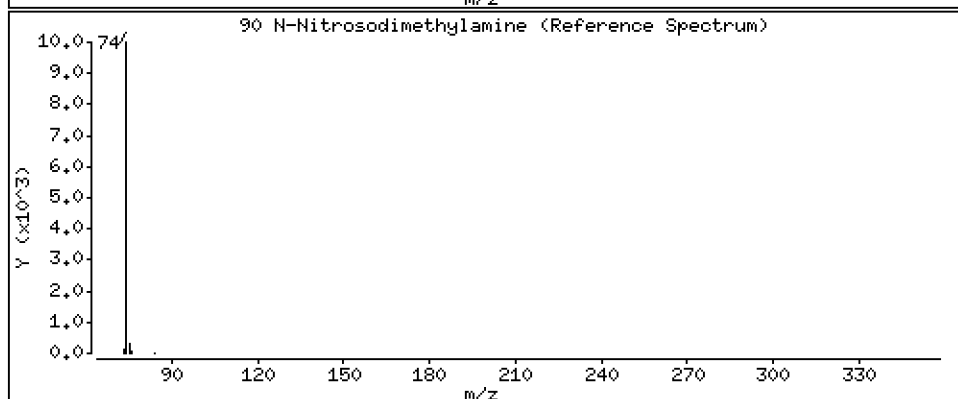
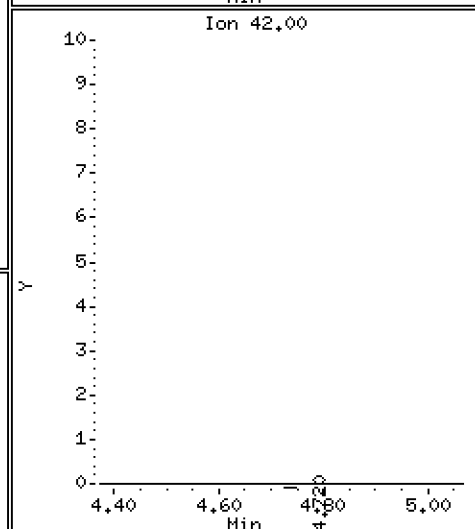
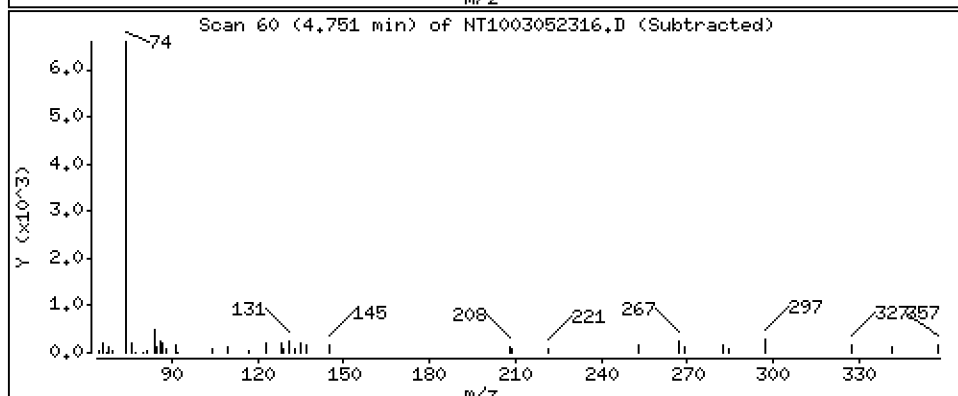
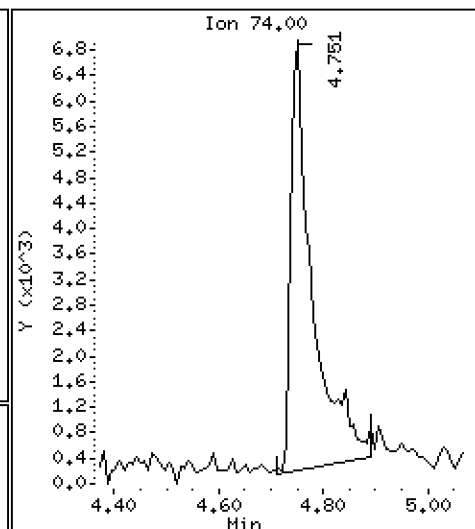
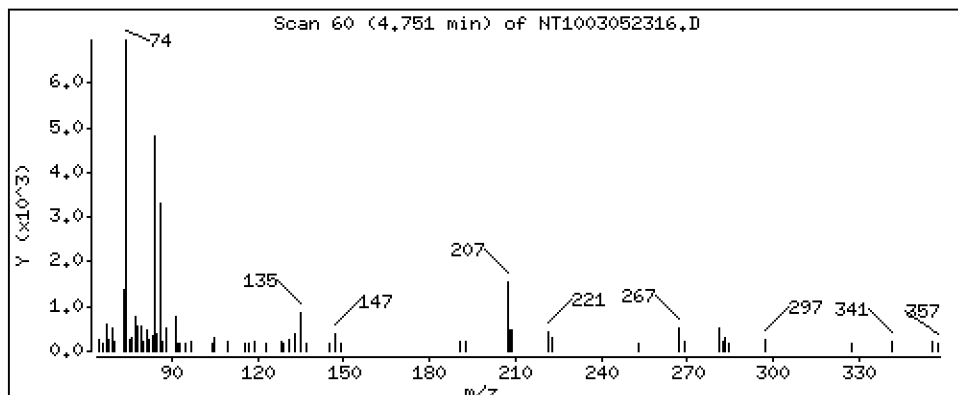
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,3262 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

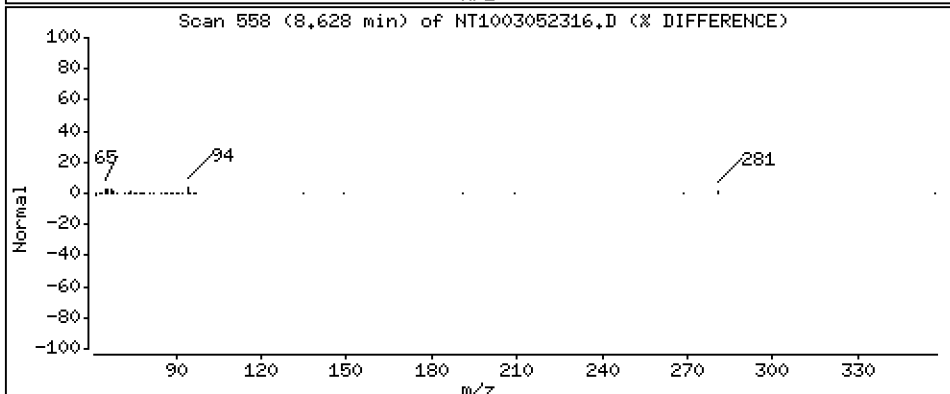
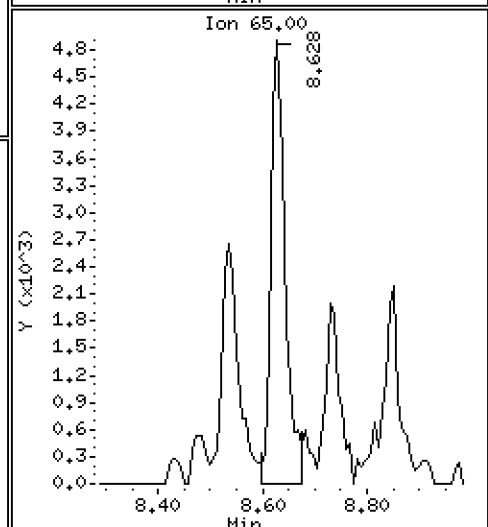
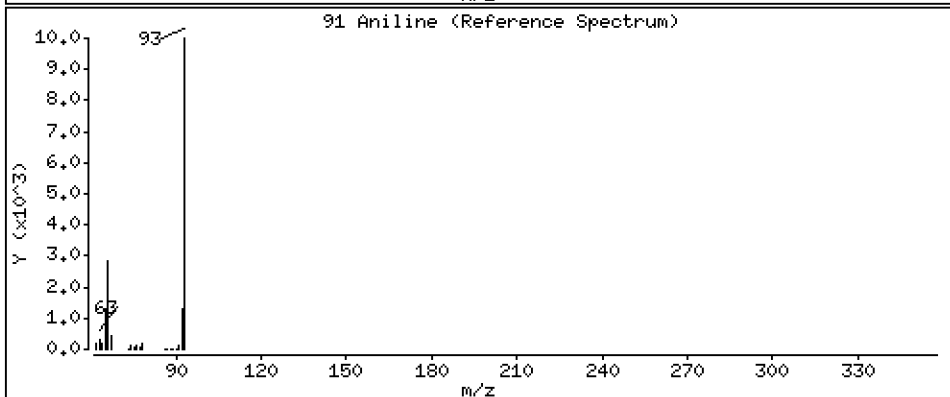
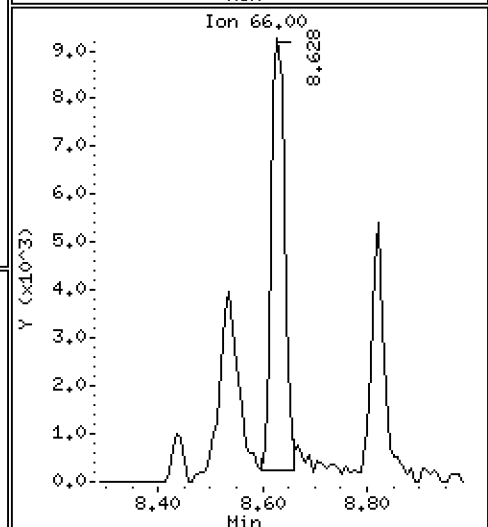
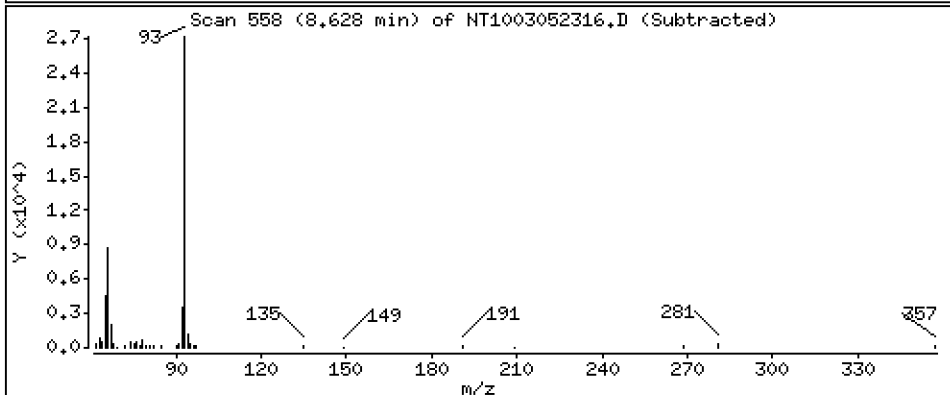
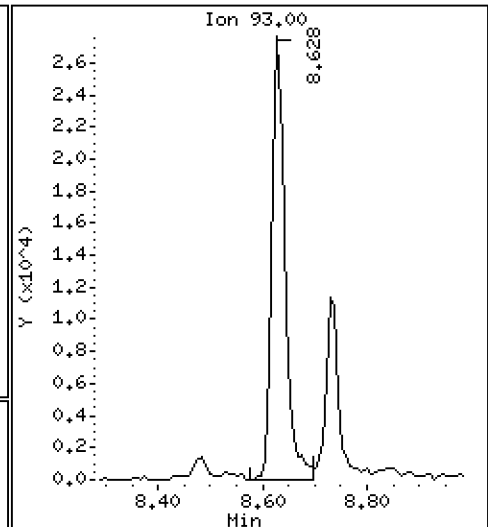
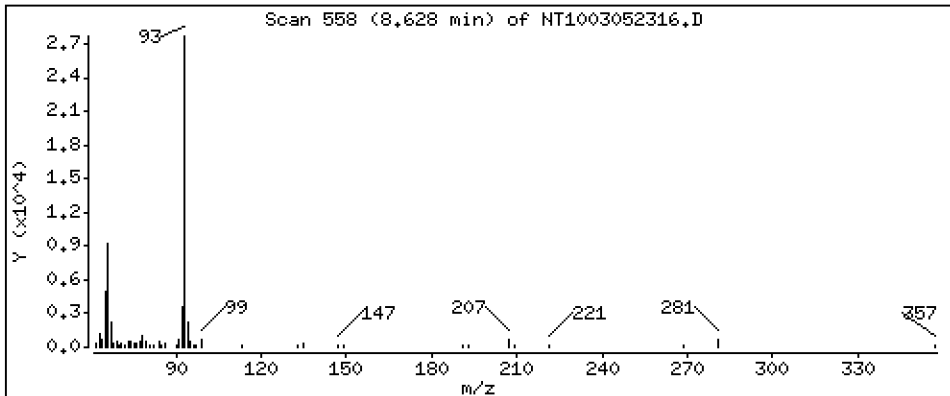
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3386 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

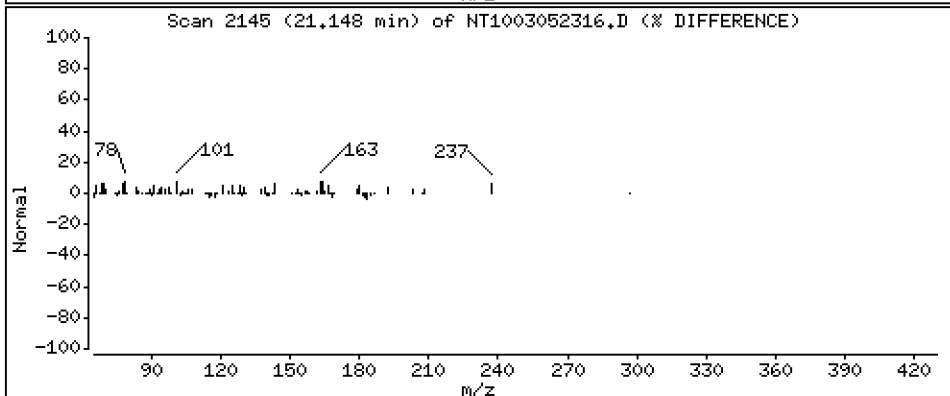
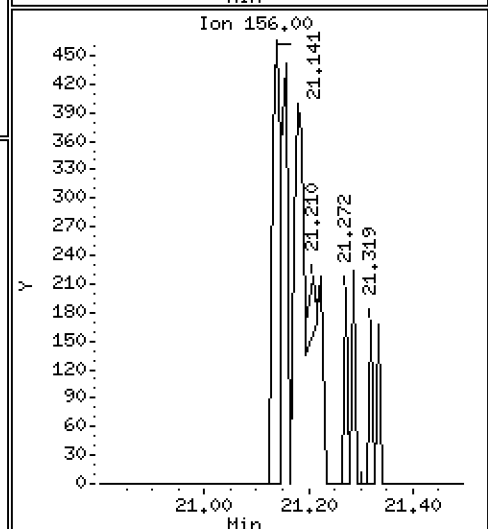
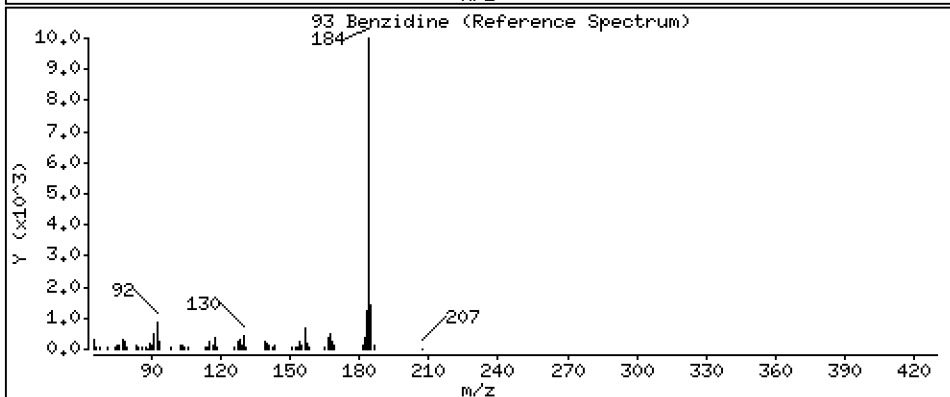
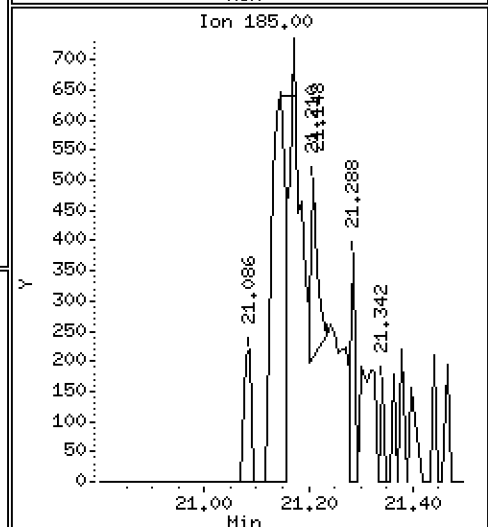
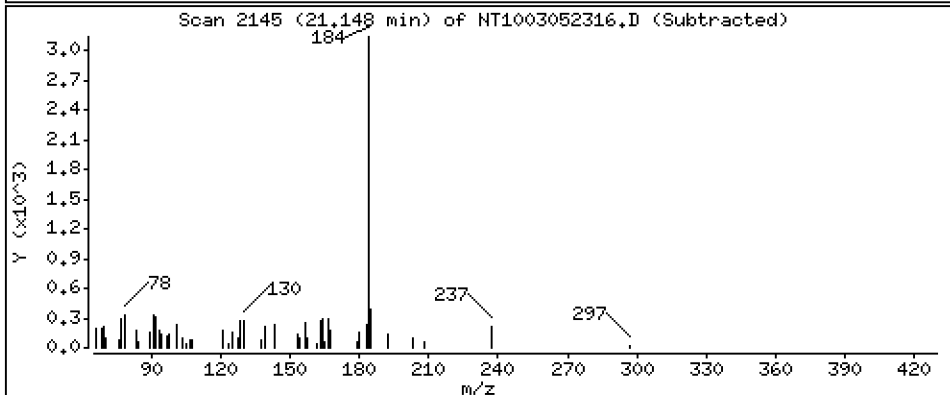
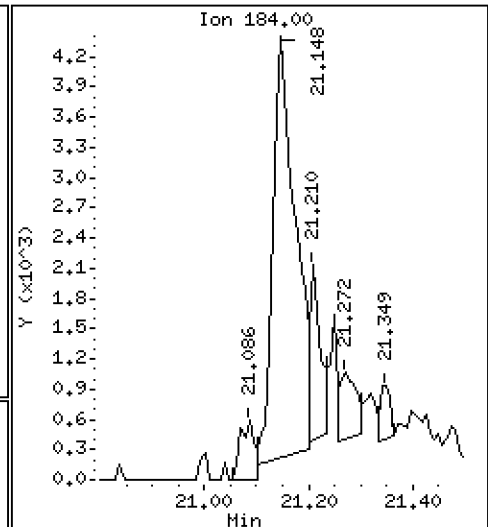
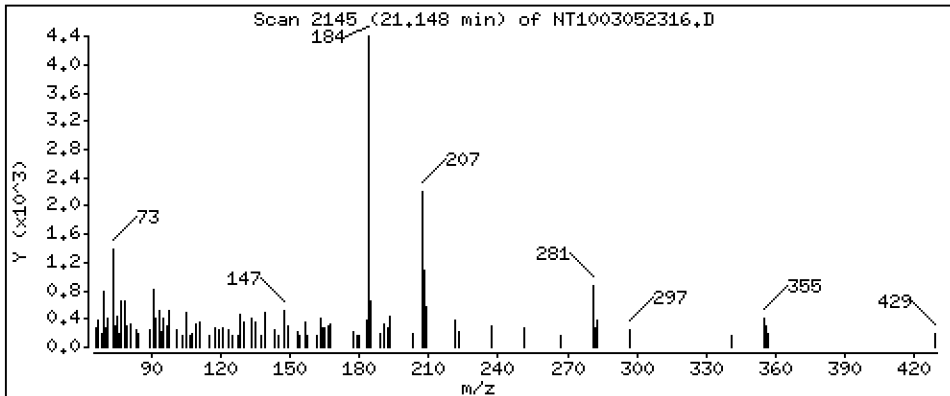
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,09219 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

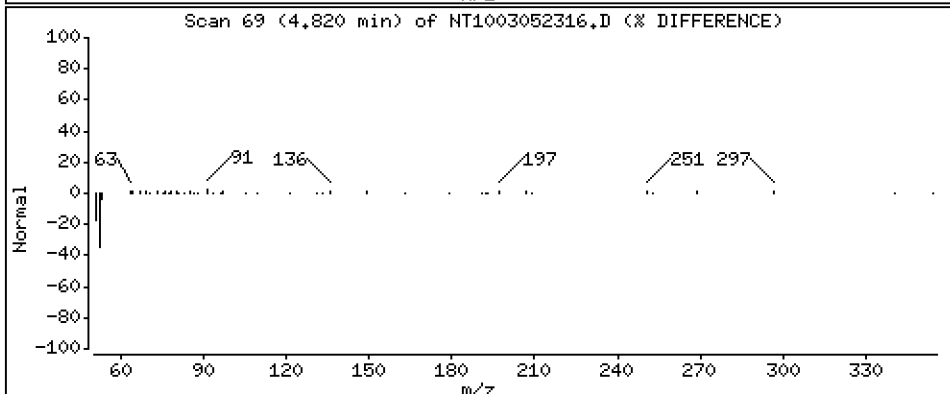
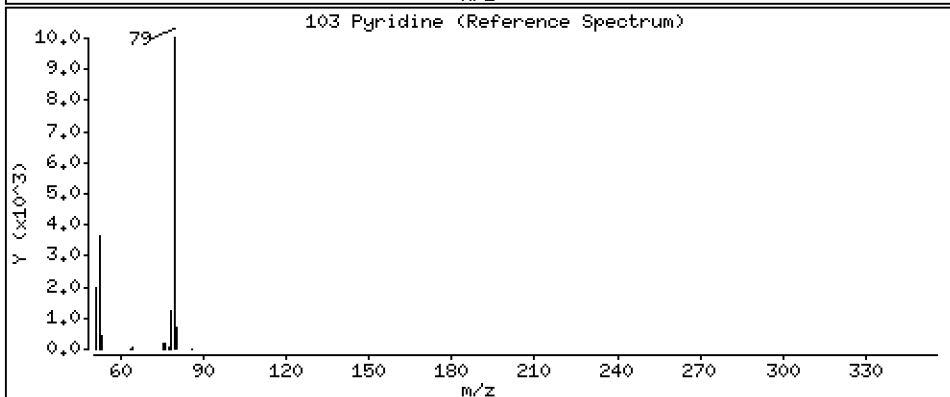
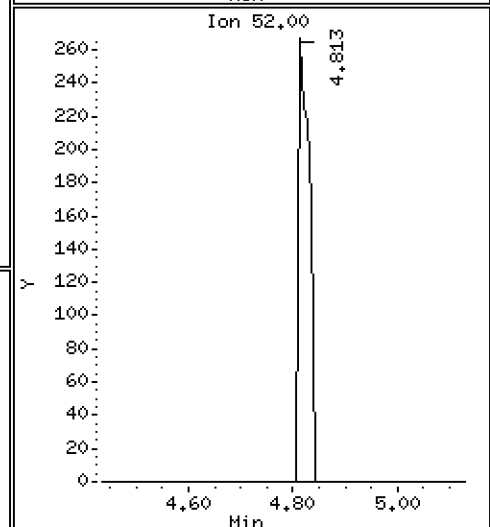
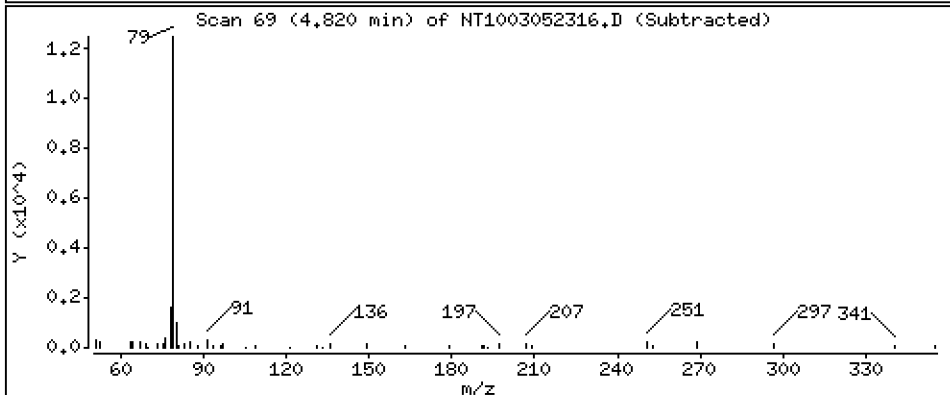
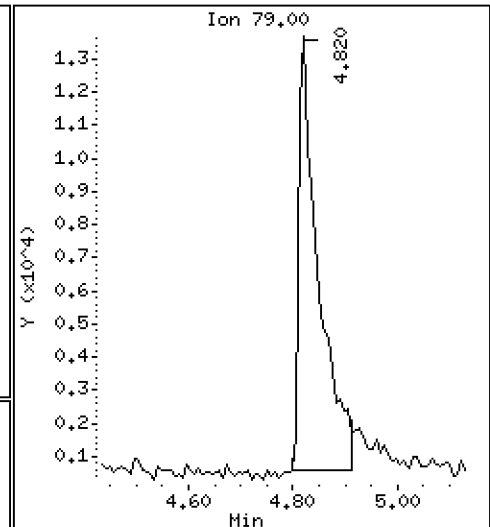
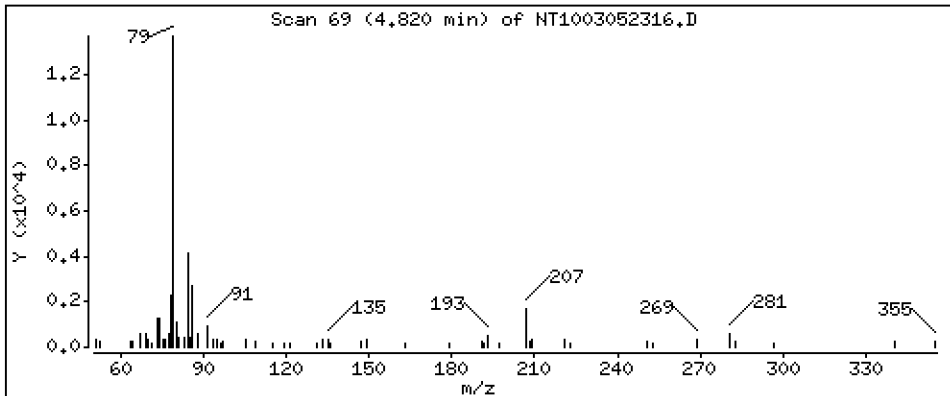
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,3228 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

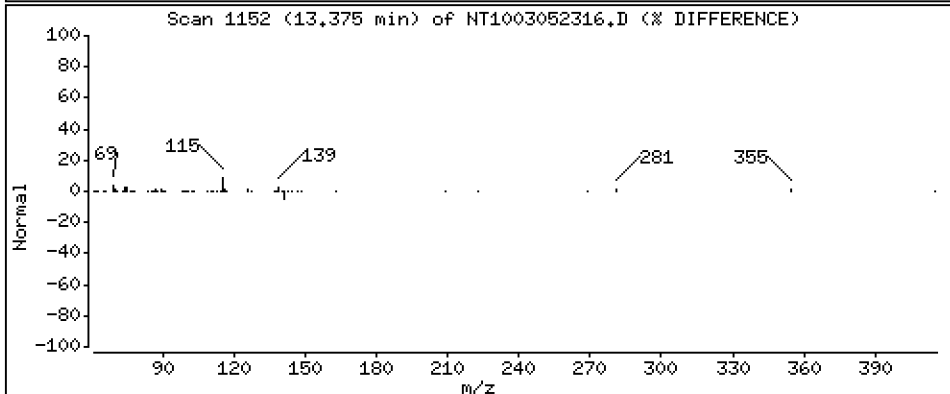
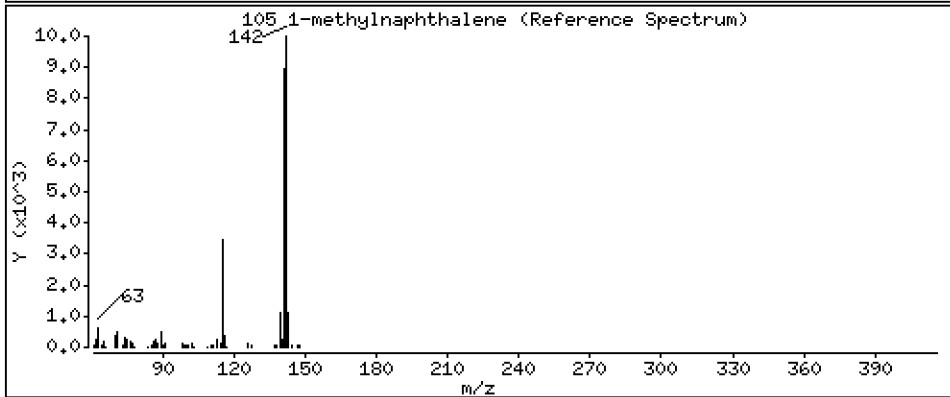
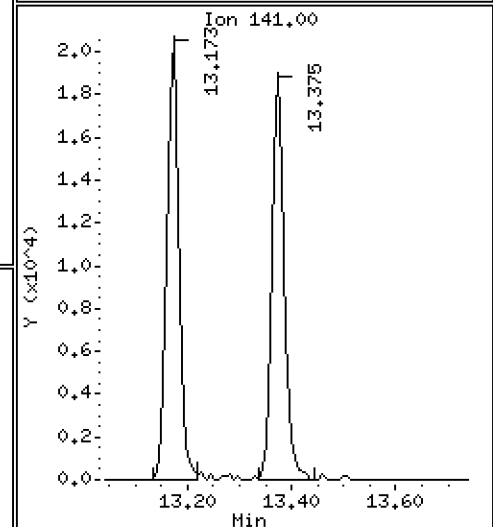
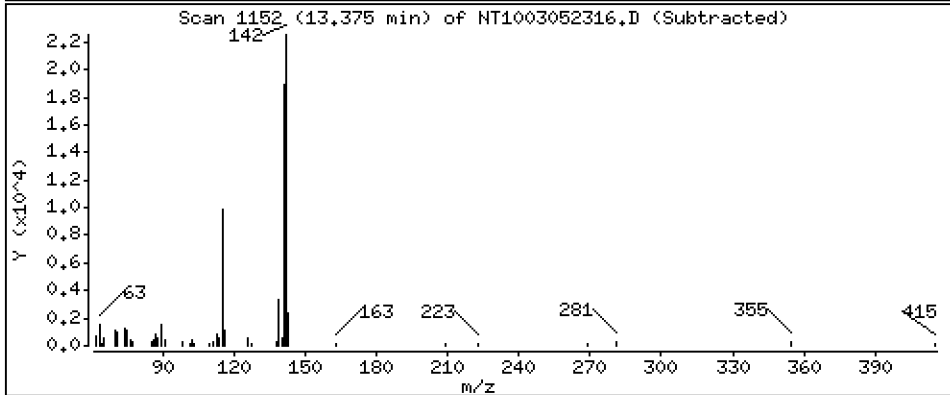
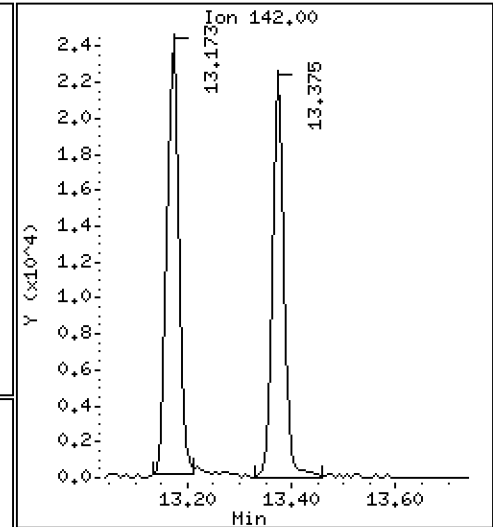
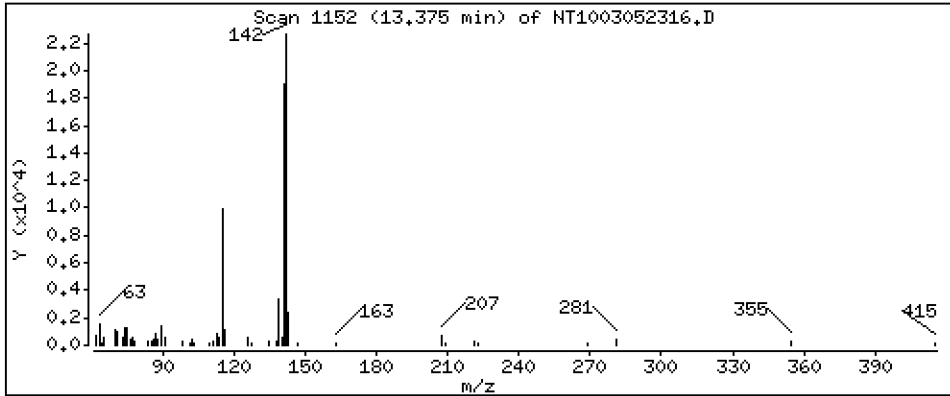
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2037 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

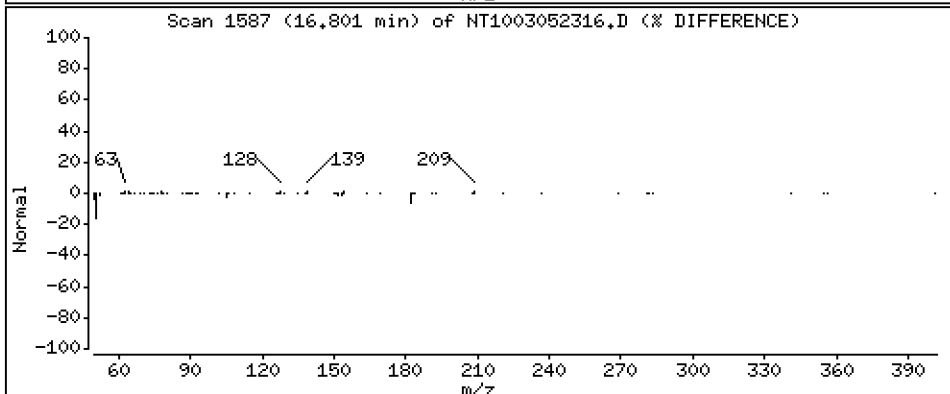
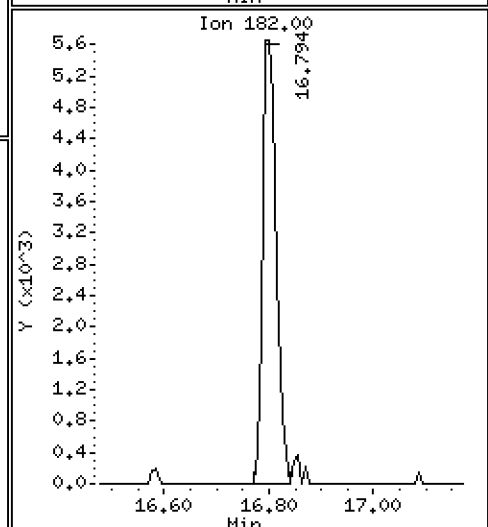
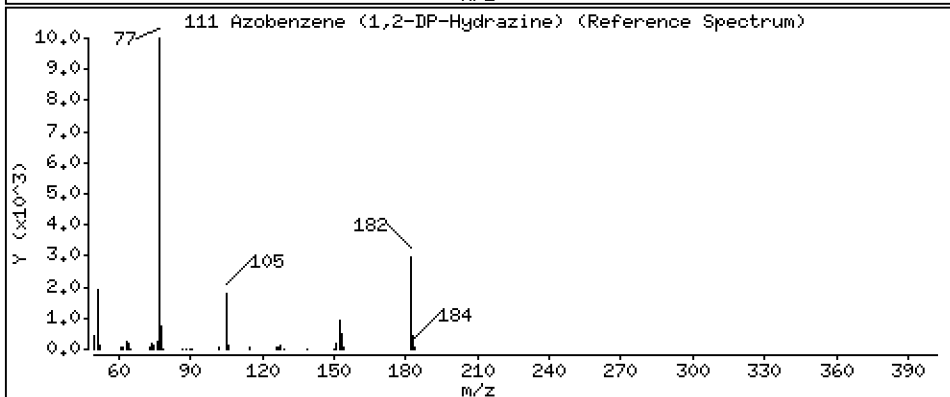
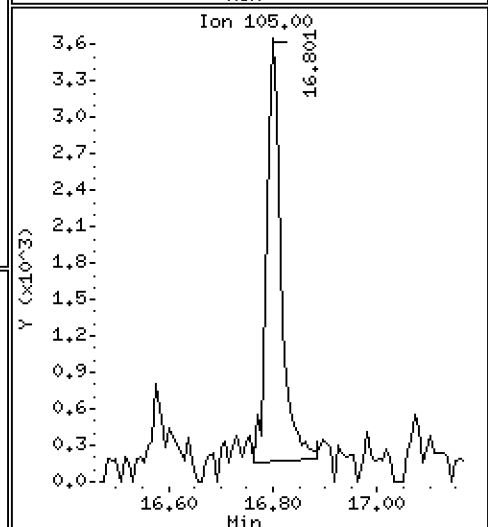
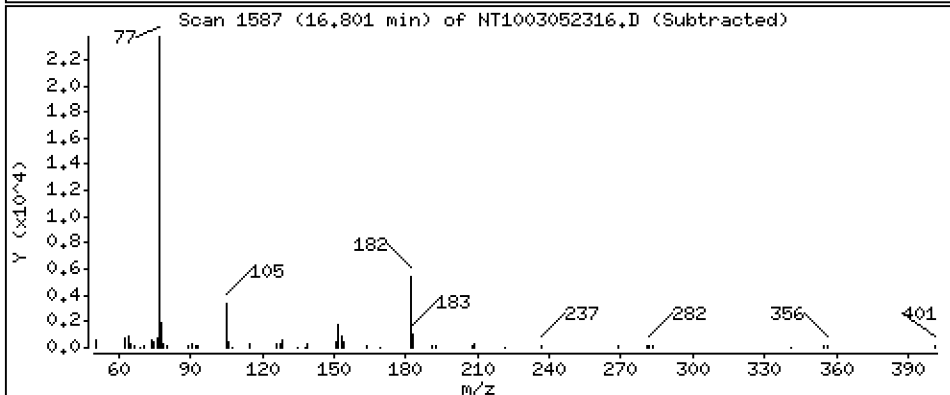
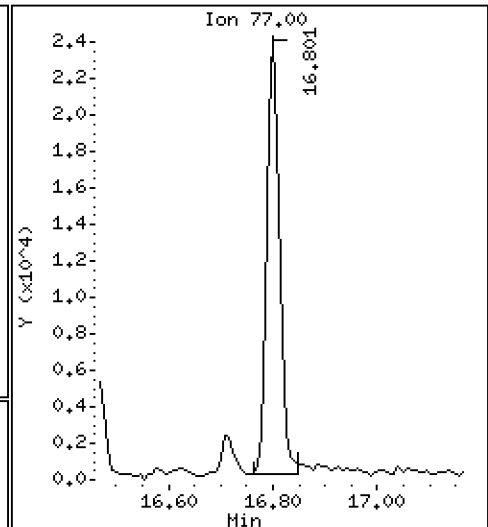
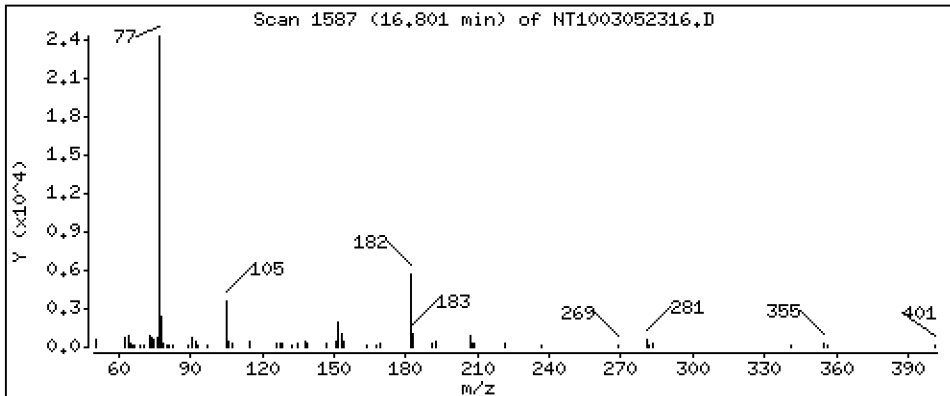
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0,1426 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

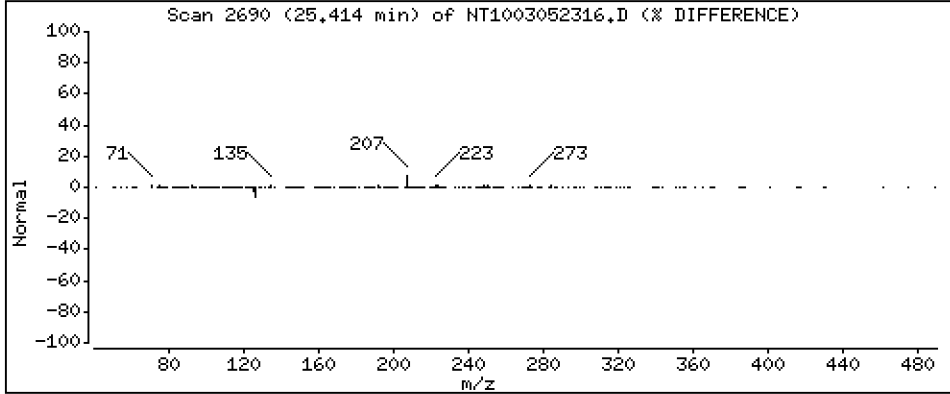
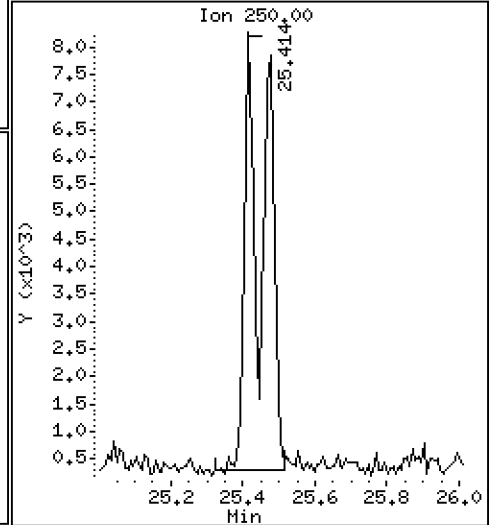
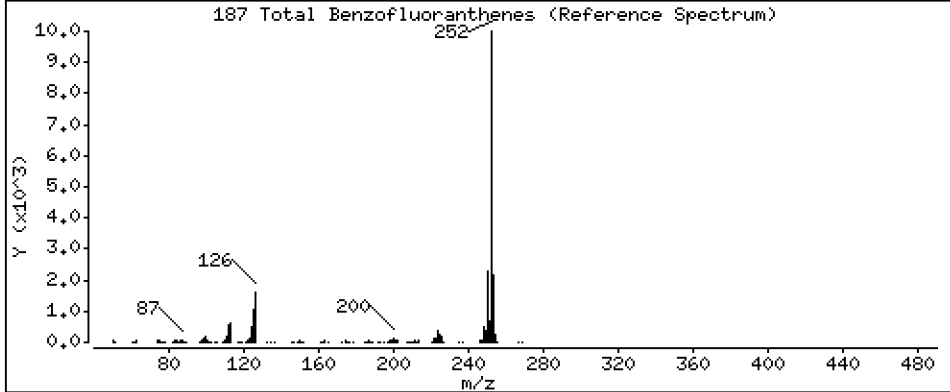
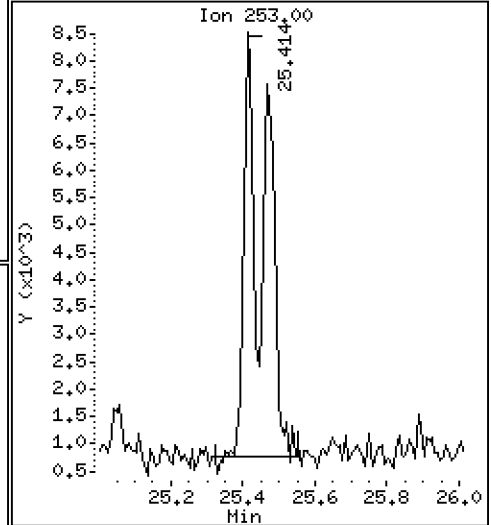
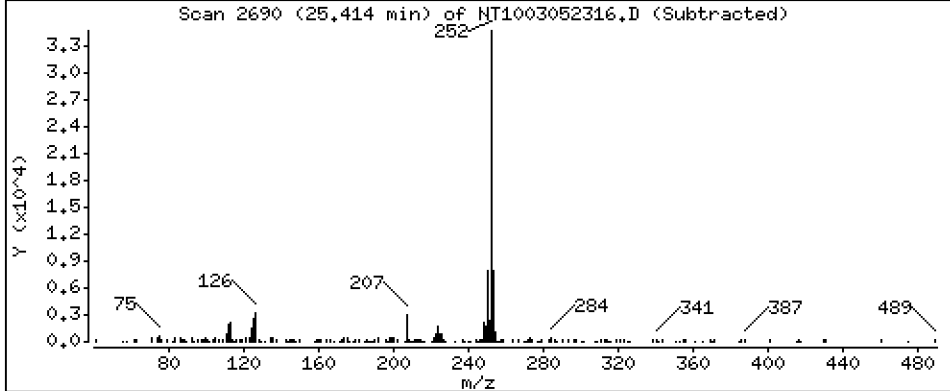
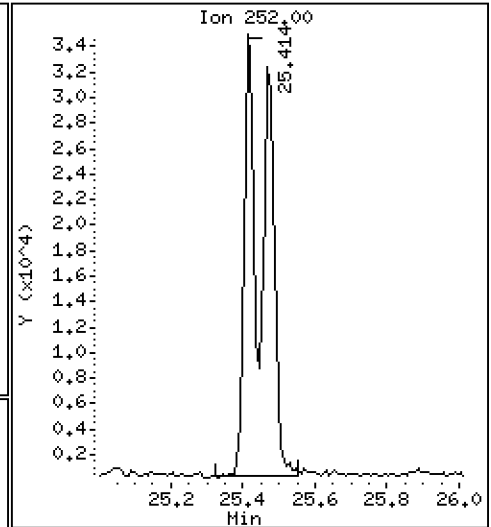
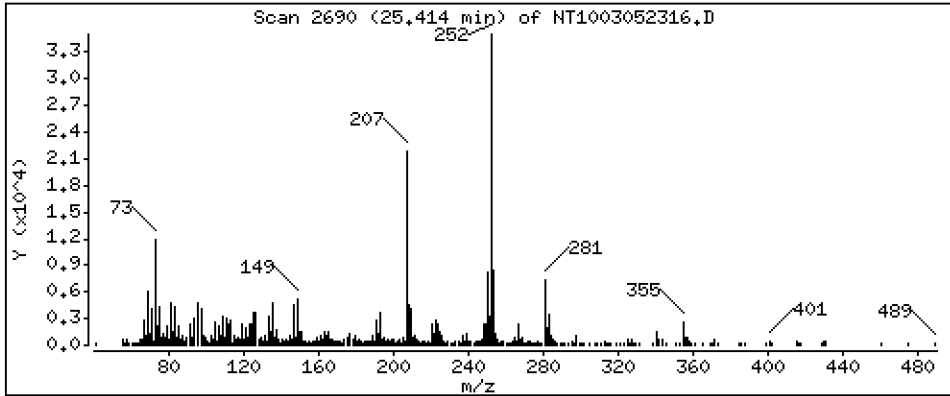
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3690 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0415-LCV1

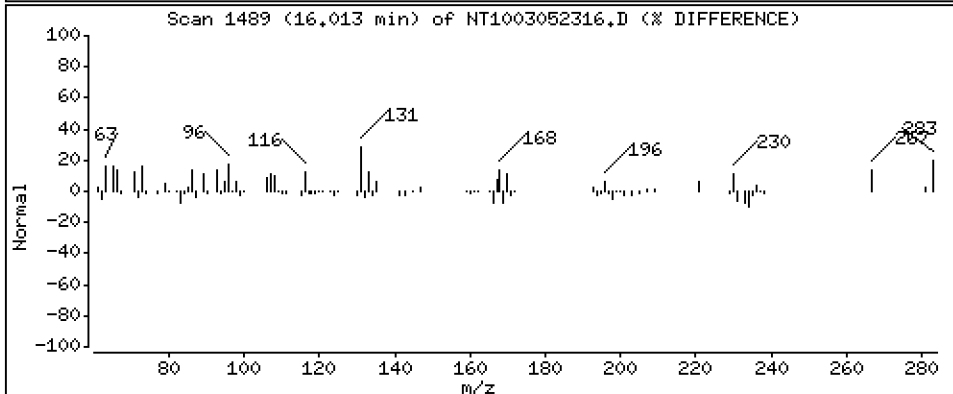
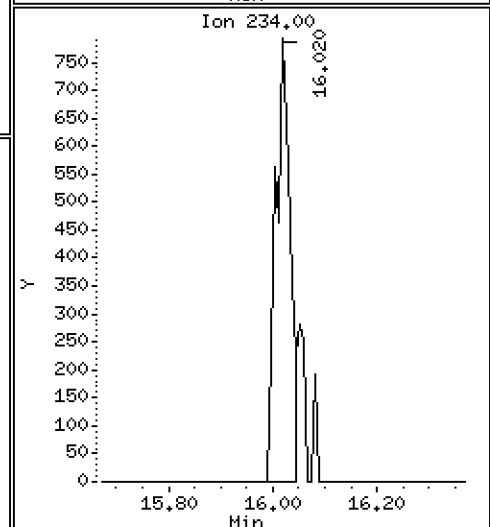
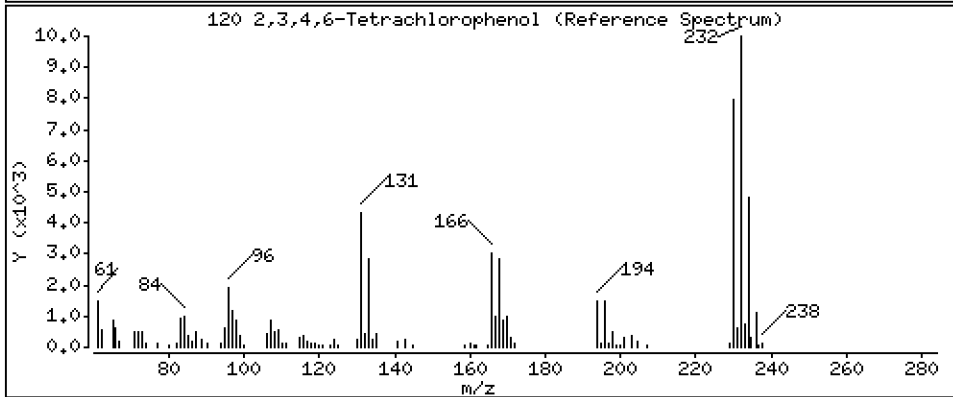
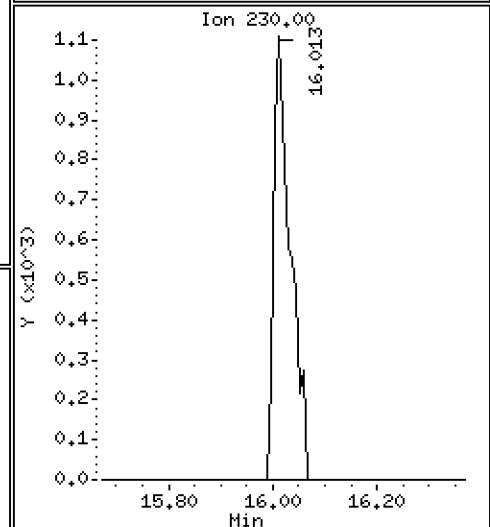
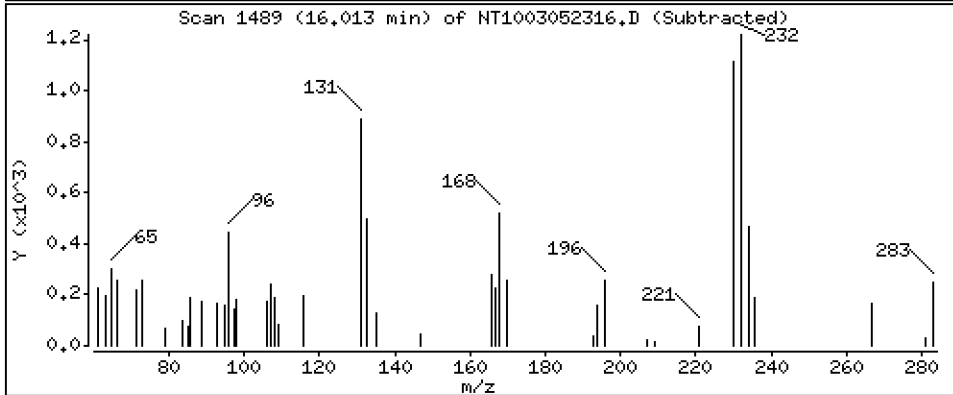
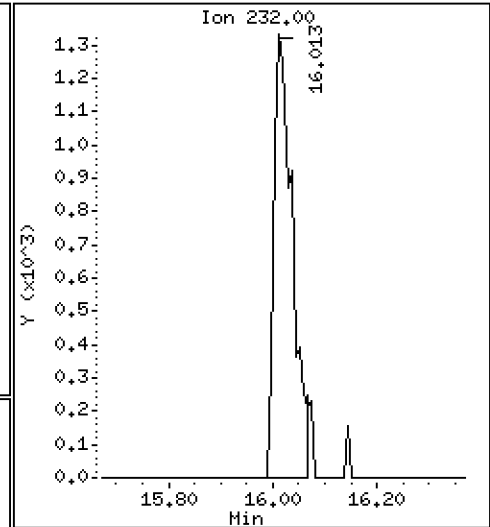
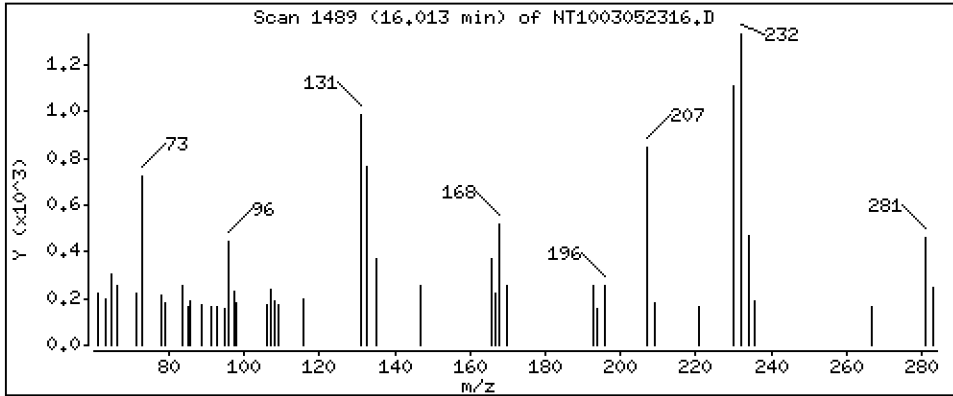
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,06265 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305A.b\NT1003052316.D
 Lab Smp Id: SLC0415-LCV1
 Inj Date : 05-MAR-2023 22:54
 Operator : VTS
 Smp Info : SLC0415-LCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Meth Date : 27-Mar-2023 13:49 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.905	(0.747)	24639	0.25732	0.2573
\$ 2 Phenol-d5	99		8.512	8.512	(0.921)	26840	0.24143	0.2414 (M)
3 Phenol	94		8.535	8.535	(0.923)	19934	0.16865	0.1687
\$ 5 2-Chlorophenol-d4	132		8.821	8.821	(0.954)	27998	0.29519	0.2952
4 Bis(2-Chloroethyl)ether	93		8.728	8.736	(0.944)	18111	0.20052	0.2005
6 2-Chlorophenol	128		8.844	8.852	(0.956)	18894	0.19175	0.1918
7 1,3-Dichlorobenzene	146		9.138	9.138	(0.988)	23235	0.21388	0.2139
* 8 1,4-Dichlorobenzene-d4	152		9.247	9.247	(1.000)	304339	4.00000	
9 1,4-Dichlorobenzene	146		9.278	9.286	(1.003)	22403	0.20761	0.2076
\$ 10 1,2-Dichlorobenzene-d4	152		9.534	9.542	(1.031)	13197	0.18624	0.1862 (MH)
12 1,2-Dichlorobenzene	146		9.557	9.565	(1.034)	21085	0.20187	0.2019
11 Benzyl alcohol	108		9.495	9.487	(1.027)	6331	0.10449	0.1045
14 2,2'-oxybis(1-Chloropropane)	121		9.728	9.736	(1.052)	6802	0.22589	0.2259 (M)
13 2-Methylphenol	108		9.674	9.674	(1.046)	16731	0.18271	0.1827
17 Hexachloroethane	117		10.209	10.217	(1.104)	8290	0.18717	0.1872
16 N-Nitroso-di-n-propylamine	70		9.984	9.984	(1.080)	15192	0.21300	0.2130 (M)
15 4-Methylphenol	108		9.969	9.961	(1.078)	17035	0.14834	0.1483
\$ 18 Nitrobenzene-d5	82		10.302	10.302	(0.879)	22428	0.19364	0.1936
19 Nitrobenzene	77		10.341	10.341	(0.882)	19034	0.17519	0.1752
20 Isophorone	82		10.791	10.807	(0.920)	22364	0.16125	0.1613 (M)
21 2-Nitrophenol	139		10.967	10.967	(0.935)	7751	0.12860	0.1286
22 2,4-Dimethylphenol	107		11.009	11.018	(0.939)	35197	0.33865	0.3387
23 Bis(2-Chloroethoxy)methane	93		11.213	11.222	(0.956)	17168	0.20031	0.2003
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.442	11.434	(0.976)	27743	0.33870	0.3387
26 1,2,4-Trichlorobenzene	180		11.603	11.610	(0.989)	18827	0.23089	0.2309
* 27 Naphthalene-d8	136		11.726	11.734	(1.000)	1055141	4.00000	
28 Naphthalene	128		11.773	11.780	(1.004)	54840	0.20250	0.2025
29 4-Chloroaniline	127		11.873	11.881	(1.013)	30346	0.25602	0.2560
30 Hexachlorobutadiene	225		11.997	12.004	(1.023)	14901	0.25097	0.2510
31 4-Chloro-3-methylphenol	107		12.840	12.840	(1.095)	25733	0.29862	0.2986
32 2-Methylnaphthalene	142		13.173	13.181	(1.123)	37623	0.19665	0.1967
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.746	13.753	(0.897)	17060	0.32942	0.3294	
35 2,4,5-Trichlorophenol	196		13.838	13.831	(0.903)	16201	0.29311	0.2931	
§ 36 2-Fluorobiphenyl	172		13.916	13.931	(0.908)	43720	0.22388	0.2239	
37 2-Chloronaphthalene	162		14.179	14.194	(0.925)	32997	0.21524	0.2152	
38 2-Nitroaniline	65		14.396	14.403	(0.939)	9490	0.22640	0.2264	
39 Dimethylphthalate	163		14.752	14.767	(0.963)	34543	0.19536	0.1954	
40 Acenaphthylene	152		15.038	15.054	(0.981)	49617	0.18773	0.1877	
41 2,6-Dinitrotoluene	165		14.891	14.907	(0.972)	11477	0.29572	0.2957	
* 42 Acenaphthene-d10	164		15.324	15.340	(1.000)	547496	4.00000		
43 3-Nitroaniline	138		15.301	15.255	(0.998)	1364	0.03059	0.03059	
44 Acenaphthene	153		15.394	15.409	(1.005)	31569	0.19806	0.1981	
45 2,4-Dinitrophenol	184		Compound Not Detected.						
46 Dibenzofuran	168		15.757	15.773	(1.028)	47684	0.20157	0.2016	
47 4-Nitrophenol	109		Compound Not Detected.						
48 2,4-Dinitrotoluene	165		15.734	15.749	(1.027)	13756	0.24450	0.2445	
50 Diethylphthalate	149		16.221	16.244	(1.059)	33898	0.18097	0.1810	
49 Fluorene	166		16.469	16.492	(1.075)	38122	0.19369	0.1937	
51 4-Chlorophenyl-phenylether	204		16.469	16.484	(1.075)	18604	0.21700	0.2170	
52 4-Nitroaniline	138		16.554	16.531	(1.080)	4182	0.08725	0.08725	
53 4,6-Dinitro-2-methylphenol	198		16.585	16.593	(0.899)	2150	0.09412	0.09412	
54 N-Nitrosodiphenylamine	169		16.716	16.731	(0.907)	29423	0.20276	0.2028	
§ 55 2,4,6-Tribromophenol	330		16.978	16.994	(1.108)	4583	0.13635	0.1363	
56 4-Bromophenyl-phenylether	248		17.496	17.511	(0.949)	13639	0.23196	0.2320	
57 Hexachlorobenzene	284		17.604	17.627	(0.955)	15418	0.23286	0.2329	
58 Pentachlorophenol	266		Compound Not Detected.						
* 59 Phenanthrene-d10	188		18.440	18.455	(1.000)	980771	4.00000		
60 Phenanthrene	178		18.486	18.509	(1.003)	49659	0.19785	0.1978	
61 Anthracene	178		18.595	18.618	(1.008)	47785	0.19634	0.1963	
62 Carbazole	167		18.935	18.950	(1.027)	41438	0.18585	0.1858	
63 Di-n-butylphthalate	149		19.624	19.647	(1.064)	48037	0.15877	0.1588	
64 Fluoranthene	202		20.869	20.892	(0.888)	56258	0.18315	0.1832	
65 Pyrene	202		21.303	21.326	(0.907)	56818	0.18166	0.1817	
§ 66 Terphenyl-d14	244		21.581	21.604	(0.919)	49942	0.19734	0.1973	
67 Butylbenzylphthalate	149		22.472	22.495	(0.956)	23049	0.13685	0.1369	
68 Benzo(a)anthracene	228		23.470	23.501	(0.999)	62818	0.19952	0.1995	
* 69 Chrysene-d12	240		23.494	23.517	(1.000)	892900	4.00000		
70 3,3'-Dichlorobenzidine	252		23.424	23.447	(0.997)	49374	0.35208	0.3521	
71 Chrysene	228		23.532	23.563	(1.002)	55959	0.21870	0.2187	
72 bis(2-Ethylhexyl)phthalate	149		23.470	23.494	(0.956)	40516	0.18646	0.1865	
* 134 Di-n-octylphthalate-d4	153		24.562	24.593	(1.000)	1549553	4.00000		
73 Di-n-octylphthalate	149		24.570	24.601	(1.000)	77579	0.22577	0.2258	
74 Benzo(b)fluoranthene	252		25.414	25.452	(0.968)	69278	0.18022	0.1802	
75 Benzo(k)fluoranthene	252		25.468	25.507	(0.970)	66325	0.17922	0.1792	
76 Benzo(a)pyrene	252		26.126	26.157	(0.996)	64475	0.18763	0.1876	
* 77 Perylene-d12	264		26.242	26.289	(1.000)	1127057	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		29.103	29.158	(1.109)	79884	0.19876	0.1988	
79 Dibenzo(a,h)anthracene	278		29.150	29.204	(1.111)	66385	0.21777	0.2178	
80 Benzo(g,h,i)perylene	276		29.973	30.043	(1.142)	66257	0.20689	0.2069	
90 N-Nitrosodimethylamine	74		4.750	4.719	(0.514)	20166	0.32623	0.3262 (M)	
91 Aniline	93		8.628	8.636	(0.933)	46399	0.33857	0.3386	
93 Benzidine	184		21.148	21.148	(0.900)	12571	0.09219	0.09219	
103 Pyridine	79		4.820	4.781	(0.521)	35382	0.32275	0.3228	
105 1-methylnaphthalene	142		13.374	13.390	(1.141)	35278	0.20373	0.2037	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.801	16.816	(1.096)	39886	0.14260	0.1426	

Compounds	QUANT SIG		CONCENTRATIONS					
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
187 Total Benzofluoranthenes	252		25.414	25.507	(0.968)	136280	0.36905	0.3690
120 2,3,4,6-Tetrachlorophenol	232		16.012	16.020	(1.045)	3210	0.06265	0.06265

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 05-MAR-2023
 Lab File ID: NT1003052316.D Calibration Time: 21:38
 Lab Smp Id: SLC0415-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305A.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	264922	132461	529844	304339	14.88
27 Naphthalene-d8	947542	473771	1895084	1055141	11.36
42 Acenaphthene-d10	505666	252833	1011332	547496	8.27
59 Phenanthrene-d10	940283	470142	1880566	980771	4.31
69 Chrysene-d12	987952	493976	1975904	892900	-9.62
134 Di-n-octylphthala	1625017	812509	3250034	1549553	-4.64
77 Perylene-d12	1073798	536899	2147596	1127057	4.96

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.07
42 Acenaphthene-d10	15.34	14.84	15.84	15.32	-0.10
59 Phenanthrene-d10	18.46	17.96	18.96	18.44	-0.08
69 Chrysene-d12	23.52	23.02	24.02	23.49	-0.10
134 Di-n-octylphthala	24.59	24.09	25.09	24.56	-0.13
77 Perylene-d12	26.29	25.79	26.79	26.24	-0.18

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

REVIEW SUMMARY FOR FILE - NT1003052316.D

Lab ID: SLC0415-LCV1
nt10.i, 20230305A.b\ABN.m, 05-MAR-2023 22:54

RT CO-ELUTION COMPOUNDS

23.471 bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT CCV RRT DELTA COMPOUND

NONE

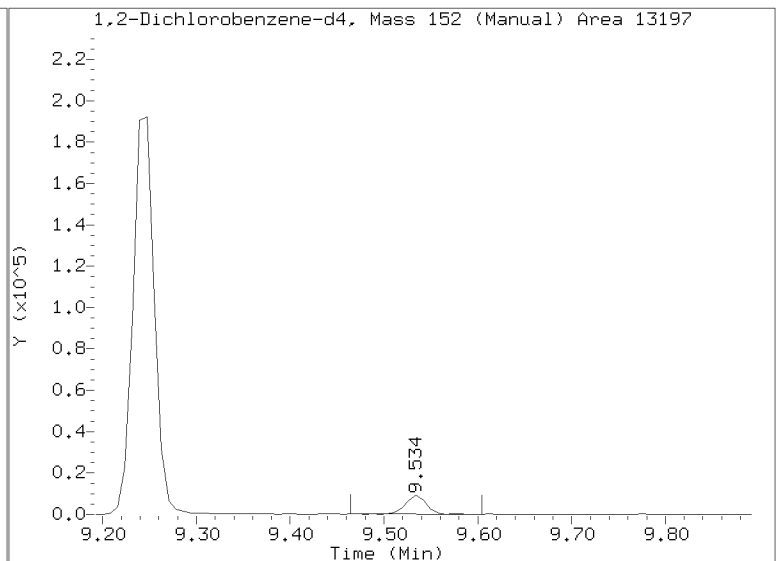
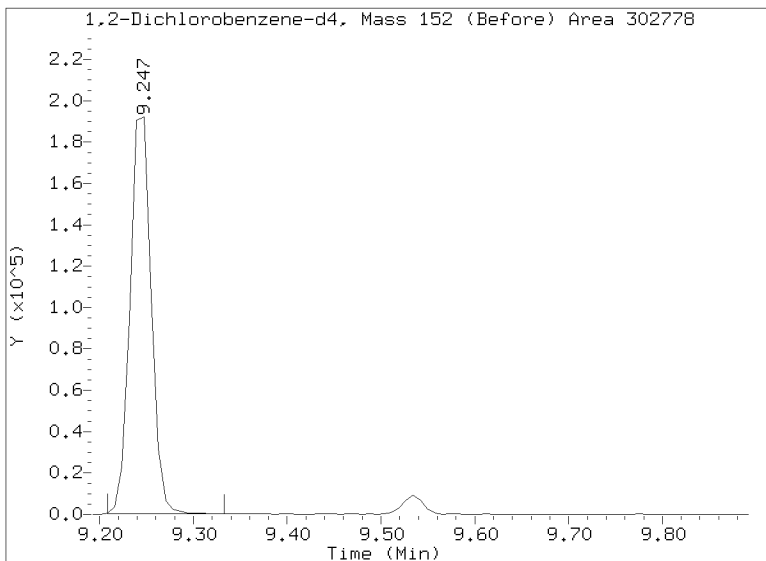
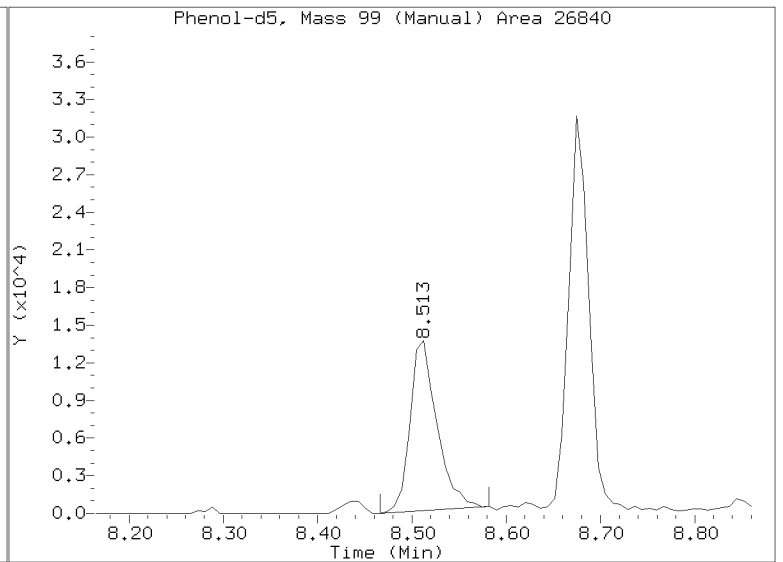
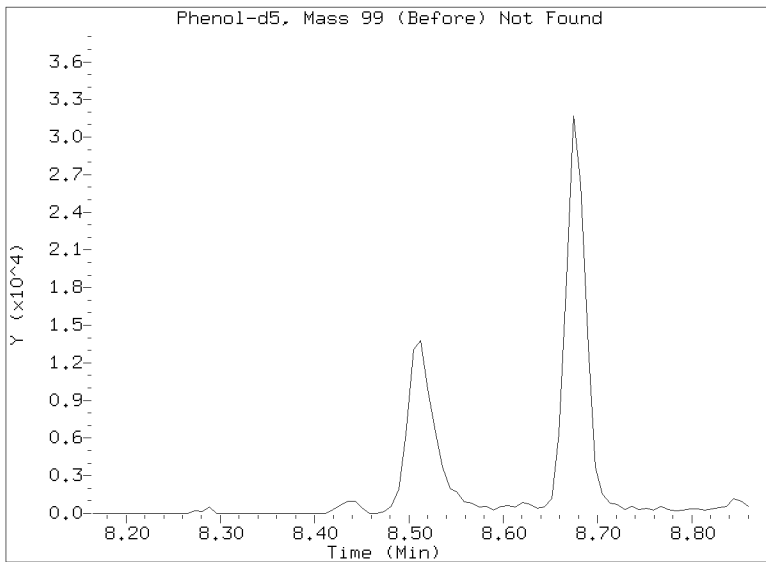
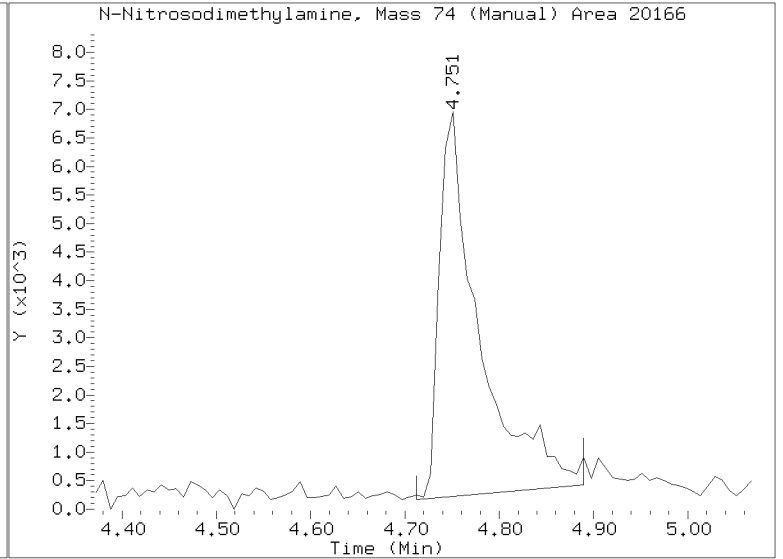
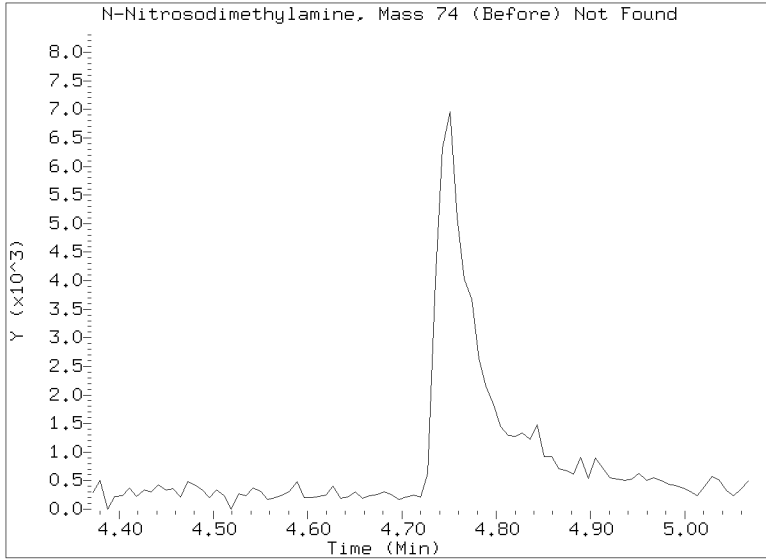
RRT check based on Ccal File: NT1003052314.D

On Column LOD for nt10.i, 20230305A.b\ABN.m, ICAL.sub = 0.0000

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

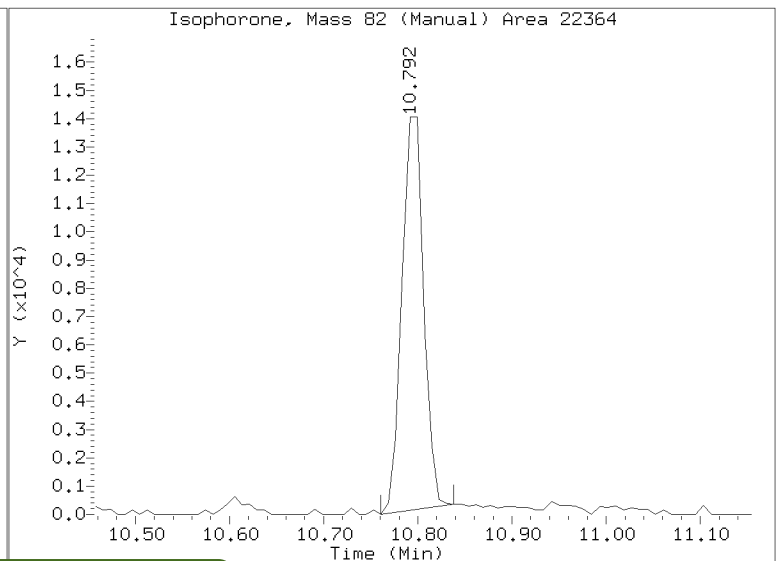
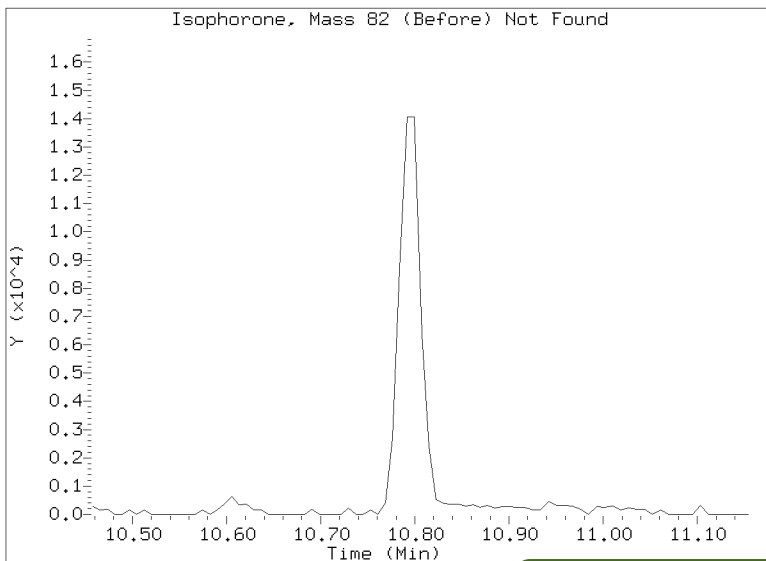
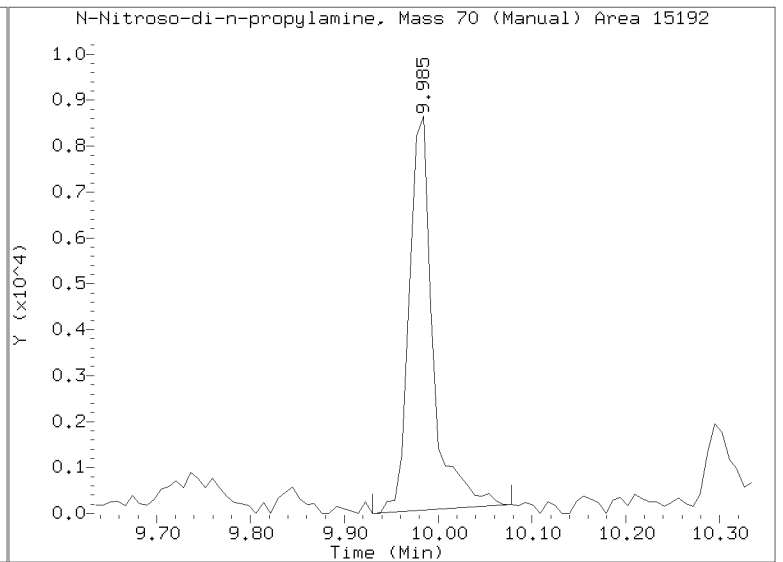
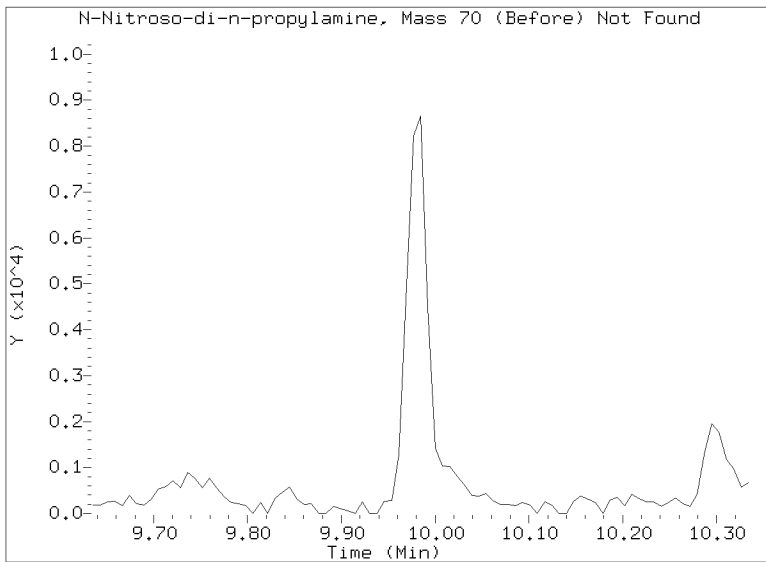
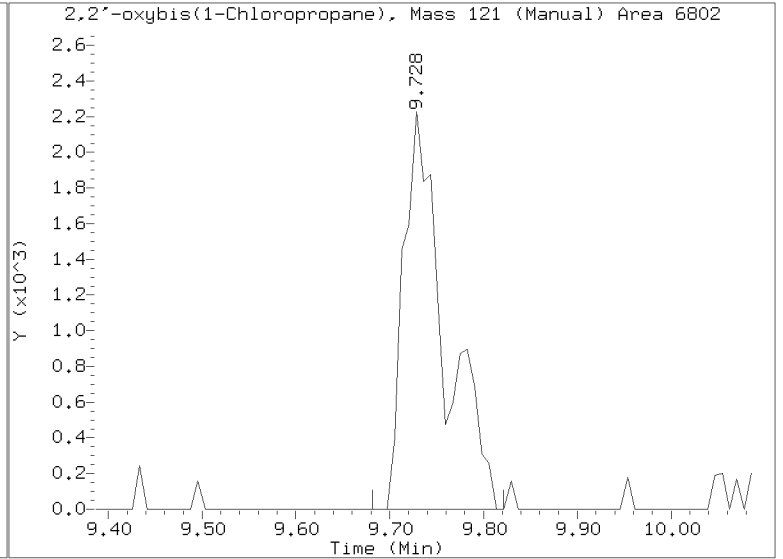
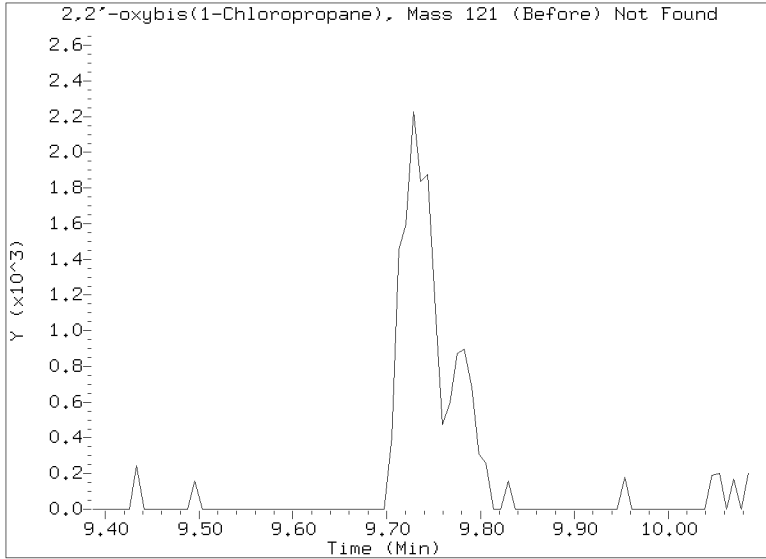
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052316.D
Injection Date: 05-MAR-2023 22:54
Lab ID:SLC0415-LCV1 Client ID:
Report Date: 03/27/2023 13:58



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/NT1003052316.D
Injection Date: 05-MAR-2023 22:54
Lab ID:SLC0415-LCV1 Client ID:
Report Date: 03/27/2023 13:58



APPROVED

By Deenay Dunmore at 2:10 pm, Mar 27, 2023



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052315.D

Calibration Date: 03/01/2023

Sequence: SLC0415

Injection Date: 03/05/23

Lab Sample ID: SLC0415-LCV2

Injection Time: 22:16

Sequence Name: ABN 1.0

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	1.0000	1.0	1.5534590	1.5970670		2.8	+/-50
4-Methylphenol	A	1.0000	0.8	1.2087680	1.2211910		-19.0	+/-50
Naphthalene	A	1.0000	1.0	1.0266520	1.0195650		-0.7	+/-50
2-Methylnaphthalene	A	1.0000	1.0	0.7252818	0.7452537		2.8	+/-50
Acenaphthylene	A	1.0000	1.1	1.9309320	2.1043730		9.0	+/-50
Dimethylphthalate	A	1.0000	1.0	1.2917940	1.3251880		2.6	+/-50
Acenaphthene	A	1.0000	1.0	1.1645250	1.1373830		-2.3	+/-50
Dibenzofuran	A	1.0000	1.0	1.7283260	1.8001200		4.2	+/-50
Fluorene	A	1.0000	1.0	1.4379840	1.3893600		-3.4	+/-50
Pentachlorophenol	A	2.0000	0.2	0.1145550	0.0099549		-92.0	+/-50 *
Phenanthrene	A	1.0000	1.0	1.0236730	1.0205670		-0.3	+/-50
Anthracene	A	1.0000	1.0	0.9926226	1.0249060		3.3	+/-50
Fluoranthene	A	1.0000	0.9	1.3760330	1.2434520		-9.6	+/-50
Pyrene	A	1.0000	0.9	1.4011560	1.2715690		-9.2	+/-50
Butylbenzylphthalate	A	1.0000	0.8	0.6475451	0.5916349		-21.4	+/-50
Benzo(a)anthracene	A	1.0000	1.0	1.4104100	1.3648200		-3.2	+/-50
Chrysene	A	1.0000	1.1	1.1462500	1.2502540		9.1	+/-50
bis(2-Ethylhexyl)phthalate	A	1.0000	0.9	0.5331838	0.5039173		-10.6	+/-50
Benzo(a)fluoranthene, Total	A	2.0000	1.8	1.3383070	1.2124070		-8.2	+/-50
Benzo(a)pyrene	A	1.0000	0.9	1.2312020	1.1519410		-6.3	+/-50
Indeno(1,2,3-cd)pyrene	A	1.0000	1.0	1.4033590	1.4007500		-2.6	+/-50
Dibenzo(a,h)anthracene	A	1.0000	1.1	1.1150690	1.1725150		7.3	+/-50
Benzo(g,h,i)perylene	A	1.0000	1.0	1.1245240	1.1850940		3.5	+/-50
2-Fluorophenol	A	1.5000	1.49	1.2585100	1.2542990		-0.3	+/-50
Phenol-d5	A	1.5000	1.56	1.4611190	1.5190420		4.0	+/-50
2-Chlorophenol-d4	A	1.5000	1.61	1.2465880	1.3409330		7.6	+/-50
1,2-Dichlorobenzene-d4	A	1.0000	1.03	0.9313544	0.9587817		2.9	+/-50
Nitrobenzene-d5	A	1.0000	1.10	0.4390871	0.4822726		9.8	+/-50
2-Fluorobiphenyl	A	1.0000	1.09	1.4267270	1.5492940		8.6	+/-50
2,4,6-Tribromophenol	A	1.5000	1.40	0.2287830	0.2315135		-6.5	+/-50
p-Terphenyl-d14	A	1.0000	0.971	1.1337350	1.1011420		-2.9	+/-50

* Values outside of QC limits



CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052335.D

Calibration Date: 03/01/2023

Sequence: SLC0425

Injection Date: 03/06/23

Lab Sample ID: SLC0425-CCV1

Injection Time: 10:49

Sequence Name: Calibration Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.0	1.5534590	1.5687520		1.0	+/-50
4-Methylphenol	A	5.0000	4.2	1.2087680	1.2461070		-16.6	+/-50
Naphthalene	A	5.0000	4.8	1.0266520	0.9801518		-4.5	+/-50
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7323466		1.0	+/-50
Acenaphthylene	A	5.0000	5.5	1.9309320	2.1211570		9.9	+/-50
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2344680		-4.4	+/-50
Acenaphthene	A	5.0000	4.7	1.1645250	1.1053110		-5.1	+/-50
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7410090		0.7	+/-50
Fluorene	A	5.0000	4.7	1.4379840	1.3637360		-5.2	+/-50
Pentachlorophenol	A	10.000	4.1	0.1145550	0.0518702		-59.3	+/-50 *
Phenanthrene	A	5.0000	4.9	1.0236730	0.9935781		-2.9	+/-50
Anthracene	A	5.0000	5.1	0.9926226	1.0100330		1.8	+/-50
Fluoranthene	A	5.0000	4.2	1.3760330	1.1445430		-16.8	+/-50
Pyrene	A	5.0000	4.2	1.4011560	1.1849590		-15.4	+/-50
Butylbenzylphthalate	A	5.0000	3.7	0.6475451	0.5467276		-26.5	+/-50
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3231140		-6.2	+/-50
Chrysene	A	5.0000	5.2	1.1462500	1.1944670		4.2	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.6	0.5331838	0.5283480		-8.4	+/-50
Benzo(a)fluoranthene, Total	A	10.000	8.9	1.3383070	1.2249600		-11.0	+/-50
Benzo(a)pyrene	A	5.0000	4.4	1.2312020	1.1314620		-11.5	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.4	1.4033590	1.3069760		-12.5	+/-50
Dibenzo(a,h)anthracene	A	5.0000	4.8	1.1150690	1.0973120		-4.1	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.2	1.1245240	0.9942818		-15.6	+/-50
2-Fluorophenol	A	7.5000	7.45	1.2585100	1.2502000		-0.7	+/-50
Phenol-d5	A	7.5000	8.03	1.4611190	1.5639700		7.0	+/-50
2-Chlorophenol-d4	A	7.5000	7.93	1.2465880	1.3178750		5.7	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.89	0.9313544	0.9102352		-2.3	+/-50
Nitrobenzene-d5	A	5.0000	5.43	0.4390871	0.4771869		8.7	+/-50
2-Fluorobiphenyl	A	5.0000	5.17	1.4267270	1.4755780		3.4	+/-50
2,4,6-Tribromophenol	A	7.5000	7.90	0.2287830	0.2737737		5.3	+/-50
p-Terphenyl-d14	A	5.0000	4.52	1.1337350	1.0246610		-9.6	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052335.D

Date: 06-HRR-2023 10:49

Client ID:

Sample Info: SLC0425-CCW1

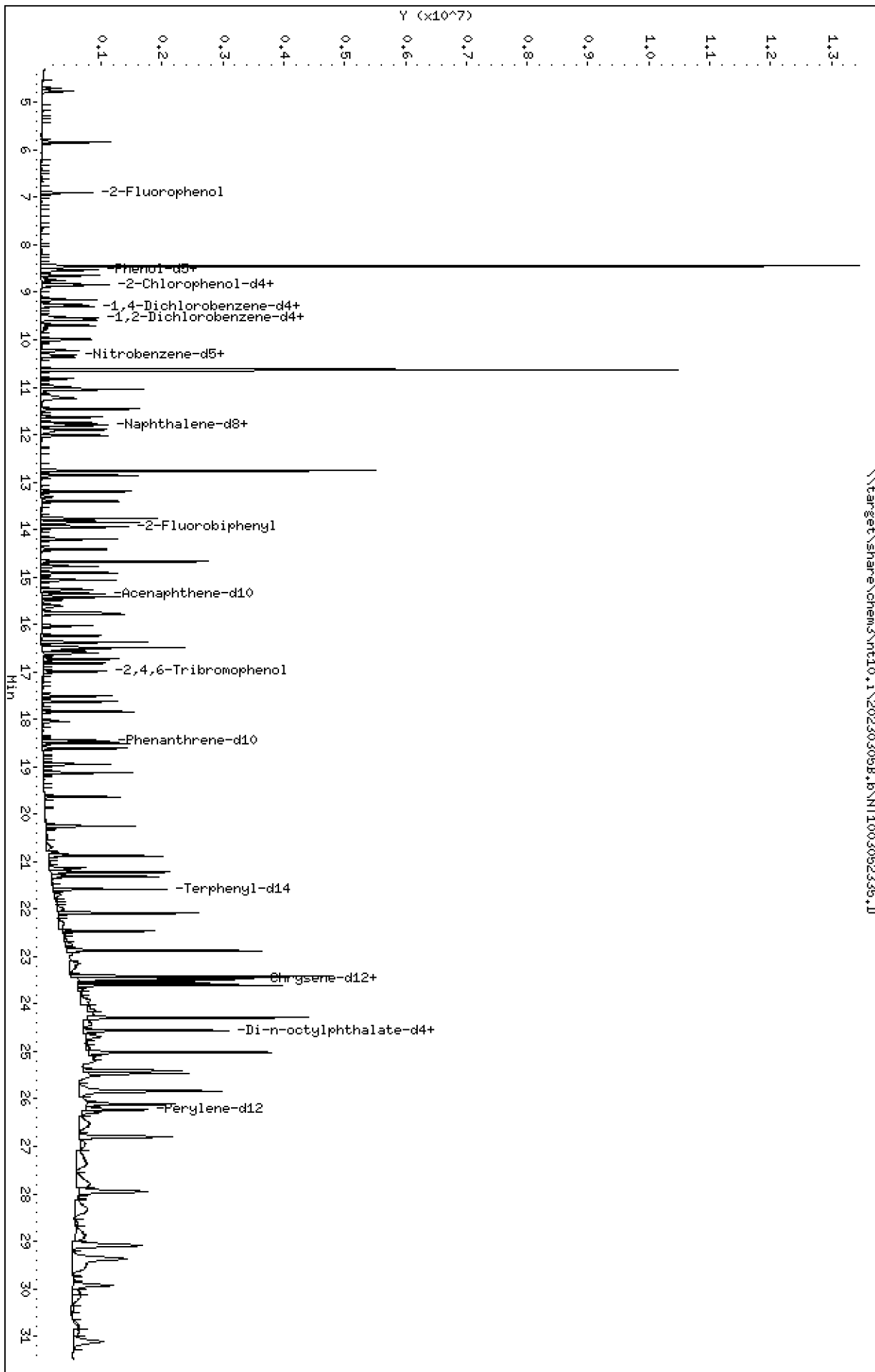
Column phase: ZB-5msi

Instrument: nt10.1

Operator: VTS

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\NT1003052335.D



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

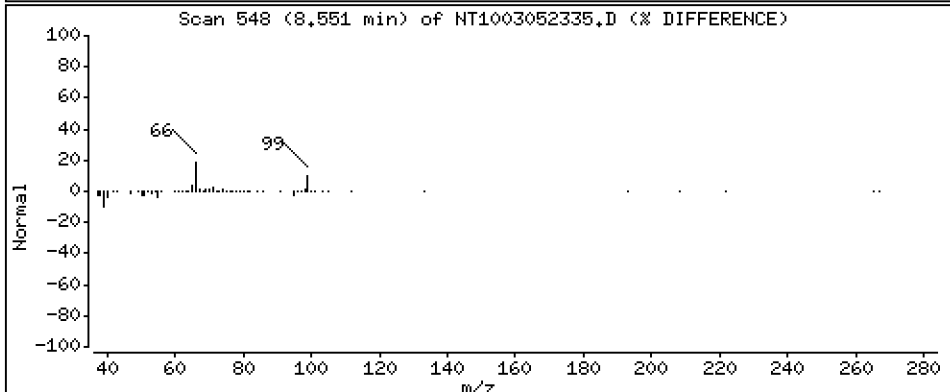
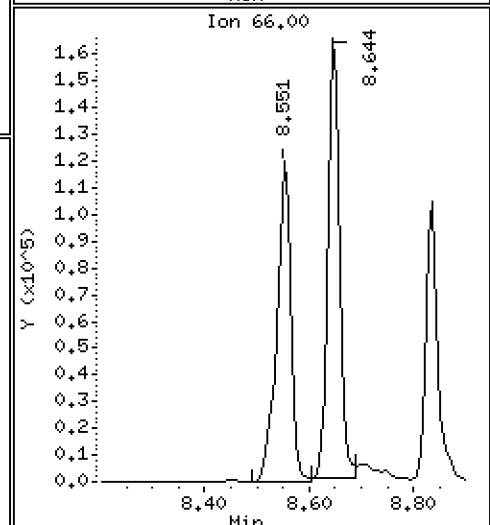
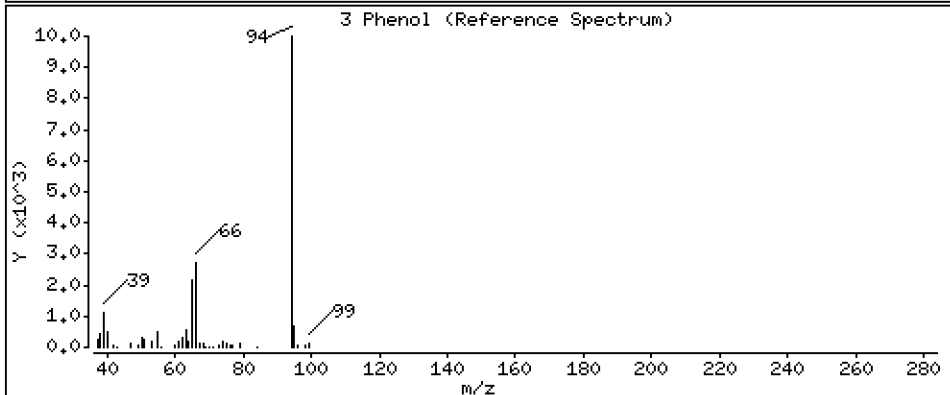
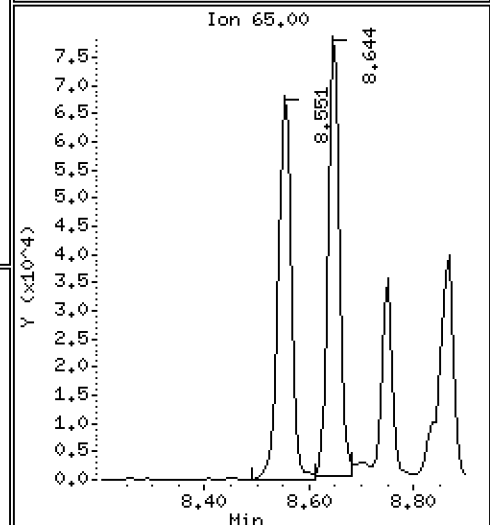
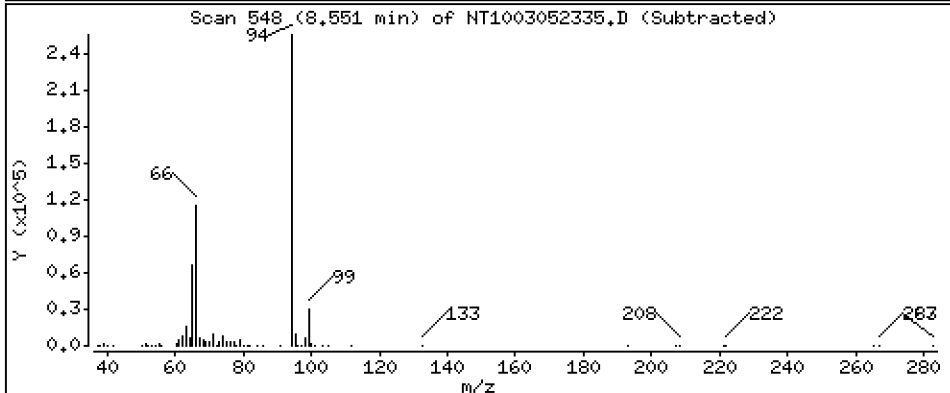
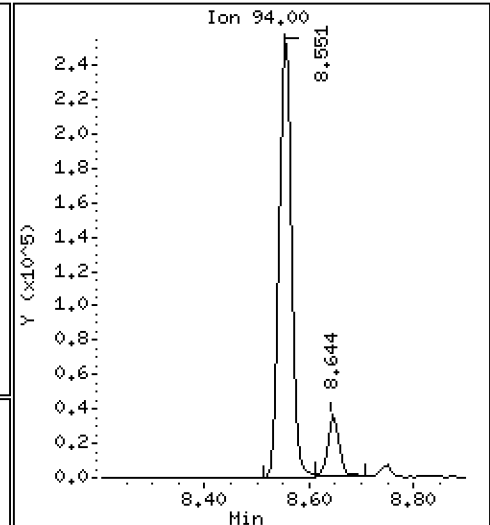
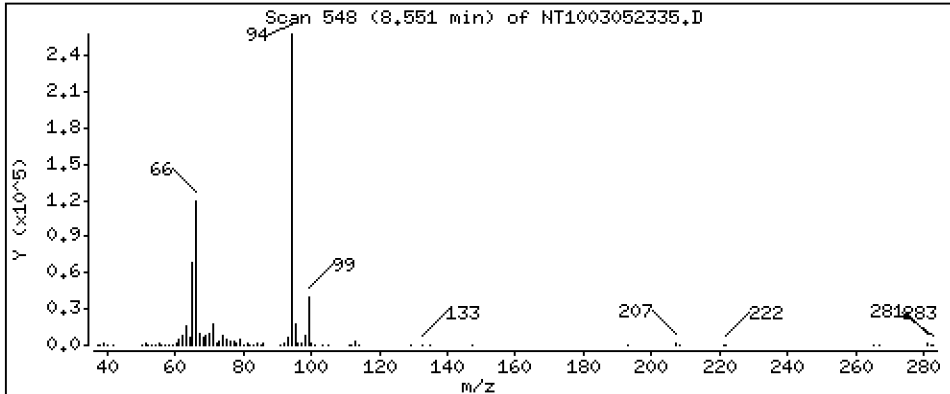
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 5,049 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

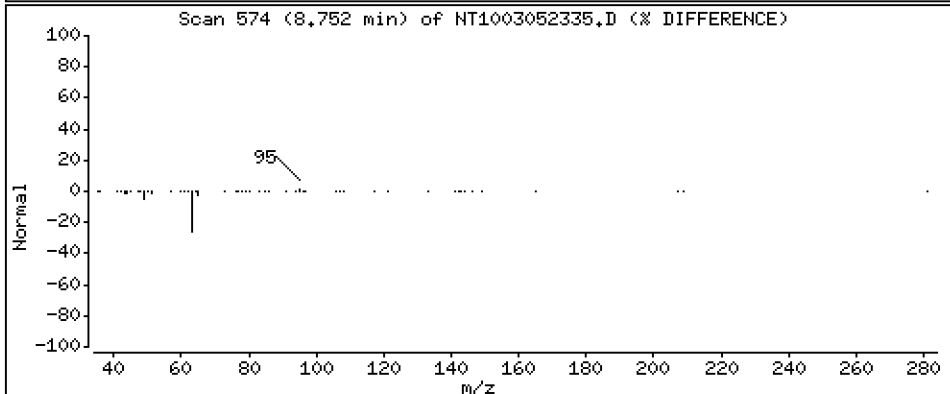
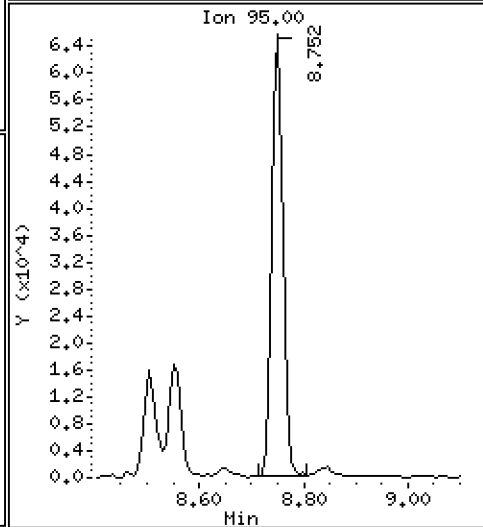
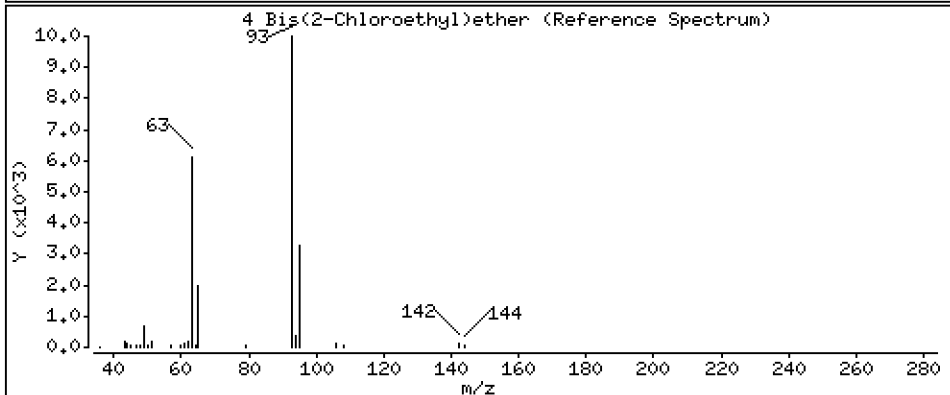
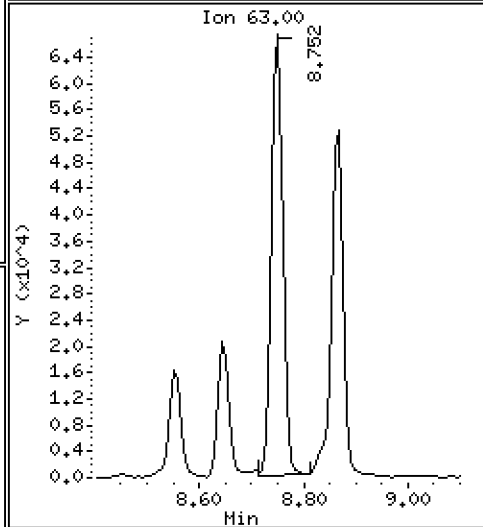
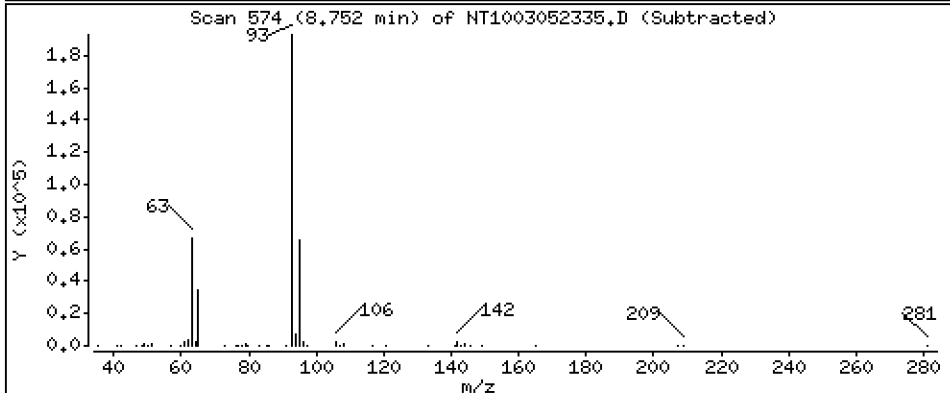
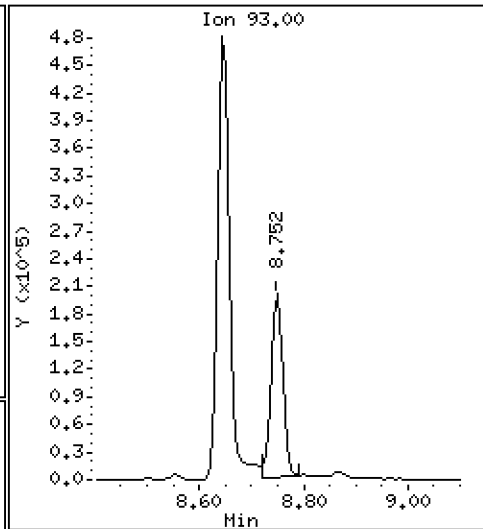
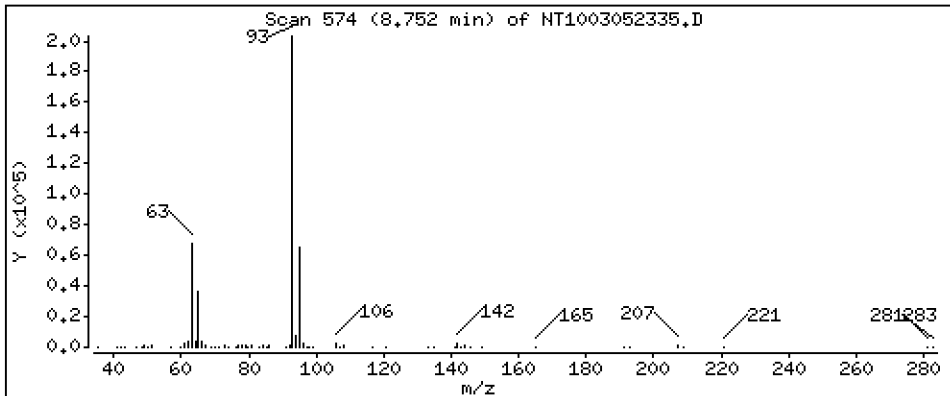
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 4,870 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

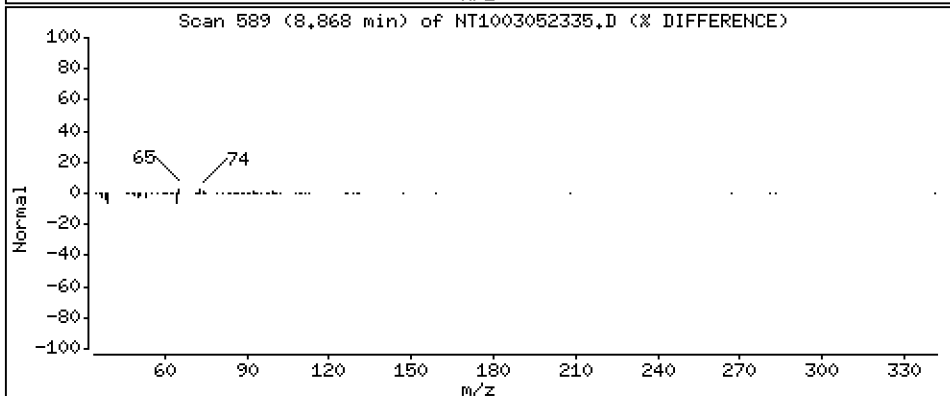
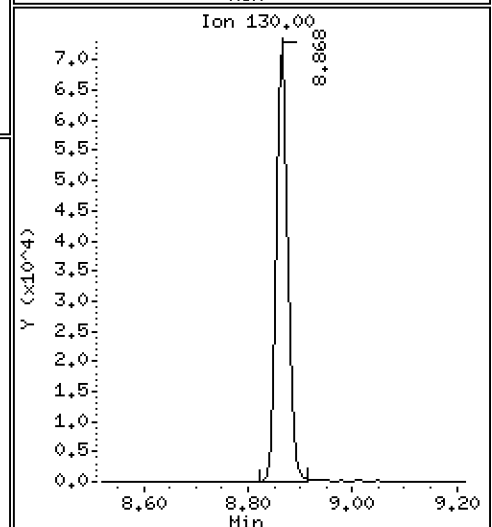
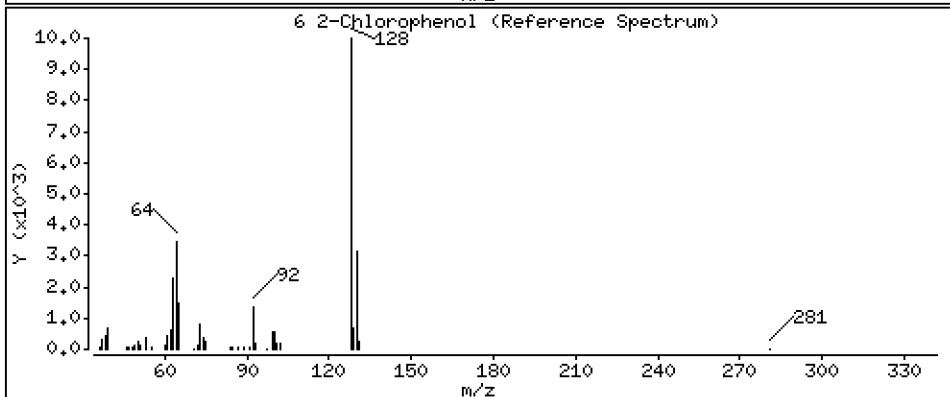
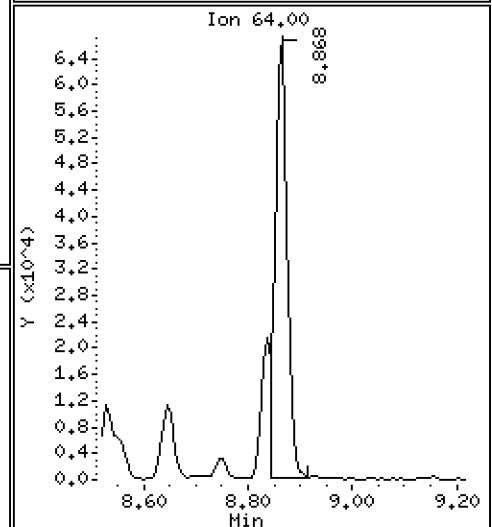
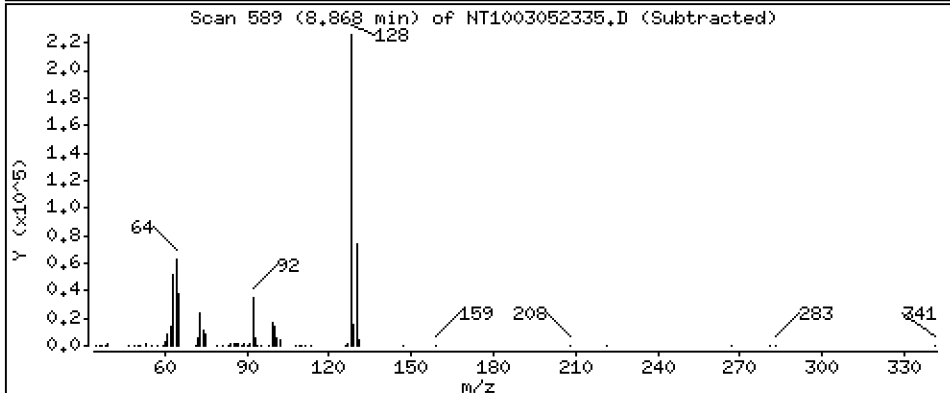
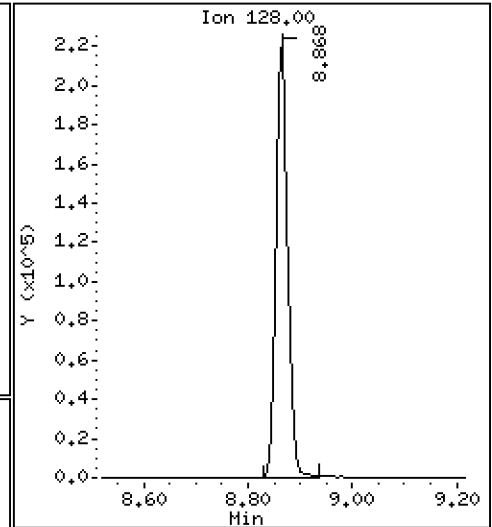
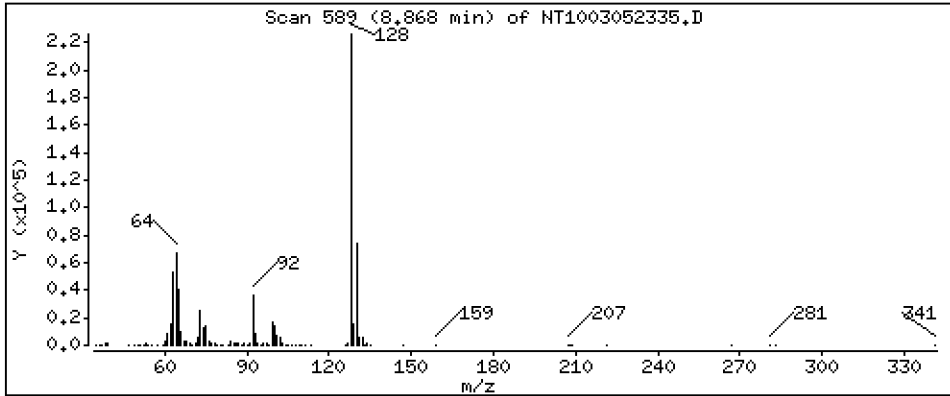
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 5,182 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

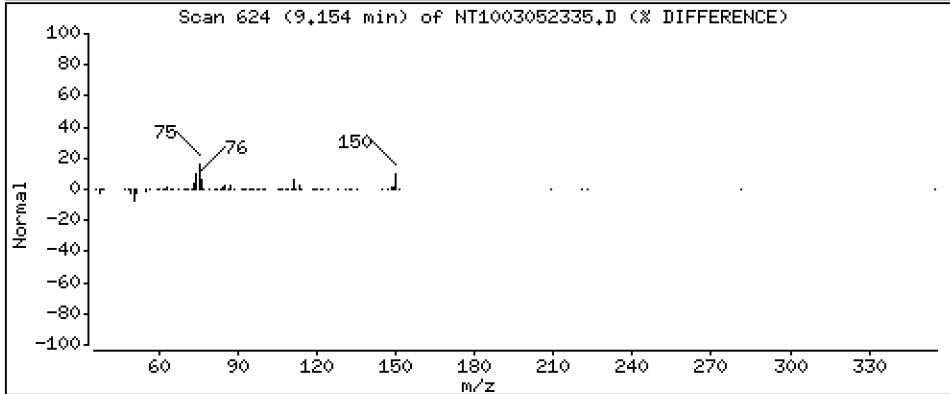
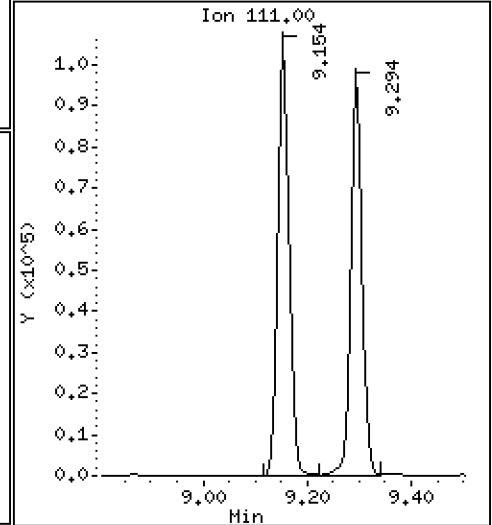
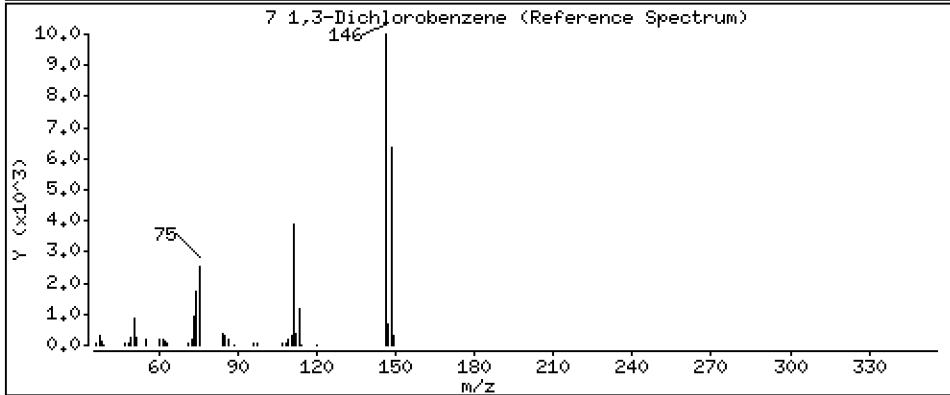
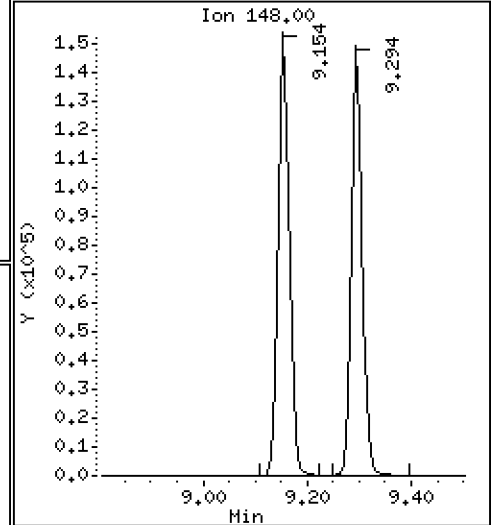
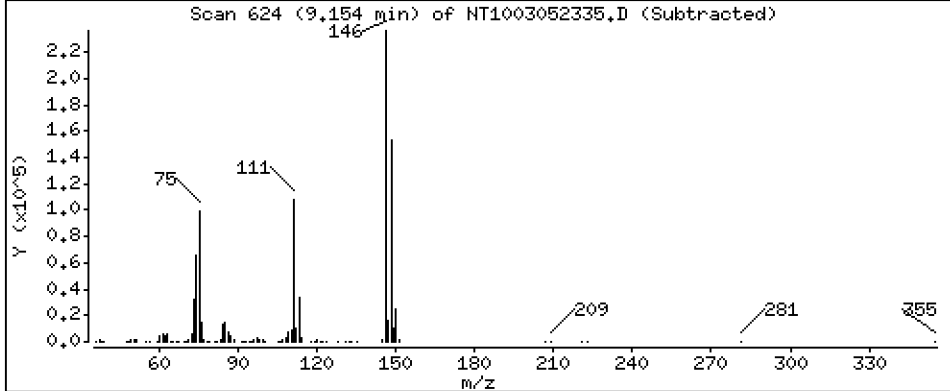
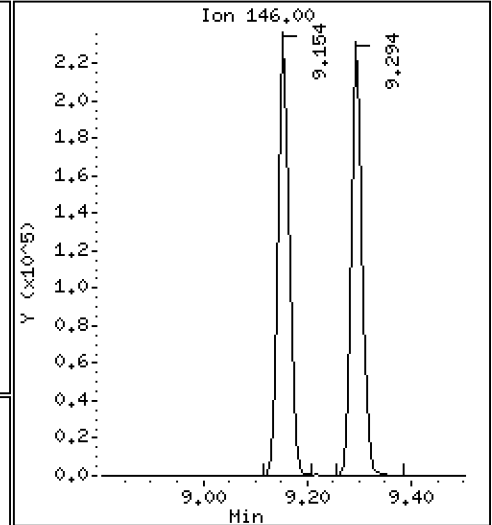
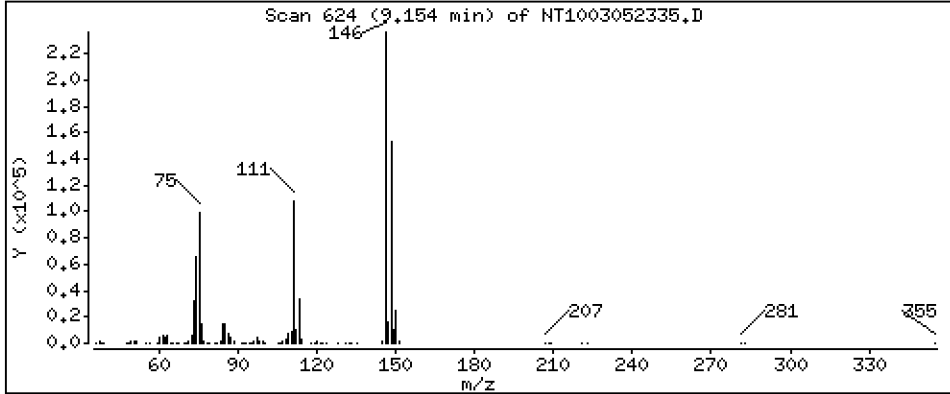
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,711 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

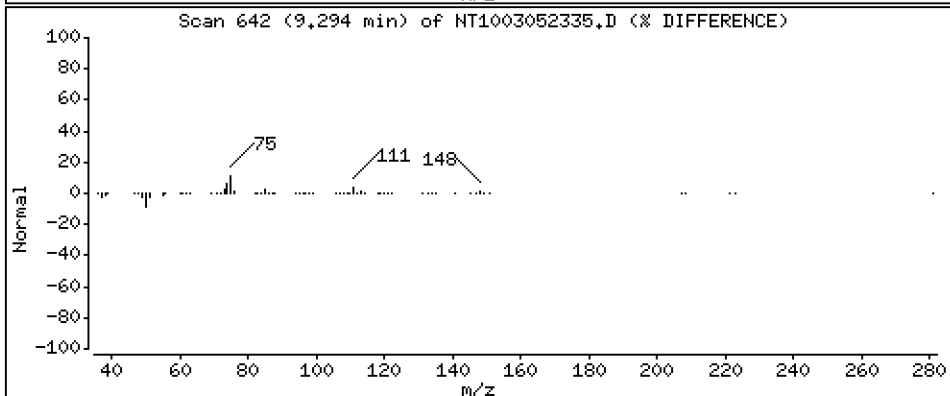
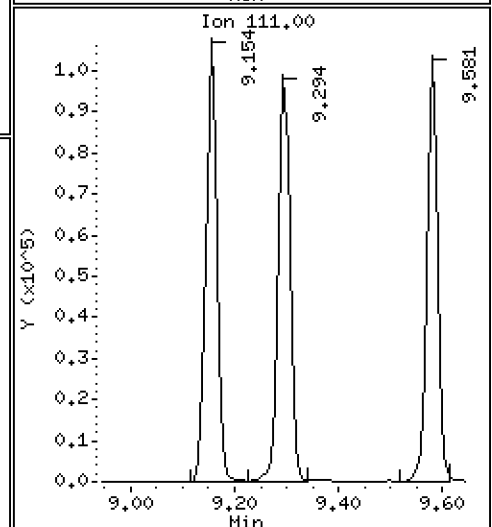
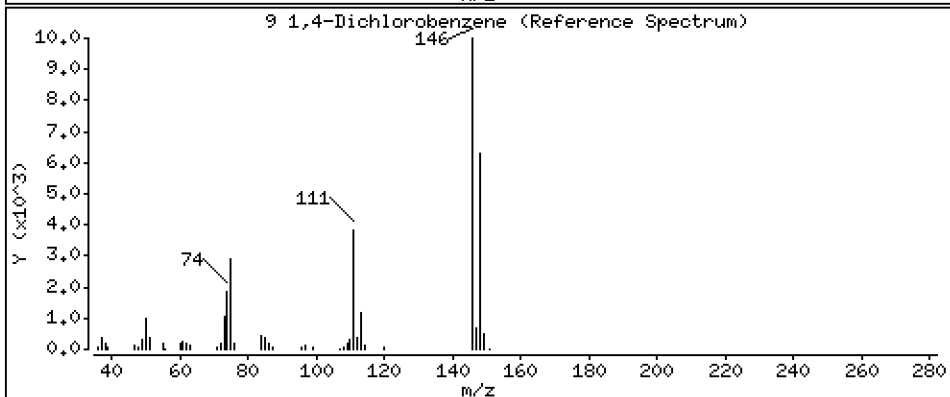
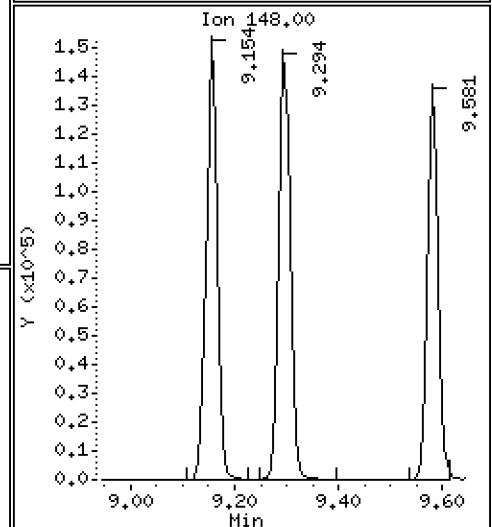
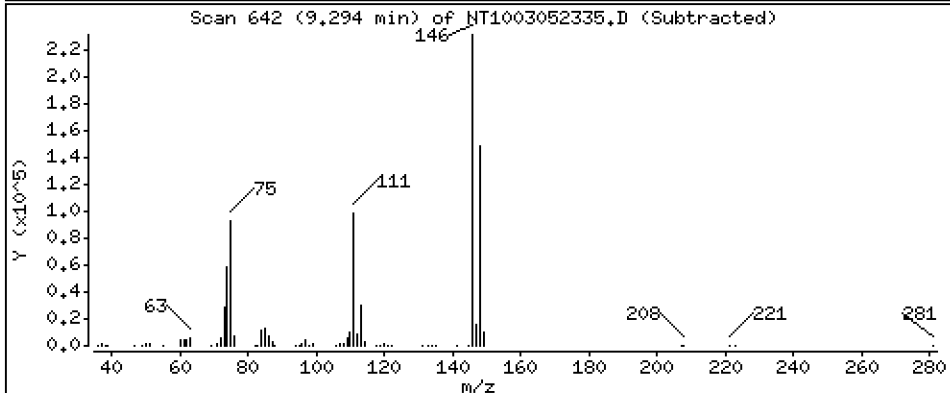
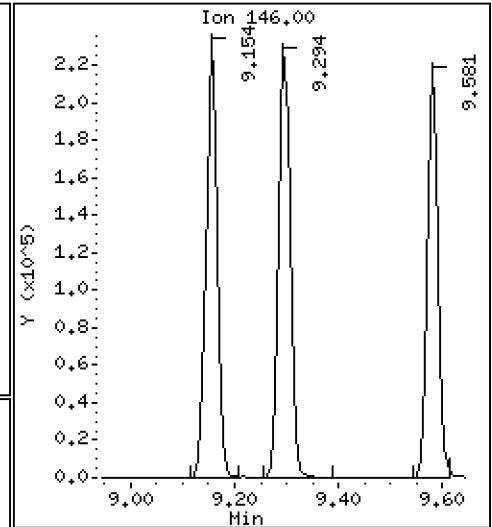
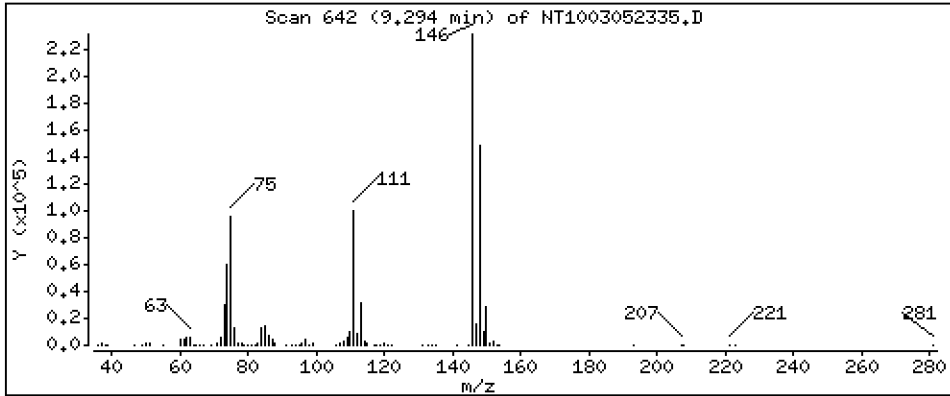
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 4,655 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

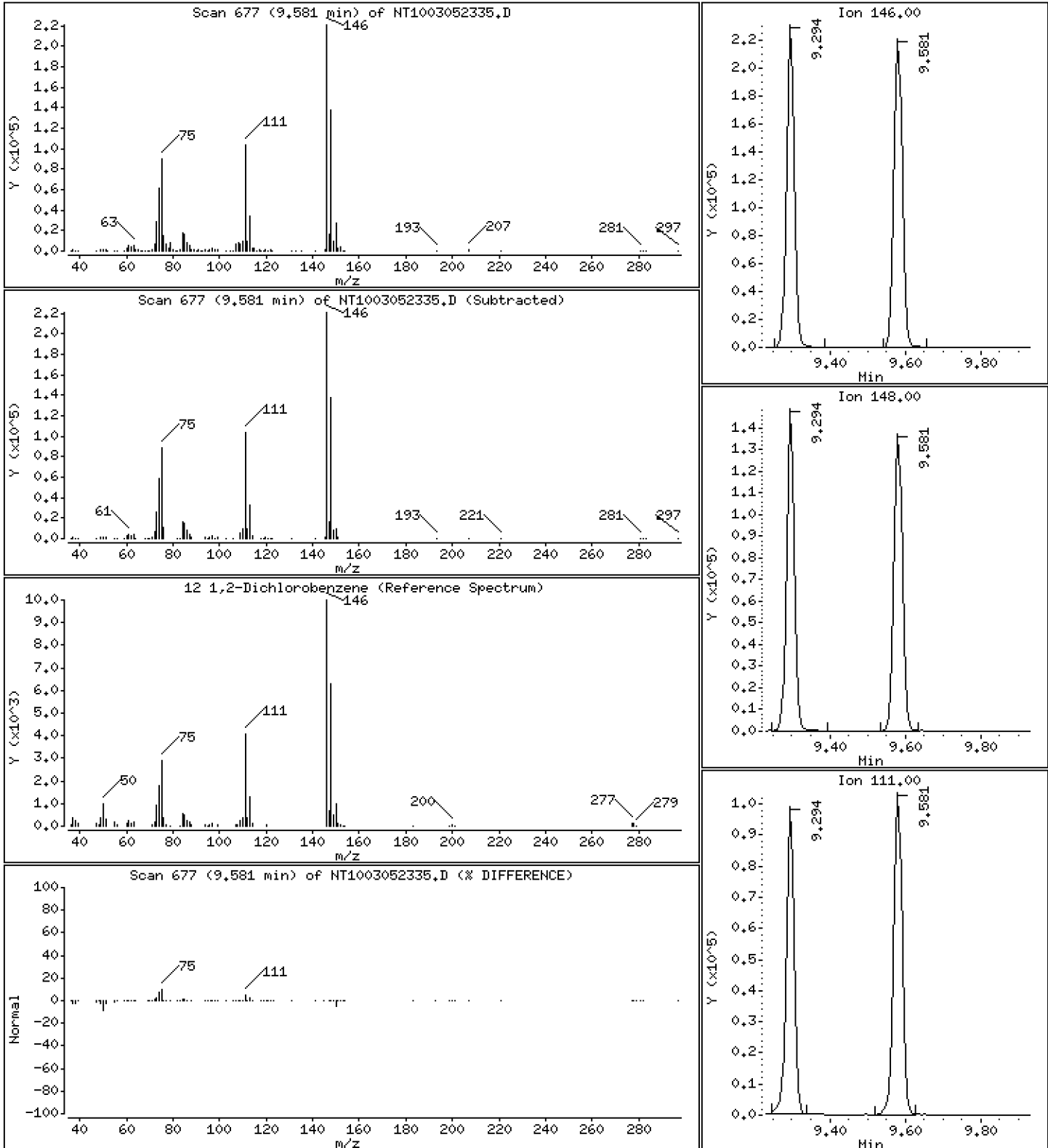
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,666 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

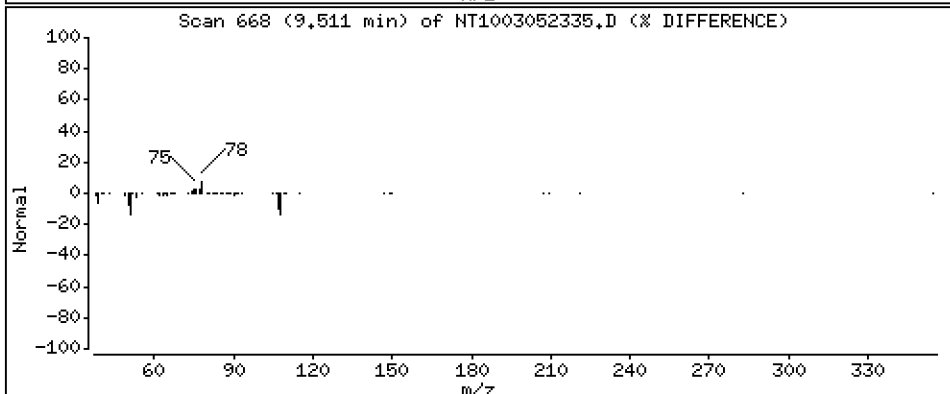
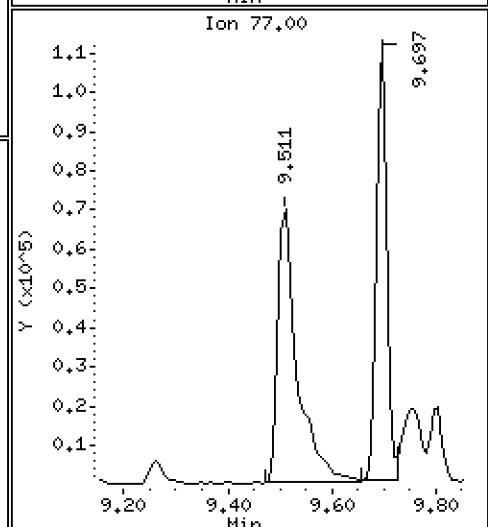
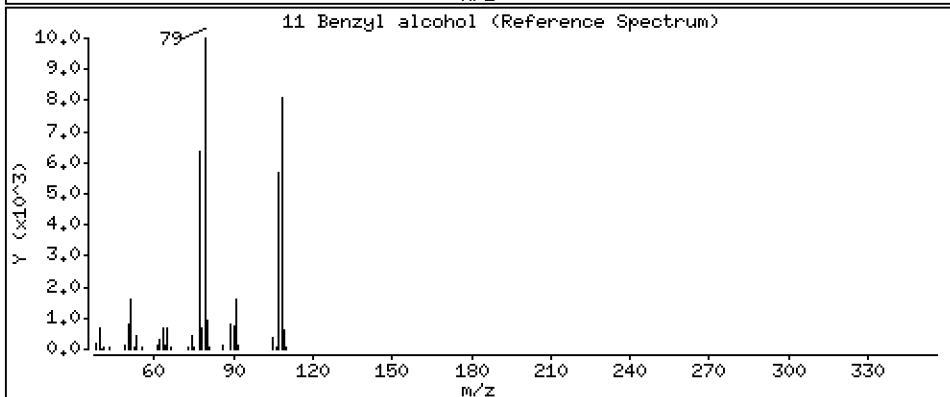
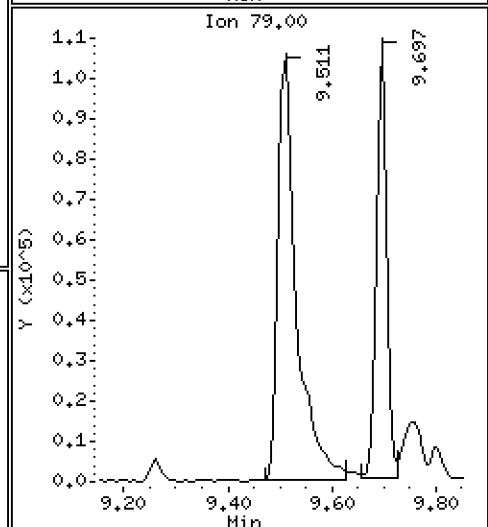
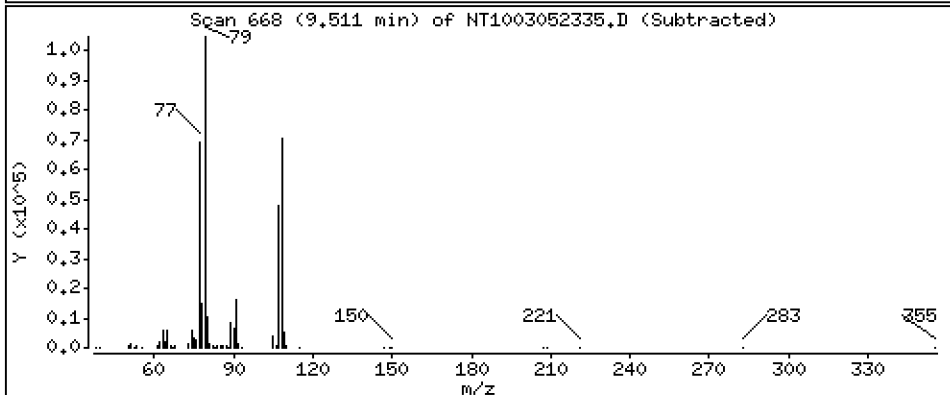
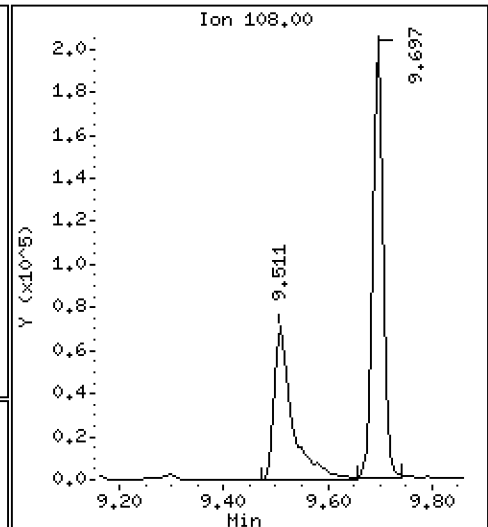
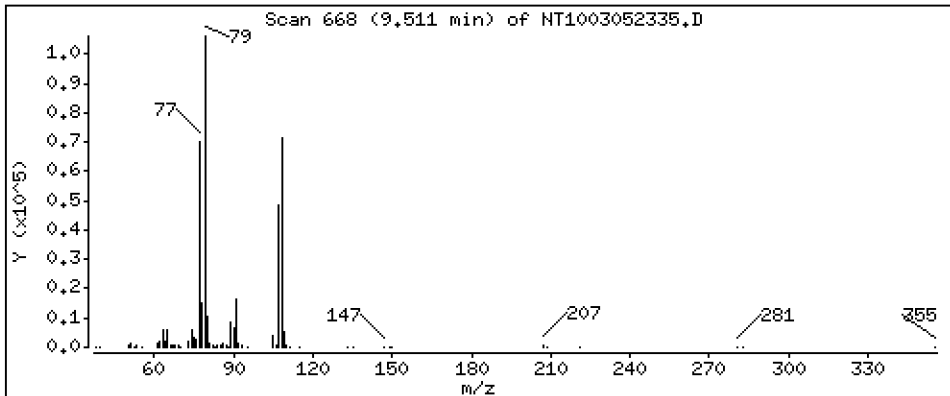
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,095 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

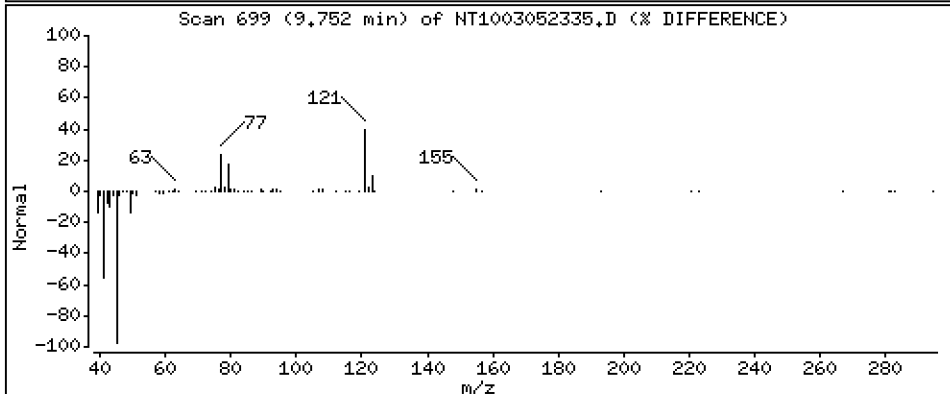
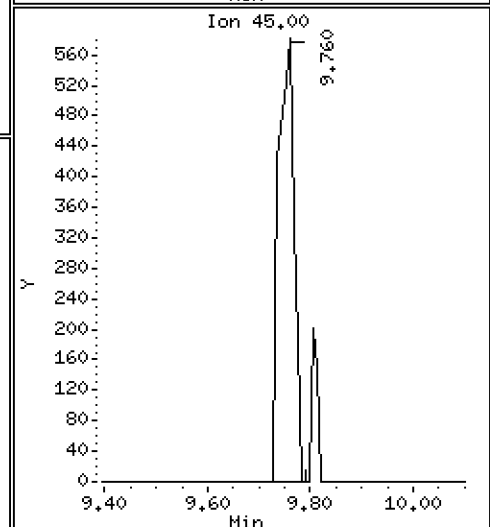
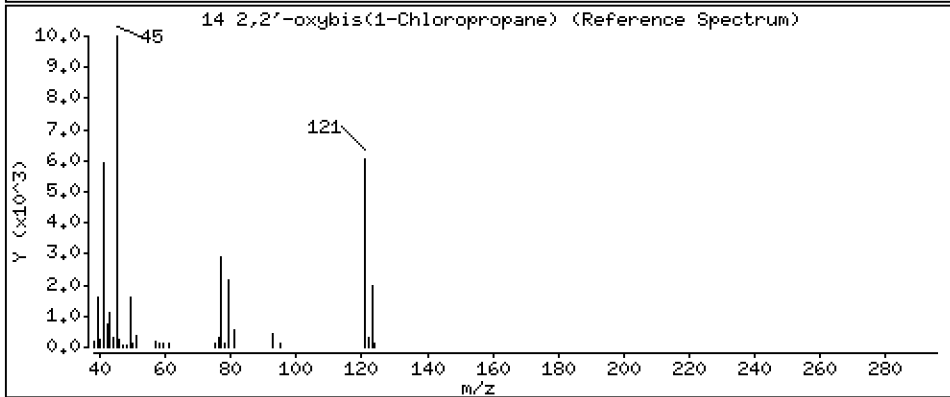
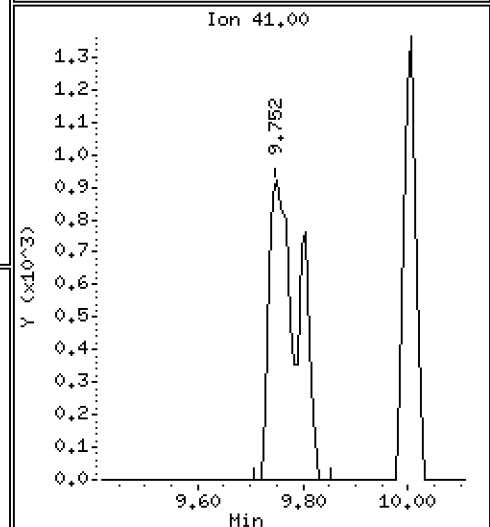
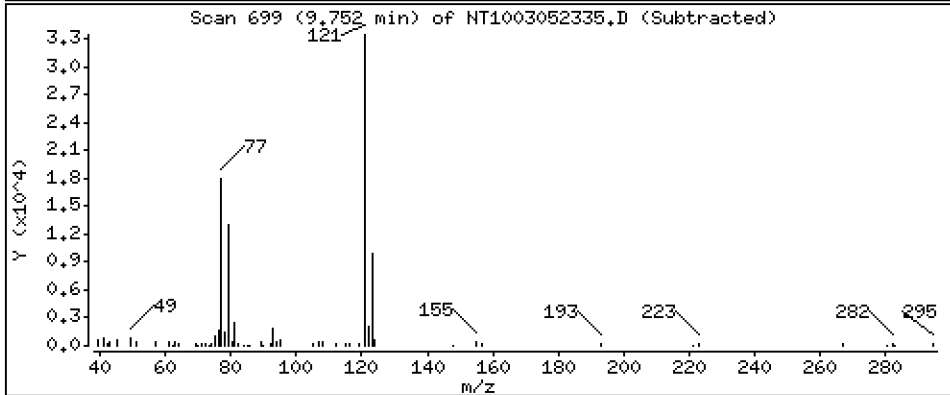
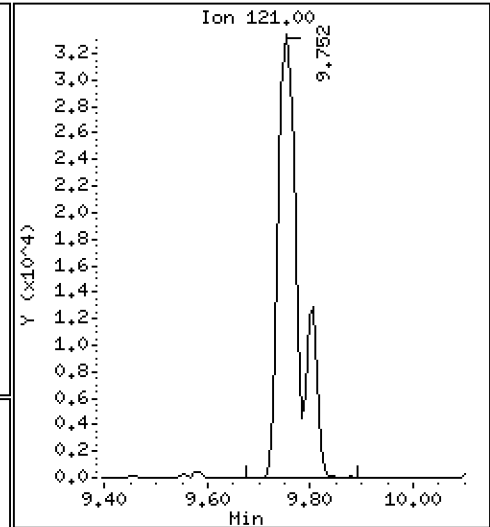
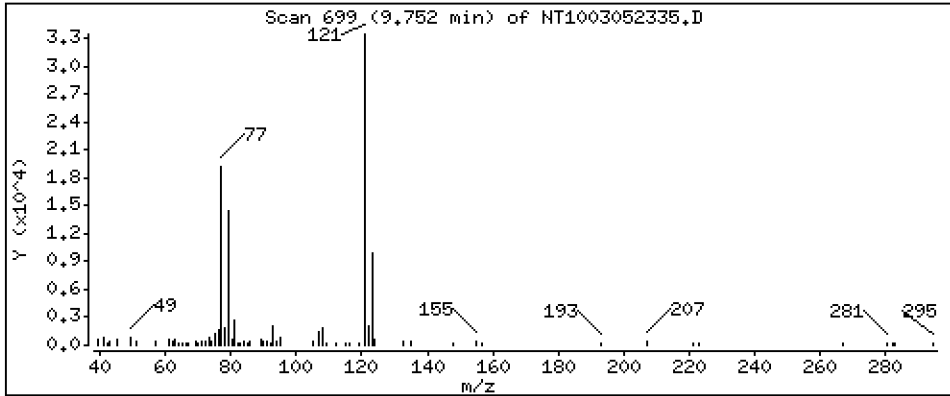
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,586 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

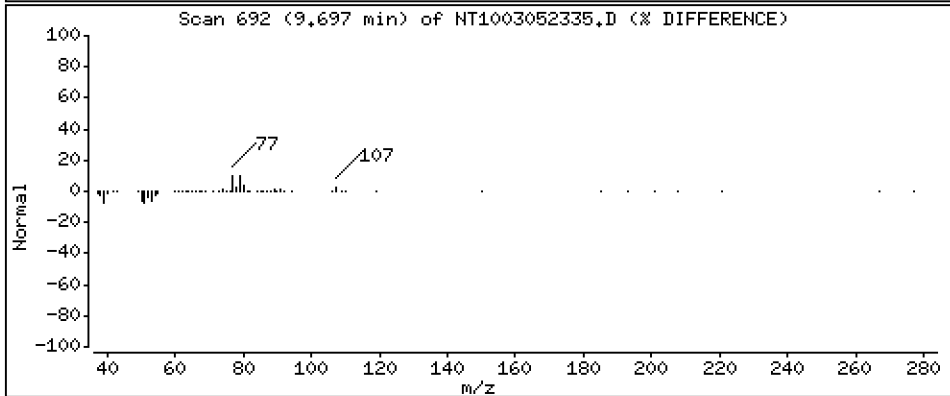
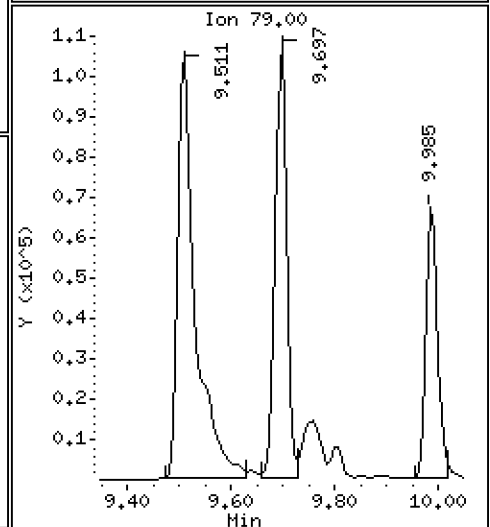
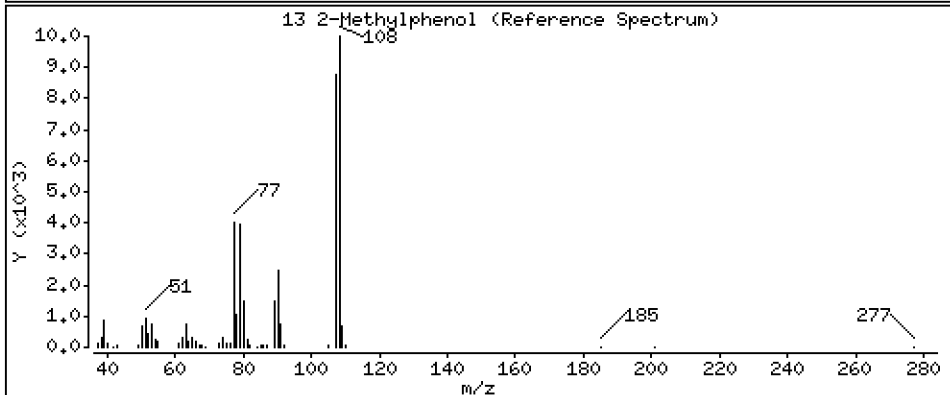
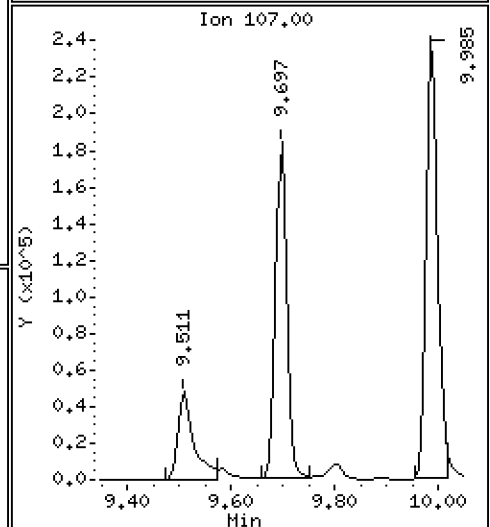
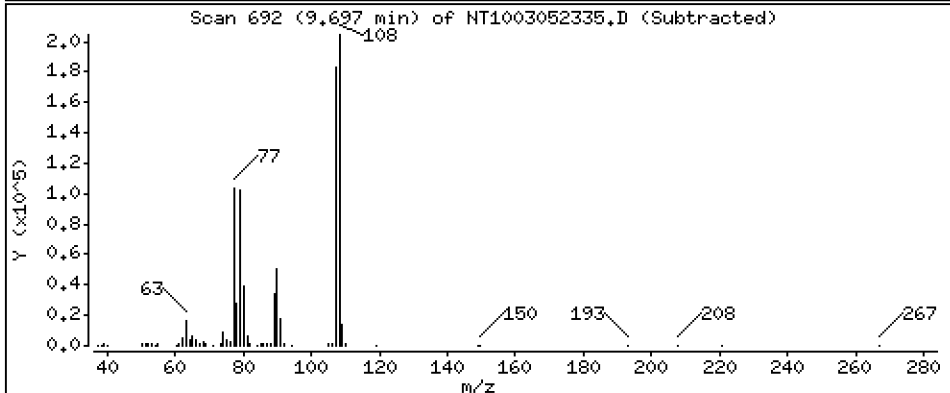
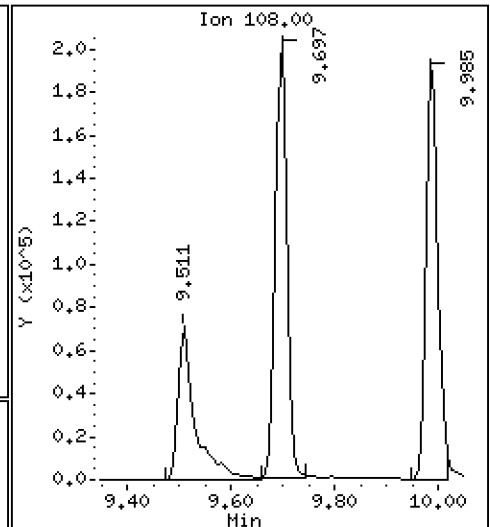
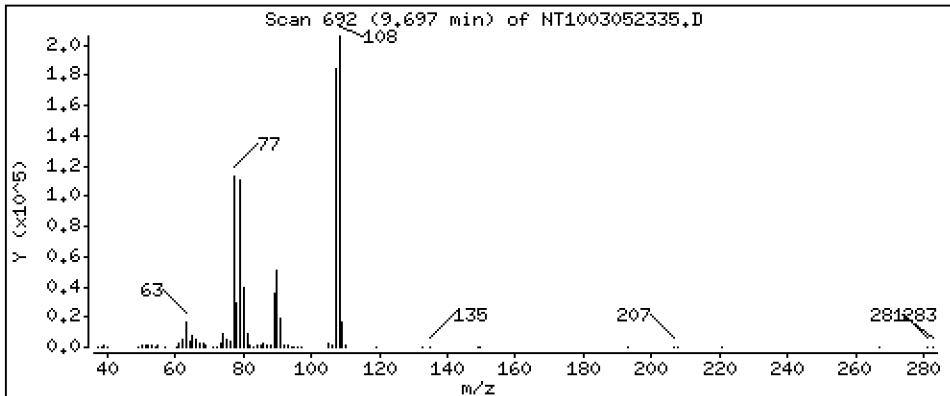
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 4,705 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

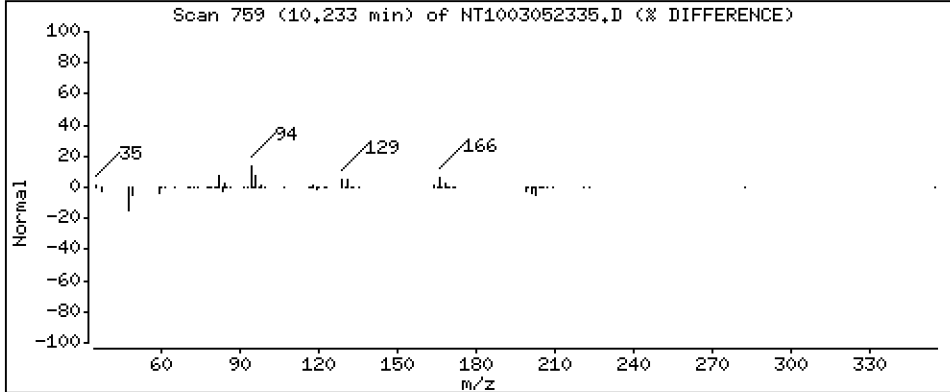
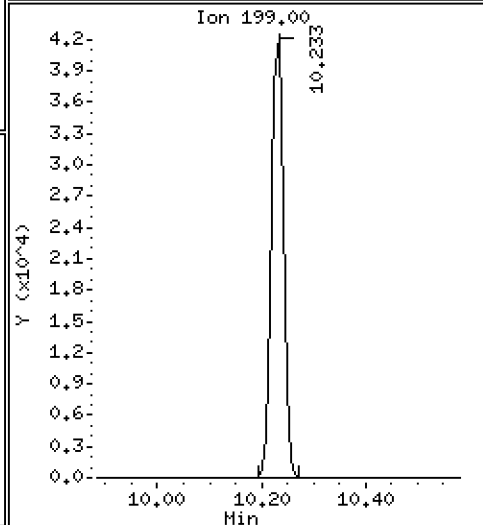
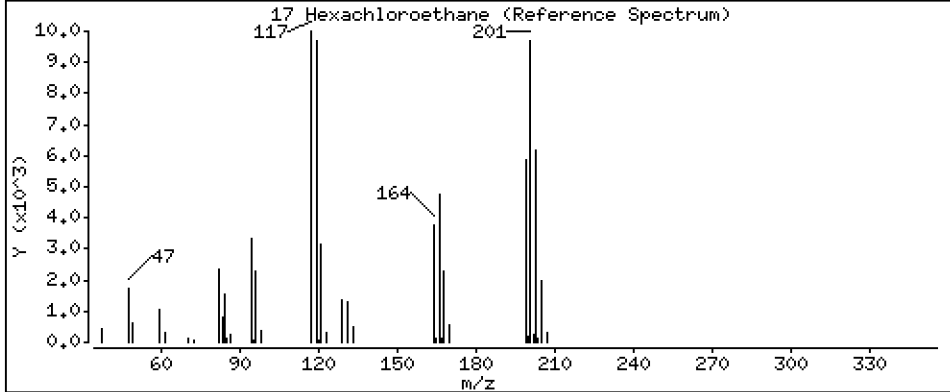
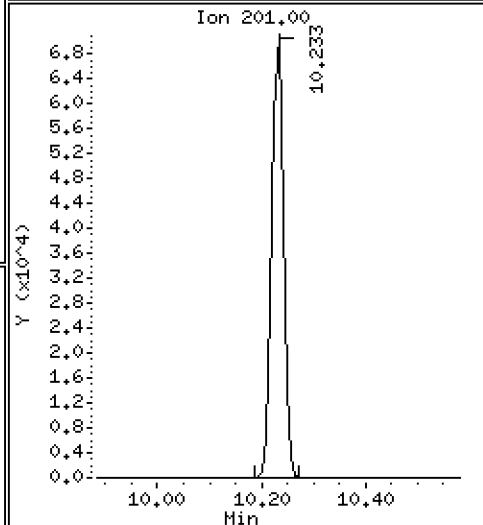
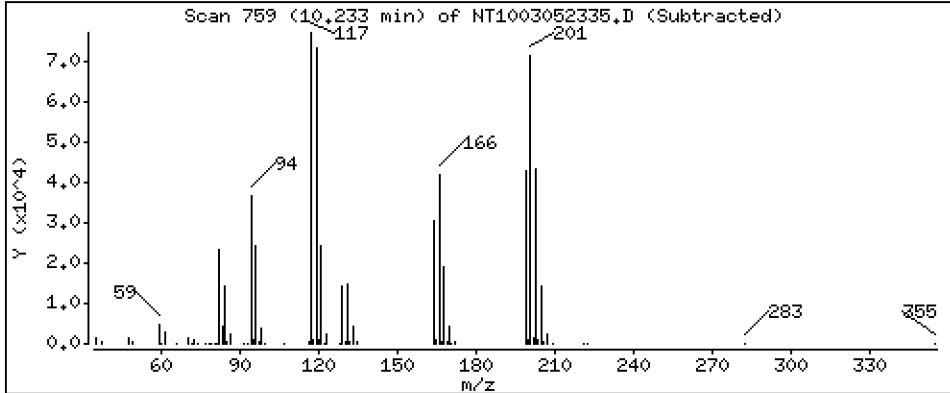
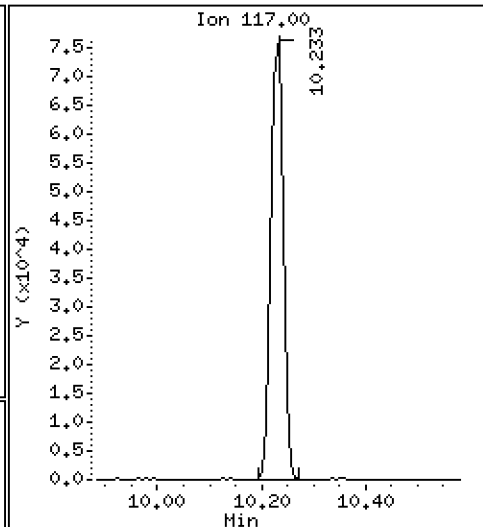
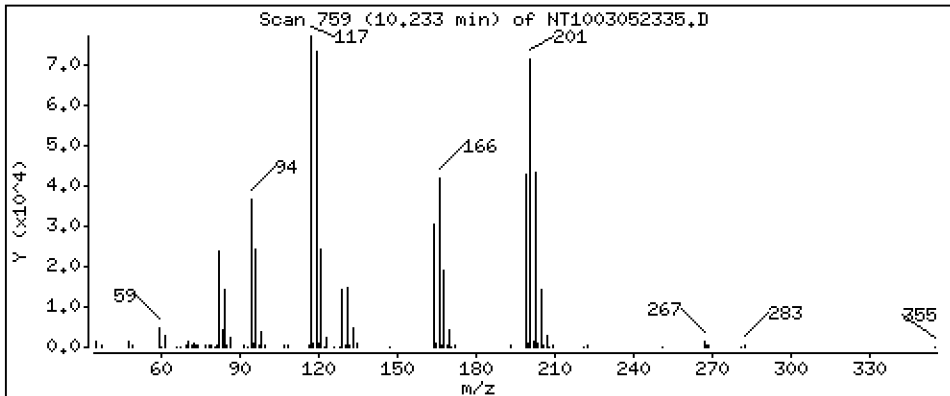
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 4,047 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

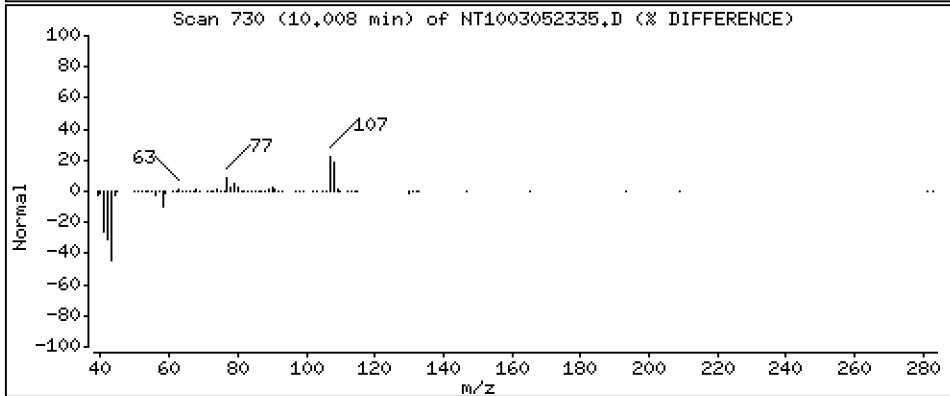
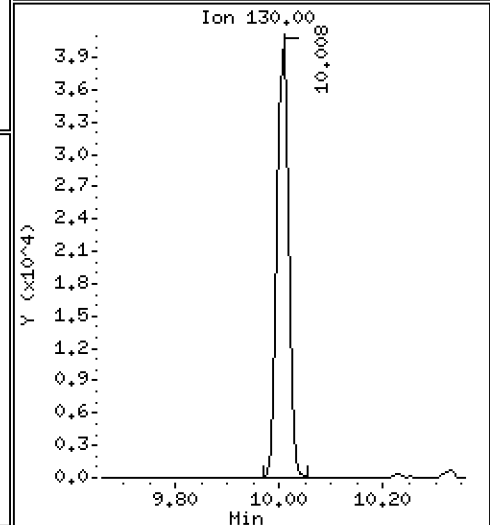
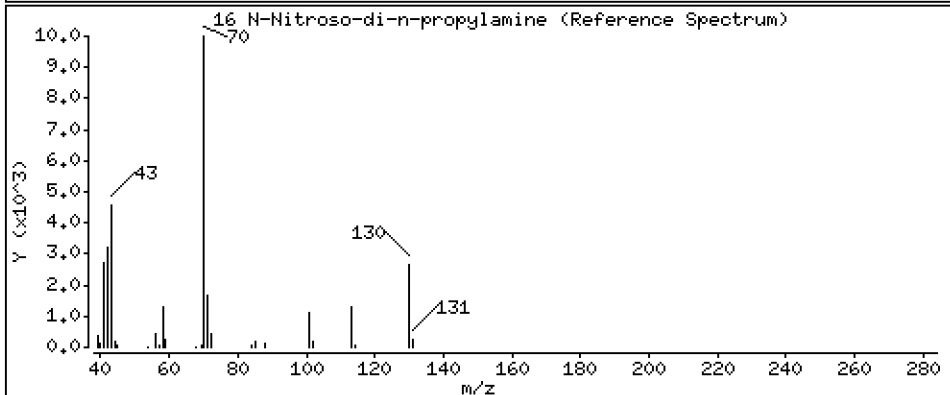
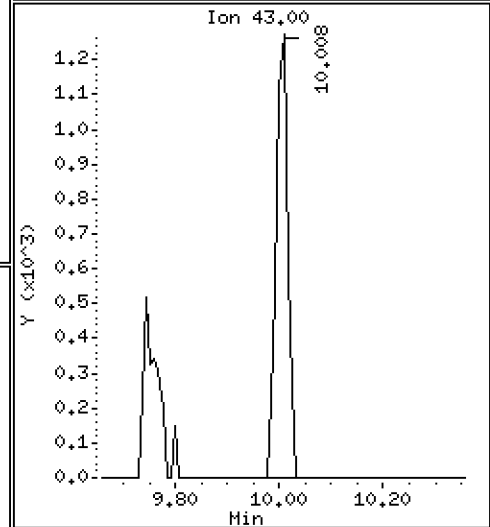
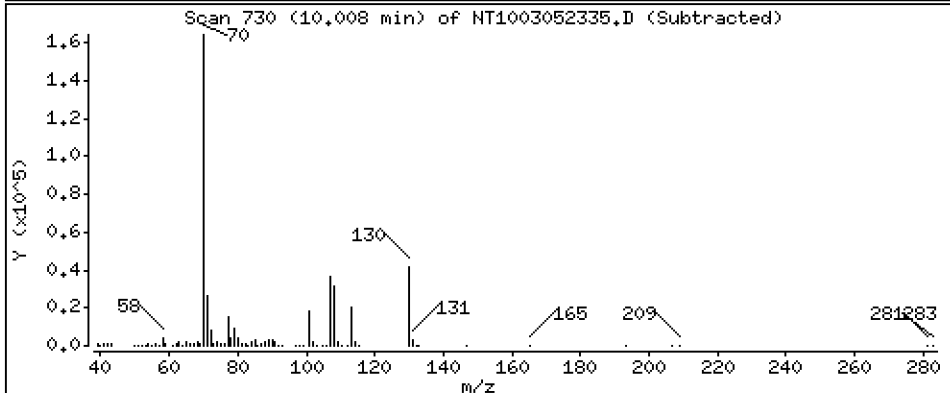
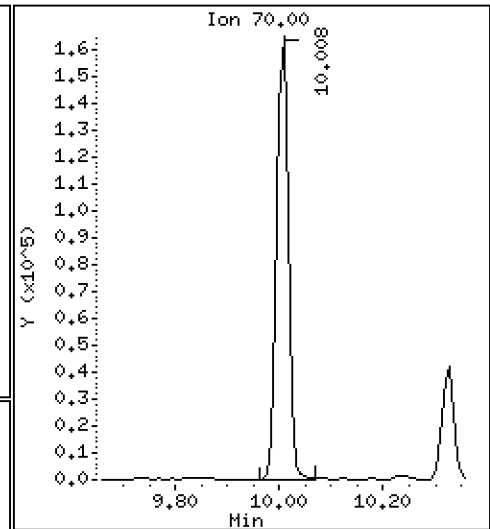
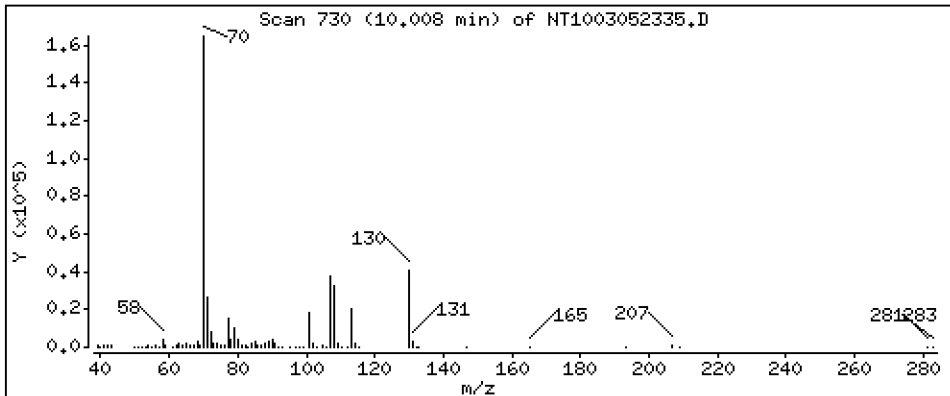
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,114 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

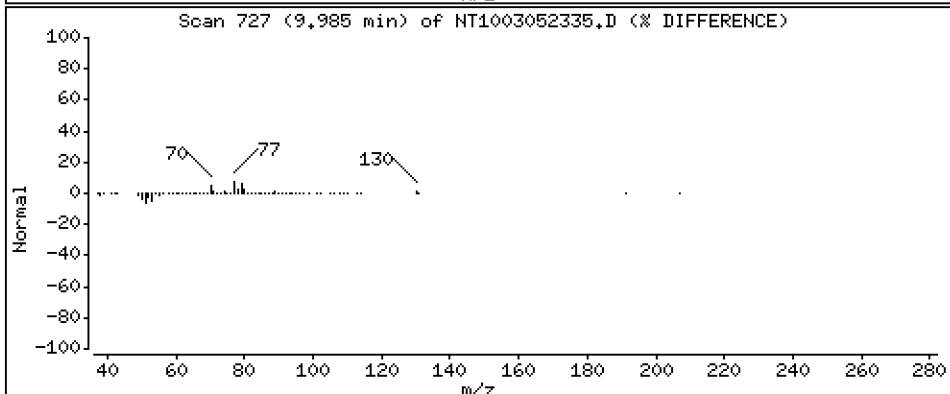
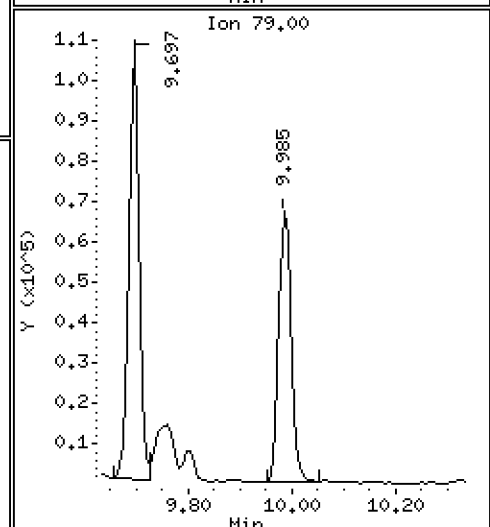
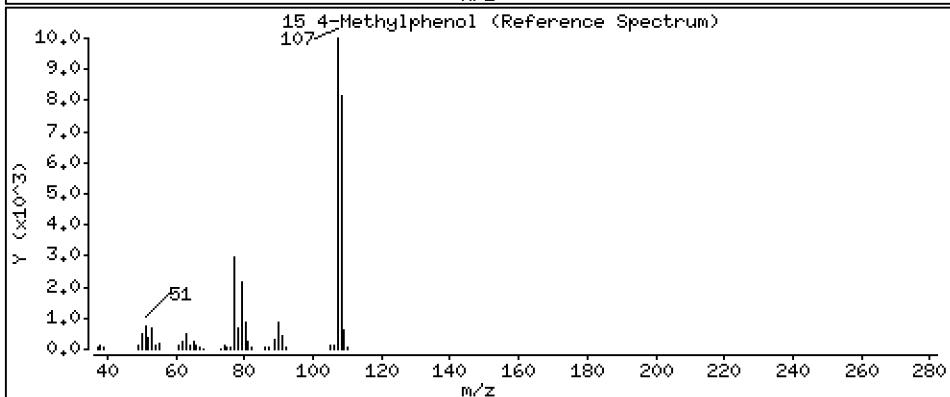
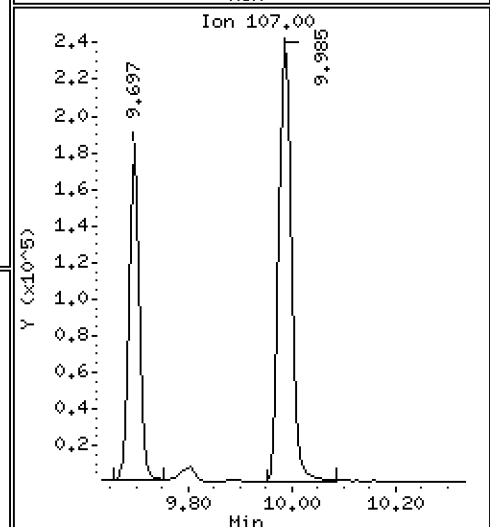
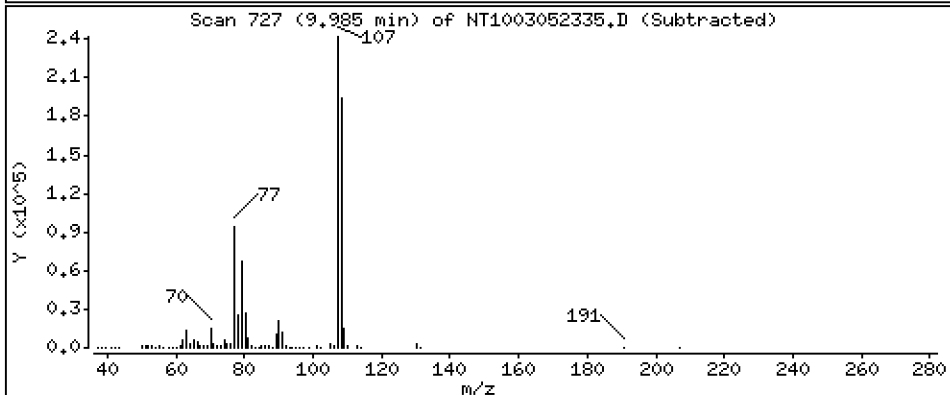
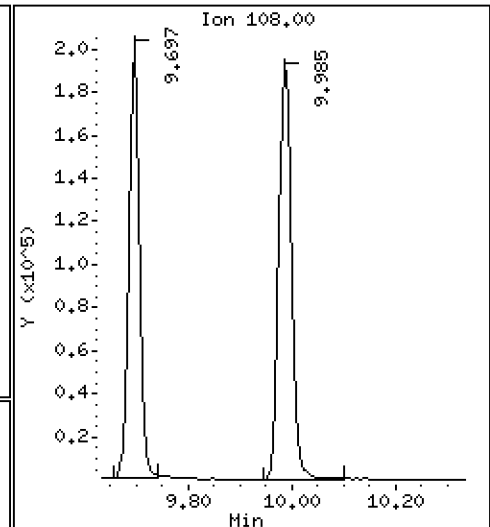
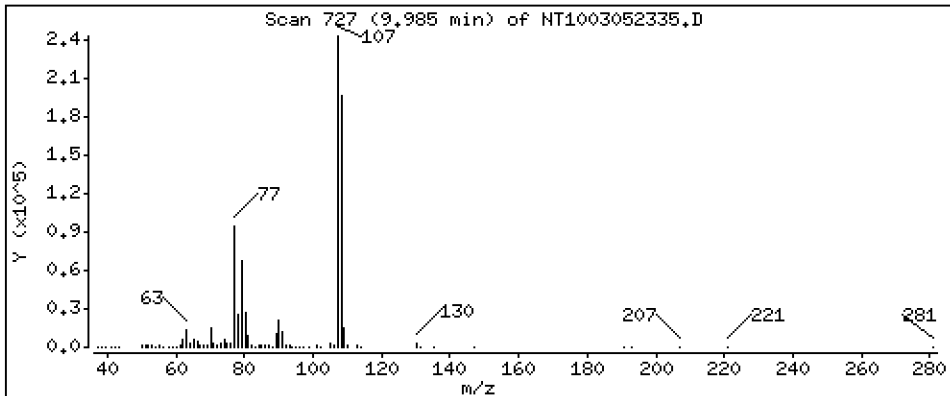
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,170 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

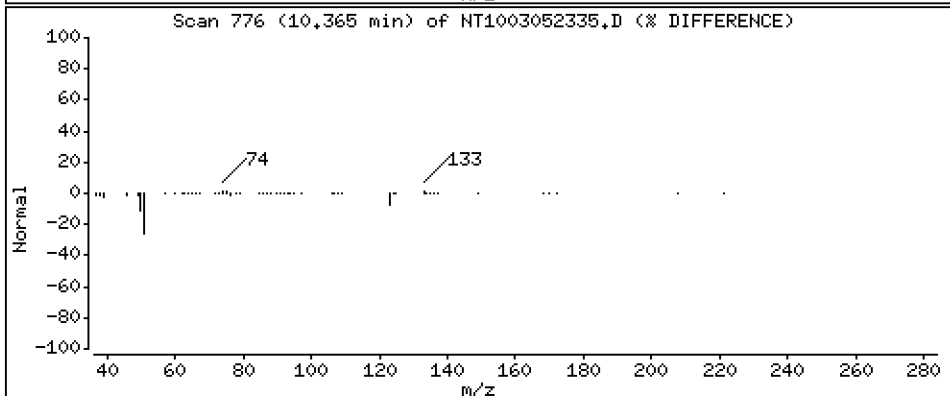
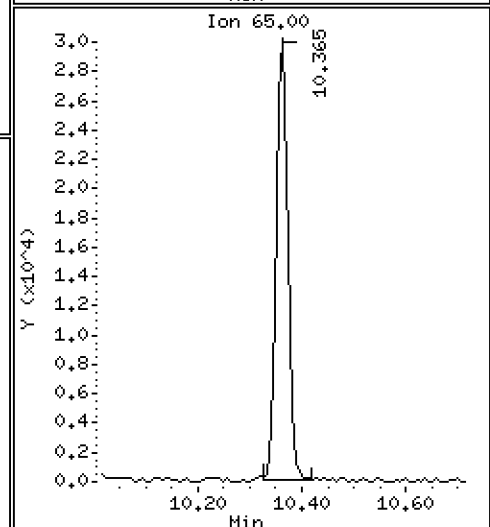
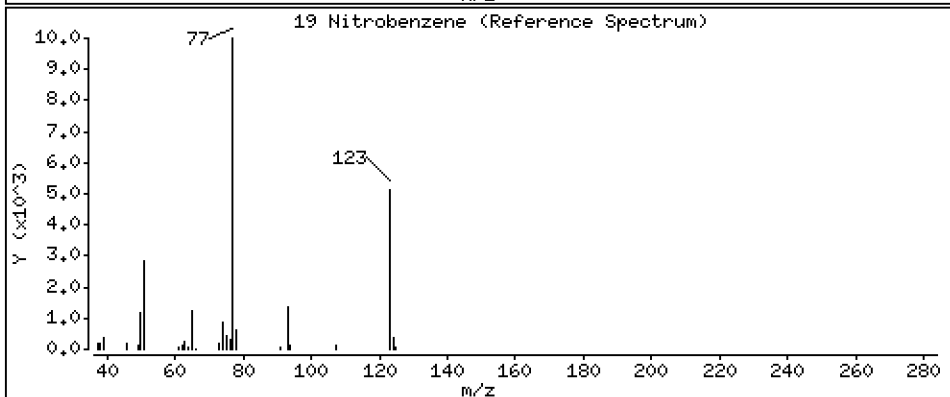
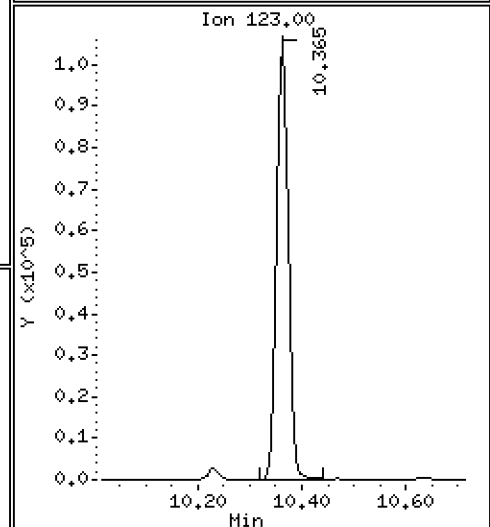
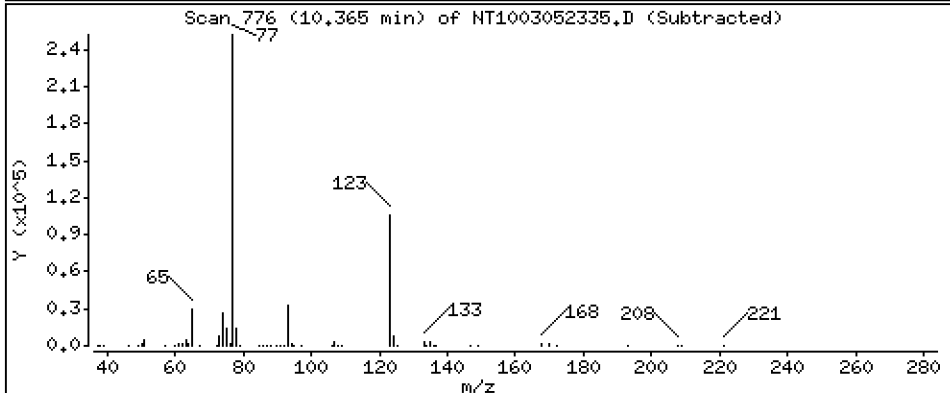
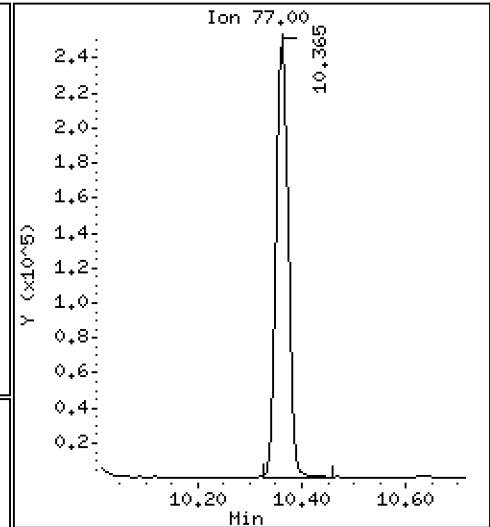
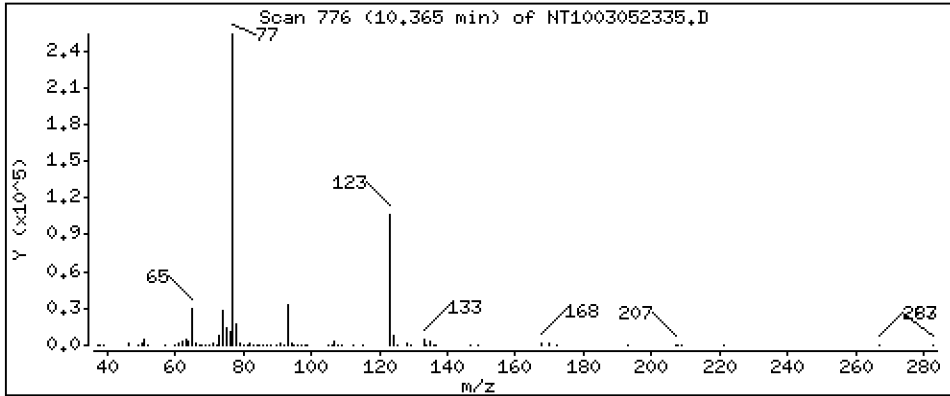
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

19 Nitrobenzene

Concentration: 5,236 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

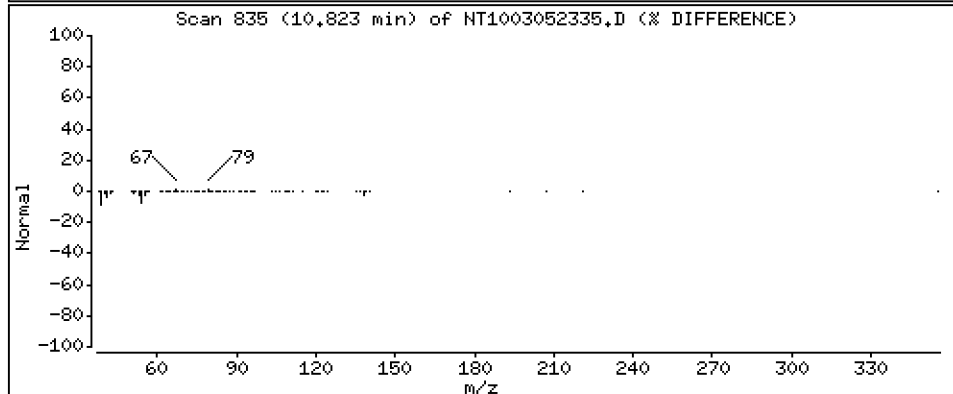
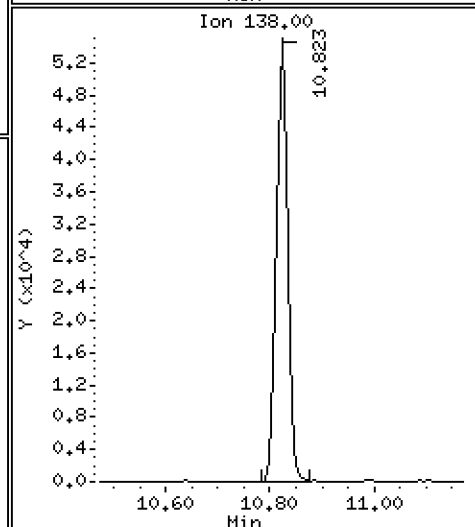
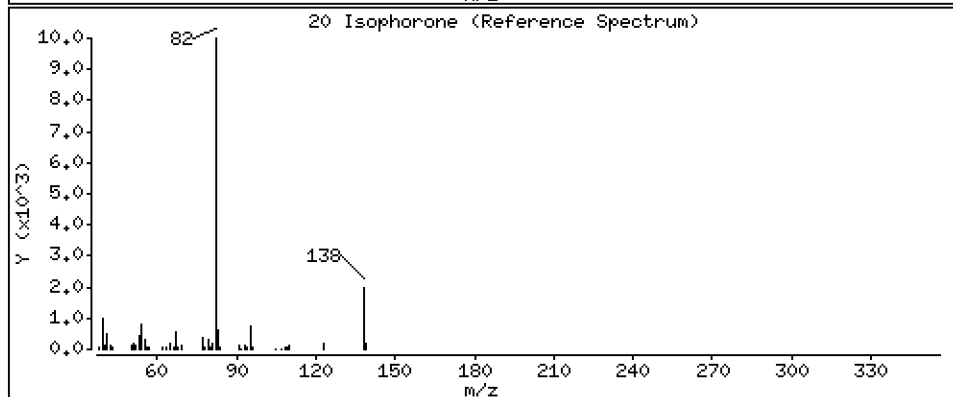
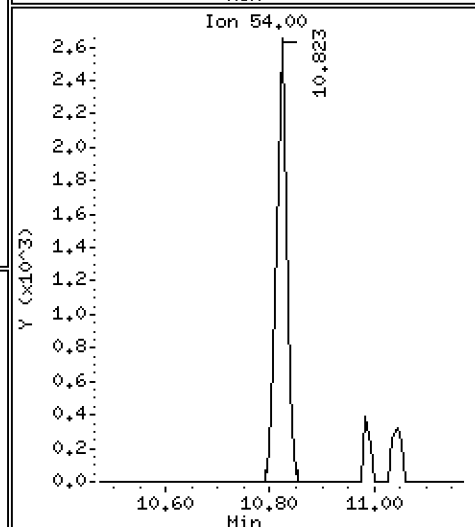
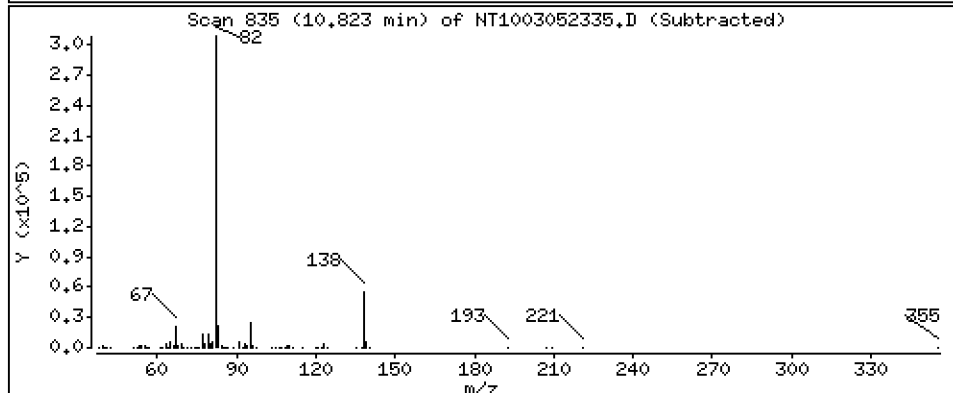
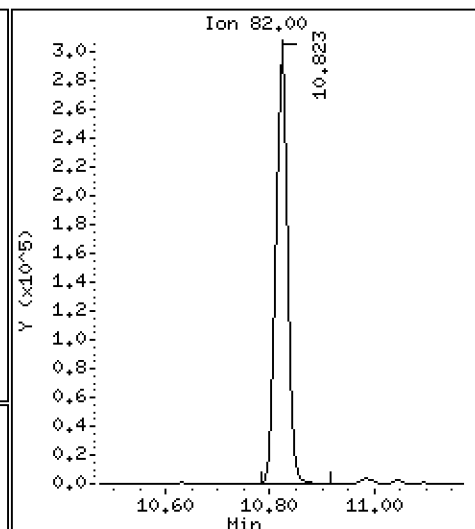
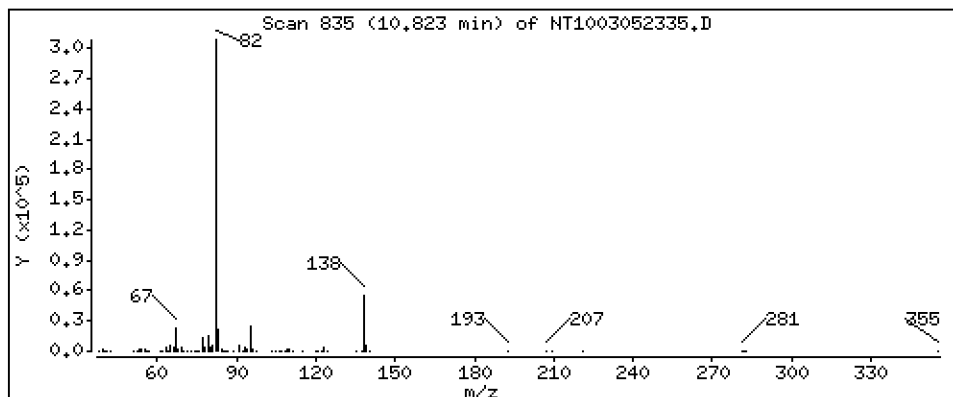
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

20 Isophorone

Concentration: 5,597 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

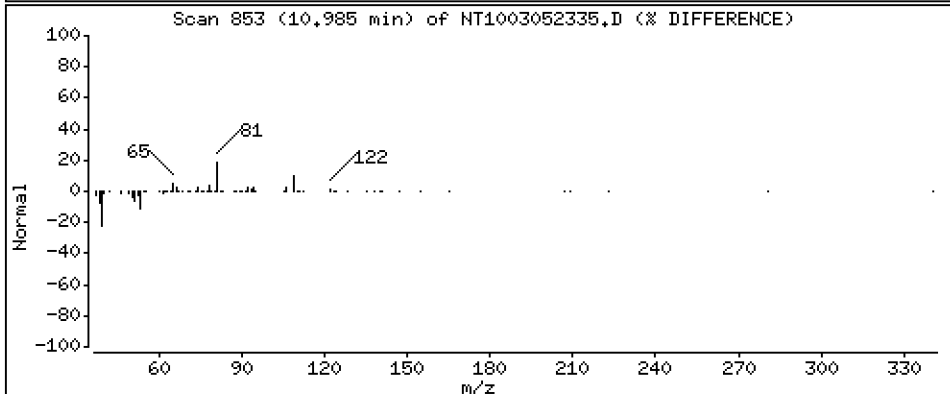
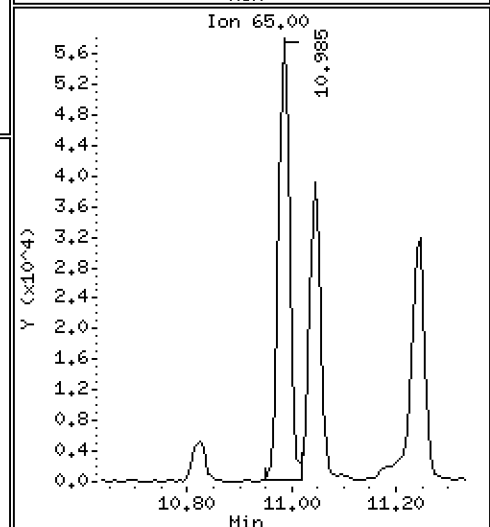
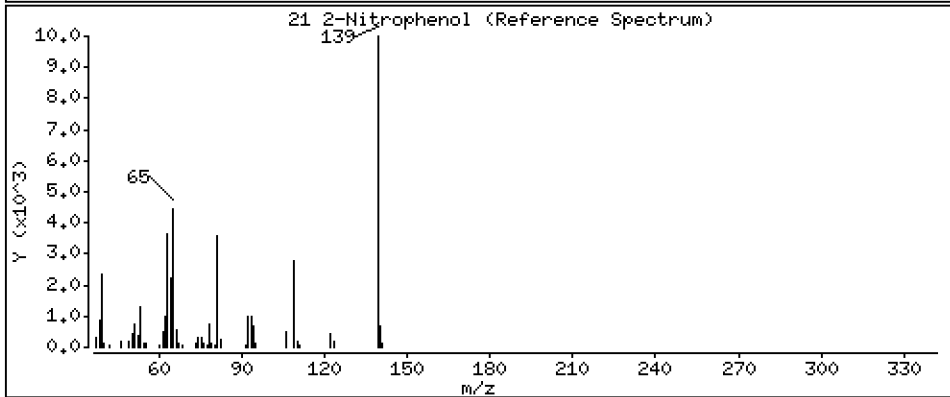
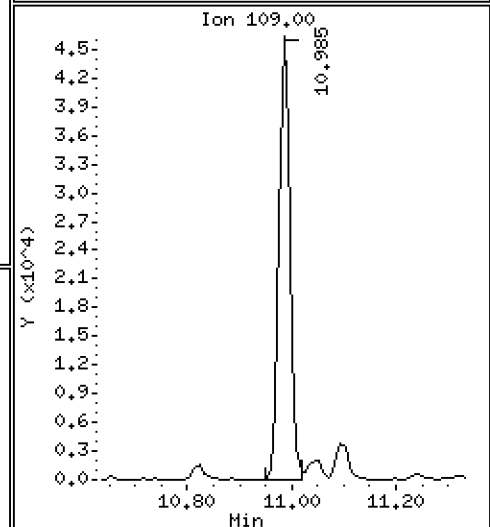
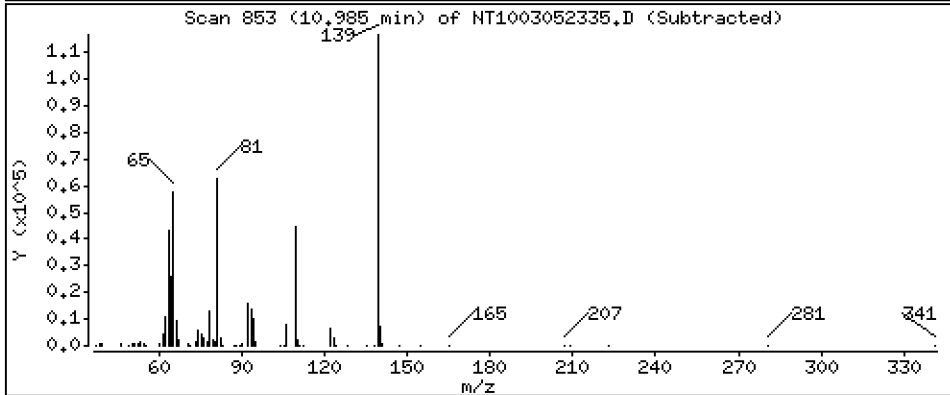
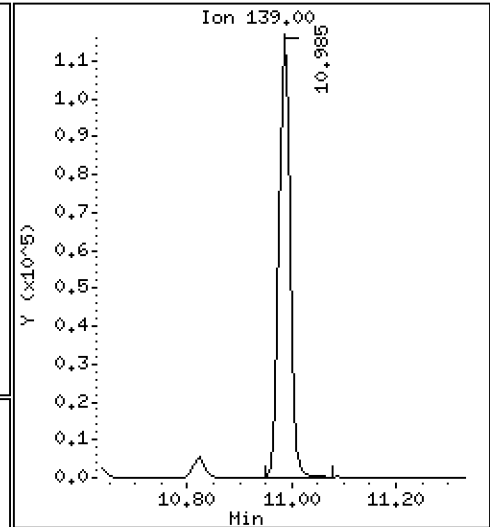
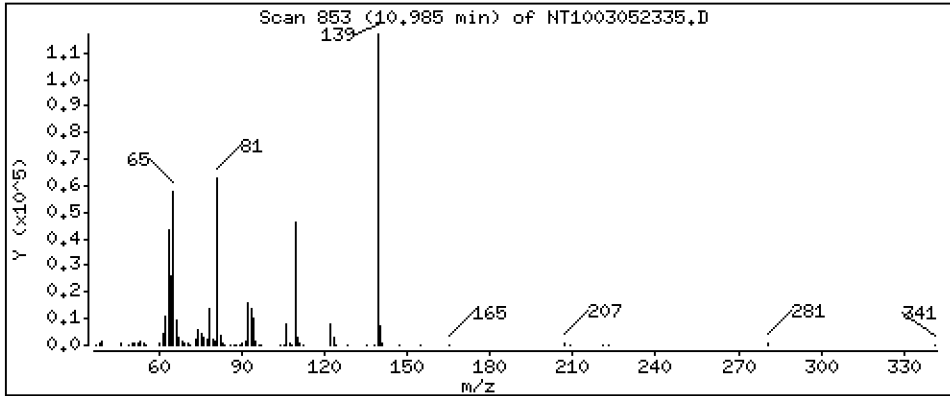
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 4,453 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

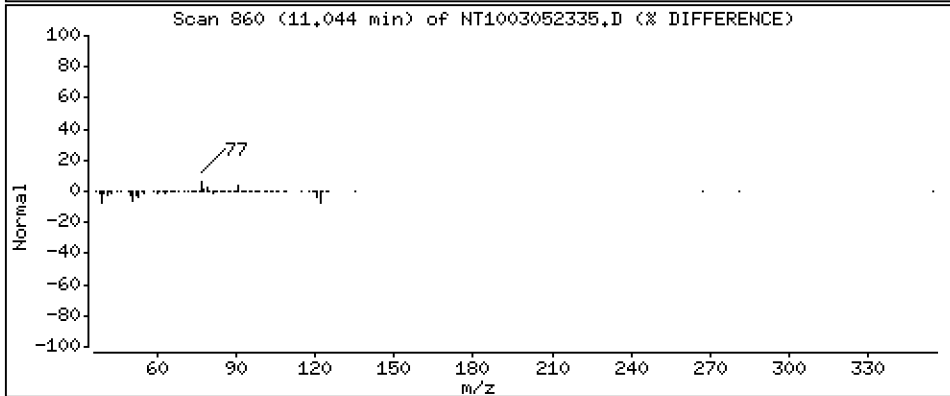
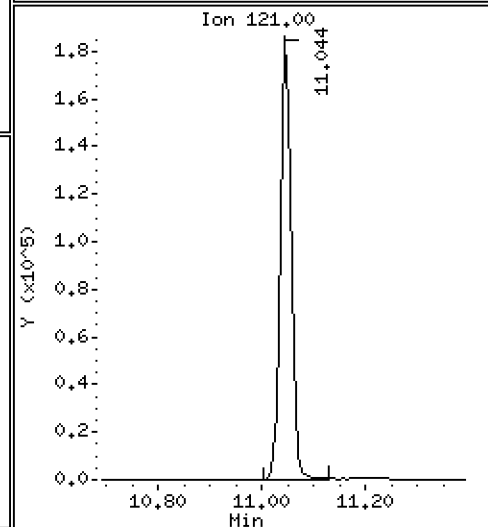
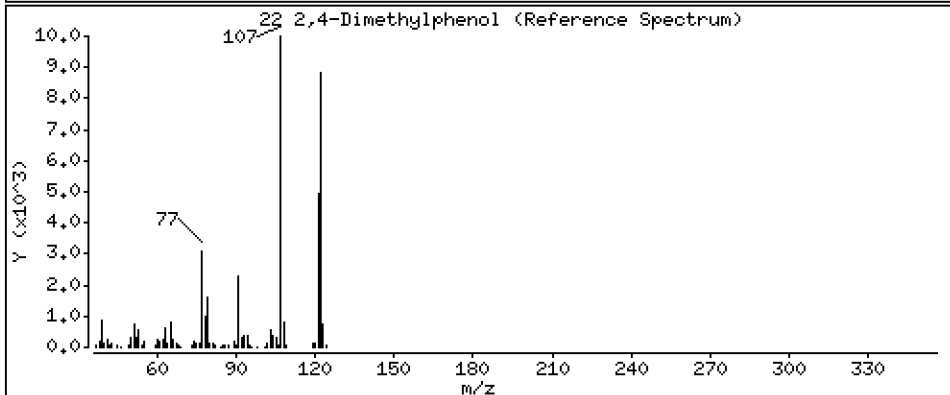
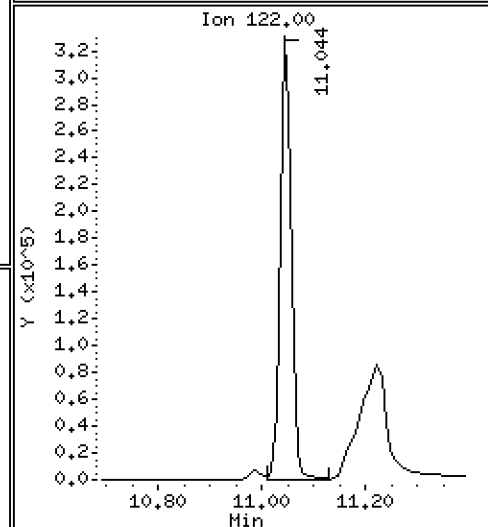
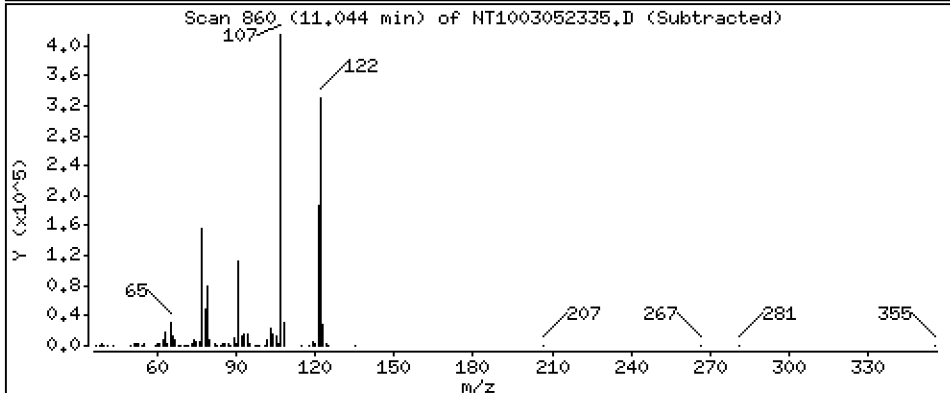
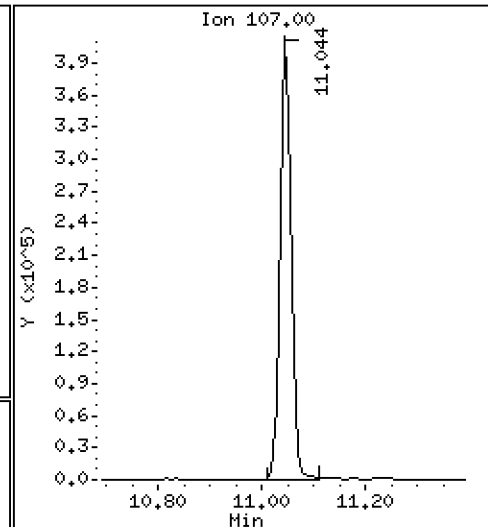
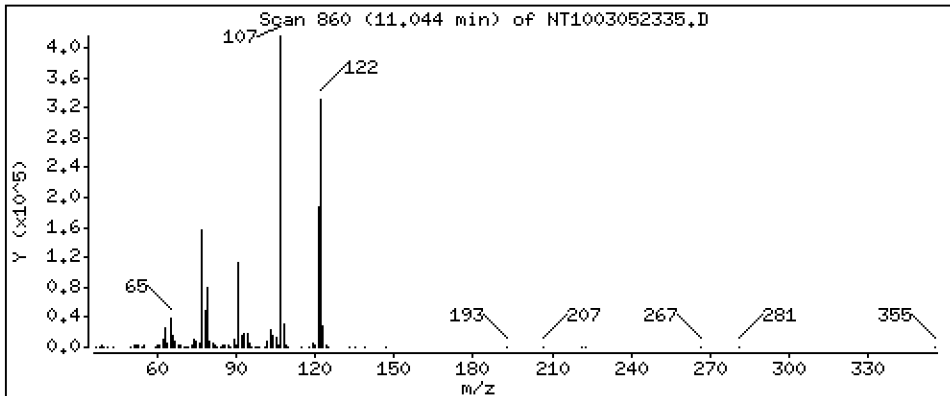
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 8,812 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

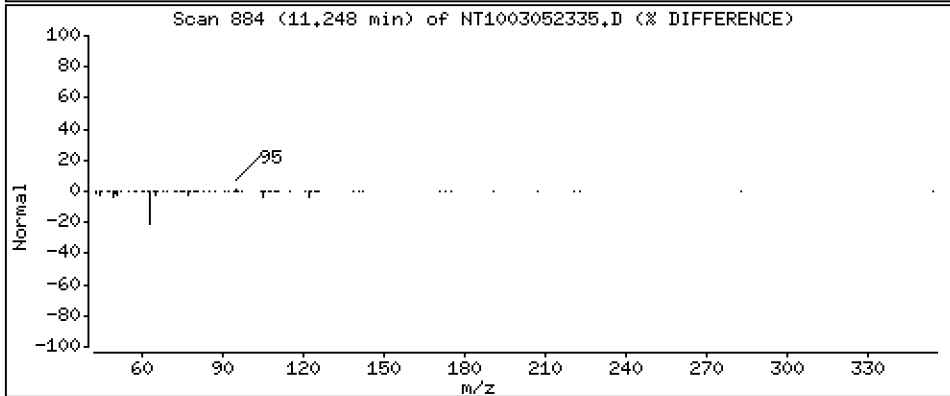
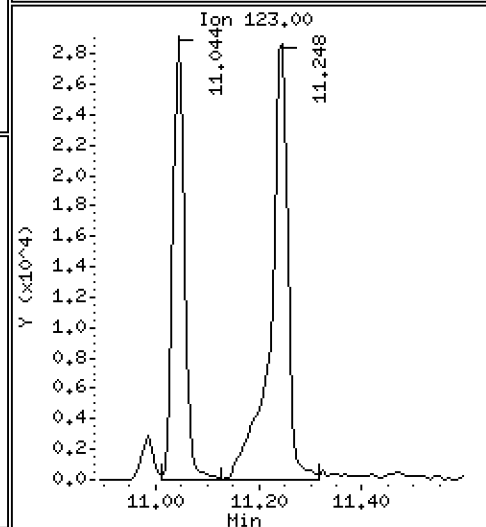
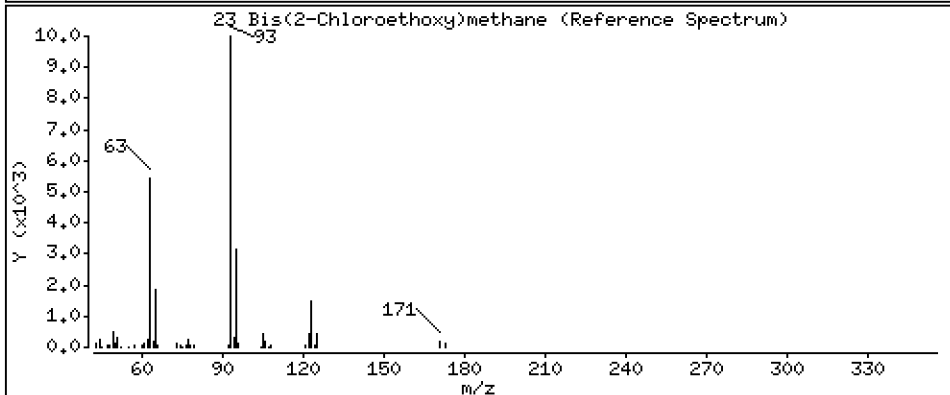
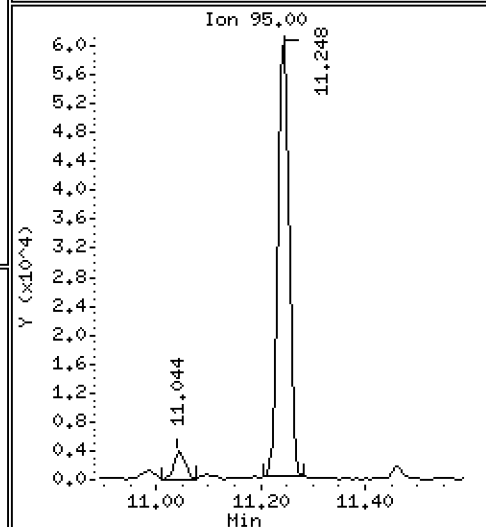
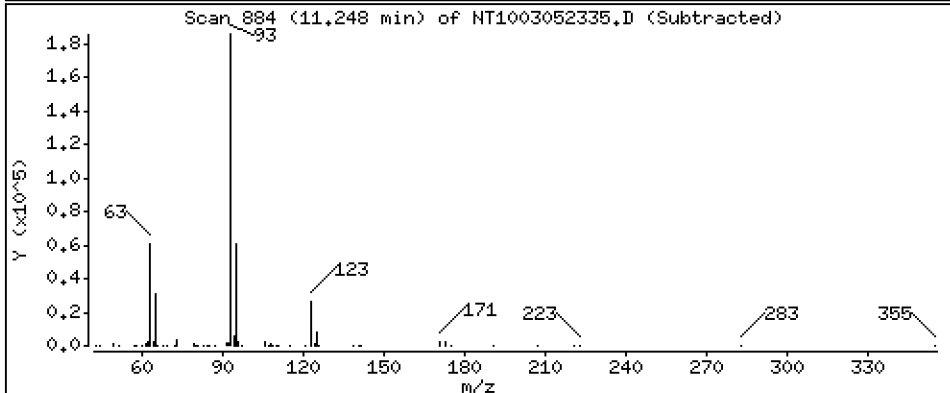
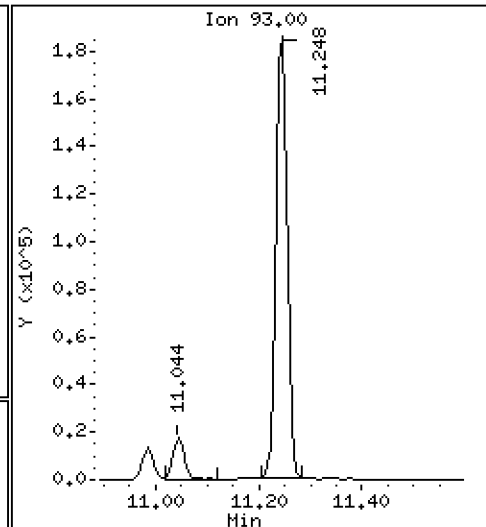
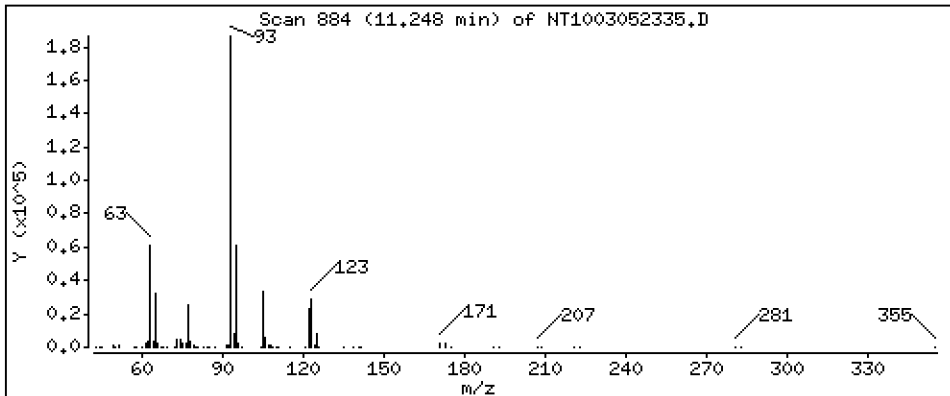
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 4,954 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

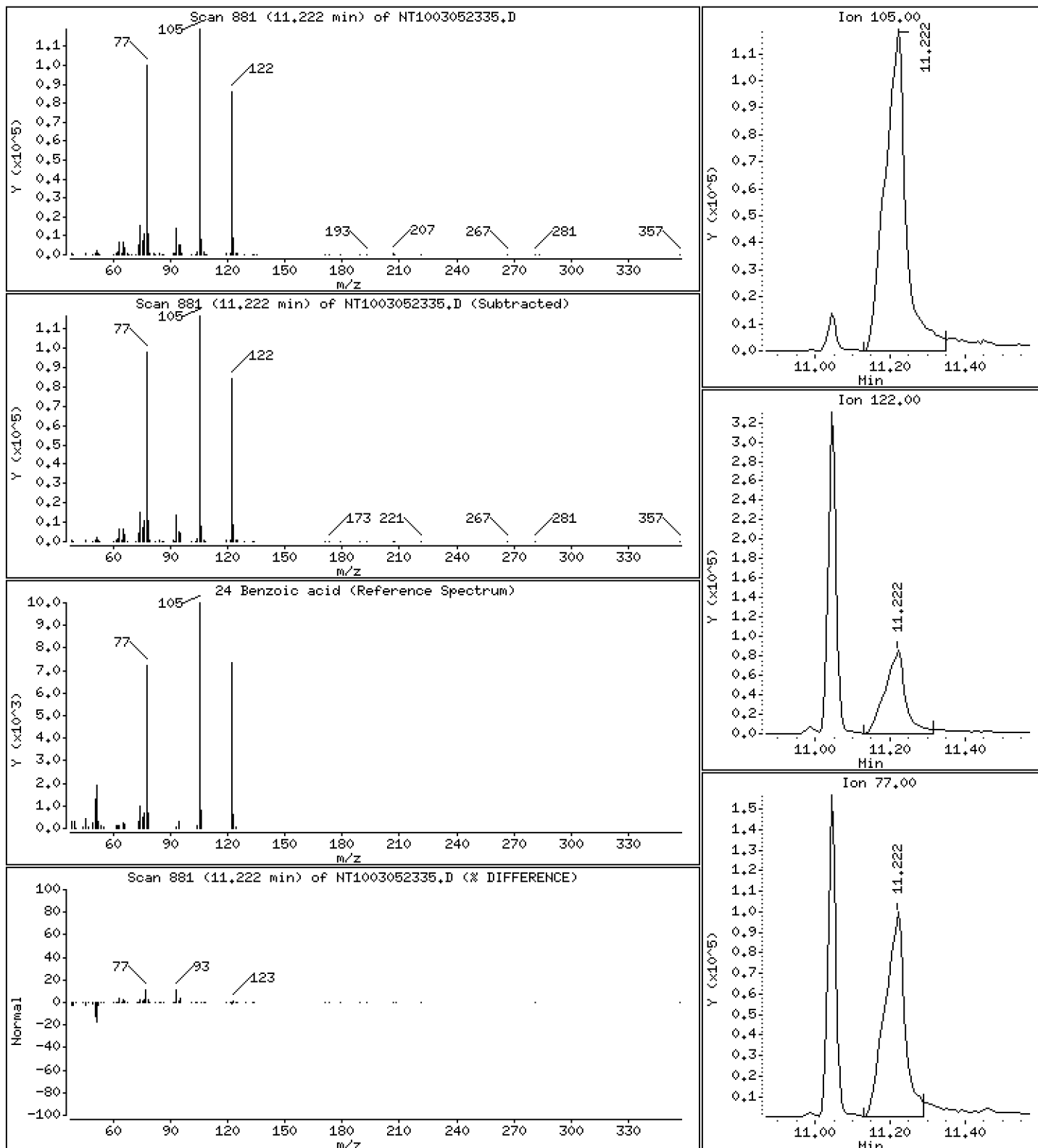
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 11,06 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

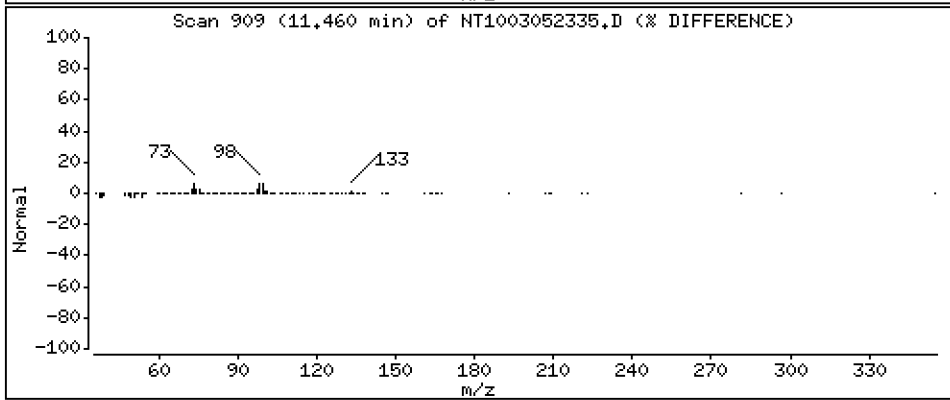
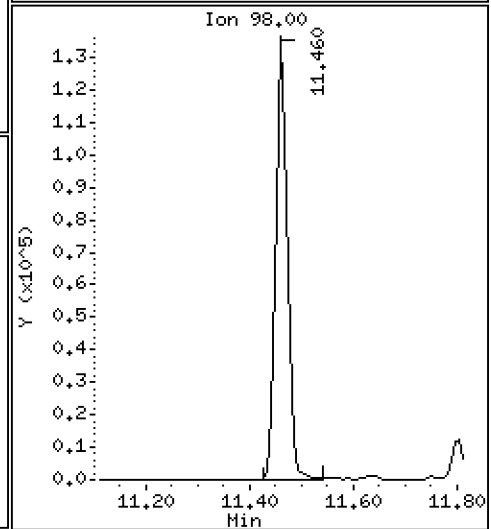
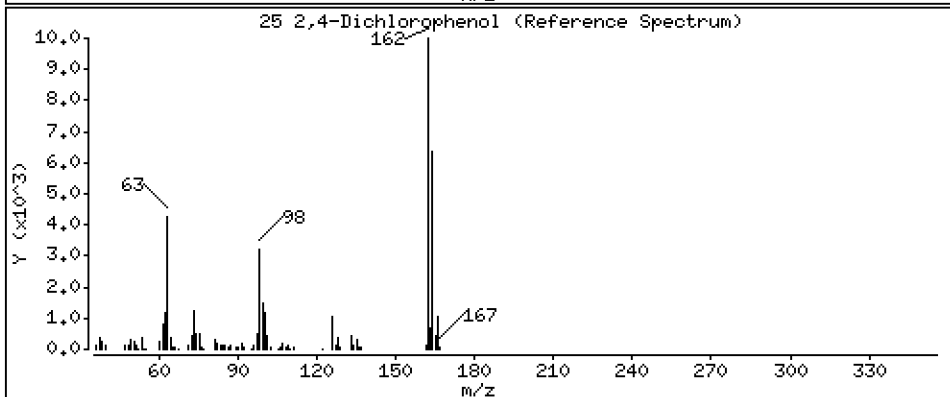
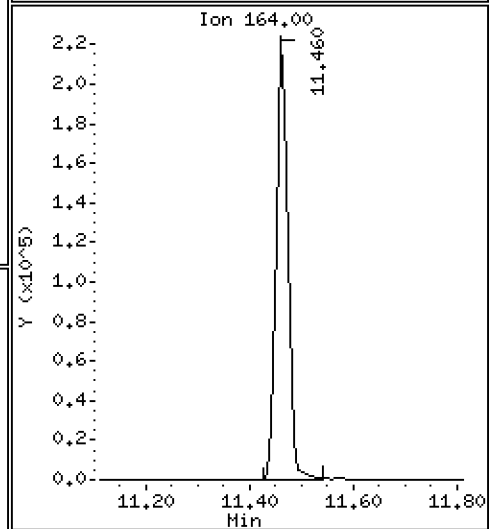
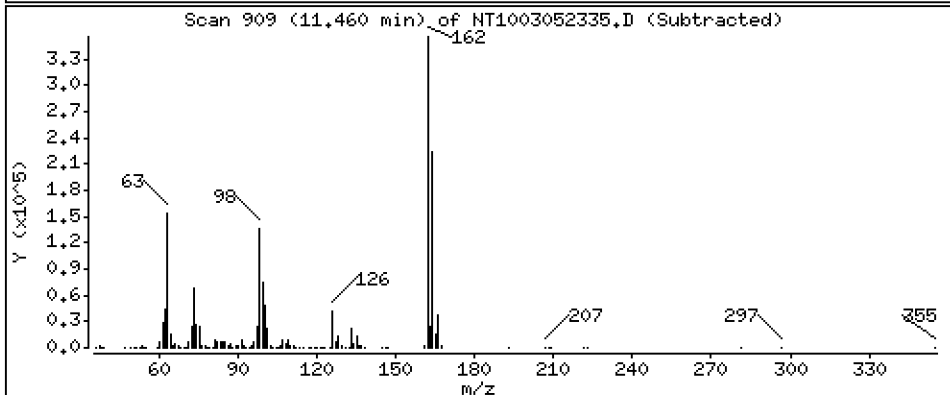
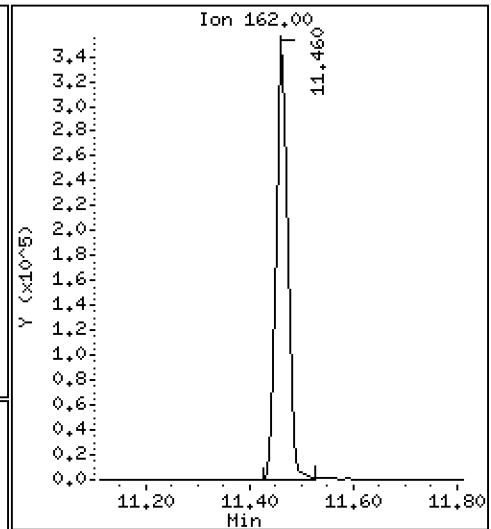
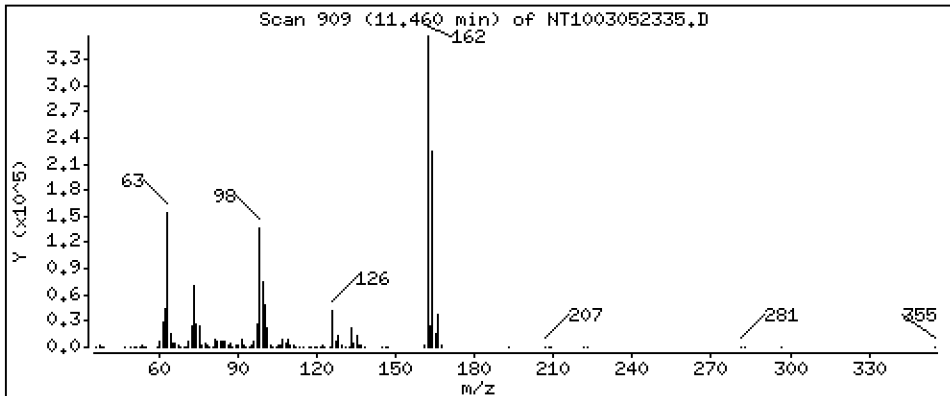
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 11,24 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

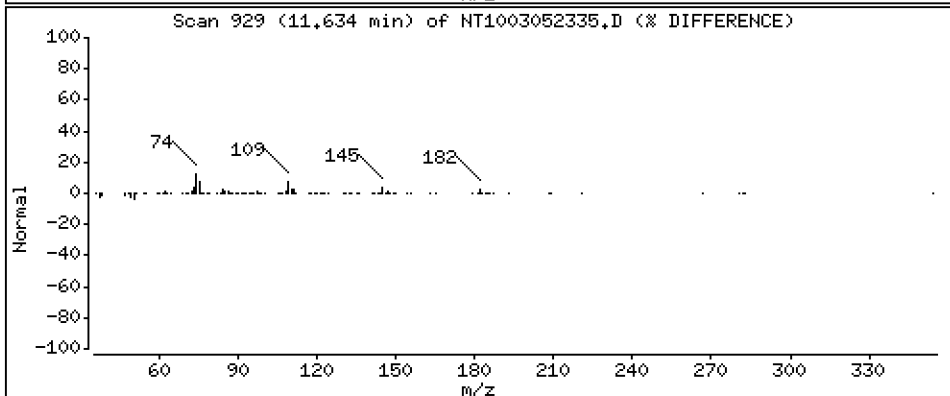
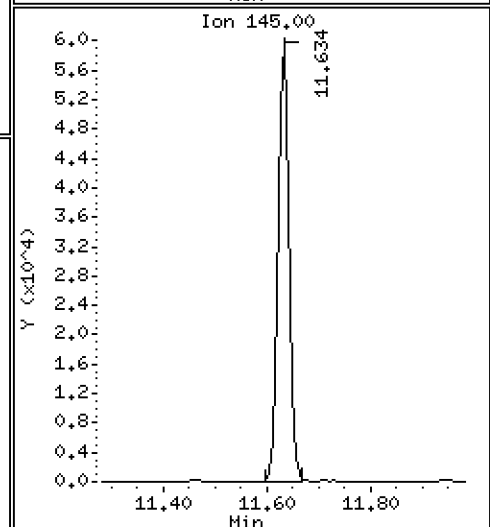
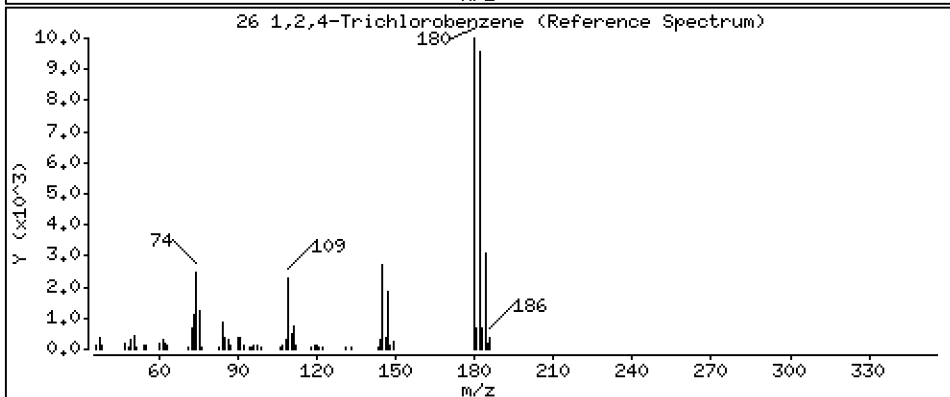
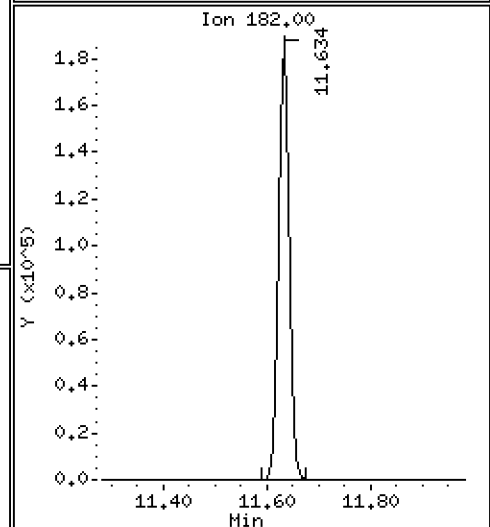
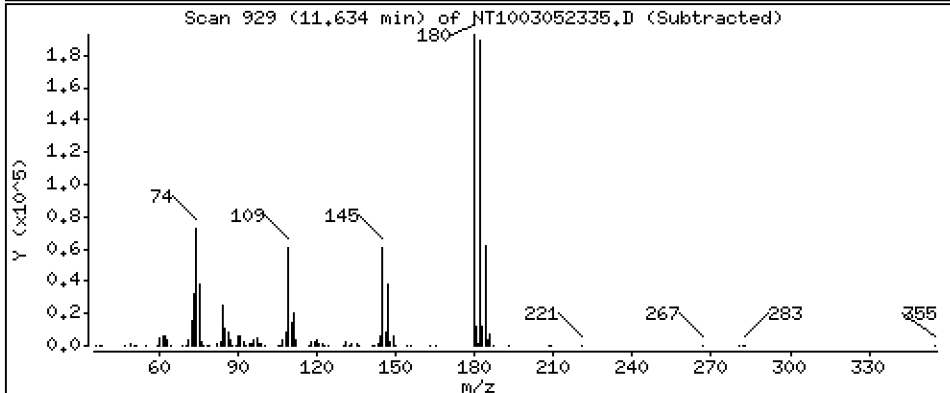
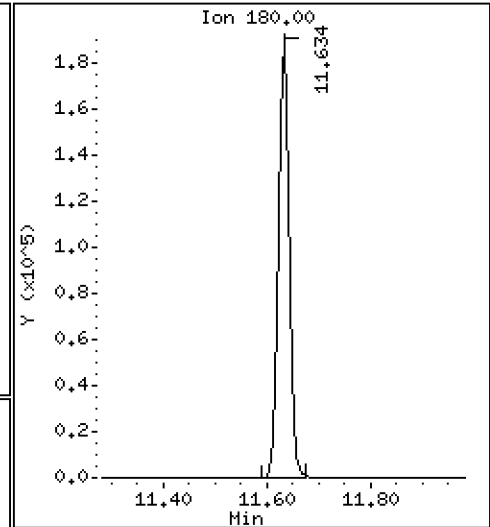
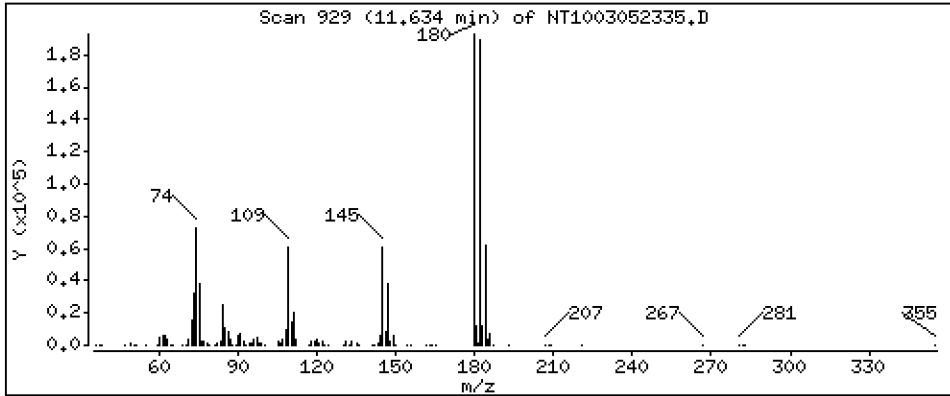
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 5,190 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

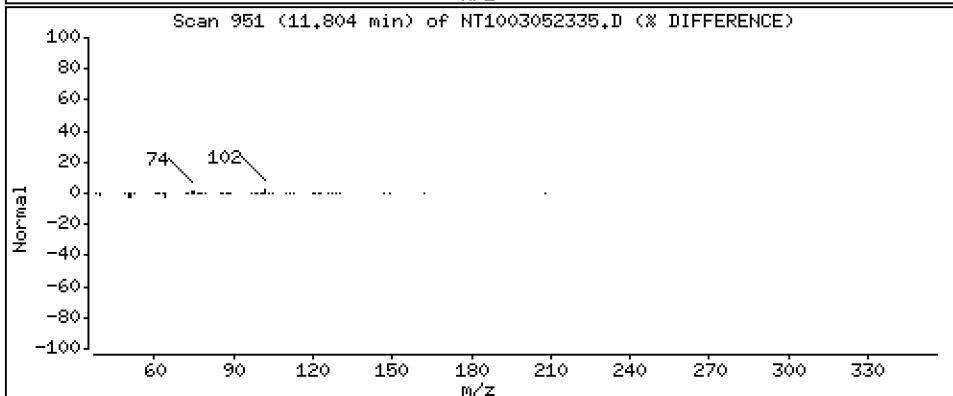
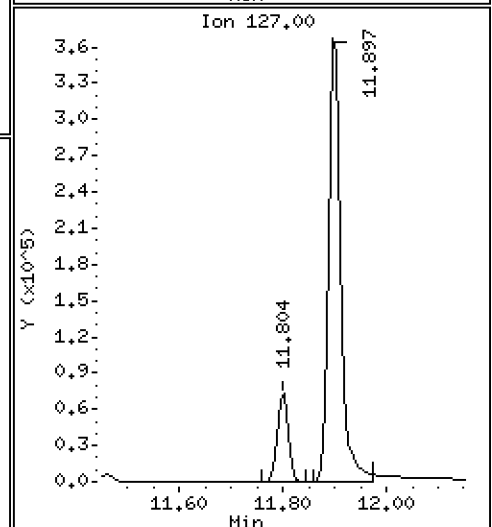
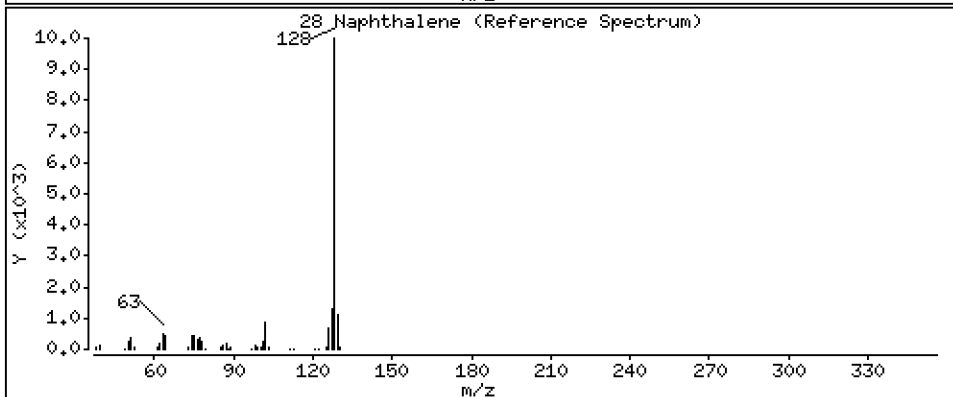
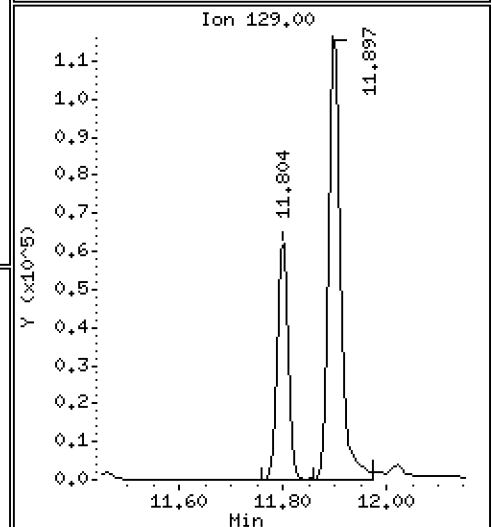
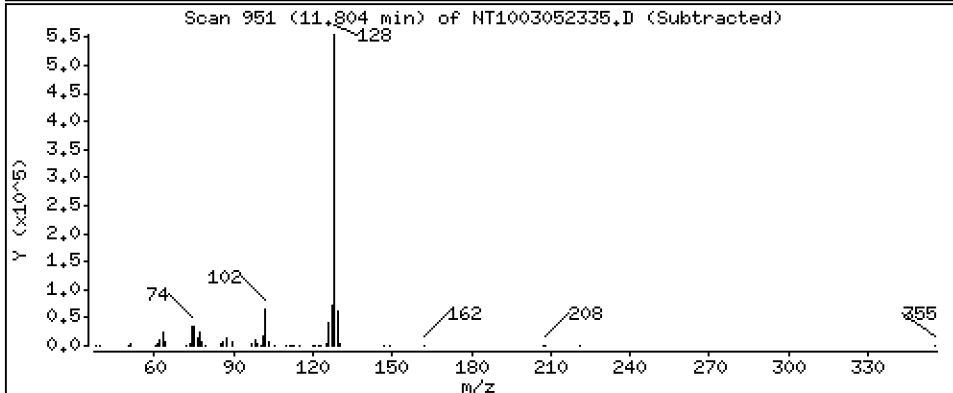
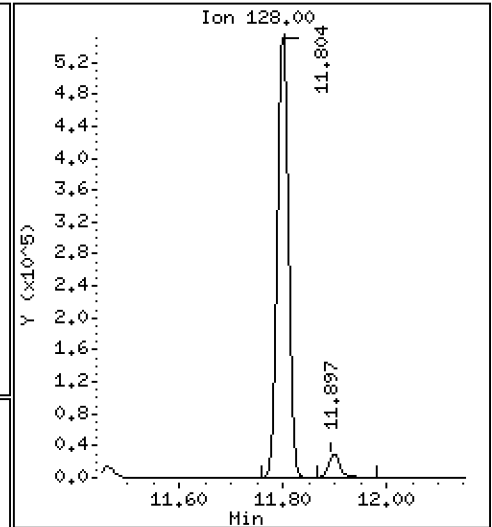
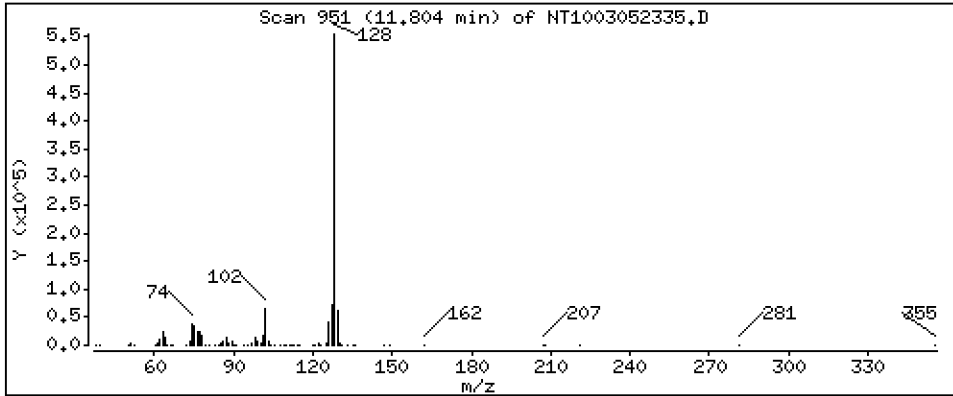
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 4,774 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

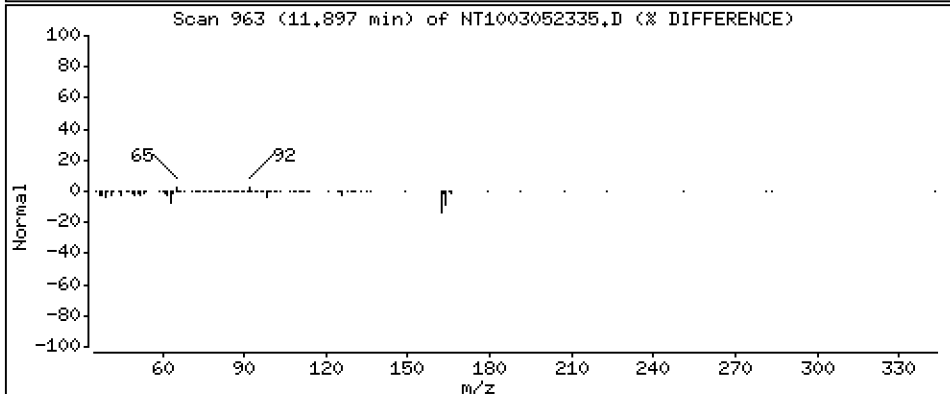
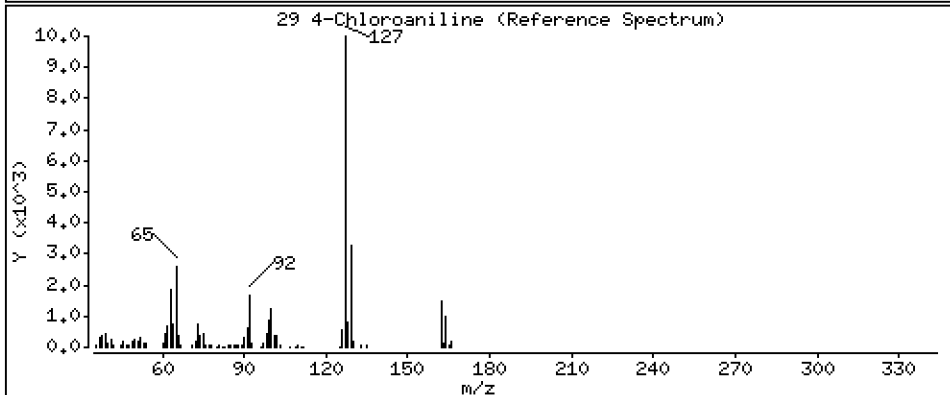
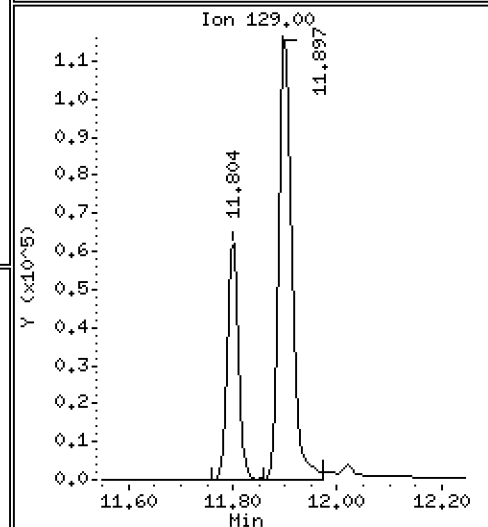
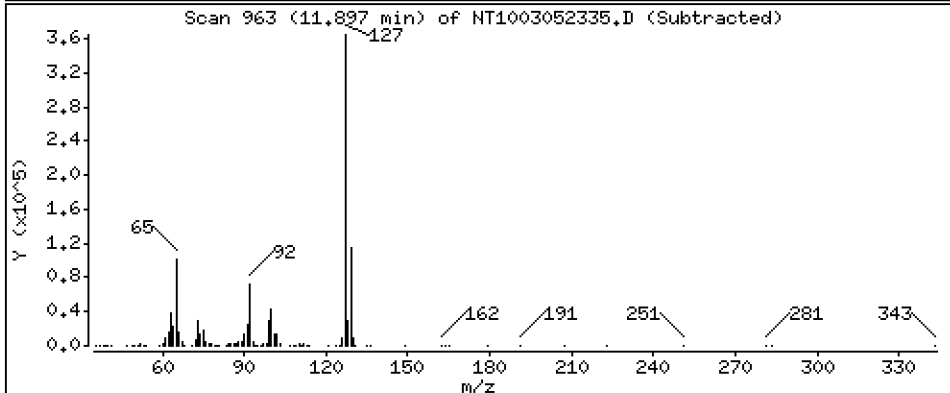
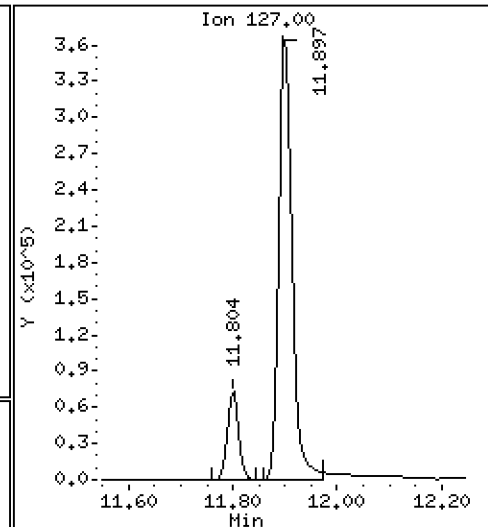
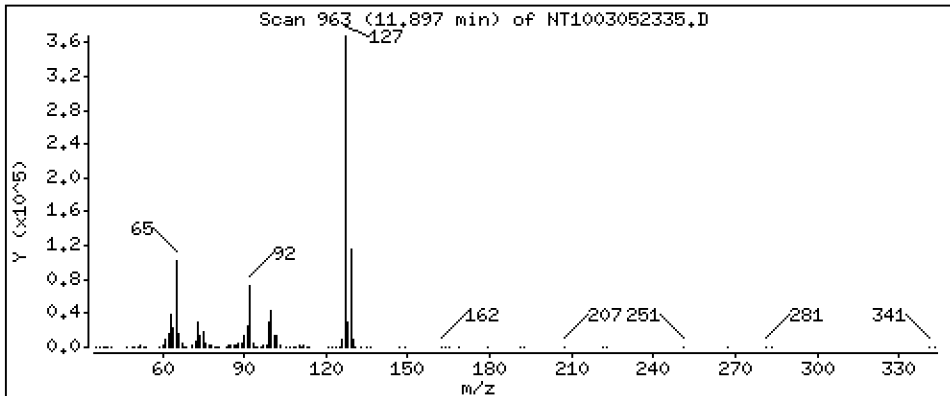
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 8,638 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

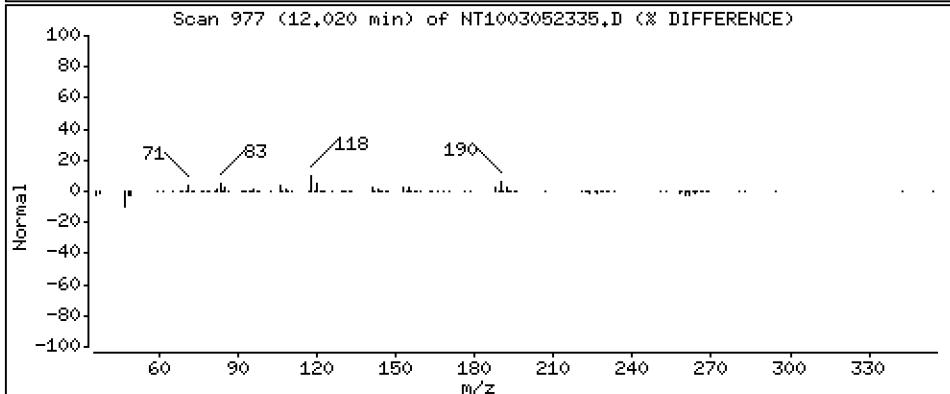
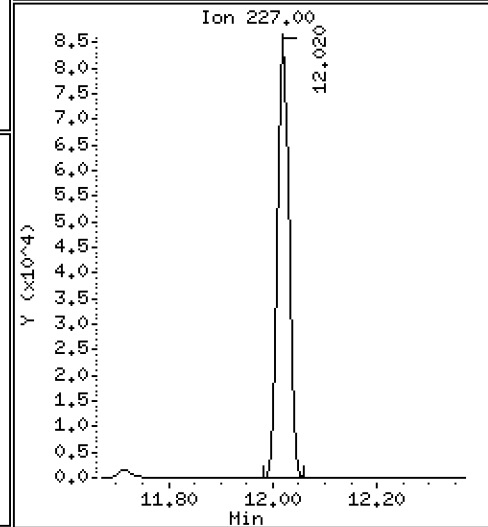
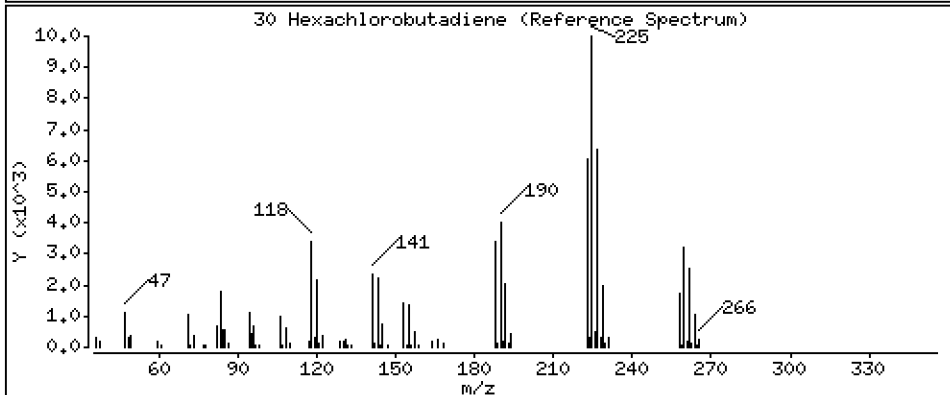
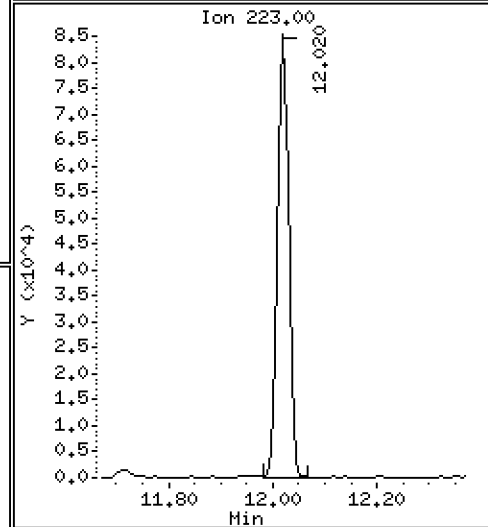
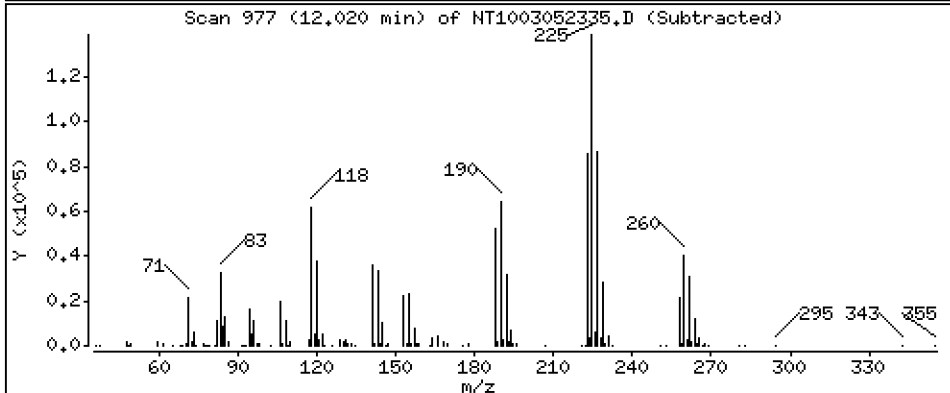
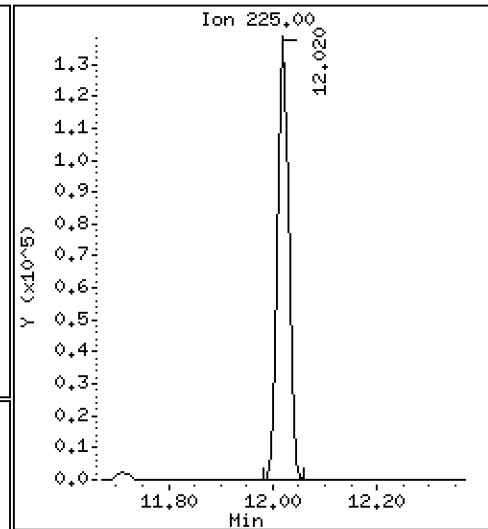
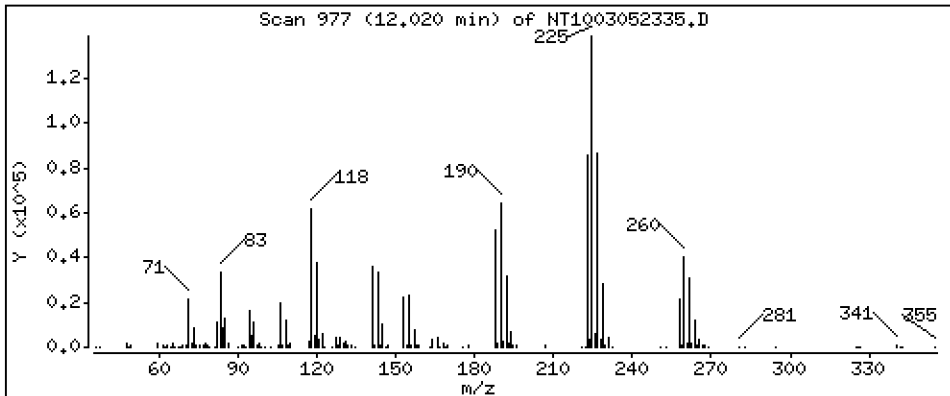
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,823 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

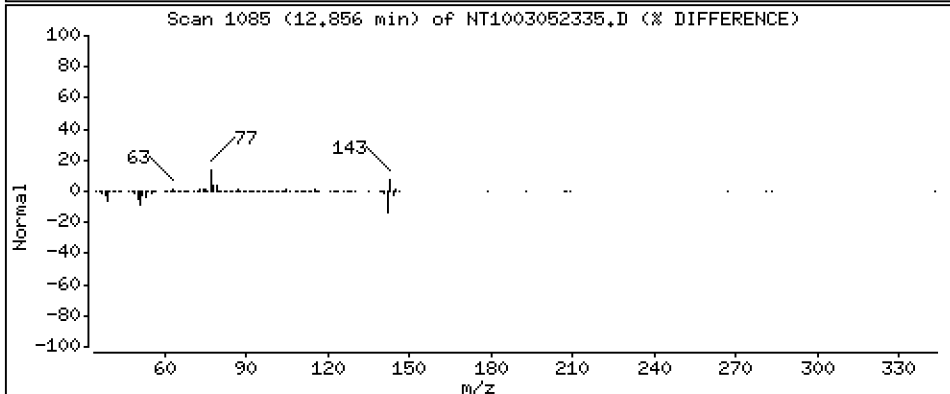
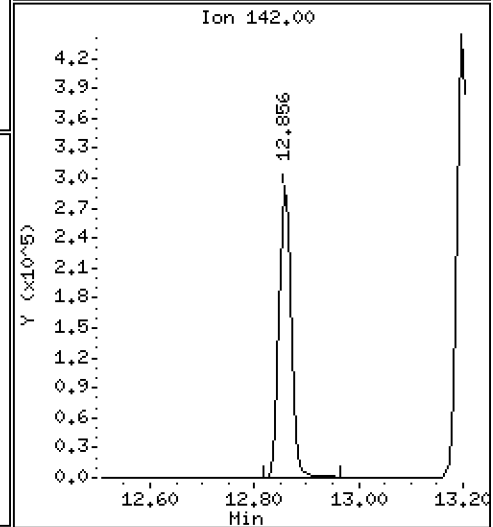
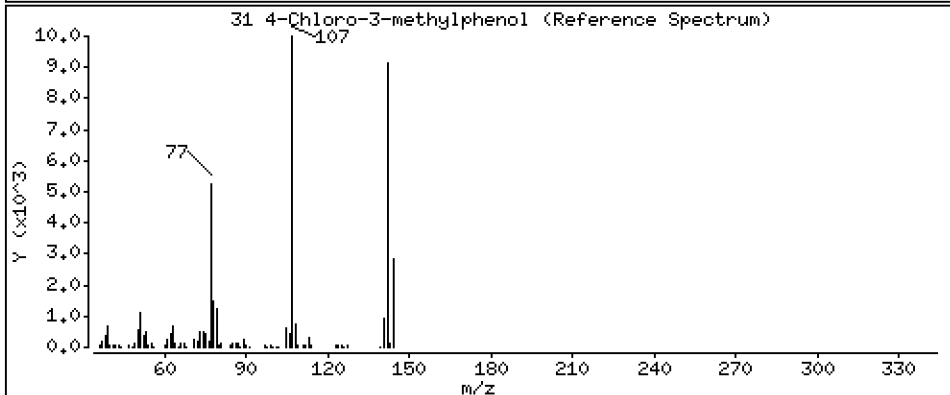
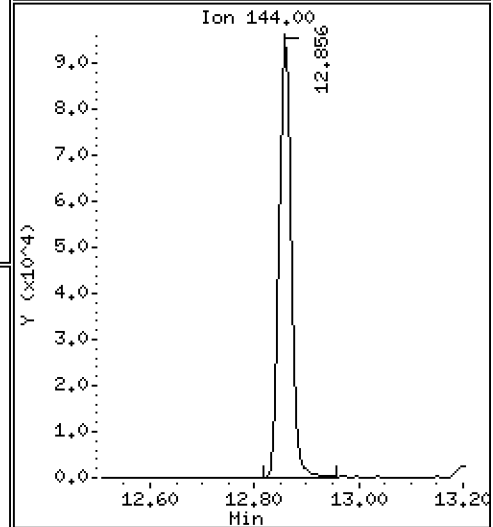
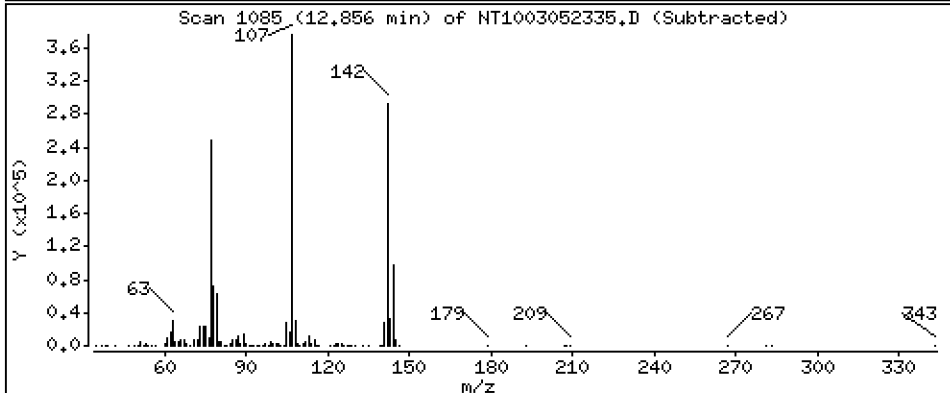
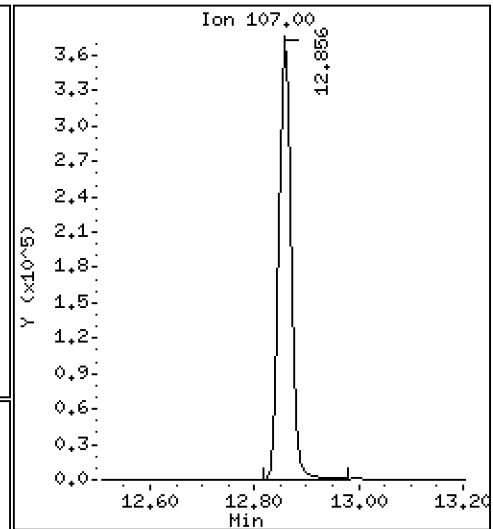
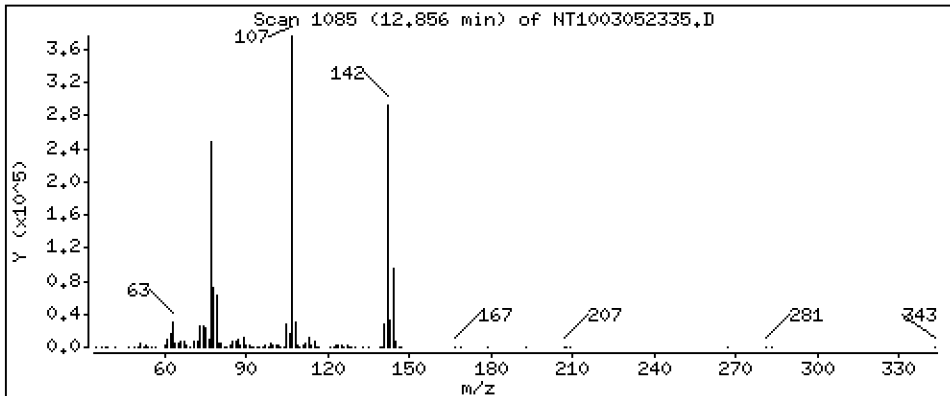
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

31 4-Chloro-3-methylphenol

Concentration: 9,569 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

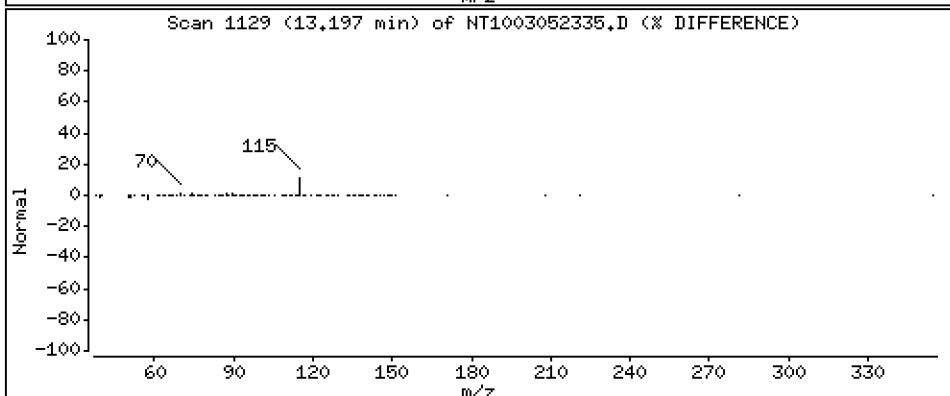
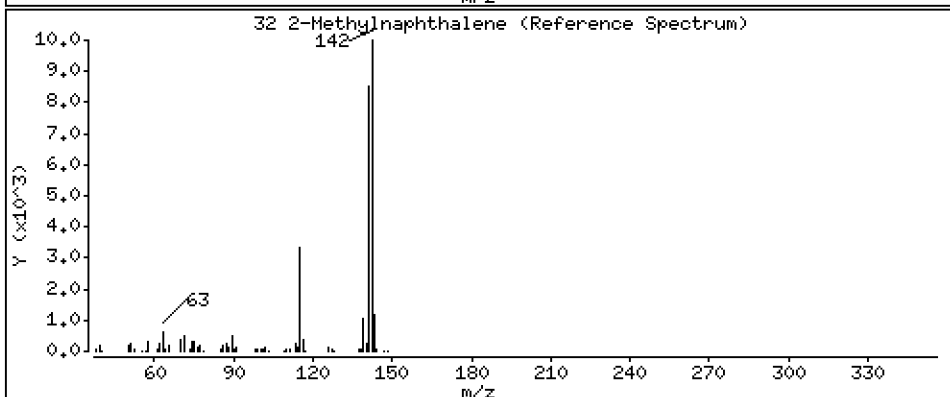
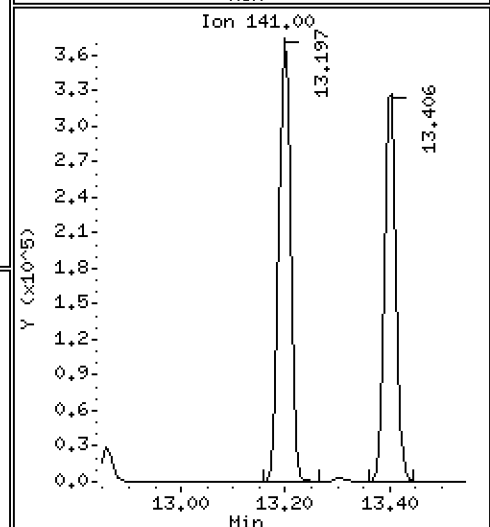
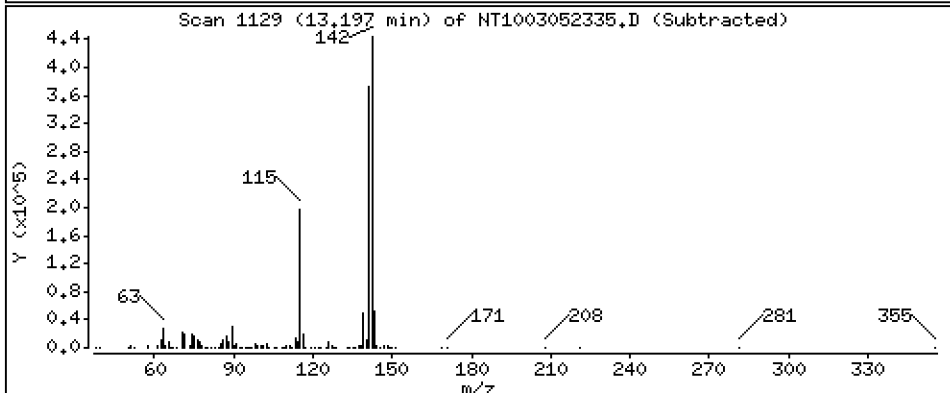
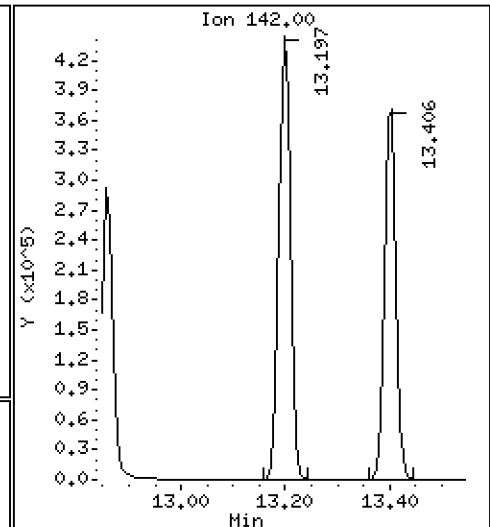
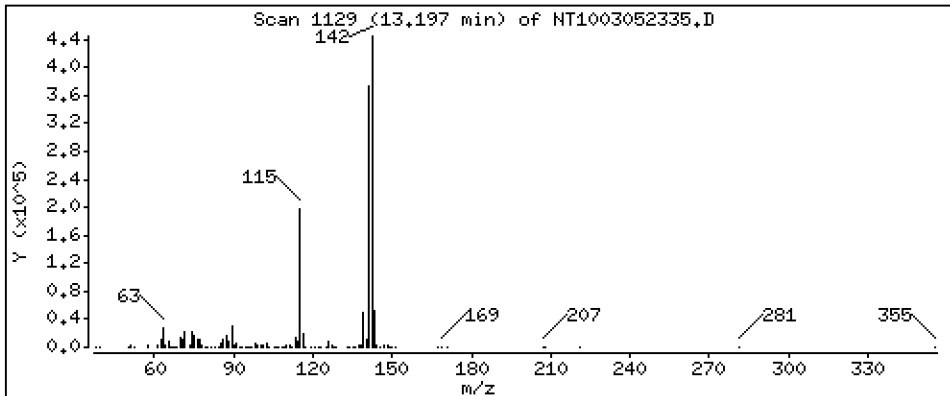
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 5,049 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

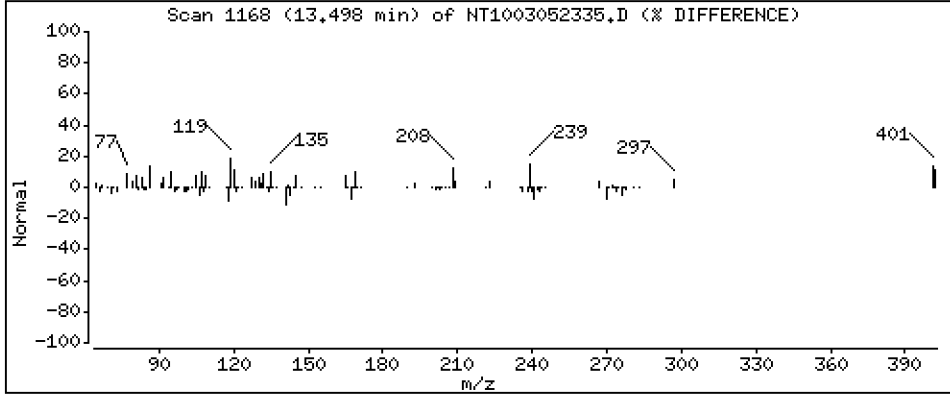
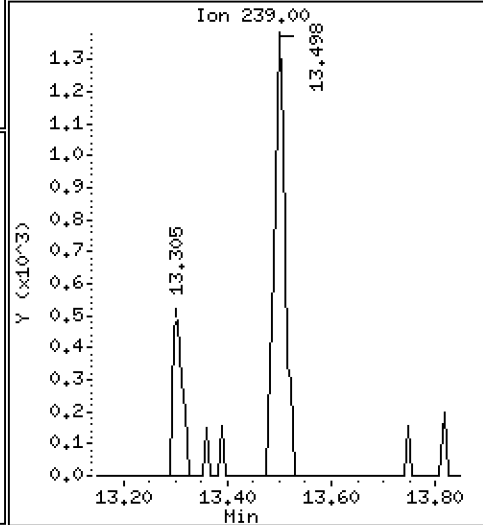
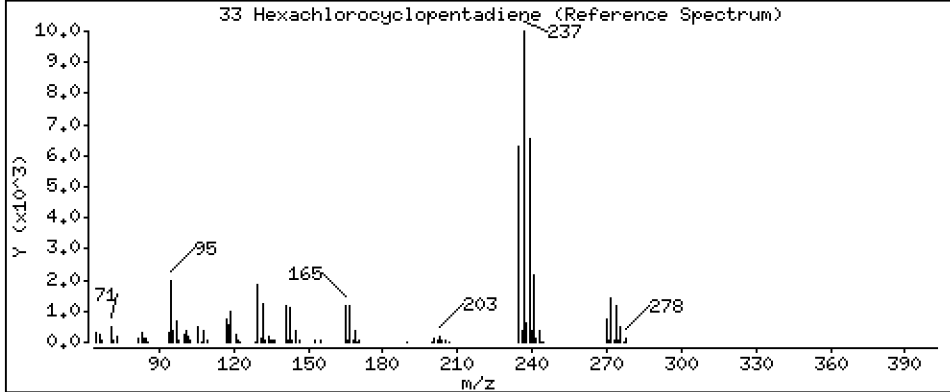
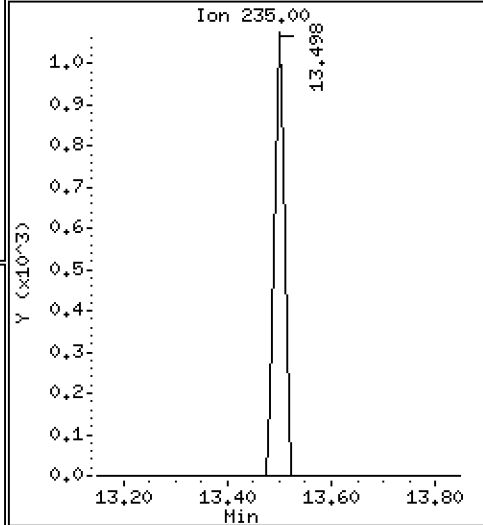
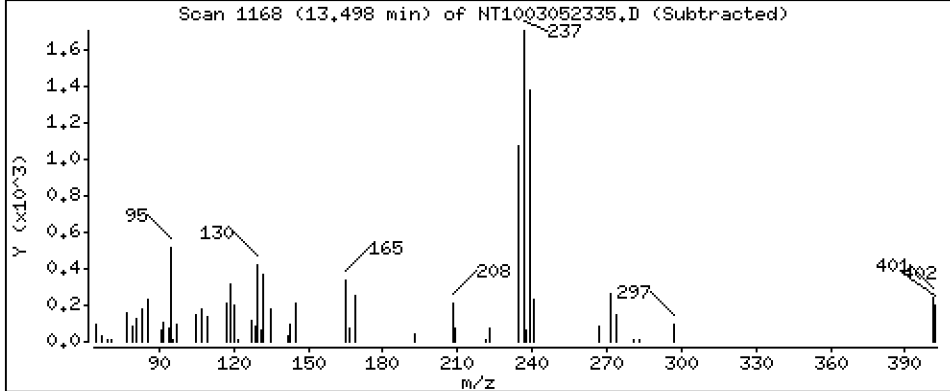
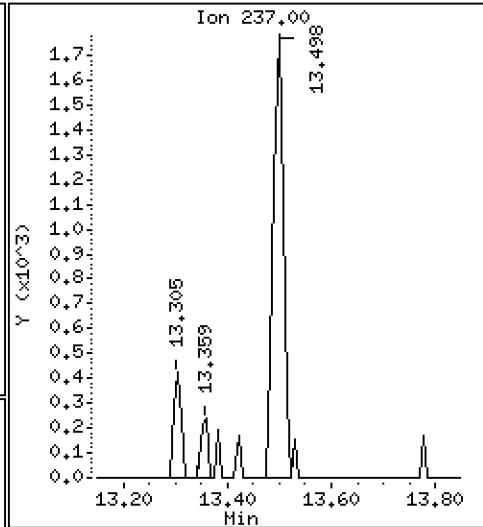
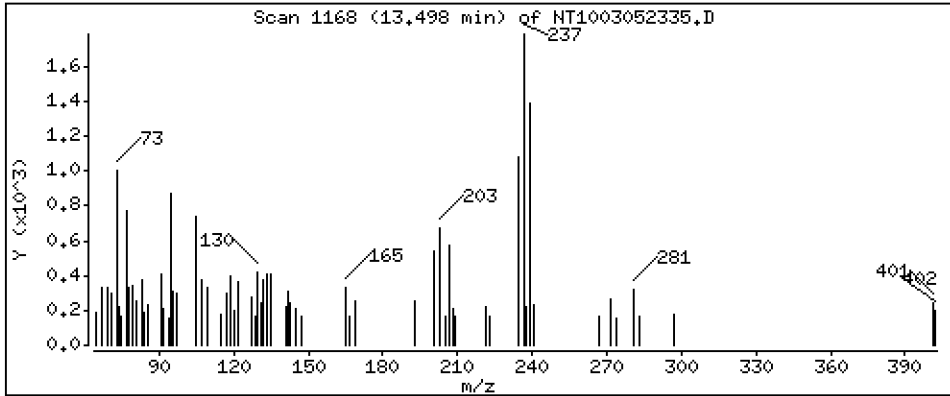
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

33 Hexachlorocyclopentadiene

Concentration: 0.1740 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

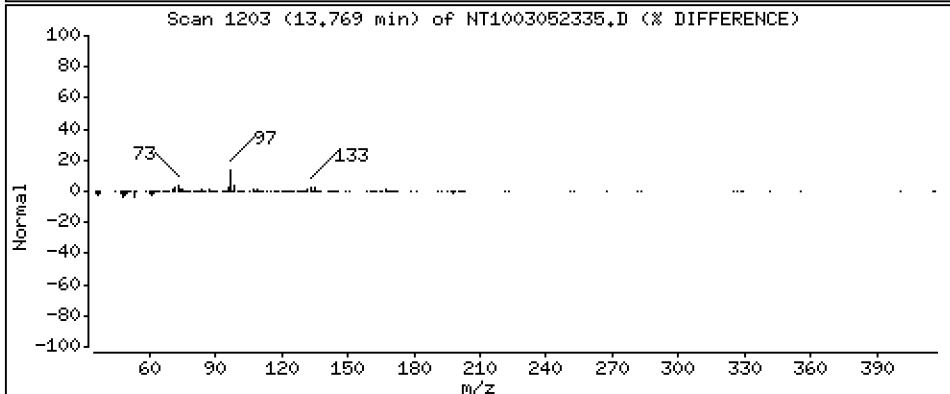
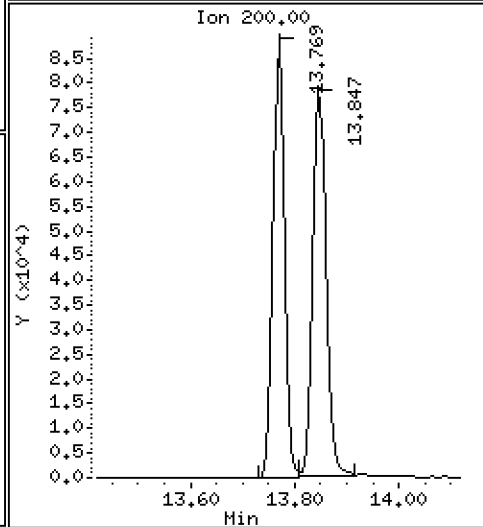
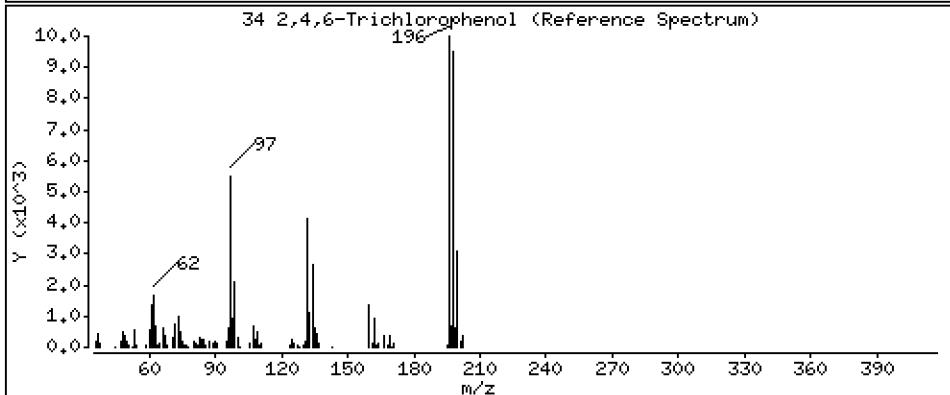
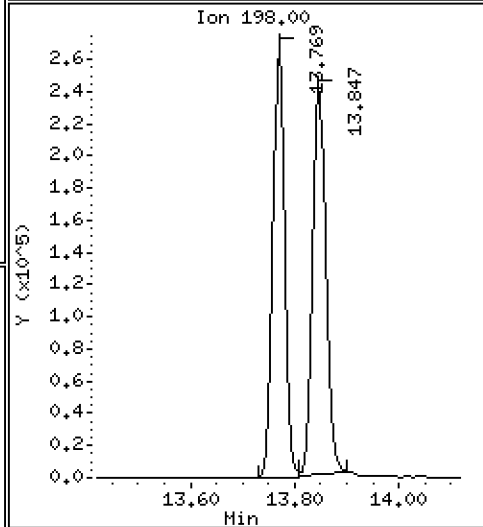
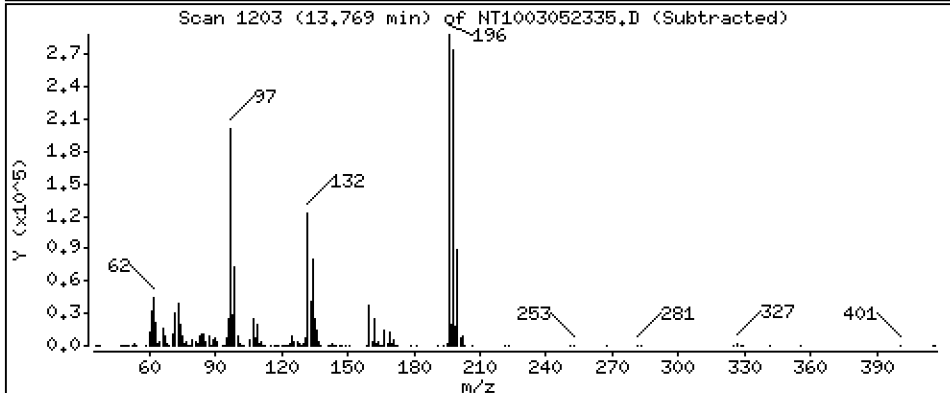
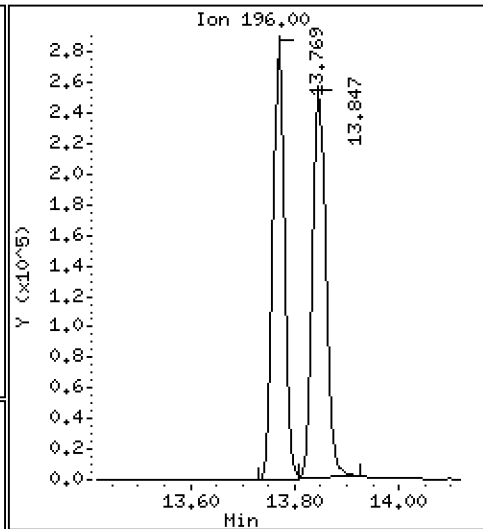
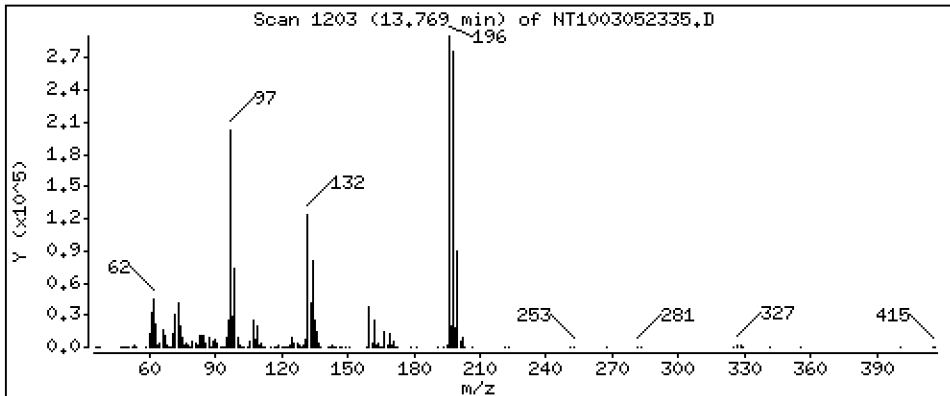
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 10,63 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

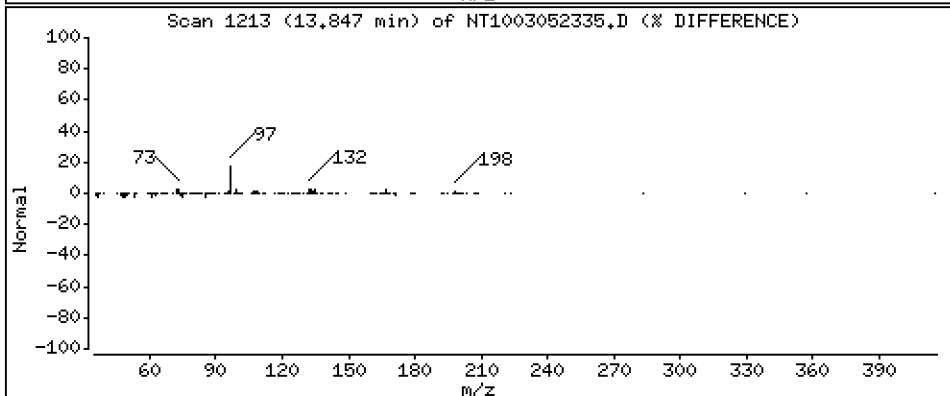
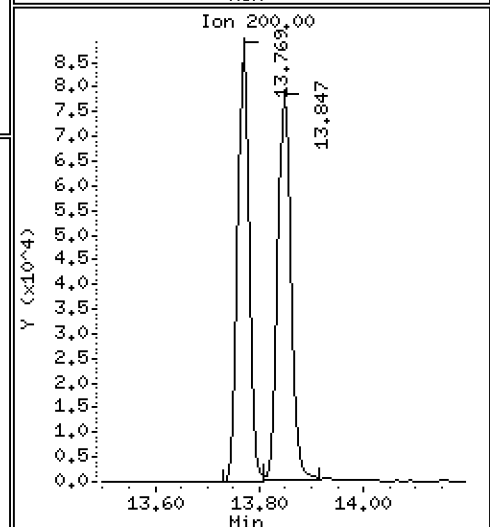
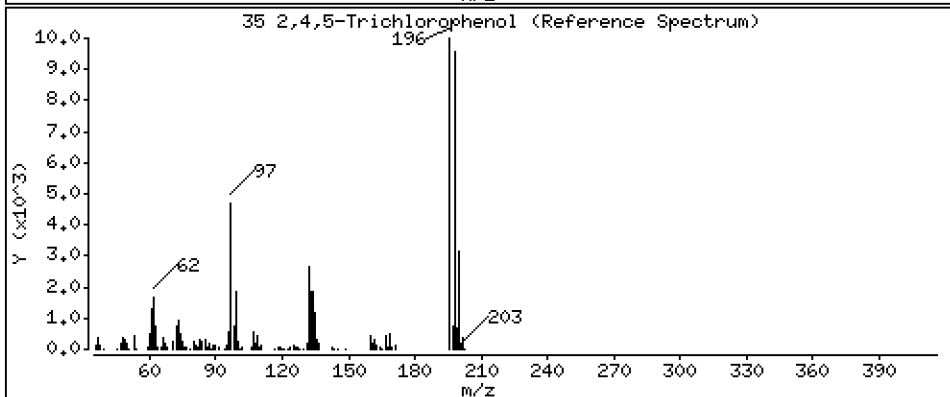
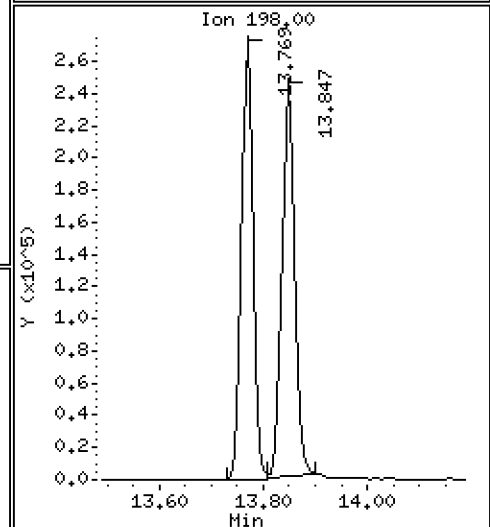
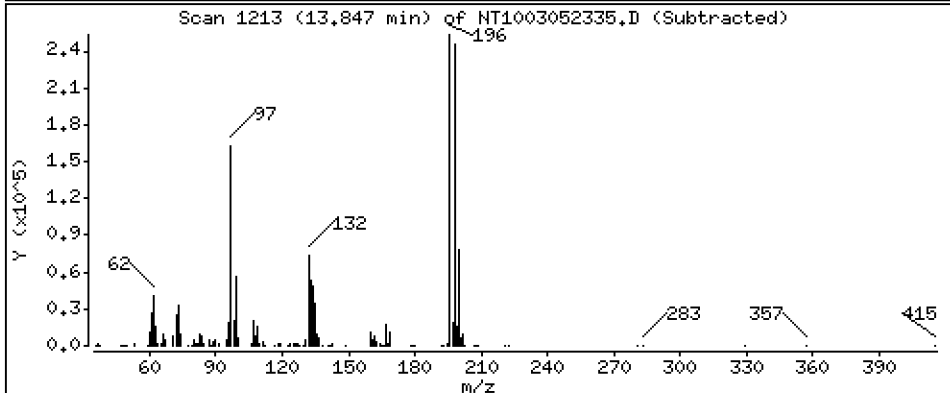
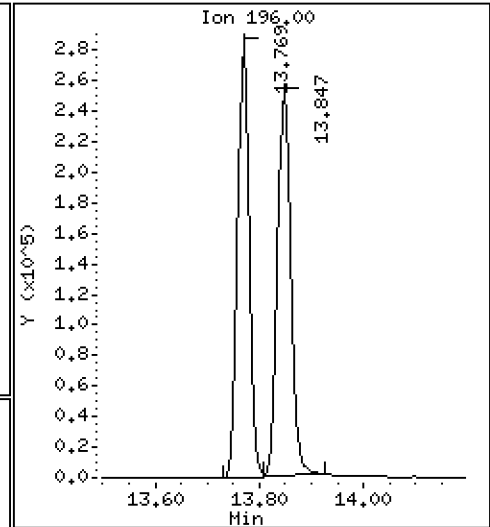
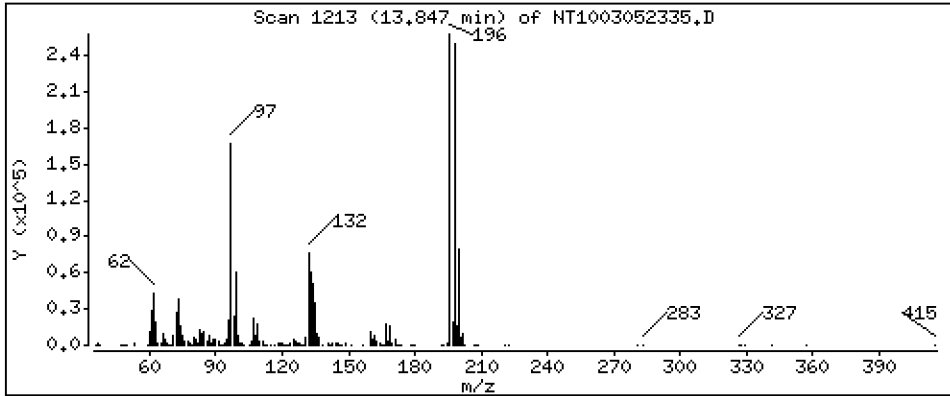
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 10,29 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

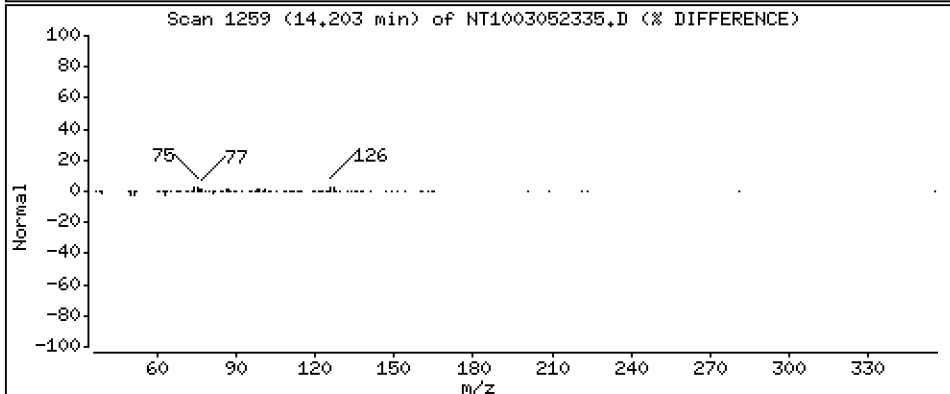
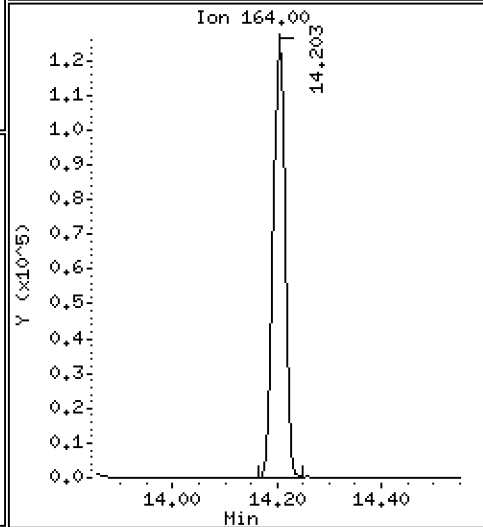
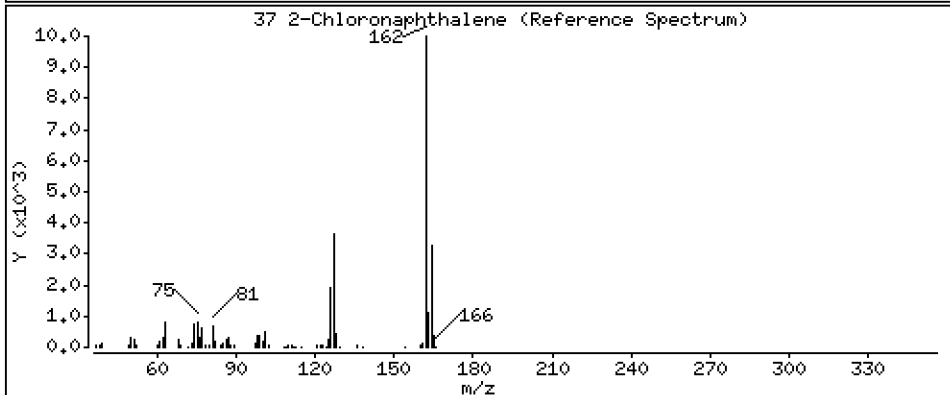
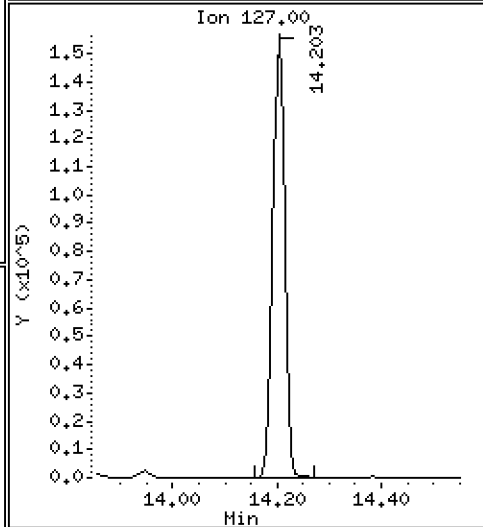
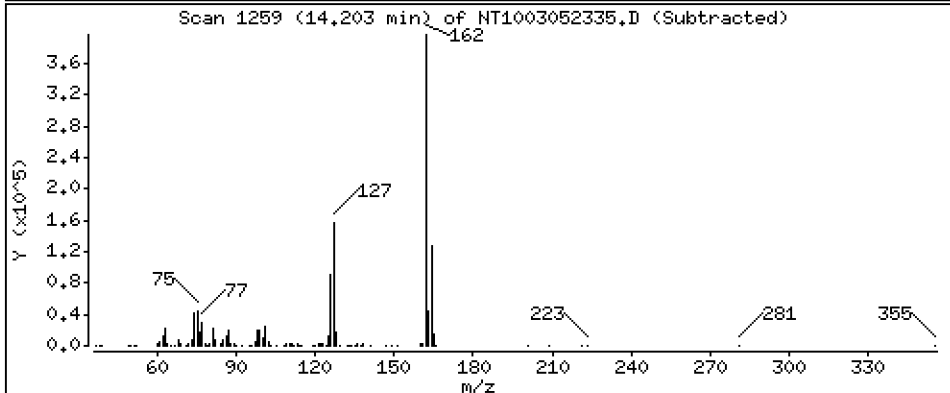
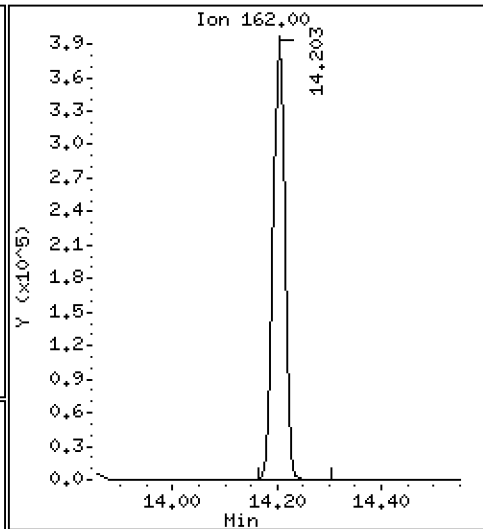
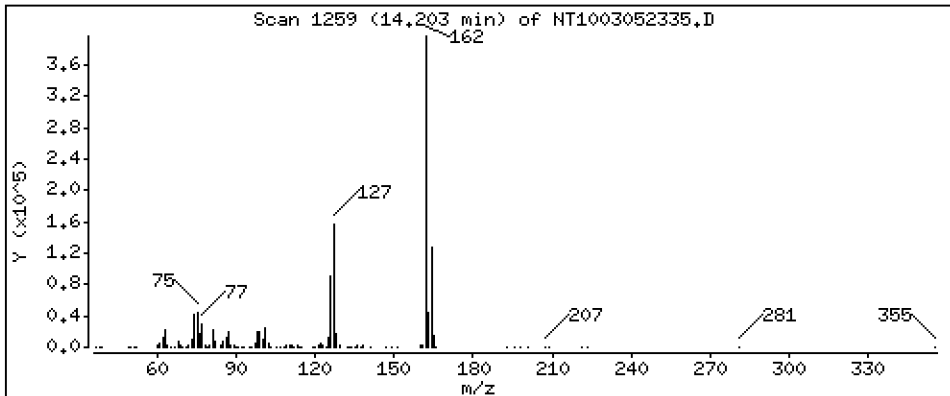
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 5,287 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

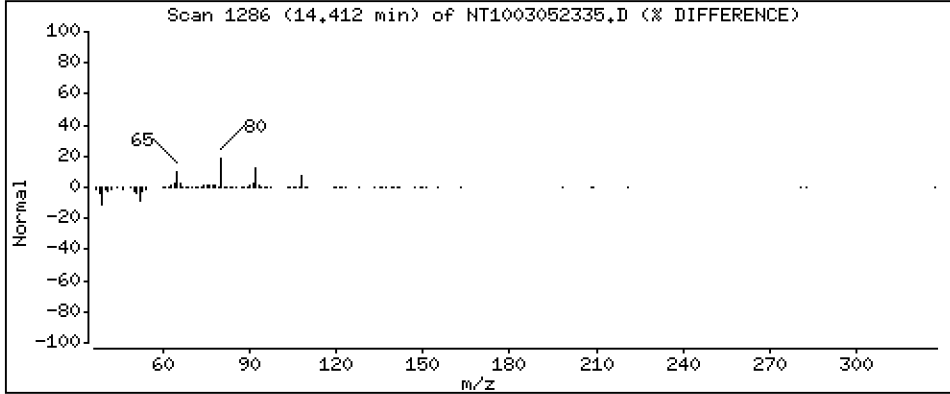
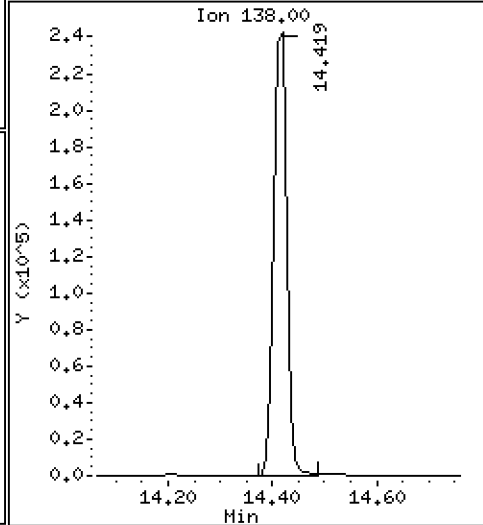
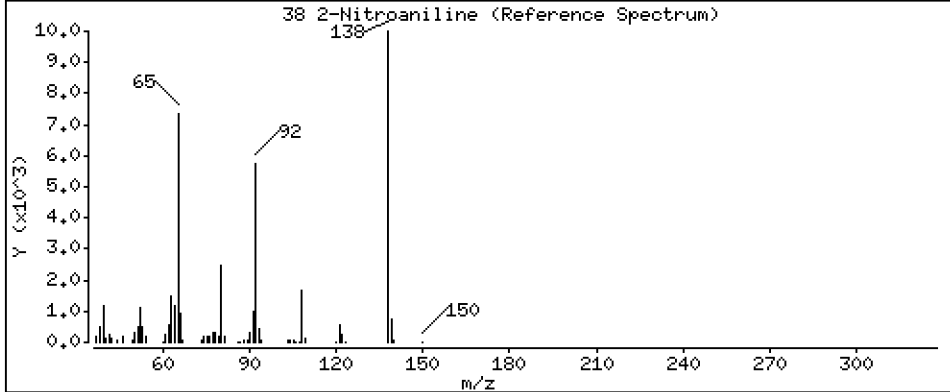
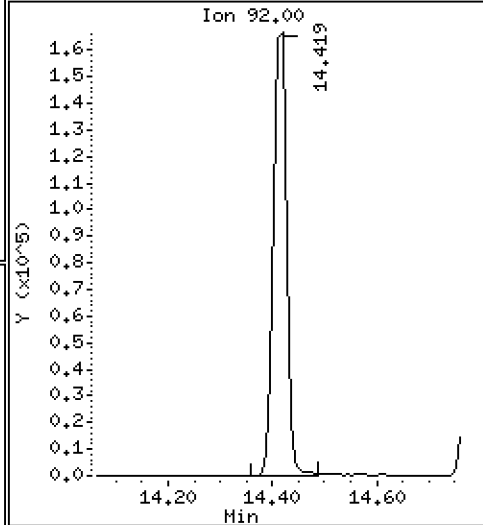
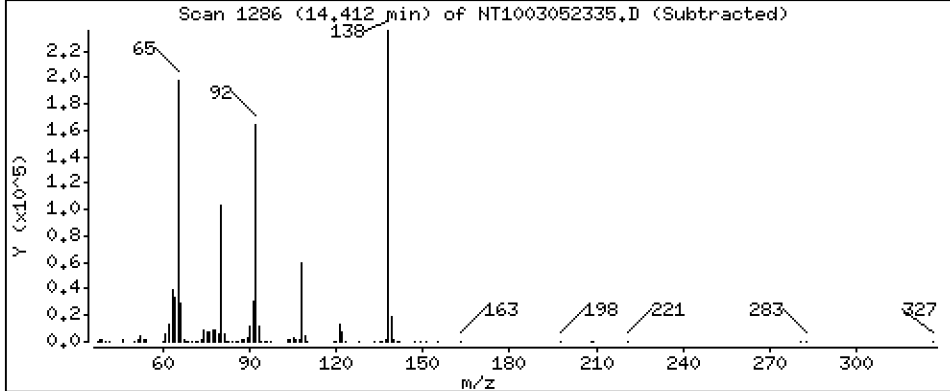
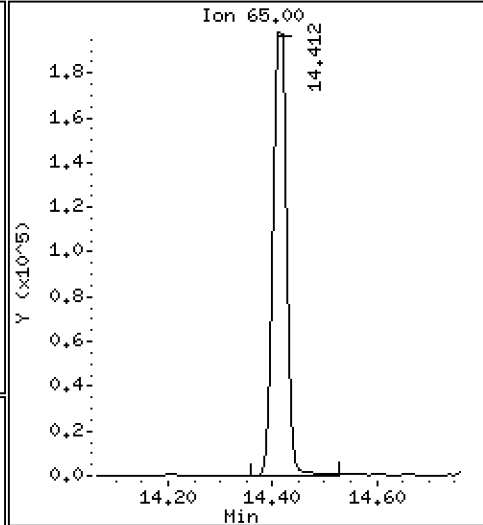
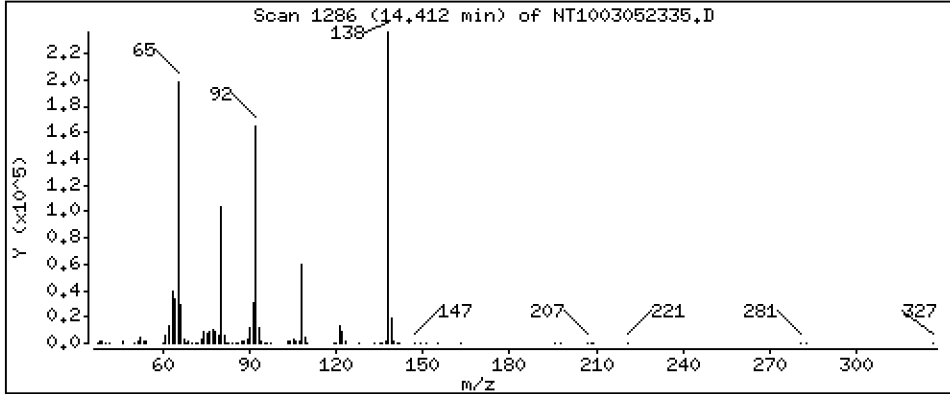
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 10,81 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

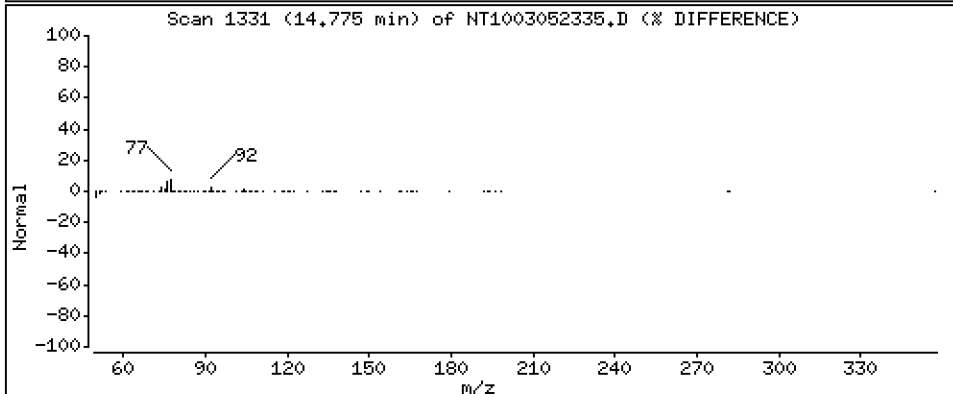
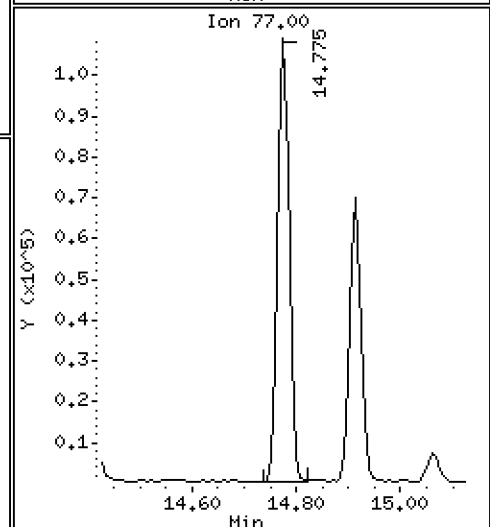
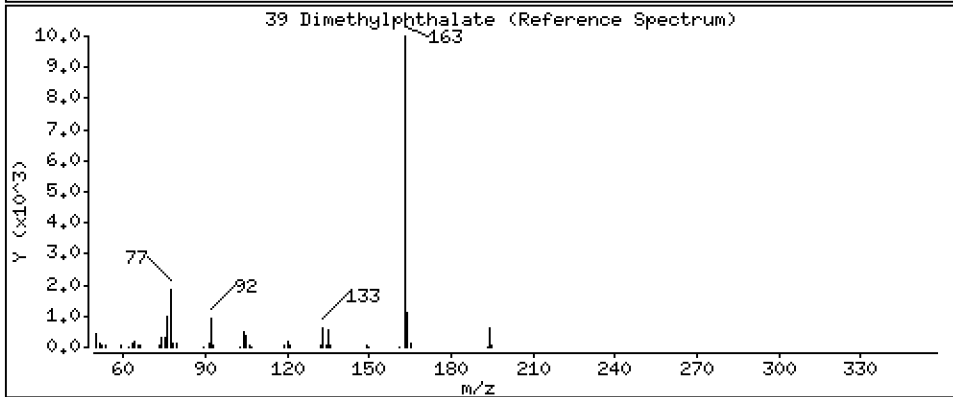
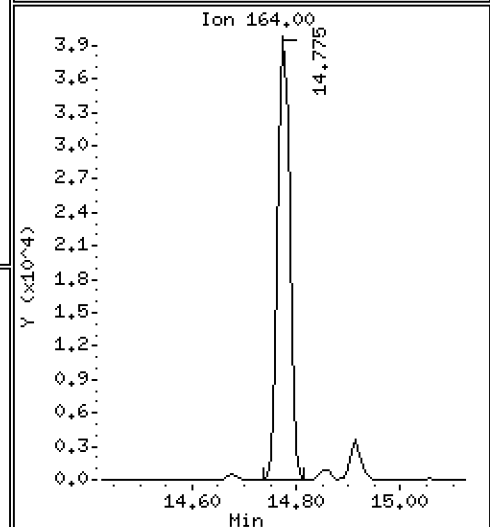
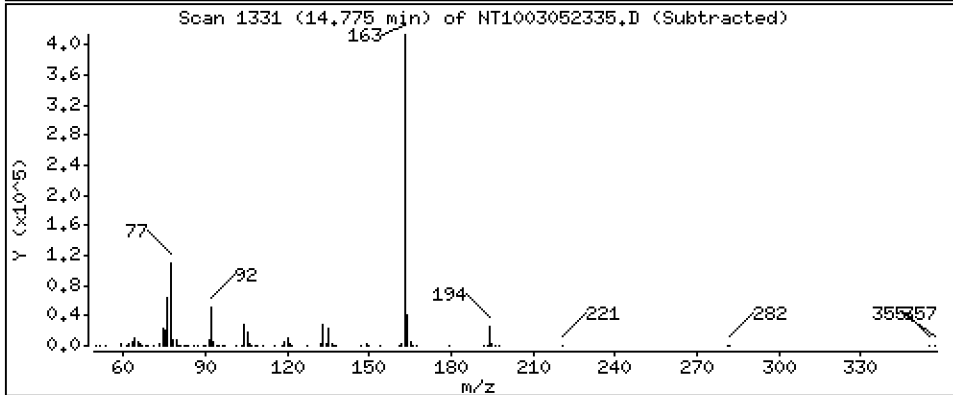
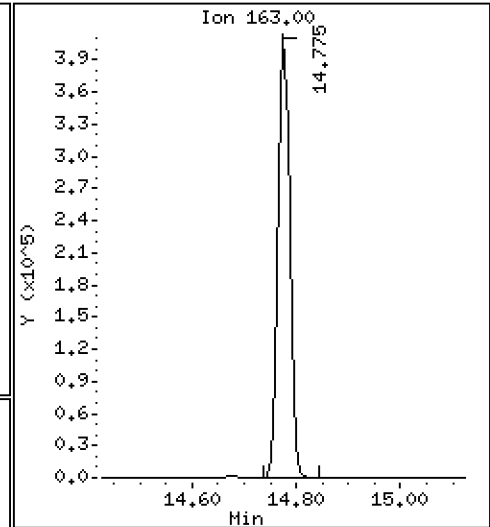
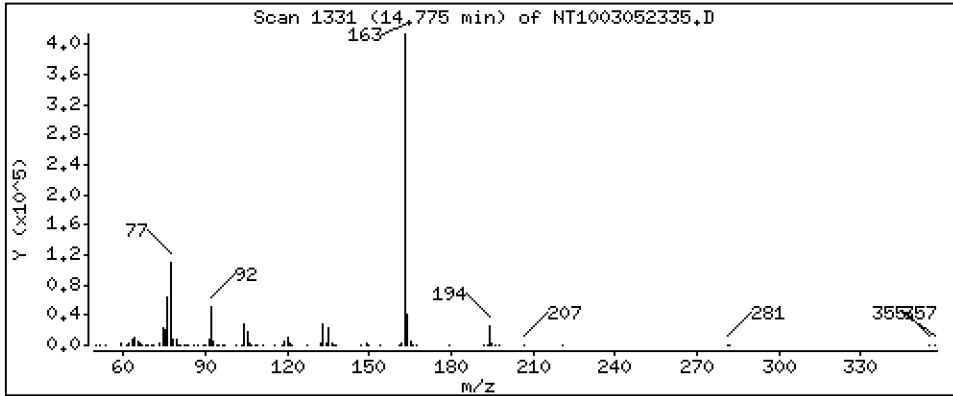
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,778 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

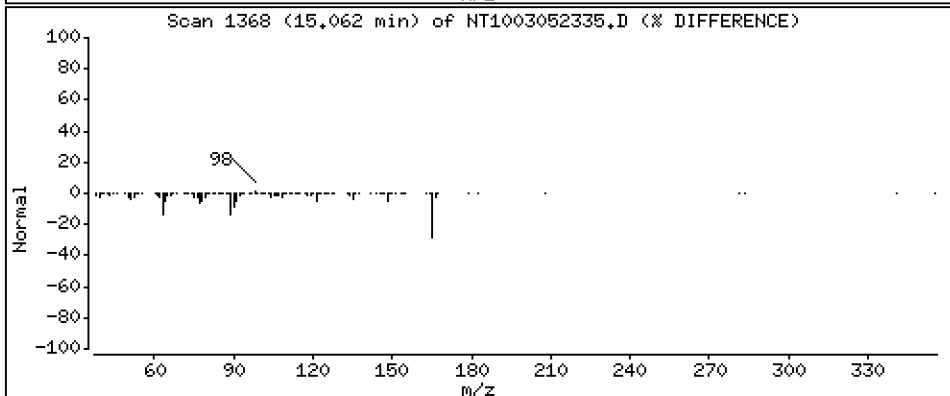
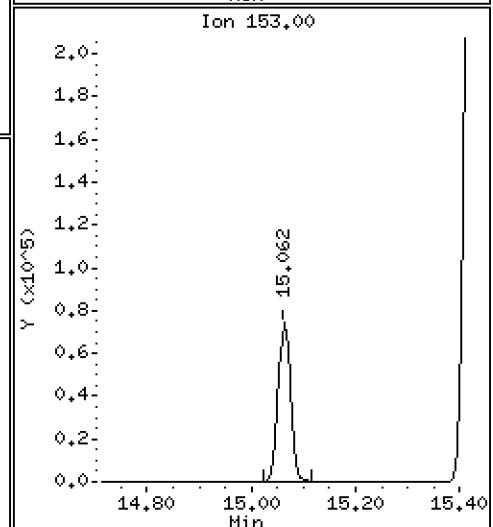
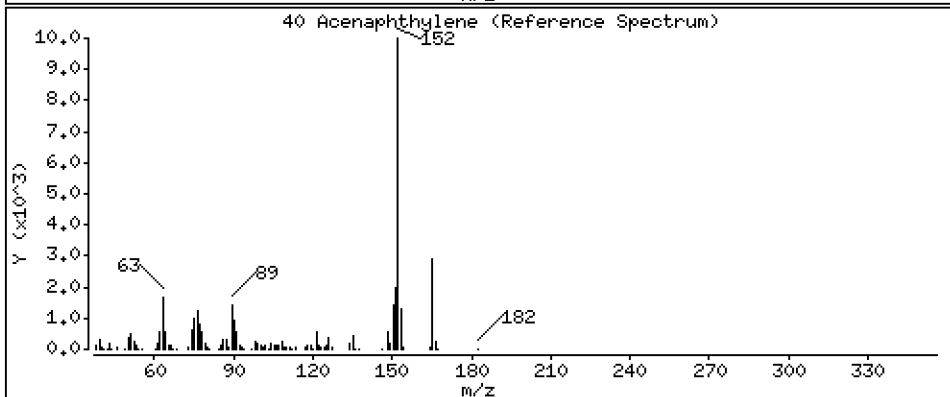
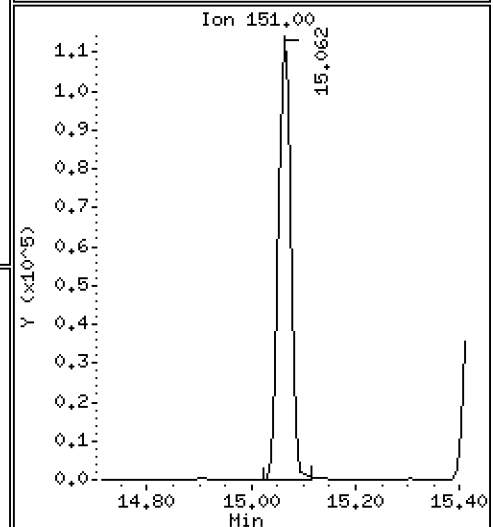
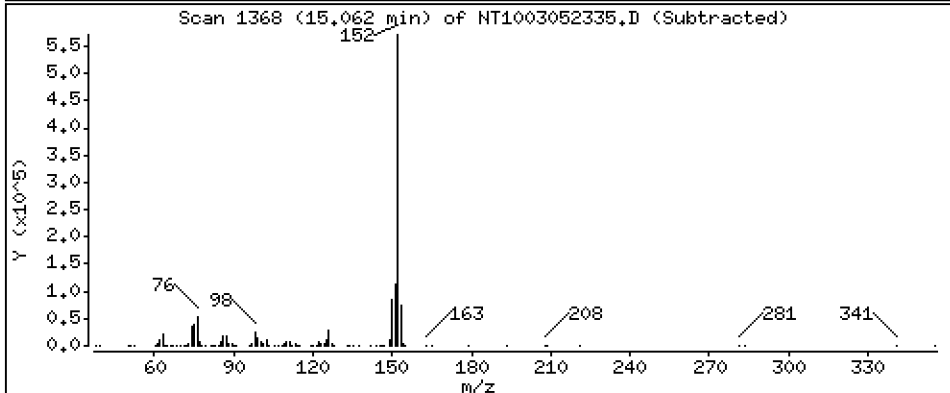
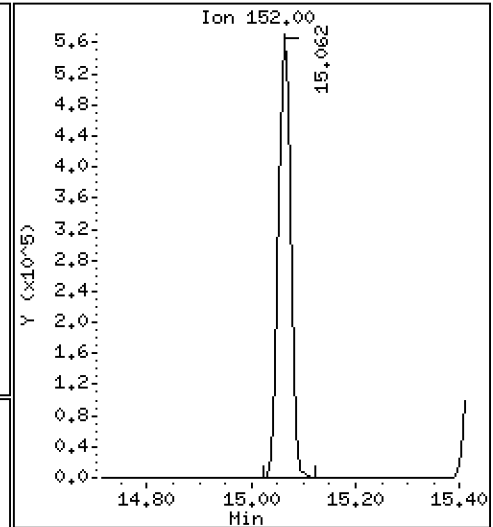
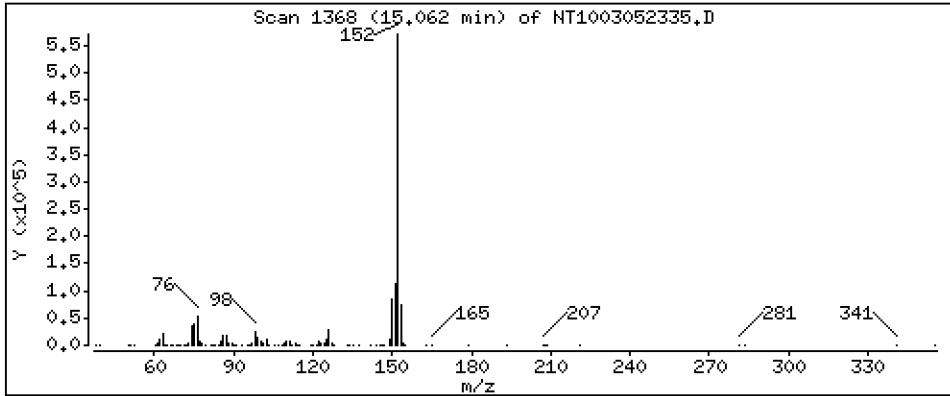
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 5,493 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

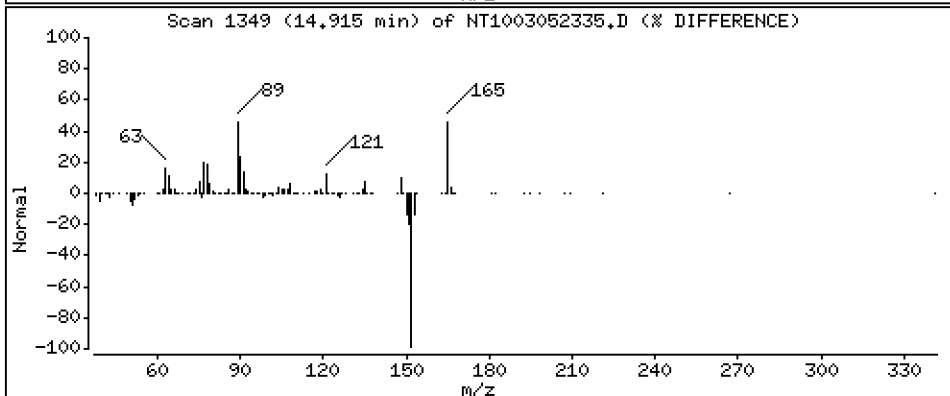
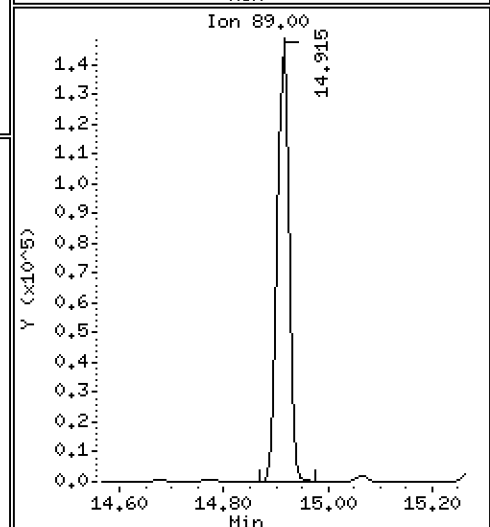
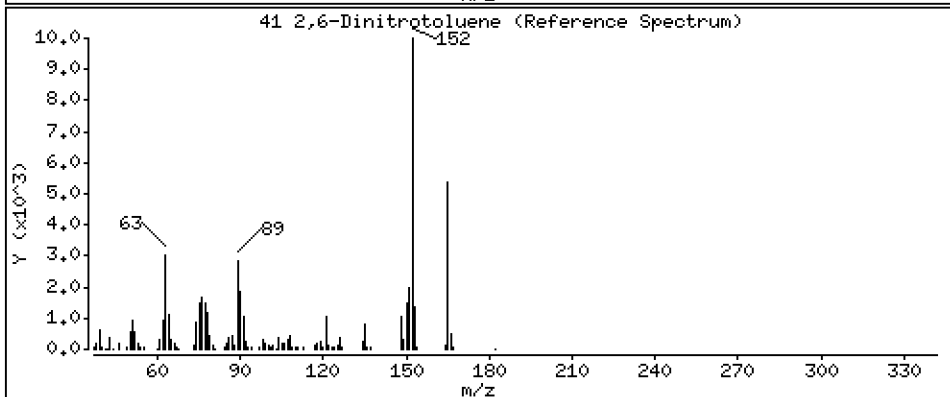
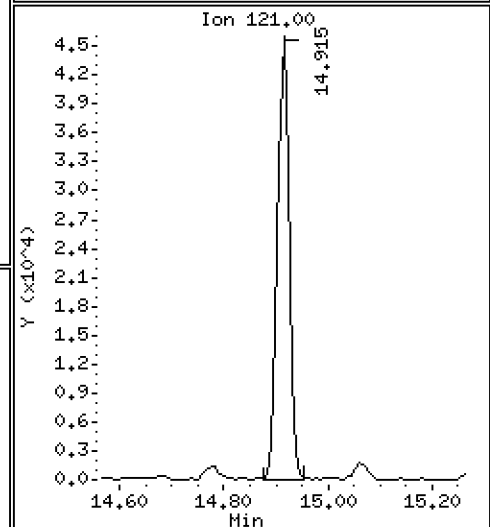
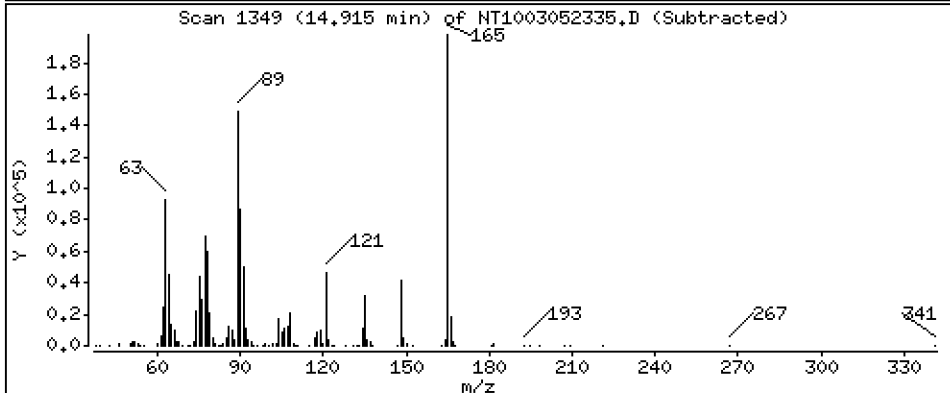
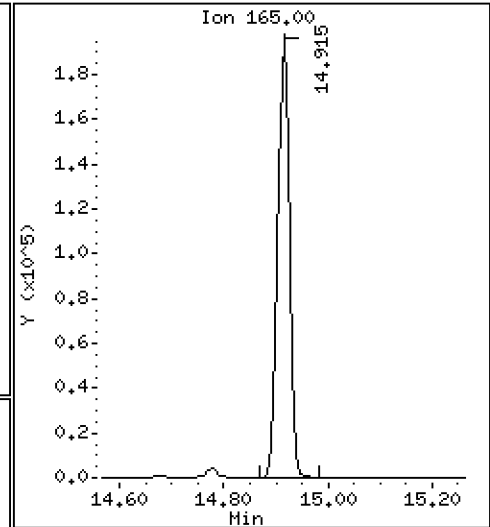
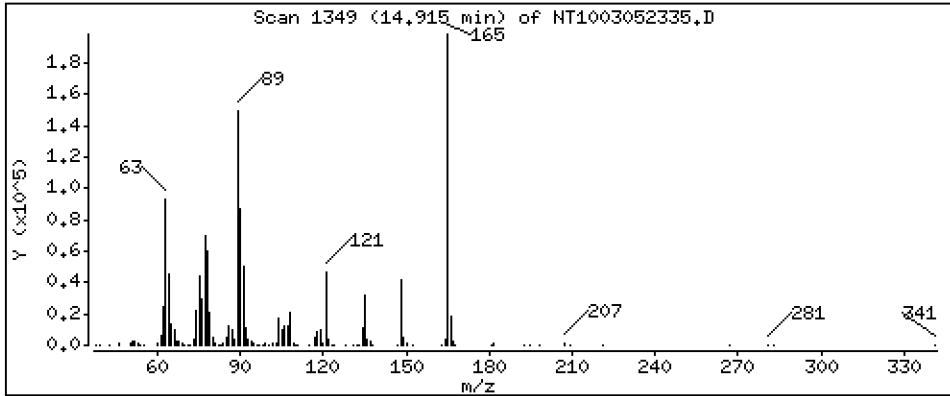
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

41 2,6-Dinitrotoluene

Concentration: 10.00 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

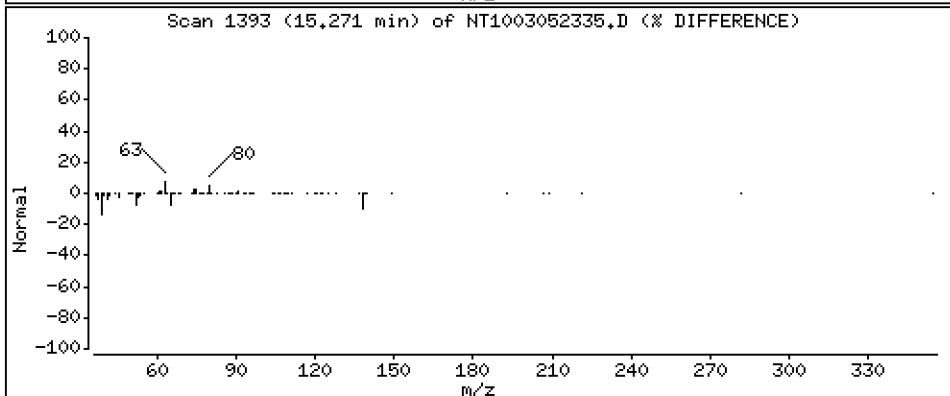
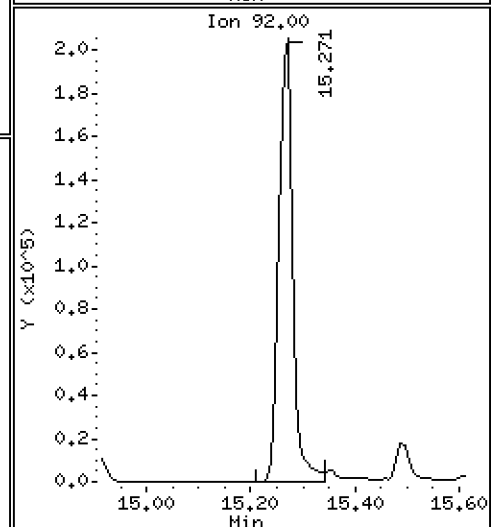
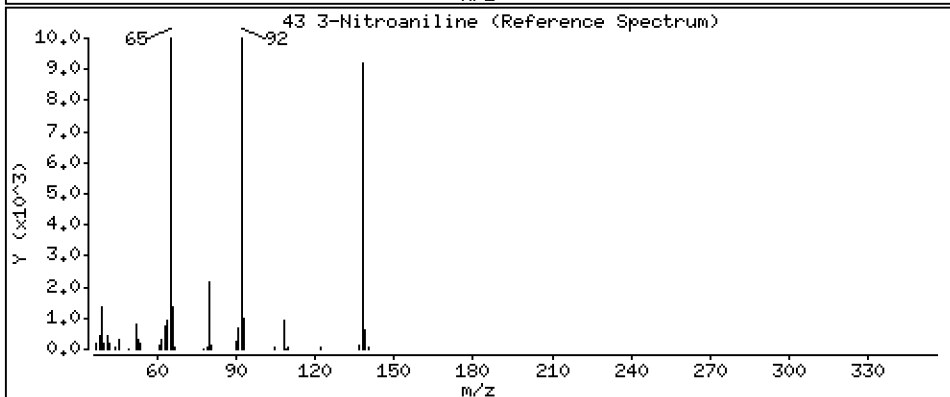
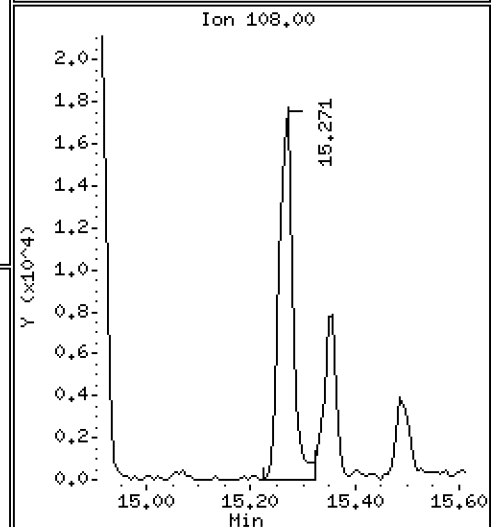
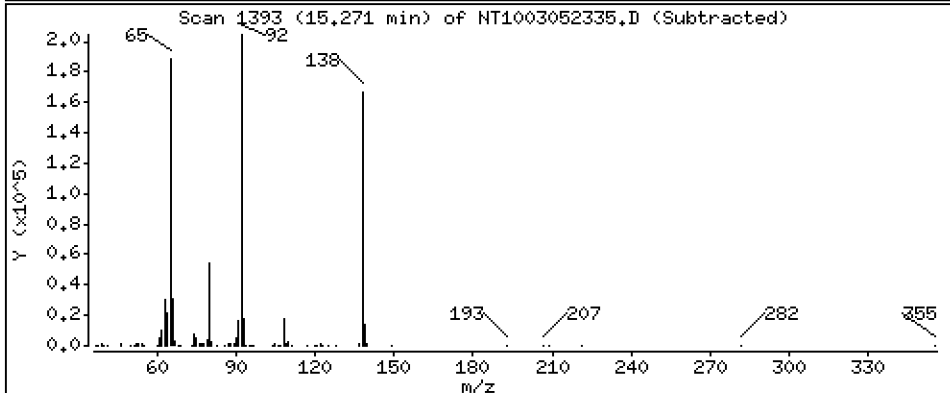
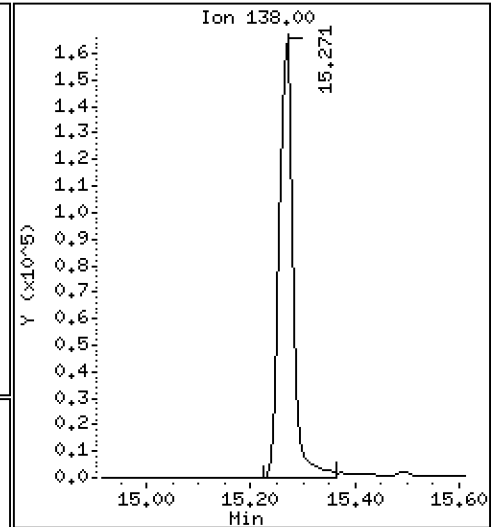
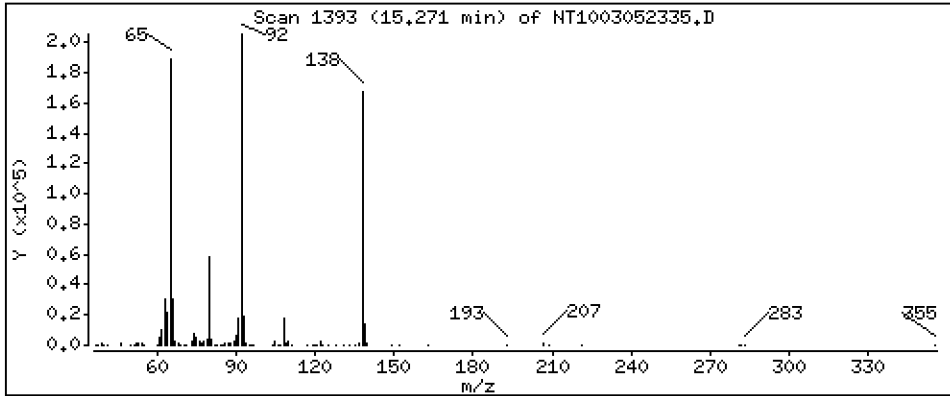
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

43 3-Nitroaniline

Concentration: 9,148 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

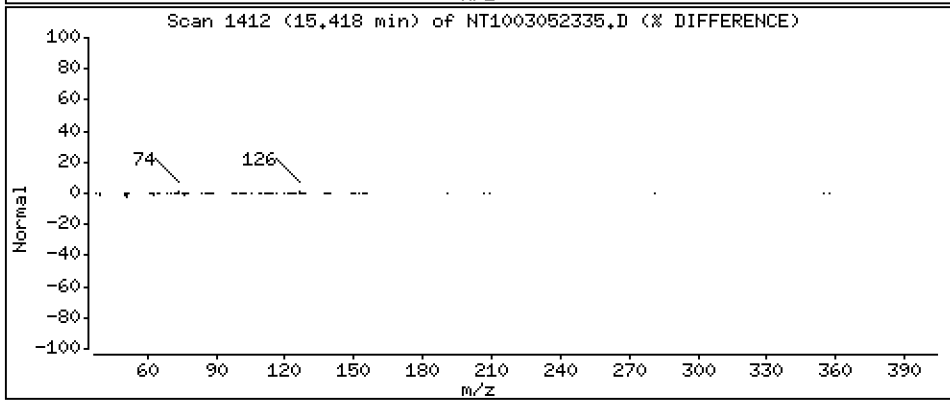
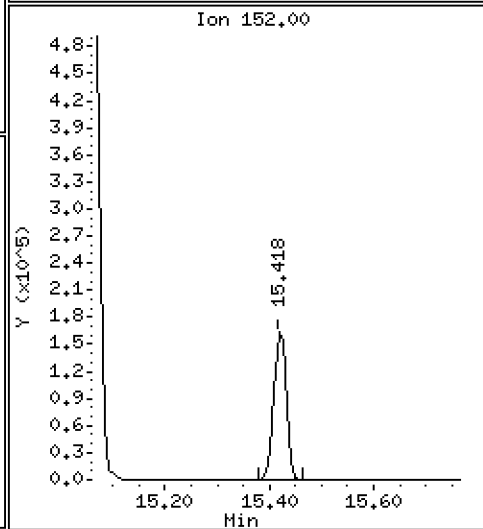
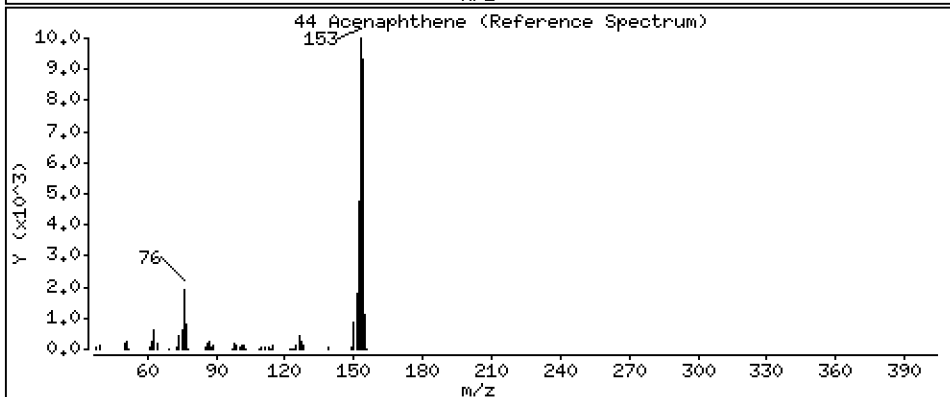
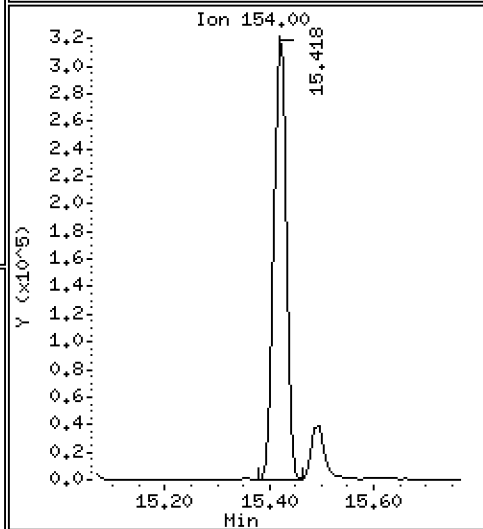
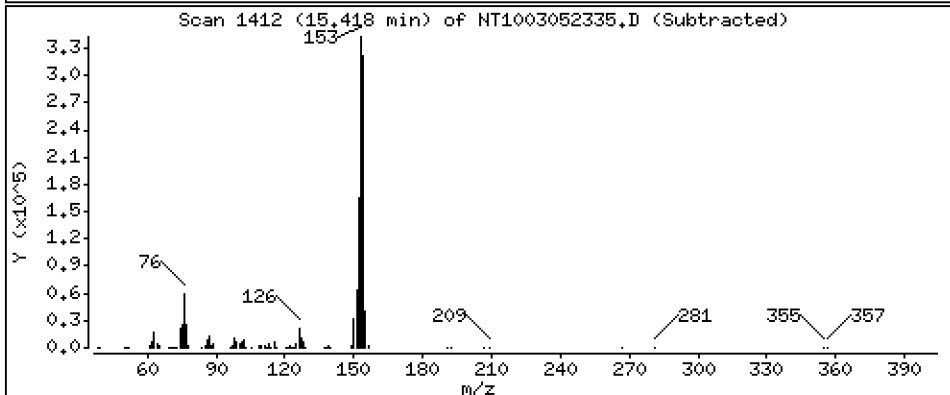
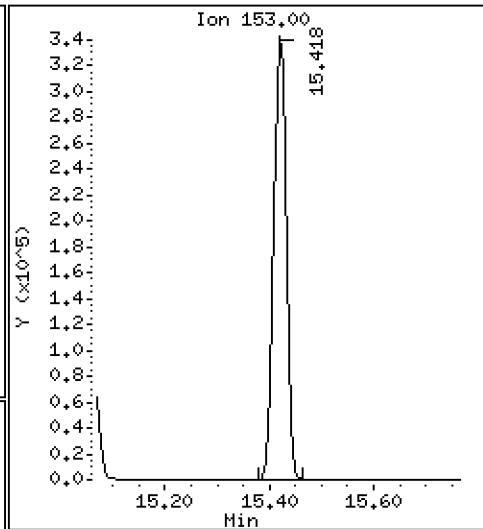
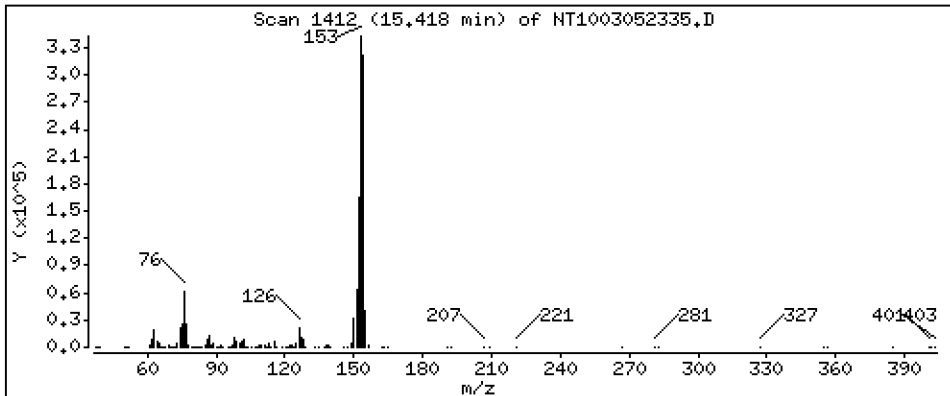
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

44 Acenaphthene

Concentration: 4,746 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

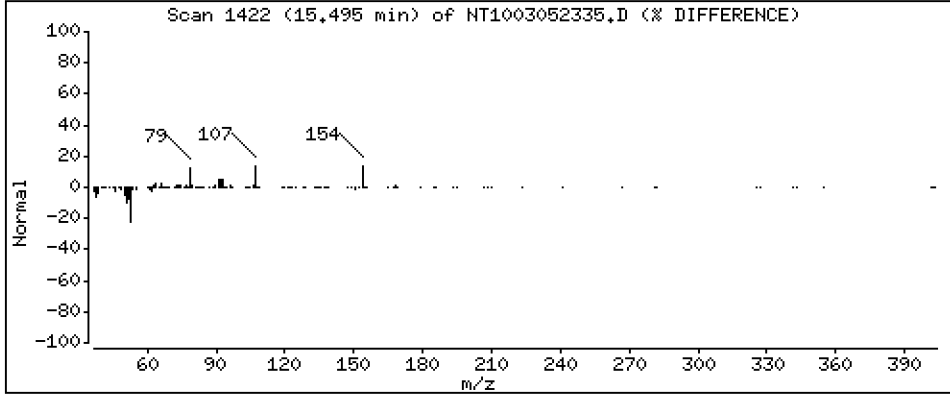
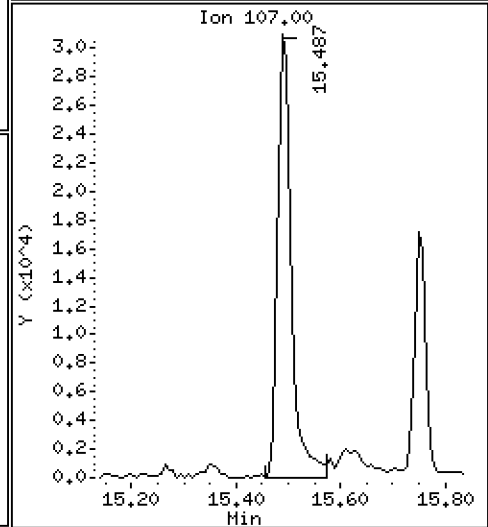
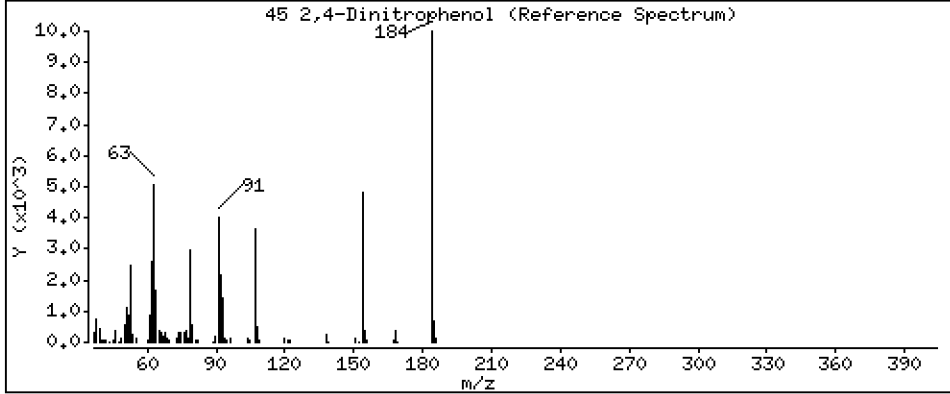
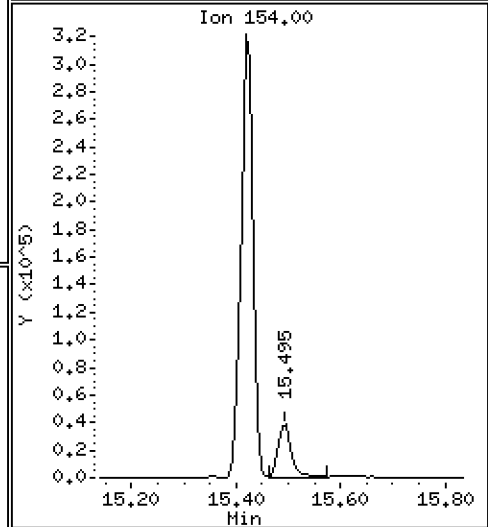
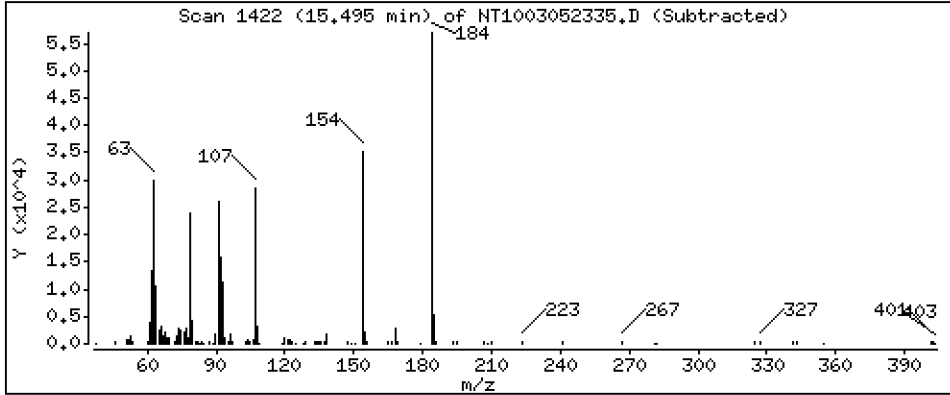
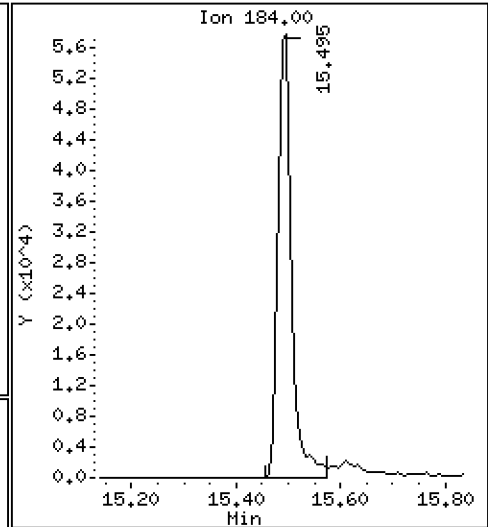
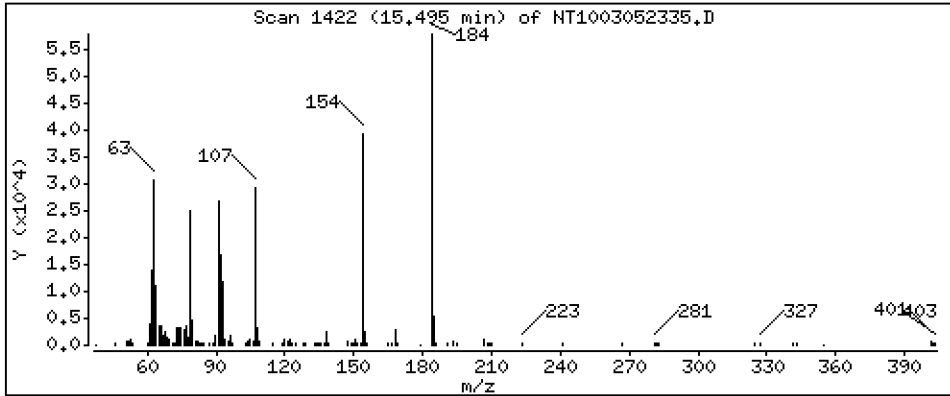
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

45 2,4-Dinitrophenol

Concentration: 13,24 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

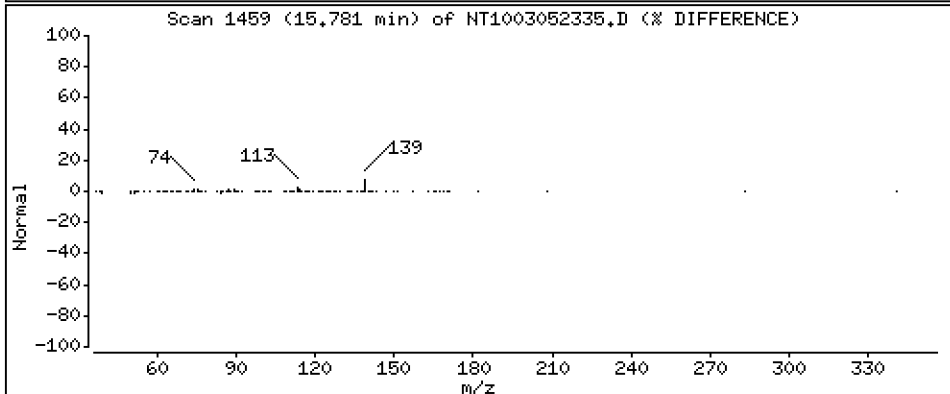
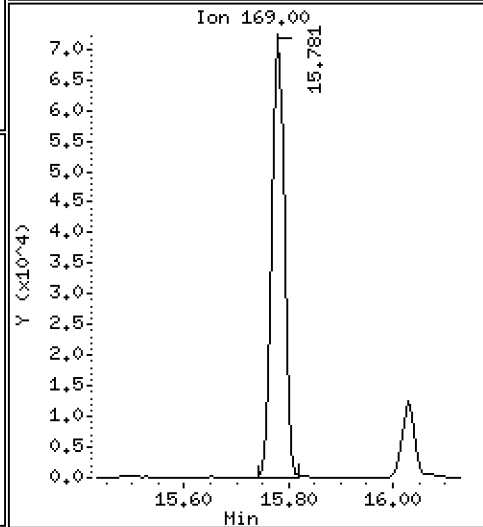
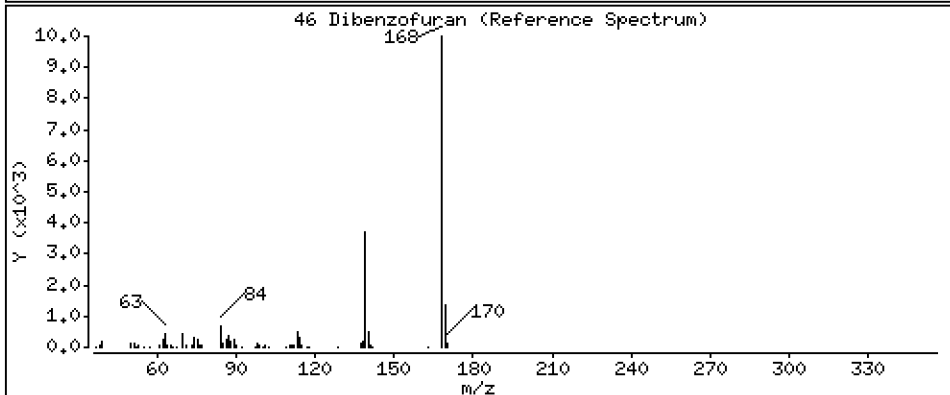
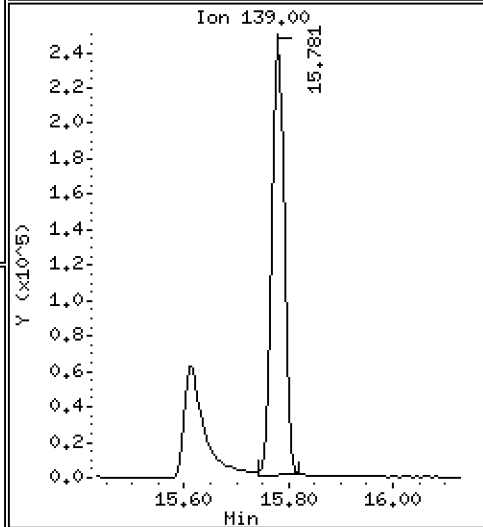
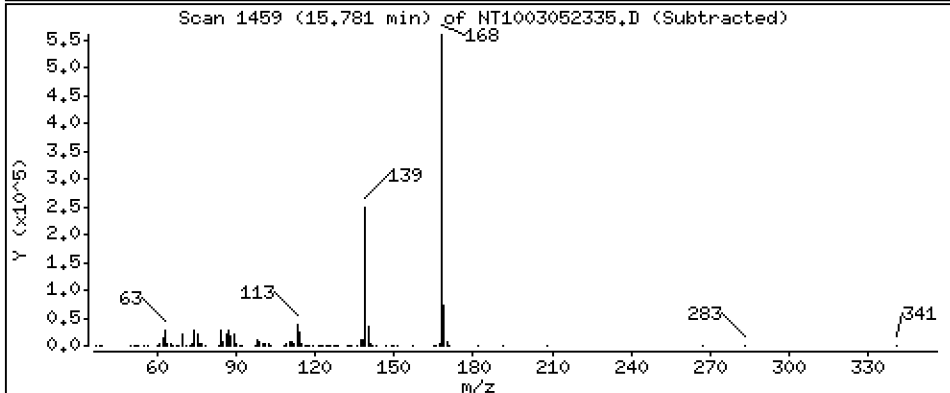
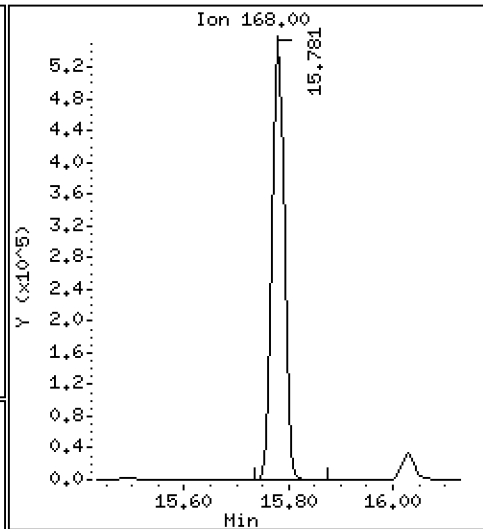
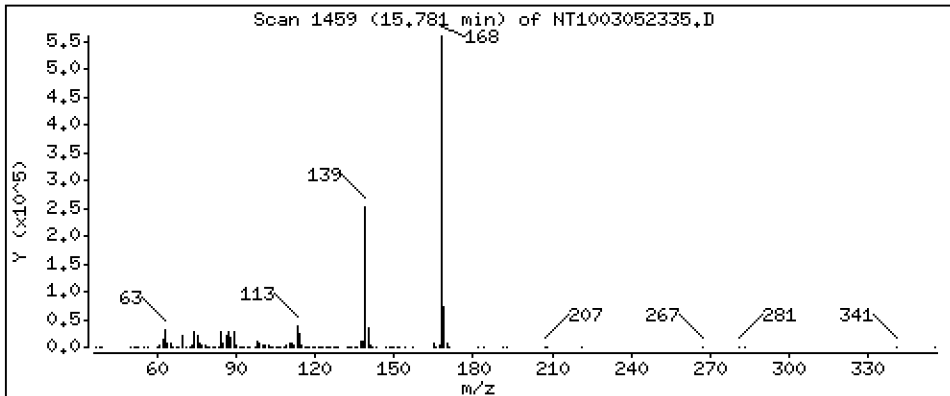
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 5,037 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

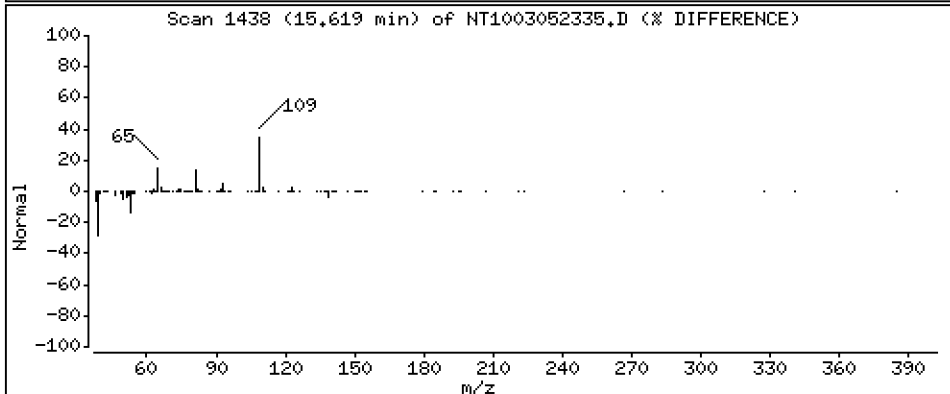
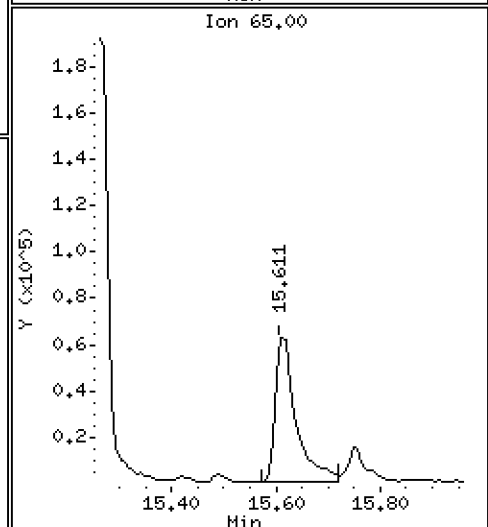
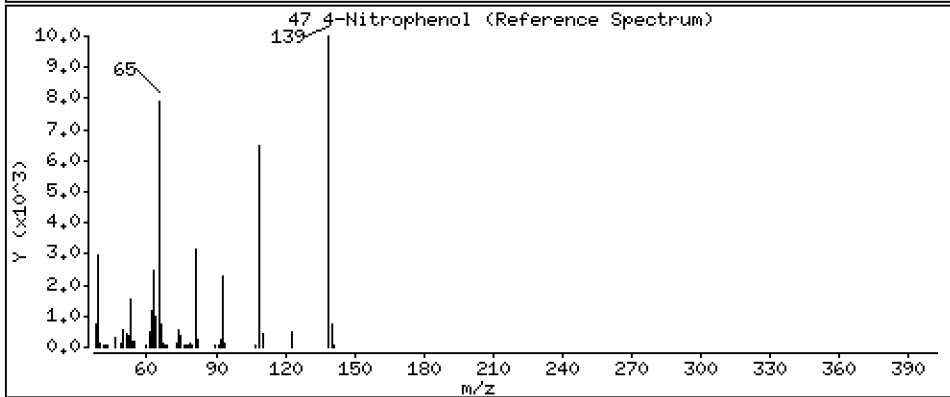
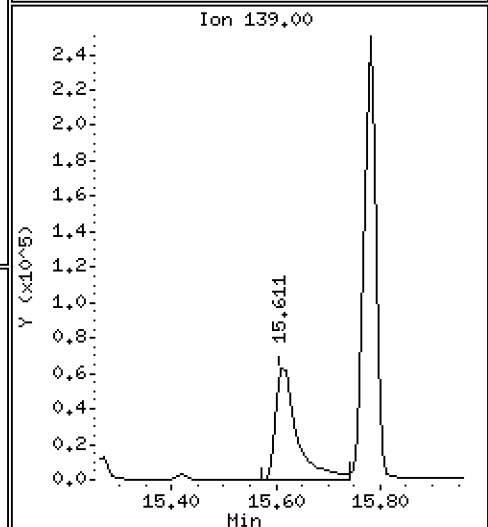
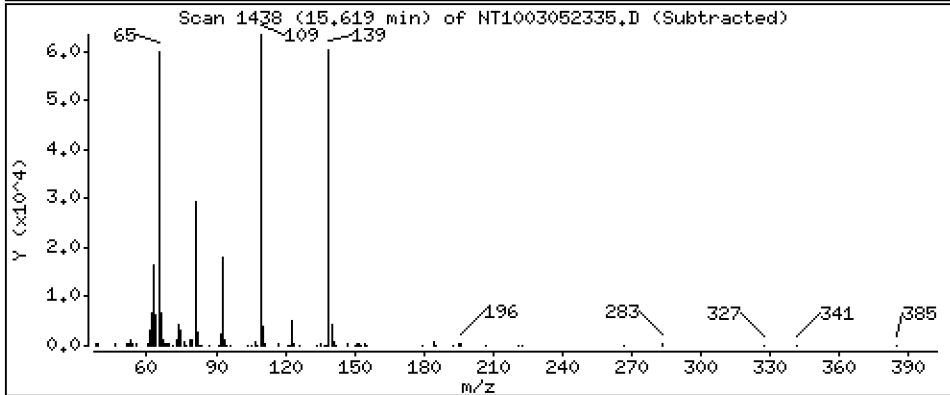
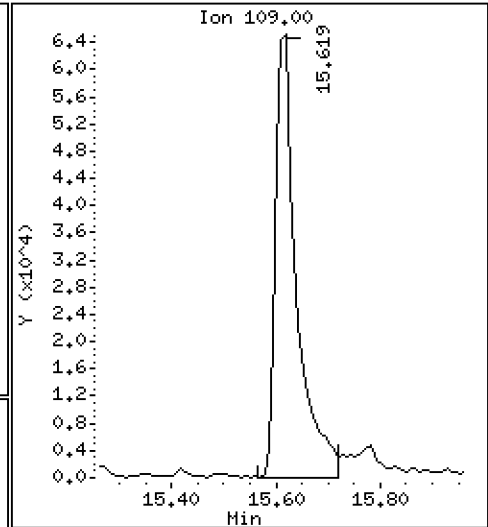
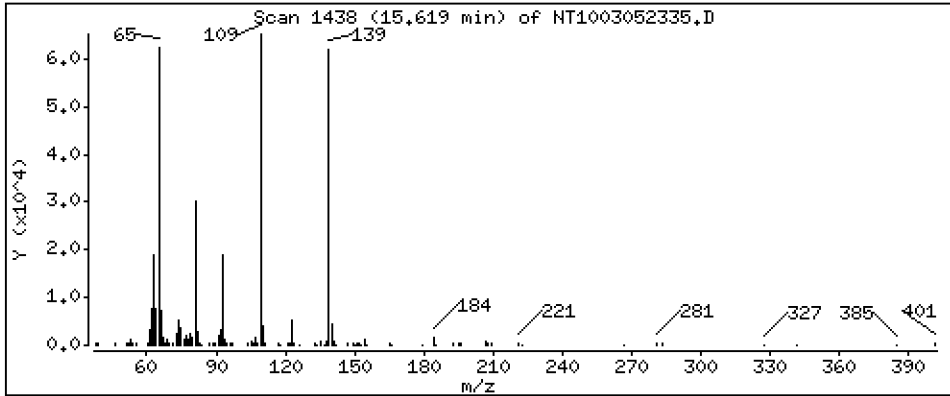
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

47 4-Nitrophenol

Concentration: 7,751 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

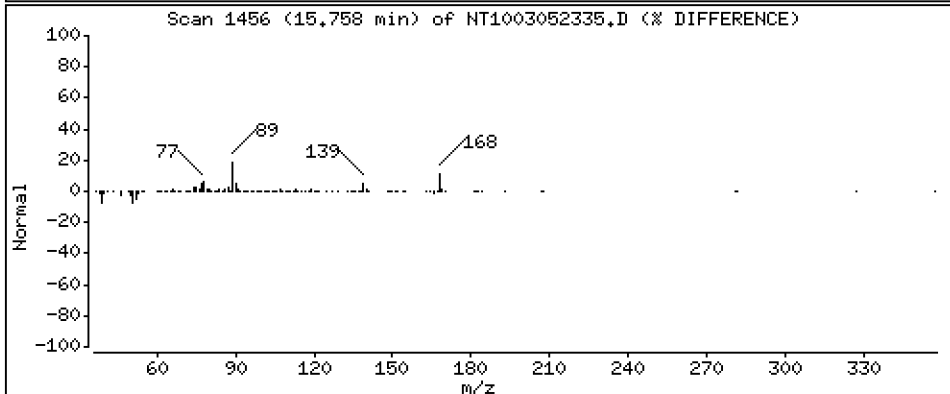
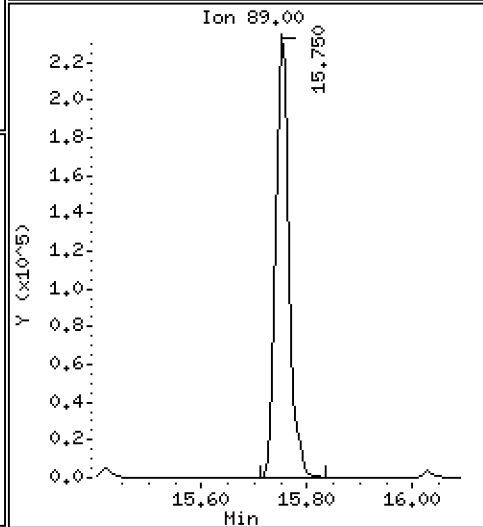
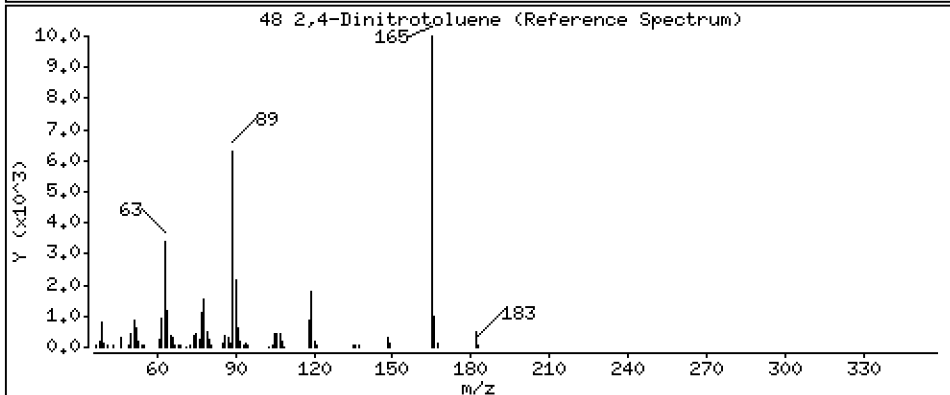
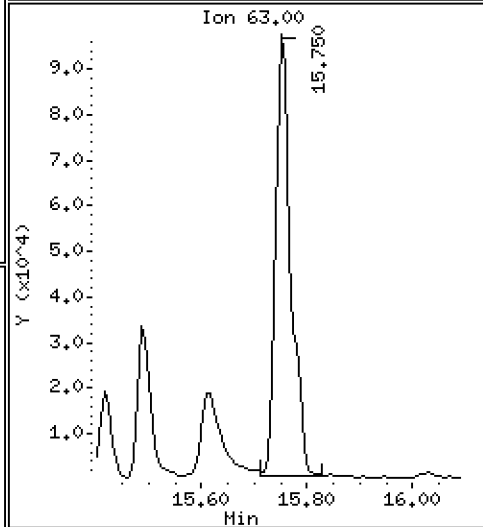
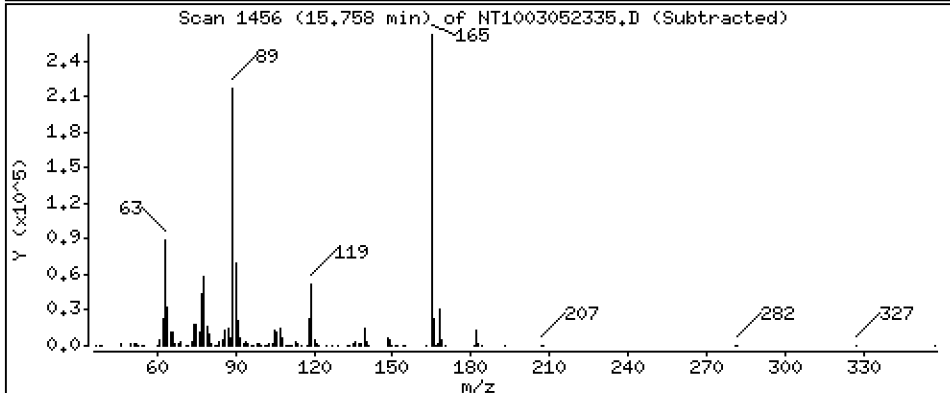
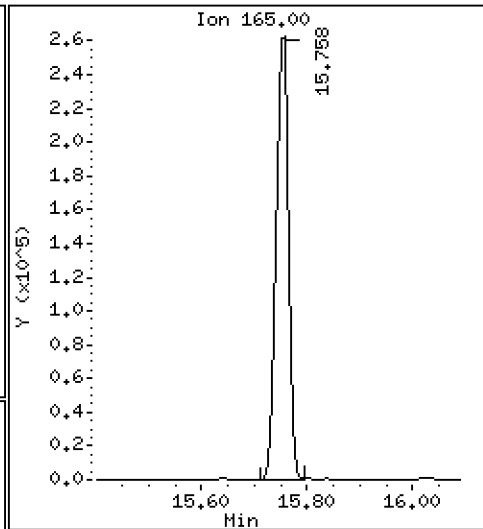
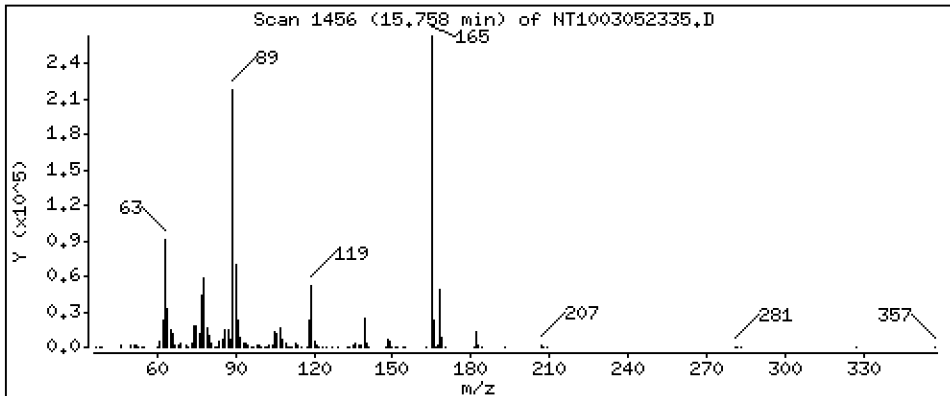
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 9,796 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

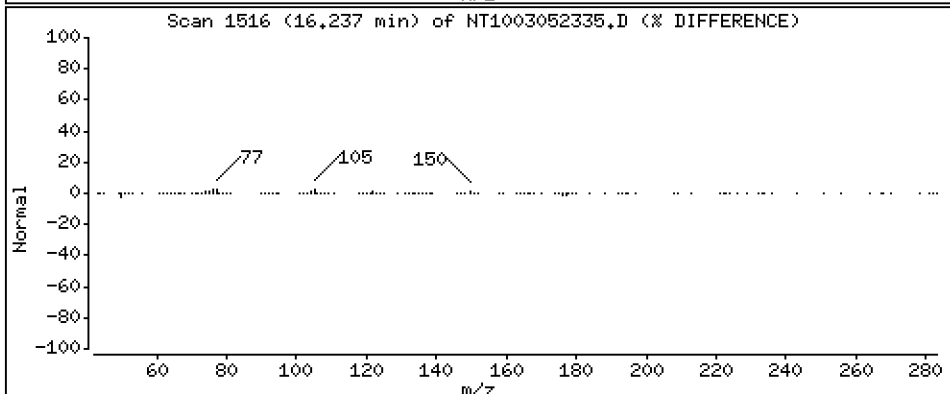
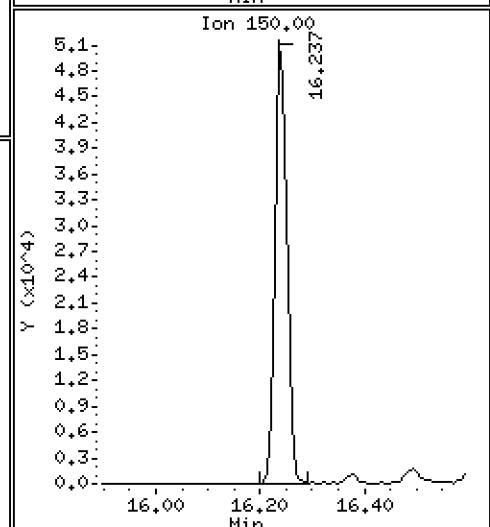
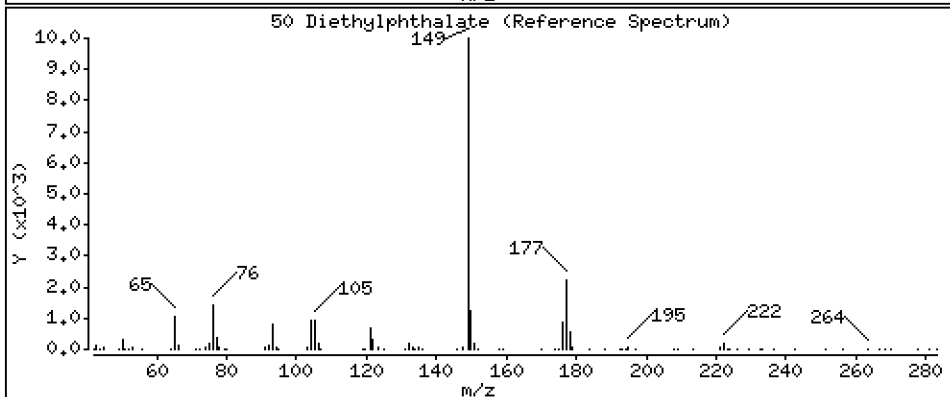
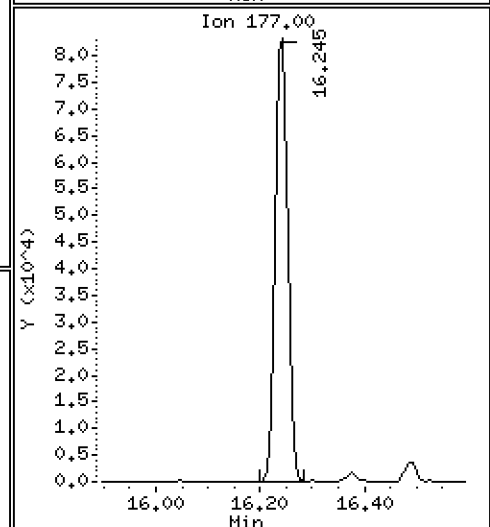
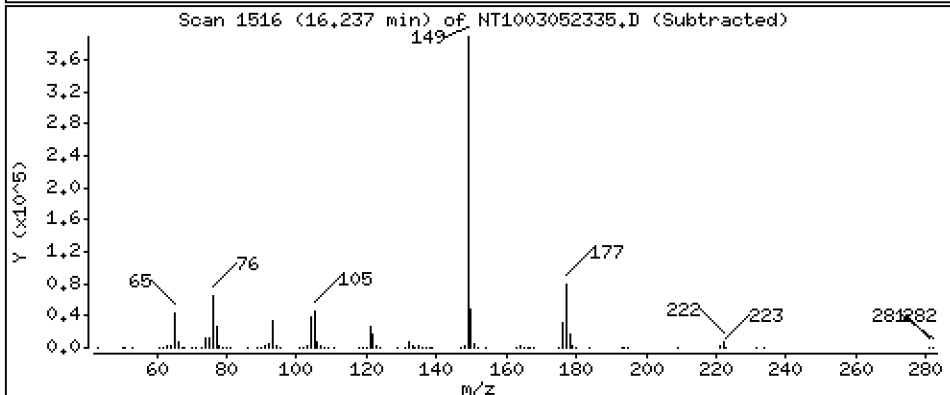
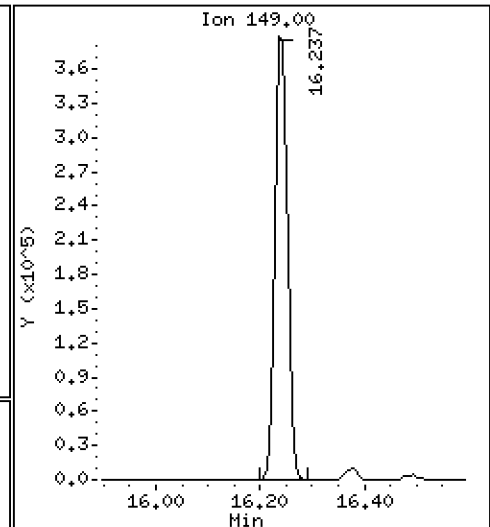
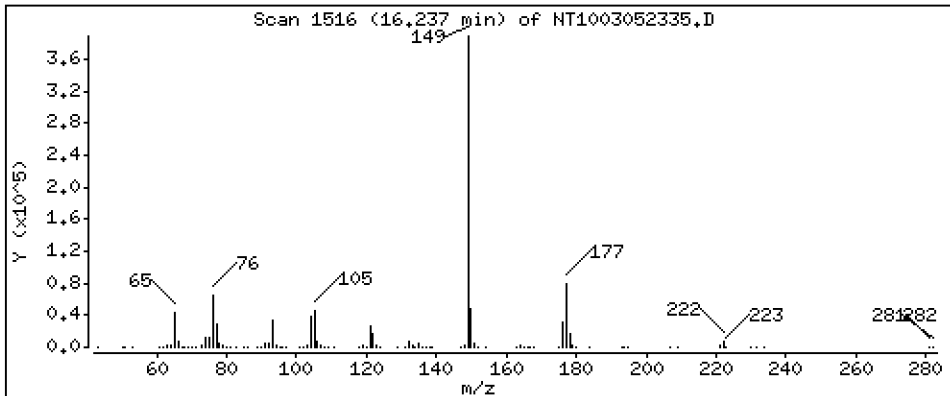
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 4,592 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

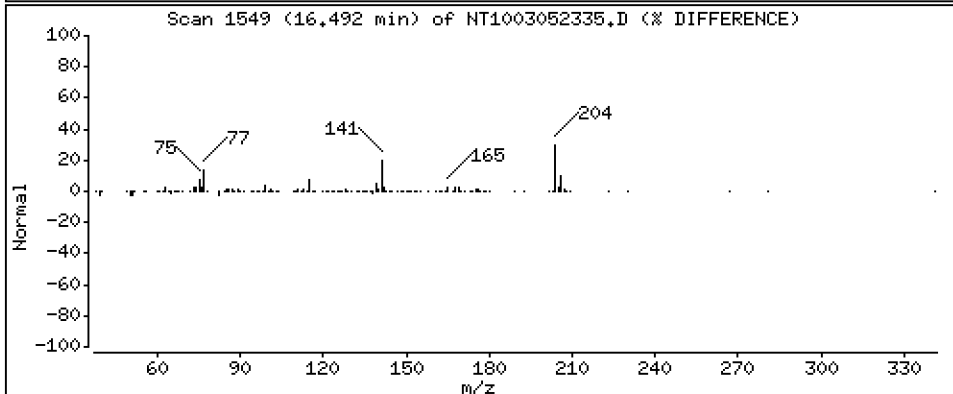
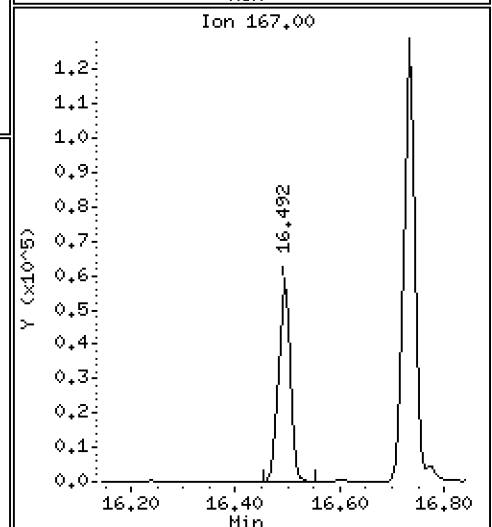
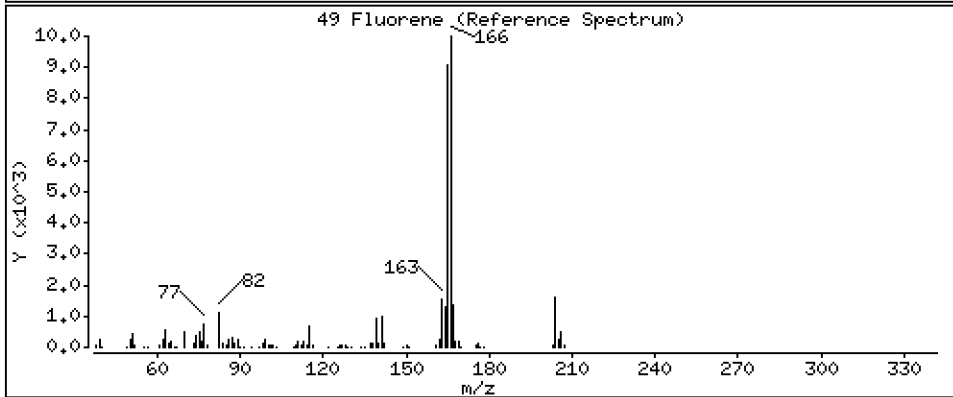
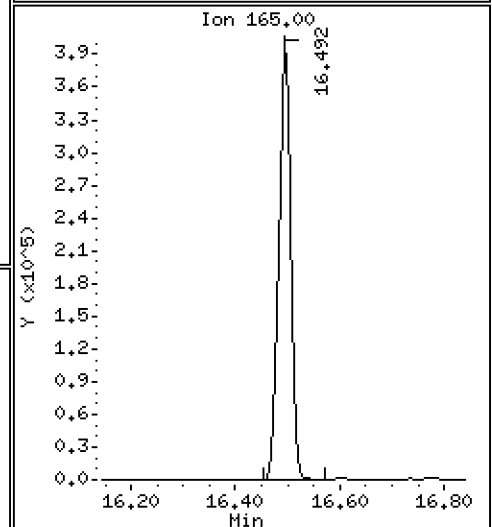
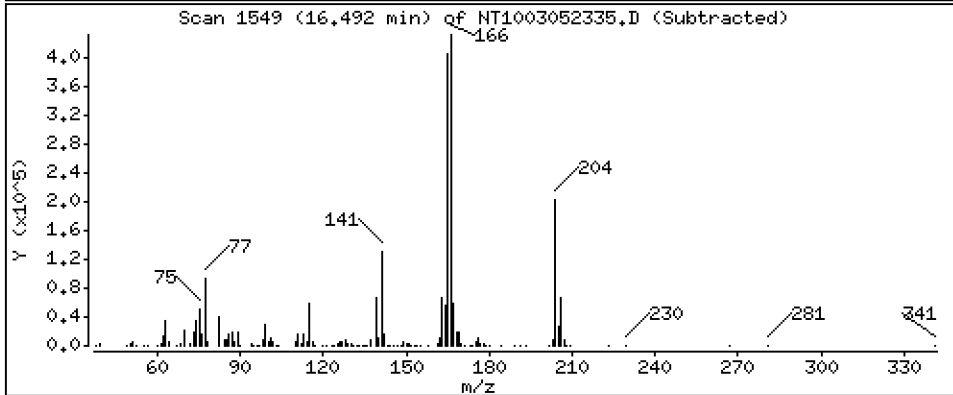
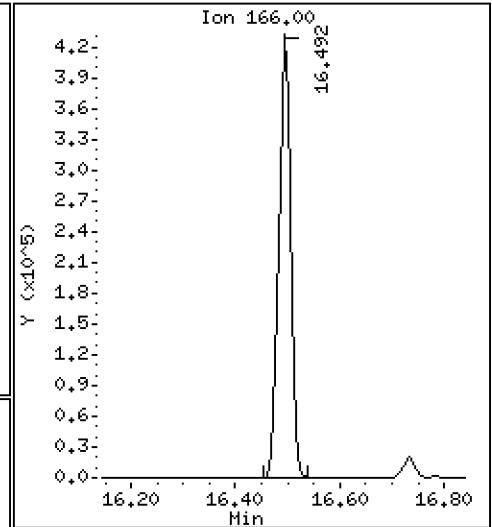
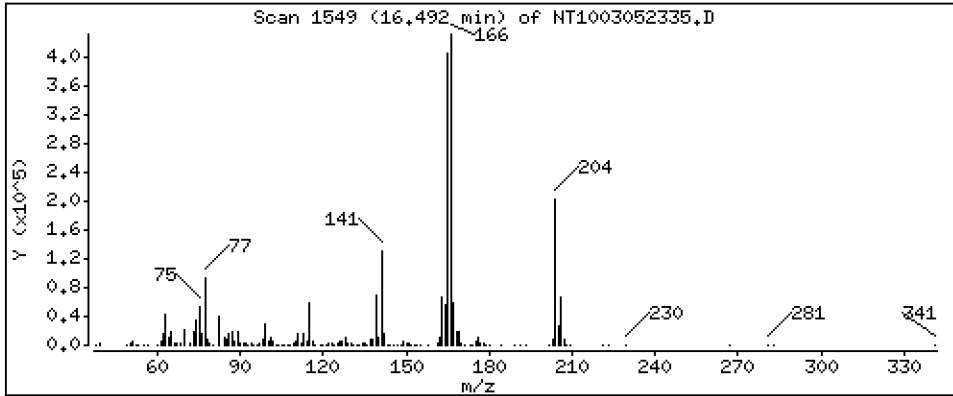
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

49 Fluorene

Concentration: 4,742 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

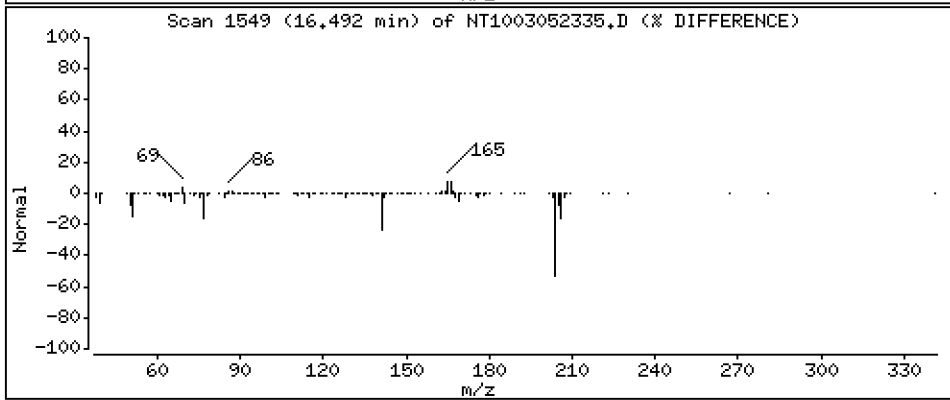
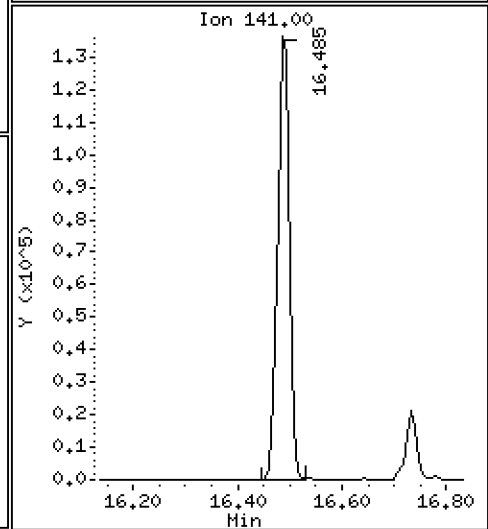
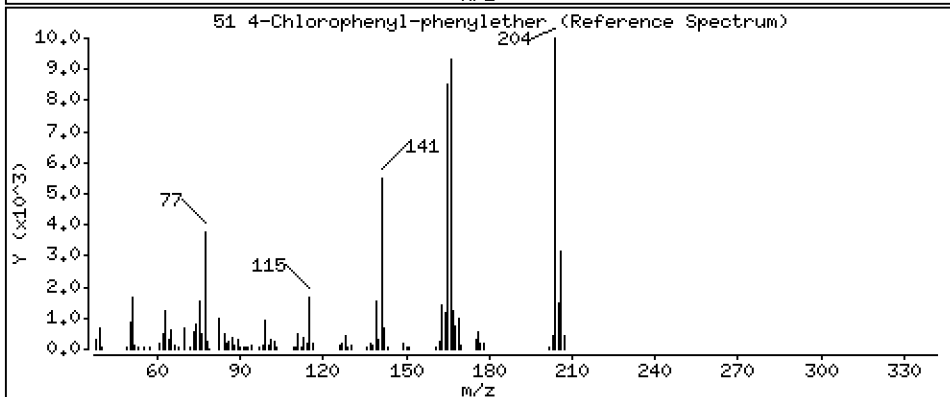
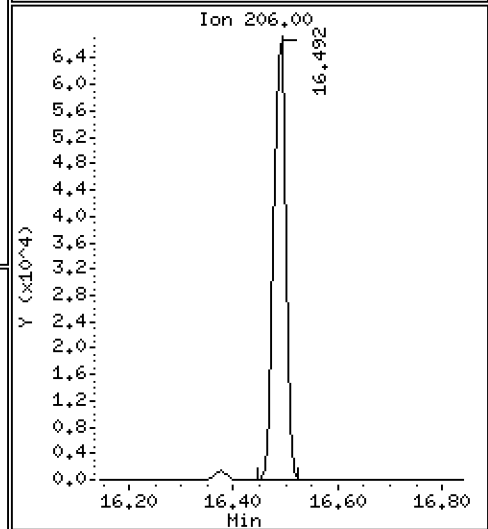
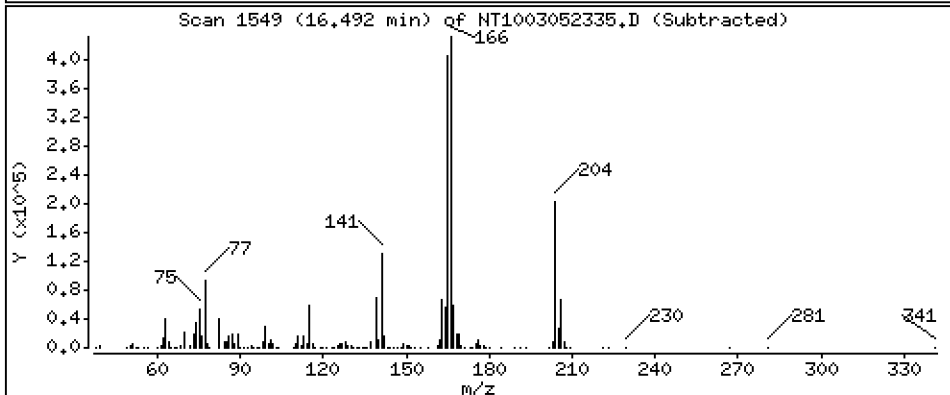
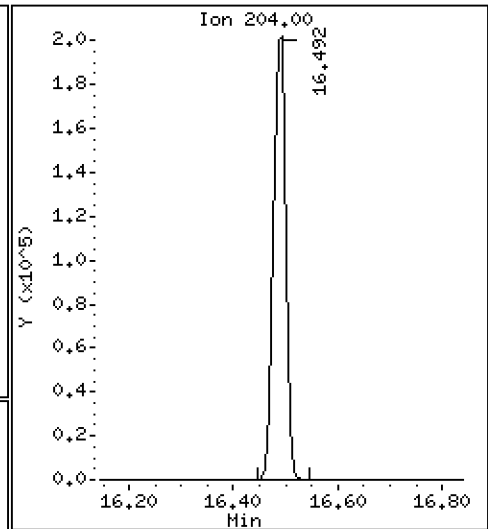
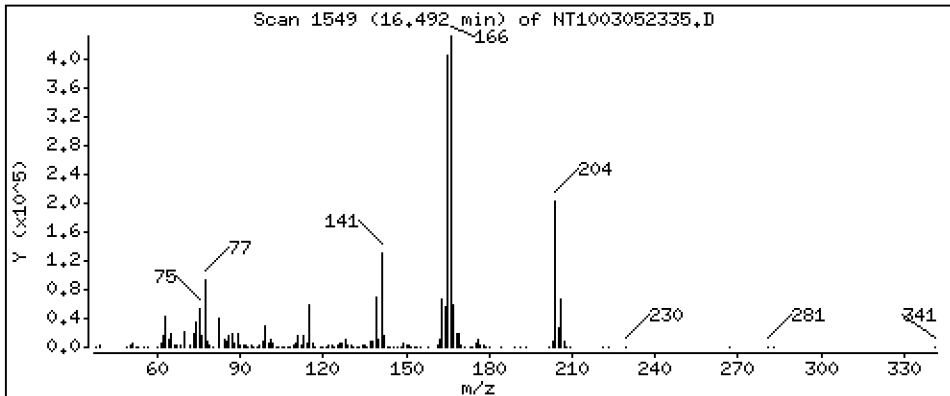
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 4,896 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

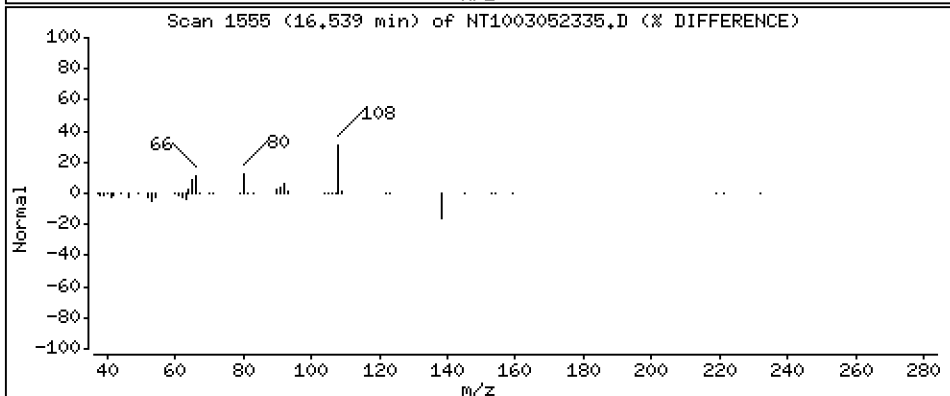
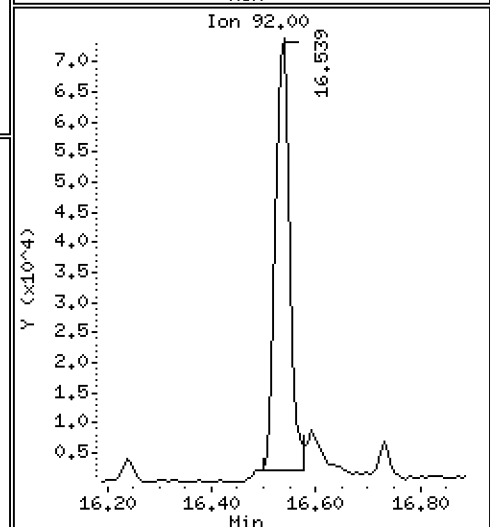
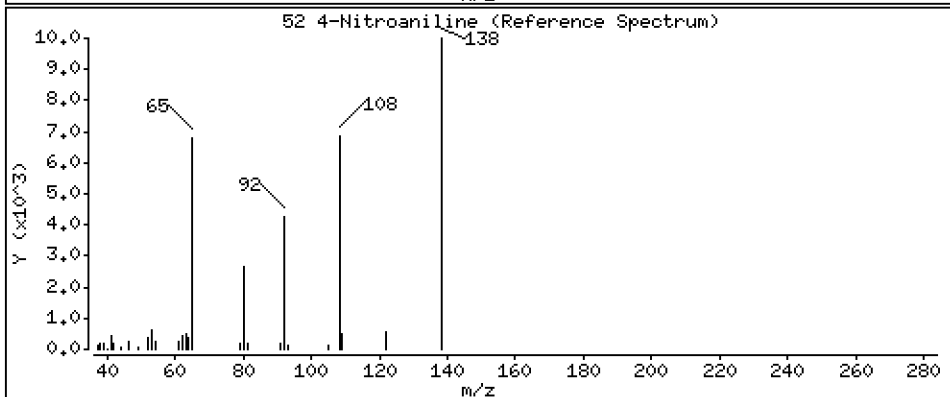
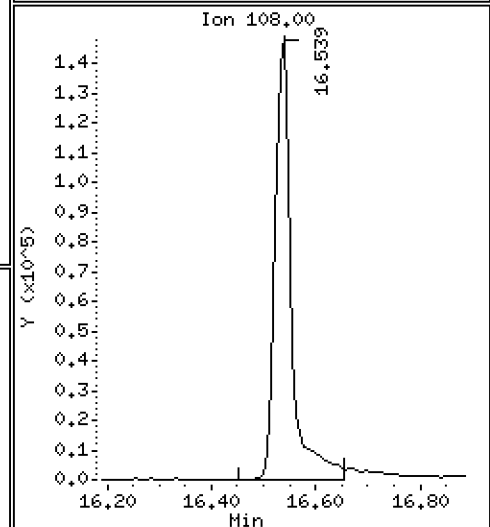
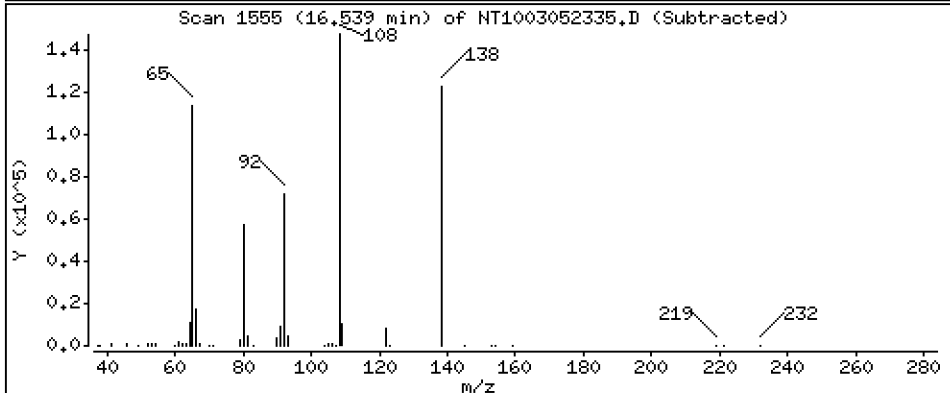
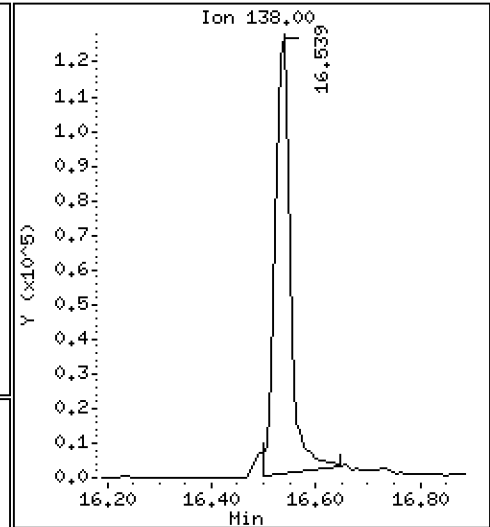
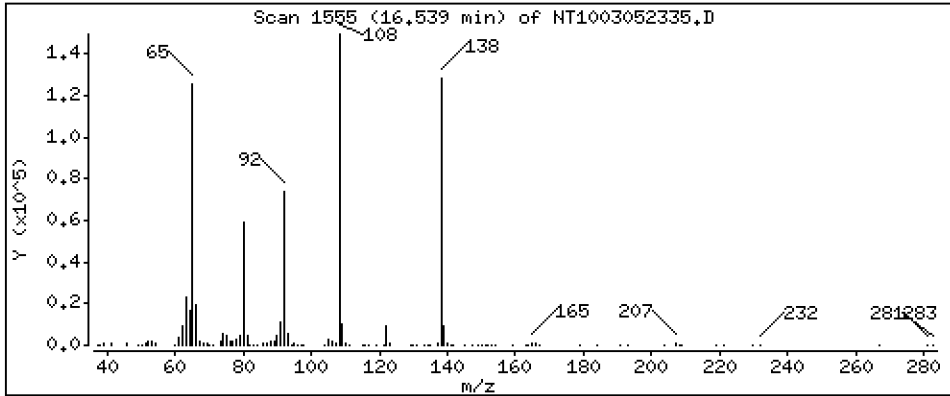
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

52 4-Nitroaniline

Concentration: 8,050 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

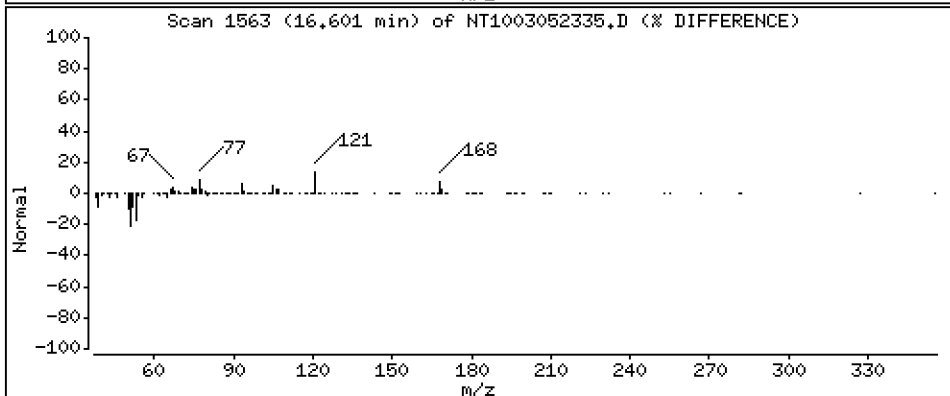
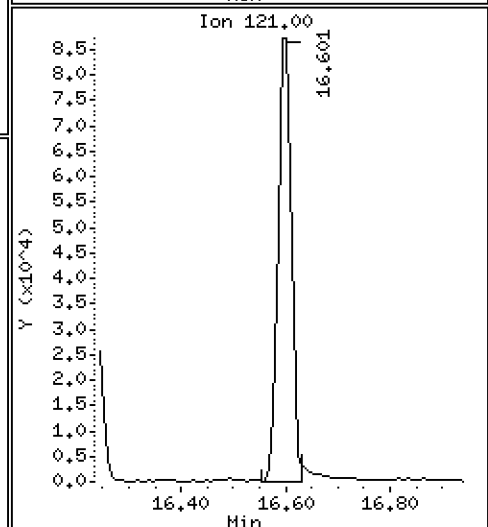
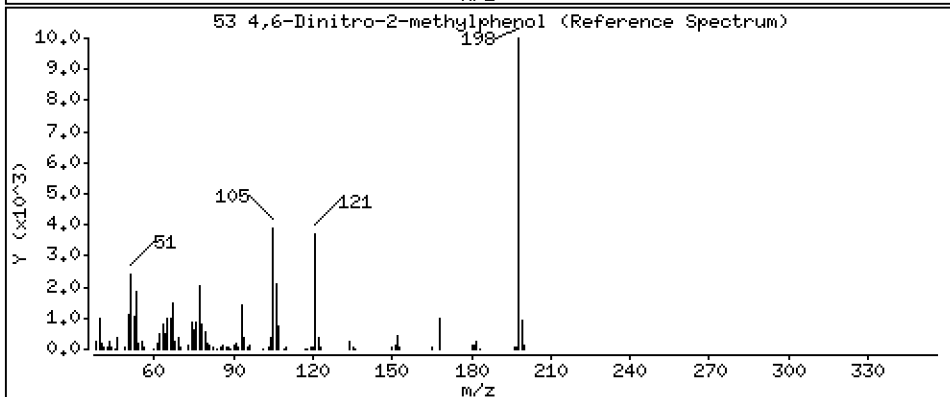
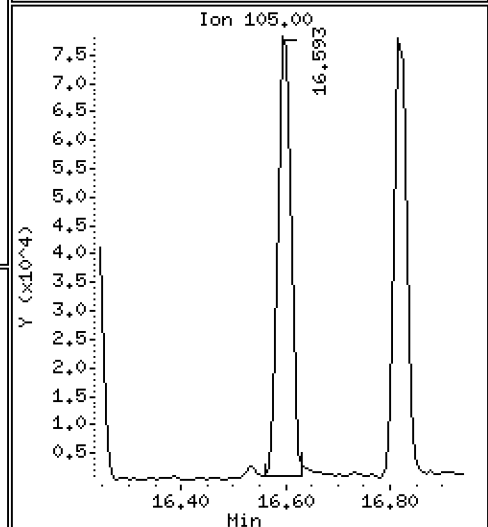
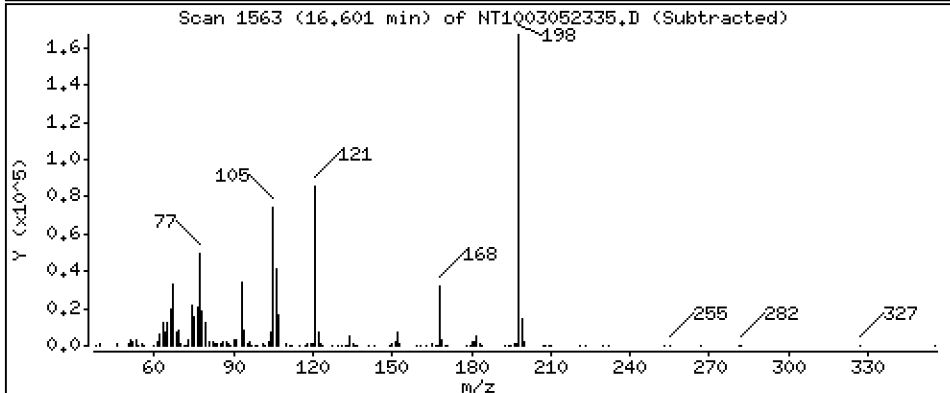
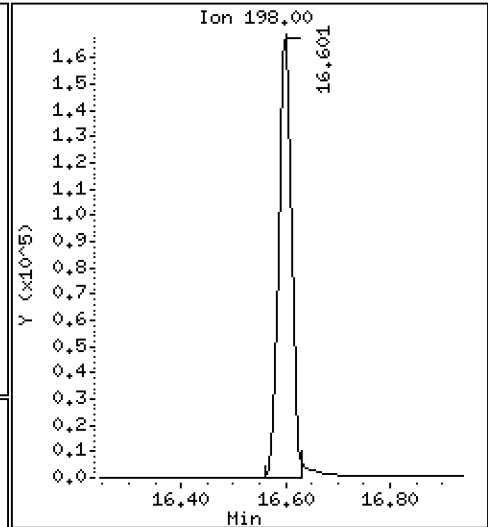
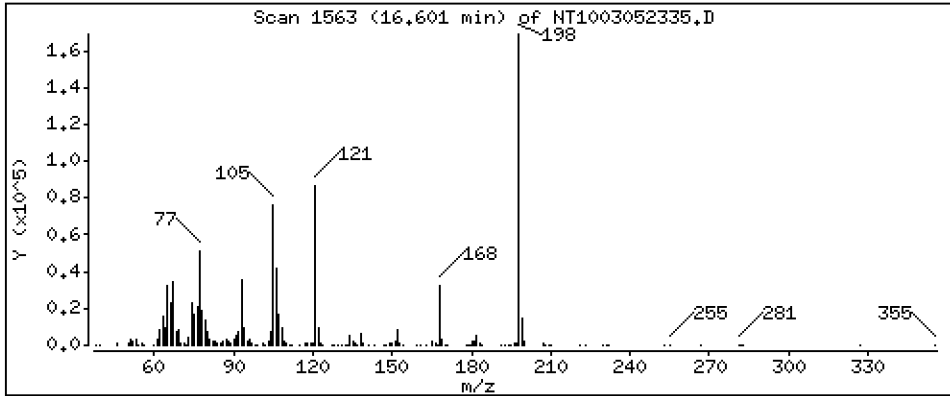
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 15,29 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

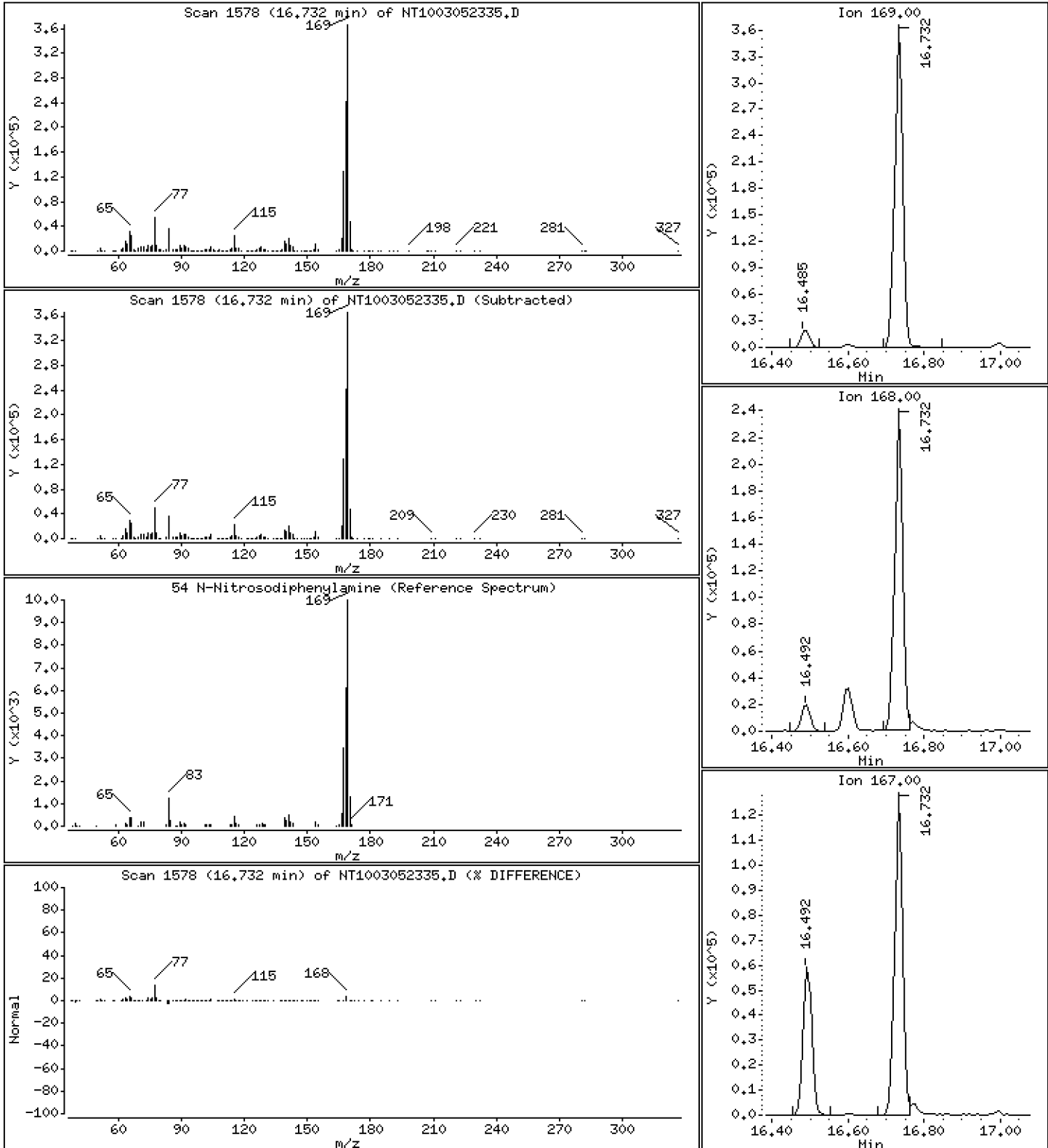
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,944 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

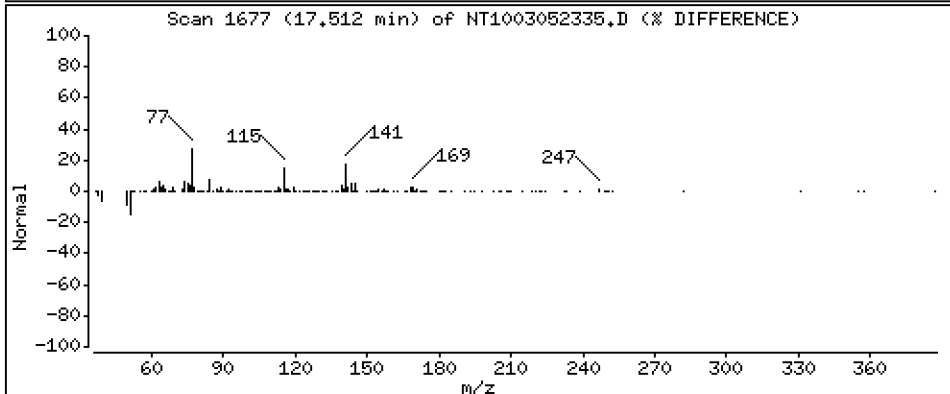
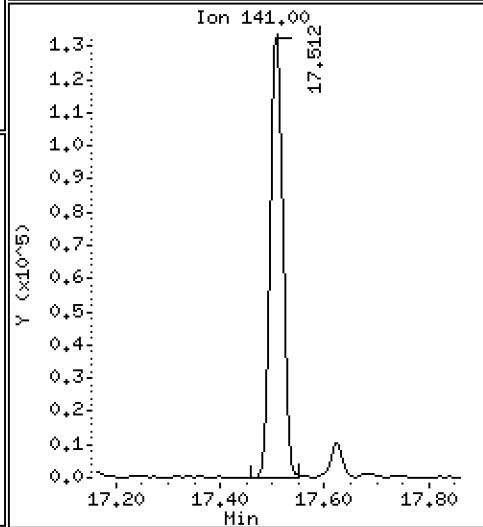
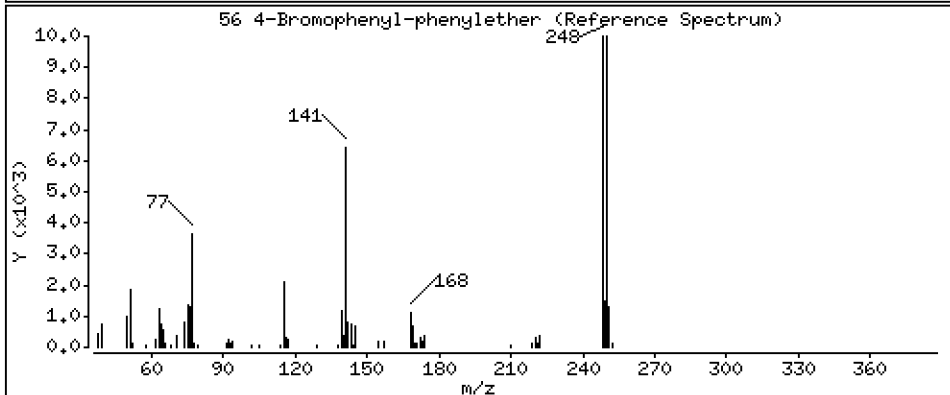
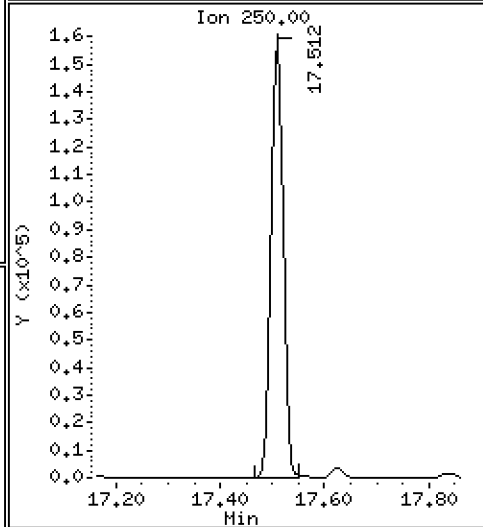
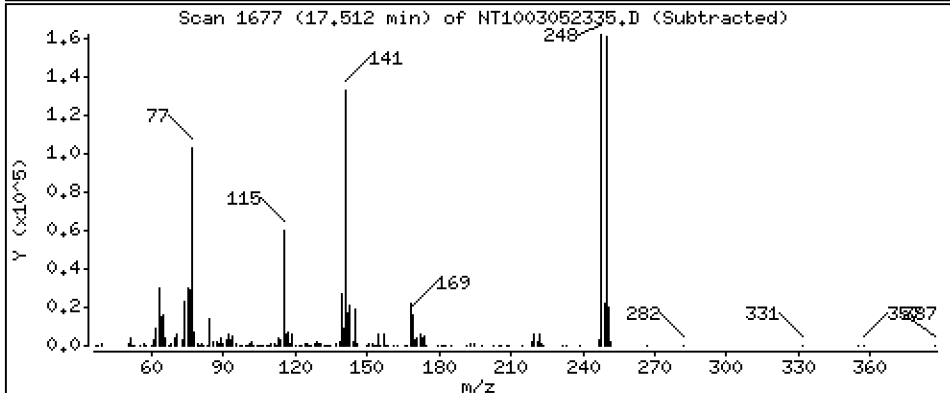
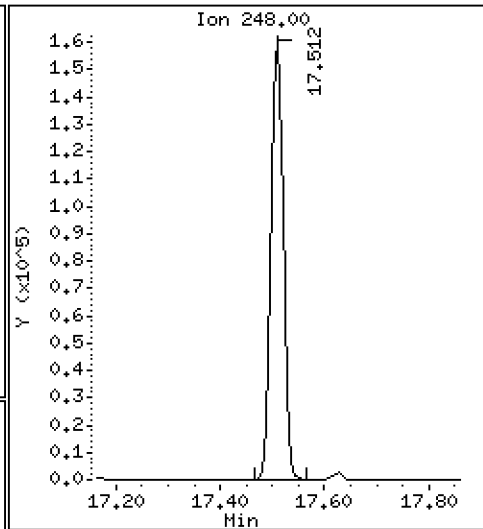
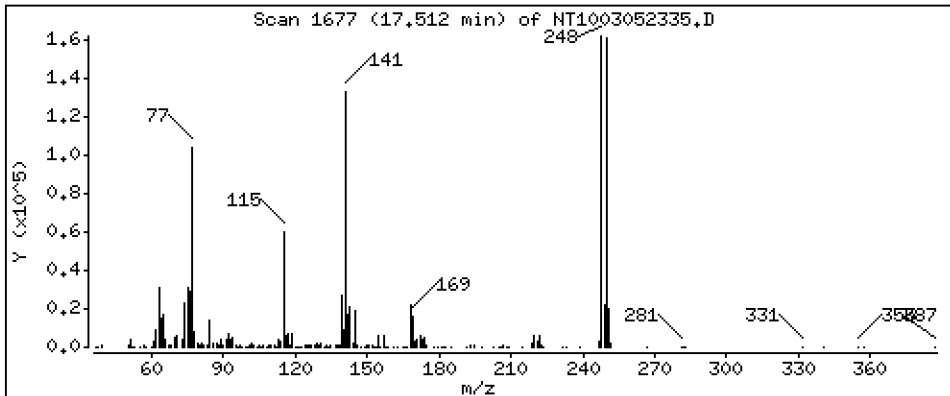
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

56 4-Bromophenyl-phenylether

Concentration: 5,805 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

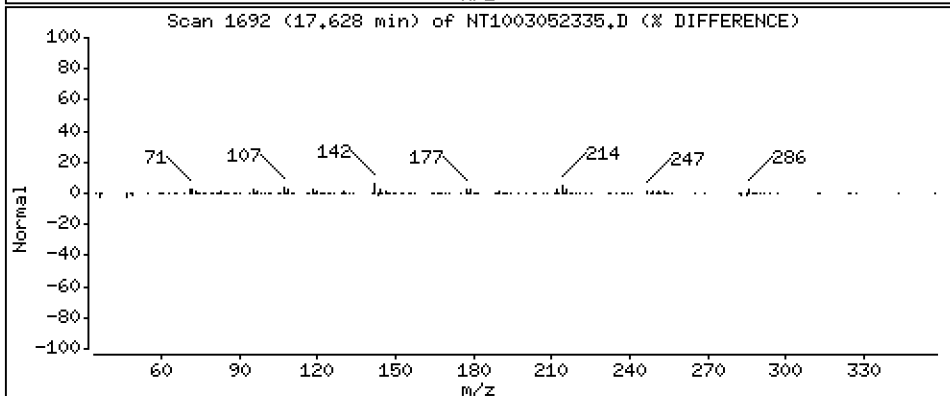
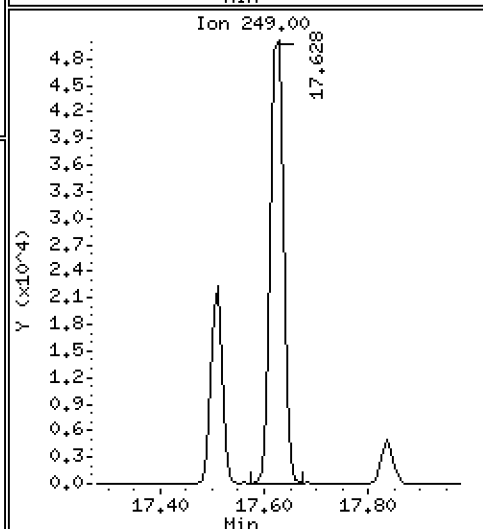
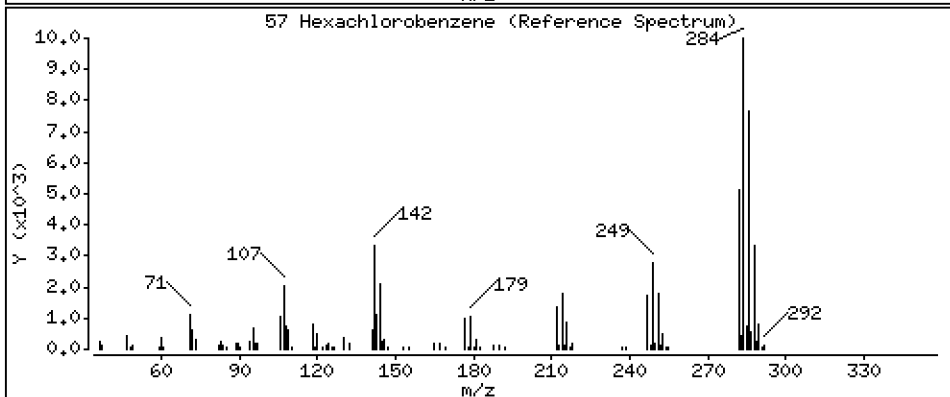
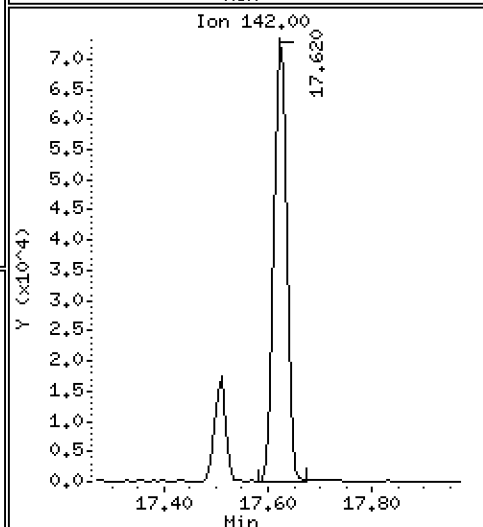
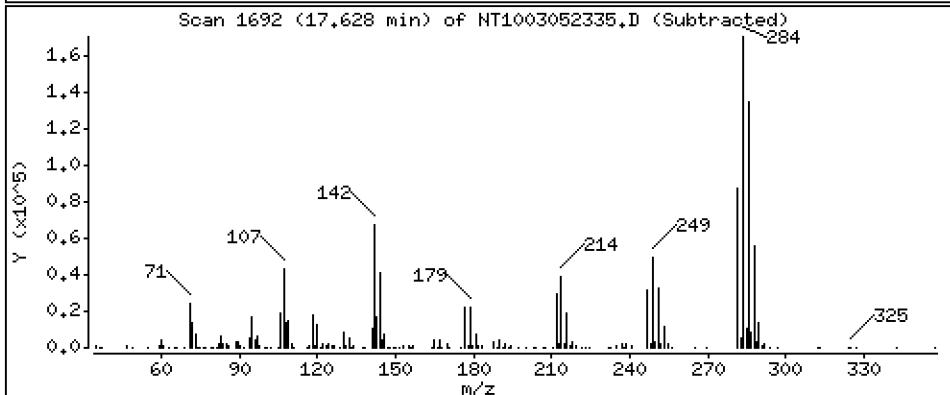
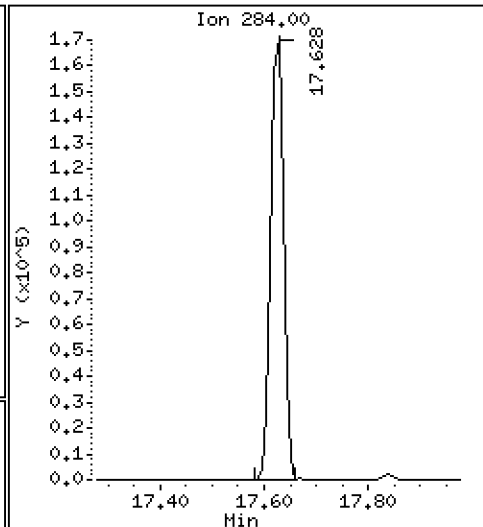
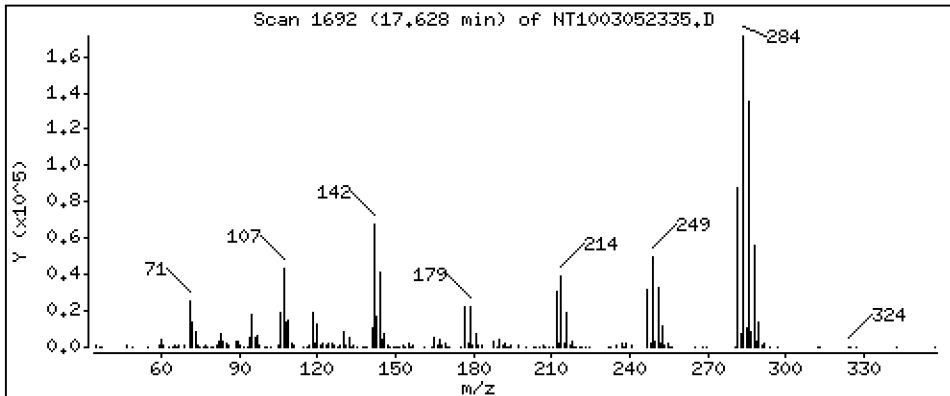
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 5,707 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

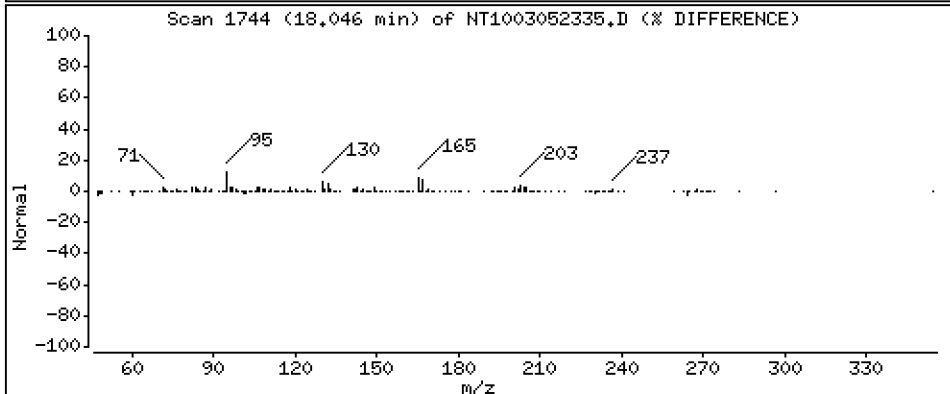
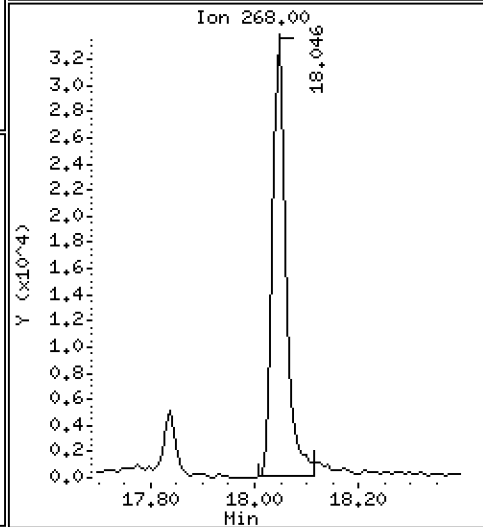
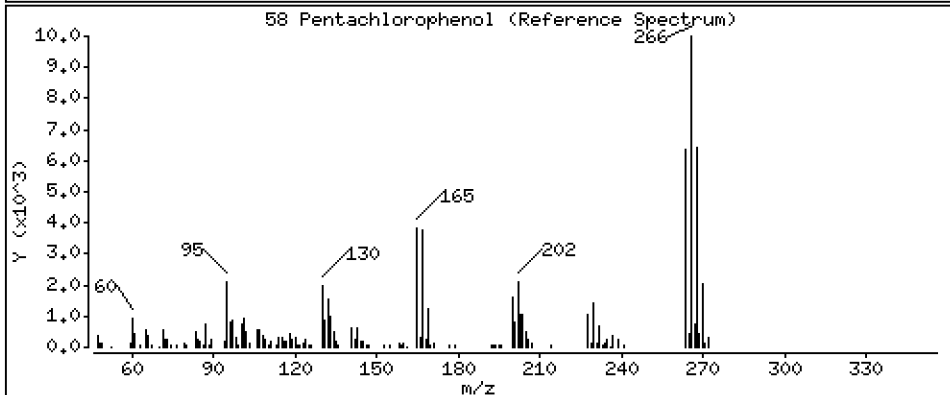
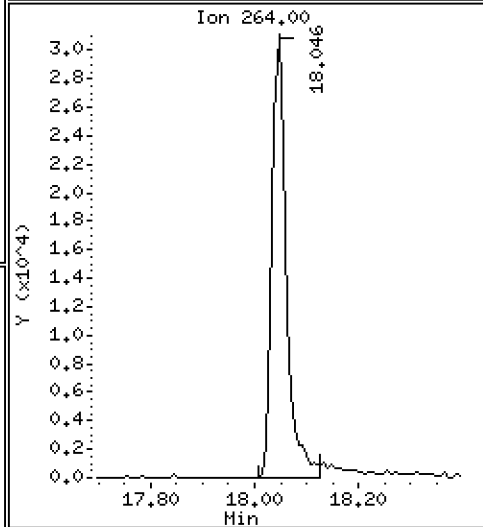
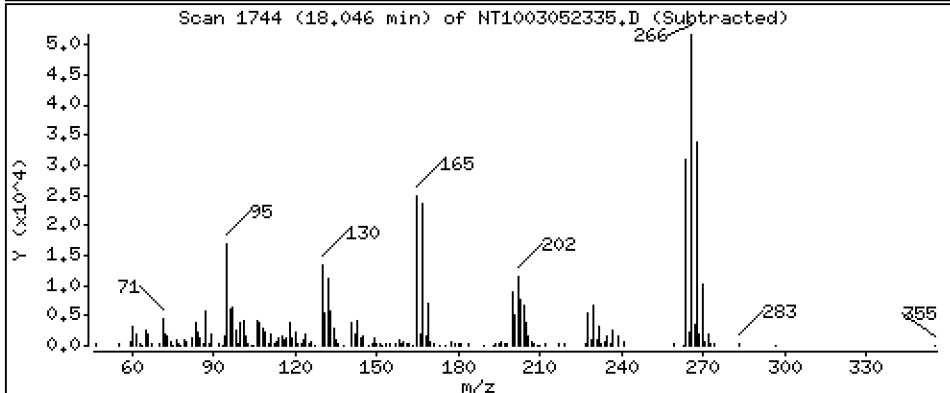
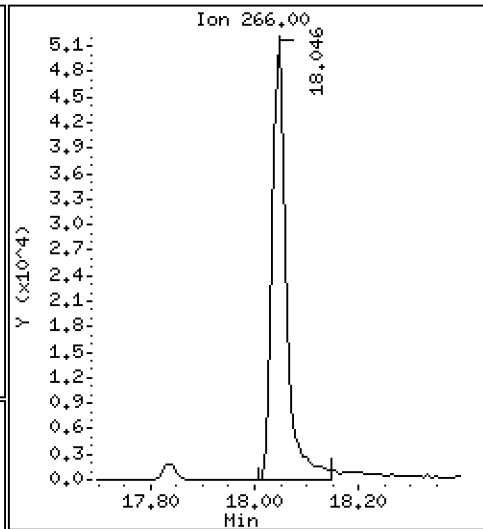
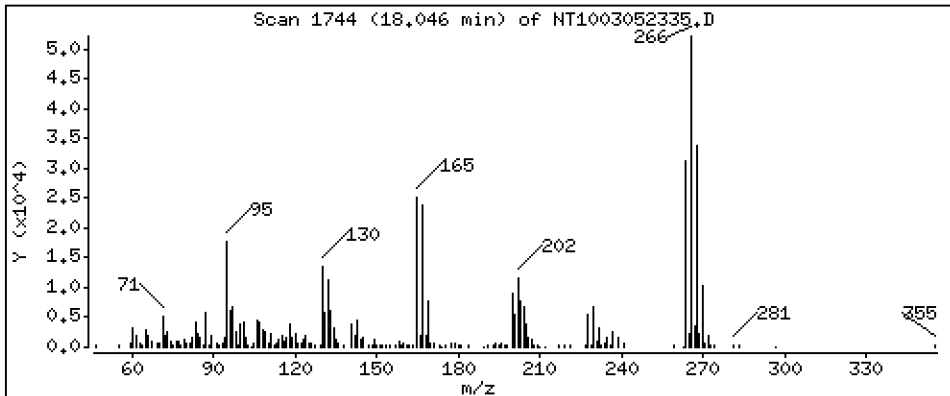
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 4,074 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

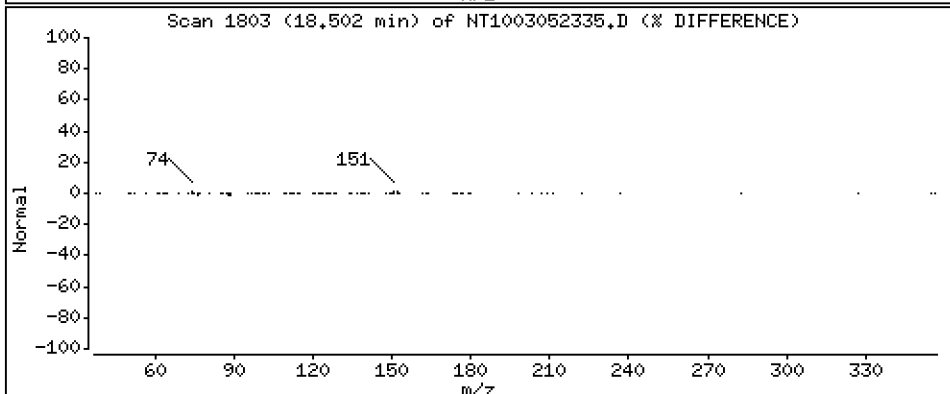
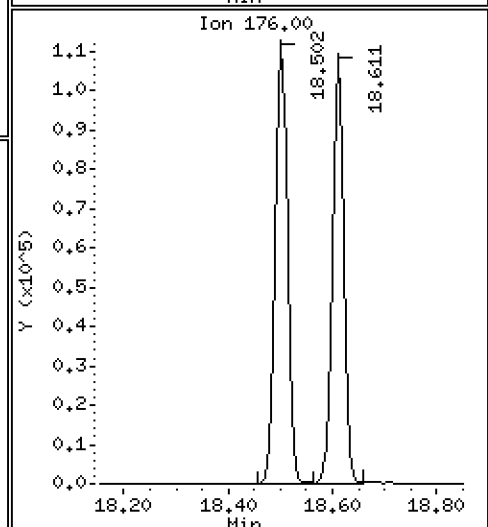
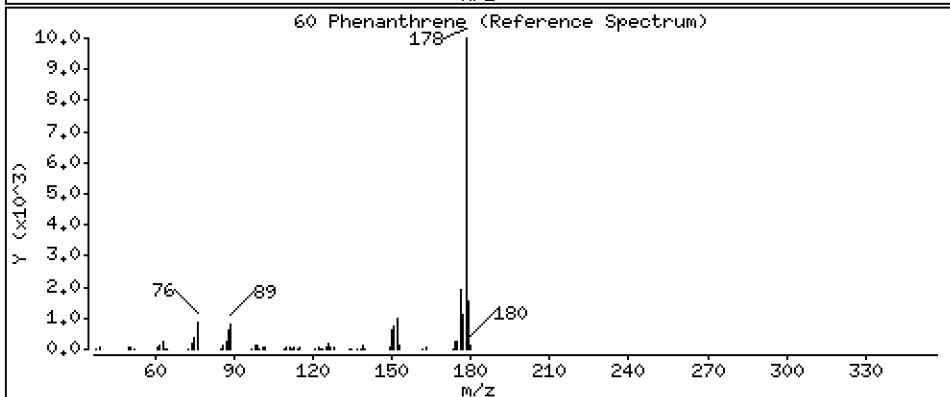
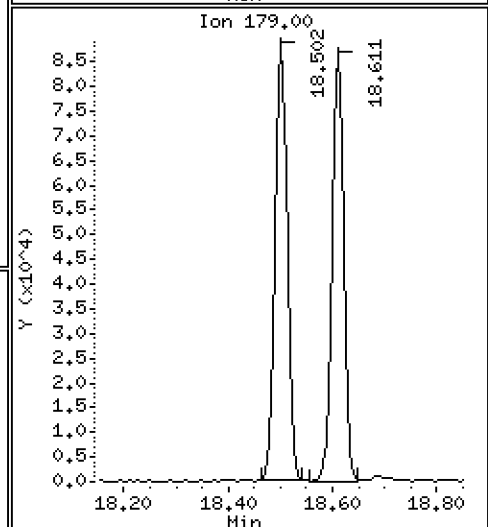
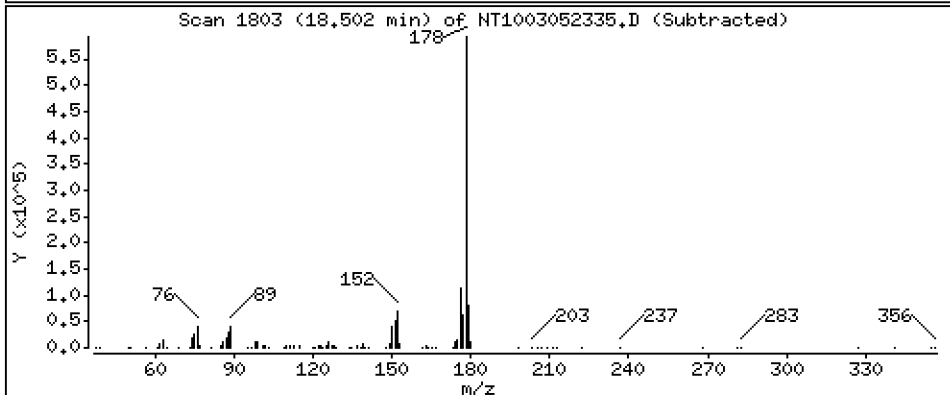
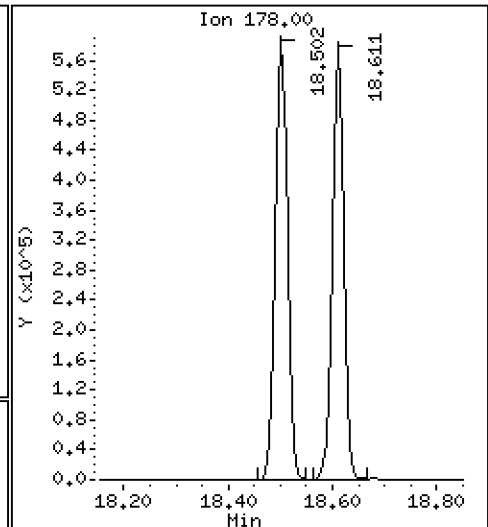
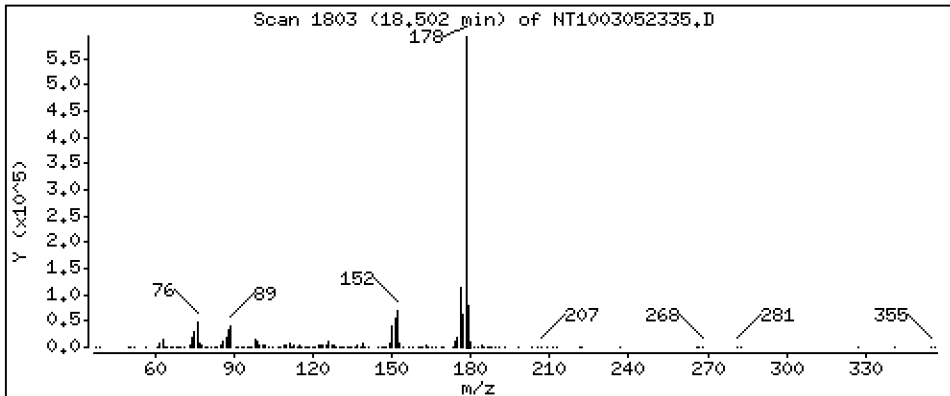
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 4,853 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

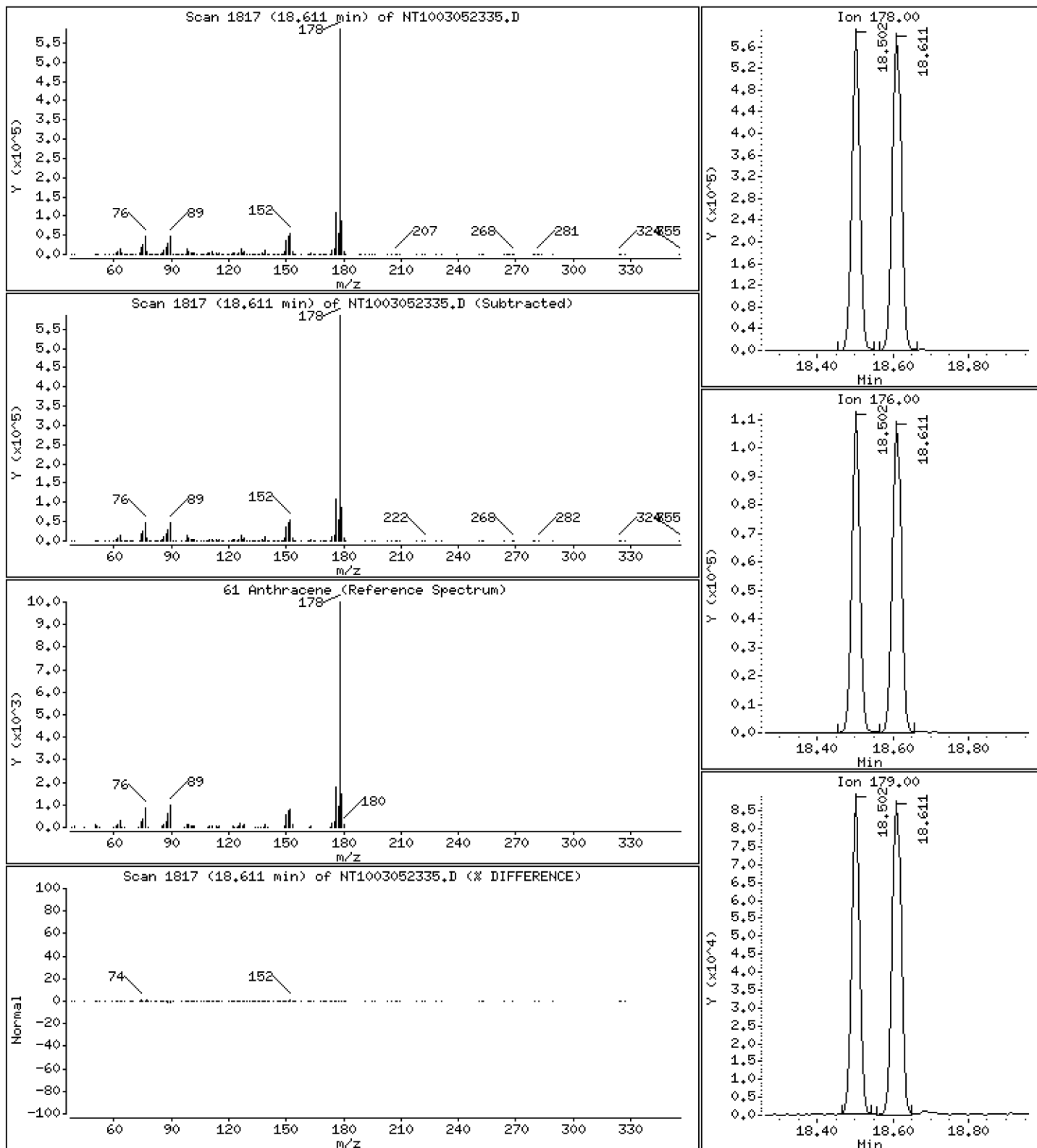
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 5,088 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

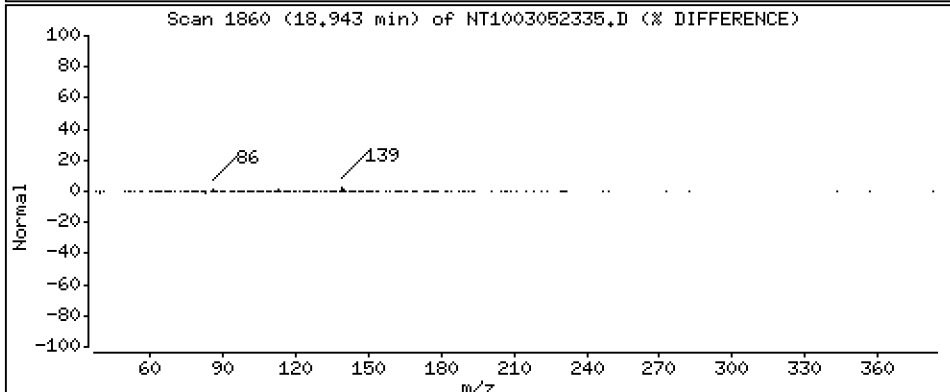
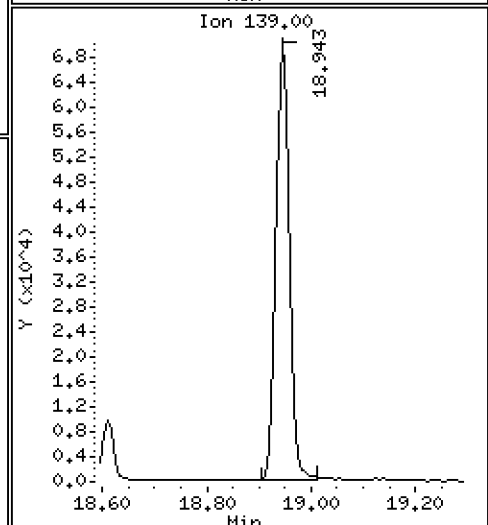
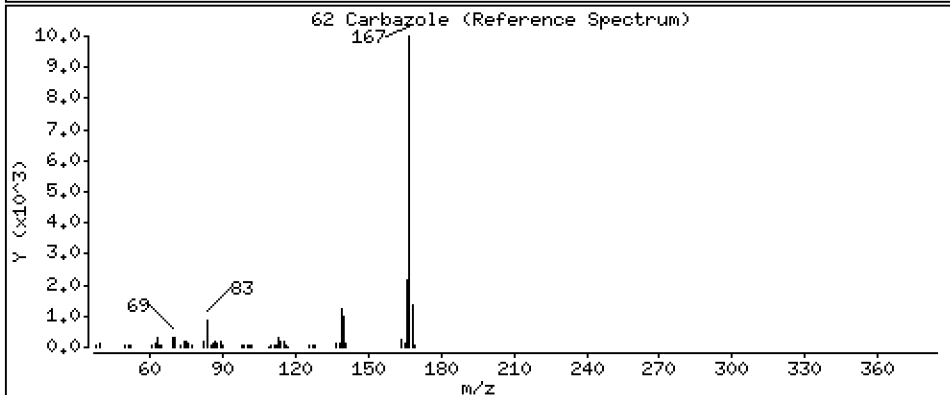
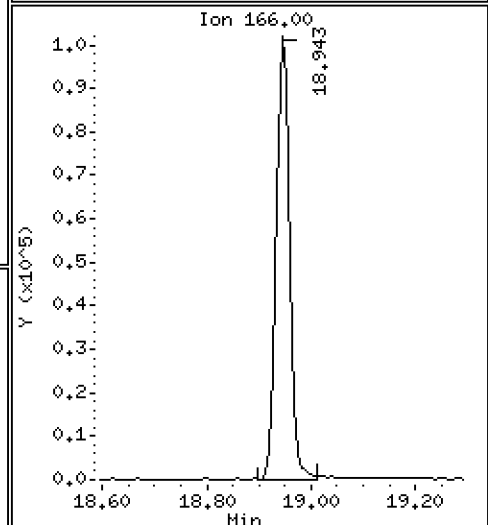
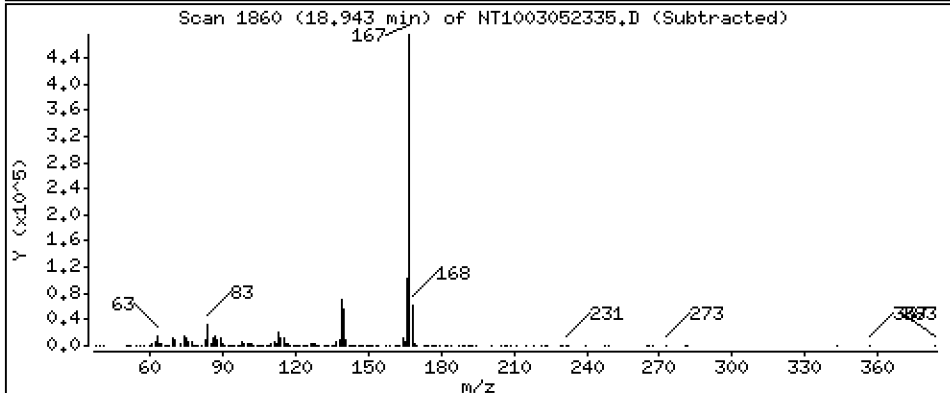
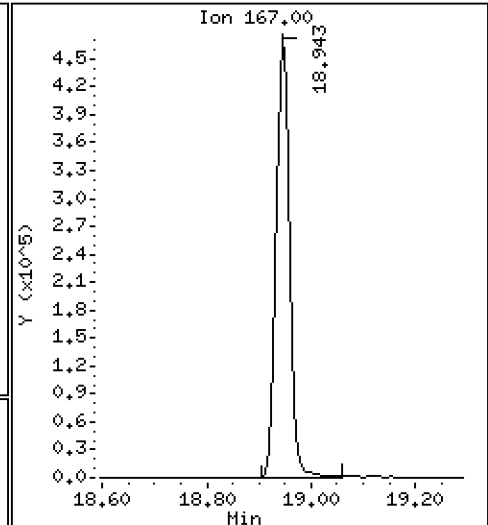
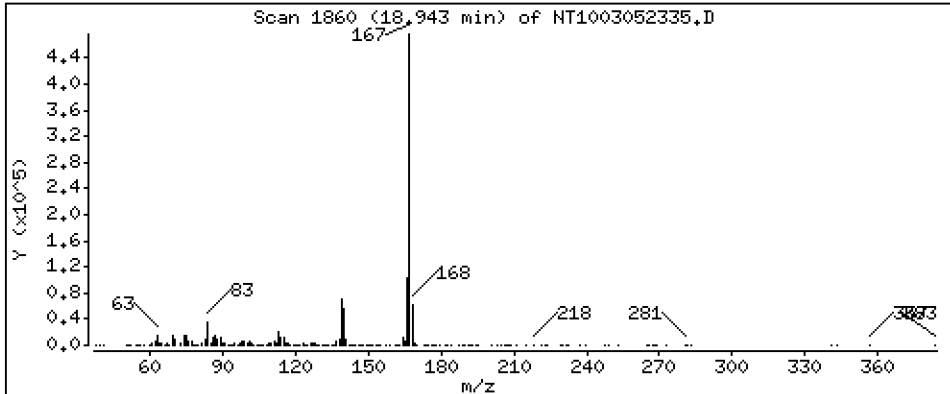
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

62 Carbazole

Concentration: 4,910 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

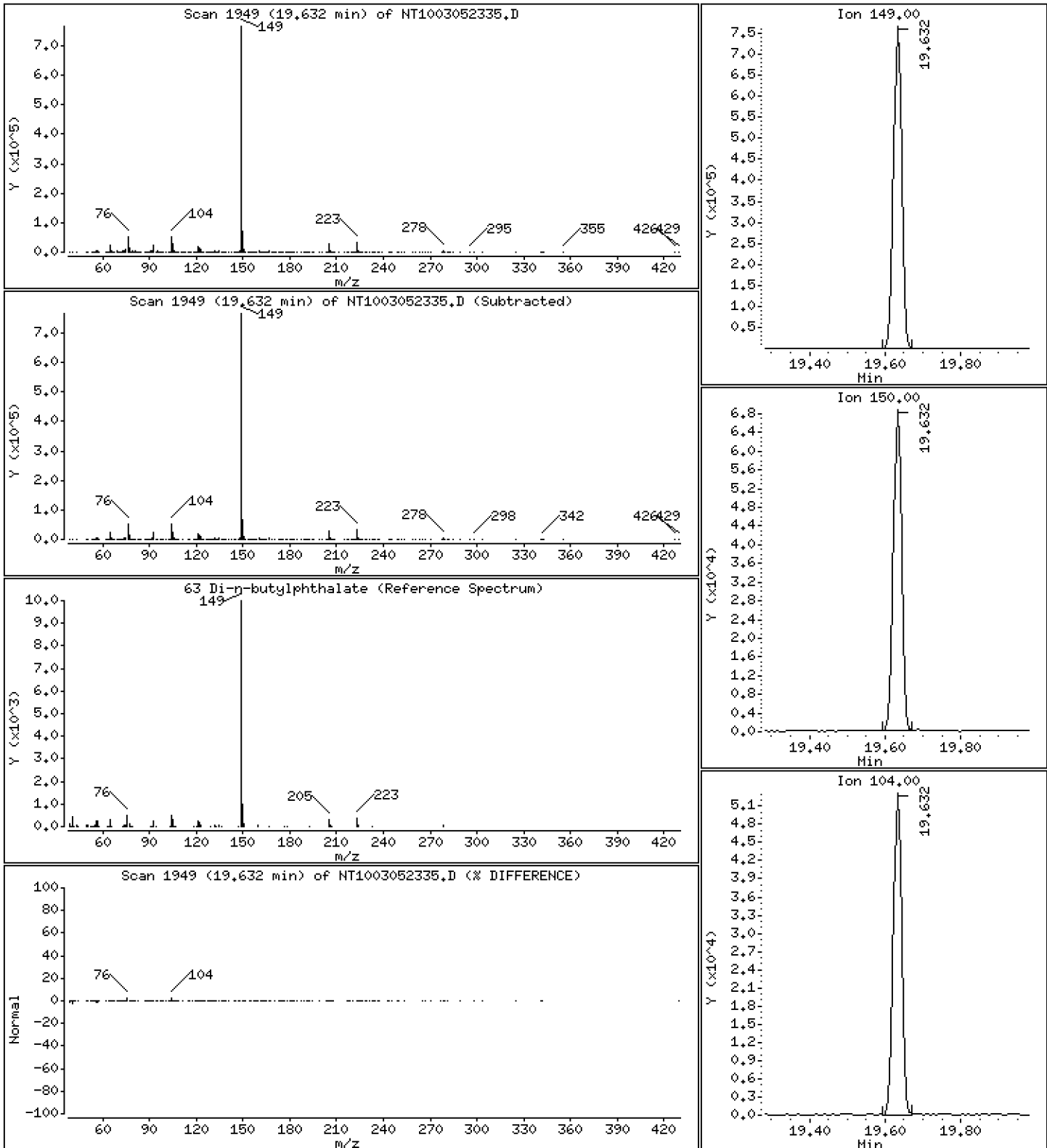
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

63 Di-n-butylphthalate

Concentration: 4,737 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

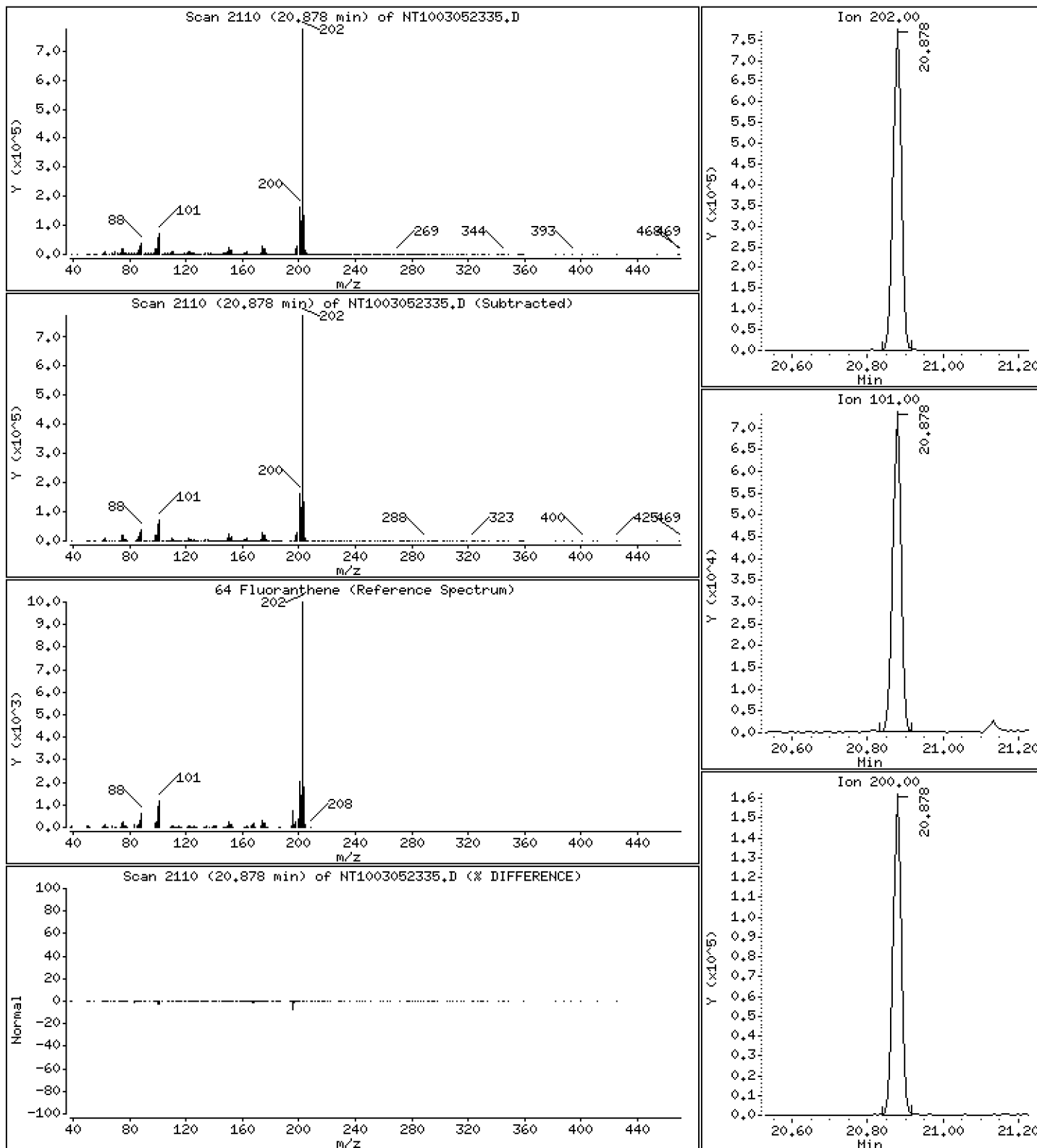
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 4,159 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

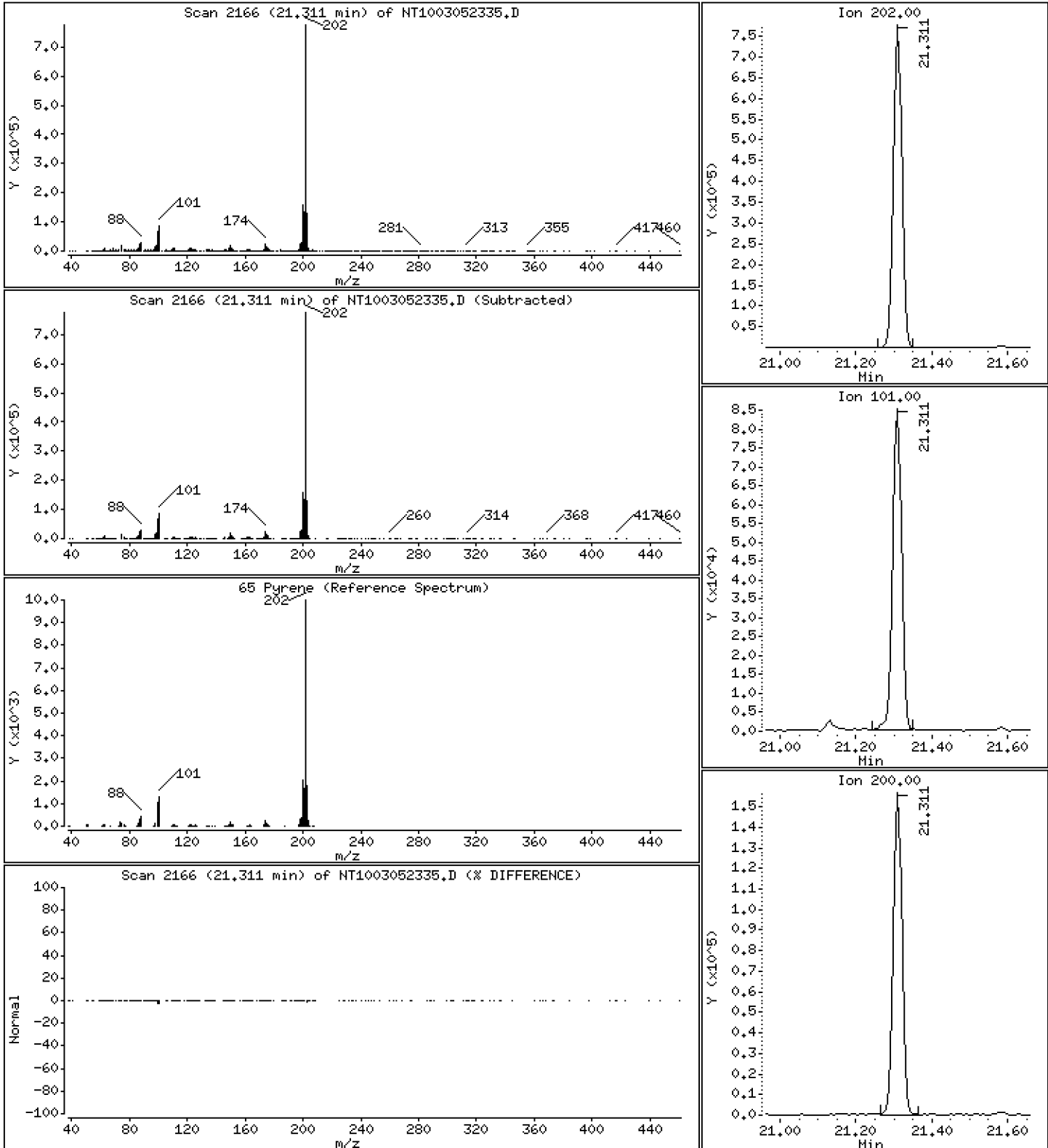
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

65 Pyrene

Concentration: 4,229 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

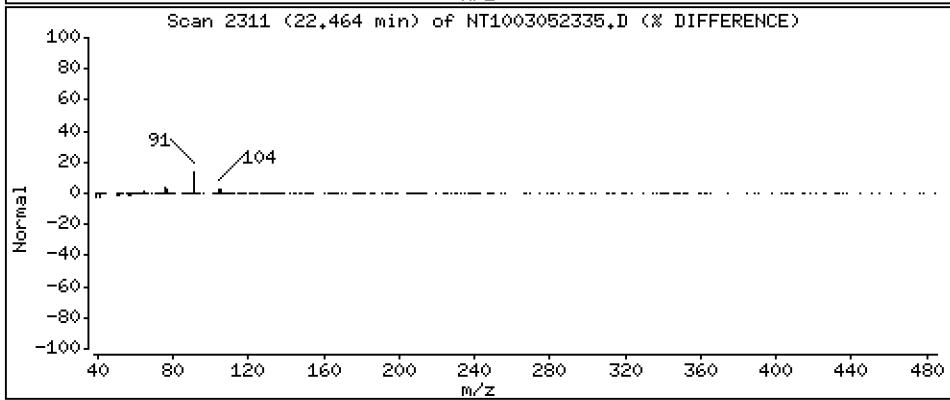
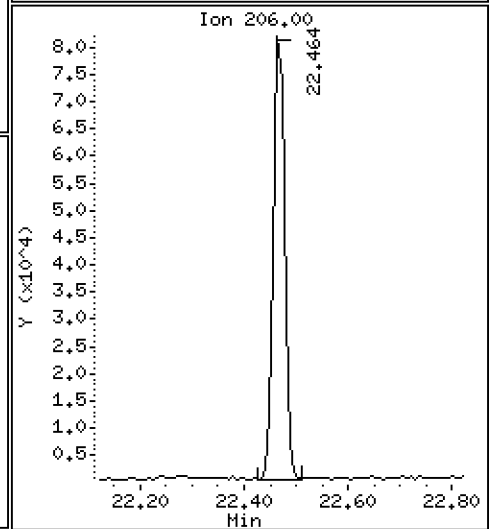
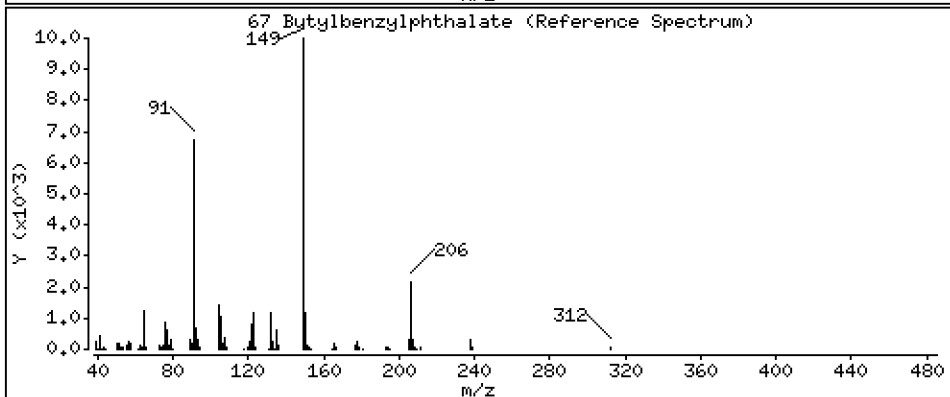
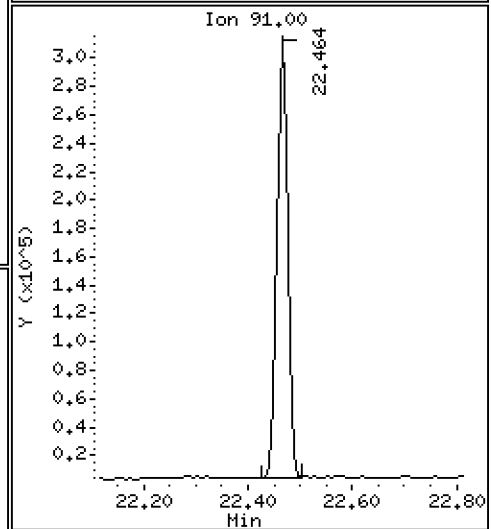
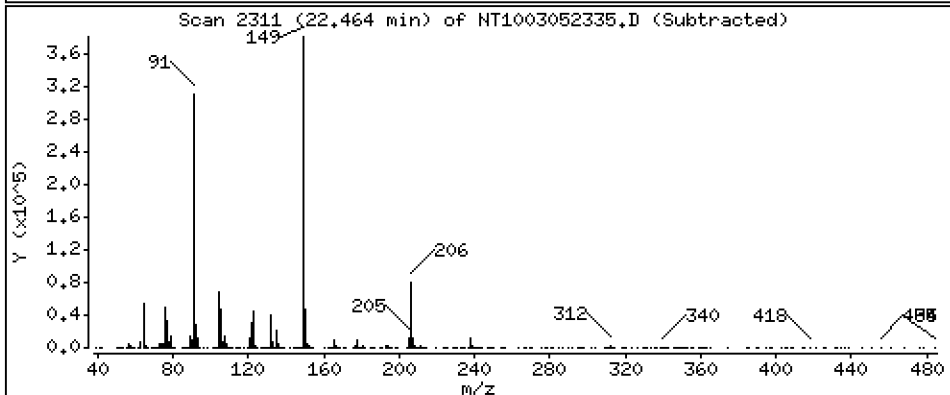
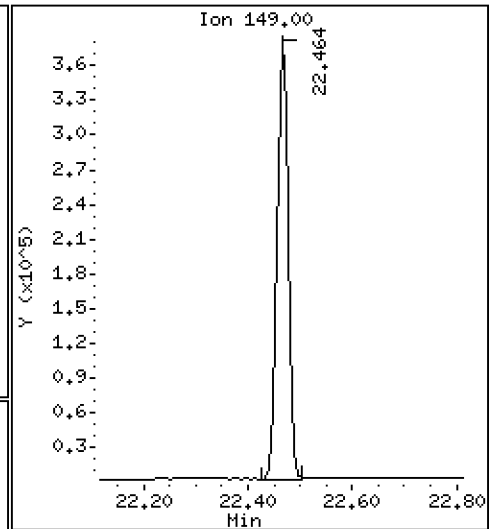
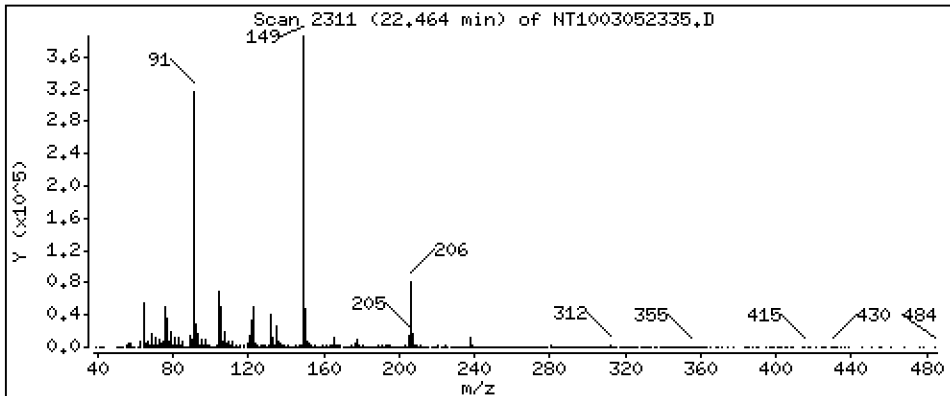
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,674 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

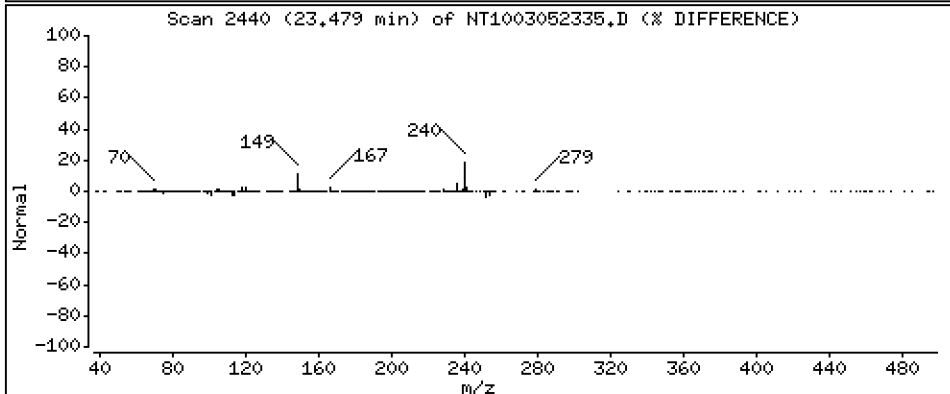
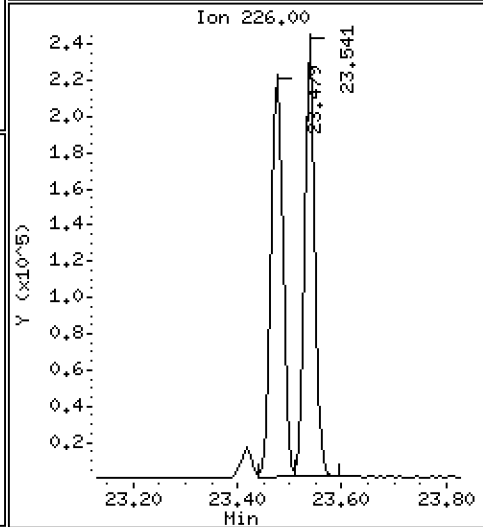
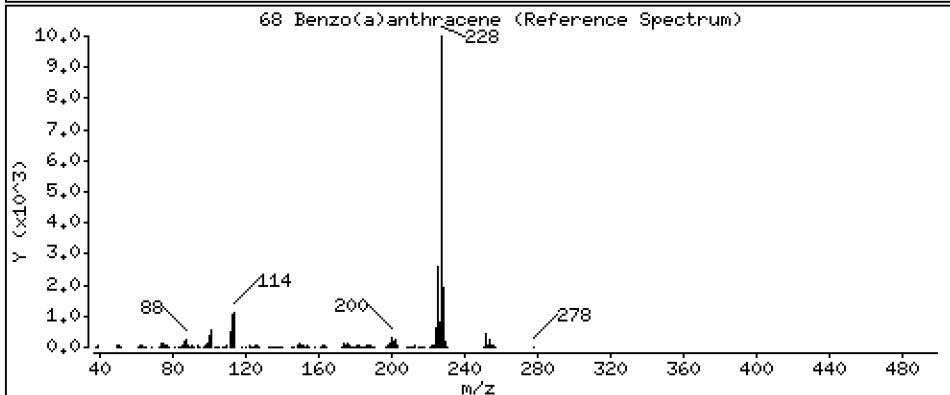
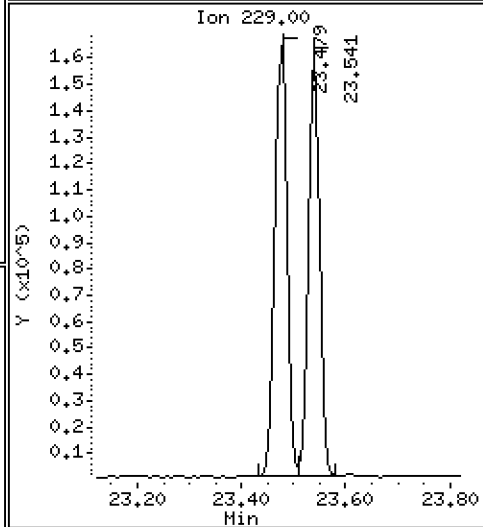
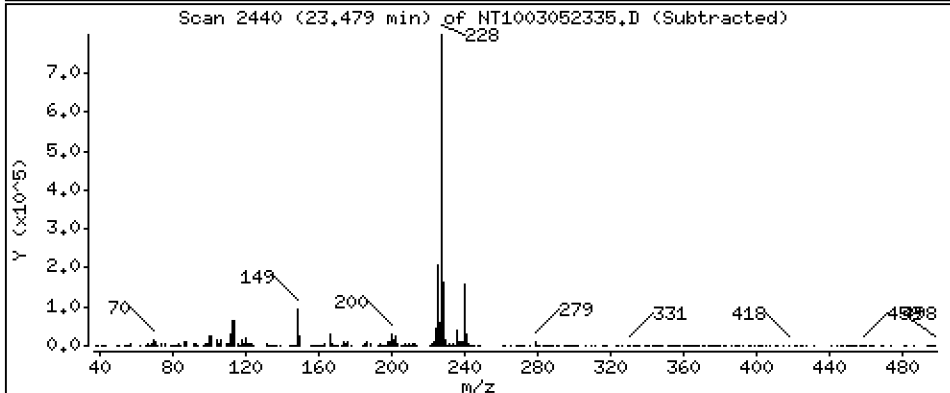
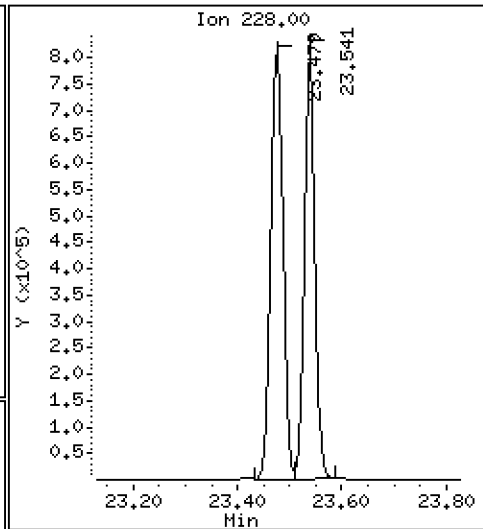
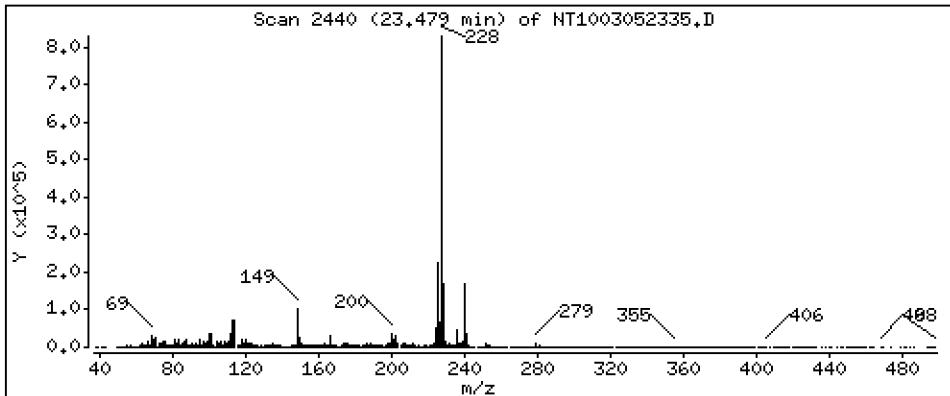
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 4,691 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

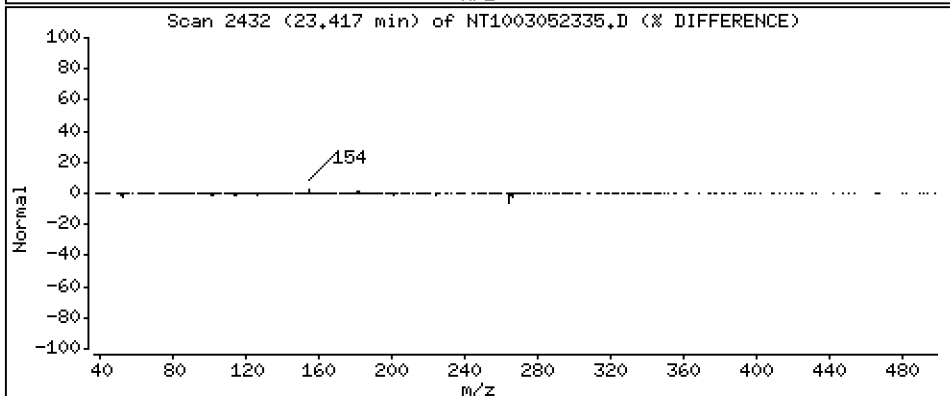
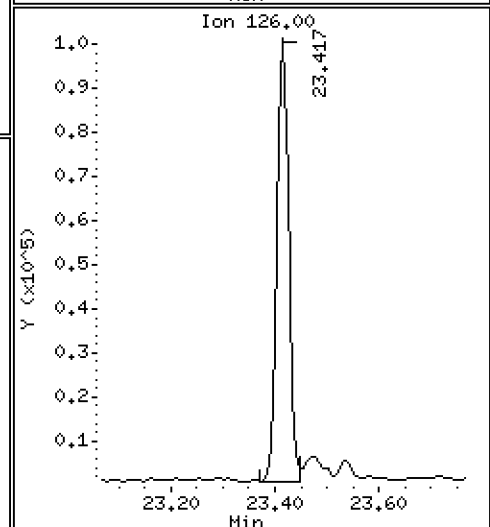
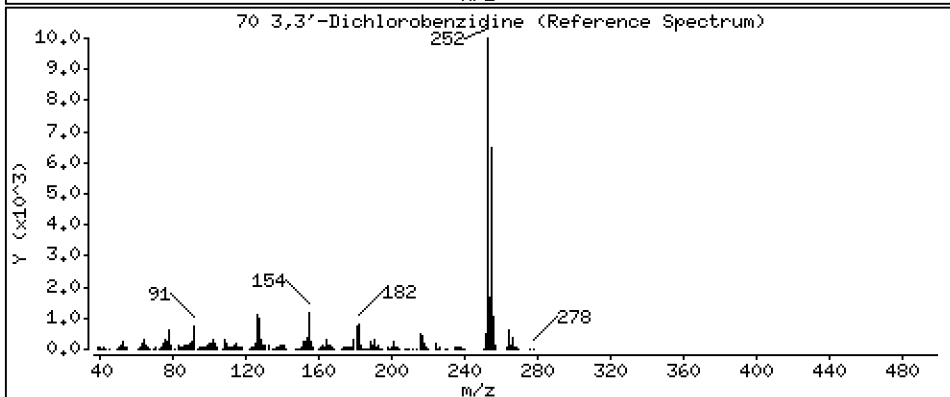
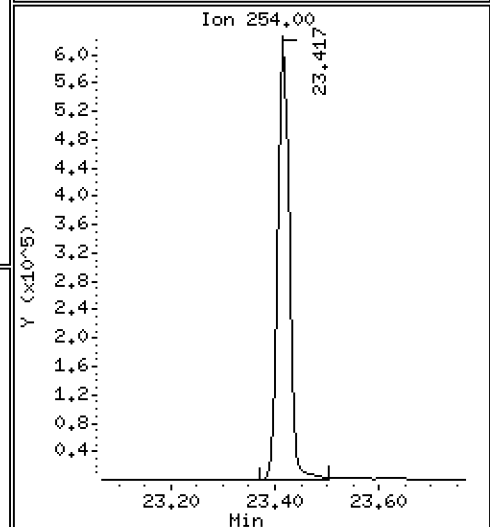
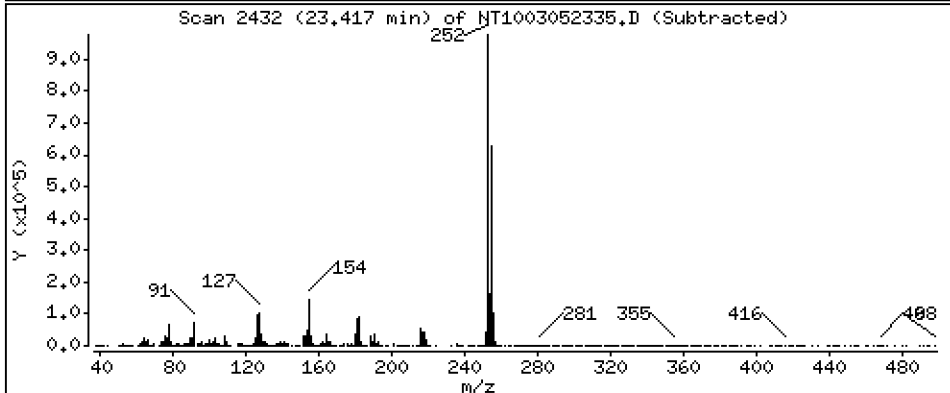
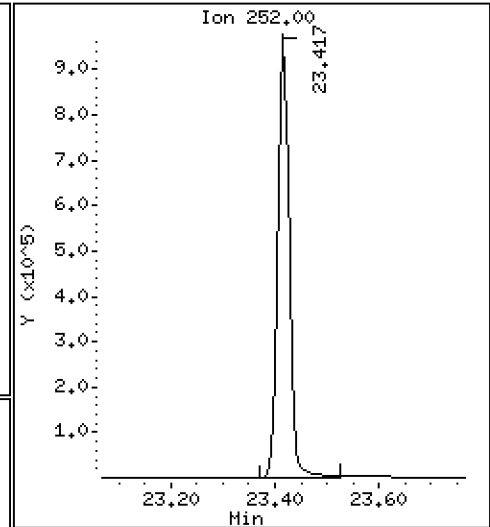
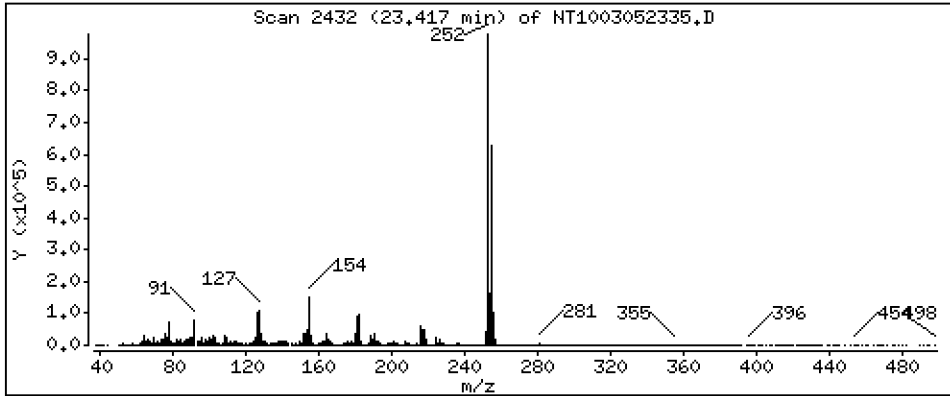
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 11,34 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

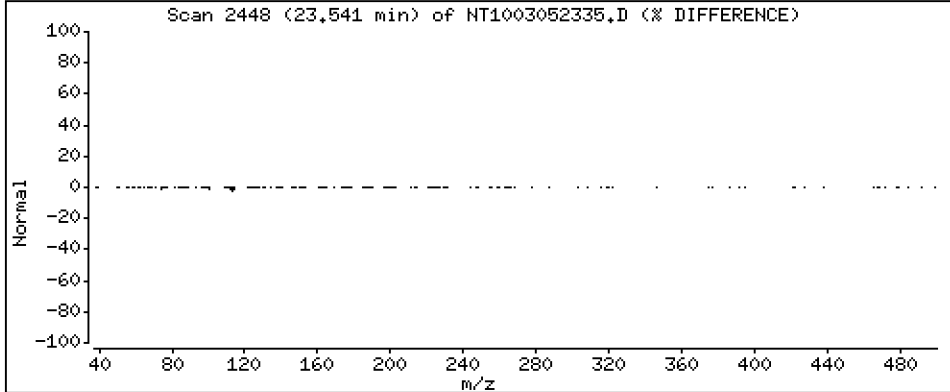
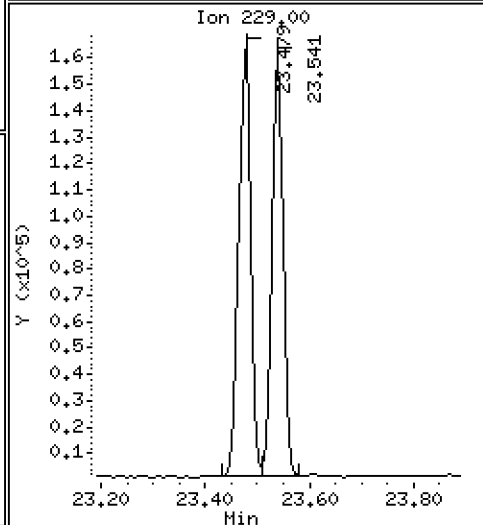
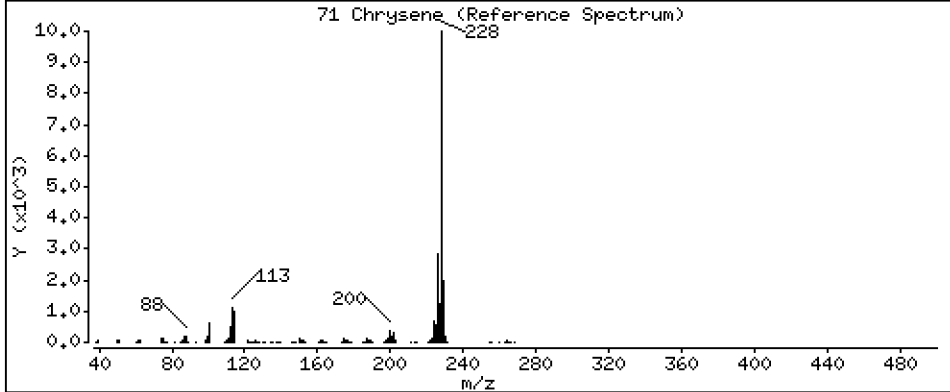
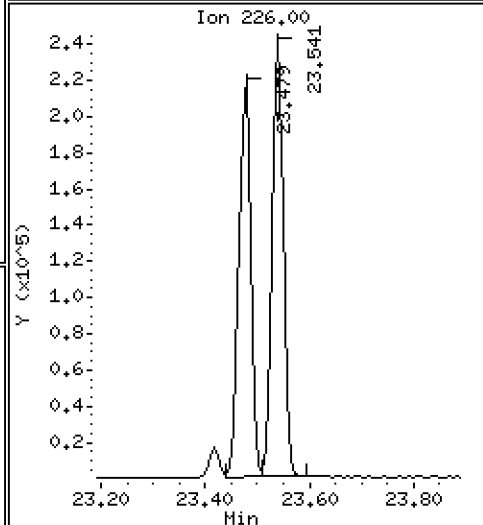
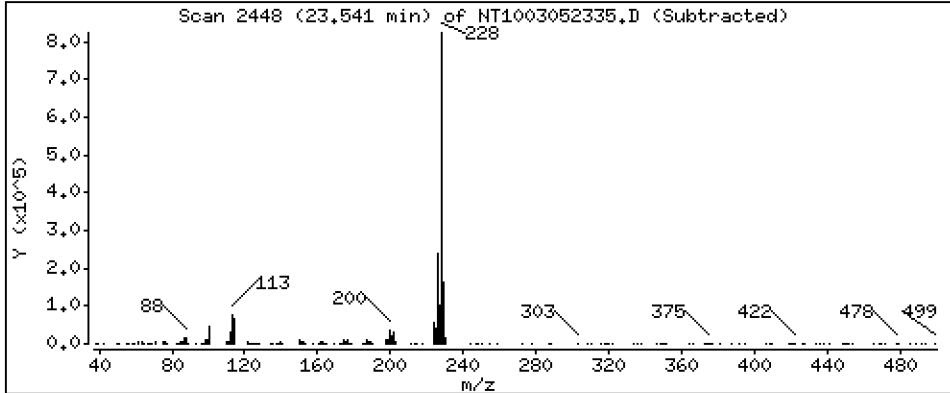
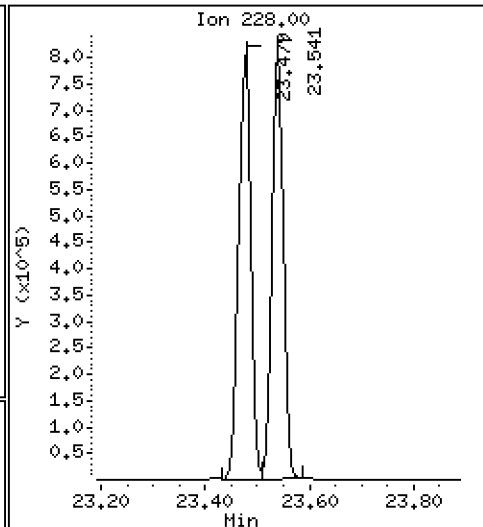
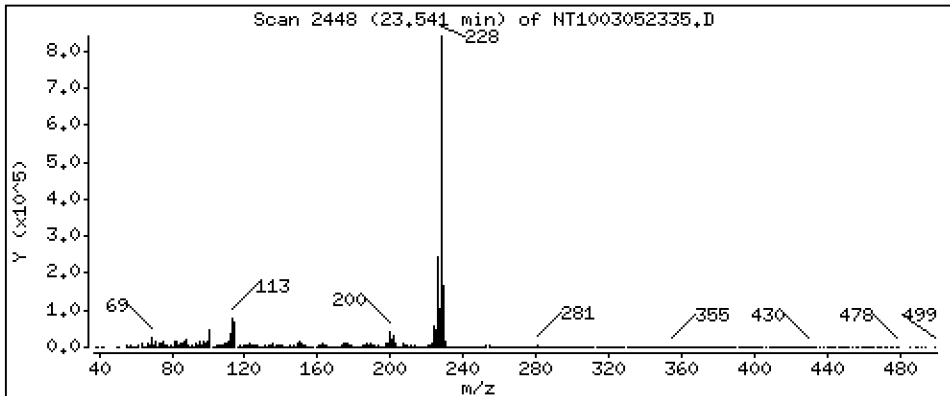
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 5,210 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

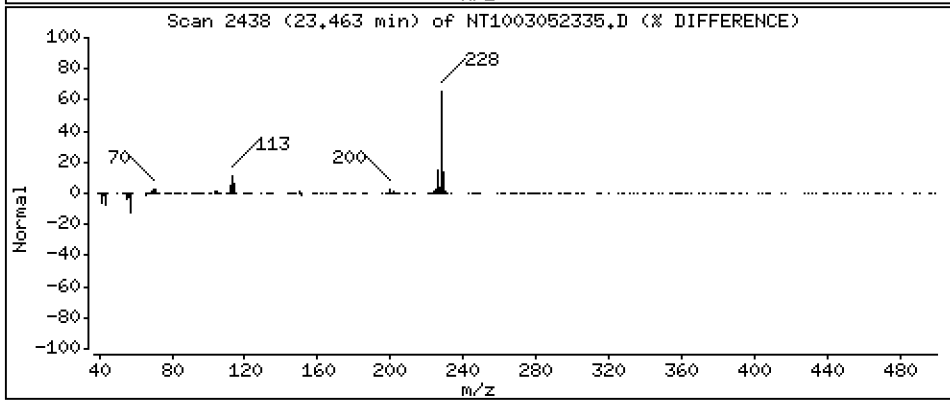
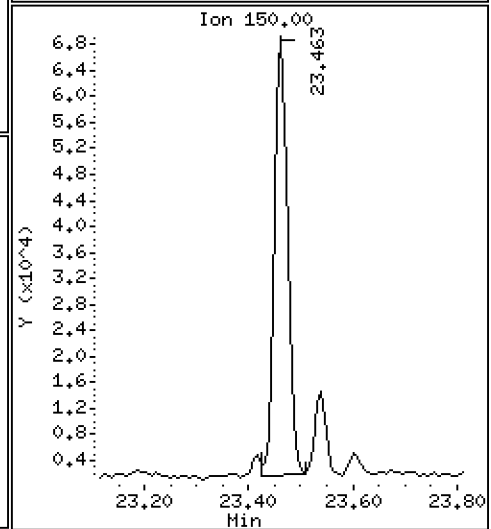
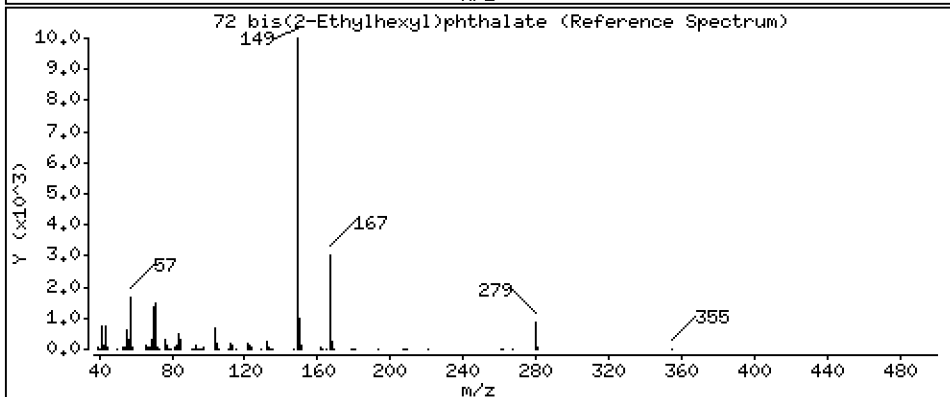
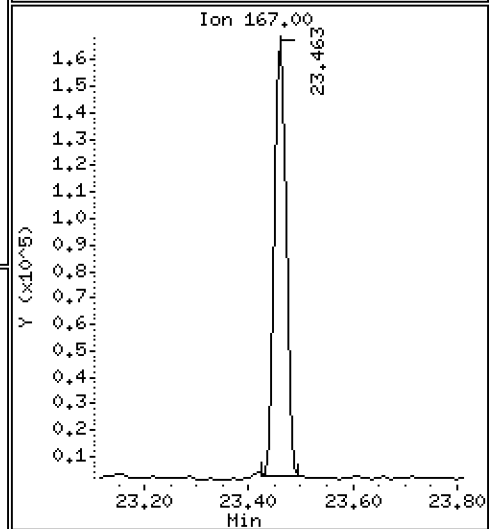
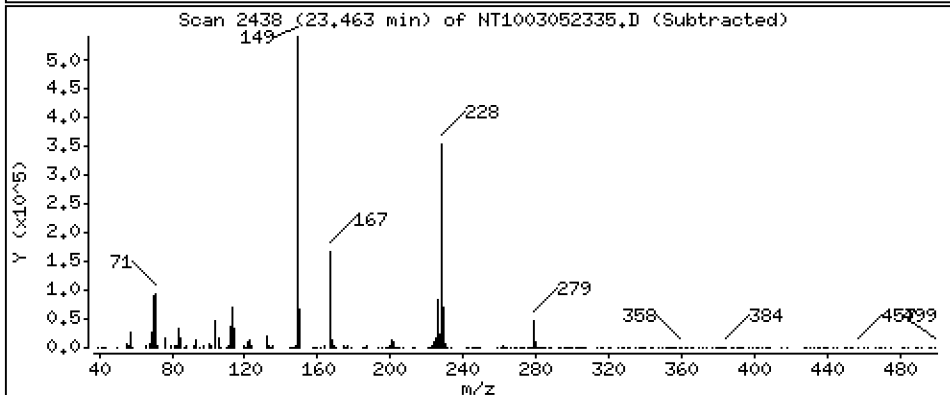
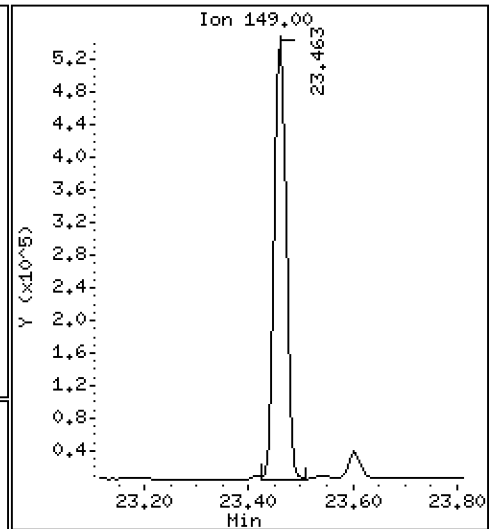
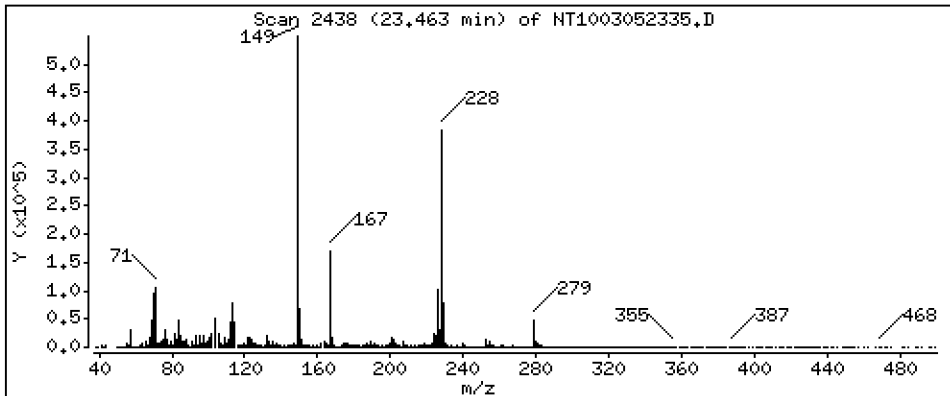
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

72 bis(2-Ethylhexyl)phthalate

Concentration: 4,579 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

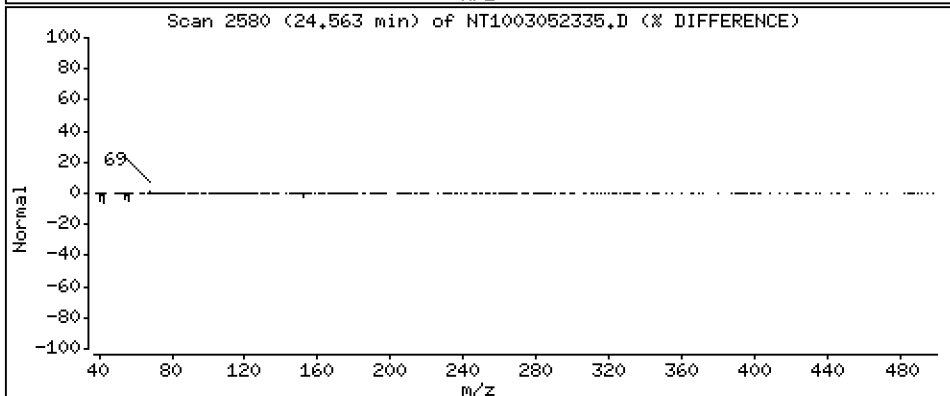
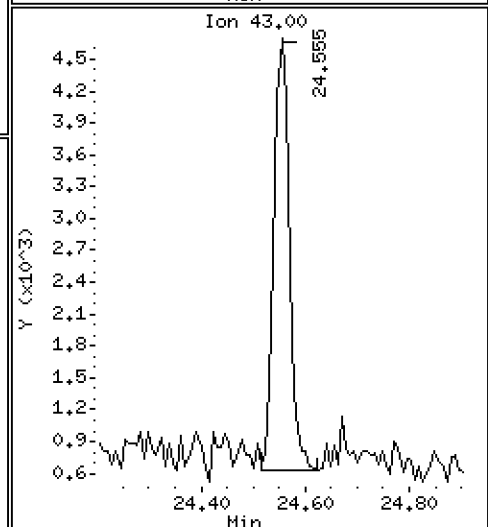
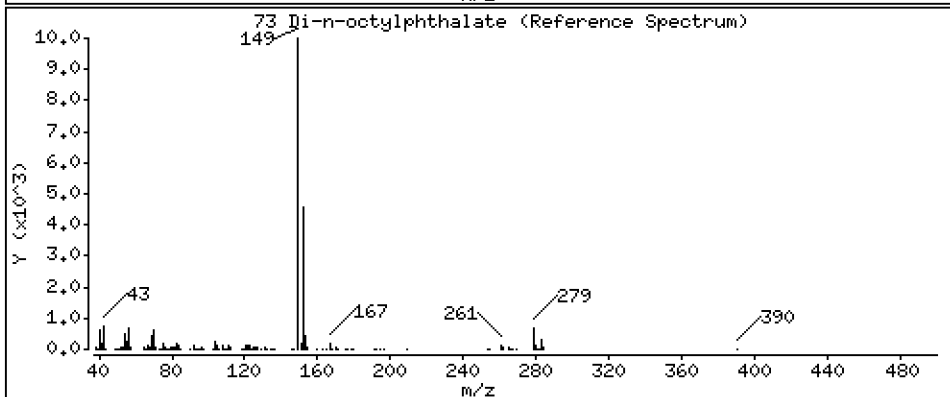
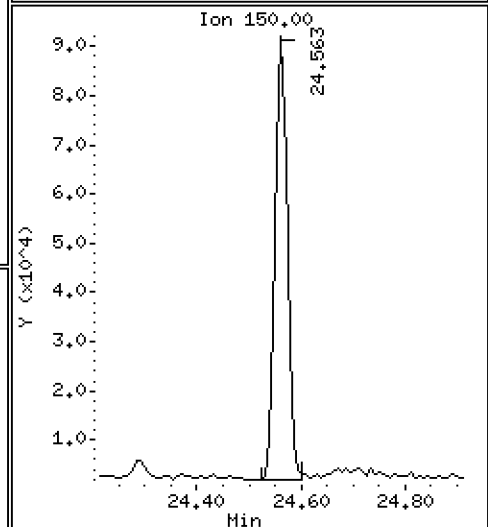
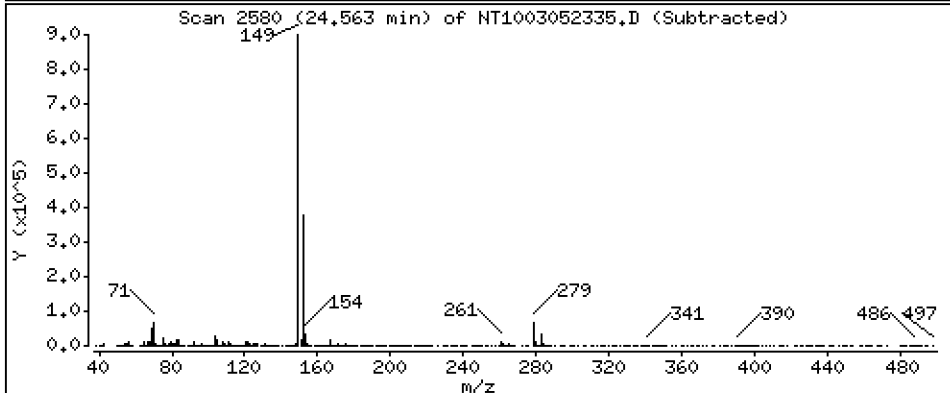
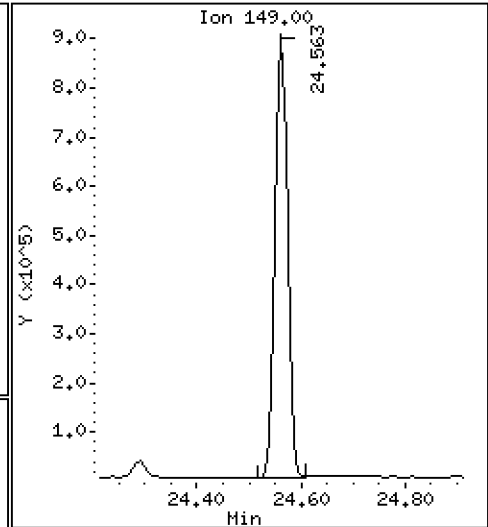
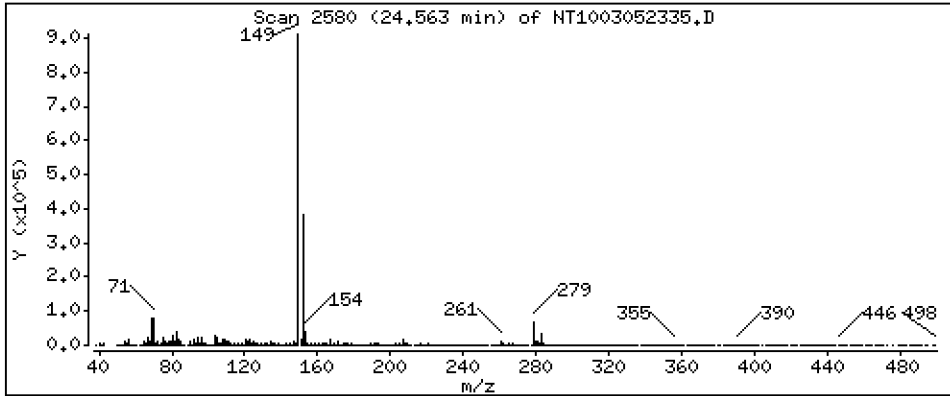
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

73 Di-n-octylphthalate

Concentration: 5,184 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

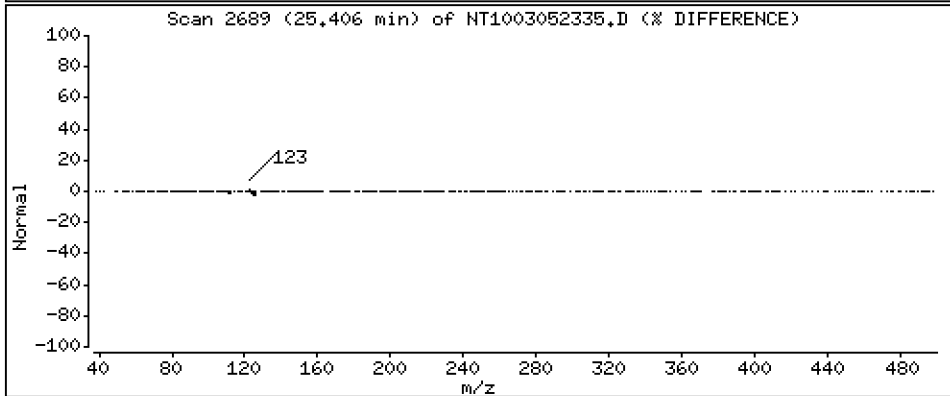
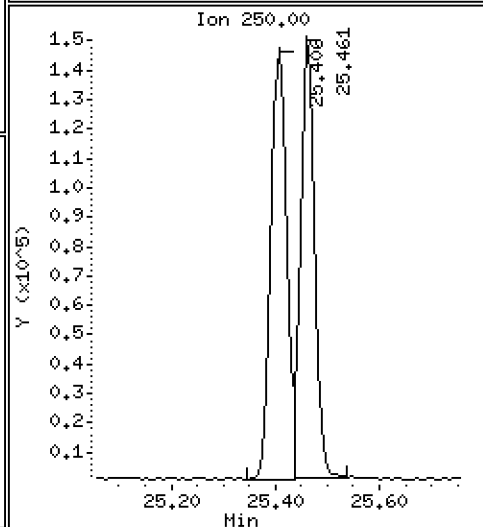
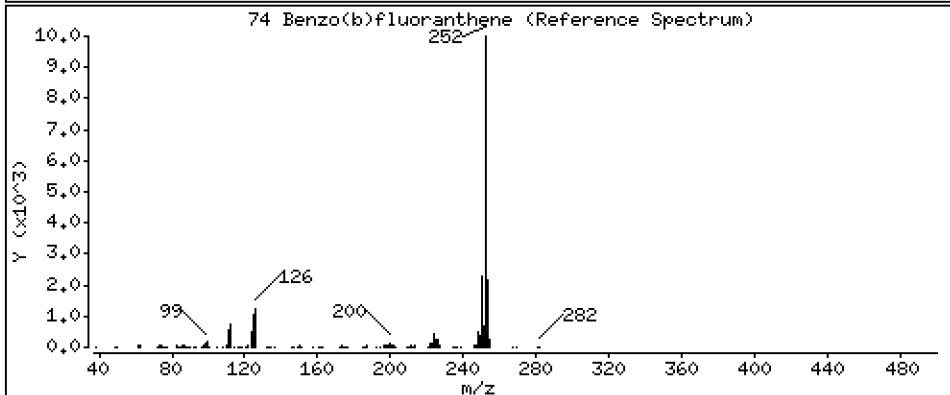
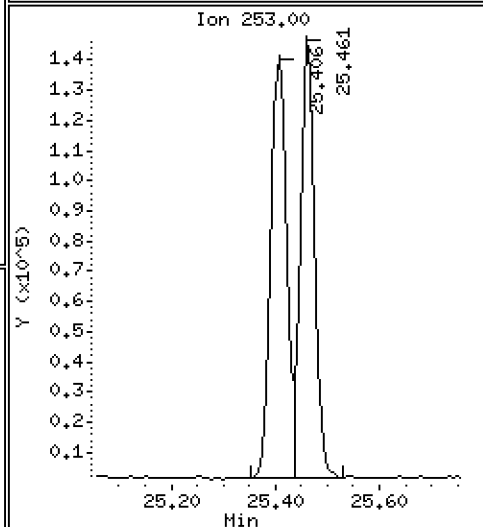
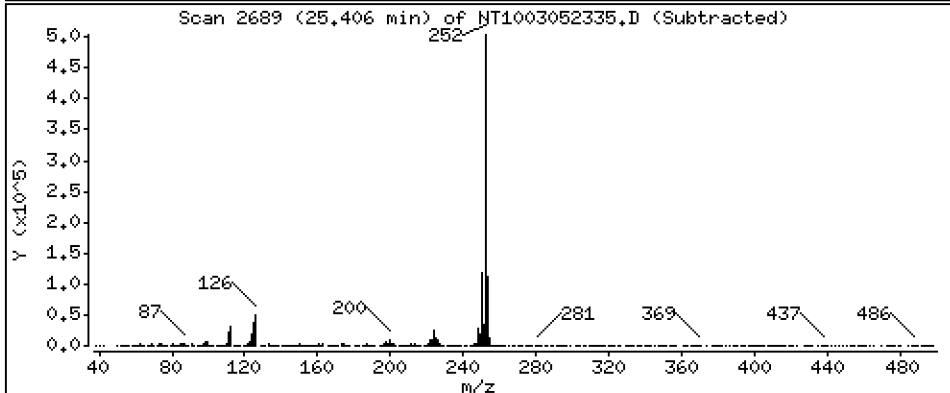
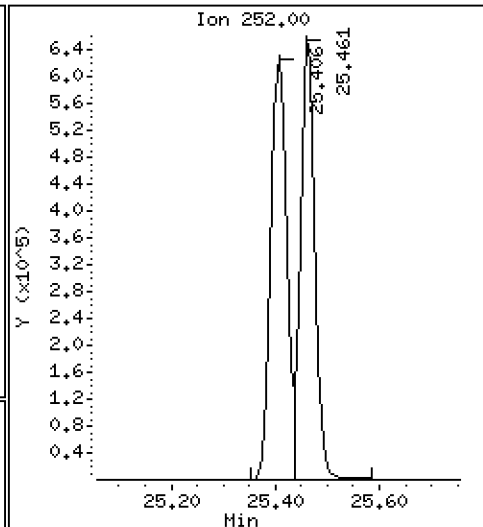
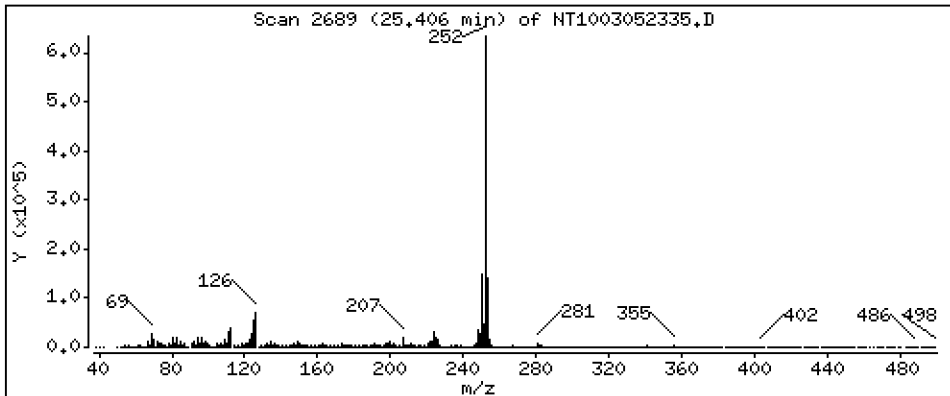
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 4,406 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

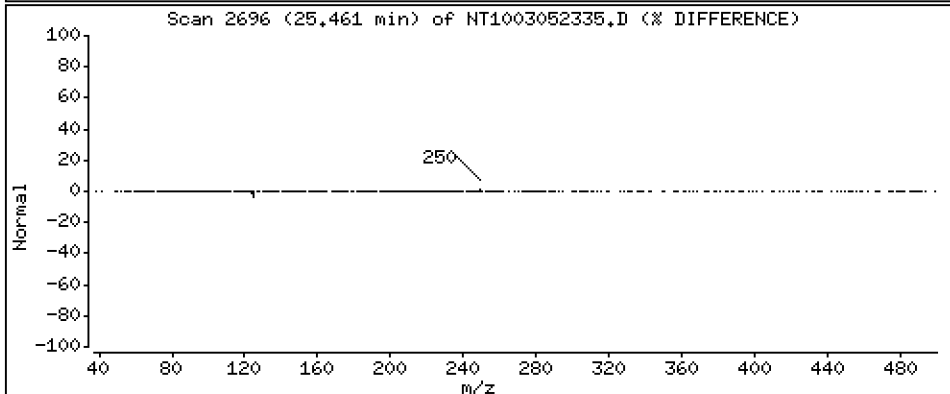
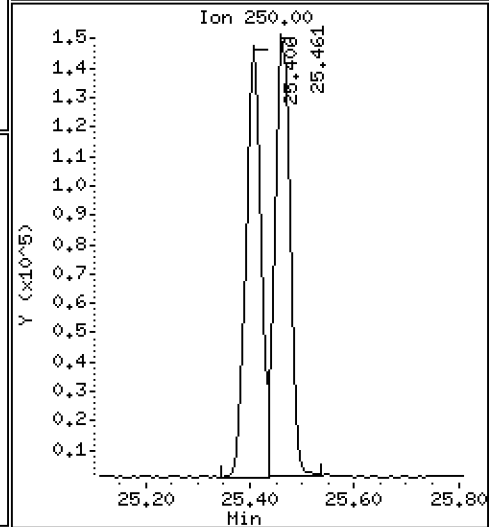
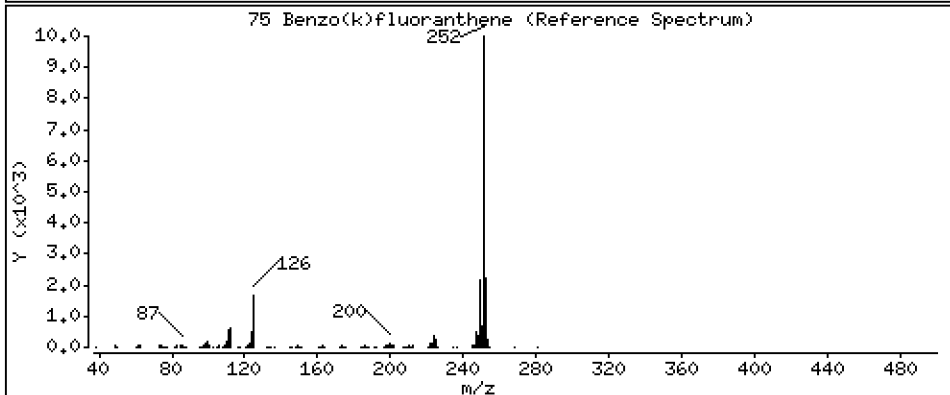
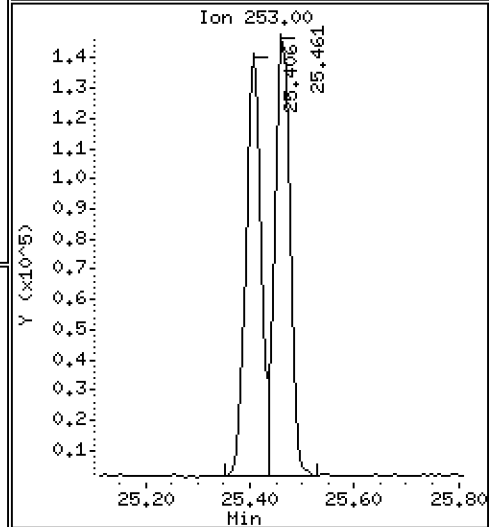
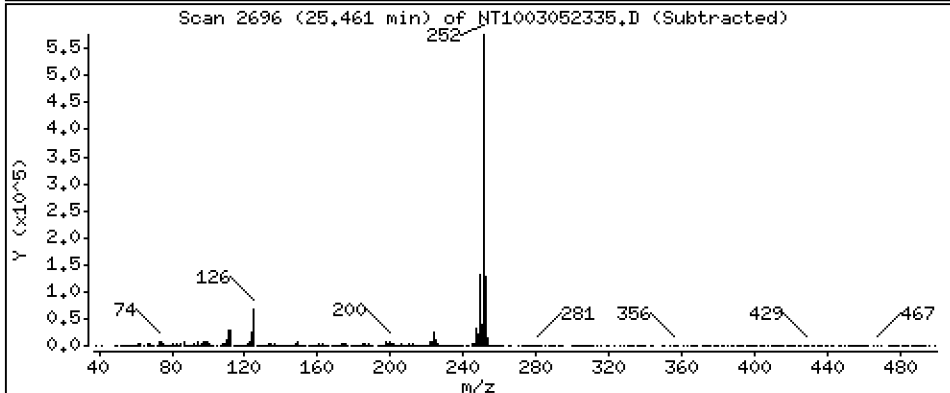
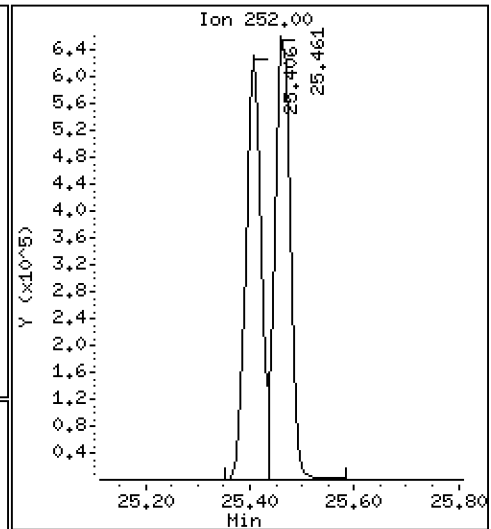
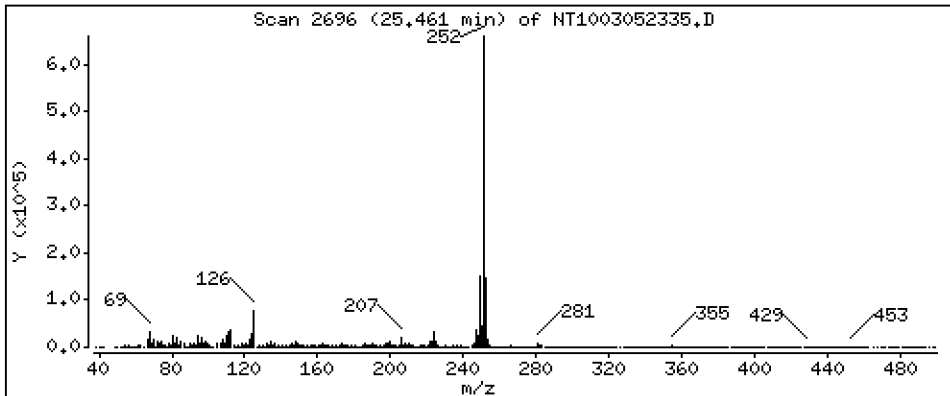
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 4,491 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

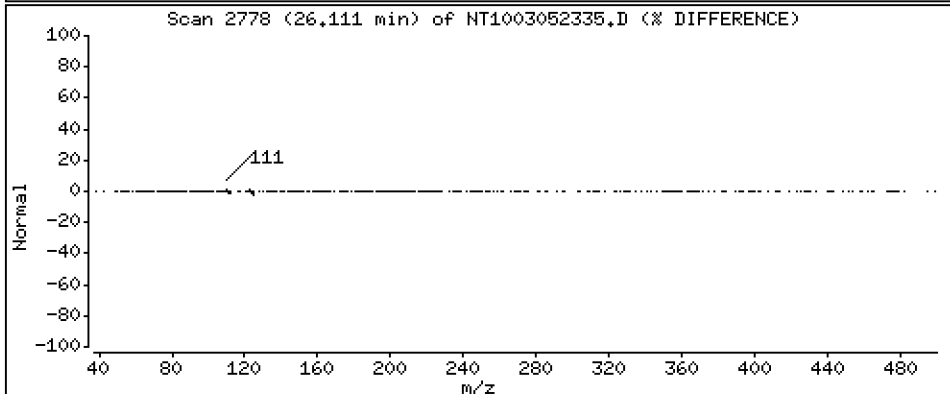
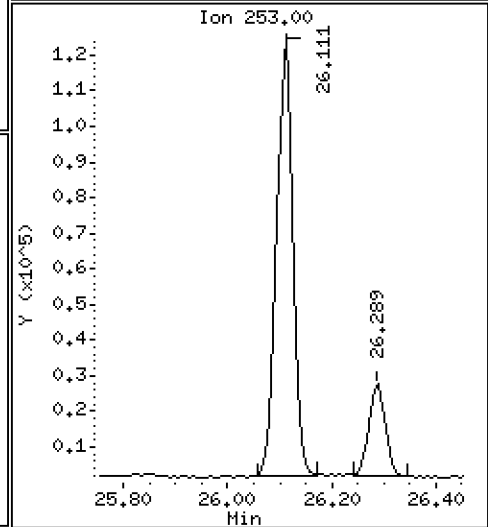
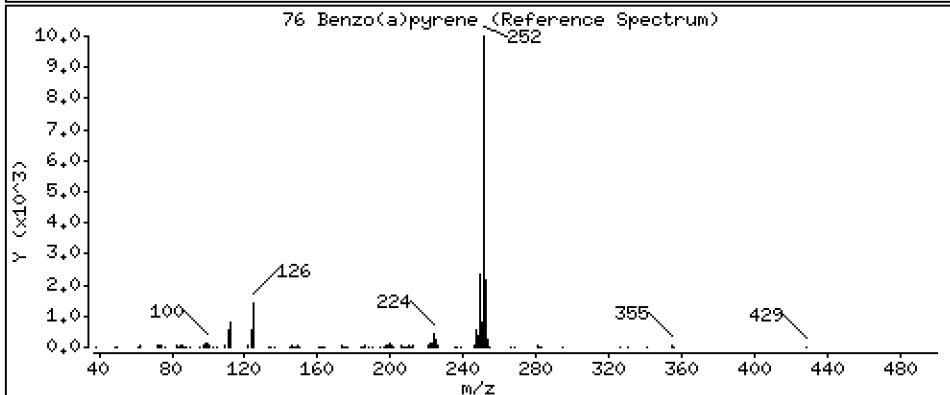
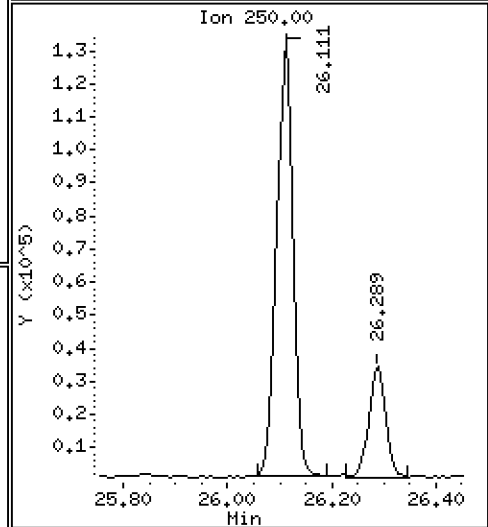
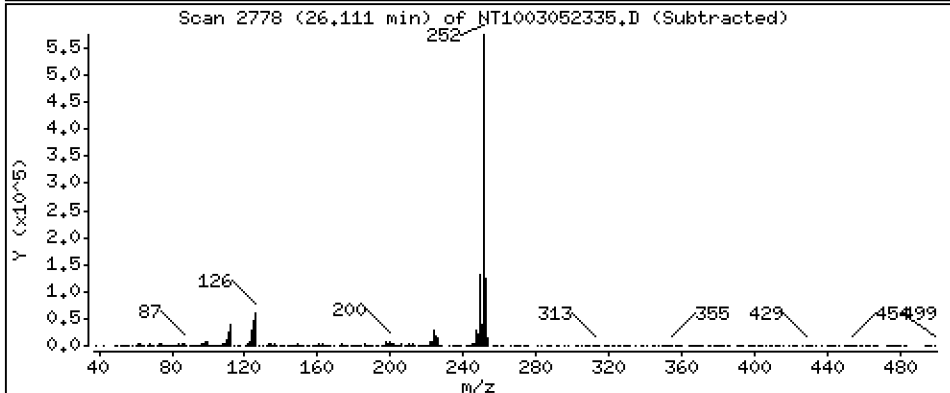
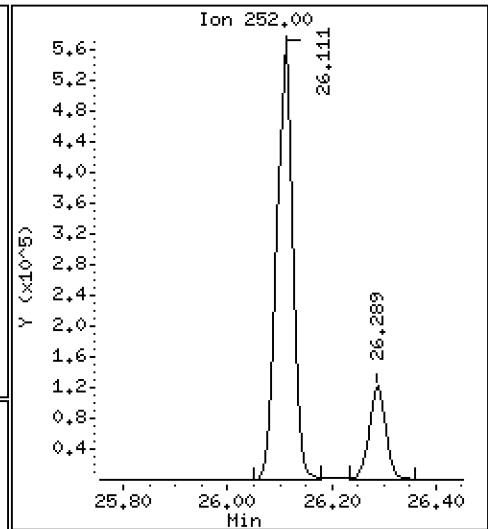
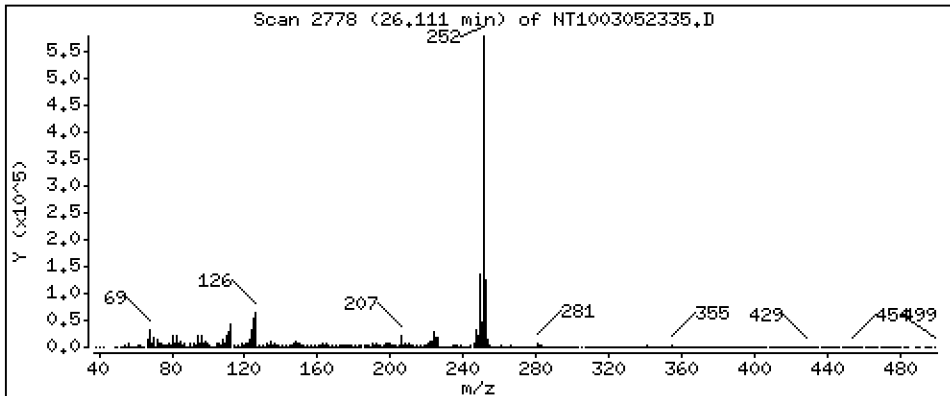
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 4,425 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

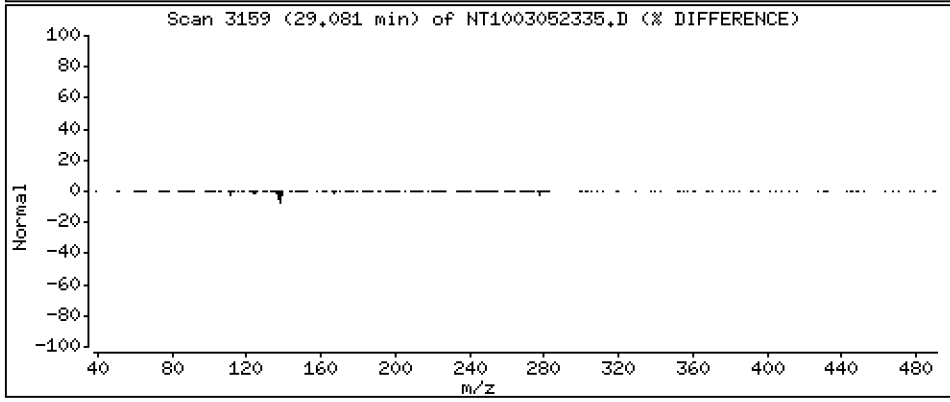
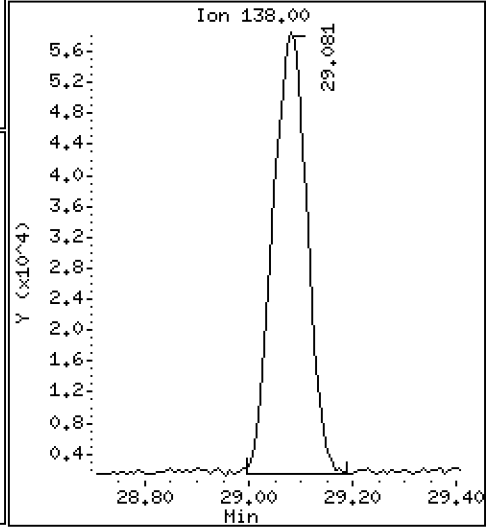
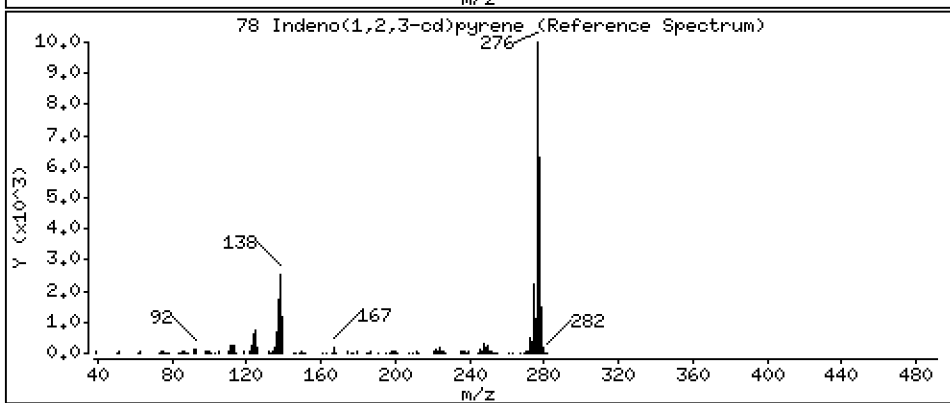
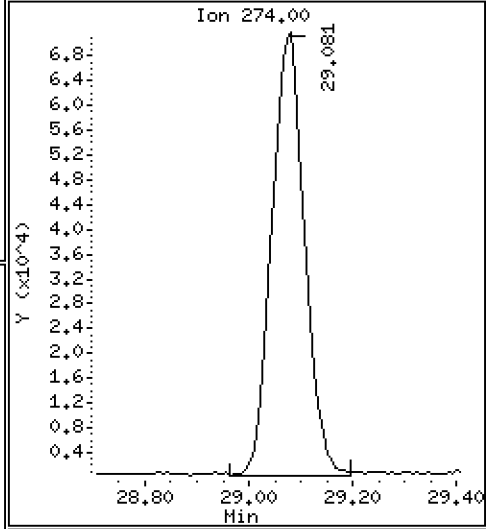
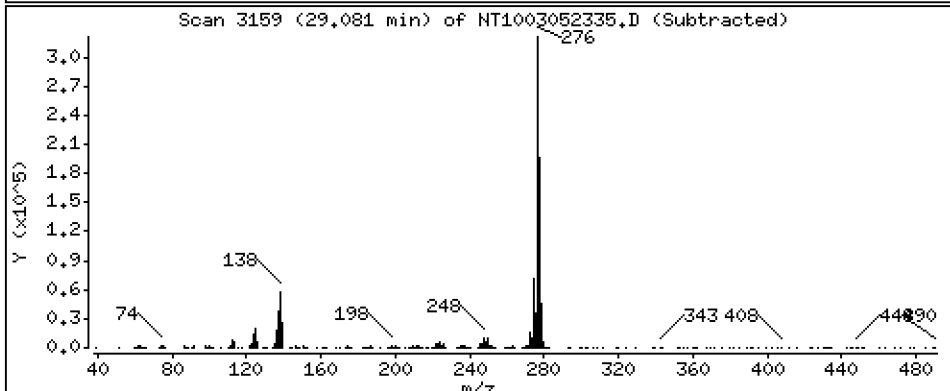
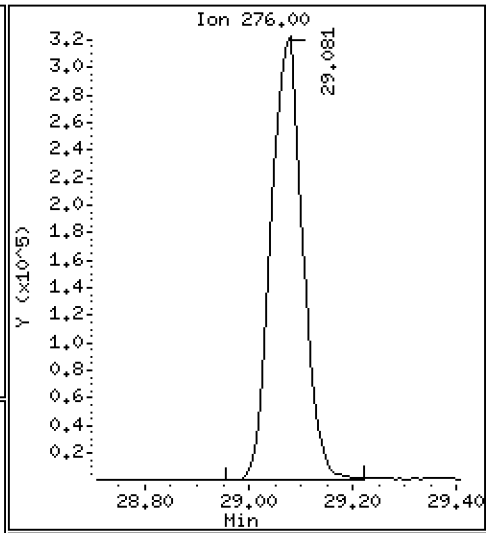
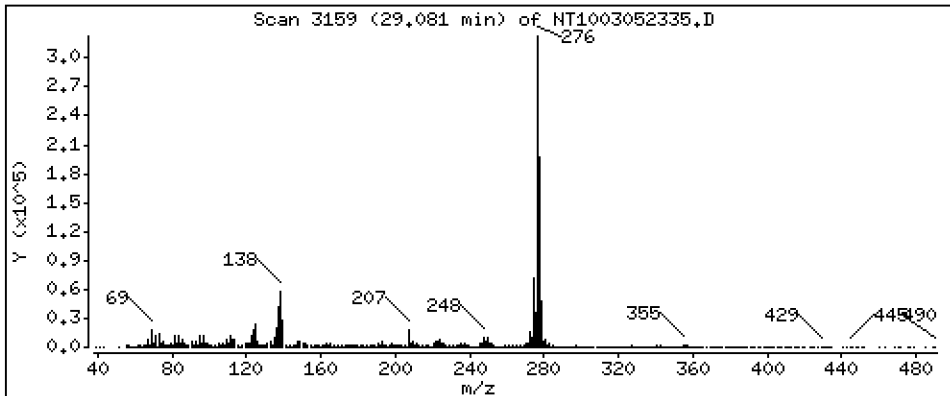
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 4,377 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

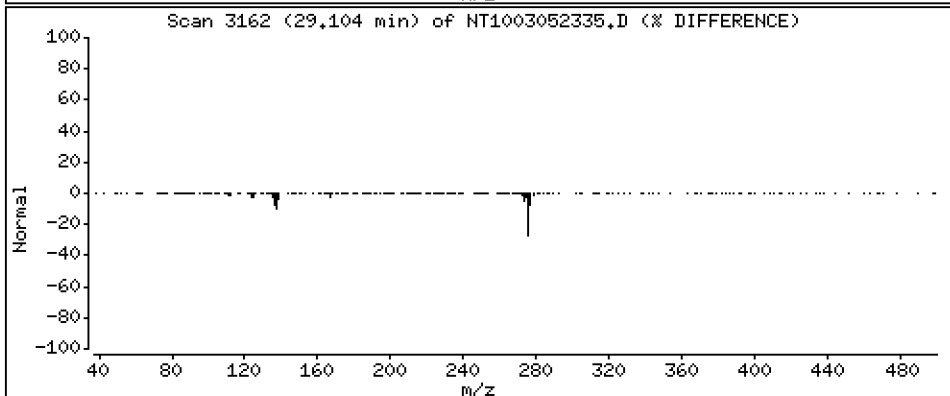
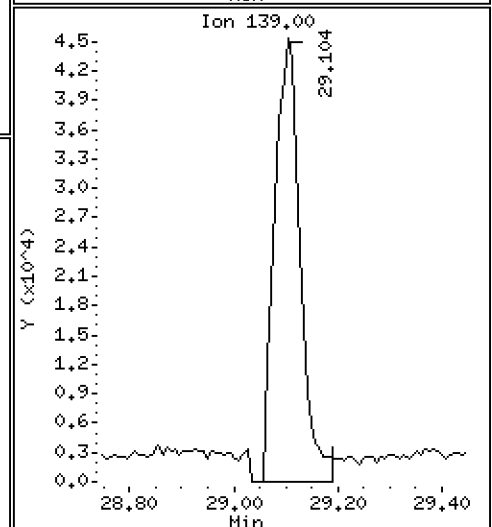
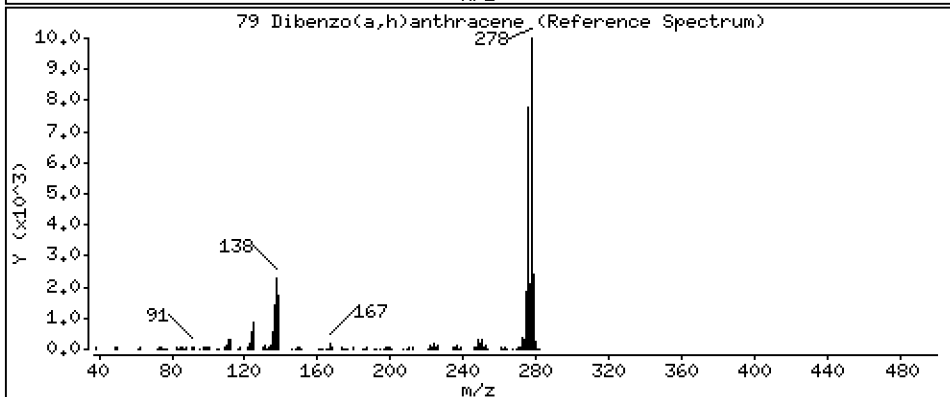
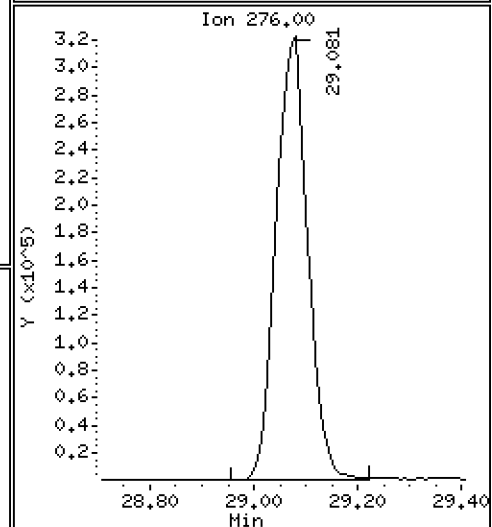
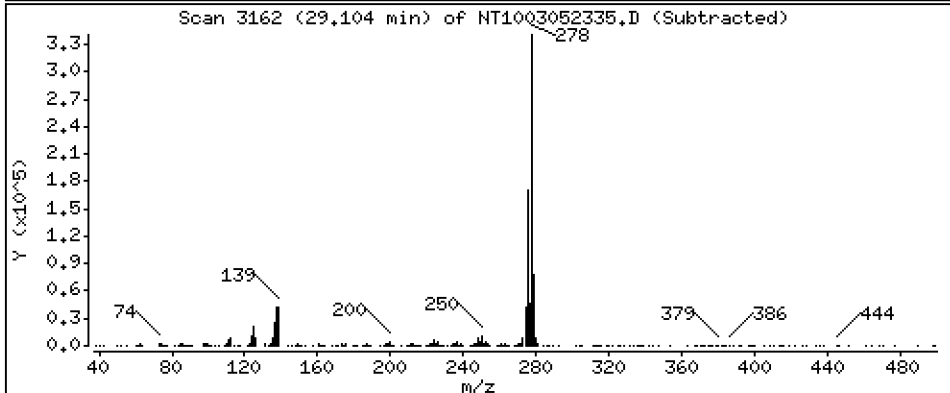
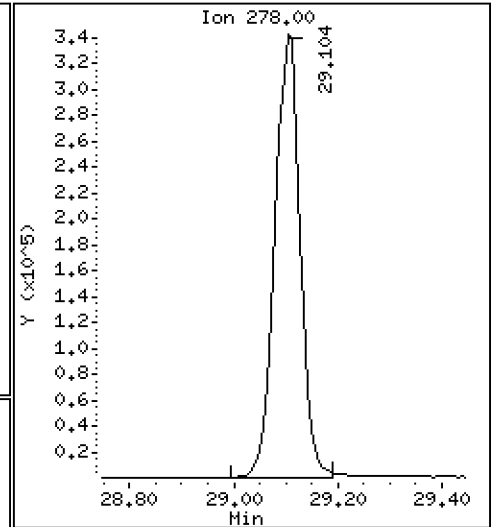
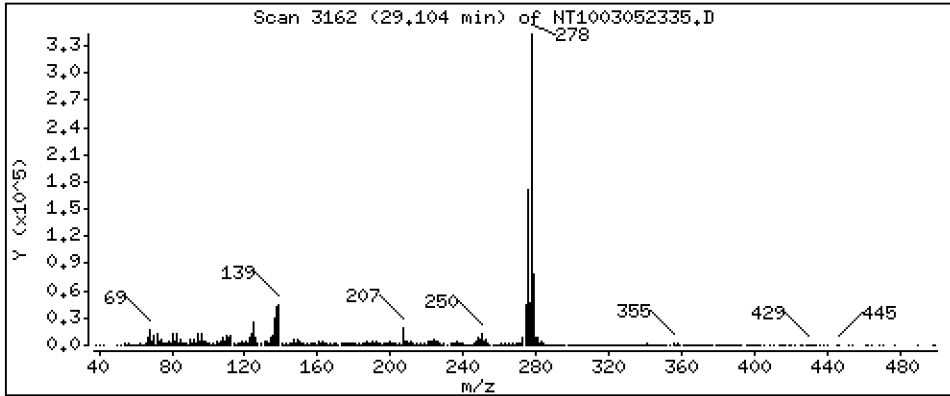
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,793 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

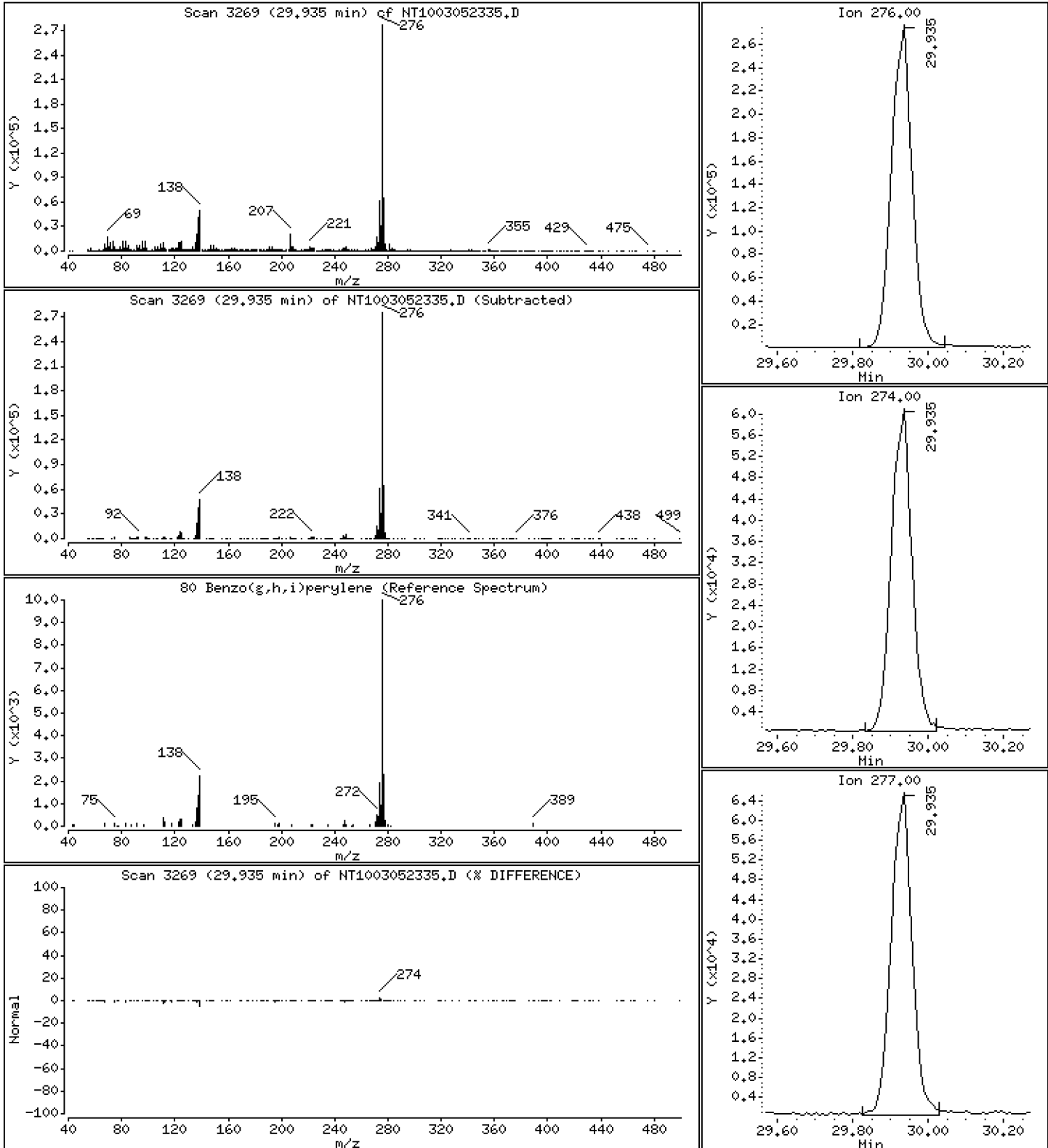
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 4,220 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

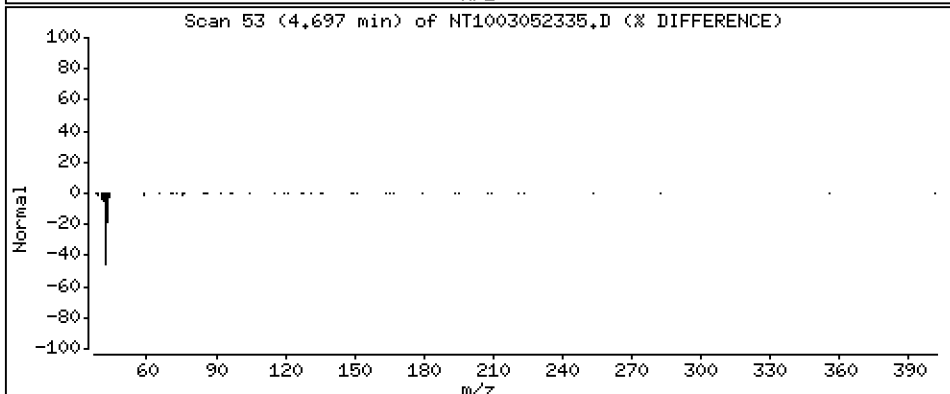
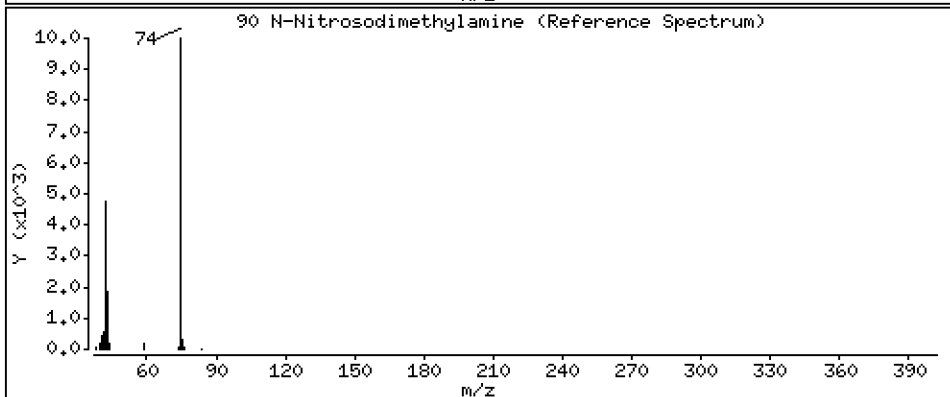
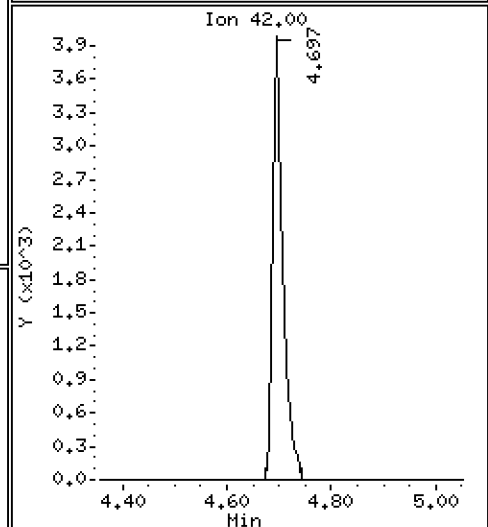
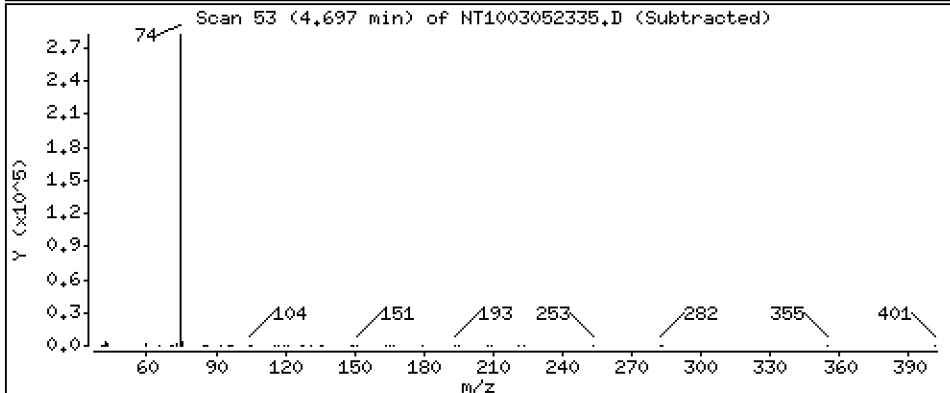
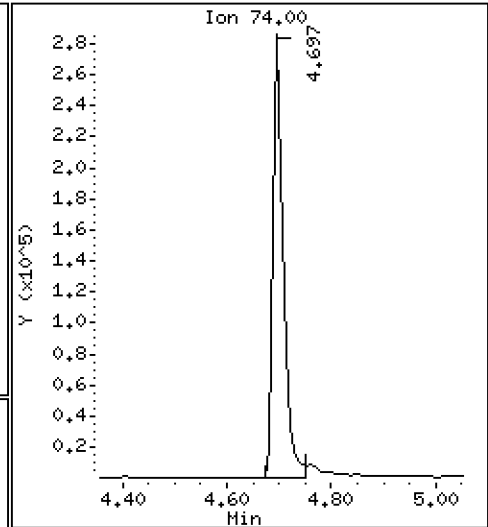
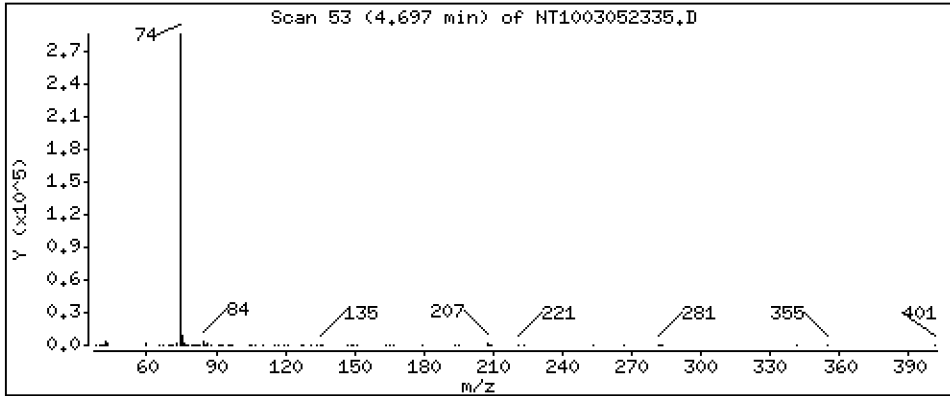
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 9,303 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

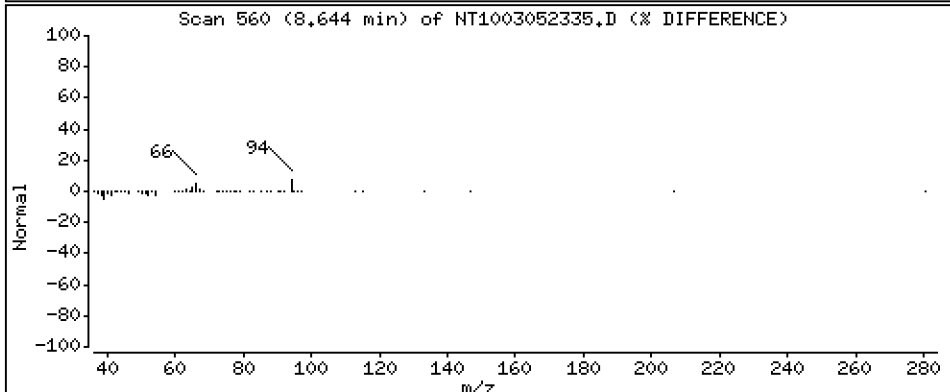
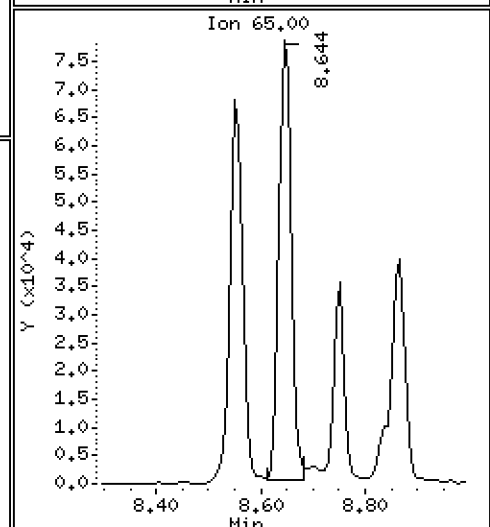
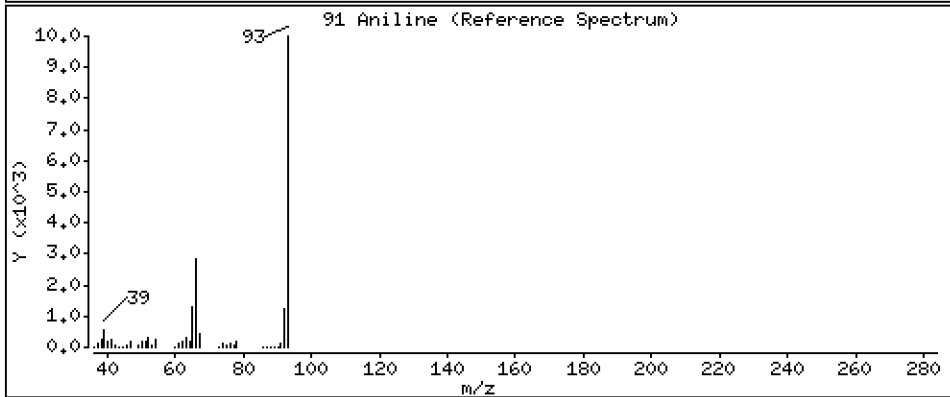
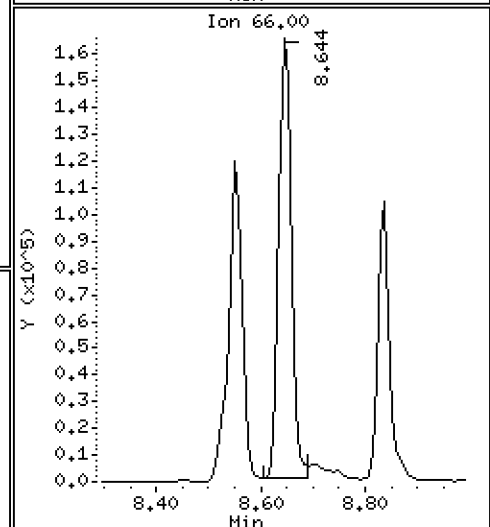
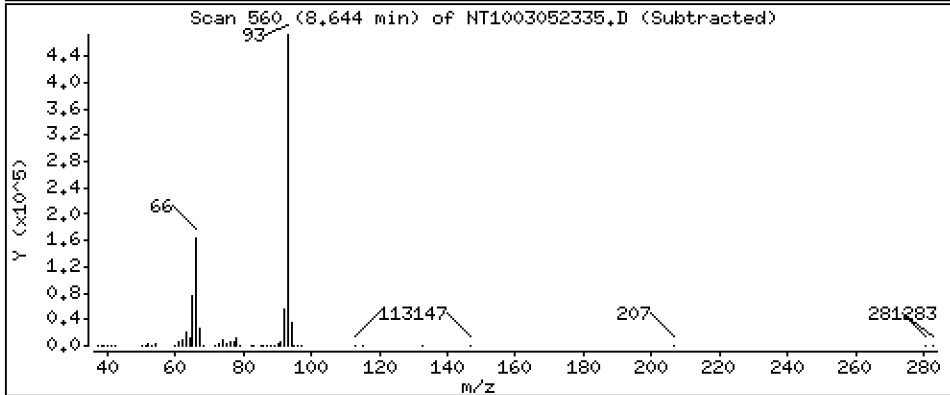
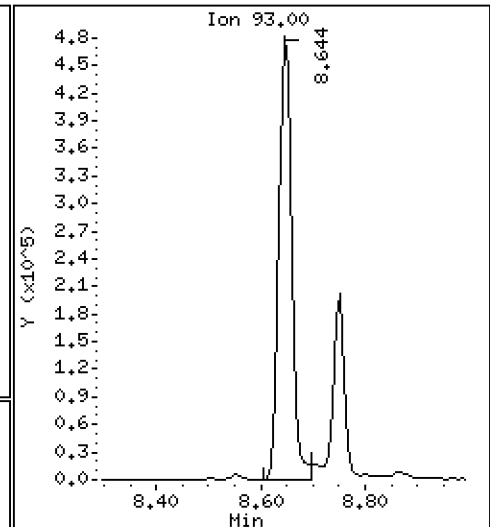
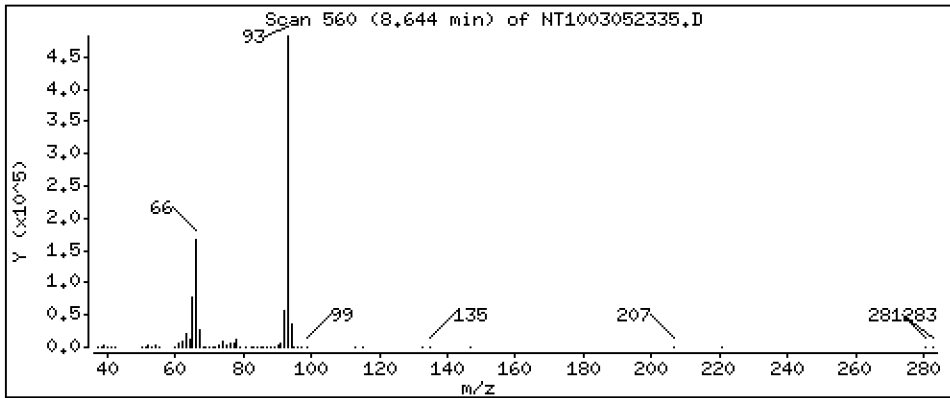
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 8,689 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

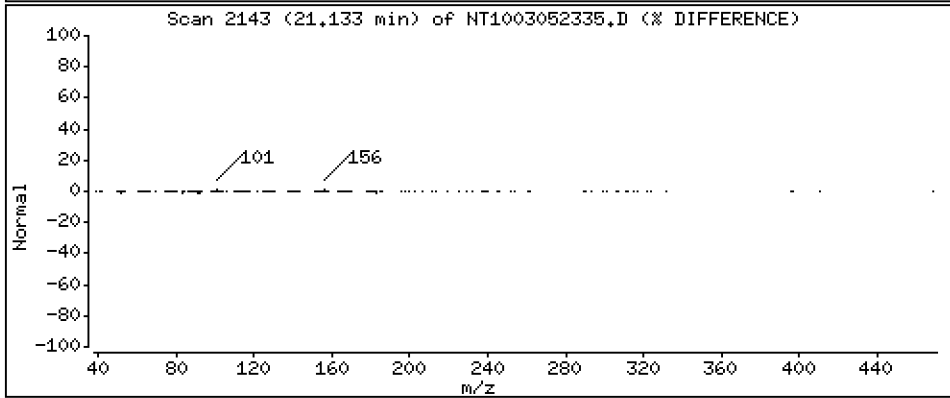
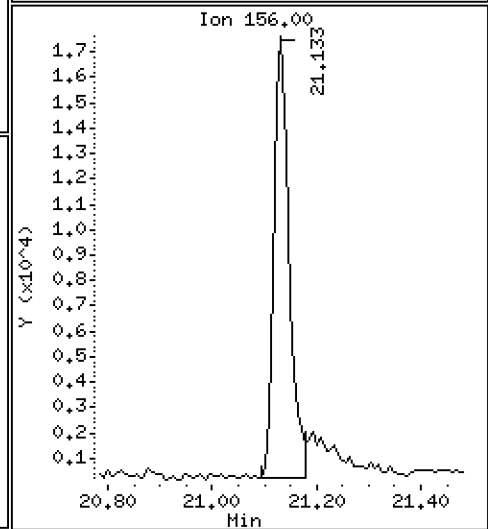
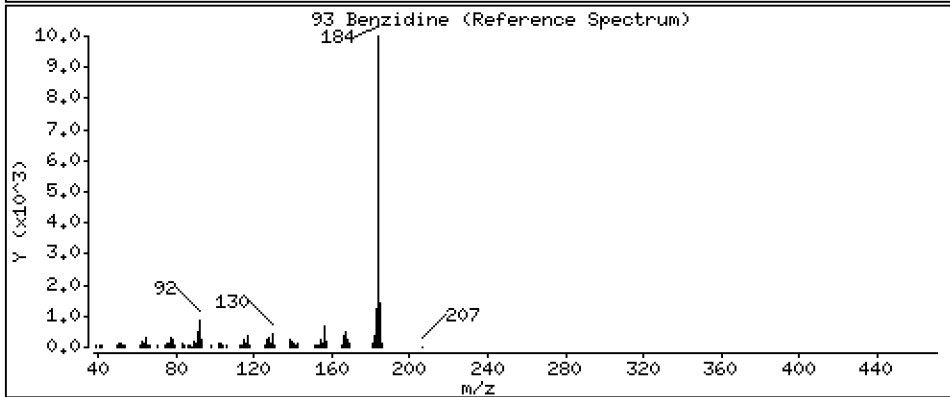
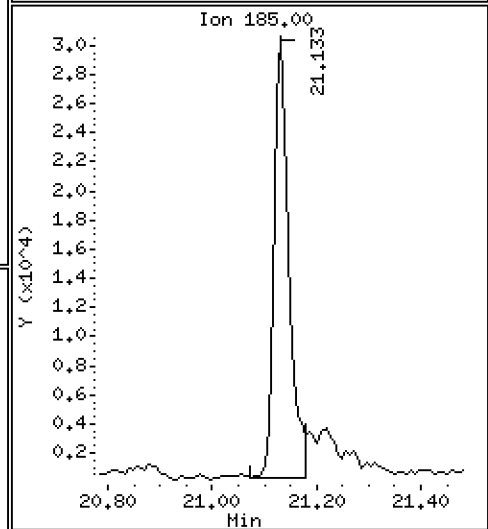
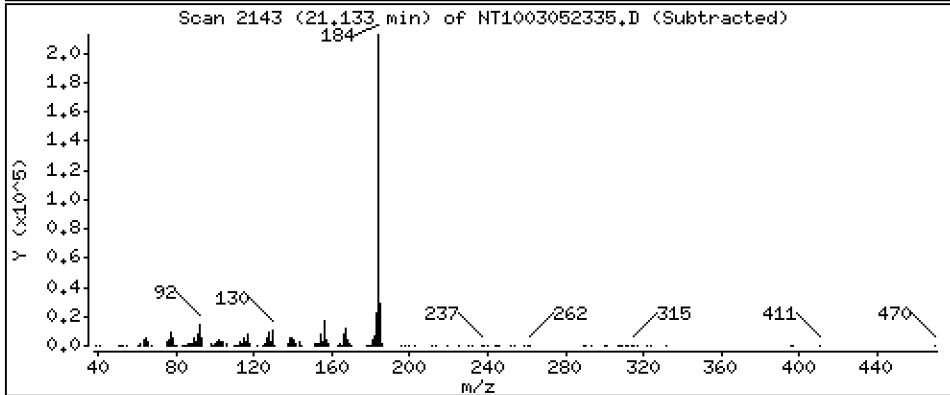
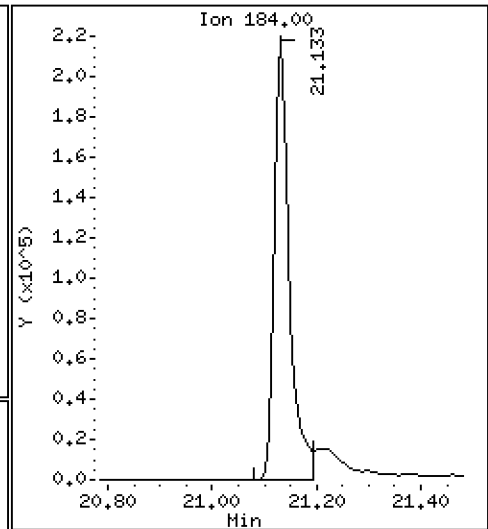
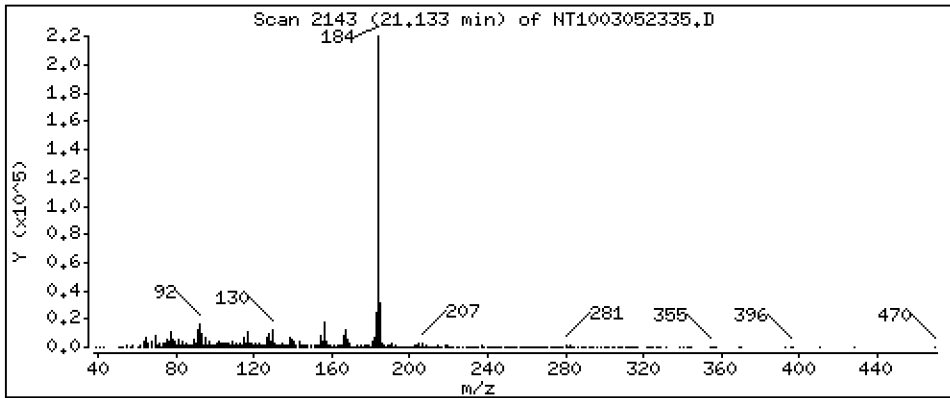
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 3,610 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

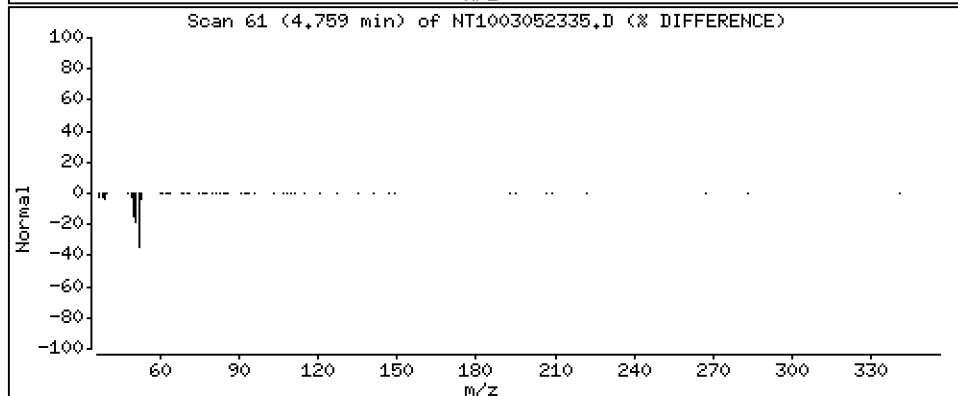
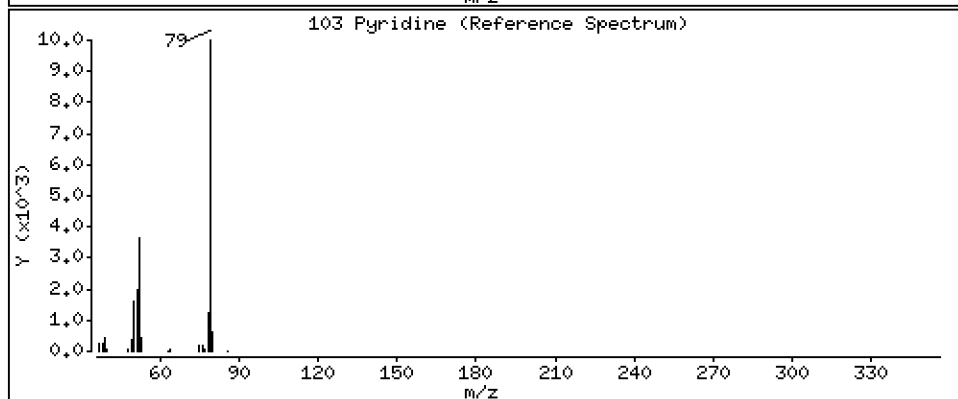
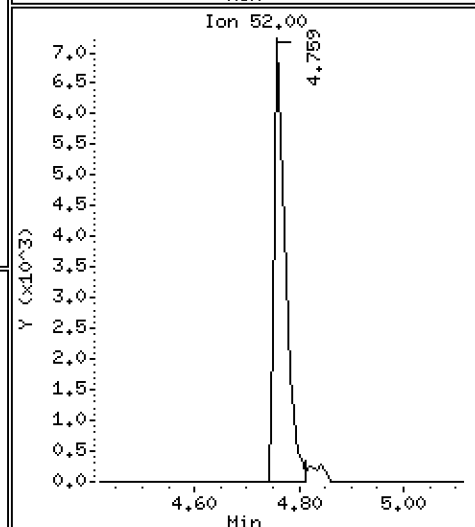
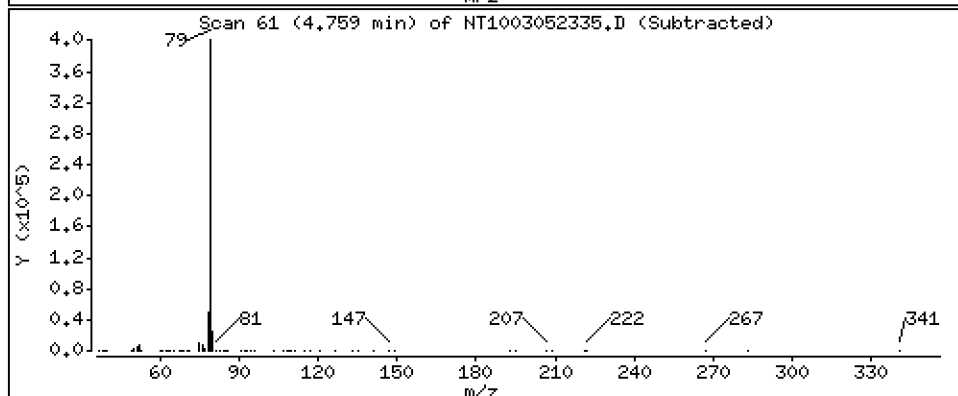
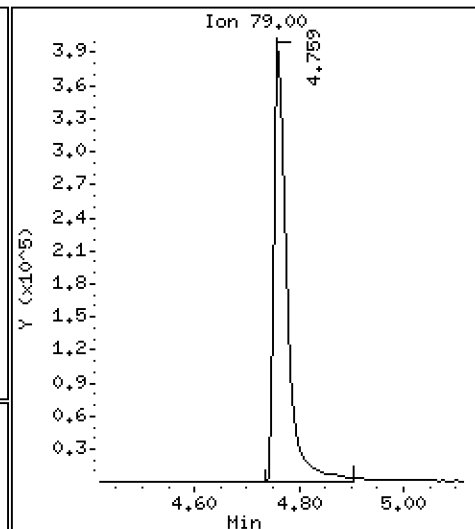
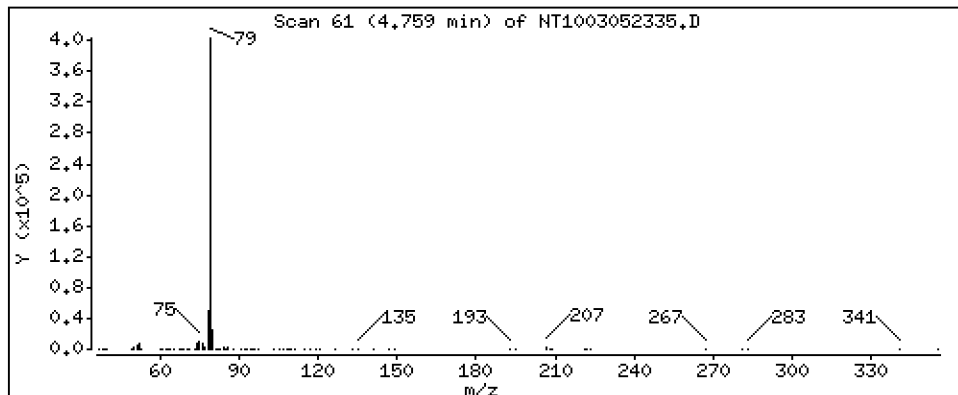
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 9,082 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

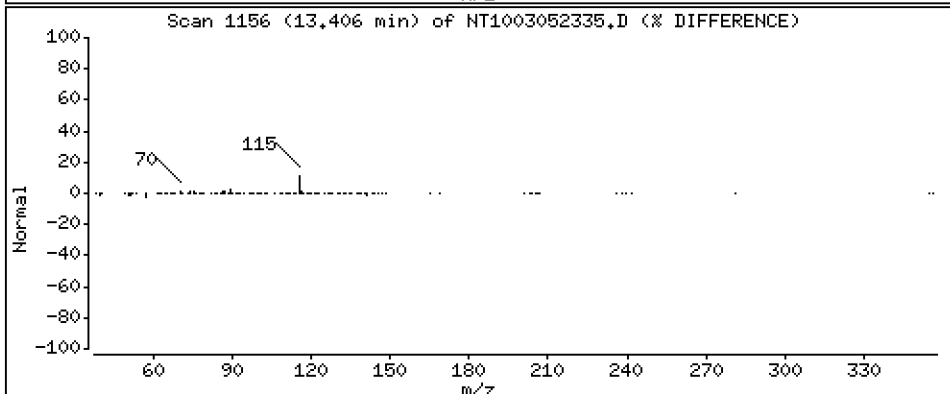
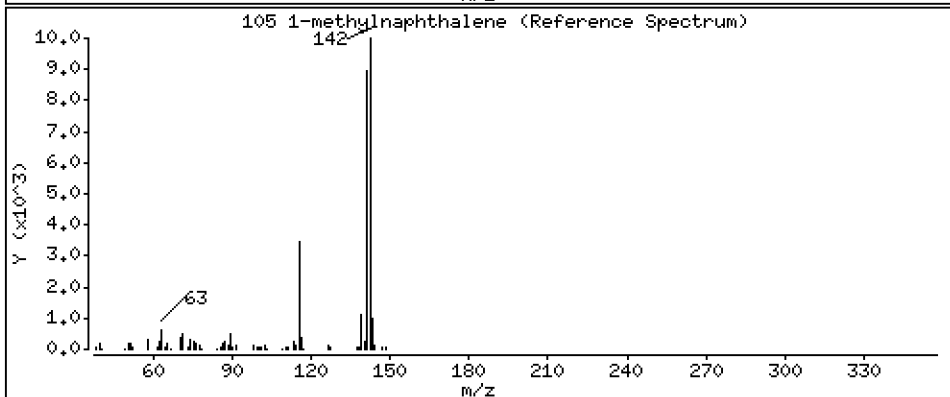
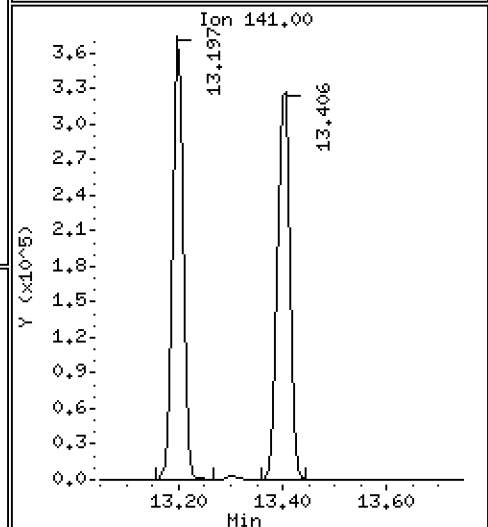
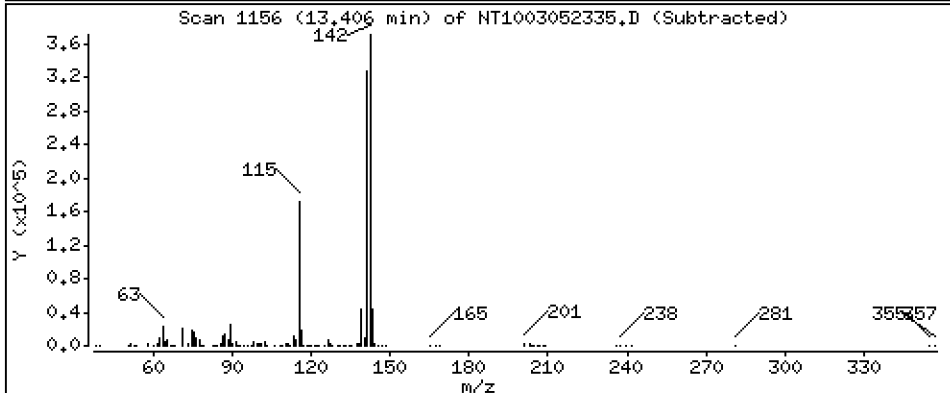
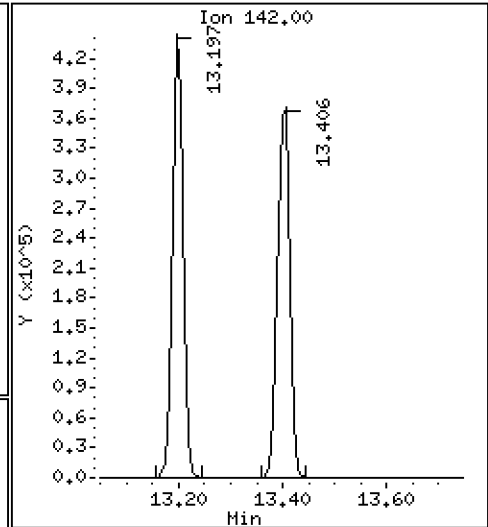
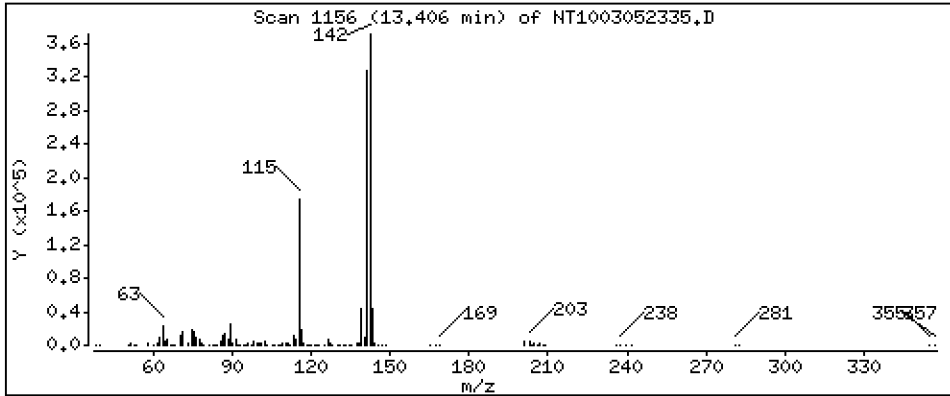
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 4,994 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

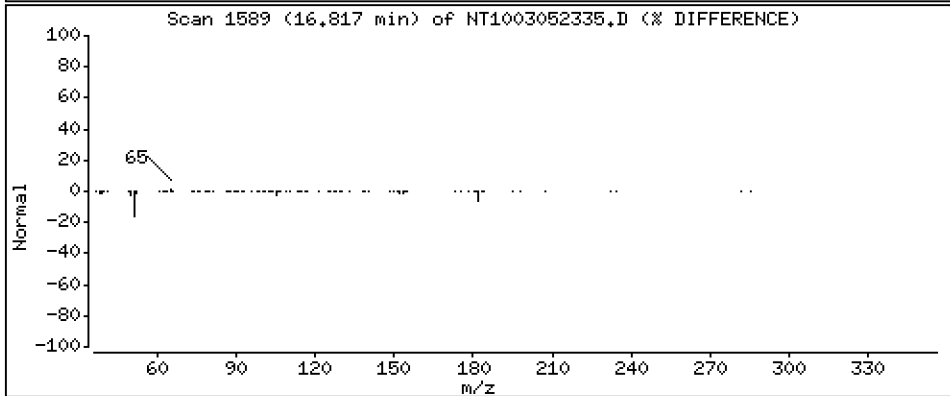
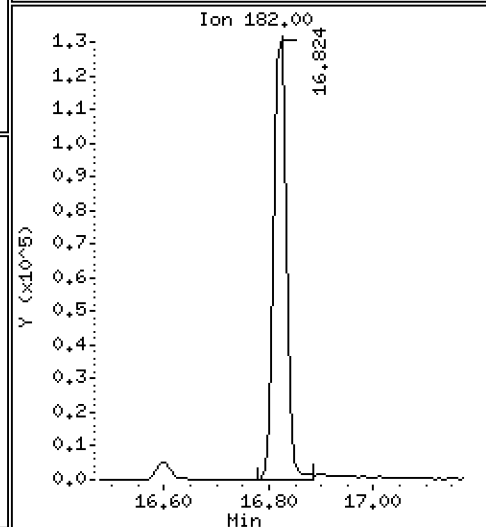
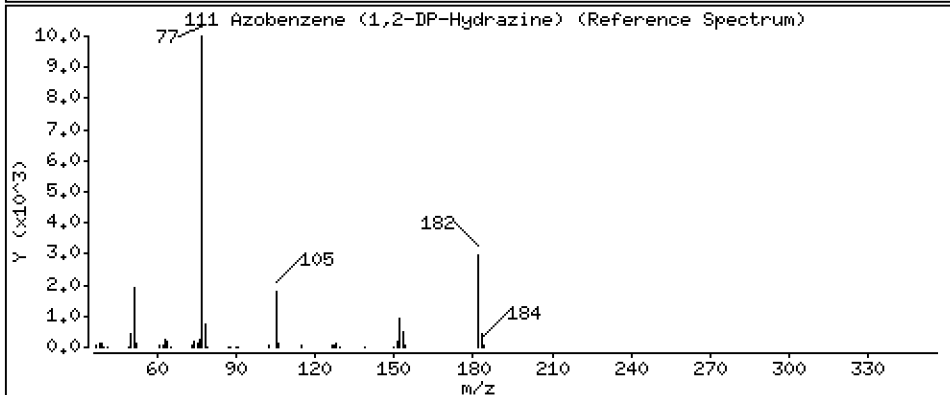
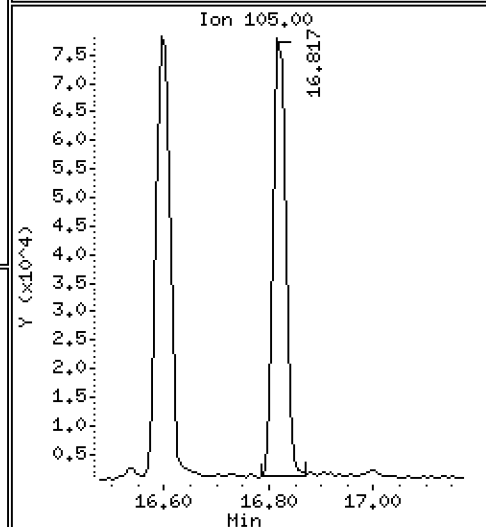
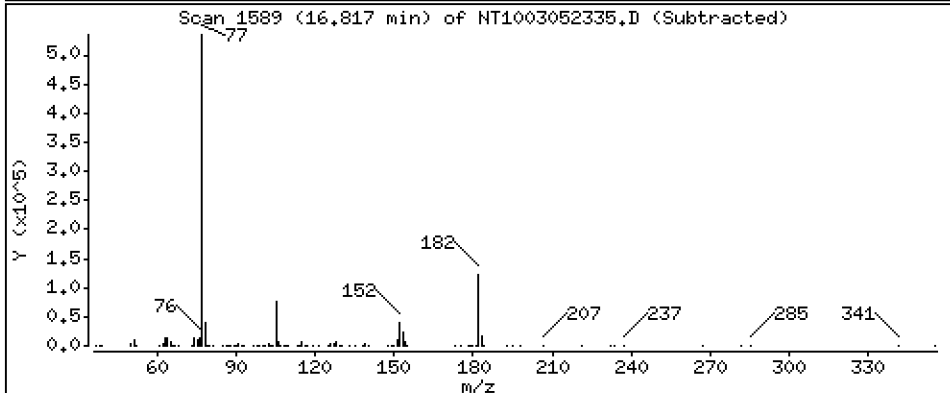
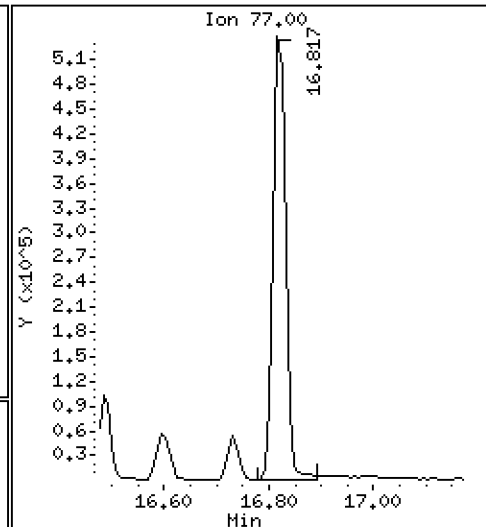
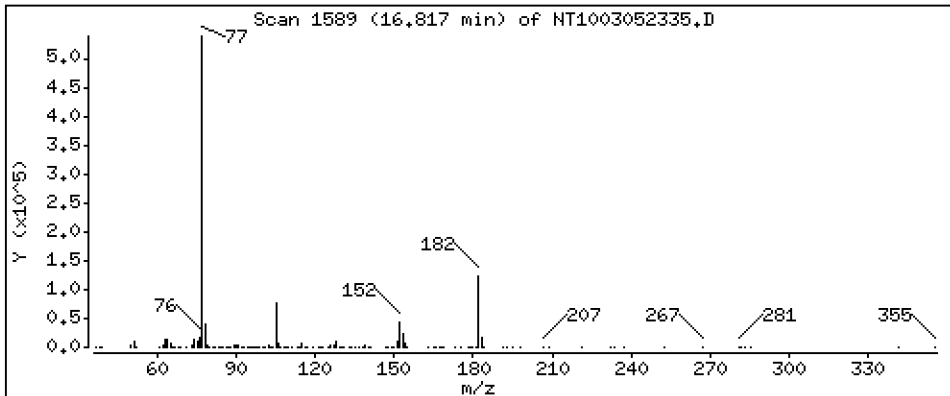
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 4,265 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

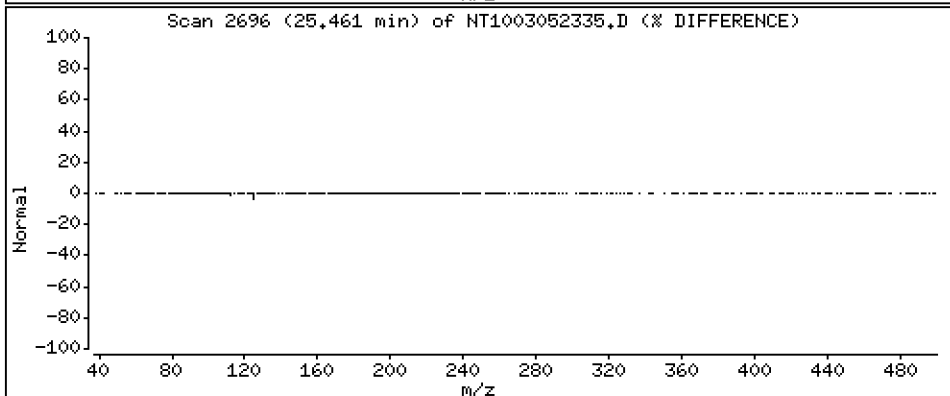
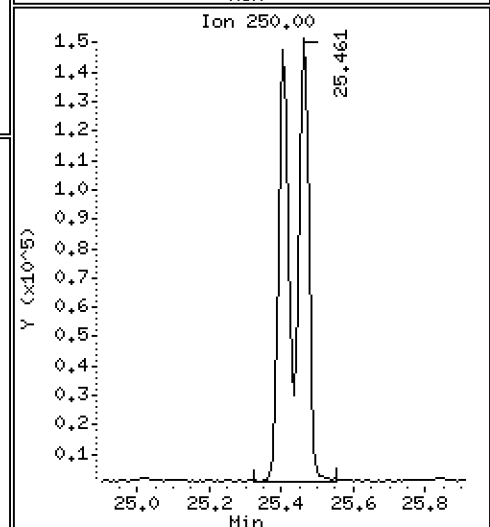
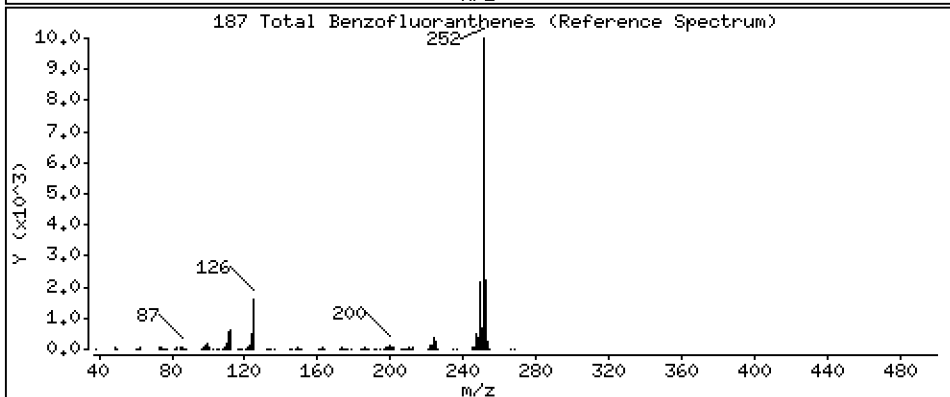
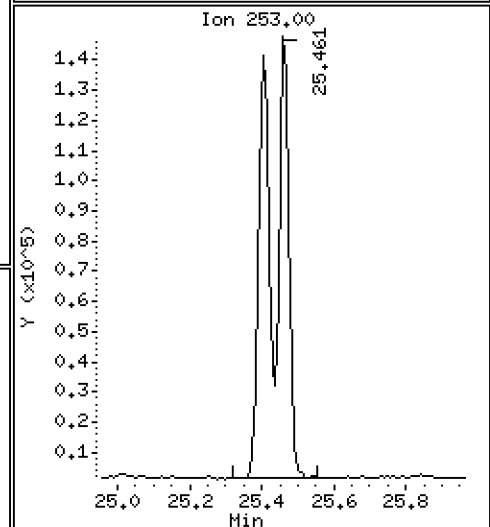
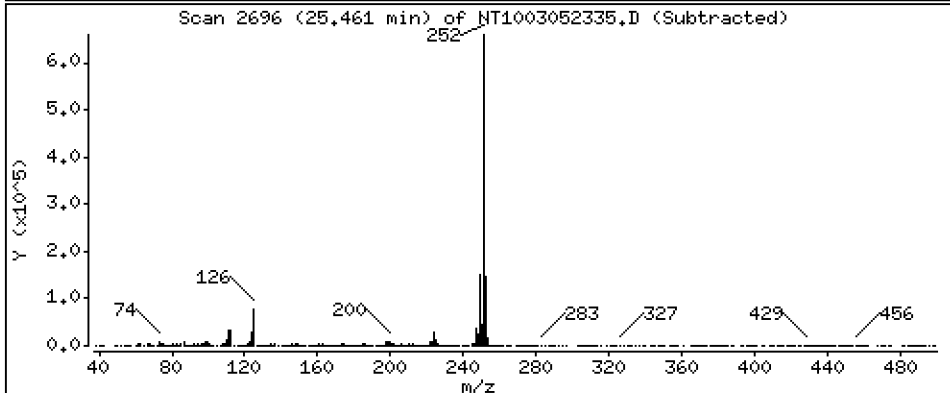
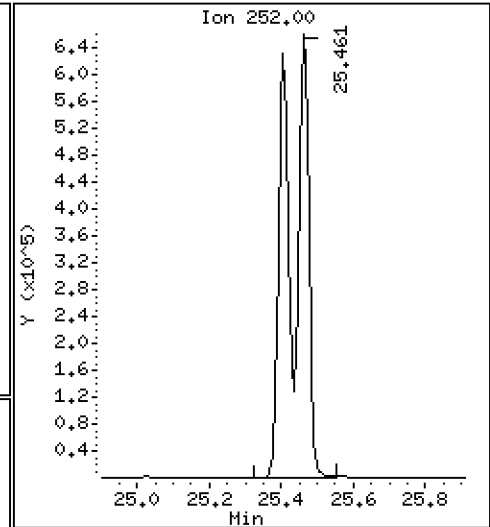
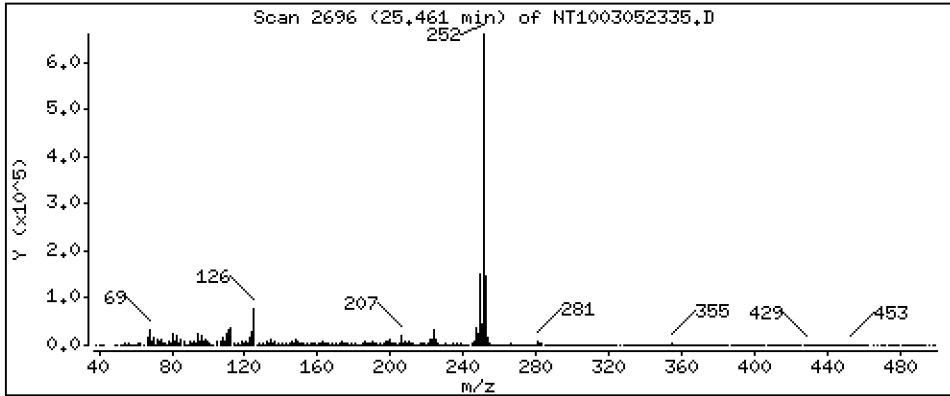
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 8,903 ug/mL



Date : 06-MAR-2023 10:49

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-CCV1

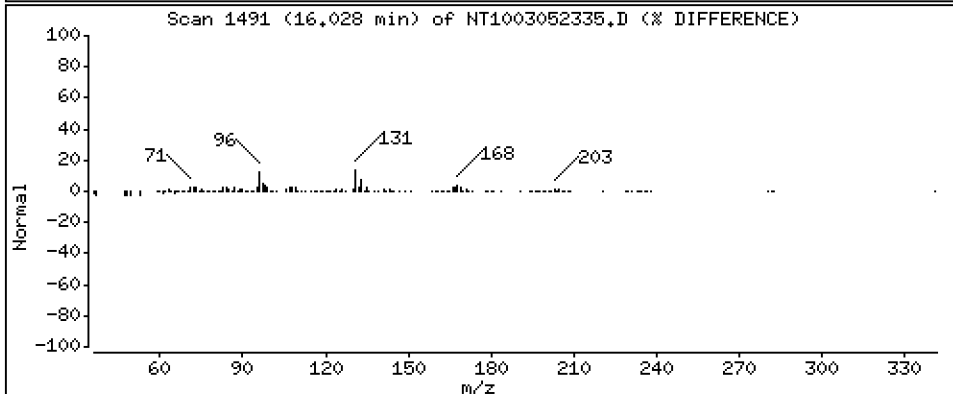
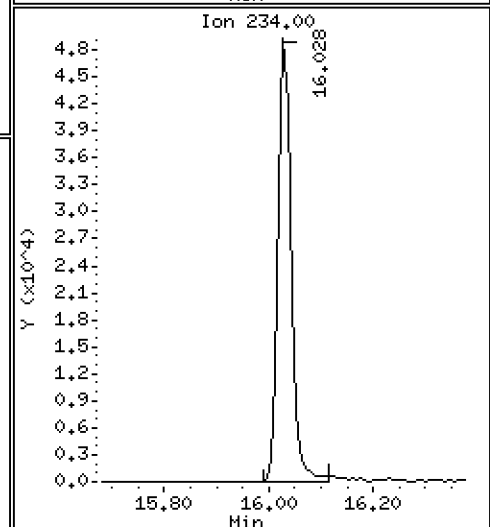
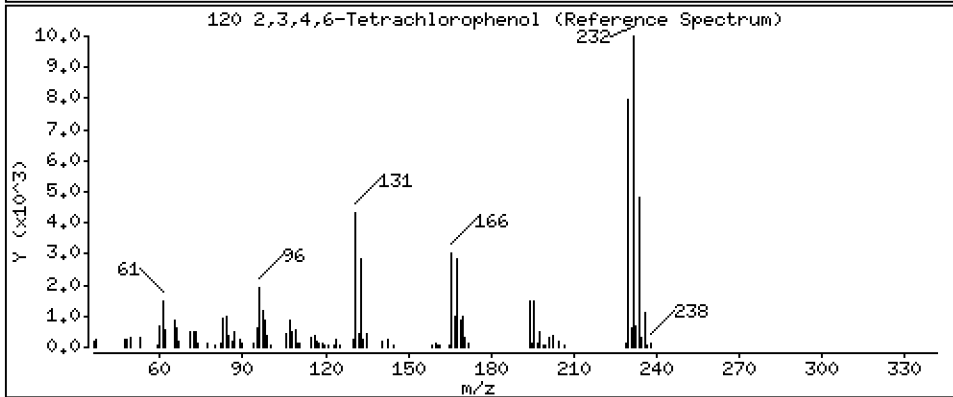
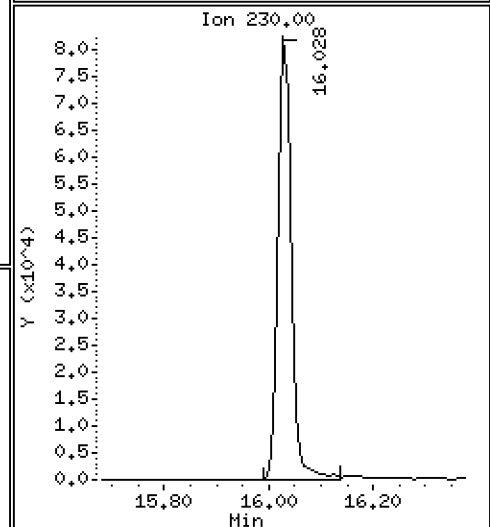
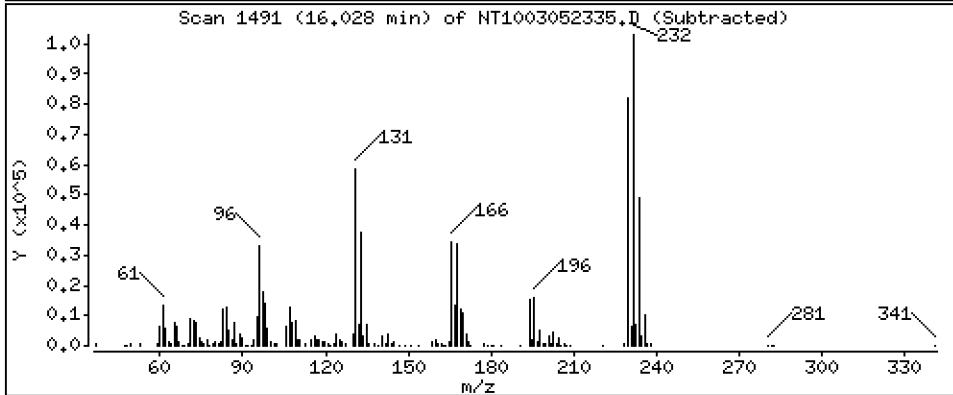
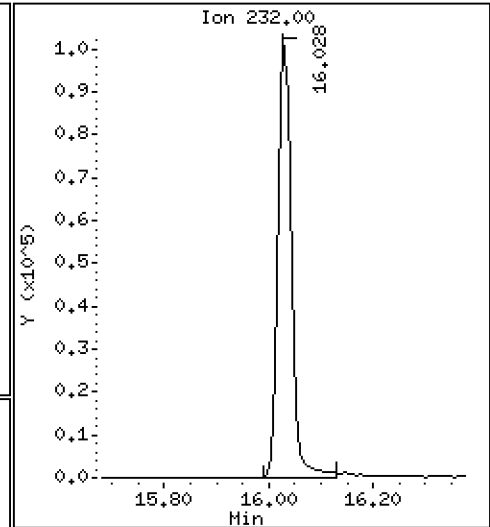
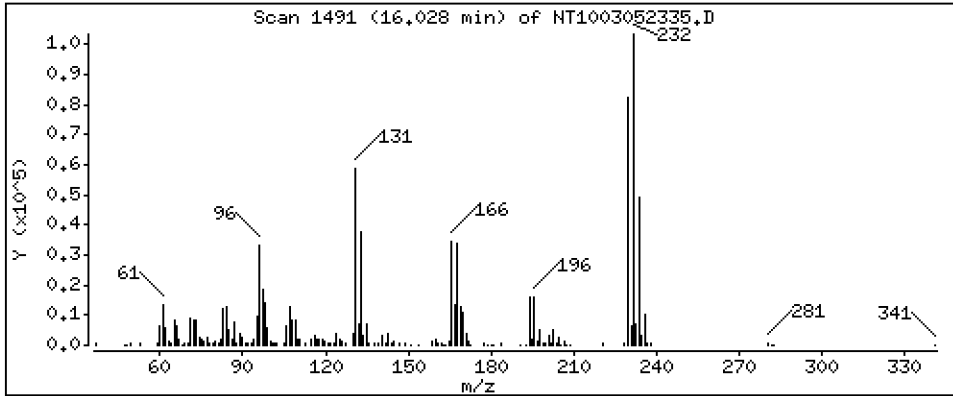
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 4,976 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052335.D
 Lab Smp Id: SLC0425-CCV1
 Inj Date : 06-MAR-2023 10:49
 Operator : VTS
 Smp Info : SLC0425-CCV1
 Misc Info :
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: ICAL.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.905	6.905	(0.745)	475548	7.45048	7.450
\$ 2 Phenol-d5	99		8.527	8.527	(0.921)	594899	8.02794	8.028
3 Phenol	94		8.551	8.550	(0.923)	397812	5.04922	5.049
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.954)	501290	7.92889	7.929
4 Bis(2-Chloroethyl)ether	93		8.751	8.751	(0.945)	293186	4.86976	4.870
6 2-Chlorophenol	128		8.867	8.867	(0.957)	340334	5.18166	5.182
7 1,3-Dichlorobenzene	146		9.154	9.153	(0.988)	341164	4.71123	4.711
* 8 1,4-Dichlorobenzene-d4	152		9.262	9.262	(1.000)	202868	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.293	(1.003)	334834	4.65499	4.655
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.031)	230822	4.88662	4.887
12 1,2-Dichlorobenzene	146		9.580	9.580	(1.034)	324848	4.66587	4.666
11 Benzyl alcohol	108		9.511	9.510	(1.027)	168915	4.09494	4.095
14 2,2'-oxybis(1-Chloropropane)	121		9.751	9.751	(1.053)	92061	4.58650	4.586 (M)
13 2-Methylphenol	108		9.697	9.697	(1.047)	293512	4.70510	4.705
17 Hexachloroethane	117		10.233	10.232	(1.105)	119493	4.04727	4.047
16 N-Nitroso-di-n-propylamine	70		10.007	10.007	(1.080)	243146	5.11428	5.114
15 4-Methylphenol	108		9.984	9.984	(1.078)	315994	4.16982	4.170
\$ 18 Nitrobenzene-d5	82		10.326	10.325	(0.878)	424079	5.43385	5.434
19 Nitrobenzene	77		10.364	10.364	(0.882)	383318	5.23593	5.236
20 Isophorone	82		10.822	10.822	(0.920)	523026	5.59678	5.597
21 2-Nitrophenol	139		10.984	10.984	(0.934)	175658	4.45332	4.453
22 2,4-Dimethylphenol	107		11.043	11.043	(0.939)	630827	8.81212	8.812
23 Bis(2-Chloroethoxy)methane	93		11.247	11.247	(0.957)	286114	4.95425	4.954
24 Benzoic acid	105		11.222	11.221	(0.954)	469961	11.0552	11.06
25 2,4-Dichlorophenol	162		11.459	11.459	(0.975)	639457	11.2436	11.24
26 1,2,4-Trichlorobenzene	180		11.634	11.633	(0.989)	285178	5.19043	5.190
* 27 Naphthalene-d8	136		11.757	11.757	(1.000)	710965	4.00000	
28 Naphthalene	128		11.804	11.803	(1.004)	871067	4.77353	4.774
29 4-Chloroaniline	127		11.896	11.896	(1.012)	710052	8.63811	8.638
30 Hexachlorobutadiene	225		12.020	12.020	(1.022)	192950	4.82301	4.823
31 4-Chloro-3-methylphenol	107		12.856	12.855	(1.093)	577540	9.56901	9.569
32 2-Methylnaphthalene	142		13.196	13.196	(1.122)	650841	5.04870	5.049
33 Hexachlorocyclopentadiene	237		13.498	13.498	(0.879)	2258	0.17402	0.1740

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196	13.769	13.769	(0.897)	416465	10.6269	10.63
35 2,4,5-Trichlorophenol	196	13.846	13.846	(0.902)	430846	10.2931	10.29
§ 36 2-Fluorobiphenyl	172	13.947	13.939	(0.908)	725916	5.17120	5.171
37 2-Chloronaphthalene	162	14.202	14.202	(0.925)	582611	5.28689	5.287
38 2-Nitroaniline	65	14.411	14.411	(0.939)	337901	10.8052	10.81
39 Dimethylphthalate	163	14.775	14.775	(0.962)	607301	4.77811	4.778
40 Acenaphthylene	152	15.061	15.061	(0.981)	1043511	5.49257	5.493
41 2,6-Dinitrotoluene	165	14.914	14.914	(0.971)	288216	10.0007	10.00
* 42 Acenaphthene-d10	164	15.355	15.347	(1.000)	393563	4.00000	
43 3-Nitroaniline	138	15.270	15.262	(0.994)	293219	9.14815	9.148
44 Acenaphthene	153	15.417	15.417	(1.004)	543762	4.74576	4.746
45 2,4-Dinitrophenol	184	15.494	15.486	(1.009)	101392	13.2423	13.24
46 Dibenzofuran	168	15.780	15.780	(1.028)	856496	5.03669	5.037
47 4-Nitrophenol	109	15.618	15.610	(1.017)	178572	7.75120	7.751
48 2,4-Dinitrotoluene	165	15.757	15.749	(1.026)	411344	9.79551	9.796 (H)
50 Diethylphthalate	149	16.237	16.244	(1.057)	618292	4.59197	4.592
49 Fluorene	166	16.492	16.492	(1.074)	670895	4.74183	4.742
51 4-Chlorophenyl-phenylether	204	16.492	16.492	(1.074)	317121	4.89628	4.896
52 4-Nitroaniline	138	16.538	16.538	(1.077)	277358	8.05023	8.050
53 4,6-Dinitro-2-methylphenol	198	16.600	16.592	(0.900)	269313	15.2939	15.29
54 N-Nitrosodiphenylamine	169	16.731	16.731	(0.907)	526548	4.94450	4.944
§ 55 2,4,6-Tribromophenol	330	16.994	16.993	(1.107)	202026	7.89807	7.898
56 4-Bromophenyl-phenylether	248	17.511	17.511	(0.949)	250482	5.80489	5.805
57 Hexachlorobenzene	284	17.627	17.627	(0.956)	277301	5.70685	5.707
58 Pentachlorophenol	266	18.045	18.045	(0.978)	93334	4.07350	4.074
* 59 Phenanthrene-d10	188	18.448	18.455	(1.000)	719751	4.00000	
60 Phenanthrene	178	18.502	18.502	(1.003)	893911	4.85301	4.853
61 Anthracene	178	18.610	18.610	(1.009)	908715	5.08770	5.088
62 Carbazole	167	18.943	18.943	(1.027)	803442	4.91018	4.910
63 Di-n-butylphthalate	149	19.631	19.631	(1.064)	1087839	4.73660	4.737
64 Fluoranthene	202	20.877	20.877	(0.889)	1098574	4.15885	4.159
65 Pyrene	202	21.310	21.310	(0.907)	1137367	4.22851	4.229
§ 66 Terphenyl-d14	244	21.581	21.581	(0.919)	983507	4.51896	4.519
67 Butylbenzylphthalate	149	22.464	22.464	(0.956)	524769	3.67444	3.674
68 Benzo(a)anthracene	228	23.478	23.478	(0.999)	1269973	4.69053	4.691
* 69 Chrysene-d12	240	23.494	23.494	(1.000)	767869	4.00000	
70 3,3'-Dichlorobenzidine	252	23.416	23.416	(0.997)	1387663	11.3445	11.34
71 Chrysene	228	23.540	23.540	(1.002)	1146493	5.21033	5.210
72 bis(2-Ethylhexyl)phthalate	149	23.463	23.463	(0.956)	817009	4.57920	4.579
* 134 Di-n-octylphthalate-d4	153	24.547	24.554	(1.000)	1237077	4.00000	
73 Di-n-octylphthalate	149	24.562	24.562	(1.001)	1422044	5.18382	5.184
74 Benzo(b)fluoranthene	252	25.406	25.406	(0.969)	1319374	4.40565	4.406
75 Benzo(k)fluoranthene	252	25.460	25.460	(0.971)	1297876	4.49087	4.491
76 Benzo(a)pyrene	252	26.111	26.103	(0.996)	1184547	4.42524	4.425
* 77 Perylene-d12	264	26.227	26.227	(1.000)	837534	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.080	29.057	(1.109)	1368296	4.37728	4.377
79 Dibenzo(a,h)anthracene	278	29.103	29.095	(1.110)	1148795	4.79317	4.793
80 Benzo(g,h,i)perylene	276	29.934	29.919	(1.141)	1040931	4.22043	4.220
90 N-Nitrosodimethylamine	74	4.696	4.704	(0.507)	383346	9.30345	9.303
91 Aniline	93	8.643	8.643	(0.933)	793760	8.68905	8.689
93 Benzidine	184	21.132	21.132	(0.899)	423300	3.60979	3.610
103 Pyridine	79	4.758	4.766	(0.514)	663646	9.08166	9.082
105 1-methylnaphthalene	142	13.405	13.397	(1.140)	582644	4.99361	4.994
111 Azobenzene (1,2-DP-Hydrazine)	77	16.816	16.824	(1.095)	857550	4.26498	4.265

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.460	25.406	(0.971)	2564864	8.90283	8.903
120 2,3,4,6-Tetrachlorophenol	232	16.028	16.028	(1.044)	194129	4.97598	4.976

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052335.D Calibration Time: 04:32
 Lab Smp Id: SLC0425-CCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	202868	-5.12
27 Naphthalene-d8	756023	378012	1512046	710965	-5.96
42 Acenaphthene-d10	411497	205749	822994	393563	-4.36
59 Phenanthrene-d10	744396	372198	1488792	719751	-3.31
69 Chrysene-d12	823005	411503	1646010	767869	-6.70
134 Di-n-octylphthala	1350476	675238	2700952	1237077	-8.40
77 Perylene-d12	894064	447032	1788128	837534	-6.32

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.76	11.26	12.26	11.76	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.36	0.05
59 Phenanthrene-d10	18.46	17.96	18.96	18.45	-0.04
69 Chrysene-d12	23.49	22.99	23.99	23.49	0.00
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	-0.03
77 Perylene-d12	26.23	25.73	26.73	26.23	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052335.D

Lab ID: SLC0425-CCV1
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 10:49

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

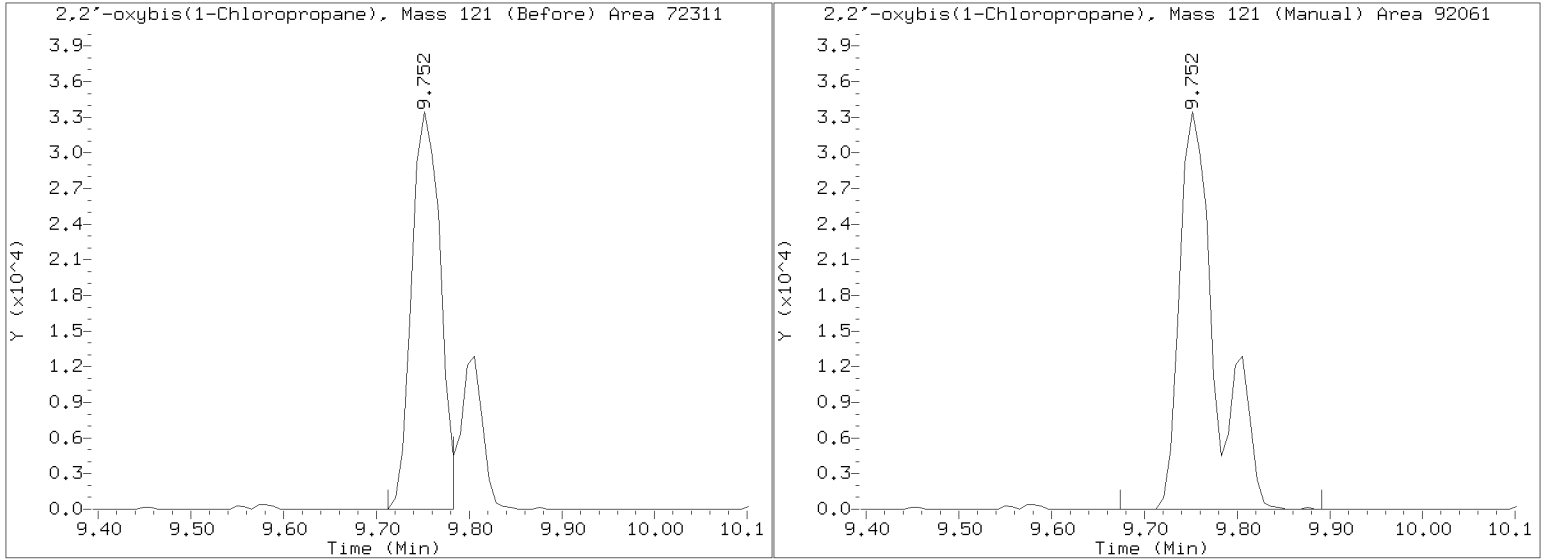
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052335.D
Injection Date: 06-MAR-2023 10:49
Lab ID:SLC0425-CCV1 Client ID:
Report Date: 03/27/2023 16:56



APPROVED

By Deenay Dunmore at 5:19 pm, Mar 27, 2023



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00019

Lab File ID: NT1003052327.D

Calibration Date: 03/01/2023

Sequence: SLC0425

Injection Date: 03/06/23

Lab Sample ID: SLC0425-LCV1

Injection Time: 05:48

Sequence Name: ABN 0.2

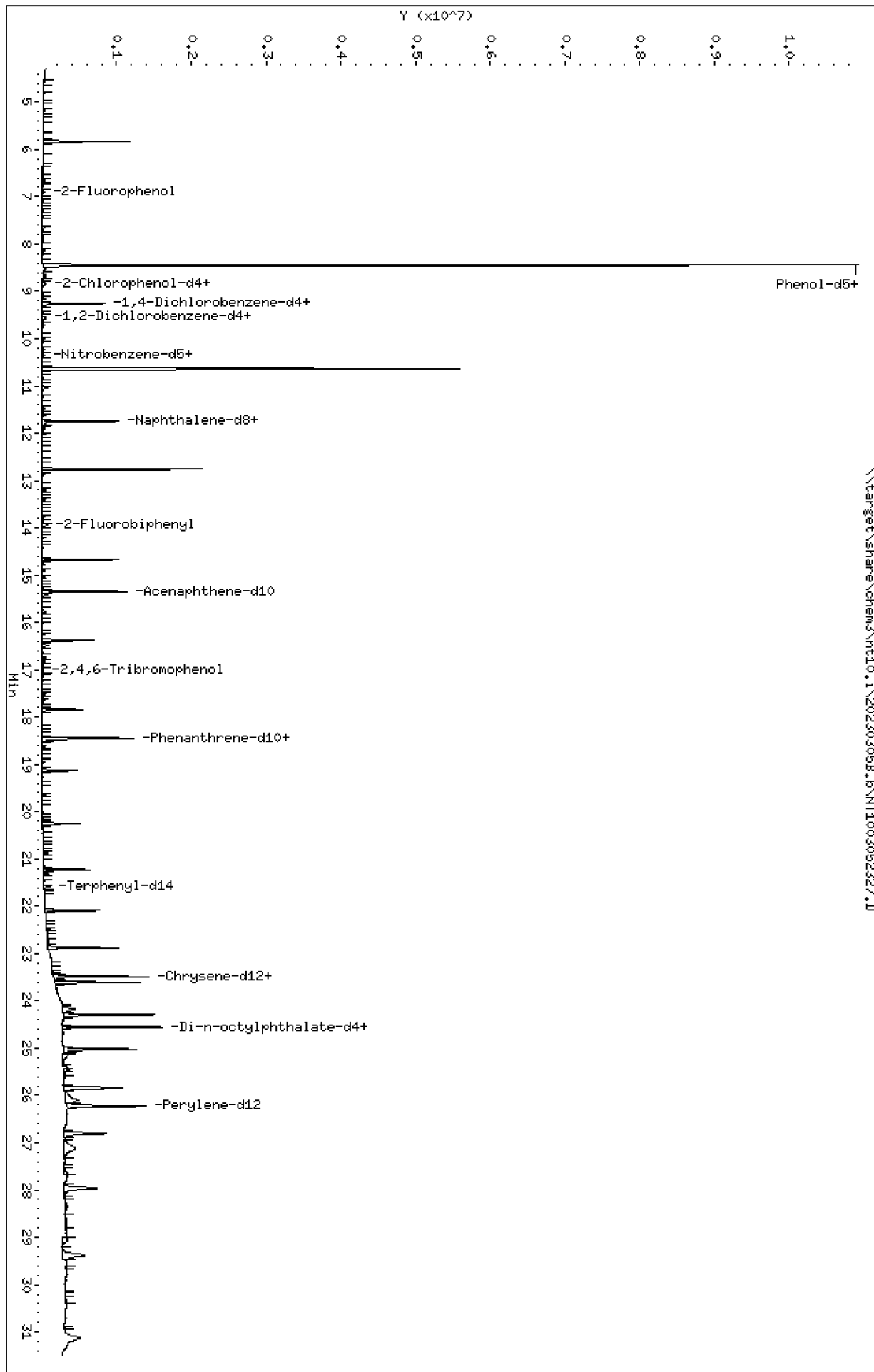
COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.5534590	1.4914340		-4.0	+/-50
4-Methylphenol	A	0.20000	0.1	1.2087680	1.0883160		-27.9	+/-50
Naphthalene	A	0.20000	0.2	1.0266520	1.0481150		2.1	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7252818	0.7331563		1.1	+/-50
Acenaphthylene	A	0.20000	0.2	1.9309320	2.1107800		9.3	+/-50
Dimethylphthalate	A	0.20000	0.2	1.2917940	1.2399850		-4.0	+/-50
Acenaphthene	A	0.20000	0.2	1.1645250	1.1259600		-3.3	+/-50
Dibenzofuran	A	0.20000	0.2	1.7283260	1.8061480		4.5	+/-50
Fluorene	A	0.20000	0.2	1.4379840	1.3834360		-3.8	+/-50
Pentachlorophenol	A	0.40000	0.0	0.1145550				+/-50 *
Phenanthrene	A	0.20000	0.2	1.0236730	1.0480070		2.4	+/-50
Anthracene	A	0.20000	0.2	0.9926226	0.9895074		-0.3	+/-50
Fluoranthene	A	0.20000	0.2	1.3760330	1.2431360		-9.7	+/-50
Pyrene	A	0.20000	0.2	1.4011560	1.2775790		-8.8	+/-50
Butylbenzylphthalate	A	0.20000	0.1	0.6475451	0.5656671		-25.0	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4104100	1.4403850		2.1	+/-50
Chrysene	A	0.20000	0.2	1.1462500	1.2618160		10.1	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5331838	0.5286886		-5.7	+/-50
Benzo(a)fluoranthene, Total	A	0.40000	0.4	1.3383070	1.2525520		-4.4	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2312020	1.1701610		-4.1	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.4033590	1.4131060		-0.9	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.1150690	1.1126600		2.9	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.1245240	1.0943510		-3.7	+/-50
2-Fluorophenol	A	0.30000	0.296	1.2585100	1.2414010		-1.4	+/-50
Phenol-d5	A	0.30000	0.248	1.4611190	1.2066940		-17.4	+/-50
2-Chlorophenol-d4	A	0.30000	0.310	1.2465880	1.2883710		3.4	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.205	0.9313544	0.9526123		2.3	+/-50
Nitrobenzene-d5	A	0.20000	0.191	0.4390871	0.4192312		-4.5	+/-50
2-Fluorobiphenyl	A	0.20000	0.214	1.4267270	1.5279240		7.1	+/-50
2,4,6-Tribromophenol	A	0.30000	0.100	0.2287830	0.0818955		-66.6	+/-50 *
p-Terphenyl-d14	A	0.20000	0.200	1.1337350	1.1362590		0.2	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.B\NT1003052327.D
 Date: 06-HR-2023 05:48
 Client ID:
 Sample Info: SLC0425-LCW1
 Column phase: ZB-5msi

Instrument: nt10.1
 Operator: VTS
 Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\NT1003052327.D



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

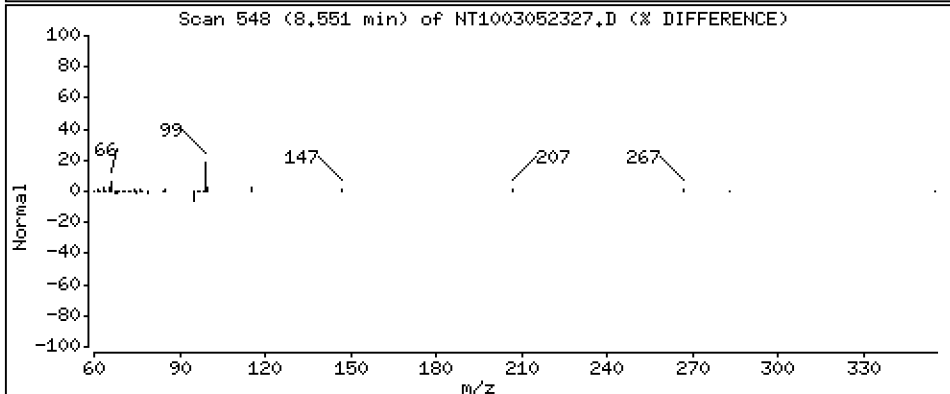
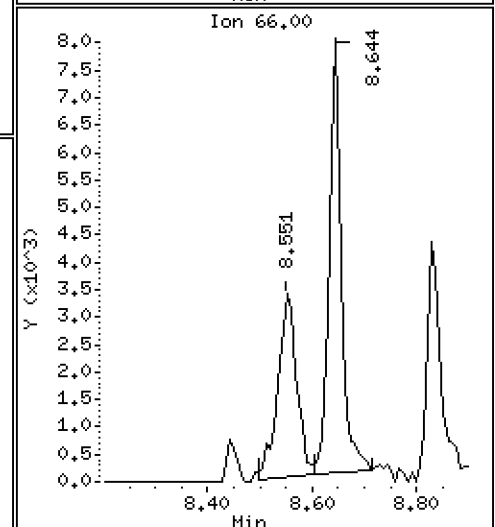
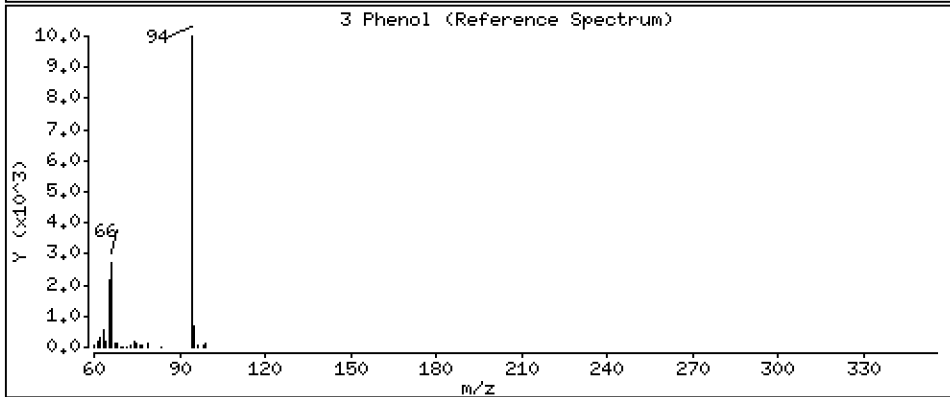
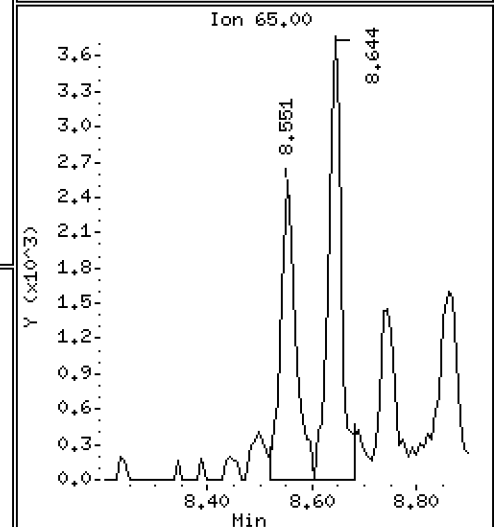
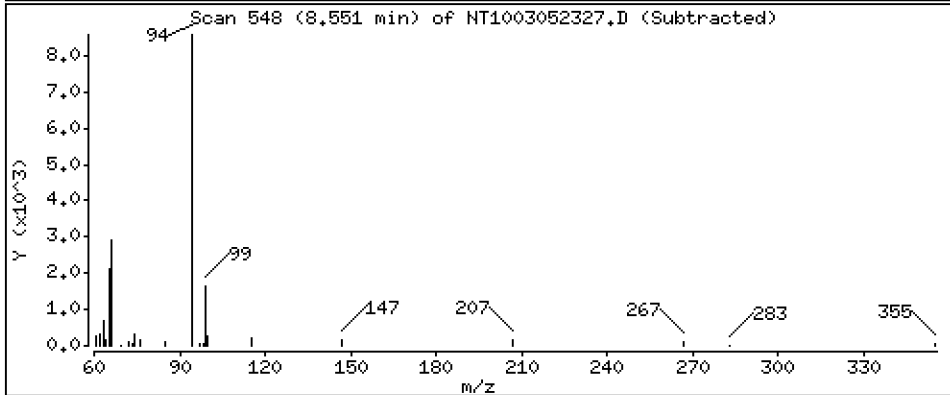
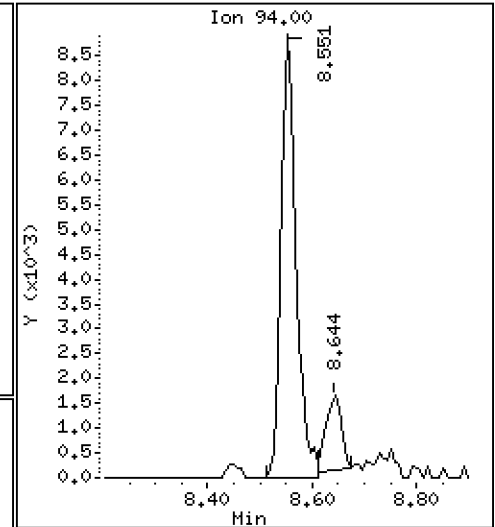
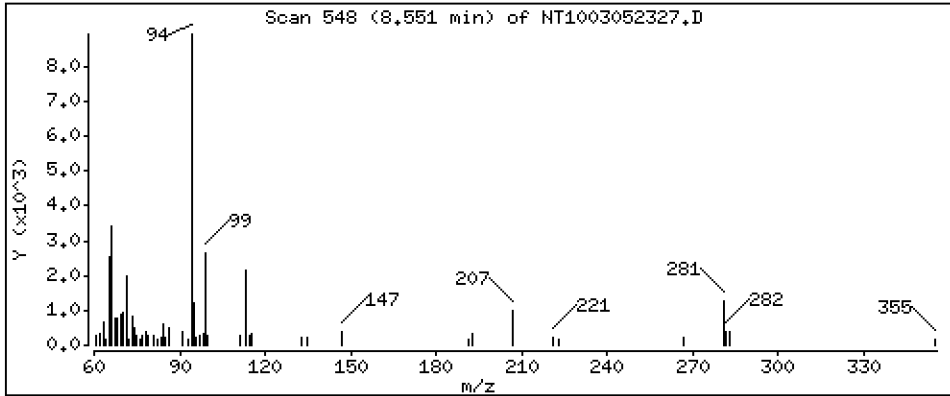
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1920 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

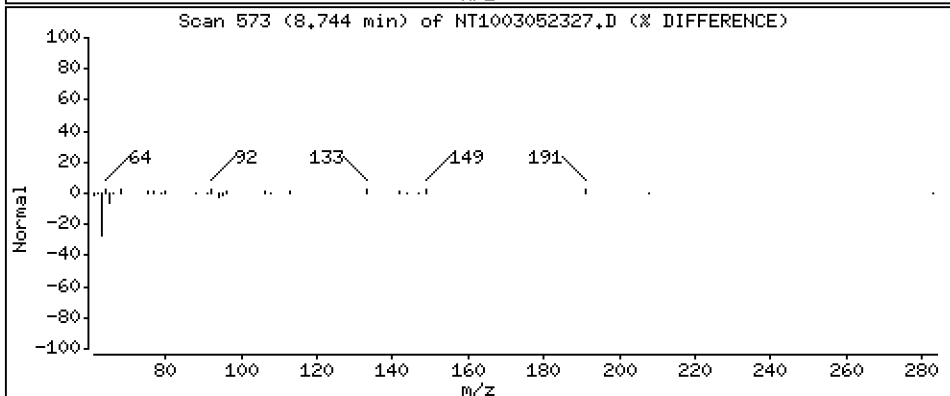
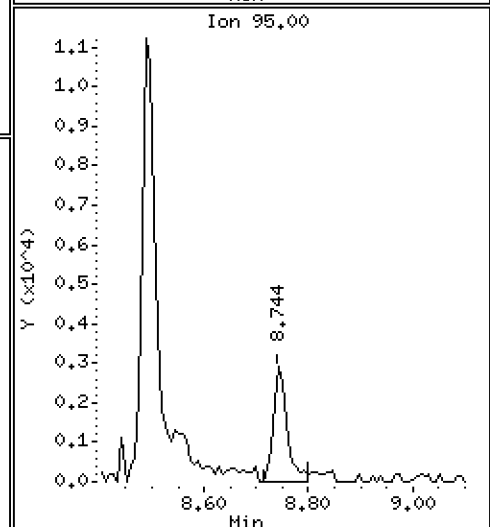
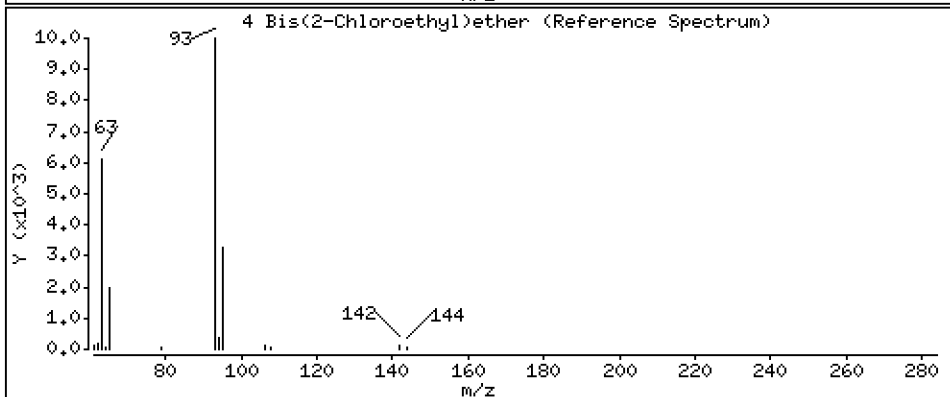
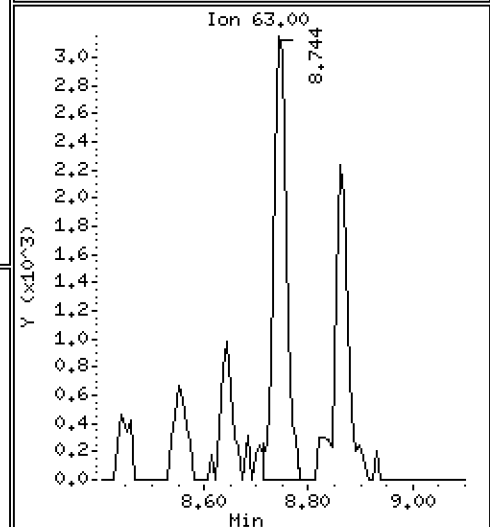
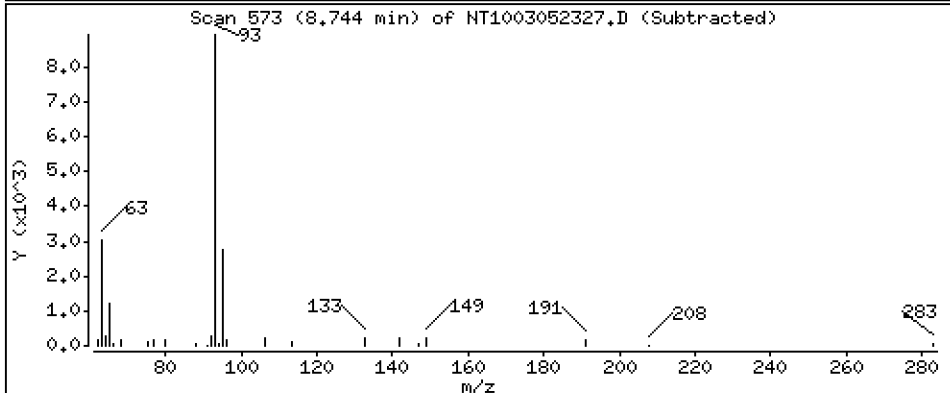
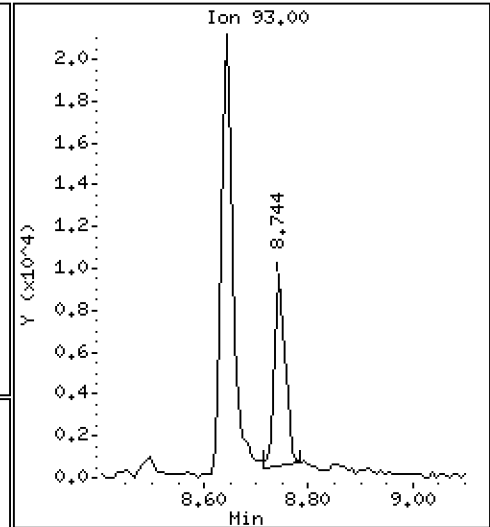
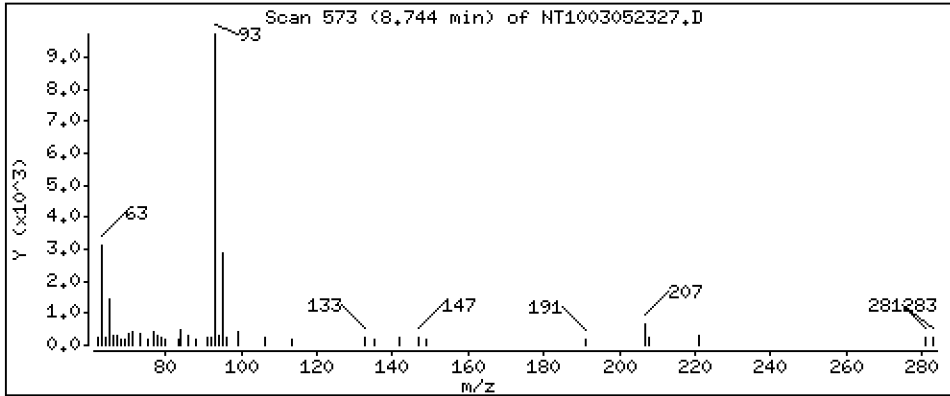
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

4 Bis(2-Chloroethyl)ether

Concentration: 0,1849 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

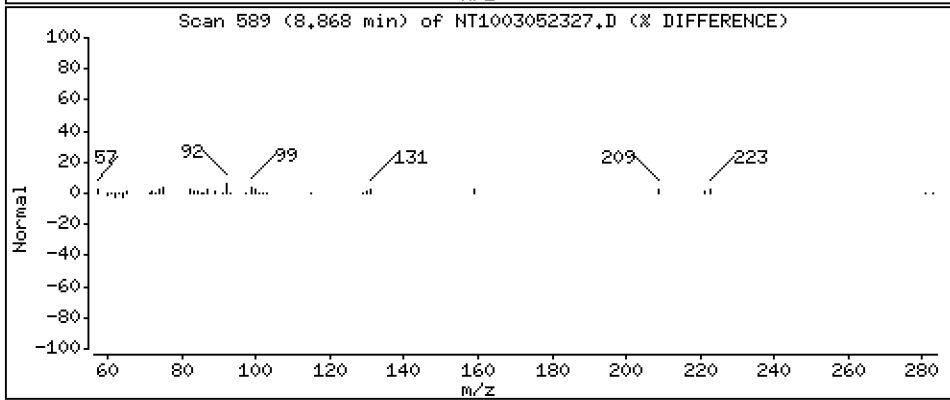
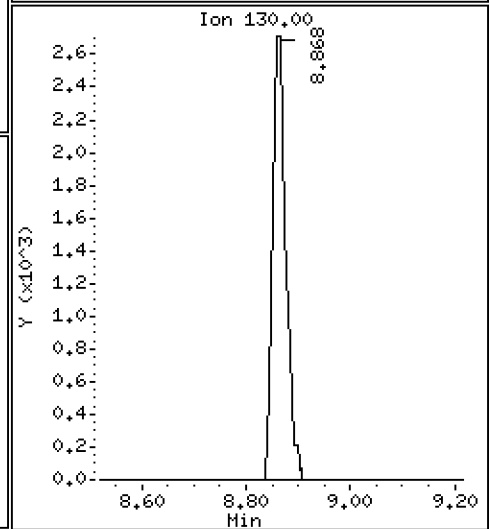
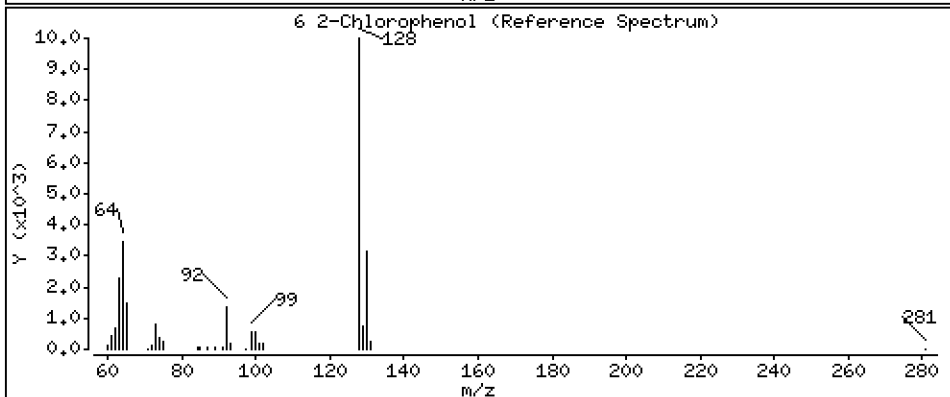
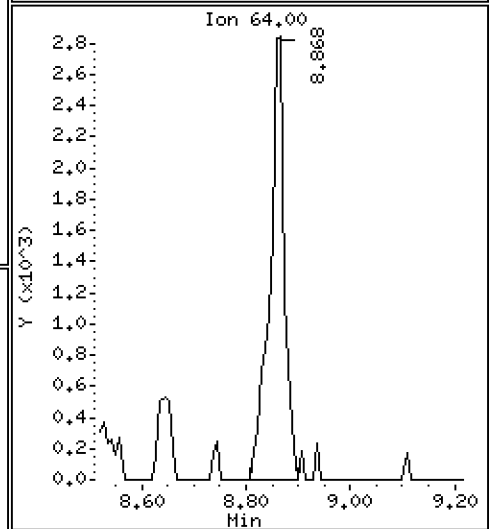
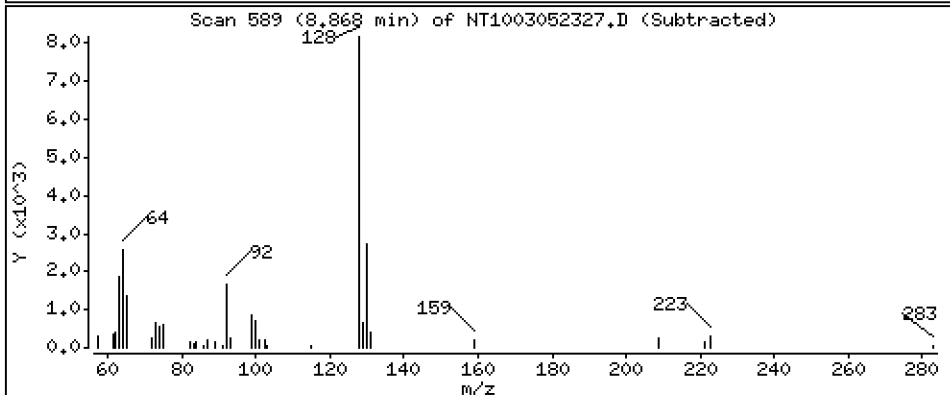
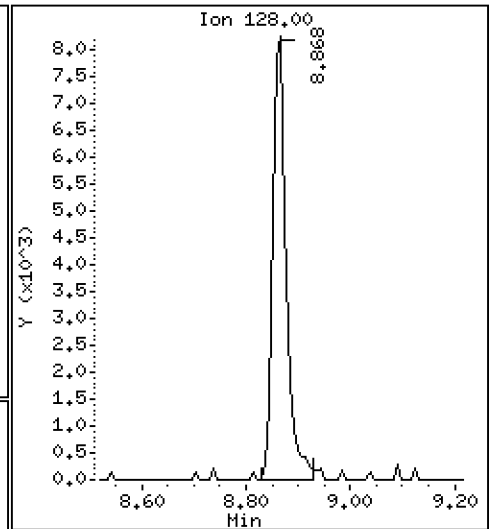
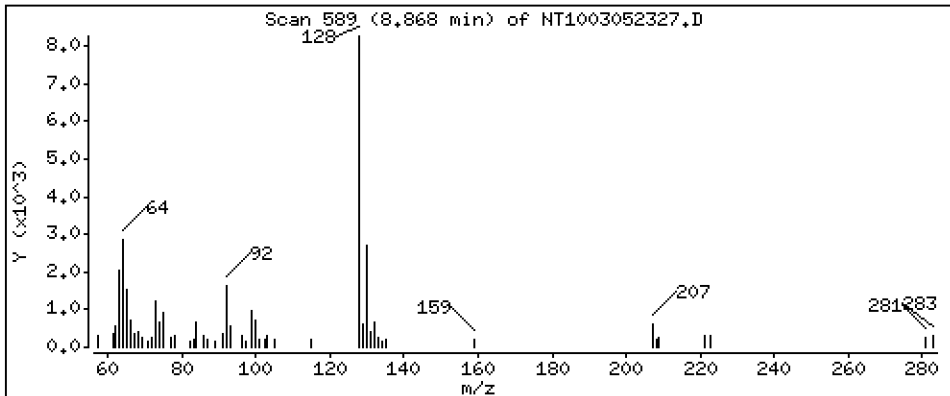
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

6 2-Chlorophenol

Concentration: 0,1999 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

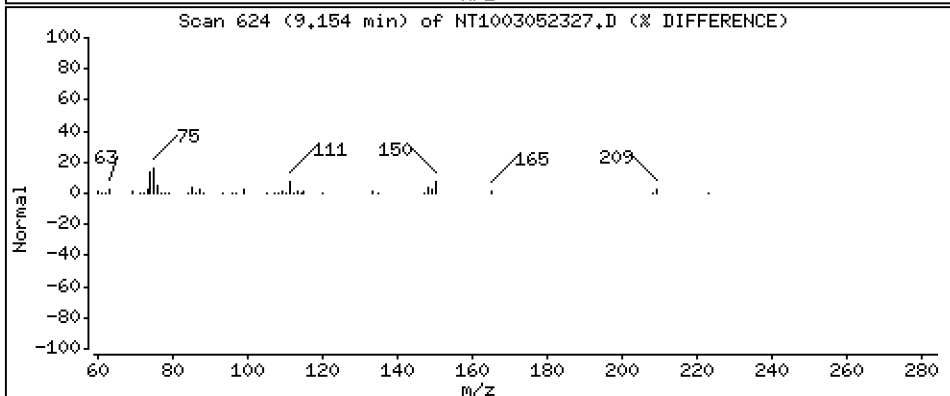
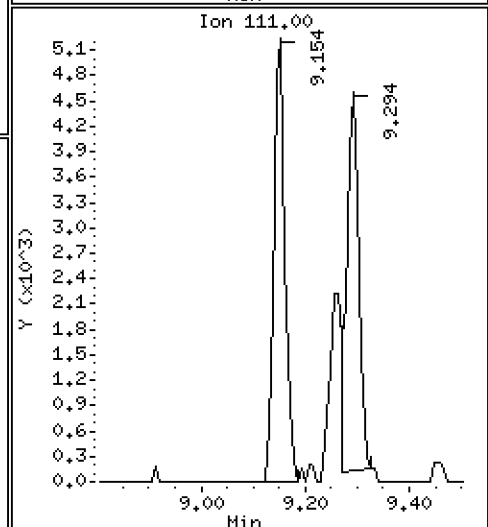
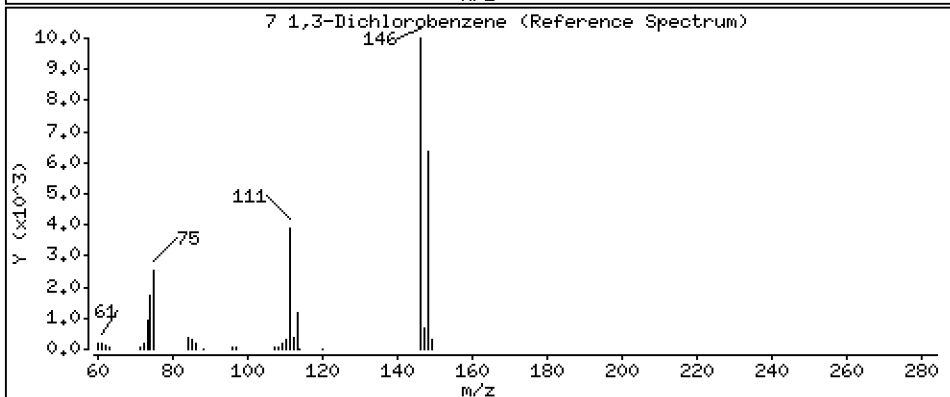
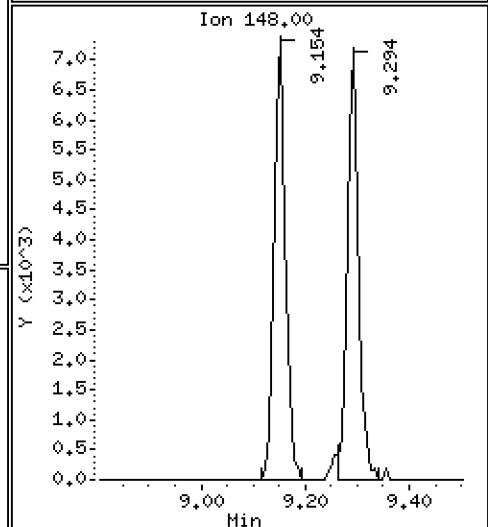
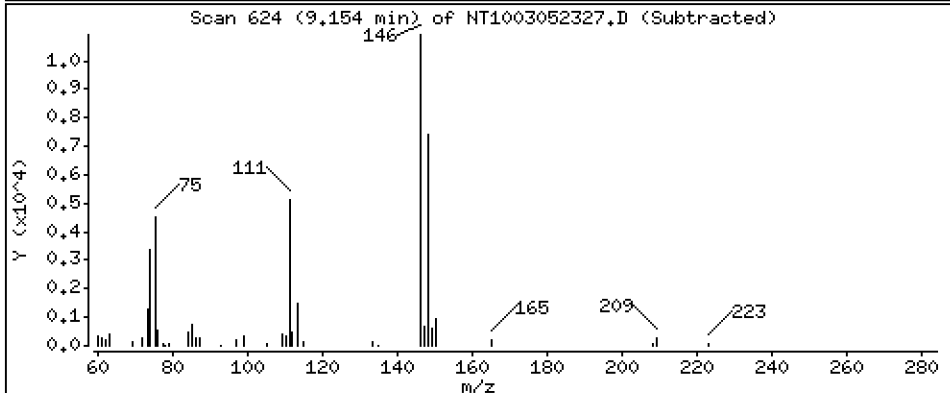
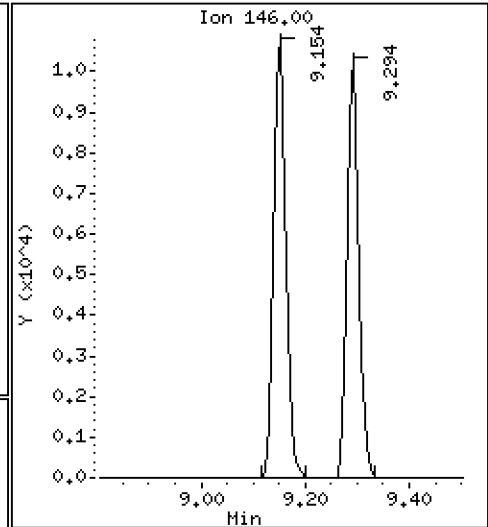
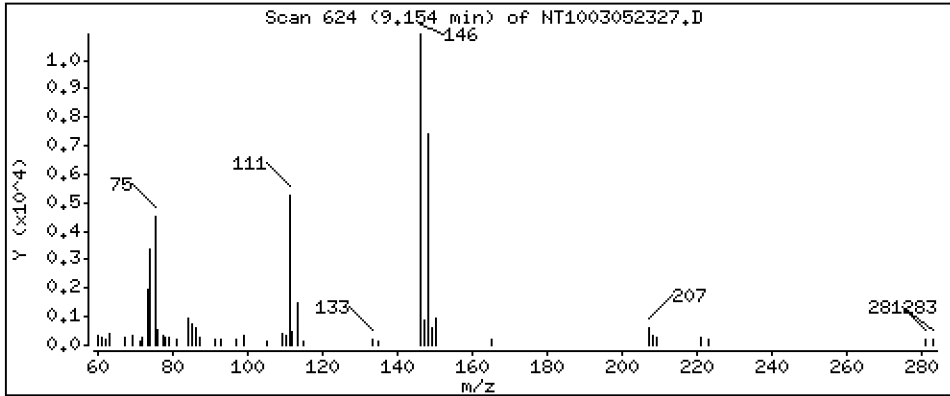
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2133 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

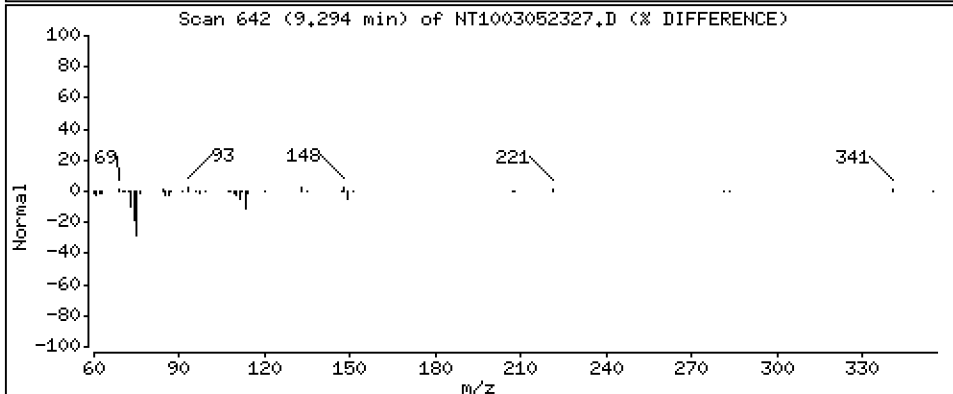
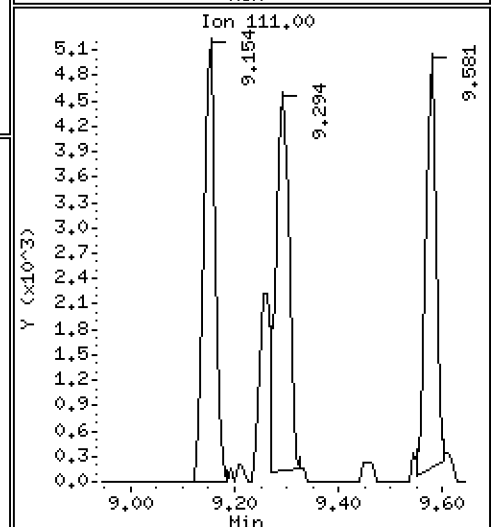
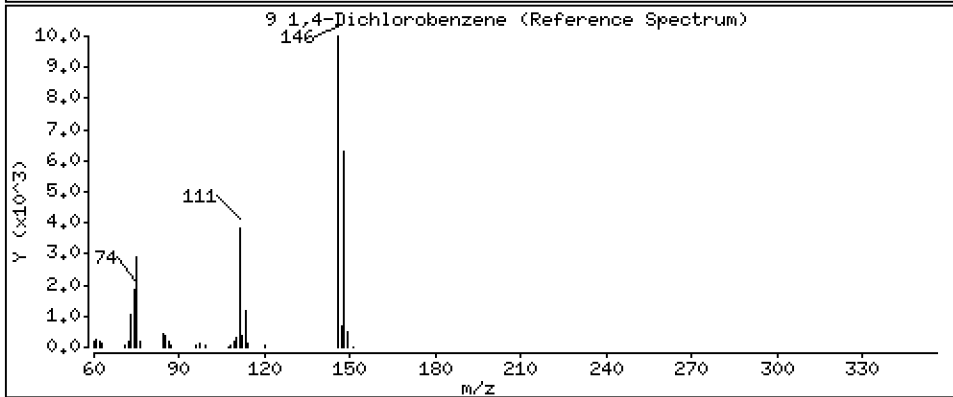
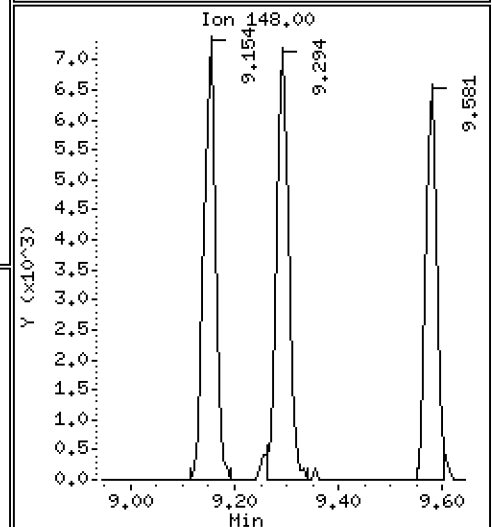
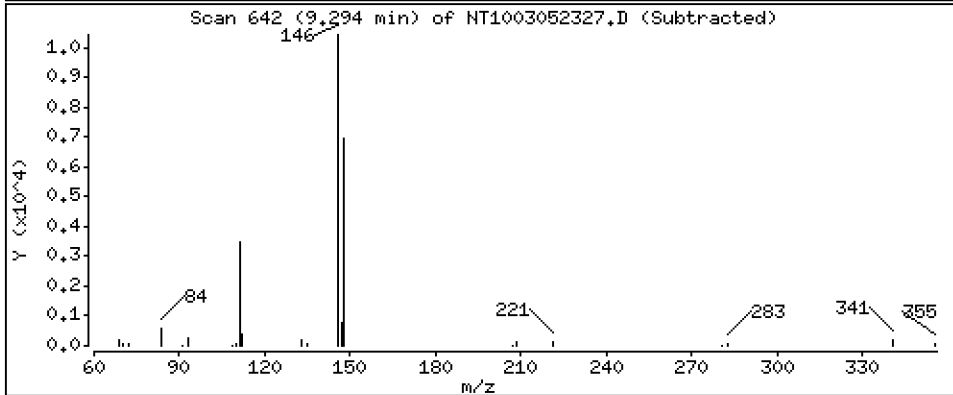
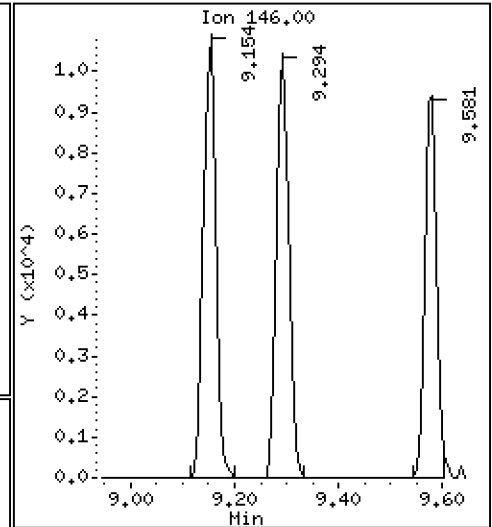
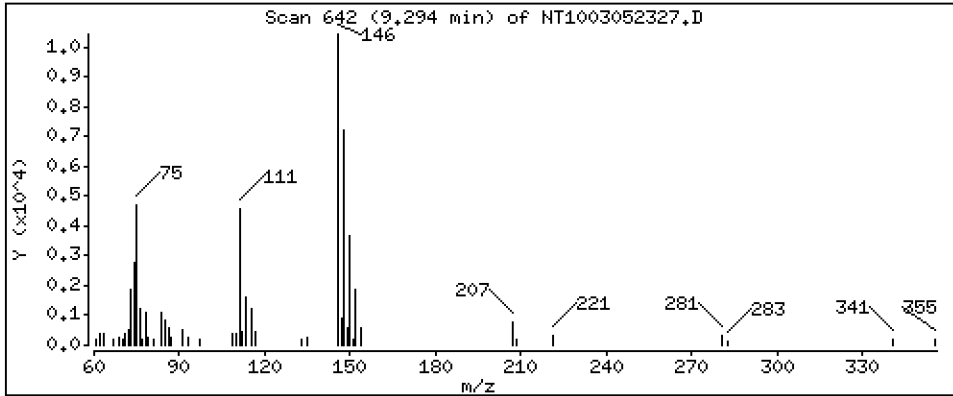
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.2008 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

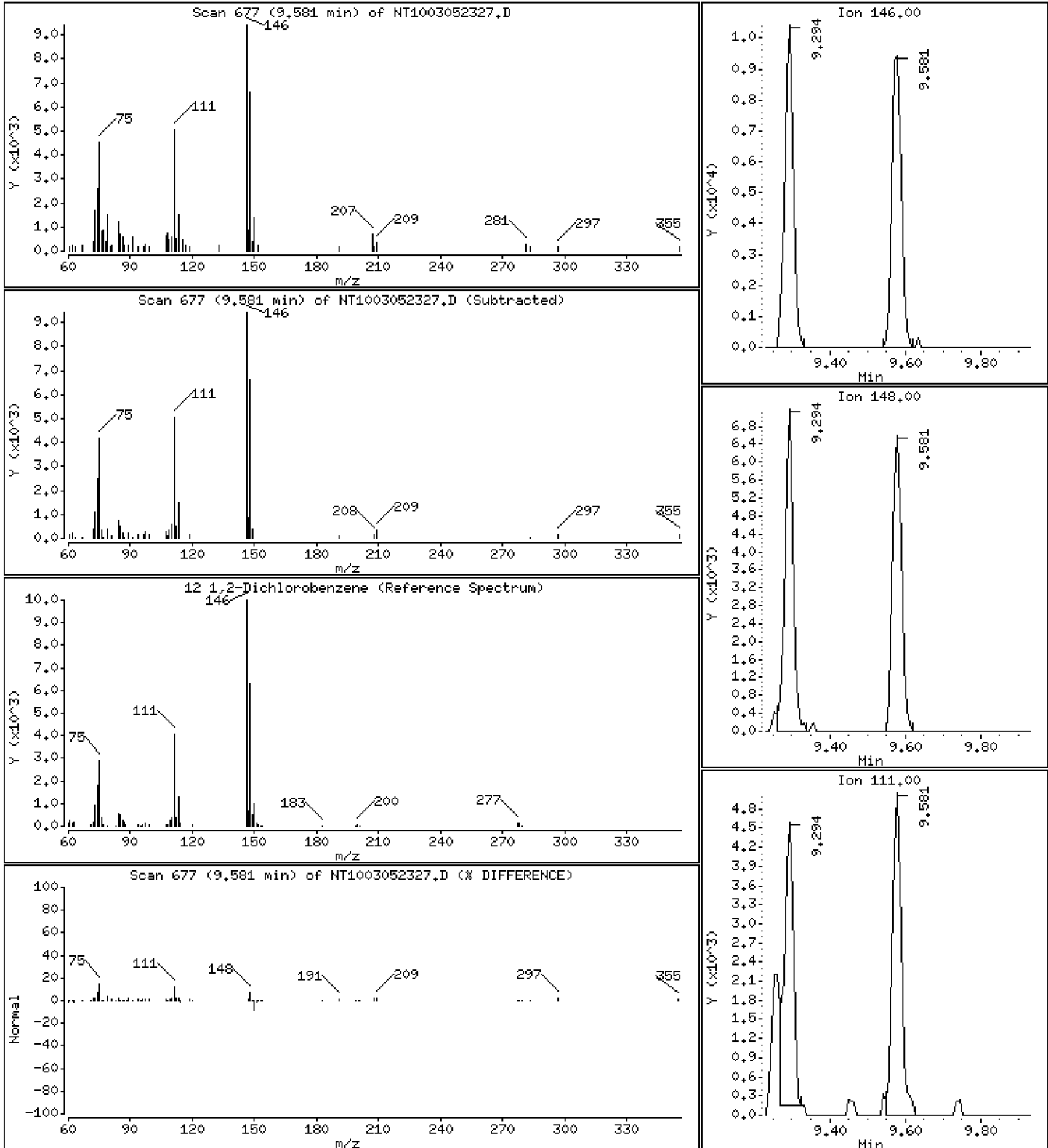
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.1976 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

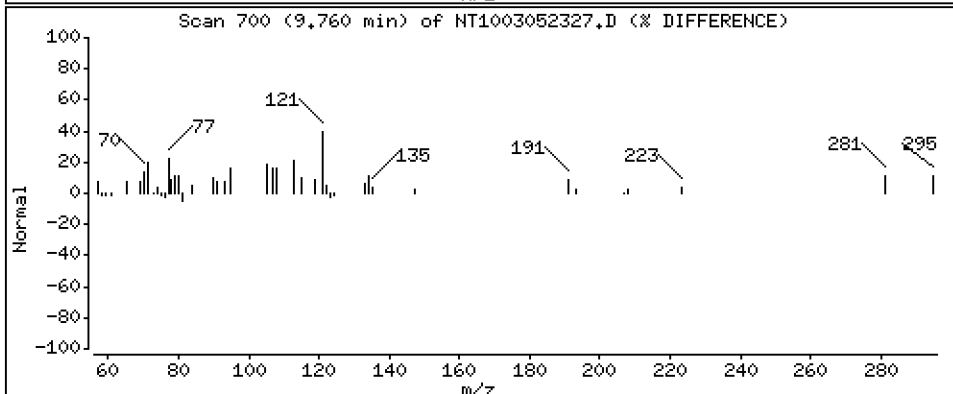
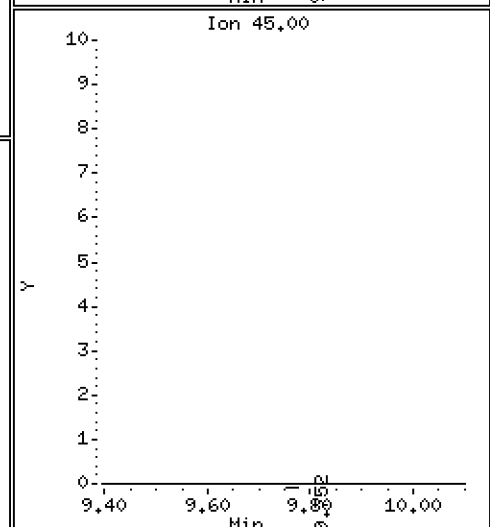
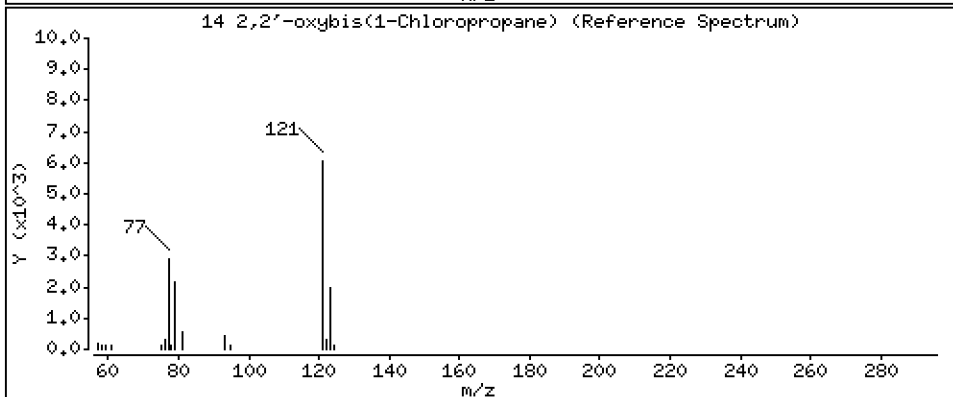
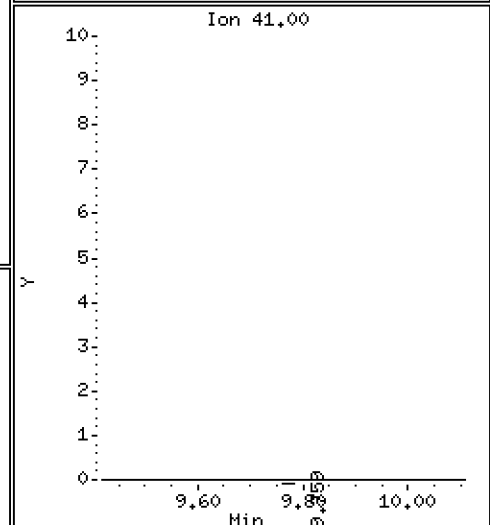
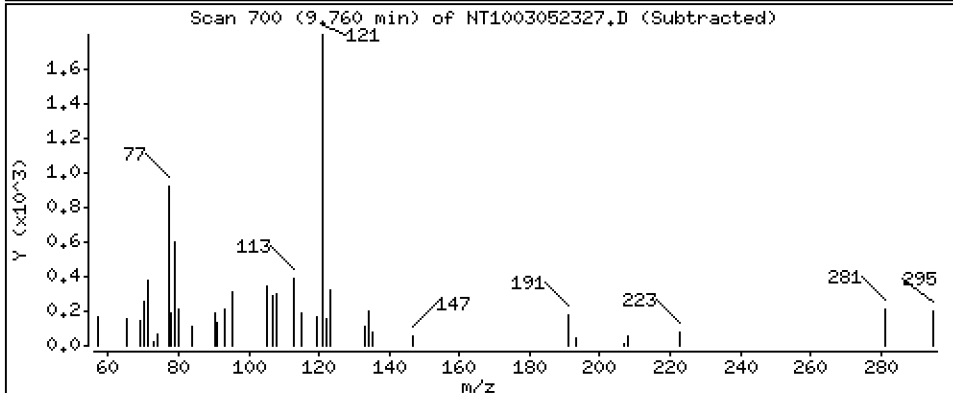
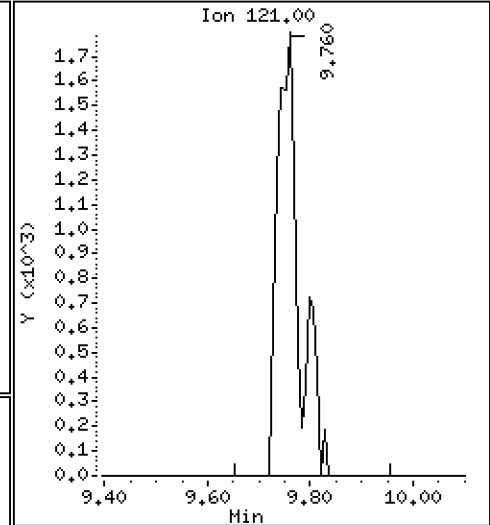
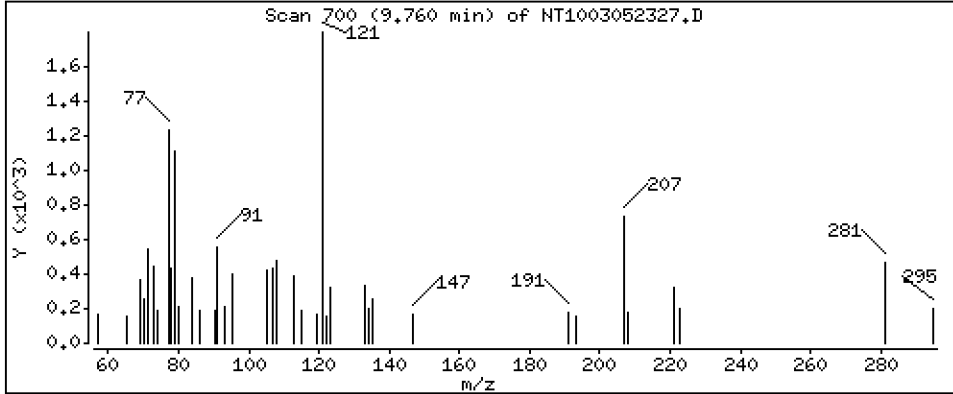
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,2387 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

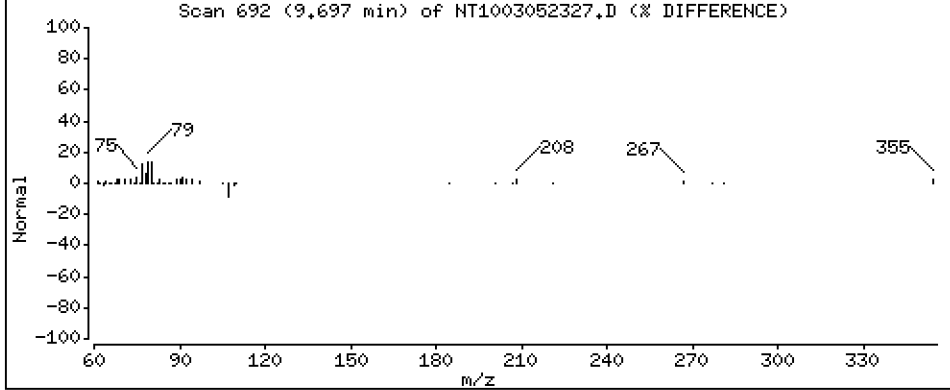
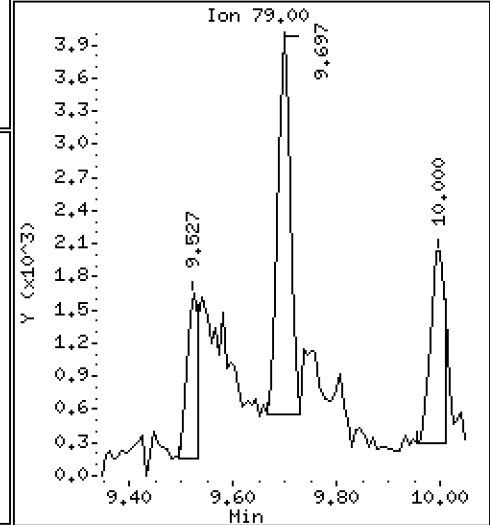
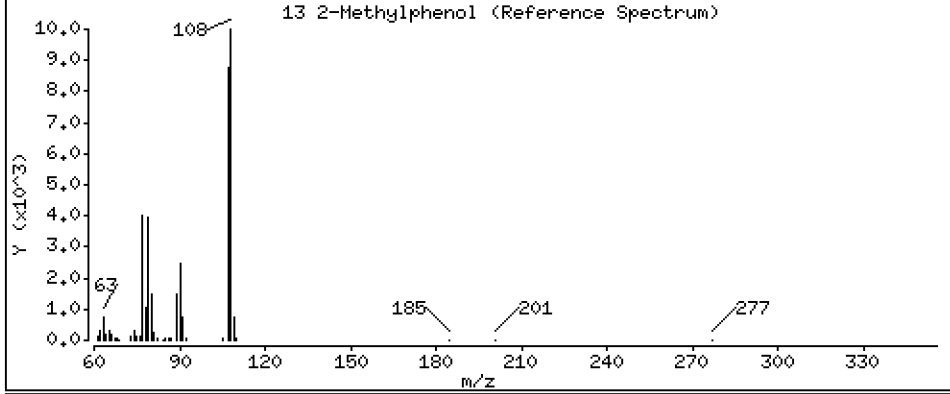
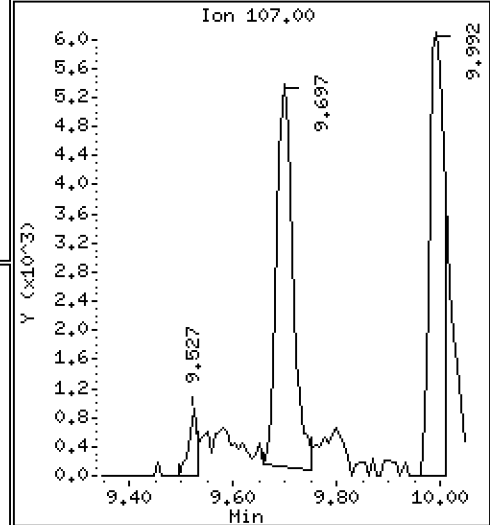
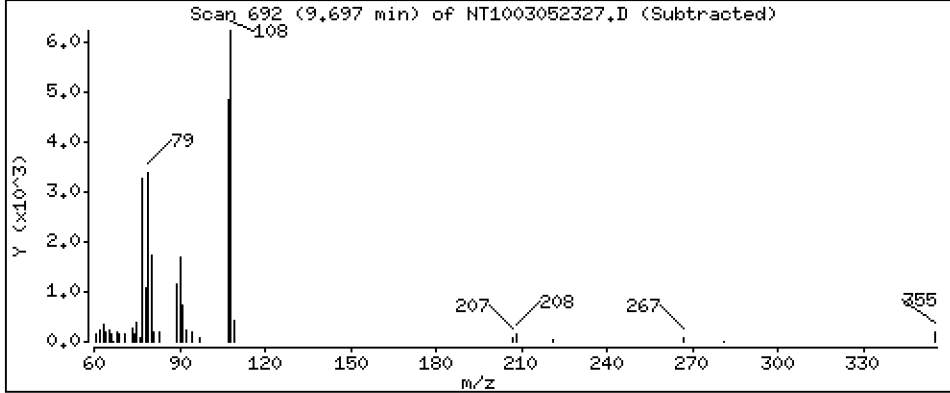
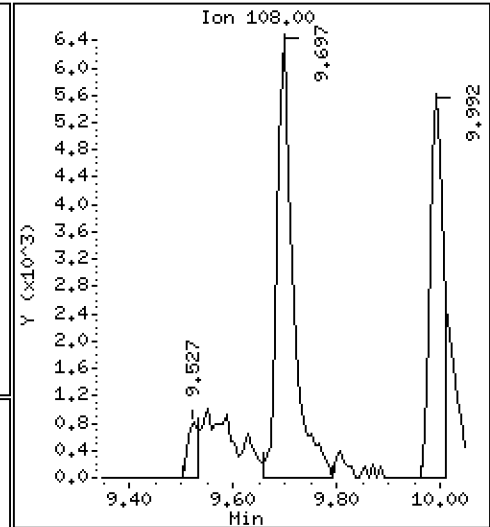
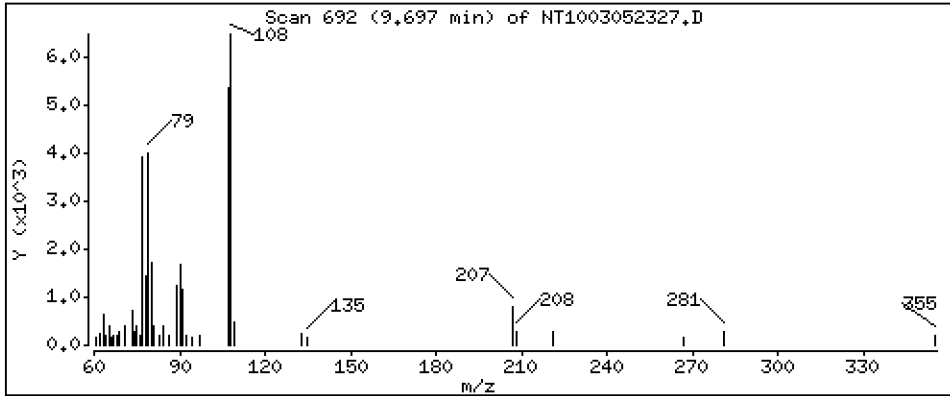
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1925 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

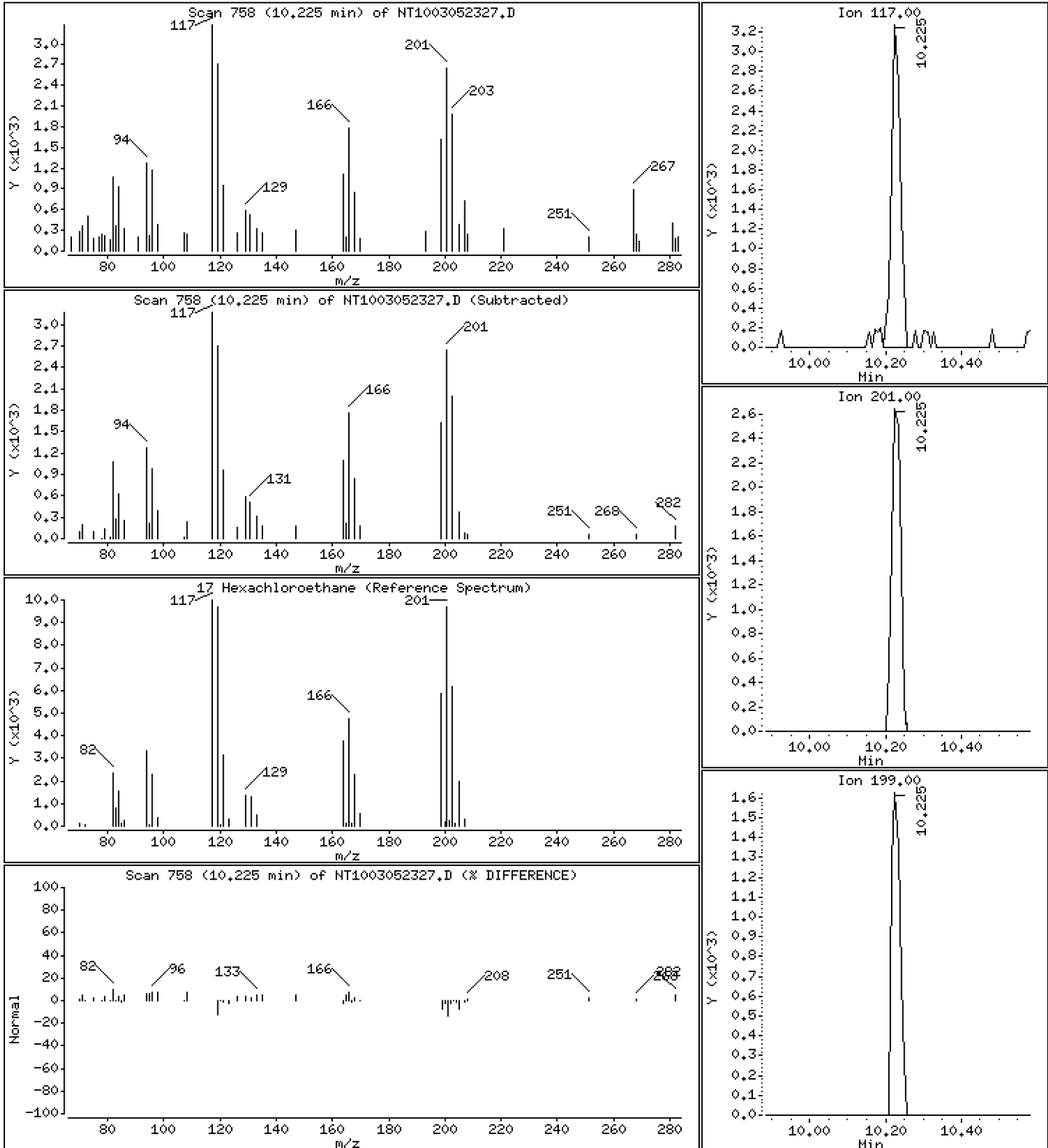
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

17 Hexachloroethane

Concentration: 0,1482 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

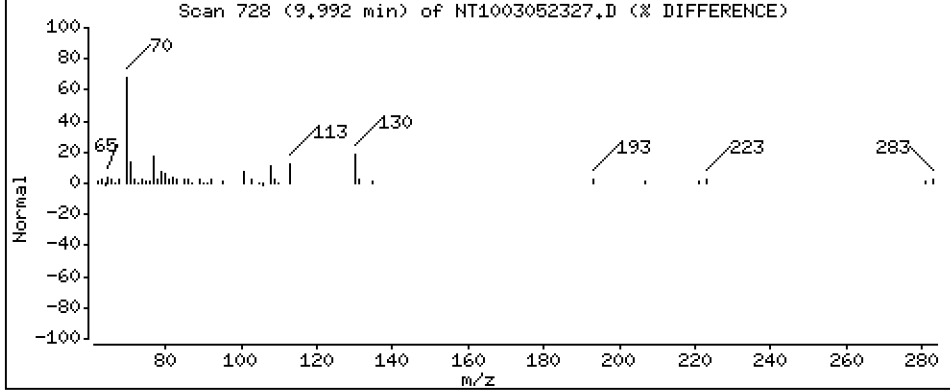
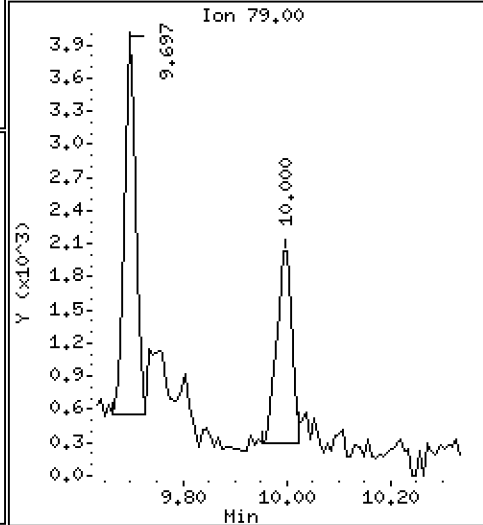
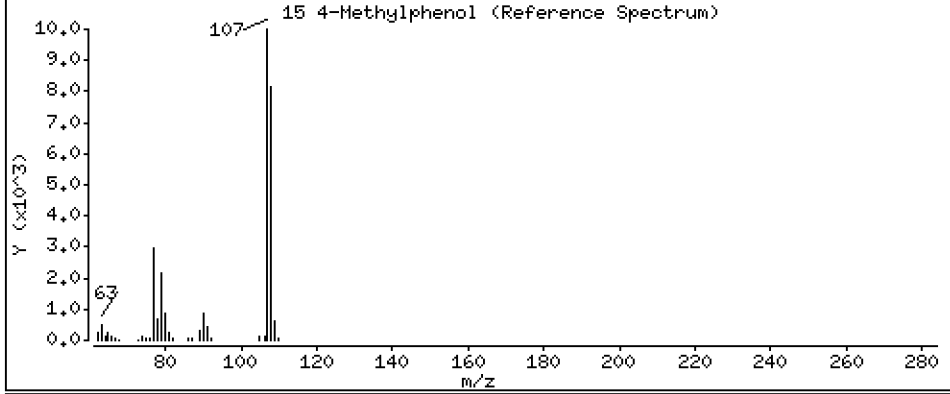
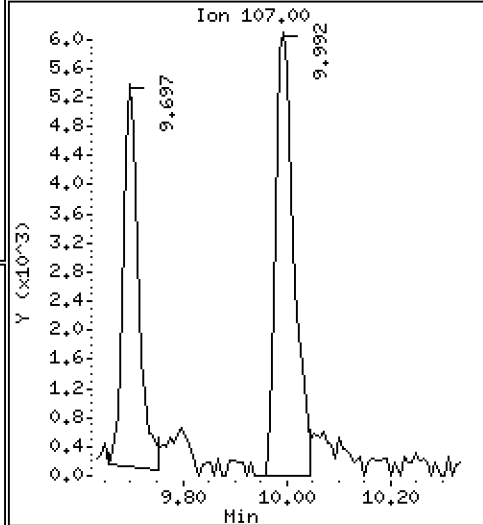
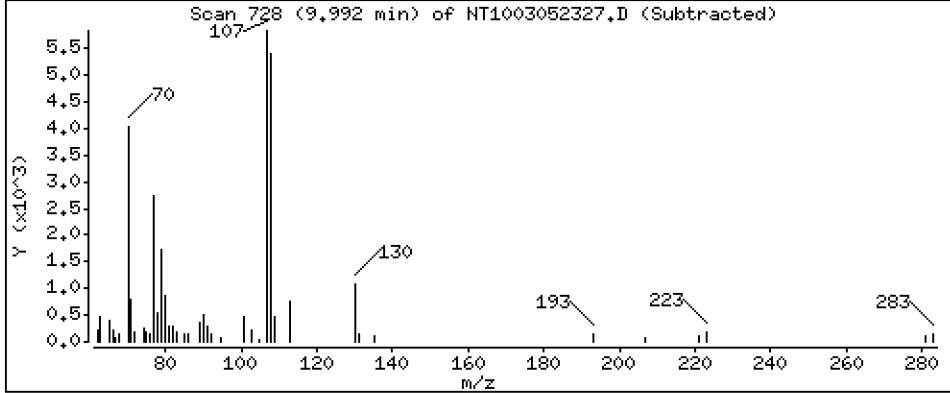
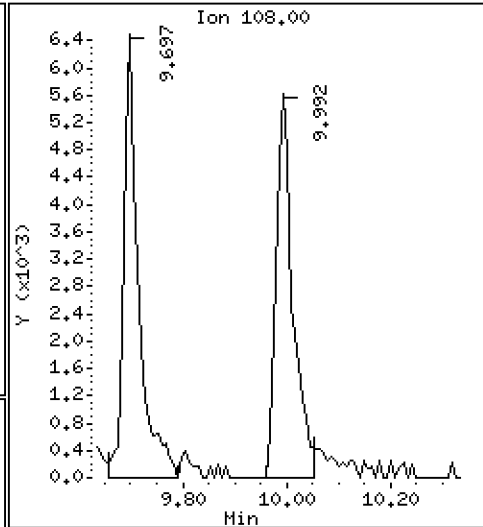
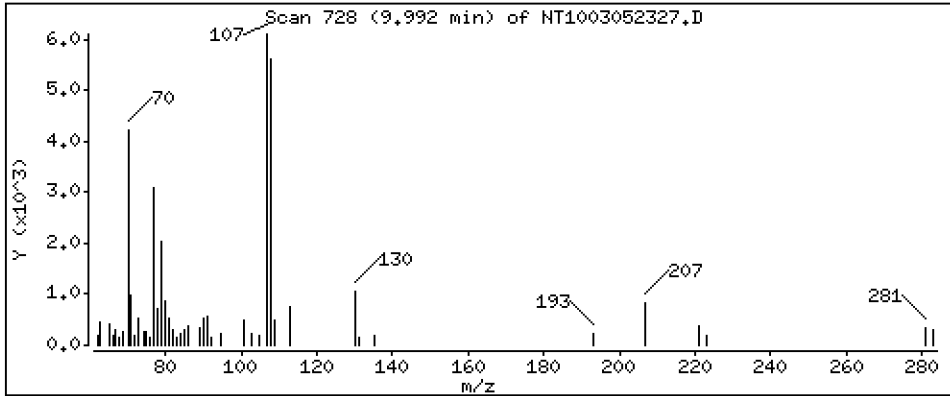
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,1442 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

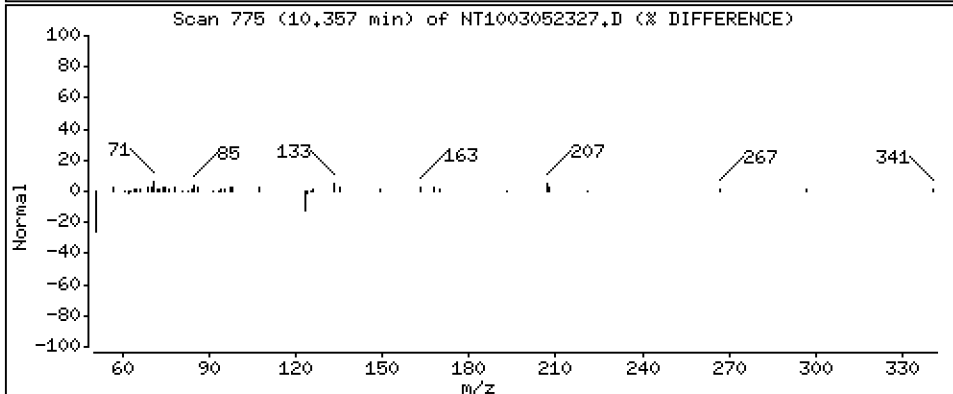
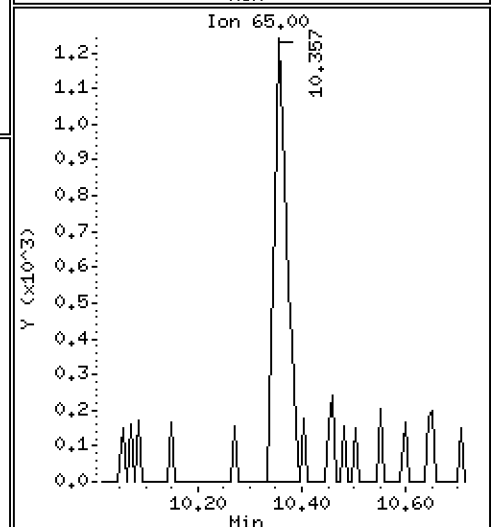
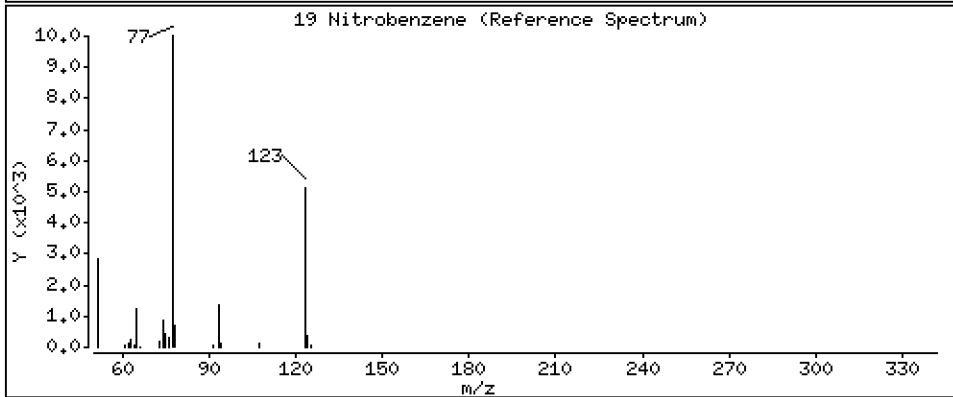
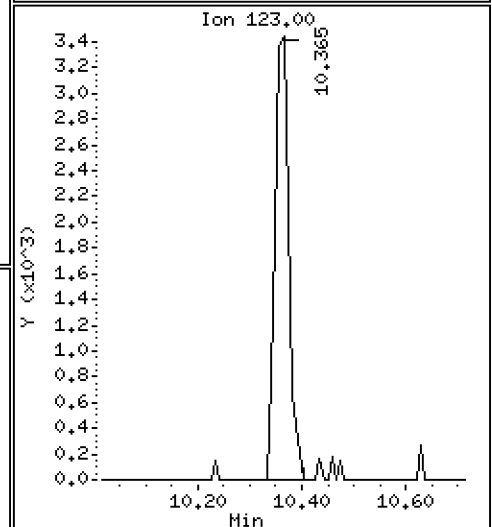
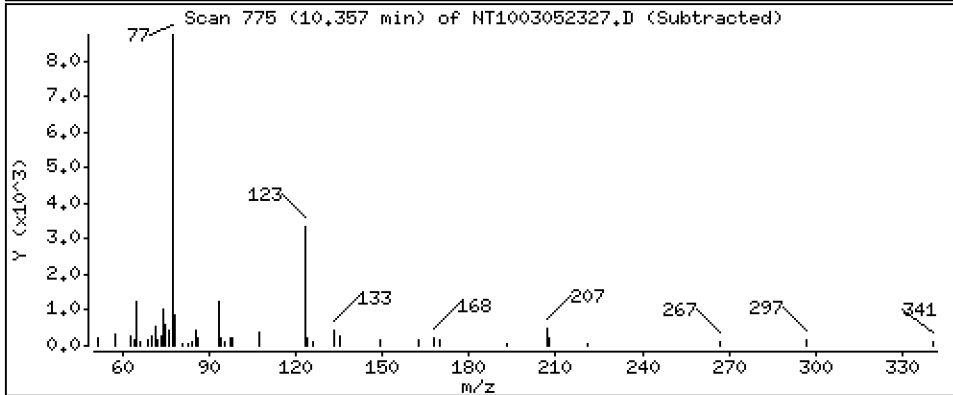
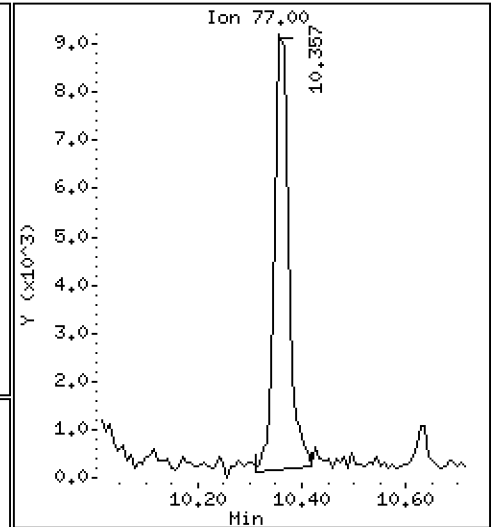
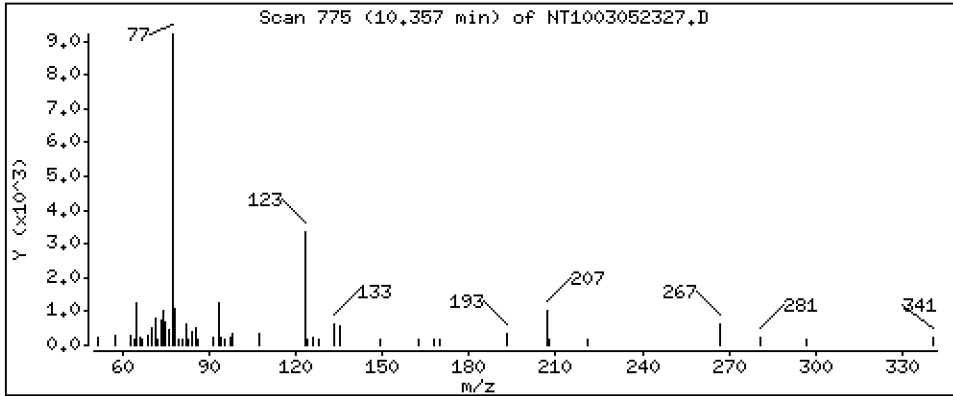
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,1990 ug/mL

19 Nitrobenzene



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

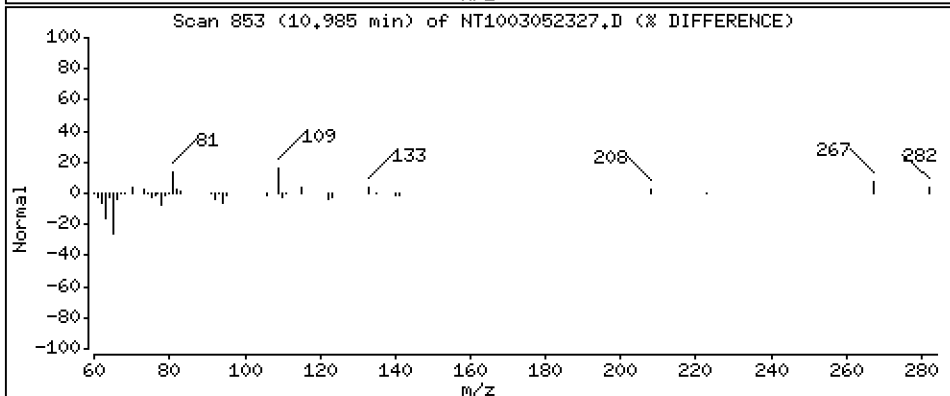
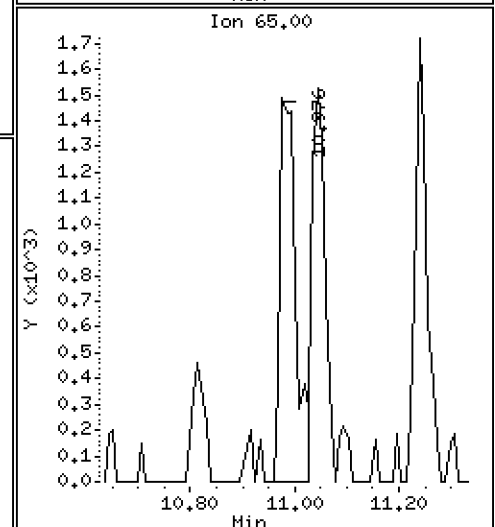
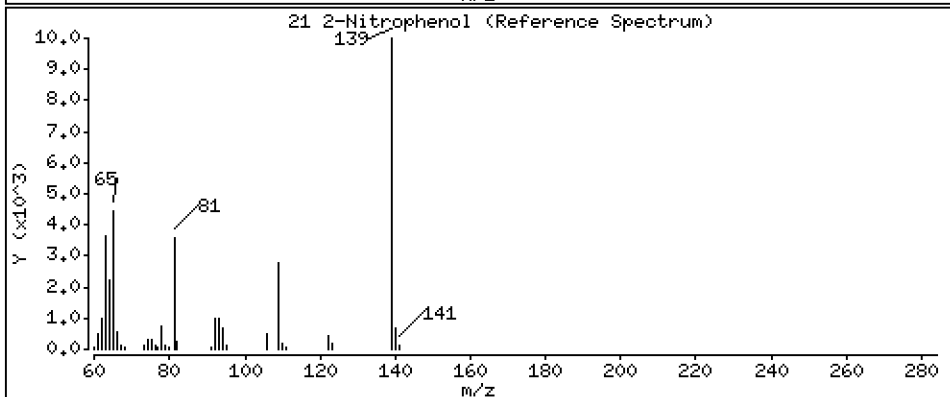
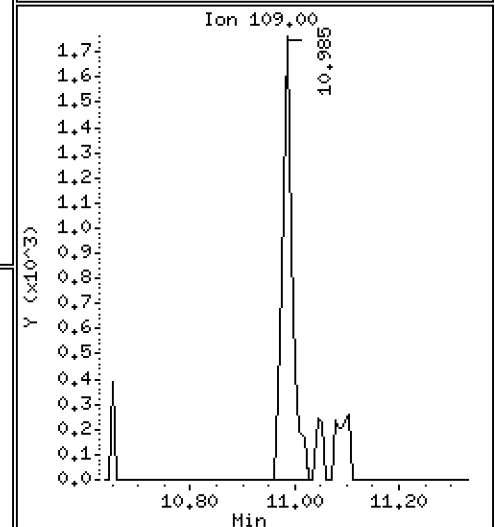
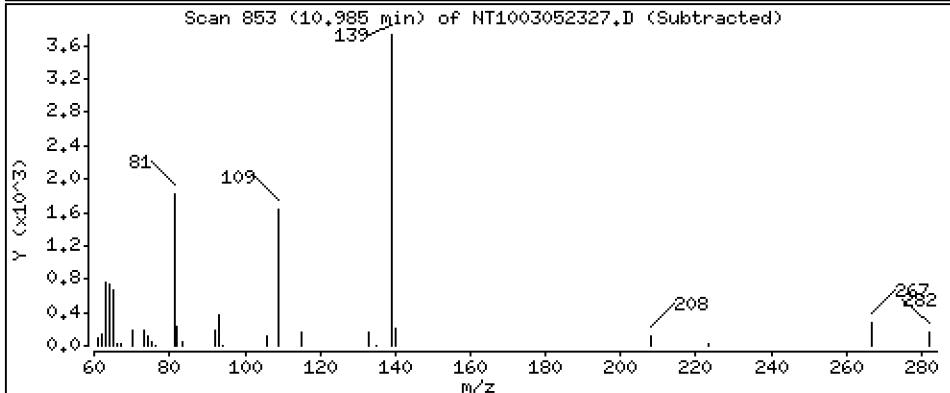
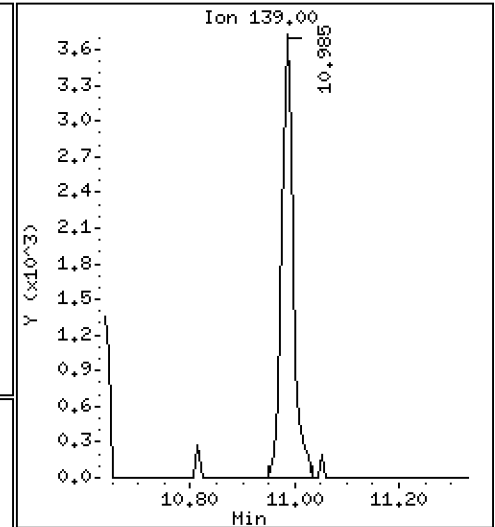
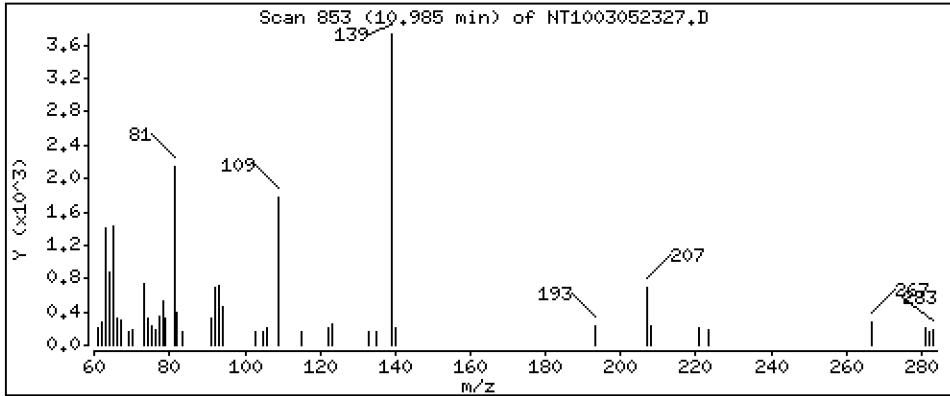
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

21 2-Nitrophenol

Concentration: 0,1259 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

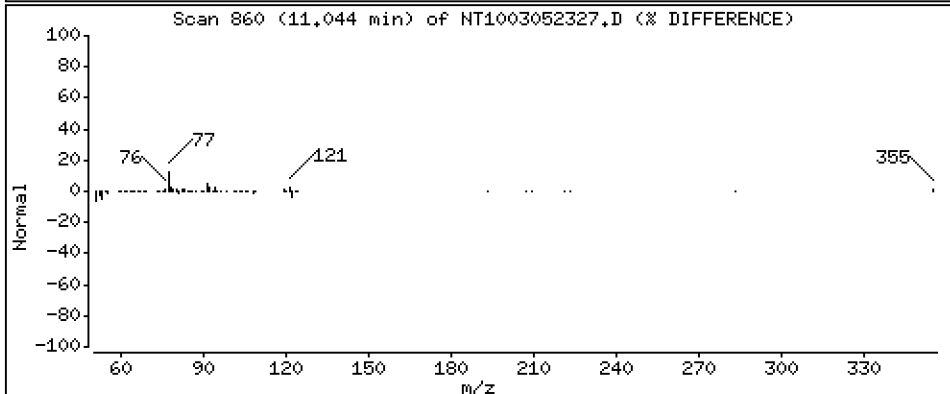
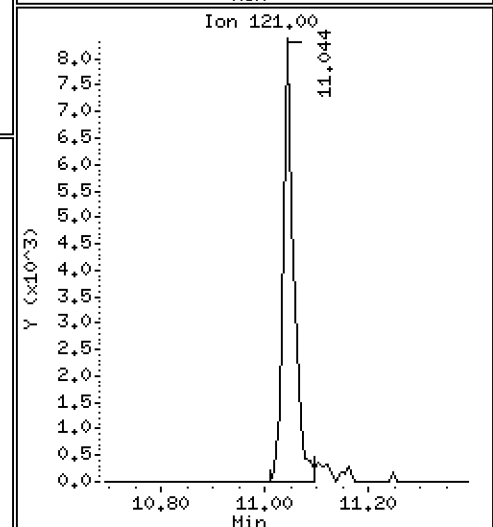
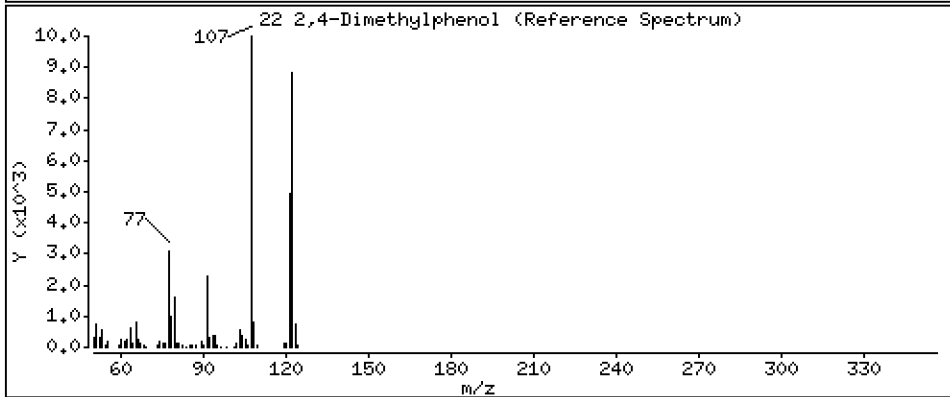
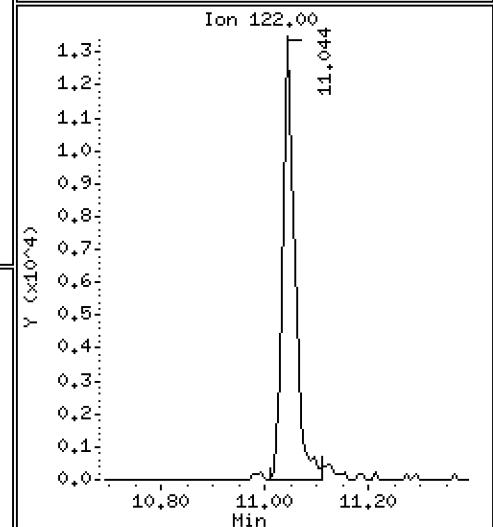
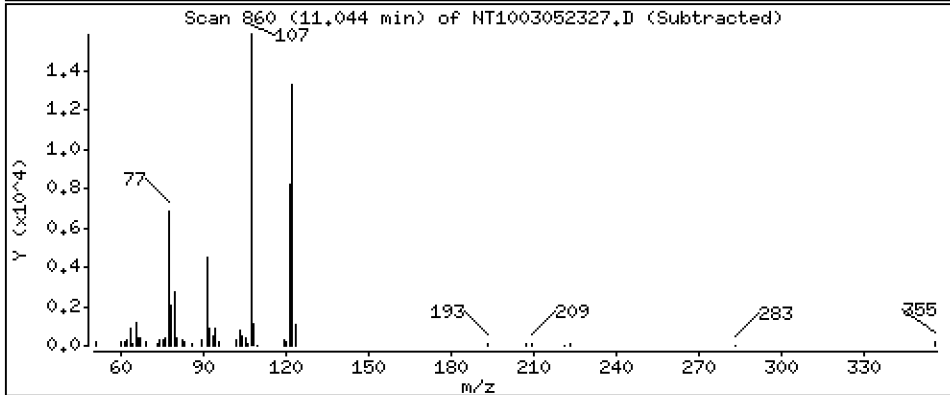
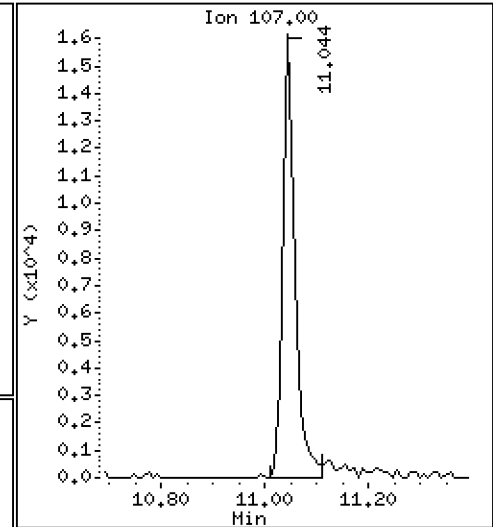
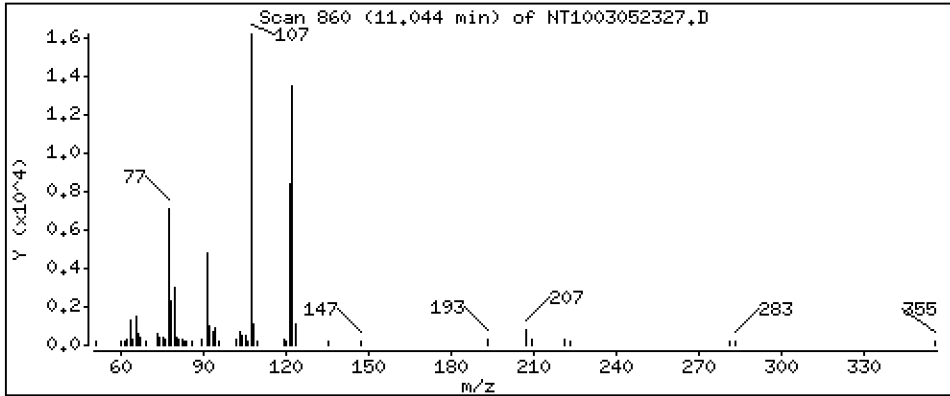
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3416 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

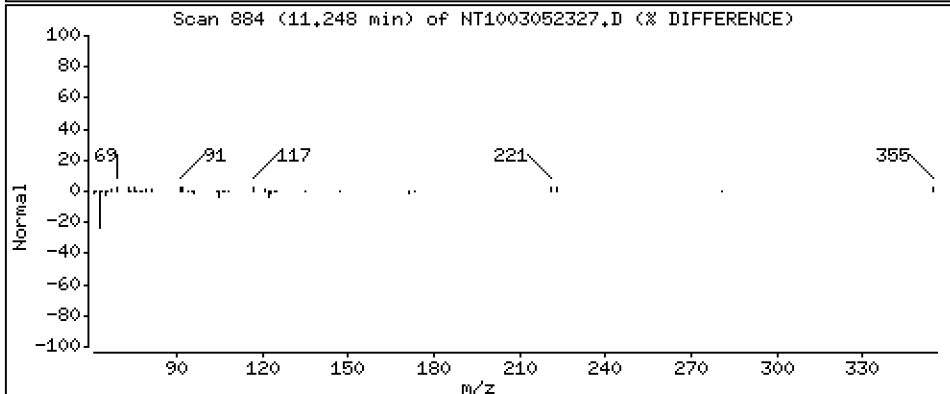
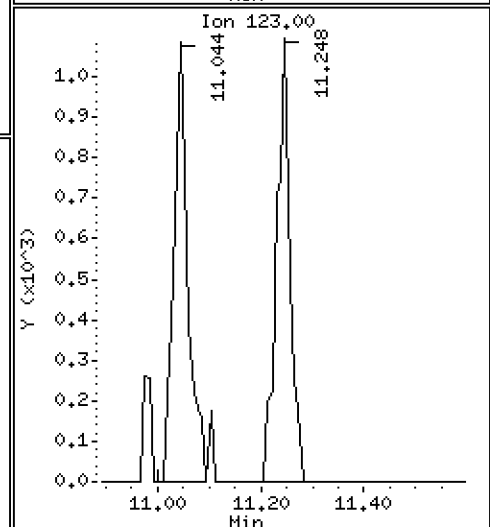
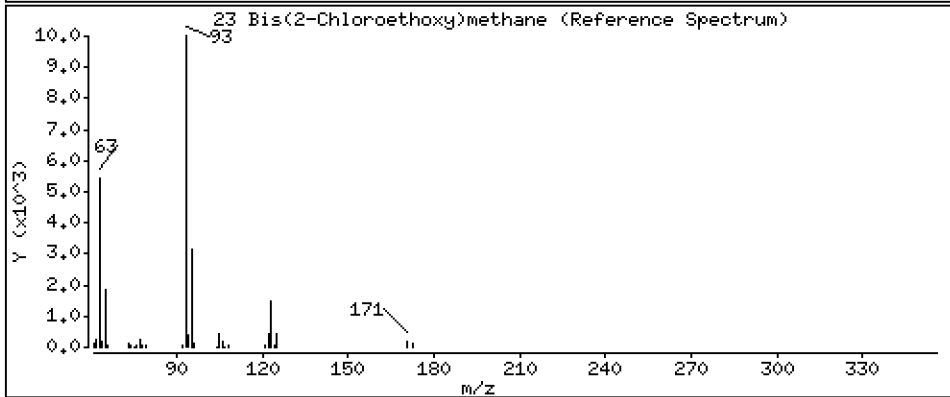
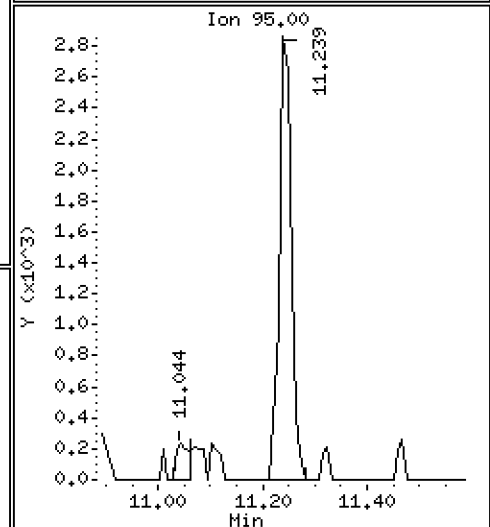
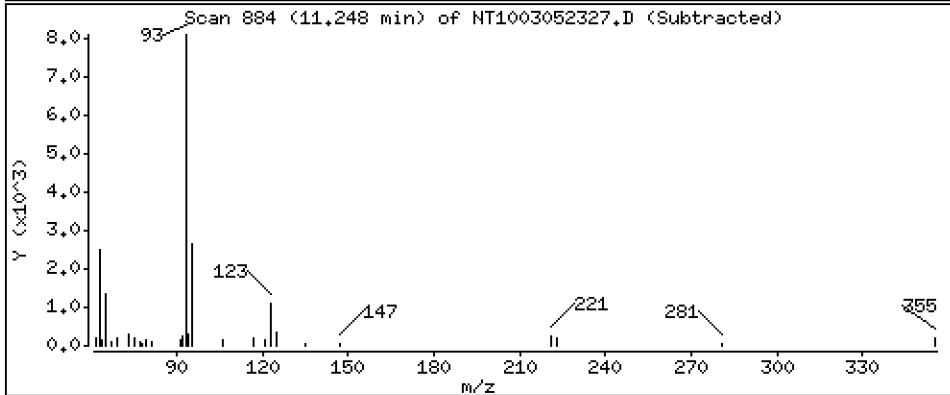
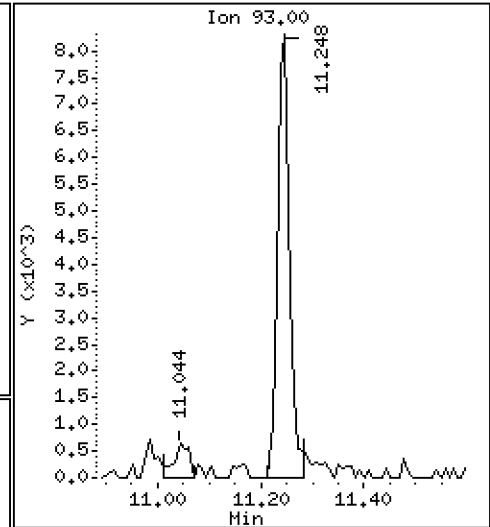
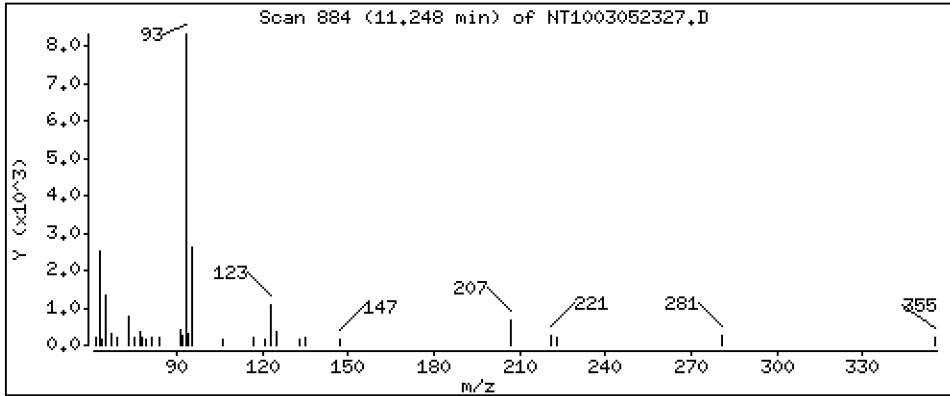
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

23 Bis(2-Chloroethoxy)methane

Concentration: 0,2053 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

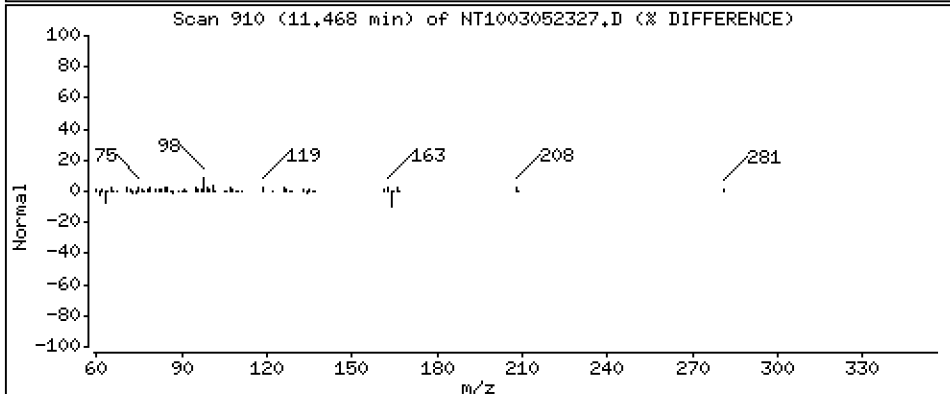
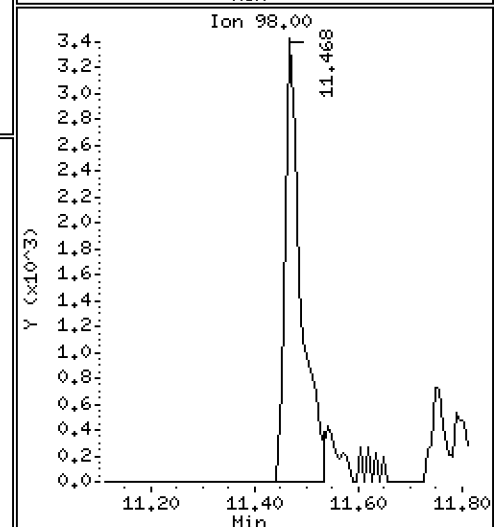
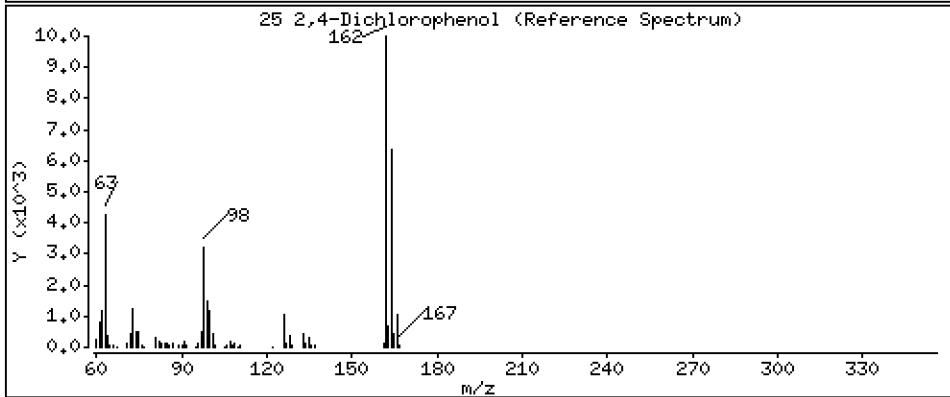
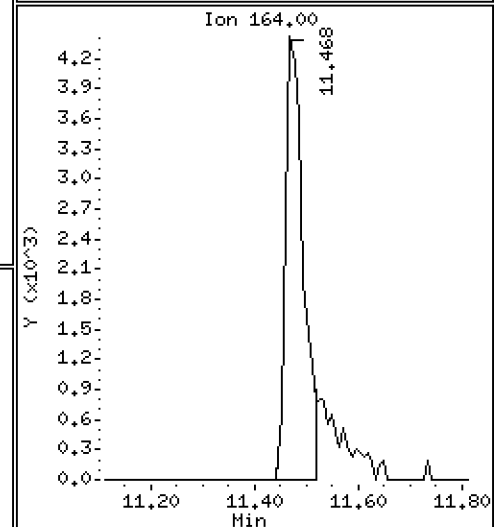
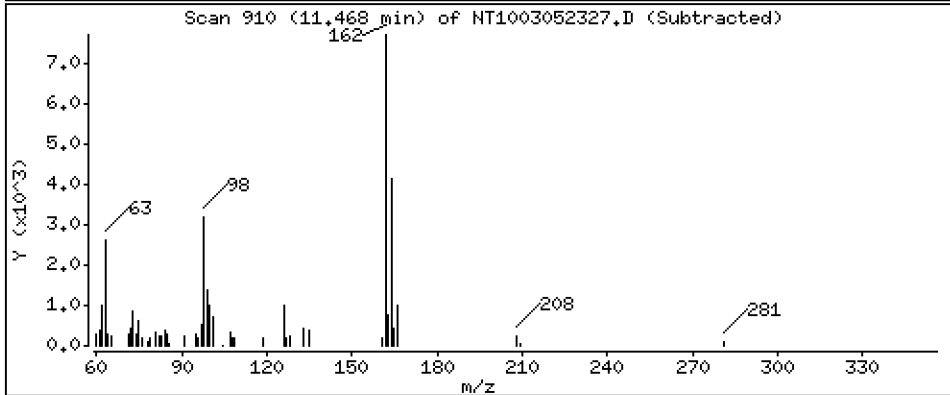
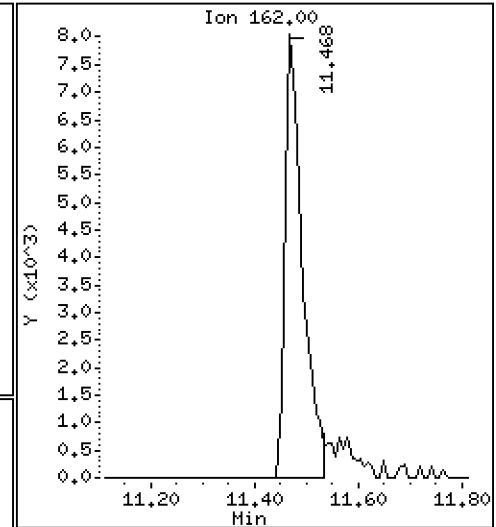
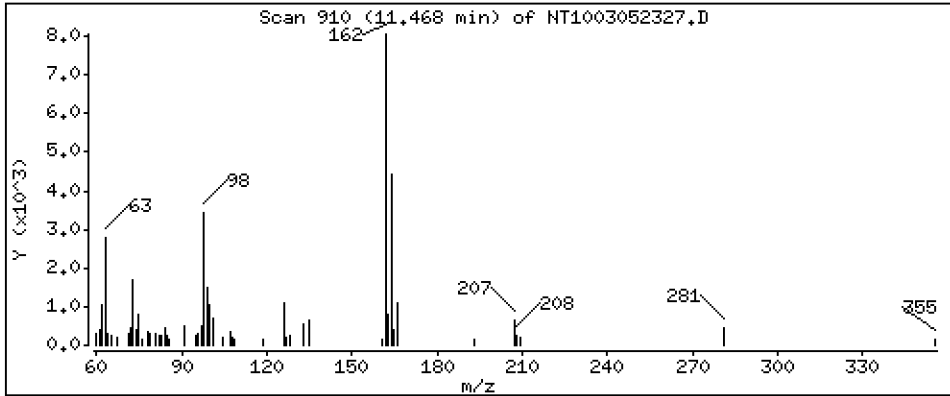
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

25 2,4-Dichlorophenol

Concentration: 0,3167 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

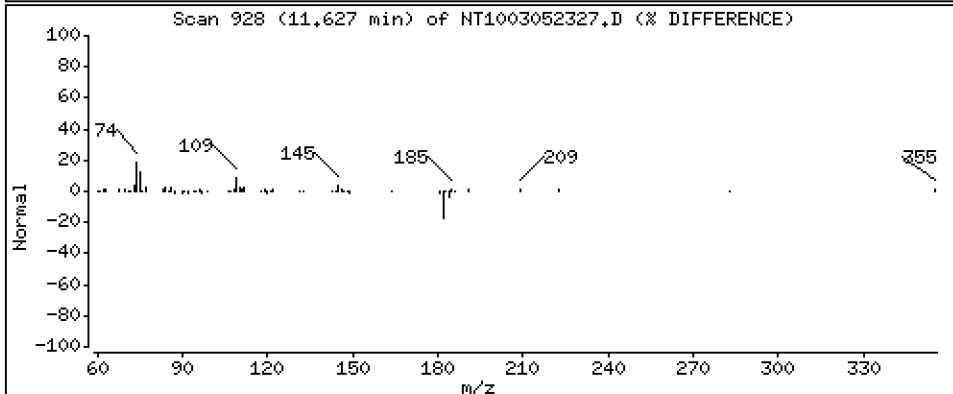
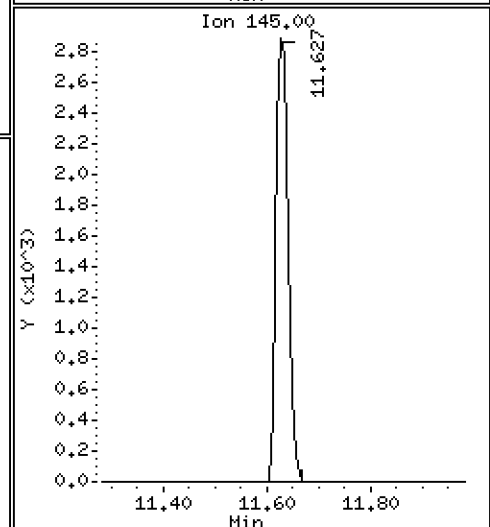
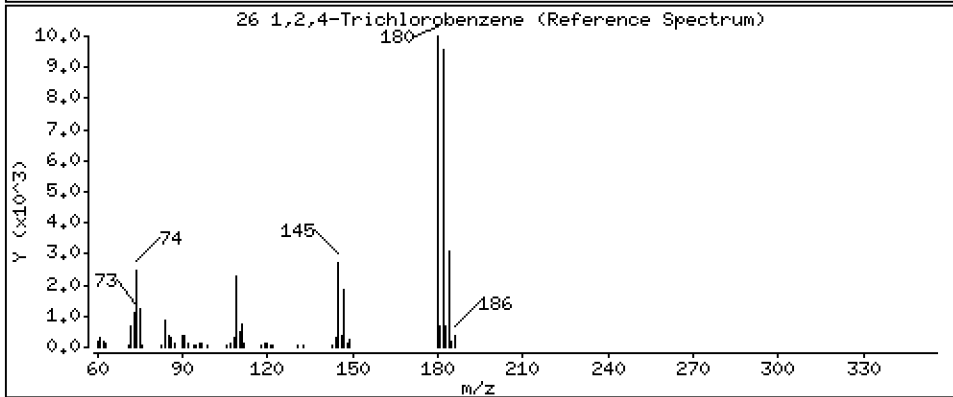
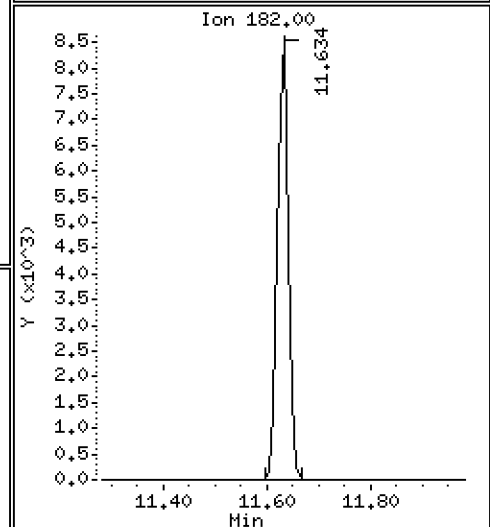
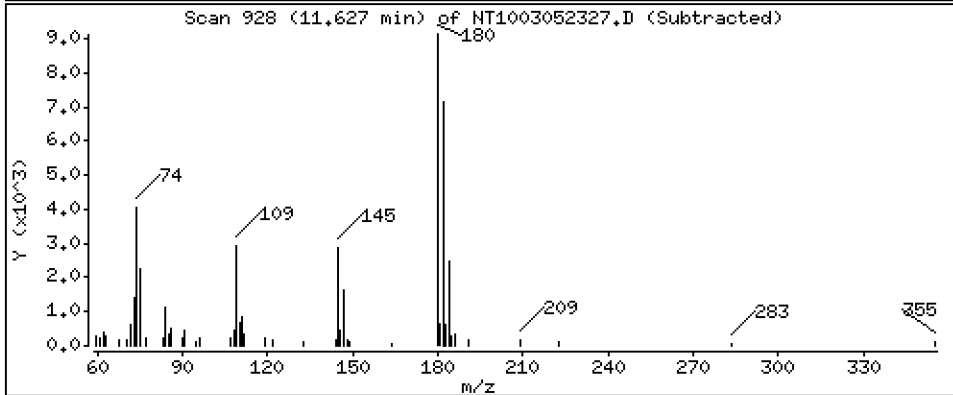
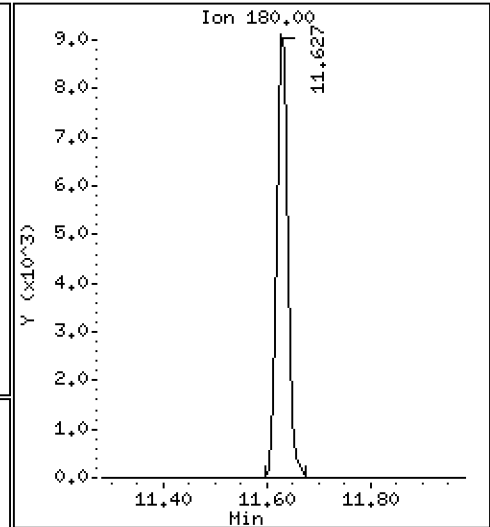
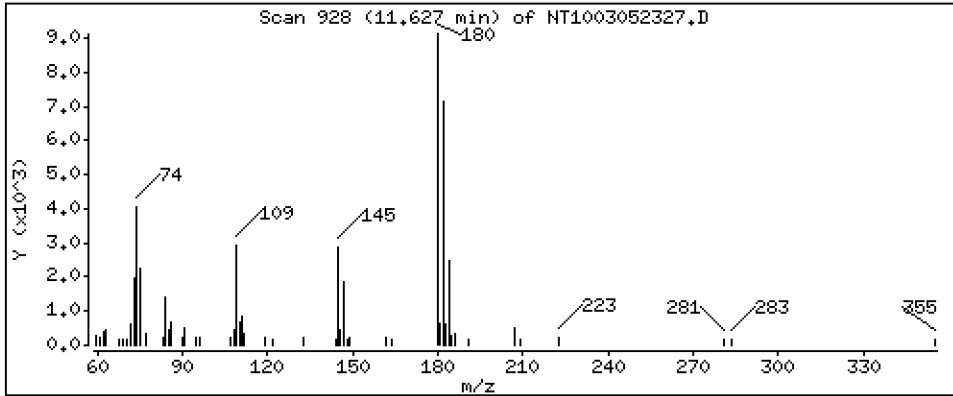
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2271 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

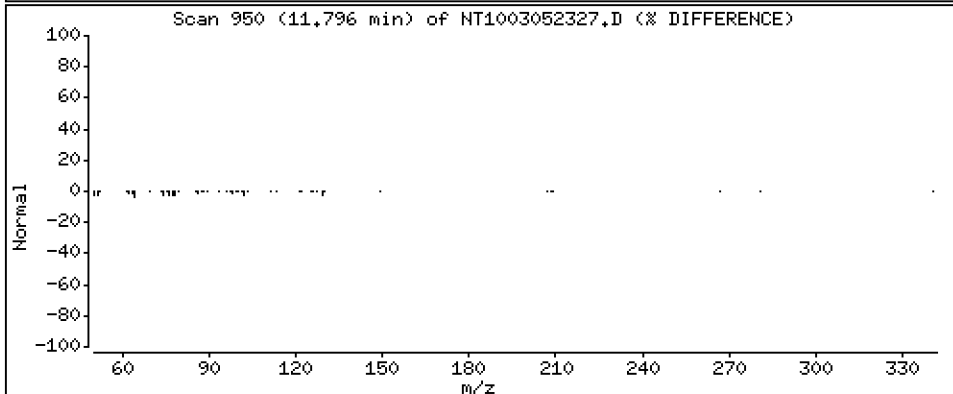
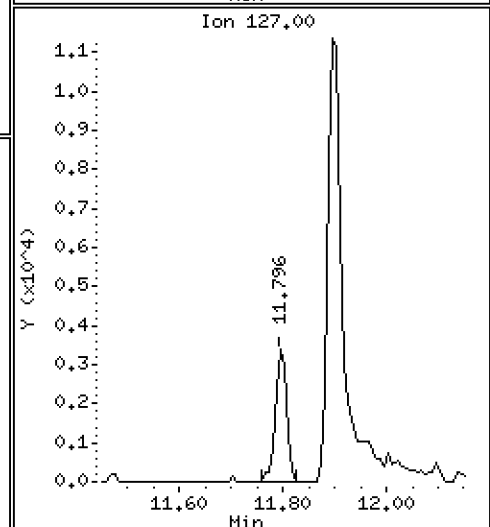
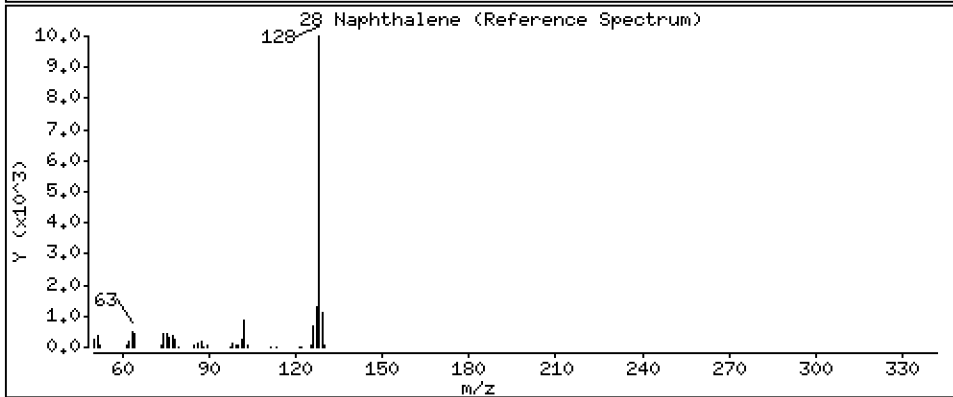
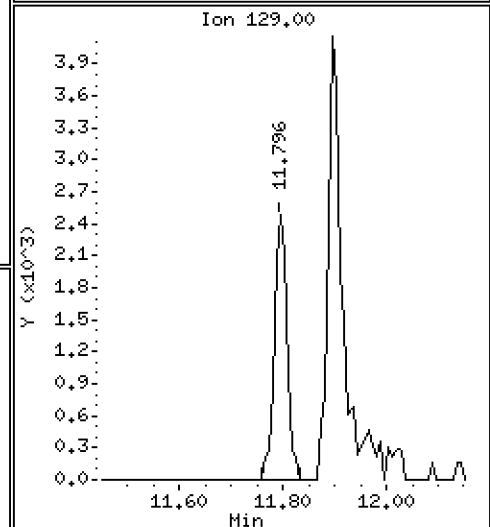
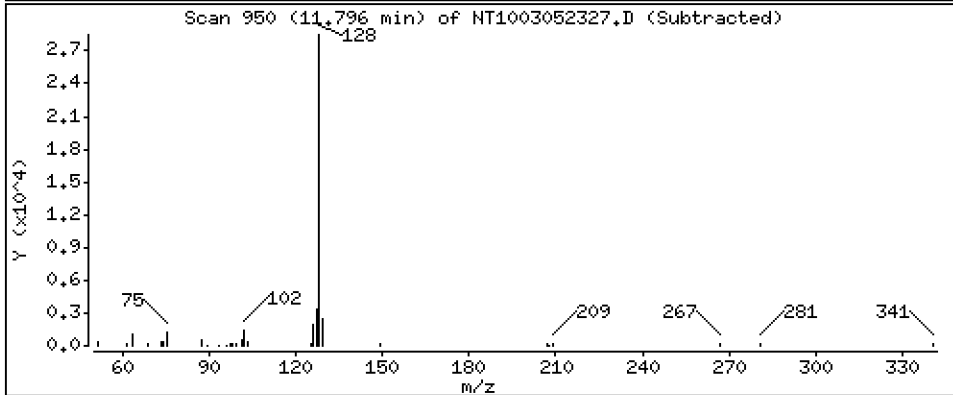
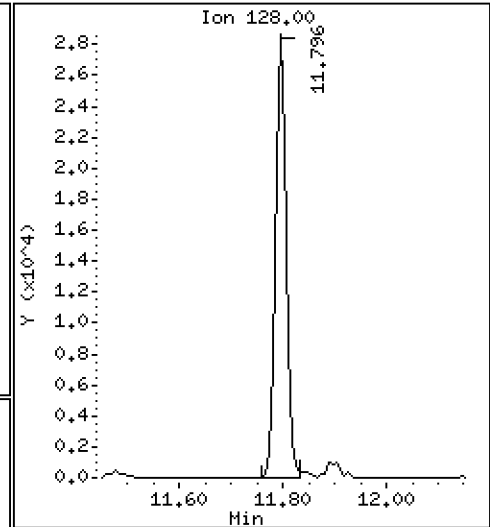
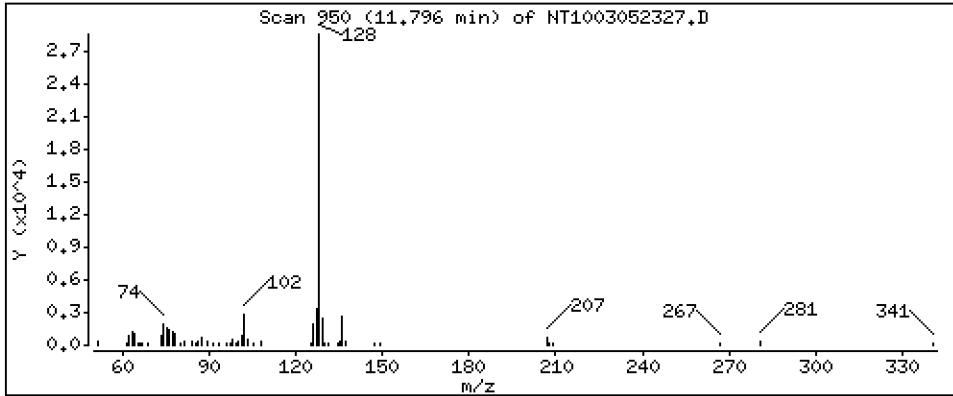
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

28 Naphthalene

Concentration: 0,2042 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

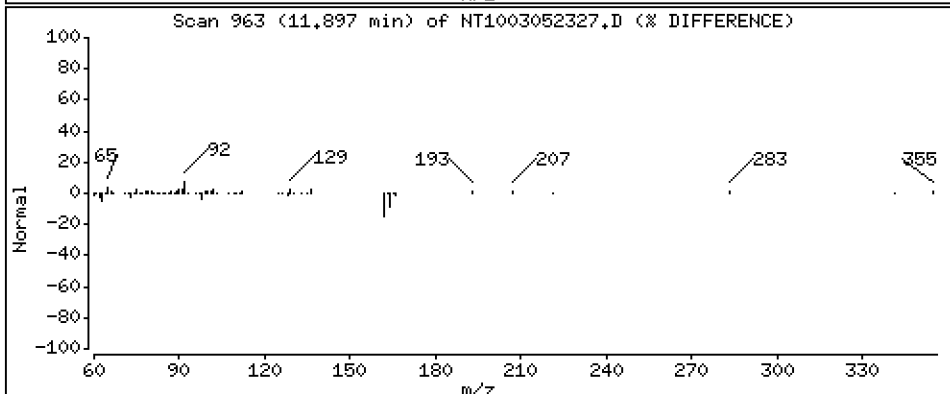
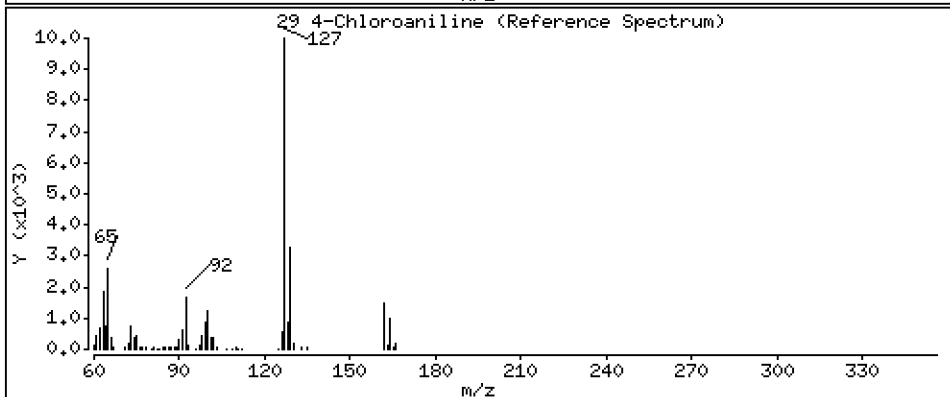
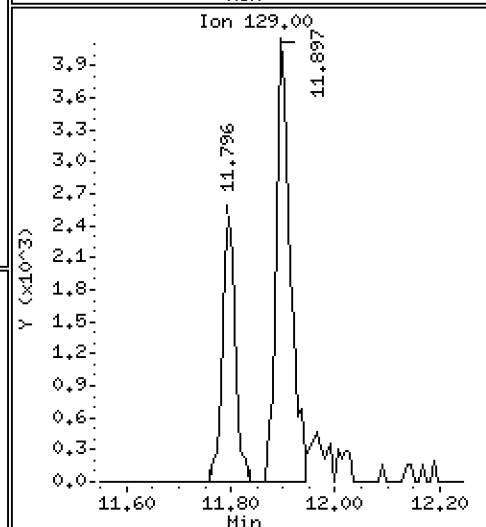
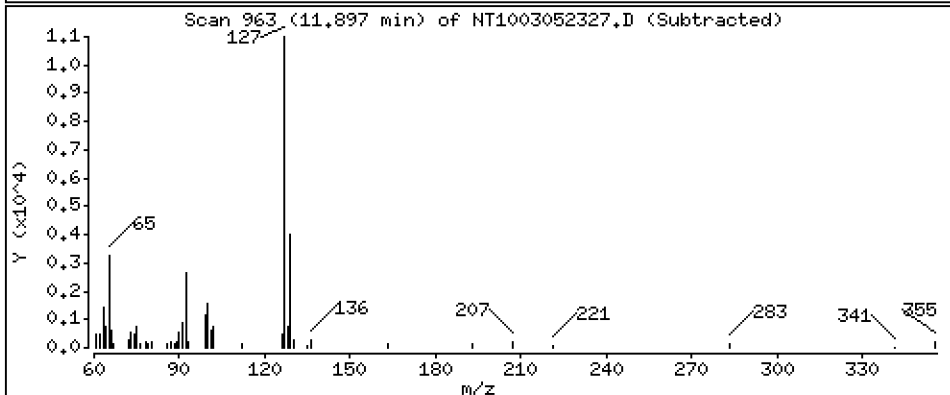
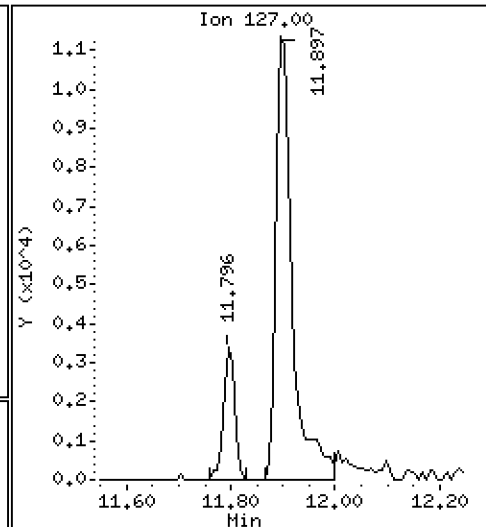
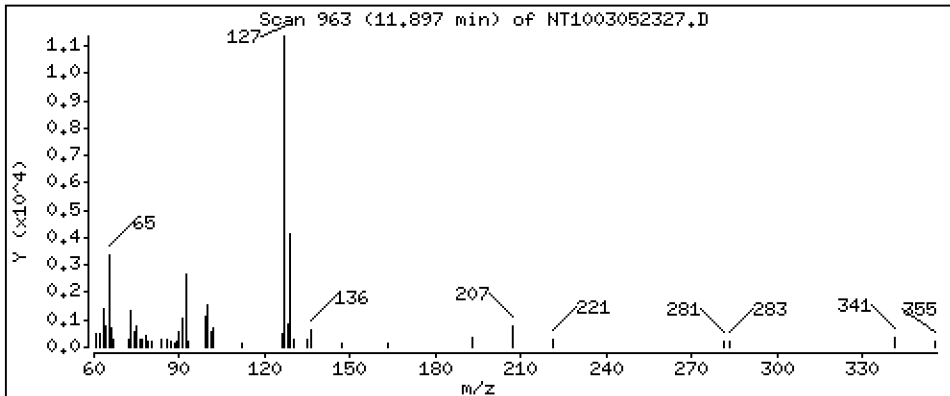
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

29 4-Chloroaniline

Concentration: 0,2916 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

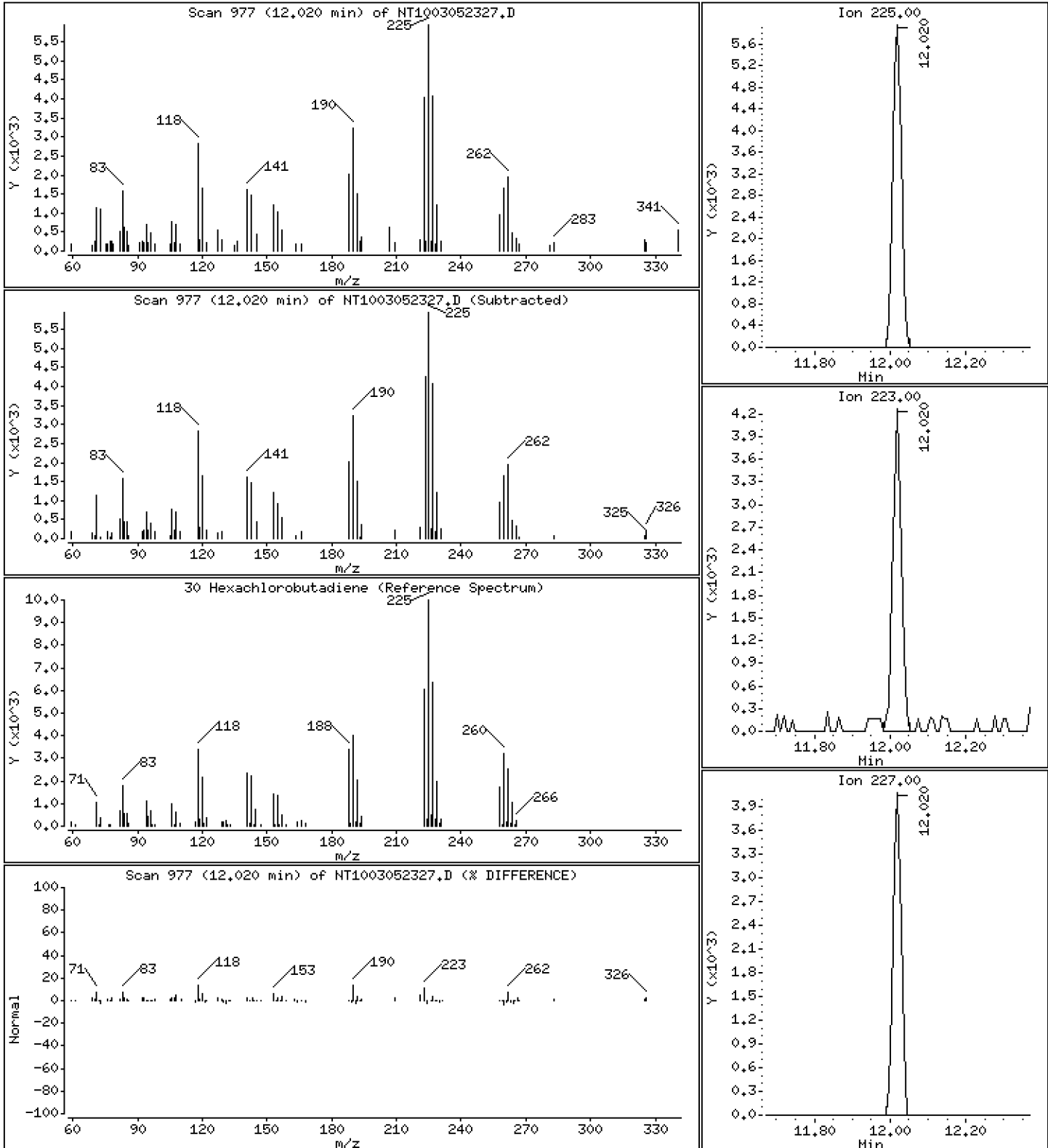
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1932 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

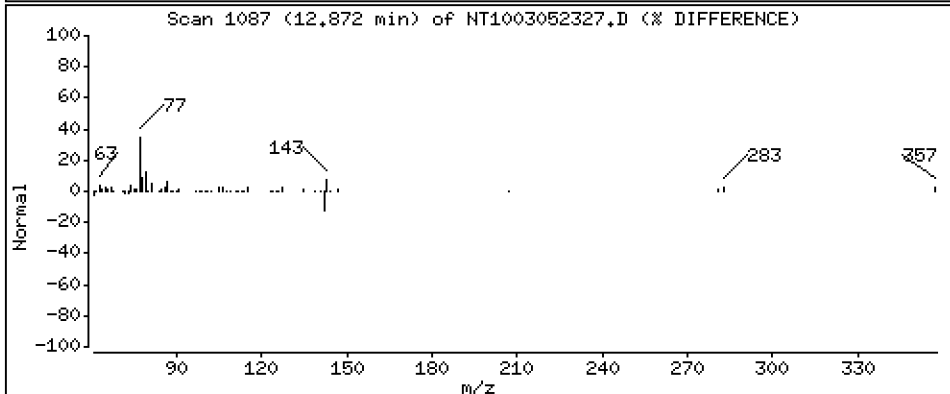
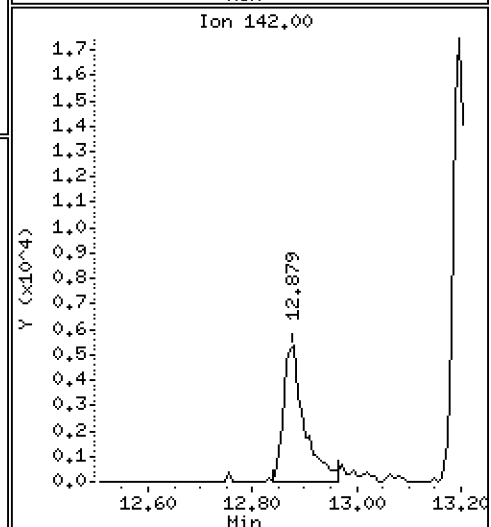
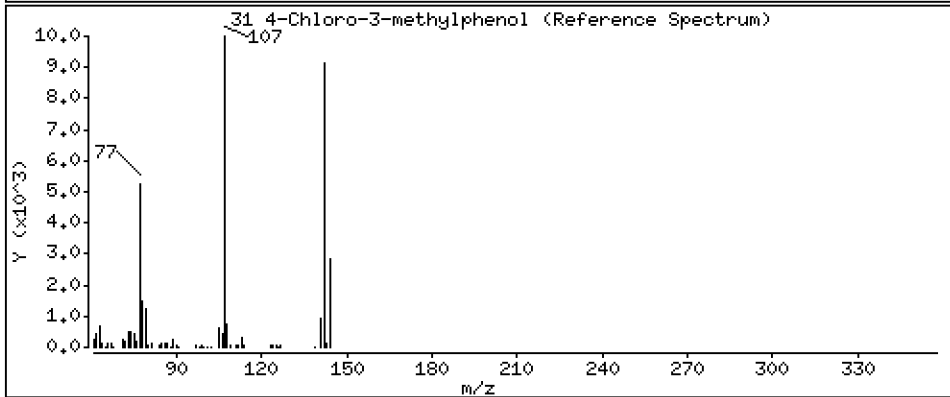
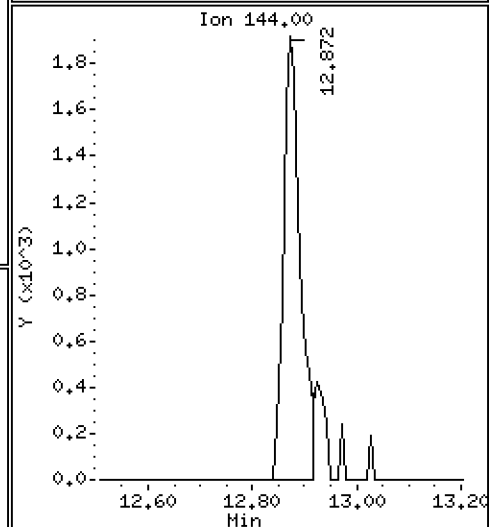
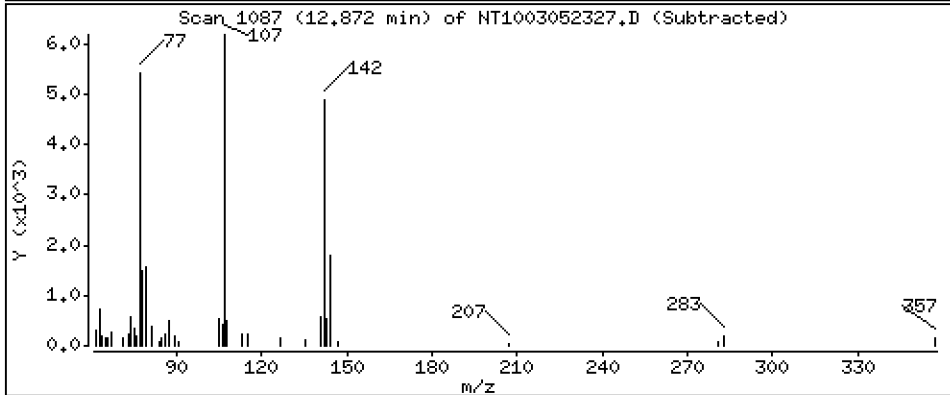
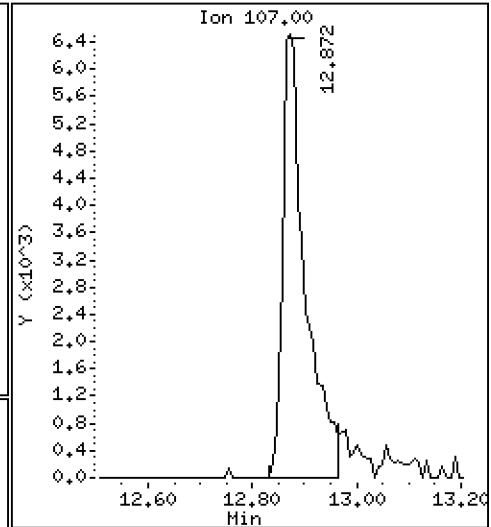
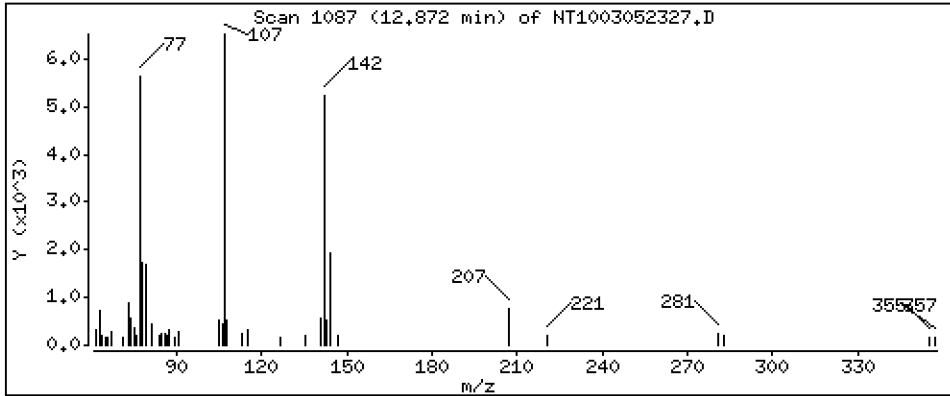
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

31 4-Chloro-3-methylphenol

Concentration: 0.3034 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

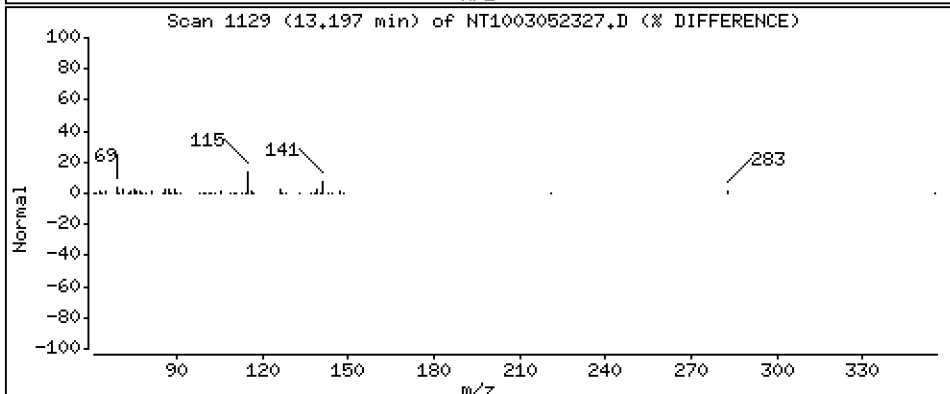
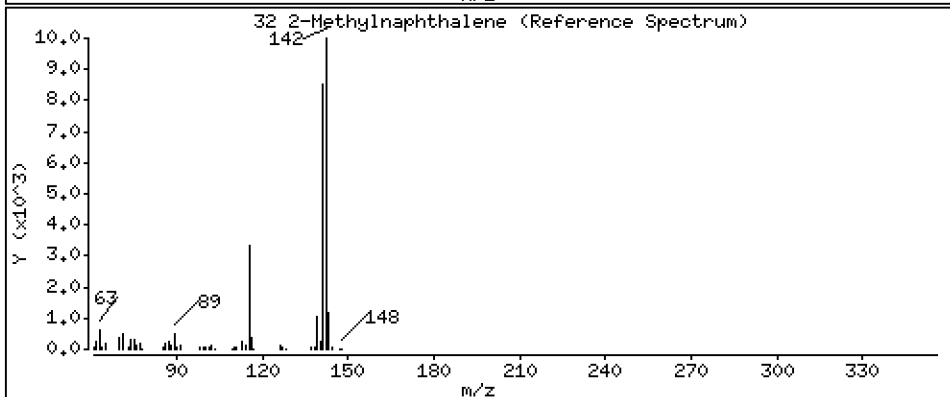
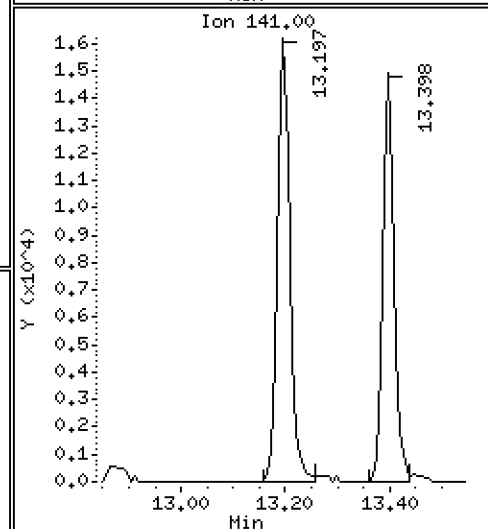
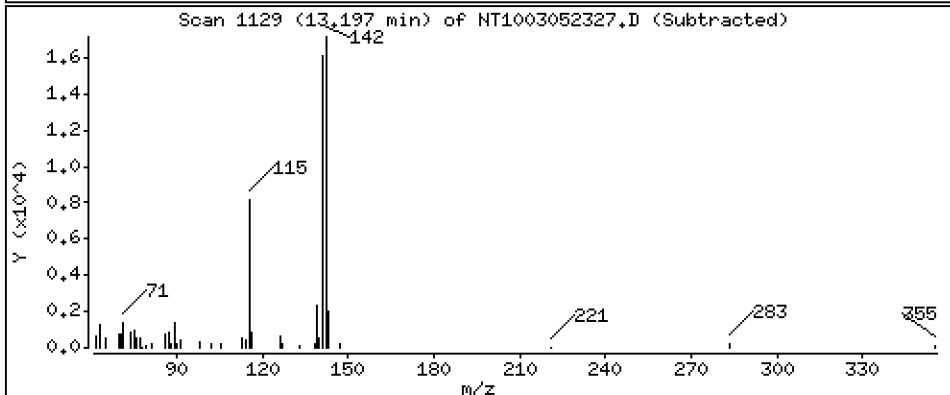
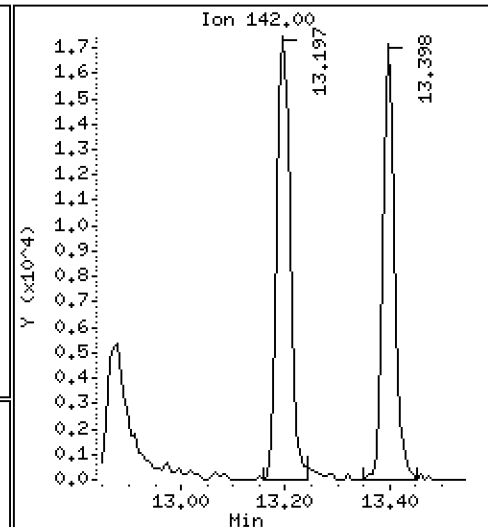
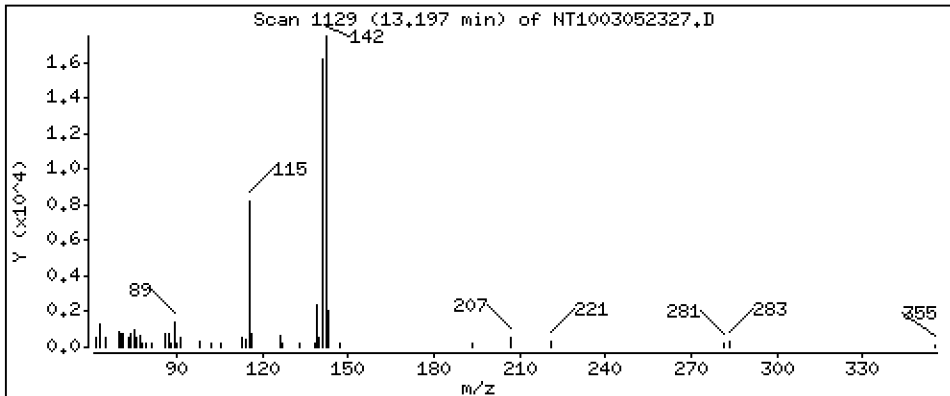
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

32 2-Methylnaphthalene

Concentration: 0,2022 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

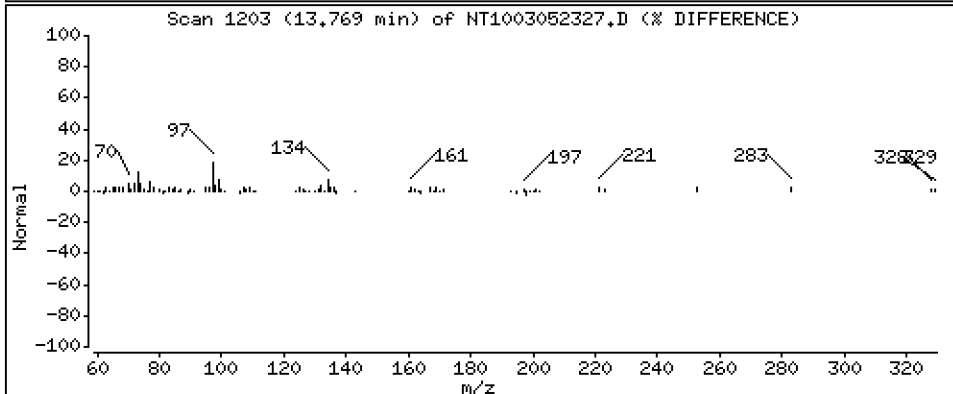
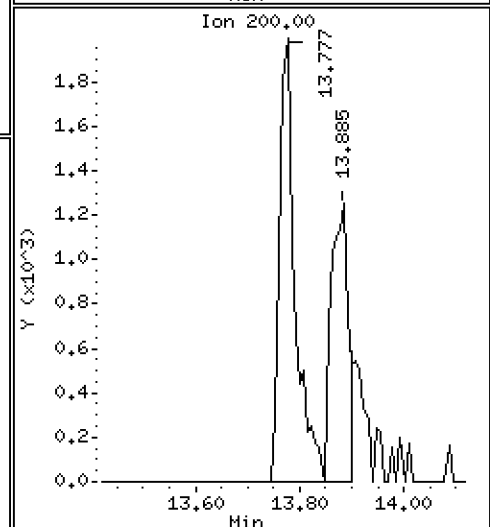
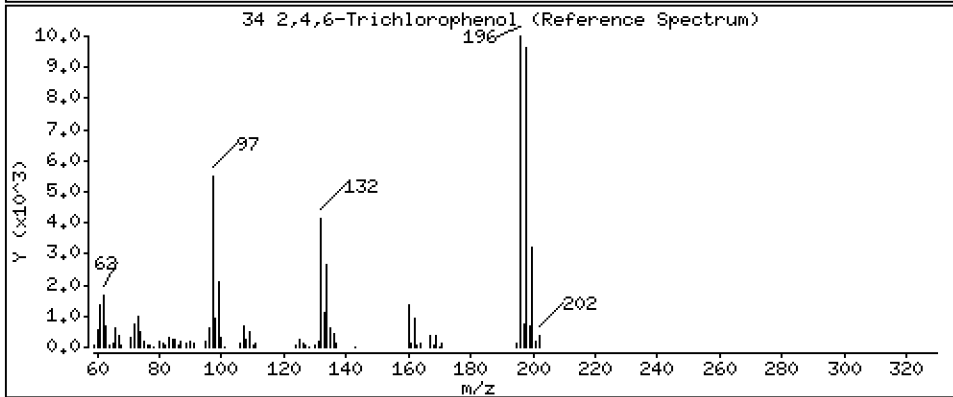
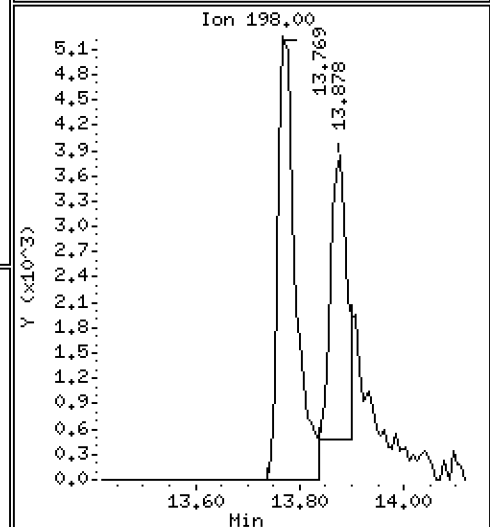
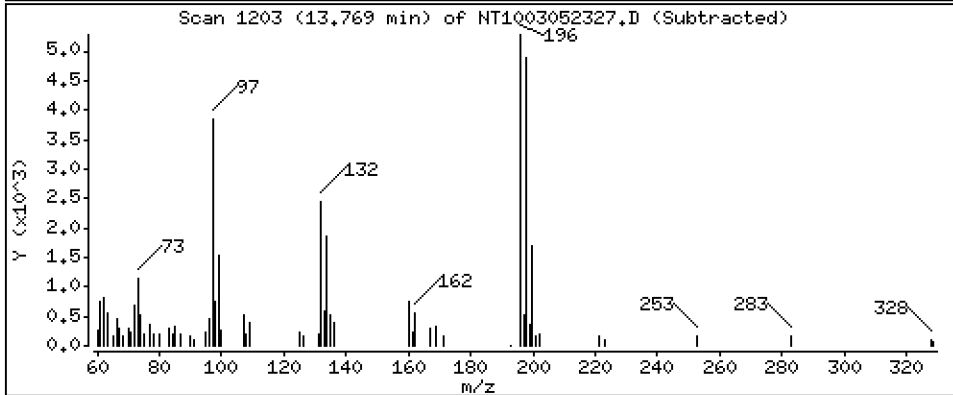
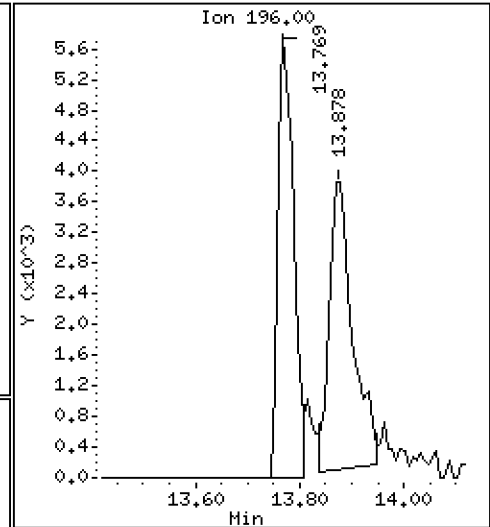
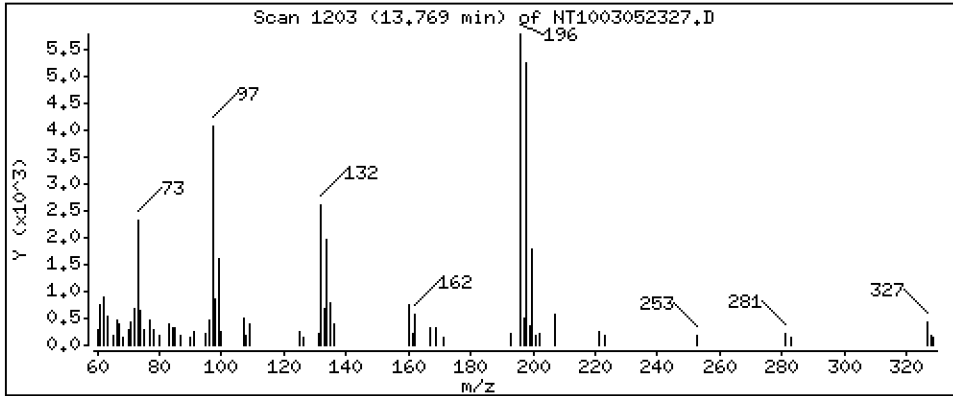
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

34 2,4,6-Trichlorophenol

Concentration: 0,2887 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

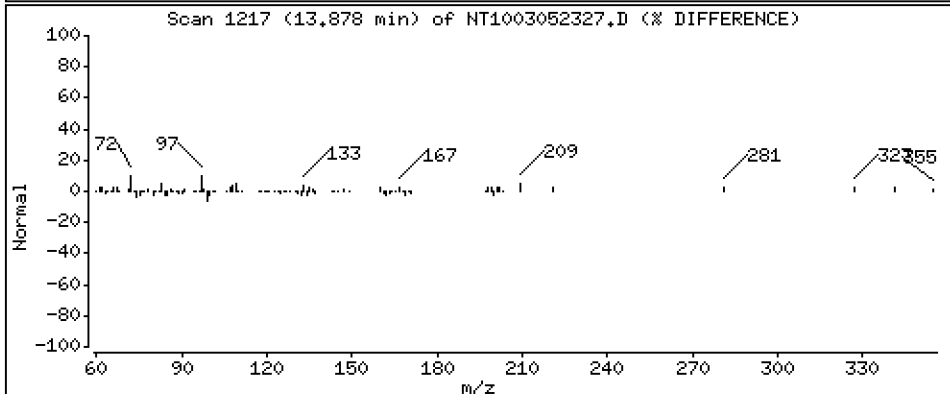
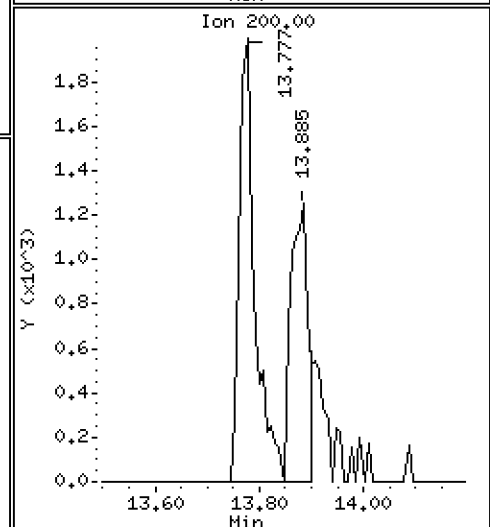
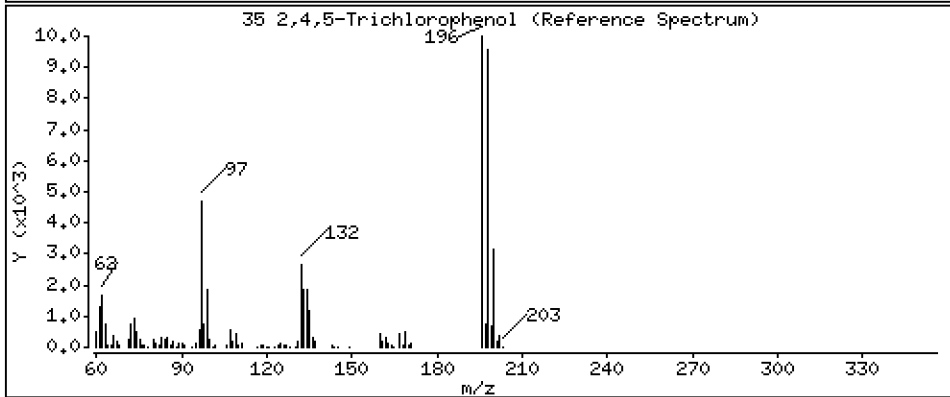
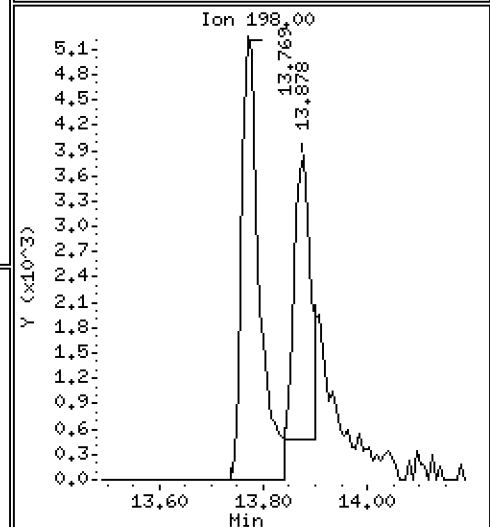
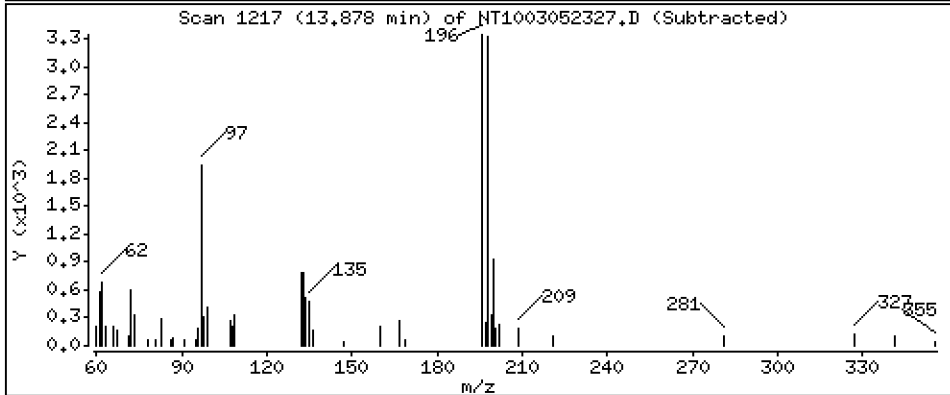
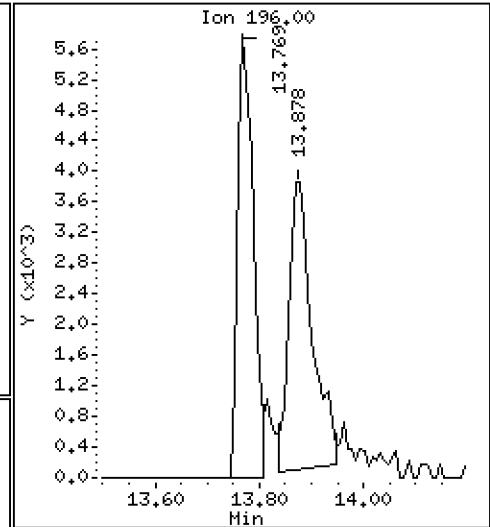
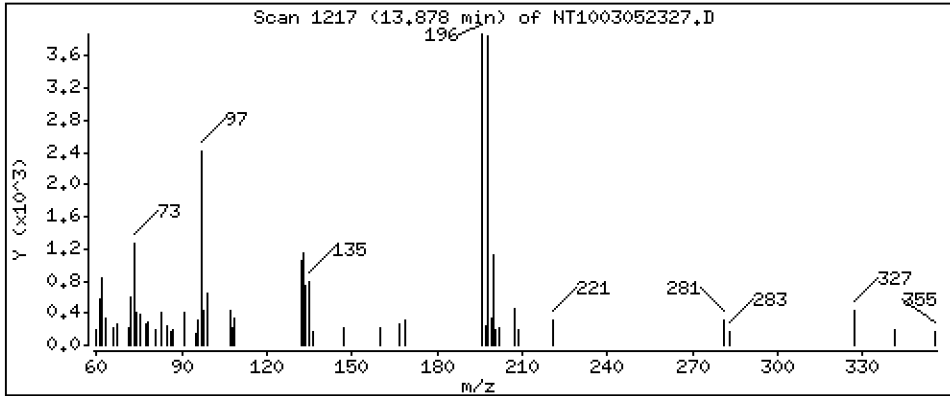
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

35 2,4,5-Trichlorophenol

Concentration: 0,2819 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

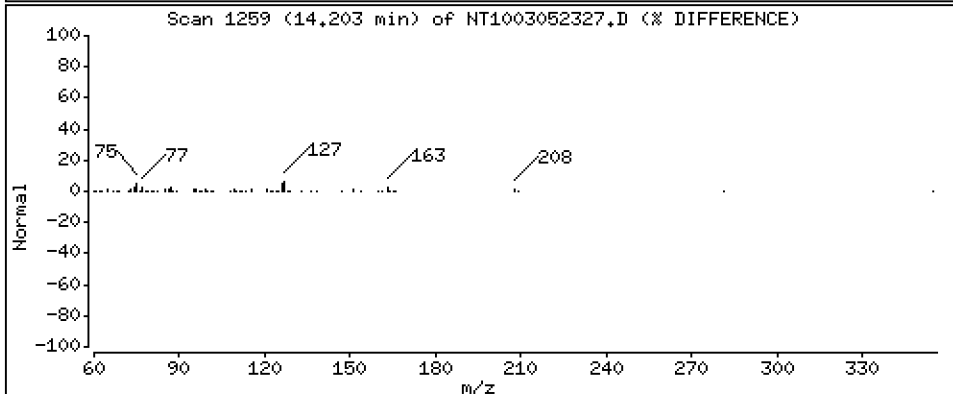
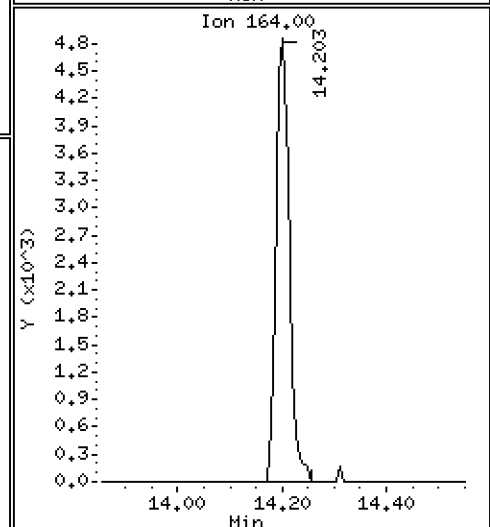
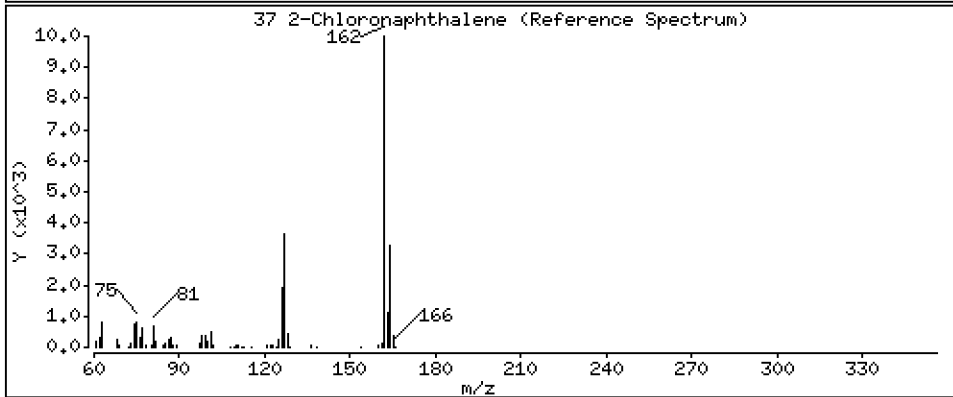
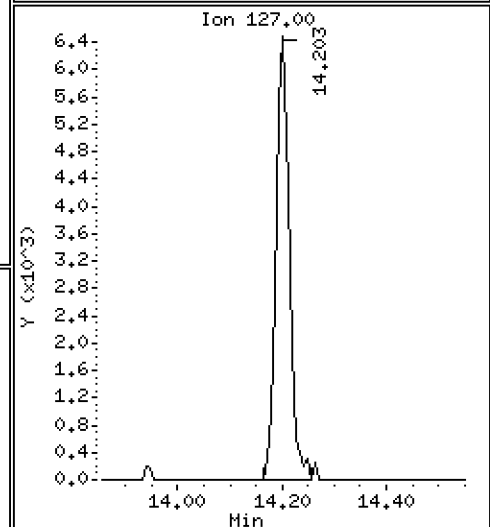
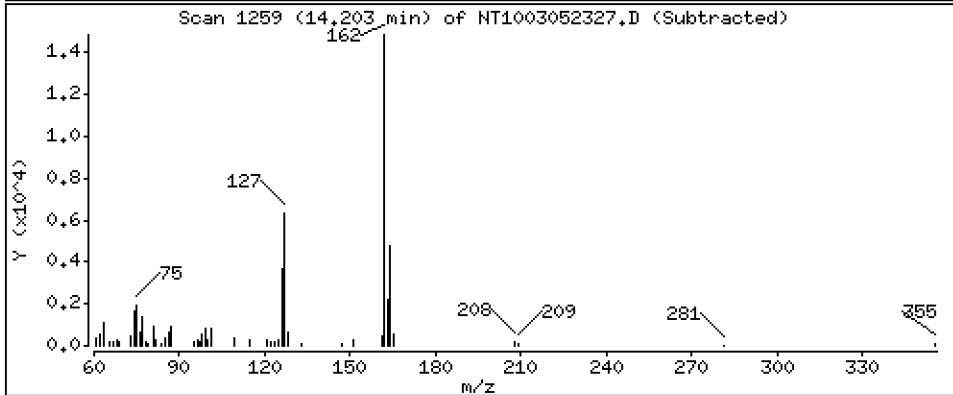
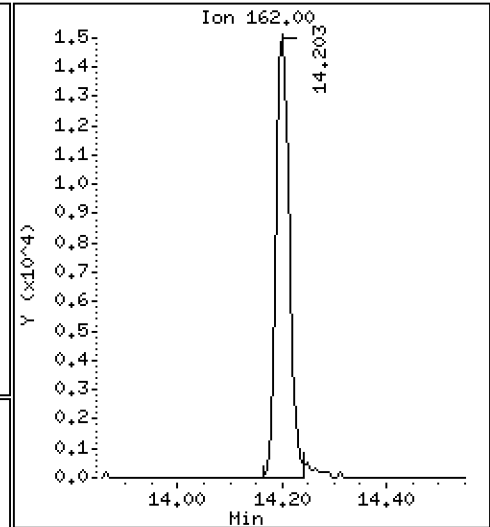
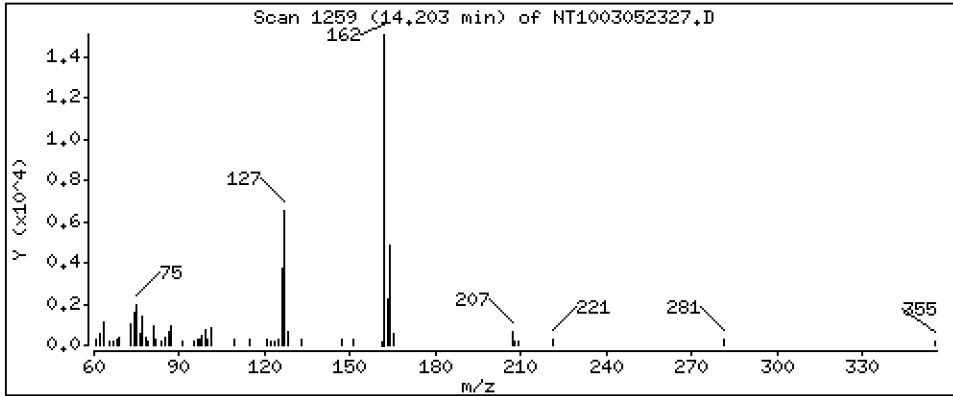
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

37 2-Chloronaphthalene

Concentration: 0,2159 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

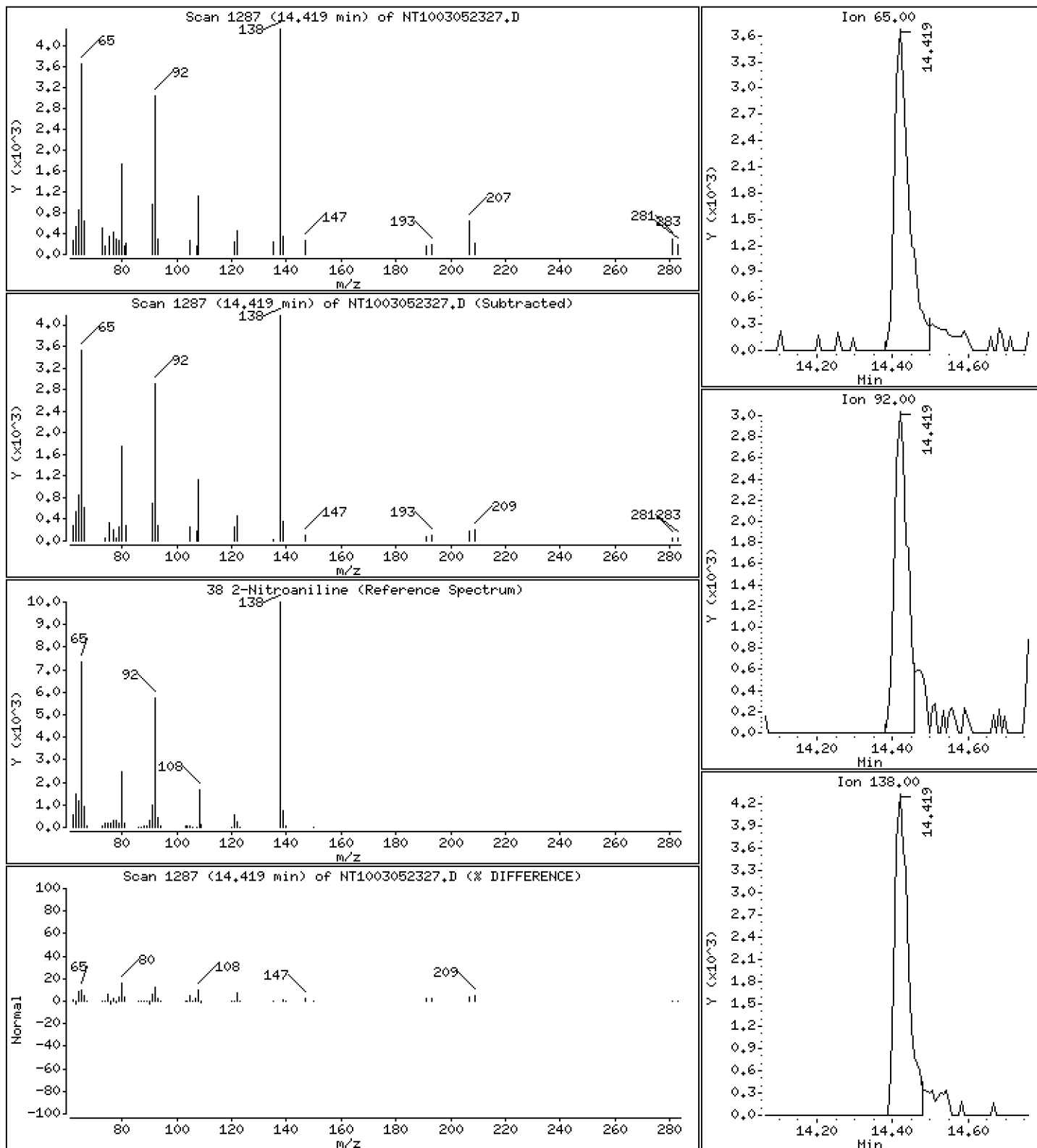
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

38 2-Nitroaniline

Concentration: 0,2965 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

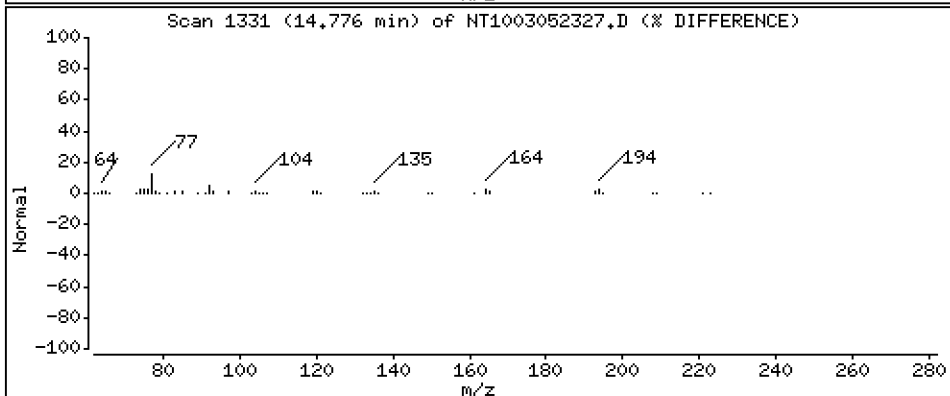
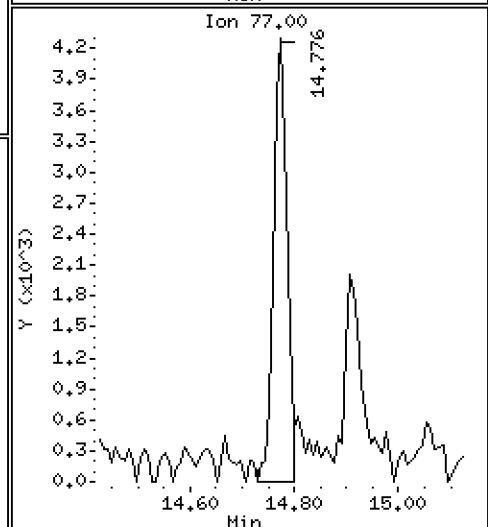
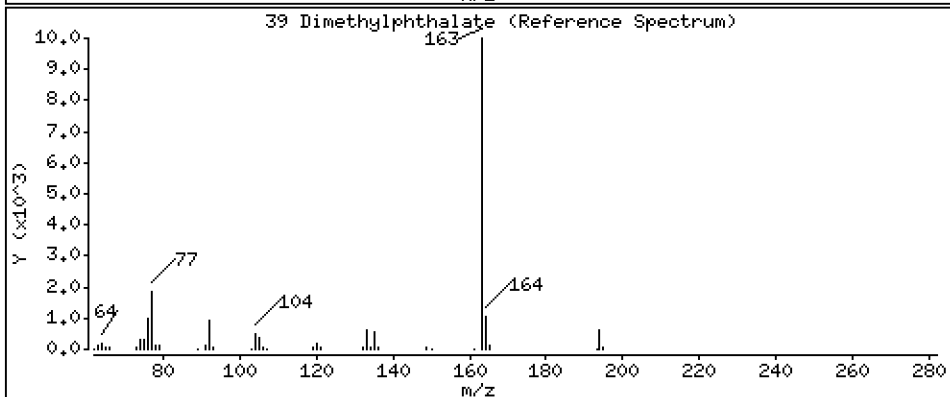
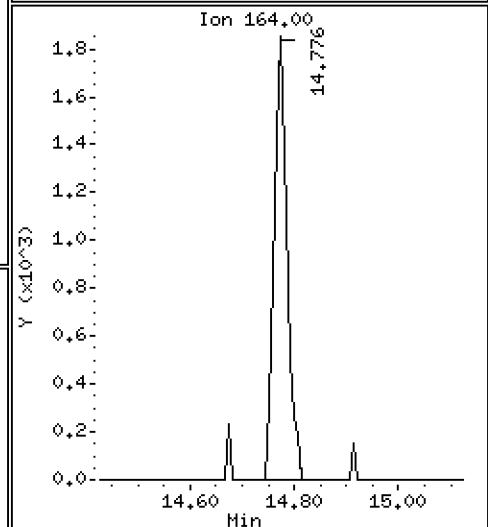
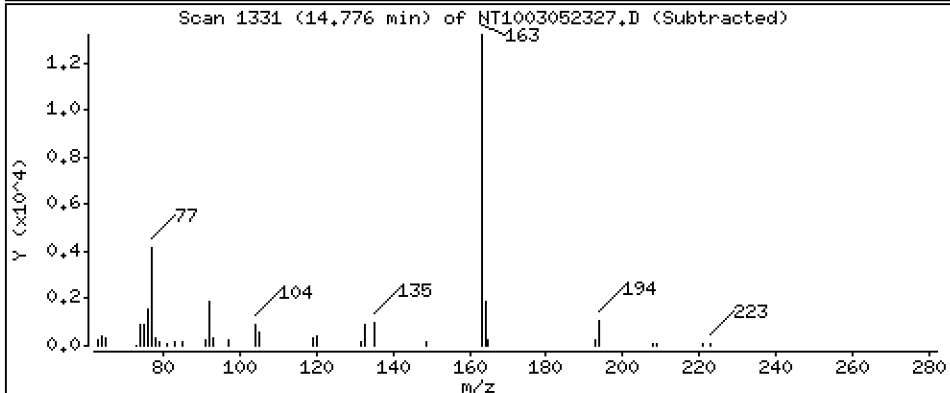
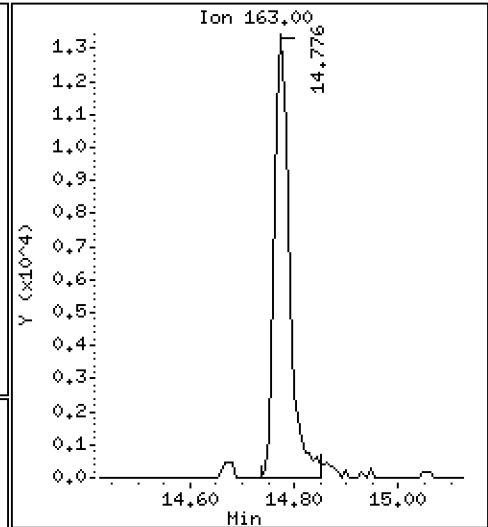
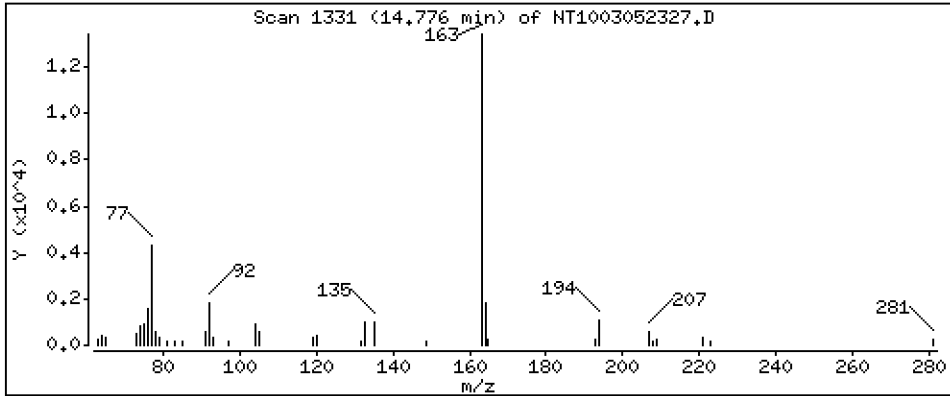
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1920 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

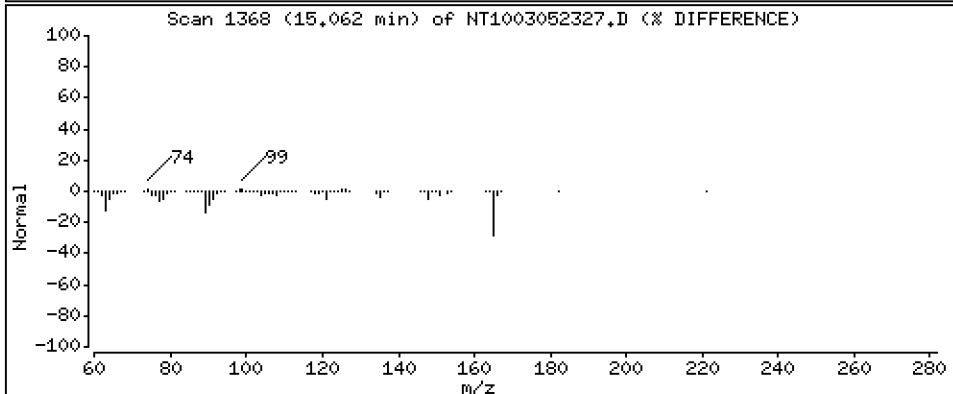
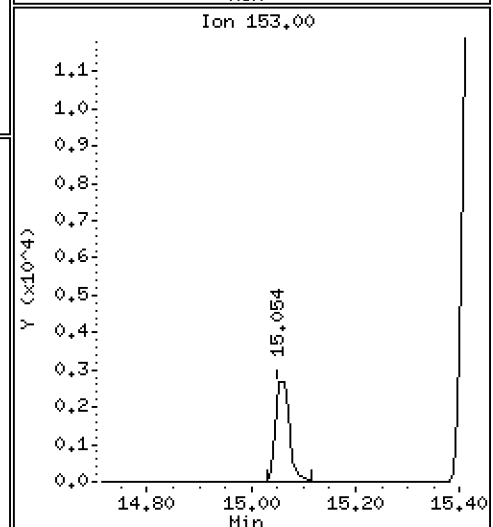
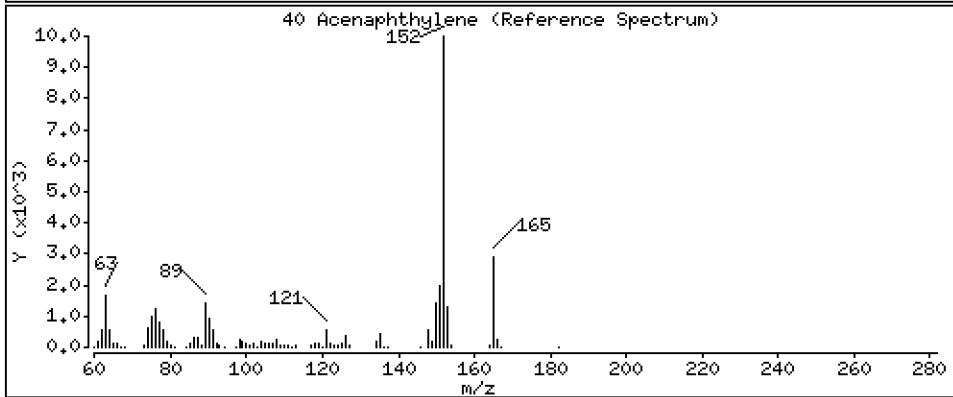
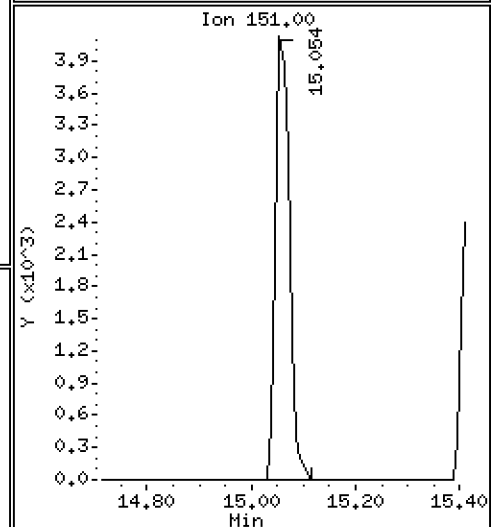
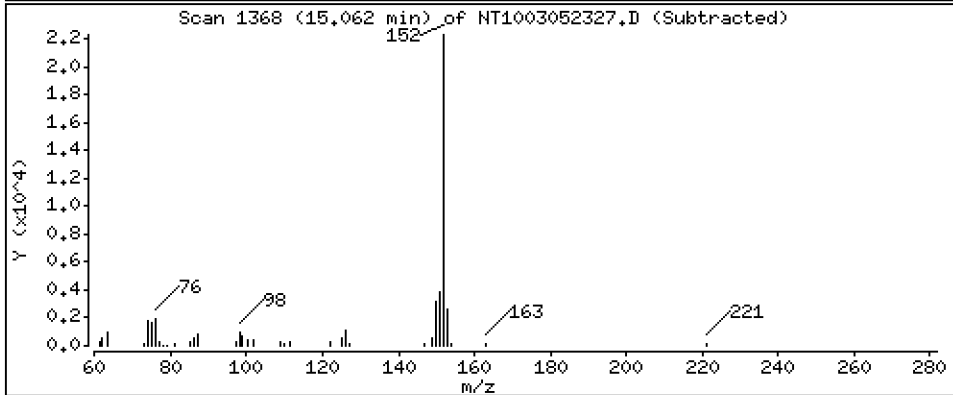
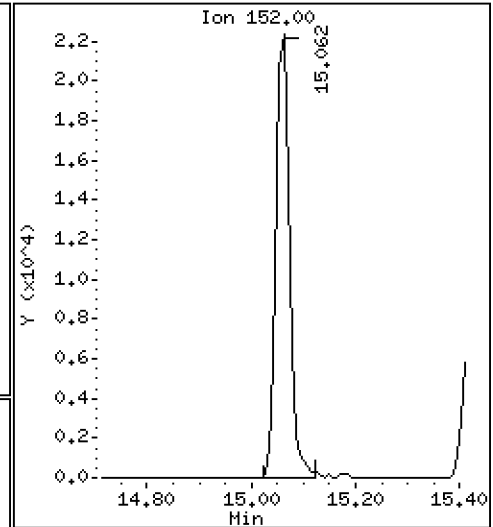
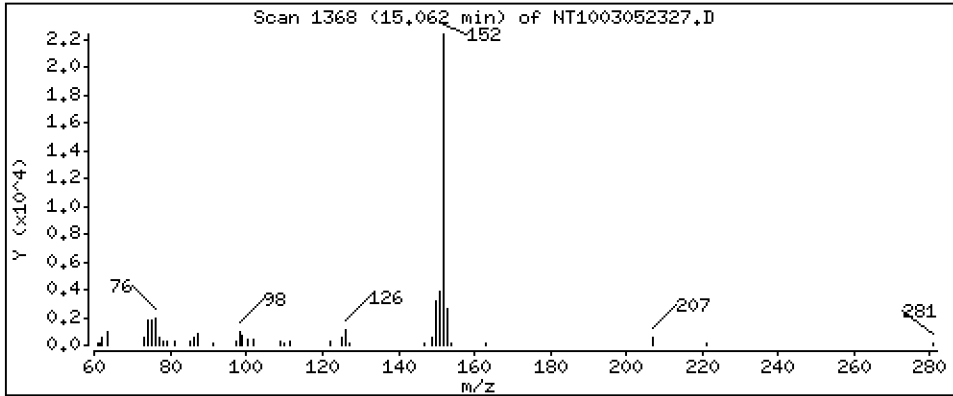
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

40 Acenaphthylene

Concentration: 0,2186 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

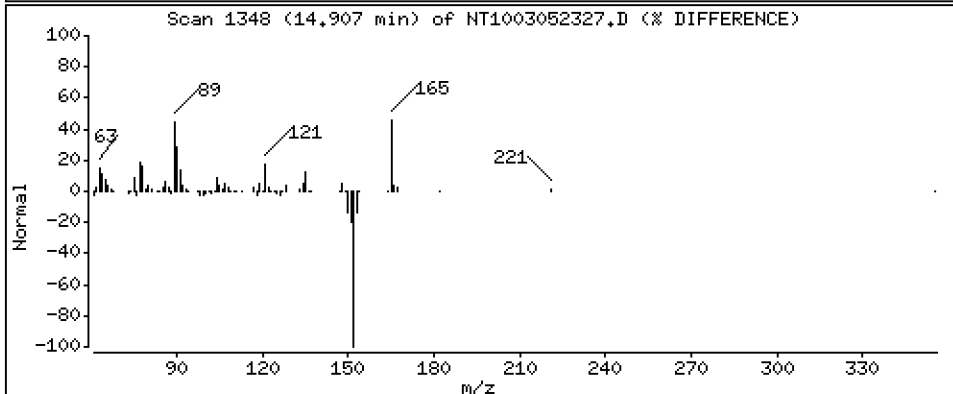
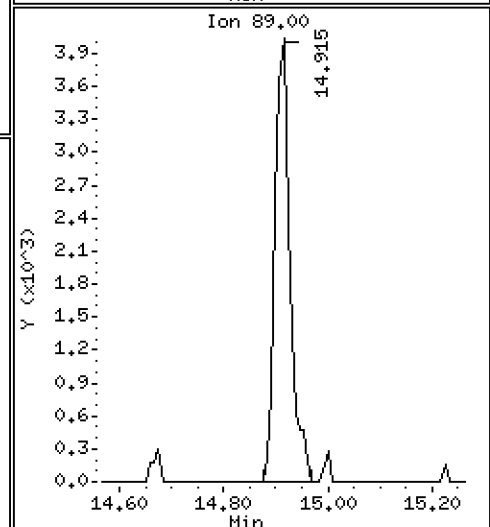
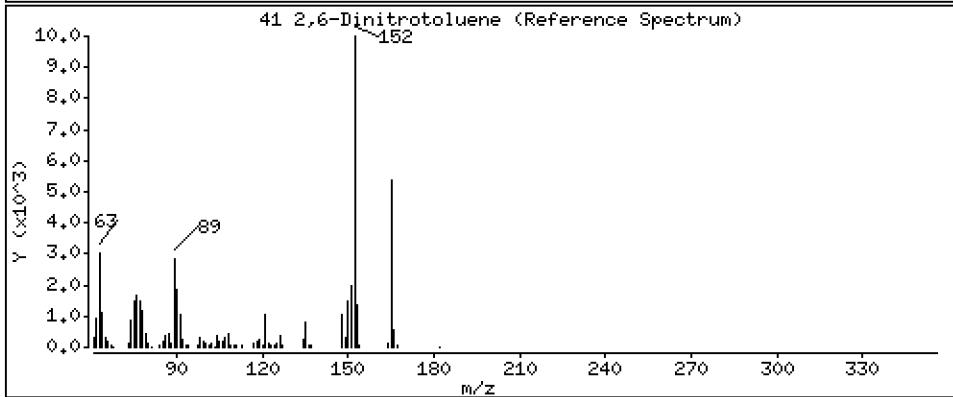
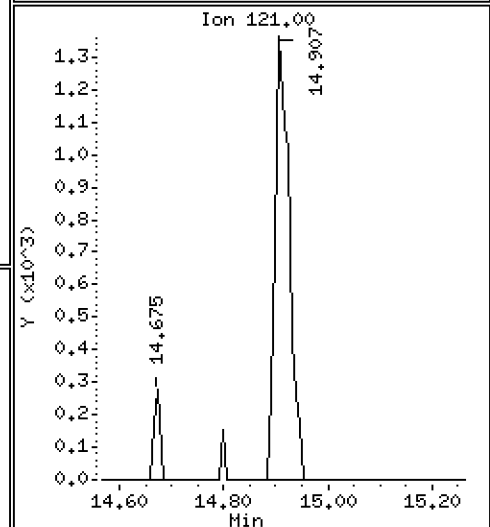
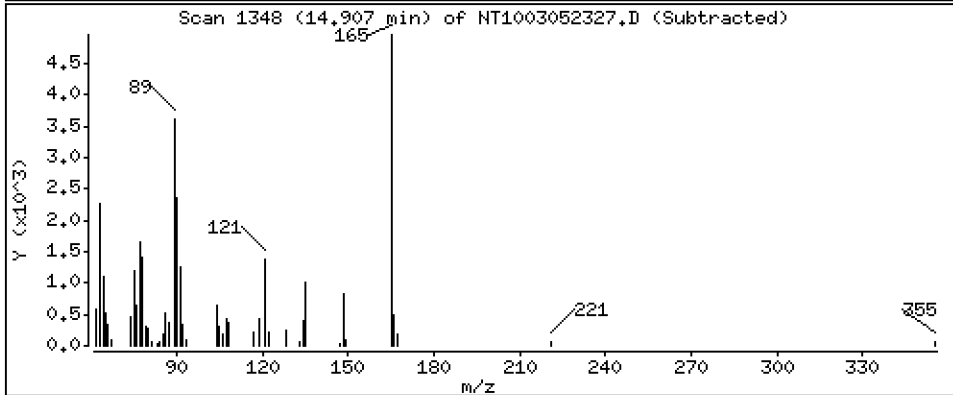
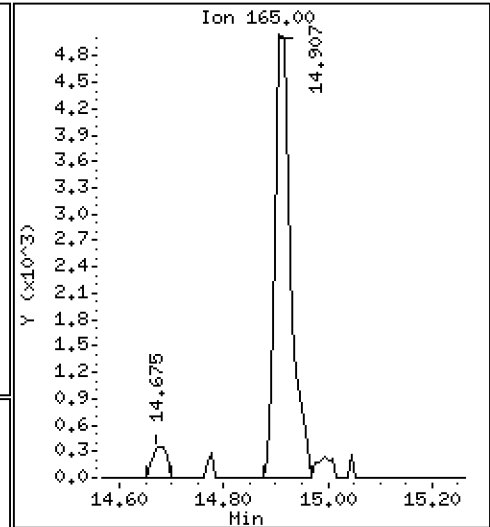
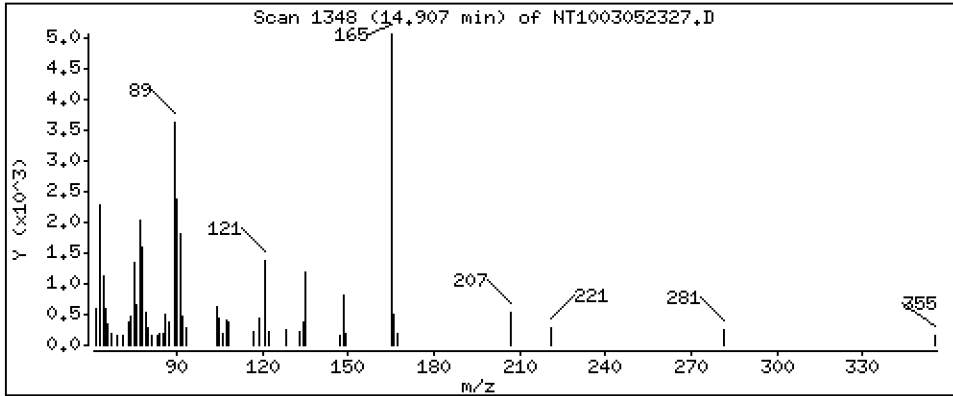
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

41 2,6-Dinitrotoluene

Concentration: 0,3414 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

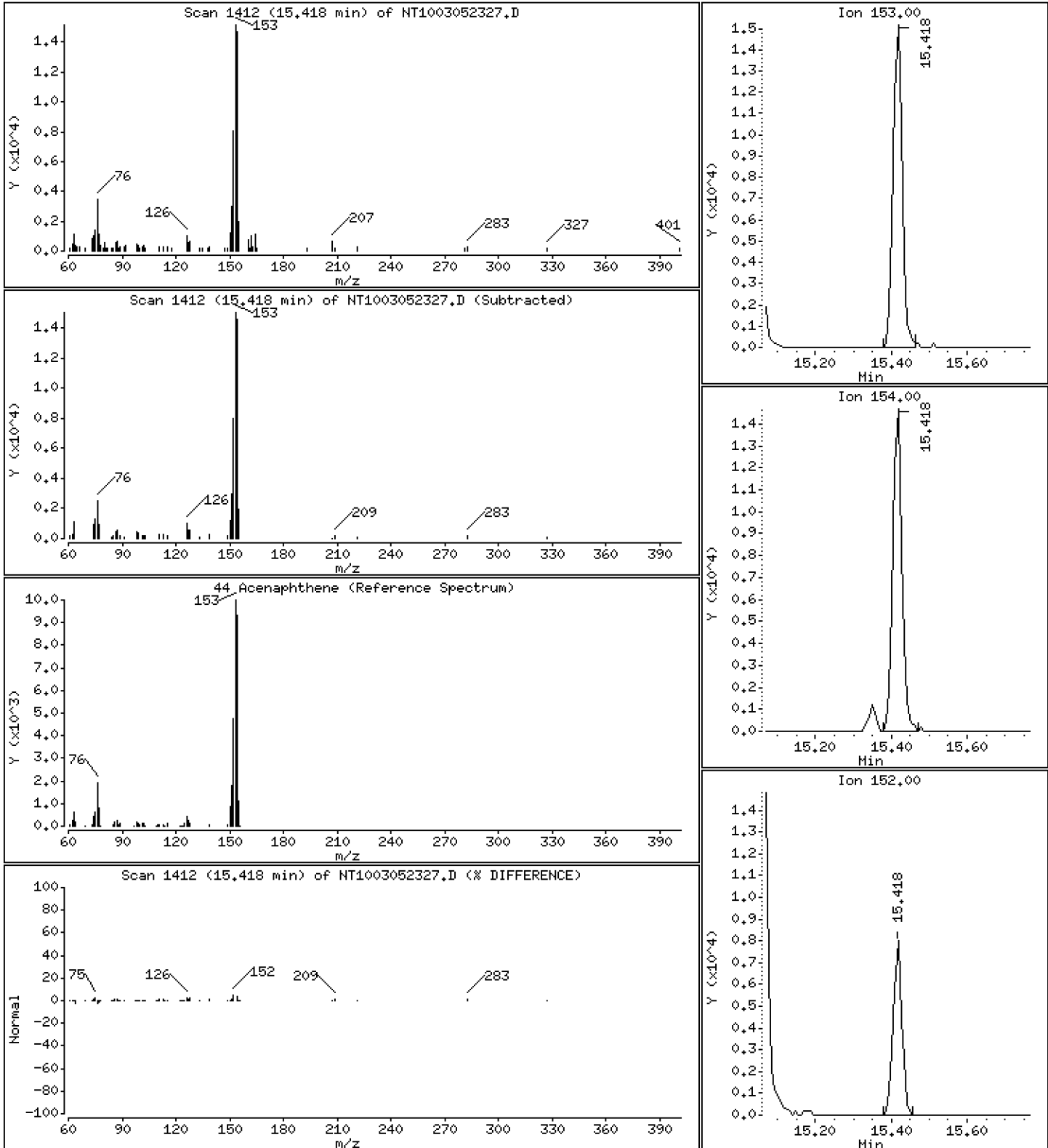
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

44 Acenaphthene

Concentration: 0.1934 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

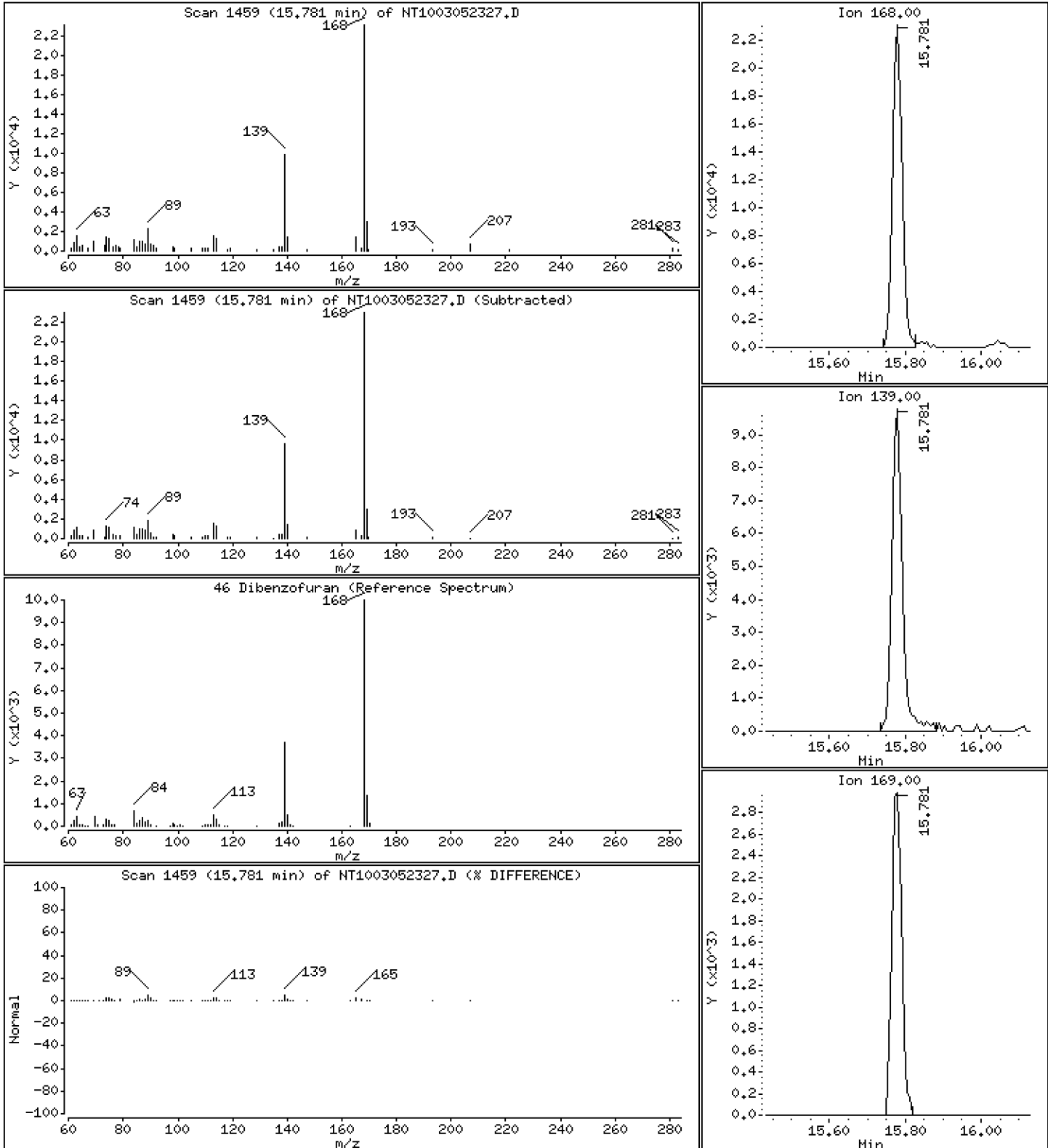
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

46 Dibenzofuran

Concentration: 0,2090 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

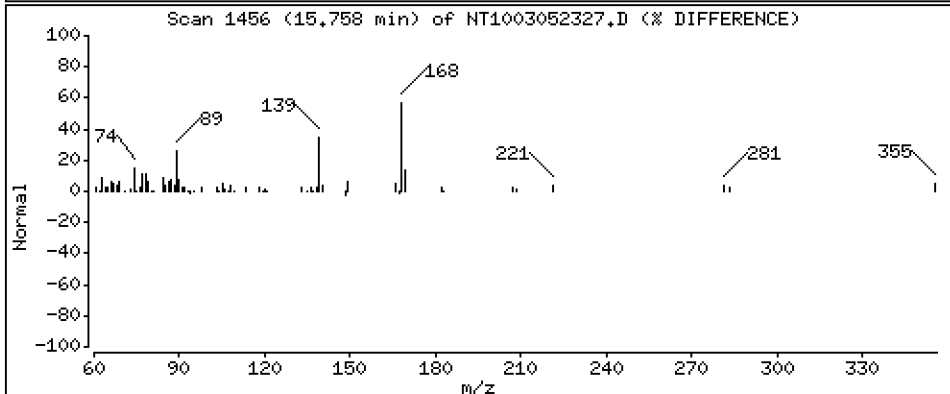
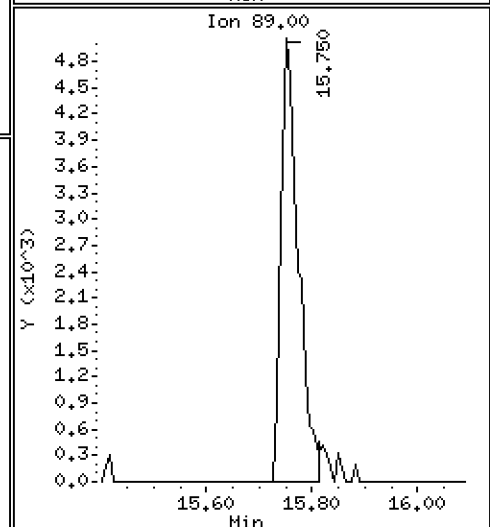
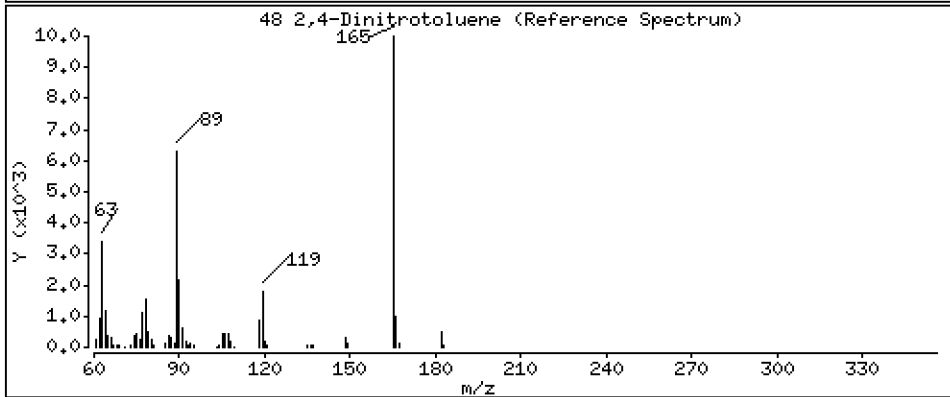
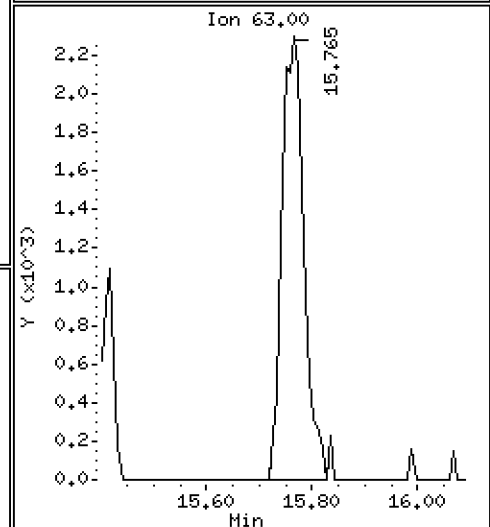
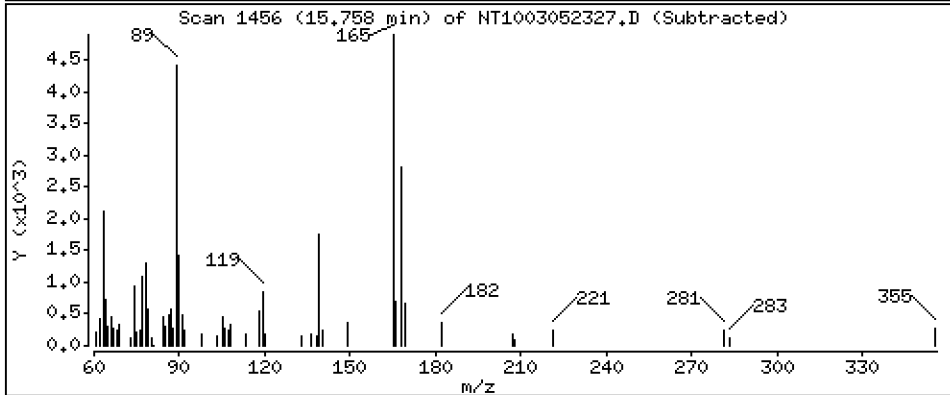
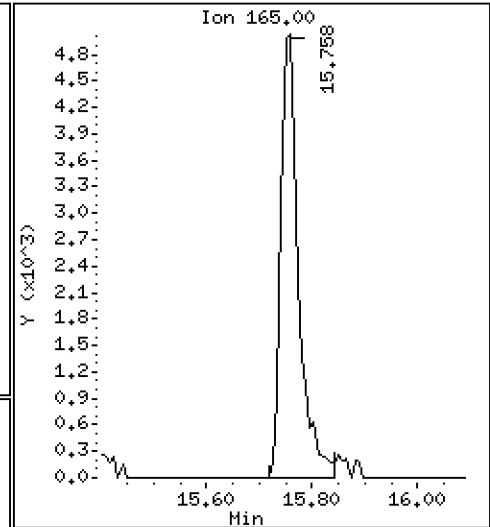
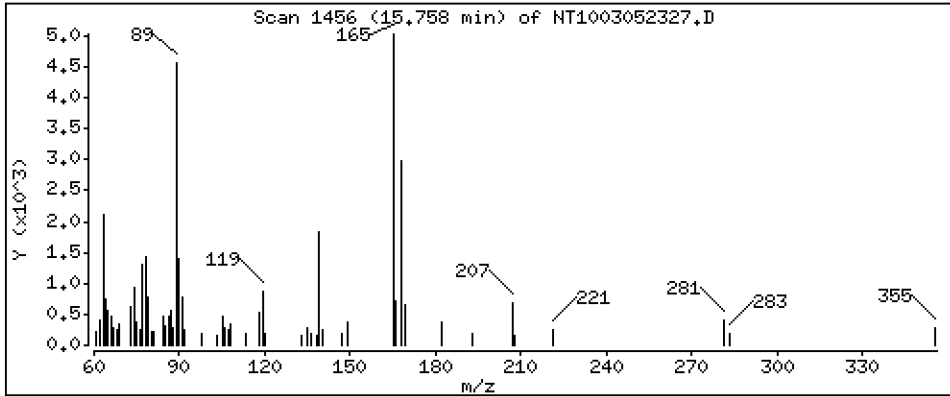
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

48 2,4-Dinitrotoluene

Concentration: 0,2647 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

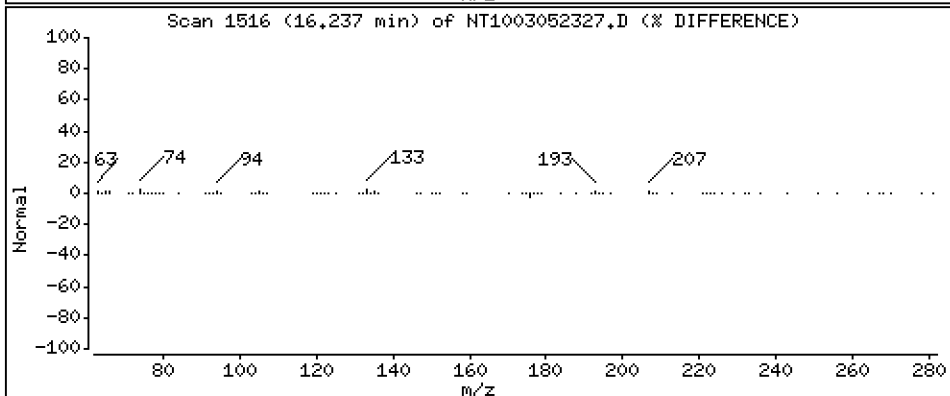
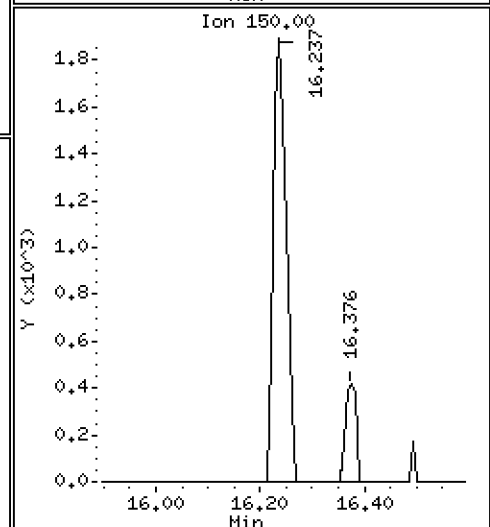
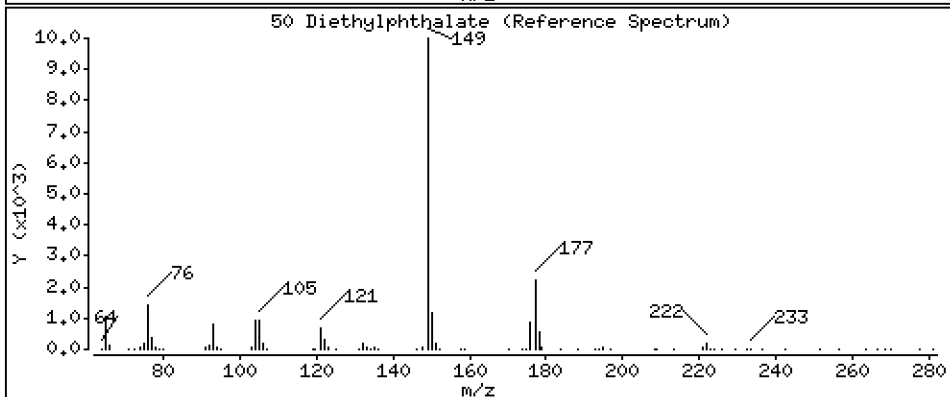
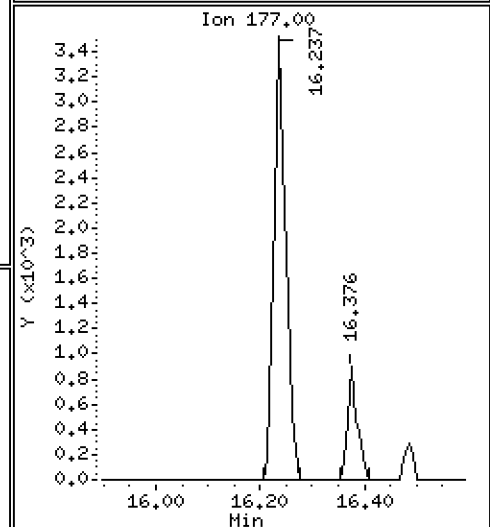
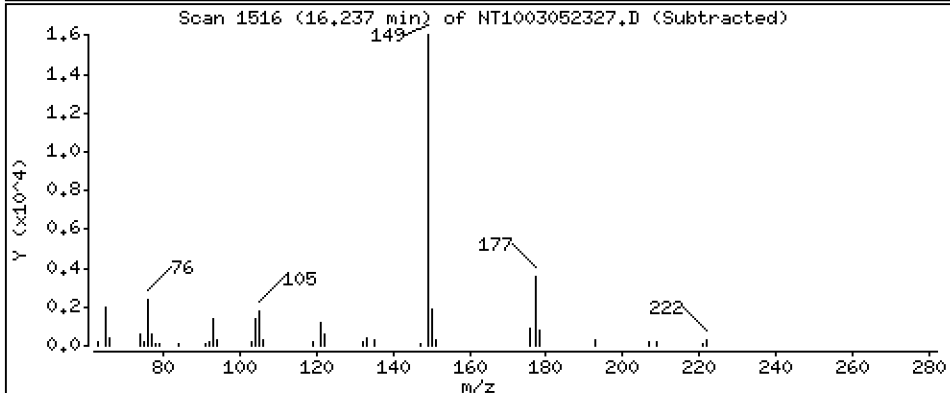
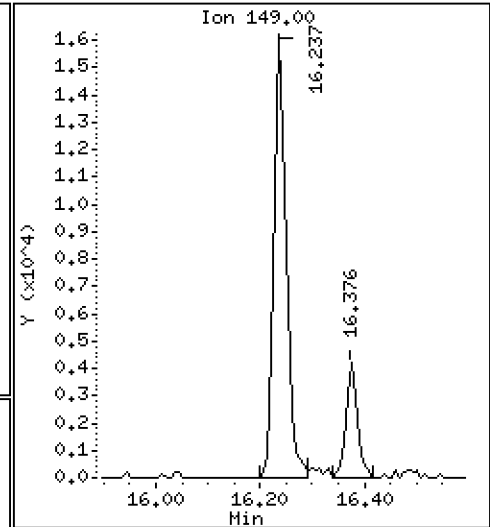
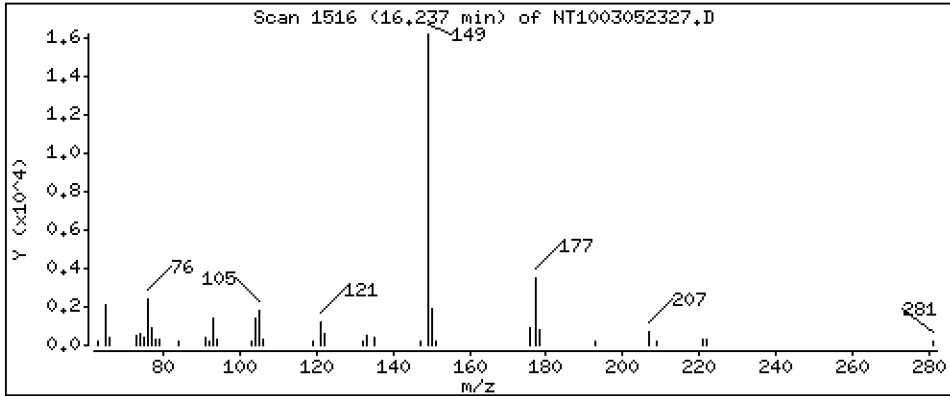
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1793 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

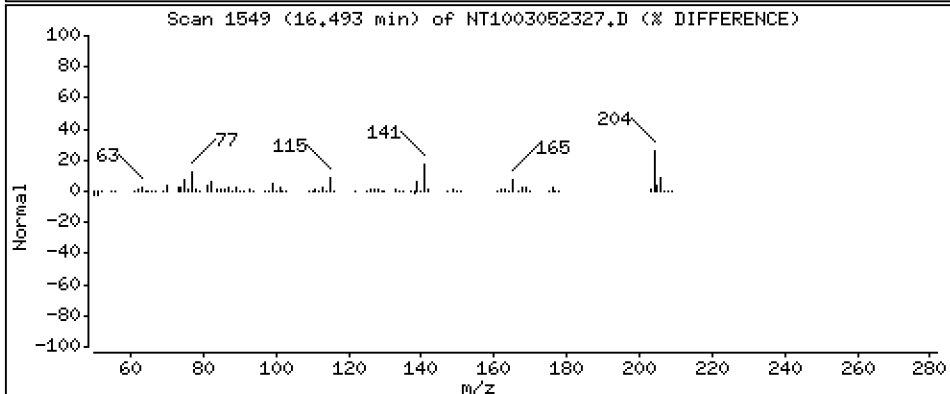
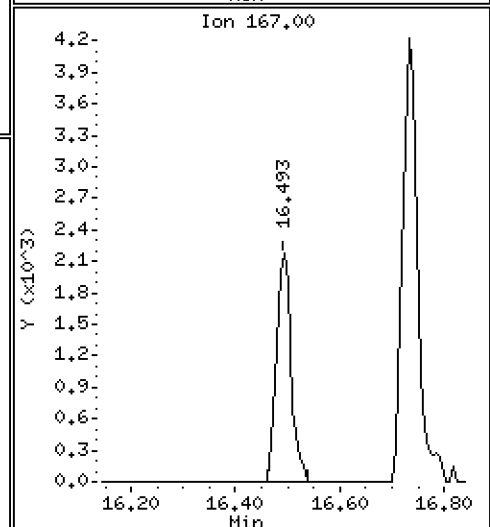
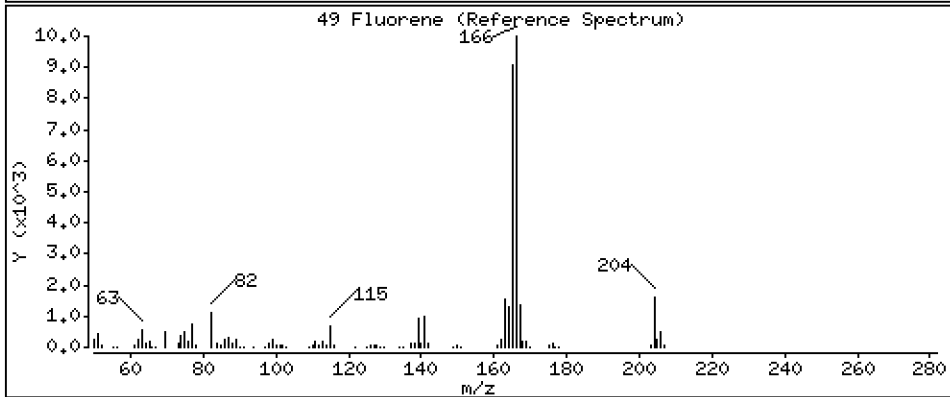
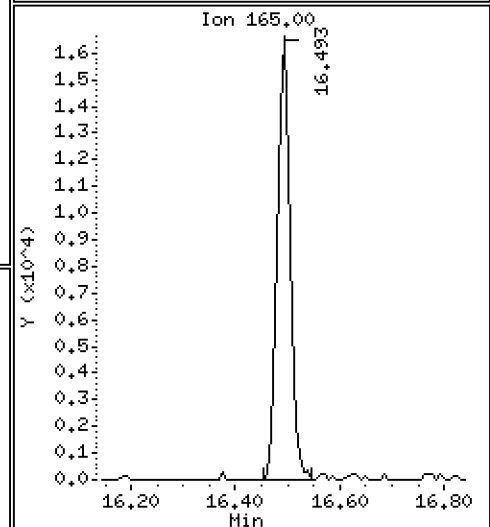
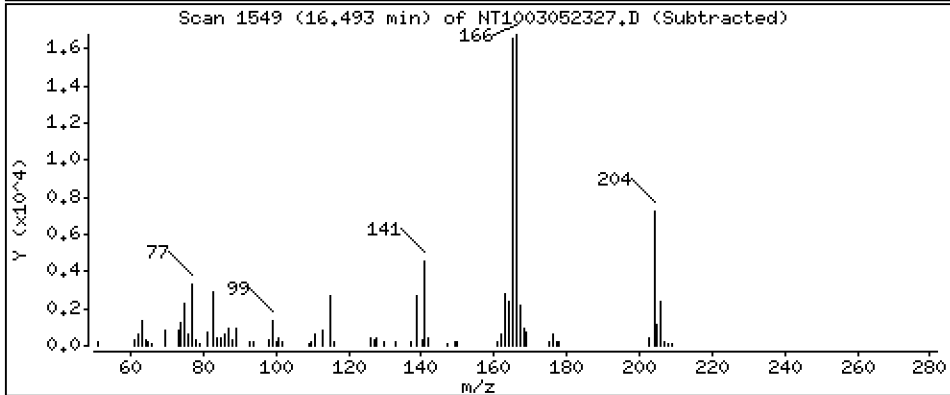
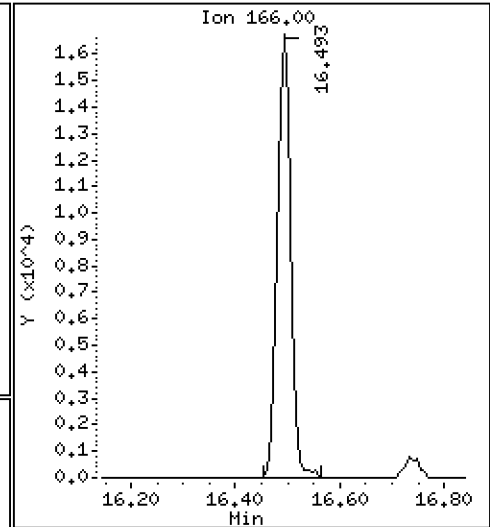
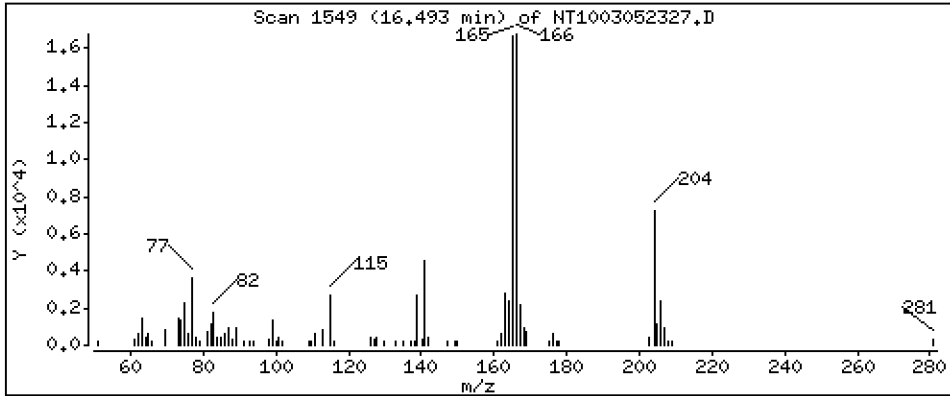
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

49 Fluorene

Concentration: 0.1924 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

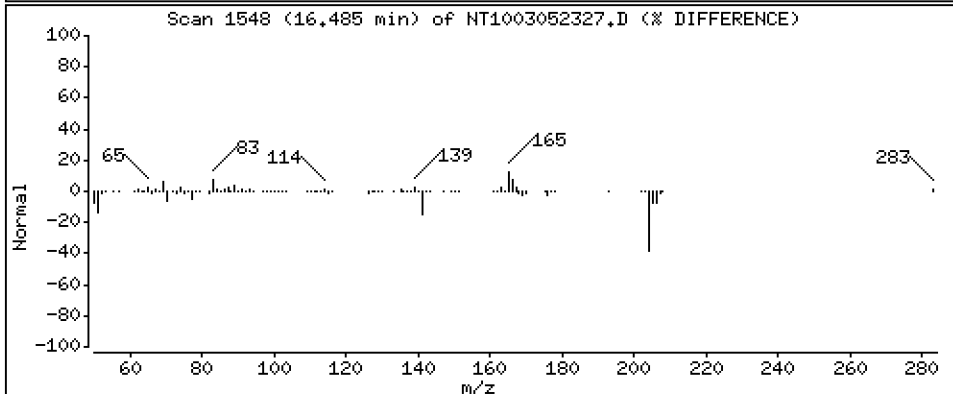
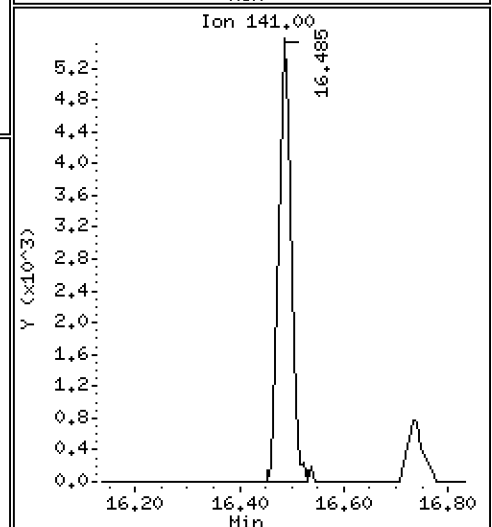
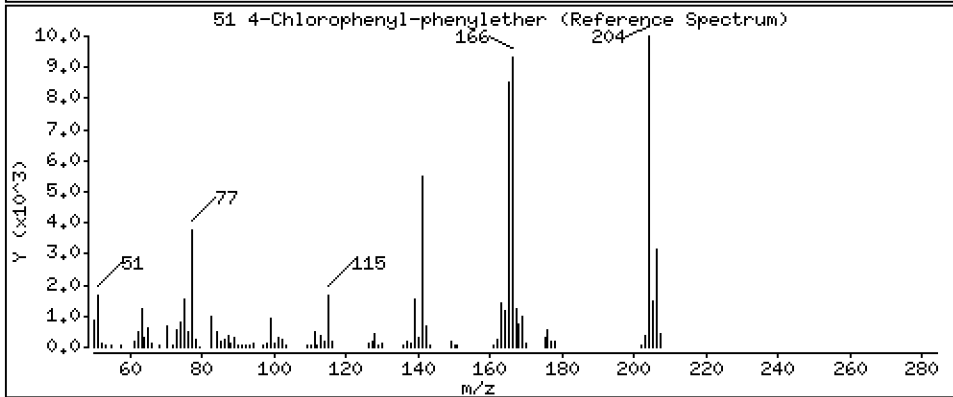
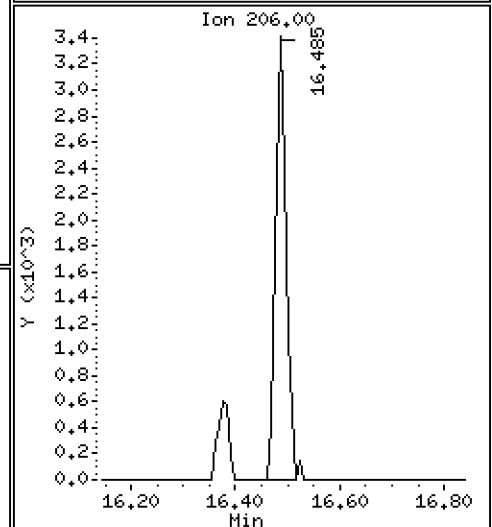
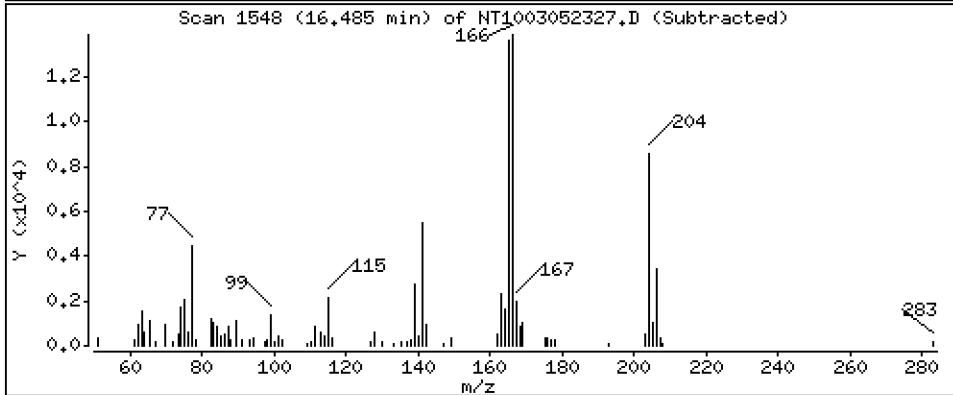
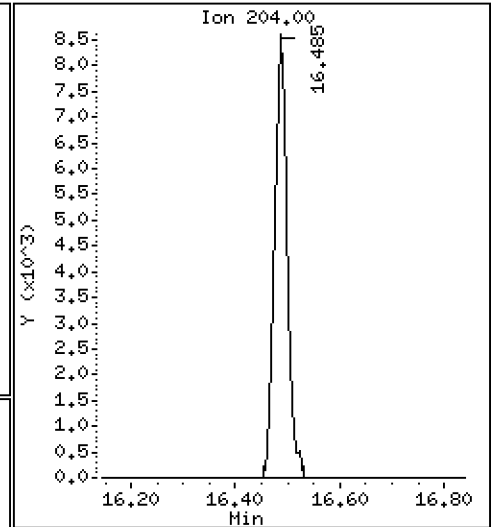
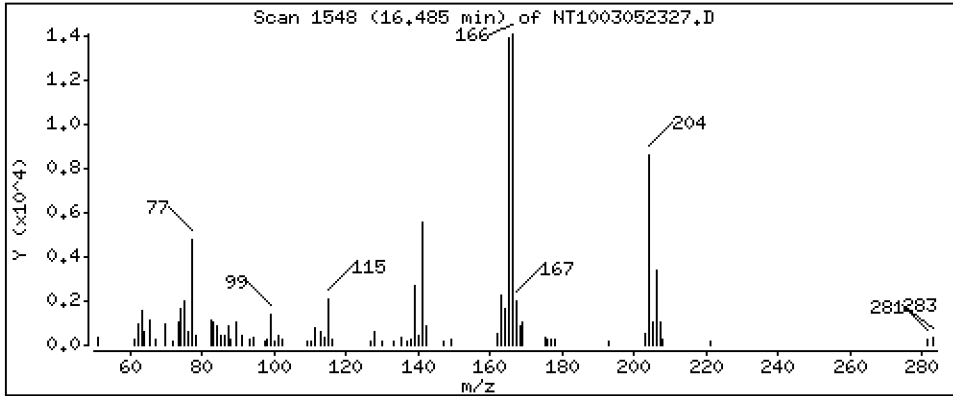
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

51 4-Chlorophenyl-phenylether

Concentration: 0,2057 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

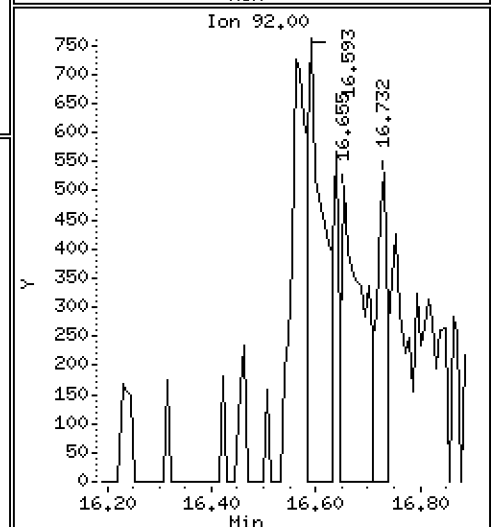
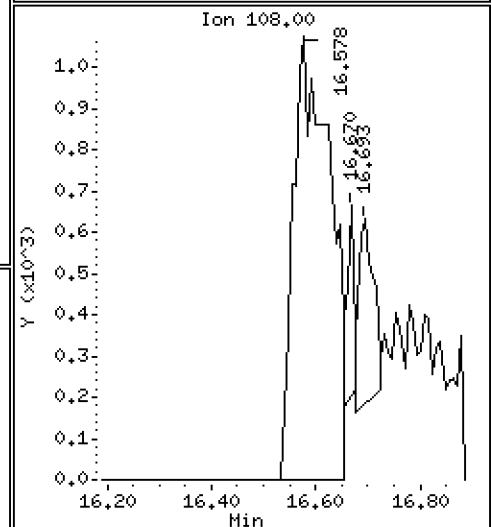
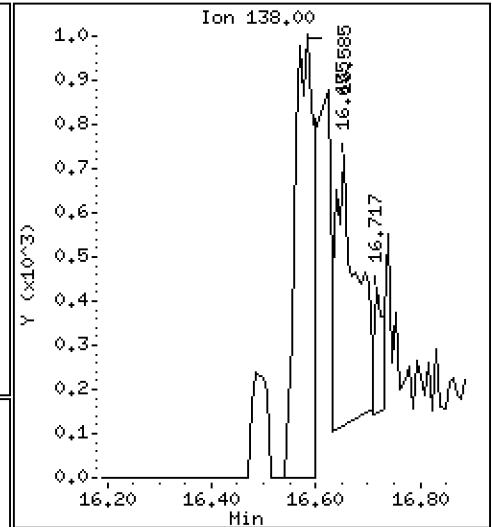
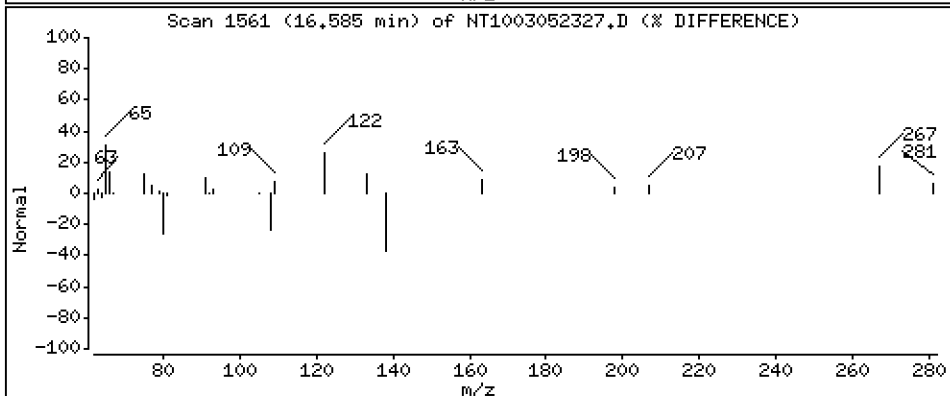
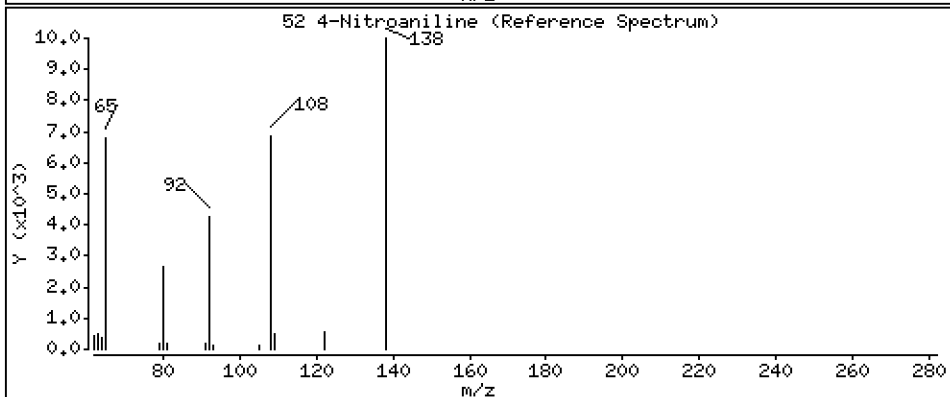
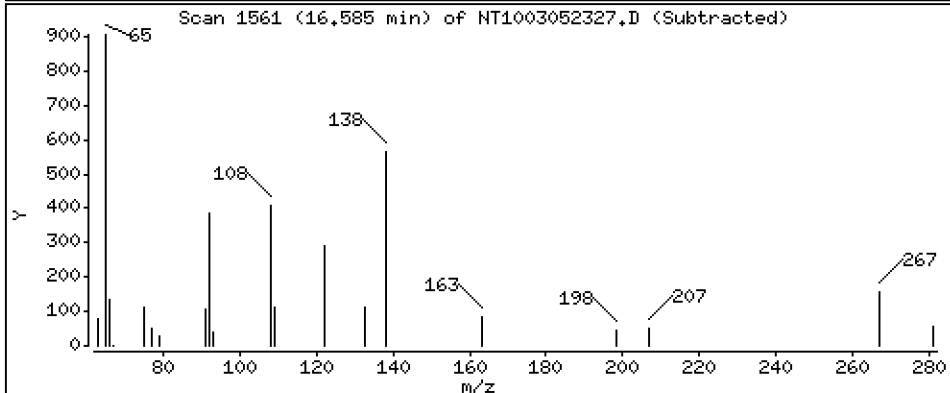
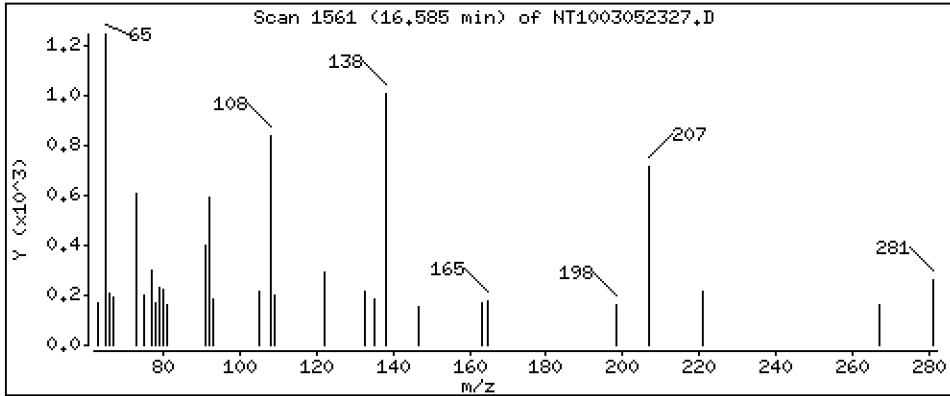
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

52 4-Nitroaniline

Concentration: 0.07164 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

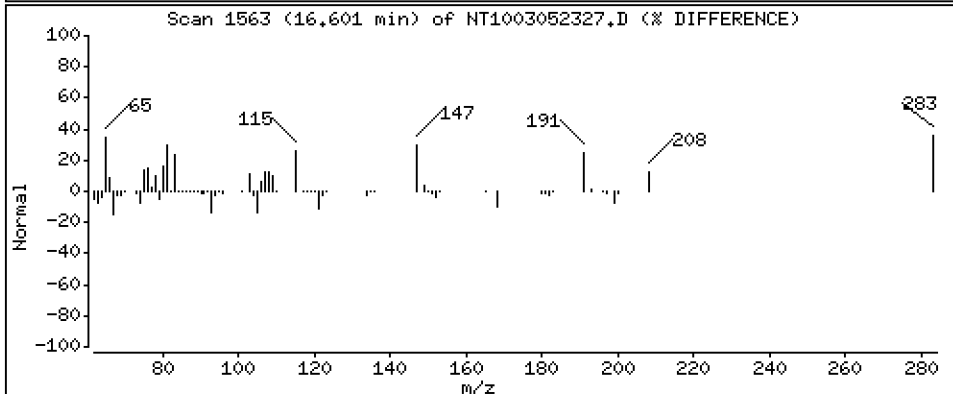
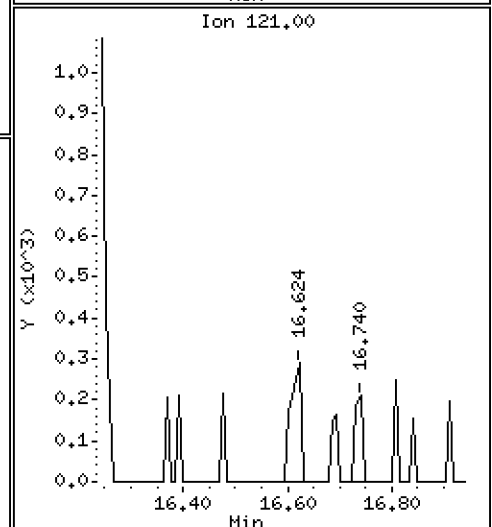
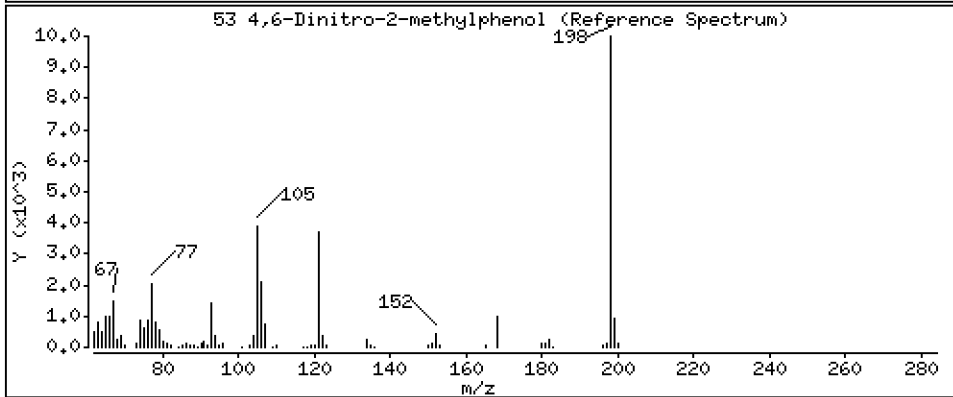
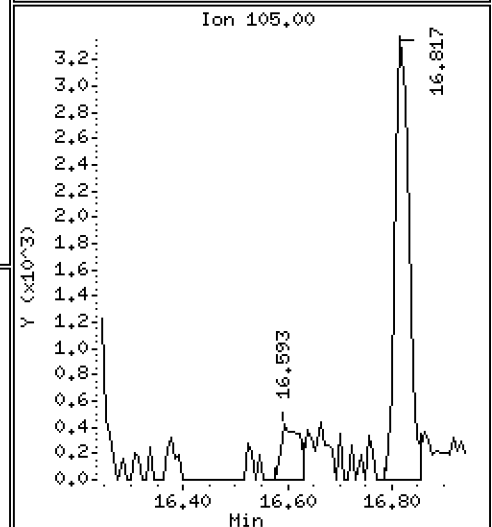
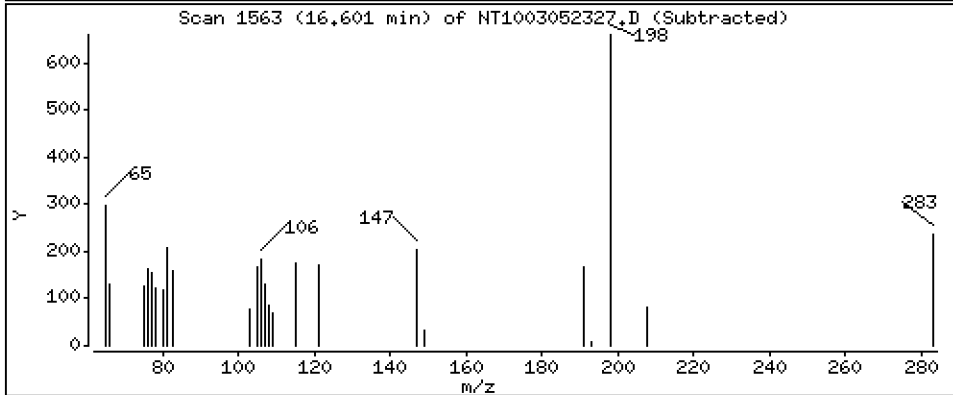
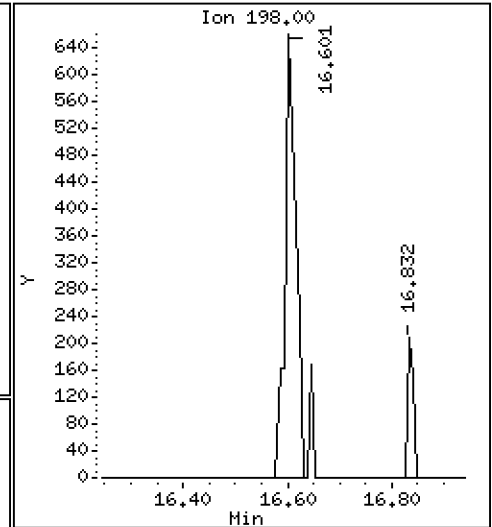
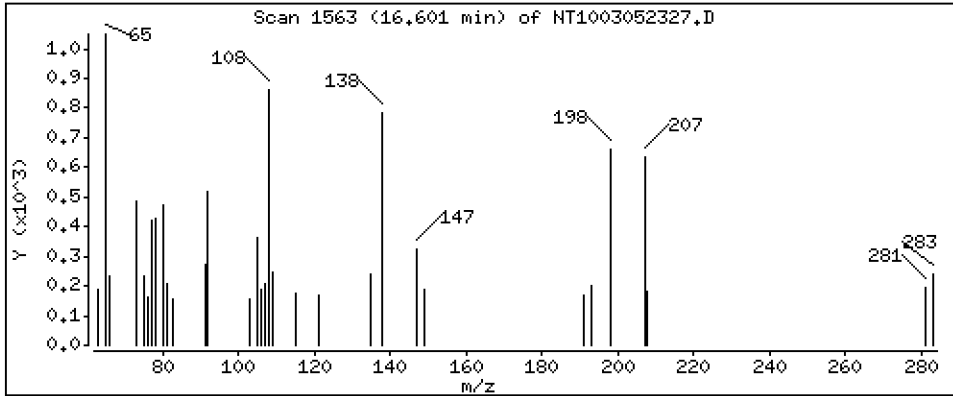
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

53 4,6-Dinitro-2-methylphenol

Concentration: 0,04366 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

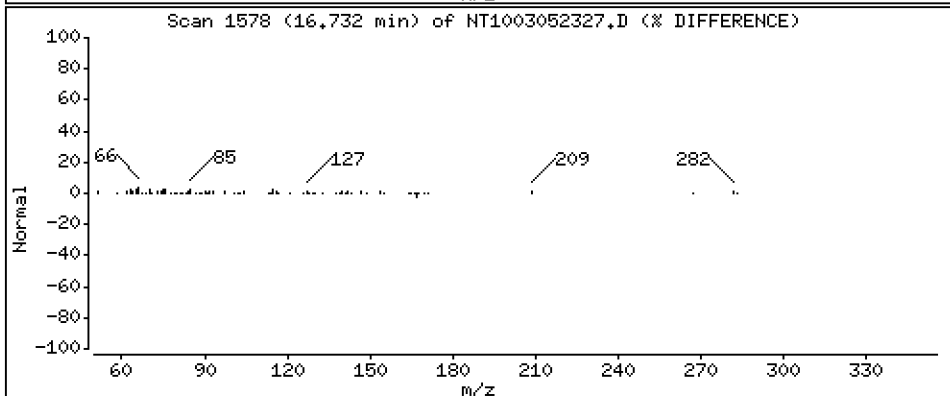
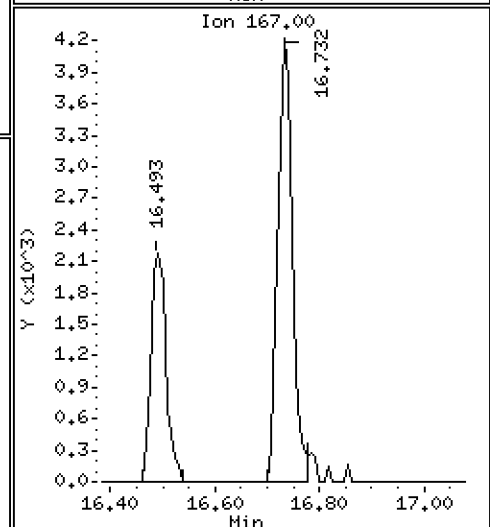
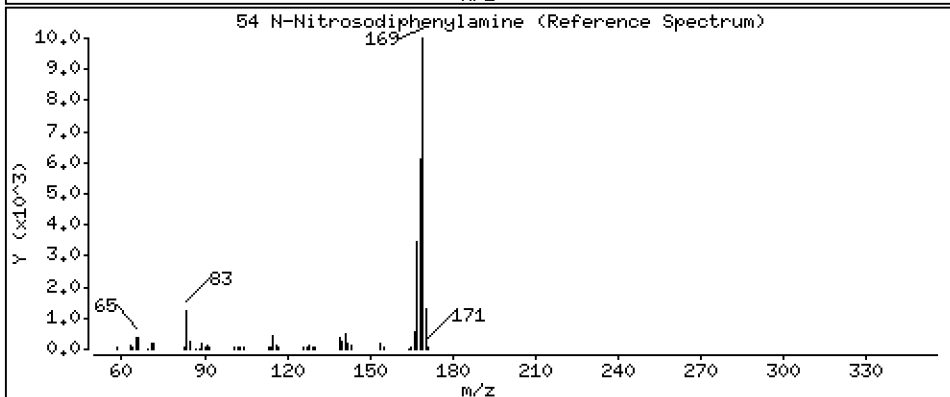
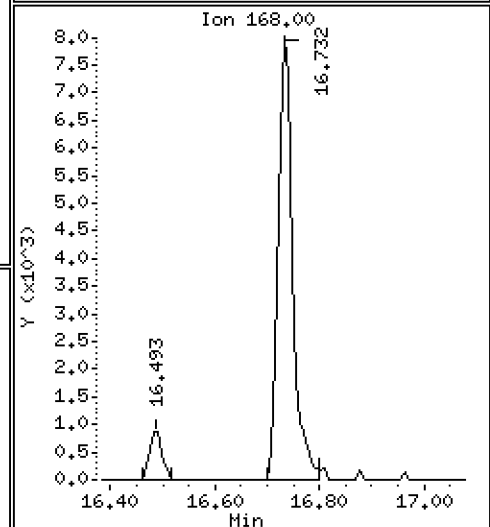
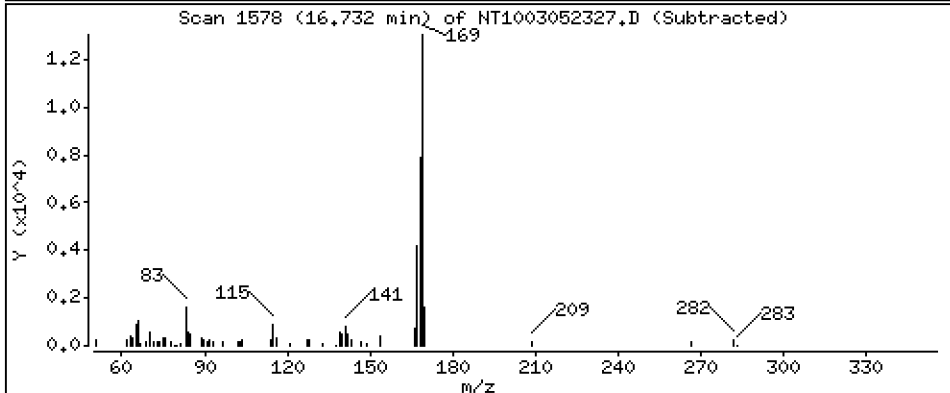
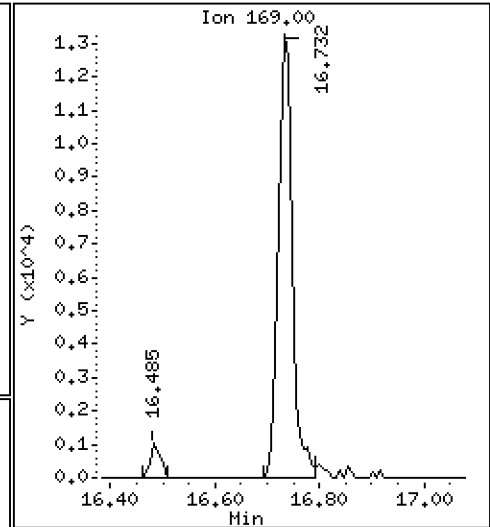
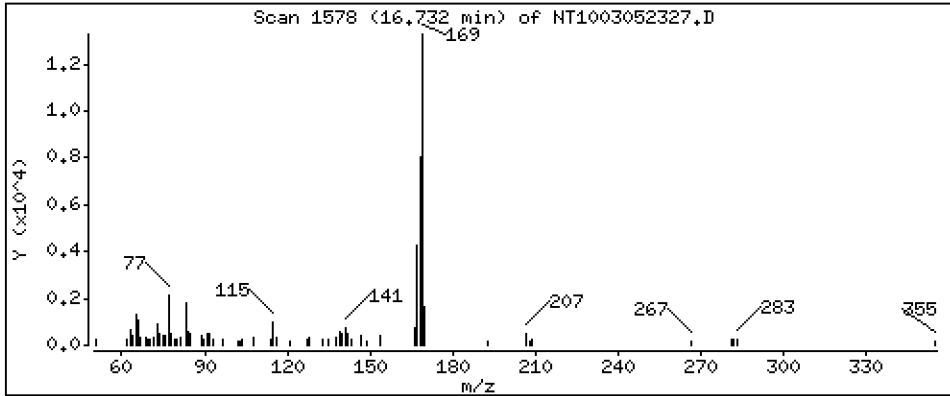
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,2132 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

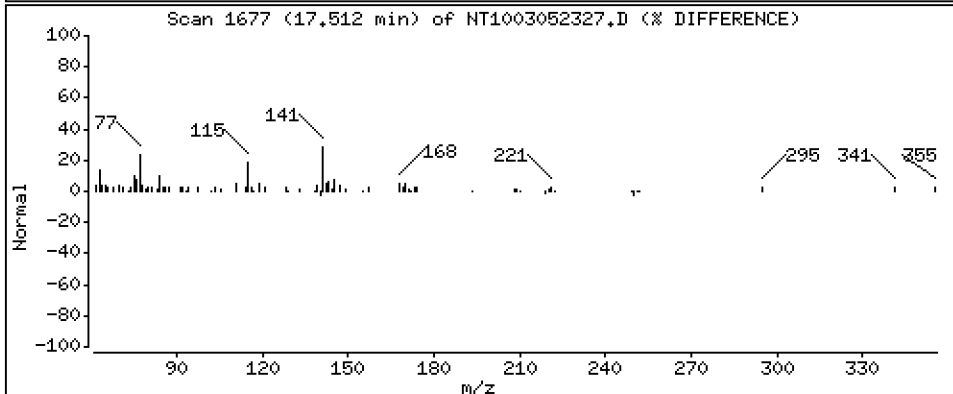
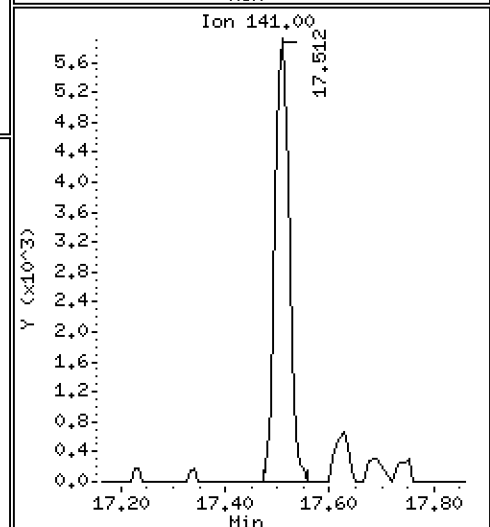
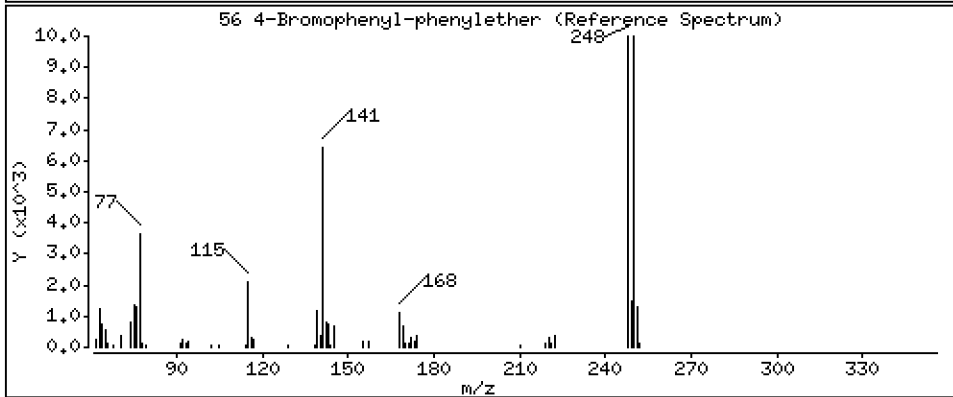
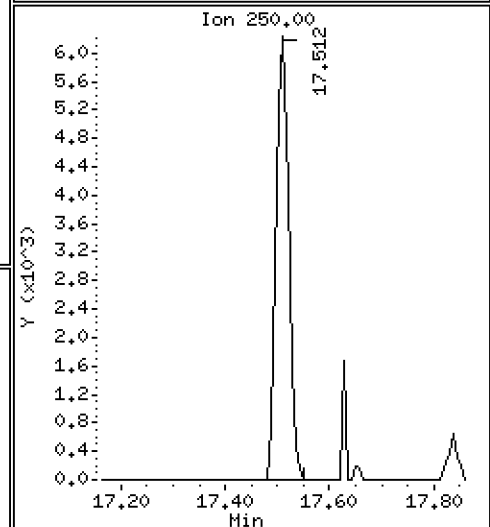
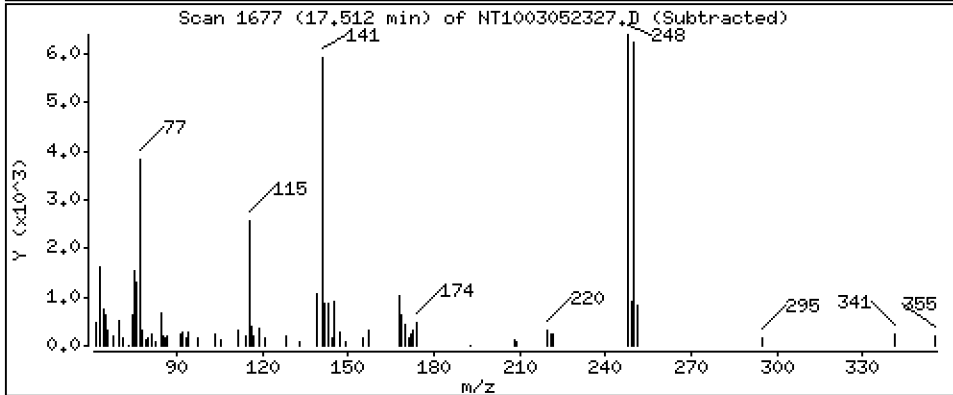
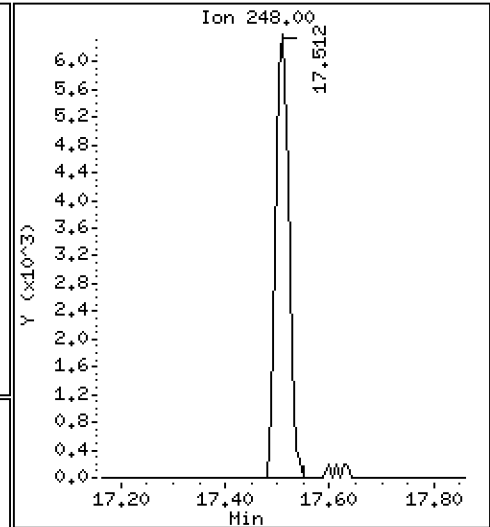
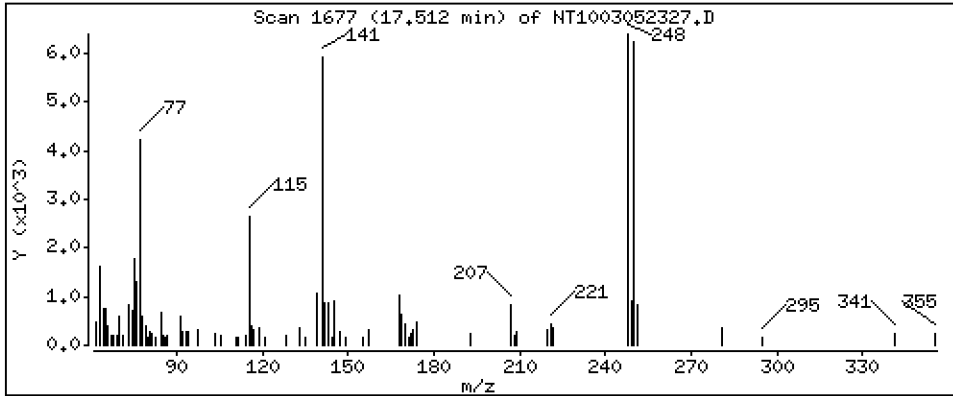
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

56 4-Bromophenyl-phenylether

Concentration: 0.2304 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

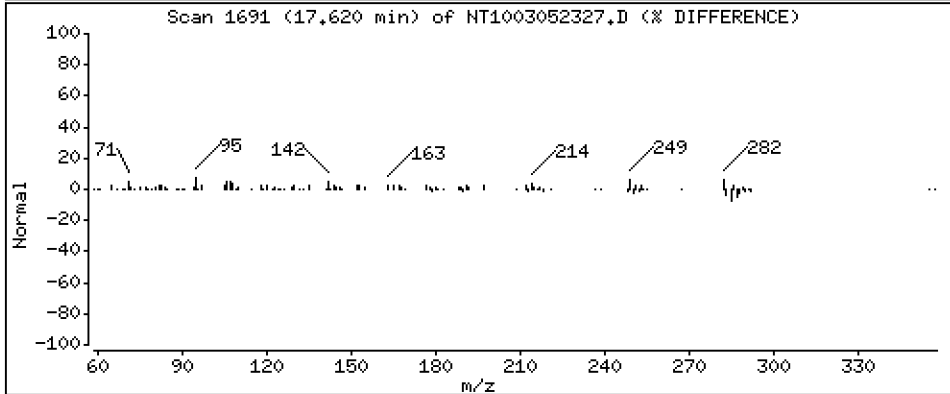
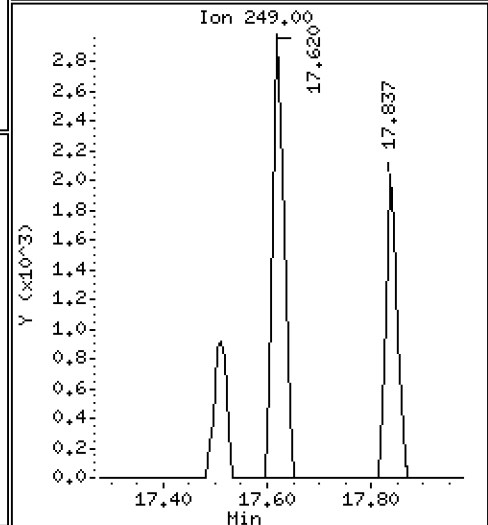
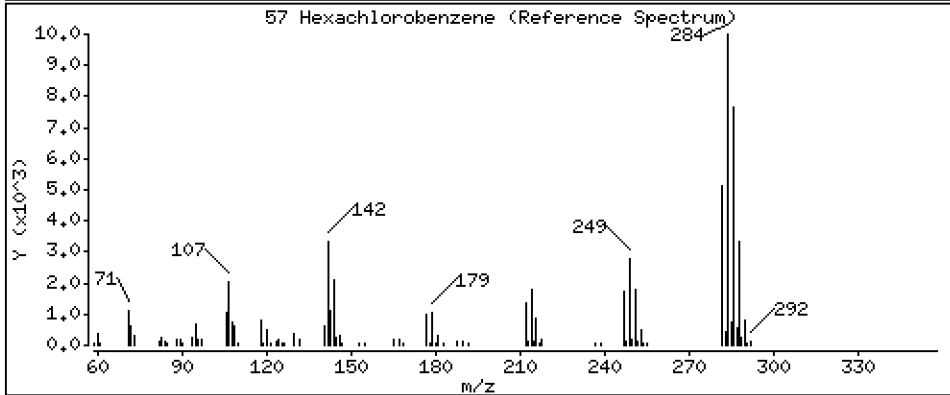
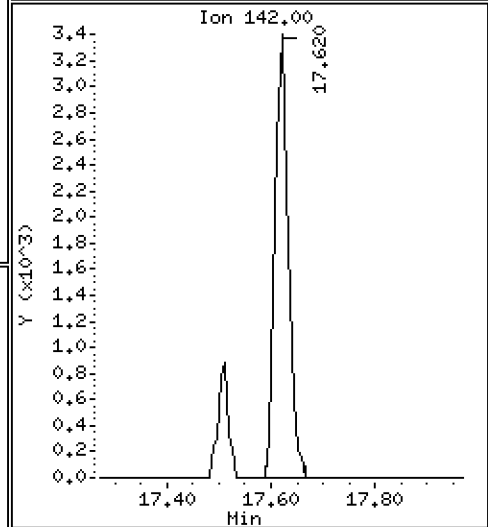
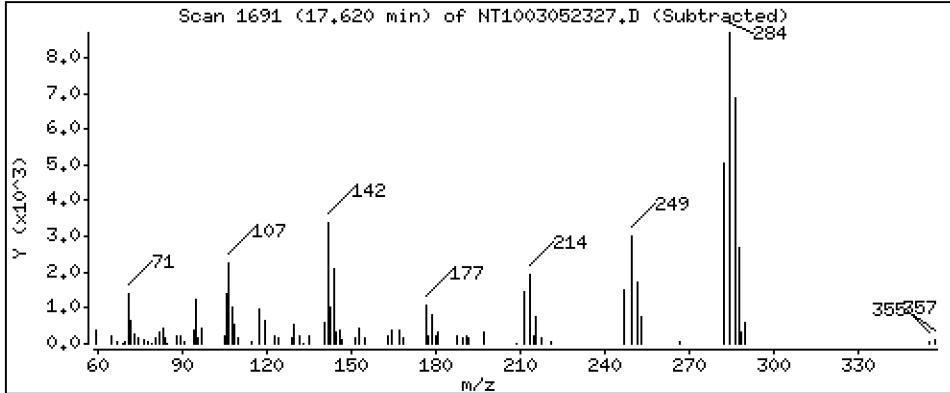
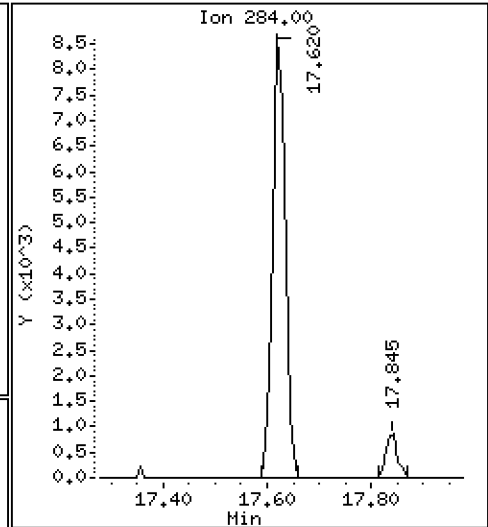
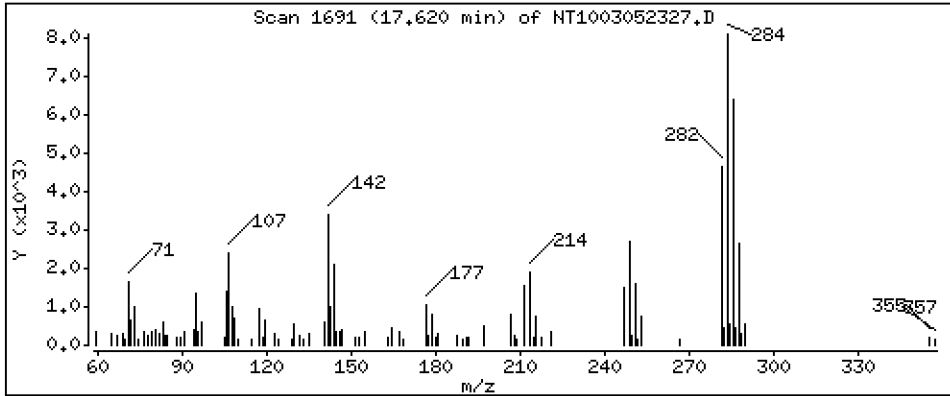
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.2594 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

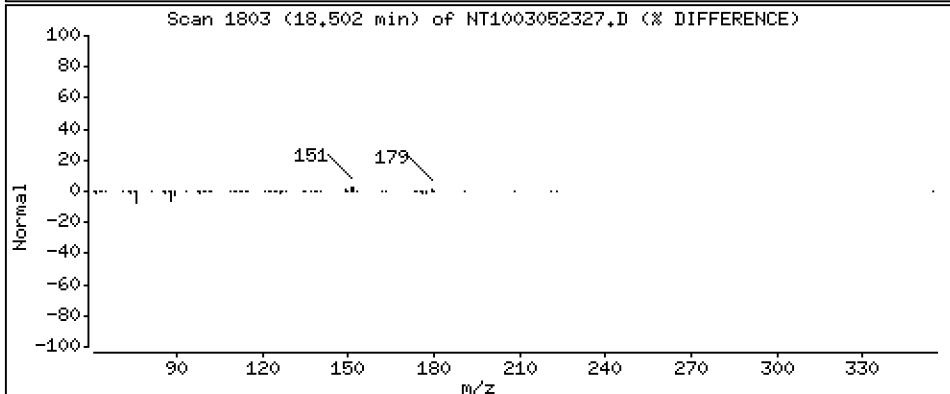
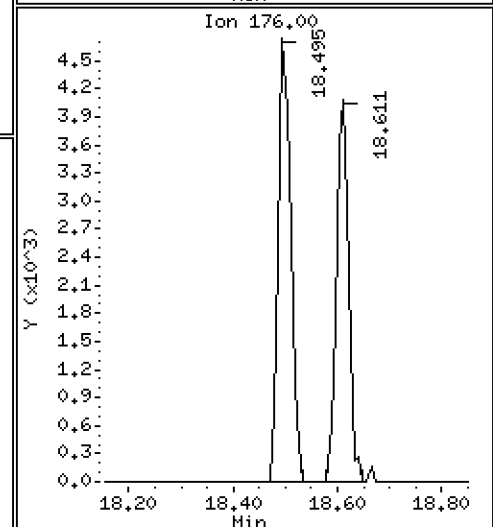
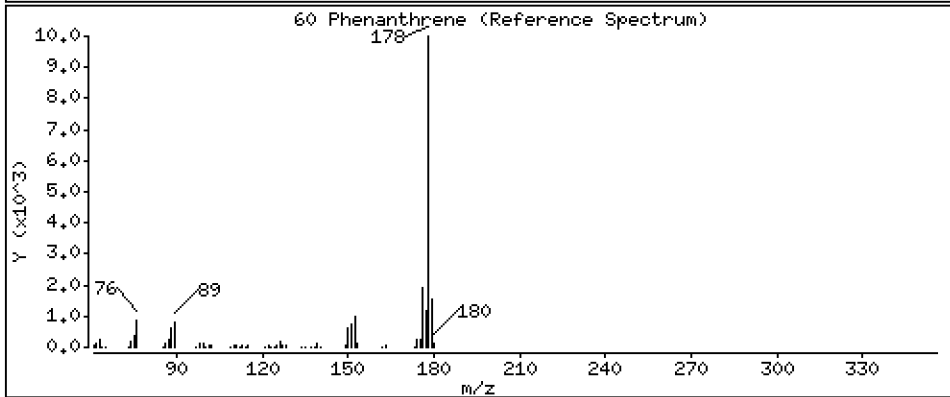
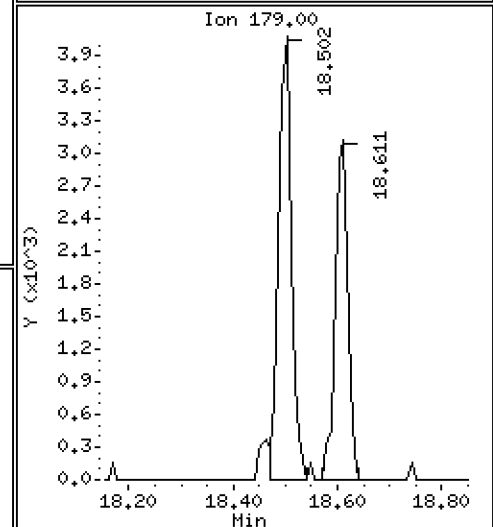
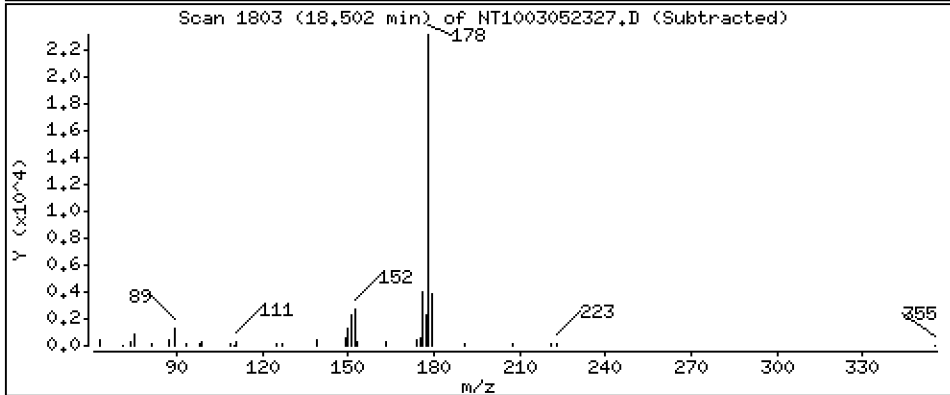
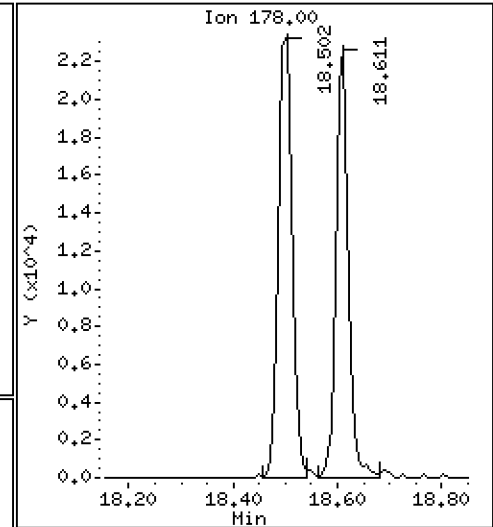
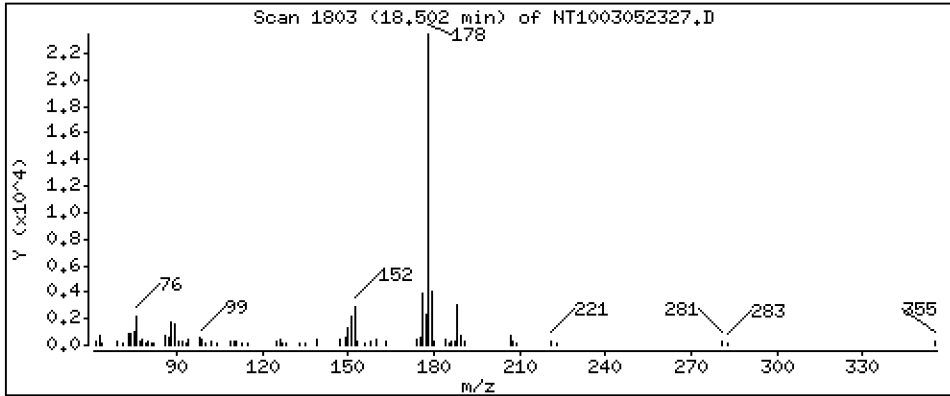
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

60 Phenanthrene

Concentration: 0,2048 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

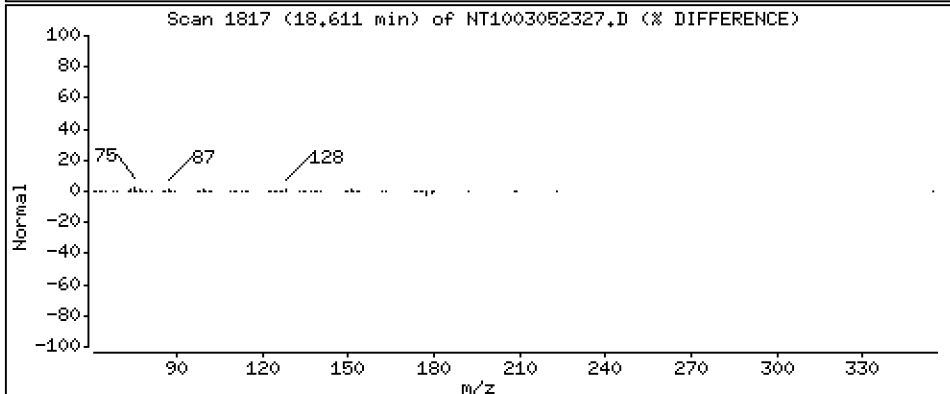
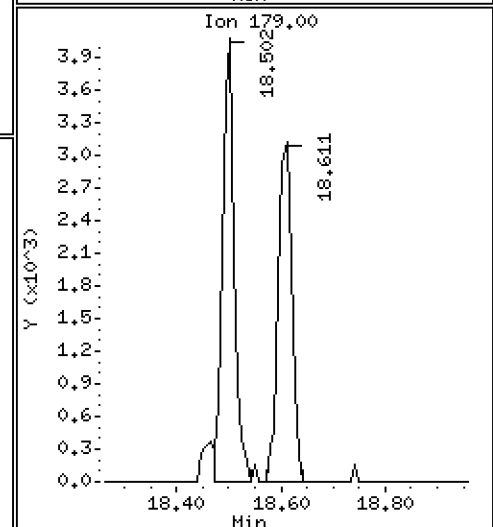
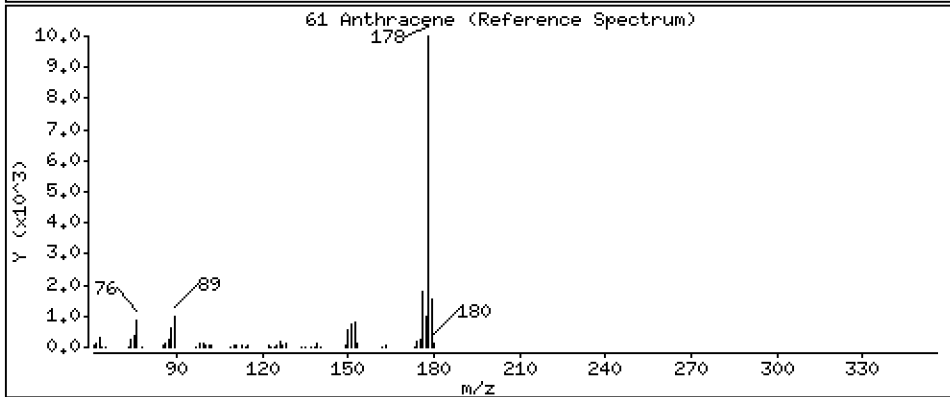
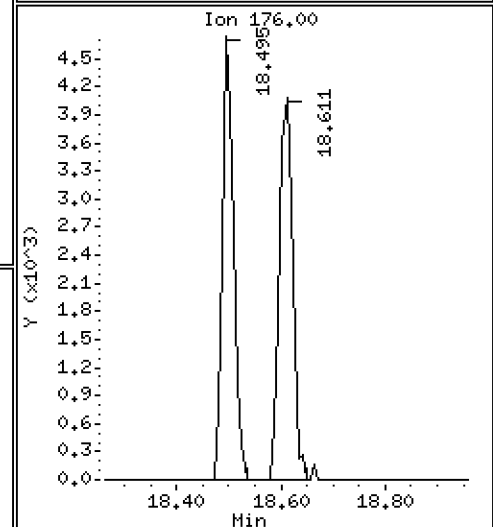
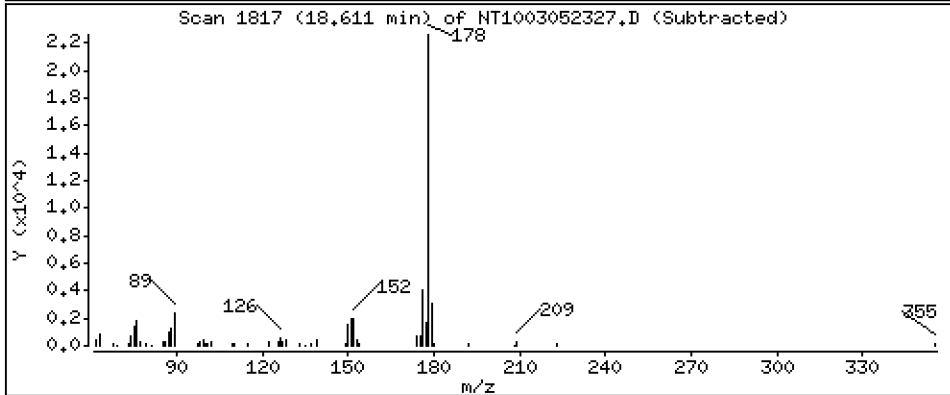
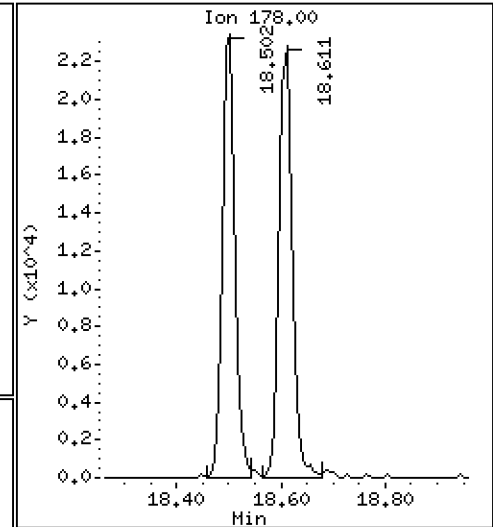
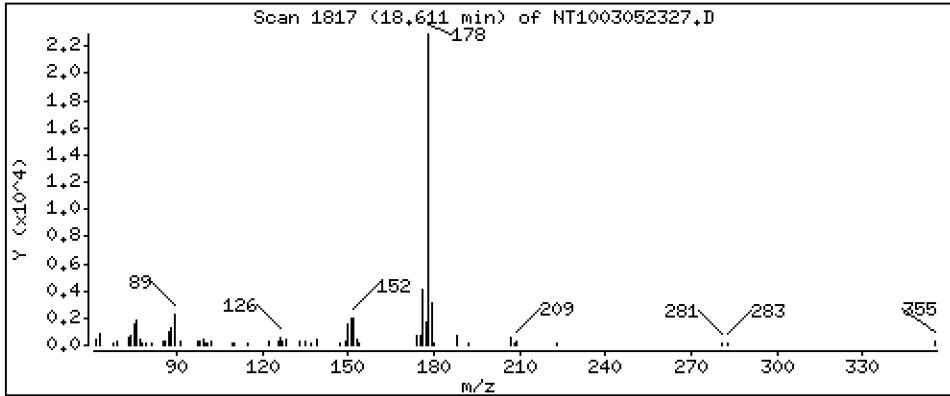
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

61 Anthracene

Concentration: 0,1994 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

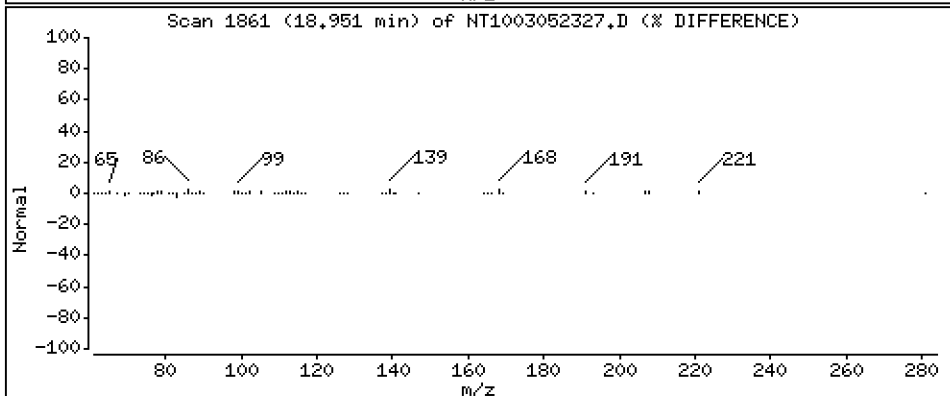
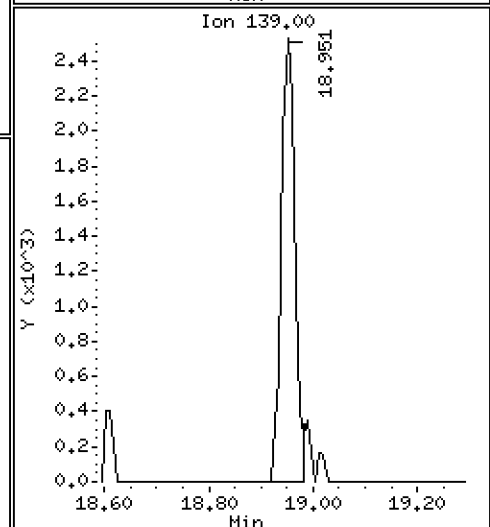
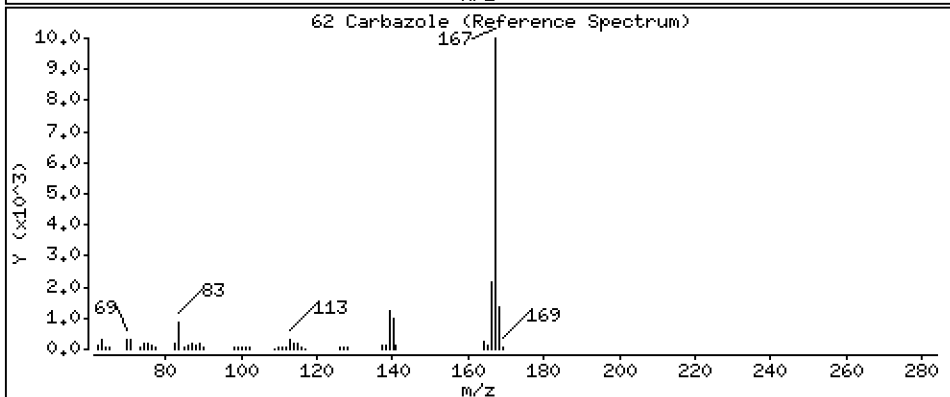
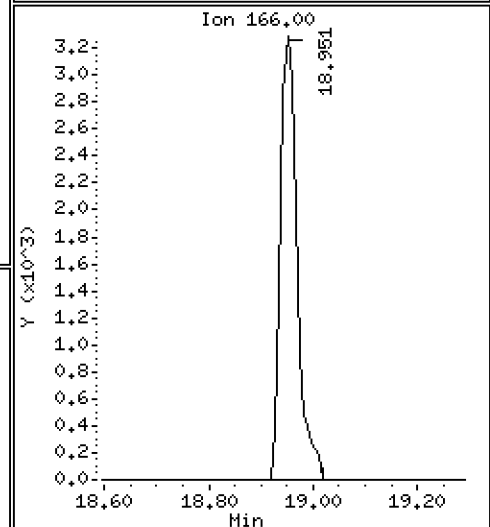
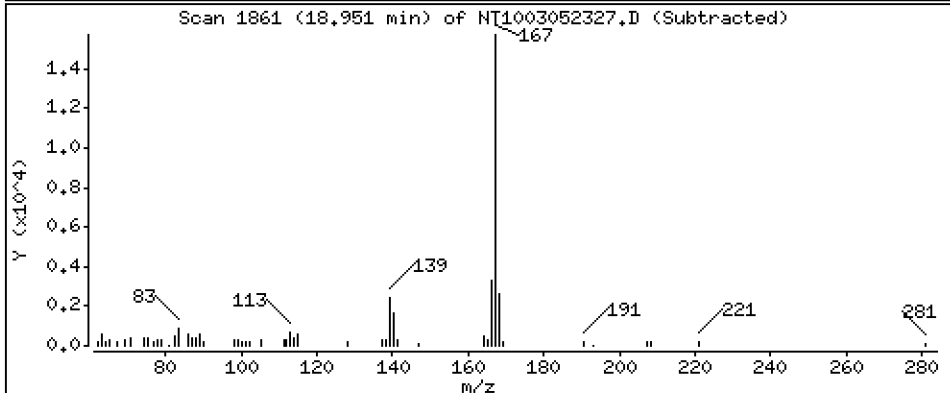
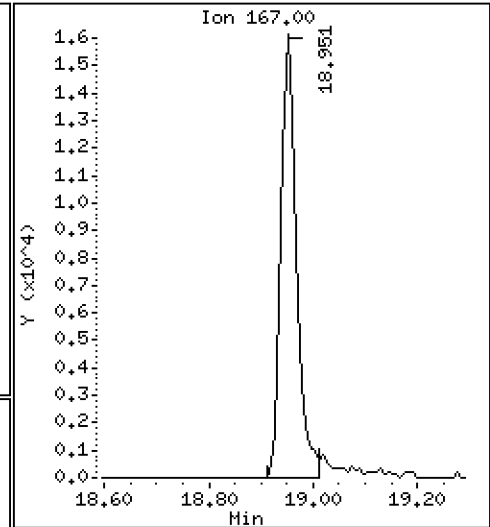
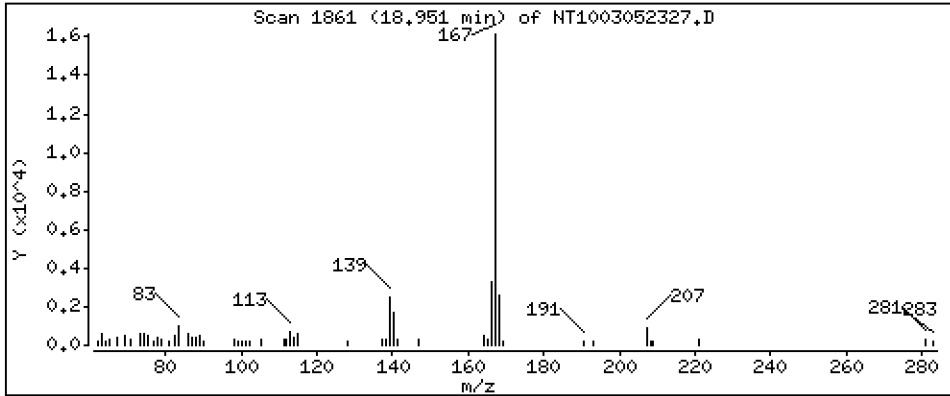
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

62 Carbazole

Concentration: 0.1816 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

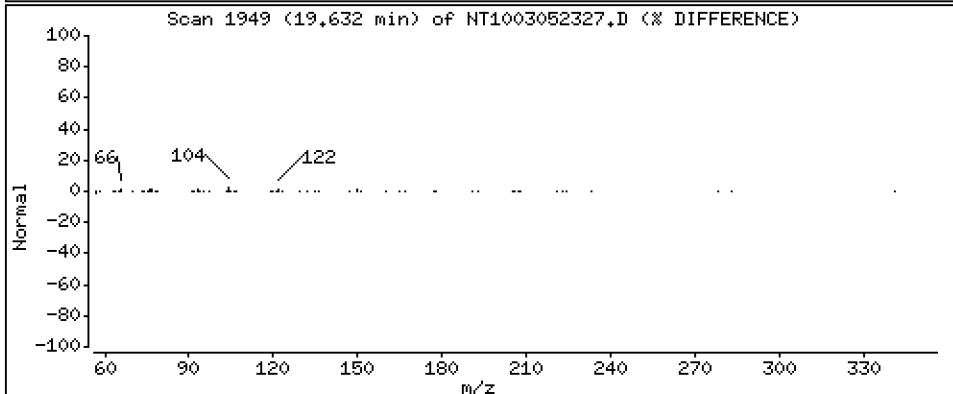
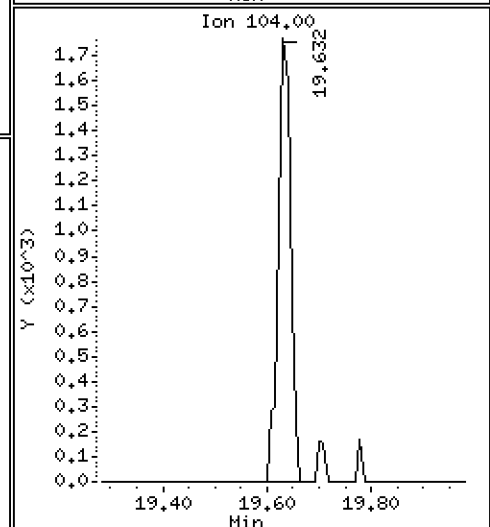
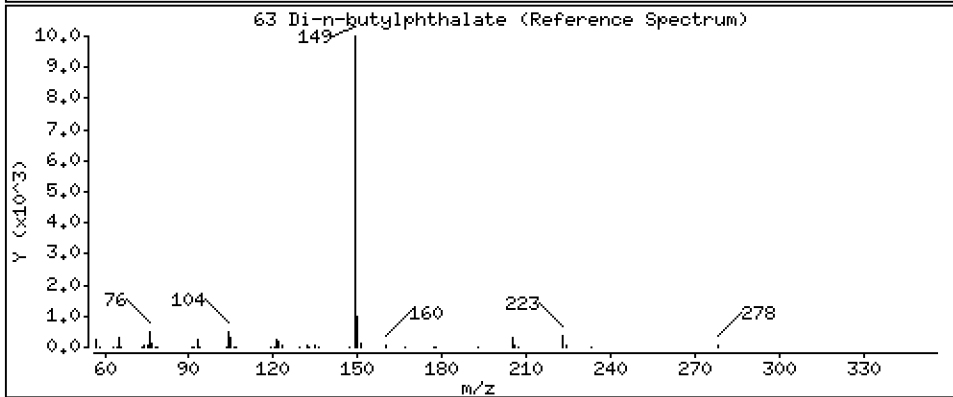
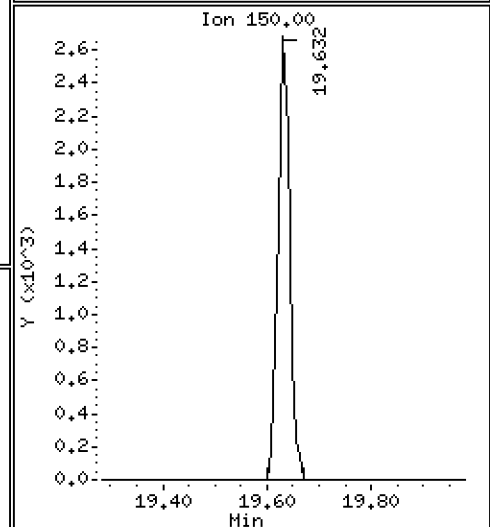
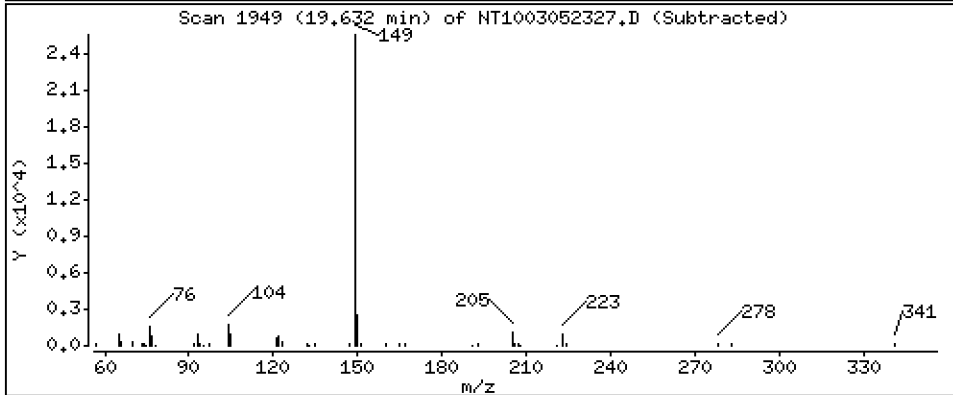
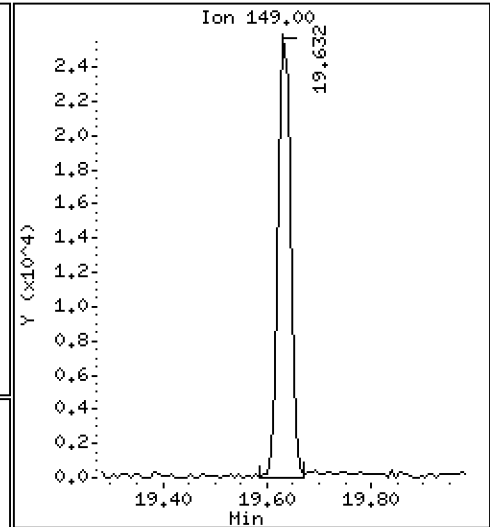
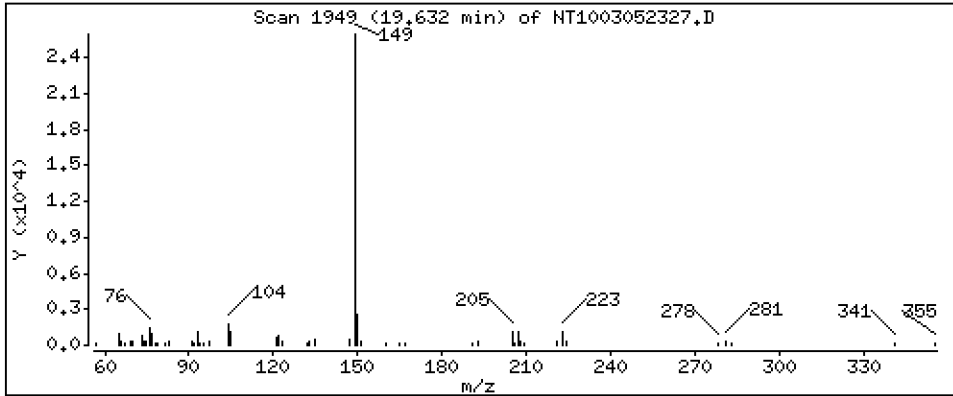
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

63 Di-n-butylphthalate

Concentration: 0.1700 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

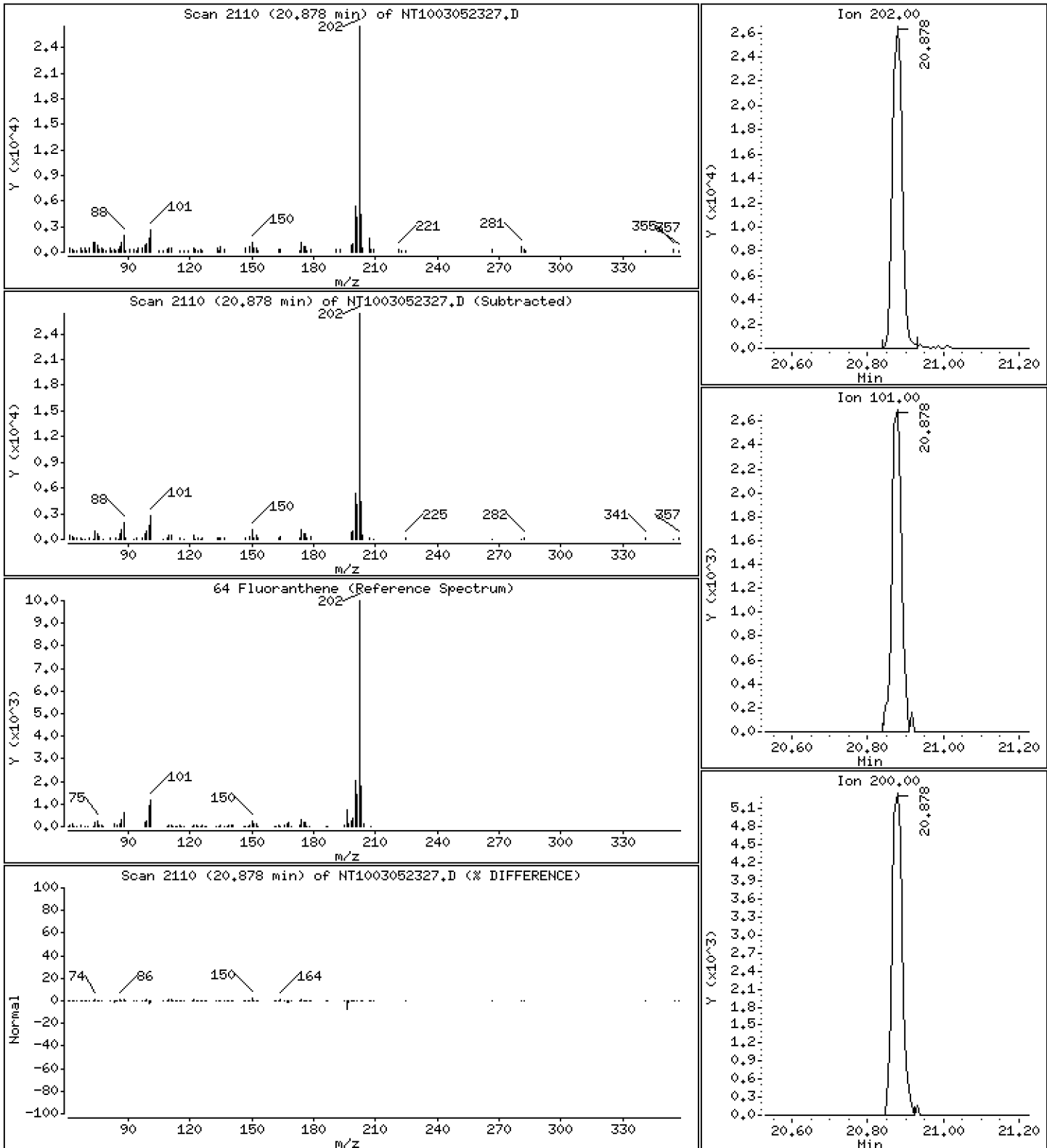
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

64 Fluoranthene

Concentration: 0,1807 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

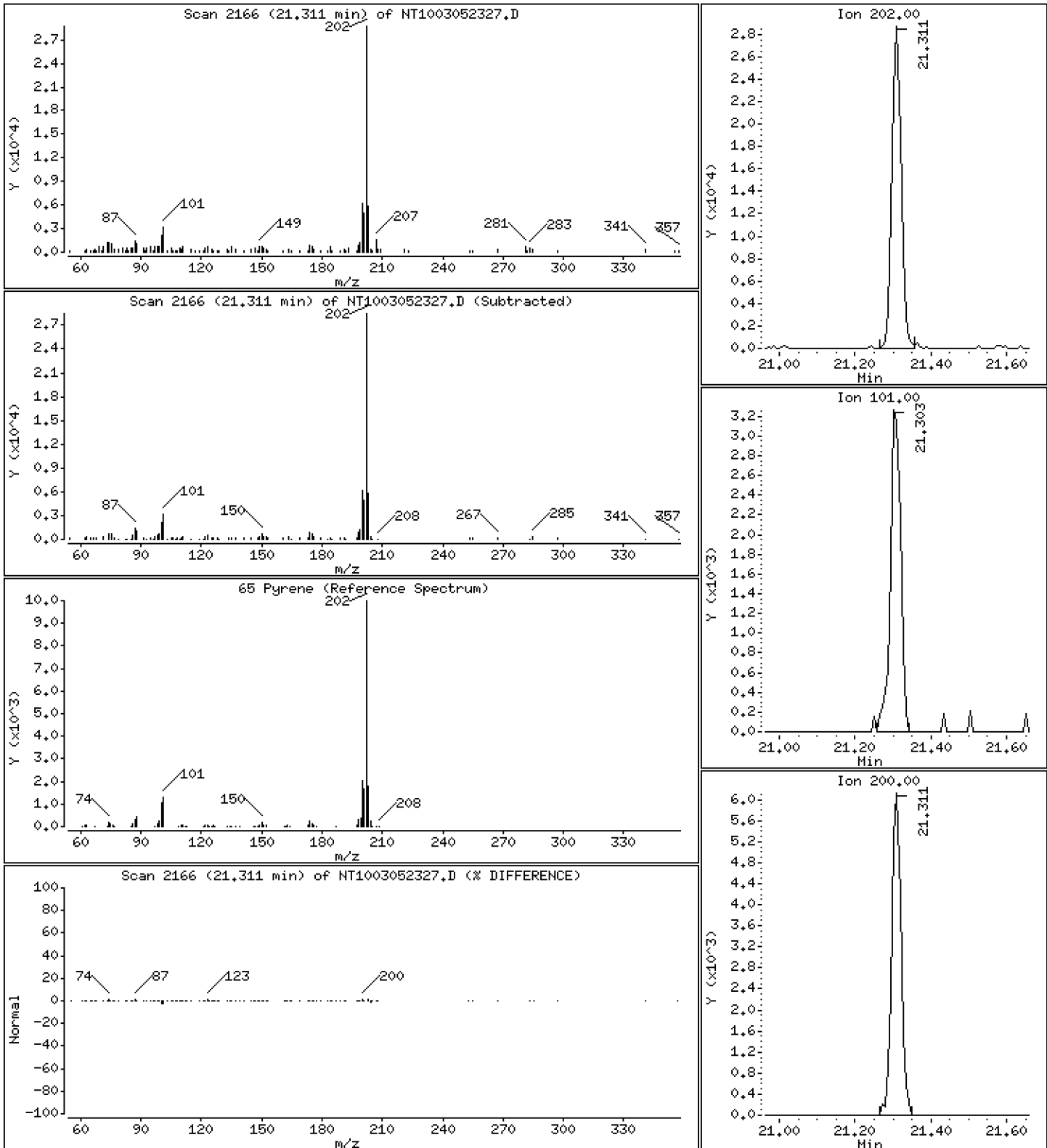
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

65 Pyrene

Concentration: 0.1824 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

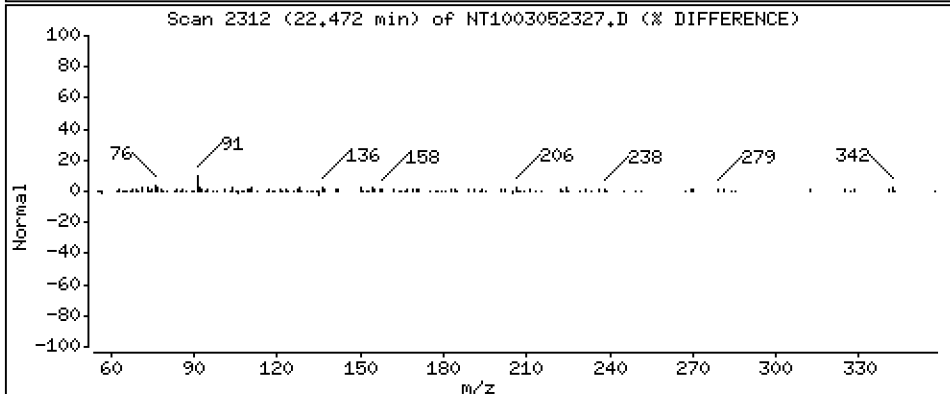
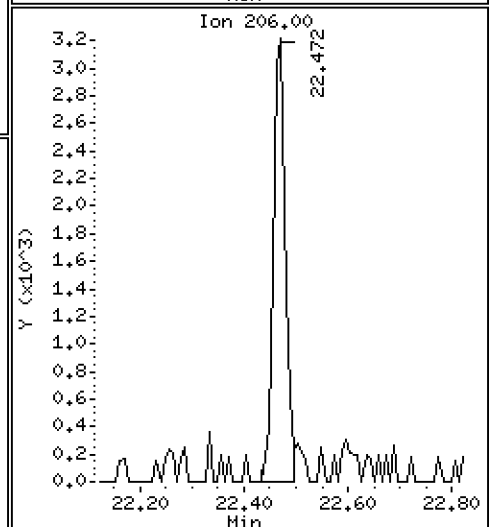
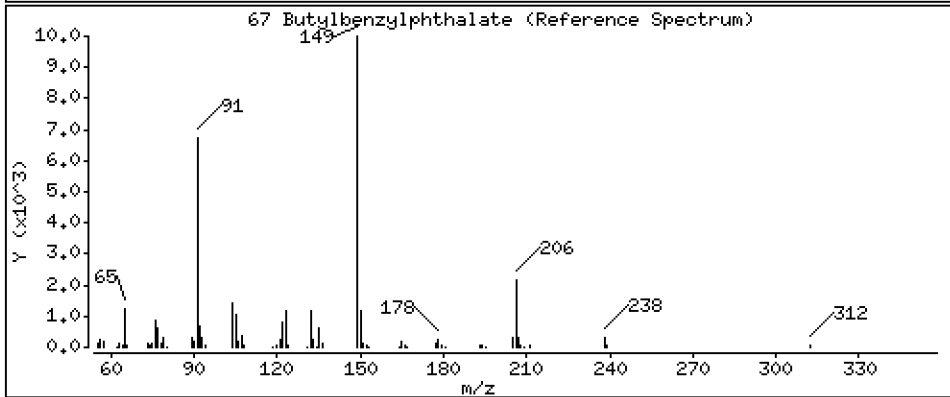
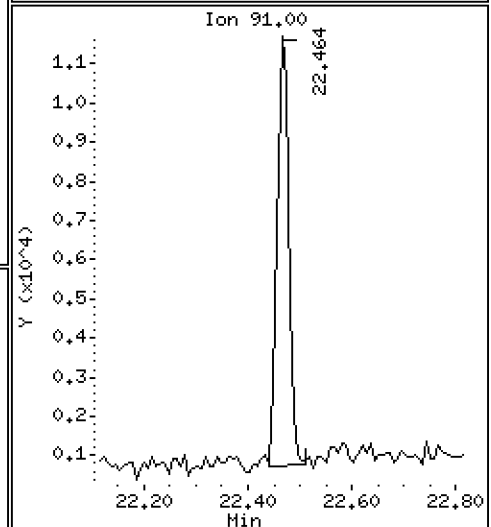
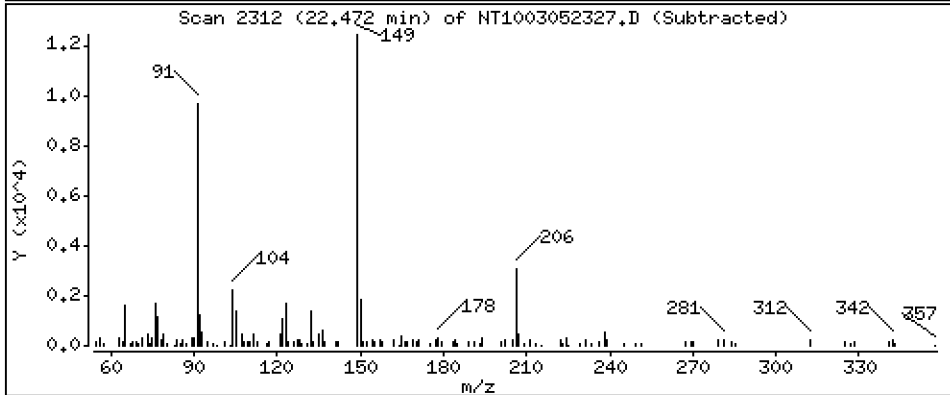
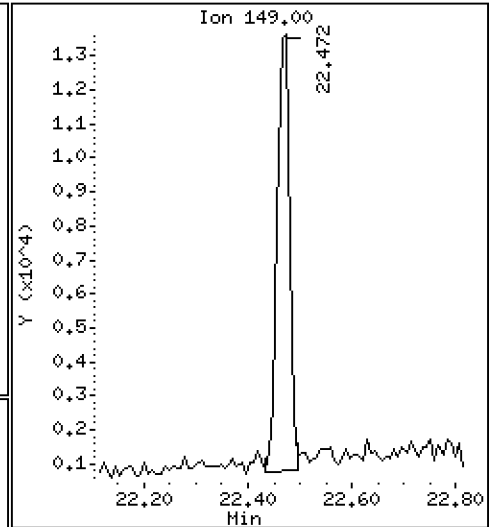
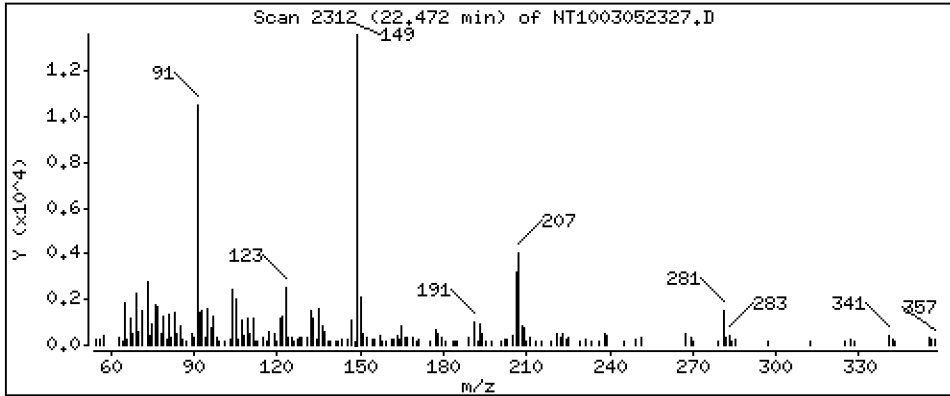
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1500 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

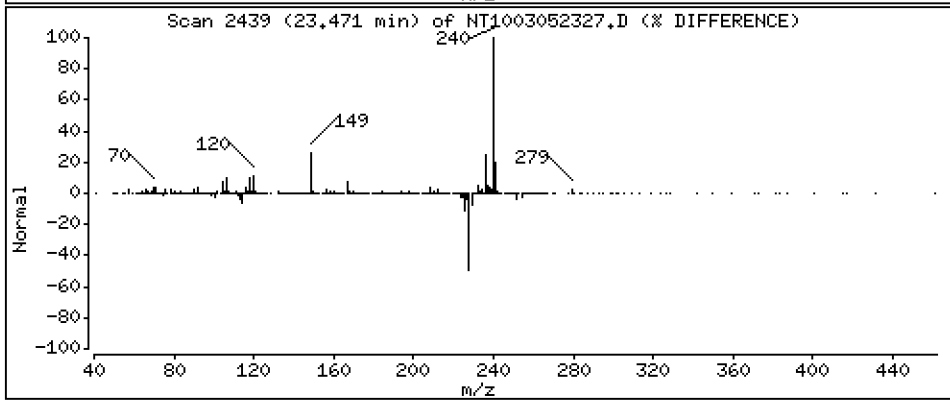
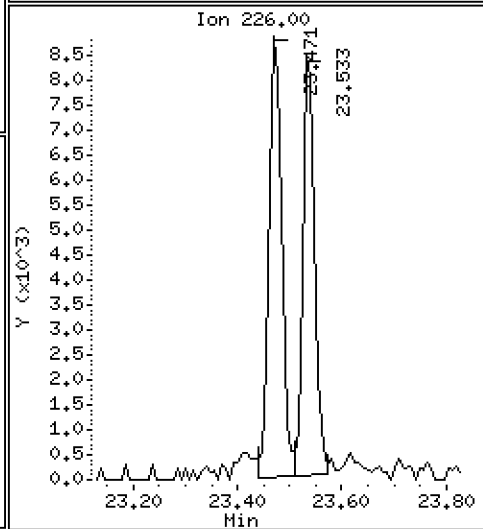
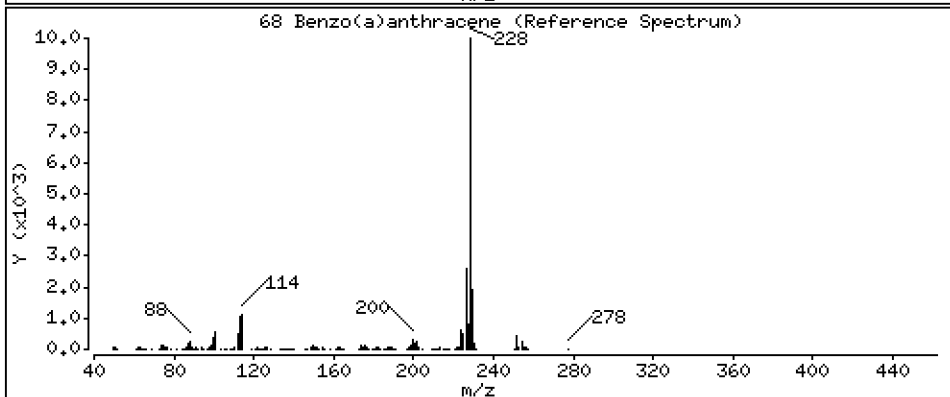
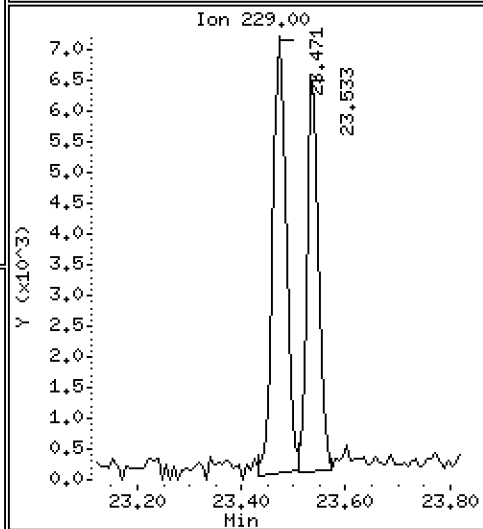
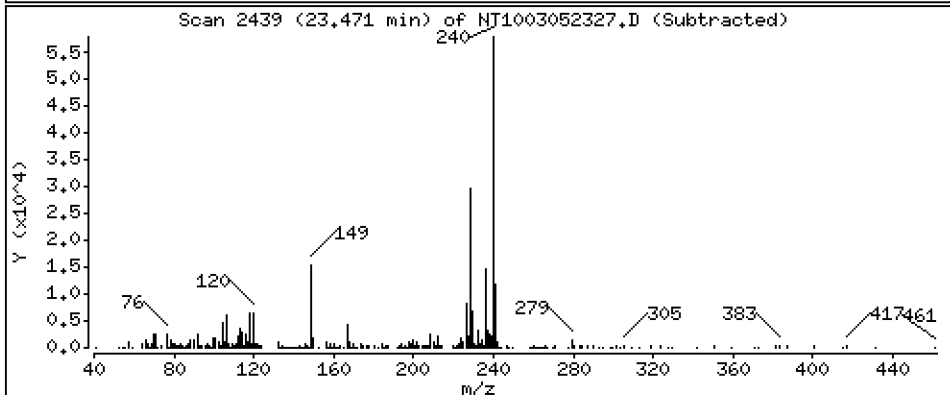
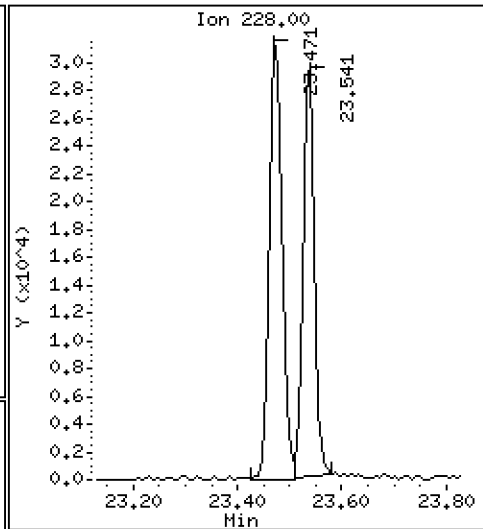
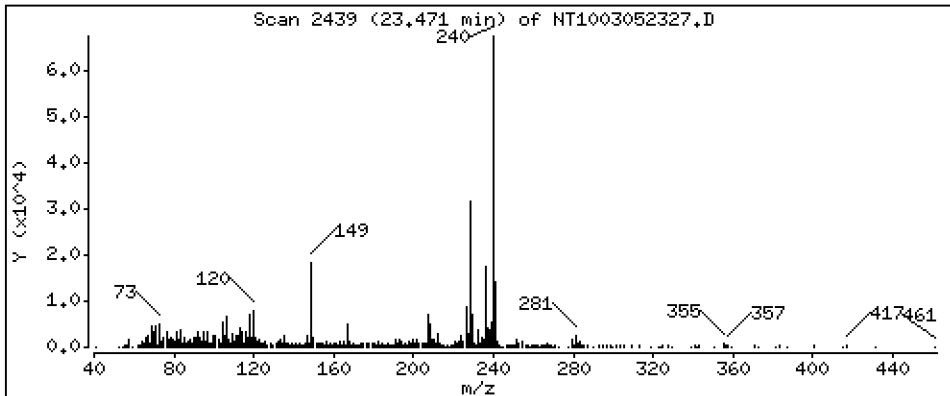
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

68 Benzo(a)anthracene

Concentration: 0,2043 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

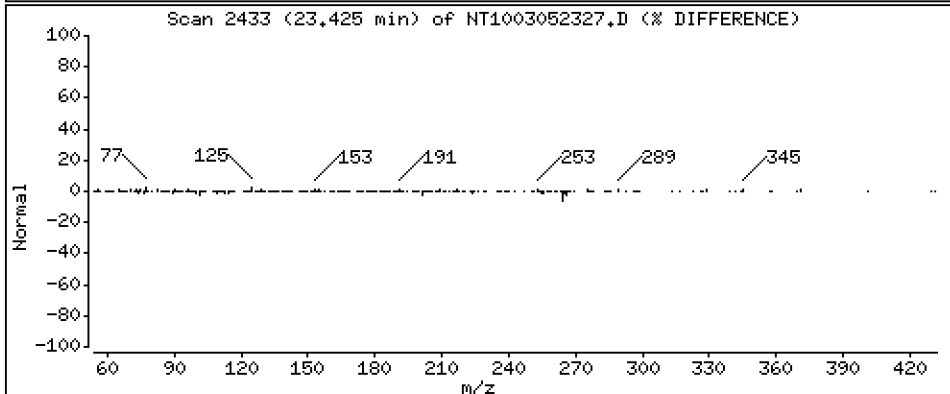
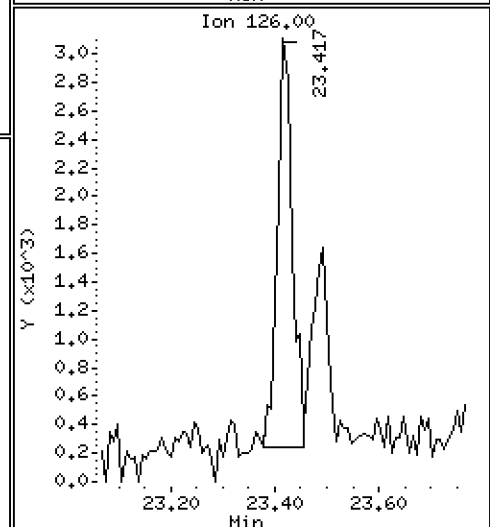
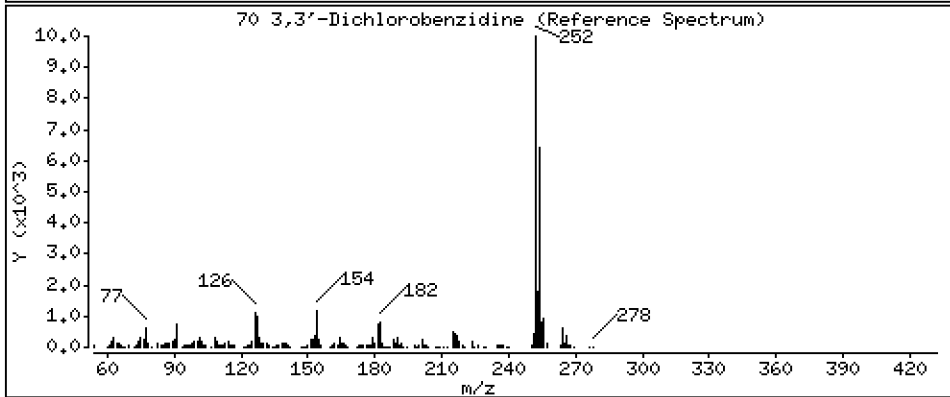
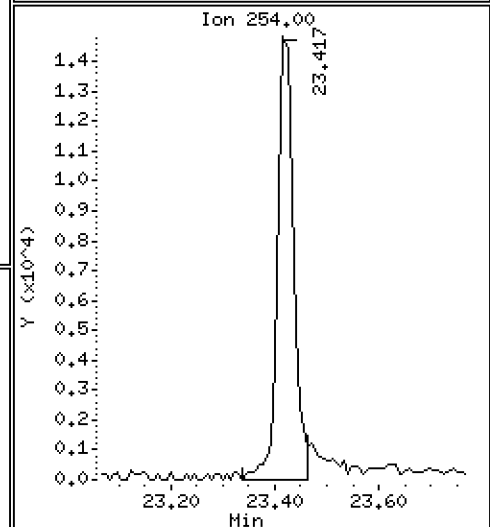
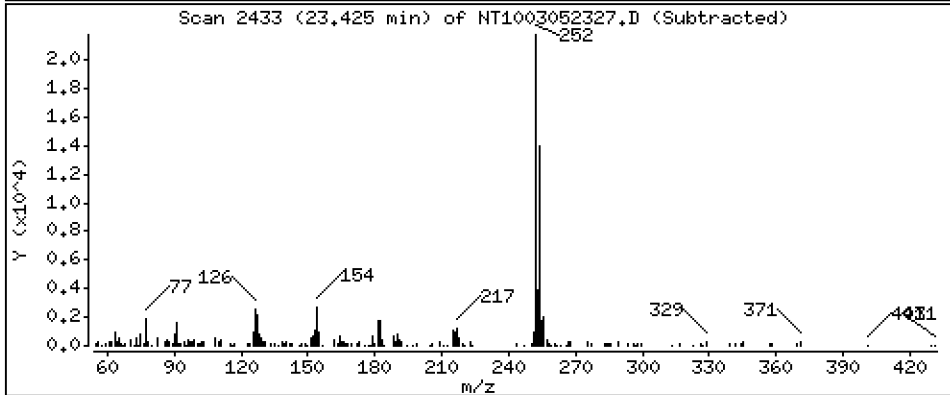
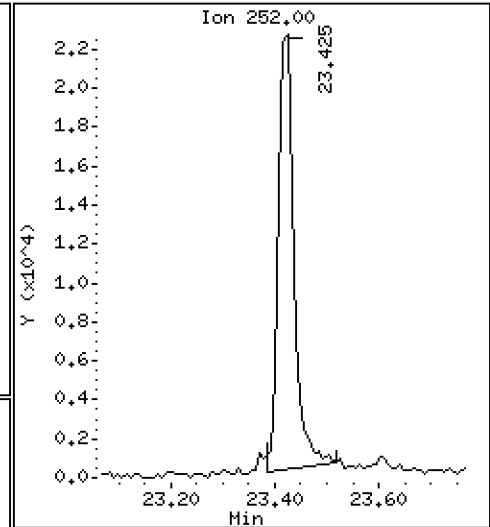
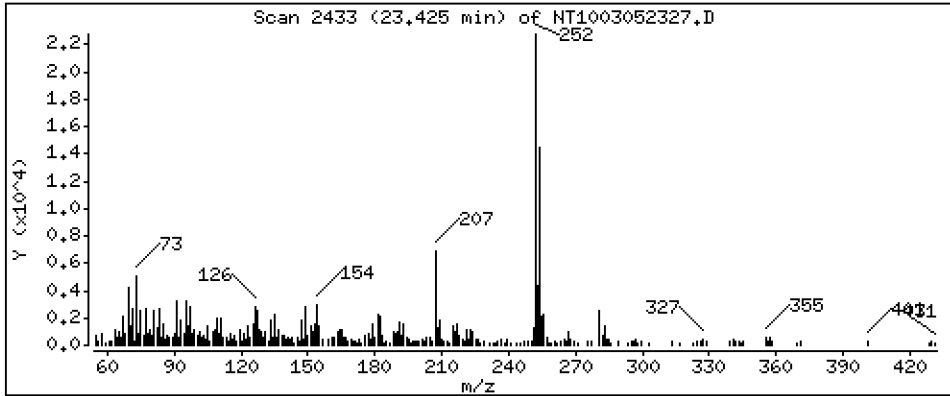
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

70 3,3'-Dichlorobenzidine

Concentration: 0,3940 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

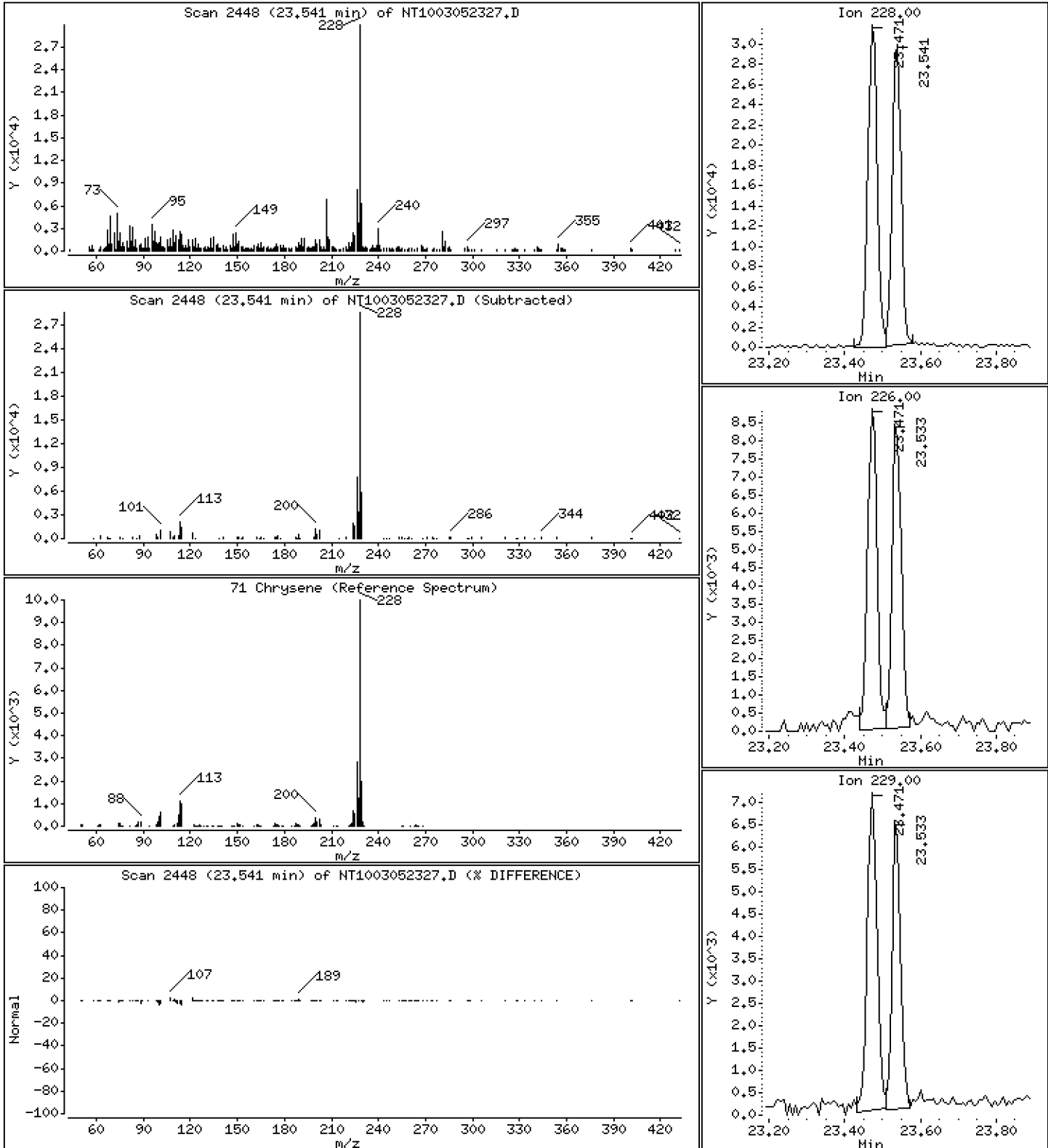
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

71 Chrysene

Concentration: 0,2202 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

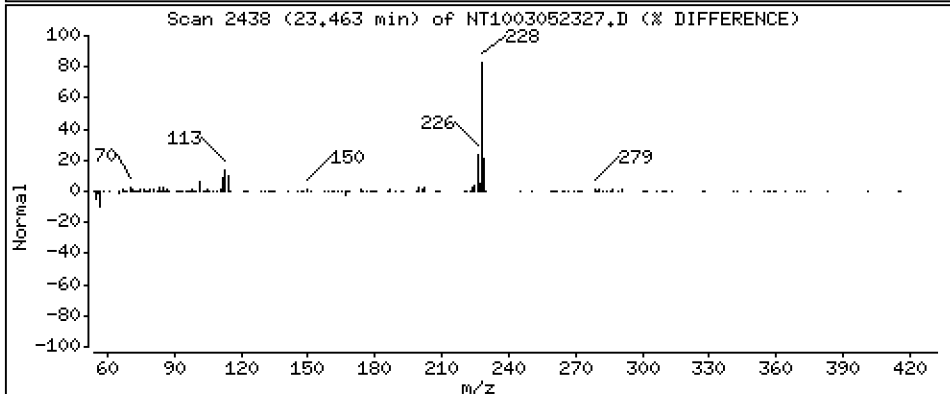
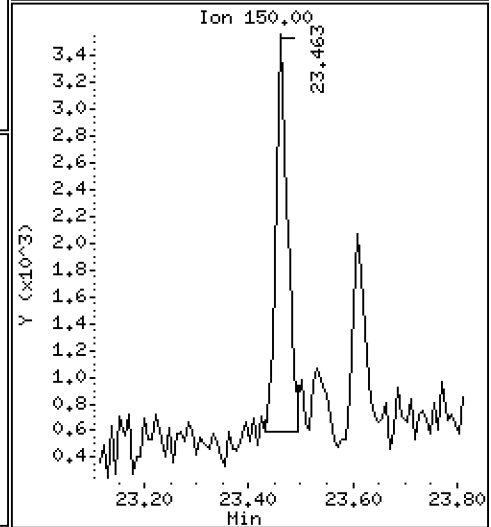
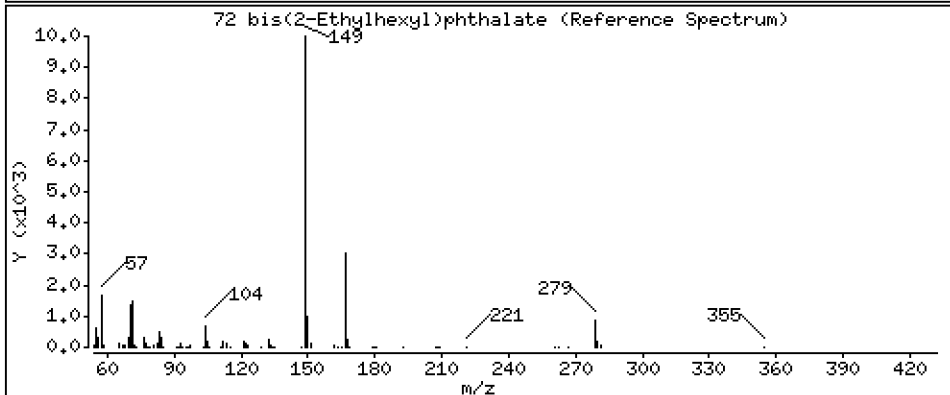
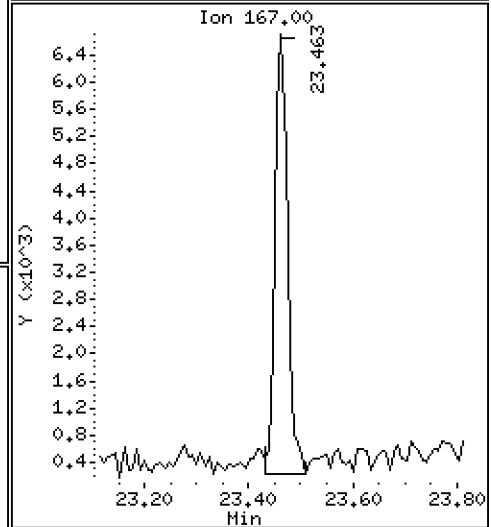
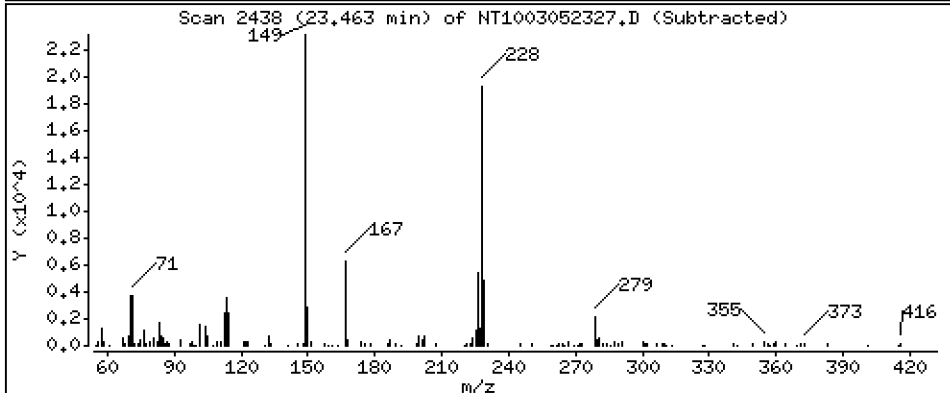
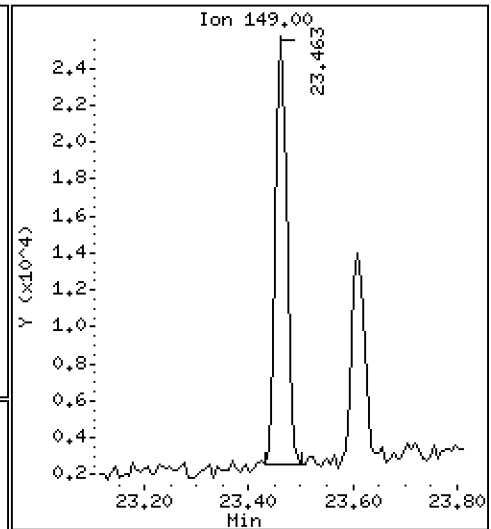
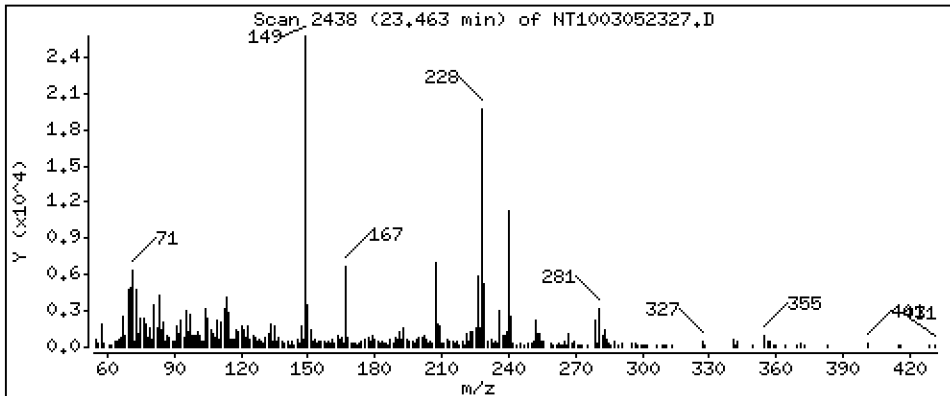
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

72 bis(2-Ethylhexyl)phthalate

Concentration: 0.1885 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

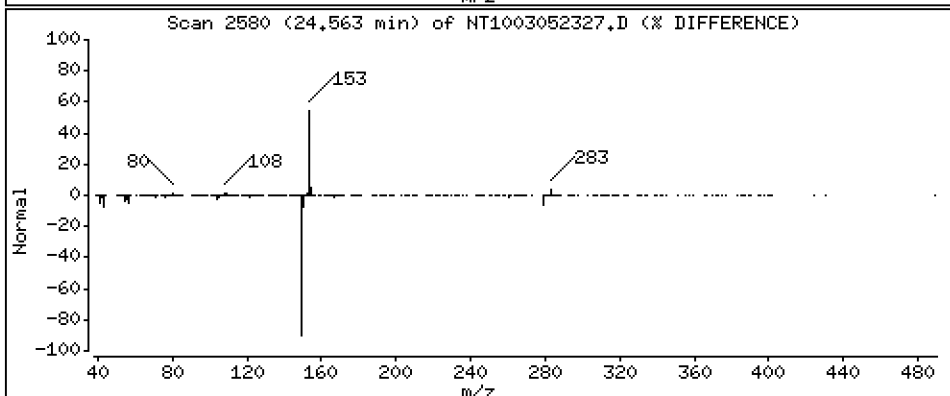
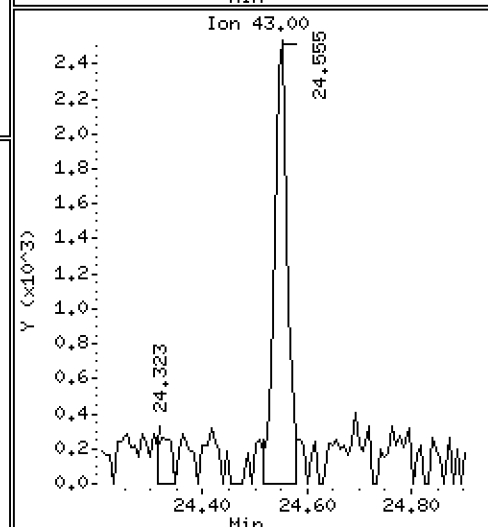
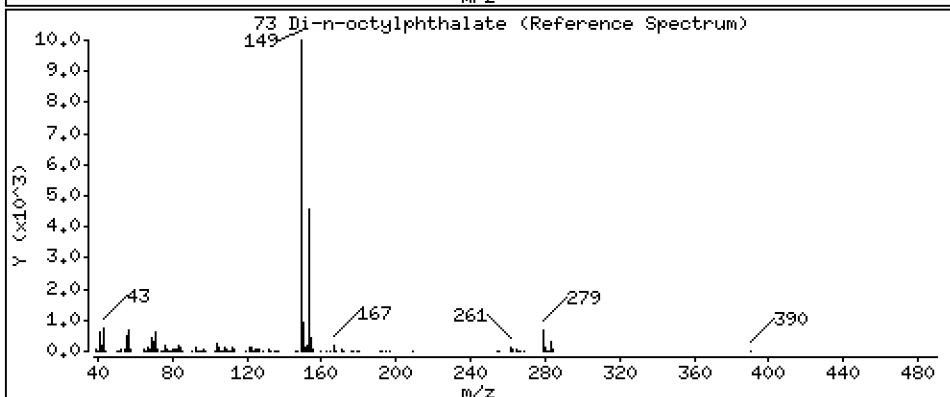
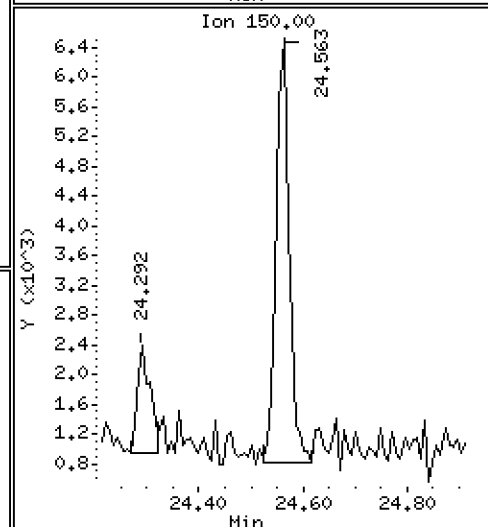
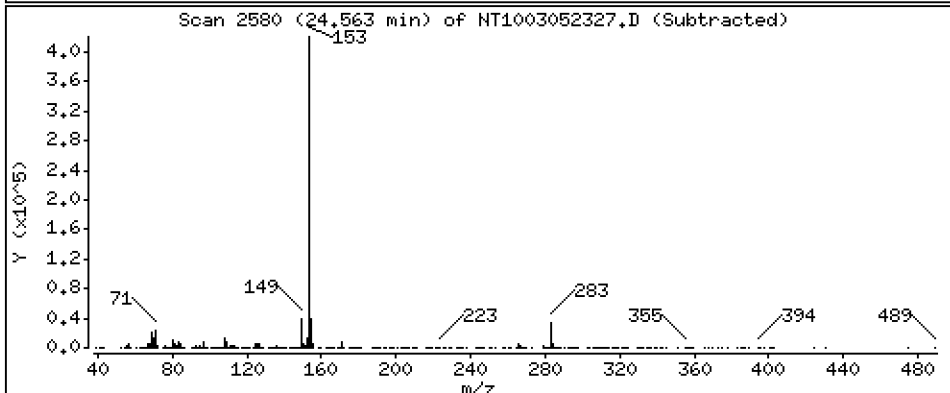
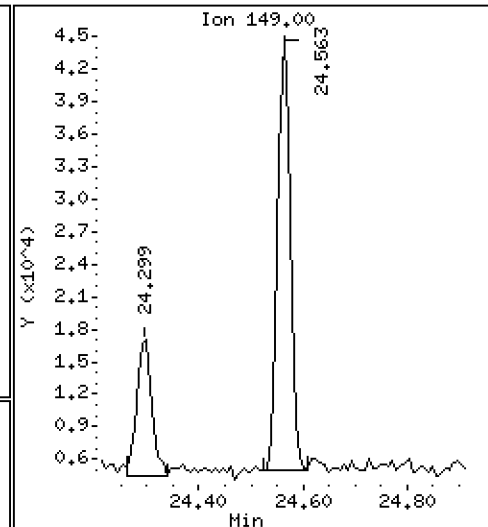
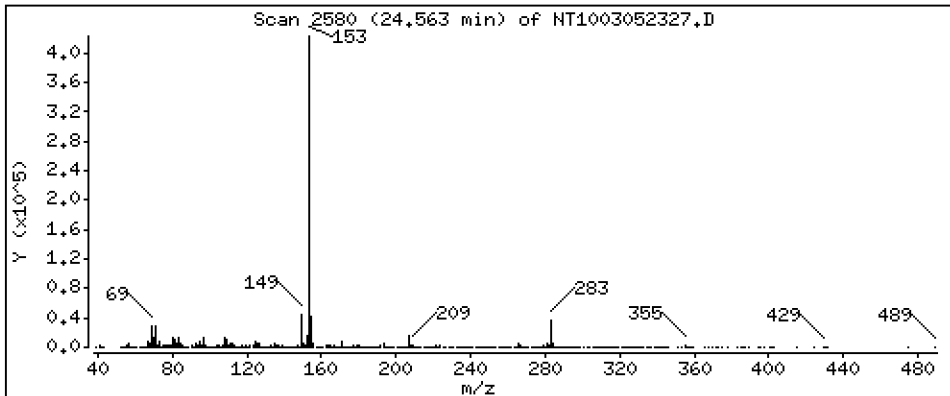
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

73 Di-n-octylphthalate

Concentration: 0.2320 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

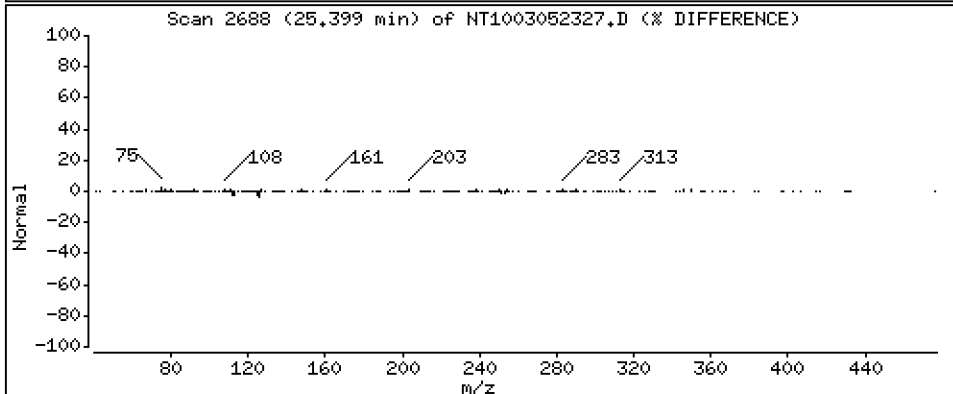
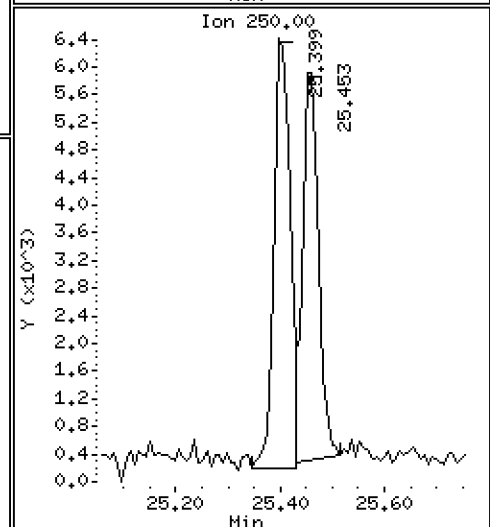
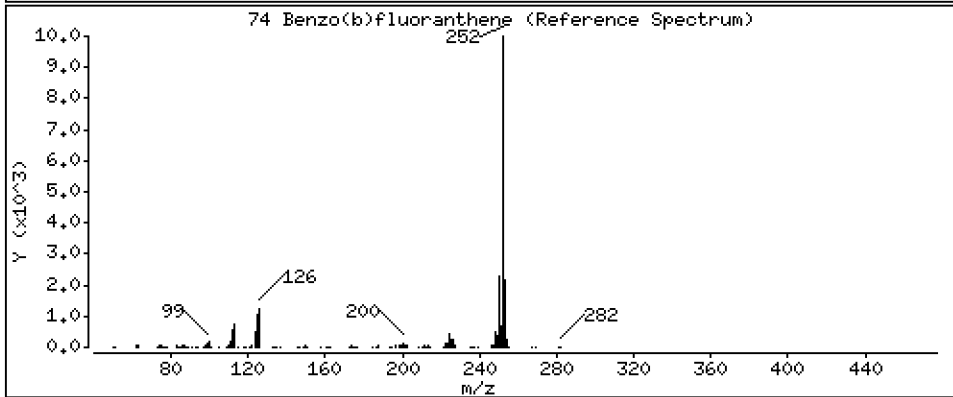
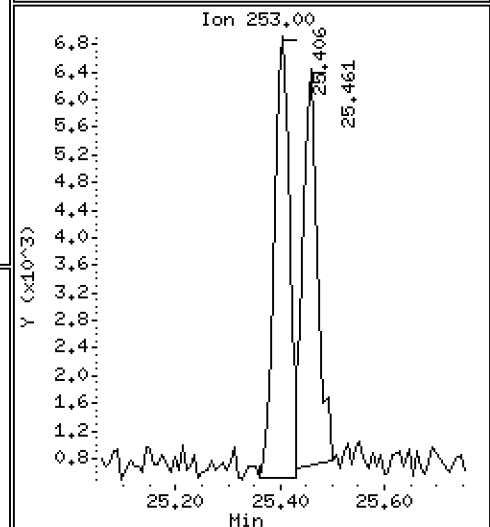
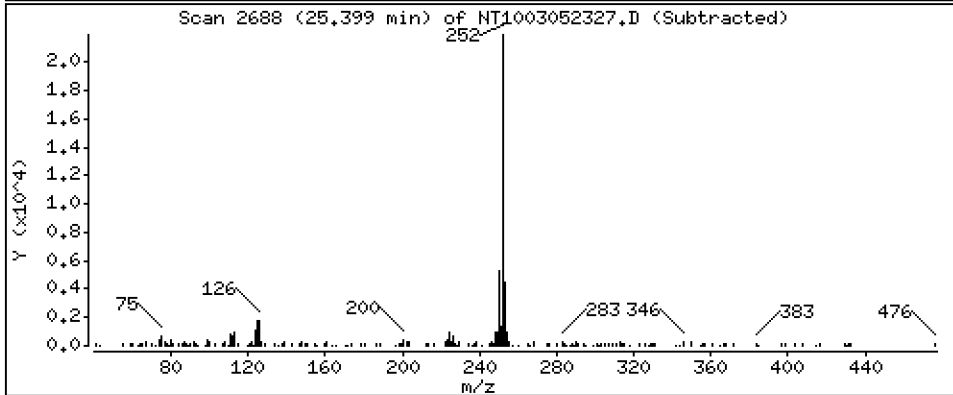
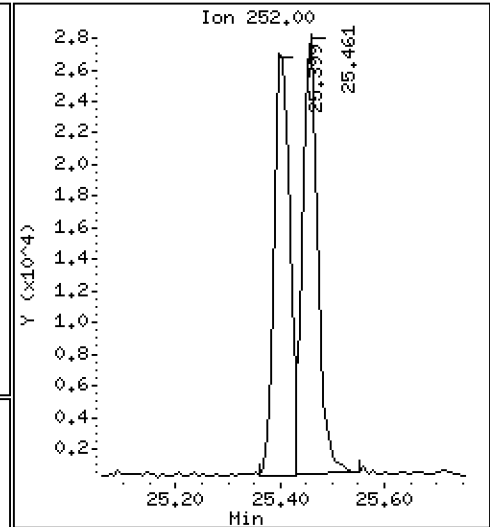
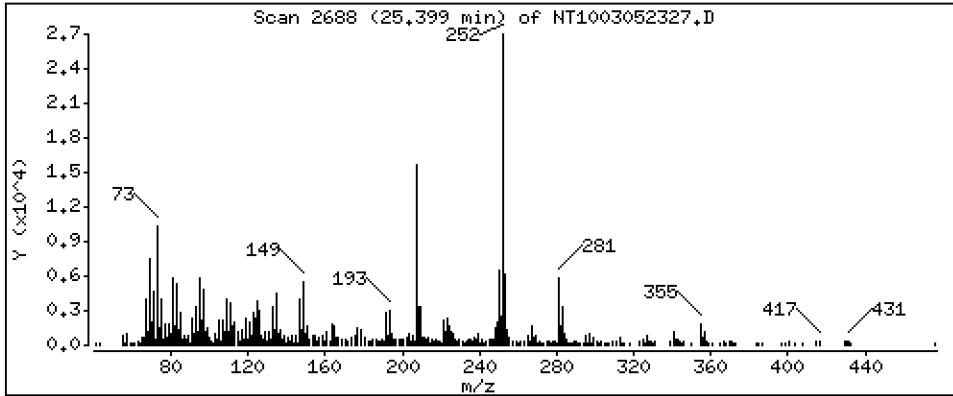
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

74 Benzo(b)fluoranthene

Concentration: 0,1774 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

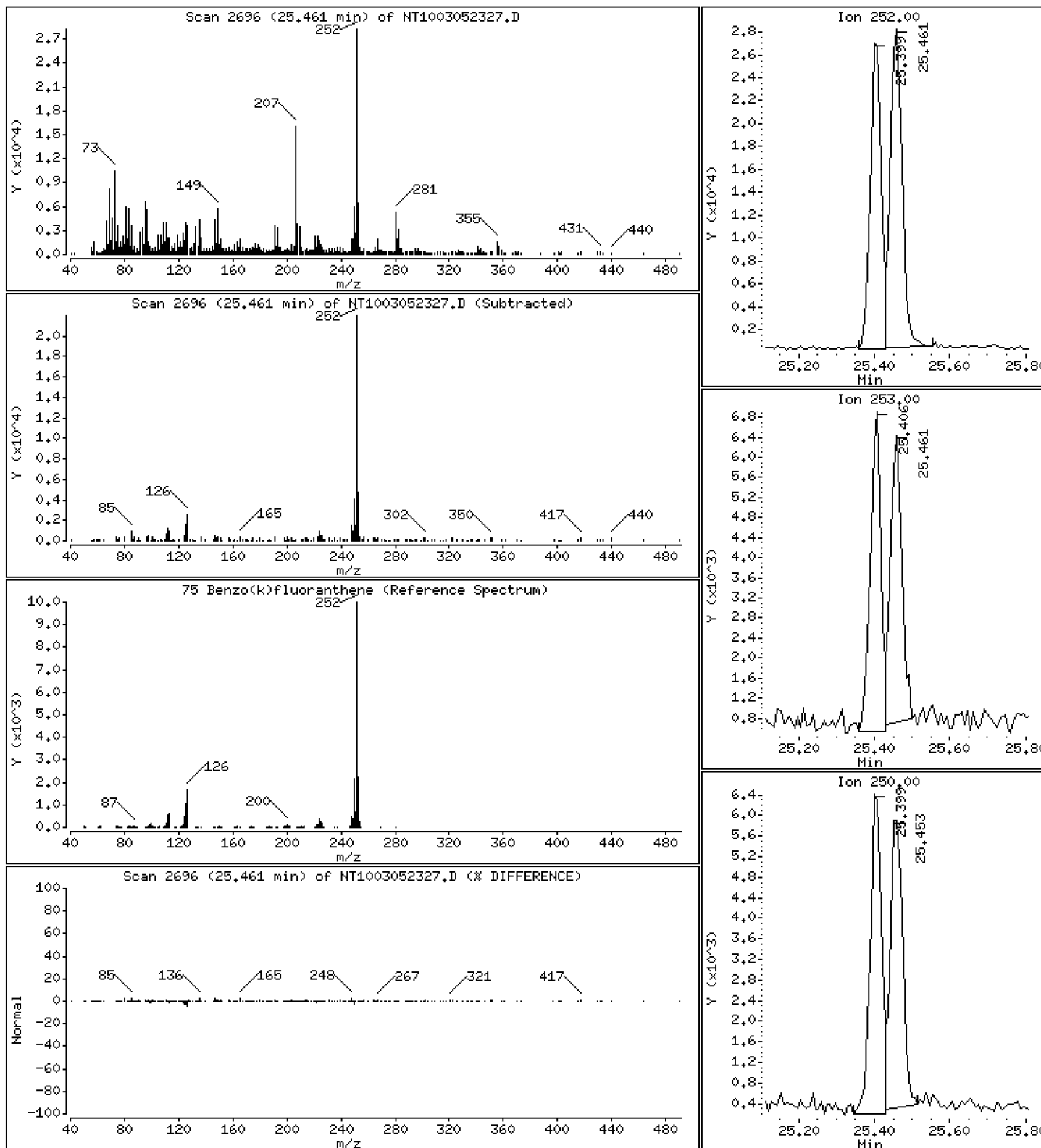
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

75 Benzo(k)fluoranthene

Concentration: 0,2045 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

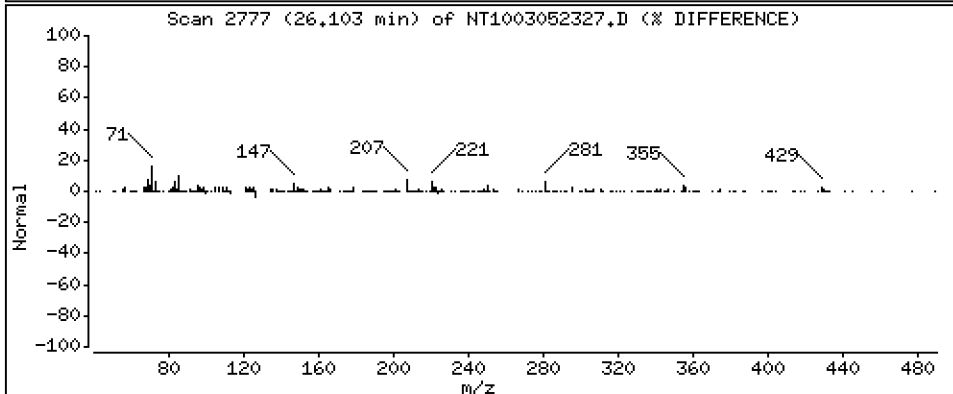
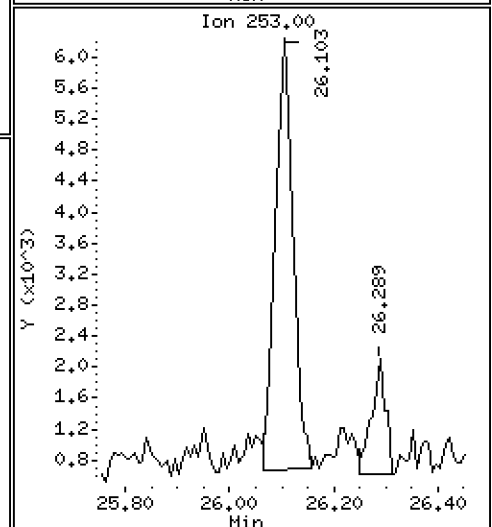
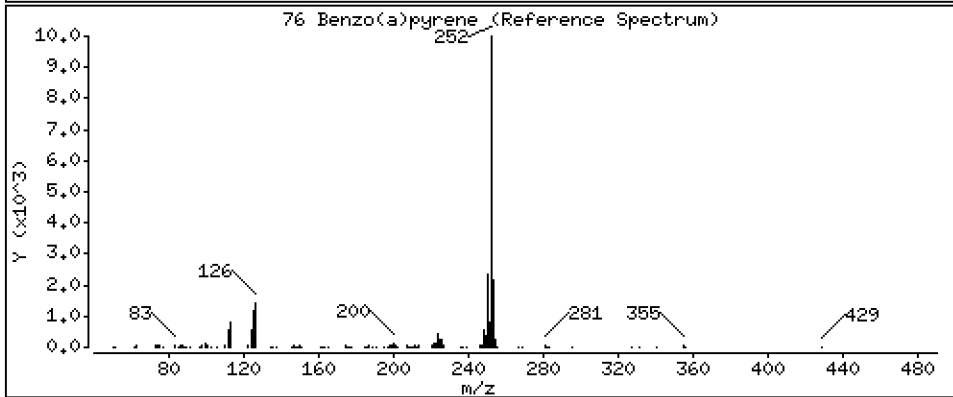
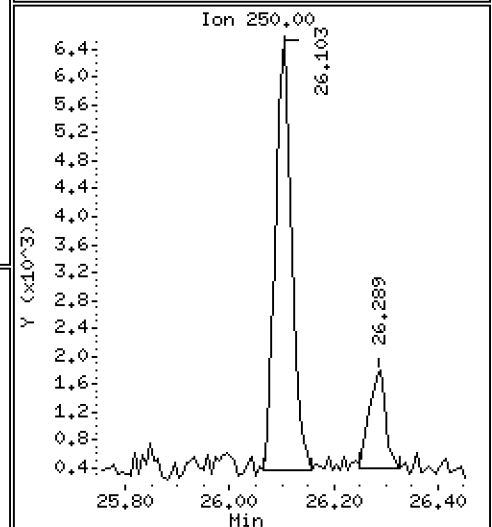
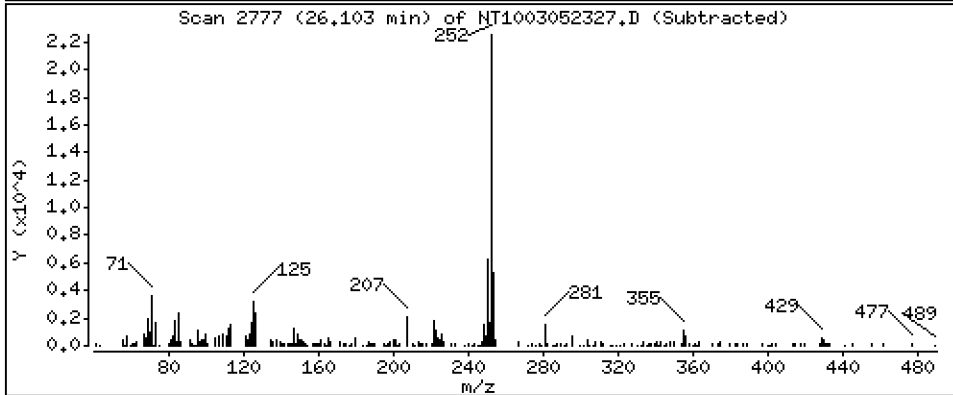
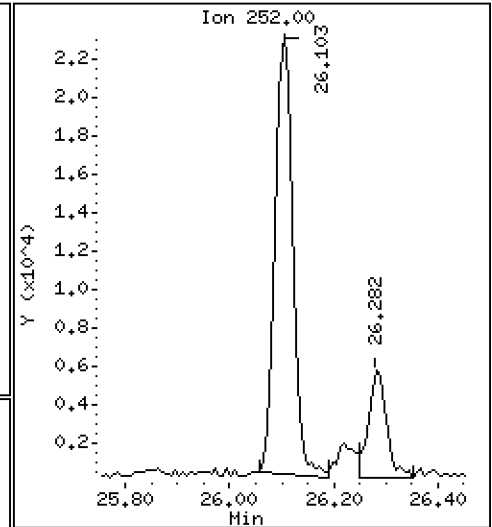
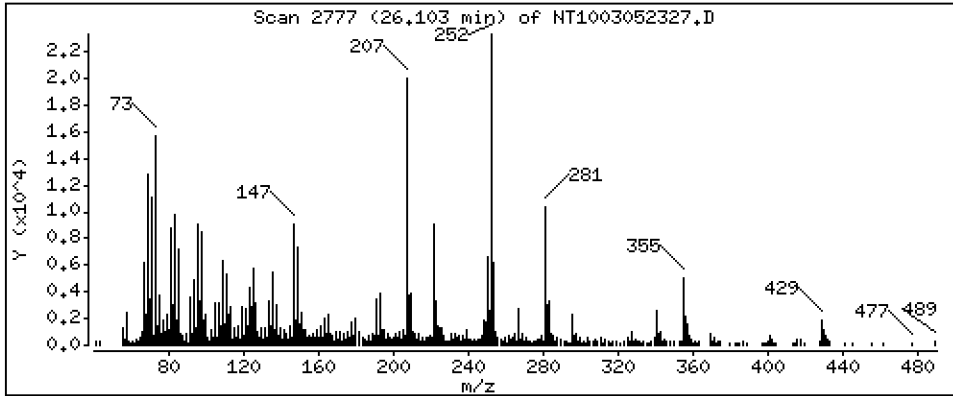
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

76 Benzo(a)pyrene

Concentration: 0,1919 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

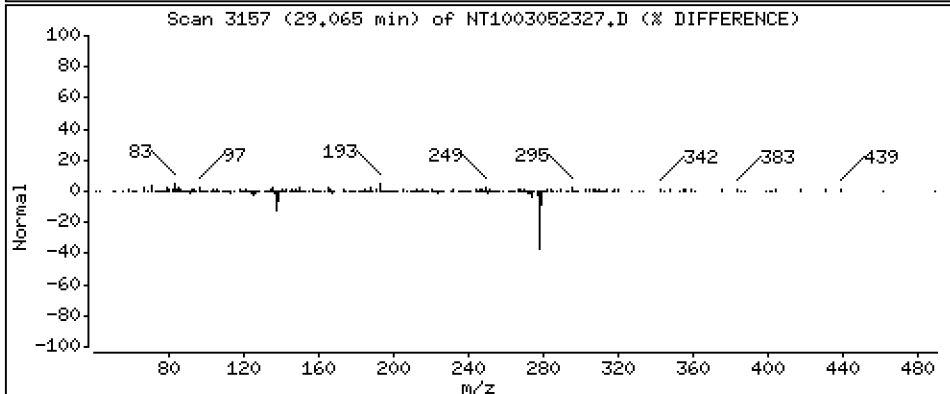
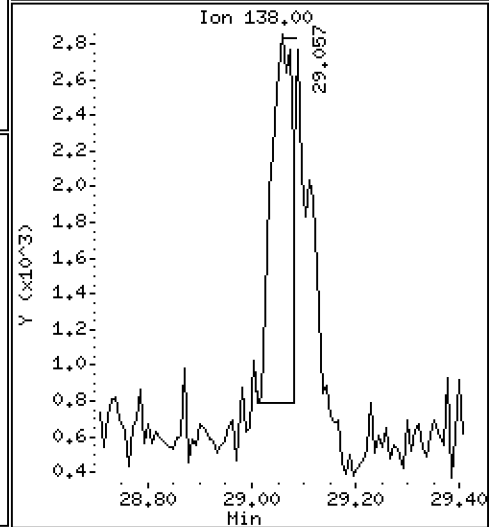
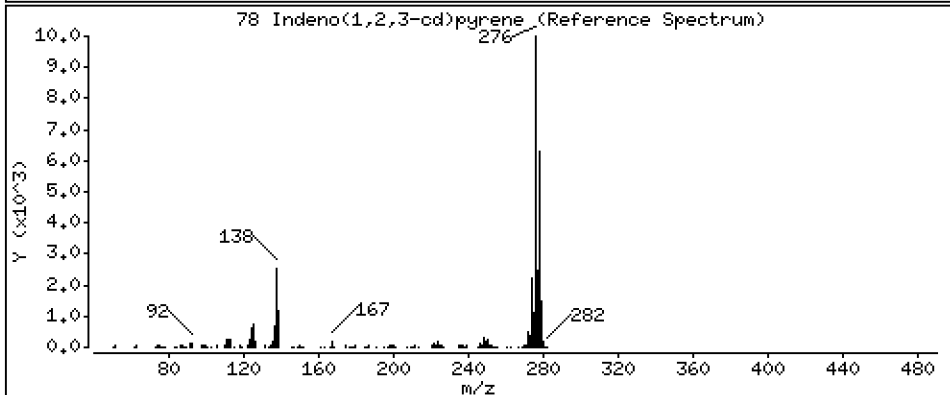
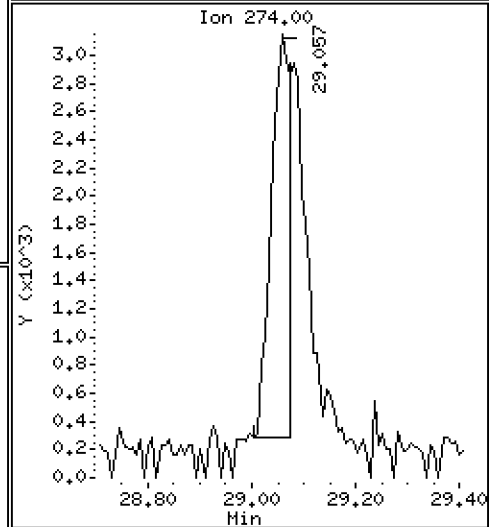
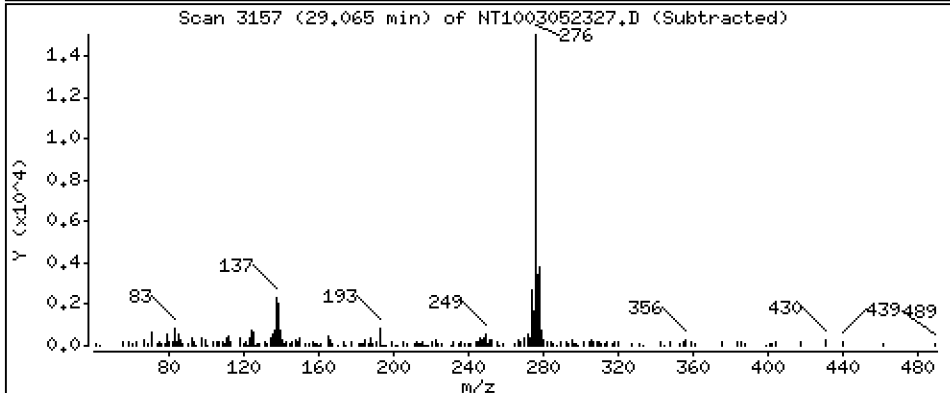
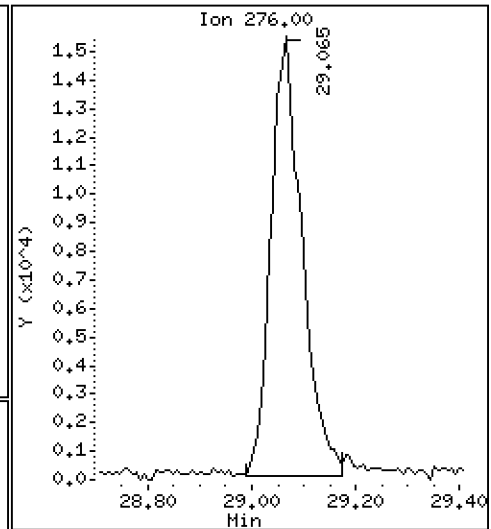
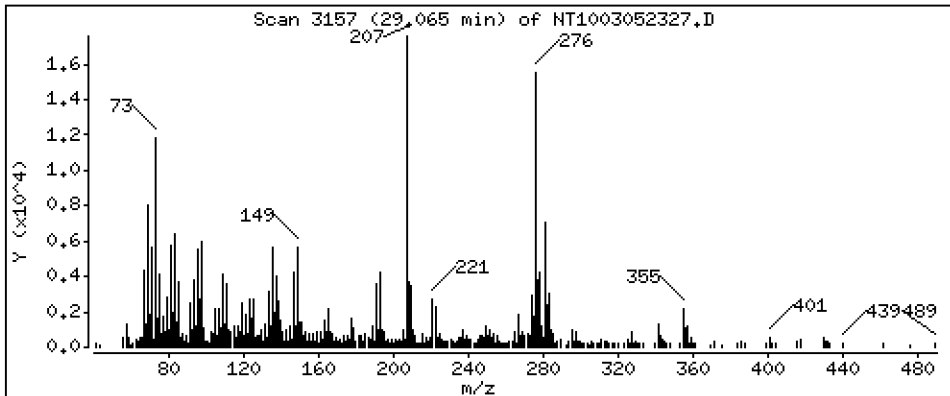
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

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

Concentration: 0,1981 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

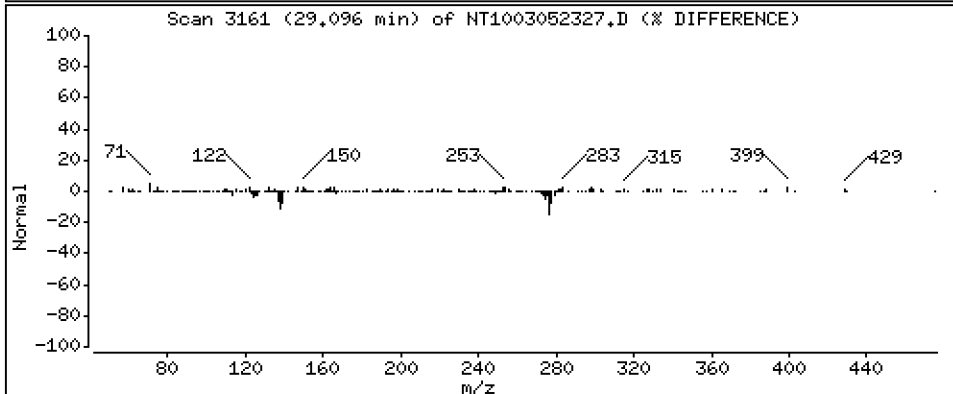
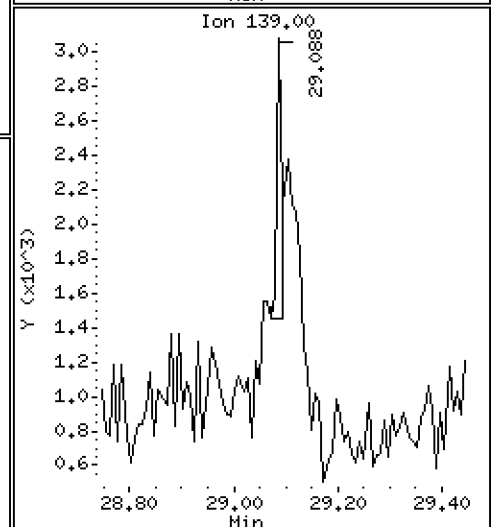
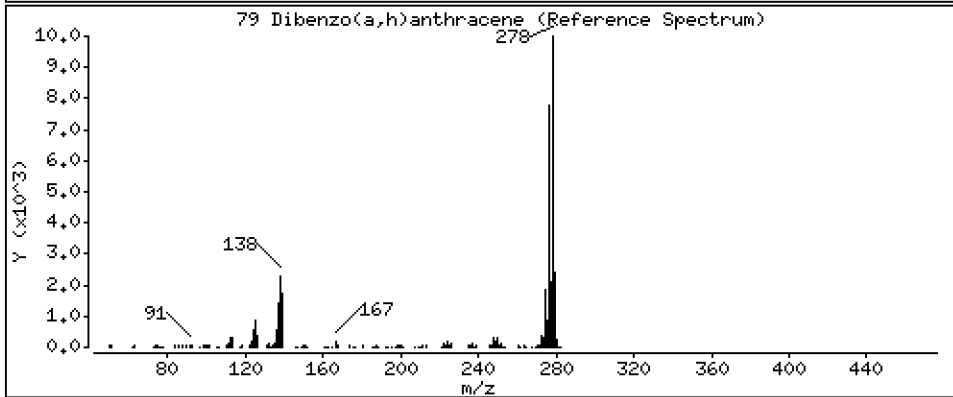
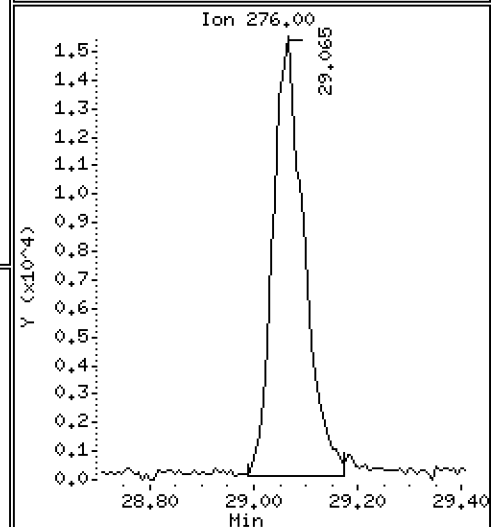
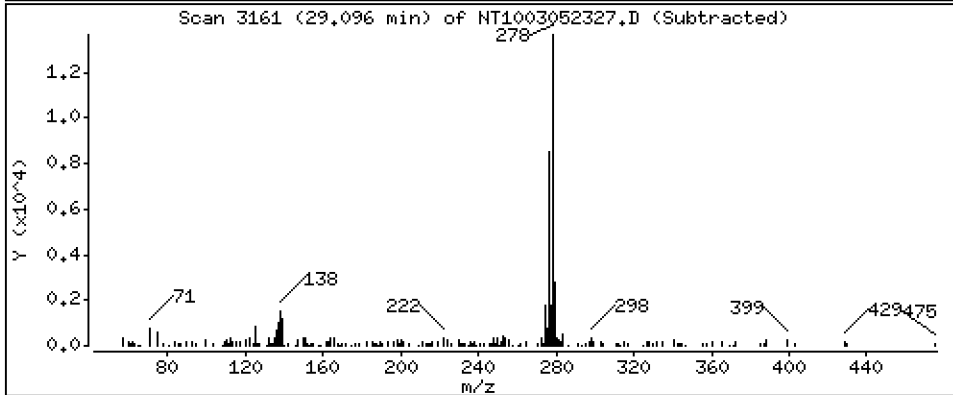
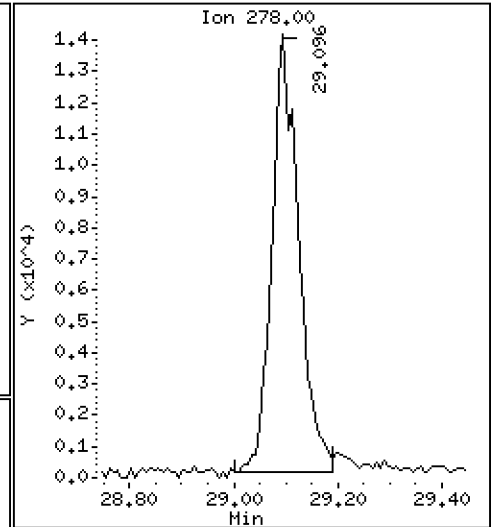
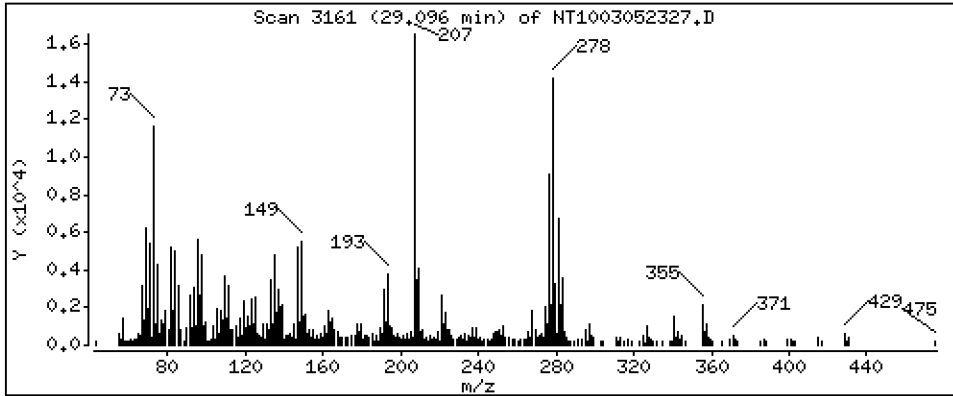
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2057 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

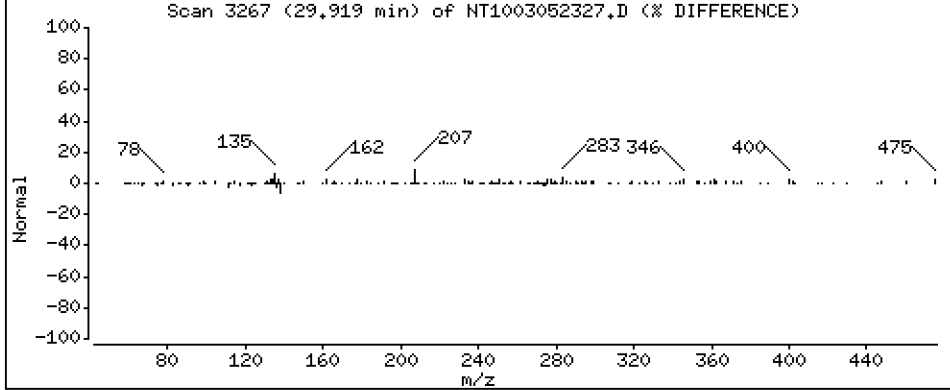
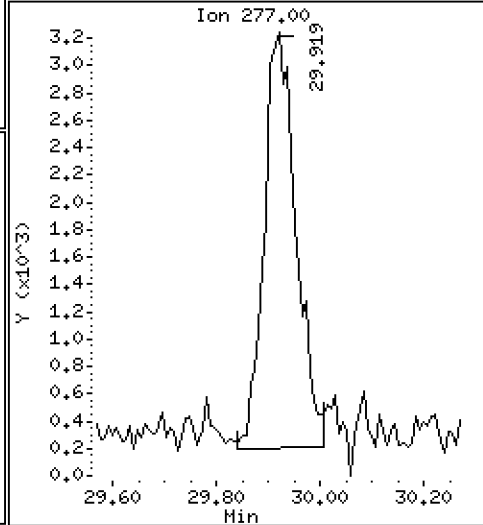
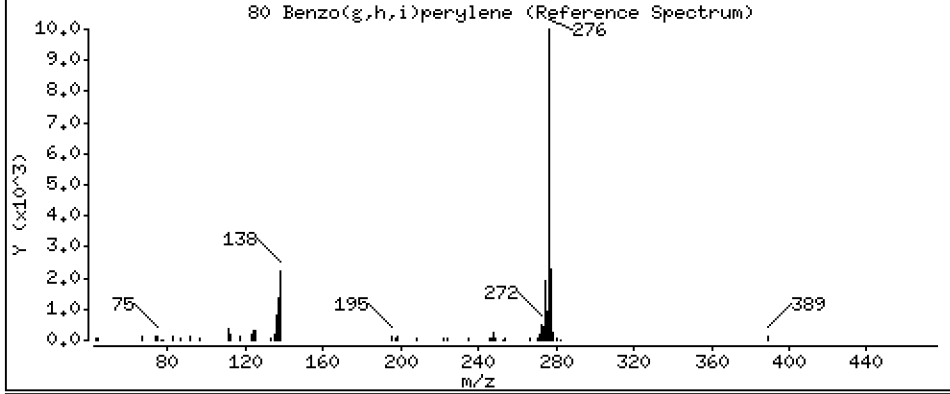
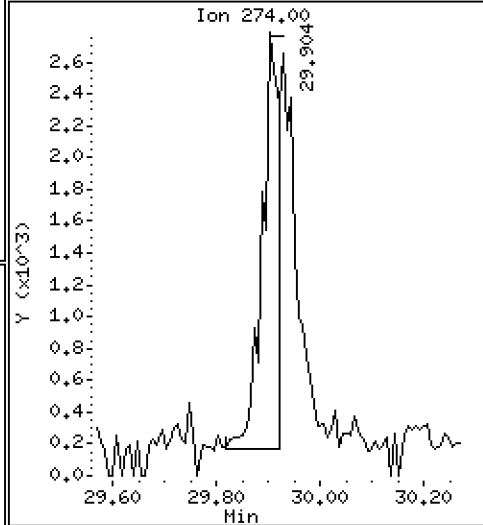
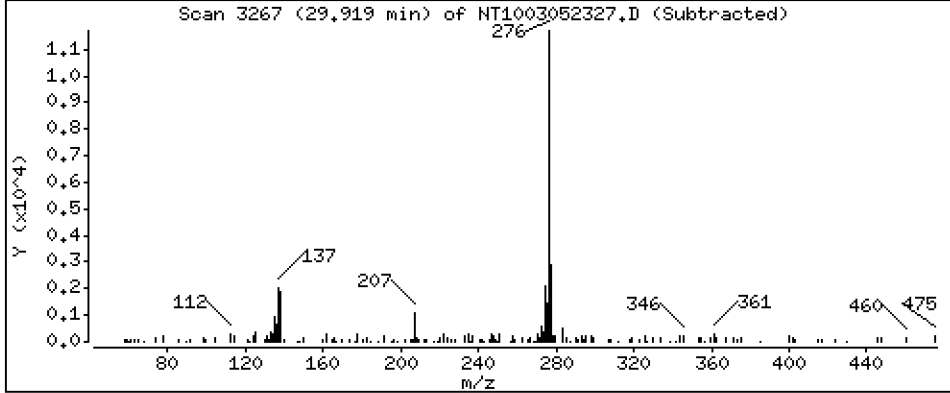
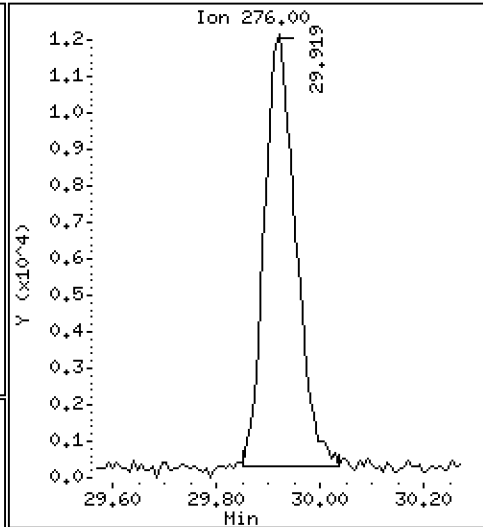
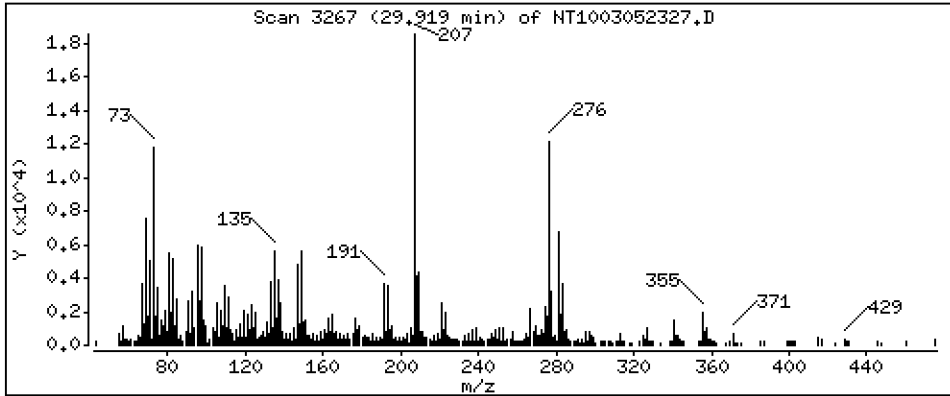
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

80 Benzo(g,h,i)perylene

Concentration: 0,1926 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

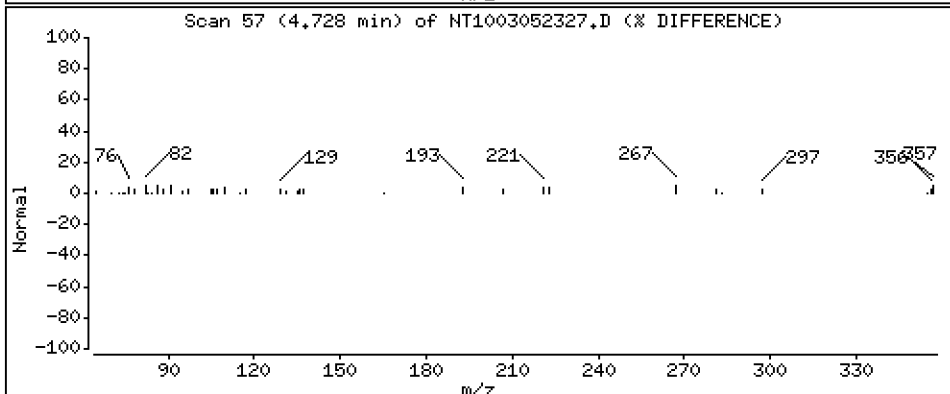
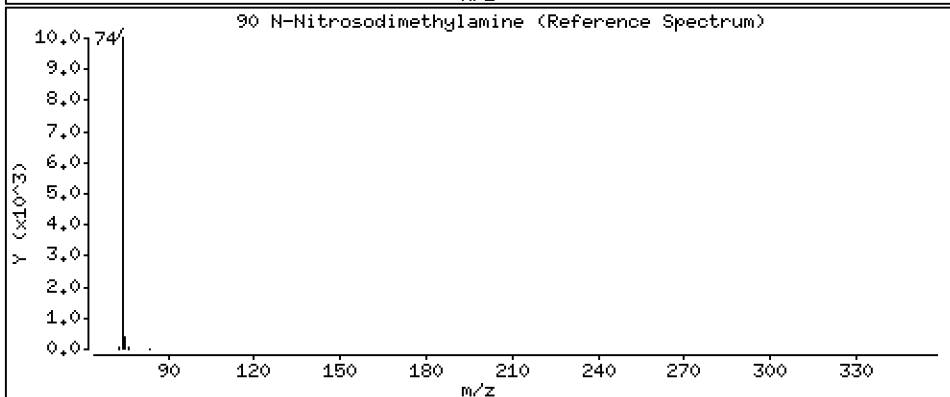
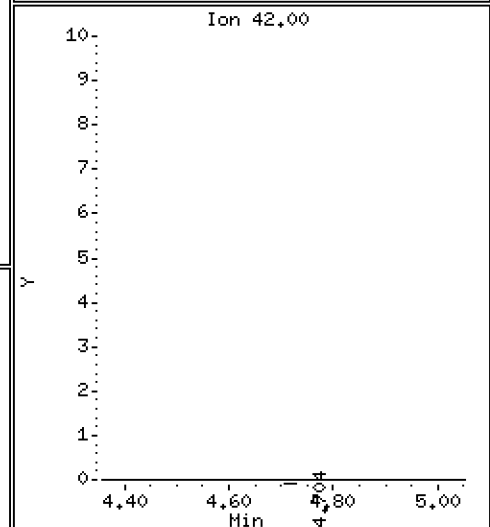
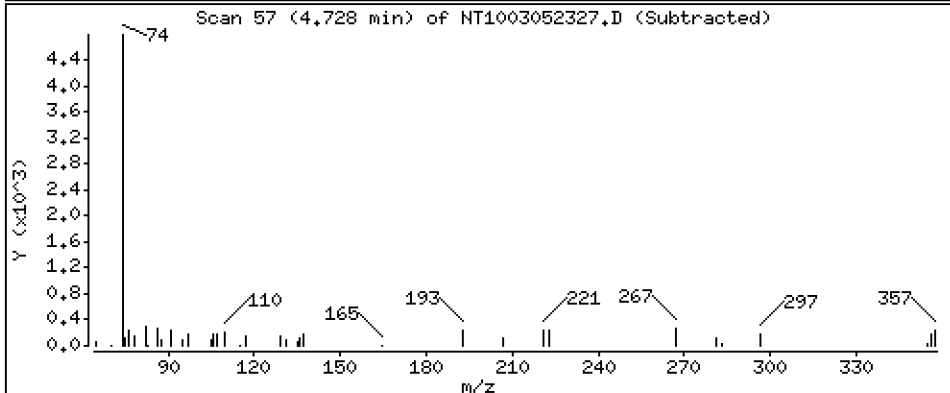
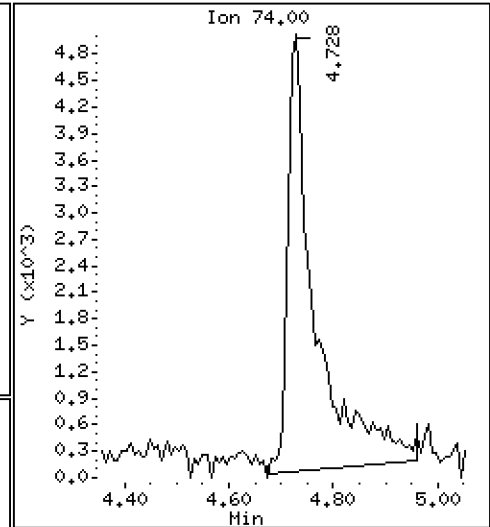
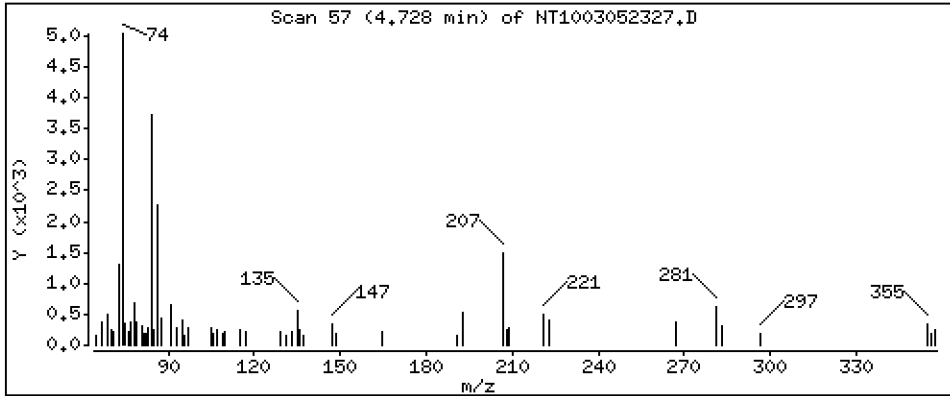
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,3880 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

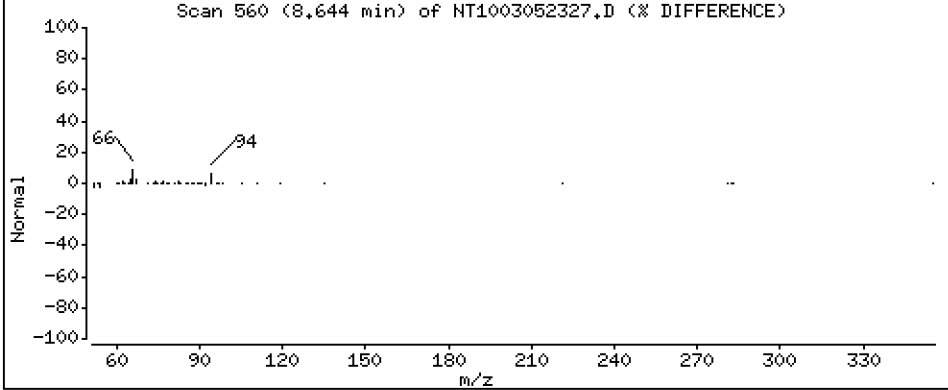
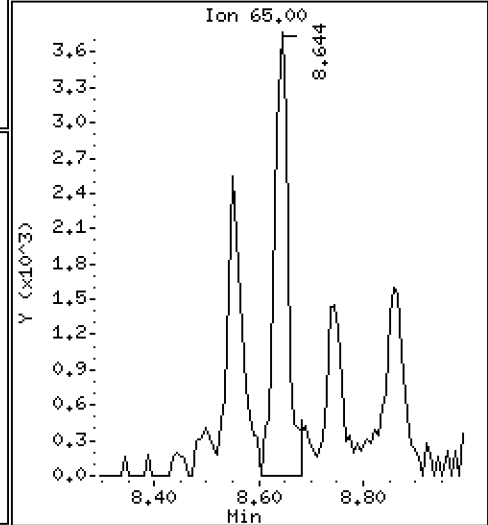
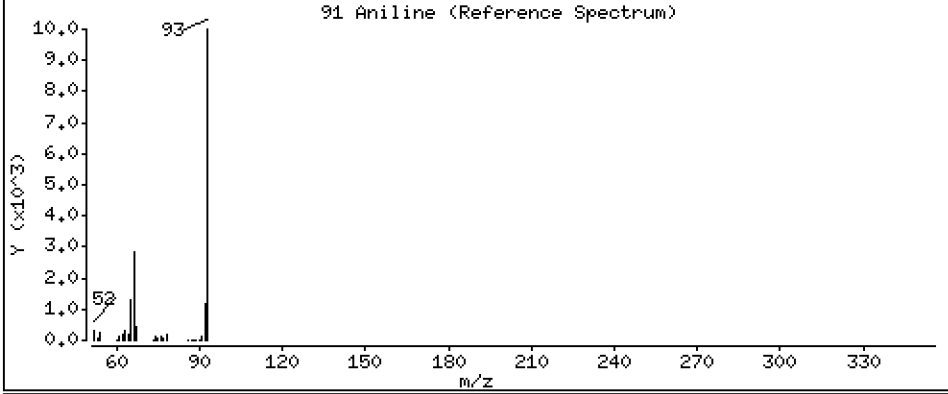
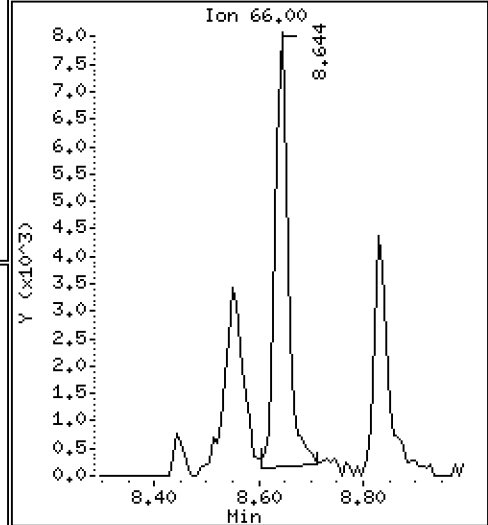
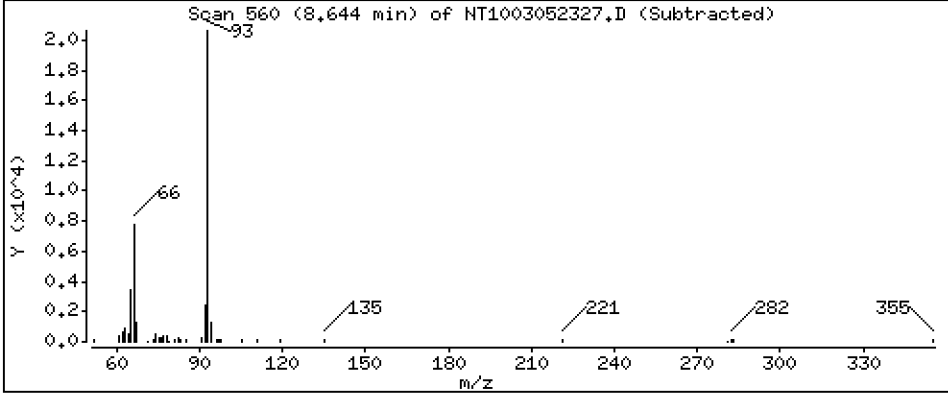
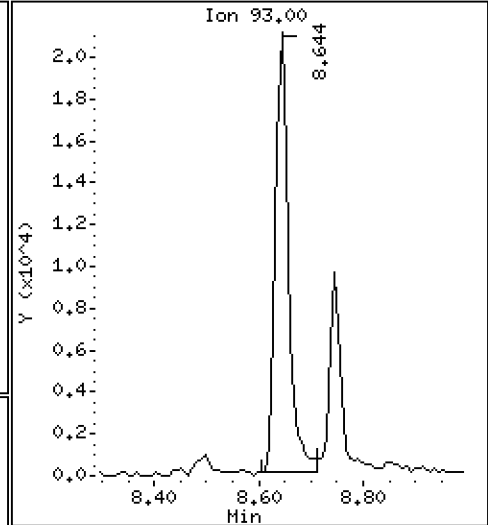
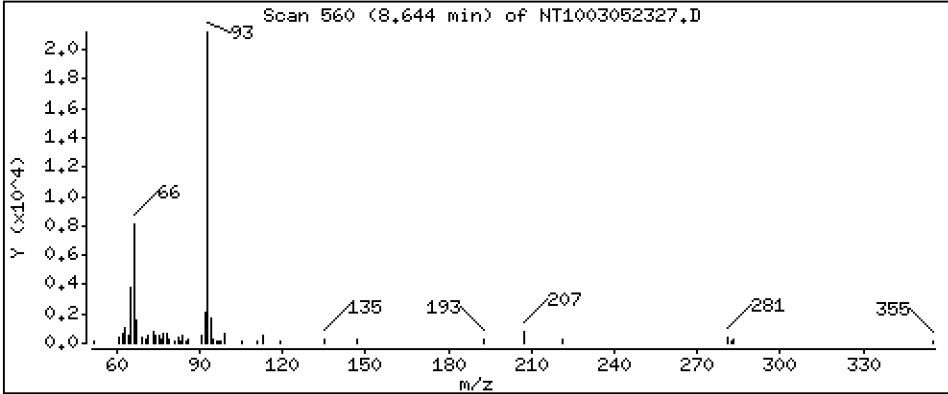
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

91 Aniline

Concentration: 0,3377 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

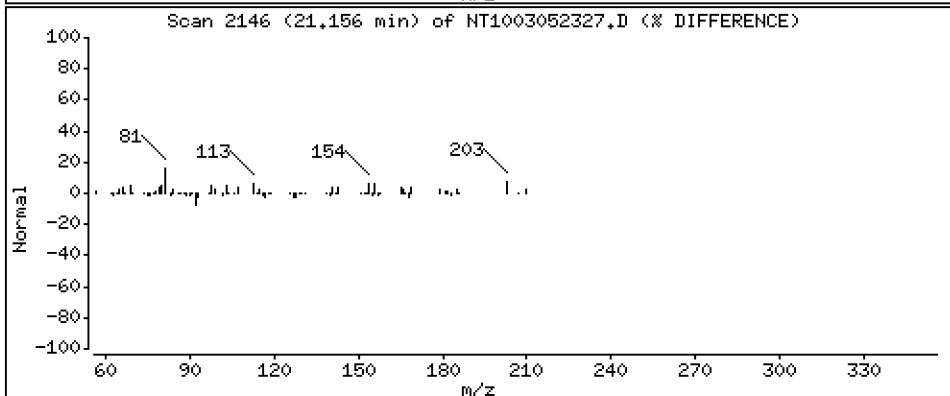
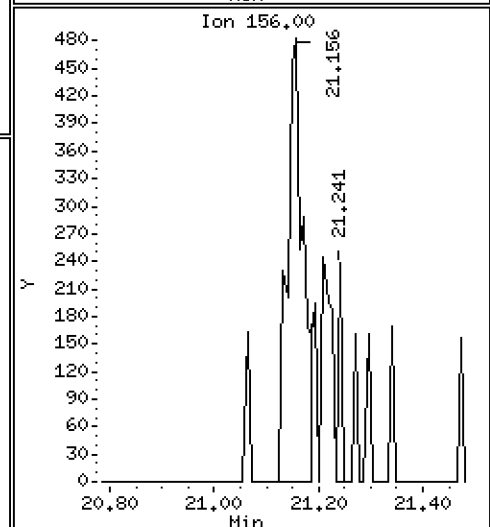
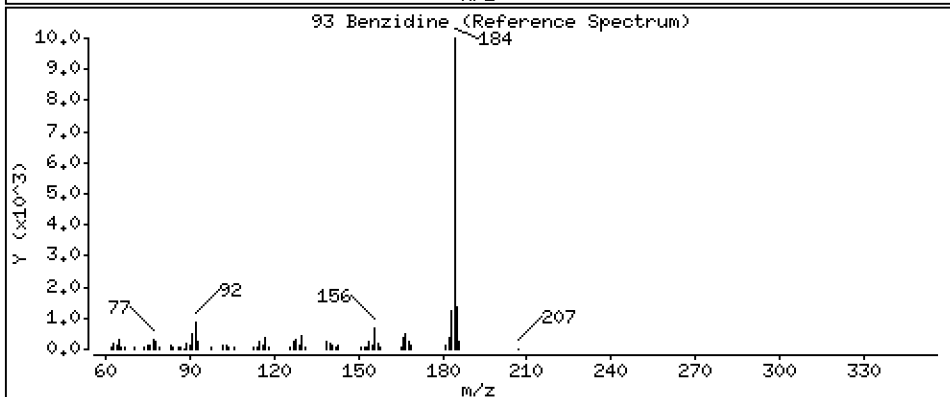
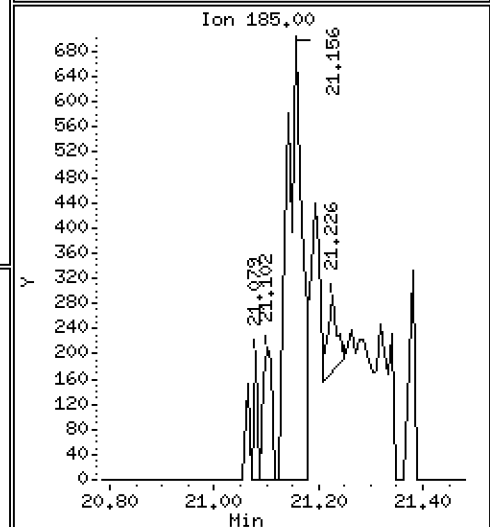
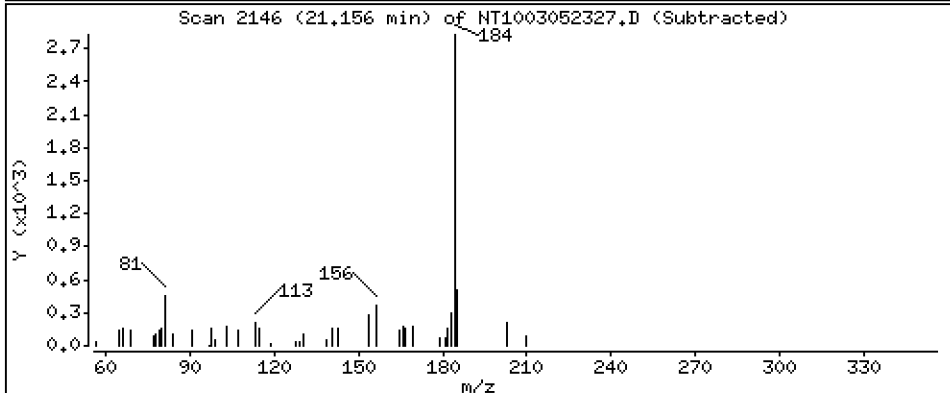
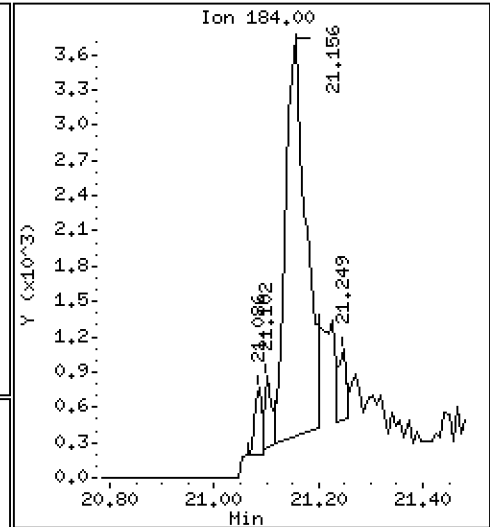
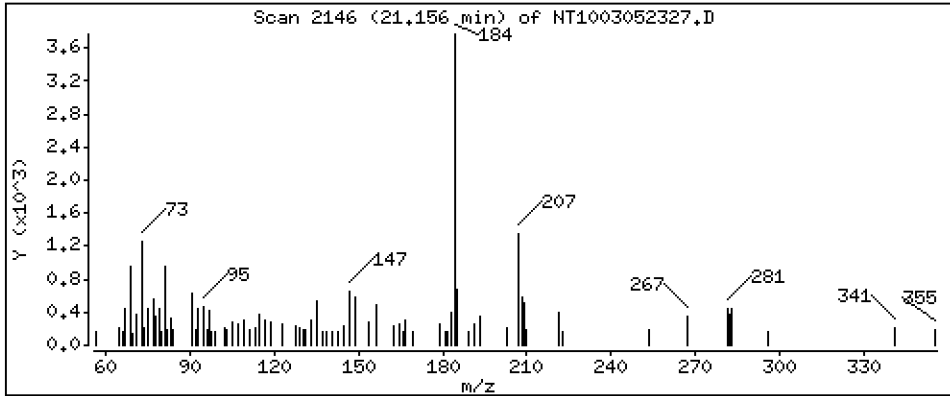
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

93 Benzidine

Concentration: 0,08480 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

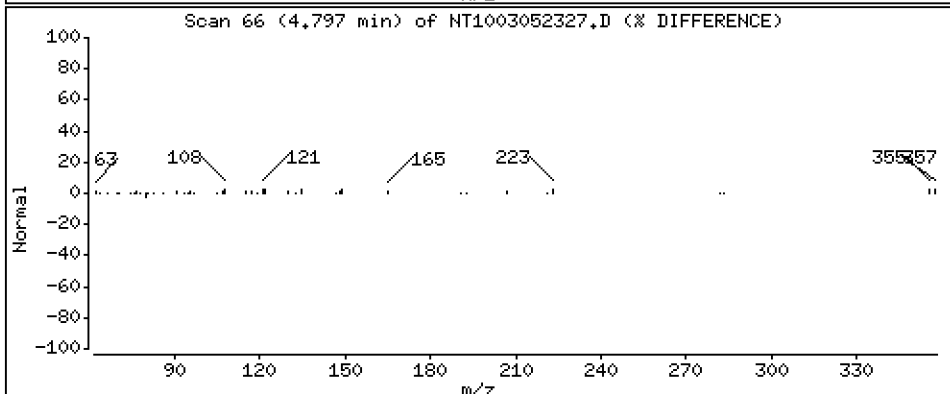
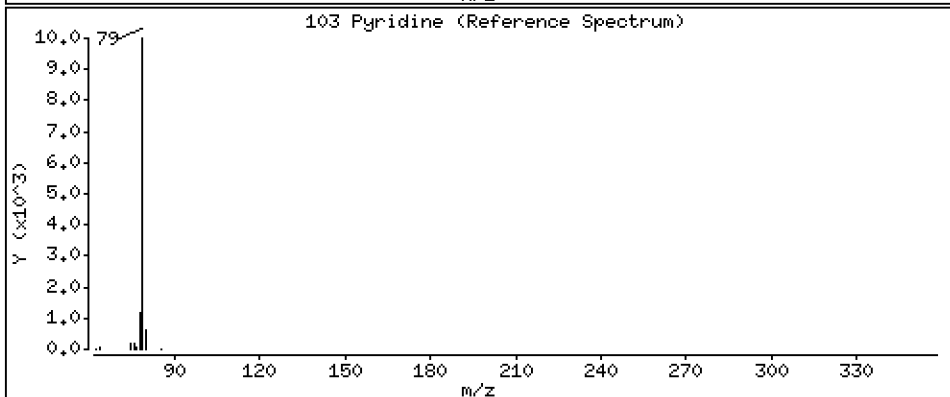
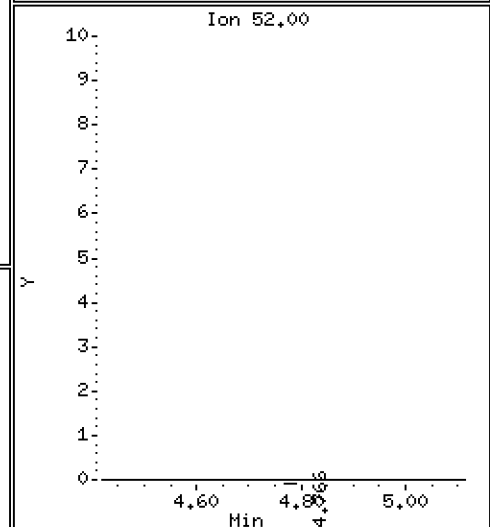
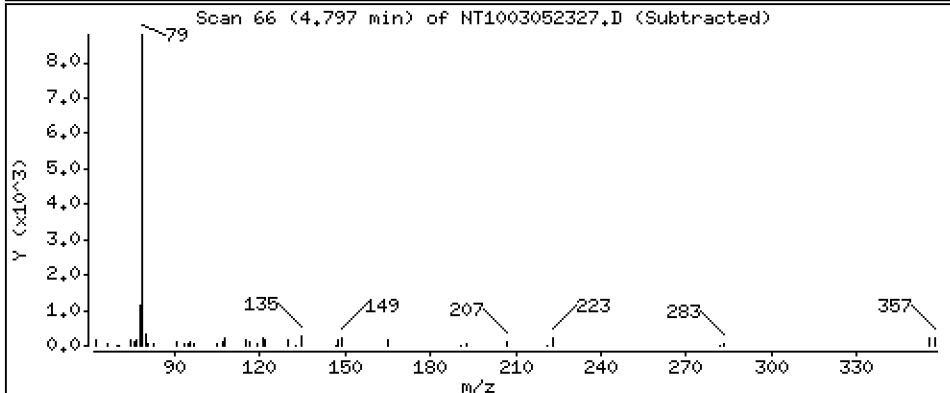
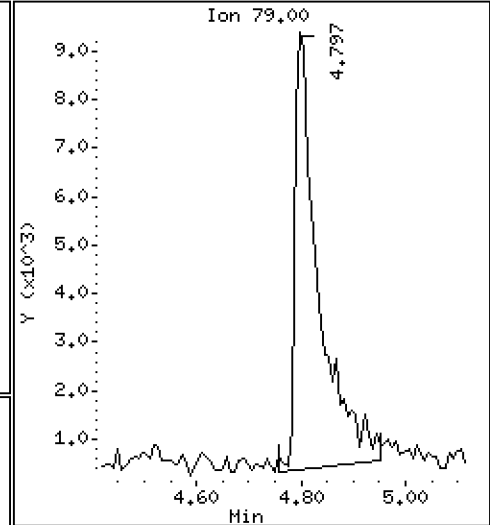
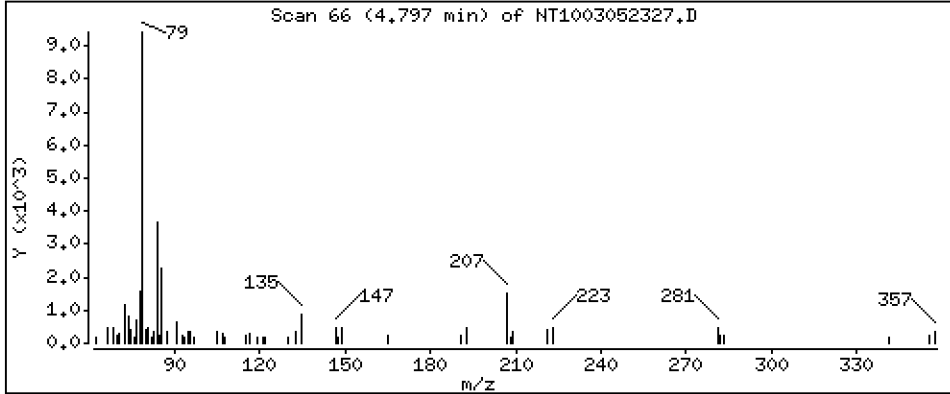
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

103 Pyridine

Concentration: 0,3528 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

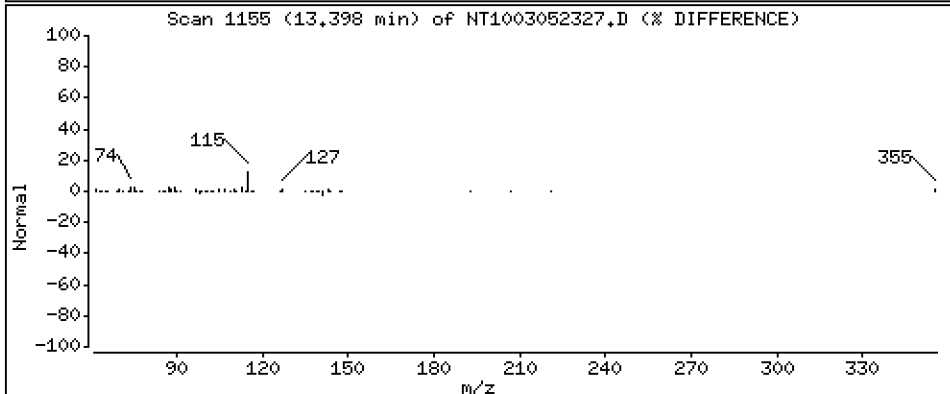
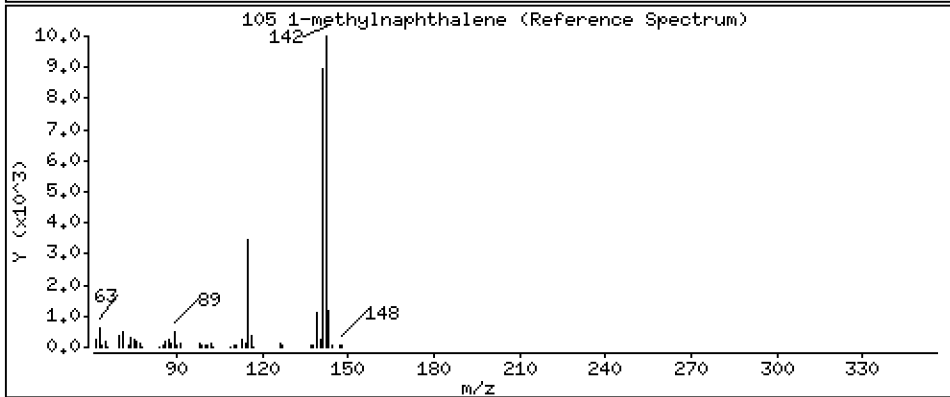
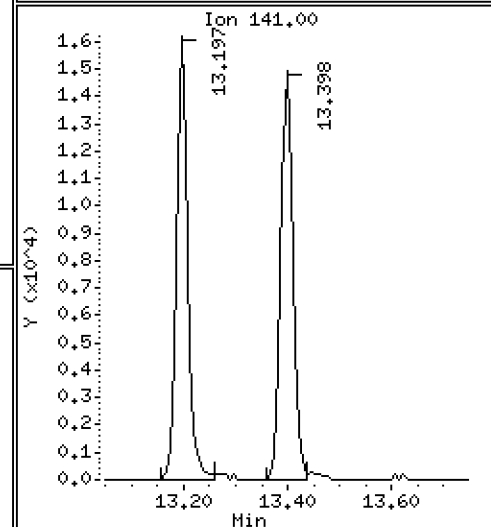
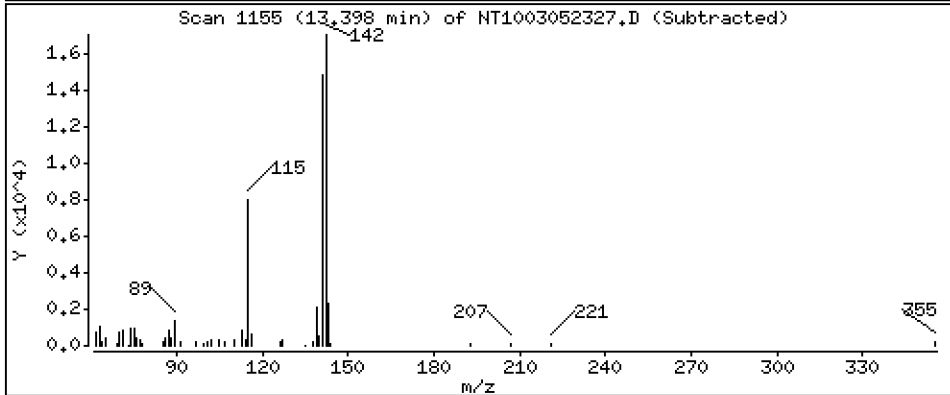
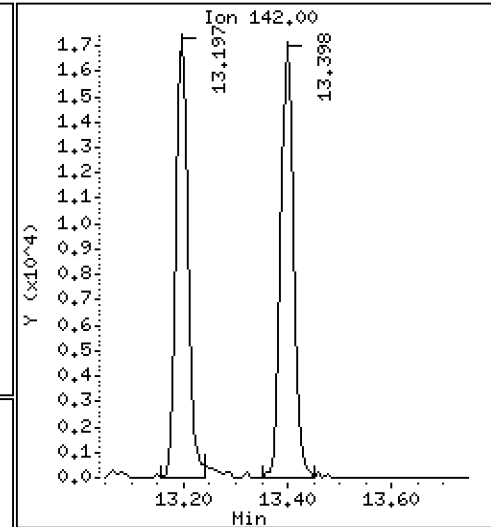
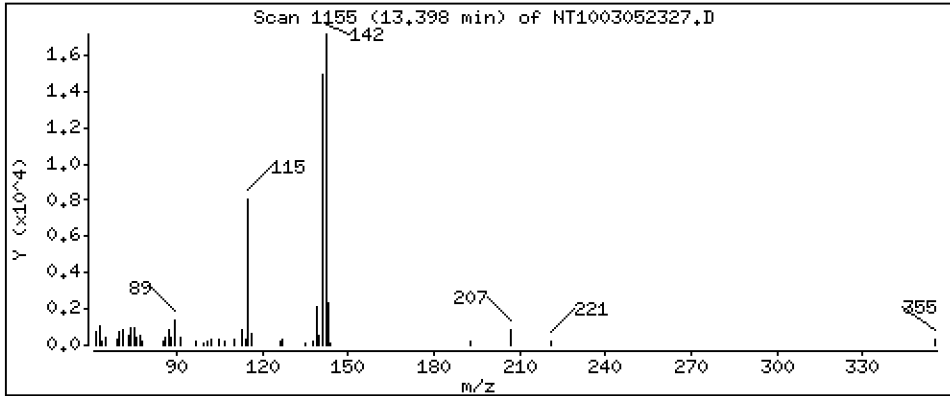
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

105 1-methylnaphthalene

Concentration: 0,2092 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

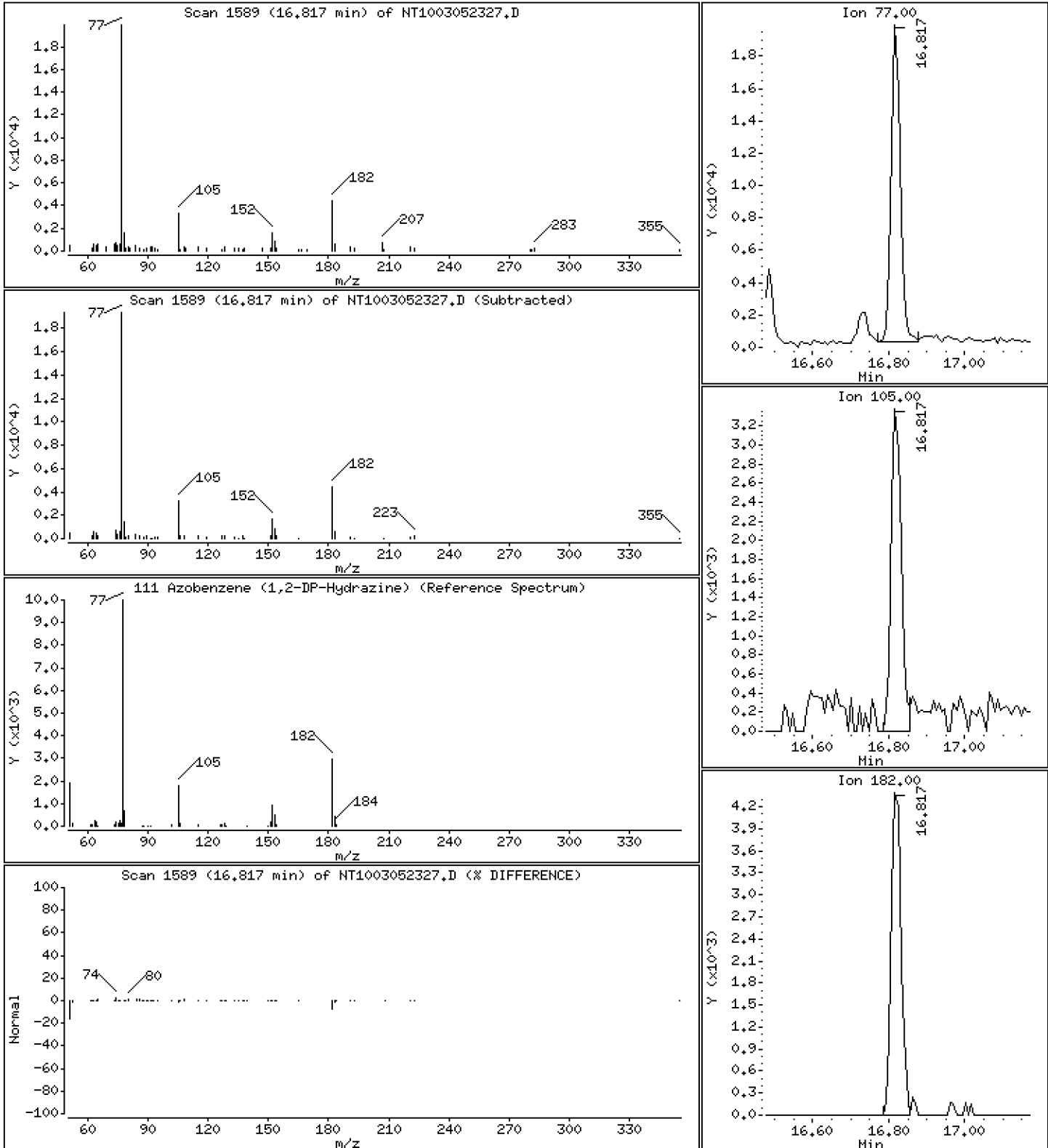
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

111 Azobenzene (1,2-DP-Hydrazine)

Concentration: 0.1419 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

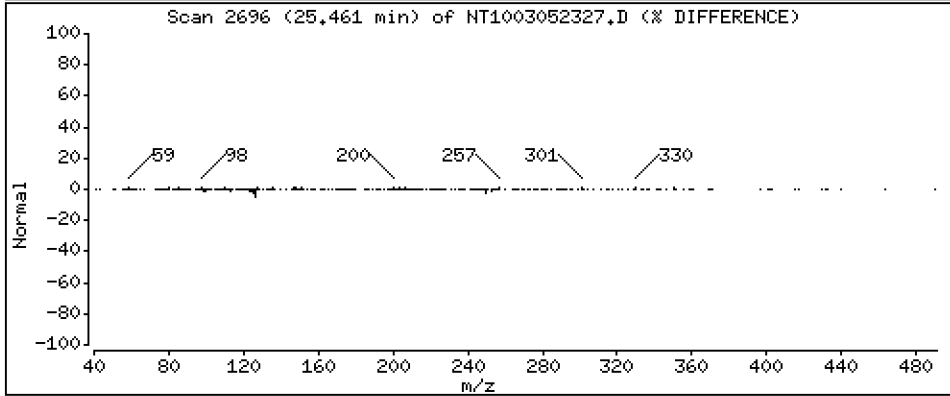
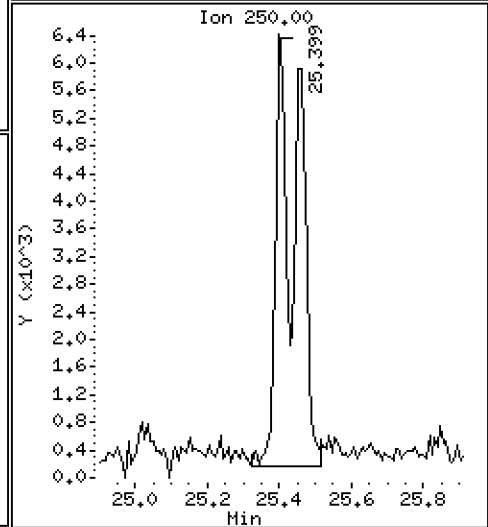
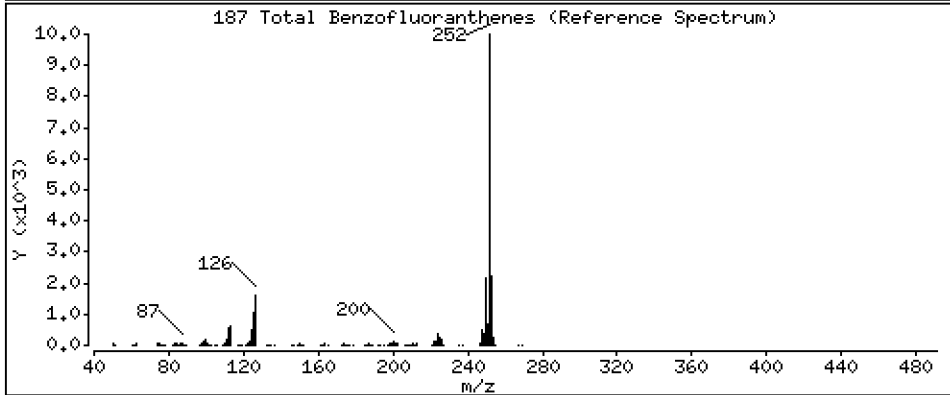
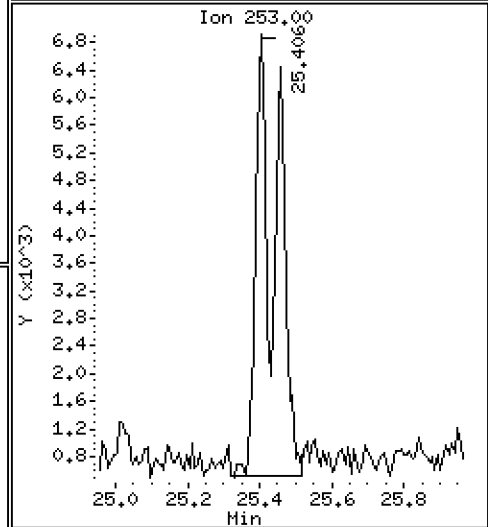
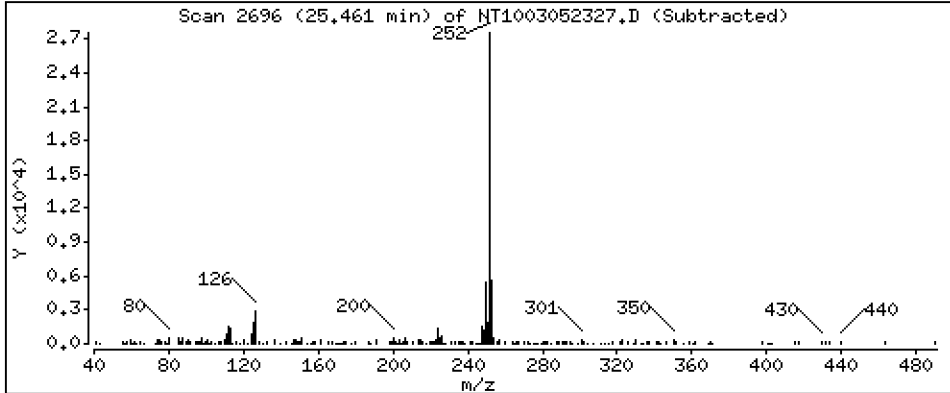
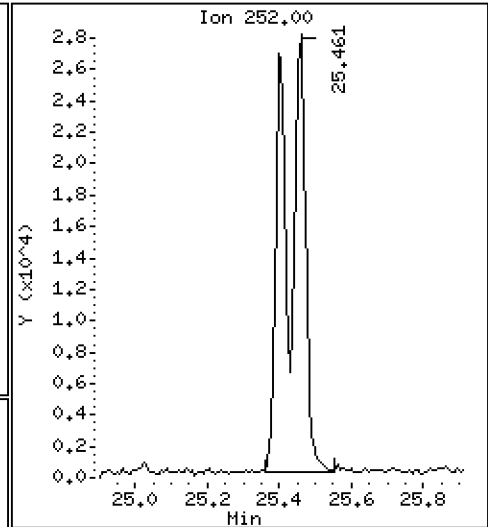
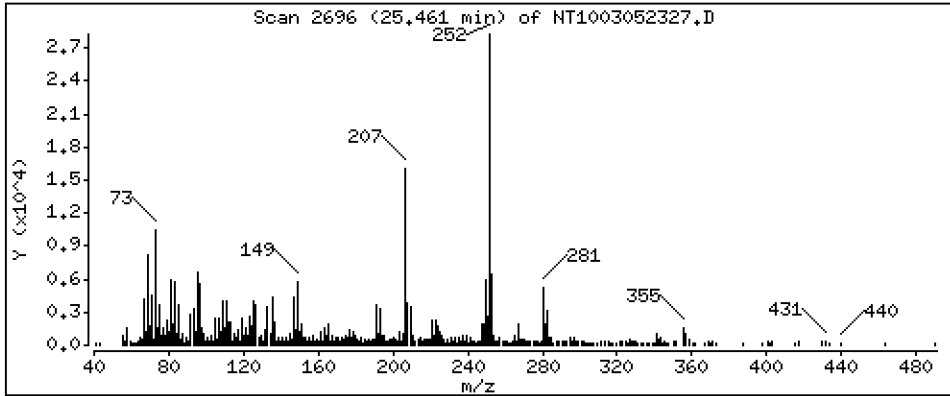
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

187 Total Benzofluoranthenes

Concentration: 0,3823 ug/mL



Date : 06-MAR-2023 05:48

Client ID:

Instrument: nt10.i

Sample Info: SLC0425-LCV1

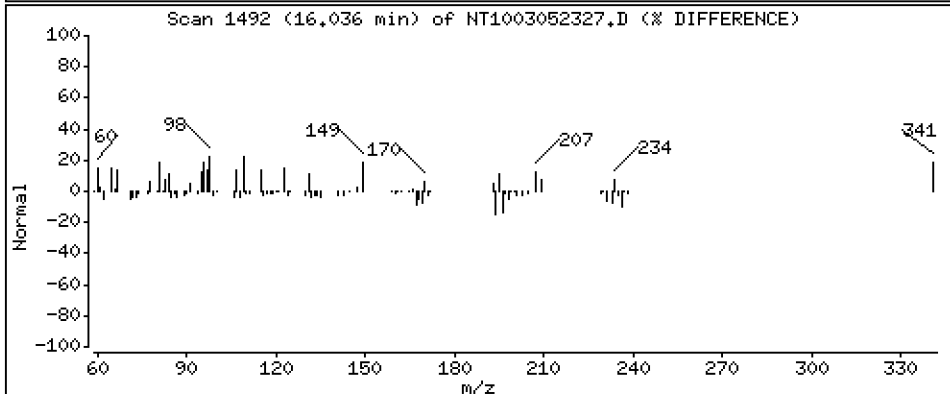
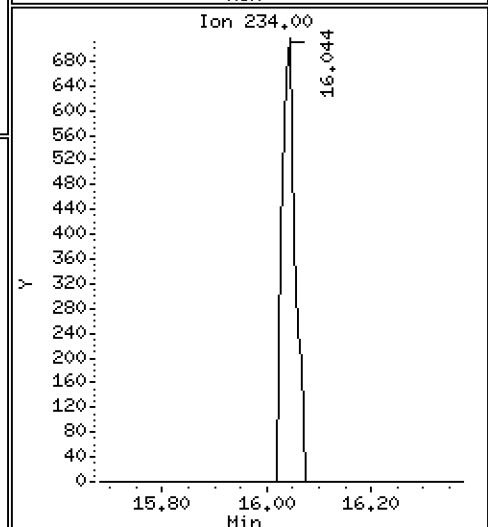
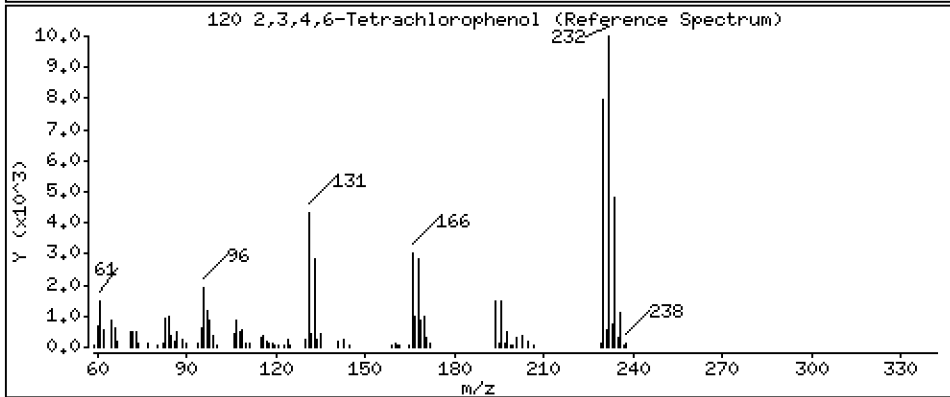
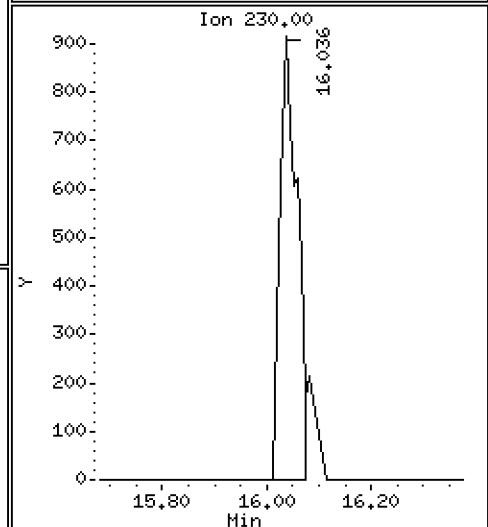
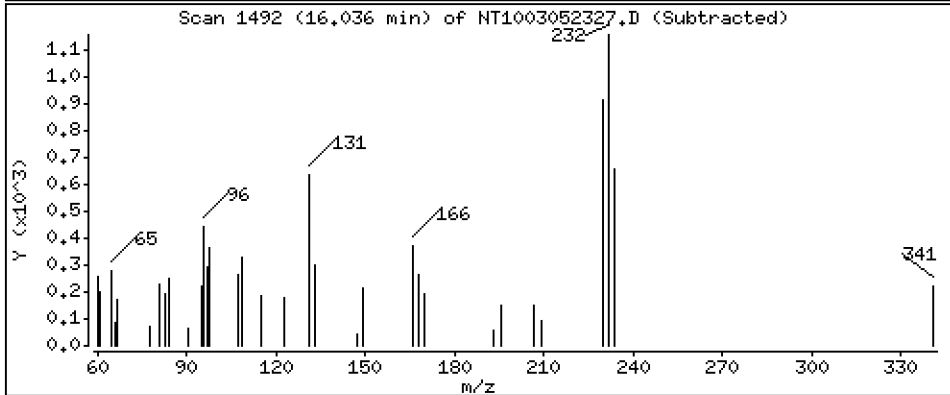
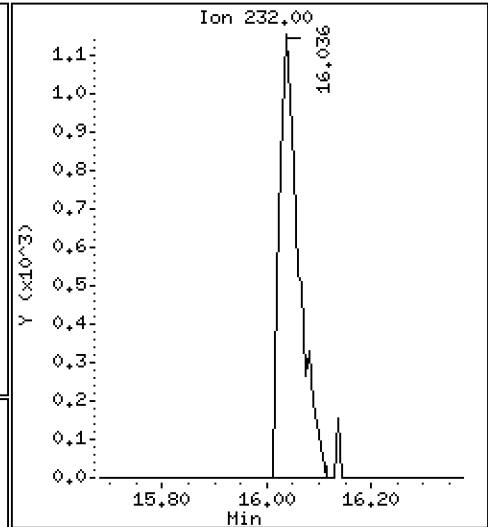
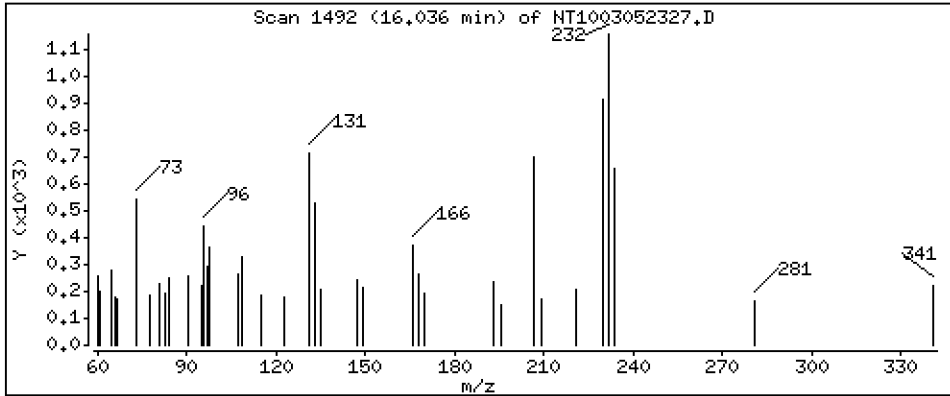
Operator: VTS

Column phase: ZB-5msi

Column diameter: 0,25

120 2,3,4,6-Tetrachlorophenol

Concentration: 0,08443 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230305B.b\NT1003052327.D

Lab Smp Id: SLC0425-LCV1

Inj Date : 06-MAR-2023 05:48

Operator : VTS

Inst ID: nt10.i

Smp Info : SLC0425-LCV1

Misc Info :

Comment : 1ul Injection

Method : \\target\share\chem3\nt10.i\20230305B.b\ABN.m

Meth Date : 27-Mar-2023 16:54 deenayd Quant Type: ISTD

Cal Date : 01-MAR-2023 19:15

Cal File: NT1003012307.D

Als bottle: 4

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: ICAL.sub

Target Version: 4.14

Processing Host: DEENAY-201905

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.897	6.905	(0.745)	21461	0.29592	0.2959
\$ 2 Phenol-d5	99		8.528	8.527	(0.921)	20861	0.24776	0.2478 (M)
3 Phenol	94		8.551	8.550	(0.924)	17189	0.19201	0.1920
\$ 5 2-Chlorophenol-d4	132		8.836	8.836	(0.955)	22273	0.31006	0.3101
4 Bis(2-Chloroethyl)ether	93		8.744	8.751	(0.945)	12646	0.18486	0.1849
6 2-Chlorophenol	128		8.867	8.867	(0.958)	14921	0.19994	0.1999
7 1,3-Dichlorobenzene	146		9.154	9.153	(0.989)	17547	0.21326	0.2133
* 8 1,4-Dichlorobenzene-d4	152		9.255	9.262	(1.000)	230503	4.00000	
9 1,4-Dichlorobenzene	146		9.293	9.293	(1.004)	16412	0.20081	0.2008
\$ 10 1,2-Dichlorobenzene-d4	152		9.549	9.557	(1.000)	10979	0.20456	0.2046 (MH)
12 1,2-Dichlorobenzene	146		9.581	9.580	(1.035)	15633	0.19762	0.1976
11 Benzyl alcohol	108		Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	121		9.759	9.751	(1.055)	5444	0.23870	0.2387 (M)
13 2-Methylphenol	108		9.697	9.697	(1.048)	13350	0.19248	0.1925
17 Hexachloroethane	117		10.225	10.232	(1.105)	4971	0.14818	0.1482
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
15 4-Methylphenol	108		9.992	9.984	(1.080)	12543	0.14421	0.1442
\$ 18 Nitrobenzene-d5	82		10.318	10.325	(0.878)	17035	0.19096	0.1910
19 Nitrobenzene	77		10.357	10.364	(0.881)	16649	0.19895	0.1990
20 Isophorone	82		Compound Not Detected.					
21 2-Nitrophenol	139		10.984	10.984	(0.935)	5843	0.12586	0.1259
22 2,4-Dimethylphenol	107		11.043	11.043	(0.940)	27348	0.34164	0.3416
23 Bis(2-Chloroethoxy)methane	93		11.247	11.247	(0.957)	13553	0.20531	0.2053
24 Benzoic acid	105		Compound Not Detected.					
25 2,4-Dichlorophenol	162		11.468	11.459	(0.976)	19981	0.31673	0.3167
26 1,2,4-Trichlorobenzene	180		11.626	11.633	(0.989)	14265	0.22714	0.2271
* 27 Naphthalene-d8	136		11.750	11.757	(1.000)	812678	4.00000	
28 Naphthalene	128		11.796	11.803	(1.004)	42589	0.20418	0.2042
29 4-Chloroaniline	127		11.896	11.896	(1.012)	26622	0.29158	0.2916
30 Hexachlorobutadiene	225		12.020	12.020	(1.023)	8836	0.19322	0.1932
31 4-Chloro-3-methylphenol	107		12.871	12.855	(1.095)	20136	0.30338	0.3034
32 2-Methylnaphthalene	142		13.196	13.196	(1.123)	29791	0.20217	0.2022
33 Hexachlorocyclopentadiene	237		Compound Not Detected.					

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
34 2,4,6-Trichlorophenol	196		13.769	13.769	(0.897)	11579	0.28868	0.2887	
35 2,4,5-Trichlorophenol	196		13.877	13.846	(0.904)	12068	0.28187	0.2819	
§ 36 2-Fluorobiphenyl	172		13.939	13.939	(0.908)	32401	0.21419	0.2142	
37 2-Chloronaphthalene	162		14.202	14.202	(0.925)	25645	0.21595	0.2159	
38 2-Nitroaniline	65		14.419	14.411	(0.939)	9631	0.29654	0.2965	
39 Dimethylphthalate	163		14.775	14.775	(0.963)	26295	0.19198	0.1920	
40 Acenaphthylene	152		15.061	15.061	(0.981)	44761	0.21863	0.2186	
41 2,6-Dinitrotoluene	165		14.907	14.914	(0.971)	10266	0.34141	0.3414	
* 42 Acenaphthene-d10	164		15.348	15.347	(1.000)	424118	4.00000		
43 3-Nitroaniline	138		Compound Not Detected.						
44 Acenaphthene	153		15.417	15.417	(1.005)	23877	0.19338	0.1934	
45 2,4-Dinitrophenol	184		Compound Not Detected.						
46 Dibenzofuran	168		15.780	15.780	(1.028)	38301	0.20901	0.2090	
47 4-Nitrophenol	109		Compound Not Detected.						
48 2,4-Dinitrotoluene	165		15.757	15.749	(1.027)	11537	0.26469	0.2647	
50 Diethylphthalate	149		16.237	16.244	(1.058)	26018	0.17931	0.1793	
49 Fluorene	166		16.492	16.492	(1.075)	29337	0.19241	0.1924	
51 4-Chlorophenyl-phenylether	204		16.484	16.492	(1.074)	13660	0.20571	0.2057	
52 4-Nitroaniline	138		16.585	16.538	(1.081)	2660	0.07164	0.07164	
53 4,6-Dinitro-2-methylphenol	198		16.600	16.592	(0.900)	795	0.04366	0.04366	
54 N-Nitrosodiphenylamine	169		16.731	16.731	(0.907)	24662	0.21318	0.2132	
§ 55 2,4,6-Tribromophenol	330		17.009	16.993	(1.108)	2605	0.10007	0.1001	
56 4-Bromophenyl-phenylether	248		17.511	17.511	(0.949)	10802	0.23044	0.2304	
57 Hexachlorobenzene	284		17.620	17.627	(0.955)	13692	0.25939	0.2594	
58 Pentachlorophenol	266		Compound Not Detected.						
* 59 Phenanthrene-d10	188		18.448	18.455	(1.000)	781884	4.00000		
60 Phenanthrene	178		18.502	18.502	(1.003)	40971	0.20475	0.2048	
61 Anthracene	178		18.610	18.610	(1.009)	38684	0.19937	0.1994	
62 Carbazole	167		18.951	18.943	(1.027)	32283	0.18162	0.1816	
63 Di-n-butylphthalate	149		19.631	19.631	(1.064)	41013	0.17002	0.1700	
64 Fluoranthene	202		20.877	20.877	(0.889)	45188	0.18068	0.1807	
65 Pyrene	202		21.310	21.310	(0.907)	46440	0.18236	0.1824	
§ 66 Terphenyl-d14	244		21.581	21.581	(0.919)	41303	0.20045	0.2004	
67 Butylbenzylphthalate	149		22.472	22.464	(0.956)	20562	0.14995	0.1500	
68 Benzo(a)anthracene	228		23.471	23.478	(0.999)	52358	0.20425	0.2043	
* 69 Chrysene-d12	240		23.494	23.494	(1.000)	727000	4.00000		
70 3,3'-Dichlorobenzidine	252		23.424	23.416	(0.997)	44994	0.39404	0.3940	
71 Chrysene	228		23.540	23.540	(1.002)	45867	0.22016	0.2202	
72 bis(2-Ethylhexyl)phthalate	149		23.463	23.463	(0.956)	33017	0.18851	0.1885	
* 134 Di-n-octylphthalate-d4	153		24.554	24.554	(1.000)	1249015	4.00000		
73 Di-n-octylphthalate	149		24.562	24.562	(1.000)	64259	0.23201	0.2320	
74 Benzo(b)fluoranthene	252		25.398	25.406	(0.968)	54521	0.17738	0.1774	
75 Benzo(k)fluoranthene	252		25.460	25.460	(0.971)	60523	0.20448	0.2045	
76 Benzo(a)pyrene	252		26.103	26.103	(0.995)	52727	0.19189	0.1919	
* 77 Perylene-d12	264		26.227	26.227	(1.000)	901192	4.00000		
78 Indeno(1,2,3-cd)pyrene	276		29.065	29.057	(1.108)	63674	0.19814	0.1981	
79 Dibenzo(a,h)anthracene	278		29.096	29.095	(1.109)	50136	0.20572	0.2057	
80 Benzo(g,h,i)perylene	276		29.919	29.919	(1.141)	49311	0.19259	0.1926	
90 N-Nitrosodimethylamine	74		4.727	4.704	(0.511)	18166	0.38802	0.3880 (M)	
91 Aniline	93		8.643	8.643	(0.934)	35052	0.33770	0.3377	
93 Benzidine	184		21.156	21.132	(0.900)	9415	0.08480	0.08480	
103 Pyridine	79		4.797	4.766	(0.518)	29293	0.35280	0.3528 (M)	
105 1-methylnaphthalene	142		13.397	13.397	(1.140)	27901	0.20920	0.2092	
111 Azobenzene (1,2-DP-Hydrazine)	77		16.816	16.824	(1.096)	30745	0.14189	0.1419	

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
=====	=====		=====	=====	=====	=====	=====	=====	
187 Total Benzofluoranthenes	252		25.460	25.406	(0.971)	112879	0.38226	0.3823	
120 2,3,4,6-Tetrachlorophenol	232		16.036	16.028	(1.045)	3352	0.08443	0.08443	

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 06-MAR-2023
 Lab File ID: NT1003052327.D Calibration Time: 04:32
 Lab Smp Id: SLC0425-LCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: VTS
 Method File: \\target\share\chem3\nt10.i\20230305B.b\ABN.m
 Misc Info:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	213820	106910	427640	230503	7.80
27 Naphthalene-d8	756023	378012	1512046	812678	7.49
42 Acenaphthene-d10	411497	205749	822994	424118	3.07
59 Phenanthrene-d10	744396	372198	1488792	781884	5.04
69 Chrysene-d12	823005	411503	1646010	727000	-11.67
134 Di-n-octylphthala	1350476	675238	2700952	1249015	-7.51
77 Perylene-d12	894064	447032	1788128	901192	0.80

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.08
27 Naphthalene-d8	11.76	11.26	12.26	11.75	-0.06
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.45	-0.04
69 Chrysene-d12	23.49	22.99	23.99	23.49	0.00
134 Di-n-octylphthala	24.55	24.05	25.05	24.55	0.00
77 Perylene-d12	26.23	25.73	26.73	26.23	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052327.D

Lab ID: SLC0425-LCV1
nt10.i, 20230305B.b\ABN.m, 06-MAR-2023 05:48

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.000	1.032	-0.0318	1,2-Dichlorobenzene-d4

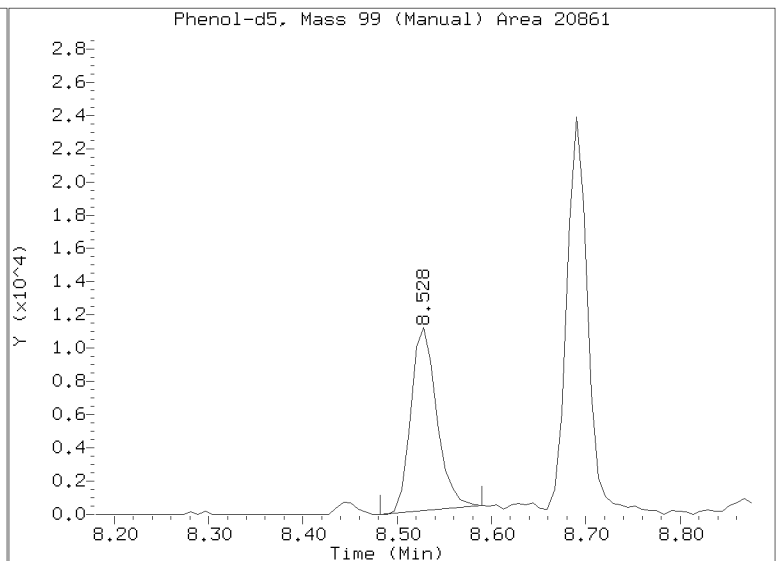
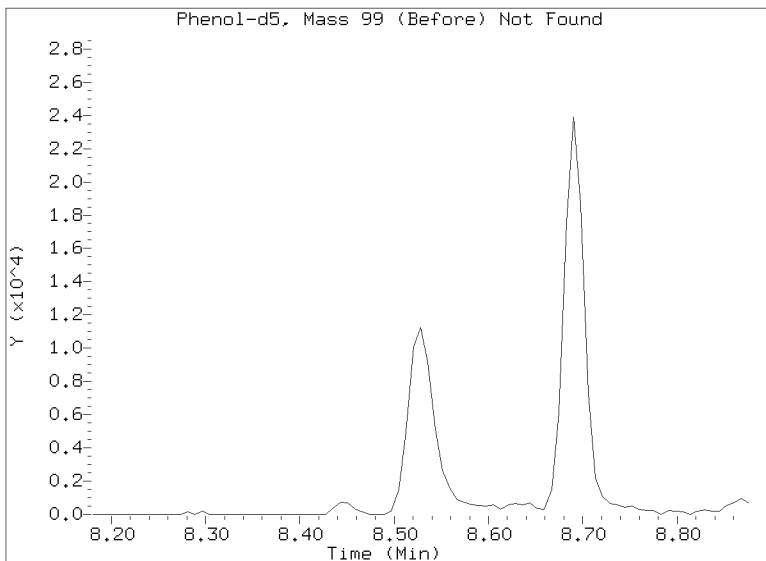
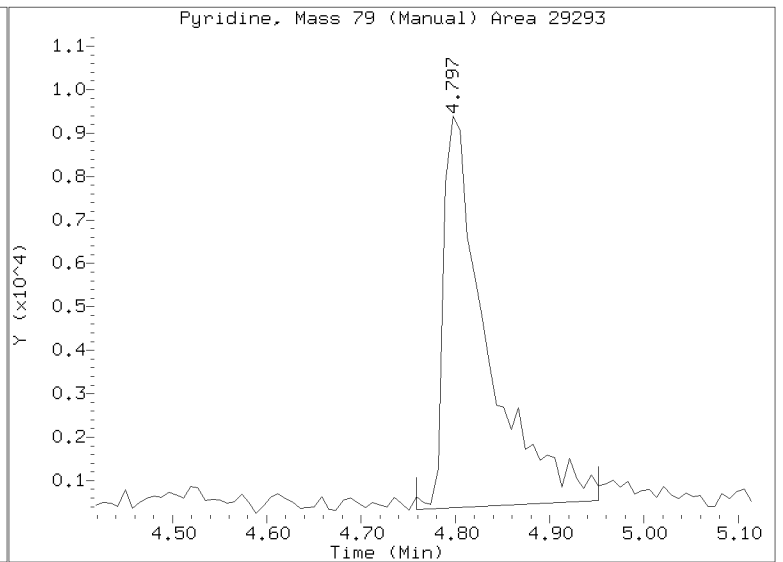
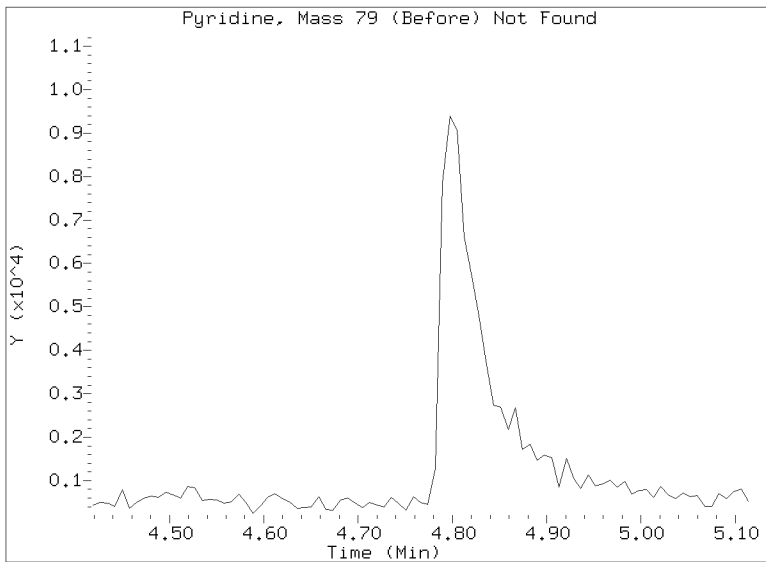
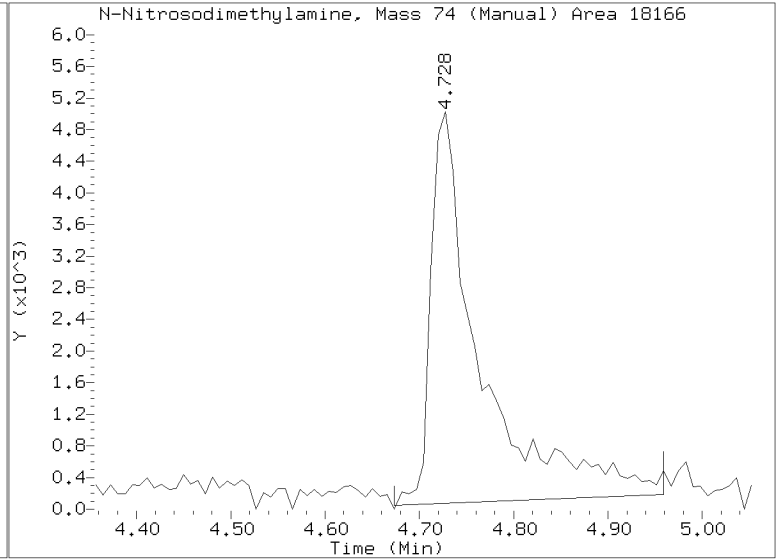
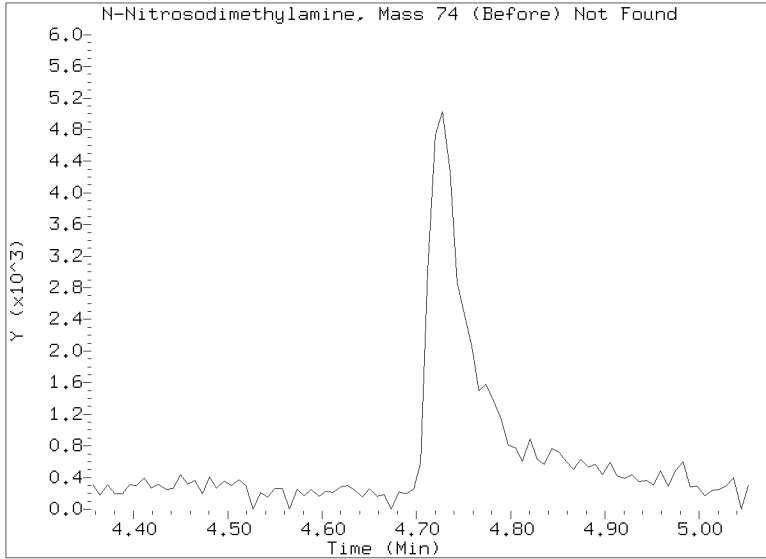
RRT check based on Ccal File: NT1003052325A.D

On Column LOD for nt10.i, 20230305B.b\ABN.m, ICAL.sub = 0.0000

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

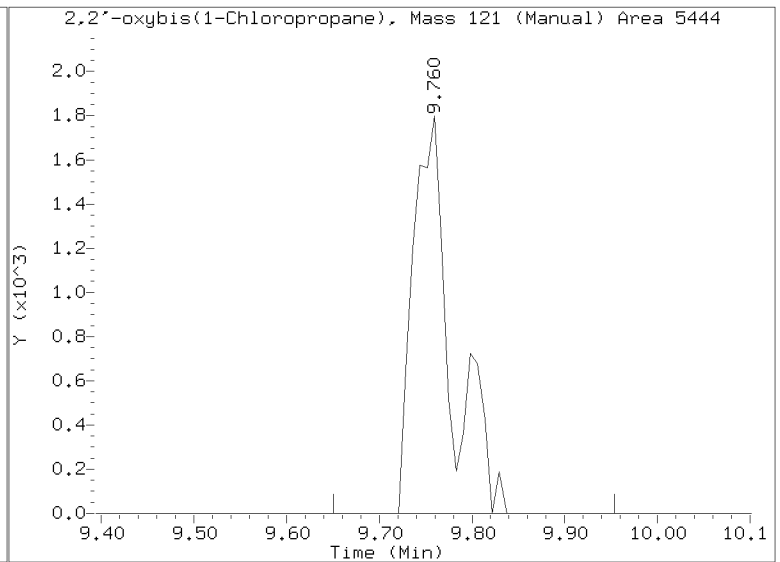
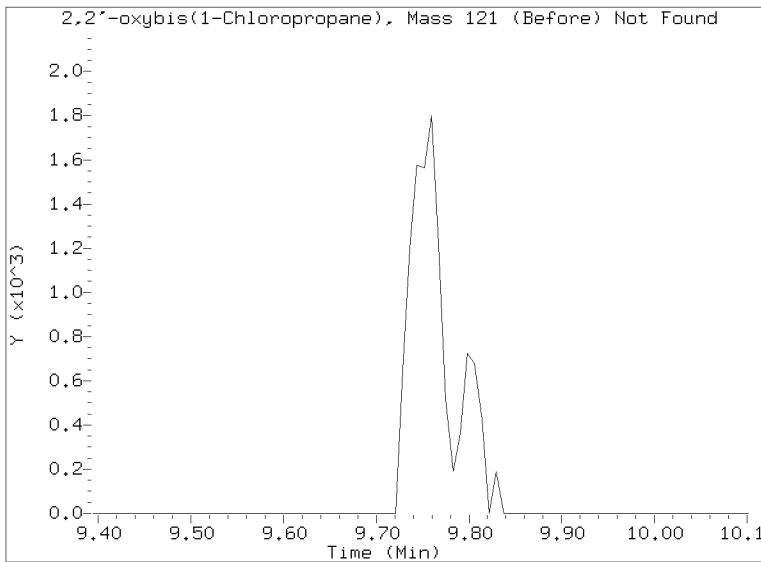
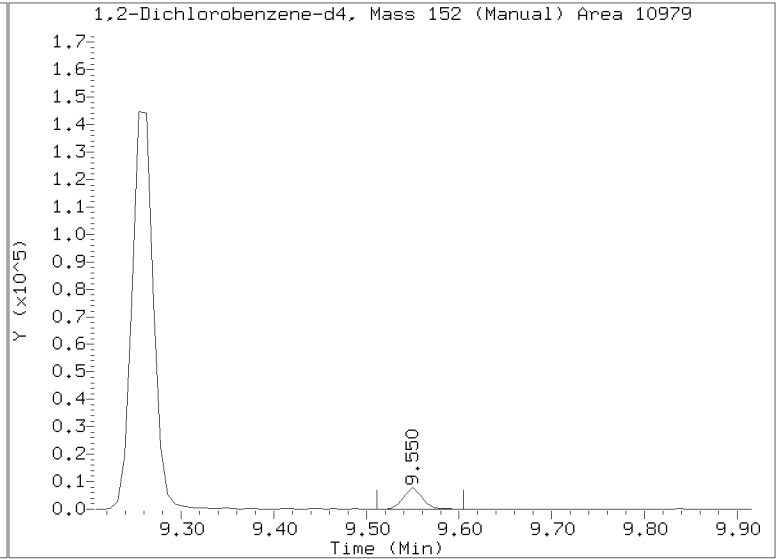
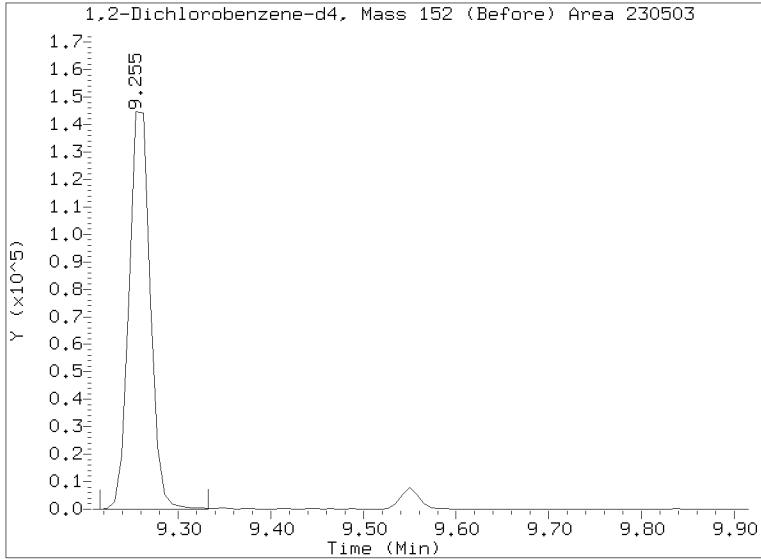
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052327.D
Injection Date: 06-MAR-2023 05:48
Lab ID:SLC0425-LCV1 Client ID:
Report Date: 03/27/2023 16:54



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/NT1003052327.D
Injection Date: 06-MAR-2023 05:48
Lab ID:SLC0425-LCV1 Client ID:
Report Date: 03/27/2023 16:54



APPROVED
By Deenay Dunmore at 5:19 pm, Mar 27, 2023



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0084

Instrument: NT10

Calibration: GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0084-TUN1	NT1003012301.D	NA	03/01/23 15:49
CAL 20	SLC0084-CAL7	NT1003012302.D	NA	03/01/23 16:04
CAL 10	SLC0084-CAL6	NT1003012303.D	NA	03/01/23 16:42
CAL 5	SLC0084-CAL5	NT1003012304.D	NA	03/01/23 17:21
CAL 2.5	SLC0084-CAL4	NT1003012305.D	NA	03/01/23 17:59
CAL 1.0	SLC0084-CAL3	NT1003012306.D	NA	03/01/23 18:37
CAL 0.5	SLC0084-CAL2	NT1003012307.D	NA	03/01/23 19:15
CAL 0.2	SLC0084-CAL1	NT1003012308.D	NA	03/01/23 19:53
SCV 5.0	SLC0084-SCV1	NT1003012311.D	NA	03/01/23 21:46
Initial Cal Blank	SLC0084-ICB1	NT1003012312.D	NA	03/01/23 22:24



ANALYSIS SEQUENCE

SLC0084

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/7/2023 1:01:11PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0084-TUN1	QC		1		K004775			
SLC0084-CAL1	QC		2		K011105	K010831		
SLC0084-CAL2	QC		3		K011106	K010831		
SLC0084-CAL3	QC		4		K011107	K010831		
SLC0084-CAL4	QC		5		K011108	K010831		
SLC0084-CAL5	QC		6		K011109	K010831		
SLC0084-CAL6	QC		7		K011110	K010831		
SLC0084-CAL7	QC		8		K011111	K010831		
SLC0084-SCV1	QC		9		K010066	K010831		
SLC0084-ICB1	QC		10		K005156	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b

Time	Filename	LabID	ClientId	DF																													
1	1549	NT1003012301.D	SLC0084-TUN1	1	|	NO ISTDS FOUND	|																										
2	1604	NT1003012302.D	SLC0084-CAL7	1	|	9.25	|	350339	|	11.73	|	1337321	|	15.32	|	721926	|	18.41	|	1389567	|	23.42	|	1382735	|	26.11	|	1052577	|	24.49	|	2772507	|
3	1642	NT1003012303.D	SLC0084-CAL6	1	|	9.25	|	343229	|	11.72	|	1283371	|	15.32	|	697310	|	18.40	|	1340795	|	23.42	|	1088479	|	26.11	|	973894	|	24.48	|	2152692	|
4	1721	NT1003012304.D	SLC0084-CAL5	1	|	9.25	|	337641	|	11.72	|	1265187	|	15.31	|	692385	|	18.40	|	1376777	|	23.42	|	1019524	|	26.10	|	1027409	|	24.48	|	2027111	|
5	1759	NT1003012305.D	SLC0084-CAL4	1	|	9.25	|	320922	|	11.72	|	1174958	|	15.31	|	642002	|	18.40	|	1218560	|	23.42	|	904733	|	26.10	|	947785	|	24.48	|	1785837	|
6	1837	NT1003012306.D	SLC0084-CAL3	1	|	9.25	|	301377	|	11.72	|	1117281	|	15.31	|	611509	|	18.40	|	1193129	|	23.42	|	938680	|	26.10	|	995239	|	24.49	|	1744984	|
7	1915	NT1003012307.D	SLC0084-CAL2	1	|	9.25	|	309085	|	11.72	|	1141293	|	15.31	|	610034	|	18.40	|	1173527	|	23.42	|	1001661	|	26.10	|	1066145	|	24.49	|	1783007	|
8	1953	NT1003012308.D	SLC0084-CAL1	1	|	9.25	|	295317	|	11.72	|	1075084	|	15.32	|	525641	|	18.40	|	1064230	|	23.42	|	908515	|	26.10	|	969731	|	24.48	|	1659419	|
9	2030	NT1003012309.D	SEQ-SIM2	1	|	9.25	|	285326	|	11.72	|	1006391	|	15.31	|	485266	|	18.40	|	993728	|	23.42	|	888551	|	26.10	|	1001314	|	24.49	|	1646702	|
10	2109	NT1003012310.D	SEQ-SIM1	1	|	9.25	|	350039	|	11.72	|	1219070	|	15.31	|	587402	|	18.40	|	1179509	|	23.42	|	1044485	|	26.10	|	1189301	|	24.48	|	1916581	|
11	2146	NT1003012311.D	SLC0084-SCV1	1	|	9.25	|	283537	|	11.72	|	1089120	|	15.32	|	607772	|	18.40	|	1205858	|	23.42	|	1219436	|	26.10	|	1289108	|	24.49	|	2317357	|
12	2224	NT1003012312.D	SLC0084-ICB1	1	|	9.25	|	480761	|	11.72	|	1681746	|	15.31	|	836849	|	18.40	|	1648281	|	23.42	|	1391477	|	26.10	|	1542419	|	24.48	|	2481481	|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1549	NT1003012301.D	SLC0084-TUN1		1	NO MANUAL INTEGRATION
1604	NT1003012302.D	SLC0084-CAL7		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol,
1642	NT1003012303.D	SLC0084-CAL6		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol,
1721	NT1003012304.D	SLC0084-CAL5		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol,
1759	NT1003012305.D	SLC0084-CAL4		1	2,2'-oxybis(1-Chloropropane), 2,4-Dinitrophenol, 4-Nitrophenol,
1837	NT1003012306.D	SLC0084-CAL3		1	2,2'-oxybis(1-Chloropropane), Benzoic acid, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol,
1915	NT1003012307.D	SLC0084-CAL2		1	2,2'-oxybis(1-Chloropropane), Benzoic acid, 4-Chloro-3-methylphenol, 2,4,5-Trichlorophenol, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, 4-Nitroaniline, N-Nitrosodimethylamine, Benzidine,
1953	NT1003012308.D	SLC0084-CAL1		1	2,2'-oxybis(1-Chloropropane), N-Nitroso-di-n-propylamine, 4-Methylphenol, Isophorone, 2,4-Dichlorophenol, Benzoic acid, 4-Chloroaniline, 4-Chloro-3-methylphenol, 2,4,5-Trichlorophenol, 2-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, Pentachlorophenol, Carbazole, Chrysene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, N-Nitrosodimethylami
2030	NT1003012309.D	SEQ-SIM2		1	NO MANUAL INTEGRATION
2109	NT1003012310.D	SEQ-SIM1		1	NO MANUAL INTEGRATION
2146	NT1003012311.D	SLC0084-SCV1		1	Bis(2-Chloroethyl)ether, 2,4,5-Trichlorophenol, 4-Nitrophenol,
2224	NT1003012312.D	SLC0084-ICB1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 07-Mar-2023 12:54

NT1003012301.D	Data Locked	yev, 07-
NT1003012302.D	Data Locked	yev, 07-
NT1003012303.D	Data Locked	yev, 07-
NT1003012304.D	Data Locked	yev, 07-
NT1003012305.D	Data Locked	yev, 07-
NT1003012306.D	Data Locked	yev, 07-
NT1003012307.D	Data Locked	yev, 07-
NT1003012308.D	Data Locked	yev, 07-
NT1003012309.D	Data Locked	yev, 07-
NT1003012310.D	Data Locked	yev, 07-
NT1003012311.D	Data Locked	yev, 07-
NT1003012312.D	Data Locked	yev, 07-



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0401

Instrument: NT10

Calibration: GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0401-TUN1	NT1003052301.D	NA	03/05/23 13:48
Initial Cal Check	SLC0401-ICV1	NT1003052302.D	NA	03/05/23 14:03
ABN 0.2	SLC0401-LCV1	NT1003052304.D	NA	03/05/23 15:18
Blank	BLA0685-BLK1	NT1003052307.D	Solid	03/05/23 17:12
LCS	BLA0685-BS1	NT1003052308.D	Solid	03/05/23 17:50
LCS Dup	BLA0685-BSD1	NT1003052309.D	Solid	03/05/23 18:28
Reference	BLA0685-SRM1	NT1003052312.D	Solid	03/05/23 20:22
ZZZZZ	23A0313-08	NT1003052313.D	Solid	03/05/23 21:00
Calibration Check	SLC0401-CCV1	NT1003052314.D	NA	03/05/23 21:38



ANALYSIS SEQUENCE

SLC0401

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00019 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0401-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301.D	JGR	
SLC0401-ICV1	Initial Cal Check	QC		2	K011109	K010831	03/05/2023 14:03	NT1003052302.D	VTS	
SLC0401-LCV1	ABN 0.2	QC		3	K011105	K010831	03/05/2023 15:18	NT1003052304.D	VTS	
BLA0685-BLK1	Blank	QC		4		K010831	03/05/2023 17:12	NT1003052307.D	VTS	
BLA0685-BS1	LCS	QC		5		K010831	03/05/2023 17:50	NT1003052308.D	VTS	
BLA0685-BSD1	LCS Dup	QC		6		K010831	03/05/2023 18:28	NT1003052309.D	VTS	
BLA0685-SRM1	Reference	QC		7		K010831	03/05/2023 20:22	NT1003052312.D	VTS	
BLA0685-MS1	Matrix Spike	QC		8		K010831	03/05/2023 19:06	NT1003052310.D	VTS	
BLA0685-MSD1	Matrix Spike Dup	QC		9		K010831	03/05/2023 19:44	NT1003052311.D	VTS	
23A0313-08	LDW23-SC1016A	20ug/kg solid or 0.2ug/L l	A 04	10		K010831	03/05/2023 21:00	NT1003052313.D	VTS	
SLC0401-CCV1	Calibration Check	QC		11	K011109	K010831	03/05/2023 21:38	NT1003052314.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305.b

Time	Filename	LabID	ClientId	DF															
1	1348	NT1003052301.D	SLC0401-TUN1	1	|	NO ISTDS FOUND|													
2	1403	NT1003052302.D	SLC0401-ICV1	1	|	9.24	297263|	11.73	1085336|	15.34	563464|	18.45	1038318|	23.52	1012751|	26.28	1152264|	24.59	1628890|
3	1518	NT1003052304.D	SLC0401-LCV1	1	|	9.24	291047|	11.73	1070295|	15.33	535349|	18.45	962985|	23.52	857365|	26.28	1034621|	24.59	1343499|
4	1712	NT1003052307.D	BLA0685-BLK1	1	|	9.25	270013|	11.73	975565|	15.34	517251|	18.46	919568|	23.52	824155|	26.29	859021|	24.60	1193964|
5	1750	NT1003052308.D	BLA0685-BS1	1	|	9.25	297547|	11.73	1075395|	15.35	556840|	18.46	1006737|	23.53	916837|	26.30	977237|	24.61	1539451|
6	1828	NT1003052309.D	BLA0685-BSD1	1	|	9.25	329316|	11.74	1198408|	15.35	627739|	18.46	1127626|	23.51	1035914|	26.27	1019954|	24.59	1620537|
7	1906	NT1003052310.D	BLA0685-MS1	1	|	9.26	304011|	11.74	1089158|	15.35	569639|	18.46	1067304|	23.52	1060207|	26.28	1160159|	24.59	1794535|
8	1944	NT1003052311.D	BLA0685-MSD1	1	|	9.25	289157|	11.74	1034245|	15.35	551777|	18.46	1017136|	23.52	1007411|	26.29	1089312|	24.60	1705215|
9	2022	NT1003052312.D	BLA0685-SRM1	1	|	9.25	256880|	11.74	917867|	15.35	495256|	18.46	917438|	23.52	883418|	26.28	987411|	24.59	1475913|
10	2100	NT1003052313.D	23A0313-08	1	|	9.25	312712|	11.73	1122631|	15.34	581958|	18.46	1092541|	23.53	985415|	26.31	1124941|	24.61	1778606|
11	2138	NT1003052314.D	SLC0401-CCV1	1	|	9.25	264922|	11.73	947542|	15.34	505666|	18.46	940283|	23.52	987952|	26.29	1073798|	24.59	1625017|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1348	NT1003052301.D	SLC0401-TUN1		1	NO MANUAL INTEGRATION
1403	NT1003052302.D	SLC0401-ICV1		1	2,2'-oxybis(1-Chloropropane),
1440	NT1003052303.D	SEQ-ICVSIM		1	NO MANUAL INTEGRATION
1518	NT1003052304.D	SLC0401-LCV1		1	2,2'-oxybis(1-Chloropropane), Isophorone, Phenol-d5,
1556	NT1003052305.D	SEQ-SIM100		1	NO MANUAL INTEGRATION
1634	NT1003052306.D	SEQ-SIM500		1	NO MANUAL INTEGRATION
1712	NT1003052307.D	BLA0685-BLK1		1	NO MANUAL INTEGRATION
1750	NT1003052308.D	BLA0685-BS1		1	NO MANUAL INTEGRATION
1828	NT1003052309.D	BLA0685-BSD1		1	NO MANUAL INTEGRATION
1906	NT1003052310.D	BLA0685-MS1		1	NO MANUAL INTEGRATION
1944	NT1003052311.D	BLA0685-MSD1		1	NO MANUAL INTEGRATION
2022	NT1003052312.D	BLA0685-SRM1		1	NO MANUAL INTEGRATION
2100	NT1003052313.D	23A0313-08		1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
2138	NT1003052314.D	SLC0401-CCV1		1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 27-Mar-2023 09:31

NT1003052301.D	Data Locked	deenayd, 27-
NT1003052302.D	Data Locked	deenayd, 27-
NT1003052303.D	Data Locked	deenayd, 27-
NT1003052304.D	Data Locked	deenayd, 27-
NT1003052305.D	Data Locked	deenayd, 27-
NT1003052306.D	Data Locked	deenayd, 27-
NT1003052307.D	Data Locked	deenayd, 27-
NT1003052308.D	Data Locked	deenayd, 27-
NT1003052309.D	Data Locked	deenayd, 27-
NT1003052310.D	Data Locked	deenayd, 27-
NT1003052311.D	Data Locked	deenayd, 27-
NT1003052312.D	Data Locked	deenayd, 27-
NT1003052313.D	Data Locked	deenayd, 27-
NT1003052314.D	Data Locked	deenayd, 27-



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0415

Instrument: NT10

Calibration: GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0415-TUN1	NT1003052301A.D	NA	03/05/23 13:48
Initial Cal Check	SLC0415-ICV1	NT1003052314A.D	NA	03/05/23 21:38
ABN 1.0	SLC0415-LCV2	NT1003052315.D	NA	03/05/23 22:16
ABN 0.2	SLC0415-LCV1	NT1003052316.D	NA	03/05/23 22:54
ZZZZZ	23A0313-09	NT1003052319.D	Solid	03/06/23 00:47
ZZZZZ	23A0313-10	NT1003052320.D	Solid	03/06/23 01:25
ZZZZZ	23A0313-11	NT1003052321.D	Solid	03/06/23 02:02
ZZZZZ	23A0313-13	NT1003052322.D	Solid	03/06/23 02:40
LDW23-SC1028	23A0326-01	NT1003052323.D	Solid	03/06/23 03:17
LDW23-SC1032	23A0326-02	NT1003052324.D	Solid	03/06/23 03:55
Calibration Check	SLC0415-CCV1	NT1003052325.D	NA	03/06/23 04:32



ANALYSIS SEQUENCE

SLC0415

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00019 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0415-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301A.D	JGR	
SLC0415-ICV1	Initial Cal Check	QC		2	K011109	K010831	03/05/2023 21:38	NT1003052314A.D	VTS	
SLC0415-LCV1	ABN 0.2	QC		3	K011105	K010831	03/05/2023 22:54	NT1003052316.D	VTS	
23A0313-09	LDW23-SC1011A	20ug/kg solid or 0.2ug/L l	A 04	4		K010831	03/06/2023 00:47	NT1003052319.D	VTS	
23A0313-10	LDW23-SC1006A	20ug/kg solid or 0.2ug/L l	A 04	5		K010831	03/06/2023 01:25	NT1003052320.D	VTS	
23A0313-11	LDW23-SC1012B	20ug/kg solid or 0.2ug/L l	A 04	6		K010831	03/06/2023 02:02	NT1003052321.D	VTS	
23A0313-13	LDW23-SC1159	20ug/kg solid or 0.2ug/L l	A 04	7		K010831	03/06/2023 02:40	NT1003052322.D	VTS	
23A0326-01	LDW23-SC1028	20ug/kg solid or 0.2ug/L l	A 04	8		K010831	03/06/2023 03:17	NT1003052323.D	VTS	
23A0326-02	LDW23-SC1032	20ug/kg solid or 0.2ug/L l	A 04	9		K010831	03/06/2023 03:55	NT1003052324.D	VTS	
SLC0415-CCV1	Calibration Check	QC		10	K011109	K010831	03/06/2023 04:32	NT1003052325.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b

Time	Filename	LabID	ClientId	DF																						
1	1348	NT1003052301.D	SLC0415-TUN1		1	|	NO	ISTDS	FOUND	|	|															
2	2138	NT1003052314.D	SLC0415-CCV1		1	|	9.25	264922	|	11.73	947542	|	15.34	505666	|	18.46	940283	|	23.52	987952	|	26.29	1073798	|	24.59	1625017
3	2254	NT1003052316.D	SLC0415-LCV1		1	|	9.25	304339	|	11.73	1055141	|	15.32	547496	|	18.44	980771	|	23.49	892900	|	26.24	1127057	|	24.56	1549553
4	0047	NT1003052319.D	23A0313-09		1	|	9.26	277293	|	11.75	992421	|	15.35	516457	|	18.45	940974	|	23.50	975868	|	26.23	1137199	|	24.56	1678858
5	0125	NT1003052320.D	23A0313-10		1	|	9.26	280367	|	11.75	999488	|	15.35	522549	|	18.46	968354	|	23.50	930222	|	26.24	1058029	|	24.56	1588066
6	0202	NT1003052321.D	23A0313-11		1	|	9.26	280895	|	11.75	1014485	|	15.35	550303	|	18.46	999299	|	23.51	951686	|	26.24	1056489	|	24.56	1621502
7	0240	NT1003052322.D	23A0313-13		1	|	9.25	223750	|	11.75	792377	|	15.35	431810	|	18.46	804967	|	23.50	771106	|	26.24	880428	|	24.56	1322148
8	0317	NT1003052323.D	23A0326-01		1	|	9.25	212800	|	11.76	756268	|	15.35	401662	|	18.46	743666	|	23.51	720209	|	26.24	842018	|	24.56	1261487
9	0355	NT1003052324.D	23A0326-02		1	|	9.26	253055	|	11.76	915691	|	15.35	493607	|	18.46	887512	|	23.51	852573	|	26.25	964821	|	24.56	1479196
10	0432	NT1003052325.D	SLC0415-CCV1		1	|	9.26	213820	|	11.76	756023	|	15.35	411497	|	18.46	744396	|	23.49	823005	|	26.23	894064	|	24.55	1350476

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1348	NT1003052301A.D	SLC0415-TUN1		1	NO MANUAL INTEGRATION
2138	NT1003052314A.D	SLC0415-ICV1		1	2,2'-oxybis(1-Chloropropane),
2216	NT1003052315.D	SEQ-CCVSIM		1	NO MANUAL INTEGRATION
2254	NT1003052316.D	SLC0415-LCV1		1	2,2'-oxybis(1-Chloropropane), N-Nitroso-di-n-propylamine, Isophorone, N-Nitrosodimethylamine, Phenol-d5, 1,2-Dichlorobenzene
2332	NT1003052317.D	SEQ-SIM100		1	NO MANUAL INTEGRATION
0009	NT1003052318.D	SEQ-SIM500		1	NO MANUAL INTEGRATION
0047	NT1003052319.D	23A0313-09		1	Benzoic acid, Dibenzo(a,h)anthracene, Pyridine,
0125	NT1003052320.D	23A0313-10		1	Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0202	NT1003052321.D	23A0313-11		1	Dibenzo(a,h)anthracene,
0240	NT1003052322.D	23A0313-13		1	2,2'-oxybis(1-Chloropropane), Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Pyridine,
0317	NT1003052323.D	23A0326-01		1	2,2'-oxybis(1-Chloropropane), Benzo(k)fluoranthene, Phenol-d5,
0355	NT1003052324.D	23A0326-02		1	Benzoic acid, Dibenzo(a,h)anthracene,
0432	NT1003052325.D	SLC0415-CCV1		1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 27-Mar-2023 15:37

NT1003052301A.D	Data Locked	deenayd, 27-
NT1003052314A.D	Data Locked	deenayd, 27-
NT1003052315.D	Data Locked	deenayd, 27-
NT1003052316.D	Data Locked	deenayd, 27-
NT1003052317.D	Data Locked	deenayd, 27-
NT1003052318.D	Data Locked	deenayd, 27-
NT1003052319.D	Data Locked	deenayd, 27-
NT1003052320.D	Data Locked	deenayd, 27-
NT1003052321.D	Data Locked	deenayd, 27-
NT1003052322.D	Data Locked	deenayd, 27-
NT1003052323.D	Data Locked	deenayd, 27-
NT1003052324.D	Data Locked	deenayd, 27-
NT1003052325.D	Data Locked	deenayd, 27-



ANALYSIS SEQUENCE

SLC0415

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00019 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0415-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301A.D	JGR	
SLC0415-ICV1	Initial Cal Check	QC		2	K011109	K010831	03/05/2023 21:38	NT1003052314A.D	VTS	
SLC0415-LCV1	ABN 0.2	QC		3	K011105	K010831	03/05/2023 22:54	NT1003052316.D	VTS	
SLC0415-LCV2	ABN 1.0	QC		4	K011107	K010831	03/05/2023 22:16	NT1003052315.D	VTS	
23A0313-09	LDW23-SC1011A	20ug/kg solid or 0.2ug/L l	A 02	5		K010831	03/06/2023 00:47	NT1003052319.D	VTS	
23A0313-10	LDW23-SC1006A	20ug/kg solid or 0.2ug/L l	A 02	6		K010831	03/06/2023 01:25	NT1003052320.D	VTS	
23A0313-11	LDW23-SC1012B	20ug/kg solid or 0.2ug/L l	A 02	7		K010831	03/06/2023 02:02	NT1003052321.D	VTS	
23A0313-13	LDW23-SC1159	20ug/kg solid or 0.2ug/L l	A 02	8		K010831	03/06/2023 02:40	NT1003052322.D	VTS	
23A0326-01	LDW23-SC1028	20ug/kg solid or 0.2ug/L l	A 02	9		K010831	03/06/2023 03:17	NT1003052323.D	VTS	
23A0326-02	LDW23-SC1032	20ug/kg solid or 0.2ug/L l	A 02	10		K010831	03/06/2023 03:55	NT1003052324.D	VTS	
SLC0415-CCV1	Calibration Check	QC		11	K011109	K010831	03/06/2023 04:32	NT1003052325.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b

Time	Filename	LabID	ClientId	DF														
1 1348	NT1003052301A.D	SLC0415-TUN1		1	|NO ISTDs FOUND||													
2 2138	NT1003052314A.D	SLC0415-ICV1		1	9.25	264922	11.73	947542	15.34	505666	18.46	940283	23.52	987952	26.29	1073798	24.59	1625017
3 2216	NT1003052315.D	SLC0415-LCV2		1	9.25	261607	11.73	924249	15.34	486503	18.45	894232	23.51	849747	26.27	1046779	24.59	1473599
4 2254	NT1003052316.D	SLC0415-LCV1		1	9.25	304339	11.73	1055141	15.32	547496	18.44	980771	23.49	892900	26.24	1127057	24.56	1549553
5 2332	NT1003052317.D	SEQ-SIM100		1	9.26	238993	11.75	852144	15.33	434797	18.42	774589	23.44	704354	26.13	830713	24.49	1143988
6 0009	NT1003052318.D	SEQ-SIM500		1	9.25	274703	11.75	978774	15.35	529073	18.45	986885	23.49	894291	26.23	1121758	24.55	1517156
7 0047	NT1003052319.D	23A0313-09		1	9.26	277293	11.75	992421	15.35	516457	18.45	940974	23.50	975868	26.23	1137199	24.56	1678858
8 0125	NT1003052320.D	23A0313-10		1	9.26	280367	11.75	999488	15.35	522549	18.46	968354	23.50	930222	26.24	1058029	24.56	1588066
9 0202	NT1003052321.D	23A0313-11		1	9.26	280895	11.75	1014485	15.35	550303	18.46	999299	23.51	951686	26.24	1056489	24.56	1621502
10 0240	NT1003052322.D	23A0313-13		1	9.25	223750	11.75	792377	15.35	431810	18.46	804967	23.50	771106	26.24	880428	24.56	1322148
11 0317	NT1003052323.D	23A0326-01		1	9.25	212800	11.76	756268	15.35	401662	18.46	743666	23.51	720209	26.24	842018	24.56	1261487
12 0355	NT1003052324.D	23A0326-02		1	9.26	253055	11.76	915691	15.35	493607	18.46	887512	23.51	852573	26.25	964821	24.56	1479196
13 0432	NT1003052325.D	SLC0415-CCV1		1	9.26	213820	11.76	756023	15.35	411497	18.46	744396	23.49	823005	26.23	894064	24.55	1350476

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b

Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1348	NT1003052301A.D	SLC0415-TUN1	1	NO MANUAL INTEGRATION
2138	NT1003052314A.D	SLC0415-ICV1	1	2,2'-oxybis(1-Chloropropane),
2216	NT1003052315.D	SLC0415-LCV2	1	2,2'-oxybis(1-Chloropropane), Pentachlorophenol,
2254	NT1003052316.D	SLC0415-LCV1	1	2,2'-oxybis(1-Chloropropane), N-Nitroso-di-n-propylamine, Isophorone, N-Nitrosodimethylamine, Phenol-d5, 1,2-D
2332	NT1003052317.D	SEQ-SIM100	1	NO MANUAL INTEGRATION
0009	NT1003052318.D	SEQ-SIM500	1	NO MANUAL INTEGRATION
0047	NT1003052319.D	23A0313-09	1	Benzoic acid, Dibenzo(a,h)anthracene, Pyridine,
0125	NT1003052320.D	23A0313-10	1	Benzoic acid, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0202	NT1003052321.D	23A0313-11	1	Dibenzo(a,h)anthracene,
0240	NT1003052322.D	23A0313-13	1	2,2'-oxybis(1-Chloropropane), Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Pyridine,
0317	NT1003052323.D	23A0326-01	1	2,2'-oxybis(1-Chloropropane), Benzo(k)fluoranthene, Phenol-d5,
0355	NT1003052324.D	23A0326-02	1	Benzoic acid, Dibenzo(a,h)anthracene,
0432	NT1003052325.D	SLC0415-CCV1	1	2,2'-oxybis(1-Chloropropane),

Security Status Report

Date: 03-Aug-2023 08:20

NT1003052301A.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052314A.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052315.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052316.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052317.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052318.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052319.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052320.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052321.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052322.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052323.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052324.D	Data Locked	van,	03-Aug-2023	08:20
NT1003052325.D	Data Locked	van,	03-Aug-2023	08:20



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0425

Instrument: NT10

Calibration: GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0425-TUN1	NT1003052301B.D	NA	03/05/23 13:48
Initial Cal Check	SLC0425-ICV1	NT1003052325B.D	NA	03/06/23 04:32
ABN 0.2	SLC0425-LCV1	NT1003052327.D	NA	03/06/23 05:48
LDW23-SC1170A	23A0326-04	NT1003052330.D	Solid	03/06/23 07:41
LDW23-SC1169C	23A0326-05	NT1003052331.D	Solid	03/06/23 08:18
LDW23-SC1161	23A0326-10	NT1003052332.D	Solid	03/06/23 08:56
LDW23-SC1155	23A0326-11	NT1003052333.D	Solid	03/06/23 09:34
LDW23-SC1162B	23A0326-12	NT1003052334.D	Solid	03/06/23 10:11
Calibration Check	SLC0425-CCV1	NT1003052335.D	NA	03/06/23 10:49



ANALYSIS SEQUENCE

SLC0425

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00019 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0425-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301A.D	JGR	
SLC0425-ICV1	Initial Cal Check	QC		2	K011109	K010831	03/06/2023 04:32	NT1003052325A.D	VTS	
SLC0425-LCV1	ABN 0.2	QC		3	K011105	K010831	03/06/2023 05:48	NT1003052327.D	VTS	
23A0326-04	LDW23-SC1170A	20ug/kg solid or 0.2ug/L l	A 04	4		K010831	03/06/2023 07:41	NT1003052330.D	VTS	
23A0326-05	LDW23-SC1169C	20ug/kg solid or 0.2ug/L l	A 04	5		K010831	03/06/2023 08:18	NT1003052331.D	VTS	
23A0326-10	LDW23-SC1161	20ug/kg solid or 0.2ug/L l	A 04	6		K010831	03/06/2023 08:56	NT1003052332.D	VTS	
23A0326-11	LDW23-SC1155	20ug/kg solid or 0.2ug/L l	A 04	7		K010831	03/06/2023 09:34	NT1003052333.D	VTS	
23A0326-12	LDW23-SC1162B	20ug/kg solid or 0.2ug/L l	A 04	8		K010831	03/06/2023 10:11	NT1003052334.D	VTS	
SLC0425-CCV1	Calibration Check	QC		9	K011109	K010831	03/06/2023 10:49	NT1003052335.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305B.b

Time	Filename	LabID	ClientId	DF
1 1348	NT1003052301B.D	SLC0425-TUN1		1 |NO ISTDs FOUND|
2 0432	NT1003052325B.D	SLC0425-ICV1		1 | 9.26 213820||11.76 756023||15.35 411497||18.46 744396||23.49 823005||26.23 894064||24.55 1350476|
3 0548	NT1003052327.D	SLC0425-LCV1		1 | 9.26 230503||11.75 812678||15.35 424118||18.45 781884||23.49 727000||26.23 901192||24.55 1249015|
4 0741	NT1003052330.D	23A0326-04		1 | 9.26 216499||11.76 793296||15.35 426962||18.45 778727||23.50 714687||26.23 878303||24.55 1293300|
5 0818	NT1003052331.D	23A0326-05		1 | 9.26 220981||11.75 796916||15.35 433796||18.46 794593||23.51 772509||26.25 856703||24.56 1358595|
6 0856	NT1003052332.D	23A0326-10		1 | 9.26 196985||11.75 706589||15.35 375459||18.46 688650||23.50 664823||26.24 749703||24.55 1165735|
7 0934	NT1003052333.D	23A0326-11		1 | 9.26 204088||11.76 737094||15.35 402918||18.46 738789||23.51 686011||26.25 773941||24.56 1223360|
8 1011	NT1003052334.D	23A0326-12		1 | 9.26 179441||11.76 652929||15.35 351071||18.46 646598||23.50 601375||26.24 688721||24.55 1063538|
9 1049	NT1003052335.D	SLC0425-CCV1		1 | 9.26 202868||11.76 710965||15.36 393563||18.45 719751||23.49 767869||26.23 837534||24.55 1237077|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305B.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1348	NT1003052301B.D	SLC0425-TUN1		1	NO MANUAL INTEGRATION
0432	NT1003052325B.D	SLC0425-ICV1		1	2,2'-oxybis(1-Chloropropane),
0510	NT1003052326.D	SEQ-CCVSIM		1	NO MANUAL INTEGRATION
0548	NT1003052327.D	SLC0425-LCV1		1	2,2'-oxybis(1-Chloropropane), N-Nitrosodimethylamine, Pyridine, Phenol-d5, 1,2-Dichlorobenzene-d4,
0625	NT1003052328.D	SEQ-SIM100		1	NO MANUAL INTEGRATION
0703	NT1003052329.D	SEQ-SIM500		1	NO MANUAL INTEGRATION
0741	NT1003052330.D	23A0326-04		1	NO MANUAL INTEGRATION
0818	NT1003052331.D	23A0326-05		1	1,4-Dichlorobenzene, Benzo(k)fluoranthene,
0856	NT1003052332.D	23A0326-10		1	2,2'-oxybis(1-Chloropropane), Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0934	NT1003052333.D	23A0326-11		1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
1011	NT1003052334.D	23A0326-12		1	2,2'-oxybis(1-Chloropropane), Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
1049	NT1003052335.D	SLC0425-CCV1		1	2,2'-oxybis(1-Chloropropane),
1127	NT1003052336.D	SEQ-CCVSIM		1	NO MANUAL INTEGRATION

Security Status Report

Date: 27-Mar-2023 17:08

NT1003052301B.D	Data Locked	deenayd, 27-
NT1003052325B.D	Data Locked	deenayd, 27-
NT1003052326.D	Data Locked	deenayd, 27-
NT1003052327.D	Data Locked	deenayd, 27-
NT1003052328.D	Data Locked	deenayd, 27-
NT1003052329.D	Data Locked	deenayd, 27-
NT1003052330.D	Data Locked	deenayd, 27-
NT1003052331.D	Data Locked	deenayd, 27-
NT1003052332.D	Data Locked	deenayd, 27-
NT1003052333.D	Data Locked	deenayd, 27-
NT1003052334.D	Data Locked	deenayd, 27-
NT1003052335.D	Data Locked	deenayd, 27-
NT1003052336.D	Data Locked	deenayd, 27-



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC SDG/WO: 23A0326
 Client: Anchor OEA, LLC Project: AOC5 MR Phase 1
 Sequence: SLC0084 Instrument: NT10
 Calibration: GC00019 Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0084-SCV1 (Water)			Lab File ID: NT1003012311.D			Analyzed: 03/01/23 21:46		
2-Fluorophenol	7.5000		80 - 120		6.898143	-6.8981	N/A	*
Phenol-d5	7.5000		80 - 120		8.491857	-8.4919	N/A	*
2-Chlorophenol-d4	7.5000		80 - 120		8.814143	-8.8141	N/A	*
1,2-Dichlorobenzene-d4	5.0000	85.9	80 - 120	9.247	9.534572	-0.2876	N/A	
Nitrobenzene-d5	5.0000		80 - 120		10.29314	-10.2931	N/A	*
2-Fluorobiphenyl	5.0000		80 - 120		13.91014	-13.9101	N/A	*
2,4,6-Tribromophenol	7.5000		80 - 120		16.947	-16.9470	N/A	*
p-Terphenyl-d14	5.0000	0.392	80 - 120	21.519	21.52357	-0.0046	N/A	*
SLC0084-ICB1 (Water)			Lab File ID: NT1003012312.D			Analyzed: 03/01/23 22:24		
2-Fluorophenol	7.5000	100	30 - 160	6.897	6.898143	-0.0011	N/A	
Phenol-d5	7.5000	95.7	30 - 160	8.489	8.491857	-0.0029	N/A	
2-Chlorophenol-d4	7.5000	98.9	30 - 160	8.813	8.814143	-0.0011	N/A	
1,2-Dichlorobenzene-d4	5.0000	94.9	30 - 160	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	5.0000	100	30 - 160	10.294	10.29314	0.0009	N/A	
2-Fluorobiphenyl	5.0000	98.2	30 - 160	13.908	13.91014	-0.0021	N/A	
2,4,6-Tribromophenol	7.5000	74.9	30 - 160	16.947	16.947	0.0000	N/A	
p-Terphenyl-d14	5.0000	96.4	30 - 160	21.527	21.52357	0.0034	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0401

Instrument: NT10

Calibration: GC00019

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0401-ICV1 (Solid) Lab File ID: NT1003052302.D Analyzed: 03/05/23 14:03								
2-Fluorophenol	7.5000	96.3	80 - 120	6.897	6.898143	-0.0011	N/A	
Phenol-d5	7.5000	106	80 - 120	8.504	8.491857	0.0121	N/A	
2-Chlorophenol-d4	7.5000	103	80 - 120	8.813	8.814143	-0.0011	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.7	80 - 120	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	5.0000	102	80 - 120	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	5.0000	107	80 - 120	13.924	13.91014	0.0139	N/A	
2,4,6-Tribromophenol	7.5000	106	80 - 120	16.986	16.947	0.0390	N/A	
p-Terphenyl-d14	5.0000	90.8	80 - 120	21.597	21.52357	0.0734	N/A	
SLC0401-LCV1 (Solid) Lab File ID: NT1003052304.D Analyzed: 03/05/23 15:18								
2-Fluorophenol	0.30000	72.9	50 - 150	6.905	6.898143	0.0069	N/A	
Phenol-d5	0.30000	62.3	50 - 150	8.504	8.491857	0.0121	N/A	
2-Chlorophenol-d4	0.30000	80.3	50 - 150	8.813	8.814143	-0.0011	N/A	
1,2-Dichlorobenzene-d4	0.20000	110	50 - 150	9.526	9.534572	-0.0086	N/A	
Nitrobenzene-d5	0.20000	77.9	50 - 150	10.294	10.29314	0.0009	N/A	
2-Fluorobiphenyl	0.20000	108	50 - 150	13.923	13.91014	0.0129	N/A	
2,4,6-Tribromophenol	0.30000	7.25	50 - 150	16.97	16.947	0.0230	N/A	*
p-Terphenyl-d14	0.20000	95.7	50 - 150	21.596	21.52357	0.0724	N/A	
BLA0685-BLK1 (Solid) Lab File ID: NT1003052307.D Analyzed: 03/05/23 17:12								
2-Fluorophenol	750.00	58.1	27 - 120	6.897	6.898143	-0.0011	N/A	
Phenol-d5	750.00	67.6	29 - 120	8.504	8.491857	0.0121	N/A	
2-Chlorophenol-d4	750.00	73.2	31 - 120	8.813	8.814143	-0.0011	N/A	
1,2-Dichlorobenzene-d4	500.00	72.5	32 - 120	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	500.00	77.4	30 - 120	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	500.00	80.7	35 - 120	13.931	13.91014	0.0209	N/A	
2,4,6-Tribromophenol	750.00	47.4	24 - 134	16.986	16.947	0.0390	N/A	
p-Terphenyl-d14	500.00	96.9	37 - 120	21.604	21.52357	0.0804	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0401
Calibration: GC00019

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0685-BS1 (Solid) Lab File ID: NT1003052308.D Analyzed: 03/05/23 17:50								
2-Fluorophenol	750.00	77.5	27 - 120	6.905	6.898143	0.0069	N/A	
Phenol-d5	750.00	86.4	29 - 120	8.504	8.491857	0.0121	N/A	
2-Chlorophenol-d4	750.00	85.6	31 - 120	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	500.00	74.4	32 - 120	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	500.00	84.4	30 - 120	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	500.00	89.3	35 - 120	13.931	13.91014	0.0209	N/A	
2,4,6-Tribromophenol	750.00	99.1	24 - 134	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	500.00	99.8	37 - 120	21.612	21.52357	0.0884	N/A	
BLA0685-BSD1 (Solid) Lab File ID: NT1003052309.D Analyzed: 03/05/23 18:28								
2-Fluorophenol	750.00	76.4	27 - 120	6.905	6.898143	0.0069	N/A	
Phenol-d5	750.00	89.1	29 - 120	8.512	8.491857	0.0201	N/A	
2-Chlorophenol-d4	750.00	89.1	31 - 120	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	500.00	79.2	32 - 120	9.542	9.534572	0.0074	N/A	
Nitrobenzene-d5	500.00	88.5	30 - 120	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	500.00	90.7	35 - 120	13.931	13.91014	0.0209	N/A	
2,4,6-Tribromophenol	750.00	94.7	24 - 134	16.986	16.947	0.0390	N/A	
p-Terphenyl-d14	500.00	92.2	37 - 120	21.597	21.52357	0.0734	N/A	
BLA0685-SRM1 (Solid) Lab File ID: NT1003052312.D Analyzed: 03/05/23 20:22								
2-Fluorophenol	7500.0	80.4	27 - 120	6.905	6.898143	0.0069	N/A	
Phenol-d5	7500.0	85.7	29 - 120	8.512	8.491857	0.0201	N/A	
2-Chlorophenol-d4	7500.0	90.0	31 - 120	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	5000.0	80.9	32 - 120	9.541	9.534572	0.0064	N/A	
Nitrobenzene-d5	5000.0	90.9	30 - 120	10.31	10.29314	0.0169	N/A	
2-Fluorobiphenyl	5000.0	89.3	35 - 120	13.931	13.91014	0.0209	N/A	
2,4,6-Tribromophenol	7500.0	95.5	24 - 134	16.993	16.947	0.0460	N/A	
p-Terphenyl-d14	5000.0	84.8	37 - 120	21.604	21.52357	0.0804	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0401

Instrument: NT10

Calibration: GC00019

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0401-CCV1 (Solid)		Lab File ID: NT1003052314.D			Analyzed: 03/05/23 21:38			
2-Fluorophenol	7.5000	98.4	50 - 150	6.905	6.898143	0.0069	N/A	
Phenol-d5	7.5000	110	50 - 150	8.512	8.491857	0.0201	N/A	
2-Chlorophenol-d4	7.5000	106	50 - 150	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.1	50 - 150	9.542	9.534572	0.0074	N/A	
Nitrobenzene-d5	5.0000	107	50 - 150	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	5.0000	105	50 - 150	13.931	13.91014	0.0209	N/A	
2,4,6-Tribromophenol	7.5000	102	50 - 150	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	5.0000	91.8	50 - 150	21.604	21.52357	0.0804	N/A	



SURROGATE RECOVERY AND RT SUMMARY EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0415

Instrument: NT10

Calibration: GC00019

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0415-ICV1 (Solid)			Lab File ID: NT1003052314A.D			Analyzed: 03/05/23 21:38		
2-Fluorophenol	7.5000	98.4	80 - 120	6.905	6.898143	0.0069	N/A	
Phenol-d5	7.5000	110	80 - 120	8.512	8.491857	0.0201	N/A	
2-Chlorophenol-d4	7.5000	106	80 - 120	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.1	80 - 120	9.542	9.534572	0.0074	N/A	
Nitrobenzene-d5	5.0000	107	80 - 120	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	5.0000	105	80 - 120	13.931	13.91014	0.0209	N/A	
2,4,6-Tribromophenol	7.5000	102	80 - 120	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	5.0000	91.8	80 - 120	21.604	21.52357	0.0804	N/A	
SLC0415-LCV2 (Solid)			Lab File ID: NT1003052315.D			Analyzed: 03/05/23 22:16		
2-Fluorophenol	1.5000	99.7	50 - 150	6.897	6.898143	-0.0011	N/A	
Phenol-d5	1.5000	104	50 - 150	8.504	8.491857	0.0121	N/A	
2-Chlorophenol-d4	1.5000	108	50 - 150	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	1.0000	103	50 - 150	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	1.0000	110	50 - 150	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	1.0000	109	50 - 150	13.923	13.91014	0.0129	N/A	
2,4,6-Tribromophenol	1.5000	93.5	50 - 150	16.978	16.947	0.0310	N/A	
p-Terphenyl-d14	1.0000	97.1	50 - 150	21.597	21.52357	0.0734	N/A	
SLC0415-LCV1 (Solid)			Lab File ID: NT1003052316.D			Analyzed: 03/05/23 22:54		
2-Fluorophenol	0.30000	85.8	50 - 150	6.905	6.898143	0.0069	N/A	
Phenol-d5	0.30000	80.5	50 - 150	8.512	8.491857	0.0201	N/A	
2-Chlorophenol-d4	0.30000	98.4	50 - 150	8.821	8.814143	0.0069	N/A	
1,2-Dichlorobenzene-d4	0.20000	93.1	50 - 150	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	0.20000	96.8	50 - 150	10.302	10.29314	0.0089	N/A	
2-Fluorobiphenyl	0.20000	112	50 - 150	13.916	13.91014	0.0059	N/A	
2,4,6-Tribromophenol	0.30000	45.5	50 - 150	16.978	16.947	0.0310	N/A	*
p-Terphenyl-d14	0.20000	98.7	50 - 150	21.581	21.52357	0.0574	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0415

Instrument: NT10

Calibration: GC00019

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0326-01 (Solid)		Lab File ID: NT1003052323.D			Analyzed: 03/06/23 03:17			
2-Fluorophenol	719.89	6.27	27 - 120	6.905	6.898143	0.0069	N/A	*
Phenol-d5	719.89	30.6	29 - 120	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	719.89	39.0	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	479.93	69.1	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	479.93	82.6	30 - 120	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	479.93	93.7	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	719.89	8.99	24 - 134	16.993	16.947	0.0460	N/A	*
p-Terphenyl-d14	479.93	80.3	37 - 120	21.596	21.52357	0.0724	N/A	
23A0326-02 (Solid)		Lab File ID: NT1003052324.D			Analyzed: 03/06/23 03:55			
2-Fluorophenol	745.65	37.3	27 - 120	6.913	6.898143	0.0149	N/A	
Phenol-d5	745.65	66.8	29 - 120	8.528	8.491857	0.0361	N/A	
2-Chlorophenol-d4	745.65	59.8	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	497.10	70.9	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	497.10	82.2	30 - 120	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	497.10	83.3	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	745.65	26.1	24 - 134	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	497.10	74.4	37 - 120	21.597	21.52357	0.0734	N/A	
SLC0415-CCV1 (Solid)		Lab File ID: NT1003052325.D			Analyzed: 03/06/23 04:32			
2-Fluorophenol	7.5000	101	50 - 150	6.905	6.898143	0.0069	N/A	
Phenol-d5	7.5000	109	50 - 150	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	7.5000	106	50 - 150	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	5.0000	96.0	50 - 150	9.557	9.534572	0.0224	N/A	
Nitrobenzene-d5	5.0000	109	50 - 150	10.325	10.29314	0.0319	N/A	
2-Fluorobiphenyl	5.0000	102	50 - 150	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	7.5000	98.8	50 - 150	16.993	16.947	0.0460	N/A	
p-Terphenyl-d14	5.0000	89.1	50 - 150	21.581	21.52357	0.0574	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0425
Calibration: GC00019

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0425-ICV1 (Solid) Lab File ID: NT1003052325B.D Analyzed: 03/06/23 04:32								
2-Fluorophenol	7.5000	101	80 - 120	6.905	6.898143	0.0069	N/A	
Phenol-d5	7.5000	109	80 - 120	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	7.5000	106	80 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	5.0000	96.0	80 - 120	9.557	9.534572	0.0224	N/A	
Nitrobenzene-d5	5.0000	109	80 - 120	10.325	10.29314	0.0319	N/A	
2-Fluorobiphenyl	5.0000	102	80 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	7.5000	98.8	80 - 120	16.993	16.947	0.0460	N/A	
p-Terphenyl-d14	5.0000	89.1	80 - 120	21.581	21.52357	0.0574	N/A	
SLC0425-LCV1 (Solid) Lab File ID: NT1003052327.D Analyzed: 03/06/23 05:48								
2-Fluorophenol	0.30000	98.6	50 - 150	6.897	6.898143	-0.0011	N/A	
Phenol-d5	0.30000	82.6	50 - 150	8.528	8.491857	0.0361	N/A	
2-Chlorophenol-d4	0.30000	103	50 - 150	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	0.20000	102	50 - 150	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	0.20000	95.5	50 - 150	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	0.20000	107	50 - 150	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	0.30000	33.4	50 - 150	17.009	16.947	0.0620	N/A	*
p-Terphenyl-d14	0.20000	100	50 - 150	21.581	21.52357	0.0574	N/A	
23A0326-04 (Solid) Lab File ID: NT1003052330.D Analyzed: 03/06/23 07:41								
2-Fluorophenol	749.03	72.2	27 - 120	6.912	6.898143	0.0139	N/A	
Phenol-d5	749.03	81.0	29 - 120	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	749.03	82.7	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	499.35	71.8	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	499.35	83.8	30 - 120	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	499.35	86.6	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	749.03	95.2	24 - 134	16.993	16.947	0.0460	N/A	
p-Terphenyl-d14	499.35	76.2	37 - 120	21.589	21.52357	0.0654	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0425

Instrument: NT10

Calibration: GC00019

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0326-05 (Solid)		Lab File ID: NT1003052331.D			Analyzed: 03/06/23 08:18			
2-Fluorophenol	735.20	73.9	27 - 120	6.913	6.898143	0.0149	N/A	
Phenol-d5	735.20	81.3	29 - 120	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	735.20	84.4	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	490.13	75.4	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	490.13	84.8	30 - 120	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	490.13	87.9	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	735.20	94.1	24 - 134	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	490.13	72.7	37 - 120	21.597	21.52357	0.0734	N/A	
23A0326-10 (Solid)		Lab File ID: NT1003052332.D			Analyzed: 03/06/23 08:56			
2-Fluorophenol	727.16	65.5	27 - 120	6.913	6.898143	0.0149	N/A	
Phenol-d5	727.16	69.7	29 - 120	8.528	8.491857	0.0361	N/A	
2-Chlorophenol-d4	727.16	74.4	31 - 120	8.837	8.814143	0.0229	N/A	
1,2-Dichlorobenzene-d4	484.77	67.1	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	484.77	78.8	30 - 120	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	484.77	82.4	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	727.16	78.6	24 - 134	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	484.77	70.8	37 - 120	21.597	21.52357	0.0734	N/A	
23A0326-11 (Solid)		Lab File ID: NT1003052333.D			Analyzed: 03/06/23 09:34			
2-Fluorophenol	720.54	71.6	27 - 120	6.912	6.898143	0.0139	N/A	
Phenol-d5	720.54	78.7	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	720.54	83.2	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	480.36	73.7	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	480.36	88.1	30 - 120	10.318	10.29314	0.0249	N/A	
2-Fluorobiphenyl	480.36	87.8	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	720.54	87.5	24 - 134	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	480.36	78.1	37 - 120	21.597	21.52357	0.0734	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0425

Instrument: NT10

Calibration: GC00019

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0326-12 (Solid)		Lab File ID: NT1003052334.D			Analyzed: 03/06/23 10:11			
2-Fluorophenol	724.22	70.9	27 - 120	6.912	6.898143	0.0139	N/A	
Phenol-d5	724.22	74.8	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	724.22	83.3	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	482.81	73.3	32 - 120	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	482.81	85.4	30 - 120	10.326	10.29314	0.0329	N/A	
2-Fluorobiphenyl	482.81	88.0	35 - 120	13.939	13.91014	0.0289	N/A	
2,4,6-Tribromophenol	724.22	95.3	24 - 134	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	482.81	72.1	37 - 120	21.597	21.52357	0.0734	N/A	
SLC0425-CCV1 (Solid)		Lab File ID: NT1003052335.D			Analyzed: 03/06/23 10:49			
2-Fluorophenol	7.5000	99.3	50 - 150	6.905	6.898143	0.0069	N/A	
Phenol-d5	7.5000	107	50 - 150	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	7.5000	106	50 - 150	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.7	50 - 150	9.549	9.534572	0.0144	N/A	
Nitrobenzene-d5	5.0000	109	50 - 150	10.326	10.29314	0.0329	N/A	
2-Fluorobiphenyl	5.0000	103	50 - 150	13.947	13.91014	0.0369	N/A	
2,4,6-Tribromophenol	7.5000	105	50 - 150	16.994	16.947	0.0470	N/A	
p-Terphenyl-d14	5.0000	90.4	50 - 150	21.581	21.52357	0.0574	N/A	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0084

Instrument: NT10

Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0084-SCV1)		(Water)	Lab File ID: NT1003012311.D			Analyzed: 03/01/23 21:46			
1,4-Dichlorobenzene-d4	283537	9.247	337641	9.246	84	50 - 200	0.001	+/-0.50	
Naphthalene-d8	1089120	11.719	1265187	11.718	86	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	607772	15.317	692385	15.308	88	50 - 200	0.009	+/-0.50	
Phenanthrene-d10	1205858	18.401	1376777	18.401	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	1219436	23.416	1019524	23.416	120	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2317357	24.485	2027111	24.484	114	50 - 200	0.001	+/-0.50	
Perylene-d12	1289108	26.103	1027409	26.102	125	50 - 200	0.001	+/-0.50	
Initial Cal Blank (SLC0084-ICB1)		(Water)	Lab File ID: NT1003012312.D			Analyzed: 03/01/23 22:24			
1,4-Dichlorobenzene-d4	480761	9.246	337641	9.246	142	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1681746	11.718	1265187	11.718	133	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	836849	15.308	692385	15.308	121	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1648281	18.401	1376777	18.401	120	50 - 200	0.000	+/-0.50	
Chrysene-d12	1391477	23.416	1019524	23.416	136	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2481481	24.484	2027111	24.484	122	50 - 200	0.000	+/-0.50	
Perylene-d12	1542419	26.102	1027409	26.102	150	50 - 200	0.000	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0401

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0401-ICV1)		(Solid)	Lab File ID: NT1003052302.D			Analyzed: 03/05/23 14:03			
1,4-Dichlorobenzene-d4	297263	9.239	297263	9.239	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1085336	11.726	1085336	11.726	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	563464	15.34	563464	15.34	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1038318	18.448	1038318	18.448	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1012751	23.517	1012751	23.517	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1628890	24.593	1628890	24.593	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1152264	26.281	1152264	26.281	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0401-LCV1)		(Solid)	Lab File ID: NT1003052304.D			Analyzed: 03/05/23 15:18			
1,4-Dichlorobenzene-d4	291047	9.239	297263	9.239	98	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1070295	11.726	1085336	11.726	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	535349	15.332	563464	15.34	95	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	962985	18.447	1038318	18.448	93	50 - 200	-0.001	+/-0.50	
Chrysene-d12	857365	23.517	1012751	23.517	85	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1343499	24.593	1628890	24.593	82	50 - 200	0.000	+/-0.50	
Perylene-d12	1034621	26.281	1152264	26.281	90	50 - 200	0.000	+/-0.50	
Blank (BLA0685-BLK1)		(Solid)	Lab File ID: NT1003052307.D			Analyzed: 03/05/23 17:12			
1,4-Dichlorobenzene-d4	270013	9.247	297263	9.239	91	50 - 200	0.008	+/-0.50	
Naphthalene-d8	975565	11.734	1085336	11.726	90	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	517251	15.34	563464	15.34	92	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	919568	18.455	1038318	18.448	89	50 - 200	0.007	+/-0.50	
Chrysene-d12	824155	23.517	1012751	23.517	81	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1193964	24.601	1628890	24.593	73	50 - 200	0.008	+/-0.50	
Perylene-d12	859021	26.289	1152264	26.281	75	50 - 200	0.008	+/-0.50	
LCS (BLA0685-BS1)		(Solid)	Lab File ID: NT1003052308.D			Analyzed: 03/05/23 17:50			
1,4-Dichlorobenzene-d4	297547	9.247	297263	9.239	100	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1075395	11.734	1085336	11.726	99	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	556840	15.347	563464	15.34	99	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1006737	18.455	1038318	18.448	97	50 - 200	0.007	+/-0.50	
Chrysene-d12	916837	23.525	1012751	23.517	91	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1539451	24.608	1628890	24.593	95	50 - 200	0.015	+/-0.50	
Perylene-d12	977237	26.296	1152264	26.281	85	50 - 200	0.015	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0401

Instrument: NT10

Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLA0685-BSD1)		(Solid)	Lab File ID: NT1003052309.D			Analyzed: 03/05/23 18:28			
1,4-Dichlorobenzene-d4	329316	9.247	297263	9.239	111	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1198408	11.742	1085336	11.726	110	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	627739	15.348	563464	15.34	111	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1127626	18.455	1038318	18.448	109	50 - 200	0.007	+/-0.50	
Chrysene-d12	1035914	23.509	1012751	23.517	102	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1620537	24.593	1628890	24.593	99	50 - 200	0.000	+/-0.50	
Perylene-d12	1019954	26.273	1152264	26.281	89	50 - 200	-0.008	+/-0.50	
Reference (BLA0685-SRM1)		(Solid)	Lab File ID: NT1003052312.D			Analyzed: 03/05/23 20:22			
1,4-Dichlorobenzene-d4	256880	9.247	297263	9.239	86	50 - 200	0.008	+/-0.50	
Naphthalene-d8	917867	11.742	1085336	11.726	85	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	495256	15.347	563464	15.34	88	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	917438	18.455	1038318	18.448	88	50 - 200	0.007	+/-0.50	
Chrysene-d12	883418	23.517	1012751	23.517	87	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1475913	24.593	1628890	24.593	91	50 - 200	0.000	+/-0.50	
Perylene-d12	987411	26.281	1152264	26.281	86	50 - 200	0.000	+/-0.50	
Calibration Check (SLC0401-CCV1)		(Water)	Lab File ID: NT1003052314.D			Analyzed: 03/05/23 21:38			
1,4-Dichlorobenzene-d4	264922	9.247	297263	9.239	89	50 - 200	0.008	+/-0.50	
Naphthalene-d8	947542	11.734	1085336	11.726	87	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	505666	15.34	563464	15.34	90	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	940283	18.455	1038318	18.448	91	50 - 200	0.007	+/-0.50	
Chrysene-d12	987952	23.517	1012751	23.517	98	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1625017	24.593	1628890	24.593	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1073798	26.289	1152264	26.281	93	50 - 200	0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0415

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0415-ICV1)		(Solid)	Lab File ID: NT1003052314A.D			Analyzed: 03/05/23 21:38			
1,4-Dichlorobenzene-d4	264922	9.247	264922	9.247	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	947542	11.734	947542	11.734	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	505666	15.34	505666	15.34	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	940283	18.455	940283	18.455	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	987952	23.517	987952	23.517	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1625017	24.593	1625017	24.593	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1073798	26.289	1073798	26.289	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0415-LCV2)		(Solid)	Lab File ID: NT1003052315.D			Analyzed: 03/05/23 22:16			
1,4-Dichlorobenzene-d4	261607	9.247	264922	9.247	99	50 - 200	0.000	+/-0.50	
Naphthalene-d8	924249	11.734	947542	11.734	98	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	486503	15.34	505666	15.34	96	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	894232	18.447	940283	18.455	95	50 - 200	-0.008	+/-0.50	
Chrysene-d12	849747	23.509	987952	23.517	86	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1473599	24.585	1625017	24.593	91	50 - 200	-0.008	+/-0.50	
Perylene-d12	1046779	26.273	1073798	26.289	97	50 - 200	-0.016	+/-0.50	
Low Cal Check (SLC0415-LCV1)		(Solid)	Lab File ID: NT1003052316.D			Analyzed: 03/05/23 22:54			
1,4-Dichlorobenzene-d4	304339	9.247	264922	9.247	115	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1055141	11.726	947542	11.734	111	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	547496	15.324	505666	15.34	108	50 - 200	-0.016	+/-0.50	
Phenanthrene-d10	980771	18.44	940283	18.455	104	50 - 200	-0.015	+/-0.50	
Chrysene-d12	892900	23.494	987952	23.517	90	50 - 200	-0.023	+/-0.50	
Di-n-Octylphthalate-d4	1549553	24.562	1625017	24.593	95	50 - 200	-0.031	+/-0.50	
Perylene-d12	1127057	26.242	1073798	26.289	105	50 - 200	-0.047	+/-0.50	
LDW23-SC1028 (23A0326-01)		(Solid)	Lab File ID: NT1003052323.D			Analyzed: 03/06/23 03:17			
1,4-Dichlorobenzene-d4	212800	9.254	264922	9.247	80	50 - 200	0.007	+/-0.50	
Naphthalene-d8	756268	11.757	947542	11.734	80	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	401662	15.347	505666	15.34	79	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	743666	18.455	940283	18.455	79	50 - 200	0.000	+/-0.50	
Chrysene-d12	720209	23.509	987952	23.517	73	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1261487	24.562	1625017	24.593	78	50 - 200	-0.031	+/-0.50	
Perylene-d12	842018	26.242	1073798	26.289	78	50 - 200	-0.047	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0415

Instrument: NT10

Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1032 (23A0326-02)		(Solid)	Lab File ID: NT1003052324.D			Analyzed: 03/06/23 03:55			
1,4-Dichlorobenzene-d4	253055	9.262	264922	9.247	96	50 - 200	0.015	+/-0.50	
Naphthalene-d8	915691	11.757	947542	11.734	97	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	493607	15.348	505666	15.34	98	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	887512	18.455	940283	18.455	94	50 - 200	0.000	+/-0.50	
Chrysene-d12	852573	23.509	987952	23.517	86	50 - 200	-0.008	+/-0.50	
Di-n-Octylphthalate-d4	1479196	24.562	1625017	24.593	91	50 - 200	-0.031	+/-0.50	
Perylene-d12	964821	26.25	1073798	26.289	90	50 - 200	-0.039	+/-0.50	
Calibration Check (SLC0415-CCV1)		(Water)	Lab File ID: NT1003052325.D			Analyzed: 03/06/23 04:32			
1,4-Dichlorobenzene-d4	213820	9.262	264922	9.247	81	50 - 200	0.015	+/-0.50	
Naphthalene-d8	756023	11.757	947542	11.734	80	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	411497	15.347	505666	15.34	81	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	744396	18.455	940283	18.455	79	50 - 200	0.000	+/-0.50	
Chrysene-d12	823005	23.494	987952	23.517	83	50 - 200	-0.023	+/-0.50	
Di-n-Octylphthalate-d4	1350476	24.554	1625017	24.593	83	50 - 200	-0.039	+/-0.50	
Perylene-d12	894064	26.227	1073798	26.289	83	50 - 200	-0.062	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0425

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0425-ICV1)		(Solid)	Lab File ID: NT1003052325B.D			Analyzed: 03/06/23 04:32			
1,4-Dichlorobenzene-d4	213820	9.262	213820	9.262	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	756023	11.757	756023	11.757	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	411497	15.347	411497	15.347	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	744396	18.455	744396	18.455	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	823005	23.494	823005	23.494	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1350476	24.554	1350476	24.554	100	50 - 200	0.000	+/-0.50	
Perylene-d12	894064	26.227	894064	26.227	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0425-LCV1)		(Solid)	Lab File ID: NT1003052327.D			Analyzed: 03/06/23 05:48			
1,4-Dichlorobenzene-d4	230503	9.255	213820	9.262	108	50 - 200	-0.007	+/-0.50	
Naphthalene-d8	812678	11.75	756023	11.757	107	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	424118	15.348	411497	15.347	103	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	781884	18.448	744396	18.455	105	50 - 200	-0.007	+/-0.50	
Chrysene-d12	727000	23.494	823005	23.494	88	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1249015	24.554	1350476	24.554	92	50 - 200	0.000	+/-0.50	
Perylene-d12	901192	26.227	894064	26.227	101	50 - 200	0.000	+/-0.50	
LDW23-SC1170A (23A0326-04)		(Solid)	Lab File ID: NT1003052330.D			Analyzed: 03/06/23 07:41			
1,4-Dichlorobenzene-d4	216499	9.262	213820	9.262	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	793296	11.757	756023	11.757	105	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	426962	15.347	411497	15.347	104	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	778727	18.448	744396	18.455	105	50 - 200	-0.007	+/-0.50	
Chrysene-d12	714687	23.501	823005	23.494	87	50 - 200	0.007	+/-0.50	
Di-n-Octylphthalate-d4	1293300	24.554	1350476	24.554	96	50 - 200	0.000	+/-0.50	
Perylene-d12	878303	26.234	894064	26.227	98	50 - 200	0.007	+/-0.50	
LDW23-SC1169C (23A0326-05)		(Solid)	Lab File ID: NT1003052331.D			Analyzed: 03/06/23 08:18			
1,4-Dichlorobenzene-d4	220981	9.262	213820	9.262	103	50 - 200	0.000	+/-0.50	
Naphthalene-d8	796916	11.749	756023	11.757	105	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	433796	15.347	411497	15.347	105	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	794593	18.455	744396	18.455	107	50 - 200	0.000	+/-0.50	
Chrysene-d12	772509	23.509	823005	23.494	94	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1358595	24.562	1350476	24.554	101	50 - 200	0.008	+/-0.50	
Perylene-d12	856703	26.25	894064	26.227	96	50 - 200	0.023	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0425

Instrument: NT10

Calibration: GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1161 (23A0326-10)		(Solid)	Lab File ID: NT1003052332.D			Analyzed: 03/06/23 08:56			
1,4-Dichlorobenzene-d4	196985	9.262	213820	9.262	92	50 - 200	0.000	+/-0.50	
Naphthalene-d8	706589	11.75	756023	11.757	93	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	375459	15.348	411497	15.347	91	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	688650	18.455	744396	18.455	93	50 - 200	0.000	+/-0.50	
Chrysene-d12	664823	23.502	823005	23.494	81	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	1165735	24.554	1350476	24.554	86	50 - 200	0.000	+/-0.50	
Perylene-d12	749703	26.242	894064	26.227	84	50 - 200	0.015	+/-0.50	
LDW23-SC1155 (23A0326-11)		(Solid)	Lab File ID: NT1003052333.D			Analyzed: 03/06/23 09:34			
1,4-Dichlorobenzene-d4	204088	9.262	213820	9.262	95	50 - 200	0.000	+/-0.50	
Naphthalene-d8	737094	11.757	756023	11.757	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	402918	15.347	411497	15.347	98	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	738789	18.455	744396	18.455	99	50 - 200	0.000	+/-0.50	
Chrysene-d12	686011	23.509	823005	23.494	83	50 - 200	0.015	+/-0.50	
Di-n-Octylphthalate-d4	1223360	24.562	1350476	24.554	91	50 - 200	0.008	+/-0.50	
Perylene-d12	773941	26.25	894064	26.227	87	50 - 200	0.023	+/-0.50	
LDW23-SC1162B (23A0326-12)		(Solid)	Lab File ID: NT1003052334.D			Analyzed: 03/06/23 10:11			
1,4-Dichlorobenzene-d4	179441	9.262	213820	9.262	84	50 - 200	0.000	+/-0.50	
Naphthalene-d8	652929	11.757	756023	11.757	86	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	351071	15.347	411497	15.347	85	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	646598	18.455	744396	18.455	87	50 - 200	0.000	+/-0.50	
Chrysene-d12	601375	23.501	823005	23.494	73	50 - 200	0.007	+/-0.50	
Di-n-Octylphthalate-d4	1063538	24.554	1350476	24.554	79	50 - 200	0.000	+/-0.50	
Perylene-d12	688721	26.242	894064	26.227	77	50 - 200	0.015	+/-0.50	
Calibration Check (SLC0425-CCV1)		(Water)	Lab File ID: NT1003052335.D			Analyzed: 03/06/23 10:49			
1,4-Dichlorobenzene-d4	202868	9.262	213820	9.262	95	50 - 200	0.000	+/-0.50	
Naphthalene-d8	710965	11.757	756023	11.757	94	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	393563	15.355	411497	15.347	96	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	719751	18.448	744396	18.455	97	50 - 200	-0.007	+/-0.50	
Chrysene-d12	767869	23.494	823005	23.494	93	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1237077	24.547	1350476	24.554	92	50 - 200	-0.007	+/-0.50	
Perylene-d12	837534	26.227	894064	26.227	94	50 - 200	0.000	+/-0.50	



HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 03:17	32	40	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 03:55	32	40	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 07:41	32	40	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 08:18	32	40	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	02/02/23 13:06	15	365	03/06/23 08:56	32	40	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	02/02/23 13:06	15	365	03/06/23 09:34	32	40	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	02/02/23 13:06	15	365	03/06/23 10:11	32	40	

* Indicates hold time exceedance.



METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: NT10

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dimethylphthalate	4.4	20.0	ug/kg
Acenaphthene	5.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Pentachlorophenol	31.3	100	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	14.1	50.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: 0-916

Lot #: 59-57A

Purity: 99%

Analyst: VFB

Element: B000954



Description: SVOC 4,4 DDT Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 23-Sep-13
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 11:46 by JZ
Vendor: Chem Service Lot #: 198-128A
Vendor Catalog #:

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AS



Description: SVOC alpha-Terpineol Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 12:13 by JZ
Vendor: ACROS Organics Lot #: AD16481201
Vendor Catalog #:

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: AD6481201

Purity: 98%

Analyst: 12



Description: SVOA Dibutyl Phenyl phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 15:45 by JZ
Vendor: Monsanto Lot #: N/A
Vendor Catalog #:

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst: AD



Description: SVOC Triphenyl Phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 15:59 by JZ
Vendor: Aldrich Lot #: 04902CM
Vendor Catalog #:

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Triphenyl phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04902CM

Purity: 99%

Analyst: [Signature]



Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Bulkyated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AB



Description: SVOC Butyl Diphenyl Phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 17:02 by JZ
Vendor: Monsanto Lot #: N/A
Vendor Catalog #:

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 99%

Analyst: [Signature]



Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941

SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: 644 5021

Purity: 90.29%

Analyst: AB



Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945

SVOC Benzoic Acid
Expires 12/31/2029

Prepared By Jianqing Zhou 12/31/2012

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0224339

Purity: 98%

Analyst: AB



Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948

SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By _____ Date _____



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: RB



Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL



B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 62-53

Purity: 99%

Analyst: AB



Description: SVOA Benzidine Expires: 31-Dec-29
Standard Type: Analyte Spike Prepared: 15-Oct-13
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 15-Oct-13 12:07 by JZ
Vendor: SIGMA Lot #: 18C0024
Vendor Catalog #:

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 95%

Analyst: B.

Certificate of Analysis

Product Name: 1,2,4,5-Tetrachlorobenzene
Product Description: 98%
Product Brand: Sigma-Aldrich
Product Number: 131857
Molecular Weight: 215.89
CAS Number: 95-94-3

TEST

APPEARANCE
INFRARED SPECTRUM

GAS LIQUID

QUALITY CONTROL

SPECIFICATION

WHITE POWDER, CHIPS OR CRYSTALS
CONFORMS TO STRUCTURE.

97.5% (MINIMUM)

LOT 19309JR RESULTS

WHITE CHIPS
CONFORMS TO STRUCTURE AND
STANDARD AS
ILLUSTRATED ON PAGE 1011C OF EDITION
I,
VOLUME 1 OF "THE ALDRICH LIBRARY OF
FT-IR
SPECTRA".
99.9 %
JULY 1997



Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

F009172

SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

Data File: \\target\share\chem2\fid4a,1\20230317,1\42301703.D
Date: 17-MAR-2023 10:46
Client ID:
Sample Info: K007226

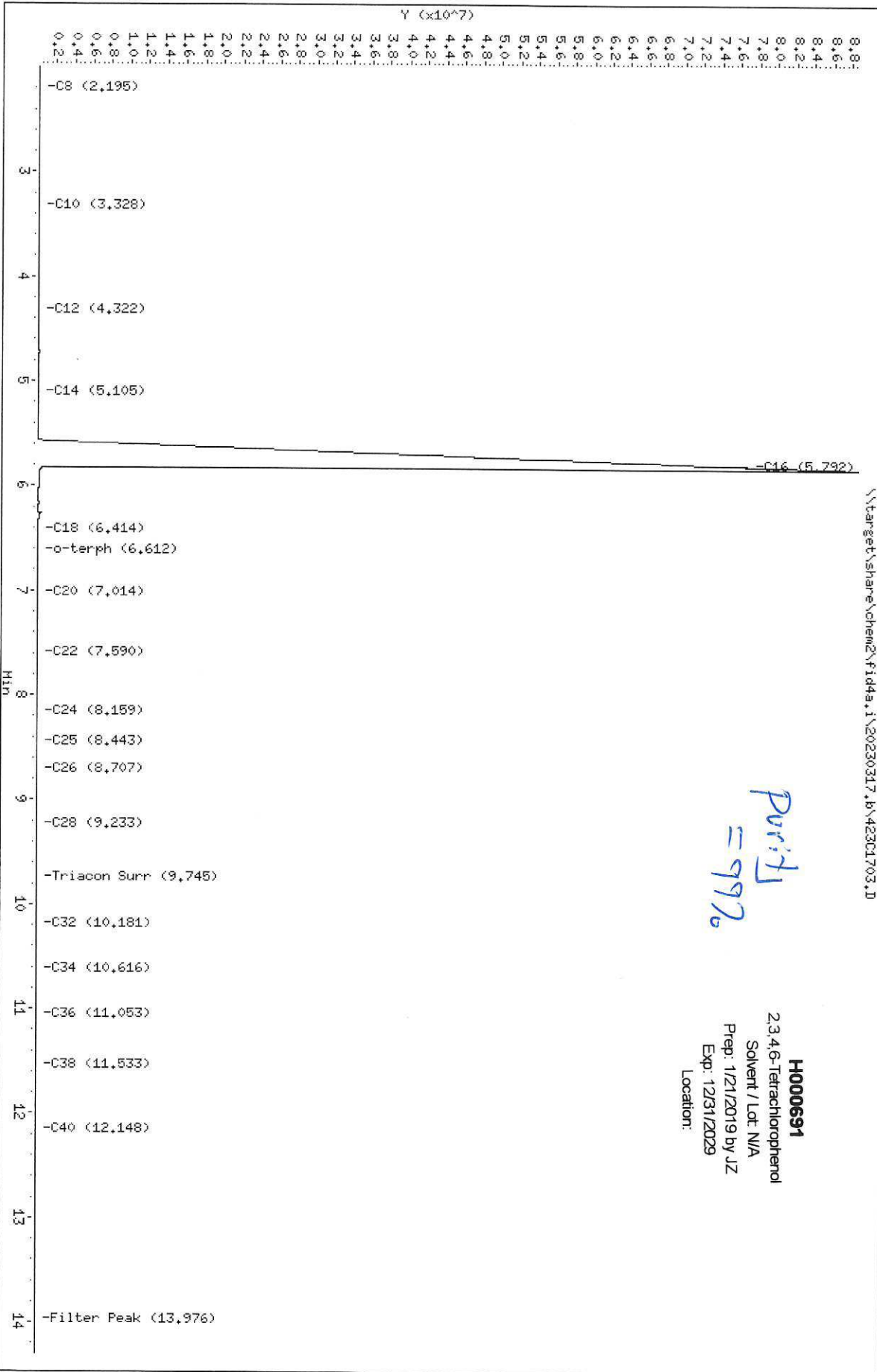
Column phase: RTX-1

Instrument: fid4a,1

Operator: AA

Column diameter: 0.25

Page 1



Purity
= 99.7%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

H000691

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
 Lab Smp Id: K007226
 Inj Date : 17-MAR-2023 10:46
 Operator : AA Inst ID: fid4a.i
 Smp Info : K007226
 Misc Info :
 Comment :
 Method : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
 Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
 Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: Falcon+ Compound Sublist: tph.sub
 Target Version: 4.14
 Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
 Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	\$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	\$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
===== 677340272	===== 268782821	===== 100.000			

Total unknown % area = 25.478

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005199

SVOA-ABN BASE STOCK-200-800ug/ml
 Expires 5/31/2023
 Prepared By Jiangqing Zhou 5/18/2021

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

12-May-2021



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005200
 SVOA-ABN ACID STOCK-200-800ug/ml
 Solvent / Lot: DCM
 Prep: 5/18/2021 by JZ
 Exp: 5/31/2023
 Location:

 5/18/21

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.



Certificate of Analysis

J008074

 SVOA PAH STD 2000ug/ml
 Expires 6/30/2023
 Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Issue Date: 11-Jun-2020

Lot Number: 0006540449

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

 ISO 17034 Cert No.
 AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/

 ISO 17025 Cert
 No. AT-1937

Certificate of Analysis

Product Number: US-106N-1

Lot Number: 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:



Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 2 of 2

www.agilent.com/quality/



ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL16062

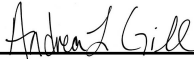
Description: Benzidines Standard

Certification Date: November 19, 2020

Storage: 4 °C

Expiration Date: November 30, 2030

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310

Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

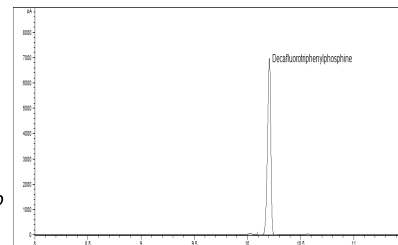


Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness

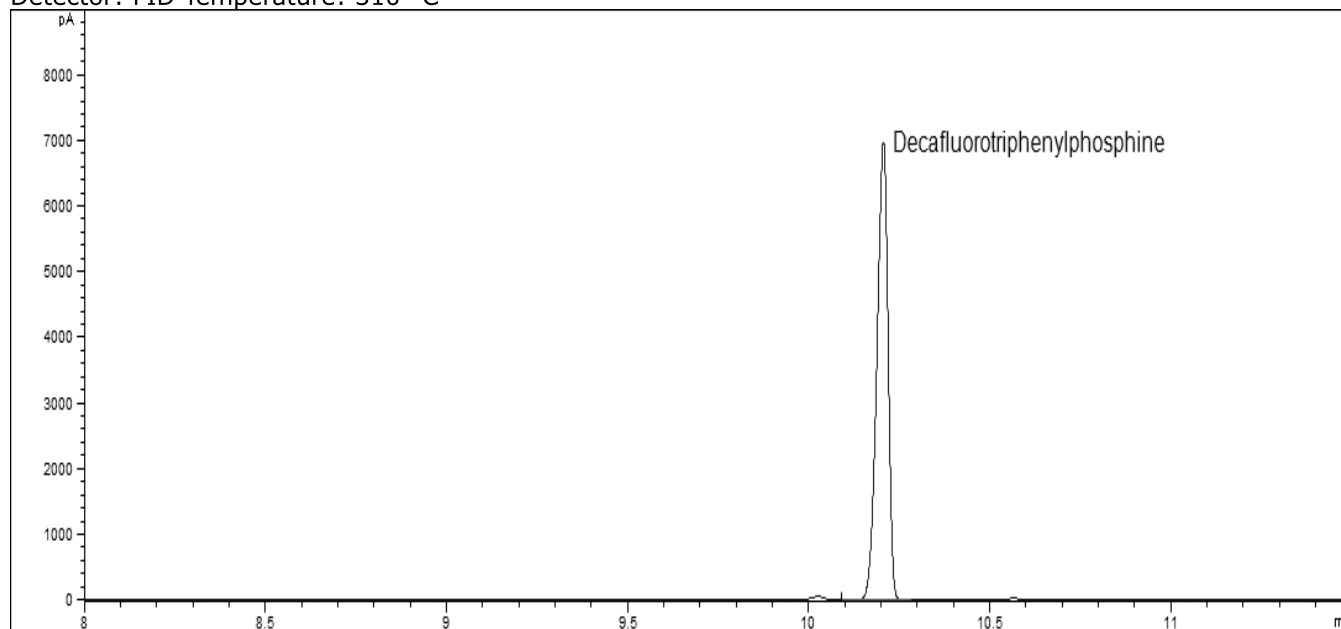
Carrier Gas: H₂ Flow Rate: 4.3 mL/min

Inlet Temperature: 250 °C Injection Volume: 1 µL

Injection Mode: 25:1

Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)

Detector: FID Temperature: 310 °C



Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL16693

Description: Benzoic Acid

Certification Date: May 6, 2021

Storage: 4 °C

Expiration Date: April 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



A Phenomenex
Company

Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenex
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443

Lot Number: CL17696

Description: Aniline

Certification Date: December 14, 2021

Storage: 4 °C

Expiration Date: December 31, 2029

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	Units	Certified ^{1,4} Value
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values



Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	Units	Suggested Acceptance Windows	Standard Deviation
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4°C.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4°C. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4°C.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

1 Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH ISO/IEC 17025:2017 (ANAB Cert AT-1467) and ISO 17034:2016 (ANAB Cert AR-1470).



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certification Date January 05, 2021
Version 0-152021



Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291

Lot Number: CL11000

Description: GC/MS Tuning Mix

Certification Date: May 9, 2014

Storage: 4 °C

Expiration Date: December 31, 2023

Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Revision Date: August 5, 2015

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891

GC/MS Tune solution-1000ug/ml

Solvent / Lot: CL11000

Prep: 4/22/2022 by VS

Exp: 12/31/2023

Location:



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL11110612_us



Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1

Lot Issue Date: 25-May-2021

Lot Number: 0006609664

Expiration Date: 30-Jun-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NC SL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

[Handwritten signature]
5/11/22

K004539

toxic sub mix#1

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 6/30/2024

Location:



ISO 17034 Cert
No. AR-1936

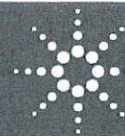
RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Reference Material Certificate

Product Name: Phenols Standard **Lot Number:** 0006648297
Product Number: US-107N-1 **Lot Issue Date:** 17-Nov-2021
Storage Conditions: Store at Room Temperature (15° to 30°C). **Expiration Date:** 31-Dec-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
4-chloro-3-methylphenol	2006	± 10 µg/mL		000059-50-7	RM01885
2-chlorophenol	2007	± 10 µg/mL		000095-57-8	RM01871
2,4-dichlorophenol	2005	± 10 µg/mL		000120-83-2	RM13878
2,4-dimethylphenol	2006	± 10 µg/mL		000105-67-9	RM13009
2,4-dinitrophenol	2006	± 10 µg/mL		000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005	± 10 µg/mL		000534-52-1	RM02292
2-nitrophenol	2007	± 10 µg/mL		000088-75-5	RM13445
4-nitrophenol	2006	± 10 µg/mL		000100-02-7	RM03752
pentachlorophenol	2006	± 10 µg/mL		000087-86-5	RM02474
phenol	2006	± 10 µg/mL		000108-95-2	RM11471
2,4,6-trichlorophenol	2006	± 10 µg/mL		000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSS Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

JZ 5/11/22

ISO 17034



Agilent

Trusted Answers

Reference Material Certificate

Product Name: PAH Standard

Lot Number: 0006627349

Product Number: US-106N-1

Lot Issue Date: 17-Sep-2021

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
acenaphthene	2007	± 10 µg/mL		000083-32-9	RM10879
acenaphthylene	2004	± 10 µg/mL		000208-96-8	RM10891
anthracene	2006	± 10 µg/mL		000120-12-7	RM14212
benz[a]anthracene	2006	± 10 µg/mL		000056-55-3	RM16072
benzo[b]fluoranthene	2006	± 10 µg/mL		000205-99-2	RM14571
benzo[k]fluoranthene	2006	± 10 µg/mL		000207-08-9	RM18376
benzo[ghi]perylene	2006	± 10 µg/mL		000191-24-2	RM15761
benzo[a]pyrene	2006	± 10 µg/mL		000050-32-8	RM17573
chrysene	2007	± 10 µg/mL		000218-01-9	RM13771
dibenz[a,h]anthracene	2006	± 10 µg/mL		000053-70-3	RM06786
fluoranthene	2006	± 10 µg/mL		000206-44-0	RM12277
fluorene	2006	± 10 µg/mL		000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006	± 10 µg/mL		000193-39-5	RM14192
naphthalene	2007	± 10 µg/mL		000091-20-3	RM10445
phenanthrene	2005	± 10 µg/mL		000085-01-8	RM10495
pyrene	2005	± 10 µg/mL		000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541

SVOA PAH STD 2000ug/ml

Solvent / Lot: DCM/BENZENE

Prep: 5/11/2022 by JZ

Exp: 10/31/2024

Location: Fridge 19

Page: 1 of 2

CSD-QA-015.1



Reference Materials Producer
Cert #2495.01



Certificate of Analysis



Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number:	ECS-A-030	Lot No.	AA210126005
Description:	Base/Neutrals Mix 1	Manufactured Date:	1-26-2021
Matrix:	Methylene Chloride	Expiration Date:	1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Mave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$ where k=2 is the coverage factor at the 95% confidence level
- $u_c =$ combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributied By SPEX CertiPrep

SPEX CertiPrep 

Your Science is Our Passion.®

203 Norcross Ave. Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-732-549-7144 • Fax 1-732-603-9647





Reference Materials Producer
Cert #2495.01



Certificate of Analysis



Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Moore

Report of Certification

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- | | |
|--|---|
| <ul style="list-style-type: none">- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification | <ul style="list-style-type: none">- Guide to the Expression of Uncertainty in Measurement 1997- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition- ASTM Guide D6362-98- NIST Technical Note 1297- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers- ISO/REMCO N280 |
|--|---|

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributed By SPEX CertiPrep

SPEX CertiPrep

Your Science is Our Passion.®

203 Norcross Ave. Metuchen NJ 08840

www.spexcstiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647





Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1

Lot Issue Date: 19-Jul-2021

Lot Number: 0006624769

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543

1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

[Handwritten signature]
5/11/22

Sample lot approver:

[Handwritten signature]
Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1

Lot Issue Date: 02-Jul-2021

Lot Number: 0006620643

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544

toxic sub mix#2

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 7/31/2023

Location:

JZ 05/11/22



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 31493 Lot No.: A0181243
Description: CLP 04.1 BNA Surrogate Mix
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: October 31, 2025 Storage: 10°C or colder
Handling: Sonicate prior to use. Ship: Ambient

Handwritten signature and date: 05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Table with 7 columns: Elution Order, Compound, CAS #, Purity, Weight, Concentration, and Method. Contains 7 rows of data for various compounds like 2-Fluorophenol, Phenol-d6, 2-Chlorophenol-d4, 1,2-Dichlorobenzene-d4, Nitrobenzene-d5, 2-Fluorobiphenyl, and 2,4,6-Tribromophenol.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL17953

Description: Benzoic Acid

Certification Date: January 31, 2022

Storage: 4 °C

Expiration Date: January 31, 2032

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603

Benzoic Acid @2000ug/ml

Solvent / Lot: N/A

Prep: 5/13/2022 by JZ

Exp: 1/31/2032

Location: GC



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL17662

Description: Benzidines Standard

Certification Date: December 2, 2021

Storage: 4 °C

Expiration Date: November 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604

Benzidines std @2000ug/ml
Solvent / Lot: Mecl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

JZ 5/13/22



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

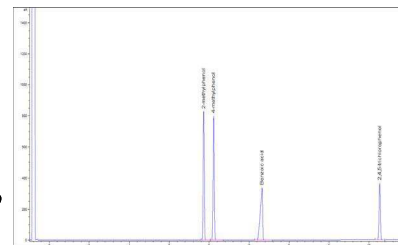


Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

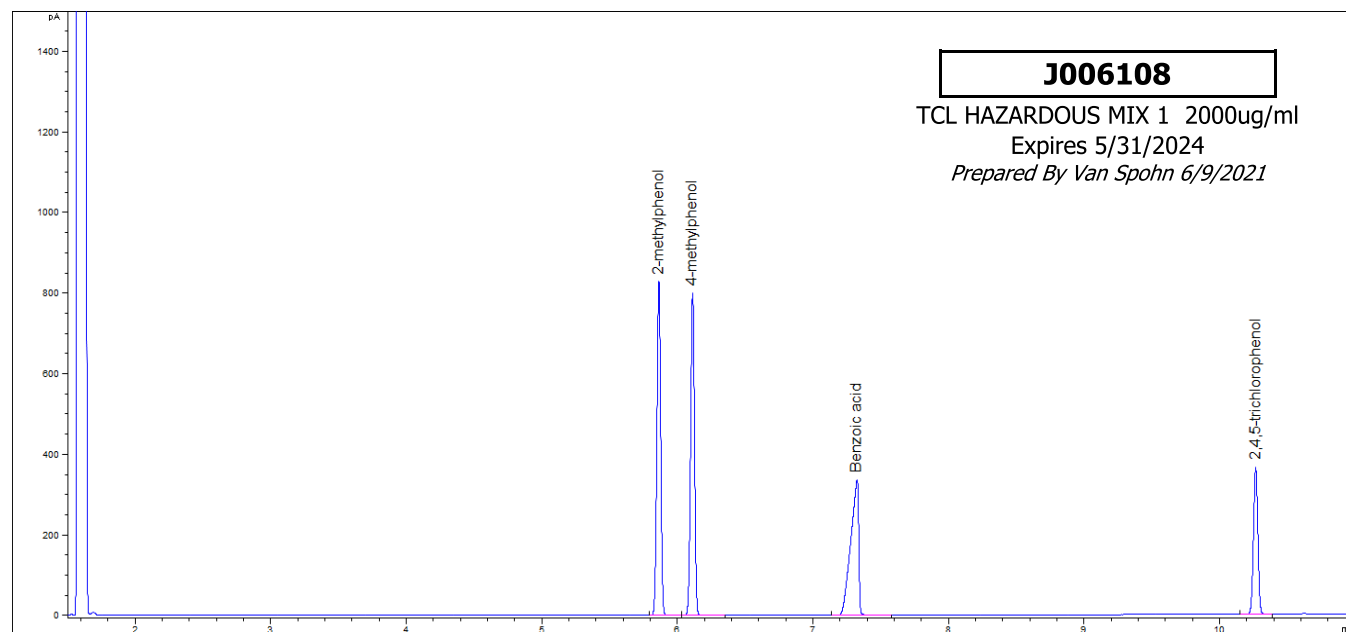
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Elution order	Raw Material Lot
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:

Analytical Method Parameters:
 Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
 Carrier Gas: H₂, Flow: 4.5 mL/min
 Inlet Temperature: 170 °C, Injection Volume: 1 µL
 Injection Mode: Split, Split Ratio: 20:1



Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021



Handwritten signature of Andy Ommen in black ink.

Andy Ommen - QC Manager

Handwritten signature of Mark Pooler in black ink.

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

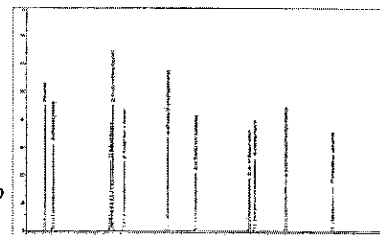
The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

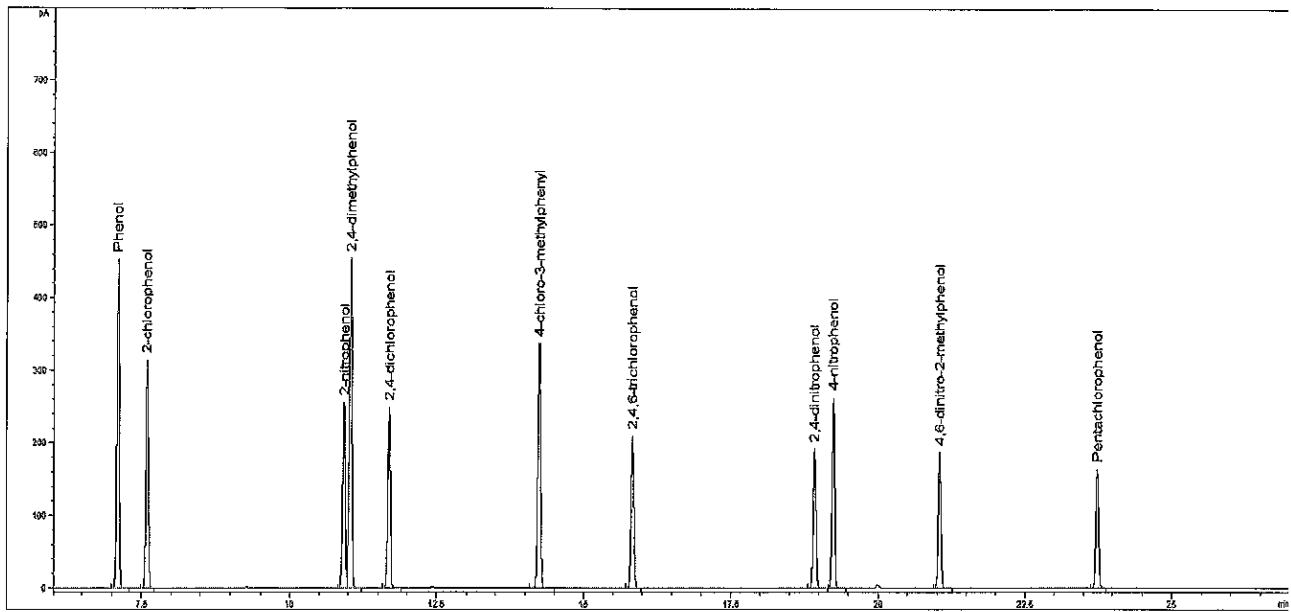
Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597

TCL Phenols Mix 2000ug/ml
 Solvent / Lot: LRAD0139
 Prep: 12/30/2021 by VS
 Exp: 7/31/2024
 Location:





METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m x 0.53 mm I.D., 1.5 µm film thickness

Carrier Gas: H₂ Flow Rate: 4.5 mL/min

Inlet Temperature: 200 °C Injection Volume: 1.0 µL

Injection Mode: 25:1

Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)

Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorophenol
6	14.242	4-chloro-3-methylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021



Andy Ommen

Mark Pooler

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability:

This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty:

Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment:

Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.





110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

K007194
 CLP 04.1 BNA SURR MIX
 Solvent / Lot: A0187400
 Prep: 8/5/2022 by VS
 Exp: 4/30/2026
 Location:

IAL



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400
Description : CLP 04.1 BNA Surrogate Mix
CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2026 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	2-Fluorophenol CAS # 367-12-4 Purity 99% (Lot STBJ3299)	1,508.0 µg/mL	+/-	8.9571	µg/mL Gravimetric
			+/-	44.0466	µg/mL Unstressed
			+/-	53.4340	µg/mL Stressed
2	Phenol-d6 CAS # 13127-88-3 Purity 99% (Lot SL210831)	1,510.0 µg/mL	+/-	8.9689	µg/mL Gravimetric
			+/-	44.1050	µg/mL Unstressed
			+/-	53.5049	µg/mL Stressed
3	2-Chlorophenol-d4 CAS # 93951-73-6 Purity 99% (Lot PR-30568)	1,512.0 µg/mL	+/-	8.9808	µg/mL Gravimetric
			+/-	44.1635	µg/mL Unstressed
			+/-	53.5758	µg/mL Stressed
4	1,2-Dichlorobenzene-d4 CAS # 2199-69-1 Purity 99% (Lot PR-32597)	1,004.0 µg/mL	+/-	5.9635	µg/mL Gravimetric
			+/-	29.3255	µg/mL Unstressed
			+/-	35.5754	µg/mL Stressed
5	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99% (Lot PR-29940A)	1,004.0 µg/mL	+/-	5.9635	µg/mL Gravimetric
			+/-	29.3255	µg/mL Unstressed
			+/-	35.5754	µg/mL Stressed
6	2-Fluorobiphenyl CAS # 321-60-8 Purity 99% (Lot 00021384)	1,004.0 µg/mL	+/-	5.9635	µg/mL Gravimetric
			+/-	29.3255	µg/mL Unstressed
			+/-	35.5754	µg/mL Stressed
7	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99% (Lot MKCJ7664)	1,502.0 µg/mL	+/-	8.9214	µg/mL Gravimetric
			+/-	43.8714	µg/mL Unstressed
			+/-	53.2214	µg/mL Stressed

8	p-Terphenyl-d14		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)		+/- 29.2671	µg/mL	Unstressed
	Purity 99%			+/- 35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

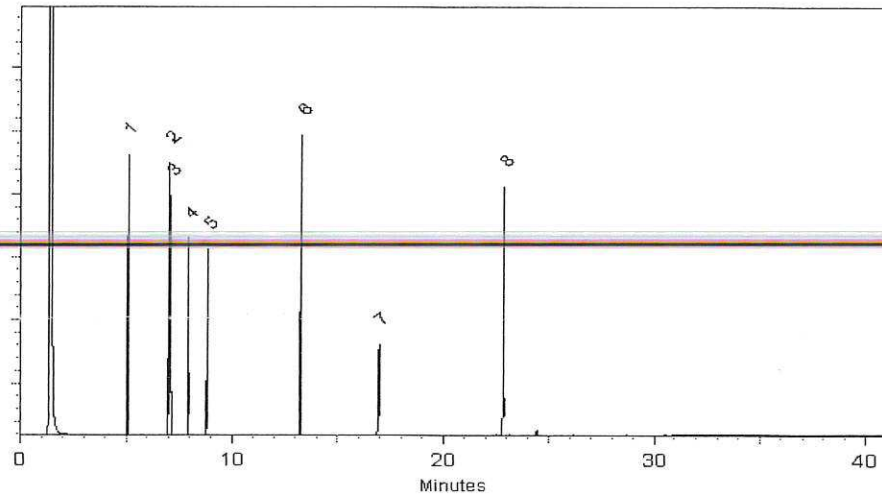
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder
Bryan Snyder - Operations Tech I

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Mixed: 17-Jul-2022 **Balance:** 1128353505

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

K007995

SVOA-8270 LCS MIX 1000ug/ml

Solvent / Lot: N/A

Prep: 8/29/2022 by JZ

Exp: 8/31/2023

Location: FREEZER 44



Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444 **Lot Number:** CL18355
Description: 8270 Calibration Standard **Certification Date:** July 25, 2022
Storage: -18 °C **Expiration Date:** August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroisopropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

03 JUN 2022



Andy Ommen - QC Manager



Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-01 A

SDG: 23A0326

Sampled: 01/16/23 15:17

Prepared: 02/02/23 13:06

File ID: NT1003052323S.D

% Solids: 58.96

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 03:17

Batch: BLA0685

Sequence: SLC0440

Initial/Final: 17.67 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.5	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	1.1	J	0.7	4.8
100-51-6	Benzyl Alcohol	1	15.5	J	2.4	19.2
65-85-0	Benzoic acid	1	19.0	J	12.9	96.0
105-67-9	2,4-Dimethylphenol	1	2.6	J	2.1	19.2
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.5	J	1.3	4.8
87-86-5	Pentachlorophenol	1	19.2	U	2.0	19.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	719.89	51.4	7.15	27 - 120	*
p-Terphenyl-d14	479.93	765	159	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305A.b\SIH.b\NT1003052323S.D

Date : 06-HRR-2023 03:17

Client ID:

Sample Info: 23A0326-01

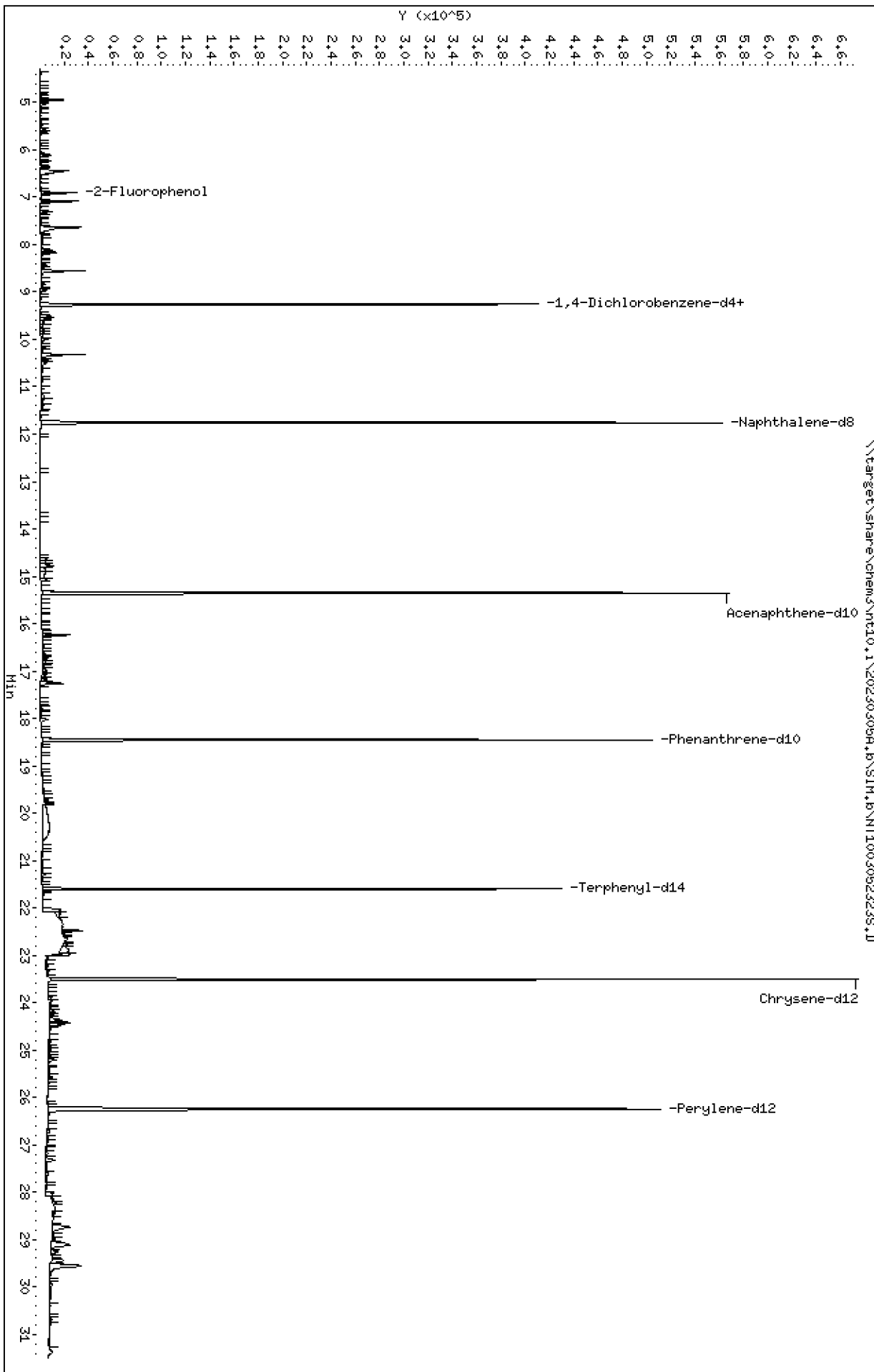
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305A.b\SIH.b\NT1003052323S.D



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

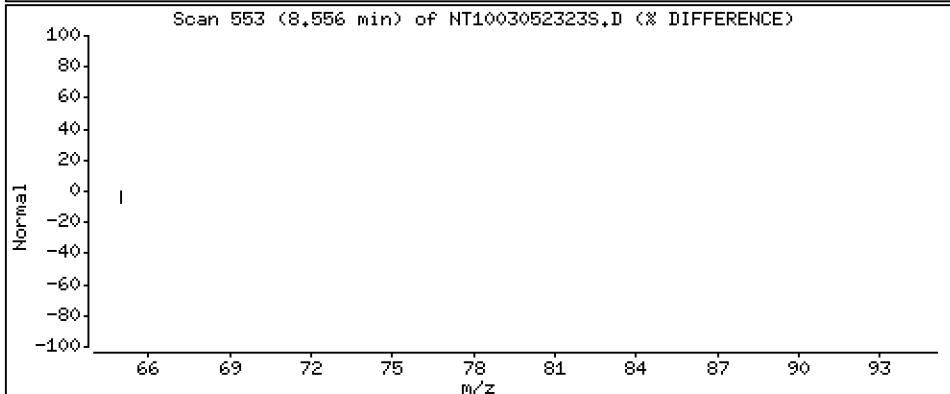
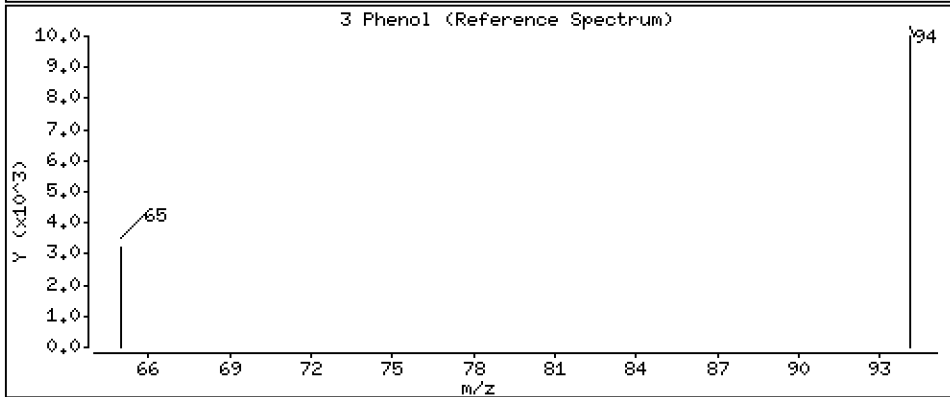
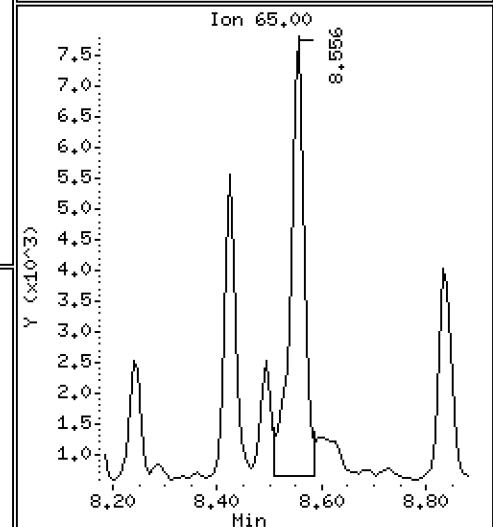
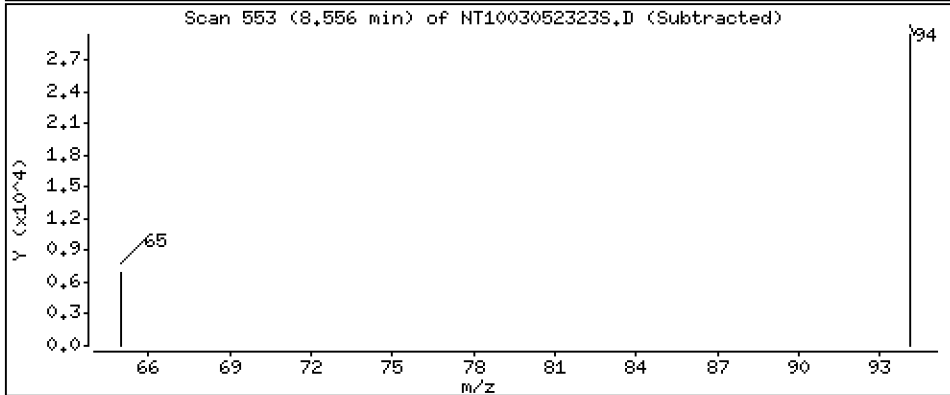
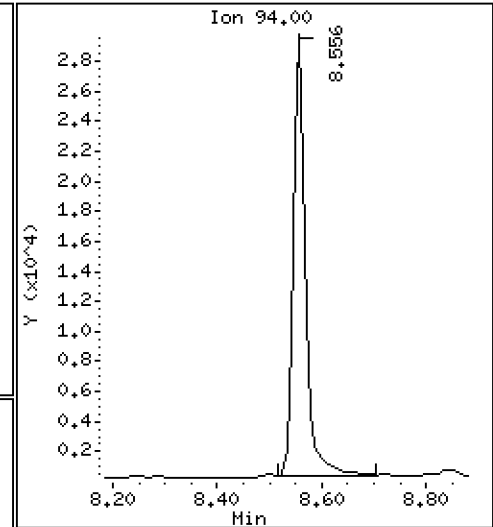
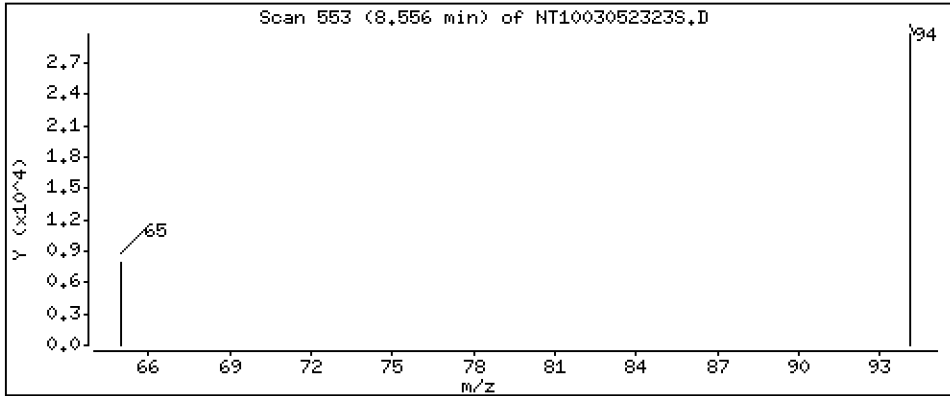
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,4900 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

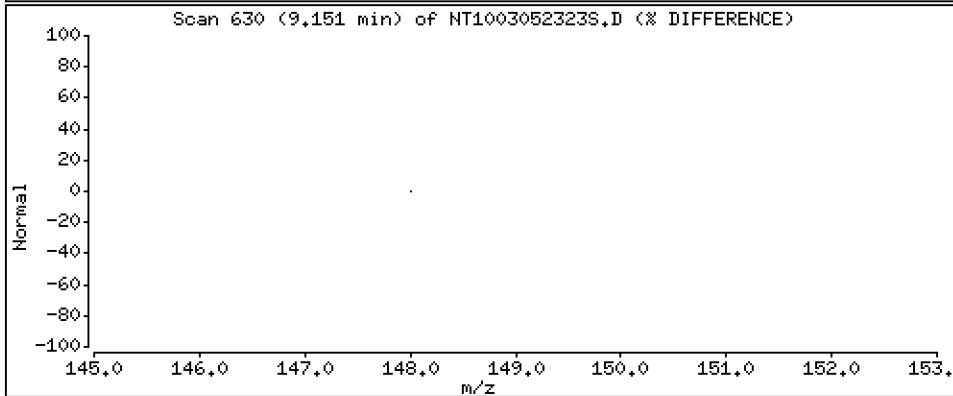
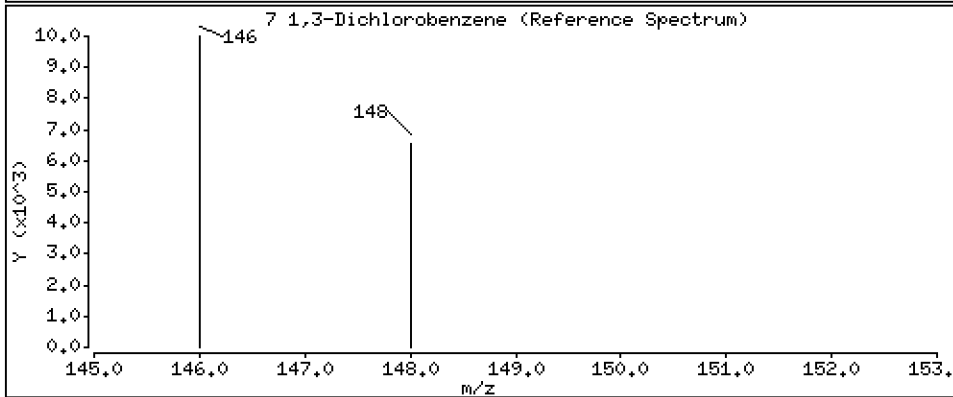
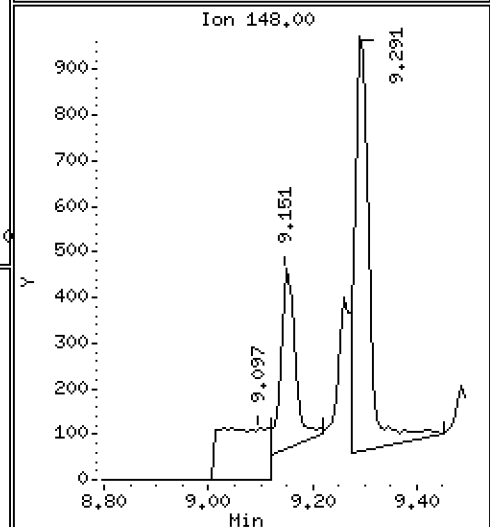
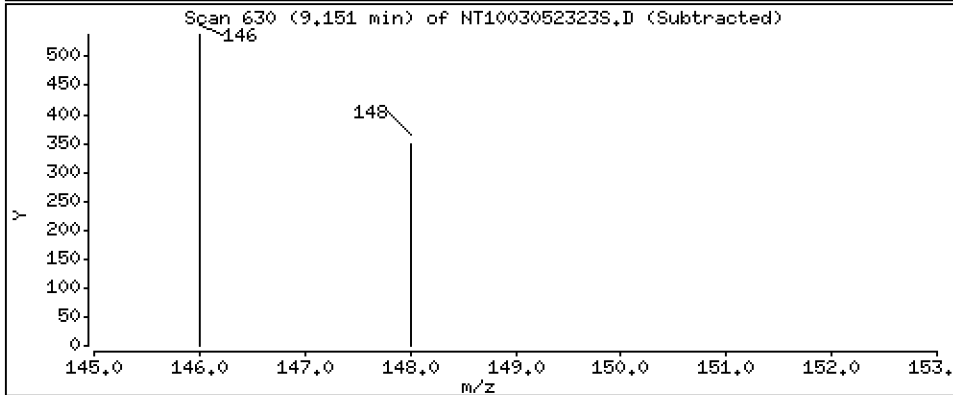
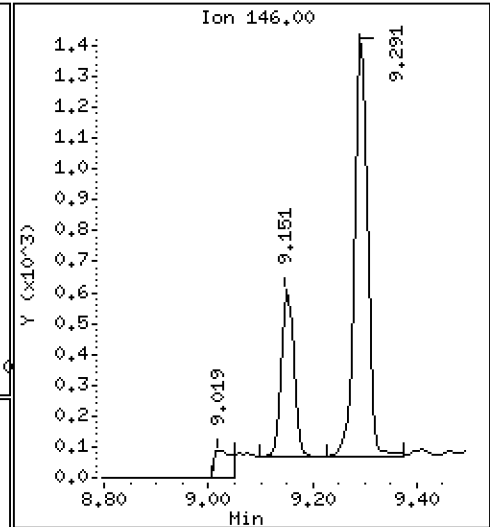
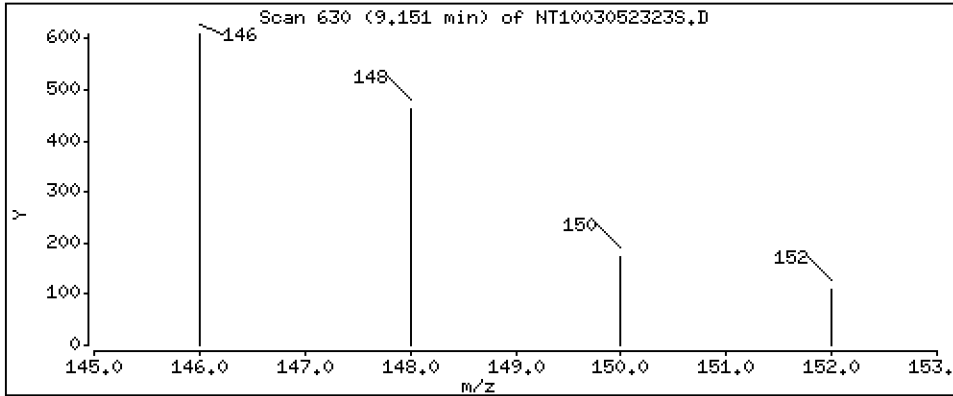
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,009472 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

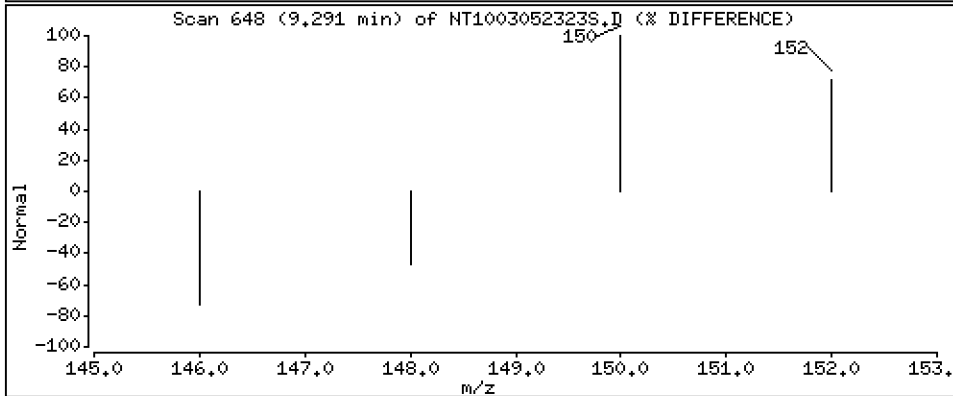
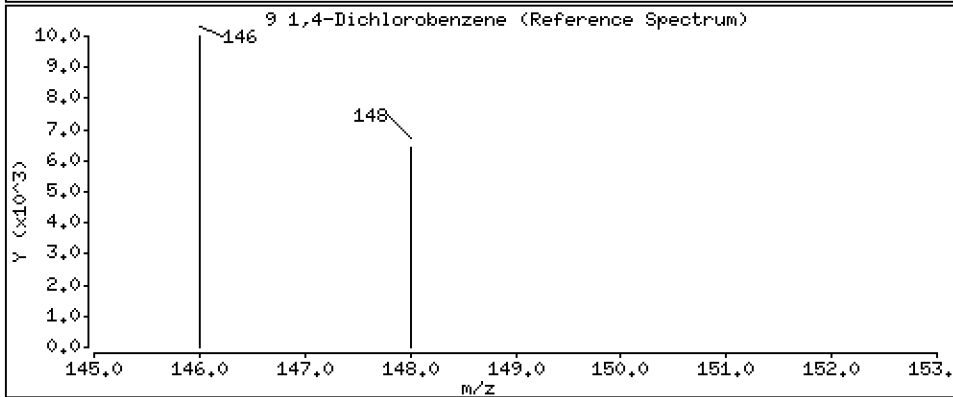
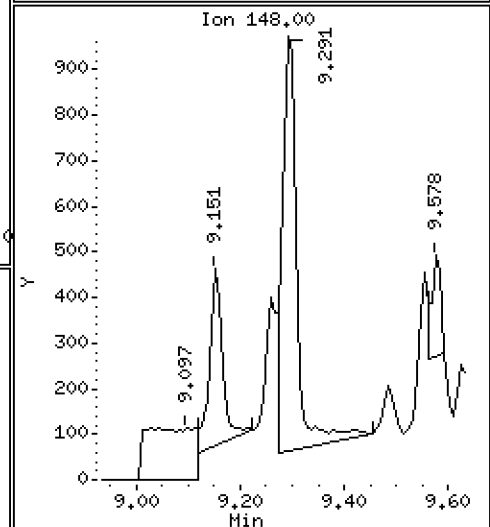
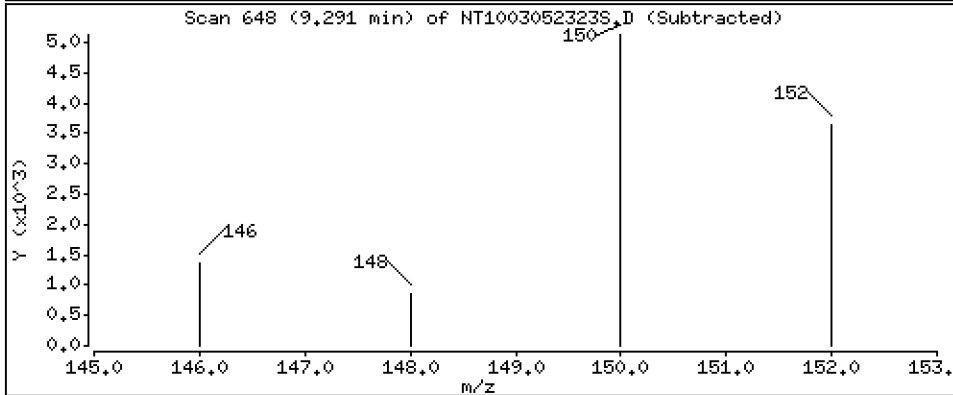
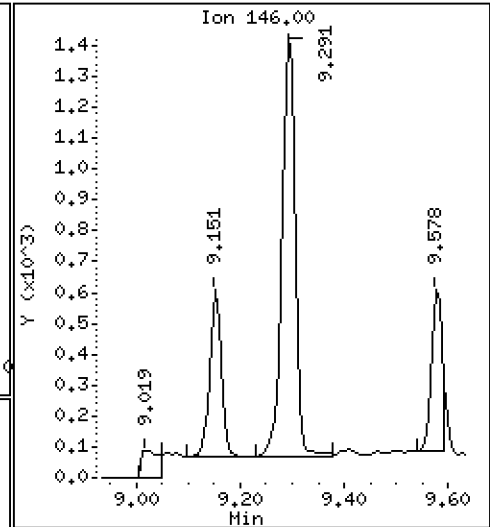
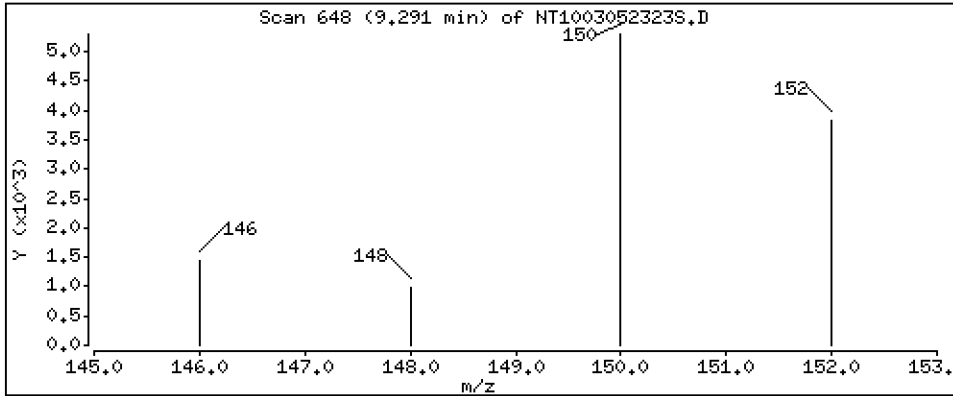
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,02643 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

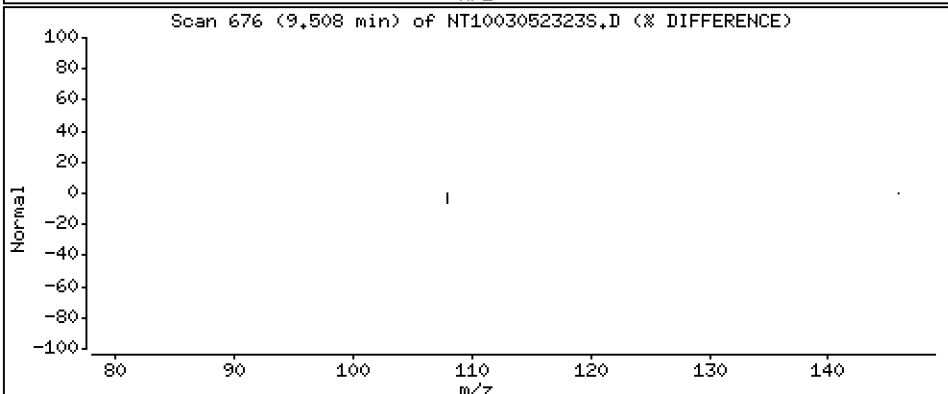
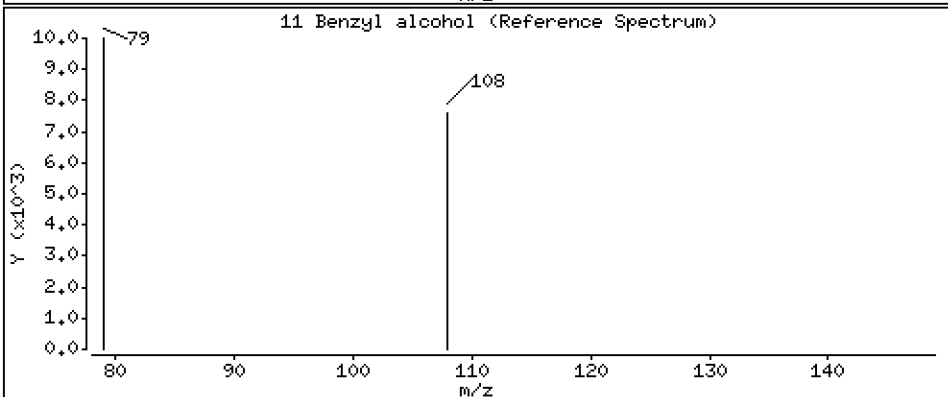
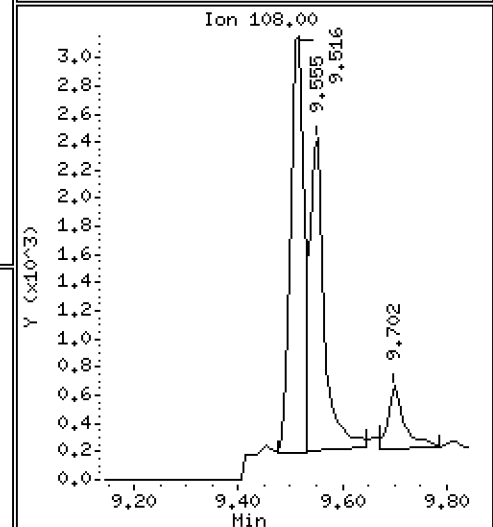
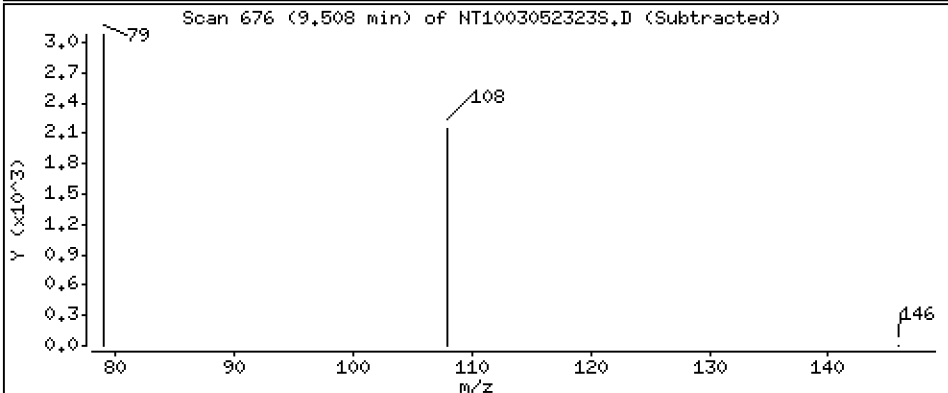
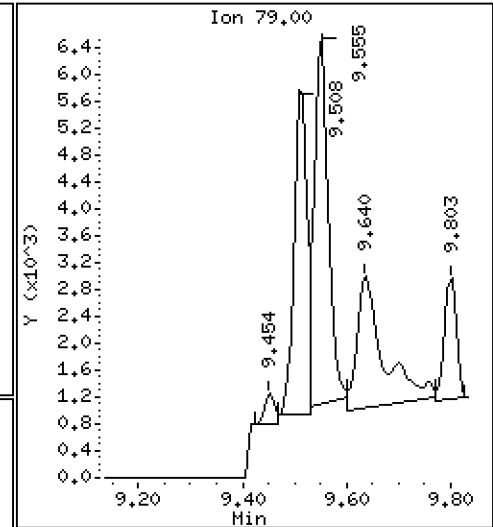
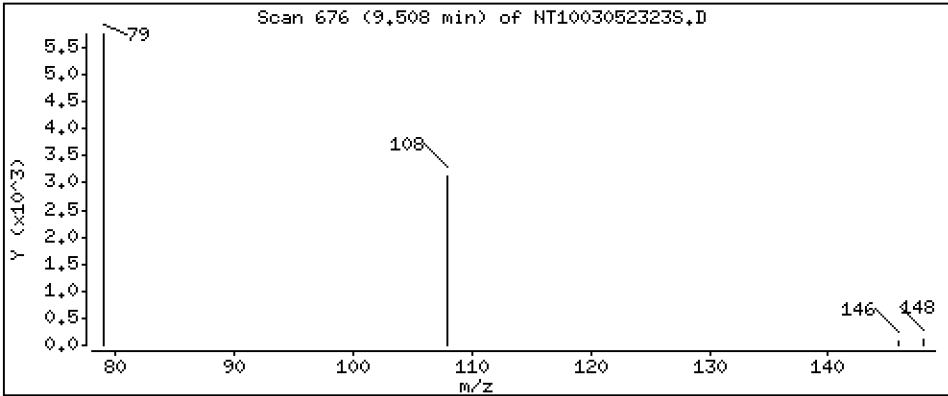
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1620 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

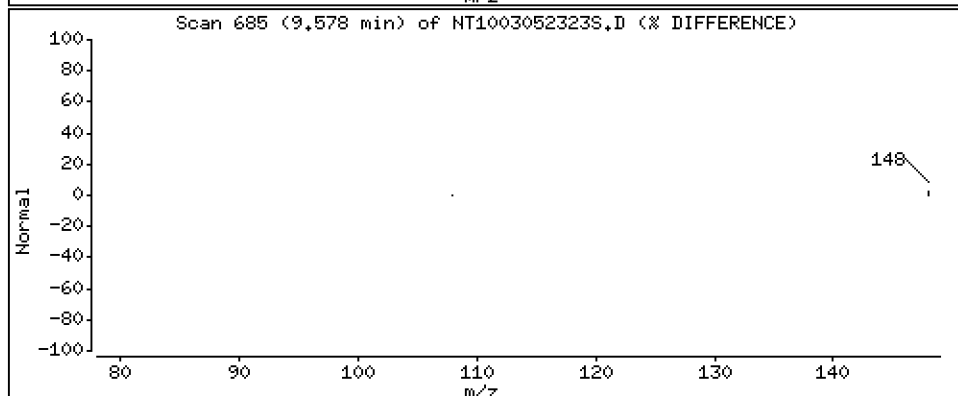
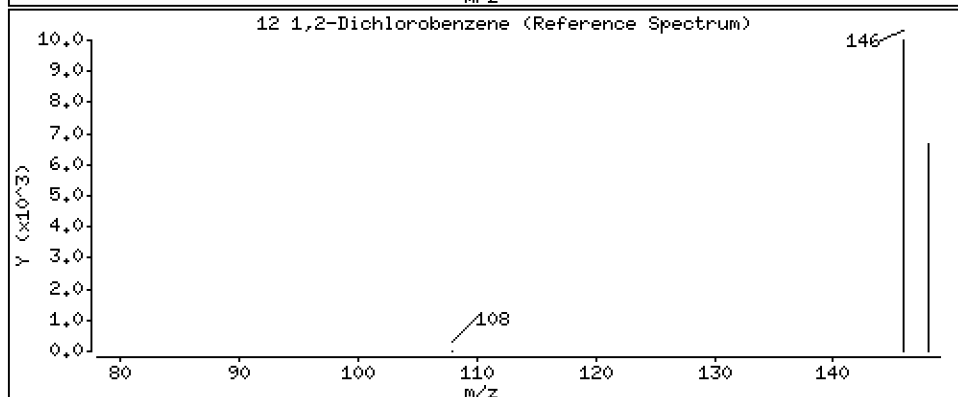
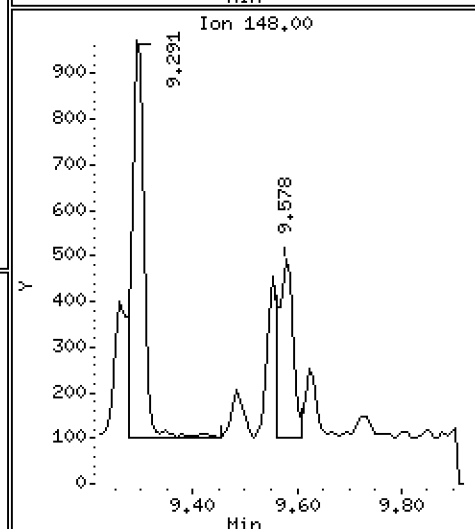
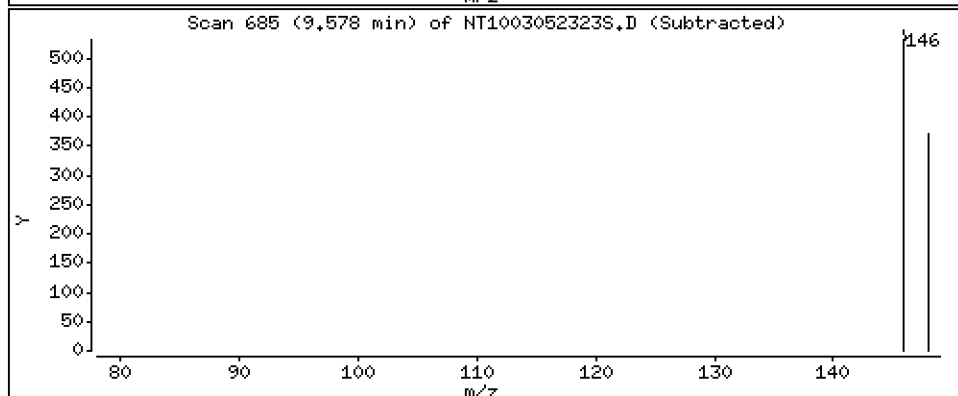
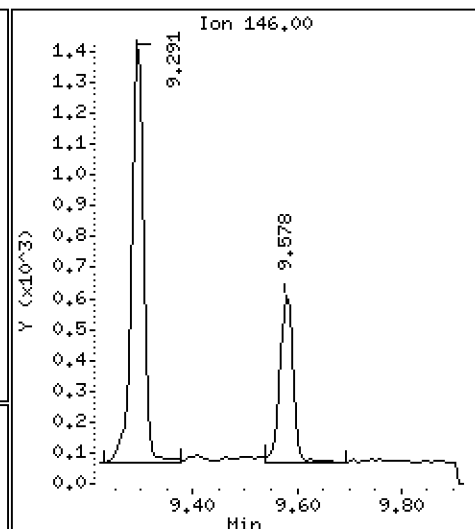
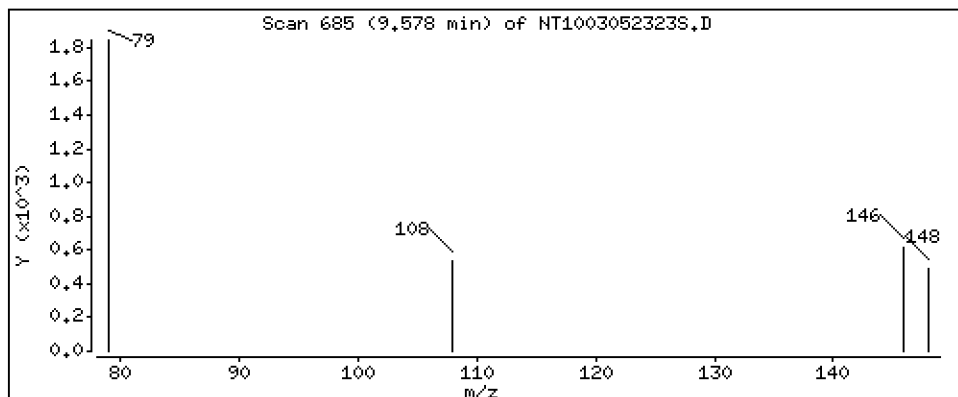
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,01122 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

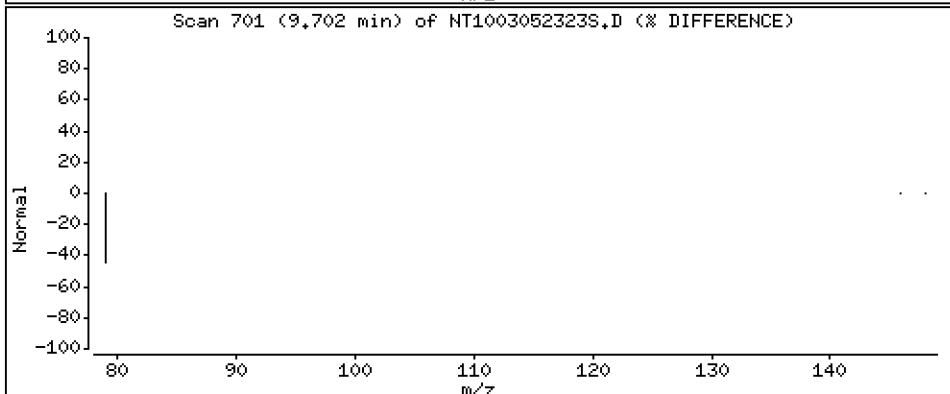
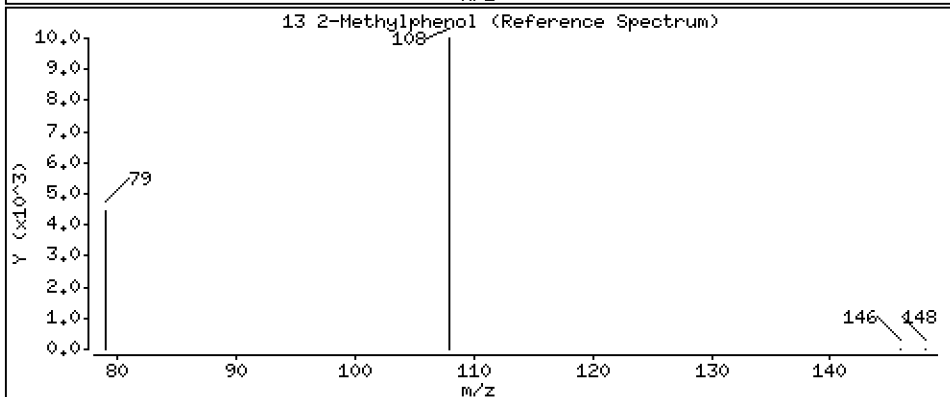
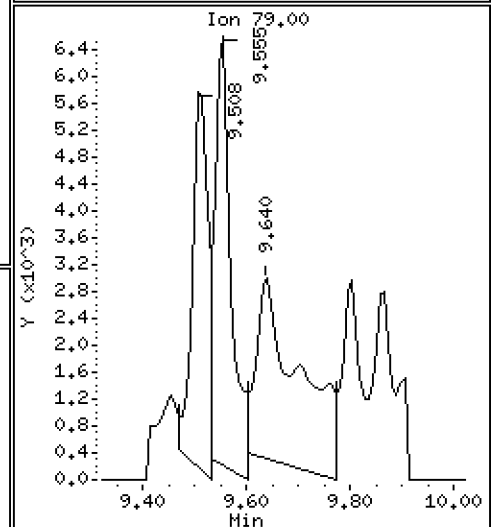
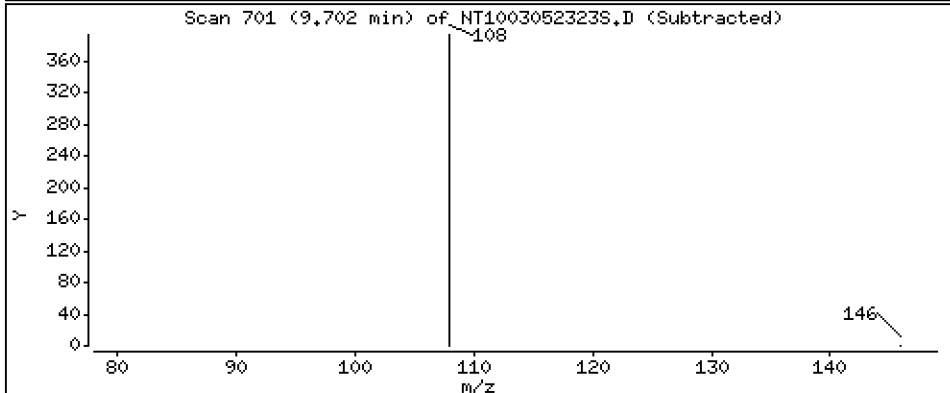
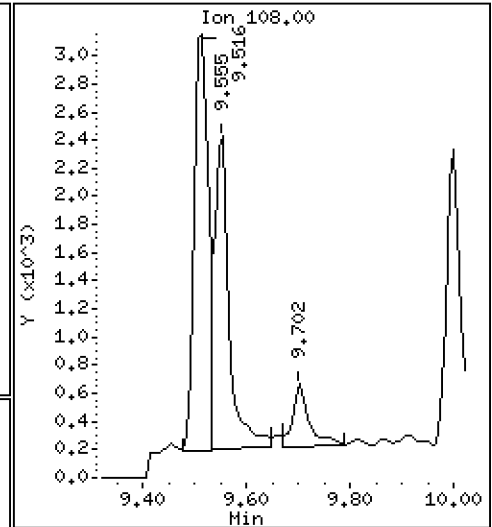
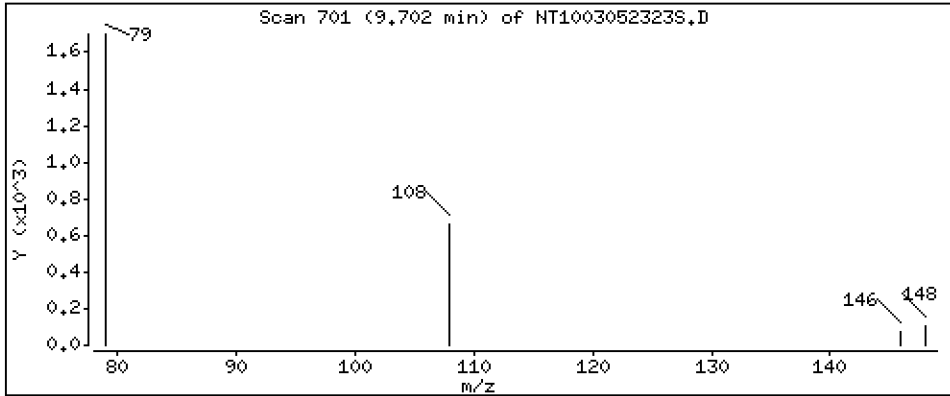
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,01641 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

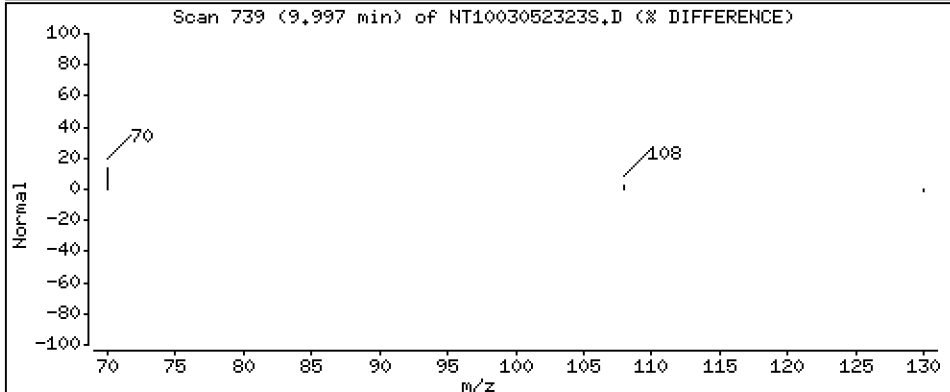
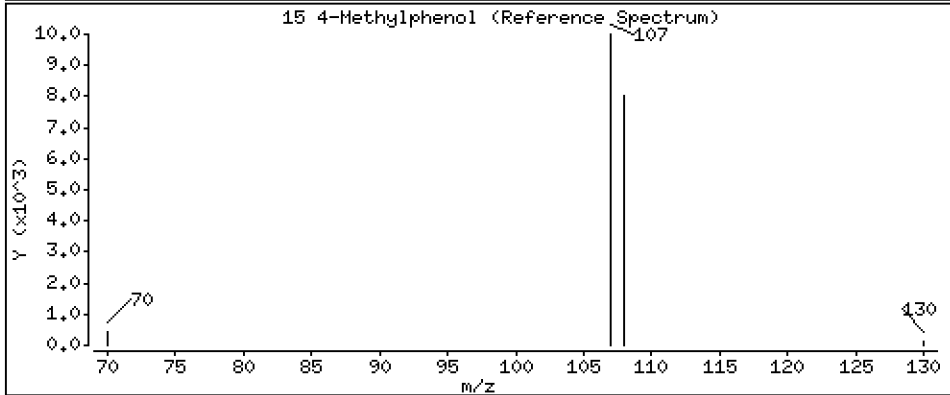
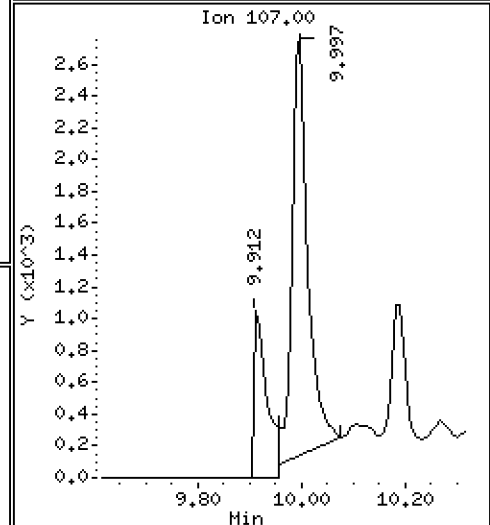
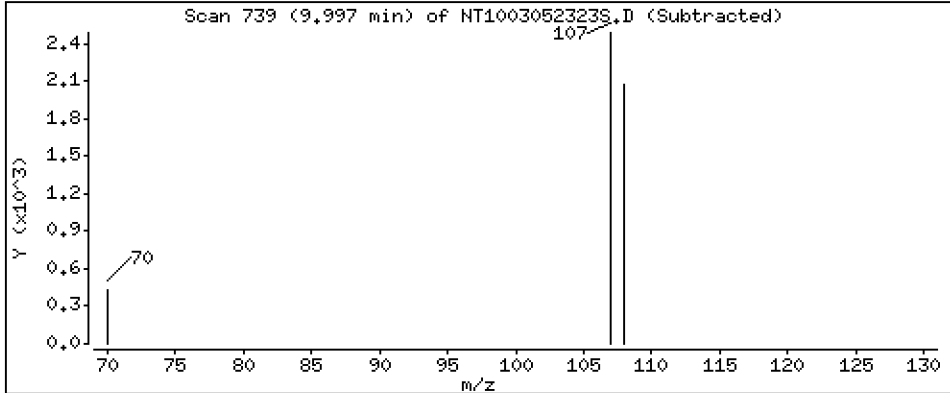
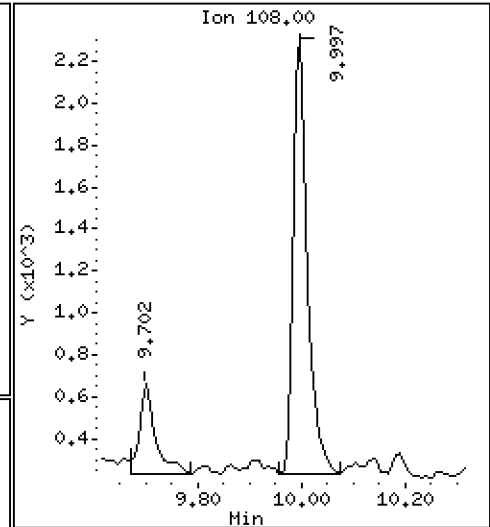
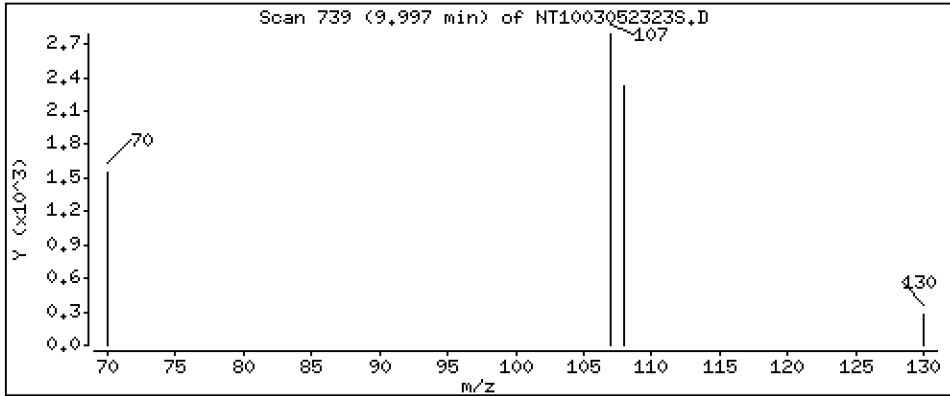
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.06508 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

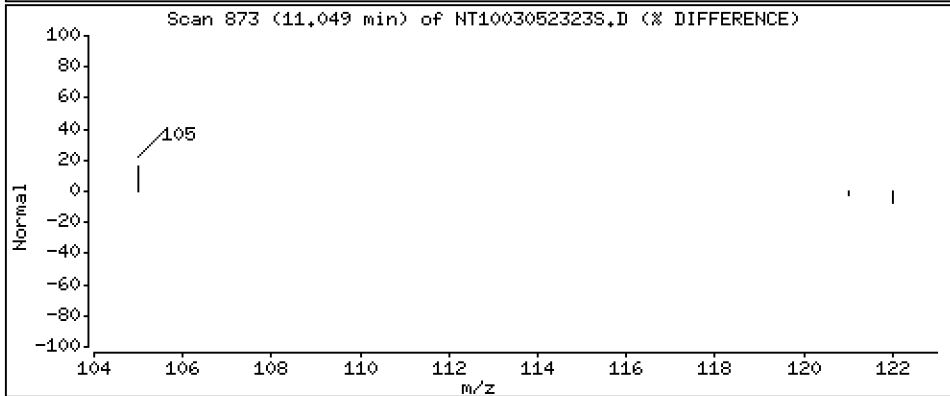
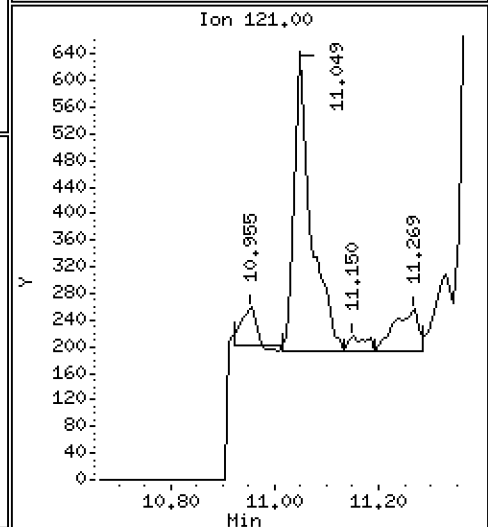
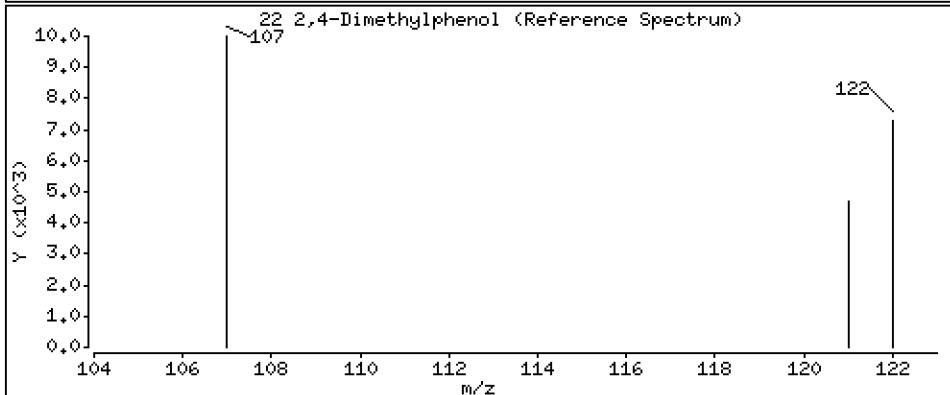
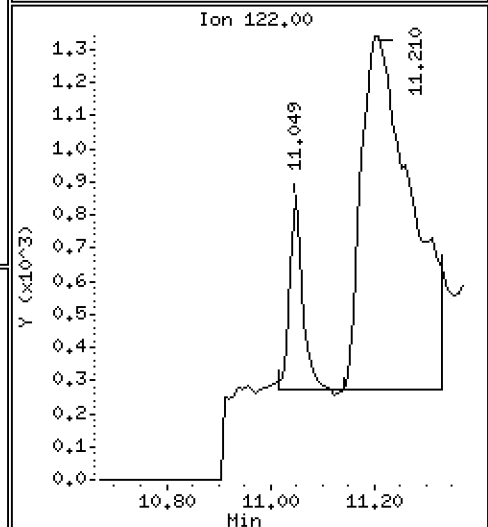
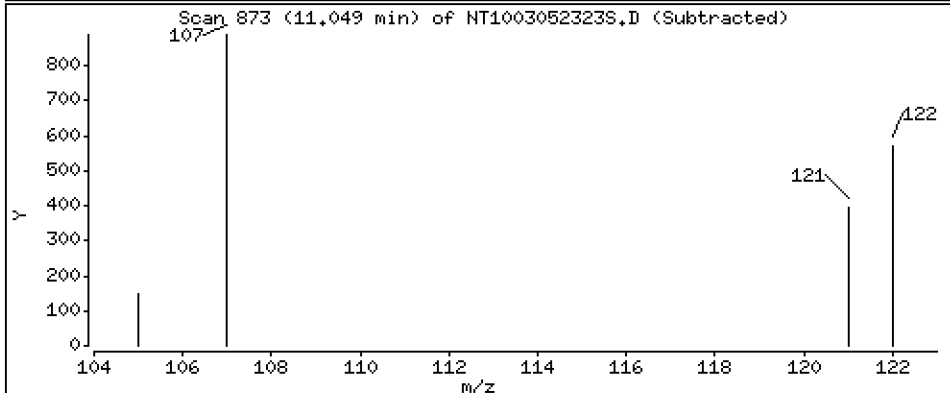
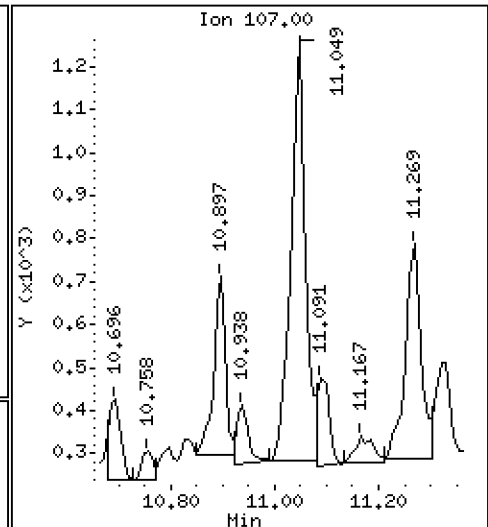
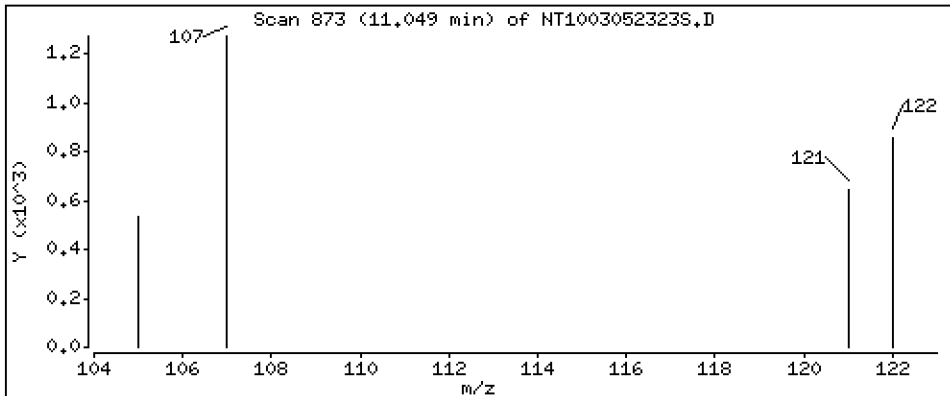
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.02699 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

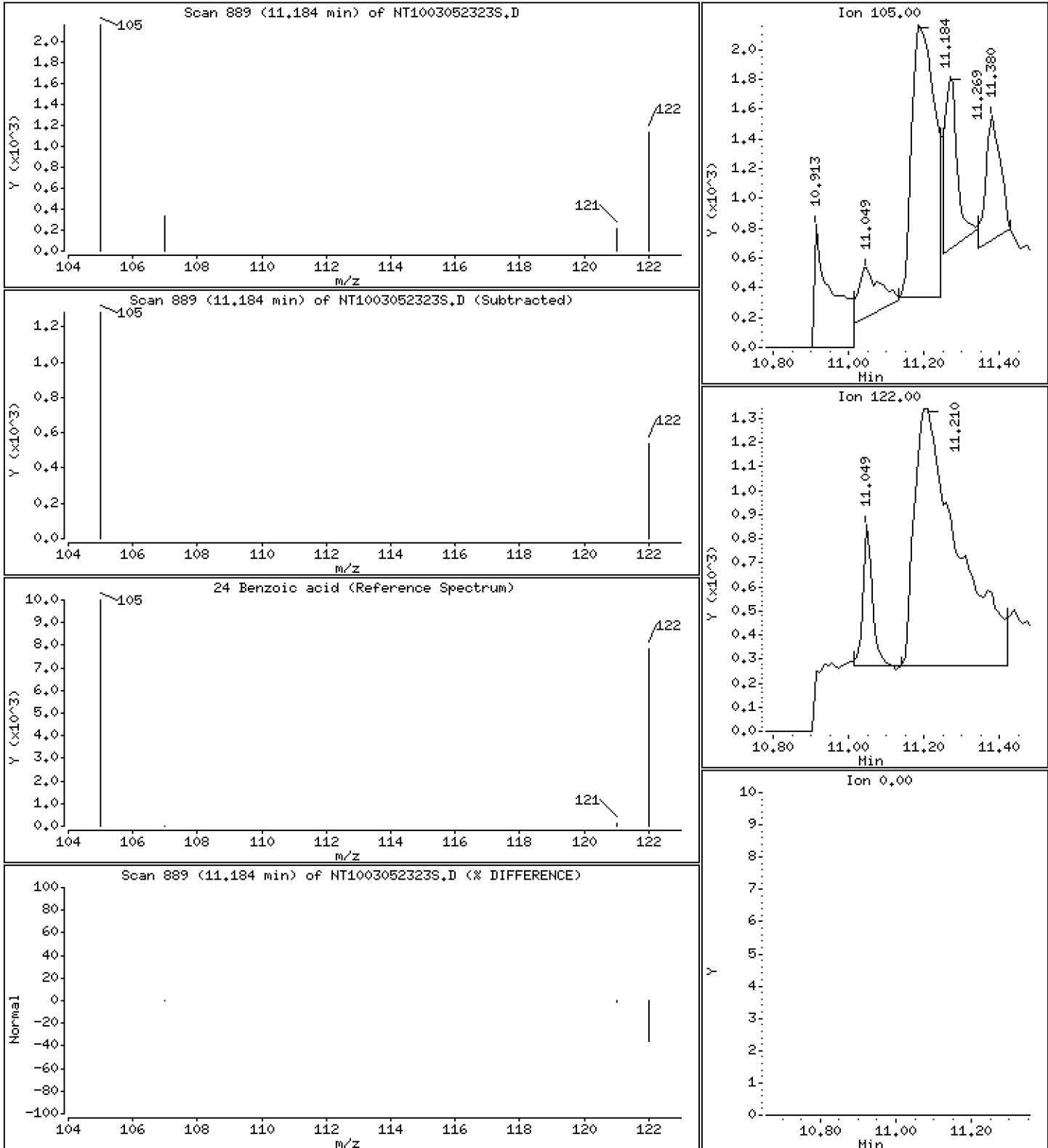
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1983 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

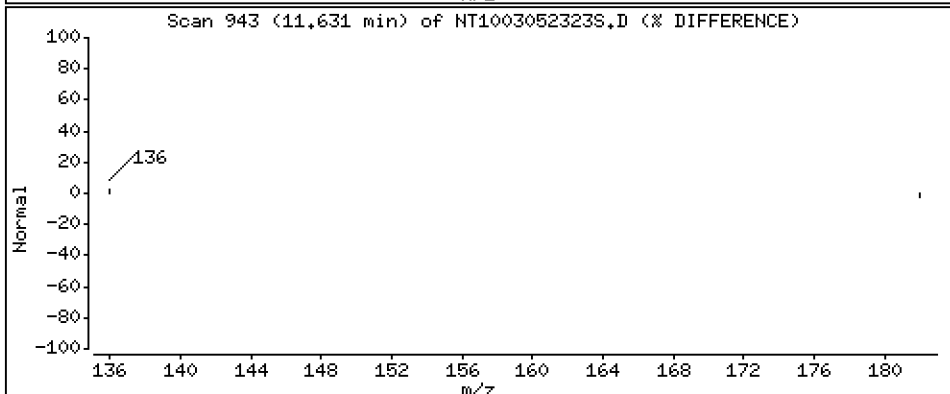
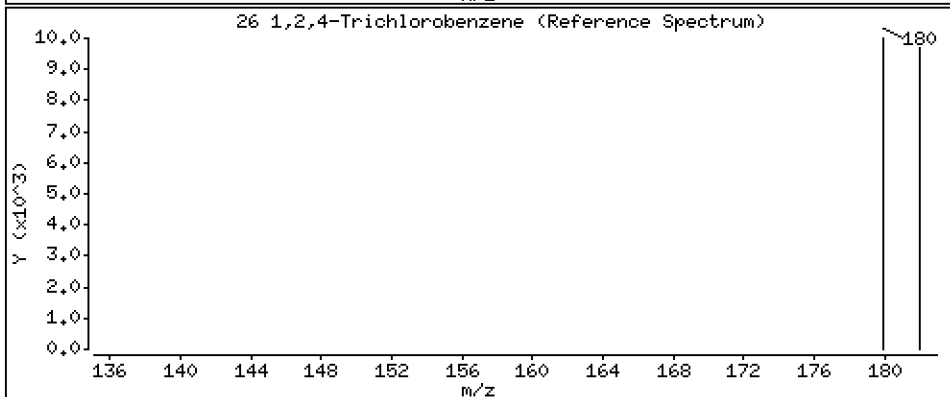
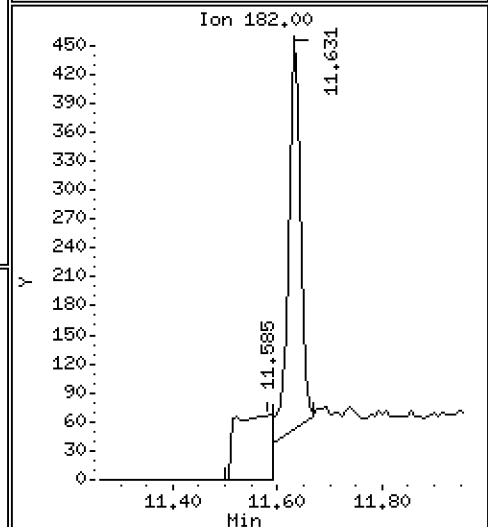
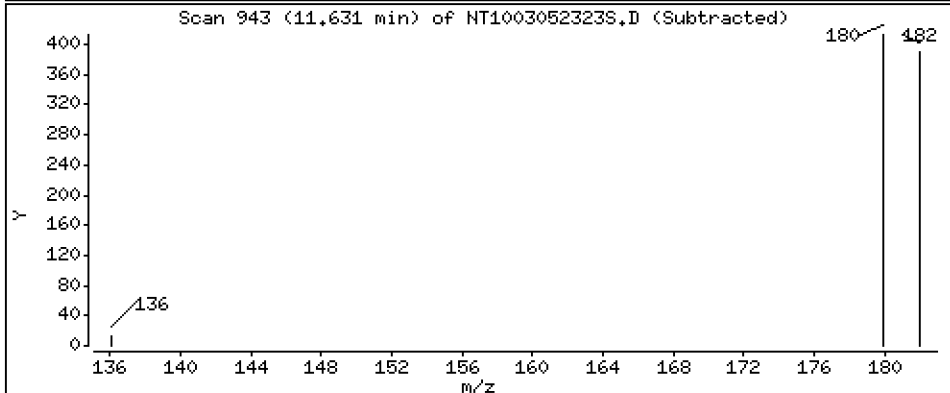
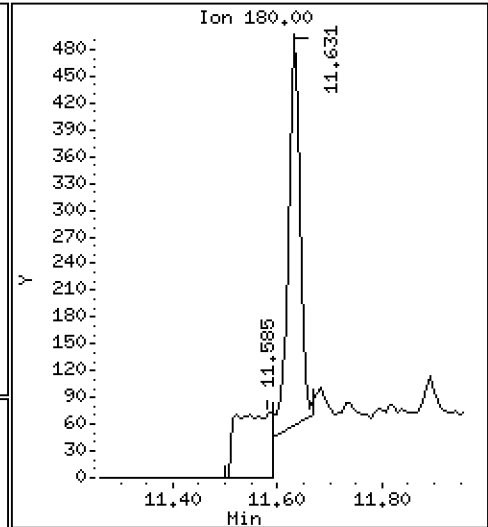
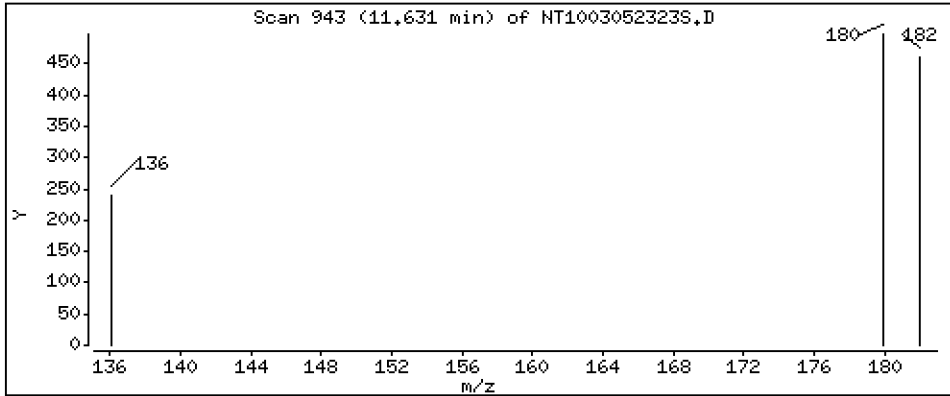
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,01148 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

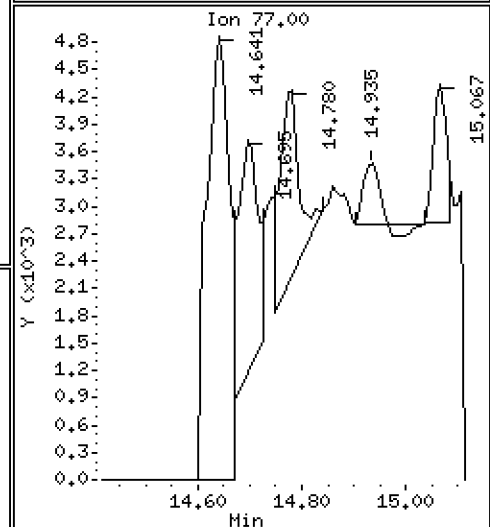
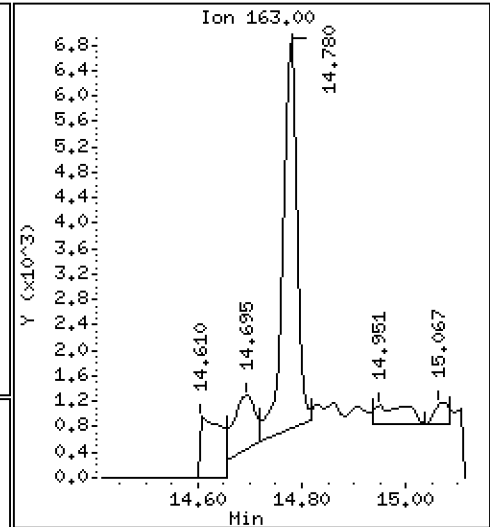
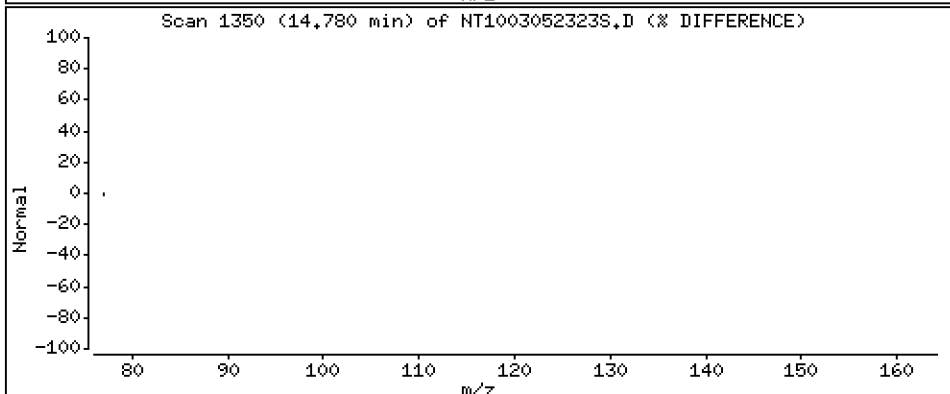
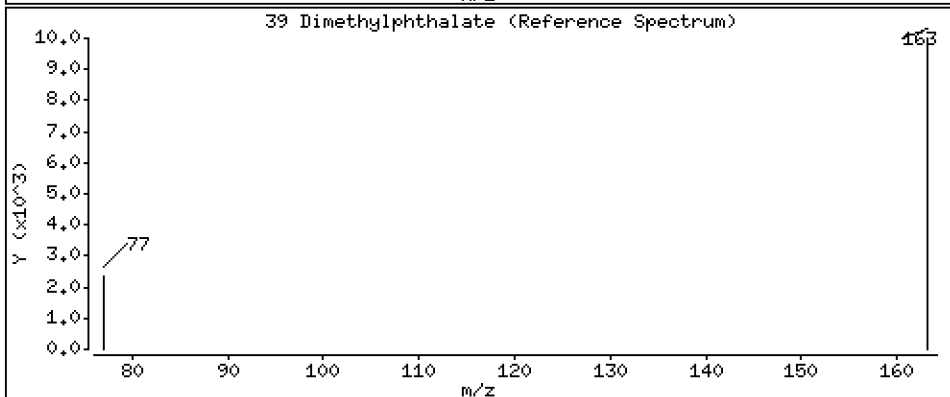
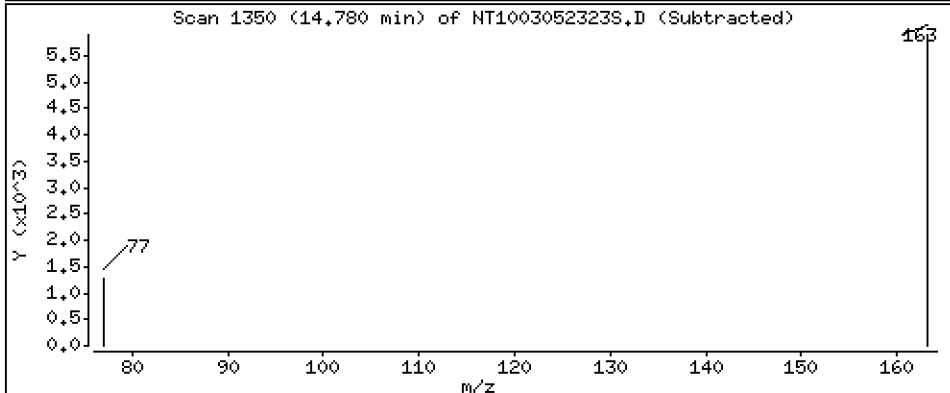
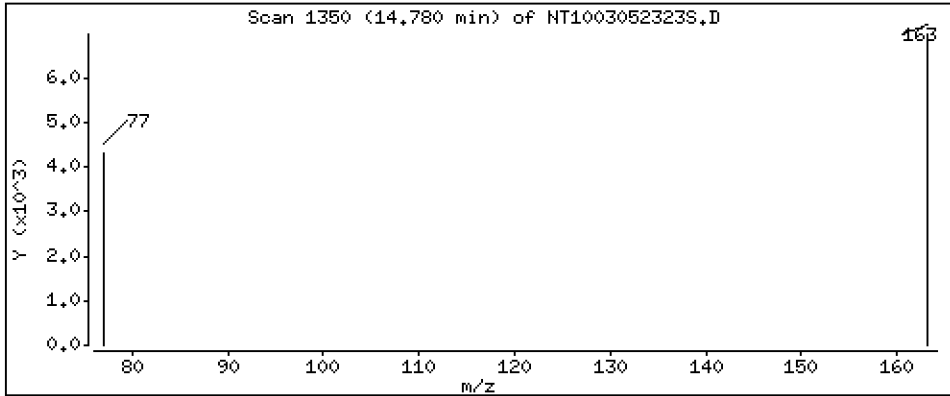
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,08548 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

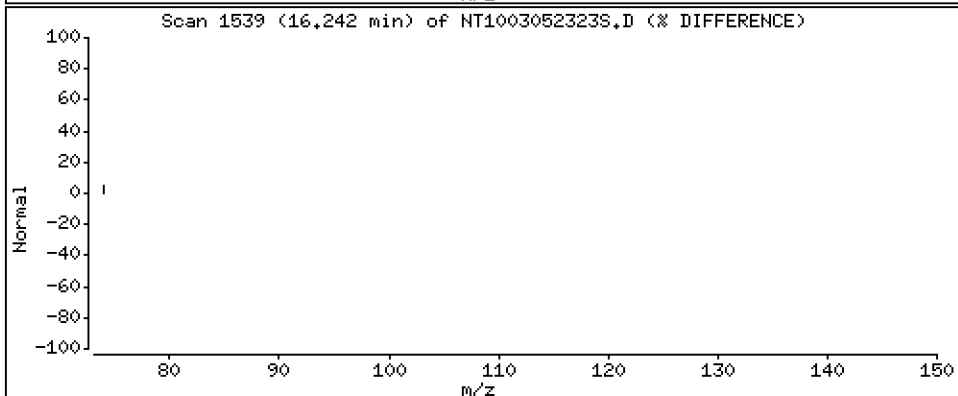
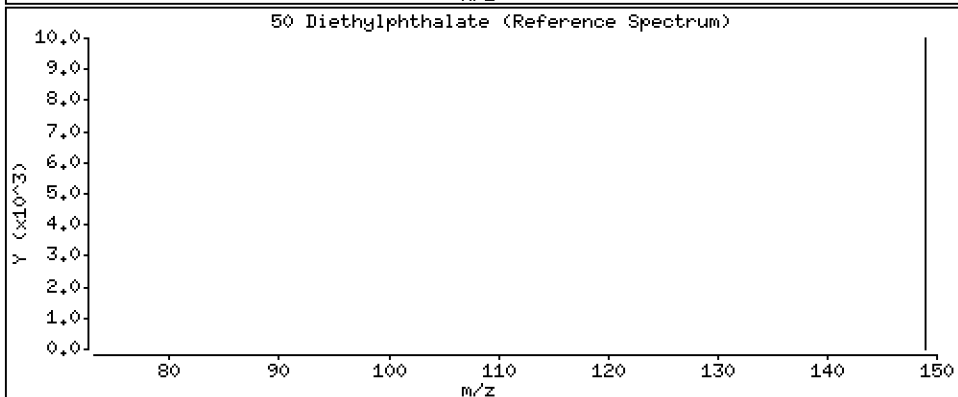
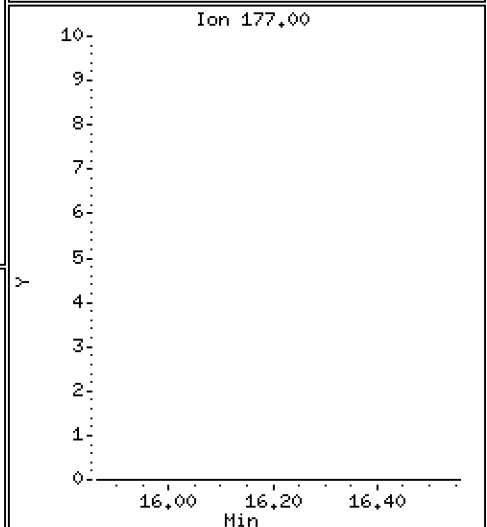
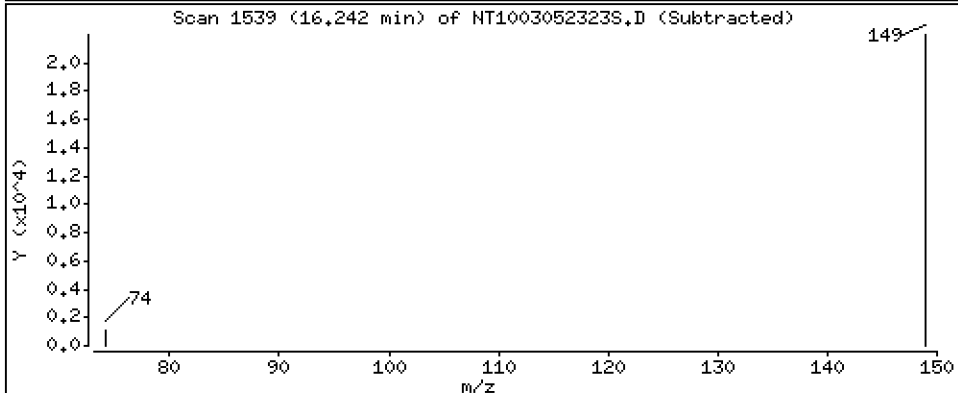
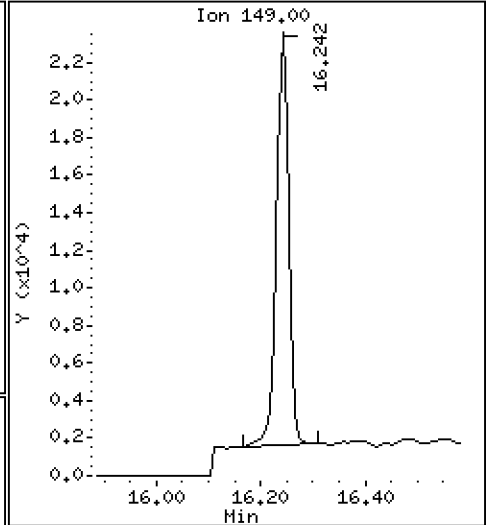
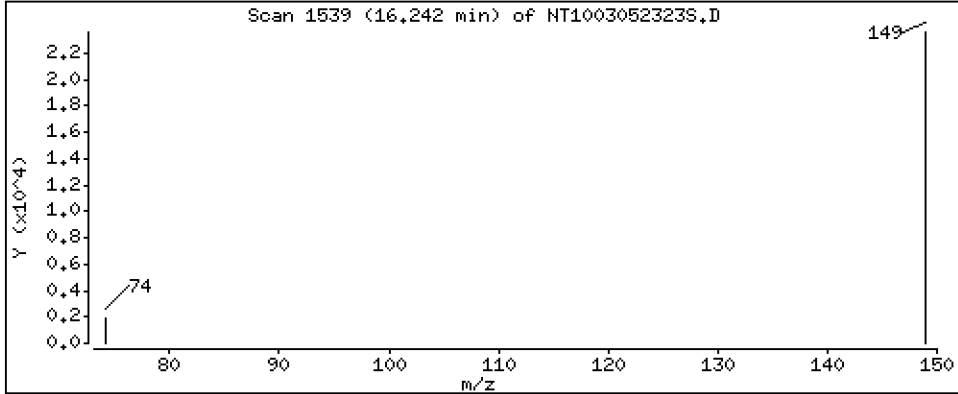
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2724 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

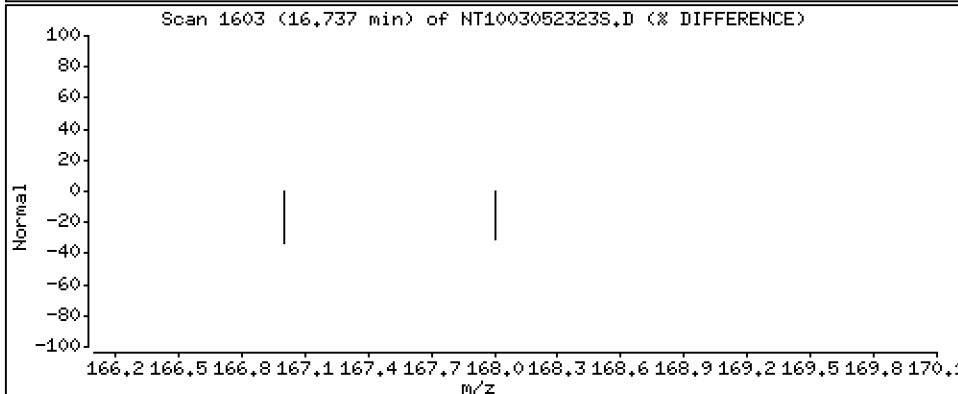
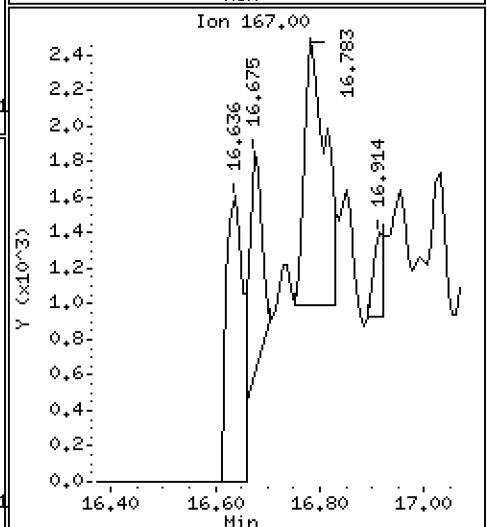
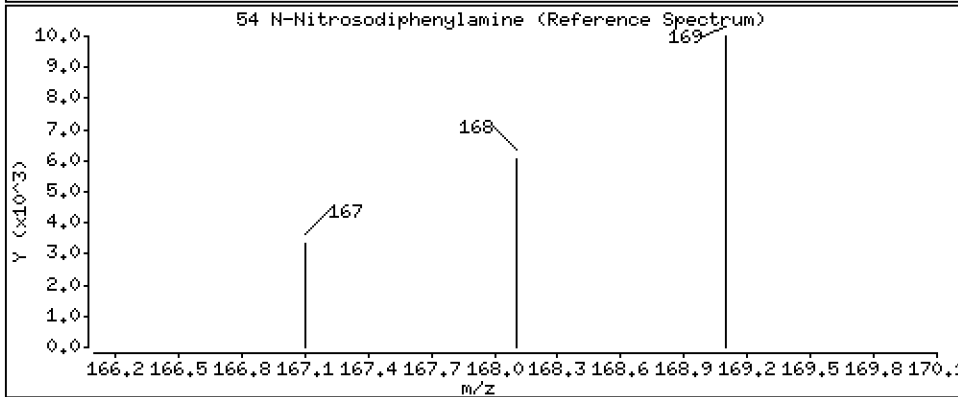
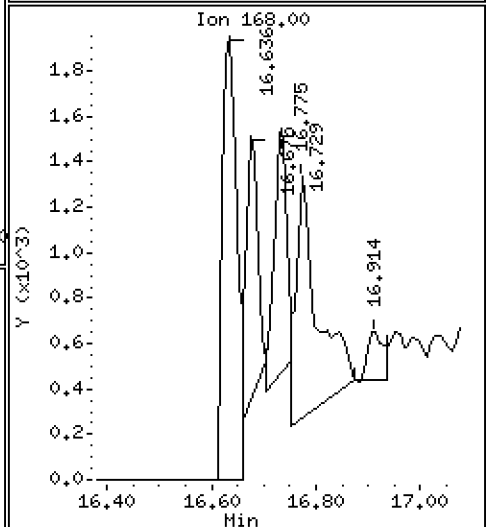
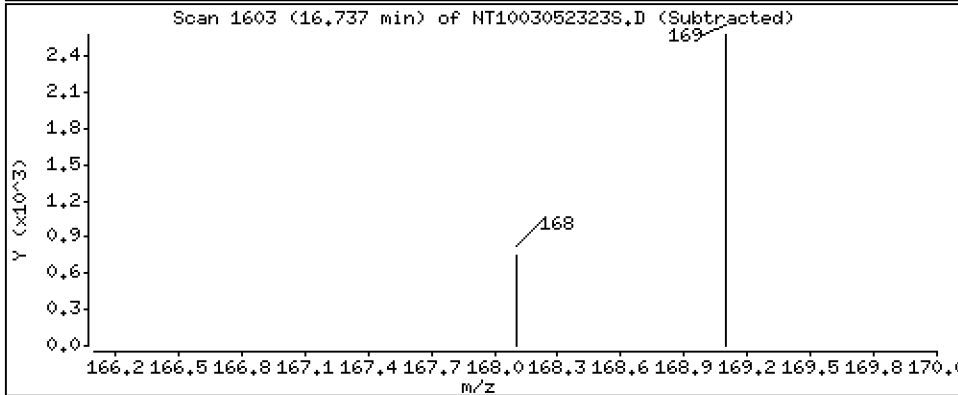
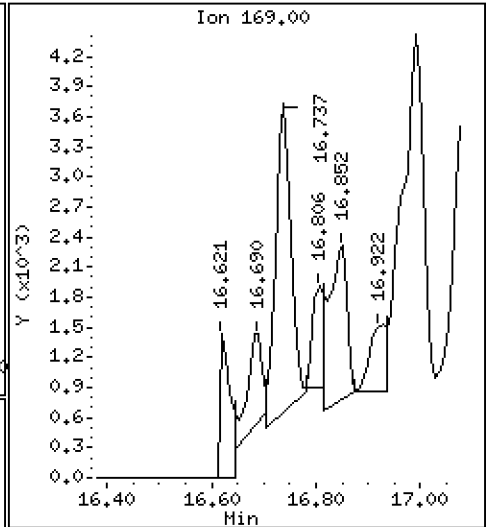
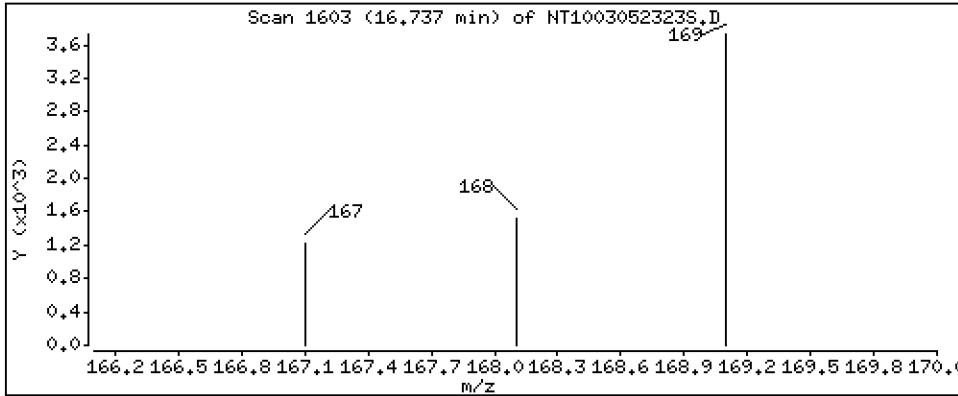
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,04676 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

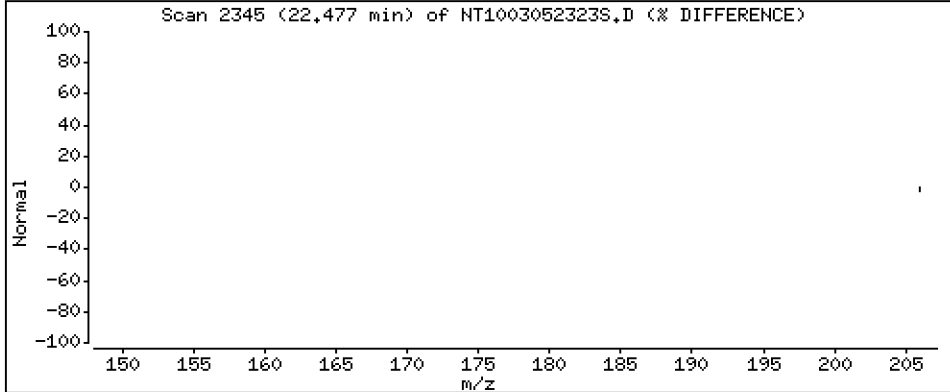
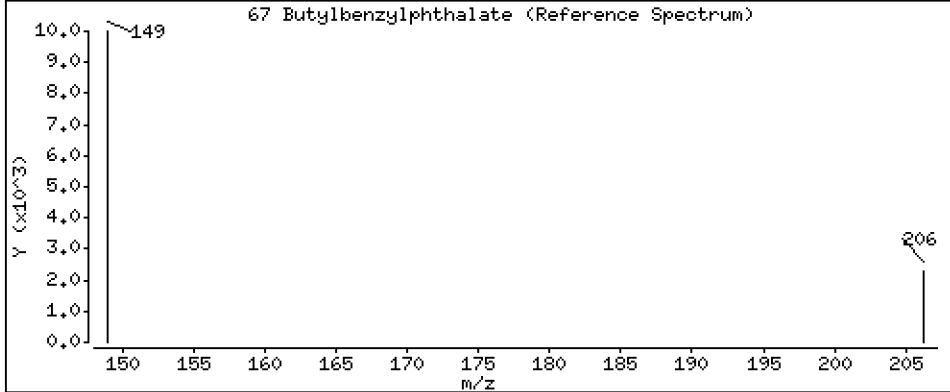
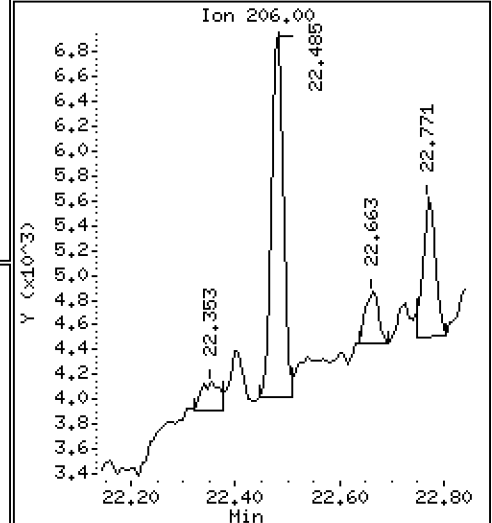
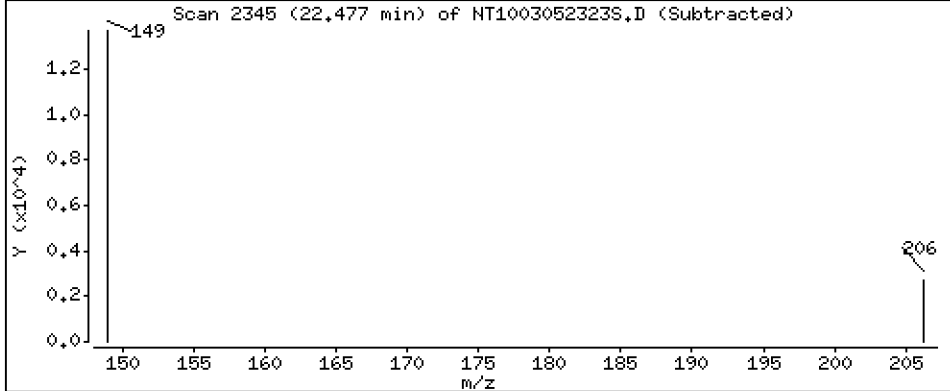
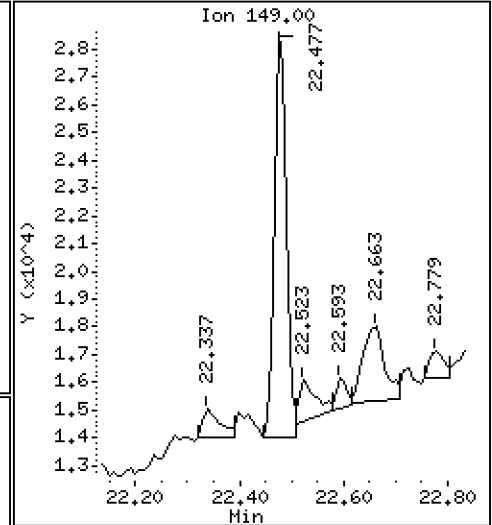
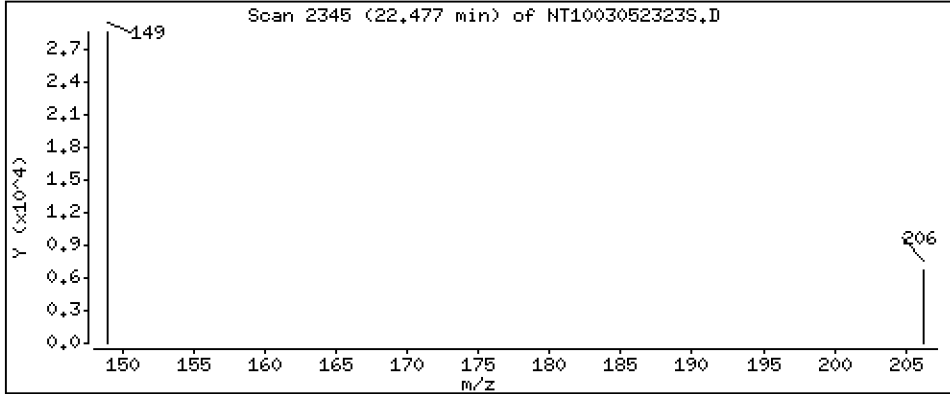
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1595 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

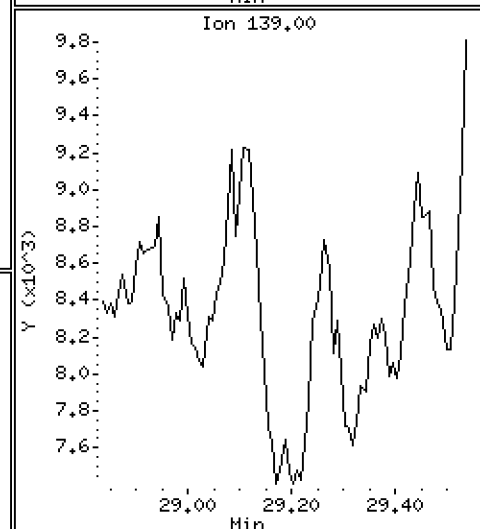
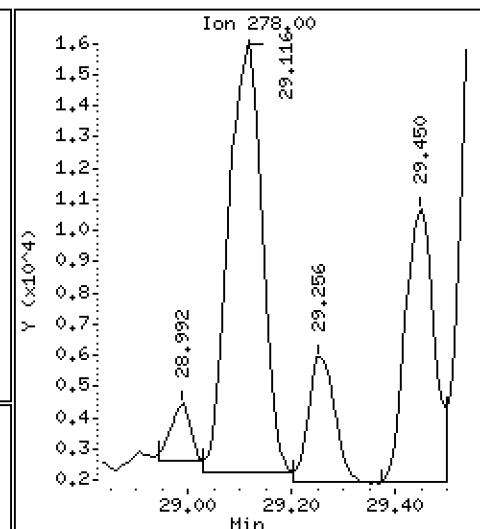
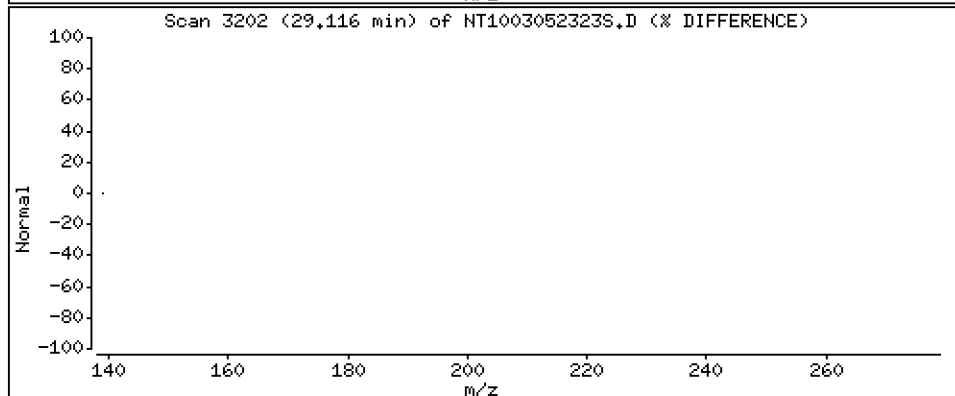
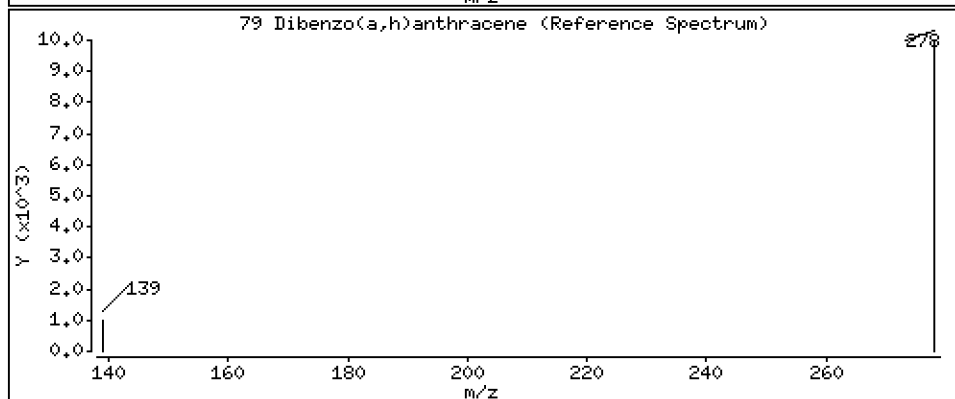
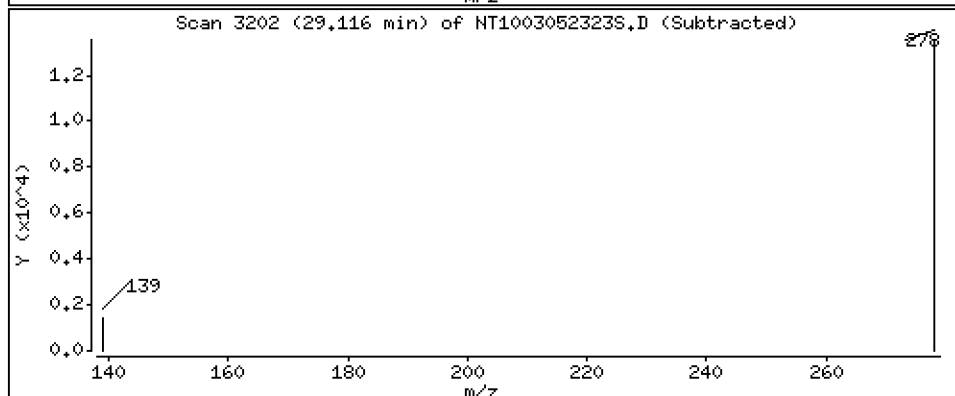
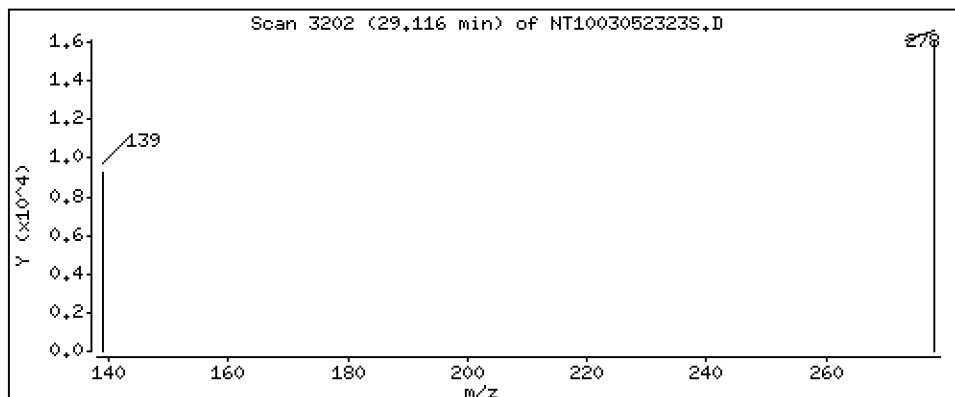
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2714 ug/mL



Date : 06-MAR-2023 03:17

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-01

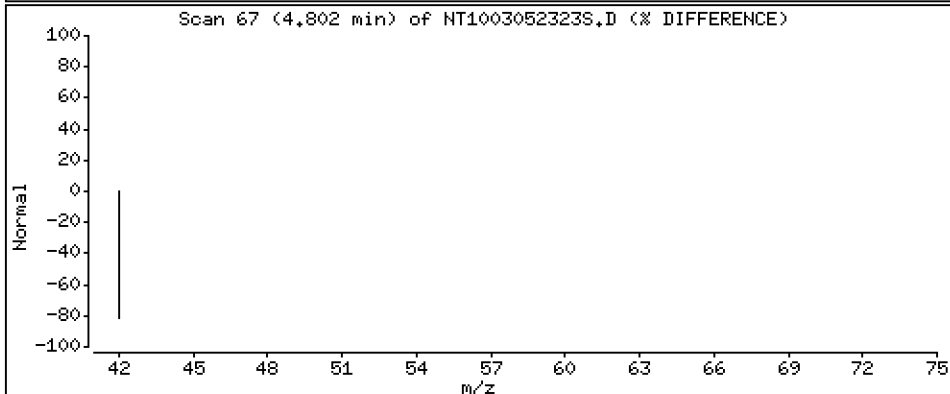
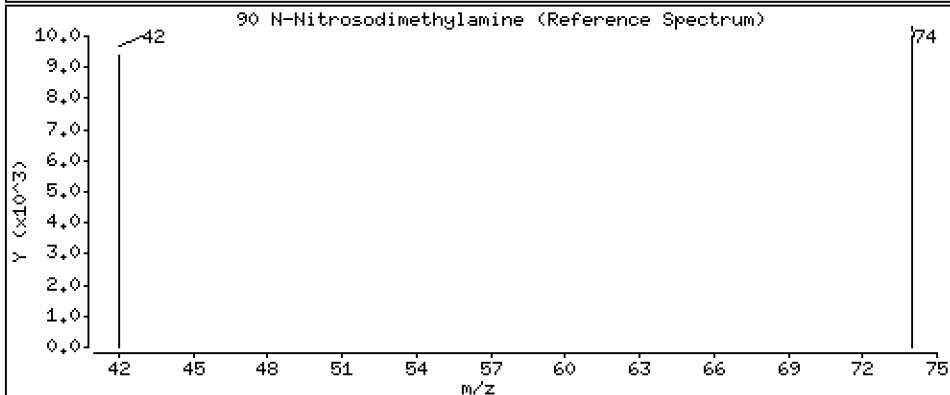
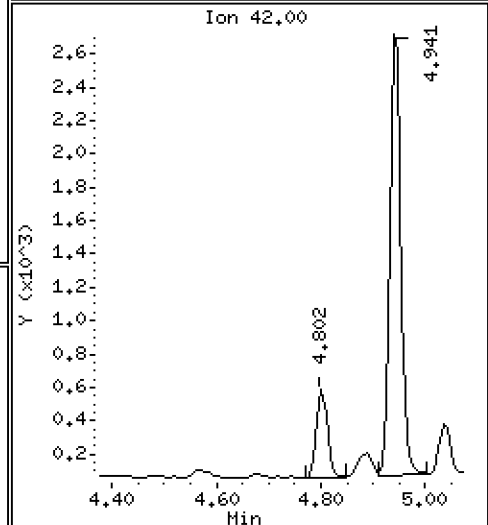
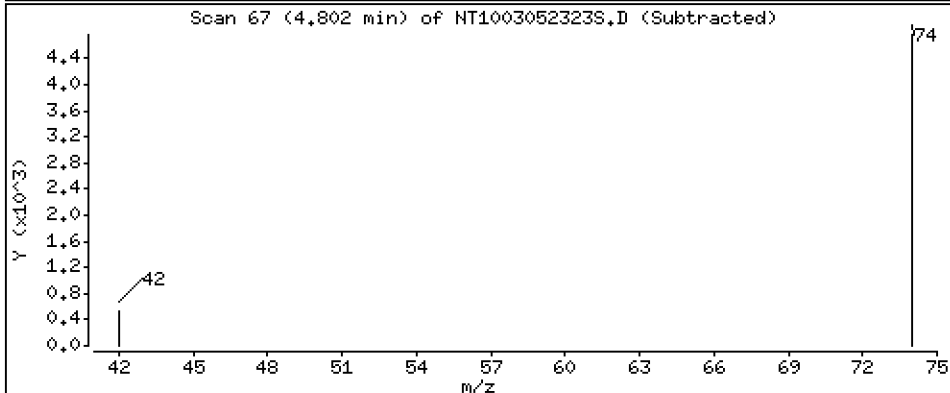
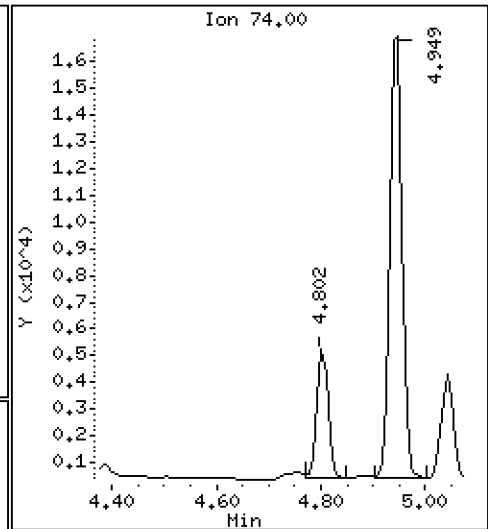
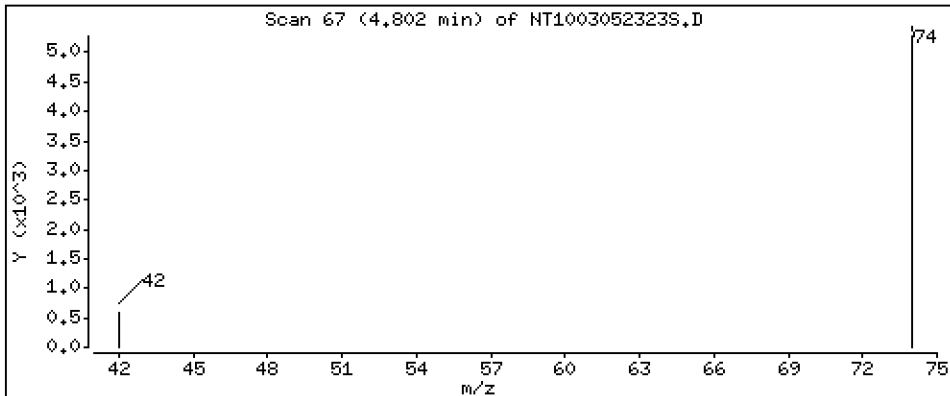
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,1689 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052323S.D
 Lab Smp Id: 23A0326-01
 Inj Date : 06-MAR-2023 03:17
 Operator : YZ
 Smp Info : 23A0326-01
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 29-Mar-2023 11:59 van
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: VANS-201906

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.745)	36699	0.53593	0.5359 (R)
3 Phenol	94		8.555	8.532	(0.924)	49599	0.48996	0.4900
7 1,3-Dichlorobenzene	146		9.151	9.143	(0.988)	842	0.00947	0.009472
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.252	(1.000)	239857	4.00000	
9 1,4-Dichlorobenzene	146		9.290	9.283	(1.003)	2284	0.02643	0.02643
11 Benzyl alcohol	79		9.508	9.484	(1.027)	9084	0.16197	0.1620 (H)
12 1,2-Dichlorobenzene	146		9.577	9.570	(1.034)	932	0.01122	0.01122
13 2-Methylphenol	108		9.702	9.671	(1.048)	996	0.01641	0.01641
15 4-Methylphenol	108		9.997	9.966	(1.080)	4111	0.06508	0.06508
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.048	11.014	(0.940)	1948	0.02699	0.02699
24 Benzoic acid	105		11.184	11.133	(0.951)	7853	0.19825	0.1983
26 1,2,4-Trichlorobenzene	180		11.631	11.608	(0.989)	703	0.01148	0.01148
* 27 Naphthalene-d8	136		11.754	11.731	(1.000)	850863	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.780	14.764	(0.963)	11295	0.08548	0.08548
* 42 Acenaphthene-d10	162		15.352	15.337	(1.000)	416153	4.00000	
50 Diethylphthalate	149		16.241	16.234	(1.058)	33946	0.27241	0.2724 (M)
54 N-Nitrosodiphenylamine	169		16.736	16.729	(0.907)	6425	0.04676	0.04676
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.460	18.453	(1.000)	849063	4.00000	
\$ 66 Terphenyl-d14	244		21.601	21.594	(0.919)	533195	7.96524	7.965 (R)
67 Butylbenzylphthalate	149		22.476	22.484	(0.956)	22283	0.15950	0.1595
* 69 Chrysene-d12	240		23.506	23.514	(1.000)	827784	4.00000	
* 77 Perylene-d12	264		26.247	26.270	(1.000)	975174	4.00000	
79 Dibenzo(a,h)anthracene	278		29.116	29.186	(1.109)	61524	0.27144	0.2714 (H)
90 N-Nitrosodimethylamine	74		4.801	4.724	(0.519)	6847	0.16889	0.1689

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052323S.D
 Lab Smp Id: 23A0326-01
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	293840	146920	587680	239857	-18.37
27 Naphthalene-d8	1032639	516320	2065278	850863	-17.60
42 Acenaphthene-d10	502349	251175	1004698	416153	-17.16
59 Phenanthrene-d10	975997	487999	1951994	849063	-13.01
69 Chrysene-d12	978544	489272	1957088	827784	-15.41
77 Perylene-d12	1201606	600803	2403212	975174	-18.84

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.75	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.10
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.03
77 Perylene-d12	26.27	25.77	26.77	26.25	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003052323S.D

Lab ID: 23A0326-01

nt10.i, 20230305A.b\SIM.b\SIMABN2.m, 06-MAR-2023 03:17

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.519	0.511	0.0079	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003052315SA.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

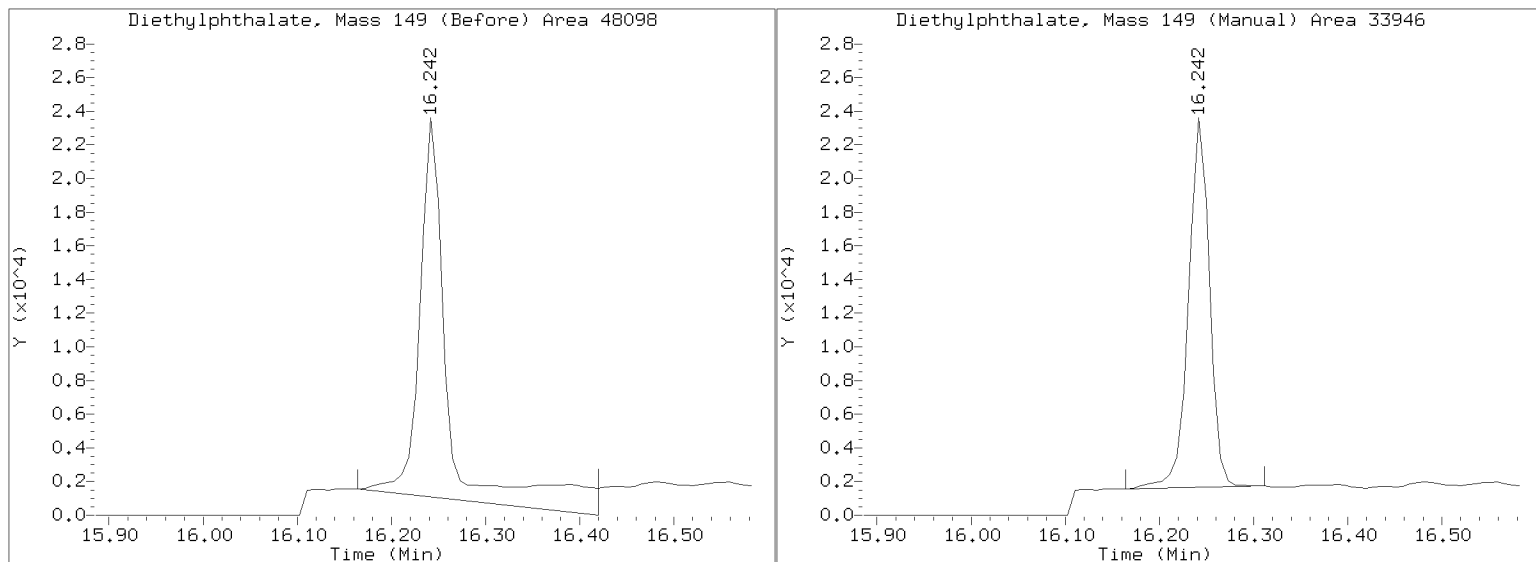
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/SIM.b/NT1003052323S.D

Injection Date: 06-MAR-2023 03:17

Lab ID: 23A0326-01 Client ID:

Report Date: 03/29/2023 12:00





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-02 A

SDG: 23A0326

Sampled: 01/16/23 15:32

Prepared: 02/02/23 13:06

File ID: NT1003052324S.D

% Solids: 57.28

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 03:55

Batch: BLA0685

Sequence: SLC0440

Initial/Final: 17.56 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.1	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	28.9		2.5	19.9
65-85-0	Benzoic acid	1	36.1	J	13.3	99.4
105-67-9	2,4-Dimethylphenol	1	2.3	J	2.2	19.9
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	3.6	J	1.3	5.0
87-86-5	Pentachlorophenol	1	19.9	U	2.1	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	745.65	299	40.1	27 - 120	
p-Terphenyl-d14	497.10	716	144	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305A.b\SIM.b\NT1003052324S.D

Date: 06-HRR-2023 03:55

Client ID:

Sample Info: 23A0326-02

Page 1

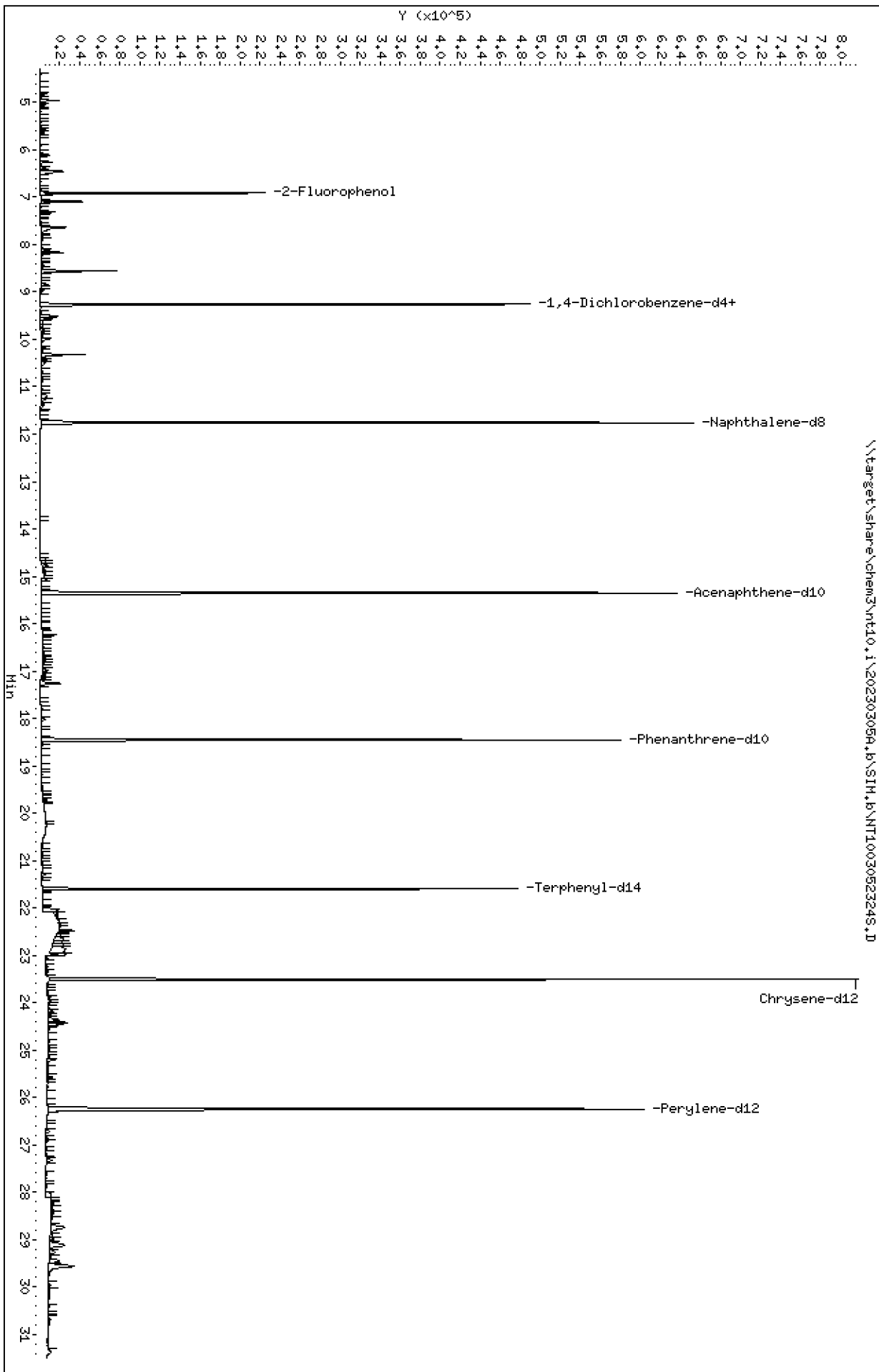
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305A.b\SIM.b\NT1003052324S.D



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

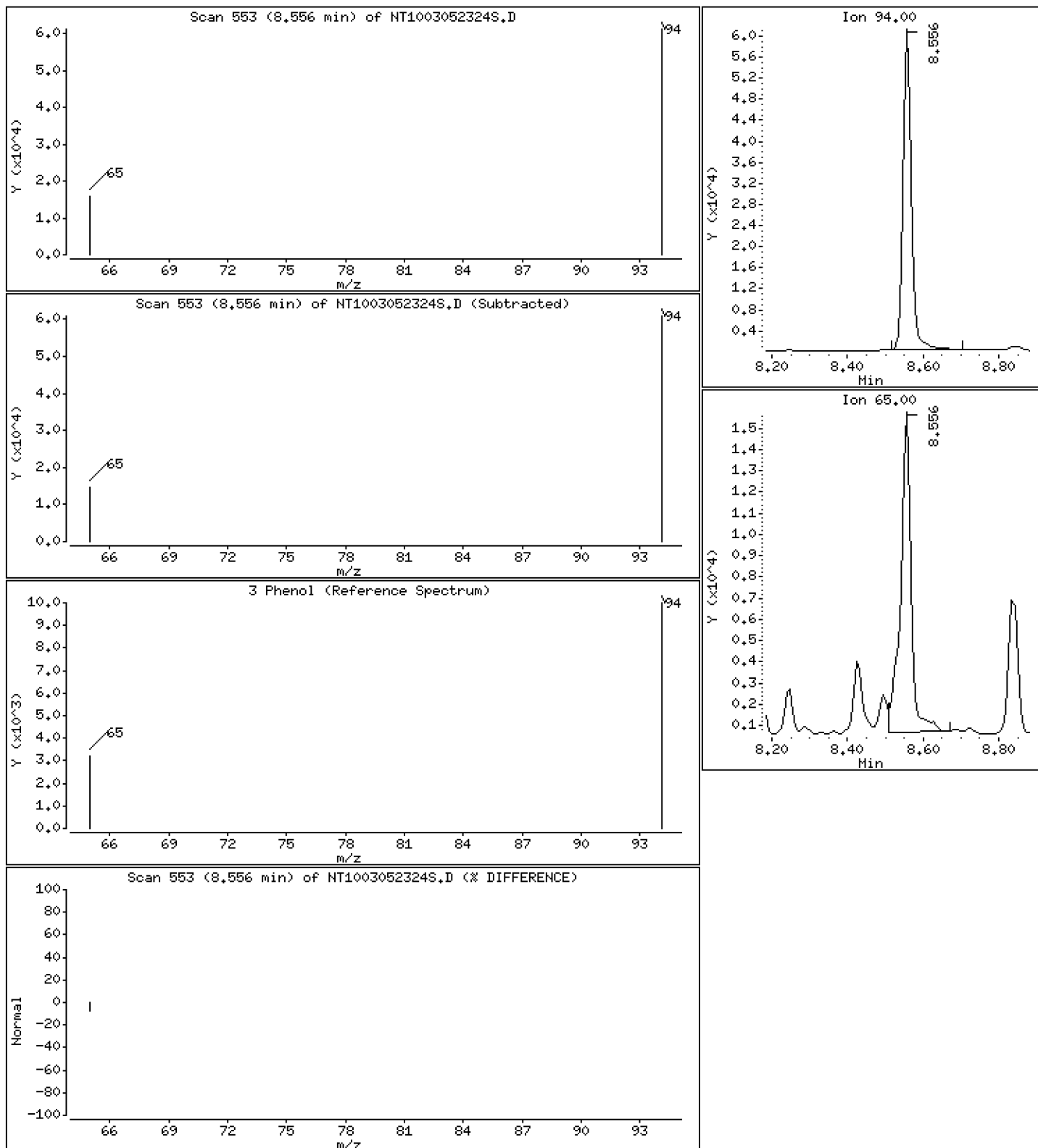
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,7966 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

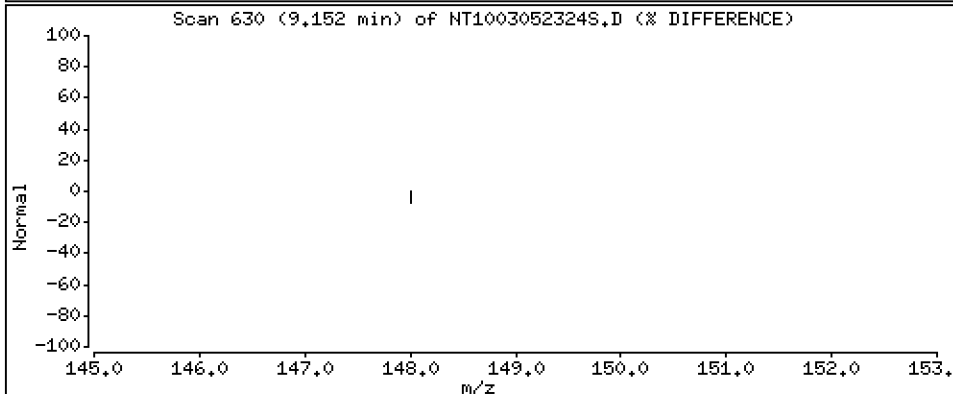
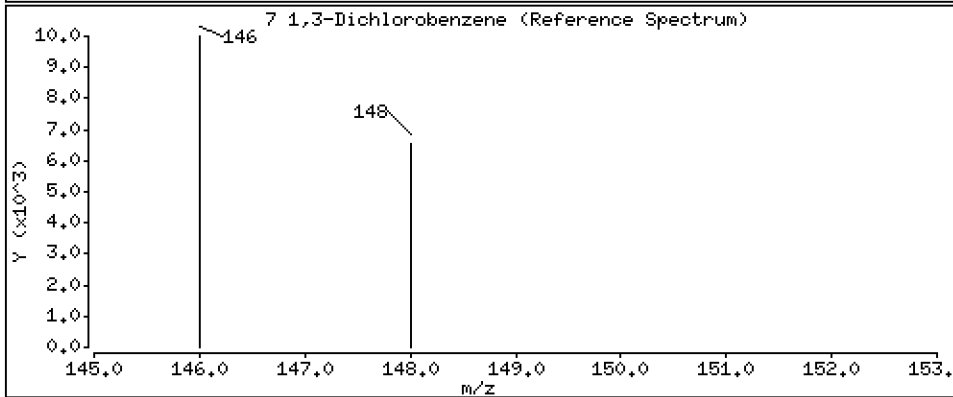
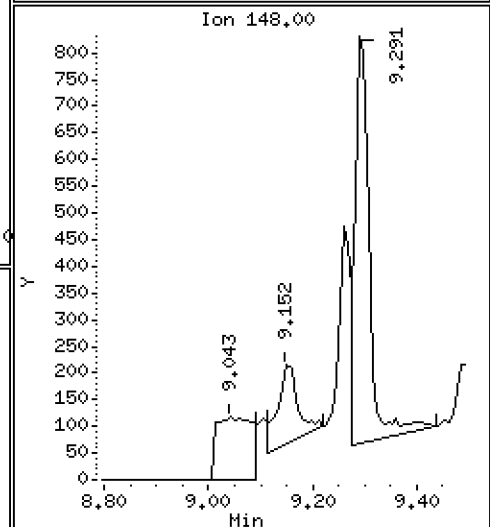
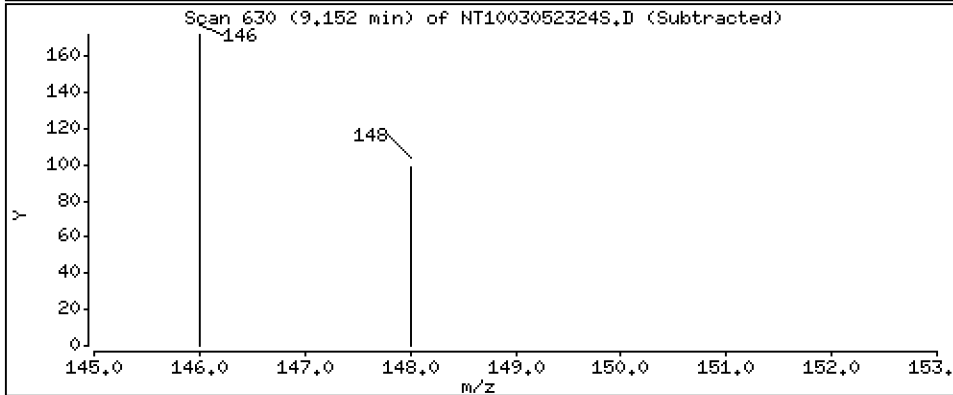
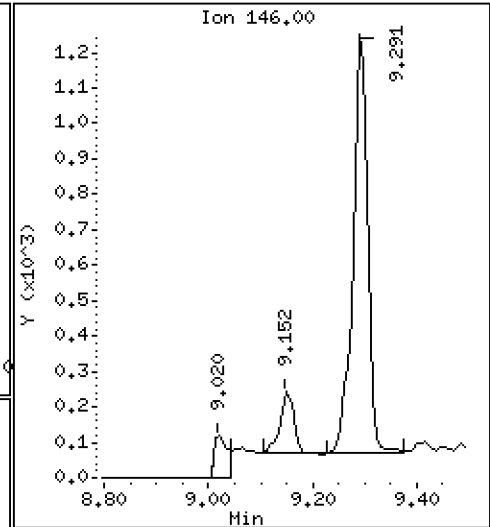
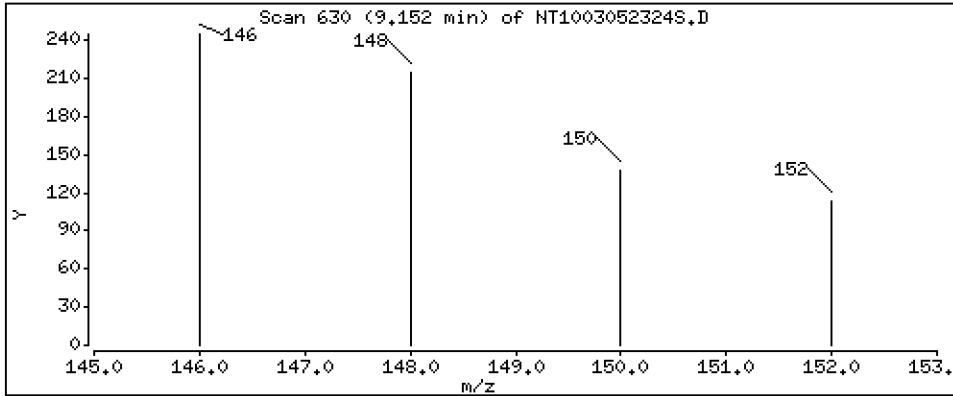
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,002794 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

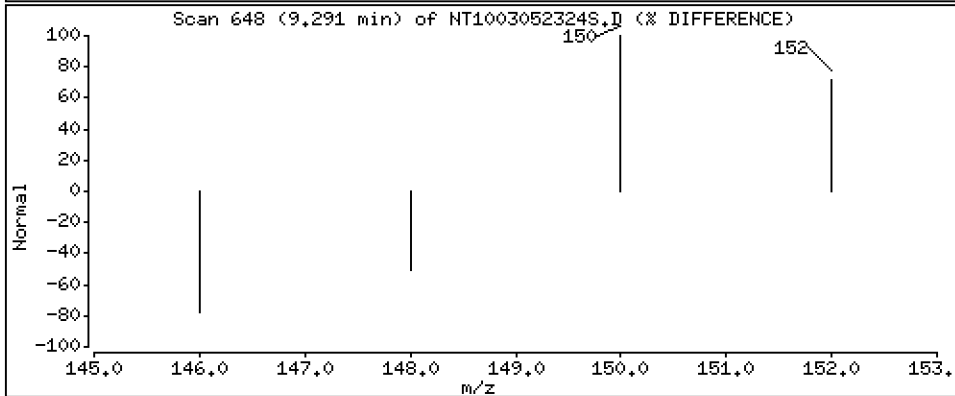
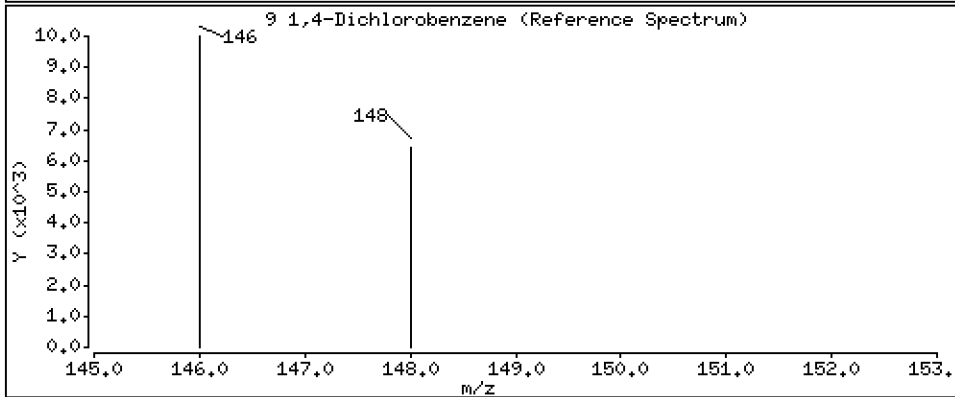
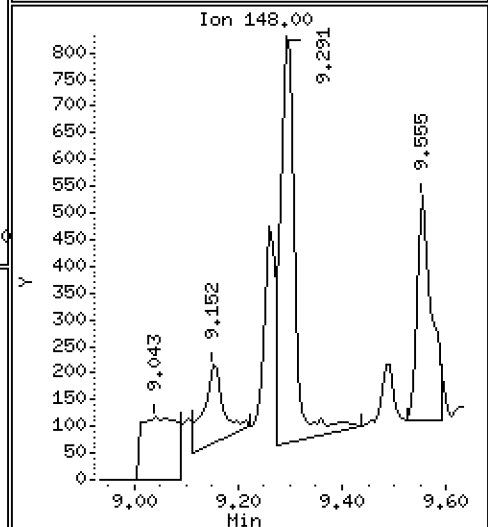
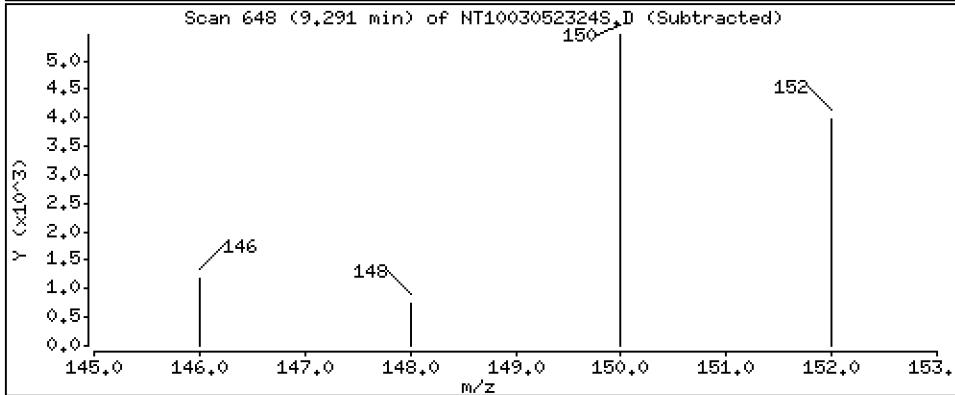
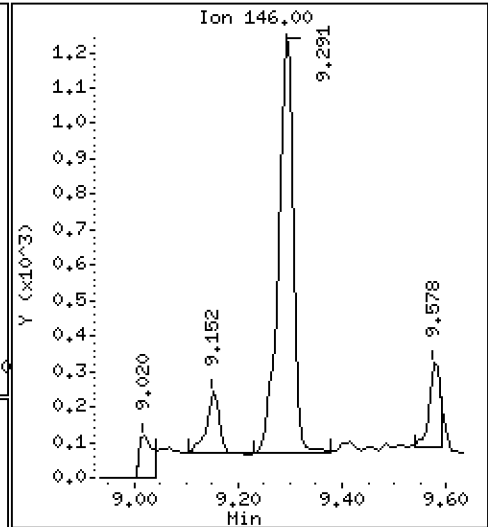
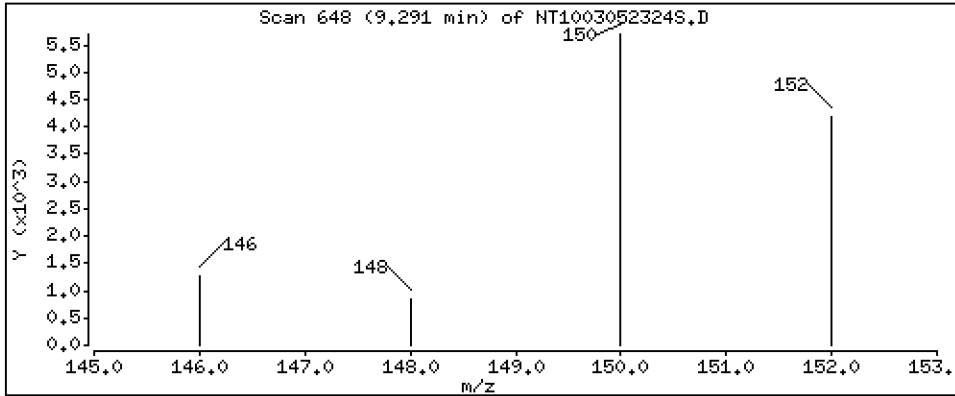
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.02156 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

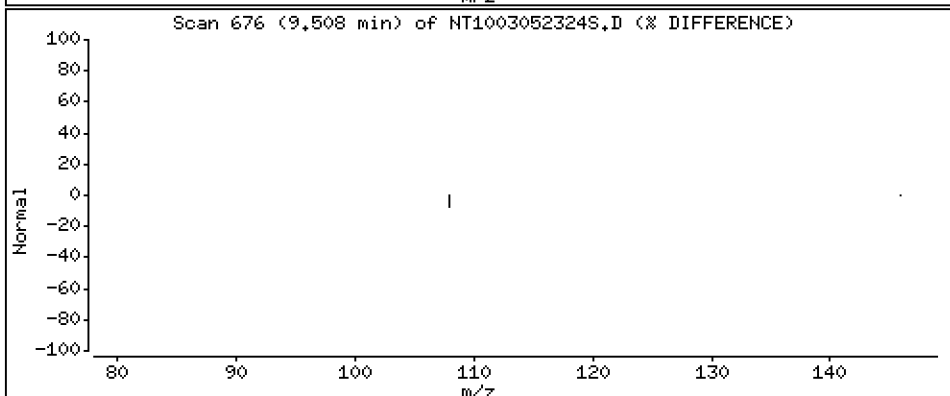
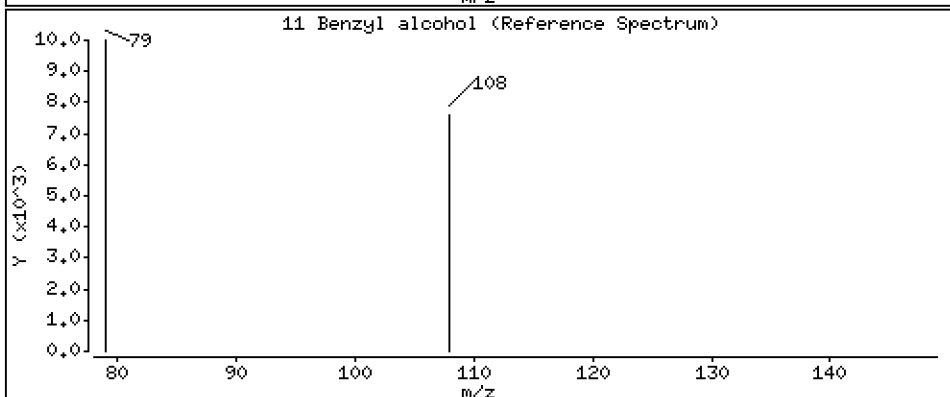
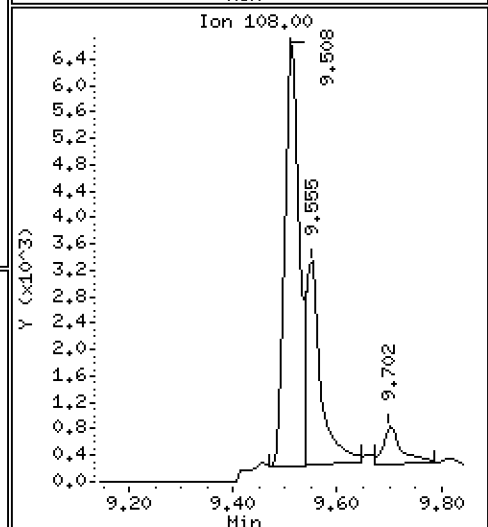
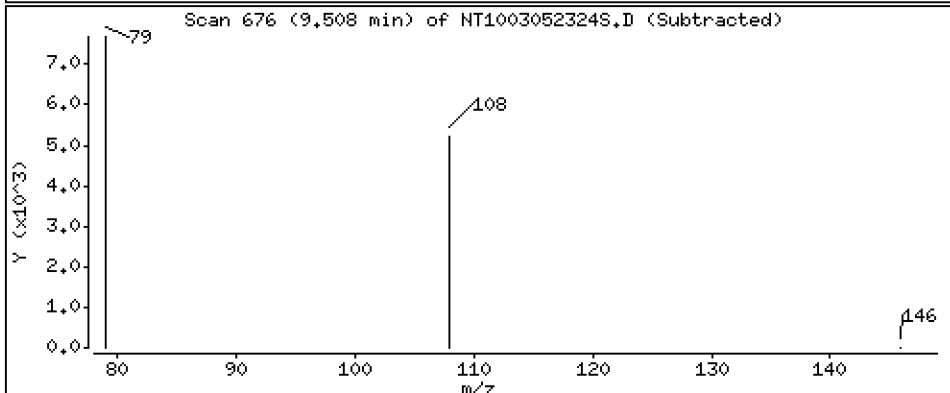
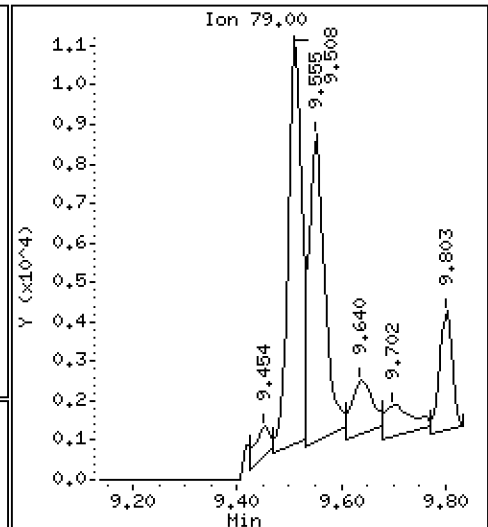
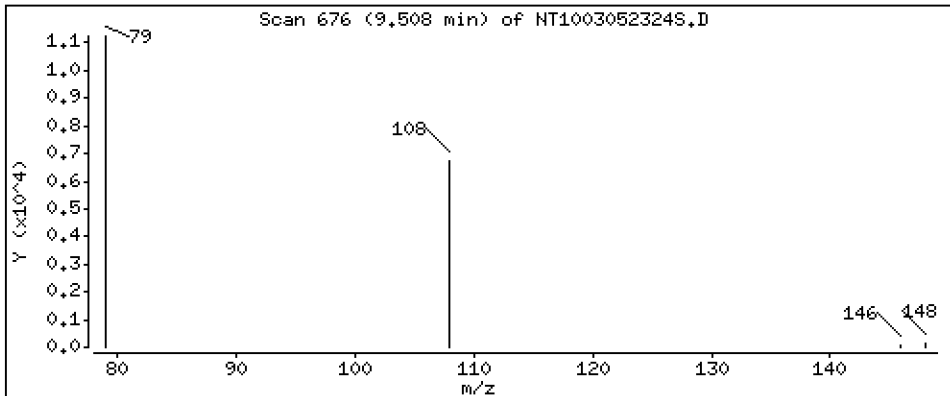
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.2912 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

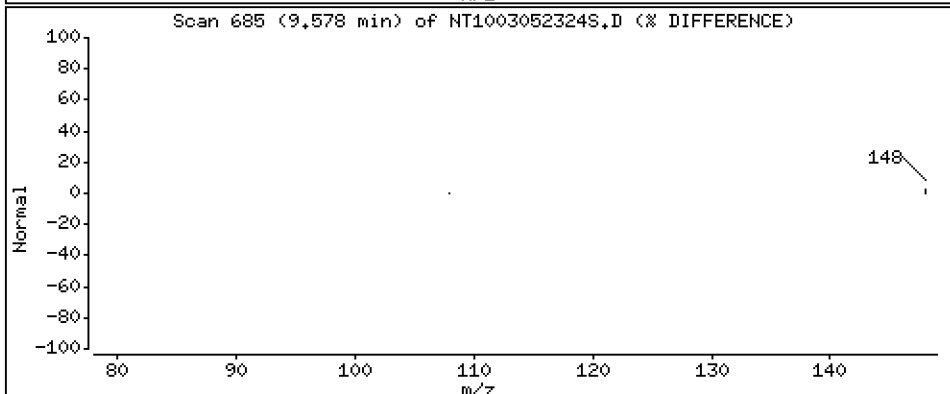
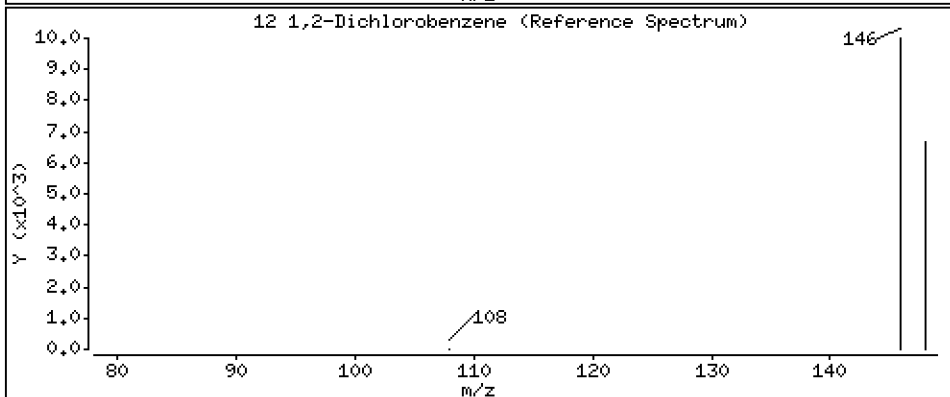
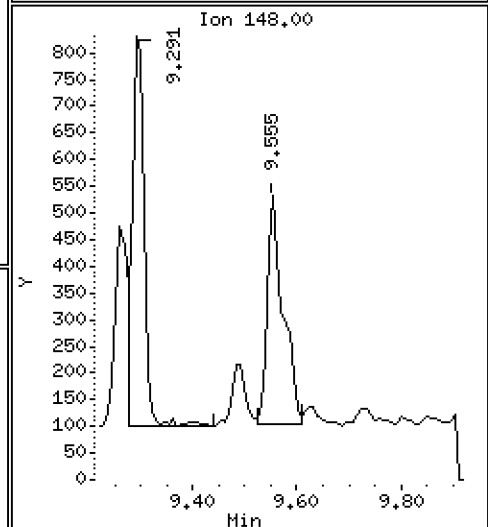
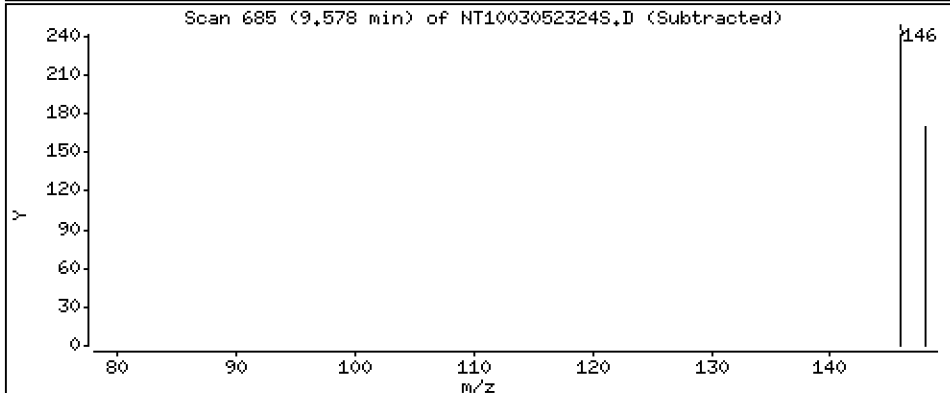
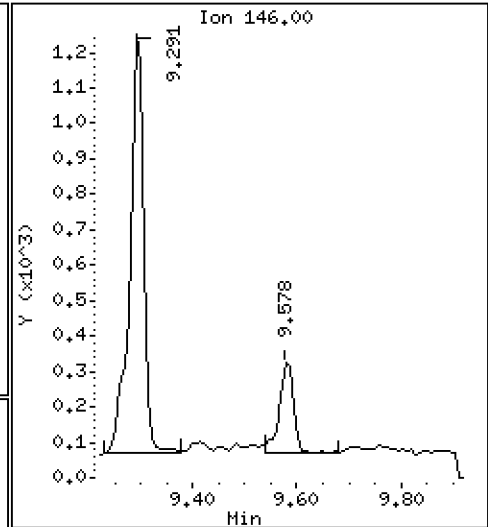
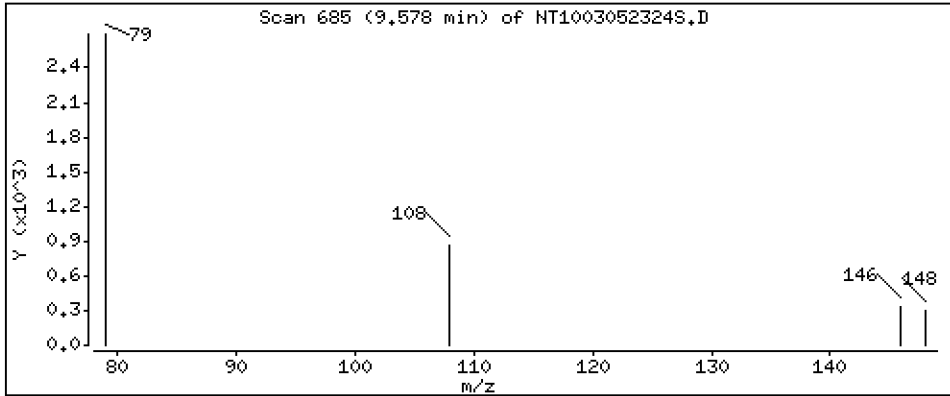
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,004846 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

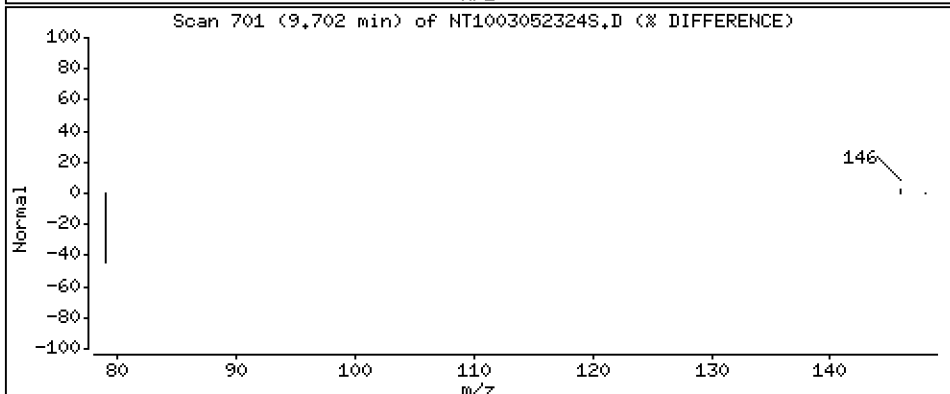
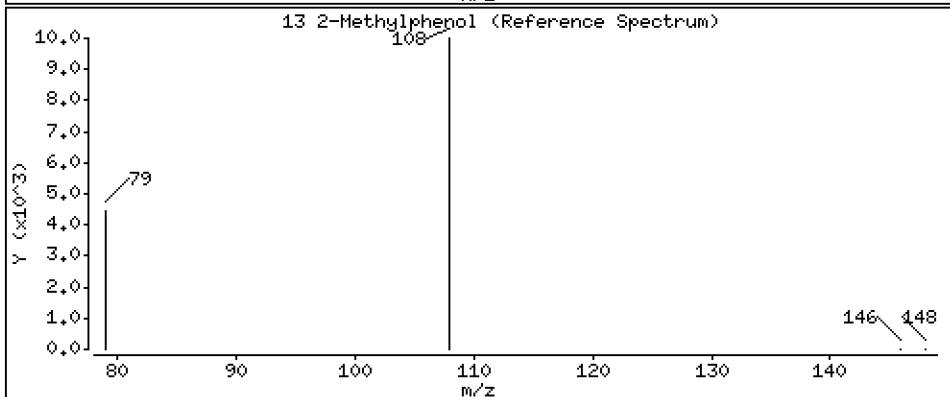
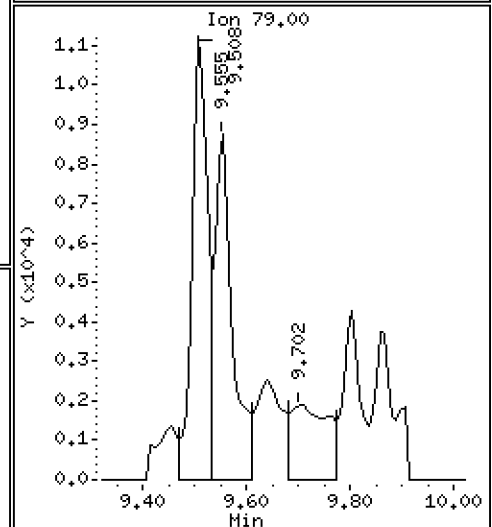
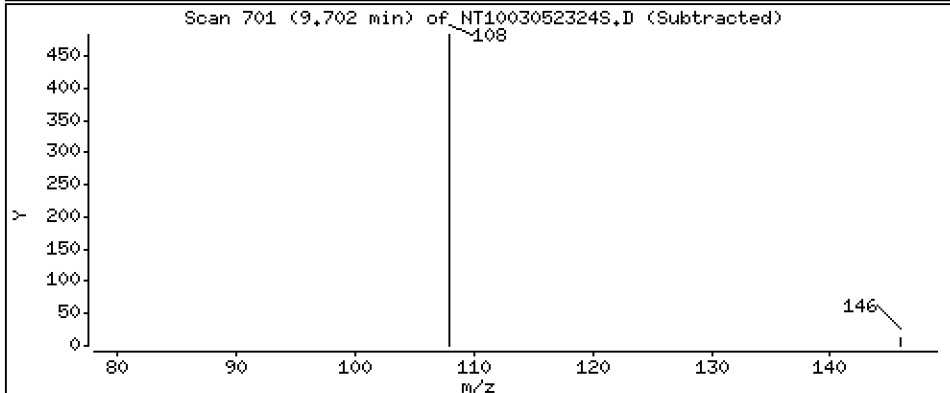
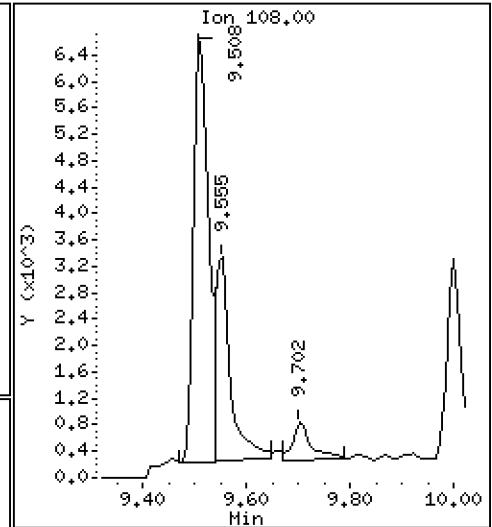
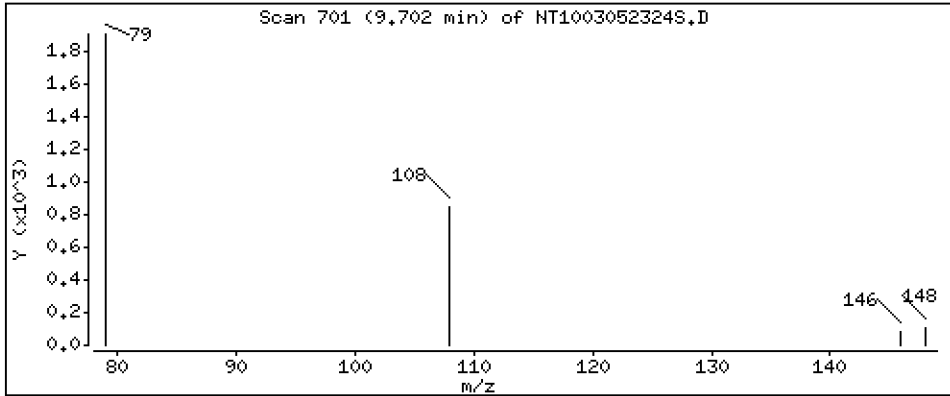
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,01929 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

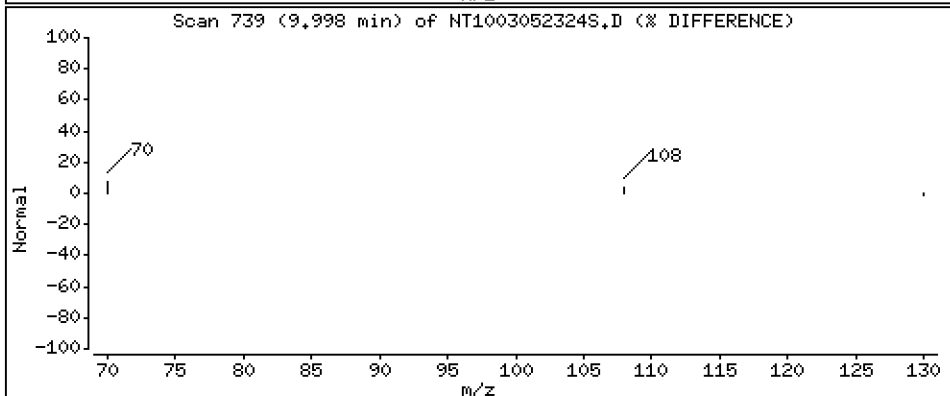
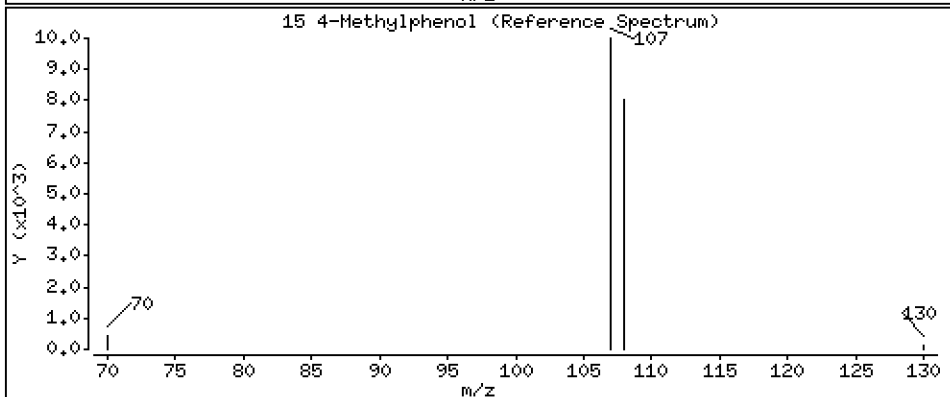
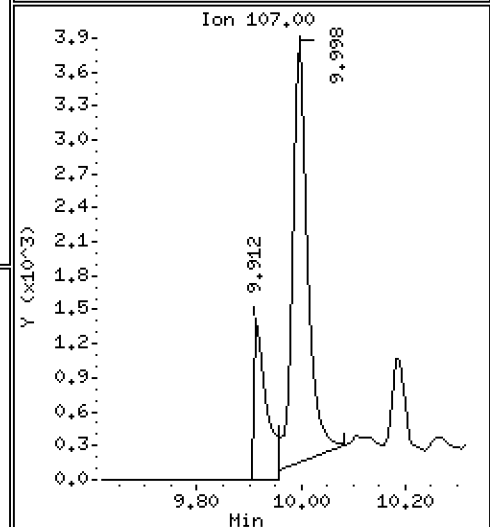
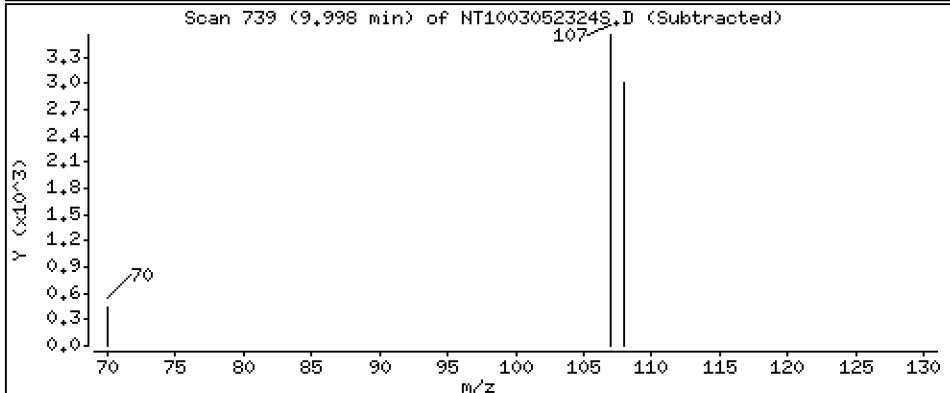
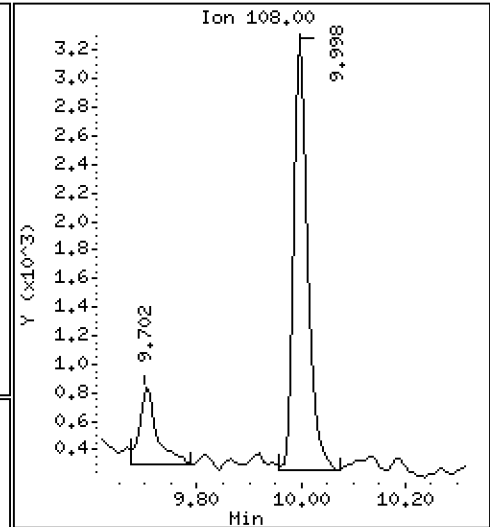
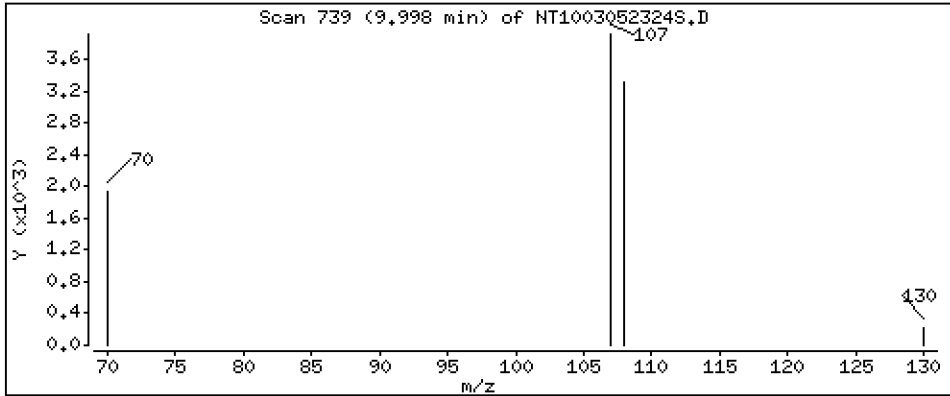
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.07805 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

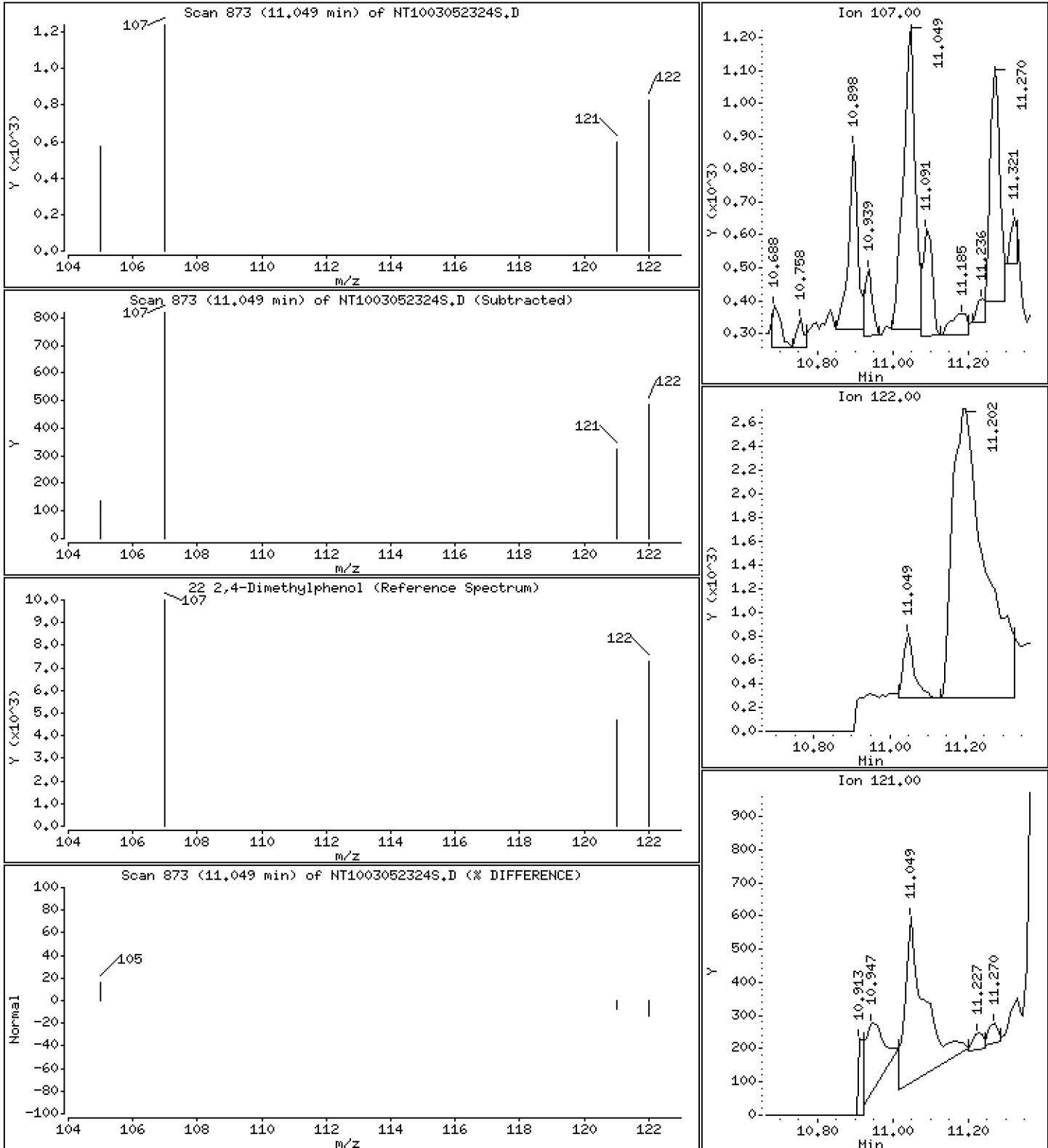
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.02358 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

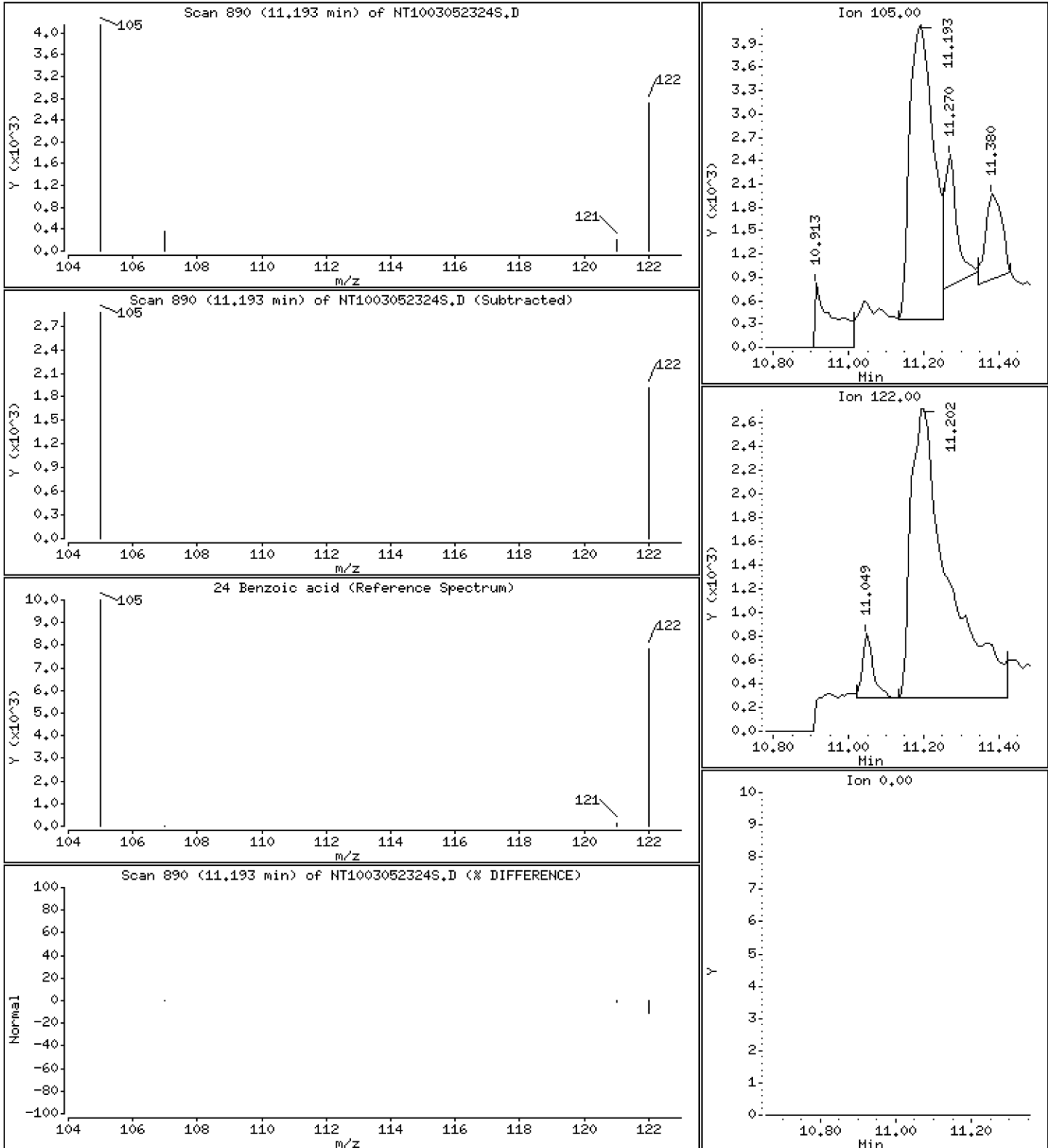
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,3631 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

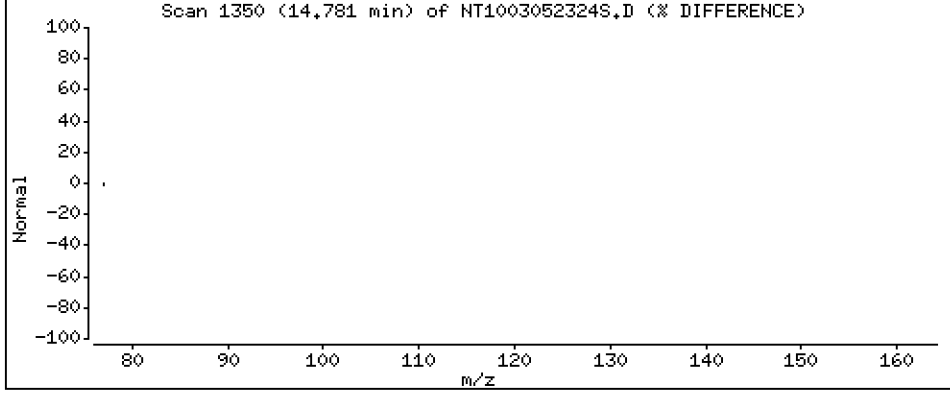
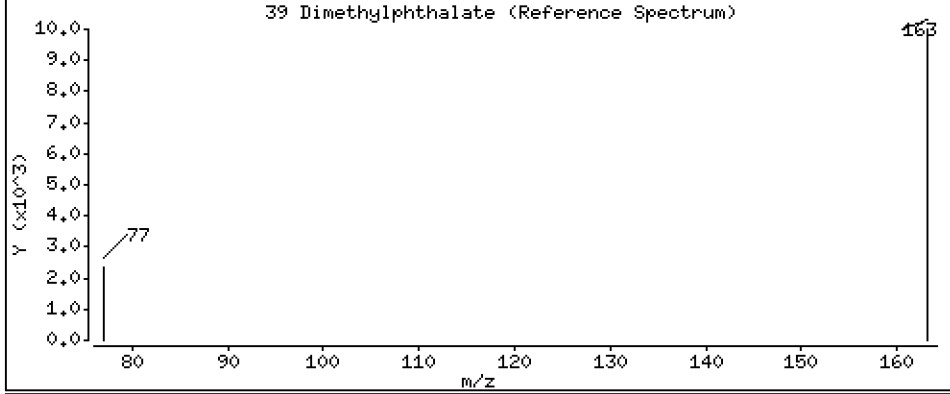
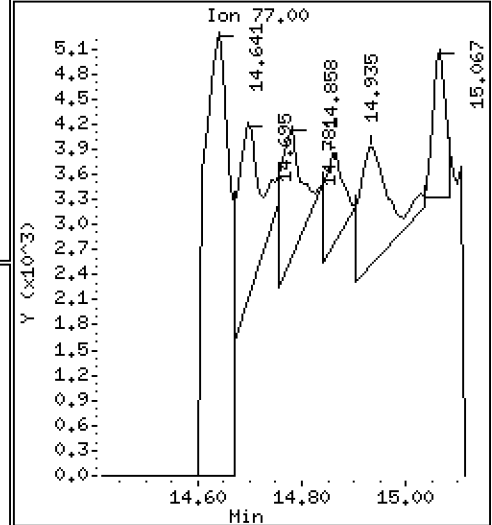
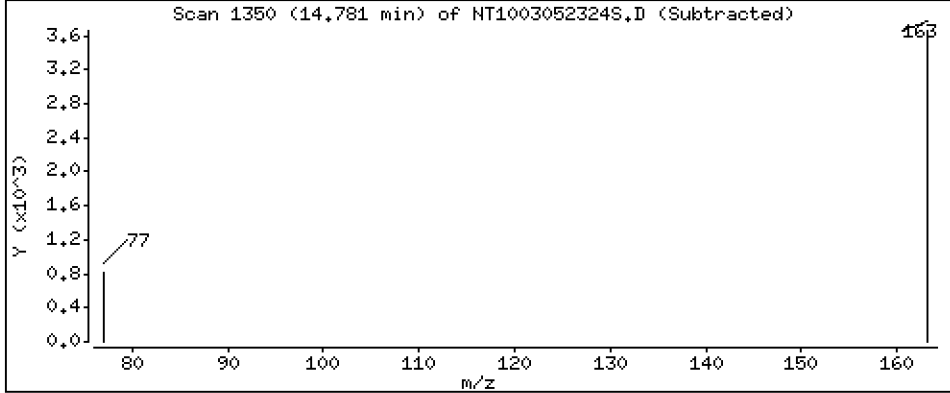
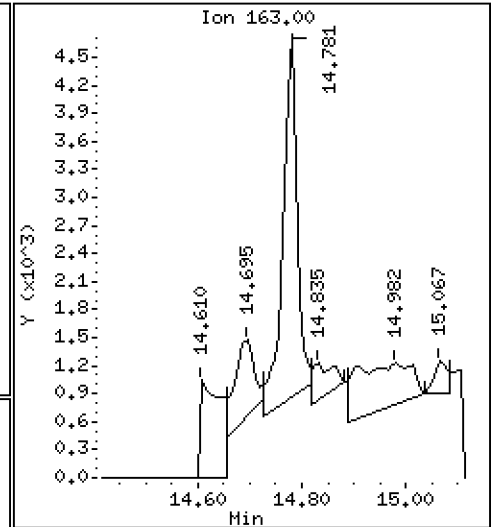
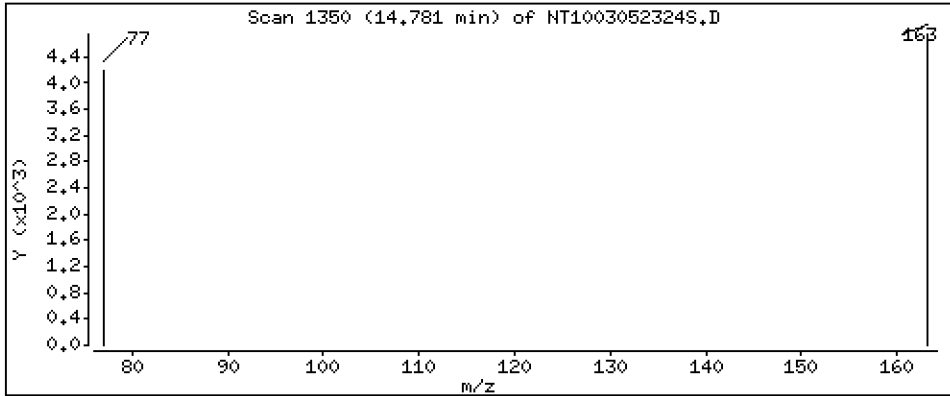
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.04622 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

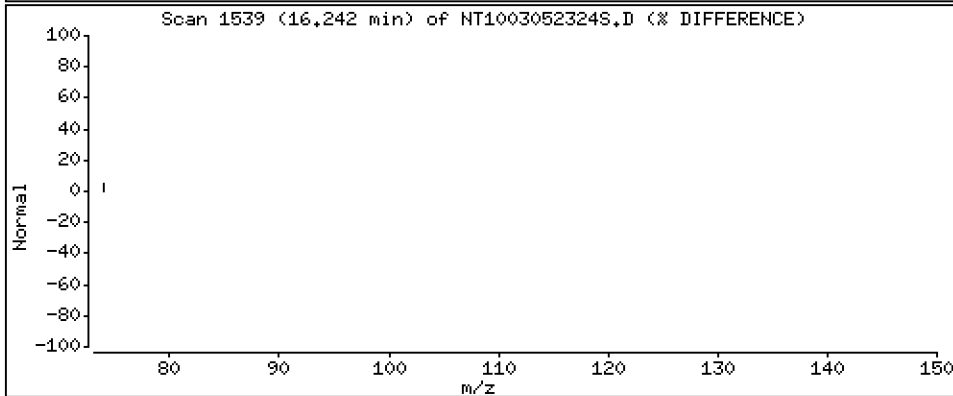
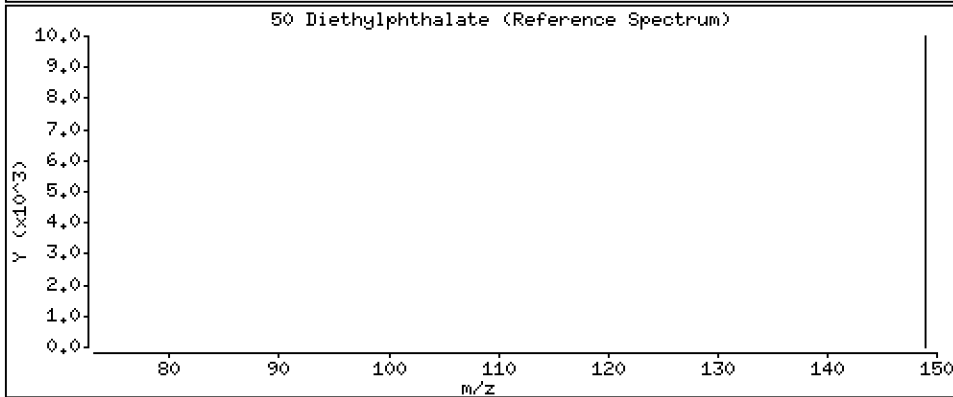
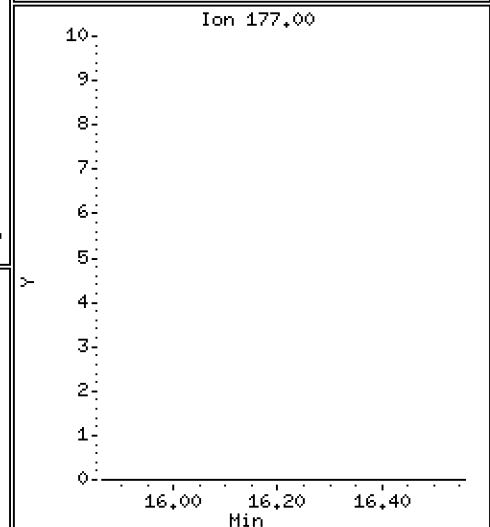
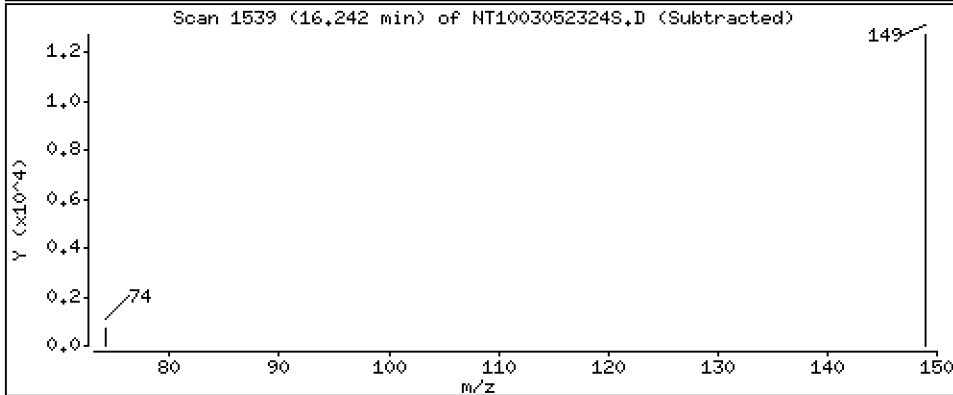
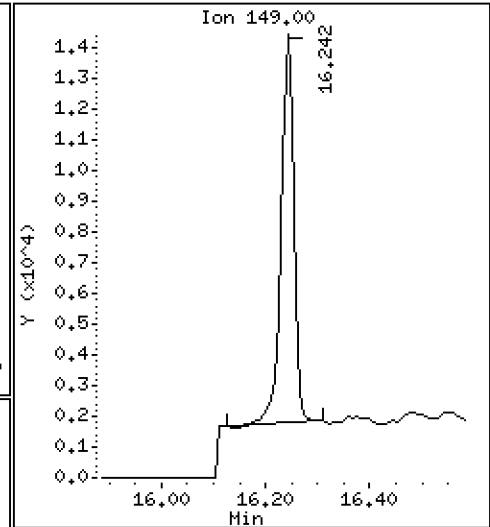
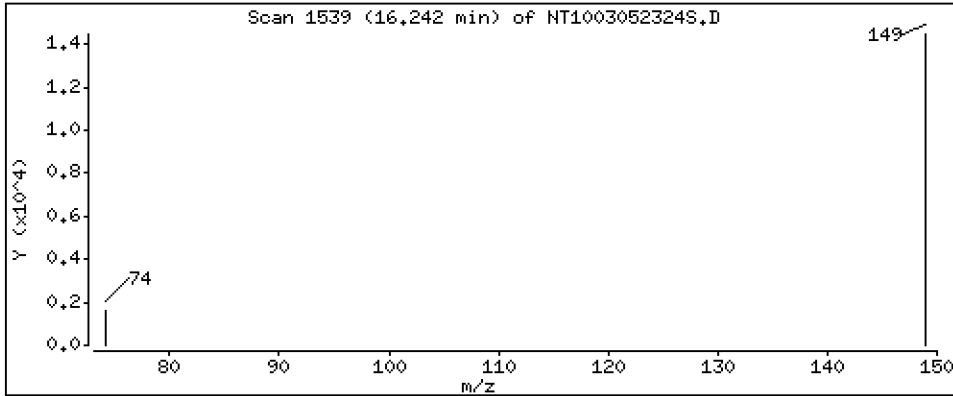
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1358 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

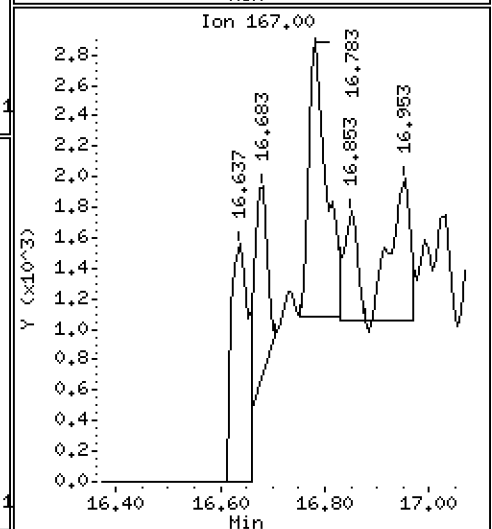
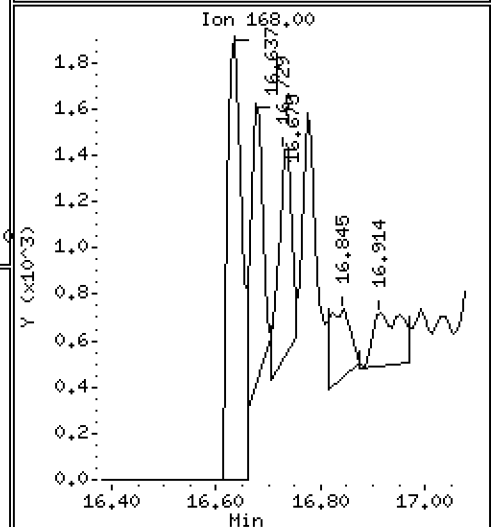
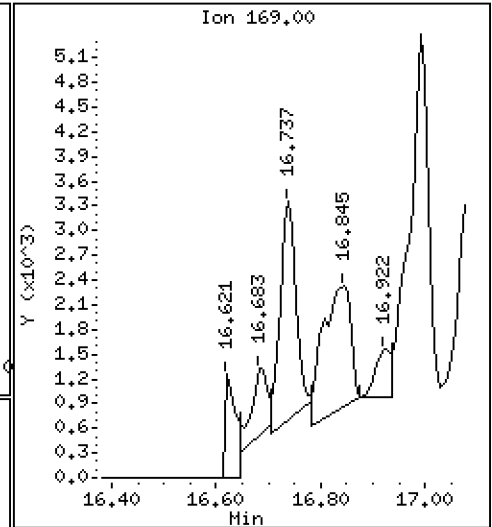
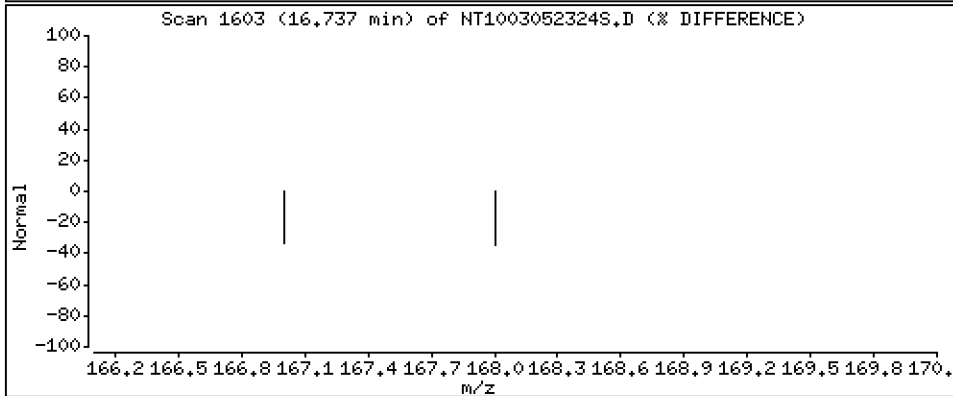
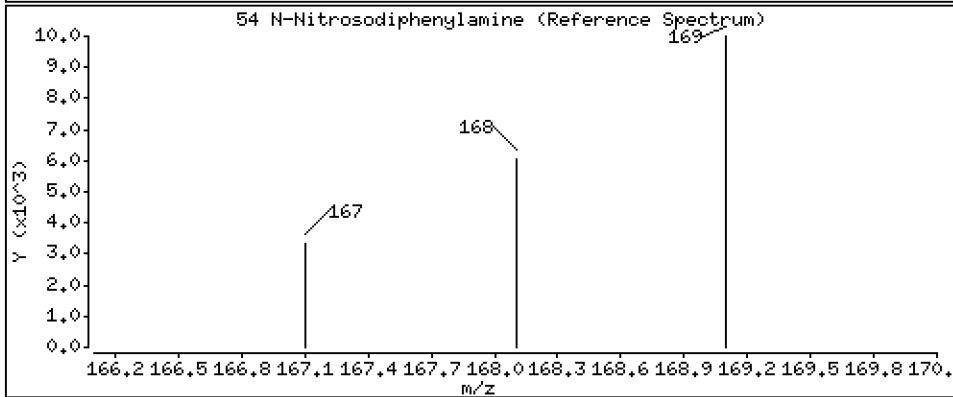
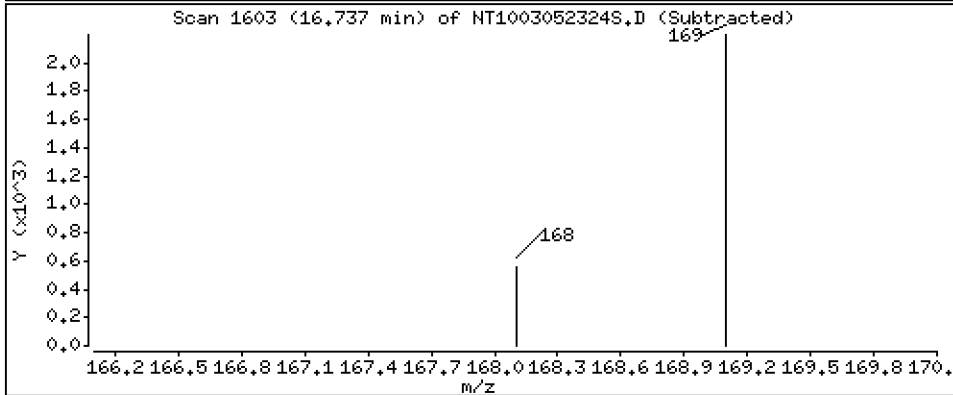
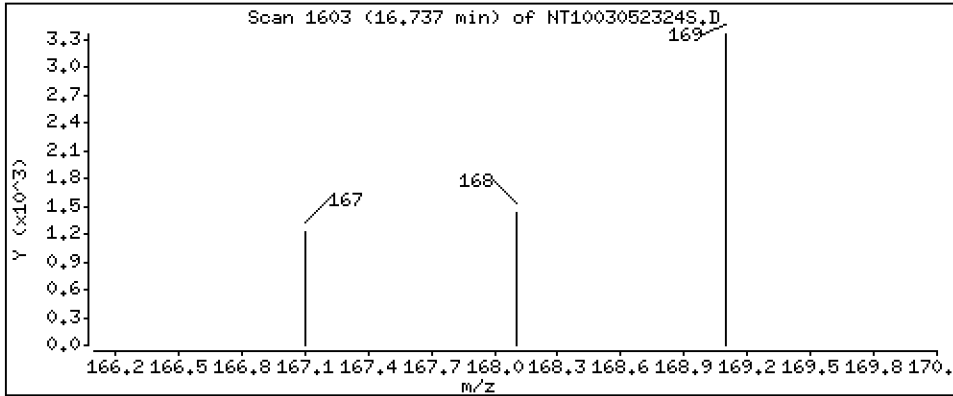
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.03575 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

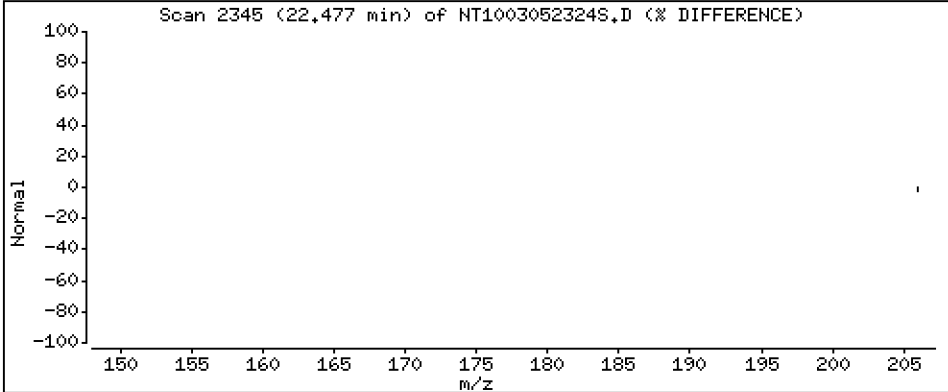
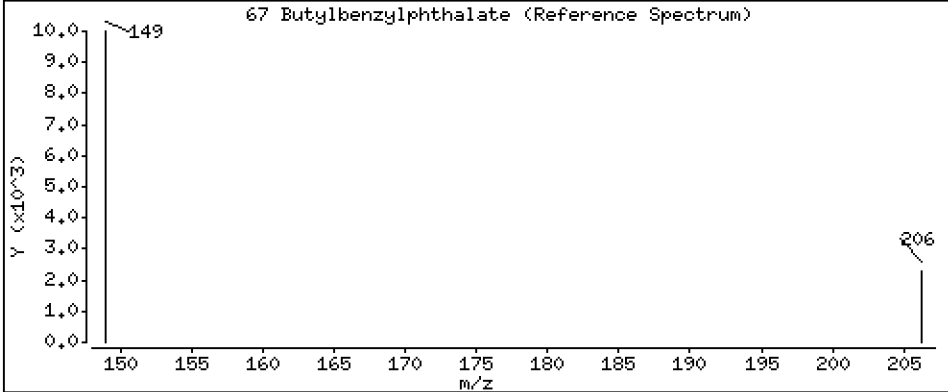
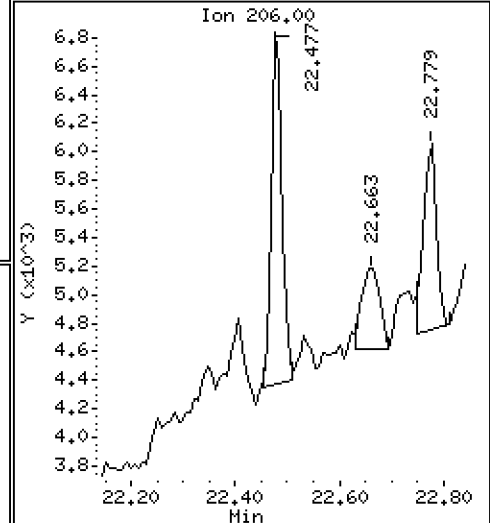
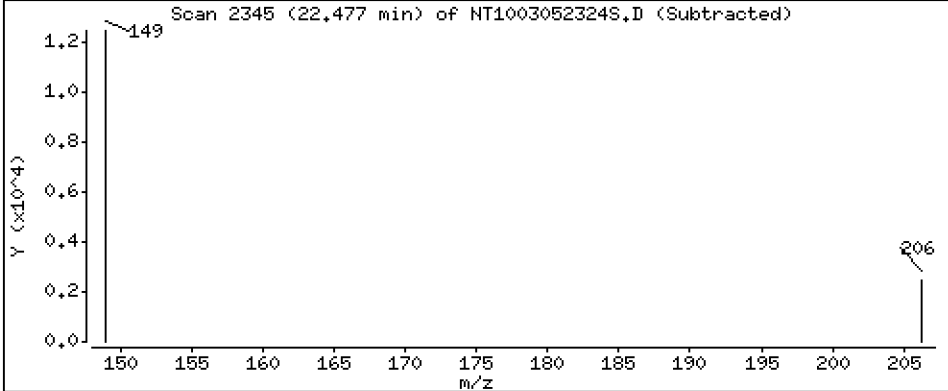
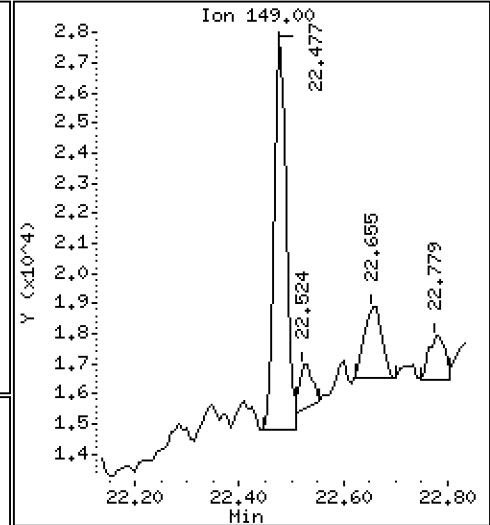
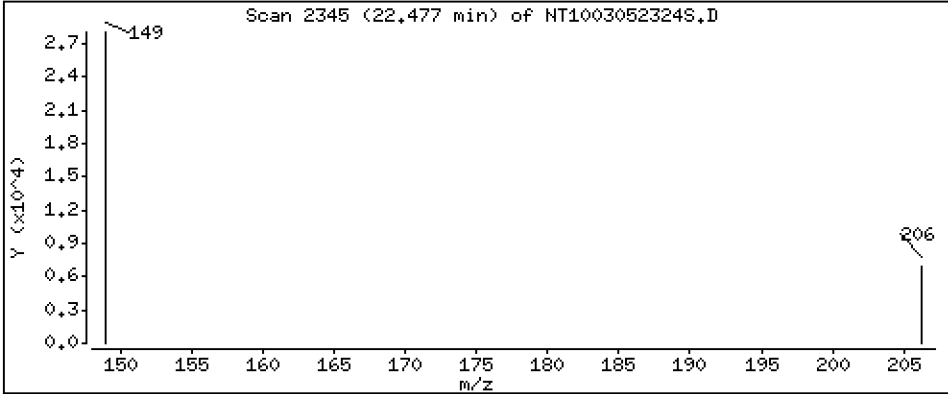
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1171 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

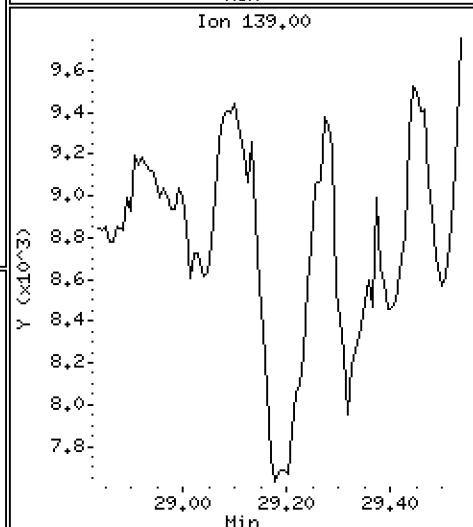
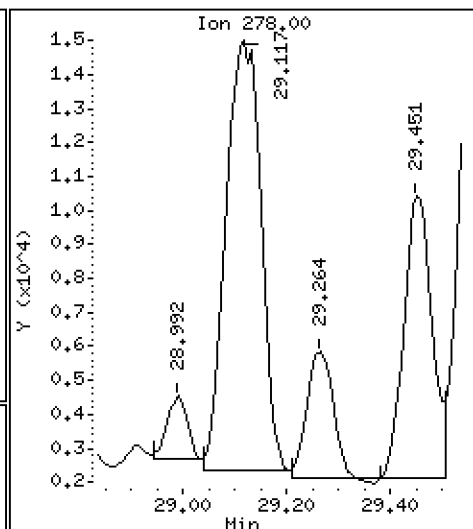
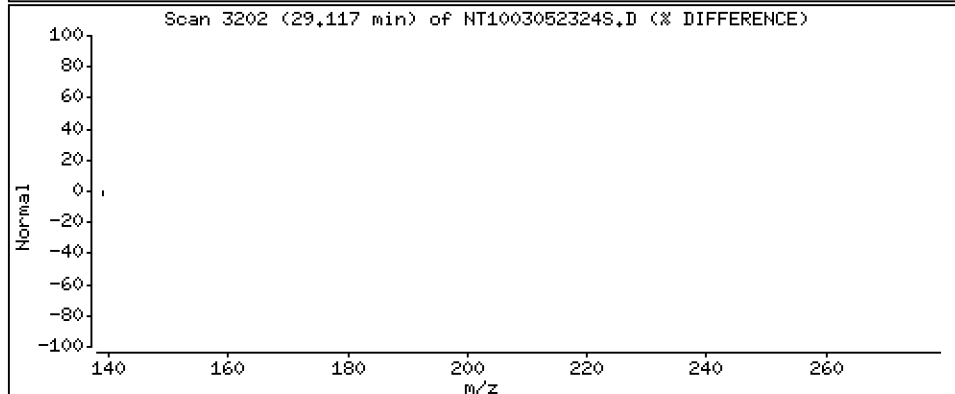
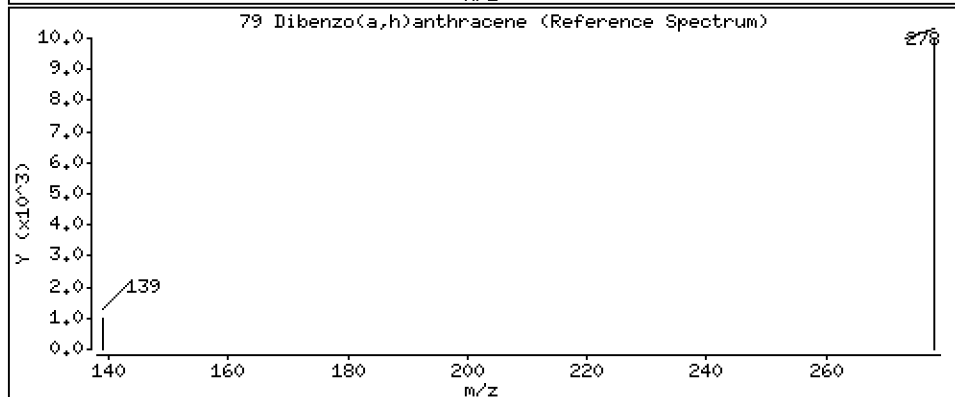
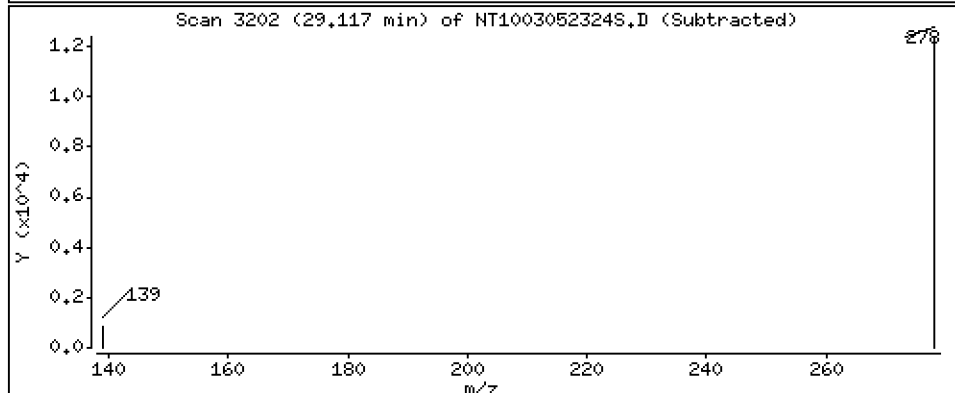
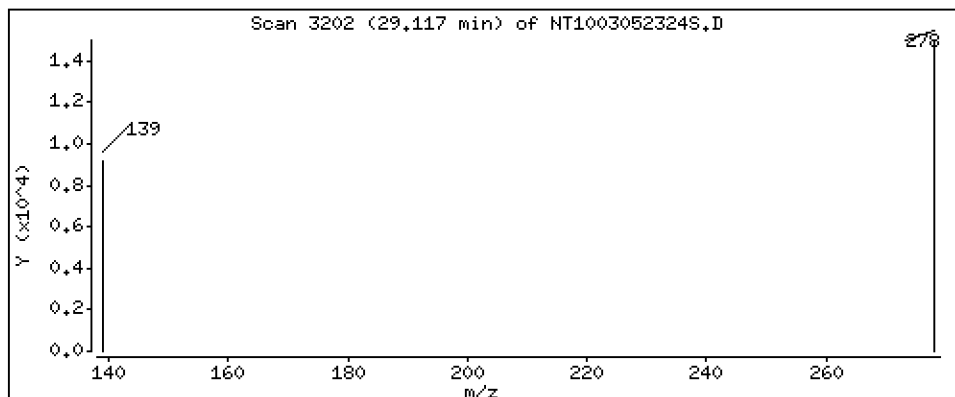
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2290 ug/mL



Date : 06-MAR-2023 03:55

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-02

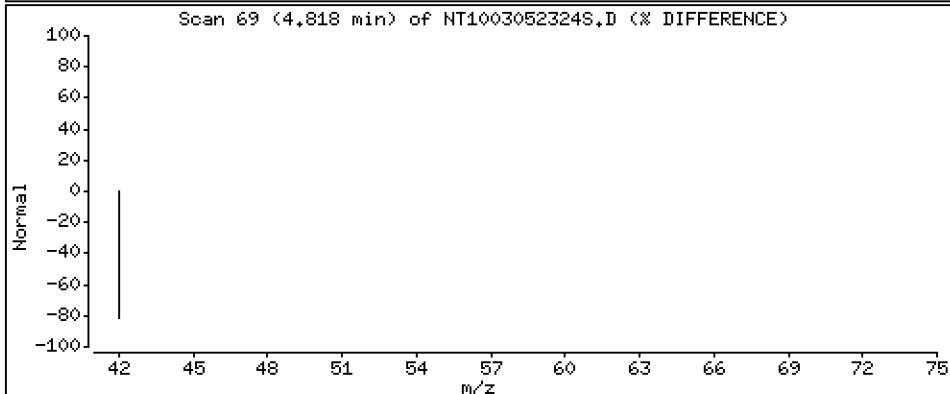
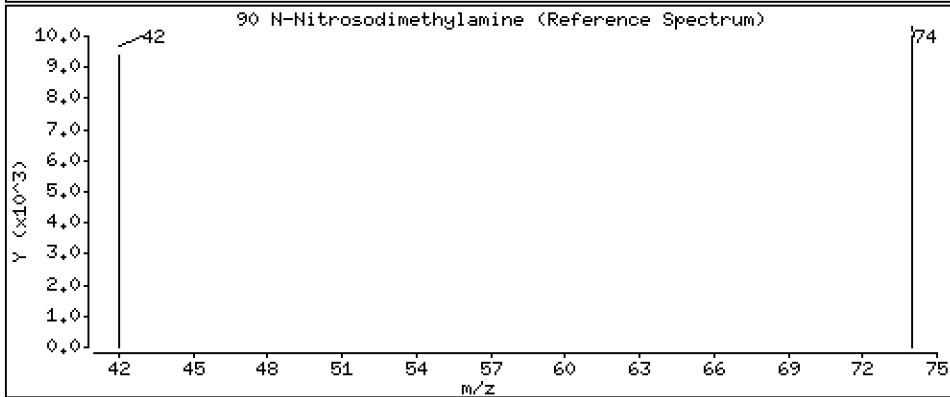
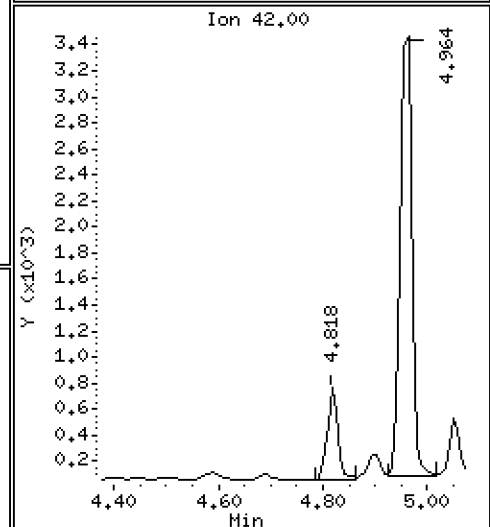
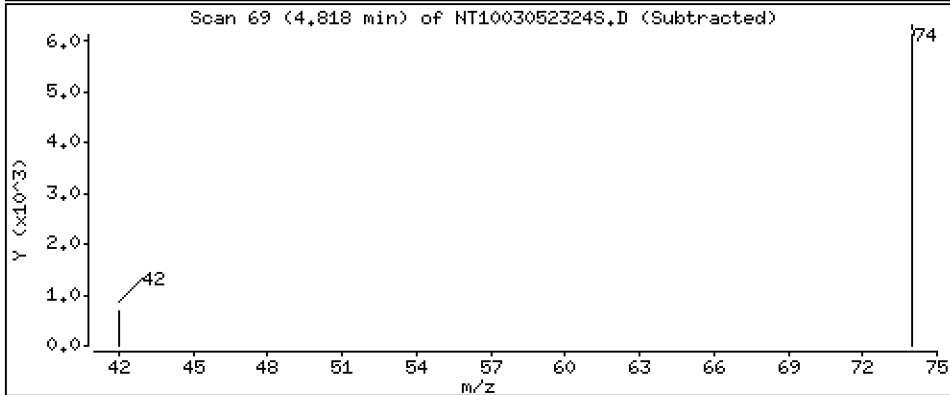
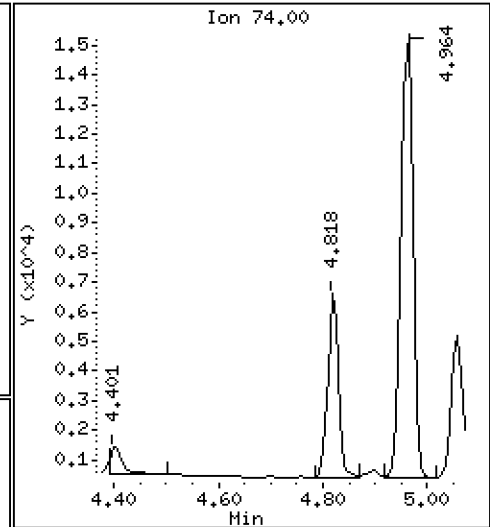
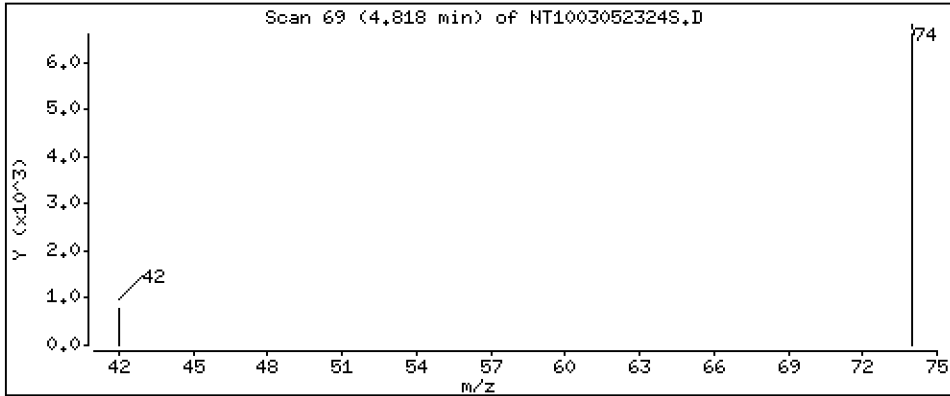
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 0.1789 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052324S.D
 Lab Smp Id: 23A0326-02
 Inj Date : 06-MAR-2023 03:55
 Operator : YZ
 Smp Info : 23A0326-02
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 29-Mar-2023 11:59 van
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: VANS-201906

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.746)	246826	3.00409	3.004 (R)
3 Phenol	94		8.556	8.532	(0.924)	96910	0.79661	0.7966
7 1,3-Dichlorobenzene	146		9.151	9.143	(0.988)	298	0.00279	0.002794
* 8 1,4-Dichlorobenzene-d4	152		9.260	9.252	(1.000)	287793	4.00000	
9 1,4-Dichlorobenzene	146		9.291	9.283	(1.003)	2236	0.02156	0.02156
11 Benzyl alcohol	79		9.508	9.484	(1.027)	19626	0.29117	0.2912 (H)
12 1,2-Dichlorobenzene	146		9.578	9.570	(1.034)	483	0.00485	0.004846
13 2-Methylphenol	108		9.702	9.671	(1.048)	1405	0.01929	0.01929
15 4-Methylphenol	108		9.997	9.966	(1.080)	5917	0.07805	0.07805
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.048	11.014	(0.940)	2029	0.02358	0.02358
24 Benzoic acid	105		11.193	11.133	(0.952)	17155	0.36307	0.3631
26 1,2,4-Trichlorobenzene	180		Compound Not Detected.					
* 27 Naphthalene-d8	136		11.755	11.731	(1.000)	1014116	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.780	14.764	(0.963)	7298	0.04622	0.04622
* 42 Acenaphthene-d10	162		15.353	15.337	(1.000)	497309	4.00000	
50 Diethylphthalate	149		16.242	16.234	(1.058)	20216	0.13576	0.1358 (M)
54 N-Nitrosodiphenylamine	169		16.736	16.729	(0.907)	5782	0.03575	0.03575
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.460	18.453	(1.000)	999293	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.594	(0.919)	574985	7.20581	7.206 (R)
67 Butylbenzylphthalate	149		22.477	22.484	(0.956)	19500	0.11708	0.1171
* 69 Chrysene-d12	240		23.507	23.514	(1.000)	986742	4.00000	
* 77 Perylene-d12	264		26.247	26.270	(1.000)	1120343	4.00000	
79 Dibenzo(a,h)anthracene	278		29.116	29.186	(1.109)	59597	0.22900	0.2290 (H)
90 N-Nitrosodimethylamine	74		4.817	4.724	(0.520)	8702	0.17889	0.1789

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052324S.D
 Lab Smp Id: 23A0326-02
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	293840	146920	587680	287793	-2.06
27 Naphthalene-d8	1032639	516320	2065278	1014116	-1.79
42 Acenaphthene-d10	502349	251175	1004698	497309	-1.00
59 Phenanthrene-d10	975997	487999	1951994	999293	2.39
69 Chrysene-d12	978544	489272	1957088	986742	0.84
77 Perylene-d12	1201606	600803	2403212	1120343	-6.76

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.09
27 Naphthalene-d8	11.73	11.23	12.23	11.76	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.10
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.03
77 Perylene-d12	26.27	25.77	26.77	26.25	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003052324S.D

Lab ID: 23A0326-02

nt10.i, 20230305A.b\SIM.b\SIMABN2.m, 06-MAR-2023 03:55

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.520	0.511	0.0096	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003052315SA.D

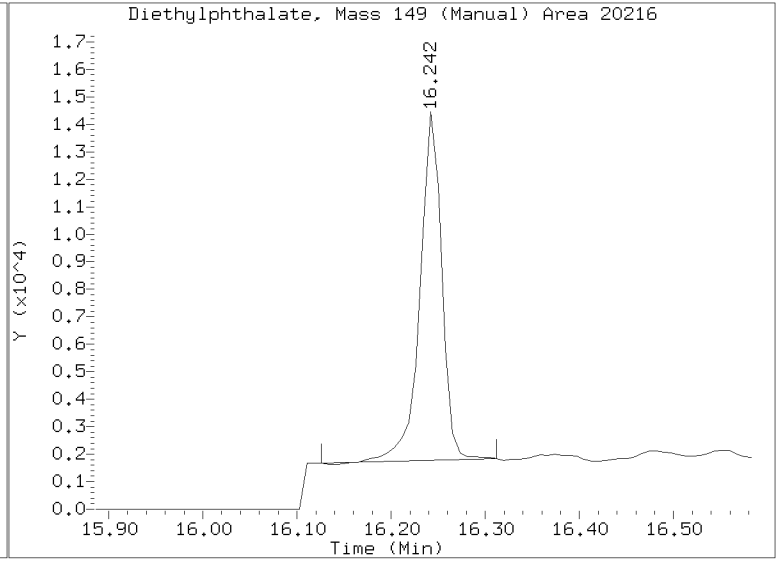
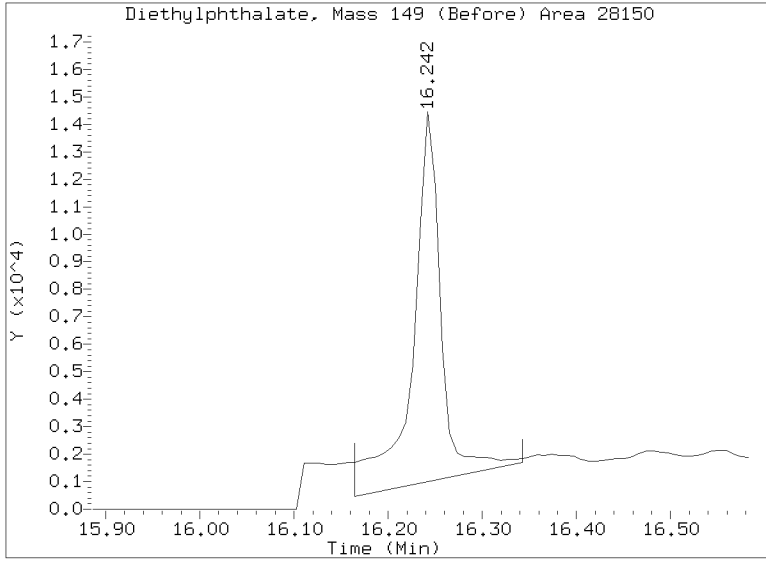
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/SIM.b/NT1003052324S.D
Injection Date: 06-MAR-2023 03:55
Lab ID:23A0326-02 Client ID:
Report Date: 03/29/2023 12:00





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-04 A

SDG: 23A0326

Sampled: 01/17/23 10:33

Prepared: 02/02/23 13:06

File ID: NT1003052330S.D

% Solids: 51.64

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 07:41

Batch: BLA0685

Sequence: SLC0447

Initial/Final: 19.39 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.4	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	58.9		2.5	20.0
65-85-0	Benzoic acid	1	84.7	J	13.4	99.9
105-67-9	2,4-Dimethylphenol	1	3.3	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	4.6	J	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.03	581	77.6	27 - 120	
p-Terphenyl-d14	499.35	729	146	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052330S.D

Date: 06-HRR-2023 07:41

Client ID:

Sample Info: 23A0326-04

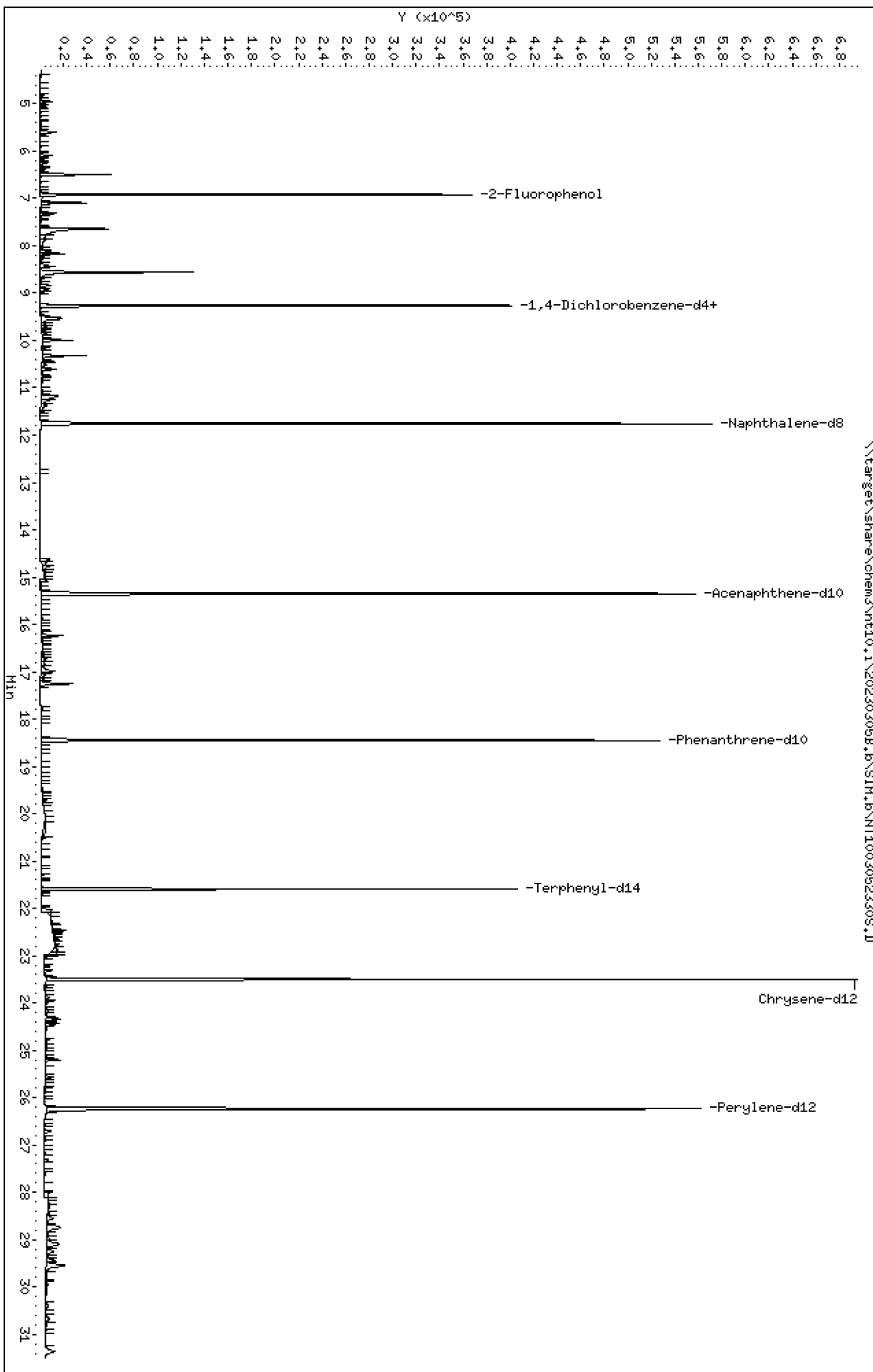
Page 1

Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

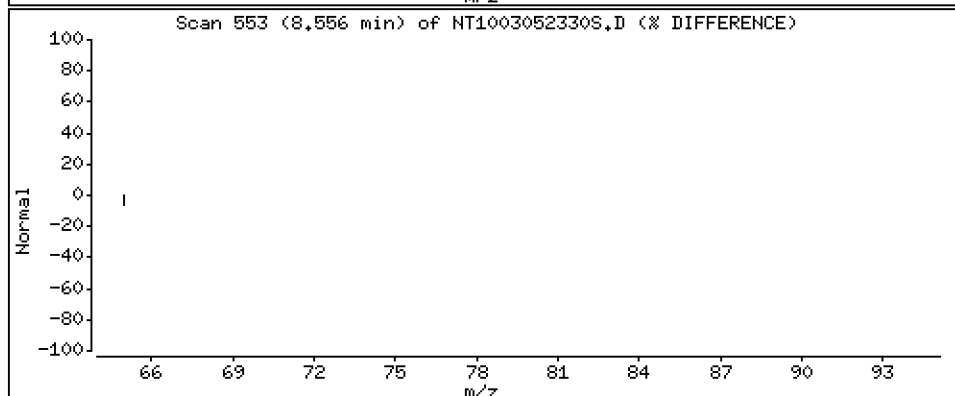
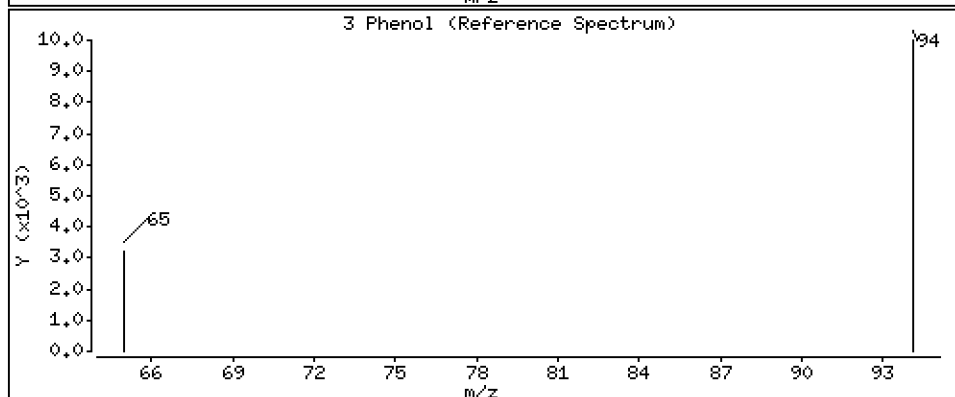
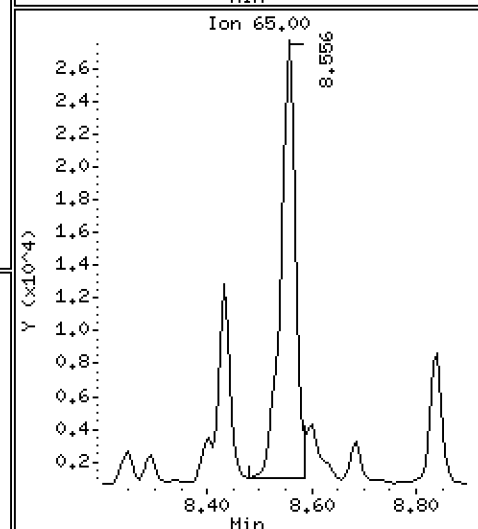
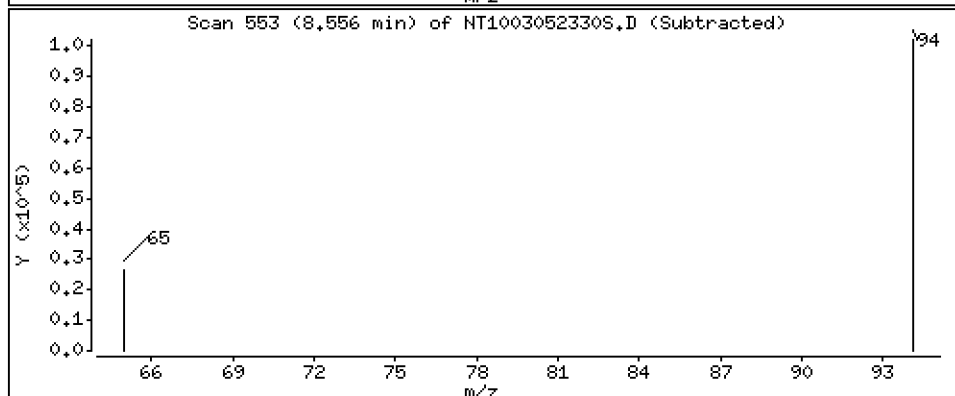
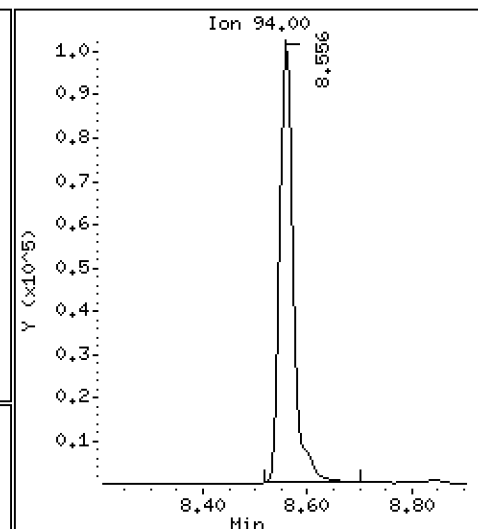
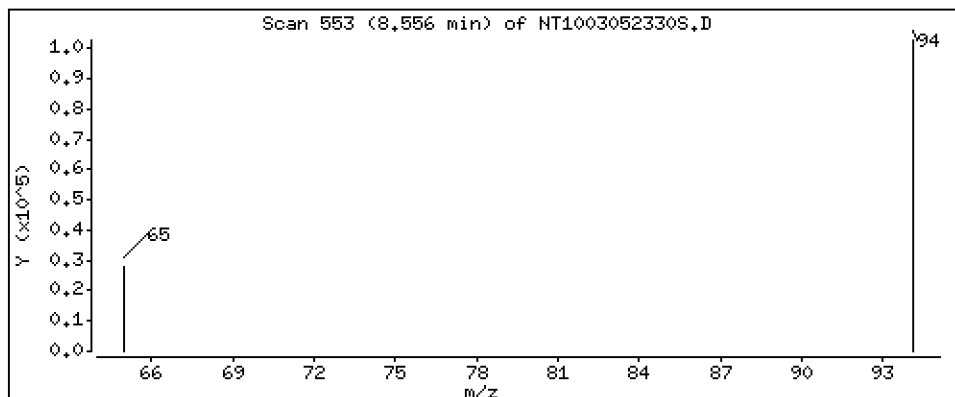
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 1.692 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

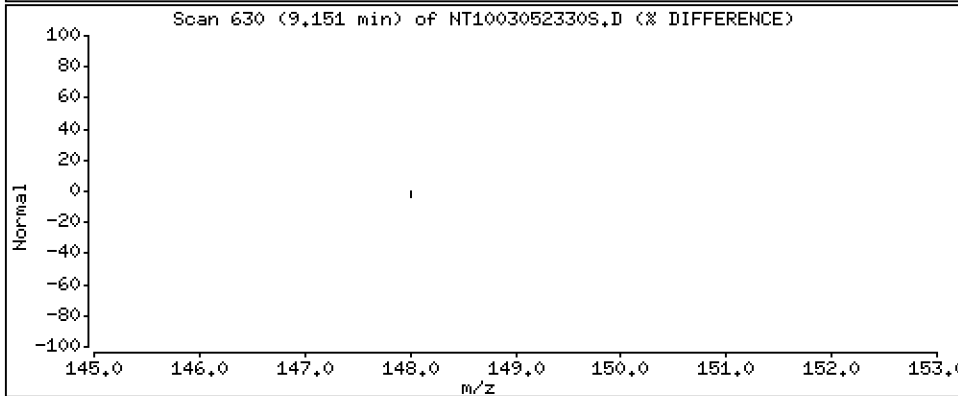
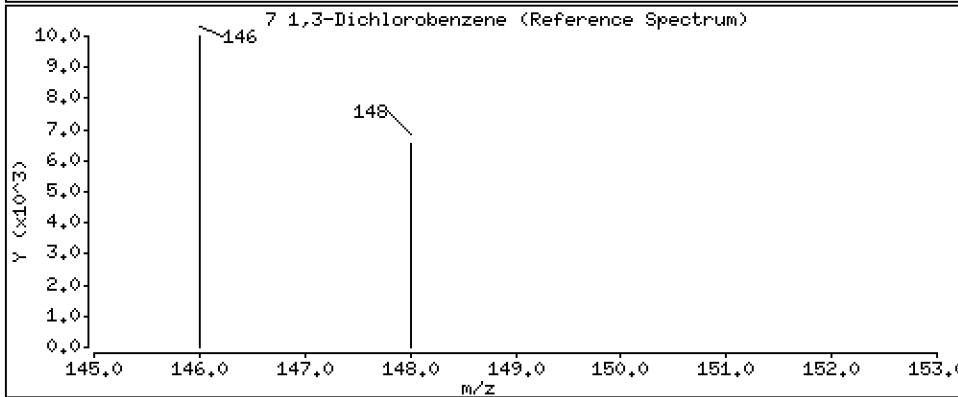
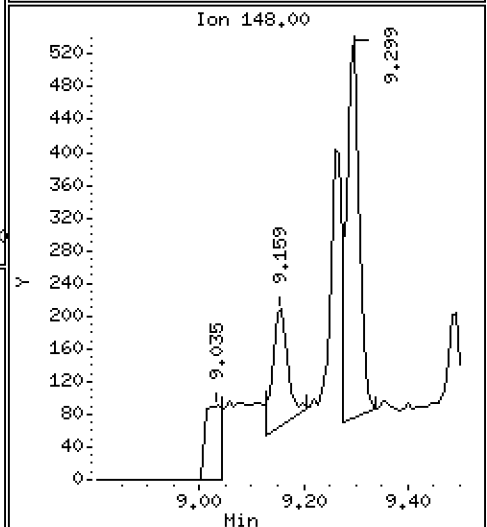
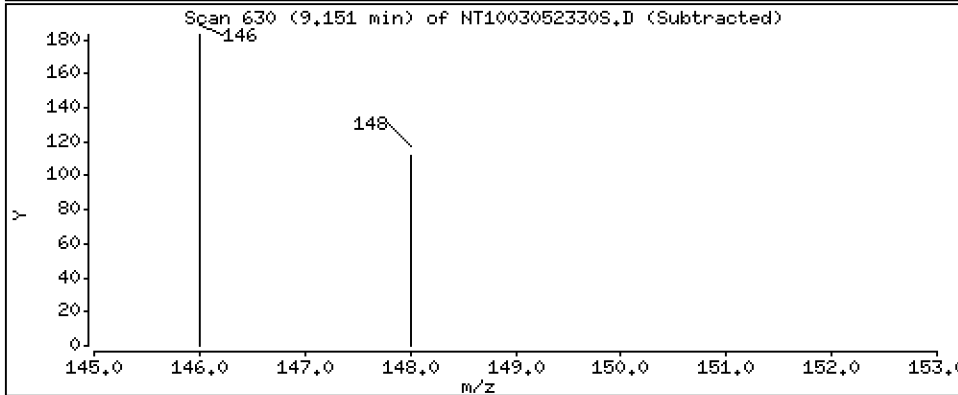
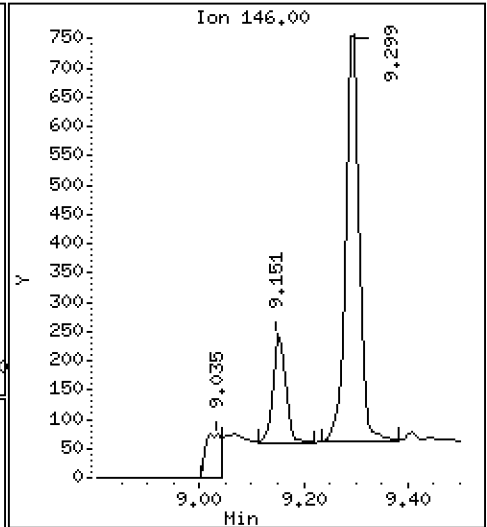
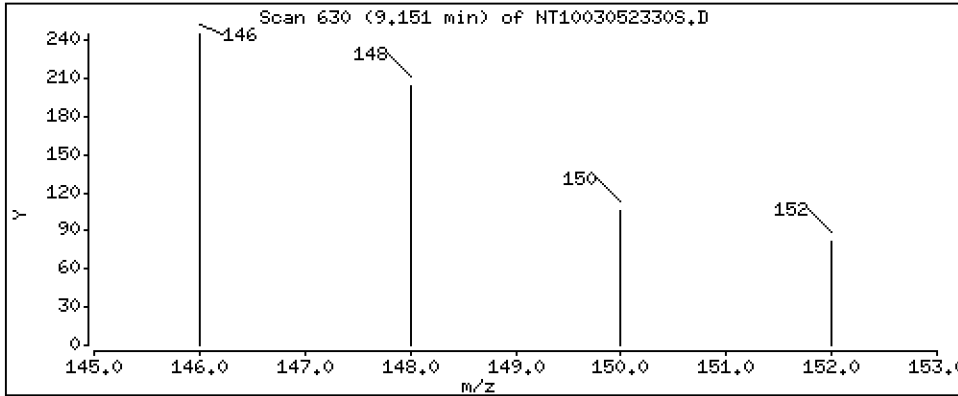
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,003366 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

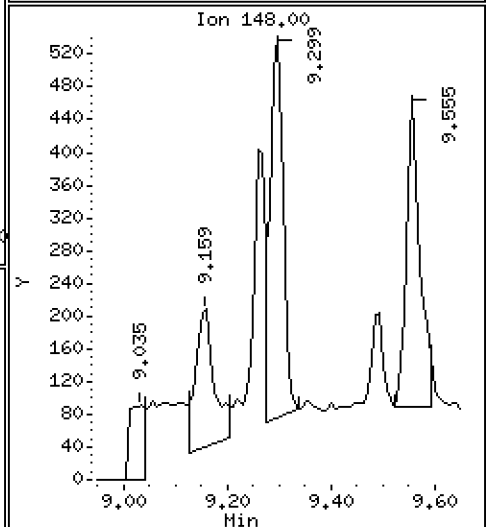
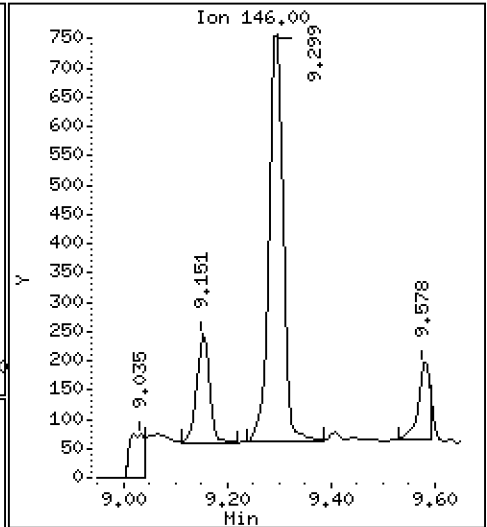
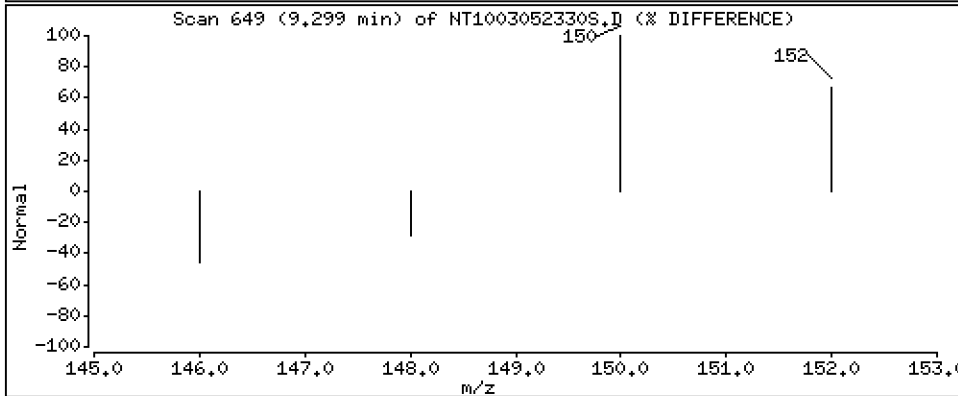
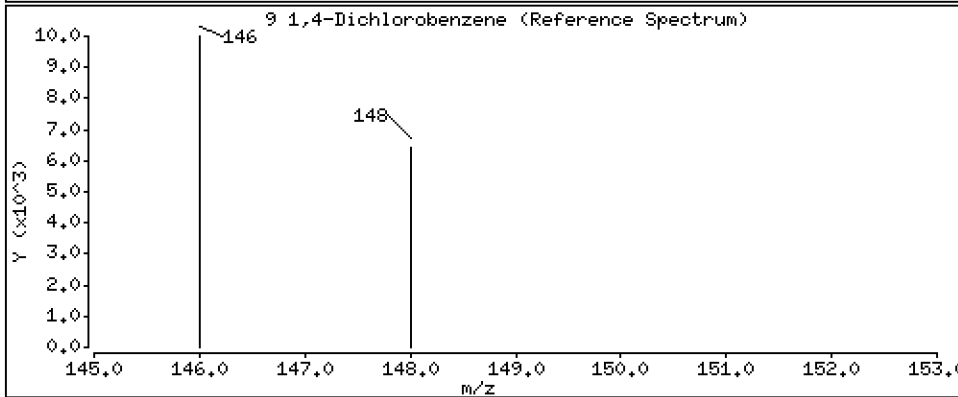
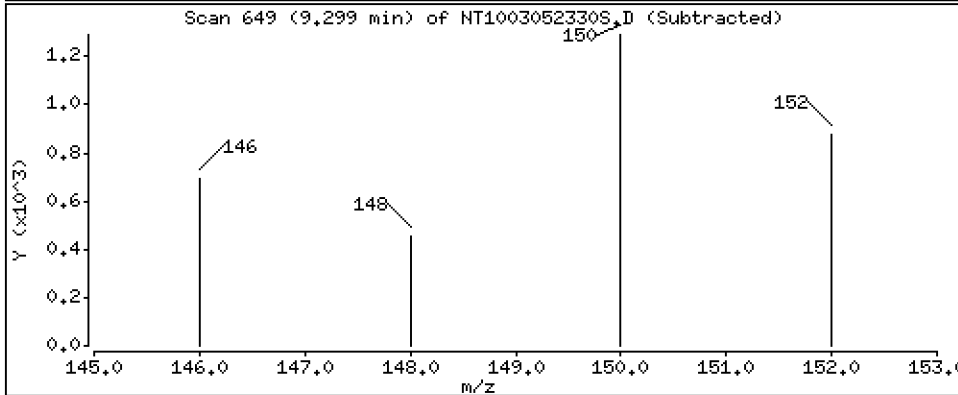
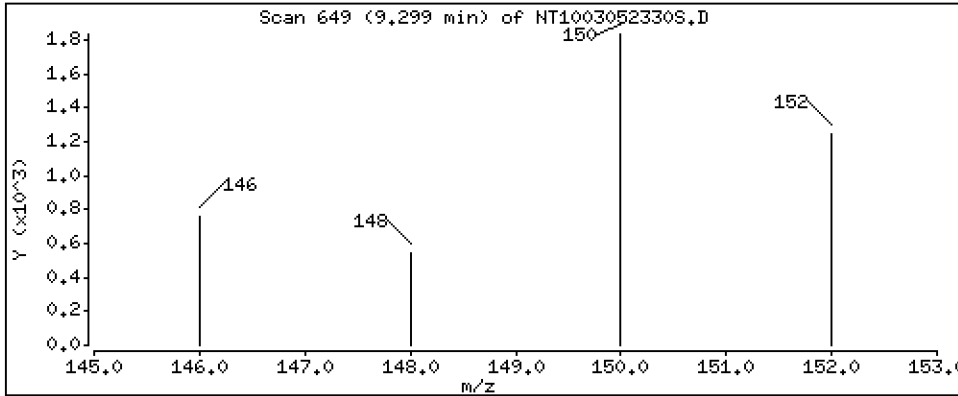
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.01422 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

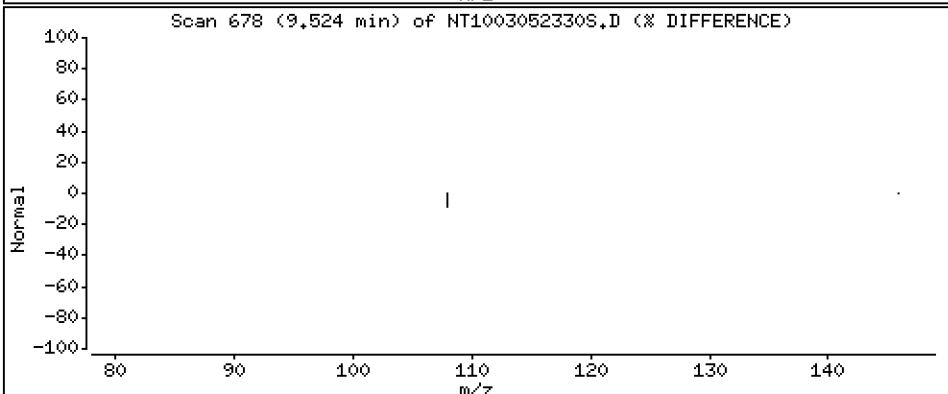
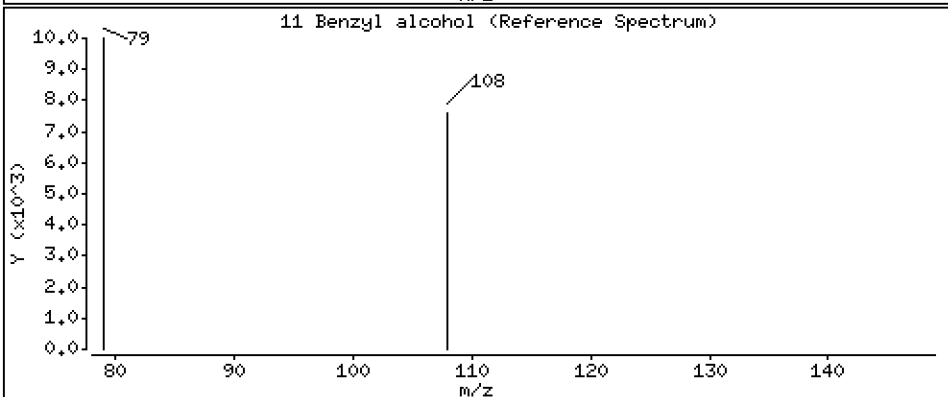
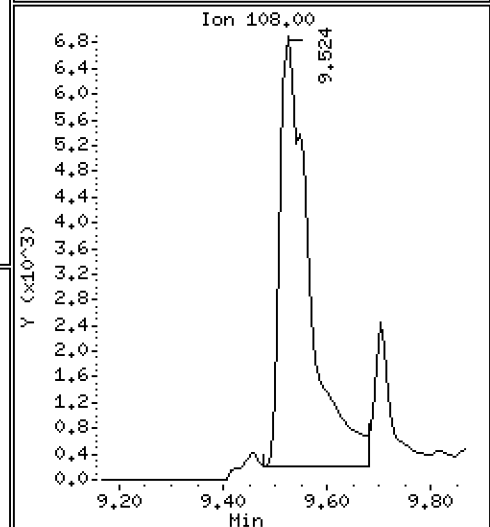
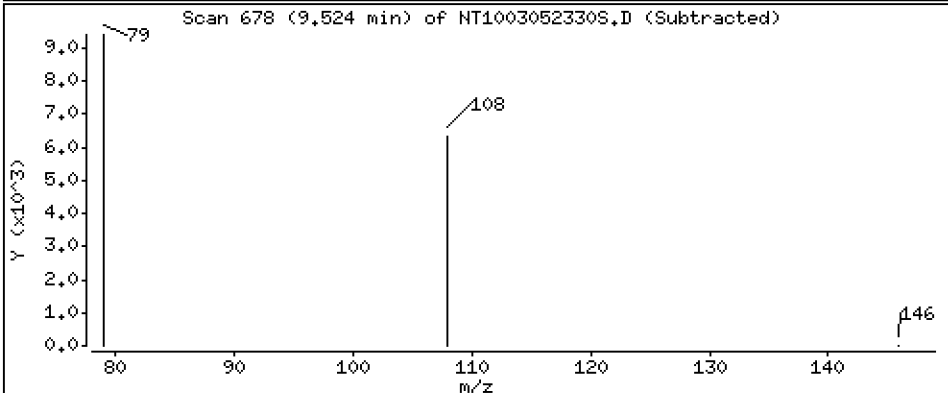
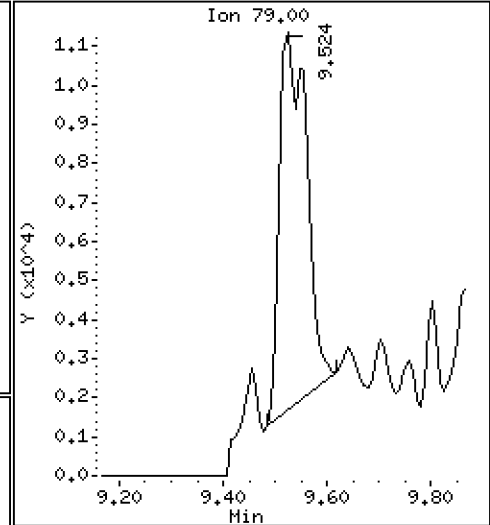
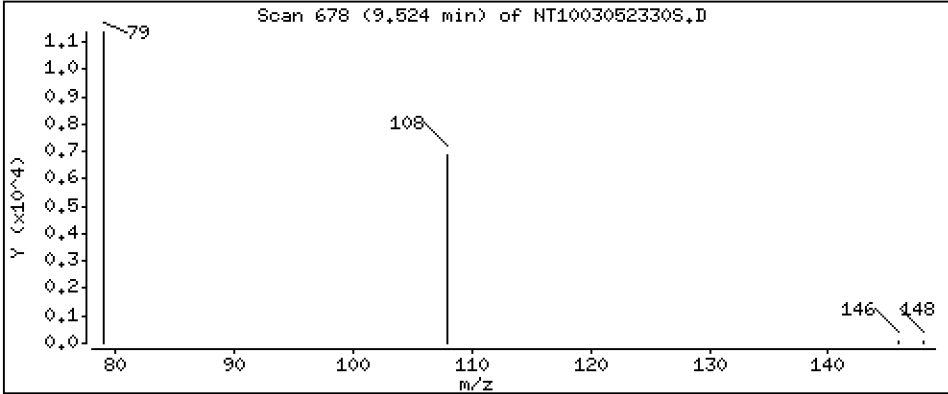
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.5897 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

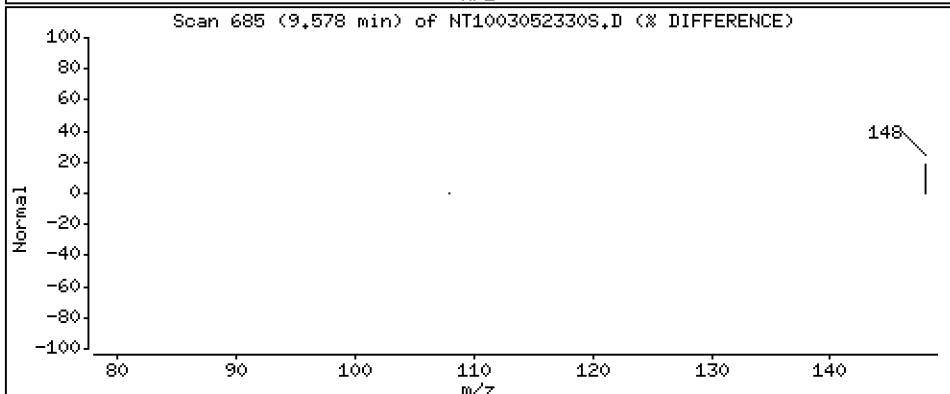
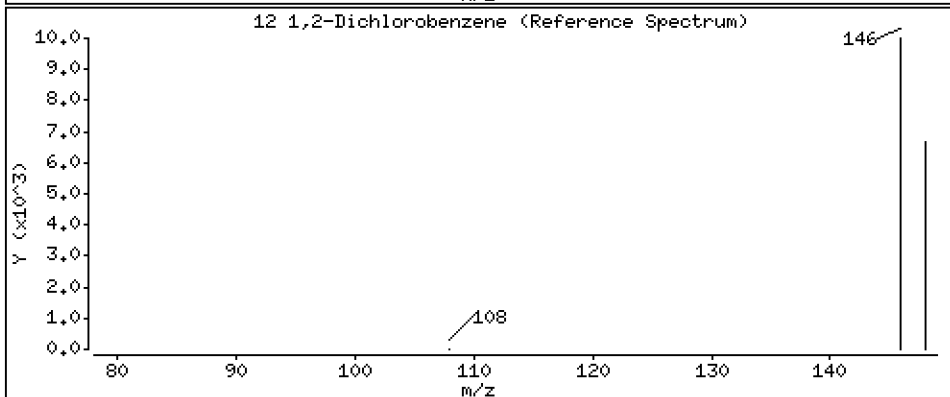
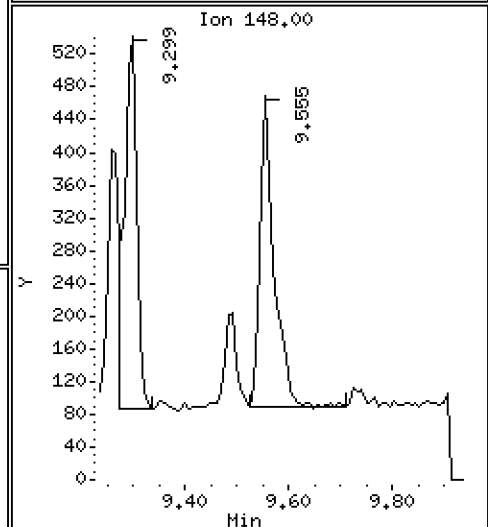
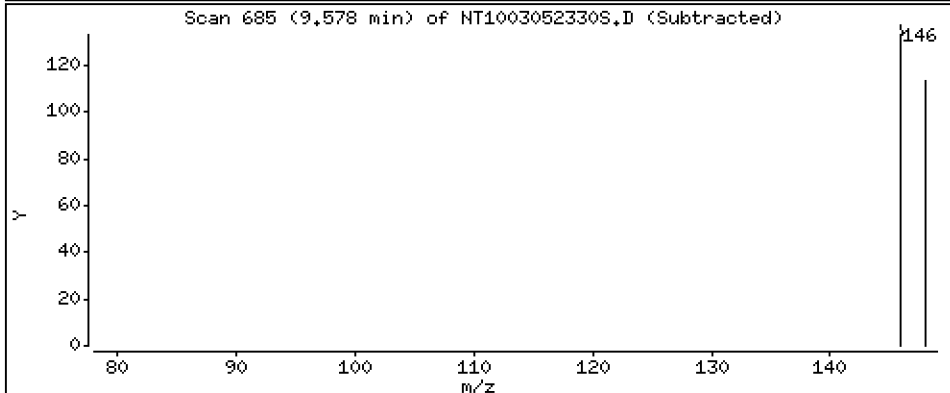
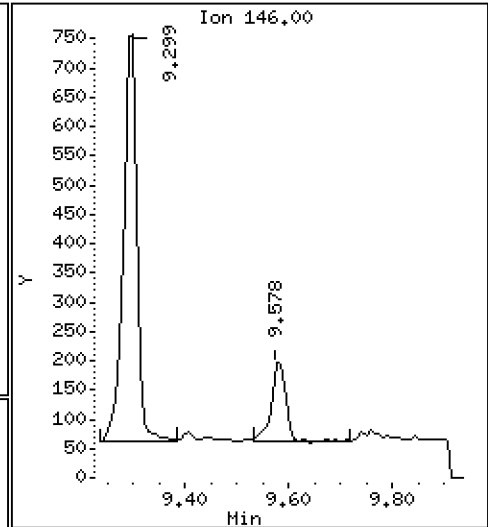
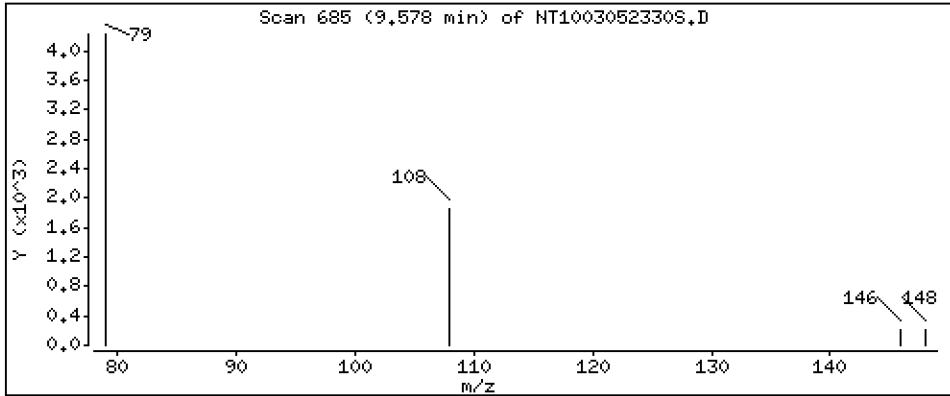
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,002971 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

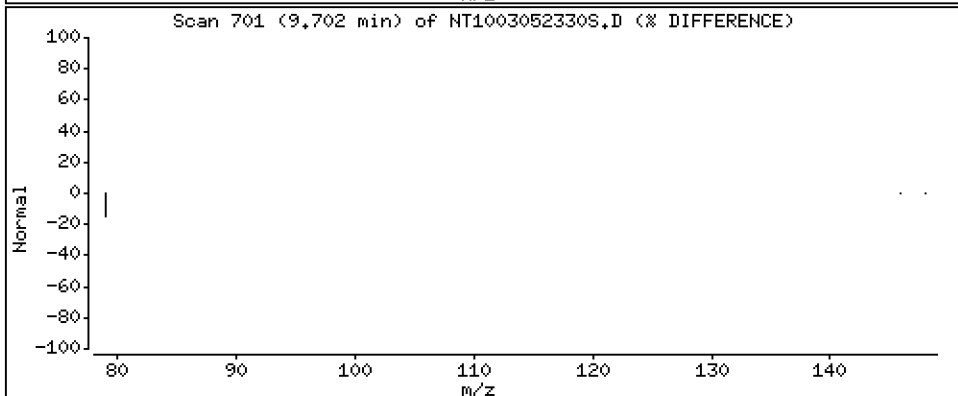
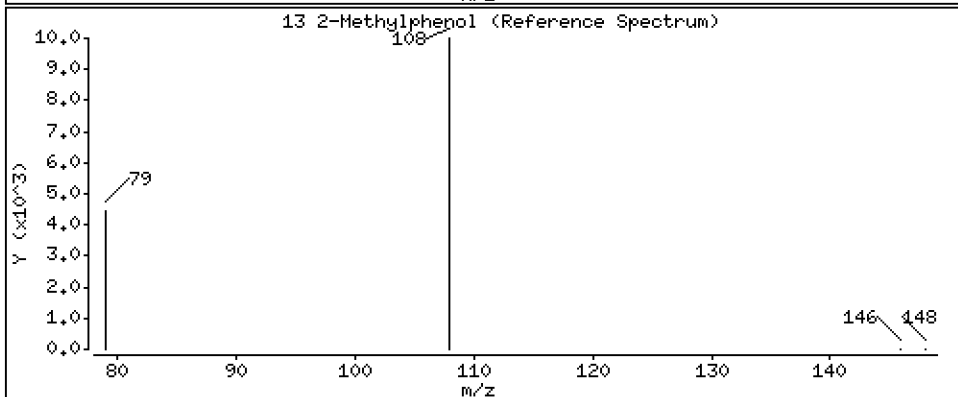
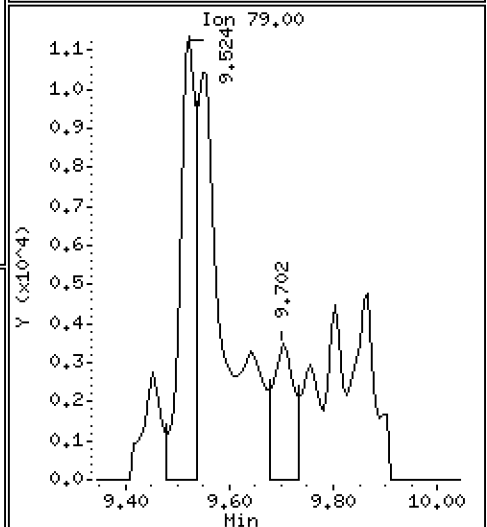
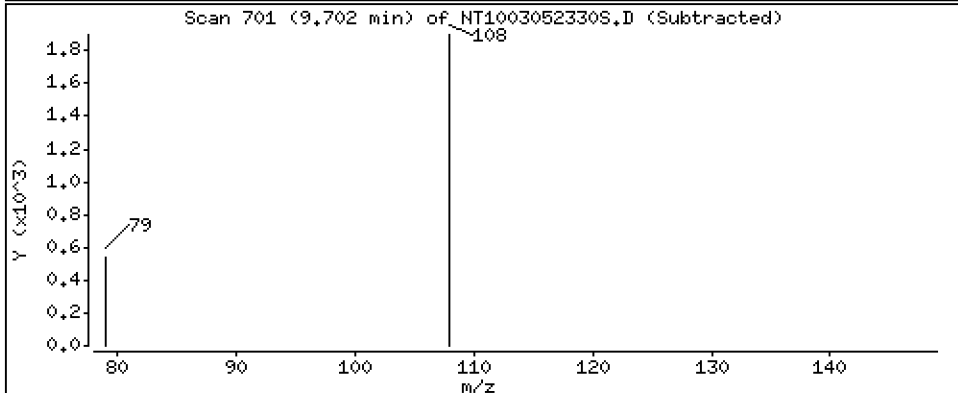
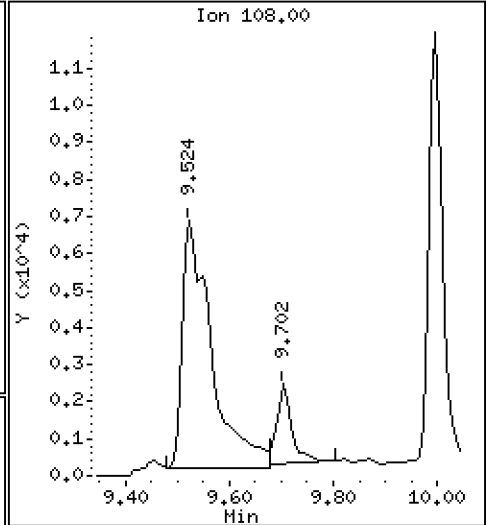
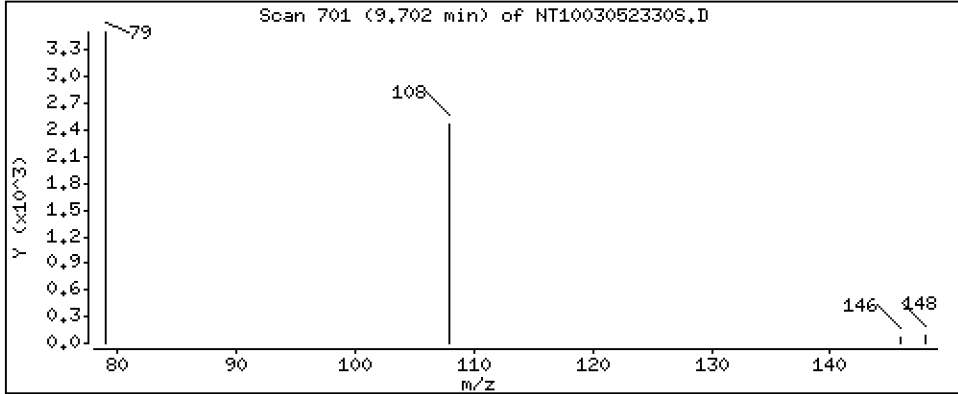
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,06709 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

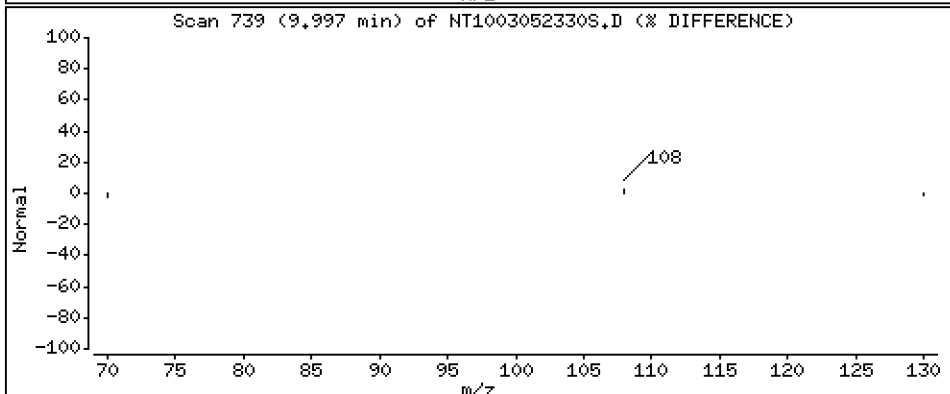
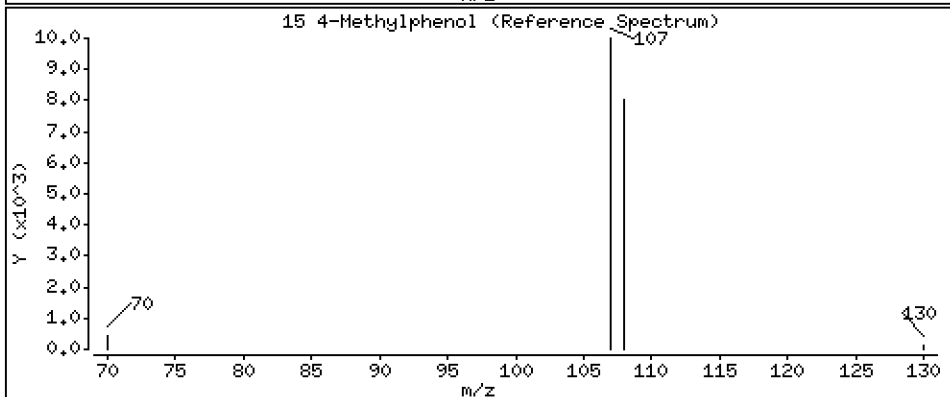
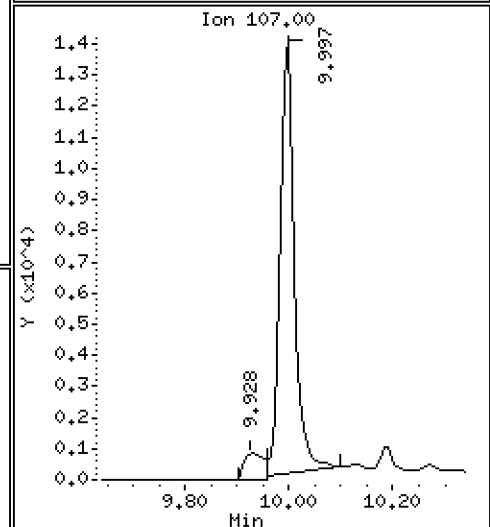
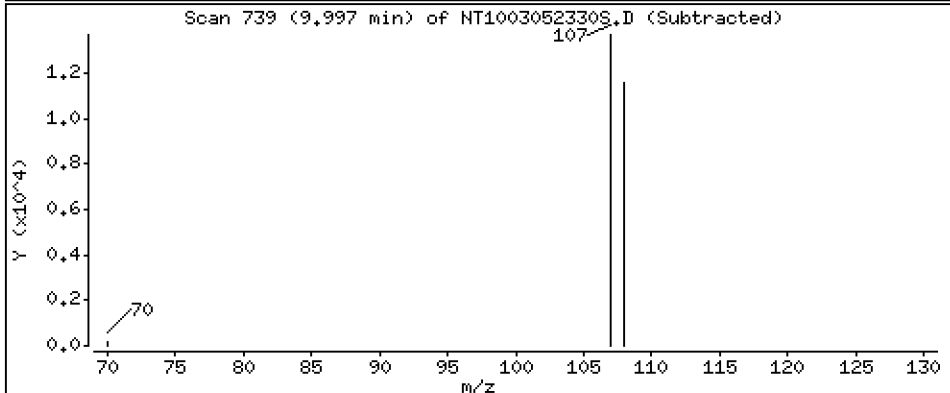
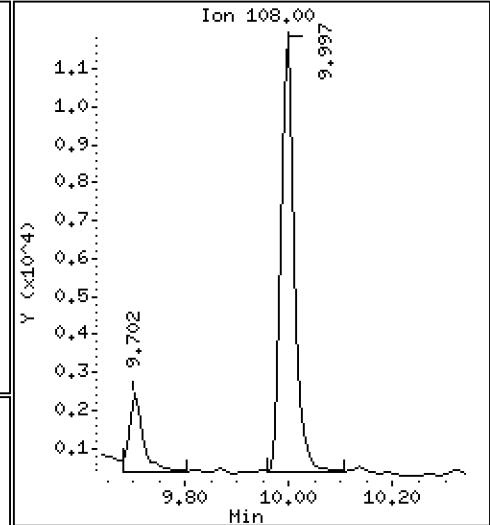
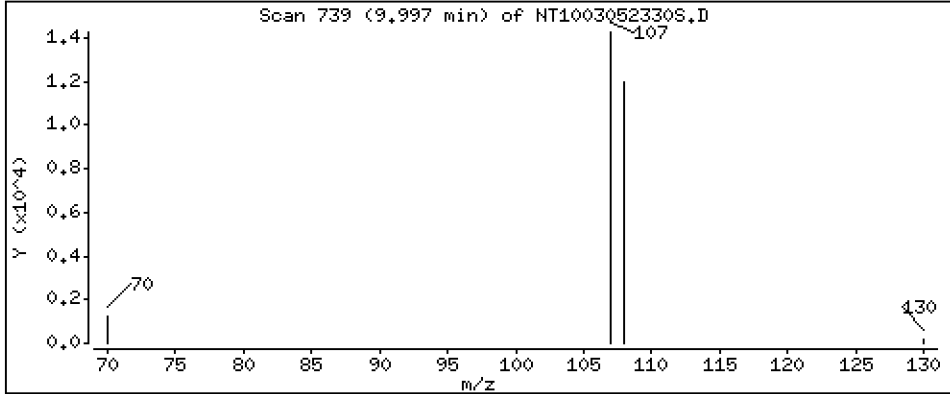
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,3056 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

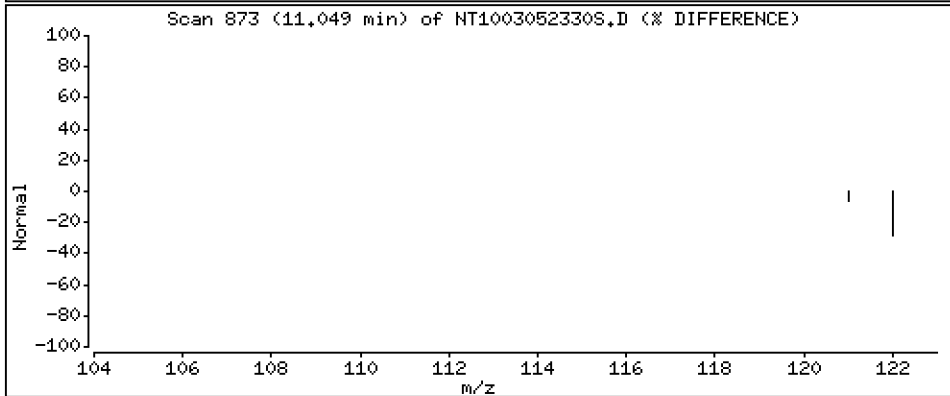
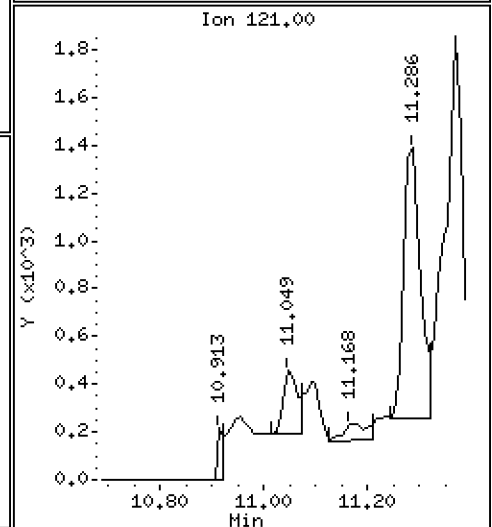
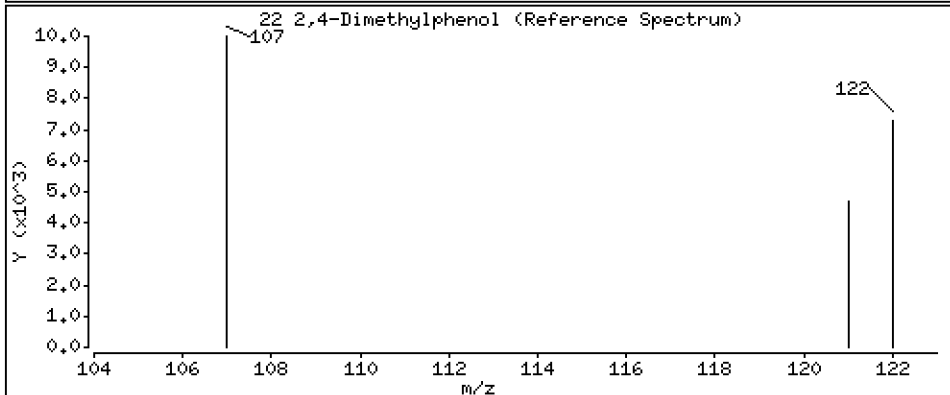
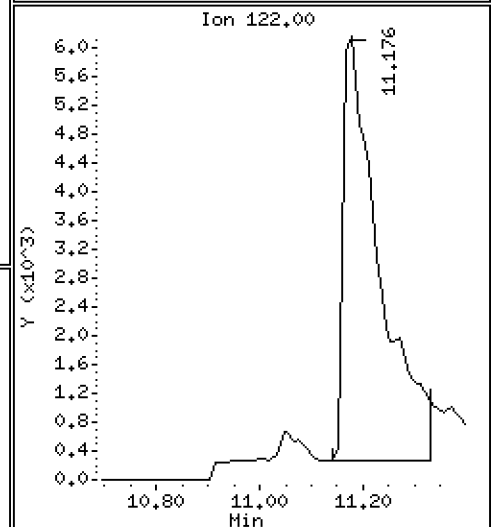
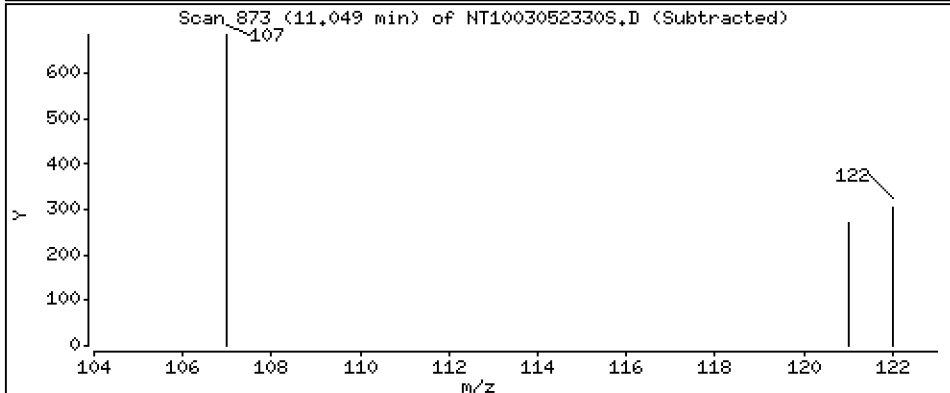
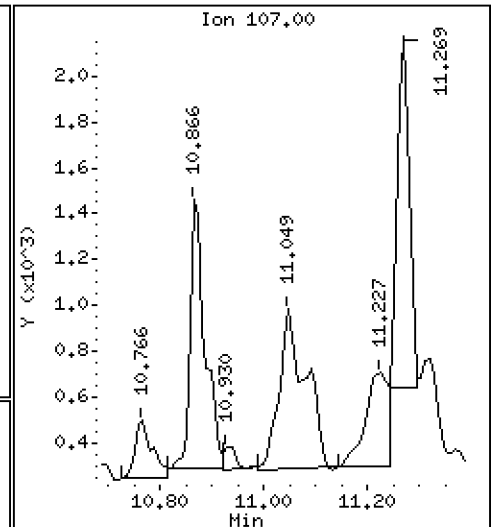
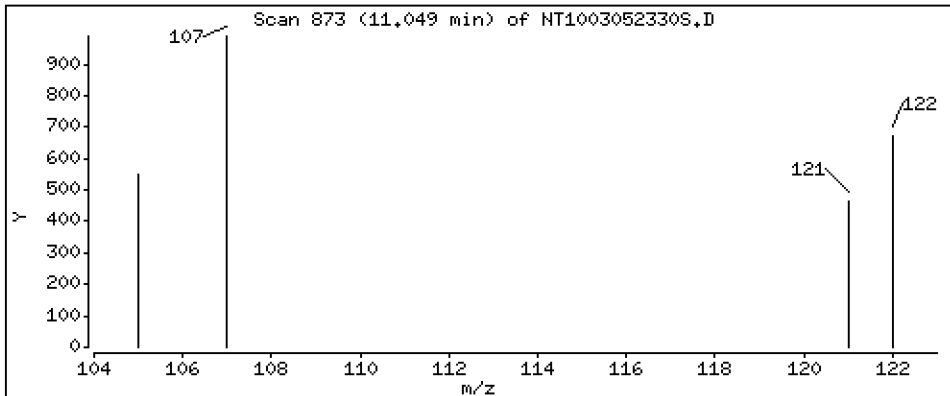
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.03305 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

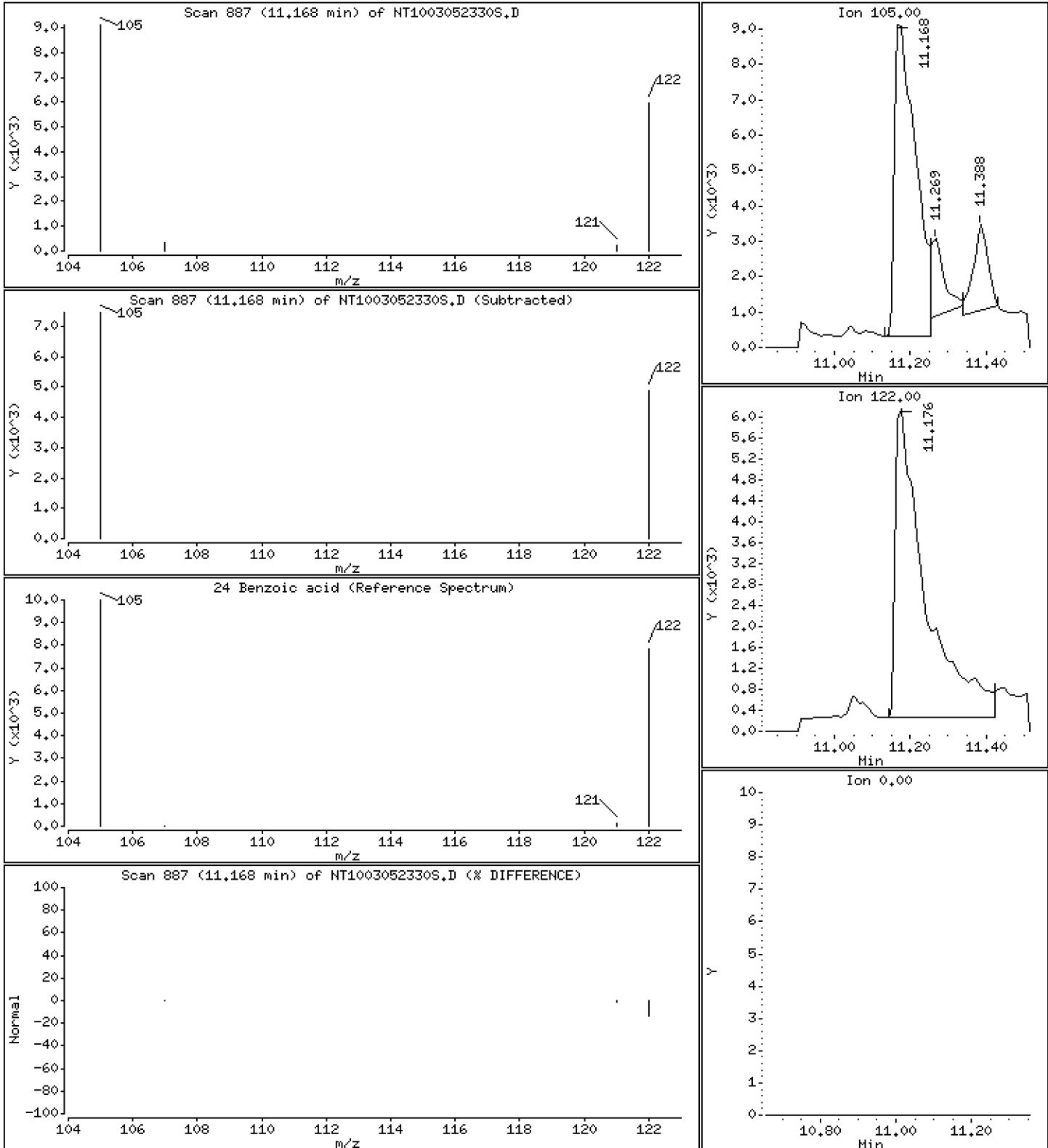
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,8480 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

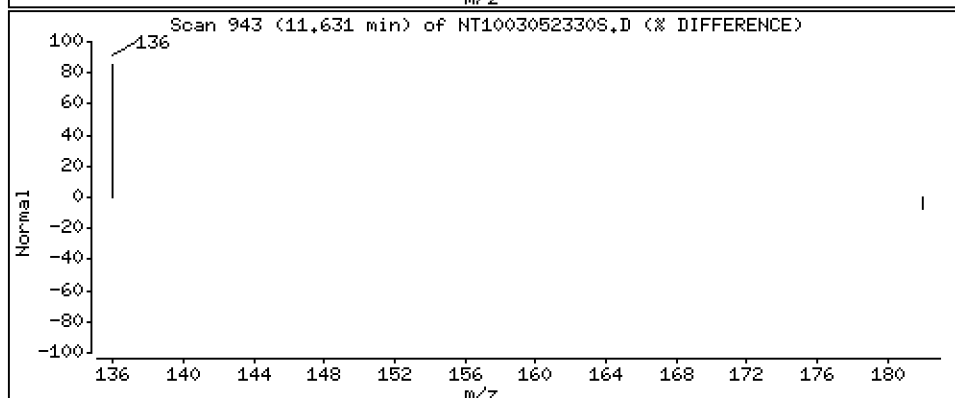
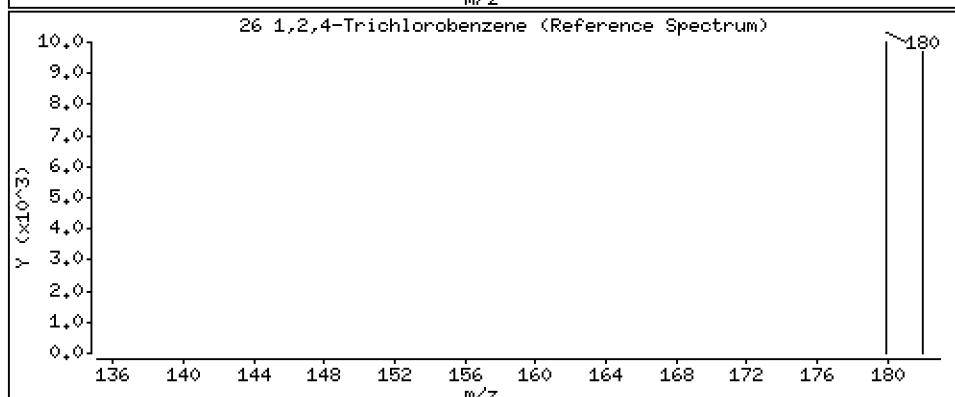
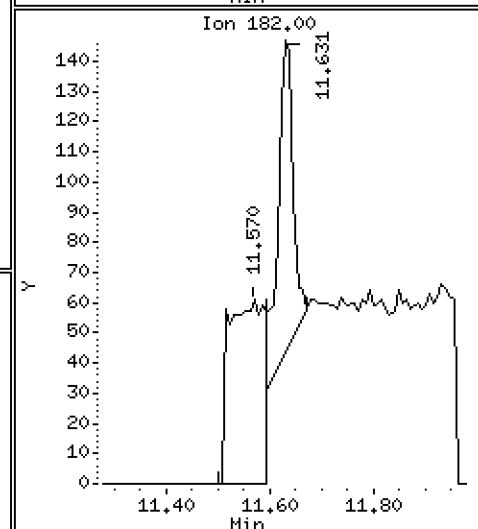
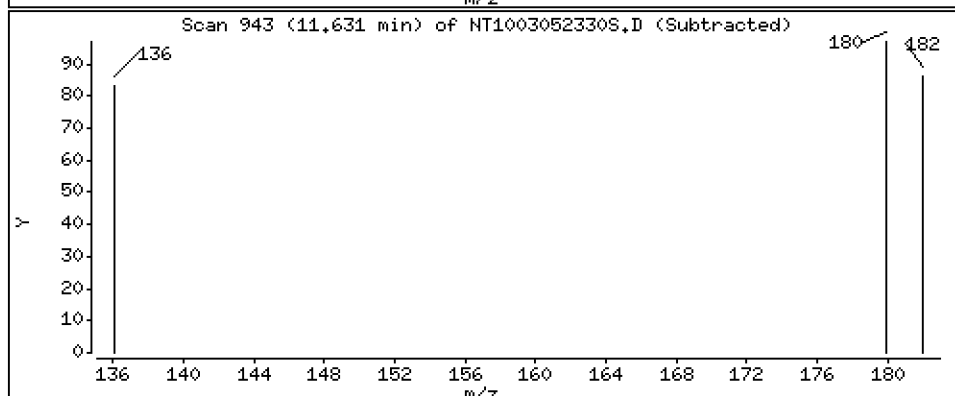
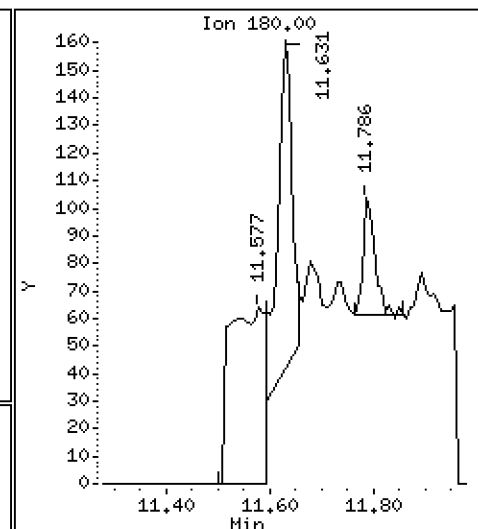
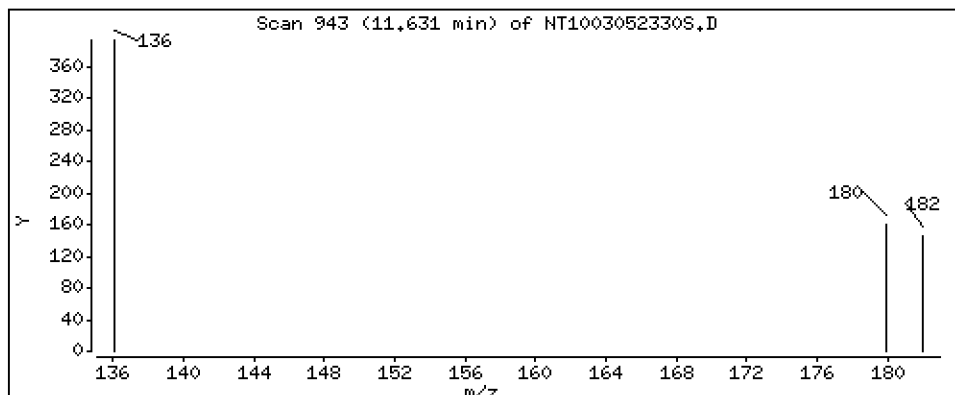
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,003790 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

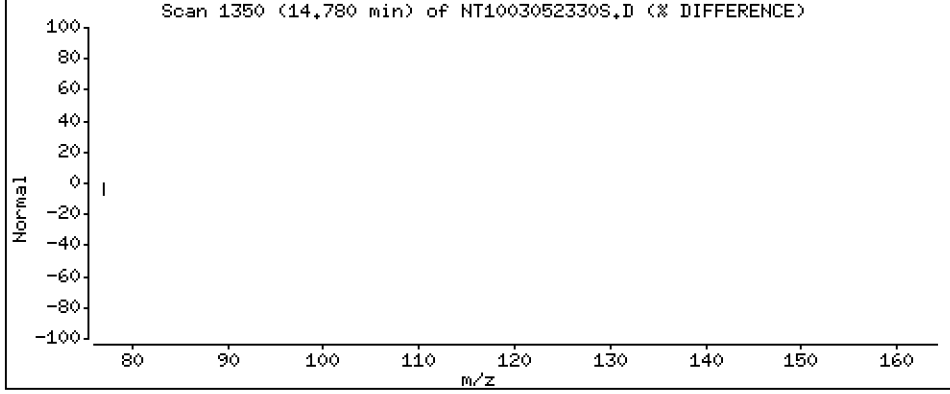
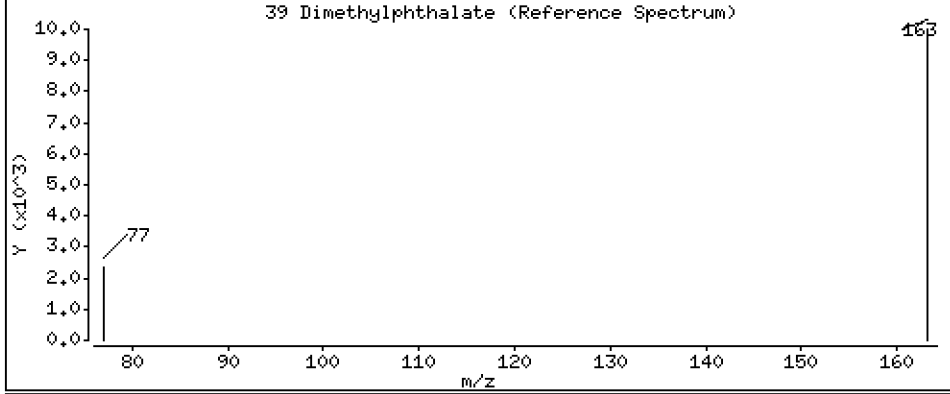
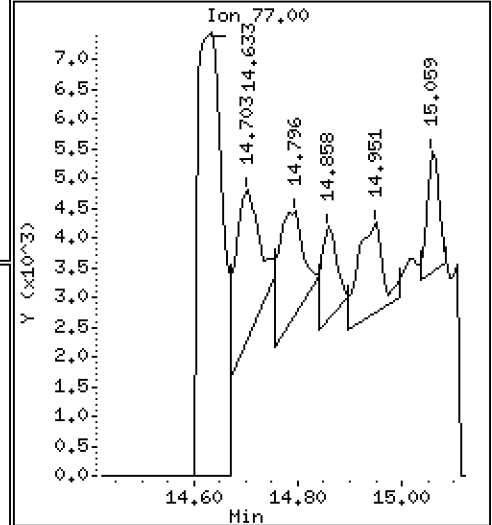
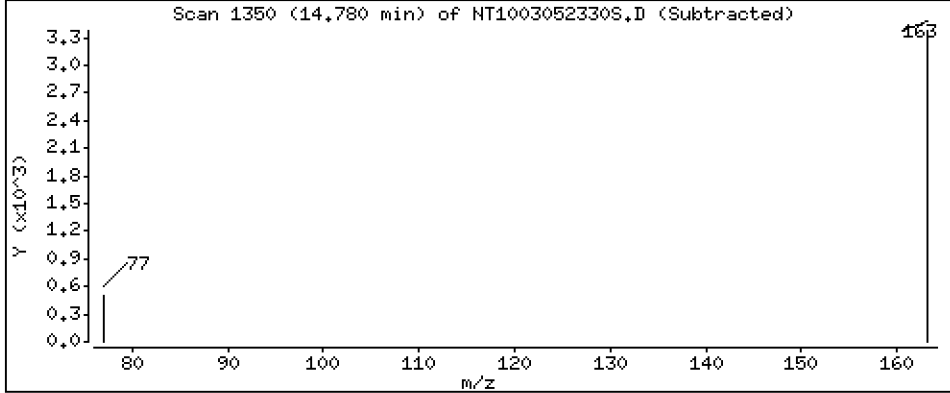
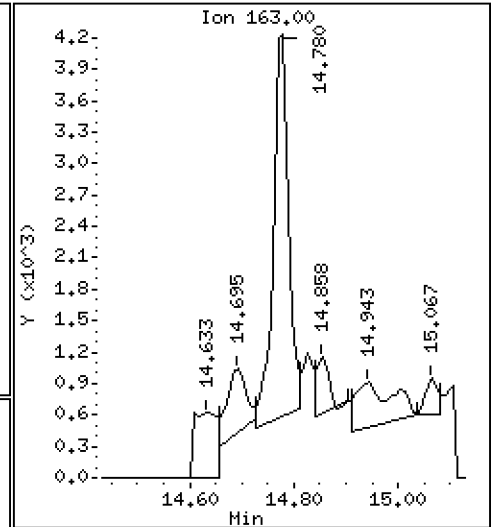
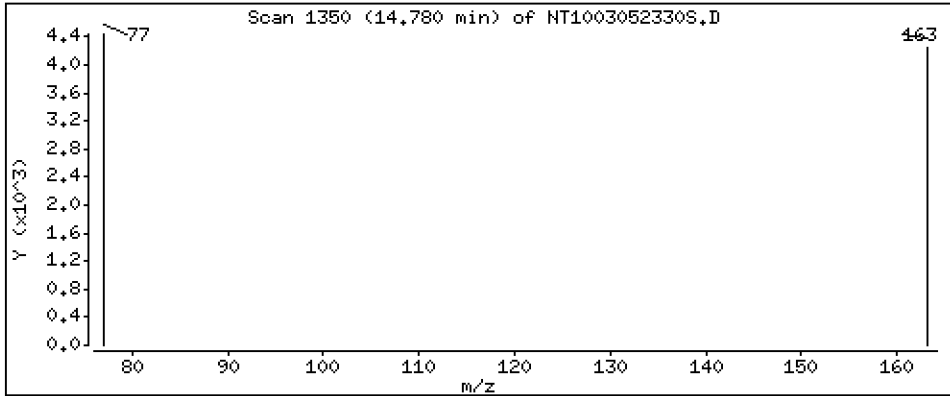
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,05177 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

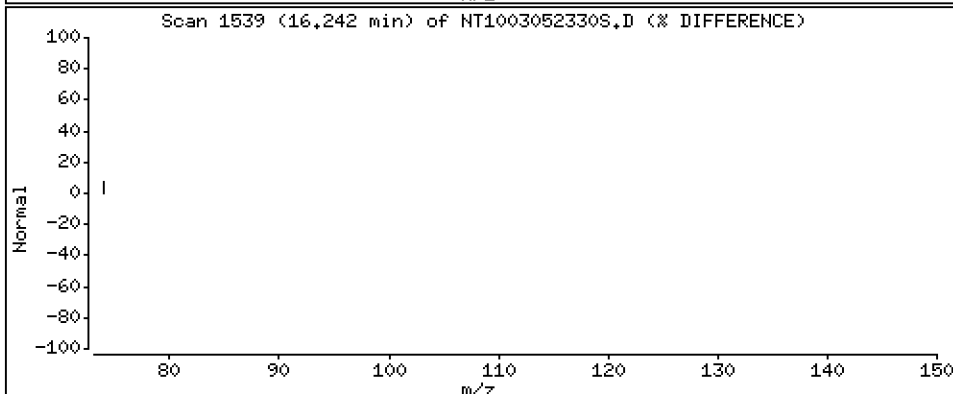
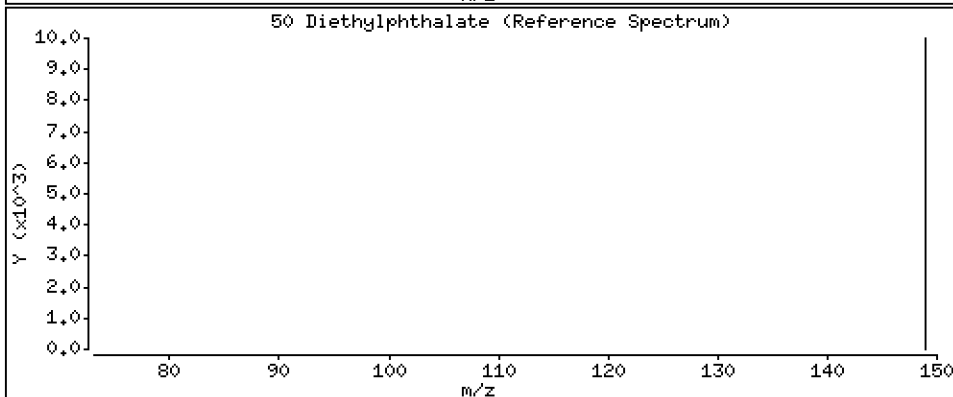
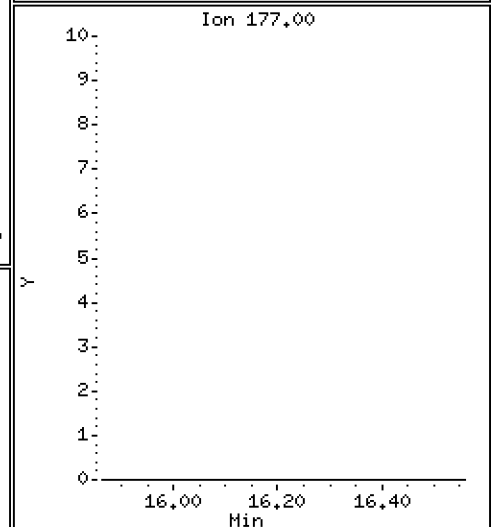
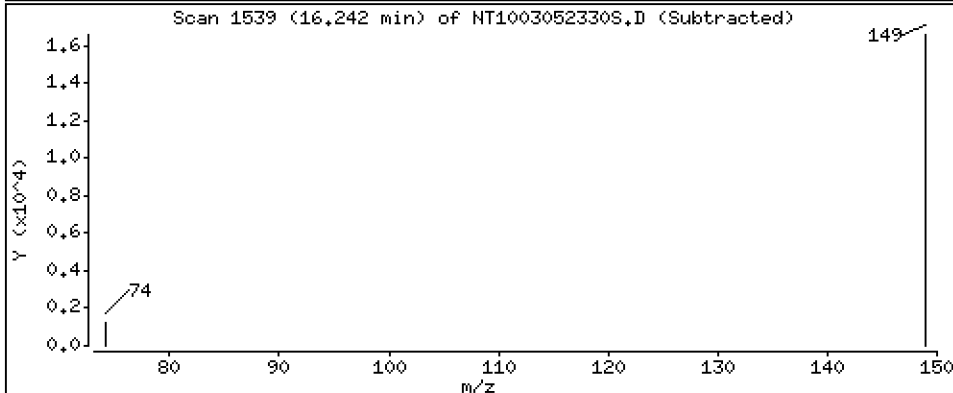
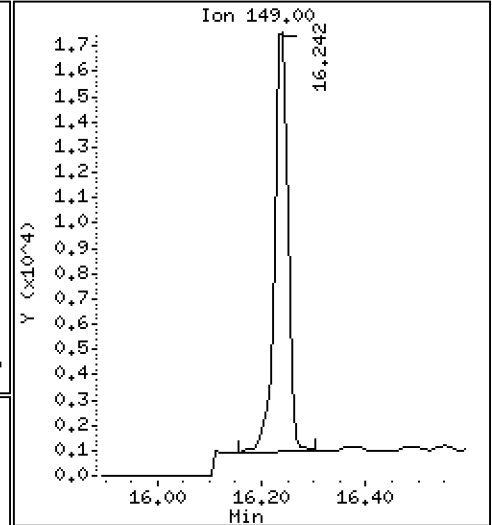
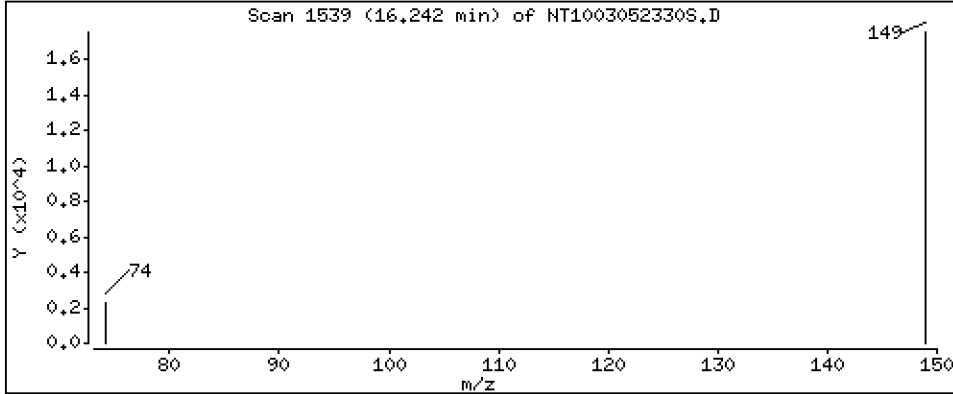
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2139 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

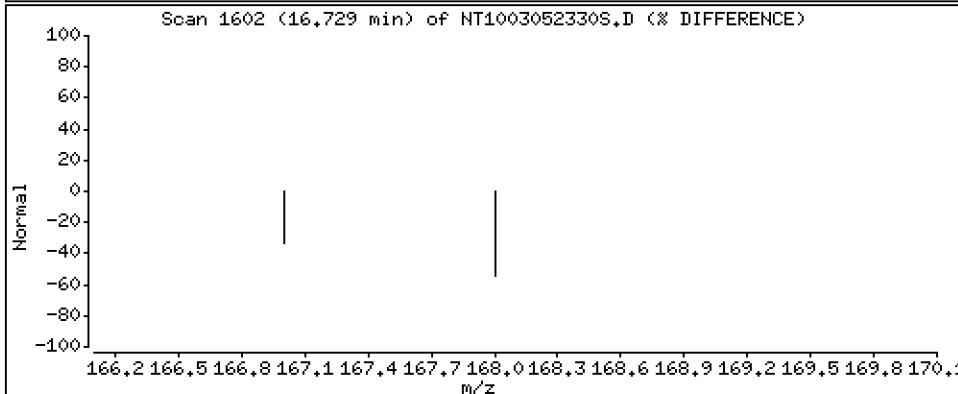
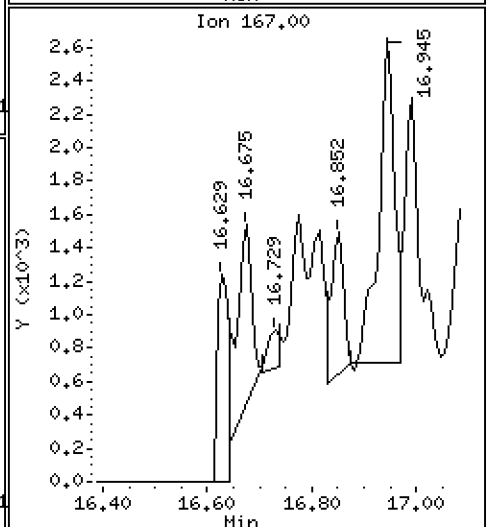
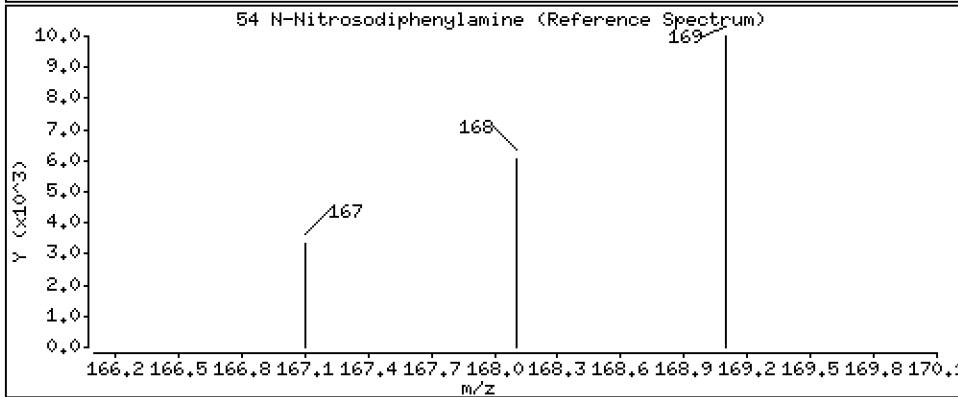
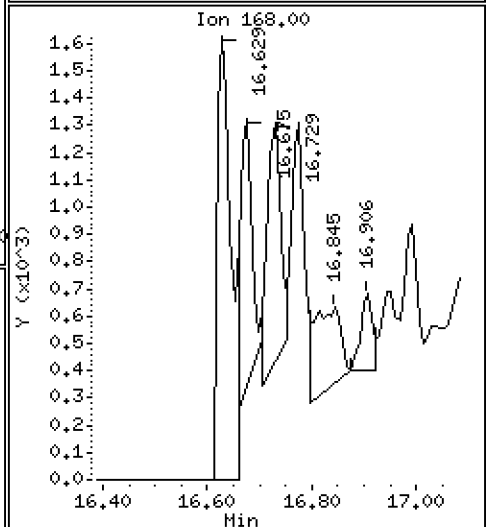
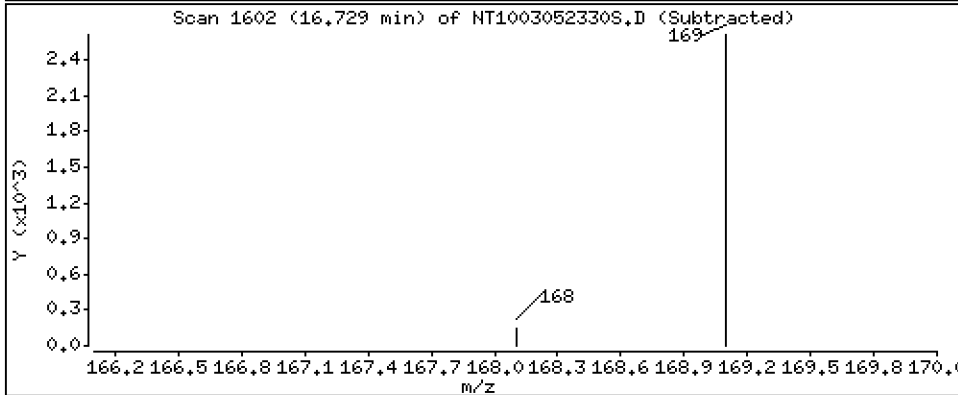
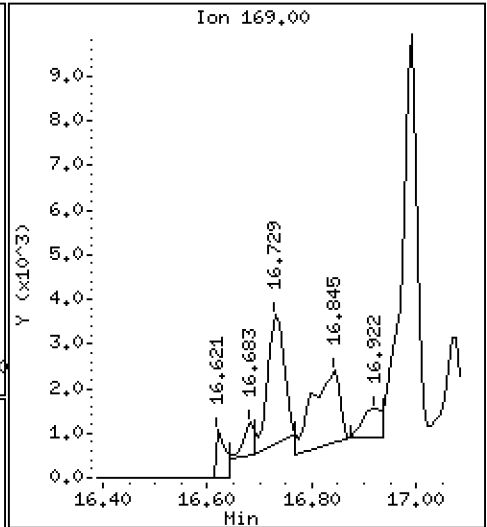
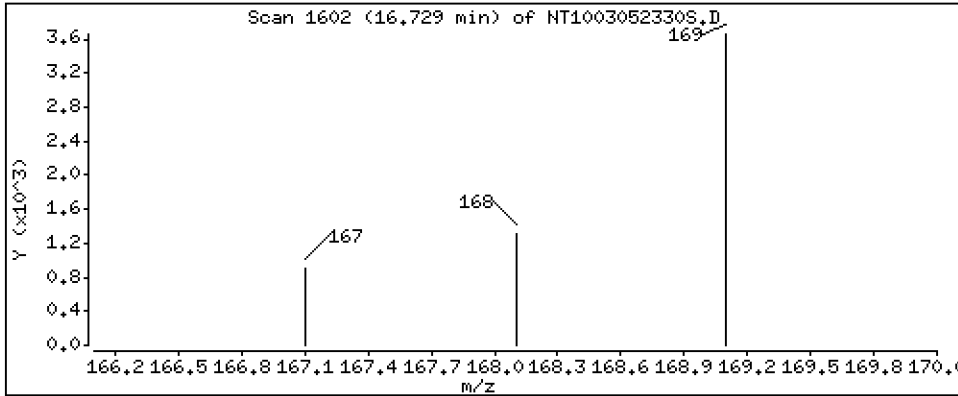
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.04601 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

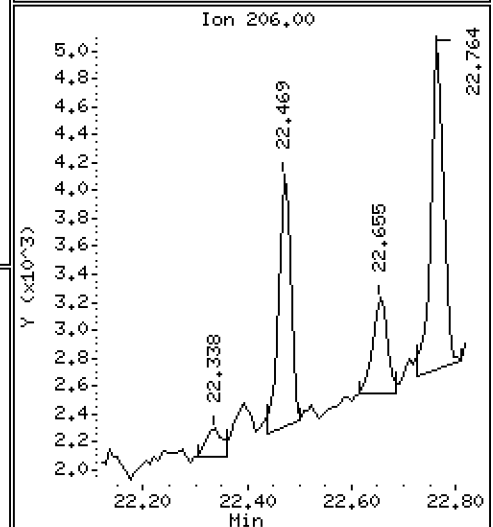
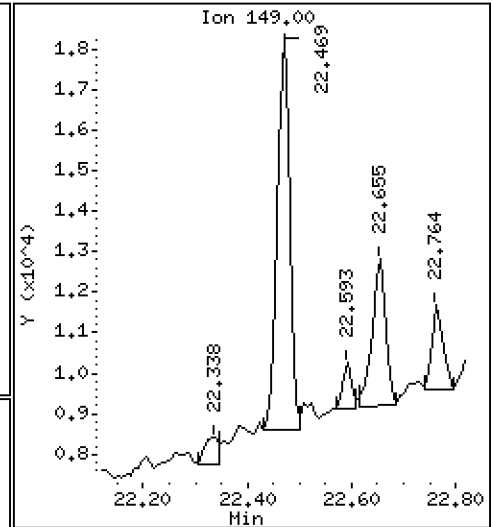
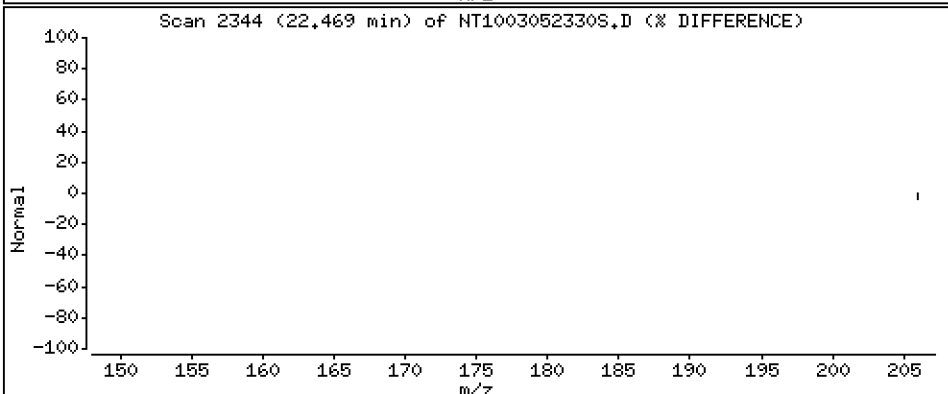
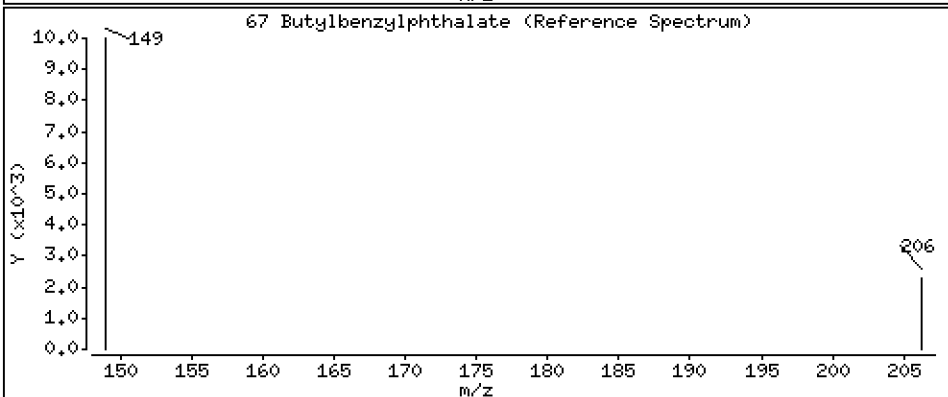
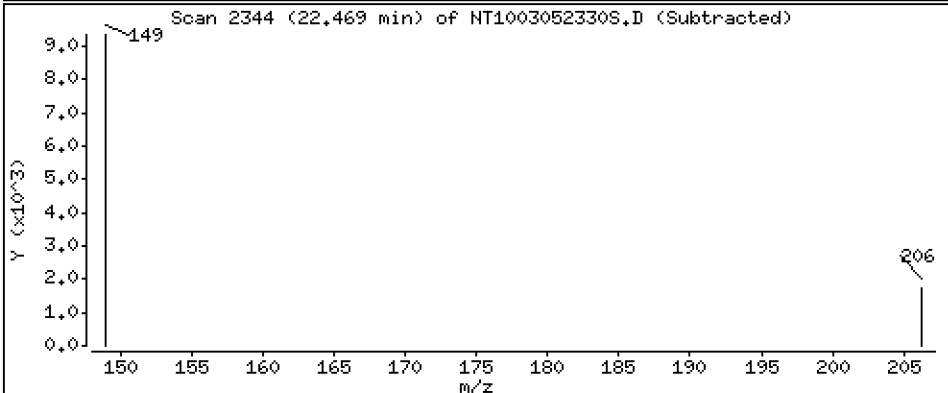
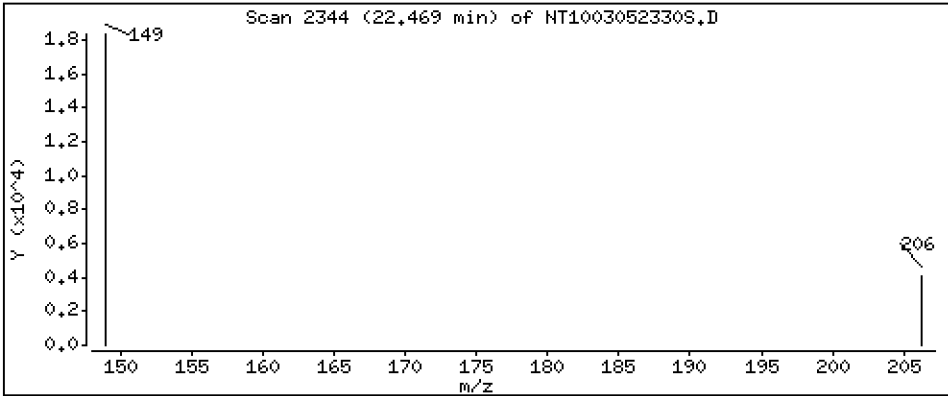
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1088 ug/mL



Date : 06-MAR-2023 07:41

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-04

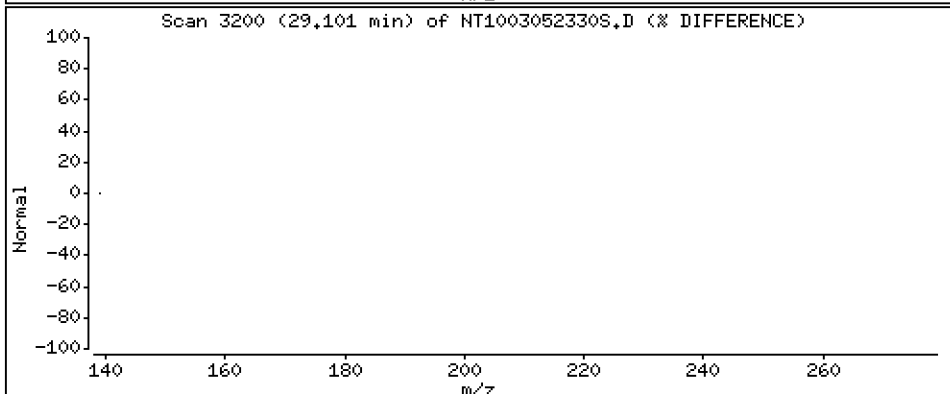
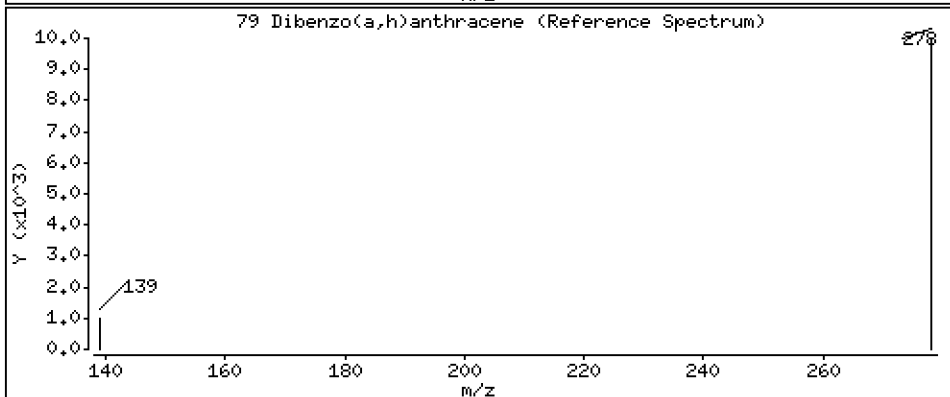
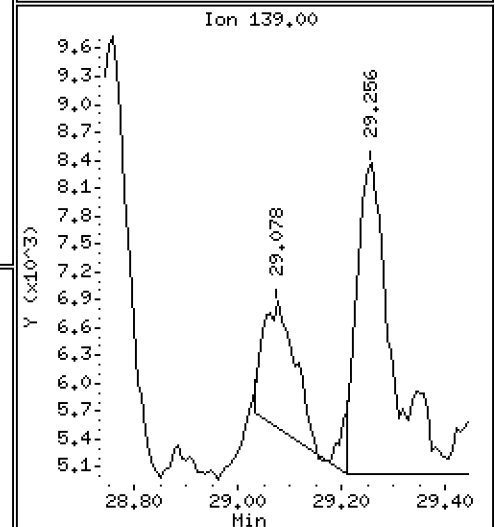
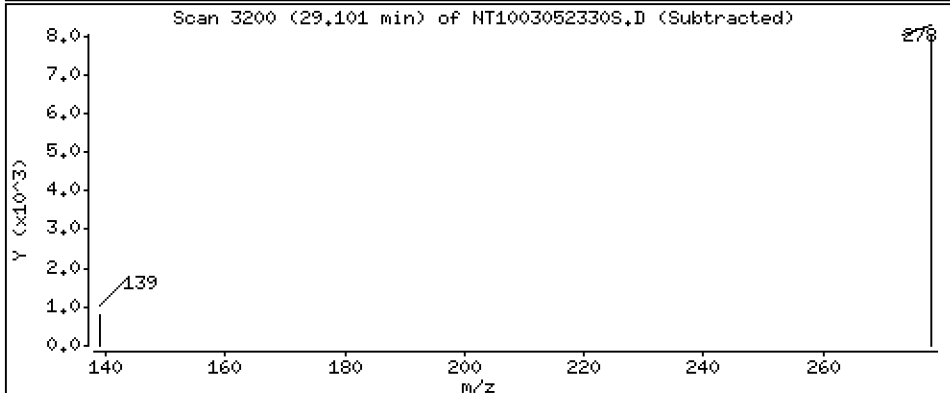
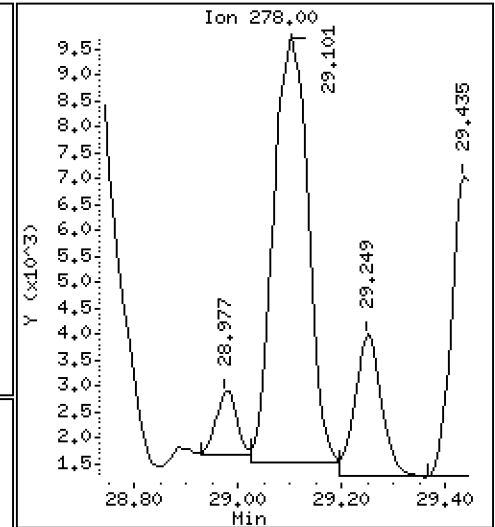
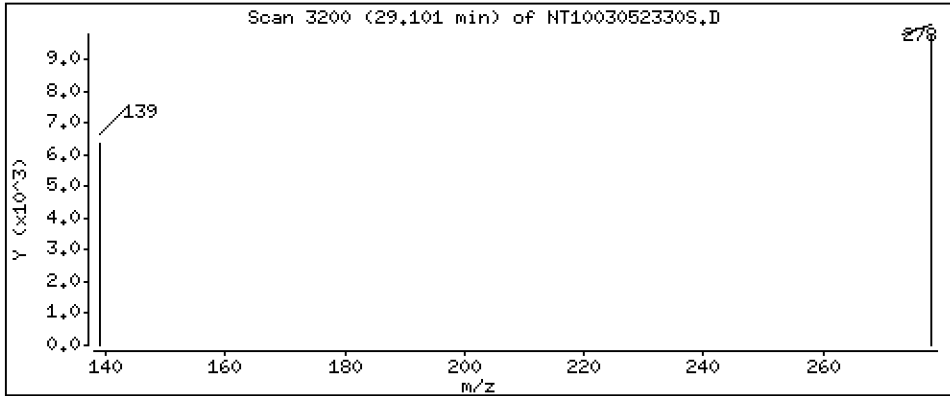
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1577 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052330S.D
 Lab Smp Id: 23A0326-04
 Inj Date : 06-MAR-2023 07:41
 Operator : YZ
 Smp Info : 23A0326-04
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.917	6.902	(0.746)	410202	5.81981	5.820 (R)
3 Phenol	94		8.556	8.556	(0.923)	177364	1.69170	1.692
7 1,3-Dichlorobenzene	146		9.151	9.151	(0.987)	308	0.00337	0.003366
* 8 1,4-Dichlorobenzene-d4	152		9.267	9.259	(1.000)	246883	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.003)	1265	0.01422	0.01422
11 Benzyl alcohol	79		9.523	9.515	(1.028)	34229	0.58970	0.5897 (M)
12 1,2-Dichlorobenzene	146		9.578	9.585	(1.033)	254	0.00297	0.002971
13 2-Methylphenol	108		9.702	9.694	(1.047)	4194	0.06709	0.06709
15 4-Methylphenol	108		9.997	9.989	(1.079)	19919	0.30556	0.3056
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.048	11.040	(0.940)	2467	0.03305	0.03305
24 Benzoic acid	105		11.167	11.167	(0.950)	34841	0.84799	0.8480
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	240	0.00379	0.003790
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	879699	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.780	14.780	(0.963)	7238	0.05177	0.05177
* 42 Acenaphthene-d10	162		15.352	15.352	(1.000)	440303	4.00000	
50 Diethylphthalate	149		16.242	16.241	(1.058)	28195	0.21385	0.2139 (MH)
54 N-Nitrosodiphenylamine	169		16.729	16.736	(0.907)	6389	0.04601	0.04601
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	858013	4.00000	
\$ 66 Terphenyl-d14	244		21.594	21.586	(0.919)	488916	7.29570	7.296 (R)
67 Butylbenzylphthalate	149		22.469	22.469	(0.956)	15219	0.10880	0.1088
* 69 Chrysene-d12	240		23.499	23.491	(1.000)	828700	4.00000	
* 77 Perylene-d12	264		26.239	26.224	(1.000)	1038678	4.00000	
79 Dibenzo(a,h)anthracene	278		29.101	29.093	(1.109)	37999	0.15765	0.1577 (H)
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052330S.D
 Lab Smp Id: 23A0326-04
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	246883	3.11
27 Naphthalene-d8	849492	424746	1698984	879699	3.56
42 Acenaphthene-d10	421435	210718	842870	440303	4.48
59 Phenanthrene-d10	835585	417793	1671170	858013	2.68
69 Chrysene-d12	874614	437307	1749228	828700	-5.25
77 Perylene-d12	1035818	517909	2071636	1038678	0.28

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.27	0.08
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.50	0.03
77 Perylene-d12	26.22	25.72	26.72	26.24	0.06

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

REVIEW SUMMARY FOR FILE - NT1003052330S.D

Lab ID: 23A0326-04

nt10.i, 20230305B.b\SIM.b\SIMABN2.m, 06-MAR-2023 07:41

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

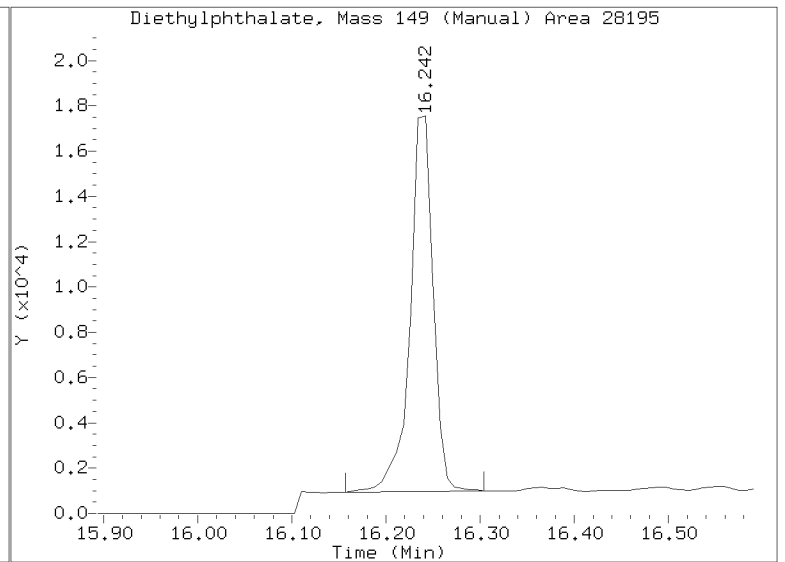
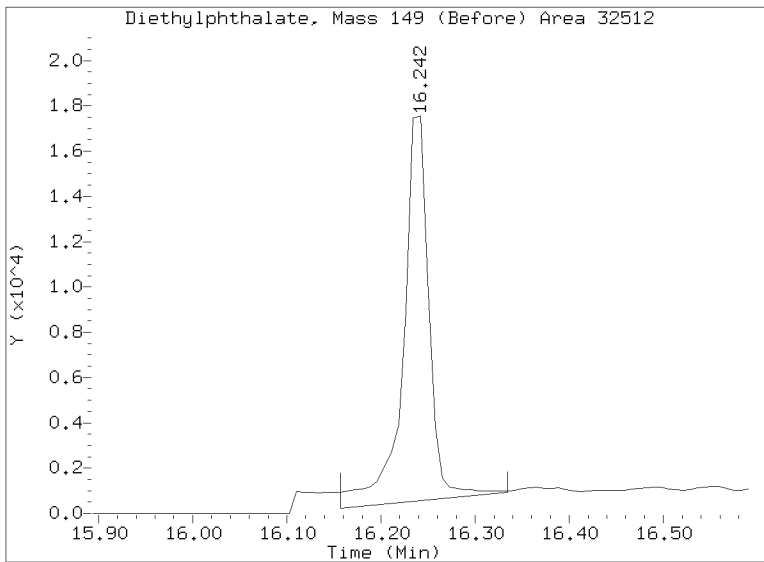
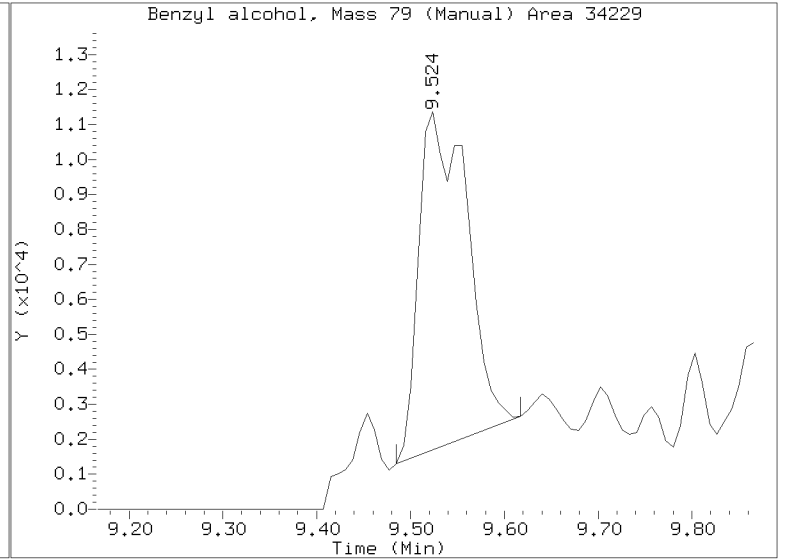
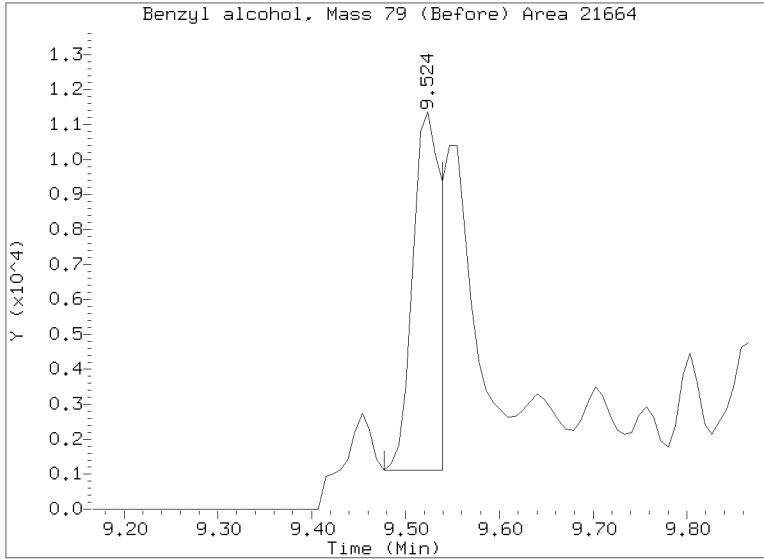
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/SIM.b/NT1003052330S.D
Injection Date: 06-MAR-2023 07:41
Lab ID: 23A0326-04 Client ID:
Report Date: 03/31/2023 08:57



APPROVED

By Deenay Dunmore at 9:14 am, Mar 31, 2023



Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-05 A

SDG: 23A0326

Sampled: 01/17/23 11:08

Prepared: 02/02/23 13:06

File ID: NT1003052331S.D

% Solids: 54.64

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 08:18

Batch: BLA0685

Sequence: SLC0447

Initial/Final: 18.67 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	3.5	J	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	1.4	J	0.7	4.9
100-51-6	Benzyl Alcohol	1	32.8		2.4	19.6
65-85-0	Benzoic acid	1	98.0	U	13.1	98.0
105-67-9	2,4-Dimethylphenol	1	4.6	J	2.1	19.6
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	7.7		1.3	4.9
87-86-5	Pentachlorophenol	1	19.6	U	2.1	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.20	584	79.4	27 - 120	
p-Terphenyl-d14	490.13	675	138	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052331S.D

Date: 06-MAR-2023 08:18

Client ID:

Sample Info: 23A0326-05

Page 1

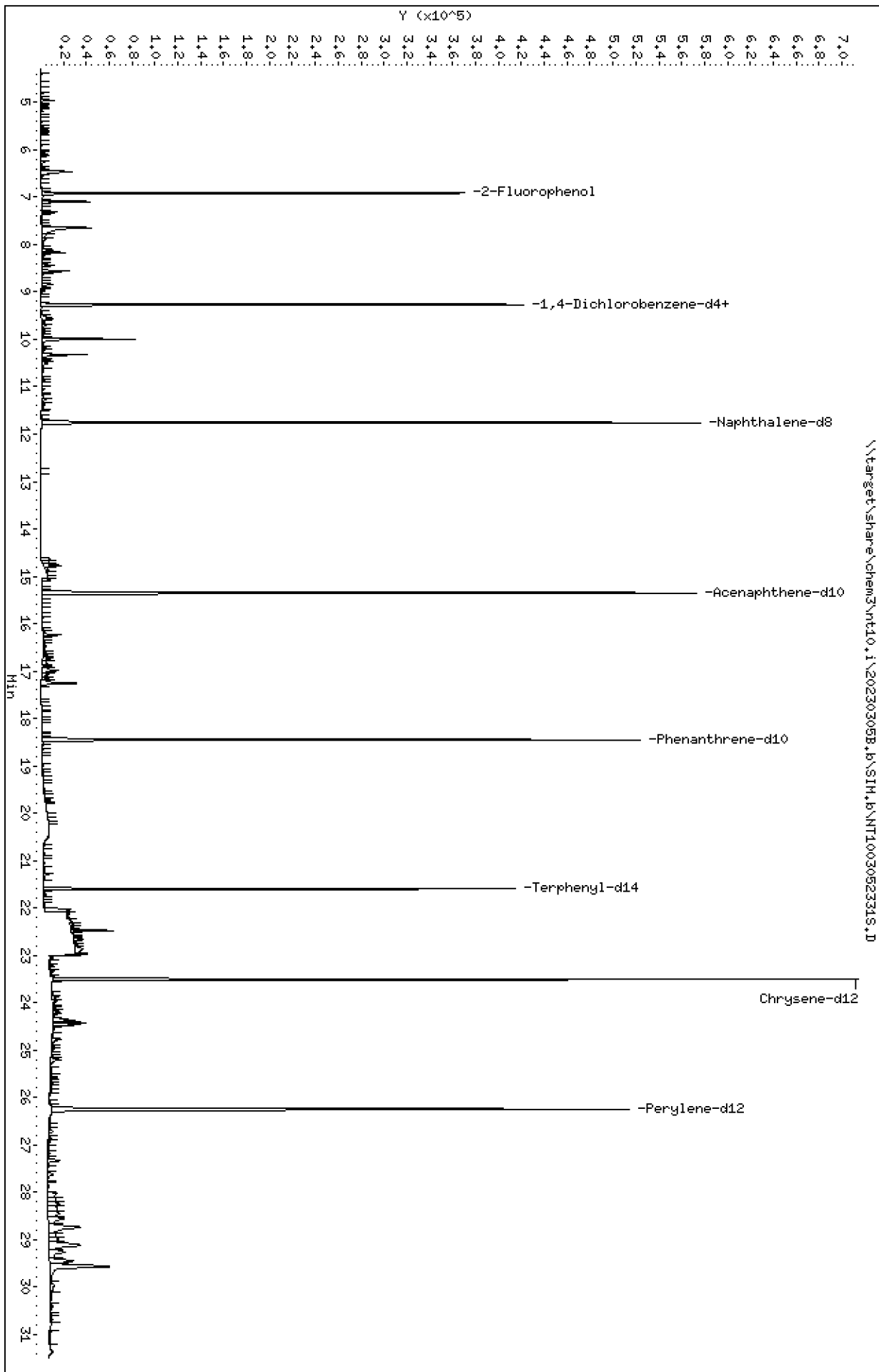
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052331S.D



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

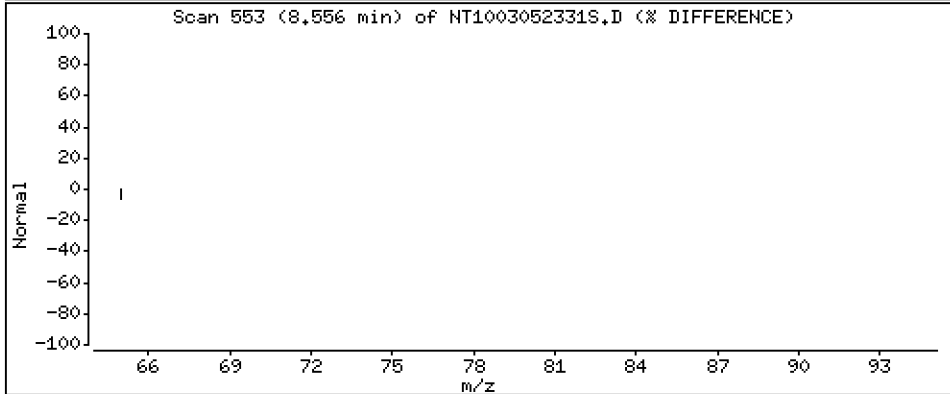
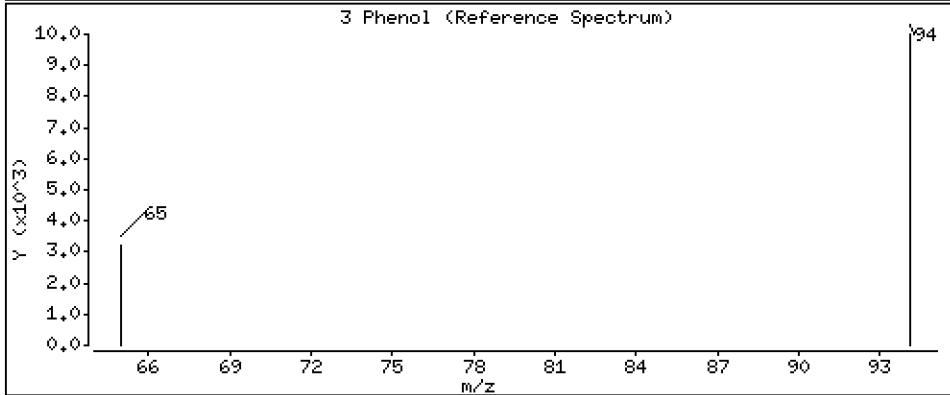
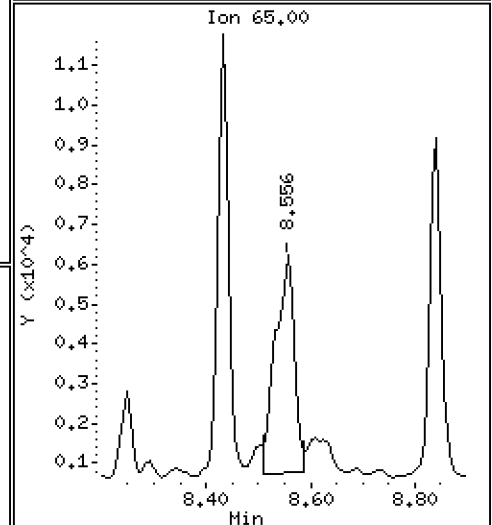
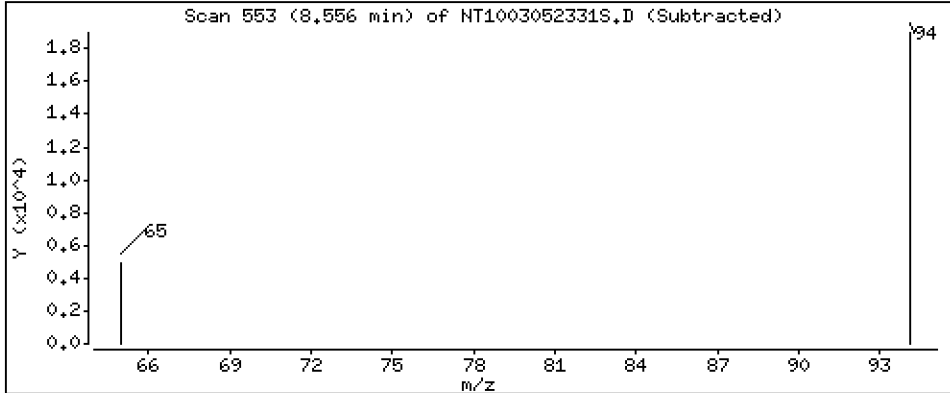
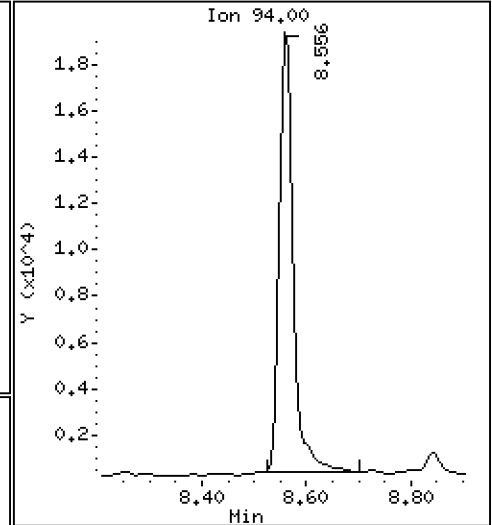
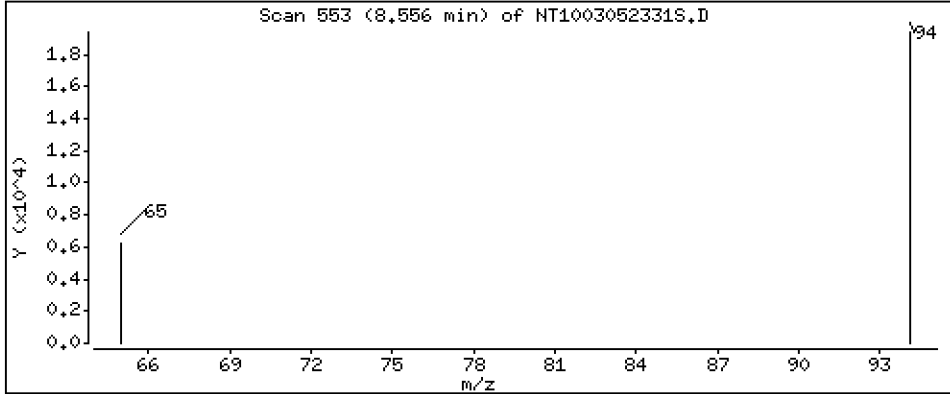
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,3202 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

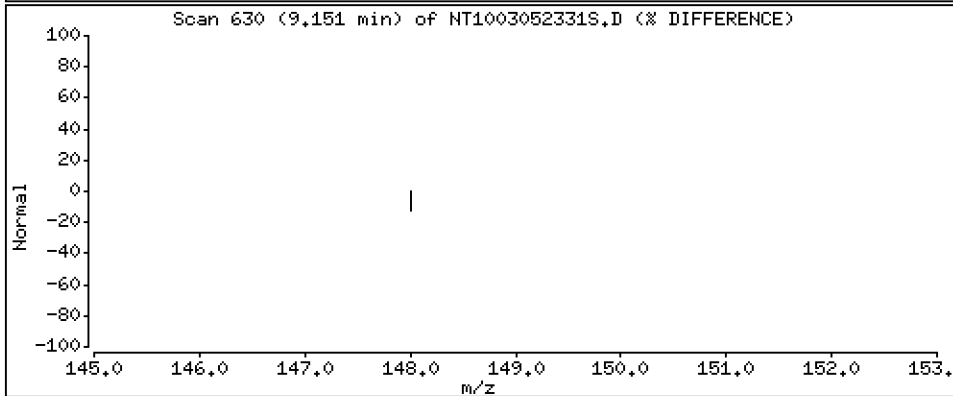
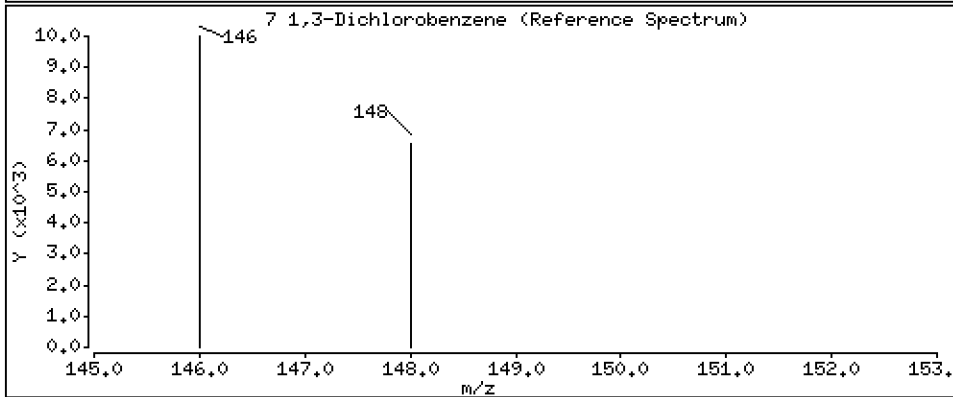
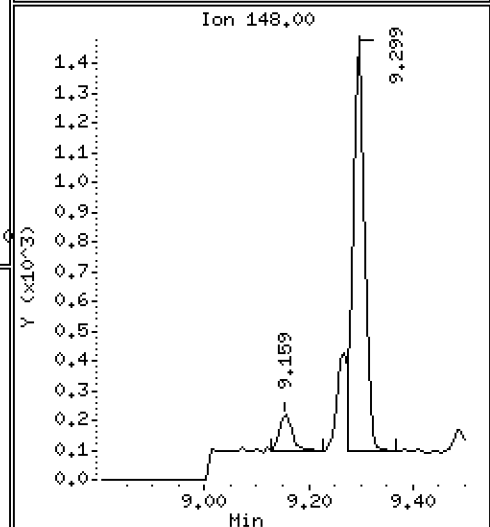
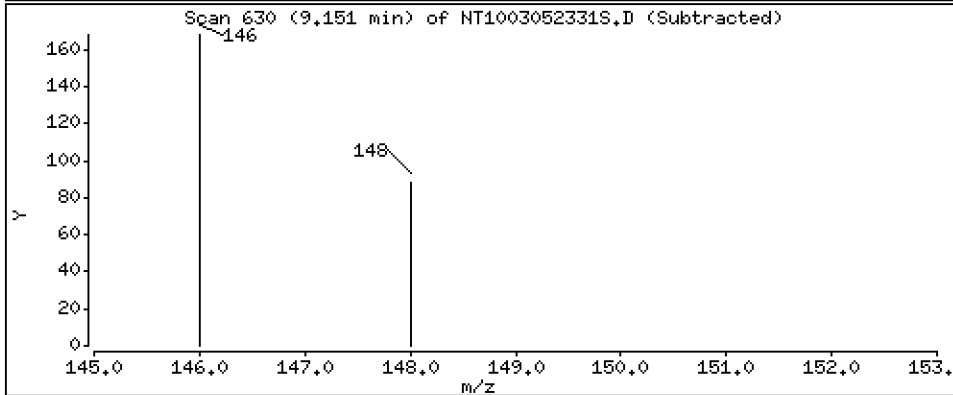
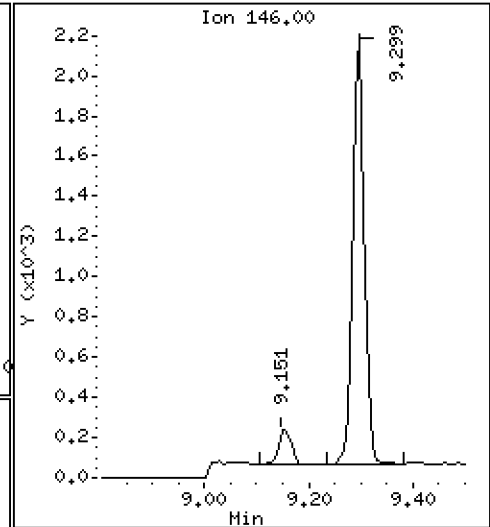
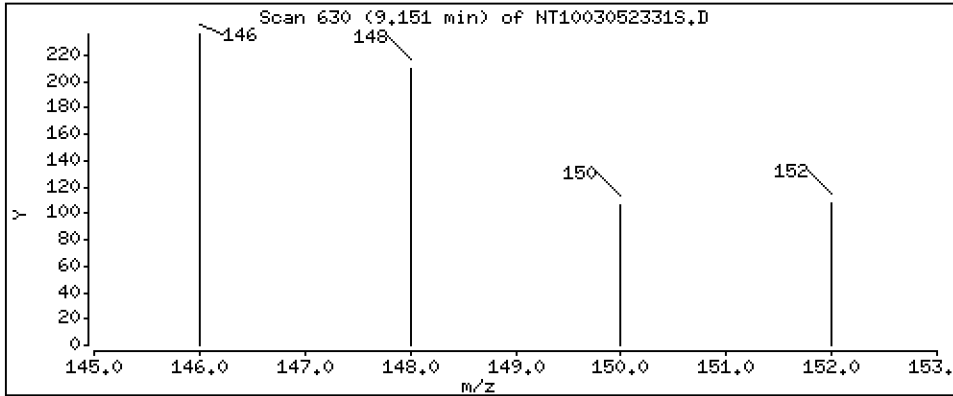
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,003162 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

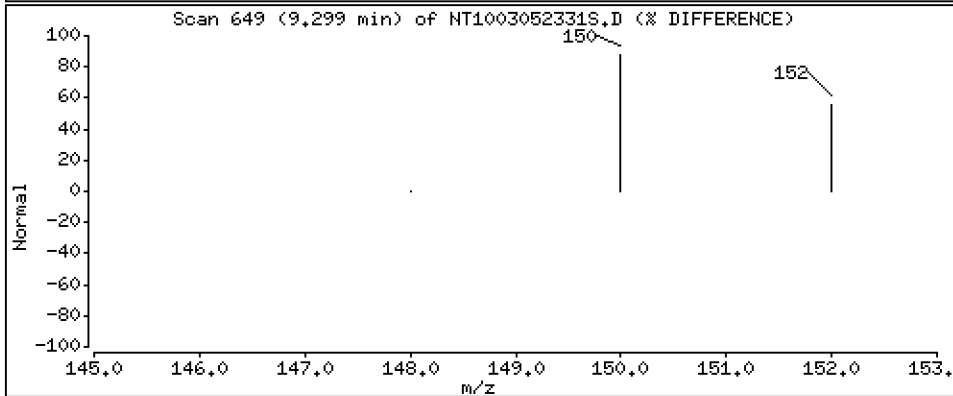
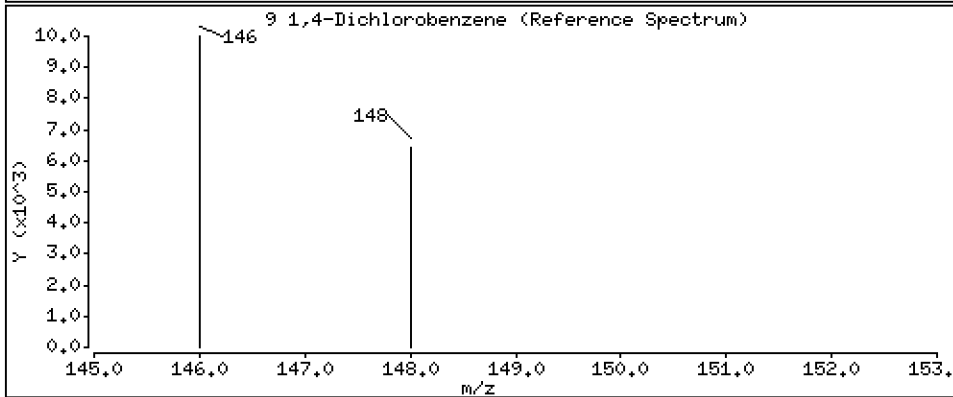
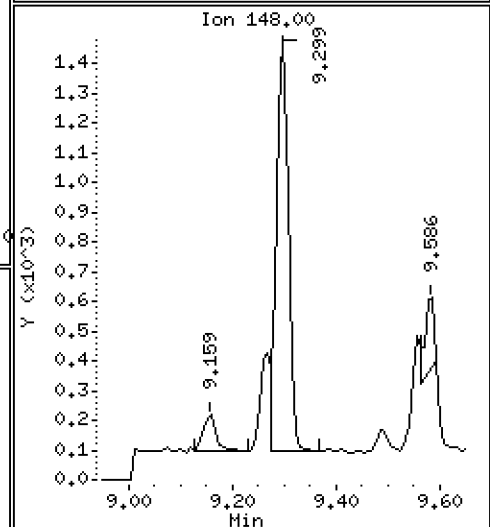
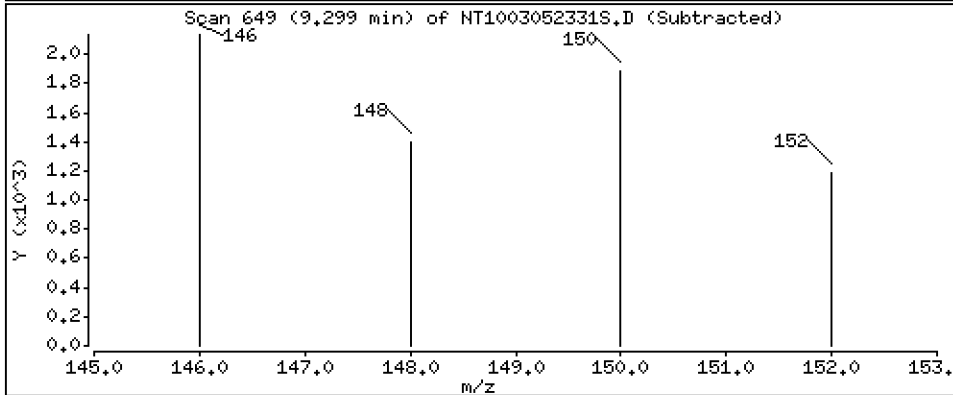
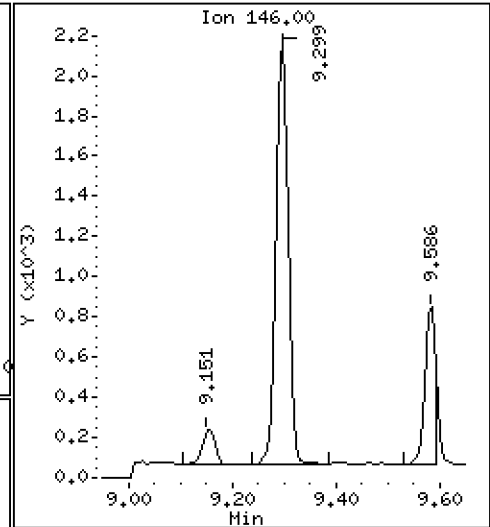
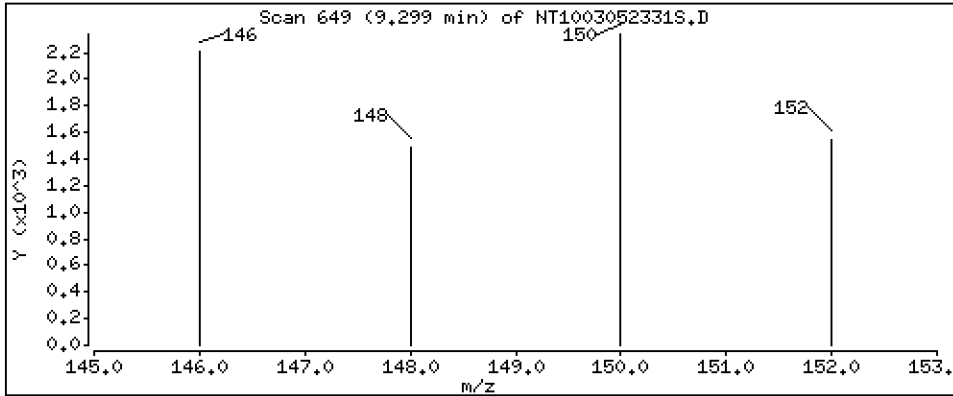
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.03585 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

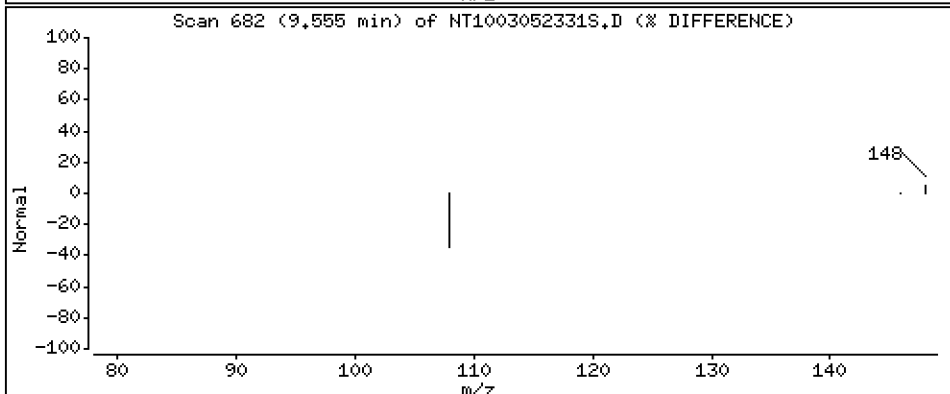
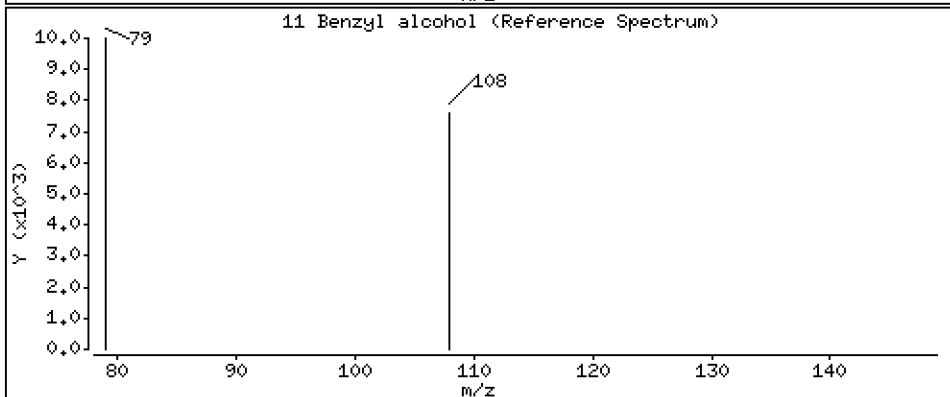
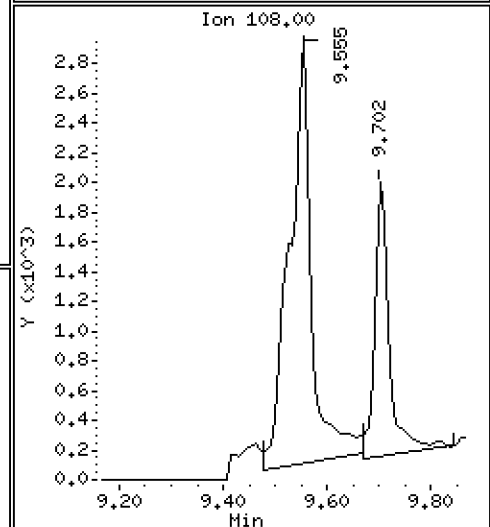
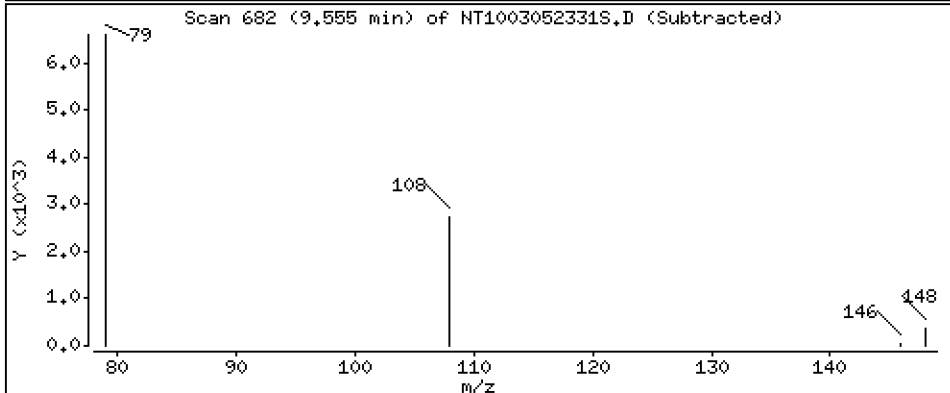
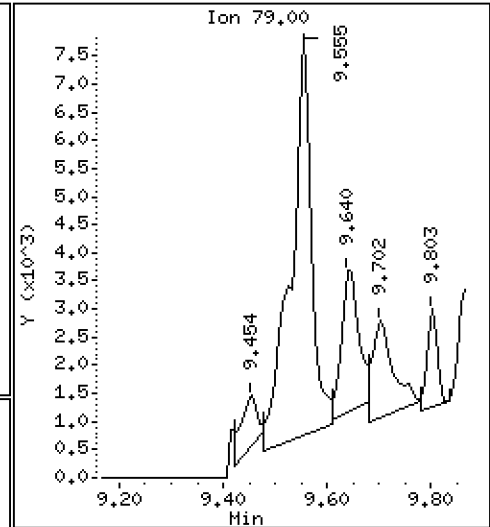
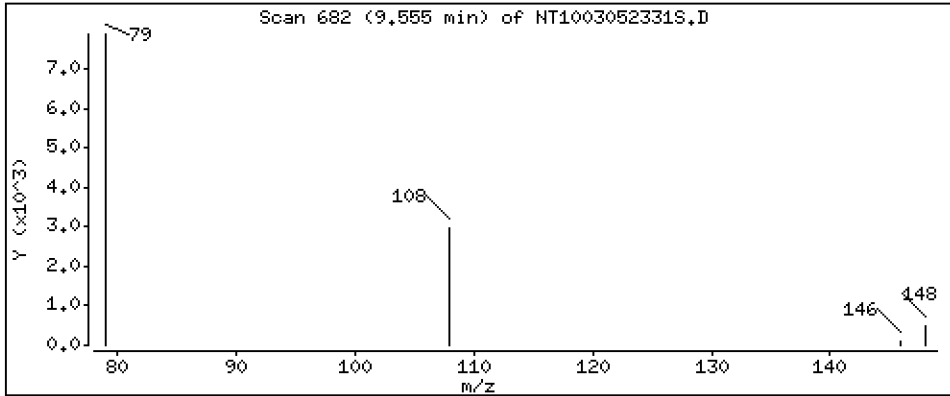
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.3343 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

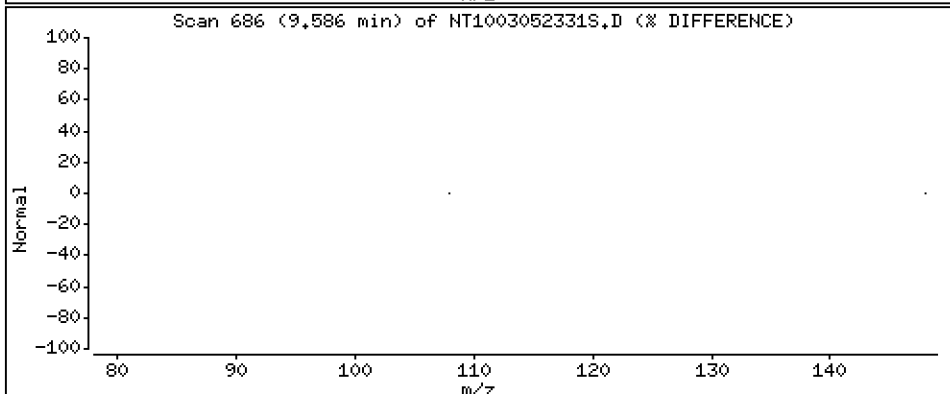
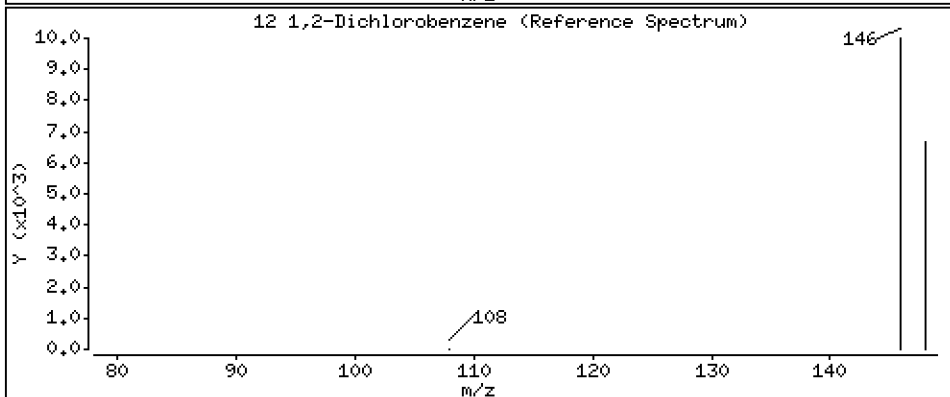
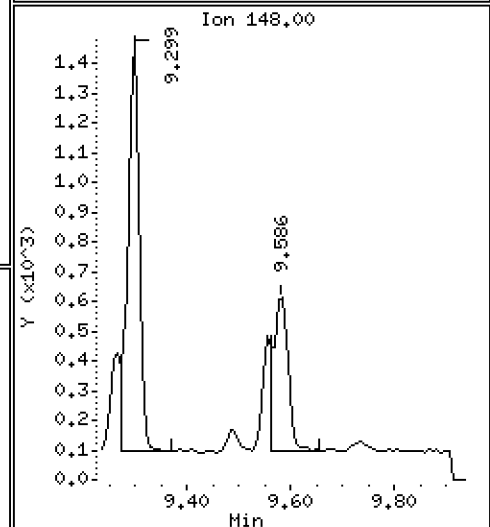
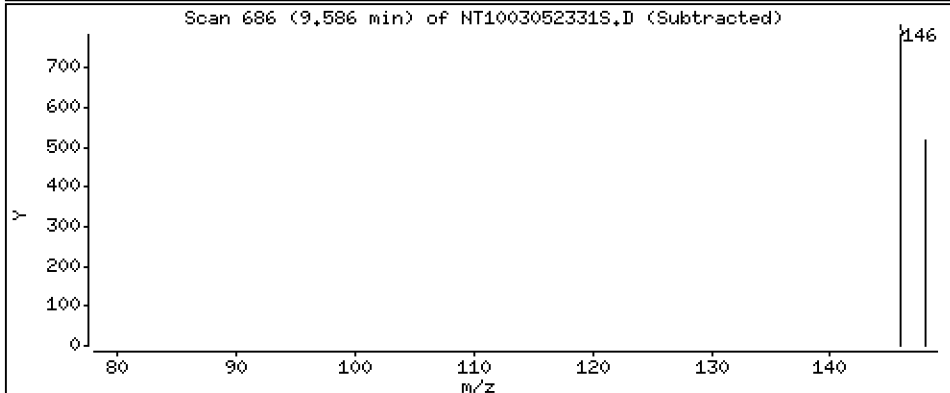
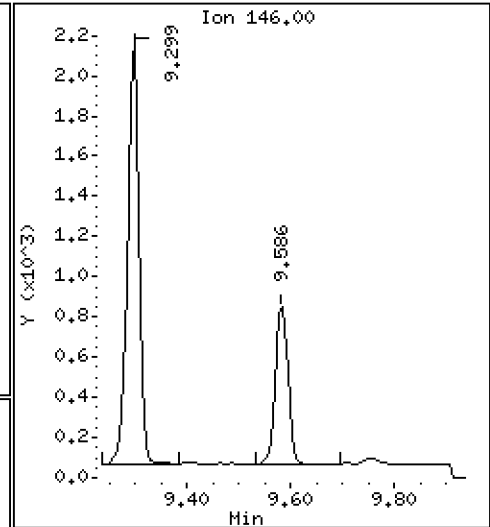
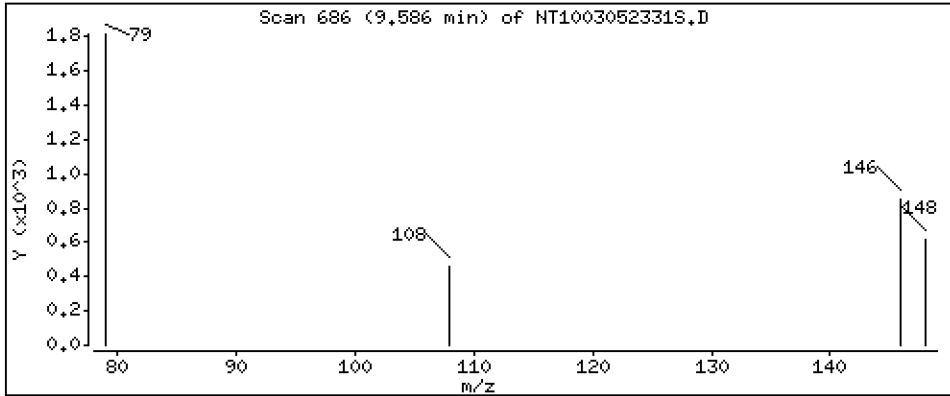
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,01447 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

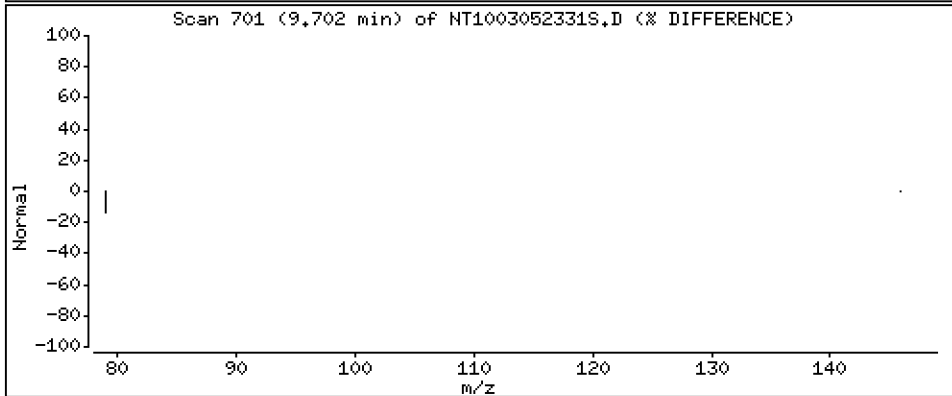
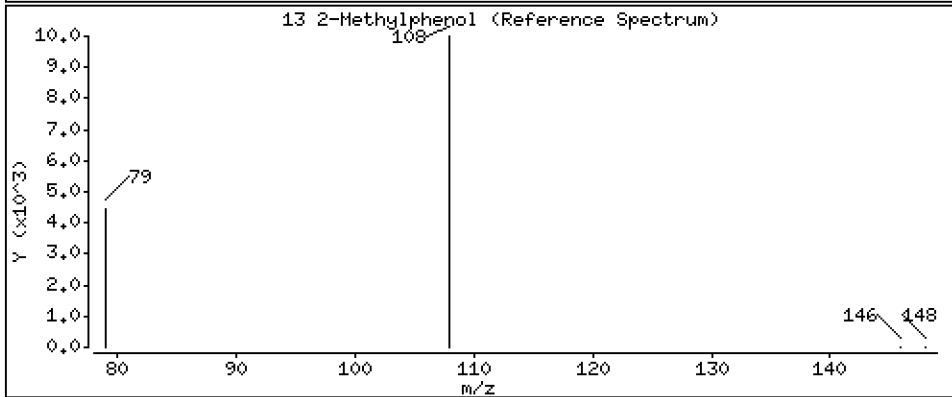
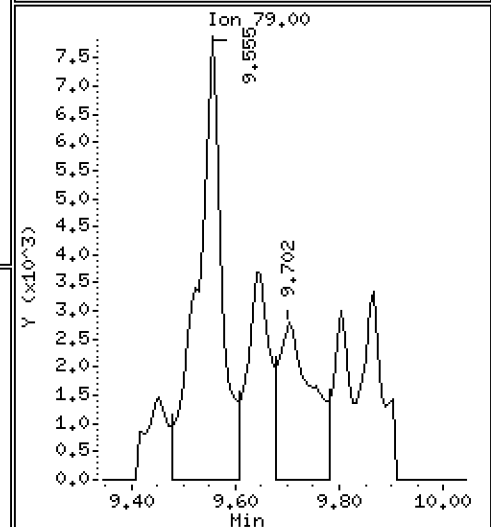
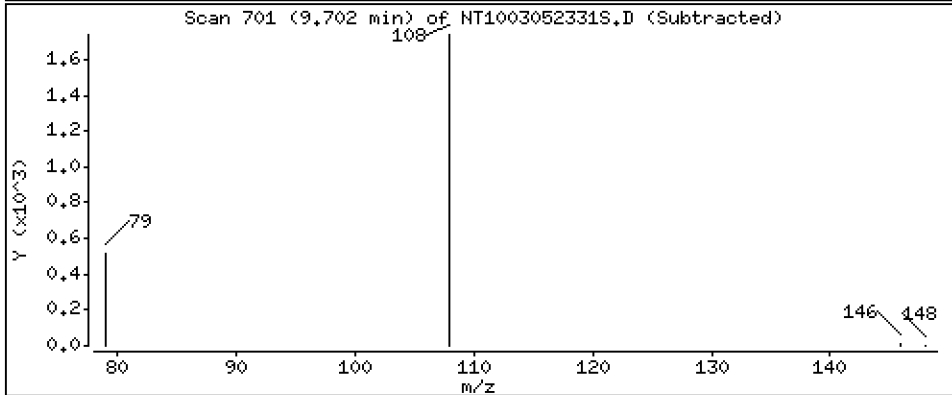
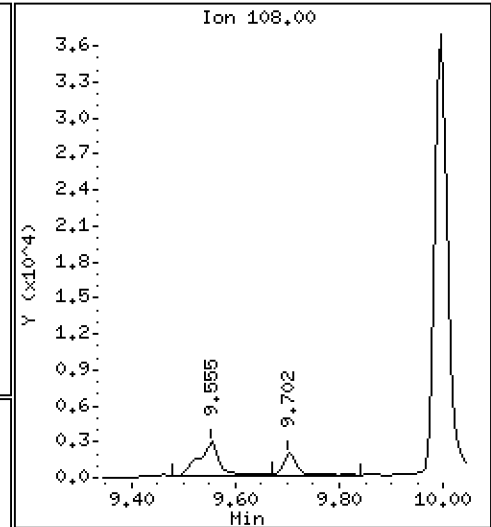
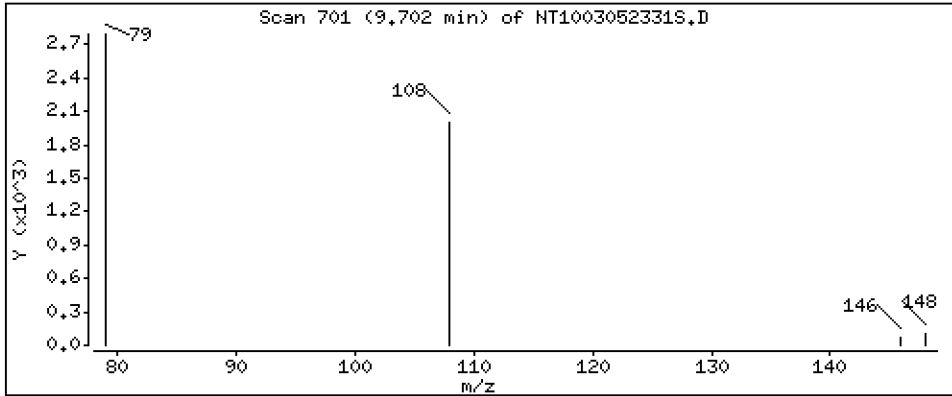
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.05160 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

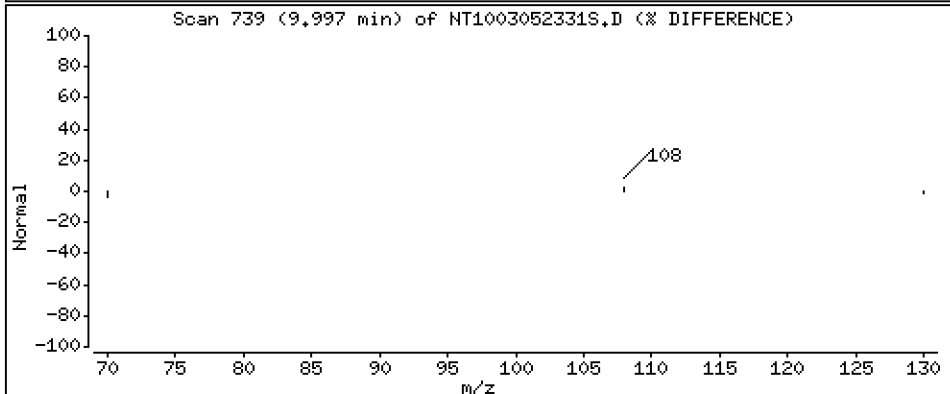
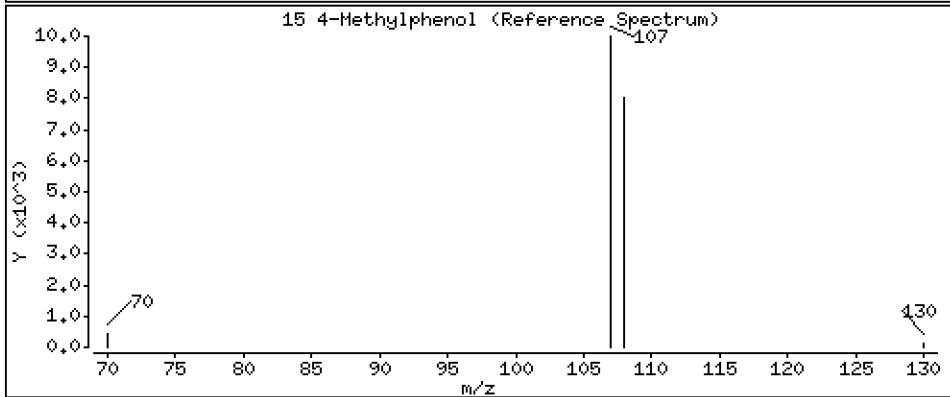
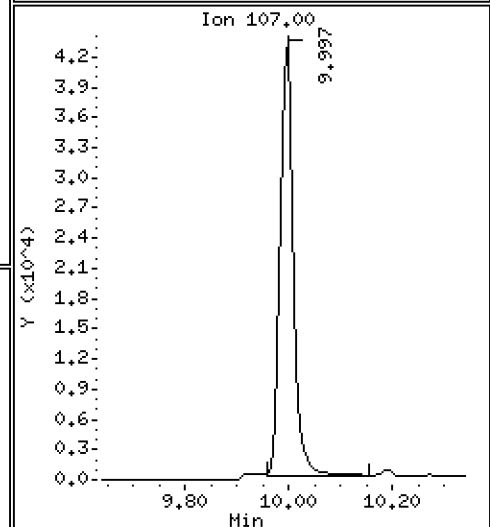
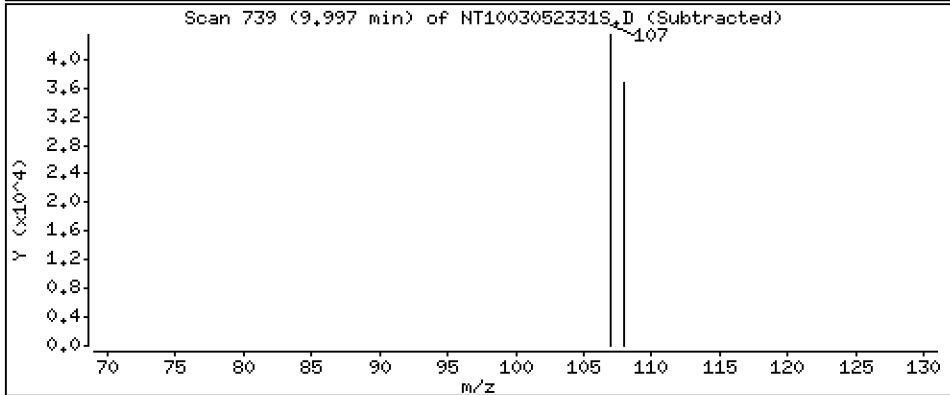
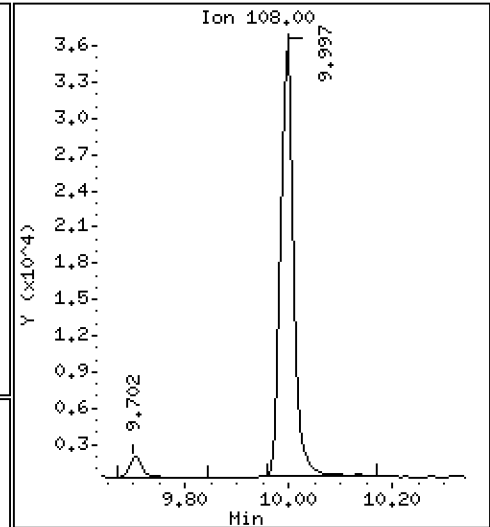
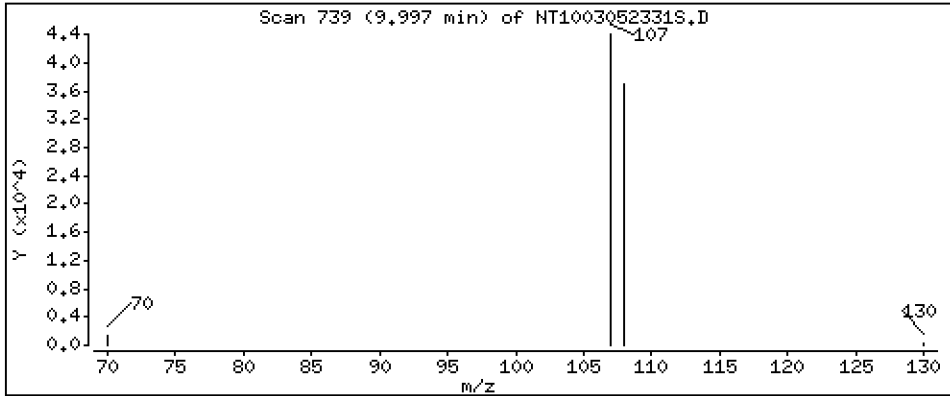
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,9060 ug/mL

15 4-Methylphenol



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

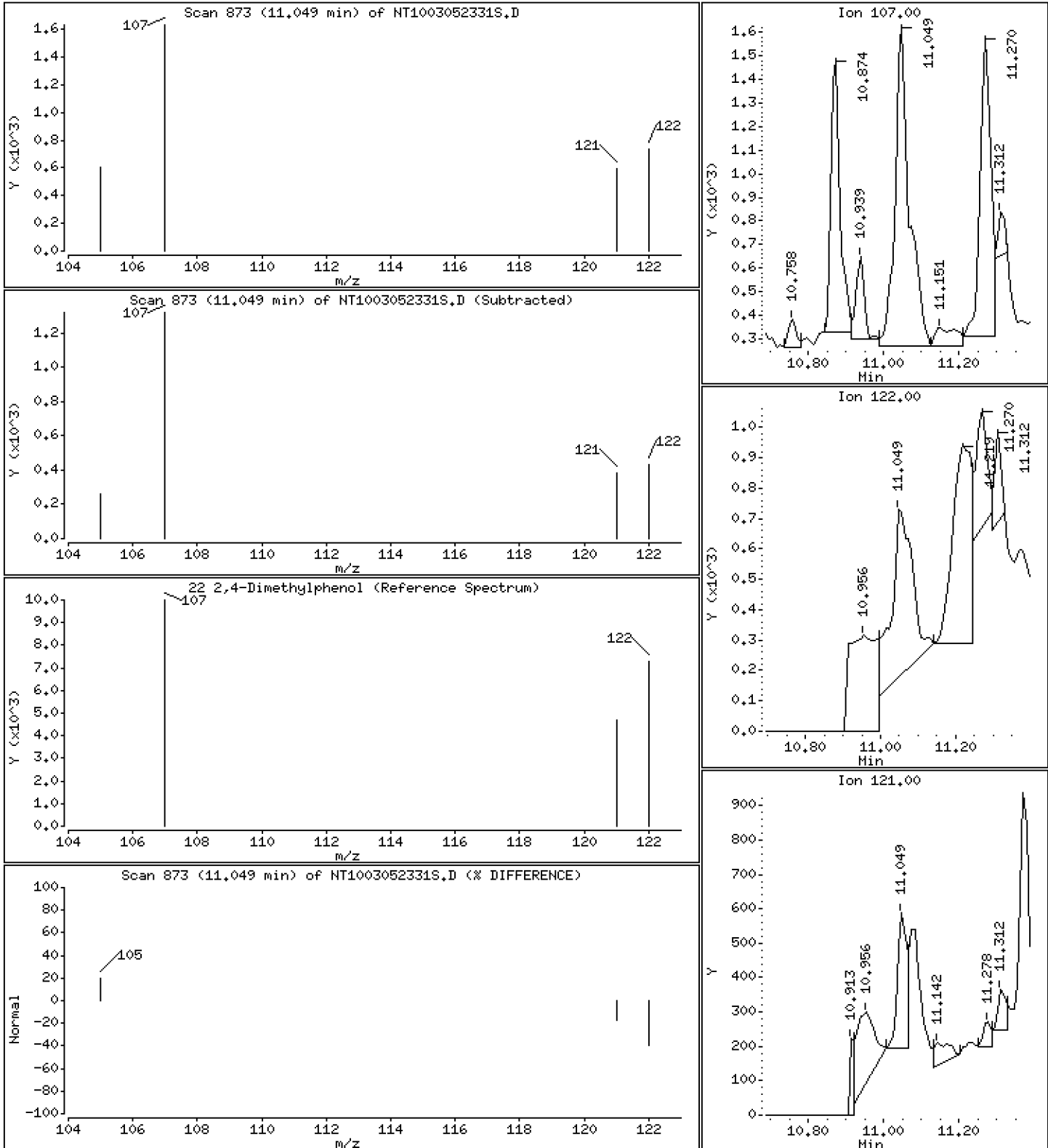
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.04735 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

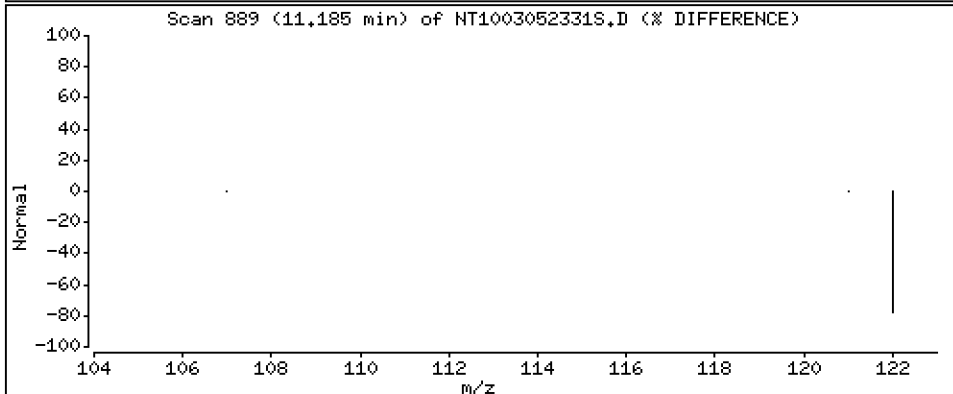
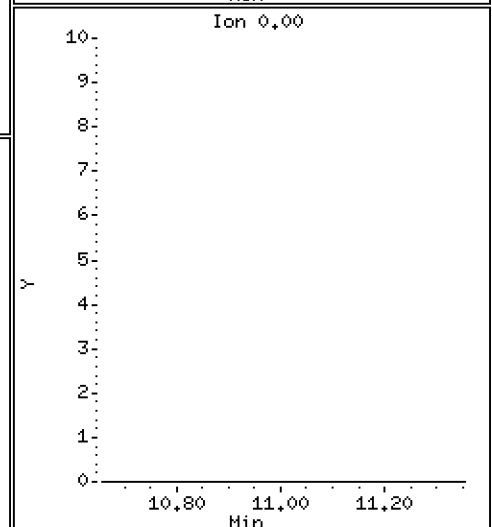
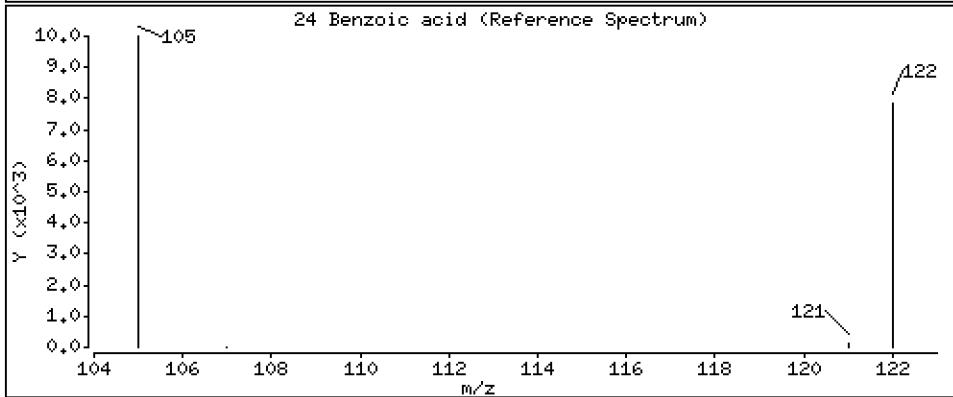
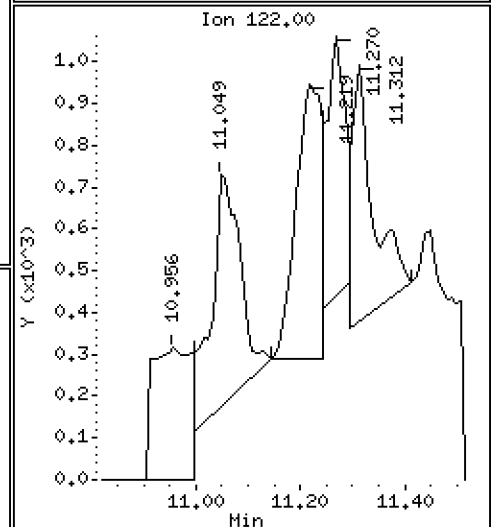
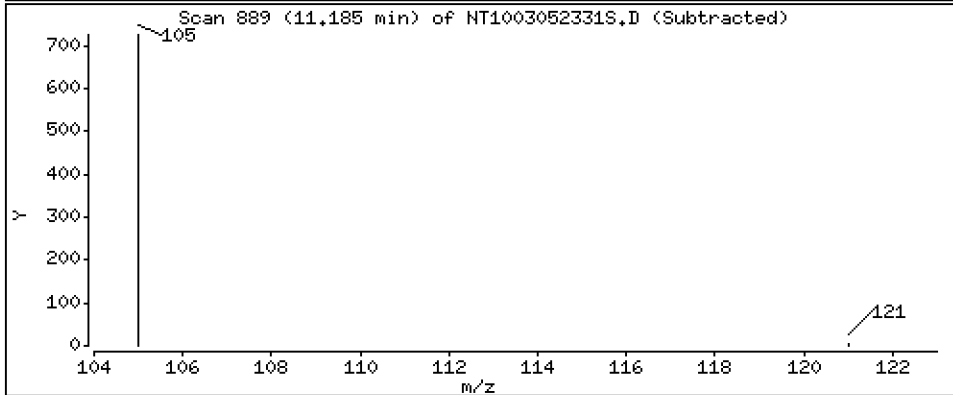
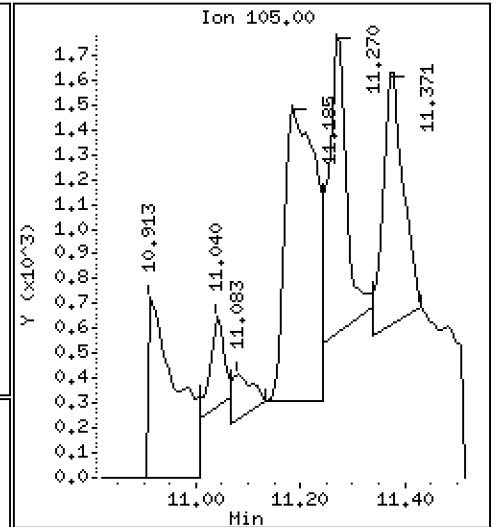
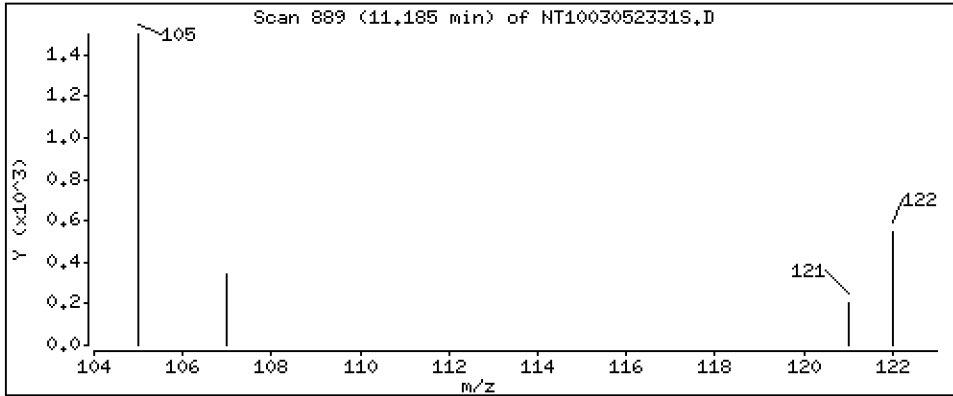
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1247 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

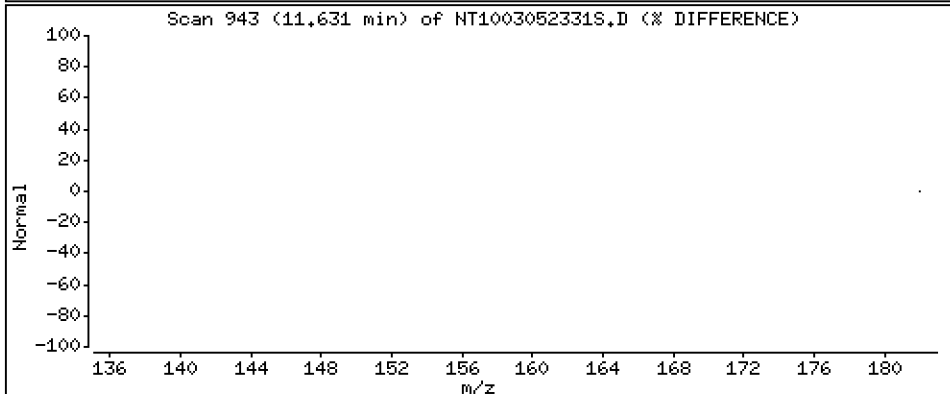
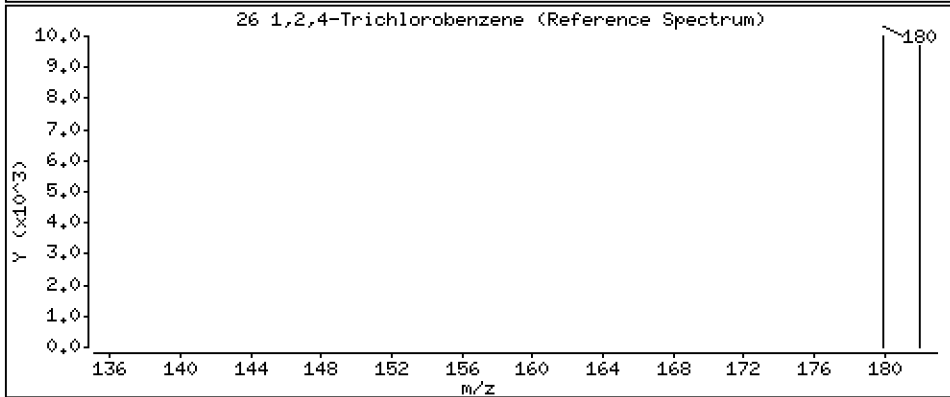
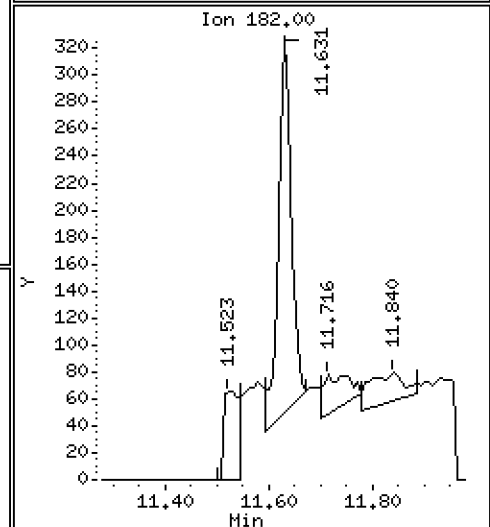
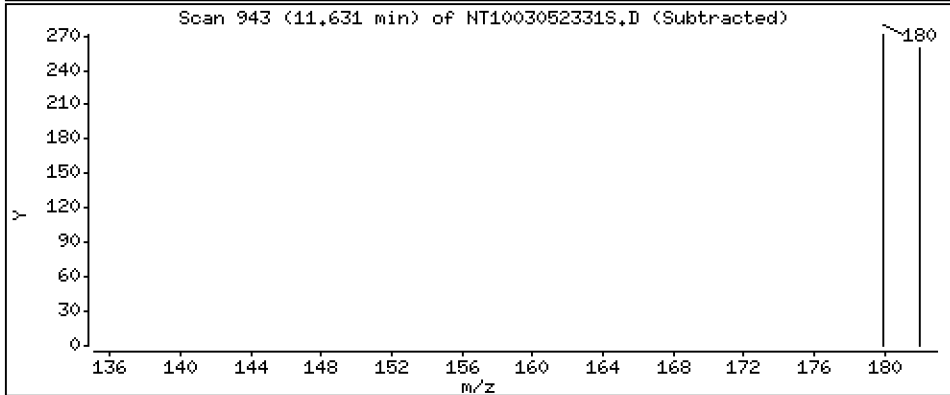
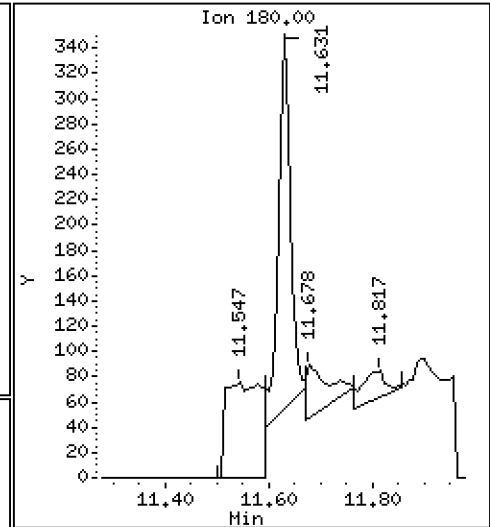
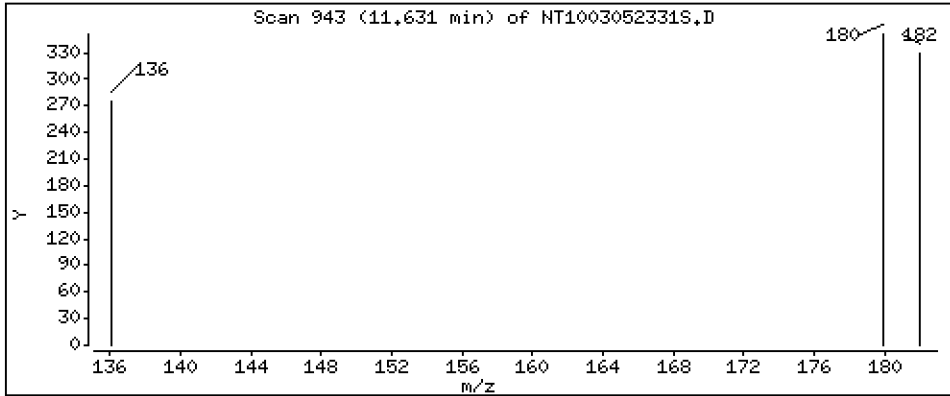
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,007666 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

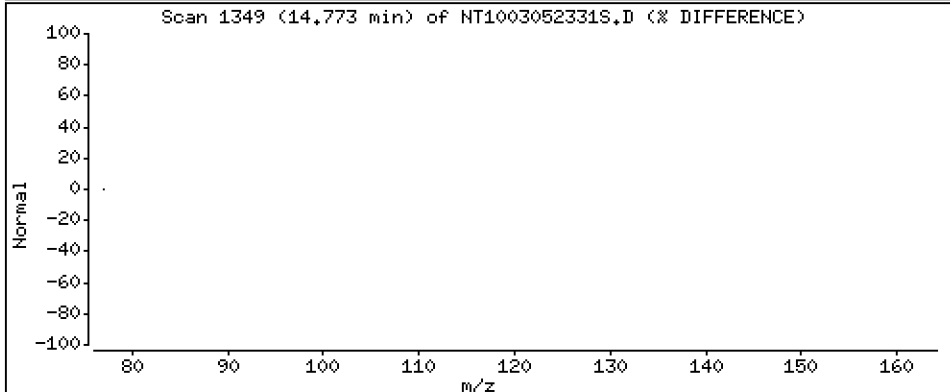
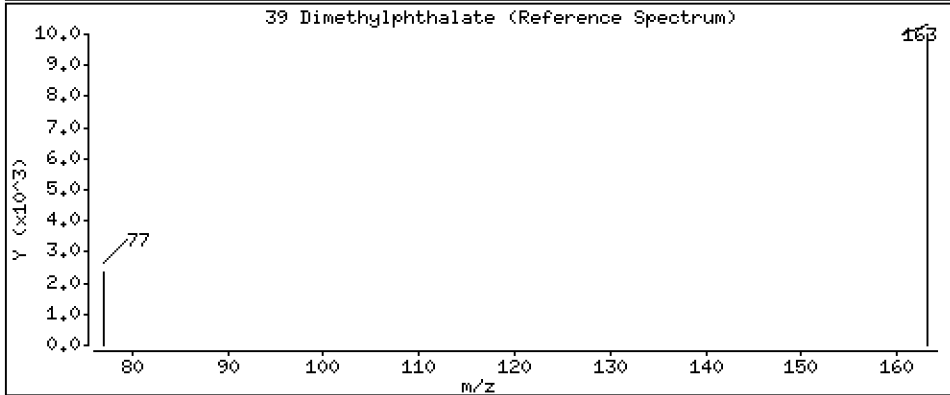
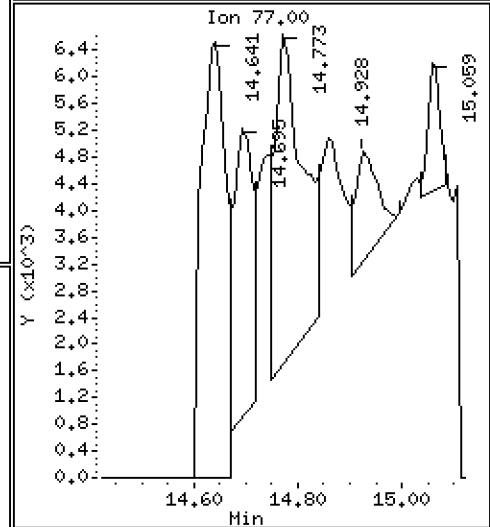
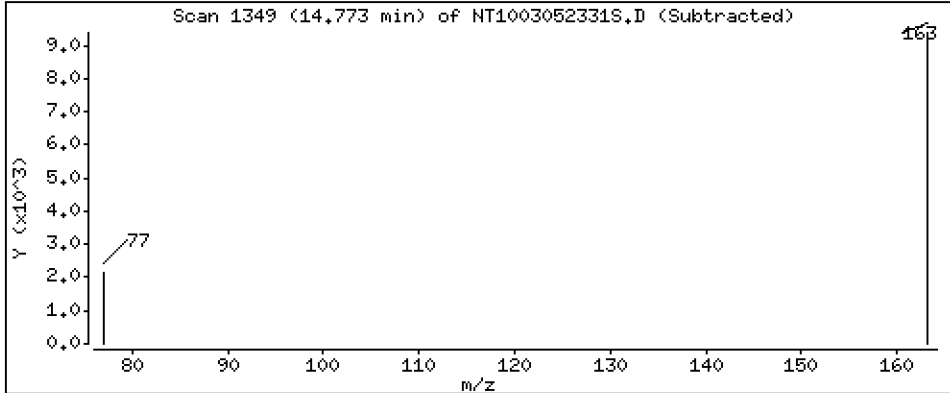
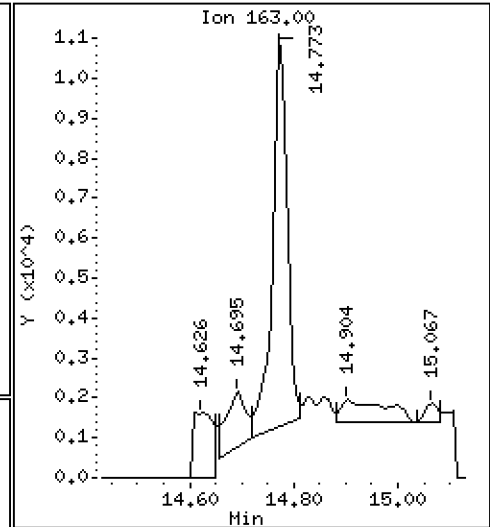
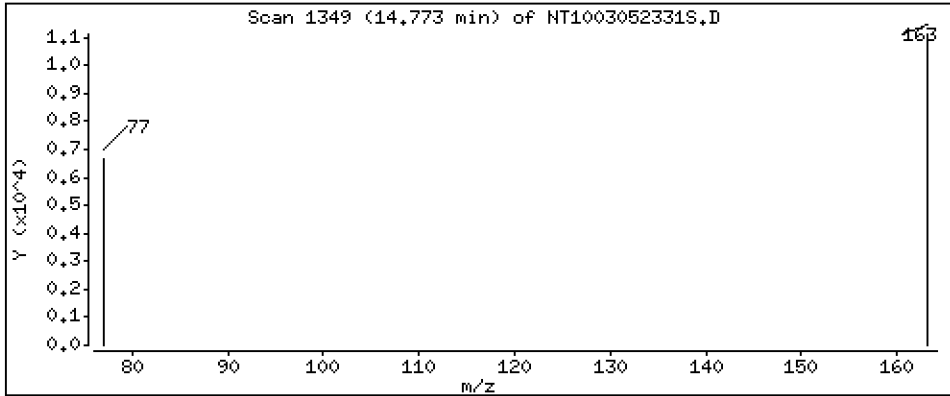
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.1305 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

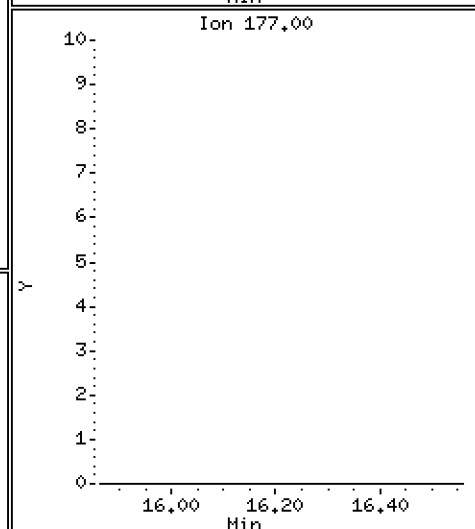
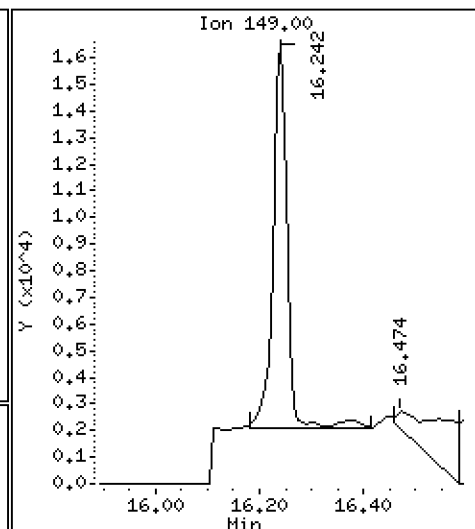
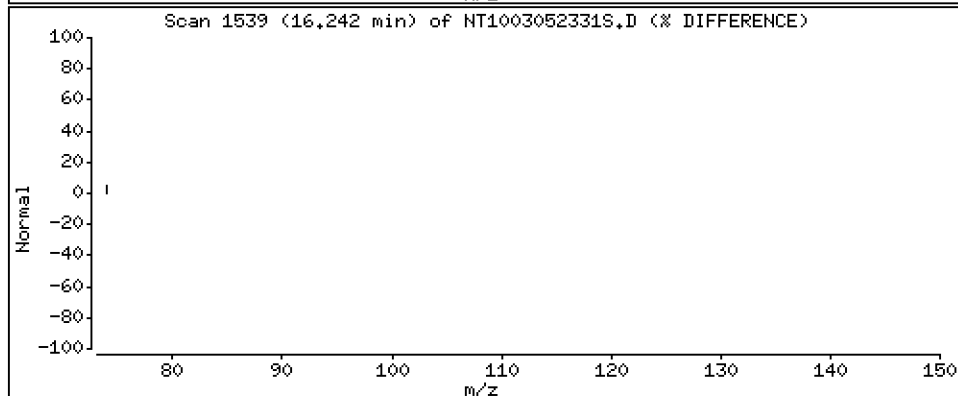
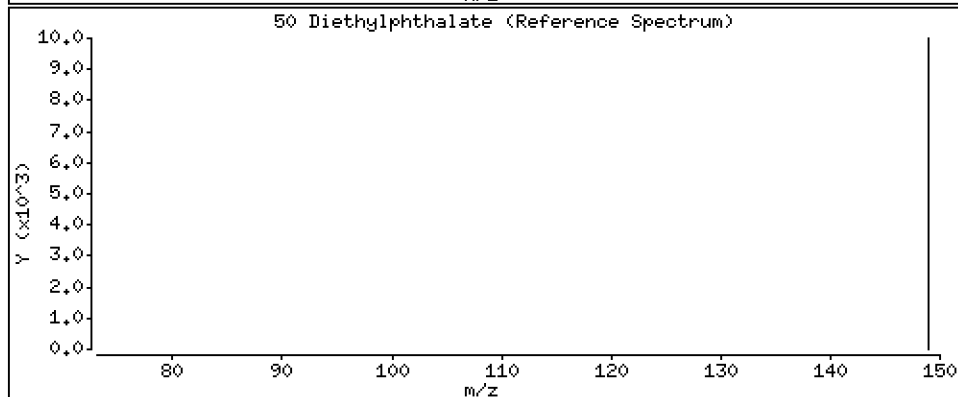
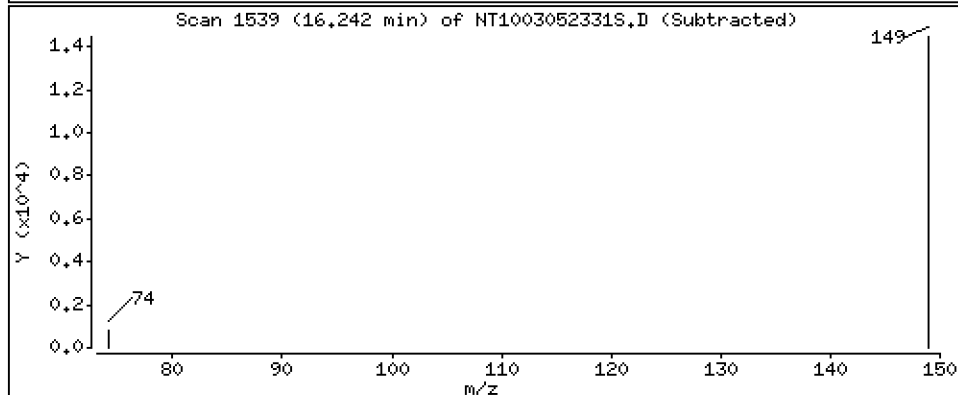
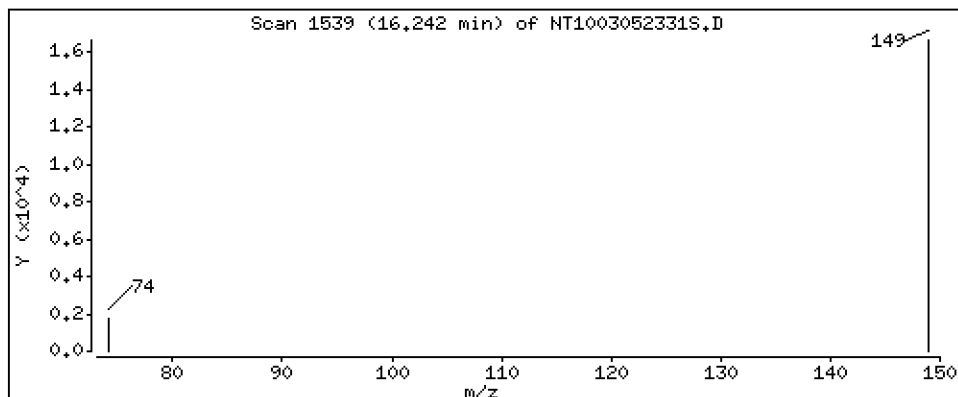
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1896 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

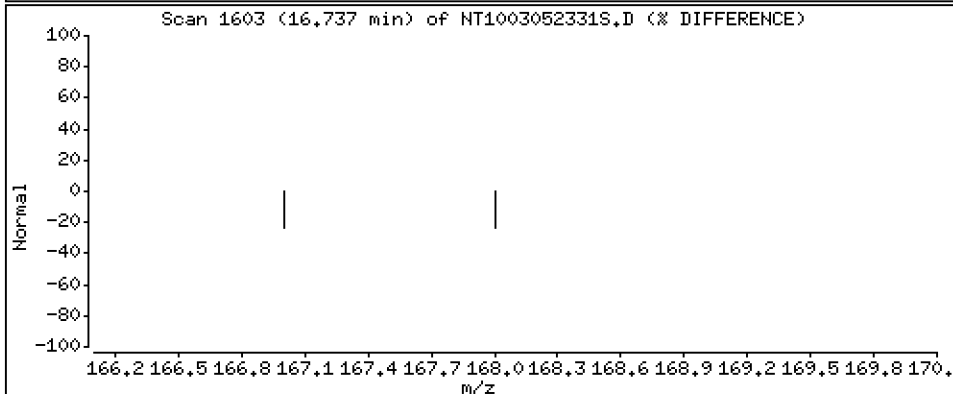
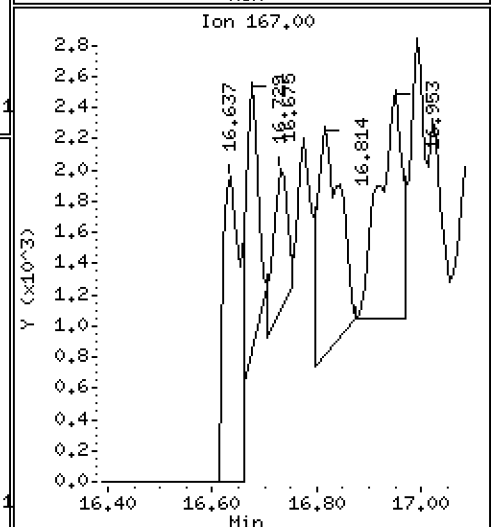
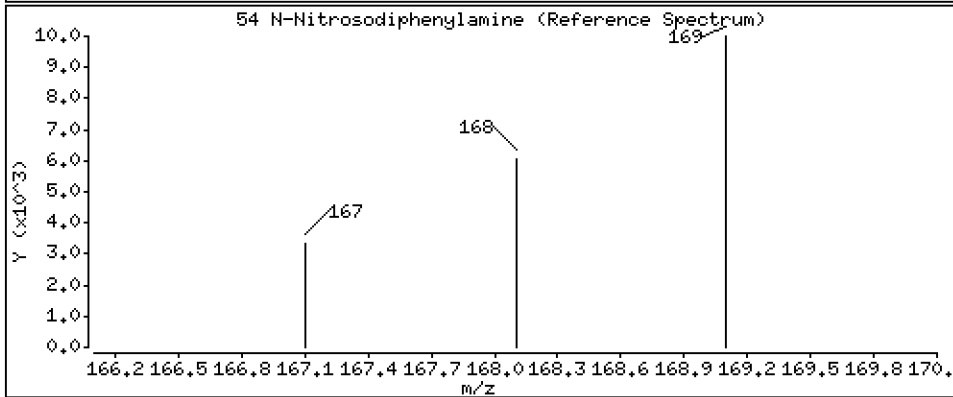
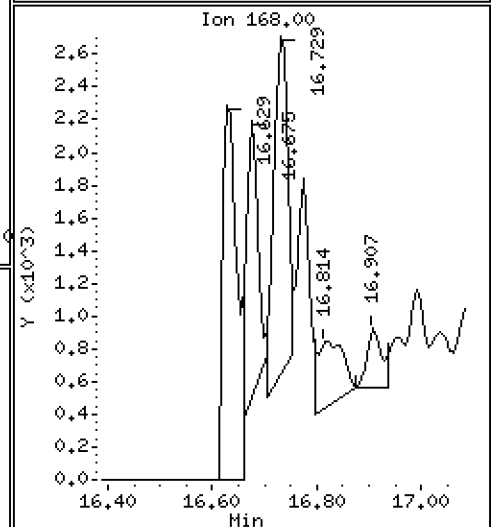
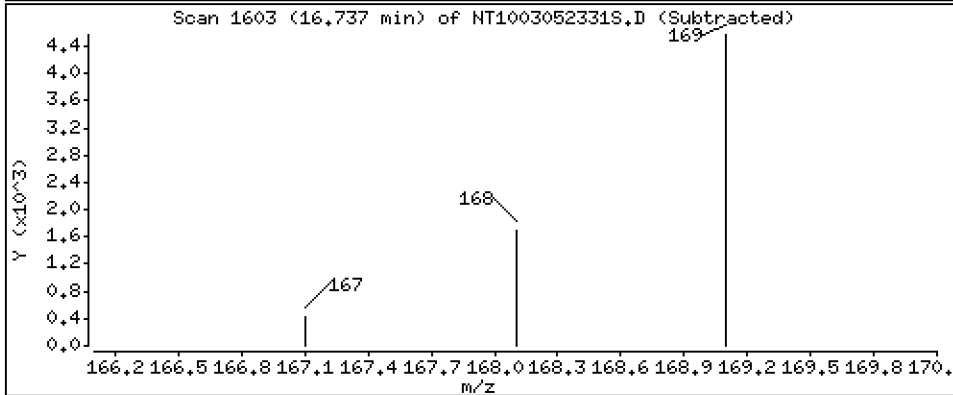
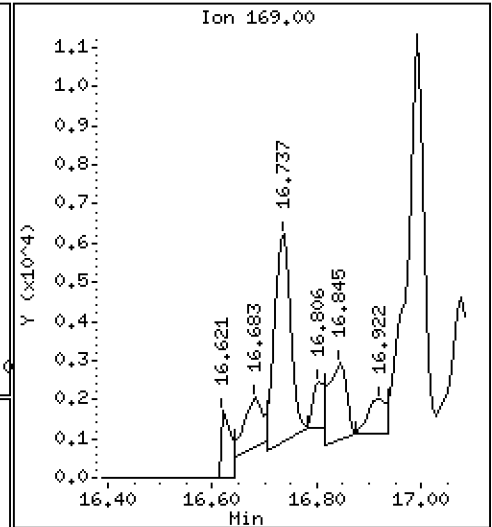
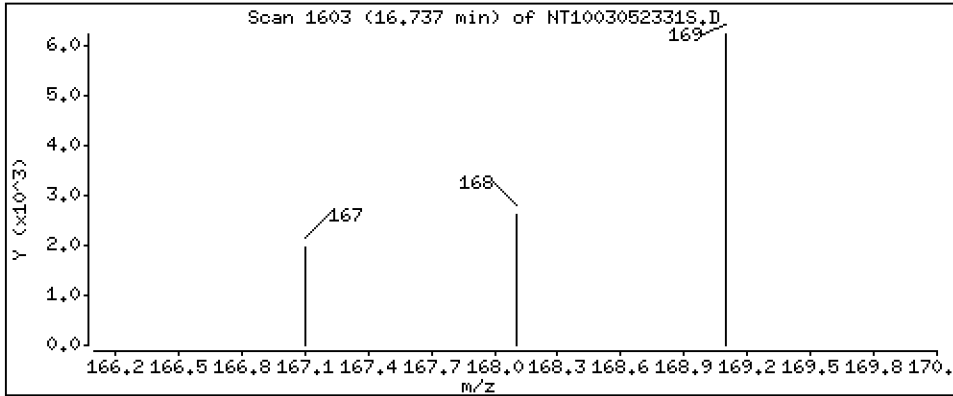
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.07871 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

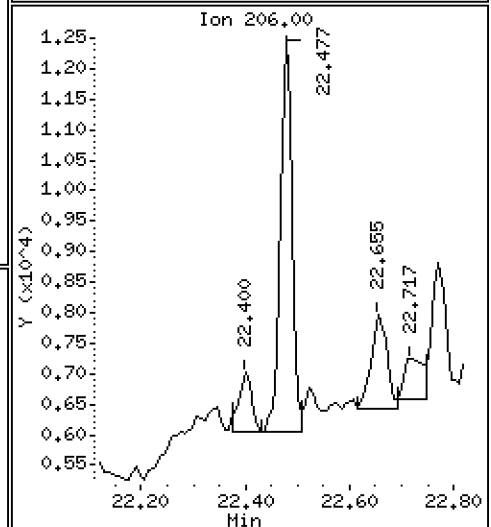
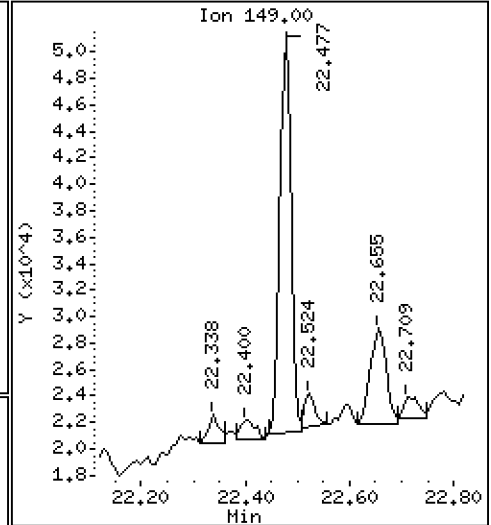
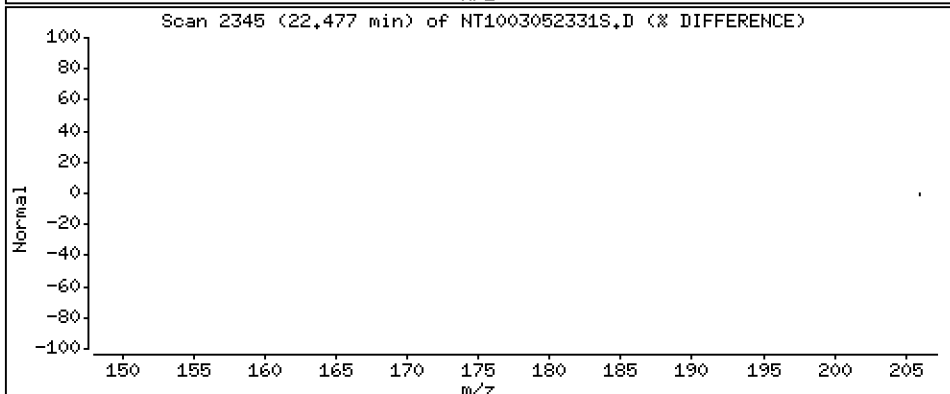
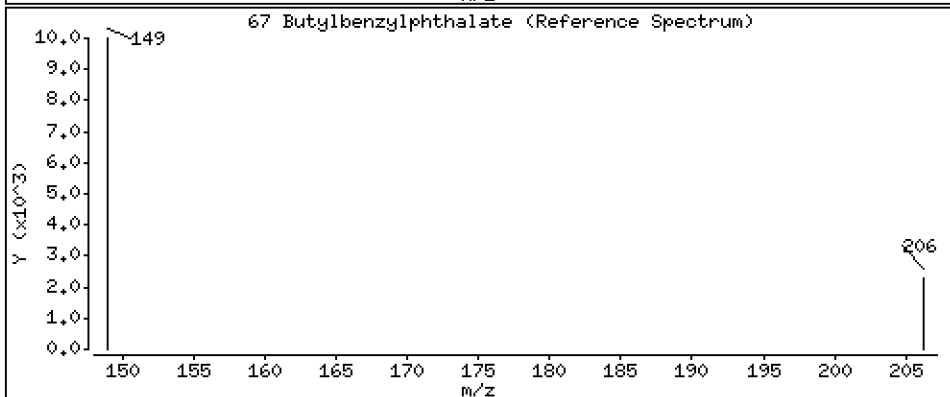
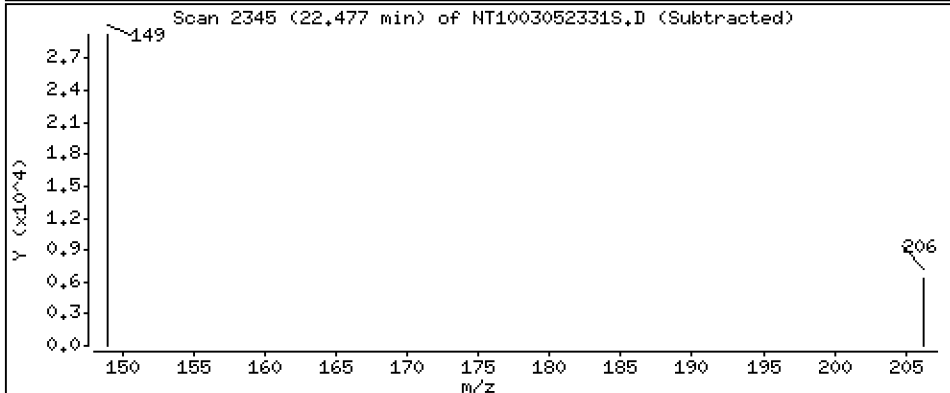
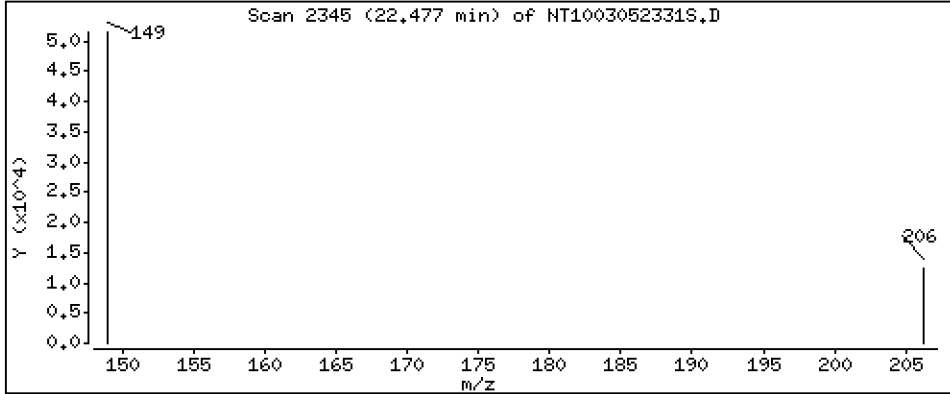
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,2807 ug/mL



Date : 06-MAR-2023 08:18

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-05

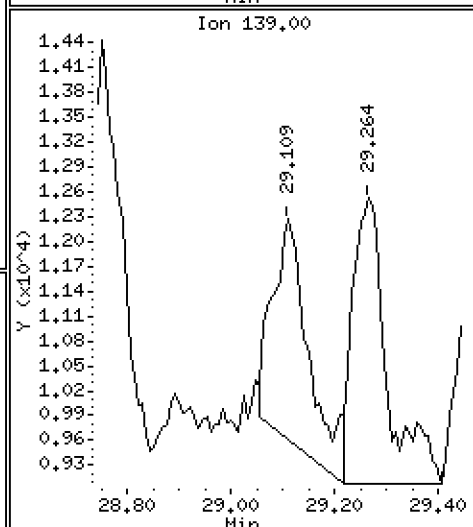
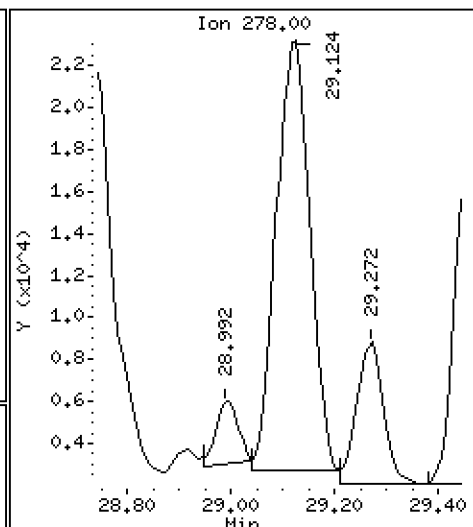
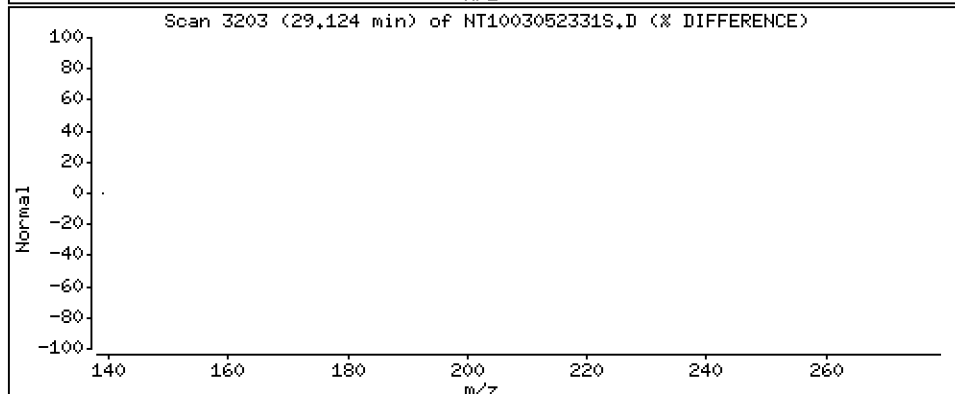
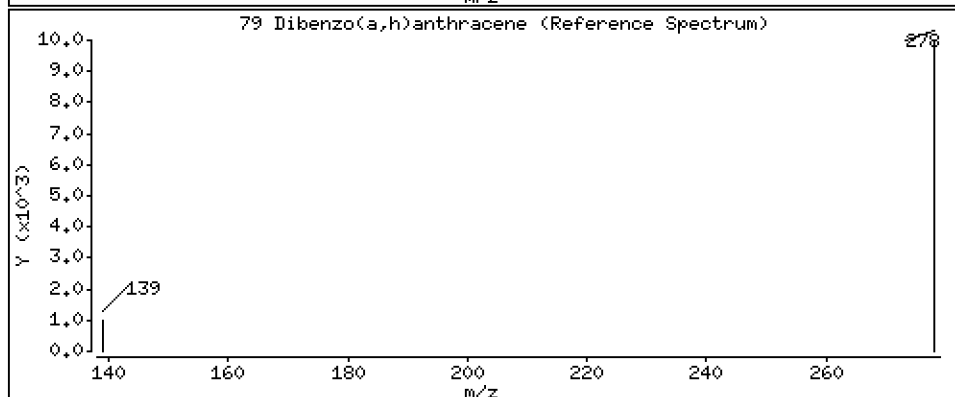
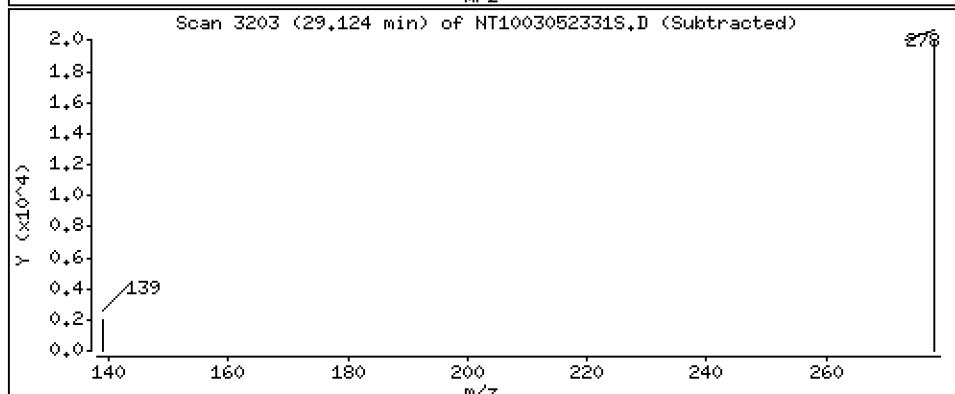
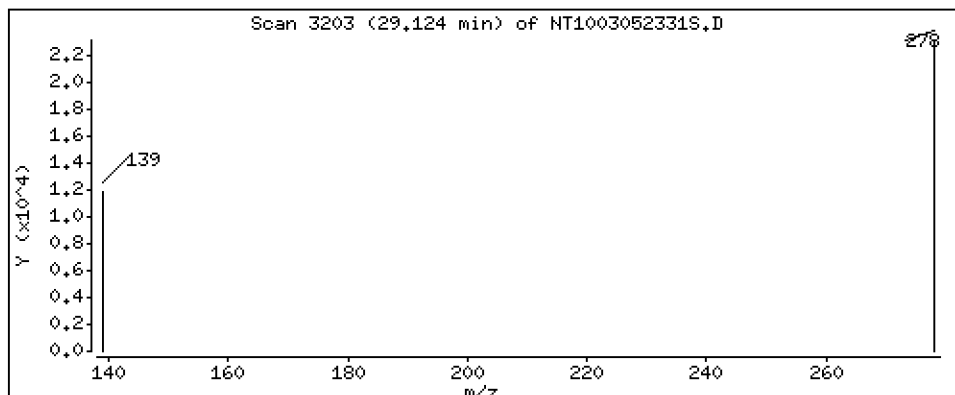
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,4125 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052331S.D
 Lab Smp Id: 23A0326-05
 Inj Date : 06-MAR-2023 08:18
 Operator : YZ
 Smp Info : 23A0326-05
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.918	6.902	(0.746)	430780	5.95444	5.954 (R)
3 Phenol	94		8.556	8.556	(0.923)	34216	0.32020	0.3202
7 1,3-Dichlorobenzene	146		9.151	9.151	(0.987)	297	0.00316	0.003162
* 8 1,4-Dichlorobenzene-d4	152		9.267	9.259	(1.000)	253406	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.003)	3273	0.03585	0.03585
11 Benzyl alcohol	79		9.554	9.515	(1.031)	19852	0.33430	0.3343
12 1,2-Dichlorobenzene	146		9.585	9.585	(1.034)	1270	0.01447	0.01447
13 2-Methylphenol	108		9.702	9.694	(1.047)	3311	0.05160	0.05160
15 4-Methylphenol	108		9.997	9.989	(1.079)	61017	0.90599	0.9060
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.048	11.040	(0.940)	3553	0.04735	0.04735
24 Benzoic acid	105		11.184	11.167	(0.951)	5131	0.12467	0.1247 (H)
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	488	0.00767	0.007666
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	884415	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.772	14.780	(0.962)	18595	0.13054	0.1305
* 42 Acenaphthene-d10	162		15.353	15.352	(1.000)	448606	4.00000	
50 Diethylphthalate	149		16.242	16.241	(1.058)	25474	0.18964	0.1896 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.736	(0.907)	11203	0.07871	0.07871
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	879449	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.586	(0.919)	493739	6.88473	6.885 (R)
67 Butylbenzylphthalate	149		22.477	22.469	(0.956)	41990	0.28068	0.2807
* 69 Chrysene-d12	240		23.506	23.491	(1.000)	886830	4.00000	
* 77 Perylene-d12	264		26.255	26.224	(1.000)	972028	4.00000	
79 Dibenzo(a,h)anthracene	278		29.124	29.093	(1.109)	93377	0.41247	0.4125 (H)
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052331S.D
 Lab Smp Id: 23A0326-05
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	253406	5.83
27 Naphthalene-d8	849492	424746	1698984	884415	4.11
42 Acenaphthene-d10	421435	210718	842870	448606	6.45
59 Phenanthrene-d10	835585	417793	1671170	879449	5.25
69 Chrysene-d12	874614	437307	1749228	886830	1.40
77 Perylene-d12	1035818	517909	2071636	972028	-6.16

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.27	0.09
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.51	0.07
77 Perylene-d12	26.22	25.72	26.72	26.26	0.12

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

REVIEW SUMMARY FOR FILE - NT1003052331S.D

Lab ID: 23A0326-05

nt10.i, 20230305B.b\SIM.b\SIMABN2.m,

06-MAR-2023 08:18

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Polynuclear Aromatic Hydrocarbons

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-08 A

SDG: 23A0326

Sampled: 01/17/23 12:31

Prepared: 02/01/23 11:29

File ID: N823020631.D

% Solids: 75.53

Preparation: EPA 3546 (Microwave)

Analyzed: 02/07/23 02:16

Batch: BLA0683

Sequence: SLB0075

Initial/Final: 13.27 g Wet / 0.5 mL

Instrument: NT8

Column: RXI-17Sil ms

Calibration: GA00050

Cleanups: GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	47.7		0.82	4.99
218-01-9	Chrysene	1	69.7		1.05	4.99
205-99-2	Benzo(b)fluoranthene	1	54.0		1.37	4.99
207-08-9	Benzo(k)fluoranthene	1	27.3		0.76	4.99
50-32-8	Benzo(a)pyrene	1	44.8		0.61	4.99
193-39-5	Indeno(1,2,3-cd)pyrene	1	23.2		1.05	4.99
53-70-3	Dibenzo(a,h)anthracene	1	7.28		0.89	4.99

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	149.66	106	71.1	32 - 120	
Dibenzo[a,h]anthracene-d14	149.66	146	97.5	21 - 133	
Fluoranthene-d10	149.66	158	106	36 - 134	

Data File: \\target\share\chem3\nt8.1\20230206A,B\N823020631.D

Date : 07-FEB-2023 02:16

Client ID:

Sample Info: 23A0326-08

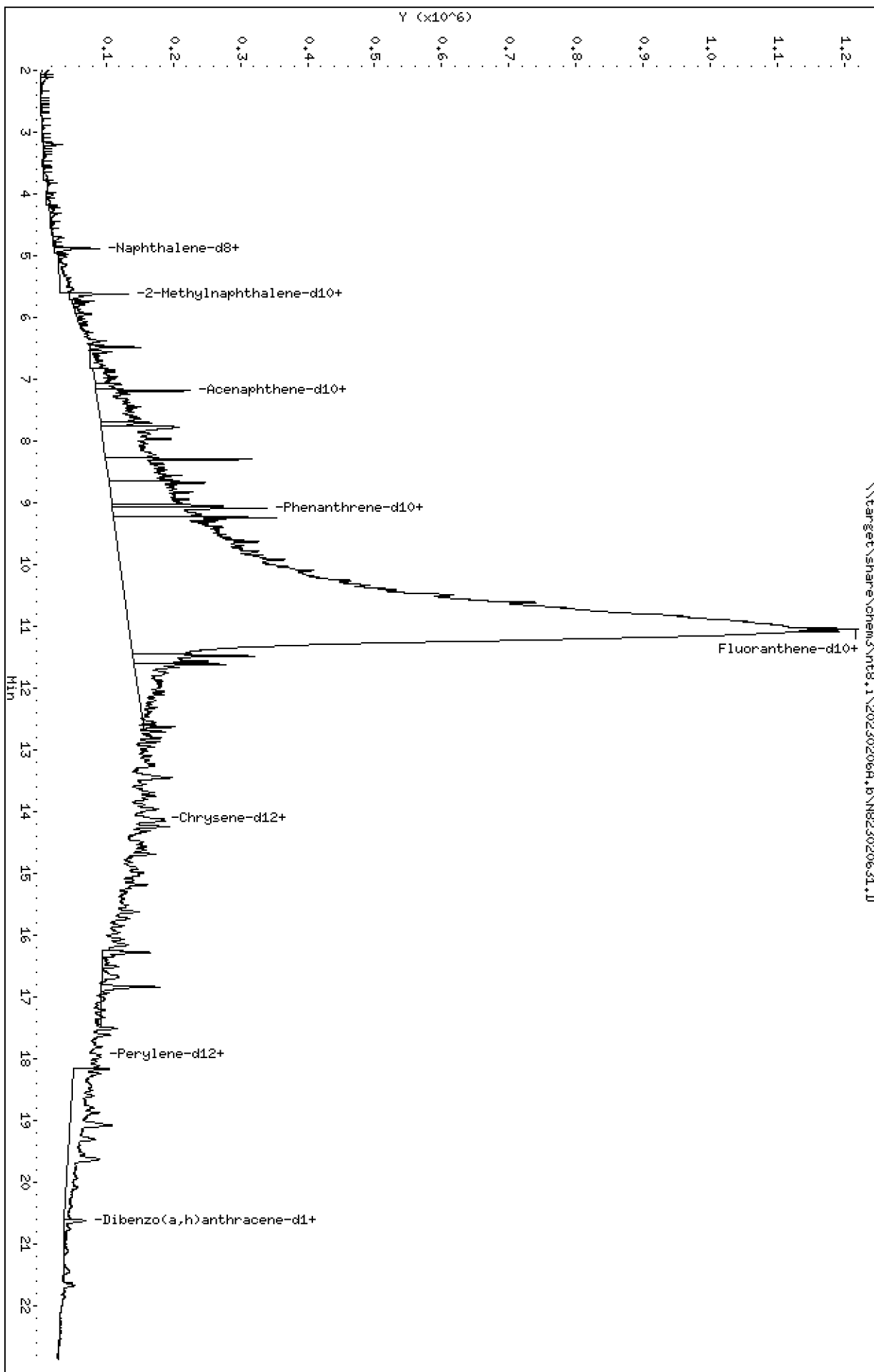
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

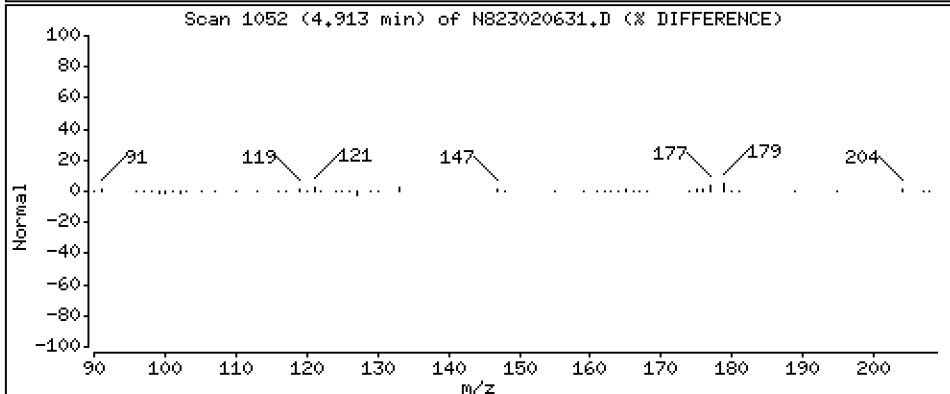
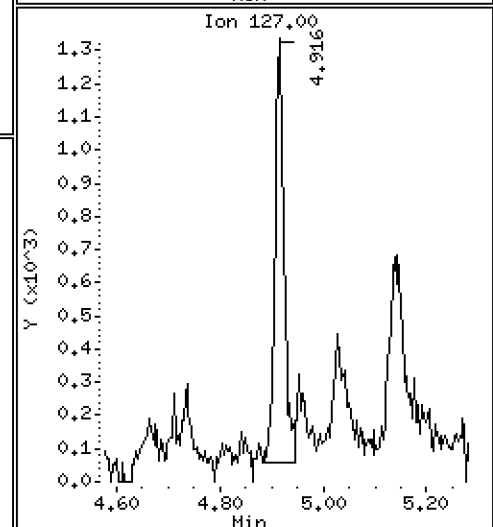
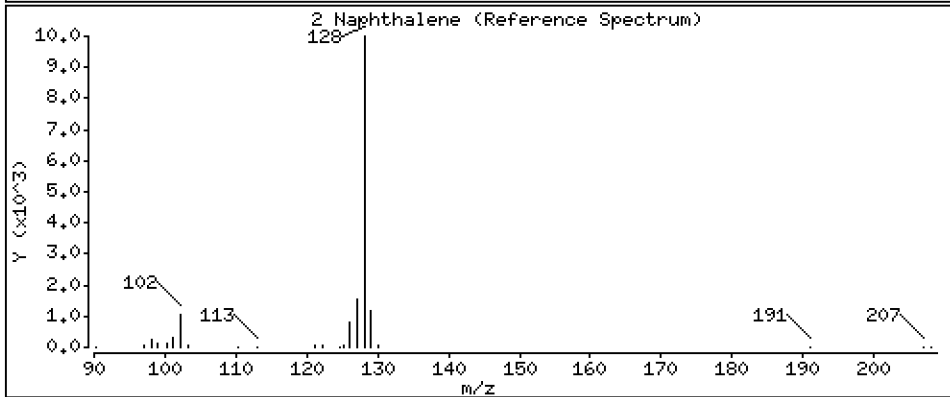
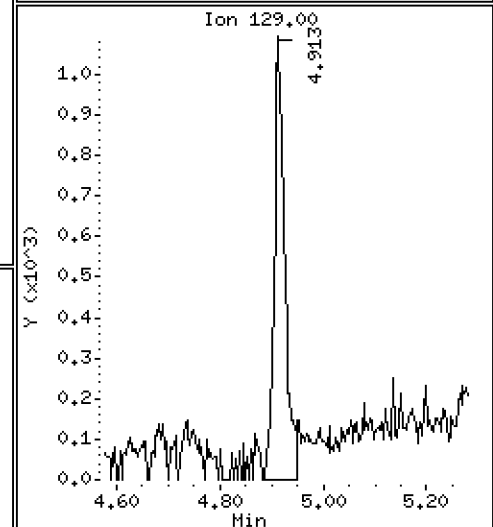
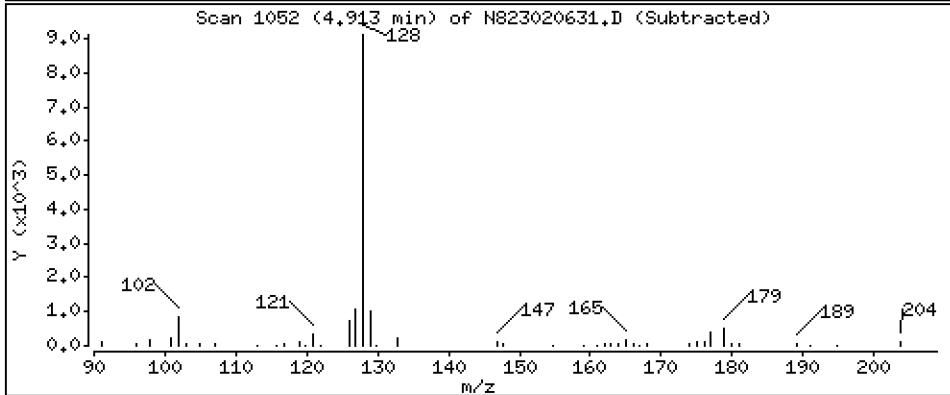
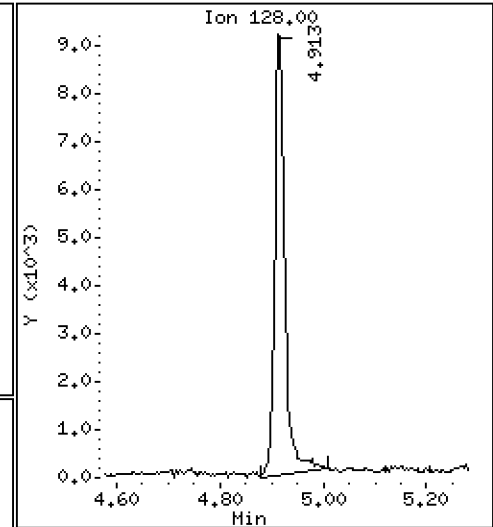
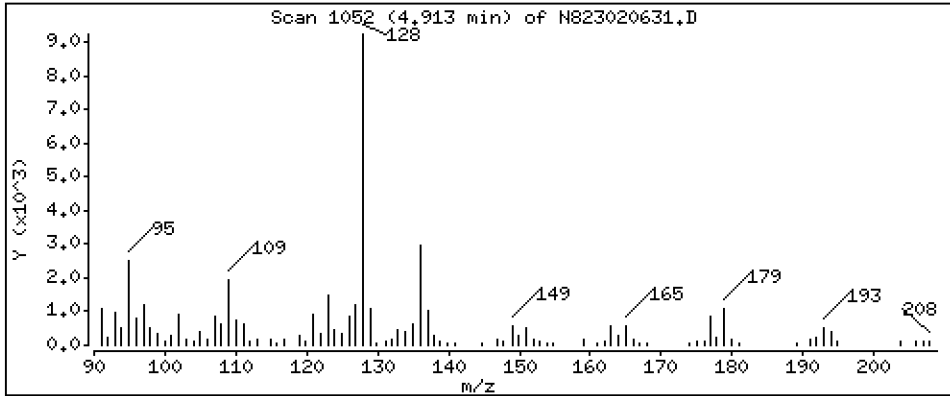
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 0.4726 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

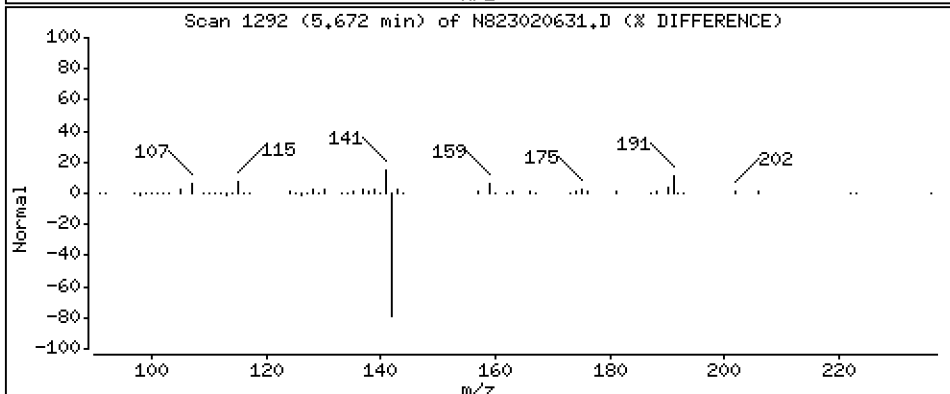
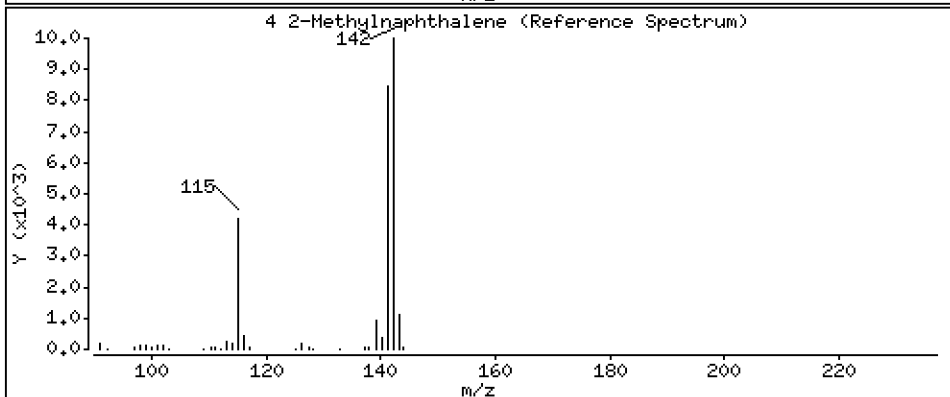
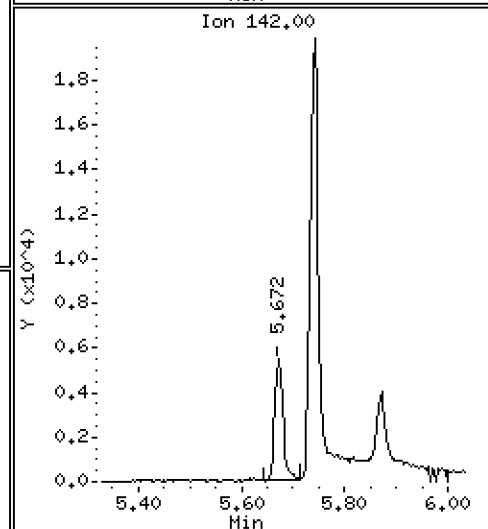
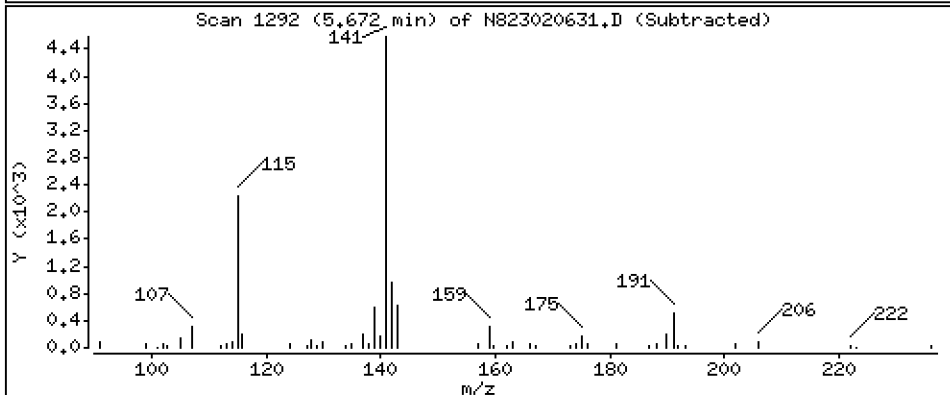
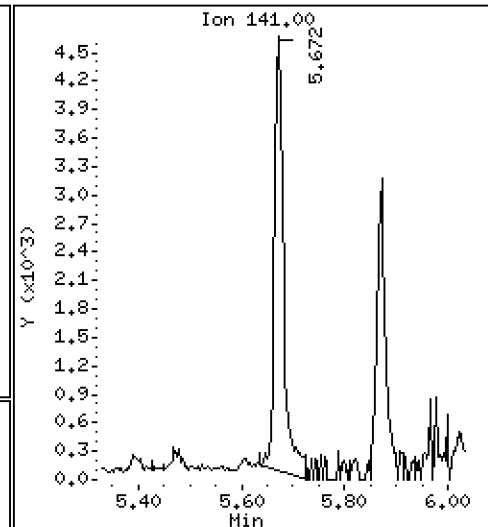
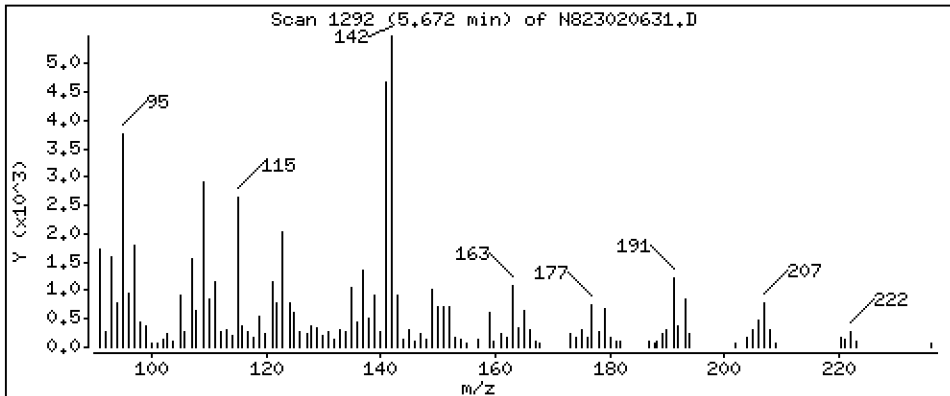
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

4 2-Methylnaphthalene

Concentration: 0,3785 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

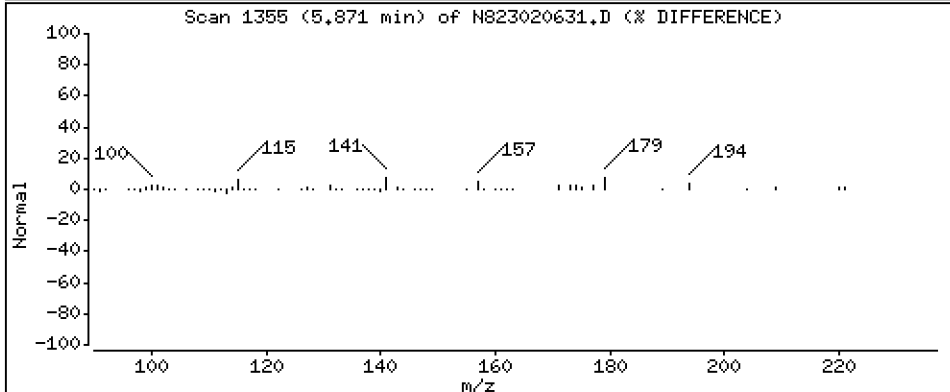
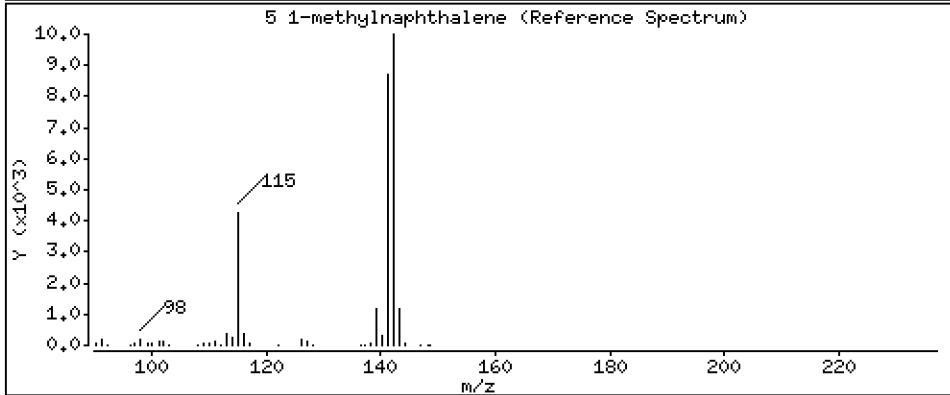
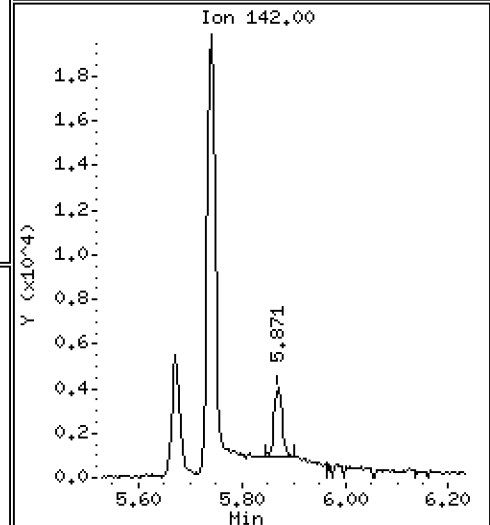
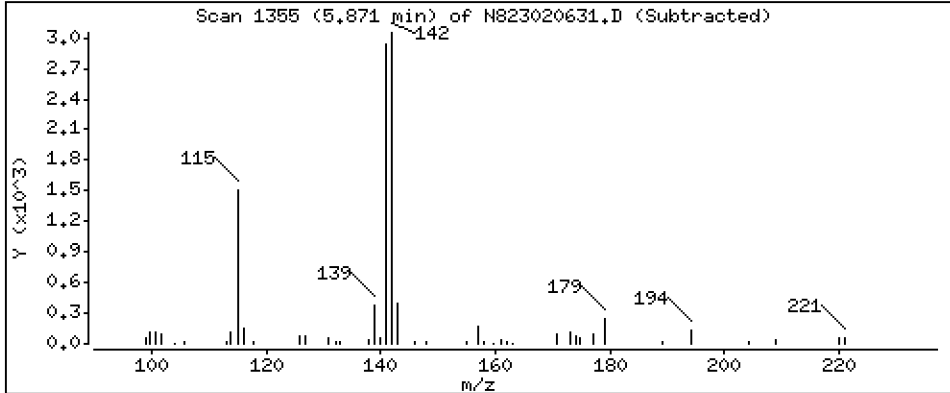
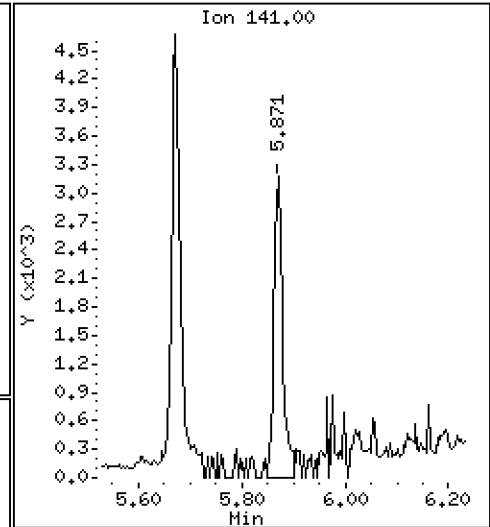
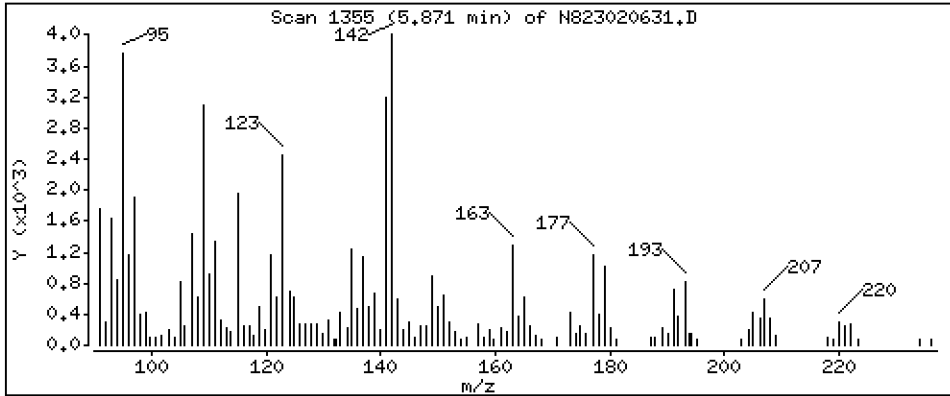
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

5 1-methylnaphthalene

Concentration: 0,2536 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

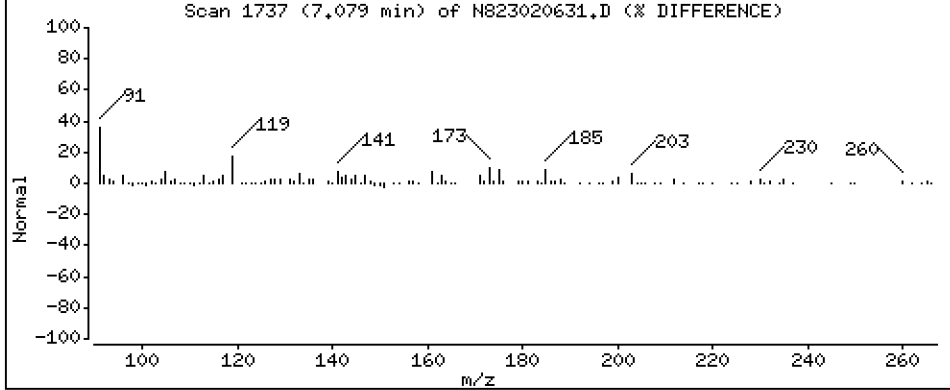
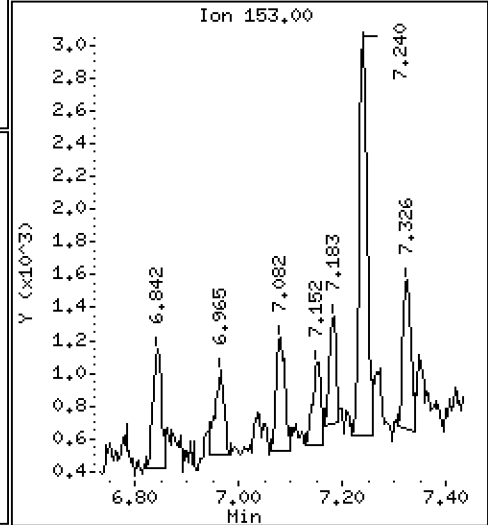
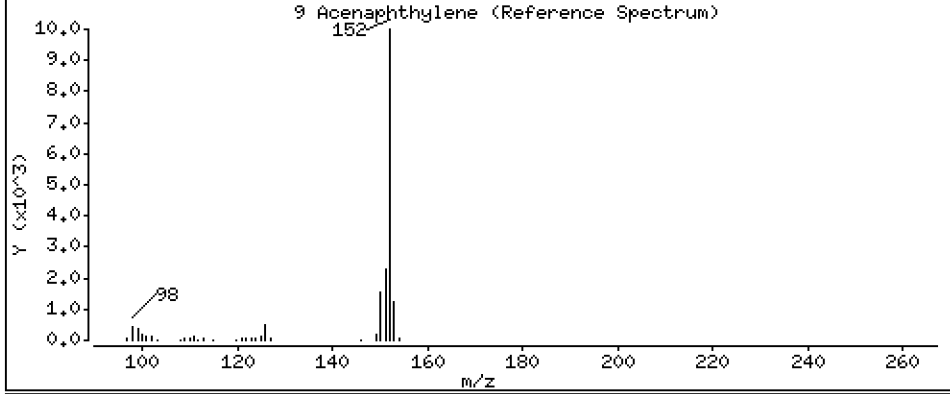
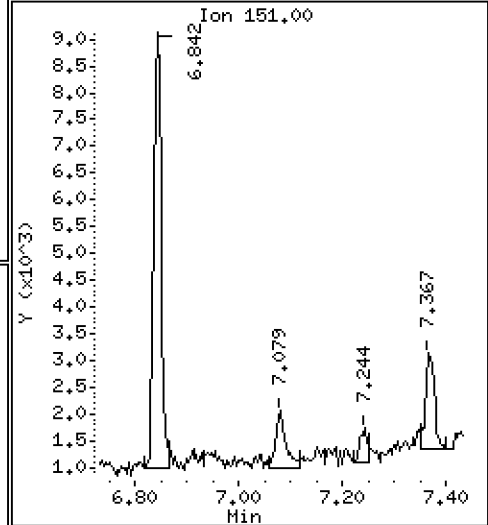
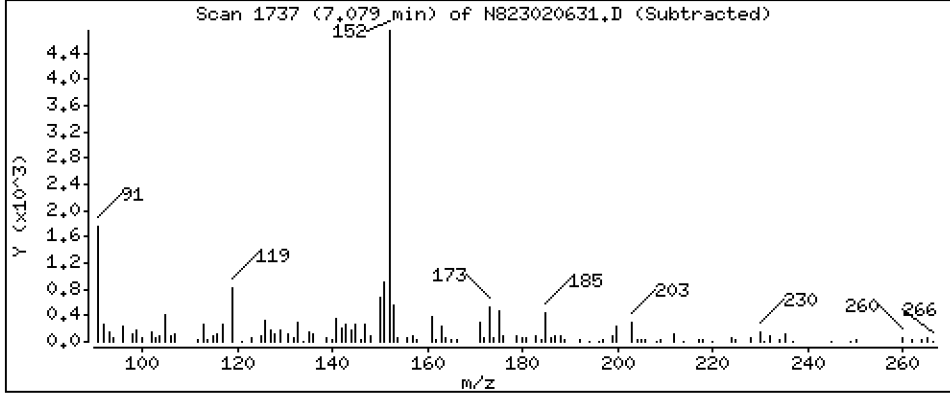
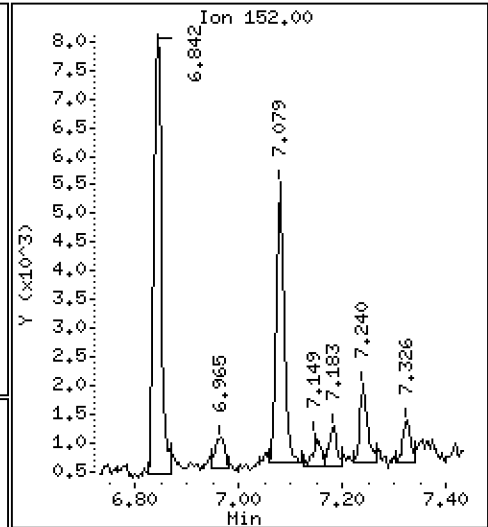
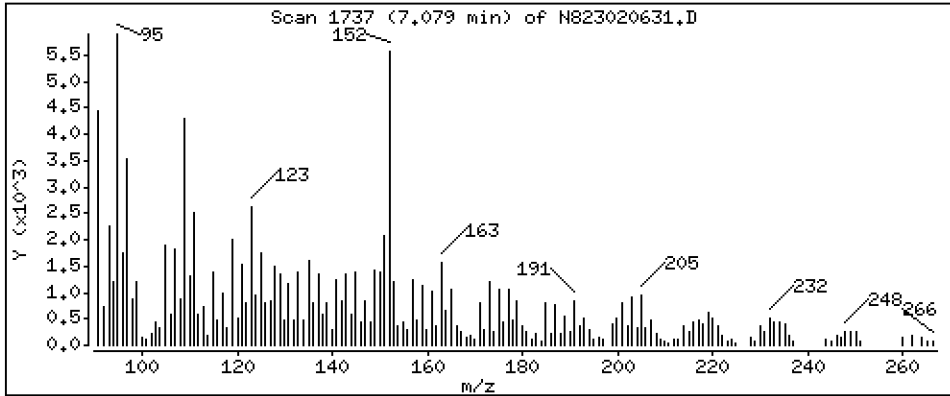
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 0,2187 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

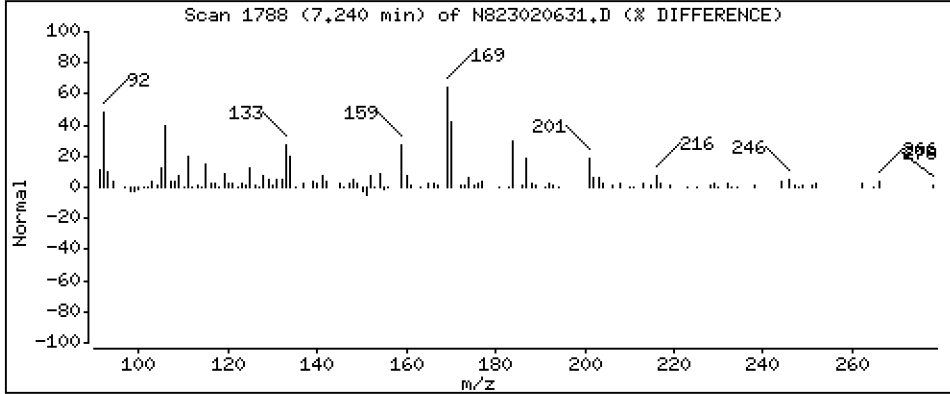
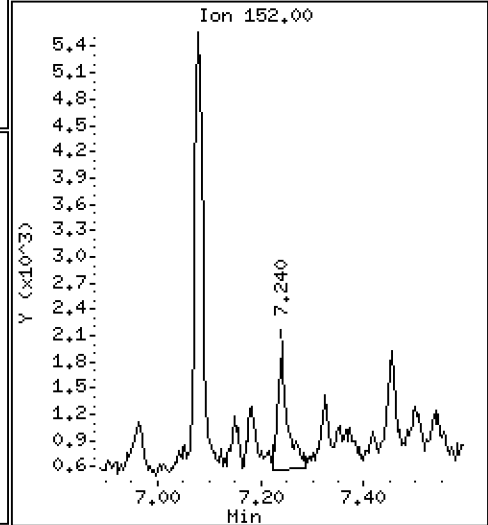
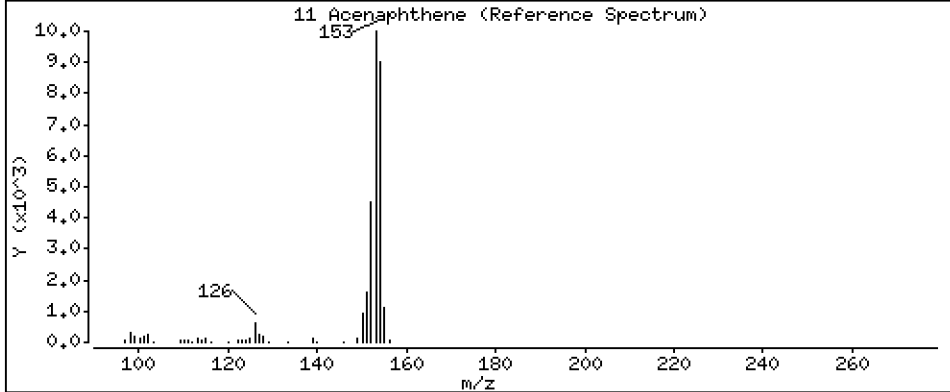
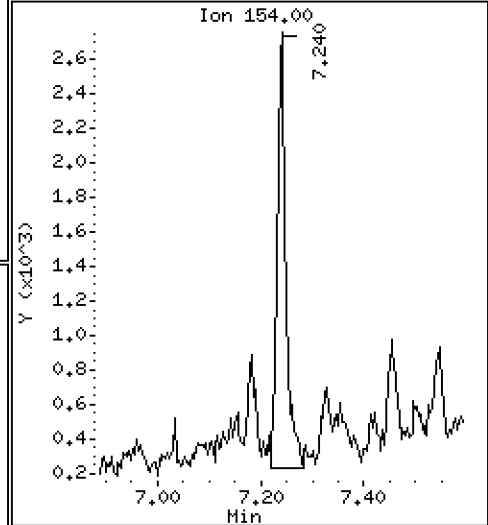
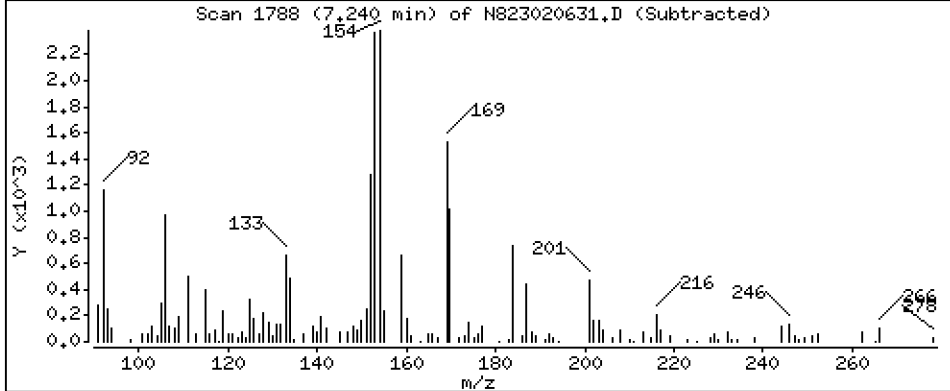
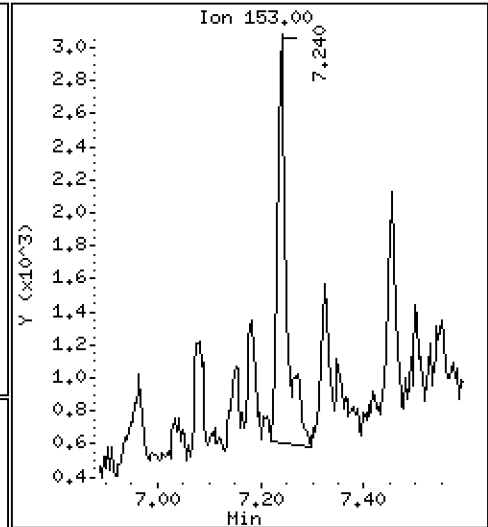
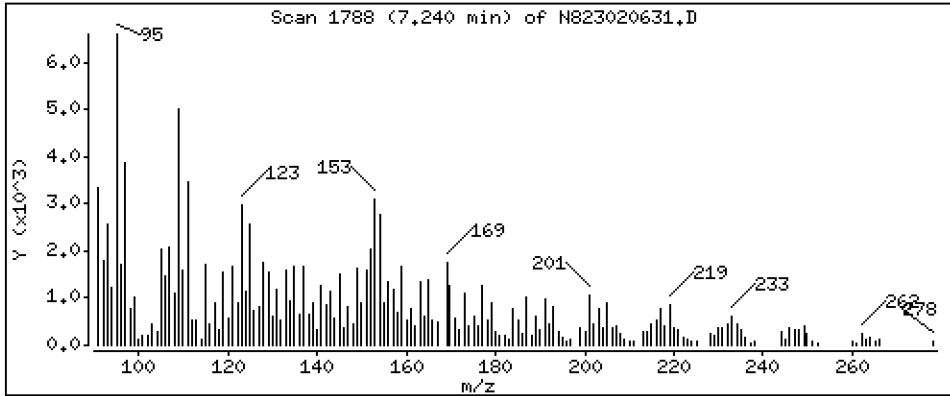
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

11 Acenaphthene

Concentration: 0.1935 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

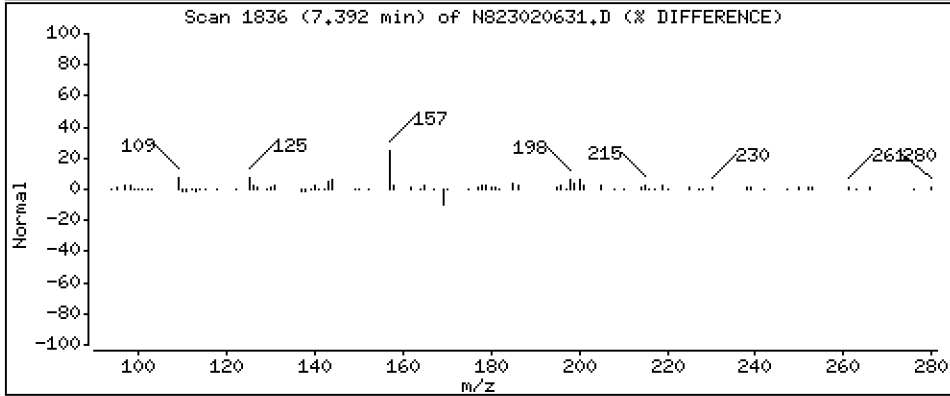
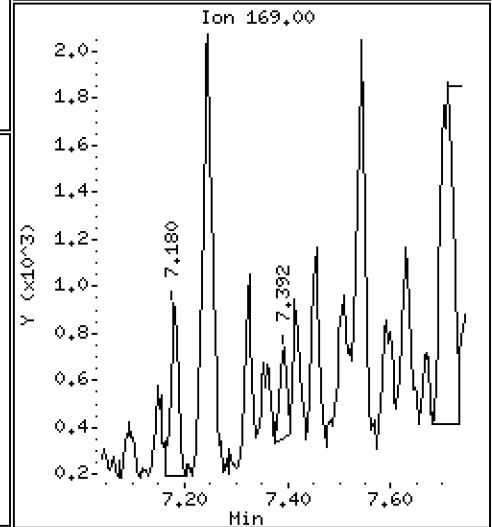
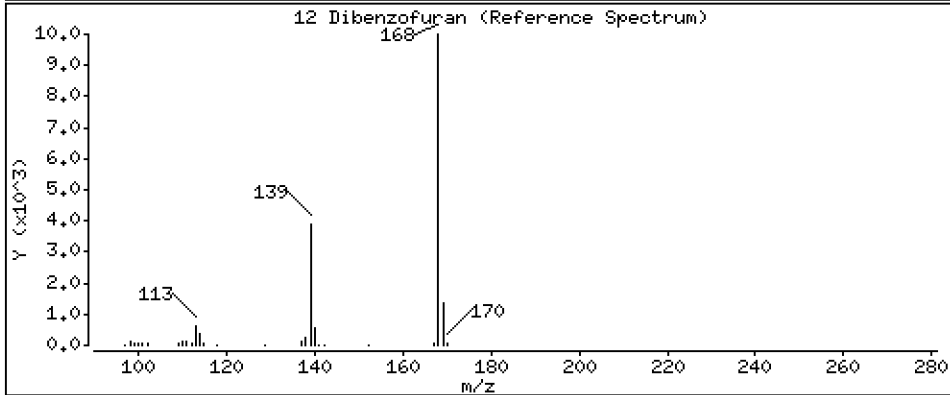
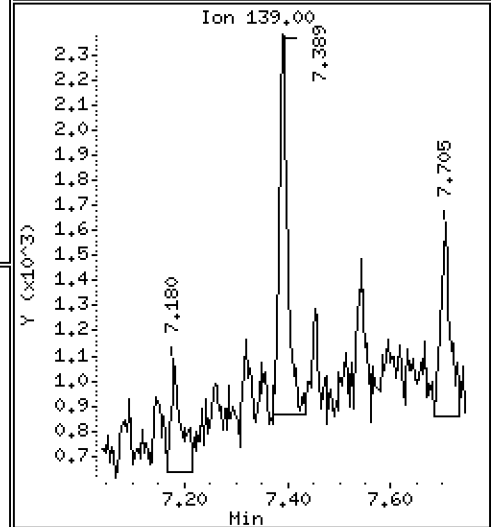
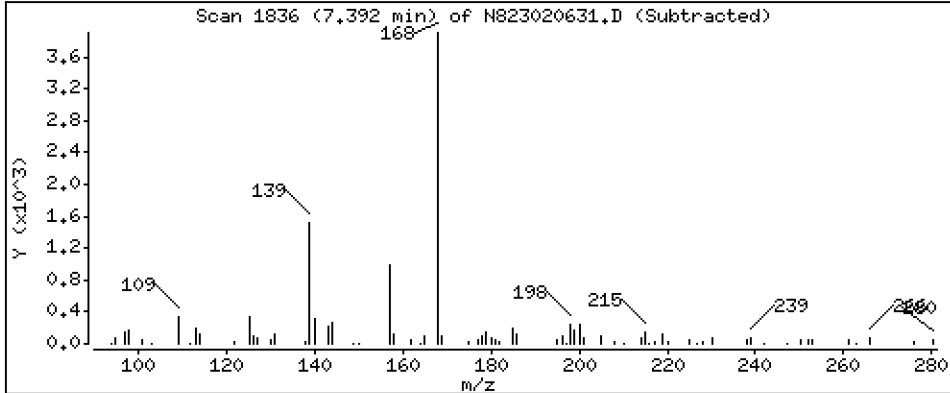
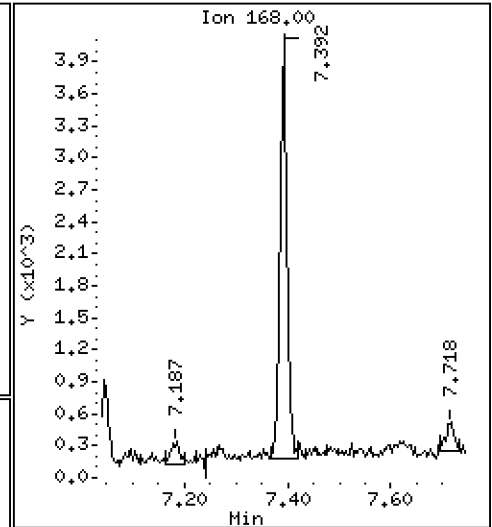
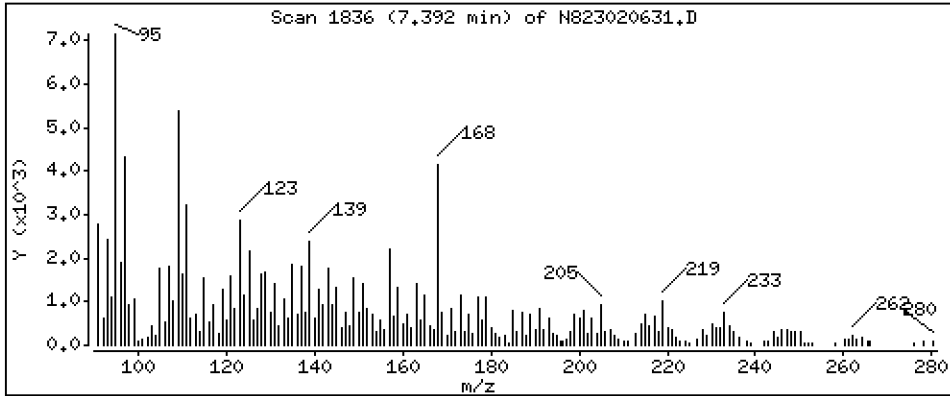
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 0,1575 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

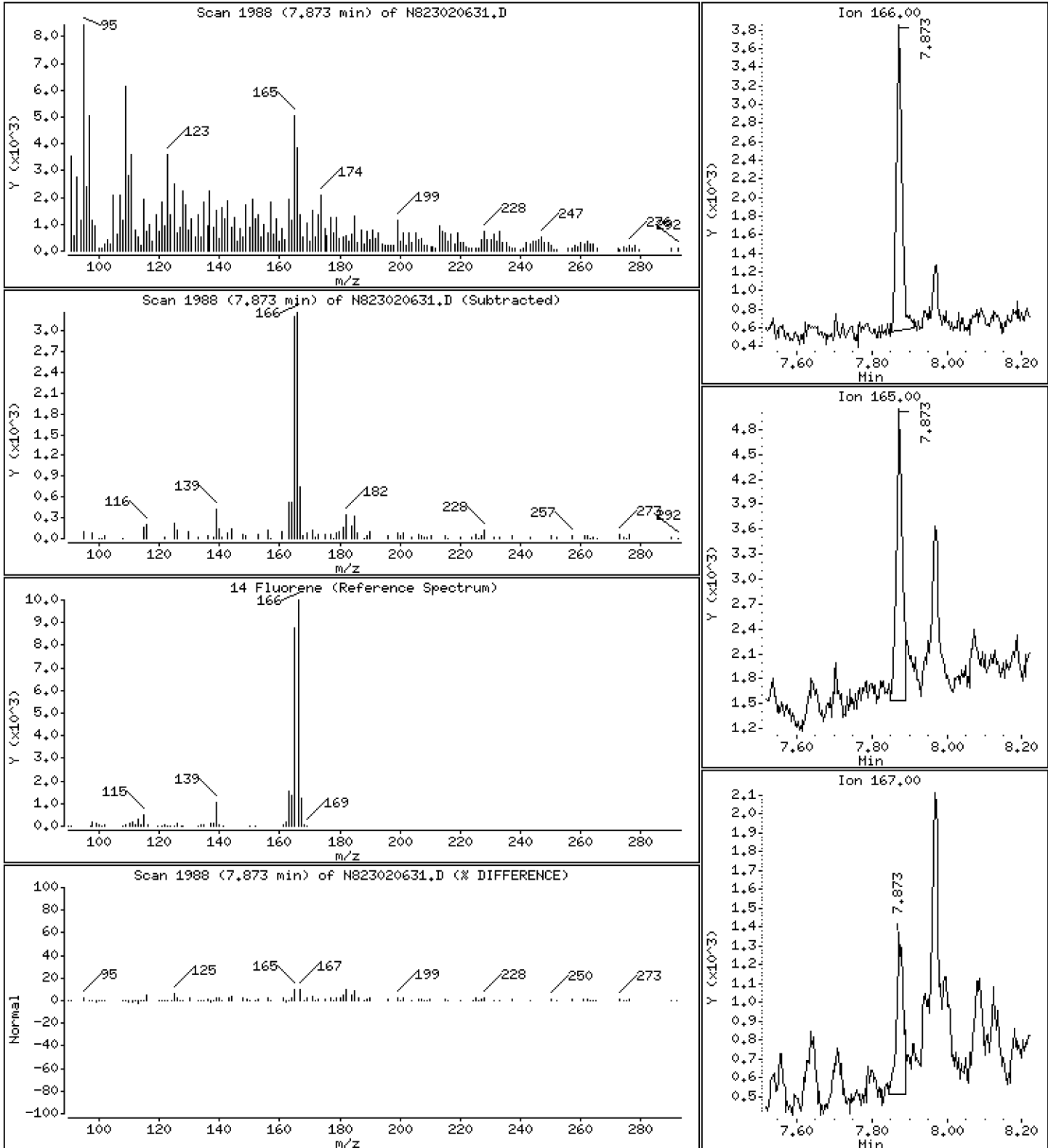
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

14 Fluorene

Concentration: 0.1838 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

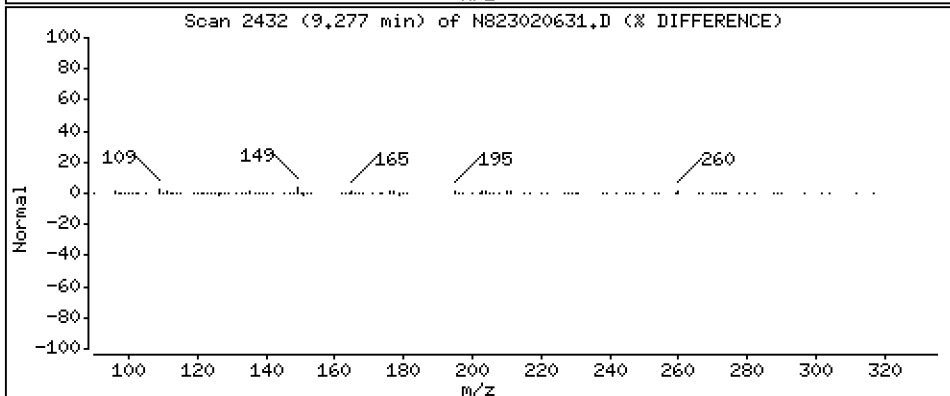
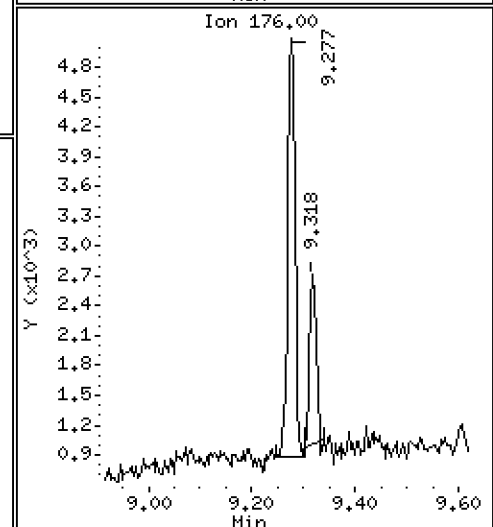
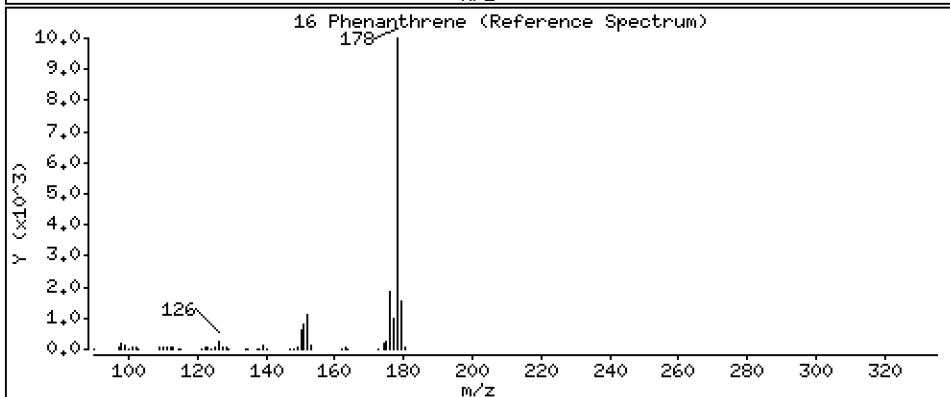
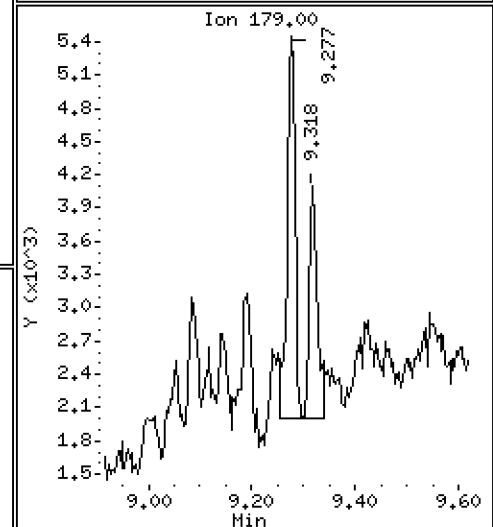
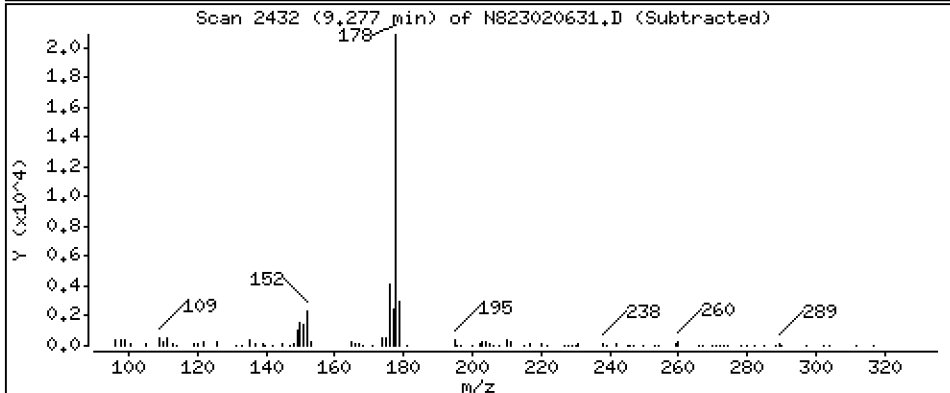
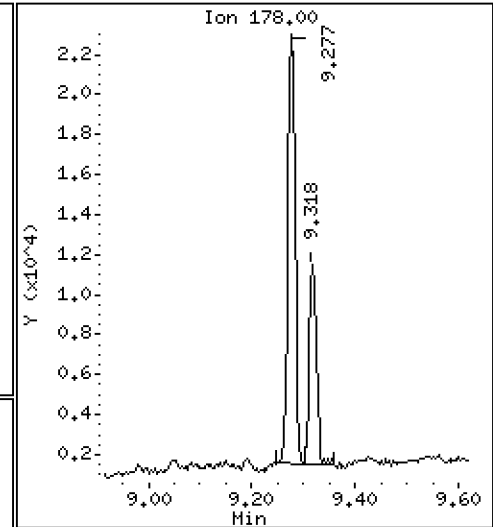
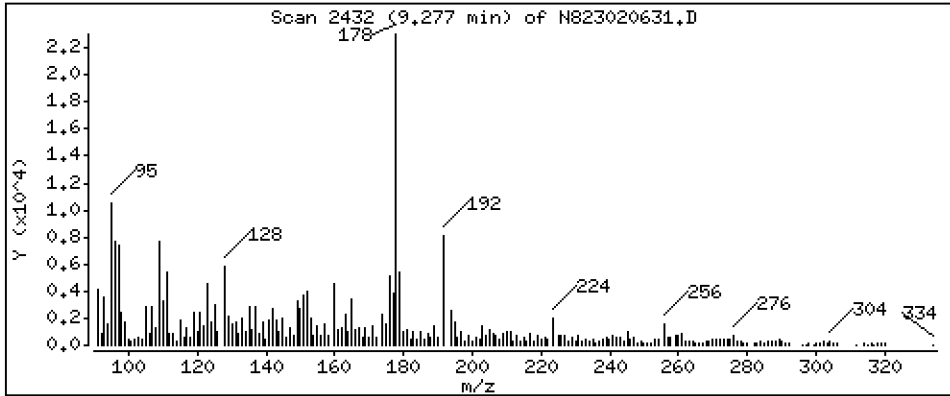
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 0,8699 ug/mL

16 Phenanthrene



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

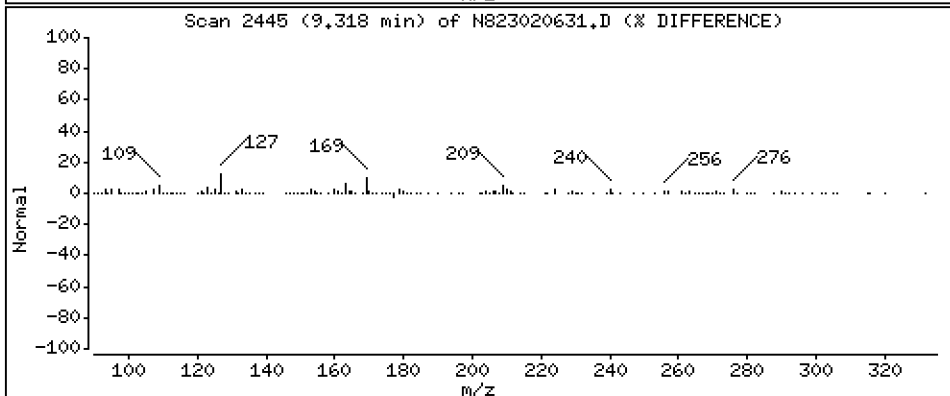
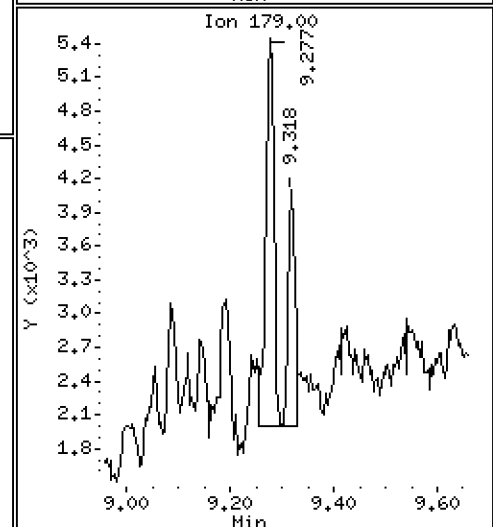
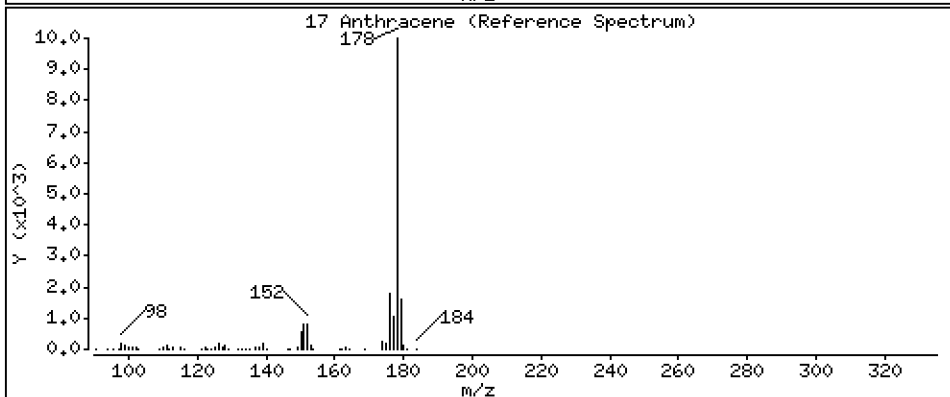
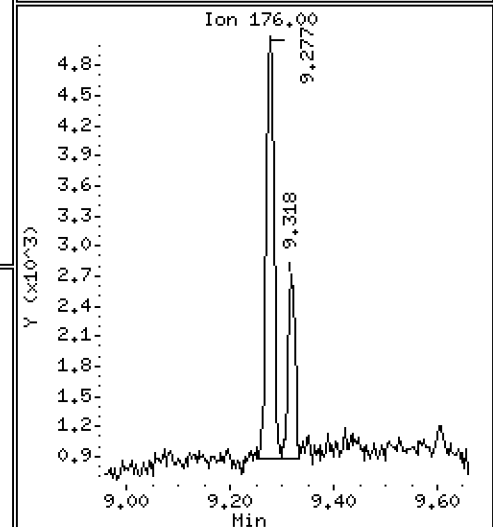
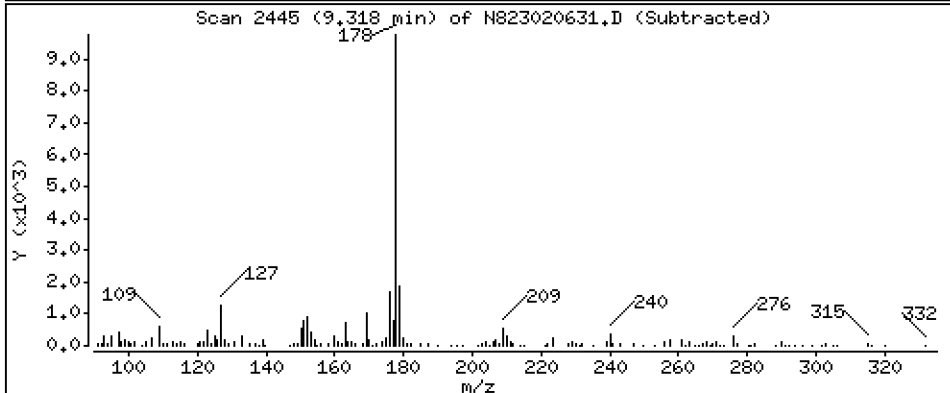
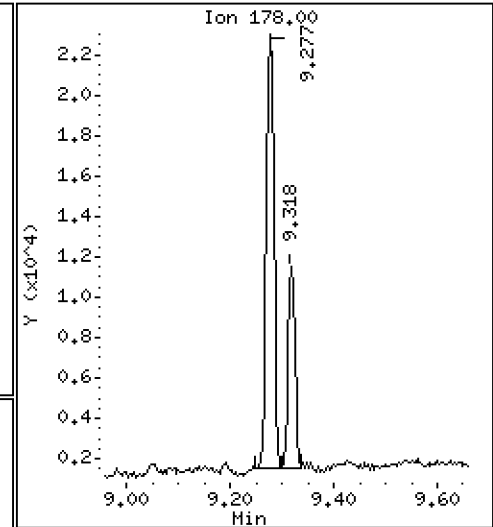
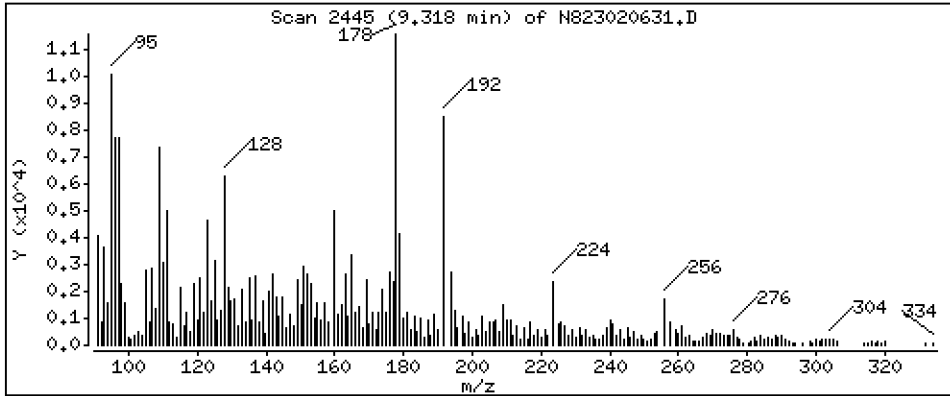
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 0,4257 ug/mL

17 Anthracene



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

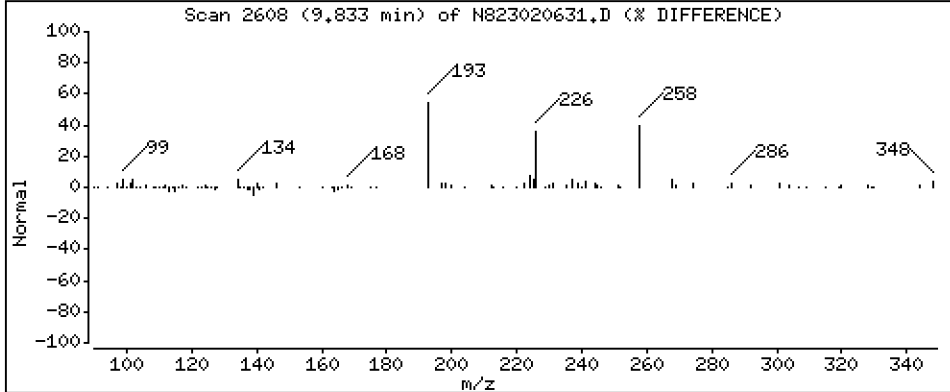
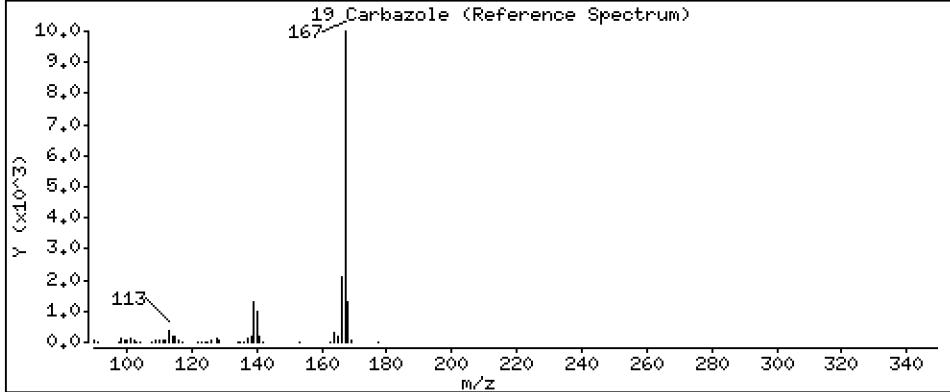
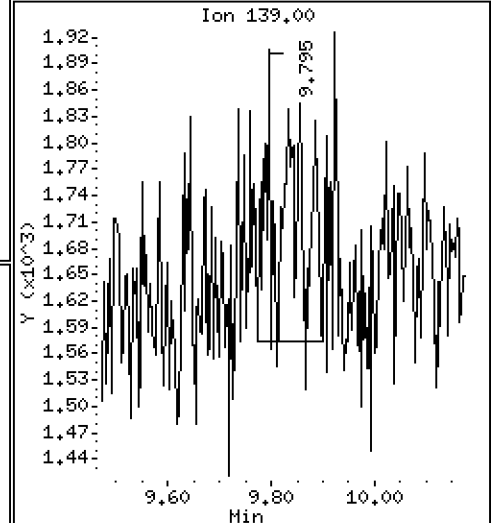
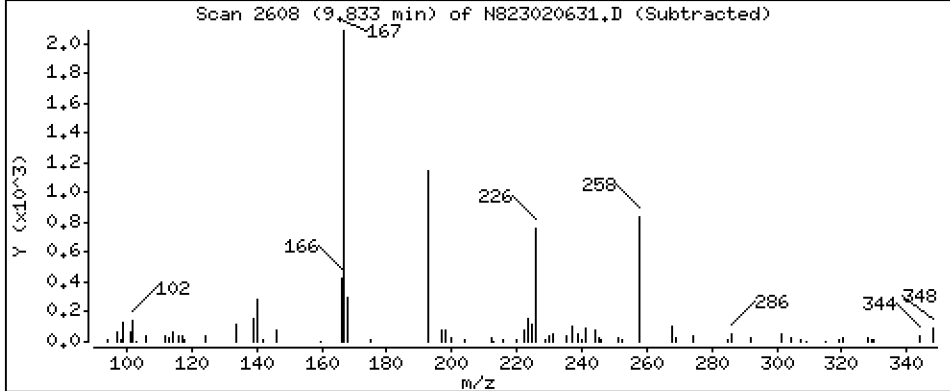
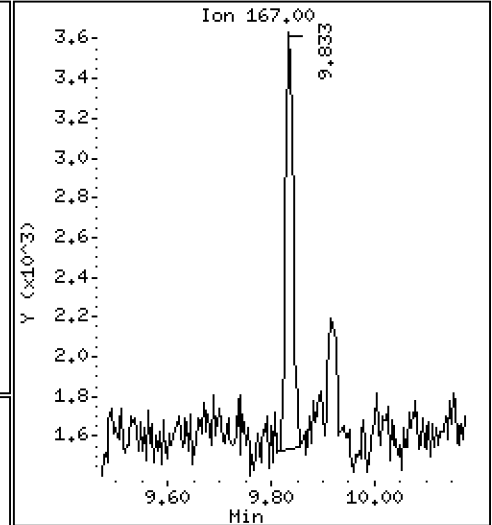
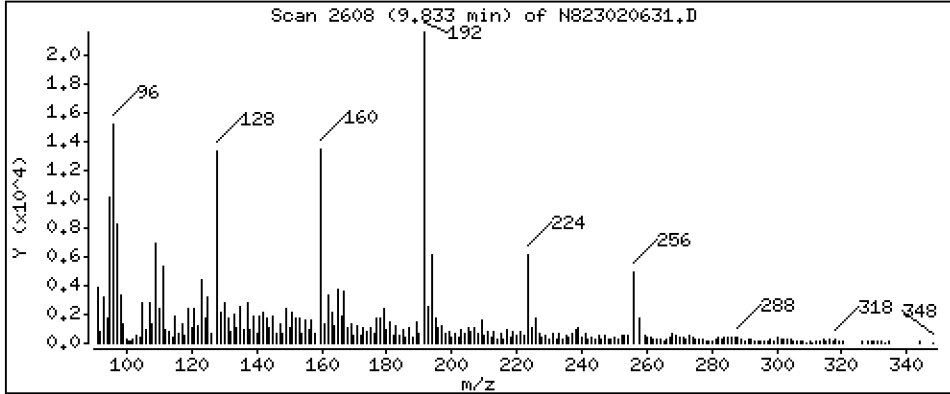
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

19 Carbazole

Concentration: 0.1048 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

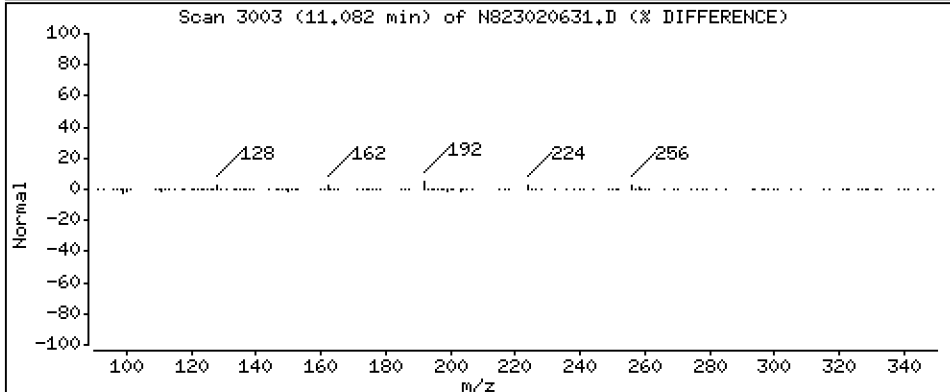
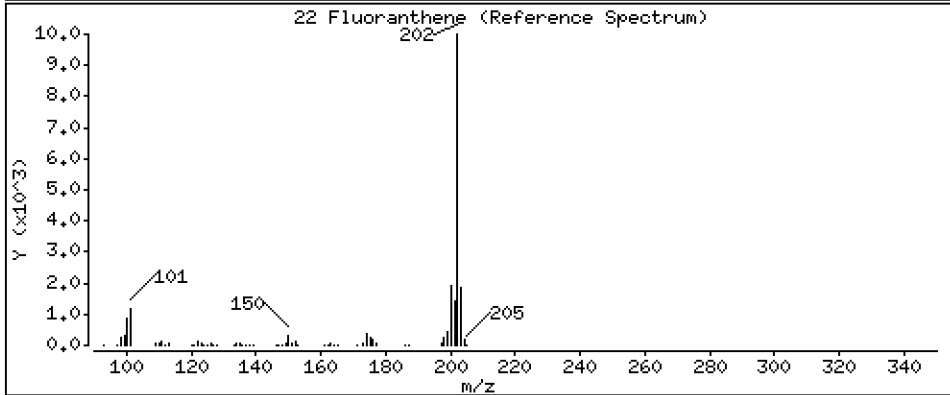
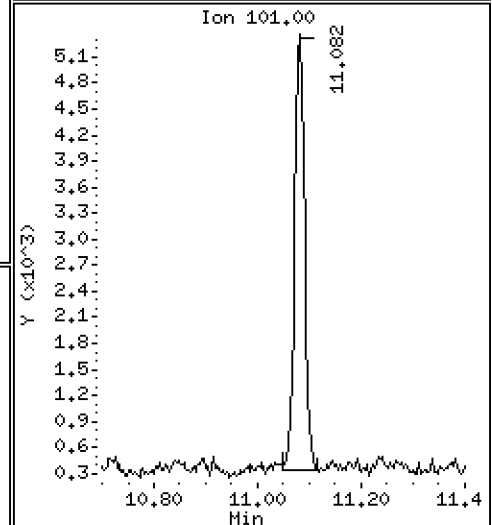
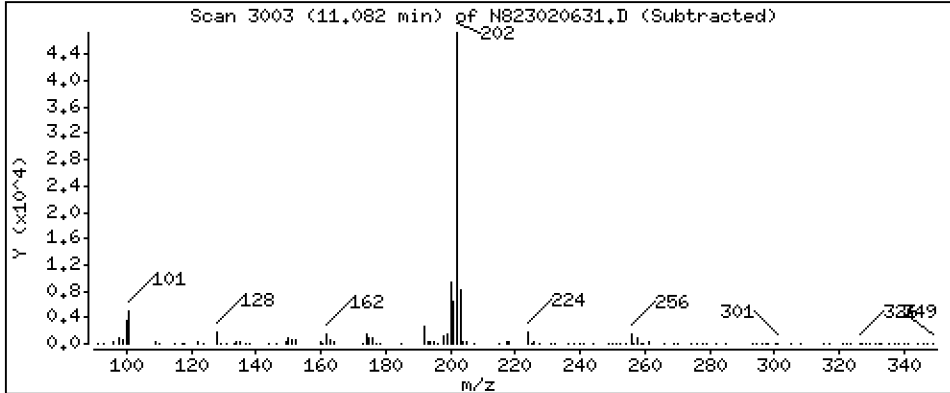
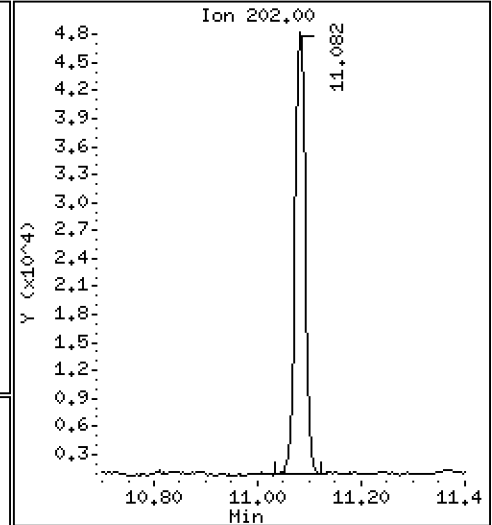
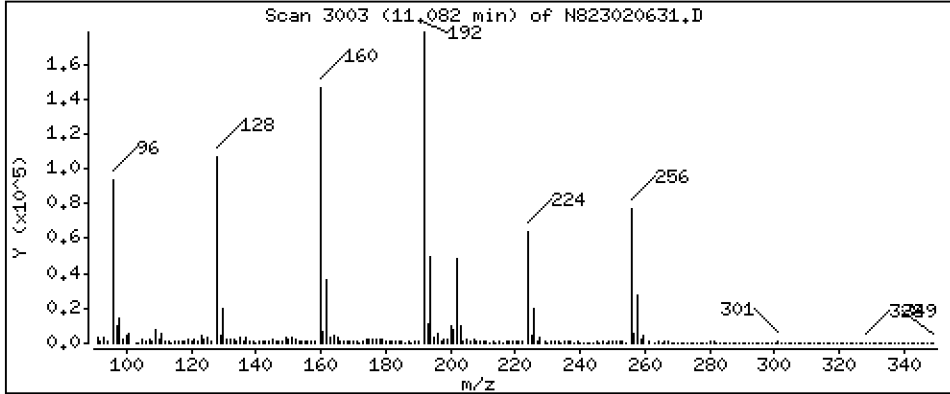
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,422 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

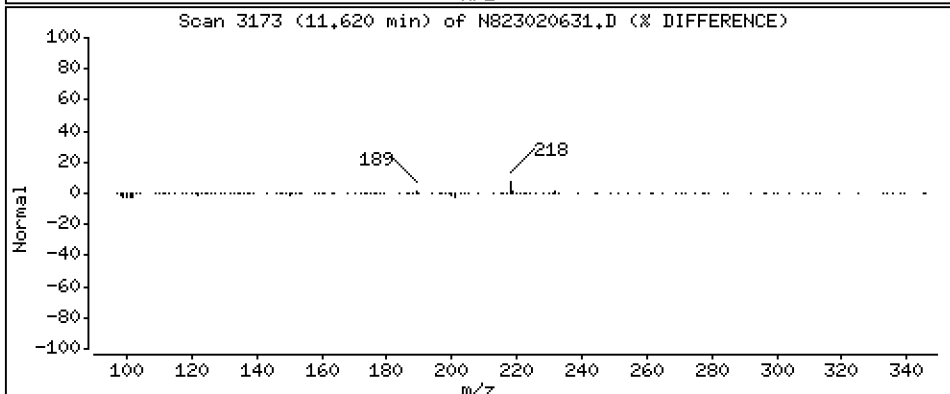
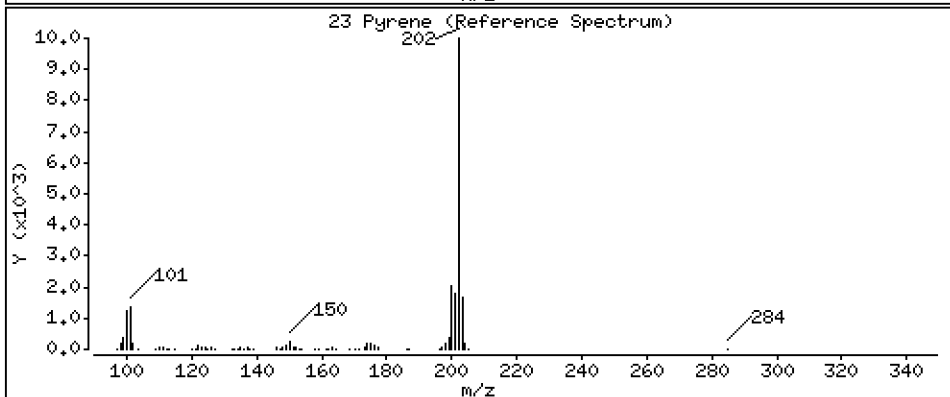
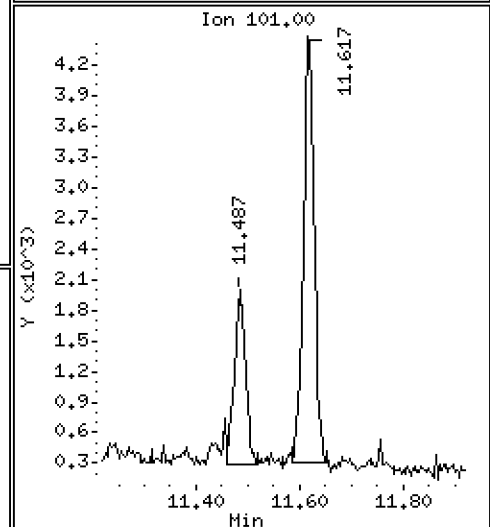
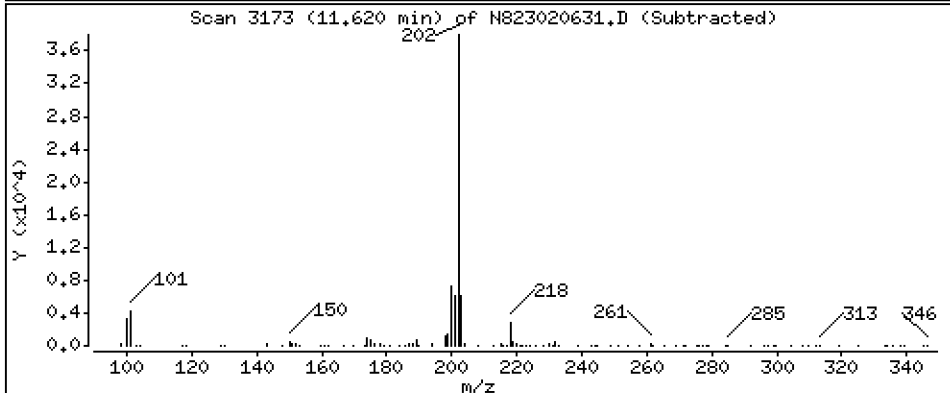
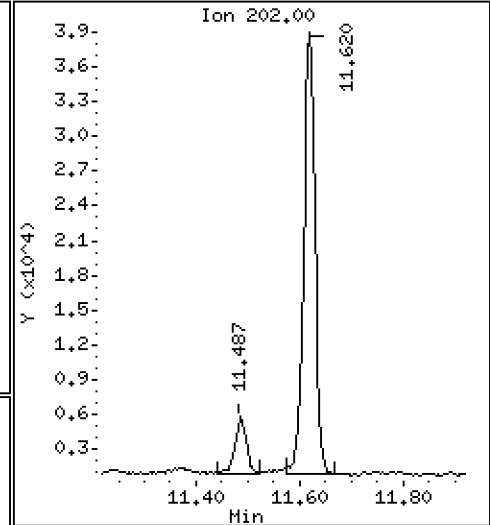
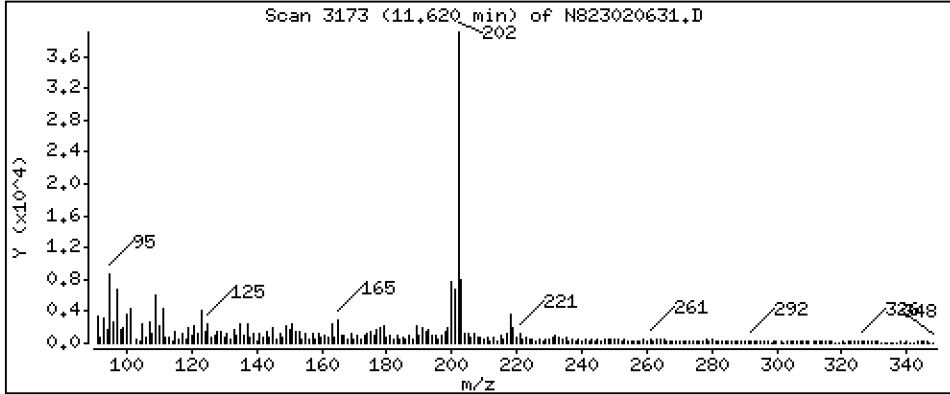
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 4,125 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

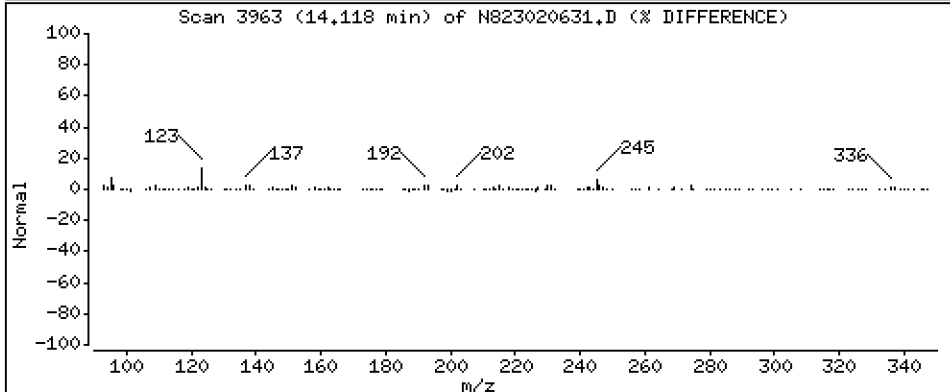
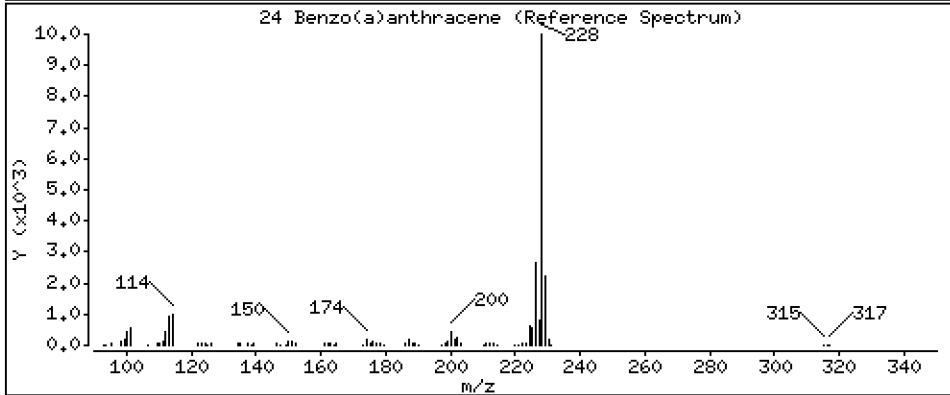
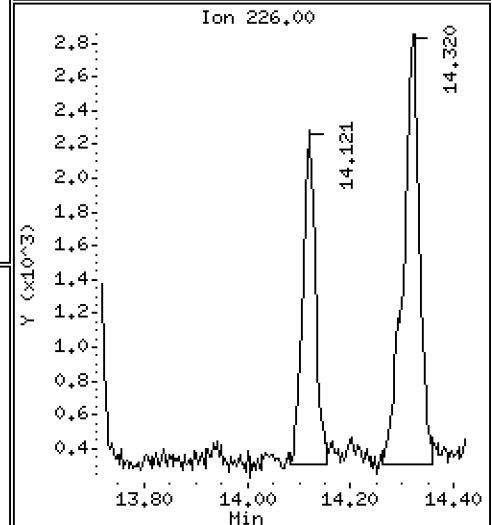
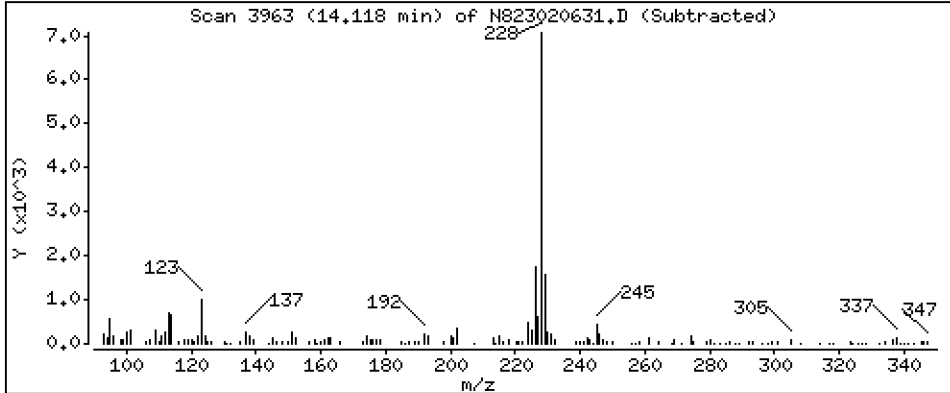
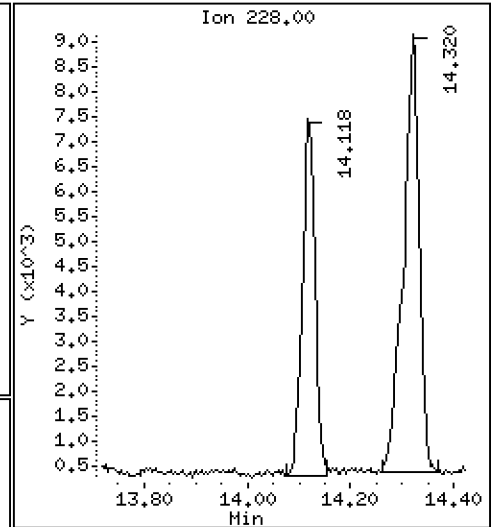
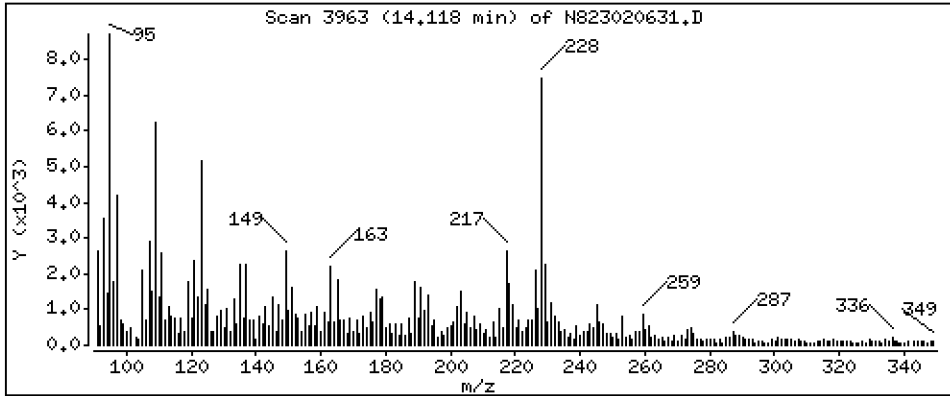
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

24 Benzo(a)anthracene

Concentration: 0,9552 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

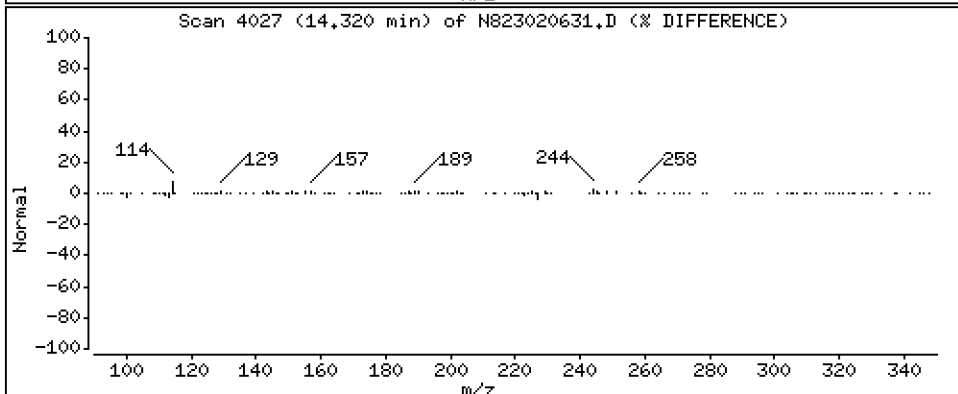
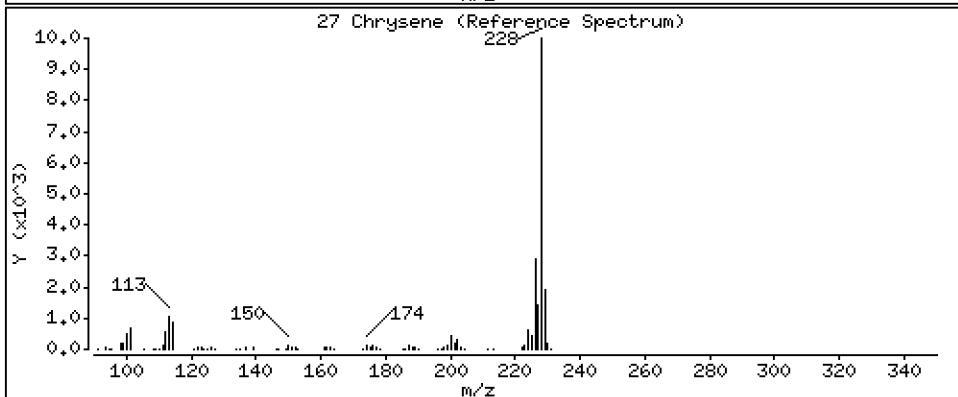
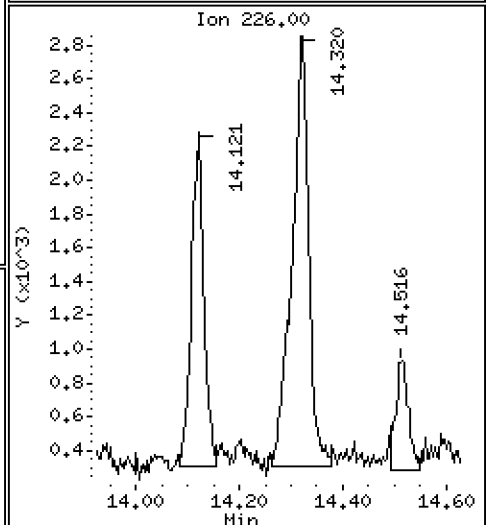
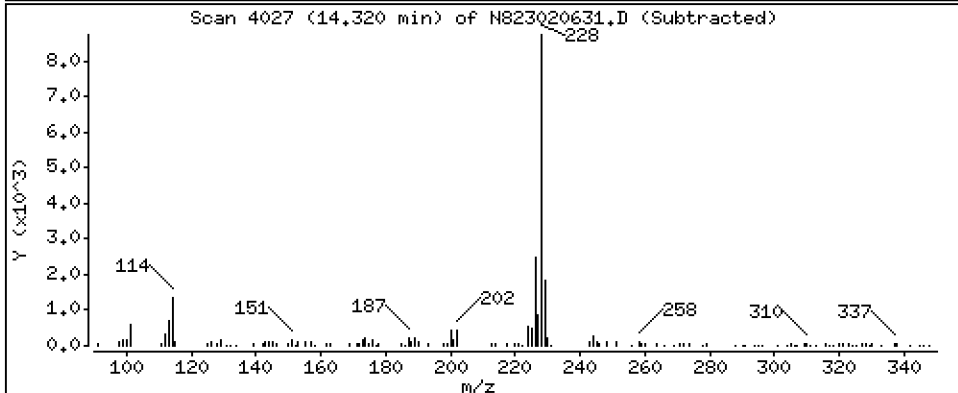
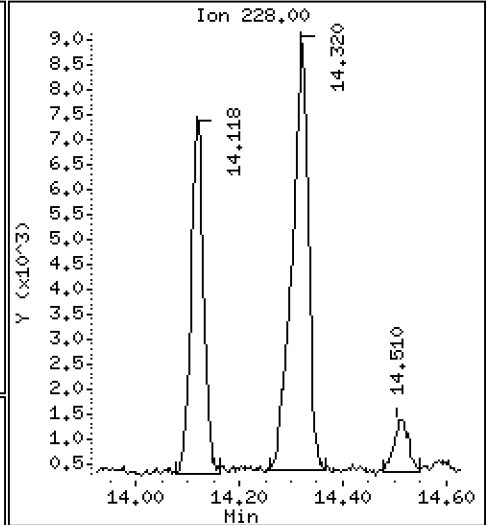
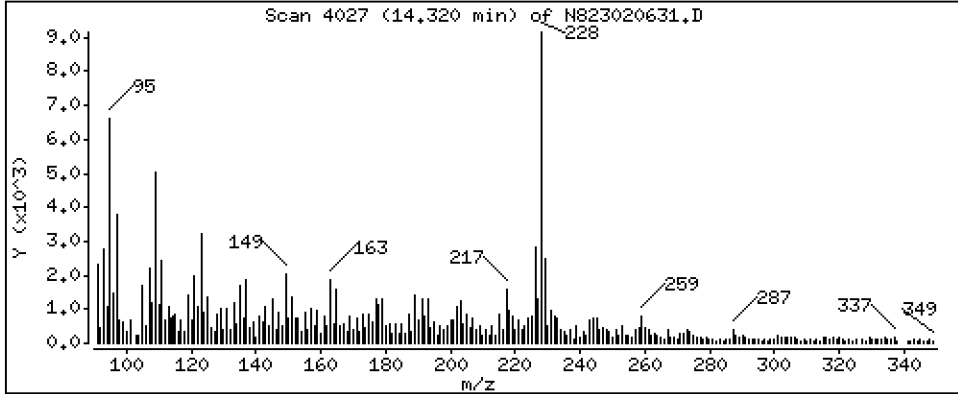
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 1,397 ug/mL

27 Chrysene



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

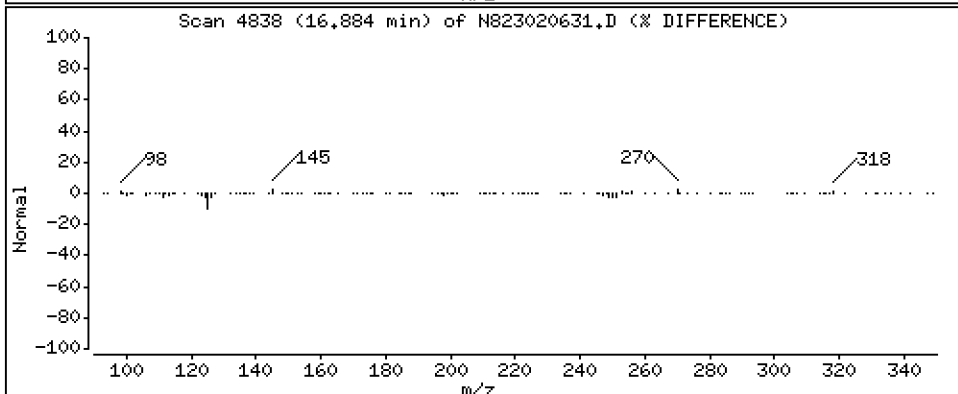
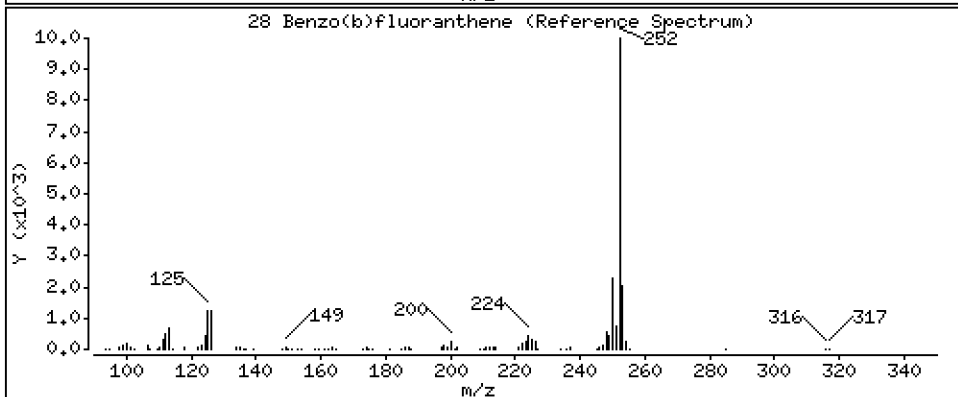
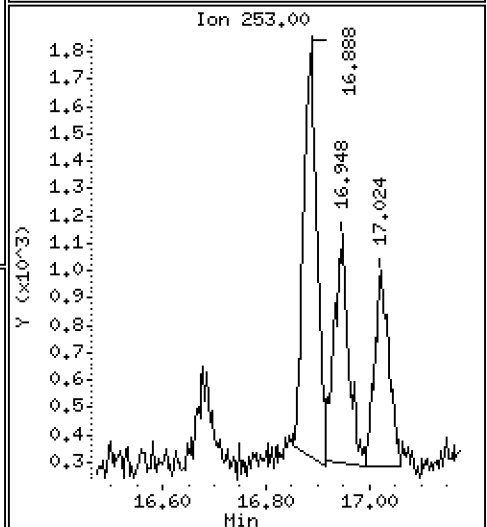
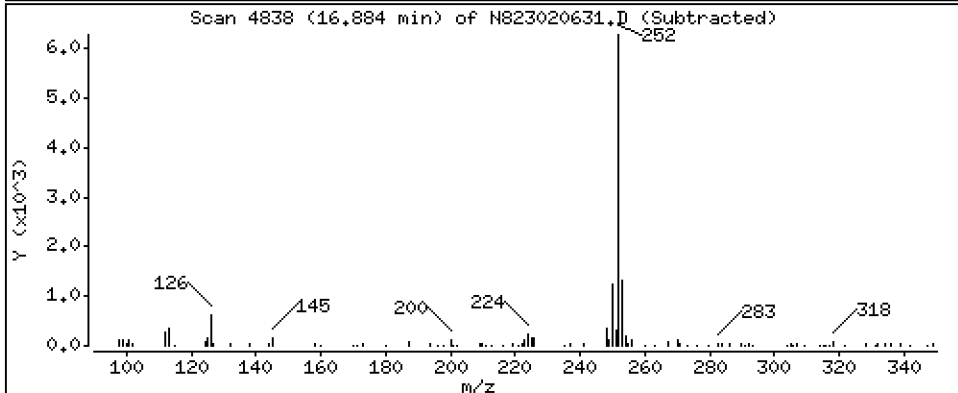
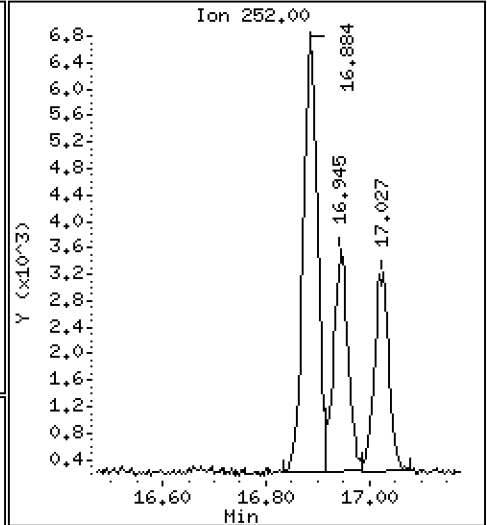
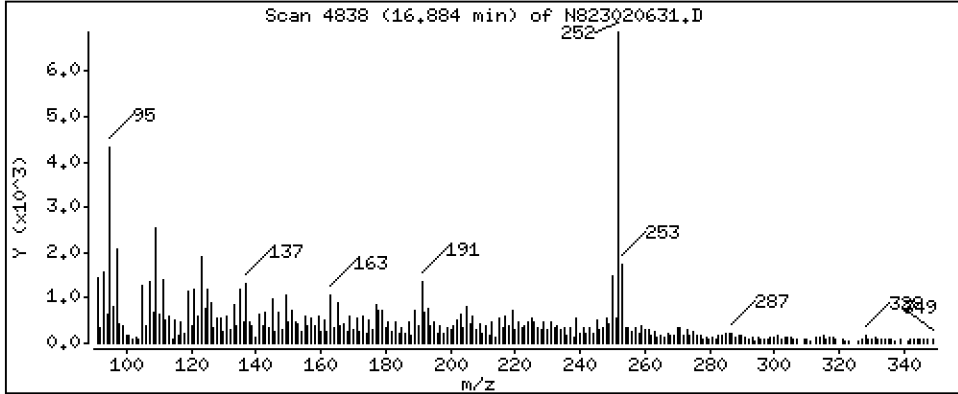
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

28 Benzo(b)fluoranthene

Concentration: 1.082 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

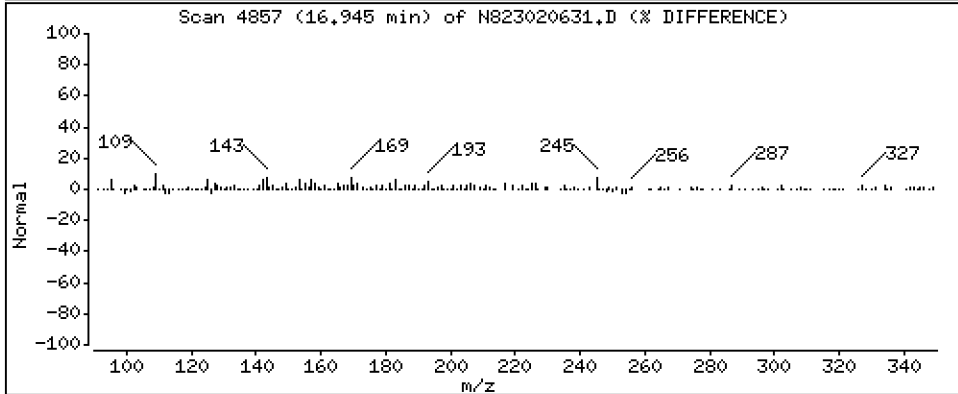
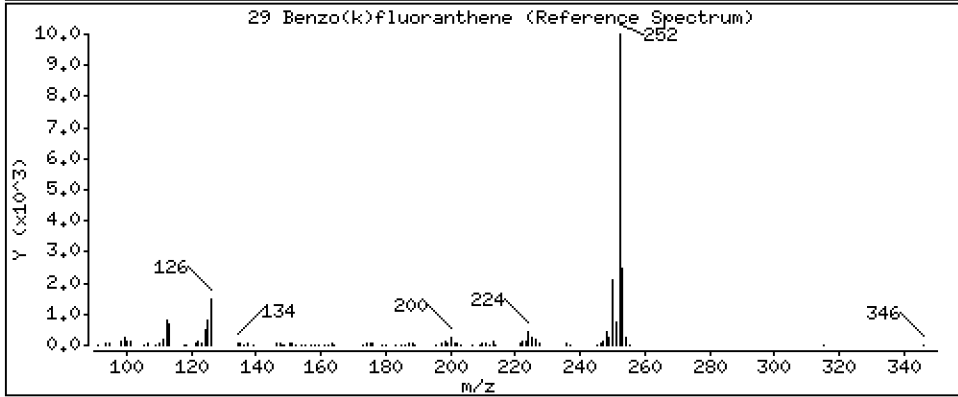
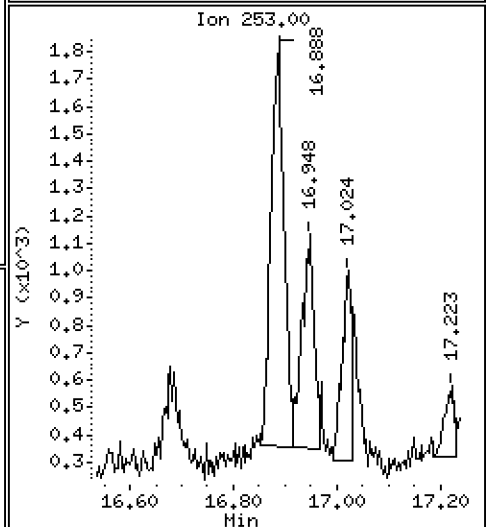
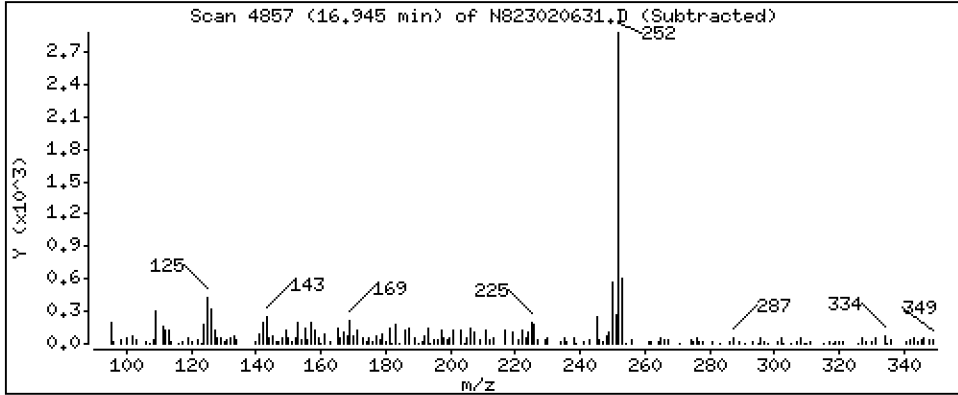
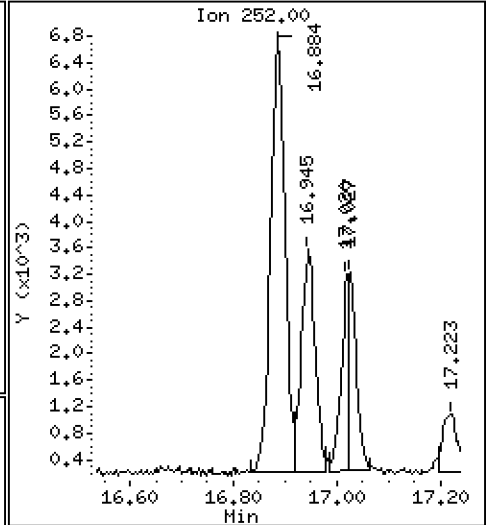
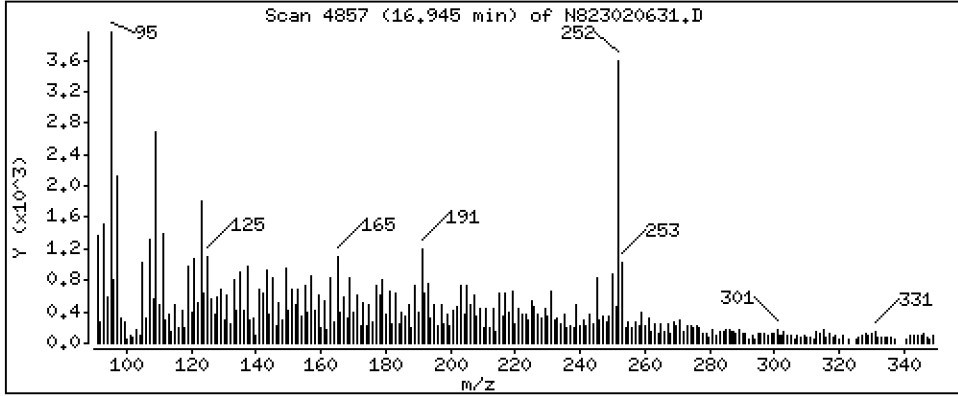
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

29 Benzo(k)fluoranthene

Concentration: 0.5472 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

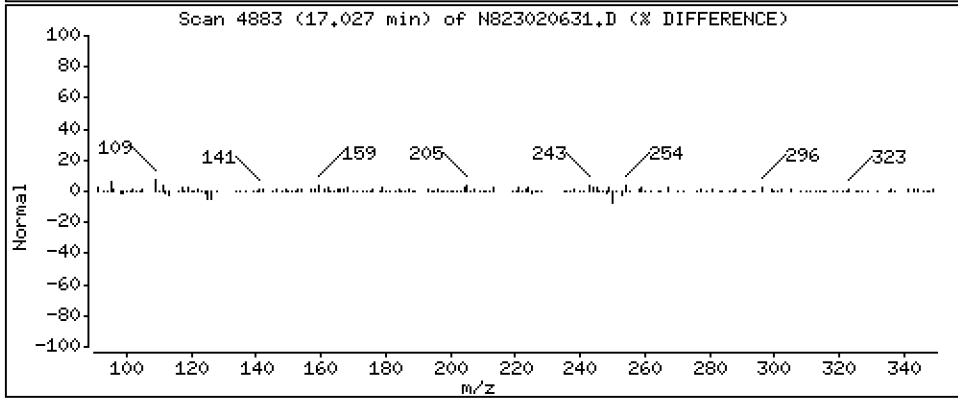
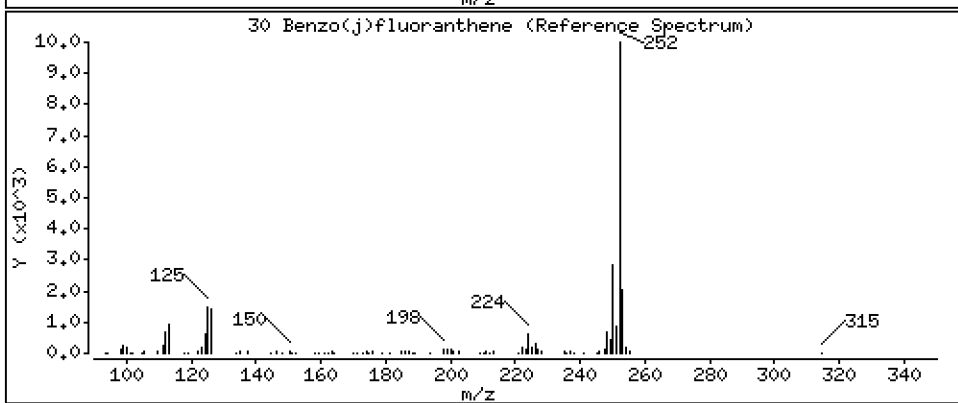
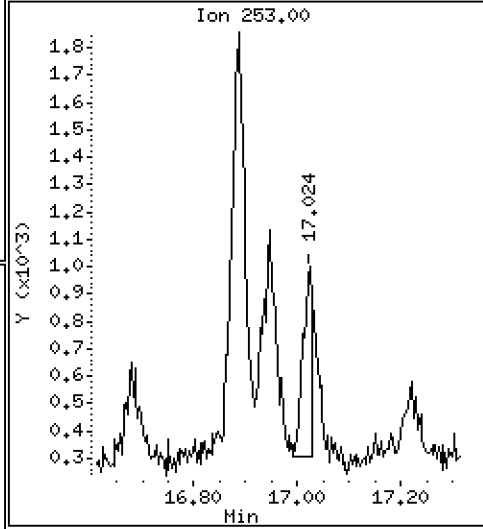
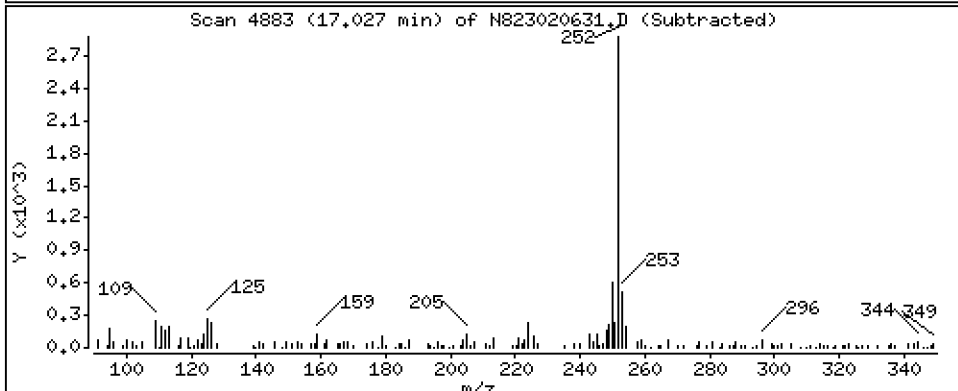
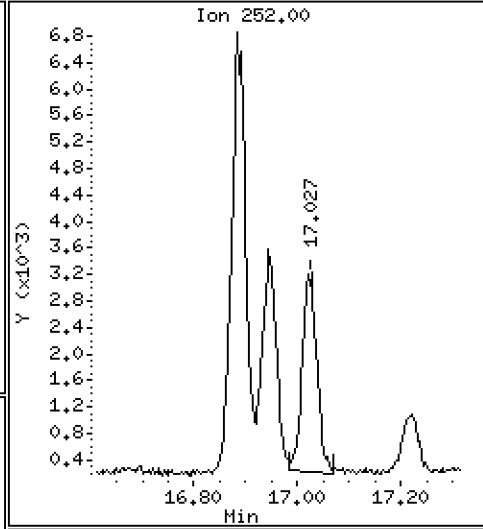
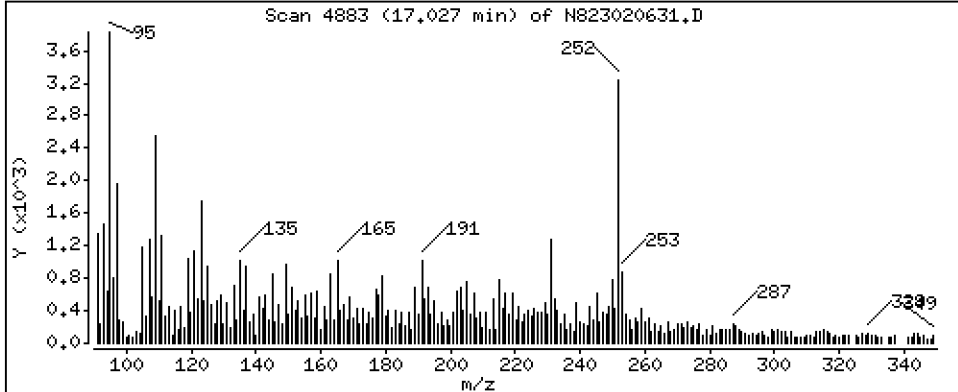
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

30 Benzo(j)fluoranthene

Concentration: 0,5670 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

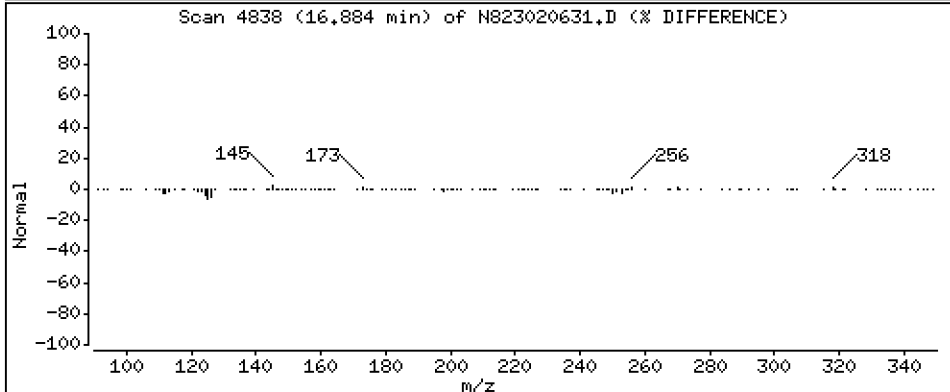
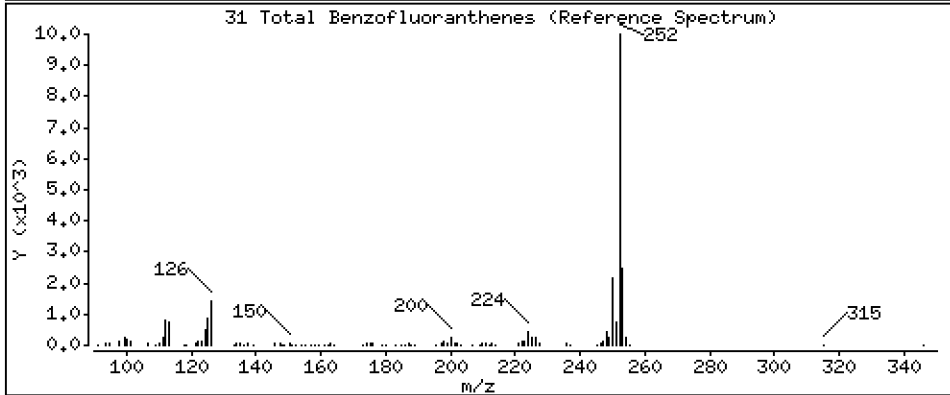
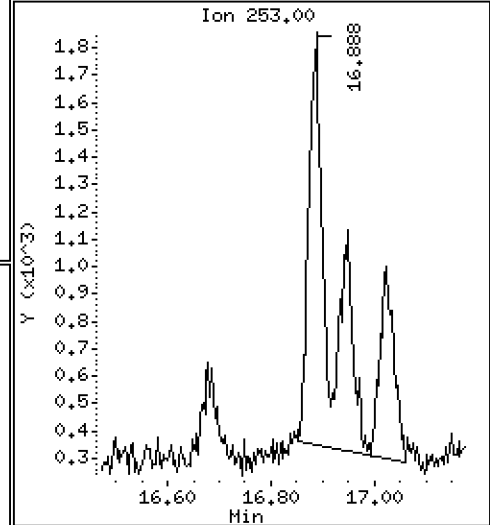
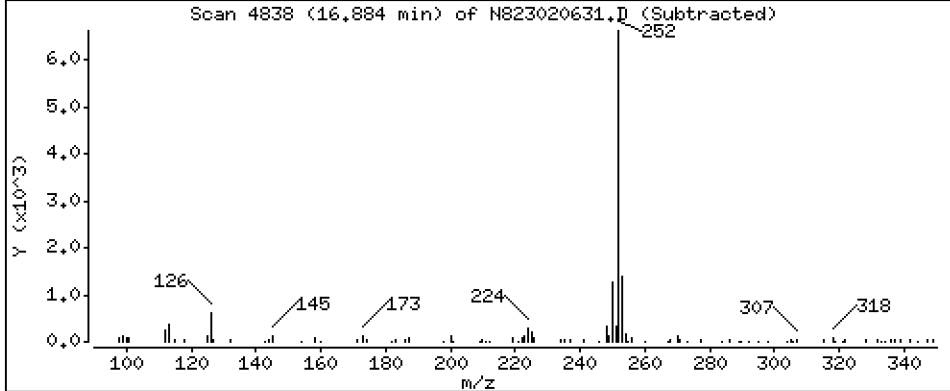
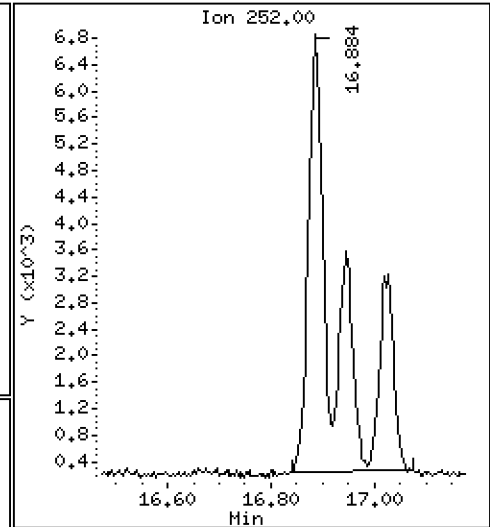
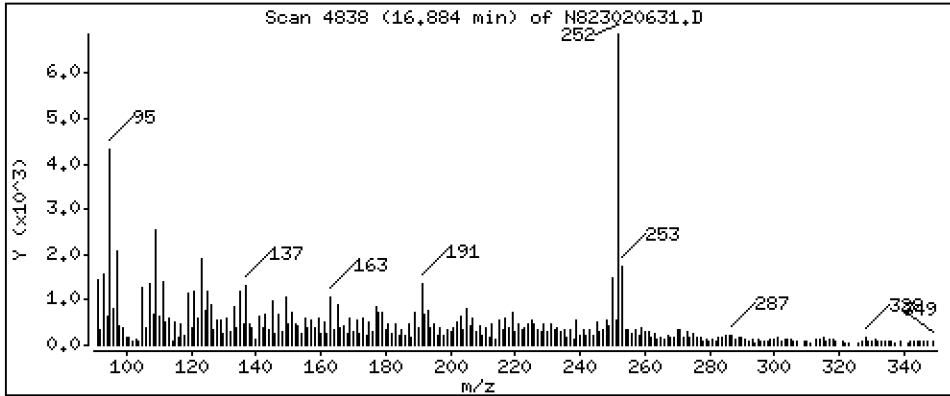
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

31 Total Benzofluoranthenes

Concentration: 2,178 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

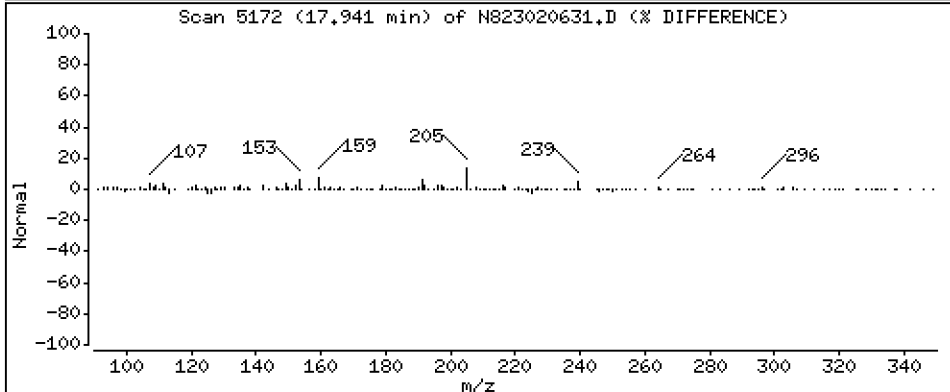
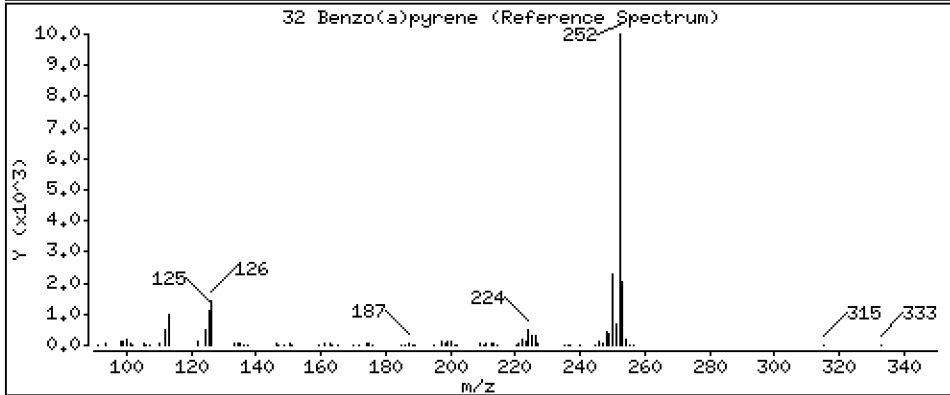
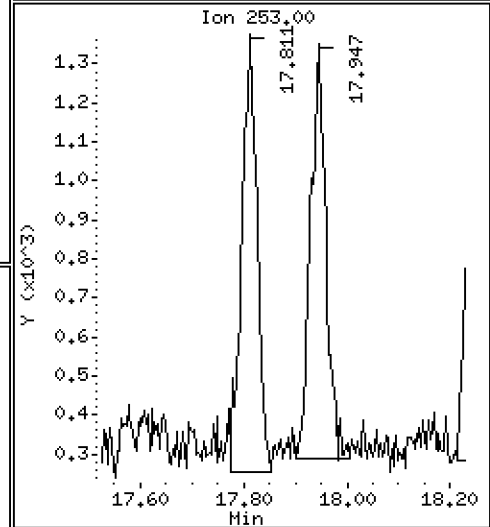
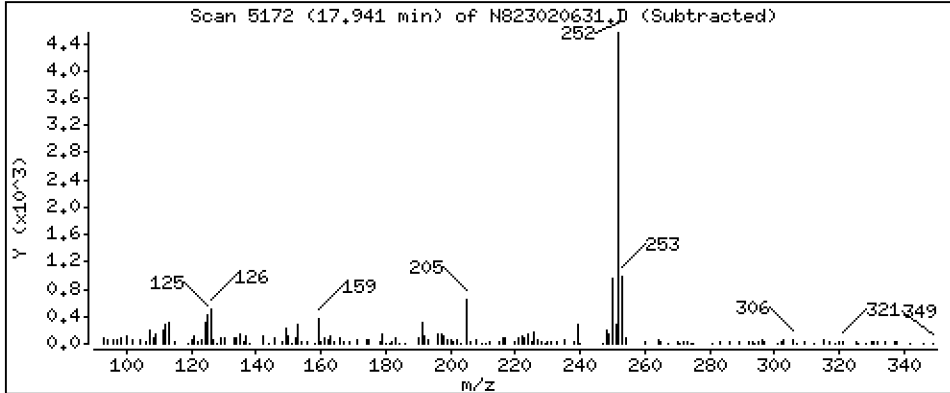
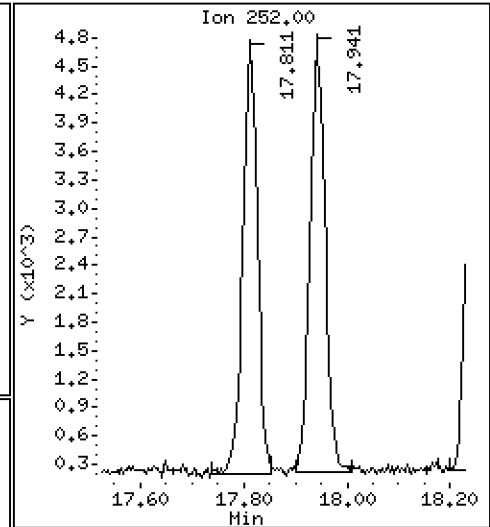
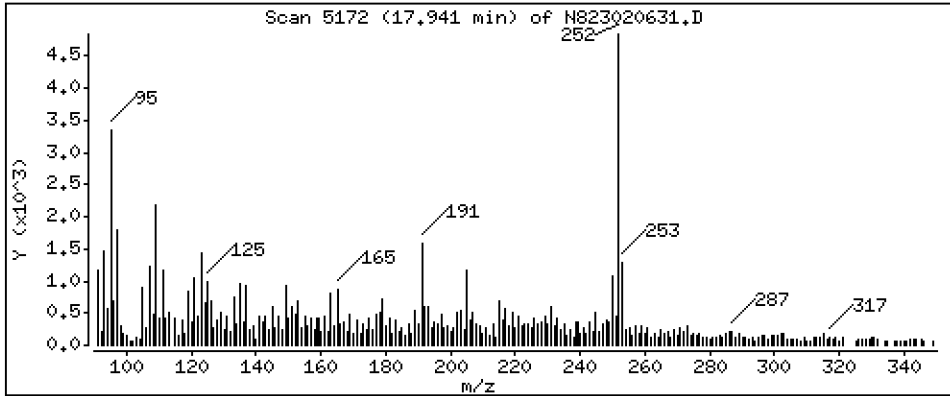
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 0,8978 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

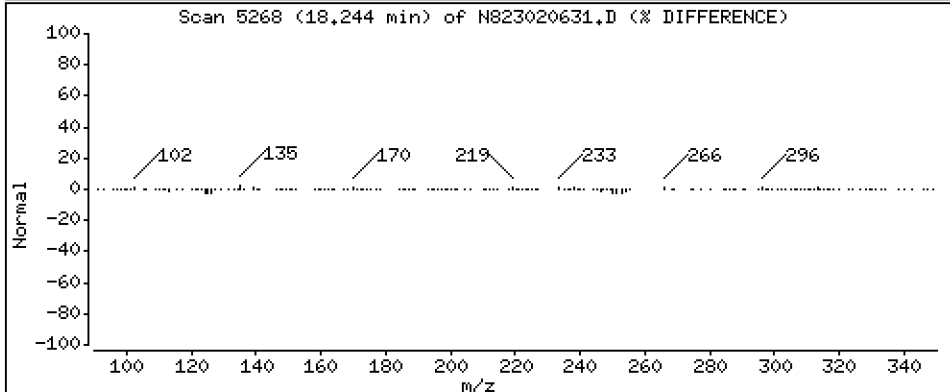
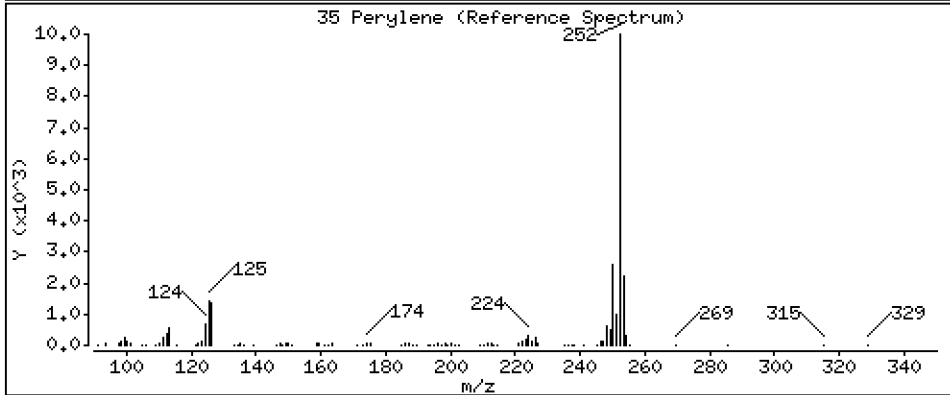
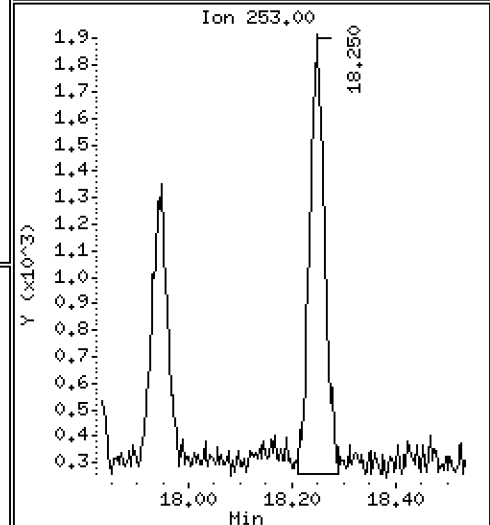
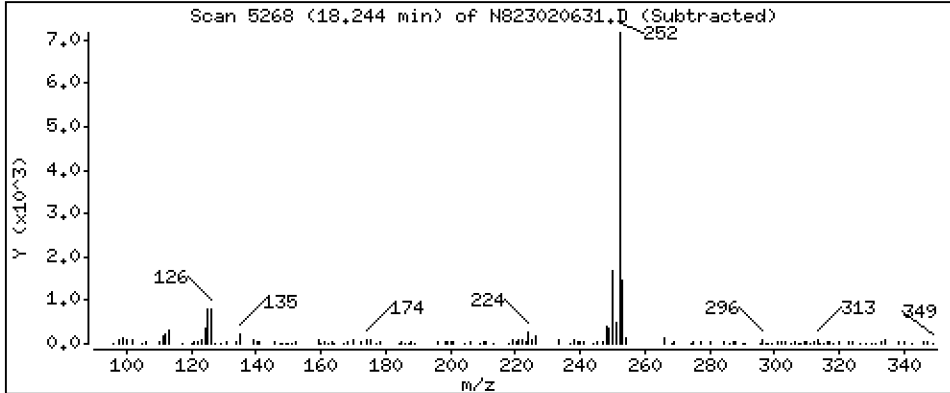
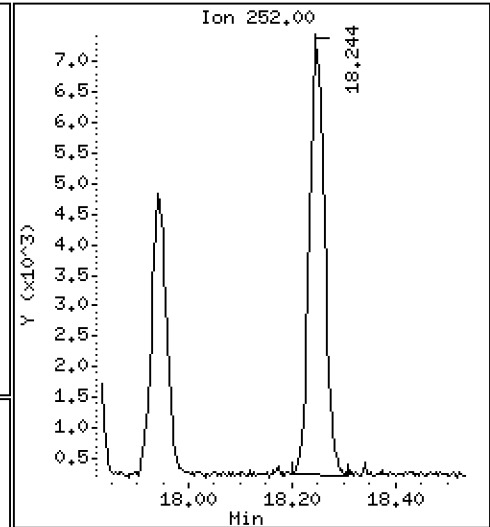
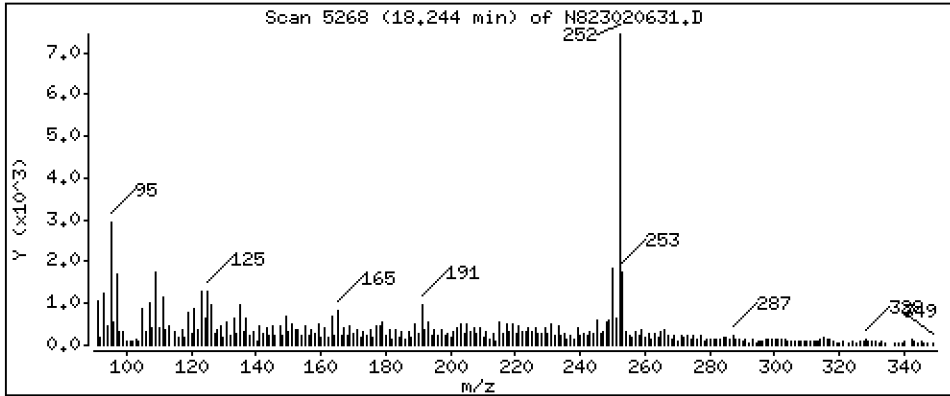
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

35 Perylene

Concentration: 1,313 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

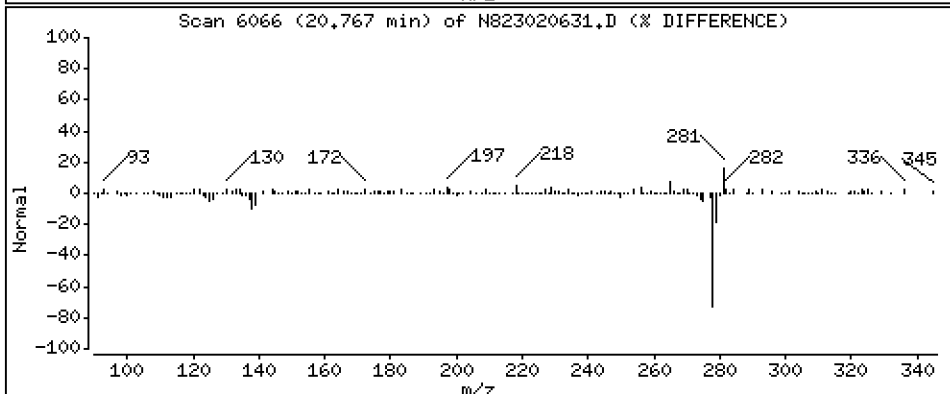
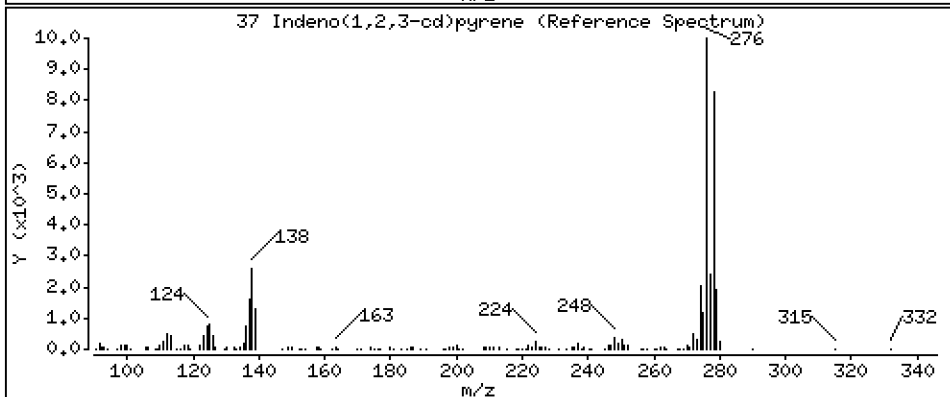
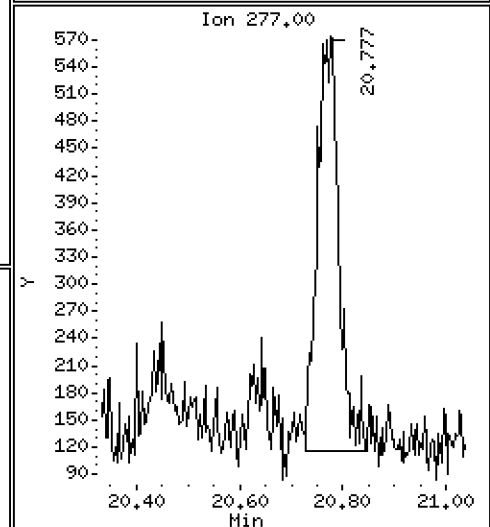
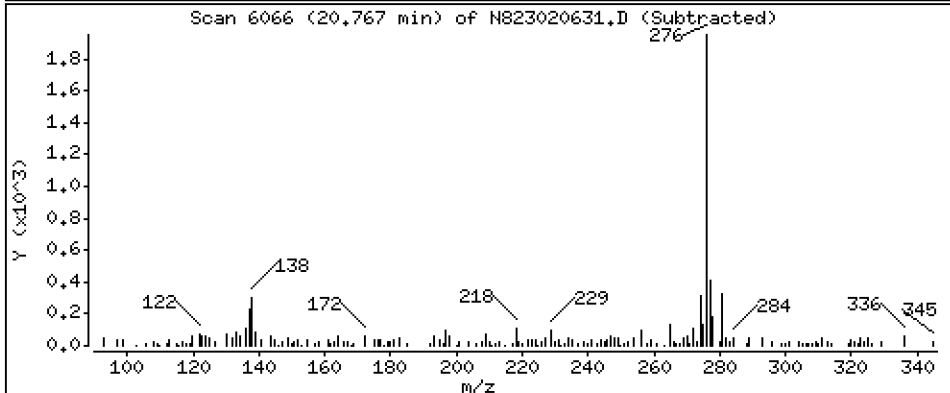
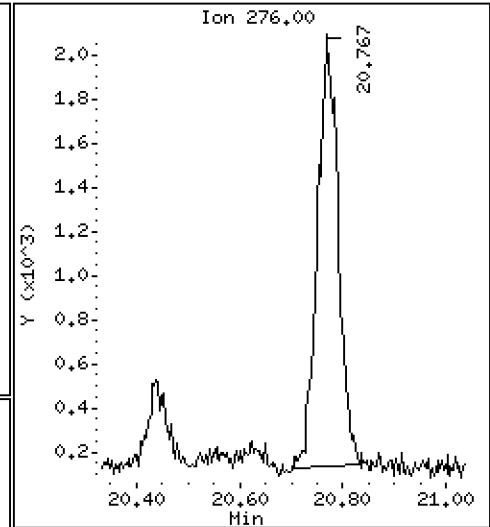
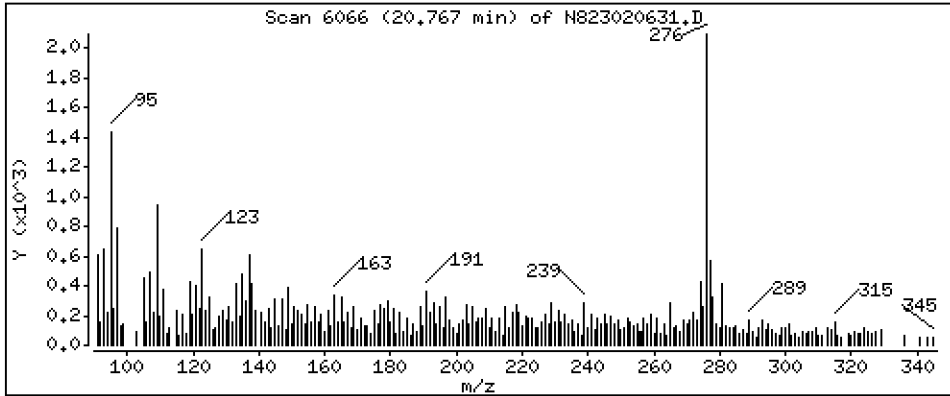
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 0,4660 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

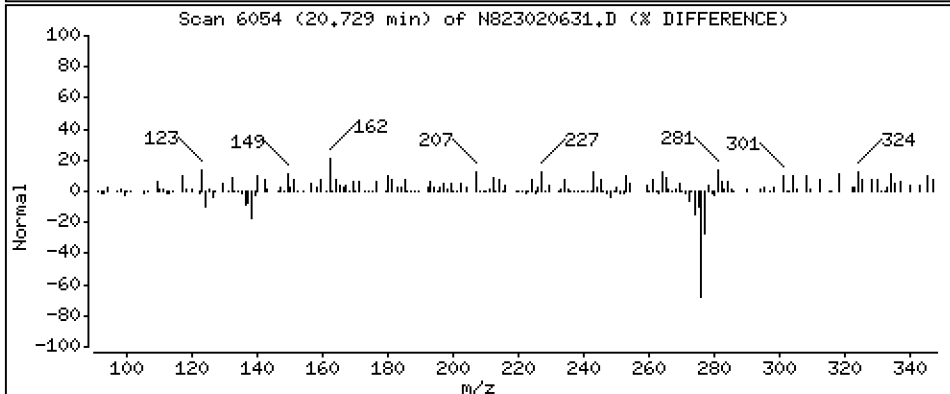
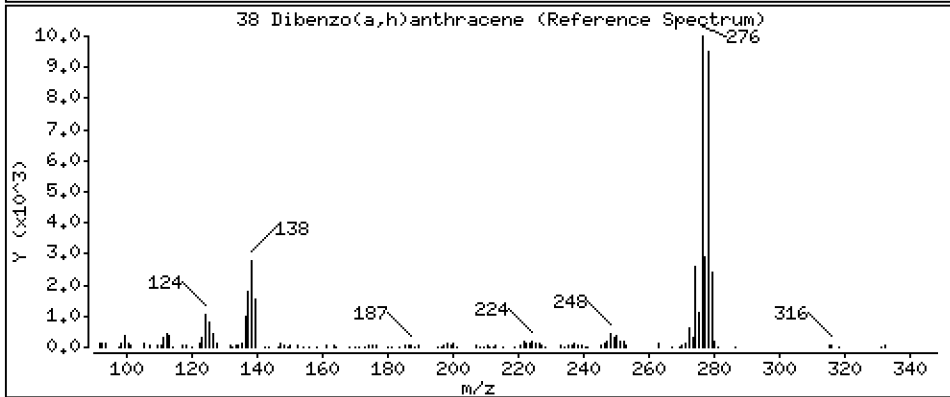
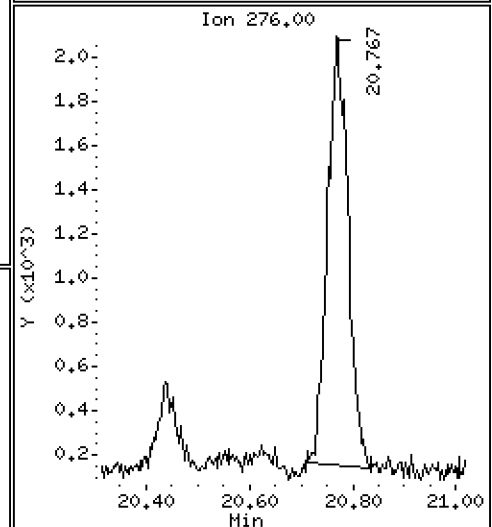
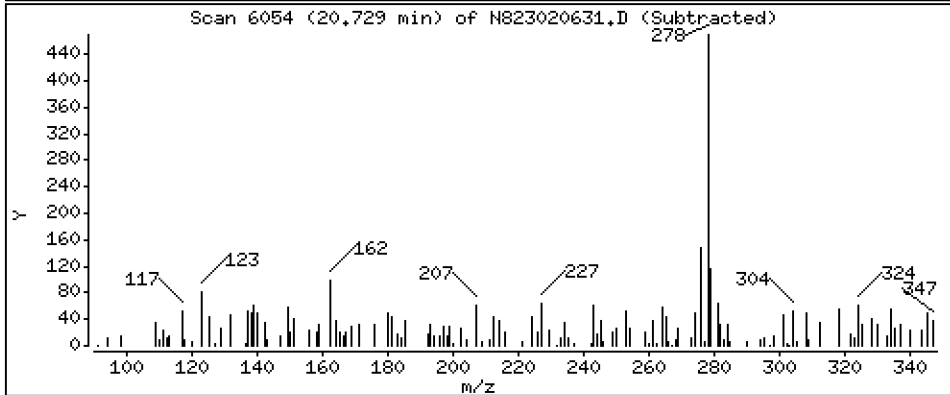
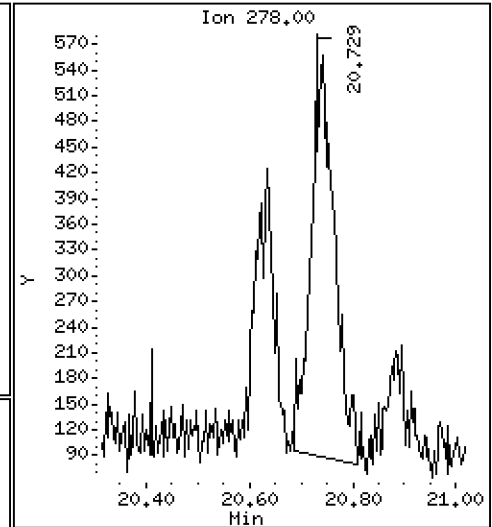
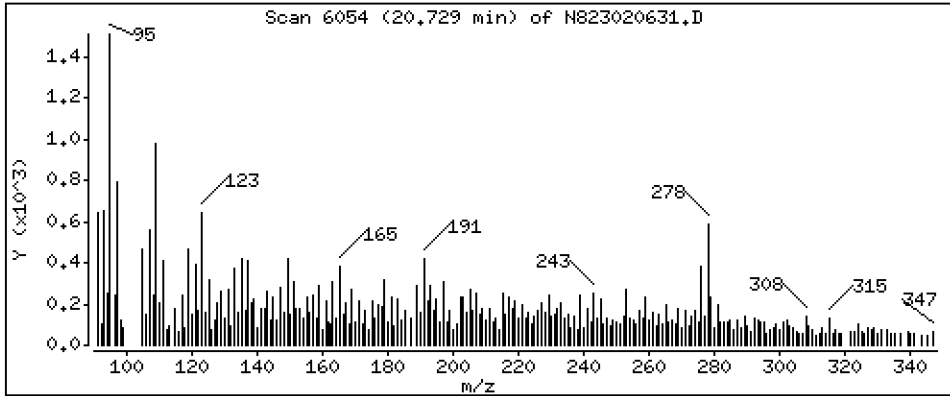
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 0,1460 ug/mL



Date : 07-FEB-2023 02:16

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-08

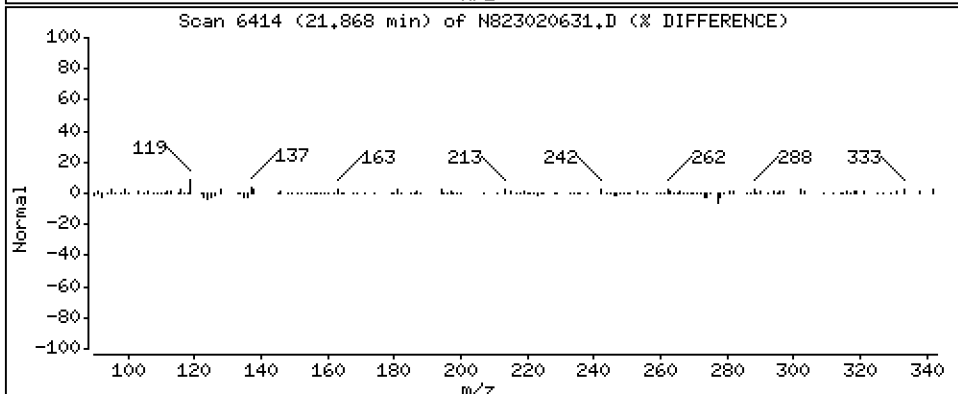
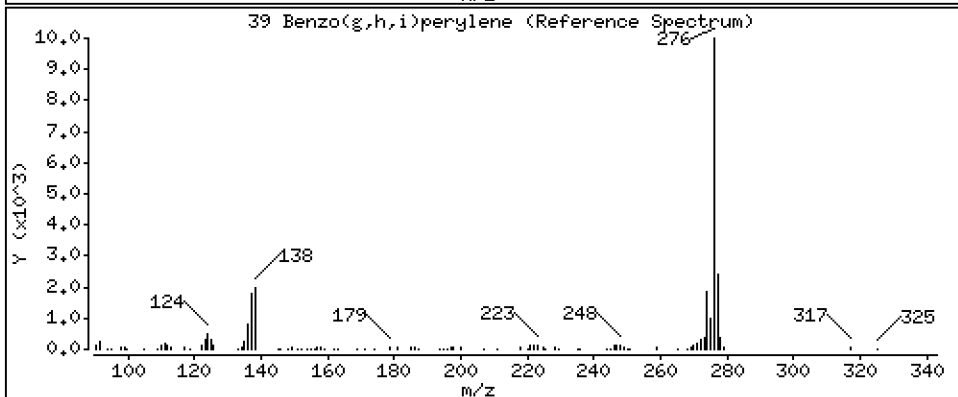
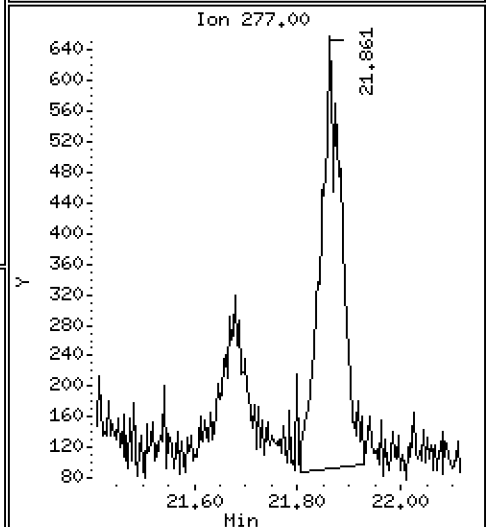
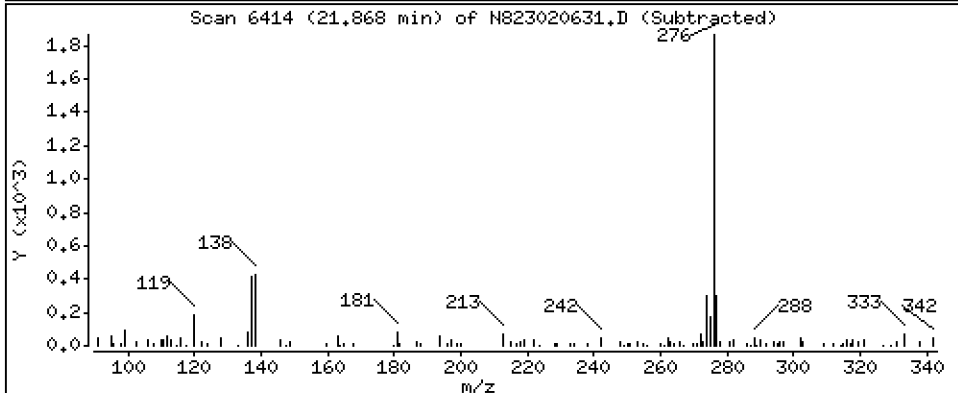
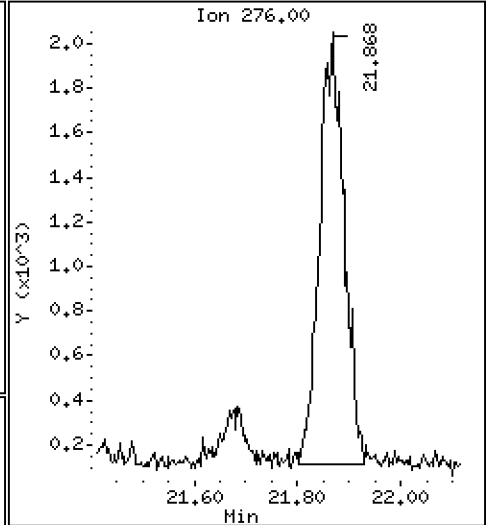
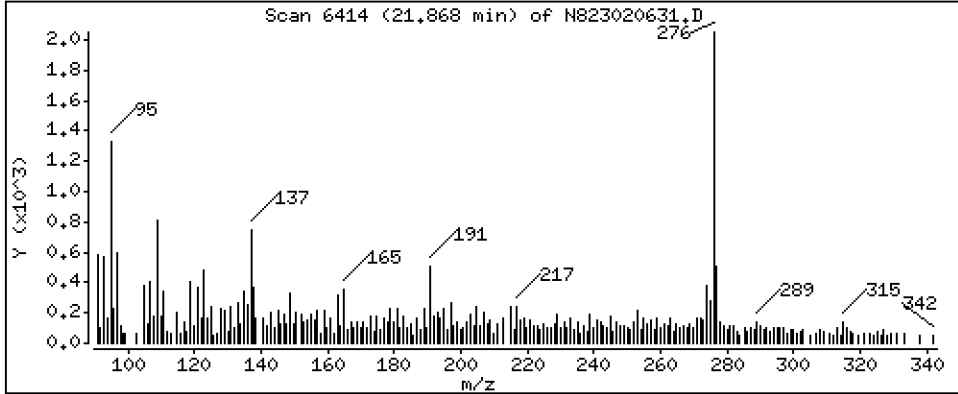
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 0,5927 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020631.D
 Lab Smp Id: 23A0326-08
 Inj Date : 07-FEB-2023 02:16
 Operator : JZ Inst ID: nt8.i
 Smp Info : 23A0326-08
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 31
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PNAXMDL.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
* 1 Naphthalene-d8	136		4.884	4.900	(1.000)	56917	2.00000	
2 Naphthalene	128		4.913	4.928	(1.006)	12507	0.47260	0.4726 (M)
\$ 3 2-Methylnaphthalene-d10	152		5.624	5.634	(1.151)	33092	2.13185	2.132
4 2-Methylnaphthalene	141		5.672	5.681	(1.161)	5509	0.37845	0.3785 (M)
5 1-methylnaphthalene	141		5.871	5.880	(1.202)	3747	0.25363	0.2536 (M)
9 Acenaphthylene	152		7.079	7.082	(0.985)	5280	0.21874	0.2187
* 10 Acenaphthene-d10	164		7.189	7.189	(1.000)	31966	2.00000	
11 Acenaphthene	153		7.240	7.240	(1.007)	3130	0.19353	0.1935 (M)
12 Dibenzofuran	168		7.392	7.392	(1.028)	3868	0.15746	0.1575
14 Fluorene	166		7.872	7.869	(1.095)	3507	0.18381	0.1838 (M)
* 15 Phenanthrene-d10	188		9.238	9.232	(1.000)	50110	2.00000	
16 Phenanthrene	178		9.276	9.267	(1.004)	21293	0.86990	0.8699
17 Anthracene	178		9.317	9.308	(1.009)	9465	0.42566	0.4257
19 Carbazole	167		9.833	9.823	(1.064)	2137	0.10483	0.1048 (M)
22 Fluoranthene	202		11.082	11.050	(1.200)	64528	2.42185	2.422
\$ 21 Fluoranthene-d10	212		11.044	11.009	(1.195)	70000	3.16623	3.166 (M)
23 Pyrene	202		11.619	11.569	(0.816)	58007	4.12549	4.125
24 Benzo(a)anthracene	228		14.117	14.070	(0.991)	12174	0.95525	0.9552
* 25 Chrysene-d12	240		14.247	14.202	(1.000)	22679	2.00000	
27 Chrysene	228		14.320	14.275	(1.005)	18954	1.39707	1.397
28 Benzo(b)fluoranthene	252		16.884	16.824	(0.929)	12793	1.08217	1.082
29 Benzo(k)fluoranthene	252		16.944	16.887	(0.932)	6336	0.54718	0.5472
30 Benzo(j)fluoranthene	252		17.026	16.963	(0.937)	5911	0.56705	0.5670 (M)
31 Total Benzofluoranthenes	252		16.884	16.824	(0.929)	24384	2.17797	2.178 (M)
32 Benzo(a)pyrene	252		17.940	17.877	(0.987)	9340	0.89782	0.8978
* 33 Perylene-d12	264		18.174	18.107	(1.000)	20298	2.00000	(M)
35 Perylene	252		18.244	18.183	(1.004)	14662	1.31339	1.313 (M)
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.634	20.549	(1.135)	23270	2.92587	2.926 (M)
37 Indeno(1,2,3-cd)pyrene	276		20.767	20.684	(1.143)	5523	0.46602	0.4660 (M)
38 Dibenzo(a,h)anthracene	278		20.729	20.666	(1.141)	1489	0.14599	0.1460 (M)
39 Benzo(g,h,i)perylene	276		21.867	21.763	(1.203)	6364	0.59267	0.5927 (M)

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020631.D Calibration Time: 15:15
 Lab Smp Id: 23A0326-08
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	56917	28.38
10 Acenaphthene-d10	26127	13064	52254	31966	22.35
15 Phenanthrene-d10	47424	23712	94848	50110	5.66
25 Chrysene-d12	36794	18397	73588	22679	-38.36
33 Perylene-d12	36636	18318	73272	20298	-44.60

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.32
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	0.00
15 Phenanthrene-d10	9.23	8.73	9.73	9.24	0.07
25 Chrysene-d12	14.20	13.70	14.70	14.25	0.31
33 Perylene-d12	18.11	17.61	18.61	18.17	0.37

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

REVIEW SUMMARY FOR FILE - N823020631.D

Lab ID: 23A0326-08

nt8.i, 20230206A.b\FSIMPNA230119.m, 07-FEB-2023 02:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

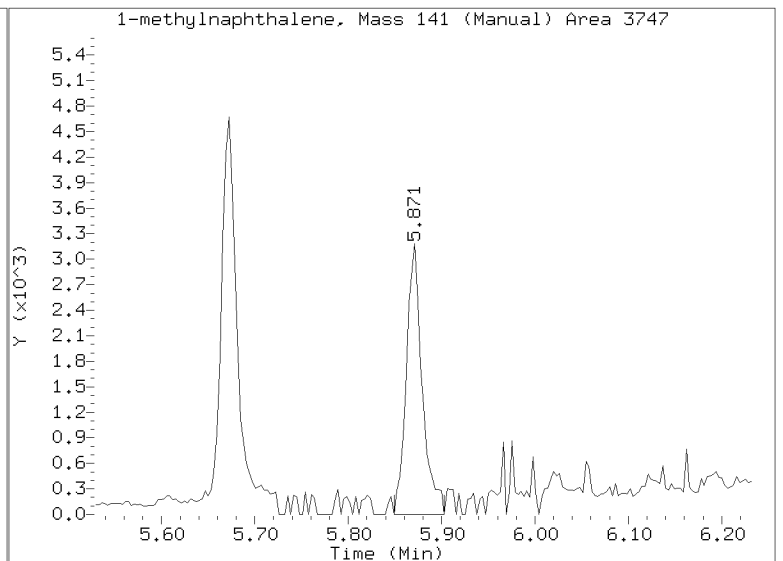
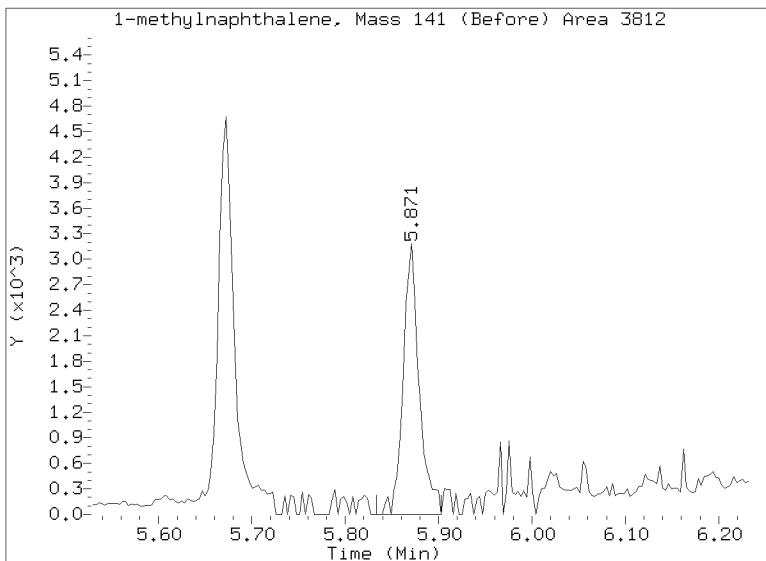
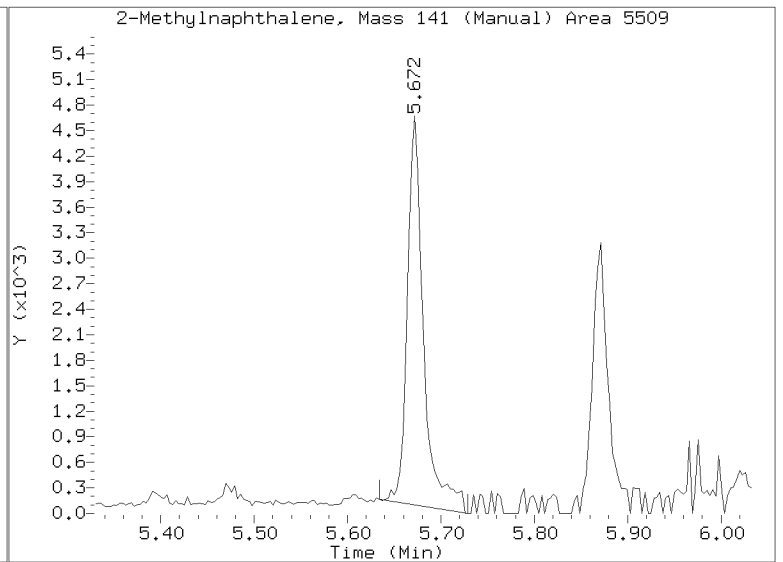
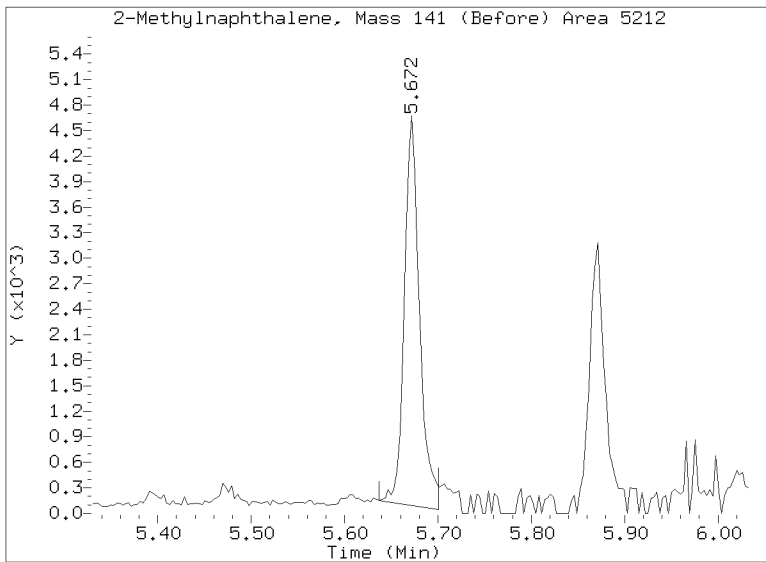
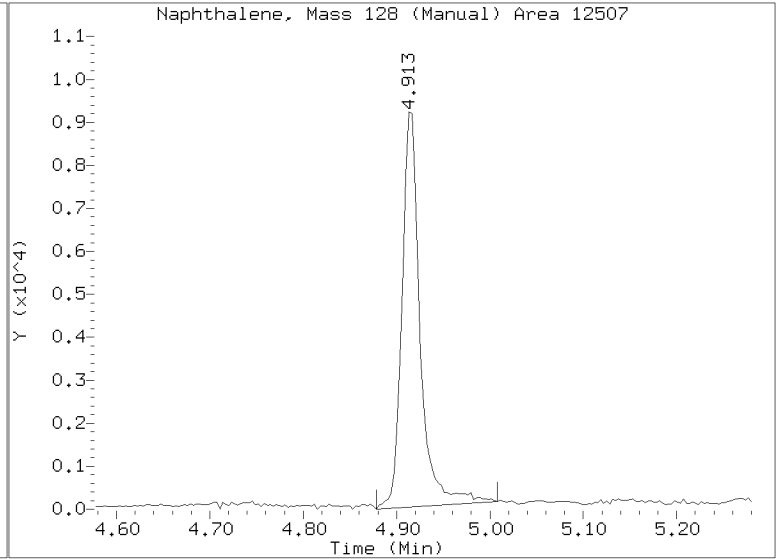
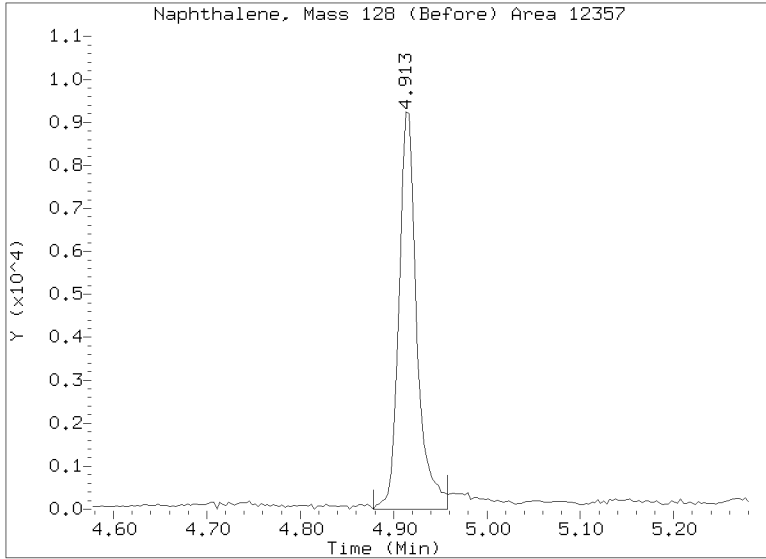
No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

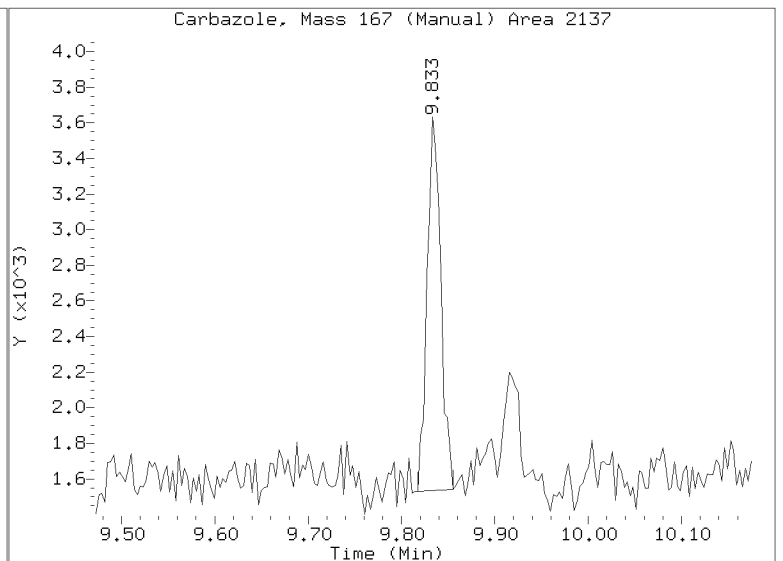
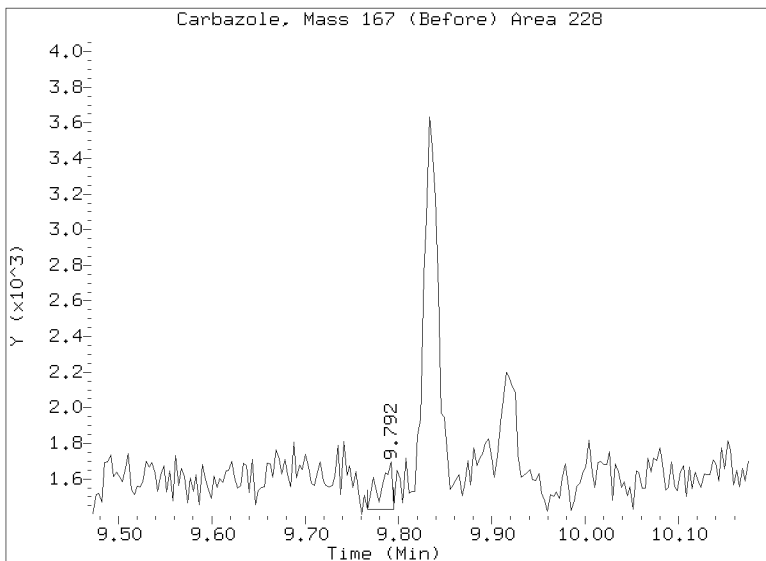
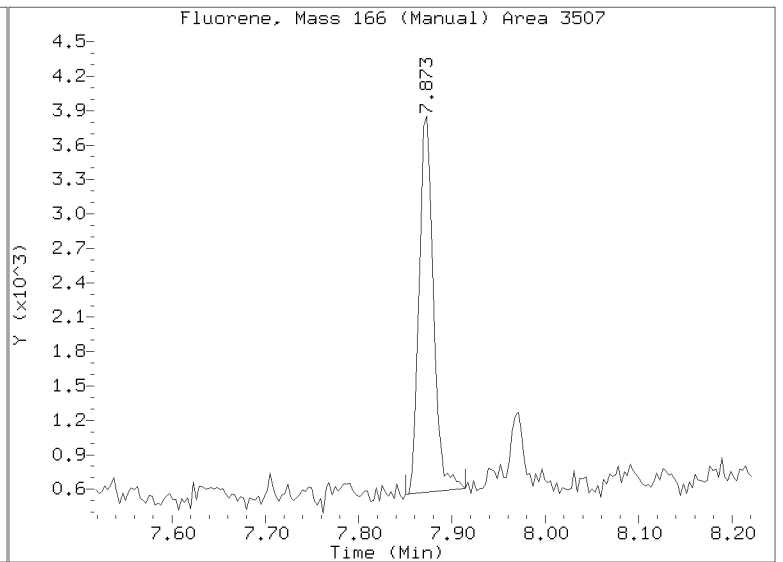
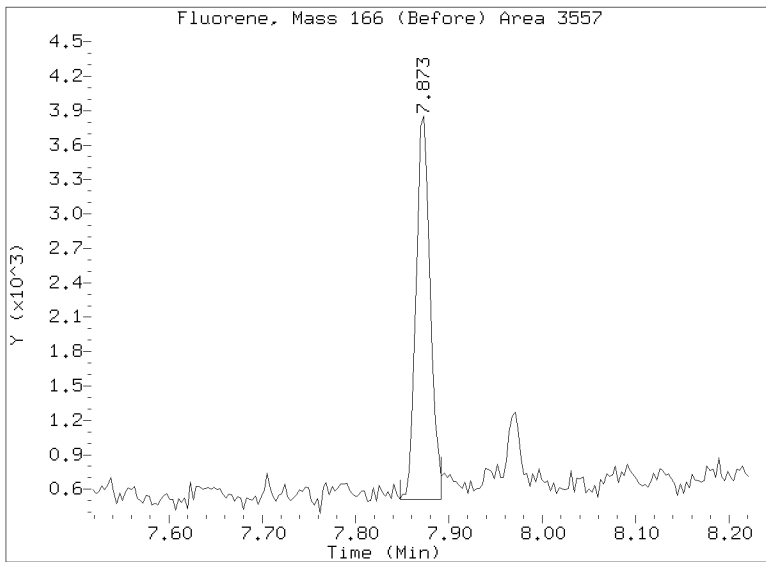
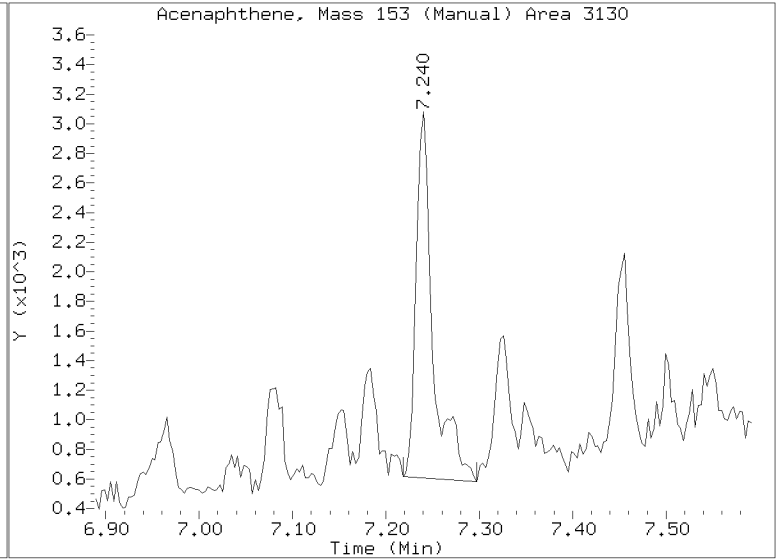
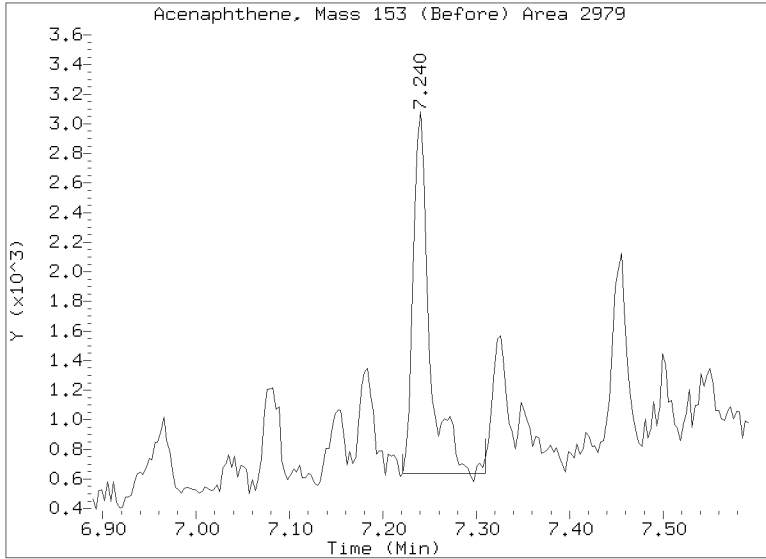
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020631.D
Injection Date: 07-FEB-2023 02:16
Lab ID:23A0326-08 Client ID:
Report Date: 02/07/2023 19:31



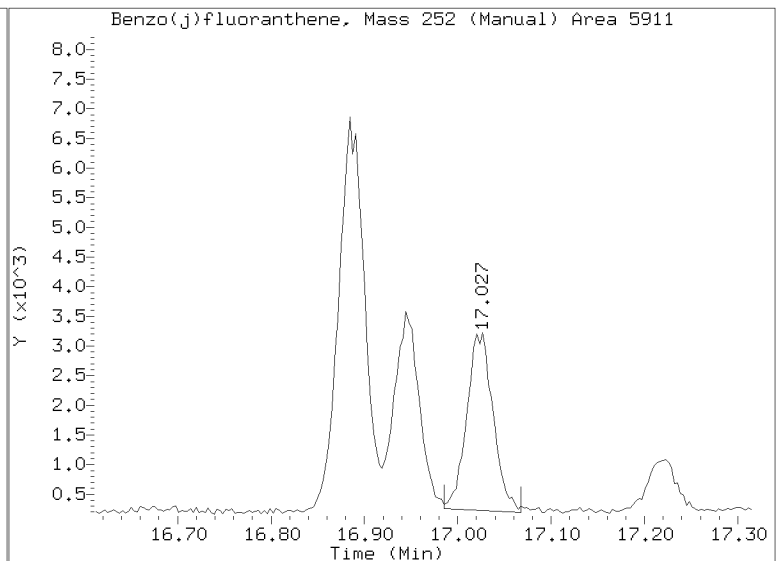
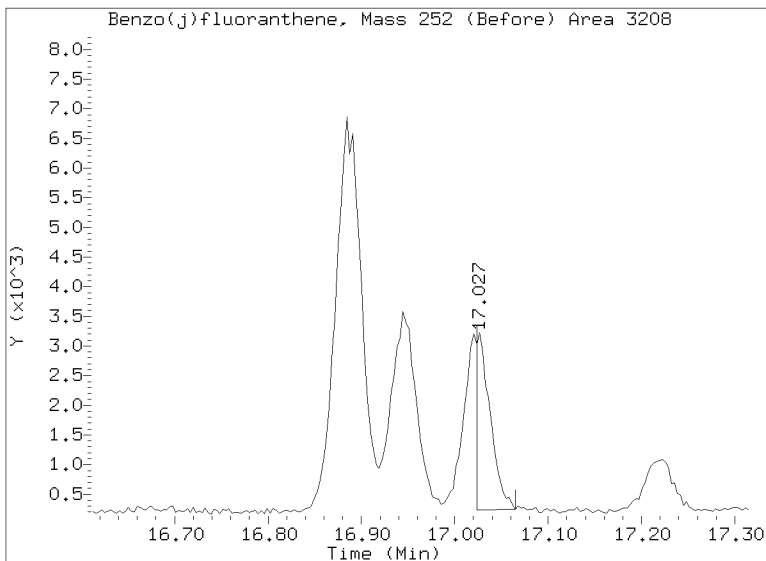
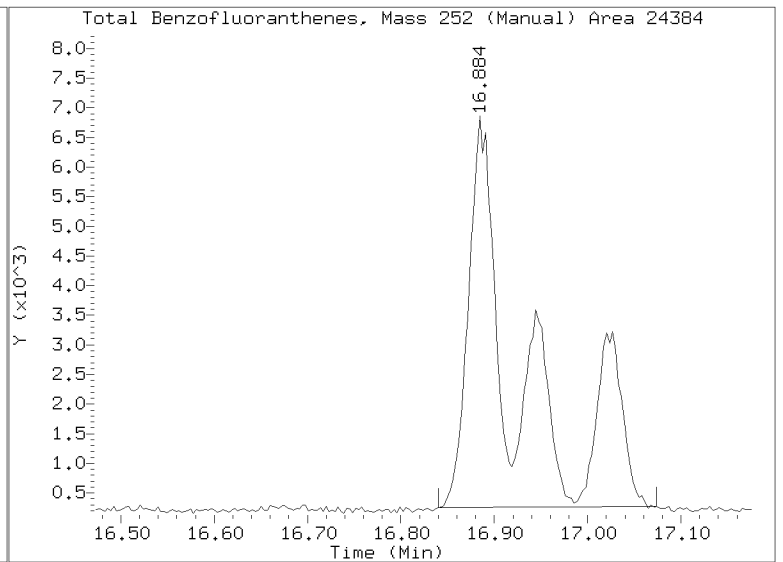
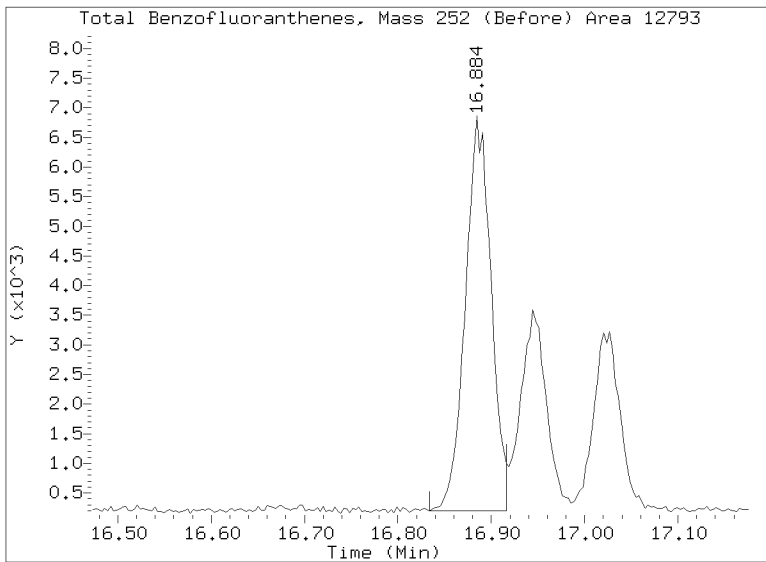
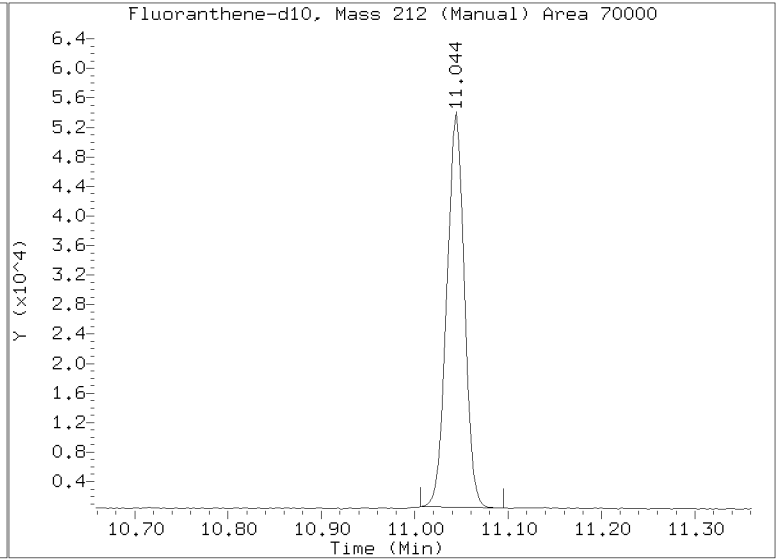
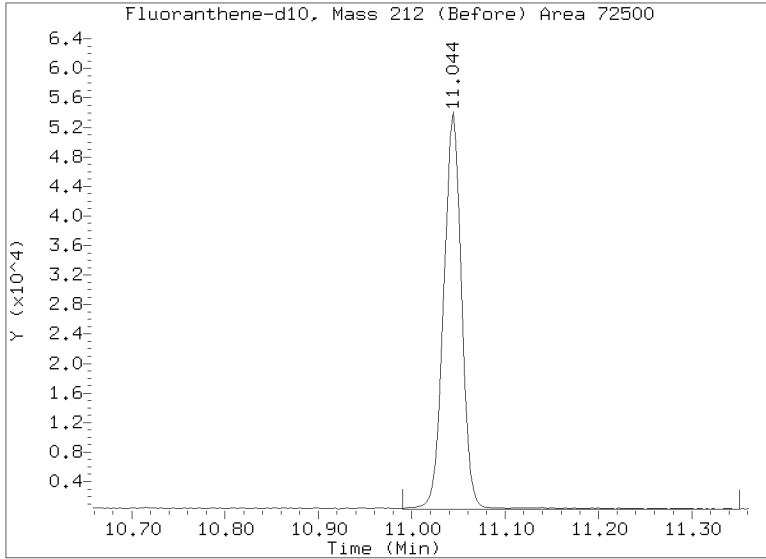
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020631.D
Injection Date: 07-FEB-2023 02:16
Lab ID:23A0326-08 Client ID:
Report Date: 02/07/2023 19:31



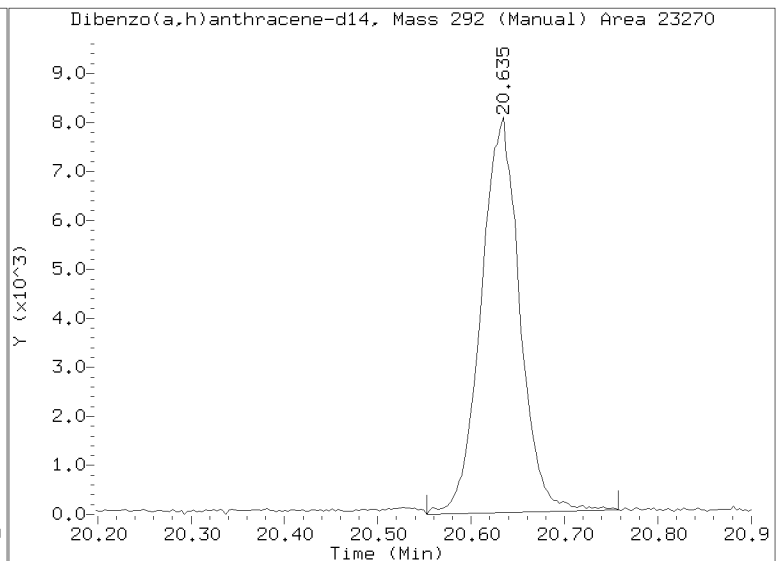
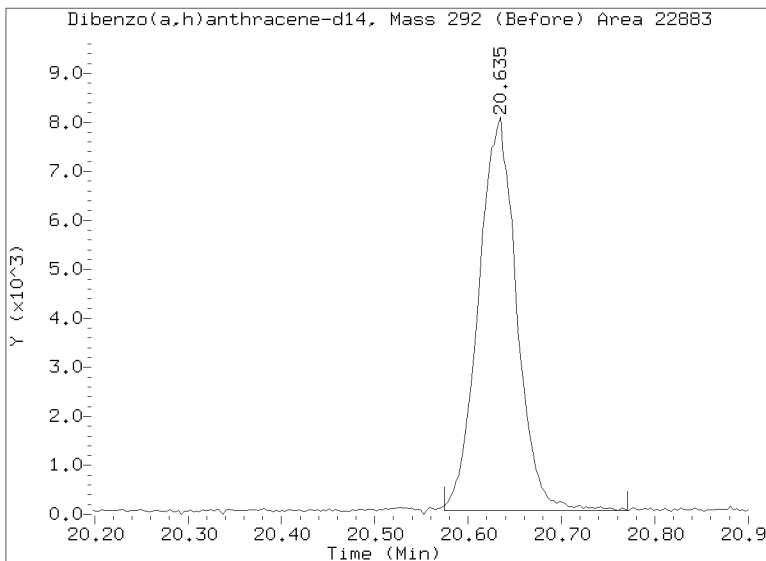
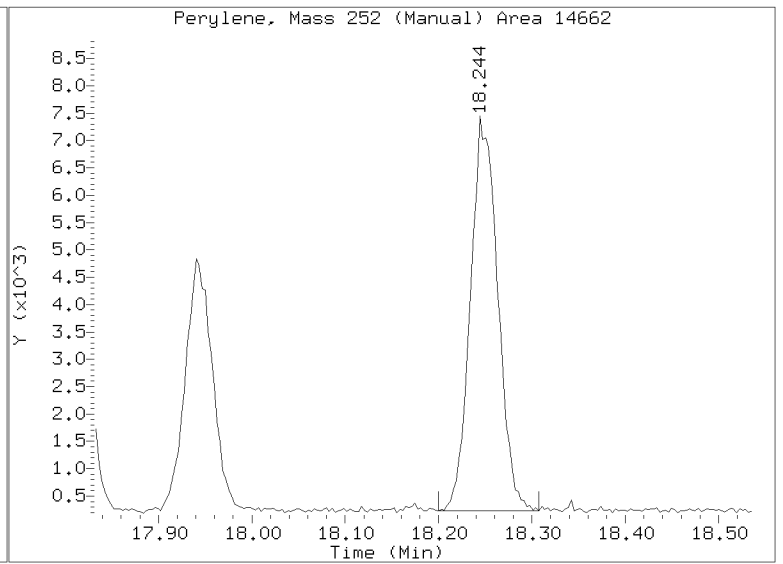
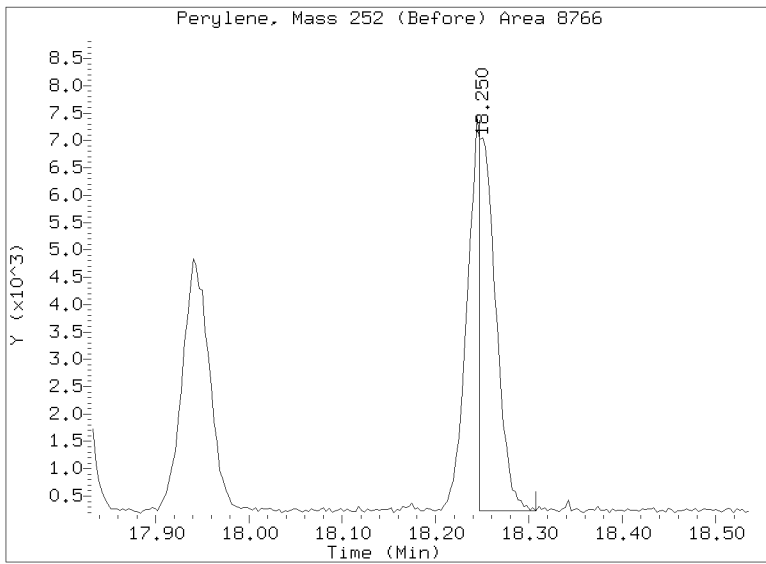
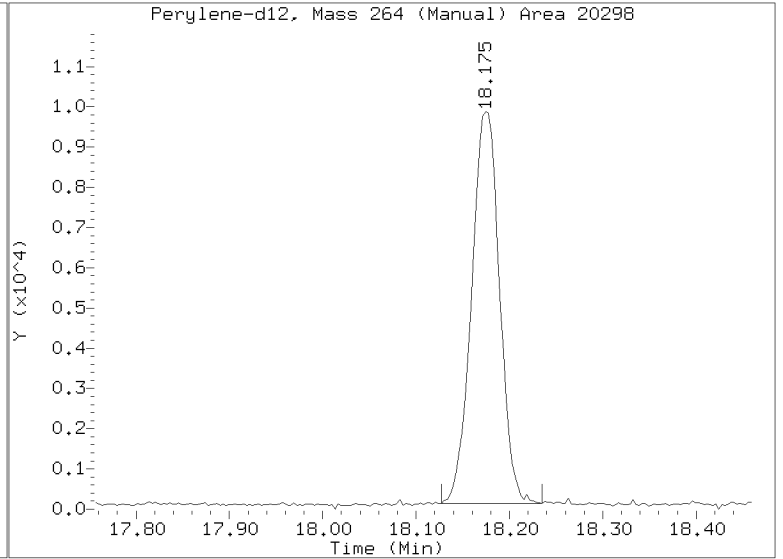
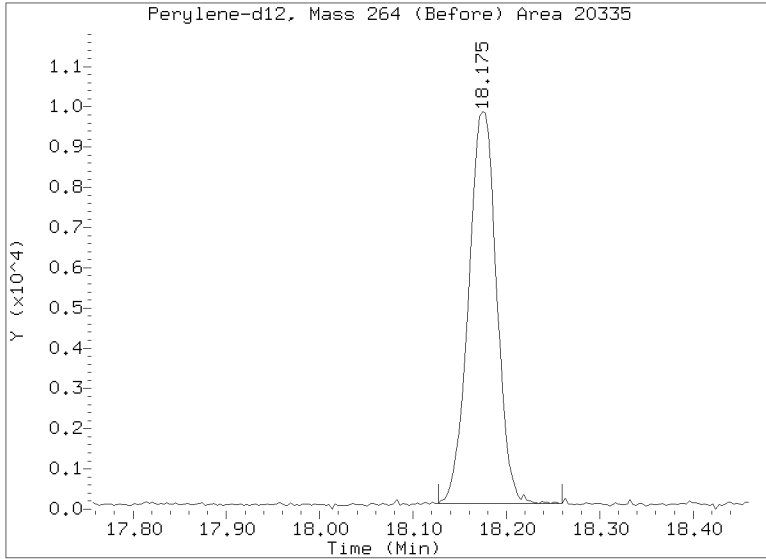
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020631.D
Injection Date: 07-FEB-2023 02:16
Lab ID:23A0326-08 Client ID:
Report Date: 02/07/2023 19:31



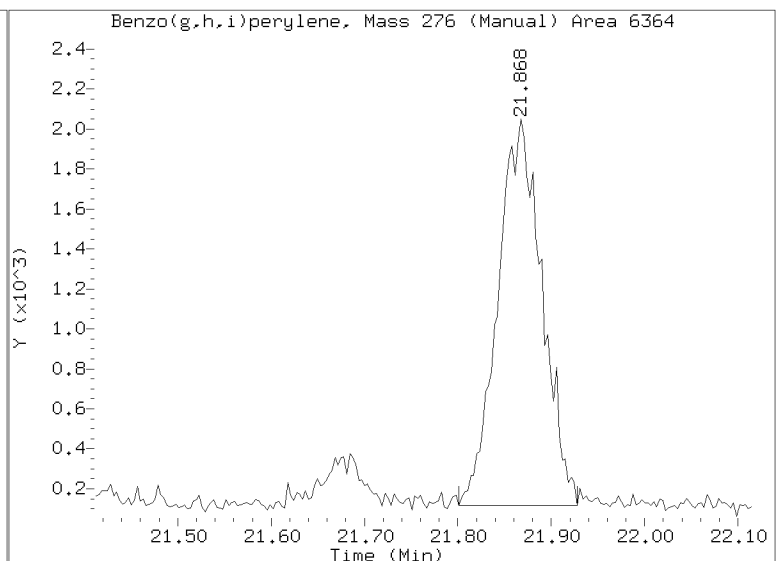
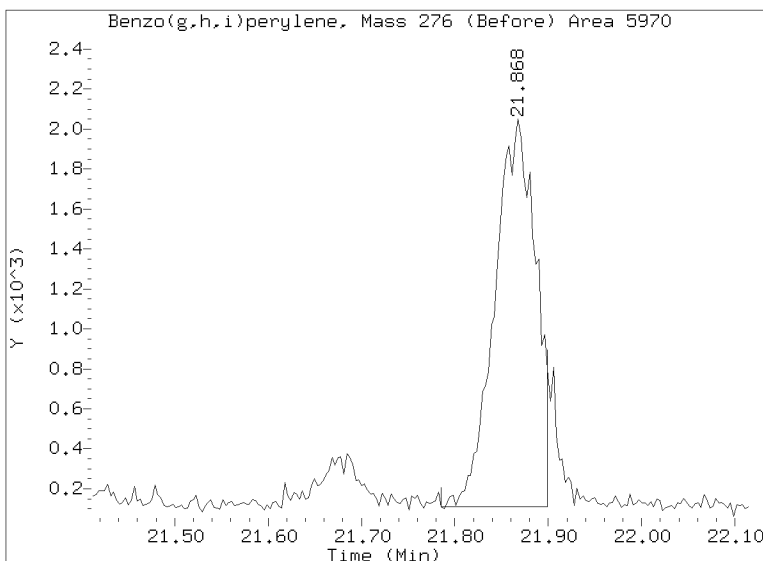
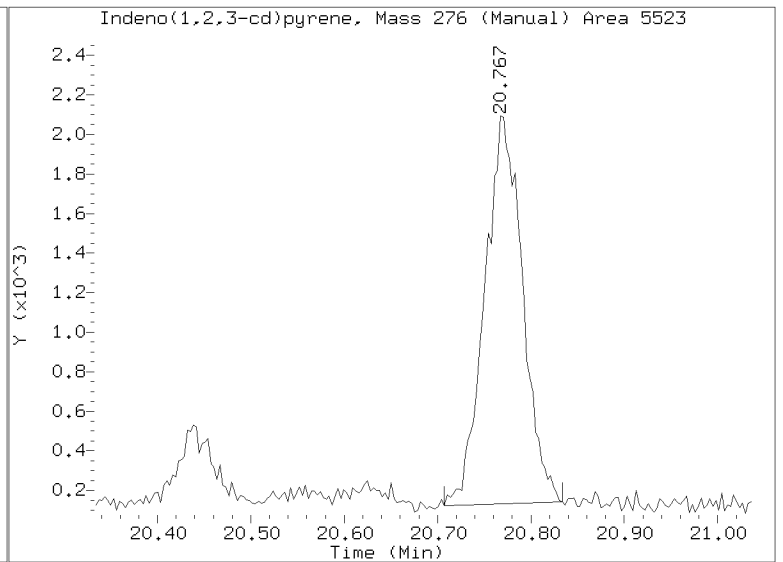
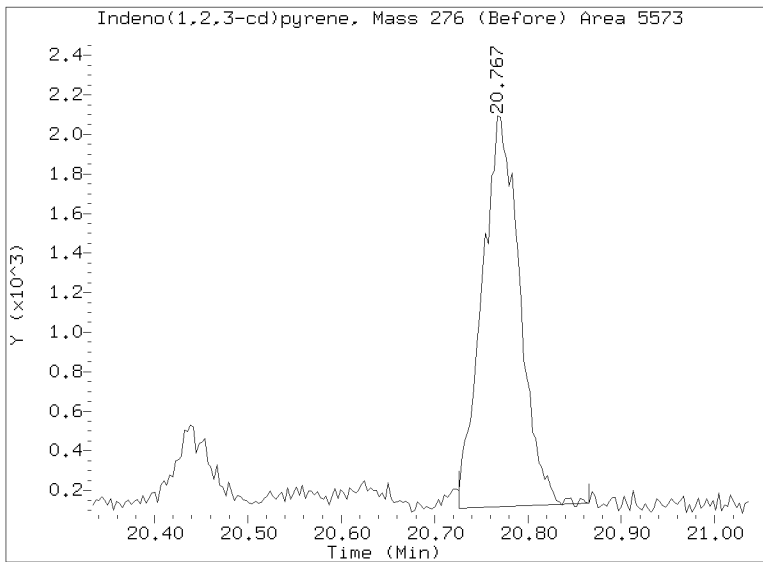
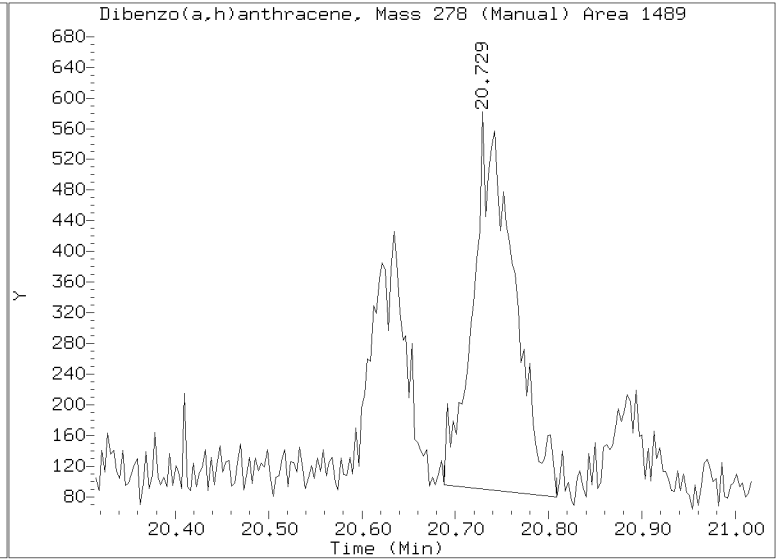
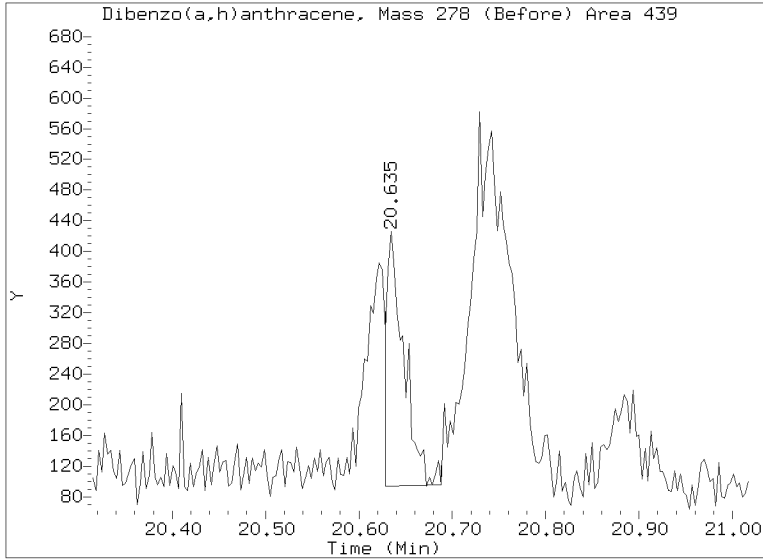
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020631.D
Injection Date: 07-FEB-2023 02:16
Lab ID:23A0326-08 Client ID:
Report Date: 02/07/2023 19:31



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020631.D
Injection Date: 07-FEB-2023 02:16
Lab ID:23A0326-08 Client ID:
Report Date: 02/07/2023 19:31





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Polynuclear Aromatic Hydrocarbons

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-09 A

SDG: 23A0326

Sampled: 01/17/23 13:32

Prepared: 02/01/23 11:29

File ID: N823020632.D

% Solids: 61.94

Preparation: EPA 3546 (Microwave)

Analyzed: 02/07/23 02:42

Batch: BLA0683

Sequence: SLB0075

Initial/Final: 16.15 g Wet / 0.5 mL

Instrument: NT8

Column: RXI-17Sil ms

Calibration: GA00050

Cleanups: GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	65.3		0.82	5.00
218-01-9	Chrysene	1	76.7		1.05	5.00
205-99-2	Benzo(b)fluoranthene	1	85.3		1.37	5.00
207-08-9	Benzo(k)fluoranthene	1	46.2		0.76	5.00
50-32-8	Benzo(a)pyrene	1	81.6		0.61	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	1	45.6		1.05	5.00
53-70-3	Dibenzo(a,h)anthracene	1	15.3		0.89	5.00

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	149.95	138	92.3	32 - 120	
Dibenzo[a,h]anthracene-d14	149.95	190	126	21 - 133	
Fluoranthene-d10	149.95	160	107	36 - 134	

Data File: \\target\share\chem3\nt8.1\20230206A,B\N823020632.D

Date: 07-FEB-2023 02:42

Client ID:

Sample Info: 23A0326-09

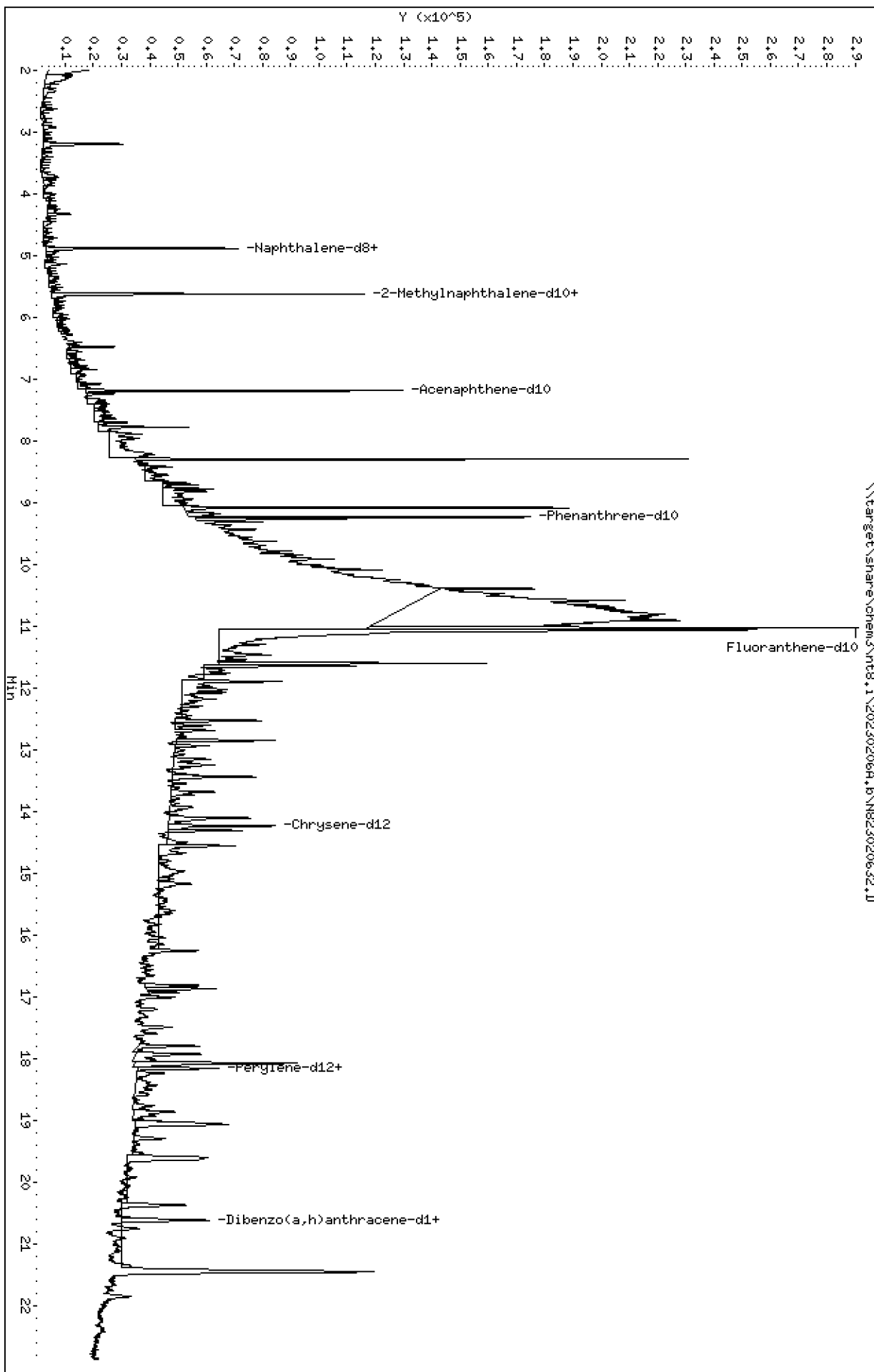
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

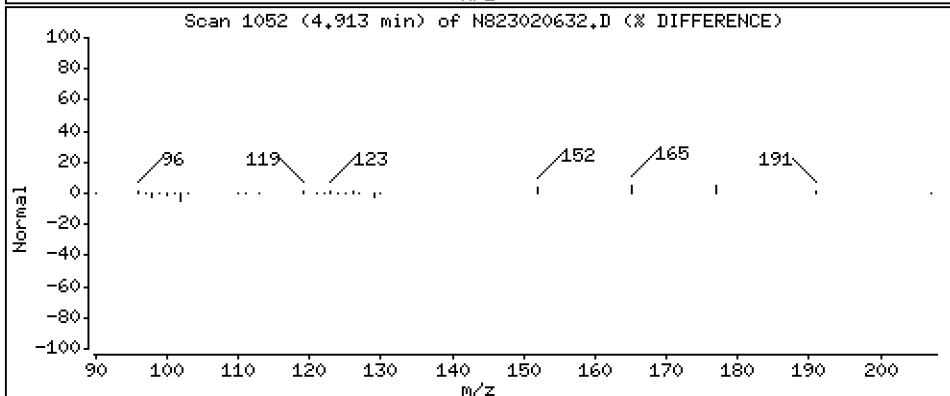
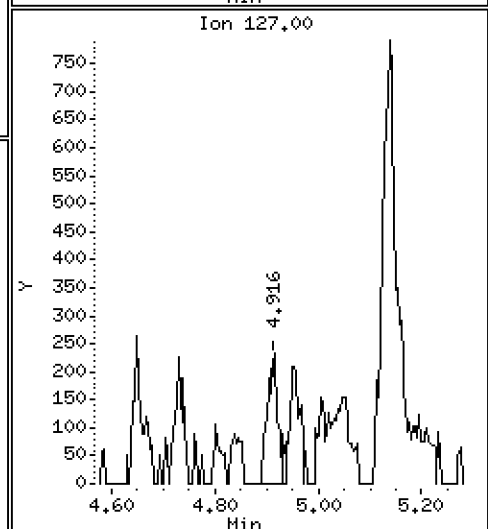
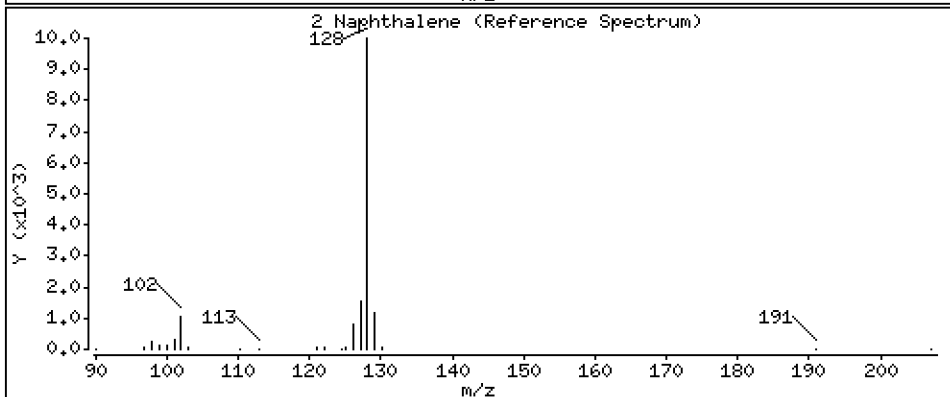
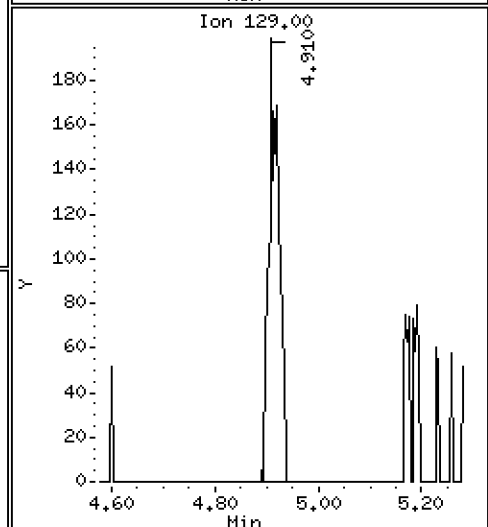
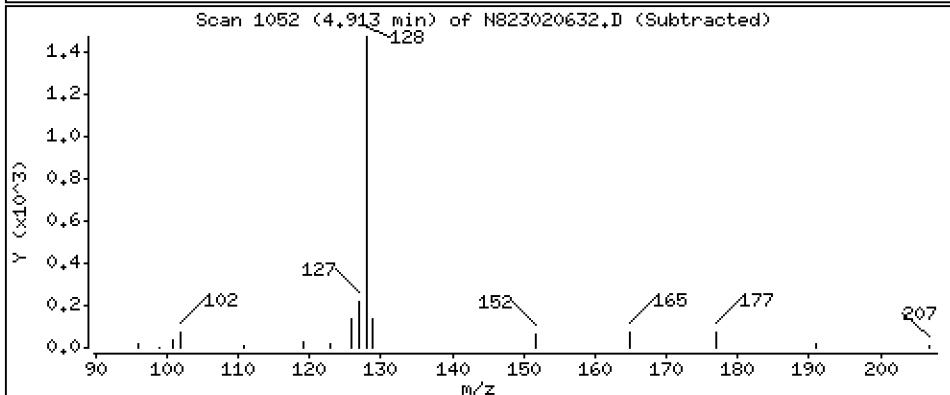
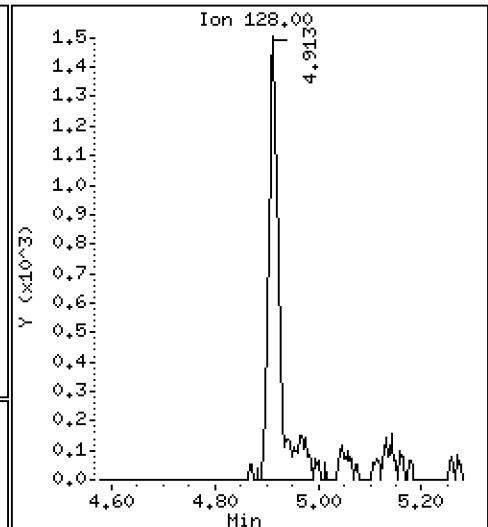
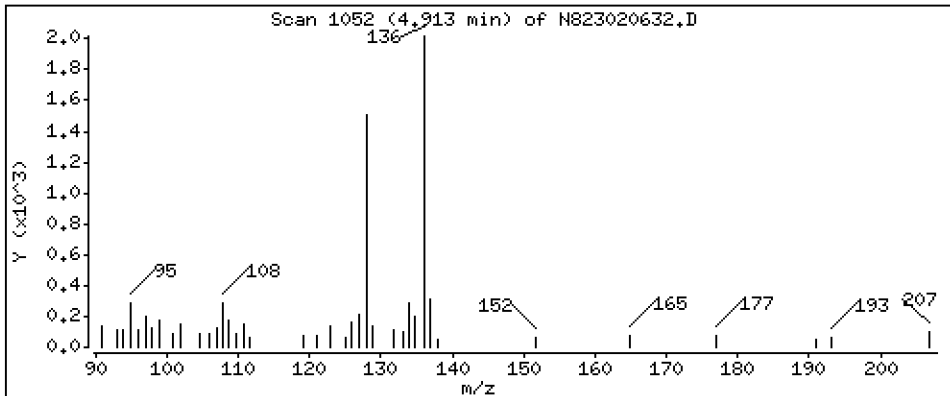
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 0.08343 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

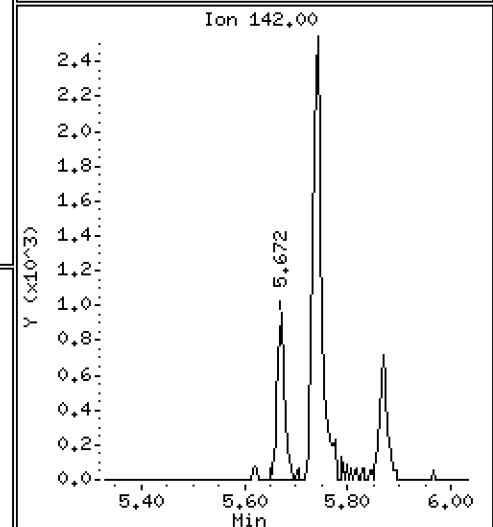
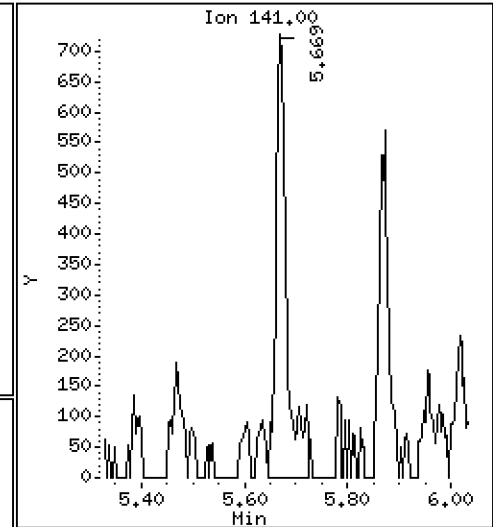
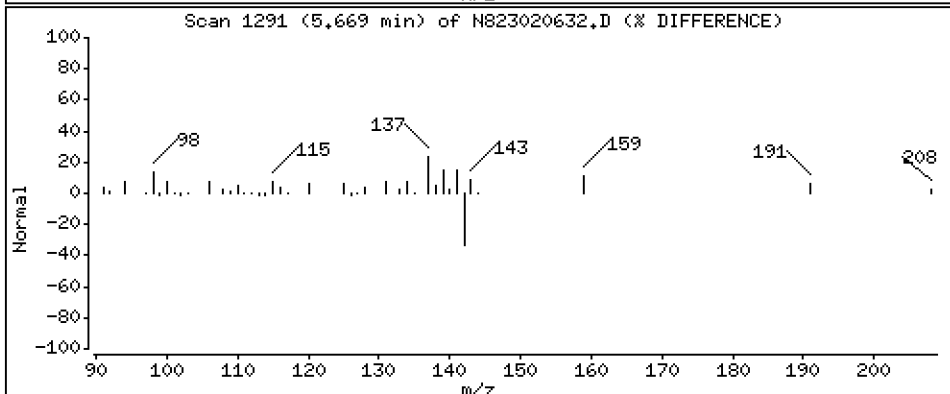
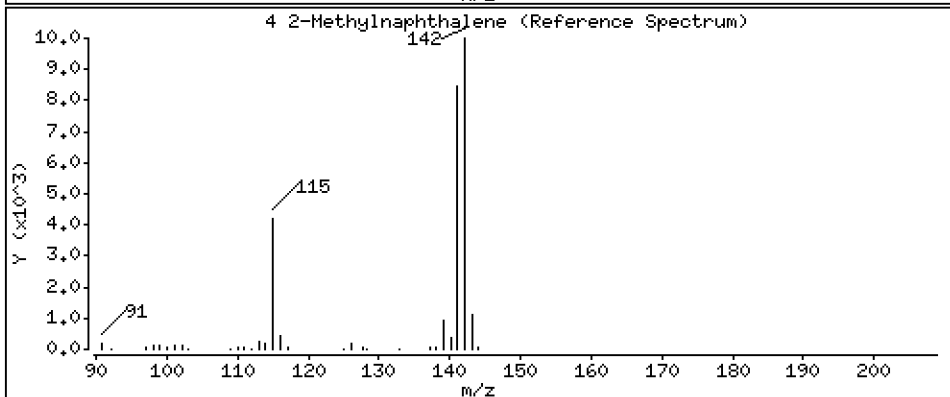
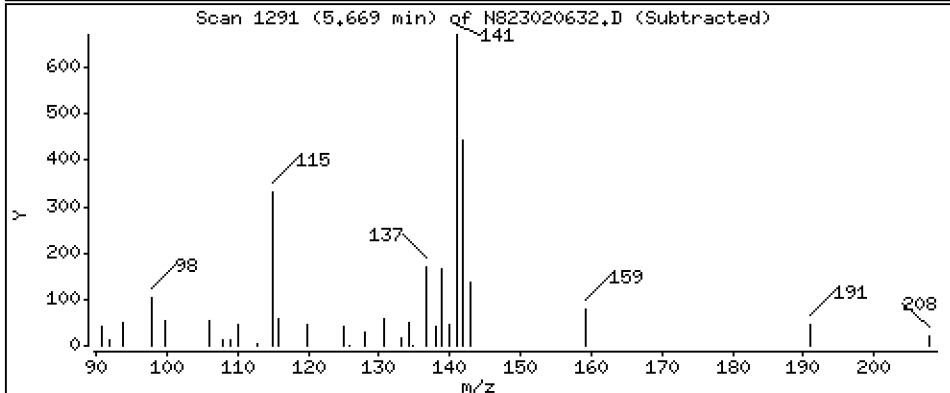
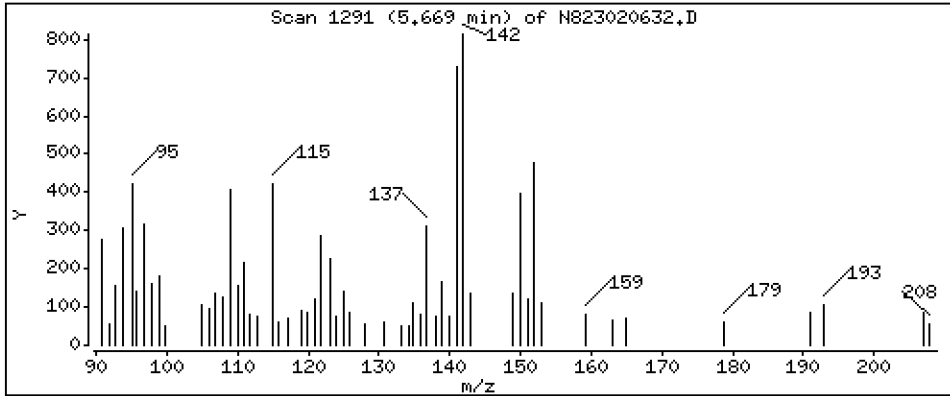
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

4-Methylnaphthalene

Concentration: 0.07293 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

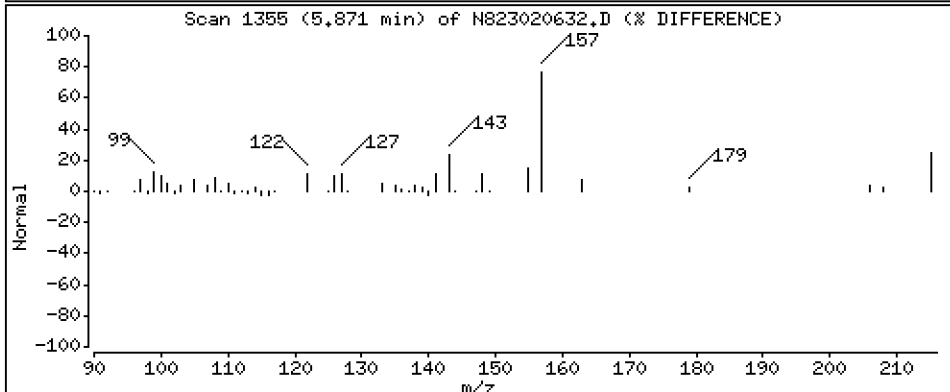
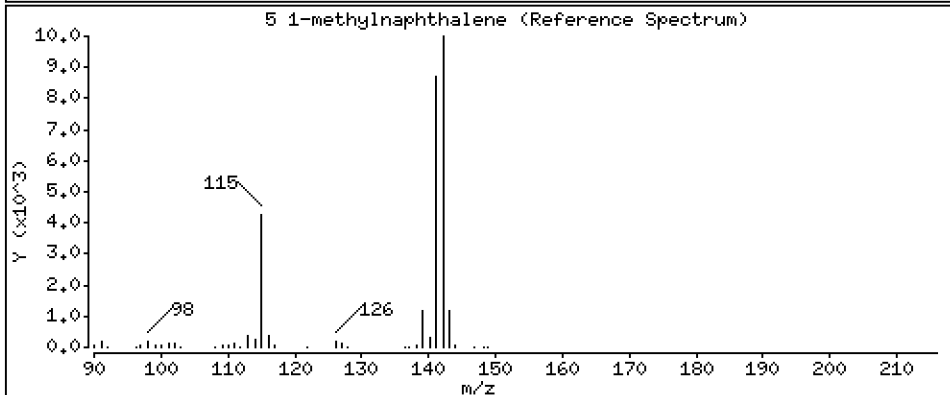
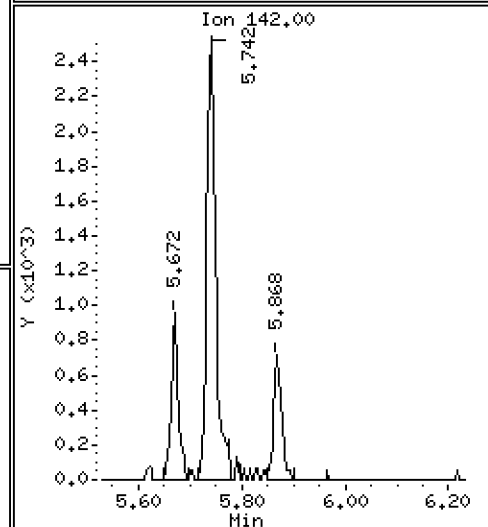
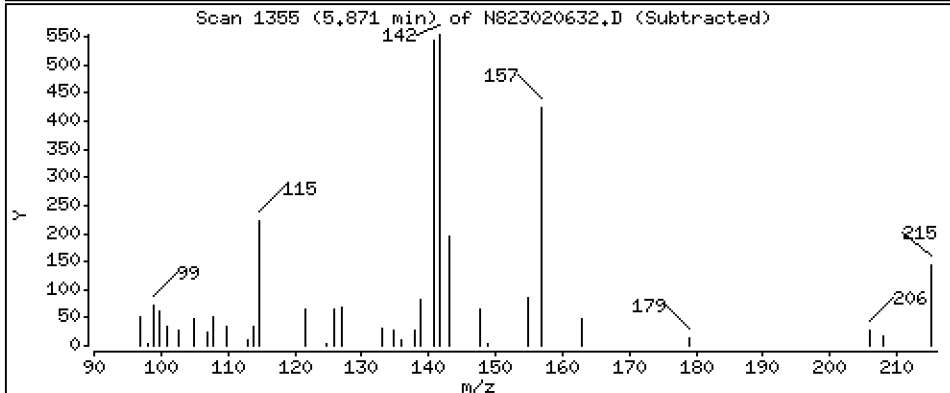
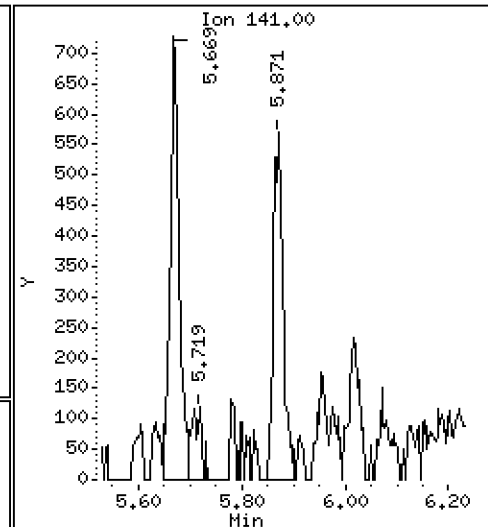
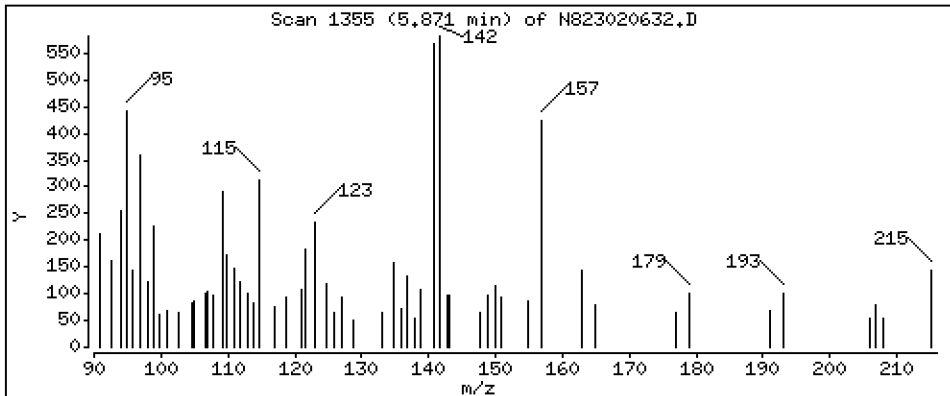
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

5 1-methylnaphthalene

Concentration: 0.04974 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

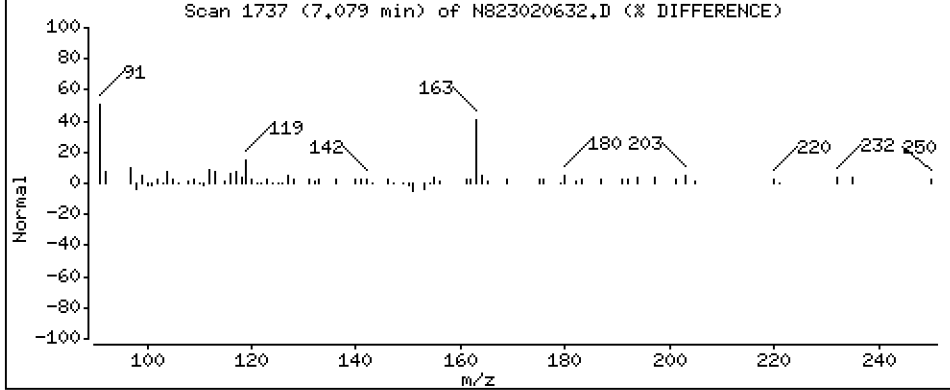
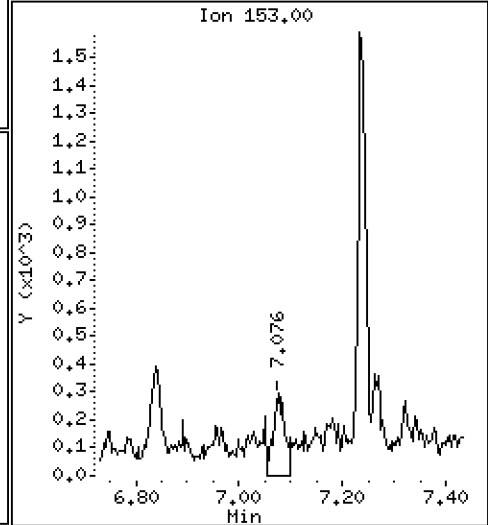
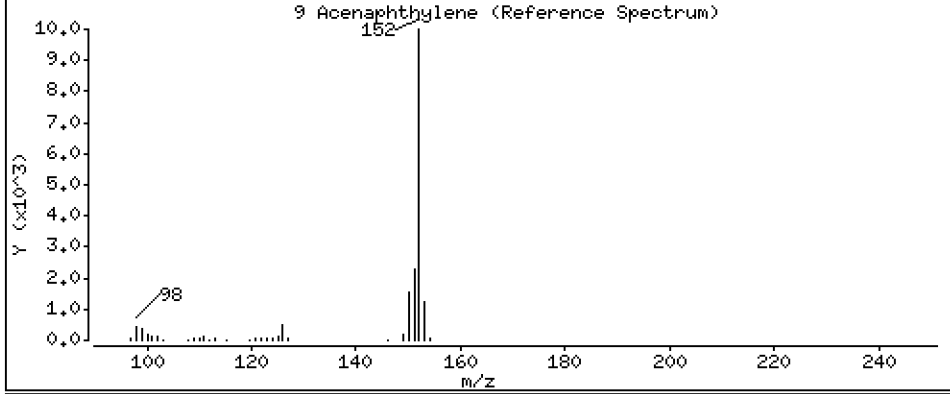
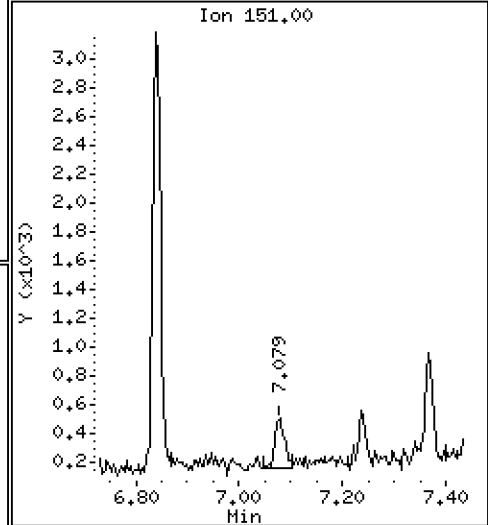
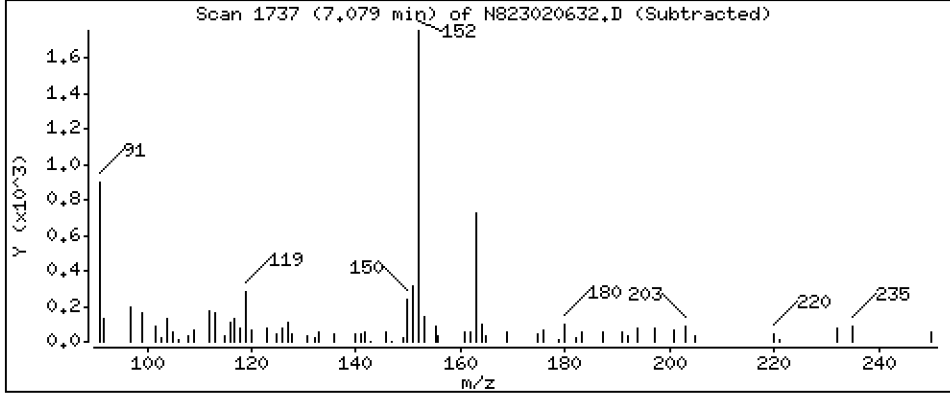
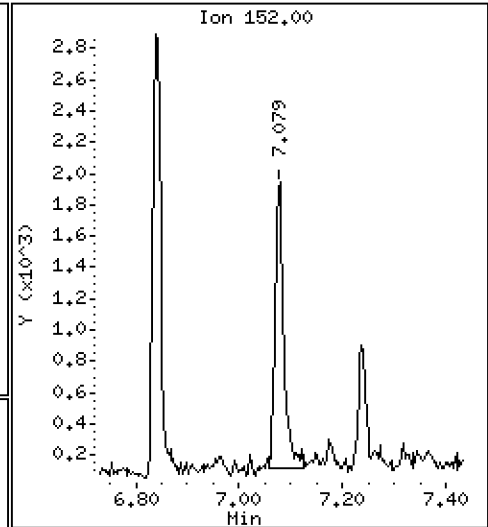
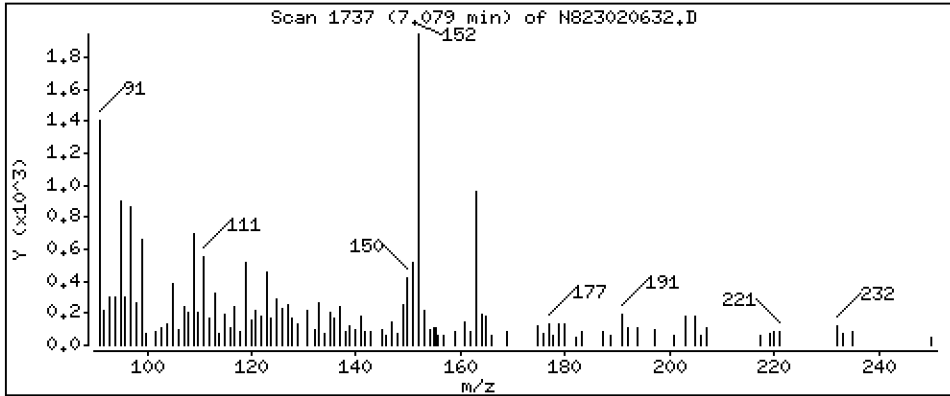
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

9 Acenaphthylene

Concentration: 0.08669 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

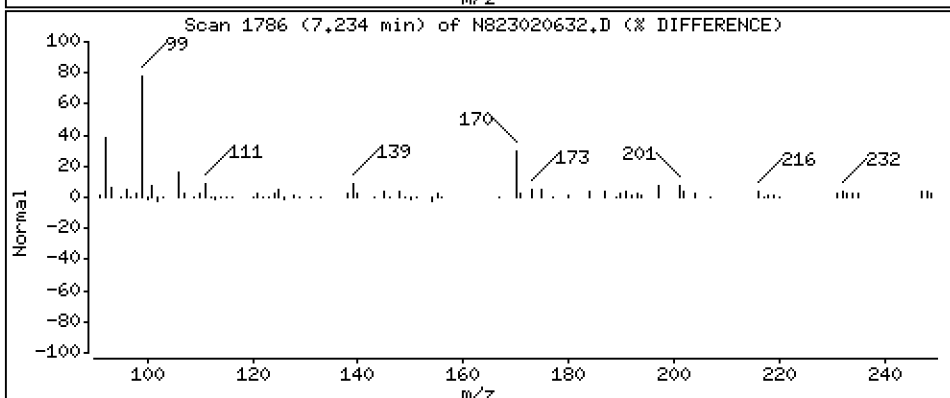
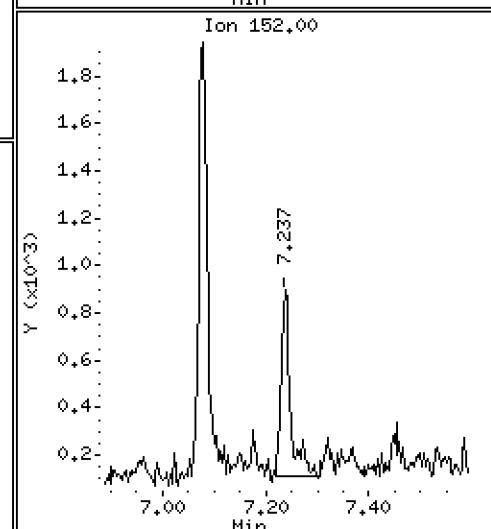
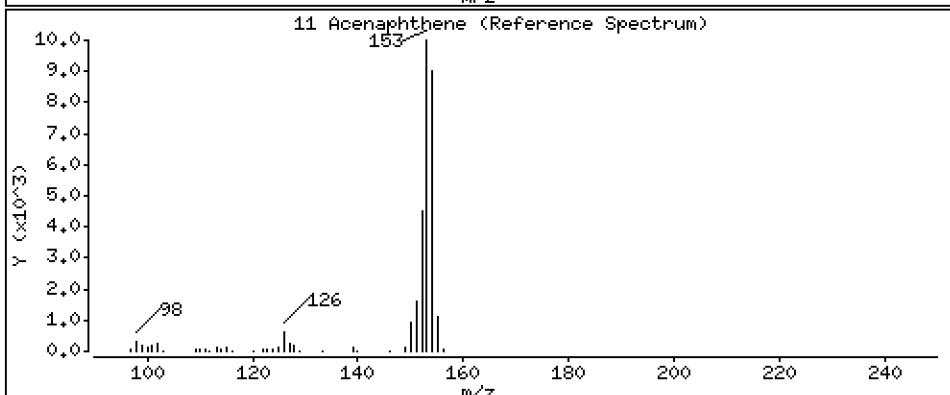
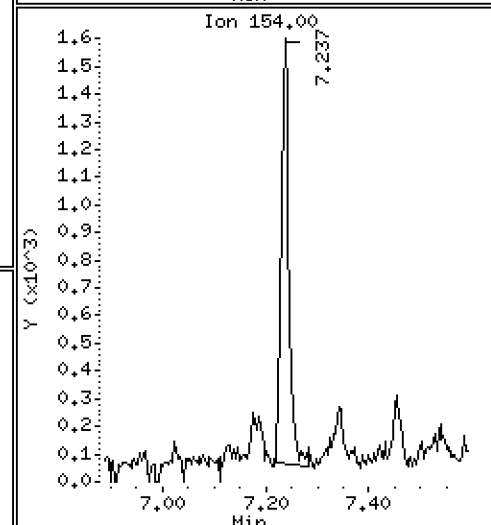
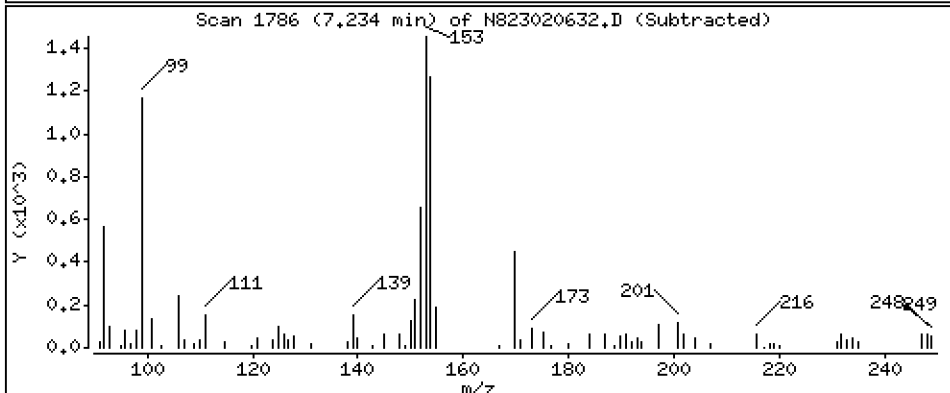
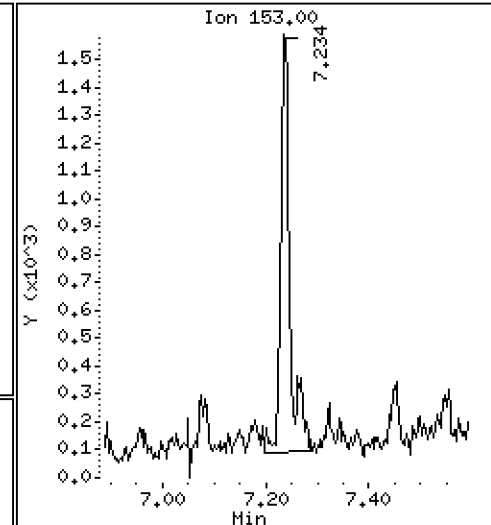
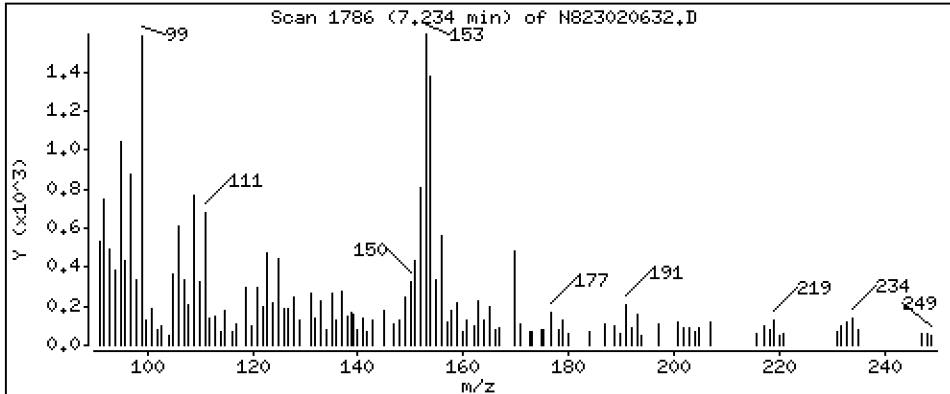
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

Concentration: 0.1088 ug/mL

11 Acenaphthene



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

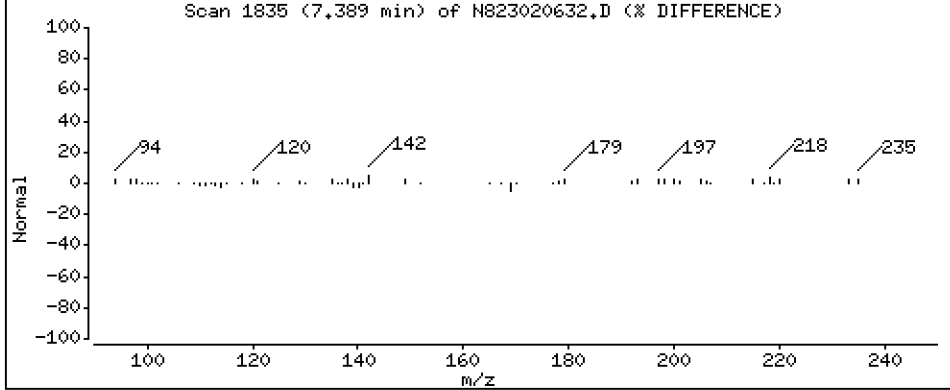
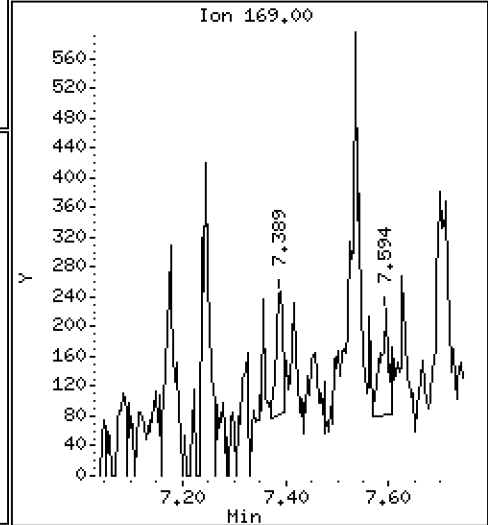
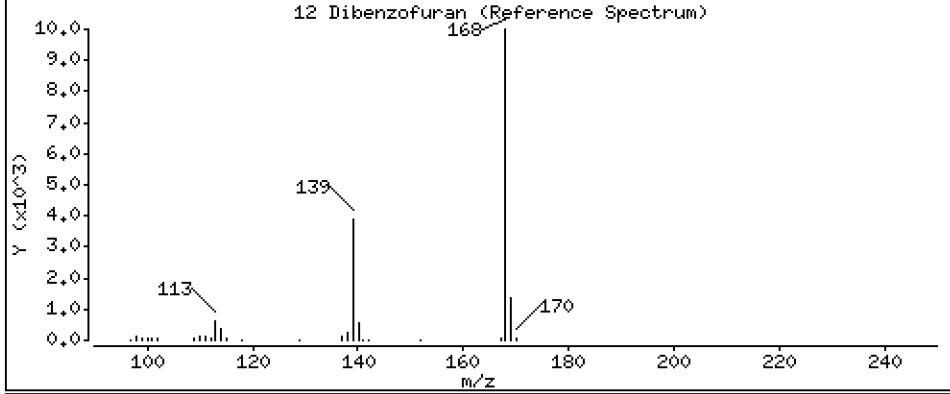
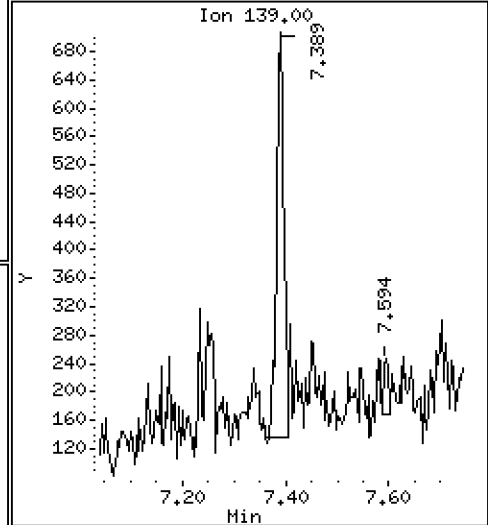
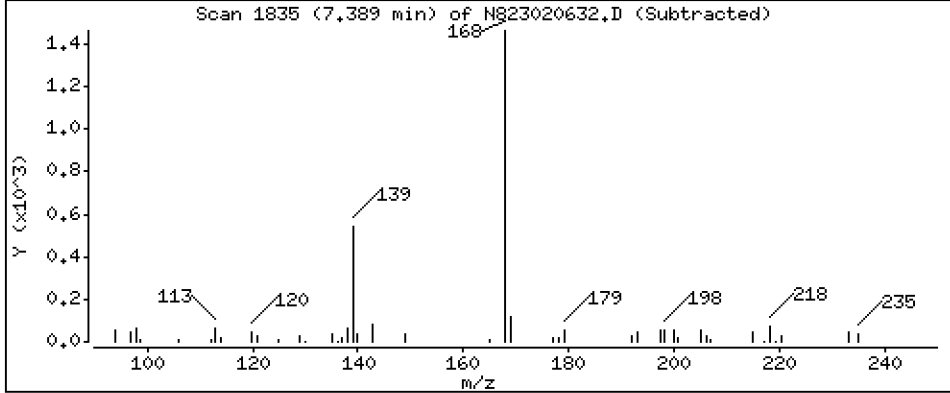
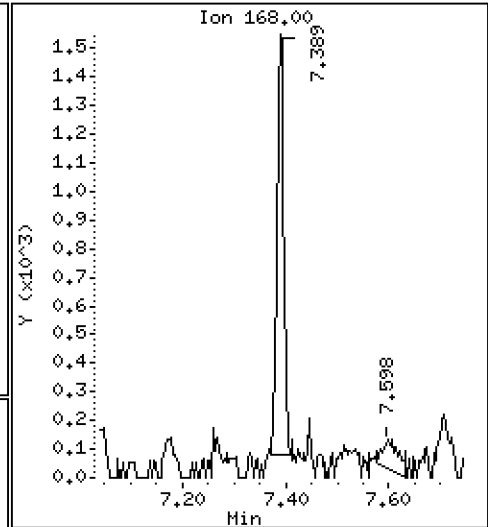
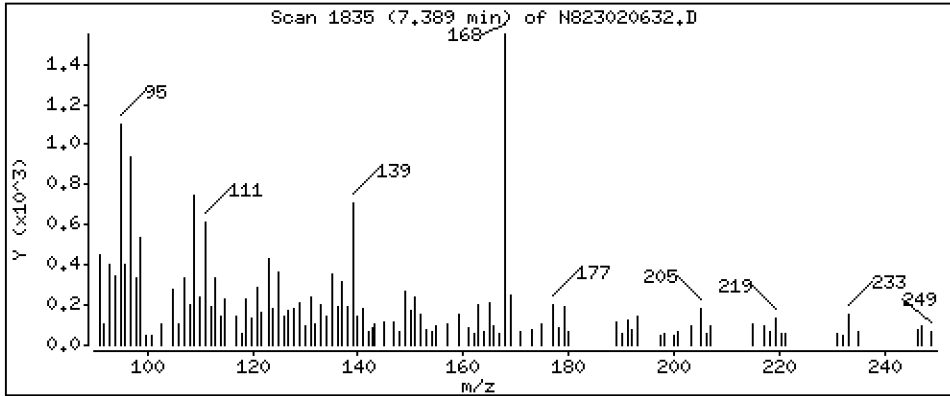
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

12 Dibenzofuran

Concentration: 0.05197 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

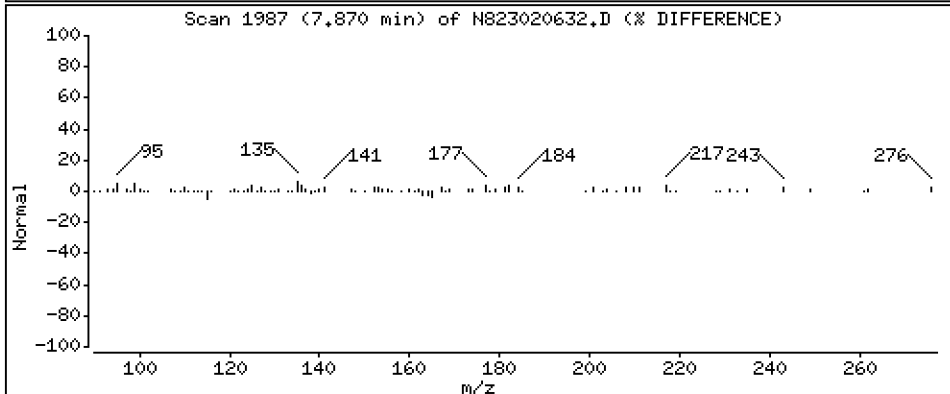
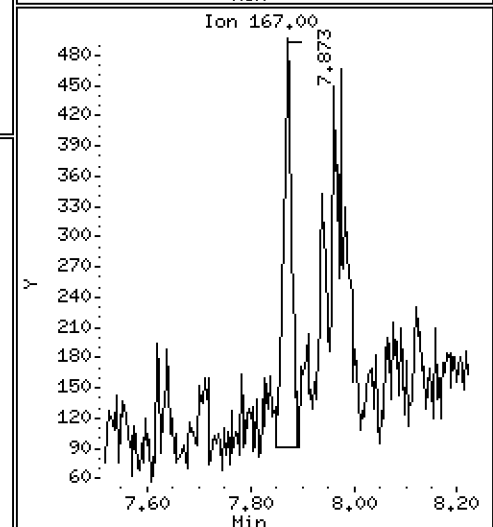
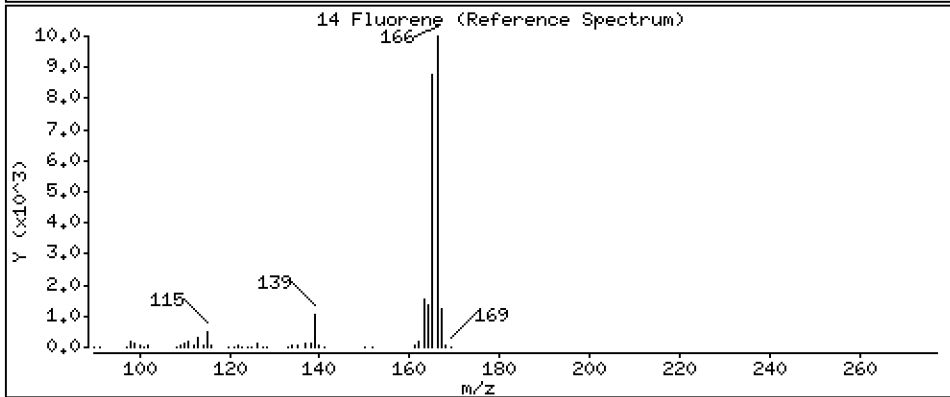
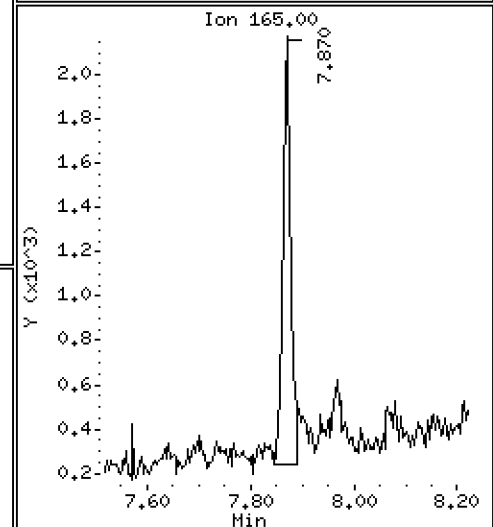
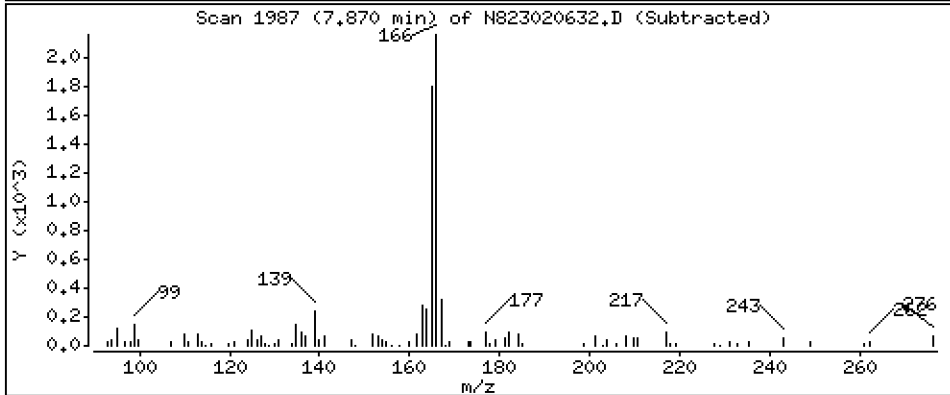
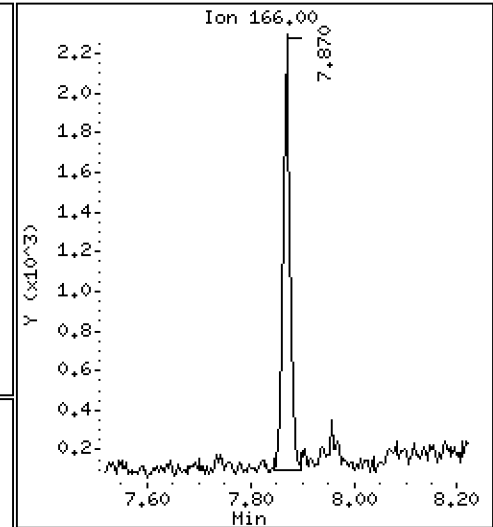
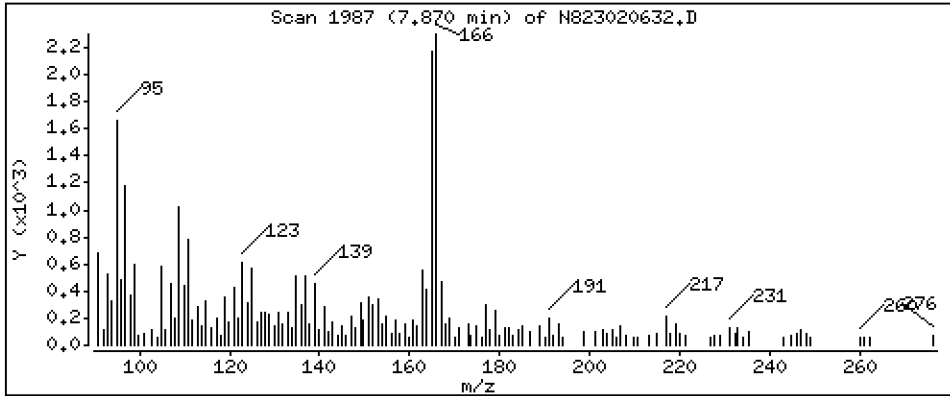
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

Concentration: 0.1048 ug/mL

14 Fluorene



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

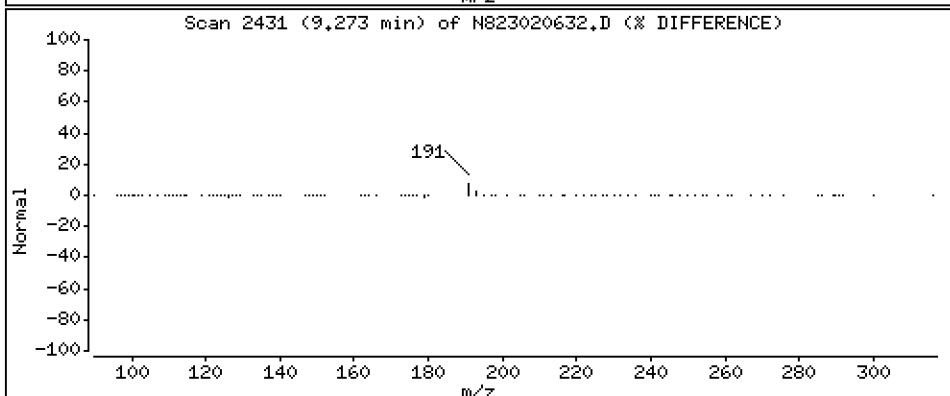
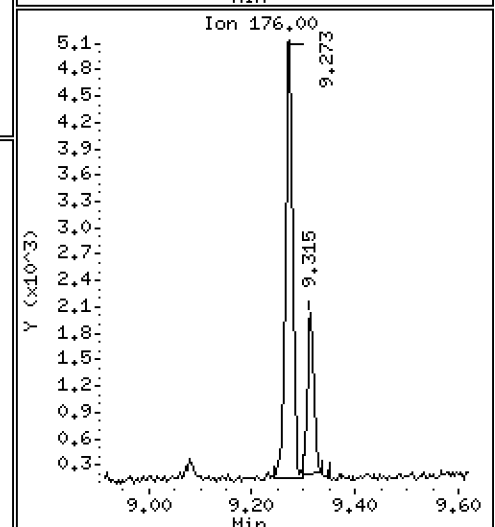
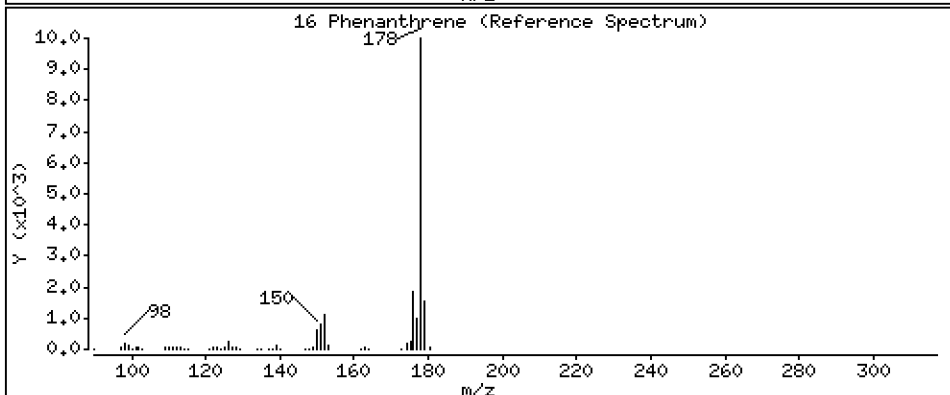
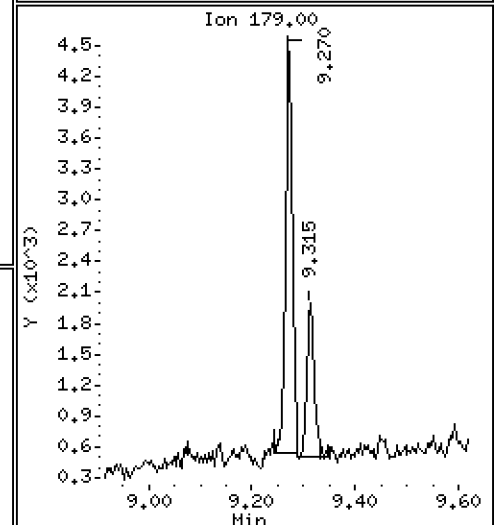
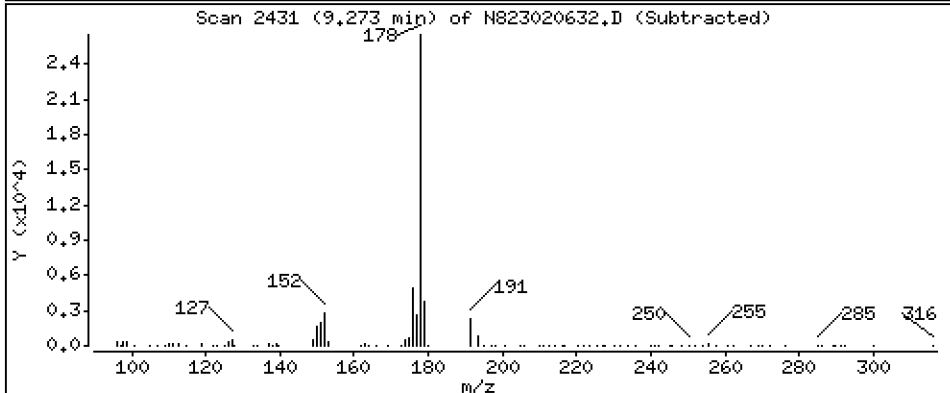
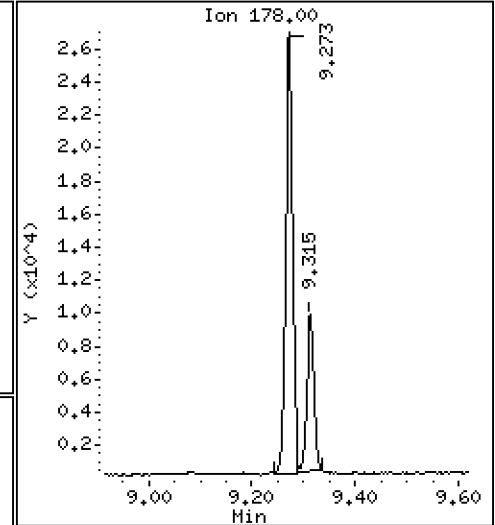
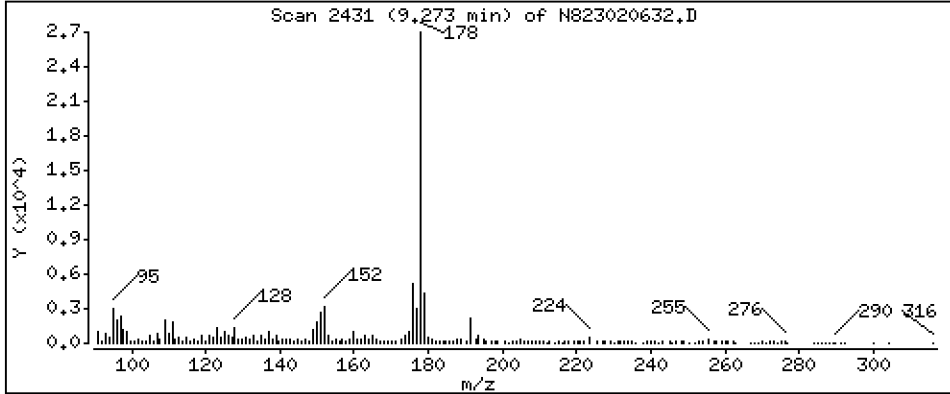
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

Concentration: 0.9526 ug/mL

16 Phenanthrene



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

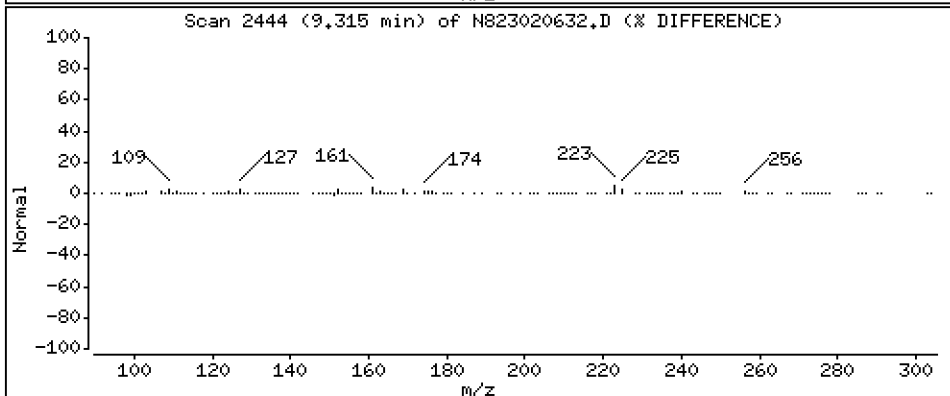
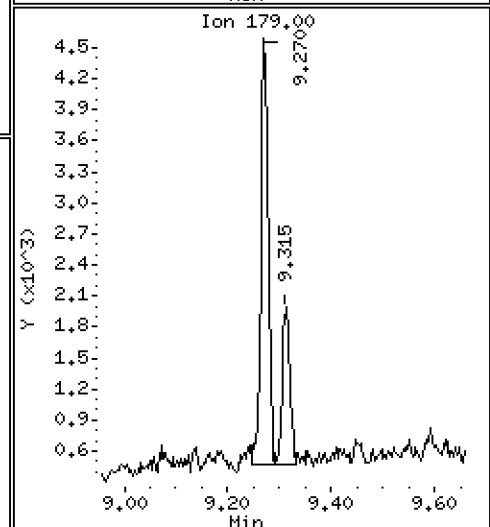
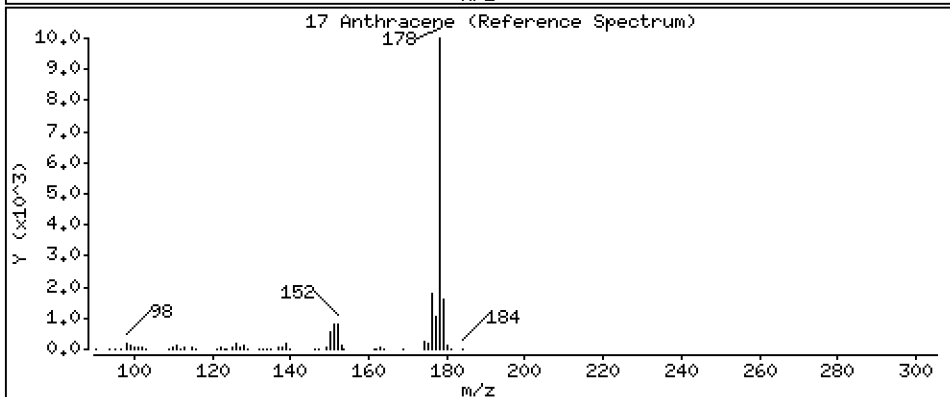
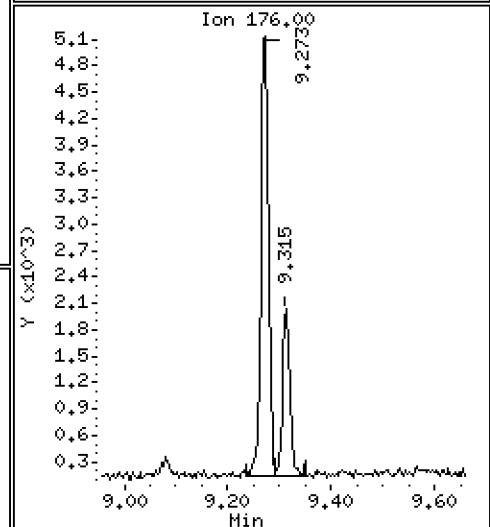
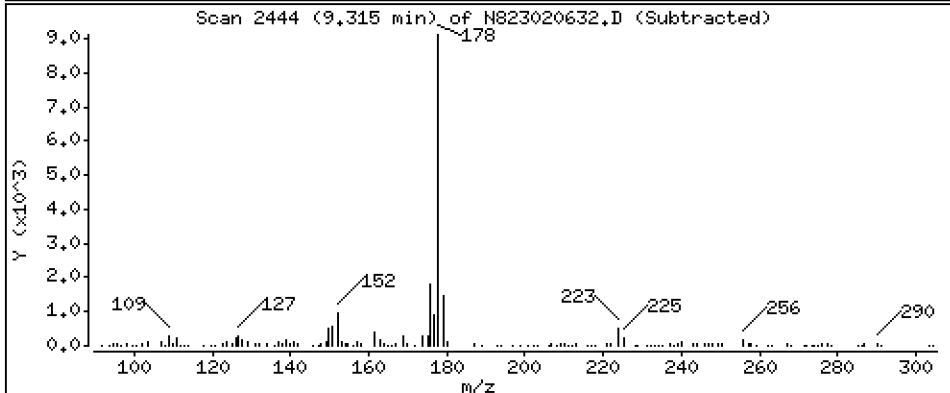
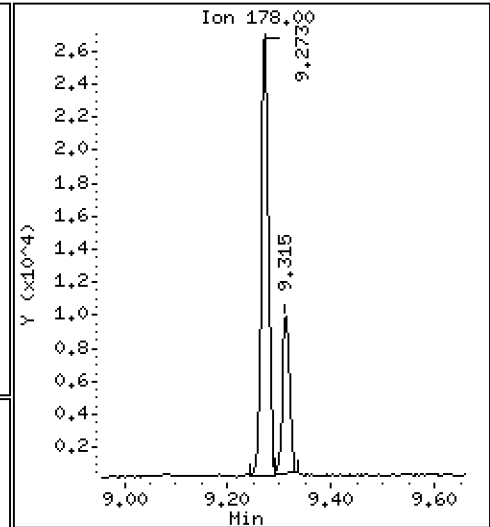
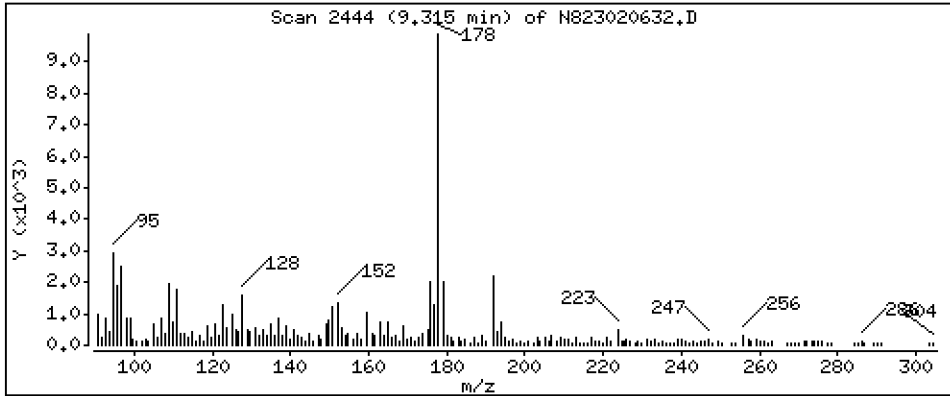
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 0,3818 ug/mL

17 Anthracene



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

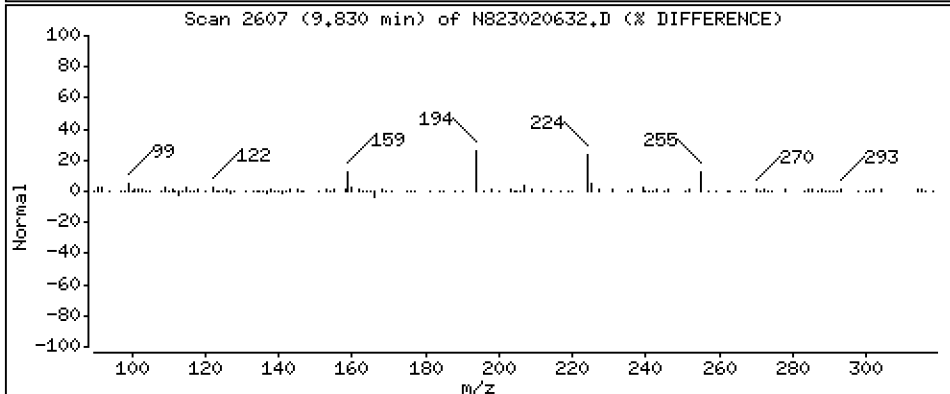
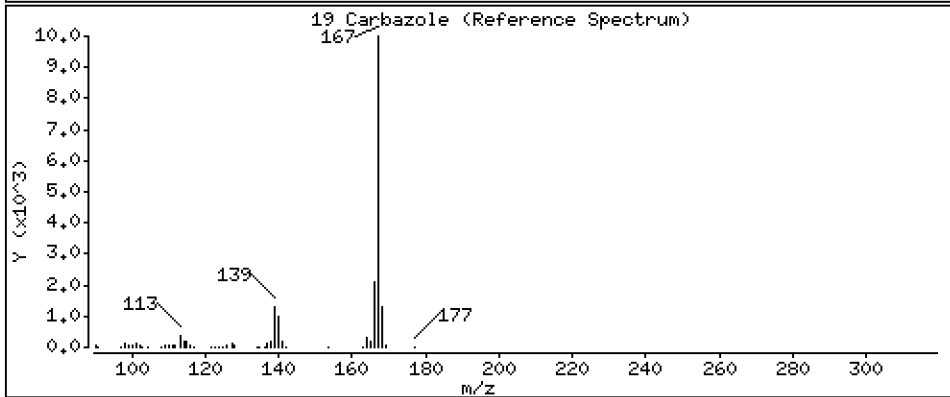
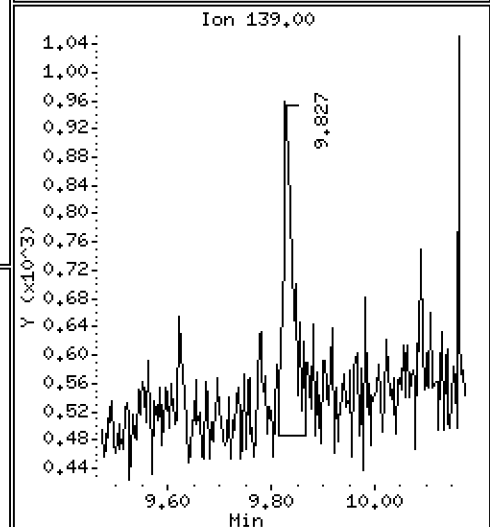
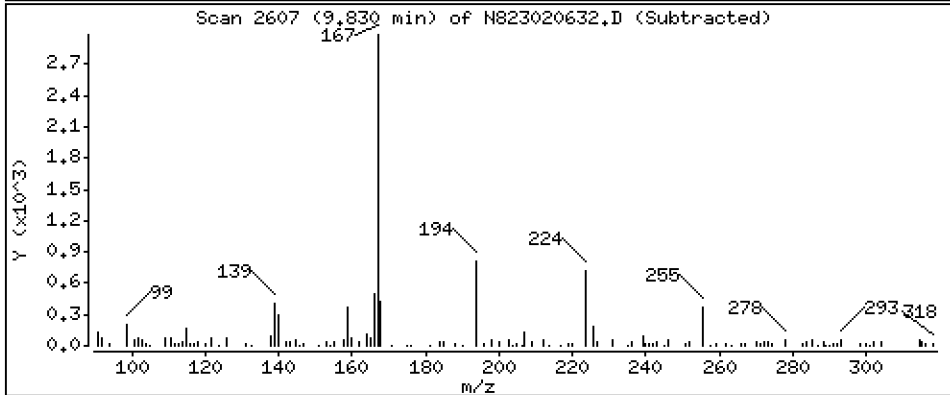
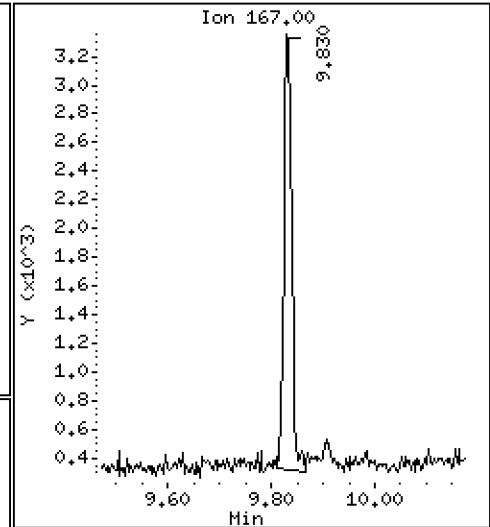
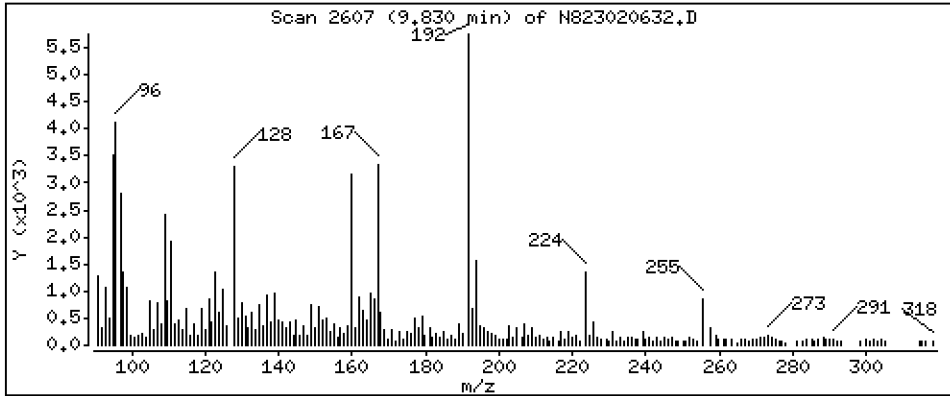
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

19 Carbazole

Concentration: 0,1465 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

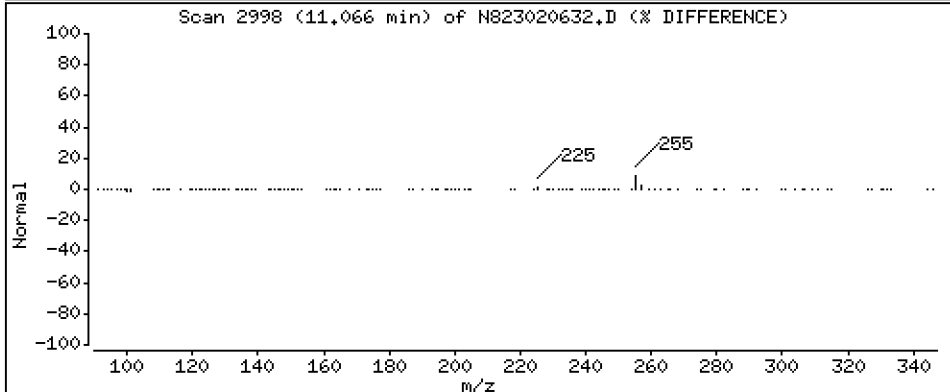
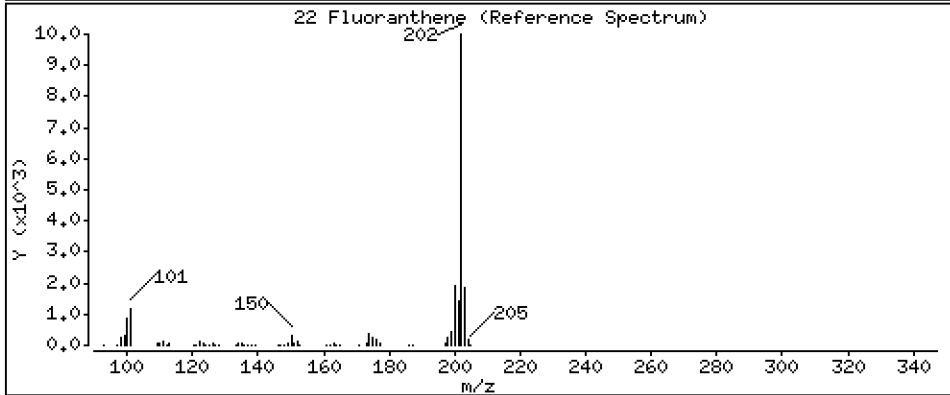
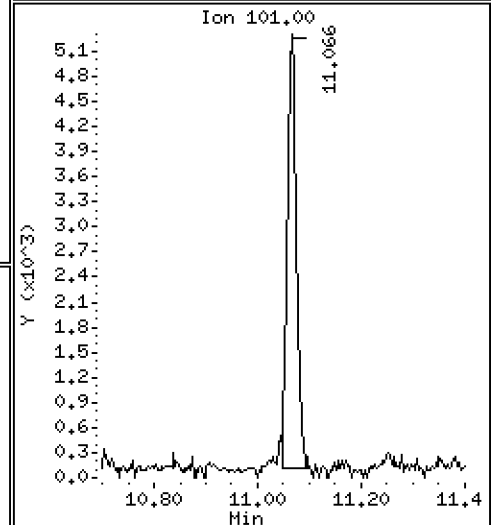
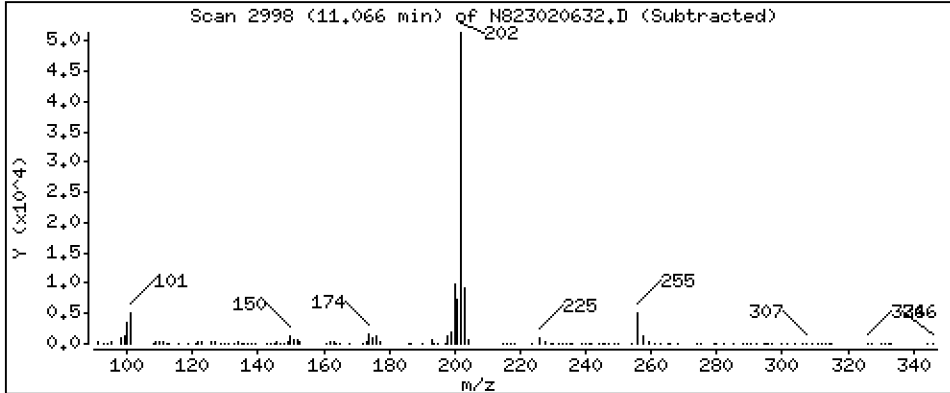
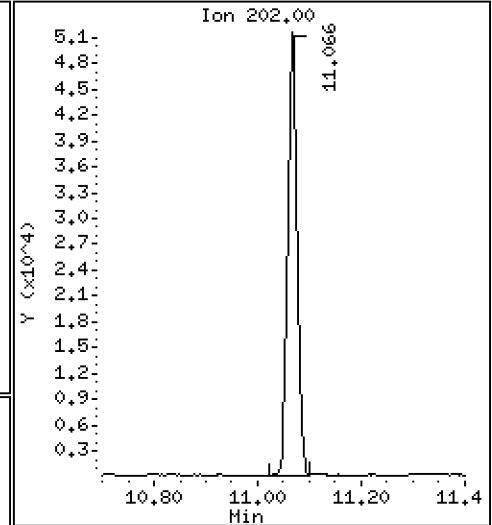
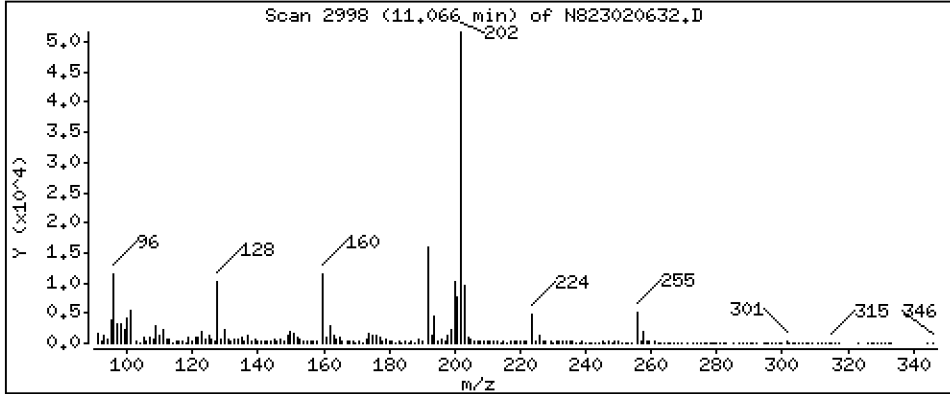
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,262 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

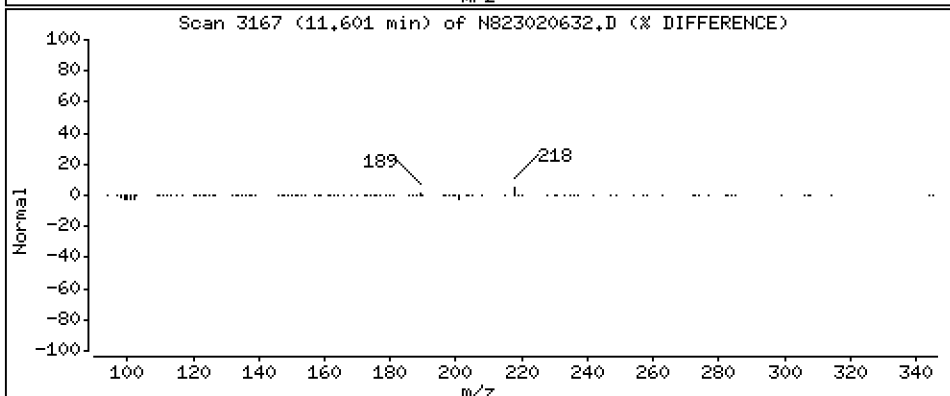
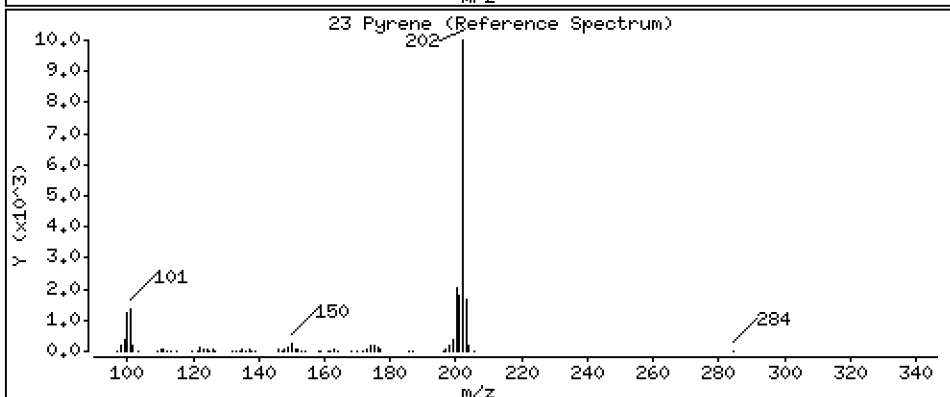
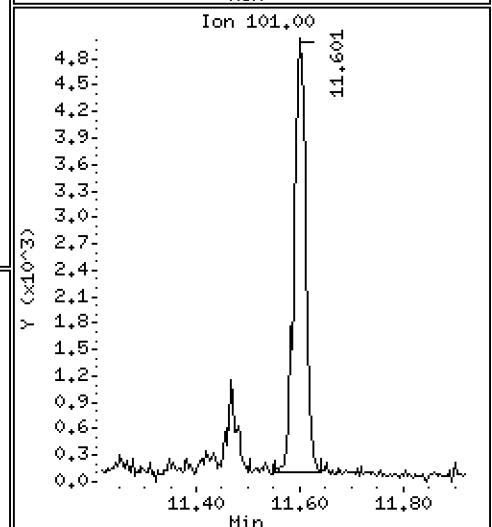
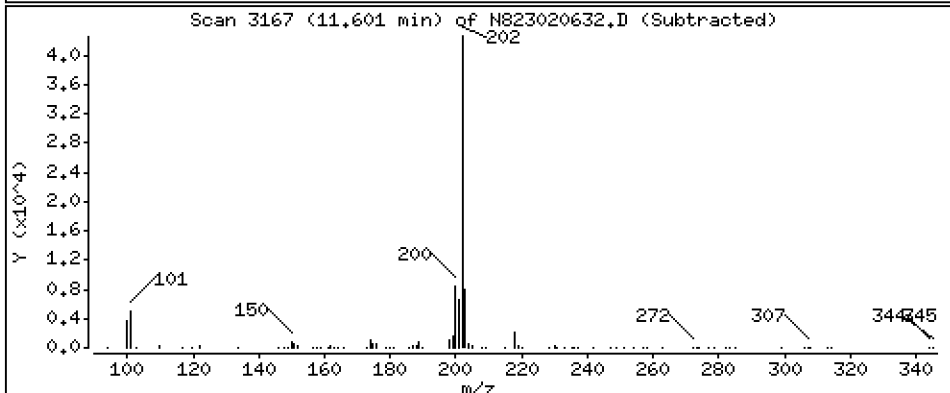
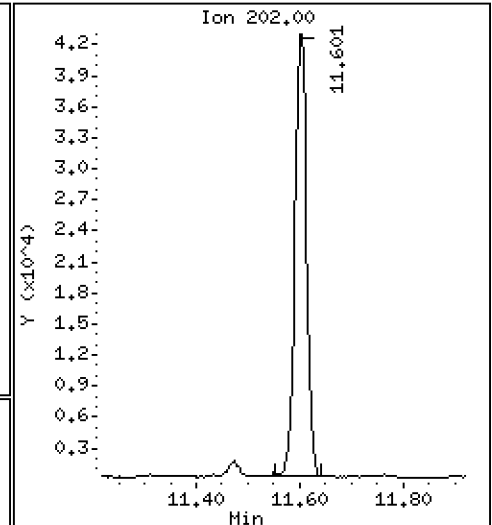
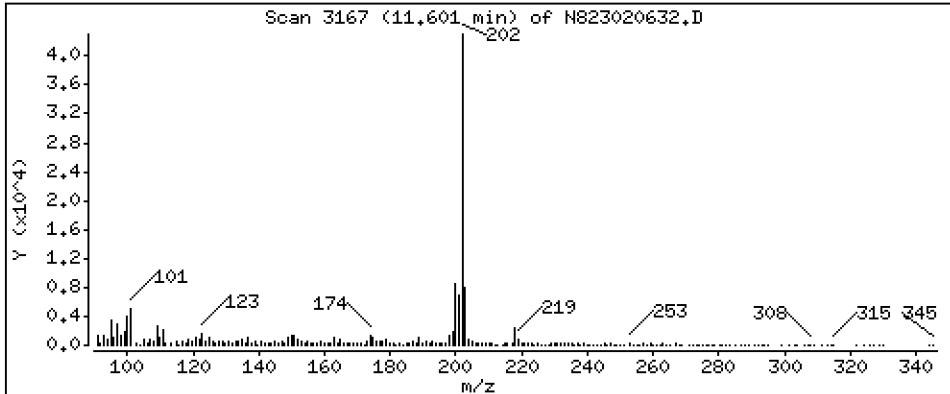
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 4,739 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

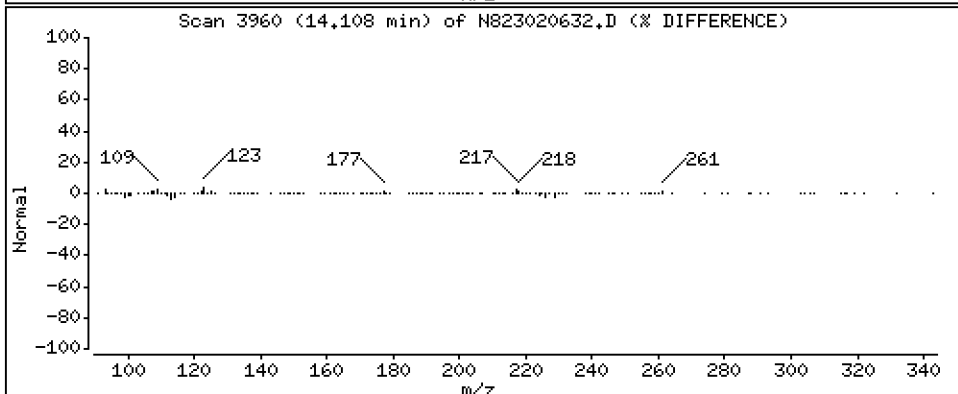
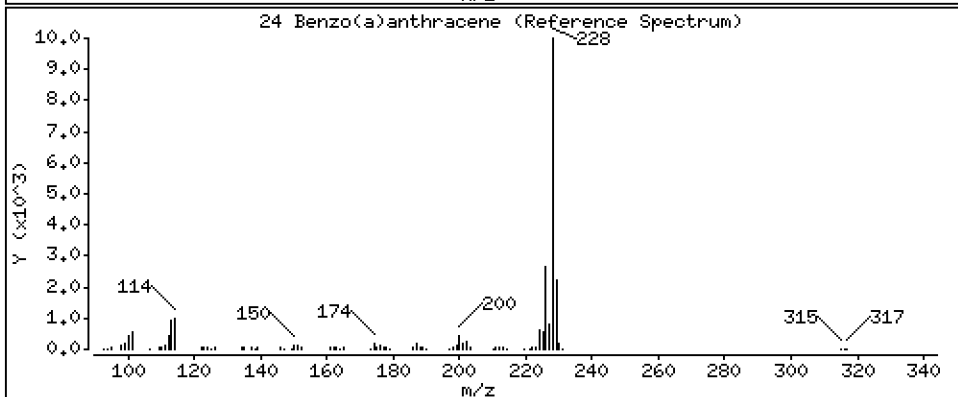
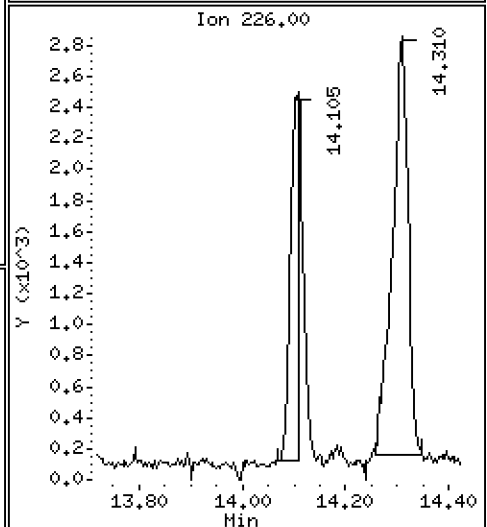
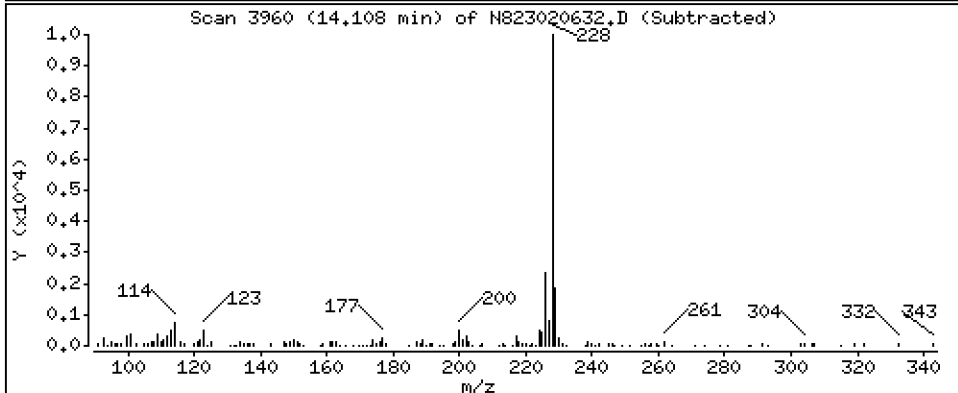
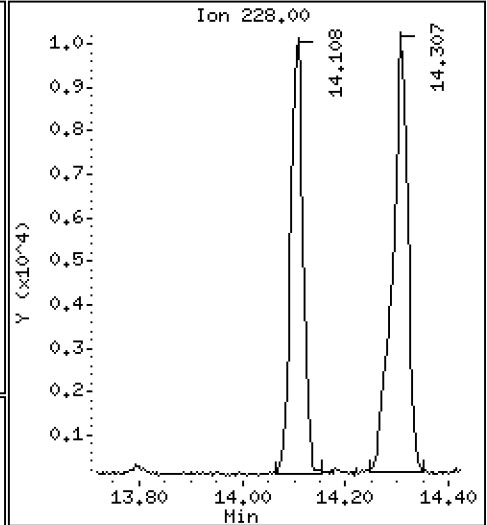
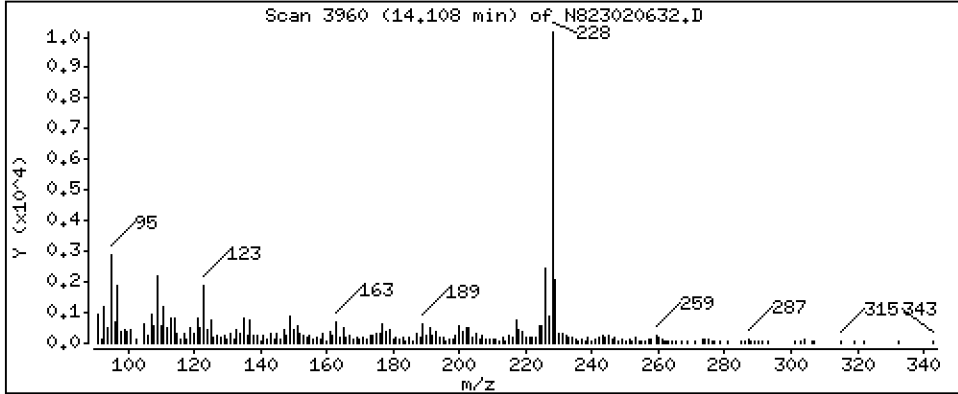
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

24 Benzo(a)anthracene

Concentration: 1,307 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

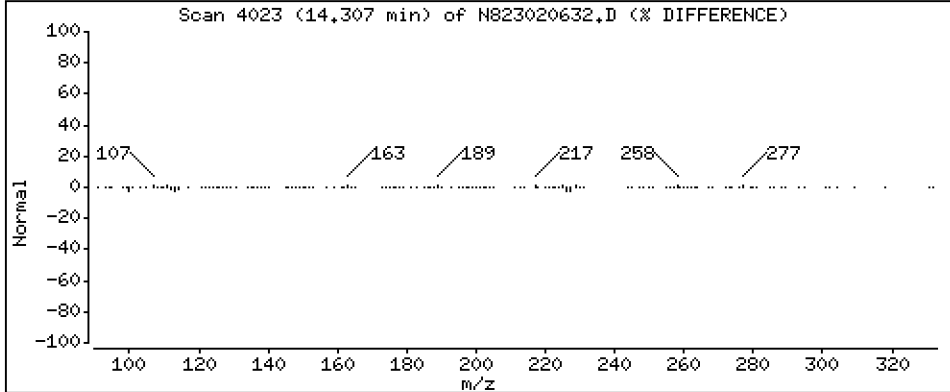
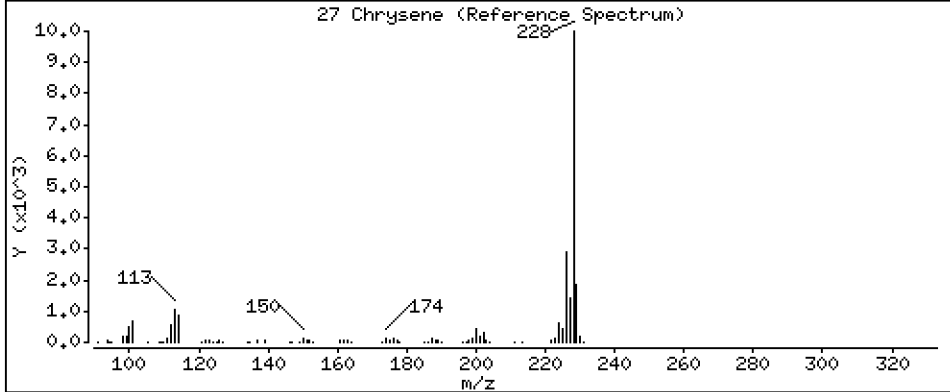
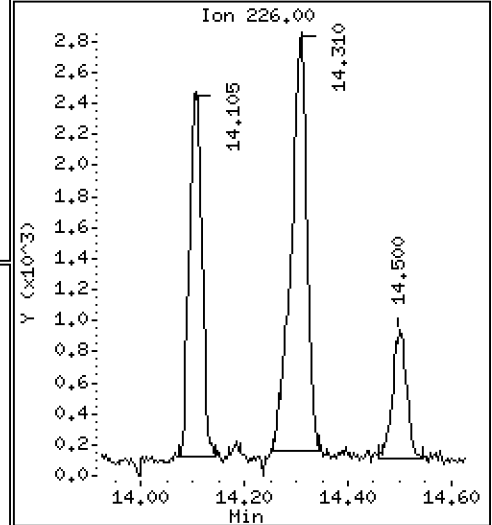
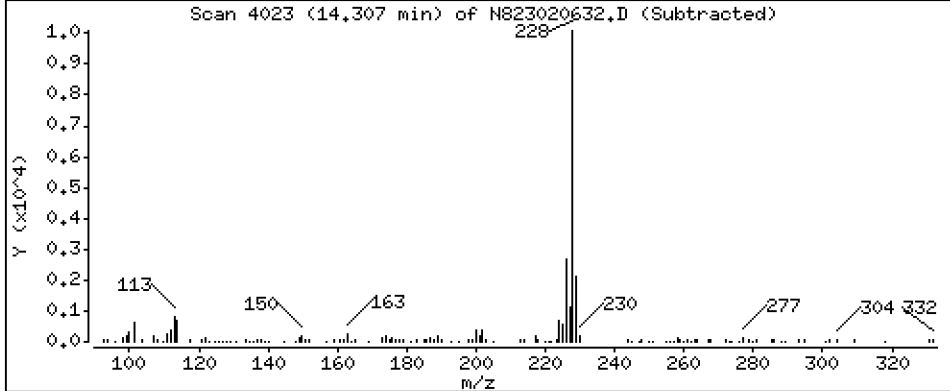
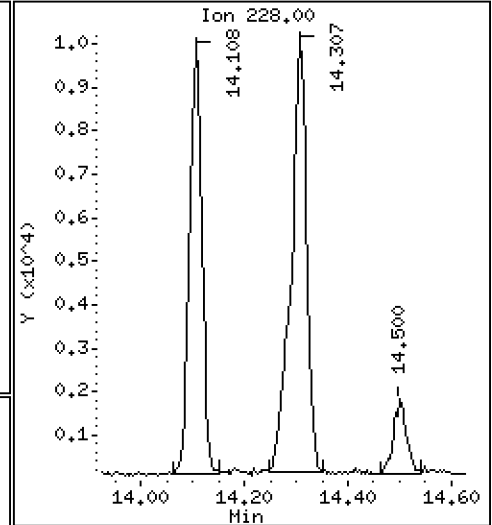
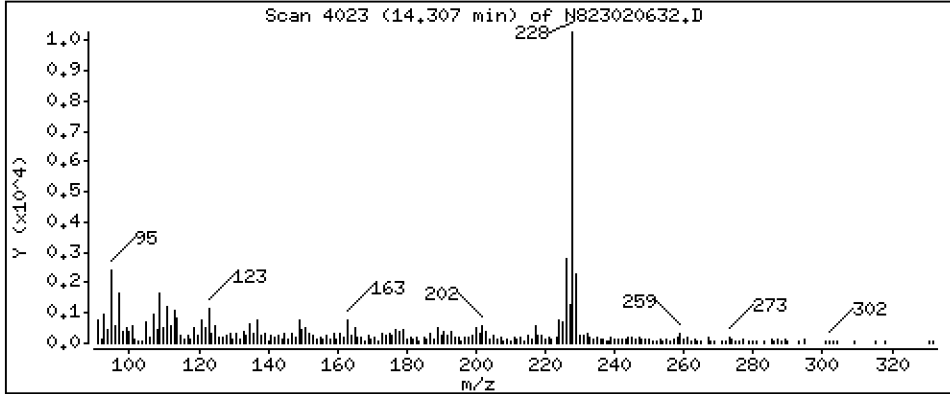
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 1,534 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

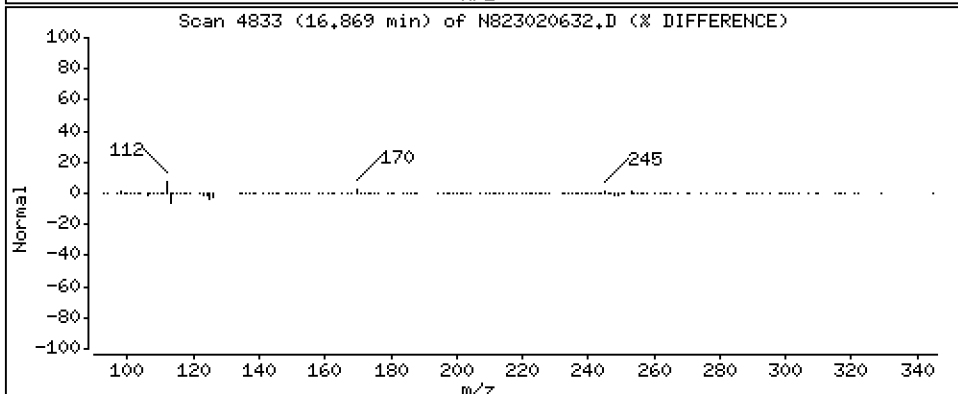
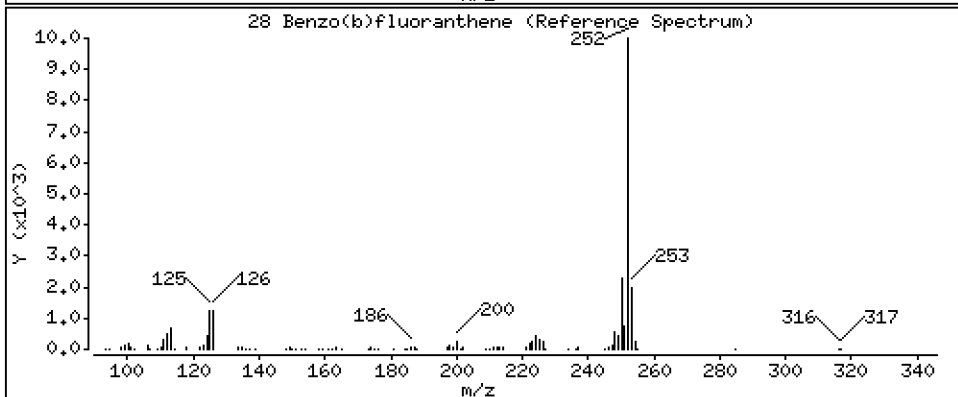
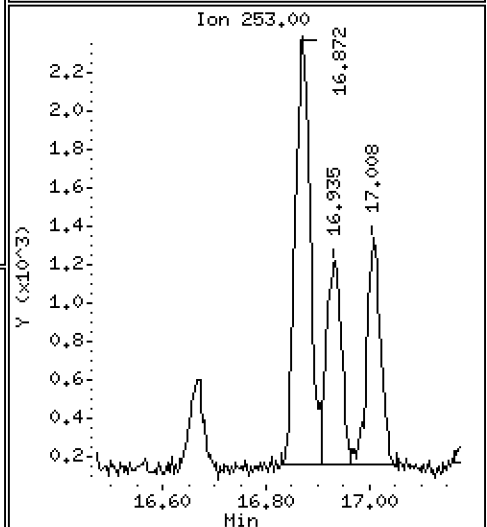
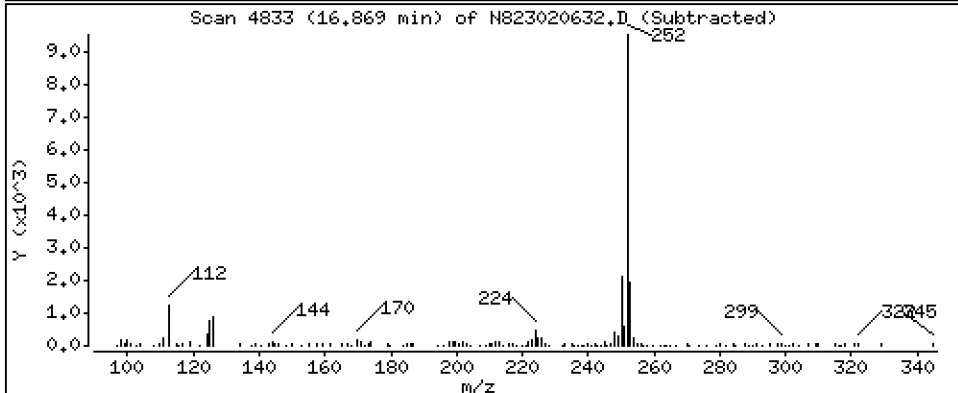
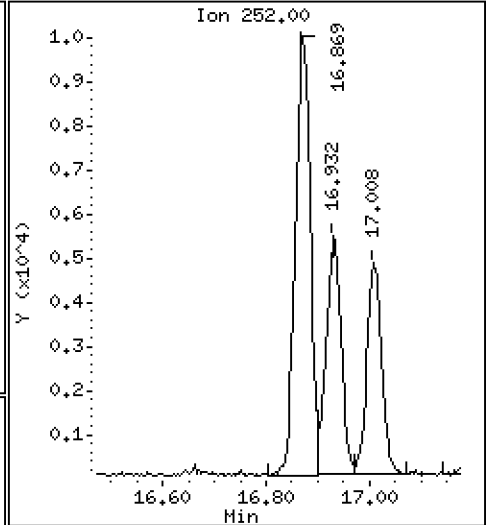
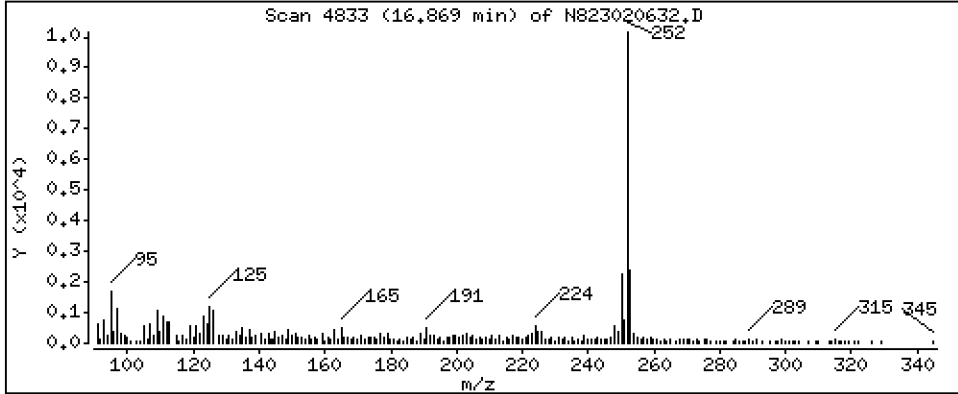
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 1,707 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

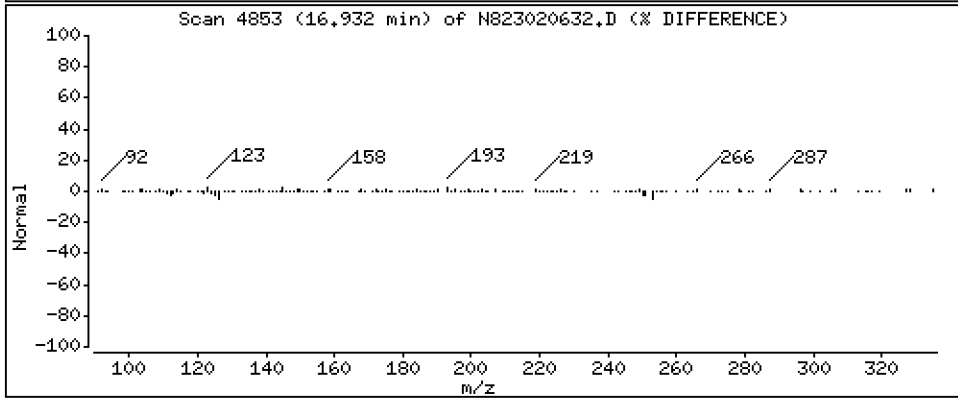
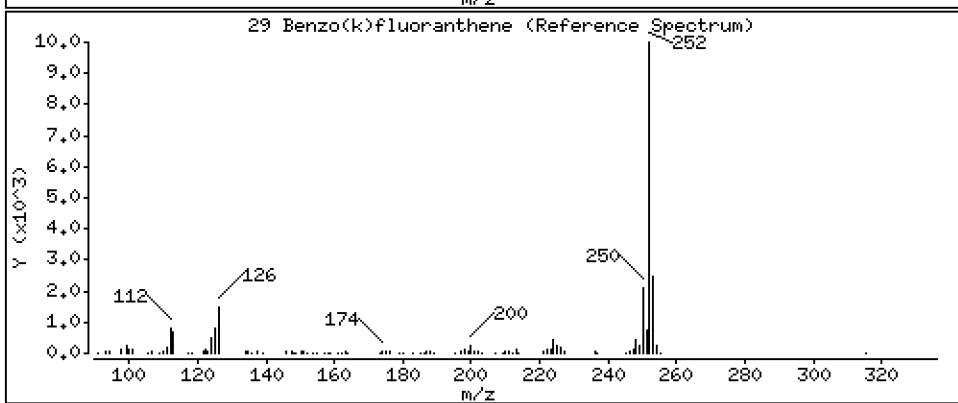
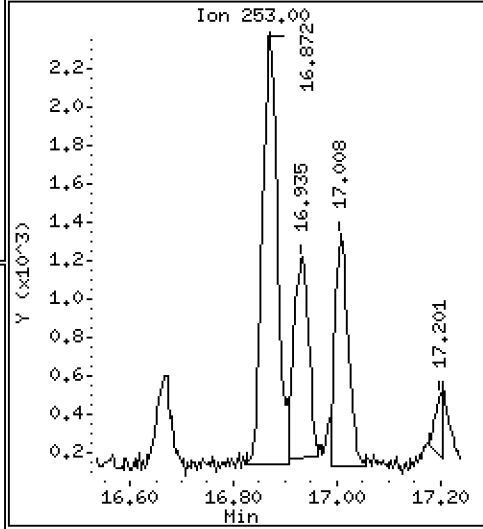
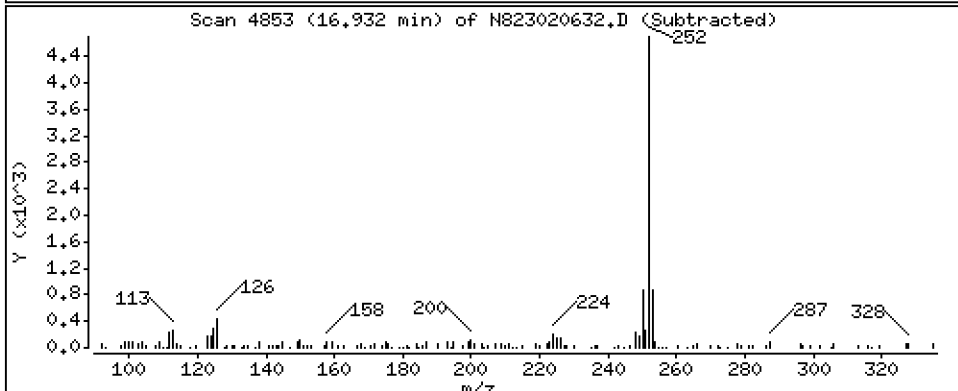
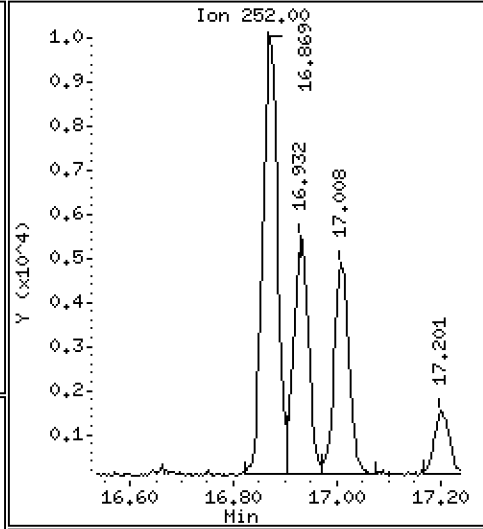
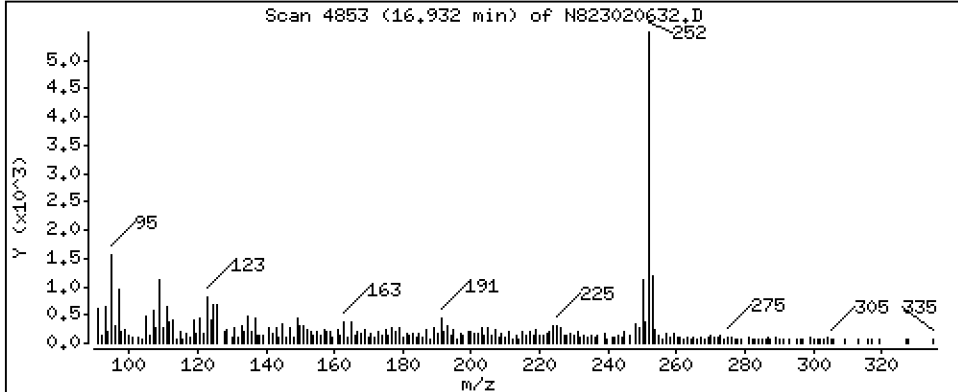
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

29 Benzo(k)fluoranthene

Concentration: 0,9240 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

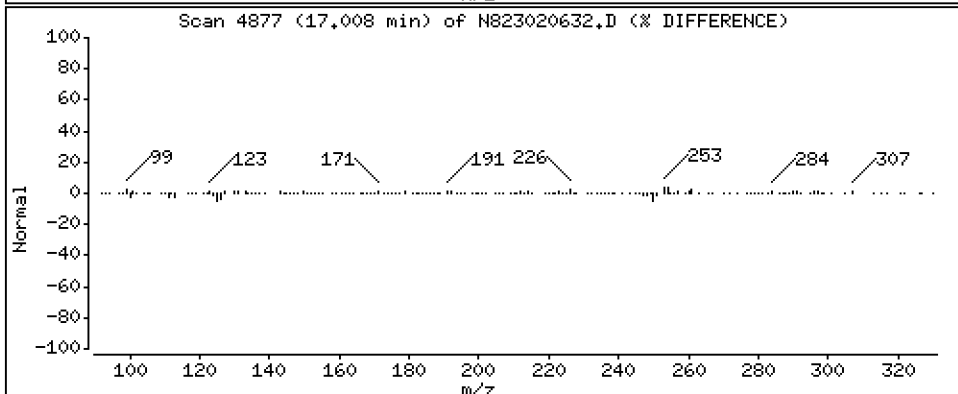
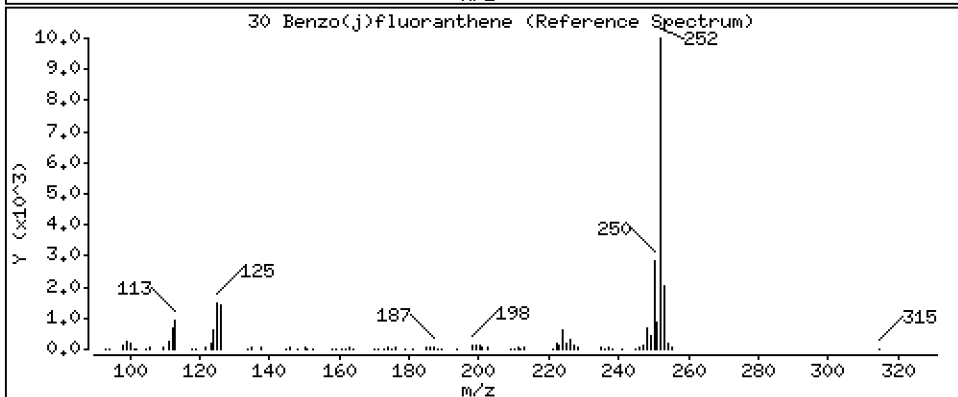
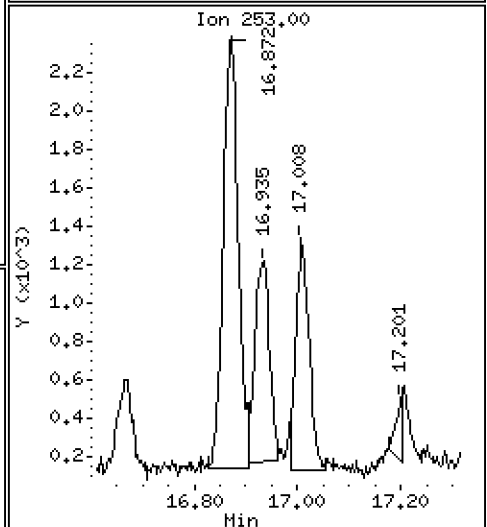
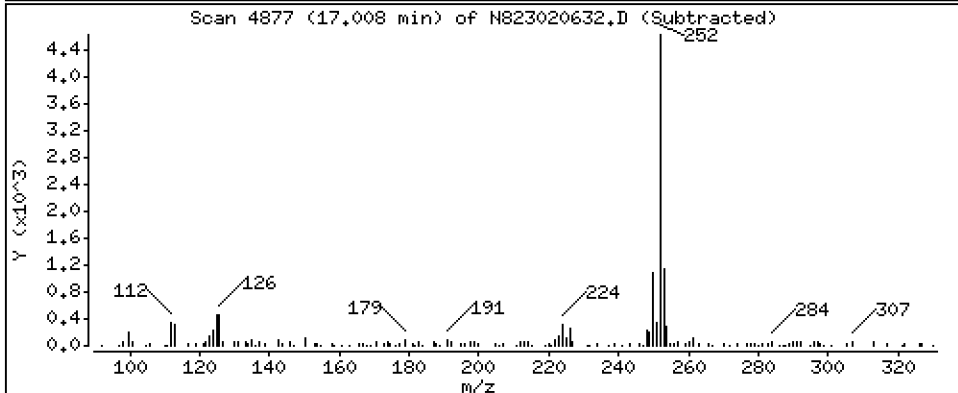
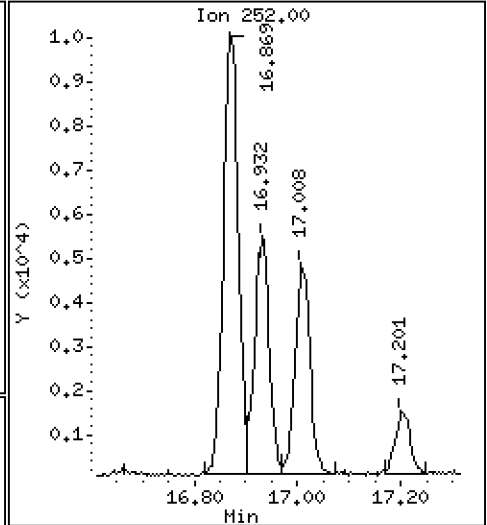
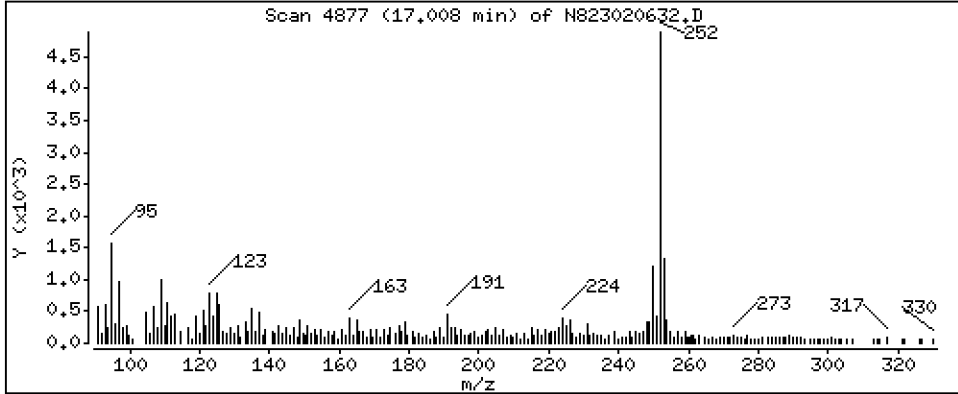
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

30 Benzo(j)fluoranthene

Concentration: 0,9182 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

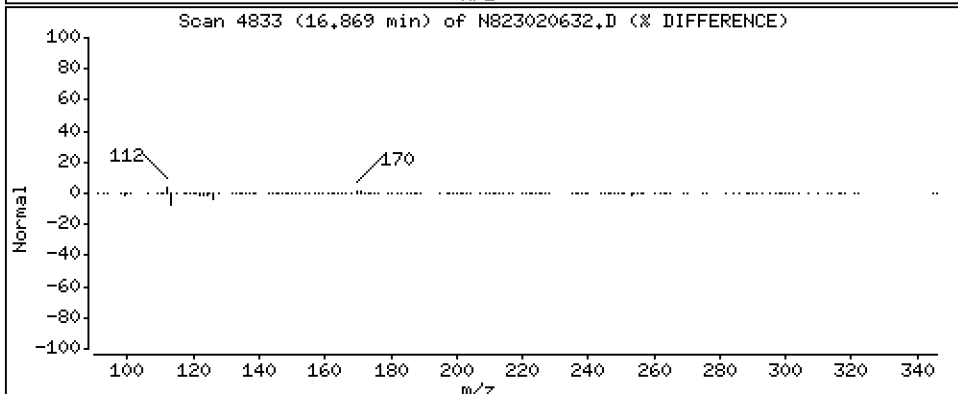
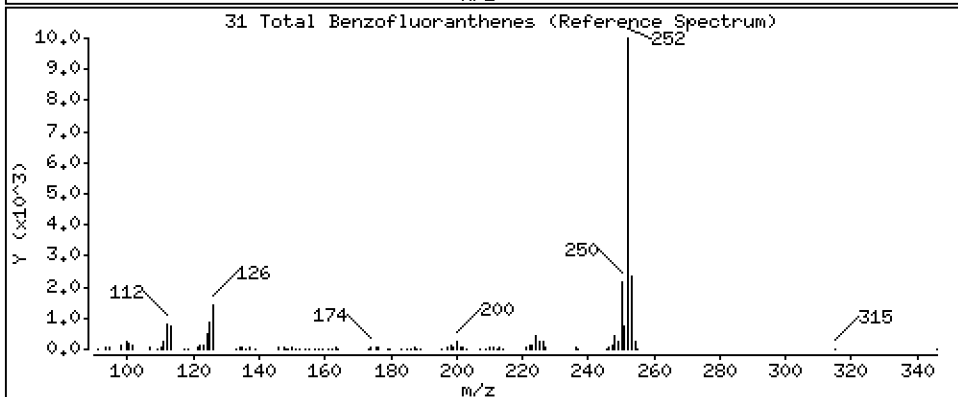
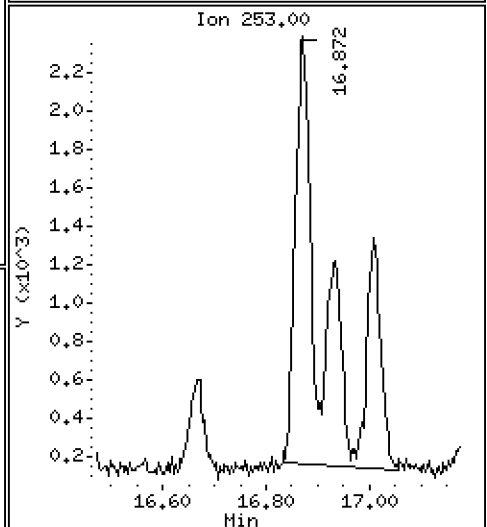
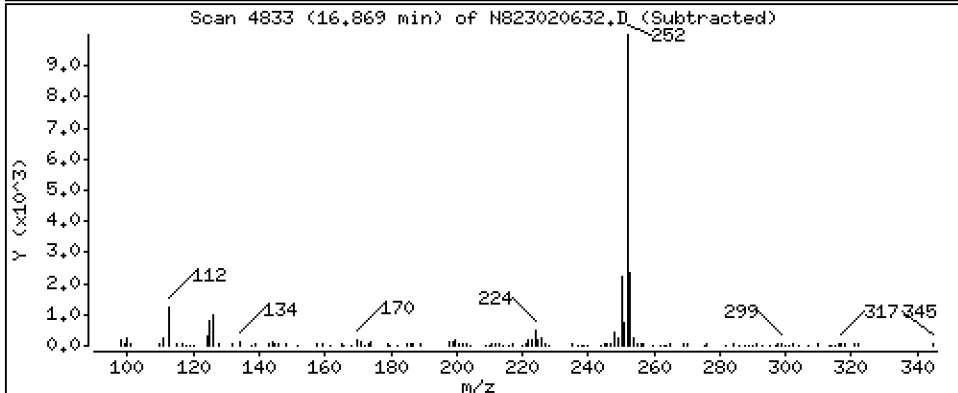
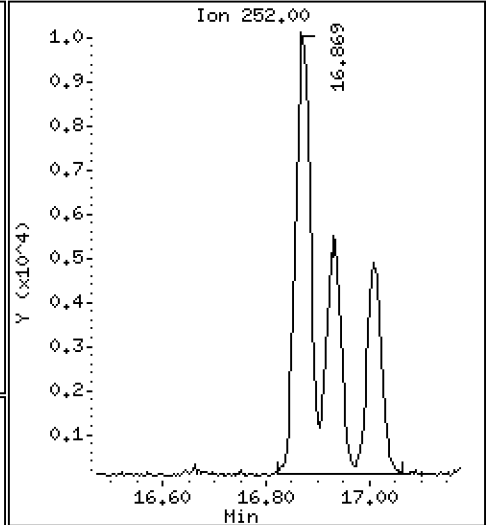
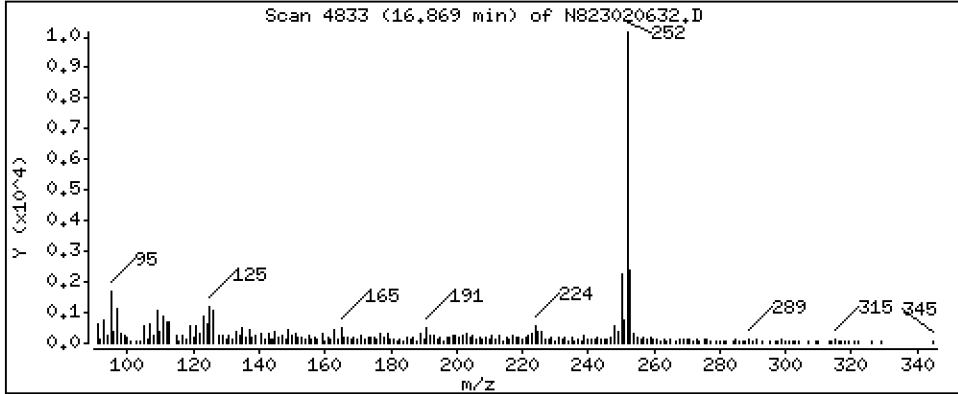
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 3,580 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

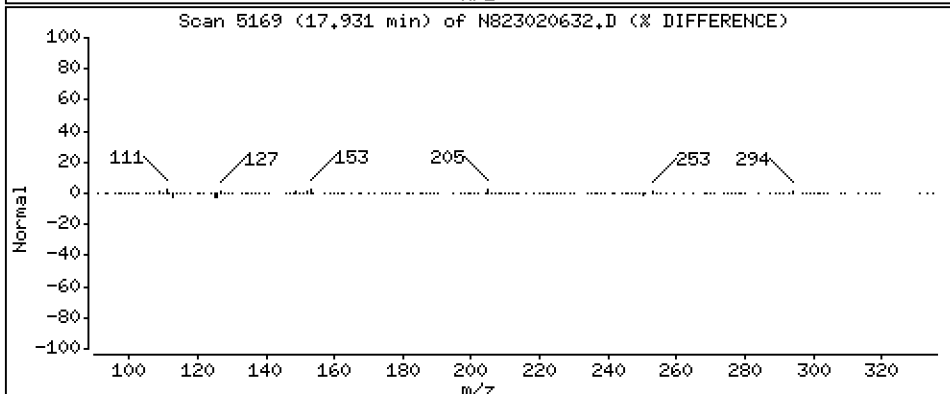
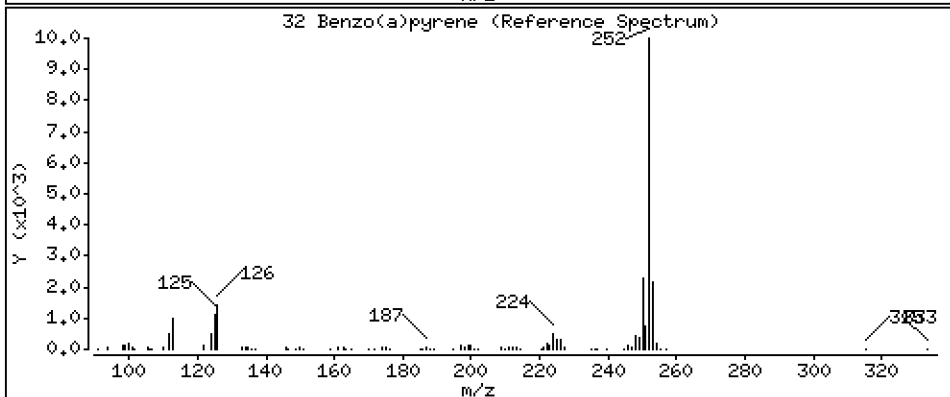
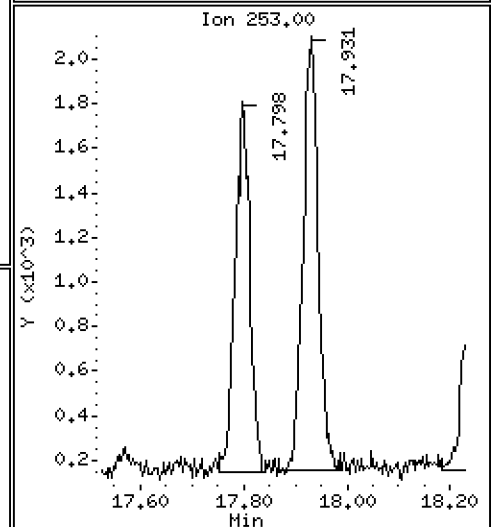
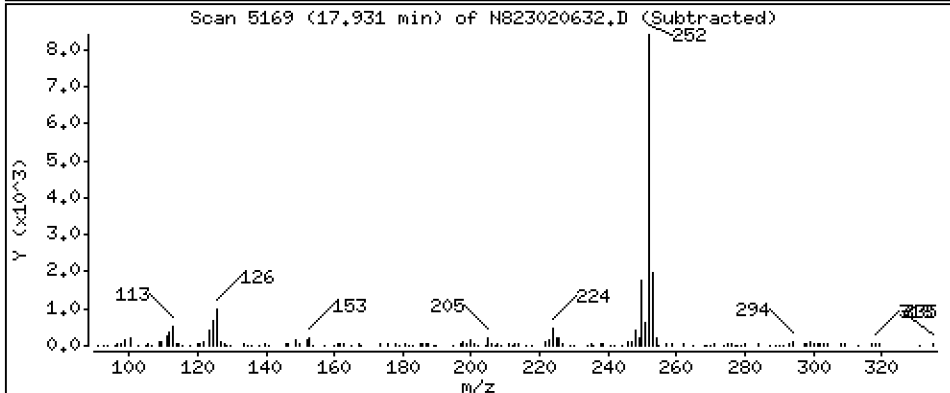
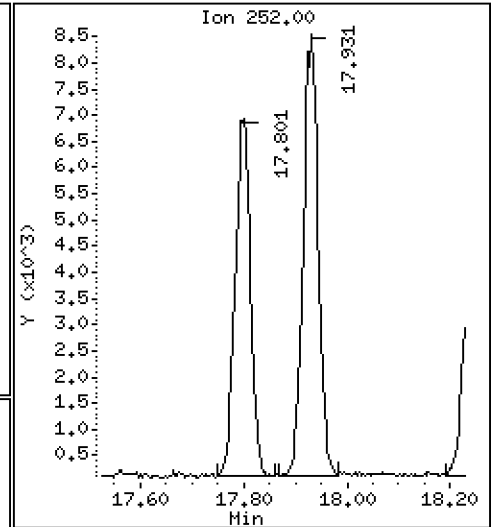
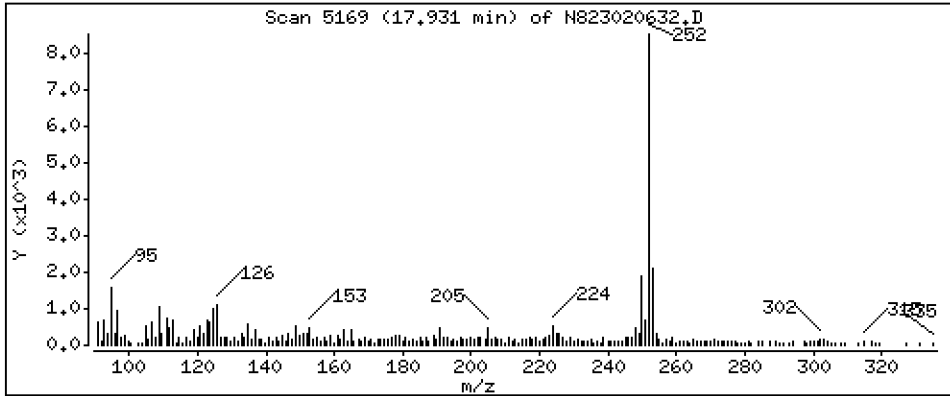
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 1,632 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

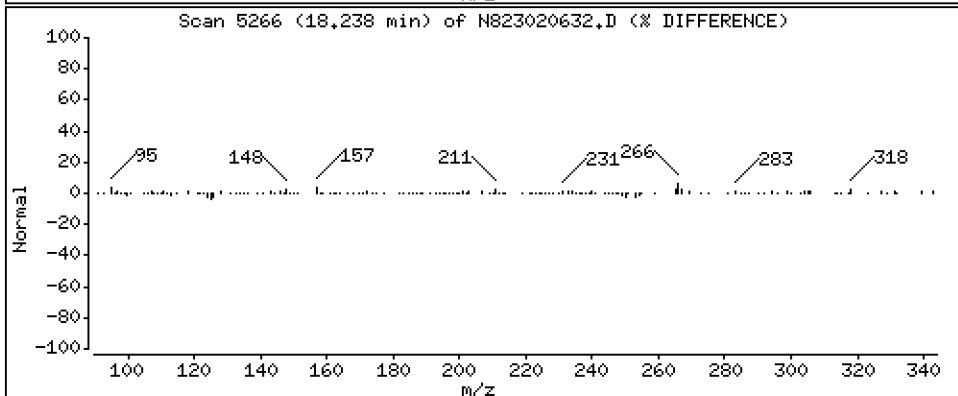
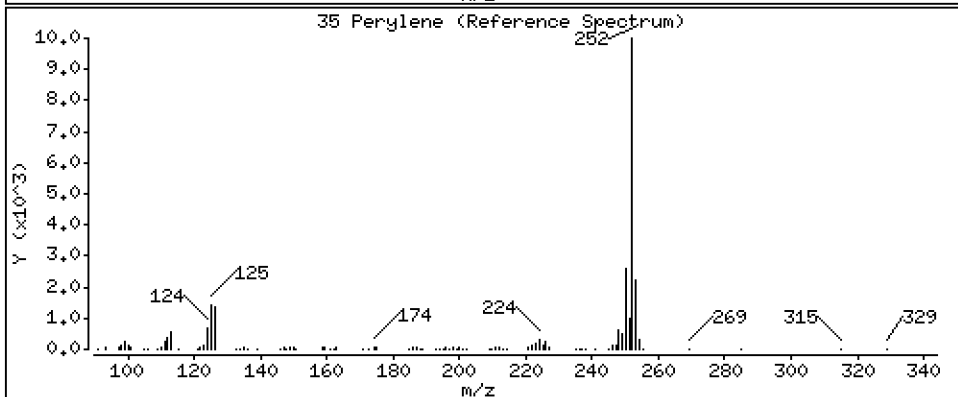
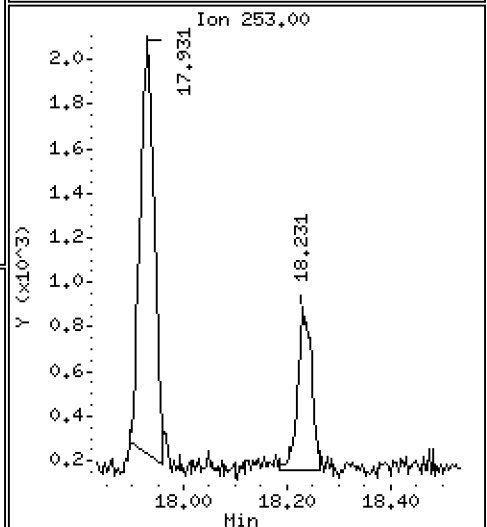
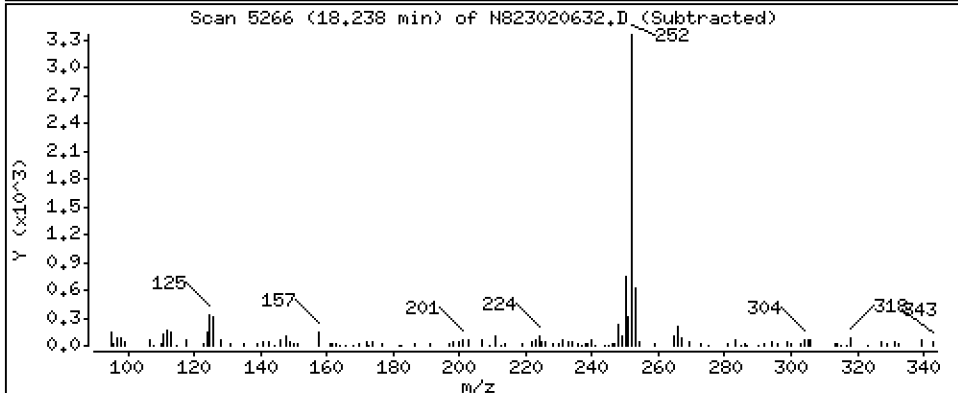
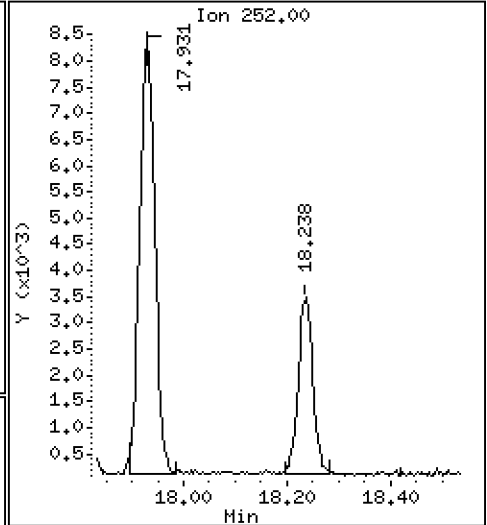
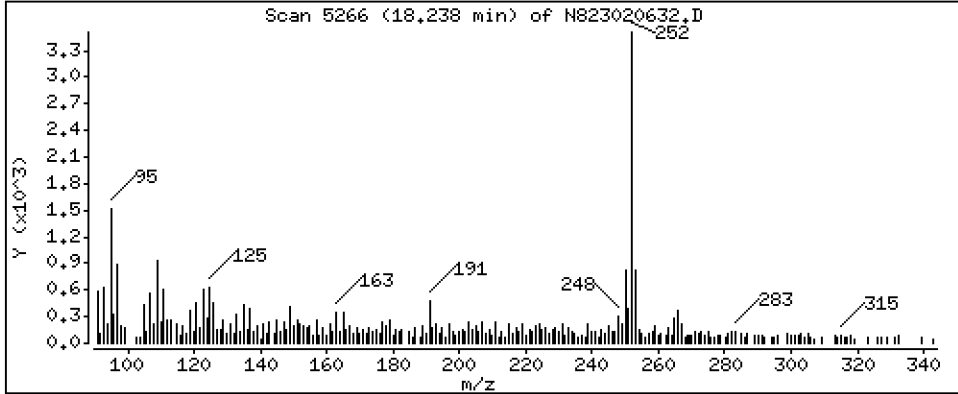
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

35 Perylene

Concentration: 0,5874 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

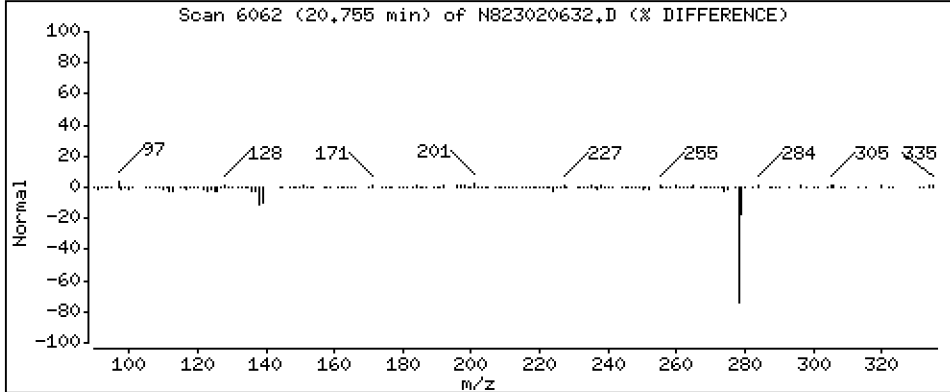
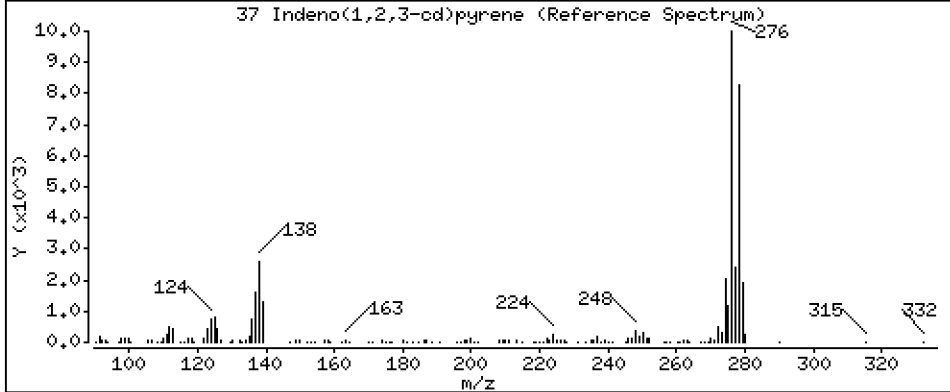
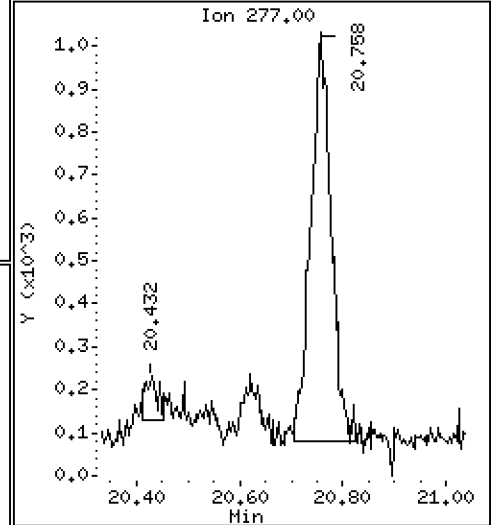
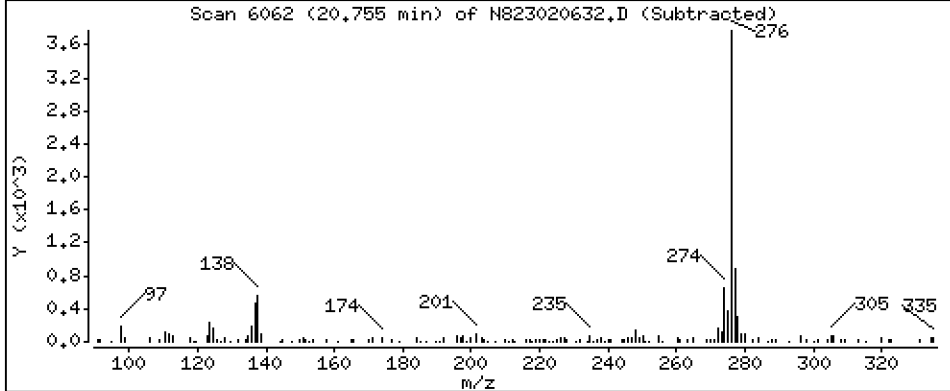
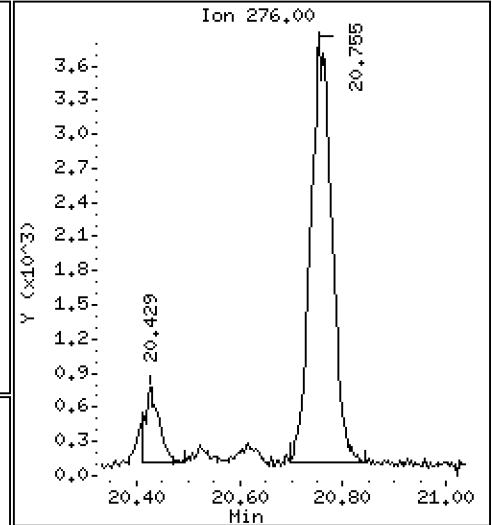
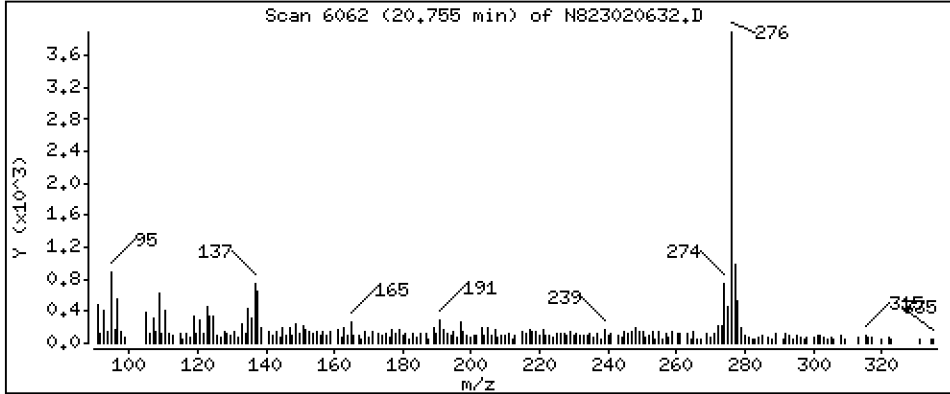
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 0,9115 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

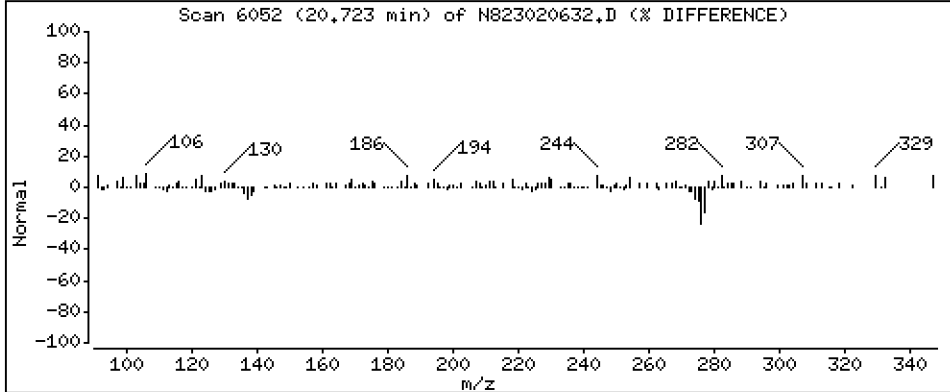
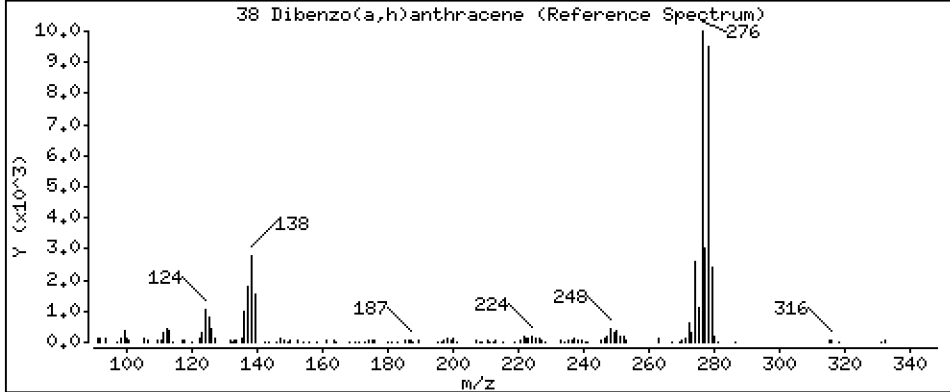
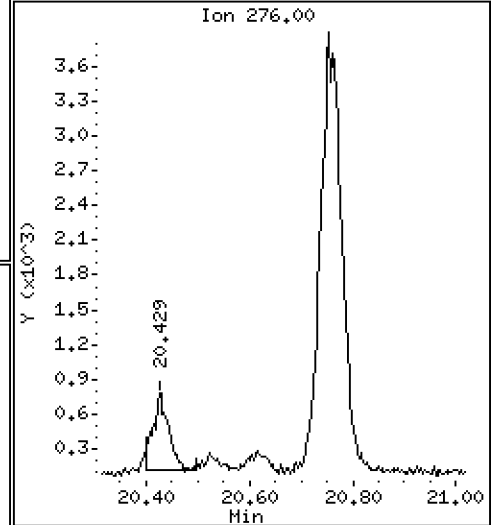
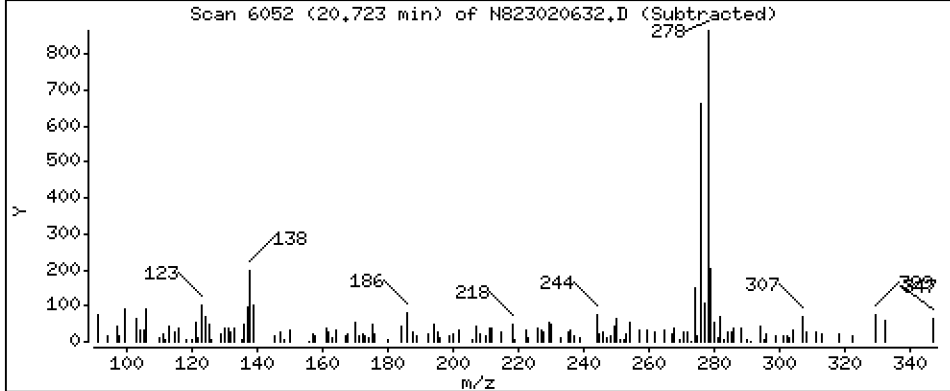
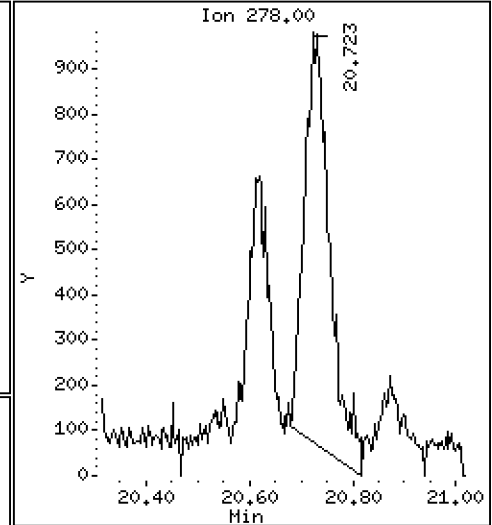
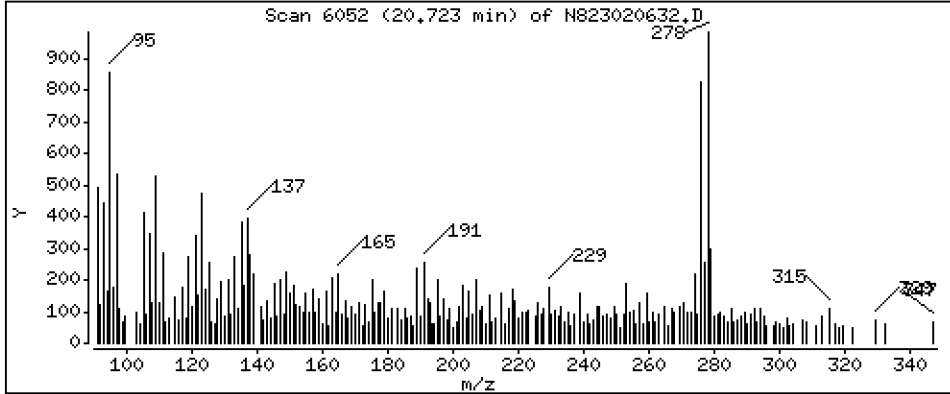
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 0,3057 ug/mL



Date : 07-FEB-2023 02:42

Client ID:

Instrument: nt8.i

Sample Info: 23A0326-09

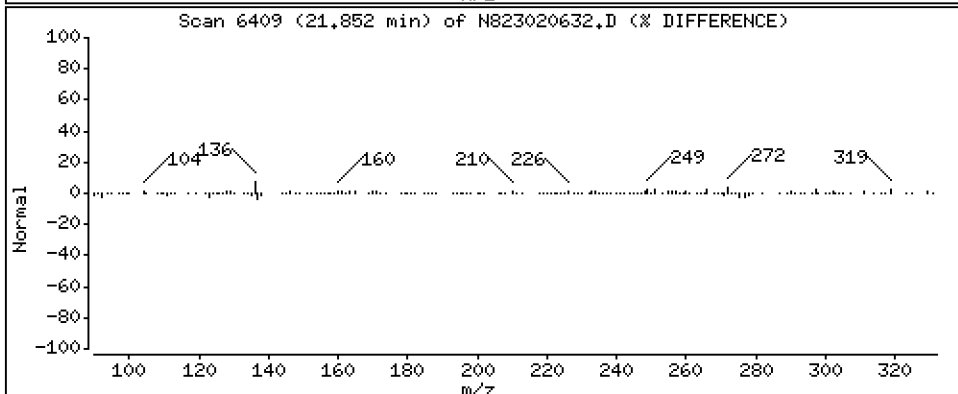
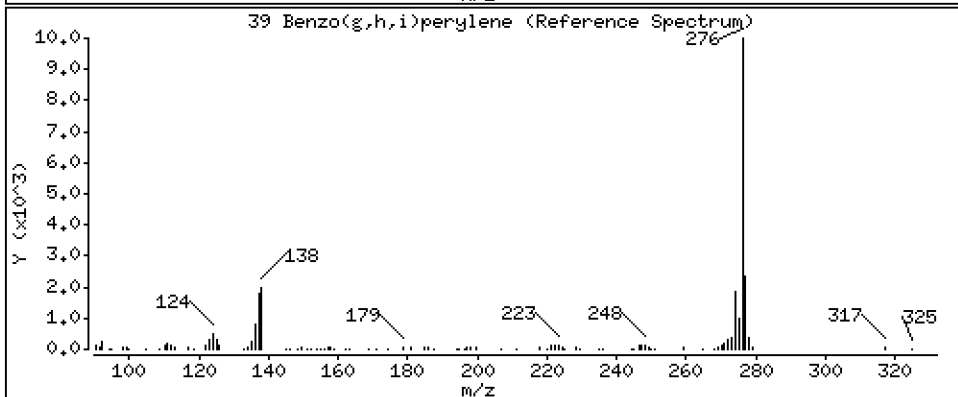
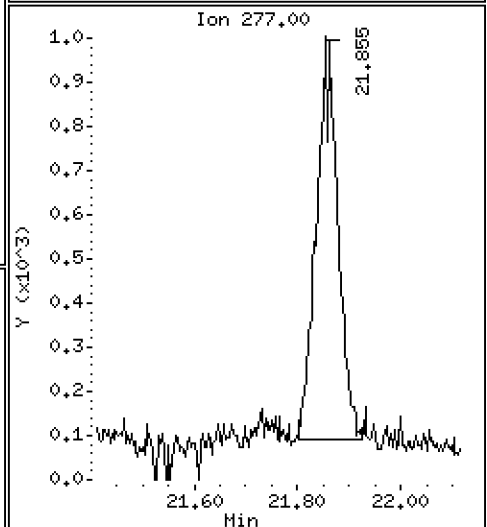
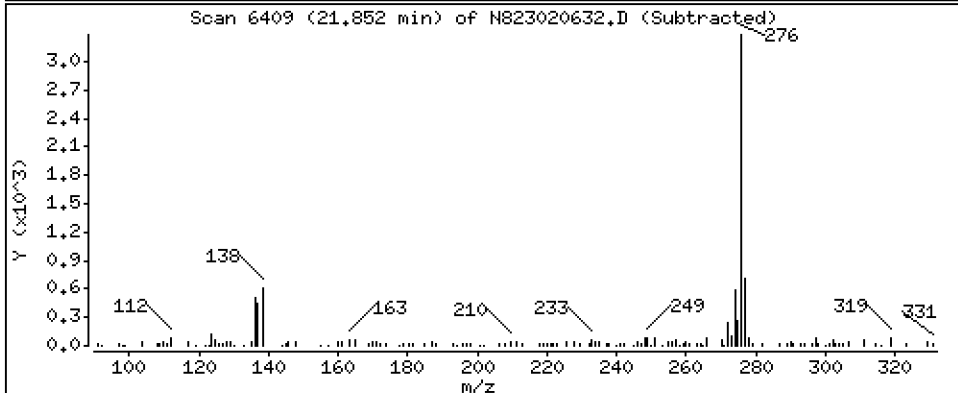
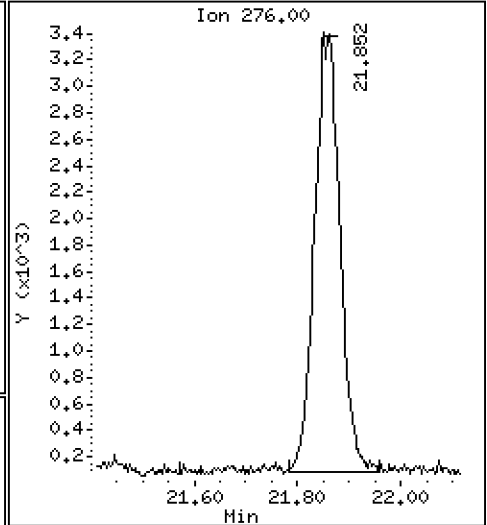
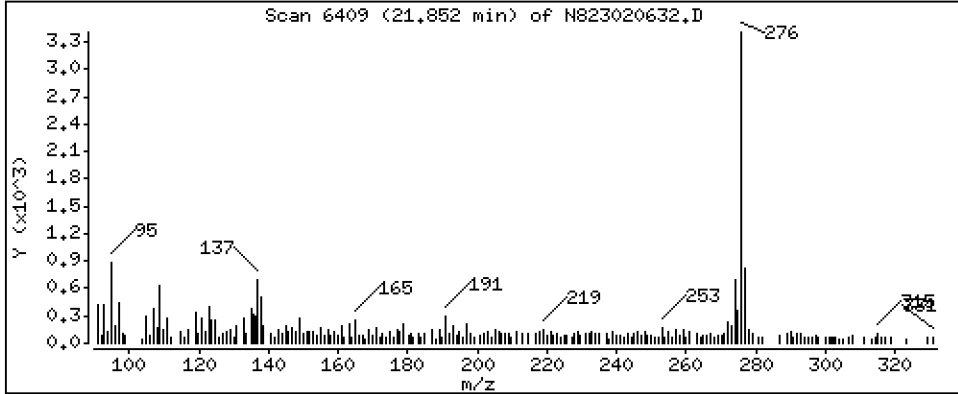
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 1,072 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020632.D
 Lab Smp Id: 23A0326-09
 Inj Date : 07-FEB-2023 02:42
 Operator : JZ Inst ID: nt8.i
 Smp Info : 23A0326-09
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 32
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PNAXMDL.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 1 Naphthalene-d8	136		4.881	4.900	(1.000)	55762	2.00000	
2 Naphthalene	128		4.913	4.928	(1.006)	2163	0.08343	0.08343 (M)
\$ 3 2-Methylnaphthalene-d10	152		5.621	5.634	(1.152)	42103	2.76853	2.769
4 2-Methylnaphthalene	141		5.668	5.681	(1.161)	1040	0.07293	0.07293 (M)
5 1-methylnaphthalene	141		5.871	5.880	(1.203)	720	0.04974	0.04974
9 Acenaphthylene	152		7.079	7.082	(0.985)	2193	0.08669	0.08669 (M)
* 10 Acenaphthene-d10	164		7.186	7.189	(1.000)	33500	2.00000	
11 Acenaphthene	153		7.233	7.240	(1.007)	1844	0.10879	0.1088 (M)
12 Dibenzofuran	168		7.388	7.392	(1.028)	1338	0.05197	0.05197
14 Fluorene	166		7.869	7.869	(1.095)	2096	0.10483	0.1048
* 15 Phenanthrene-d10	188		9.235	9.232	(1.000)	54143	2.00000	
16 Phenanthrene	178		9.273	9.267	(1.004)	25194	0.95260	0.9526
17 Anthracene	178		9.314	9.308	(1.009)	9174	0.38184	0.3818
19 Carbazole	167		9.829	9.823	(1.064)	3227	0.14651	0.1465 (M)
22 Fluoranthene	202		11.066	11.050	(1.198)	65122	2.26208	2.262
\$ 21 Fluoranthene-d10	212		11.028	11.009	(1.194)	76347	3.19608	3.196
23 Pyrene	202		11.600	11.569	(0.815)	66459	4.73872	4.739
24 Benzo(a)anthracene	228		14.108	14.070	(0.991)	16611	1.30675	1.307
* 25 Chrysene-d12	240		14.234	14.202	(1.000)	22621	2.00000	
27 Chrysene	228		14.307	14.275	(1.005)	20765	1.53448	1.534
28 Benzo(b)fluoranthene	252		16.868	16.824	(0.929)	20111	1.70725	1.707
29 Benzo(k)fluoranthene	252		16.931	16.887	(0.932)	10661	0.92397	0.9240
30 Benzo(j)fluoranthene	252		17.007	16.963	(0.936)	9538	0.91825	0.9182
31 Total Benzofluoranthenes	252		16.868	16.824	(0.929)	39941	3.58022	3.580 (M)
32 Benzo(a)pyrene	252		17.930	17.877	(0.987)	16916	1.63186	1.632
* 33 Perylene-d12	264		18.164	18.107	(1.000)	20226	2.00000	
35 Perylene	252		18.237	18.183	(1.004)	6534	0.58739	0.5874
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.621	20.549	(1.135)	30066	3.79383	3.794
37 Indeno(1,2,3-cd)pyrene	276		20.754	20.684	(1.143)	10764	0.91147	0.9115
38 Dibenzo(a,h)anthracene	278		20.722	20.666	(1.141)	3107	0.30572	0.3057 (M)
39 Benzo(g,h,i)perylene	276		21.851	21.763	(1.203)	11465	1.07153	1.072

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020632.D Calibration Time: 15:15
 Lab Smp Id: 23A0326-09
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	55762	25.77
10 Acenaphthene-d10	26127	13064	52254	33500	28.22
15 Phenanthrene-d10	47424	23712	94848	54143	14.17
25 Chrysene-d12	36794	18397	73588	22621	-38.52
33 Perylene-d12	36636	18318	73272	20226	-44.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.39
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	-0.04
15 Phenanthrene-d10	9.23	8.73	9.73	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.23	0.22
33 Perylene-d12	18.11	17.61	18.61	18.16	0.31

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

REVIEW SUMMARY FOR FILE - N823020632.D

Lab ID: 23A0326-09

nt8.i, 20230206A.b\FSIMPNA230119.m, 07-FEB-2023 02:42

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

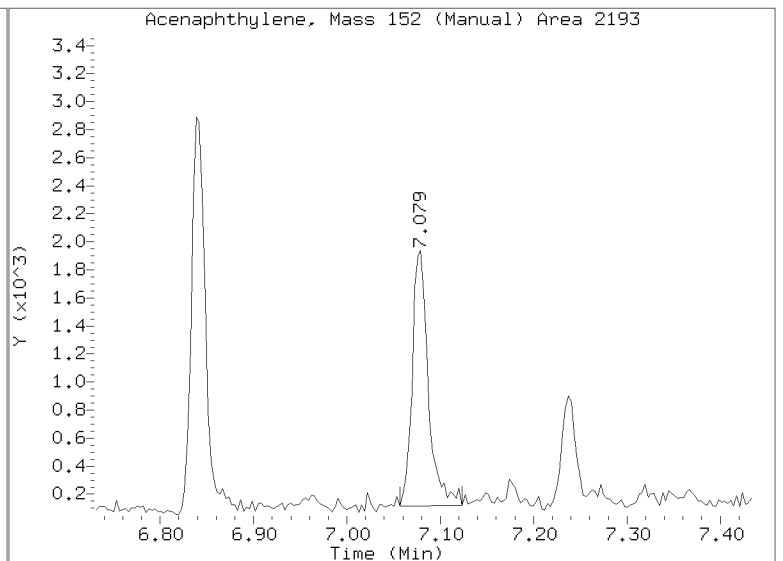
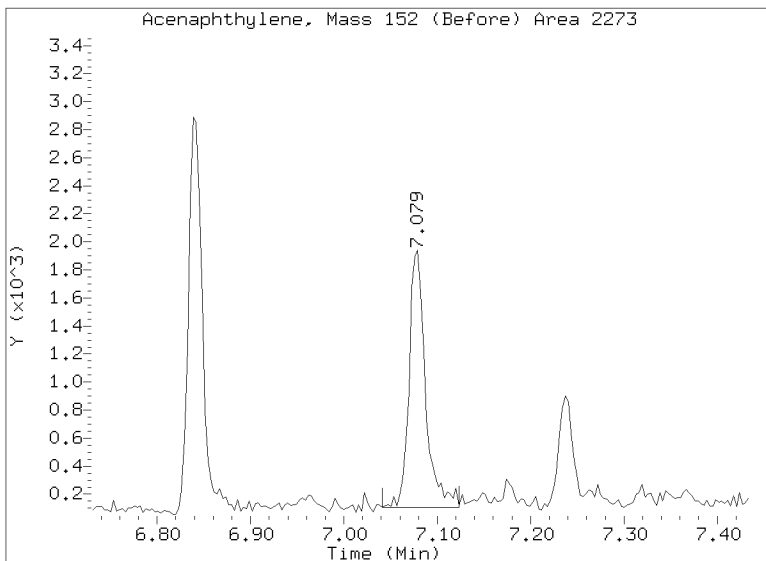
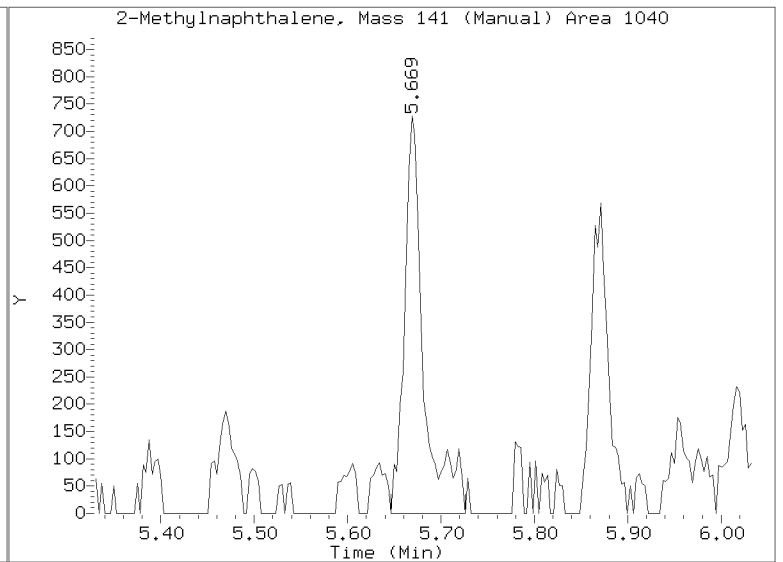
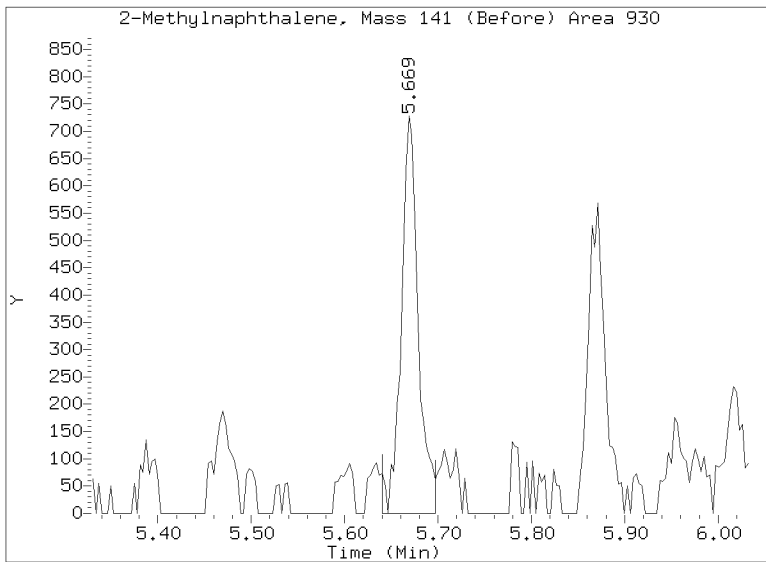
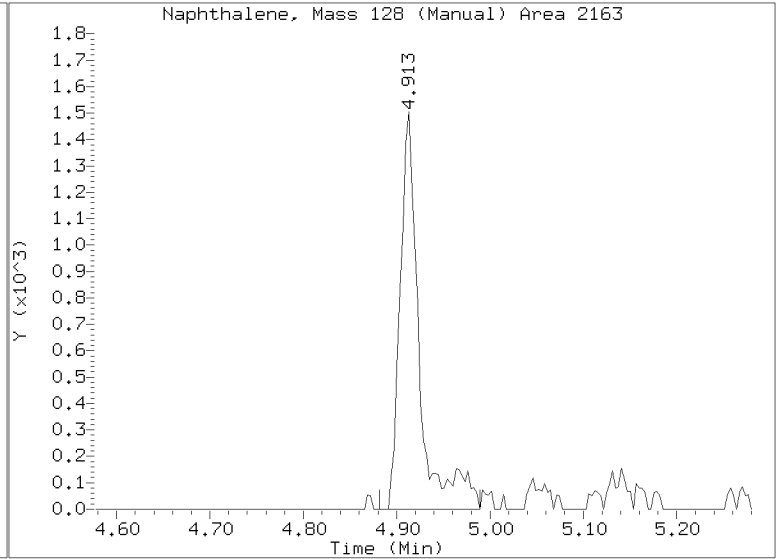
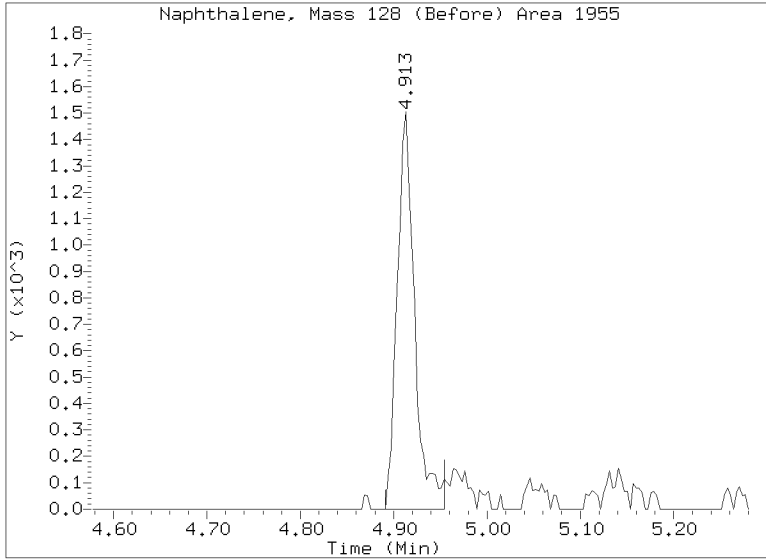
No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

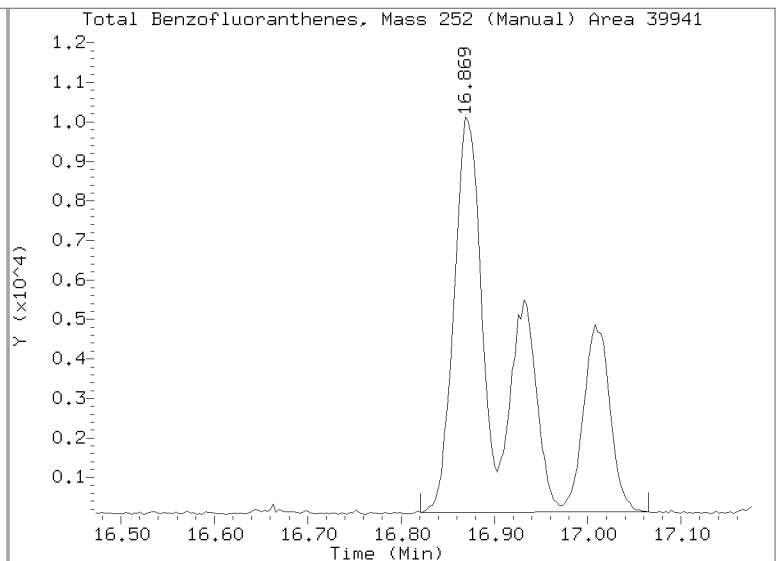
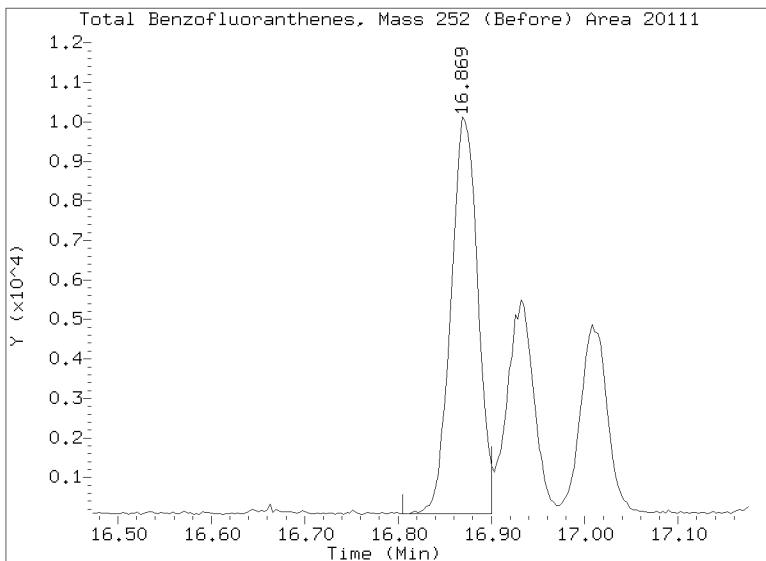
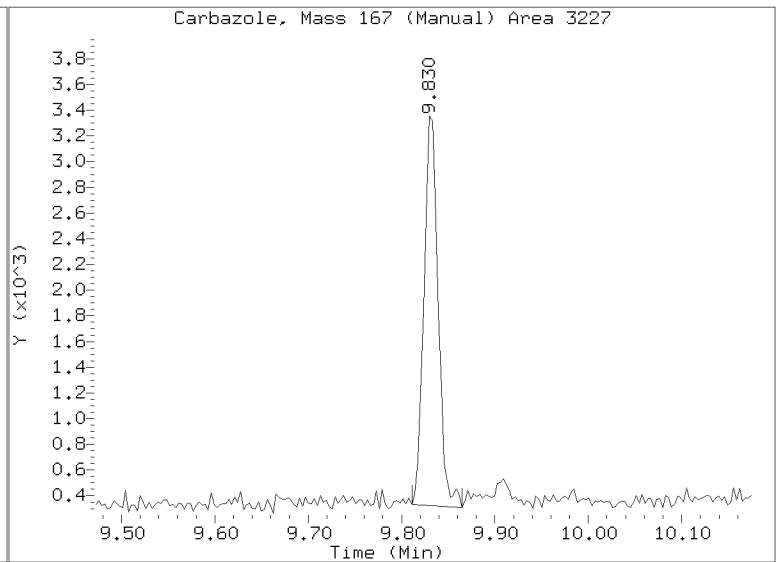
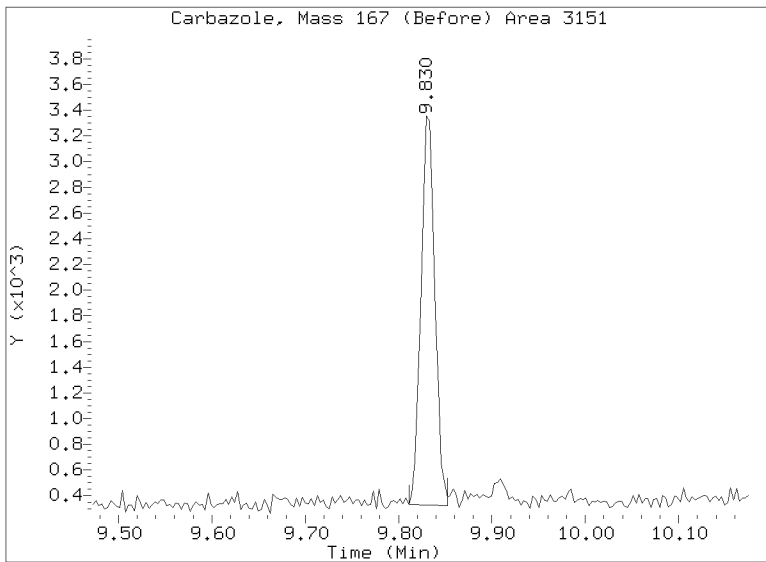
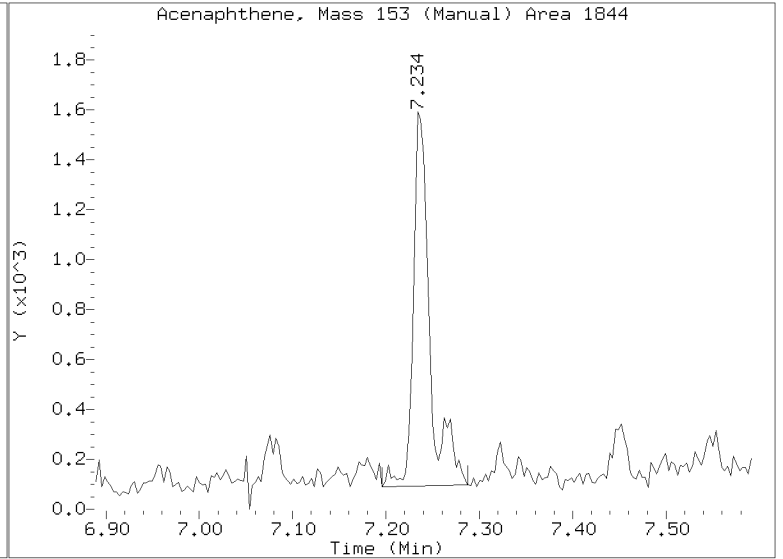
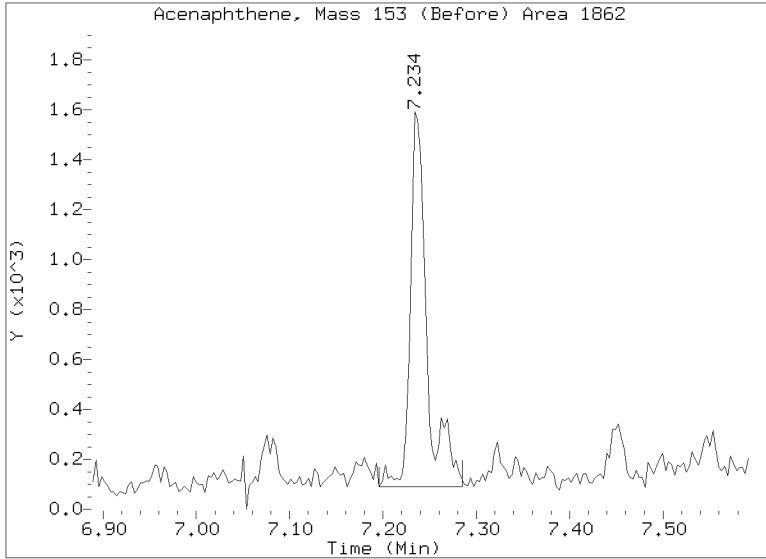
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020632.D
Injection Date: 07-FEB-2023 02:42
Lab ID:23A0326-09 Client ID:
Report Date: 02/07/2023 19:31



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020632.D
Injection Date: 07-FEB-2023 02:42
Lab ID:23A0326-09 Client ID:
Report Date: 02/07/2023 19:31



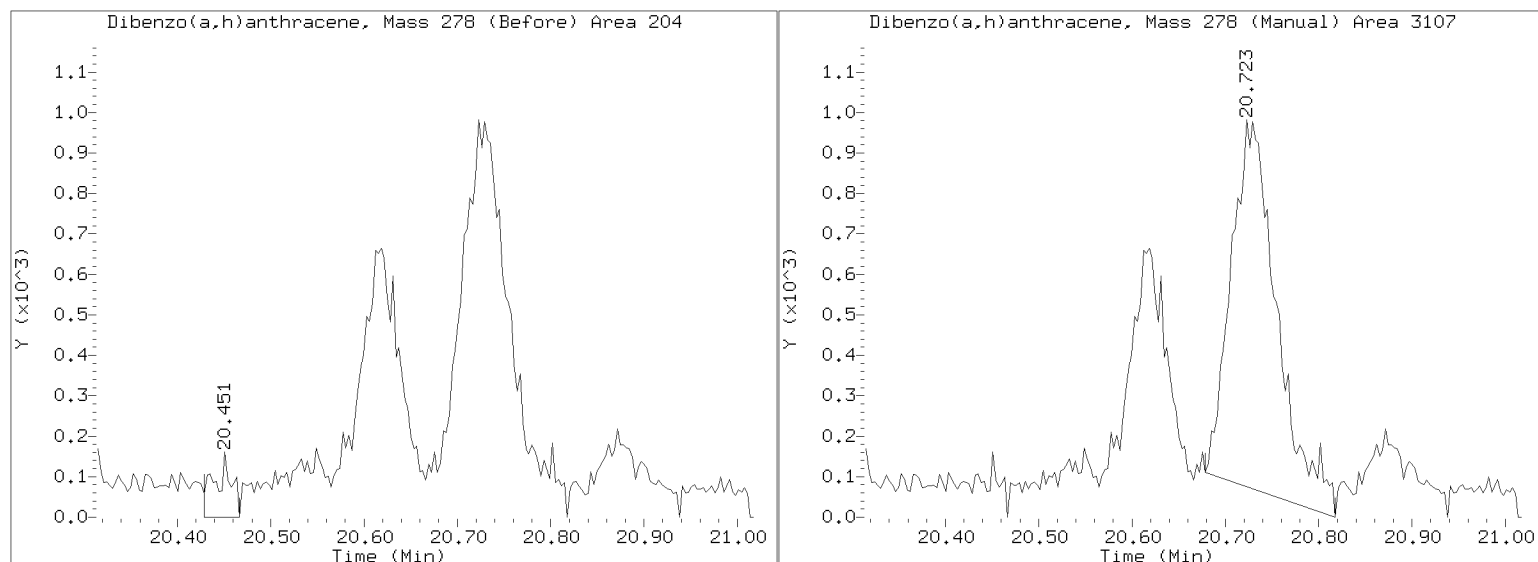
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020632.D

Injection Date: 07-FEB-2023 02:42

Lab ID:23A0326-09 Client ID:

Report Date: 02/07/2023 19:31





Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-10 A

SDG: 23A0326

Sampled: 01/17/23 14:18

Prepared: 02/02/23 13:06

File ID: NT1003052332S.D

% Solids: 54.63

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 08:56

Batch: BLA0685

Sequence: SLC0447

Initial/Final: 18.88 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	10.5		0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	4.8	U	0.7	4.8
100-51-6	Benzyl Alcohol	1	32.0		2.4	19.4
65-85-0	Benzoic acid	1	97.0	U	13.0	97.0
105-67-9	2,4-Dimethylphenol	1	19.4	U	2.1	19.4
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.2	J	1.3	4.8
87-86-5	Pentachlorophenol	1	2.1	J	2.1	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	727.16	518	71.3	27 - 120	
p-Terphenyl-d14	484.77	656	135	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052332S.D

Date : 06-HRR-2023 08:56

Client ID:

Sample Info: 23A0326-10

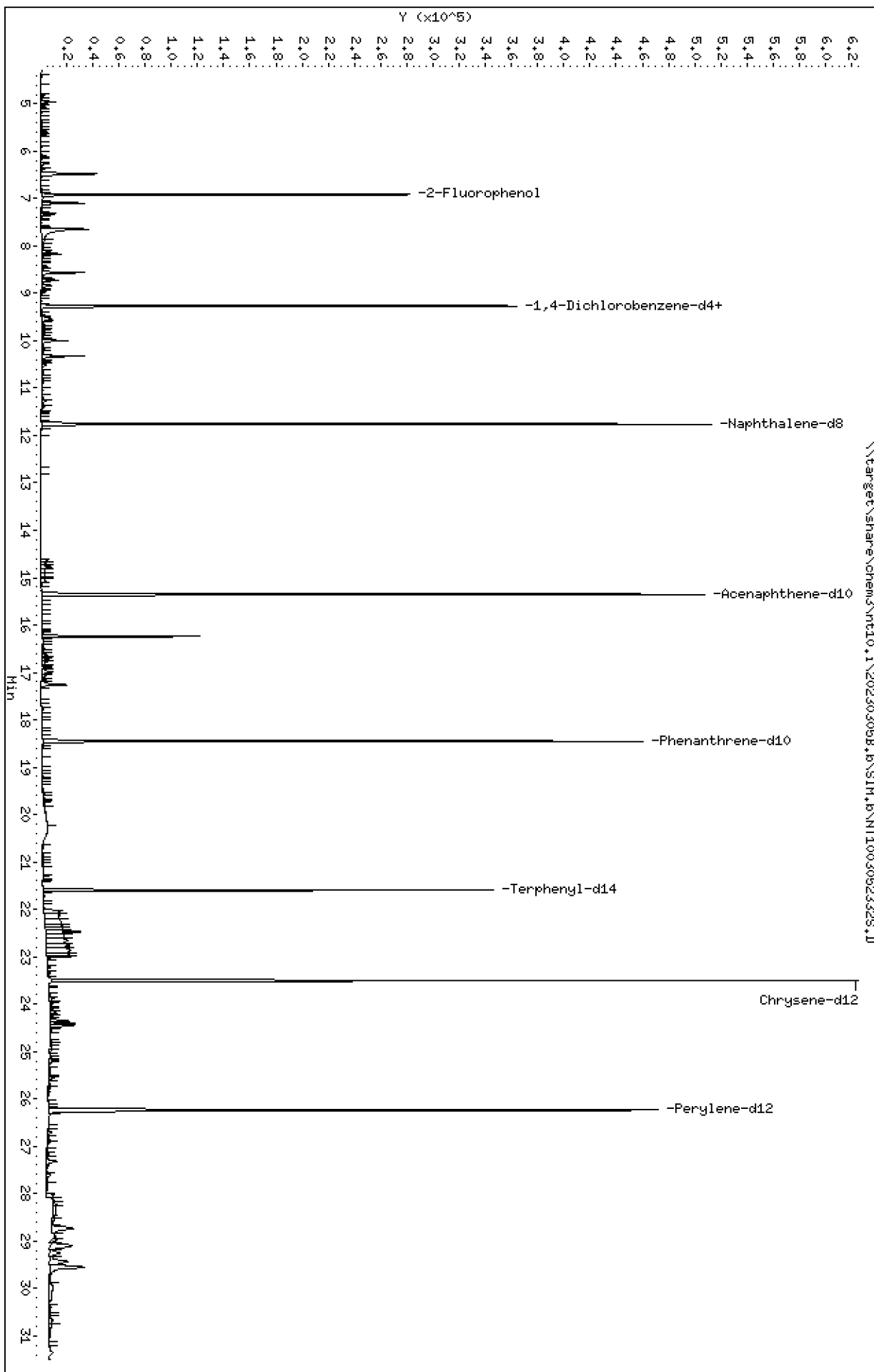
Page 1

Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

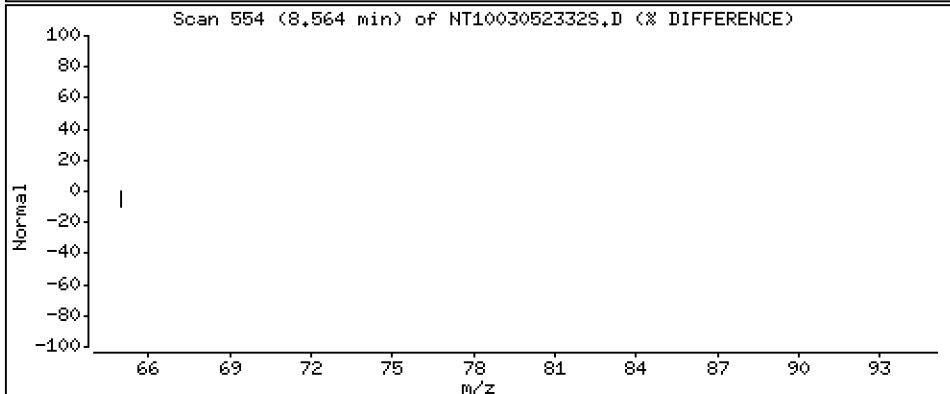
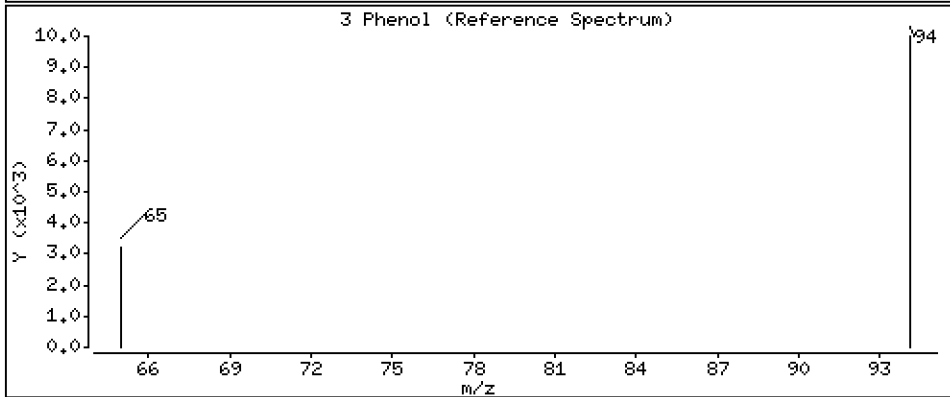
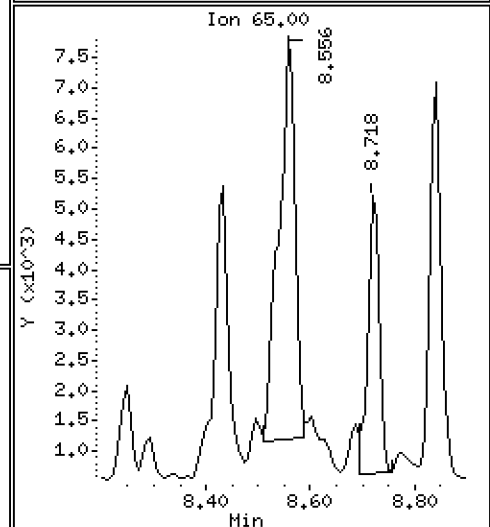
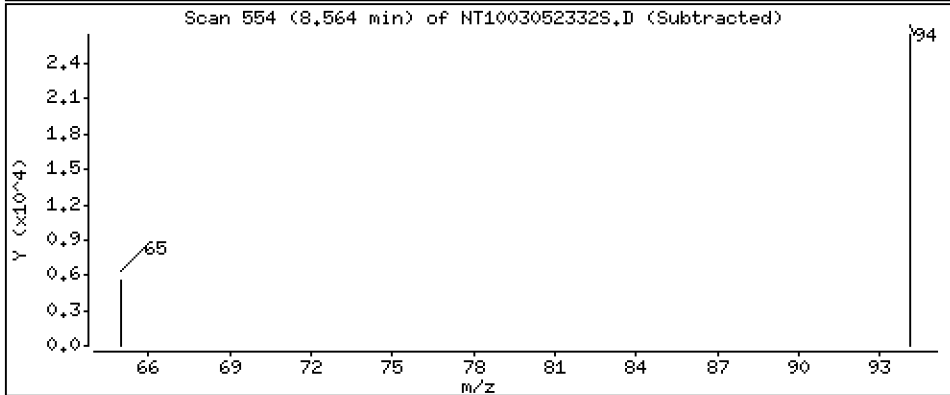
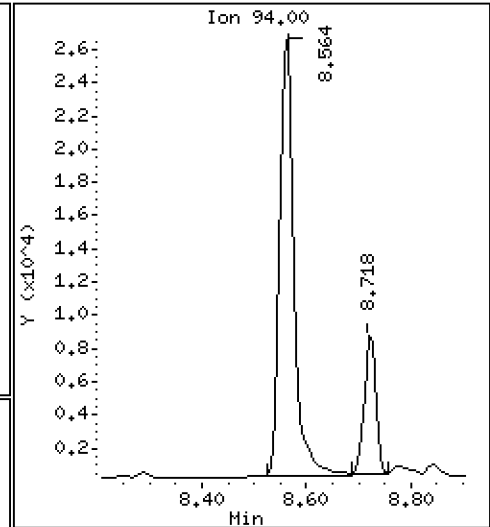
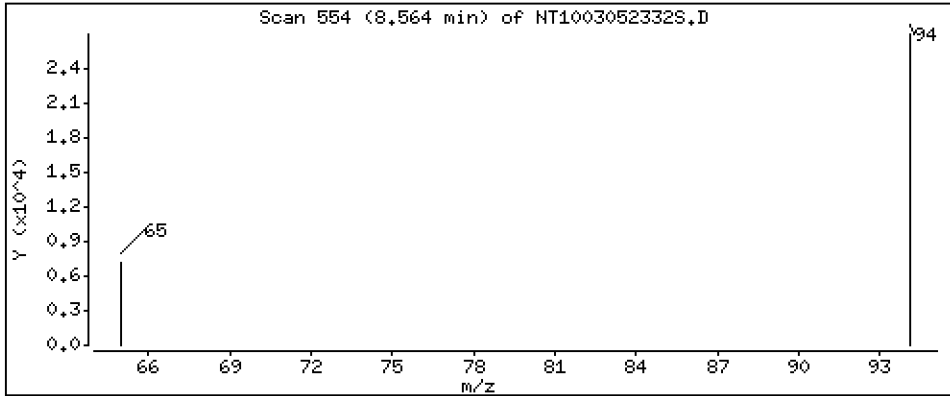
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,5229 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

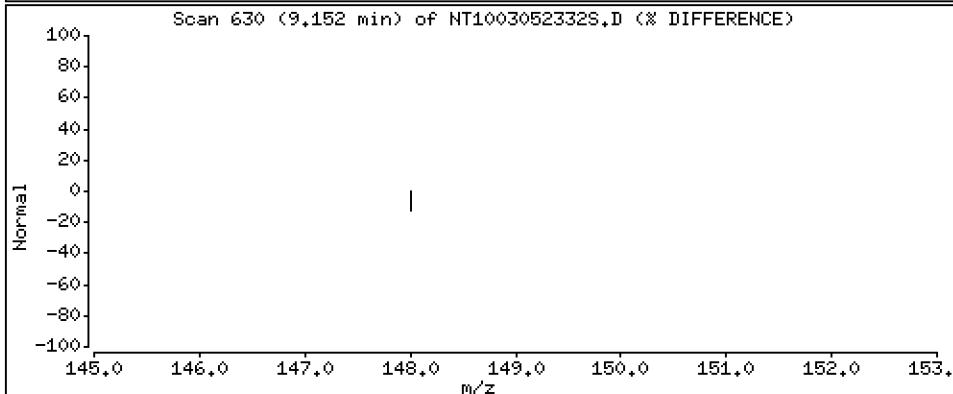
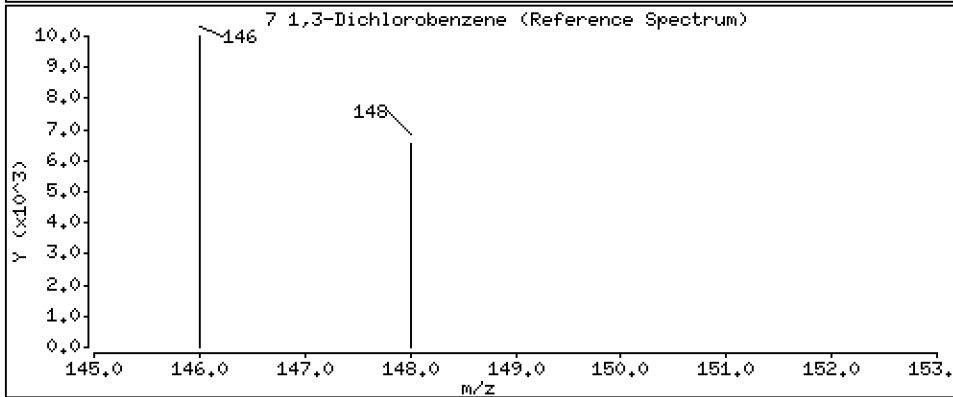
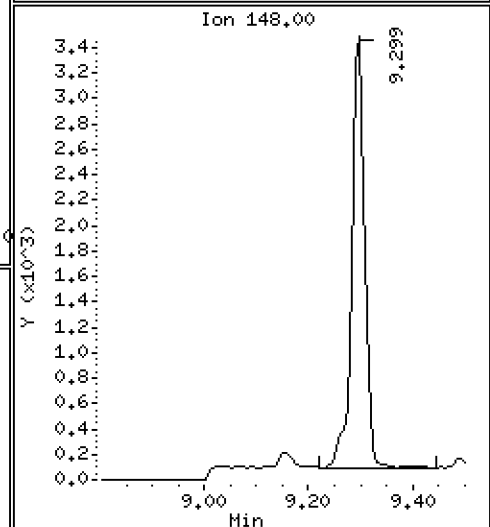
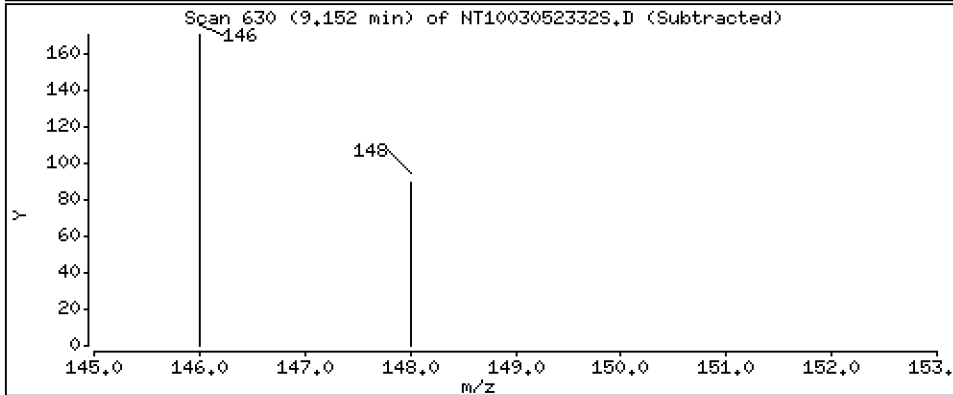
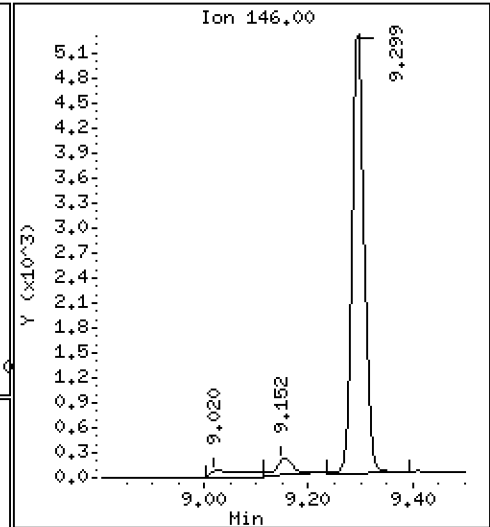
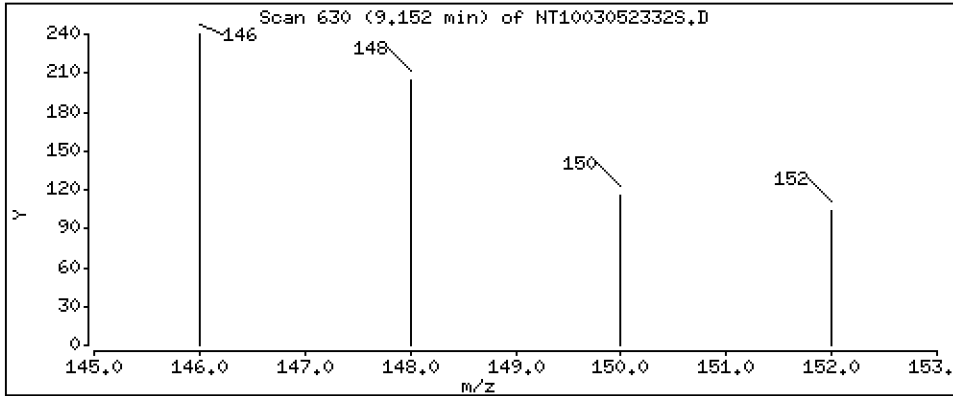
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.005516 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

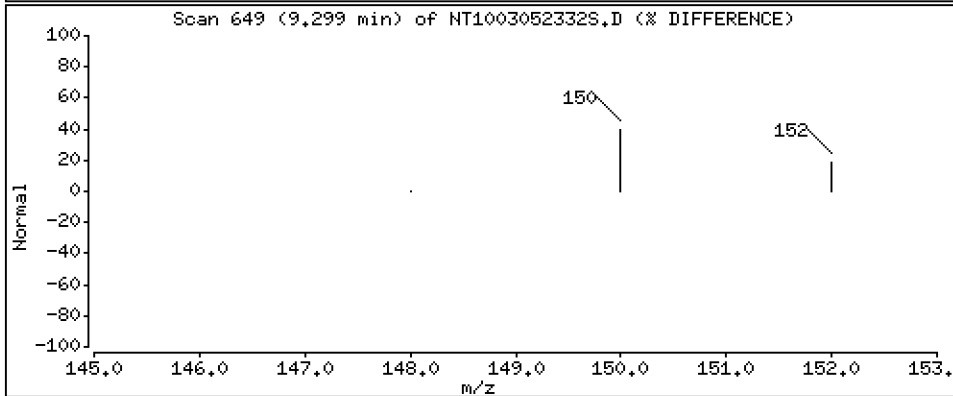
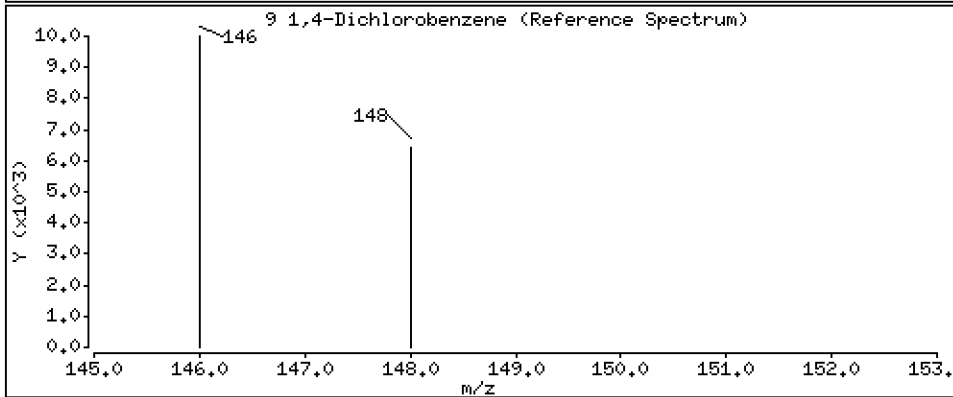
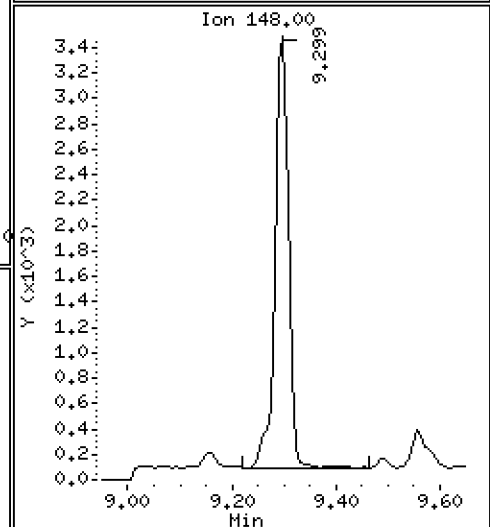
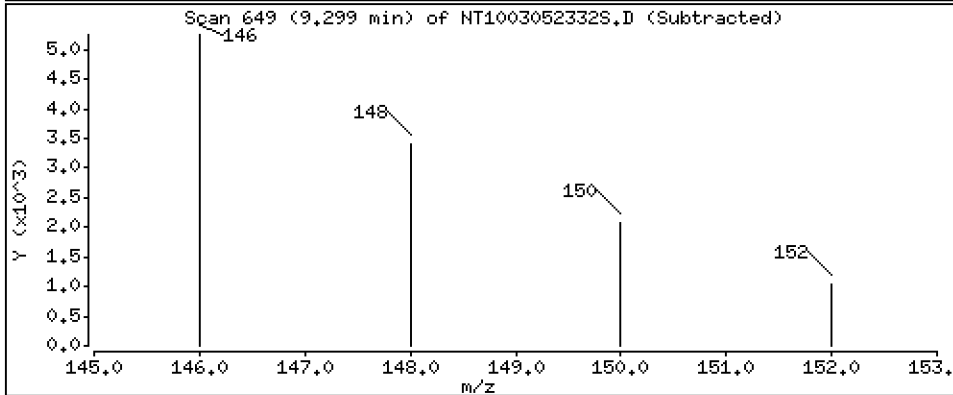
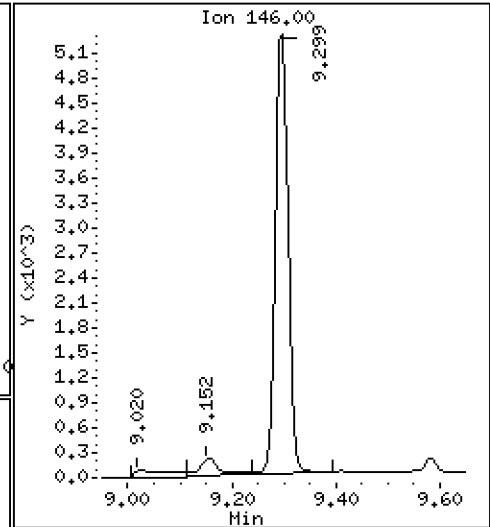
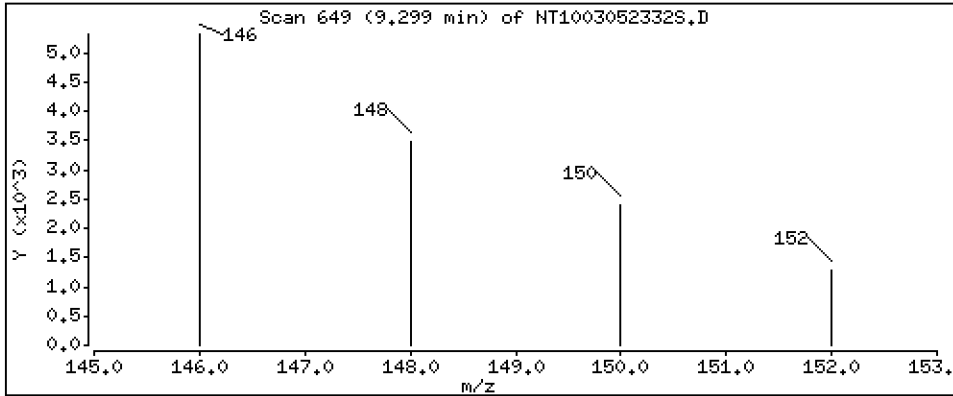
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.1085 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

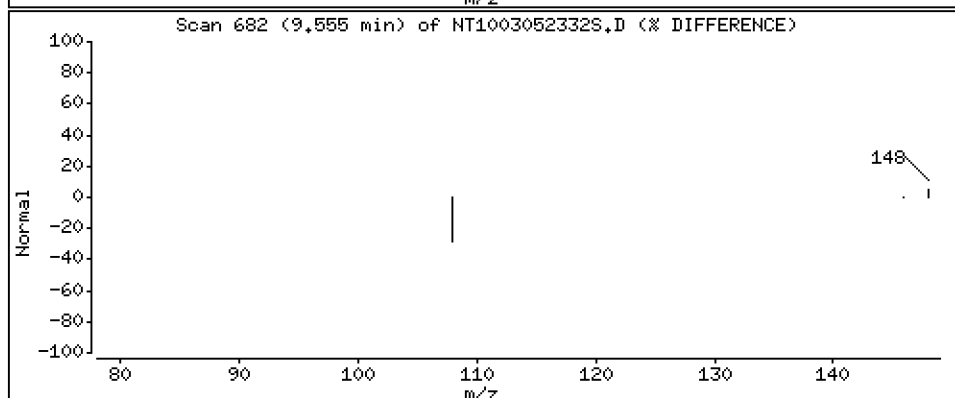
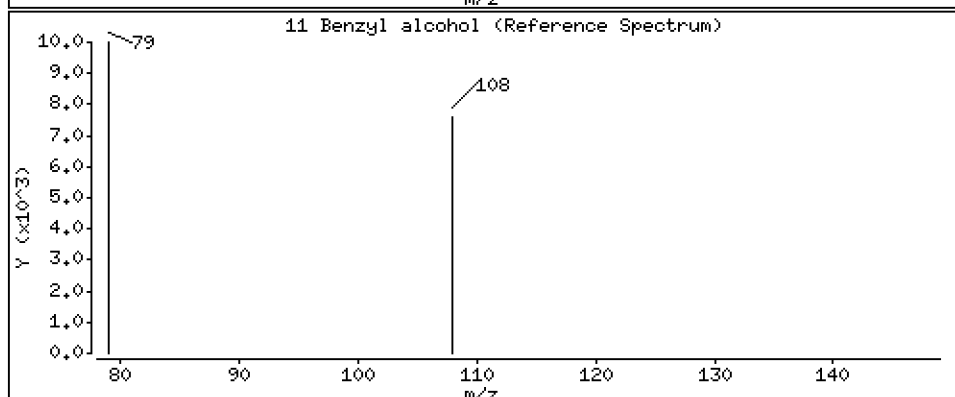
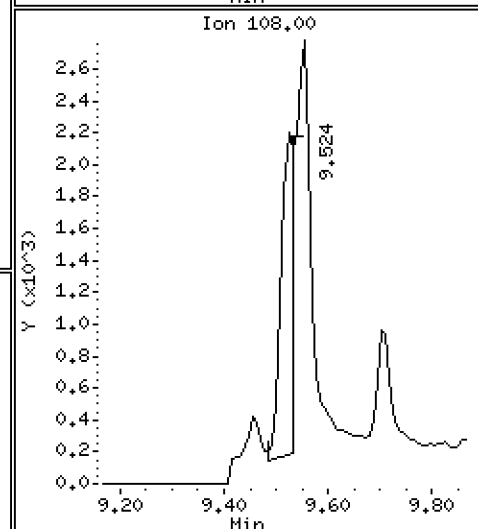
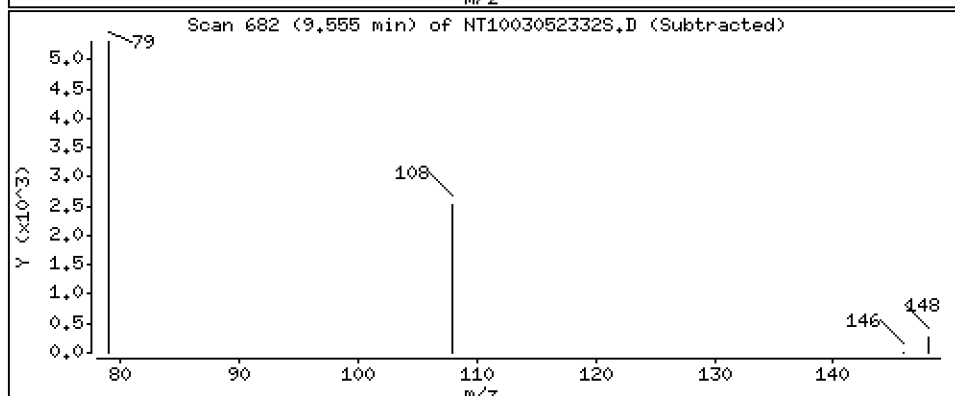
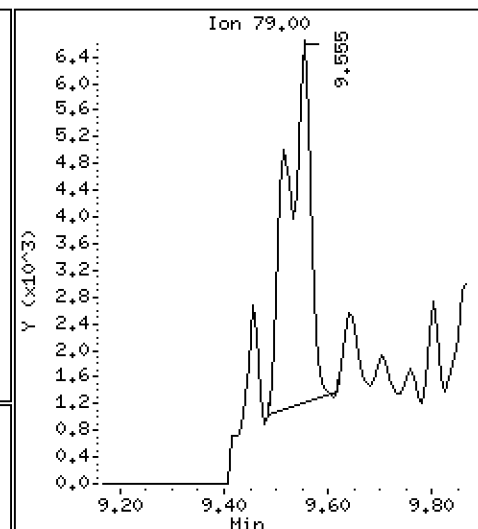
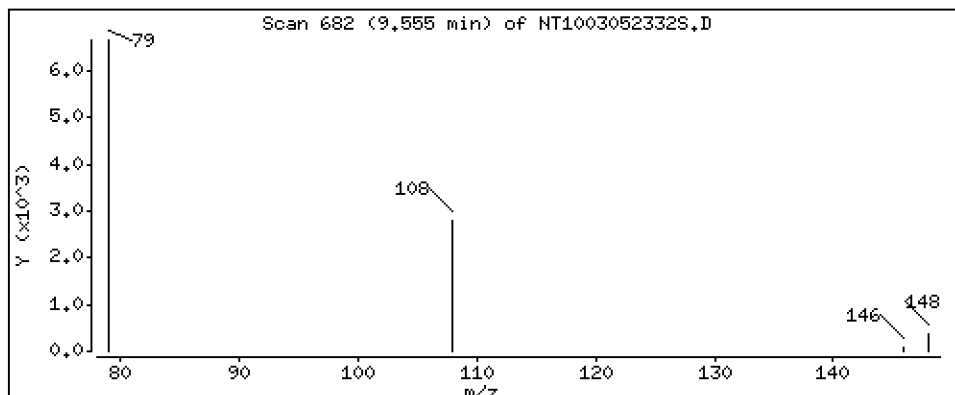
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,3304 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

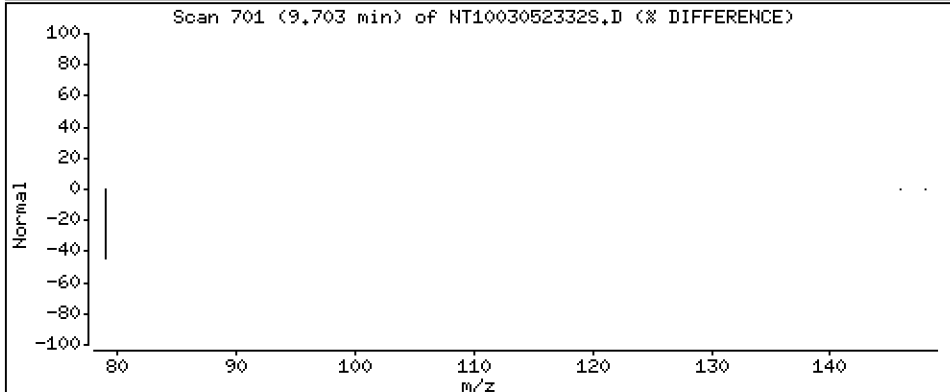
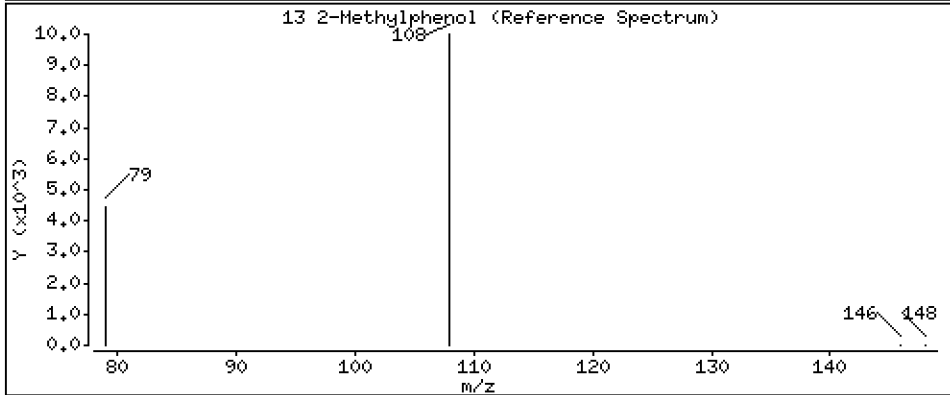
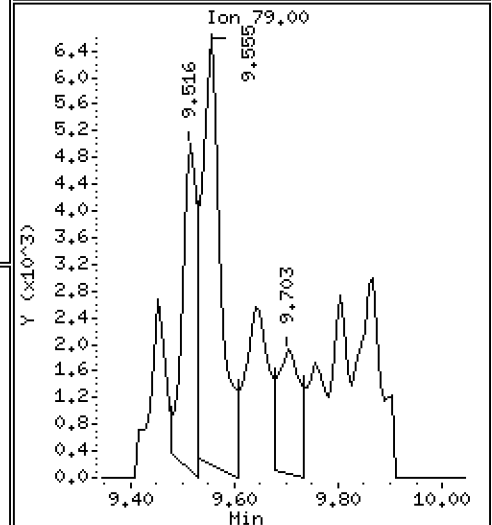
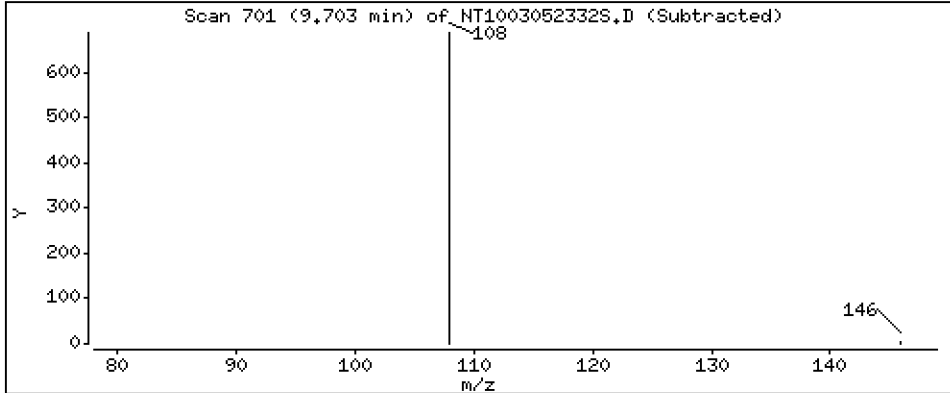
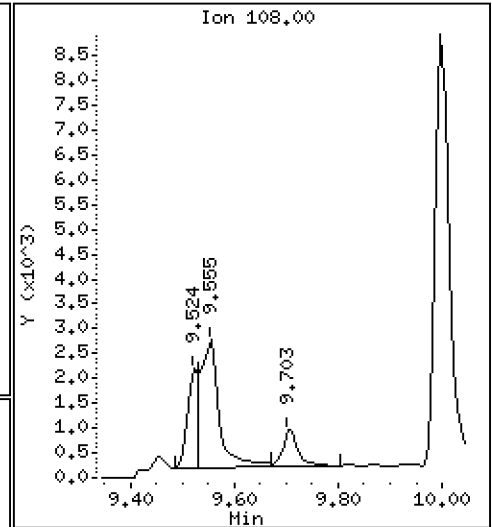
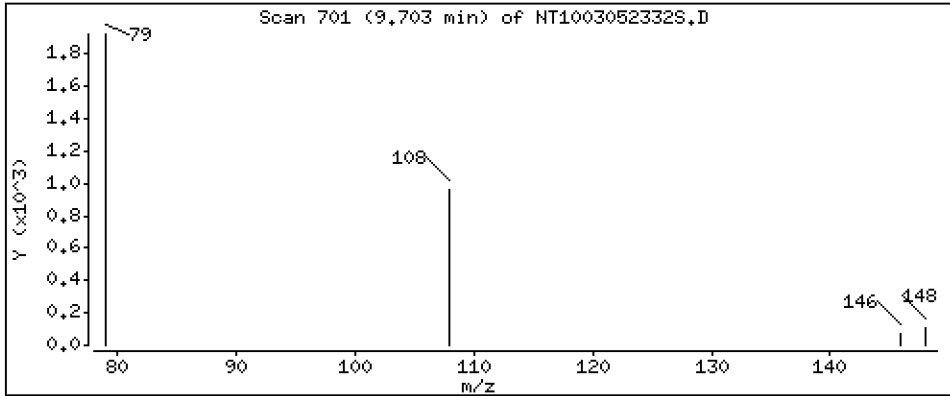
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,02807 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

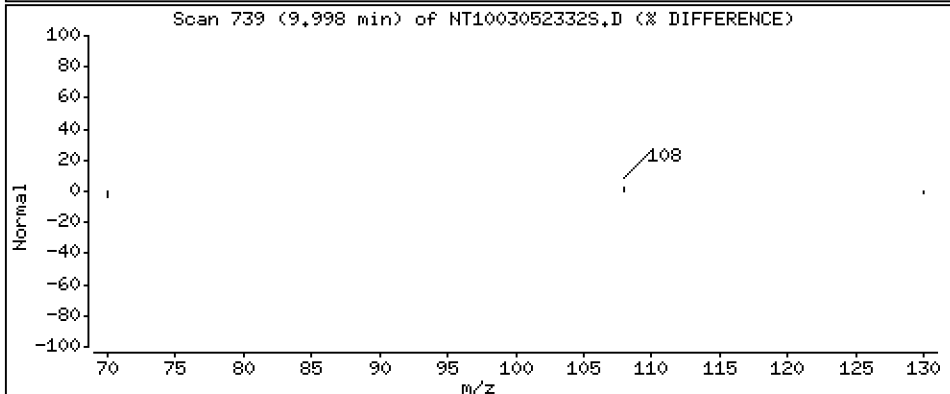
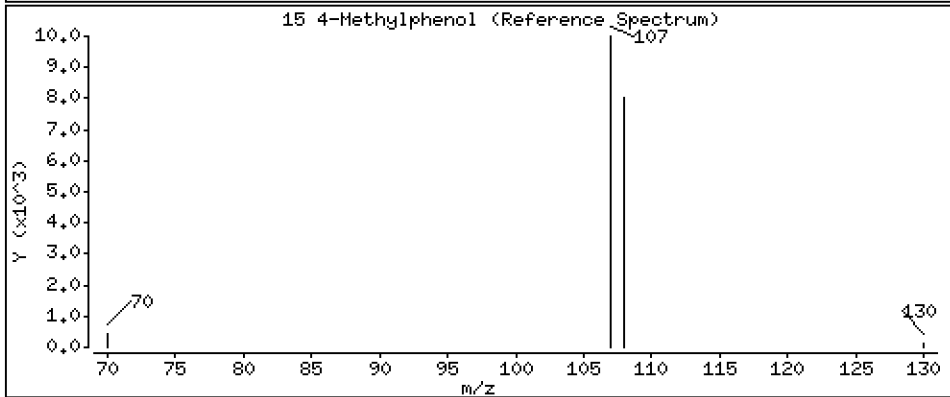
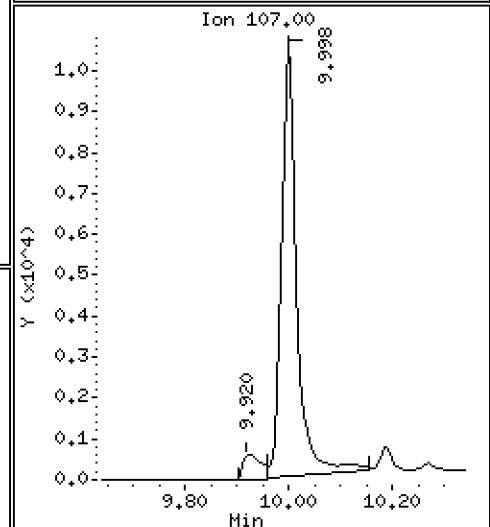
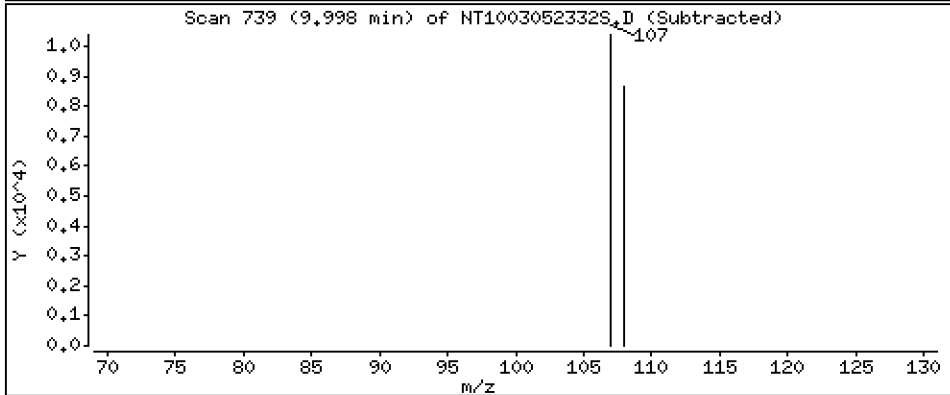
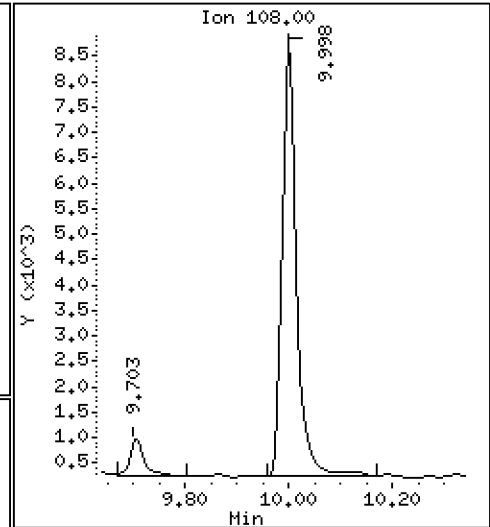
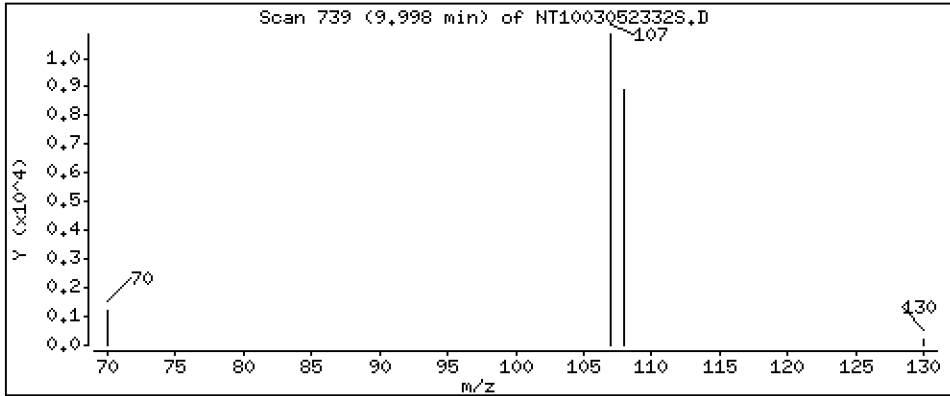
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,2772 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

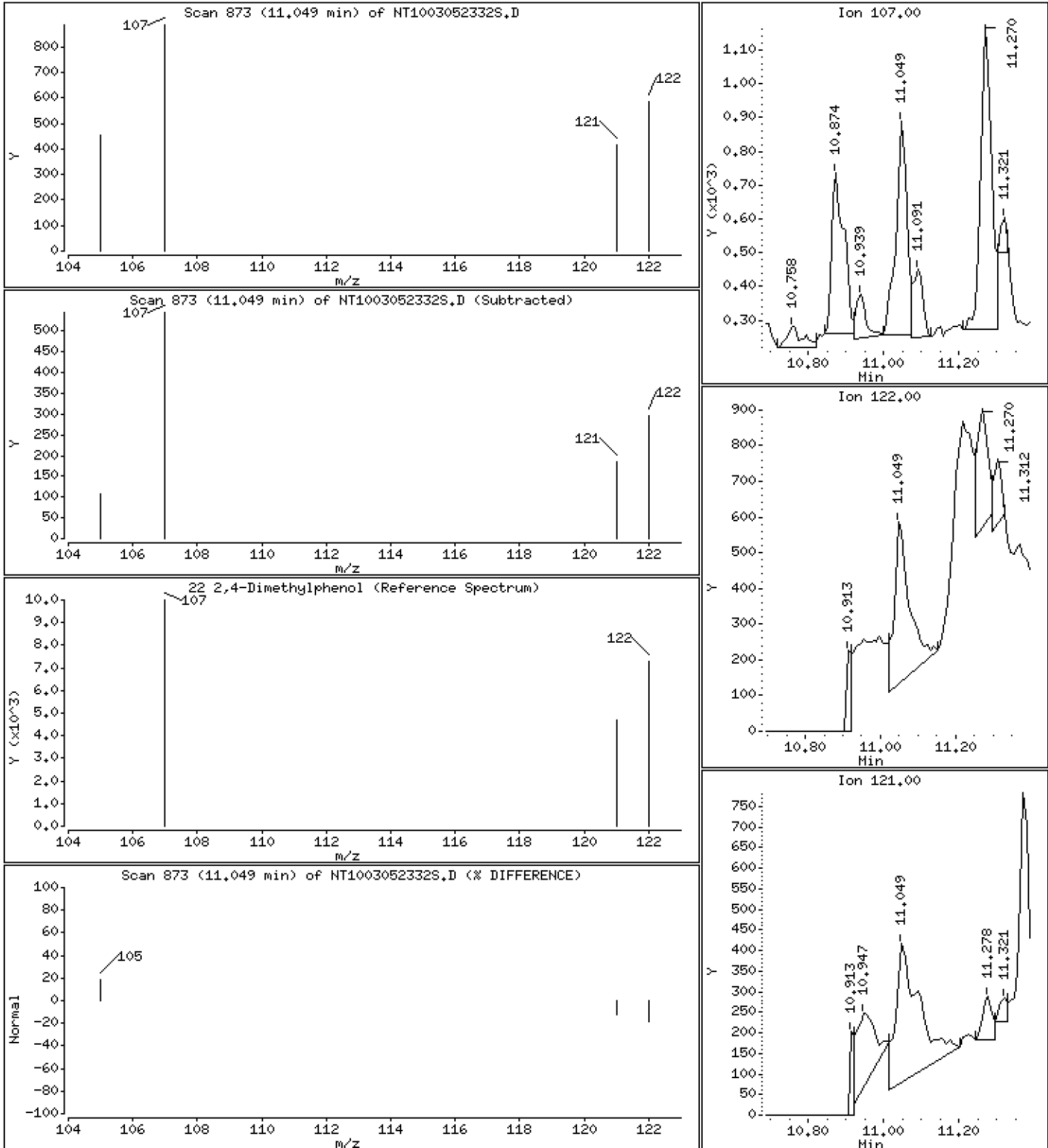
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.01977 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

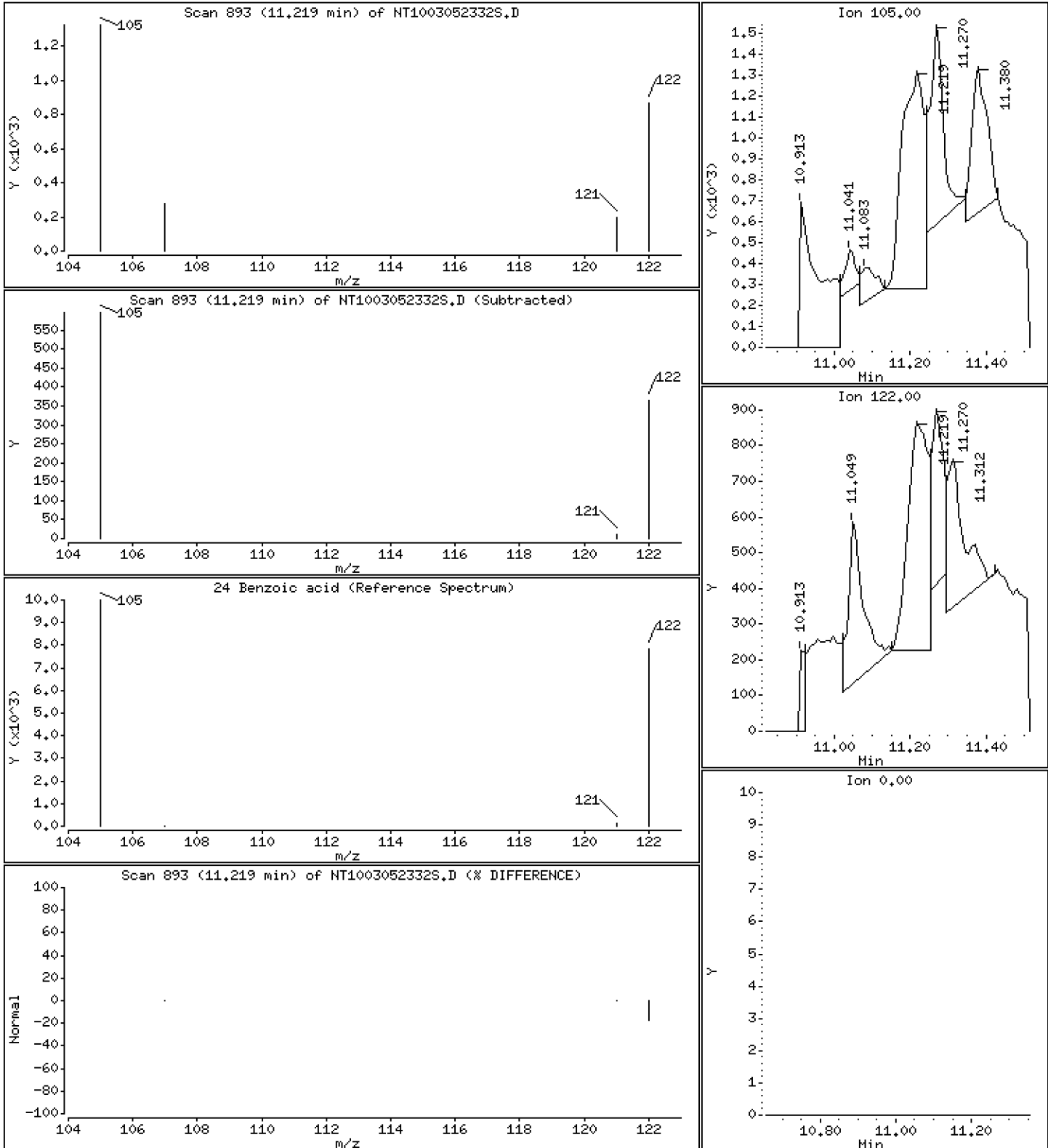
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,1196 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

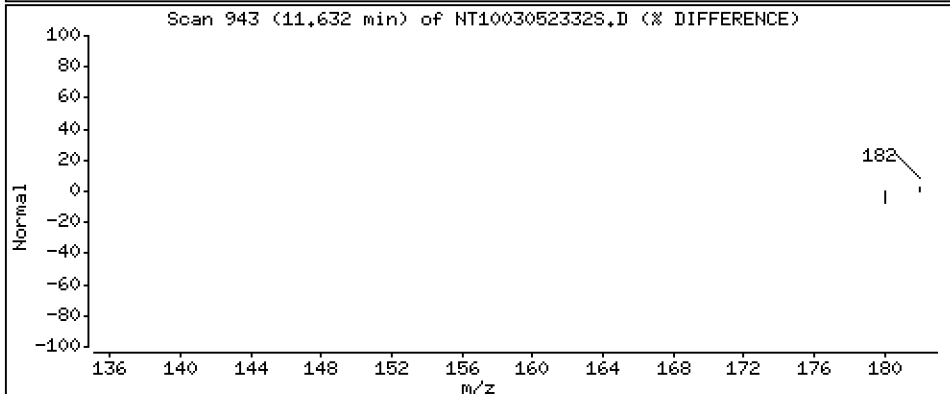
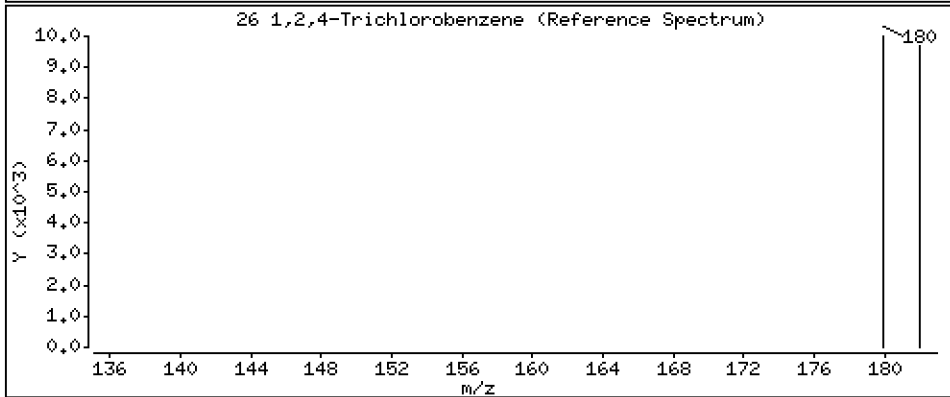
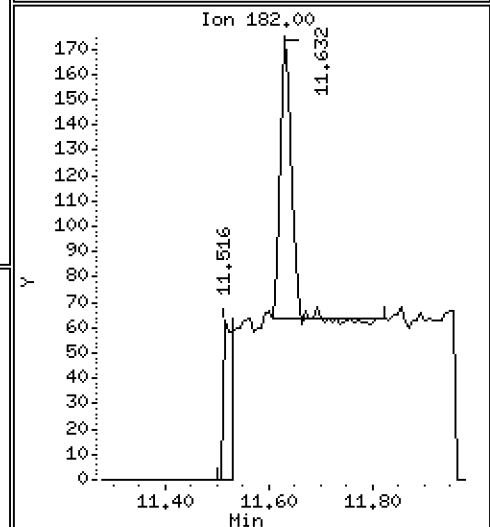
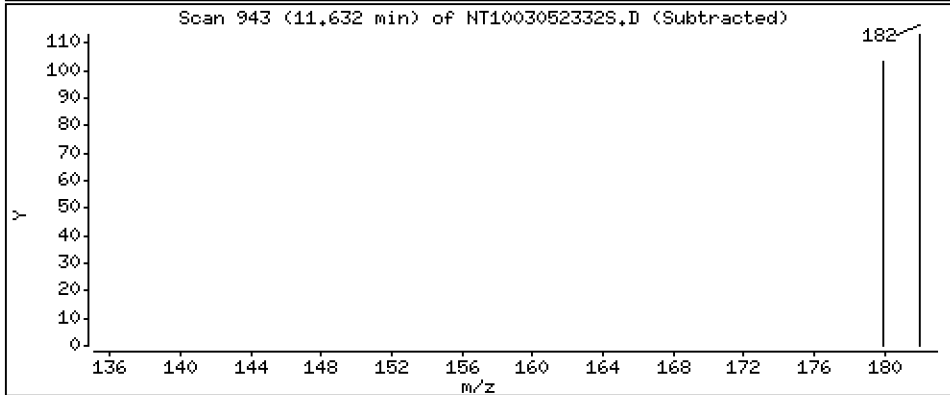
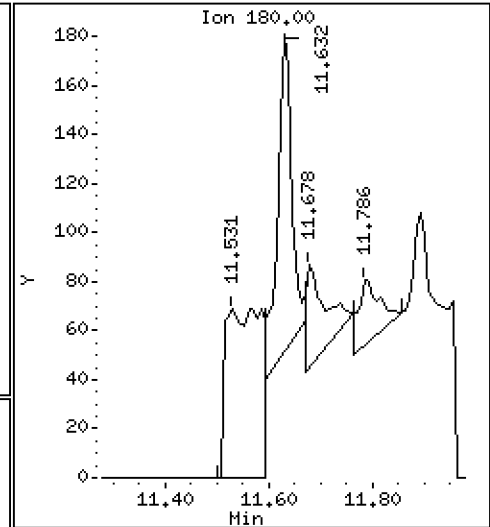
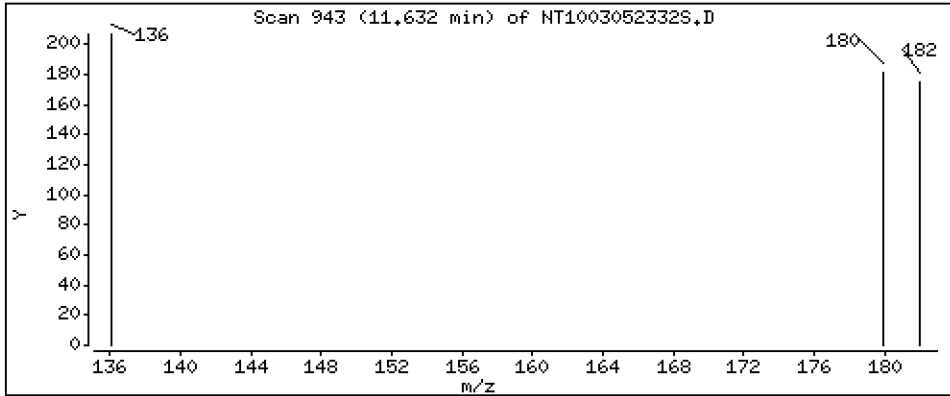
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,004498 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

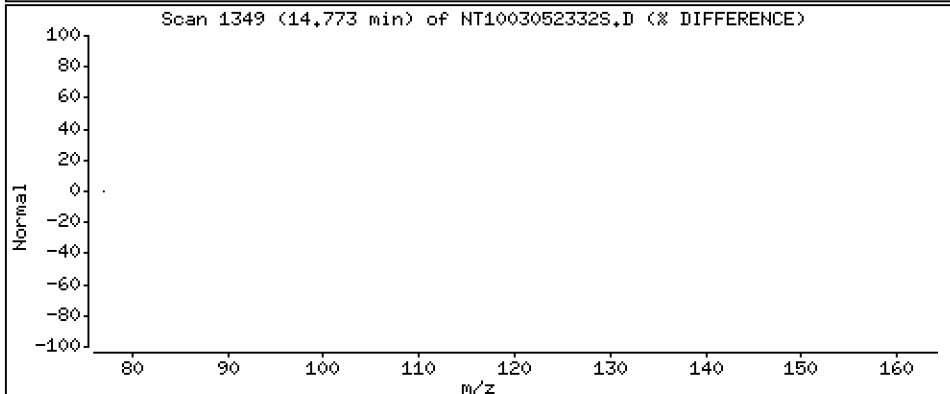
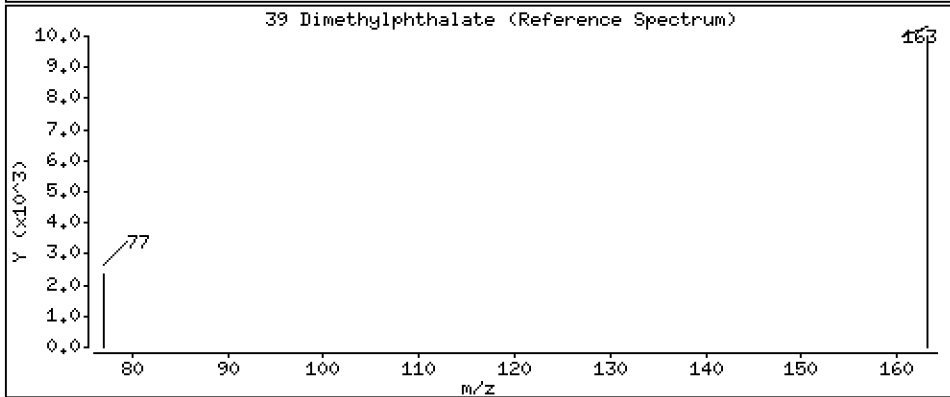
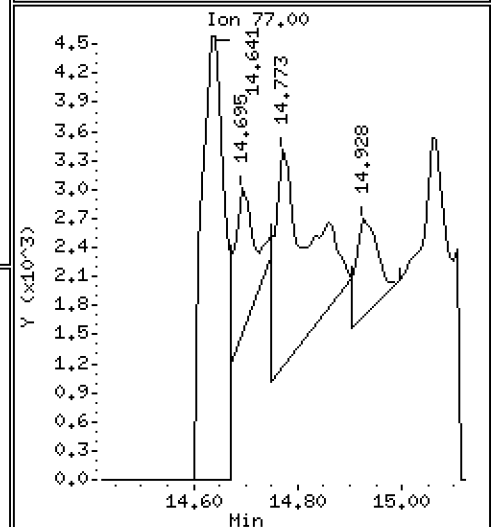
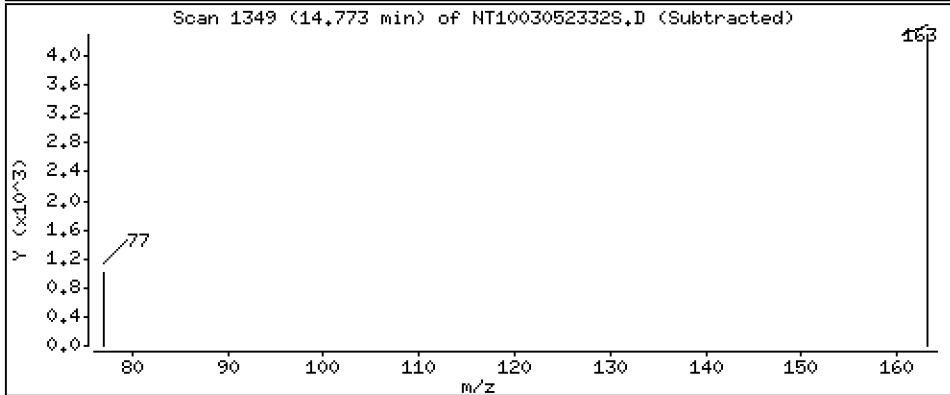
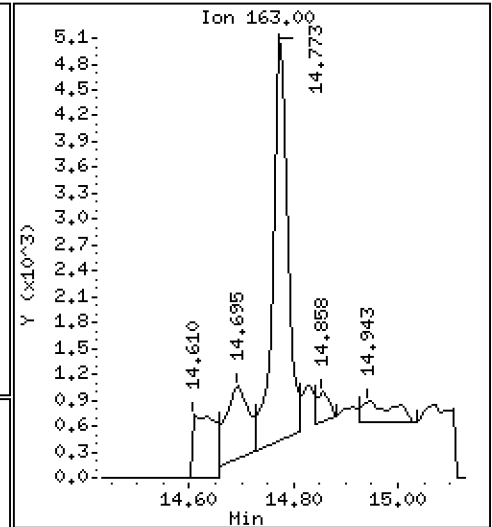
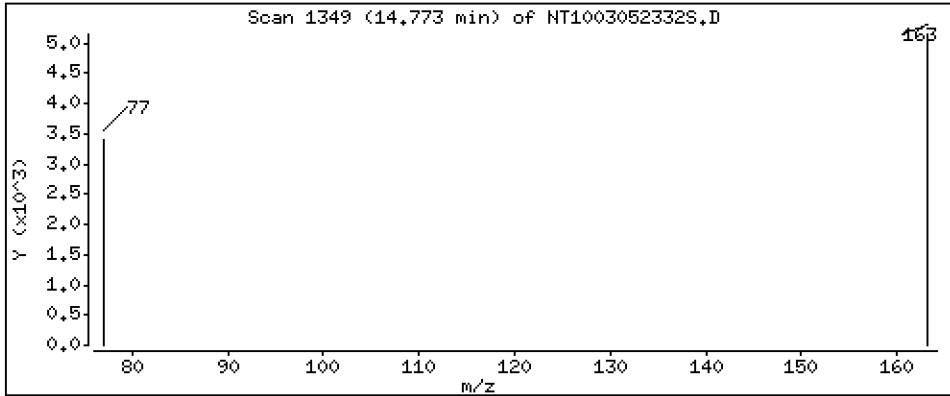
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,07332 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

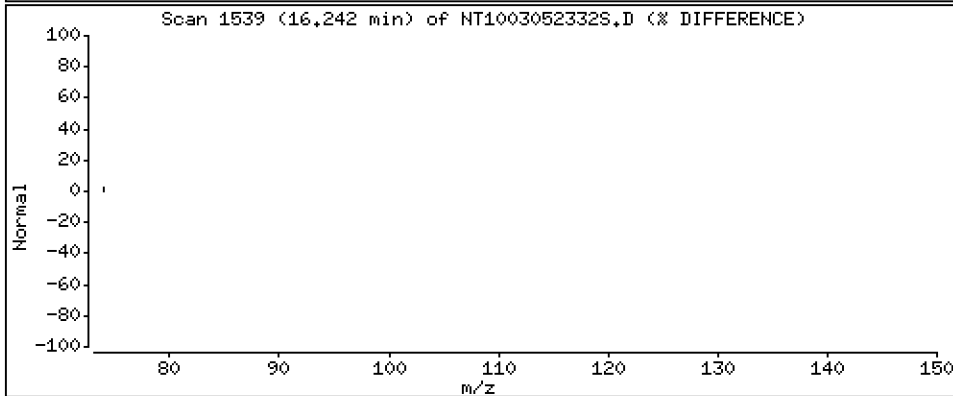
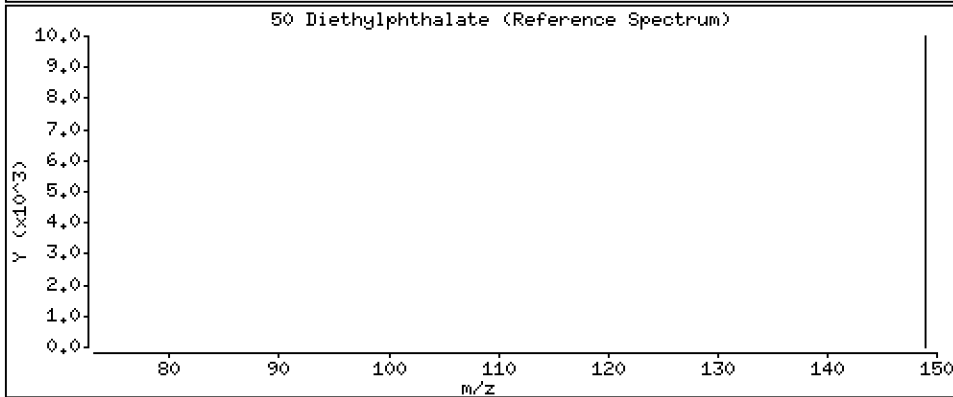
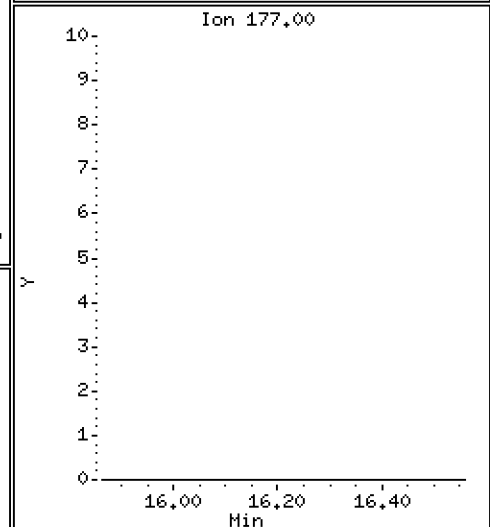
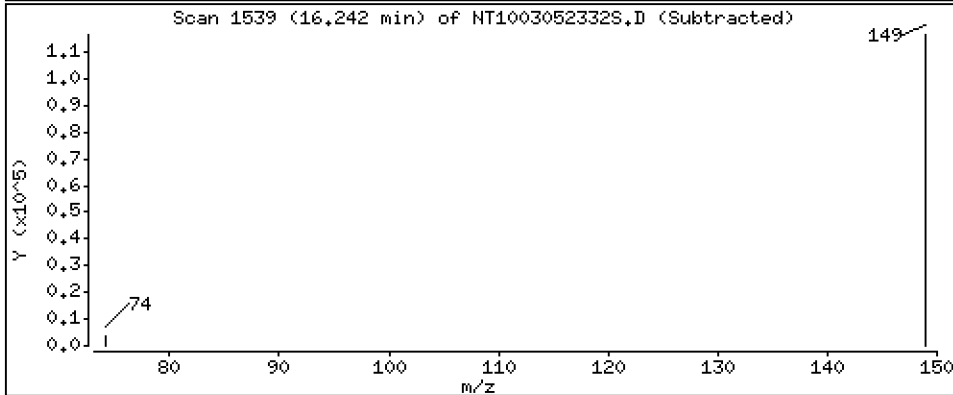
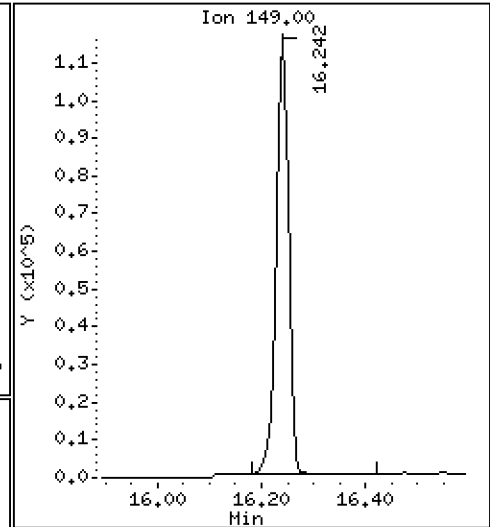
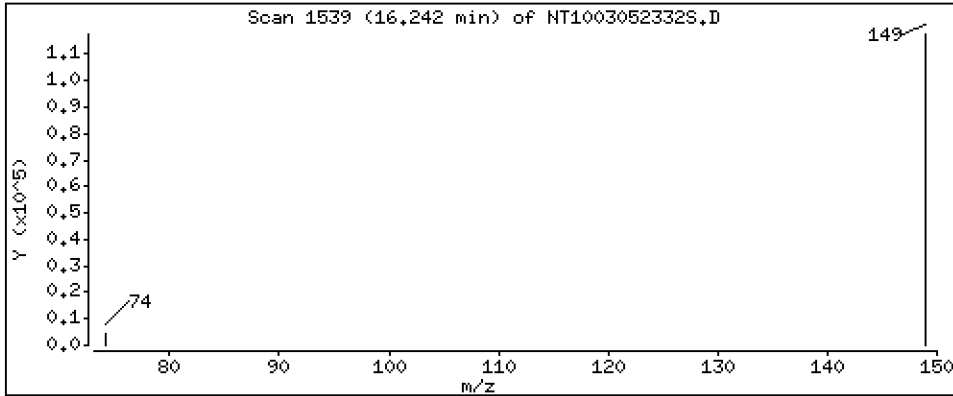
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 1,562 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

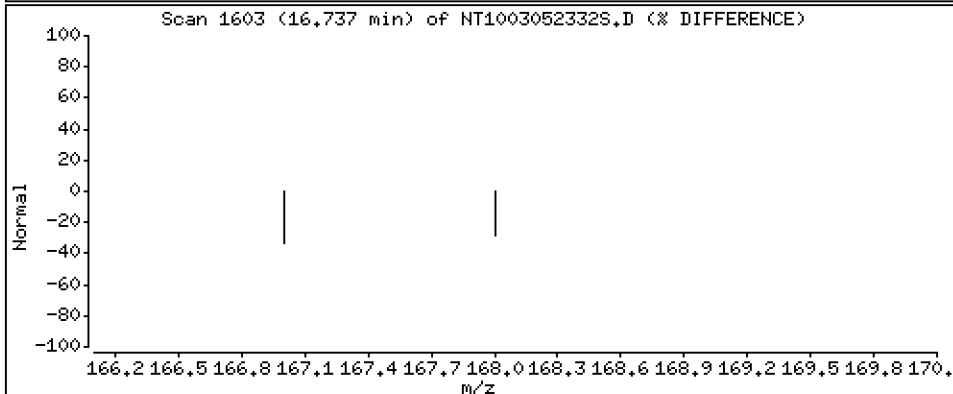
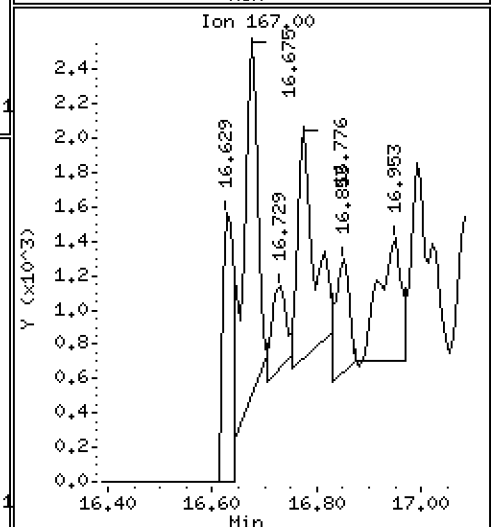
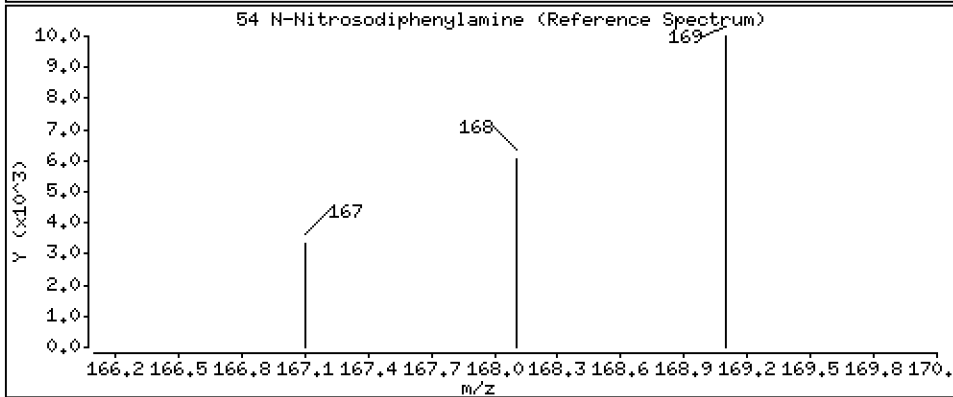
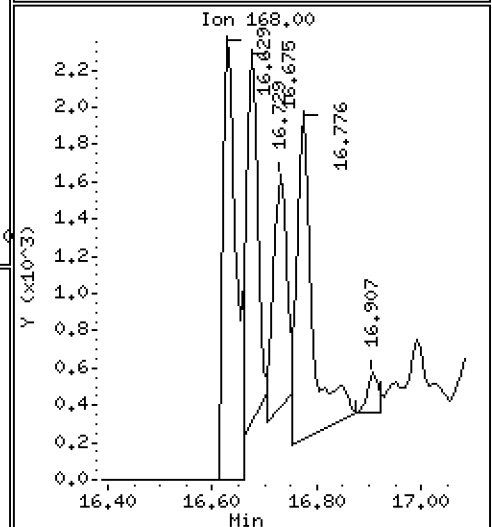
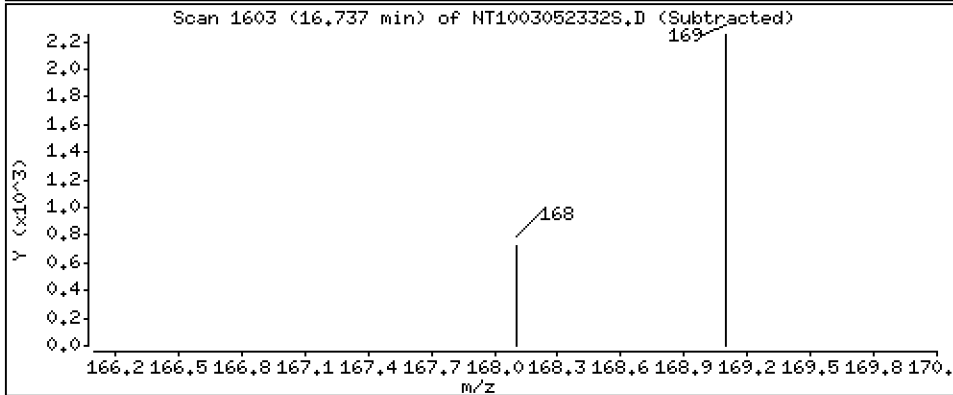
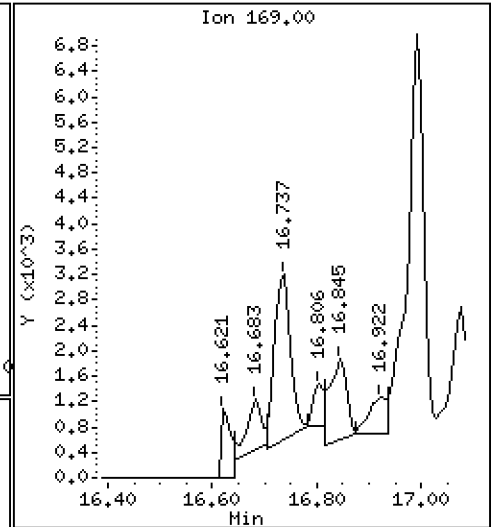
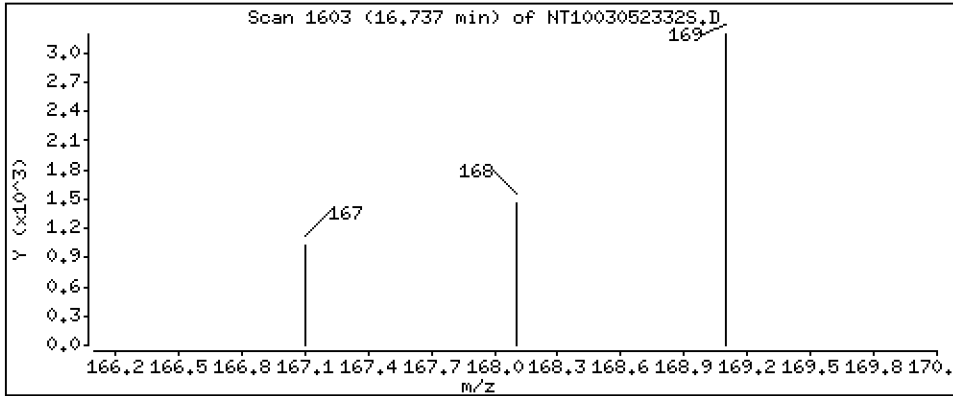
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.04365 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

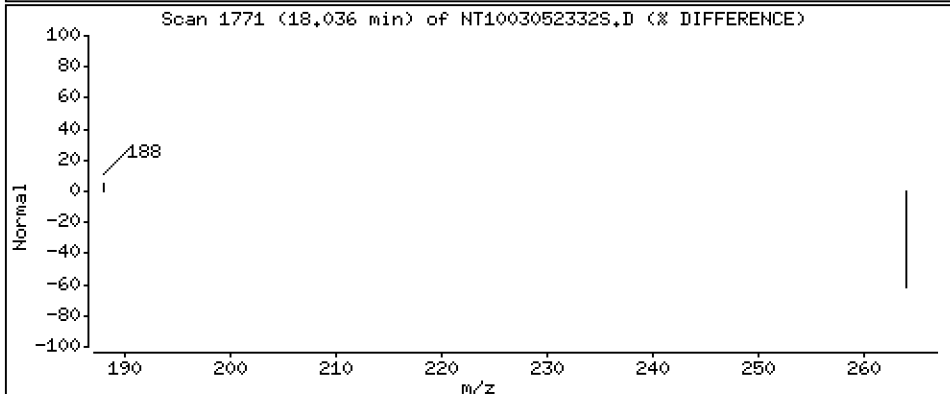
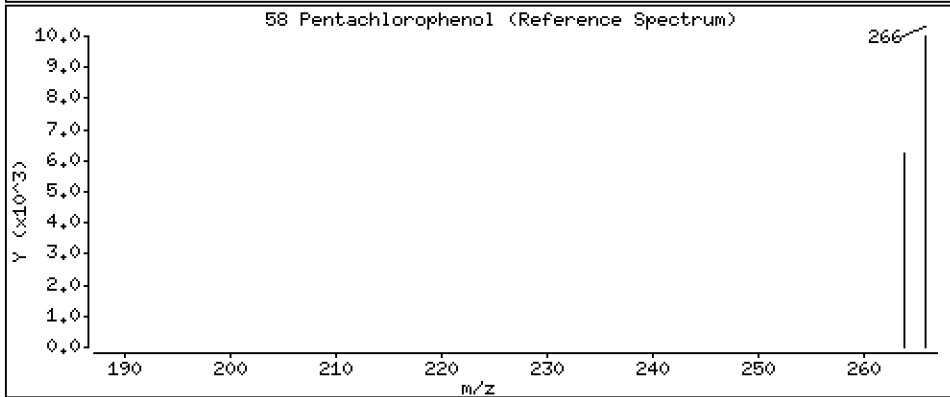
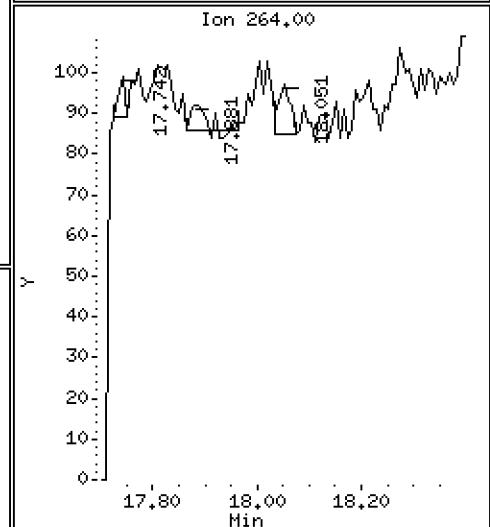
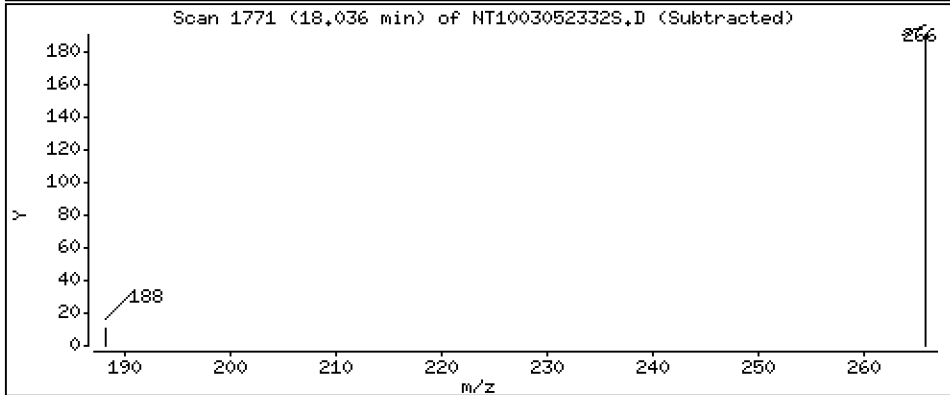
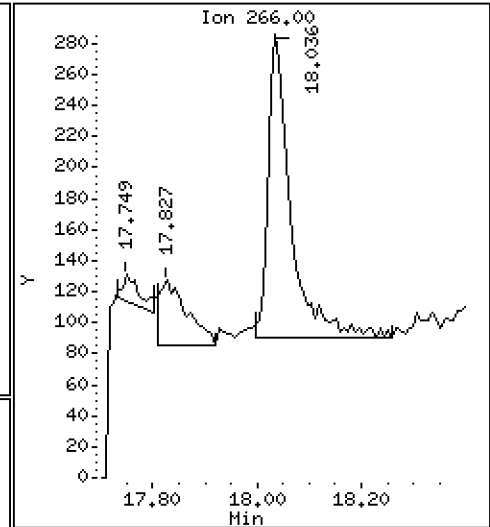
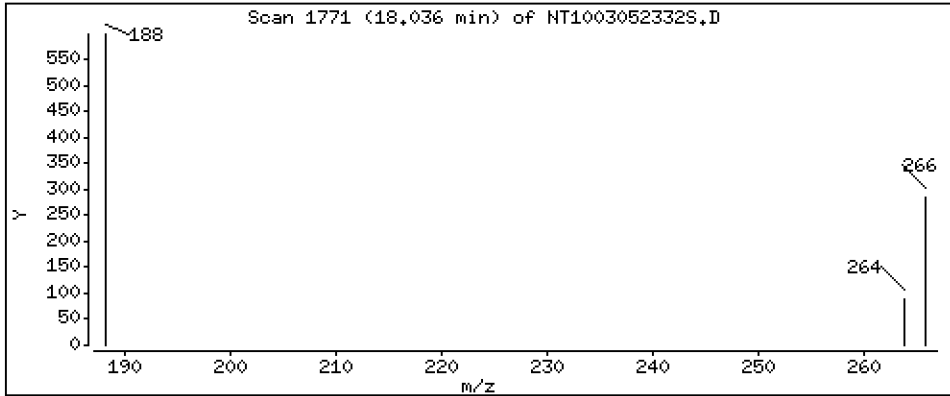
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,02216 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

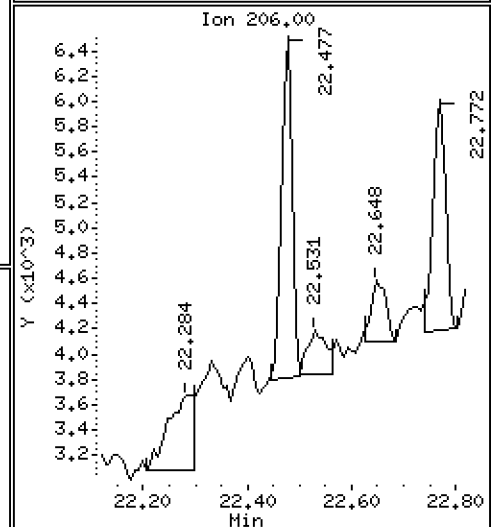
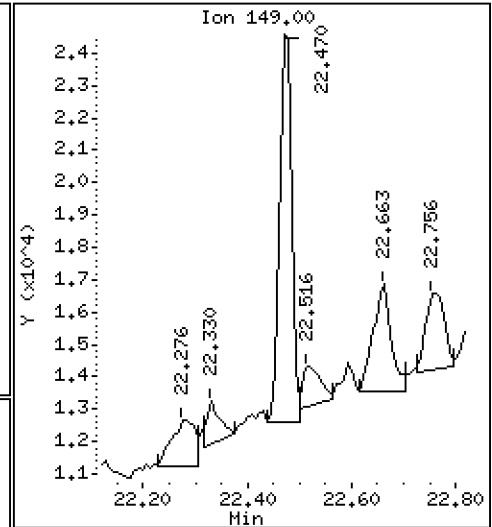
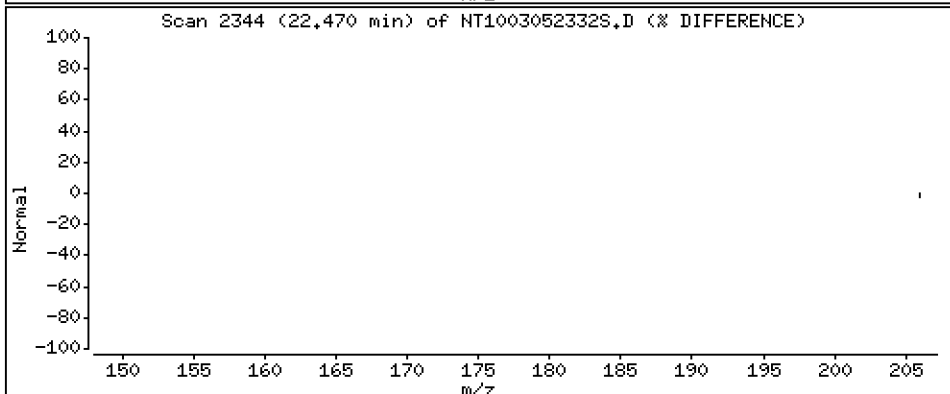
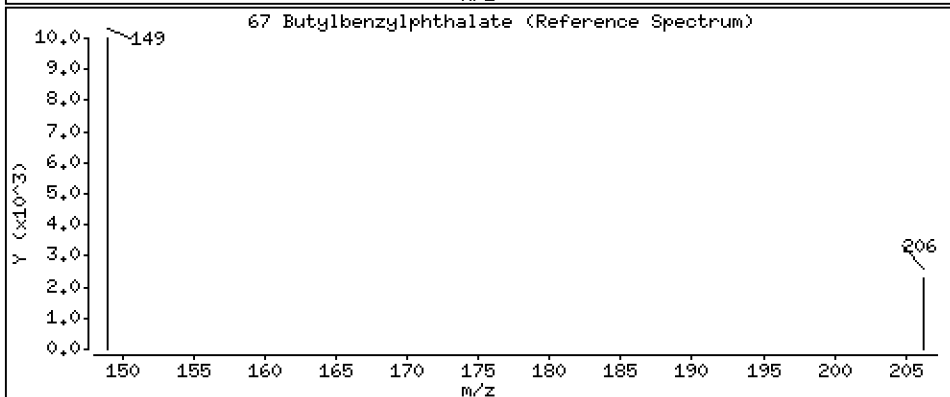
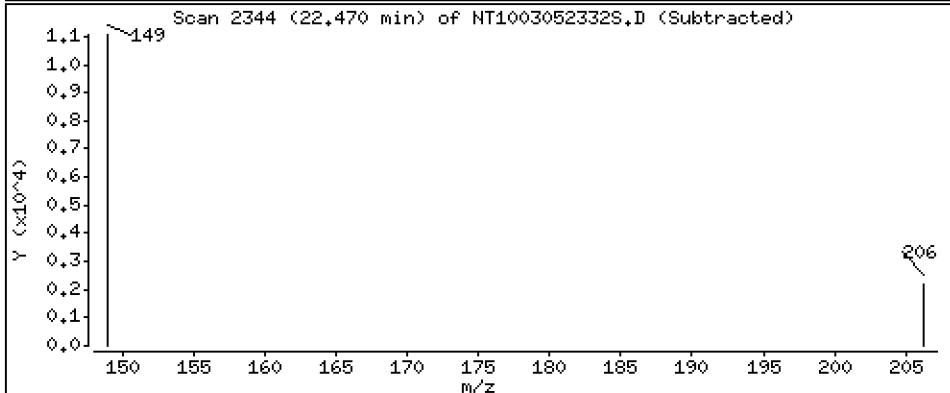
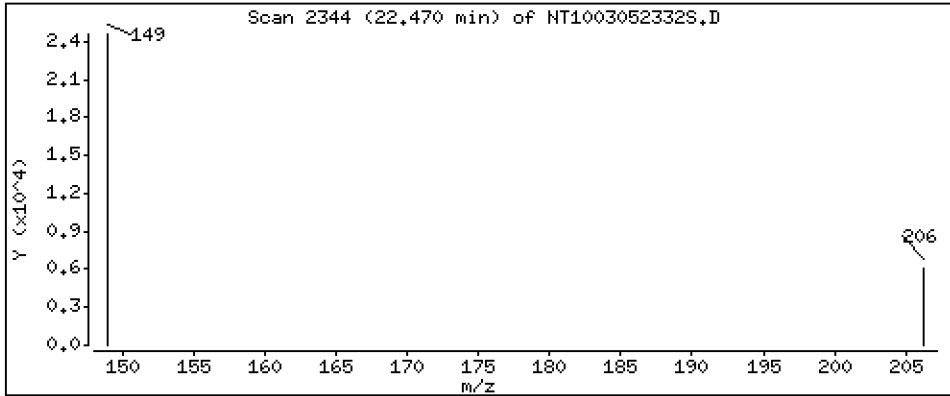
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1445 ug/mL



Date : 06-MAR-2023 08:56

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-10

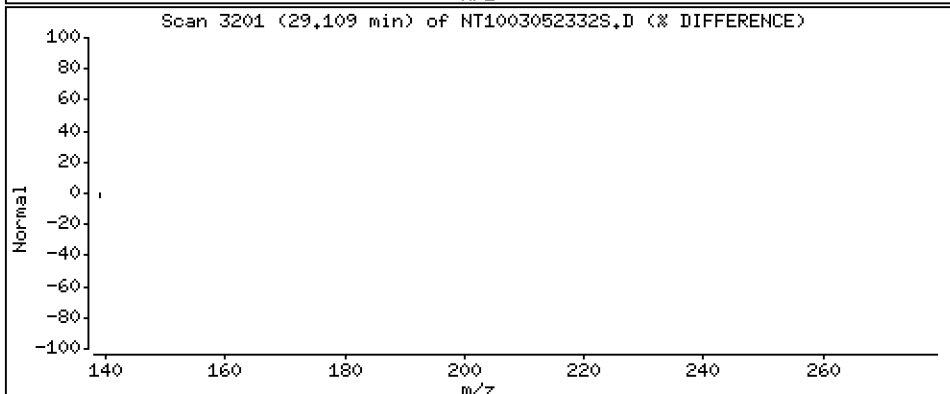
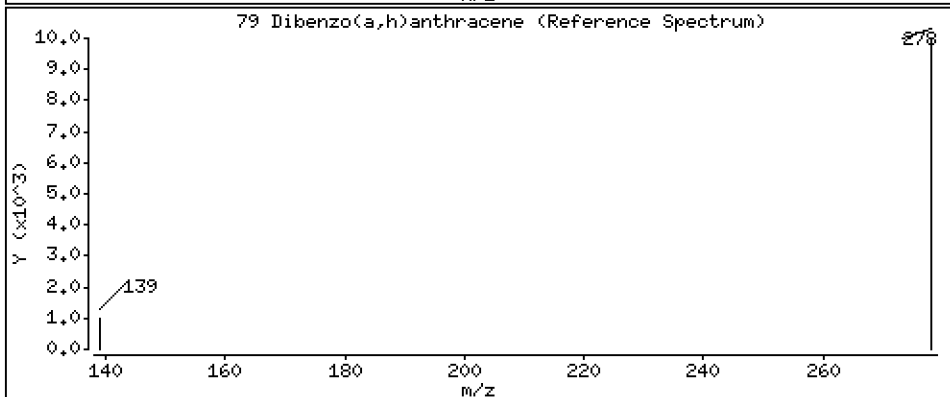
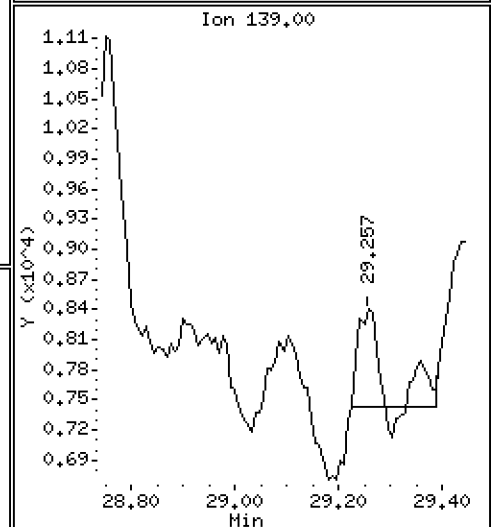
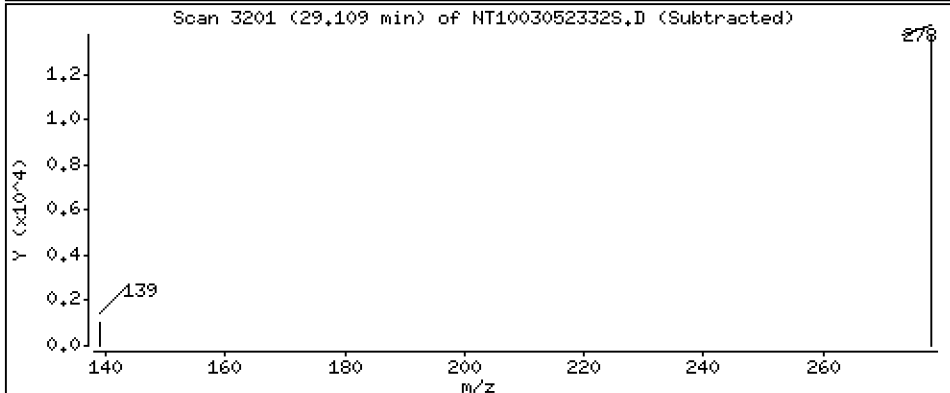
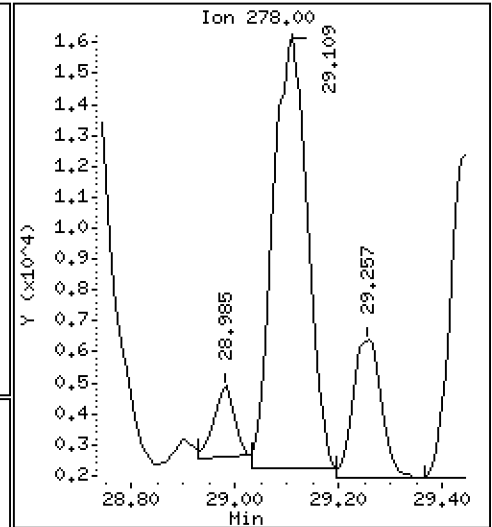
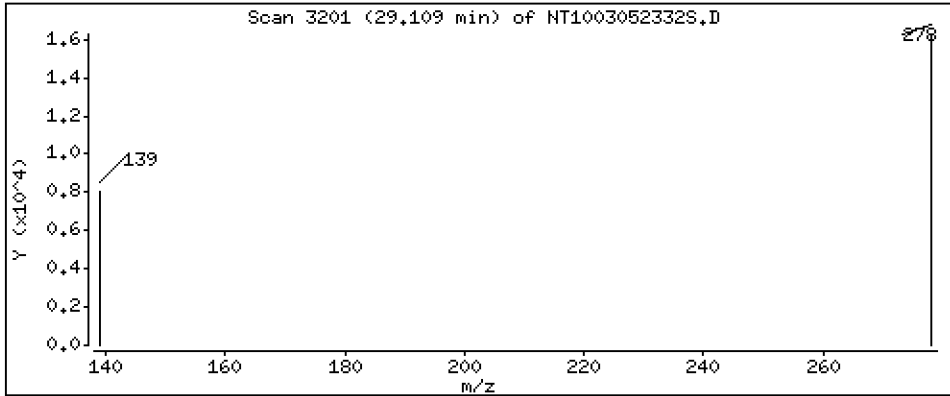
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,3216 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052332S.D
 Lab Smp Id: 23A0326-10
 Inj Date : 06-MAR-2023 08:56
 Operator : YZ
 Smp Info : 23A0326-10
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.918	6.902	(0.746)	336061	5.34726	5.347 (R)
3 Phenol	94		8.564	8.556	(0.924)	48594	0.52295	0.5229
7 1,3-Dichlorobenzene	146		9.151	9.151	(0.987)	450	0.00552	0.005516
* 8 1,4-Dichlorobenzene-d4	152		9.267	9.259	(1.000)	220135	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.003)	8604	0.10847	0.1085
11 Benzyl alcohol	79		9.555	9.515	(1.031)	17045	0.33043	0.3304 (M)
12 1,2-Dichlorobenzene	146		Compound Not Detected.					
13 2-Methylphenol	108		9.702	9.694	(1.047)	1564	0.02807	0.02807
15 4-Methylphenol	108		9.997	9.989	(1.079)	16108	0.27721	0.2772
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.049	11.040	(0.940)	1311	0.01977	0.01977
24 Benzoic acid	105		11.218	11.167	(0.954)	4350	0.11961	0.1196 (H)
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	253	0.00450	0.004498
* 27 Naphthalene-d8	136		11.755	11.754	(1.000)	781530	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.772	14.780	(0.962)	8954	0.07332	0.07332
* 42 Acenaphthene-d10	162		15.353	15.352	(1.000)	384624	4.00000	
50 Diethylphthalate	149		16.242	16.241	(1.058)	179879	1.56185	1.562 (H)
54 N-Nitrosodiphenylamine	169		16.737	16.736	(0.907)	5492	0.04365	0.04365
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		18.035	18.050	(0.977)	571	0.02216	0.02216 (H)
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	777427	4.00000	
\$ 66 Terphenyl-d14	244		21.594	21.586	(0.919)	418171	6.76791	6.768 (R)
67 Butylbenzylphthalate	149		22.469	22.469	(0.956)	18629	0.14446	0.1445
* 69 Chrysene-d12	240		23.507	23.491	(1.000)	764063	4.00000	
* 77 Perylene-d12	264		26.240	26.224	(1.000)	865273	4.00000	
79 Dibenzo(a,h)anthracene	278		29.108	29.093	(1.109)	64724	0.32159	0.3216 (H)
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052332S.D
 Lab Smp Id: 23A0326-10
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	220135	-8.06
27 Naphthalene-d8	849492	424746	1698984	781530	-8.00
42 Acenaphthene-d10	421435	210718	842870	384624	-8.73
59 Phenanthrene-d10	835585	417793	1671170	777427	-6.96
69 Chrysene-d12	874614	437307	1749228	764063	-12.64
77 Perylene-d12	1035818	517909	2071636	865273	-16.46

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.27	0.09
27 Naphthalene-d8	11.75	11.25	12.25	11.76	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.51	0.07
77 Perylene-d12	26.22	25.72	26.72	26.24	0.06

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

REVIEW SUMMARY FOR FILE - NT1003052332S.D

Lab ID: 23A0326-10

nt10.i, 20230305B.b\SIM.b\SIMABN2.m, 06-MAR-2023 08:56

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

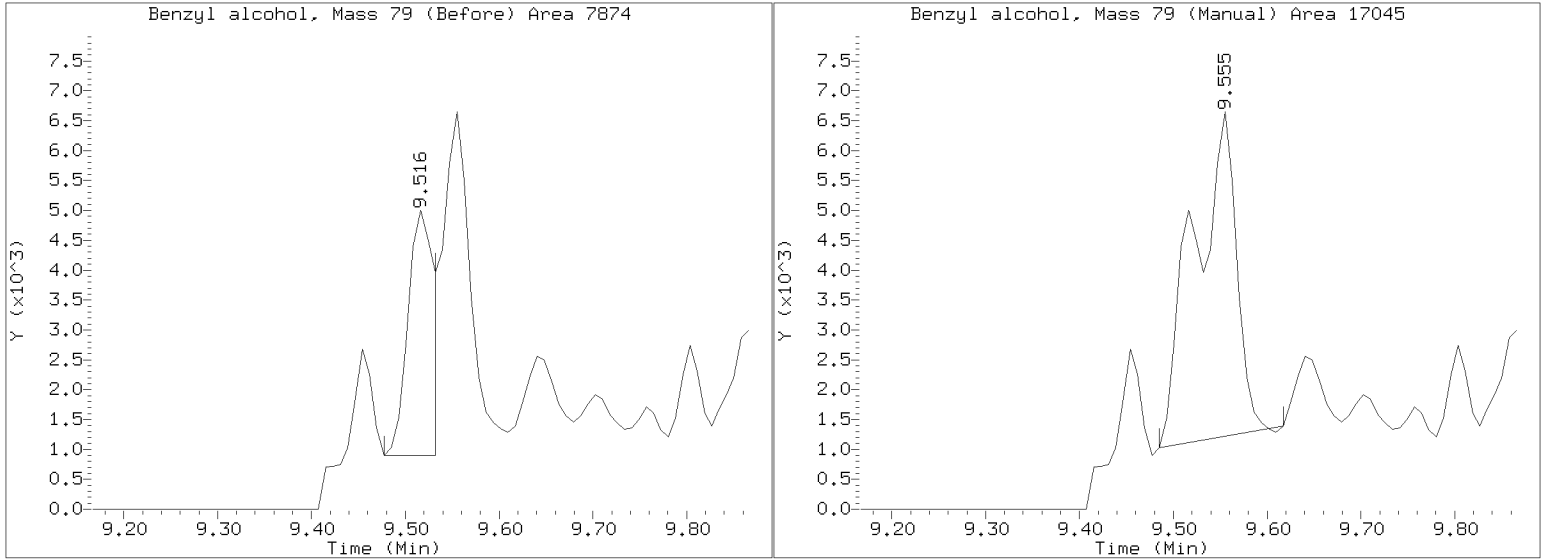
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/SIM.b/NT1003052332S.D
Injection Date: 06-MAR-2023 08:56
Lab ID:23A0326-10 Client ID:
Report Date: 03/31/2023 08:57



APPROVED
By Deenay Dunmore at 9:13 am, Mar 31, 2023



Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-11 A

SDG: 23A0326

Sampled: 01/17/23 14:06

Prepared: 02/02/23 13:06

File ID: NT1003052333S.D

% Solids: 52.57

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 09:34

Batch: BLA0685

Sequence: SLC0447

Initial/Final: 19.8 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.6	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	4.8	U	0.7	4.8
100-51-6	Benzyl Alcohol	1	35.2		2.4	19.2
65-85-0	Benzoic acid	1	21.0	J	12.9	96.1
105-67-9	2,4-Dimethylphenol	1	3.8	J	2.1	19.2
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.1	J	1.3	4.8
87-86-5	Pentachlorophenol	1	2.6	J	2.0	19.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	720.54	562	78.0	27 - 120	
p-Terphenyl-d14	480.36	723	151	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052333S.D

Date: 06-HRR-2023 09:34

Client ID:

Sample Info: 23A0326-11

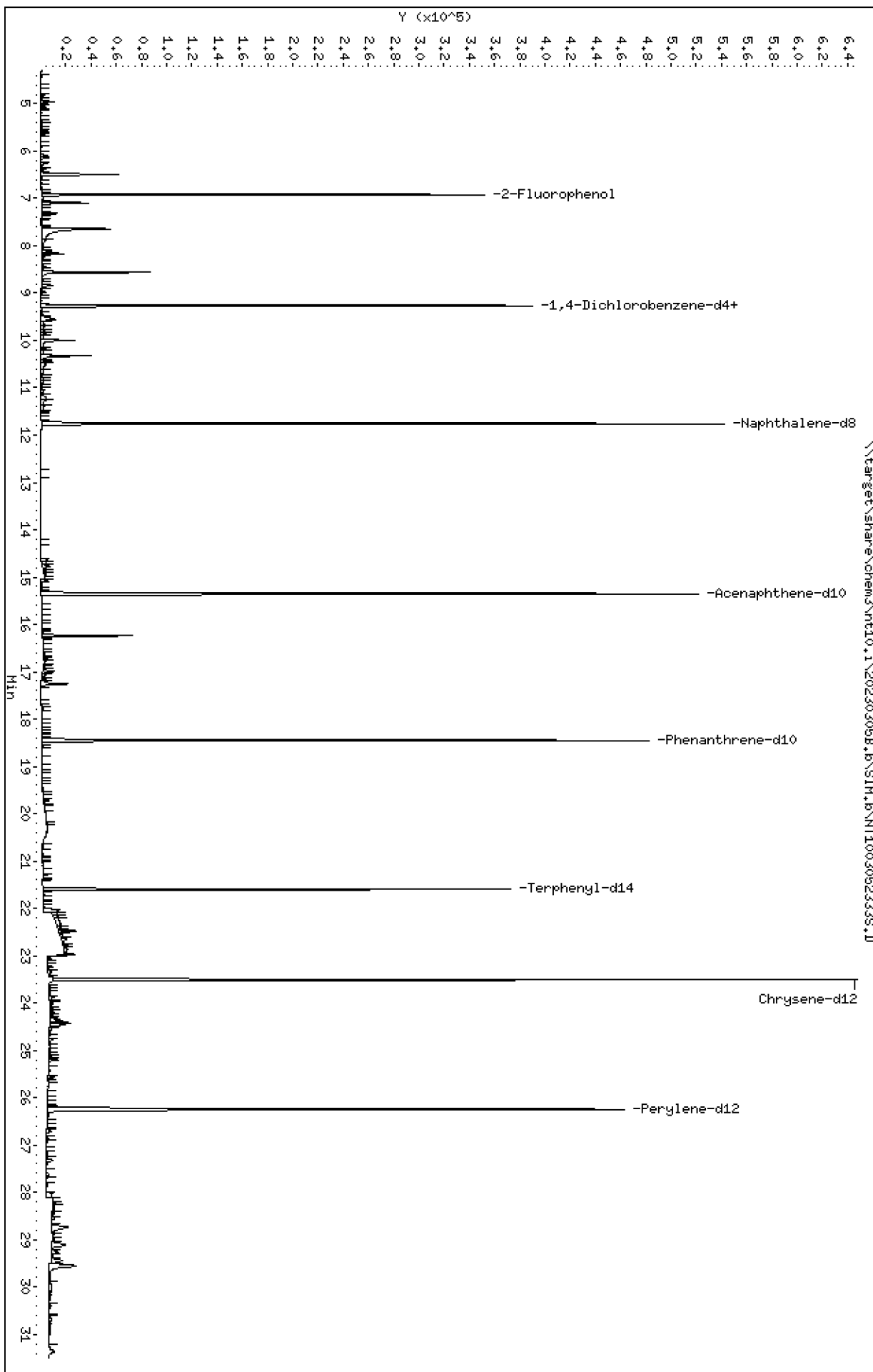
Page 1

Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

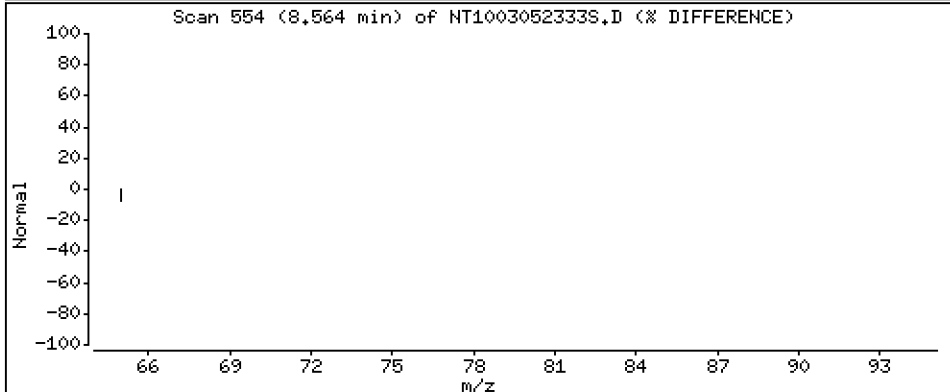
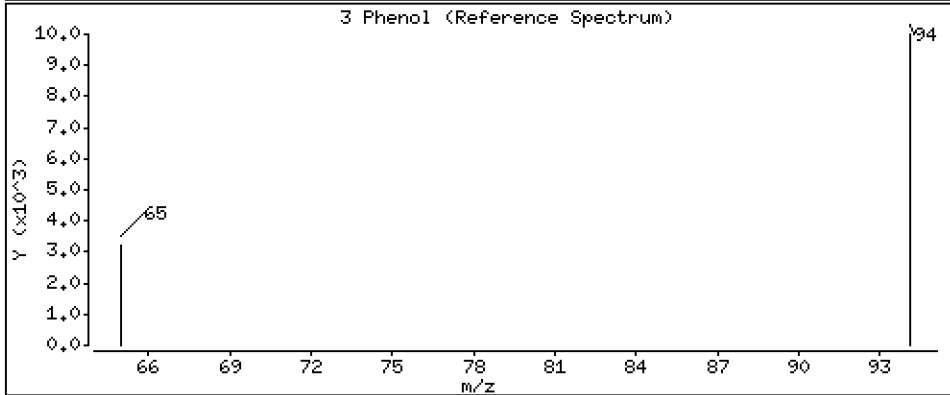
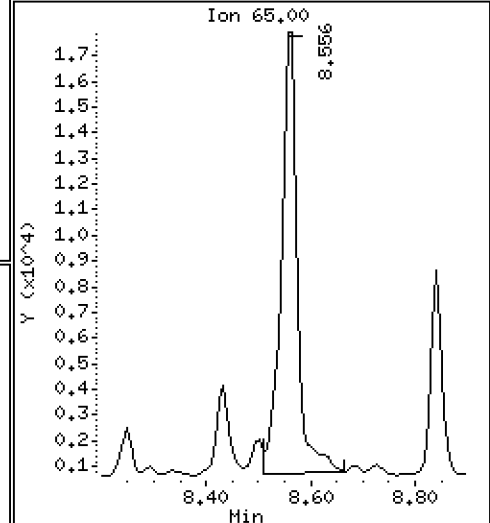
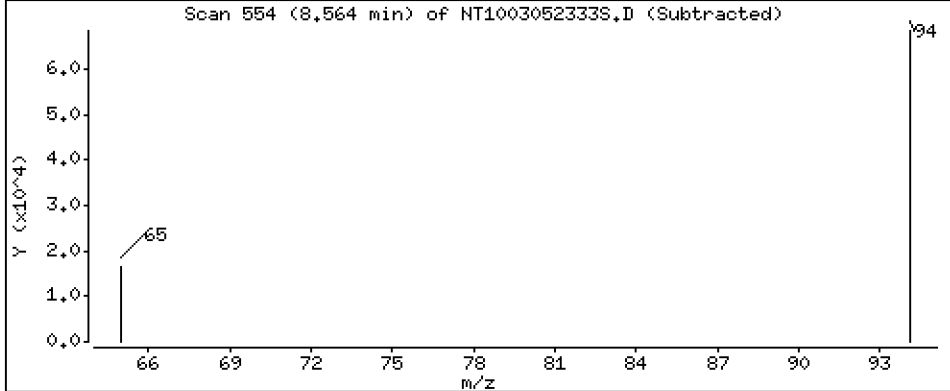
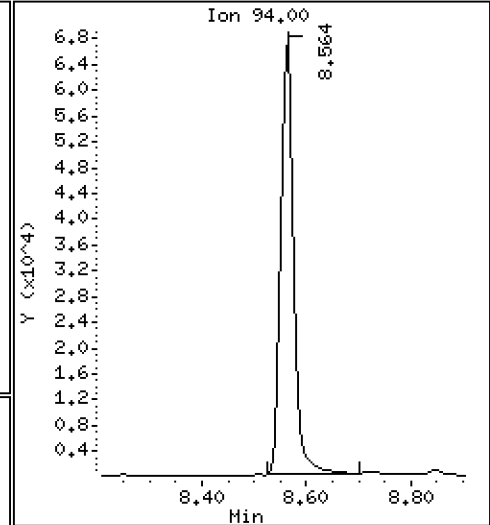
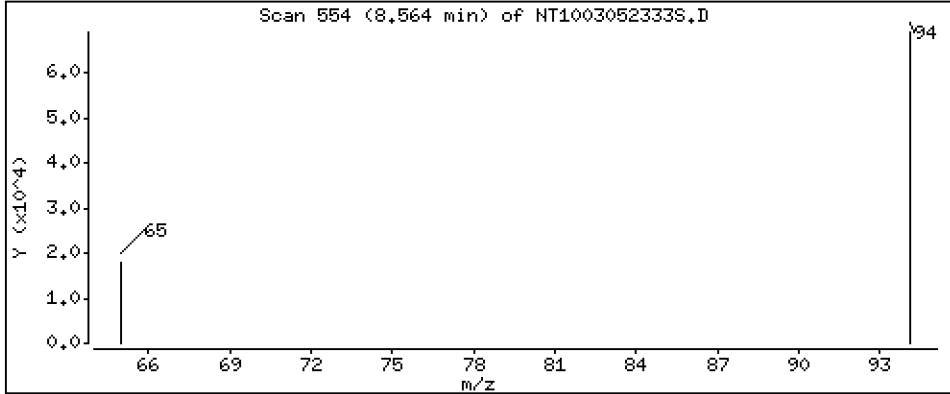
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 1,155 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

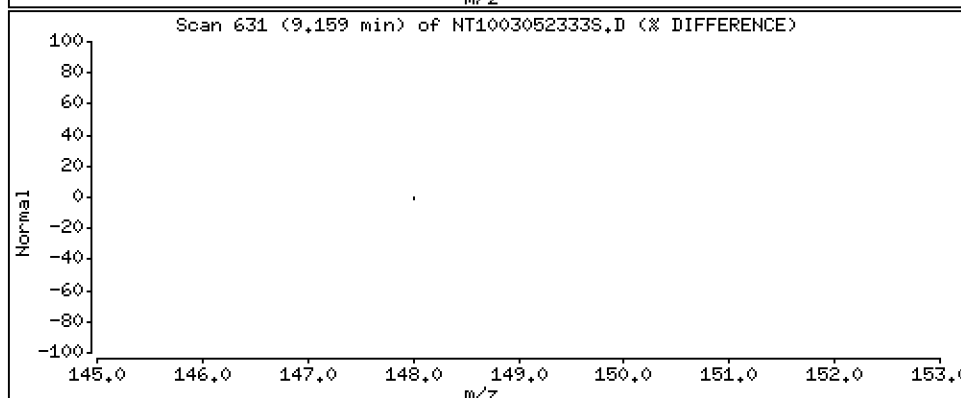
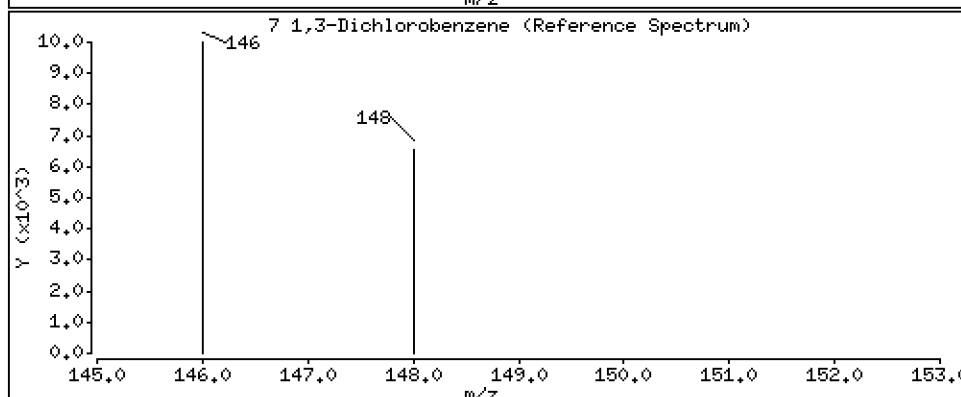
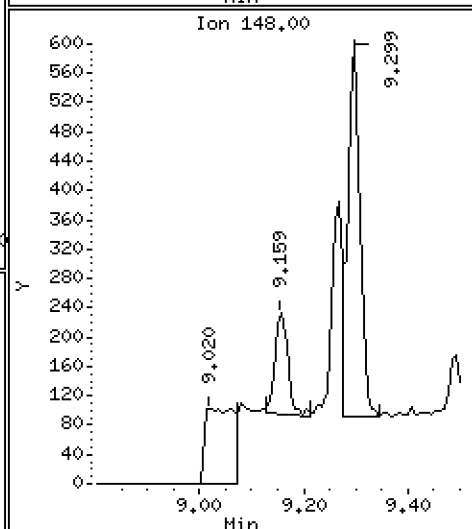
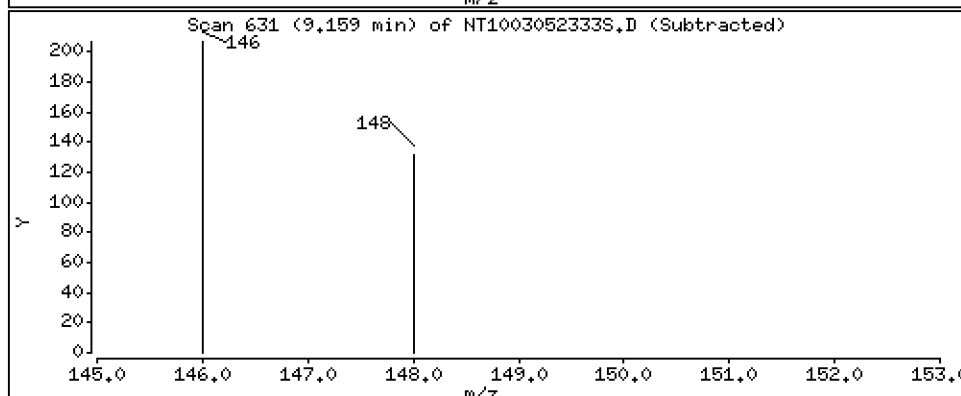
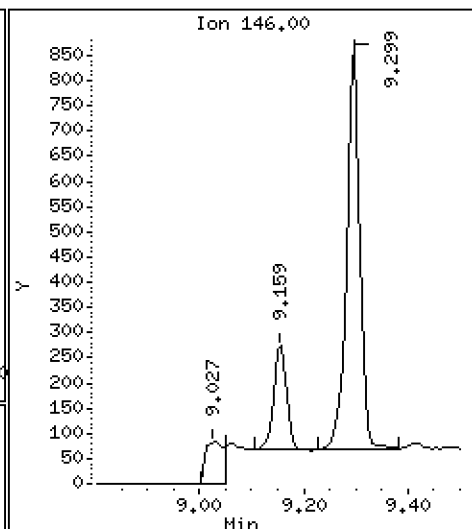
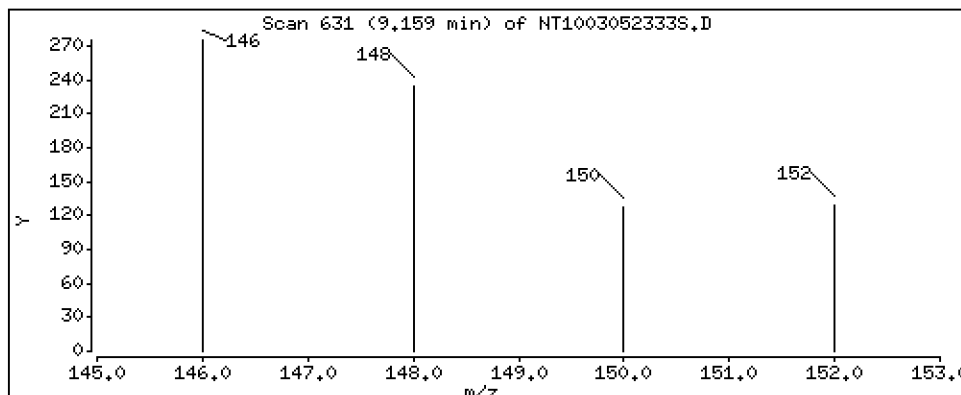
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,004044 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

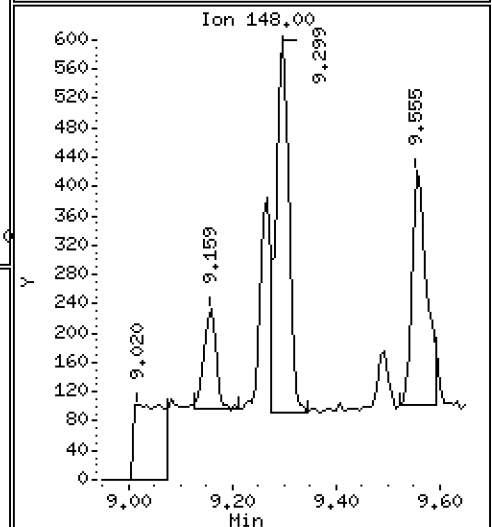
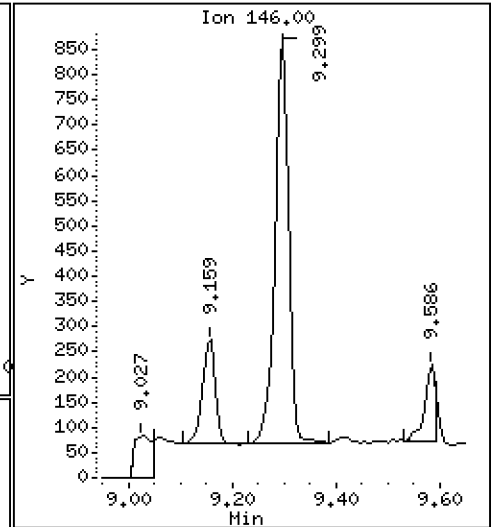
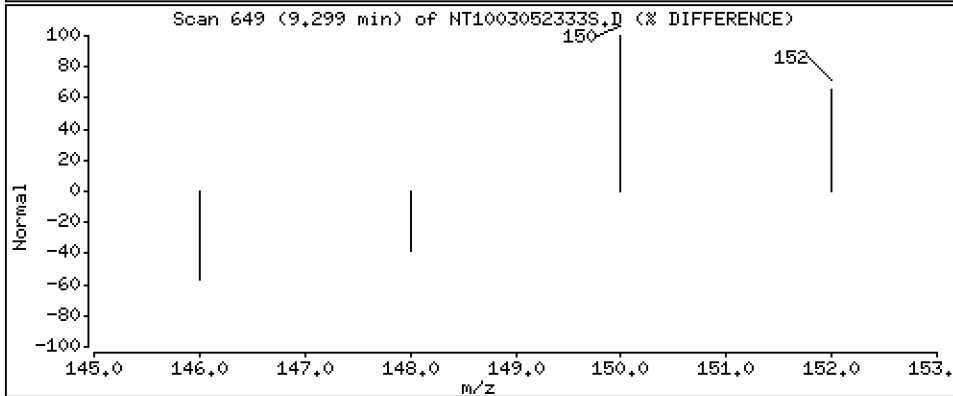
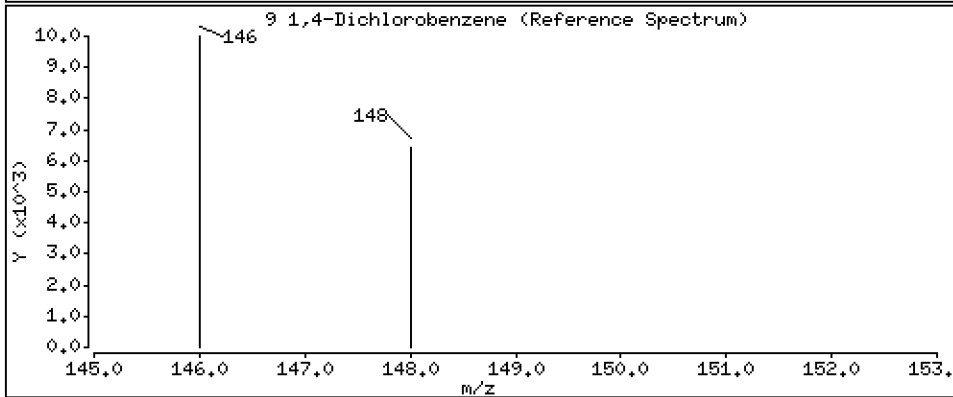
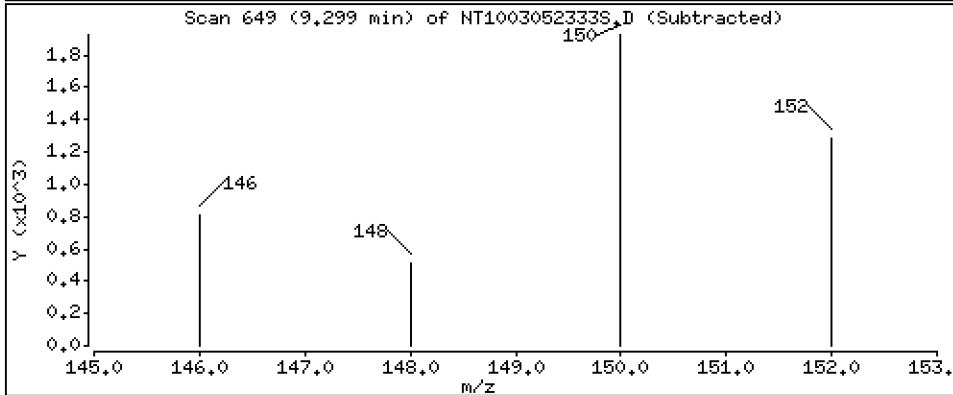
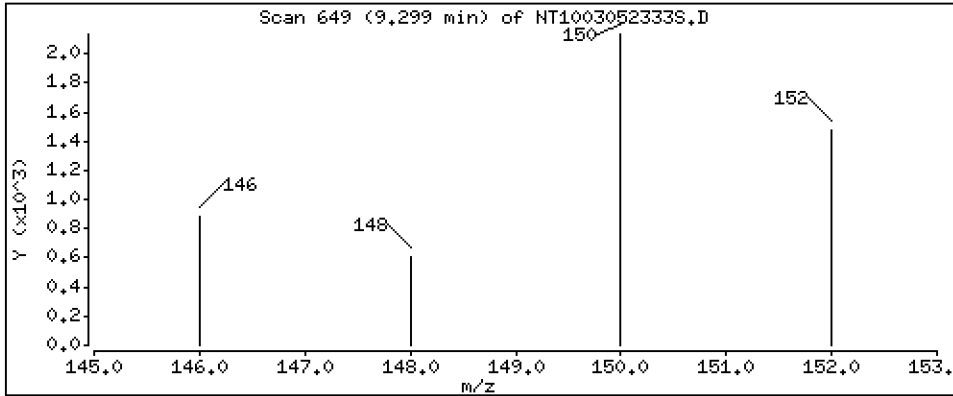
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.01681 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

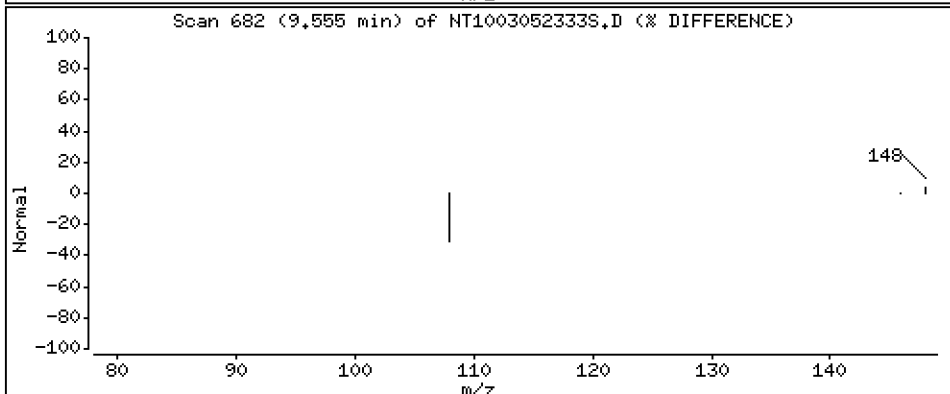
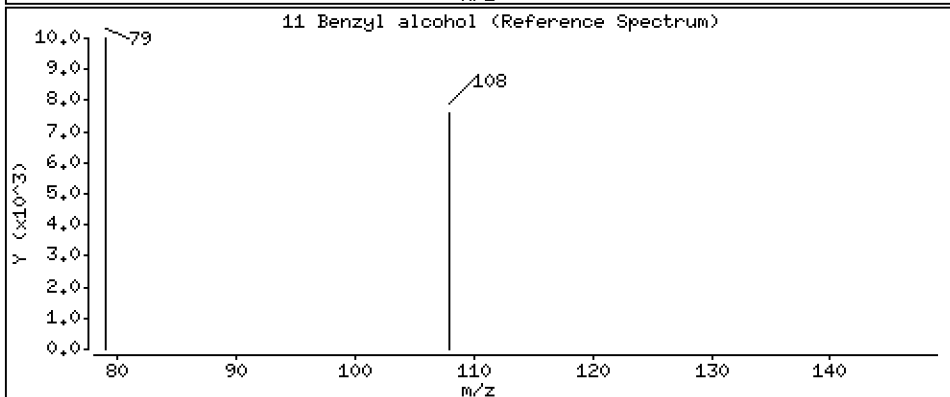
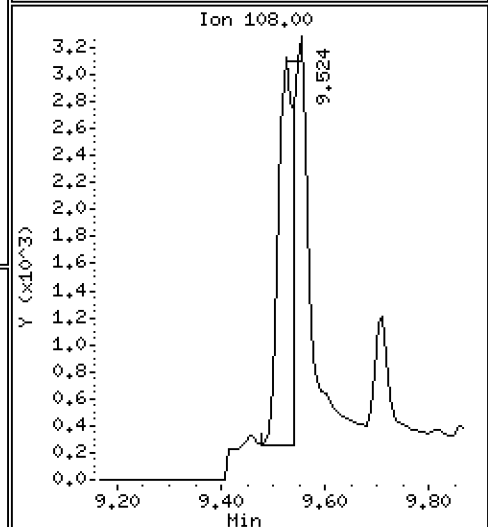
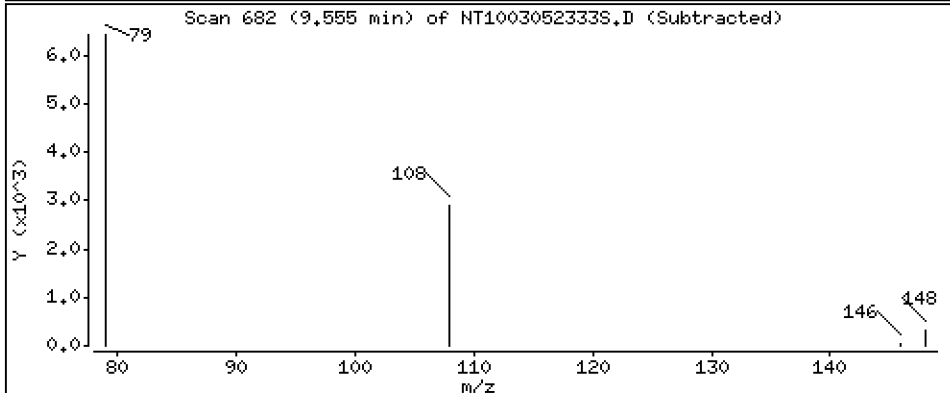
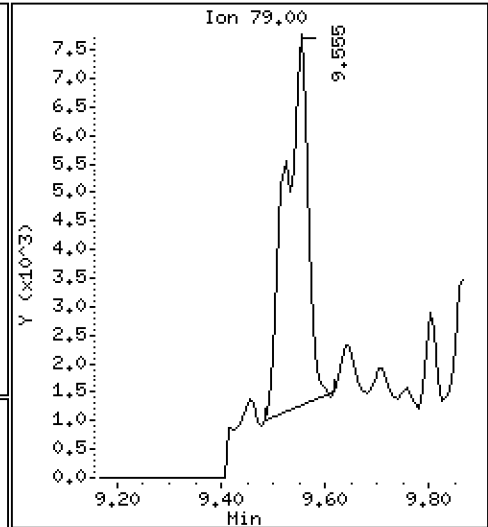
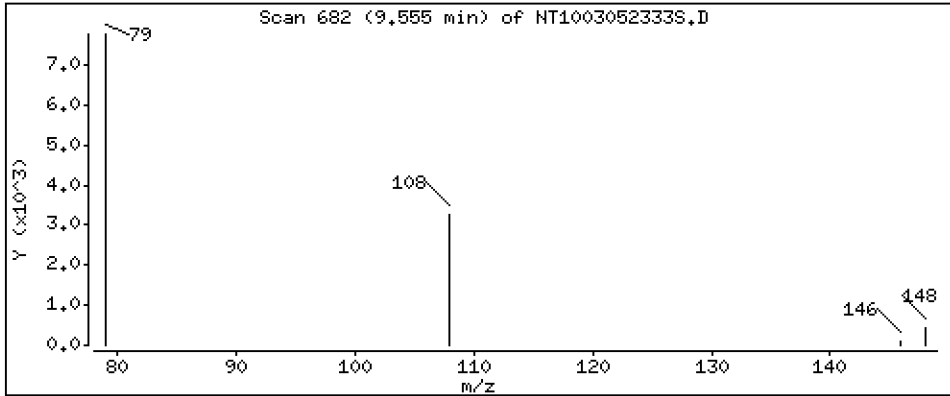
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,3663 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

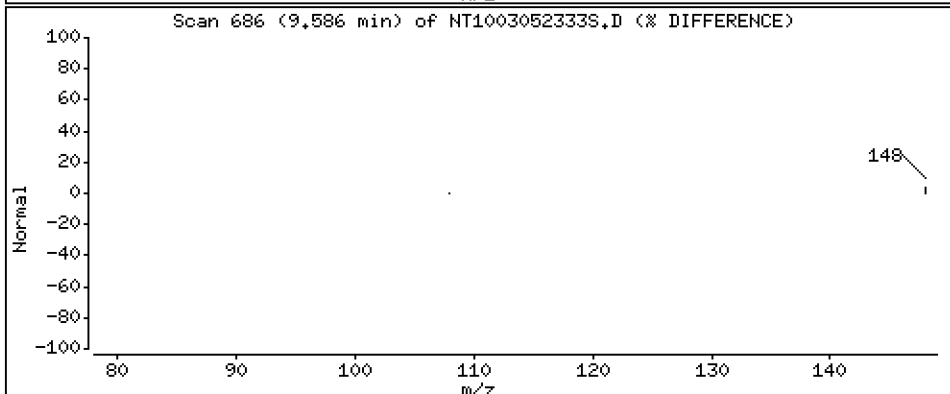
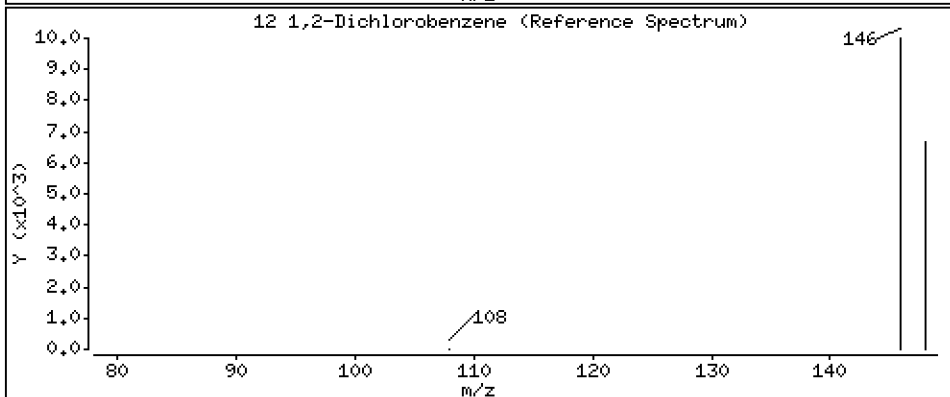
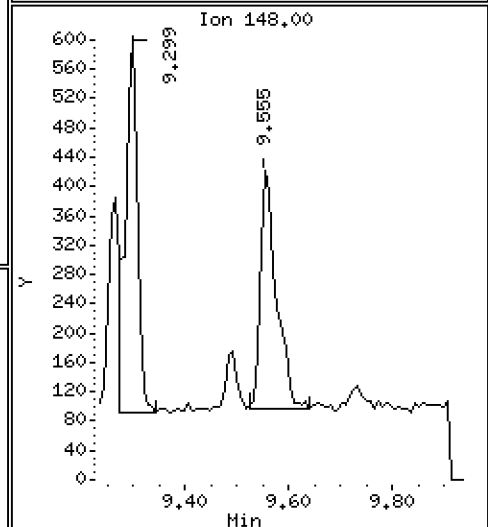
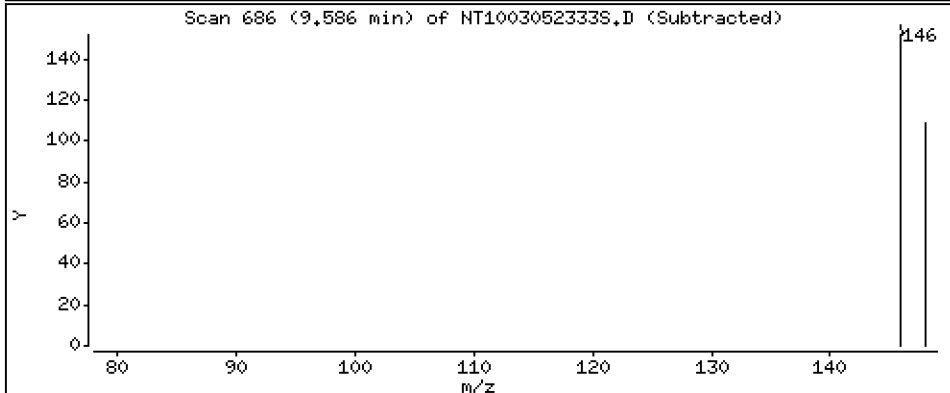
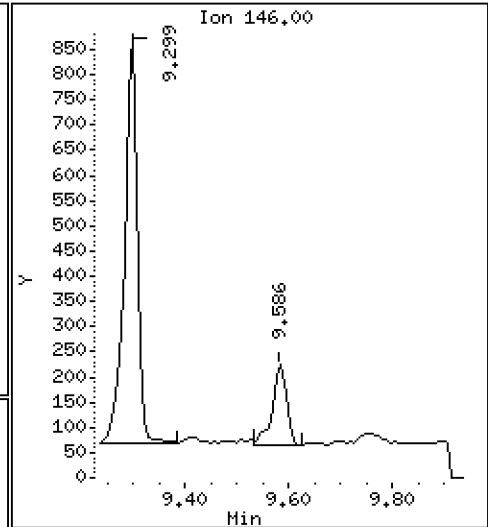
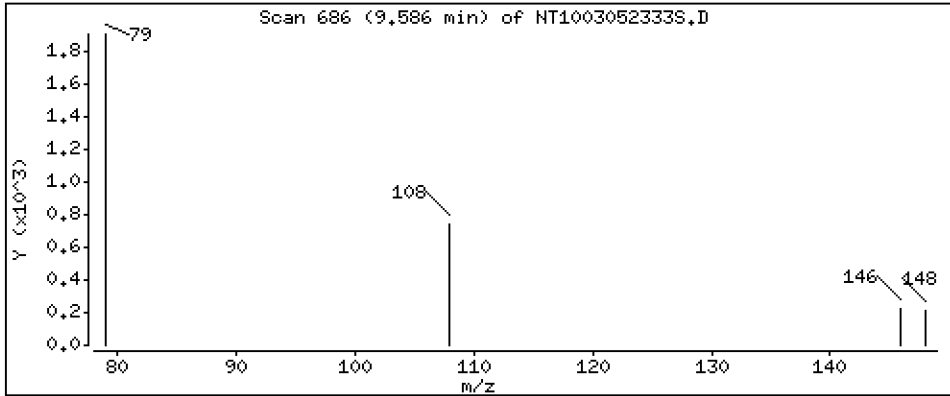
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,003650 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

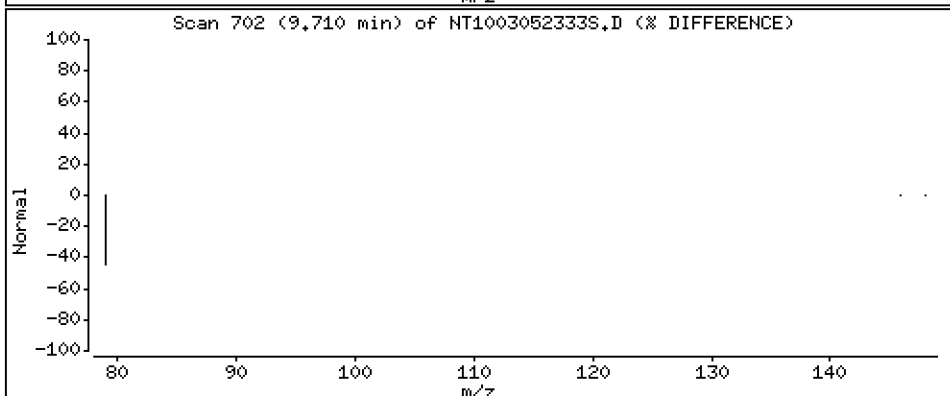
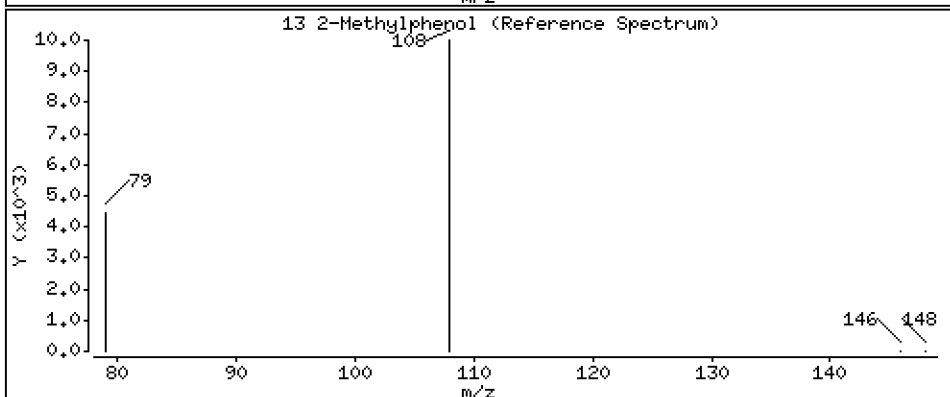
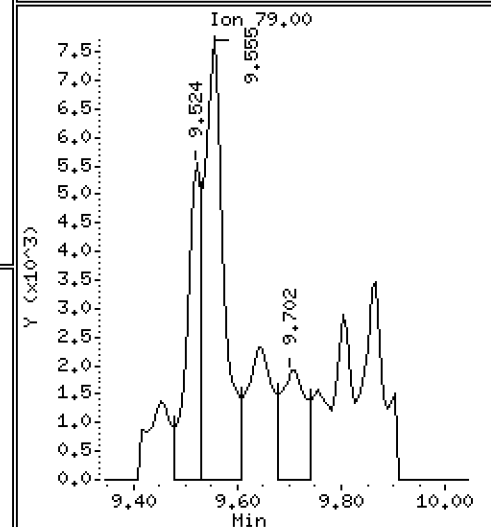
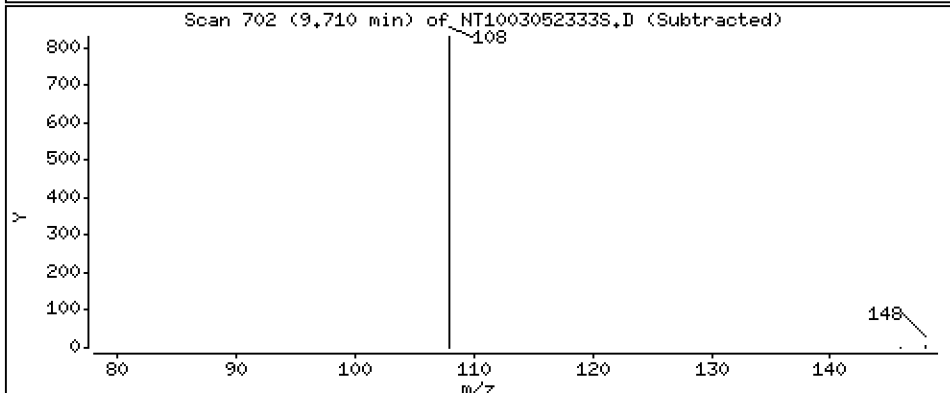
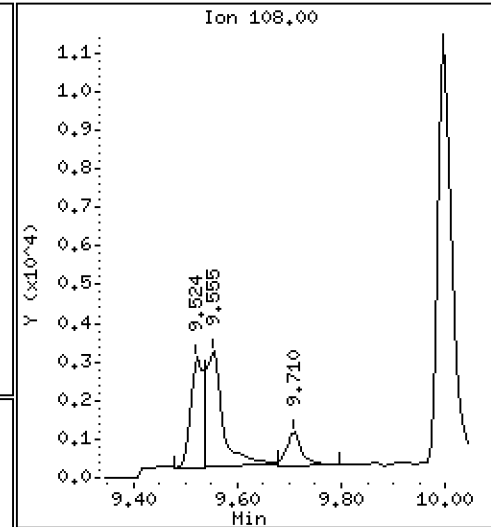
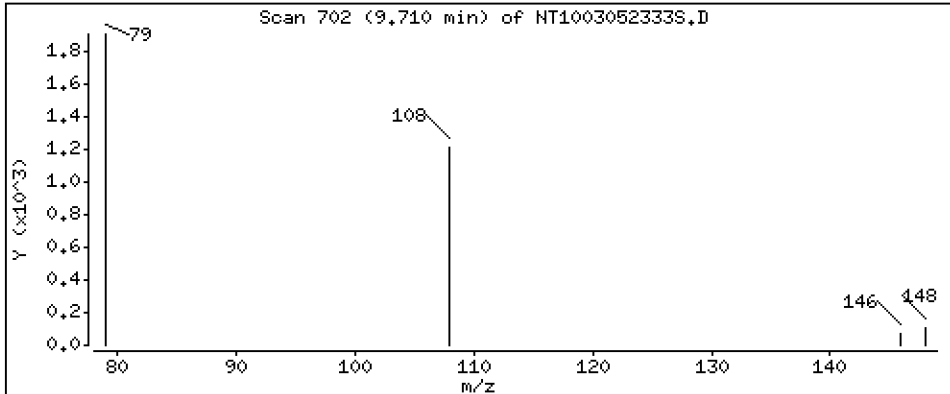
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

Concentration: 0,03091 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

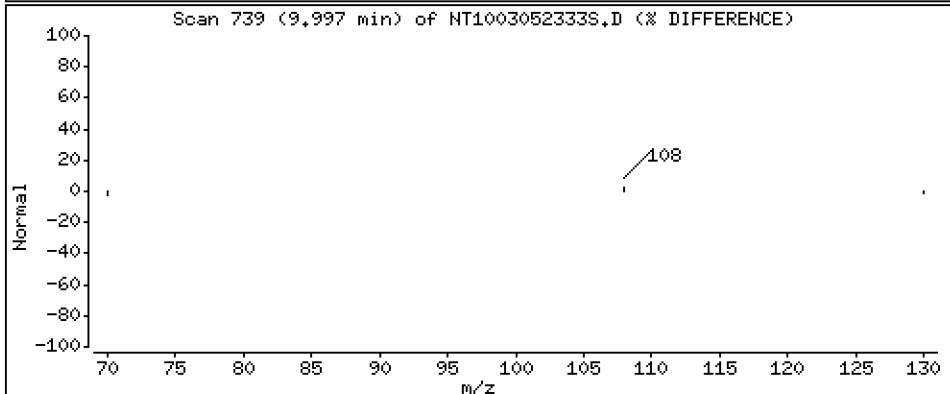
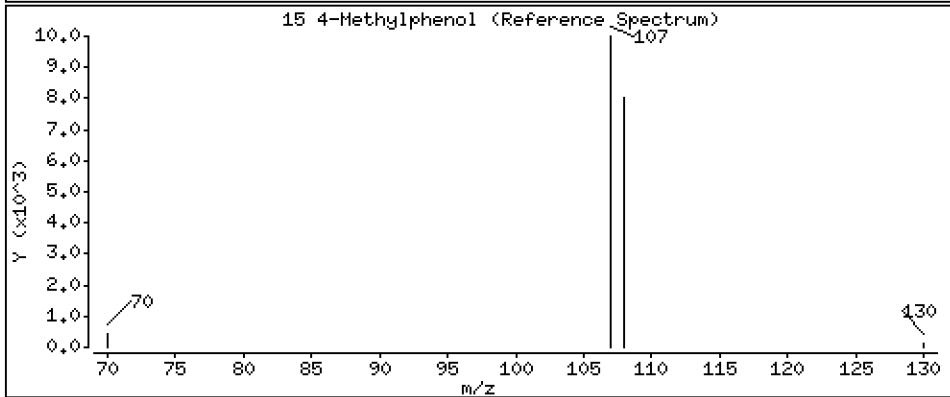
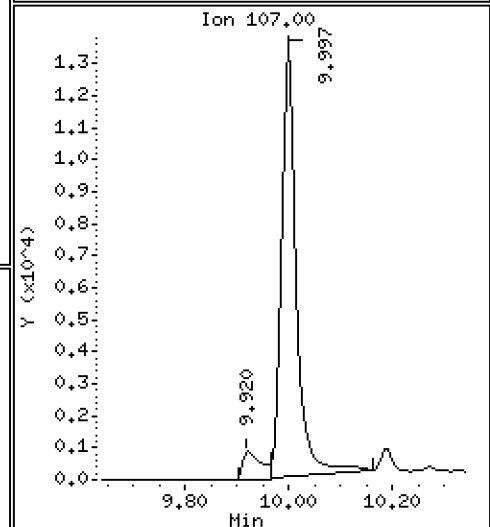
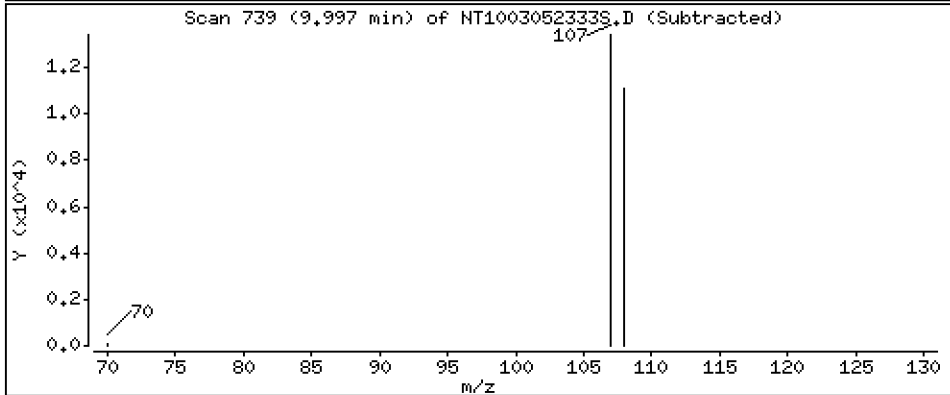
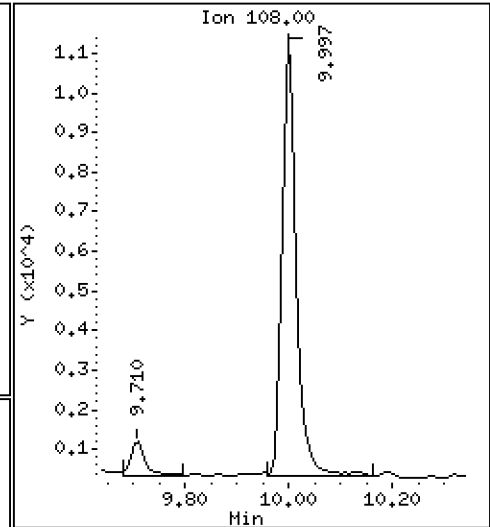
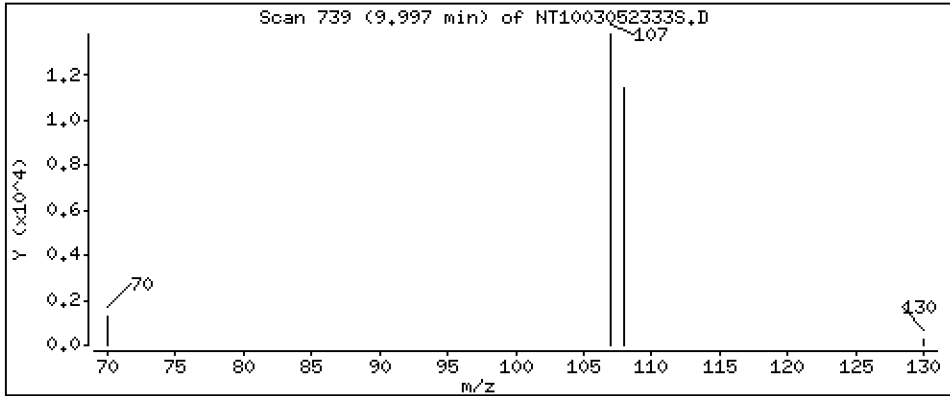
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,3391 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

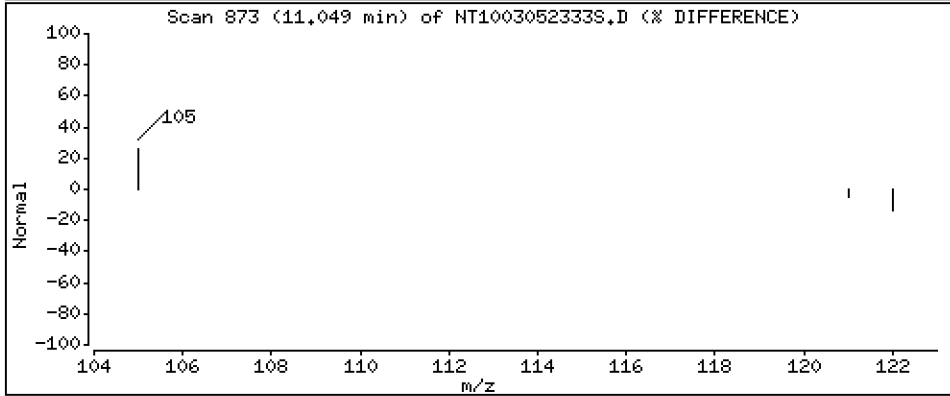
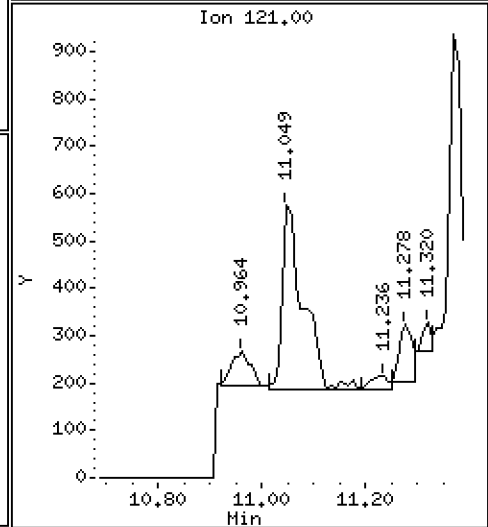
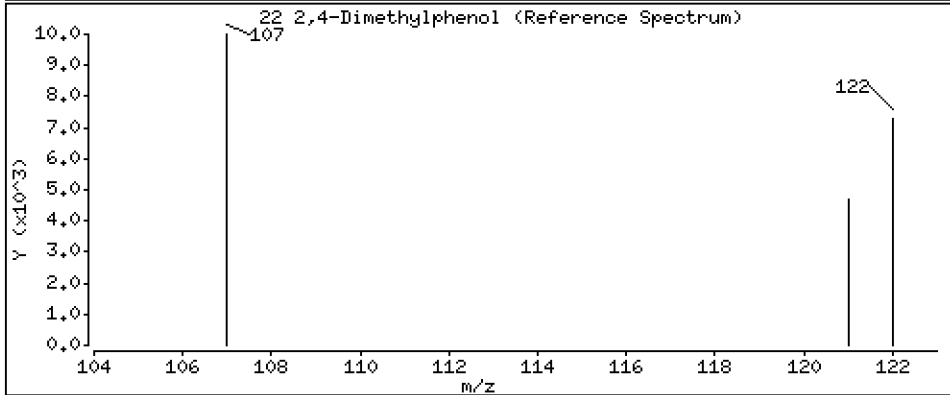
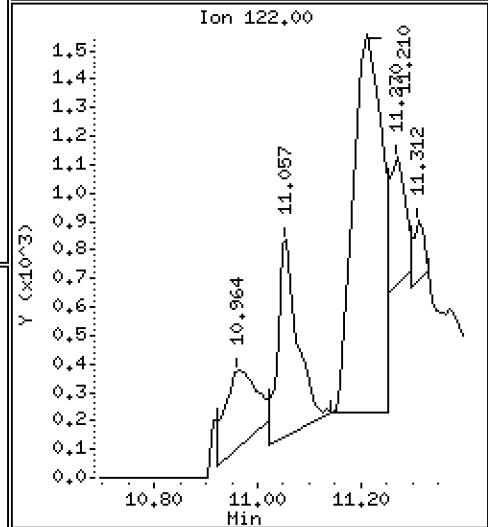
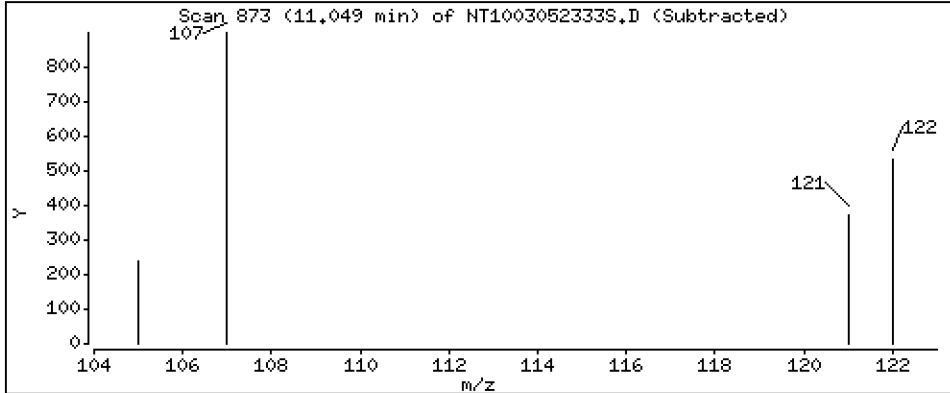
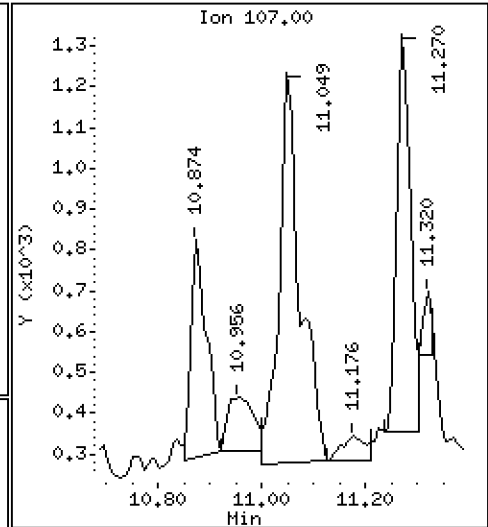
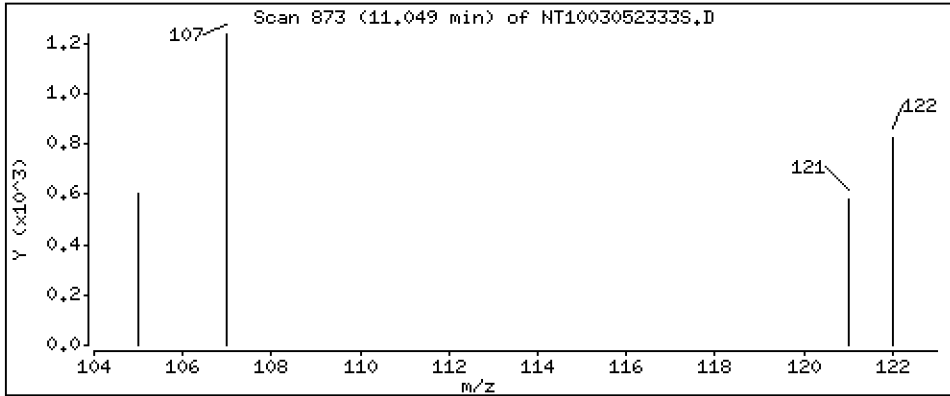
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.03911 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

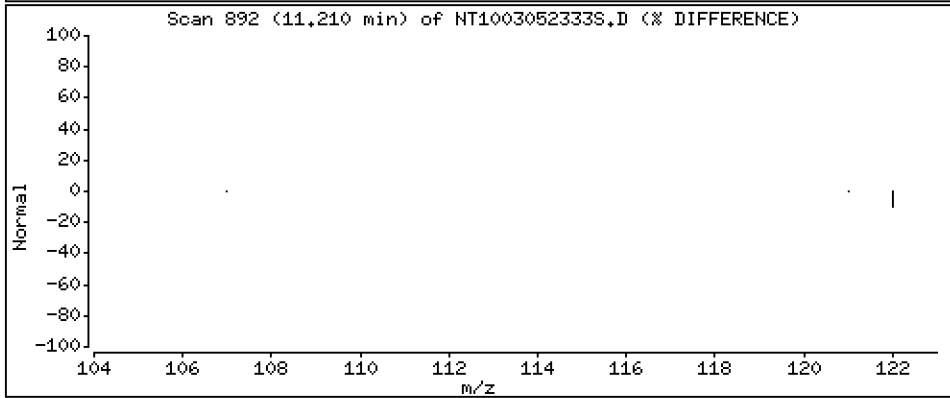
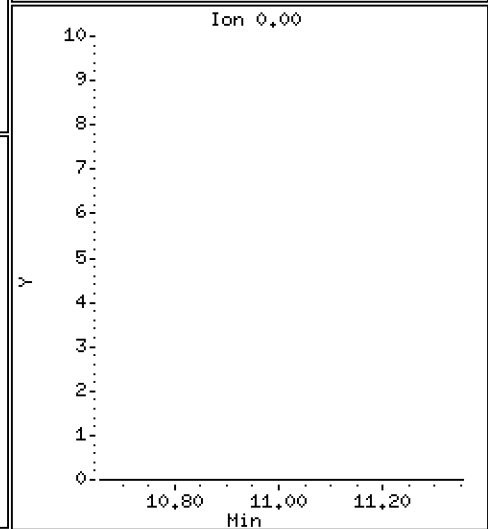
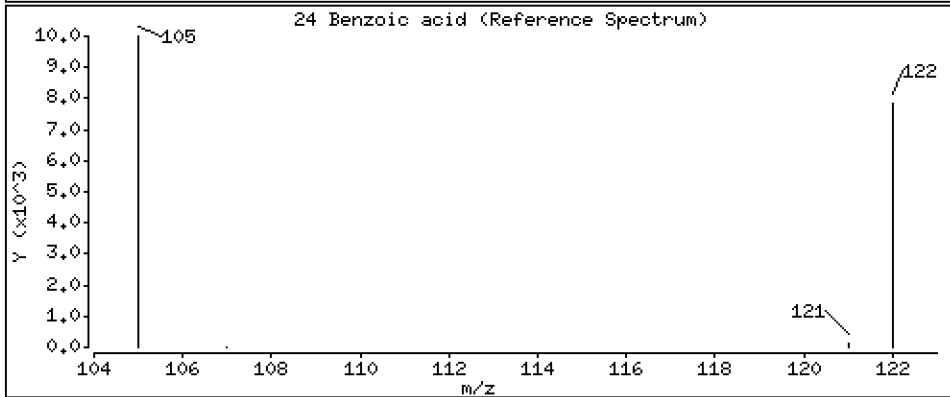
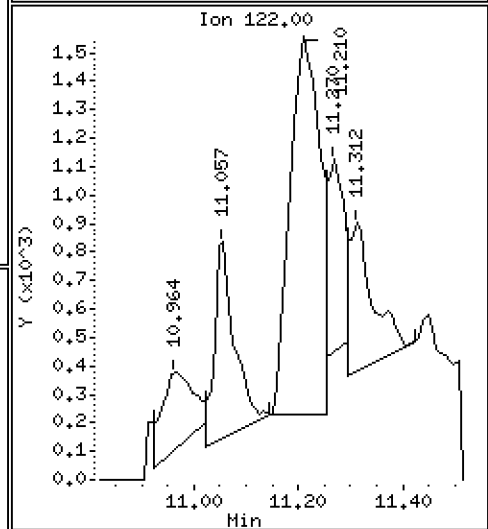
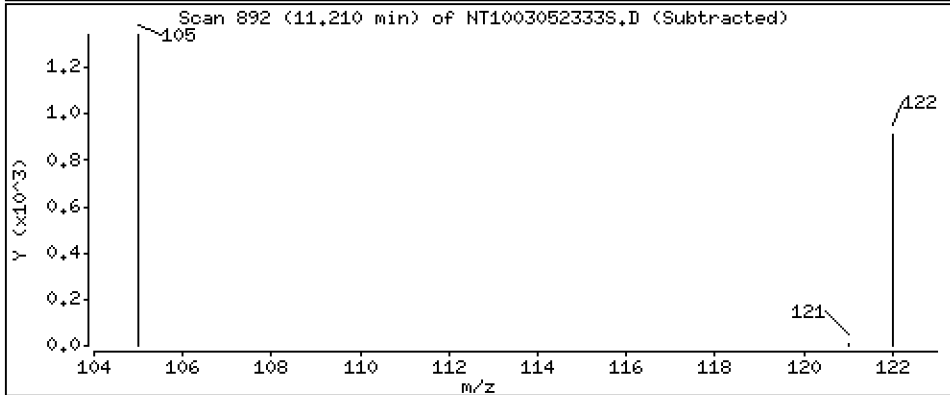
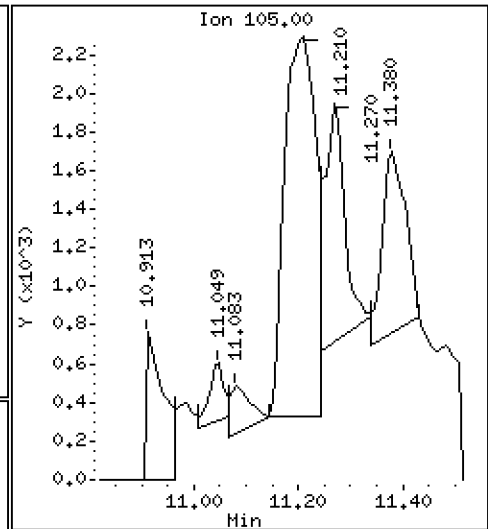
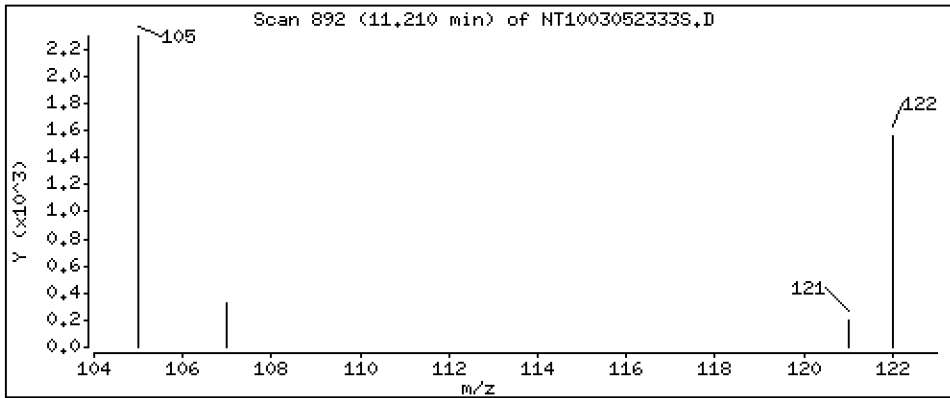
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,2189 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

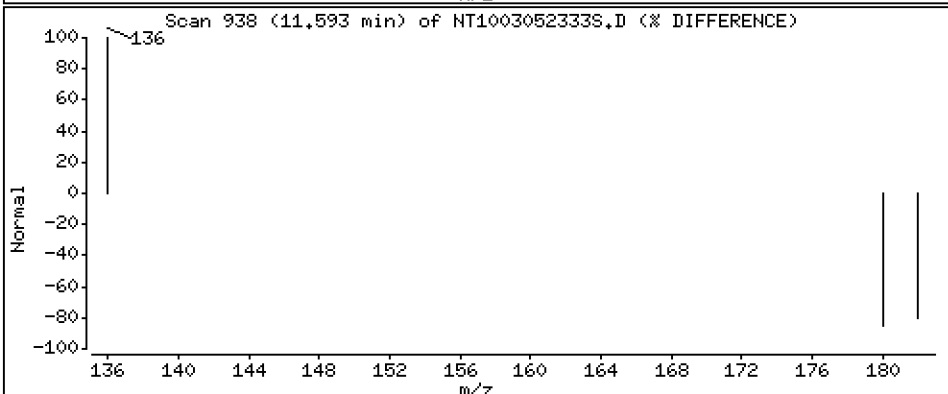
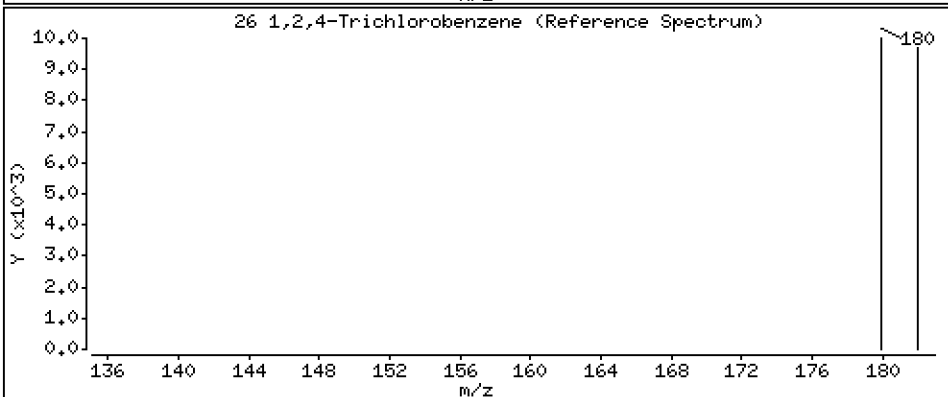
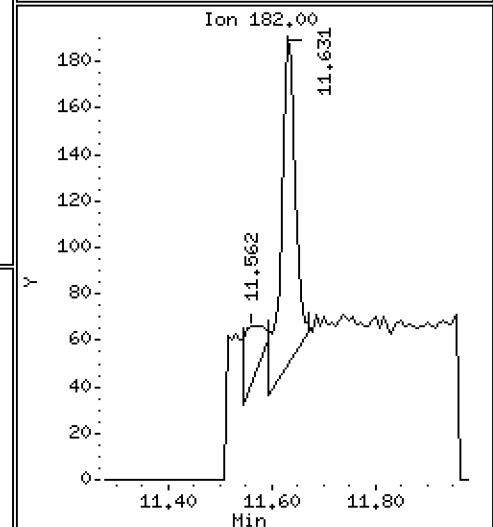
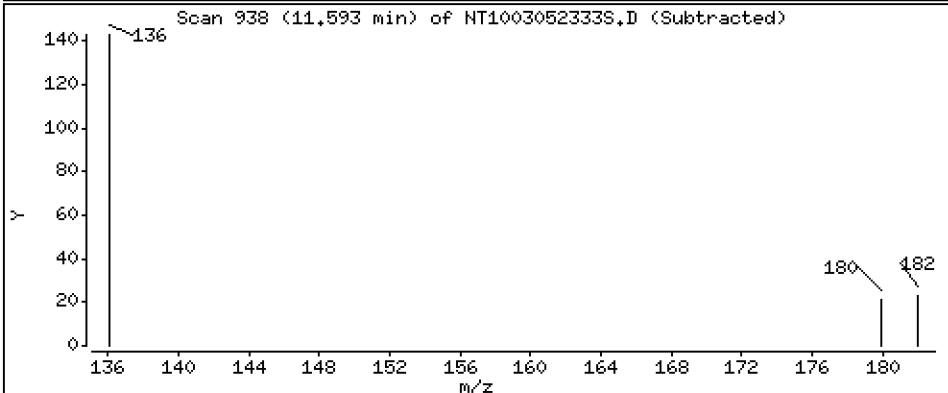
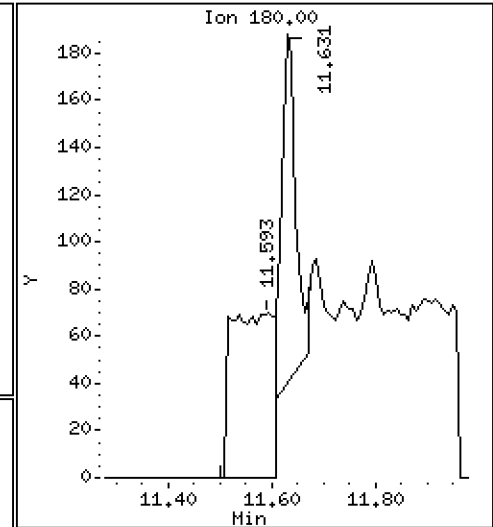
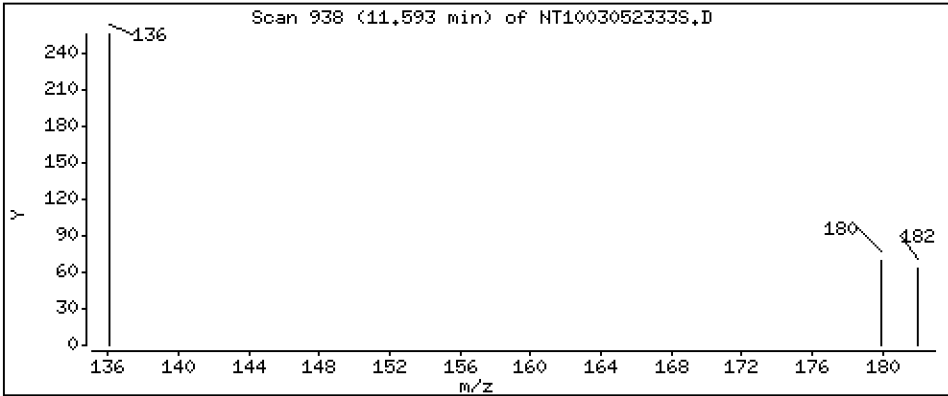
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,006944 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

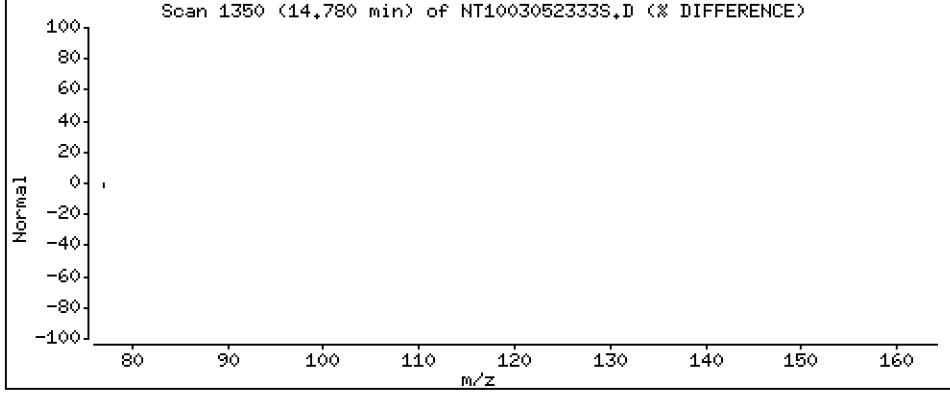
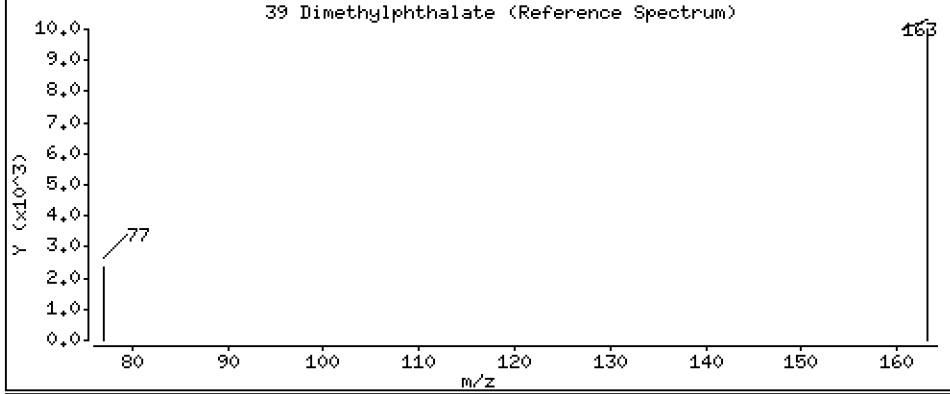
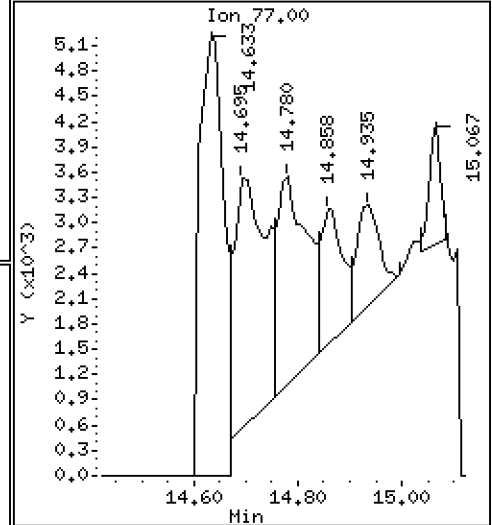
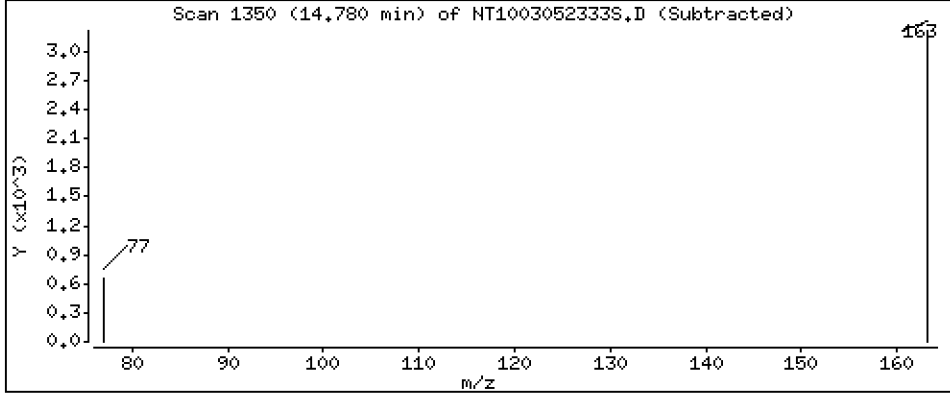
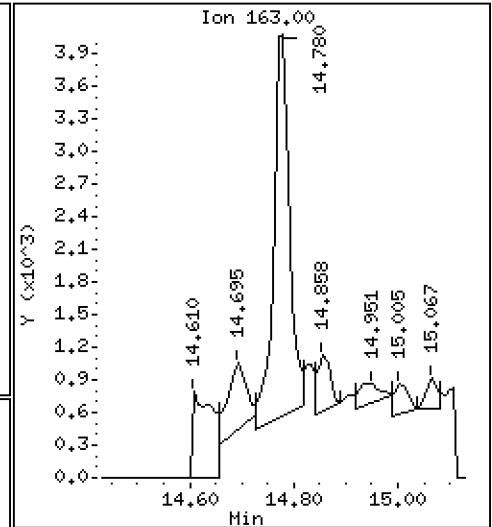
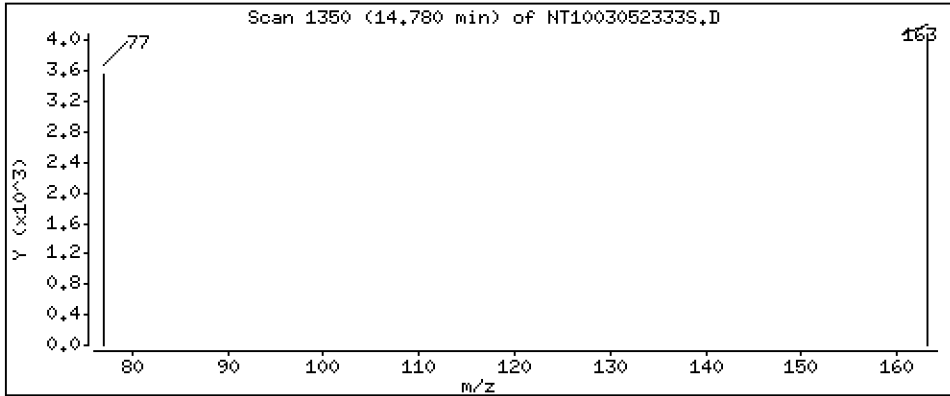
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,05564 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

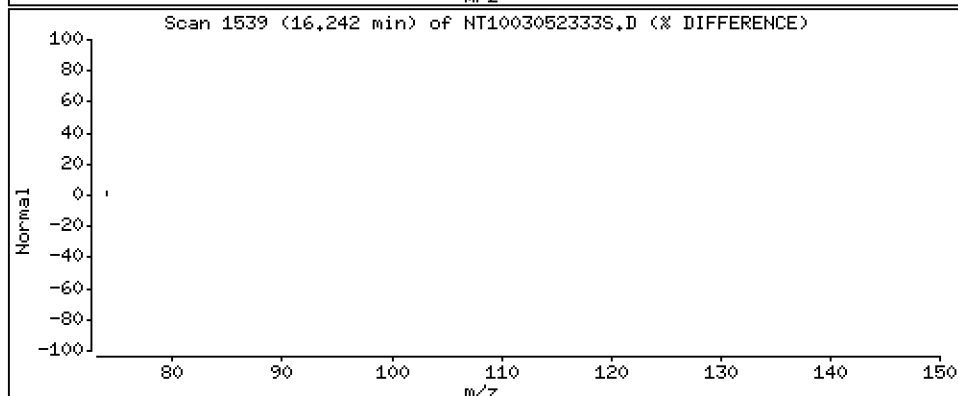
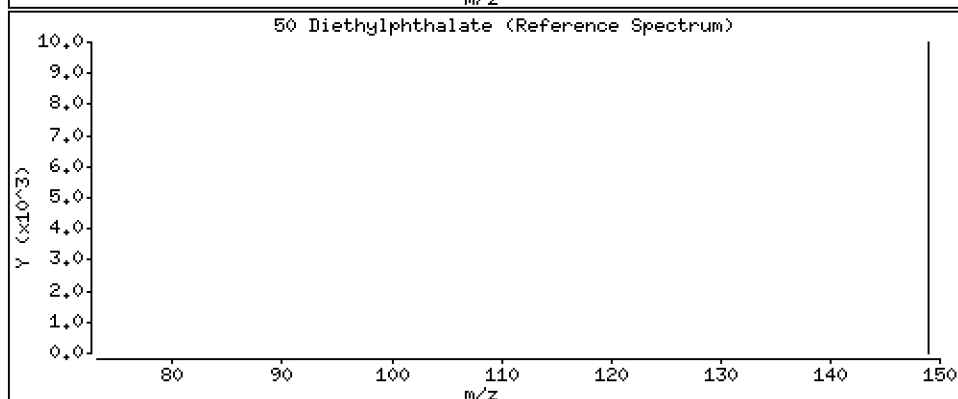
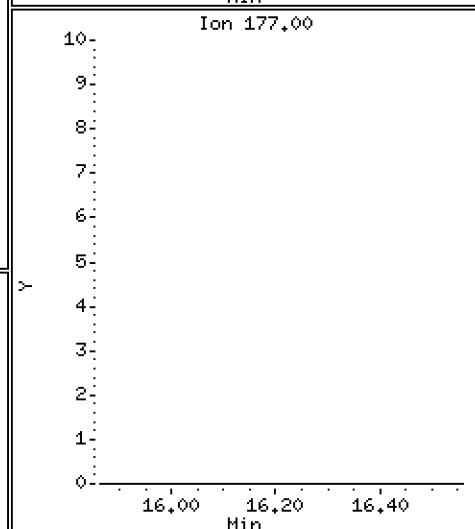
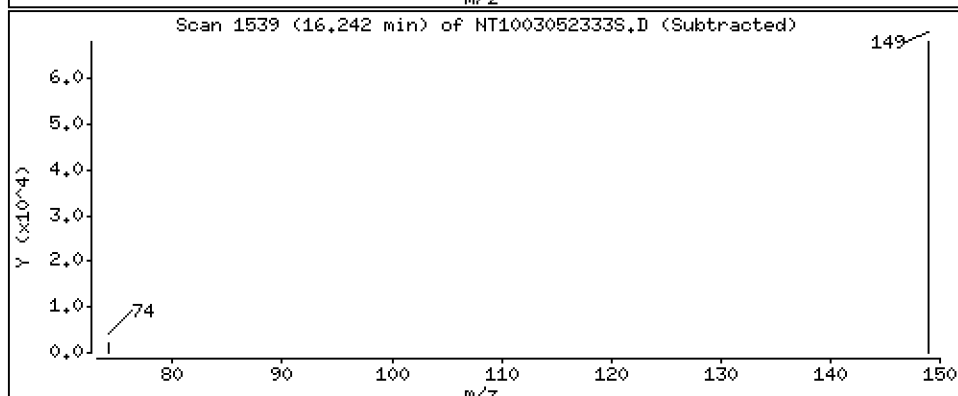
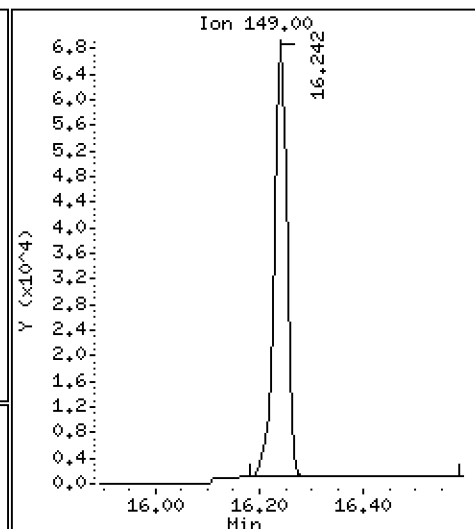
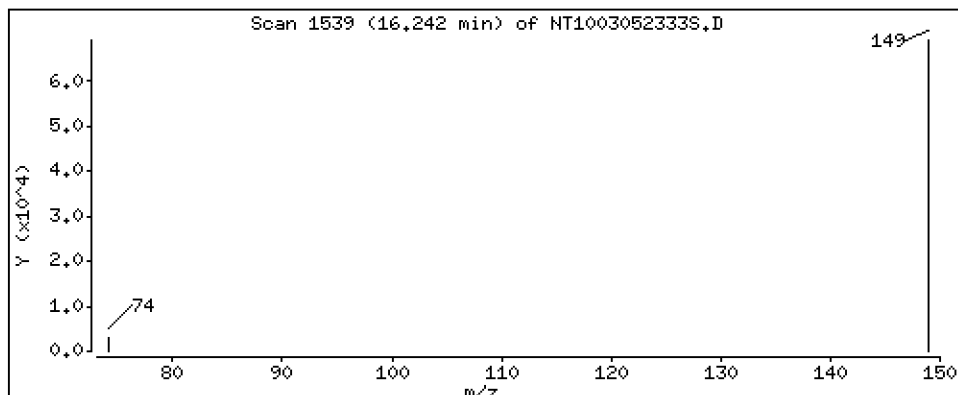
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,8953 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

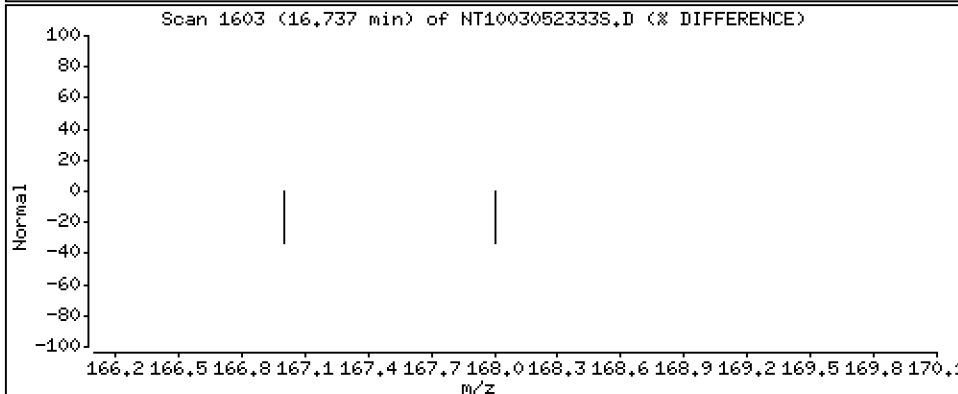
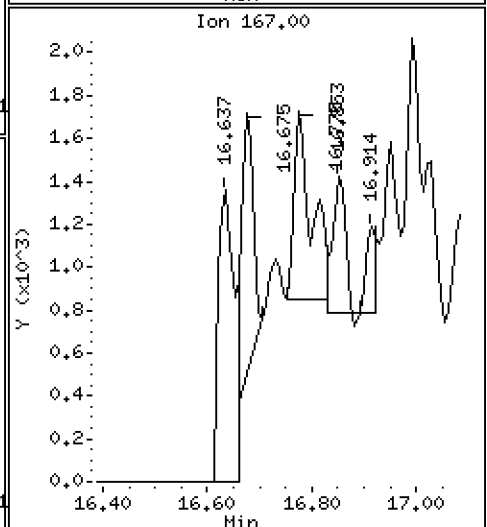
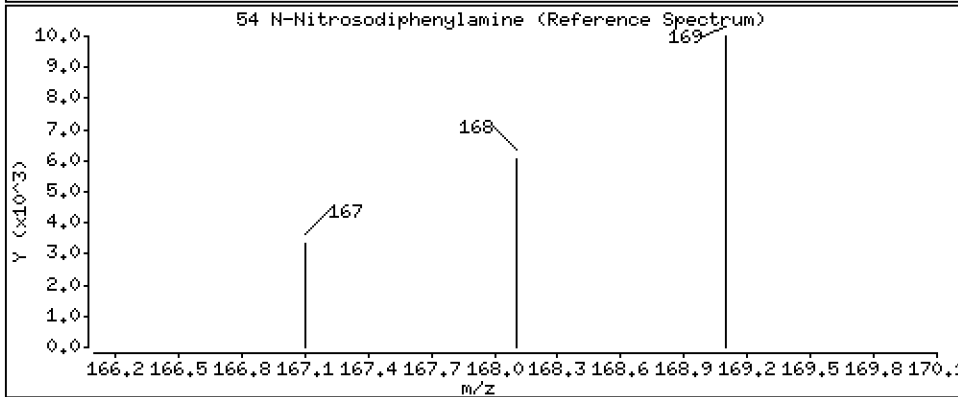
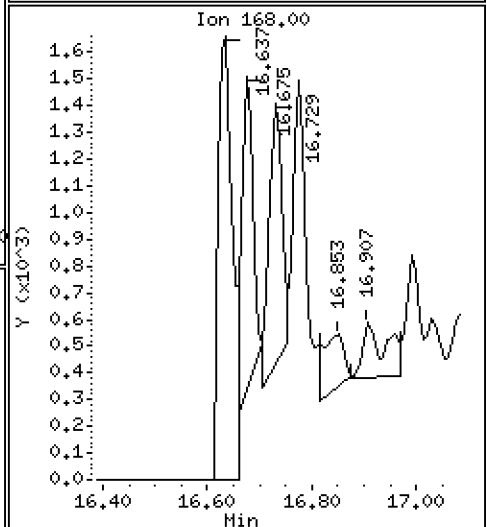
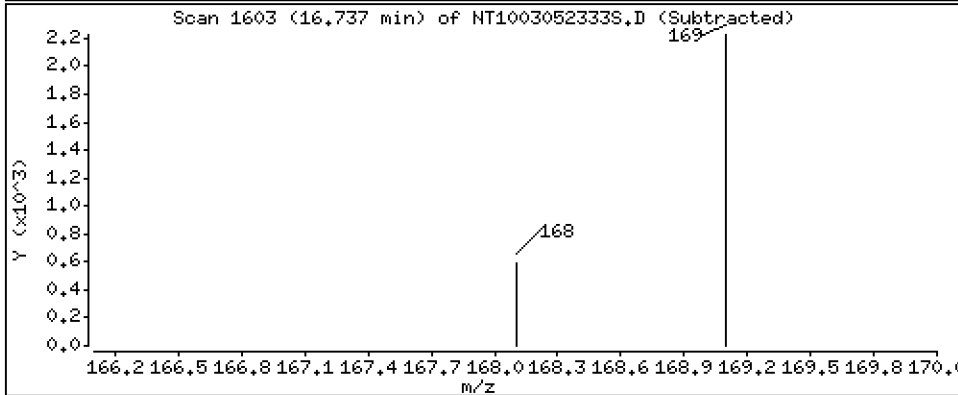
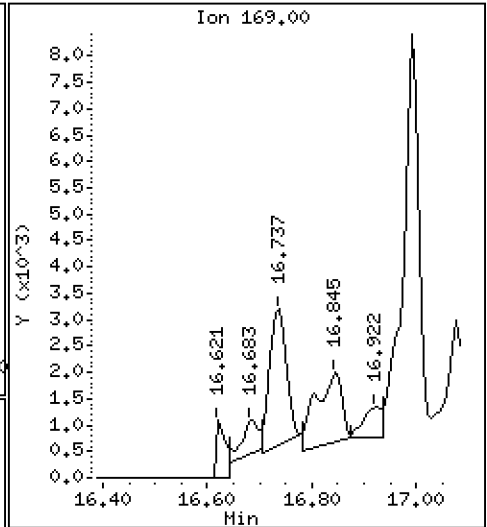
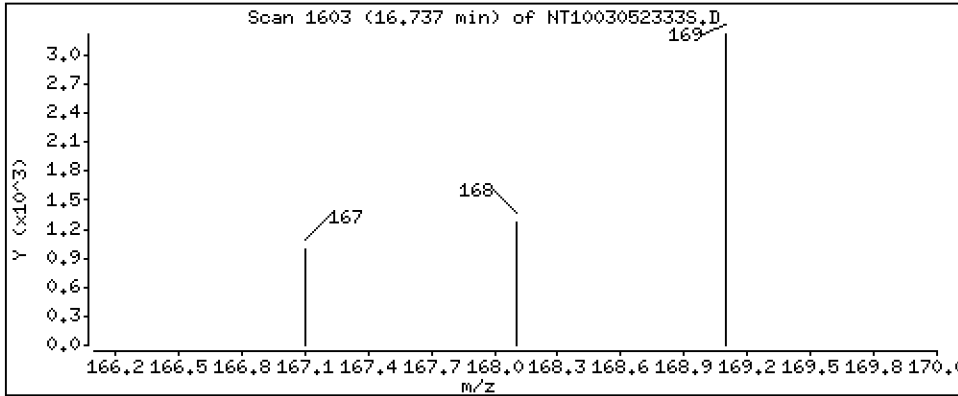
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,04302 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

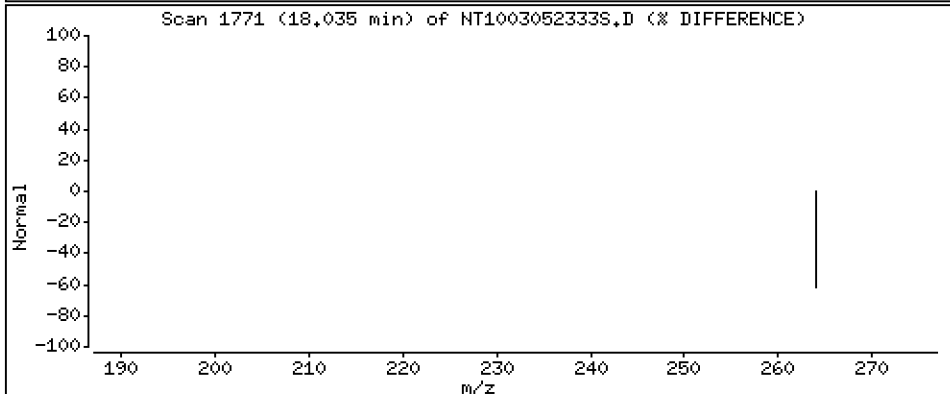
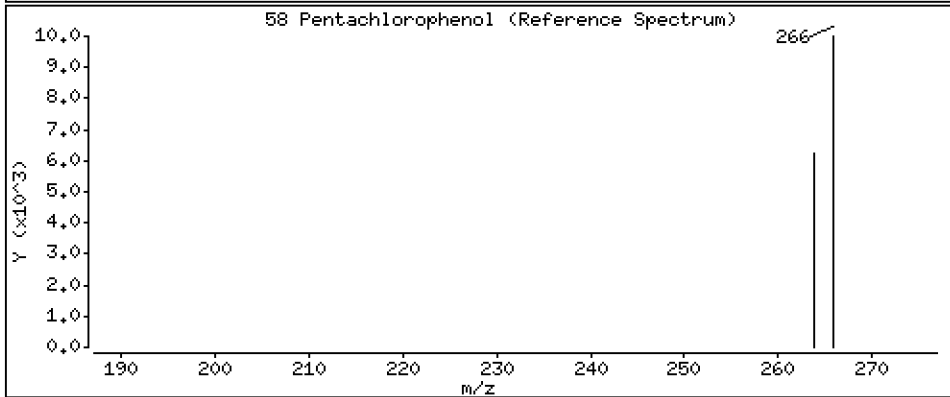
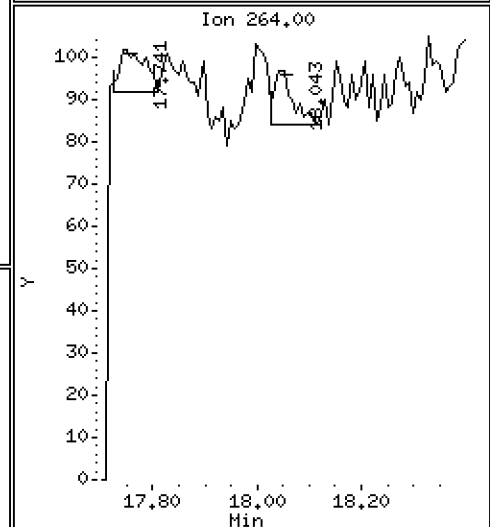
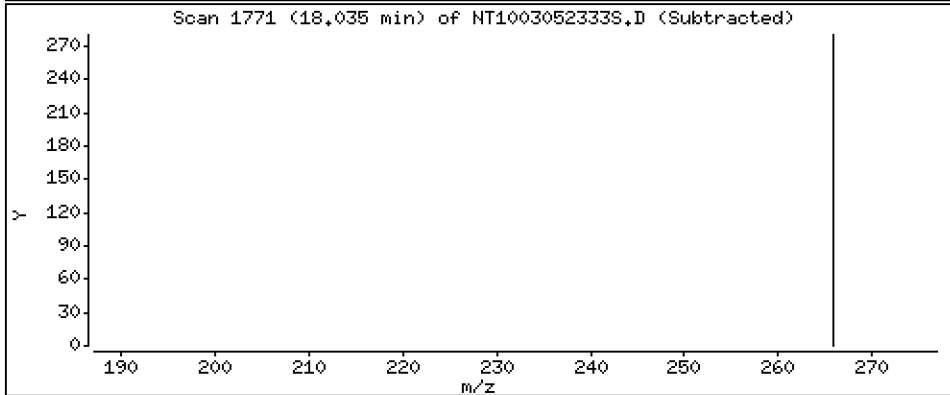
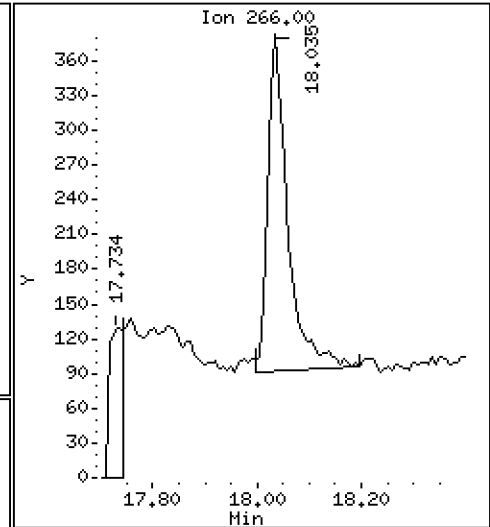
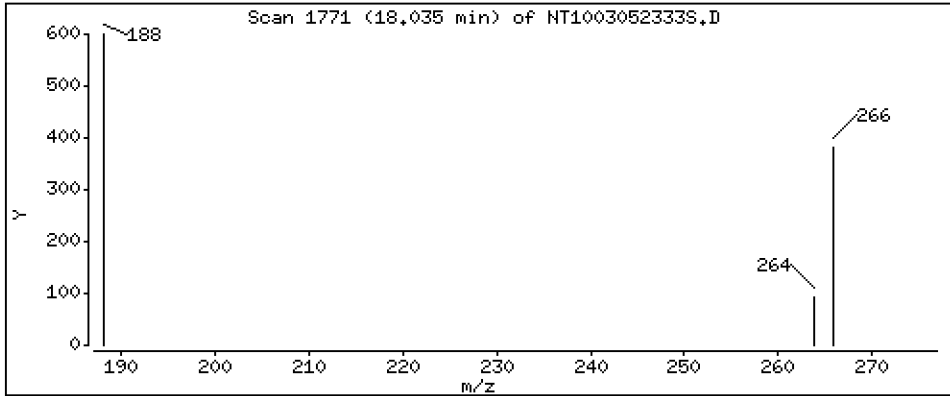
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,02736 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

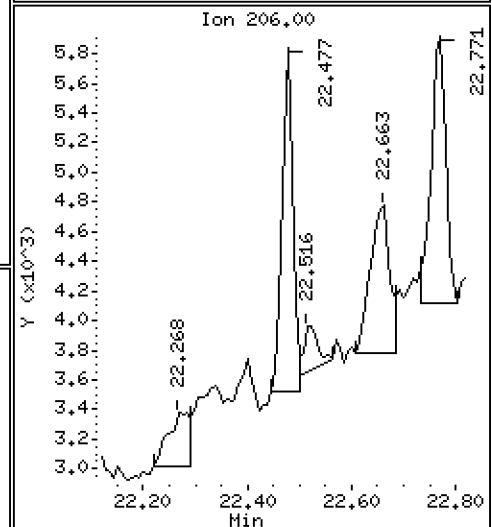
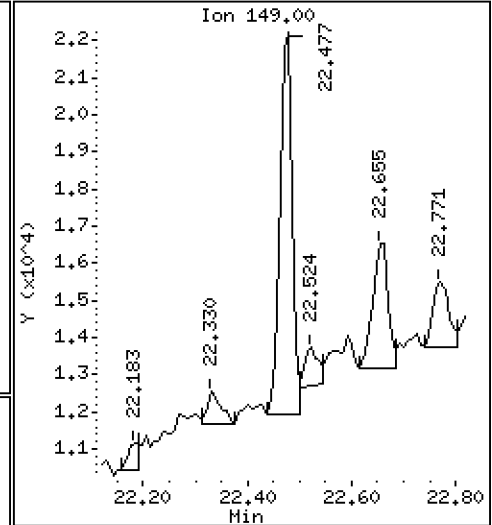
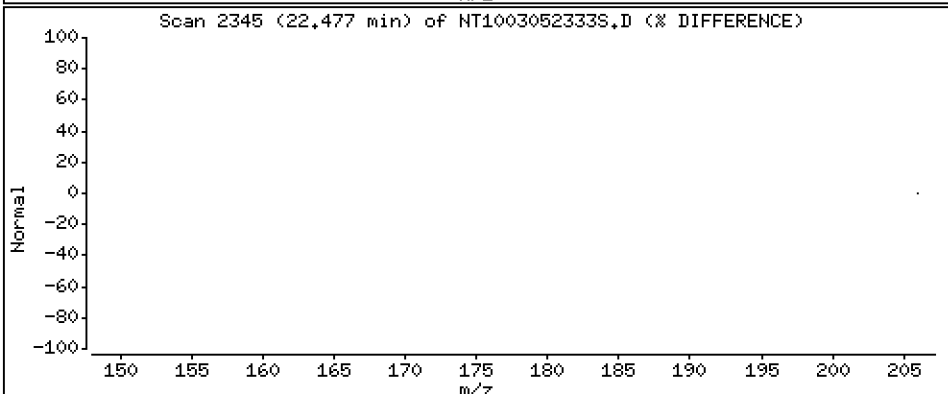
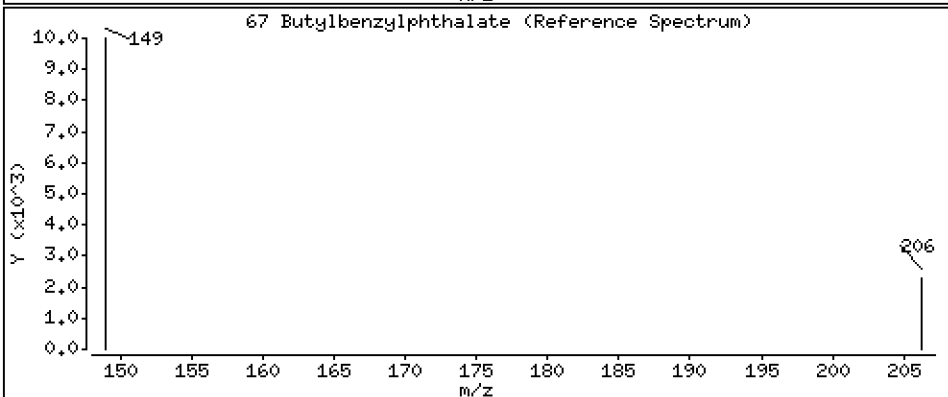
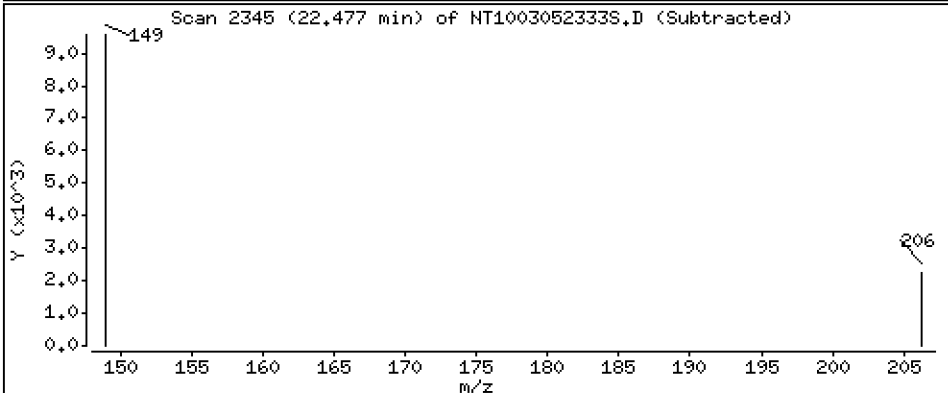
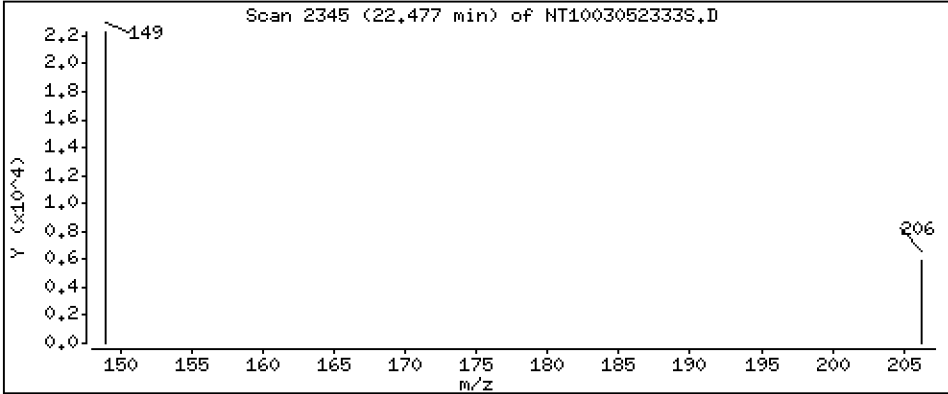
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.1191 ug/mL



Date : 06-MAR-2023 09:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-11

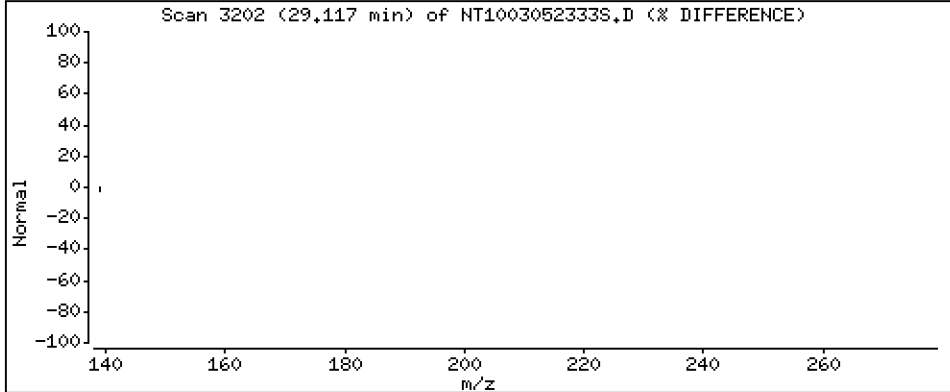
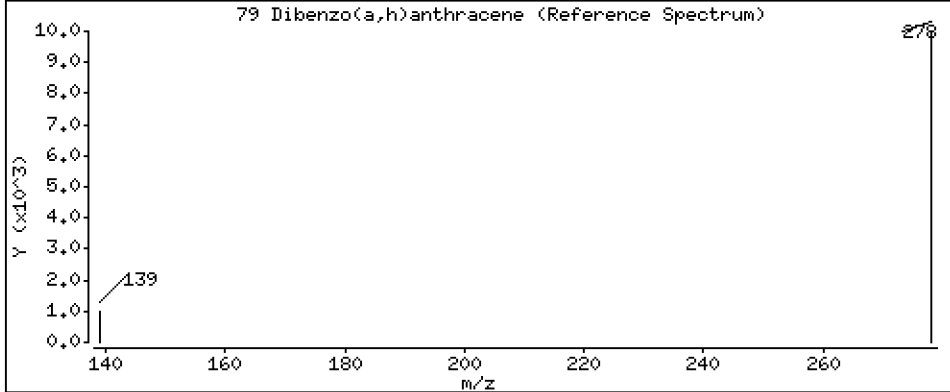
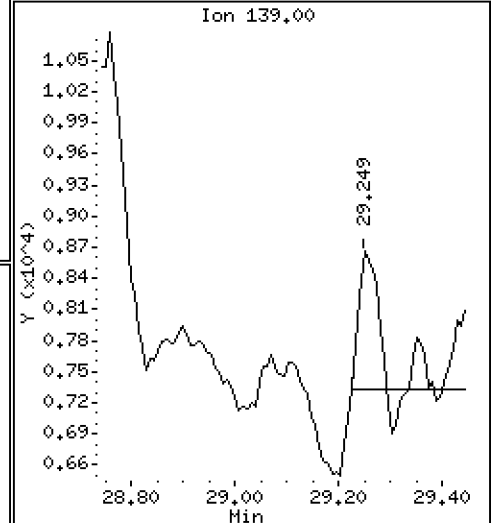
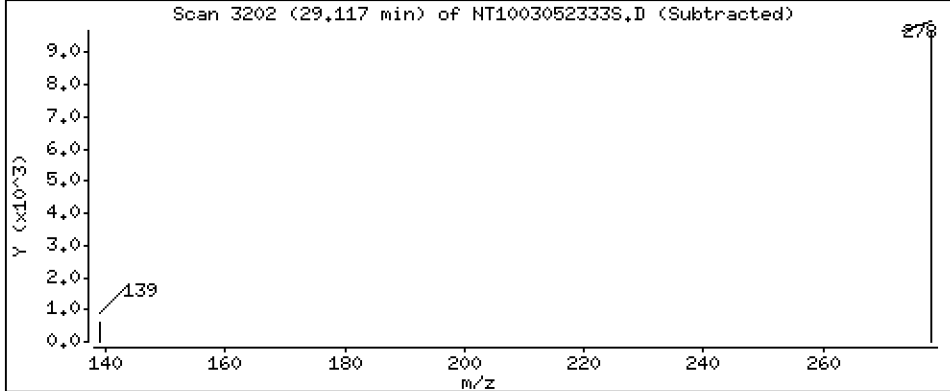
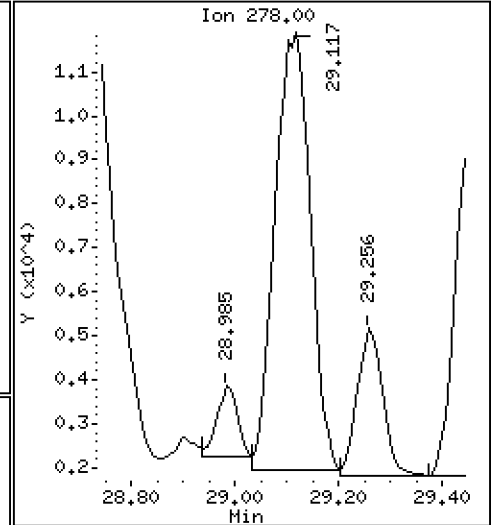
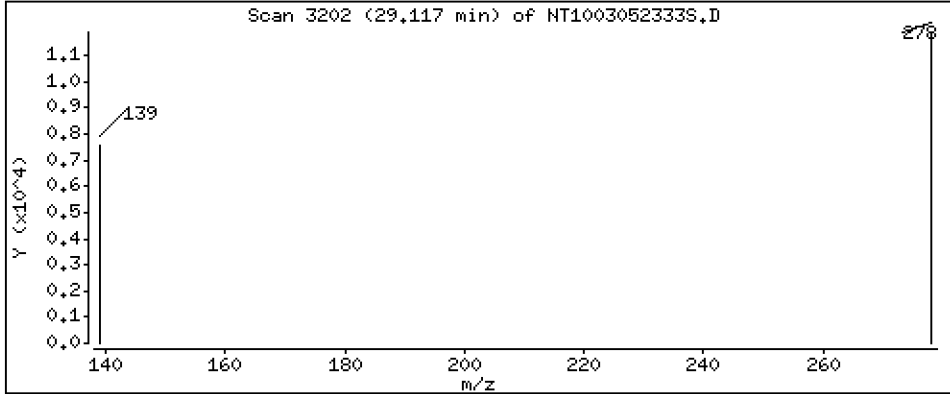
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2292 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052333S.D
 Lab Smp Id: 23A0326-11
 Inj Date : 06-MAR-2023 09:34
 Operator : YZ
 Smp Info : 23A0326-11
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 23
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.918	6.902	(0.746)	384213	5.84672	5.847 (R)
3 Phenol	94		8.563	8.556	(0.924)	112603	1.15516	1.155
7 1,3-Dichlorobenzene	146		9.159	9.151	(0.988)	345	0.00404	0.004044
* 8 1,4-Dichlorobenzene-d4	152		9.267	9.259	(1.000)	230177	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.003)	1394	0.01681	0.01681
11 Benzyl alcohol	79		9.554	9.515	(1.031)	19766	0.36629	0.3663 (M)
12 1,2-Dichlorobenzene	146		9.585	9.585	(1.034)	291	0.00365	0.003650
13 2-Methylphenol	108		9.710	9.694	(1.048)	1801	0.03091	0.03091
15 4-Methylphenol	108		9.997	9.989	(1.079)	20616	0.33908	0.3391
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.048	11.040	(0.940)	2735	0.03911	0.03911
24 Benzoic acid	105		11.210	11.167	(0.954)	8402	0.21892	0.2189 (H)
26 1,2,4-Trichlorobenzene	180		11.592	11.631	(0.986)	412	0.00694	0.006944
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	824331	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.780	14.780	(0.963)	7242	0.05564	0.05564
* 42 Acenaphthene-d10	162		15.352	15.352	(1.000)	409943	4.00000	
50 Diethylphthalate	149		16.242	16.241	(1.058)	109899	0.89529	0.8953 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.736	(0.907)	5797	0.04302	0.04302
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		18.035	18.050	(0.977)	755	0.02736	0.02736
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	832581	4.00000	
\$ 66 Terphenyl-d14	244		21.594	21.586	(0.919)	485827	7.53047	7.530 (R)
67 Butylbenzylphthalate	149		22.477	22.469	(0.956)	16039	0.11911	0.1191
* 69 Chrysene-d12	240		23.506	23.491	(1.000)	797791	4.00000	
* 77 Perylene-d12	264		26.247	26.224	(1.000)	888447	4.00000	
79 Dibenzo(a,h)anthracene	278		29.116	29.093	(1.109)	47301	0.22920	0.2292 (H)
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052333S.D
 Lab Smp Id: 23A0326-11
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	230177	-3.87
27 Naphthalene-d8	849492	424746	1698984	824331	-2.96
42 Acenaphthene-d10	421435	210718	842870	409943	-2.73
59 Phenanthrene-d10	835585	417793	1671170	832581	-0.36
69 Chrysene-d12	874614	437307	1749228	797791	-8.78
77 Perylene-d12	1035818	517909	2071636	888447	-14.23

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.27	0.08
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.51	0.07
77 Perylene-d12	26.22	25.72	26.72	26.25	0.09

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

REVIEW SUMMARY FOR FILE - NT1003052333S.D

Lab ID: 23A0326-11

nt10.i, 20230305B.b\SIM.b\SIMABN2.m,

06-MAR-2023 09:34

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

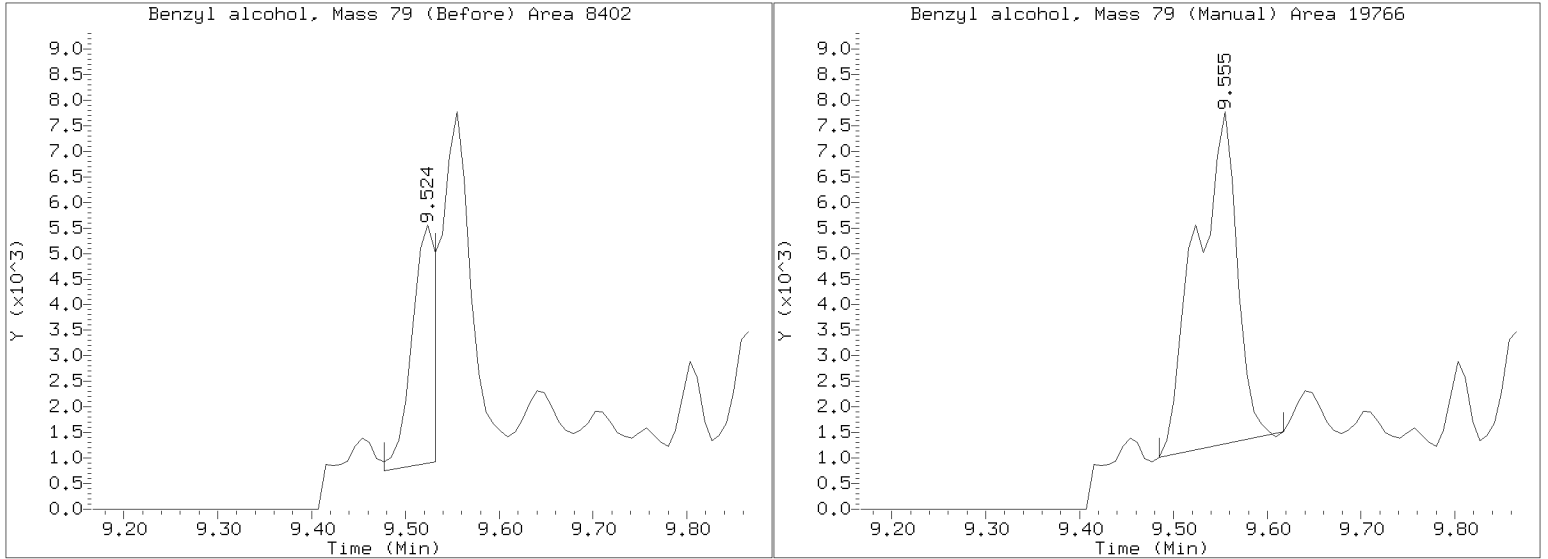
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/SIM.b/NT1003052333S.D
Injection Date: 06-MAR-2023 09:34
Lab ID:23A0326-11 Client ID:
Report Date: 03/31/2023 08:57



APPROVED

By Deenay Dunmore at 9:13 am, Mar 31, 2023



Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
SIM SVOC Organics (Dual scan list)

Laboratory: Analytical Resources, LLC

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-12 A

SDG: 23A0326

Sampled: 01/17/23 14:37

Prepared: 02/02/23 13:06

File ID: NT1003052334S.D

% Solids: 51.42

Preparation: EPA 3546 (Microwave)

Analyzed: 03/06/23 10:11

Batch: BLA0685

Sequence: SLC0447

Initial/Final: 20.14 g Wet / 1 mL

Instrument: NT10

Column: ZB-5MSi

Calibration: GC00032

Cleanups: GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.8	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	4.8	U	0.7	4.8
100-51-6	Benzyl Alcohol	1	37.3		2.4	19.3
65-85-0	Benzoic acid	1	96.6	U	12.9	96.6
105-67-9	2,4-Dimethylphenol	1	19.3	U	2.1	19.3
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.2	J	1.3	4.8
87-86-5	Pentachlorophenol	1	19.3	U	2.1	19.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	724.22	554	76.5	27 - 120	
p-Terphenyl-d14	482.81	679	141	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052334S.D

Date: 06-MAR-2023 10:11

Client ID:

Sample Info: 23A0326-12

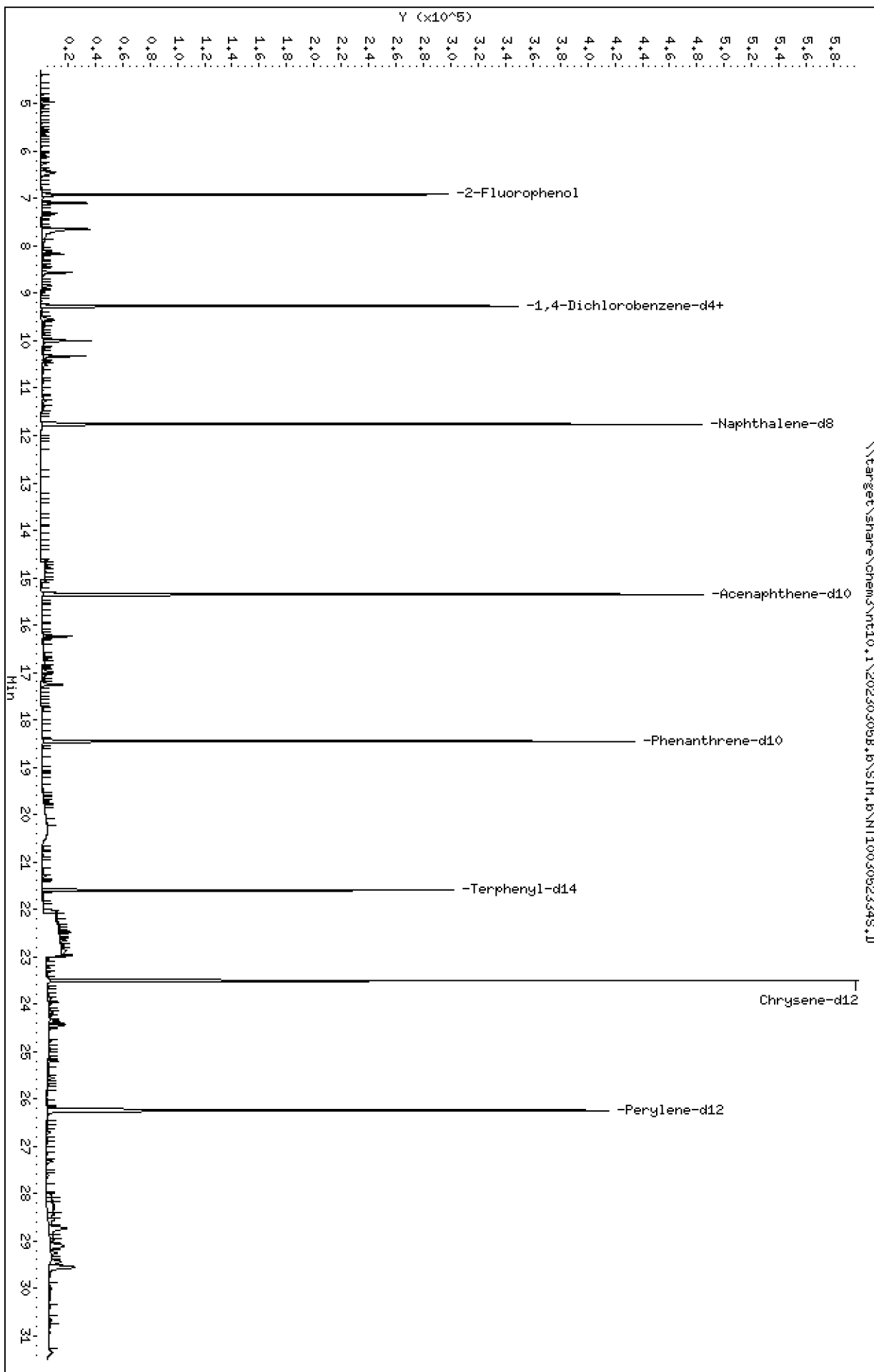
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052334S.D



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

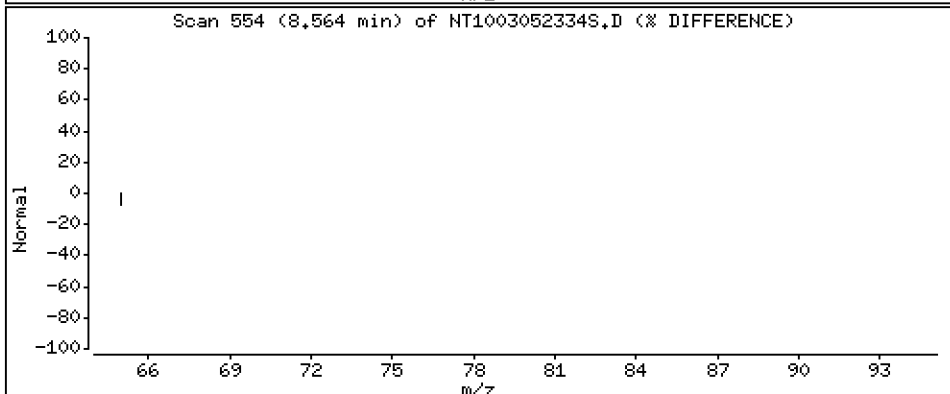
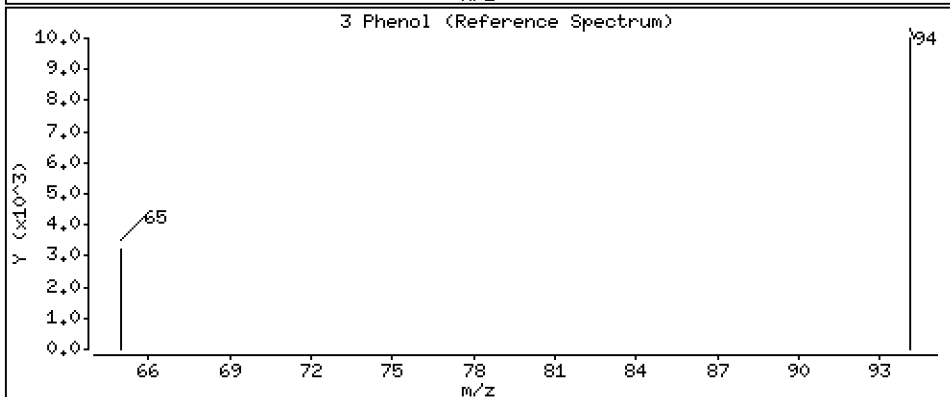
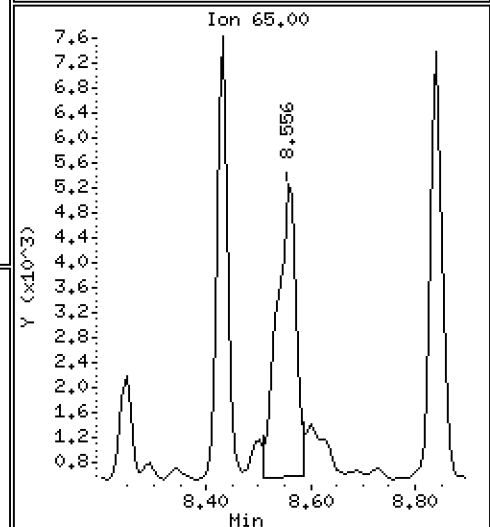
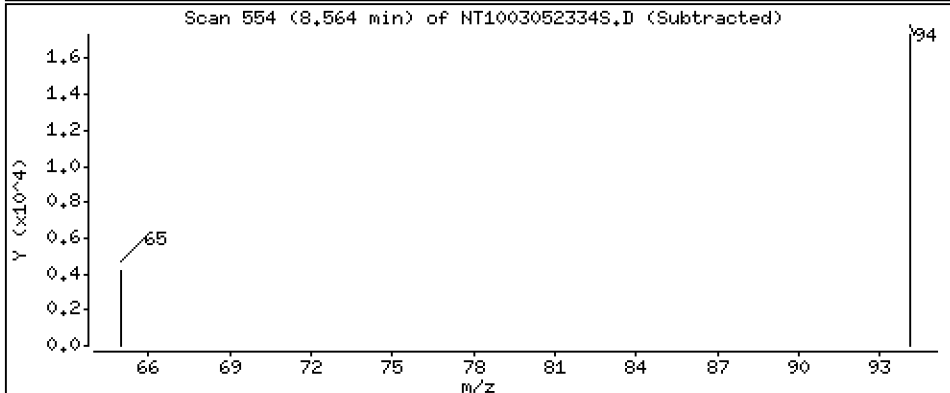
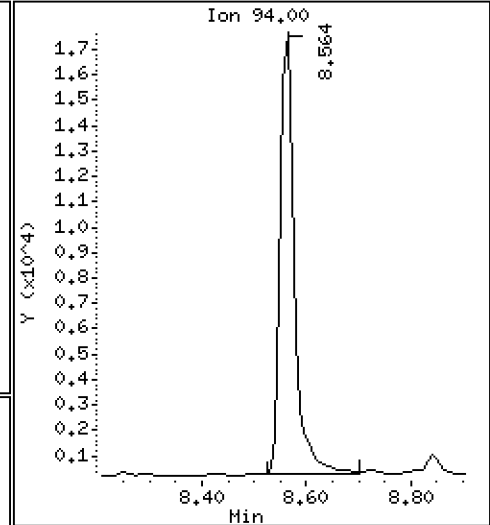
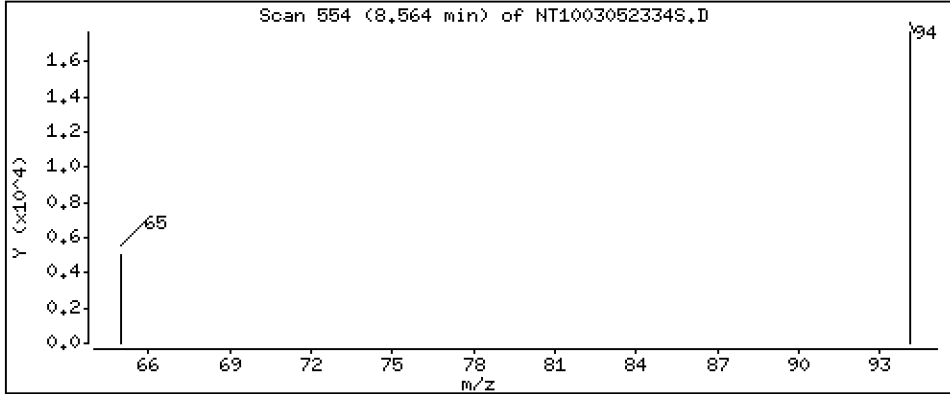
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,3595 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

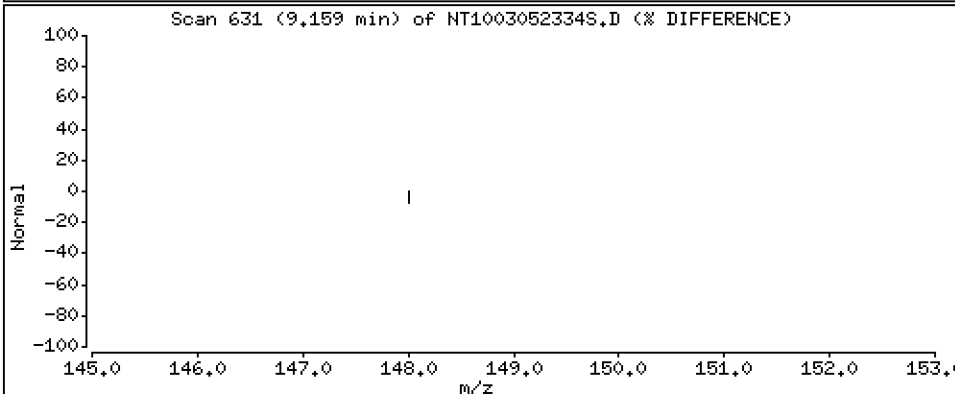
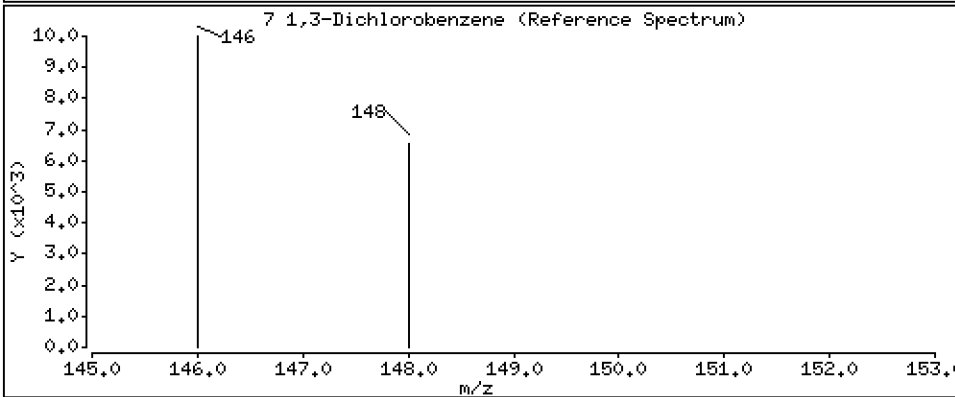
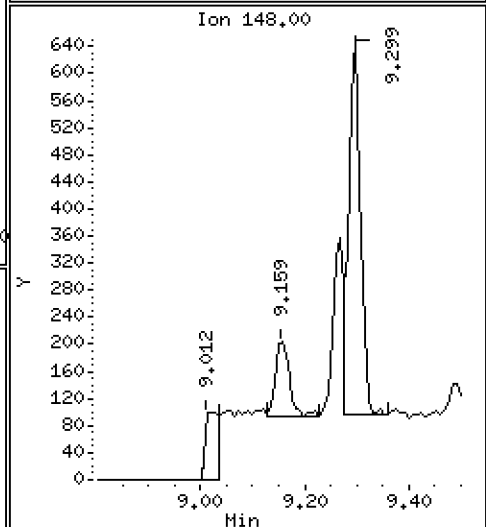
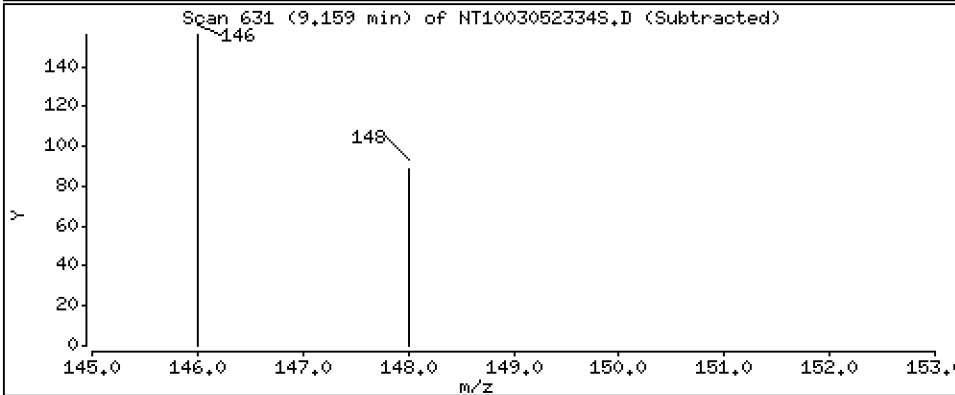
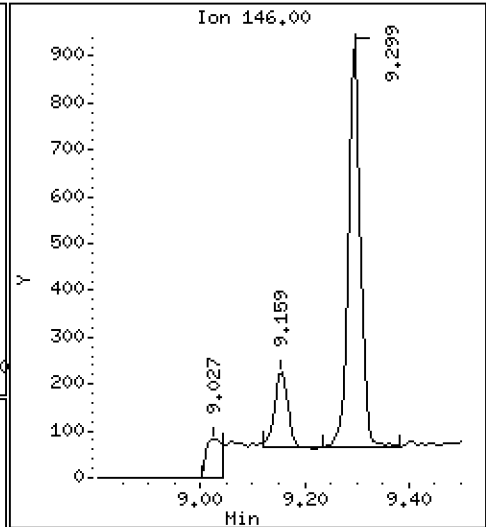
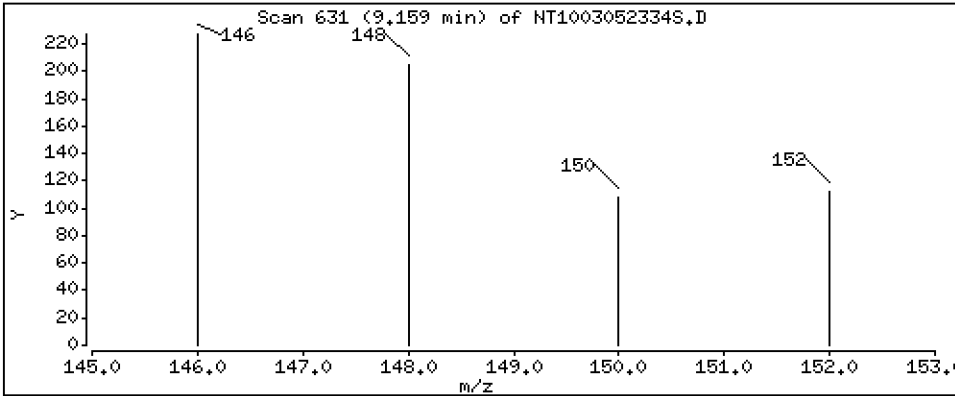
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,003436 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

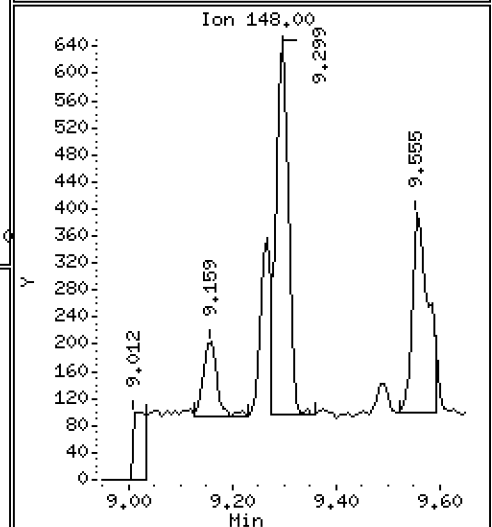
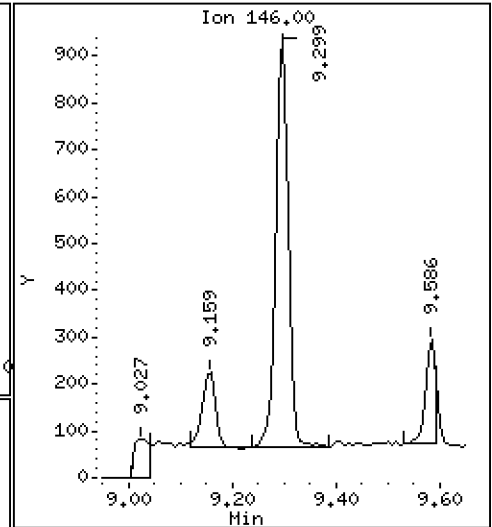
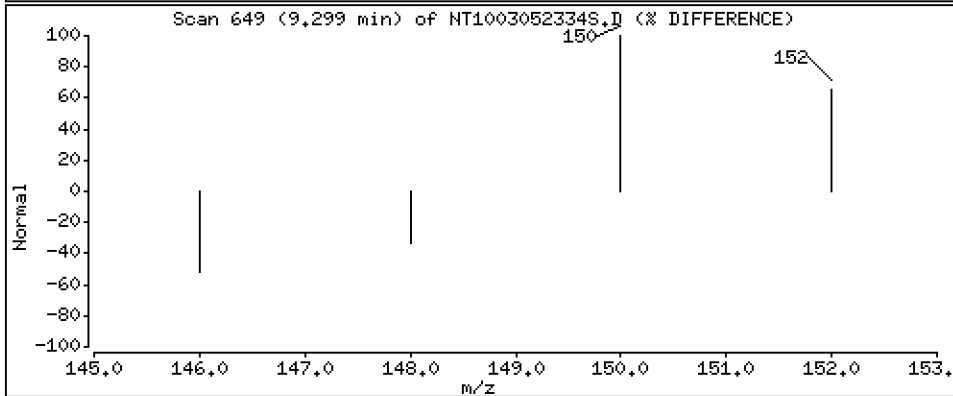
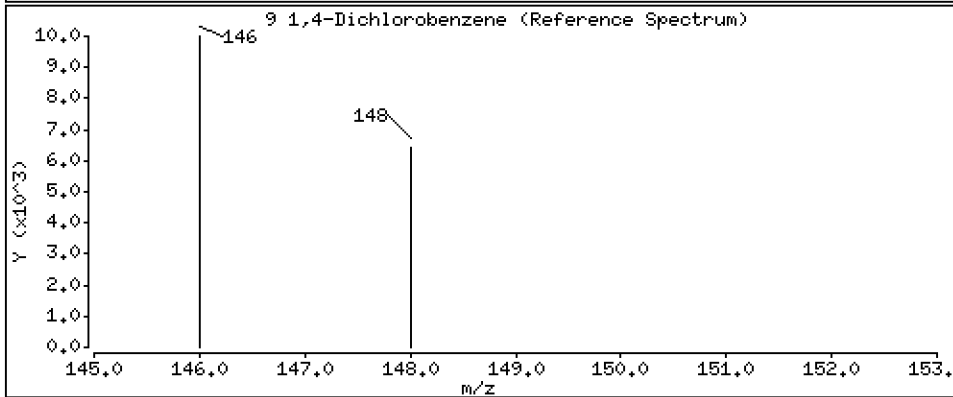
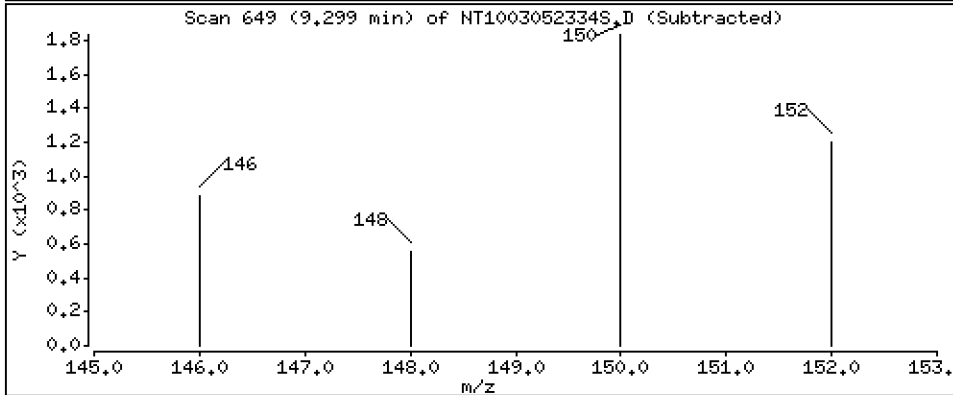
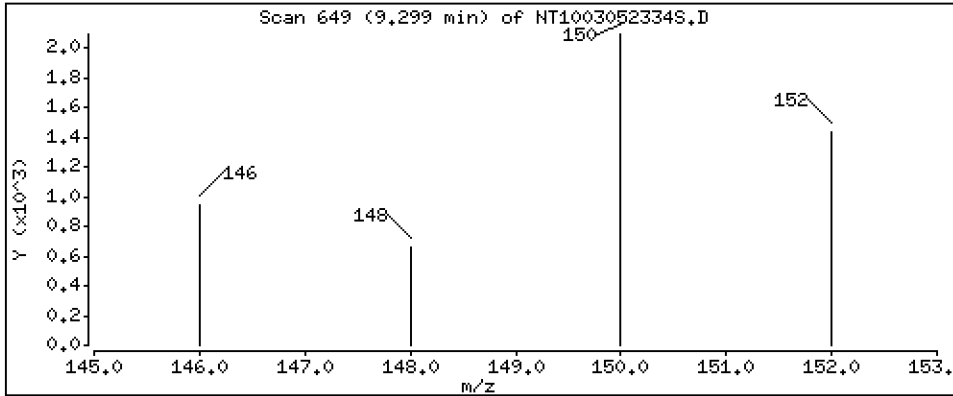
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,01858 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

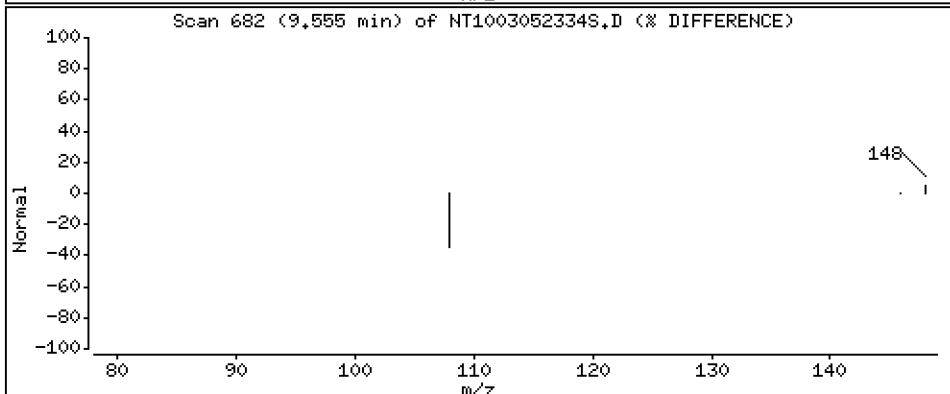
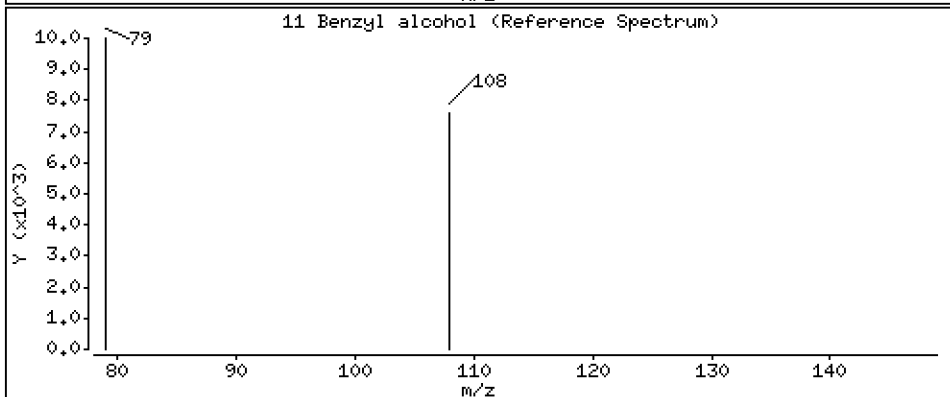
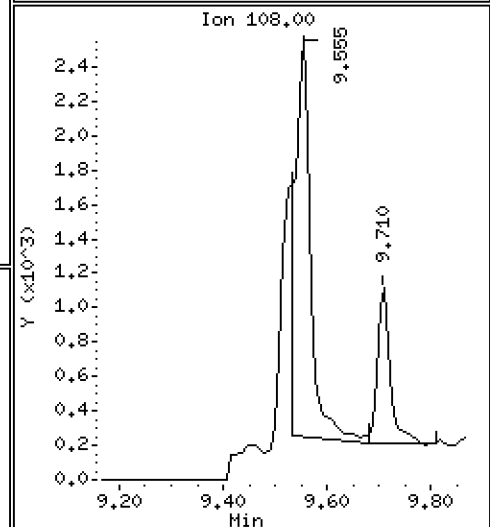
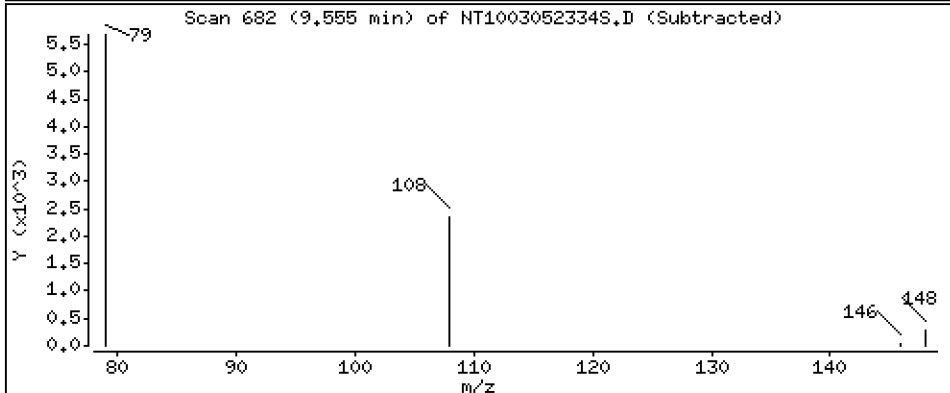
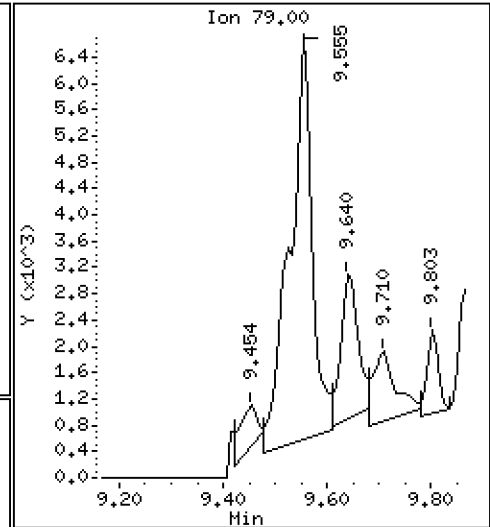
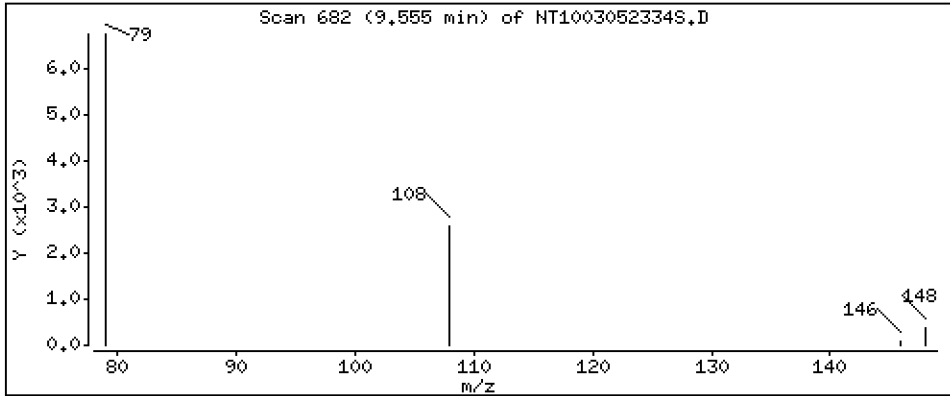
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,3868 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

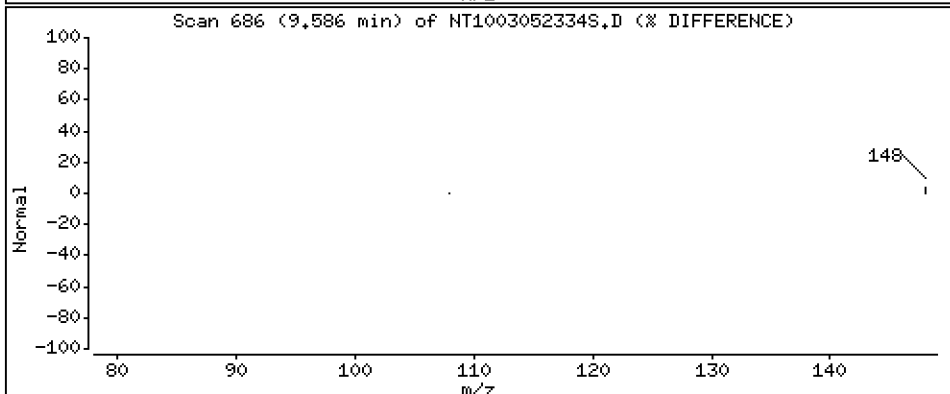
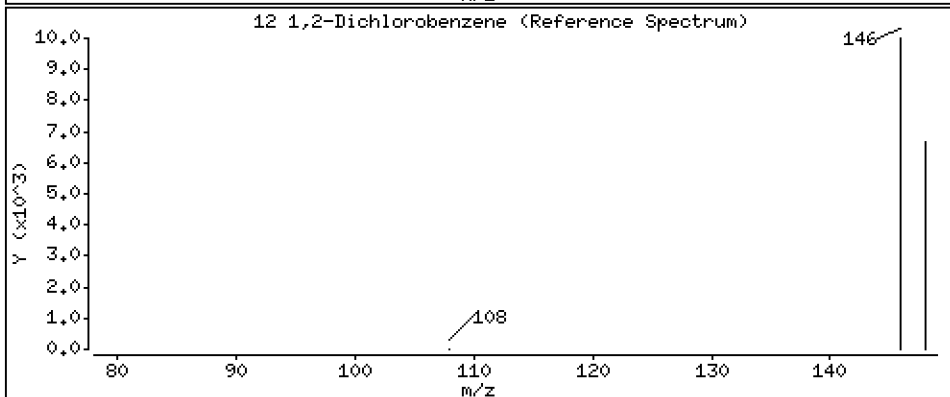
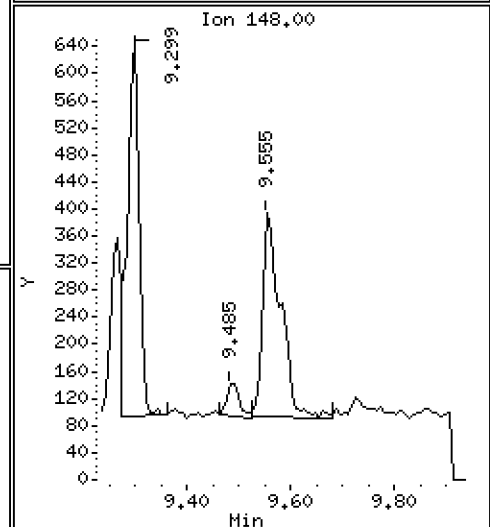
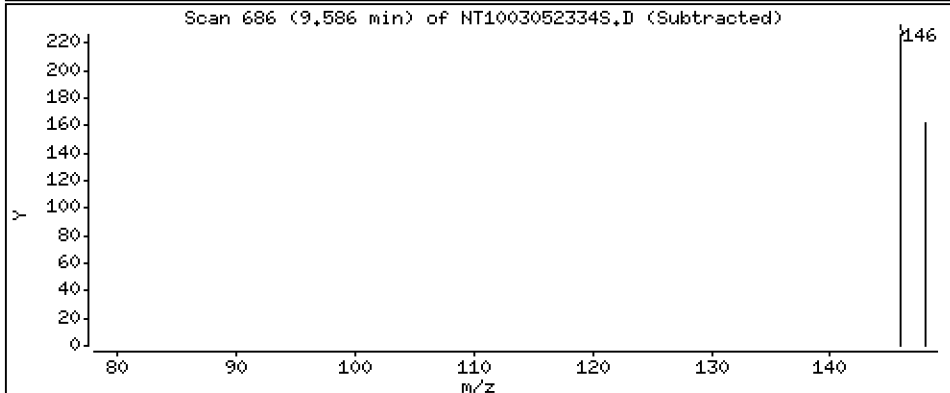
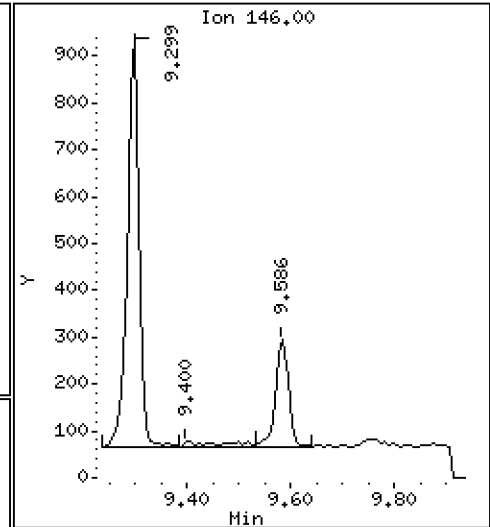
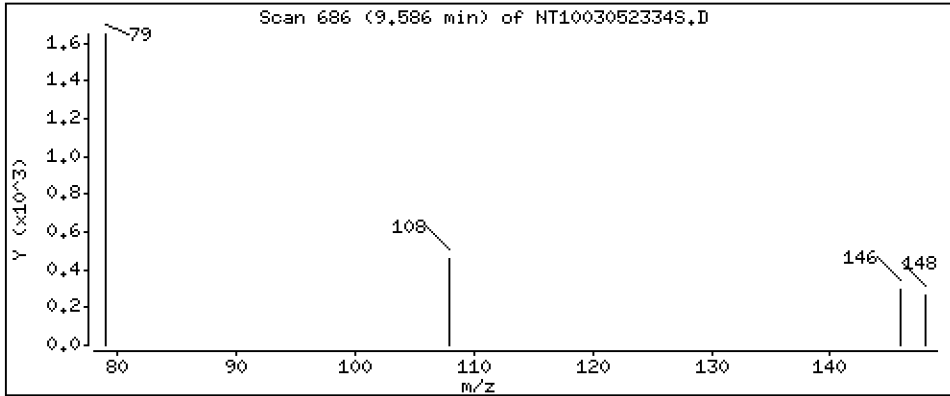
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,005474 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

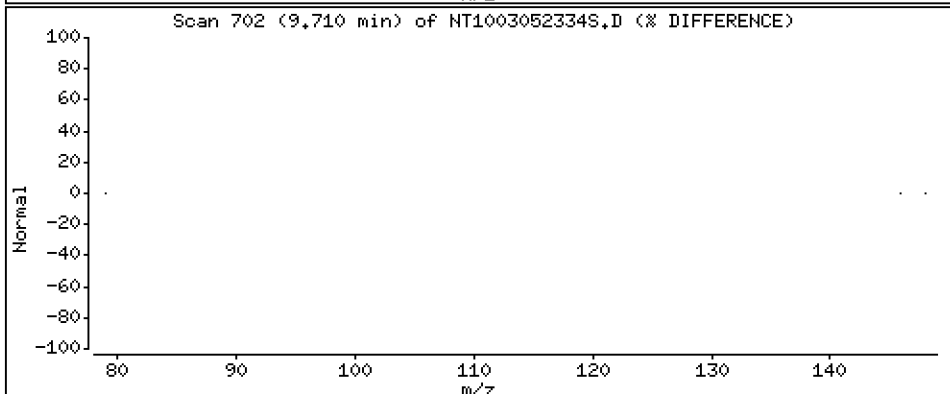
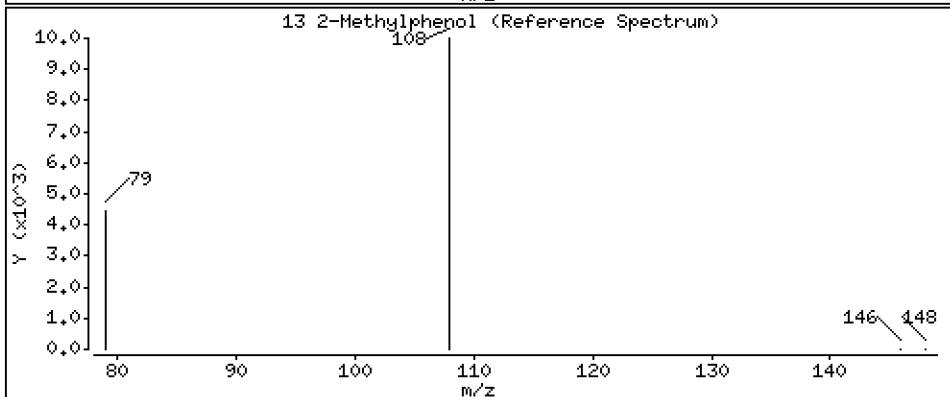
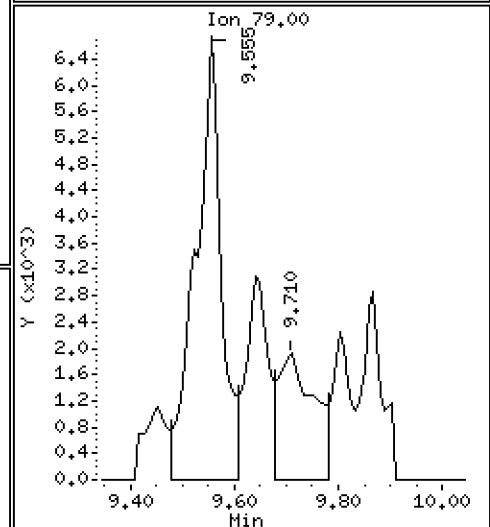
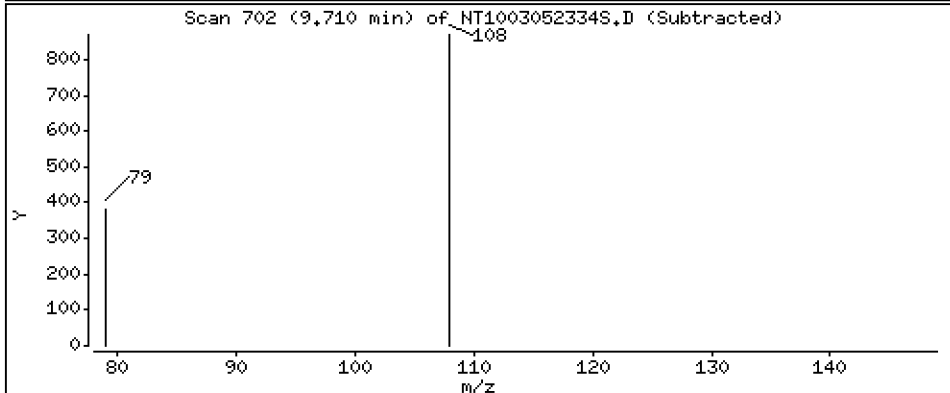
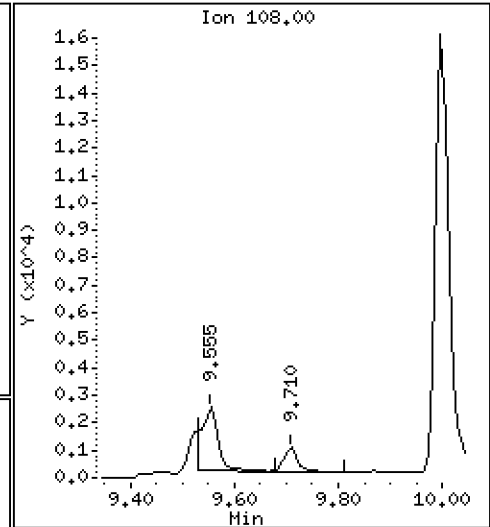
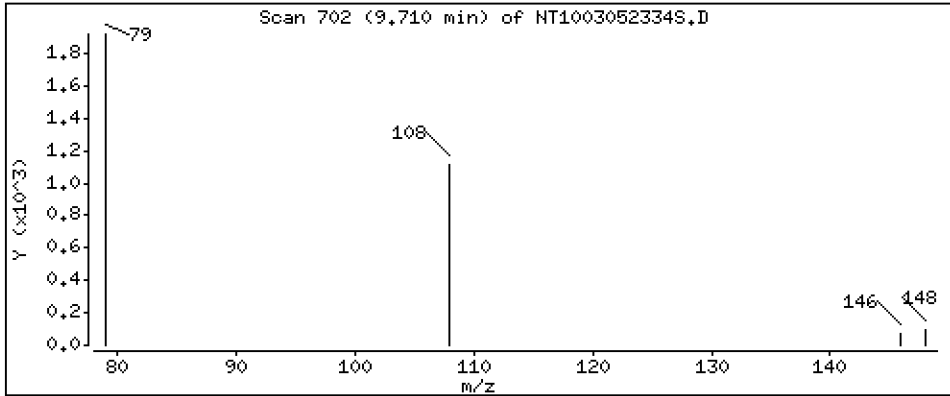
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.03111 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

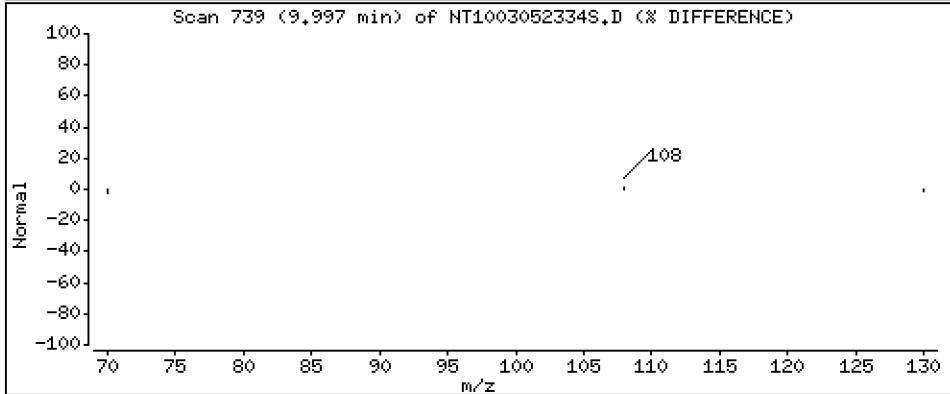
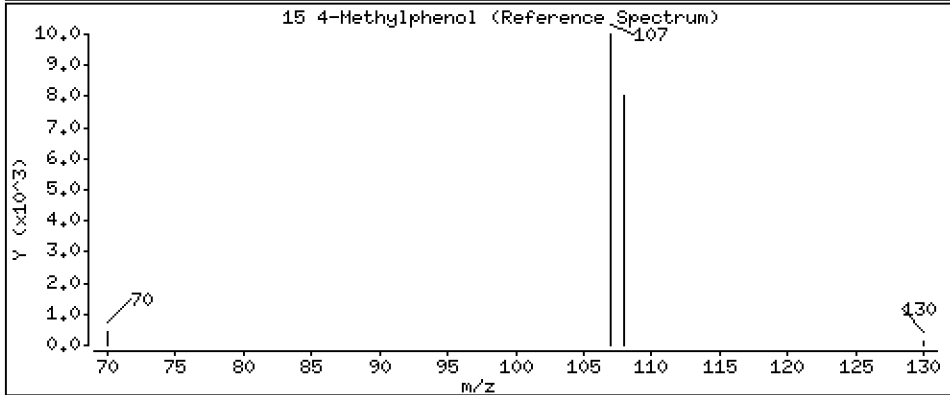
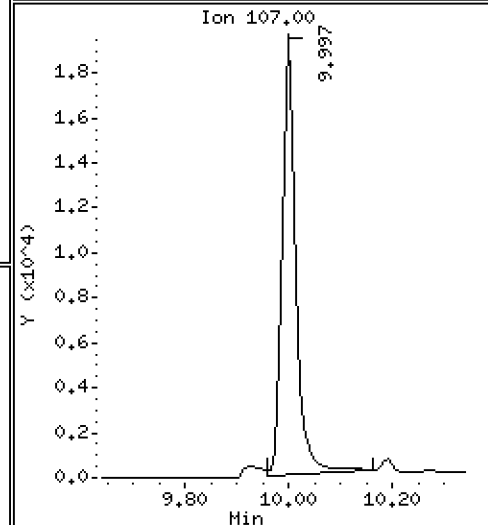
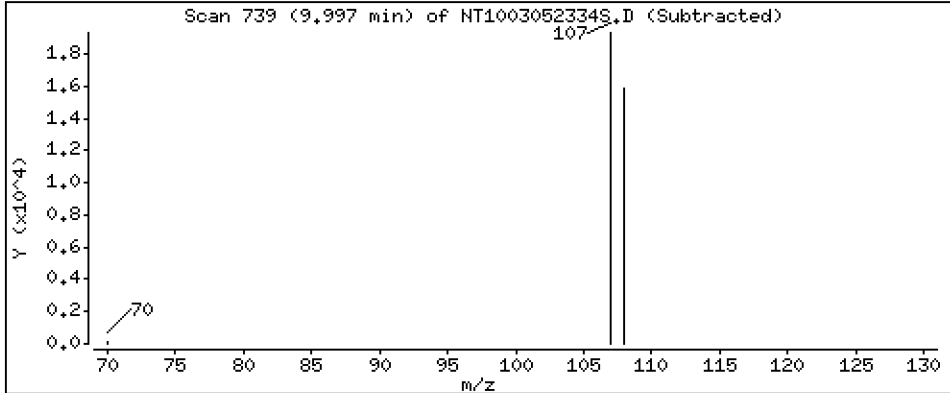
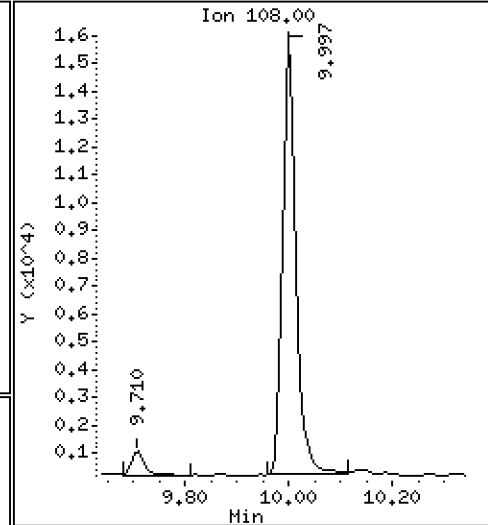
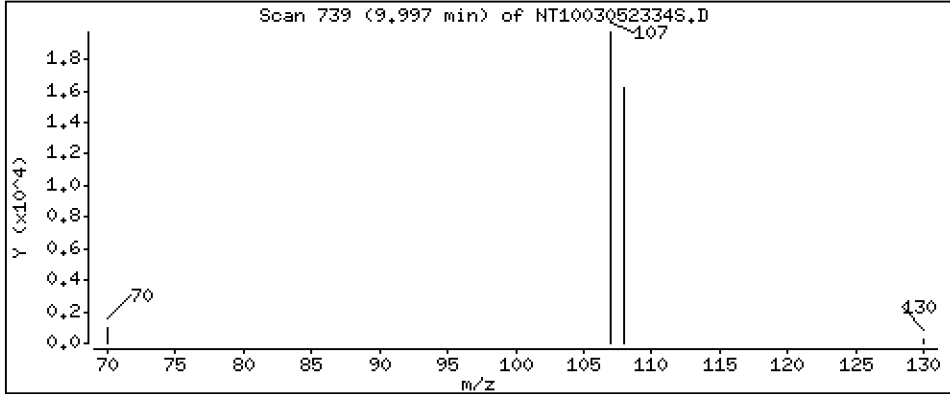
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,5110 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

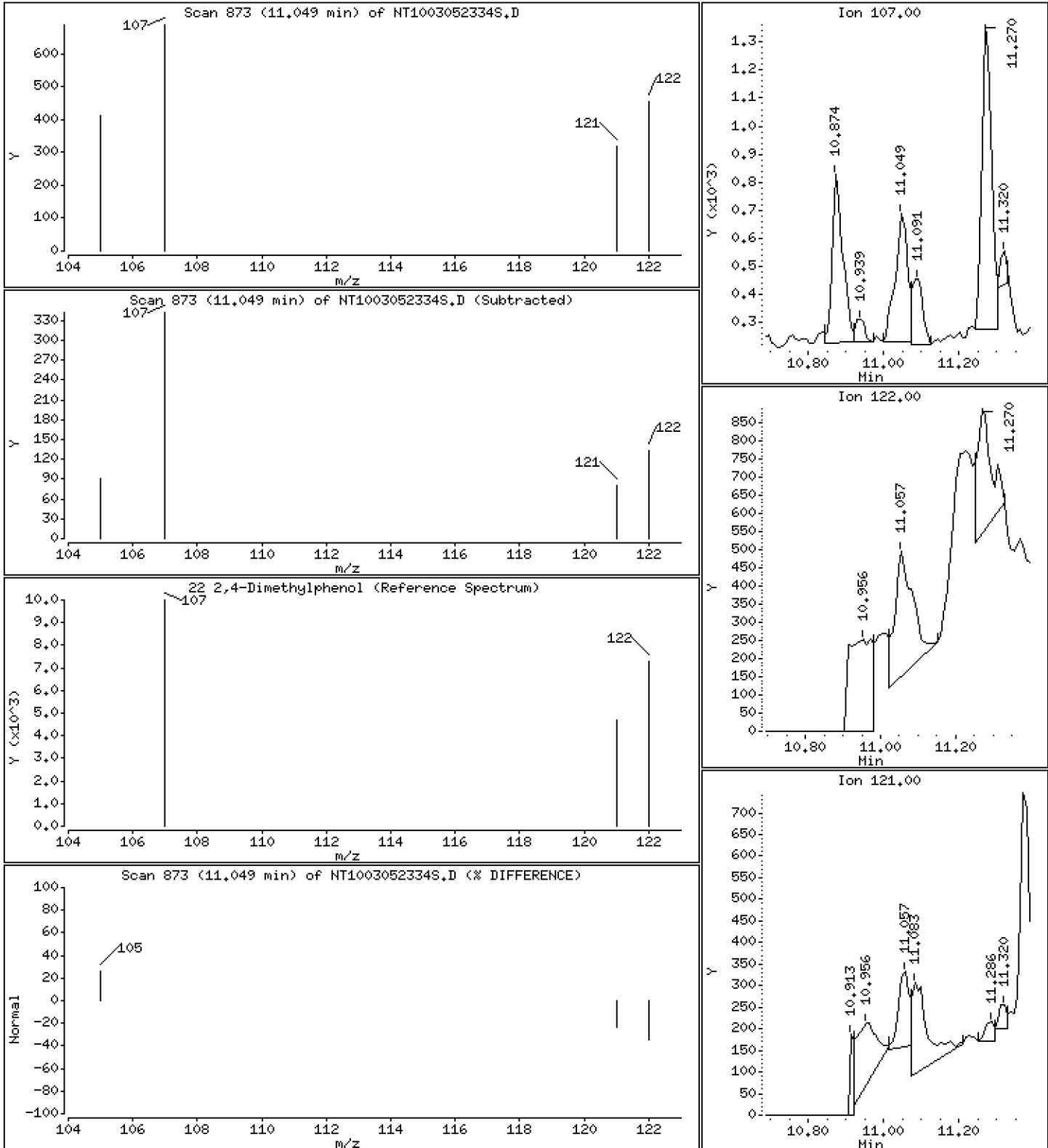
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.01757 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

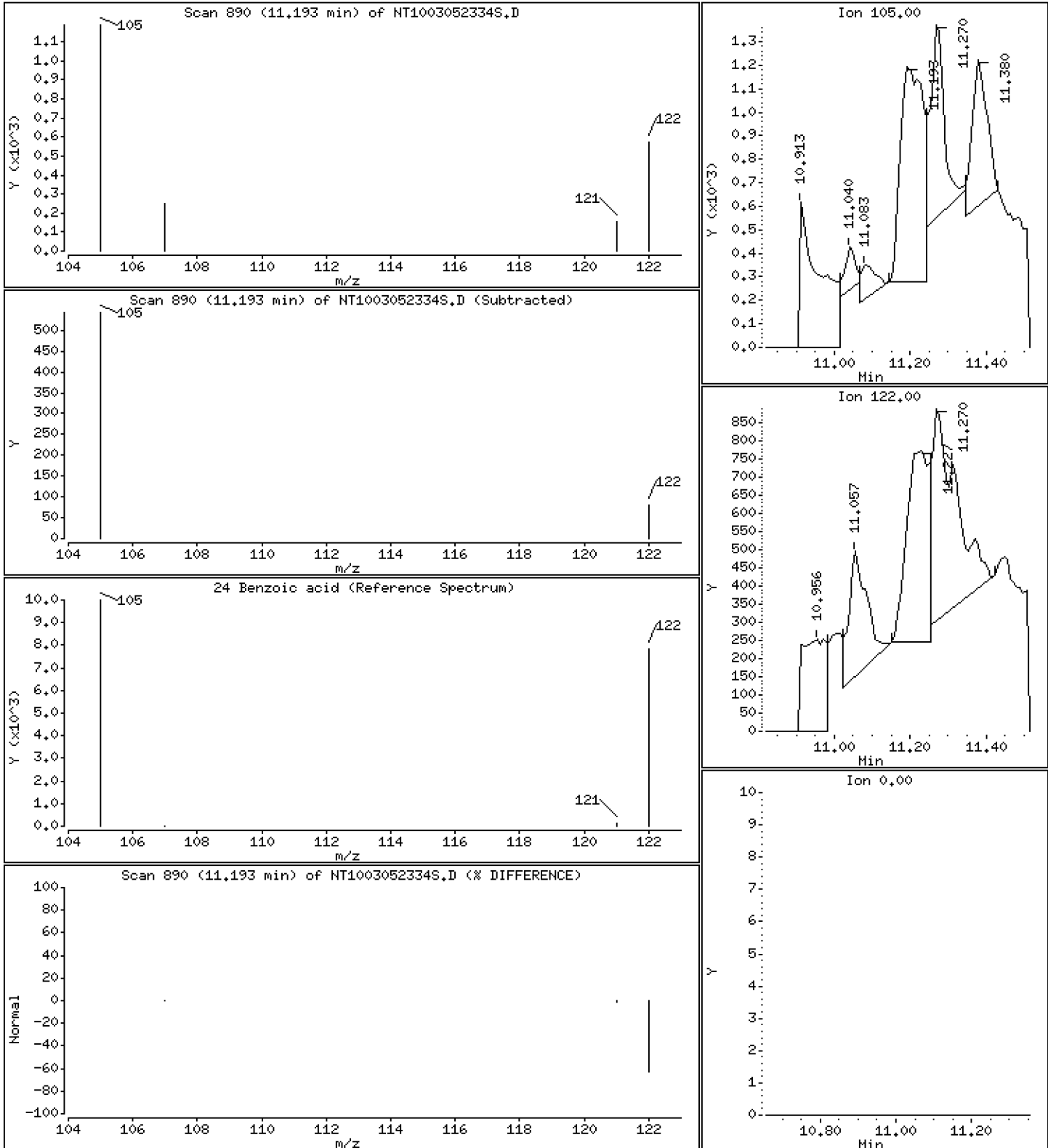
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.1162 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

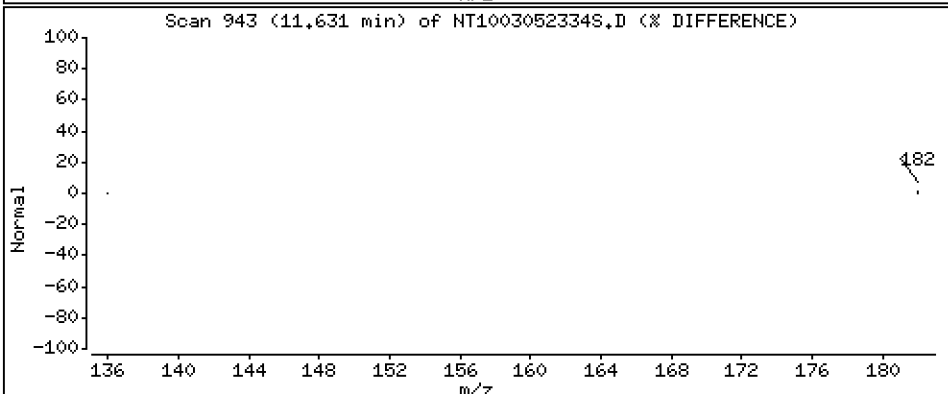
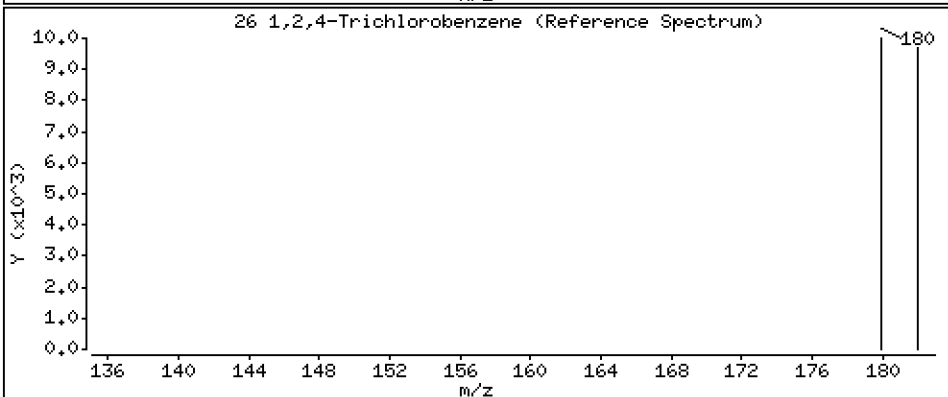
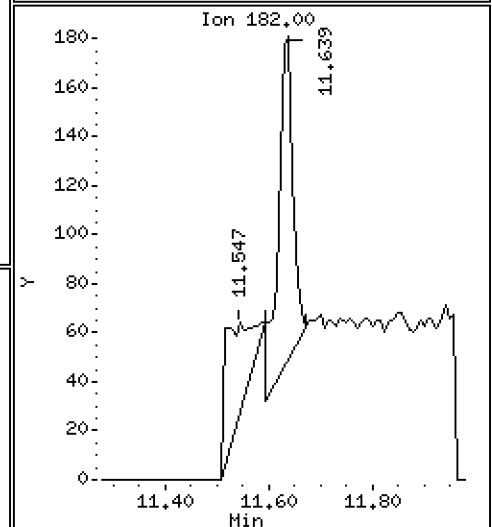
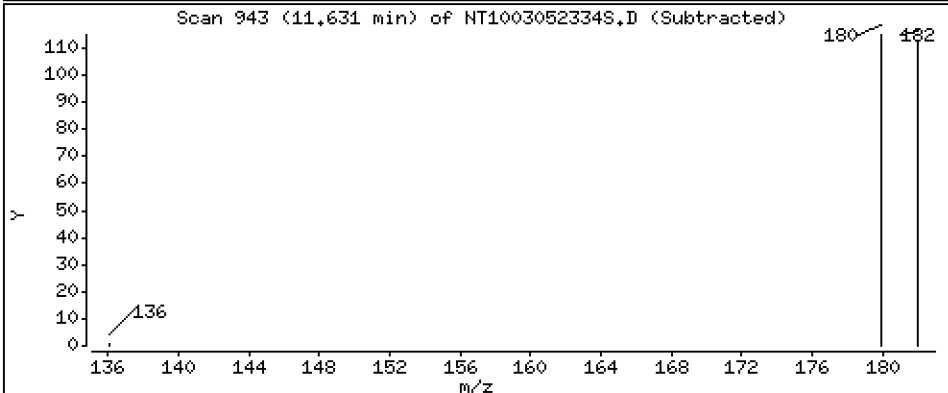
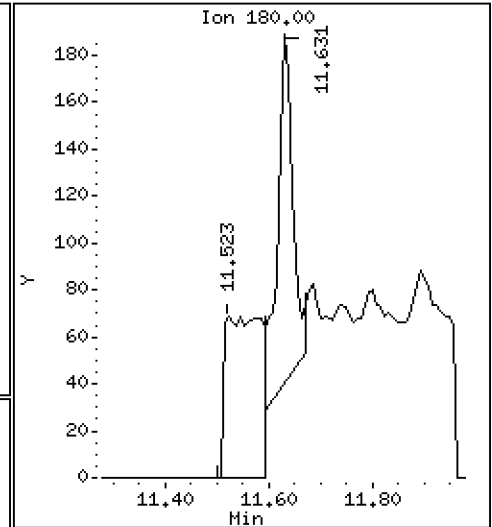
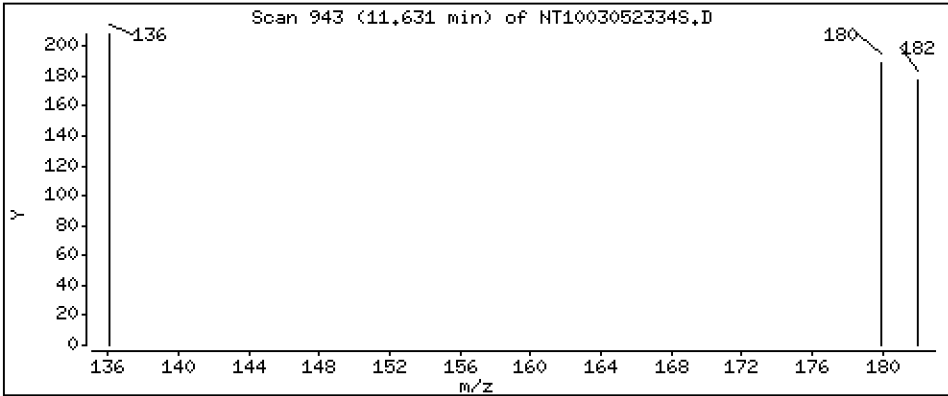
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,005988 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

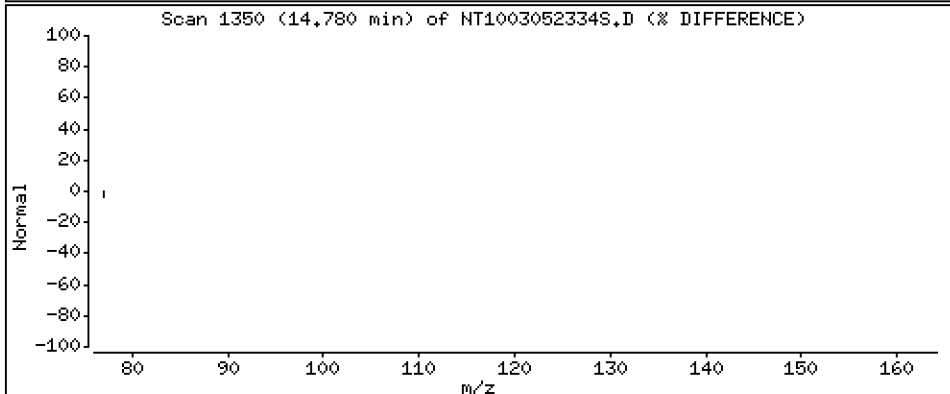
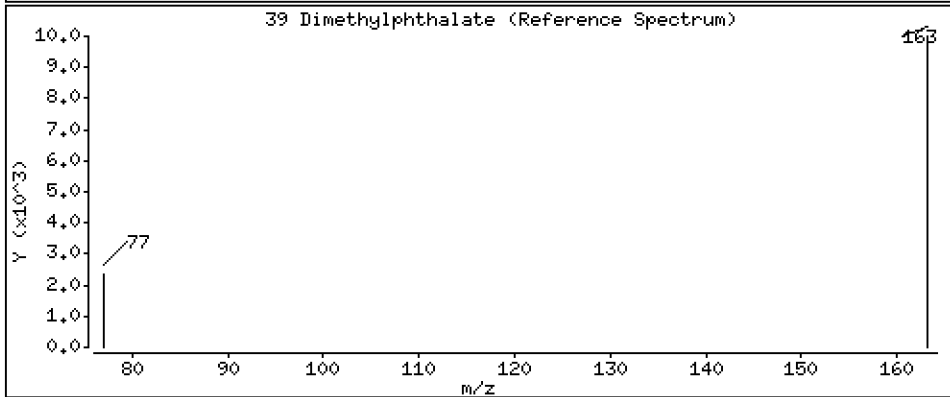
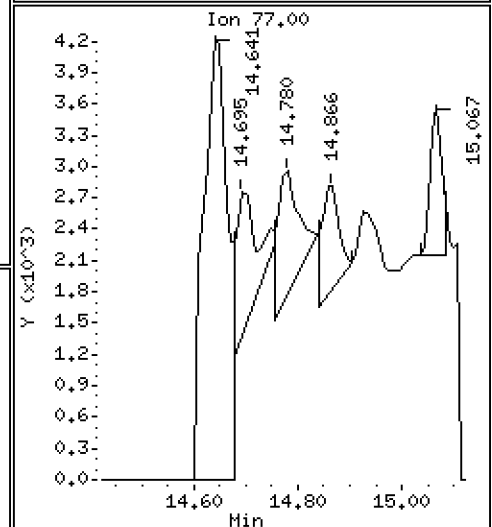
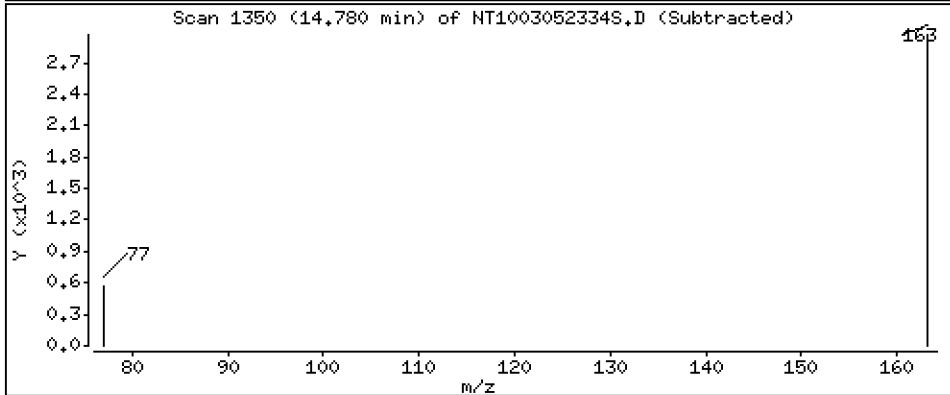
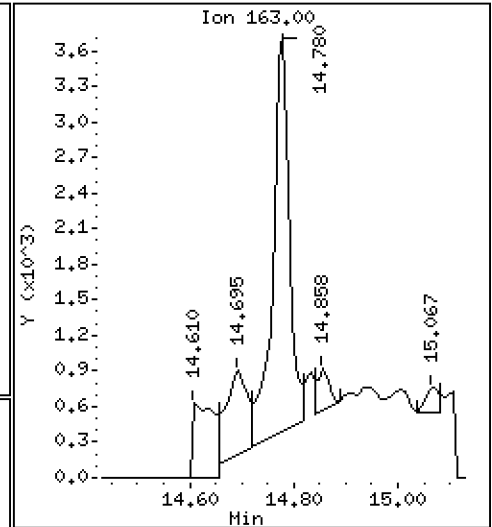
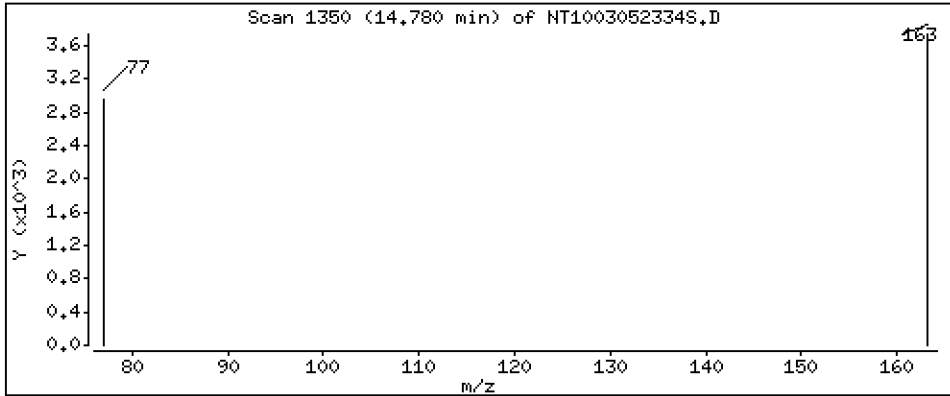
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.06267 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

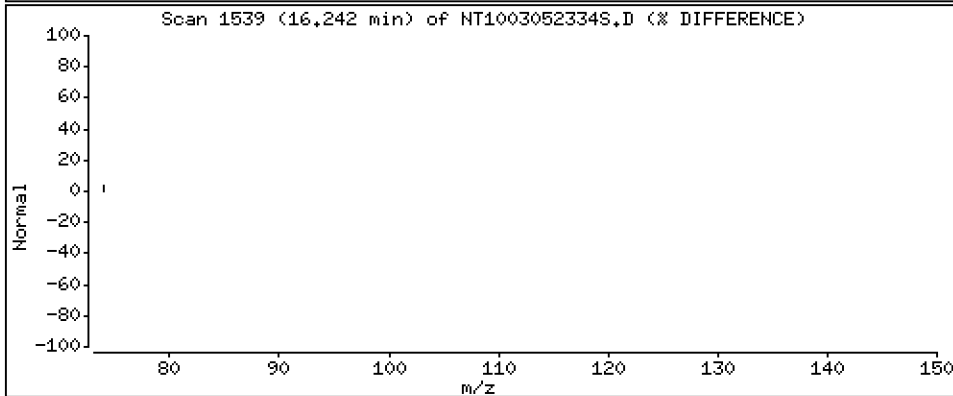
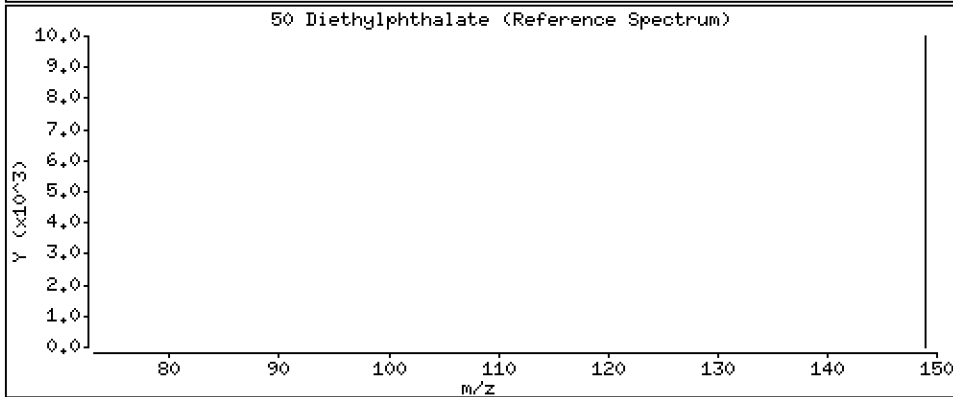
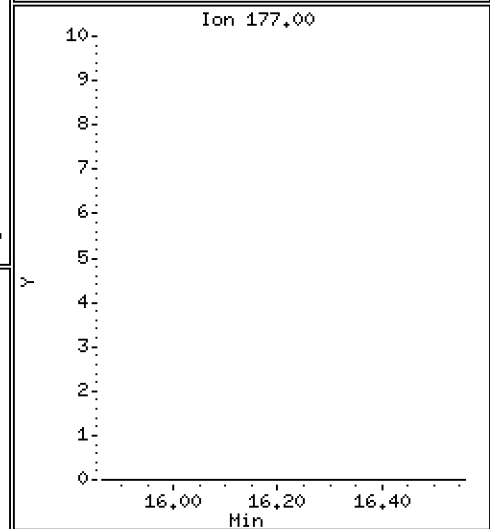
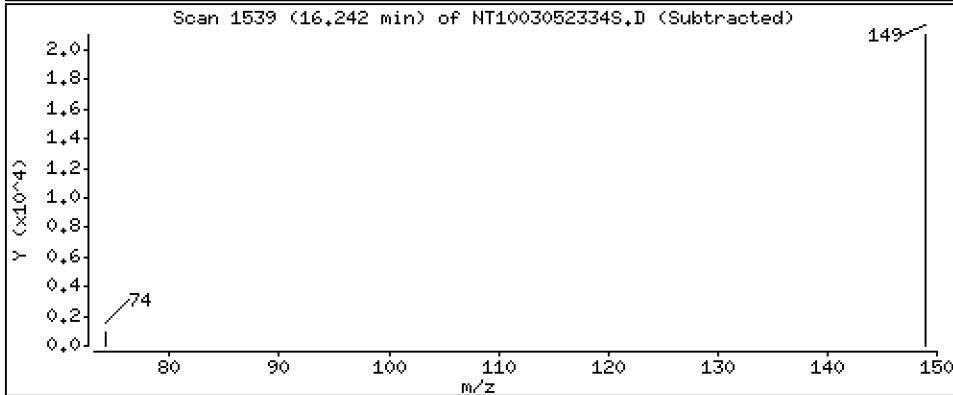
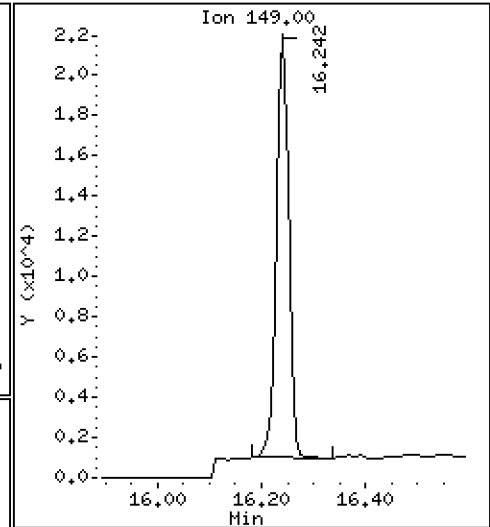
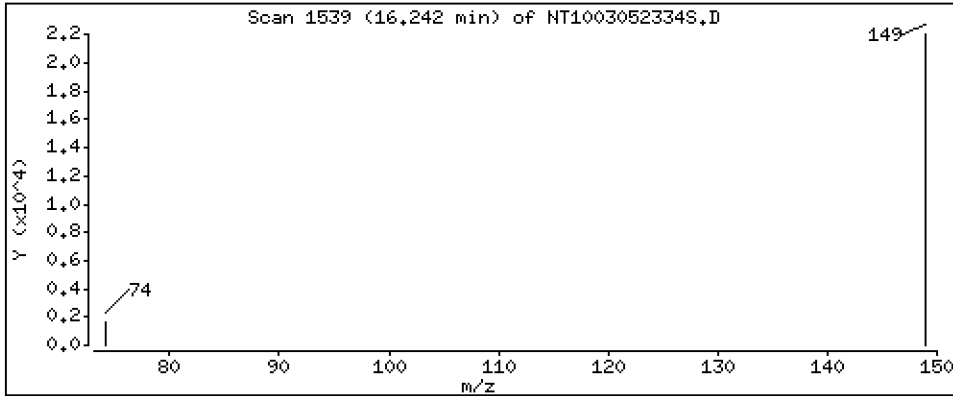
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2986 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

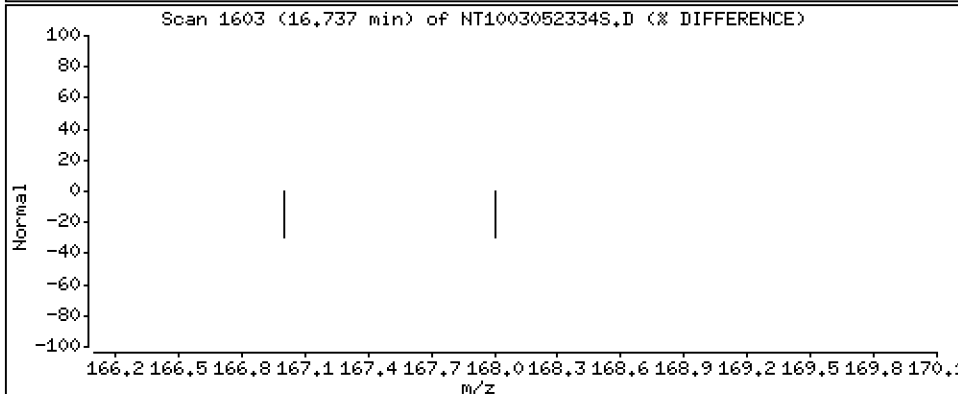
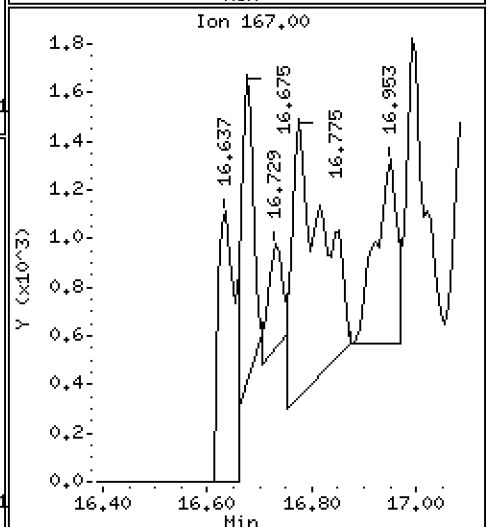
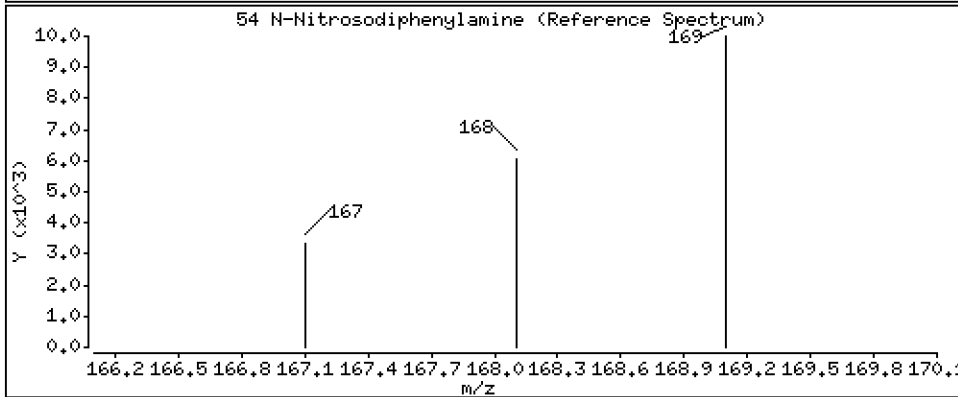
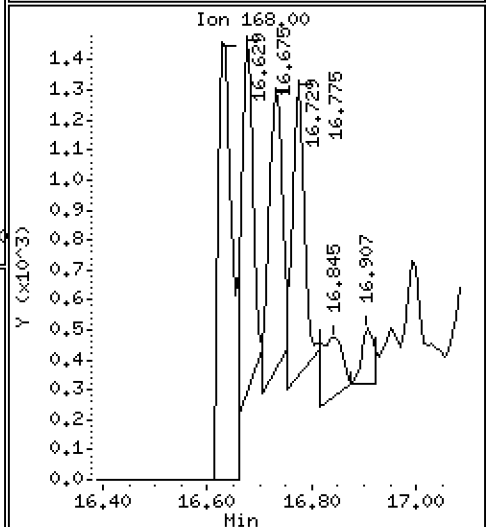
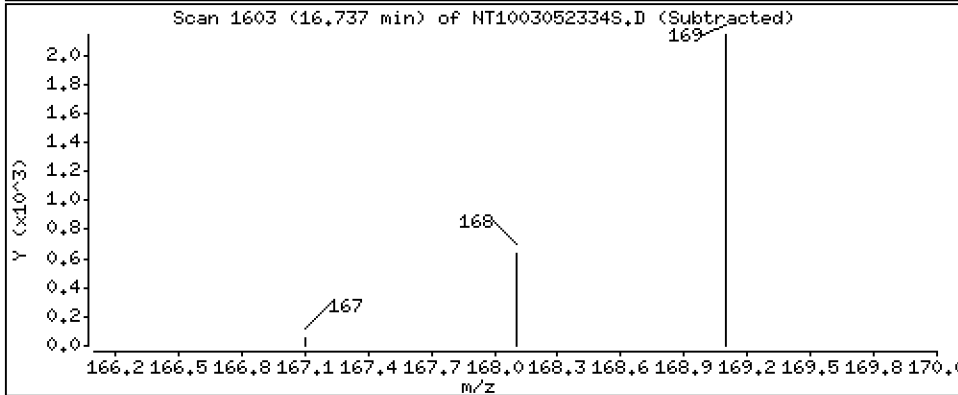
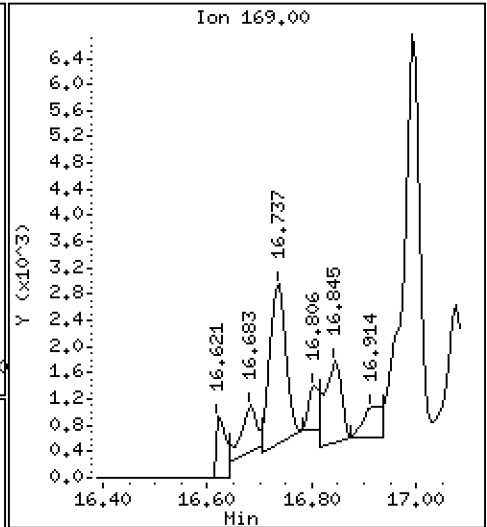
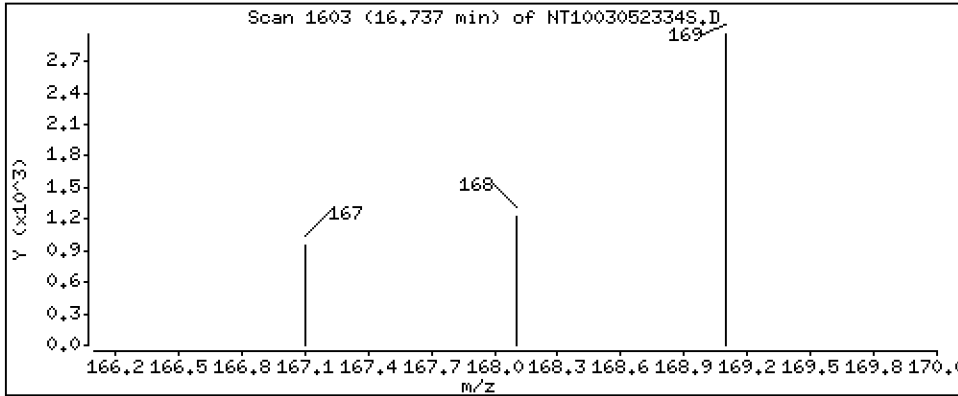
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.04373 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

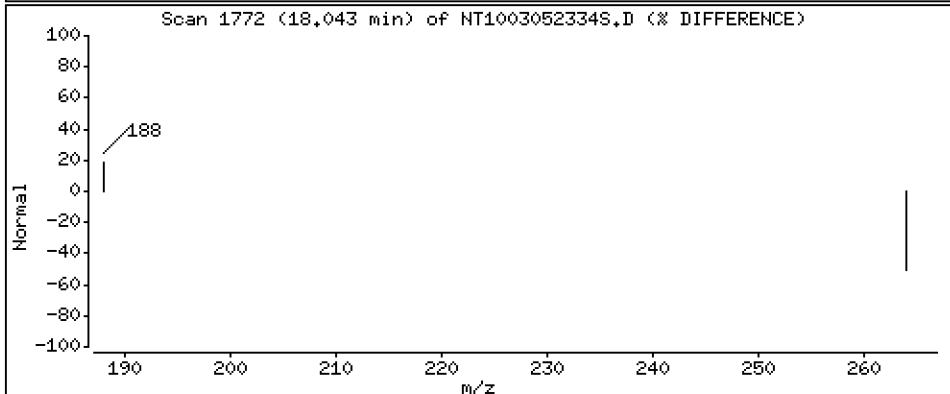
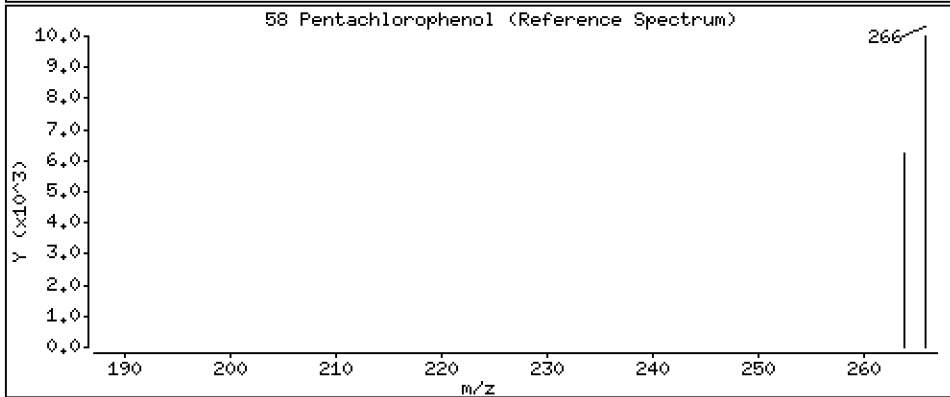
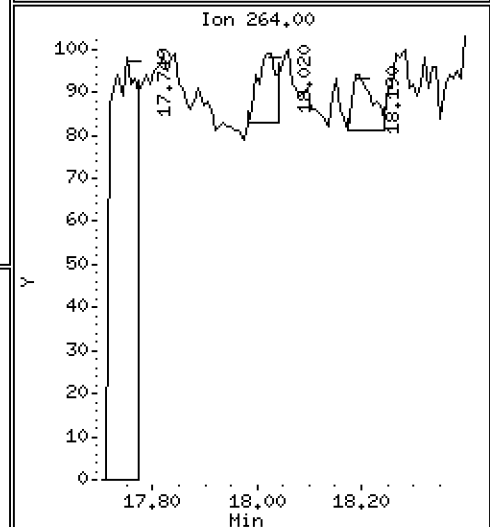
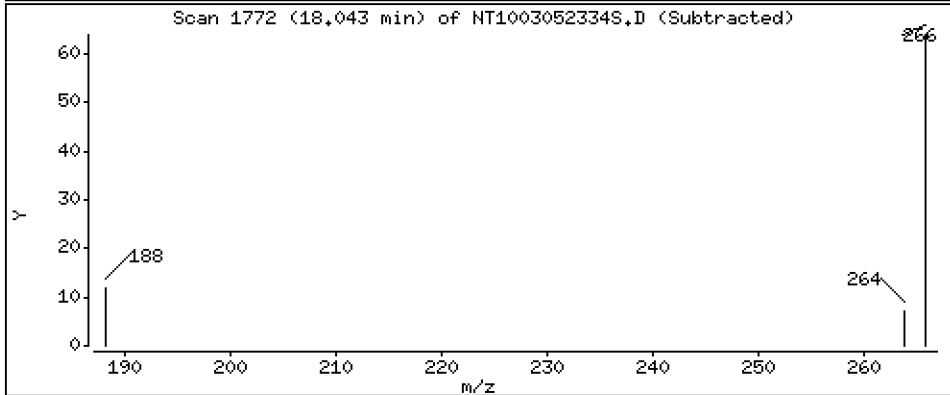
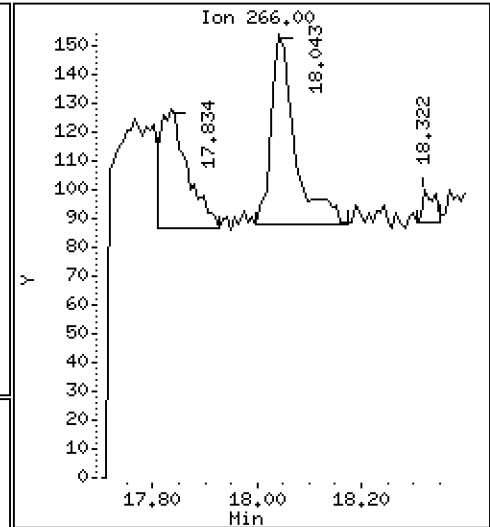
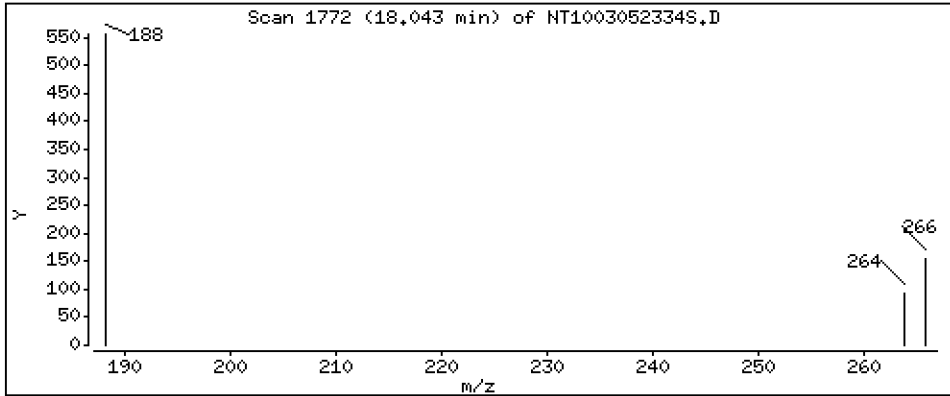
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,008415 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

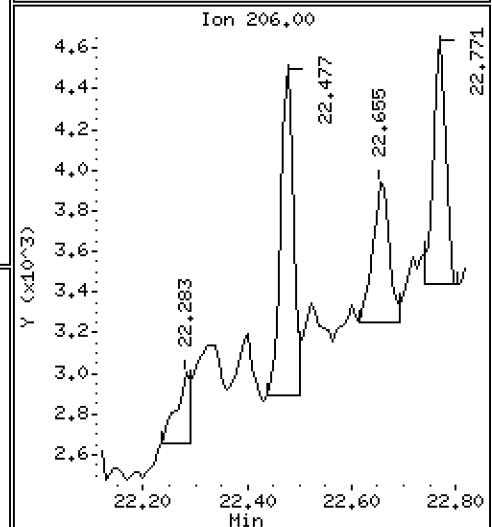
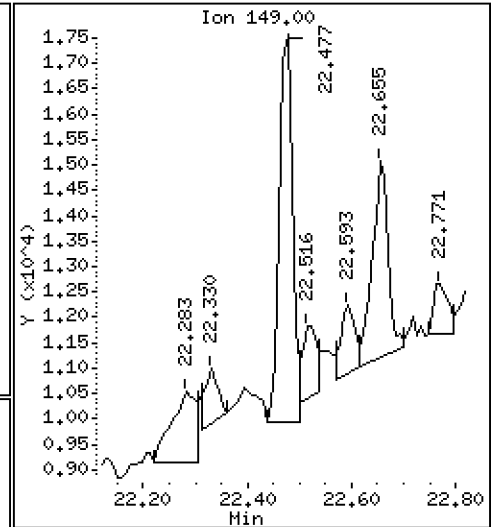
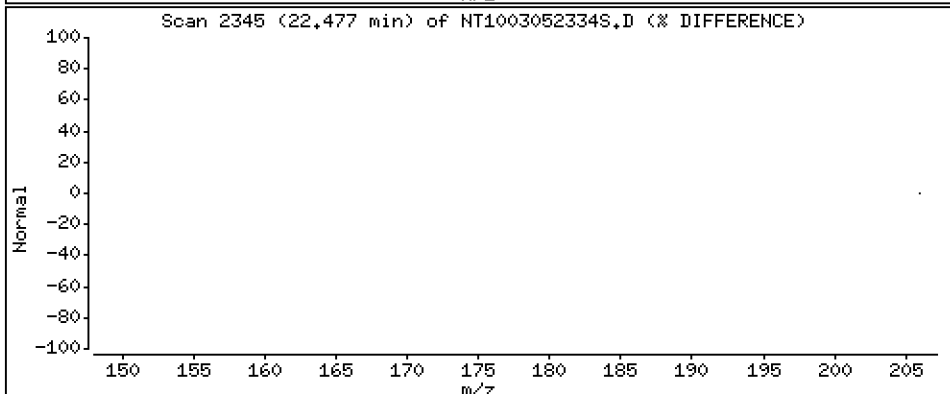
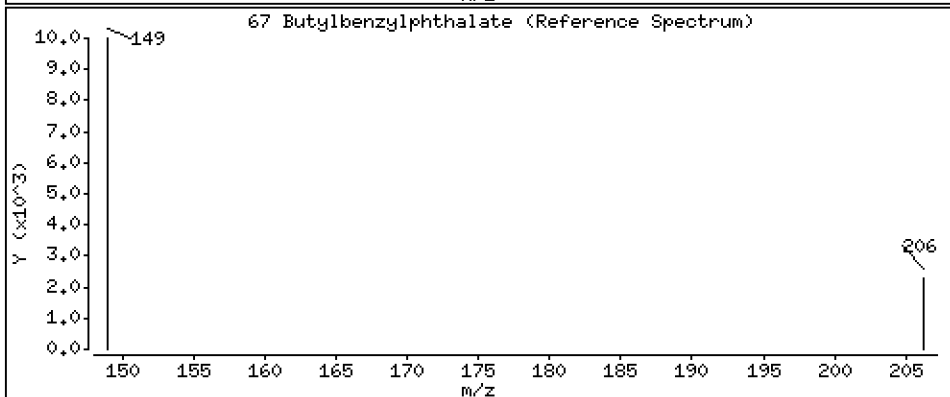
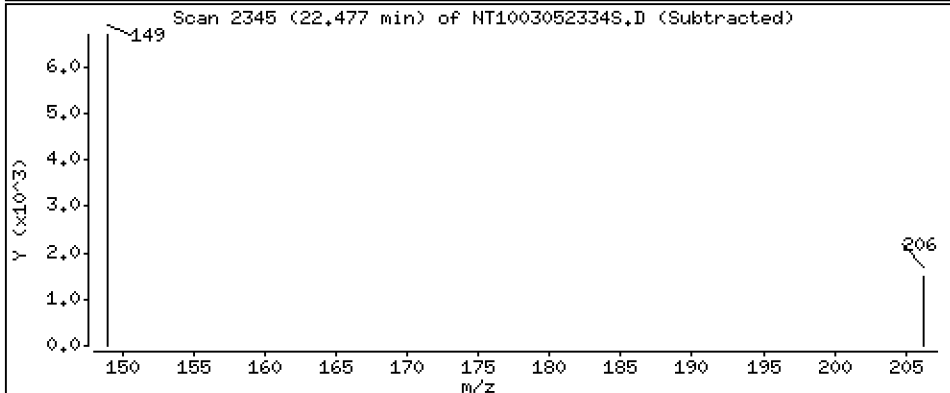
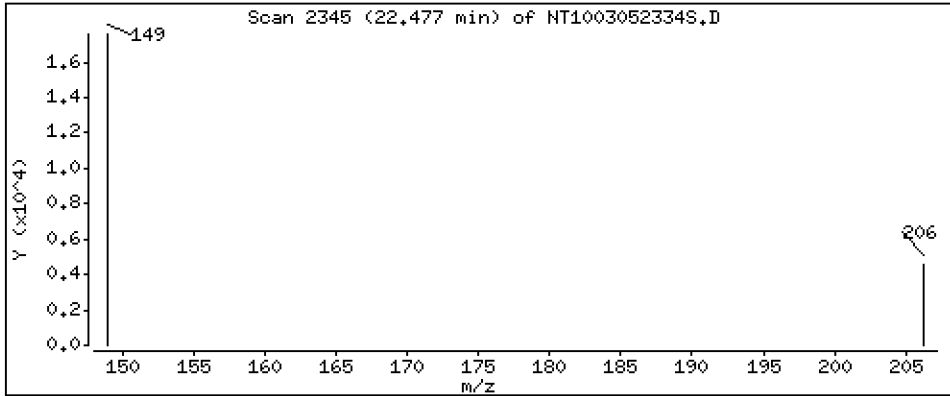
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1123 ug/mL



Date : 06-MAR-2023 10:11

Client ID:

Instrument: nt10.i

Sample Info: 23A0326-12

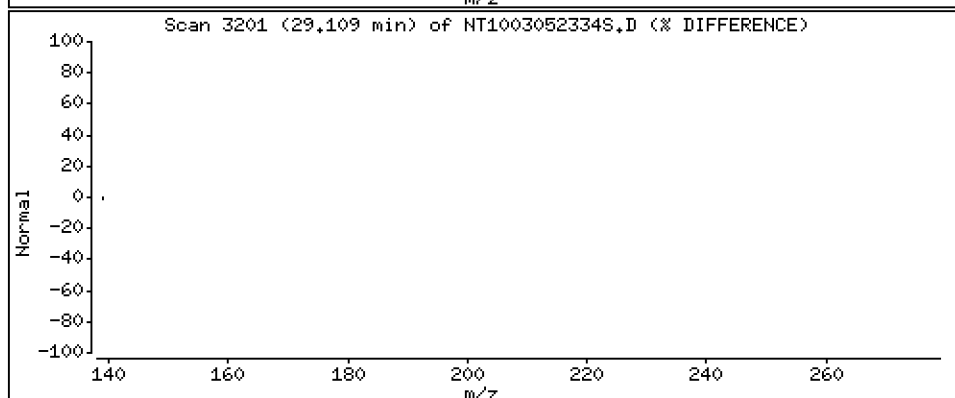
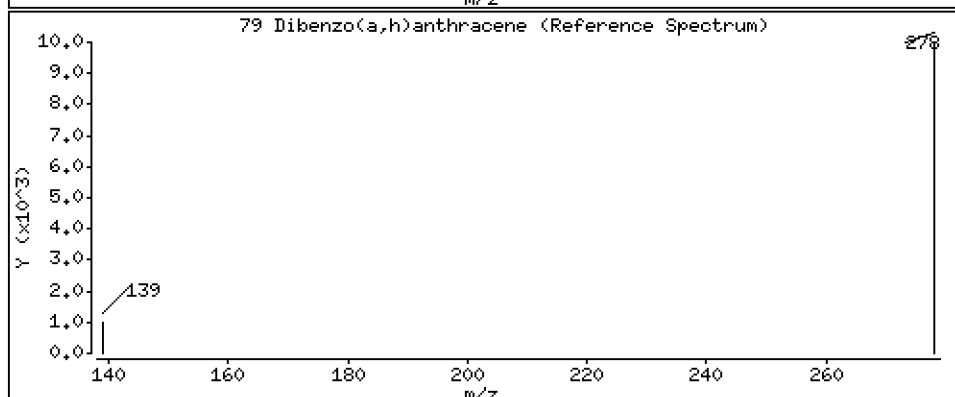
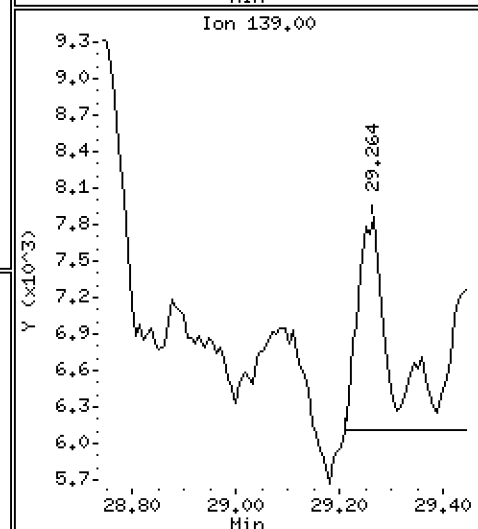
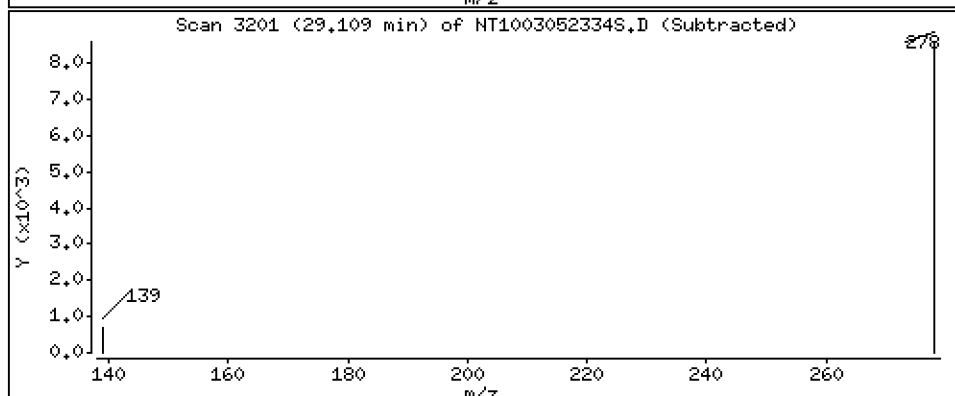
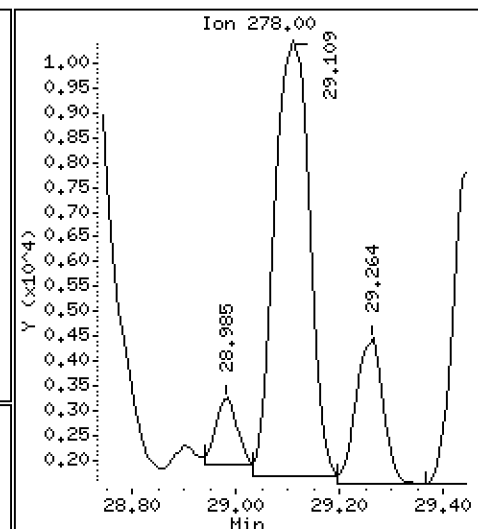
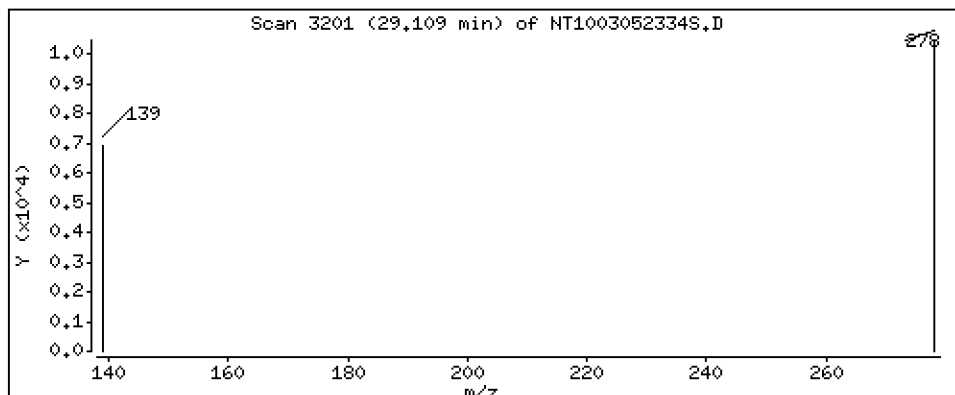
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2262 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052334S.D
 Lab Smp Id: 23A0326-12
 Inj Date : 06-MAR-2023 10:11
 Operator : YZ
 Smp Info : 23A0326-12
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 24
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.746)	336766	5.73395	5.734 (R)
3 Phenol	94		8.563	8.556	(0.924)	31191	0.35948	0.3595
7 1,3-Dichlorobenzene	146		9.159	9.151	(0.988)	262	0.00344	0.003436
* 8 1,4-Dichlorobenzene-d4	152		9.267	9.259	(1.000)	205720	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.003)	1377	0.01858	0.01858
11 Benzyl alcohol	79		9.554	9.515	(1.031)	18658	0.38677	0.3868
12 1,2-Dichlorobenzene	146		9.585	9.585	(1.034)	390	0.00547	0.005474
13 2-Methylphenol	108		9.710	9.694	(1.048)	1620	0.03111	0.03111
15 4-Methylphenol	108		9.997	9.989	(1.079)	27821	0.51104	0.5110
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		11.048	11.040	(0.940)	1093	0.01757	0.01757
24 Benzoic acid	105		11.193	11.167	(0.952)	3963	0.11615	0.1162 (H)
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	316	0.00599	0.005988
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	733196	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.780	14.780	(0.963)	7237	0.06267	0.06267
* 42 Acenaphthene-d10	162		15.352	15.352	(1.000)	363700	4.00000	
50 Diethylphthalate	149		16.242	16.241	(1.058)	32519	0.29860	0.2986 (MH)
54 N-Nitrosodiphenylamine	169		16.736	16.736	(0.907)	5178	0.04373	0.04373
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		18.043	18.050	(0.978)	204	0.00841	0.008415
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	731713	4.00000	
\$ 66 Terphenyl-d14	244		21.594	21.586	(0.919)	389818	7.03194	7.032 (R)
67 Butylbenzylphthalate	149		22.477	22.469	(0.956)	12992	0.11228	0.1123
* 69 Chrysene-d12	240		23.506	23.491	(1.000)	685514	4.00000	
* 77 Perylene-d12	264		26.247	26.224	(1.000)	788109	4.00000	
79 Dibenzo(a,h)anthracene	278		29.108	29.093	(1.109)	41408	0.22620	0.2262 (H)
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052334S.D
 Lab Smp Id: 23A0326-12
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	205720	-14.08
27 Naphthalene-d8	849492	424746	1698984	733196	-13.69
42 Acenaphthene-d10	421435	210718	842870	363700	-13.70
59 Phenanthrene-d10	835585	417793	1671170	731713	-12.43
69 Chrysene-d12	874614	437307	1749228	685514	-21.62
77 Perylene-d12	1035818	517909	2071636	788109	-23.91

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.27	0.08
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.51	0.07
77 Perylene-d12	26.22	25.72	26.72	26.25	0.09

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

REVIEW SUMMARY FOR FILE - NT1003052334S.D

Lab ID: 23A0326-12

nt10.i, 20230305B.b\SIM.b\SIMABN2.m, 06-MAR-2023 10:11

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

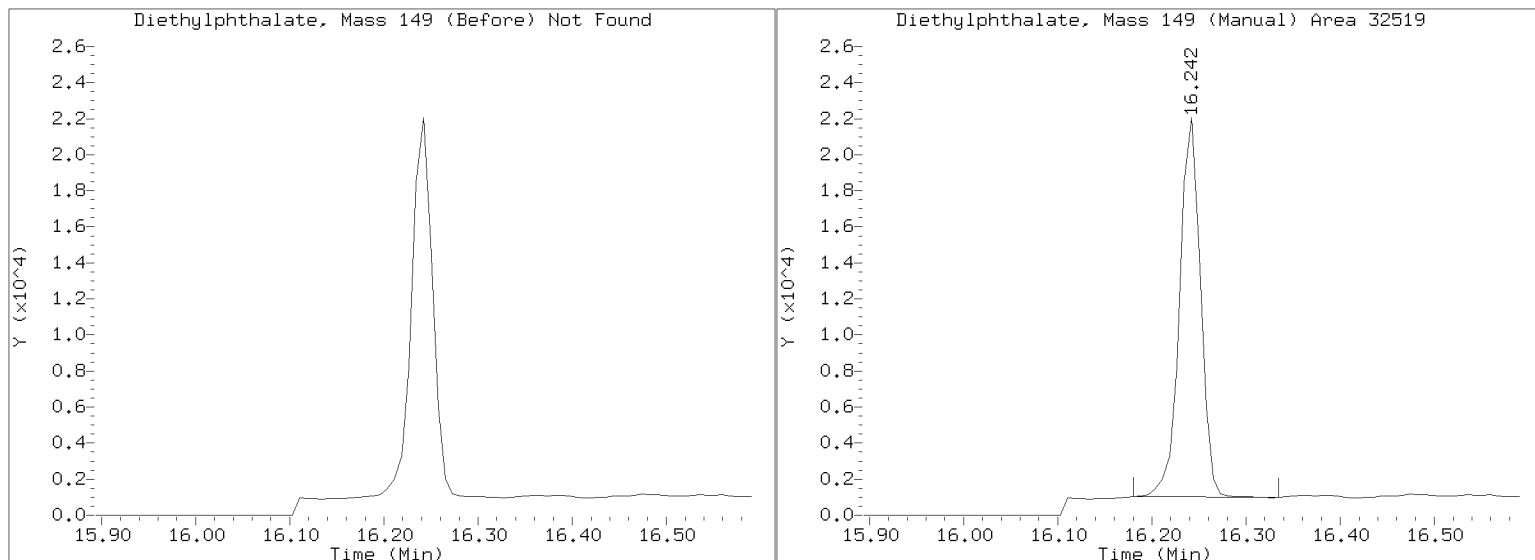
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305B.b/SIM.b/NT1003052334S.D

Injection Date: 06-MAR-2023 10:11

Lab ID: 23A0326-12 Client ID:

Report Date: 03/31/2023 08:57



APPROVED

By Deenay Dunmore at 9:13 am, Mar 31, 2023



PREPARATION BATCH SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0683 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1181	23A0326-08	N823020631.D	02/01/23 11:29	
LDW23-IT1127	23A0326-09	N823020632.D	02/01/23 11:29	
Blank	BLA0683-BLK1	N823020608.D	02/01/23 11:29	
LCS	BLA0683-BS1	N823020609.D	02/01/23 11:29	
LCS Dup	BLA0683-BSD1	N823020610.D	02/01/23 11:29	
Reference	BLA0683-SRM1	N823020611.D	02/01/23 11:29	



Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WG Comments

23A0207: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0249: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0313: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Analysis: 8270E-SIM PAH (0.1ug/L or 5ug/kg)

Lab Number & Container	% Solids	Initial (g)		(REQ/Opt)	(REQ/Opt)	(REQ/Opt)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 10 (Wet)	Actual	GPC C/U (1:1)	Sulfur C/U (1:1) Y/N (Transfer Rinse)	Silica Gel C/U (1:1) Y/N			
23A0207-01 A	78.4	(12.75)	12.78	1 2 3 (1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-02 A	78.6	(12.72)	12.77	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-03 A	80.0	(12.50)	12.50	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-04 A	73.6	(13.59)	13.60	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-05 A	71.3	(14.02)	14.07	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-06 A	79.0	(12.67)	12.69	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-07 A	78.8	(12.70)	12.75	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-08 A	72.8	(13.73)	13.79	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-09 A	73.0	(13.70)	13.78	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-15 A	77.8	(12.86)	12.88	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-16 A	62.7	(15.95)	15.98	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0207-17 A	63.2	(15.82)	15.83	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0249-07 A	74.7	(13.38)	13.40	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0295-08 A	78.0	(12.82)	12.82	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0313-03 A	62.7	(15.95)	15.97	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0313-04 A	69.6	(14.38)	14.39	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0313-12 A	50.0	(19.98)	19.99	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0326-08 A	75.5	(13.24)	13.27	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
23A0326-09 A	61.9	(16.15)	16.15	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	

Batch QC

Lab Number	% Solids	Initial (g)		(REQ/Opt)	(REQ/Opt)	(REQ/Opt)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 10 (Wet)	Actual	GPC C/U (1:1)	Sulfur C/U (1:1) Y/N (Transfer Rinse)	Silica Gel C/U (1:1) Y/N			
BLA0683-BLK1	100.0	(10.00)	10.00	1 2 3 (1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
BLA0683-BS1	100.0	(10.00)	10.00	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
BLA0683-BSD1	100.0	(10.00)	10.00	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	
BLA0683-MS1	80.0	(12.50)	12.50	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	Use 23A0207-03
BLA0683-MSD1	80.0	(12.50)	12.50	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	Use 23A0207-03

SRM IS ON 3RD PAGE!!!!!!



Batch: BLA0683

Prepared using: EPA 3546 (Microwave)
8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments
 23A0207: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0249: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0295: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0313: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0326: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Reagents Used

Surrogates & Spike Standards Used

Microwave	Station/Reagent	Standard ID
1 (2) 3 CT 02/01/23 Analyst/Date	Microwave Analyst: CT/MB Date: 02/01/23	
Pre-GPC KD 100°C (No Exchange)	Pre-Deactivated Glass Wool L0000252	
1 2 3 4 5 6 CT 02/01/23 Analyst/Date	Anhydrous Sodium Sulfate L0000759	
	1:1 Methylene Chloride/Acetone L0000281	
	Methylene Chloride L0000808	
Pre GPC TurboVap	Pre GPC KD Analyst: CT Date: 2/2/23	
1 2 3 4 TWC 2/2/23 Analyst/Date	Methylene Chloride L0000808	
	Hexane K0011373	
	GPC Filter Prep Analyst: TWC Date: 2/2/23	
GPC	Methylene Chloride L0000808	
1 (2) 3 TWC 2/2/23 Analyst/Date	GPC Analyst: TWC Date: 2/2/23	
	Methylene Chloride L0000808	
Post-GPC KD 80°C Hexane Exchange 2 x 20 mL 100°C	GPC Calibration File CL1A0166	
1 2 3 4 5 6 TWC 2/4/23 Analyst/Date	Post GPC KD Analyst: TWC Date: 2/4/23	
	Methylene Chloride L0000808	
	Hexane K0011373	
Pre-Cleanup TurboVap	Vialing Analyst: CT Date: 4/6/23	
1 2 3 4 CT 2/4/23 Analyst/Date	Hexane K0011373	
	Methylene Chloride L0000808	
	Silica Gel (SPE) darts L001084	

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	B (K009860) m	100uL		
15/75ug/mL	Exp Date: 9/28/2423		CT	MB
Spike	15 (K009081) m	200uL		
15/75ug/mL	Exp Date: 8/4/2423		CT	MB

MANUALLY ENTER EXPIRATION DATES!

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

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



Batch: BLA0683

Prepared using: EPA 3546 (Microwave)
8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments
 23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

BLA0683-SRM1	100.0	(10.00) ^(5.00) 5.00	(1:1) Y/N	(1:1) Y/N	(1:1) Y/N	0.5	0.5	Use L000097
--------------	-------	---	-----------	-----------	-----------	-----	-----	-------------

+1g DI WATER

Client verified By [Signature] Date 02/01/23

Preparation Reviewed By [Signature] Date 2/6/23

Extraction Date and Time 02/01/23 11:29



Batch: BLA0683

Prepared using: EPA 3546 (Microwave)
8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

Matrix: Solid Date Prepared: 02/01/23 Balance ID: B146462614 Set Up By: CTG 1/25/23

WO Comments
 23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
 23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
 <H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 4	QLS 4



Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Post-Cleanup TurboVap 1 2 ③ 4 <i>CP 2/1/23</i> Analyst/Date	Sodium Sulfite	<i>NA</i>
	Tetrabutylammonium hydrogensulfate (TBAS)	<i>NA</i>
Vialing <i>CP 2/1/23</i> Analyst/Date		



Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
<p>SPECIAL INSTRUCTIONS:</p> <ol style="list-style-type: none"> 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM ONLY to the vessels (until solvent is 3 inches above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 10-15 min in Refridgerator 05. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using 1:1 DCM/ACE. 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. If GPC is Req add 10mL Hexane and KD to 5mL at 100°C (NO EXCHANGE) 12. If GPC is NOT Req = KD to 5mL at 100°C. Exchange to Hexane (2X with 10mL.) to 5mL at 100°C. 13. TurboVap. 14. If no GPC then Sulfur clean is REQUIRED. 15. Sulfur clean = Hexane transfer rinse. 16. Silica Clean-up Any Color=REQ (All or none). 17. TurboVap 18. Vial in DCM. <p>A. Need Total Solids Y <input type="checkbox"/> N</p> <p>B. Archive/Freeze <input checked="" type="checkbox"/> N</p>	



Extraction Parameter: SLM Extraction Batch BLA0683

Total Solids Batch: BLA0589 Work Order(s): 23A0207

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= 207-6,7,	DP 1/25/23
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= 207-1,2,3,4,5,9,10,12,13,15,11	DP 1/25/23
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input checked="" type="checkbox"/> Clay/Clumps (Difficult to homogenize)= 207-8	DP 1/25/23
<input checked="" type="checkbox"/> Rocks (%+size)? 30% $\frac{1}{4}'' - \frac{1}{2}'' = 207-3,9,10,12,14$ 60% $\frac{1}{5}'' - \frac{1}{3}'' = 207-15$	DP 1/25/23
<input checked="" type="checkbox"/> Organics (Leaves/sticks/grass)= 207-10,16	DP 1/25/23
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input checked="" type="checkbox"/> Previously Frozen =	LSD 1/25/23
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input type="checkbox"/> Share Samples Y / N	
<input type="checkbox"/> Multiple Jars Y / N	
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Extraction Parameter: SIM Extraction Batch DLA0683

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>02-11</u>	<u>OR 1/26/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>03-06, 08, 10</u>	<u>OR 1/26/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input checked="" type="checkbox"/> Previously Frozen = <u>02-11</u>	<u>OR 1/26/23</u>
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y <input checked="" type="checkbox"/> N	<u>OR 1/26/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y <input checked="" type="checkbox"/> N	<u>OR 1/26/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Extraction Parameter: SIM Extraction Batch BLA0683

Total Solids Batch: BLA0590 Work Order(s): 23A0295

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= 01-10	CR 1/26/23
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= 01, 02, 04, 06, 07	CR 1/26/23
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input checked="" type="checkbox"/> Previously Frozen = 01-10	CR 1/26/23
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/(N)	CR 1/26/23
<input checked="" type="checkbox"/> Multiple Jars Y/(N)	CR 1/26/23
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Extraction Parameter: SIM Extraction Batch BLA0683

Total Solids Batch: BLA0619 Work Order(s): LSA0313

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>11</u>	<u>Y</u> <u>1/27/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>1, 2, 5-11, 13</u>	<u>Y</u> <u>1/27/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors= <u>sulfur odor = 1, 2, 5-11, 13, 13, 14</u>	<u>Y</u> <u>1/27/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/N	<u>Y</u> <u>1/27/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y/N	<u>Y</u> <u>1/27/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Extraction Parameter: S/M

Extraction Batch BLA0683

Total Solids Batch: BIA 0320

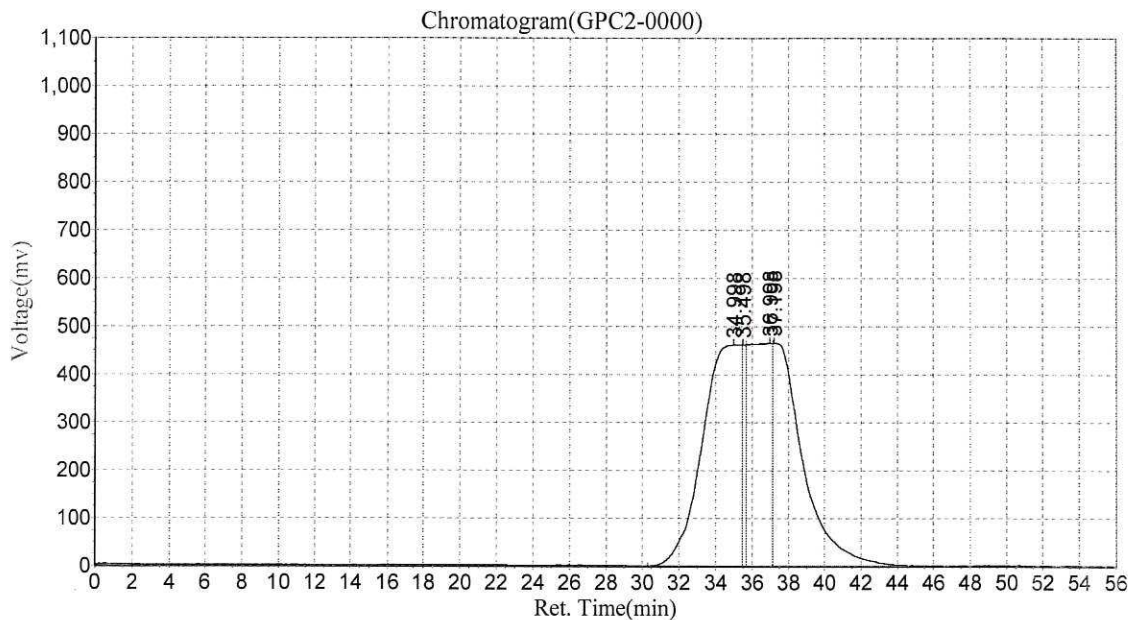
Work Order(s): 23A0326

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>φ7, φ8.</u>	<u>N φ 1/27/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>φ1-12</u>	<u>N φ 1/27/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	<u>φ</u>
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel/ <u>sulfur odors</u> = <u>φ1-φ6, φ9-12.</u>	<u>N φ 1/27/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/N	
<input checked="" type="checkbox"/> Multiple Jars Y/N	<u>N φ 1/27/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	<u>N φ 1/27/23</u>
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-02,8:21:39 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0000
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-02,8:21:39 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		34.998	462779.906	67250400.000	40.3226
2		35.498	462383.969	5546438.500	3.3256
3		36.998	465204.125	40820080.000	24.4753
4		37.198	465312.156	53164016.000	31.8766
Total			1855680.156	166780934.500	100.000

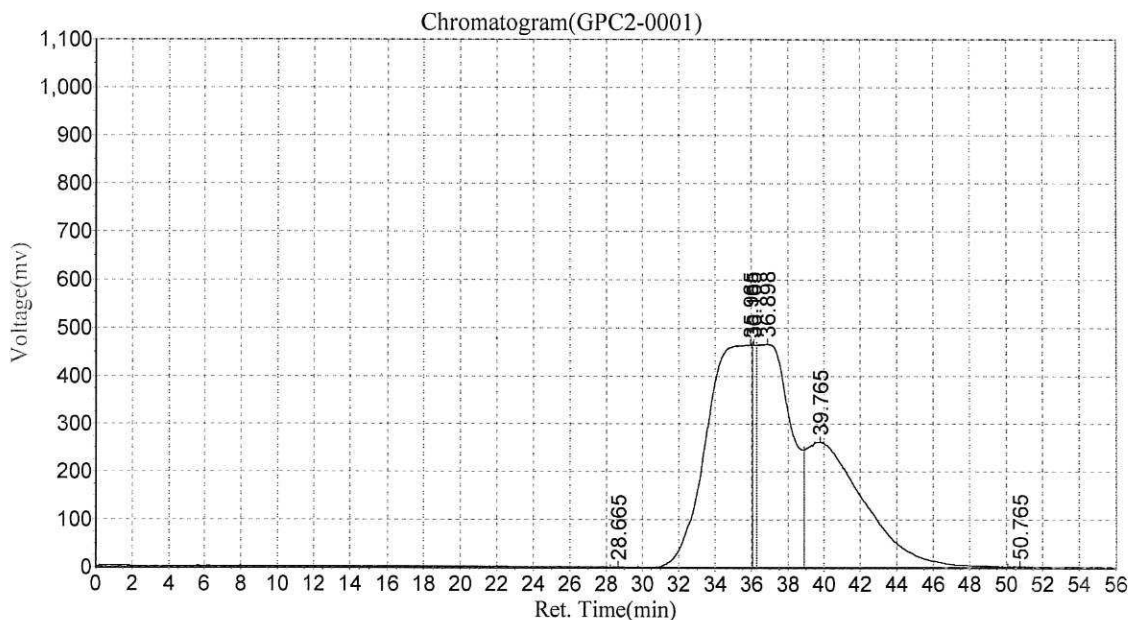
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-02,9:19:24 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0001
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-02,9:19:24 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.665	1929.831	106790.094	0.0523
2		35.965	466271.906	80026520.000	39.1944
3		36.165	466463.031	5595818.500	2.7406
4		36.898	467998.438	59461916.000	29.1225
5		39.765	263151.000	58778816.000	28.7879
6		50.765	2365.027	208814.094	0.1023
Total			1668179.233	204178674.688	100.000

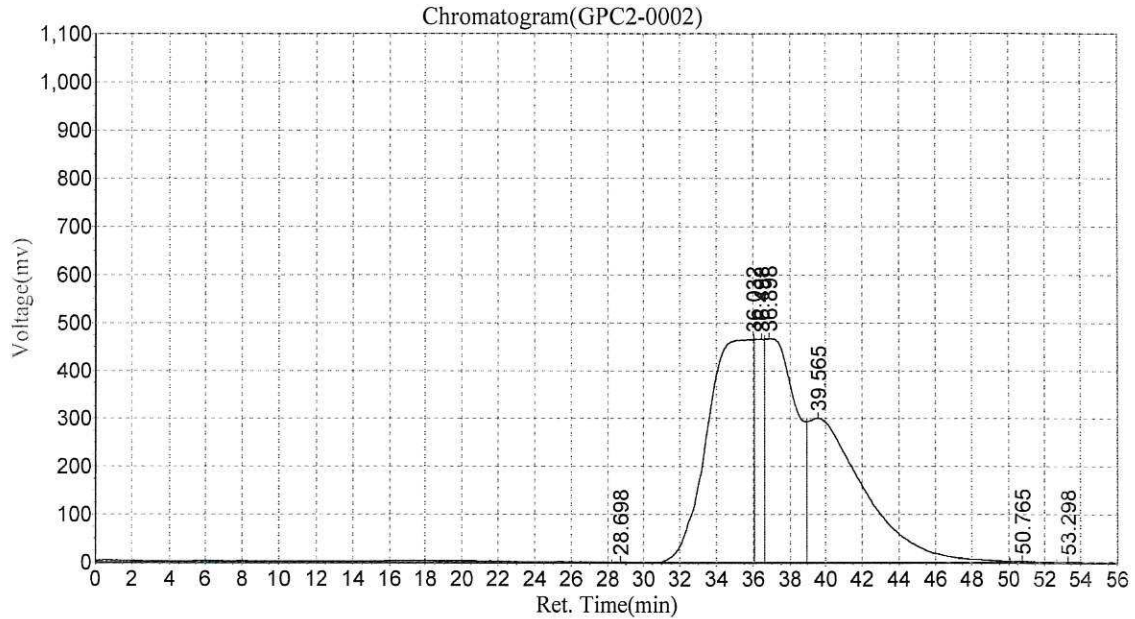
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-02,10:17:06 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0002
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-02,10:17:06 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.698	2463.859	143297.484	0.0663
2		36.032	467350.656	80045688.000	37.0349
3		36.498	468077.344	14966868.000	6.9247
4		36.898	469001.656	55208184.000	25.5433
5		39.565	301660.969	65301040.000	30.2129
6		50.765	3672.394	355260.875	0.1644
7		53.298	1939.964	115634.453	0.0535
Total			1714166.841	216135972.813	100.000

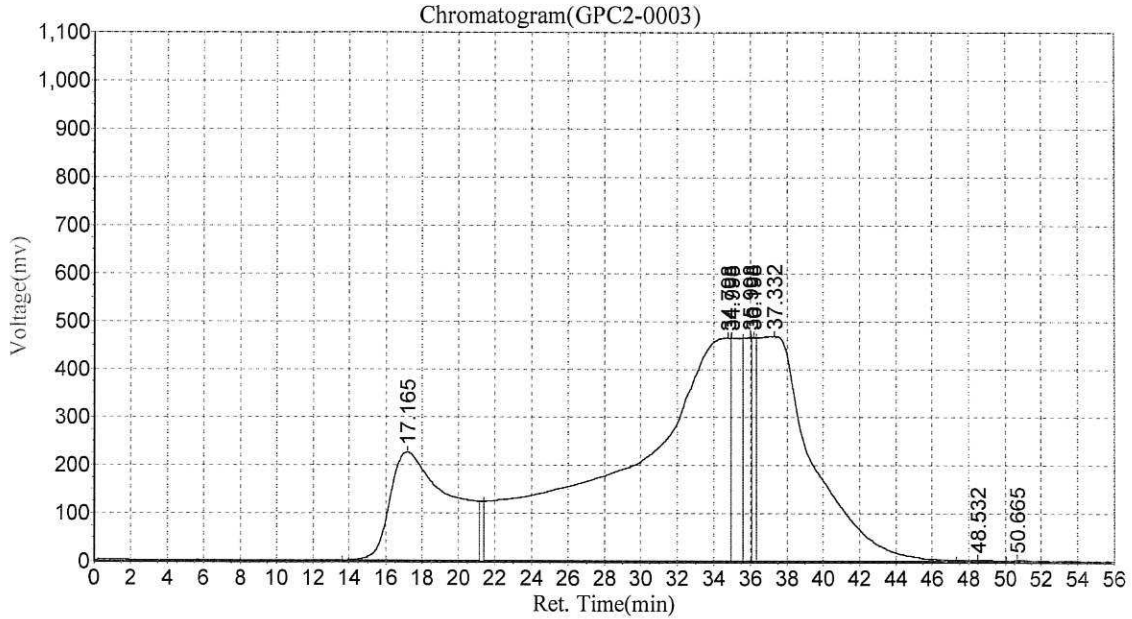
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-02,11:14:50 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0003
 Method File:E:\GPC2_InHouse.mtd

Analyst:TWG
 Date/Time:2023-02-02,11:14:50 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.165	224601.266	51653576.000	14.0564
2		34.798	464461.281	179650384.000	48.8879
3		34.998	464240.656	18550414.000	5.0481
4		35.998	464909.531	13004145.000	3.5388
5		36.198	465242.906	7439951.000	2.0246
6		37.332	467331.688	96709328.000	26.3173
7		48.532	2622.546	321109.906	0.0874
8		50.665	2085.188	145165.078	0.0395
Total			2555495.063	367474072.984	100.000

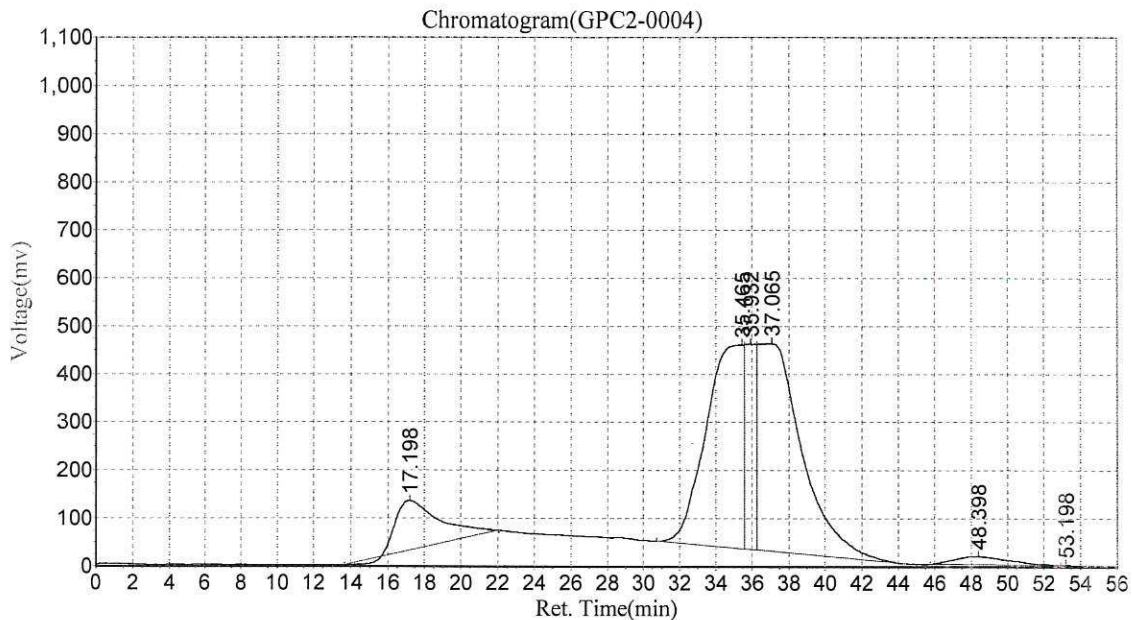
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOE

Date:2023-02-03,12:12:31 AM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0004
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-03,12:12:32 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	103859.641	16772050.000	9.9215
2		35.465	423849.281	59973016.000	35.4772
3		35.932	427541.000	17072136.000	10.0991
4		37.065	432420.375	71367624.000	42.2177
5		48.398	17561.232	3733371.000	2.2085
6		53.198	2032.452	128595.063	0.0761
Total			1407263.981	169046792.063	100.000

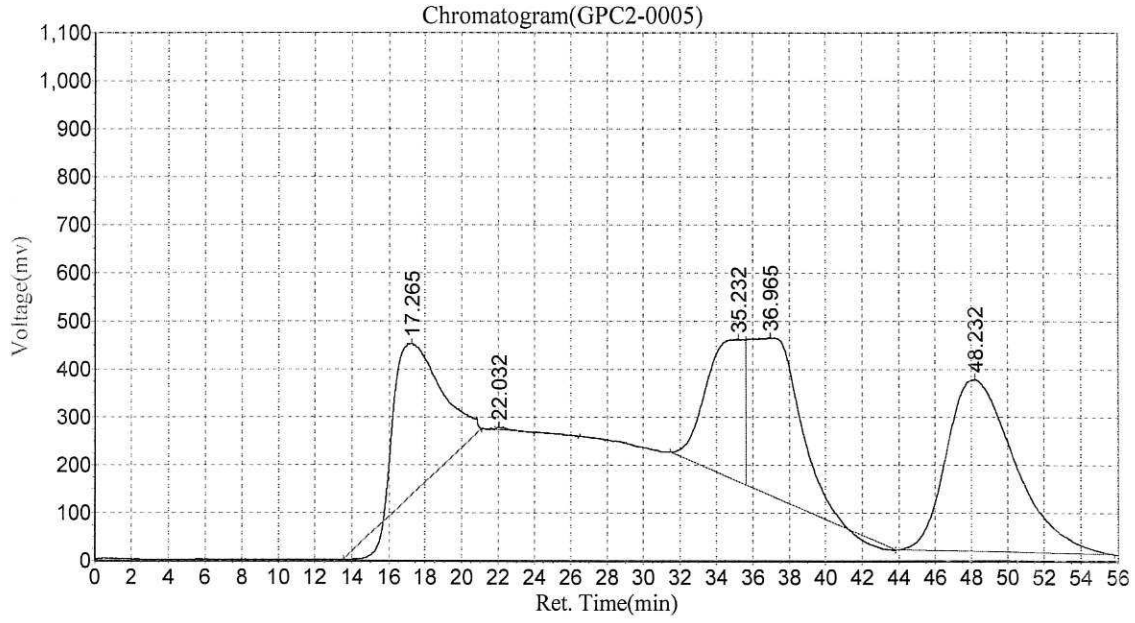
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,1:10:19 AM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0005
 Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
 Date/Time:2023-02-03,1:10:19 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	314913.031	52300416.000	20.8043
2		22.032	5661.474	282365.594	0.1123
3		35.232	297091.719	41670928.000	16.5760
4		36.965	328802.625	62632340.000	24.9142
5		48.232	358413.219	94506504.000	37.5932
Total			1304882.067	251392553.594	100.000

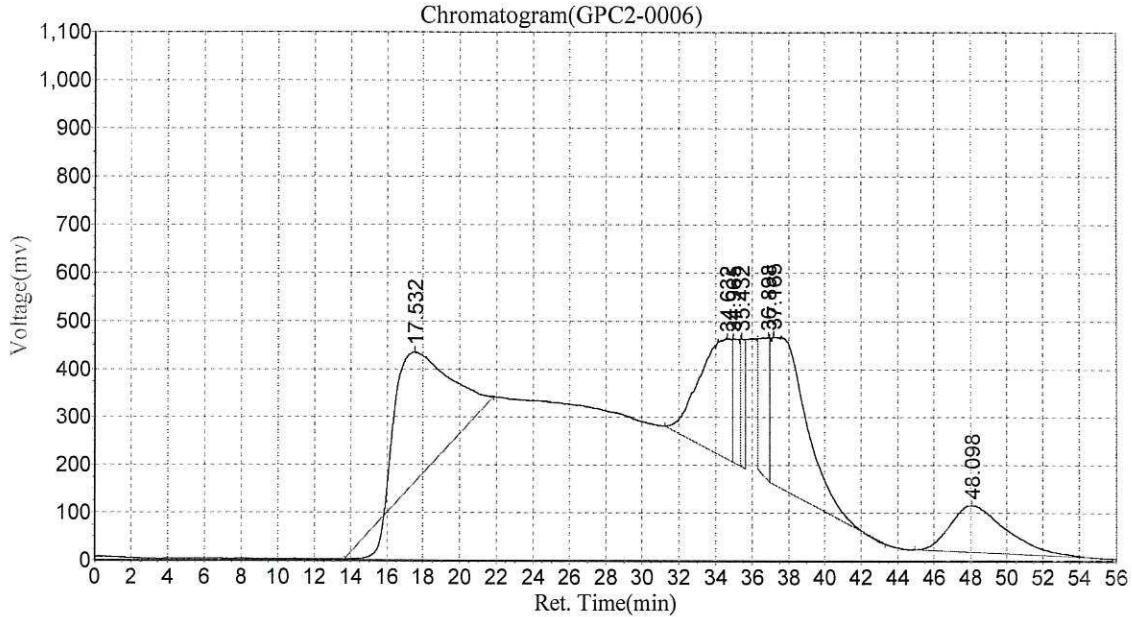
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOG

Date:2023-02-03,2:08:00 AM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0006
 Method File:E:\GPC2_InHouse.mtd

Analyst:TWTC
 Date/Time:2023-02-03,2:08:00 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.532	271902.906	49996660.000	30.1162
2		34.632	251321.703	28982862.000	17.4582
3		34.965	257266.750	7278267.500	4.3842
4		35.432	269060.219	4297007.000	2.5884
5		36.898	299770.844	11729887.000	7.0657
6		37.165	307776.688	42546676.000	25.6286
7		48.098	97117.070	21181228.000	12.7588
Total			1754216.180	166012587.500	100.000

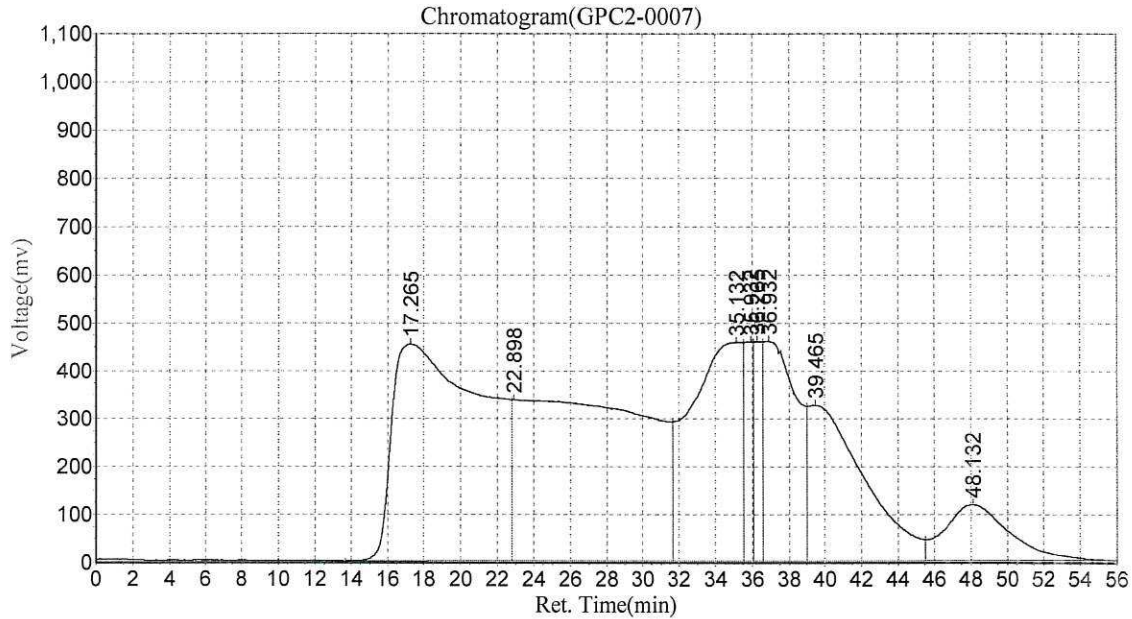
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,3:05:43 AM
Data File:c:\n2000\data\gpc2\020223\GPC2-0007
Method File:E:\GPC2_InHouse.mtd

Analyst:TWG
Date/Time:2023-02-03,3:05:44 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	452407.938	156356352.000	26.0695
2		22.898	336108.969	169868304.000	28.3224
3		35.132	455910.875	89104992.000	14.8566
4		35.932	456753.531	14604799.000	2.4351
5		36.265	457339.969	14630709.000	2.4394
6		36.932	457927.844	57260720.000	9.5472
7		39.465	324297.594	69352872.000	11.5633
8		48.132	116227.008	28588052.000	4.7665
Total			3056973.727	599766800.000	100.000

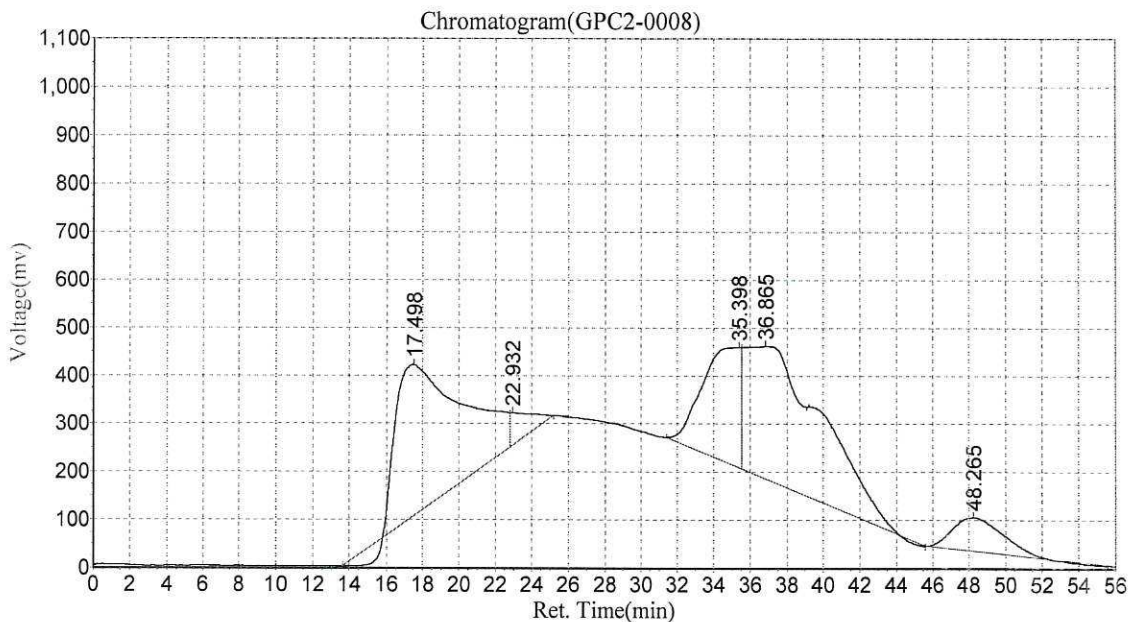
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,4:03:24 AM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0008
 Method File:E:\GPC2_InHouse.mtd

Analyst:ETWC
 Date/Time:2023-02-03,4:03:25 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	314550.094	74786392.000	35.3328
2		22.932	67745.508	5143057.500	2.4298
3		35.398	251036.063	34348928.000	16.2282
4		36.865	277122.625	83870256.000	39.6245
5		48.265	70504.664	13513937.000	6.3847
Total			980958.953	211662570.500	100.000

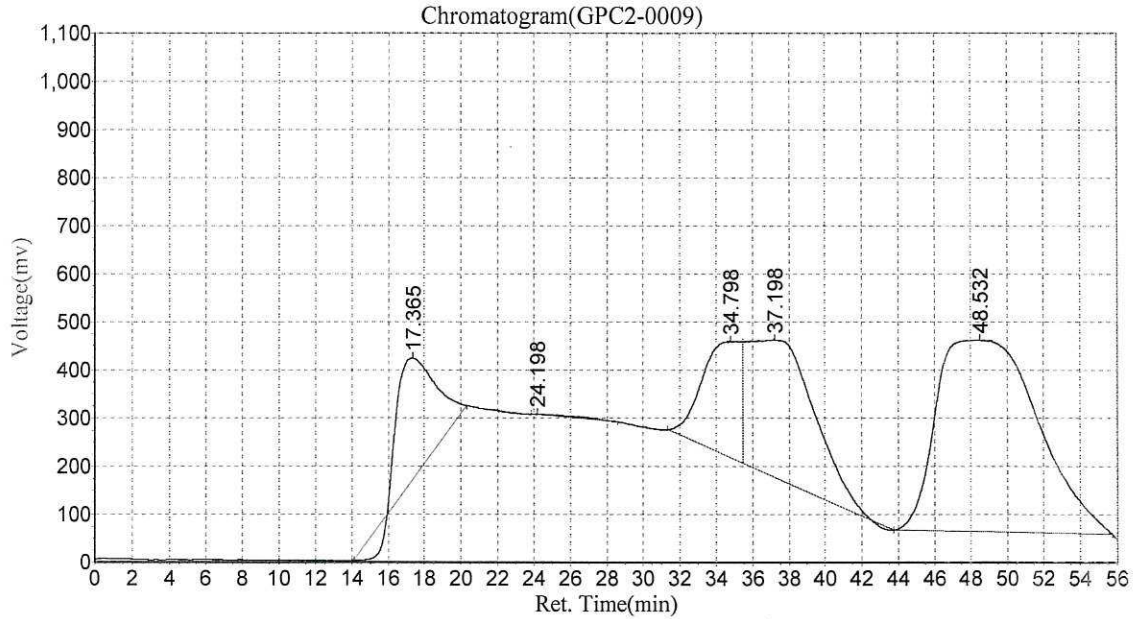
Ingredient Table

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

BLA0683 23A0207/249/295/313/326-PSDDA SVOC

Date:2023-02-03,5:01:08 AM
Data File:c:\n2000\data\gpc2\020223\GPC2-0009
Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
Date/Time:2023-02-03,5:01:08 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	253076.938	34035368.000	11.4757
2		24.198	1548.352	551275.625	0.1859
3		34.798	241417.547	34753688.000	11.7179
4		37.198	285579.594	73586008.000	24.8110
5		48.532	396909.406	153659616.000	51.8095
Total			1178531.837	296585955.625	100.000

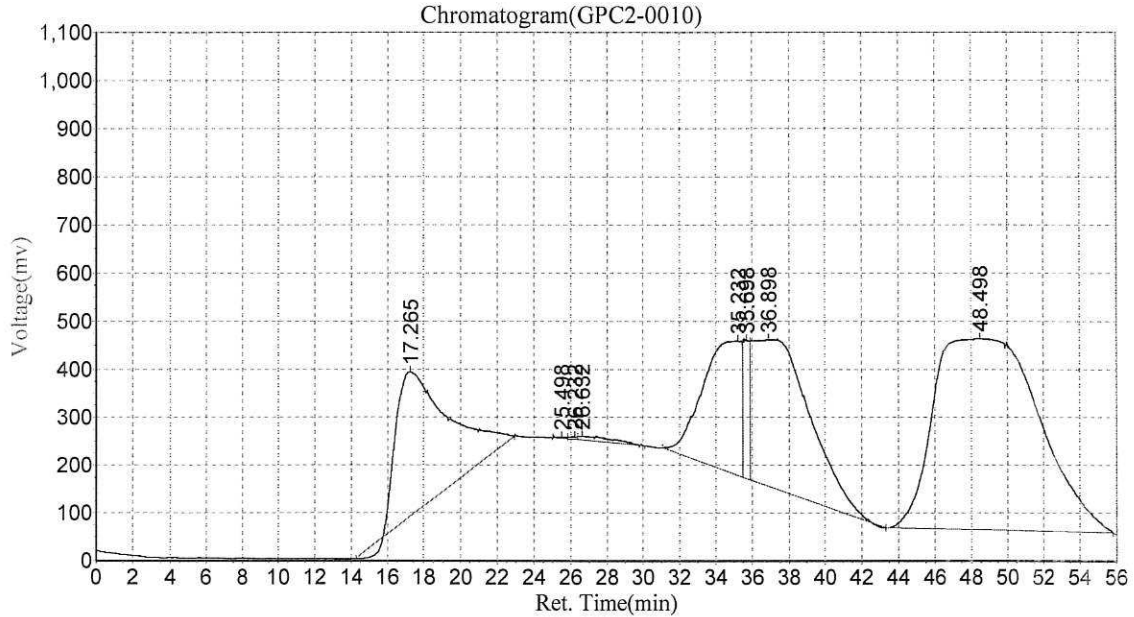
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,5:58:50 AM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0010
 Method File:E:\GPC2_InHouse.mtd

Analyst:TW
 Date/Time:2023-02-03,5:58:50 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	301585.656	58040020.000	17.2727
2		25.498	4945.564	211897.125	0.0631
3		26.232	7706.532	228023.844	0.0679
4		26.632	9703.787	1523924.250	0.4535
5		35.232	279869.375	40176824.000	11.9566
6		35.698	288066.219	6885327.500	2.0491
7		36.898	305517.188	67790240.000	20.1744
8		48.498	398102.656	161164608.000	47.9627
Total			1595496.977	336020864.719	100.000

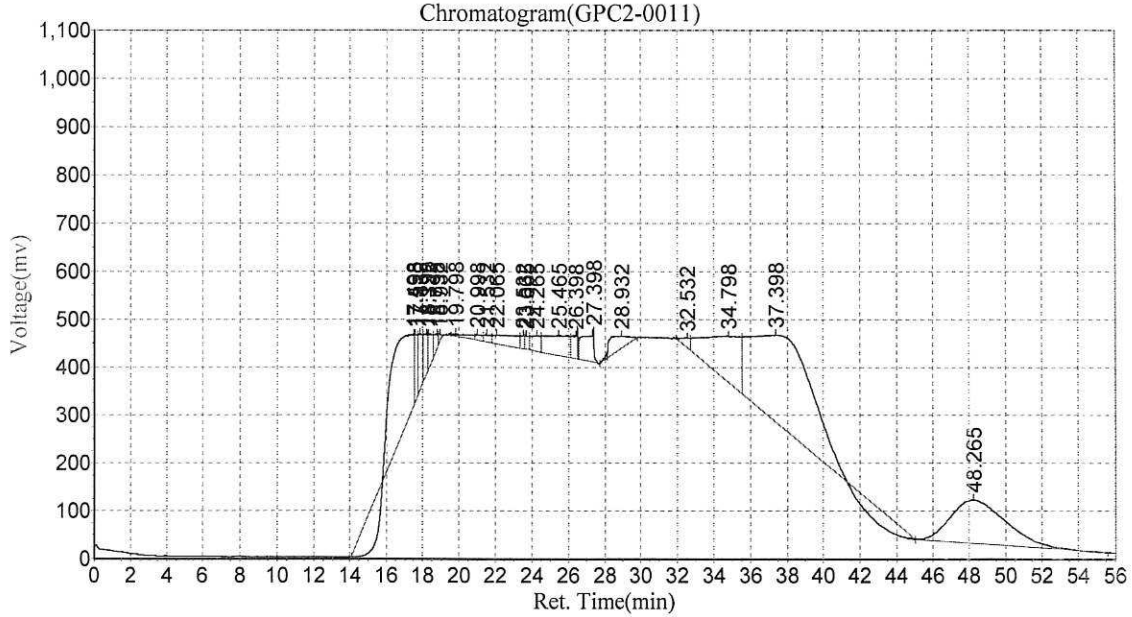
Ingredient Table

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

BLA0683 23A0207/249/295/313/326-PSDDA SVOC

Date:2023-02-03,6:56:33 AM
Data File:c:\n2000\data\gpc2\020223\GPC2-0011
Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
Date/Time:2023-02-03,6:56:34 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	150156.766	12097292.000	11.4156
2		17.598	140476.156	1645478.500	1.5527
3		17.832	119357.398	2056264.875	1.9404
4		18.198	85322.492	1252242.750	1.1817
5		18.332	72737.344	1161352.625	1.0959
6		18.798	29226.830	654541.313	0.6177
7		18.932	17179.684	163270.047	0.1541
8		19.798	4424.072	503451.313	0.4751
9		20.998	11694.288	334645.313	0.3158
10		21.532	15486.384	427853.938	0.4037
11		22.065	19205.479	2003156.625	1.8903
12		23.532	28287.742	438005.344	0.4133
13		23.665	28841.768	461408.500	0.4354
14		24.265	33595.375	1295721.375	1.2227
15		25.465	42509.590	3904855.500	3.6848
16		26.398	49051.758	1208008.375	1.1399
17		27.398	60342.438	2605926.000	2.4591
18		28.932	29036.000	2720518.500	2.5672
19		32.532	20221.428	634607.125	0.5988
20		34.798	96254.375	12312502.000	11.6186
21		37.398	181448.219	39008568.000	36.8102

22	48.265	90207.734	19082378.000	18.0070
Total		1325063.318	105972048.016	100.000

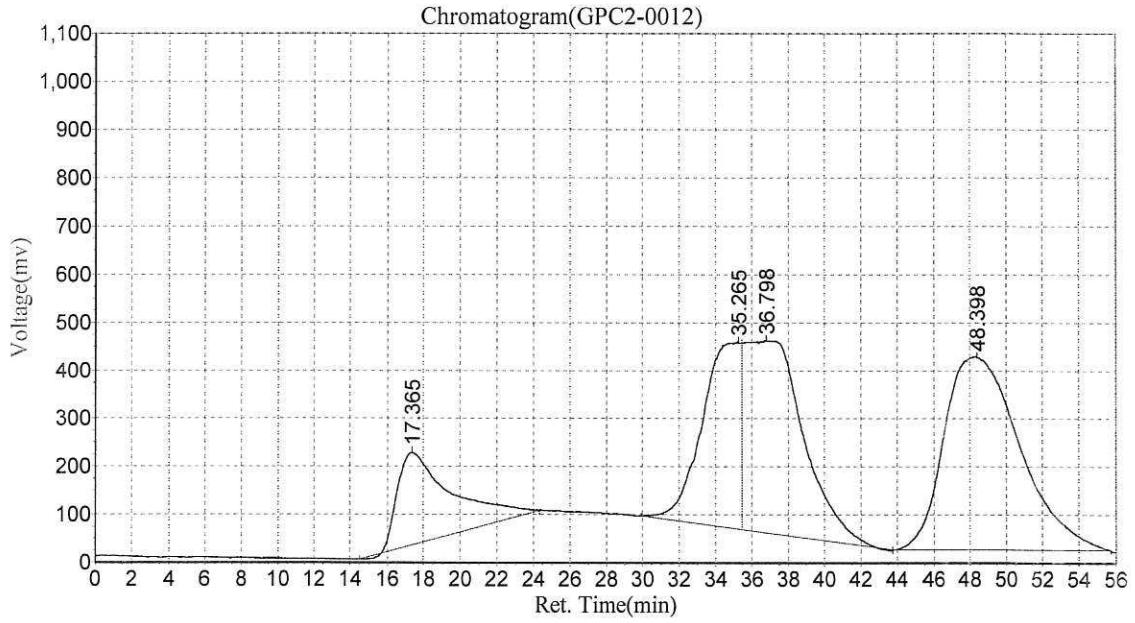
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,7:54:15 AM
Data File:c:\n2000\data\gpc2\020223\GPC2-0012
Method File:E:\GPC2_InHouse.mtd

Analyst:°TWC
Date/Time:2023-02-03,7:54:16 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	192764.609	39357356.000	12.9566
2		35.265	389684.469	56802572.000	18.6996
3		36.798	400426.688	90046592.000	29.6436
4		48.398	402658.625	117557240.000	38.7002
Total			1385534.391	303763760.000	100.000

Ingredient Table

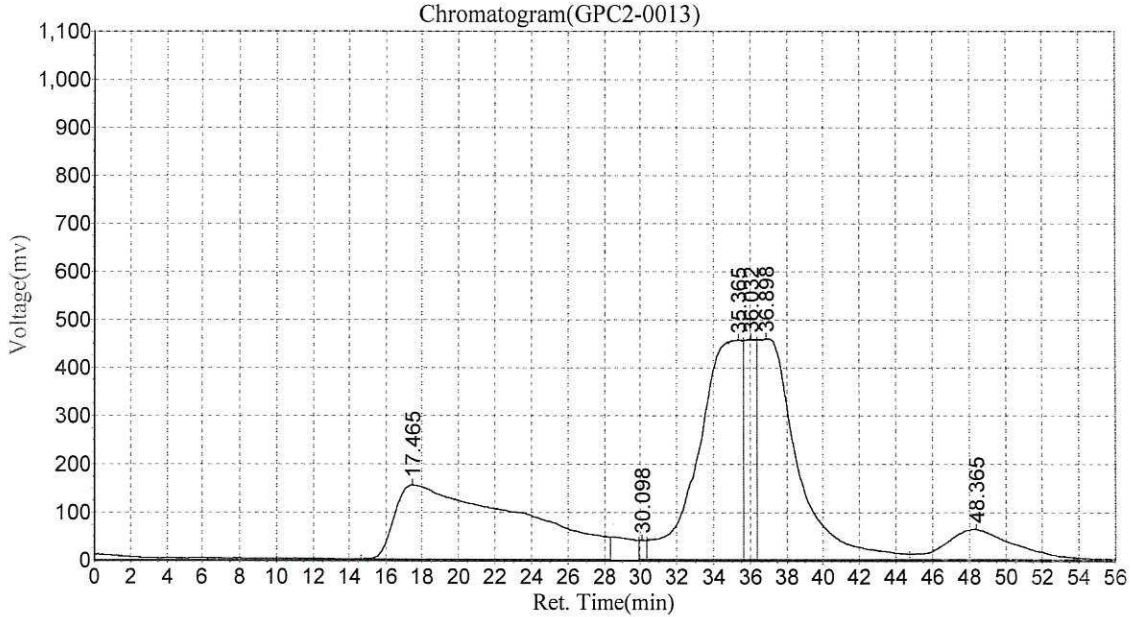
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

PMA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,8:51:58 AM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0013
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-03,8:51:59 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.465	154916.563	73637648.000	29.1653
2		30.098	39966.410	1115042.750	0.4416
3		35.365	454919.375	73257320.000	29.0147
4		36.032	456558.688	20031644.000	7.9338
5		36.898	457025.906	68557808.000	27.1534
6		48.365	61729.695	15884059.000	6.2911
Total			1625116.637	252483521.750	100.000

Ingredient Table

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

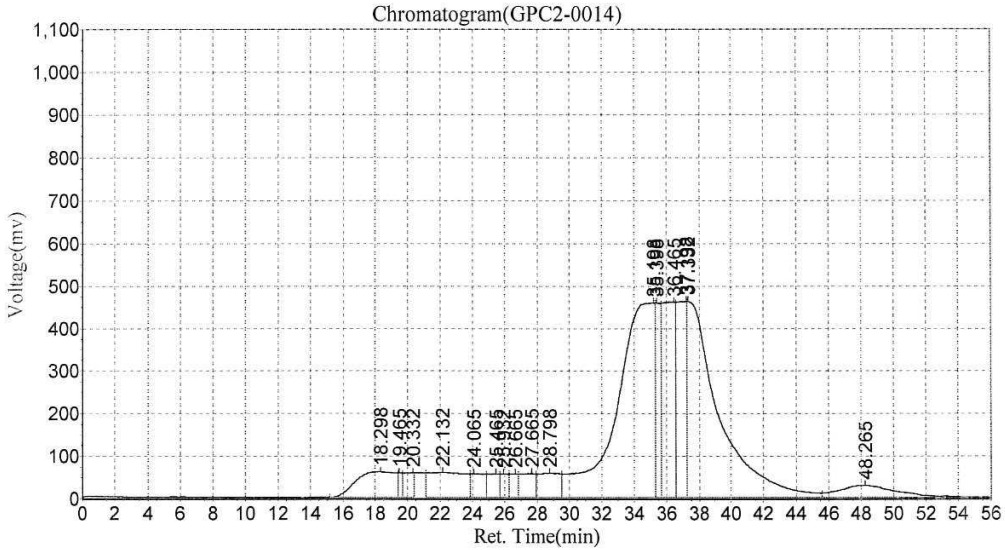
PMA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

00
00
00
00

Date:2023-02-03,9:49:39 AM
Data File:c:\n2000\data\gpc2\202223\GPC2-0014
Method File:E:\GPC2_InHouse.mtd

Analyst:£°TWC
Date/Time:2023-02-03,9:49:40 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		18.298	60048.105	9976911.000	4.1927
2		19.465	57496.121	1032012.313	0.4337
3		20.332	57767.902	2407162.250	1.0116
4		22.132	58504.297	9364249.000	3.9353
5		24.065	55681.348	3322191.000	1.3961
6		25.465	55570.766	2872310.500	1.2071
7		25.932	55568.574	1768891.500	0.7434
8		26.665	55674.695	1995675.875	0.8387
9		27.665	56416.137	3564821.250	1.4981
10		28.798	57244.238	5422950.500	2.2790
11		35.198	457051.875	73606272.000	30.9327
12		35.398	457298.344	9130736.000	3.8371
13		36.465	459425.625	25671926.000	10.7885
14		37.198	460735.750	18402272.000	7.7335
15		37.332	460656.406	62422432.000	26.2327
16		48.265	27794.424	6995441.500	2.9398
Total			2892934.607	237956254.688	100.000

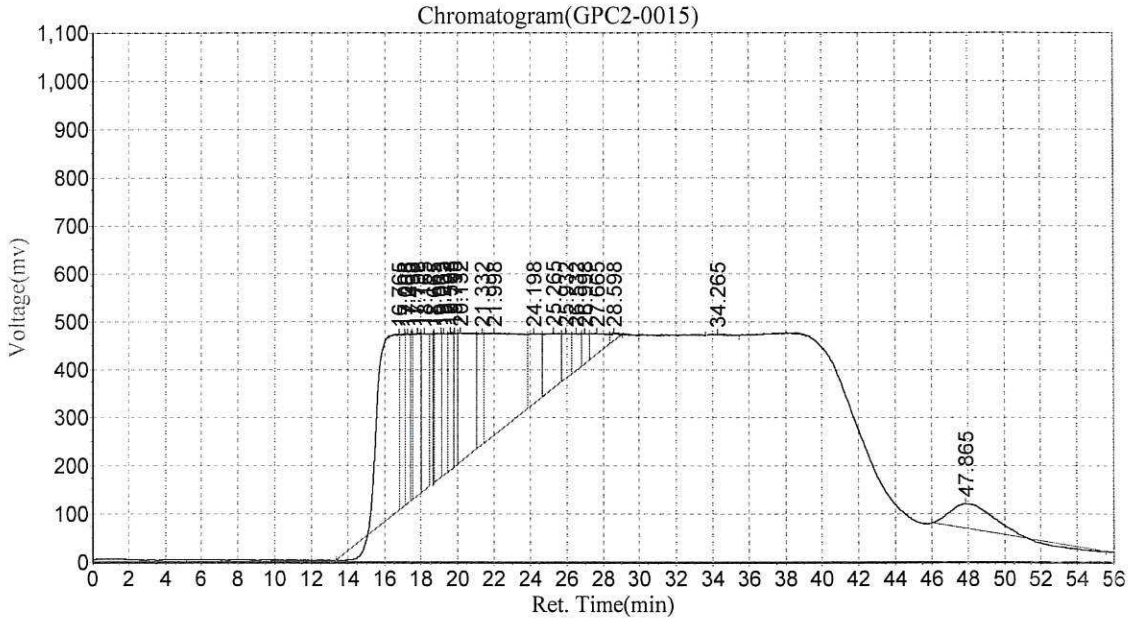
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
----	---------	----------	------------	---------	---------	----------

BLA0683 23A0207/249/295/313/326-PSDDA SVOC

Date:2023-02-03,10:47:23 AM
Data File:c:\n2000\data\gpc2\020223\GPC2-0015
Method File:E:\GPC2_InHouse.mtd

Analyst:TW
Date/Time:2023-02-03,10:47:24 AM



Results

Table with 6 columns: Peak No., Peak ID, Ret Time, Height, Area, Conc. It lists 21 peaks with their respective retention times and other metrics.

GPC #2

2

22	34.265	1755.064	112754.148	0.0673
23	47.865	51972.305	8044898.500	4.8011
Total		4881190.714	167562219.961	100.000

Ingredient Table

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

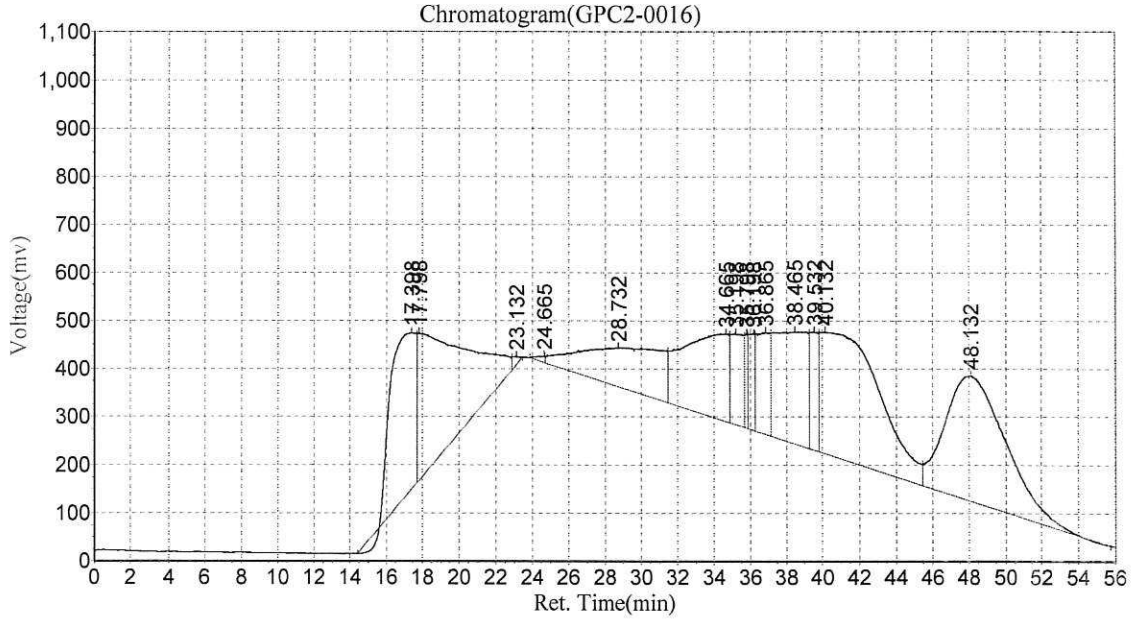
-16

PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,11:45:05 AM
Data File:c:\n2000\data\gpc2\020223\GPC2-0016
Method File:E:\GPC2_InHouse.mtd

Analyst:TWC
Date/Time:2023-02-03,11:45:06 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	324336.125	32039514.000	9.9187
2		17.798	305546.000	50962064.000	15.7767
3		23.132	16512.959	516093.500	0.1598
4		24.665	12271.665	353445.594	0.1094
5		28.732	79824.297	26664902.000	8.2549
6		34.665	181378.484	30154842.000	9.3353
7		35.198	187763.922	8999736.000	2.7861
8		35.798	194910.672	2327127.500	0.7204
9		36.198	199988.500	4749149.500	1.4702
10		36.865	211014.563	10773333.000	3.3352
11		38.465	231982.891	29139394.000	9.0209
12		39.532	244471.781	7808018.500	2.4172
13		40.132	251630.516	58841484.000	18.2160
14		48.132	257314.172	59691644.000	18.4792
Total			2698946.546	323020747.594	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2						
3						

2023-02-03

Analytical Resources, Inc.

GPC #2

4	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

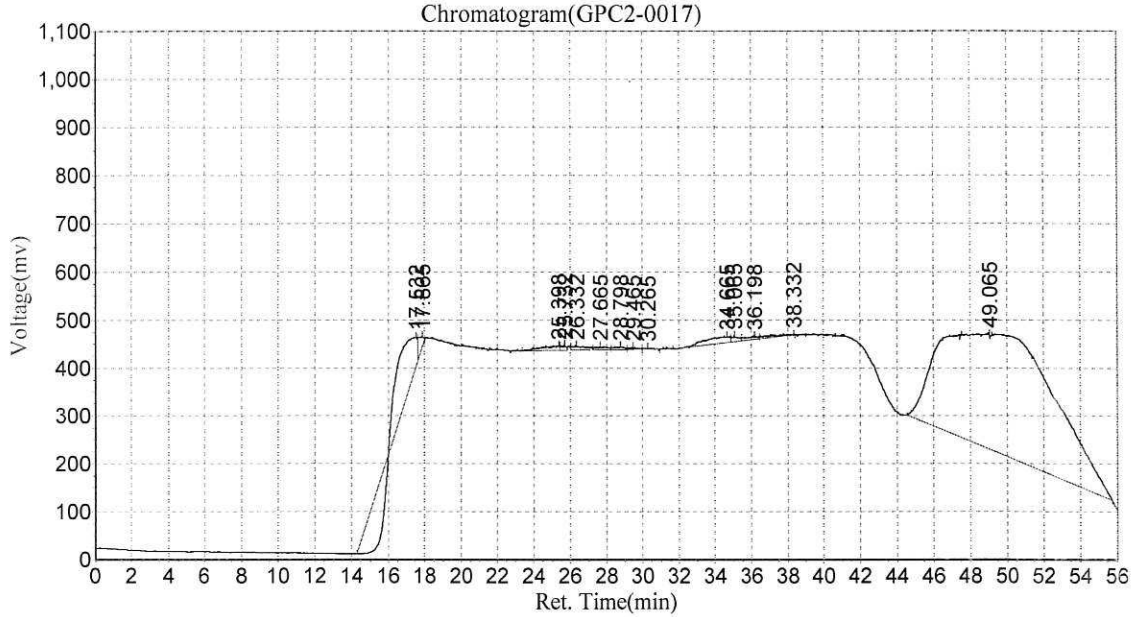
-16/17

PMA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,12:42:48 PM
Data File:c:\n2000\data\gpc2\020223\GPC2-0017
Method File:E:\GPC2_InHouse.mtd

Analyst:TWG
Date/Time:2023-02-03,12:42:48 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.532	62962.734	2069155.875	1.8043
2		17.865	23356.572	640010.125	0.5581
3		25.398	9312.584	698289.563	0.6089
4		25.732	9808.682	208419.906	0.1817
5		26.332	8977.257	440951.313	0.3845
6		27.665	6698.646	345836.688	0.3016
7		28.798	5973.177	269666.188	0.2352
8		29.465	4193.372	166344.641	0.1451
9		30.265	2563.805	106823.953	0.0932
10		34.665	13693.869	1498502.000	1.3067
11		35.065	12427.252	388743.188	0.3390
12		36.198	8756.669	483430.156	0.4216
13		38.332	4223.042	692287.750	0.6037
14		49.065	238951.469	106668840.000	93.0165
Total			411899.131	114677301.344	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2						
3						

4	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

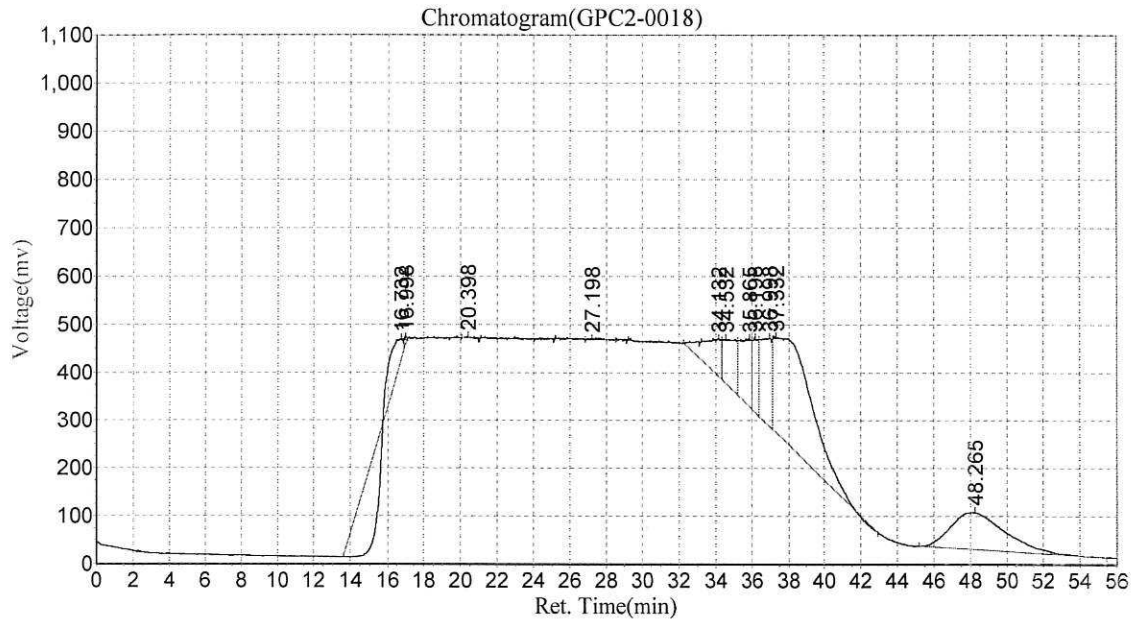
-47

PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,1:40:30 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0018
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-03,1:40:30 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.732	45919.352	8523812.000	10.0726
2		16.998	15925.276	155252.969	0.1835
3		20.398	3516.694	143889.734	0.1700
4		27.198	2094.000	163273.594	0.1929
5		34.132	76292.023	5178846.500	6.1199
6		34.532	90319.391	5111082.000	6.0398
7		35.865	139968.266	6171932.000	7.2934
8		36.198	153349.234	3645020.000	4.3073
9		36.998	183074.953	7632789.500	9.0197
10		37.332	197526.922	31824870.000	37.6077
11		48.265	77143.633	16072590.000	18.9931
Total			985129.744	84623358.297	100.000

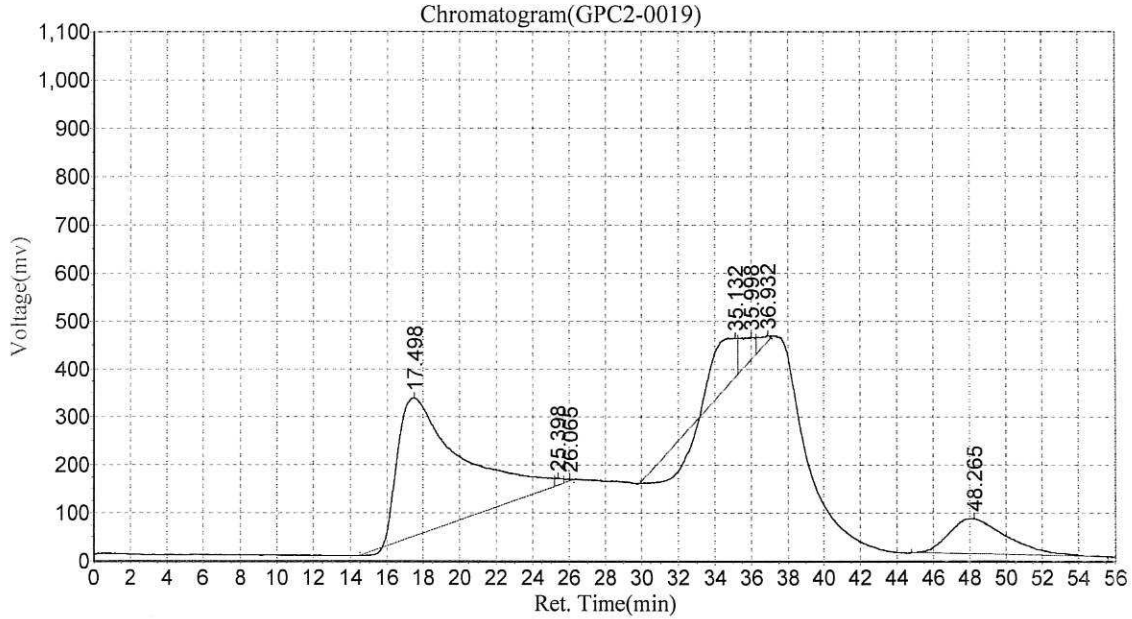
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,2:38:13 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0019
 Method File:E:\GPC2_InHouse.mtd

Analyst:TW
 Date/Time:2023-02-03,2:38:14 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	288790.219	69298784.000	74.3576
2		25.398	14576.957	418597.844	0.4492
3		26.065	3898.218	139971.906	0.1502
4		35.132	82011.219	2749233.500	2.9499
5		35.998	46565.590	3319897.250	3.5622
6		36.932	9886.218	931136.250	0.9991
7		48.265	73244.594	16339092.000	17.5318
Total			518973.014	93196712.750	100.000

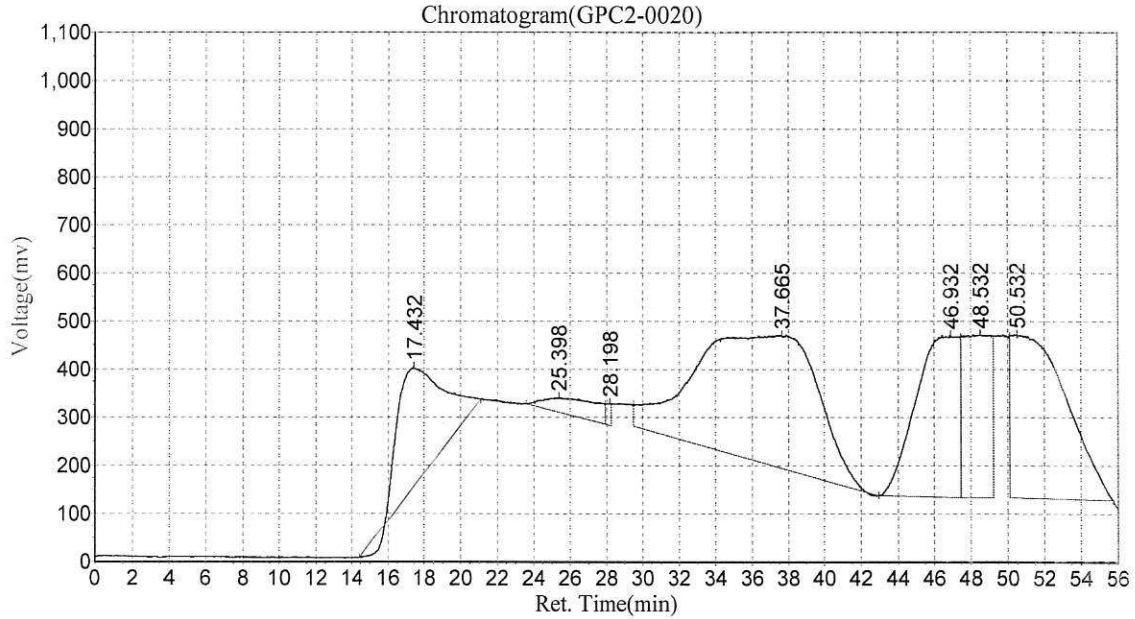
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,3:35:55 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0020
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-03,3:35:56 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.432	246907.359	39977740.000	11.8431
2		25.398	29472.152	7166949.000	2.1232
3		28.198	45714.168	888203.500	0.2631
4		37.665	280352.594	130623968.000	38.6964
5		46.932	331494.438	54702460.000	16.2052
6		48.532	334813.813	34697888.000	10.2790
7		50.532	335731.531	69504168.000	20.5901
Total			1604486.055	337561376.500	100.000

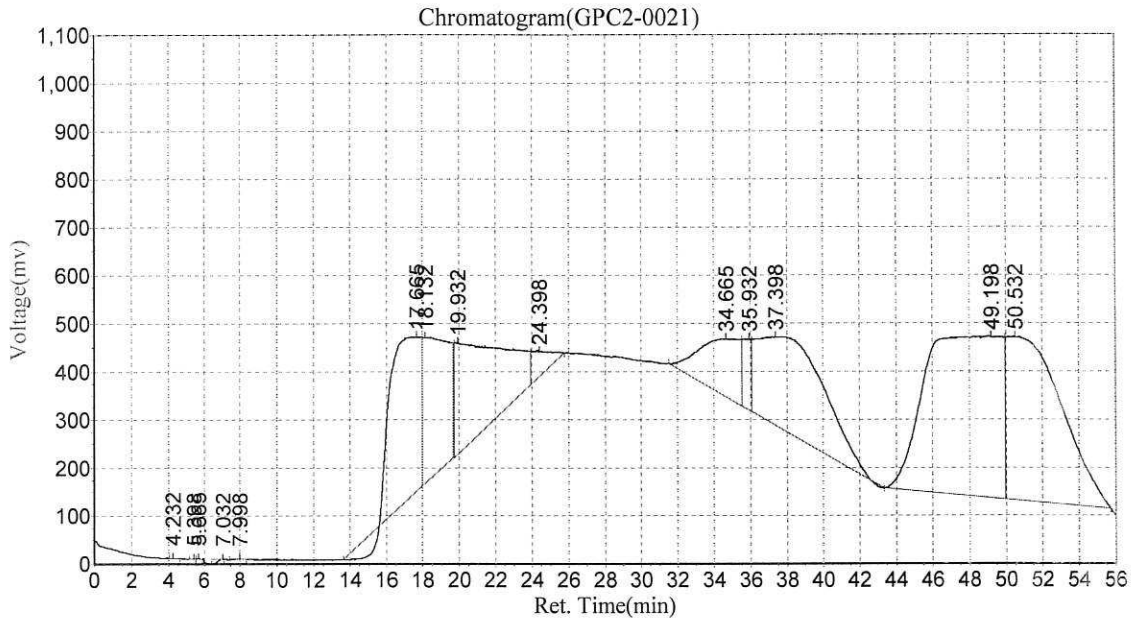
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,4:33:38 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0021
 Method File:E:\GPC2_InHouse.mtd

Analyst: TWC
 Date/Time:2023-02-03,4:33:39 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		4.232	2923.735	102155.758	0.0296
2		5.398	6411.877	126159.086	0.0365
3		5.665	7692.510	166386.672	0.0481
4		7.032	6402.068	143318.547	0.0415
5		7.998	2383.118	145098.828	0.0420
6		17.665	320849.281	37015128.000	10.7086
7		18.132	303389.031	27385254.000	7.9227
8		19.932	228741.828	38189688.000	11.0484
9		24.398	53874.801	3971512.250	1.1490
10		34.665	119432.836	17935770.000	5.1889
11		35.932	147077.063	4601548.500	1.3312
12		37.398	182894.750	50871432.000	14.7173
13		49.198	332663.313	95740272.000	27.6980
14		50.532	336072.063	69263712.000	20.0383
Total			2050808.273	345657435.641	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2						
3						

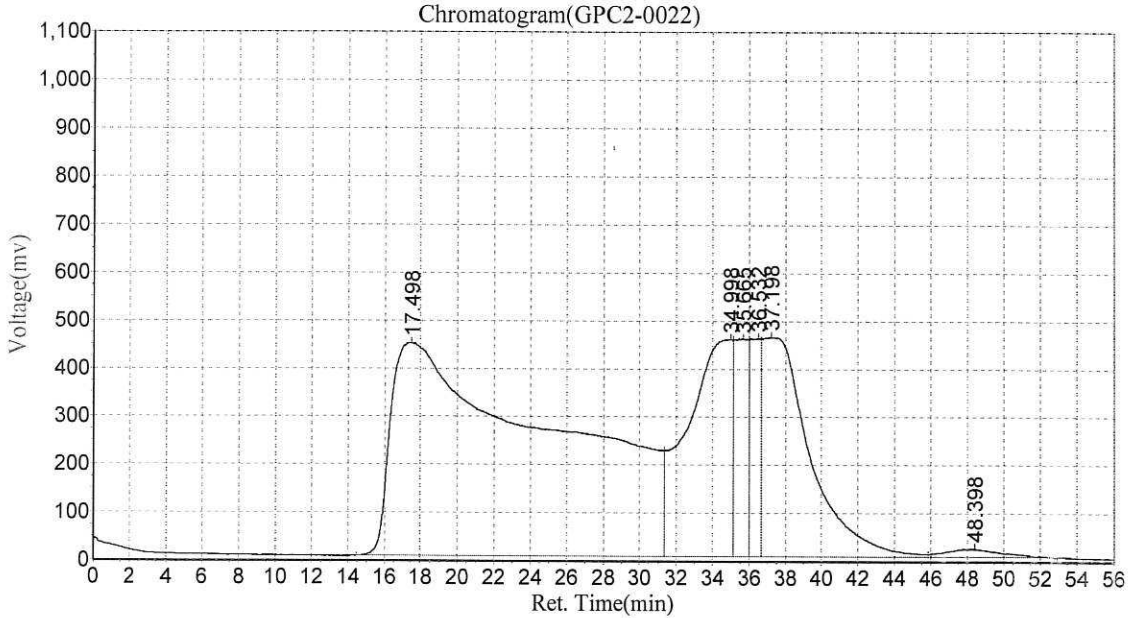
4	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-12 PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,5:31:19 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0022
 Method File:E:\GPC2_InHouse.mtd

Analyst:ETWC
 Date/Time:2023-02-03,5:31:20 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	443615.781	273805472.000	57.0171
2		34.998	453027.906	77459216.000	16.1301
3		35.665	453917.656	23558834.000	4.9059
4		36.532	454958.625	18174318.000	3.7846
5		37.198	457432.375	83429976.000	17.3734
6		48.398	16758.920	3788306.750	0.7889
Total			2279711.264	480216122.750	100.000

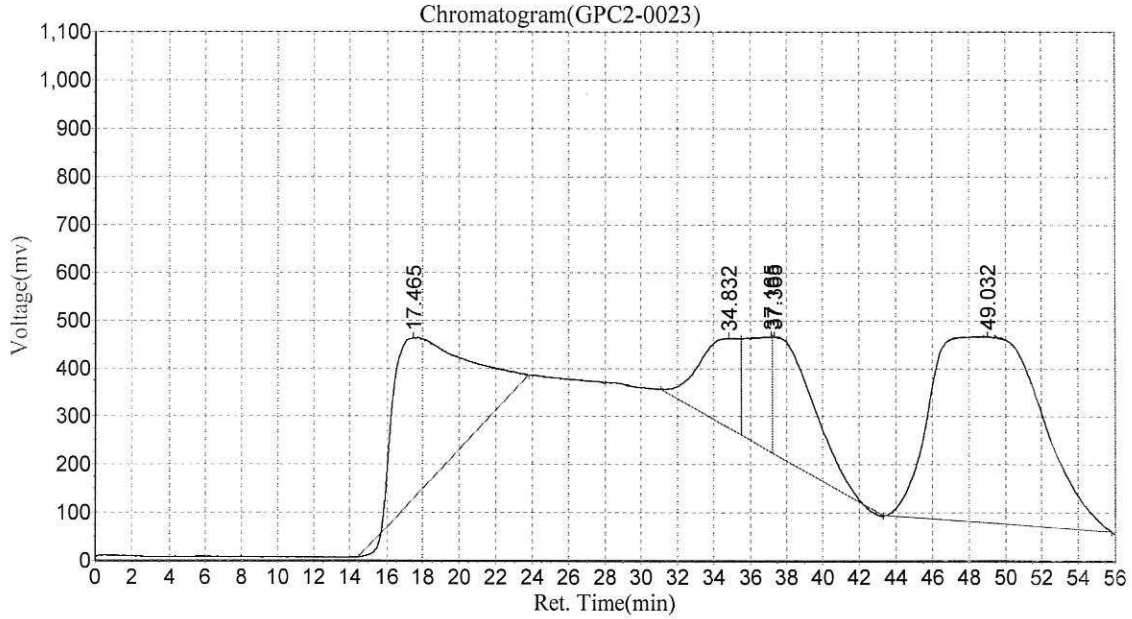
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,6:29:02 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0023
 Method File:E:\GPC2_InHouse.mtd

Analyst:TW
 Date/Time:2023-02-03,6:29:03 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.465	337520.375	88754104.000	25.9983
2		34.832	186786.047	27407800.000	8.0284
3		37.165	240168.063	23002038.000	6.7379
4		37.365	245067.641	39192672.000	11.4805
5		49.032	387579.313	163027232.000	47.7548
Total			1397121.438	341383846.000	100.000

Ingredient Table

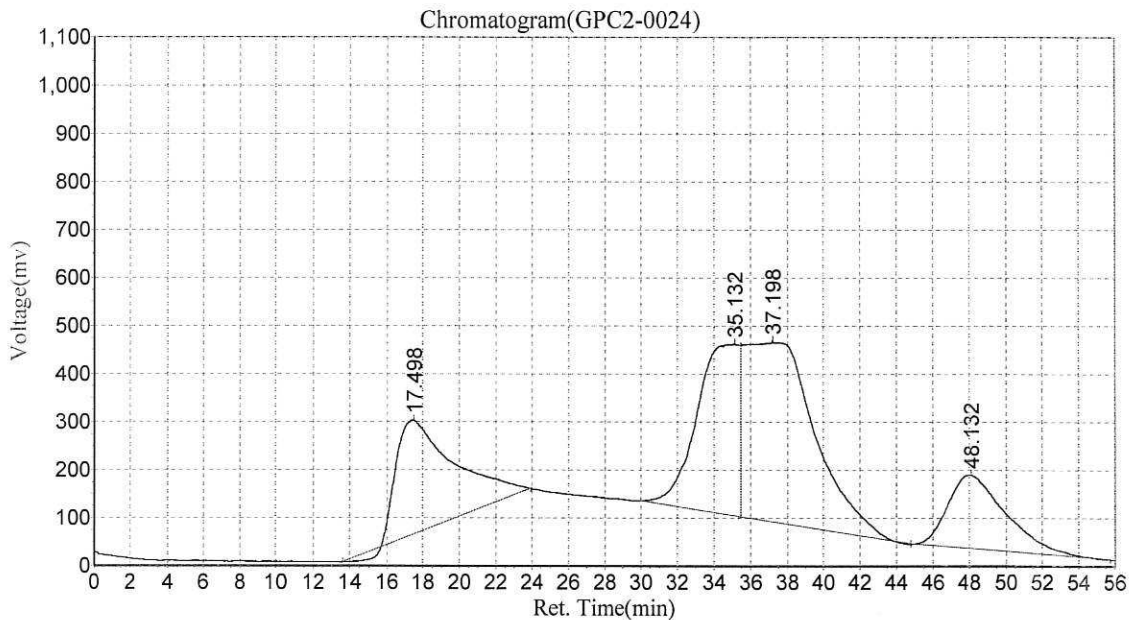
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-09 PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,7:26:44 PM
 Data File:c:\n2000\data\gpc2\020223\GPC2-0024
 Method File:E:\GPC2_InHouse.mtd

Analyst:ETWC
 Date/Time:2023-02-03,7:26:45 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	237727.203	51635180.000	21.2819
2		35.132	357614.375	56225404.000	23.1738
3		37.198	373828.469	100445344.000	41.3994
4		48.132	153996.641	34318940.000	14.1449
Total			1123166.688	242624868.000	100.000

Ingredient Table

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



PREPARATION BATCH SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0685 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	NT1003052323S.D	02/02/23 13:06	
LDW23-SC1032	23A0326-02	NT1003052324S.D	02/02/23 13:06	
LDW23-SC1170A	23A0326-04	NT1003052330S.D	02/02/23 13:06	
LDW23-SC1169C	23A0326-05	NT1003052331S.D	02/02/23 13:06	
LDW23-SC1161	23A0326-10	NT1003052332S.D	02/02/23 13:06	
LDW23-SC1155	23A0326-11	NT1003052333S.D	02/02/23 13:06	
LDW23-SC1162B	23A0326-12	NT1003052334S.D	02/02/23 13:06	
Blank	BLA0685-BLK2	NT1003052307S.D	02/02/23 13:06	
LCS	BLA0685-BS2	NT1003052308S.D	02/02/23 13:06	
LCS Dup	BLA0685-BSD2	NT1003052309S.D	02/02/23 13:06	
Reference	BLA0685-SRM2	NT1003052312S.D	02/02/23 13:06	



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0685

Prepared using: EPA 3546 (MicroWave)

8270E SVOC (20ug/kg solid or 0.2ug/L low H2O Sepf) in Solid (Version:AOCC4 List)

Matrix: Solid

Date Prepared: 2/2/23

Balance ID: B13929802

Set Up By: CRO 1/28/23

WO Comments
23A0313-08 A <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M><E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23A0326-01 A <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M><E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0313-08 A	56.1	17.95	(1:1)	1mL	1	0.5	
23A0313-09 A	52.3	19.42	(1:1)	1mL	1	0.5	
23A0313-10 A	54.1	18.53	(1:1)	1mL	1	0.5	
23A0313-11 A	58.7	17.95	(1:1)	1mL	1	0.5	
23A0313-13 A	84.7	11.80	(1:1)	1mL	1	0.5	
23A0326-01 A	59.0	12.67	(1:1)	1mL	1	0.5	
23A0326-02 A	57.3	17.56	(1:1)	1mL	1	0.5	
23A0326-04 A	51.6	19.34	(1:1)	1mL	1	0.5	
23A0326-05 A	54.6	18.67	(1:1)	1mL	1	0.5	
23A0326-10 A	54.6	18.88	(1:1)	1mL	1	0.5	
23A0326-11 A	52.6	19.88	(1:1)	1mL	1	0.5	
23A0326-12 A	51.4	20.14	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0685-BLKI	100.0	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0685-BSI	100.0	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0685-BSDI	100.0	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0685-MSI	84.7	11.80	(1:1)	1mL	1	0.5	Use 23A0313-13
BLA0685-MSDI	84.7	11.80	(1:1)	1mL	1	0.5	Use 23A0313-13
BLA0685-SRMI	100.0	10.00	(1:1)	1mL	1	0.5	Use K003477

+1g DI WATER

Client ID verified By: R

2/2/23

Date

Preparation Reviewed By: LS

2/15/23

Date

Extraction Date and Time

2/10/23 13:46



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0685

Prepared using: EPA 3546 (Microwave)

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

WQ Comments

23A0313: <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M><E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP <C><M>BPR PS, MS/MSD <M><E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36, K011477-79, MS/MSD <E>
<H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

Prep Steps

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: <i>VR</i> 2/12/23 Date: 2/12/23	
Anhydrous Sodium Sulfate	L0000759
1:1 Methylene Chloride/Acetone	L0000291
Methylene Chloride	L0000908
Pre-Deactivated Glass Wool	L0000257
Pre GPC KD Analyst: <i>WJ</i> Date: 2-10-23	
Pre-Deactivated Glass Wool	
Anhydrous Sodium Sulfate	
Methylene Chloride	L0000000
Hexane	W011277
GPC Filter Prep Analyst: <i>WKS</i> Date: 2/12/23	
Methylene Chloride	L0000808
Post GPC KD 80-85°C Analyst/Date: <i>W</i> 2-15	
Turbo Vap Analyst/Date: <i>W</i> 2-15	
Post GPC KD Analyst: <i>W</i> Date: 2-15-23	
Methylene Chloride	L0000800
Water Wash Analyst/Date: <i>W</i> 2/15/23	
Methylene Chloride	L0000808

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150ug/mL Exp Date: <i>5/9/23</i>	A K010466	50µL	<i>VR</i>	<i>W</i>
Full List Spike (Freezer) 100µg/mL Exp Date: <i>8/31/23</i>	7 K011369 (V) K011247	50µL	<i>VR</i>	<i>W</i>
Base Spike 200µg/mL Exp Date: <i>4/19/23</i>	56 K011369 (V) K003759	50µL	<i>VR</i>	<i>W</i>
Acid Spike 100/200µg/mL Exp Date: <i>4/19/23</i>	38 K011369 (V) K003760	50µL	<i>VR</i>	<i>W</i>

MANUALLY ENTER EXPIRATION DATES!

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

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

W
2-15



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0685

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0313: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)
 23A0326: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM 1006840-43, 7935-36,K011477-79, MS/MSD <E>
 <H>BPR 1006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

Prep Instructions

SPECIAL INSTRUCTIONS:

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

- A. Need Total Solids Y N
- B. Archive/Freeze N



Extraction Parameter: SWA Extraction Batch BA0685

Total Solids Batch: BLA1919 Work Order(s): 23A0312

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel) = <u>B.</u>	<u>NP 4/127/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared) = <u>41, 42, 45 = 41, 13</u>	<u>NP 4/127/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples) = <u>12/123</u>	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize) =	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass) =	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors = <u>Sulfur odor = 41, 42, 45 - 11, 13, 43, 44.</u>	<u>NP 4/127/23</u>
<input type="checkbox"/> Received in 32oz jar(s) = Homogenized in Pyrex dish =	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details) =	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color =	
<input type="checkbox"/> Particulates (%) = (Note: >5% = Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%) =	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors =	
<input type="checkbox"/> Other (Details) =	
<input type="checkbox"/> Received in 1.0L Bottle(s) = No Bottle Rinse =	
<input checked="" type="checkbox"/> Other Notes/Comments = (Note problems, concerns, corrective actions).	
<u>- 313 on stored on GPC over night lost 25 mL of the total</u>	
<u>75 mL (Carvone)</u>	
<u>Share Samples Y/N</u> <u>Y/N</u>	
<input checked="" type="checkbox"/> Multiple Jars Y/N <u>N</u>	
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity =	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen =	



Extraction Parameter: SWA Extraction Batch BLA0685

Total Solids Batch: BLA0378 Work Order(s): 23A0324

Screens:	Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)=	<u>φ7, φ8.</u>	<u>M φ1/27/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)=	<u>φ1-12</u>	<u>M φ1/27/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=		
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=		
<input type="checkbox"/> Rocks (%+size)?		
<input type="checkbox"/> Organics (Leaves/sticks/grass)=		
<input checked="" type="checkbox"/> Oily, obvious fuel(<u>sulfur odors</u>)=	<u>φ1-φ6, φ9-12.</u>	<u>M φ1/27/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=		
<input type="checkbox"/> Previously Frozen =		
<input type="checkbox"/> Other (Details)=		
AQUEOUS:		
<input checked="" type="checkbox"/> No Anomalies		
<input type="checkbox"/> Turbid/Color=		
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)		
<input type="checkbox"/> Emulsions (%)=		
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=		
<input type="checkbox"/> Other (Details)=		
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=		
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).		
<input checked="" type="checkbox"/> Share Samples Y/N	<u>Y</u>	<u>M φ1/27/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y/N	<u>Y</u>	<u>M φ1/27/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=		
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=		



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0043

Cleanup Type: GPC

Cleanup Method: EPA 3640A GPC Cleanup 1:1

Analysis: EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1181	23A0326-08	N823020631.D	02/06/2023	
LDW23-IT1127	23A0326-09	N823020632.D	02/06/2023	
LCS	BLA0683-BS1	N823020609.D	02/06/2023	
LCS Dup	BLA0683-BSD1	N823020610.D	02/06/2023	
Reference	BLA0683-SRM1	N823020611.D	02/06/2023	
Blank	BLA0683-BLK1	N823020608.D	02/06/2023	



CLEANUP BENCH SHEET

CLB0043

Matrix: Solid

Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1

Check Standard: CLA0166-GPC1

Printed: 2/6/2023 3:58:25PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0207-01	A	LDW23-IT1088	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-02	A	LDW23-IT1089	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-03	A	LDW23-IT1079	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-04	A	LDW23-IT1080	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-05	A	LDW23-IT1080-FD	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-06	A	LDW23-IT1072	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-07	A	LDW23-IT1081	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-08	A	LDW23-IT1068	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-09	A	LDW23-IT1062	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-15	A	LDW23-IT1078	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-16	A	LDW23-IT1201	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-17	A	LDW23-IT1209	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0249-07	A	LDW23-IT1034	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0295-08	A	LDW23-IT1027	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0313-03	A	LDW23-IT1114	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0313-04	A	LDW23-IT1120	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0313-12	A	LDW23-IT1148	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0326-08	A	LDW23-IT1181	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0326-09	A	LDW23-IT1127	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
BLA0683-BLK1	-	Blank	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BS1	-	LCS	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BSD1	-	LCS Dup	-	0.5	0.5	-	2/6/2023	CTO	



CLEANUP BENCH SHEET

CLB0043

Matrix: Solid

Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1

Check Standard: CLA0166-GPC1

Printed: 2/6/2023 3:58:25PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0683-MS1	-	Matrix Spike	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-SRM1	-	Reference	-	0.5	0.5	-	2/6/2023	CTO	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0044

Cleanup Type: Silica Gel

Cleanup Method: EPA 3630C Silica Gel Cleanup - uL

Analysis: EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1181	23A0326-08	N823020631.D	02/06/2023	
LDW23-IT1127	23A0326-09	N823020632.D	02/06/2023	
Blank	BLA0683-BLK1	N823020608.D	02/06/2023	
LCS	BLA0683-BS1	N823020609.D	02/06/2023	
LCS Dup	BLA0683-BSD1	N823020610.D	02/06/2023	
Reference	BLA0683-SRM1	N823020611.D	02/06/2023	



CLEANUP BENCH SHEET

CLB0044

Matrix: Solid Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/6/2023 3:58:56PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0207-01	A	LDW23-IT1088	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-02	A	LDW23-IT1089	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-03	A	LDW23-IT1079	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-04	A	LDW23-IT1080	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-05	A	LDW23-IT1080-FD	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-06	A	LDW23-IT1072	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-07	A	LDW23-IT1081	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-08	A	LDW23-IT1068	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-09	A	LDW23-IT1062	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-15	A	LDW23-IT1078	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-16	A	LDW23-IT1201	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0207-17	A	LDW23-IT1209	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0249-07	A	LDW23-IT1034	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0295-08	A	LDW23-IT1027	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0313-03	A	LDW23-IT1114	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0313-04	A	LDW23-IT1120	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0313-12	A	LDW23-IT1148	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0326-08	A	LDW23-IT1181	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
23A0326-09	A	LDW23-IT1127	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg)	2/6/2023	CTO	
BLA0683-BLK1	-	Blank	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BS1	-	LCS	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BSD1	-	LCS Dup	-	0.5	0.5	-	2/6/2023	CTO	



CLEANUP BENCH SHEET

CLB0044

Matrix: Solid Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/6/2023 3:58:56PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0683-MS1	-	Matrix Spike	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-SRM1	-	Reference	-	0.5	0.5	-	2/6/2023	CTO	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0136

Cleanup Type: GPC

Cleanup Method: EPA 3640A GPC Cleanup 1:1

Analysis: EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1169C	23A0326-05	NT1003052331S.D	02/15/2023	
Reference	BLA0685-SRM2	NT1003052312S.D	02/15/2023	
LDW23-SC1028	23A0326-01	NT1003052323S.D	02/15/2023	
LDW23-SC1032	23A0326-02	NT1003052324S.D	02/15/2023	
LDW23-SC1155	23A0326-11	NT1003052333S.D	02/15/2023	
LDW23-SC1162B	23A0326-12	NT1003052334S.D	02/15/2023	
LDW23-SC1170A	23A0326-04	NT1003052330S.D	02/15/2023	
Blank	BLA0685-BLK2	NT1003052307S.D	02/15/2023	
LCS Dup	BLA0685-BSD2	NT1003052309S.D	02/15/2023	
LDW23-SC1161	23A0326-10	NT1003052332S.D	02/15/2023	
LCS	BLA0685-BS2	NT1003052308S.D	02/15/2023	



CLEANUP BENCH SHEET

CLB0136

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLA0166-GPC1 Printed: 2/15/2023 2:29:55PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0313-08	A	LDW23-SC1016A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-08	A	LDW23-SC1016A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-09	A	LDW23-SC1011A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-09	A	LDW23-SC1011A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-10	A	LDW23-SC1006A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-10	A	LDW23-SC1006A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-11	A	LDW23-SC1012B	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-11	A	LDW23-SC1012B	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0313-13	A	LDW23-SC1159	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0313-13	A	LDW23-SC1159	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-01	A	LDW23-SC1028	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-01	A	LDW23-SC1028	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-02	A	LDW23-SC1032	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-02	A	LDW23-SC1032	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-04	A	LDW23-SC1170A	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-04	A	LDW23-SC1170A	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-05	A	LDW23-SC1169C	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-05	A	LDW23-SC1169C	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-10	A	LDW23-SC1161	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-10	A	LDW23-SC1161	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-11	A	LDW23-SC1155	A 01	1	1	VOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
23A0326-11	A	LDW23-SC1155	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	



CLEANUP BENCH SHEET

CLB0136

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLA0166-GPC1 Printed: 2/15/2023 2:29:55PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0326-12	A	LDW23-SC1162B	A 04	1	1	8270E-SIM Dual Scan SVOC	2/15/2023	LMJ	
23A0326-12	A	LDW23-SC1162B	A 01	1	1	SVOC (20ug/kg solid or 0.2ug/L low H ₂	2/15/2023	LMJ	
BLA0685-BLK1	-	Blank	-	1	1	-	2/15/2023	LMJ	
BLA0685-BLK2	-	Blank	-	1	1	-	2/15/2023	LMJ	
BLA0685-BS1	-	LCS	-	1	1	-	2/15/2023	LMJ	
BLA0685-BS2	-	LCS	-	1	1	-	2/15/2023	LMJ	
BLA0685-BSD1	-	LCS Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-BSD2	-	LCS Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-MS1	-	Matrix Spike	-	1	1	-	2/15/2023	LMJ	
BLA0685-MS2	-	Matrix Spike	-	1	1	-	2/15/2023	LMJ	
BLA0685-MSD1	-	Matrix Spike Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-MSD2	-	Matrix Spike Dup	-	1	1	-	2/15/2023	LMJ	
BLA0685-SRM1	-	Reference	-	1	1	-	2/15/2023	LMJ	
BLA0685-SRM2	-	Reference	-	1	1	-	2/15/2023	LMJ	



Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLA0683-BLK1</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/01/23 11:29</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLA0683</u>	Sequence:	<u>SLB0075</u>
Instrument:	<u>NT8</u>	Column:	<u>RXI-17Sil ms</u>
		Cleanups:	<u>GPC, Silica Gel</u>
		File ID:	<u>N823020608.D</u>
		Analyzed:	<u>02/06/23 15:57</u>
		Initial/Final:	<u>10 g / 0.5 mL</u>
		Calibration:	<u>GA00050</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	5.00	U	0.82	5.00
218-01-9	Chrysene	1	5.00	U	1.05	5.00
205-99-2	Benzo(b)fluoranthene	1	5.00	U	1.37	5.00
207-08-9	Benzo(k)fluoranthene	1	5.00	U	0.76	5.00
50-32-8	Benzo(a)pyrene	1	5.00	U	0.61	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	1	5.00	U	1.05	5.00
53-70-3	Dibenzo(a,h)anthracene	1	5.00	U	0.89	5.00

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	150.00	125	83.2	32 - 120	
Dibenzo[a,h]anthracene-d14	150.00	232	154	21 - 133	*
Fluoranthene-d10	150.00	149	99.4	36 - 134	

Data File: \\target\share\chem3\nt8.1\20230206A.b\N823020608.D

Date: 06-FEB-2023 15:57

Client ID:

Sample Info: BLR0683-BLK1,

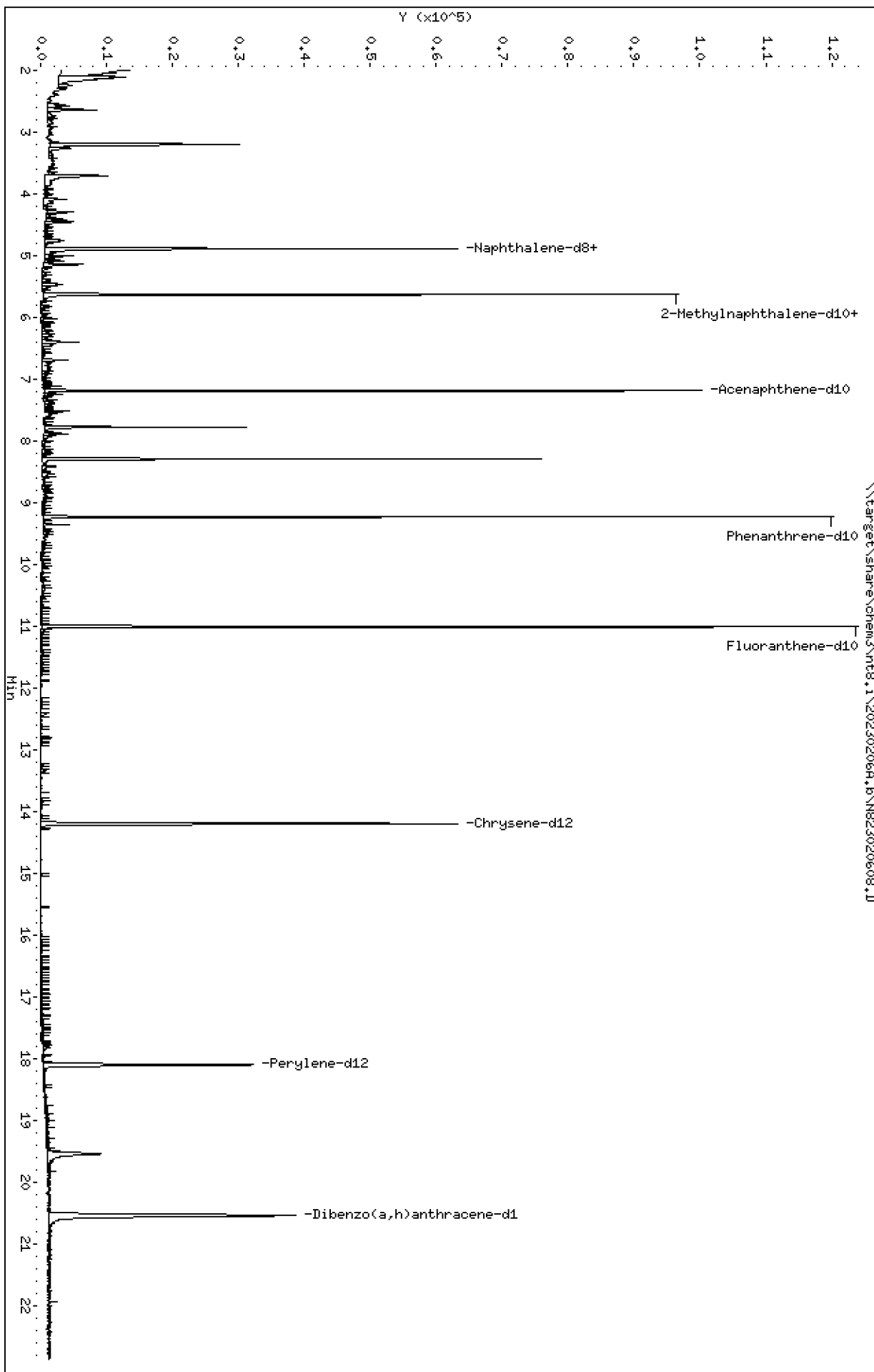
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

\\target\share\chem3\nt8.1\20230206A.b\N823020608.D



Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

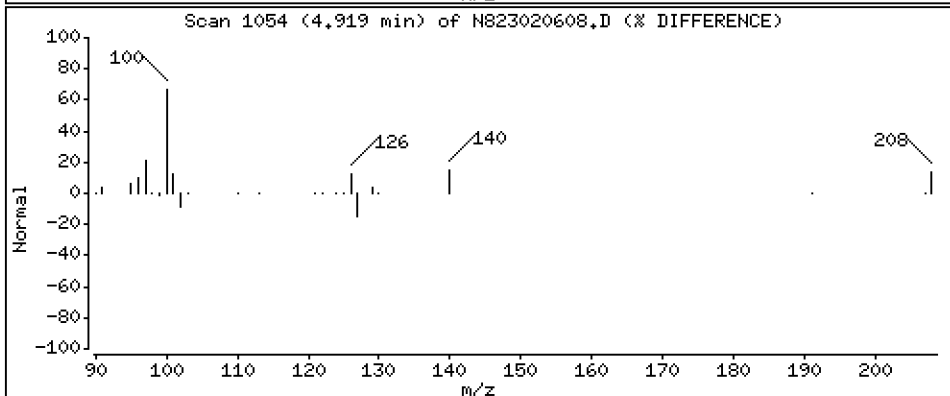
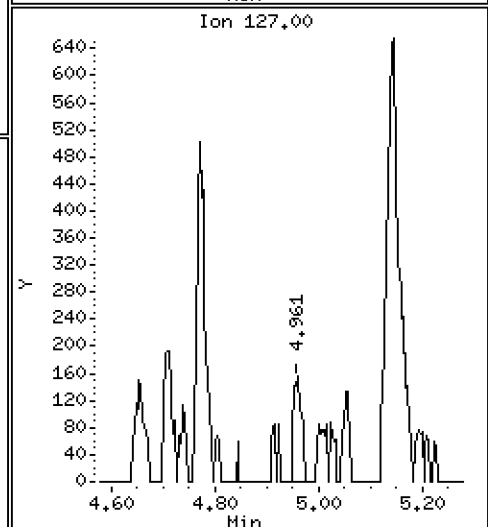
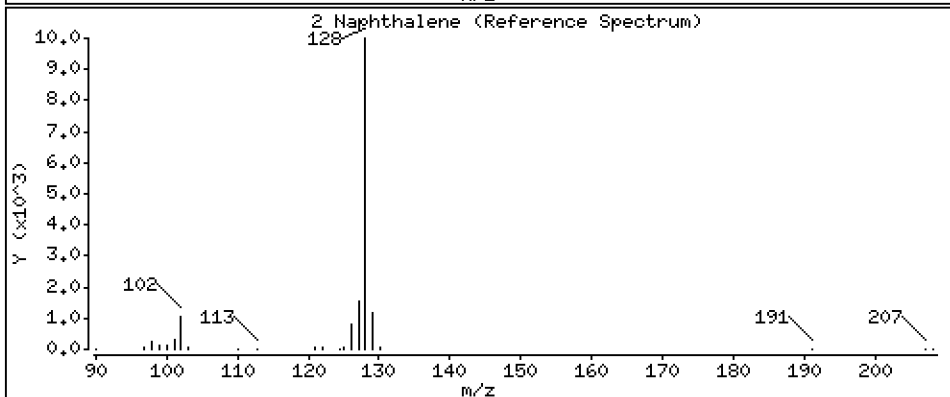
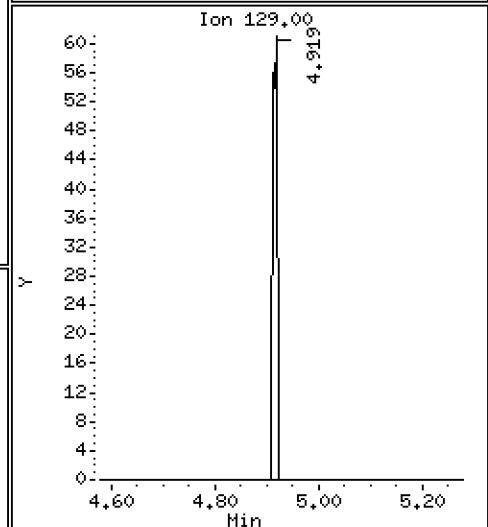
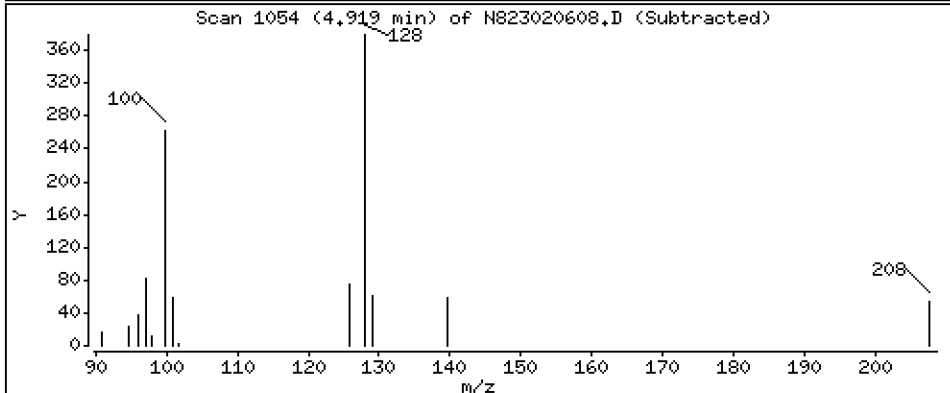
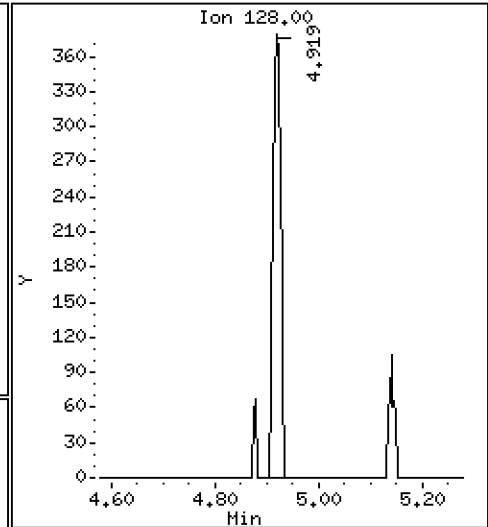
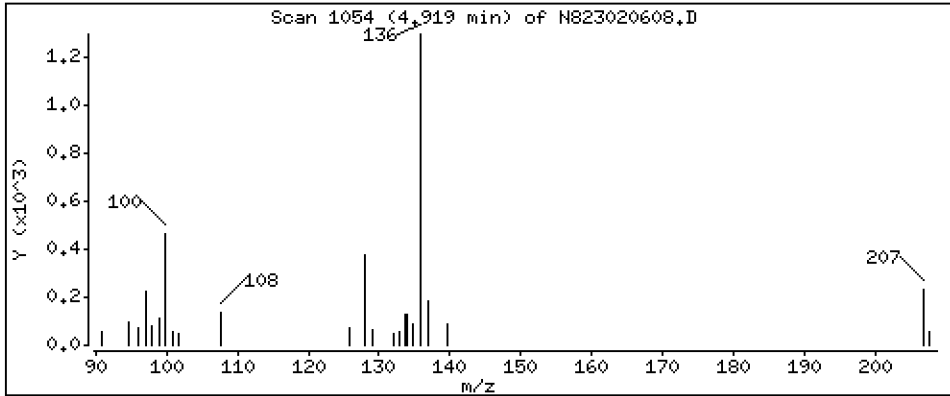
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

2 Naphthalene

Concentration: 0,01704 ug/mL



Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

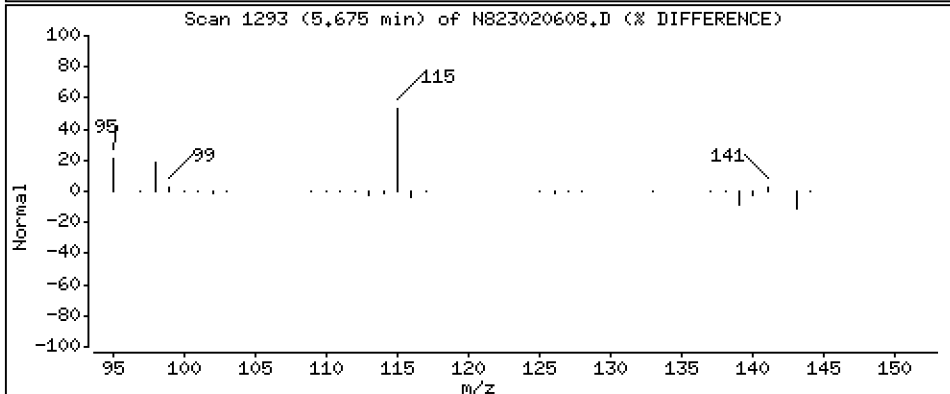
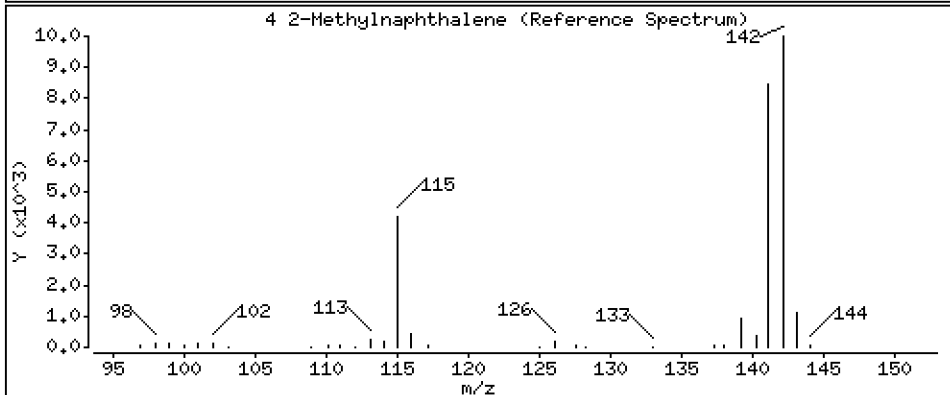
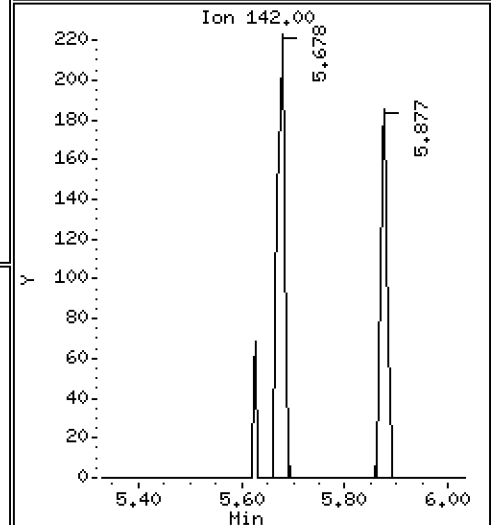
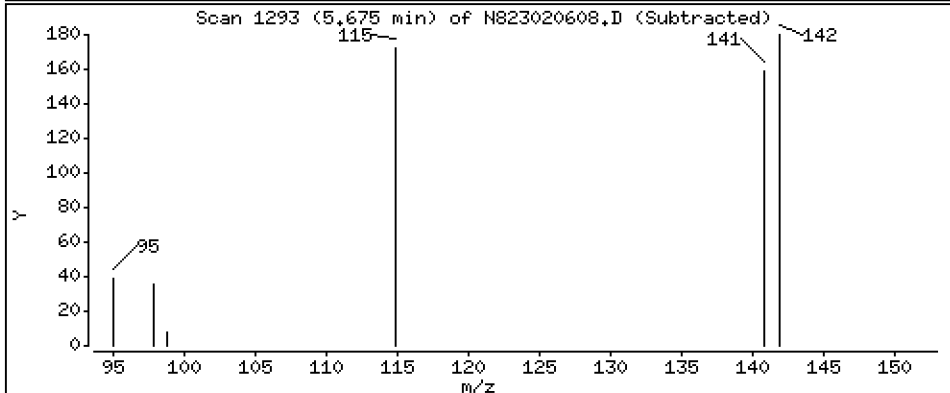
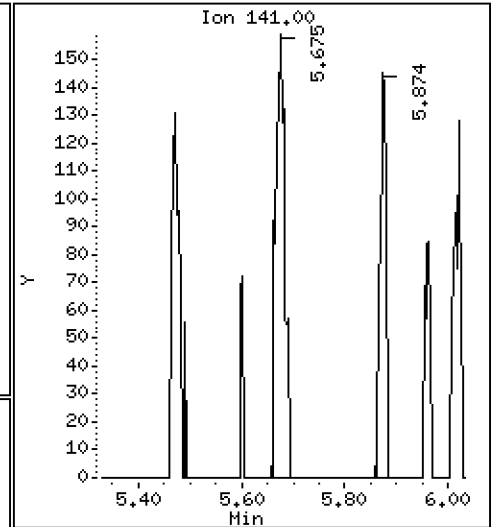
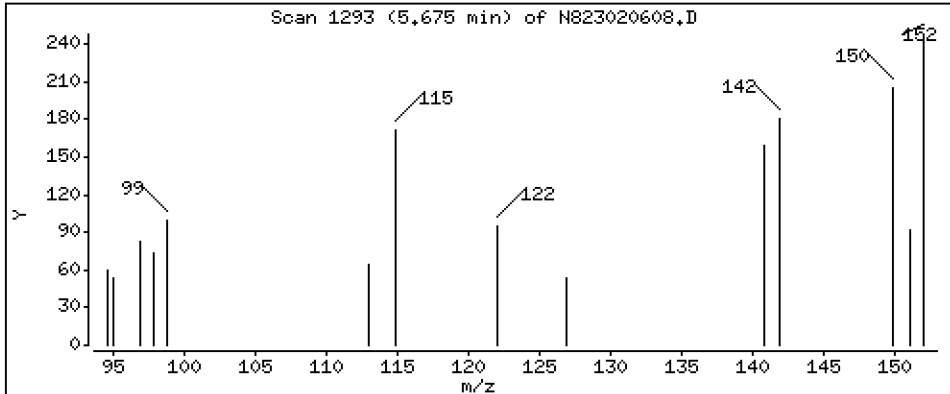
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

4 2-Methylnaphthalene

Concentration: 0,01541 ug/mL



Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

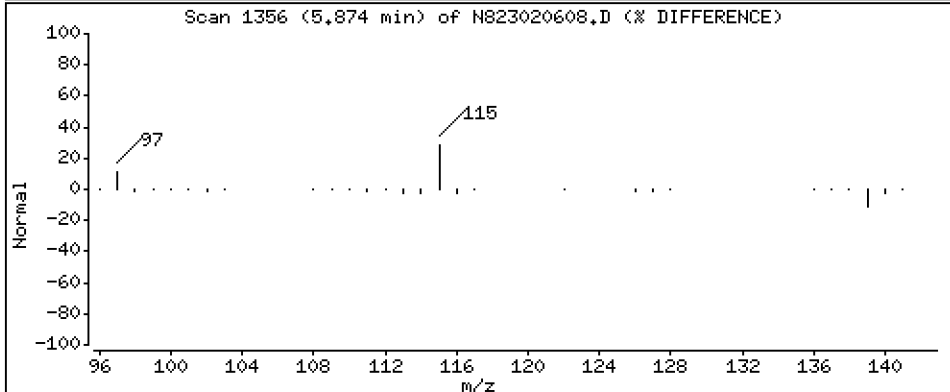
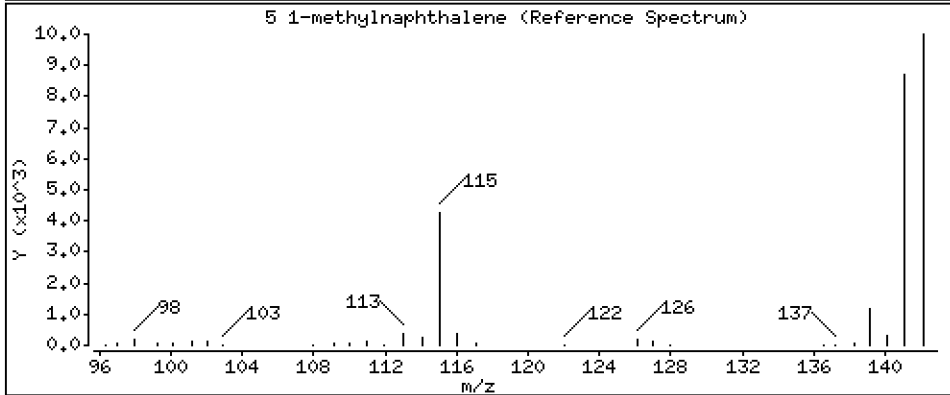
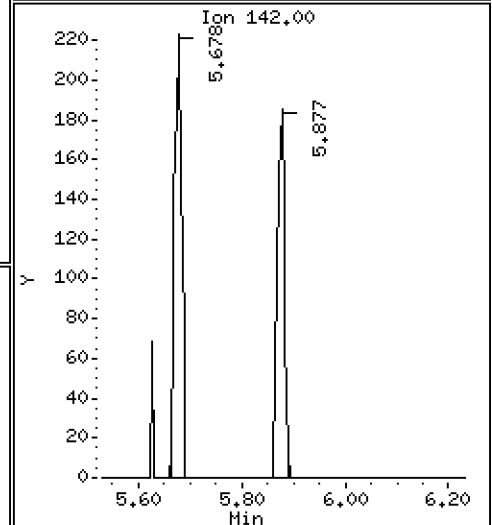
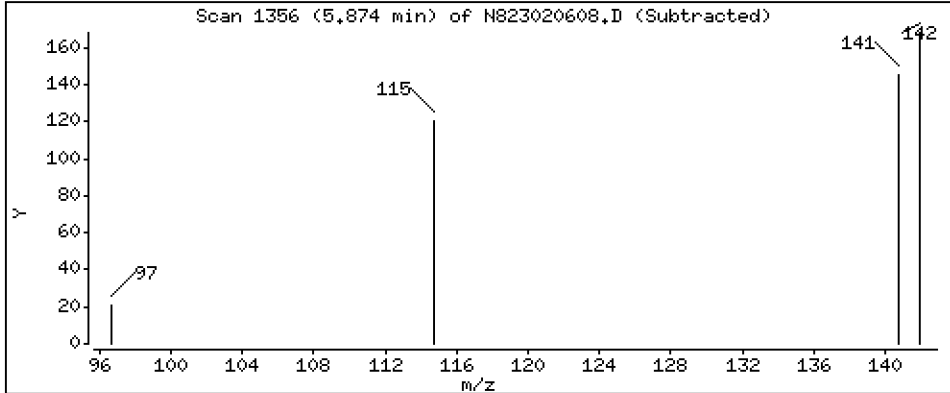
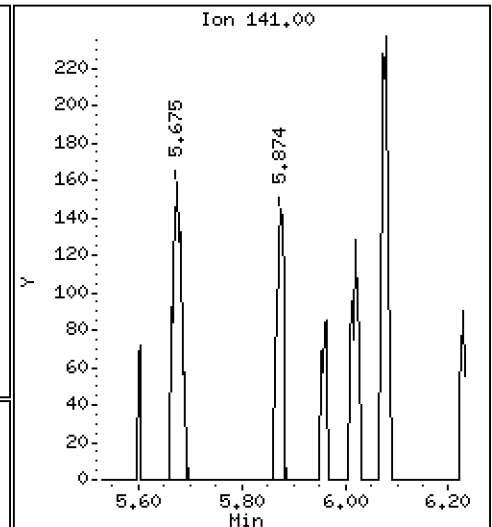
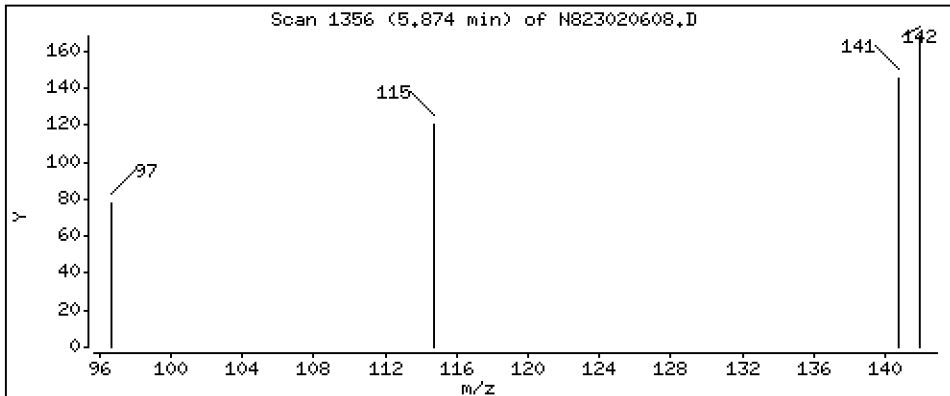
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

5 1-methylnaphthalene

Concentration: 0,009910 ug/mL



Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

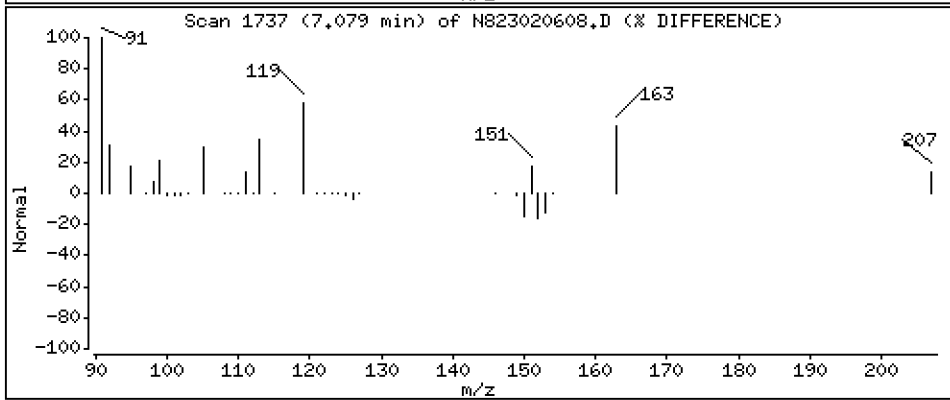
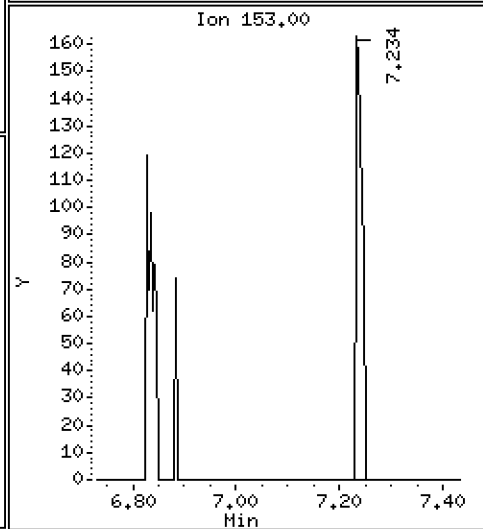
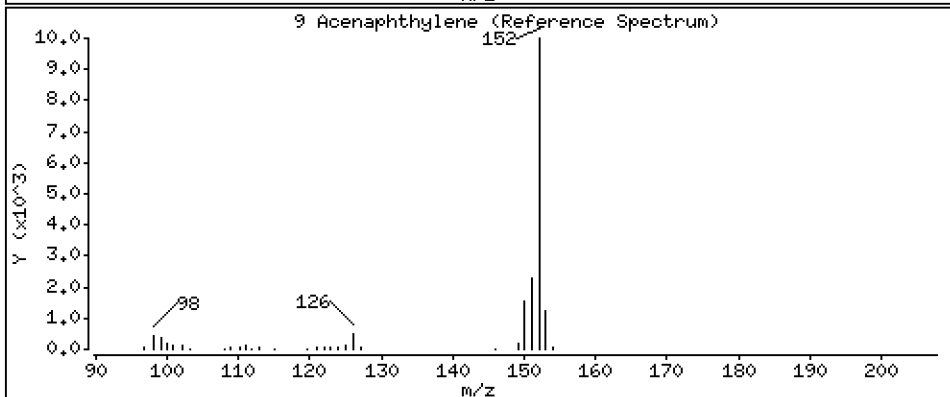
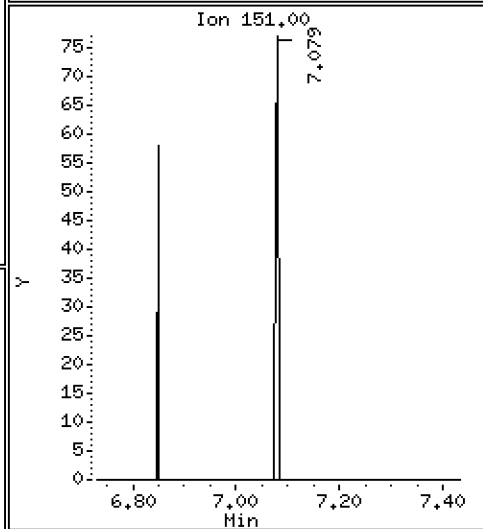
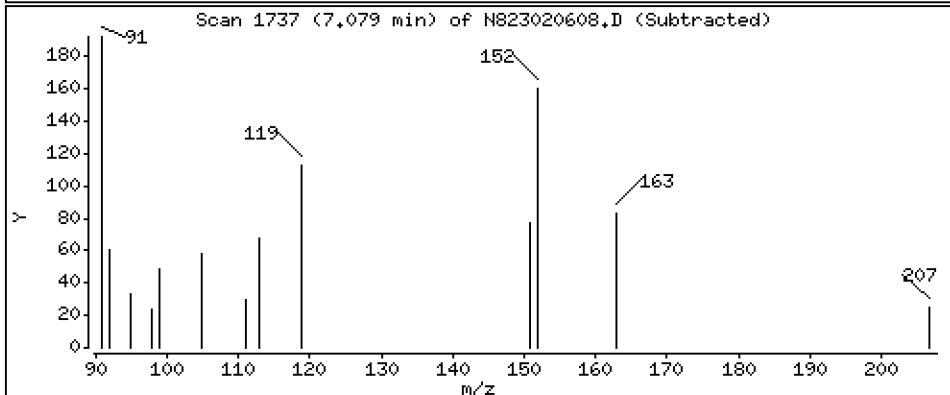
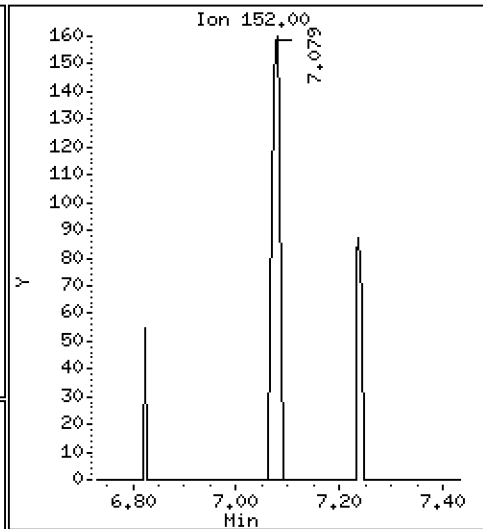
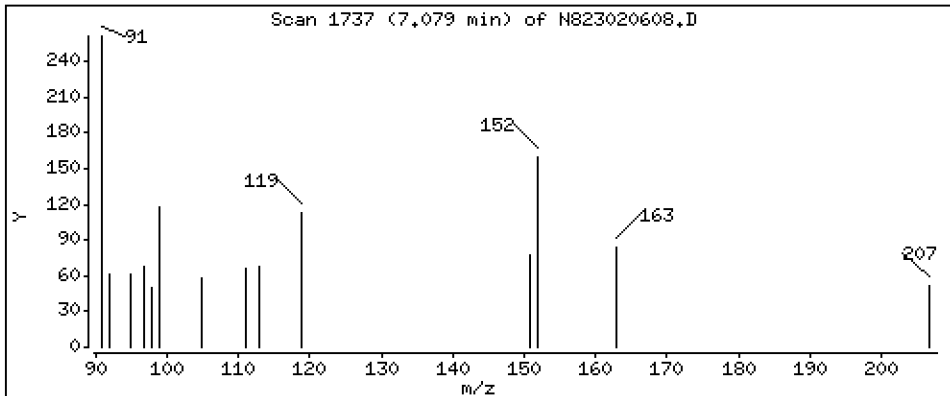
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 0,008068 ug/mL



Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

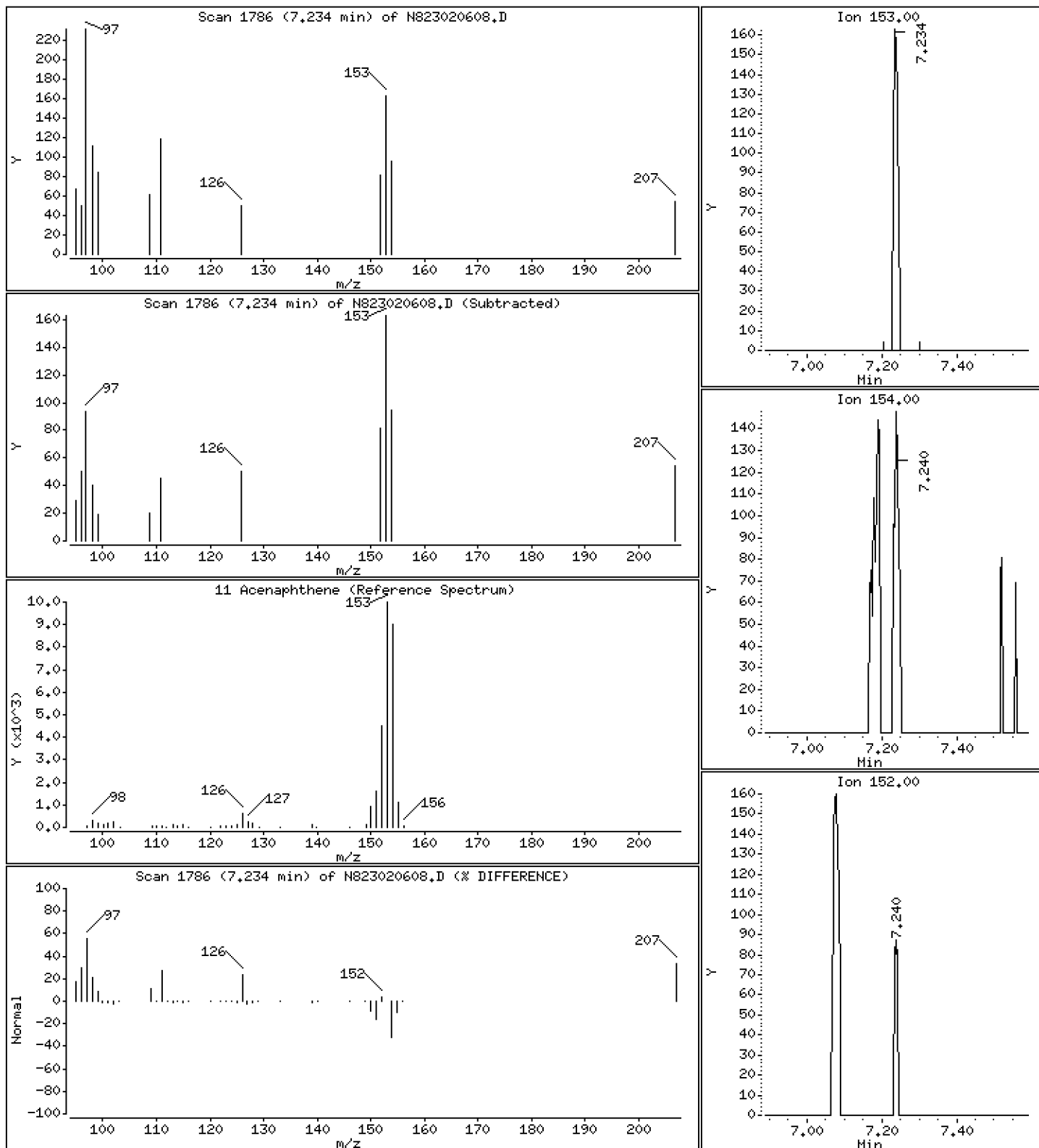
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

11 Acenaphthene

Concentration: 0,009619 ug/mL



Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

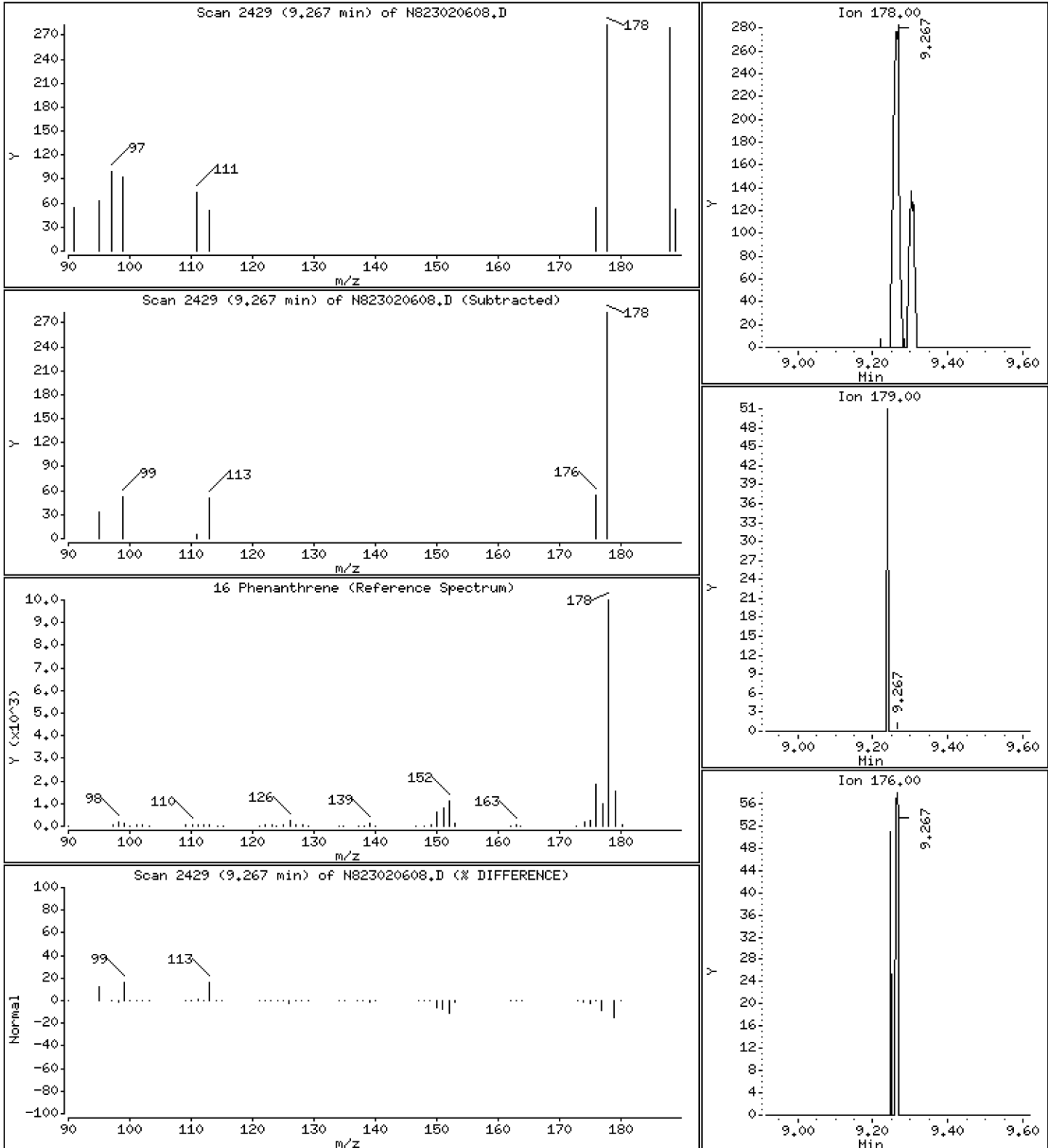
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

16 Phenanthrene

Concentration: 0,01235 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020608.D
 Lab Smp Id: BLA0683-BLK1
 Inj Date : 06-FEB-2023 15:57
 Operator : JZ Inst ID: nt8.i
 Smp Info : BLA0683-BLK1,
 Misc Info : 23-
 Comment : 1ul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PNAXMDL.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
* 1 Naphthalene-d8	136		4.890	4.900	(1.000)	48985	2.00000	
2 Naphthalene	128		4.919	4.928	(1.006)	388	0.01704	0.01704
\$ 3 2-Methylnaphthalene-d10	152		5.627	5.634	(1.151)	33328	2.49472	2.495
4 2-Methylnaphthalene	141		5.675	5.681	(1.160)	193	0.01541	0.01541
5 1-methylnaphthalene	141		5.874	5.880	(1.201)	126	0.00991	0.009910
9 Acenaphthylene	152		7.079	7.082	(0.985)	174	0.00807	0.008068
* 10 Acenaphthene-d10	164		7.189	7.189	(1.000)	28561	2.00000	
11 Acenaphthene	153		7.233	7.240	(1.006)	139	0.00962	0.009619 (M)
12 Dibenzofuran	168		Compound Not Detected.					
14 Fluorene	166		Compound Not Detected.					
* 15 Phenanthrene-d10	188		9.229	9.232	(1.000)	52393	2.00000	
16 Phenanthrene	178		9.267	9.267	(1.004)	316	0.01235	0.01235 (M)
17 Anthracene	178		Compound Not Detected.					
19 Carbazole	167		Compound Not Detected.					
22 Fluoranthene	202		Compound Not Detected.					
\$ 21 Fluoranthene-d10	212		11.009	11.009	(1.193)	68900	2.98067	2.981
23 Pyrene	202		Compound Not Detected.					
24 Benzo(a)anthracene	228		Compound Not Detected.					
* 25 Chrysene-d12	240		14.196	14.202	(1.000)	40654	2.00000	
27 Chrysene	228		Compound Not Detected.					
28 Benzo(b)fluoranthene	252		Compound Not Detected.					
29 Benzo(k)fluoranthene	252		Compound Not Detected.					
30 Benzo(j)fluoranthene	252		Compound Not Detected.					
31 Total Benzofluoranthenes	252		Compound Not Detected.					
32 Benzo(a)pyrene	252		Compound Not Detected.					
* 33 Perylene-d12	264		18.104	18.107	(1.000)	24723	2.00000	
35 Perylene	252		Compound Not Detected.					
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.545	20.549	(1.135)	44884	4.63342	4.633
37 Indeno(1,2,3-cd)pyrene	276		Compound Not Detected.					
38 Dibenzo(a,h)anthracene	278		Compound Not Detected.					
39 Benzo(g,h,i)perylene	276		Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020608.D Calibration Time: 15:15
 Lab Smp Id: BLA0683-BLK1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	48985	10.49
10 Acenaphthene-d10	26127	13064	52254	28561	9.32
15 Phenanthrene-d10	47424	23712	94848	52393	10.48
25 Chrysene-d12	36794	18397	73588	40654	10.49
33 Perylene-d12	36636	18318	73272	24723	-32.52

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.89	-0.19
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	0.00
15 Phenanthrene-d10	9.23	8.73	9.73	9.23	-0.03
25 Chrysene-d12	14.20	13.70	14.70	14.20	-0.04
33 Perylene-d12	18.11	17.61	18.61	18.10	-0.02

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

REVIEW SUMMARY FOR FILE - N823020608.D

Lab ID: BLA0683-BLK1

nt8.i, 20230206A.b\FSIMPNA230119.m,

06-FEB-2023 15:57

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

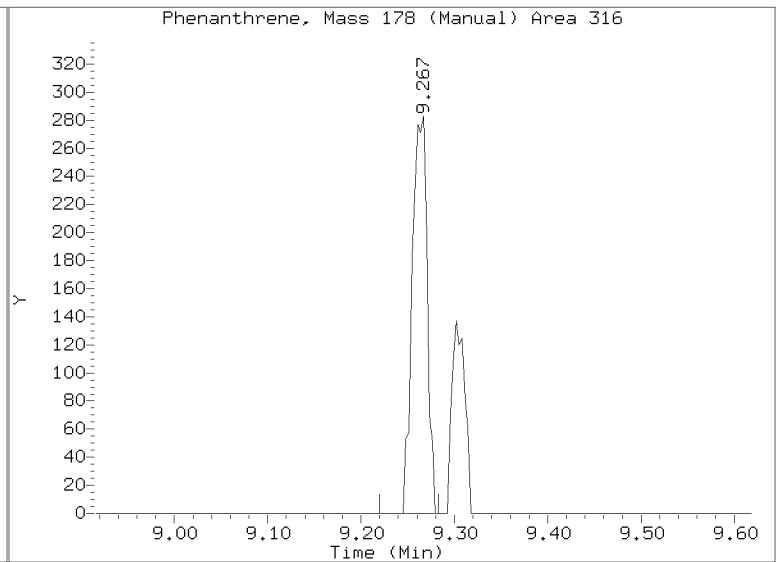
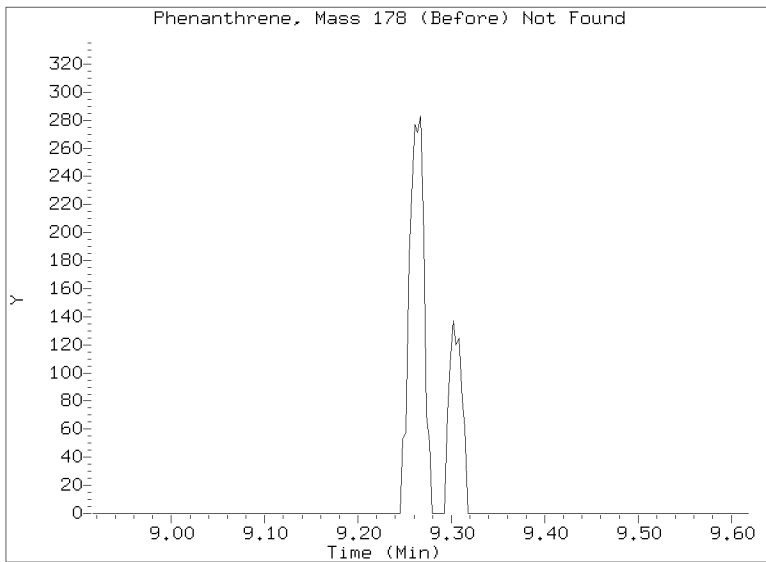
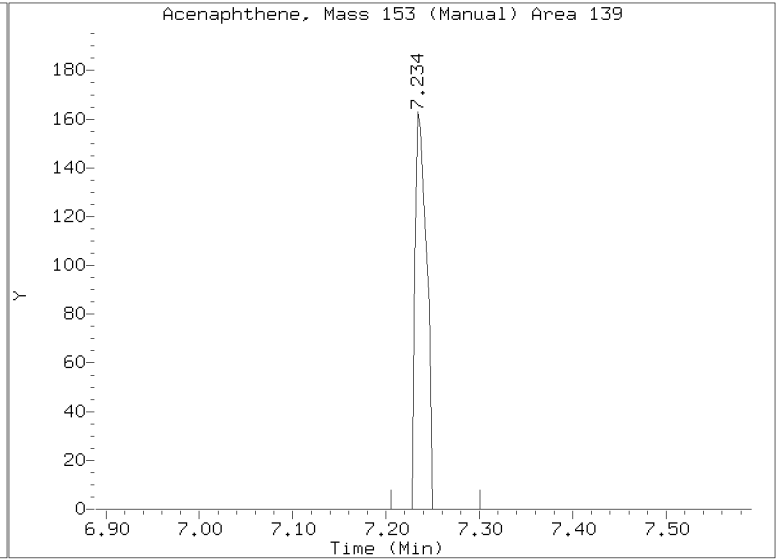
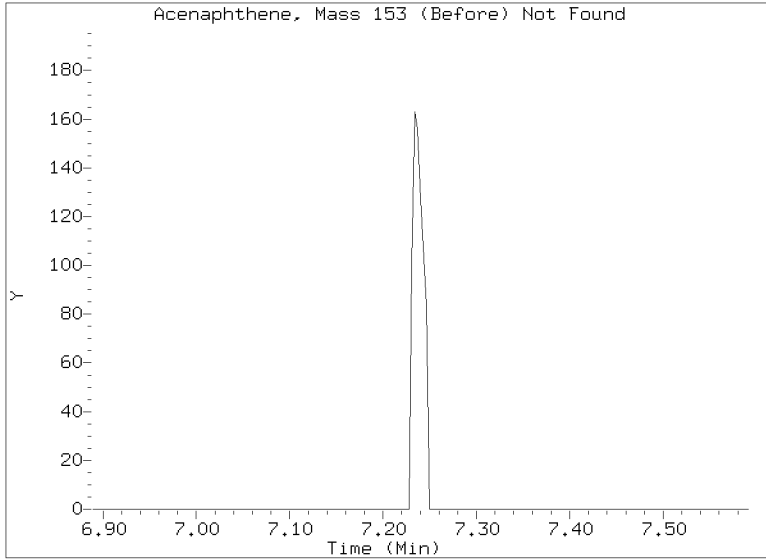
No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020608.D
Injection Date: 06-FEB-2023 15:57
Lab ID:BLA0683-BLK1 Client ID:
Report Date: 02/07/2023 13:19





Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLA0685-BLK2</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/02/23 13:06</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLA0685</u>	Sequence:	<u>SLC0435</u>
Instrument:	<u>NT10</u>	Column:	<u>ZB-5MSi</u>
		File ID:	<u>NT1003052307S.D</u>
		Analyzed:	<u>03/05/23 17:12</u>
		Initial/Final:	<u>10 g / 1 mL</u>
		Calibration:	<u>GC00032</u>
		Cleanups:	<u>GPC</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	0.8	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	17.3	J	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	469	62.5	27 - 120	
p-Terphenyl-d14	500.00	703	141	37 - 120	*

Data File: \\target\share\chem3\nt10.1\20230305.B\SIM.B\NT1003052307S.D

Date: 05-MAR-2023 17:12

Client ID:

Sample Info: BLR0685-BLK2

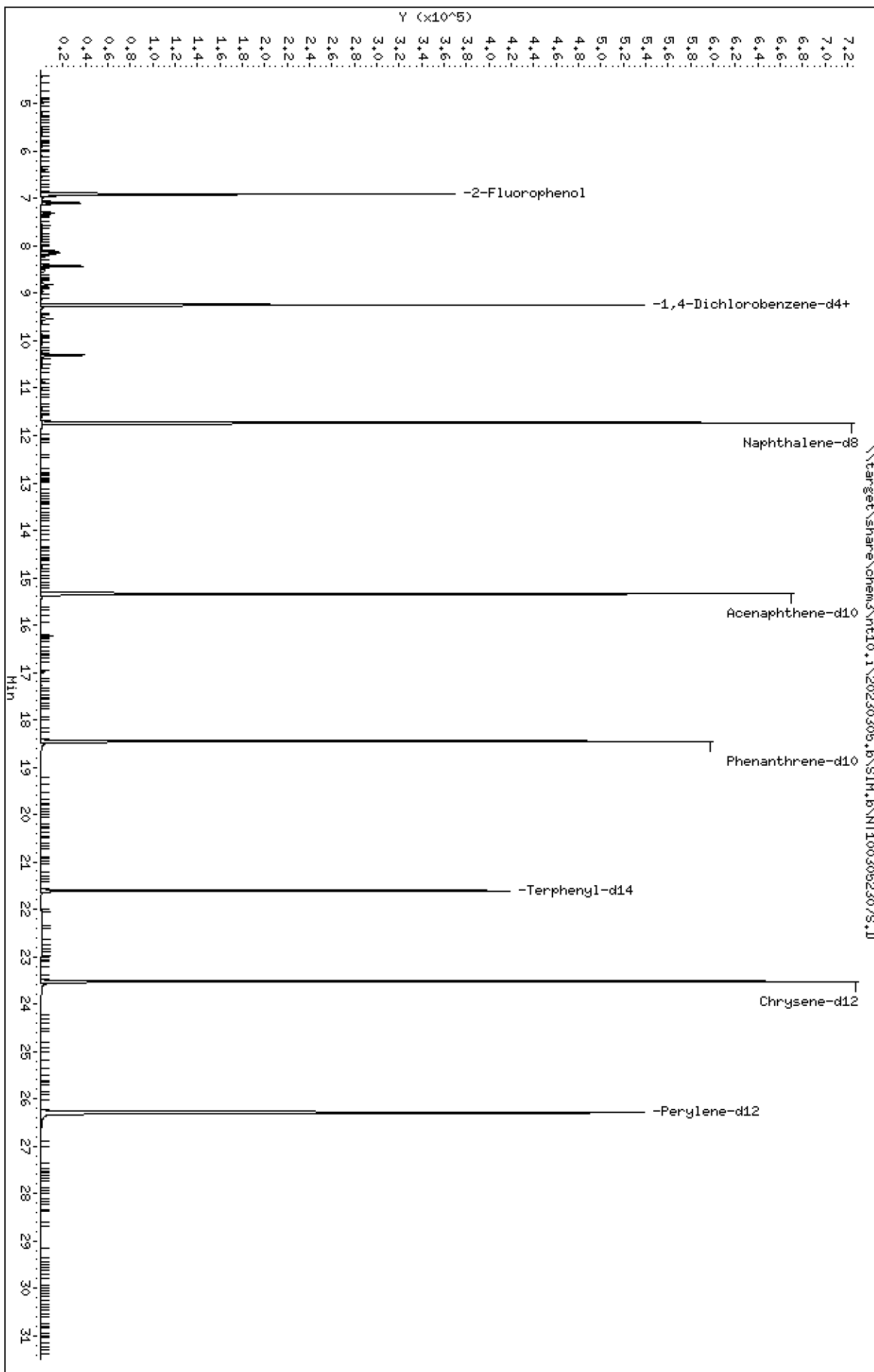
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

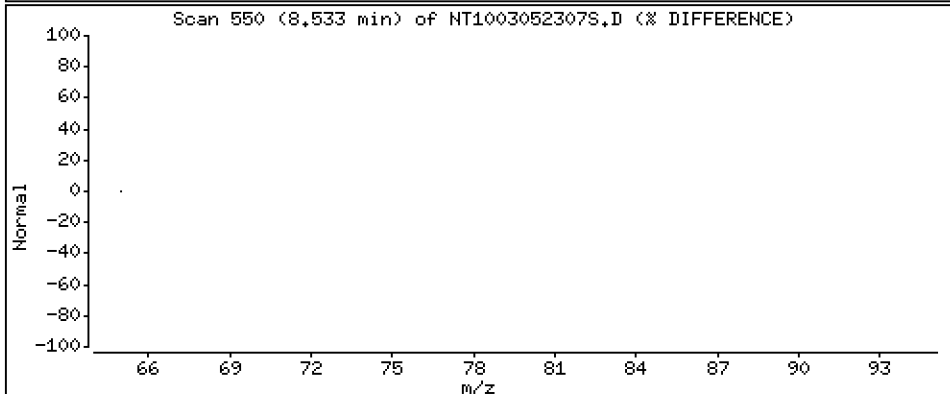
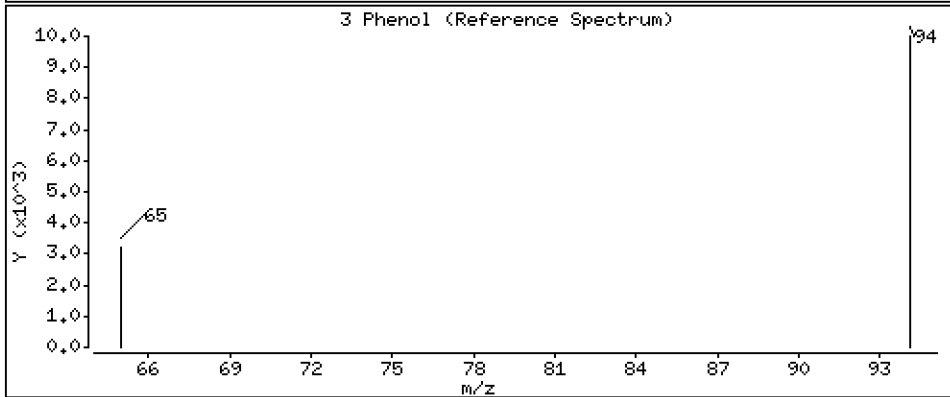
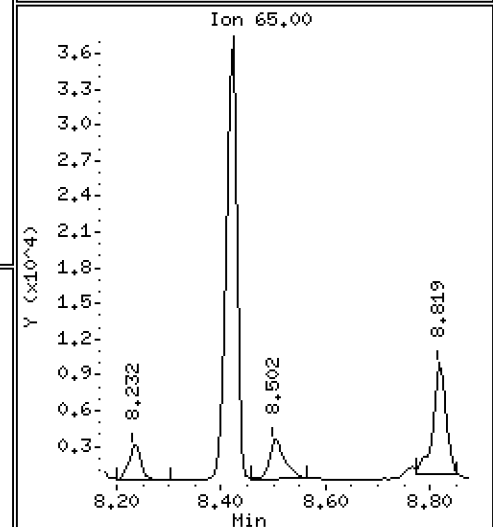
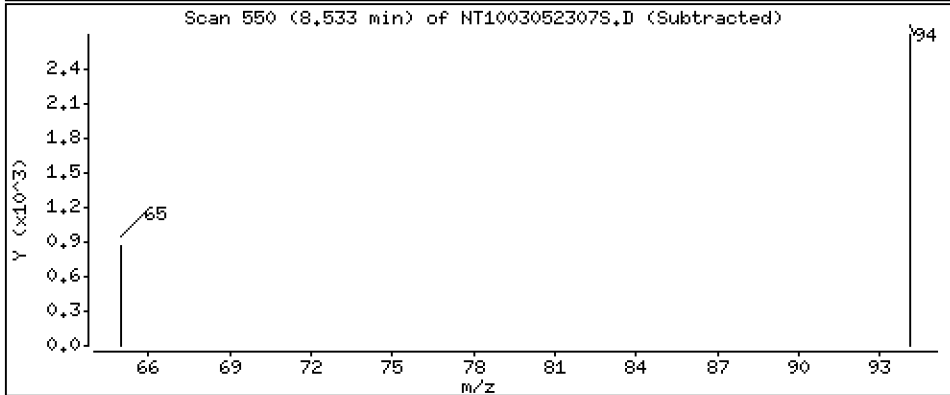
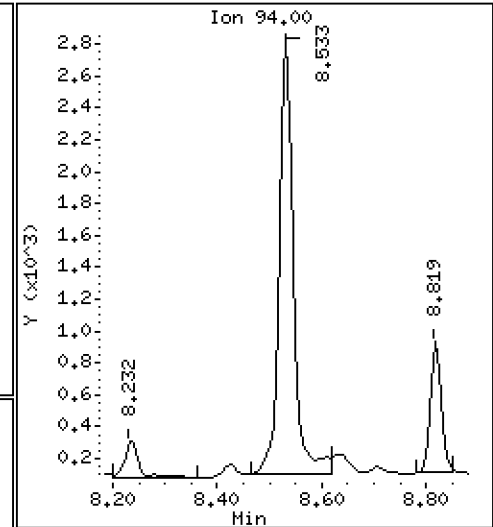
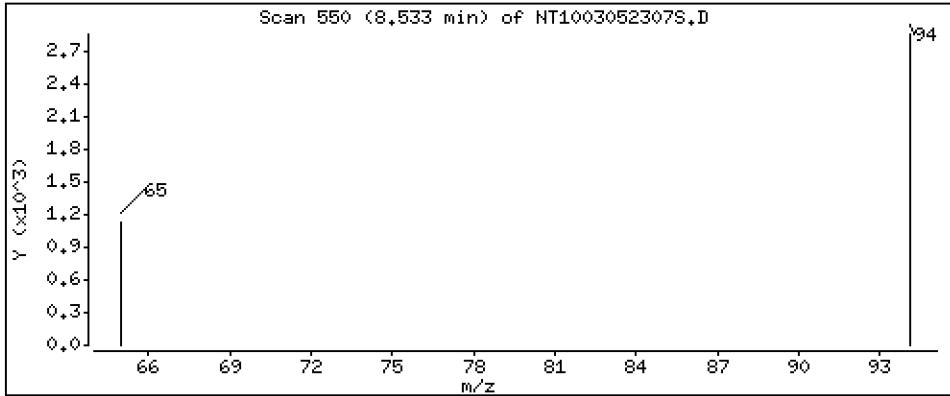
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,03792 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

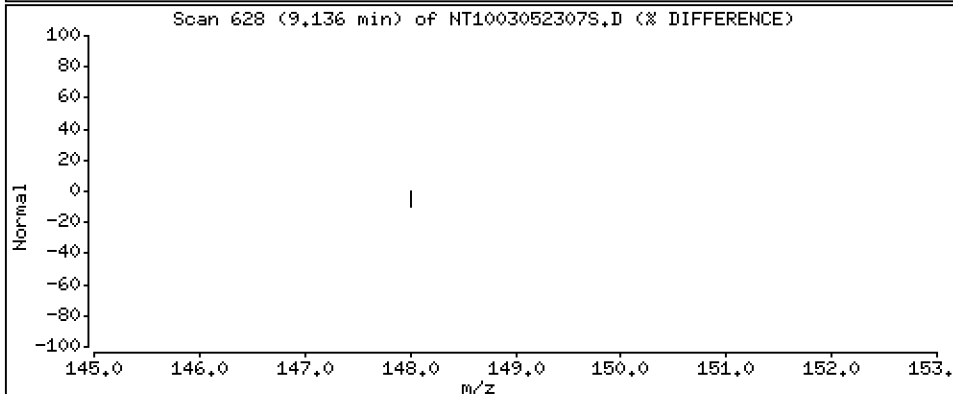
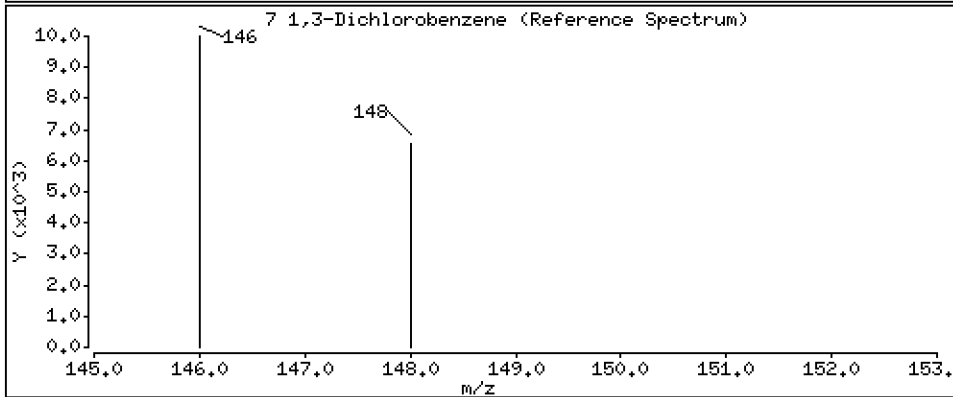
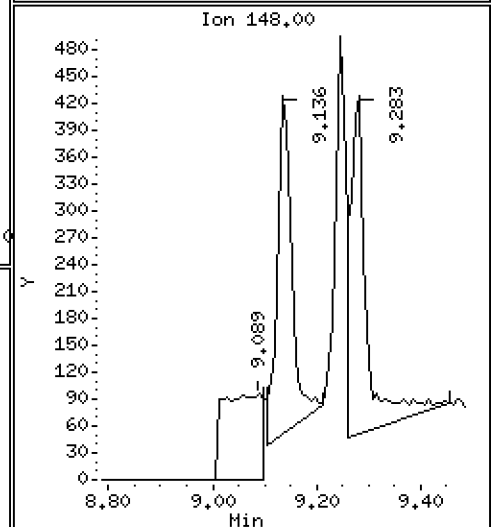
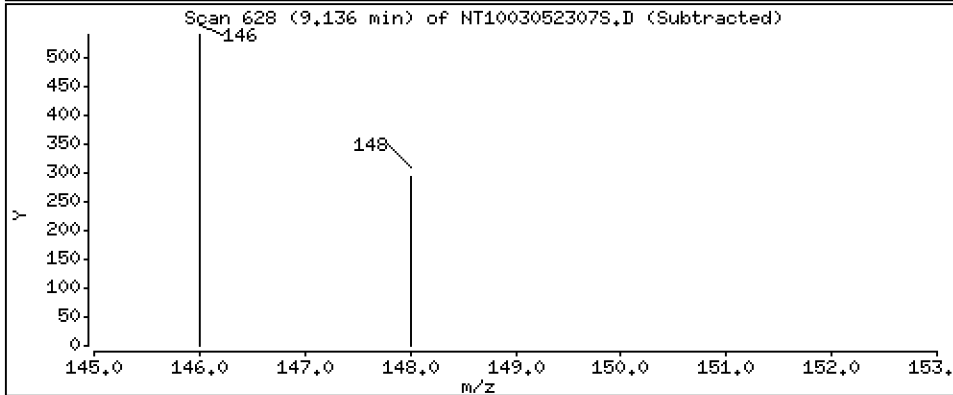
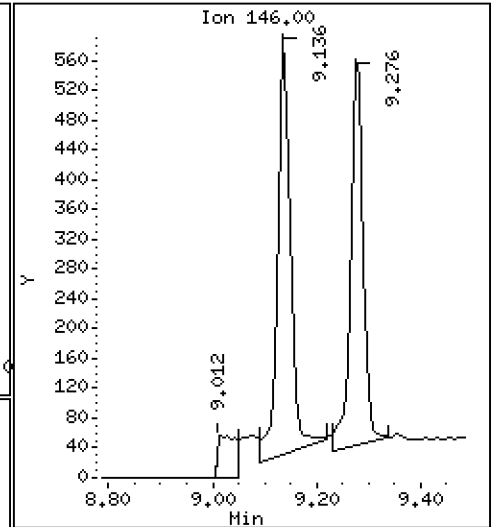
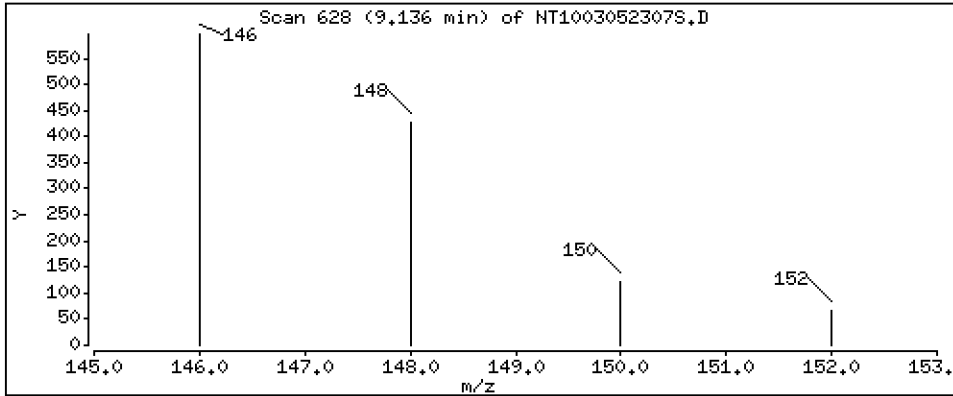
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,008131 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

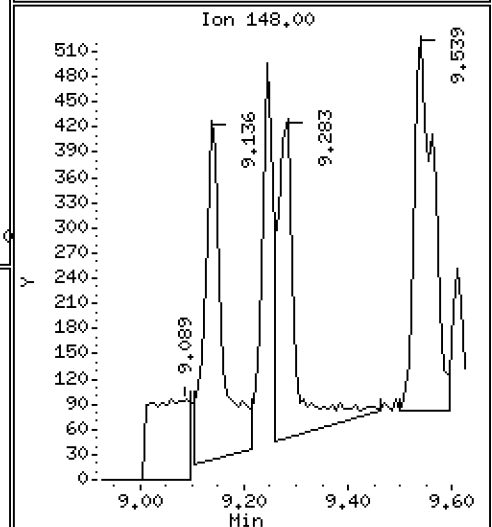
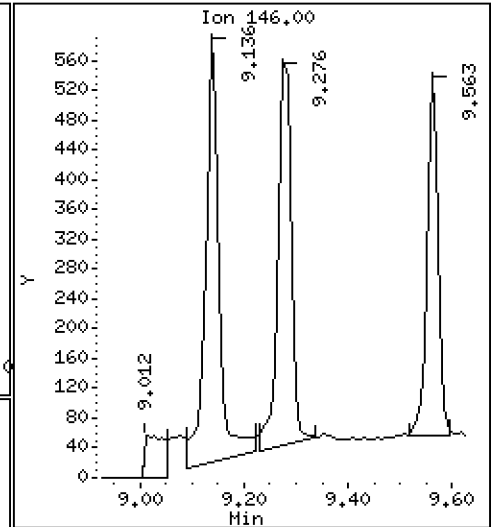
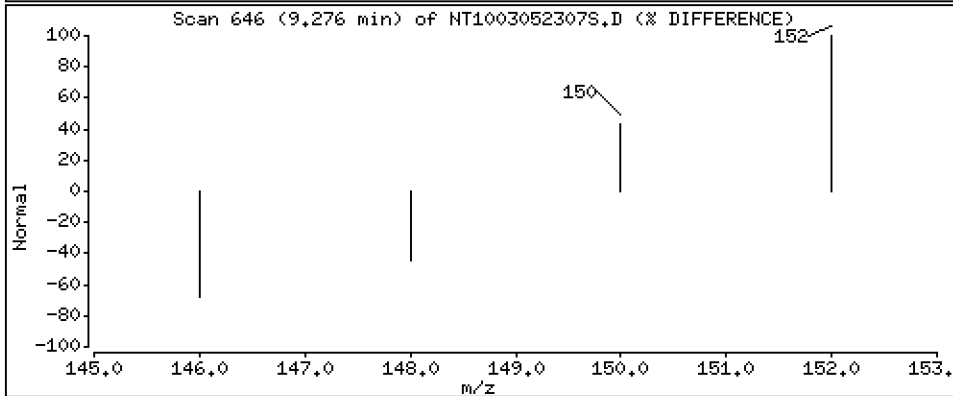
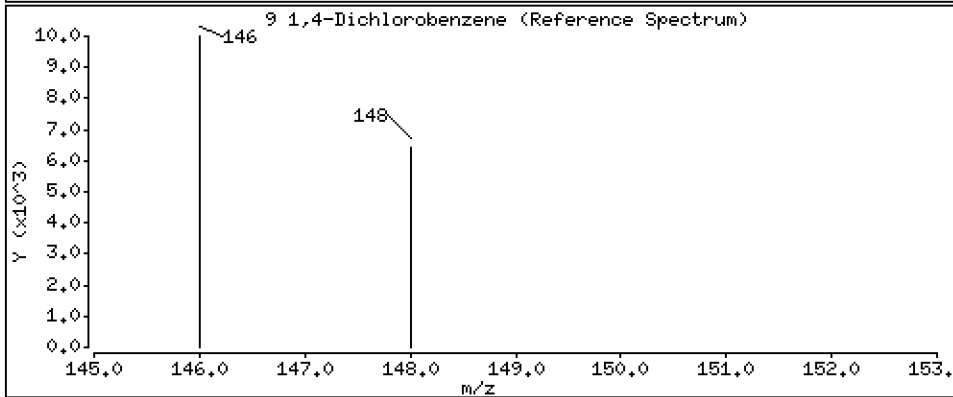
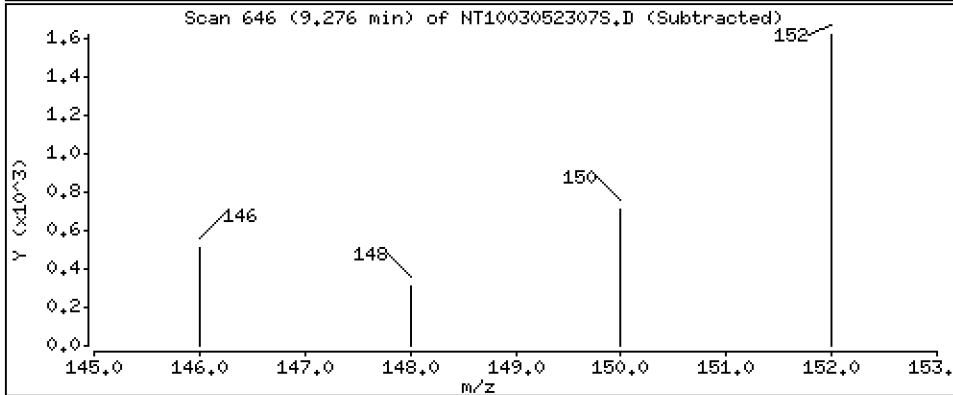
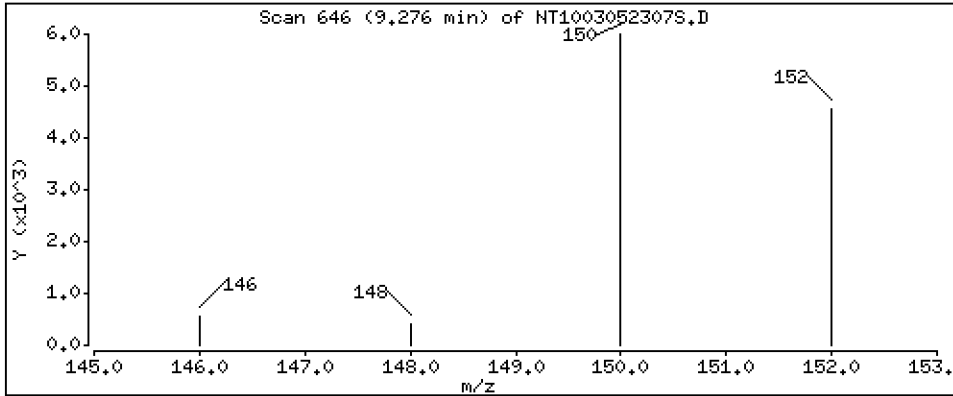
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,007877 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

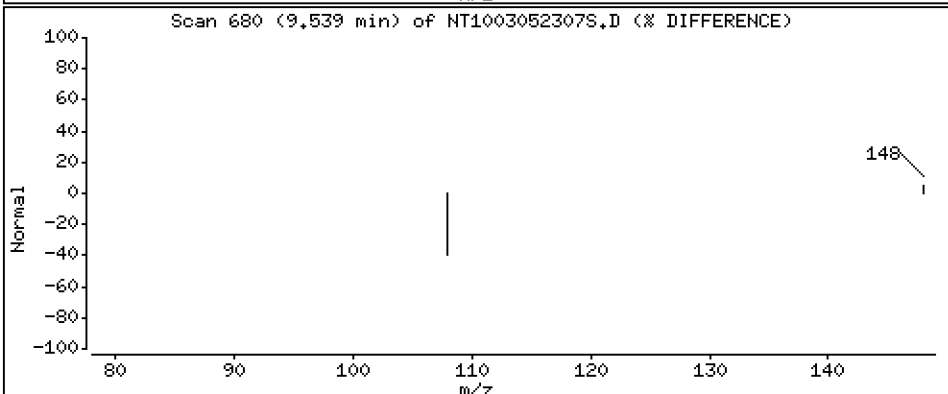
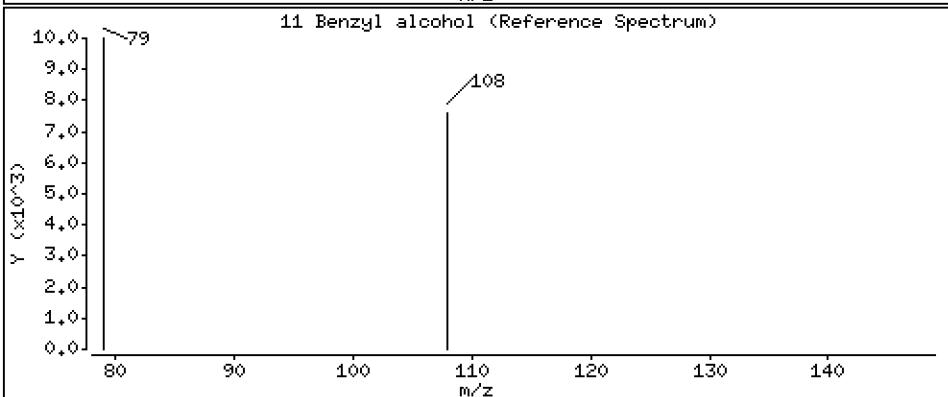
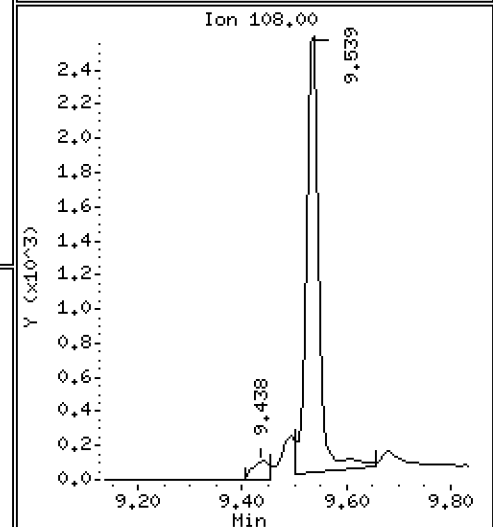
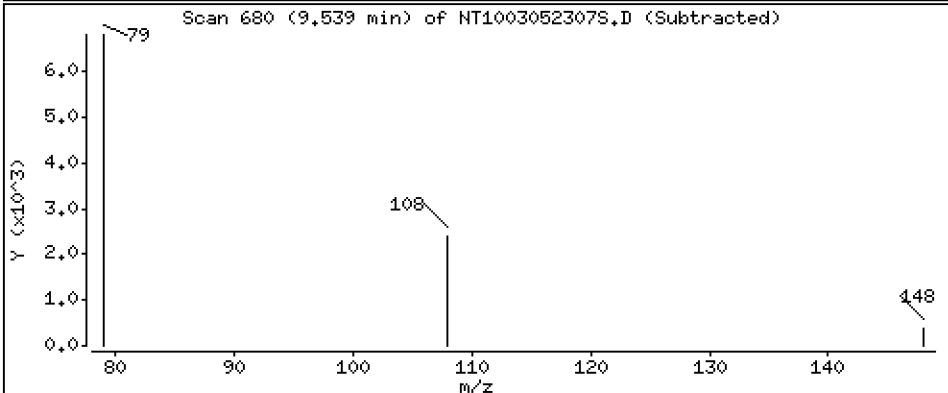
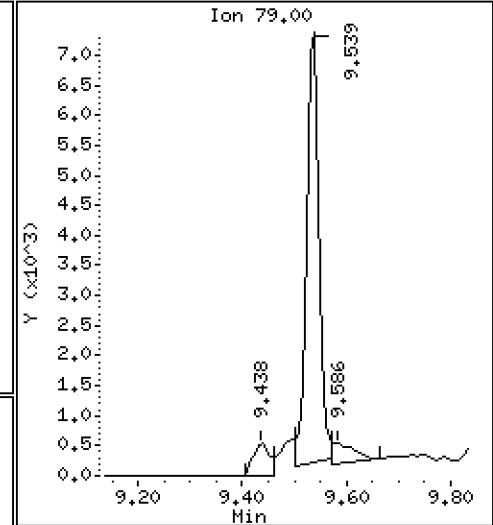
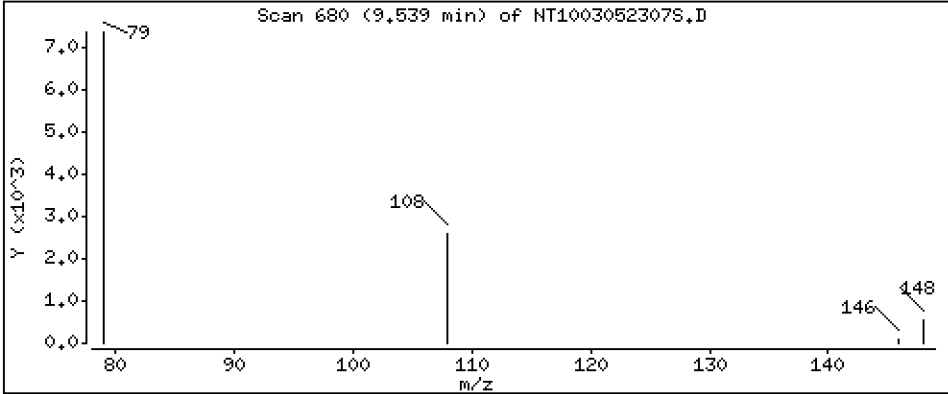
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1731 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

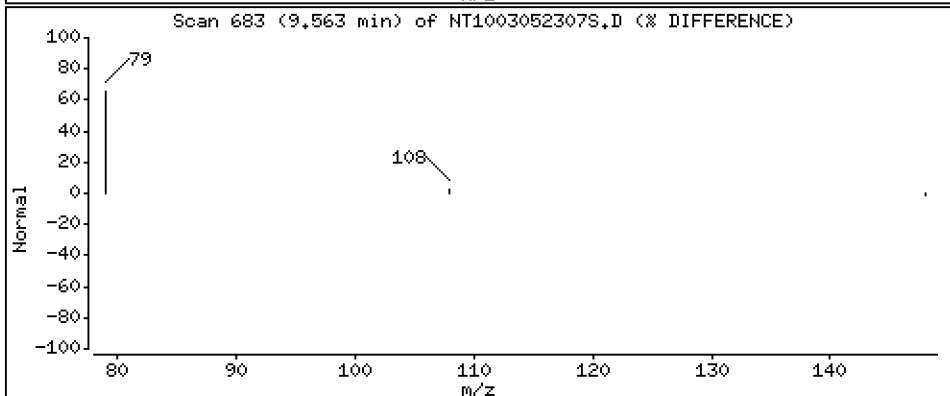
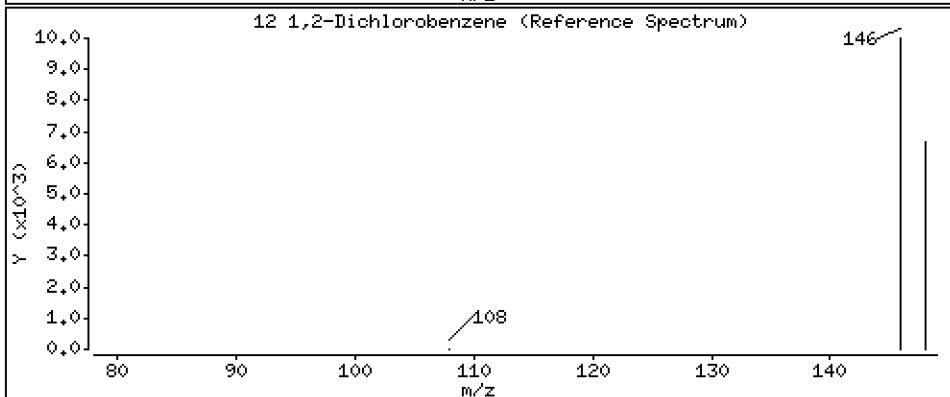
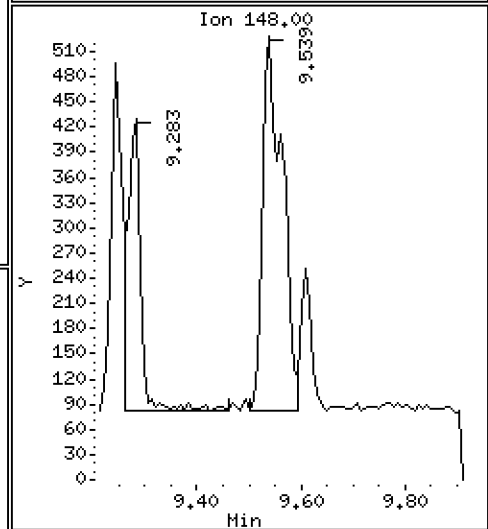
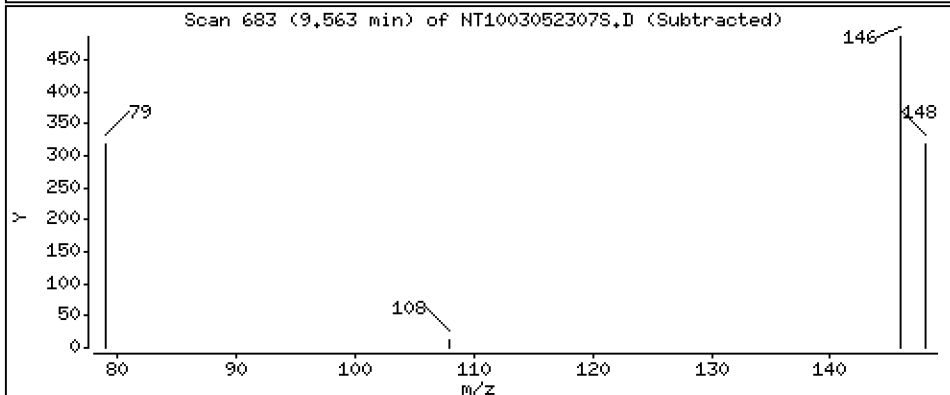
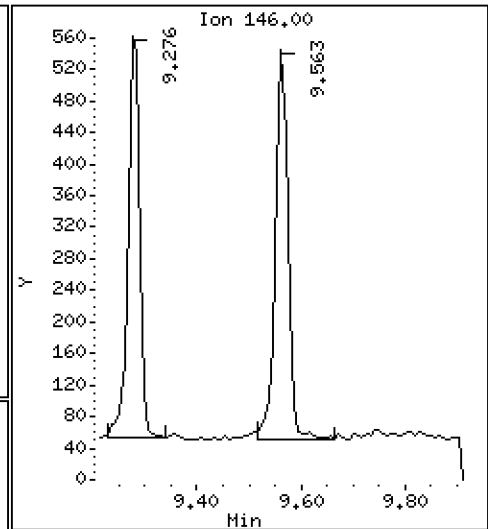
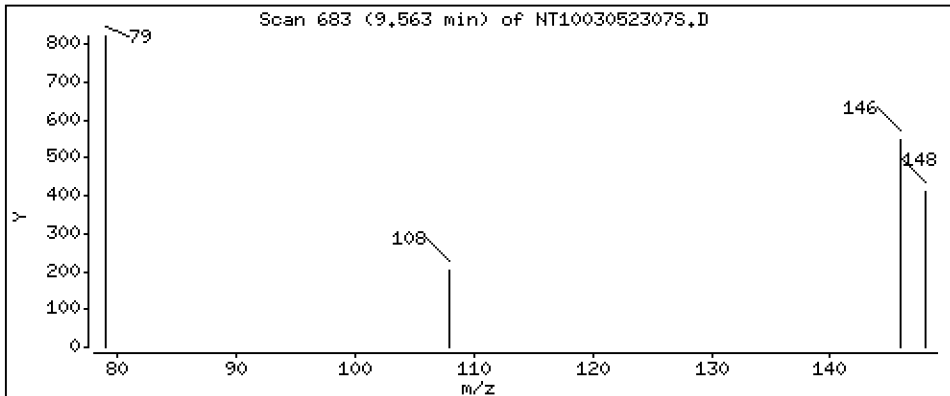
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,007352 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

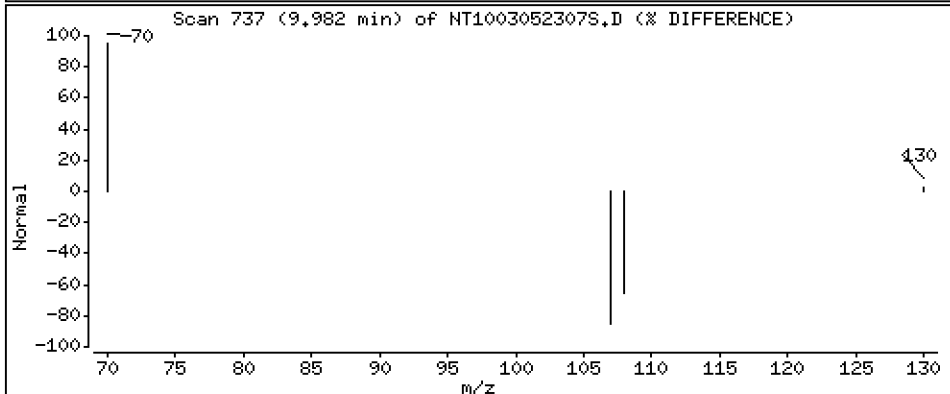
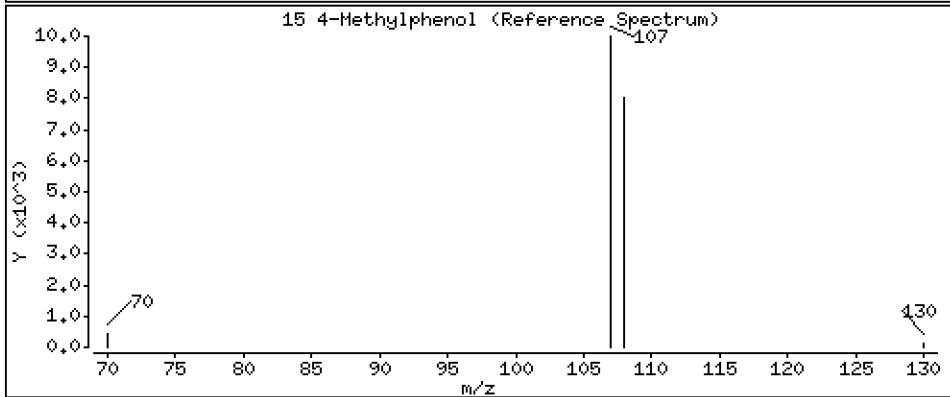
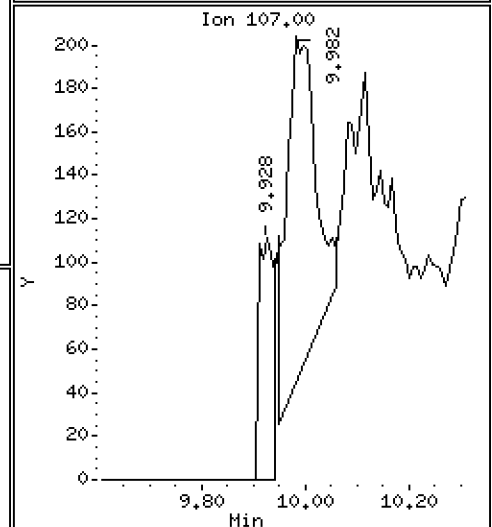
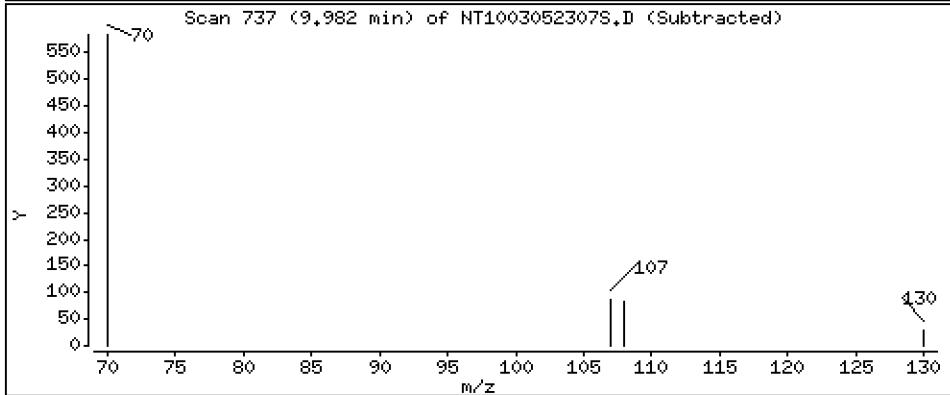
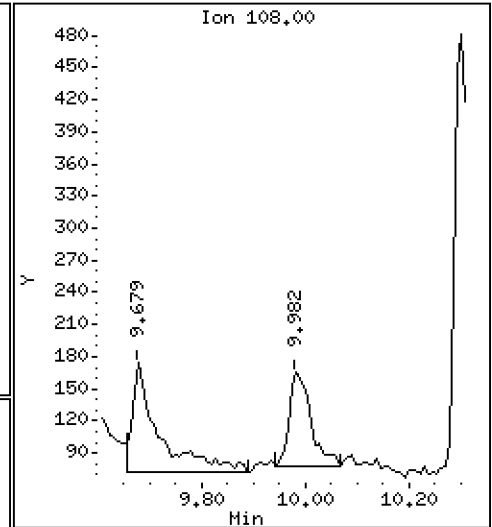
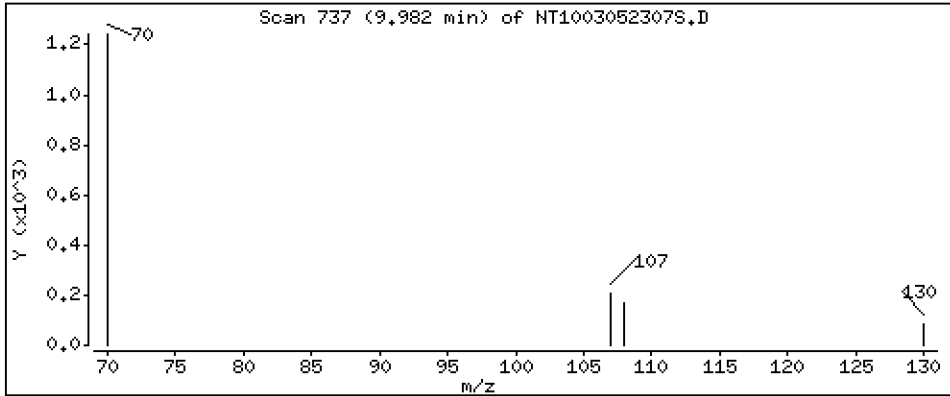
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,003217 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

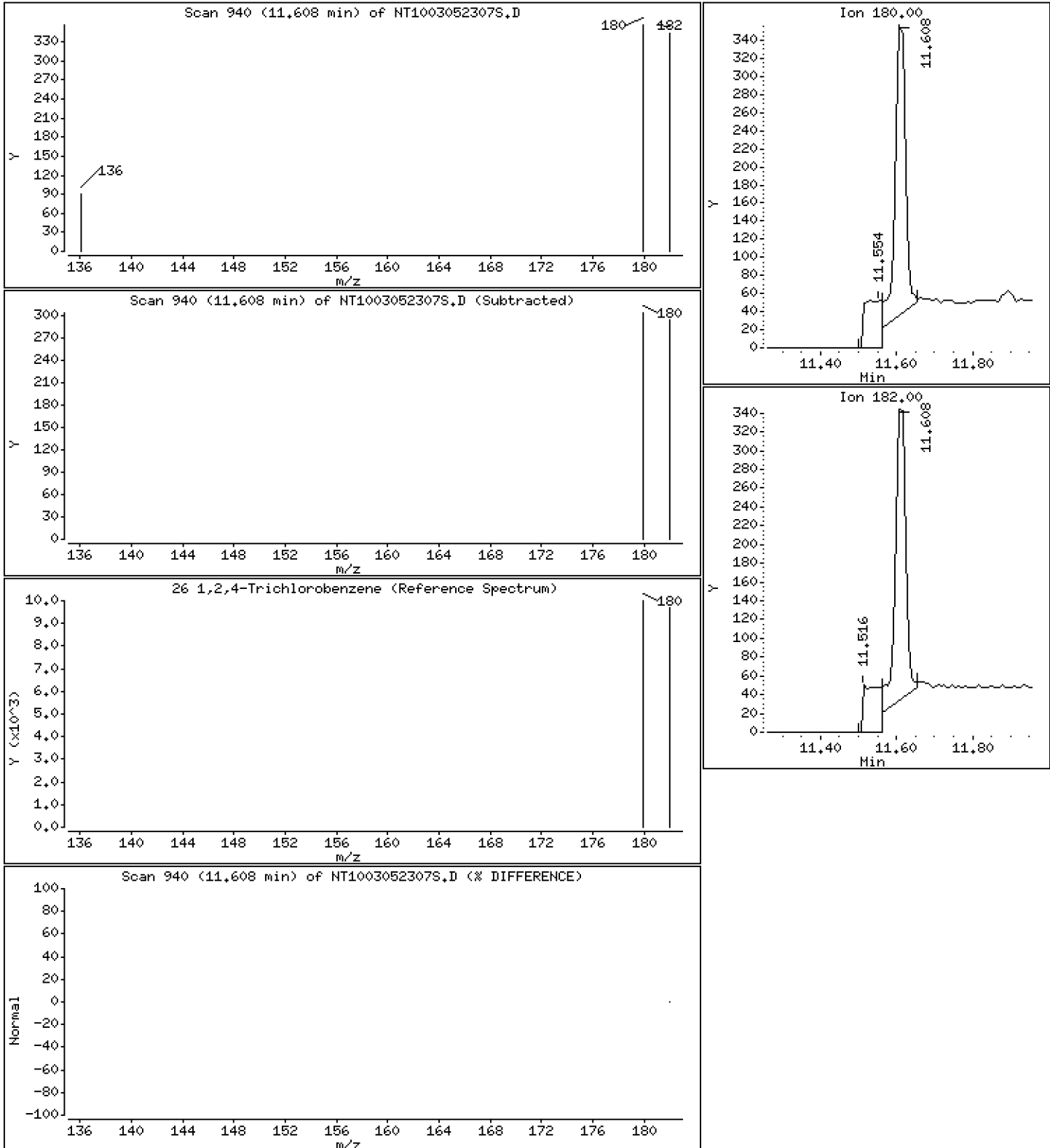
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,007472 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

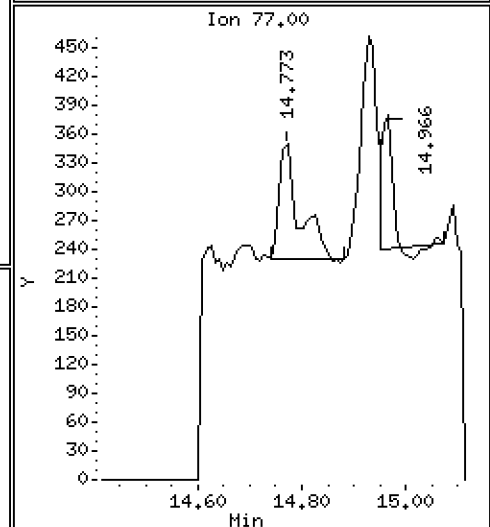
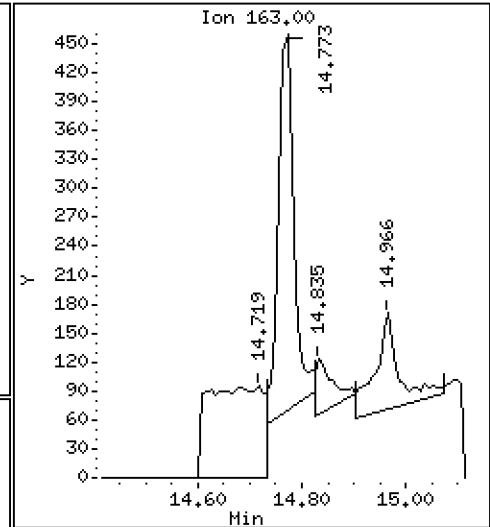
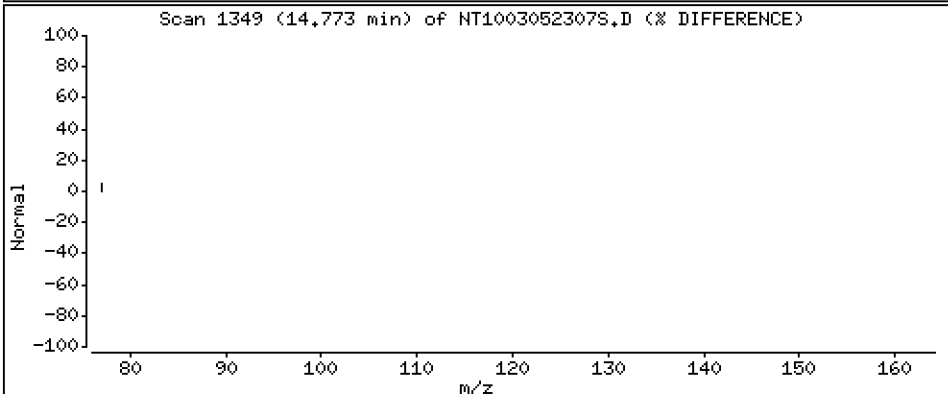
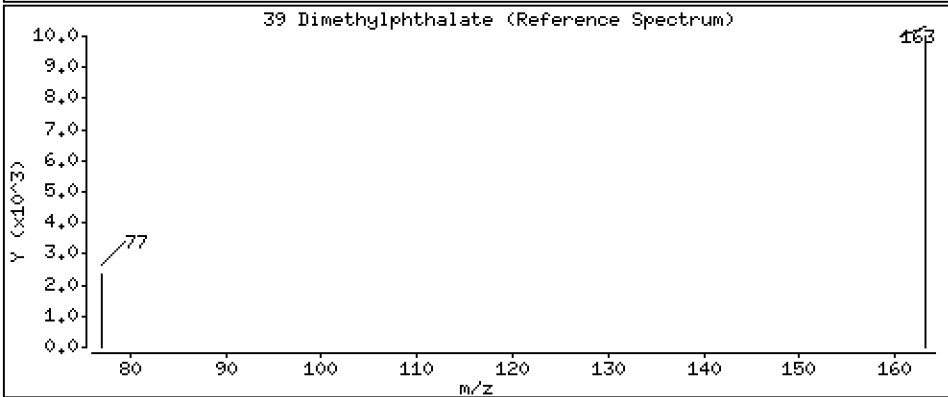
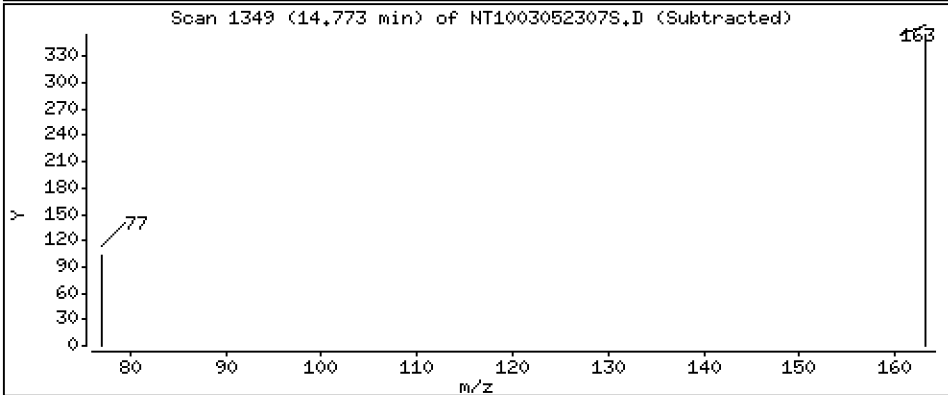
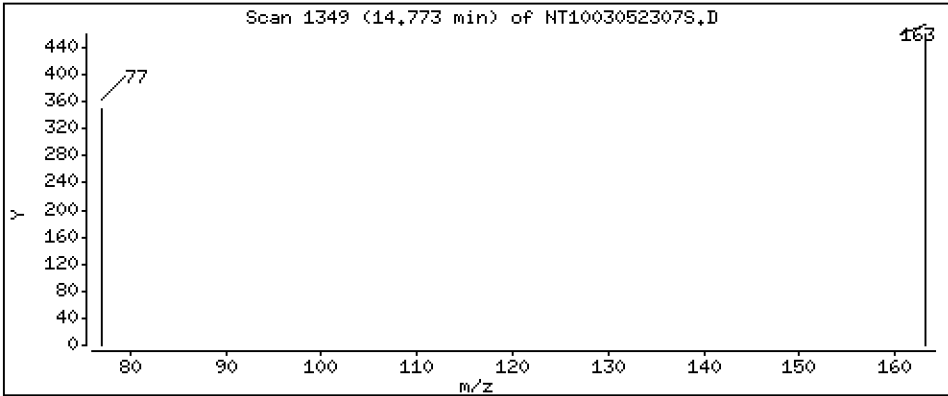
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,004682 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

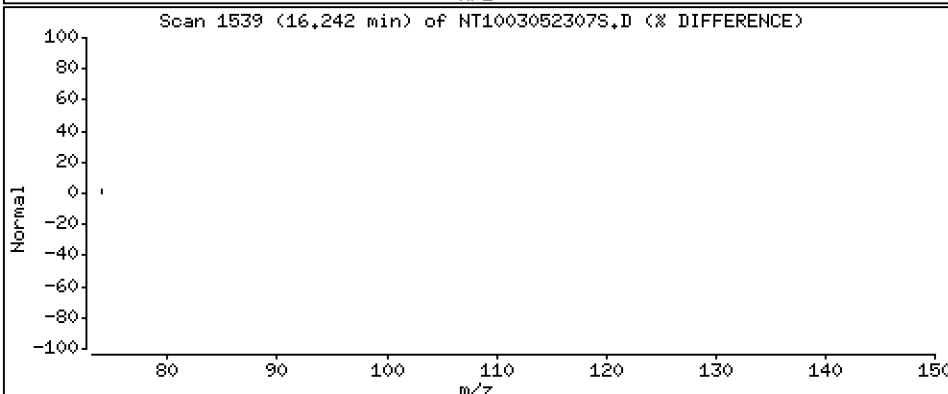
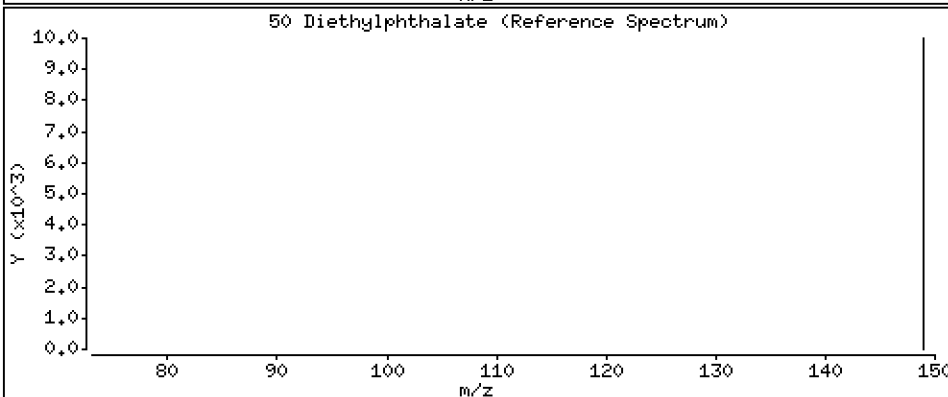
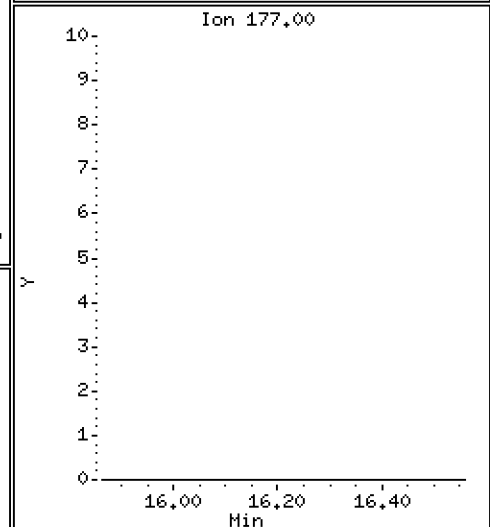
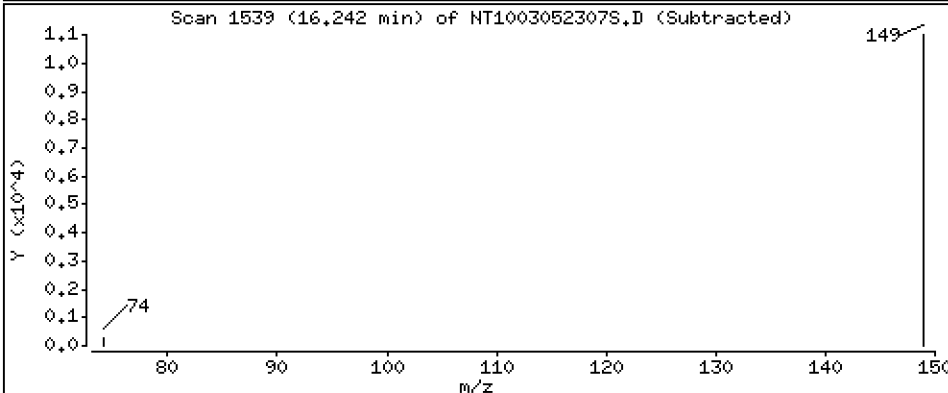
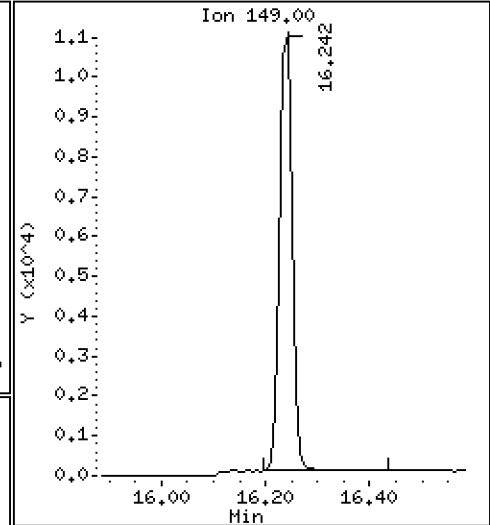
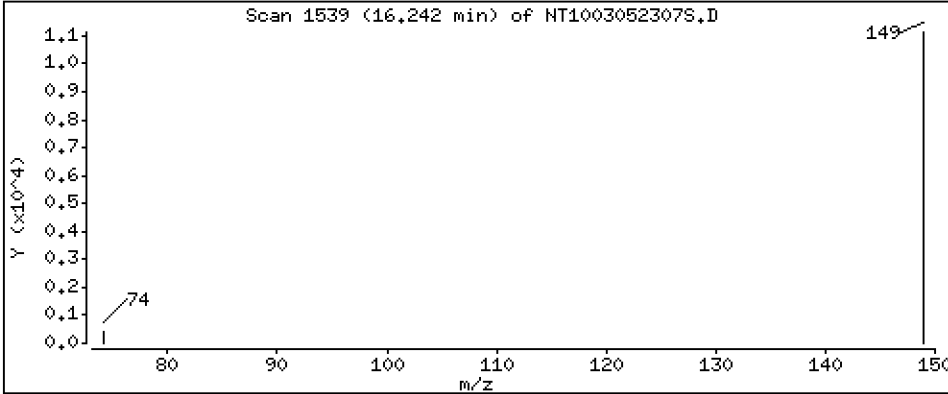
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1105 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

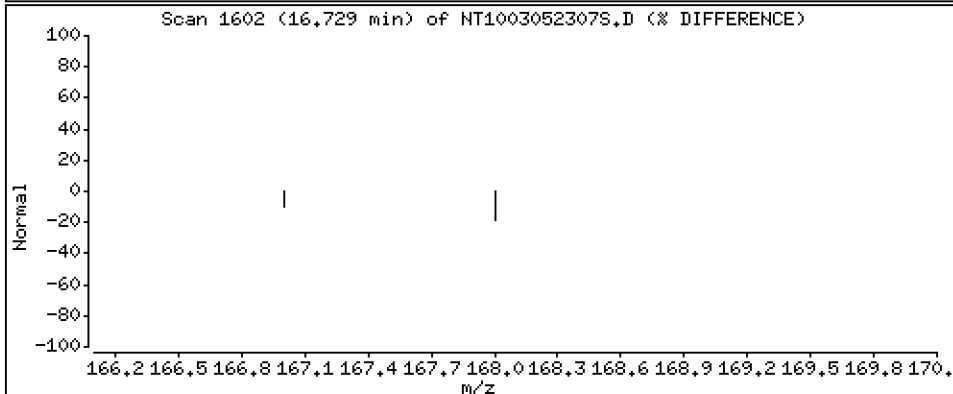
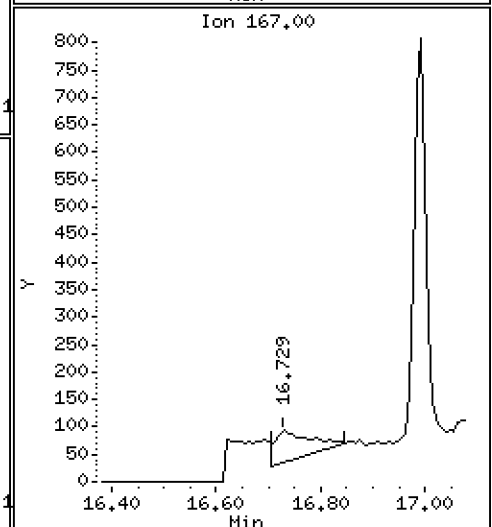
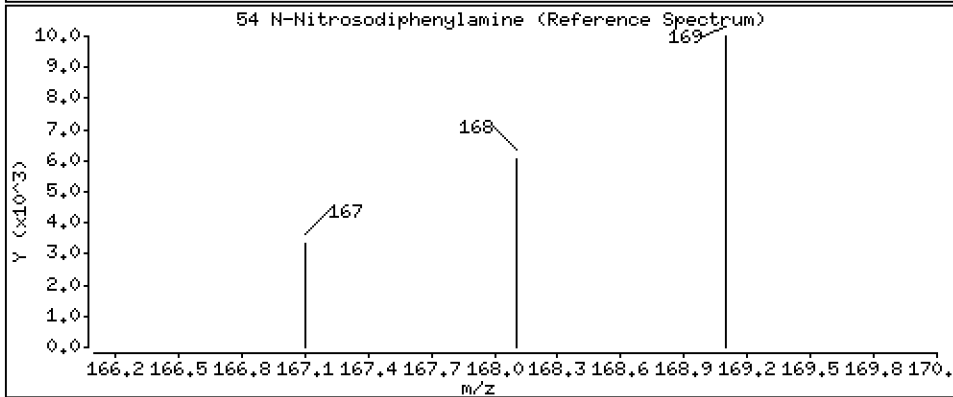
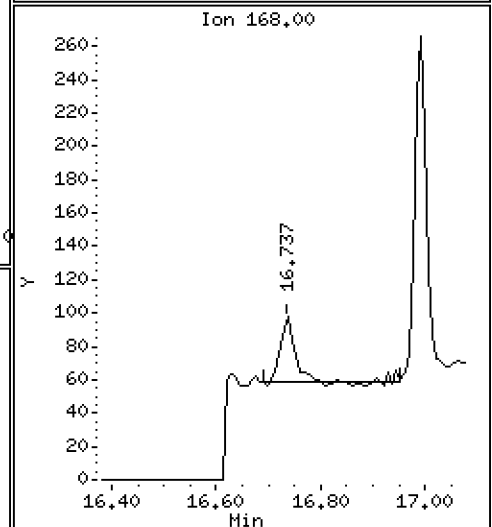
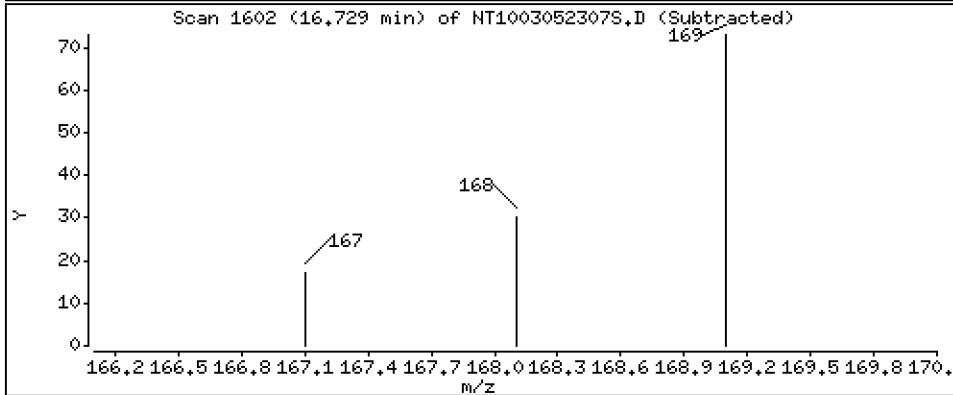
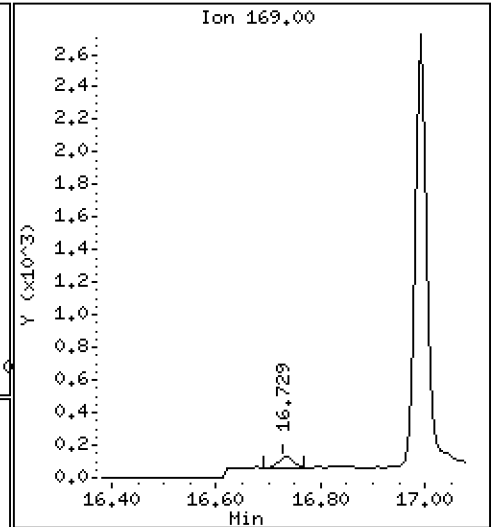
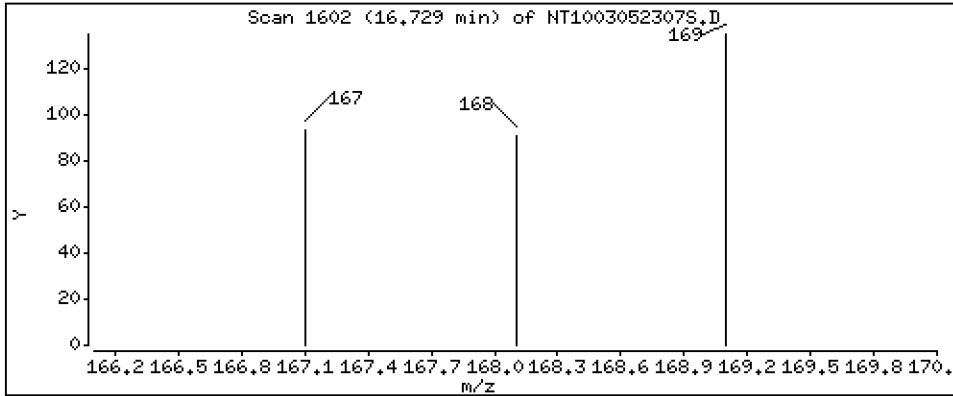
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,0008467 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

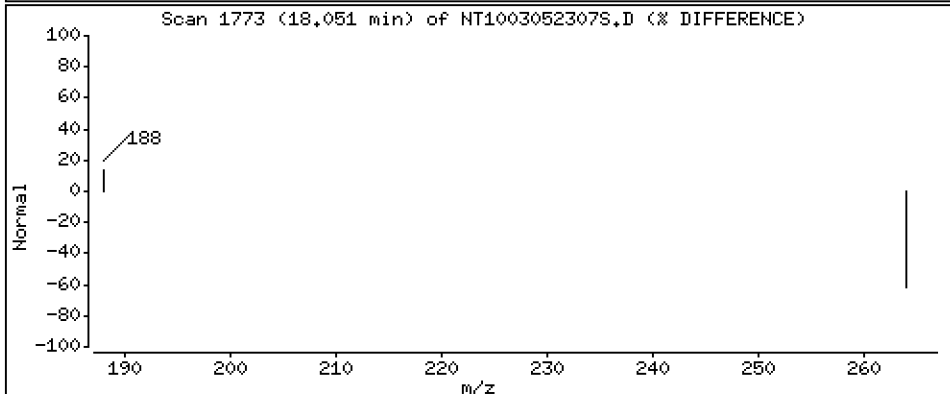
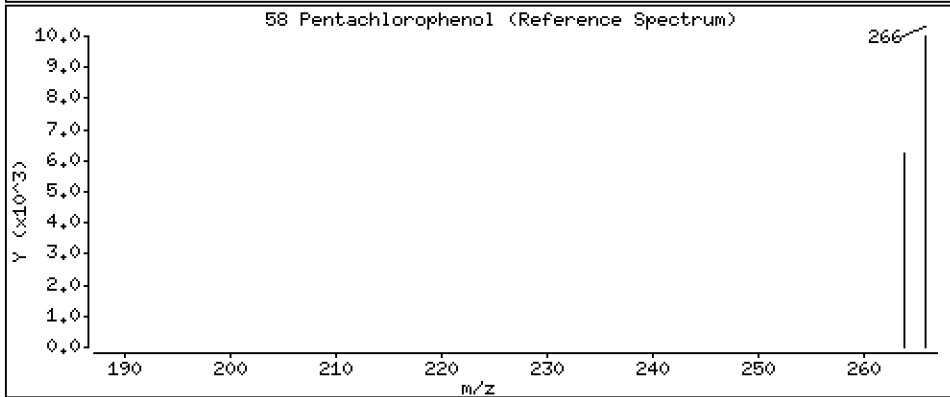
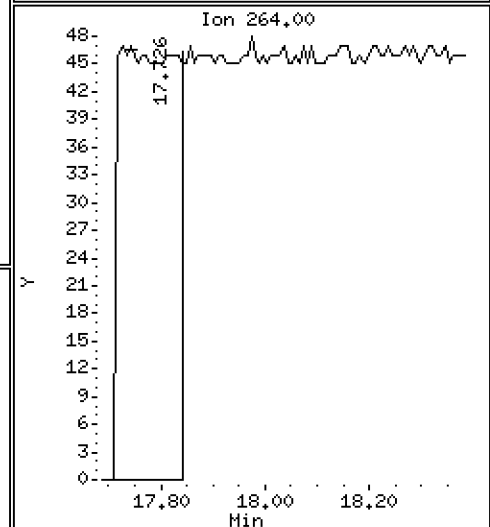
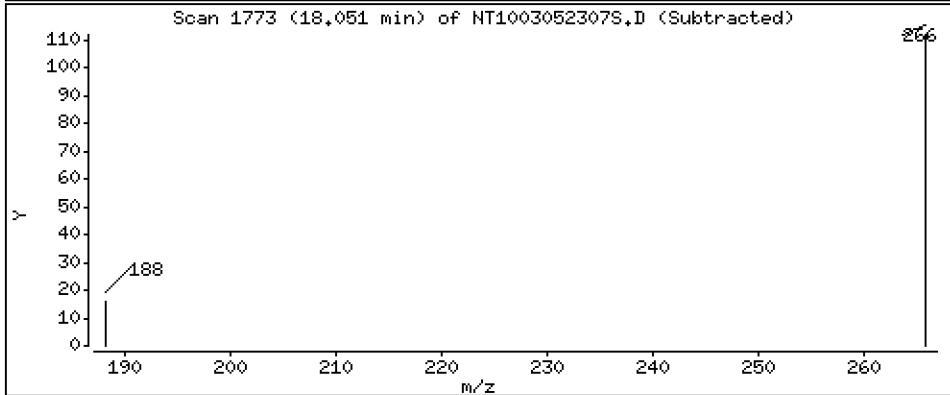
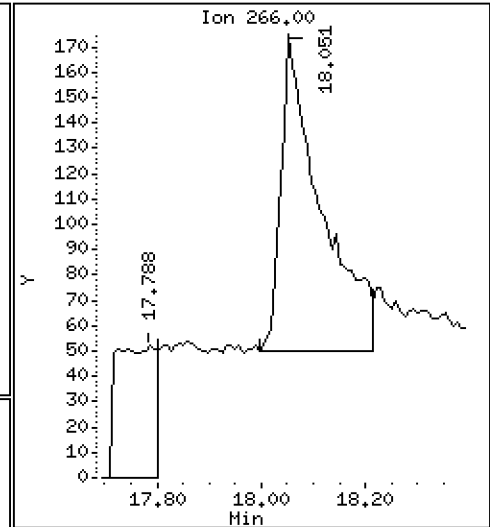
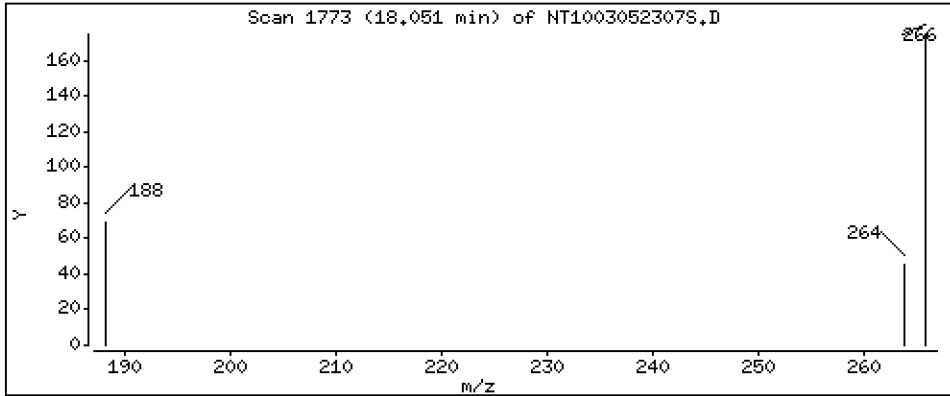
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,01972 ug/mL



Date : 05-MAR-2023 17:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BLK2

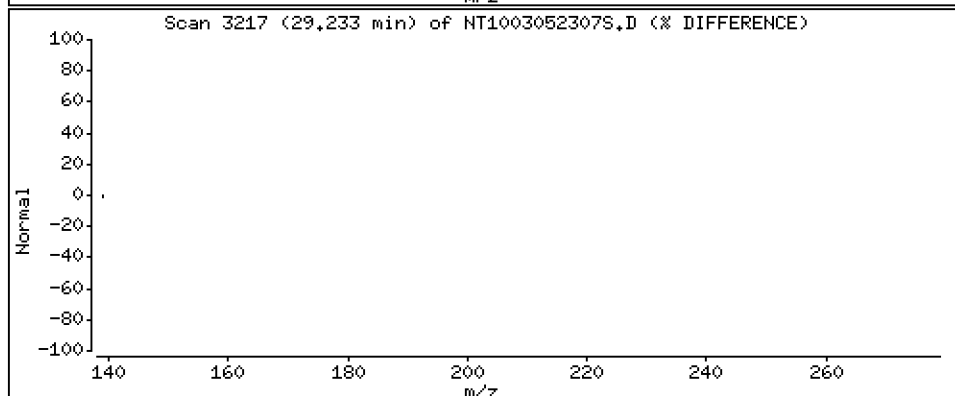
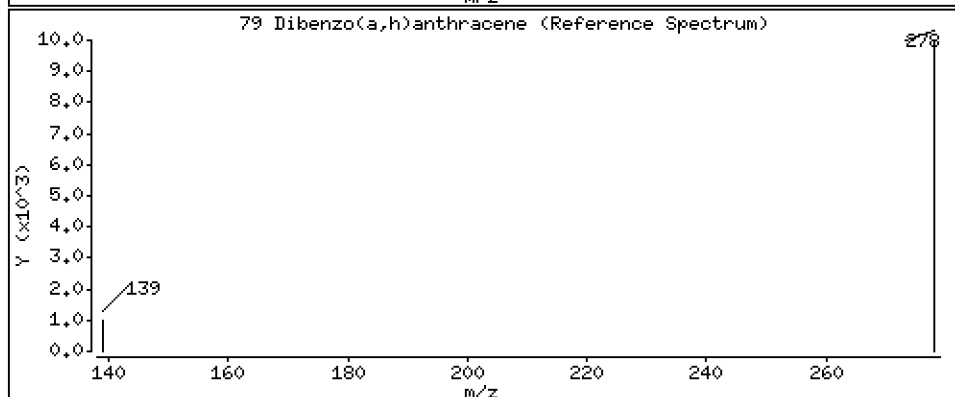
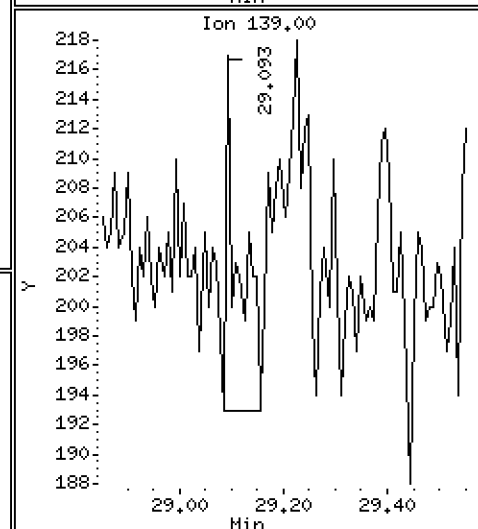
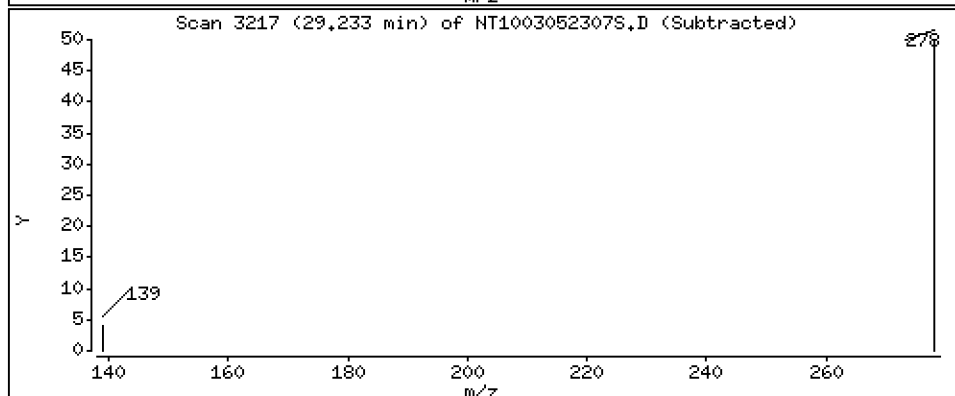
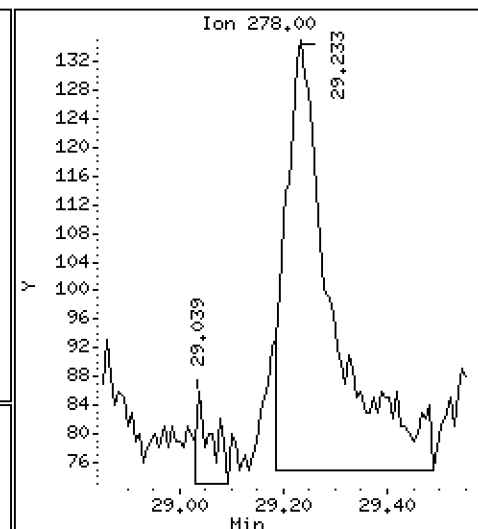
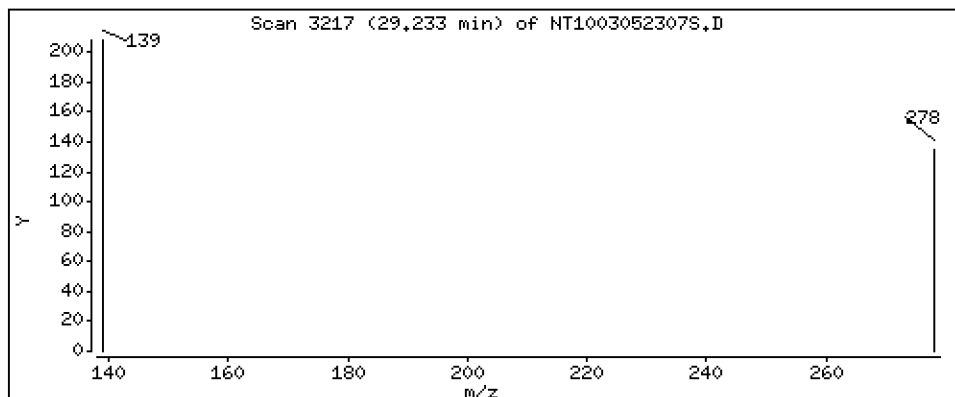
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,001630 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052307S.D
 Lab Smp Id: BLA0685-BLK2
 Inj Date : 05-MAR-2023 17:12
 Operator : YZ
 Smp Info : BLA0685-BLK2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.747)	412695	4.68894	4.689(R)
3 Phenol	94		8.533	8.533	(0.923)	4923	0.03792	0.03792
7 1,3-Dichlorobenzene	146		9.135	9.136	(0.988)	929	0.00813	0.008131
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.244	(1.000)	308288	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	875	0.00788	0.007877
11 Benzyl alcohol	79		9.539	9.485	(1.032)	12482	0.17313	0.1731
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	785	0.00735	0.007352
13 2-Methylphenol	108		Compound Not Detected.					
15 4-Methylphenol	108		9.981	9.958	(1.080)	261	0.00322	0.003217
16 N-Nitroso-di-n-propylamine	70		Compound Not Detected.					
22 2,4-Dimethylphenol	107		Compound Not Detected.					
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	584	0.00747	0.007472
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1085923	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.772	14.765	(0.963)	785	0.00468	0.004682
* 42 Acenaphthene-d10	162		15.337	15.337	(1.000)	528064	4.00000	
50 Diethylphthalate	149		16.242	16.234	(1.059)	17475	0.11052	0.1105(H)
54 N-Nitrosodiphenylamine	169		16.729	16.729	(0.907)	139	8e-004	0.0008467
57 Hexachlorobenzene	284		Compound Not Detected.					
58 Pentachlorophenol	266		18.050	18.043	(0.978)	663	0.01972	0.01972
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	1014390	4.00000	
\$ 66 Terphenyl-d14	244		21.609	21.602	(0.919)	525124	7.03131	7.031(R)
67 Butylbenzylphthalate	149		Compound Not Detected.					
* 69 Chrysene-d12	240		23.522	23.514	(1.000)	923539	4.00000	
* 77 Perylene-d12	264		26.294	26.286	(1.000)	1001440	4.00000	
79 Dibenzo(a,h)anthracene	278		29.233	29.202	(1.112)	378	0.00163	0.001630
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052307S.D
 Lab Smp Id: BLA0685-BLK2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	308288	-4.07
27 Naphthalene-d8	1132931	566466	2265862	1085923	-4.15
42 Acenaphthene-d10	561597	280799	1123194	528064	-5.97
59 Phenanthrene-d10	1068222	534111	2136444	1014390	-5.04
69 Chrysene-d12	997572	498786	1995144	923539	-7.42
77 Perylene-d12	1245490	622745	2490980	1001440	-19.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.52	0.03
77 Perylene-d12	26.29	25.79	26.79	26.29	0.03

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

REVIEW SUMMARY FOR FILE - NT1003052307S.D

Lab ID: BLA0685-BLK2

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 17:12

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.032	1.026	0.0059	Benzyl alcohol

RRT check based on Ccal File: SIM.b/NT1003052303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt8.1\20230206A.1\N823020609.D

Date: 06-FEB-2023 16:24

Client ID:

Sample Info: BLR0683-BS1,

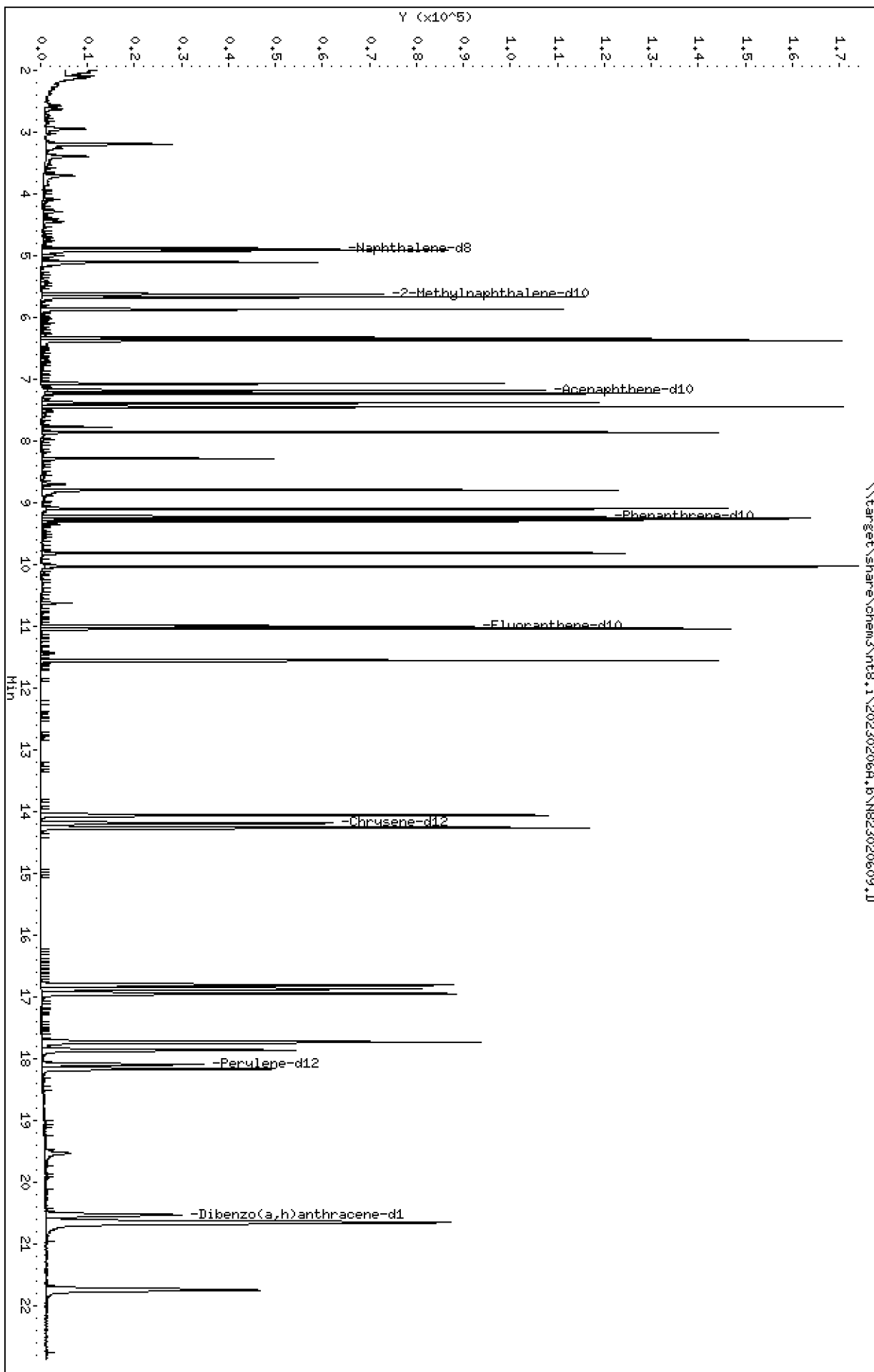
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

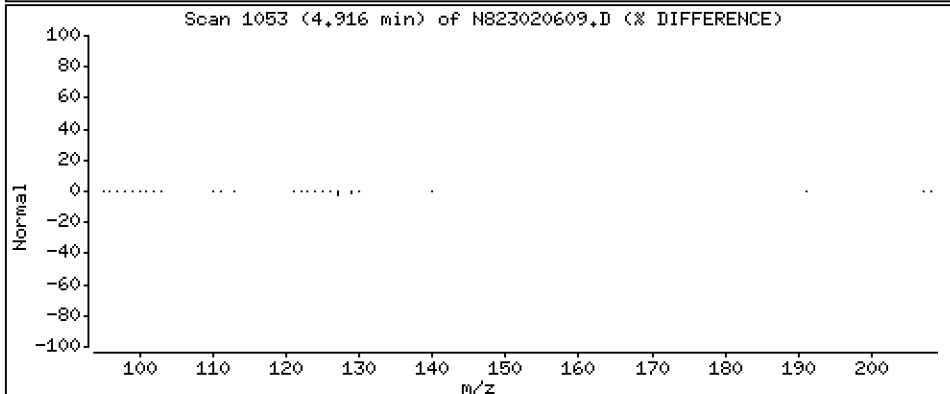
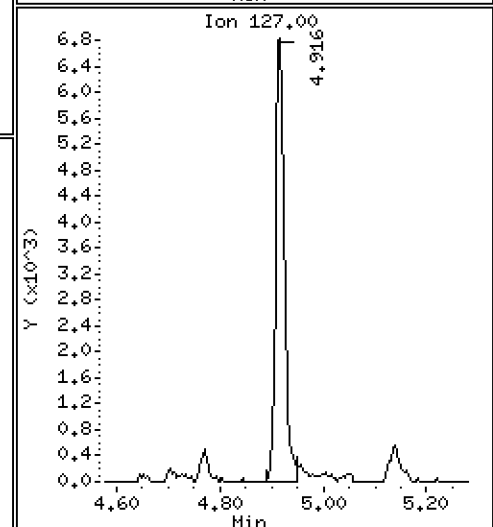
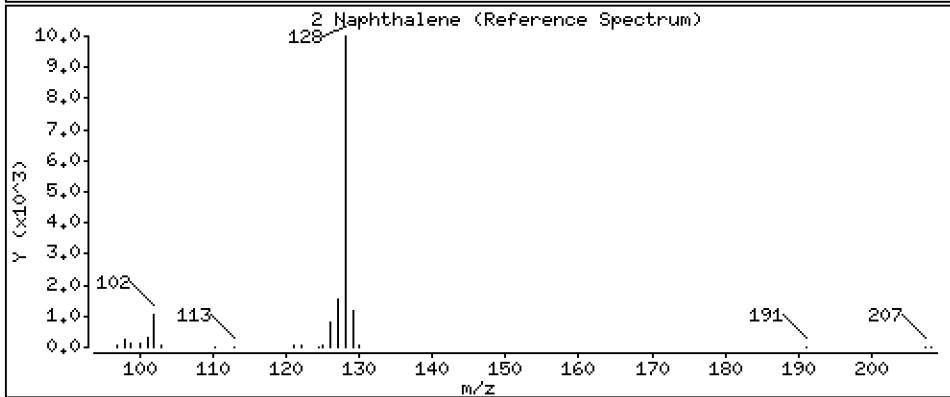
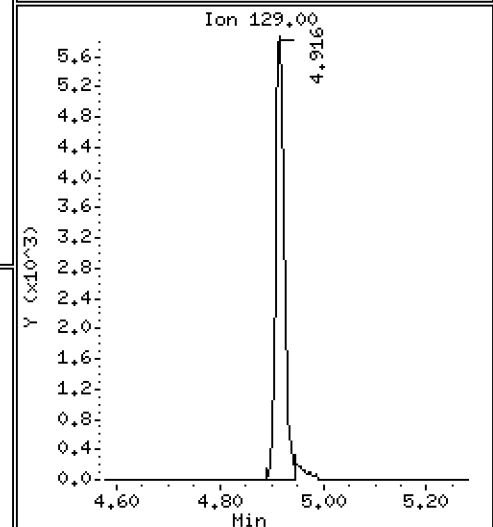
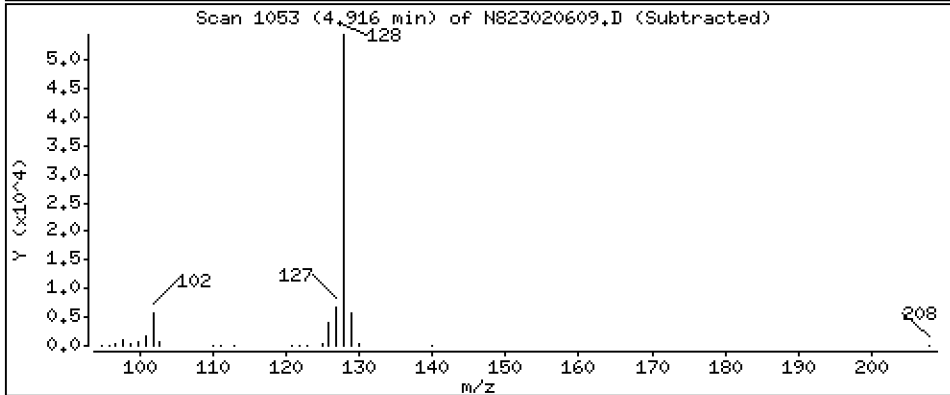
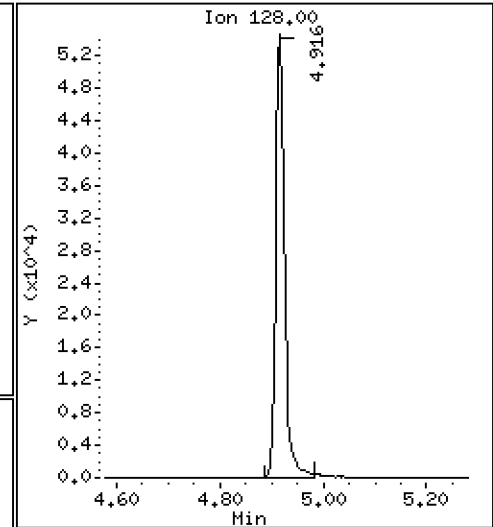
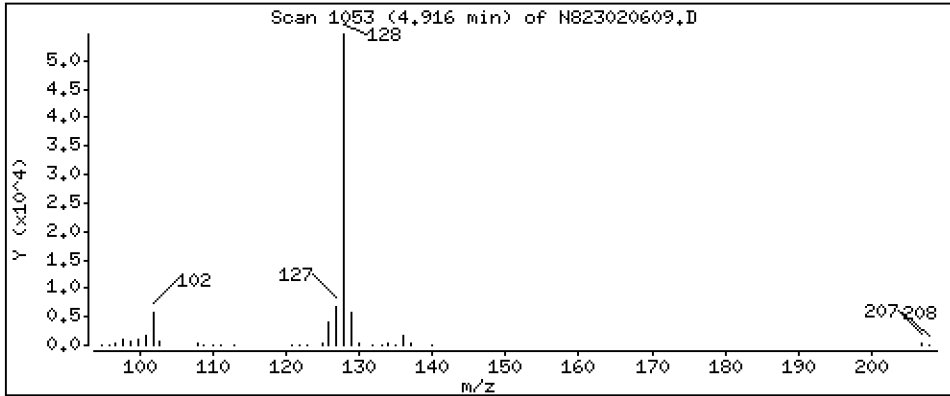
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

2 Naphthalene

Concentration: 2,731 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

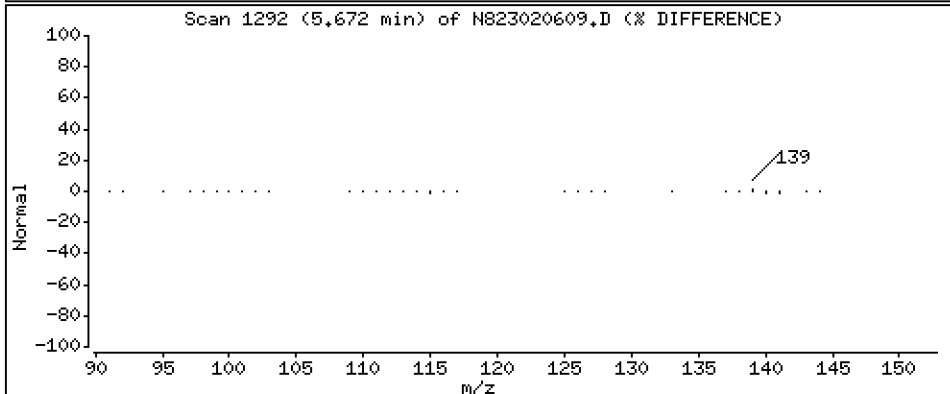
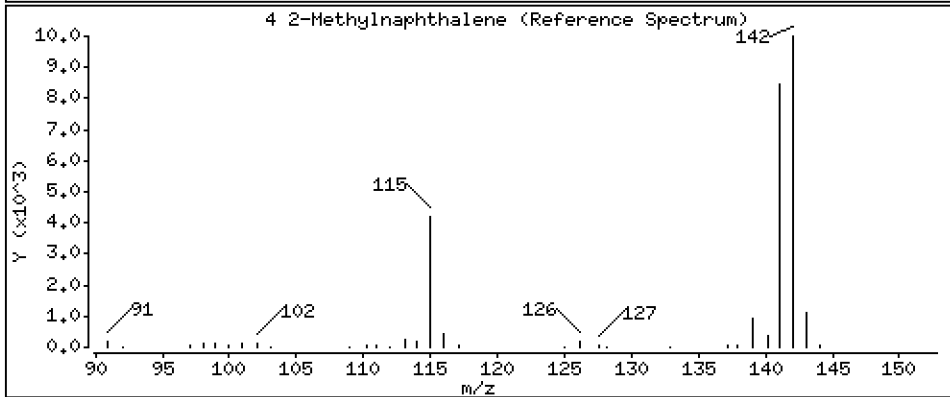
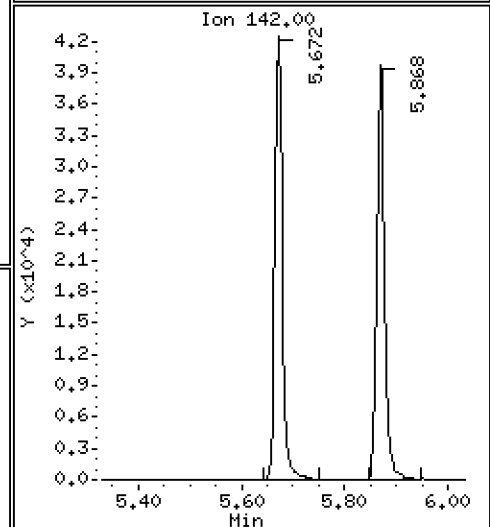
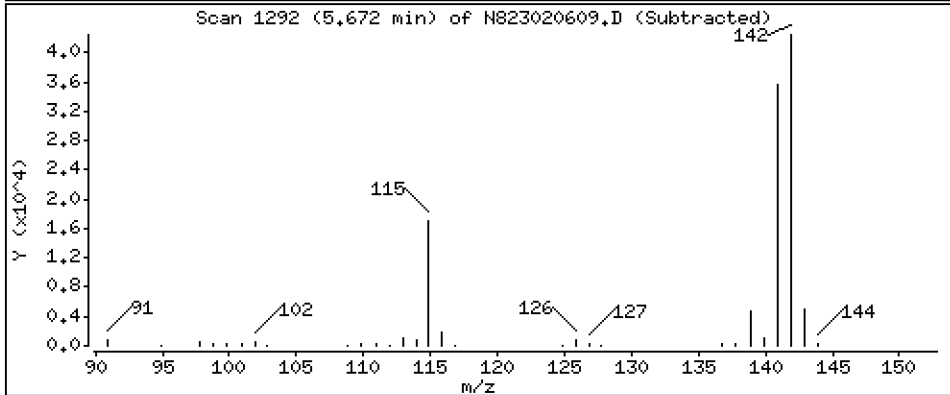
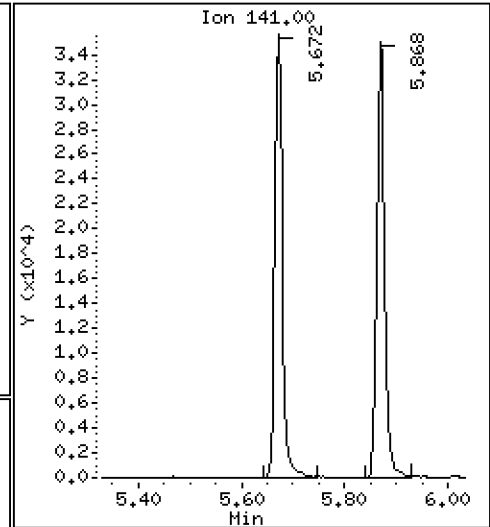
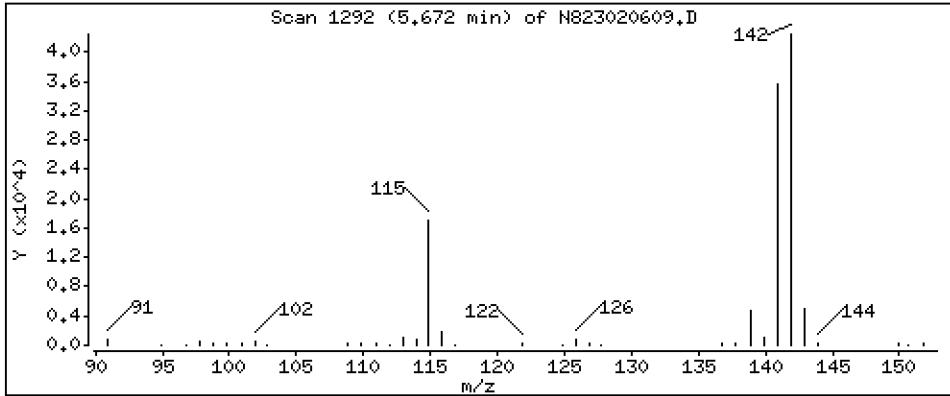
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

4 2-Methylnaphthalene

Concentration: 2,825 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

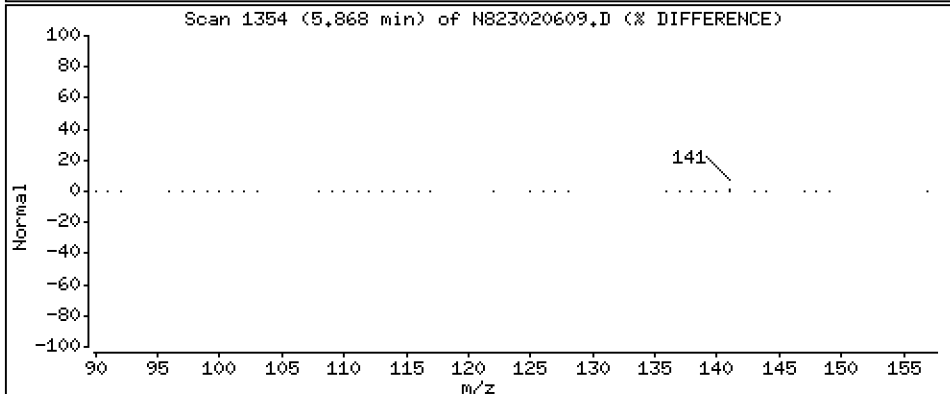
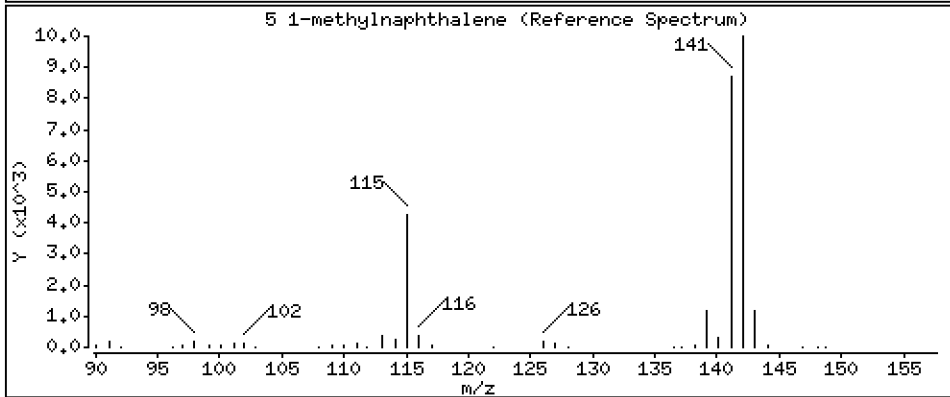
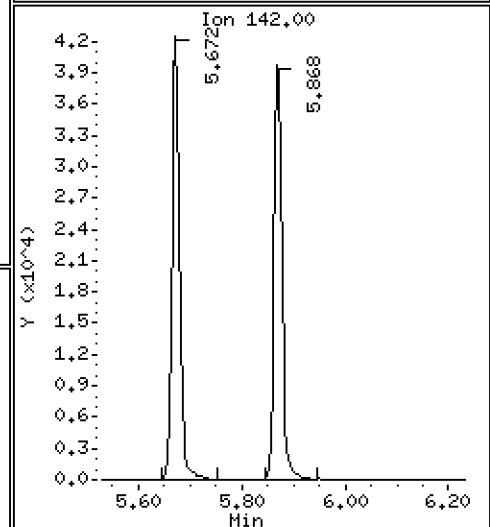
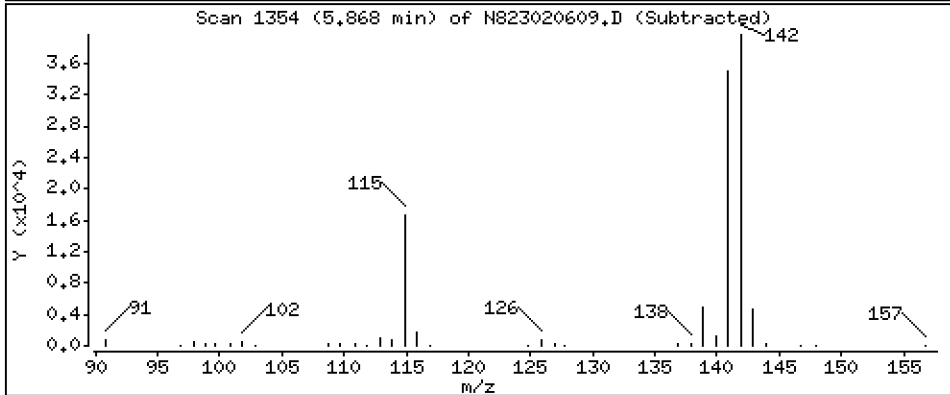
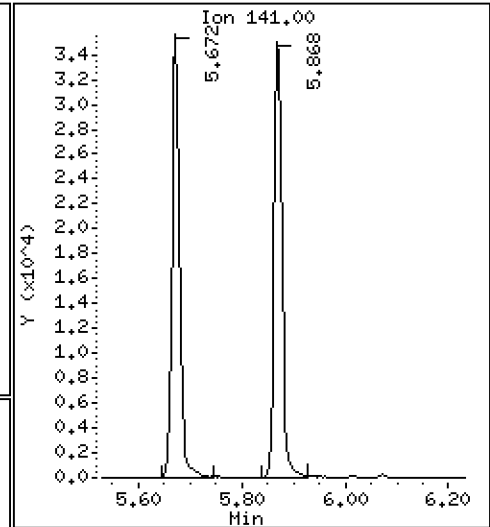
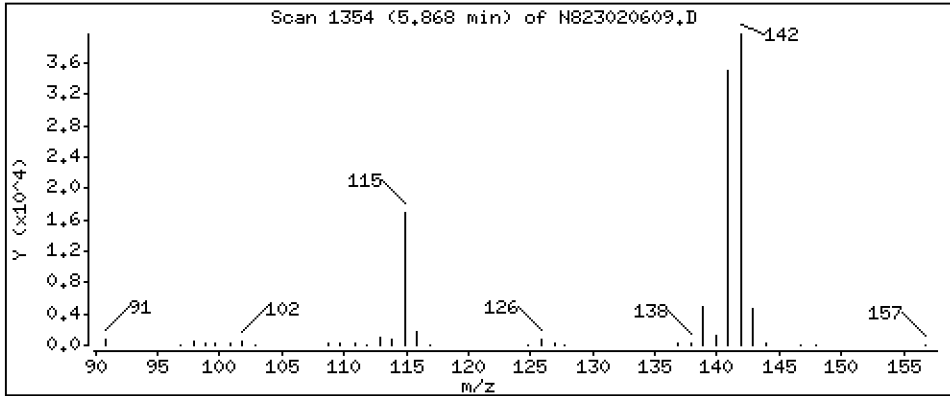
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

5 1-methylnaphthalene

Concentration: 2,796 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

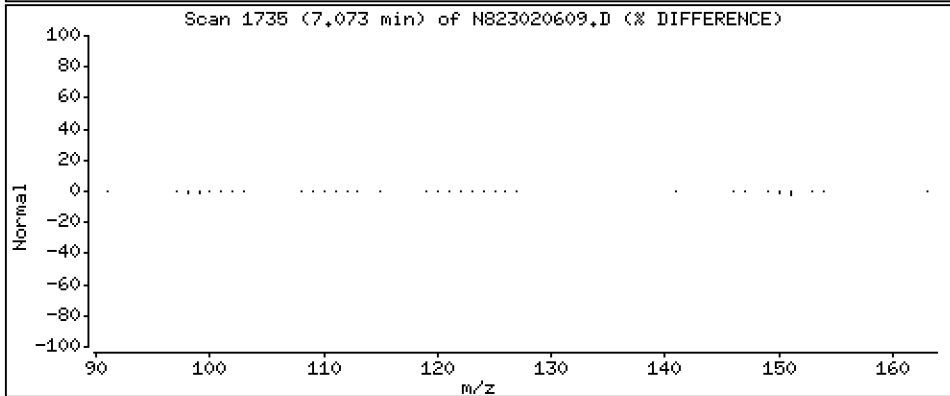
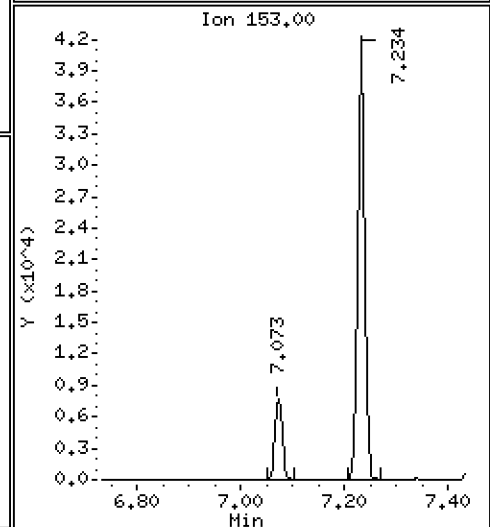
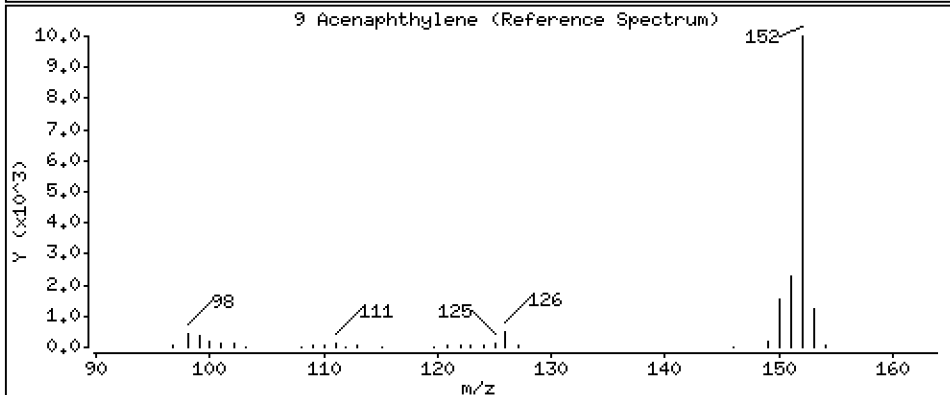
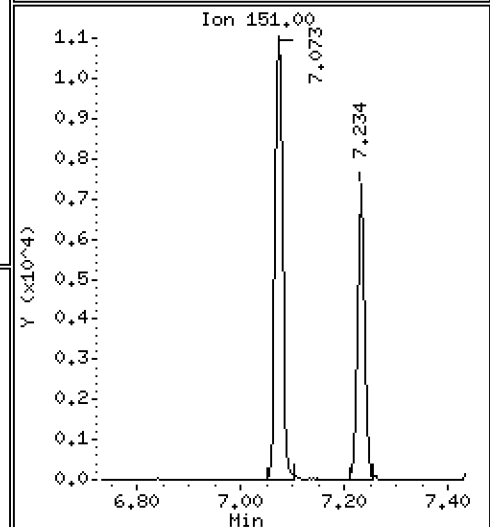
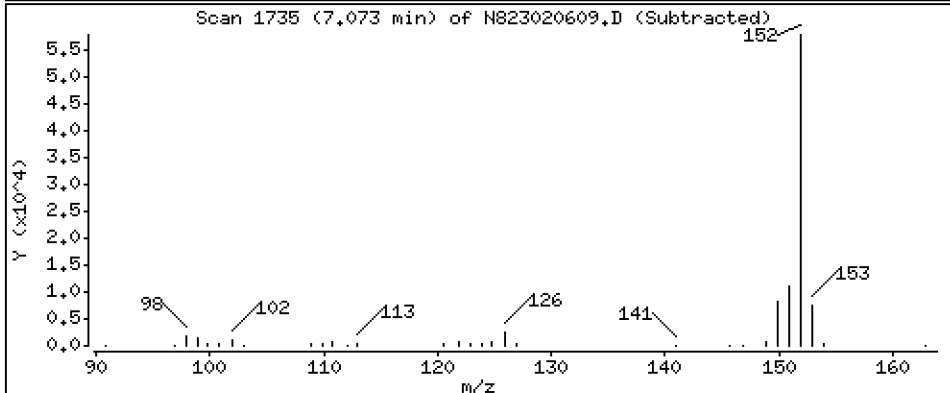
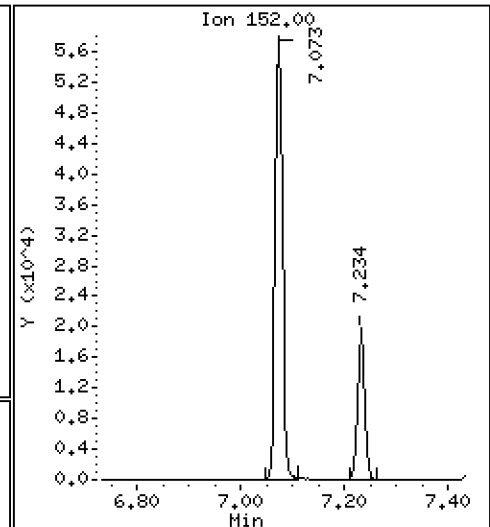
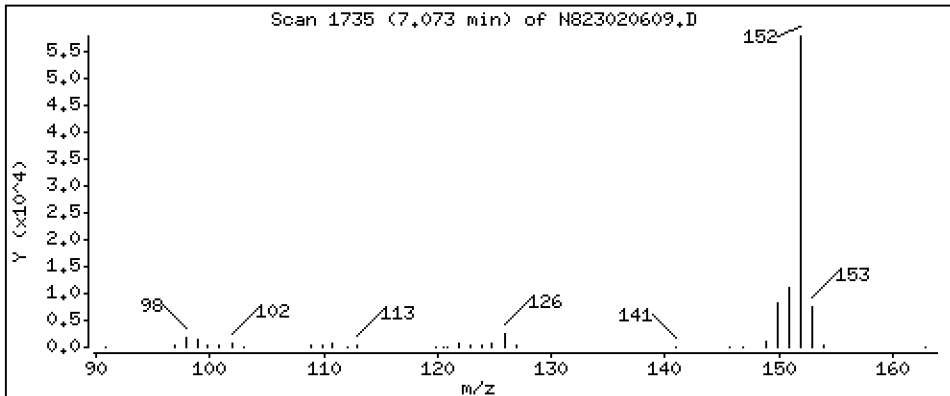
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 2,446 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

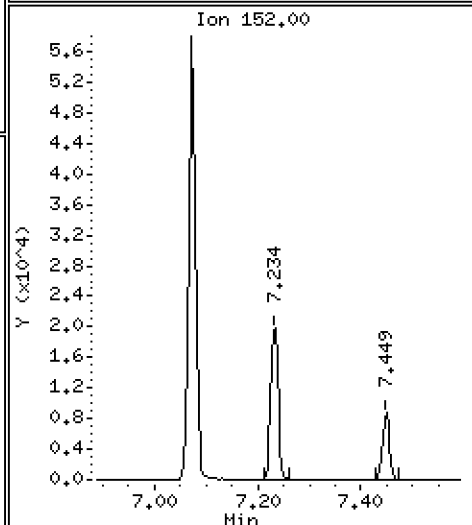
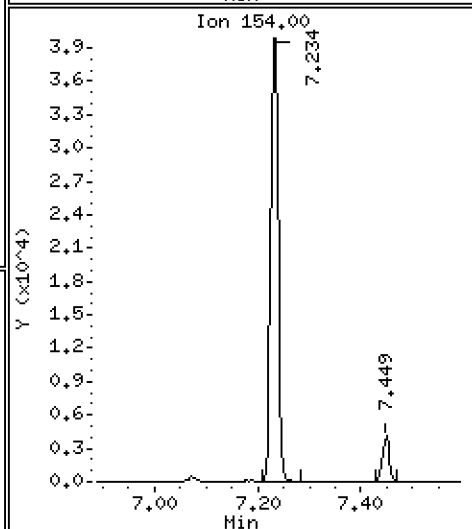
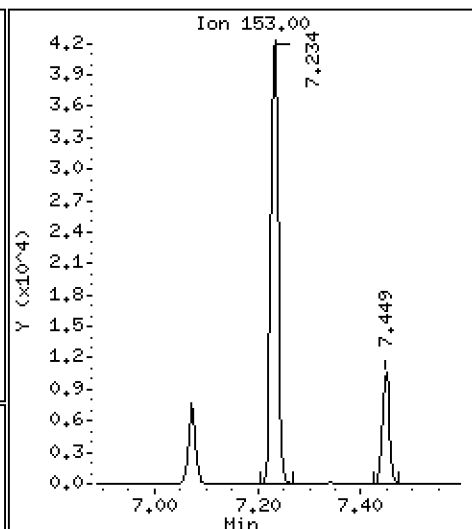
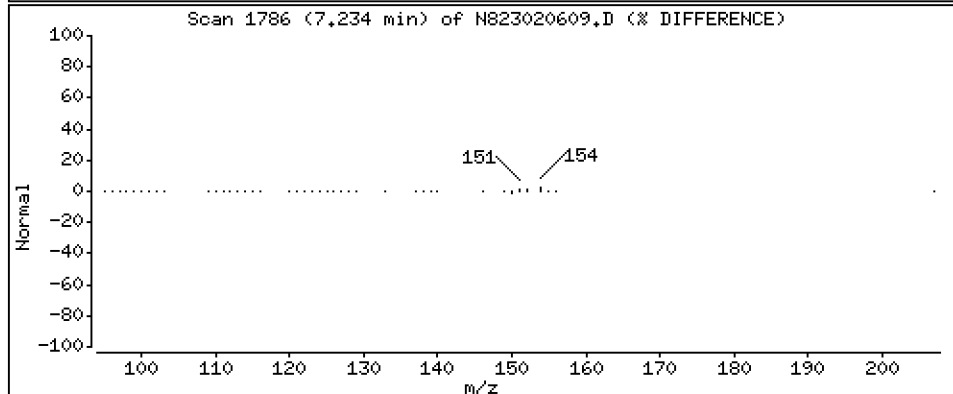
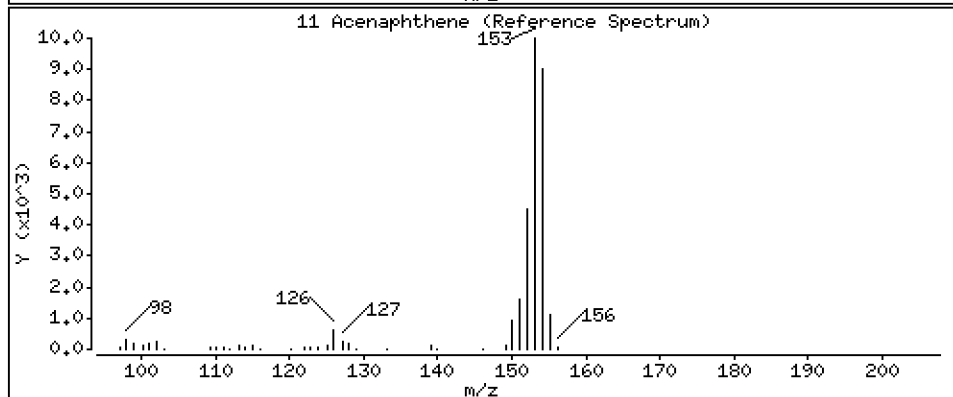
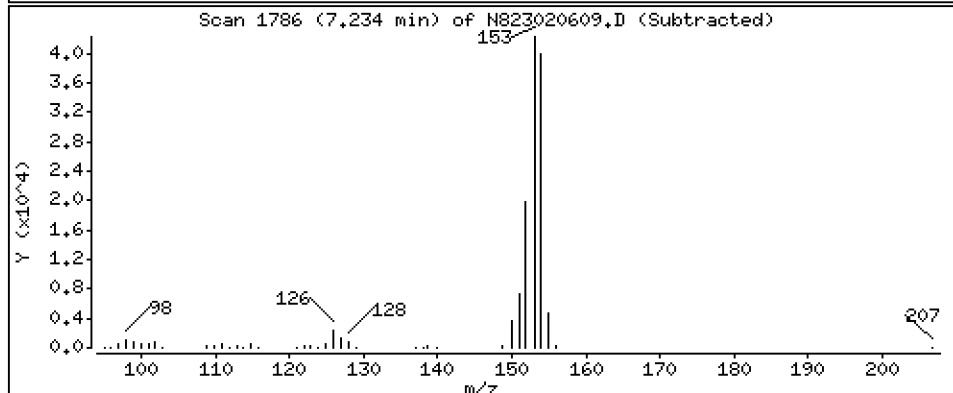
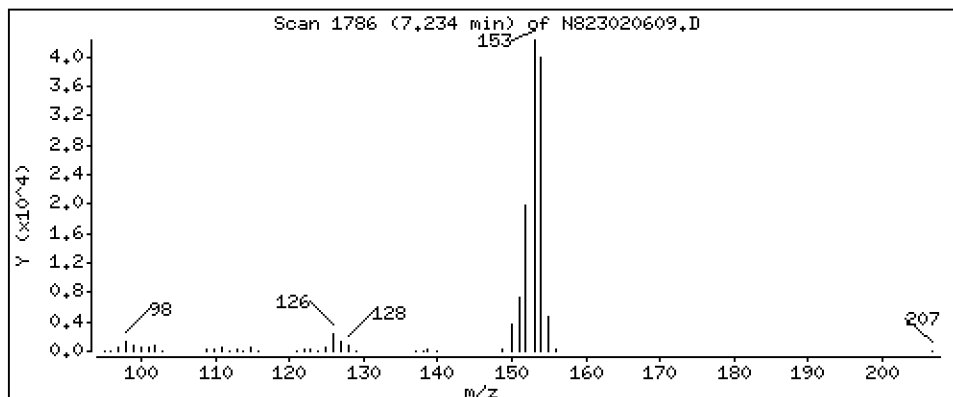
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

11 Acenaphthene

Concentration: 2,690 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

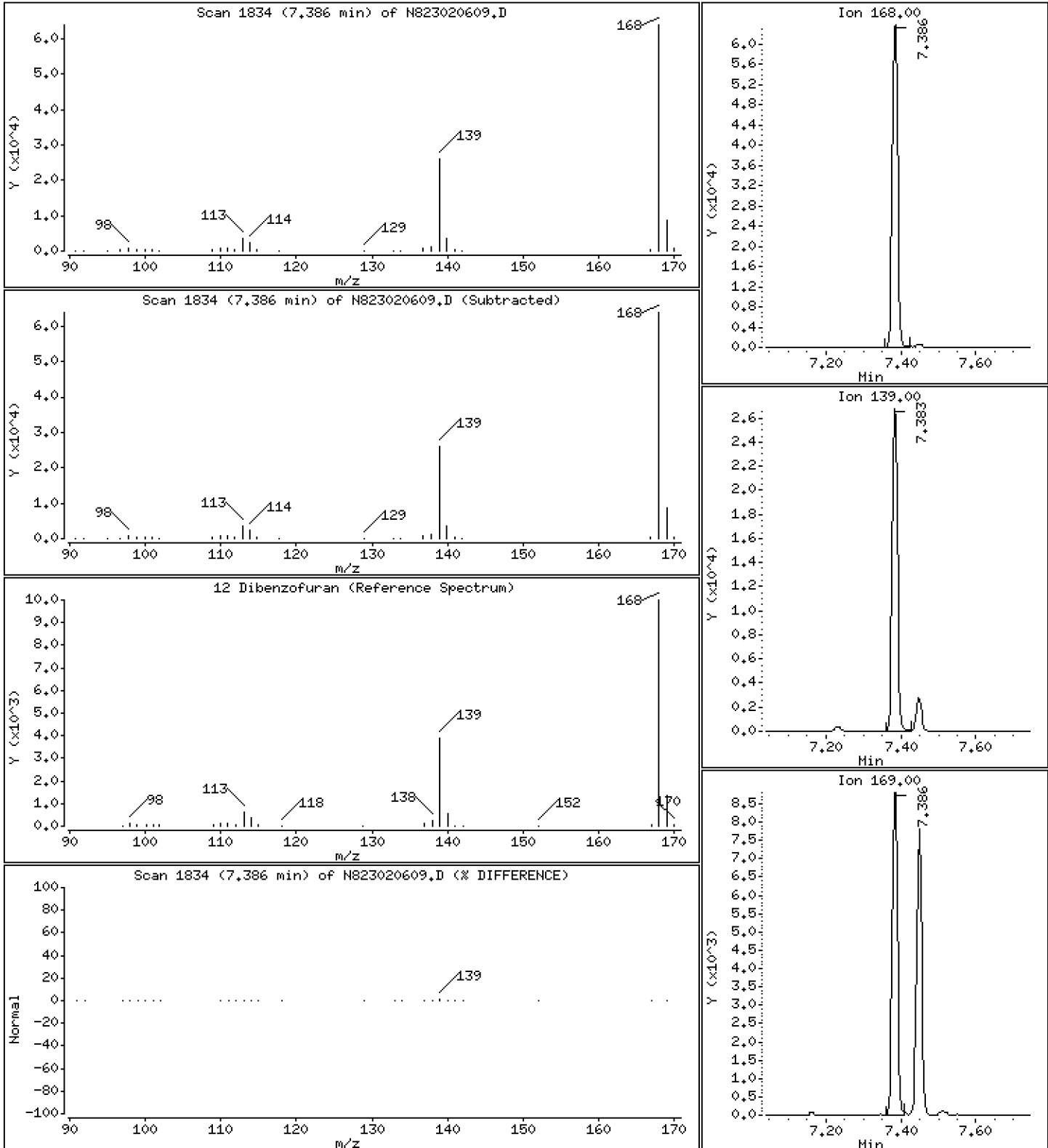
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 2,696 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

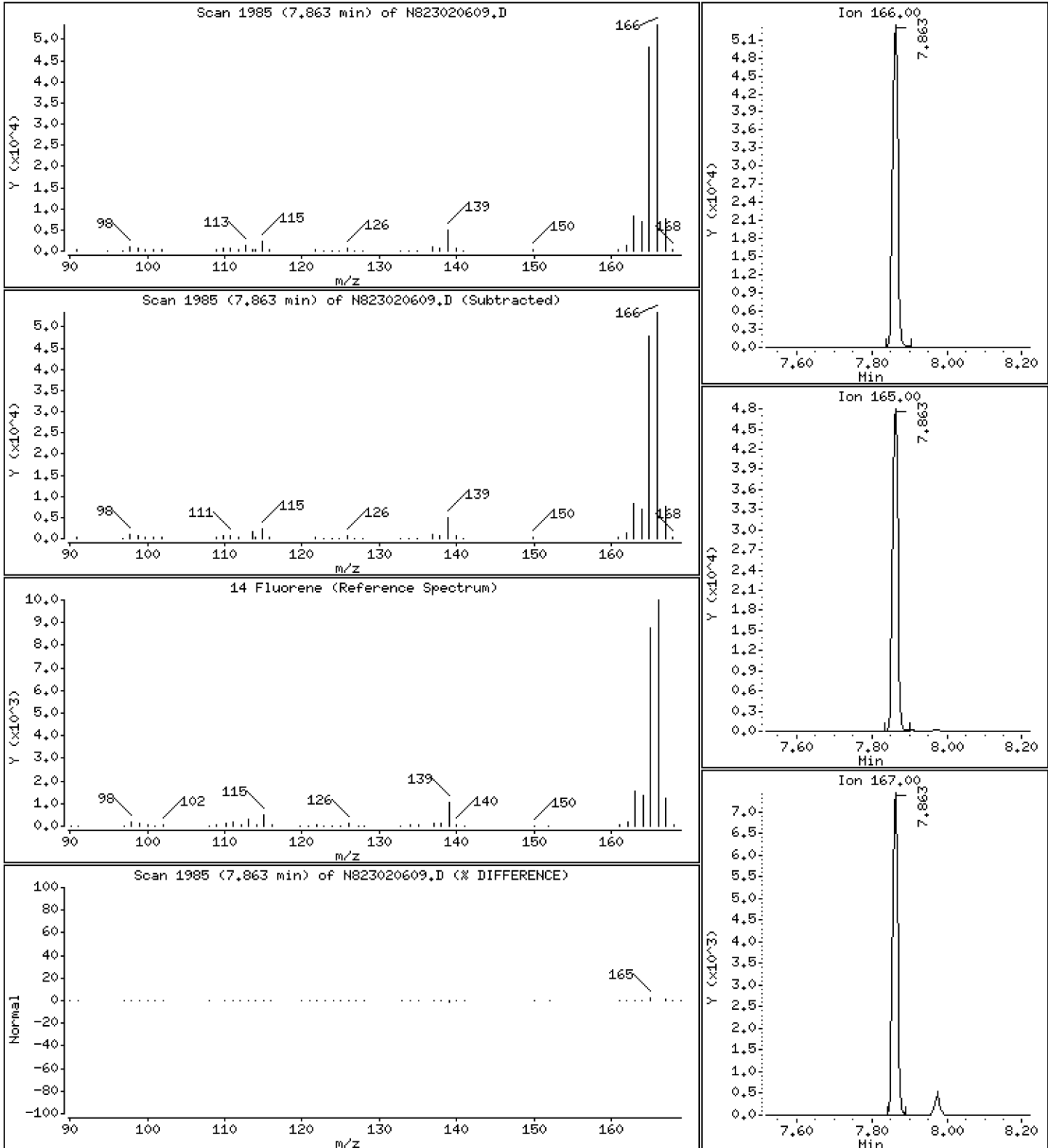
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

14 Fluorene

Concentration: 2,828 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

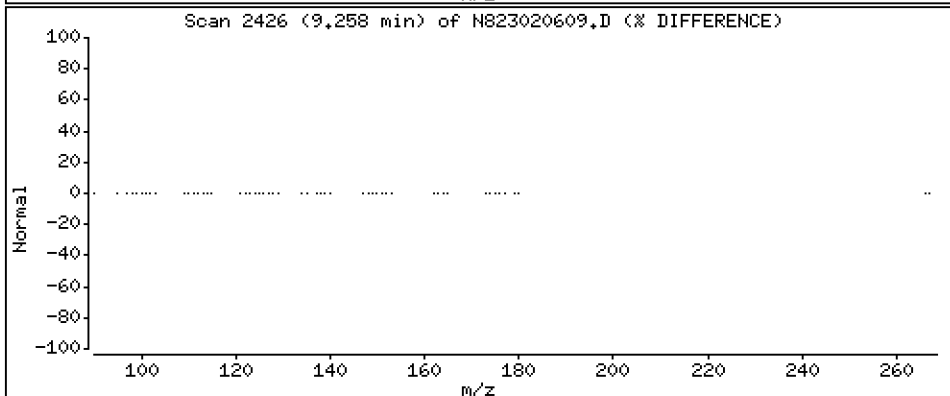
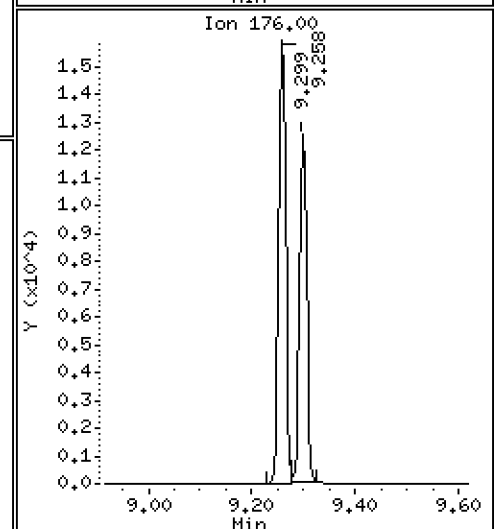
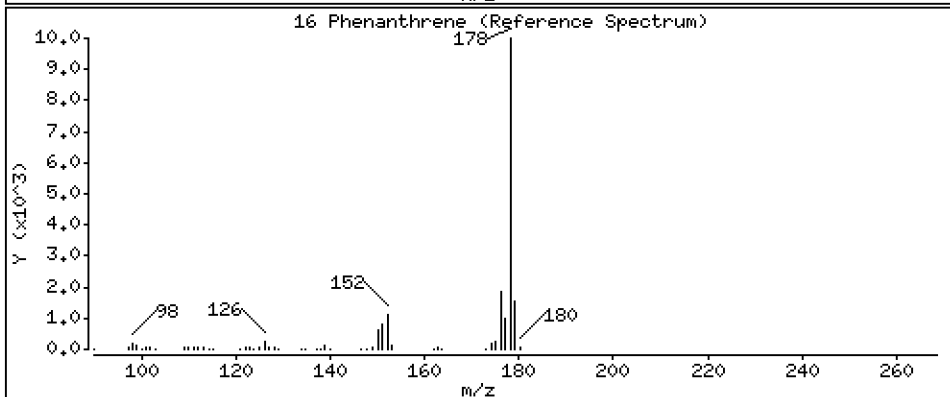
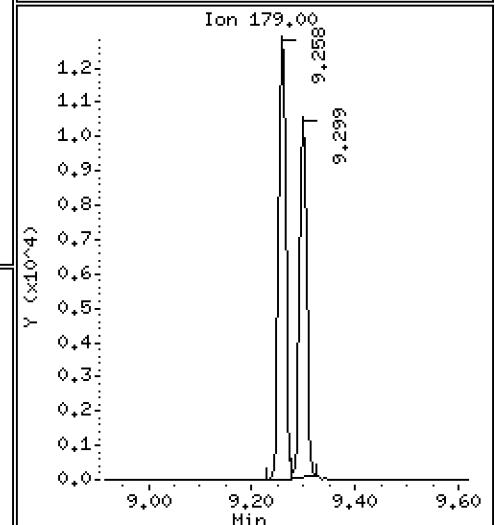
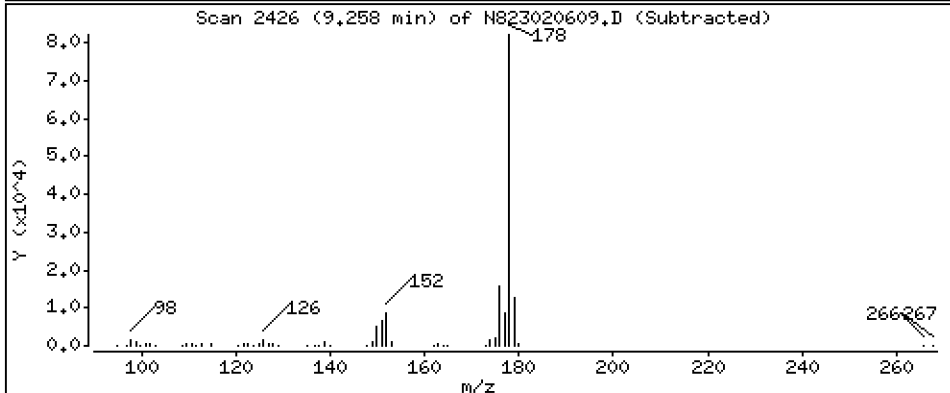
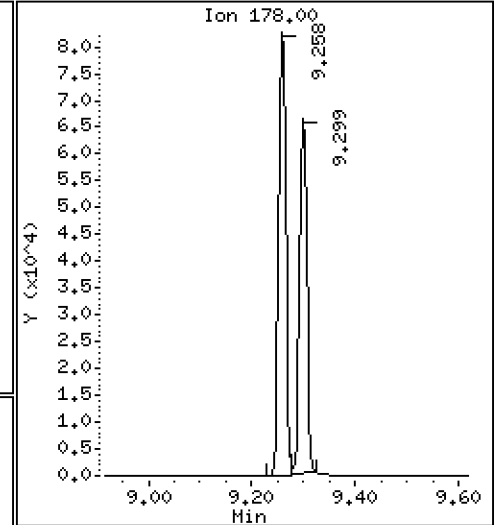
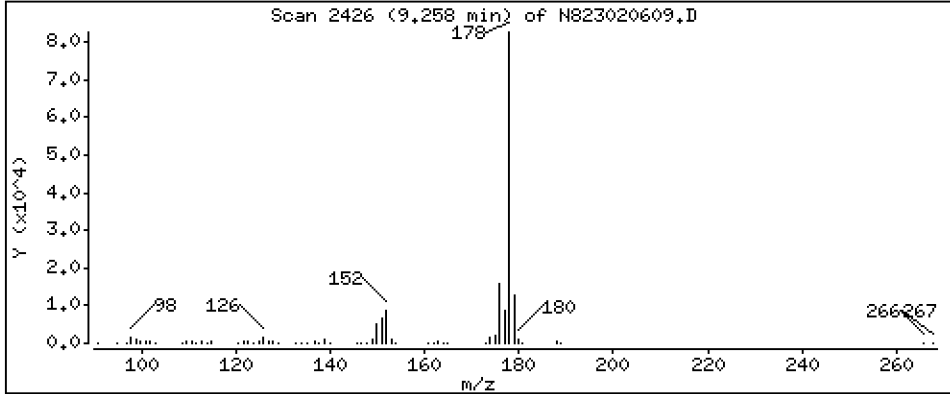
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 2,914 ug/mL

16 Phenanthrene



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

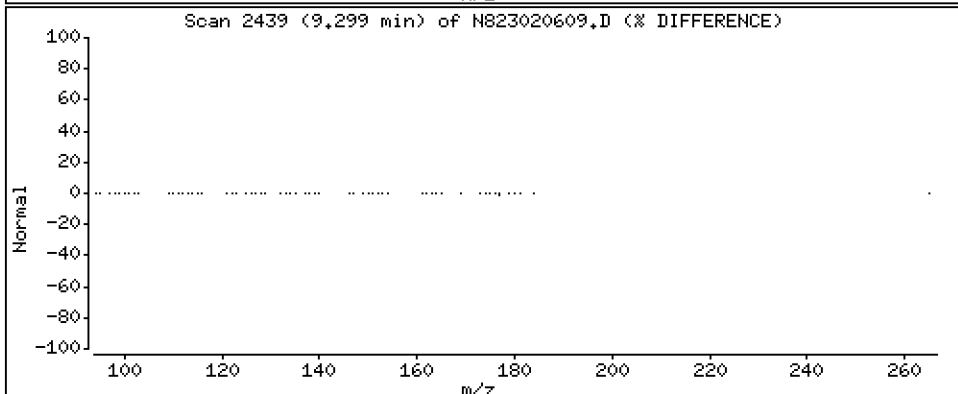
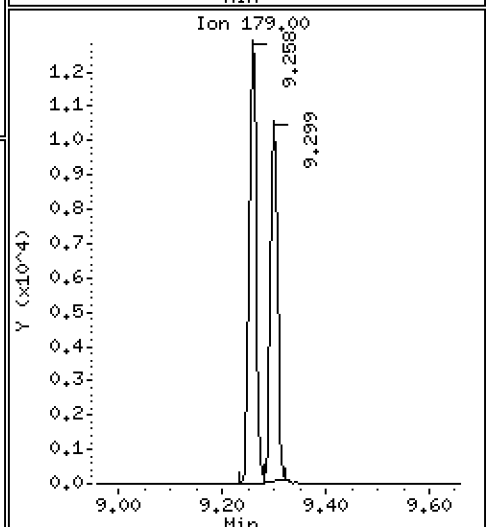
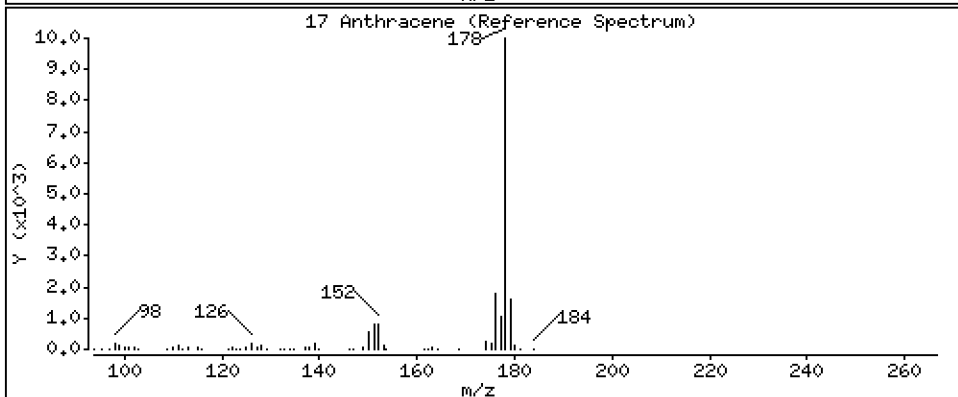
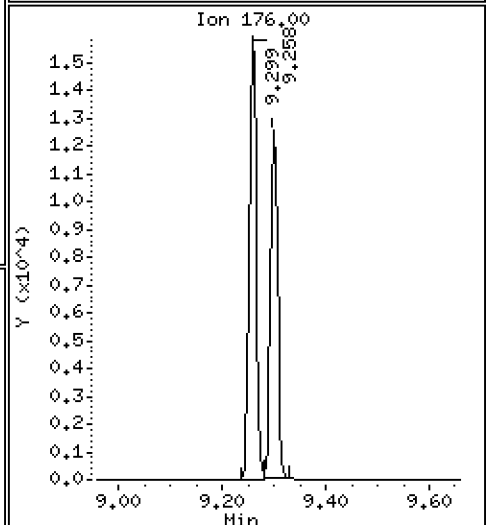
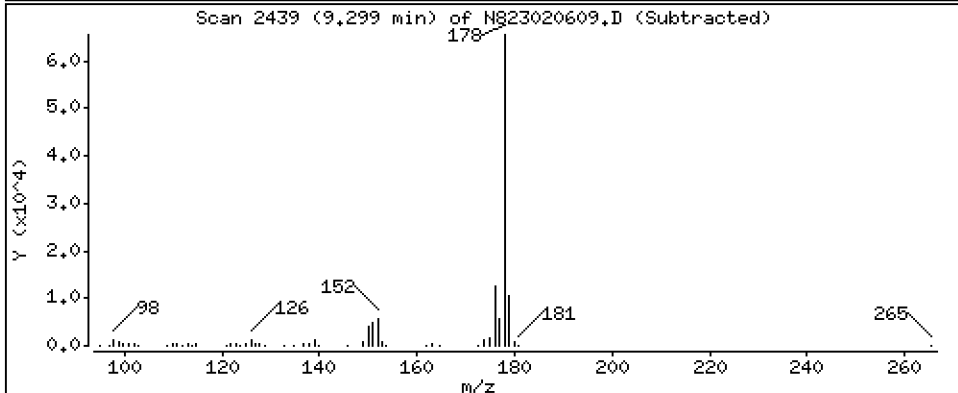
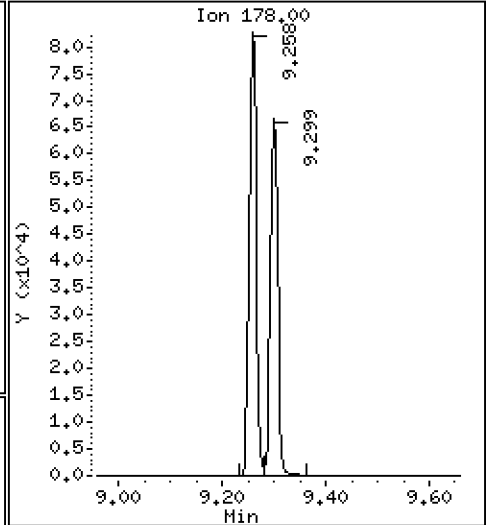
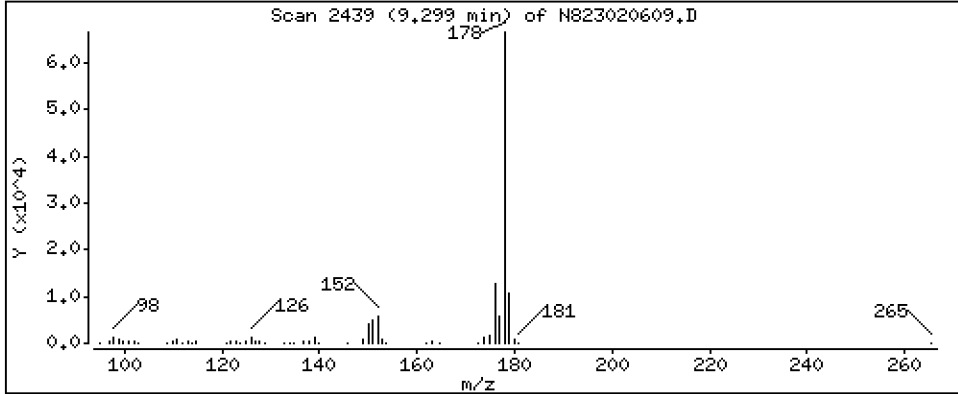
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 2,654 ug/mL

17 Anthracene



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

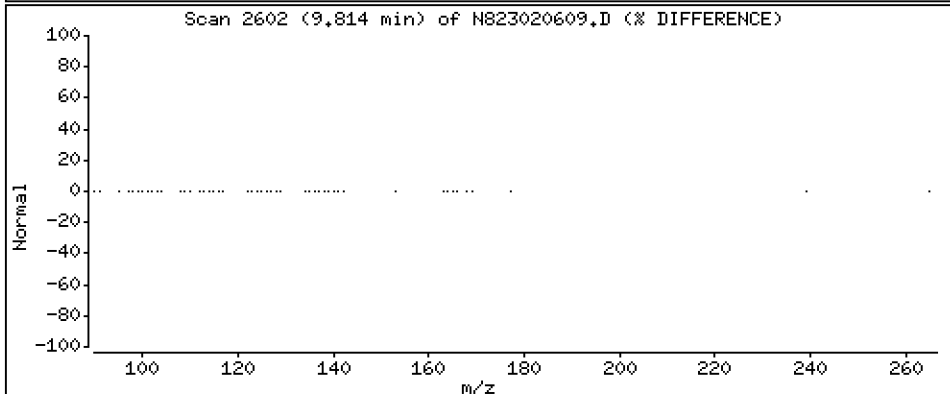
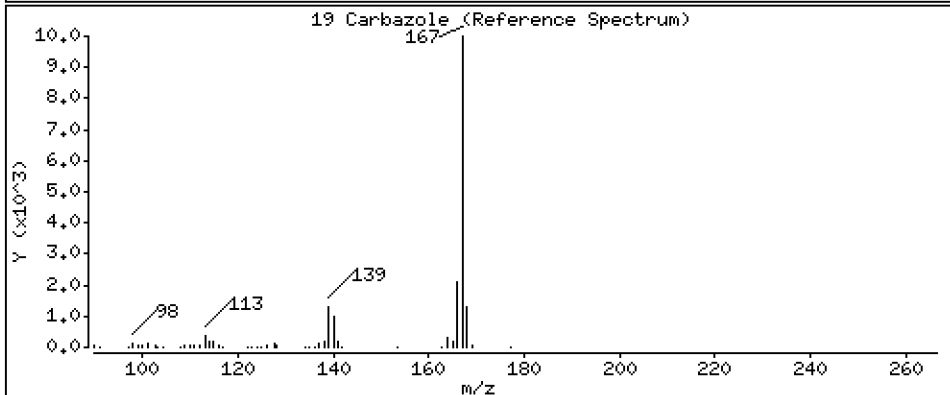
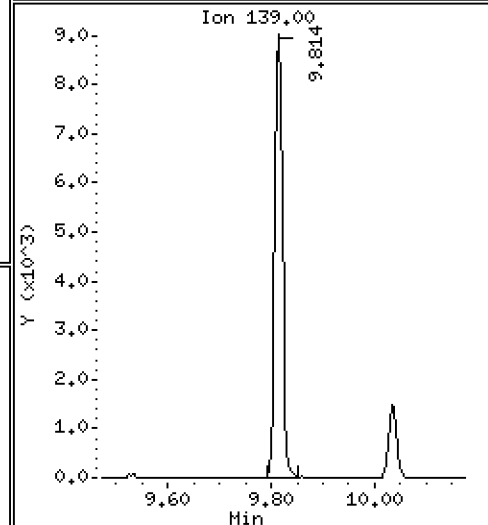
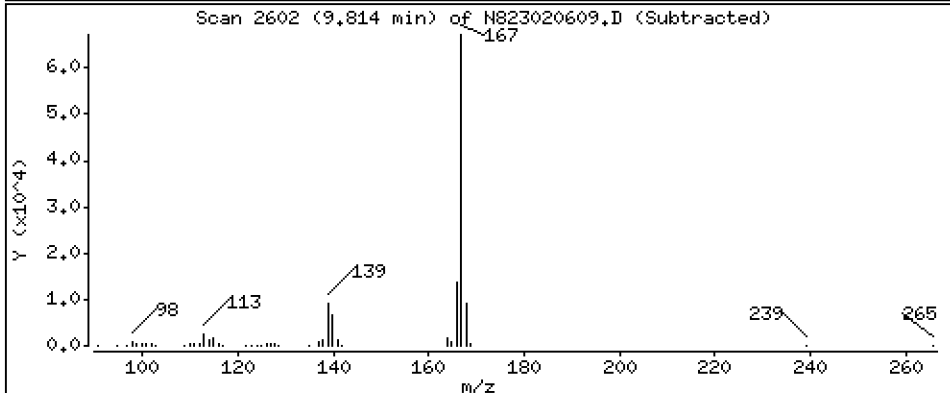
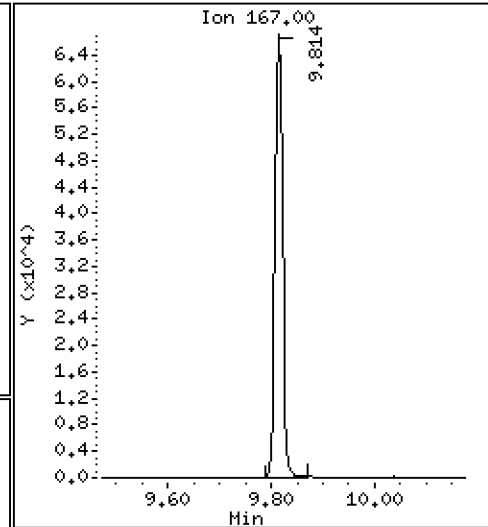
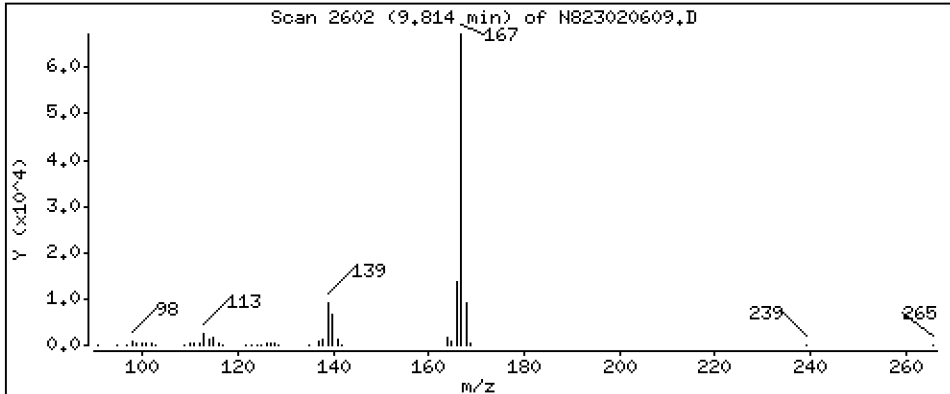
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

19 Carbazole

Concentration: 3,038 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

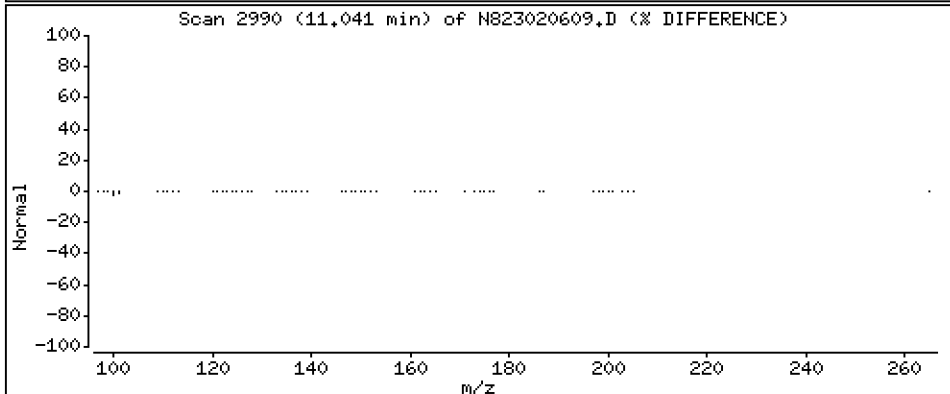
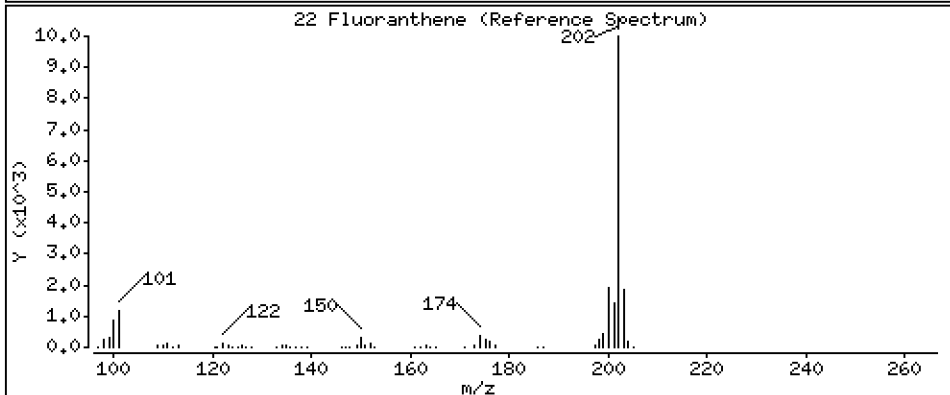
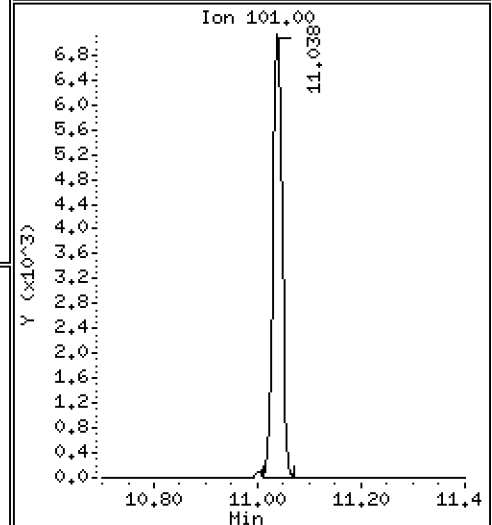
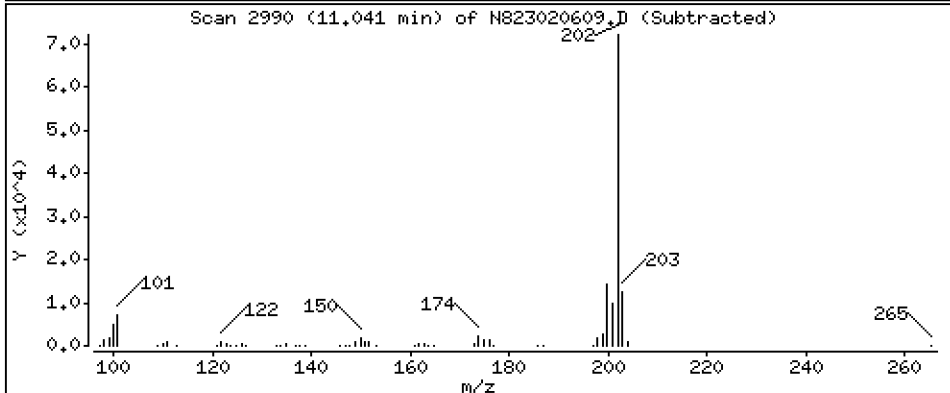
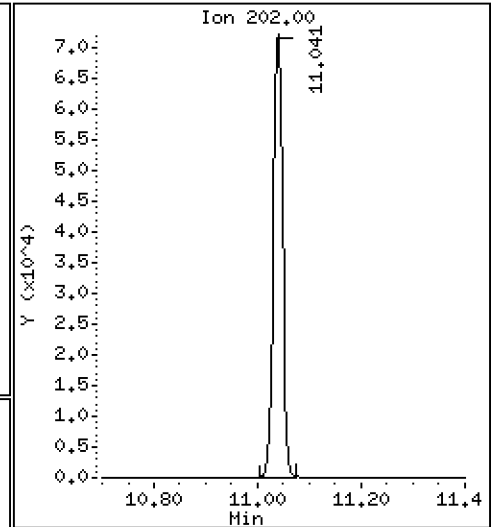
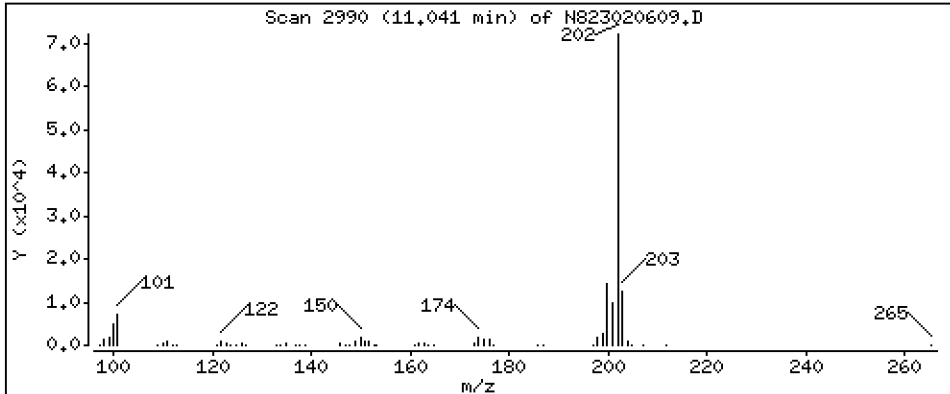
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 3,073 ug/mL

22 Fluoranthene



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

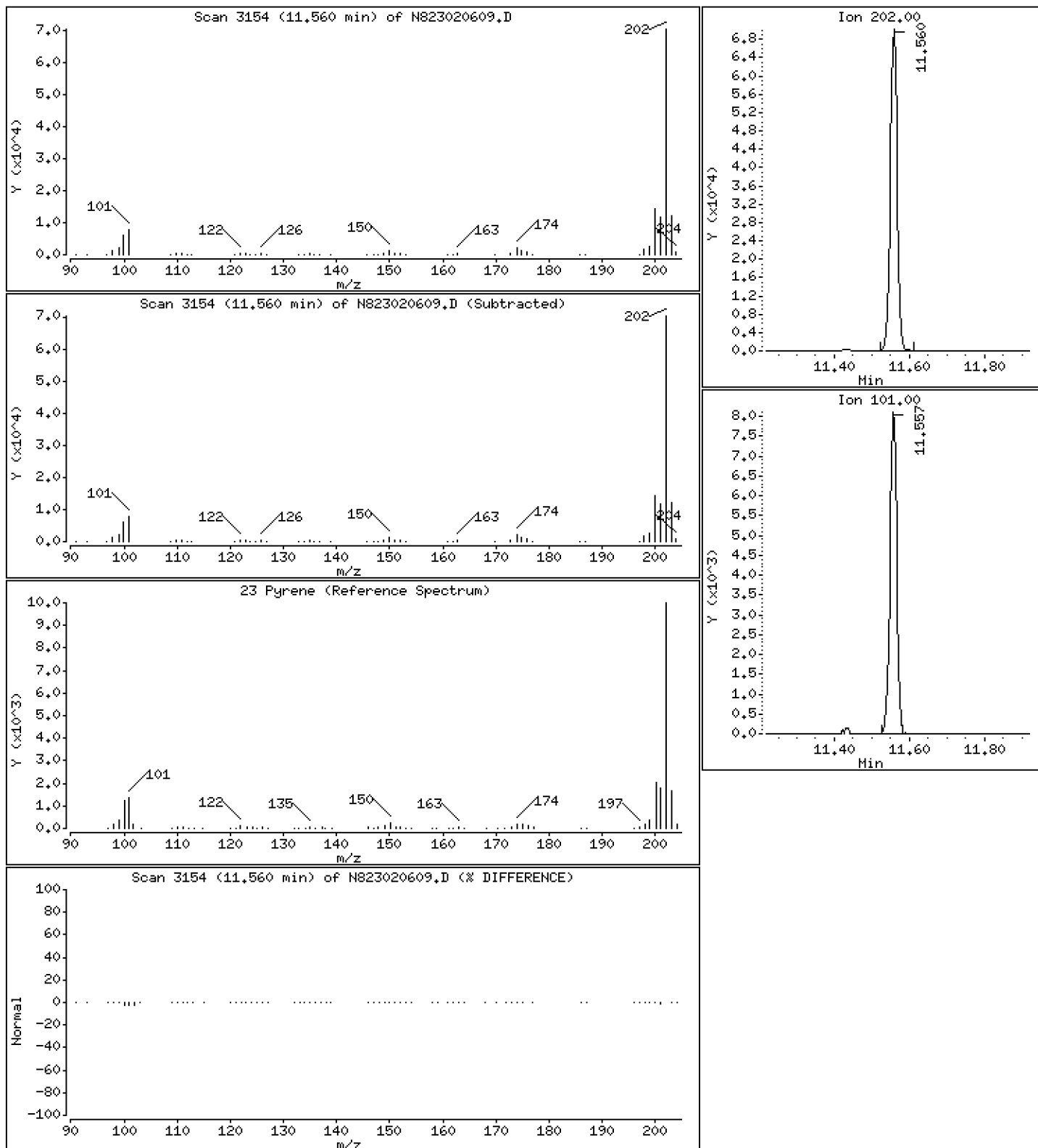
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 3,566 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

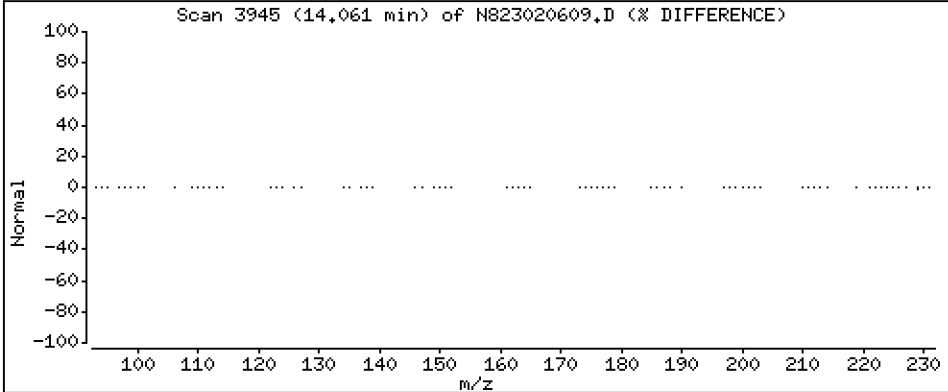
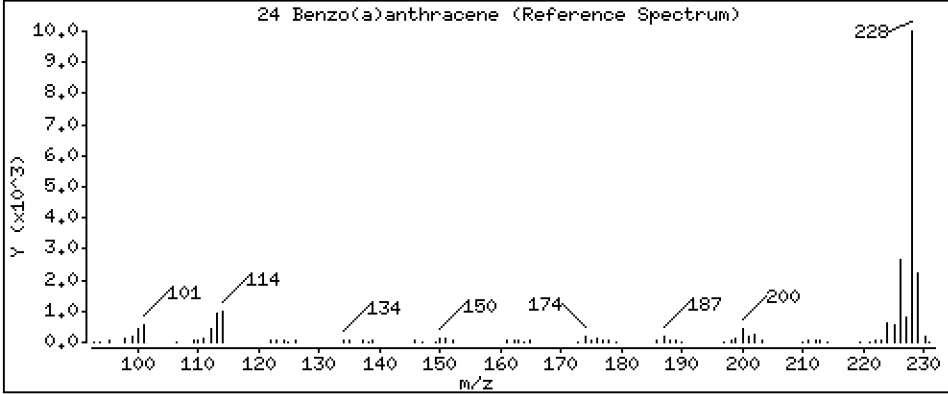
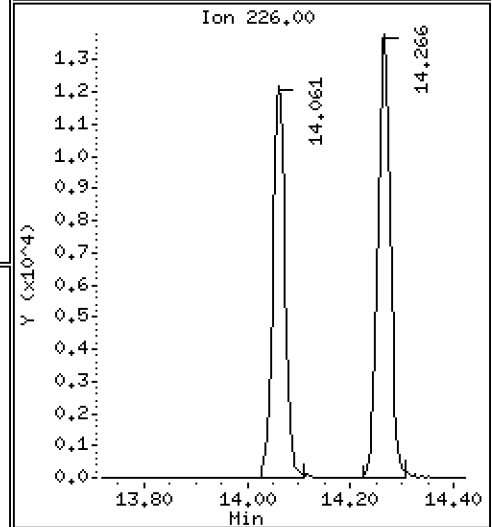
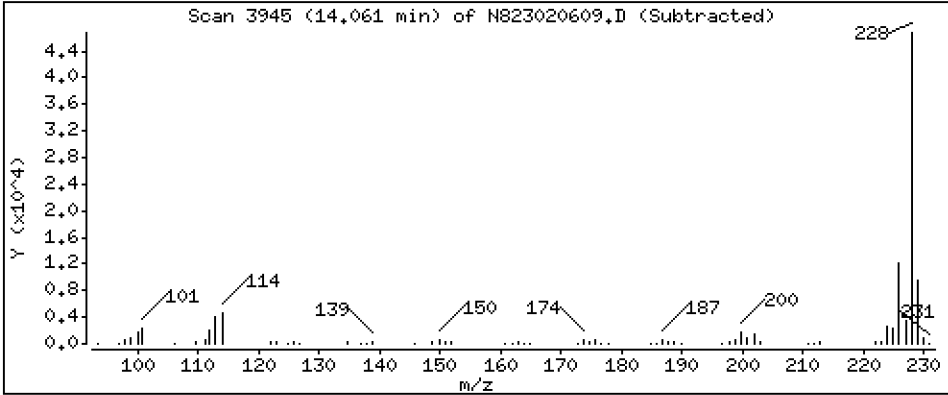
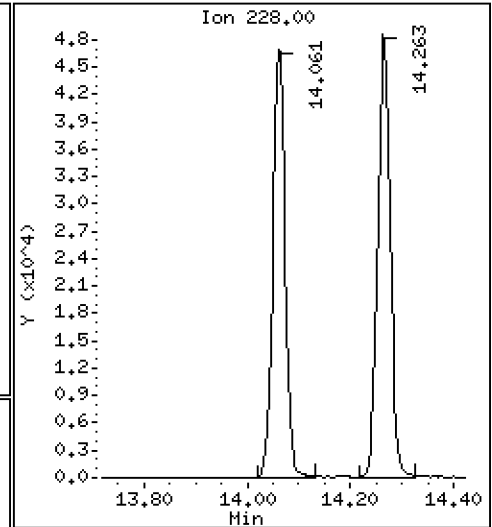
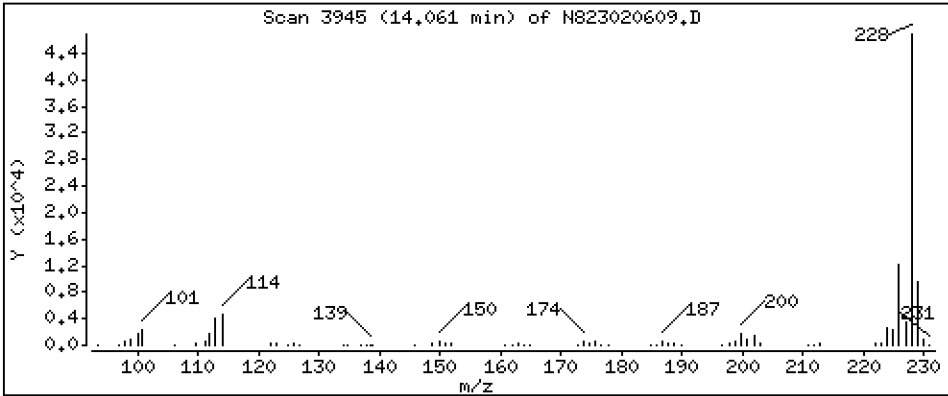
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

24 Benzo(a)anthracene

Concentration: 3,343 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

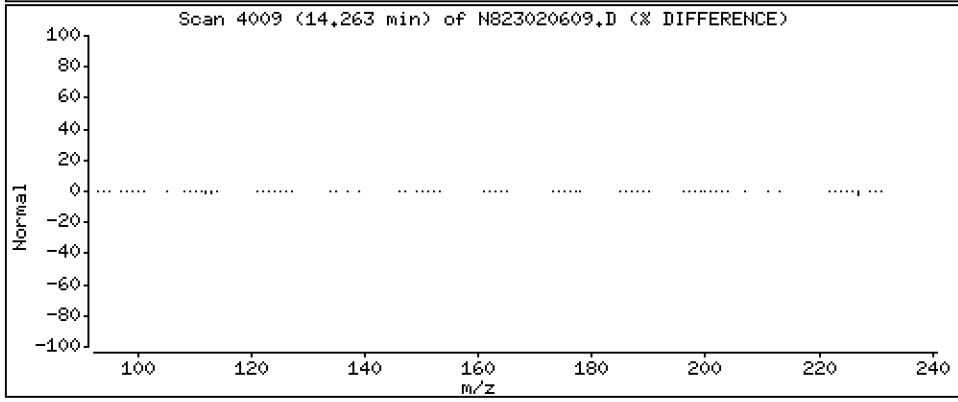
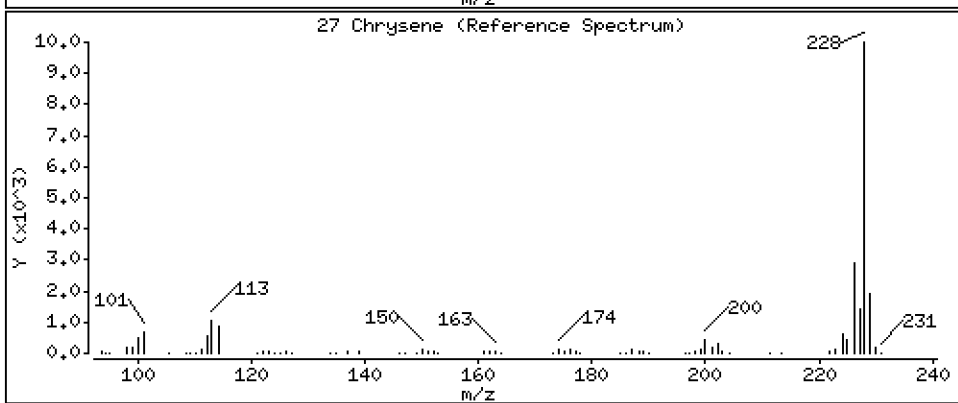
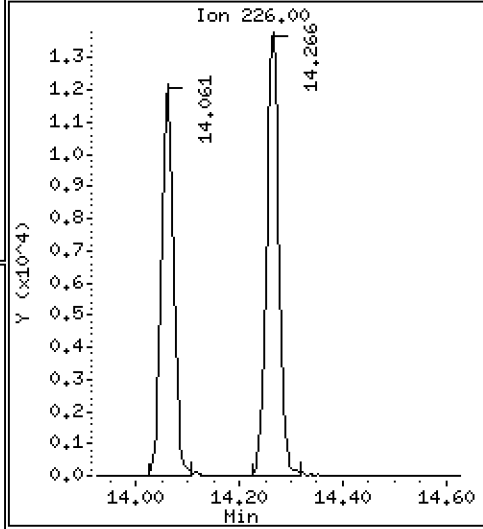
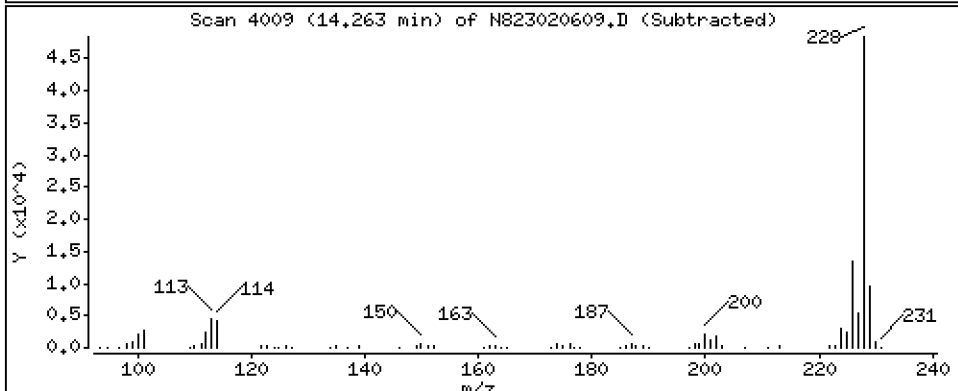
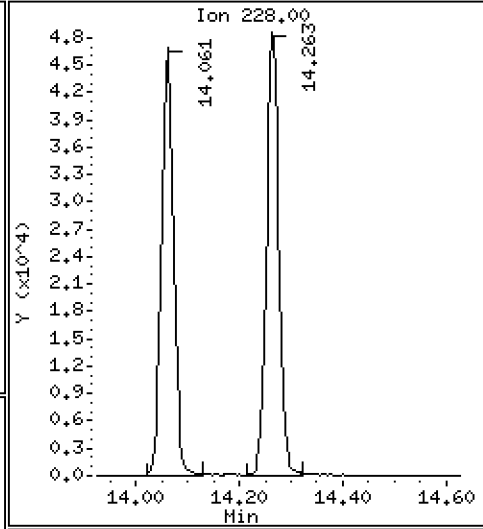
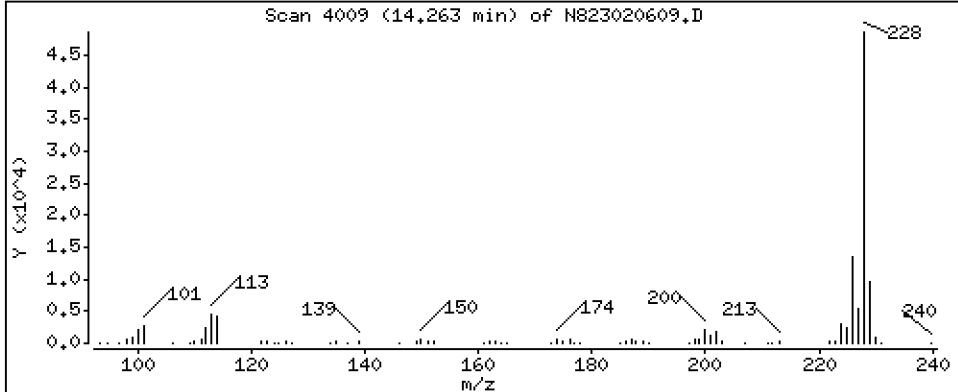
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 3,335 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

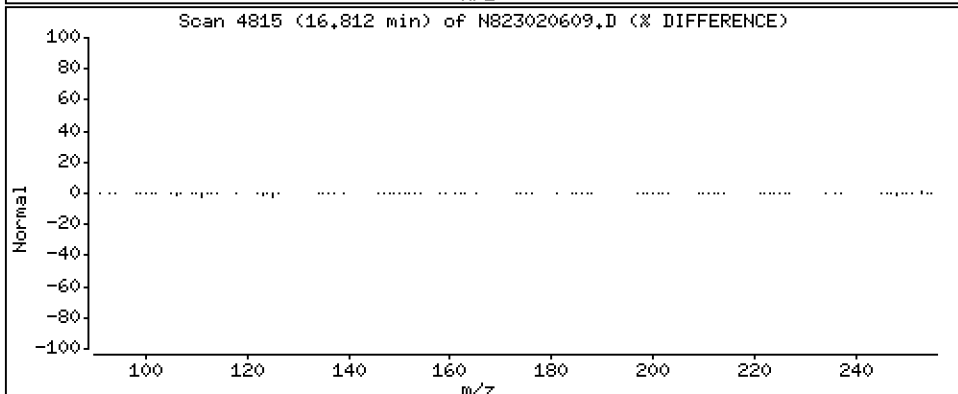
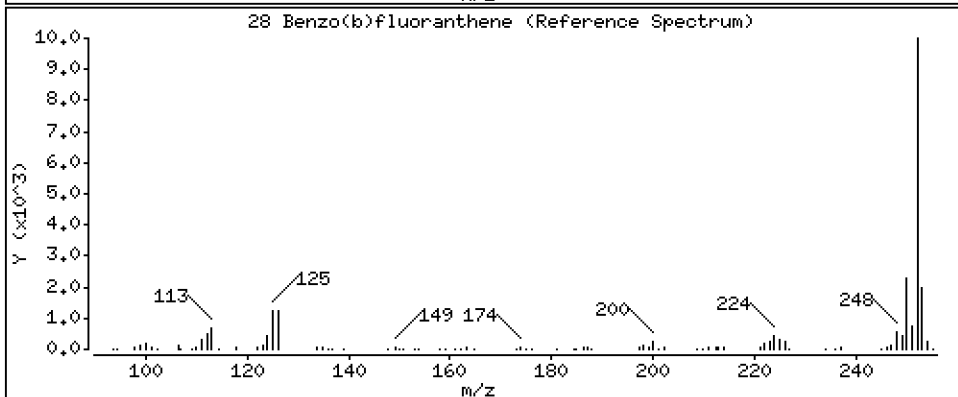
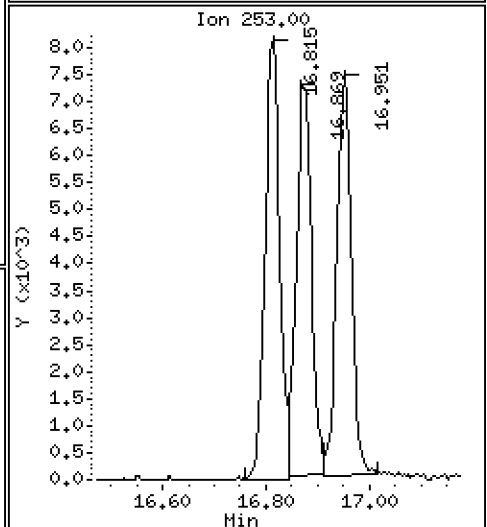
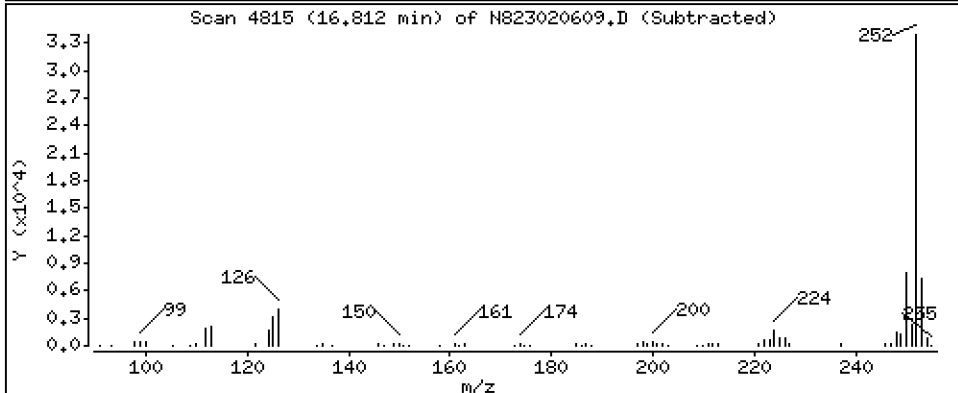
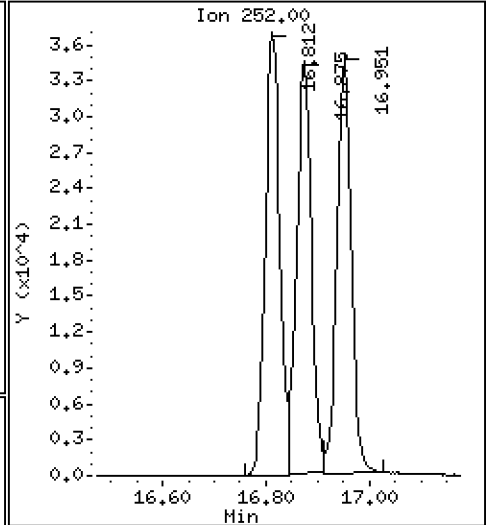
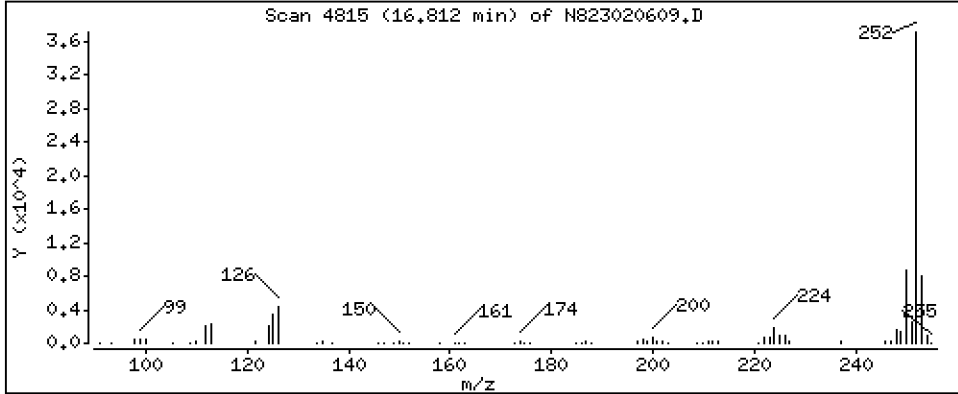
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 4,661 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

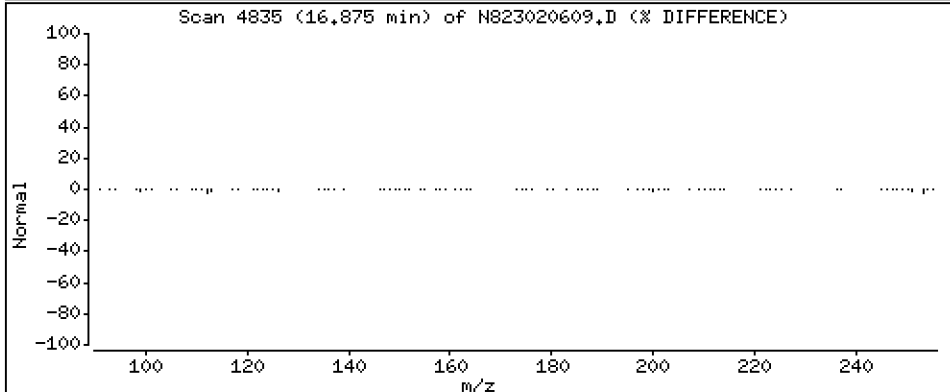
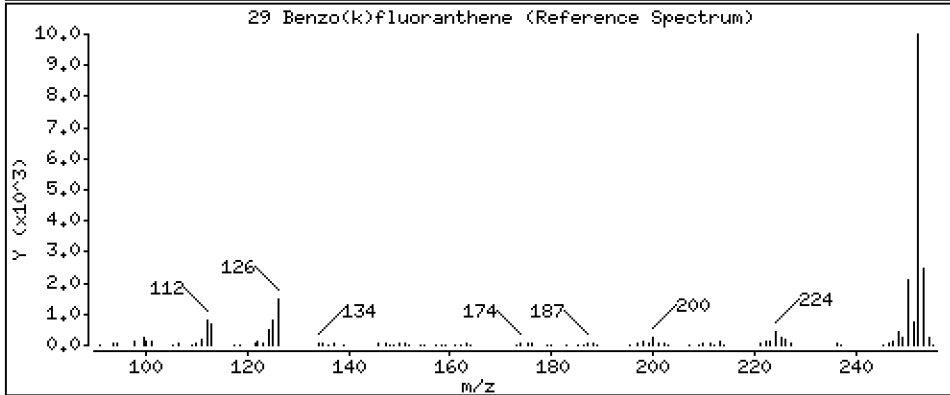
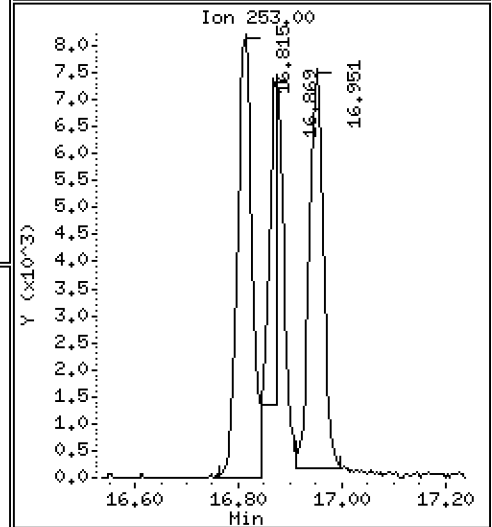
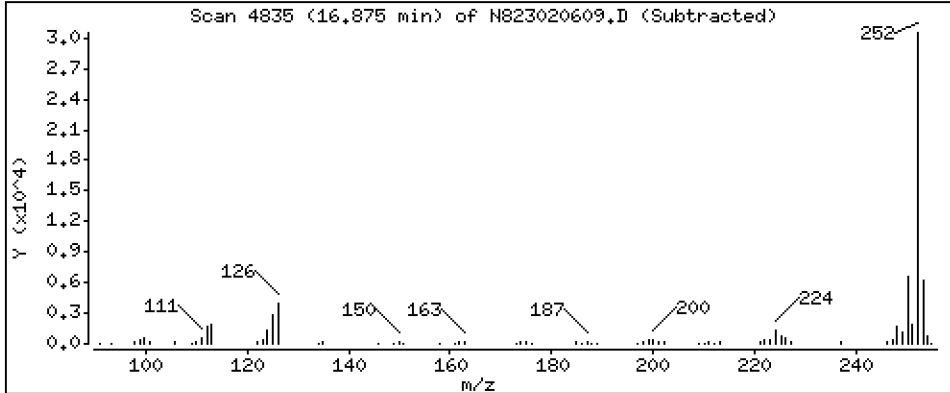
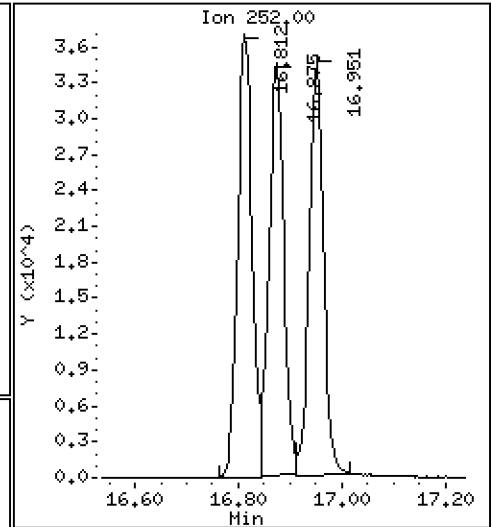
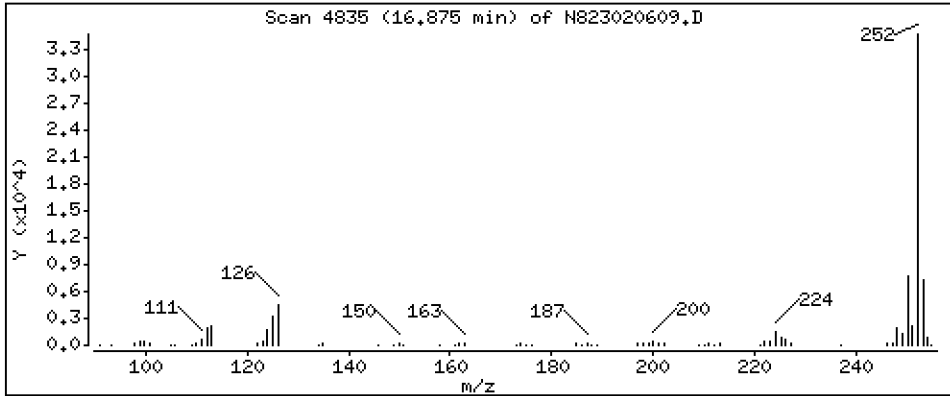
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

29 Benzo(k)fluoranthene

Concentration: 4,445 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

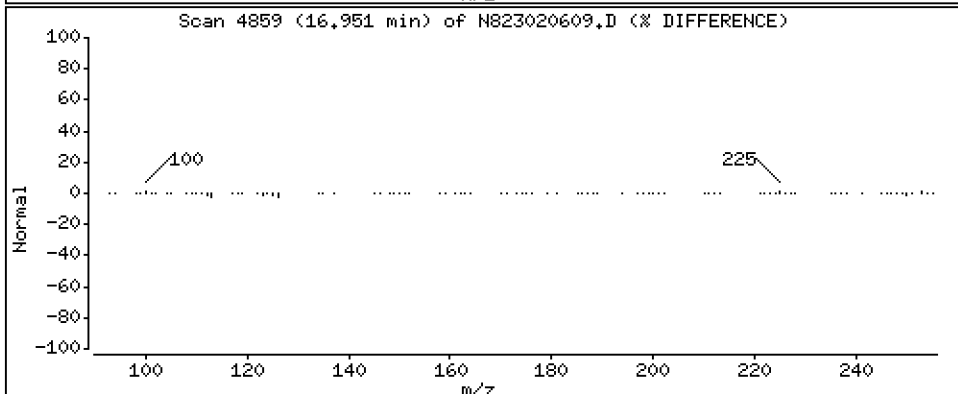
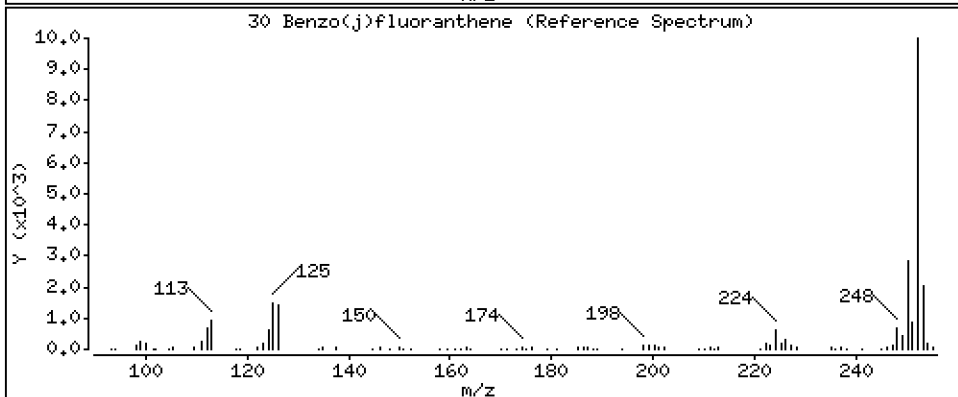
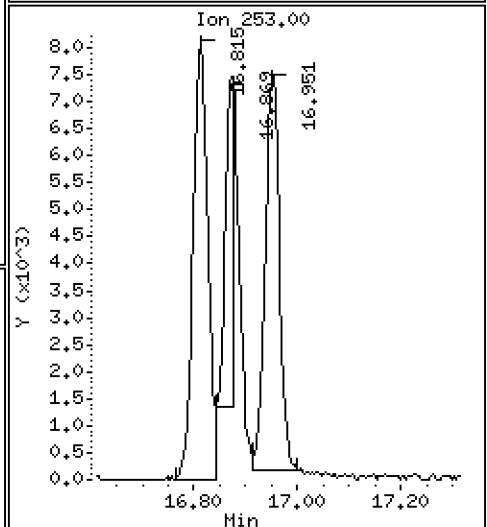
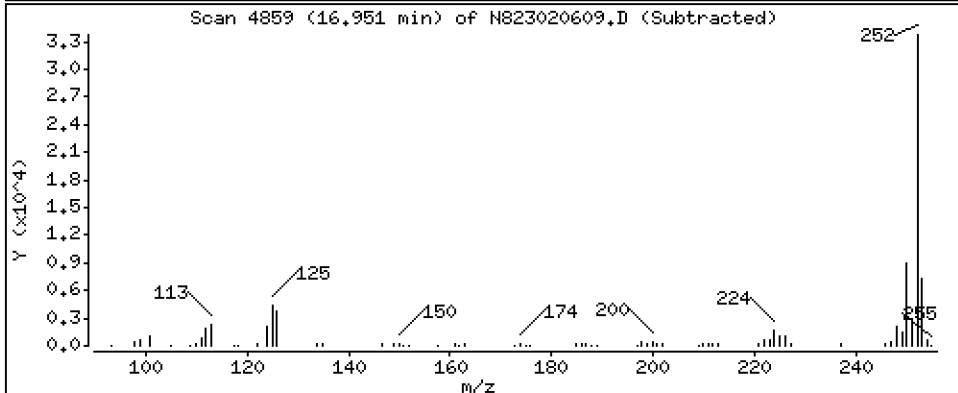
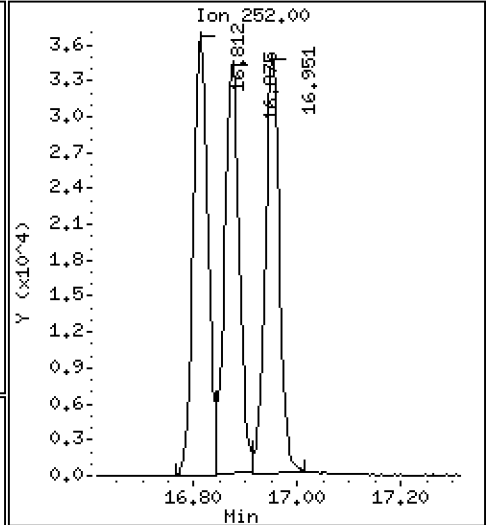
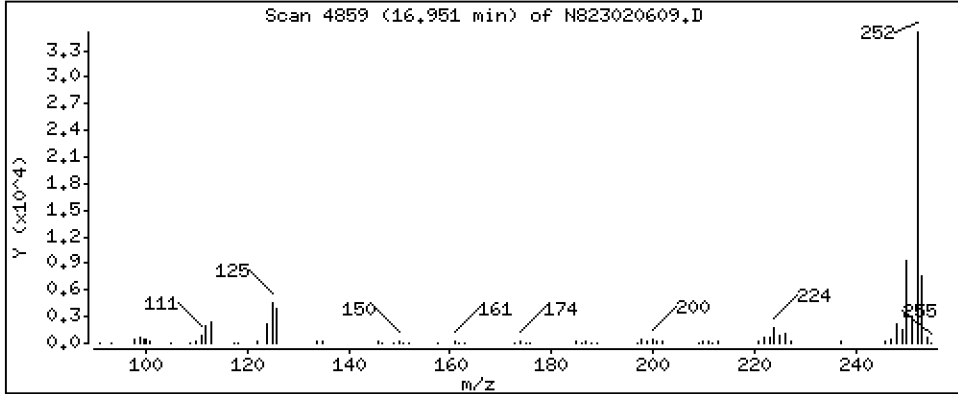
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

30 Benzo(j)fluoranthene

Concentration: 4,826 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

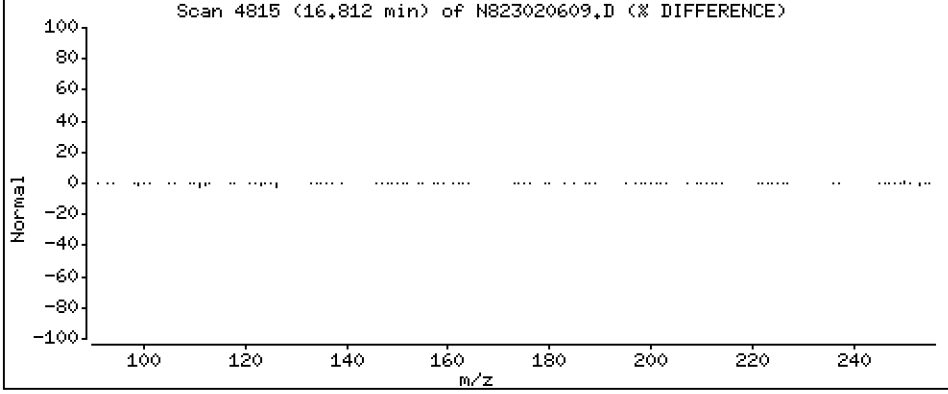
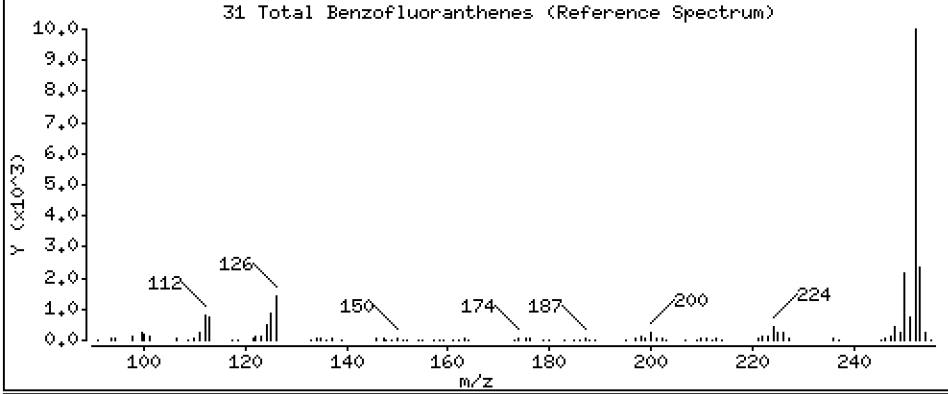
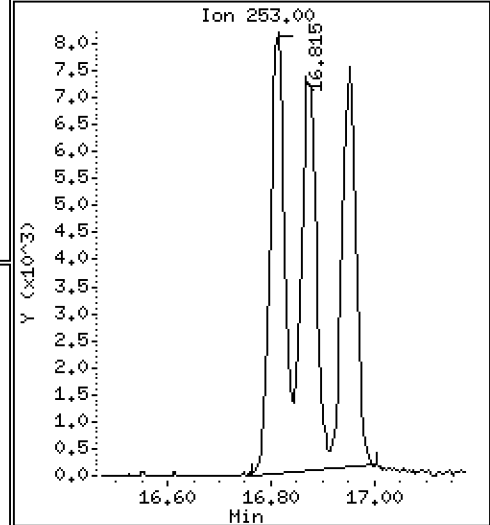
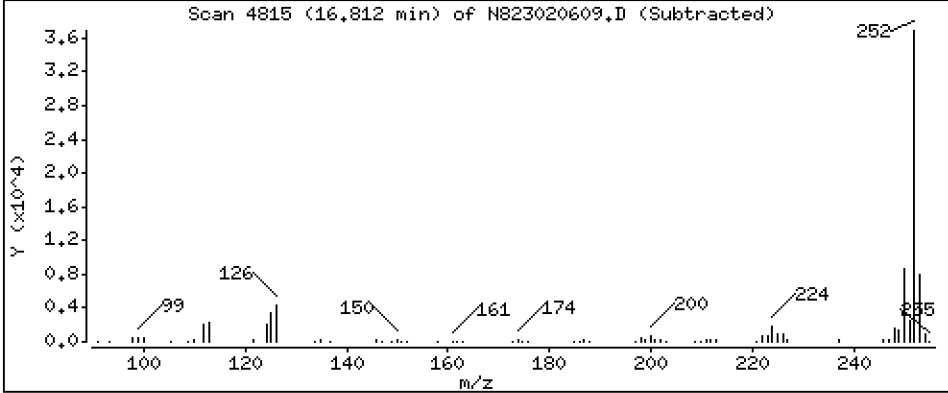
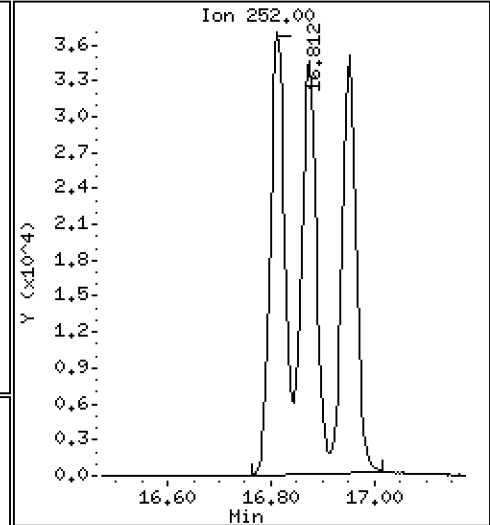
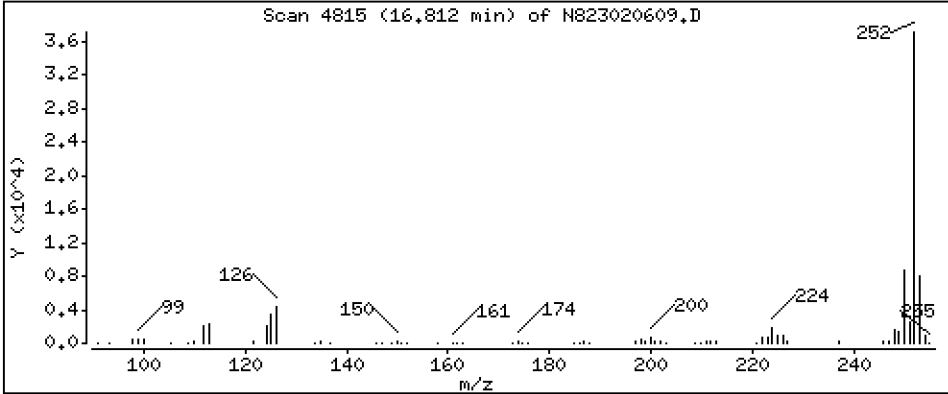
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 13,91 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

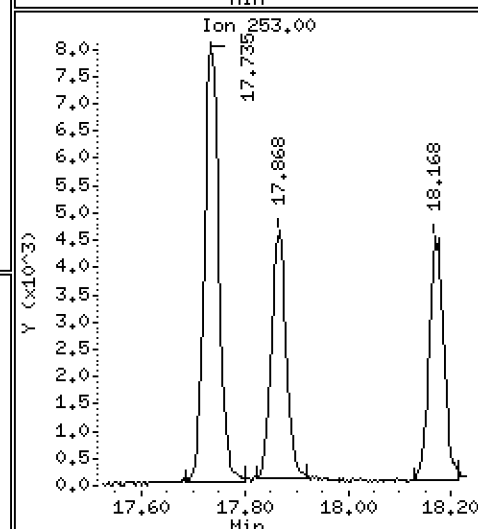
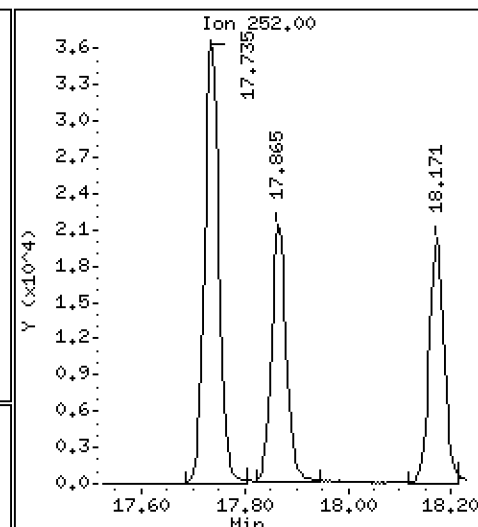
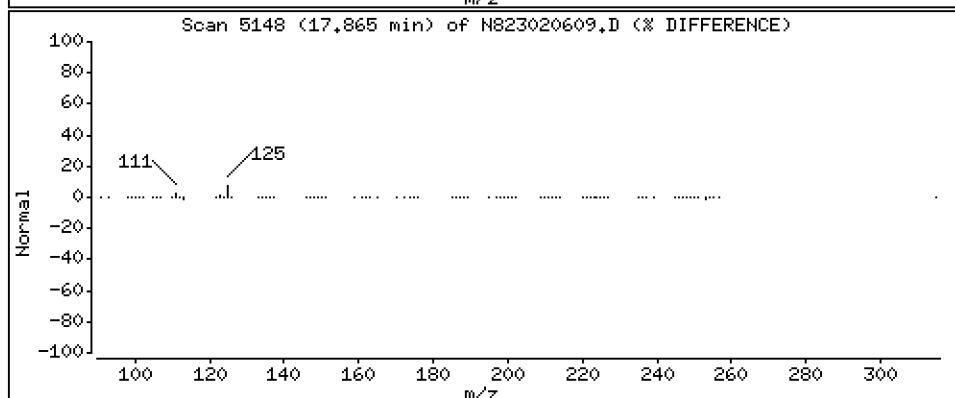
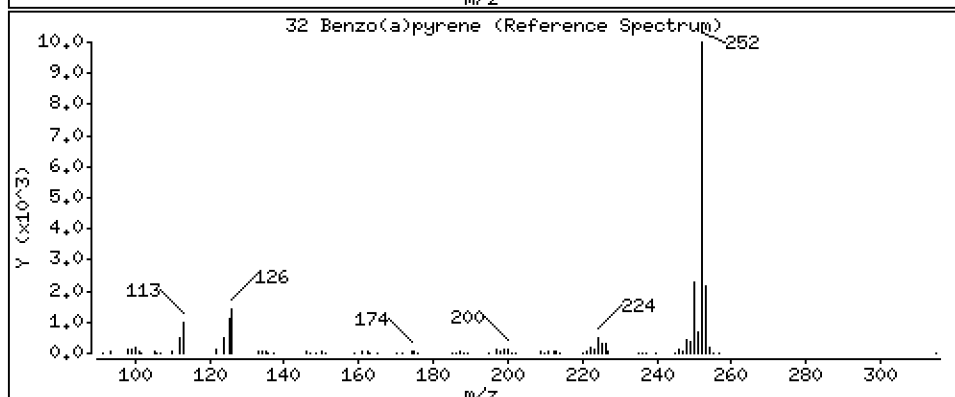
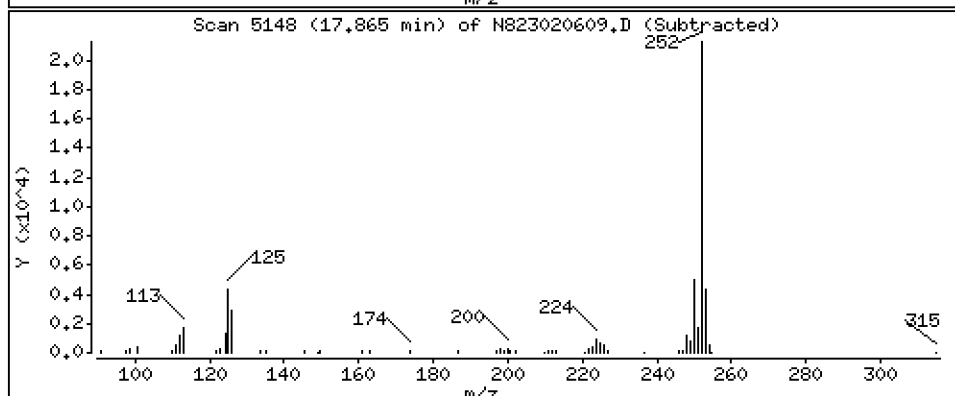
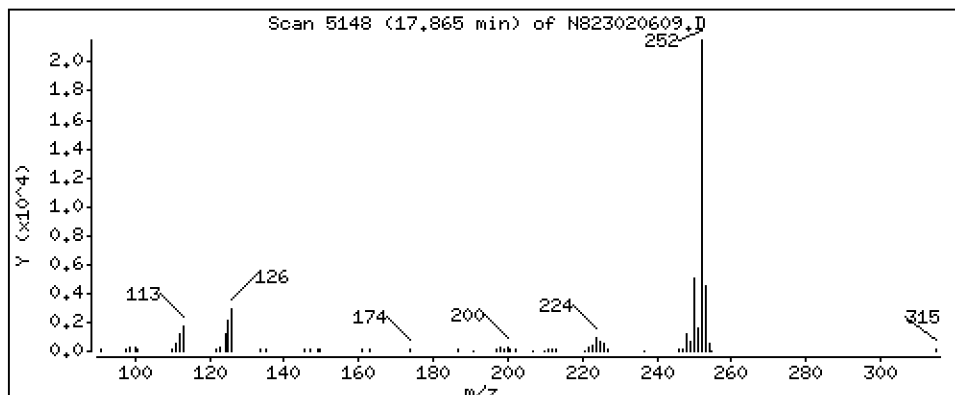
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 3,084 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

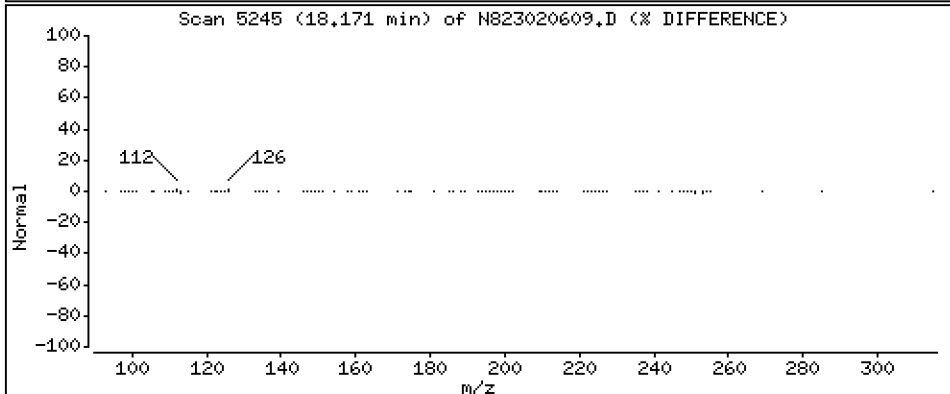
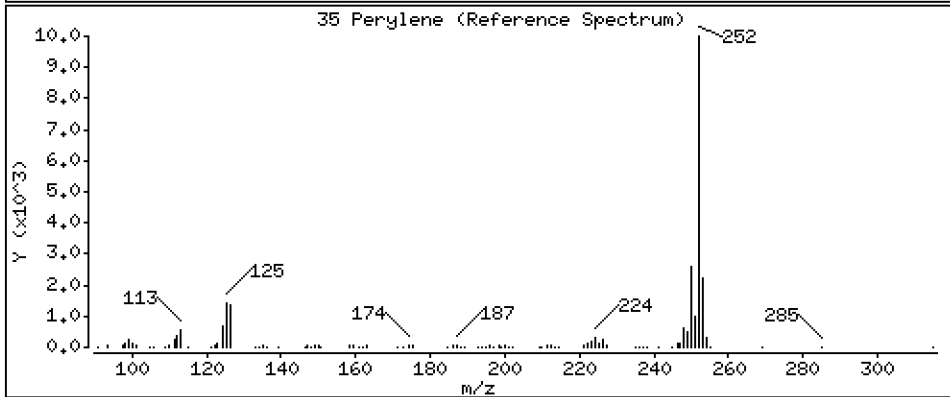
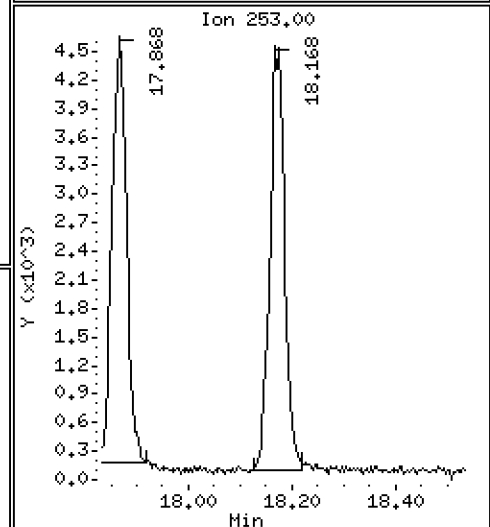
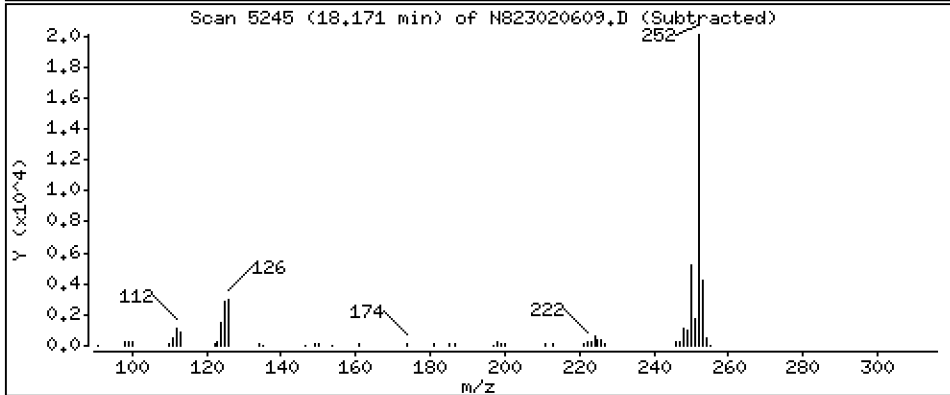
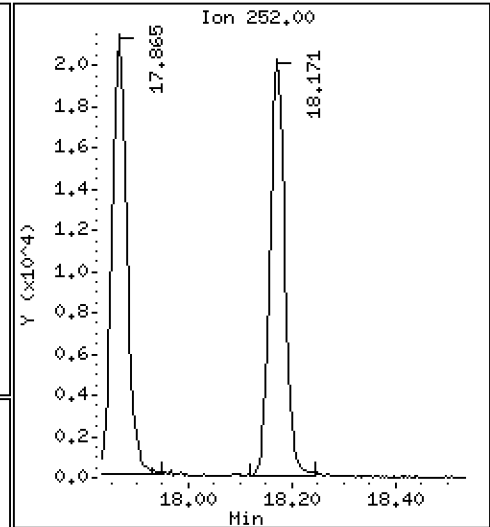
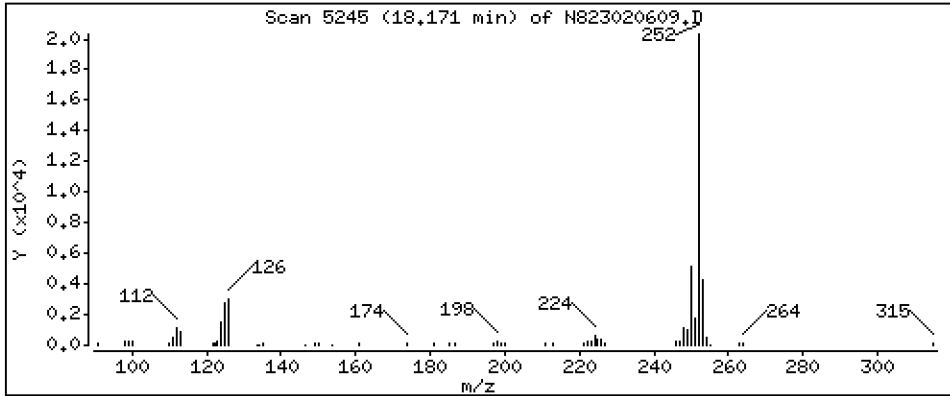
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

35 Perylene

Concentration: 2,727 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

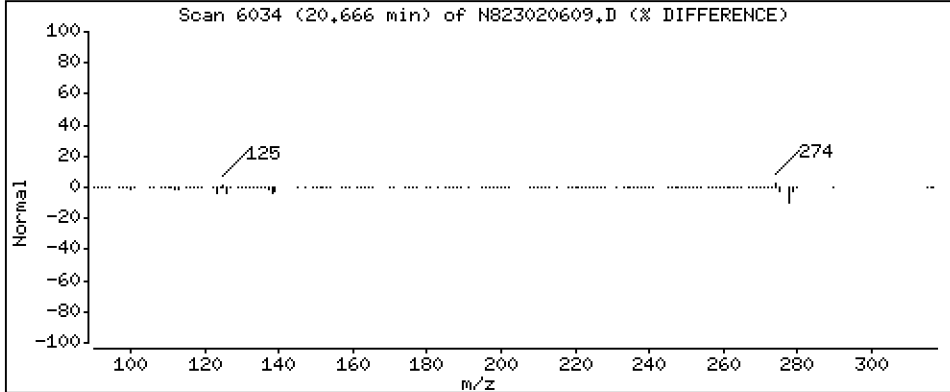
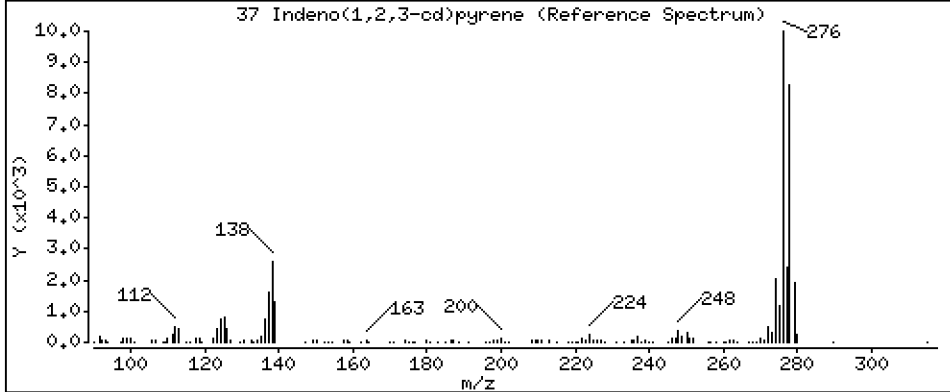
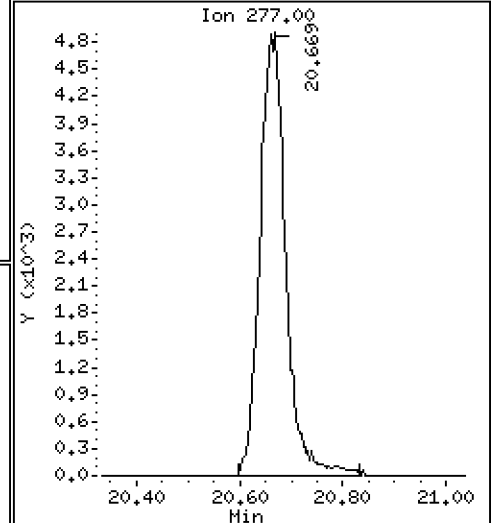
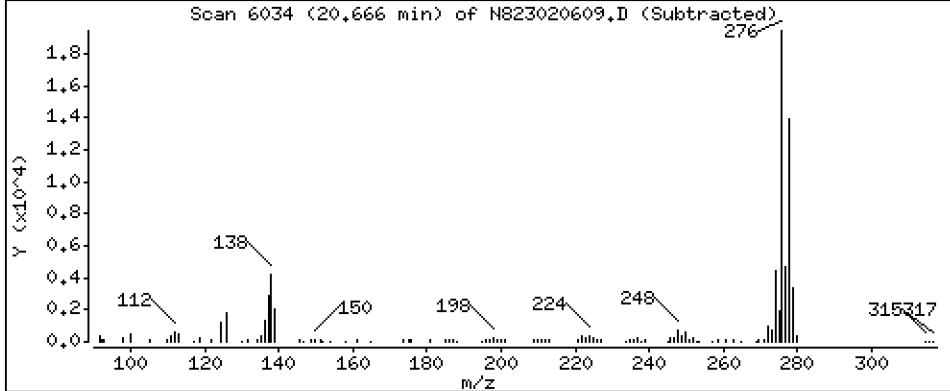
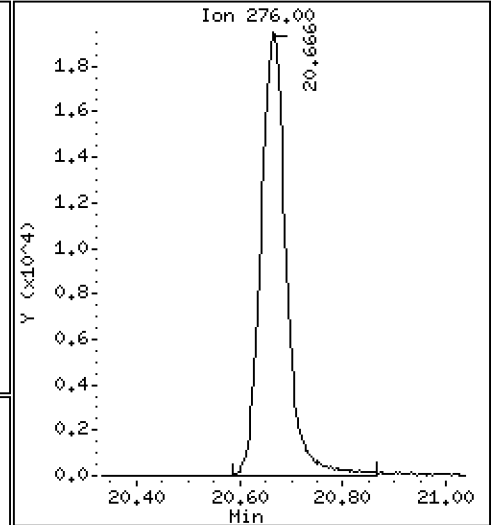
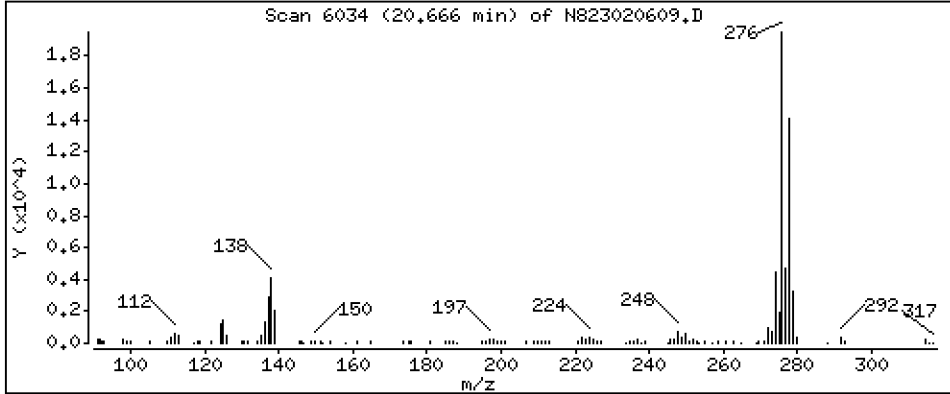
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 4,258 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

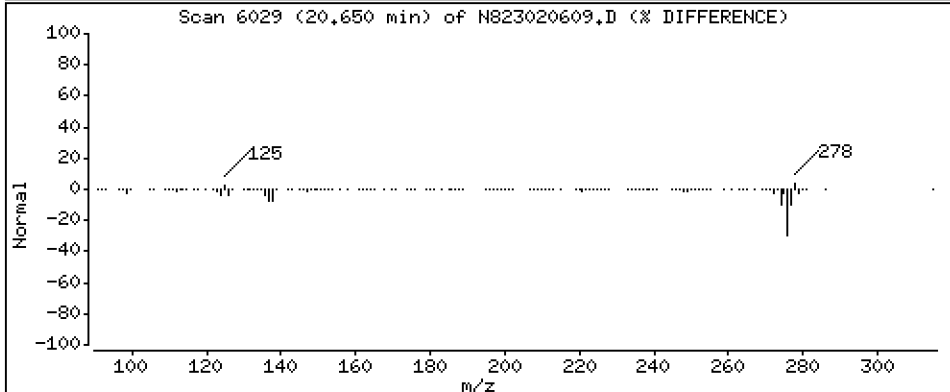
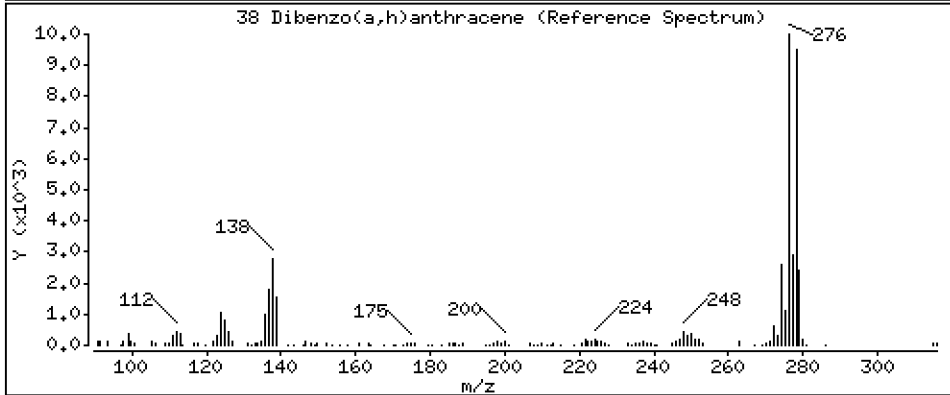
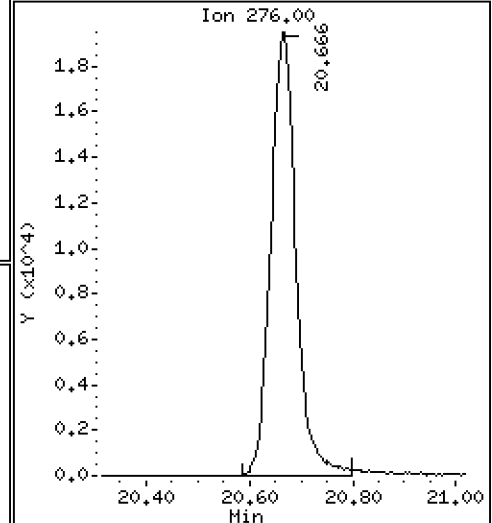
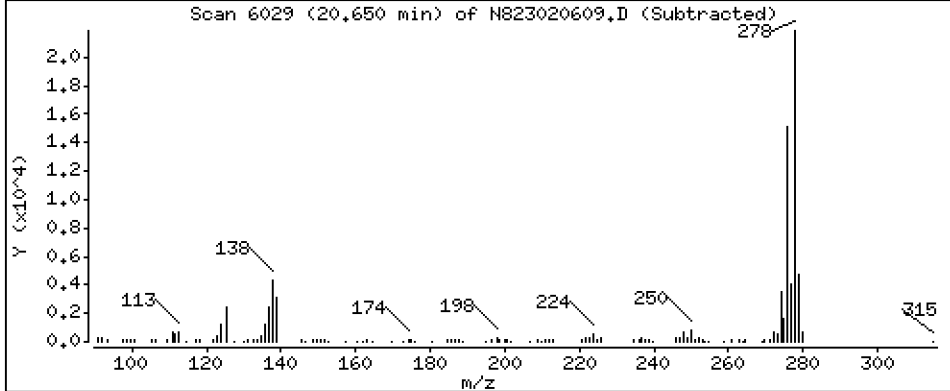
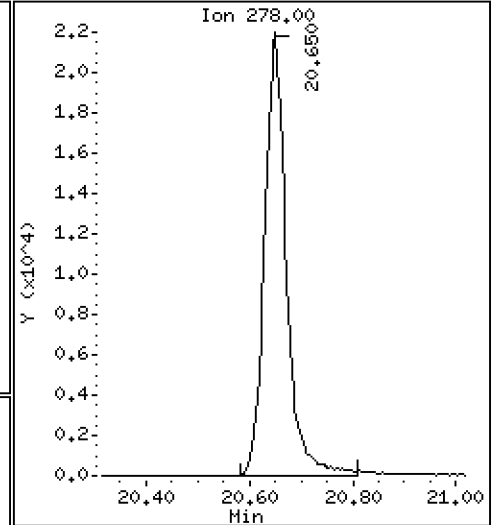
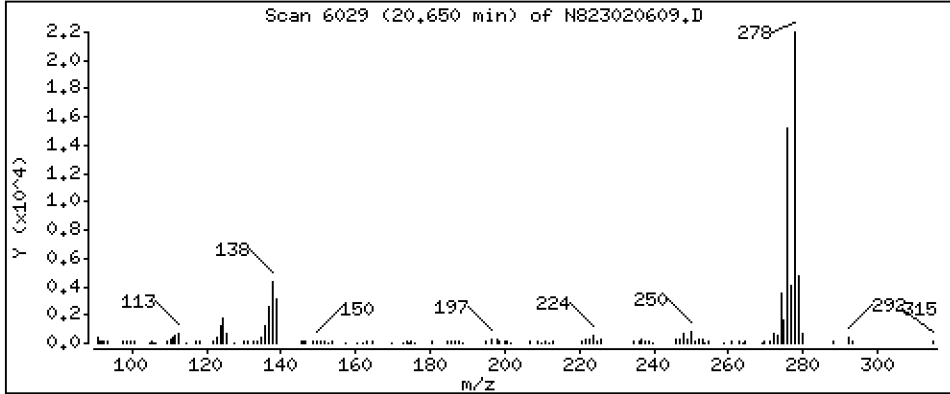
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 4,702 ug/mL



Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1.

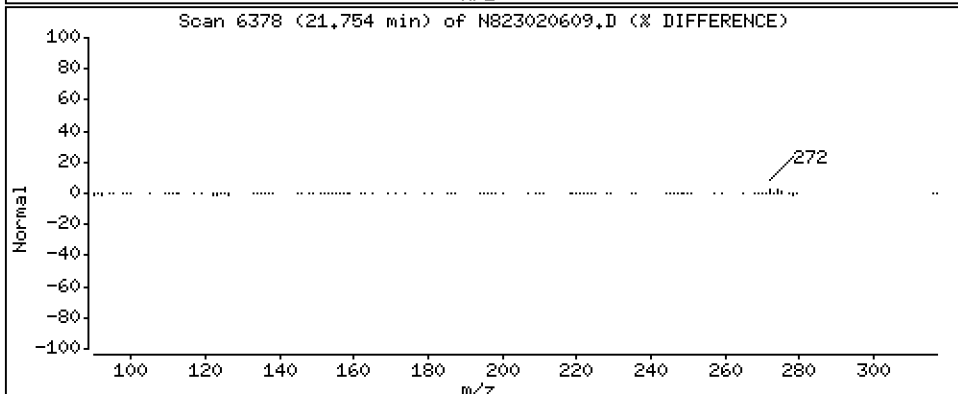
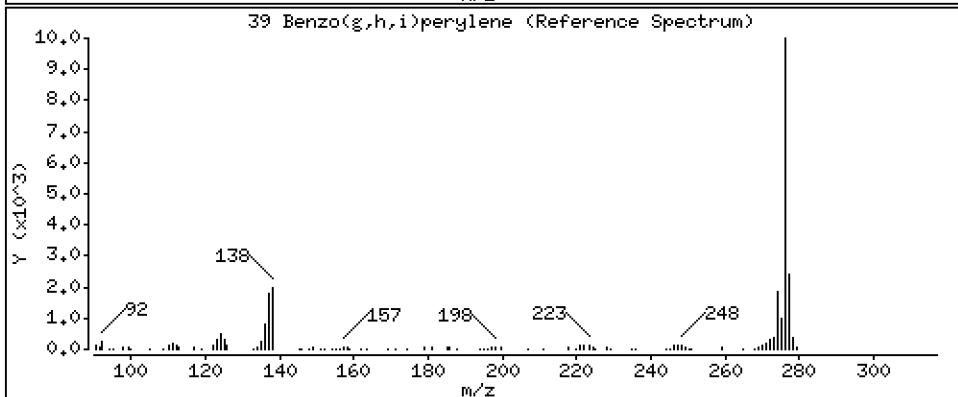
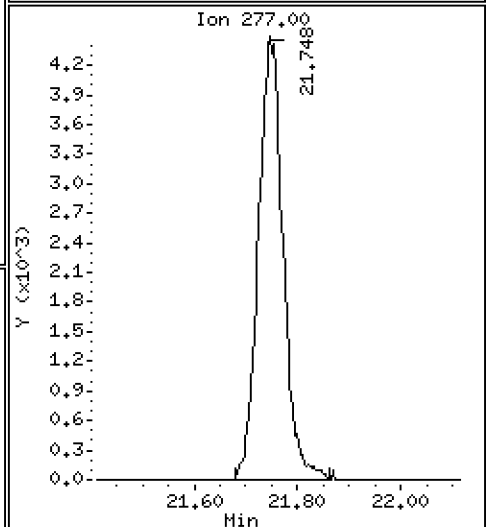
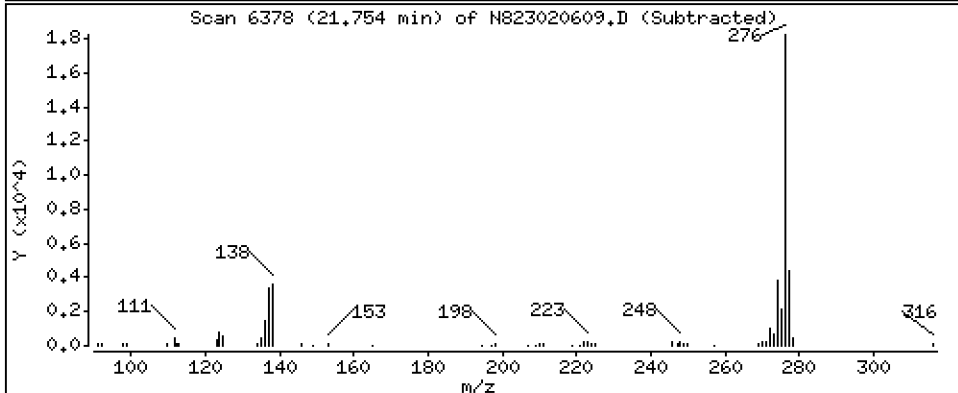
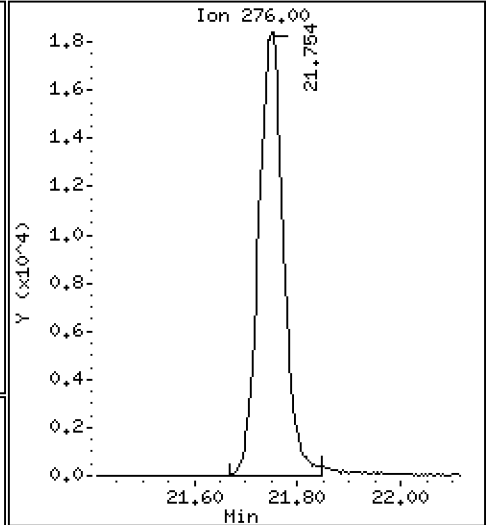
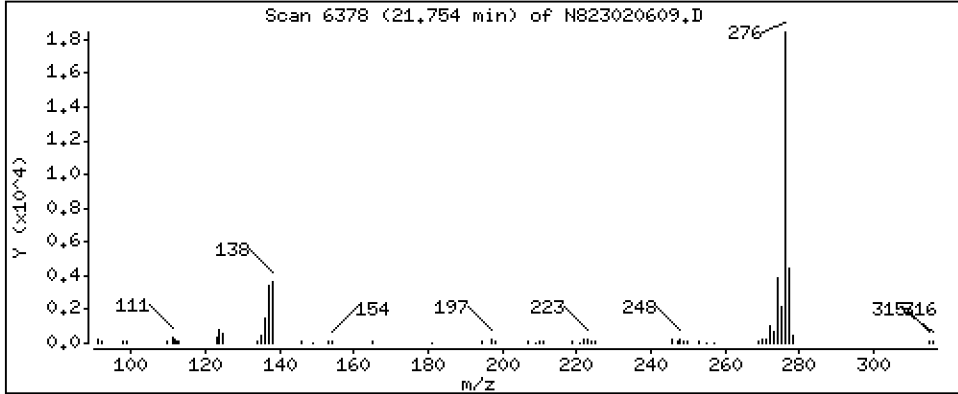
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 4,340 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020609.D
 Lab Smp Id: BLA0683-BS1
 Inj Date : 06-FEB-2023 16:24
 Operator : JZ Inst ID: nt8.i
 Smp Info : BLA0683-BS1,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PNAXMDL.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 1 Naphthalene-d8	136		4.884	4.900	(1.000)	50596	2.00000	
2 Naphthalene	128		4.916	4.928	(1.006)	64251	2.73117	2.731
\$ 3 2-Methylnaphthalene-d10	152		5.624	5.634	(1.151)	26212	1.89959	1.900
4 2-Methylnaphthalene	141		5.672	5.681	(1.161)	36550	2.82457	2.825
5 1-methylnaphthalene	141		5.868	5.880	(1.201)	36725	2.79639	2.796
9 Acenaphthylene	152		7.072	7.082	(0.985)	55125	2.44558	2.446
* 10 Acenaphthene-d10	164		7.183	7.189	(1.000)	29850	2.00000	
11 Acenaphthene	153		7.234	7.240	(1.007)	40621	2.68963	2.690
12 Dibenzofuran	168		7.385	7.392	(1.028)	61844	2.69599	2.696
14 Fluorene	166		7.863	7.869	(1.095)	50388	2.82819	2.828
* 15 Phenanthrene-d10	188		9.222	9.232	(1.000)	54061	2.00000	
16 Phenanthrene	178		9.257	9.267	(1.004)	76953	2.91404	2.914
17 Anthracene	178		9.298	9.308	(1.008)	63665	2.65387	2.654
19 Carbazole	167		9.814	9.823	(1.064)	66808	3.03779	3.038
22 Fluoranthene	202		11.041	11.050	(1.197)	88334	3.07303	3.073
\$ 21 Fluoranthene-d10	212		11.000	11.009	(1.193)	52525	2.20217	2.202
23 Pyrene	202		11.559	11.569	(0.815)	90758	3.56642	3.566
24 Benzo(a)anthracene	228		14.060	14.070	(0.991)	77098	3.34257	3.343
* 25 Chrysene-d12	240		14.190	14.202	(1.000)	41046	2.00000	
27 Chrysene	228		14.263	14.275	(1.005)	81897	3.33532	3.335
28 Benzo(b)fluoranthene	252		16.811	16.824	(0.929)	73568	4.66065	4.661
29 Benzo(k)fluoranthene	252		16.874	16.887	(0.932)	68729	4.44520	4.445
30 Benzo(j)fluoranthene	252		16.950	16.963	(0.937)	67176	4.82624	4.826
31 Total Benzofluoranthenes	252		16.811	16.824	(0.929)	207984	13.9128	13.91 (M)
32 Benzo(a)pyrene	252		17.864	17.877	(0.987)	42834	3.08366	3.084
* 33 Perylene-d12	264		18.098	18.107	(1.000)	27103	2.00000	
35 Perylene	252		18.171	18.183	(1.004)	40651	2.72714	2.727
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.536	20.549	(1.135)	36282	3.41653	3.417
37 Indeno(1,2,3-cd)pyrene	276		20.666	20.684	(1.142)	67386	4.25826	4.258
38 Dibenzo(a,h)anthracene	278		20.650	20.666	(1.141)	64030	4.70170	4.702
39 Benzo(g,h,i)perylene	276		21.753	21.763	(1.202)	62220	4.33963	4.340

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020609.D Calibration Time: 15:15
 Lab Smp Id: BLA0683-BS1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	50596	14.12
10 Acenaphthene-d10	26127	13064	52254	29850	14.25
15 Phenanthrene-d10	47424	23712	94848	54061	14.00
25 Chrysene-d12	36794	18397	73588	41046	11.56
33 Perylene-d12	36636	18318	73272	27103	-26.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.32
10 Acenaphthene-d10	7.19	6.69	7.69	7.18	-0.09
15 Phenanthrene-d10	9.23	8.73	9.73	9.22	-0.10
25 Chrysene-d12	14.20	13.70	14.70	14.19	-0.09
33 Perylene-d12	18.11	17.61	18.61	18.10	-0.05

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

REVIEW SUMMARY FOR FILE - N823020609.D

Lab ID: BLA0683-BS1

nt8.i, 20230206A.b\FSIMPNA230119.m,

06-FEB-2023 16:24

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

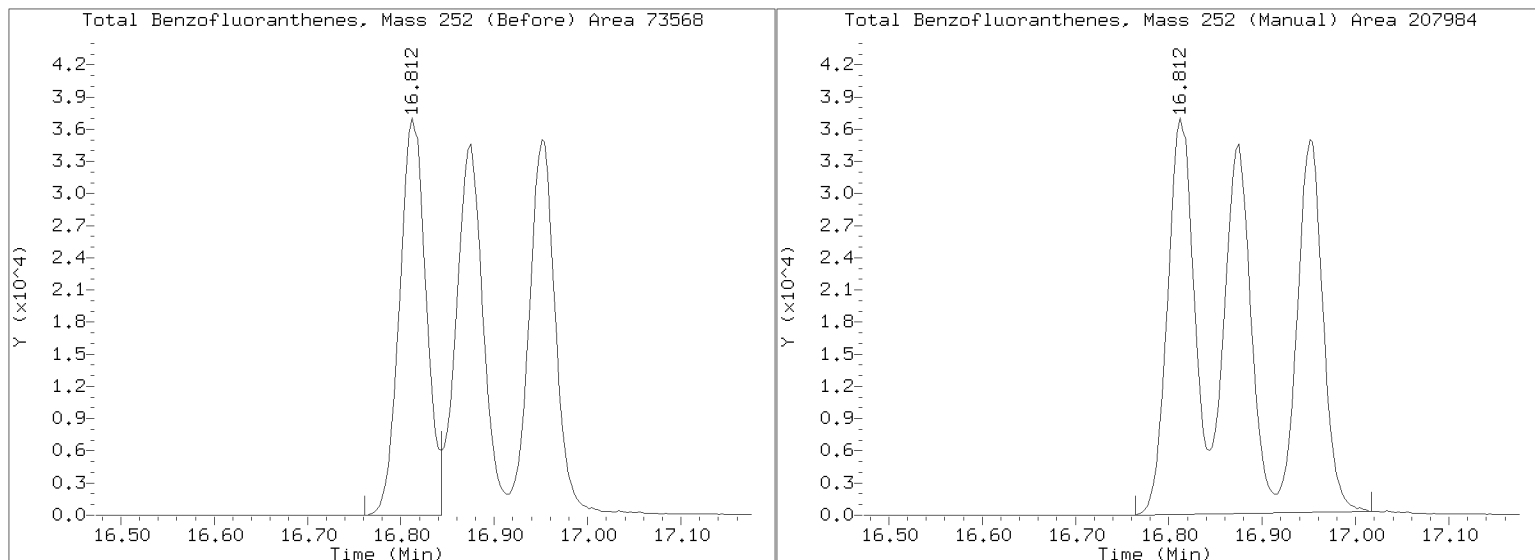
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020609.D

Injection Date: 06-FEB-2023 16:24

Lab ID:BLA0683-BS1 Client ID:

Report Date: 02/07/2023 13:19



Data File: \\target\share\chem3\nt8.1\20230206A.1\N823020610.D

Date: 06-FEB-2023 16:51

Client ID:

Sample Info: BLR0683-BSM1,

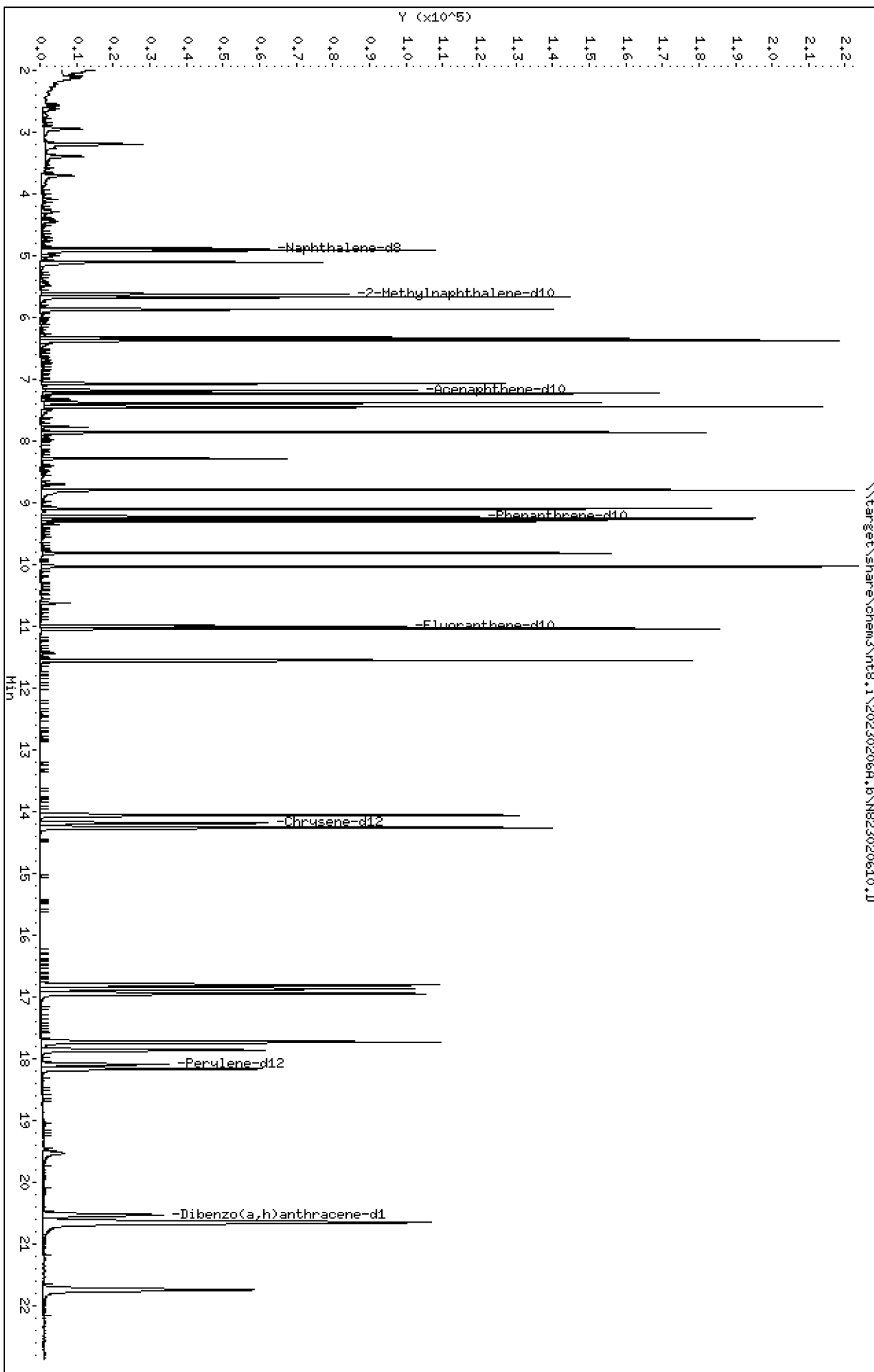
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

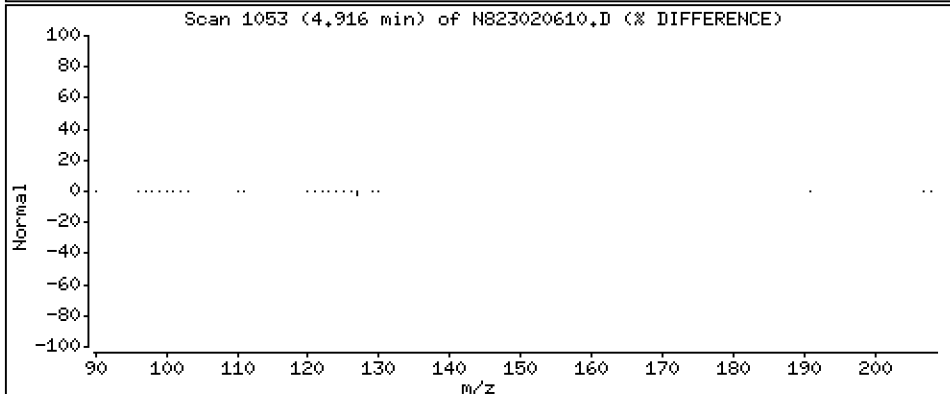
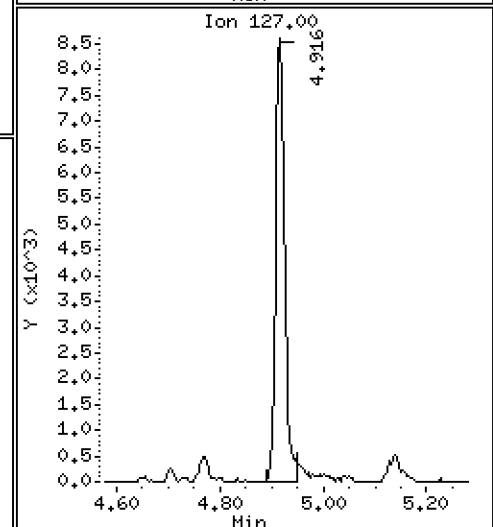
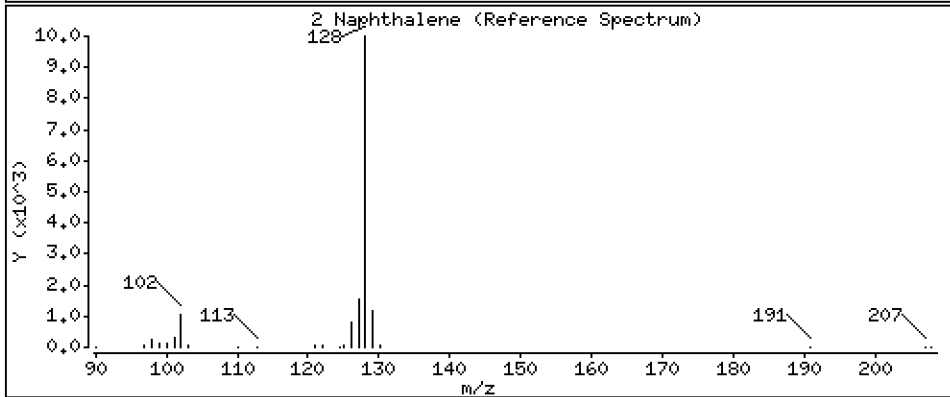
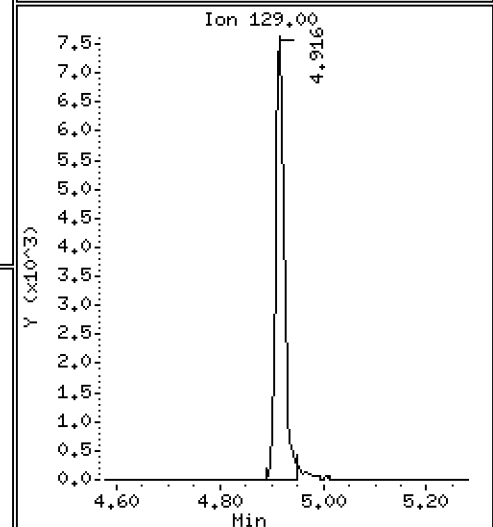
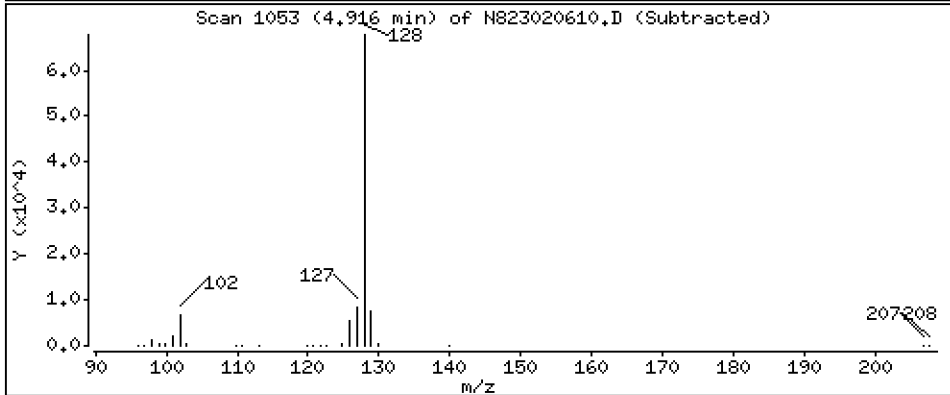
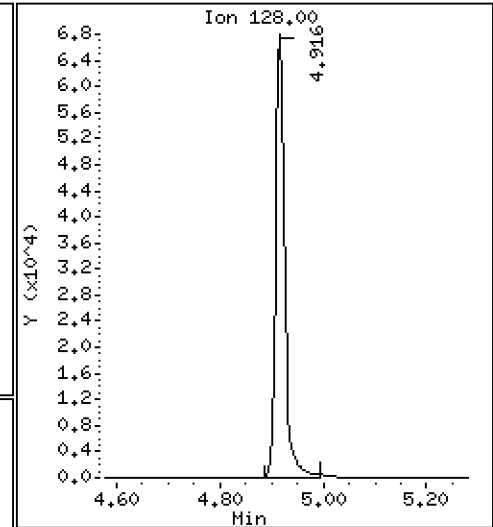
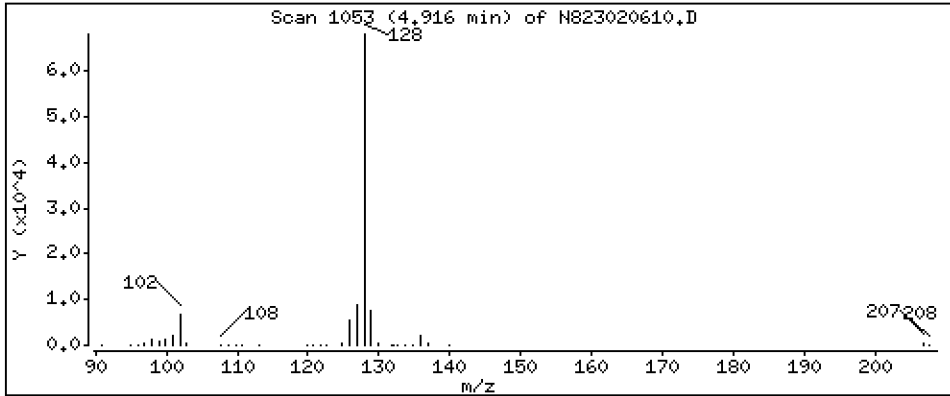
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 3,398 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

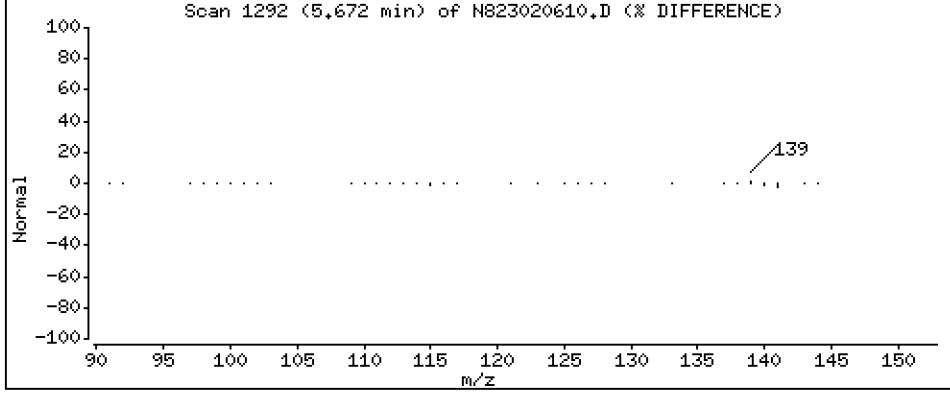
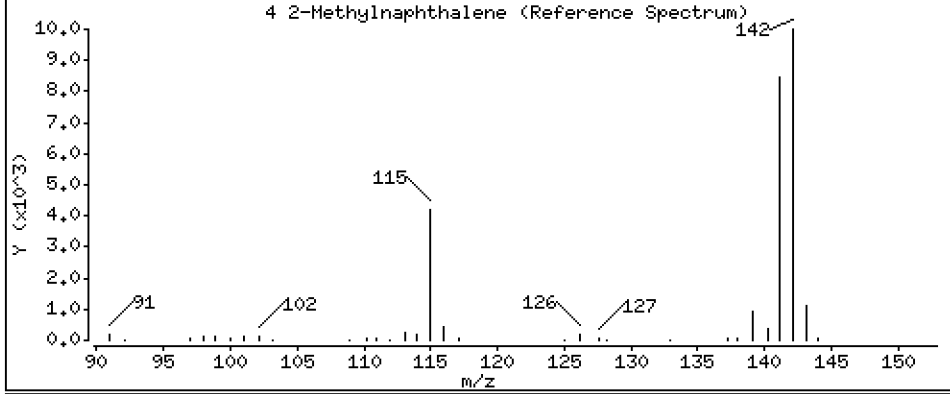
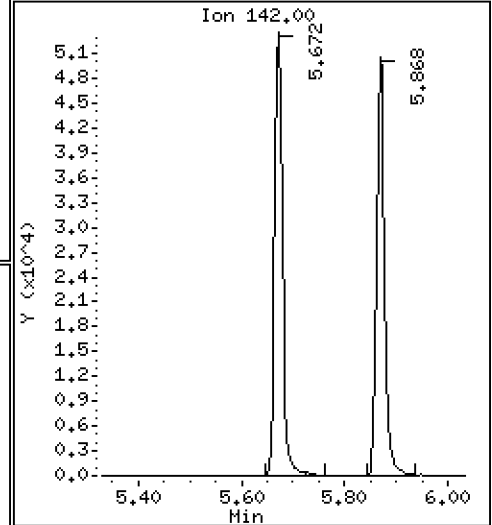
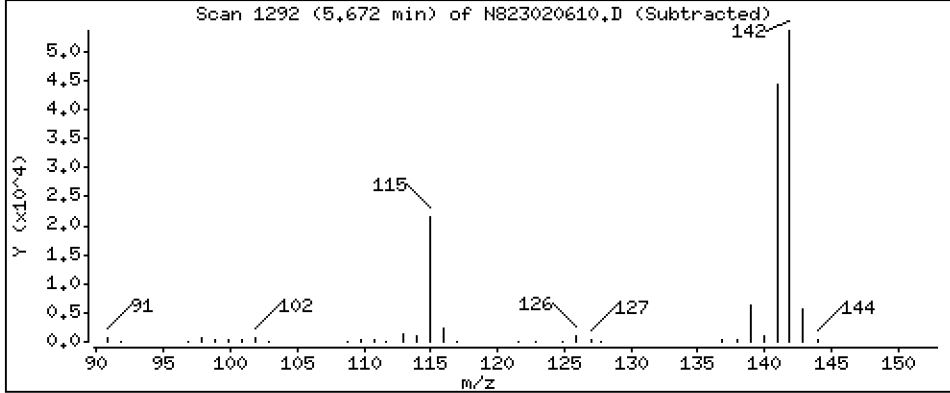
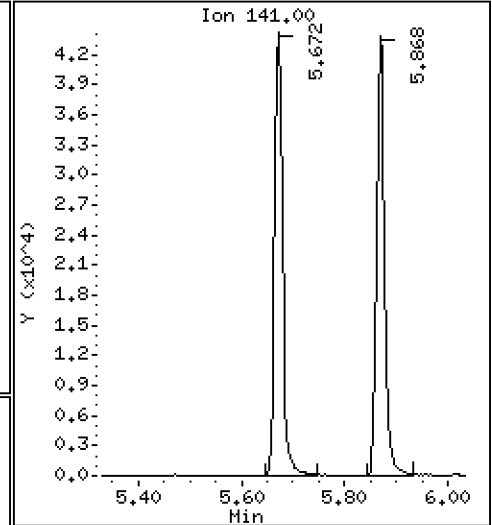
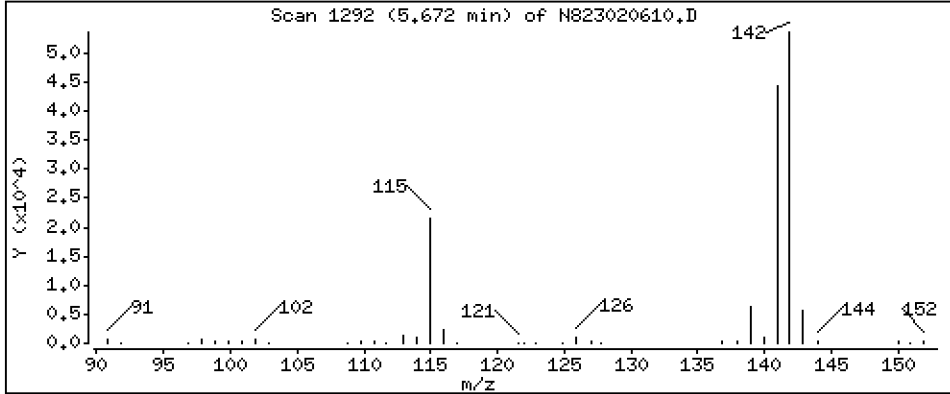
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

4 2-Methylnaphthalene

Concentration: 3,501 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

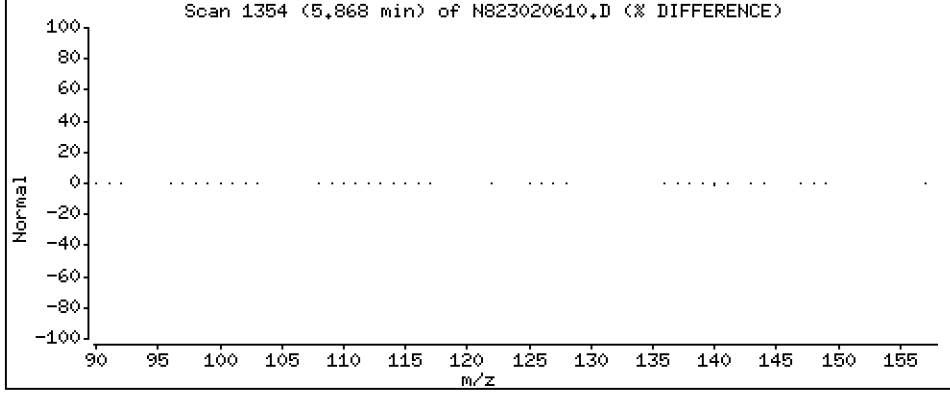
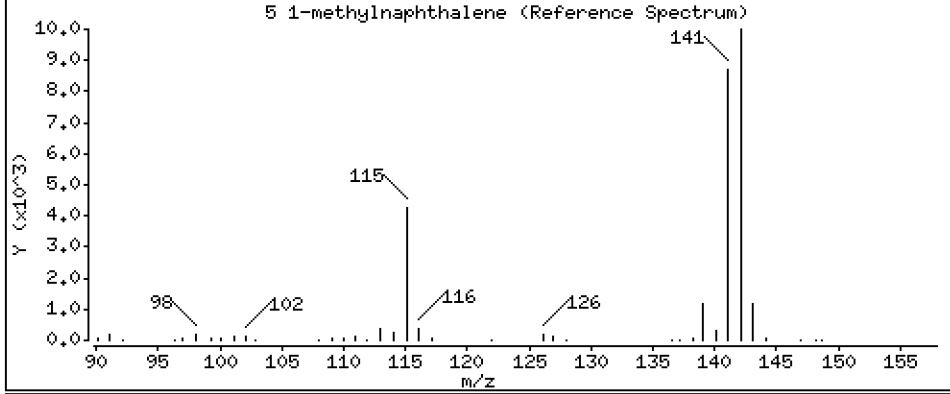
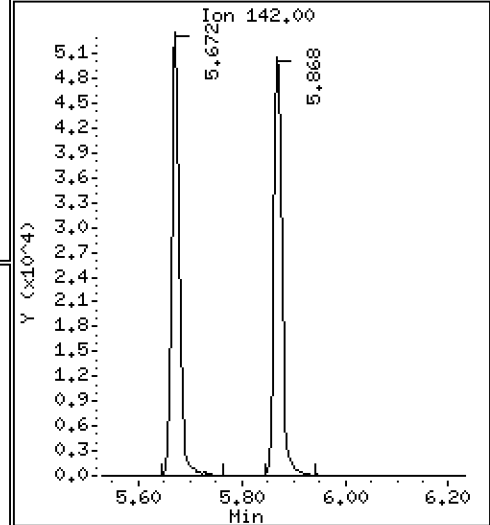
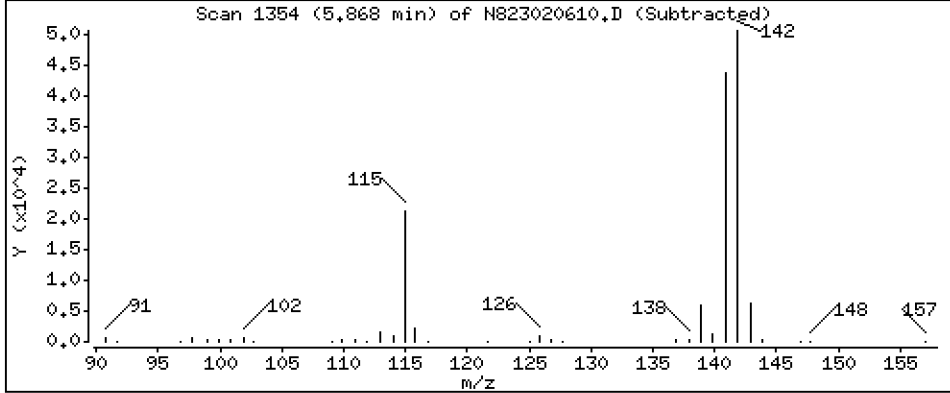
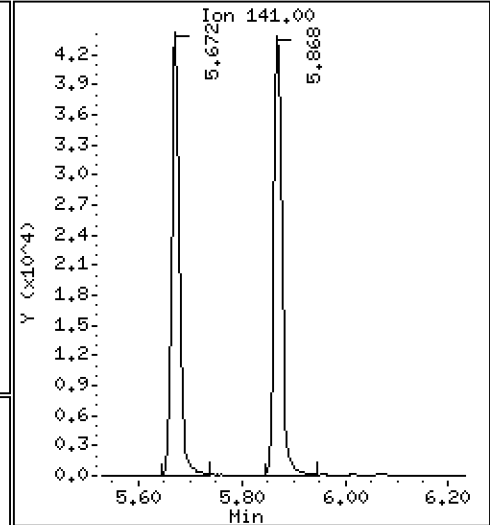
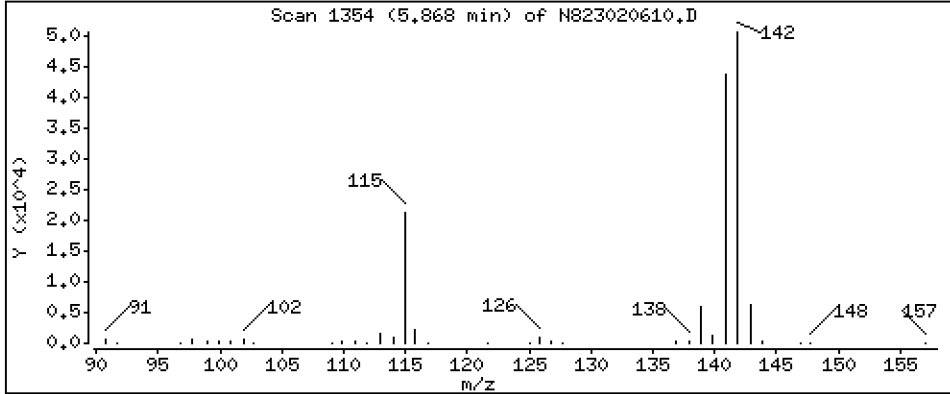
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

5 1-methylnaphthalene

Concentration: 3,468 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

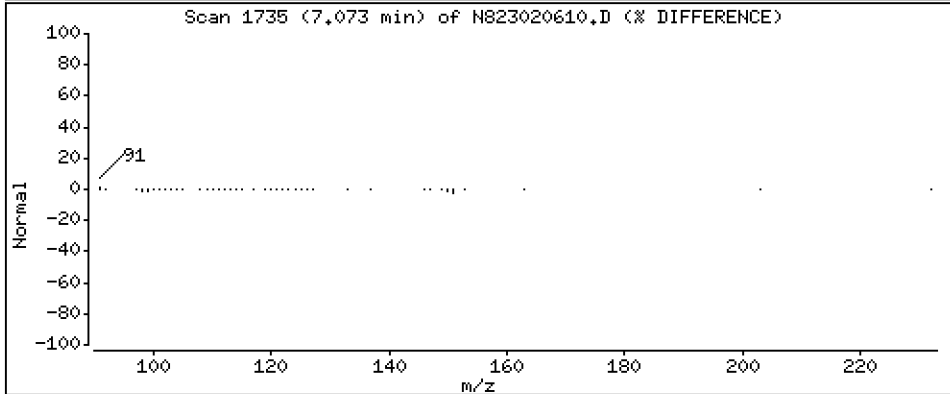
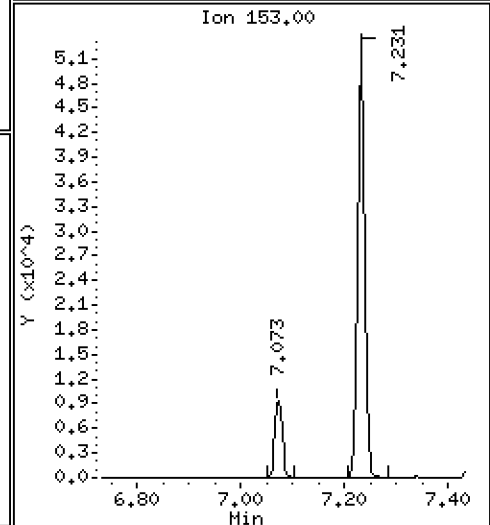
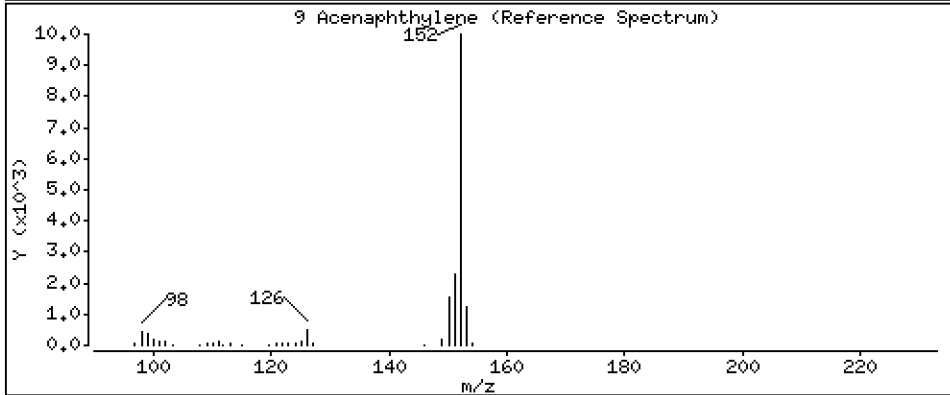
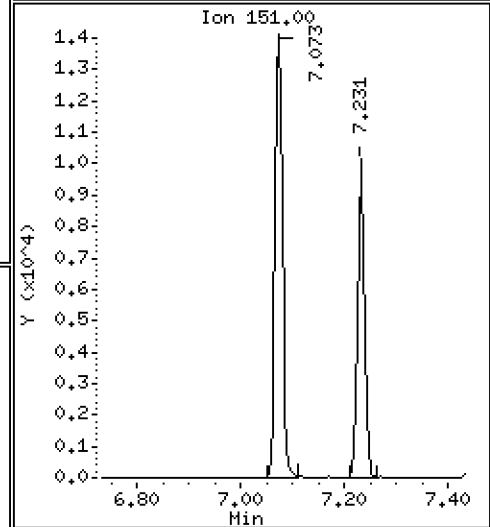
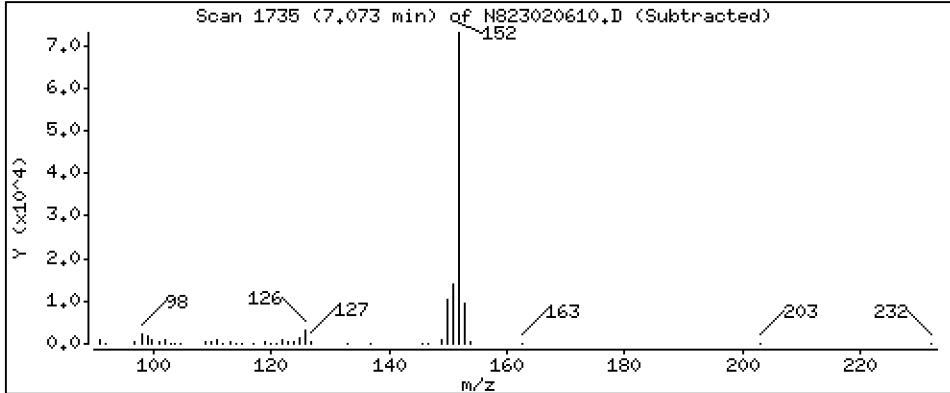
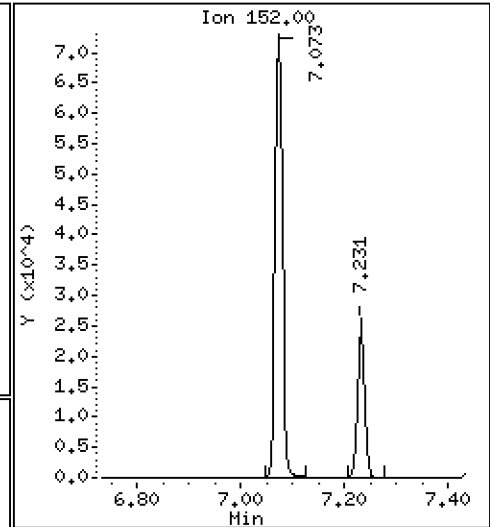
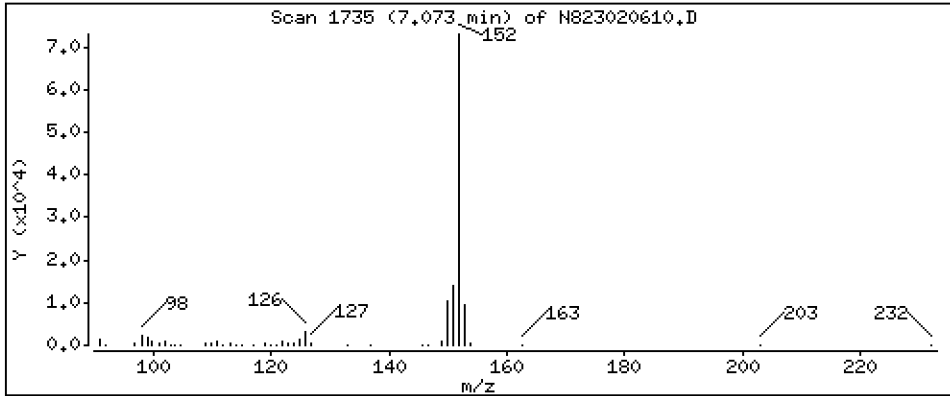
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 3,121 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

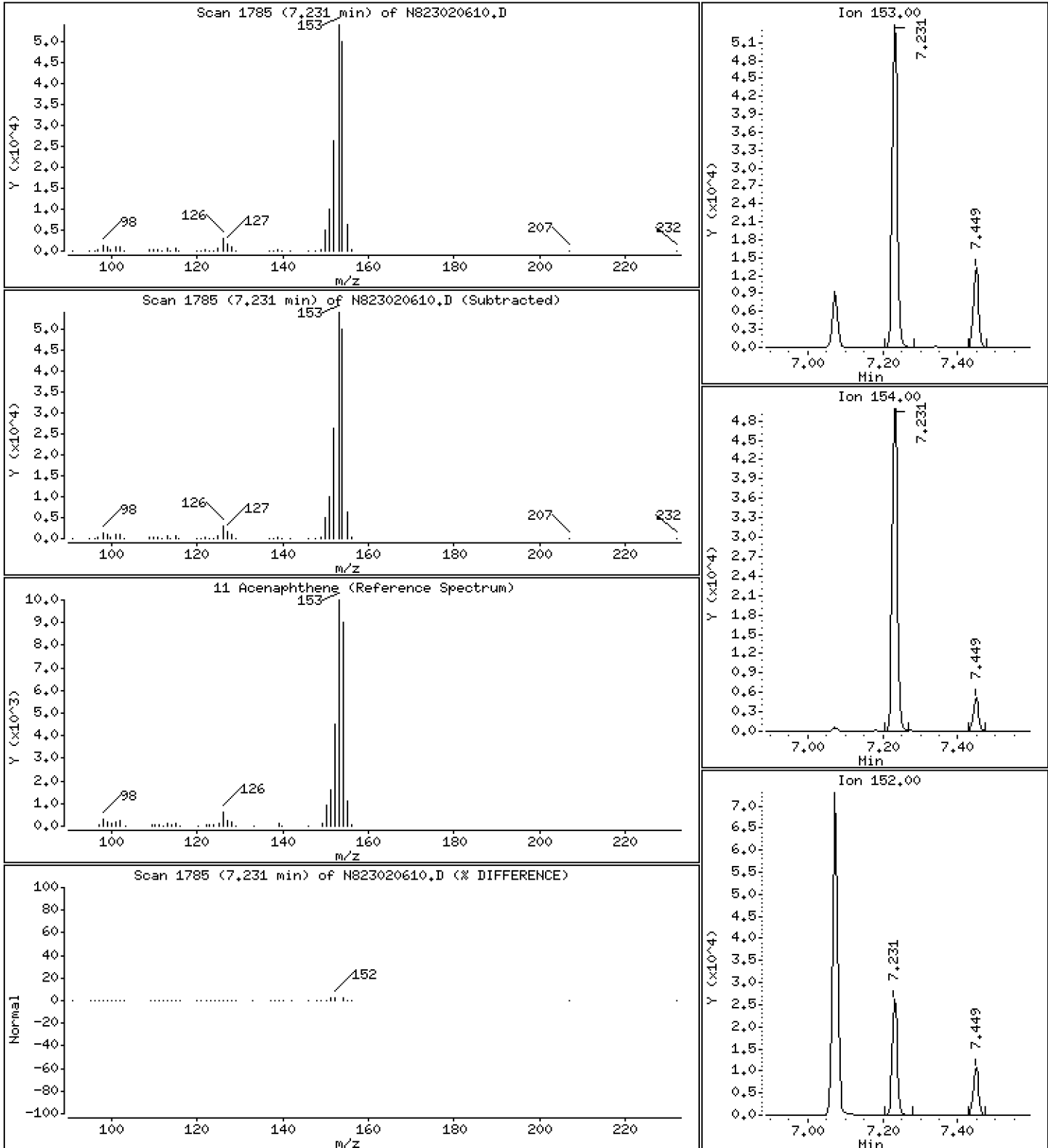
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 3,432 ug/mL

11 Acenaphthene



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

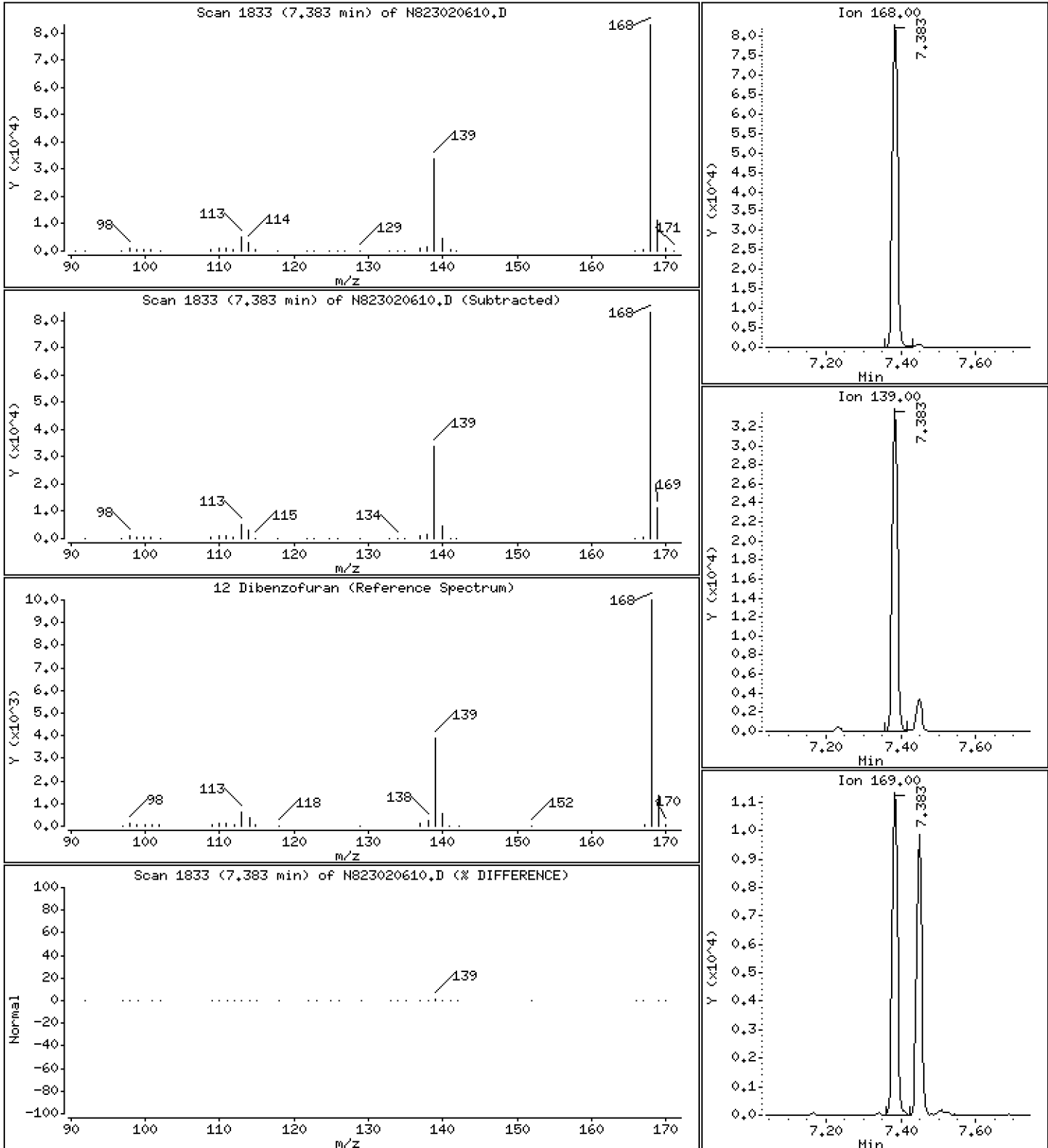
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 3,432 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

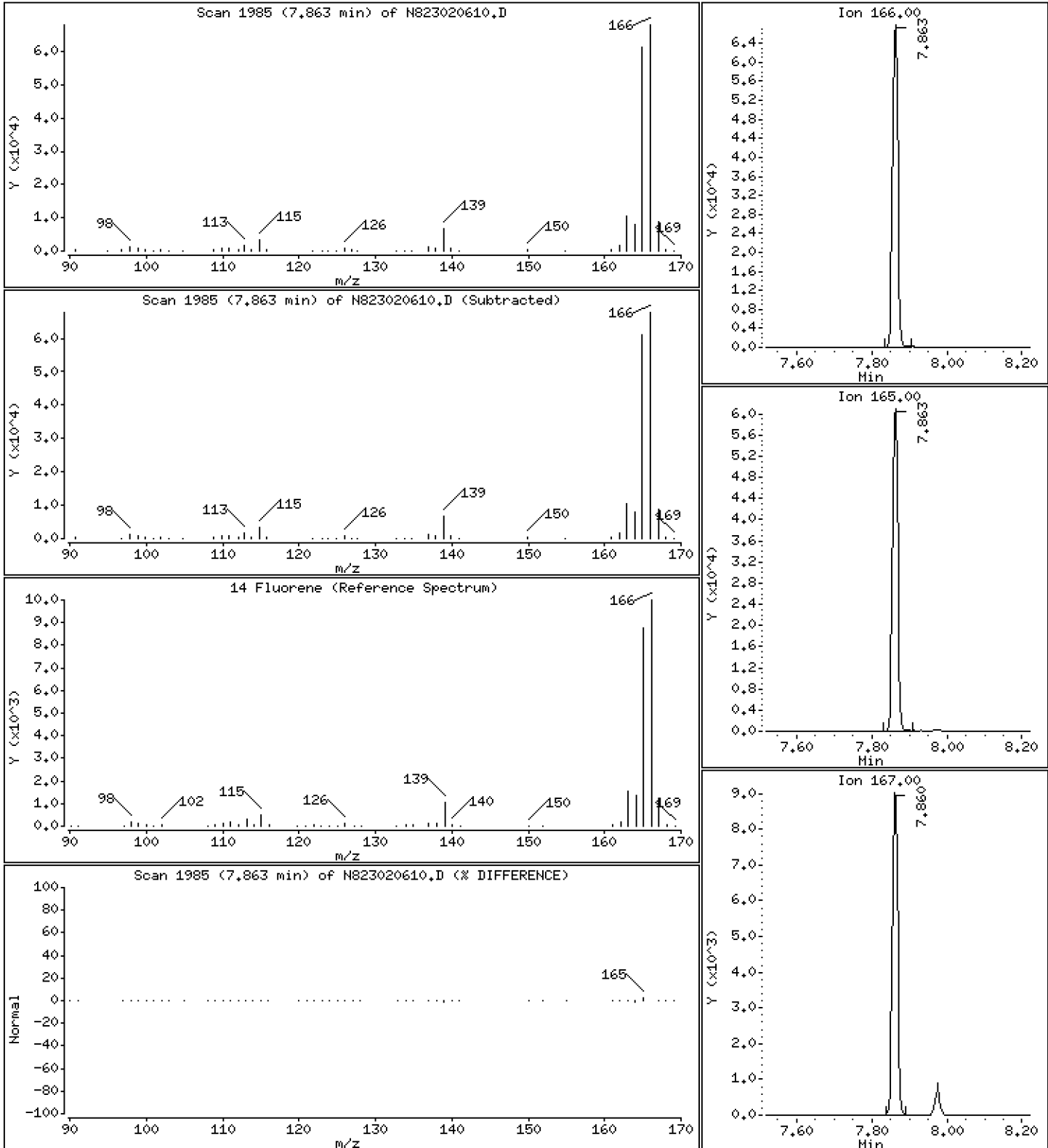
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

14 Fluorene

Concentration: 3,602 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

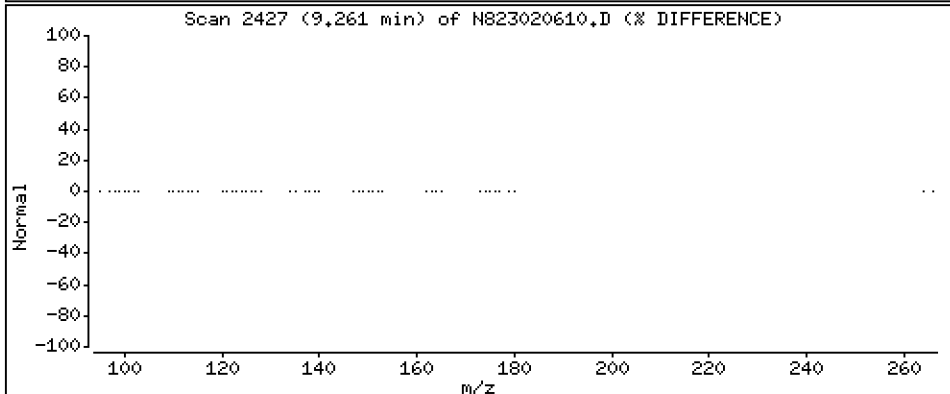
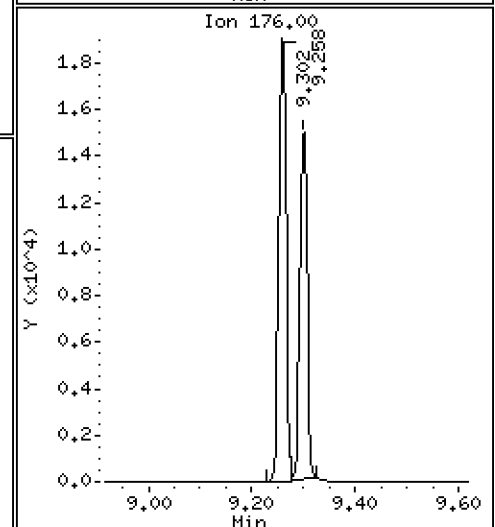
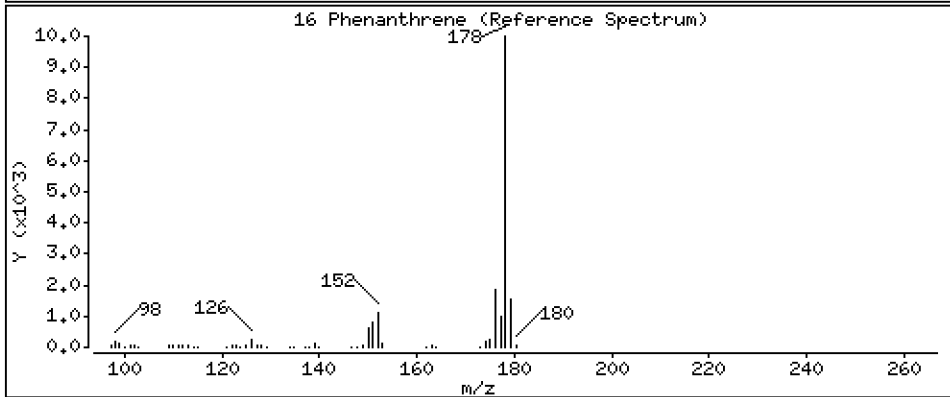
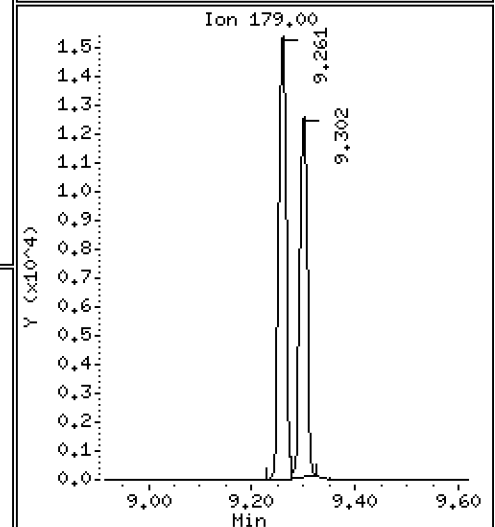
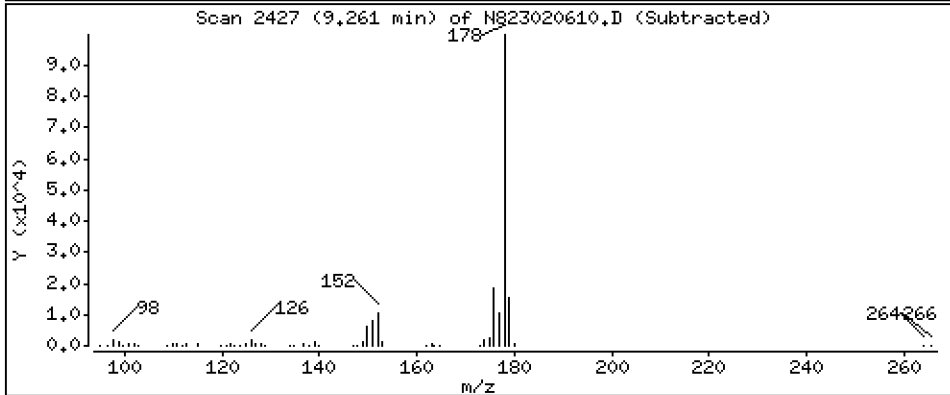
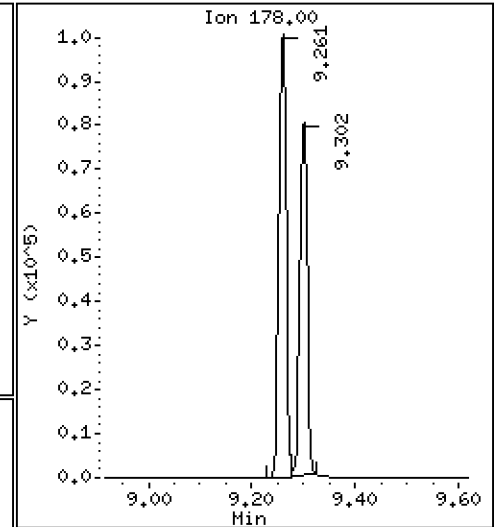
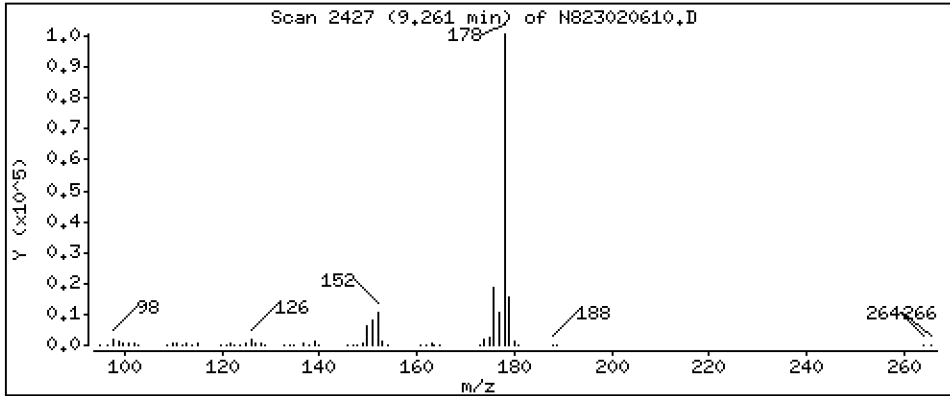
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 3,573 ug/mL

16 Phenanthrene



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

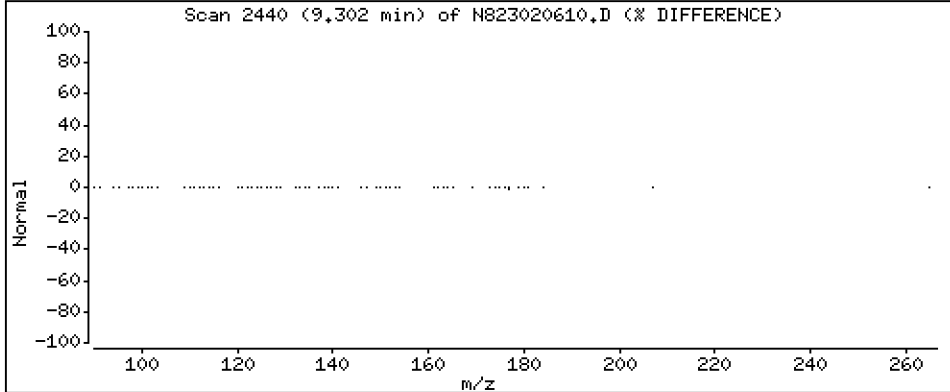
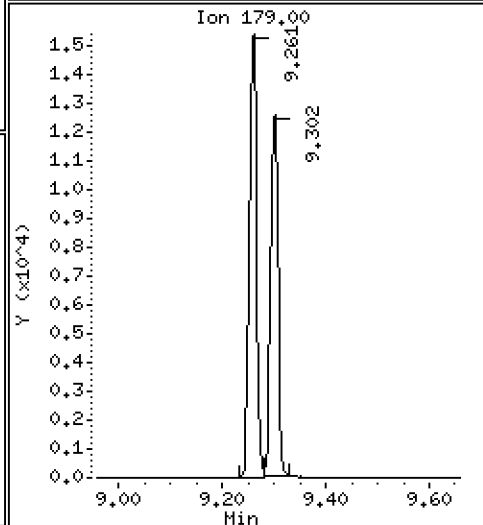
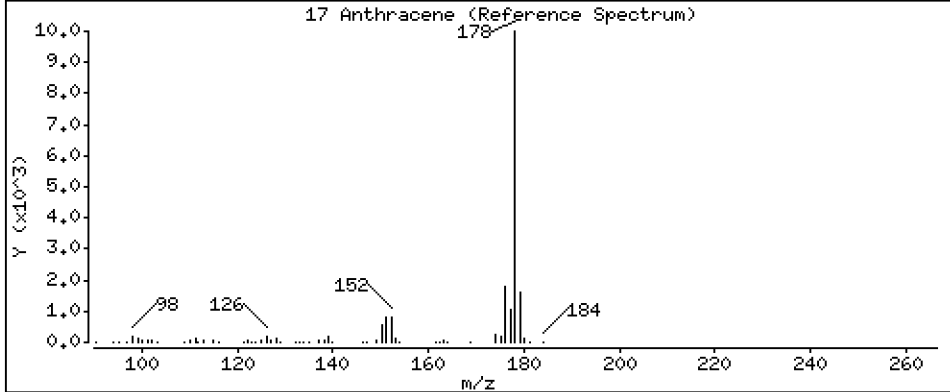
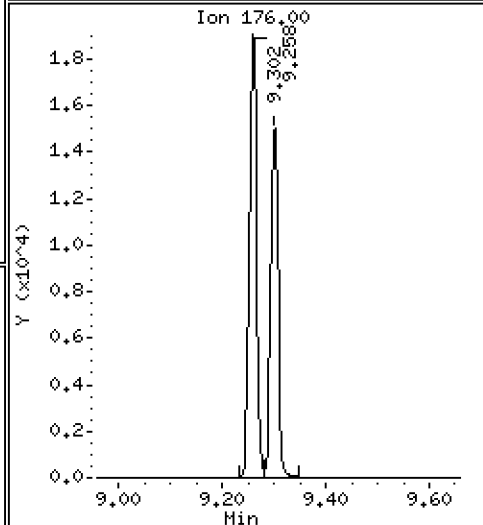
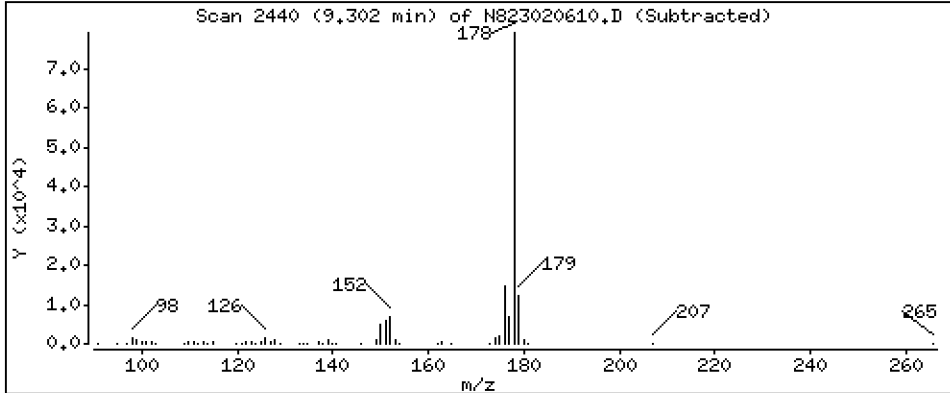
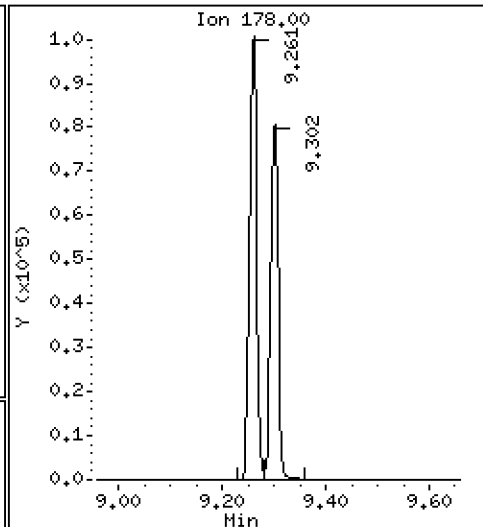
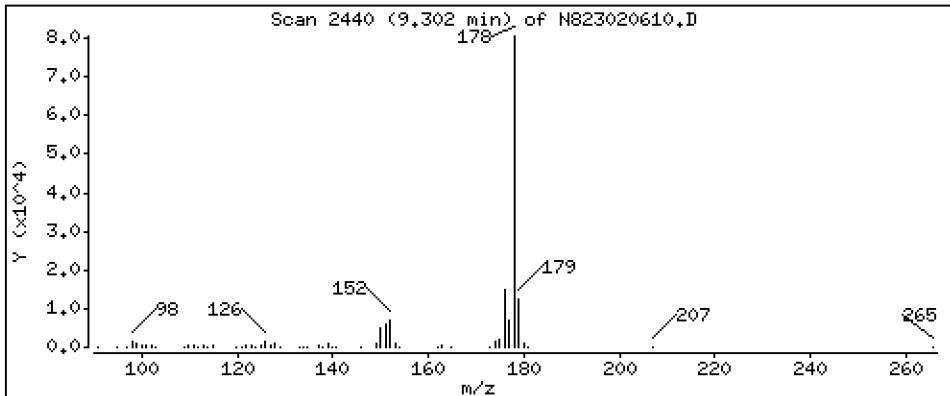
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 3,237 ug/mL

17 Anthracene



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

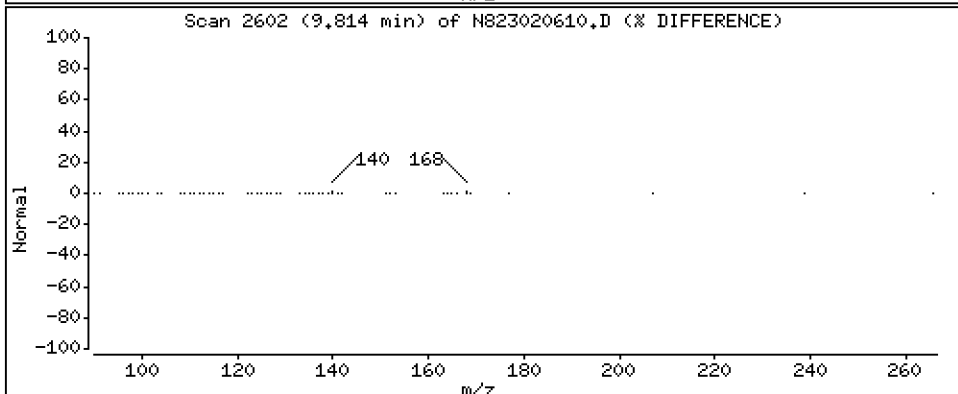
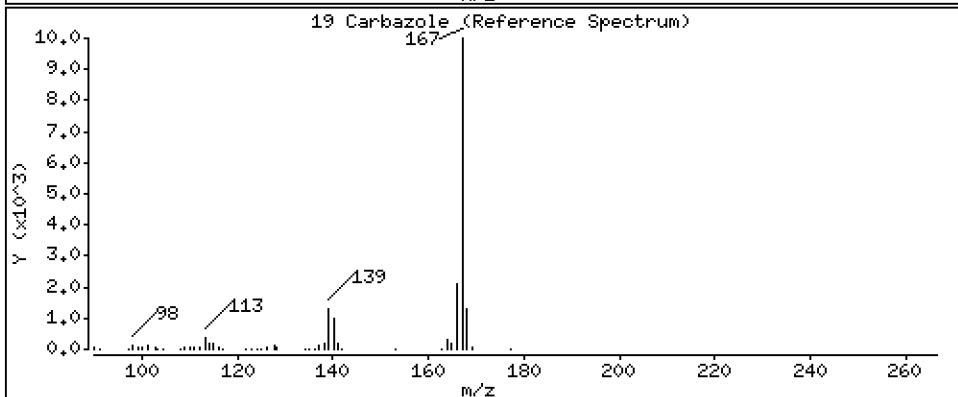
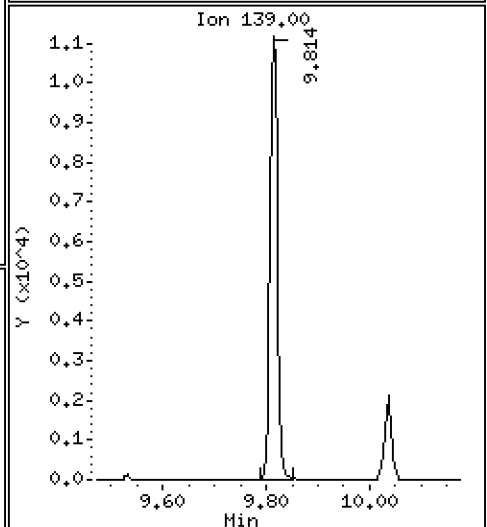
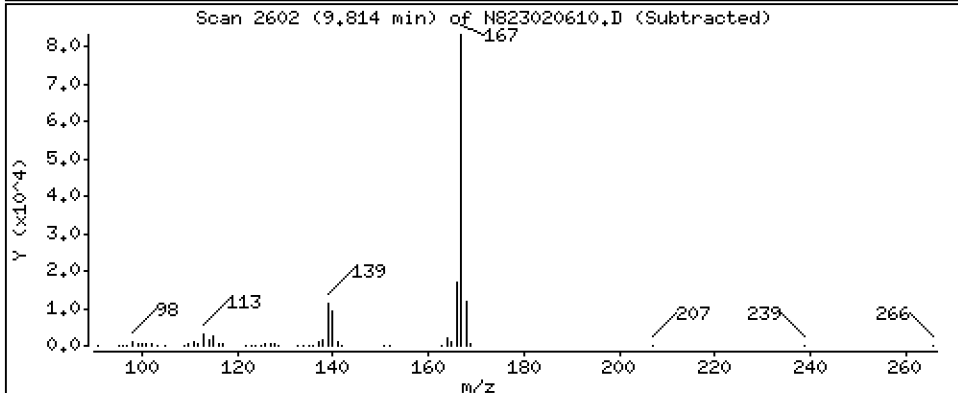
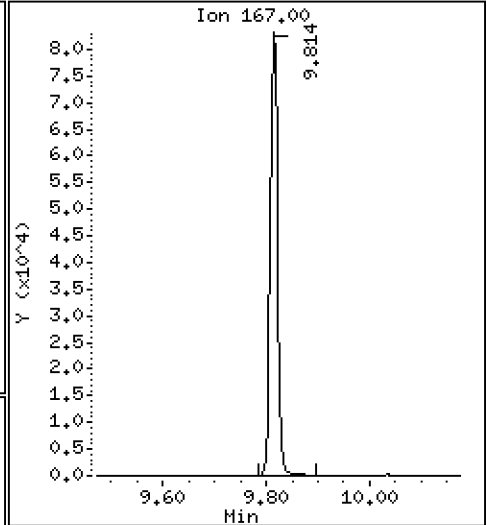
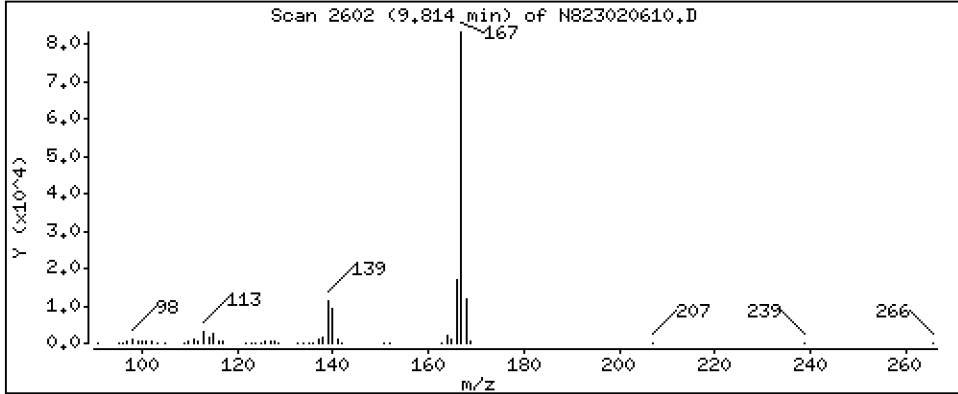
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

19 Carbazole

Concentration: 3,739 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

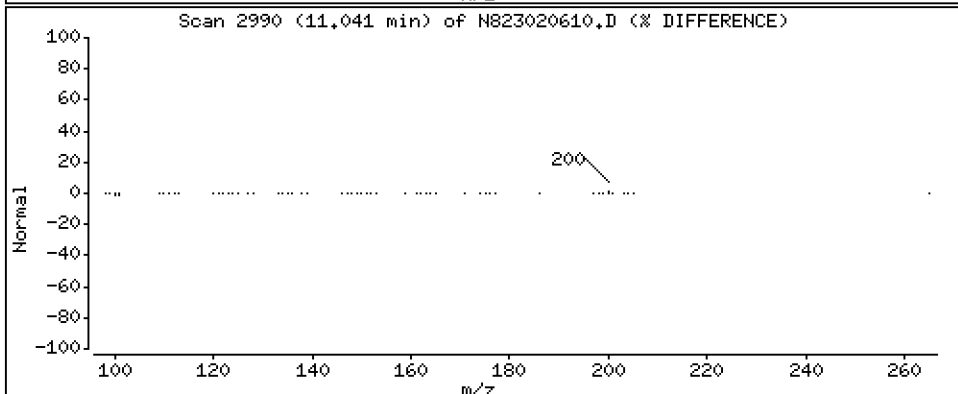
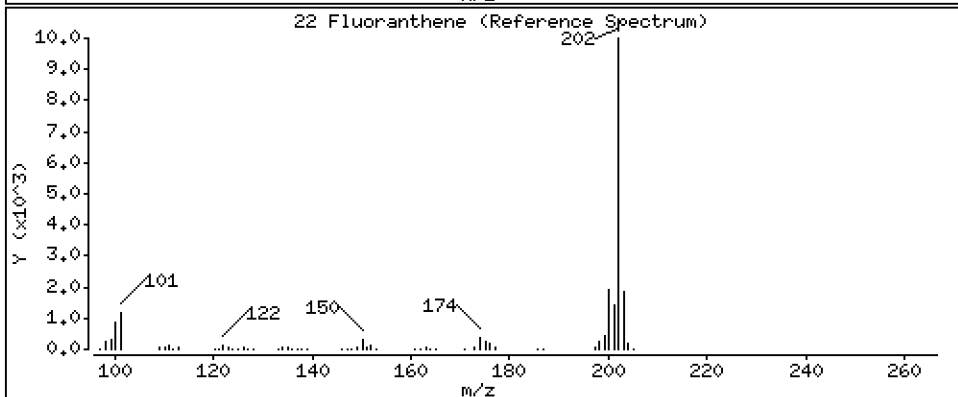
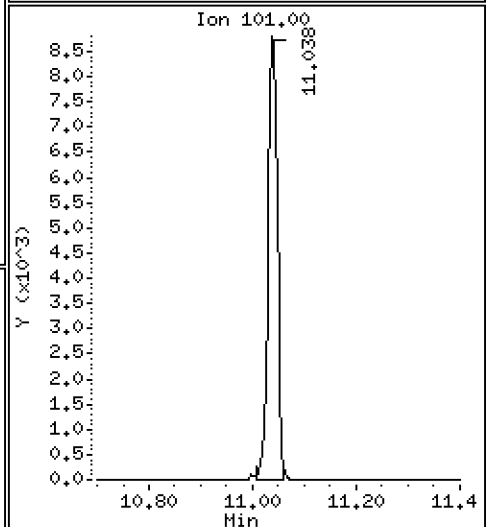
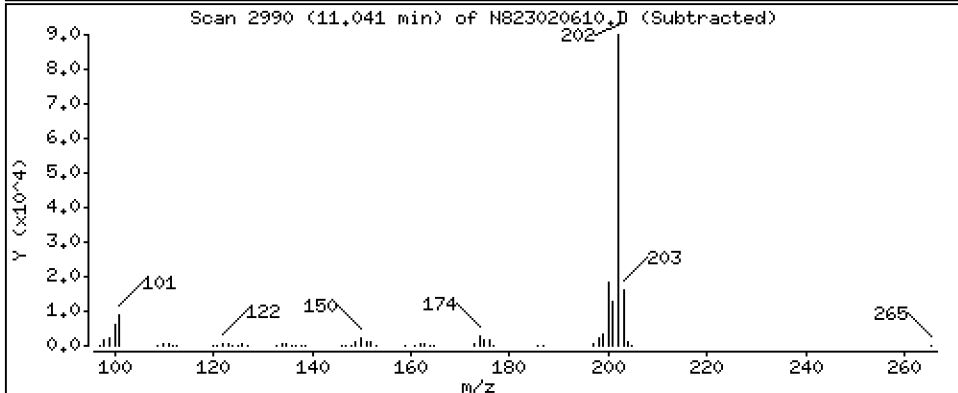
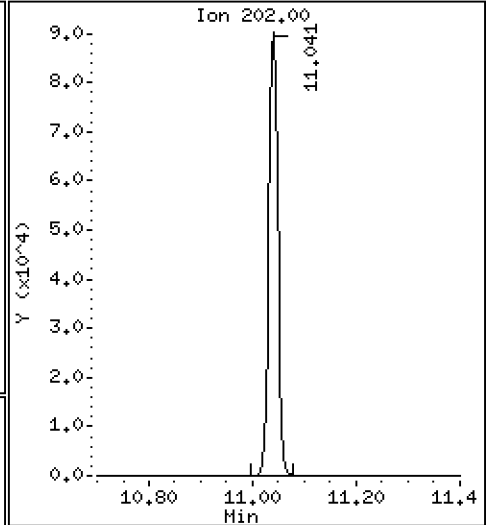
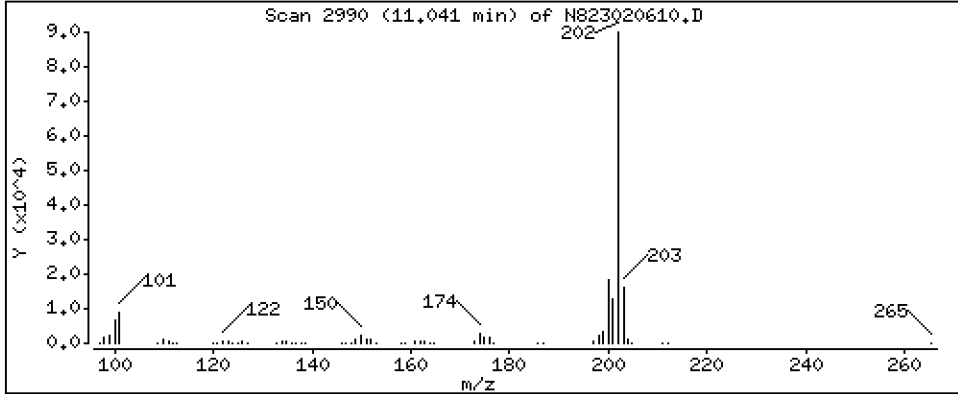
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

Concentration: 3,715 ug/mL

22 Fluoranthene



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

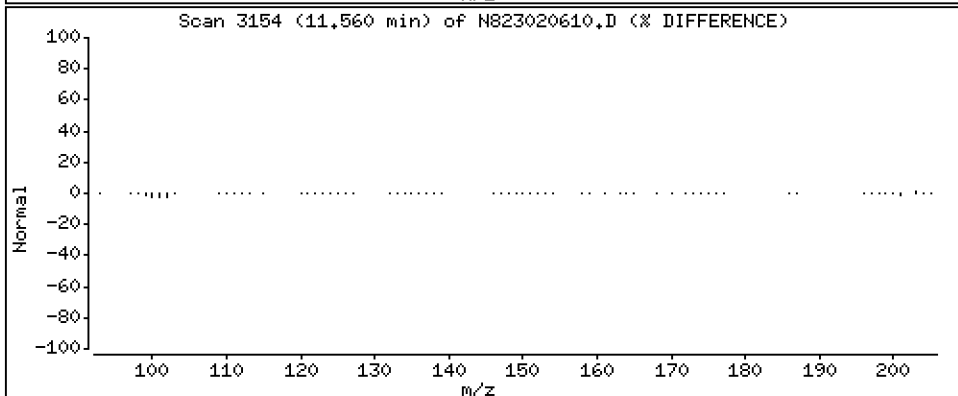
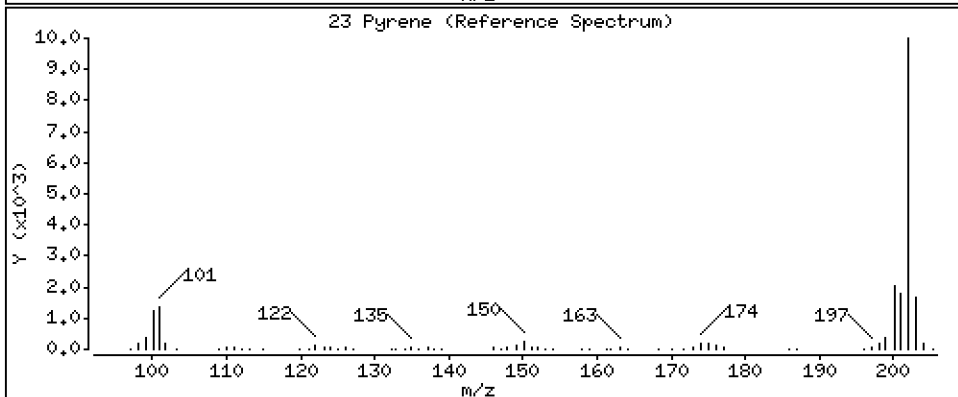
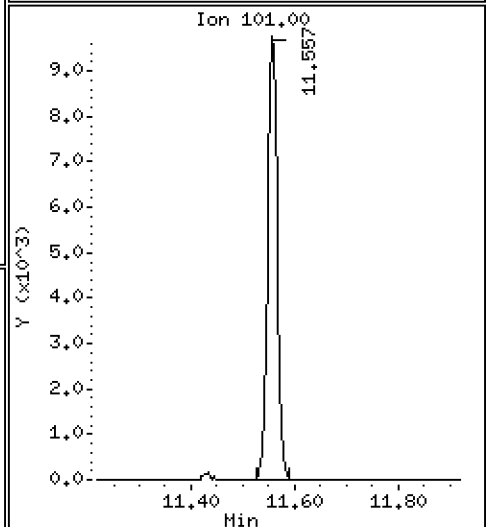
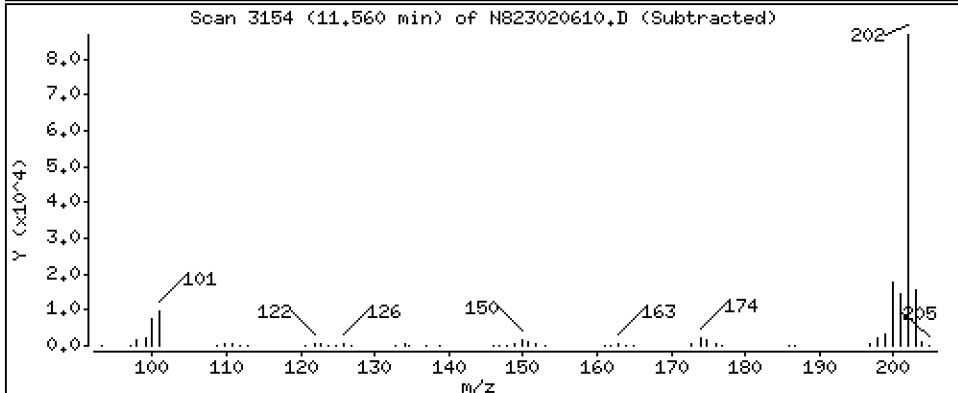
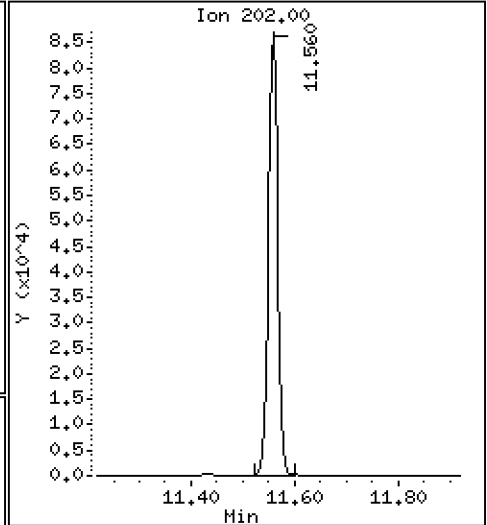
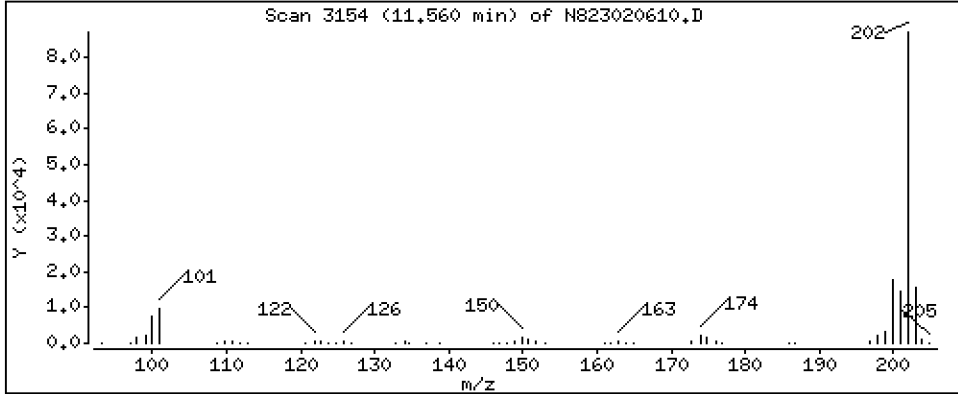
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 4,283 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

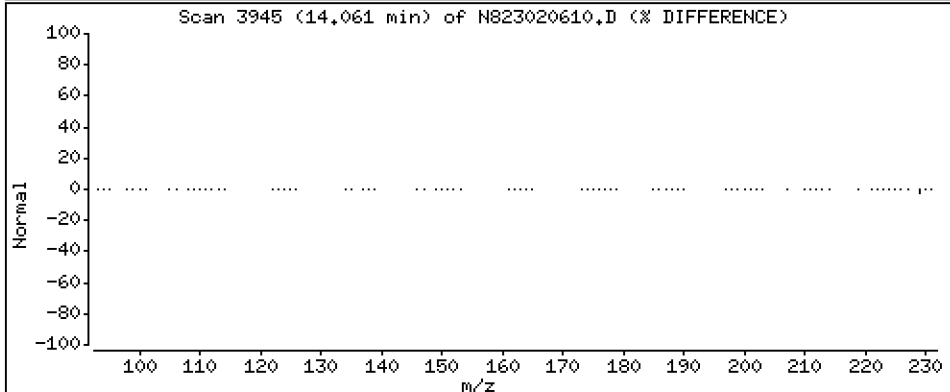
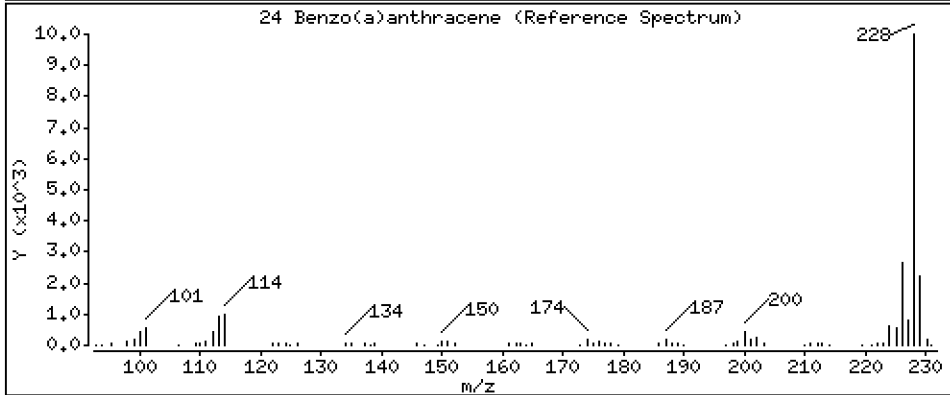
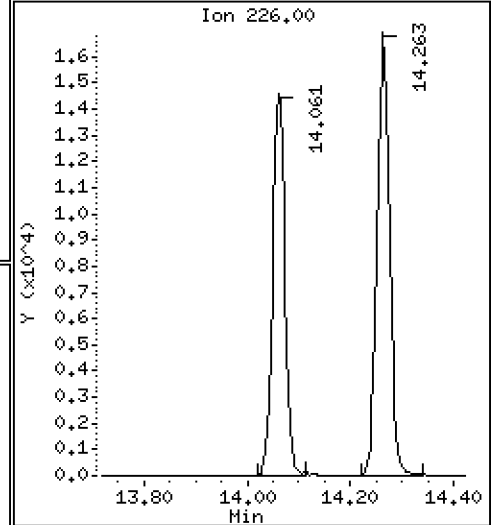
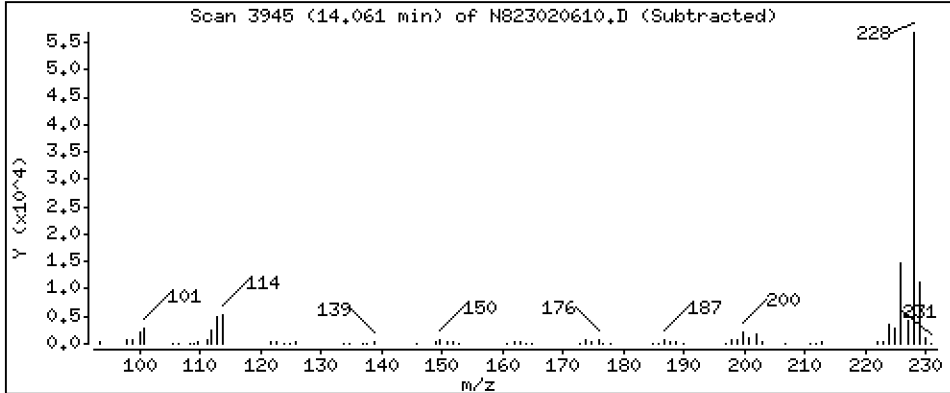
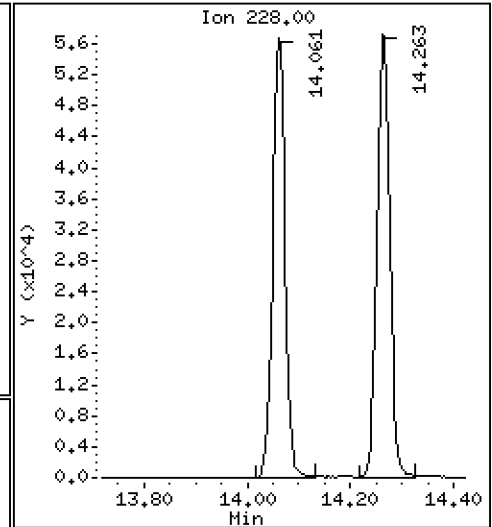
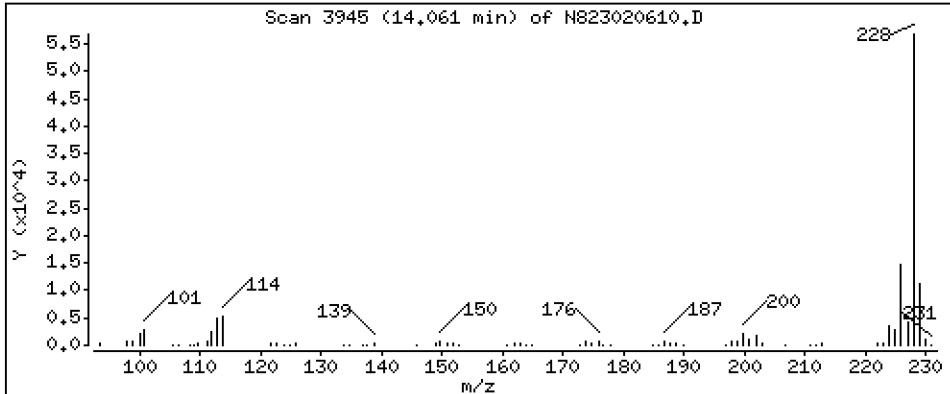
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

24 Benzo(a)anthracene

Concentration: 4,009 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

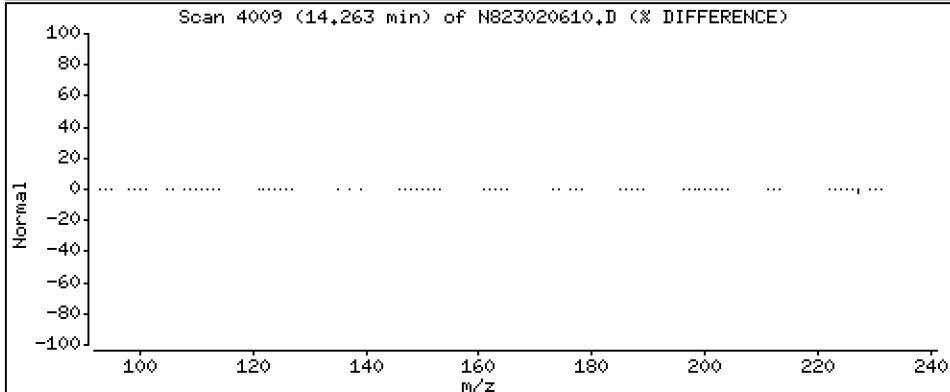
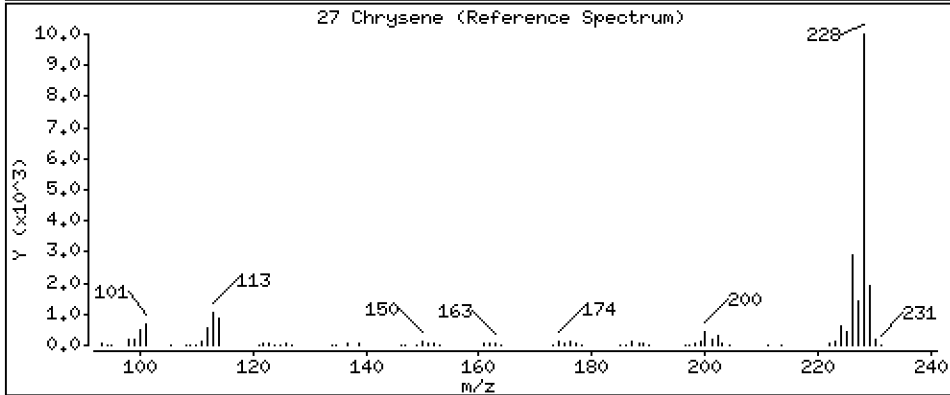
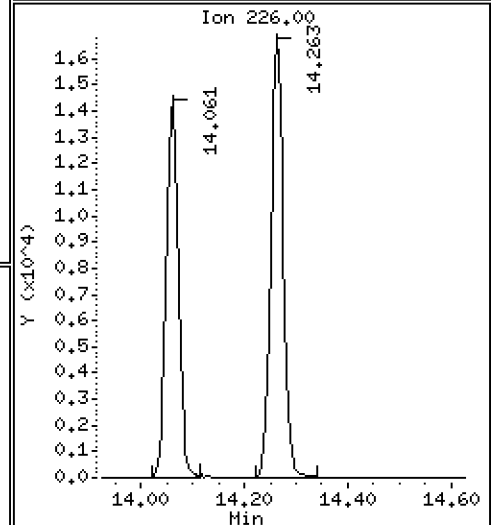
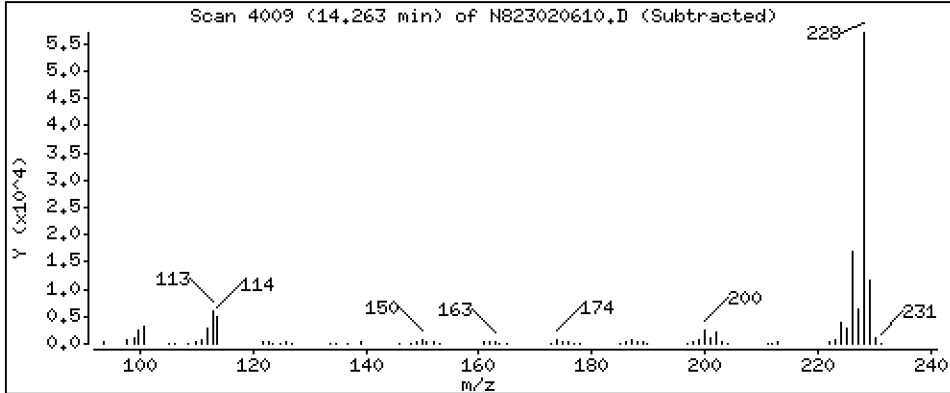
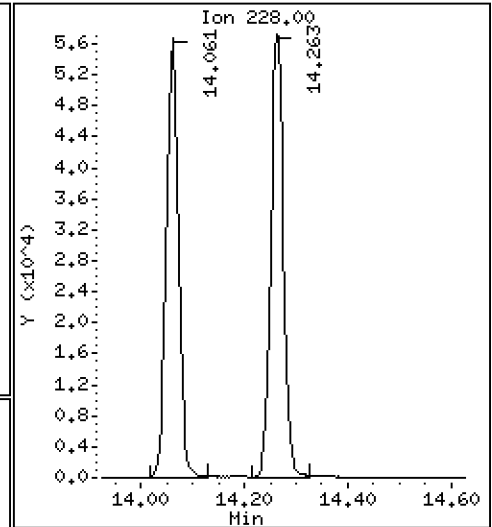
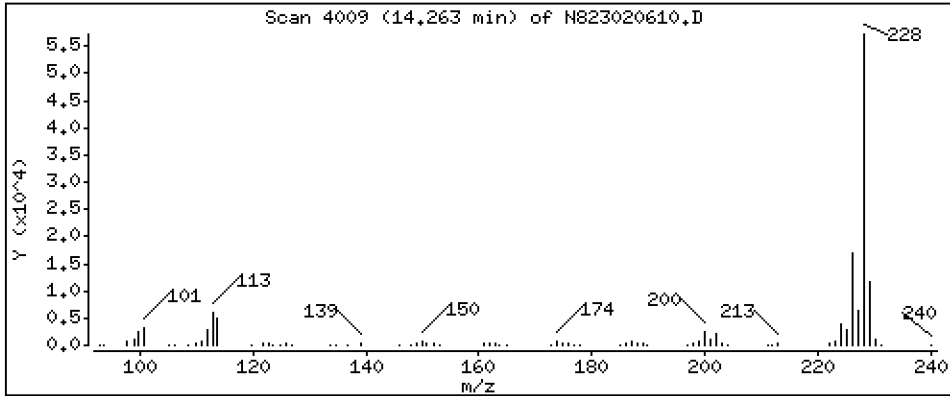
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 3,980 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

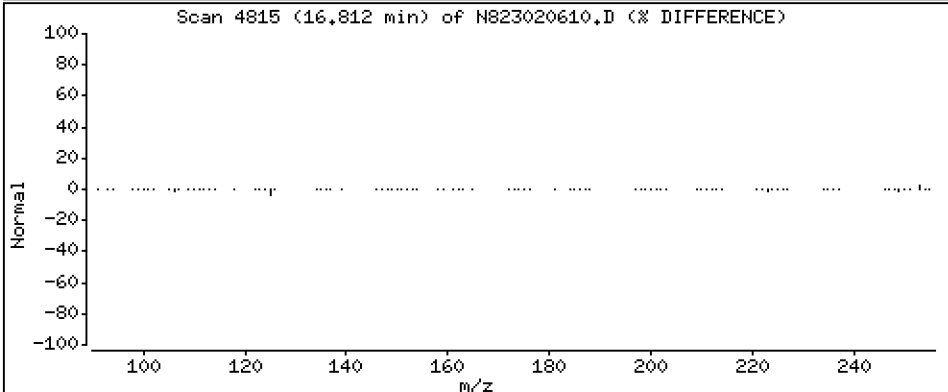
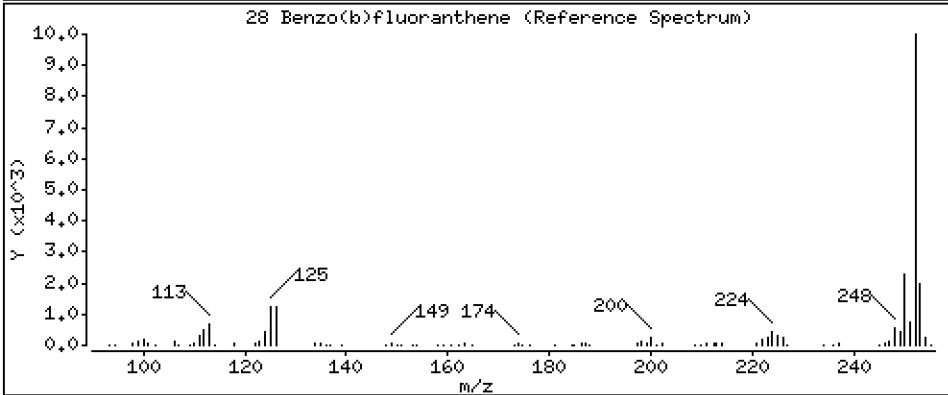
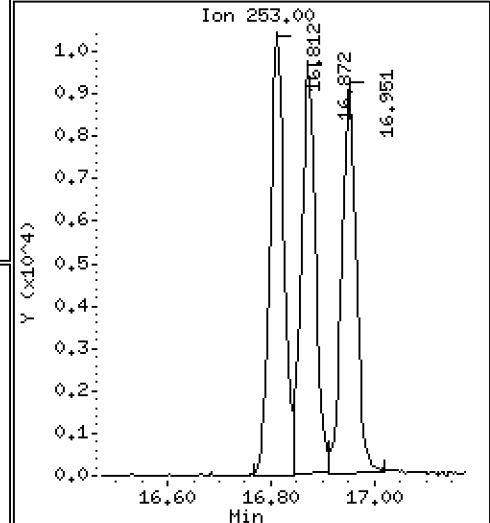
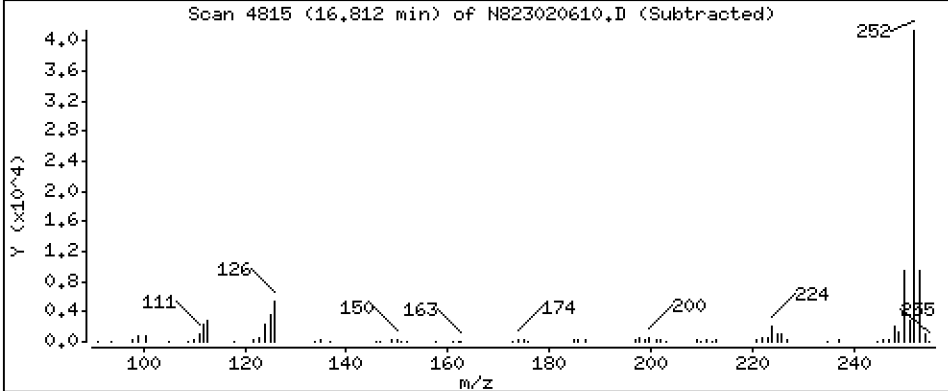
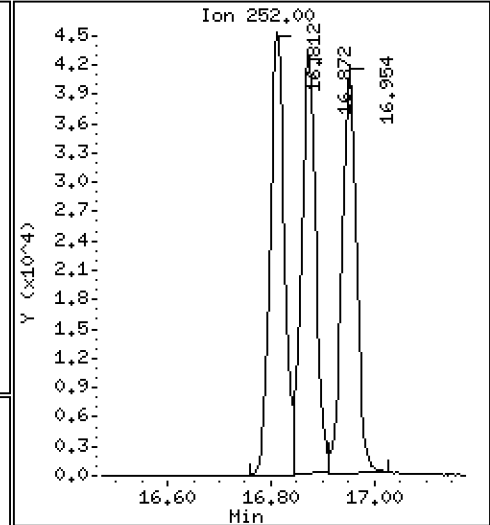
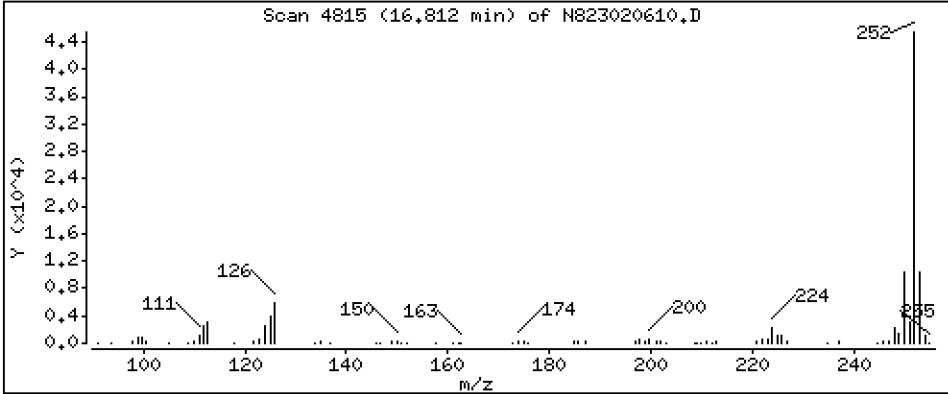
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 5,565 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

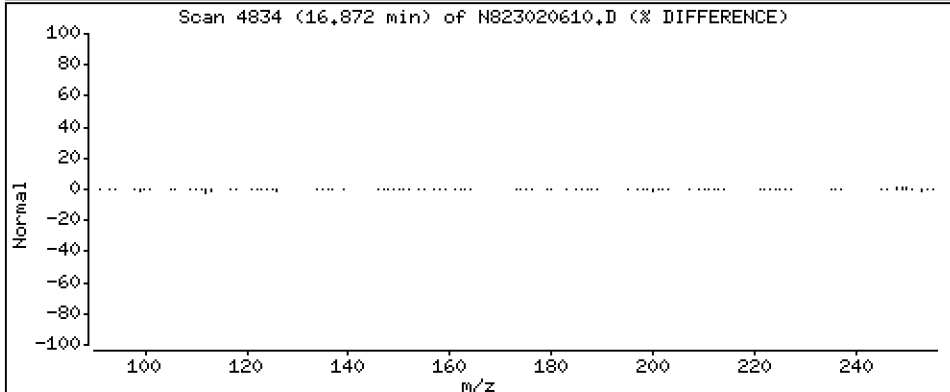
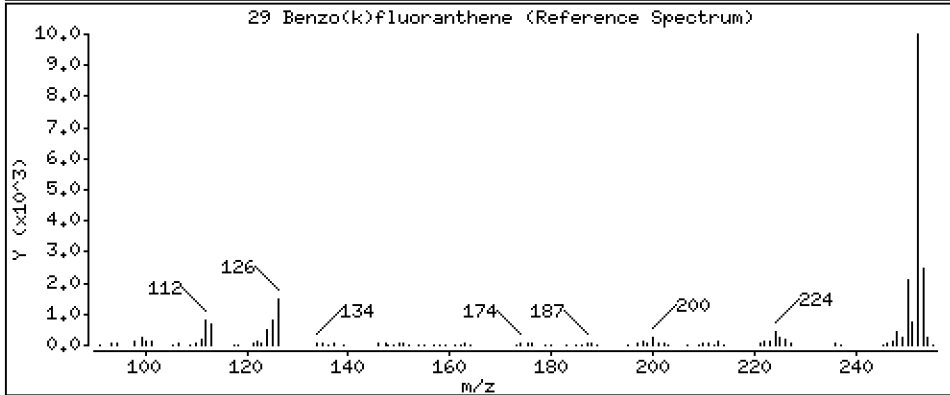
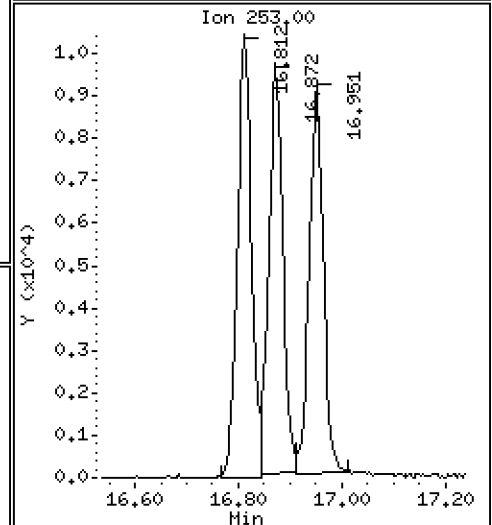
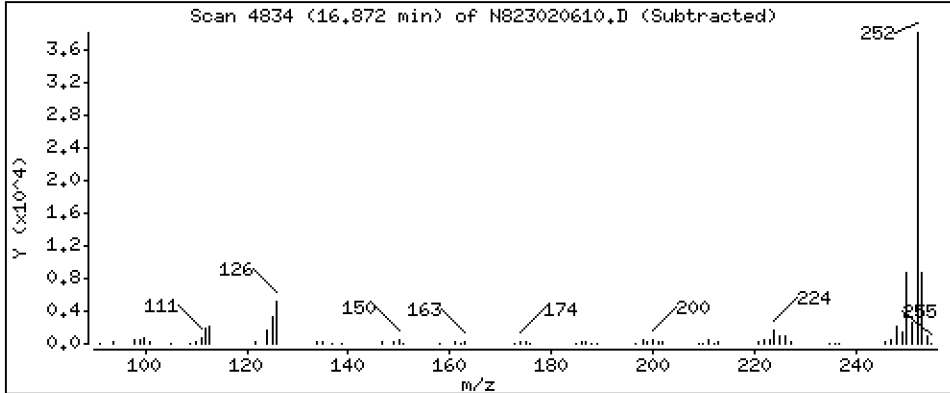
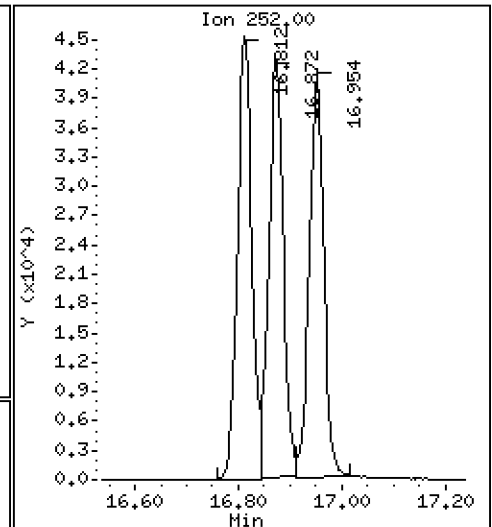
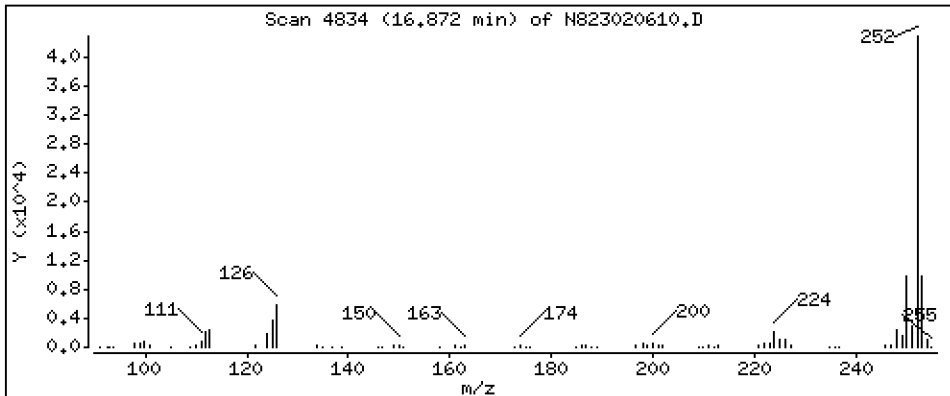
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

29 Benzo(k)fluoranthene

Concentration: 5,294 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

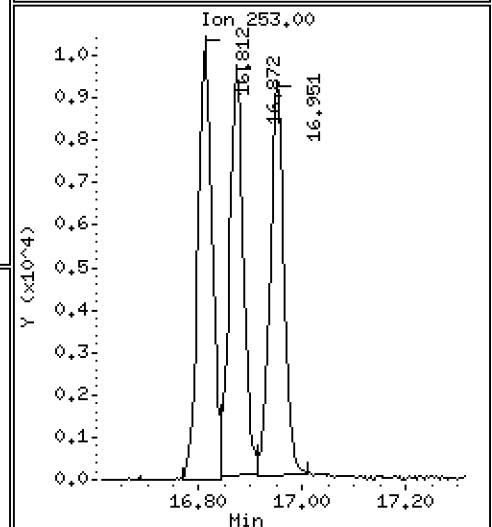
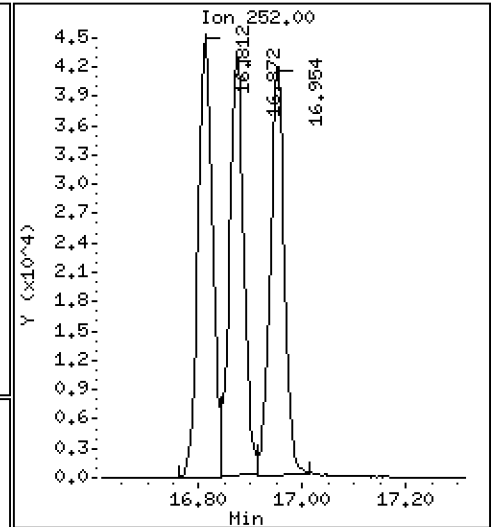
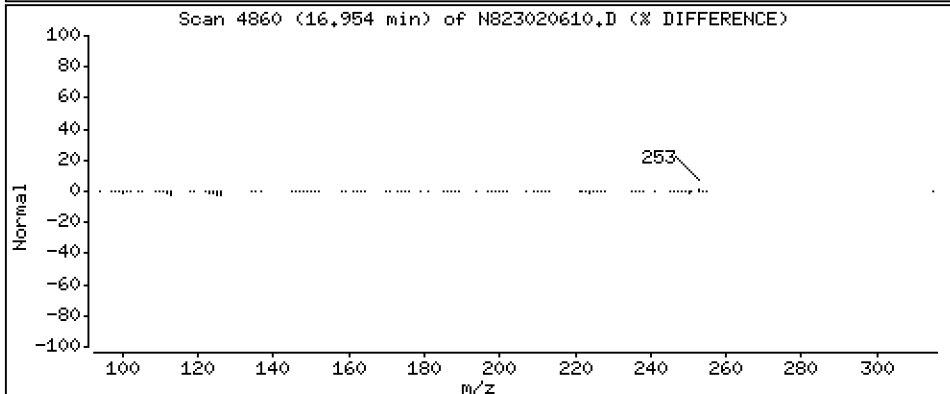
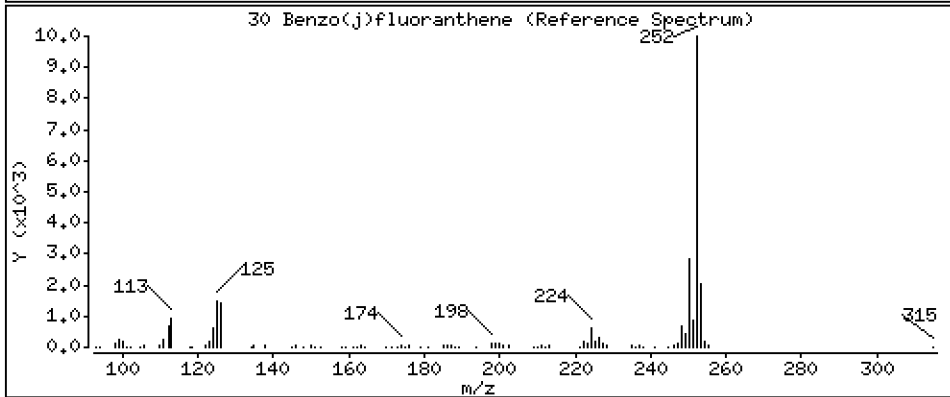
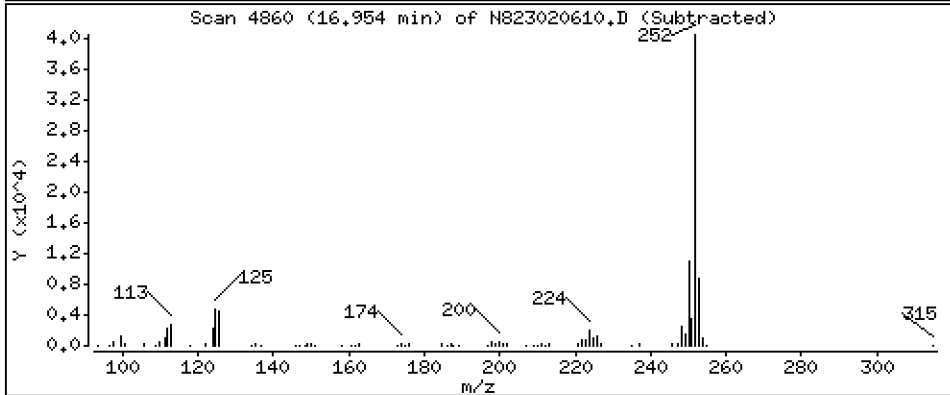
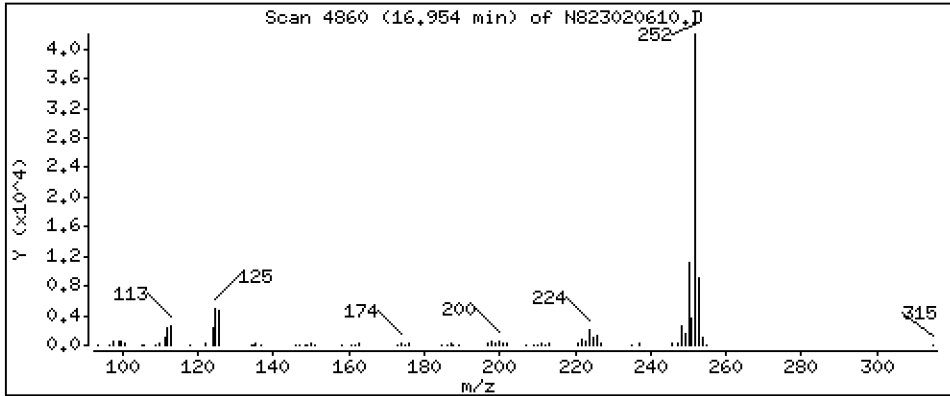
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

30 Benzo(j)fluoranthene

Concentration: 5,699 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

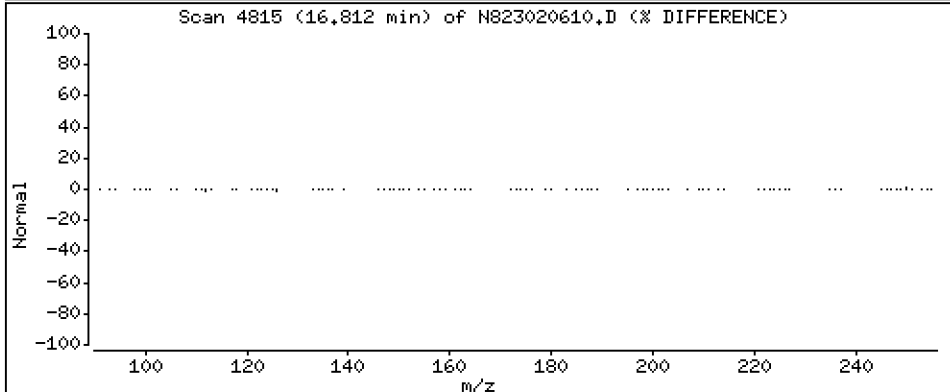
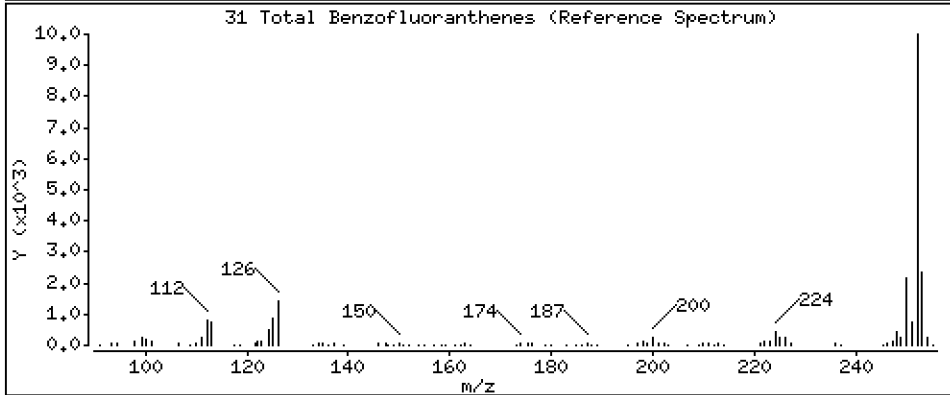
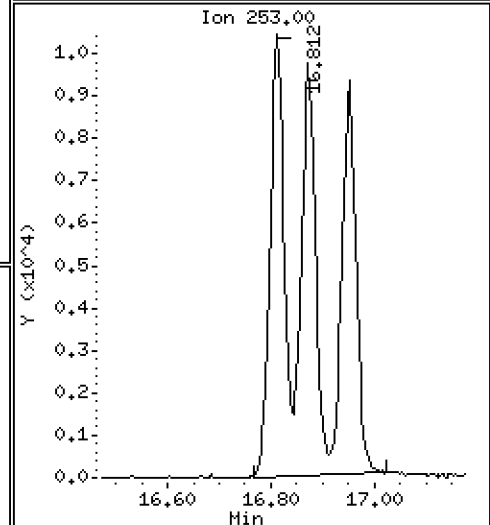
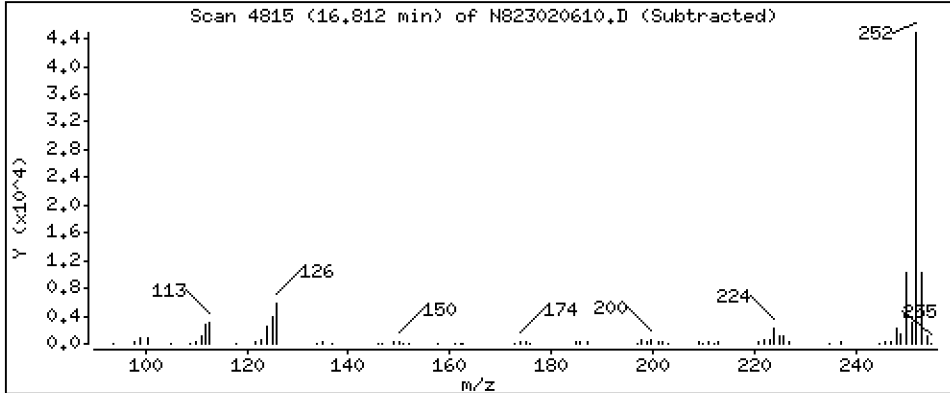
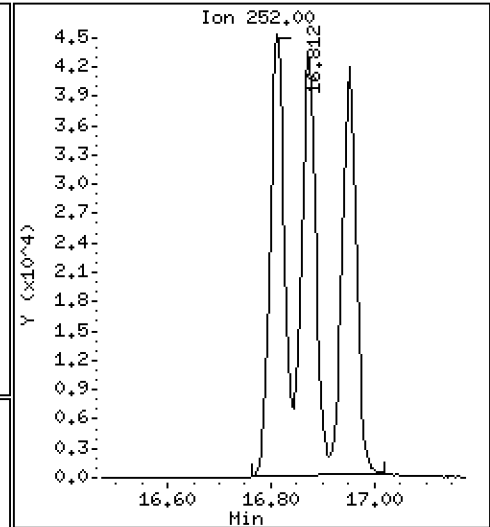
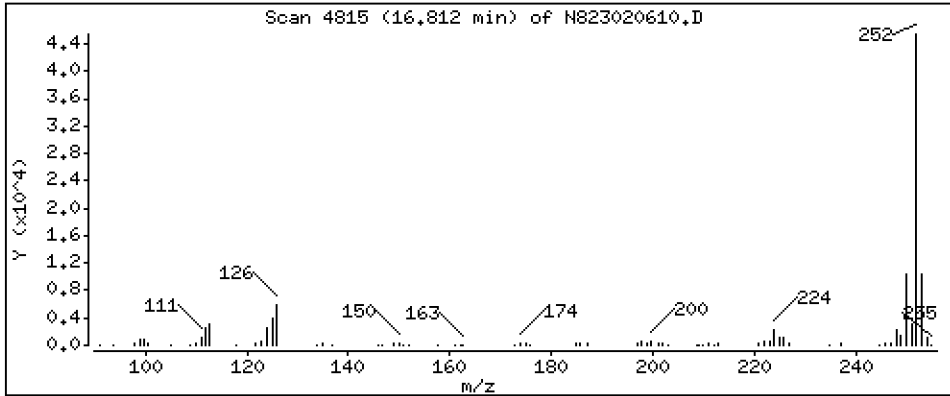
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 16,54 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

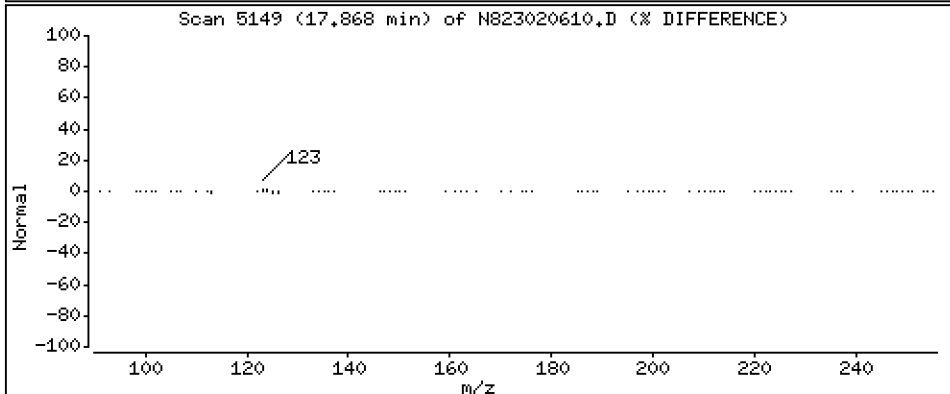
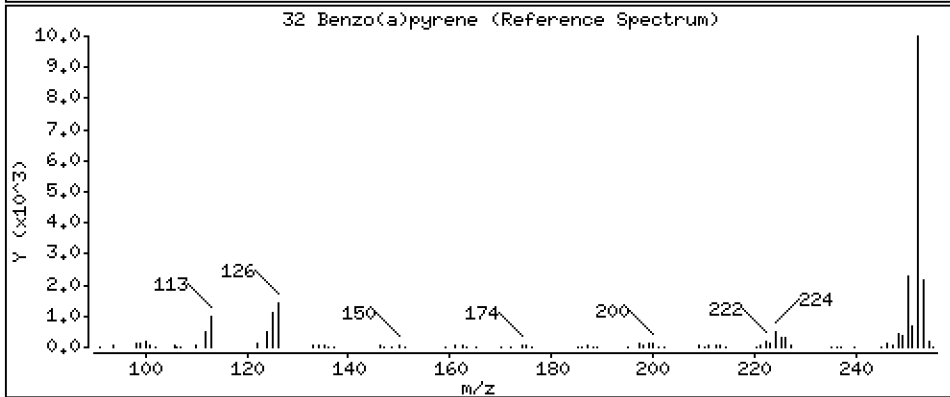
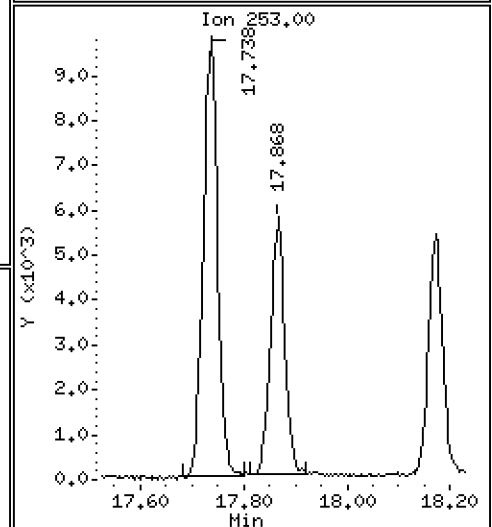
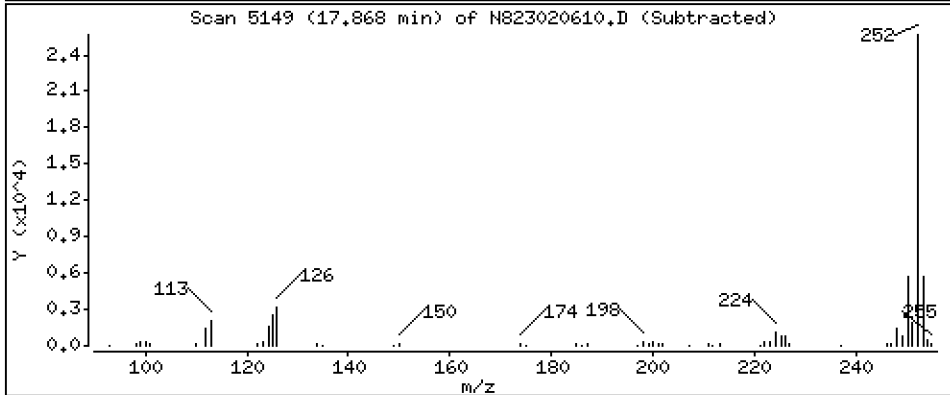
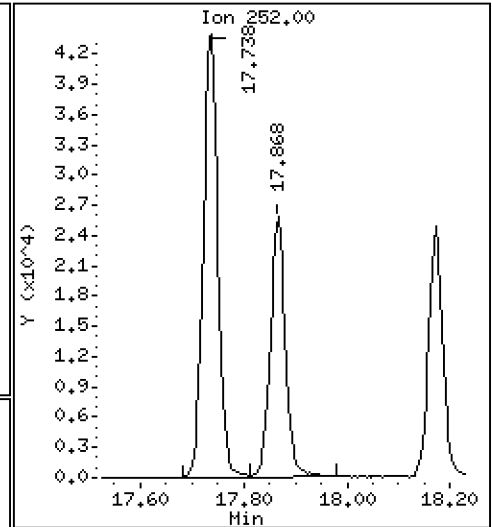
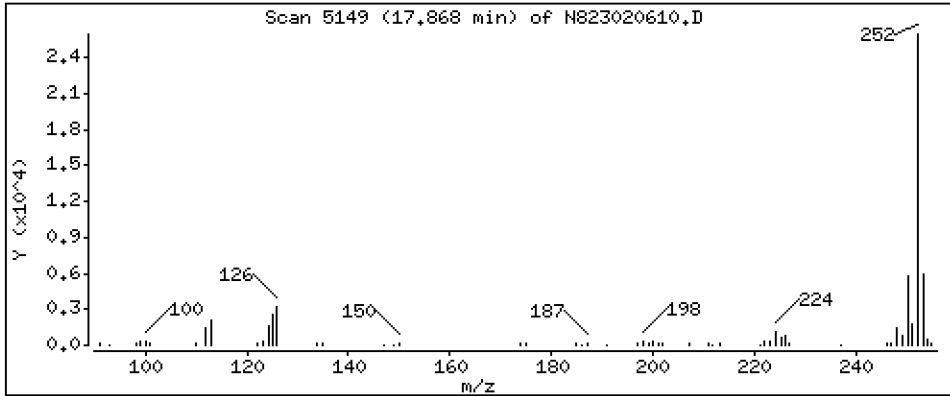
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 3,726 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

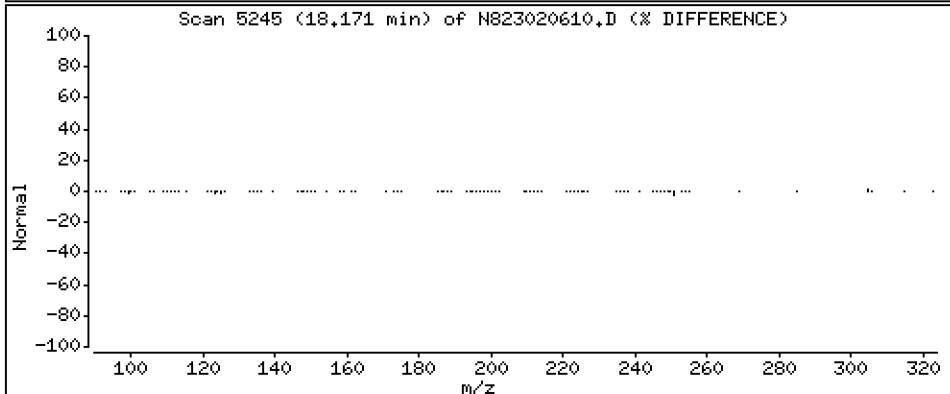
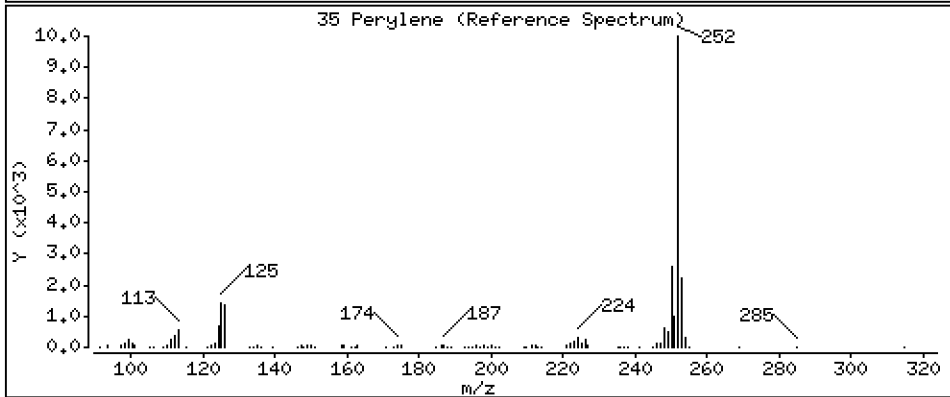
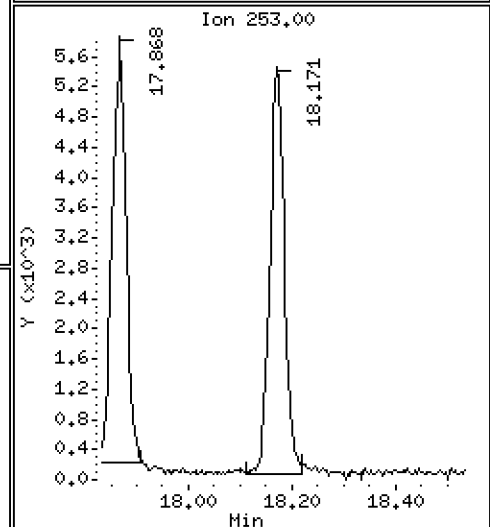
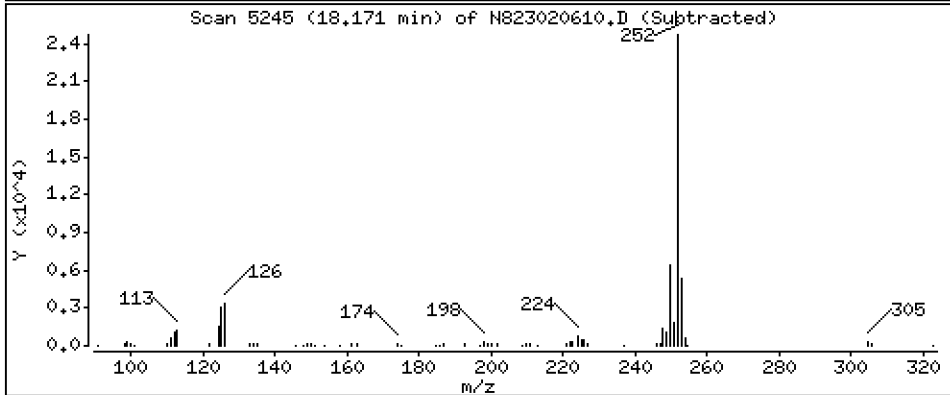
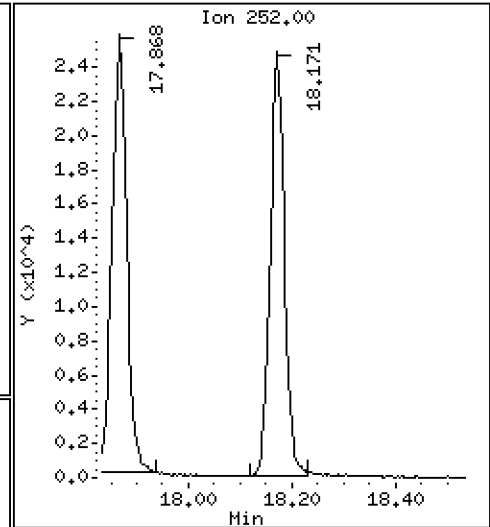
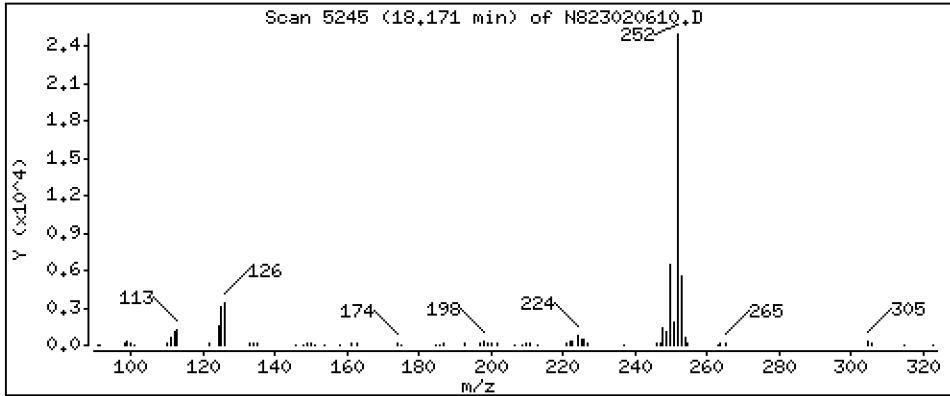
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

35 Perylene

Concentration: 3,115 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

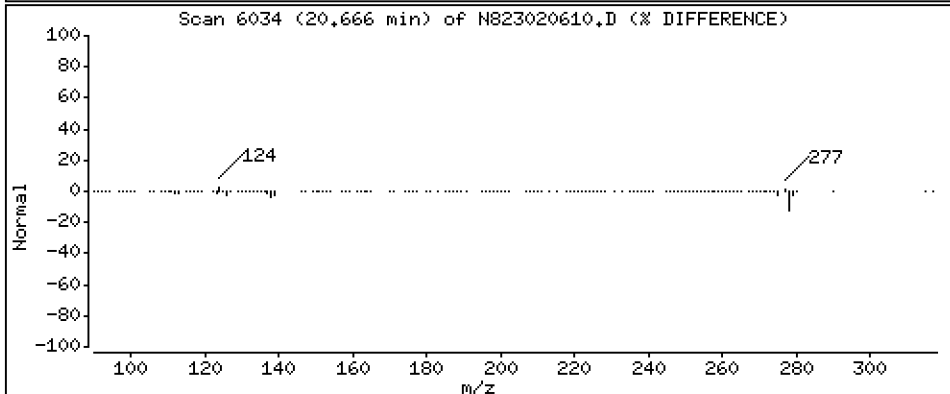
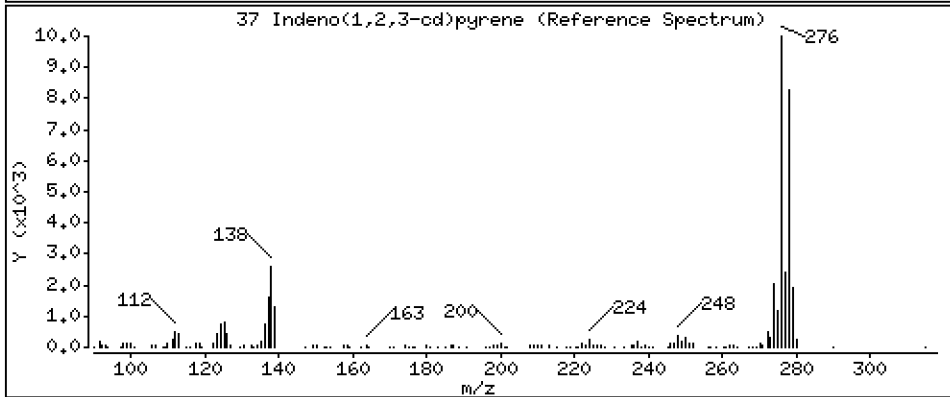
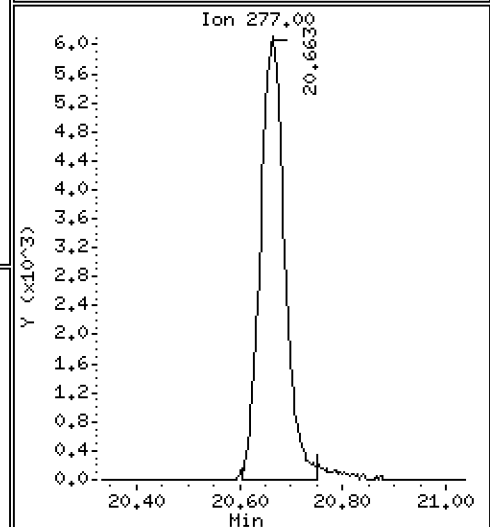
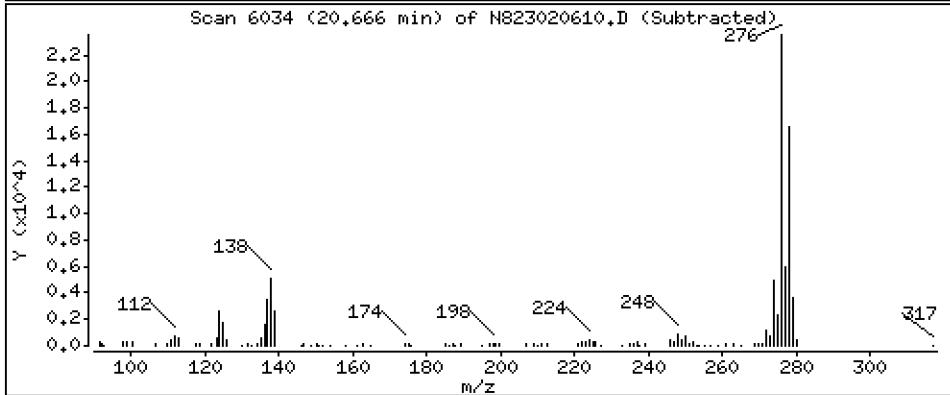
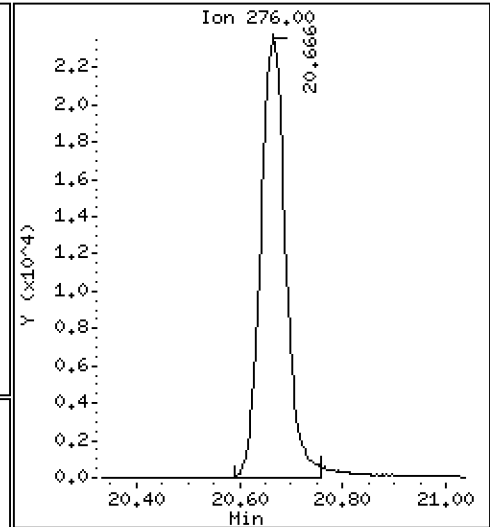
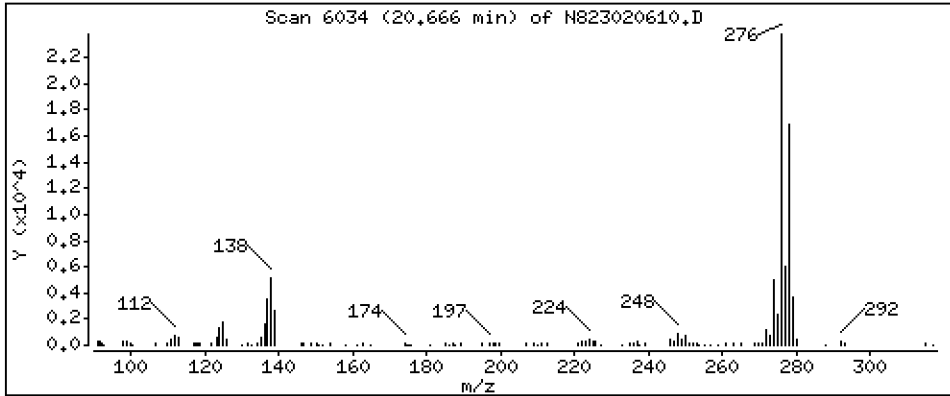
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 4,985 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

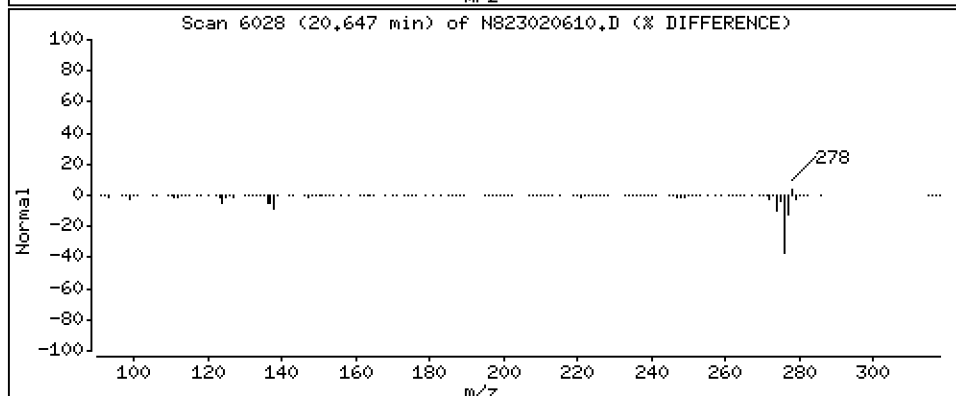
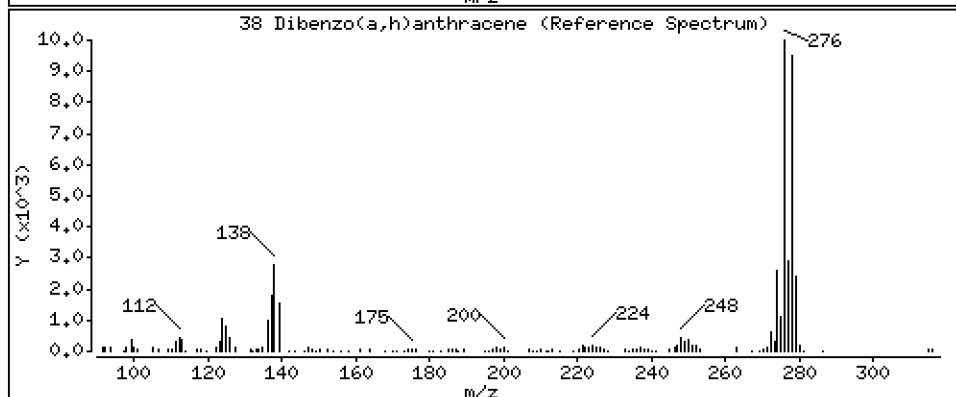
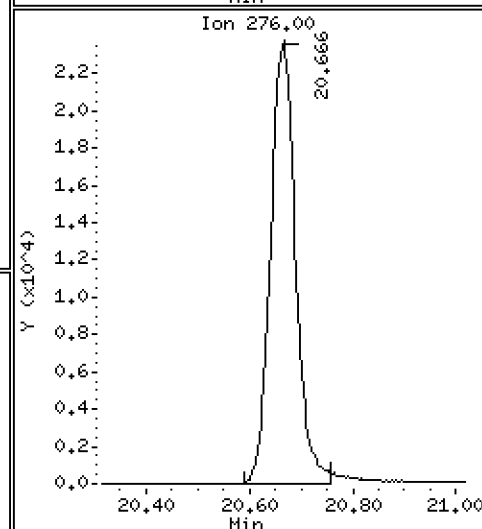
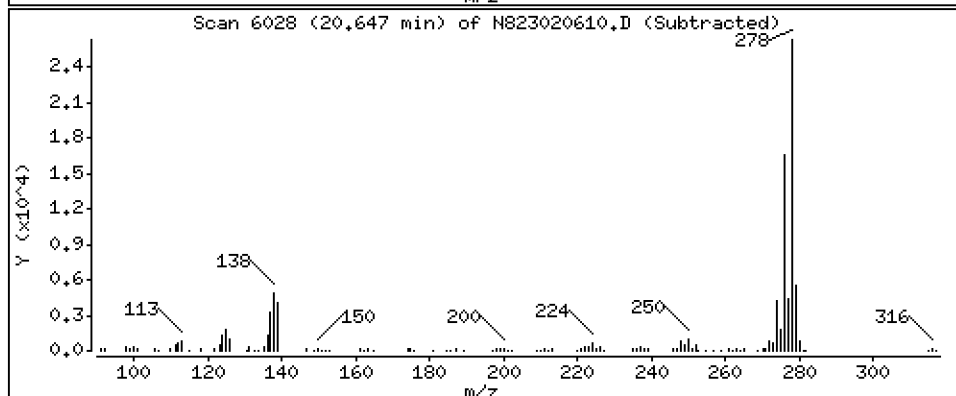
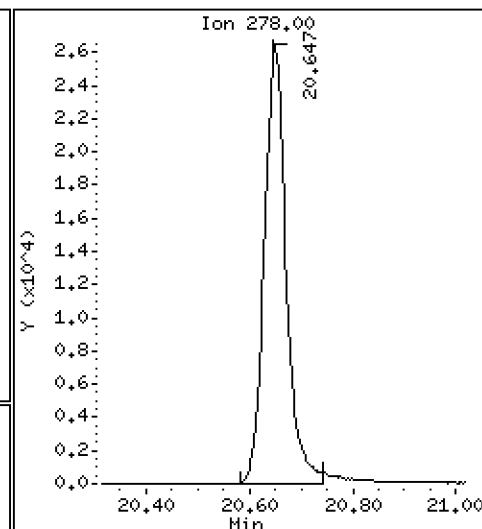
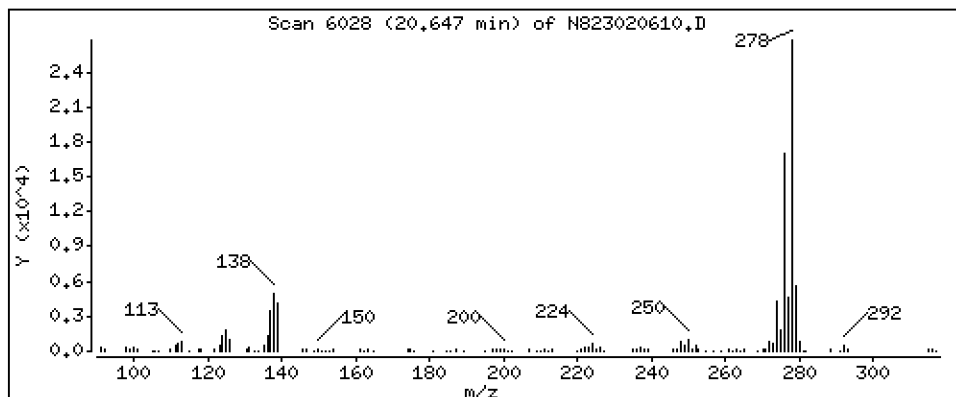
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 5,593 ug/mL



Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

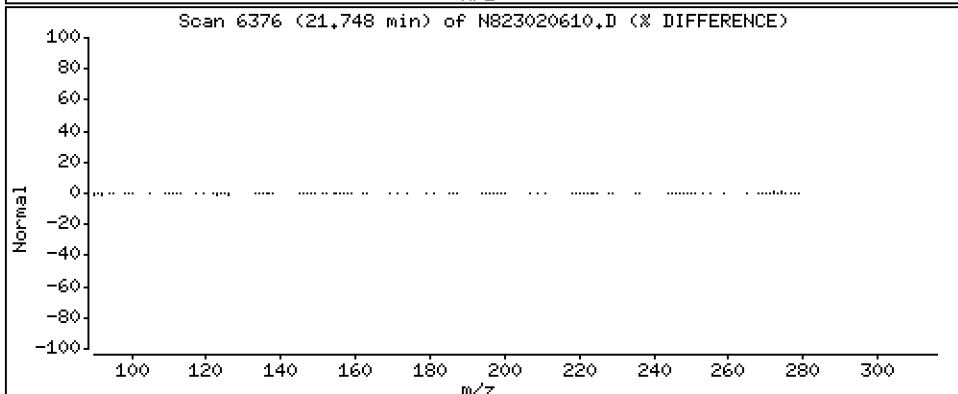
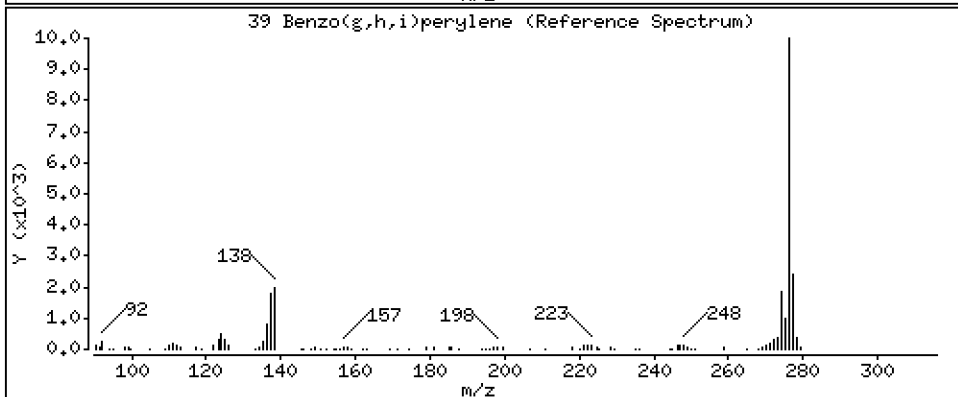
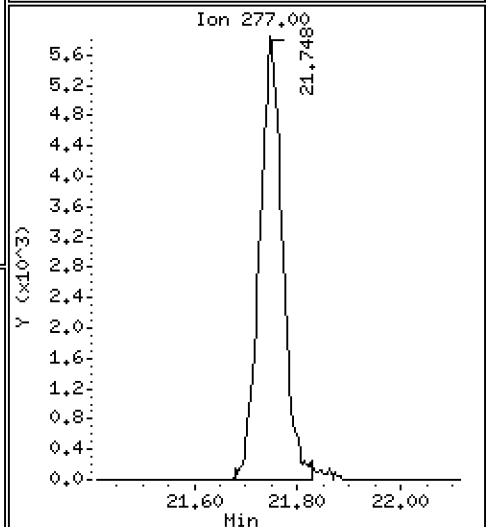
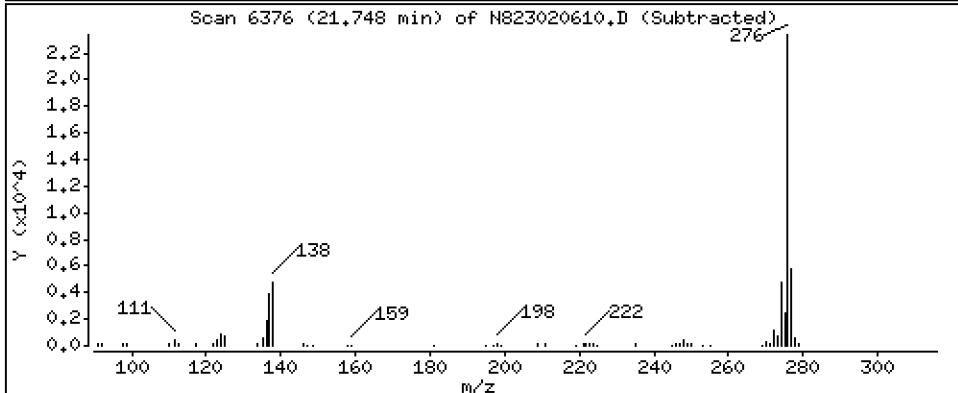
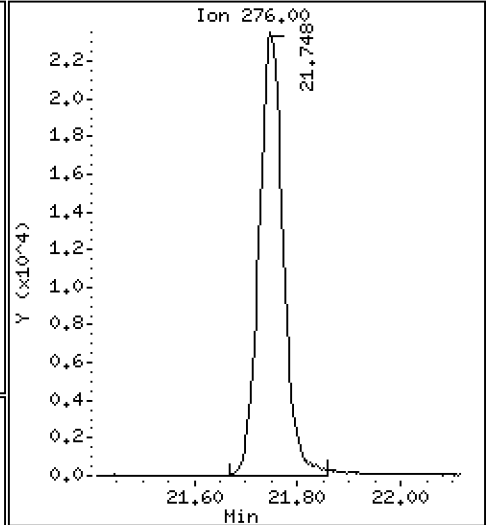
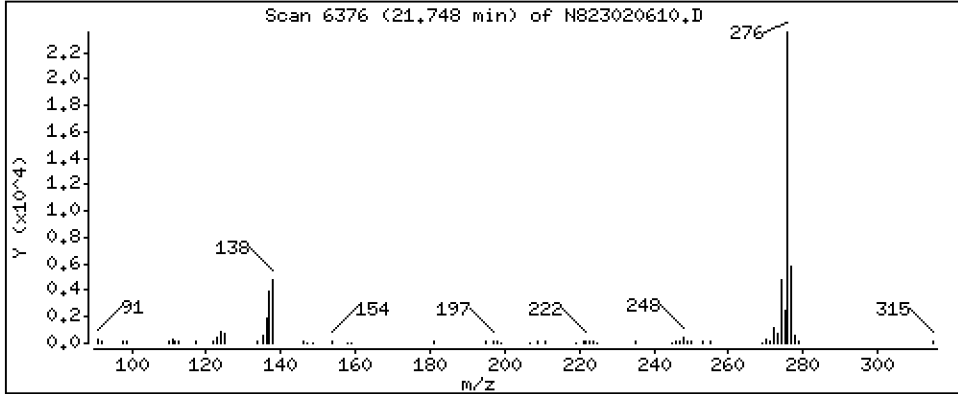
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 5,263 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020610.D
 Lab Smp Id: BLA0683-BSD1
 Inj Date : 06-FEB-2023 16:51
 Operator : JZ Inst ID: nt8.i
 Smp Info : BLA0683-BSD1,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PNAXMDL.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
* 1 Naphthalene-d8	136		4.887	4.900	(1.000)	52018	2.00000	
2 Naphthalene	128		4.916	4.928	(1.006)	82183	3.39792	3.398
\$ 3 2-Methylnaphthalene-d10	152		5.624	5.634	(1.151)	30576	2.15527	2.155
4 2-Methylnaphthalene	141		5.672	5.681	(1.160)	46582	3.50143	3.501
5 1-methylnaphthalene	141		5.868	5.880	(1.201)	46831	3.46842	3.468
9 Acenaphthylene	152		7.072	7.082	(0.985)	70701	3.12134	3.121
* 10 Acenaphthene-d10	164		7.183	7.189	(1.000)	29996	2.00000	
11 Acenaphthene	153		7.230	7.240	(1.007)	52081	3.43164	3.432
12 Dibenzofuran	168		7.382	7.392	(1.028)	79103	3.43158	3.432
14 Fluorene	166		7.863	7.869	(1.095)	64484	3.60176	3.602
* 15 Phenanthrene-d10	188		9.223	9.232	(1.000)	54697	2.00000	
16 Phenanthrene	178		9.260	9.267	(1.004)	95476	3.57343	3.573
17 Anthracene	178		9.302	9.308	(1.009)	78566	3.23694	3.237
19 Carbazole	167		9.814	9.823	(1.064)	83189	3.73866	3.739
22 Fluoranthene	202		11.041	11.050	(1.197)	108034	3.71467	3.715
\$ 21 Fluoranthene-d10	212		11.003	11.009	(1.193)	57921	2.40016	2.400
23 Pyrene	202		11.559	11.569	(0.815)	110605	4.28330	4.283
24 Benzo(a)anthracene	228		14.060	14.070	(0.991)	93819	4.00851	4.009
* 25 Chrysene-d12	240		14.187	14.202	(1.000)	41650	2.00000	
27 Chrysene	228		14.263	14.275	(1.005)	99165	3.98001	3.980
28 Benzo(b)fluoranthene	252		16.811	16.824	(0.929)	89367	5.56463	5.565
29 Benzo(k)fluoranthene	252		16.871	16.887	(0.932)	83285	5.29444	5.294
30 Benzo(j)fluoranthene	252		16.954	16.963	(0.937)	80710	5.69933	5.699
31 Total Benzofluoranthenes	252		16.811	16.824	(0.929)	251601	16.5424	16.54 (M)
32 Benzo(a)pyrene	252		17.867	17.877	(0.987)	52656	3.72586	3.726
* 33 Perylene-d12	264		18.098	18.107	(1.000)	27575	2.00000	
35 Perylene	252		18.171	18.183	(1.004)	47243	3.11513	3.115
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.533	20.549	(1.135)	38676	3.57963	3.580
37 Indeno(1,2,3-cd)pyrene	276		20.666	20.684	(1.142)	80264	4.98523	4.985
38 Dibenzo(a,h)anthracene	278		20.647	20.666	(1.141)	77498	5.59324	5.593
39 Benzo(g,h,i)perylene	276		21.747	21.763	(1.202)	76779	5.26340	5.263

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020610.D Calibration Time: 15:15
 Lab Smp Id: BLA0683-BSD1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	52018	17.33
10 Acenaphthene-d10	26127	13064	52254	29996	14.81
15 Phenanthrene-d10	47424	23712	94848	54697	15.34
25 Chrysene-d12	36794	18397	73588	41650	13.20
33 Perylene-d12	36636	18318	73272	27575	-24.73

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.89	-0.25
10 Acenaphthene-d10	7.19	6.69	7.69	7.18	-0.09
15 Phenanthrene-d10	9.23	8.73	9.73	9.22	-0.10
25 Chrysene-d12	14.20	13.70	14.70	14.19	-0.11
33 Perylene-d12	18.11	17.61	18.61	18.10	-0.05

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

REVIEW SUMMARY FOR FILE - N823020610.D

Lab ID: BLA0683-BSD1

nt8.i, 20230206A.b\FSIMPNA230119.m, 06-FEB-2023 16:51

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

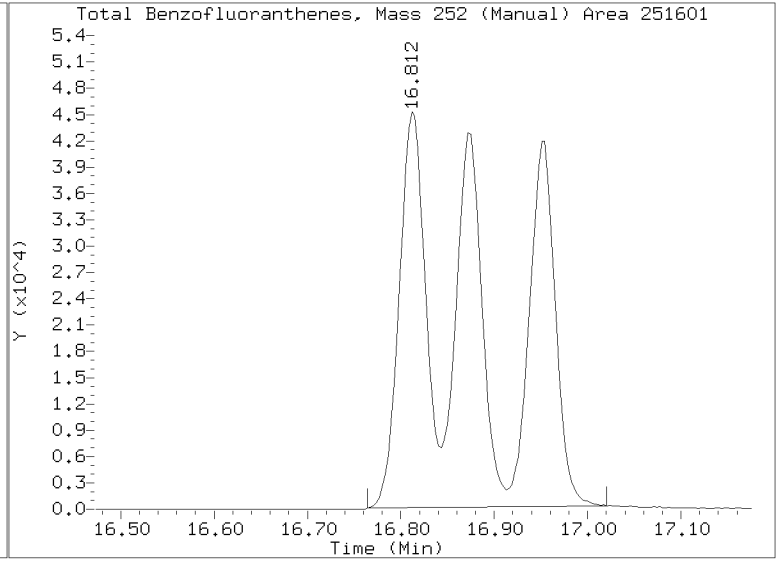
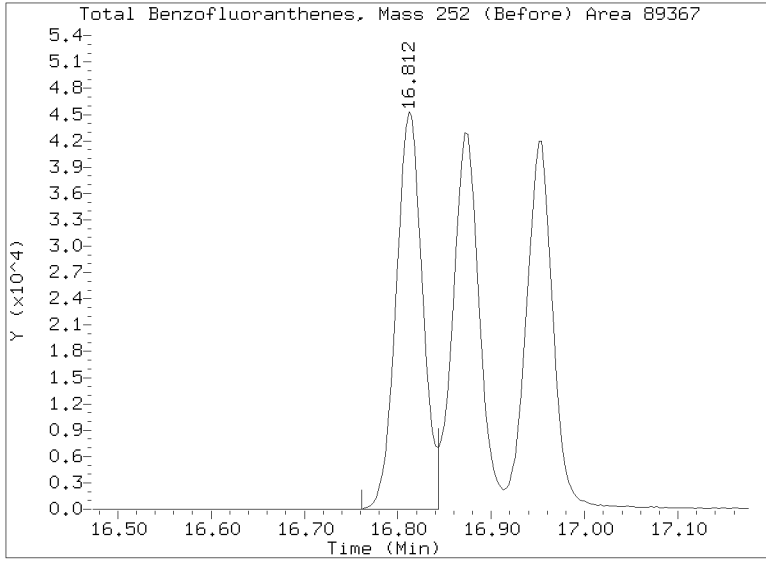
No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020610.D
Injection Date: 06-FEB-2023 16:51
Lab ID:BLA0683-BSD1 Client ID:
Report Date: 02/07/2023 13:19





LCS / LCS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/05/23 17:50

Batch: BLA0685

Laboratory ID: BLA0685-BS2

Preparation: EPA 3546 (Microwave)

Sequence Name: LCS

Initial/Final: 10 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	375		75.1	36 - 120
1,2-Dichlorobenzene	500	379		75.8	36 - 120
Benzyl Alcohol	500	429		85.9	25 - 123
Benzoic acid	2300	2550	Q	111	10 - 160
2,4-Dimethylphenol	1300	472		36.3	10 - 120
1,2,4-Trichlorobenzene	500	436		87.1	35 - 120
N-Nitrosodiphenylamine	500	308		61.7	27 - 120
Pentachlorophenol	1300	1030	Q	79.0	26 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
1,4-Dichlorobenzene	500	424		84.7	12.1	30	36 - 120
1,2-Dichlorobenzene	500	422		84.5	10.8	30	36 - 120
Benzyl Alcohol	500	481		96.2	11.4	30	25 - 123
Benzoic acid	2300	2120	Q	92.2	18.2	30	10 - 160
2,4-Dimethylphenol	1300	566		43.5	18.2	30	10 - 120
1,2,4-Trichlorobenzene	500	490		98.1	11.8	30	35 - 120
N-Nitrosodiphenylamine	500	344		68.7	10.8	30	27 - 120
Pentachlorophenol	1300	1060	Q	81.2	2.75	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.B\SIH.B\NT1003052308S.D

Date: 05-HR-2023 17:50

Client ID:

Sample Info: BLR0685-B52

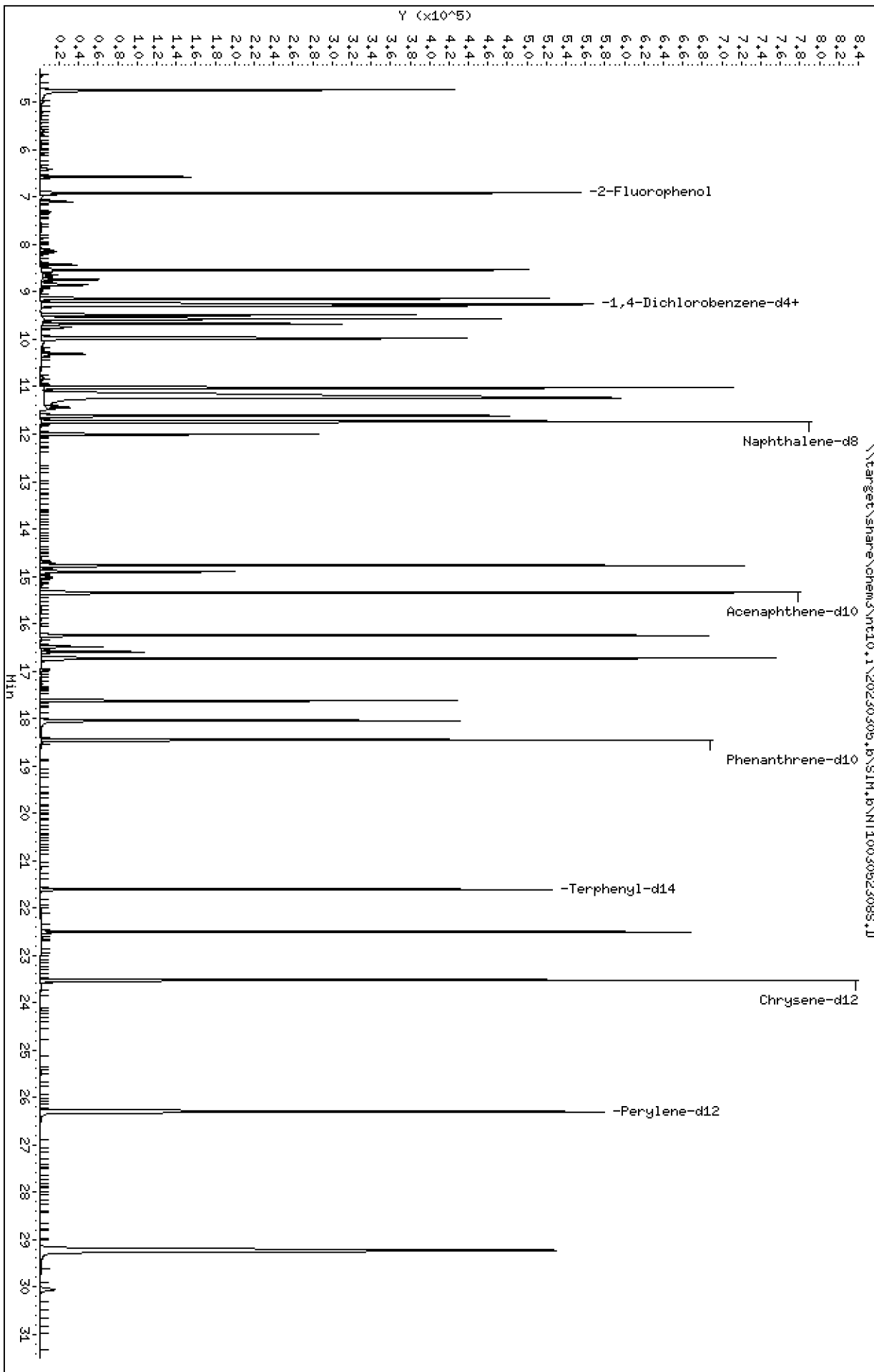
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

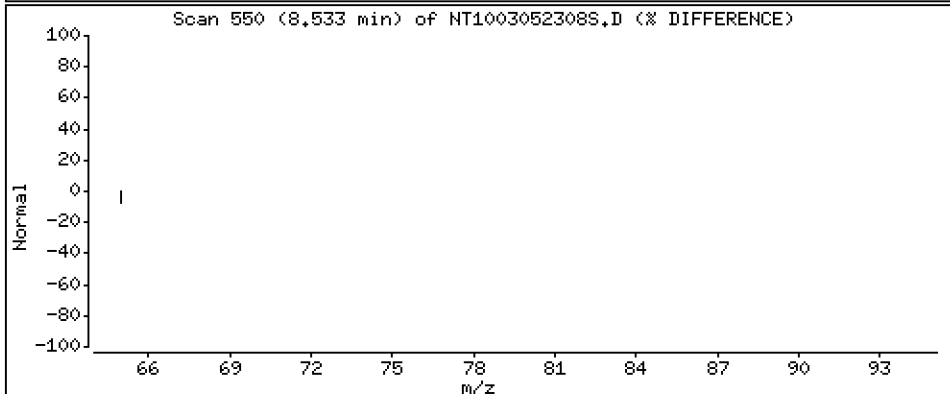
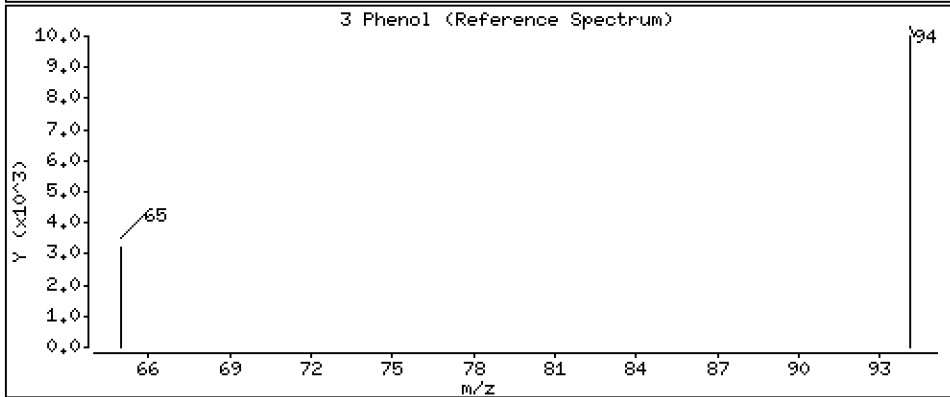
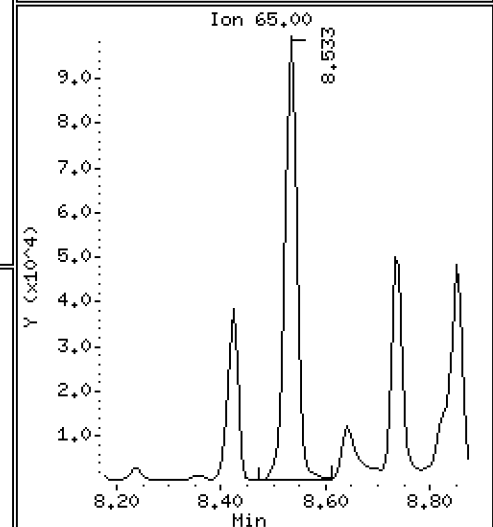
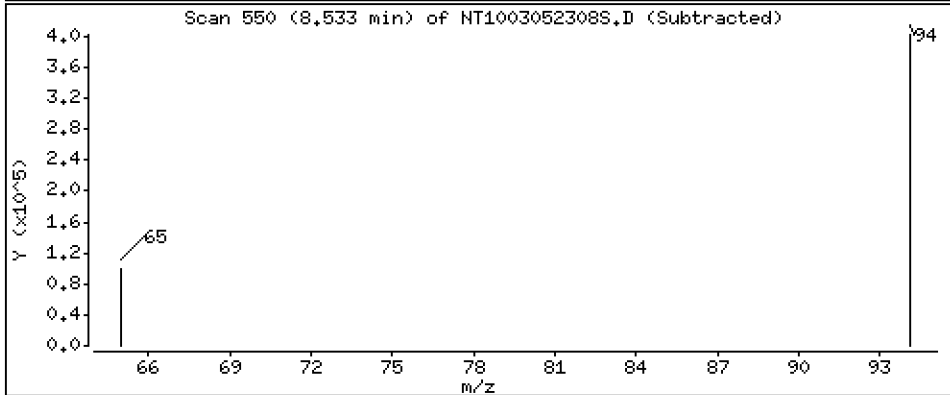
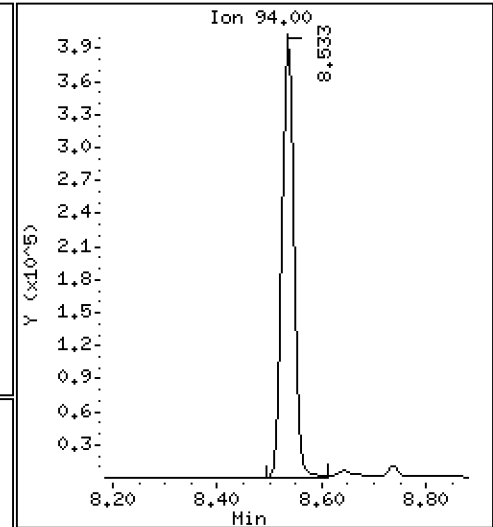
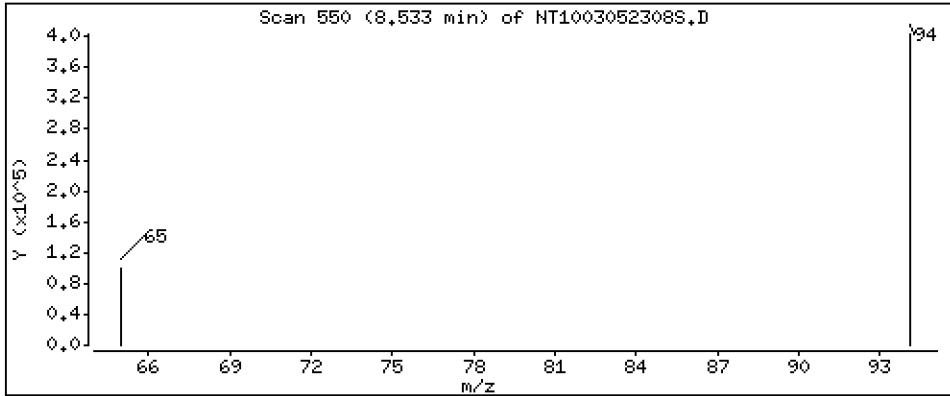
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,158 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

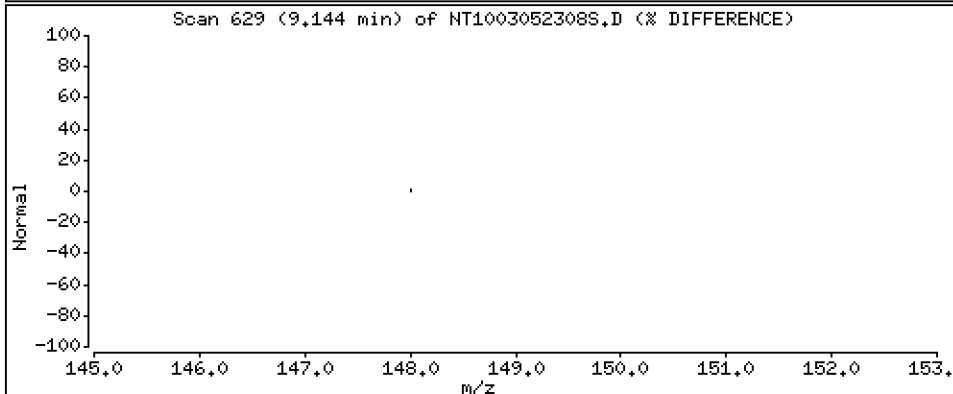
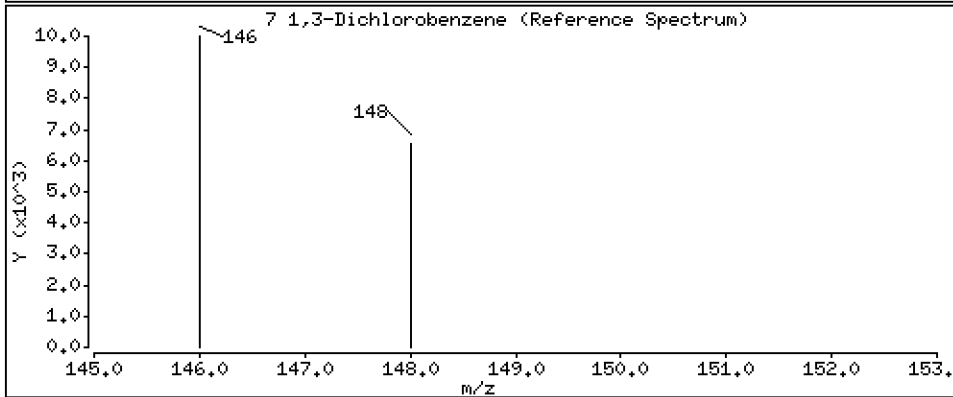
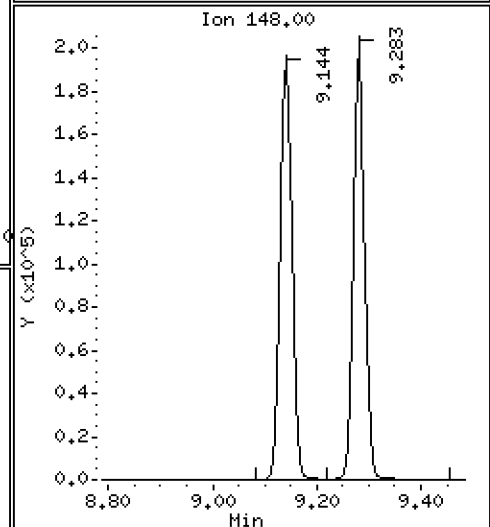
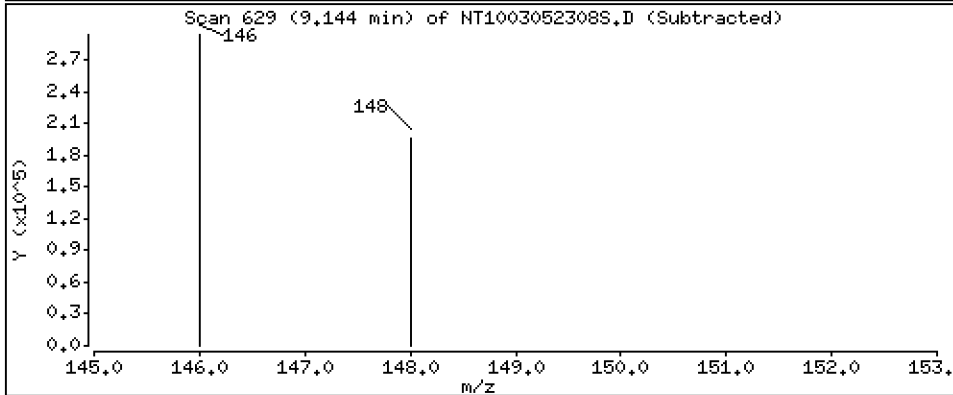
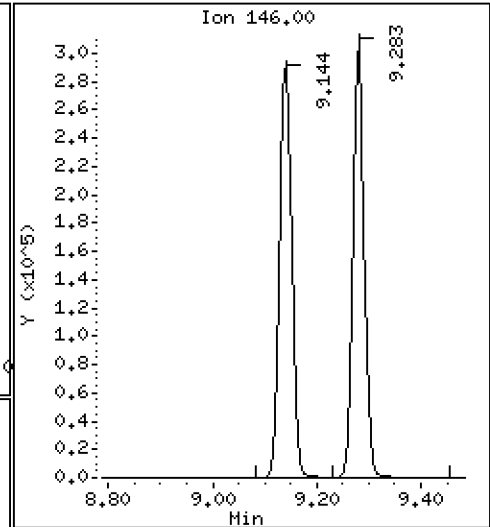
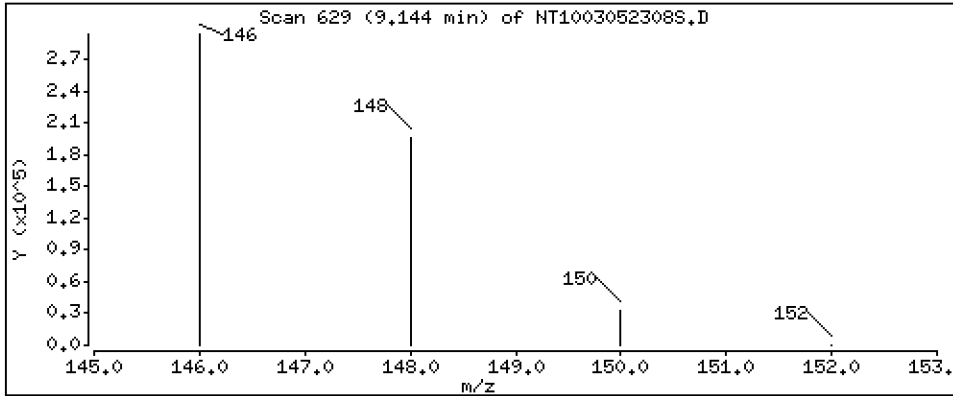
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 3,649 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

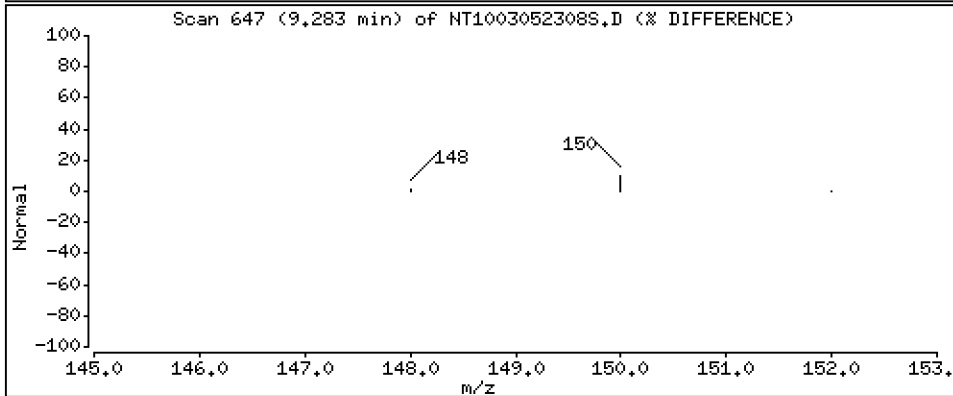
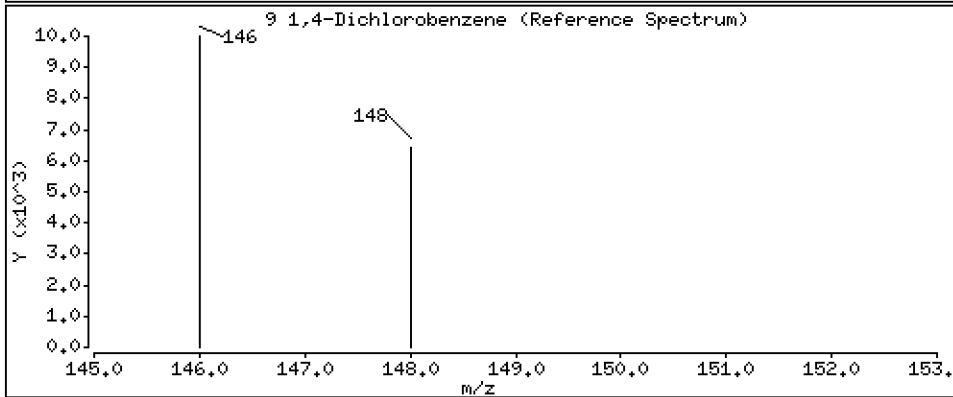
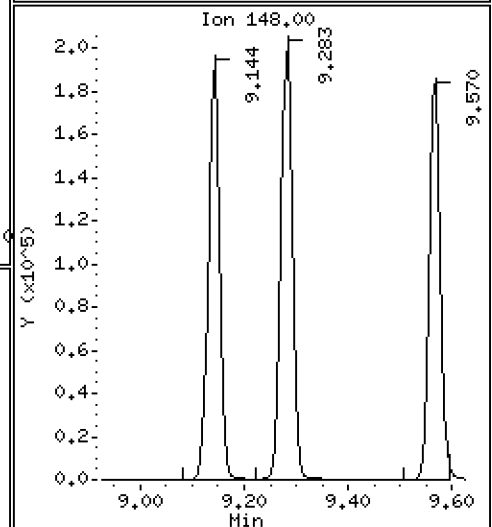
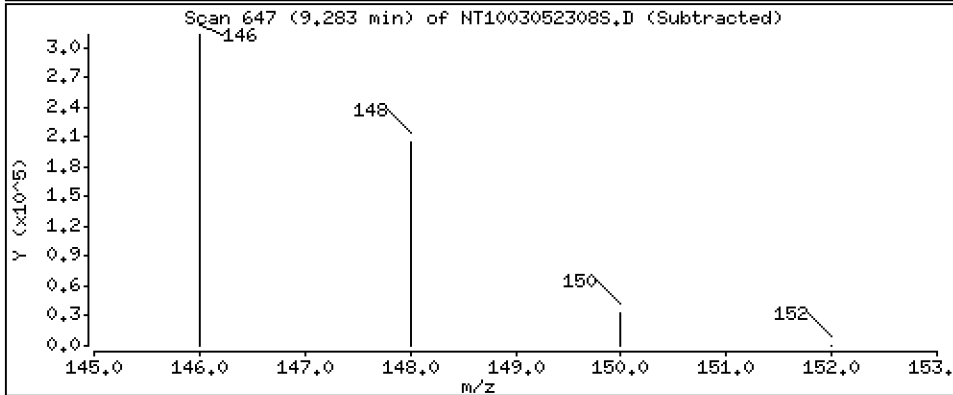
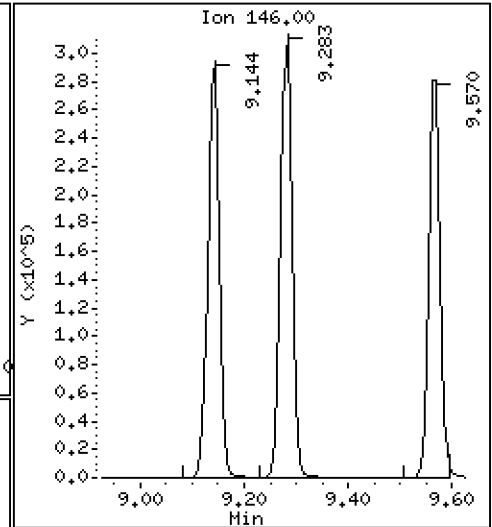
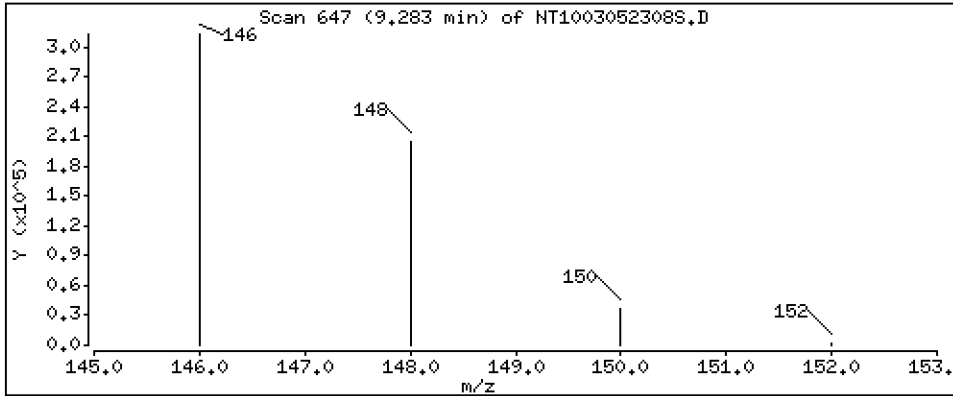
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 3,755 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

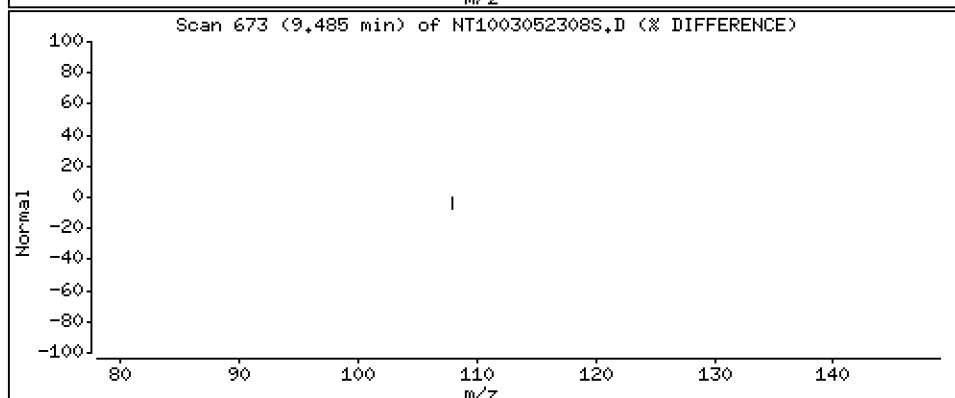
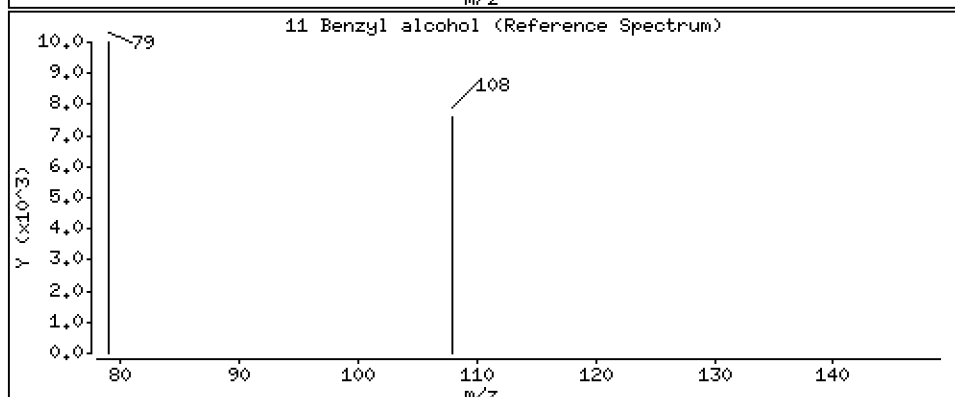
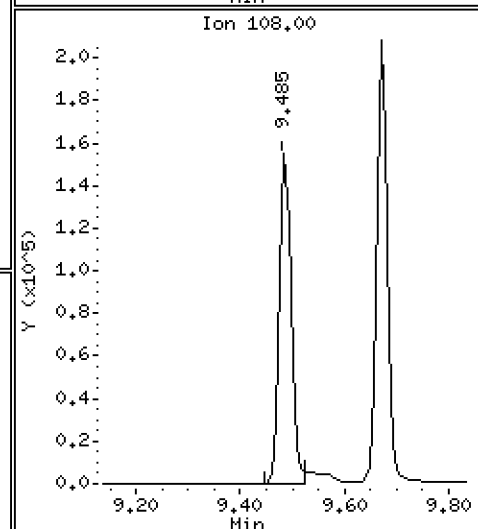
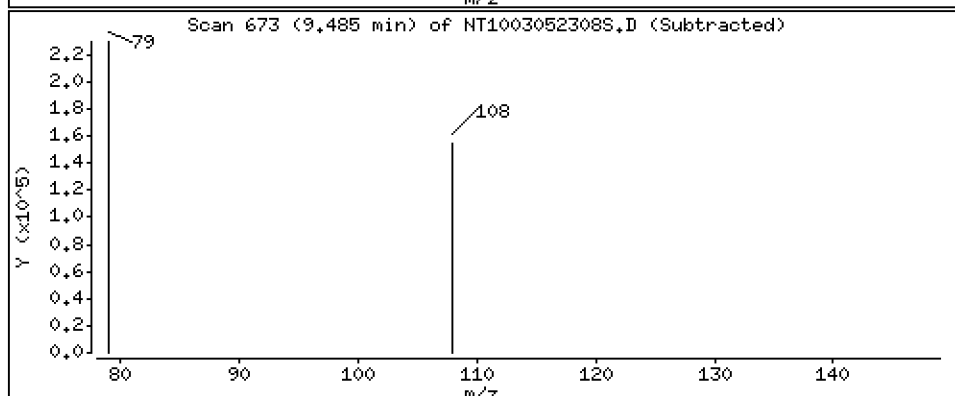
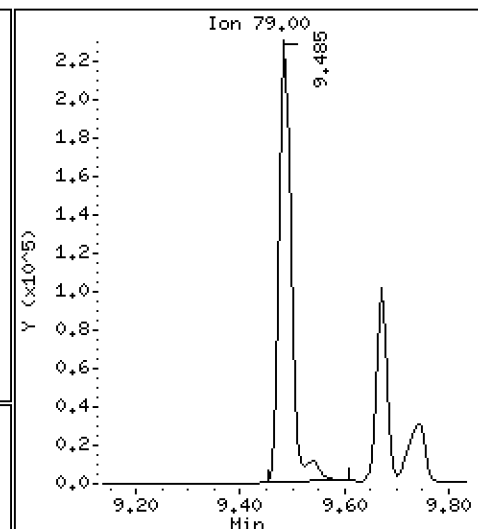
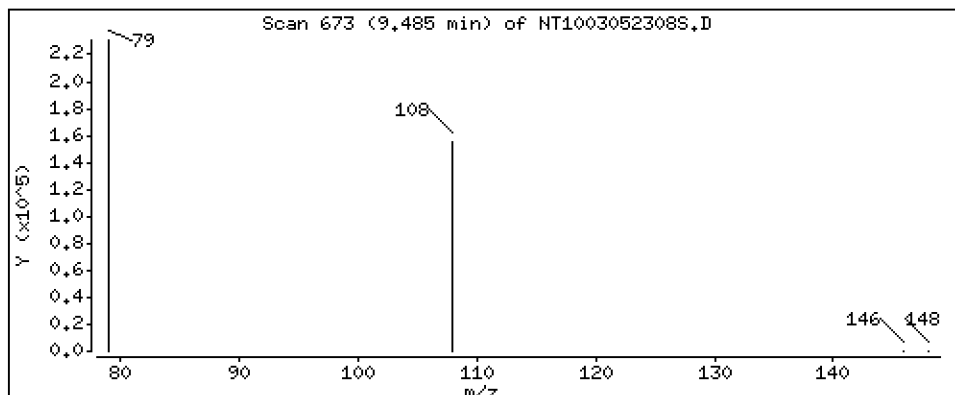
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 4,294 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

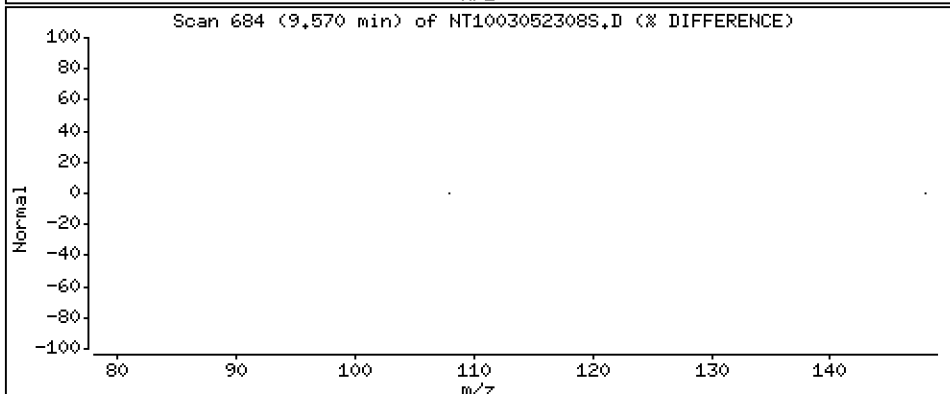
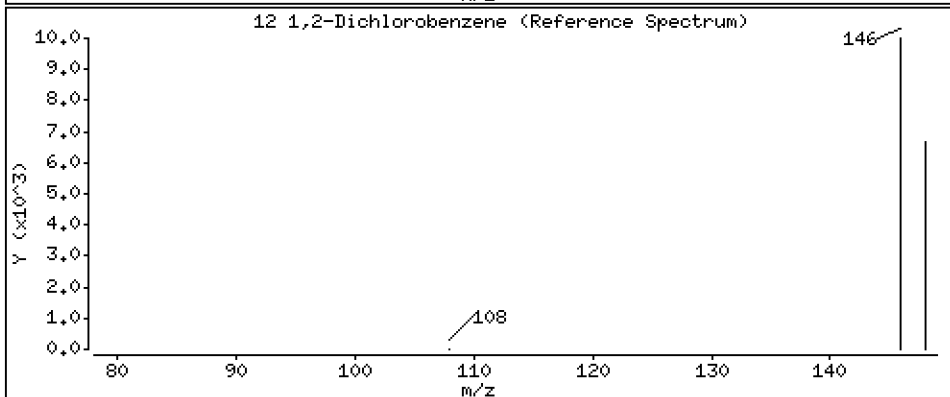
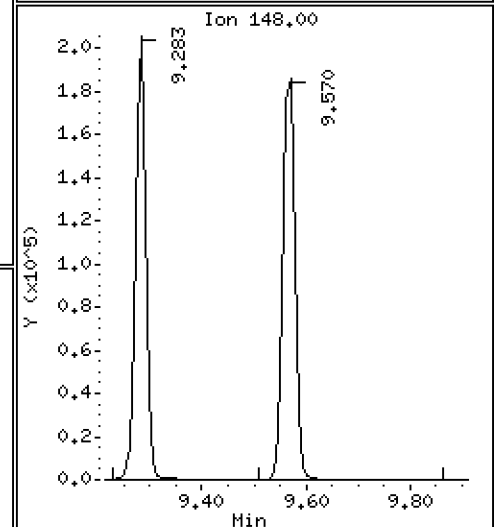
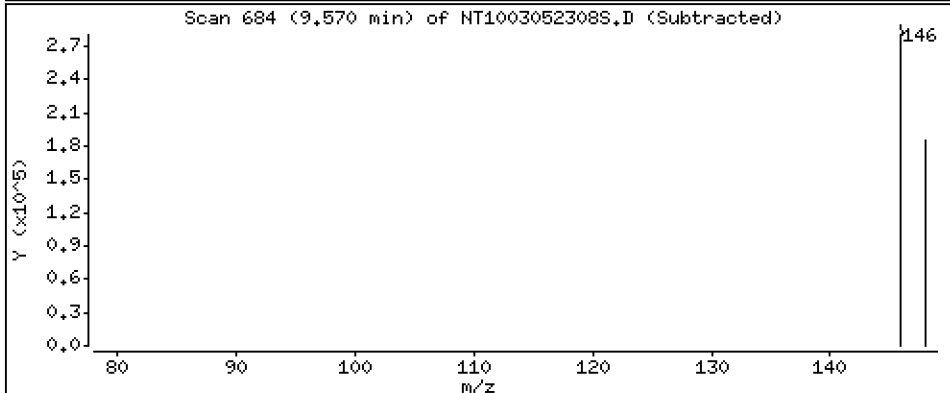
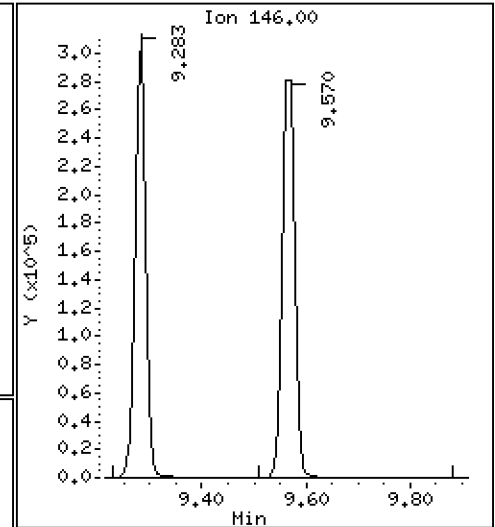
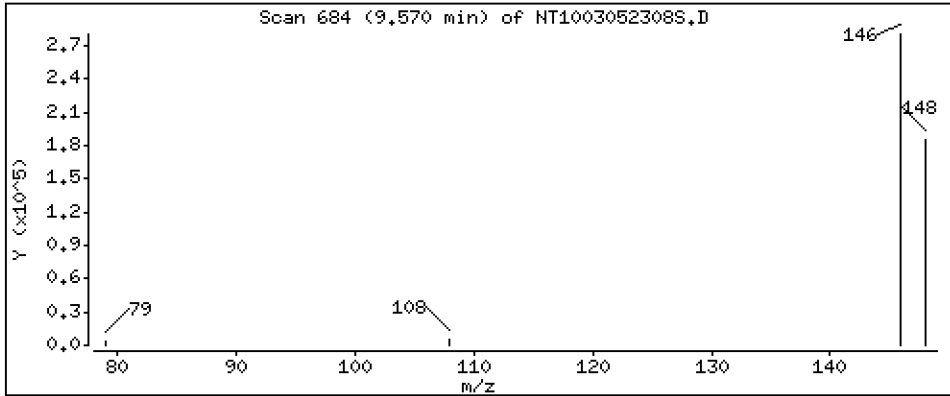
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 3,790 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

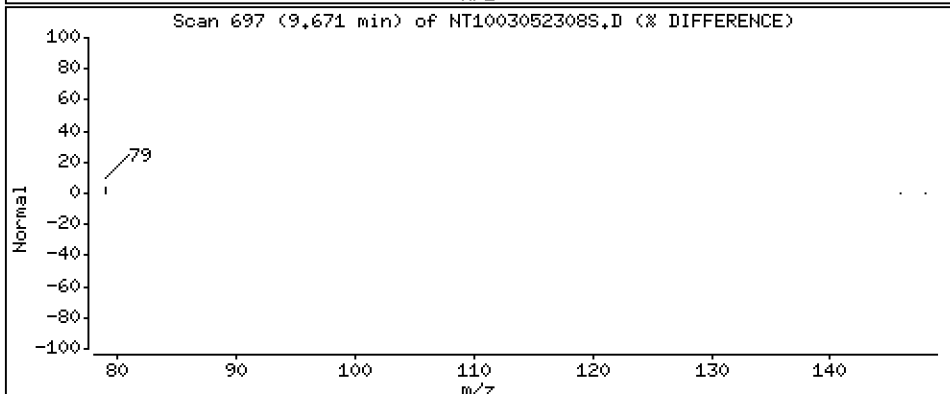
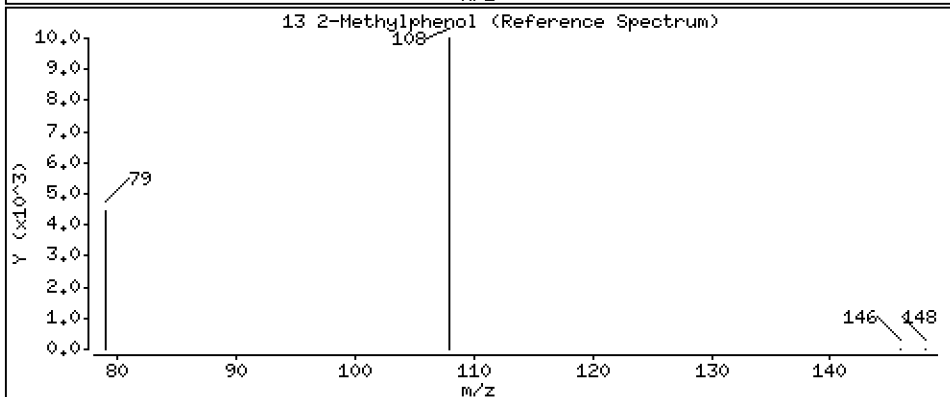
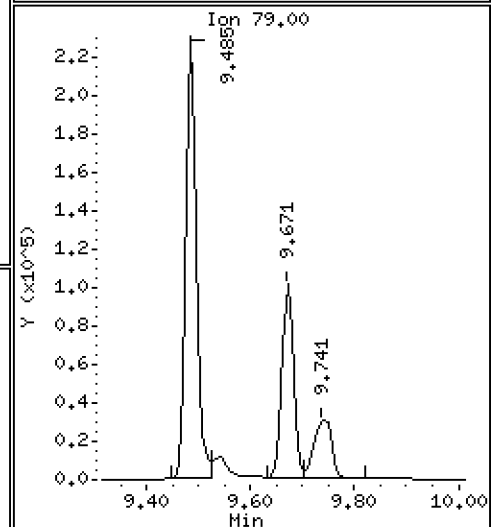
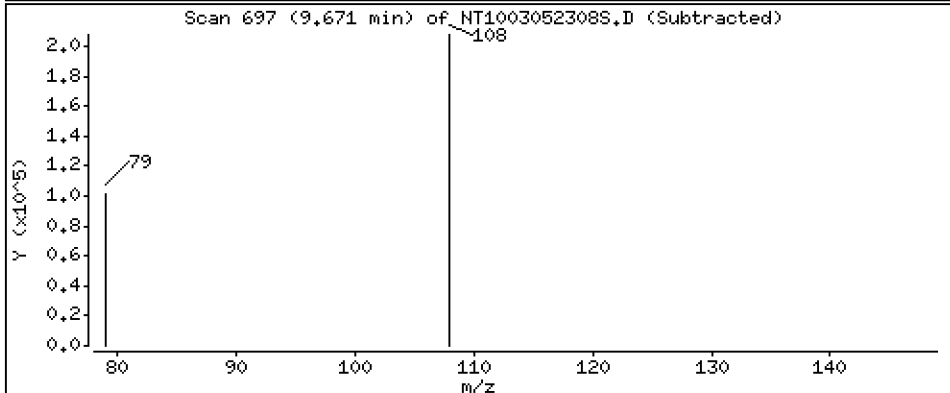
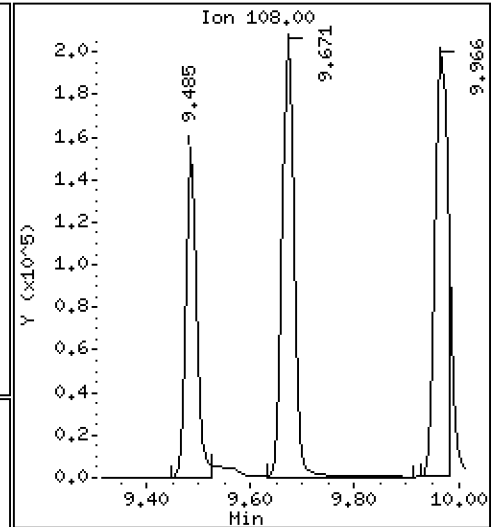
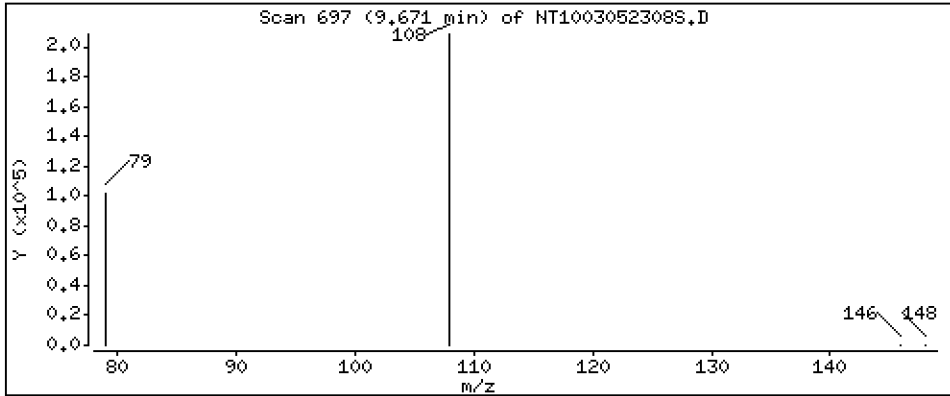
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3,577 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

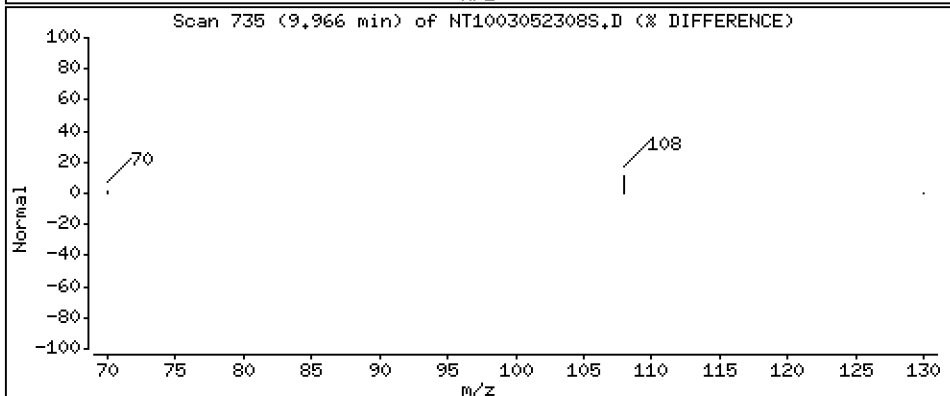
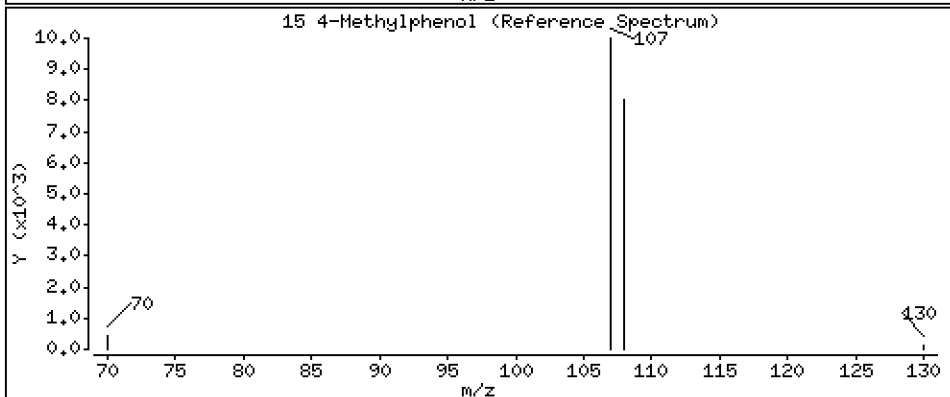
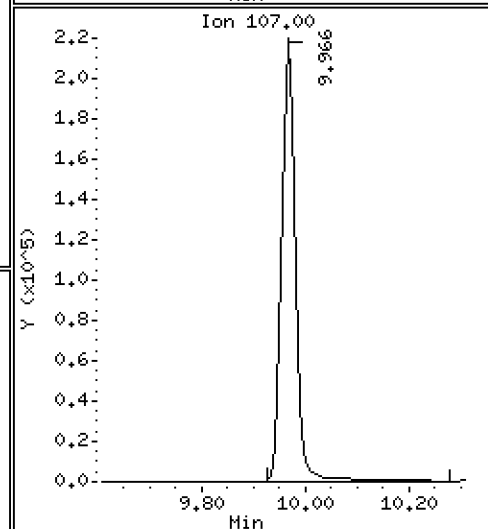
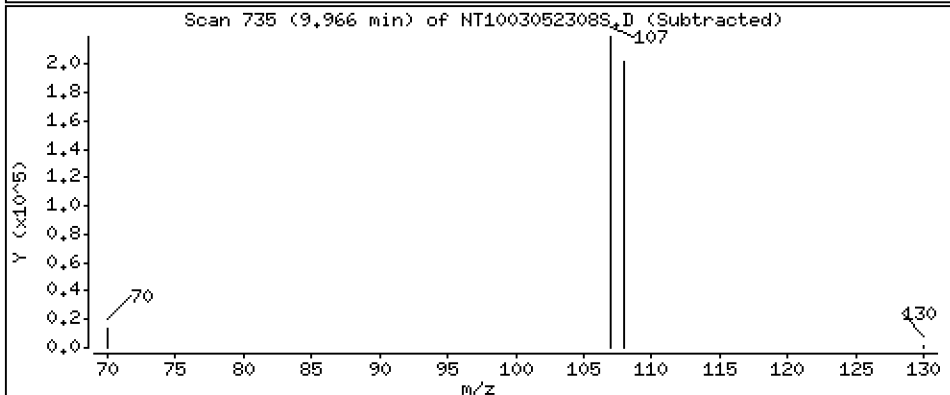
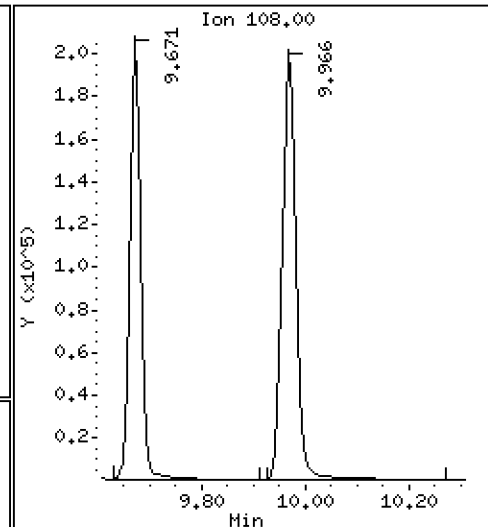
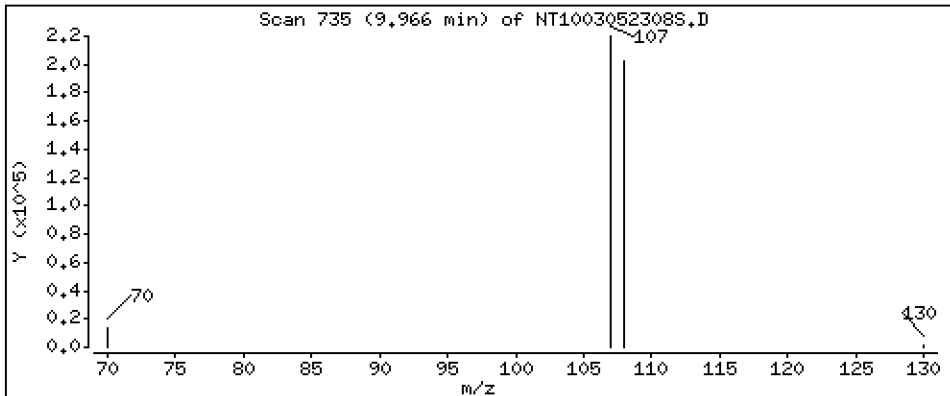
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 3.947 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

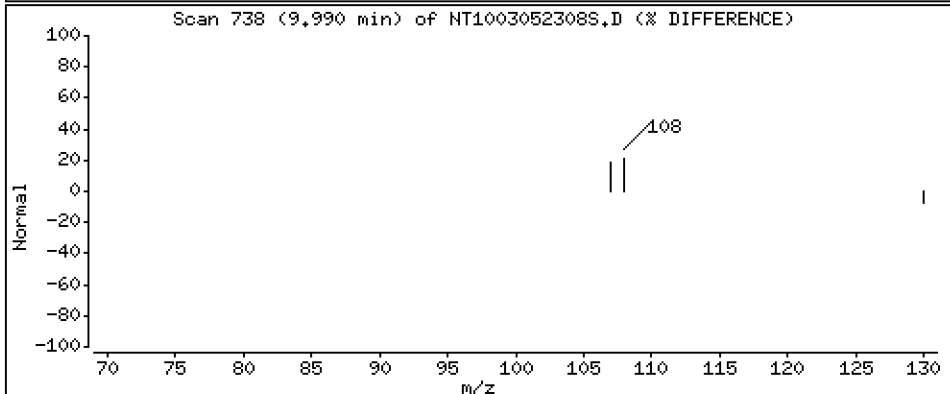
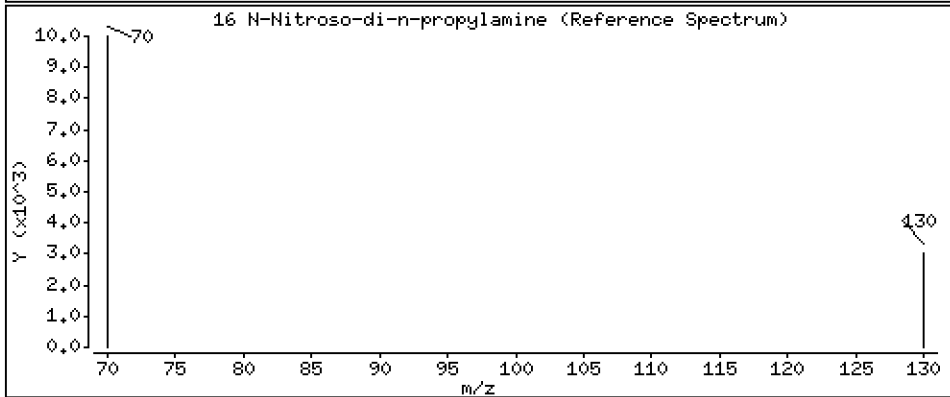
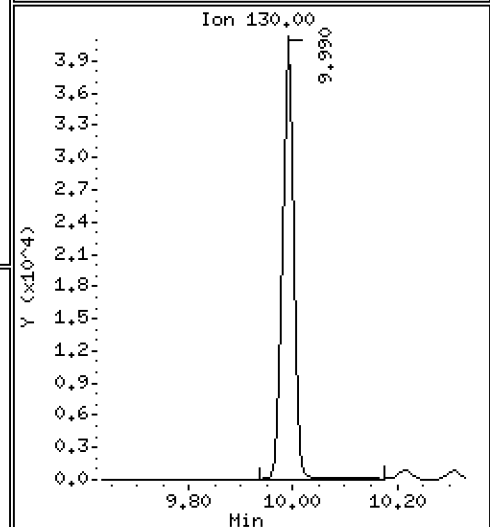
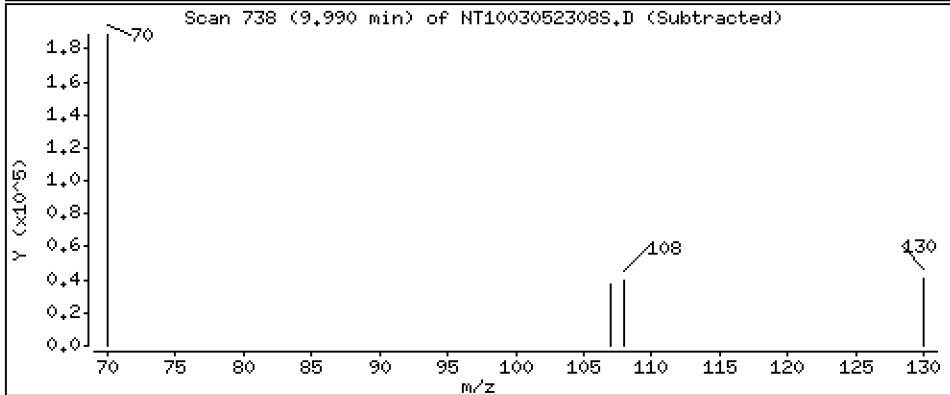
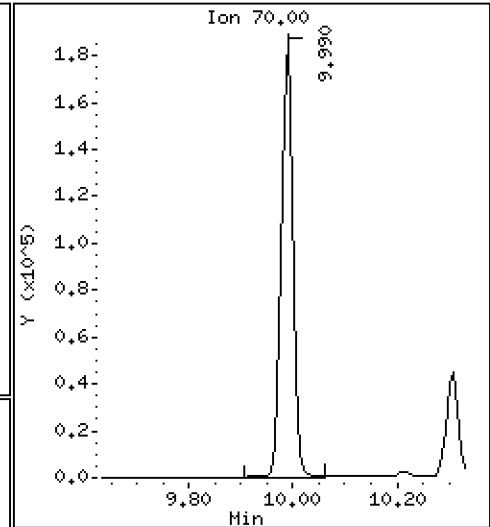
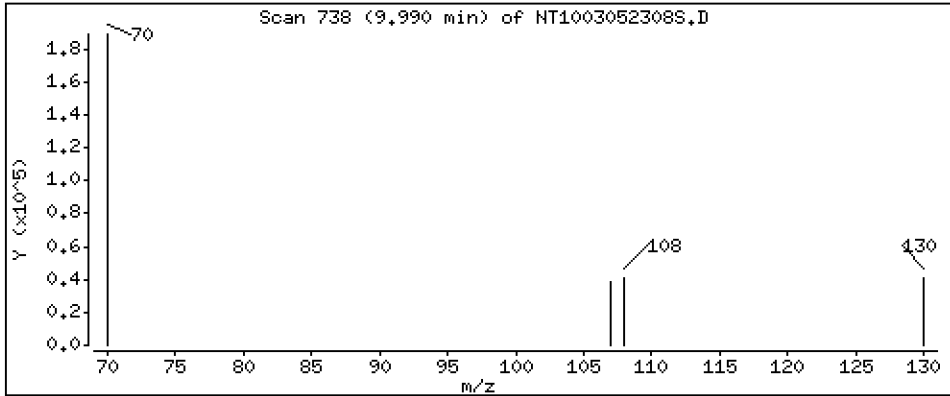
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,436 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

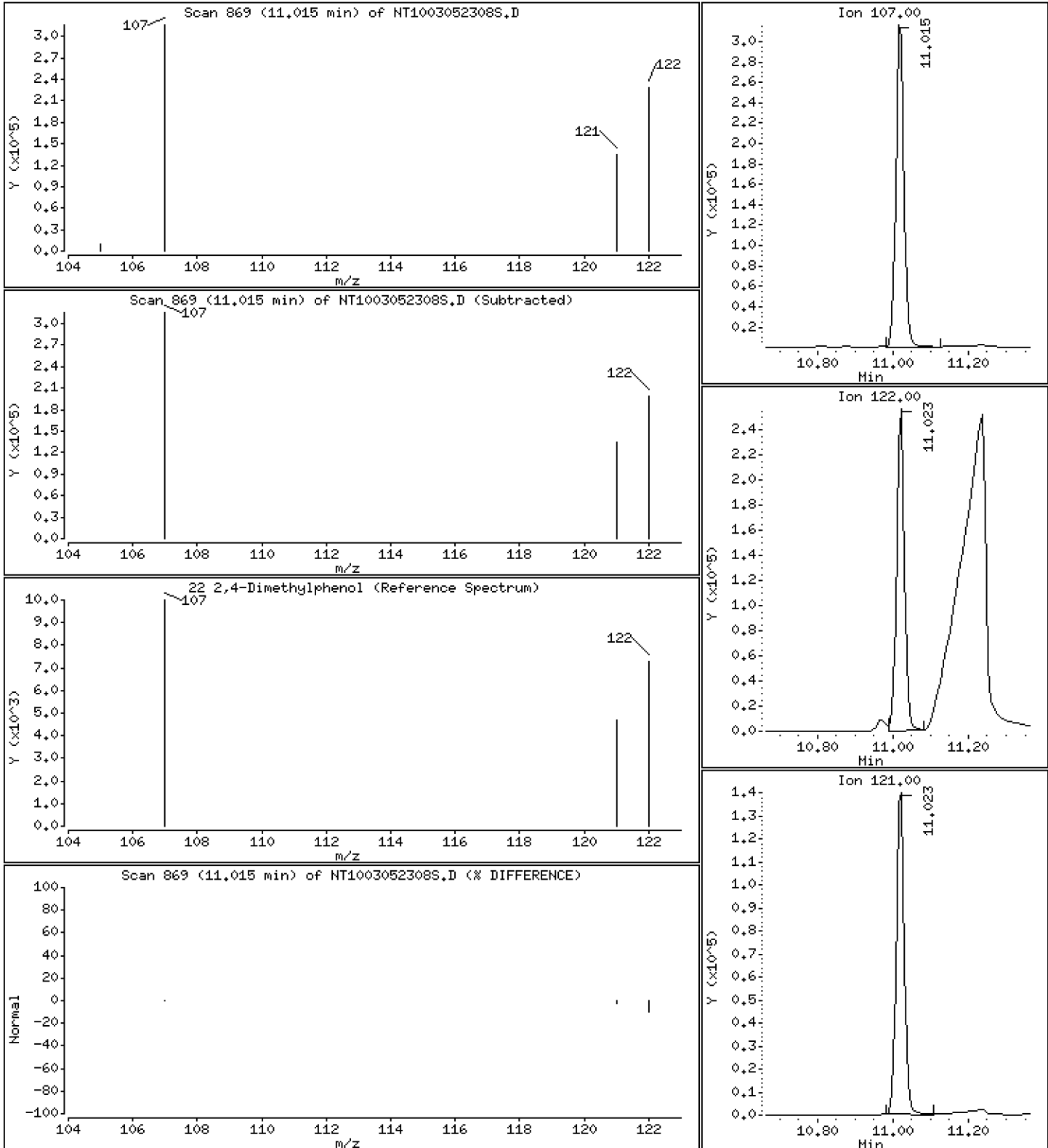
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 4.717 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

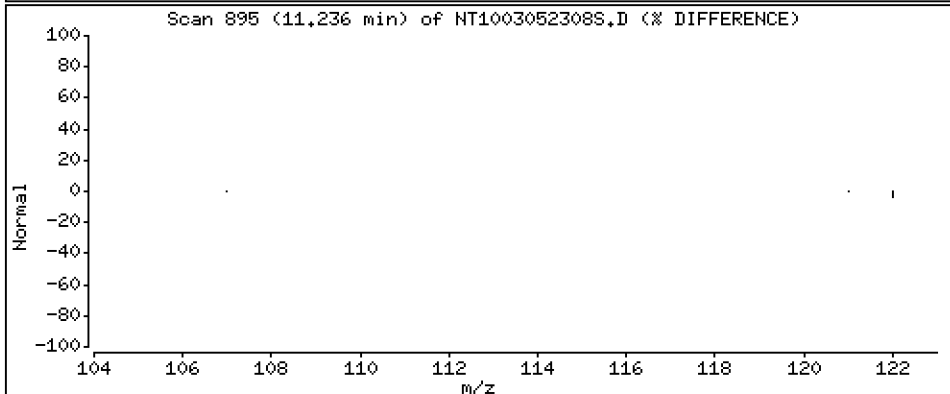
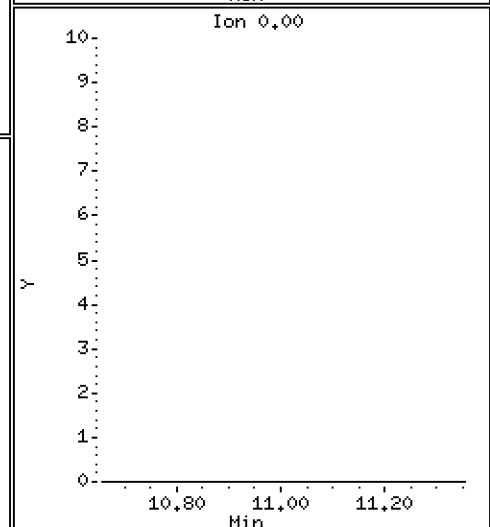
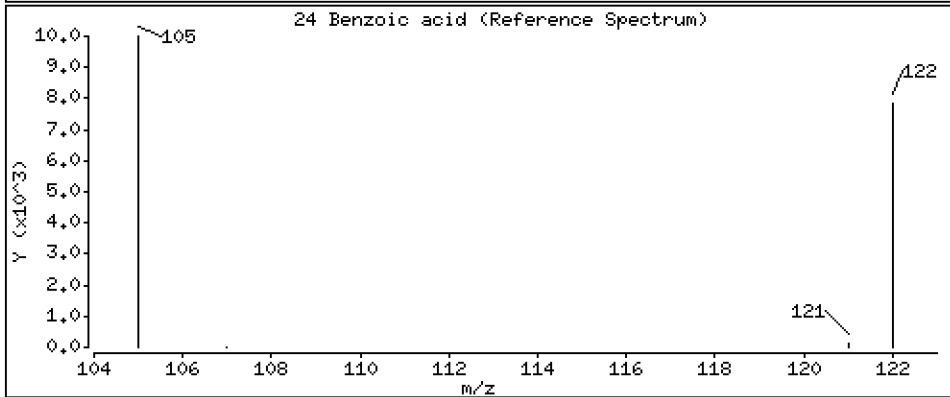
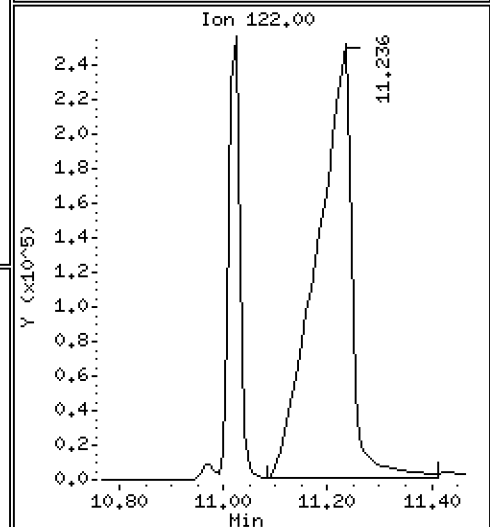
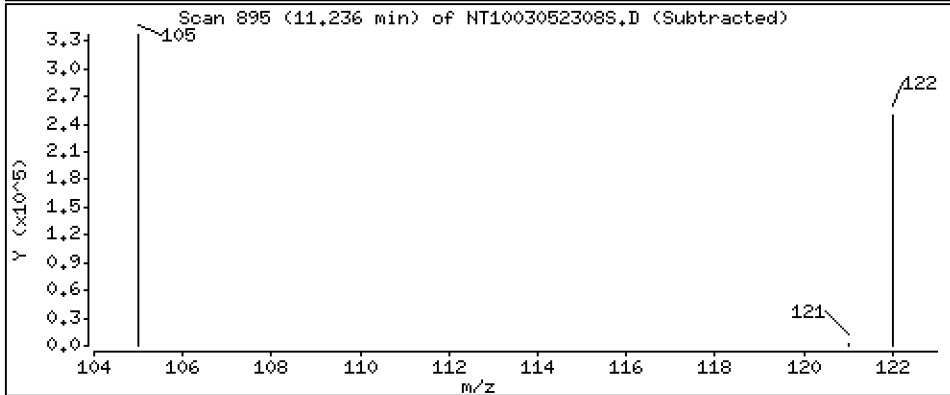
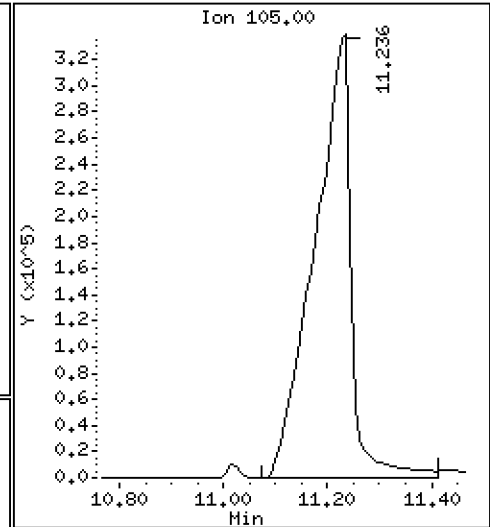
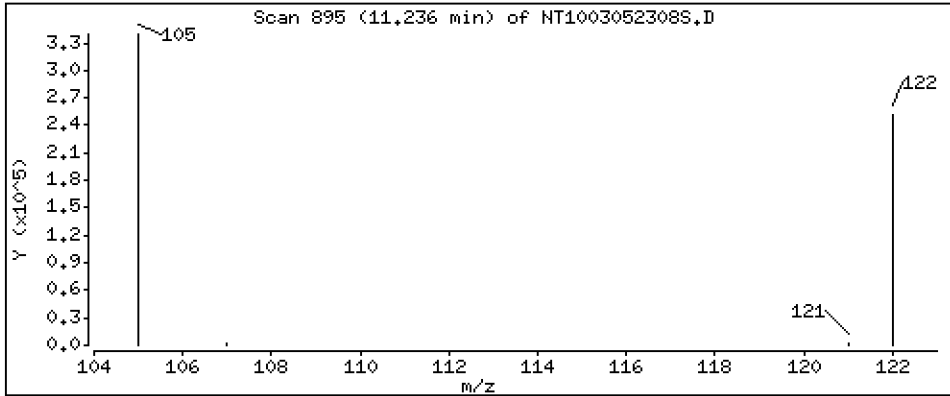
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 25,46 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

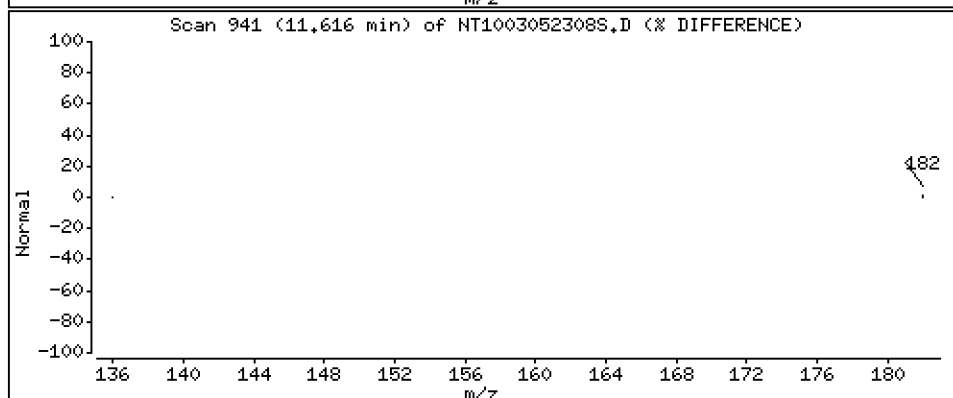
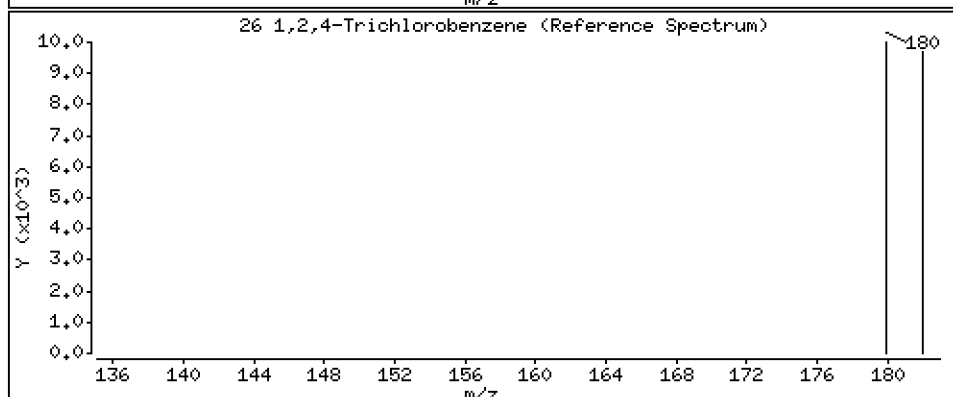
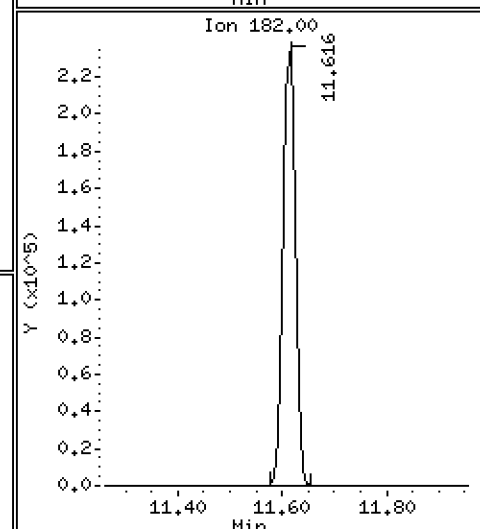
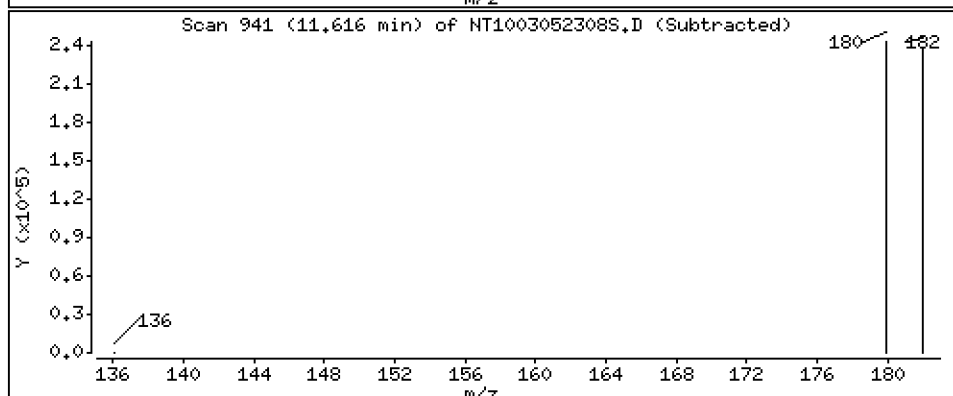
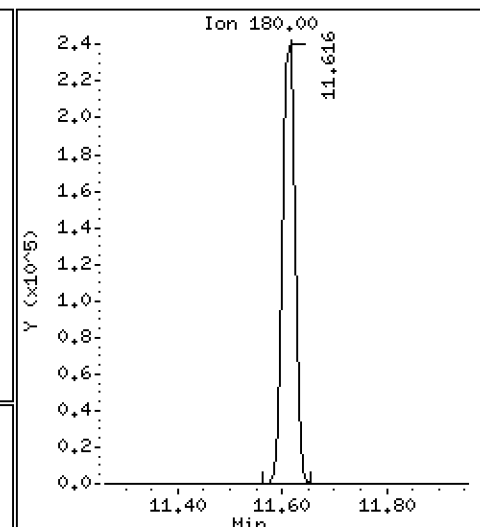
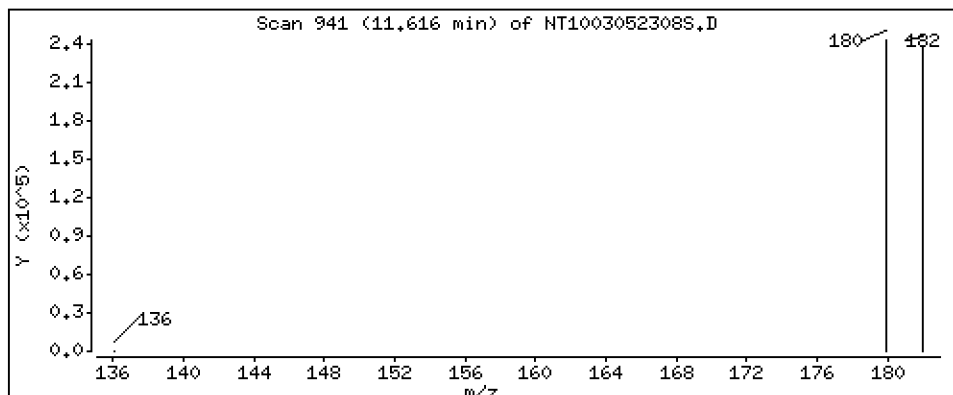
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,357 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

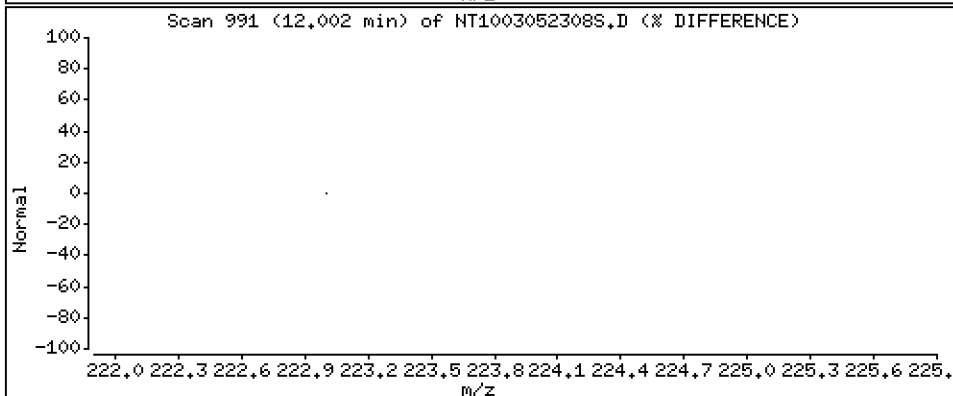
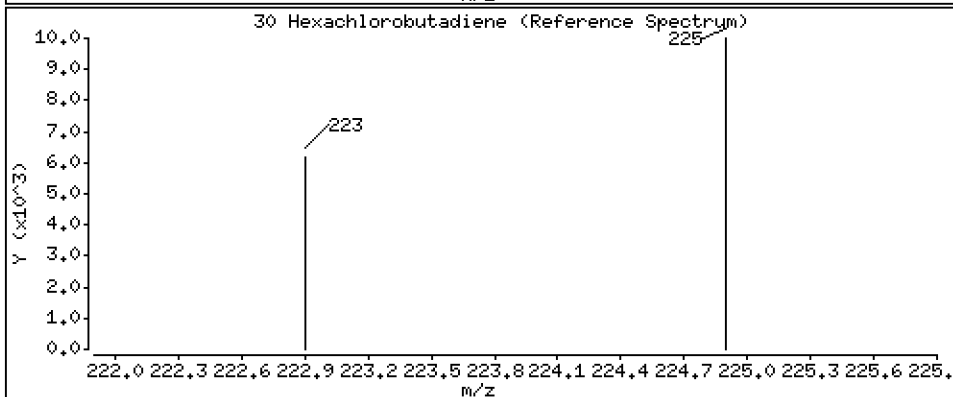
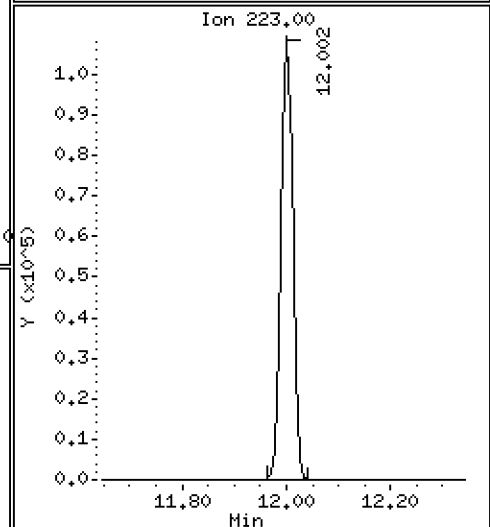
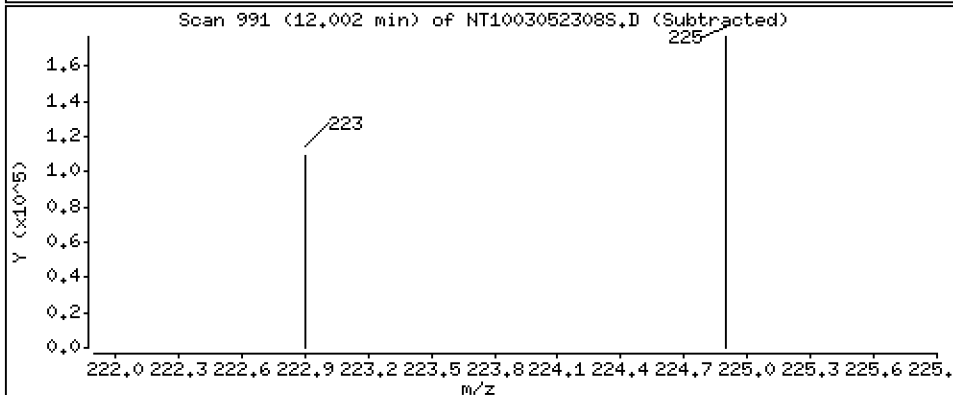
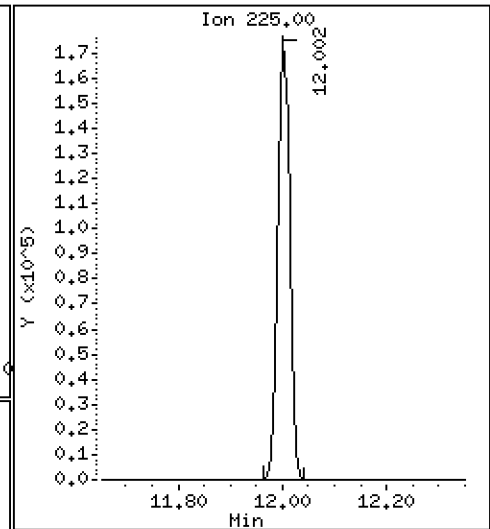
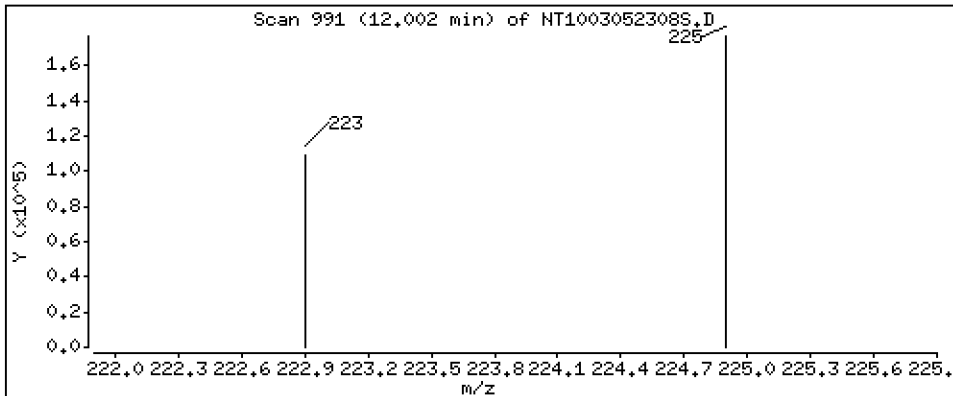
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,234 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

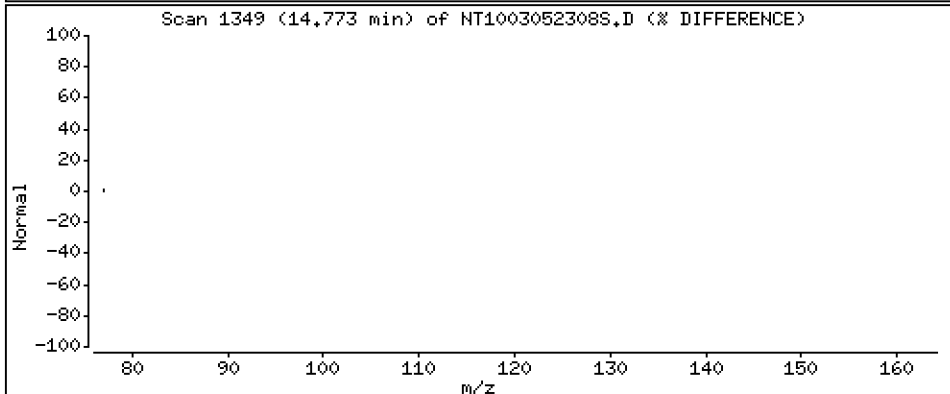
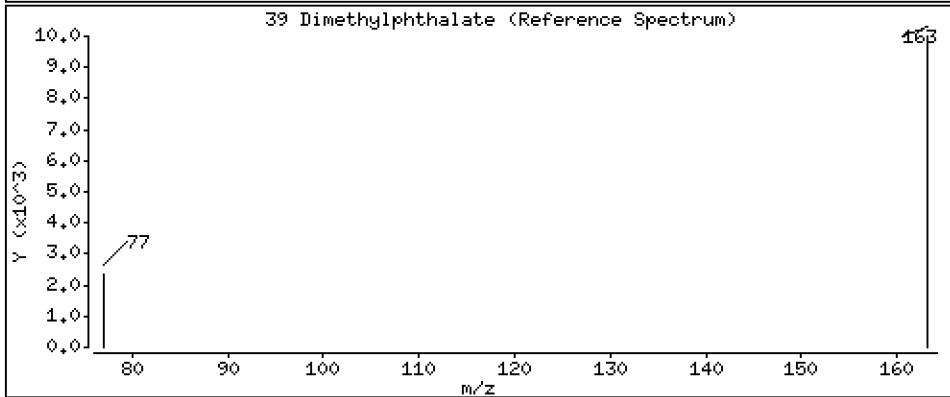
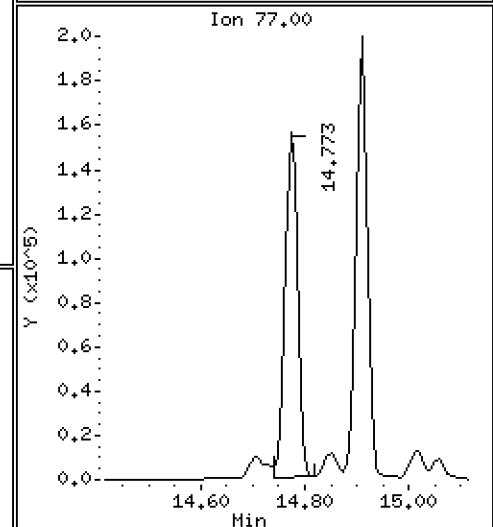
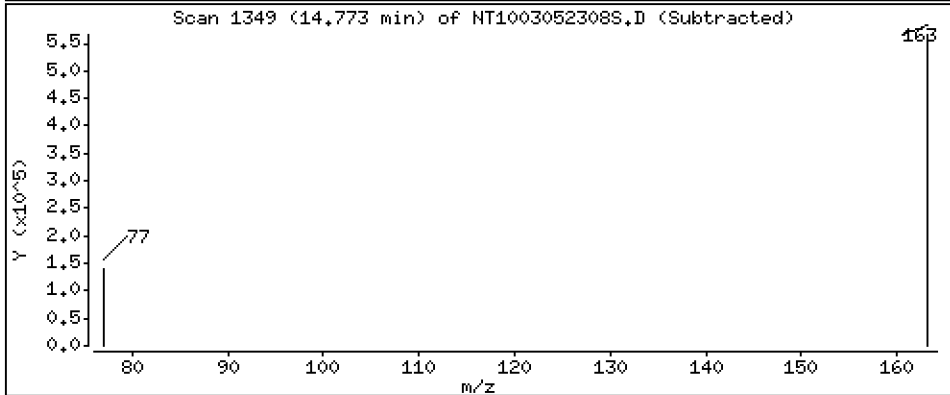
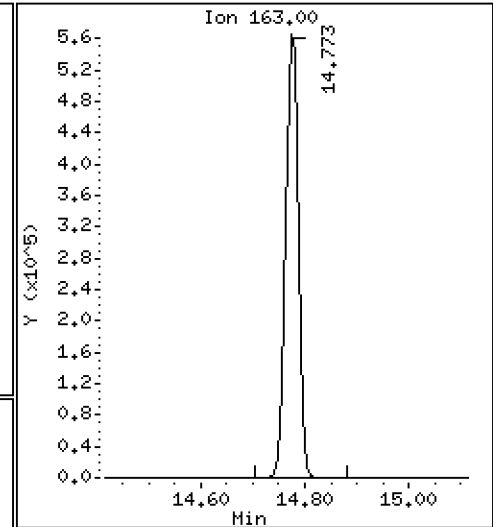
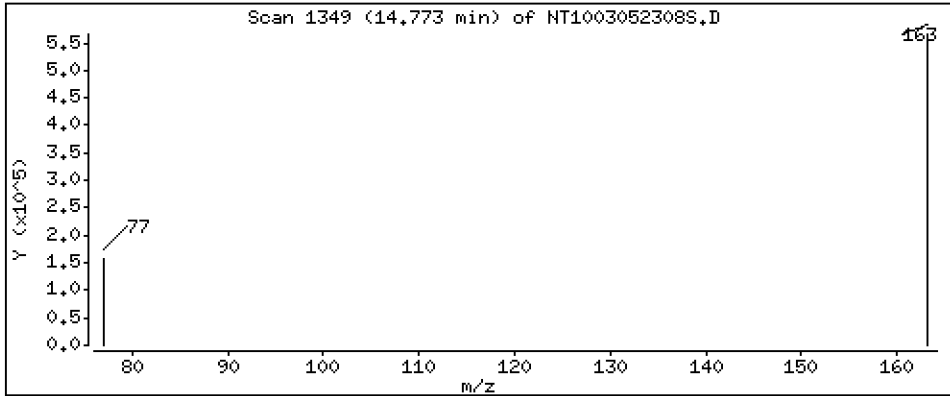
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,919 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

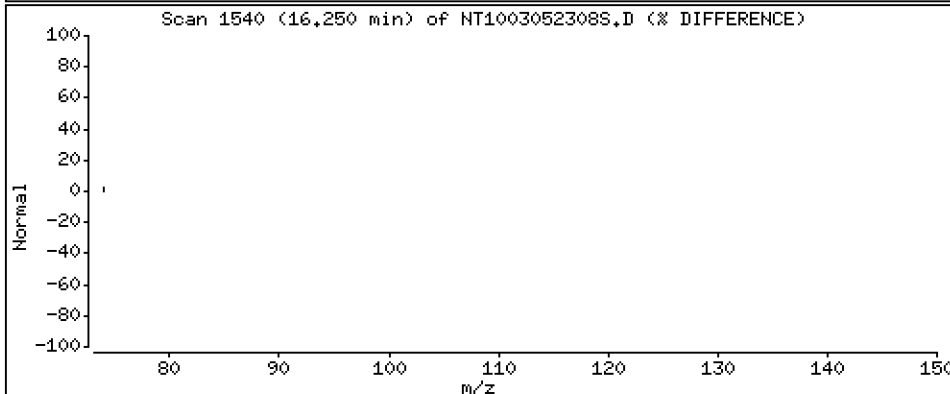
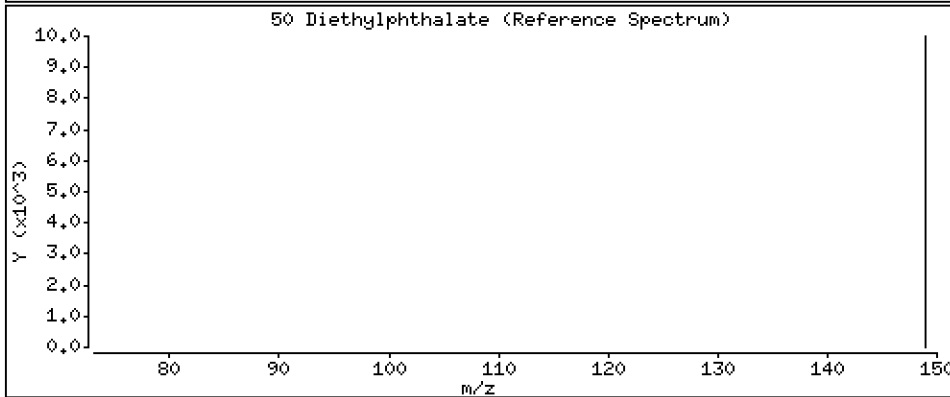
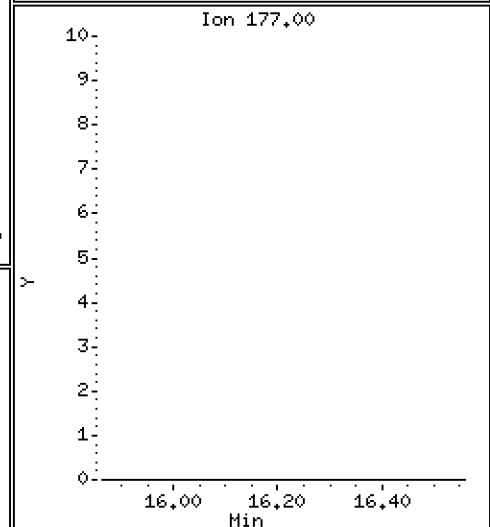
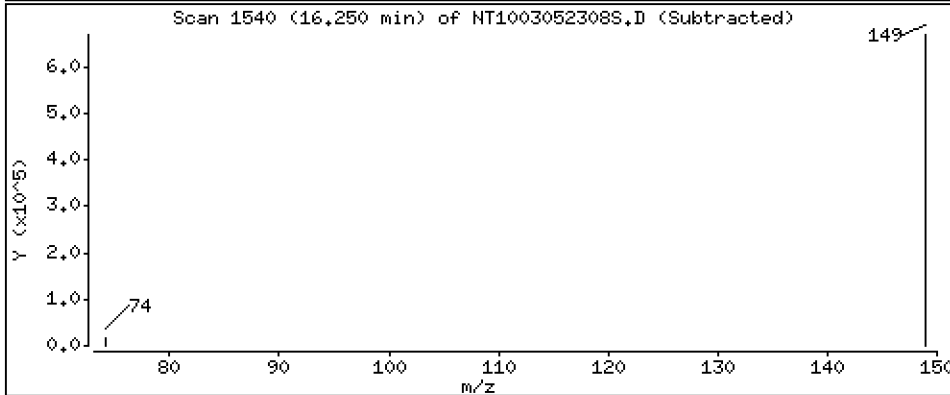
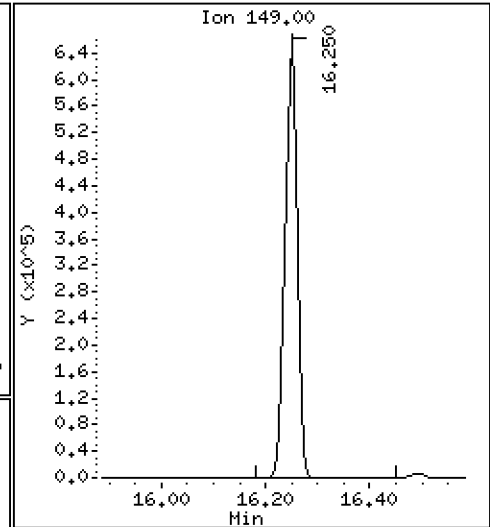
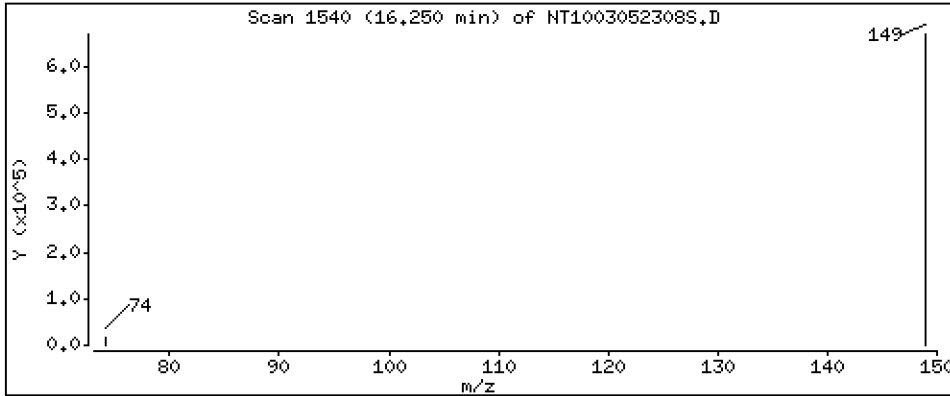
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,905 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

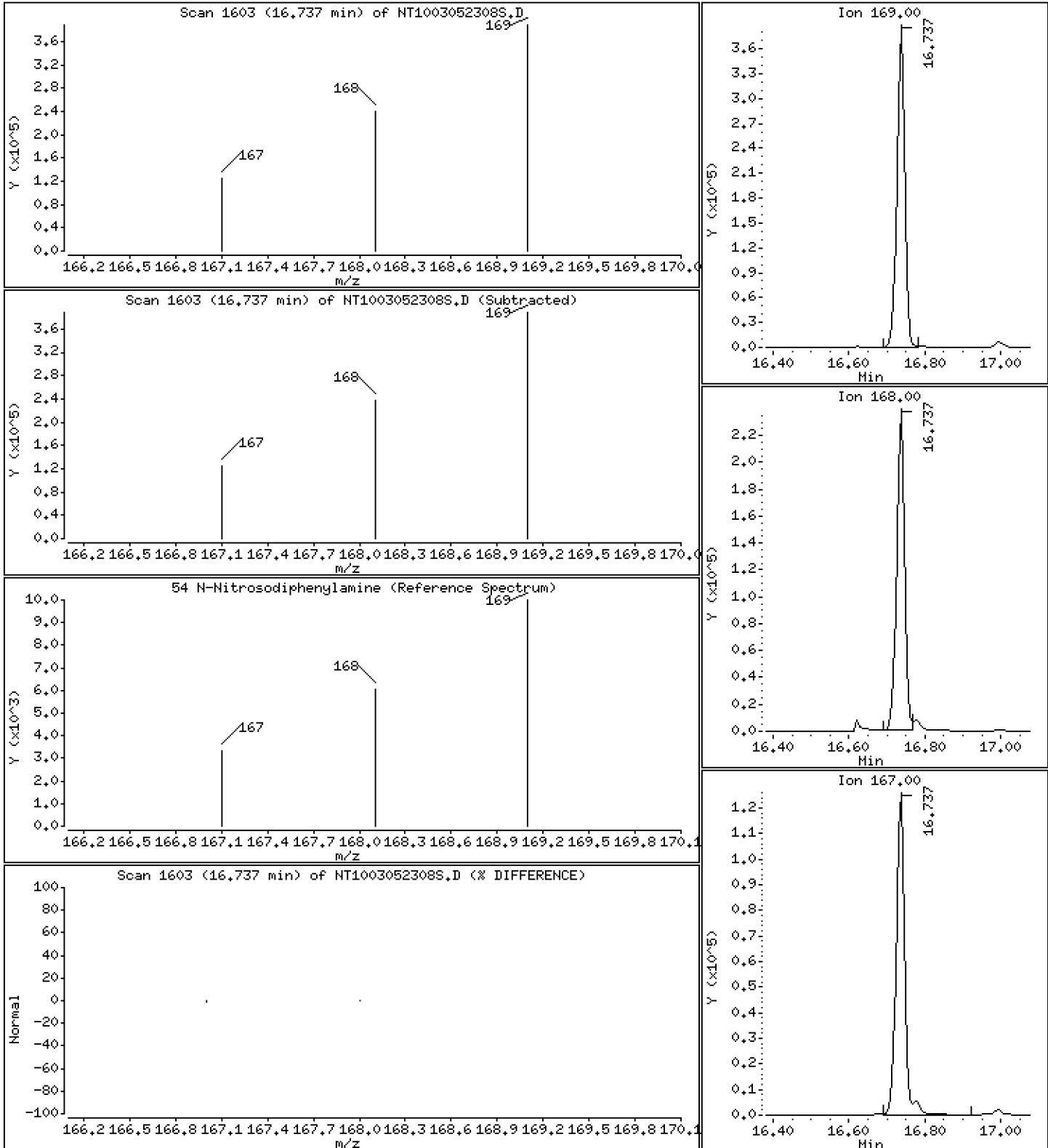
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 3,084 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

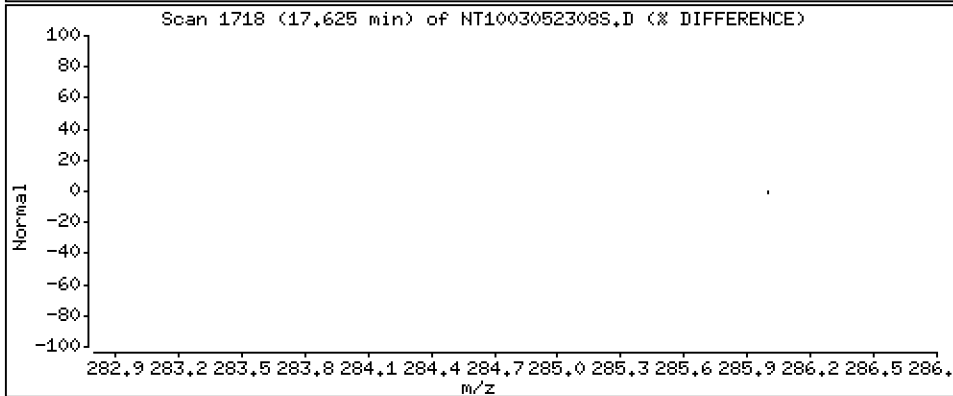
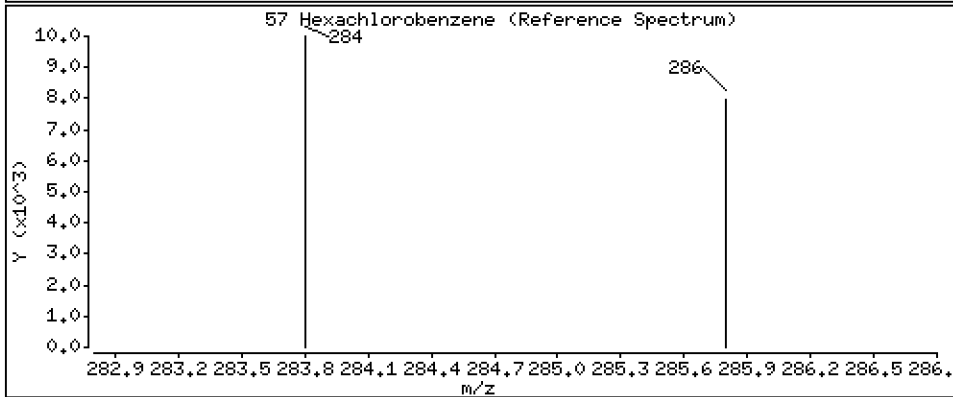
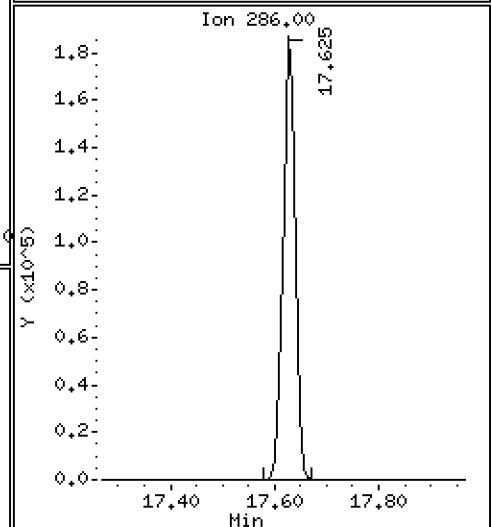
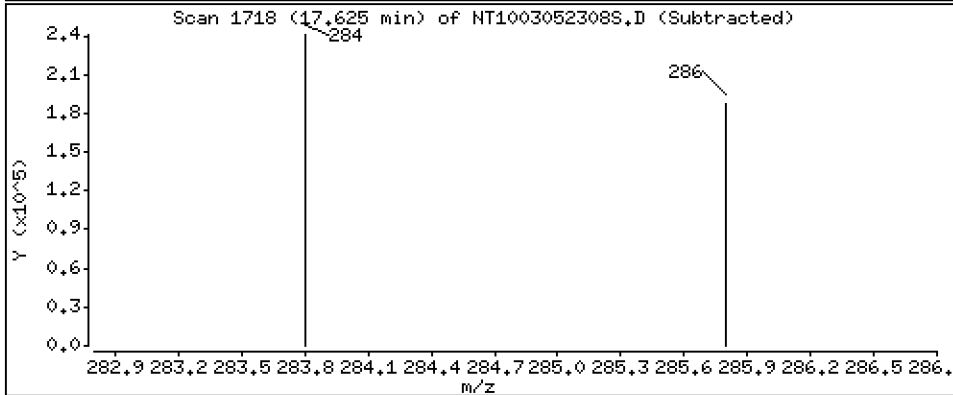
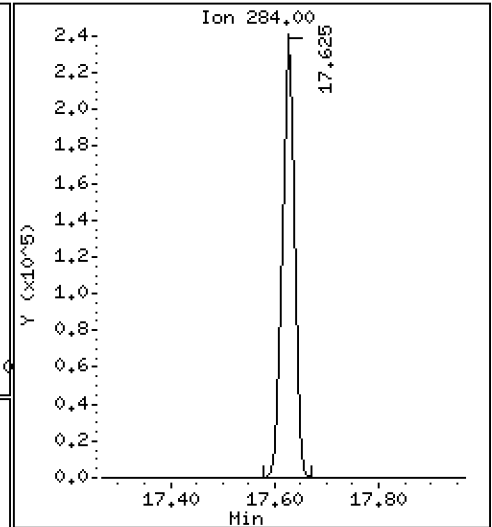
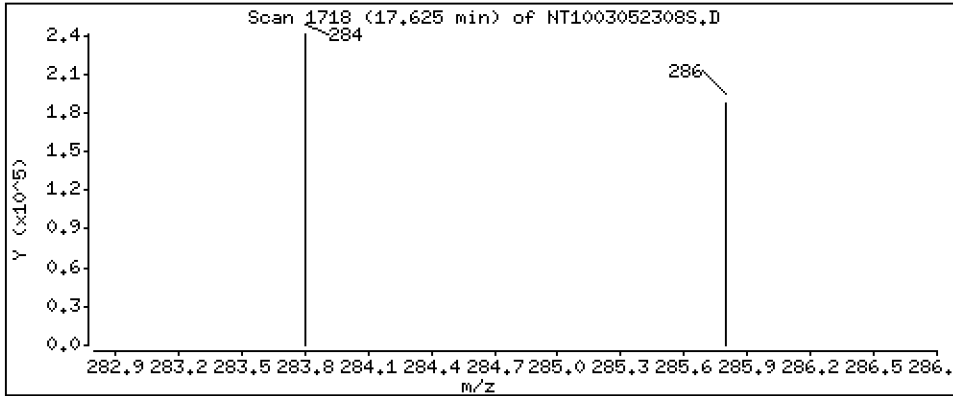
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,487 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

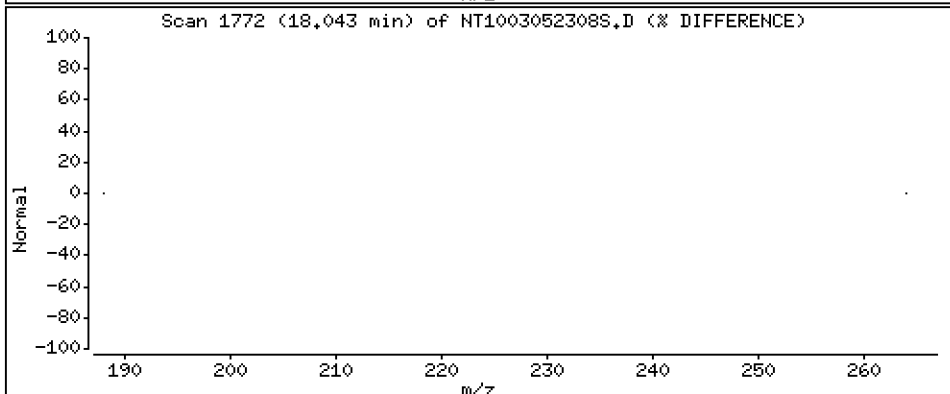
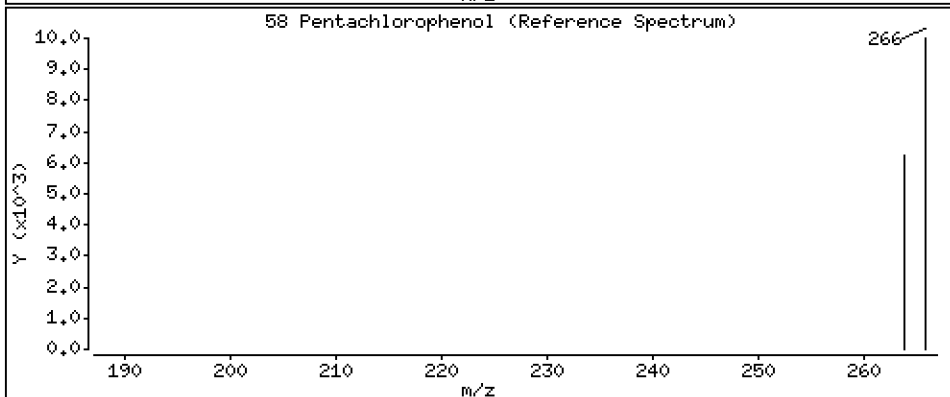
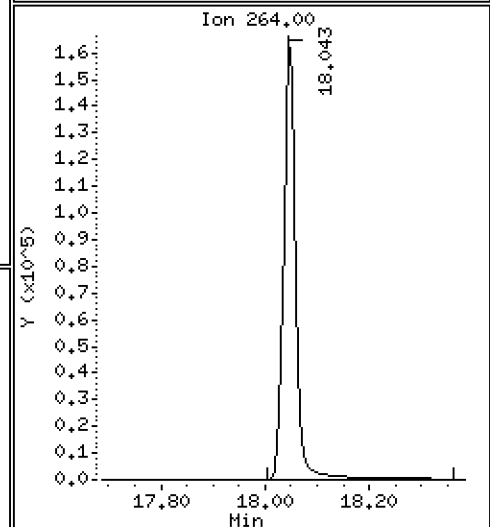
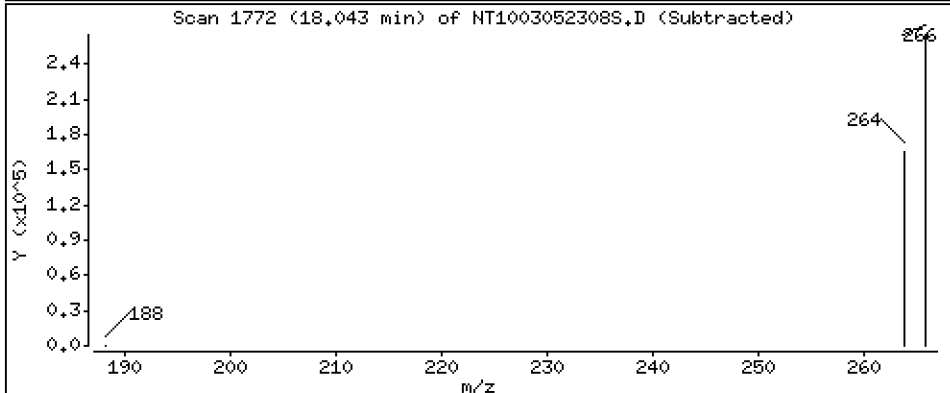
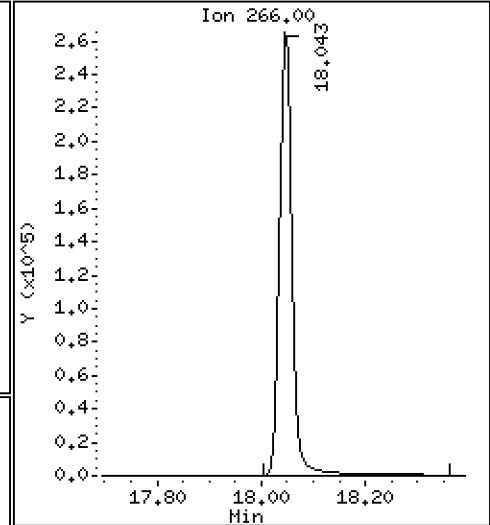
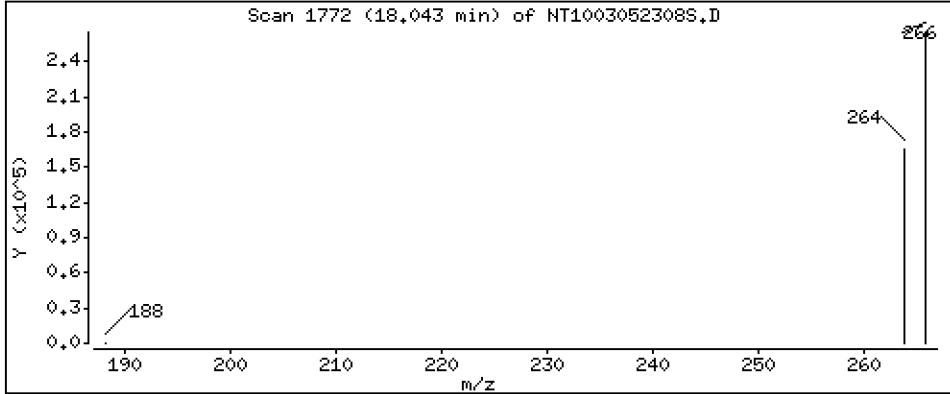
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 10,27 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

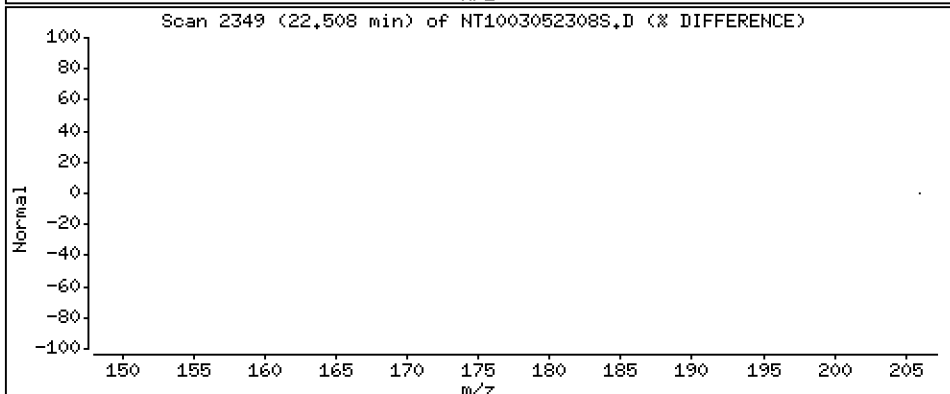
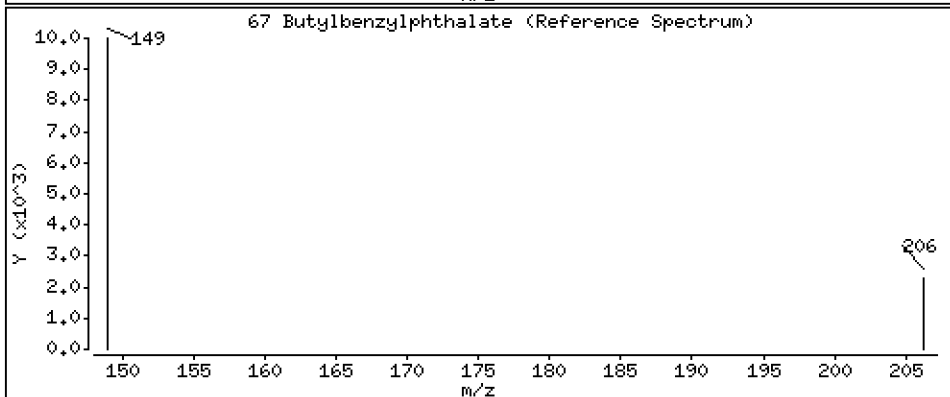
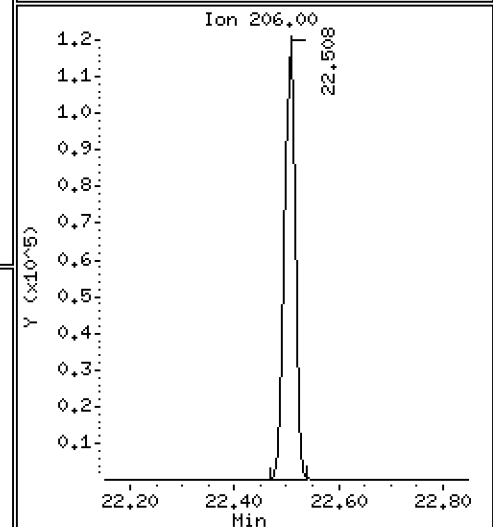
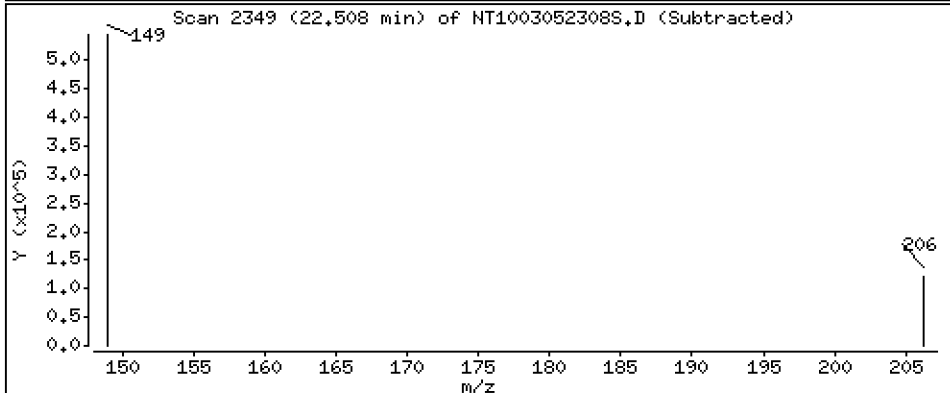
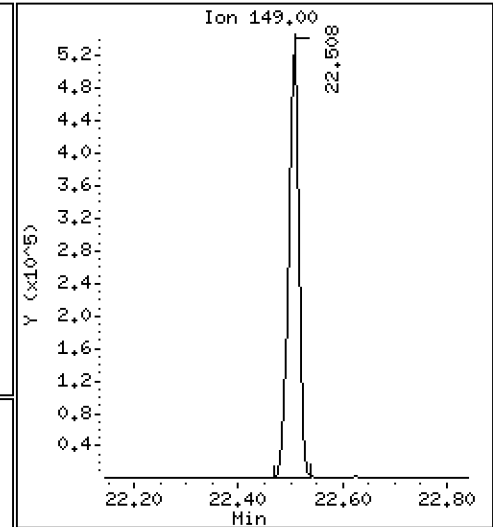
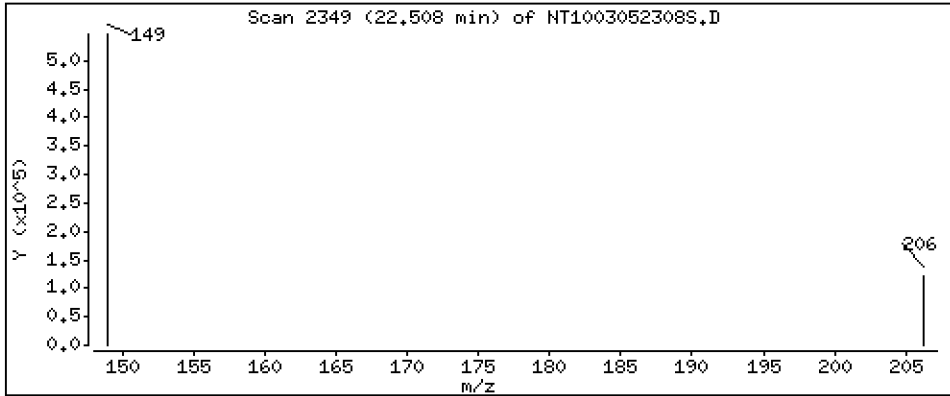
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,210 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

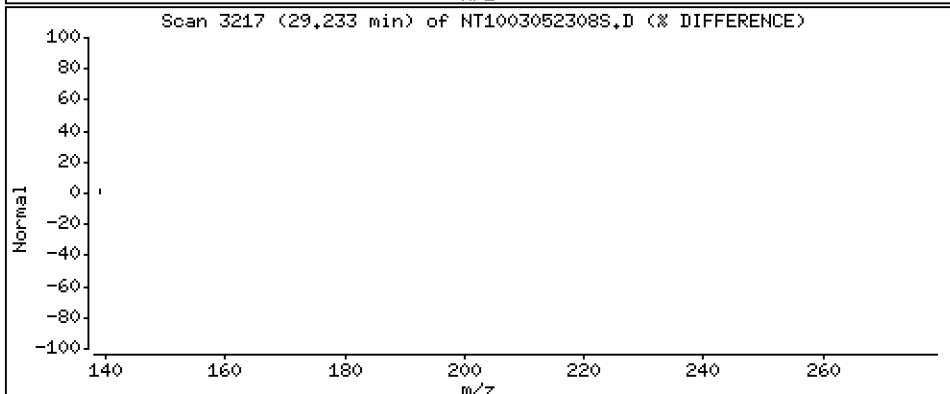
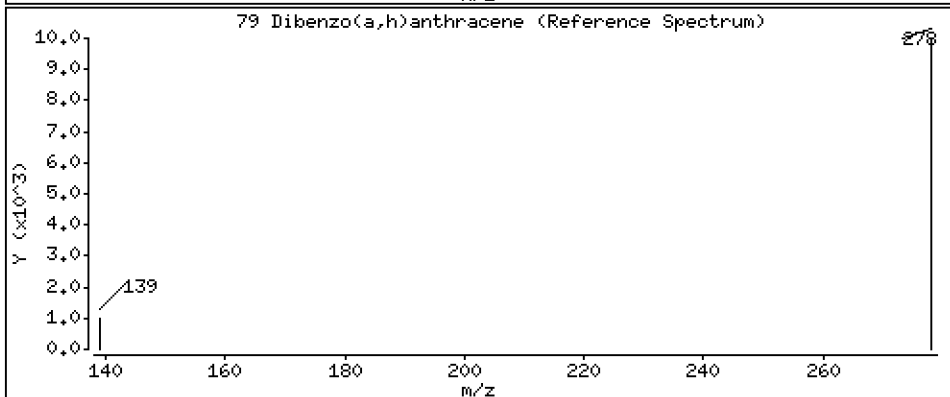
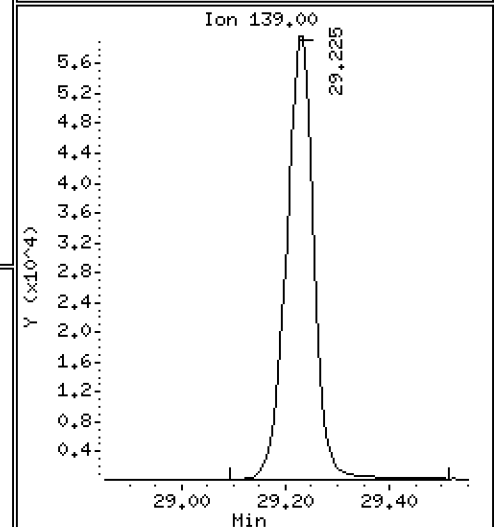
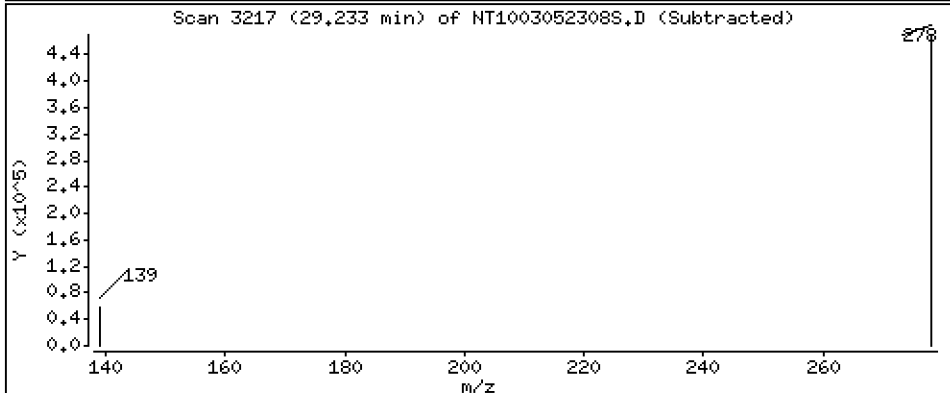
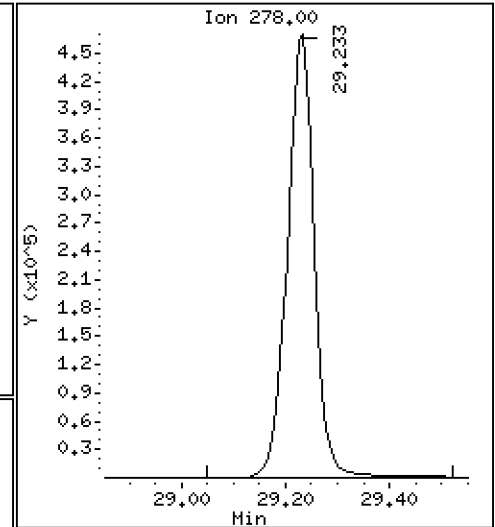
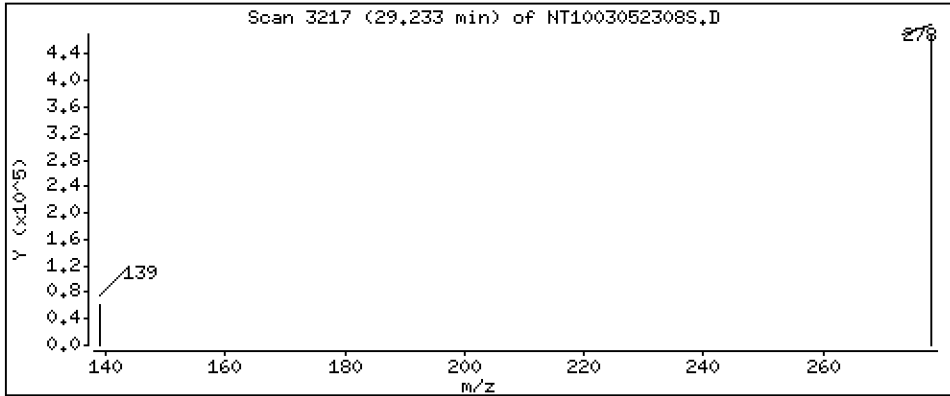
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 6,007 ug/mL



Date : 05-MAR-2023 17:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BS2

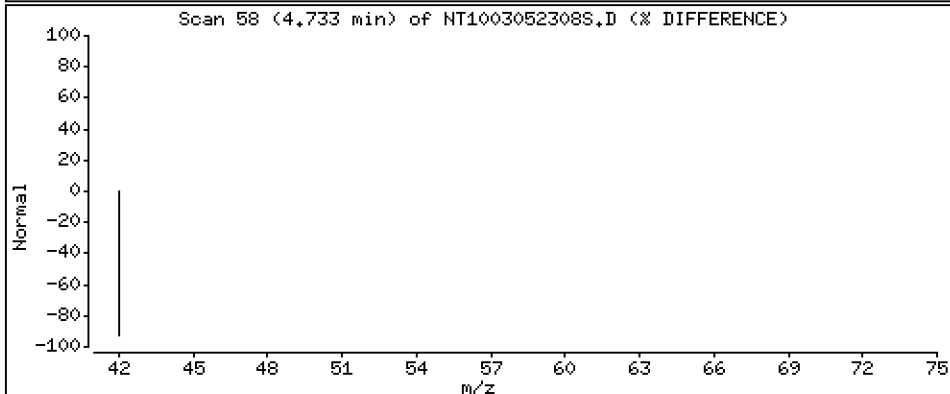
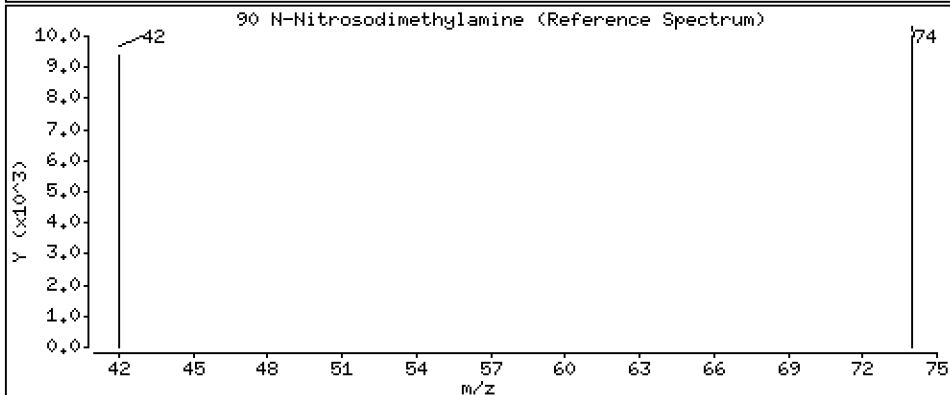
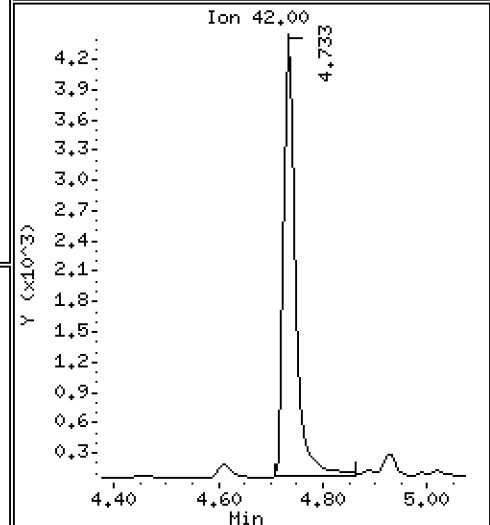
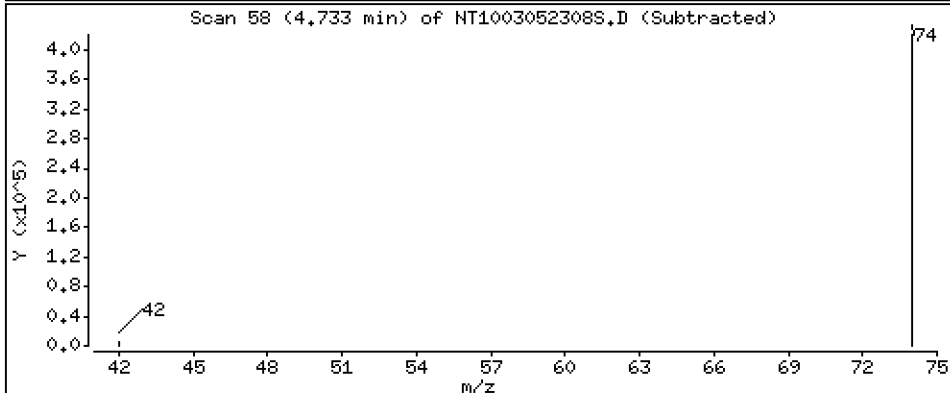
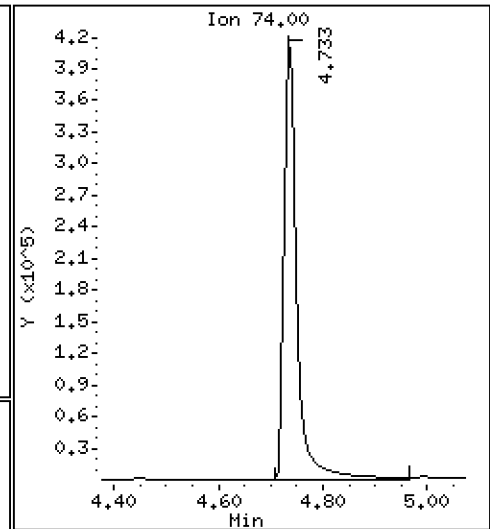
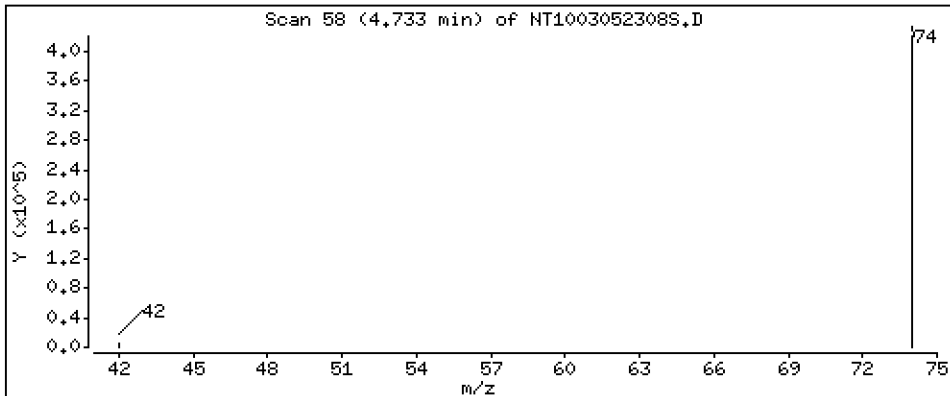
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 12,04 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052308S.D
 Lab Smp Id: BLA0685-BS2
 Inj Date : 05-MAR-2023 17:50
 Operator : YZ
 Smp Info : BLA0685-BS2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSSDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.747)	602302	6.28513	6.285 (R)
3 Phenol	94		8.532	8.533	(0.922)	600533	4.15825	4.158
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	453958	3.64920	3.649
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.244	(1.000)	335662	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.275	(1.003)	454145	3.75488	3.755
11 Benzyl alcohol	79		9.484	9.485	(1.025)	356776	4.29362	4.294 (M)
12 1,2-Dichlorobenzene	146		9.570	9.562	(1.034)	440579	3.78986	3.790
13 2-Methylphenol	108		9.671	9.663	(1.045)	313249	3.57656	3.577
15 4-Methylphenol	108		9.966	9.958	(1.077)	364692	3.94690	3.947
16 N-Nitroso-di-n-propylamine	70		9.989	9.982	(1.080)	283911	4.43574	4.436
22 2,4-Dimethylphenol	107		11.014	11.015	(0.938)	487131	4.71731	4.717
24 Benzoic acid	105		11.235	11.116	(0.957)	1669919	25.4602	25.46
26 1,2,4-Trichlorobenzene	180		11.615	11.608	(0.989)	376594	4.35653	4.357
* 27 Naphthalene-d8	136		11.739	11.731	(1.000)	1201009	4.00000	
30 Hexachlorobutadiene	225		12.002	12.002	(1.022)	259703	4.23358	4.234
39 Dimethylphthalate	163		14.772	14.765	(0.963)	917037	4.91859	4.919
* 42 Acenaphthene-d10	162		15.345	15.337	(1.000)	587178	4.00000	
50 Diethylphthalate	149		16.249	16.234	(1.059)	1038268	5.90520	5.905 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.729	(0.907)	558128	3.08353	3.084
57 Hexachlorobenzene	284		17.625	17.617	(0.955)	380111	4.48737	4.487
58 Pentachlorophenol	266		18.043	18.043	(0.977)	429732	10.2734	10.27
* 59 Phenanthrene-d10	188		18.460	18.453	(1.000)	1118430	4.00000	
\$ 66 Terphenyl-d14	244		21.609	21.602	(0.918)	610691	7.15699	7.157 (R)
67 Butylbenzylphthalate	149		22.508	22.492	(0.957)	738616	4.20957	4.210
* 69 Chrysene-d12	240		23.530	23.514	(1.000)	1055166	4.00000	
* 77 Perylene-d12	264		26.301	26.286	(1.000)	1125544	4.00000	
79 Dibenzo(a,h)anthracene	278		29.233	29.202	(1.111)	1726526	6.00728	6.007
90 N-Nitrosodimethylamine	74		4.732	4.724	(0.512)	683195	12.0418	12.04

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052308S.D
 Lab Smp Id: BLA0685-BS2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	335662	4.45
27 Naphthalene-d8	1132931	566466	2265862	1201009	6.01
42 Acenaphthene-d10	561597	280799	1123194	587178	4.56
59 Phenanthrene-d10	1068222	534111	2136444	1118430	4.70
69 Chrysene-d12	997572	498786	1995144	1055166	5.77
77 Perylene-d12	1245490	622745	2490980	1125544	-9.63

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.74	0.06
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.51	23.01	24.01	23.53	0.07
77 Perylene-d12	26.29	25.79	26.79	26.30	0.06

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

REVIEW SUMMARY FOR FILE - NT1003052308S.D

Lab ID: BLA0685-BS2

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 17:50

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.948	0.0095	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003052303S.D

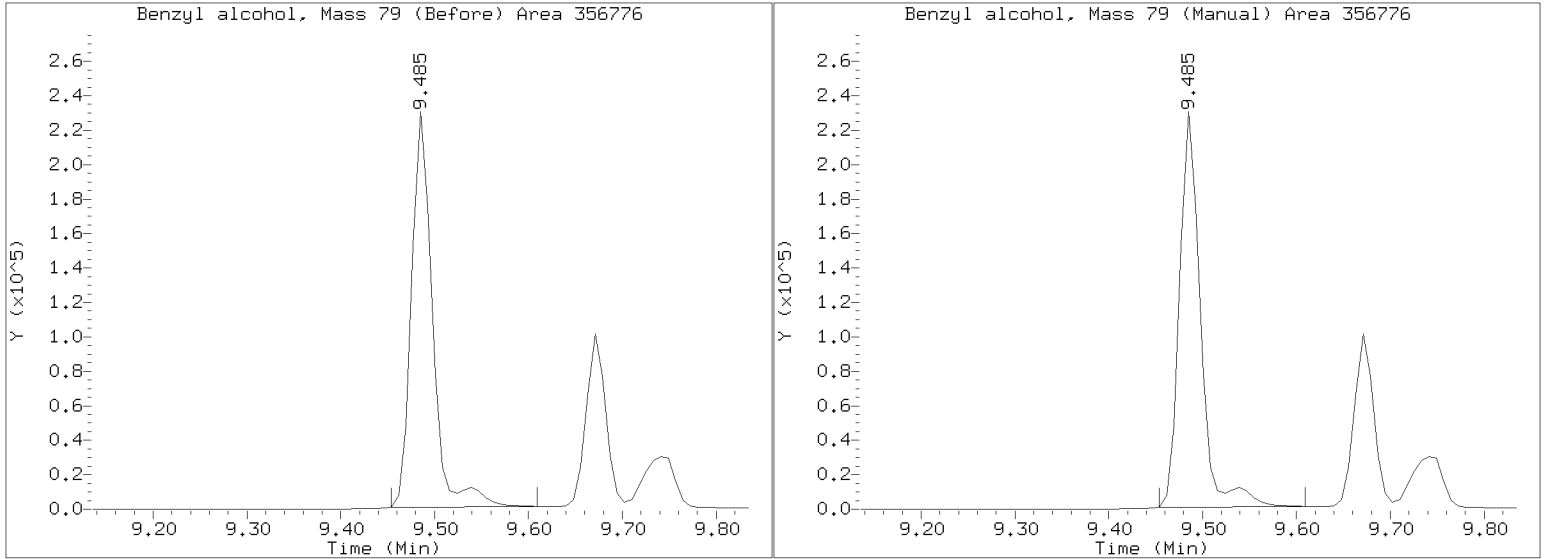
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052308S.D
Injection Date: 05-MAR-2023 17:50
Lab ID:BLA0685-BS2 Client ID:
Report Date: 03/28/2023 11:05



APPROVED
By Deenay Dunmore at 12:03 pm, Mar 28, 2023

Data File: \\target\share\chem3\nt10.1\20230305.1\SIH.B\NT1003052309S.D

Date: 05-HR-2023 18:28

Client ID:

Sample Info: BLR0685-BSM2

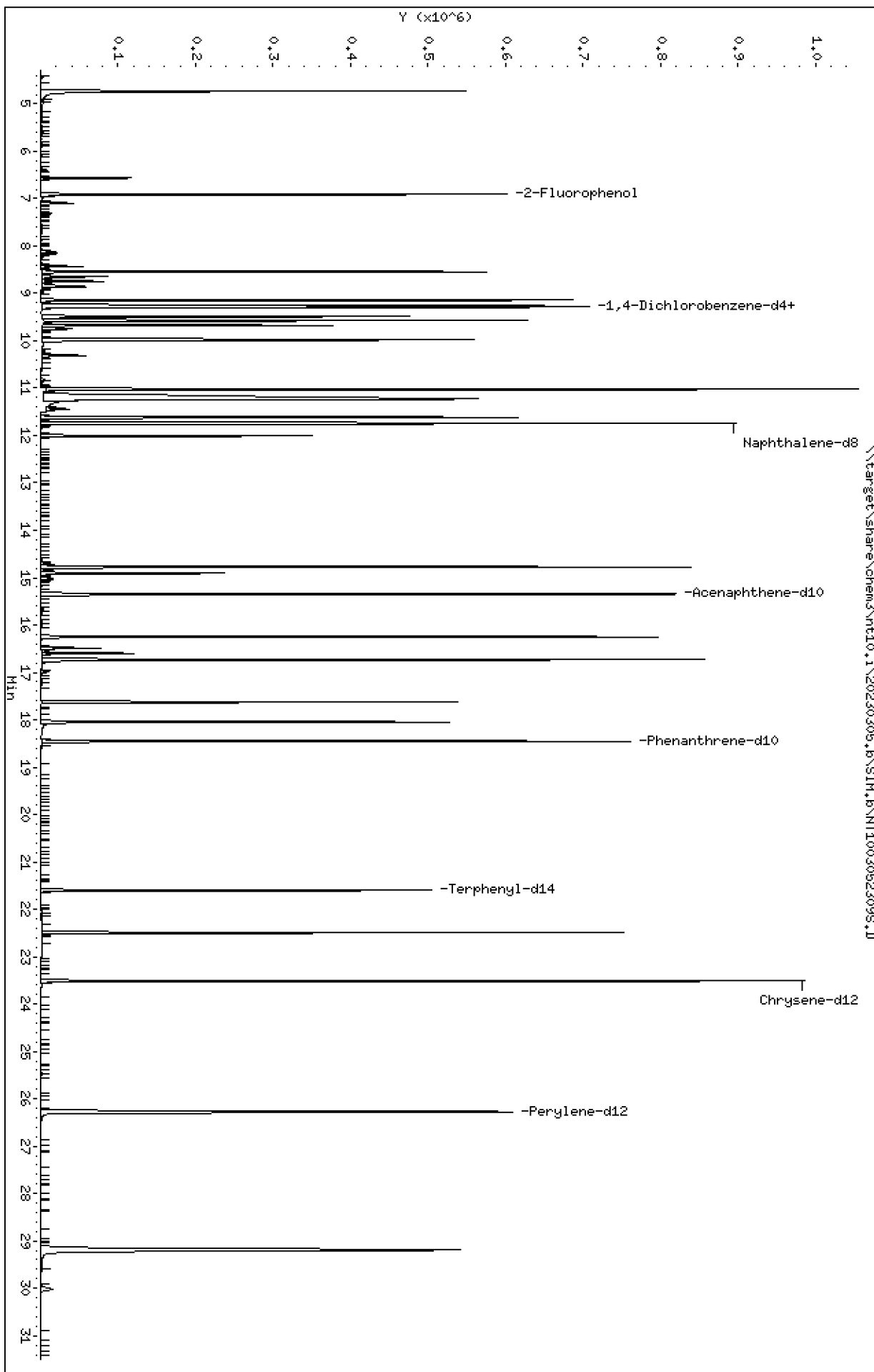
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

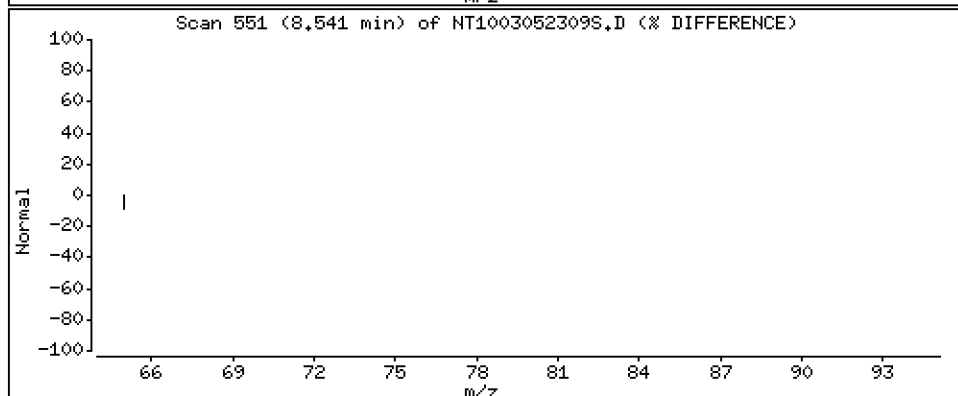
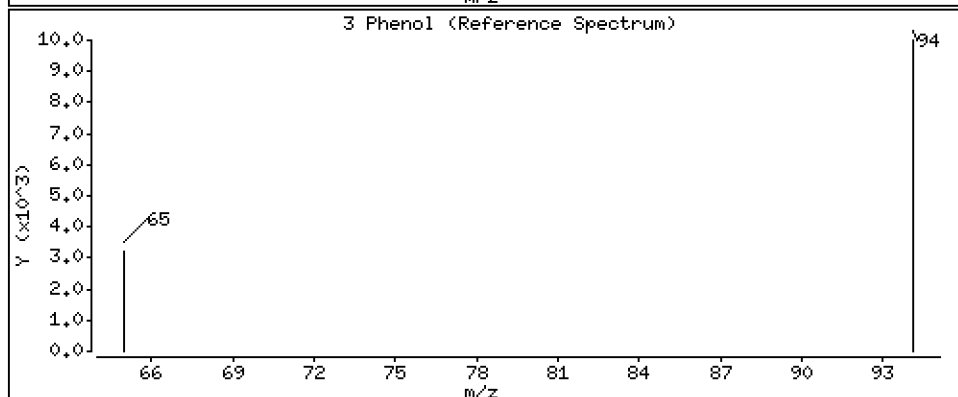
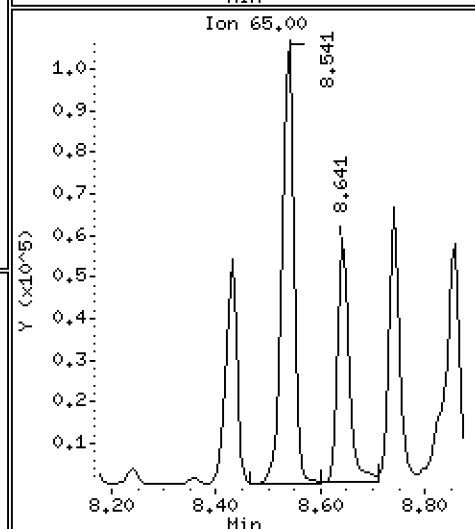
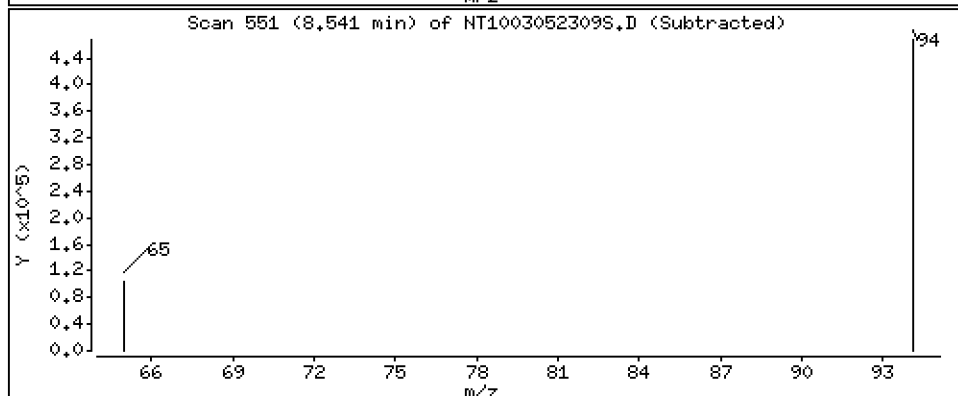
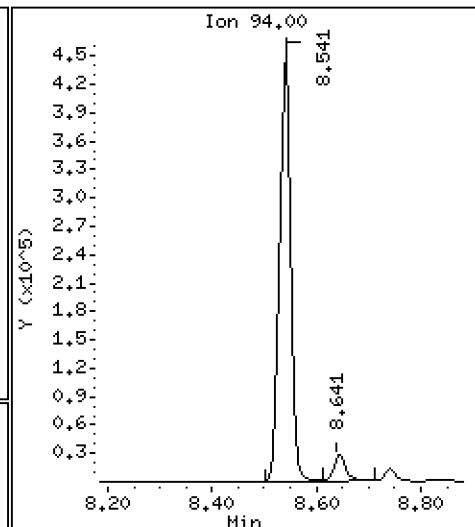
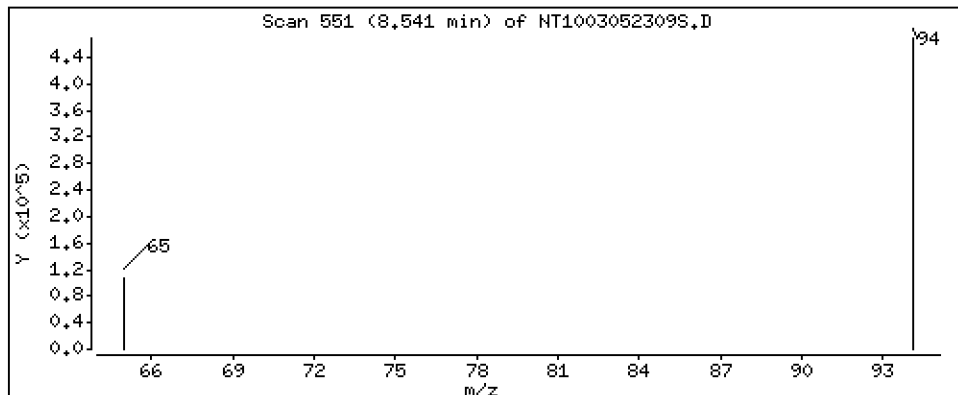
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 4,039 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

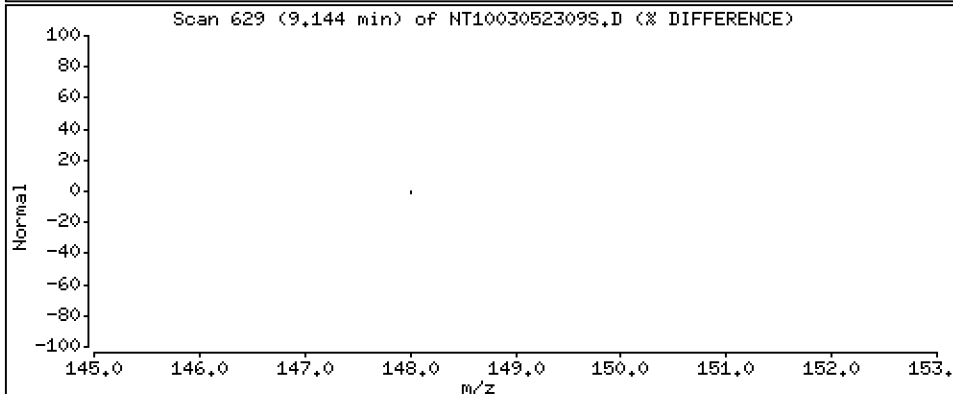
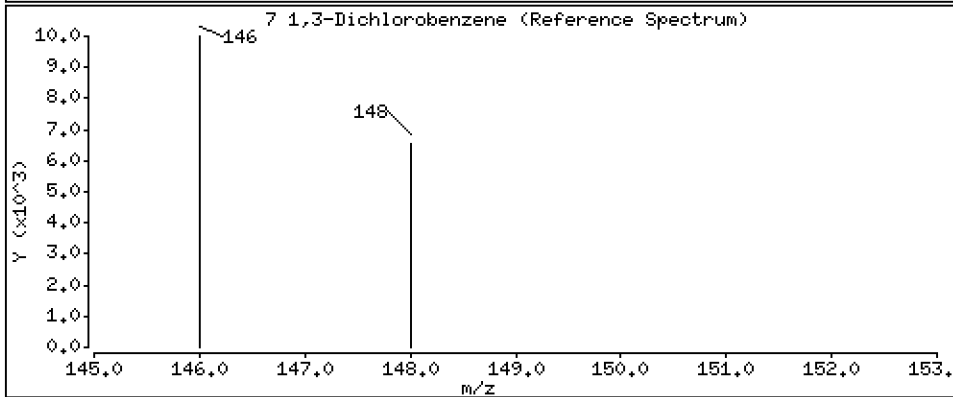
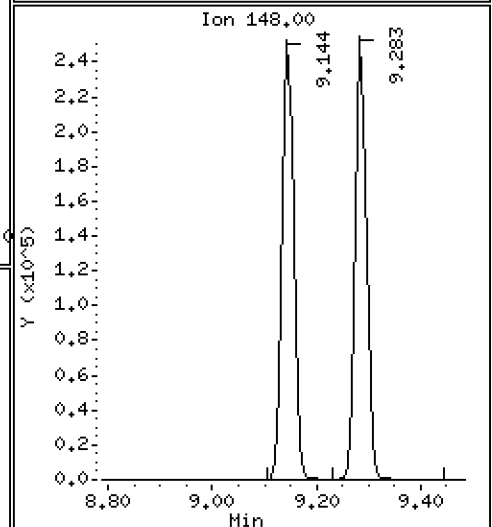
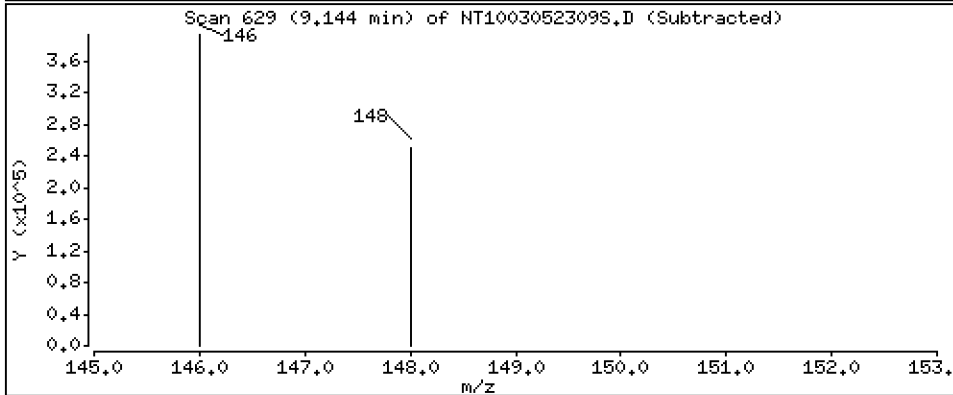
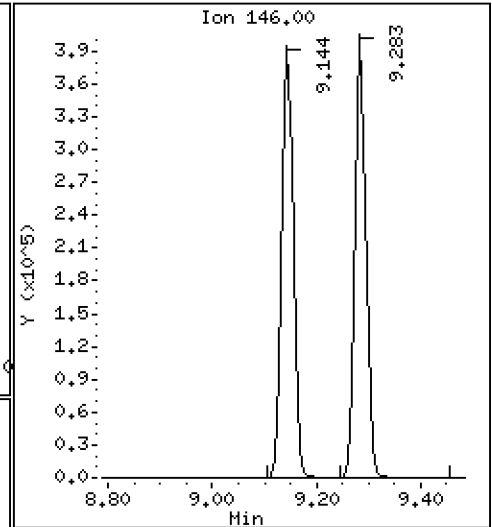
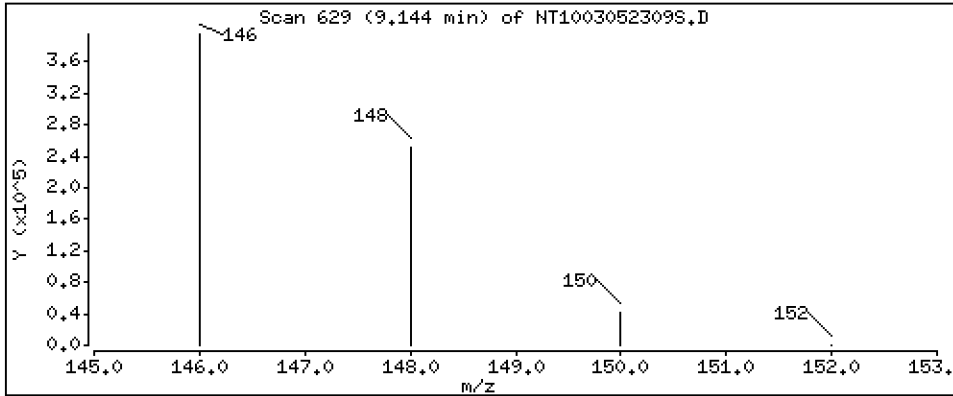
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,118 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

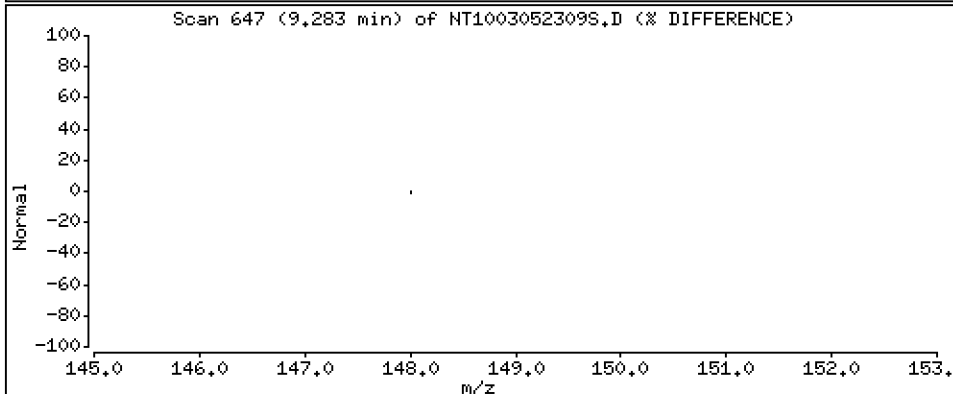
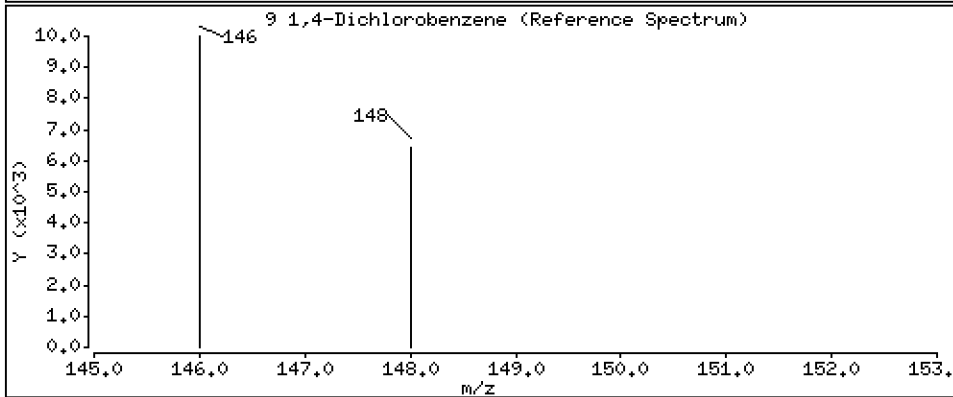
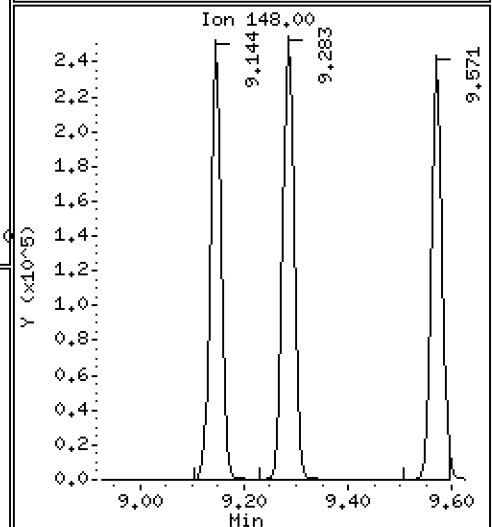
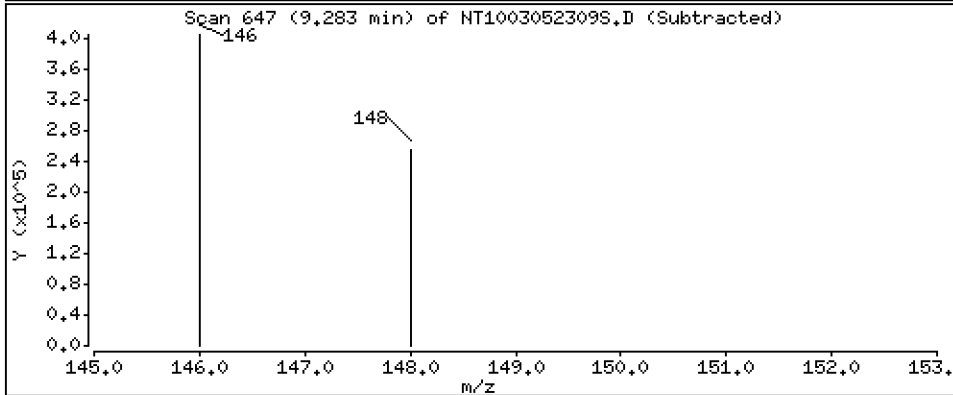
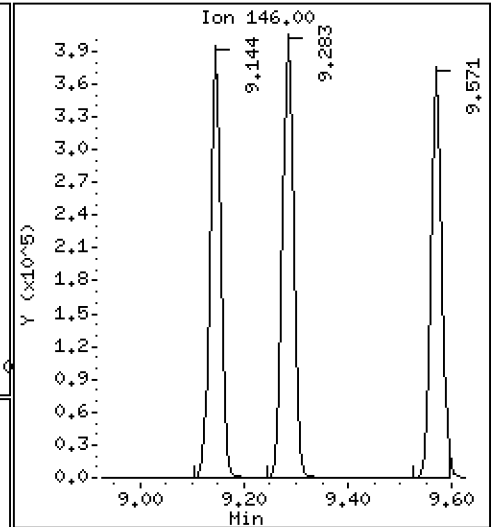
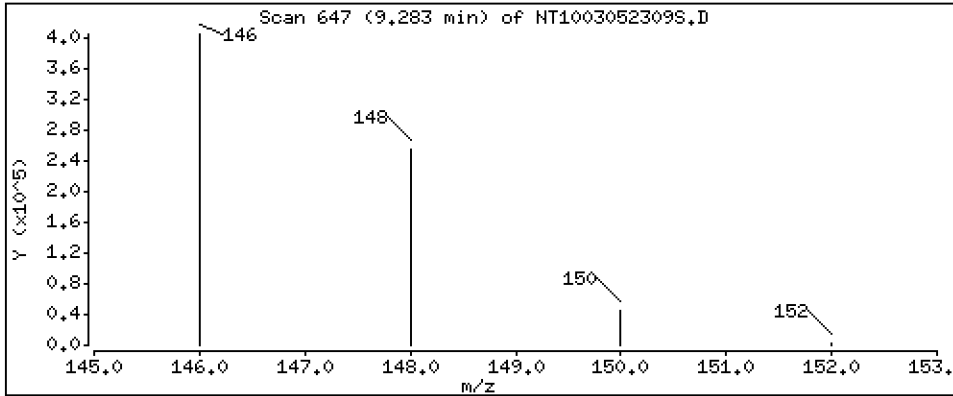
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.236 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

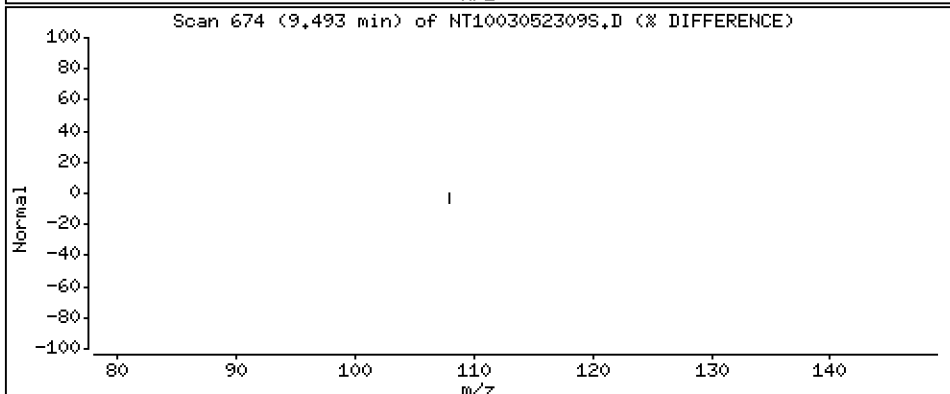
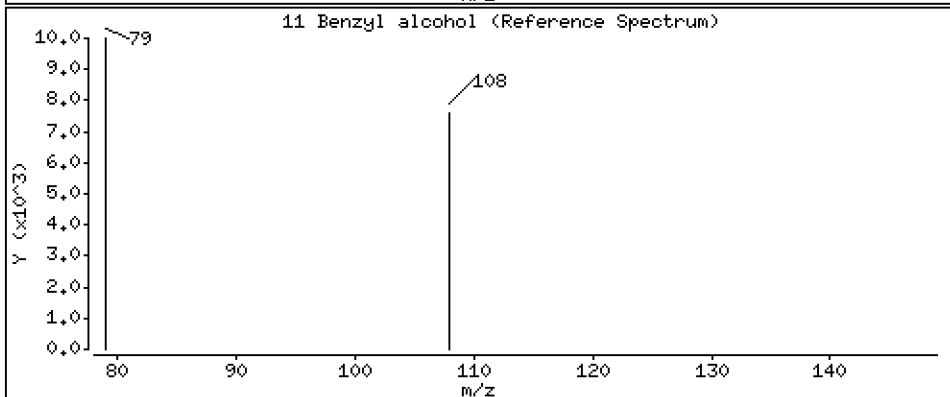
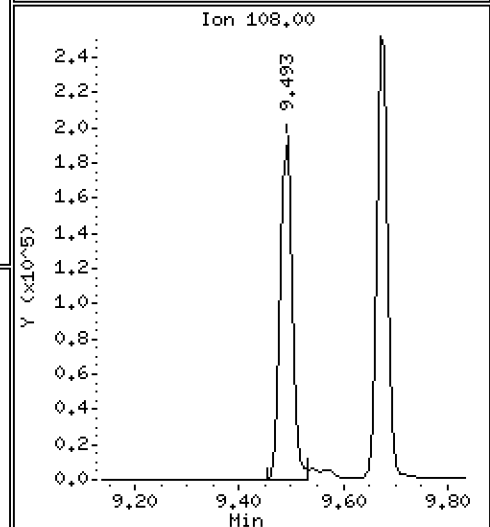
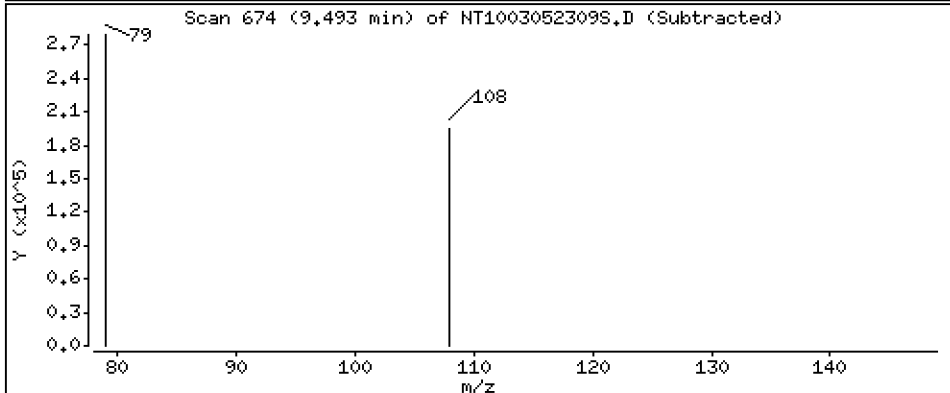
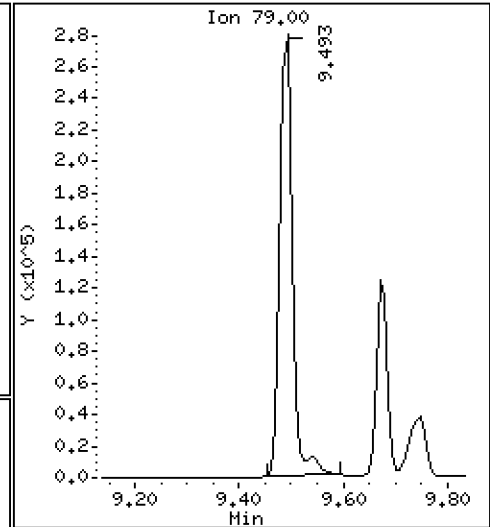
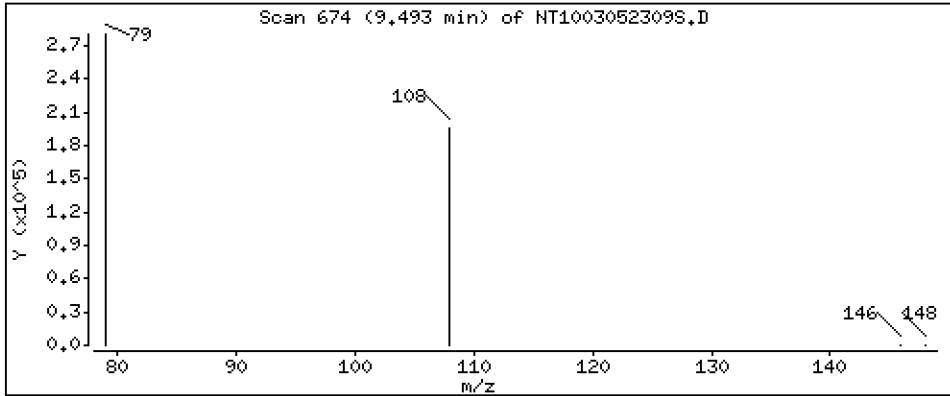
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.812 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

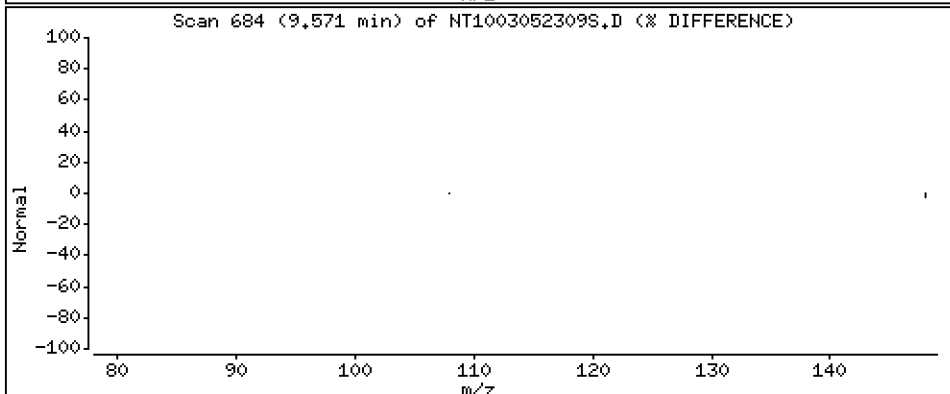
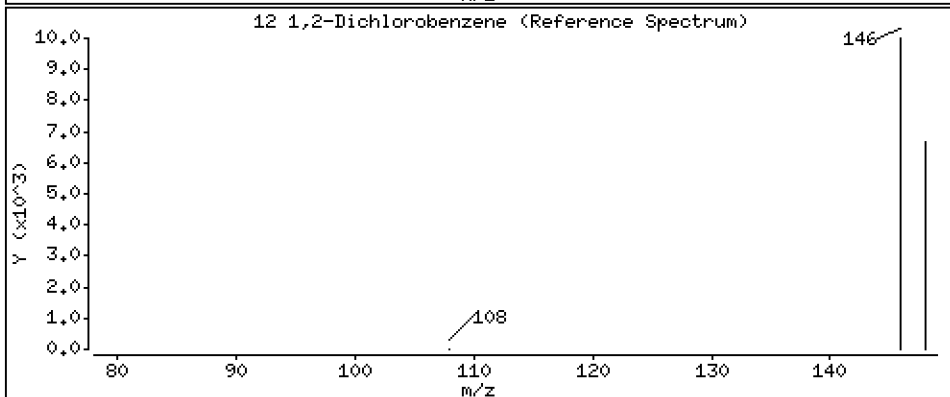
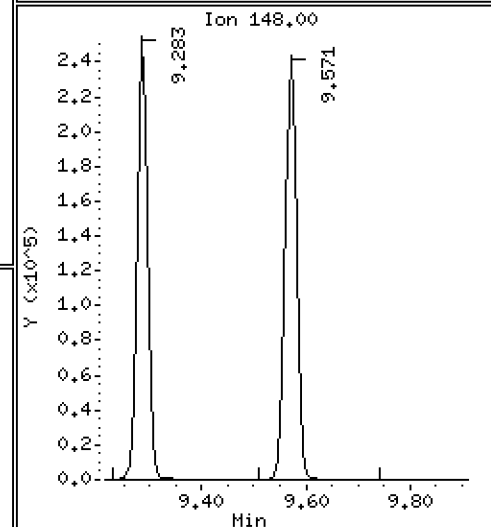
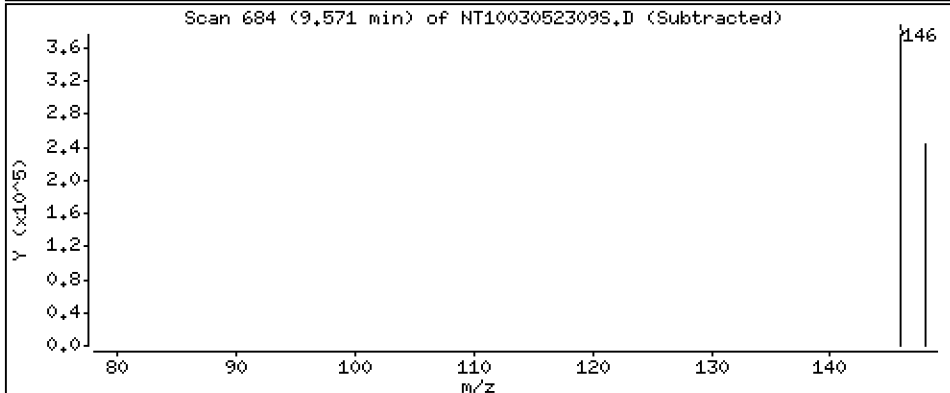
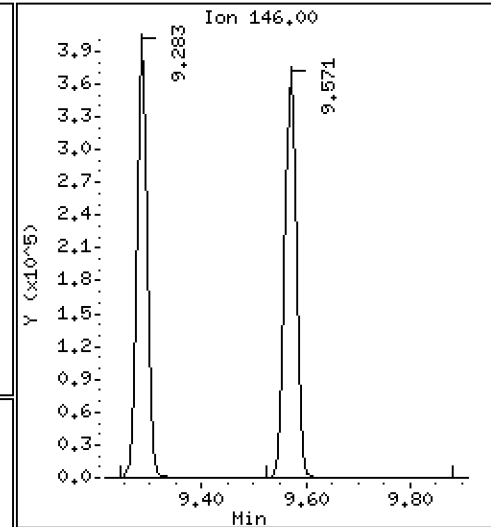
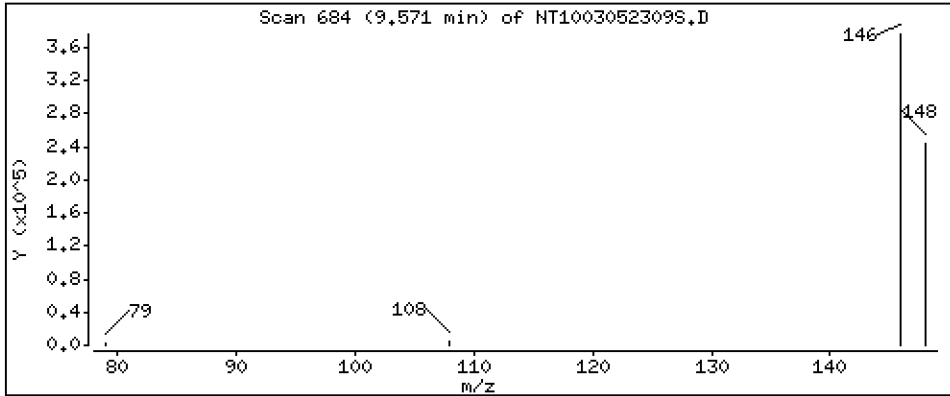
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 4,223 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

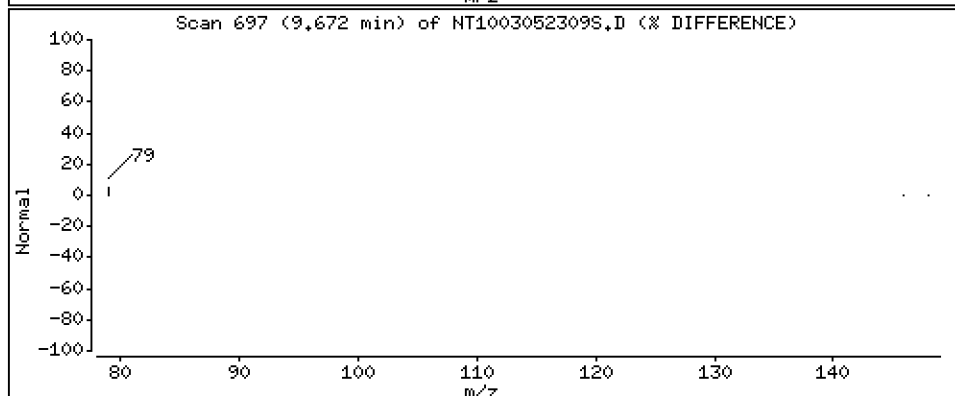
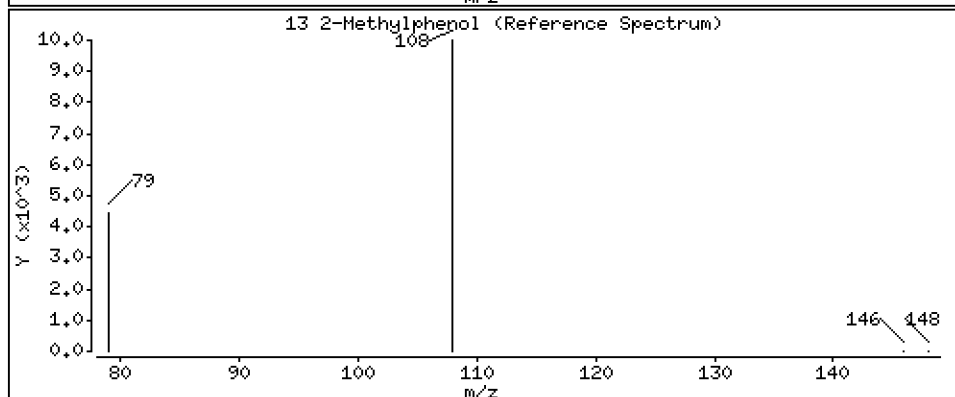
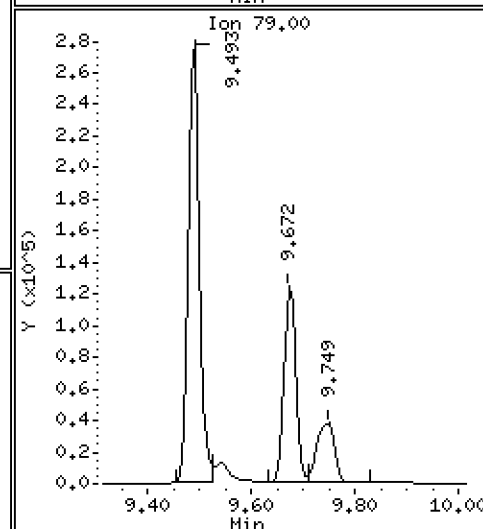
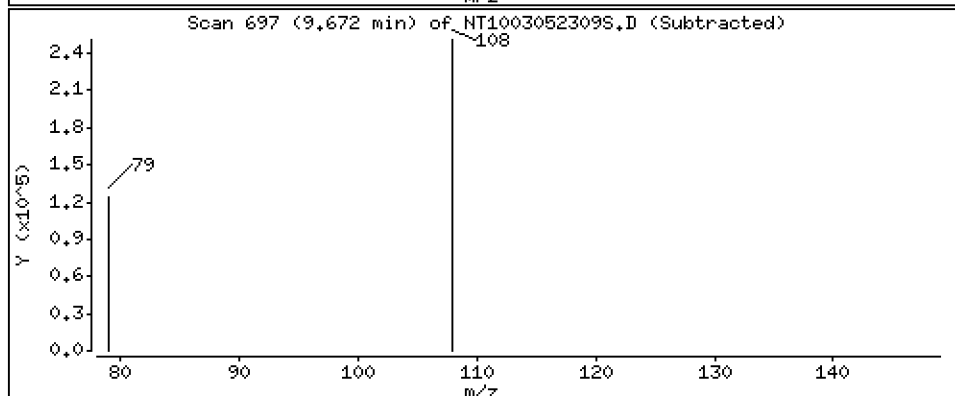
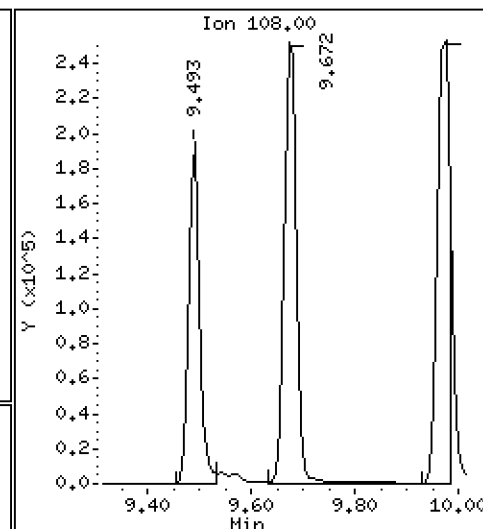
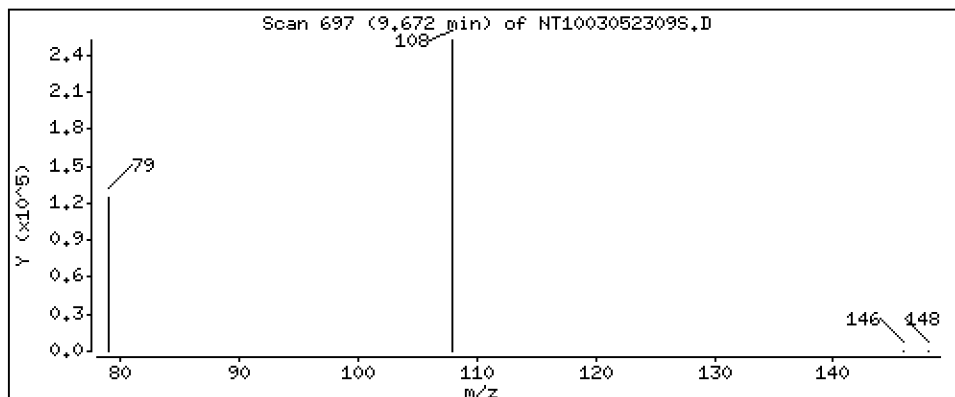
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.947 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

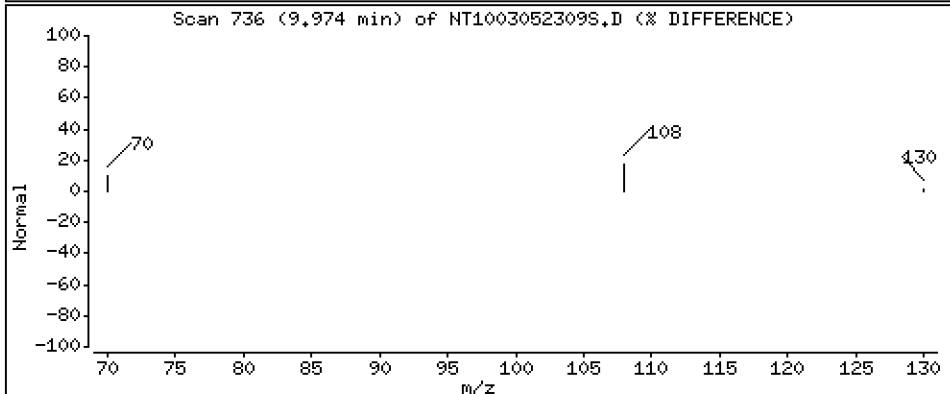
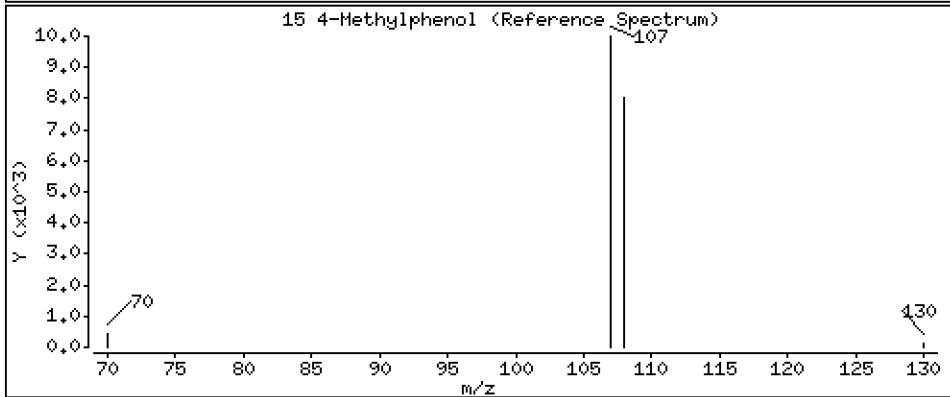
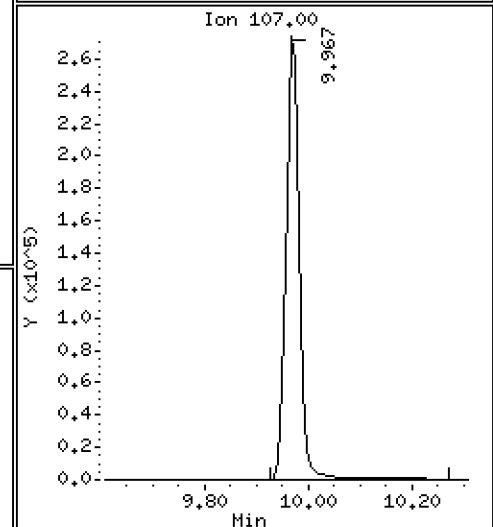
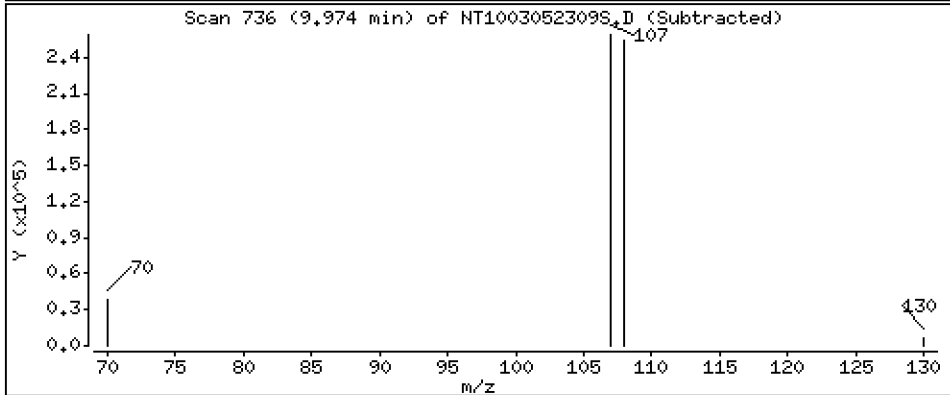
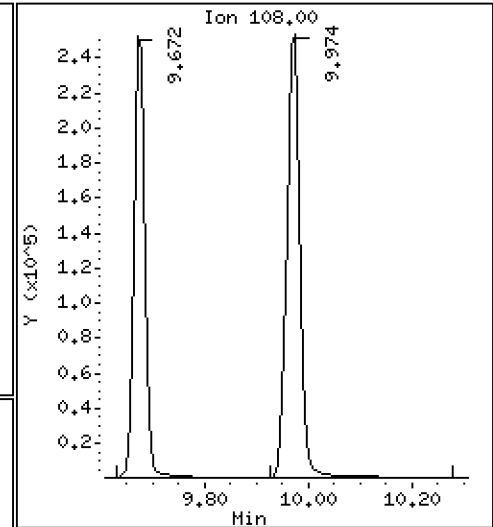
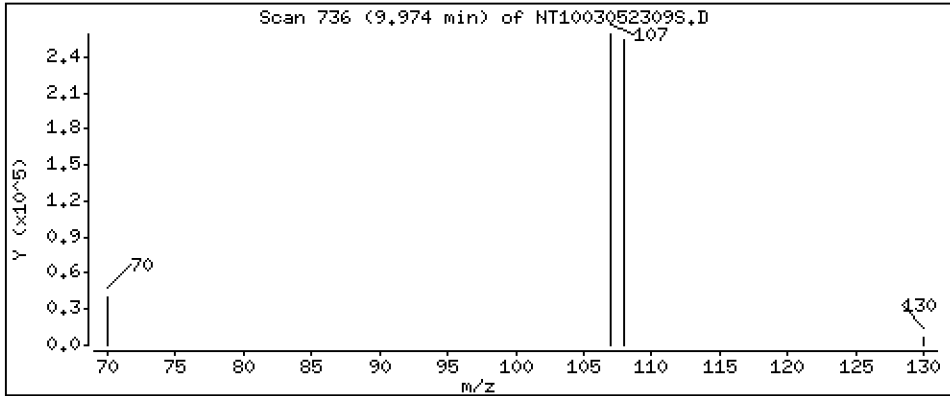
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,343 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

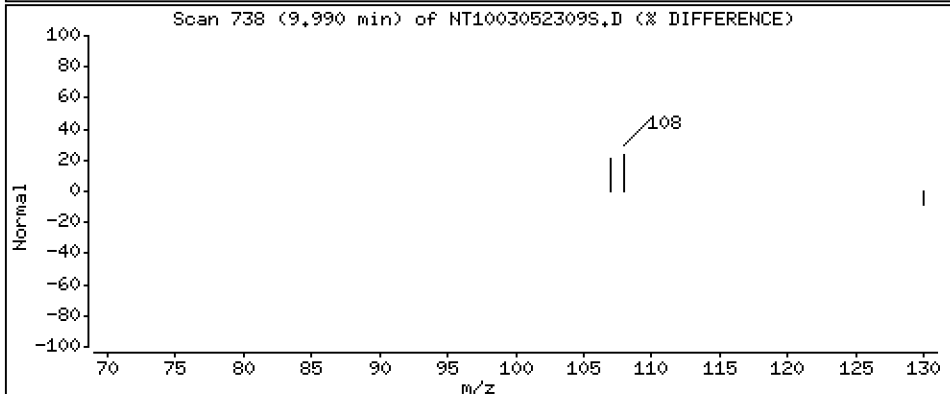
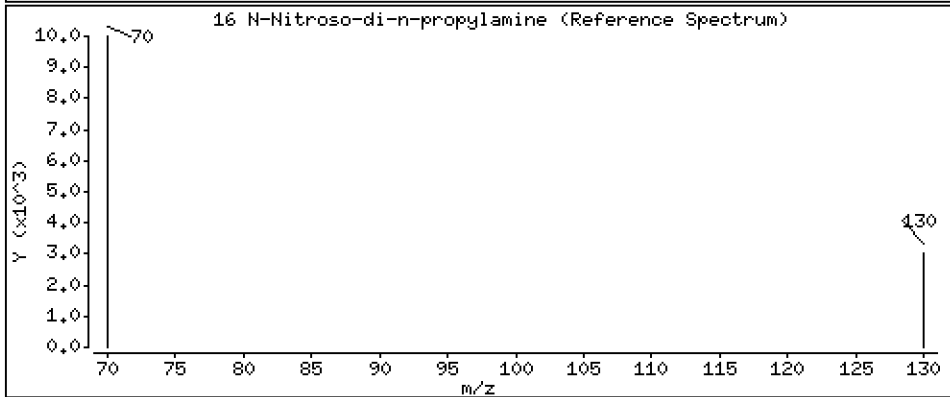
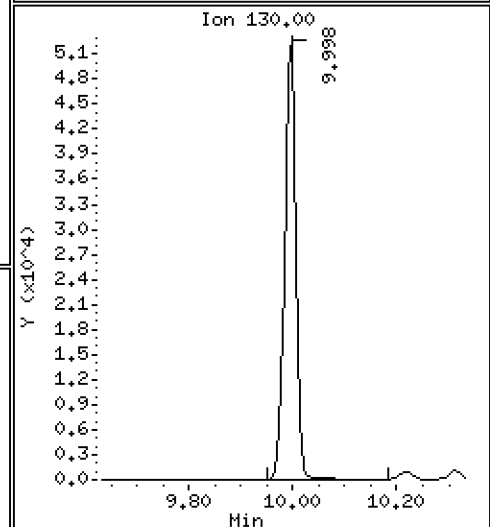
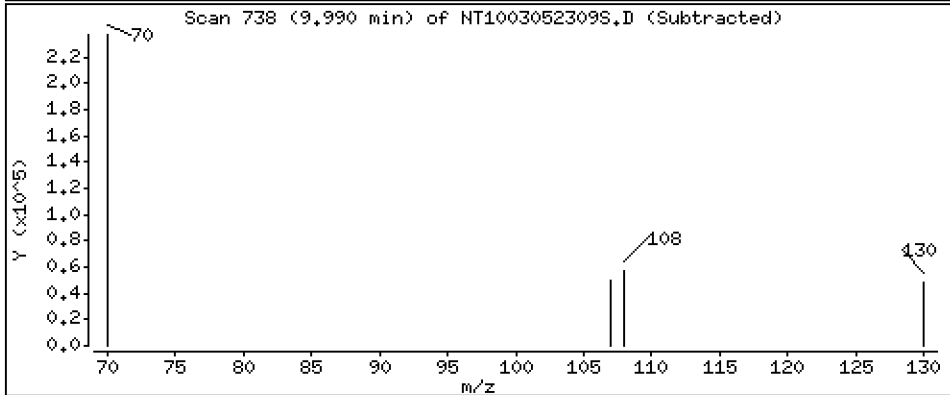
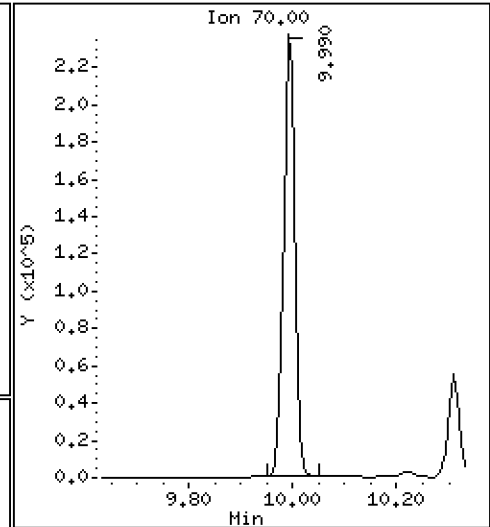
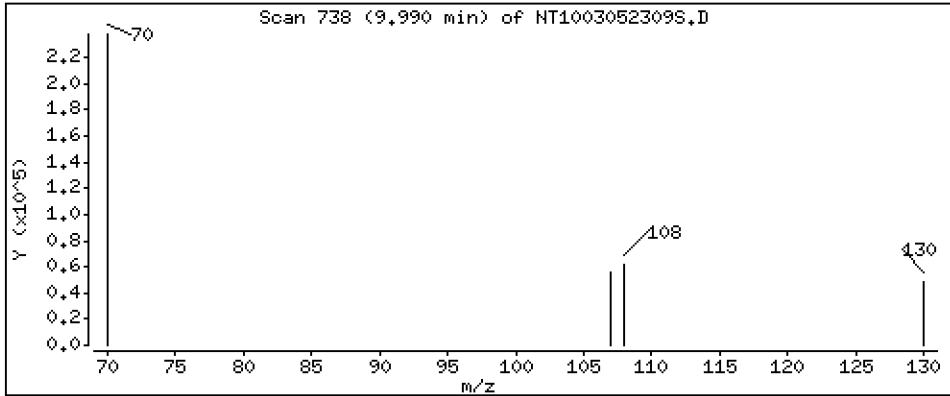
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 4,981 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

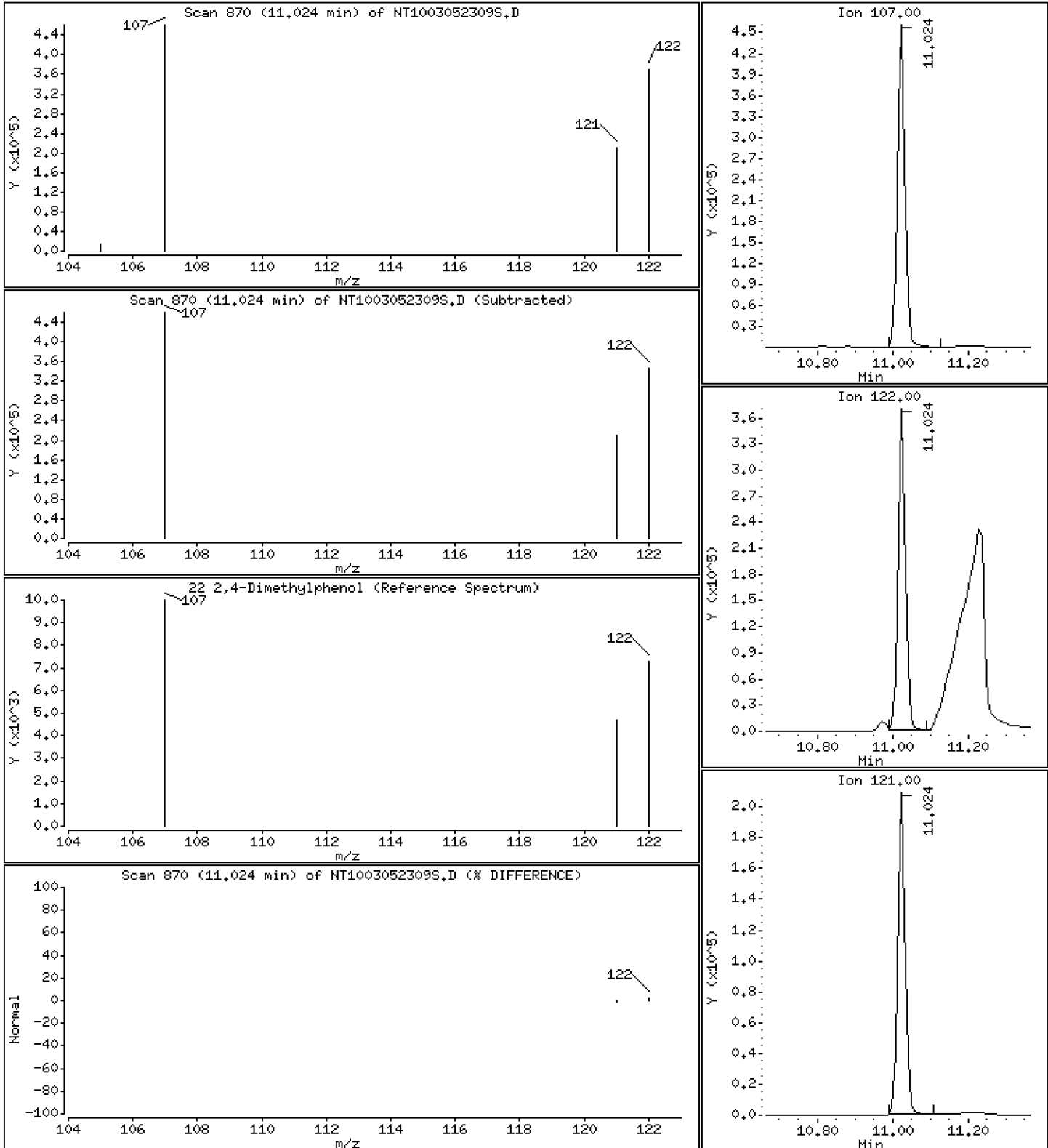
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 5,660 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

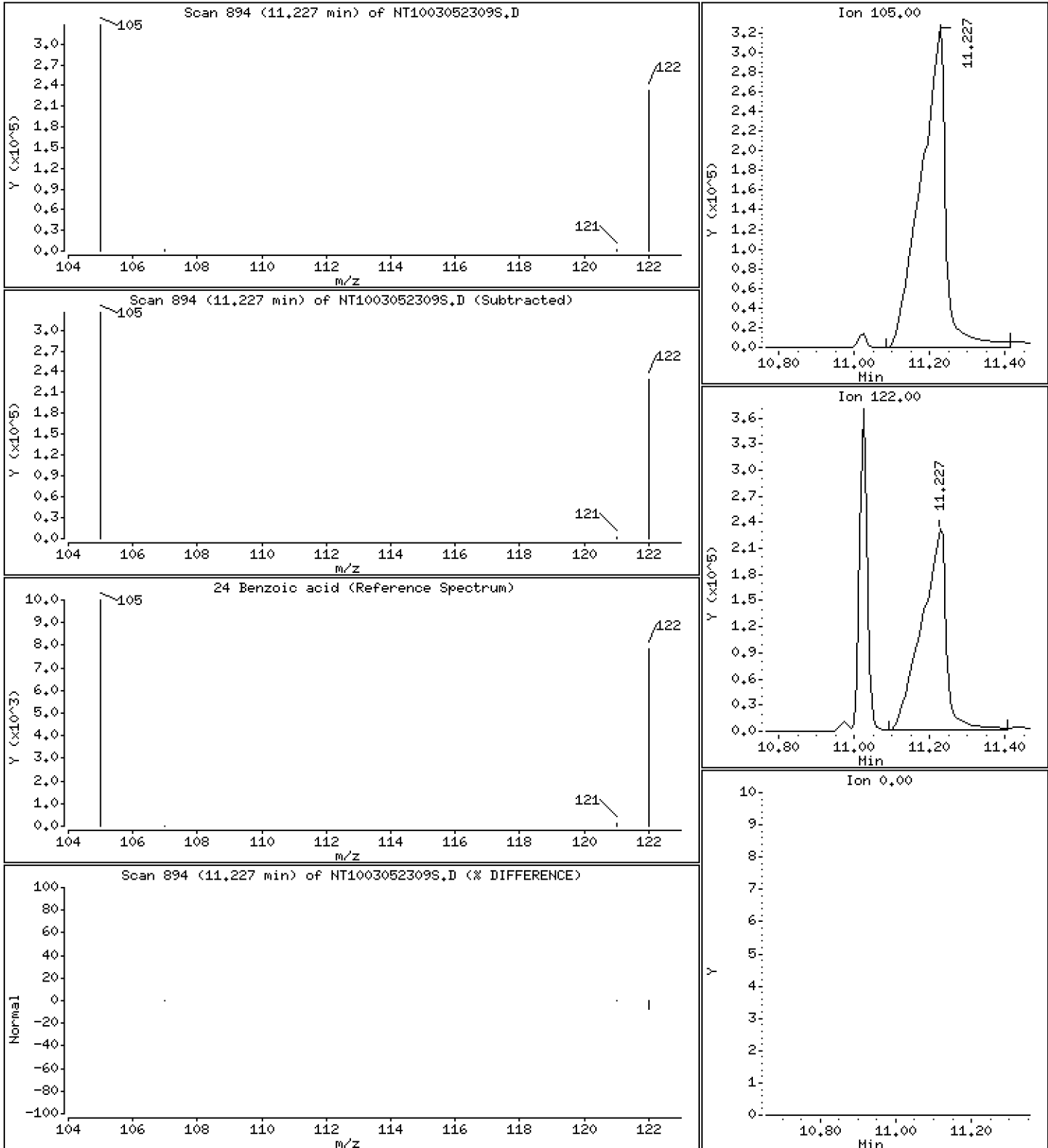
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 21,21 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

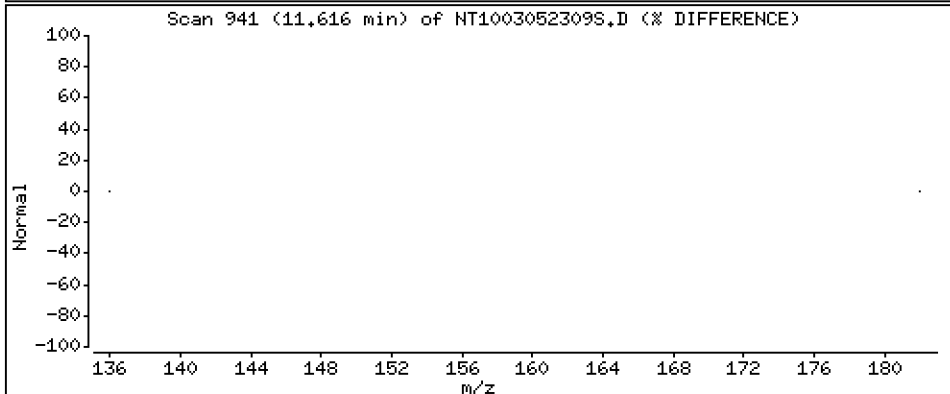
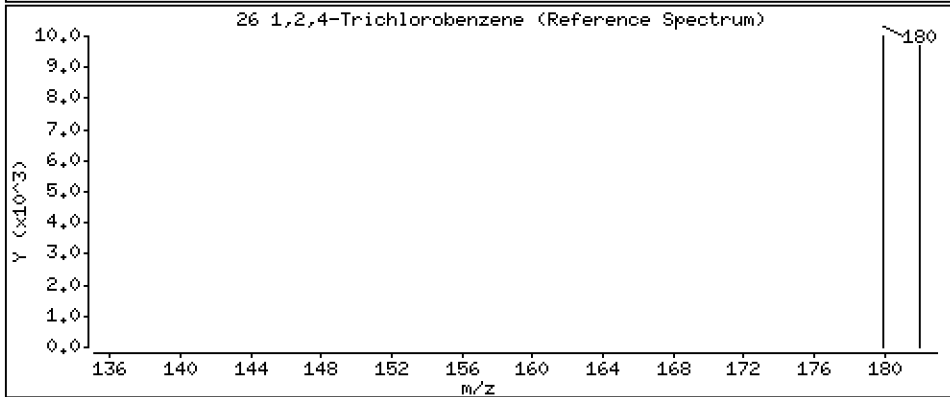
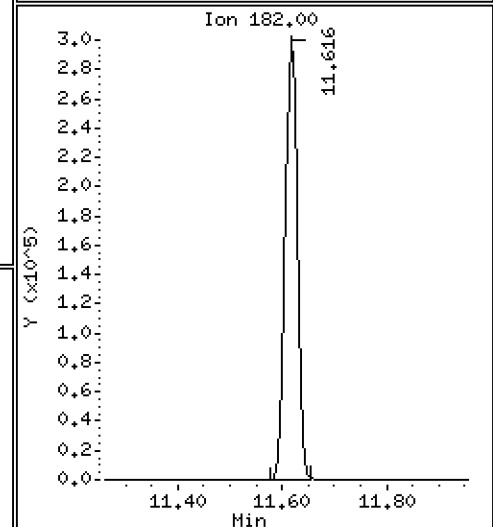
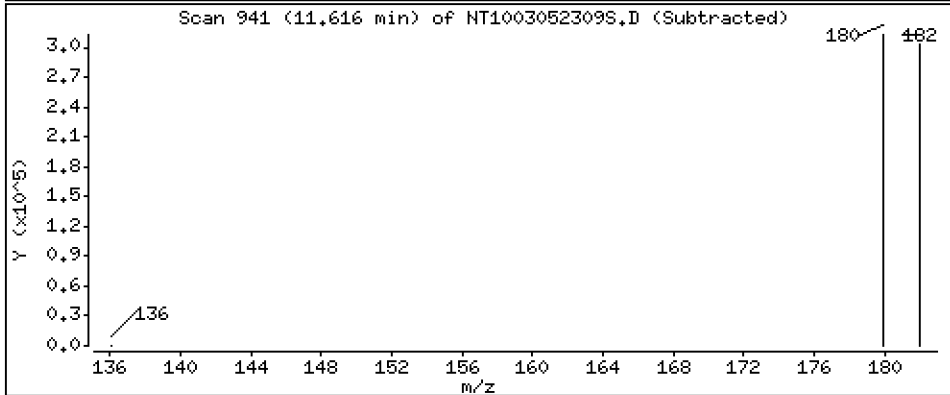
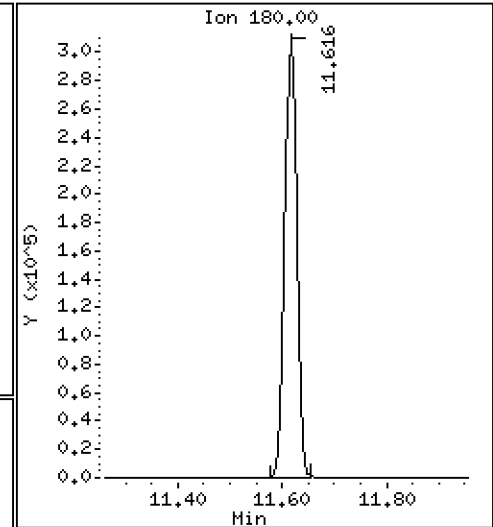
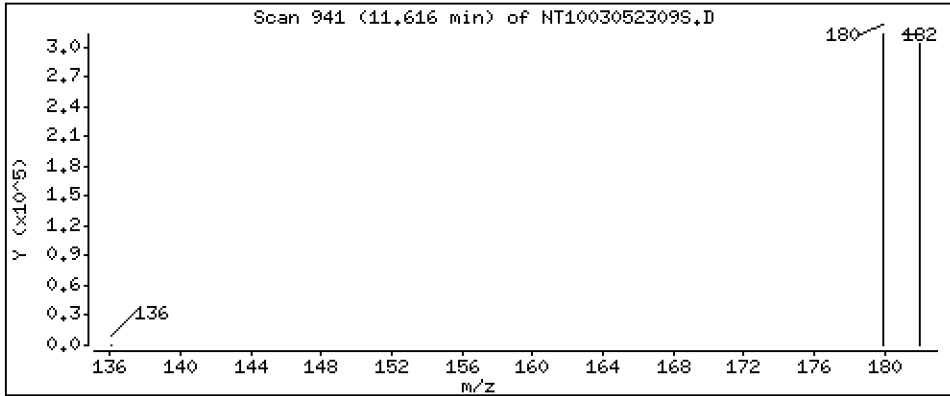
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,904 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

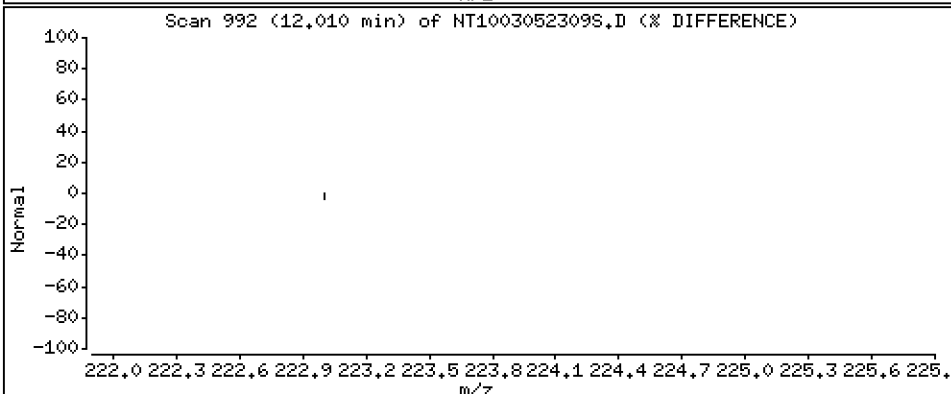
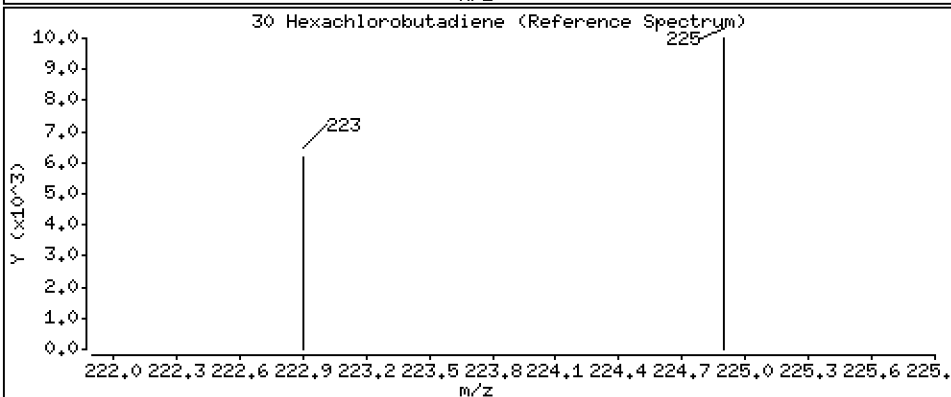
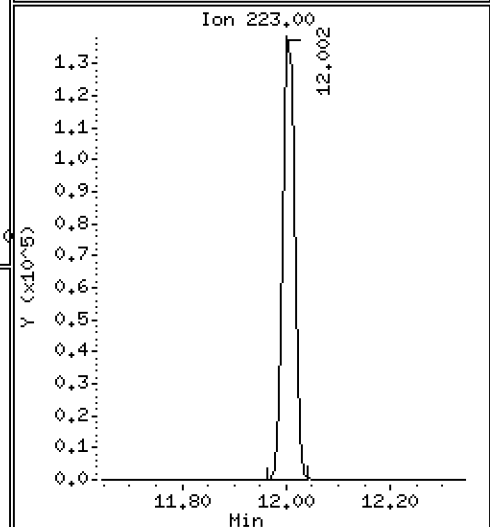
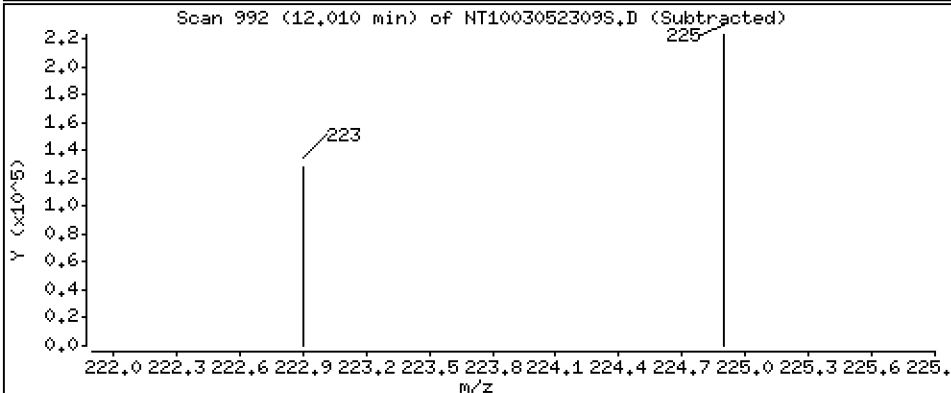
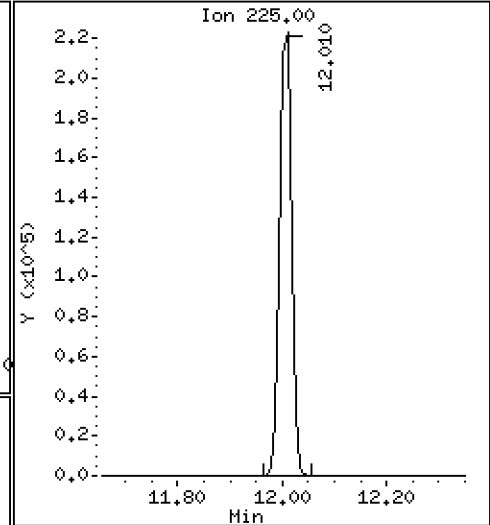
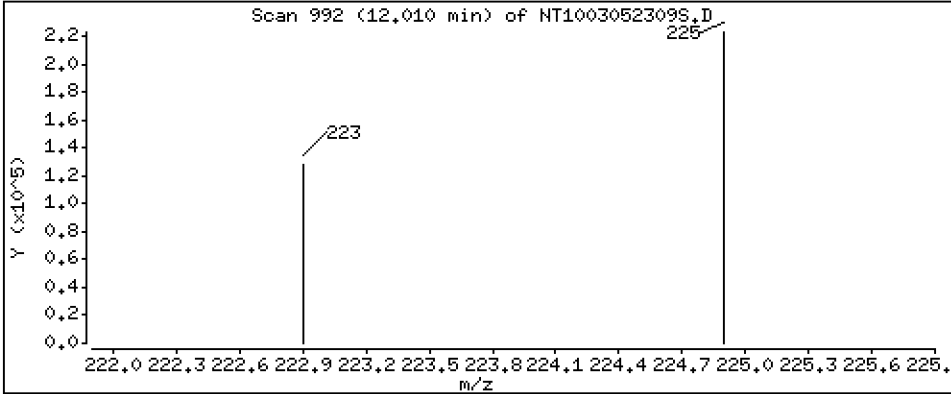
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,892 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

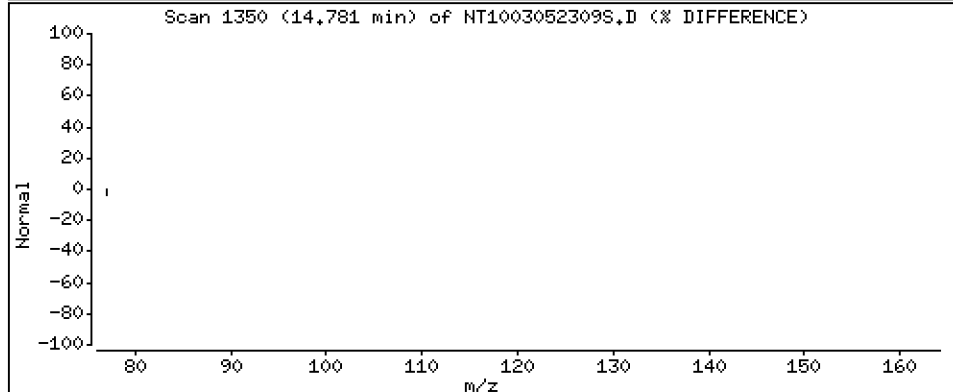
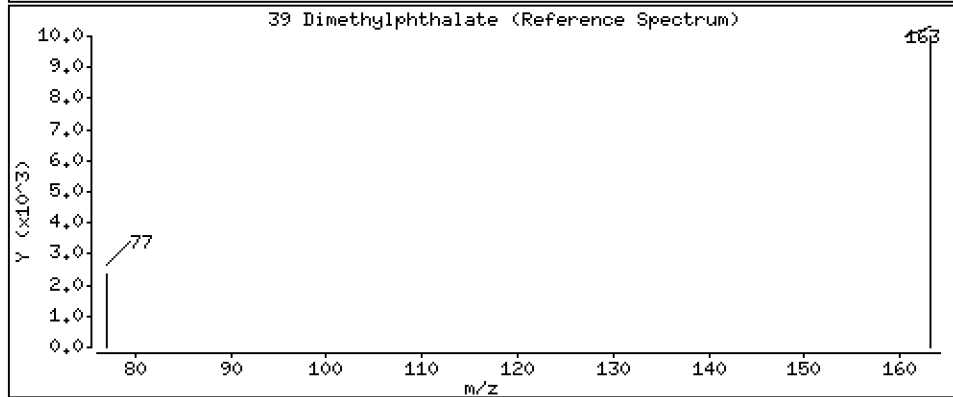
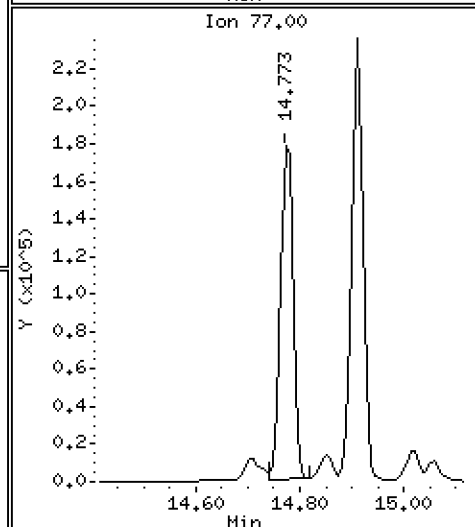
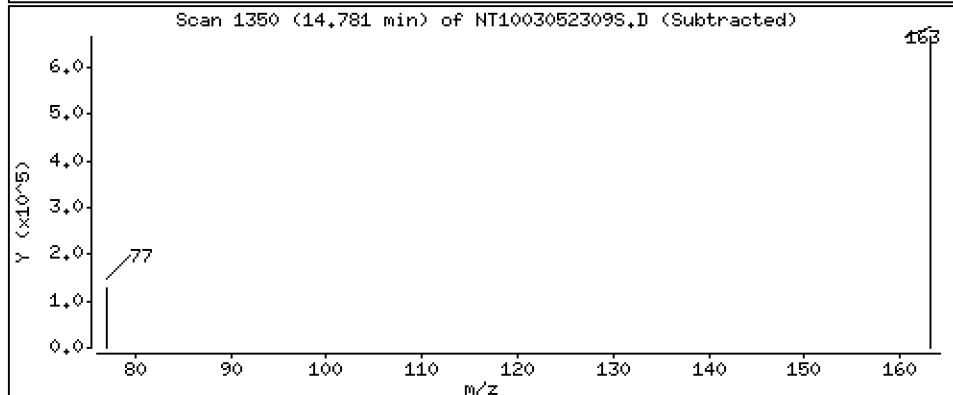
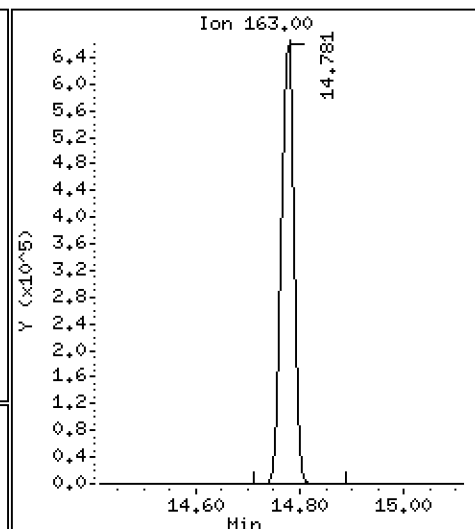
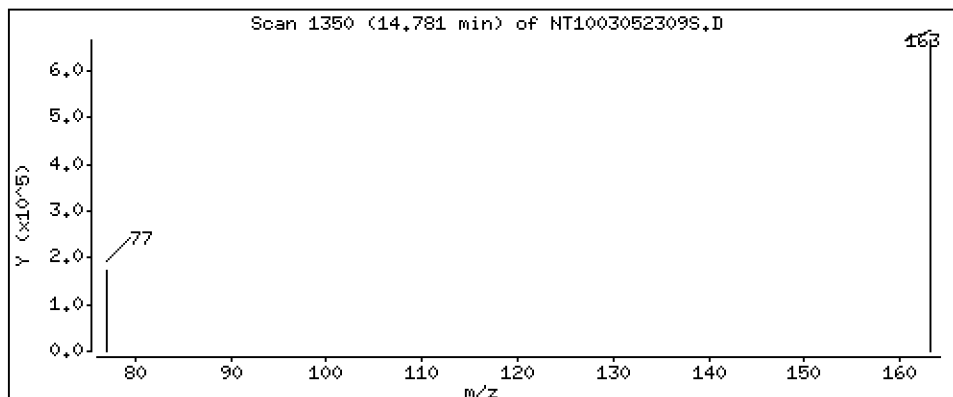
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,090 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

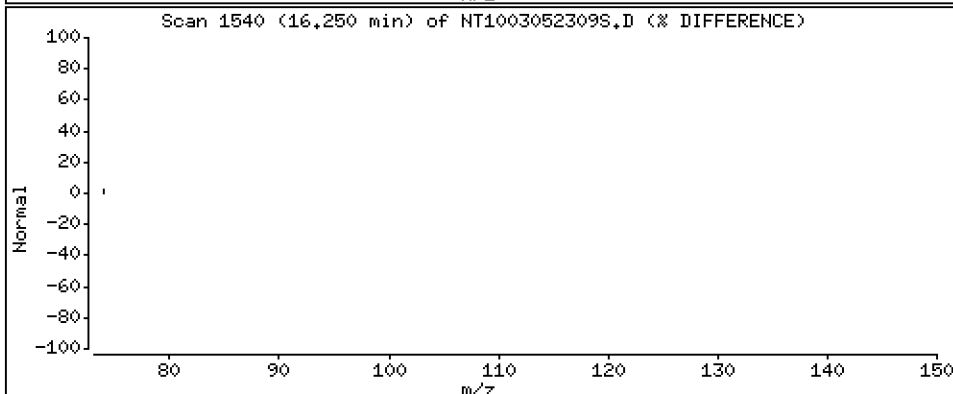
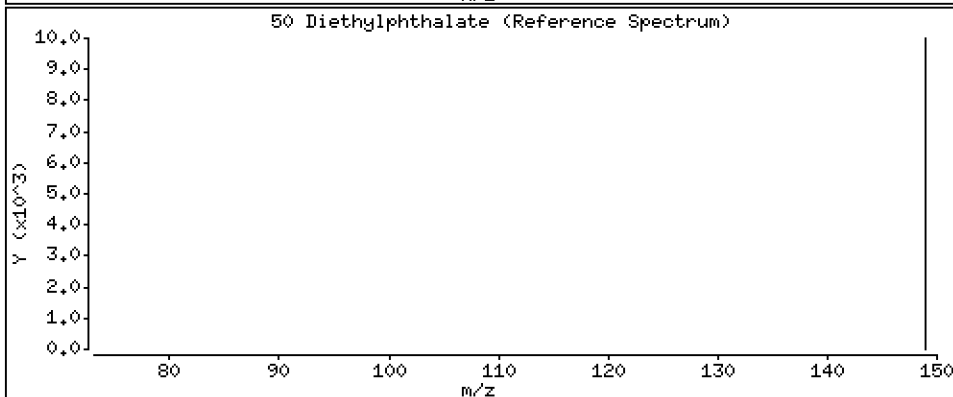
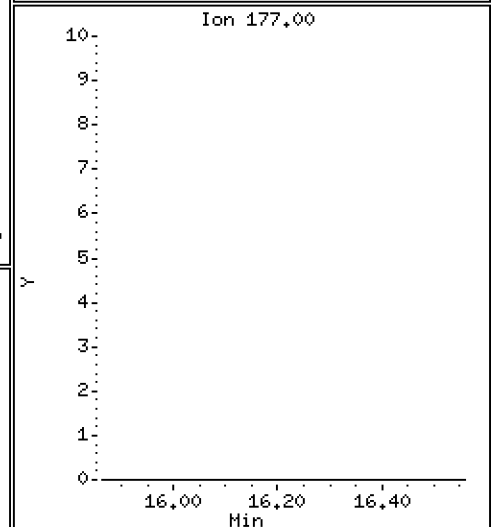
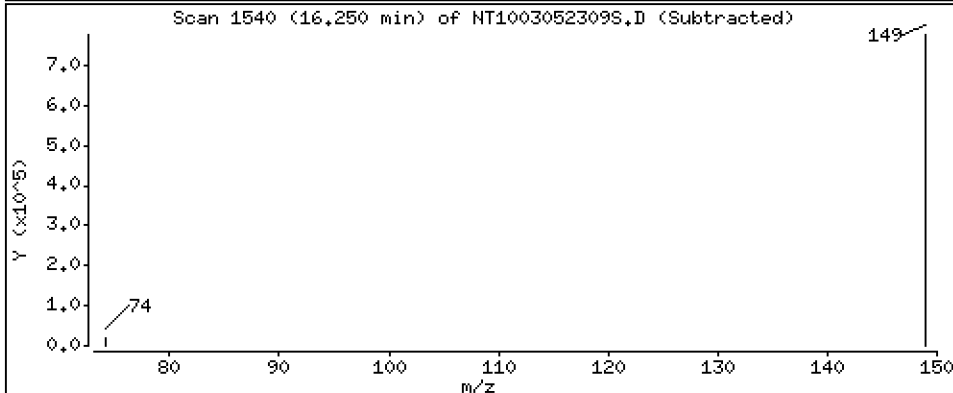
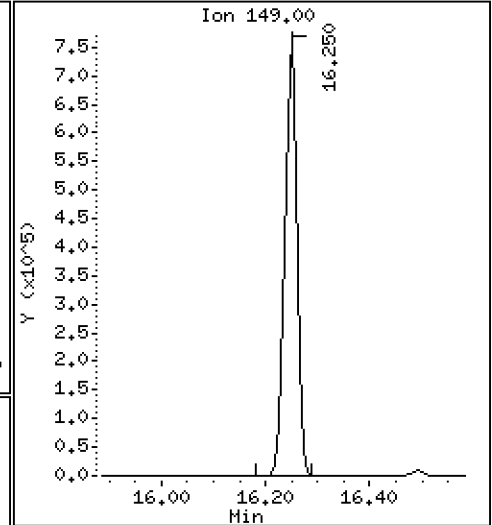
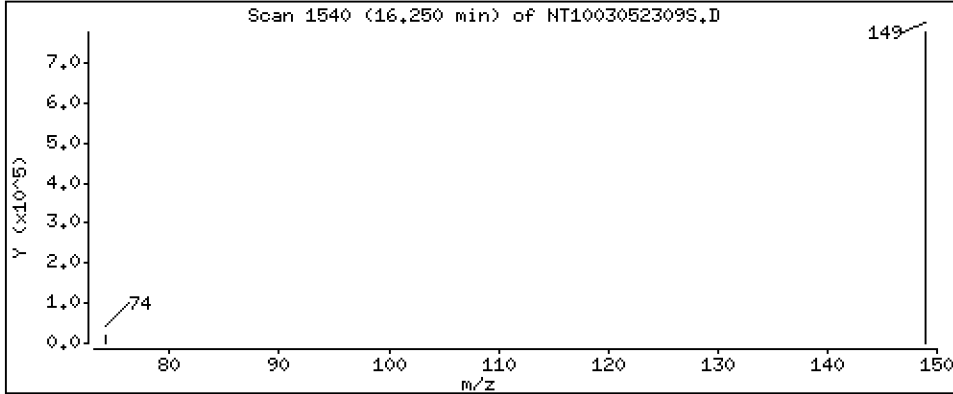
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 6,023 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

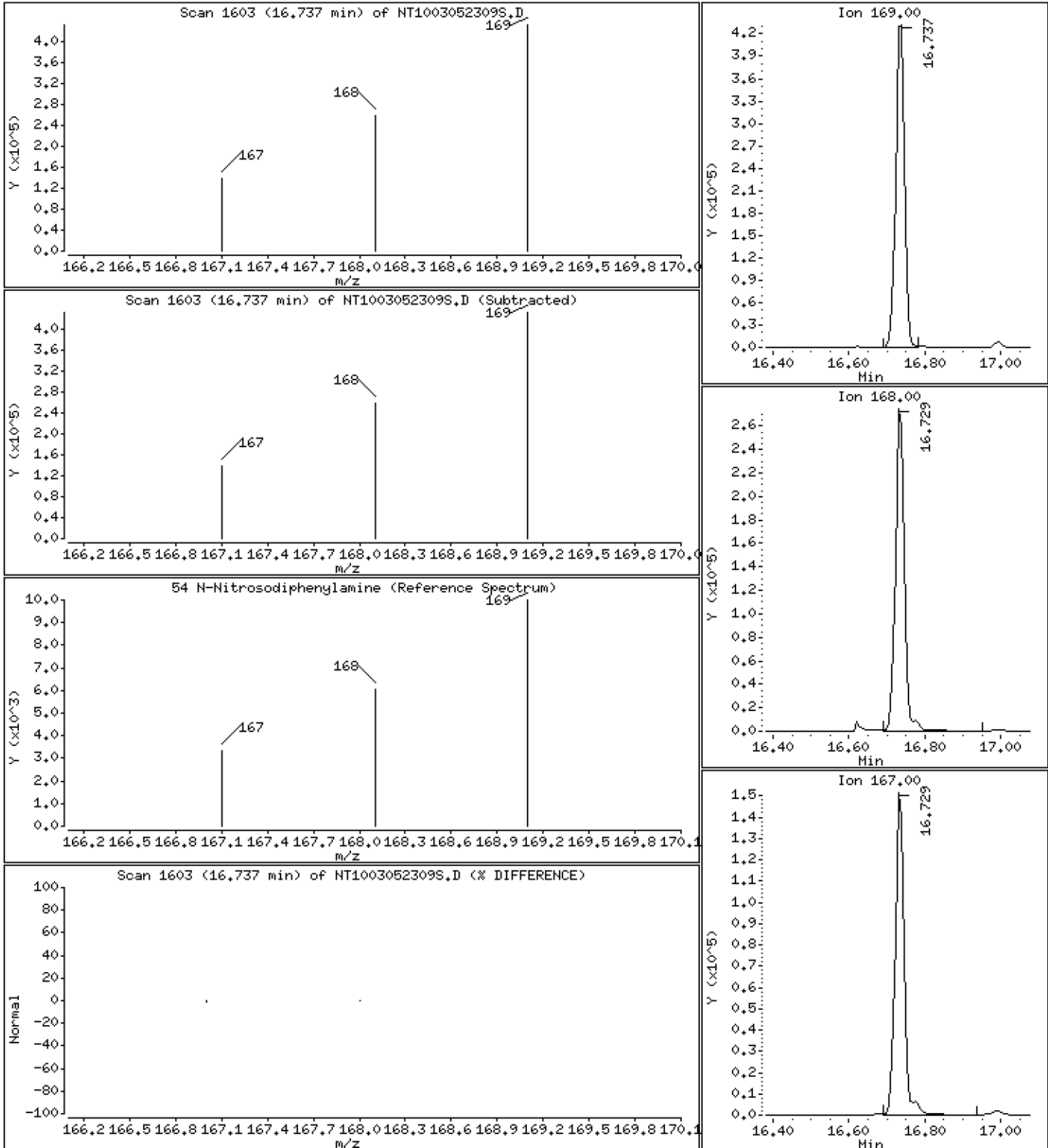
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 3,436 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

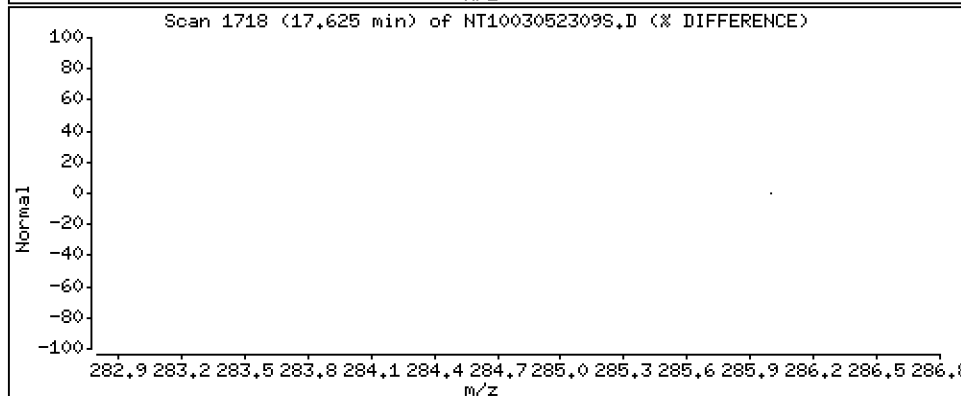
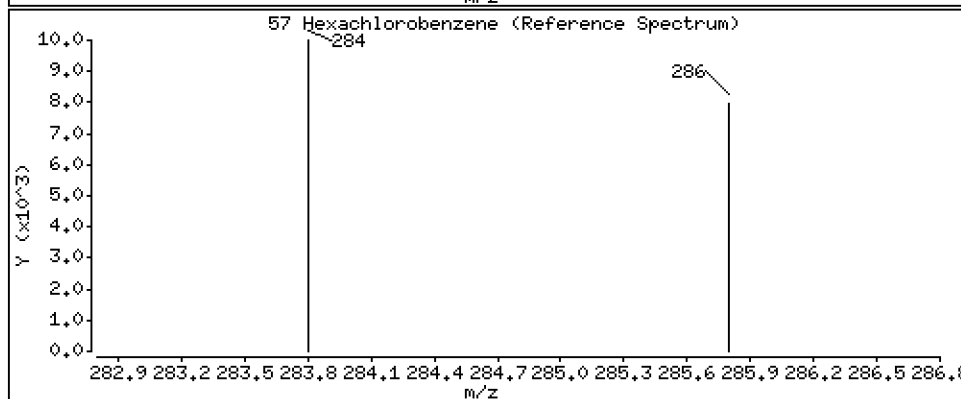
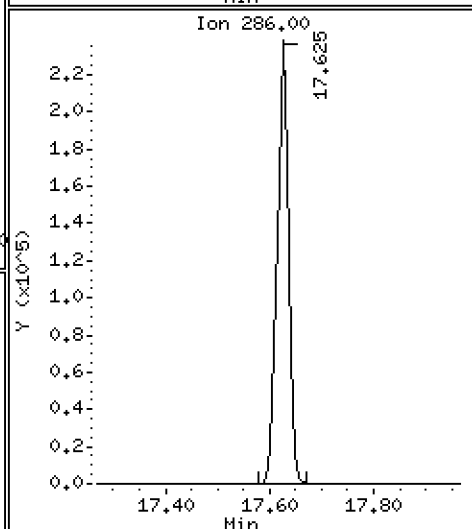
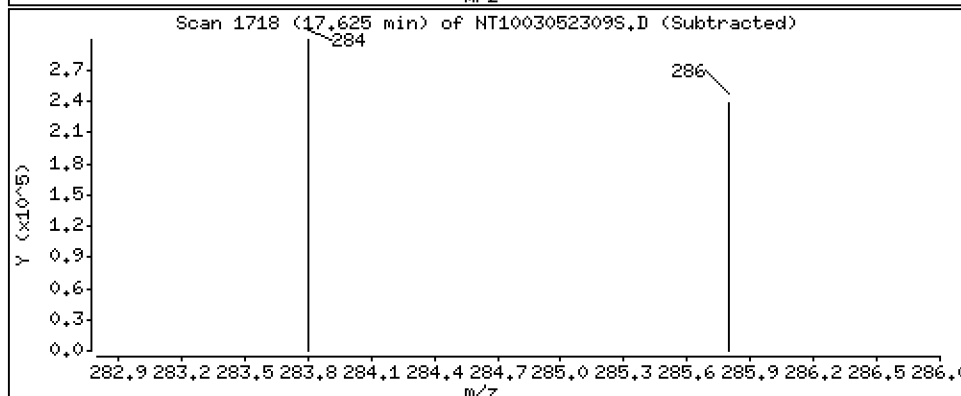
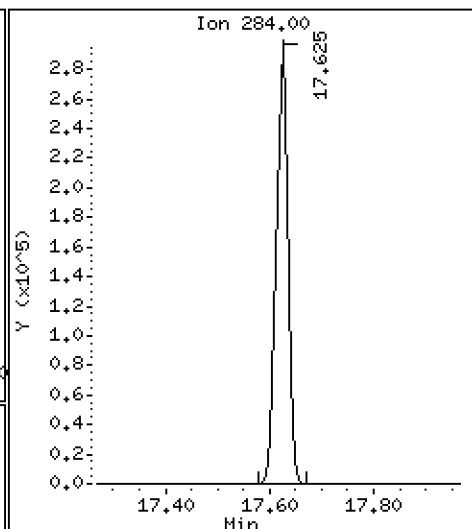
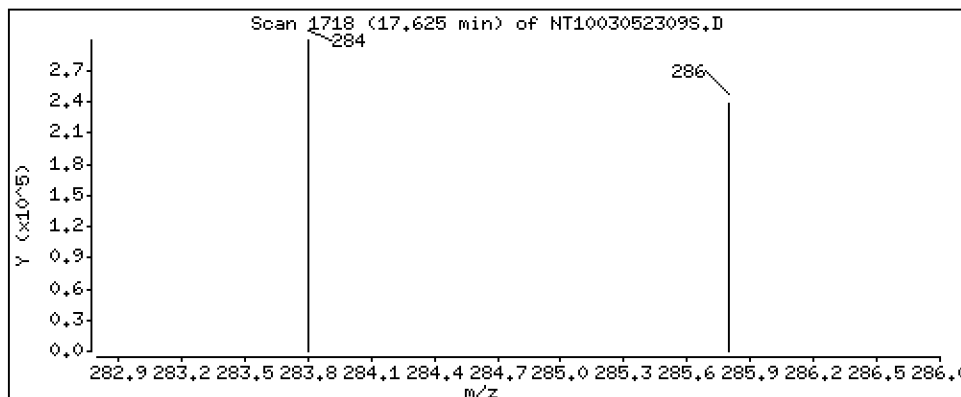
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,738 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

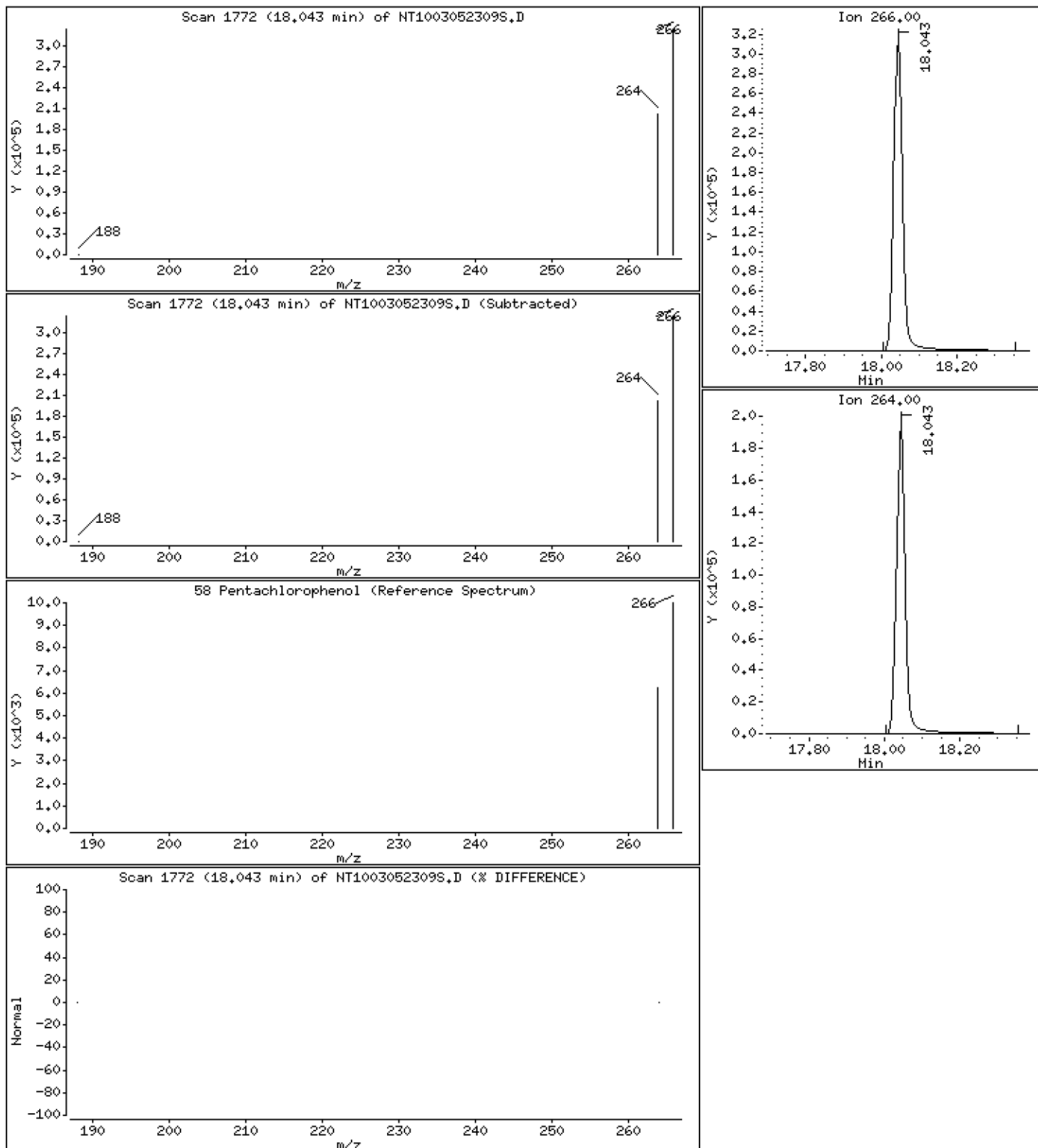
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 10,56 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

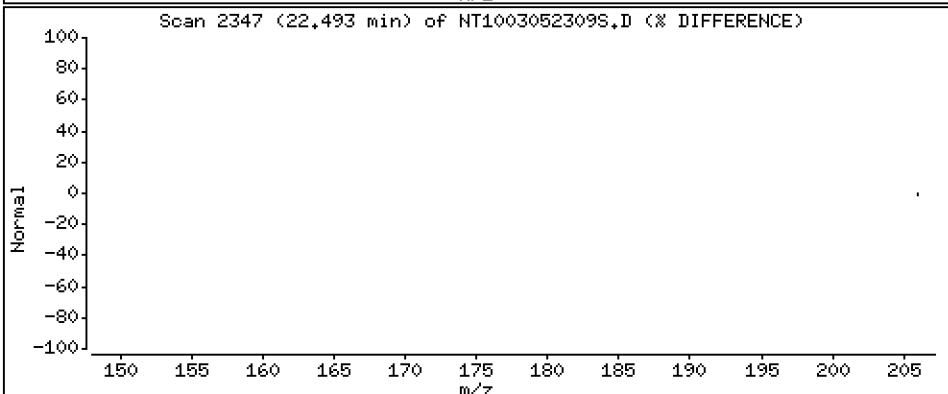
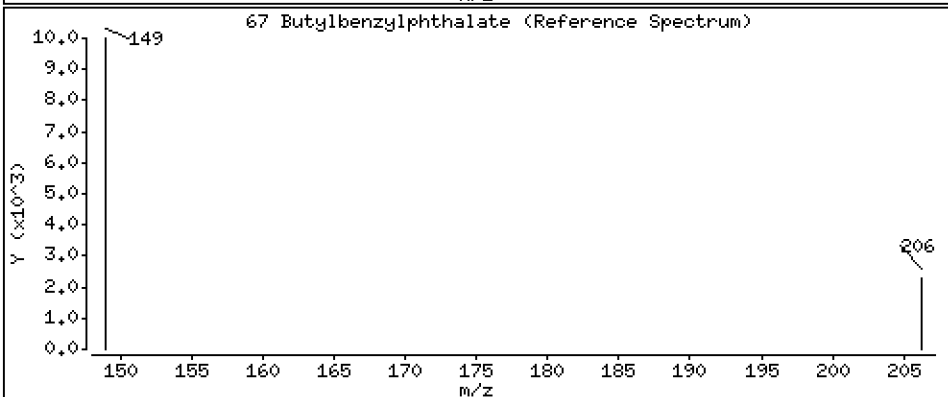
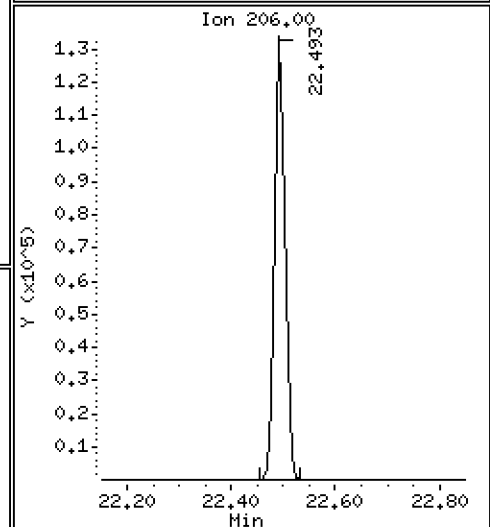
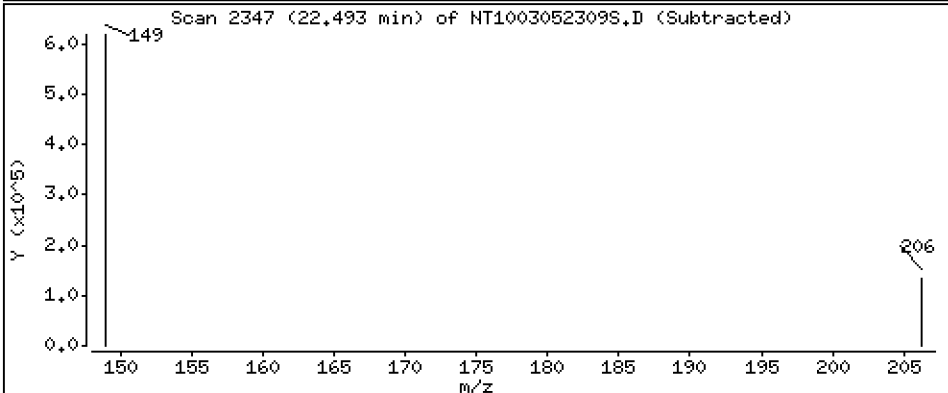
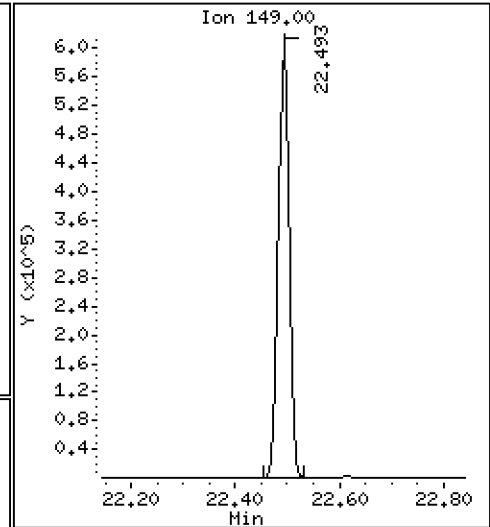
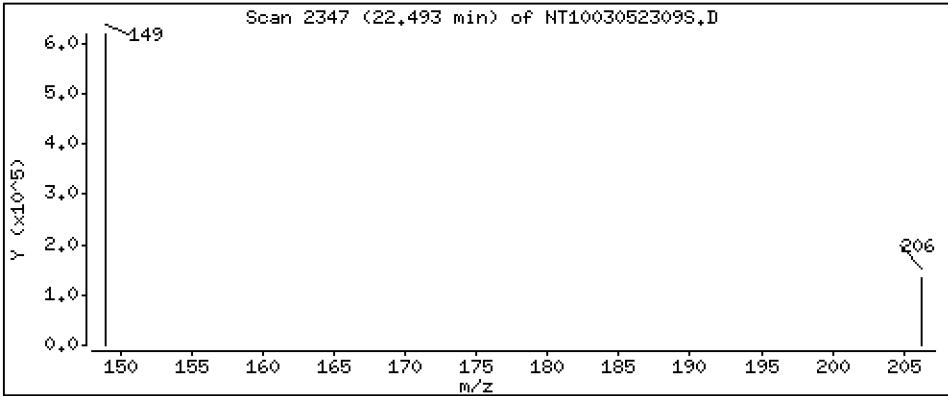
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,225 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

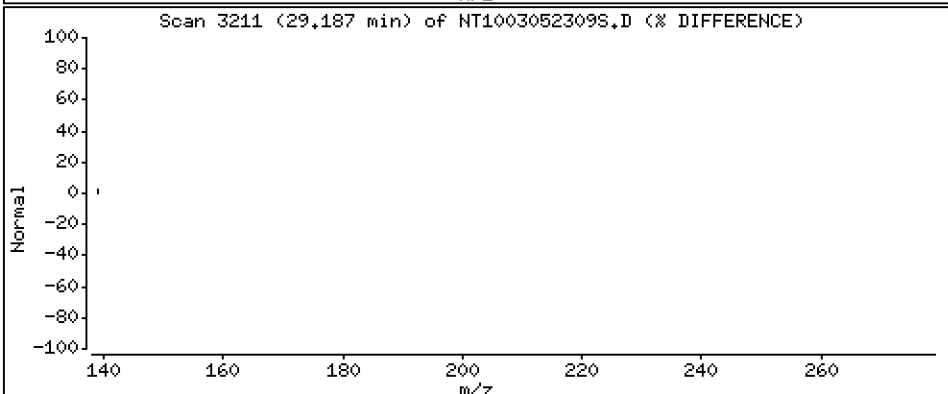
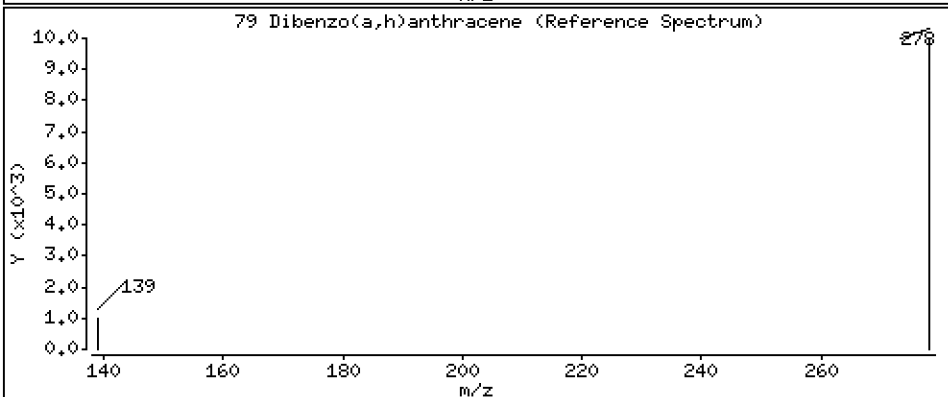
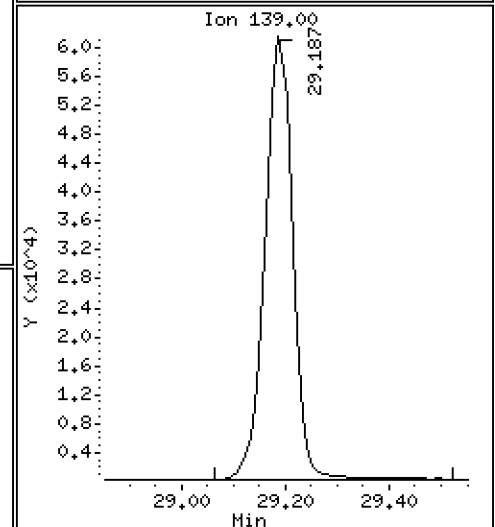
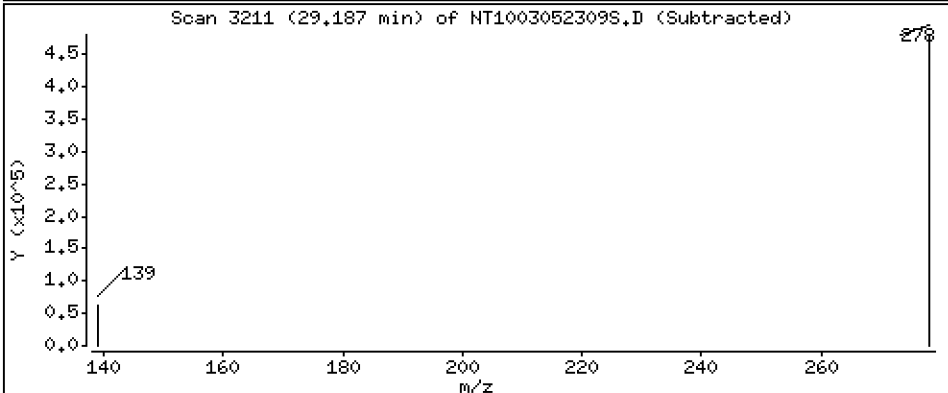
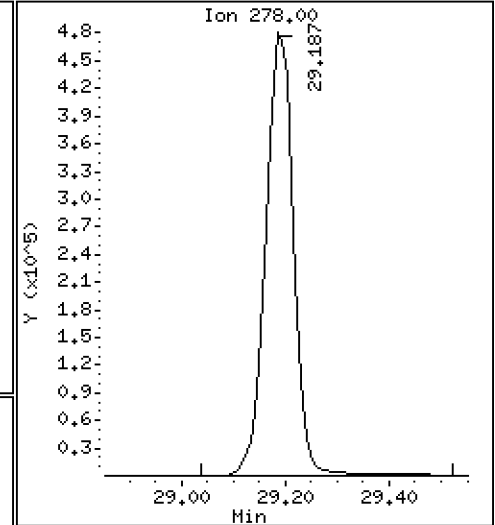
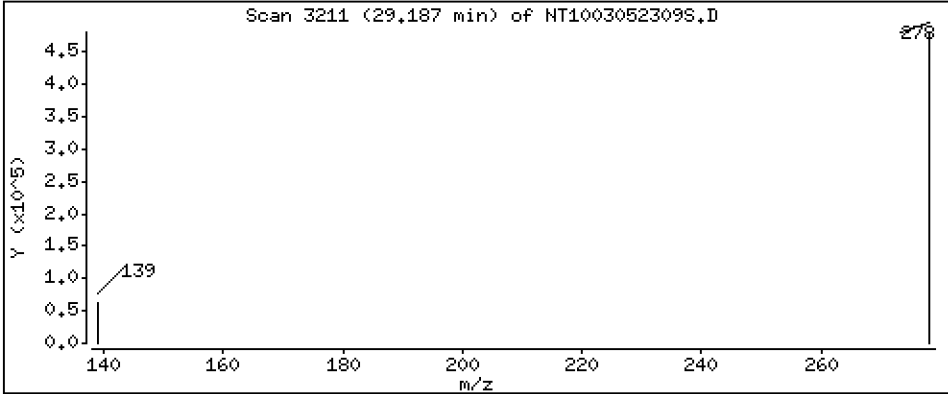
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,931 ug/mL



Date : 05-MAR-2023 18:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-BSD2

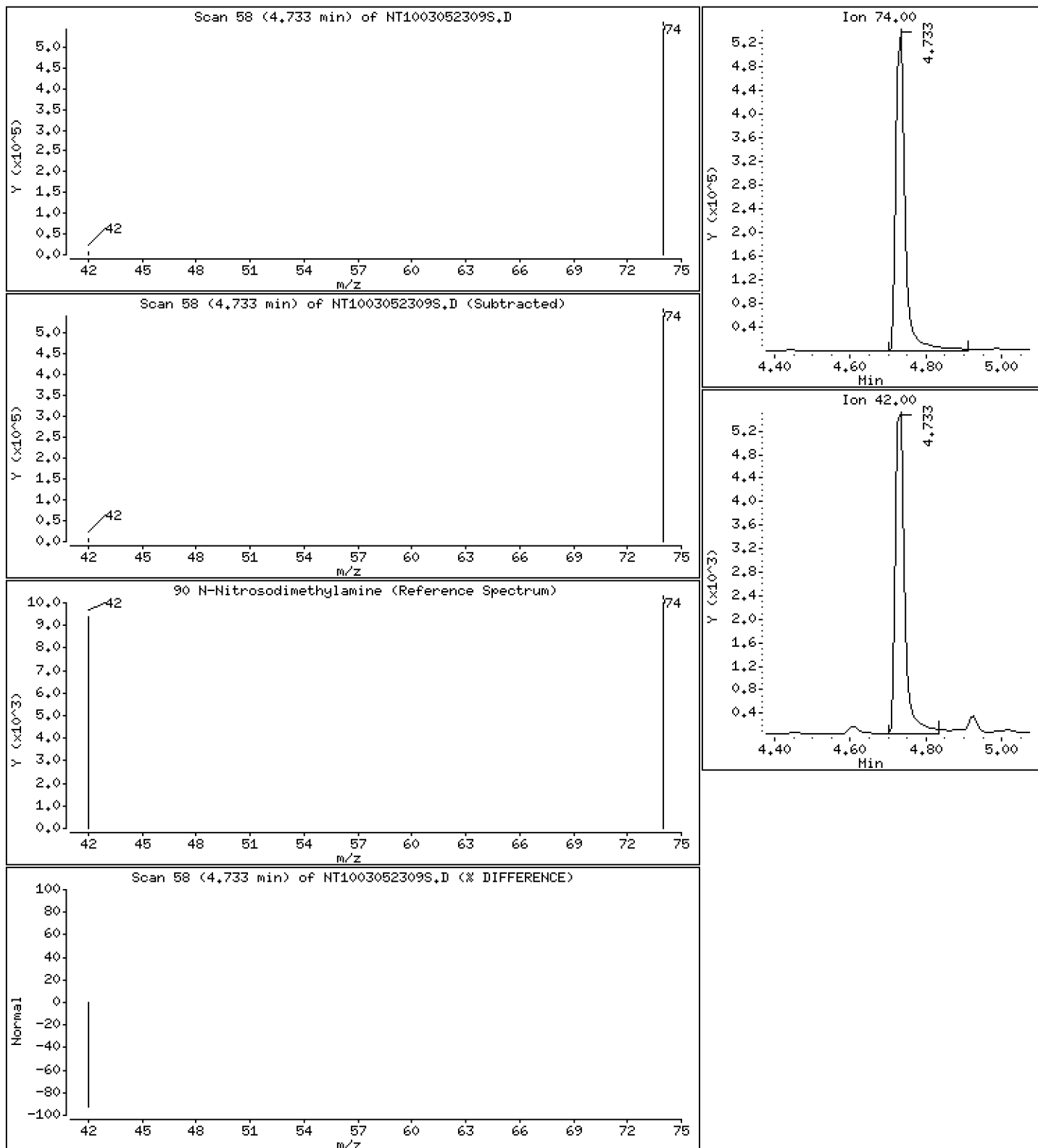
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 13,51 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052309S.D
 Lab Smp Id: BLA0685-BSD2
 Inj Date : 05-MAR-2023 18:28
 Operator : YZ
 Smp Info : BLA0685-BSD2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.747)	669811	6.27890	6.279 (R)
3 Phenol	94		8.540	8.533	(0.923)	648937	4.03912	4.039
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	570304	4.11831	4.118
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.244	(1.000)	373655	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.275	(1.003)	570382	4.23641	4.236
11 Benzyl alcohol	79		9.492	9.485	(1.026)	448655	4.81205	4.812 (M)
12 1,2-Dichlorobenzene	146		9.570	9.562	(1.034)	546559	4.22345	4.223
13 2-Methylphenol	108		9.671	9.663	(1.045)	386071	3.94667	3.947
15 4-Methylphenol	108		9.974	9.958	(1.078)	448931	4.34335	4.343
16 N-Nitroso-di-n-propylamine	70		9.989	9.982	(1.080)	355682	4.98131	4.981
22 2,4-Dimethylphenol	107		11.023	11.015	(0.939)	648102	5.65973	5.660
24 Benzoic acid	105		11.227	11.116	(0.956)	1488416	21.2143	21.21
26 1,2,4-Trichlorobenzene	180		11.616	11.608	(0.989)	468802	4.90405	4.904
* 27 Naphthalene-d8	136		11.739	11.731	(1.000)	1328154	4.00000	
30 Hexachlorobutadiene	225		12.009	12.002	(1.023)	331879	4.89225	4.892
39 Dimethylphthalate	163		14.780	14.765	(0.963)	1067662	5.08997	5.090
* 42 Acenaphthene-d10	162		15.345	15.337	(1.000)	660605	4.00000	
50 Diethylphthalate	149		16.249	16.234	(1.059)	1191422	6.02308	6.023 (H)
54 N-Nitrosodiphenylamine	169		16.737	16.729	(0.907)	695570	3.43574	3.436
57 Hexachlorobenzene	284		17.625	17.617	(0.955)	448940	4.73844	4.738
58 Pentachlorophenol	266		18.043	18.043	(0.978)	496102	10.5596	10.56
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	1250960	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.602	(0.919)	631663	6.73760	6.738 (R)
67 Butylbenzylphthalate	149		22.492	22.492	(0.957)	814494	4.22514	4.225
* 69 Chrysene-d12	240		23.514	23.514	(1.000)	1159338	4.00000	
* 77 Perylene-d12	264		26.278	26.286	(1.000)	1176555	4.00000	
79 Dibenzo(a,h)anthracene	278		29.186	29.202	(1.111)	1779227	5.93086	5.931
90 N-Nitrosodimethylamine	74		4.732	4.724	(0.512)	853555	13.5148	13.51

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052309S.D
 Lab Smp Id: BLA0685-BSD2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	373655	16.27
27 Naphthalene-d8	1132931	566466	2265862	1328154	17.23
42 Acenaphthene-d10	561597	280799	1123194	660605	17.63
59 Phenanthrene-d10	1068222	534111	2136444	1250960	17.11
69 Chrysene-d12	997572	498786	1995144	1159338	16.22
77 Perylene-d12	1245490	622745	2490980	1176555	-5.53

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.74	0.07
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.29	25.79	26.79	26.28	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003052309S.D

Lab ID: BLA0685-BSD2

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 18:28

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.956	0.948	0.0088	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003052303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

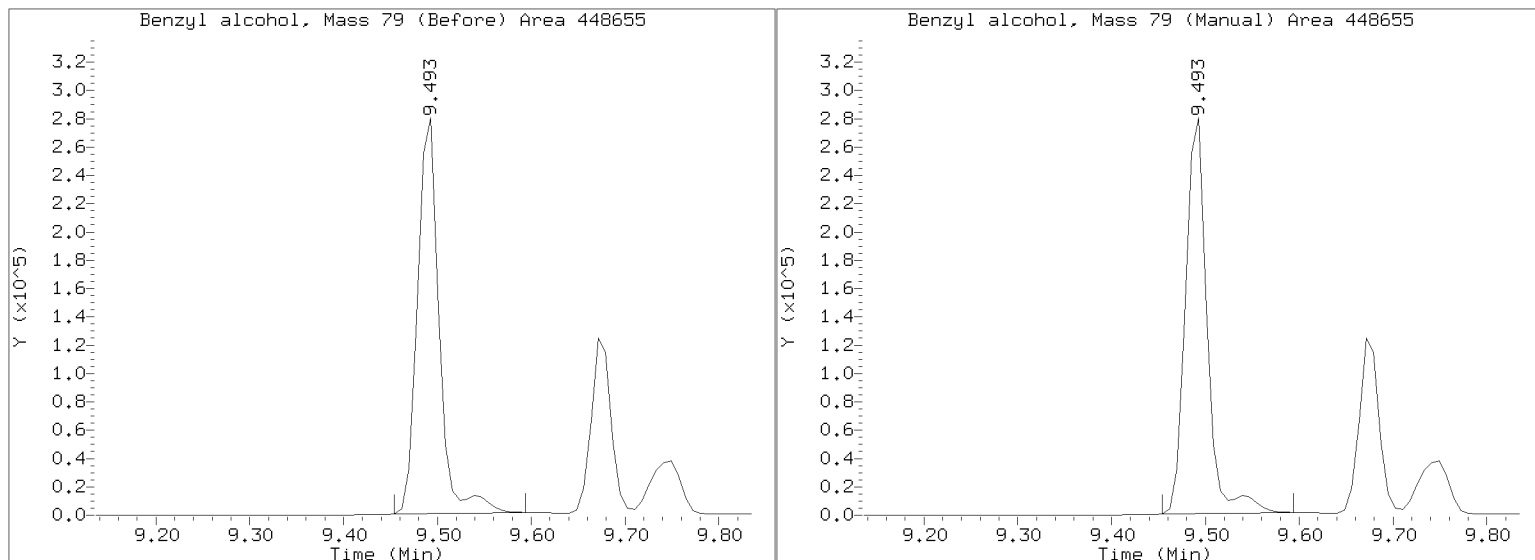
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052309S.D

Injection Date: 05-MAR-2023 18:28

Lab ID:BLA0685-BSD2 Client ID:

Report Date: 03/28/2023 11:05



APPROVED

By Deenay Dunmore at 12:02 pm, Mar 28, 2023



STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0683-SRM1

Batch: BLA0683

Initial/Final: 5 g / 0.5 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 02/06/2023 17:18

Standard ID: L000097

Expires: 10/31/2025

Standard Lot#: SQC017 (LRAD3953)

Description: SQC017-40G PAHs by HPLC40g

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Benzo(a)anthracene	110.00	88.7	1.65	10.0		80.6	26 - 174
Chrysene	231.00	176	2.11	10.0		76.3	43 - 156
Benzo(b)fluoranthene	318.00	383	2.74	10.0		120	0 - 211
Benzo(k)fluoranthene	95.100	109	1.52	10.0		114	0 - 226
Benzo(a)pyrene	159.00	109	1.23	10.0		68.8	0 - 206
Indeno(1,2,3-cd)pyrene	119.00	106	2.10	10.0		88.7	44 - 155
Dibenzo(a,h)anthracene	220.00	226	1.78	10.0		103	45 - 155

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.1\20230206A,B\N823020611.D

Date: 06-FEB-2023 17:18

Client ID:

Sample Info: BLR0683-SRM1,

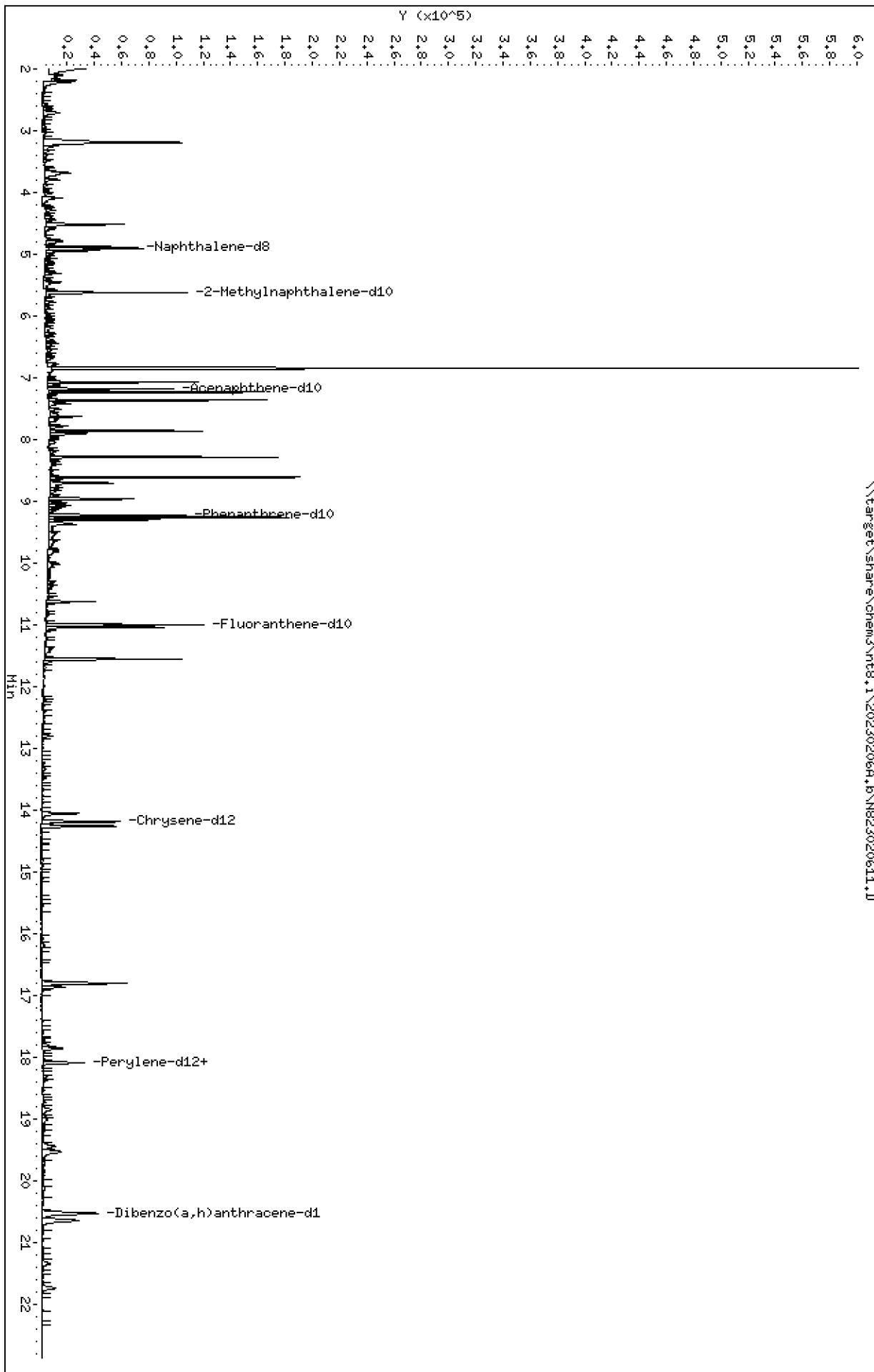
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

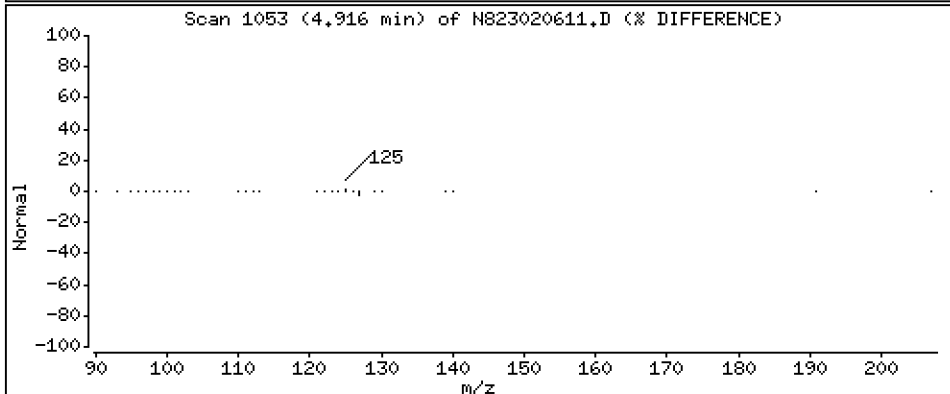
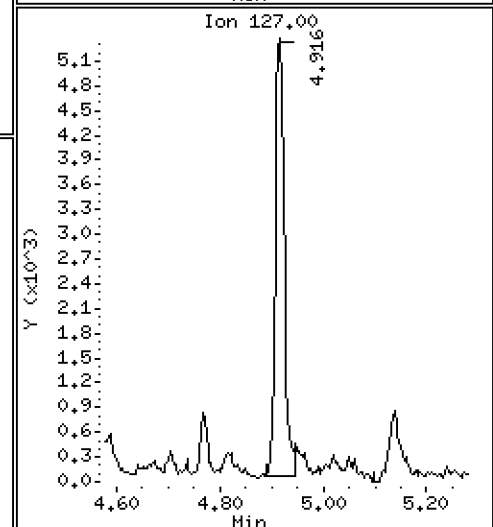
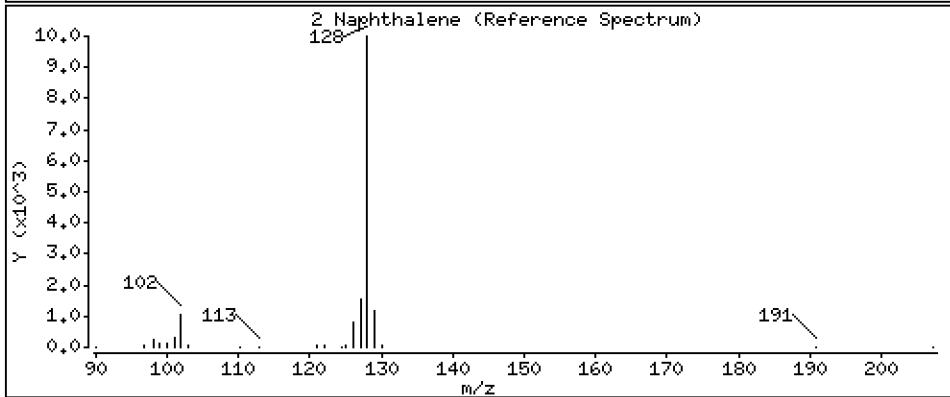
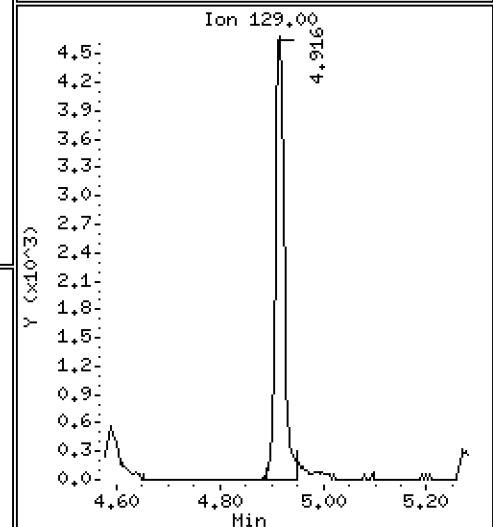
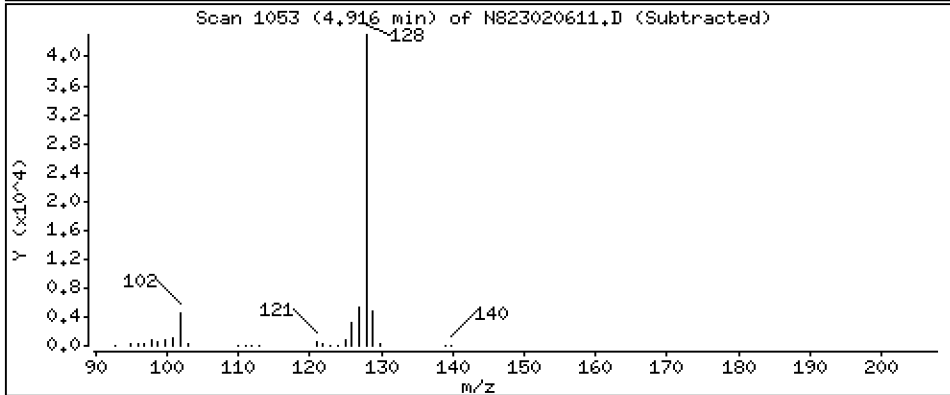
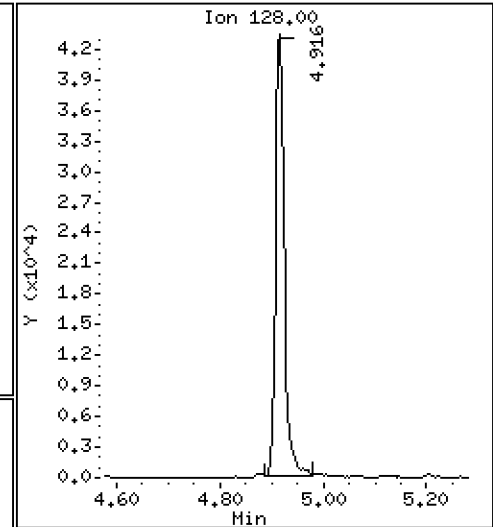
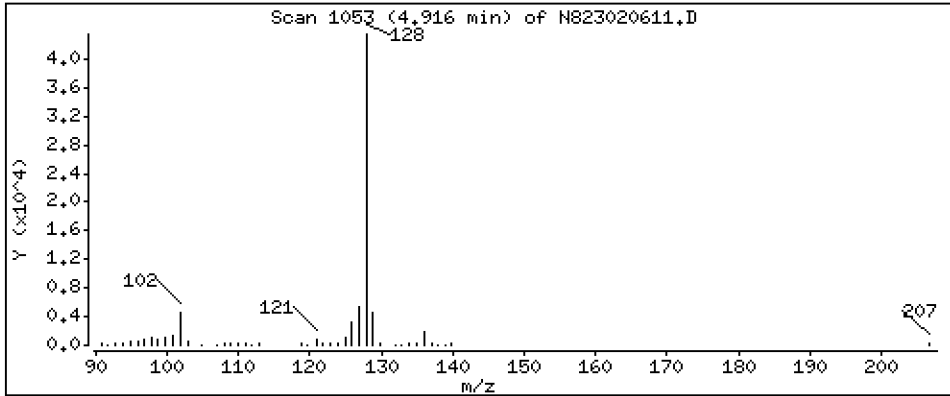
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 2.317 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

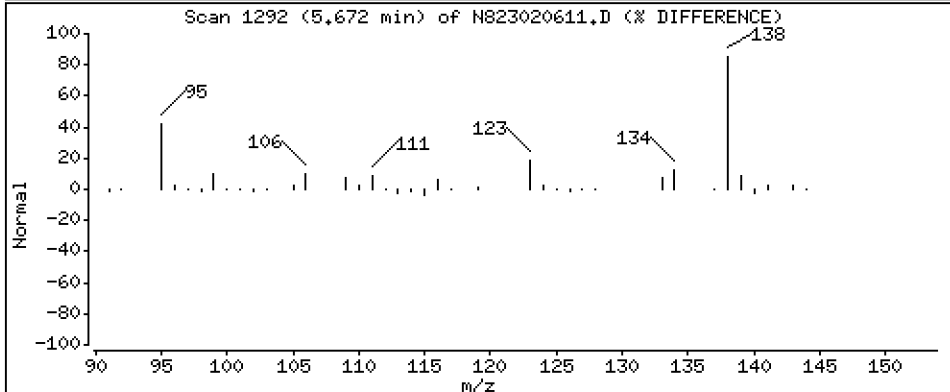
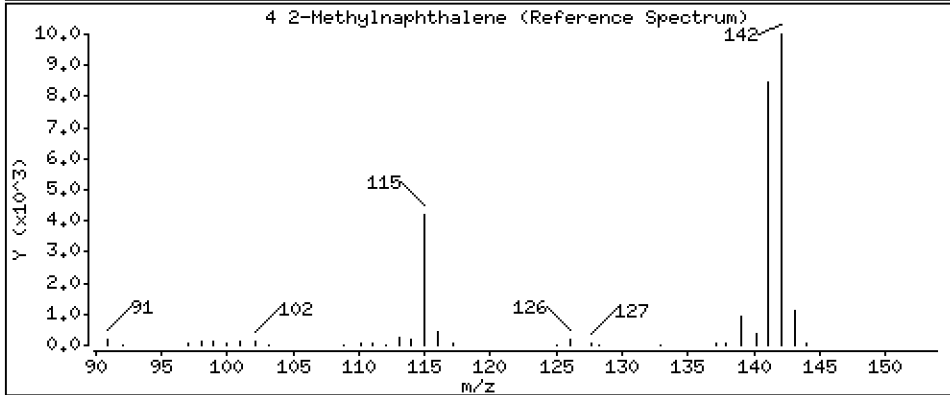
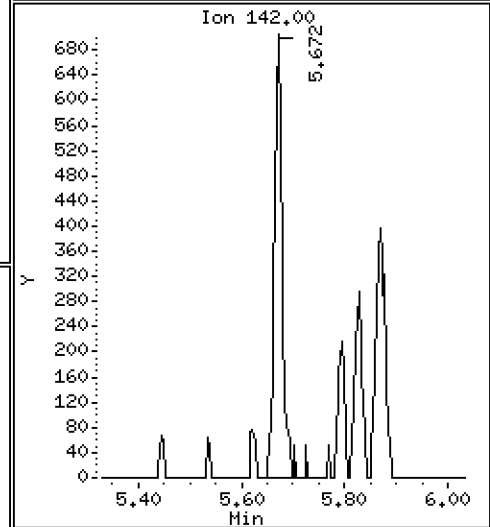
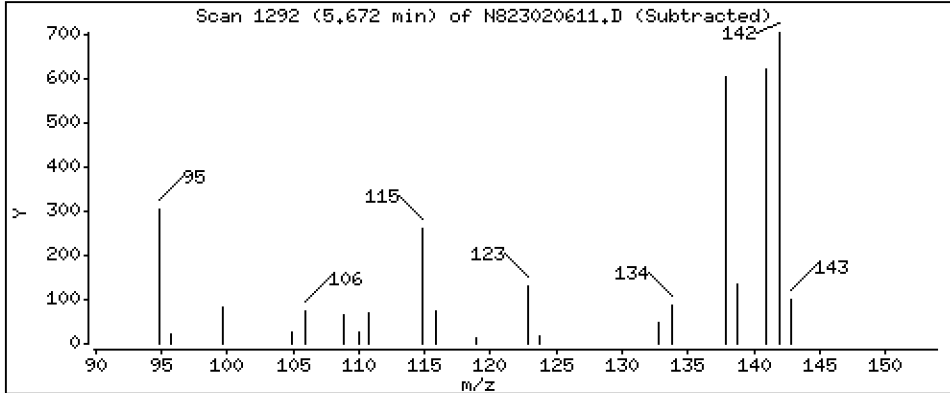
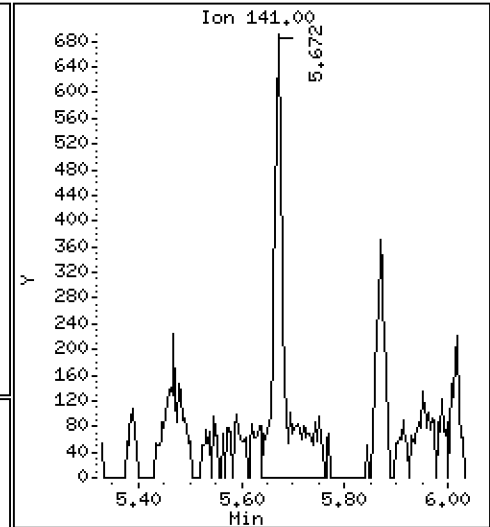
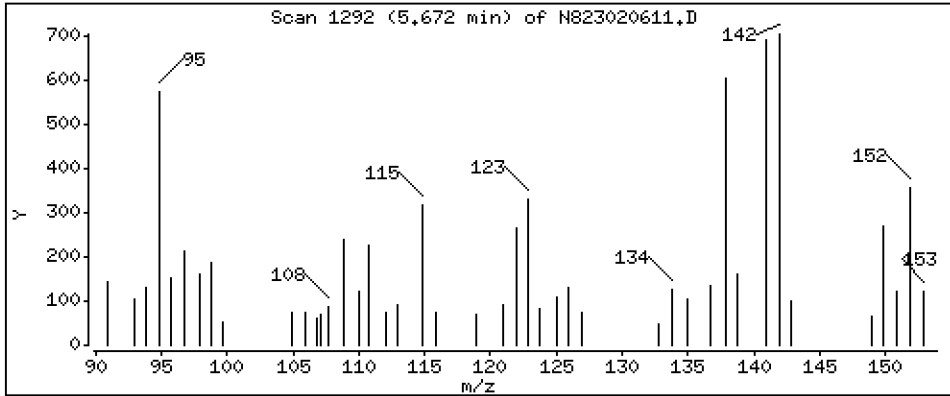
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

4-Methylnaphthalene

Concentration: 0,08433 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

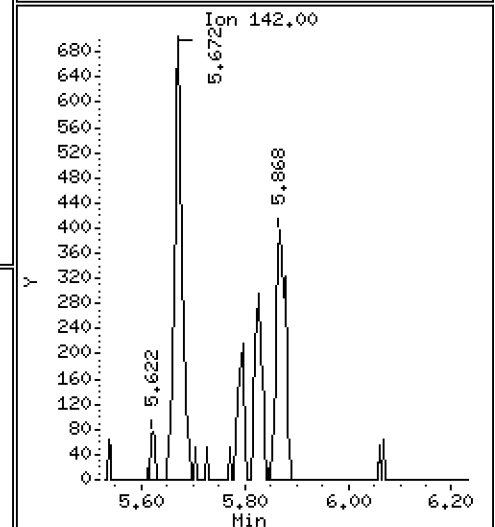
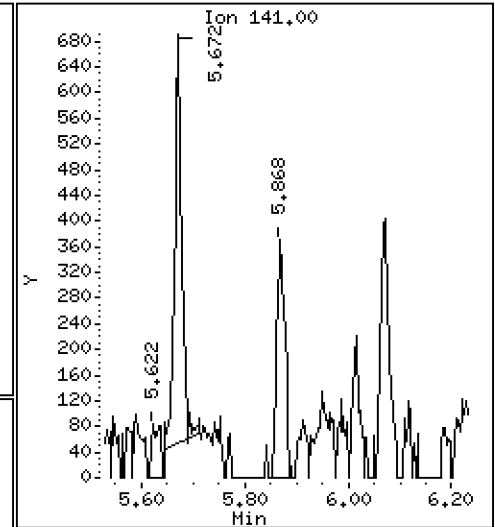
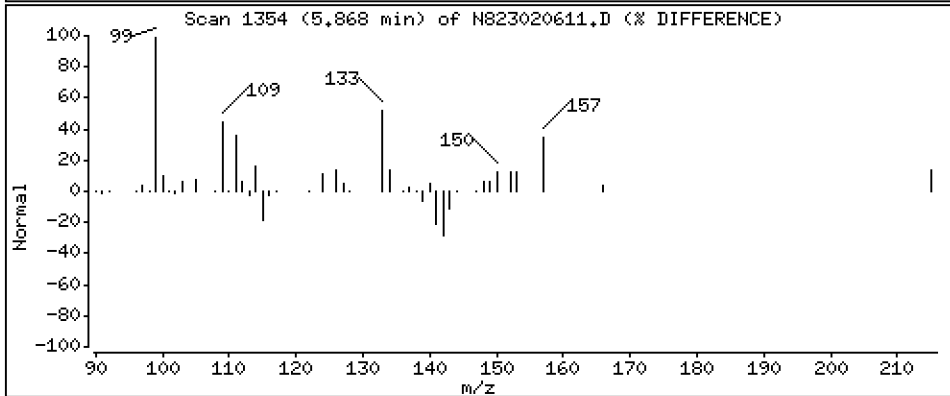
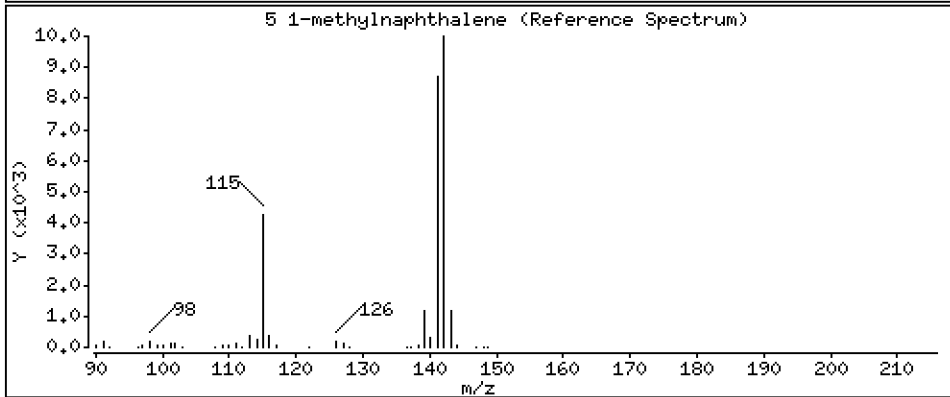
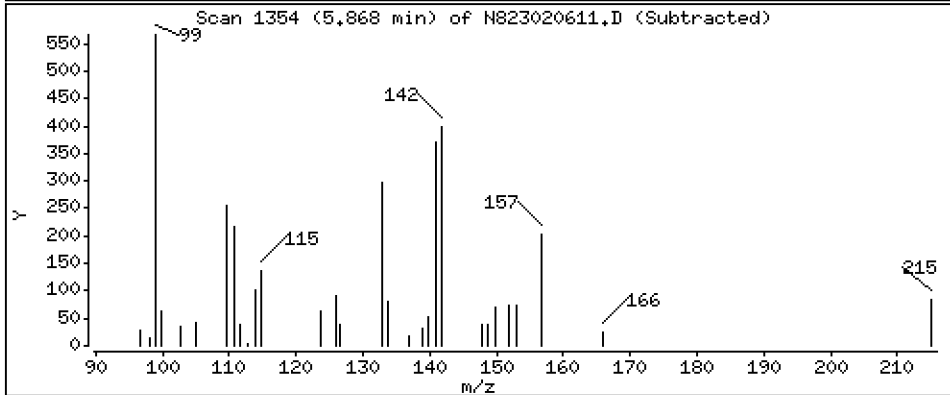
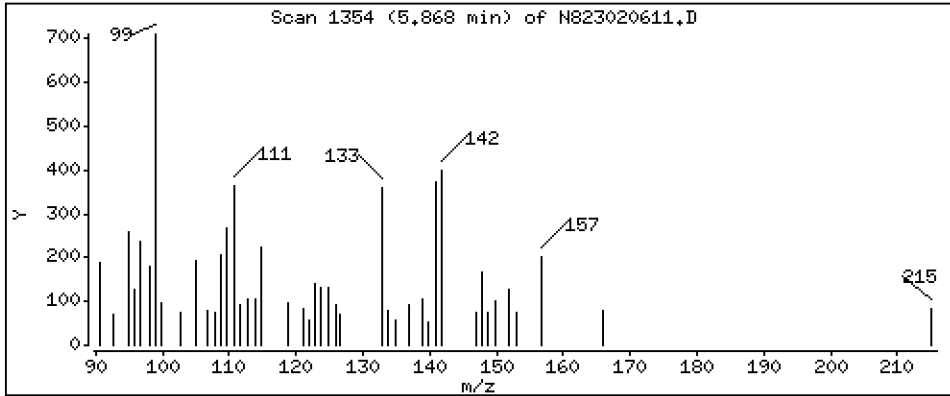
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

5 1-methylnaphthalene

Concentration: 0,03258 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

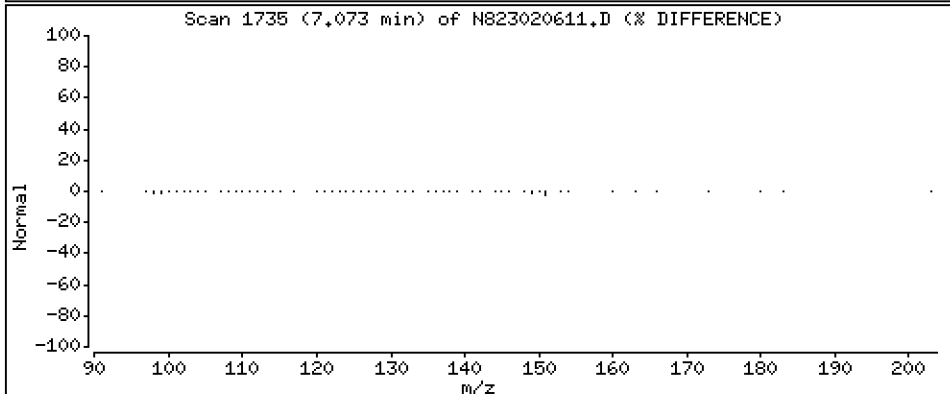
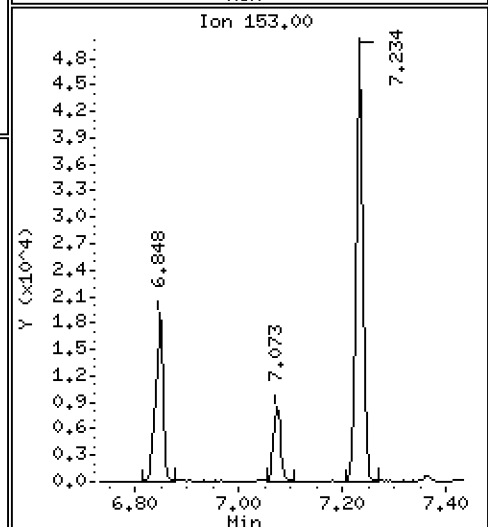
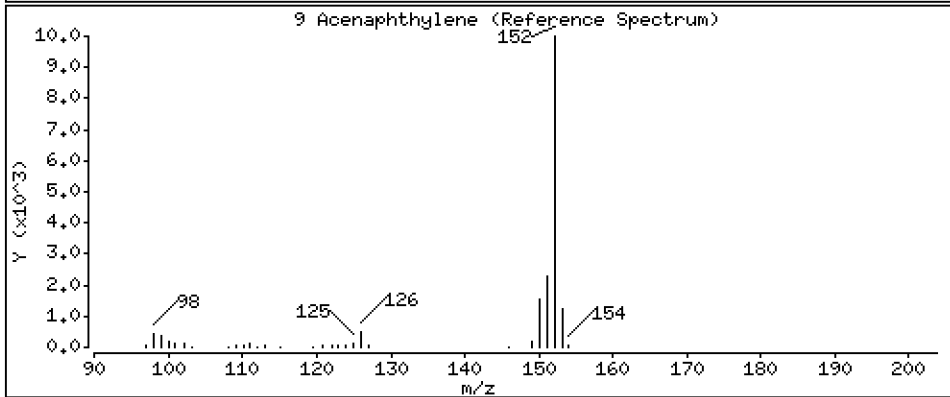
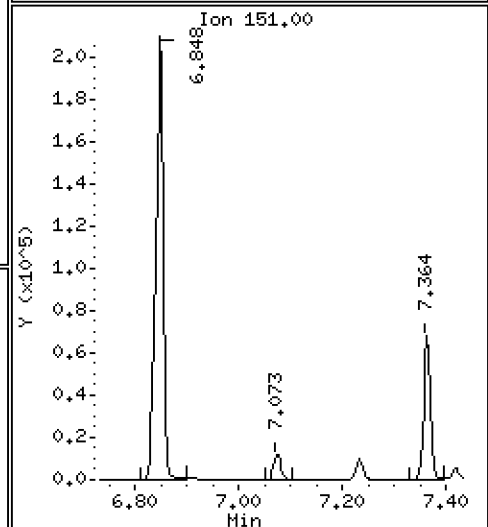
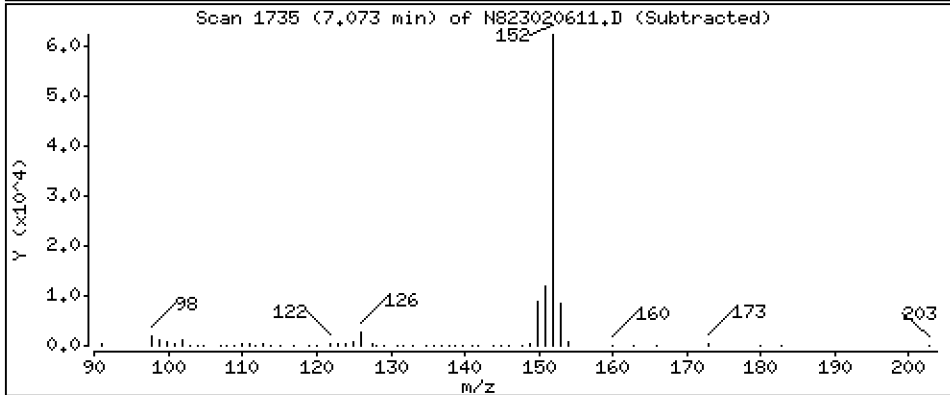
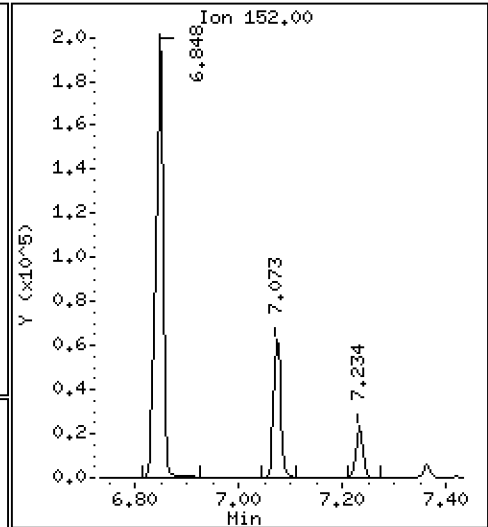
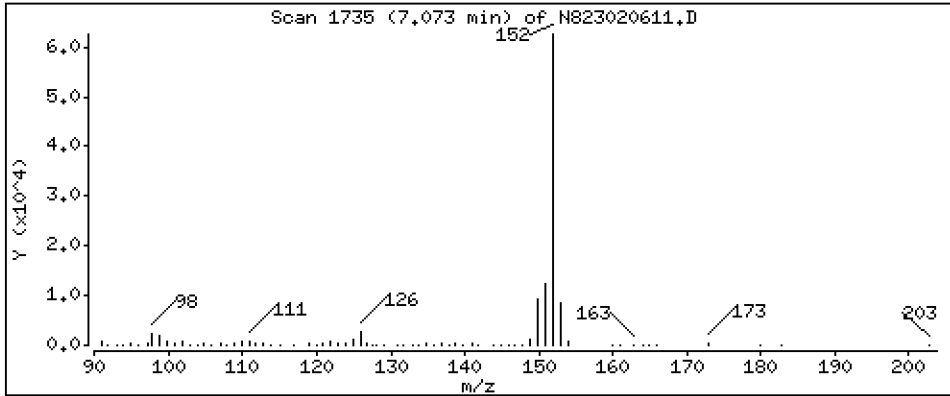
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 3,068 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

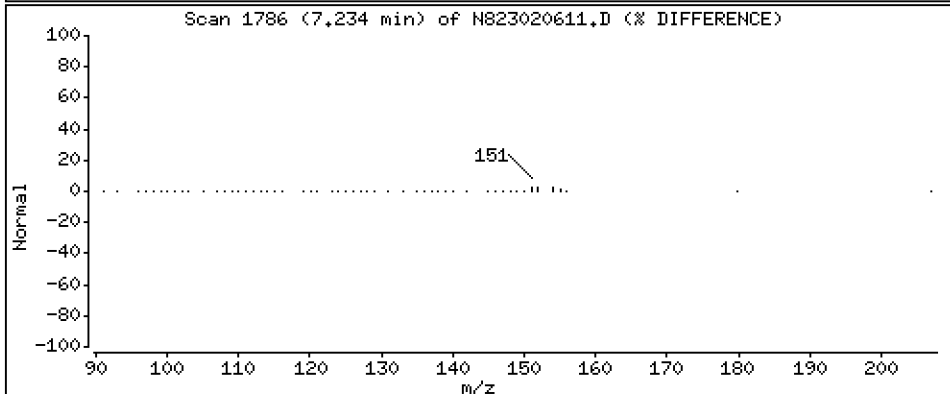
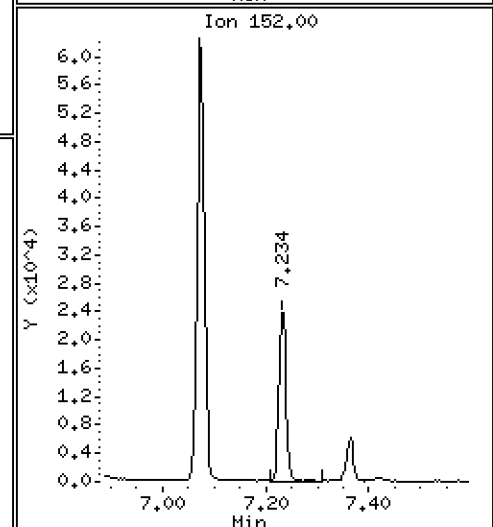
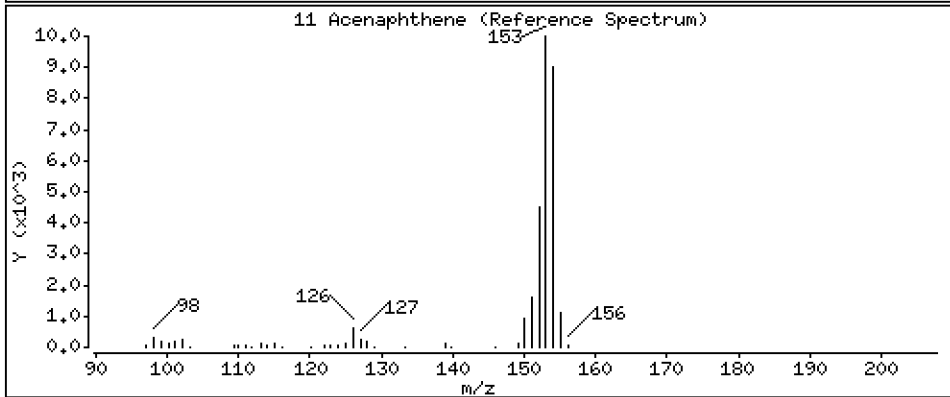
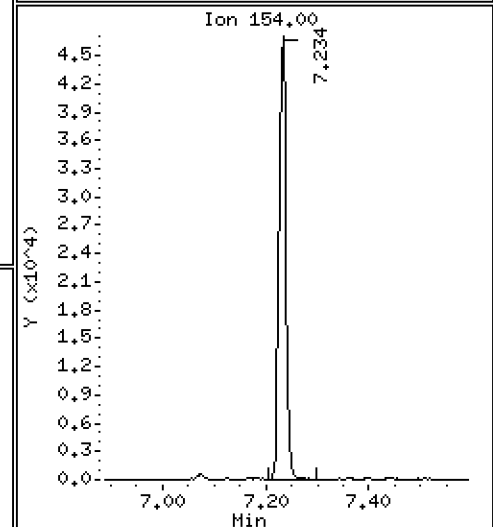
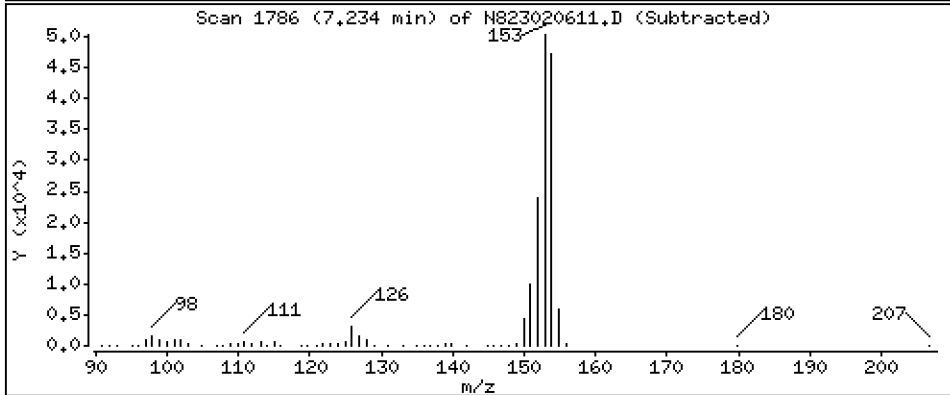
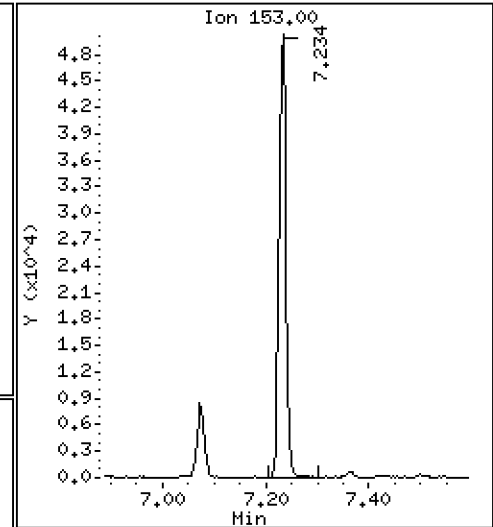
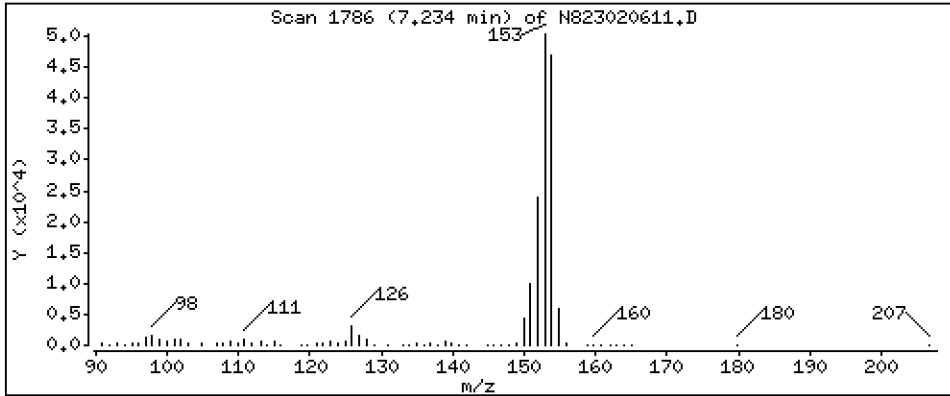
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

11 Acenaphthene

Concentration: 3,505 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

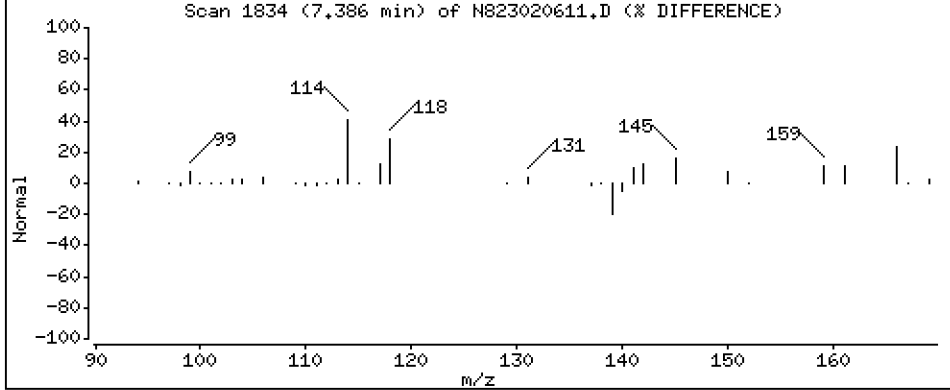
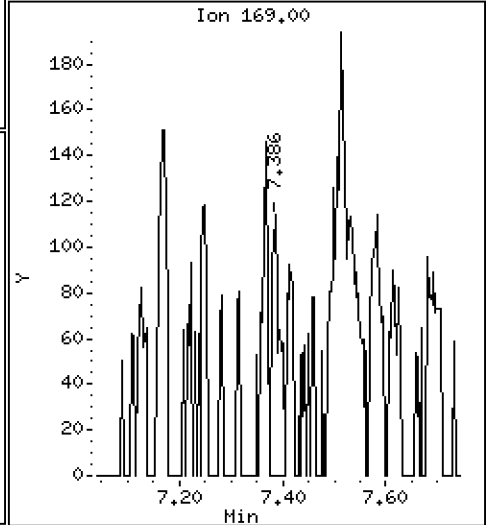
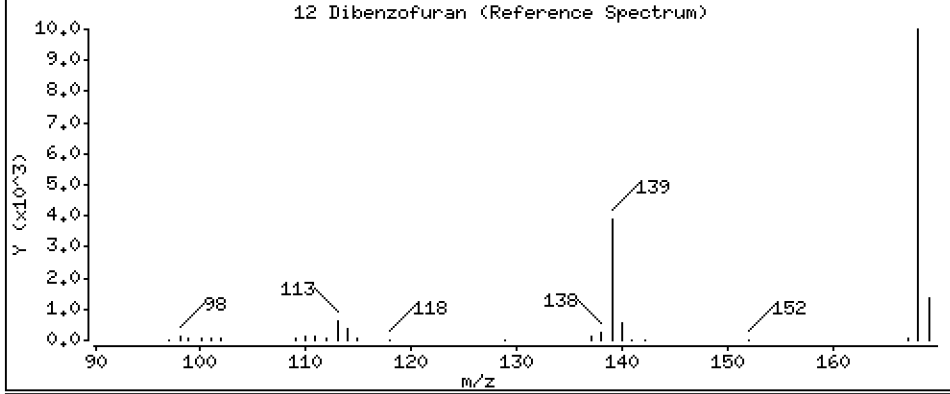
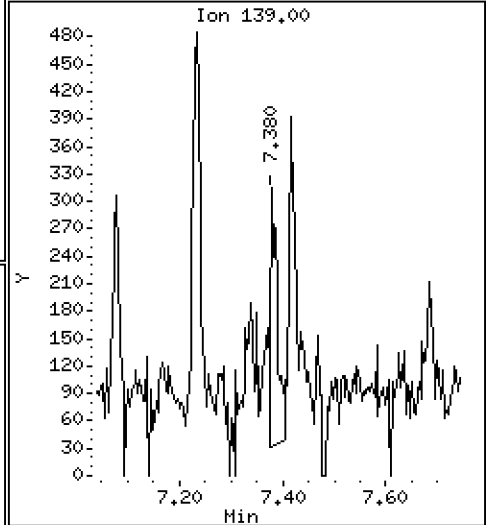
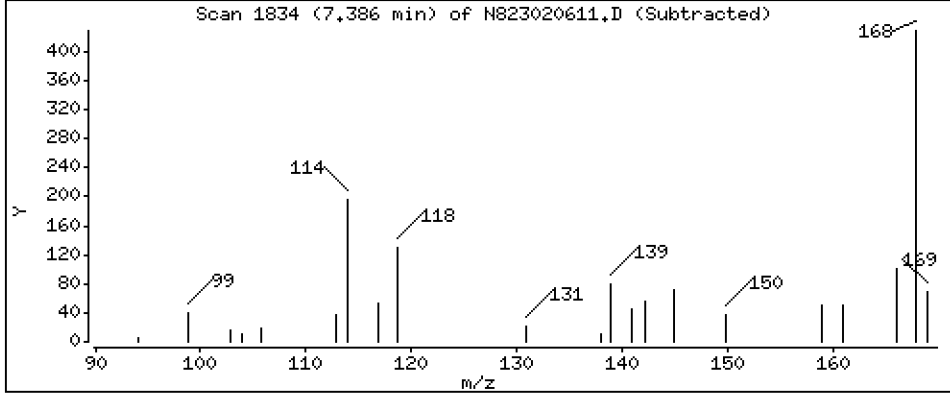
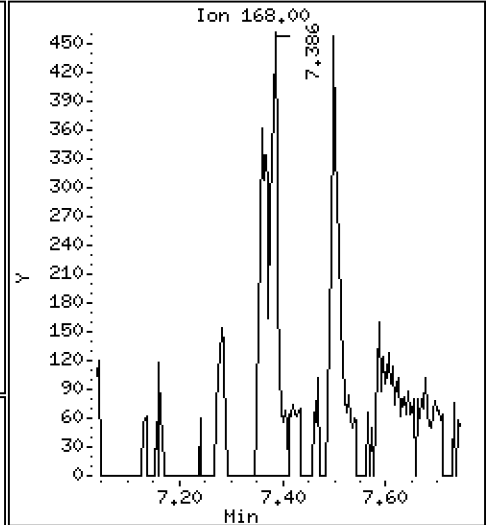
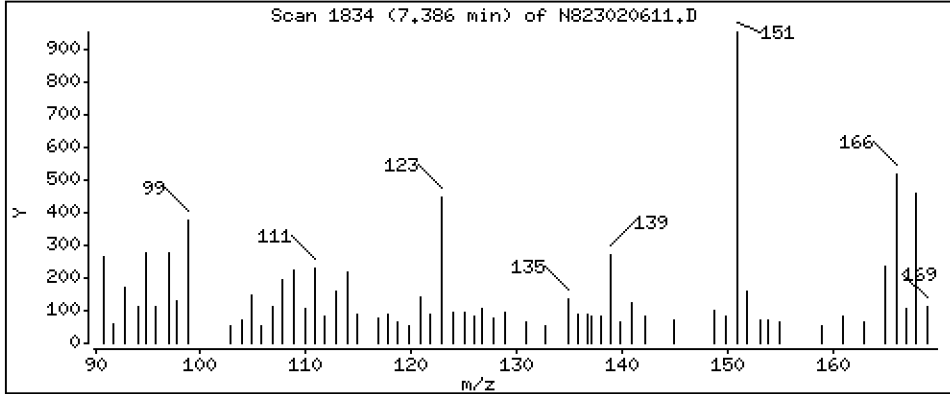
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 0,04013 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

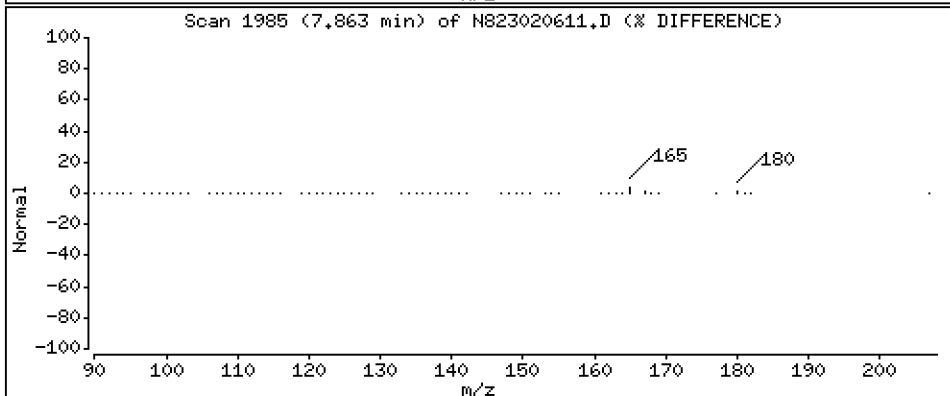
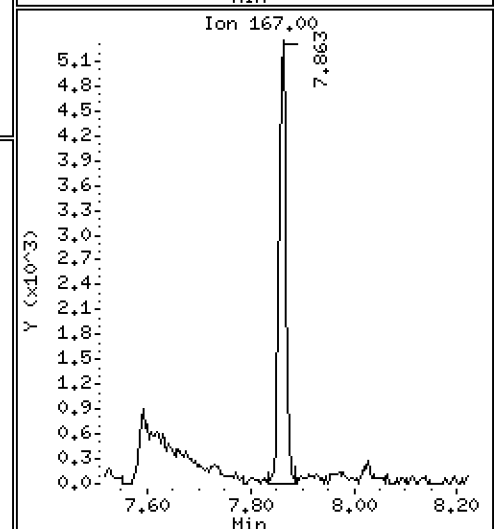
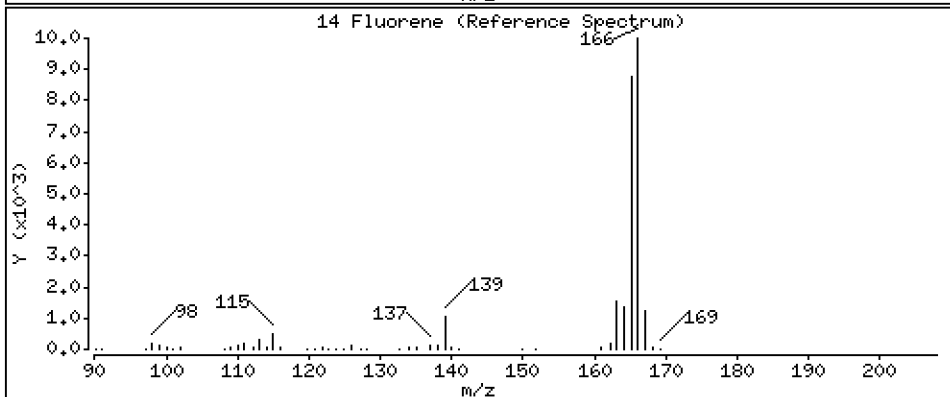
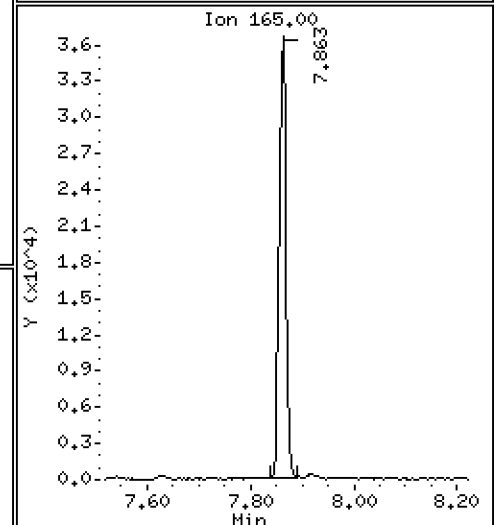
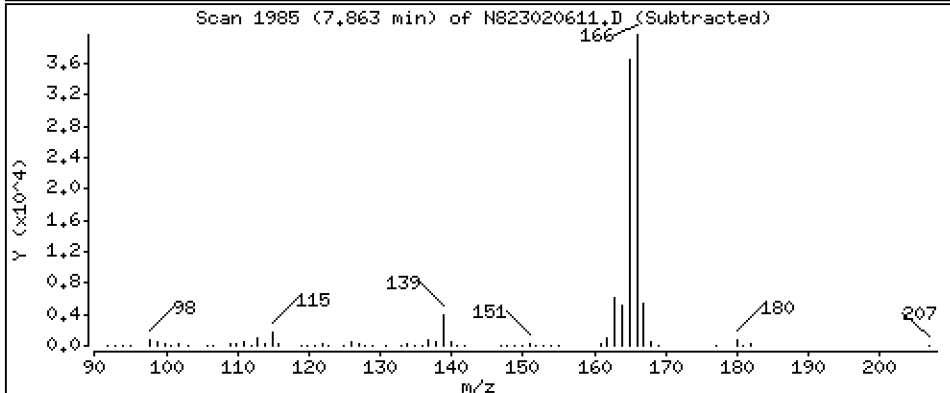
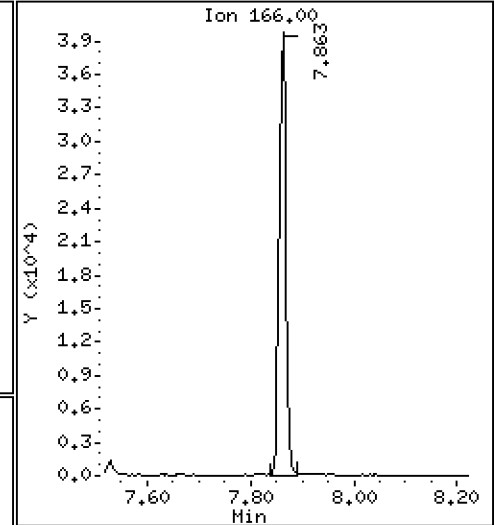
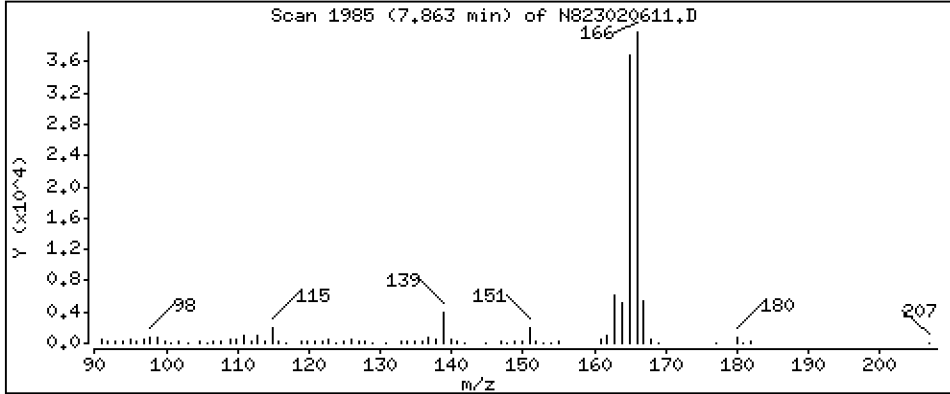
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

14 Fluorene

Concentration: 2,306 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

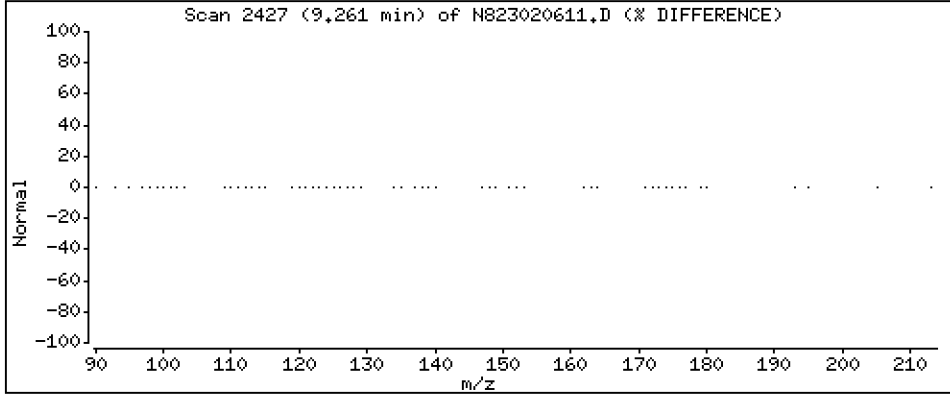
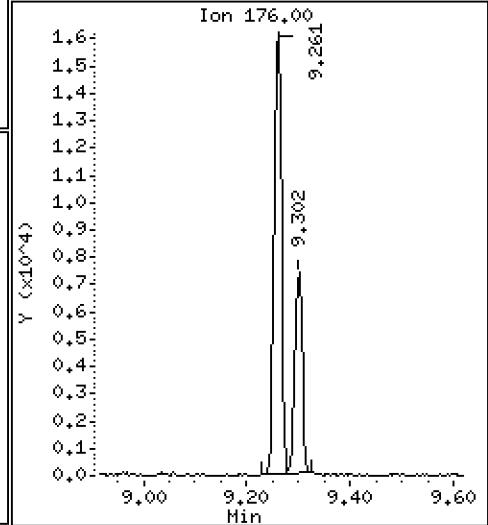
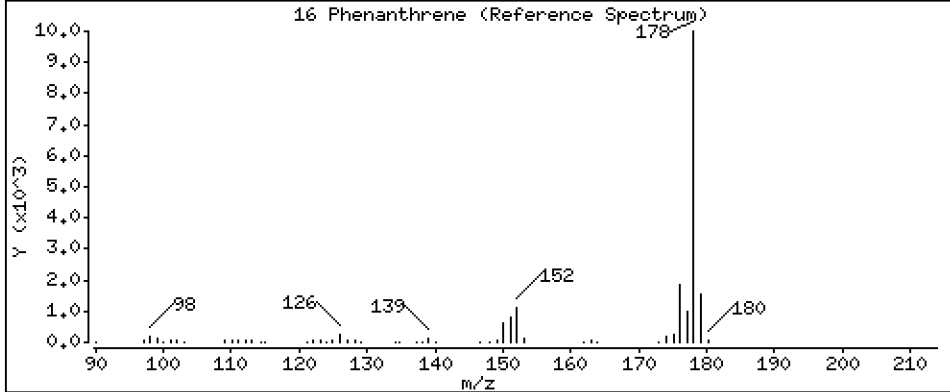
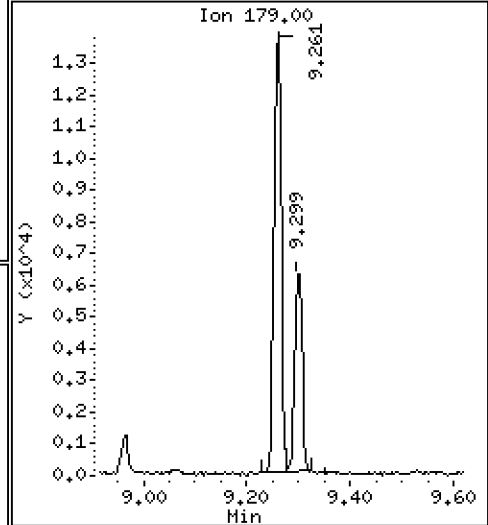
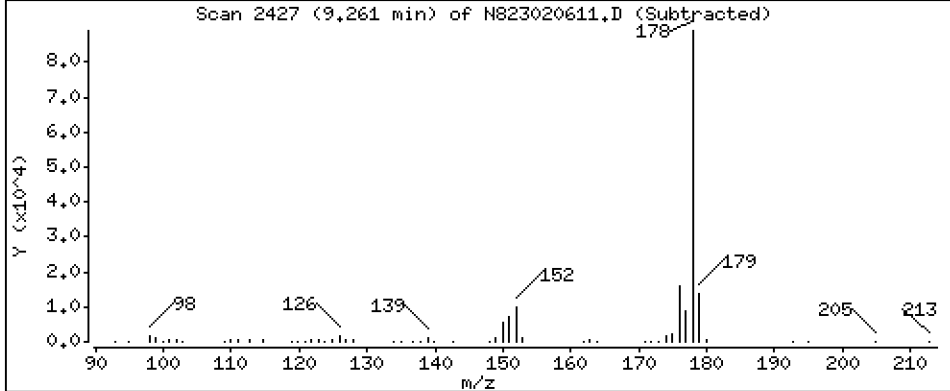
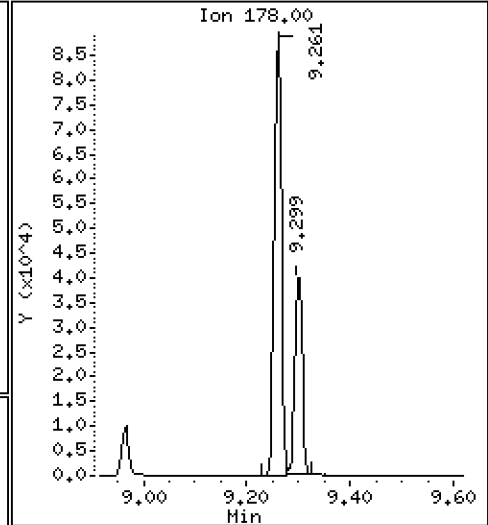
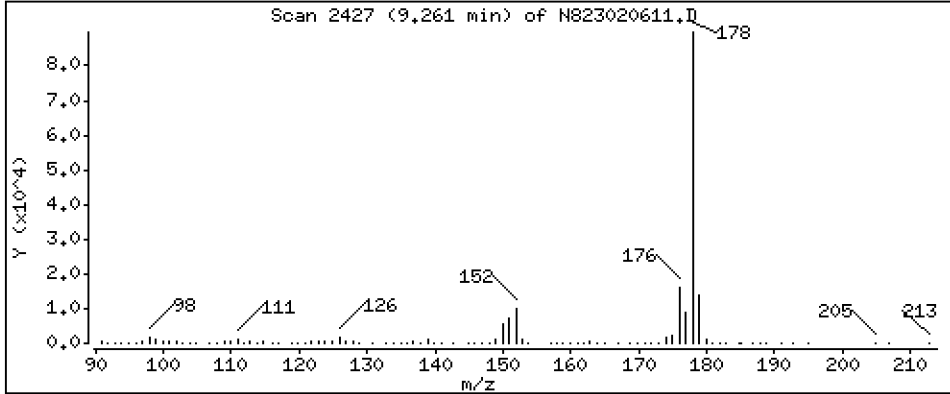
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

16 Phenanthrene

Concentration: 3,781 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

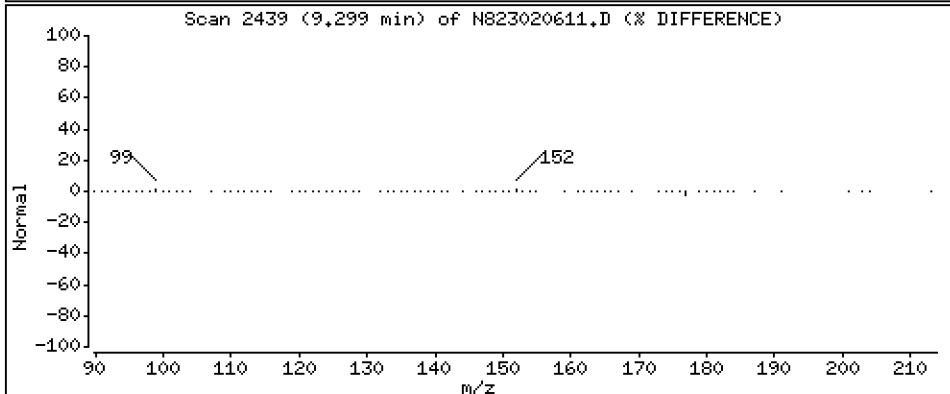
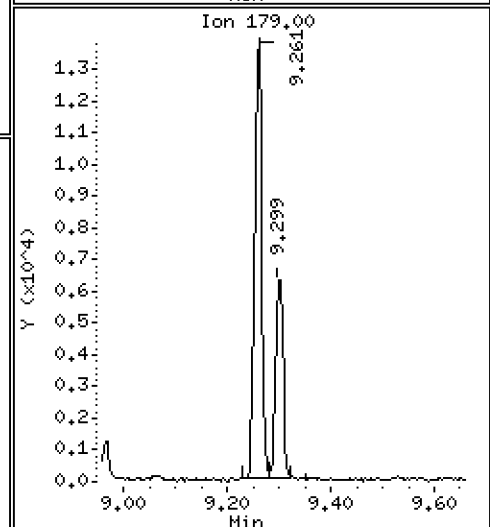
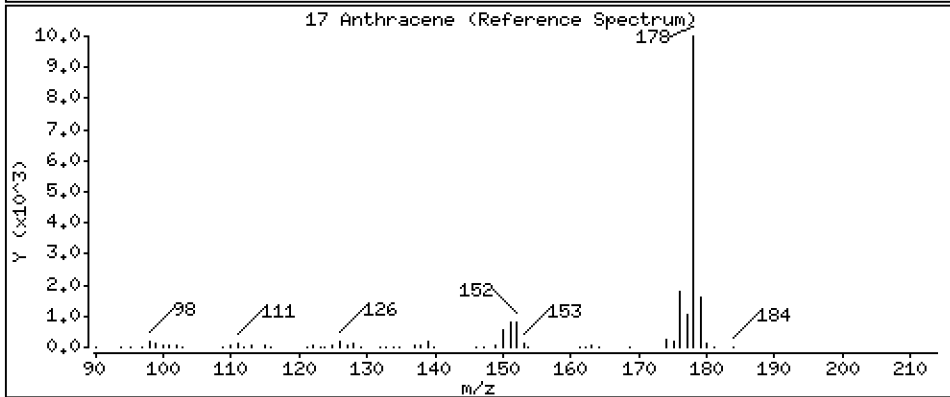
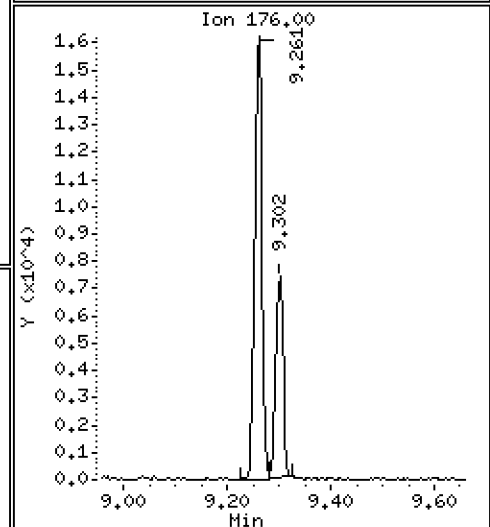
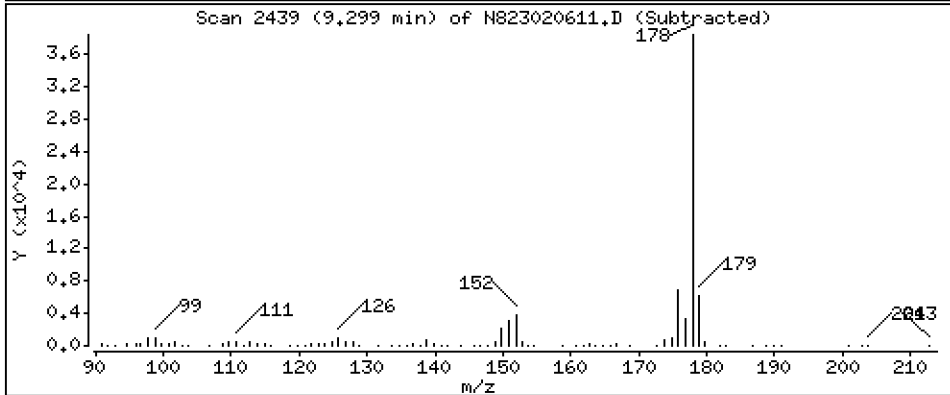
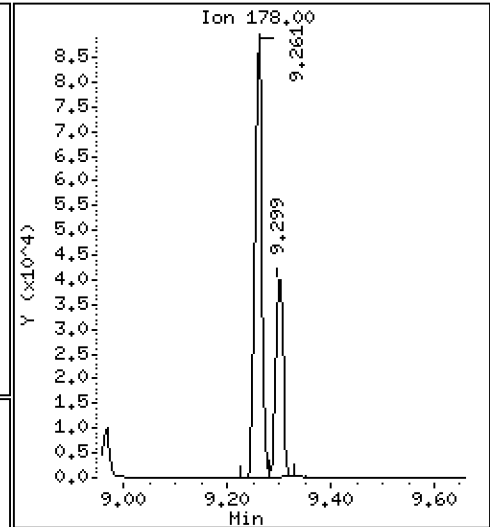
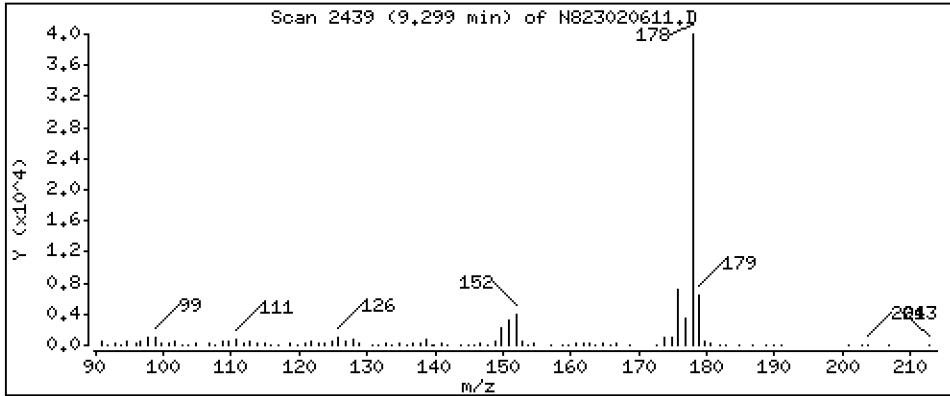
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

17 Anthracene

Concentration: 1,932 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

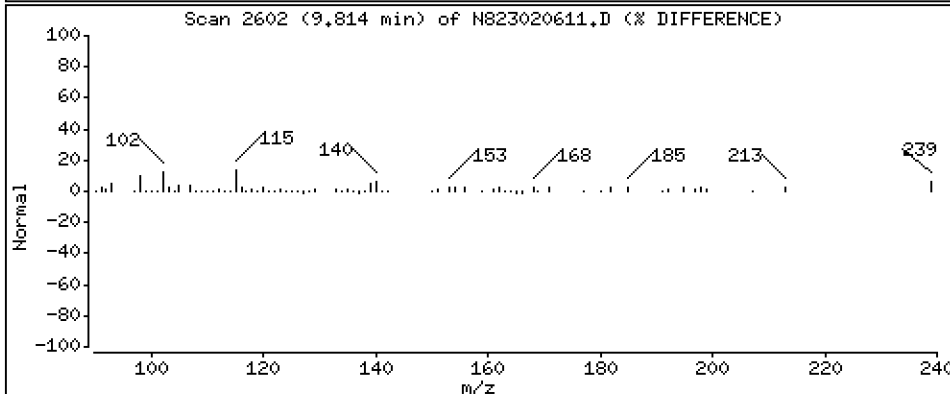
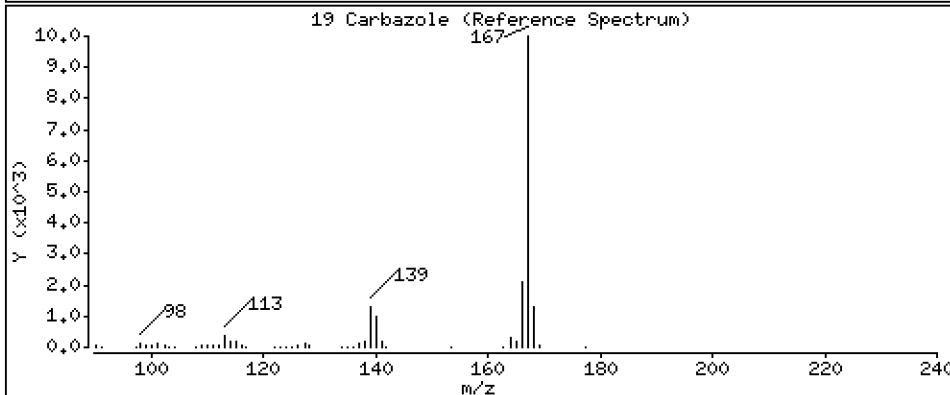
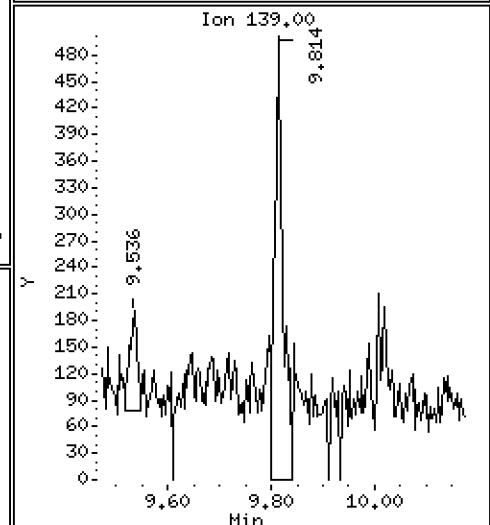
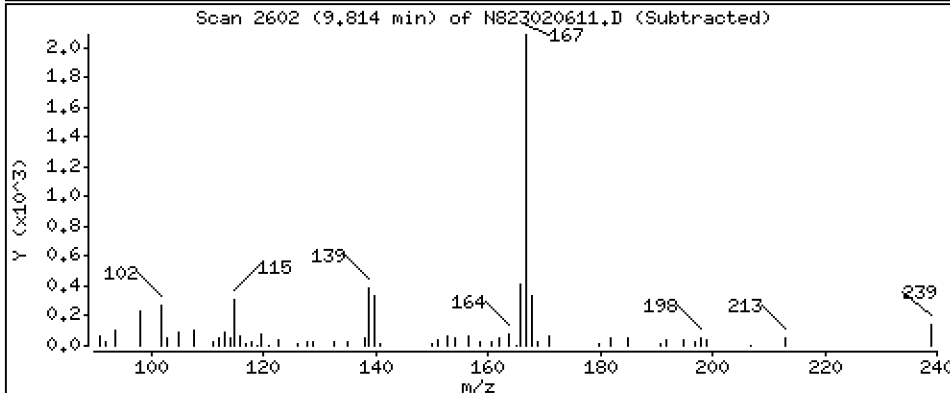
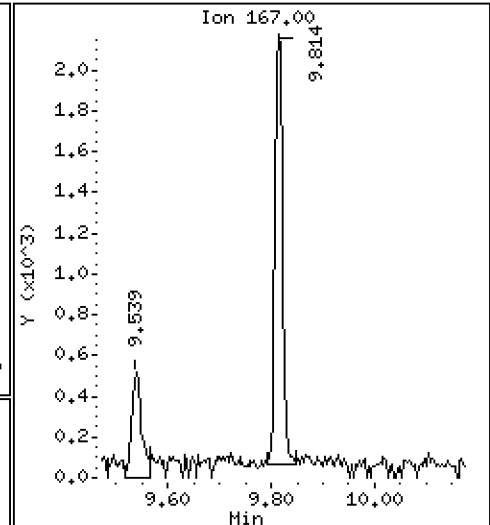
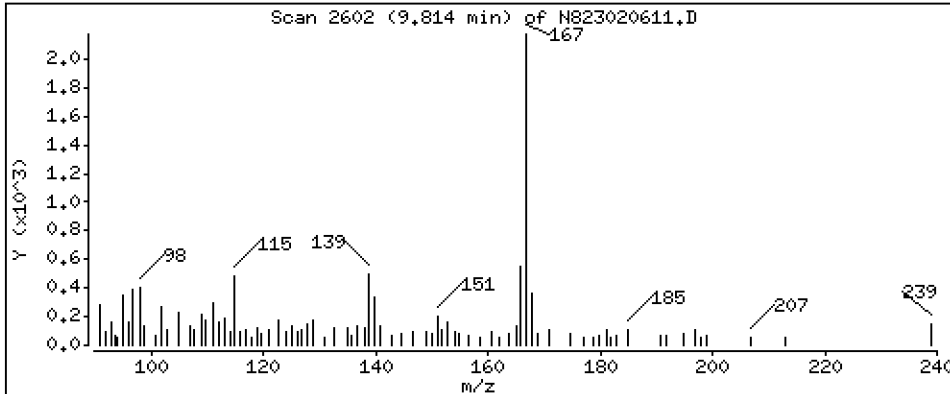
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

19 Carbazole

Concentration: 0,1191 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

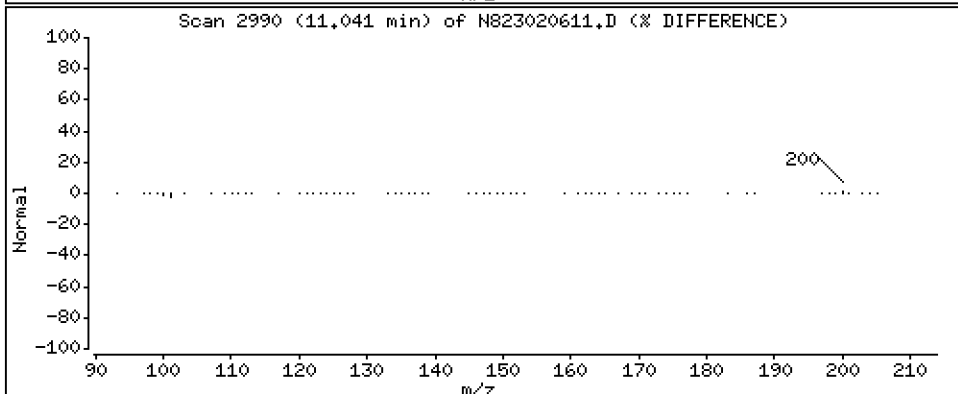
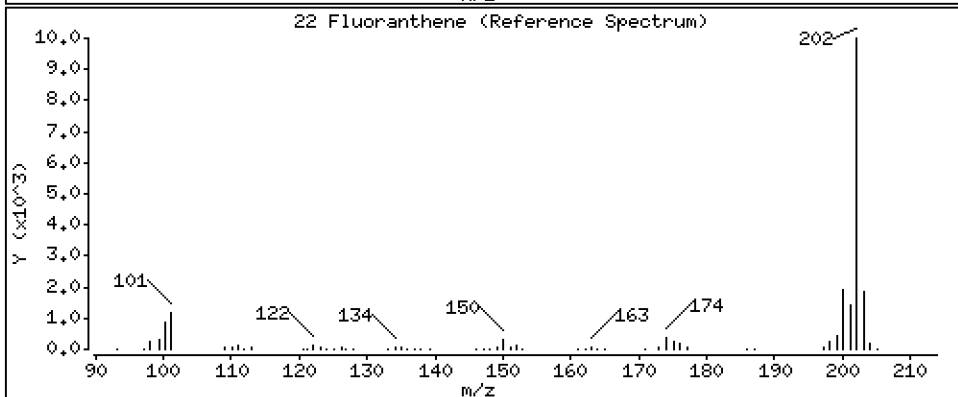
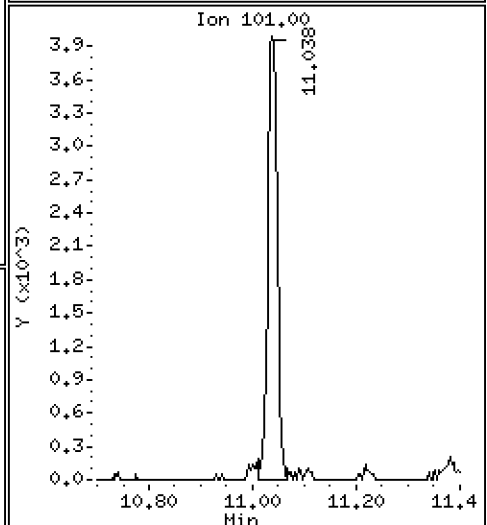
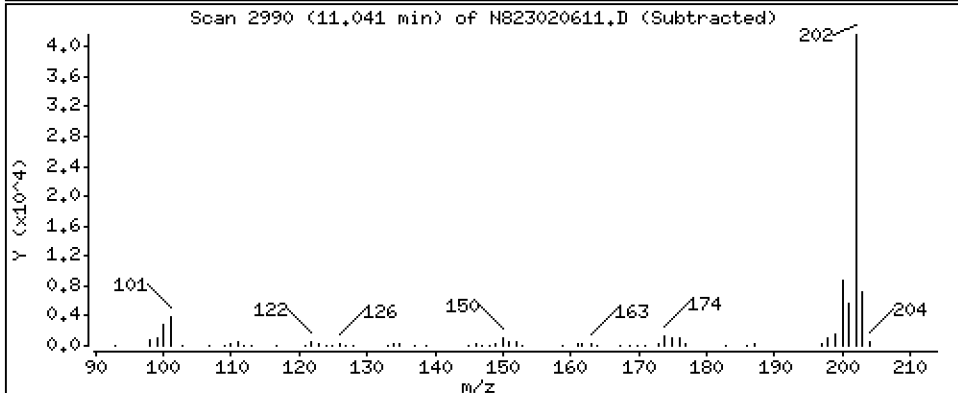
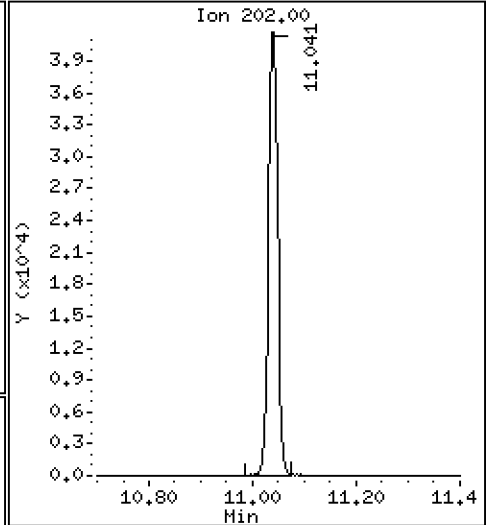
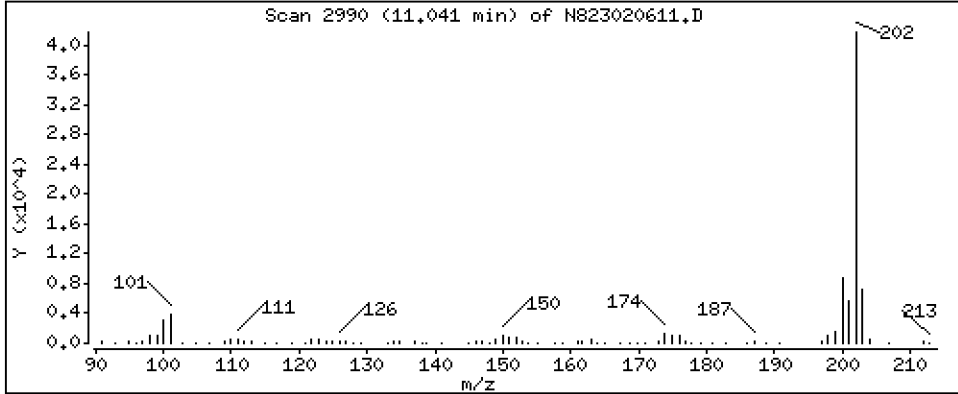
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,131 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

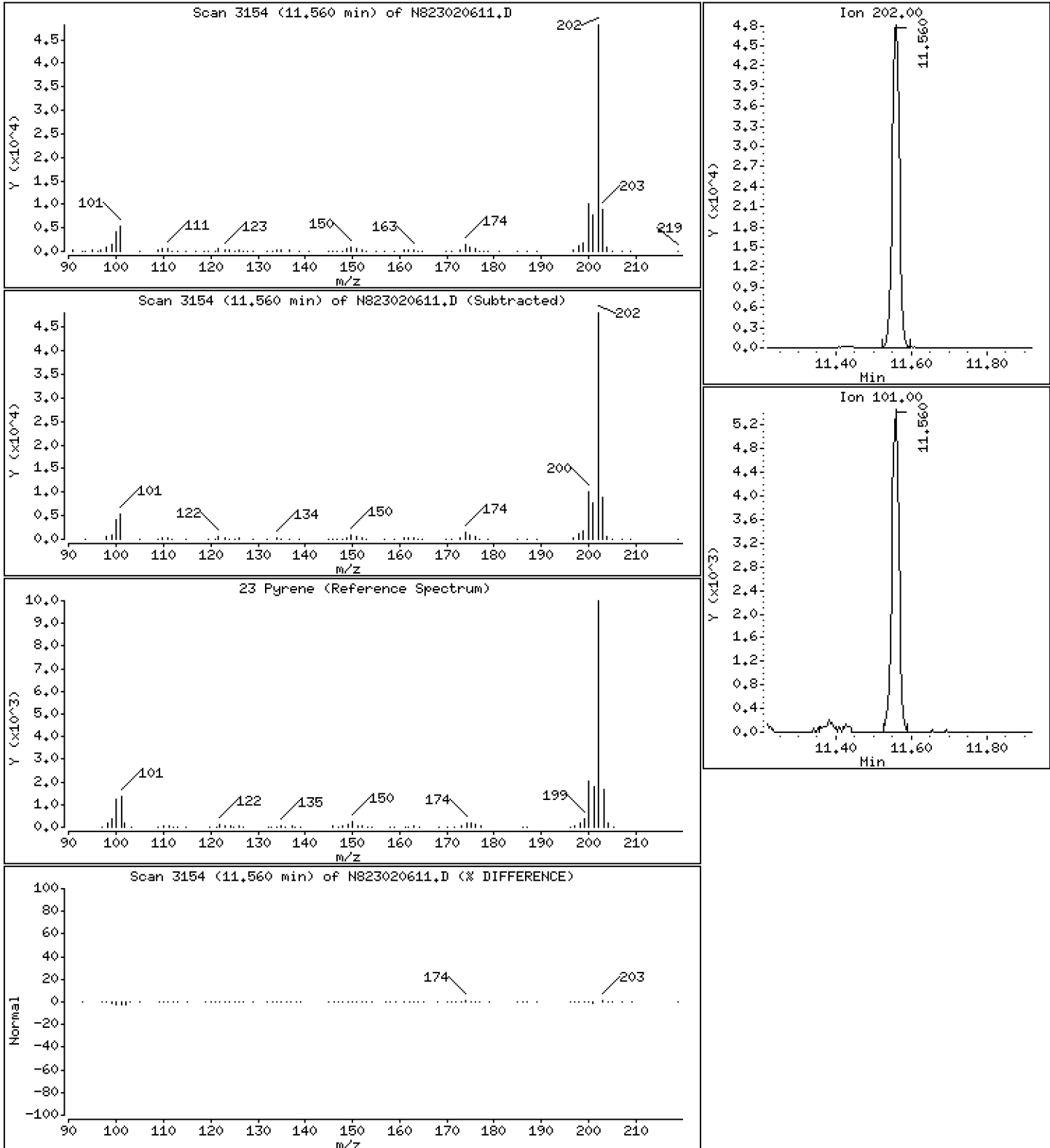
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 2,777 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

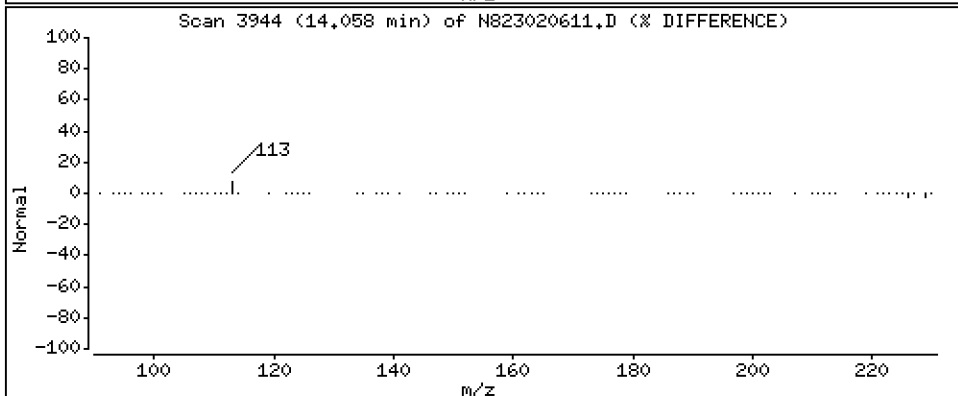
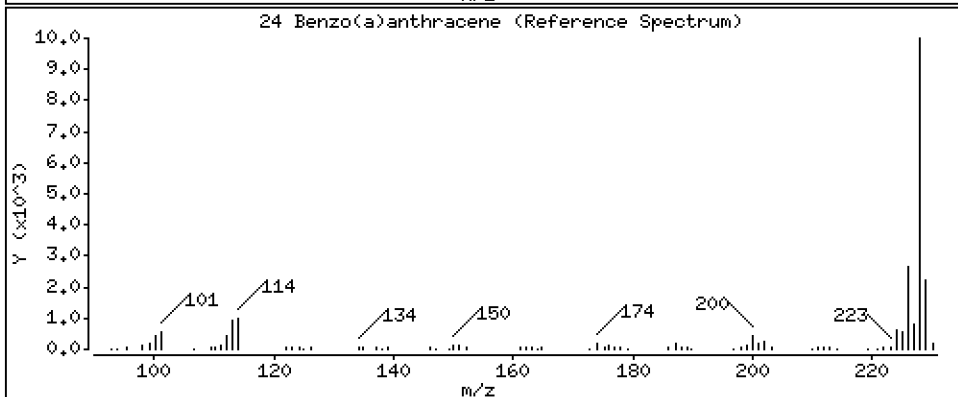
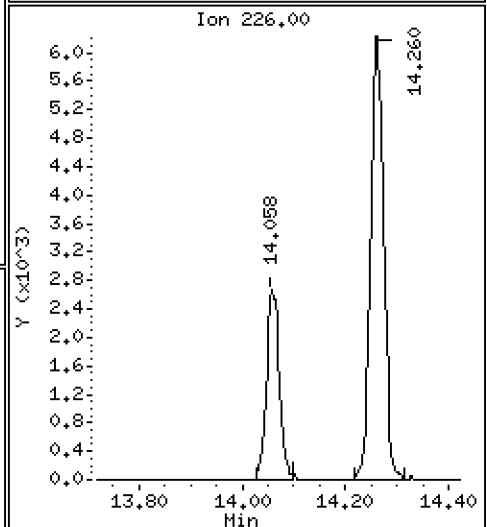
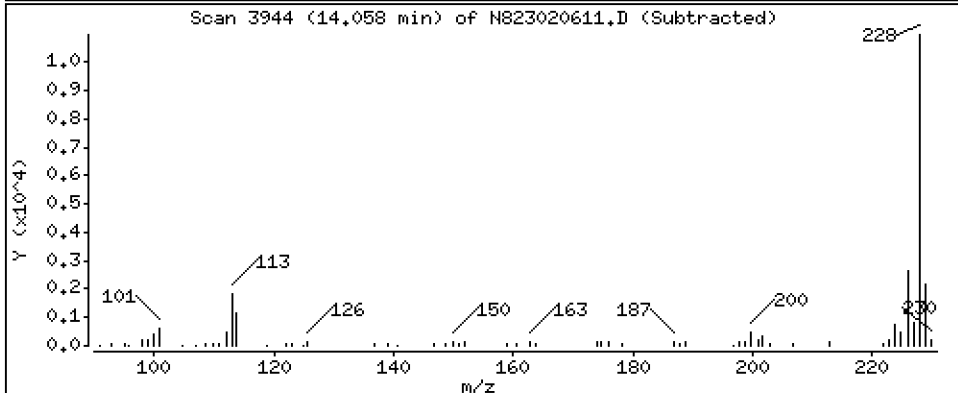
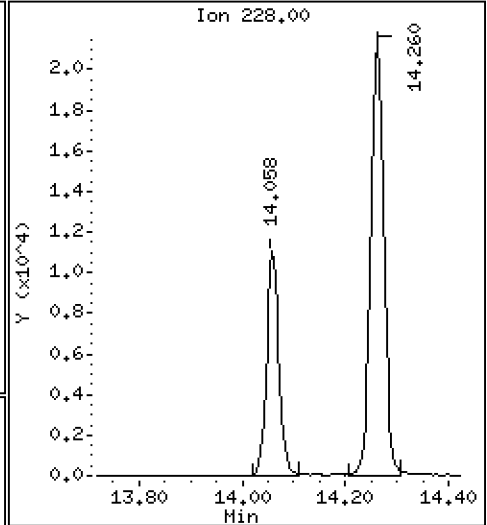
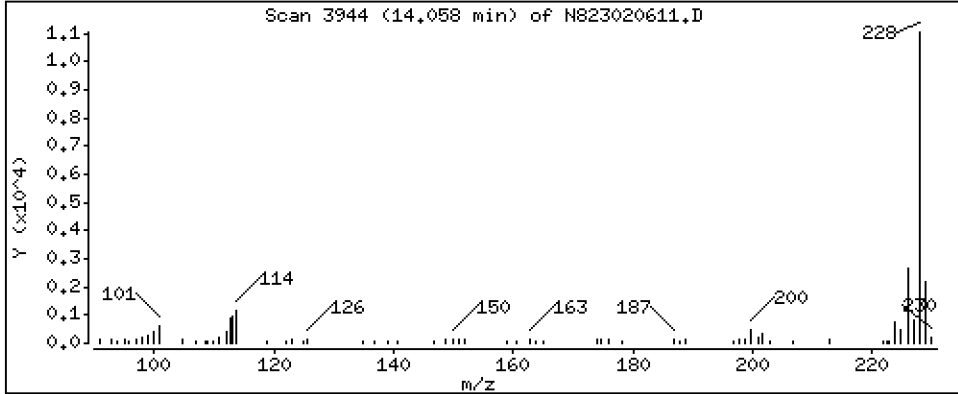
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

24 Benzo(a)anthracene

Concentration: 0,8869 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

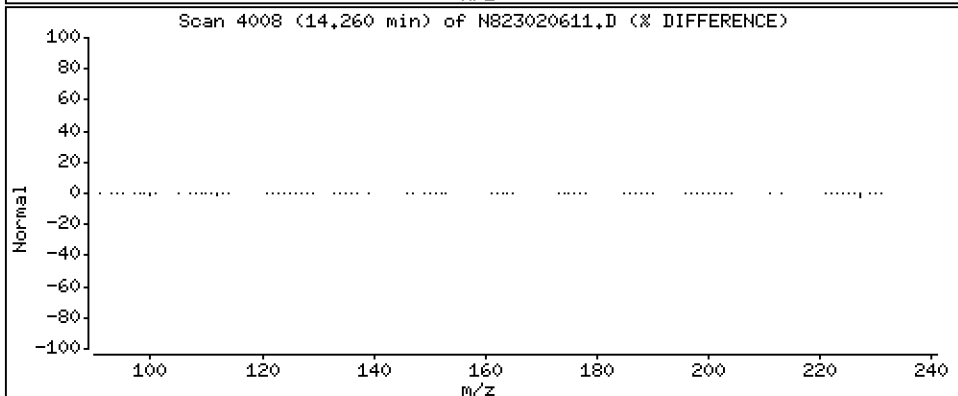
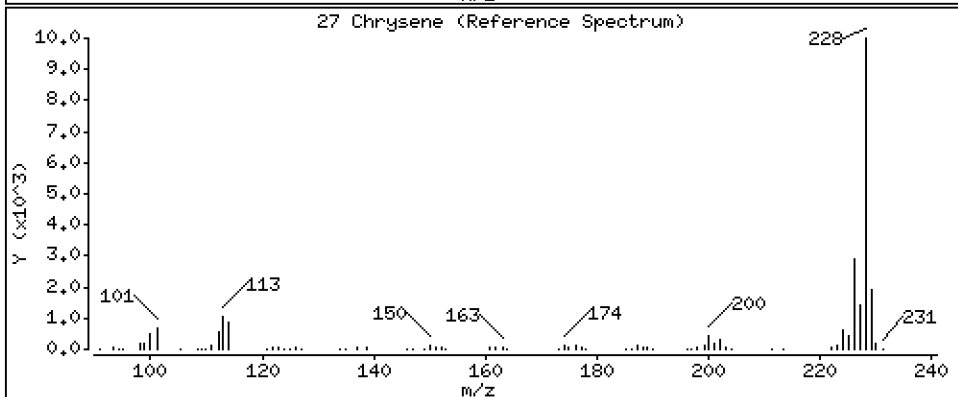
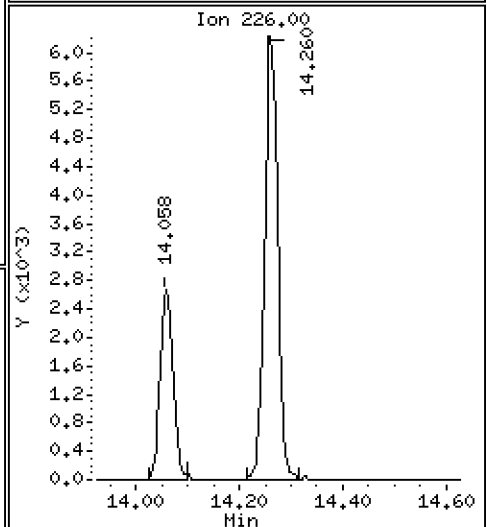
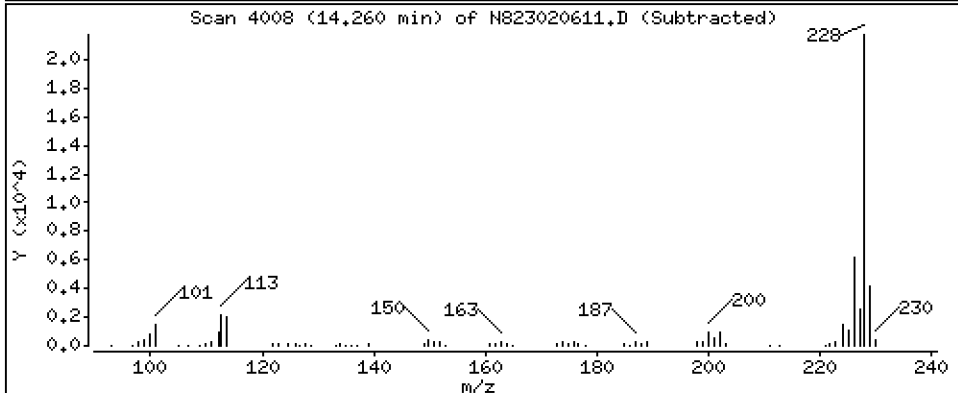
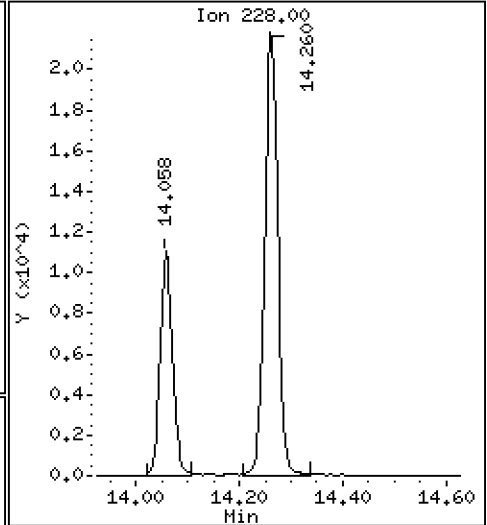
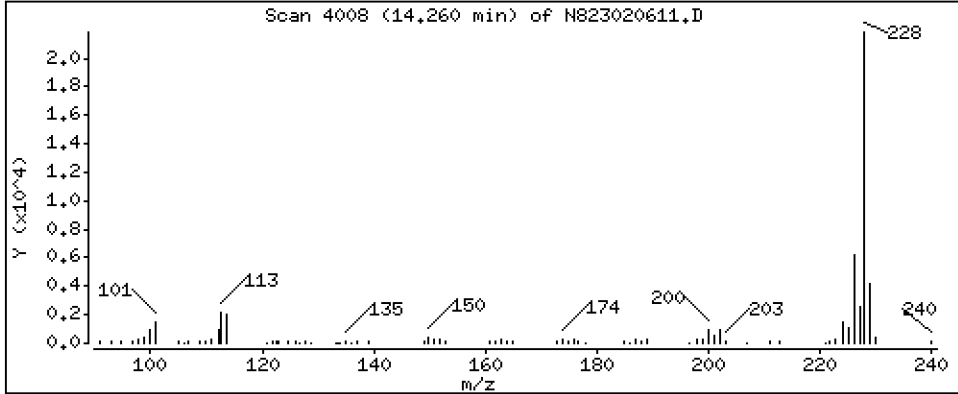
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 1,762 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

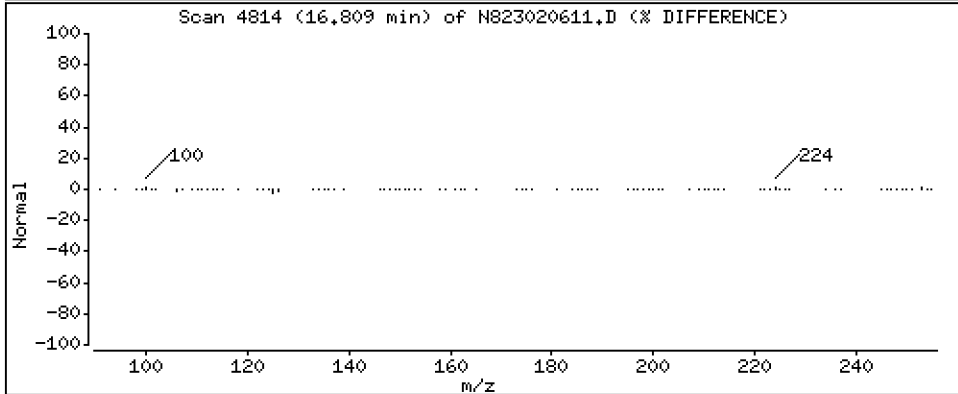
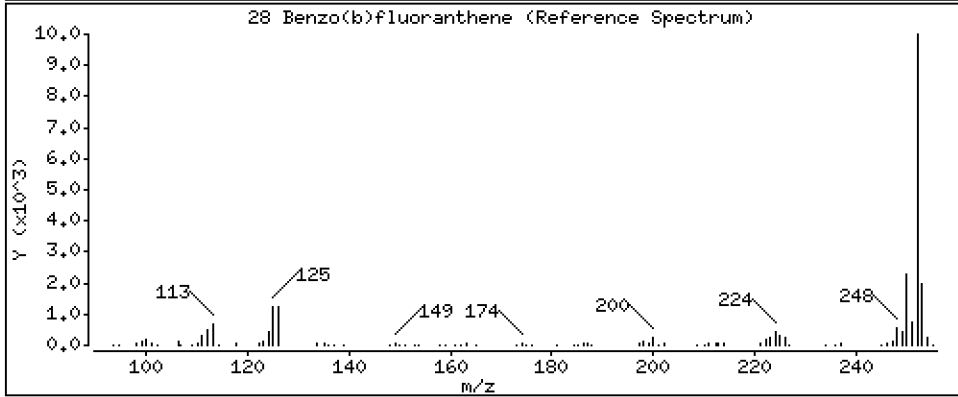
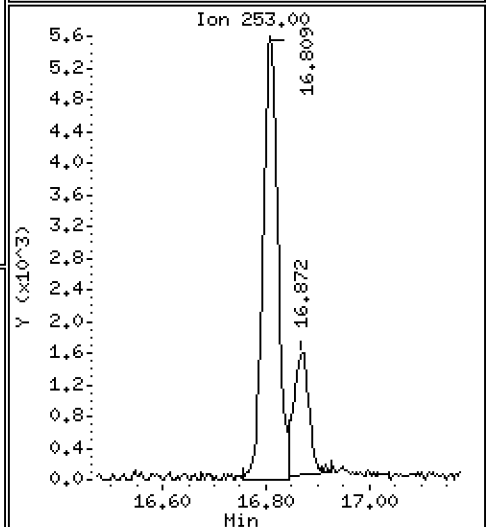
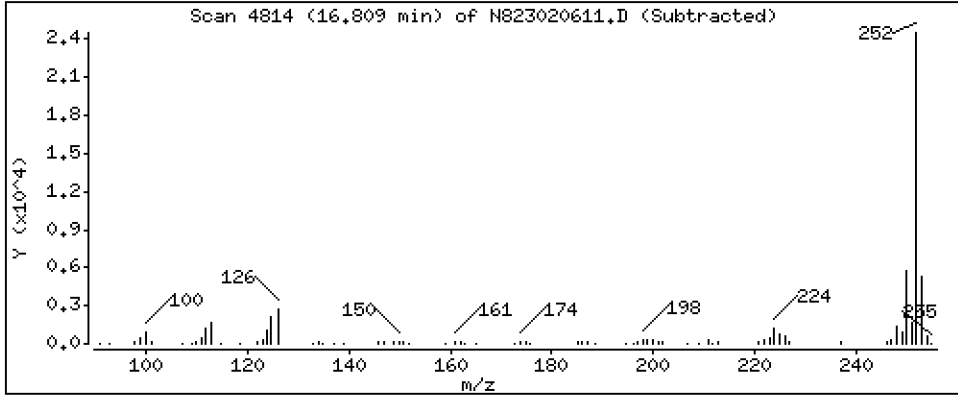
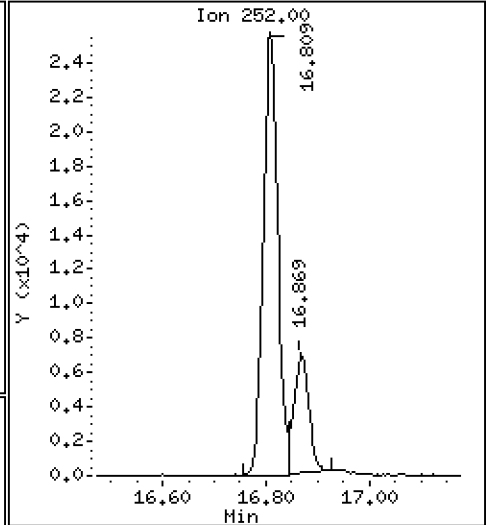
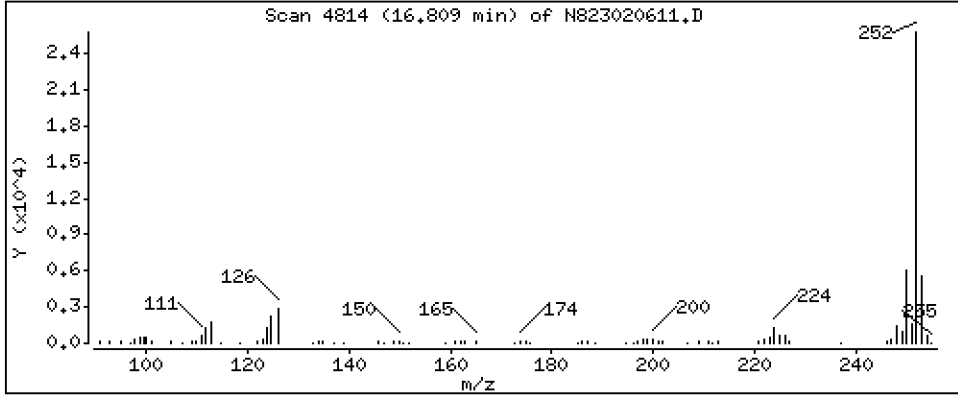
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 3,832 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

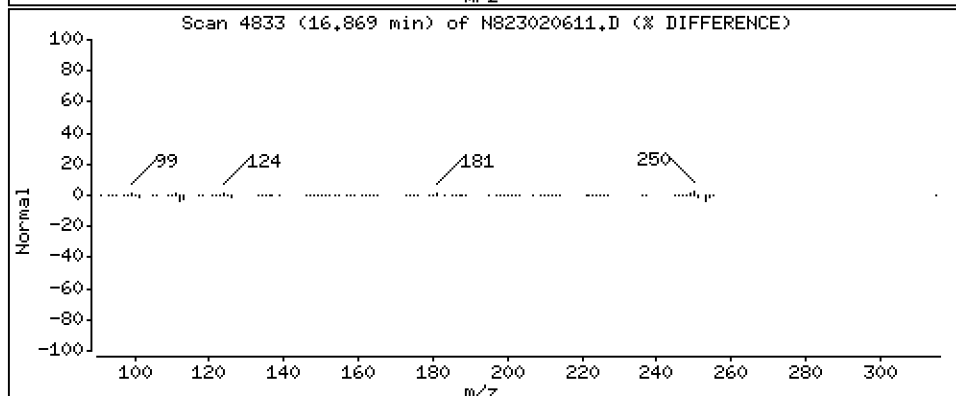
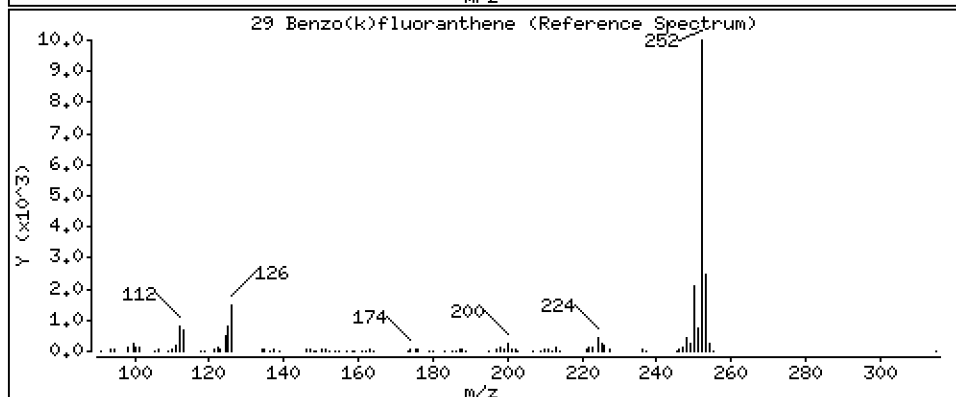
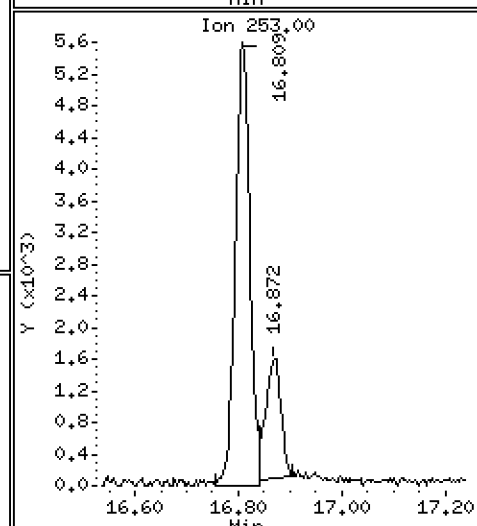
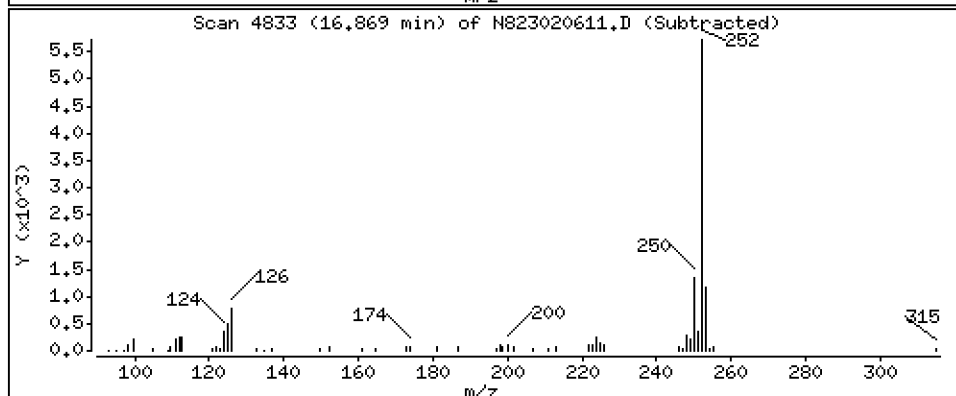
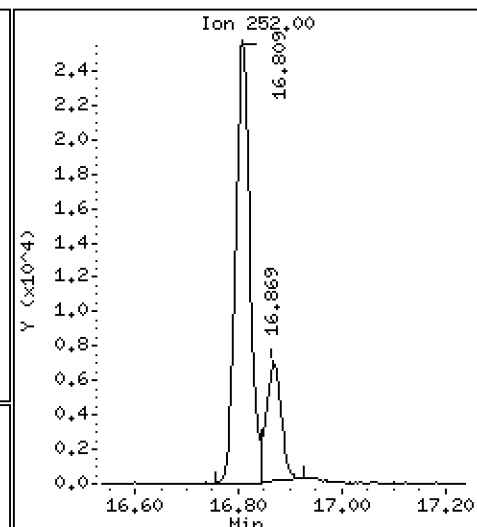
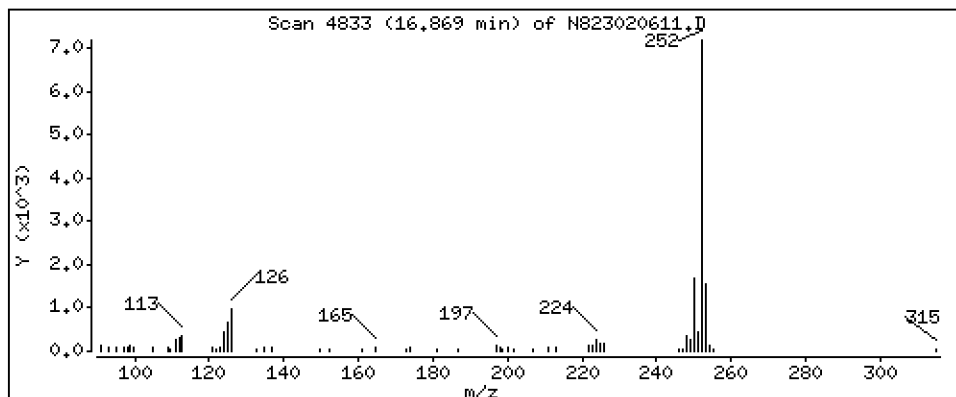
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

29 Benzo(k)fluoranthene

Concentration: 1,085 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

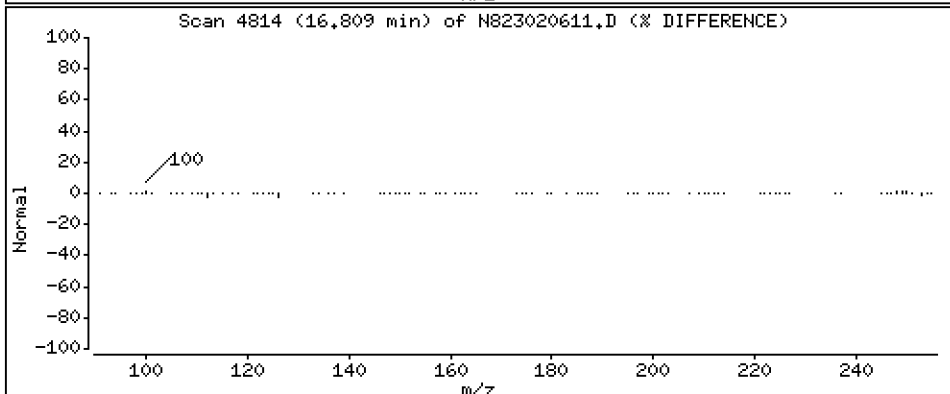
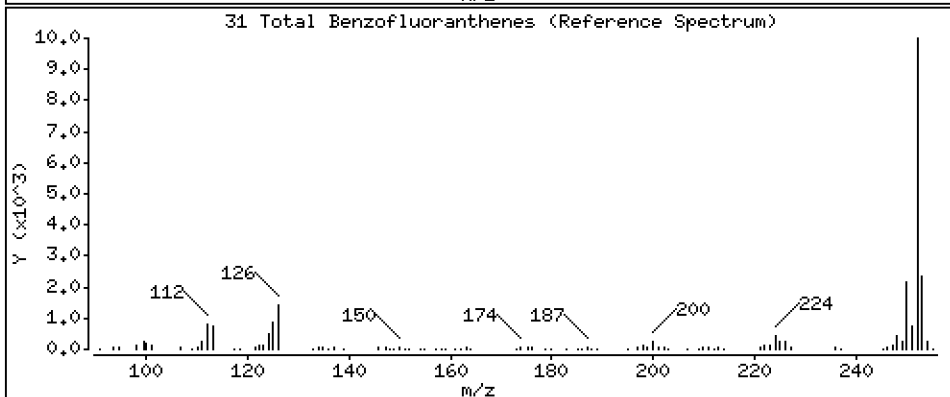
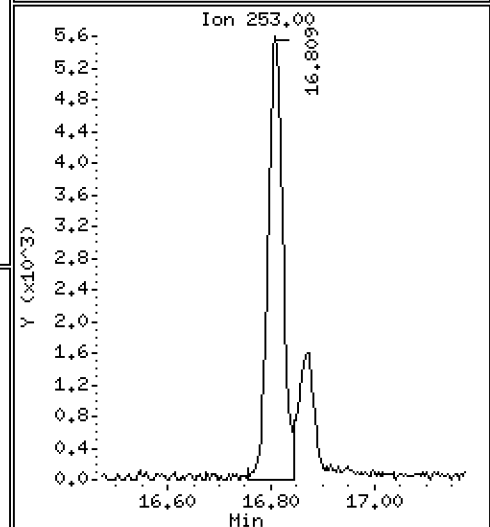
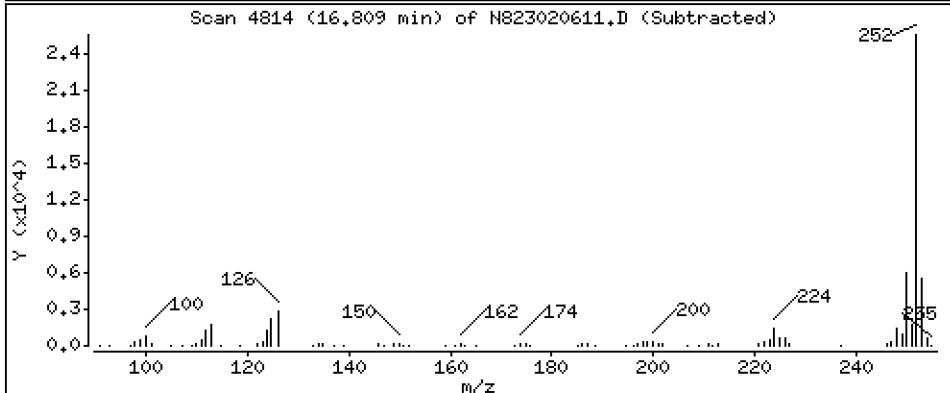
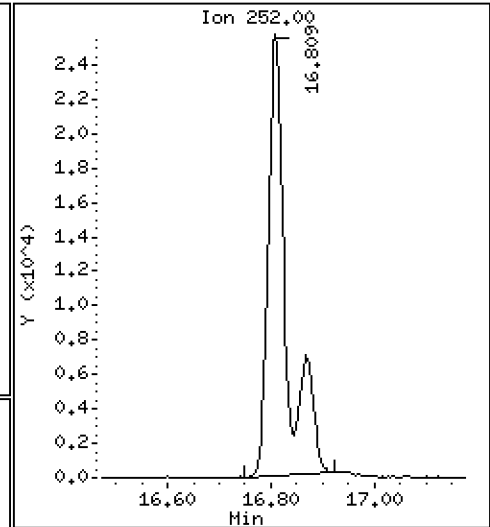
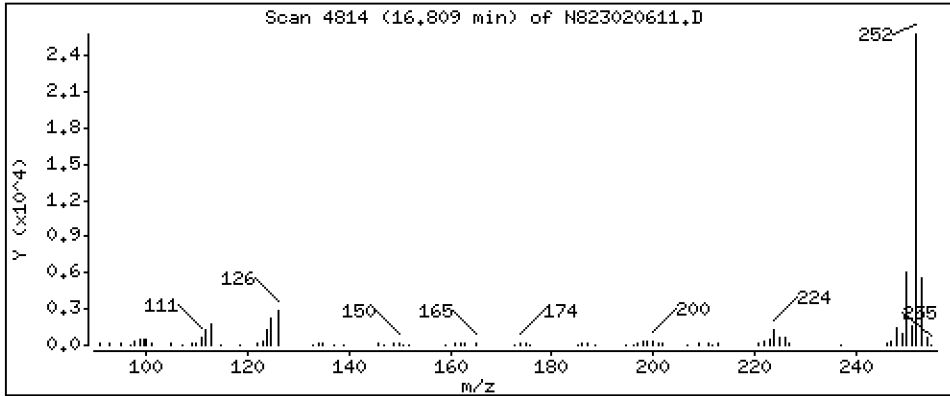
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 5,092 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

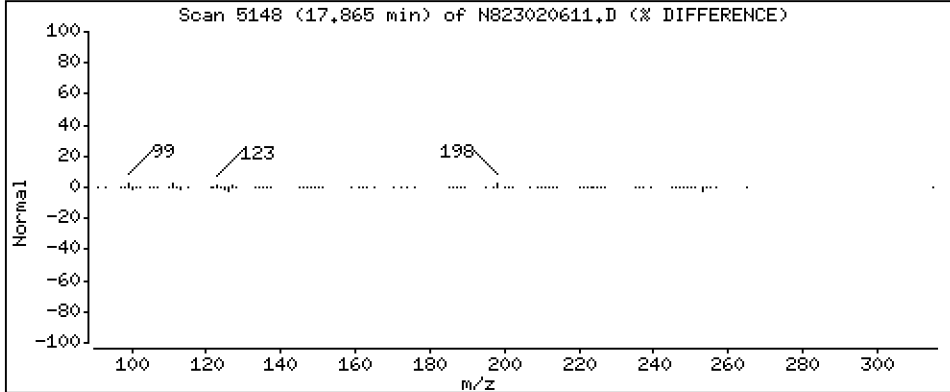
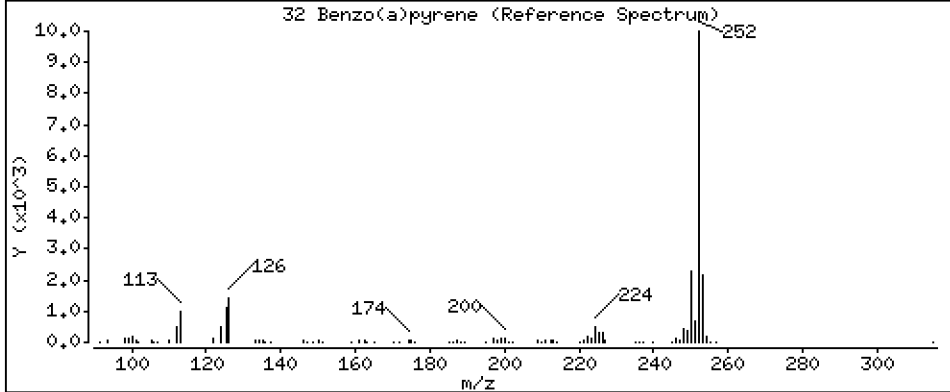
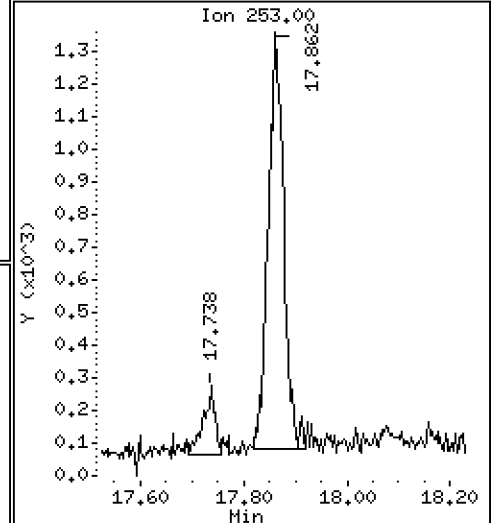
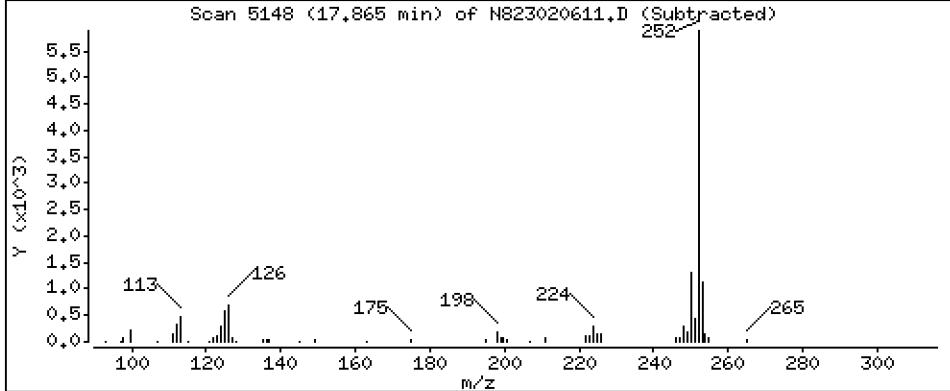
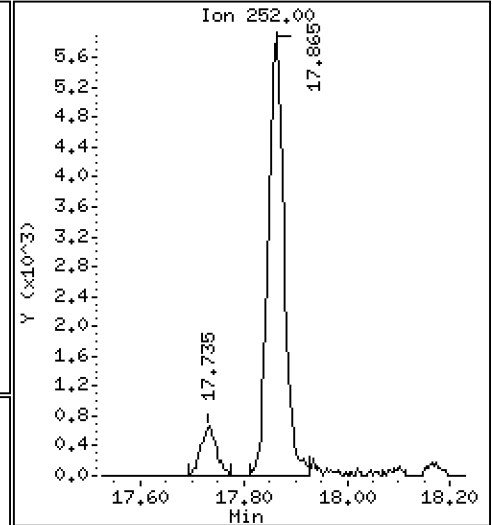
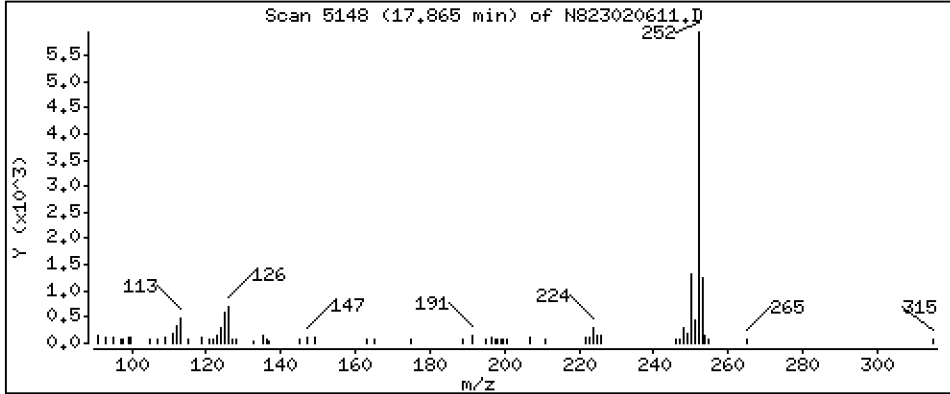
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 1,094 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

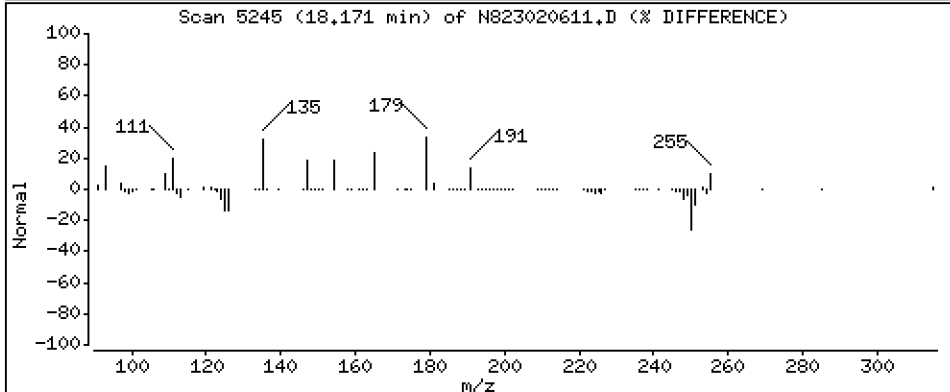
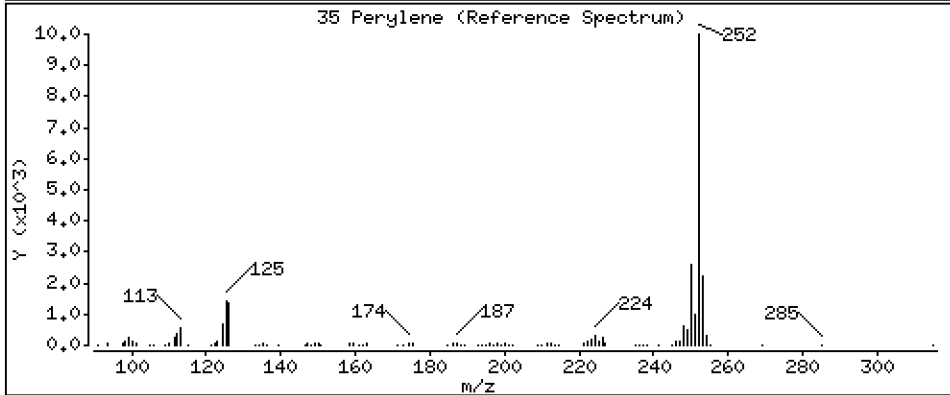
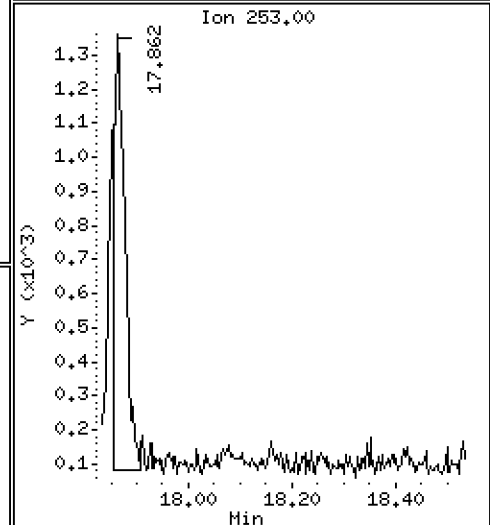
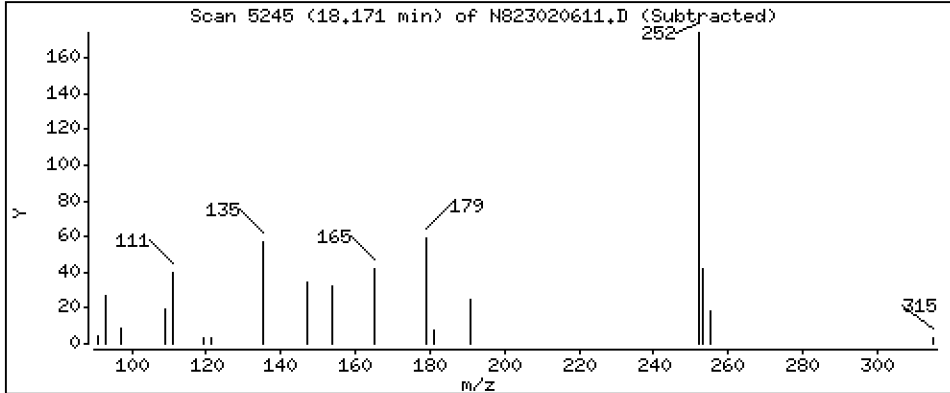
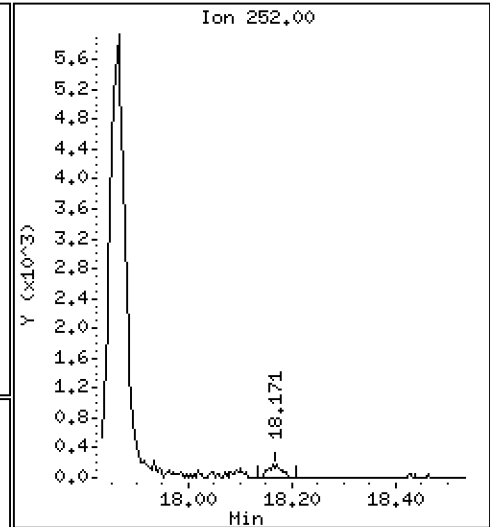
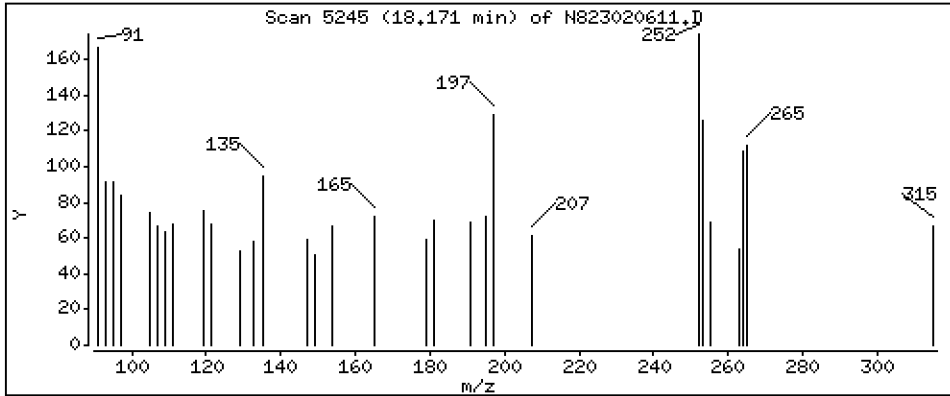
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

35 Perylene

Concentration: 0,02446 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

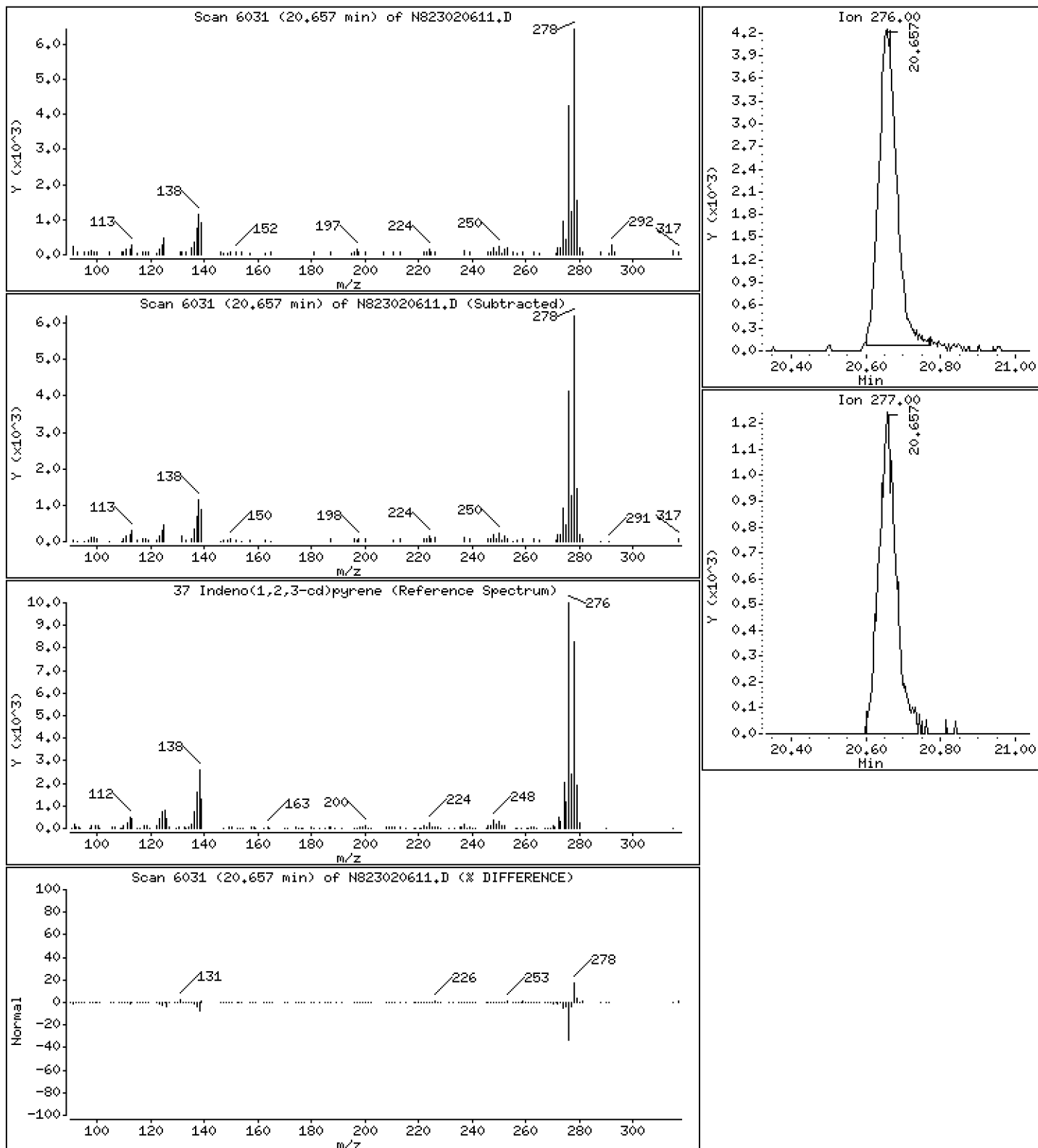
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 1,056 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

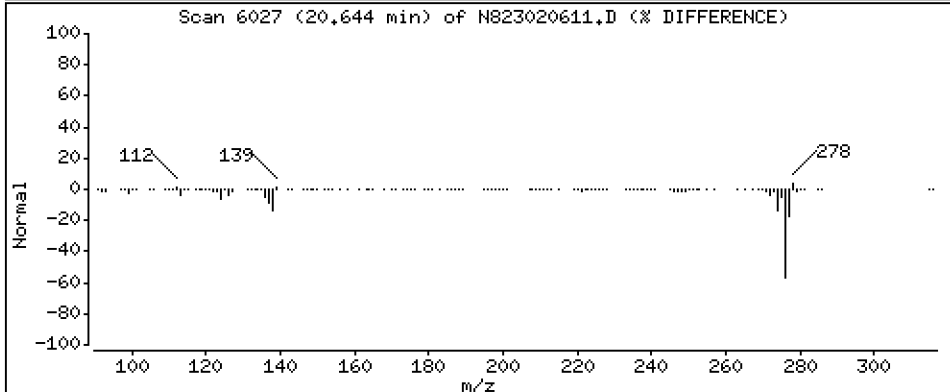
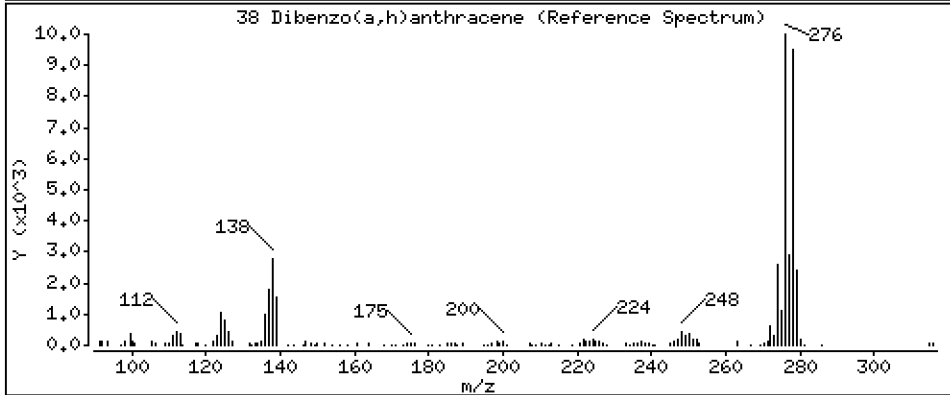
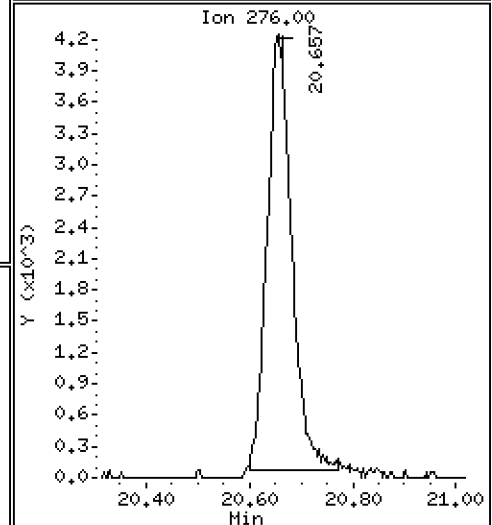
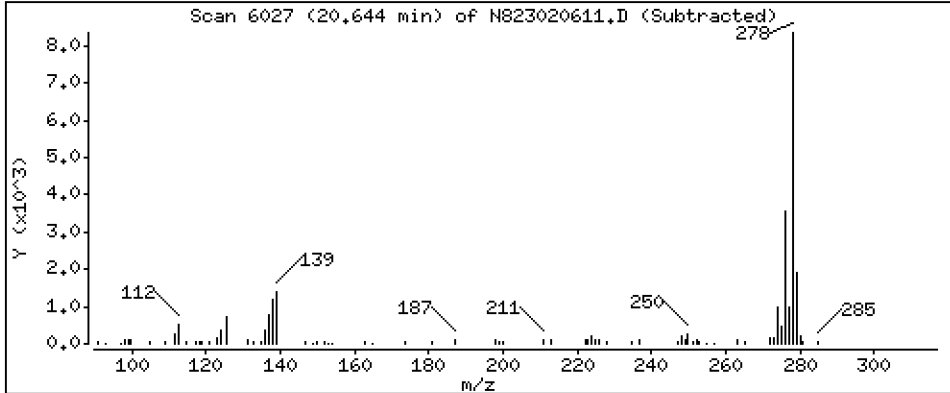
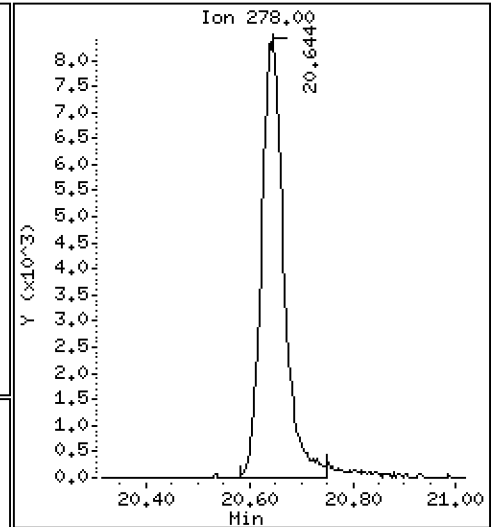
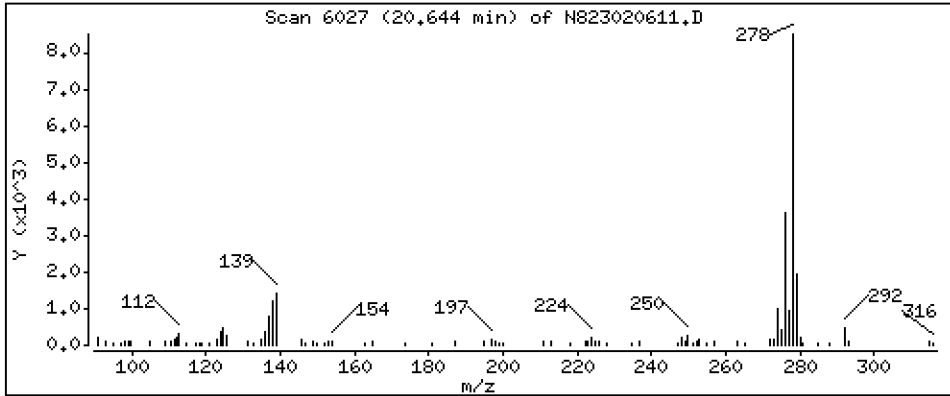
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 2,259 ug/mL



Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

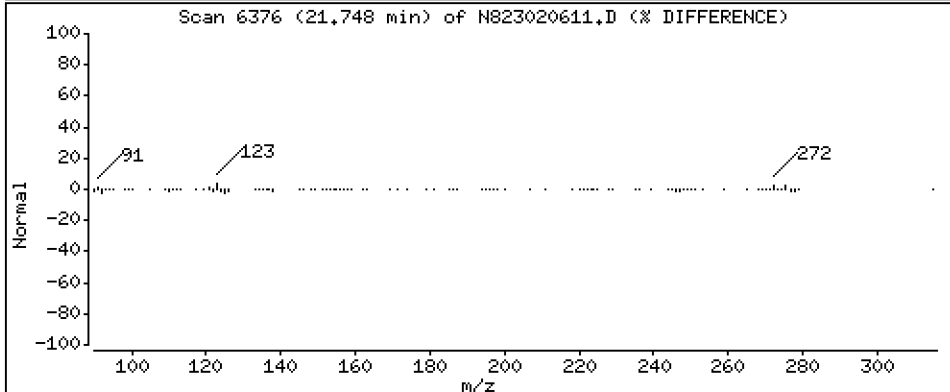
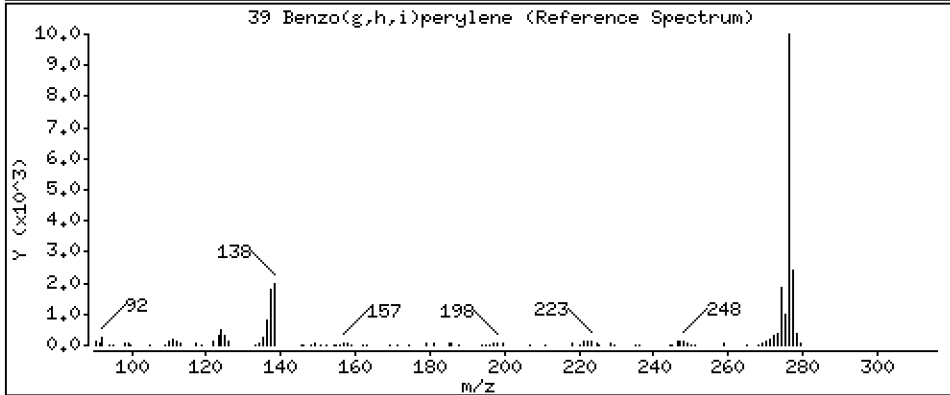
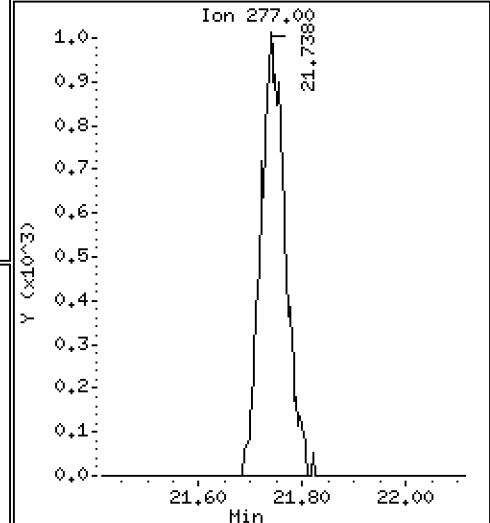
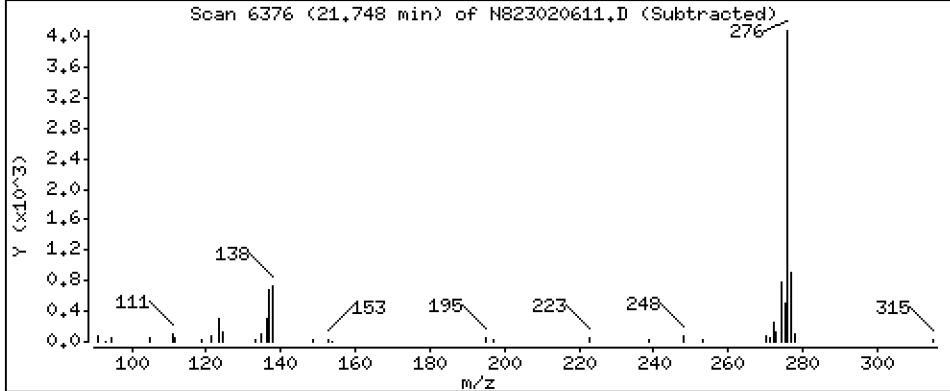
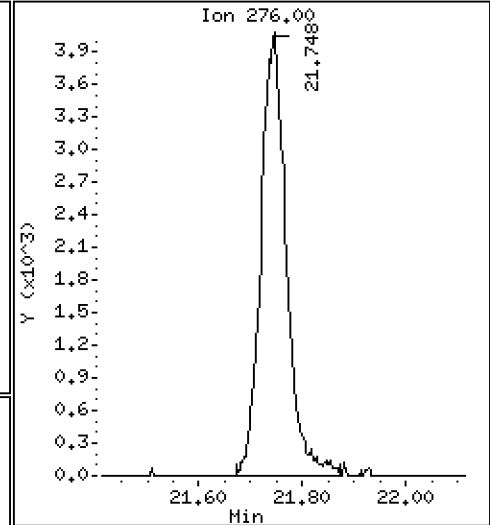
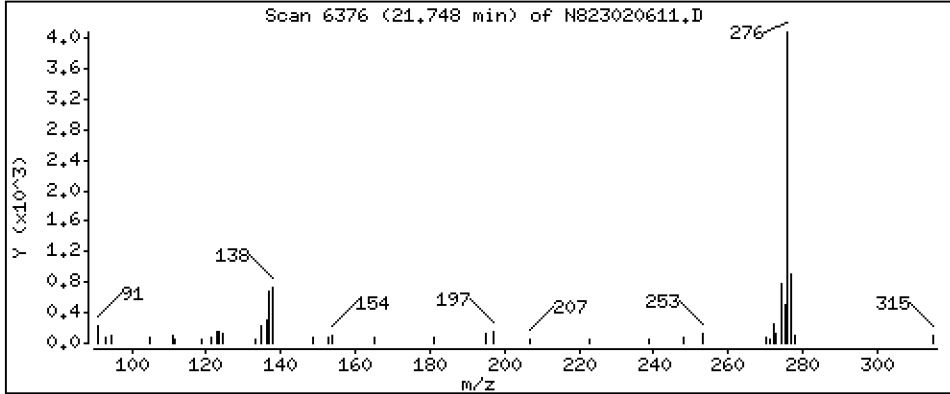
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 1,173 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020611.D
 Lab Smp Id: BLA0683-SRM1
 Inj Date : 06-FEB-2023 17:18
 Operator : JZ Inst ID: nt8.i
 Smp Info : BLA0683-SRM1,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PNAXMDL.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 1 Naphthalene-d8	136		4.884	4.900	(1.000)	47898	2.00000	
2 Naphthalene	128		4.916	4.928	(1.006)	51592	2.31660	2.317
\$ 3 2-Methylnaphthalene-d10	152		5.624	5.634	(1.151)	37554	2.87484	2.875
4 2-Methylnaphthalene	141		5.672	5.681	(1.161)	1033	0.08433	0.08433 (M)
5 1-methylnaphthalene	141		5.868	5.880	(1.201)	405	0.03258	0.03258
9 Acenaphthylene	152		7.072	7.082	(0.985)	61602	3.06777	3.068
* 10 Acenaphthene-d10	164		7.183	7.189	(1.000)	26592	2.00000	
11 Acenaphthene	153		7.234	7.240	(1.007)	47159	3.50509	3.505
12 Dibenzofuran	168		7.385	7.392	(1.028)	820	0.04013	0.04013 (M)
14 Fluorene	166		7.863	7.869	(1.095)	36596	2.30573	2.306
* 15 Phenanthrene-d10	188		9.223	9.232	(1.000)	44776	2.00000	
16 Phenanthrene	178		9.261	9.267	(1.004)	82696	3.78089	3.781
17 Anthracene	178		9.298	9.308	(1.008)	38382	1.93173	1.932
19 Carbazole	167		9.814	9.823	(1.064)	2170	0.11913	0.1191
22 Fluoranthene	202		11.041	11.050	(1.197)	50733	2.13092	2.131
\$ 21 Fluoranthene-d10	212		11.003	11.009	(1.193)	64973	3.28894	3.289
23 Pyrene	202		11.559	11.569	(0.815)	62928	2.77685	2.777
24 Benzo(a)anthracene	228		14.057	14.070	(0.991)	18218	0.88695	0.8869
* 25 Chrysene-d12	240		14.190	14.202	(1.000)	36552	2.00000	
27 Chrysene	228		14.260	14.275	(1.005)	38533	1.76223	1.762
28 Benzo(b)fluoranthene	252		16.808	16.824	(0.929)	50267	3.83154	3.832
29 Benzo(k)fluoranthene	252		16.868	16.887	(0.932)	13946	1.08526	1.085
30 Benzo(j)fluoranthene	252		Compound Not Detected.					
31 Total Benzofluoranthenes	252		16.808	16.824	(0.929)	63266	5.09198	5.092 (M)
32 Benzo(a)pyrene	252		17.864	17.877	(0.987)	12629	1.09390	1.094
* 33 Perylene-d12	264		18.092	18.107	(1.000)	22526	2.00000	
35 Perylene	252		18.171	18.183	(1.004)	303	0.02446	0.02446 (M)
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.530	20.549	(1.135)	45685	5.17608	5.176
37 Indeno(1,2,3-cd)pyrene	276		20.656	20.684	(1.142)	13884	1.05563	1.056
38 Dibenzo(a,h)anthracene	278		20.644	20.666	(1.141)	25570	2.25910	2.259
39 Benzo(g,h,i)perylene	276		21.747	21.763	(1.202)	13979	1.17309	1.173

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020611.D Calibration Time: 15:15
 Lab Smp Id: BLA0683-SRM1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	47898	8.03
10 Acenaphthene-d10	26127	13064	52254	26592	1.78
15 Phenanthrene-d10	47424	23712	94848	44776	-5.58
25 Chrysene-d12	36794	18397	73588	36552	-0.66
33 Perylene-d12	36636	18318	73272	22526	-38.51

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.32
10 Acenaphthene-d10	7.19	6.69	7.69	7.18	-0.08
15 Phenanthrene-d10	9.23	8.73	9.73	9.22	-0.10
25 Chrysene-d12	14.20	13.70	14.70	14.19	-0.09
33 Perylene-d12	18.11	17.61	18.61	18.09	-0.09

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

REVIEW SUMMARY FOR FILE - N823020611.D

Lab ID: BLA0683-SRM1

nt8.i, 20230206A.b\FSIMPNA230119.m, 06-FEB-2023 17:18

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

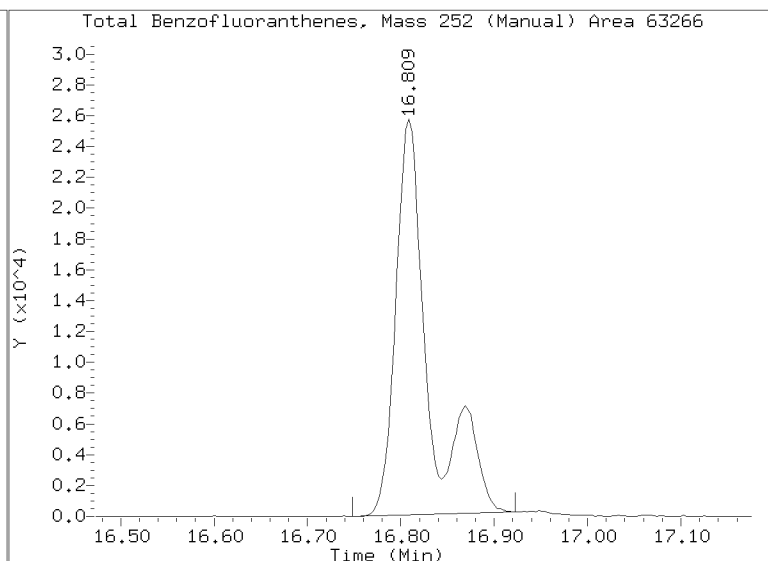
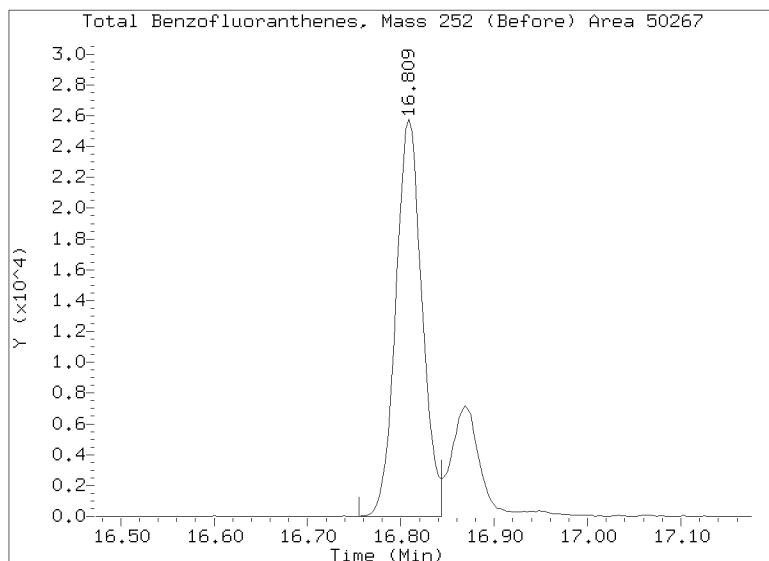
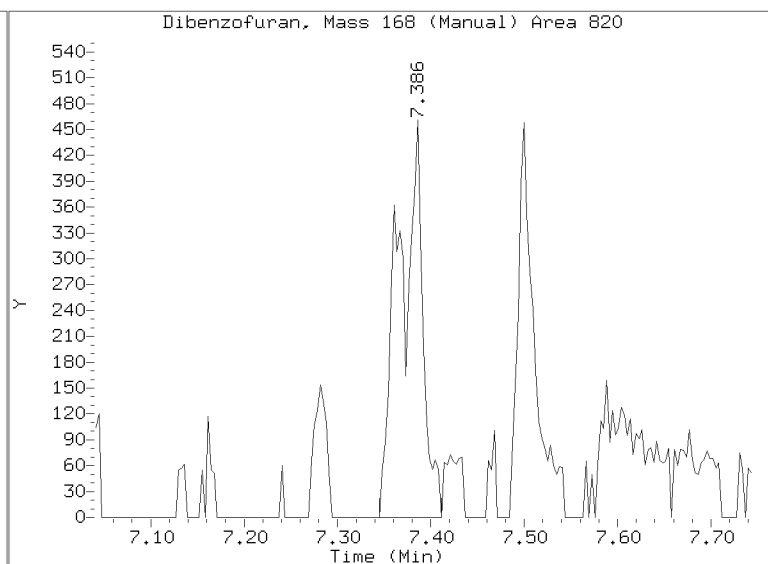
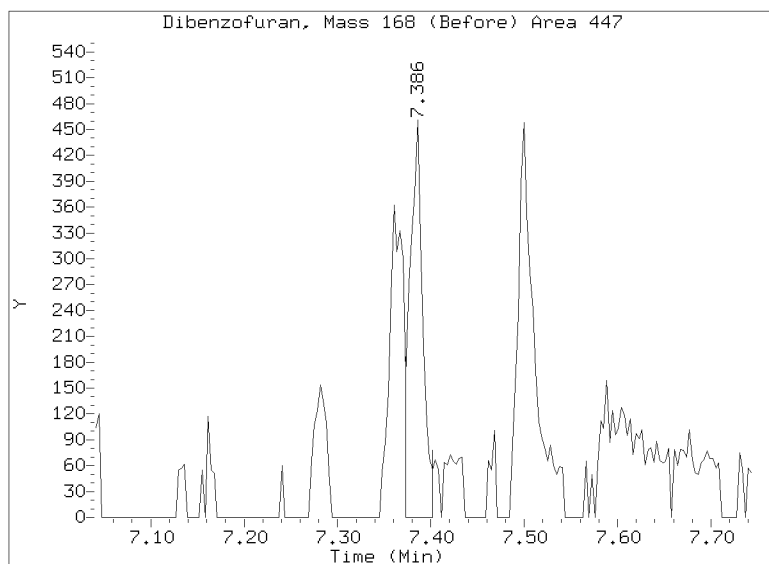
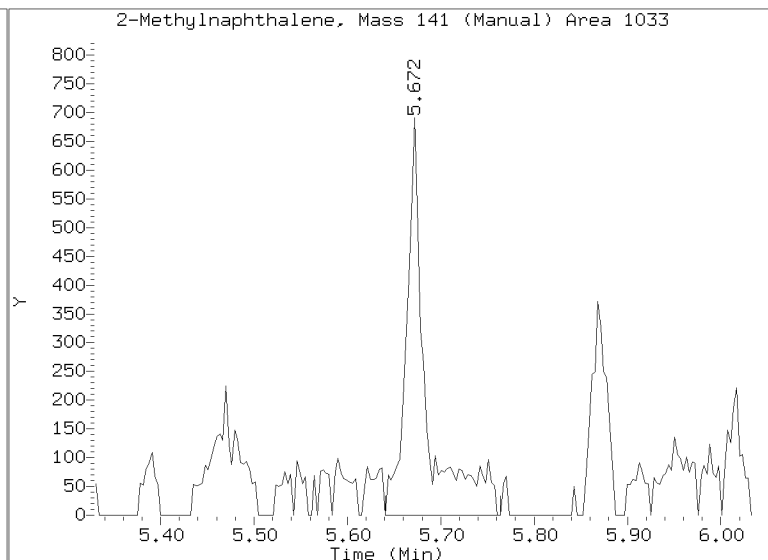
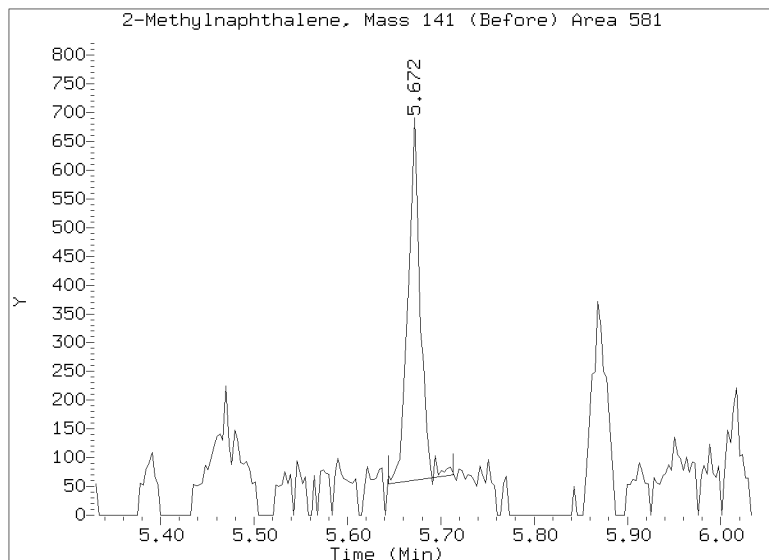
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020611.D

Injection Date: 06-FEB-2023 17:18

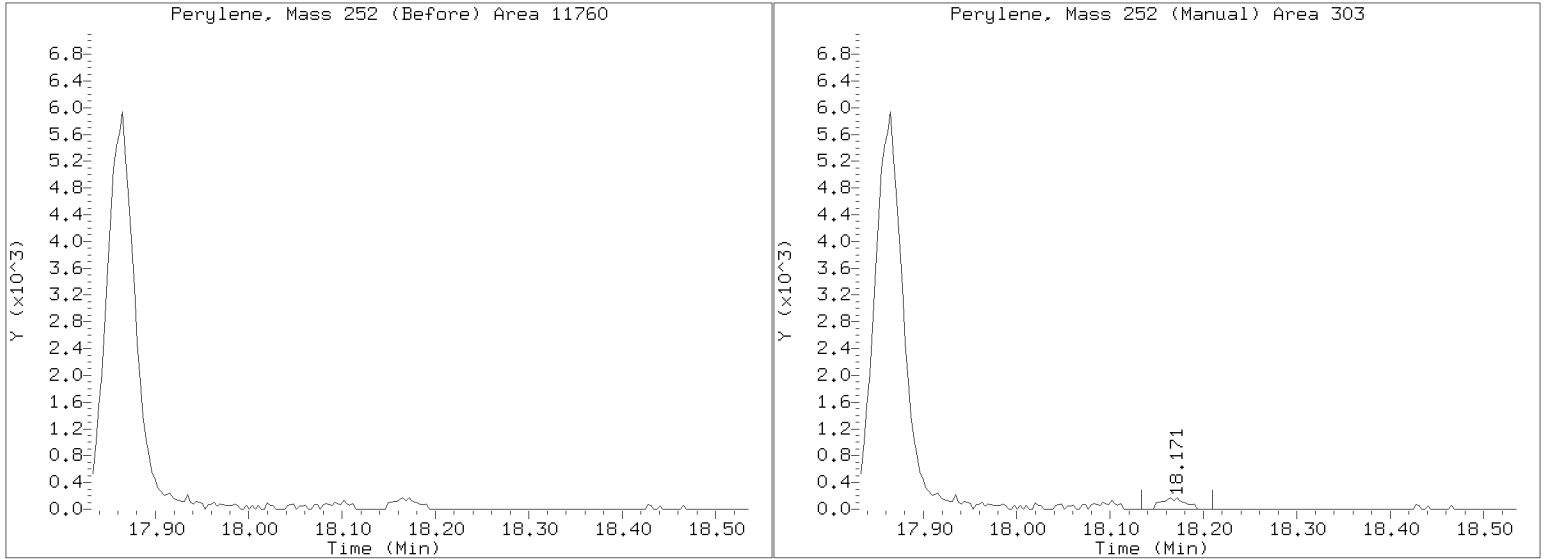
Lab ID:BLA0683-SRM1 Client ID:

Report Date: 02/07/2023 13:19



Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020611.D
Injection Date: 06-FEB-2023 17:18
Lab ID:BLA0683-SRM1 Client ID:
Report Date: 02/07/2023 13:19





STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0685-SRM2

Batch: BLA0685

Initial/Final: 1 g / 1 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 03/05/2023 20:22

Standard ID: K003477

Expires: 01/31/2024

Standard Lot#: CRM 143 (LRAC8918)

Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	512	21.7	200		8.06	0 - 220
1,2,4-Trichlorobenzene	1477.0	953	26.8	50.0		64.5	10 - 193
N-Nitrosodiphenylamine	2854.0	1910	13.1	50.0		66.9	40 - 160
Pentachlorophenol	3411.0	1650	21.3	200	Q	48.3	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.B\SIM.B\NT1003052312S.D

Date: 05-HR-2023 20:22

Client ID:

Sample Info: BLR0685-SRM2

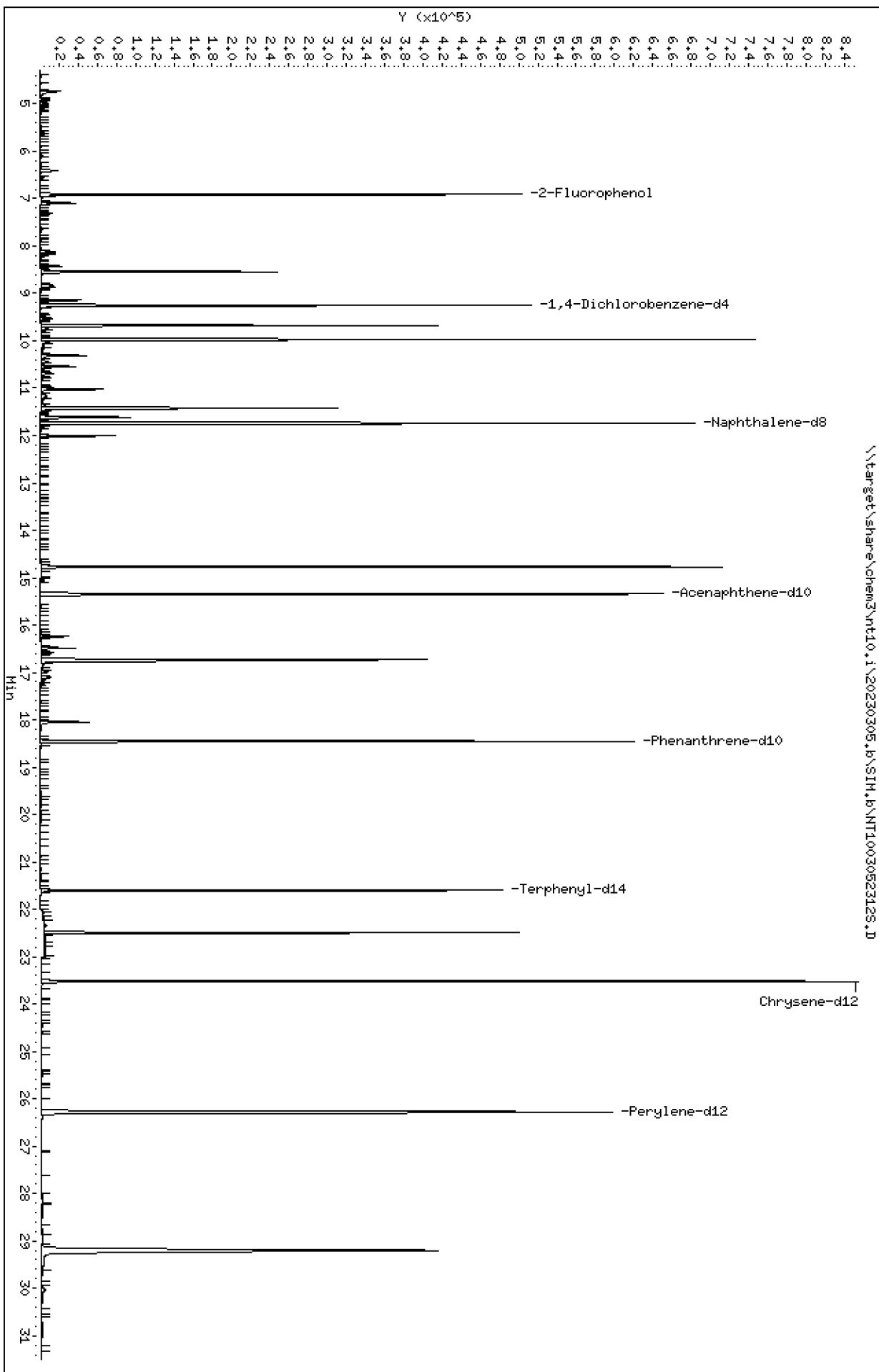
Instrument: nt10.1

Column phase: ZB-5msi

Operator: YZ

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305.B\SIM.B\NT1003052312S.D



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

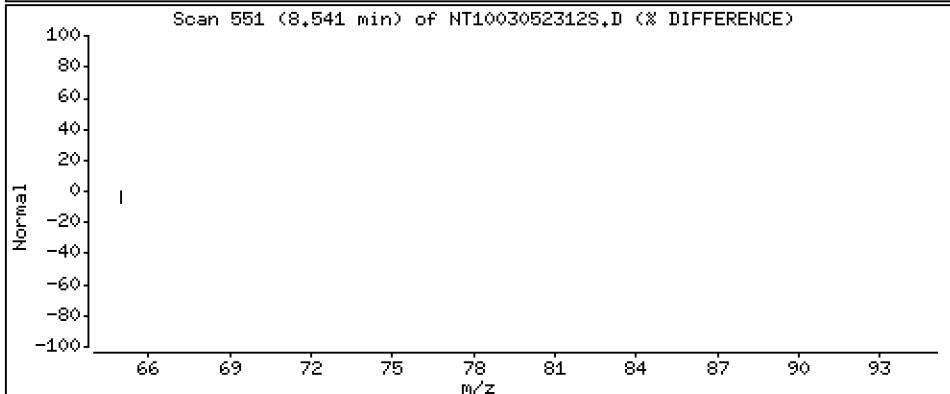
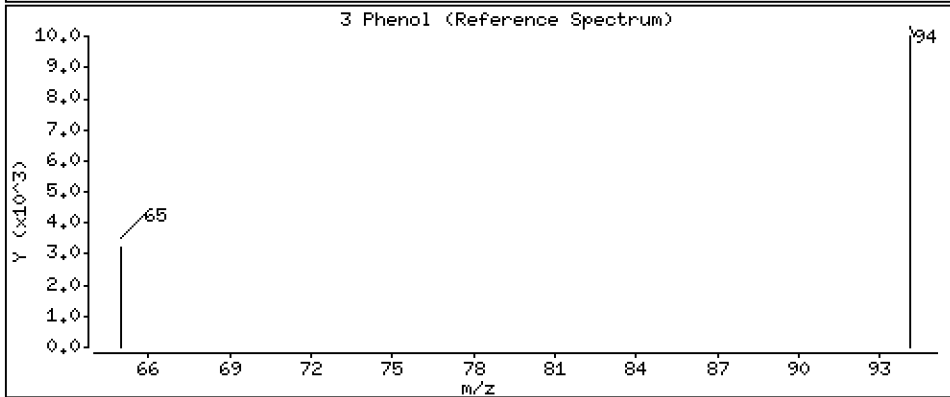
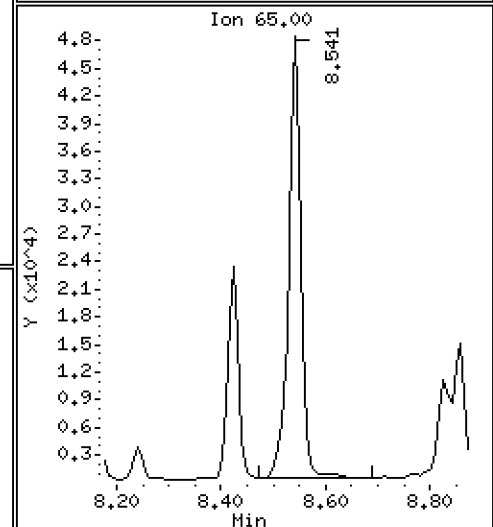
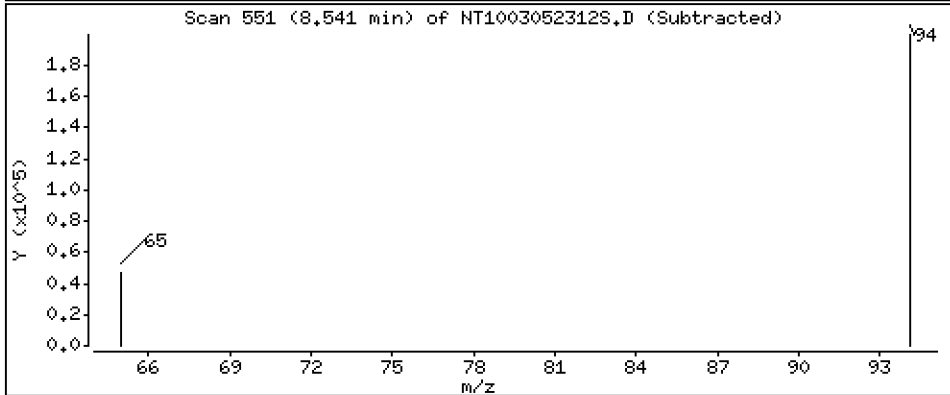
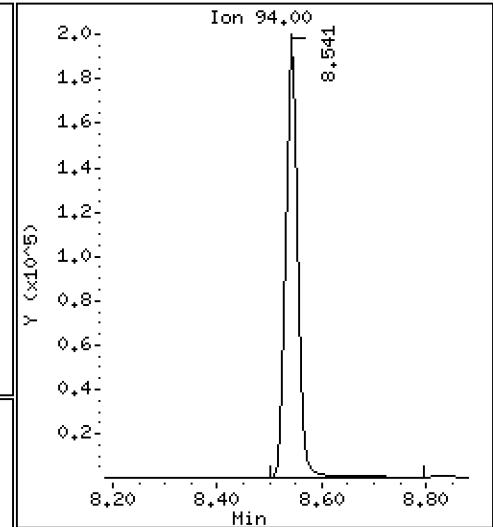
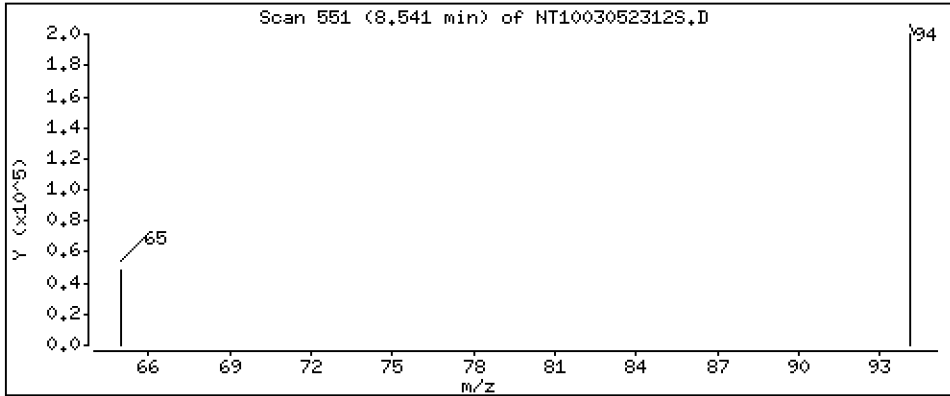
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 2,511 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

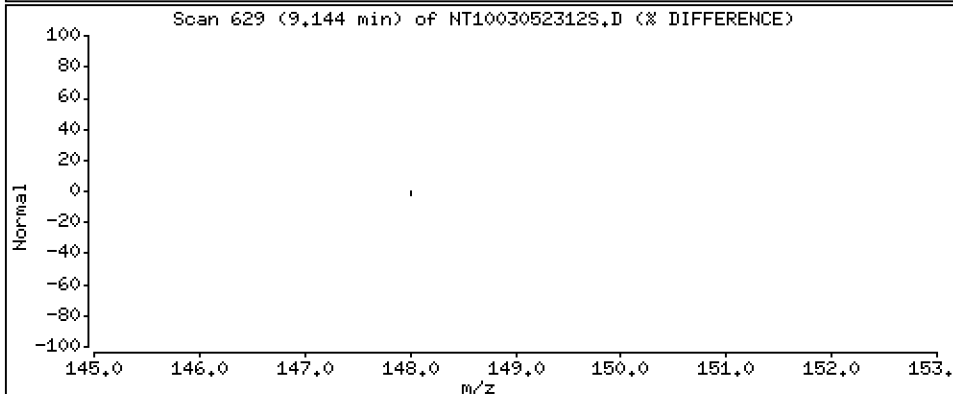
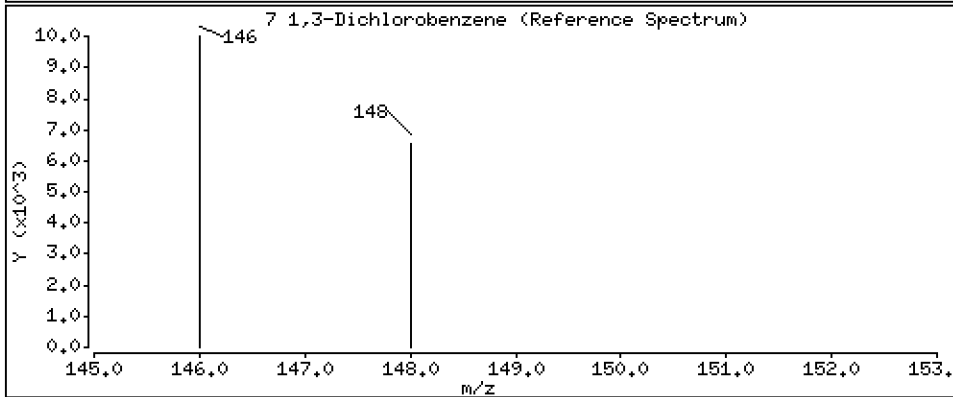
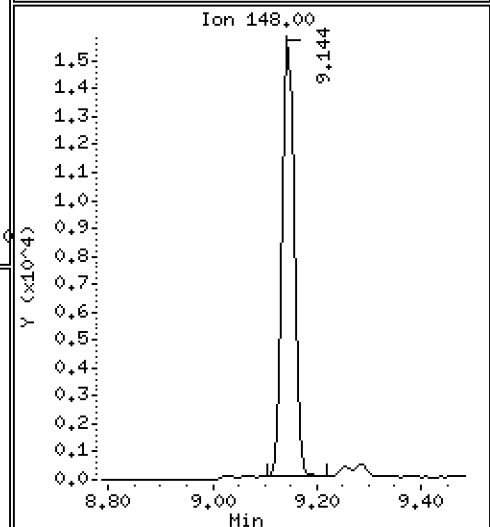
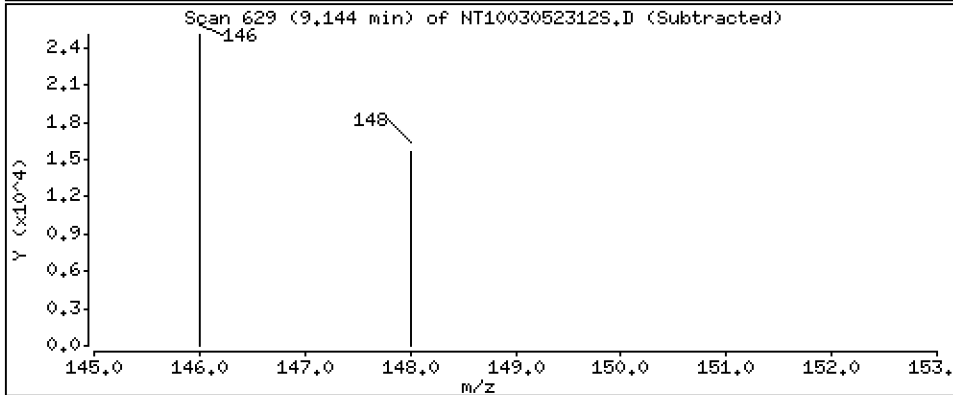
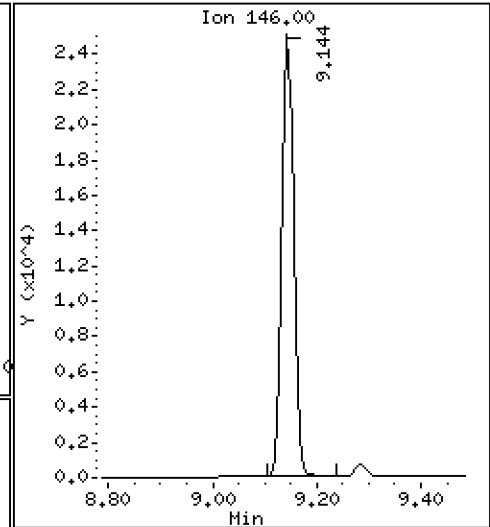
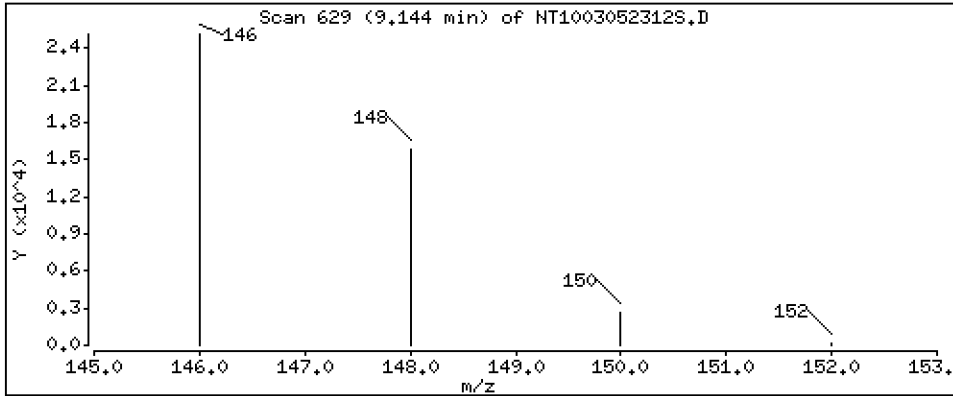
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,3470 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

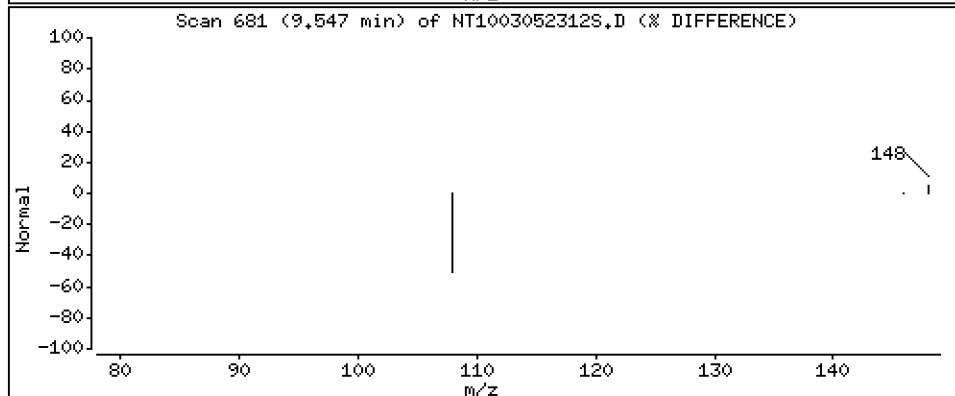
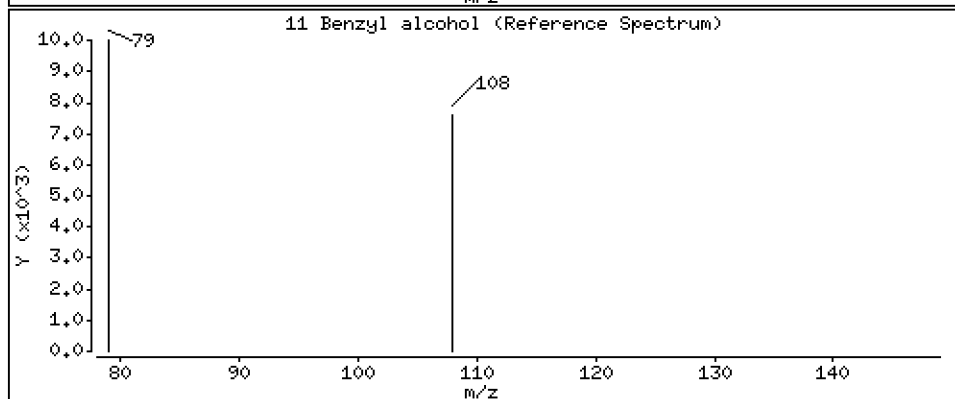
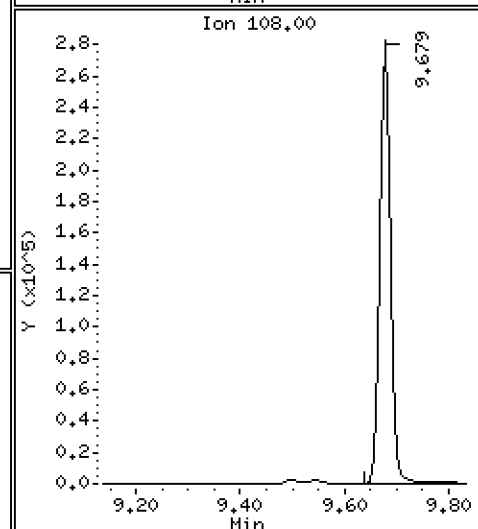
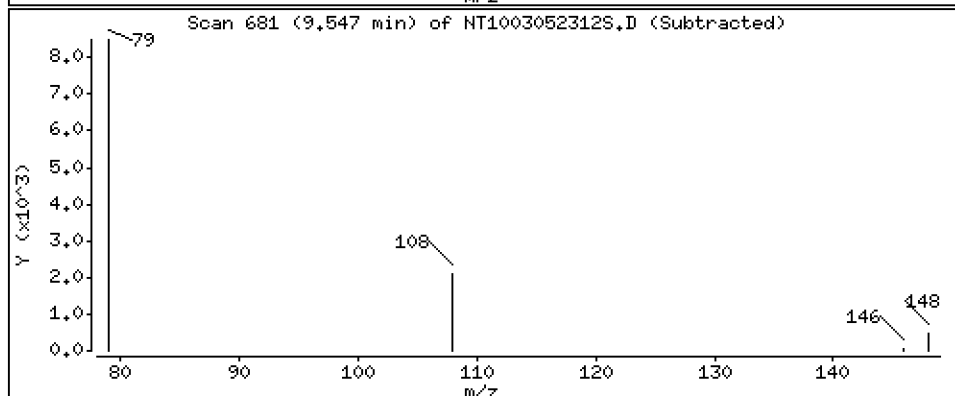
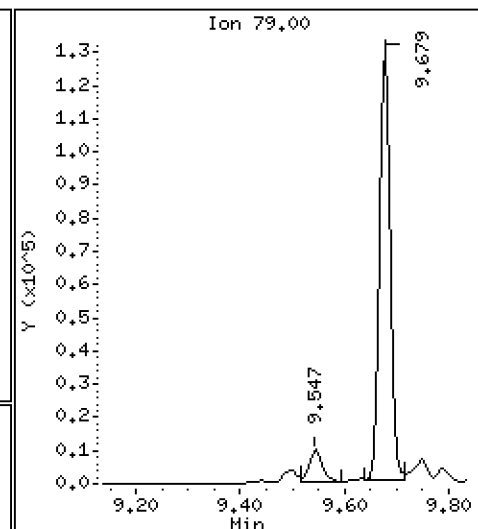
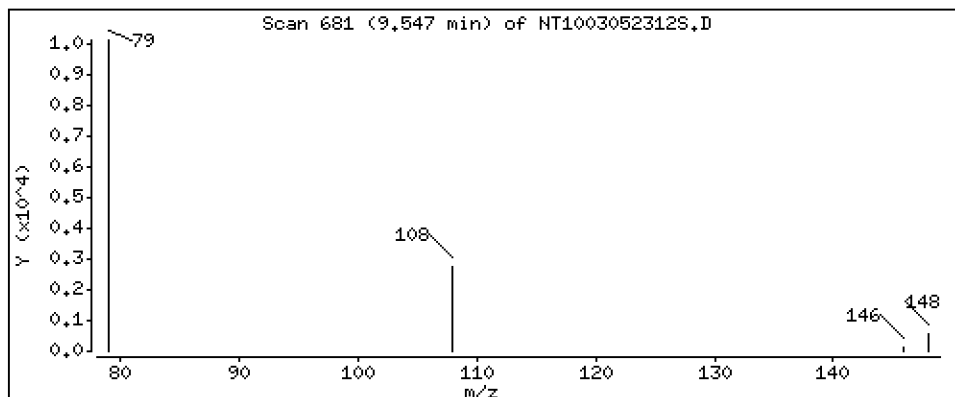
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.2402 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

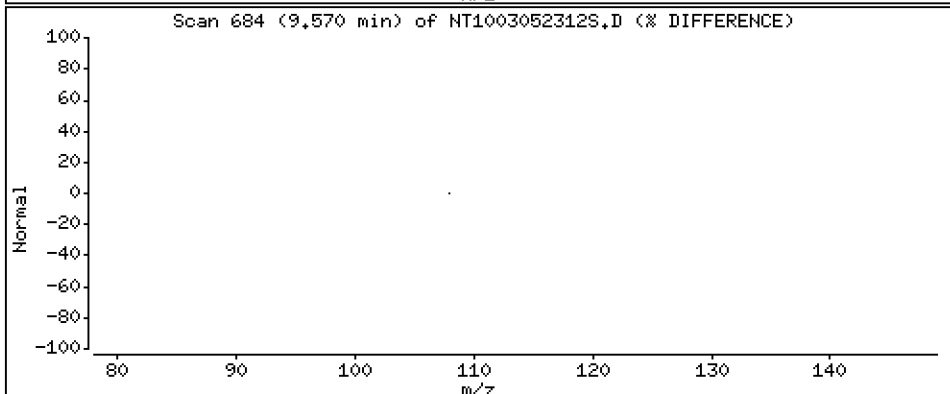
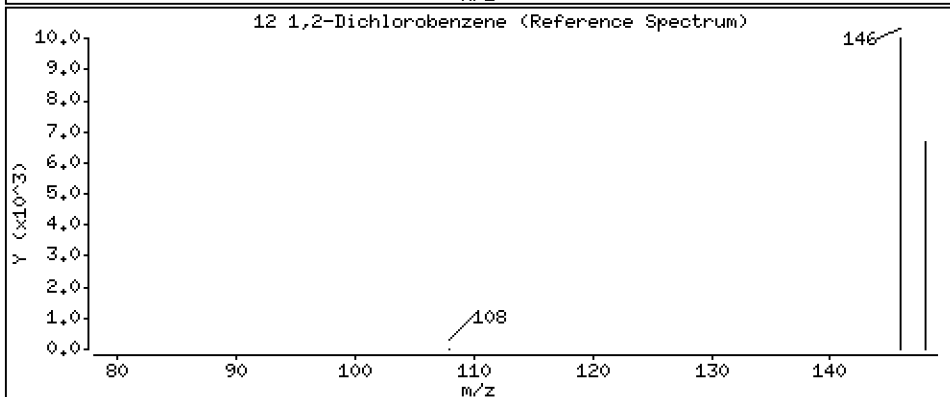
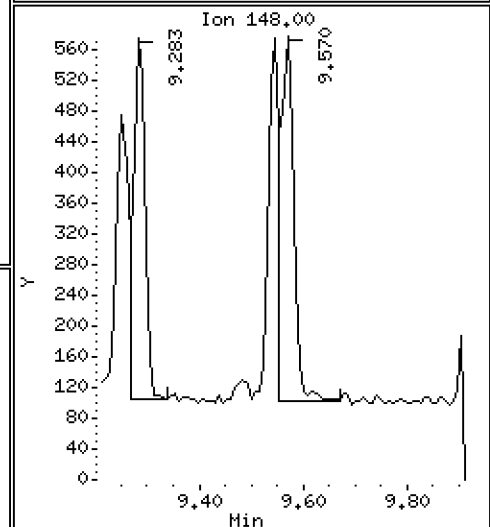
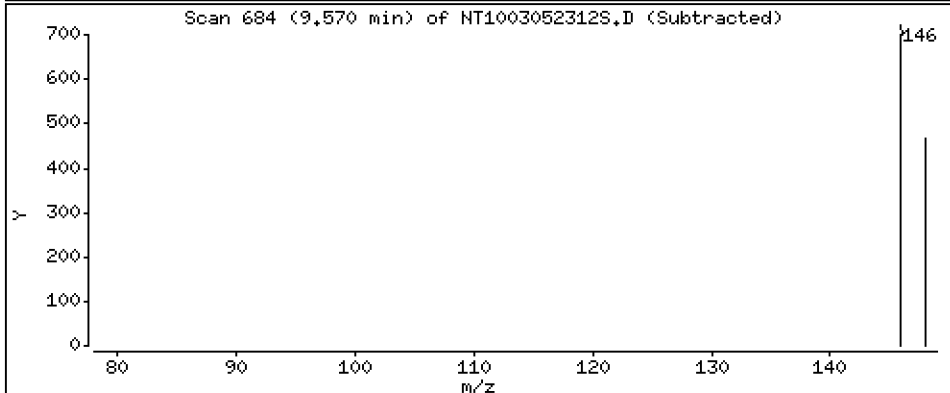
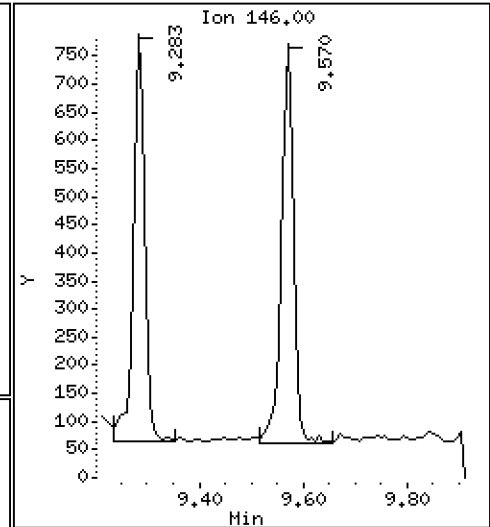
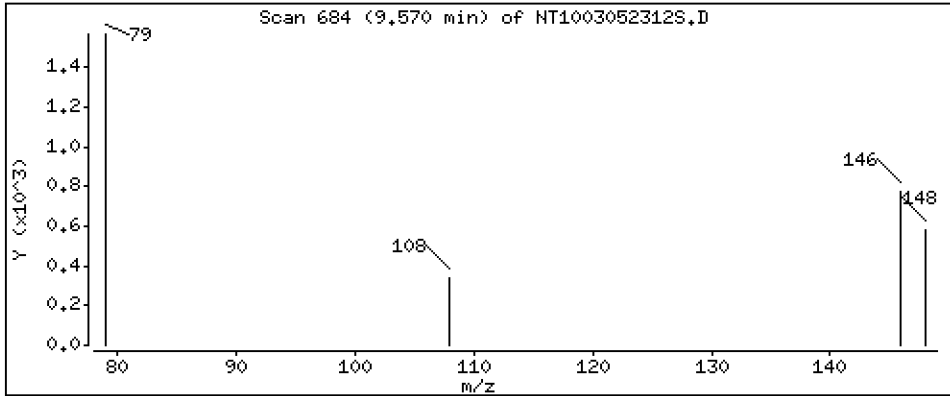
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,01072 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

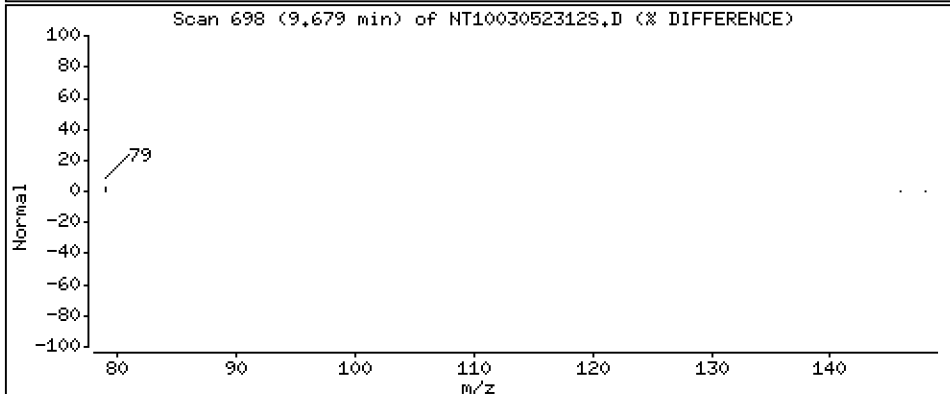
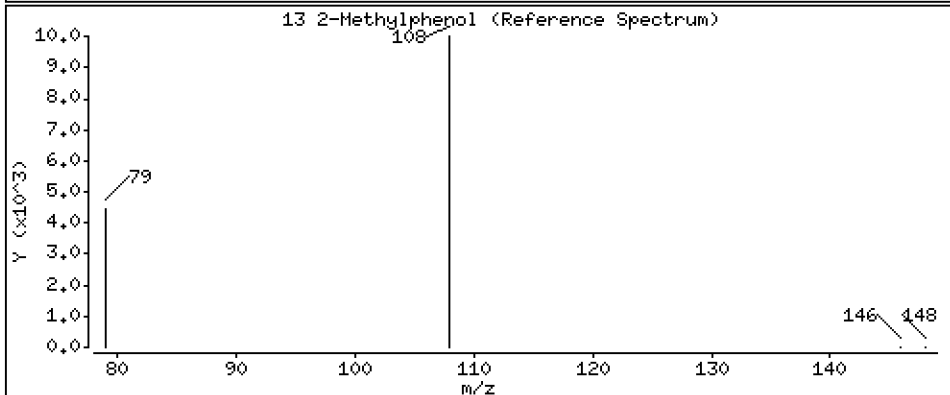
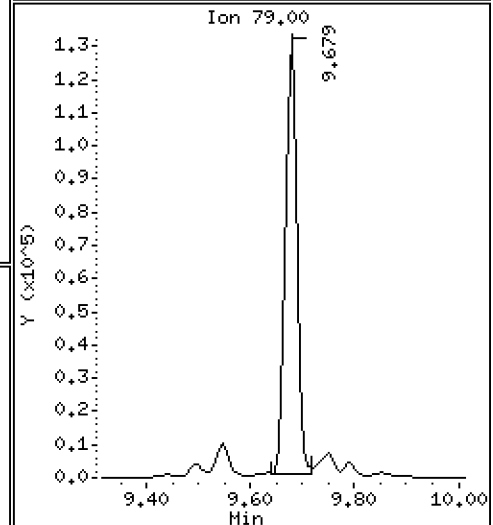
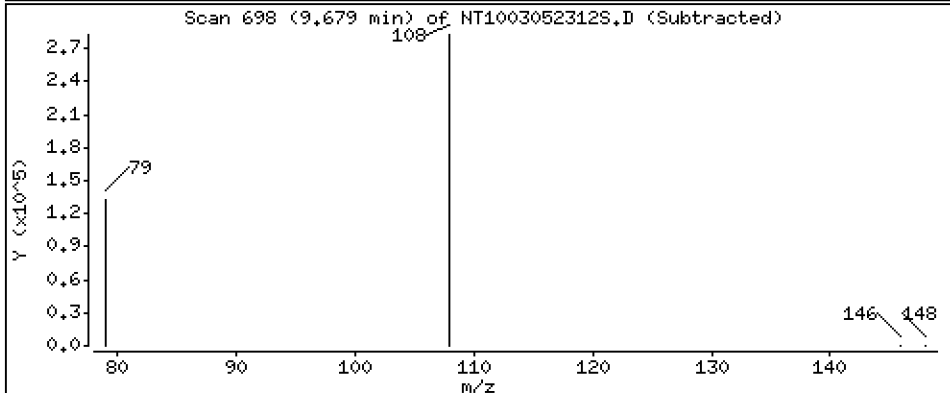
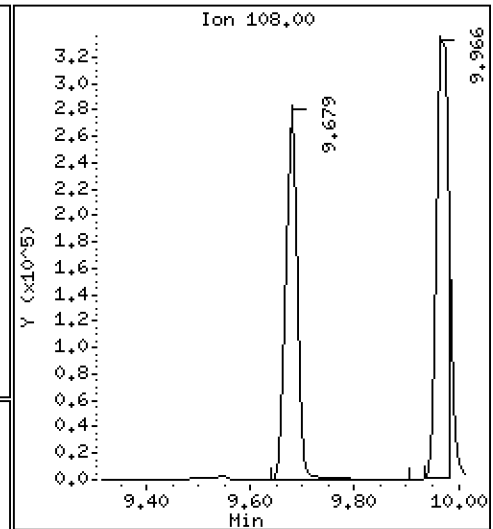
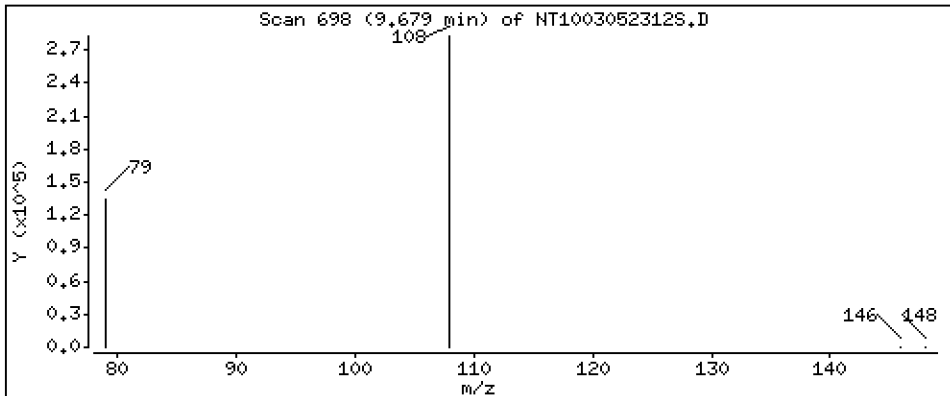
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 5,463 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

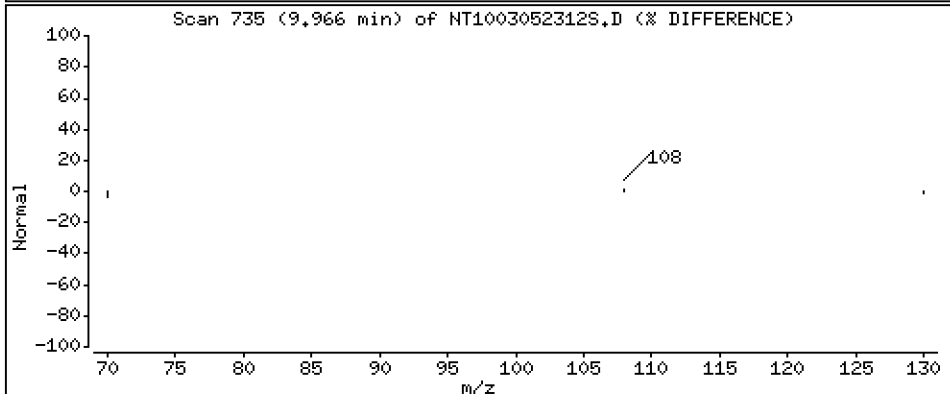
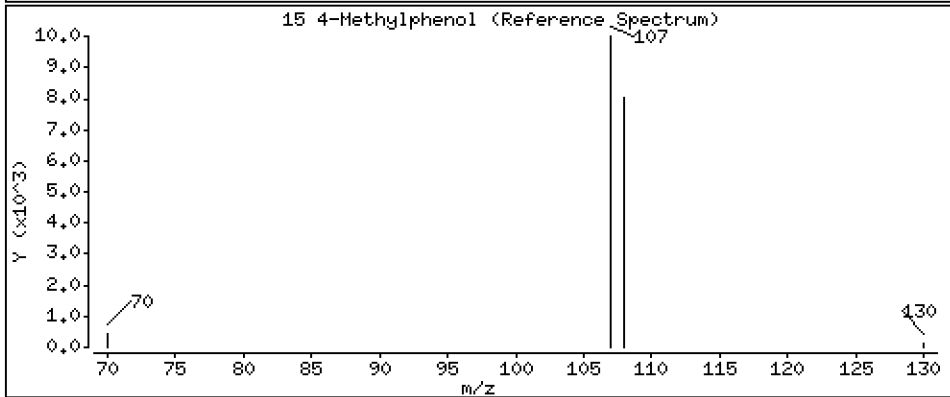
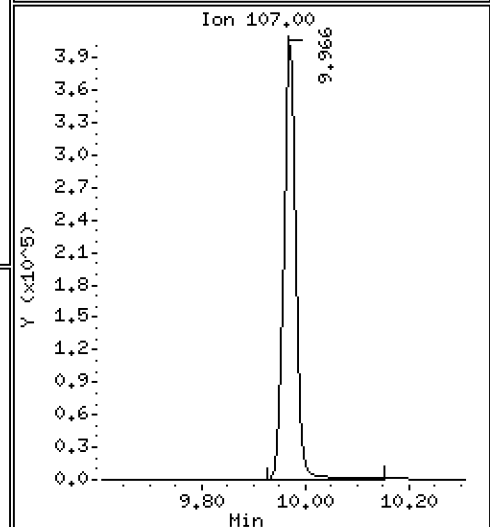
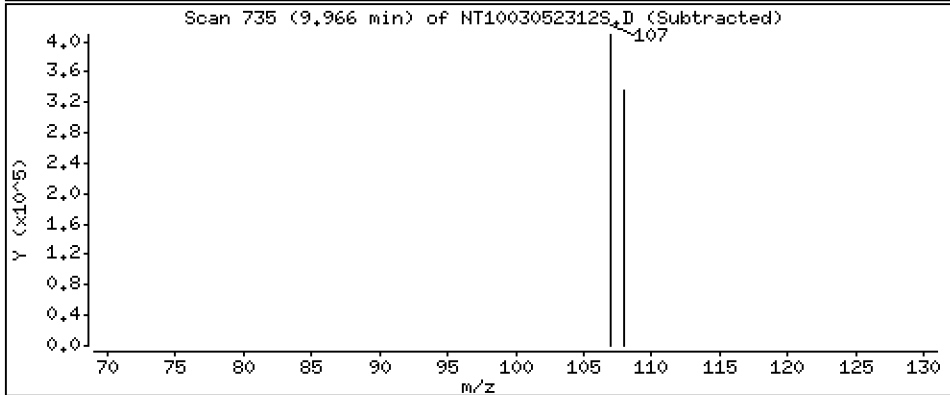
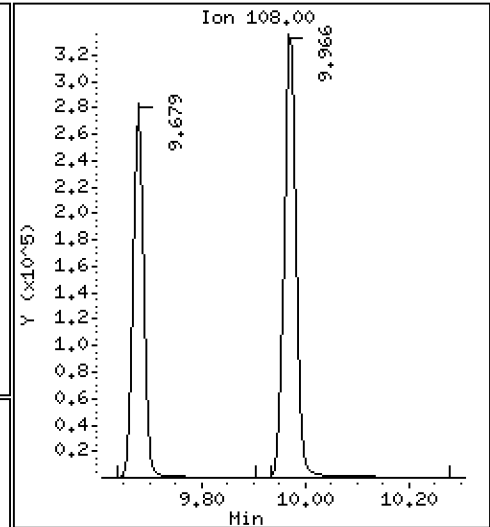
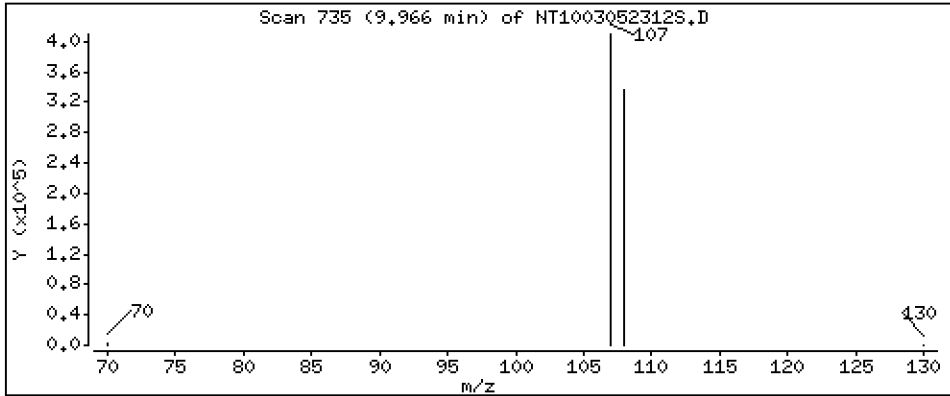
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 6.603 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

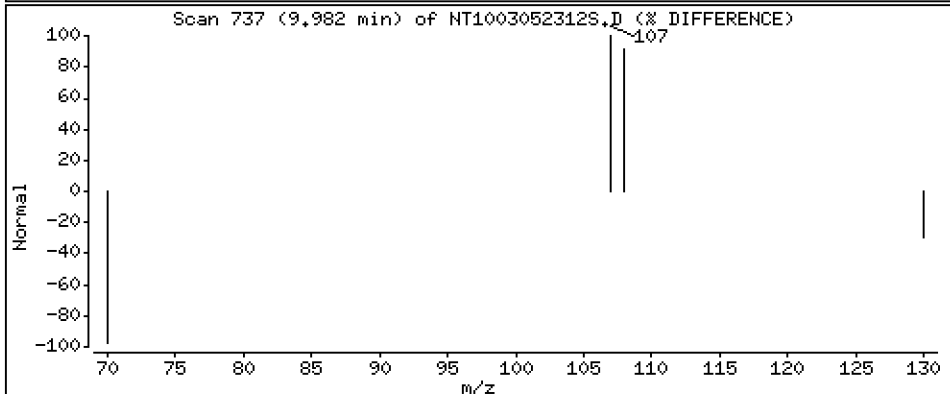
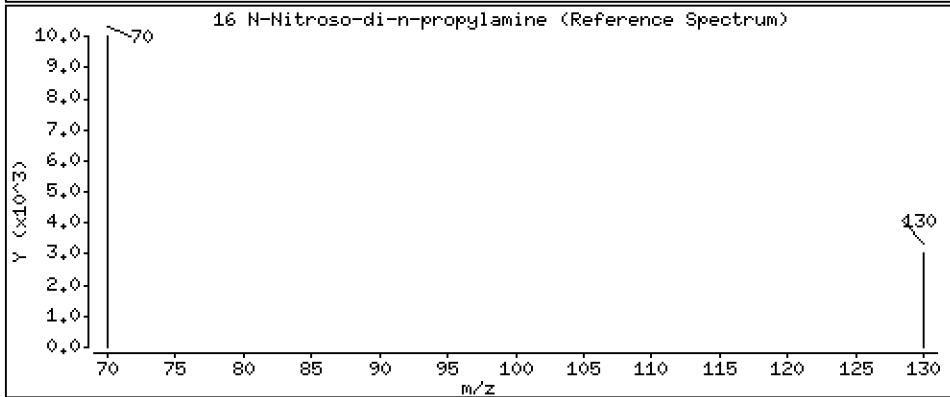
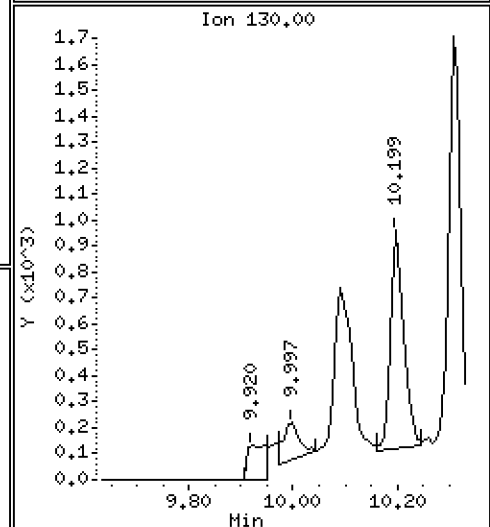
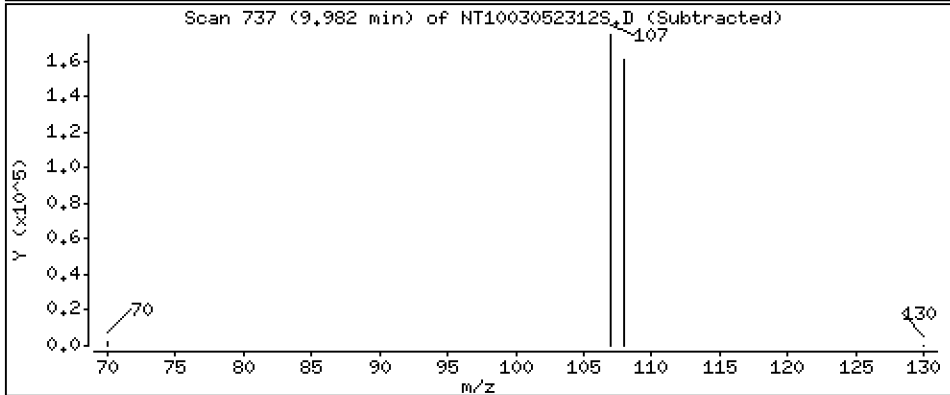
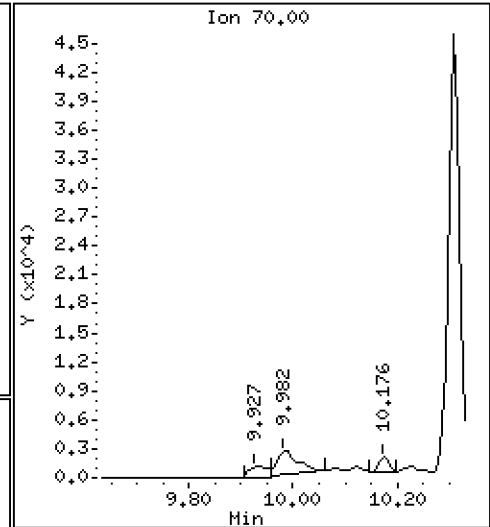
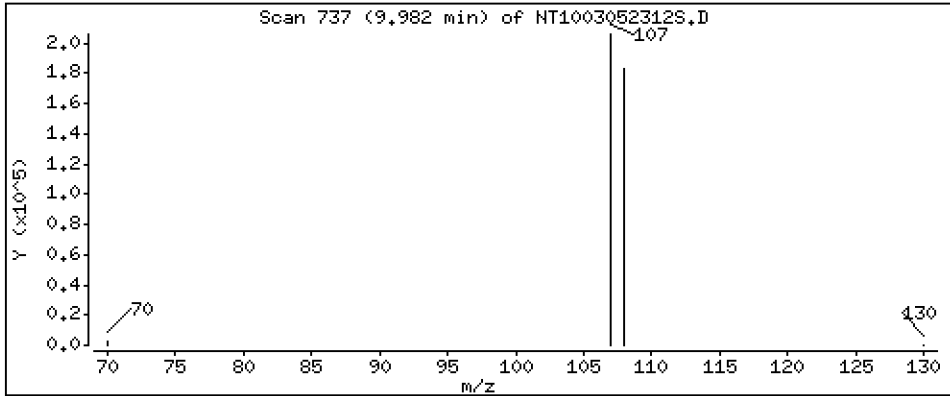
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.1216 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

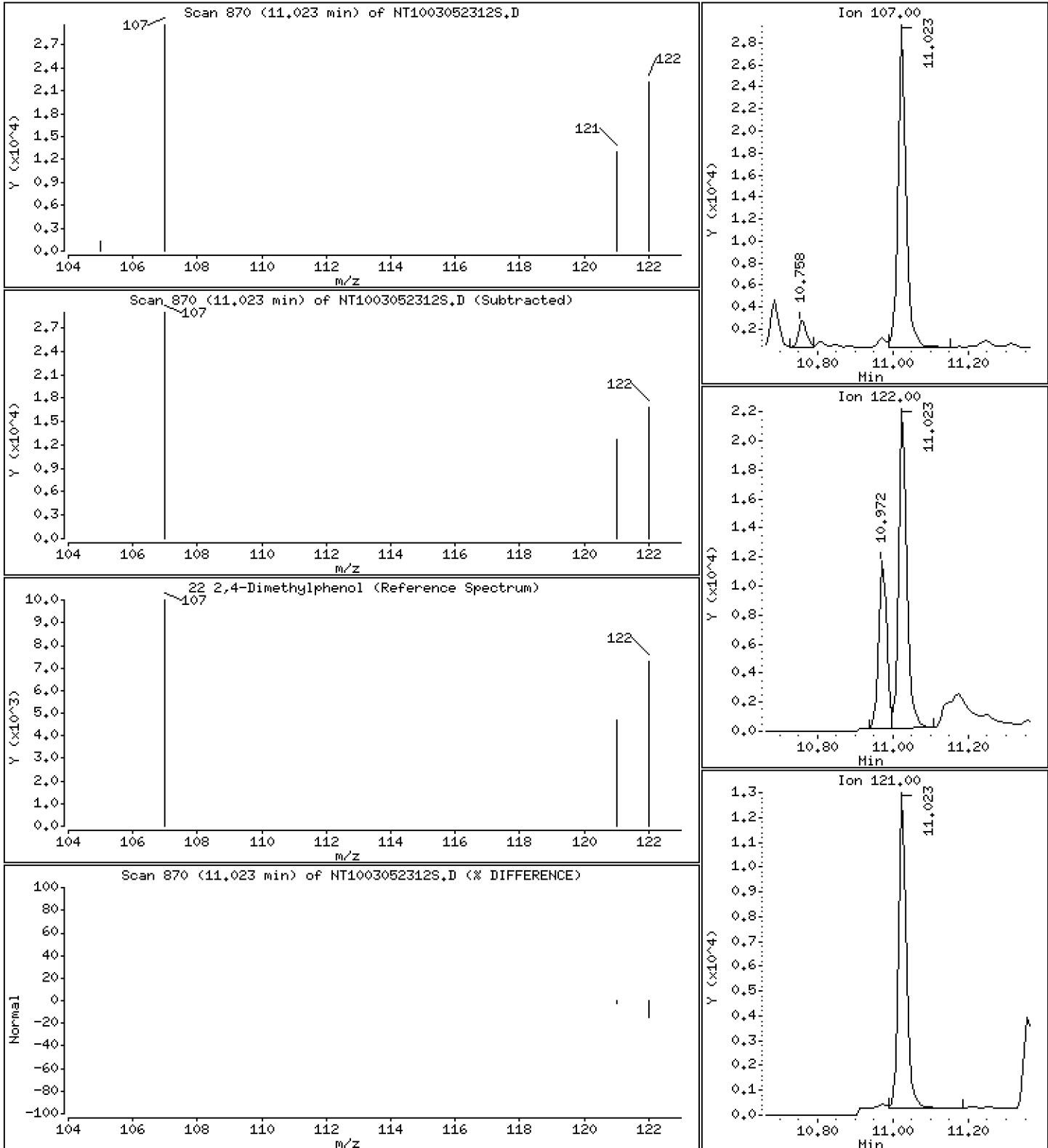
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.5125 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

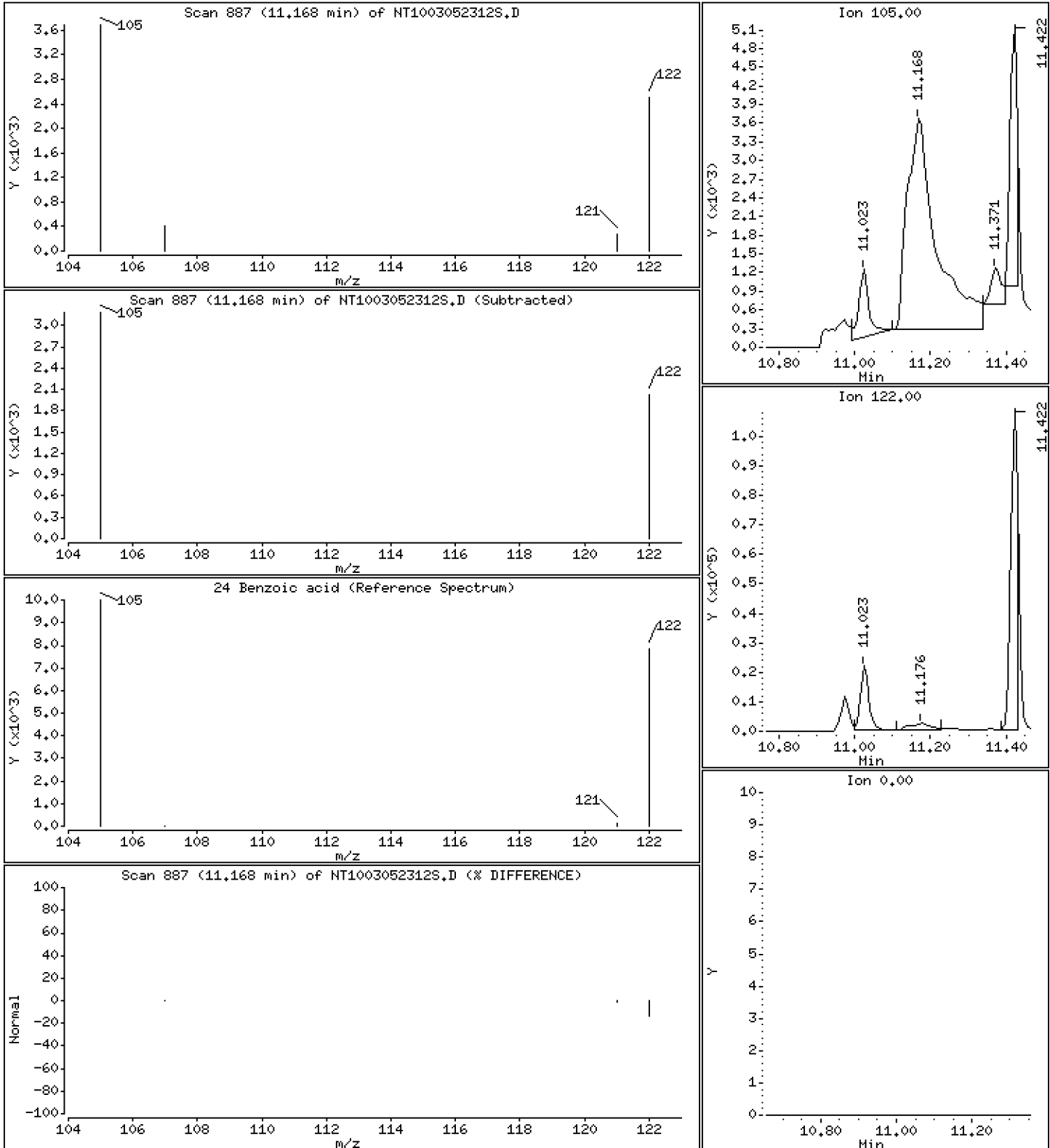
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,3882 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

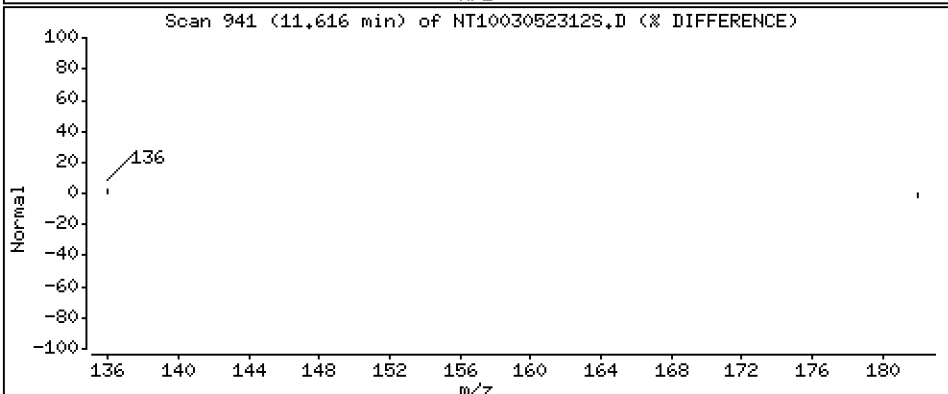
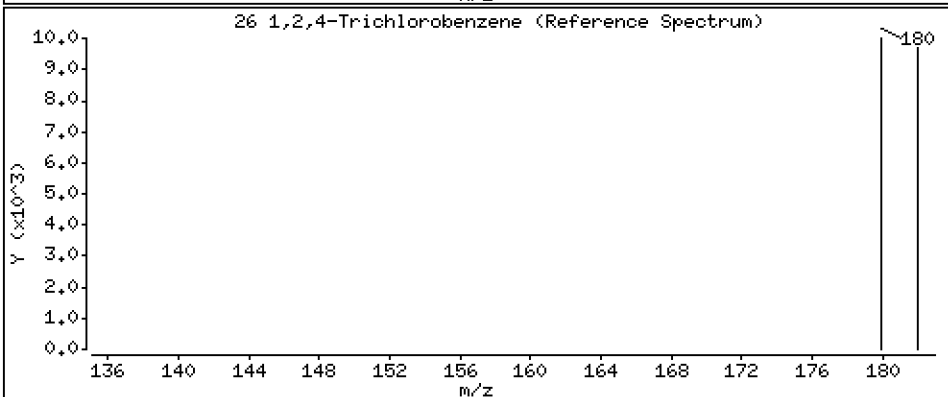
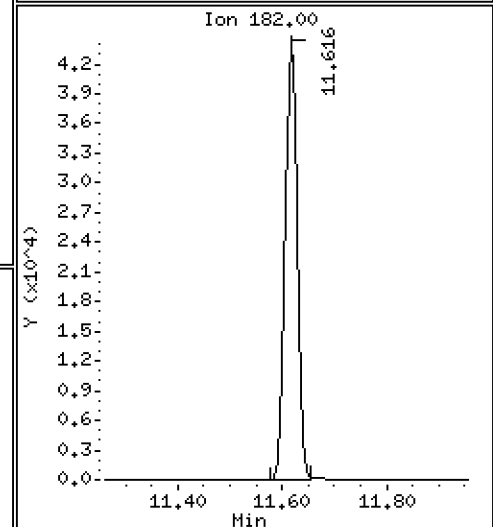
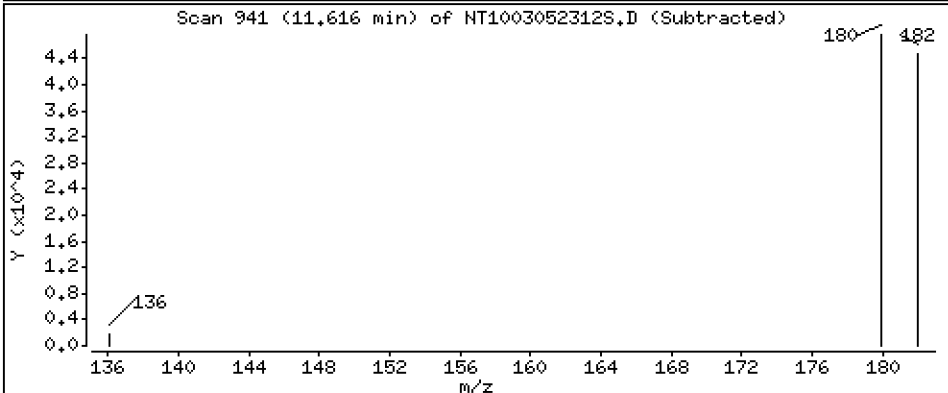
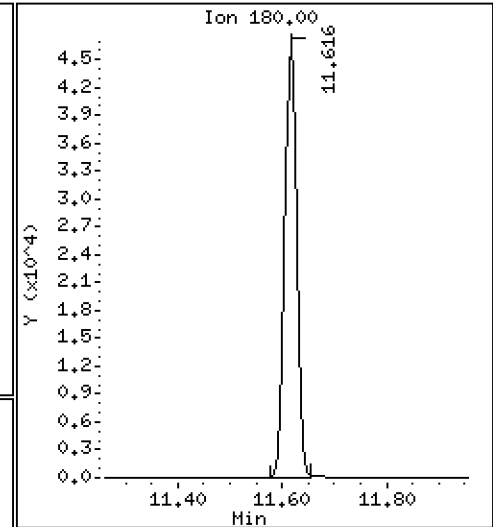
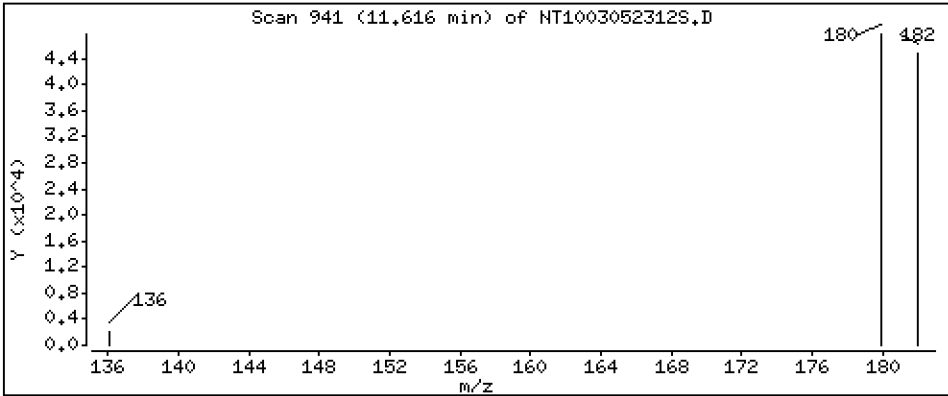
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,9528 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

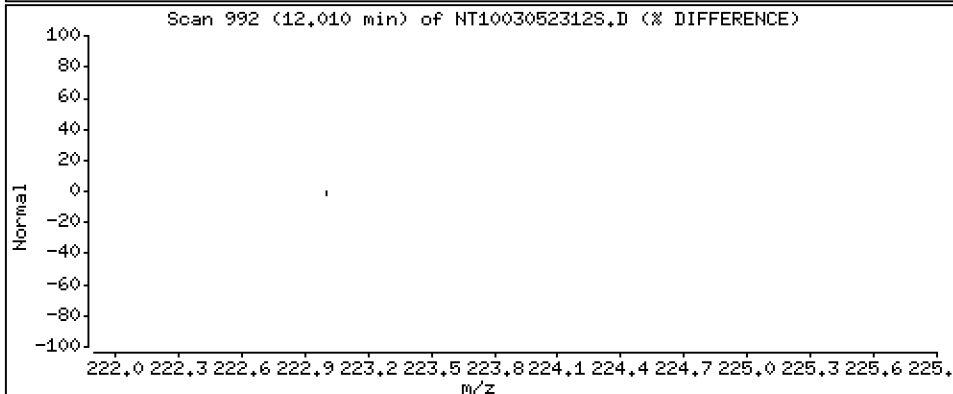
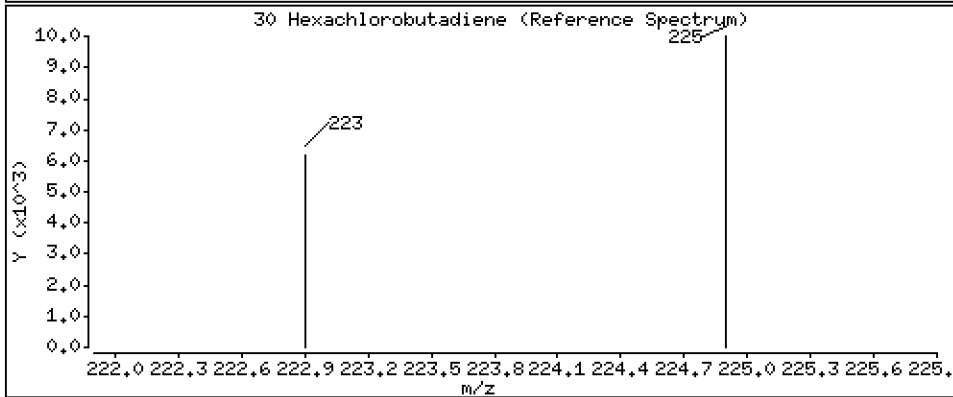
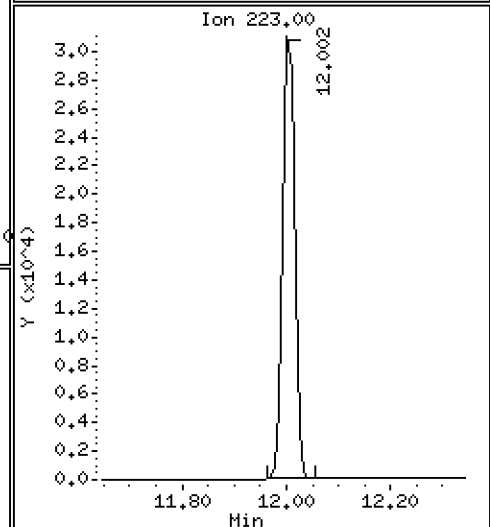
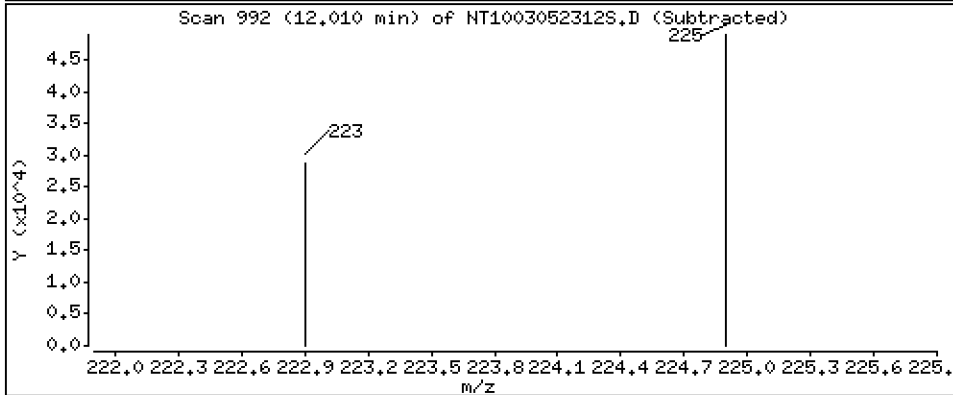
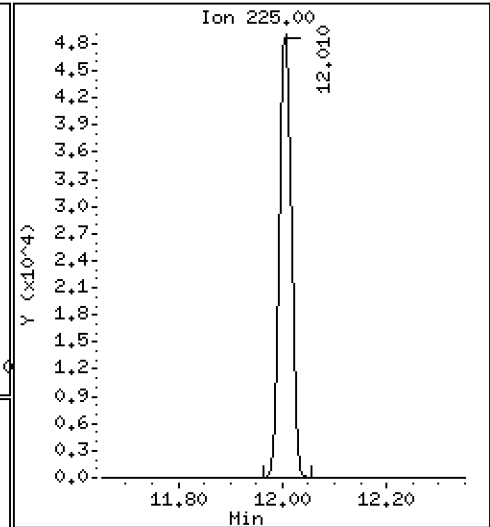
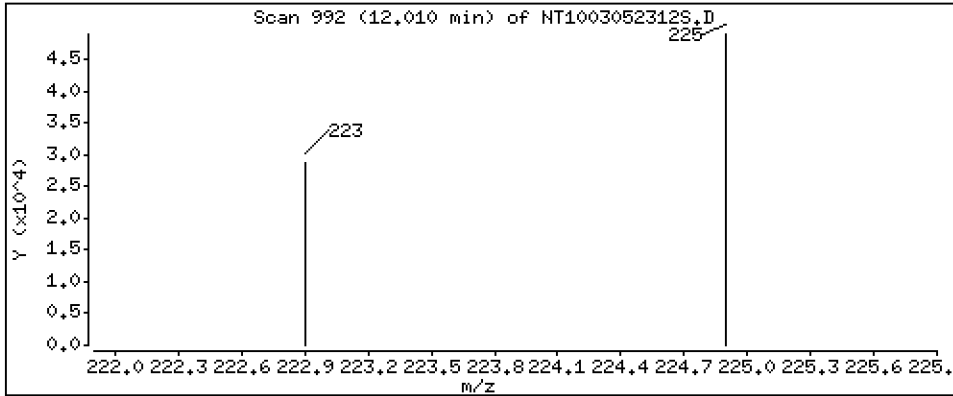
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,427 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

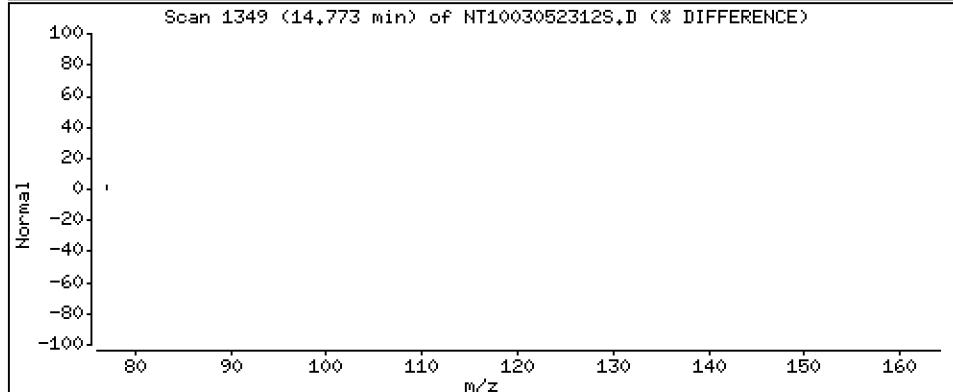
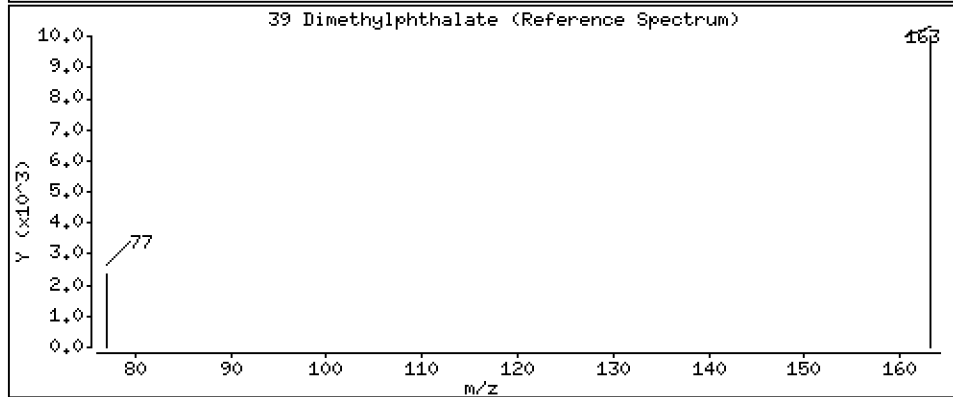
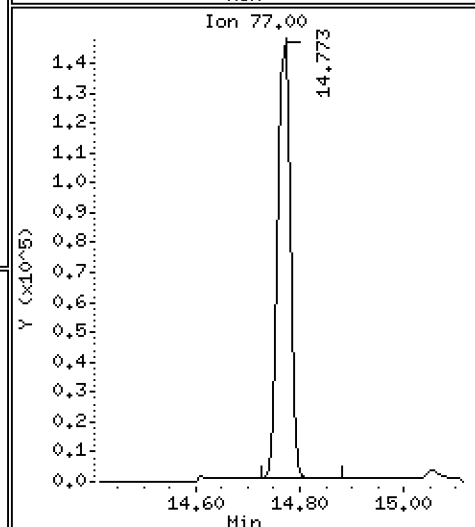
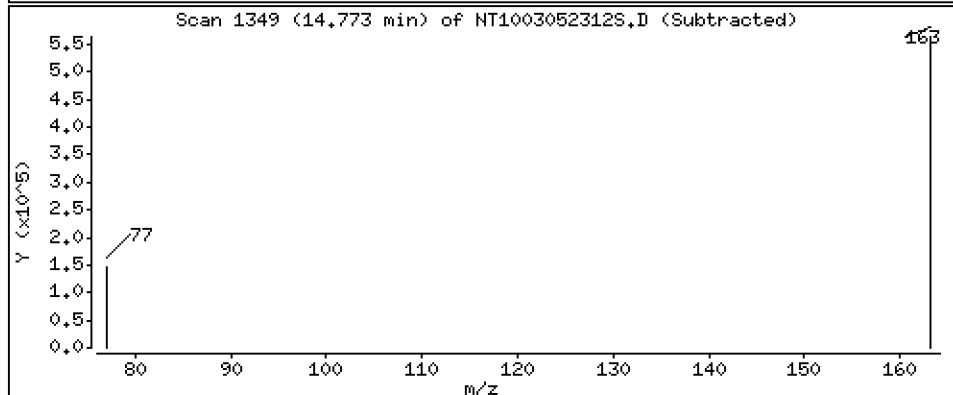
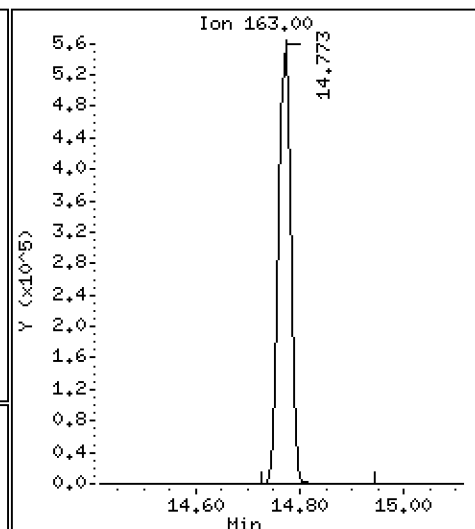
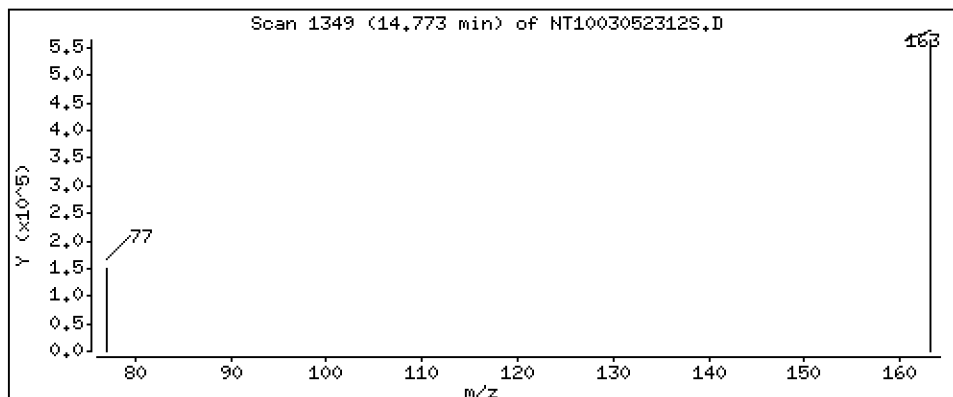
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,280 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

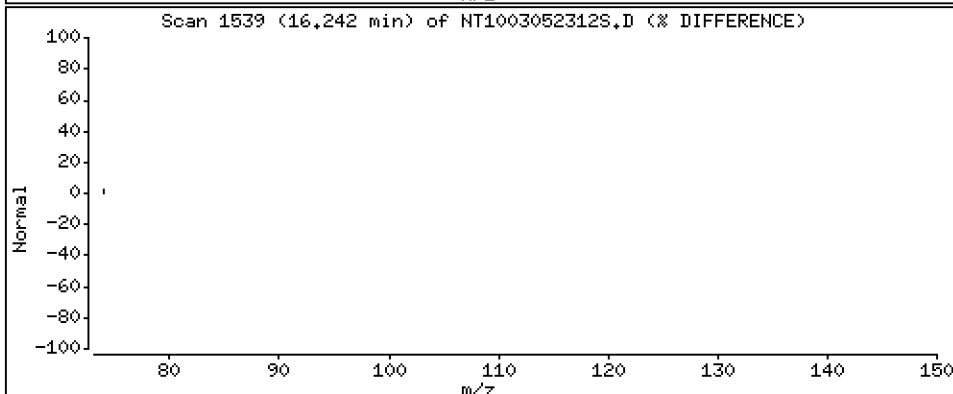
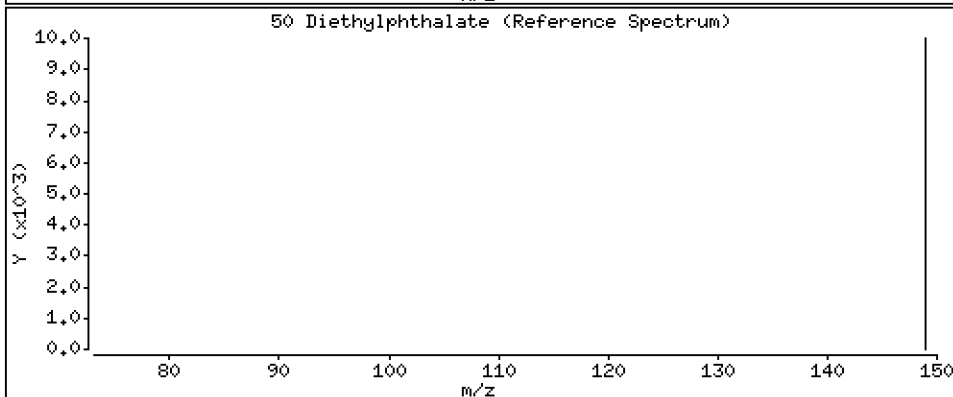
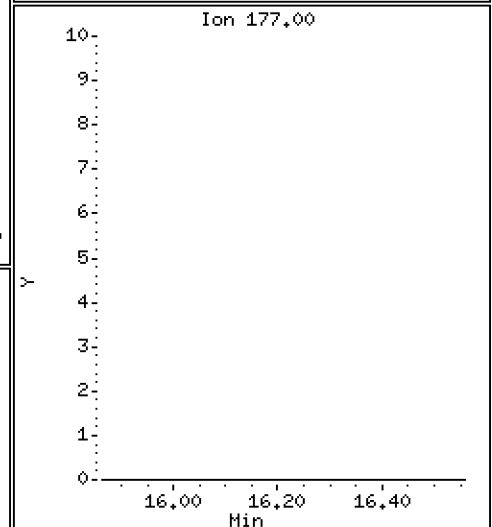
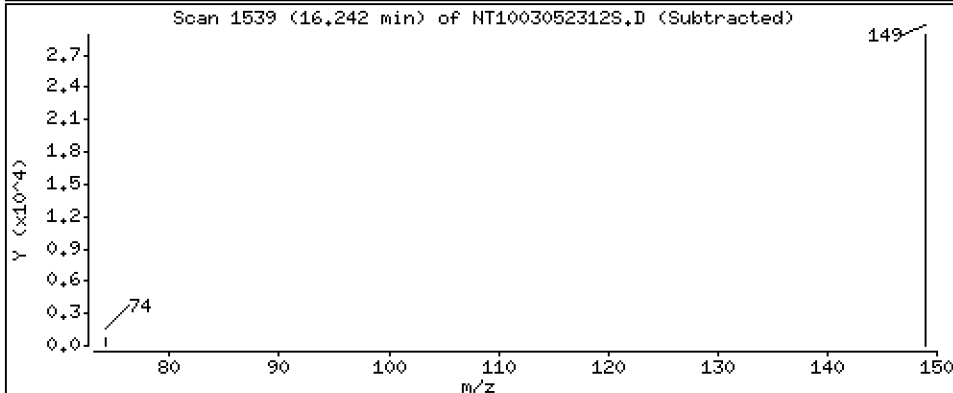
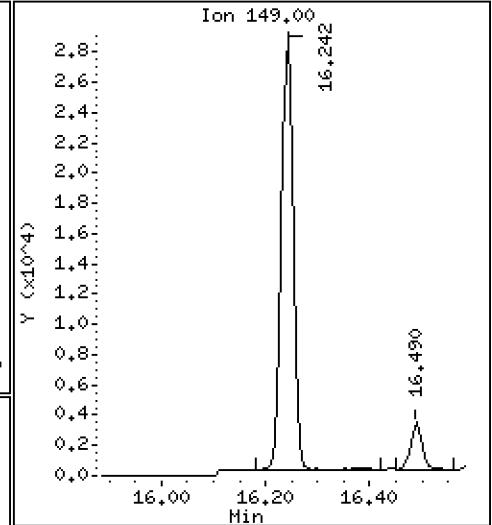
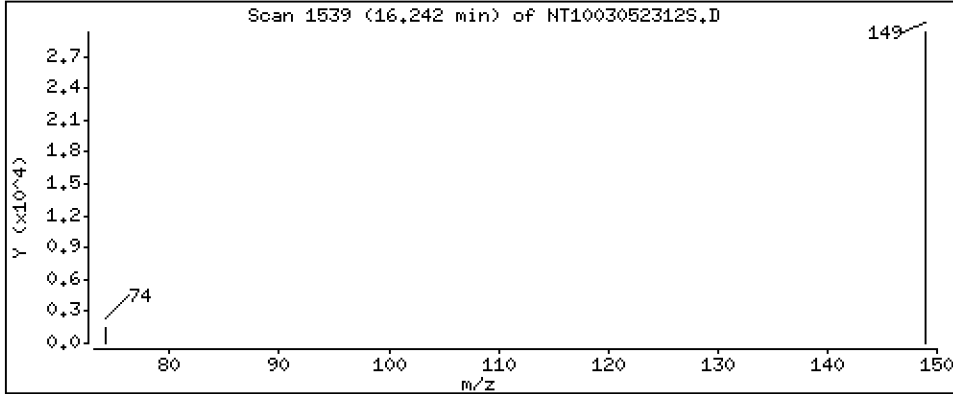
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2799 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

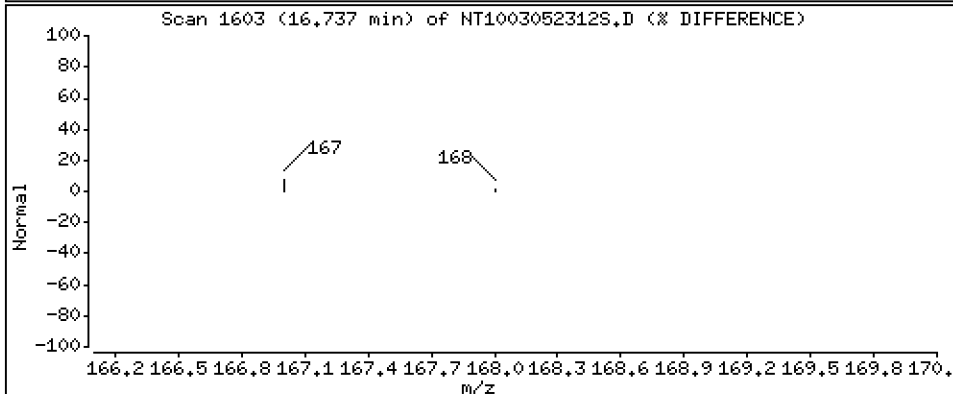
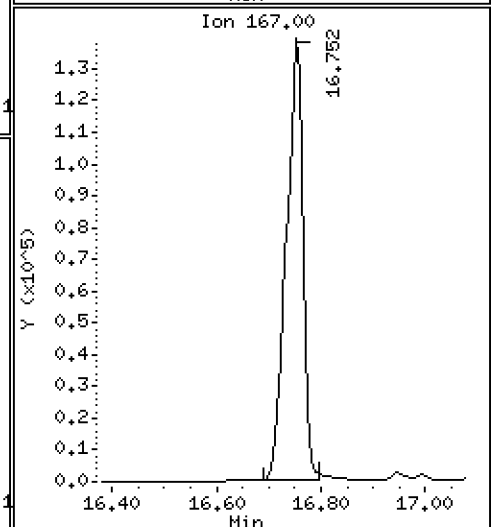
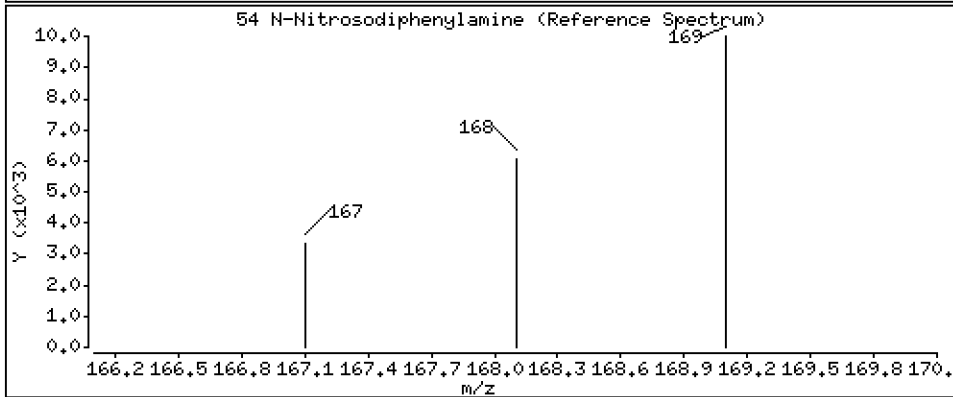
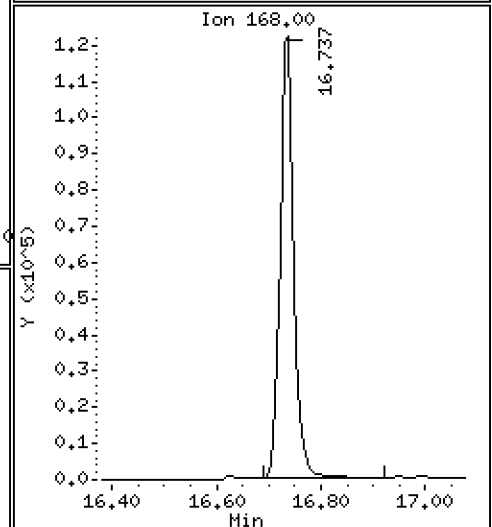
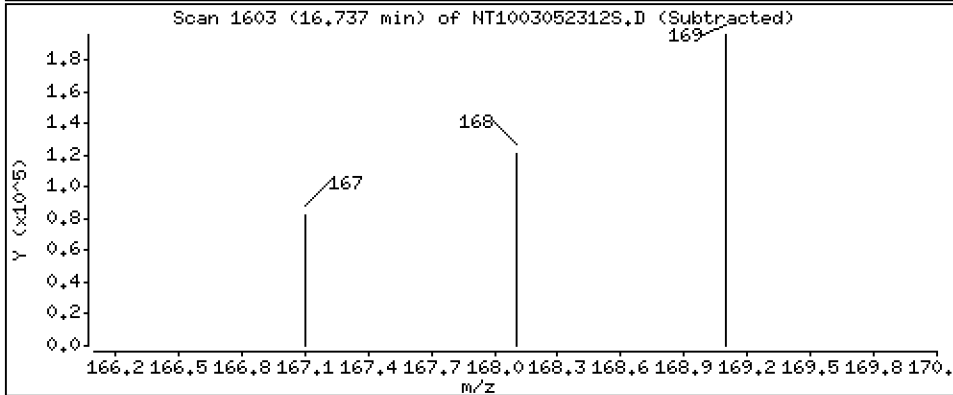
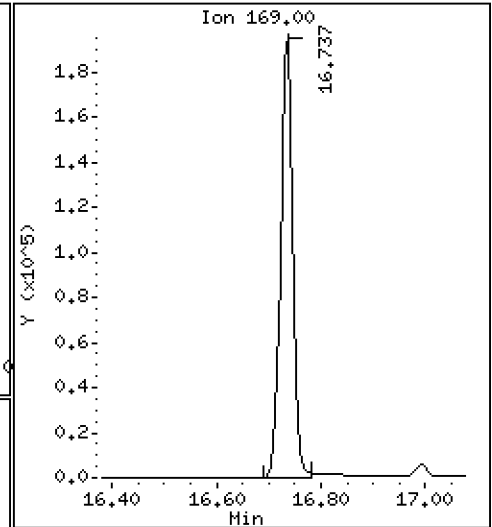
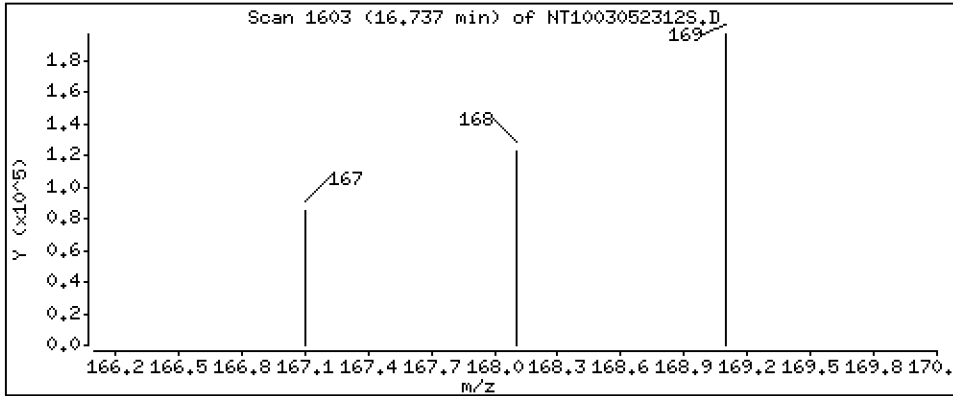
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 1.908 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

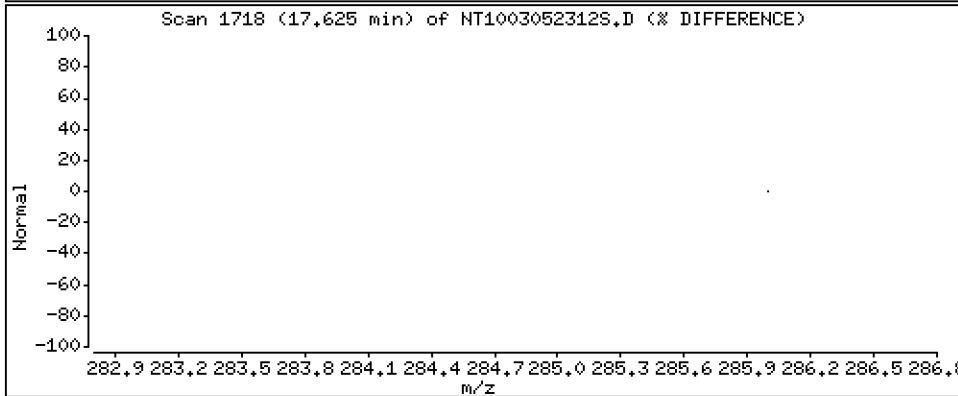
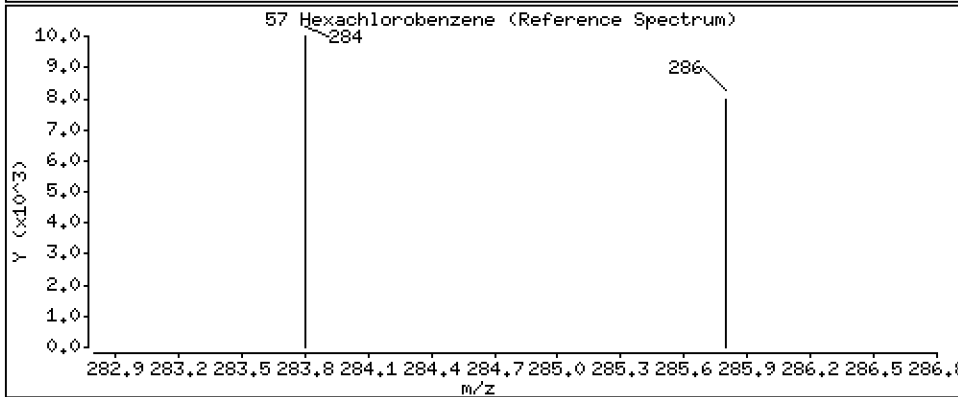
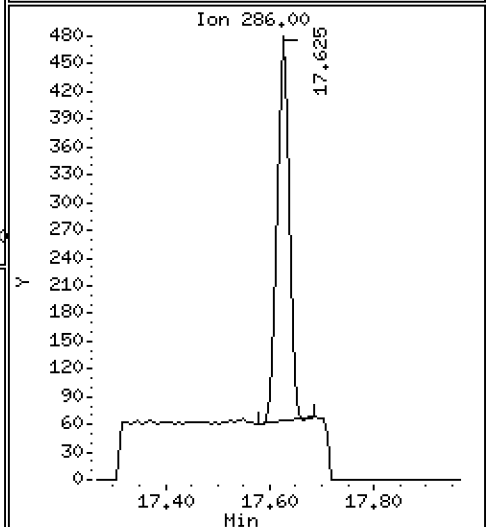
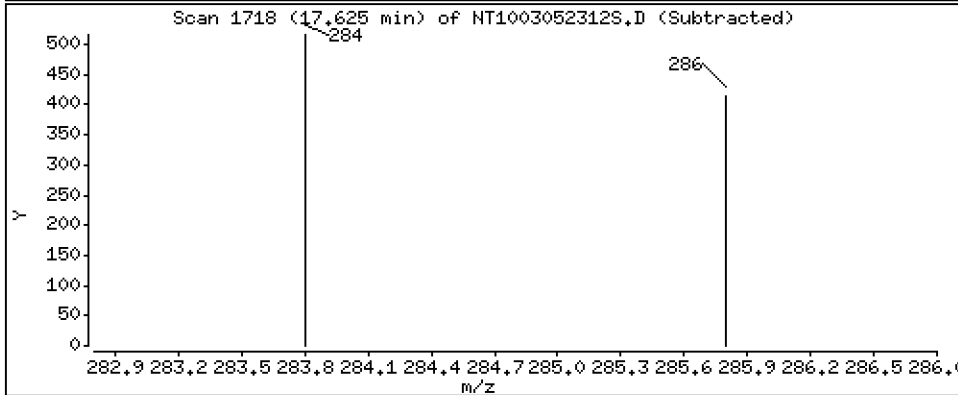
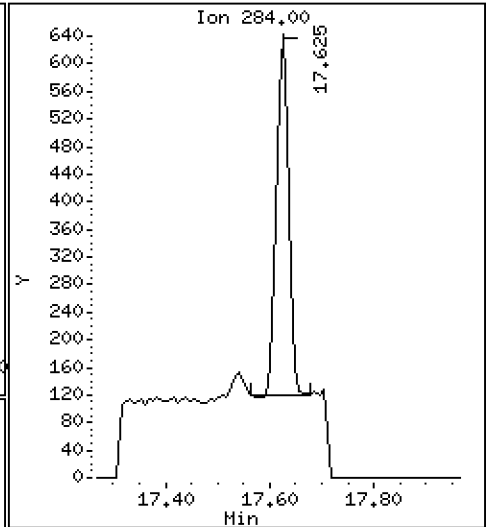
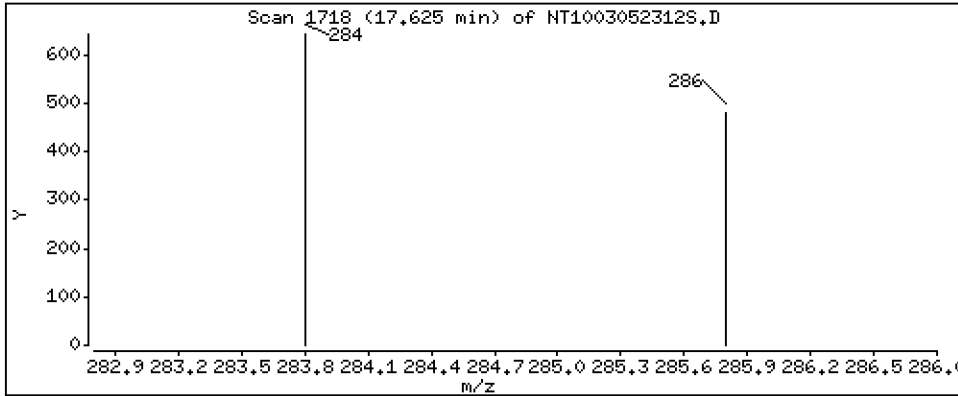
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,01057 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

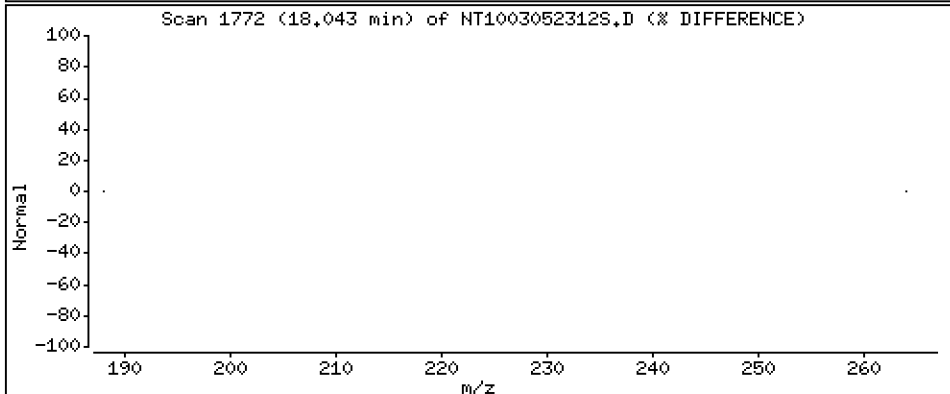
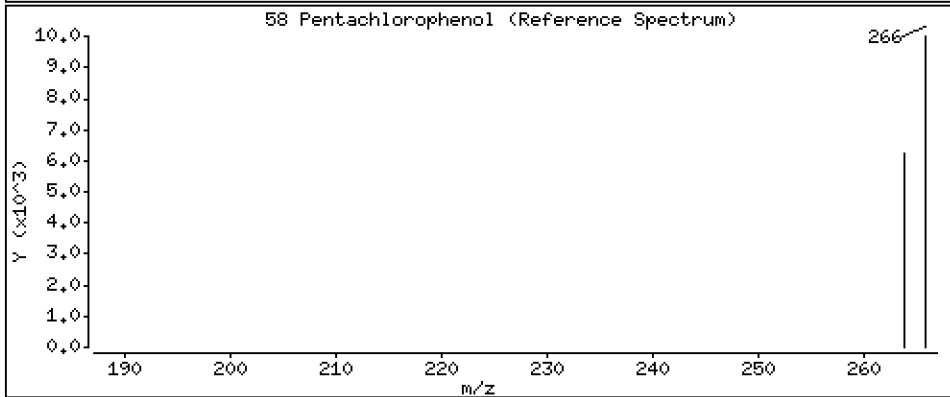
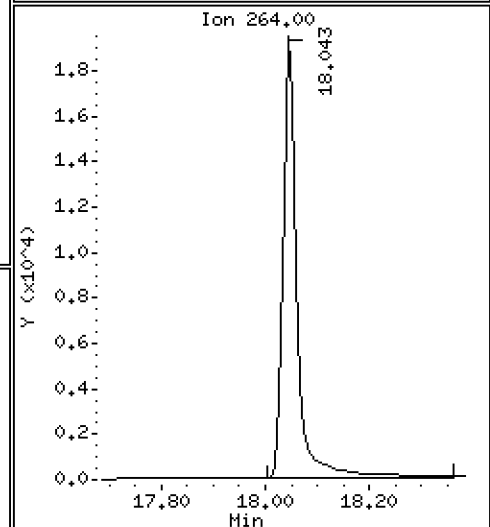
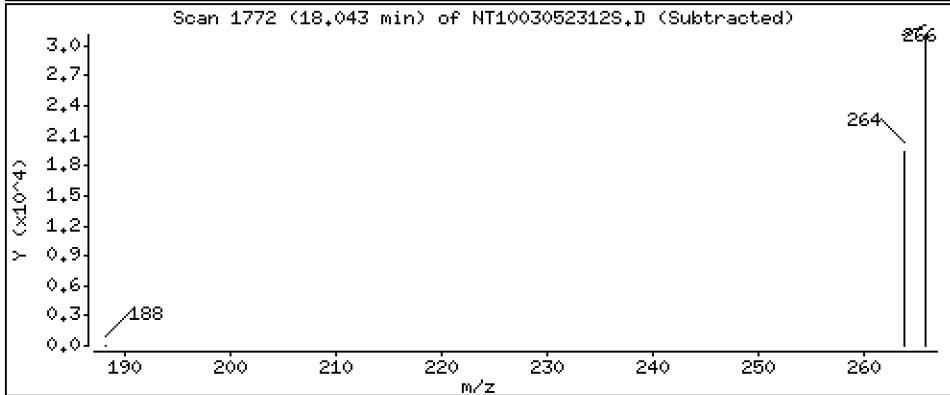
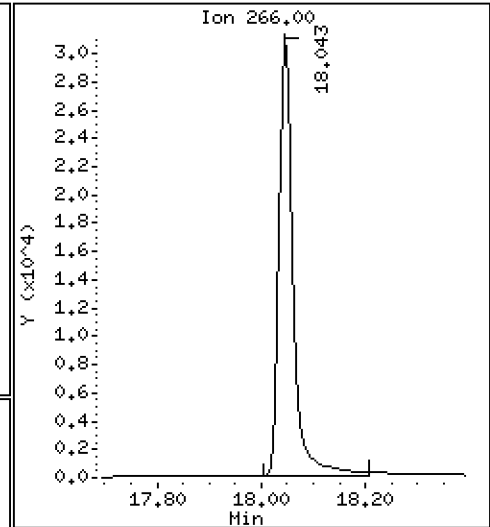
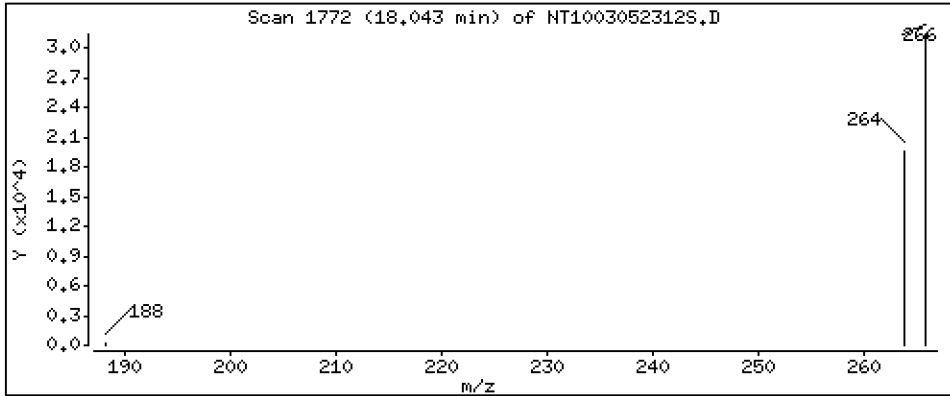
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 1,647 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

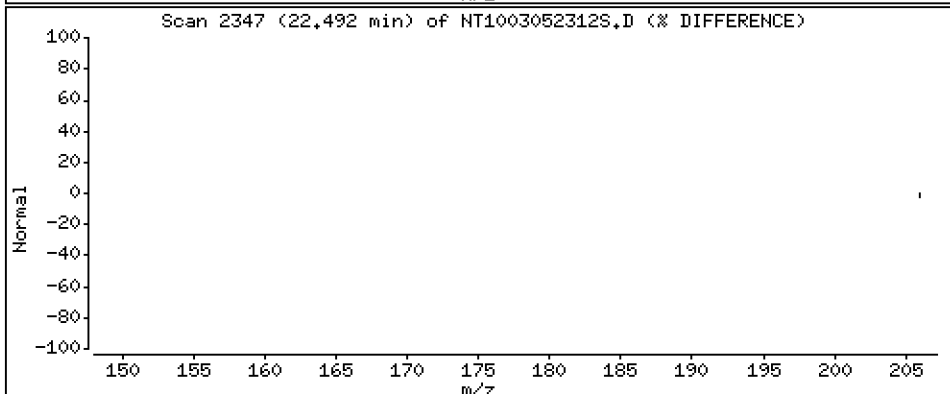
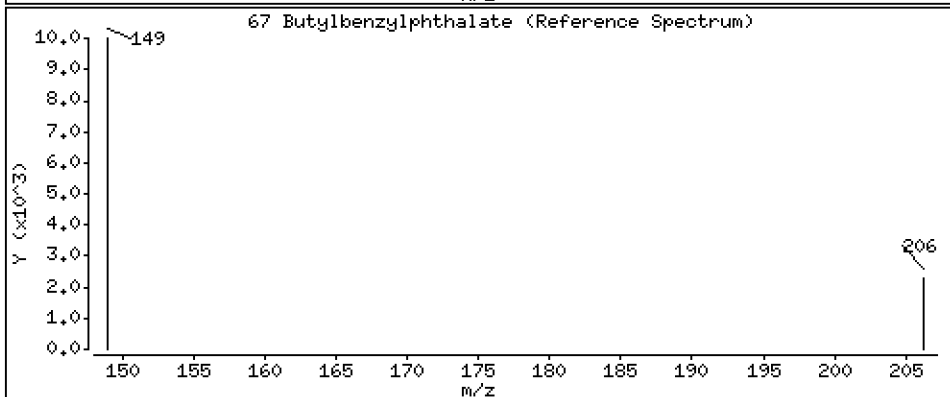
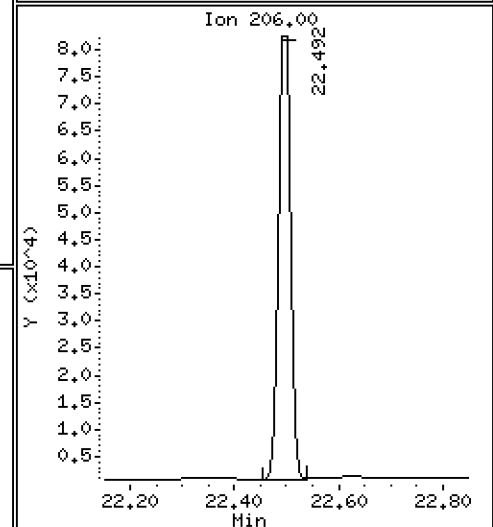
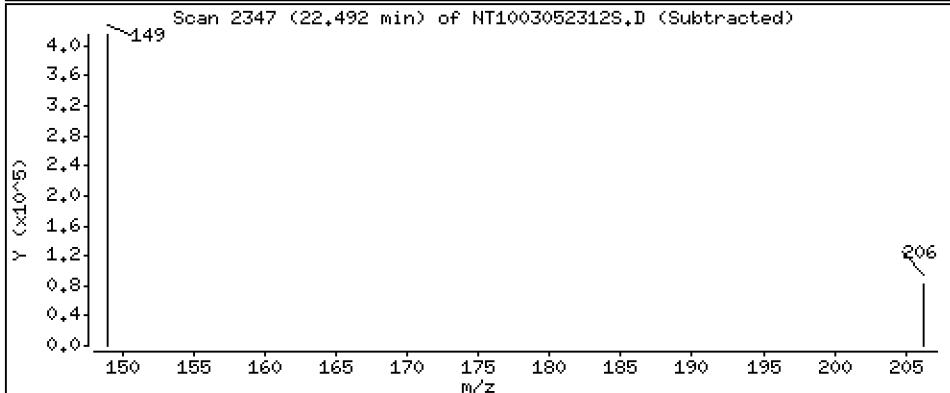
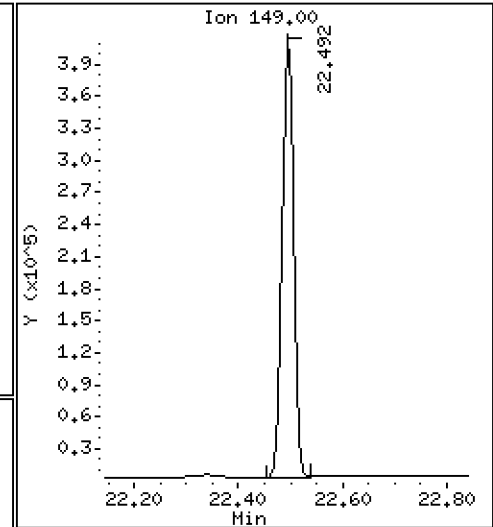
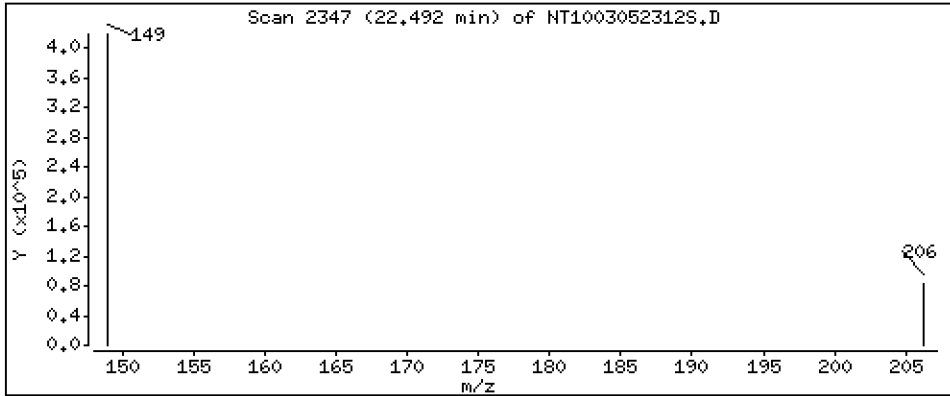
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,475 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

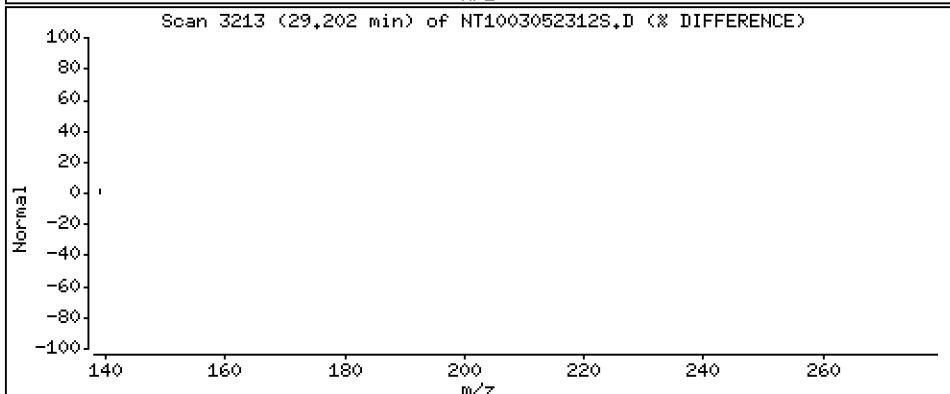
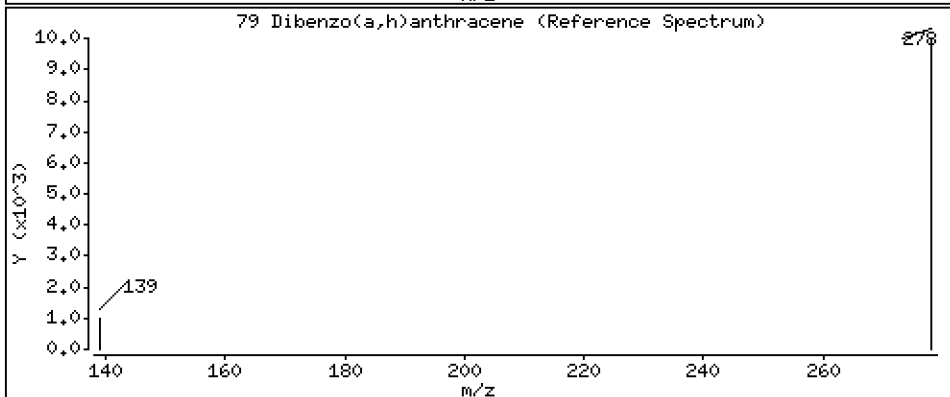
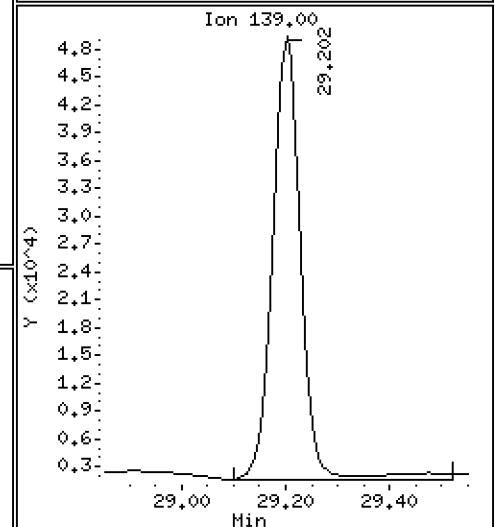
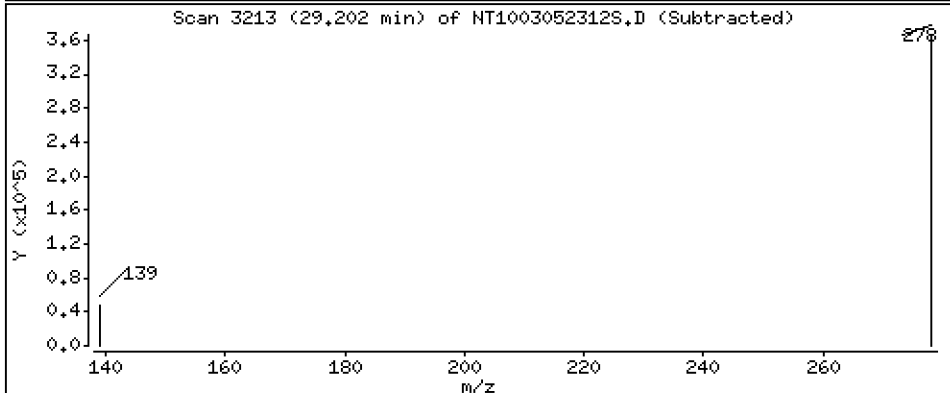
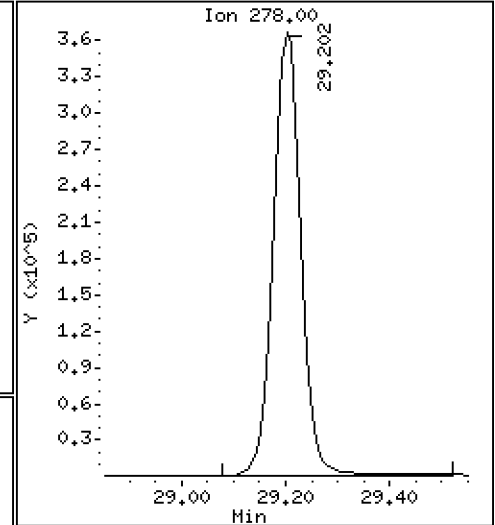
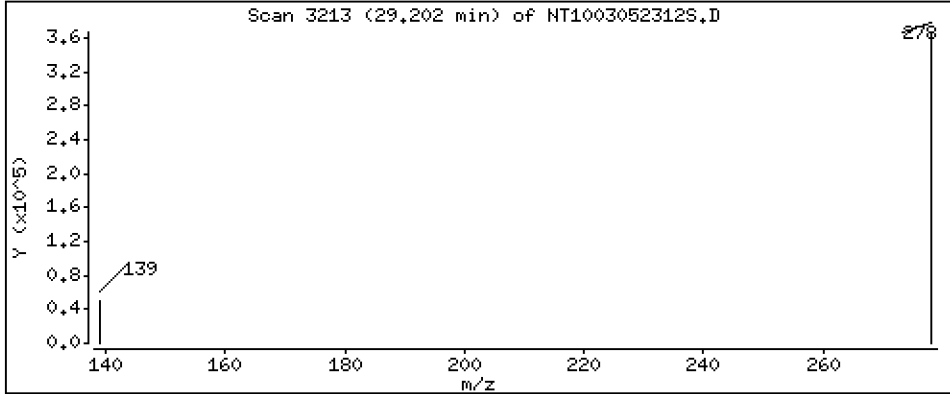
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,721 ug/mL



Date : 05-MAR-2023 20:22

Client ID:

Instrument: nt10.i

Sample Info: BLA0685-SRM2

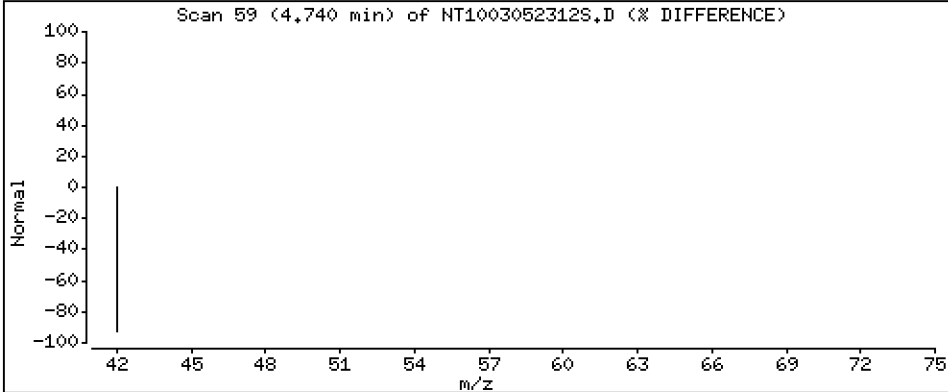
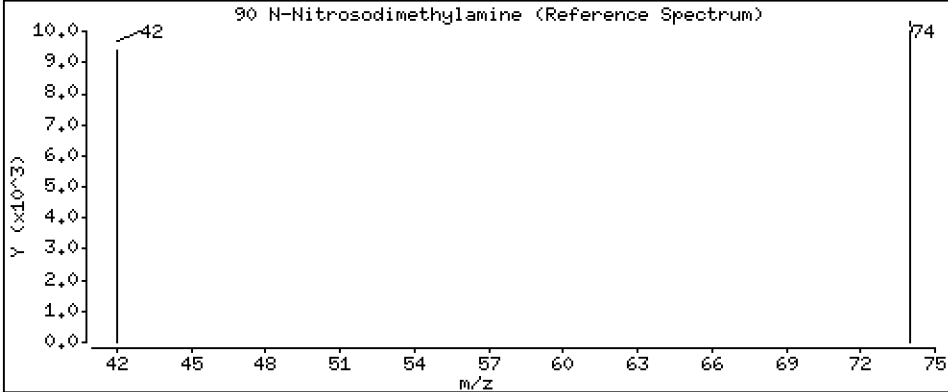
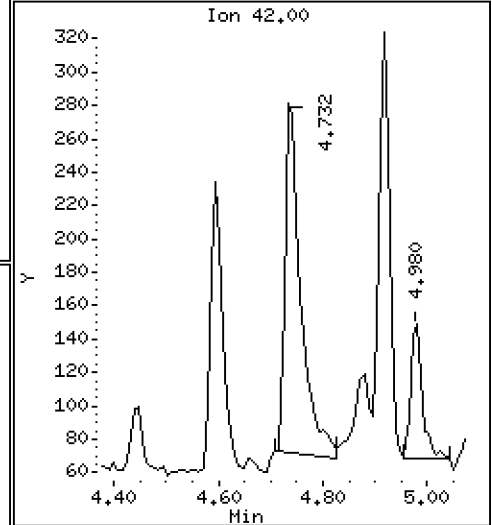
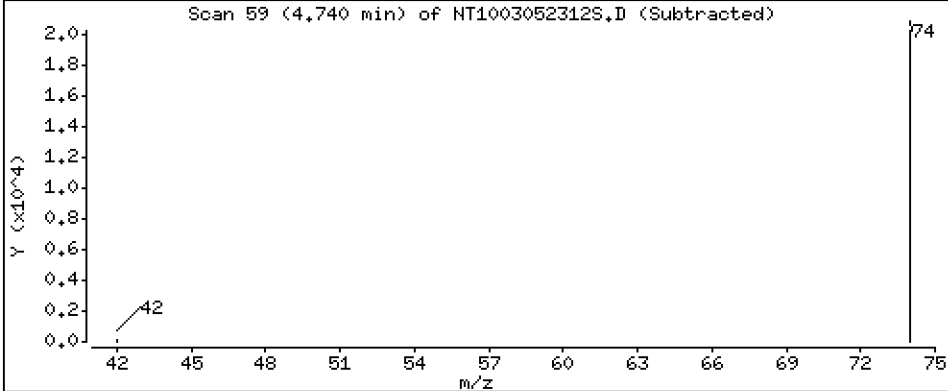
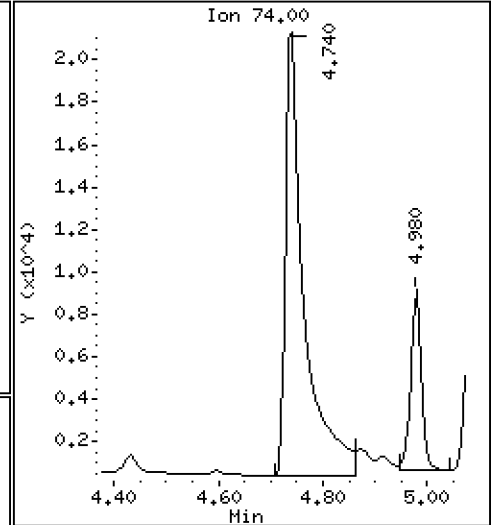
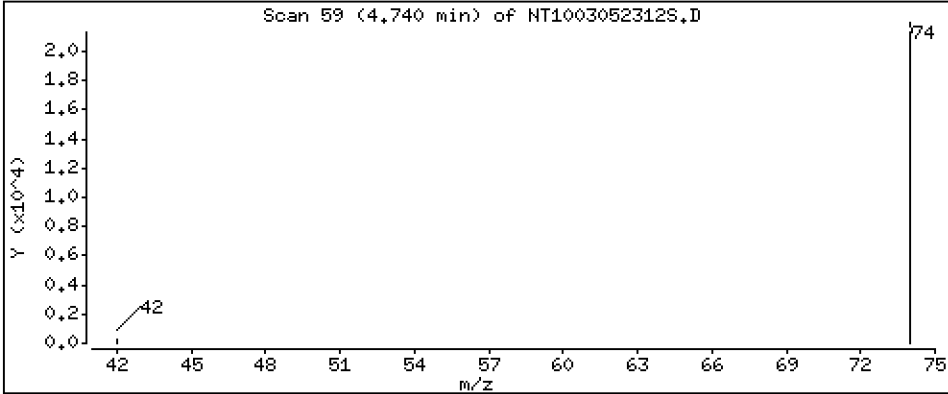
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 1,081 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052312S.D
 Lab Smp Id: BLA0685-SRM2
 Inj Date : 05-MAR-2023 20:22
 Operator : YZ
 Smp Info : BLA0685-SRM2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.747)	546972	6.57888	6.579 (R)
3 Phenol	94		8.540	8.533	(0.923)	311891	2.51118	2.511
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	37448	0.34697	0.3470
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.244	(1.000)	291216	4.00000	
9 1,4-Dichlorobenzene	146		Compound Not Detected.					
11 Benzyl alcohol	79		9.546	9.485	(1.032)	16371	0.24018	0.2402
12 1,2-Dichlorobenzene	146		9.570	9.562	(1.034)	1081	0.01072	0.01072
13 2-Methylphenol	108		9.678	9.663	(1.046)	422344	5.46272	5.463
15 4-Methylphenol	108		9.966	9.958	(1.077)	547745	6.60328	6.603
16 N-Nitroso-di-n-propylamine	70		9.981	9.982	(1.079)	6640	0.12157	0.1216
22 2,4-Dimethylphenol	107		11.023	11.015	(0.939)	44511	0.51246	0.5125
24 Benzoic acid	105		11.167	11.116	(0.951)	18496	0.38824	0.3882
26 1,2,4-Trichlorobenzene	180		11.615	11.608	(0.989)	70111	0.95277	0.9528
* 27 Naphthalene-d8	136		11.739	11.731	(1.000)	1022375	4.00000	
30 Hexachlorobutadiene	225		12.009	12.002	(1.023)	74530	1.42724	1.427
39 Dimethylphthalate	163		14.772	14.765	(0.963)	859100	5.27972	5.280
* 42 Acenaphthene-d10	162		15.345	15.337	(1.000)	512455	4.00000	
50 Diethylphthalate	149		16.241	16.234	(1.058)	42956	0.27994	0.2799 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.729	(0.907)	315589	1.90817	1.908
57 Hexachlorobenzene	284		17.625	17.617	(0.955)	818	0.01057	0.01057 (M)
58 Pentachlorophenol	266		18.042	18.043	(0.977)	56684	1.64664	1.647
* 59 Phenanthrene-d10	188		18.460	18.453	(1.000)	1021943	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.602	(0.918)	563891	6.84217	6.842 (R)
67 Butylbenzylphthalate	149		22.492	22.492	(0.956)	590414	3.47471	3.475
* 69 Chrysene-d12	240		23.522	23.514	(1.000)	1019134	4.00000	
* 77 Perylene-d12	264		26.286	26.286	(1.000)	1141471	4.00000	
79 Dibenzo(a,h)anthracene	278		29.201	29.202	(1.111)	1343818	4.72068	4.721
90 N-Nitrosodimethylamine	74		4.740	4.724	(0.512)	53225	1.08131	1.081

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052312S.D
 Lab Smp Id: BLA0685-SRM2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	291216	-9.38
27 Naphthalene-d8	1132931	566466	2265862	1022375	-9.76
42 Acenaphthene-d10	561597	280799	1123194	512455	-8.75
59 Phenanthrene-d10	1068222	534111	2136444	1021943	-4.33
69 Chrysene-d12	997572	498786	1995144	1019134	2.16
77 Perylene-d12	1245490	622745	2490980	1141471	-8.35

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.74	0.06
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.46	0.04
69 Chrysene-d12	23.51	23.01	24.01	23.52	0.03
77 Perylene-d12	26.29	25.79	26.79	26.29	-0.00

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

REVIEW SUMMARY FOR FILE - NT1003052312S.D

Lab ID: BLA0685-SRM2

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 20:22

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.032	1.026	0.0059	Benzyl alcohol

RRT check based on Ccal File: SIM.b/NT1003052303S.D

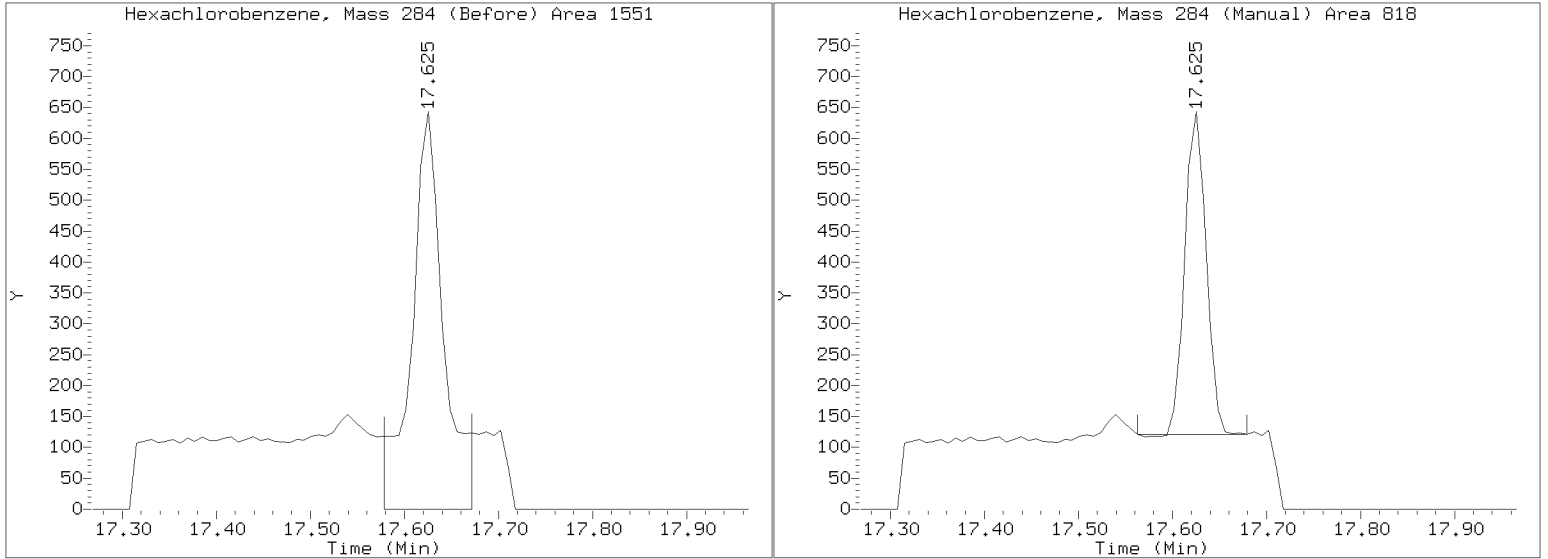
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052312S.D
Injection Date: 05-MAR-2023 20:22
Lab ID:BLA0685-SRM2 Client ID:
Report Date: 03/28/2023 11:05



APPROVED
By Deenay Dunmore at 12:02 pm, Mar 28, 2023



**MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM**

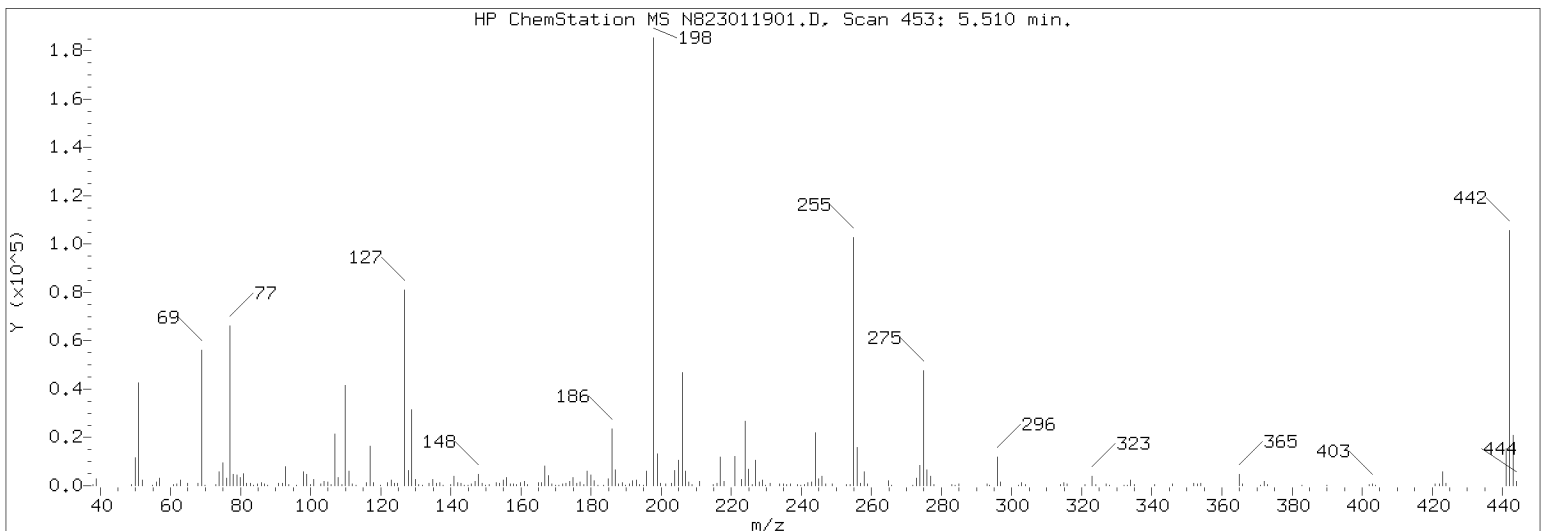
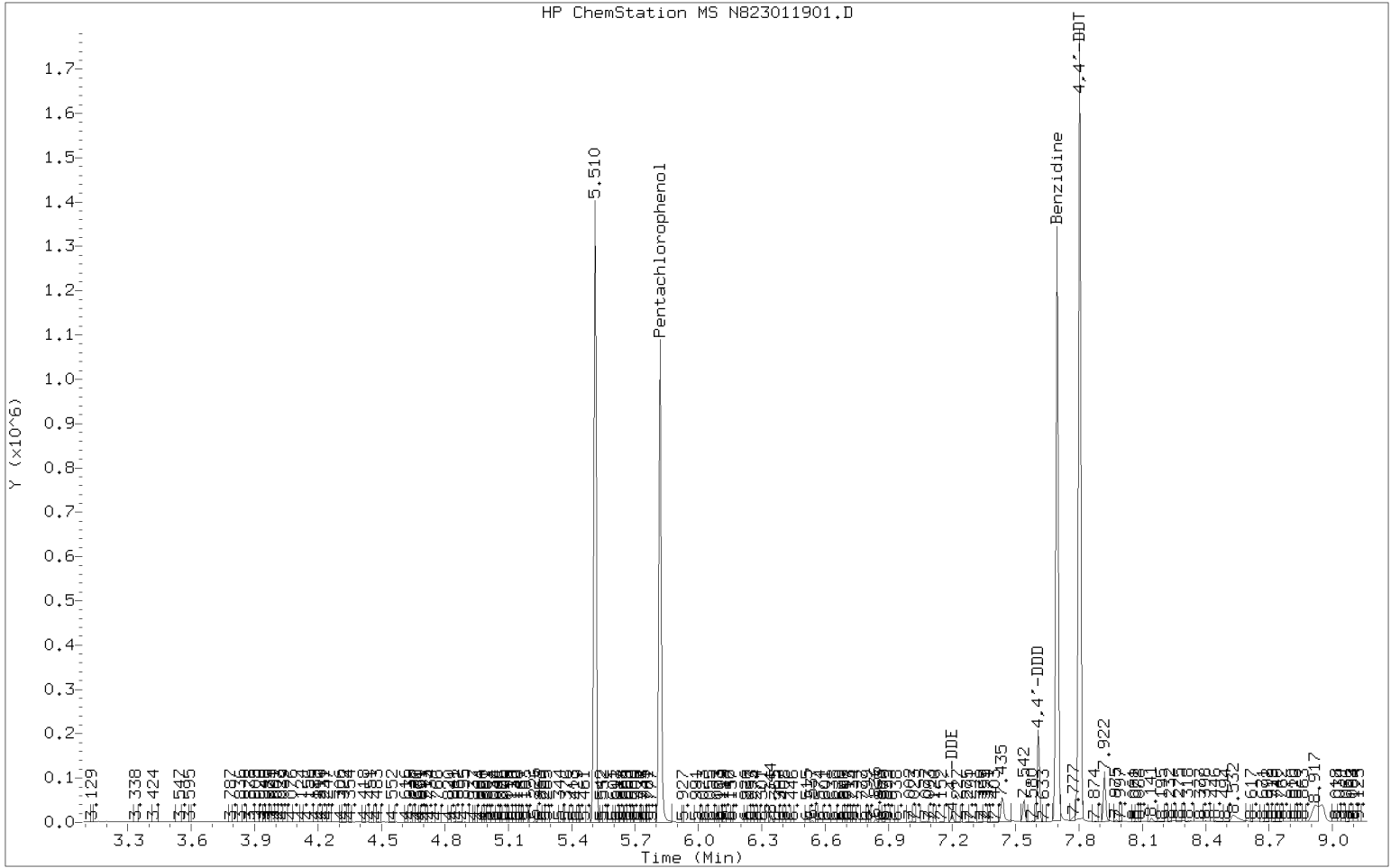
Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Lab File ID:	<u>N823011901.D</u>	Injection Date:	<u>01/19/23</u>
Instrument ID:	<u>NT8</u>	Injection Time:	<u>10:28</u>
Sequence:	<u>SLA0213</u>	Lab Sample ID:	<u>SLA0213-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.25	PASS
69	Less than 100% of 198	30.9	PASS
70	Less than 2% of 69	0.208	PASS
197	Less than 2% of 198	0.168	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	2.85	PASS
441	Less than 150% of 443	72.9	PASS
442	1 - 200% of 198	67.9	PASS
443	15 - 24% of 442	19.6	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

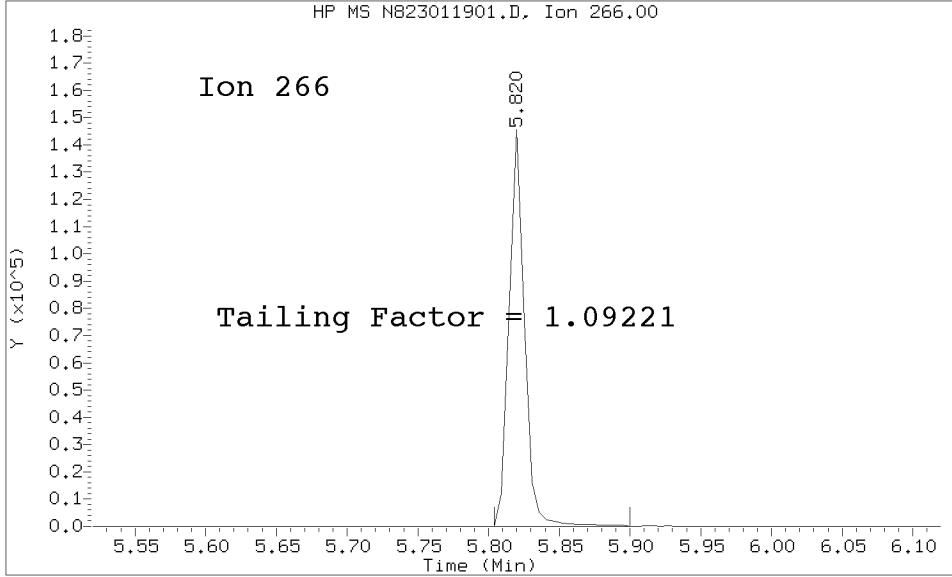
Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLA0213-TUN1	N823011901.D	01/19/2023	10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	01/19/2023	10:59
Cal Standard	SLA0213-CAL1	N823011903.D	01/19/2023	11:26
Cal Standard	SLA0213-CAL2	N823011904.D	01/19/2023	11:58
Cal Standard	SLA0213-CAL3	N823011905.D	01/19/2023	12:25
Cal Standard	SLA0213-CAL4	N823011906.D	01/19/2023	12:52
Cal Standard	SLA0213-CAL5	N823011907.D	01/19/2023	13:19
Cal Standard	SLA0213-CAL6	N823011908.D	01/19/2023	13:46
Secondary Cal Check	SLA0213-SCV1	N823011909.D	01/19/2023	14:58

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
 Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
 Injection Date: 19-JAN-2023 10:28 Operator: JZ
 Sample Info: SLA0213-TUN1 DFTPP230119
 Report Date: 01/19/2023 20:14



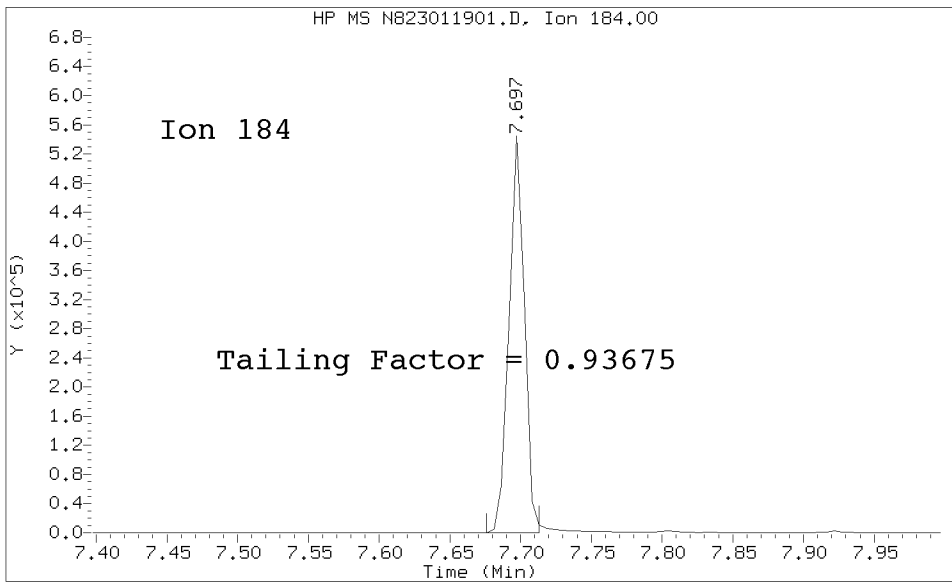
Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol

=====
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
 Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
 Location of Maximum: 198.00
 Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		



**MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM**

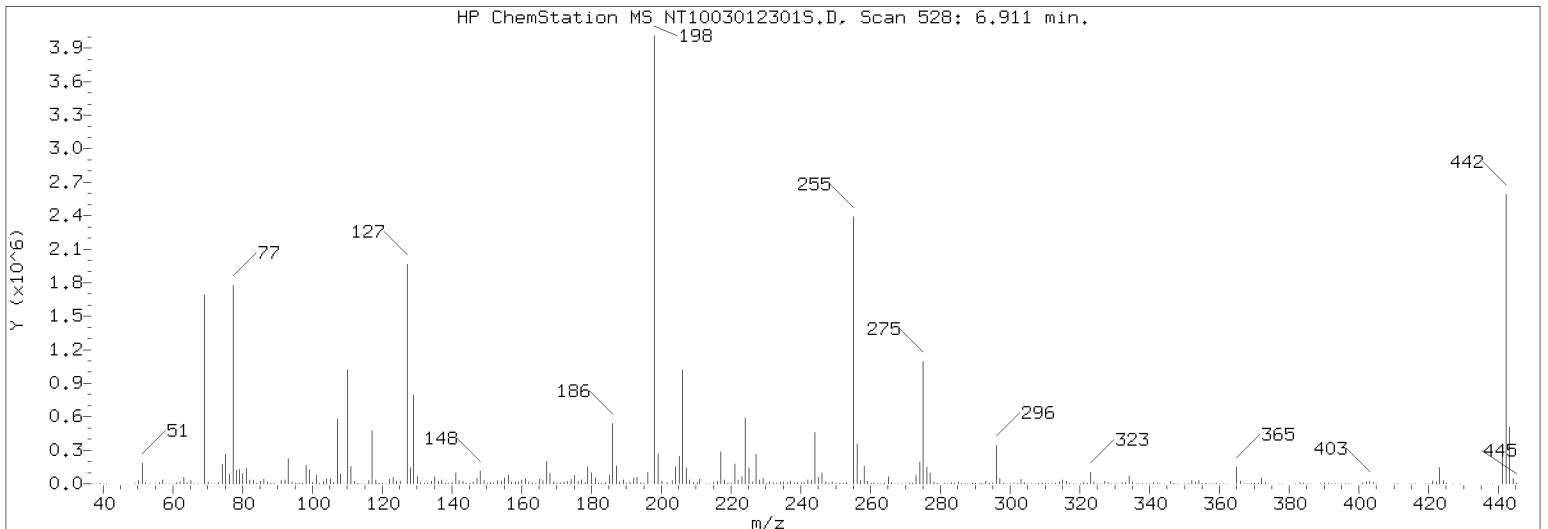
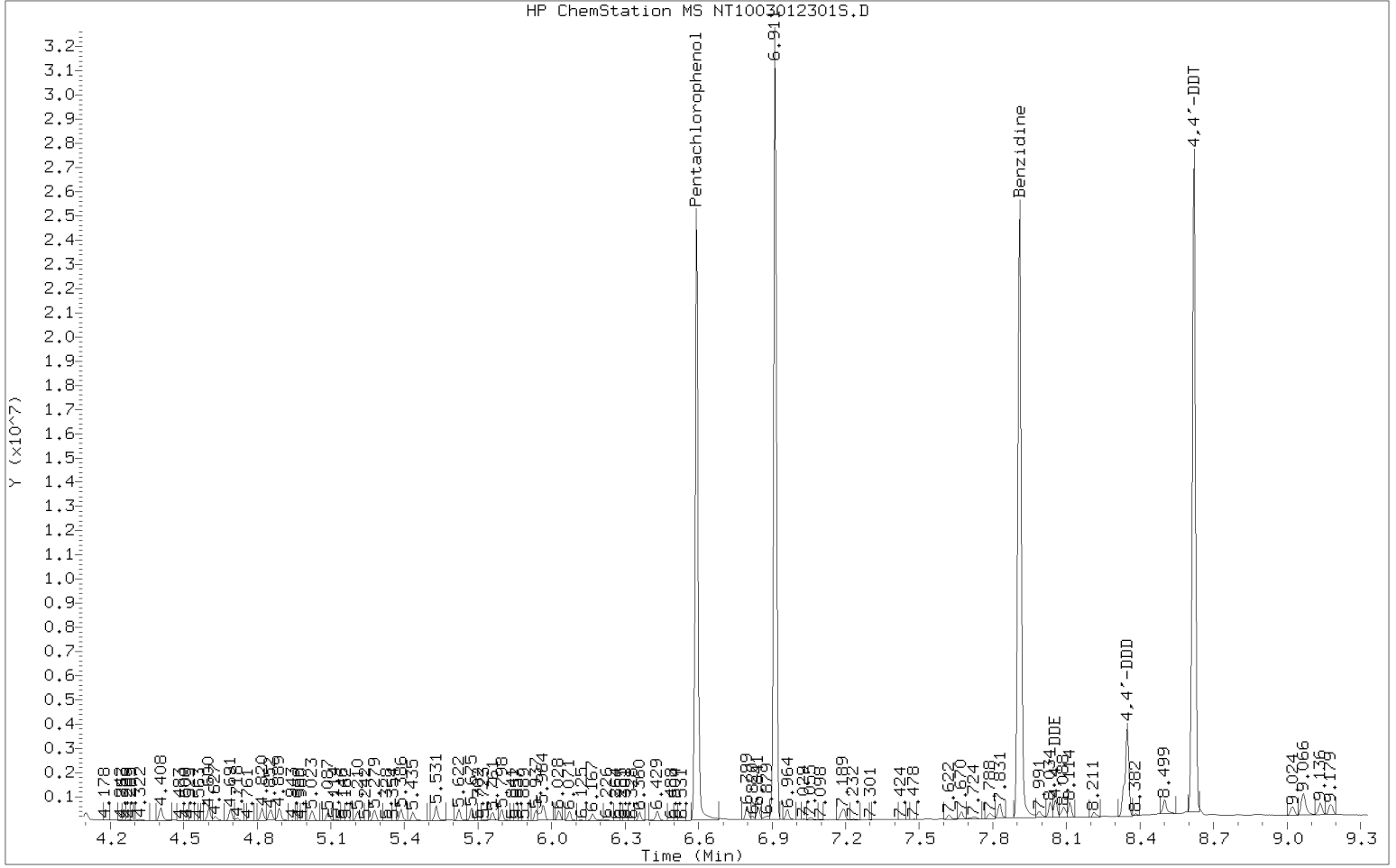
Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Lab File ID:	<u>NT1003012301S.D</u>	Injection Date:	<u>03/01/23</u>
Instrument ID:	<u>NT10</u>	Injection Time:	<u>15:49</u>
Sequence:	<u>SLC0143</u>	Lab Sample ID:	<u>SLC0143-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.793	PASS
69	Less than 100% of 198	41.1	PASS
70	Less than 2% of 69	0.366	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.67	PASS
365	1 - 100% of 198	4.33	PASS
441	Less than 150% of 443	73.4	PASS
442	1 - 200% of 198	80.1	PASS
443	15 - 24% of 442	19.1	PASS
4,4'-DDD	Less than 20% of		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Less than 200% of		

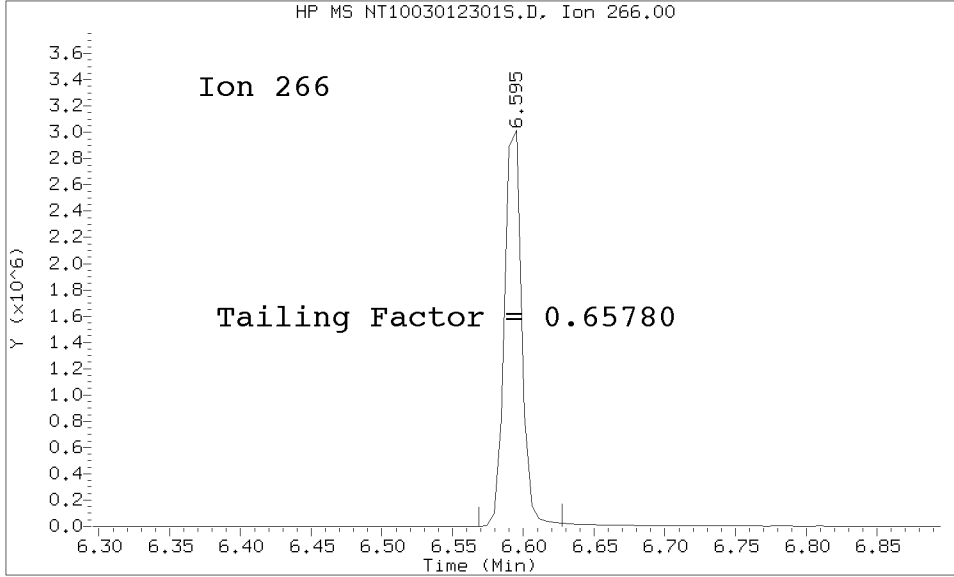
Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0143-TUN1	NT1003012301S.D	03/01/2023	15:49
Cal Standard	SLC0143-CAL8	NT1003012303S.D	03/01/2023	16:42
Cal Standard	SLC0143-CAL7	NT1003012304S.D	03/01/2023	17:21
Cal Standard	SLC0143-CAL6	NT1003012305S.D	03/01/2023	17:59
Cal Standard	SLC0143-CAL5	NT1003012306S.D	03/01/2023	18:37
Cal Standard	SLC0143-CAL4	NT1003012307S.D	03/01/2023	19:15
Cal Standard	SLC0143-CAL3	NT1003012308S.D	03/01/2023	19:53
Cal Standard	SLC0143-CAL2	NT1003012309S.D	03/01/2023	20:30
Cal Standard	SLC0143-CAL1	NT1003012310S.D	03/01/2023	21:09
Secondary Cal Check	SLC0143-SCV1	NT1003012311S.D	03/01/2023	21:46
Initial Cal Blank	SLC0143-ICB1	NT1003012312S.D	03/01/2023	22:24

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
 Method Used: \20230301.b\SIM.b\DFTPP8270E.m Inst: nt10
 Injection Date: 01-MAR-2023 15:49 Operator: JGR
 Sample Info: SLC0143-TUN1 SLC0143-TUN1
 Report Date: 07/05/2023 09:35



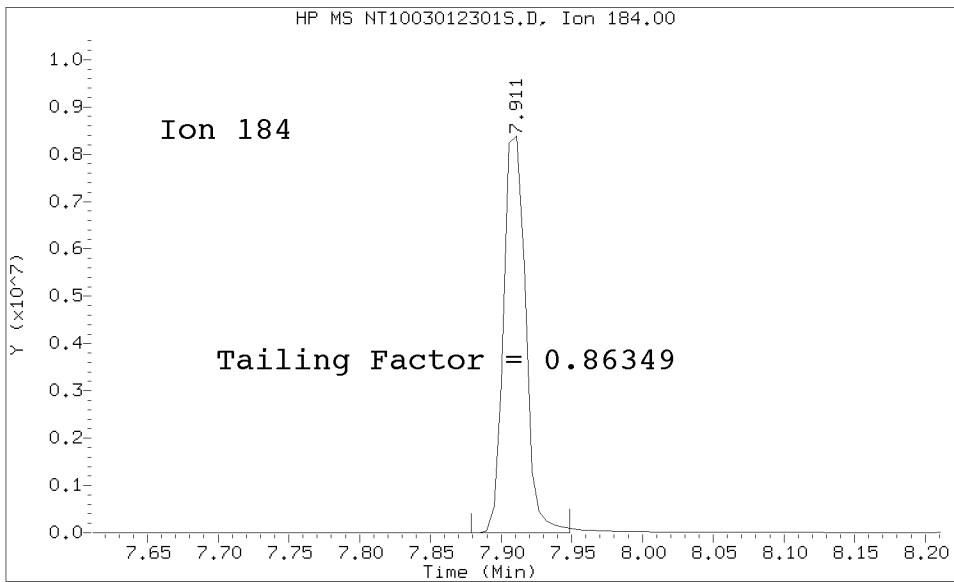
Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 07/05/2023 09:35



Pentachlorophenol

=====
Exp. RT = 6.590
Found RT = 6.595

Tail Factor = 0.658 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.911
Found RT = 7.911

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.6578035	2.000	PASS
Benzidine	0.8634886	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	4780124			N/A
4,4-DDE	47256	1.0	20.0	PASS
4,4-DDD	542360	10.2	20.0	PASS
4,4-DDD + DDE	589616	11.0	20.0	PASS

Tuning Sample, nt10.i/20230301.b/SIM.b/NT1003012301S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.33 (0.79)
69	Mass 69 relative abundance	41.10
70	Less than 2.00% of mass 69	0.15 (0.37)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.67
365	1.00 - 100.00% of mass 198	4.33
441	Less than 150.00% of mass 443	11.23 (73.44)
442	Less than 200.00% of mass 198	80.08
443	15.00 - 24.00% of mass 442	15.30 (19.10)

Data File: NT1003012301S.D
 Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
 Location of Maximum: 198.00
 Number of points: 369

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	462	140.00	7430	237.00	14976	332.00	6725
38.00	1113	141.00	70248	238.00	2080	333.00	7901
39.00	4743	142.00	22264	239.00	7687	334.00	53800
40.00	108	143.00	15456	240.00	6126	335.00	13827
45.00	84	144.00	4558	241.00	9927	336.00	1422
49.00	890	145.00	3575	242.00	22800	337.00	158
50.00	20560	146.00	12885	243.00	23656	338.00	111
51.00	115400	147.00	37000	244.00	334528	339.00	1435
52.00	5980	148.00	83184	245.00	44200	340.00	1368
53.00	270	151.00	6891	246.00	75208	341.00	9189
55.00	1004	152.00	4801	247.00	14506	342.00	2530
56.00	6893	153.00	21920	248.00	2995	343.00	476
57.00	20032	154.00	16872	249.00	12012	344.00	229
58.00	1173	155.00	39720	250.00	2462	346.00	19040
59.00	381	156.00	58960	251.00	2978	347.00	3868
60.00	603	157.00	10415	252.00	3463	348.00	369
61.00	8555	158.00	12758	253.00	7543	350.00	680
62.00	12181	159.00	10289	254.00	2201	351.00	1509
63.00	36888	160.00	23104	255.00	1779712	352.00	24280
64.00	5850	161.00	32336	256.00	261248	353.00	16313
65.00	19656	162.00	10036	257.00	19960	354.00	23616
66.00	1277	163.00	2211	258.00	115664	355.00	4277
67.00	218	164.00	3370	259.00	18720	356.00	395
68.00	9335	165.00	26672	260.00	3097	357.00	288
69.00	1177088	166.00	21880	261.00	2983	358.00	496
70.00	4303	167.00	140736	262.00	311	359.00	2088
72.00	118	168.00	67144	263.00	1088	360.00	426
73.00	8187	169.00	12299	264.00	2758	361.00	287
74.00	117944	170.00	4307	265.00	46872	362.00	66
75.00	186240	171.00	6152	266.00	6551	363.00	78
76.00	58584	172.00	12323	267.00	641	364.00	312
77.00	1243648	173.00	16696	268.00	1031	365.00	124024
78.00	82568	174.00	30816	269.00	334	366.00	17240
79.00	86720	175.00	56392	270.00	1777	367.00	1640
80.00	67968	176.00	14808	271.00	3758	368.00	51
81.00	95752	177.00	24968	272.00	4667	369.00	81
82.00	22136	178.00	8414	273.00	54184	370.00	2231
83.00	20016	179.00	108176	274.00	145920	371.00	6578
84.00	1703	180.00	69200	275.00	822080	372.00	39896
85.00	15260	181.00	35088	276.00	108424	373.00	10420
86.00	27208	182.00	5707	277.00	76856	374.00	902
87.00	12947	183.00	2410	278.00	12879	377.00	1108
88.00	4317	184.00	9057	281.00	1271	378.00	190
89.00	1969	185.00	53272	282.00	1654	379.00	112
90.00	227	186.00	390848	283.00	8058	382.00	88
91.00	20144	187.00	115736	284.00	6096	383.00	11296
92.00	22872	188.00	12489	285.00	13310	384.00	3498
93.00	159616	189.00	26224	286.00	2664	385.00	1140
94.00	9906	190.00	3820	287.00	301	386.00	187

95.00	2189	191.00	11505	288.00	1049	388.00	81
96.00	5767	192.00	34688	289.00	3146	389.00	105
97.00	2485	193.00	41016	290.00	2684	390.00	4929
98.00	117552	194.00	9131	291.00	1791	391.00	3340
99.00	90792	195.00	3653	292.00	3510	392.00	2390
100.00	7885	196.00	74504	293.00	16520	393.00	475
101.00	52896	198.00	2863616	294.00	4295	395.00	216
102.00	3052	199.00	190976	295.00	4987	396.00	208
103.00	16416	200.00	14335	296.00	267904	397.00	274
104.00	30568	201.00	9948	297.00	37320	398.00	254
105.00	30136	203.00	20560	298.00	2786	401.00	2284
106.00	9766	204.00	107568	299.00	508	402.00	15386
107.00	410176	205.00	182464	300.00	217	403.00	21456
108.00	62280	206.00	743232	301.00	3180	404.00	8460
109.00	6029	207.00	96144	302.00	4702	405.00	1217
110.00	711808	208.00	26352	303.00	29528	408.00	105
111.00	108280	209.00	9347	304.00	7967	410.00	539
112.00	13160	210.00	10562	305.00	1122	411.00	56
113.00	4333	211.00	27120	306.00	358	415.00	1010
114.00	392	212.00	2578	307.00	530	416.00	312
115.00	1356	213.00	2139	308.00	3845	419.00	166
116.00	22112	214.00	764	309.00	2265	420.00	193
117.00	350208	215.00	8027	310.00	3023	421.00	17744
118.00	25424	216.00	16051	311.00	1030	422.00	15463
119.00	2716	217.00	211072	312.00	626	423.00	129392
120.00	4884	218.00	26304	313.00	2222	424.00	25976
121.00	587	219.00	2900	314.00	12766	425.00	2691
122.00	25416	220.00	3351	315.00	29288	426.00	96
123.00	40488	221.00	123968	316.00	15518	427.00	197
124.00	17936	222.00	24608	317.00	2892	429.00	55
125.00	15919	223.00	46856	318.00	260	437.00	78
127.00	1391616	224.00	432000	319.00	629	438.00	106
128.00	102568	225.00	107056	320.00	924	439.00	148
129.00	561152	226.00	10788	321.00	8267	440.00	550
130.00	46696	227.00	195904	322.00	3948	441.00	321664
131.00	8637	228.00	27456	323.00	81096	442.00	2293248
132.00	4190	229.00	39984	324.00	14693	443.00	438016
133.00	1654	230.00	5777	325.00	1371	444.00	39248
134.00	15899	231.00	15009	326.00	1762	445.00	2356
135.00	44024	232.00	3043	327.00	15694	446.00	82
136.00	18272	233.00	3542	328.00	7475	489.00	54
137.00	22936	234.00	12458	329.00	1733		
138.00	5085	235.00	13429	330.00	352		
139.00	2552	236.00	8601	331.00	463		



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Calibration: GA00050 Instrument: NT8
Calibration Date: 01/19/2023 Column (1): RXI-17Sil ms

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Naphthalene	0.1	1.051331	0.5	0.8804155	1	0.9140738	2.5	0.9442377	5	0.9059688	10	0.8834817
2-Methylnaphthalene	0.1	0.5583976	0.5	0.483576	1	0.4966087	2.5	0.5321582	5	0.5081776	10	0.490102
1-Methylnaphthalene	0.1	0.567502	0.5	0.4881925	1	0.5073336	2.5	0.5386185	5	0.5123544	10	0.5007901
Acenaphthylene	0.1	1.569275	0.5	1.288567	1	1.419627	2.5	1.612722	5	1.573862	10	1.597505
Acenaphthene	0.1	1.159165	0.5	0.9399536	1	0.9690137	2.5	1.040021	5	0.9826181	10	0.9807186
Dibenzofuran	0.1	1.856131	0.5	1.449189	1	1.468766	2.5	1.539056	5	1.458398	10	1.450275
Fluorene	0.1	1.333774	0.5	1.066627	1	1.134936	2.5	1.226731	5	1.19285	10	1.207426
Phenanthrene	0.1	1.200199	0.5	0.9068737	1	0.925967	2.5	0.9922048	5	0.9288855	10	0.90761
Anthracene	0.1	0.9900686	0.5	0.7891408	1	0.8362482	2.5	0.9415647	5	0.895227	10	0.8727266
Fluoranthene	0.1	1.200966	0.5	0.9720444	1	1.022937	2.5	1.114343	5	1.05358	10	1.016684
Pyrene	0.1	1.416146	0.5	1.066416	1	1.156217	2.5	1.294823	5	1.256828	10	1.249389
Benzo(a)anthracene	0.1	1.200365	0.5	0.9419141	1	1.006861	2.5	1.18718	5	1.184592	10	1.222407
Chrysene	0.1	1.382333	0.5	1.081643	1	1.128342	2.5	1.227241	5	1.185771	10	1.173282
Benzo(b)fluoranthene	0.1	1.335895	0.5	0.9774708	1	1.022944	2.5	1.220494	5	1.192377	10	1.239686
Benzo(k)fluoranthene	0.1	1.327249	0.5	0.9937275	1	1.005899	2.5	1.178993	5	1.164539	10	1.175213
Benzo(j)fluoranthene	0.1	1.092831	0.5	0.9205253	1	0.9228699	2.5	1.084778	5	1.075203	10	1.066465
Benzo(a)fluoranthene, Total	0.3	1.255354	1.5	0.9344954	3	0.9716584	7.5	1.159079	15	1.142352	30	1.155882
Benzo(a)pyrene	0.1	1.139906	0.5	0.8777692	1	0.8951488	2.5	1.077374	5	1.063086	10	1.096879
Indeno(1,2,3-cd)pyrene	0.1	1.208599	0.5	0.995325	1	1.072555	2.5	1.257473	5	1.228578	10	1.24398
Dibenzo(a,h)anthracene	0.1	1.049117	0.5	0.8348251	1	0.8950591	2.5	1.081382	5	1.068557	10	1.100721
Benzo(g,h,i)perylene	0.1	1.162964	0.5	0.9102826	1	0.9409469	2.5	1.106673	5	1.088733	10	1.138469
2-Methylnaphthalene-d10	0.1	0.5857106	0.5	0.4932528	1	0.5345061	2.5	0.5674481	5	0.5504276	10	0.5413545
Dibenzo[a,h]anthracene-d14	0.1	0.580281	0.5	0.5471844	1	0.6076211	2.5	0.7324975	5	0.7420675	10	0.7980029
Fluoranthene-d10	0.1	0.9007247	0.5	0.754546	1	0.8247891	2.5	0.9550254	5	0.9291815	10	0.930087



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Naphthalene	0.9299181	6.9			RSD (15)	
2-Methylnaphthalene	0.5115033	5.6			RSD (15)	
1-Methylnaphthalene	0.5191318	5.6			RSD (15)	
Acenaphthylene	1.51026	8.5			RSD (15)	
Acenaphthene	1.011915	7.8			RSD (15)	
Dibenzofuran	1.536969	10.4			RSD (15)	
Fluorene	1.193724	7.5			RSD (15)	
Phenanthrene	0.9769567	11.6			RSD (15)	
Anthracene	0.887496	8.1			RSD (15)	
Fluoranthene	1.063426	7.7			RSD (15)	
Pyrene	1.23997	9.6			RSD (15)	
Benzo(a)anthracene	1.123887	10.5			RSD (15)	
Chrysene	1.196435	8.7			RSD (15)	
Benzo(b)fluoranthene	1.164811	11.8			RSD (15)	
Benzo(k)fluoranthene	1.140937	10.9			RSD (15)	
Benzo(j)fluoranthene	1.027112	8.0			RSD (15)	
Benzofluoranthenes, Total	1.103137	11.2			RSD (15)	
Benzo(a)pyrene	1.025027	10.8			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.167752	9.2			RSD (15)	
Dibenzo(a,h)anthracene	1.004944	11.1			RSD (15)	
Benzo(g,h,i)perylene	1.058011	10.0			RSD (15)	
2-Methylnaphthalene-d10	0.5454499	5.8			RSD (15)	
Dibenzo[a,h]anthracene-d14	0.6679424	15.3	0.9971		LCOD (0.99)	
Fluoranthene-d10	0.8823923	8.7			RSD (15)	



ANALYSIS SEQUENCE

SLA0213

Instrument: NT8
Calibration ID: GA00050

Element Column ID: J006458

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

Time	Filename	LabID	ClientId	DF											
1	1028	N823011901.D	SLA0213-TUN1	1	|	NO ISTDS FOUND|									
2	1059	N823011902.D	SLA0213-ICB1	1	|	4.92	52082|	7.20	30936|	9.24	59030|	14.22	50944|	18.12	47418|
3	1126	N823011903.D	SLA0213-CAL1	1	|	4.91	46132|	7.20	27261|	9.24	52158|	14.20	44953|	18.11	41635|
4	1158	N823011904.D	SLA0213-CAL2	1	|	4.91	45056|	7.20	26746|	9.24	50759|	14.21	44658|	18.11	42567|
5	1225	N823011905.D	SLA0213-CAL3	1	|	4.91	47180|	7.20	28206|	9.24	53233|	14.20	46493|	18.11	44587|
6	1252	N823011906.D	SLA0213-CAL4	1	|	4.91	44704|	7.20	26411|	9.24	49210|	14.20	42994|	18.11	40520|
7	1319	N823011907.D	SLA0213-CAL5	1	|	4.91	46542|	7.20	27638|	9.23	51351|	14.20	44781|	18.11	42187|
8	1346	N823011908.D	SLA0213-CAL6	1	|	4.91	46070|	7.20	26689|	9.24	50683|	14.21	43880|	18.11	40659|
9	1458	N823011909.D	SLA0213-SCV1	1	|	4.91	46346|	7.20	27709|	9.24	51685|	14.21	46582|	18.12	41743|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
 End Cal Date : 19-JAN-2023 13:46
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Last Edit : 19-Jan-2023 20:20 jianqing
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
 Level 2: \\target\share\chem3\nt8.i\20230119.b\N823011904.D
 Level 3: \\target\share\chem3\nt8.i\20230119.b\N823011905.D
 Level 4: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
 Level 5: \\target\share\chem3\nt8.i\20230119.b\N823011907.D
 Level 6: \\target\share\chem3\nt8.i\20230119.b\N823011908.D

Compound	0.10000	0.50000	1.000	2.500	5.000	10.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
2 Naphthalene	1.05133	0.88042	0.91407	0.94424	0.90597	0.88348	0.92992	6.865
4 2-Methylnaphthalene	0.55840	0.48358	0.49661	0.53216	0.50818	0.49010	0.51150	5.596
5 1-methylnaphthalene	0.56750	0.48819	0.50733	0.53862	0.51235	0.50079	0.51913	5.582
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Biphenyl	1.53553	1.22381	1.26186	1.35447	1.27381	1.26708	1.31943	8.655
8 2,6-Dimethylnaphthalene	1.00657	0.84902	0.90342	0.98129	0.93327	0.92936	0.93382	5.997
9 Acenaphthylene	1.56927	1.28857	1.41963	1.61272	1.57386	1.59750	1.51026	8.531
11 Acenaphthene	1.15917	0.93995	0.96901	1.04002	0.98262	0.98072	1.01192	7.822
12 Dibenzofuran	1.85613	1.44919	1.46877	1.53906	1.45840	1.45028	1.53697	10.407
13 1,6,7-Trimethylnaphthalene	1.10194	0.88028	0.91555	1.00758	0.95392	0.95592	0.96920	8.030
14 Fluorene	1.33377	1.06663	1.13494	1.22673	1.19285	1.20743	1.19372	7.540
16 Phenanthrene	1.20020	0.90687	0.92597	0.99220	0.92889	0.90761	0.97696	11.644
17 Anthracene	0.99007	0.78914	0.83625	0.94156	0.89523	0.87273	0.88750	8.129
18 Dibenzothiophene	1.00464	0.81097	0.83858	0.91687	0.87432	0.85731	0.88378	7.813
19 Carbazole	0.89689	0.71317	0.75168	0.85950	0.83159	0.82882	0.81361	8.430
20 1-Methylphenanthrene	0.79489	0.62625	0.65095	0.73891	0.70849	0.70462	0.70402	8.607

22	Fluoranthene	1.20097	0.97204	1.02294	1.11434	1.05358	1.01668	1.06343	7.729
23	Pyrene	1.41615	1.06642	1.15622	1.29482	1.25683	1.24939	1.23997	9.648
24	Benzo(a)anthracene	1.20036	0.94191	1.00686	1.18718	1.18459	1.22241	1.12389	10.532
27	Chrysene	1.38233	1.08164	1.12834	1.22724	1.18577	1.17328	1.19644	8.684
28	Benzo(b)fluoranthene	1.33590	0.97747	1.02294	1.22049	1.19238	1.23969	1.16481	11.769
29	Benzo(k)fluoranthene	1.32725	0.99373	1.00590	1.17899	1.16454	1.17521	1.14094	10.933
30	Benzo(j)fluoranthene	1.09283	0.92053	0.92287	1.08478	1.07520	1.06646	1.02711	7.997
31	Total Benzofluoranthenes	1.25535	0.93450	0.97166	1.15908	1.14235	1.15588	1.10314	11.202
32	Benzo(a)pyrene	1.13991	0.87777	0.89515	1.07737	1.06309	1.09688	1.02503	10.785
34	Benzo(e)pyrene	1.38633	1.02276	1.03286	1.18813	1.15641	1.18275	1.16154	11.391
35	Perylene	1.28978	0.96103	0.98751	1.14448	1.10241	1.11455	1.09996	10.771
37	Indeno(1,2,3-cd)pyrene	1.20860	0.99533	1.07255	1.25747	1.22858	1.24398	1.16775	9.225

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
 End Cal Date : 19-JAN-2023 13:46
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Last Edit : 19-Jan-2023 20:20 jianqing
 Curve Type : Average

Compound	0.10000	0.50000	1.000	2.500	5.000	10.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
38 Dibenzo(a,h)anthracene	1.04912	0.83483	0.89506	1.08138	1.06856	1.10072	1.00494	11.083
39 Benzo(g,h,i)perylene	1.16296	0.91028	0.94095	1.10667	1.08873	1.13847	1.05801	10.032
\$ 3 2-Methylnaphthalene-d10	0.58571	0.49325	0.53451	0.56745	0.55043	0.54135	0.54545	5.792
\$ 21 Fluoranthene-d10	0.90072	0.75455	0.82479	0.95503	0.92918	0.93009	0.88239	8.740
\$ 36 Dibenzo(a,h)anthracene-d14	0.58028	0.54718	0.60762	0.73250	0.74207	+++++	0.64193	13.973

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	N823011903	N823011904	N823011905	N823011906	N823011907	N823011908
INJ. DATE:	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023
INJ. TIME:	11:26	11:58	12:25	12:52	13:19	13:46

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 1 Naphthalene-d8	4.907	4.913	4.907	4.907	4.910	4.907	4.907	1.907-7.907	4.908	0.003
2 Naphthalene	4.939	4.942	4.939	4.938	4.938	4.938	4.938	1.938-7.938	4.939	0.001
\$ 3 2-Methylnaphthalene-d1	5.644	5.647	5.640	5.640	5.640	5.640	5.640	2.640-8.640	5.642	0.003
4 2-Methylnaphthalene	5.691	5.694	5.688	5.688	5.688	5.688	5.688	2.688-8.688	5.689	0.003
5 1-methylnaphthalene	5.884	5.890	5.887	5.884	5.887	5.887	5.887	2.887-8.887	5.887	0.002
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	6.377	3.377-9.377	+++++	+++++
7 Biphenyl	6.346	6.352	6.346	6.345	6.346	6.349	6.349	3.349-9.349	6.347	0.003
8 2,6-Dimethylnaphthalen	6.390	6.396	6.390	6.390	6.390	6.393	6.393	3.393-9.393	6.391	0.003
9 Acenaphthylene	7.086	7.092	7.085	7.085	7.085	7.089	7.089	4.089-10.089	7.087	0.003
* 10 Acenaphthene-d10	7.196	7.199	7.196	7.196	7.196	7.196	7.196	4.196-10.196	7.197	0.001
11 Acenaphthene	7.247	7.250	7.247	7.247	7.247	7.247	7.247	4.247-10.247	7.247	0.001
12 Dibenzofuran	7.395	7.402	7.395	7.395	7.395	7.398	7.398	4.398-10.398	7.397	0.003
13 1,6,7-Trimethylnaphtha	7.462	7.465	7.462	7.462	7.462	7.465	7.465	4.465-10.465	7.463	0.002
14 Fluorene	7.876	7.879	7.876	7.873	7.876	7.876	7.876	4.876-10.876	7.876	0.002
* 15 Phenanthrene-d10	9.236	9.239	9.236	9.236	9.232	9.236	9.236	6.236-12.236	9.236	0.002
16 Phenanthrene	9.270	9.273	9.270	9.270	9.270	9.274	9.274	6.274-12.274	9.271	0.002
17 Anthracene	9.312	9.315	9.312	9.311	9.311	9.315	9.315	6.315-12.315	9.313	0.002

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

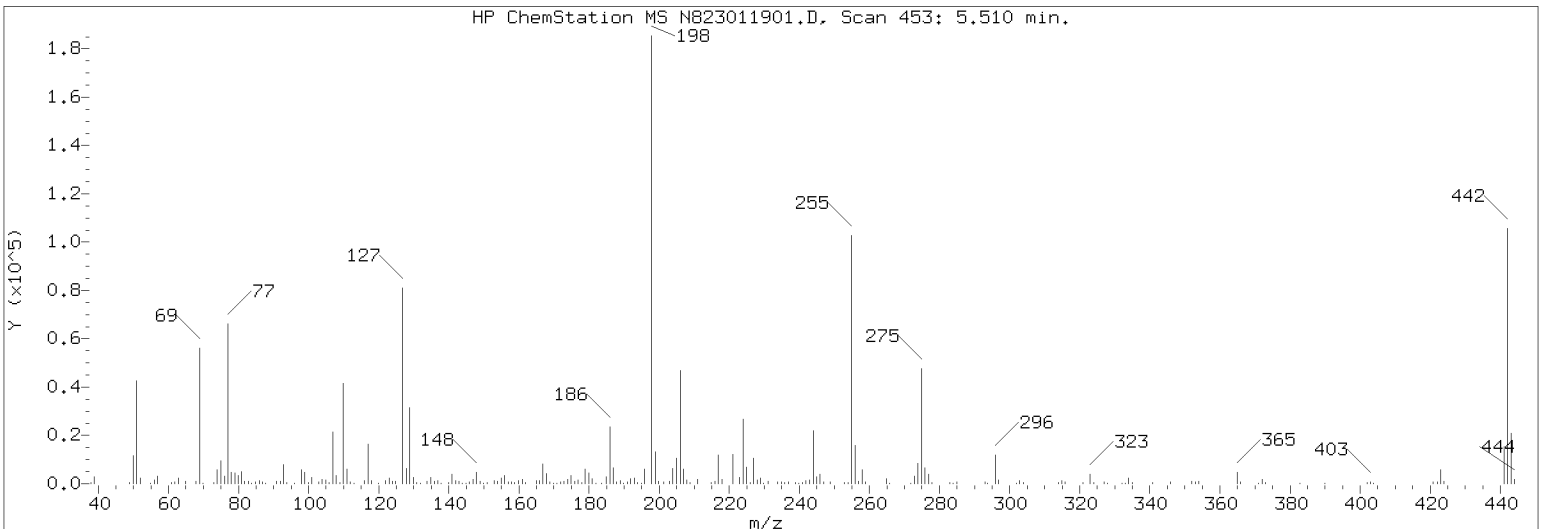
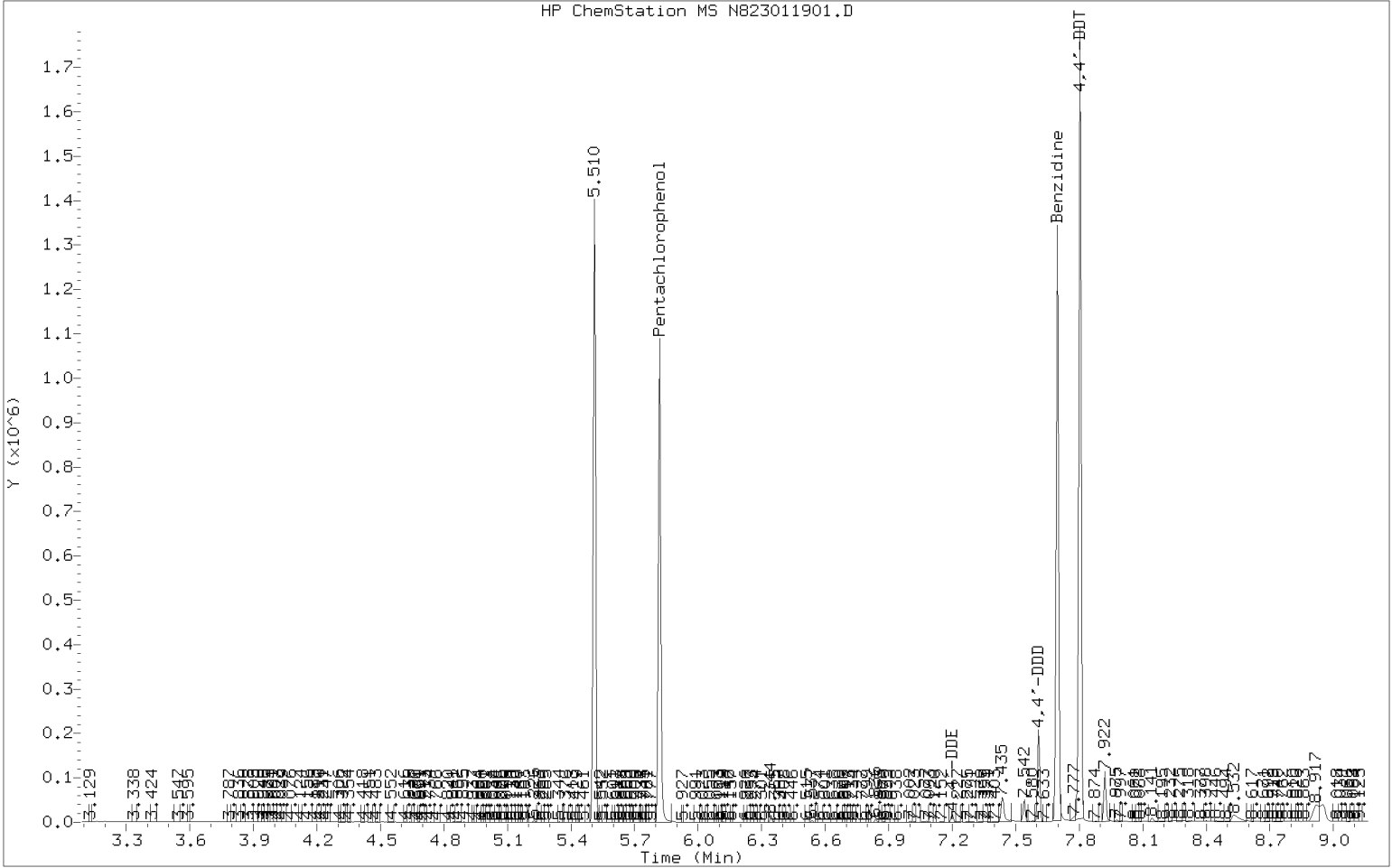
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

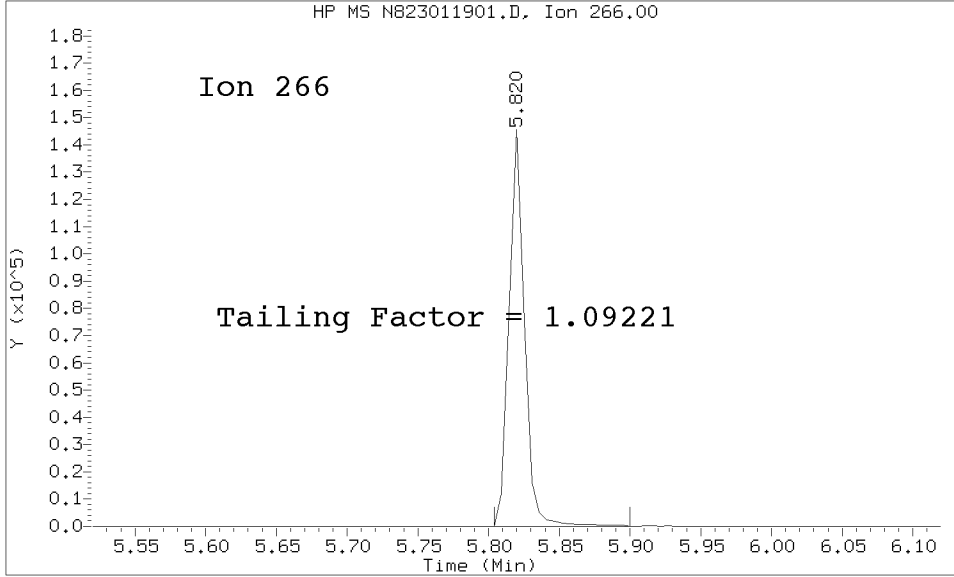
Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 Dibenzothiophene	9.109	9.112	9.109	9.109	9.109	9.112	9.112	6.112-12.112	9.110	0.002
19 Carbazole	9.824	9.830	9.824	9.824	9.824	9.827	9.827	6.827-12.827	9.825	0.003
20 1-Methylphenanthrene	10.048	10.051	10.048	10.048	10.048	10.051	10.051	7.051-13.051	10.049	0.002
21 Fluoranthene-d10	11.016	11.019	11.016	11.016	11.016	11.019	11.019	8.019-14.019	11.017	0.002
22 Fluoranthene	11.054	11.057	11.051	11.054	11.054	11.057	11.057	8.057-14.057	11.054	0.002
23 Pyrene	11.572	11.575	11.572	11.572	11.572	11.575	11.575	8.575-14.575	11.573	0.002
24 Benzo(a)anthracene	14.073	14.080	14.077	14.077	14.077	14.080	14.080	11.080-17.080	14.077	0.002
* 25 Chrysene-d12	14.203	14.209	14.203	14.203	14.203	14.206	14.206	11.206-17.206	14.205	0.003
27 Chrysene	14.276	14.279	14.276	14.279	14.279	14.282	14.282	11.282-17.282	14.278	0.002
28 Benzo(b)fluoranthene	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
29 Benzo(k)fluoranthene	16.881	16.887	16.881	16.884	16.888	16.897	16.897	13.897-19.897	16.886	0.006
30 Benzo(j)fluoranthene	16.960	16.963	16.960	16.963	16.967	16.973	16.973	13.973-19.973	16.964	0.005
31 Total Benzofluoranthene	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
32 Benzo(a)pyrene	17.874	17.883	17.877	17.877	17.884	17.890	17.890	14.890-20.890	17.881	0.006
* 33 Perylene-d12	18.111	18.114	18.111	18.111	18.111	18.114	18.114	15.114-21.114	18.112	0.002
34 Benzo(e)pyrene	17.748	17.754	17.751	17.748	17.751	17.760	17.760	14.760-20.760	17.752	0.005
35 Perylene	18.184	18.187	18.184	18.184	18.187	18.193	18.193	15.193-21.193	18.187	0.004
36 Dibenzo(a,h)anthracene	20.546	20.549	20.549	20.552	20.555	20.565	20.565	17.565-23.565	20.553	0.007
37 Indeno(1,2,3-cd)pyrene	20.666	20.676	20.672	20.676	20.682	20.691	20.691	17.691-23.691	20.677	0.009
38 Dibenzo(a,h)anthracene	20.666	20.666	20.657	20.663	20.669	20.685	20.685	17.685-23.685	20.668	0.010
39 Benzo(g,h,i)perylene	21.757	21.760	21.748	21.757	21.763	21.782	21.782	18.782-24.782	21.761	0.012

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



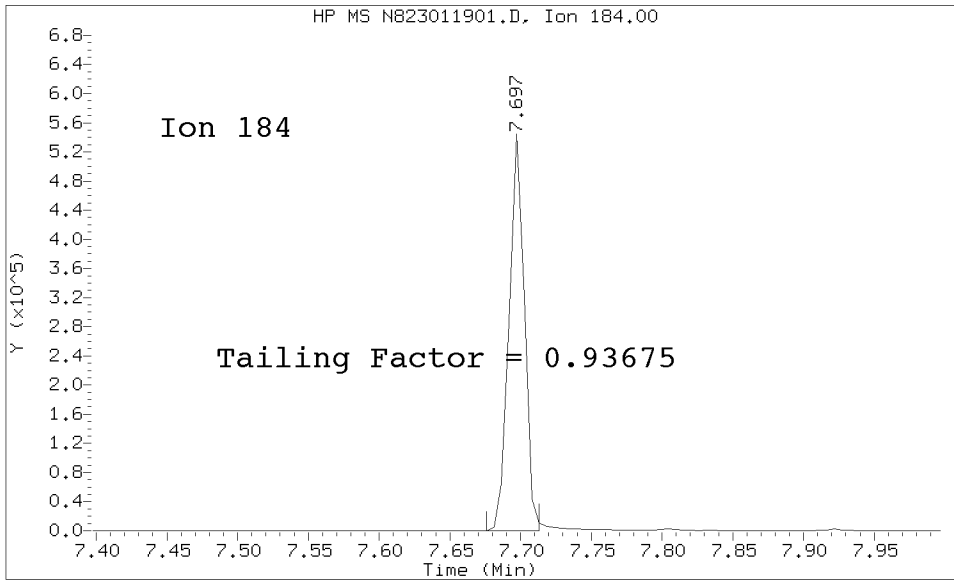
Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol

=====
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
 Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
 Location of Maximum: 198.00
 Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

Data File: \\target\share\chem3\nt8.1\20230119.B\MS23011902.D

Date: 19-JAN-2023 10:59

Client ID:

Sample Info: ICB230119

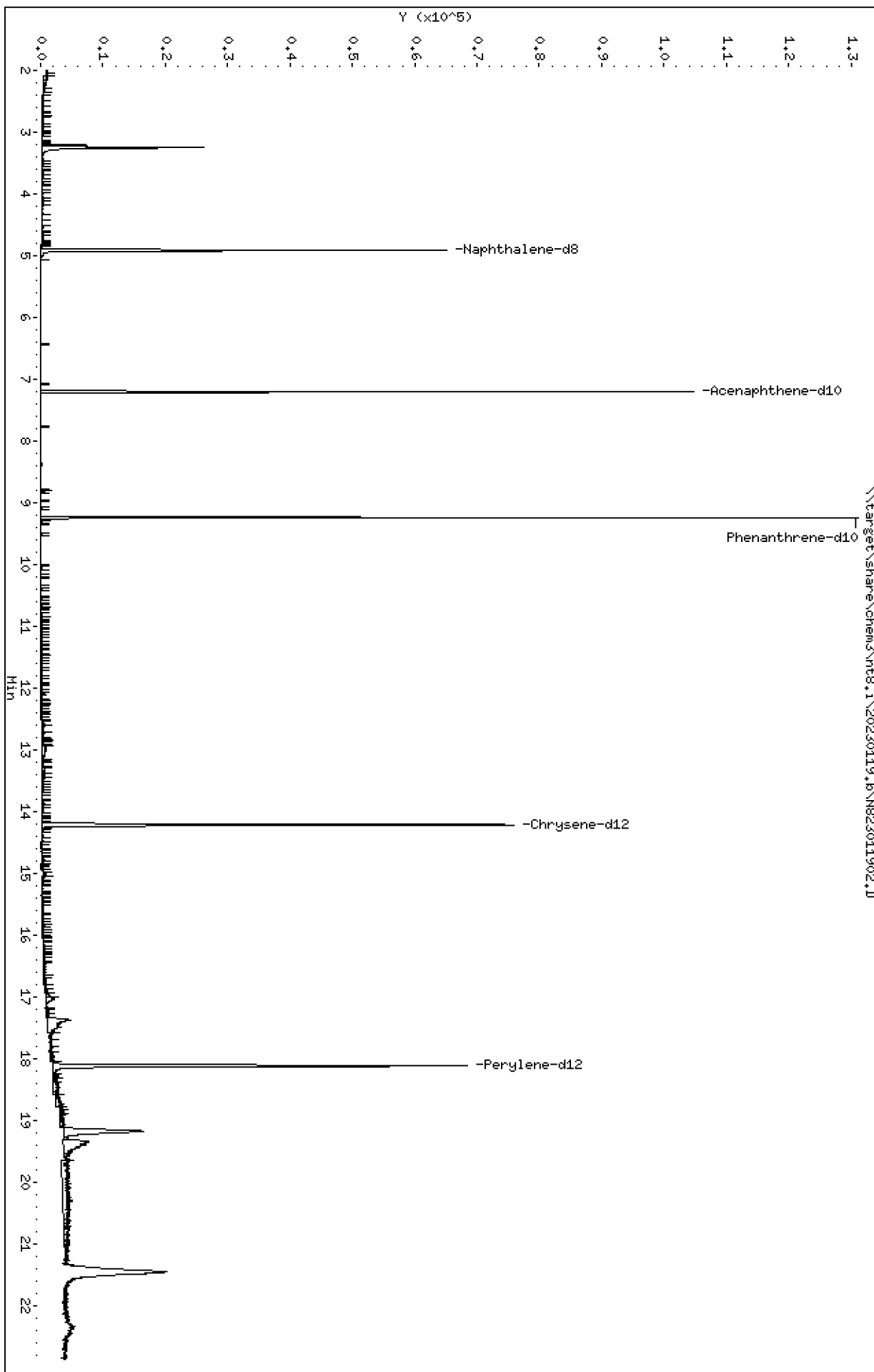
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011902.D
 Lab Smp Id: SLA0213-ICB1
 Inj Date : 19-JAN-2023 10:59
 Operator : JZ Inst ID: nt8.i
 Smp Info : ICB230119
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
=====	====		====	=====	=====	=====	=====	=====
* 1 Naphthalene-d8	136		4.916	4.906	(1.000)	52082	2.00000	
2 Naphthalene	128		Compound Not Detected.					
§ 3 2-Methylnaphthalene-d10	152		Compound Not Detected.					
4 2-Methylnaphthalene	141		Compound Not Detected.					
5 1-methylnaphthalene	141		Compound Not Detected.					
7 Biphenyl	154		Compound Not Detected.					
8 2,6-Dimethylnaphthalene	156		Compound Not Detected.					
9 Acenaphthylene	152		Compound Not Detected.					
* 10 Acenaphthene-d10	164		7.202	7.196	(1.000)	30936	2.00000	
11 Acenaphthene	153		Compound Not Detected.					
12 Dibenzofuran	168		Compound Not Detected.					
13 1,6,7-Trimethylnaphthalene	170		Compound Not Detected.					
14 Fluorene	166		Compound Not Detected.					
18 Dibenzothiophene	184		Compound Not Detected.					
* 15 Phenanthrene-d10	188		9.241	9.235	(1.000)	59030	2.00000	
16 Phenanthrene	178		Compound Not Detected.					
17 Anthracene	178		Compound Not Detected.					
19 Carbazole	167		Compound Not Detected.					
20 1-Methylphenanthrene	192		Compound Not Detected.					
22 Fluoranthene	202		Compound Not Detected.					
§ 21 Fluoranthene-d10	212		Compound Not Detected.					
23 Pyrene	202		Compound Not Detected.					
24 Benzo(a)anthracene	228		Compound Not Detected.					
* 25 Chrysene-d12	240		14.215	14.202	(1.000)	50944	2.00000	
27 Chrysene	228		Compound Not Detected.					
28 Benzo(b)fluoranthene	252		Compound Not Detected.					
29 Benzo(k)fluoranthene	252		Compound Not Detected.					
30 Benzo(j)fluoranthene	252		Compound Not Detected.					
31 Total Benzofluoranthenes	252		Compound Not Detected.					
34 Benzo(e)pyrene	252		Compound Not Detected.					
32 Benzo(a)pyrene	252		Compound Not Detected.					
* 33 Perylene-d12	264		18.120	18.111	(1.000)	47418	2.00000	
35 Perylene	252		Compound Not Detected.					

Compounds	QUANT MASS	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/mL)
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 36 Dibenzo(a,h)anthracene-d14	292					Compound Not Detected.		
37 Indeno(1,2,3-cd)pyrene	276					Compound Not Detected.		
38 Dibenzo(a,h)anthracene	278					Compound Not Detected.		
39 Benzo(g,h,i)perylene	276					Compound Not Detected.		

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011902.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-ICB1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	52082	16.50
10 Acenaphthene-d10	26411	13206	52822	30936	17.13
15 Phenanthrene-d10	49210	24605	98420	59030	19.96
25 Chrysene-d12	42994	21497	85988	50944	18.49
33 Perylene-d12	40520	20260	81040	47418	17.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.92	0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.07
25 Chrysene-d12	14.20	13.70	14.70	14.22	0.09
33 Perylene-d12	18.11	17.61	18.61	18.12	0.05

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

REVIEW SUMMARY FOR FILE - N823011902.D

Lab ID: SLA0213-ICB1

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 10:59

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Data File: \\target\share\chem3\nt8.1\20230119.B\MS23011903.D

Date: 19-JAN-2023 11:26

Client ID:

Sample Info: IC01230119,

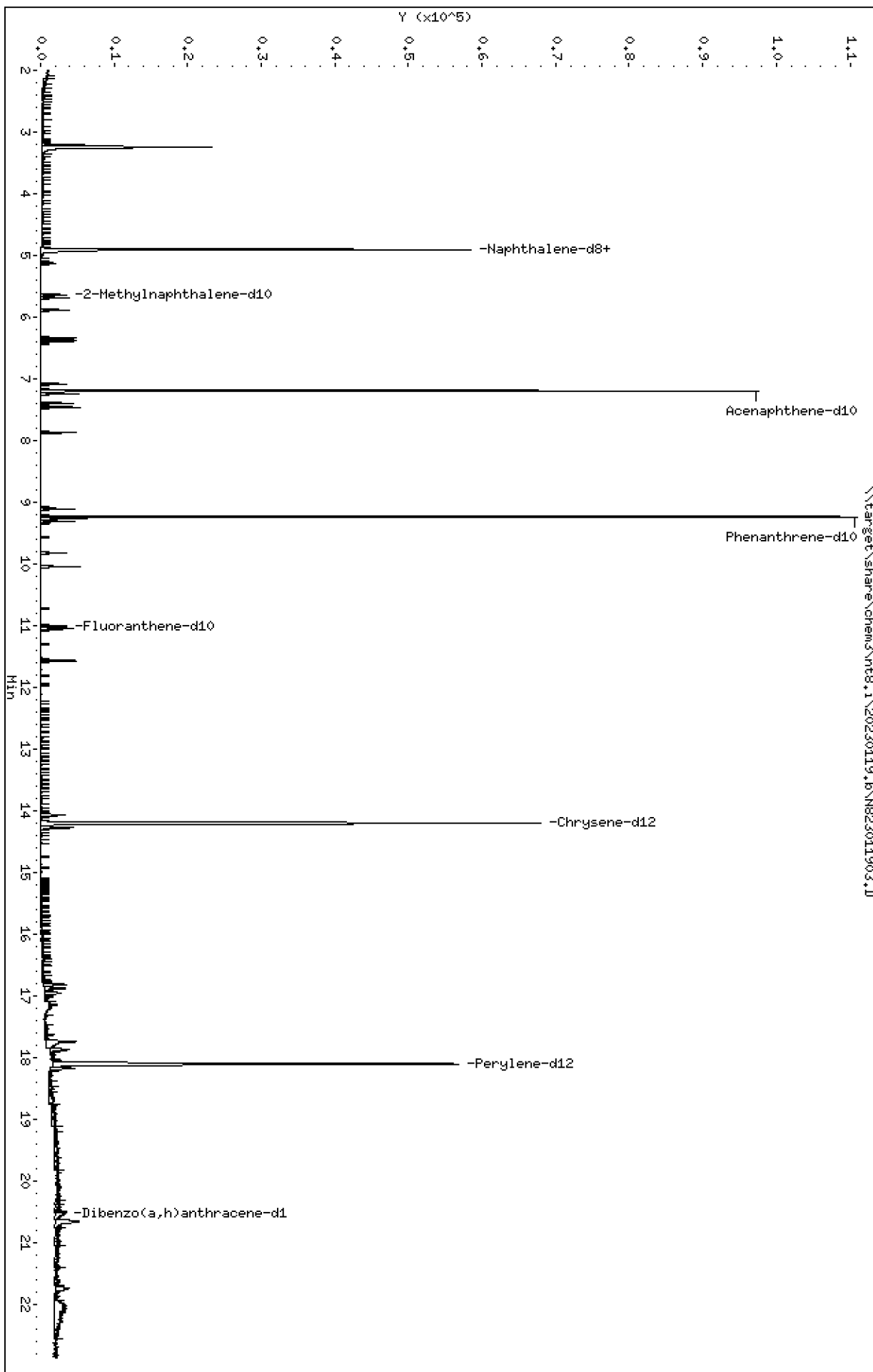
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011903.D
 Lab Smp Id: SLA0213-CAL1
 Inj Date : 19-JAN-2023 11:26
 Operator : JZ Inst ID: nt8.i
 Smp Info : IC01230119,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 3 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 1 Naphthalene-d8	136	4.906	4.906	(1.000)	46132	2.00000	
2 Naphthalene	128	4.938	4.938	(1.006)	2425	0.10000	0.1131
§ 3 2-Methylnaphthalene-d10	152	5.643	5.640	(1.150)	1351	0.10000	0.1074
4 2-Methylnaphthalene	141	5.691	5.687	(1.160)	1288	0.10000	0.1092
5 1-methylnaphthalene	141	5.883	5.887	(1.199)	1309	0.10000	0.1093
7 Biphenyl	154	6.345	6.348	(0.882)	2093	0.10000	0.1164
8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	1372	0.10000	0.1078
9 Acenaphthylene	152	7.085	7.088	(0.985)	2139	0.10000	0.1039
* 10 Acenaphthene-d10	164	7.196	7.196	(1.000)	27261	2.00000	
11 Acenaphthene	153	7.246	7.246	(1.007)	1580	0.10000	0.1146
12 Dibenzofuran	168	7.395	7.398	(1.028)	2530	0.10000	0.1208
13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	1502	0.10000	0.1137
14 Fluorene	166	7.876	7.875	(1.094)	1818	0.10000	0.1117
18 Dibenzothiophene	184	9.109	9.112	(0.986)	2620	0.10000	0.1137
* 15 Phenanthrene-d10	188	9.235	9.235	(1.000)	52158	2.00000	
16 Phenanthrene	178	9.270	9.273	(1.004)	3130	0.10000	0.1229
17 Anthracene	178	9.311	9.314	(1.008)	2582	0.10000	0.1116
19 Carbazole	167	9.823	9.826	(1.064)	2339	0.10000	0.1102
20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	2073	0.10000	0.1129
22 Fluoranthene	202	11.053	11.056	(1.197)	3132	0.10000	0.1129
§ 21 Fluoranthene-d10	212	11.015	11.018	(1.193)	2349	0.10000	0.1021
23 Pyrene	202	11.572	11.575	(0.815)	3183	0.10000	0.1142
24 Benzo(a)anthracene	228	14.073	14.079	(0.991)	2698	0.10000	0.1068
* 25 Chrysene-d12	240	14.203	14.206	(1.000)	44953	2.00000	
27 Chrysene	228	14.275	14.282	(1.005)	3107	0.10000	0.1155
28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	2781	0.10000	0.1147
29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	2763	0.10000	0.1163
30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	2275	0.10000	0.1064
31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	7840	0.30000	0.3414 (M)
34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	2886	0.10000	0.1194
32 Benzo(a)pyrene	252	17.874	17.889	(0.987)	2373	0.10000	0.1112
* 33 Perylene-d12	264	18.111	18.114	(1.000)	41635	2.00000	
35 Perylene	252	18.184	18.193	(1.004)	2685	0.10000	0.1173

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.546	20.565	(1.134)	1208	0.10000	0.09040 (M)
37 Indeno(1,2,3-cd)pyrene	276		20.666	20.691	(1.141)	2516	0.10000	0.1035
38 Dibenzo(a,h)anthracene	278		20.666	20.685	(1.141)	2184	0.10000	0.1044
39 Benzo(g,h,i)perylene	276		21.757	21.782	(1.201)	2421	0.10000	0.1099

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011903.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-CAL1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46132	3.19
10 Acenaphthene-d10	26411	13206	52822	27261	3.22
15 Phenanthrene-d10	49210	24605	98420	52158	5.99
25 Chrysene-d12	42994	21497	85988	44953	4.56
33 Perylene-d12	40520	20260	81040	41635	2.75

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011903.D

Lab ID: SLA0213-CAL1

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 11:26

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

Quant Method: ICAL

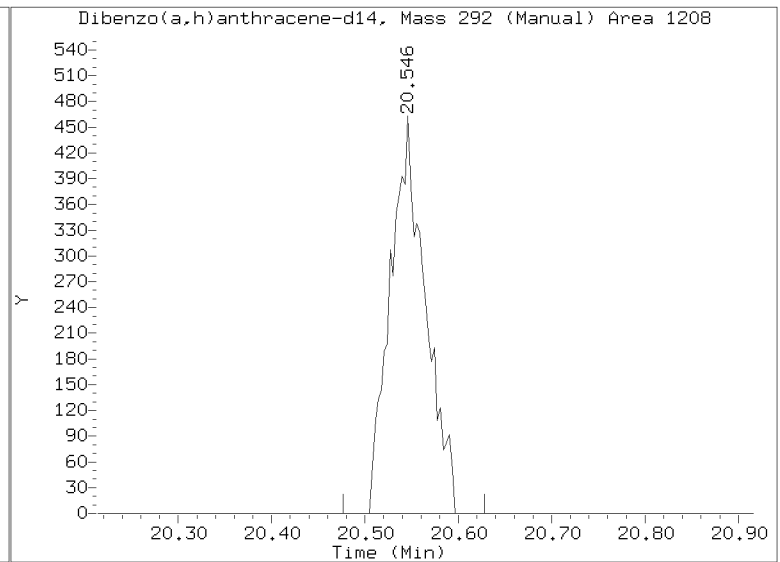
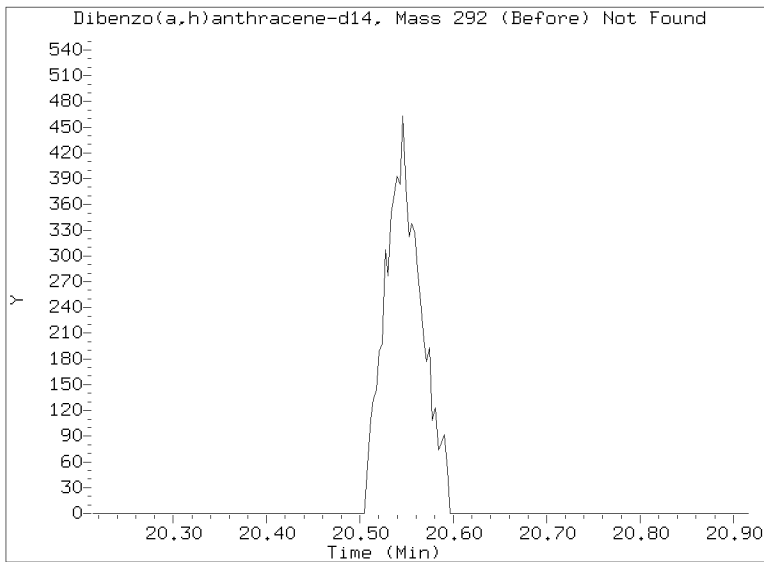
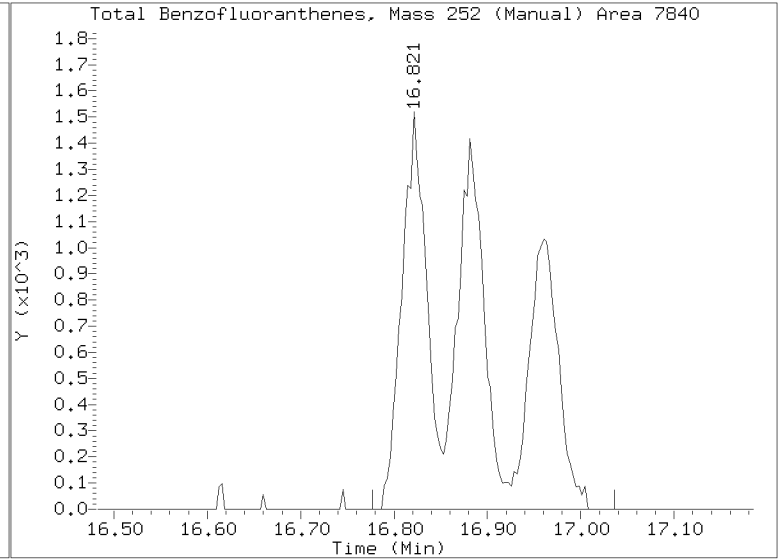
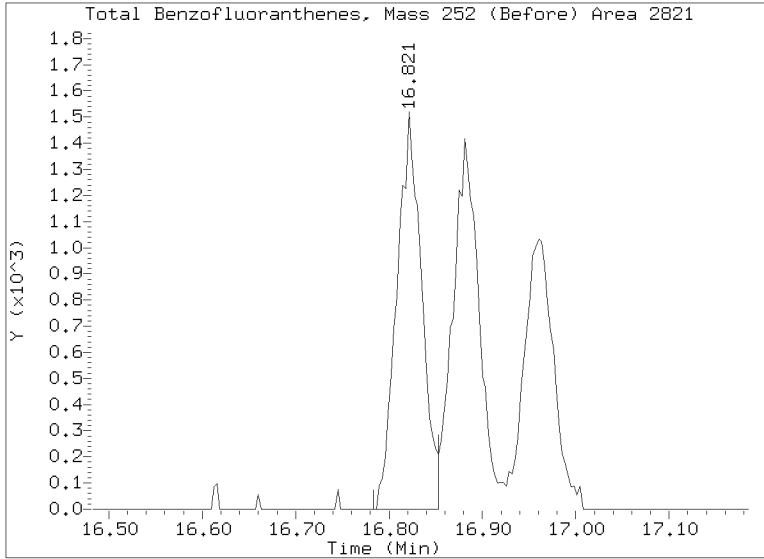
No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011903.D
Injection Date: 19-JAN-2023 11:26
Lab ID:SLA0213-CAL1 Client ID:
Report Date: 01/19/2023 20:12



Data File: \\target\share\chem3\nt8.1\20230119.B\N823011904.D

Date: 19-JAN-2023 11:58

Client ID:

Sample Info: IC05230119,

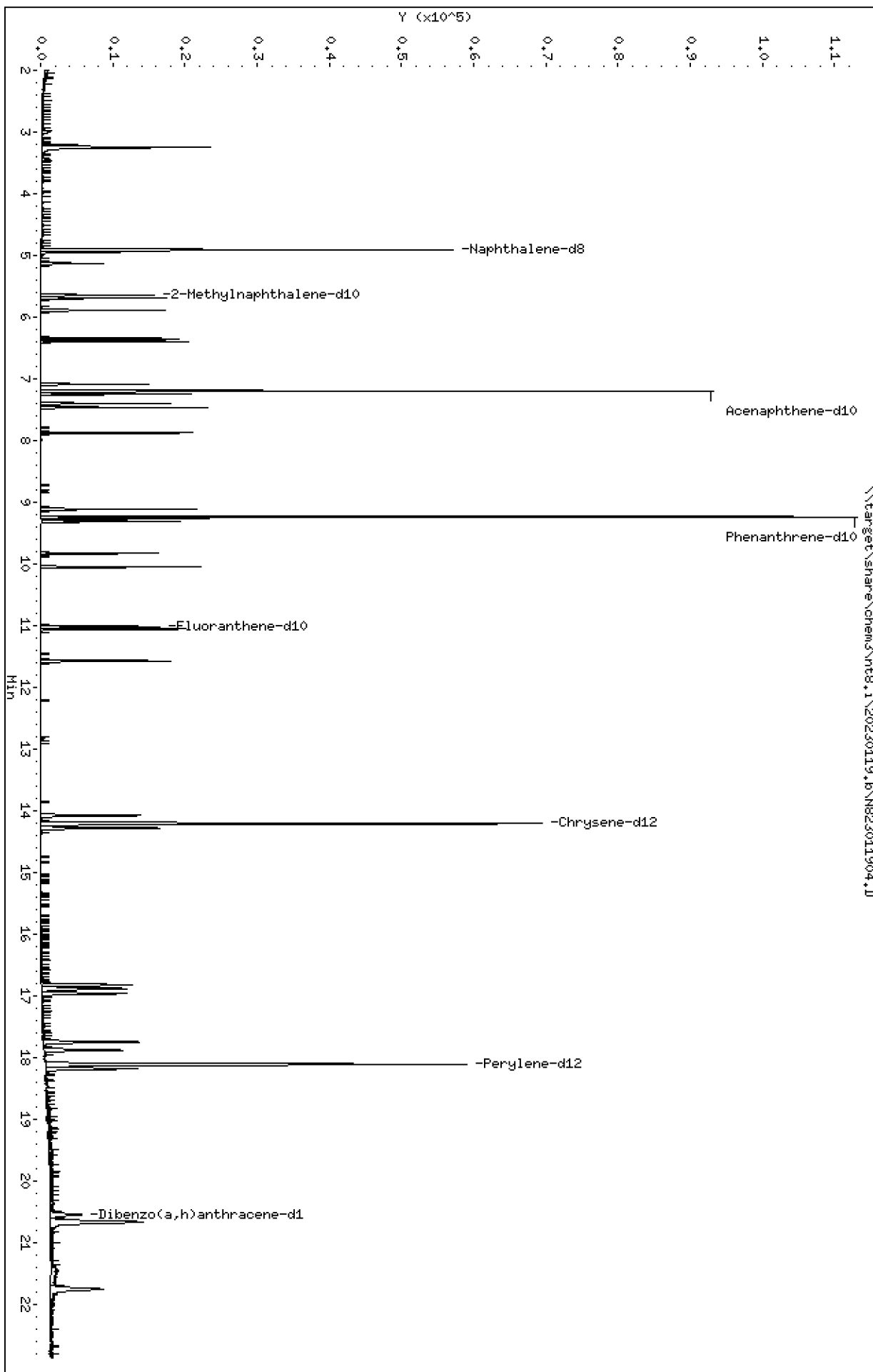
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011904.D
 Lab Smp Id: SLA0213-CAL2
 Inj Date : 19-JAN-2023 11:58
 Operator : JZ Inst ID: nt8.i
 Smp Info : IC05230119,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 4 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
* 1 Naphthalene-d8	136		4.913	4.906	(1.000)	45056	2.00000	
2 Naphthalene	128		4.941	4.938	(1.006)	9917	0.50000	0.4734
§ 3 2-Methylnaphthalene-d10	152		5.646	5.640	(1.149)	5556	0.50000	0.4522
4 2-Methylnaphthalene	141		5.694	5.687	(1.159)	5447	0.50000	0.4727
5 1-methylnaphthalene	141		5.890	5.887	(1.199)	5499	0.50000	0.4702
7 Biphenyl	154		6.351	6.348	(0.882)	8183	0.50000	0.4638
8 2,6-Dimethylnaphthalene	156		6.396	6.392	(0.888)	5677	0.50000	0.4546
9 Acenaphthylene	152		7.091	7.088	(0.985)	8616	0.50000	0.4266
* 10 Acenaphthene-d10	164		7.199	7.196	(1.000)	26746	2.00000	
11 Acenaphthene	153		7.249	7.246	(1.007)	6285	0.50000	0.4644
12 Dibenzofuran	168		7.401	7.398	(1.028)	9690	0.50000	0.4714
13 1,6,7-Trimethylnaphthalene	170		7.464	7.464	(1.037)	5886	0.50000	0.4541
14 Fluorene	166		7.879	7.875	(1.094)	7132	0.50000	0.4468
18 Dibenzothiophene	184		9.112	9.112	(0.986)	10291	0.50000	0.4588
* 15 Phenanthrene-d10	188		9.238	9.235	(1.000)	50759	2.00000	
16 Phenanthrene	178		9.273	9.273	(1.004)	11508	0.50000	0.4641
17 Anthracene	178		9.314	9.314	(1.008)	10014	0.50000	0.4446
19 Carbazole	167		9.829	9.826	(1.064)	9050	0.50000	0.4383
20 1-Methylphenanthrene	192		10.051	10.051	(1.088)	7947	0.50000	0.4448
22 Fluoranthene	202		11.056	11.056	(1.197)	12335	0.50000	0.4570
§ 21 Fluoranthene-d10	212		11.018	11.018	(1.193)	9575	0.50000	0.4276
23 Pyrene	202		11.575	11.575	(0.815)	11906	0.50000	0.4300
24 Benzo(a)anthracene	228		14.079	14.079	(0.991)	10516	0.50000	0.4190
* 25 Chrysene-d12	240		14.209	14.206	(1.000)	44658	2.00000	
27 Chrysene	228		14.278	14.282	(1.005)	12076	0.50000	0.4520
28 Benzo(b)fluoranthene	252		16.827	16.833	(0.929)	10402	0.50000	0.4196
29 Benzo(k)fluoranthene	252		16.887	16.897	(0.932)	10575	0.50000	0.4355
30 Benzo(j)fluoranthene	252		16.963	16.972	(0.936)	9796	0.50000	0.4481
31 Total Benzofluoranthenes	252		16.827	16.833	(0.929)	29834	1.50000	1.271 (M)
34 Benzo(e)pyrene	252		17.753	17.760	(0.980)	10884	0.50000	0.4403
32 Benzo(a)pyrene	252		17.883	17.889	(0.987)	9341	0.50000	0.4282
* 33 Perylene-d12	264		18.114	18.114	(1.000)	42567	2.00000	
35 Perylene	252		18.187	18.193	(1.004)	10227	0.50000	0.4368

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.549	20.565	(1.134)	5823	0.50000	0.4262 (M)
37 Indeno(1,2,3-cd)pyrene	276		20.675	20.691	(1.141)	10592	0.50000	0.4262
38 Dibenzo(a,h)anthracene	278		20.666	20.685	(1.141)	8884	0.50000	0.4154 (M)
39 Benzo(g,h,i)perylene	276		21.760	21.782	(1.201)	9687	0.50000	0.4302

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011904.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-CAL2
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	45056	0.79
10 Acenaphthene-d10	26411	13206	52822	26746	1.27
15 Phenanthrene-d10	49210	24605	98420	50759	3.15
25 Chrysene-d12	42994	21497	85988	44658	3.87
33 Perylene-d12	40520	20260	81040	42567	5.05

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.04
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.04
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

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

REVIEW SUMMARY FOR FILE - N823011904.D

Lab ID: SLA0213-CAL2

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 11:58

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

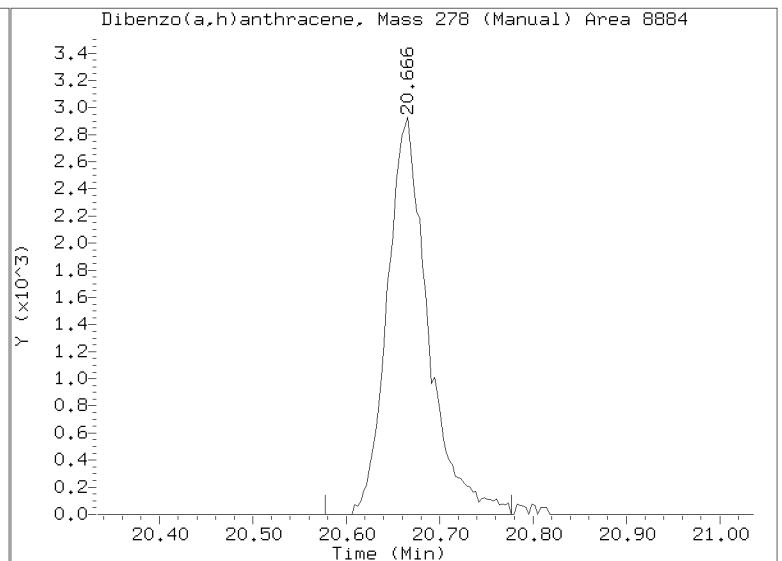
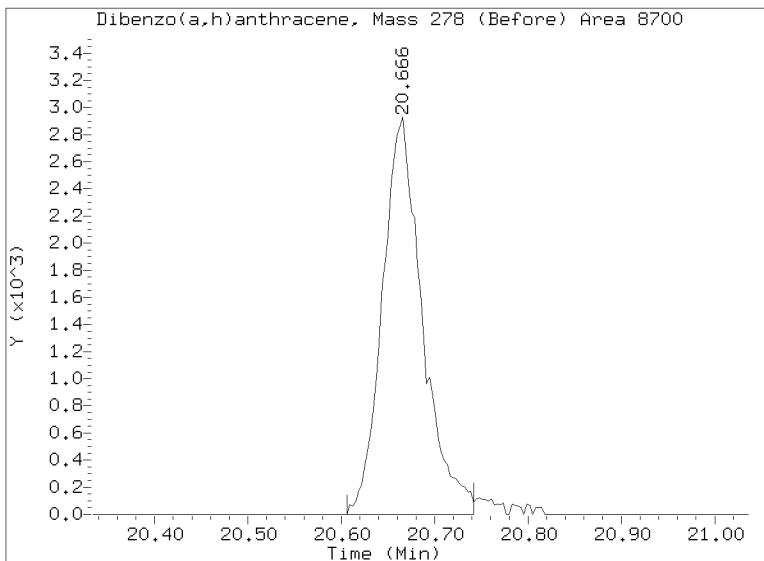
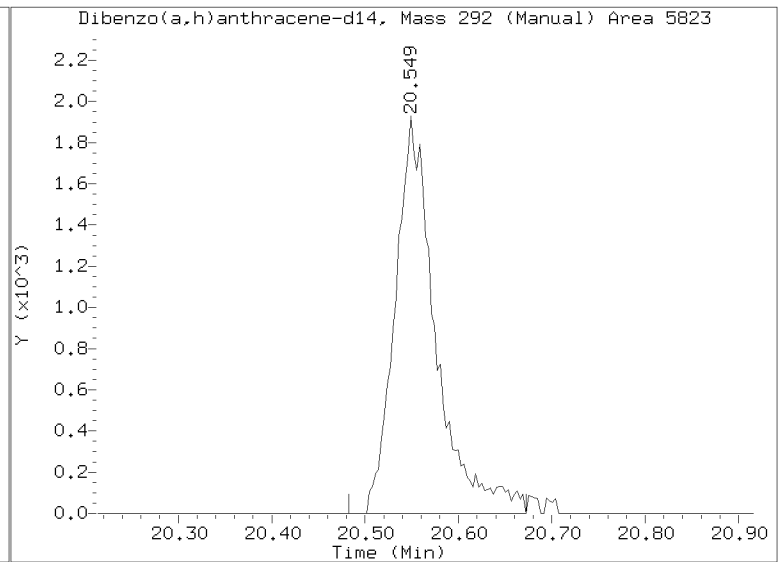
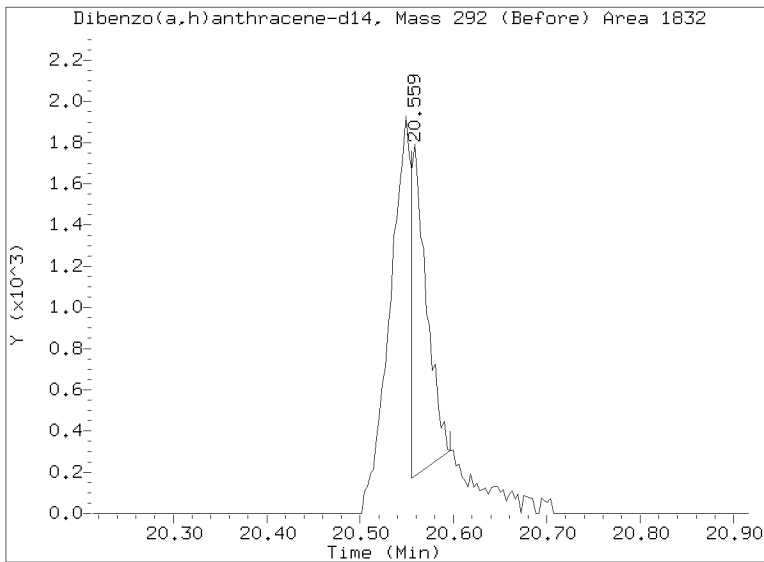
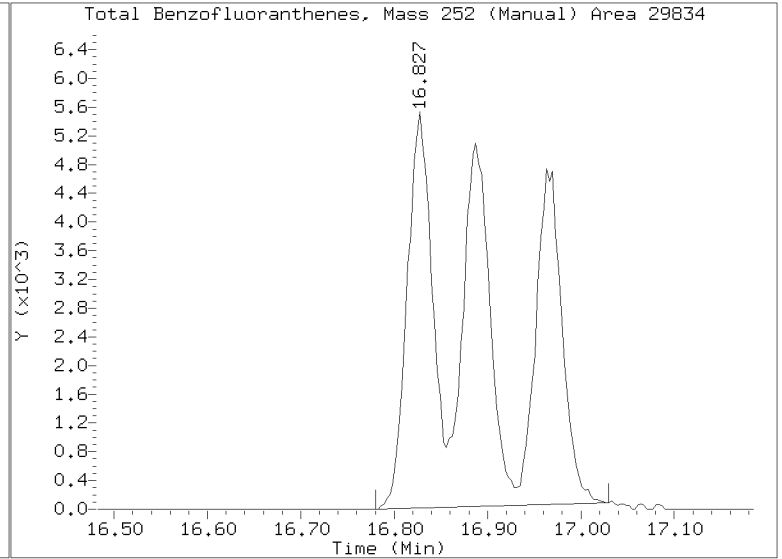
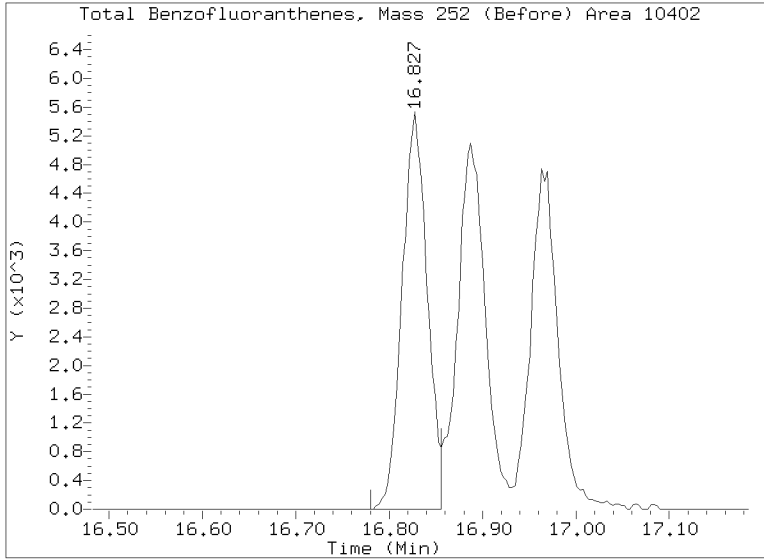
No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011904.D
Injection Date: 19-JAN-2023 11:58
Lab ID:SLA0213-CAL2 Client ID:
Report Date: 01/19/2023 20:12



Data File: \\target\share\chem3\nt8.1\20230119.B\MS23011905.D

Date: 19-JAN-2023 12:25

Client ID:

Sample Info: IC1230119,

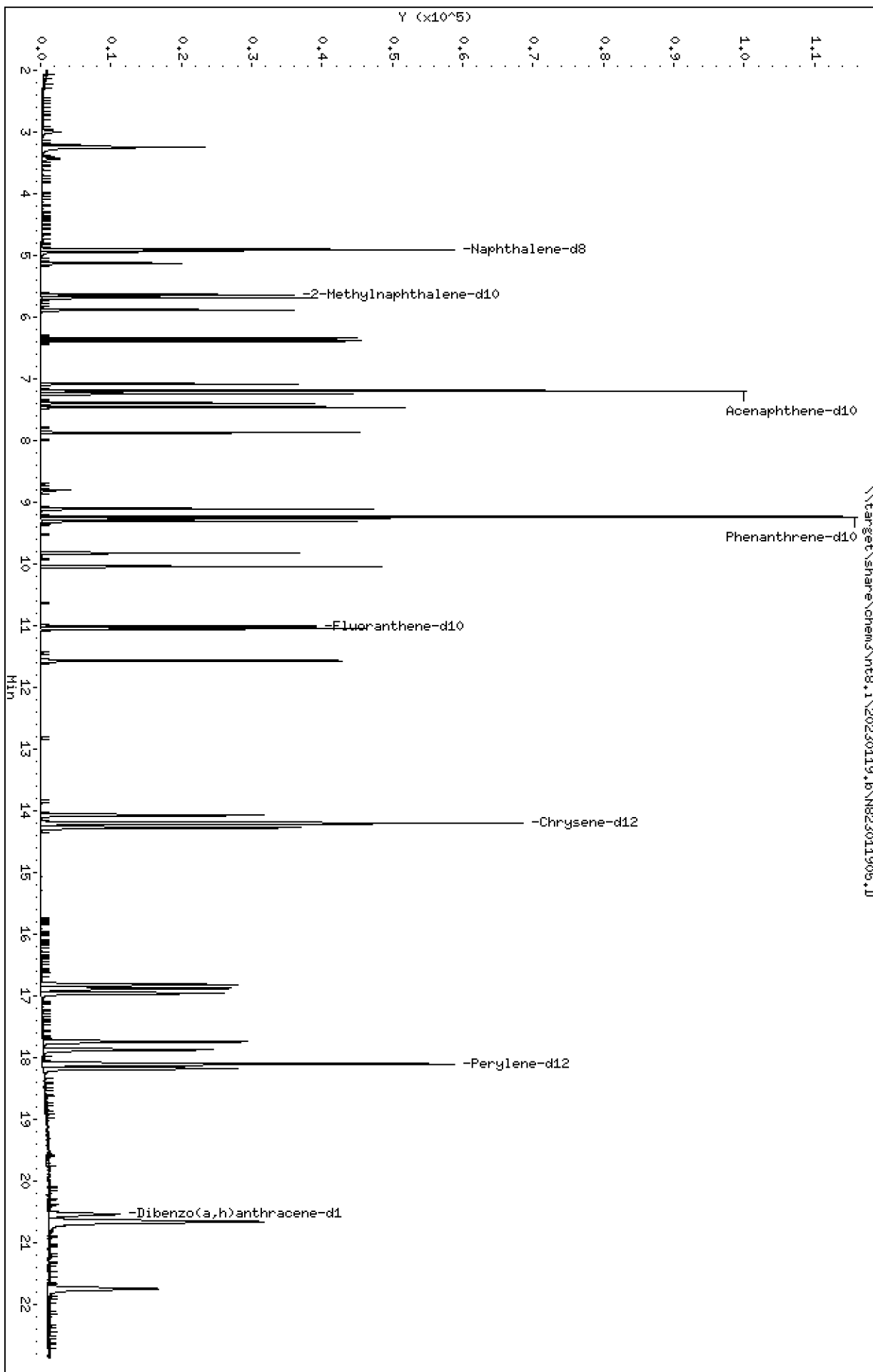
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011905.D
 Lab Smp Id: SLA0213-CAL3
 Inj Date : 19-JAN-2023 12:25
 Operator : JZ Inst ID: nt8.i
 Smp Info : IC1230119,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 5 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
* 1 Naphthalene-d8	136		4.906	4.906	(1.000)	47180	2.00000	
2 Naphthalene	128		4.938	4.938	(1.006)	21563	1.00000	0.9830
§ 3 2-Methylnaphthalene-d10	152		5.640	5.640	(1.150)	12609	1.00000	0.9799
4 2-Methylnaphthalene	141		5.687	5.687	(1.159)	11715	1.00000	0.9709
5 1-methylnaphthalene	141		5.887	5.887	(1.200)	11968	1.00000	0.9773
7 Biphenyl	154		6.345	6.348	(0.882)	17796	1.00000	0.9564
8 2,6-Dimethylnaphthalene	156		6.389	6.392	(0.888)	12741	1.00000	0.9674
9 Acenaphthylene	152		7.085	7.088	(0.985)	20021	1.00000	0.9400
* 10 Acenaphthene-d10	164		7.196	7.196	(1.000)	28206	2.00000	
11 Acenaphthene	153		7.246	7.246	(1.007)	13666	1.00000	0.9576
12 Dibenzofuran	168		7.395	7.398	(1.028)	20714	1.00000	0.9556
13 1,6,7-Trimethylnaphthalene	170		7.461	7.464	(1.037)	12912	1.00000	0.9446
14 Fluorene	166		7.875	7.875	(1.094)	16006	1.00000	0.9508
18 Dibenzothiophene	184		9.109	9.112	(0.986)	22320	1.00000	0.9489
* 15 Phenanthrene-d10	188		9.235	9.235	(1.000)	53233	2.00000	
16 Phenanthrene	178		9.270	9.273	(1.004)	24646	1.00000	0.9478
17 Anthracene	178		9.311	9.314	(1.008)	22258	1.00000	0.9423
19 Carbazole	167		9.823	9.826	(1.064)	20007	1.00000	0.9239
20 1-Methylphenanthrene	192		10.048	10.051	(1.088)	17326	1.00000	0.9246
22 Fluoranthene	202		11.050	11.056	(1.197)	27227	1.00000	0.9619
§ 21 Fluoranthene-d10	212		11.015	11.018	(1.193)	21953	1.00000	0.9347
23 Pyrene	202		11.572	11.575	(0.815)	26878	1.00000	0.9325
24 Benzo(a)anthracene	228		14.076	14.079	(0.991)	23406	1.00000	0.8959
* 25 Chrysene-d12	240		14.203	14.206	(1.000)	46493	2.00000	
27 Chrysene	228		14.275	14.282	(1.005)	26230	1.00000	0.9431
28 Benzo(b)fluoranthene	252		16.824	16.833	(0.929)	22805	1.00000	0.8782
29 Benzo(k)fluoranthene	252		16.881	16.897	(0.932)	22425	1.00000	0.8816
30 Benzo(j)fluoranthene	252		16.960	16.972	(0.936)	20574	1.00000	0.8985
31 Total Benzofluoranthenes	252		16.824	16.833	(0.929)	64985	3.00000	2.642 (M)
34 Benzo(e)pyrene	252		17.750	17.760	(0.980)	23026	1.00000	0.8892
32 Benzo(a)pyrene	252		17.877	17.889	(0.987)	19956	1.00000	0.8733
* 33 Perylene-d12	264		18.111	18.114	(1.000)	44587	2.00000	
35 Perylene	252		18.184	18.193	(1.004)	22015	1.00000	0.8978

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.549	20.565	(1.135)	13546	1.00000	0.9466
37 Indeno(1,2,3-cd)pyrene	276		20.672	20.691	(1.141)	23911	1.00000	0.9185
38 Dibenzo(a,h)anthracene	278		20.656	20.685	(1.141)	19954	1.00000	0.8907
39 Benzo(g,h,i)perylene	276		21.747	21.782	(1.201)	20977	1.00000	0.8894

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011905.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-CAL3
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	47180	5.54
10 Acenaphthene-d10	26411	13206	52822	28206	6.80
15 Phenanthrene-d10	49210	24605	98420	53233	8.18
25 Chrysene-d12	42994	21497	85988	46493	8.14
33 Perylene-d12	40520	20260	81040	44587	10.04

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011905.D

Lab ID: SLA0213-CAL3

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 12:25

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

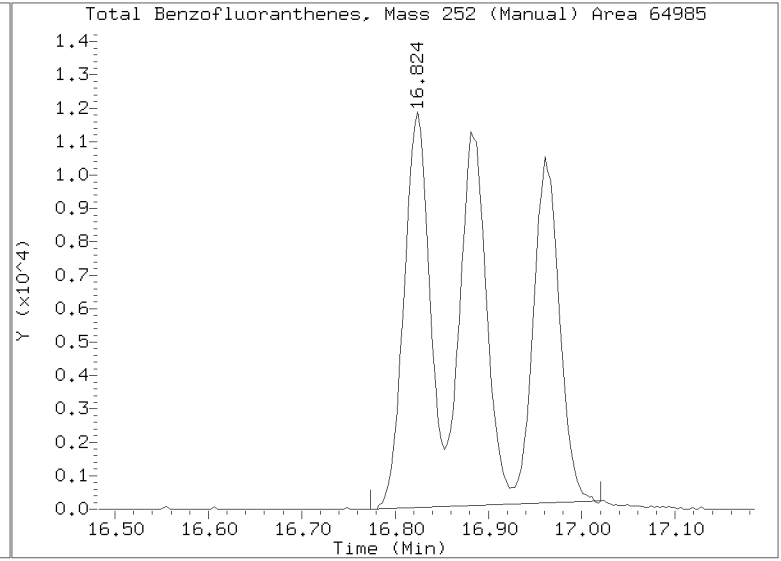
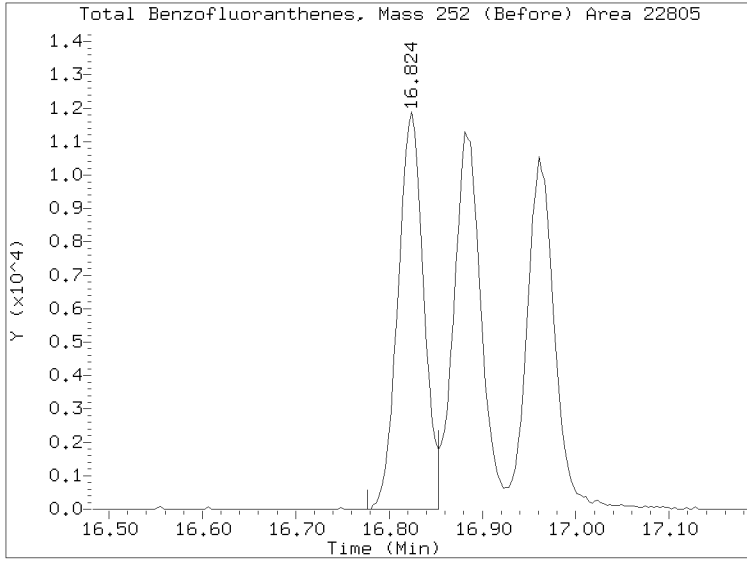
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011905.D

Injection Date: 19-JAN-2023 12:25

Lab ID:SLA0213-CAL3 Client ID:

Report Date: 01/19/2023 20:12



Data File: \\target\share\chem3\nt8.1\20230119.B\N823011906.D

Date: 19-JAN-2023 12:52

Client ID:

Sample Info: IC25230119,

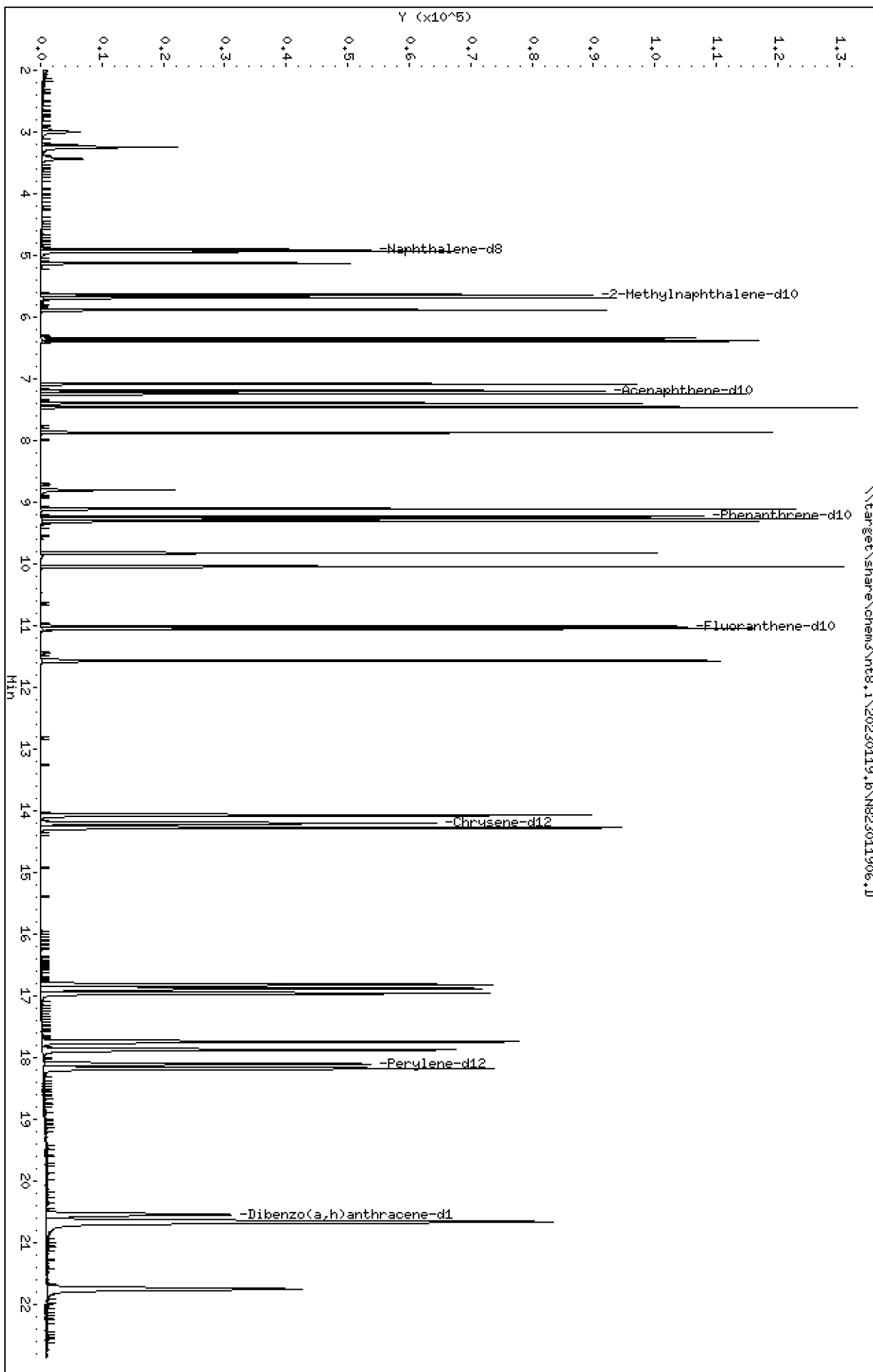
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011906.D
 Lab Smp Id: SLA0213-CAL4
 Inj Date : 19-JAN-2023 12:52
 Operator : JZ Inst ID: nt8.i
 Smp Info : IC25230119,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 6 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
* 1 Naphthalene-d8	136		4.906	4.906	(1.000)	44704	2.00000	
2 Naphthalene	128		4.938	4.938	(1.006)	52764	2.50000	2.538
§ 3 2-Methylnaphthalene-d10	152		5.640	5.640	(1.150)	31709	2.50000	2.601
4 2-Methylnaphthalene	141		5.687	5.687	(1.159)	29737	2.50000	2.601
5 1-methylnaphthalene	141		5.883	5.887	(1.199)	30098	2.50000	2.594
7 Biphenyl	154		6.345	6.348	(0.882)	44716	2.50000	2.566
8 2,6-Dimethylnaphthalene	156		6.389	6.392	(0.888)	32396	2.50000	2.627
9 Acenaphthylene	152		7.085	7.088	(0.985)	53242	2.50000	2.670
* 10 Acenaphthene-d10	164		7.196	7.196	(1.000)	26411	2.00000	
11 Acenaphthene	153		7.246	7.246	(1.007)	34335	2.50000	2.569
12 Dibenzofuran	168		7.395	7.398	(1.028)	50810	2.50000	2.503
13 1,6,7-Trimethylnaphthalene	170		7.461	7.464	(1.037)	33264	2.50000	2.599
14 Fluorene	166		7.872	7.875	(1.094)	40499	2.50000	2.569
18 Dibenzothiophene	184		9.109	9.112	(0.986)	56399	2.50000	2.594
* 15 Phenanthrene-d10	188		9.235	9.235	(1.000)	49210	2.00000	
16 Phenanthrene	178		9.270	9.273	(1.004)	61033	2.50000	2.539
17 Anthracene	178		9.311	9.314	(1.008)	57918	2.50000	2.652
19 Carbazole	167		9.823	9.826	(1.064)	52870	2.50000	2.641
20 1-Methylphenanthrene	192		10.048	10.051	(1.088)	45452	2.50000	2.624
22 Fluoranthene	202		11.053	11.056	(1.197)	68546	2.50000	2.620
§ 21 Fluoranthene-d10	212		11.015	11.018	(1.193)	58746	2.50000	2.706
23 Pyrene	202		11.572	11.575	(0.815)	69587	2.50000	2.611
24 Benzo(a)anthracene	228		14.076	14.079	(0.991)	63802	2.50000	2.641
* 25 Chrysene-d12	240		14.202	14.206	(1.000)	42994	2.00000	
27 Chrysene	228		14.278	14.282	(1.005)	65955	2.50000	2.564
28 Benzo(b)fluoranthene	252		16.821	16.833	(0.929)	61818	2.50000	2.620
29 Benzo(k)fluoranthene	252		16.884	16.897	(0.932)	59716	2.50000	2.583
30 Benzo(j)fluoranthene	252		16.963	16.972	(0.937)	54944	2.50000	2.640
31 Total Benzofluoranthenes	252		16.821	16.833	(0.929)	176122	7.50000	7.880 (M)
34 Benzo(e)pyrene	252		17.747	17.760	(0.980)	60179	2.50000	2.557
32 Benzo(a)pyrene	252		17.877	17.889	(0.987)	54569	2.50000	2.628
* 33 Perylene-d12	264		18.111	18.114	(1.000)	40520	2.00000	
35 Perylene	252		18.183	18.193	(1.004)	57968	2.50000	2.601

Compounds	QUANT SIG							AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)	
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.552	20.565	(1.135)	37101	2.50000	2.853	
37 Indeno(1,2,3-cd)pyrene	276		20.675	20.691	(1.142)	63691	2.50000	2.692	
38 Dibenzo(a,h)anthracene	278		20.662	20.685	(1.141)	54772	2.50000	2.690	
39 Benzo(g,h,i)perylene	276		21.756	21.782	(1.201)	56053	2.50000	2.615	

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011906.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-CAL4
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	44704	0.00
10 Acenaphthene-d10	26411	13206	52822	26411	0.00
15 Phenanthrene-d10	49210	24605	98420	49210	0.00
25 Chrysene-d12	42994	21497	85988	42994	0.00
33 Perylene-d12	40520	20260	81040	40520	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011906.D

Lab ID: SLA0213-CAL4

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 12:52

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

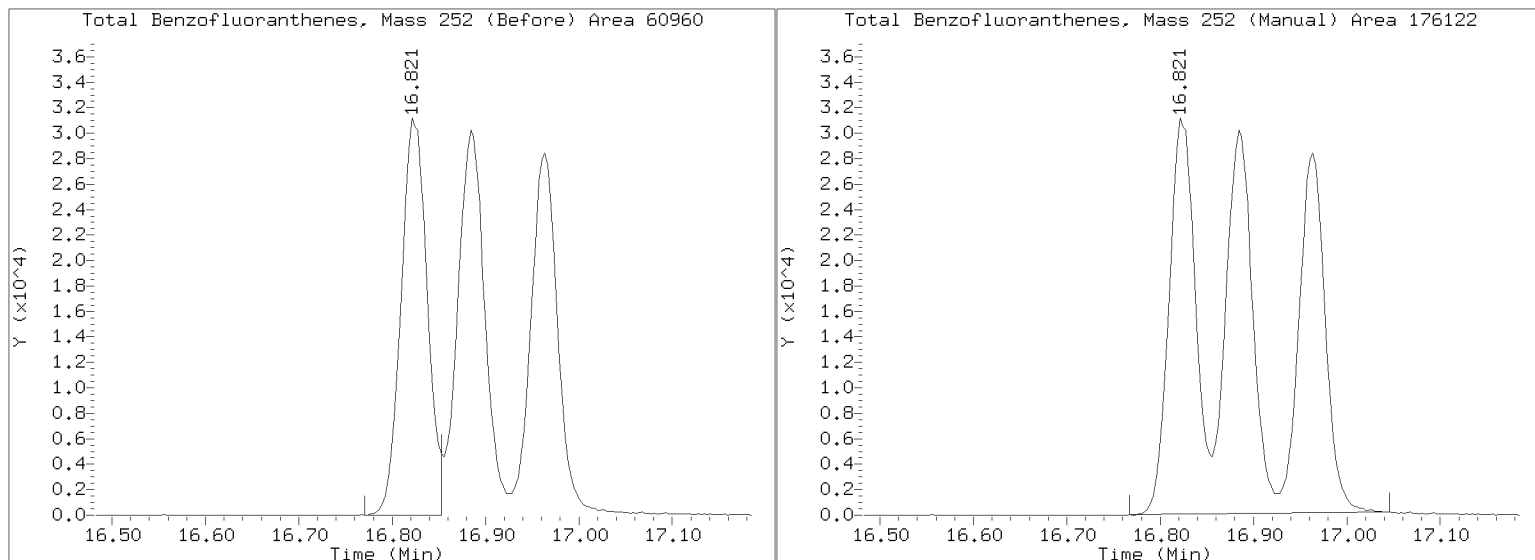
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011906.D

Injection Date: 19-JAN-2023 12:52

Lab ID:SLA0213-CAL4 Client ID:

Report Date: 01/19/2023 20:12



Data File: \\target\share\chem3\nt8.1\20230119.B\MS23011907.D

Date: 19-JAN-2023 13:19

Client ID:

Sample Info: IC6230119,

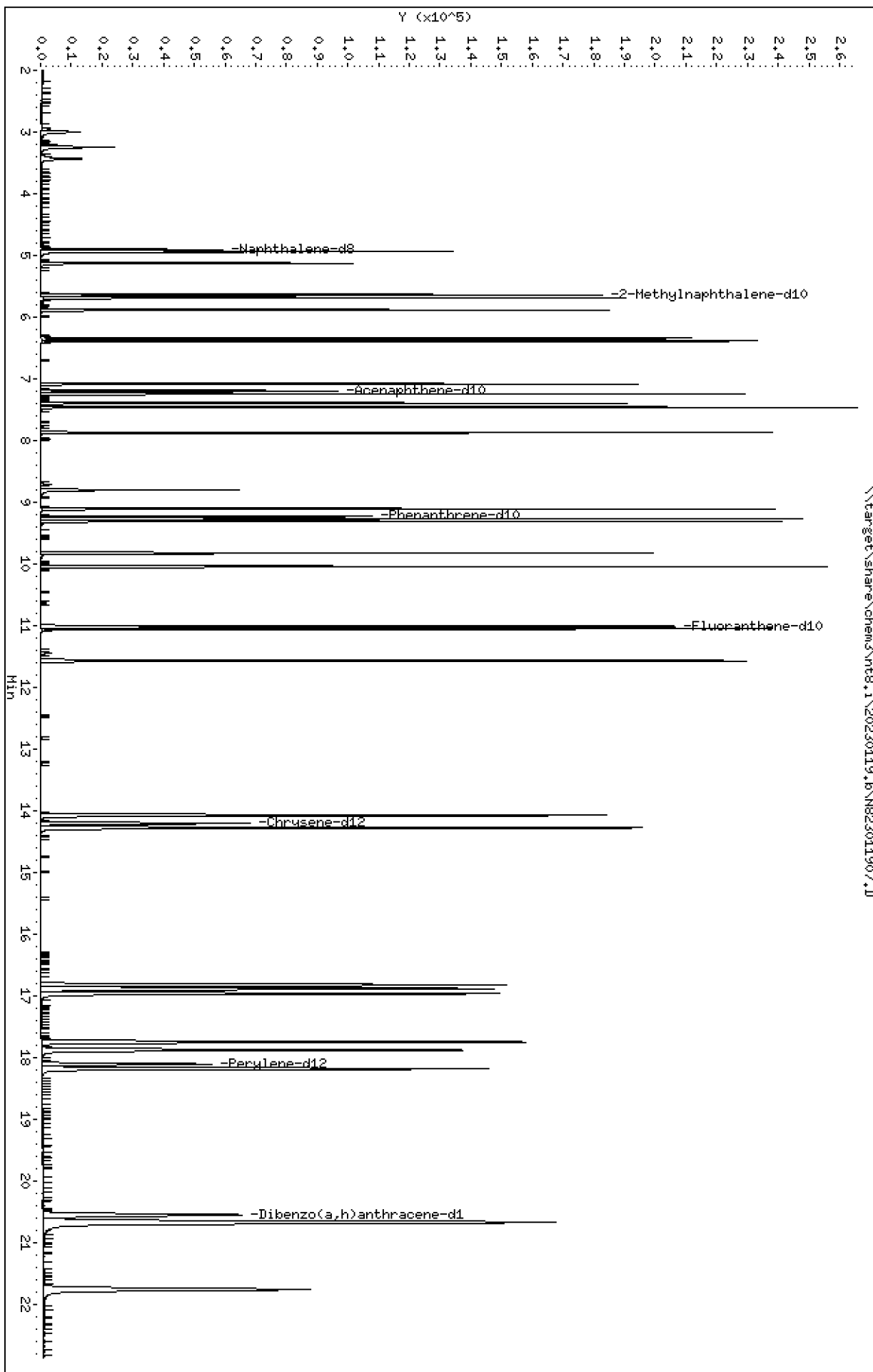
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011907.D
 Lab Smp Id: SLA0213-CAL5
 Inj Date : 19-JAN-2023 13:19
 Operator : JZ Inst ID: nt8.i
 Smp Info : IC5230119,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 7 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
* 1 Naphthalene-d8	136		4.909	4.906	(1.000)	46542	2.00000	
2 Naphthalene	128		4.938	4.938	(1.006)	105414	5.00000	4.871
§ 3 2-Methylnaphthalene-d10	152		5.640	5.640	(1.149)	64045	5.00000	5.046
4 2-Methylnaphthalene	141		5.687	5.687	(1.158)	59129	5.00000	4.967
5 1-methylnaphthalene	141		5.887	5.887	(1.199)	59615	5.00000	4.935
7 Biphenyl	154		6.345	6.348	(0.882)	88014	5.00000	4.827
8 2,6-Dimethylnaphthalene	156		6.389	6.392	(0.888)	64484	5.00000	4.997
9 Acenaphthylene	152		7.085	7.088	(0.985)	108746	5.00000	5.211
* 10 Acenaphthene-d10	164		7.196	7.196	(1.000)	27638	2.00000	
11 Acenaphthene	153		7.246	7.246	(1.007)	67894	5.00000	4.855
12 Dibenzofuran	168		7.395	7.398	(1.028)	100768	5.00000	4.744
13 1,6,7-Trimethylnaphthalene	170		7.461	7.464	(1.037)	65911	5.00000	4.921
14 Fluorene	166		7.875	7.875	(1.094)	82420	5.00000	4.996
18 Dibenzothiophene	184		9.109	9.112	(0.987)	112243	5.00000	4.946
* 15 Phenanthrene-d10	188		9.232	9.235	(1.000)	51351	2.00000	
16 Phenanthrene	178		9.270	9.273	(1.004)	119248	5.00000	4.754
17 Anthracene	178		9.311	9.314	(1.009)	114927	5.00000	5.044
19 Carbazole	167		9.823	9.826	(1.064)	106758	5.00000	5.111
20 1-Methylphenanthrene	192		10.048	10.051	(1.088)	90954	5.00000	5.032
22 Fluoranthene	202		11.053	11.056	(1.197)	135256	5.00000	4.954
§ 21 Fluoranthene-d10	212		11.015	11.018	(1.193)	119286	5.00000	5.265
23 Pyrene	202		11.572	11.575	(0.815)	140705	5.00000	5.068
24 Benzo(a)anthracene	228		14.076	14.079	(0.991)	132618	5.00000	5.270
* 25 Chrysene-d12	240		14.203	14.206	(1.000)	44781	2.00000	
27 Chrysene	228		14.278	14.282	(1.005)	132750	5.00000	4.955
28 Benzo(b)fluoranthene	252		16.827	16.833	(0.929)	125757	5.00000	5.118
29 Benzo(k)fluoranthene	252		16.887	16.897	(0.932)	122821	5.00000	5.103
30 Benzo(j)fluoranthene	252		16.966	16.972	(0.937)	113399	5.00000	5.234
31 Total Benzofluoranthenes	252		16.827	16.833	(0.929)	361443	15.0000	15.53 (M)
34 Benzo(e)pyrene	252		17.750	17.760	(0.980)	121964	5.00000	4.978
32 Benzo(a)pyrene	252		17.883	17.889	(0.987)	112121	5.00000	5.186
* 33 Perylene-d12	264		18.111	18.114	(1.000)	42187	2.00000	
35 Perylene	252		18.187	18.193	(1.004)	116268	5.00000	5.011

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.555	20.565	(1.135)	78264	5.00000	5.780
37 Indeno(1,2,3-cd)pyrene	276		20.681	20.691	(1.142)	129575	5.00000	5.260
38 Dibenzo(a,h)anthracene	278		20.669	20.685	(1.141)	112698	5.00000	5.317
39 Benzo(g,h,i)perylene	276		21.763	21.782	(1.202)	114826	5.00000	5.145

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011907.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-CAL5
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46542	4.11
10 Acenaphthene-d10	26411	13206	52822	27638	4.65
15 Phenanthrene-d10	49210	24605	98420	51351	4.35
25 Chrysene-d12	42994	21497	85988	44781	4.16
33 Perylene-d12	40520	20260	81040	42187	4.11

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.06
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.23	-0.03
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011907.D

Lab ID: SLA0213-CAL5

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 13:19

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

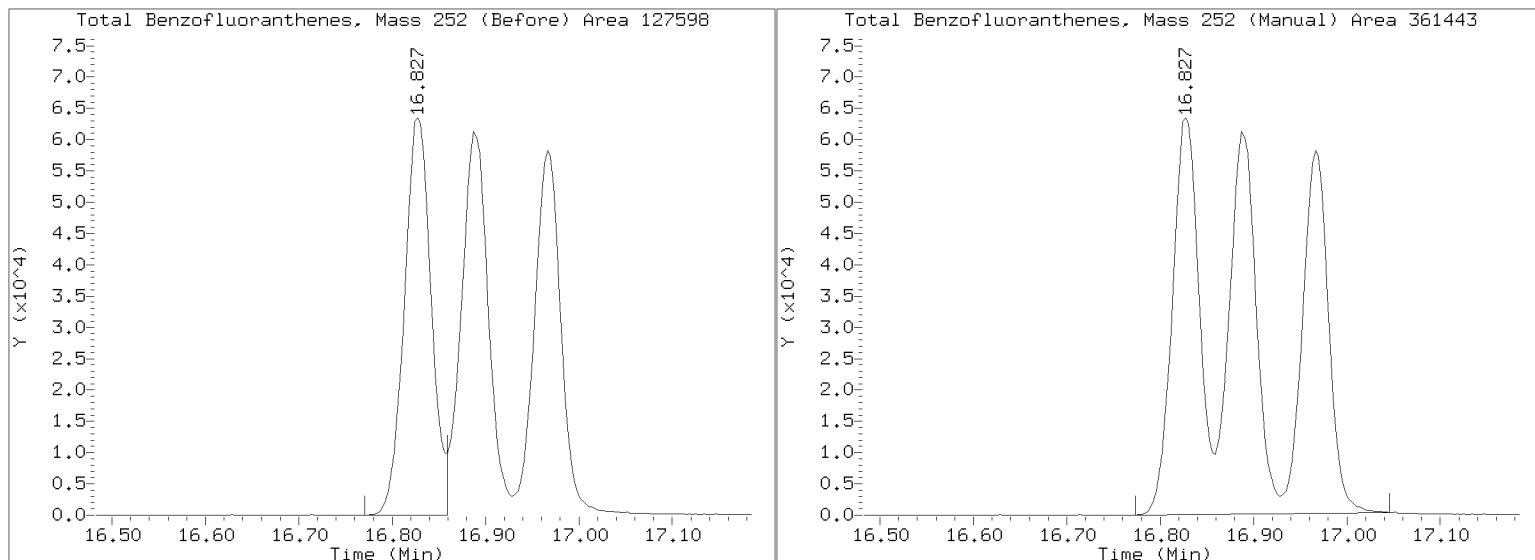
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011907.D

Injection Date: 19-JAN-2023 13:19

Lab ID:SLA0213-CAL5 Client ID:

Report Date: 01/19/2023 20:12



Data File: \\target\share\chem3\nt8.1\20230119.B\MS23011908.D

Date: 19-JAN-2023 13:46

Client ID:

Sample Info: IC10230119,

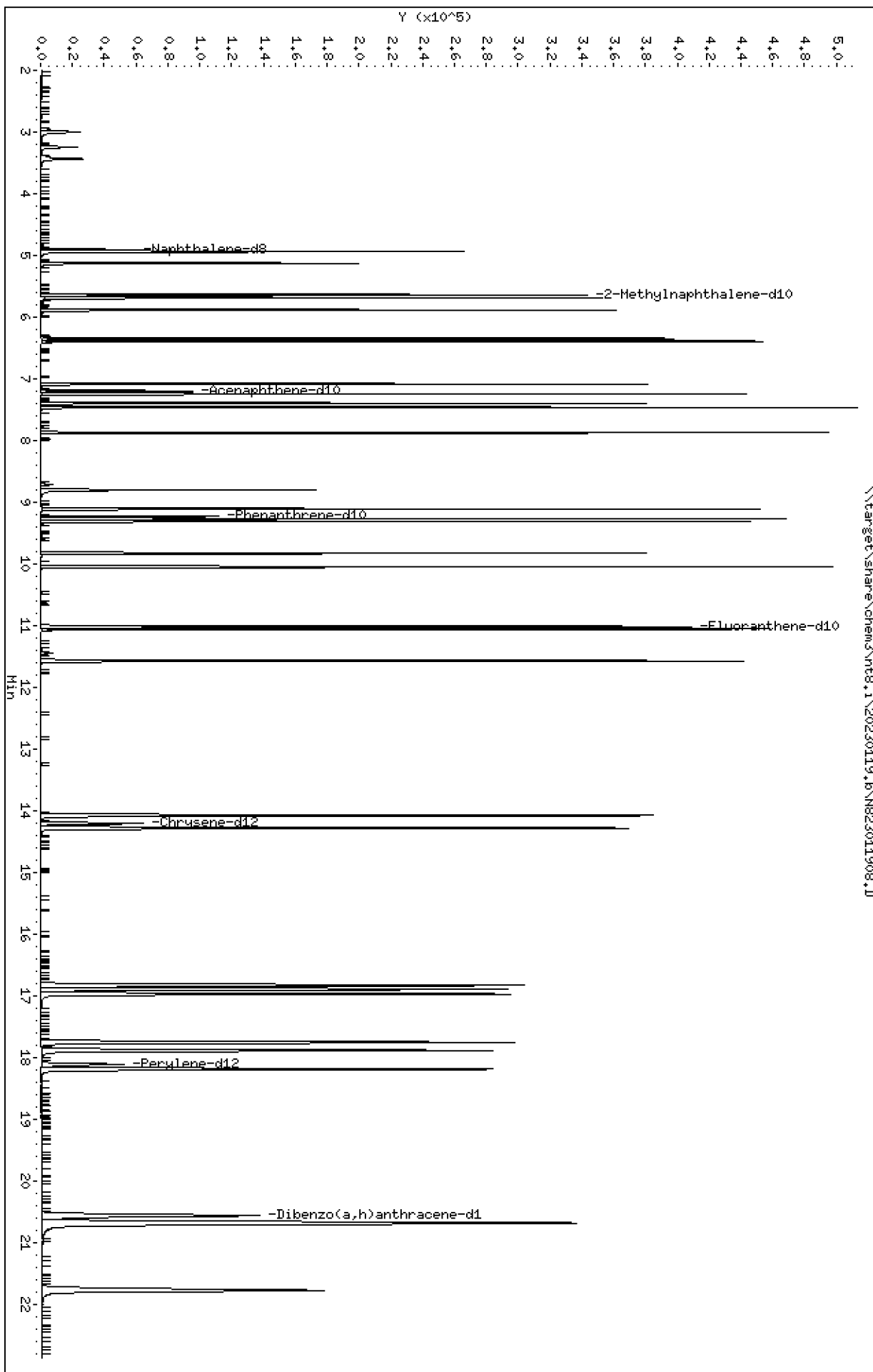
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011908.D
 Lab Smp Id: SLA0213-CAL6
 Inj Date : 19-JAN-2023 13:46
 Operator : JZ Inst ID: nt8.i
 Smp Info : IC10230119,
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 8 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 1 Naphthalene-d8	136	4.906	4.906	(1.000)	46070	2.00000	
2 Naphthalene	128	4.938	4.938	(1.006)	203510	10.0000	9.501
§ 3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	124701	10.0000	9.925
4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	112895	10.0000	9.582
5 1-methylnaphthalene	141	5.887	5.887	(1.200)	115357	10.0000	9.647
7 Biphenyl	154	6.348	6.348	(0.882)	169086	10.0000	9.603
8 2,6-Dimethylnaphthalene	156	6.392	6.392	(0.888)	124019	10.0000	9.952
9 Acenaphthylene	152	7.088	7.088	(0.985)	213179	10.0000	10.58
* 10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26689	2.00000	
11 Acenaphthene	153	7.246	7.246	(1.007)	130872	10.0000	9.692
12 Dibenzofuran	168	7.398	7.398	(1.028)	193532	10.0000	9.436
13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	127563	10.0000	9.863
14 Fluorene	166	7.875	7.875	(1.094)	161125	10.0000	10.11
18 Dibenzothiophene	184	9.112	9.112	(0.987)	217256	10.0000	9.701
* 15 Phenanthrene-d10	188	9.235	9.235	(1.000)	50683	2.00000	
16 Phenanthrene	178	9.273	9.273	(1.004)	230002	10.0000	9.290
17 Anthracene	178	9.314	9.314	(1.009)	221162	10.0000	9.834
19 Carbazole	167	9.826	9.826	(1.064)	210036	10.0000	10.19
20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	178561	10.0000	10.01
22 Fluoranthene	202	11.056	11.056	(1.197)	257643	10.0000	9.560
§ 21 Fluoranthene-d10	212	11.018	11.018	(1.193)	235698	10.0000	10.54
23 Pyrene	202	11.575	11.575	(0.815)	274116	10.0000	10.08
24 Benzo(a)anthracene	228	14.079	14.079	(0.991)	268196	10.0000	10.88
* 25 Chrysene-d12	240	14.206	14.206	(1.000)	43880	2.00000	
27 Chrysene	228	14.282	14.282	(1.005)	257418	10.0000	9.806
28 Benzo(b)fluoranthene	252	16.833	16.833	(0.929)	252022	10.0000	10.64
29 Benzo(k)fluoranthene	252	16.897	16.897	(0.933)	238915	10.0000	10.30
30 Benzo(j)fluoranthene	252	16.972	16.972	(0.937)	216807	10.0000	10.38
31 Total Benzofluoranthenes	252	16.833	16.833	(0.929)	704955	30.0000	31.43 (M)
34 Benzo(e)pyrene	252	17.760	17.760	(0.980)	240447	10.0000	10.18
32 Benzo(a)pyrene	252	17.889	17.889	(0.988)	222990	10.0000	10.70
* 33 Perylene-d12	264	18.114	18.114	(1.000)	40659	2.00000	
35 Perylene	252	18.193	18.193	(1.004)	226582	10.0000	10.13

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.564	20.565	(1.135)	162230	10.0000	12.43
37 Indeno(1,2,3-cd)pyrene	276		20.691	20.691	(1.142)	252895	10.0000	10.65
38 Dibenzo(a,h)anthracene	278		20.685	20.685	(1.142)	223771	10.0000	10.95
39 Benzo(g,h,i)perylene	276		21.782	21.782	(1.202)	231445	10.0000	10.76

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011908.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-CAL6
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46070	3.06
10 Acenaphthene-d10	26411	13206	52822	26689	1.05
15 Phenanthrene-d10	49210	24605	98420	50683	2.99
25 Chrysene-d12	42994	21497	85988	43880	2.06
33 Perylene-d12	40520	20260	81040	40659	0.34

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.02
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

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

REVIEW SUMMARY FOR FILE - N823011908.D

Lab ID: SLA0213-CAL6

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 13:46

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

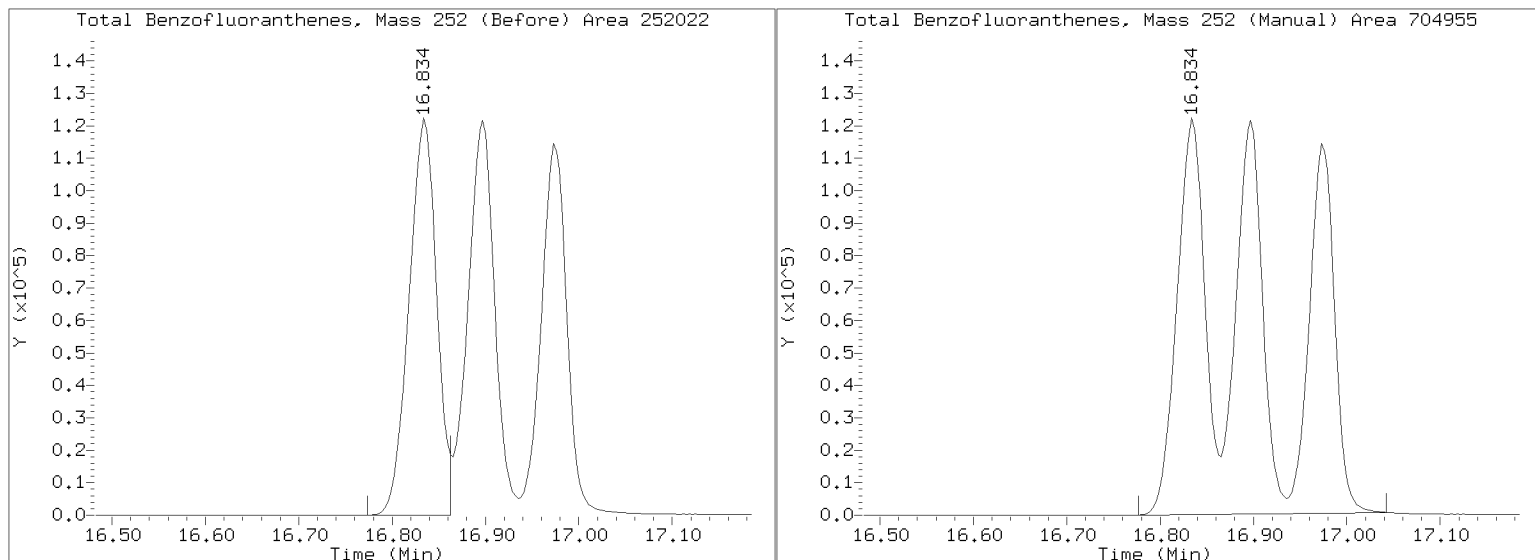
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011908.D

Injection Date: 19-JAN-2023 13:46

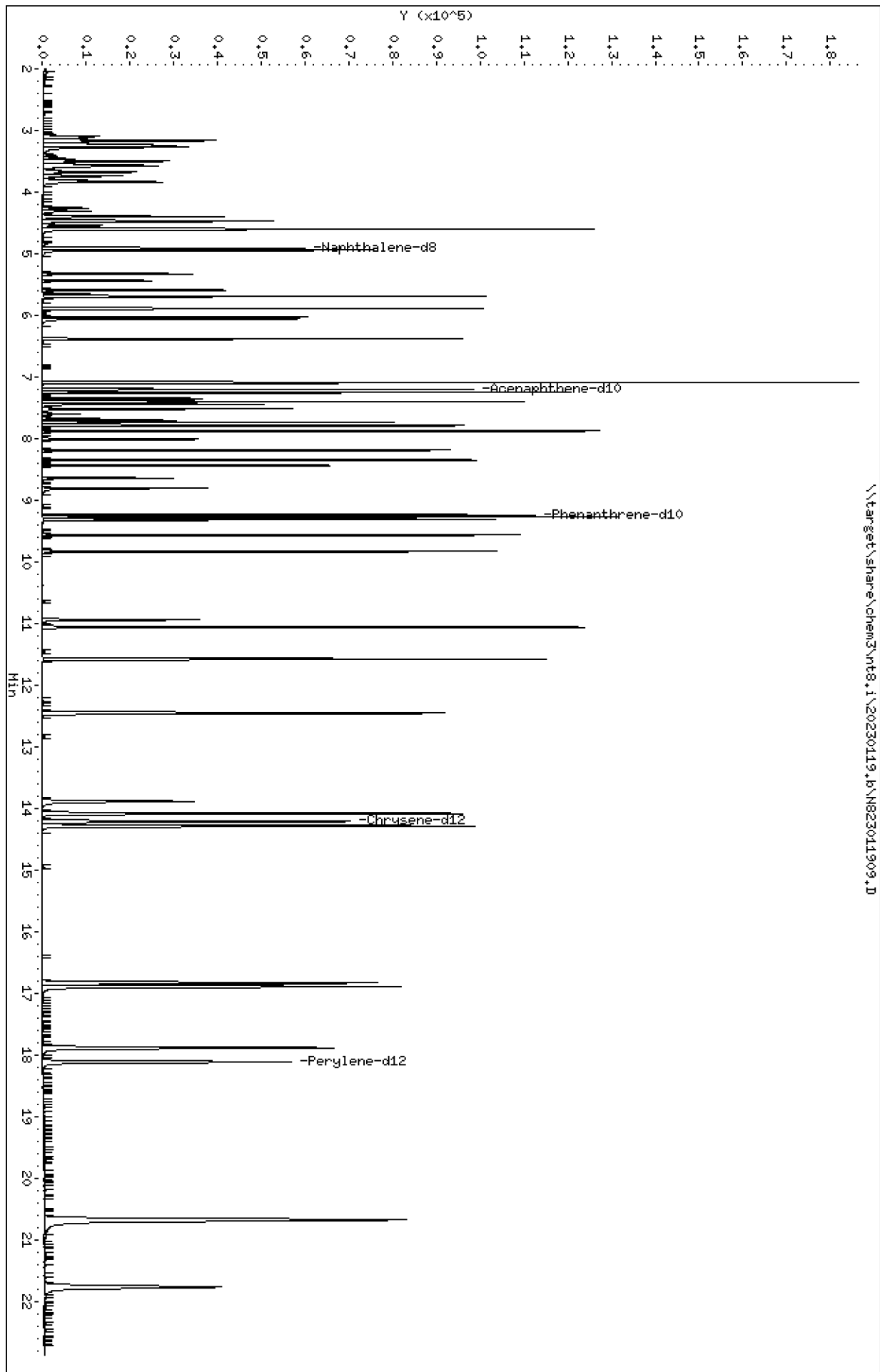
Lab ID:SLA0213-CAL6 Client ID:

Report Date: 01/19/2023 20:12



Data File: \\target\share\chem3\nt8.1\20230119.B\MS23011909.D
Date: 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.1
Operator: JZ
Column diameter: 0.25



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

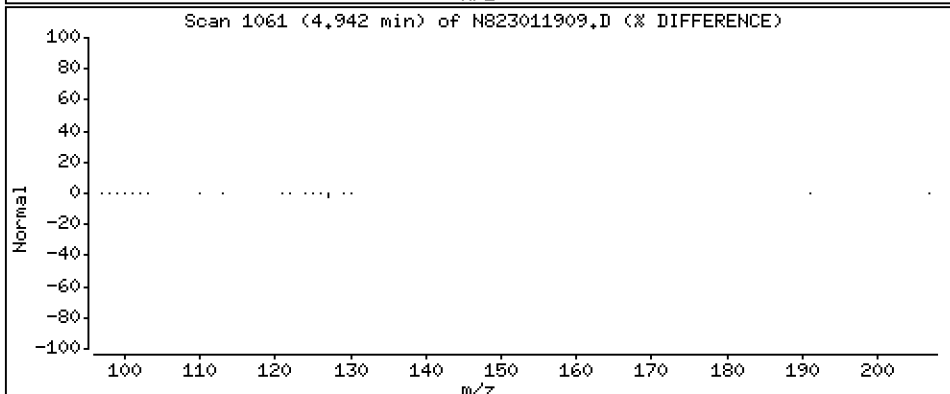
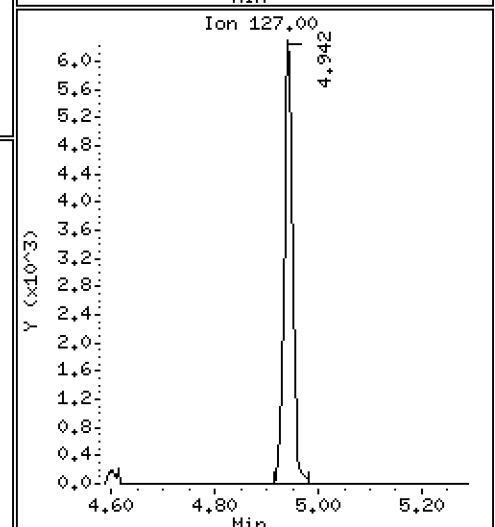
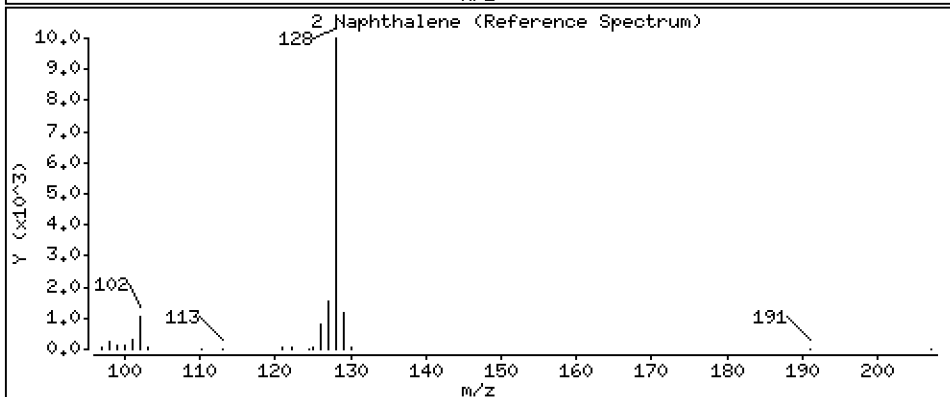
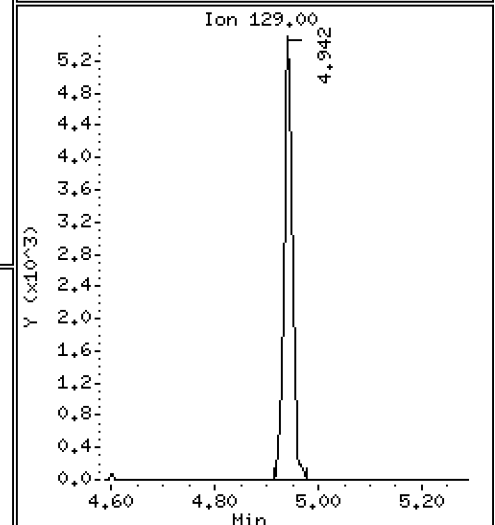
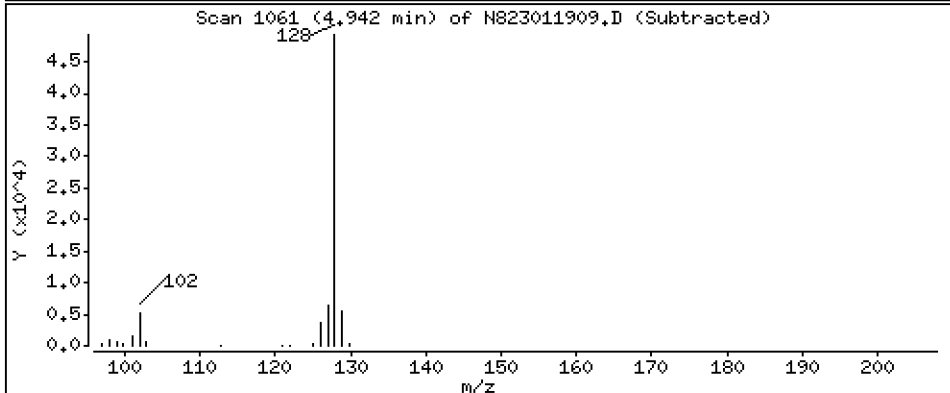
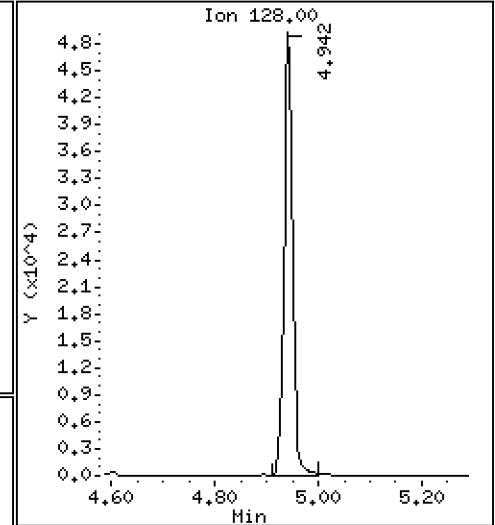
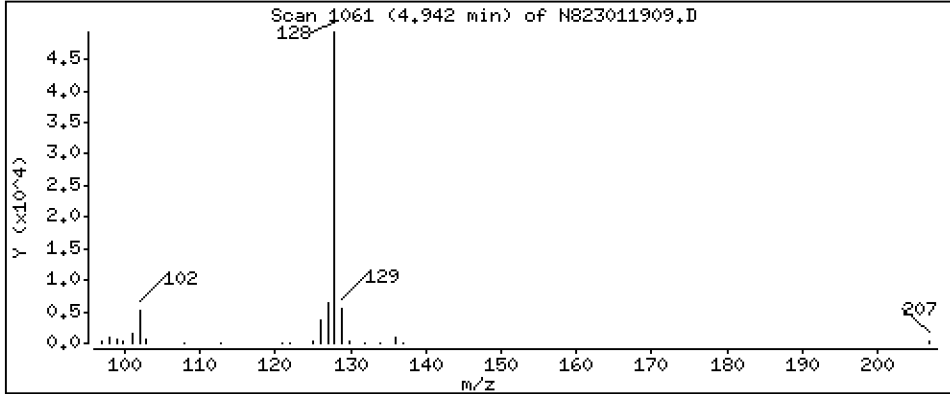
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 2,626 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

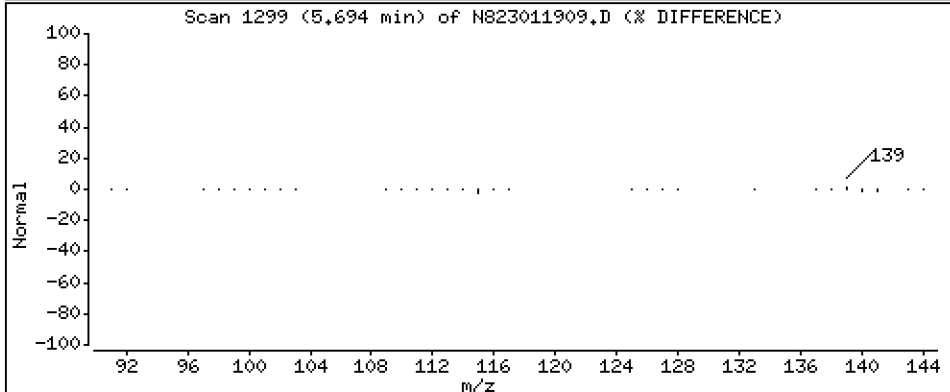
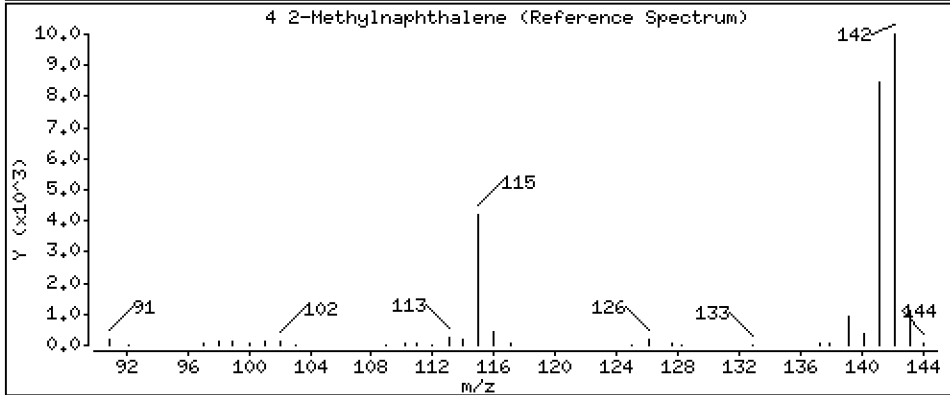
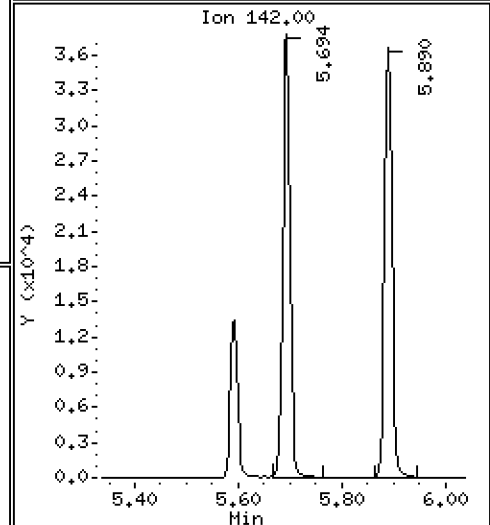
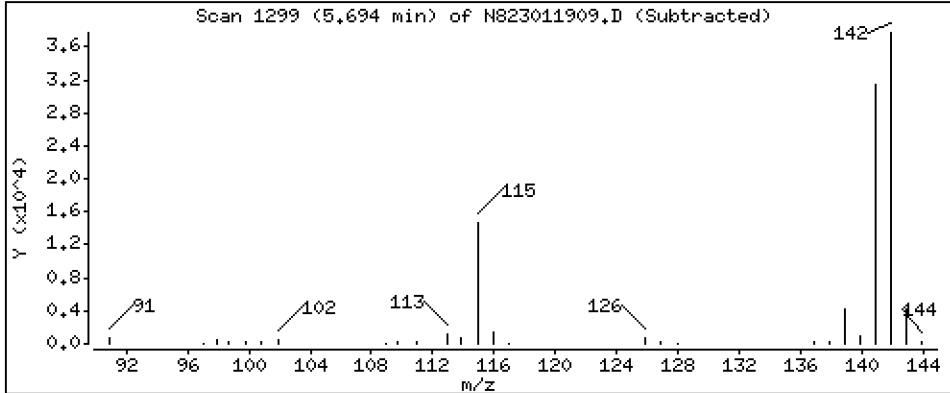
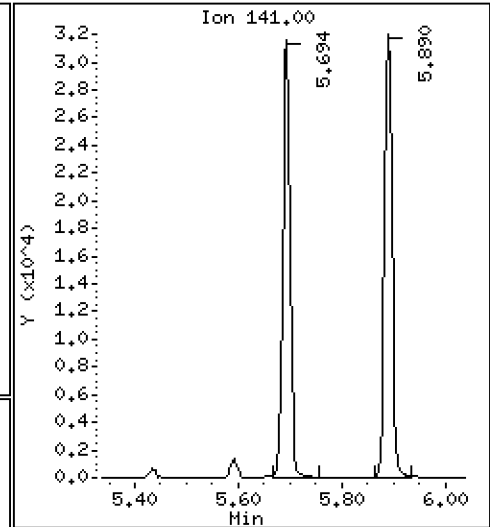
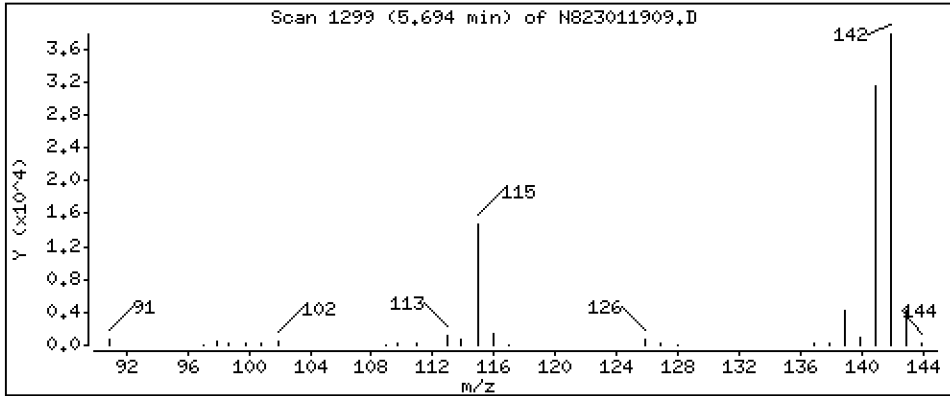
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

4 2-Methylnaphthalene

Concentration: 2,670 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

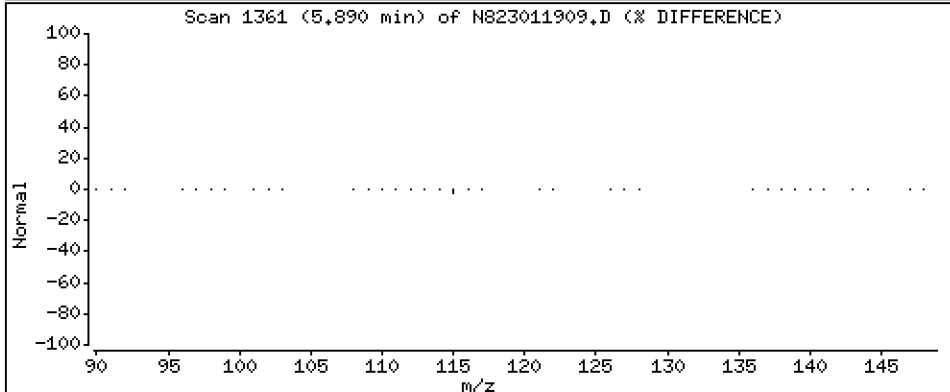
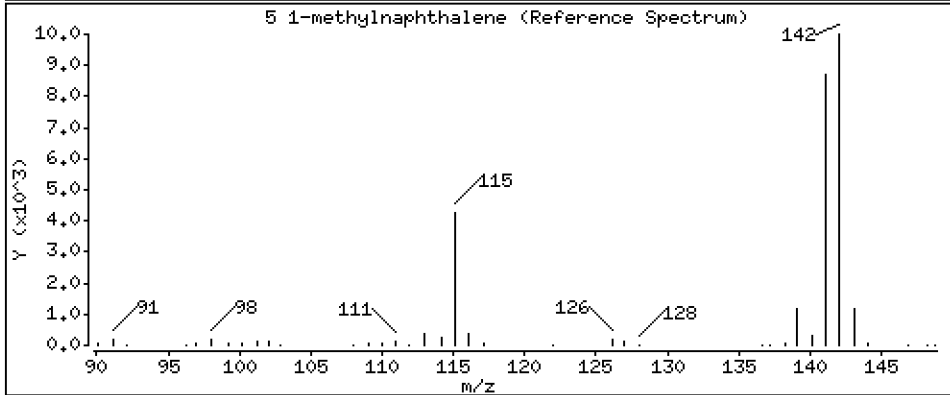
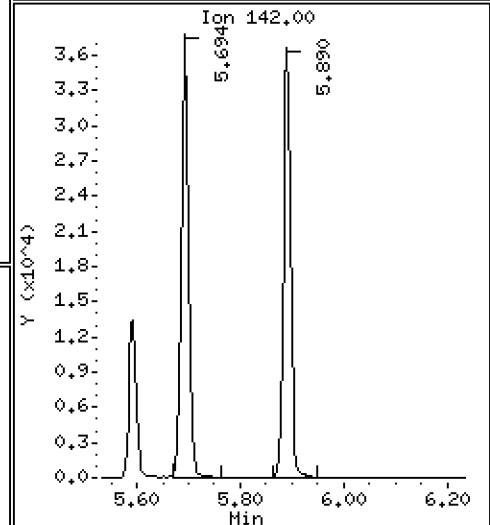
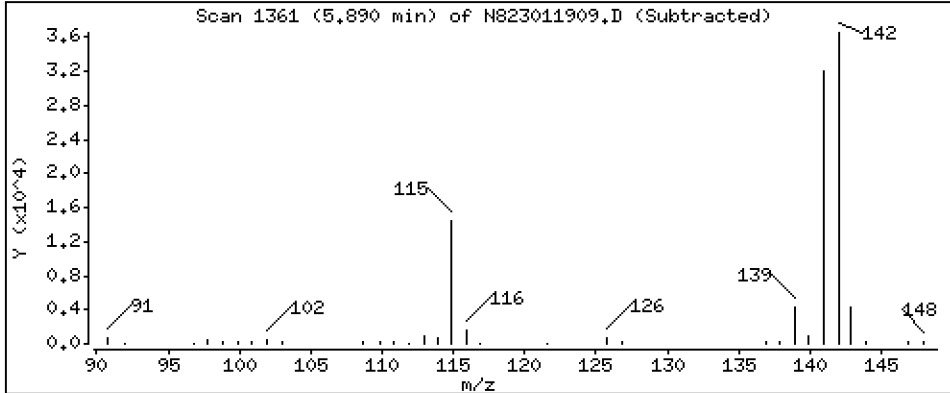
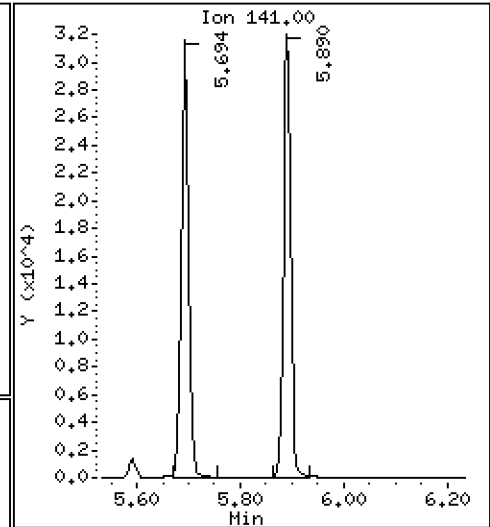
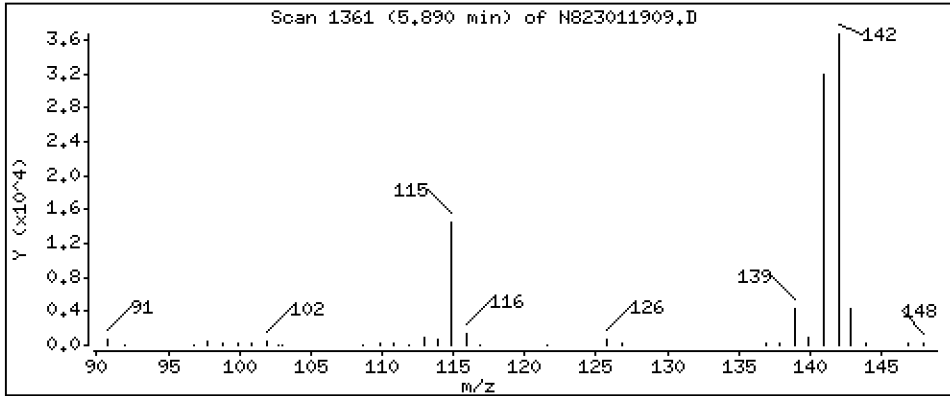
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

5 1-methylnaphthalene

Concentration: 2,649 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

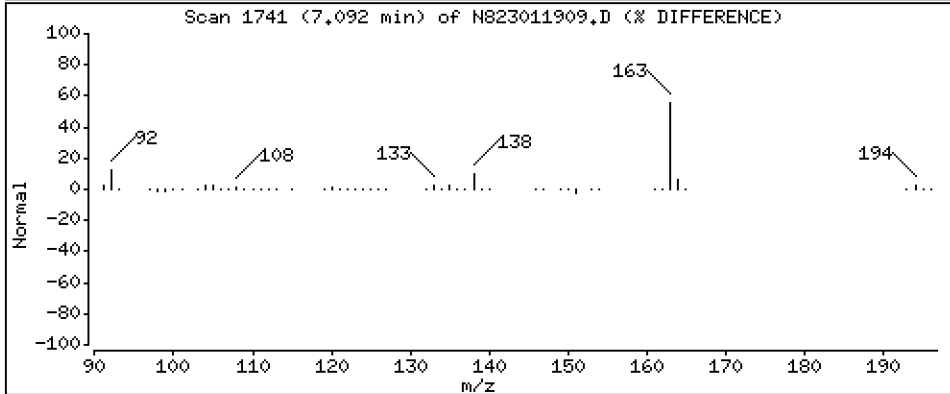
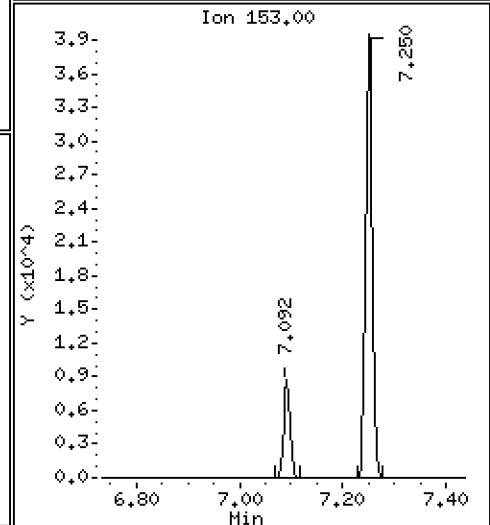
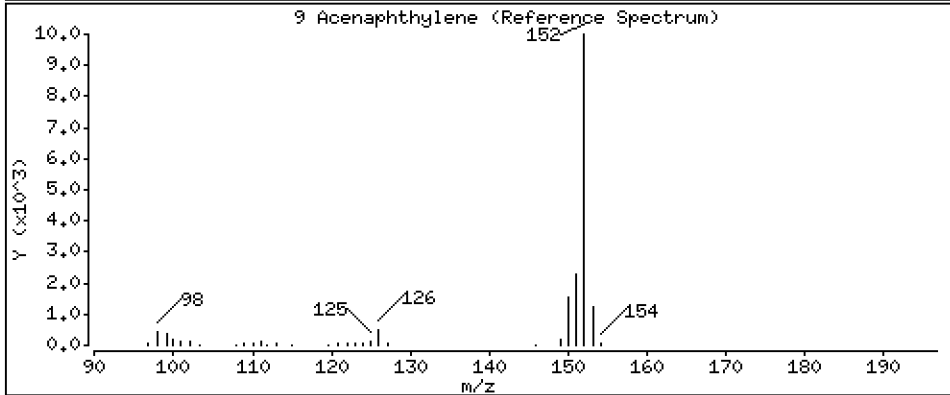
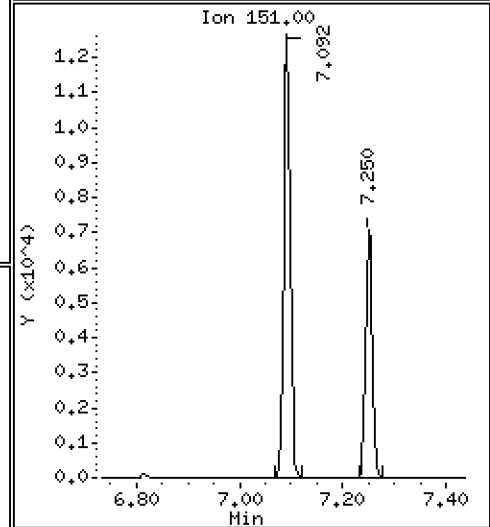
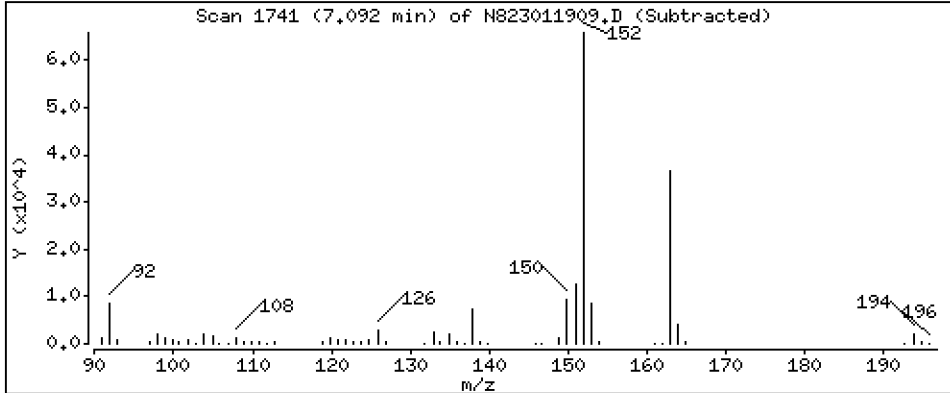
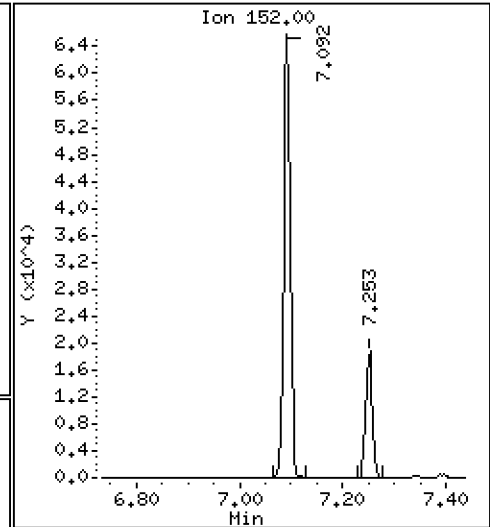
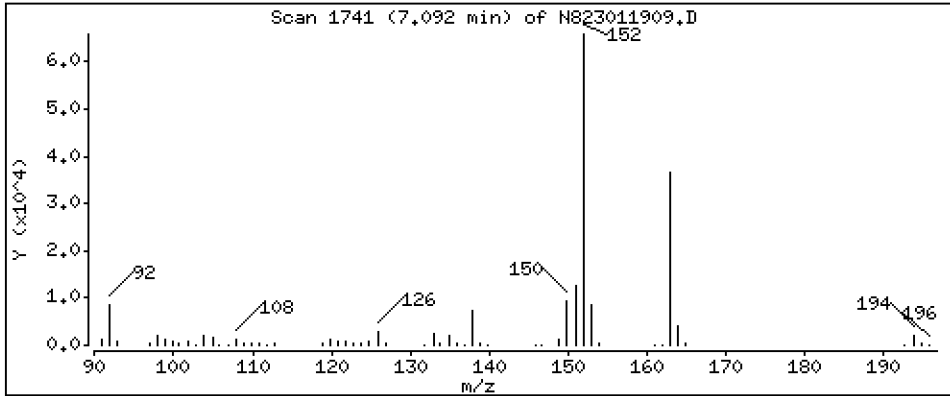
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 2,821 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

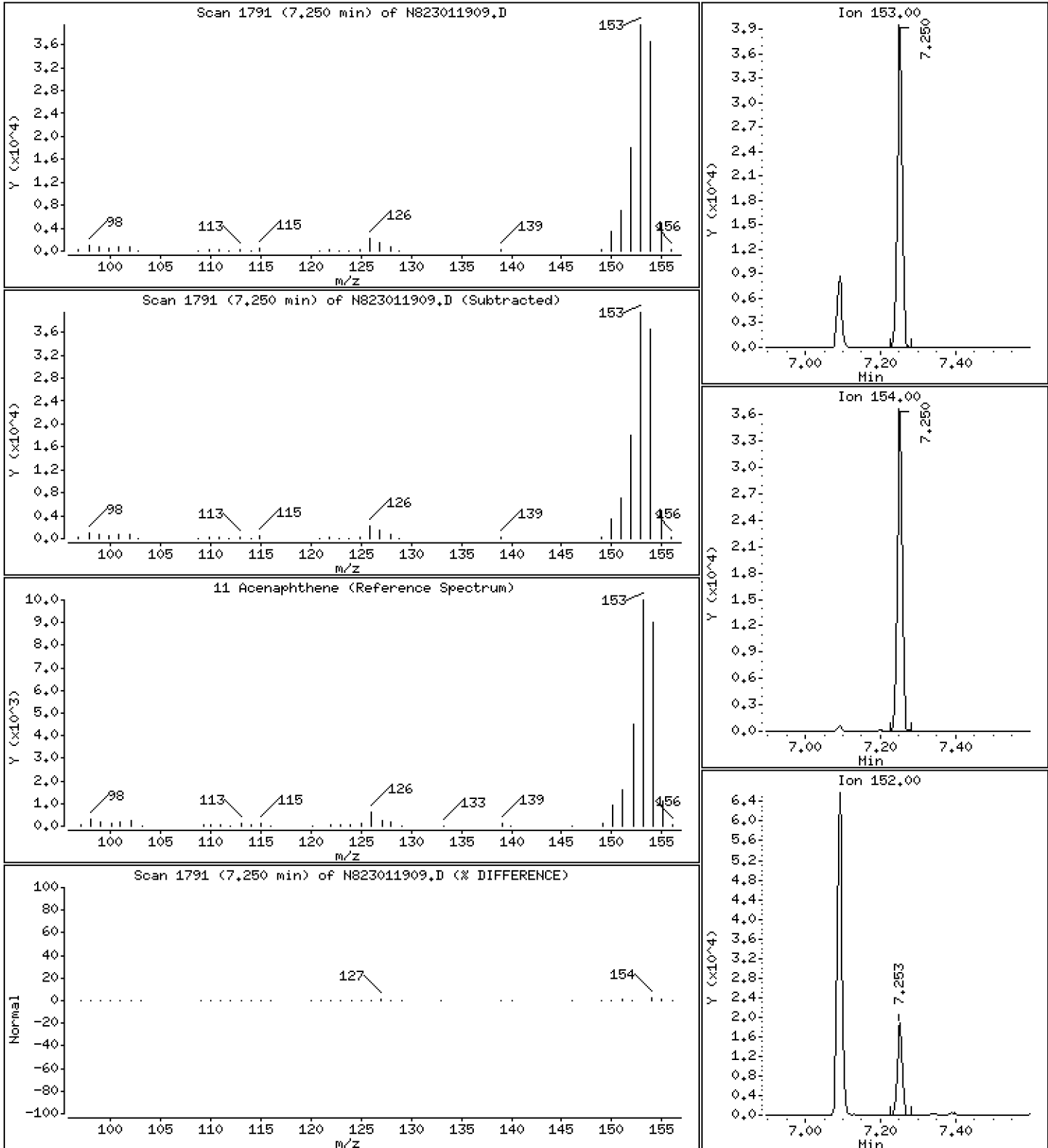
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

11 Acenaphthene

Concentration: 2,600 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

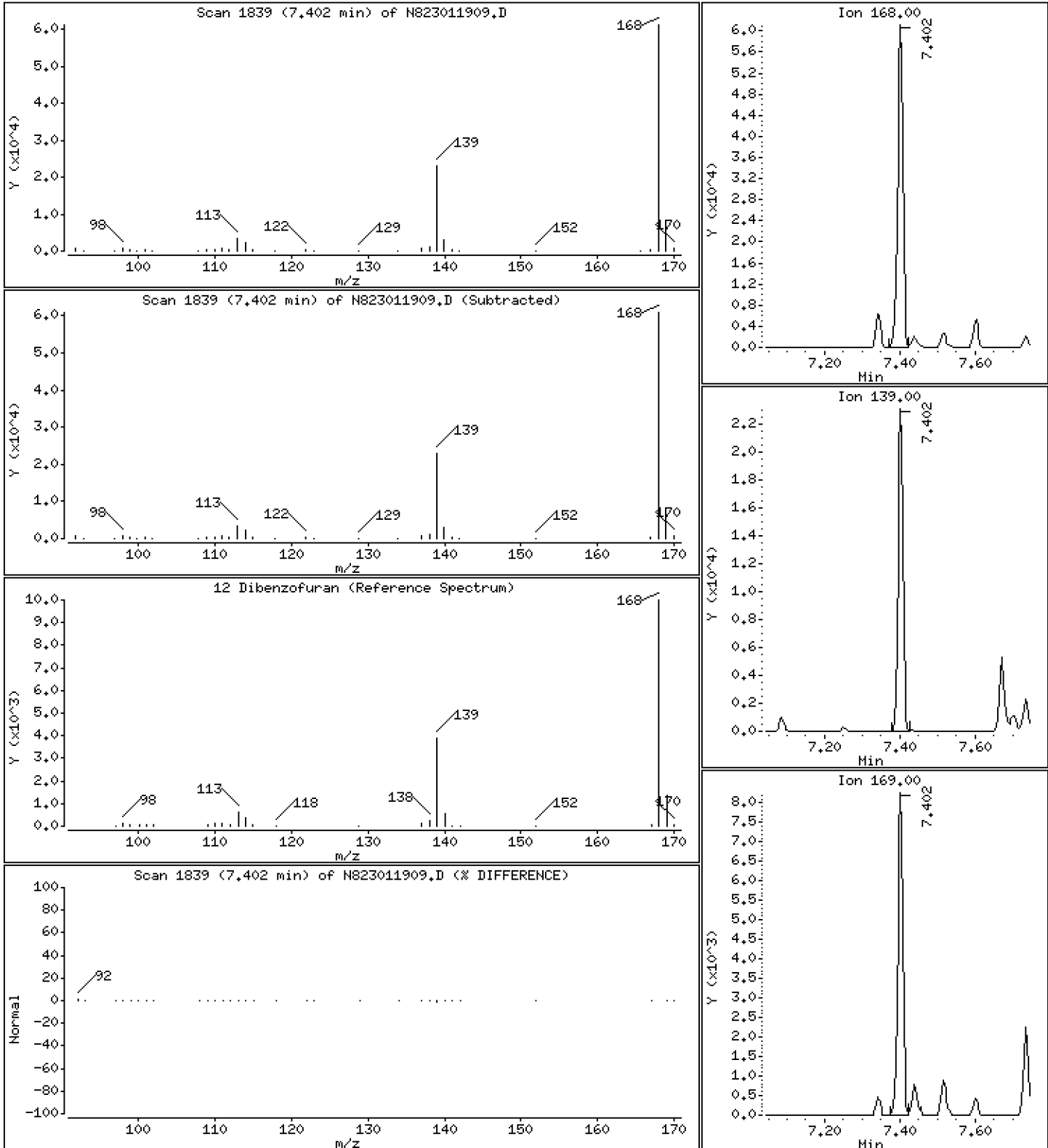
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 2,860 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

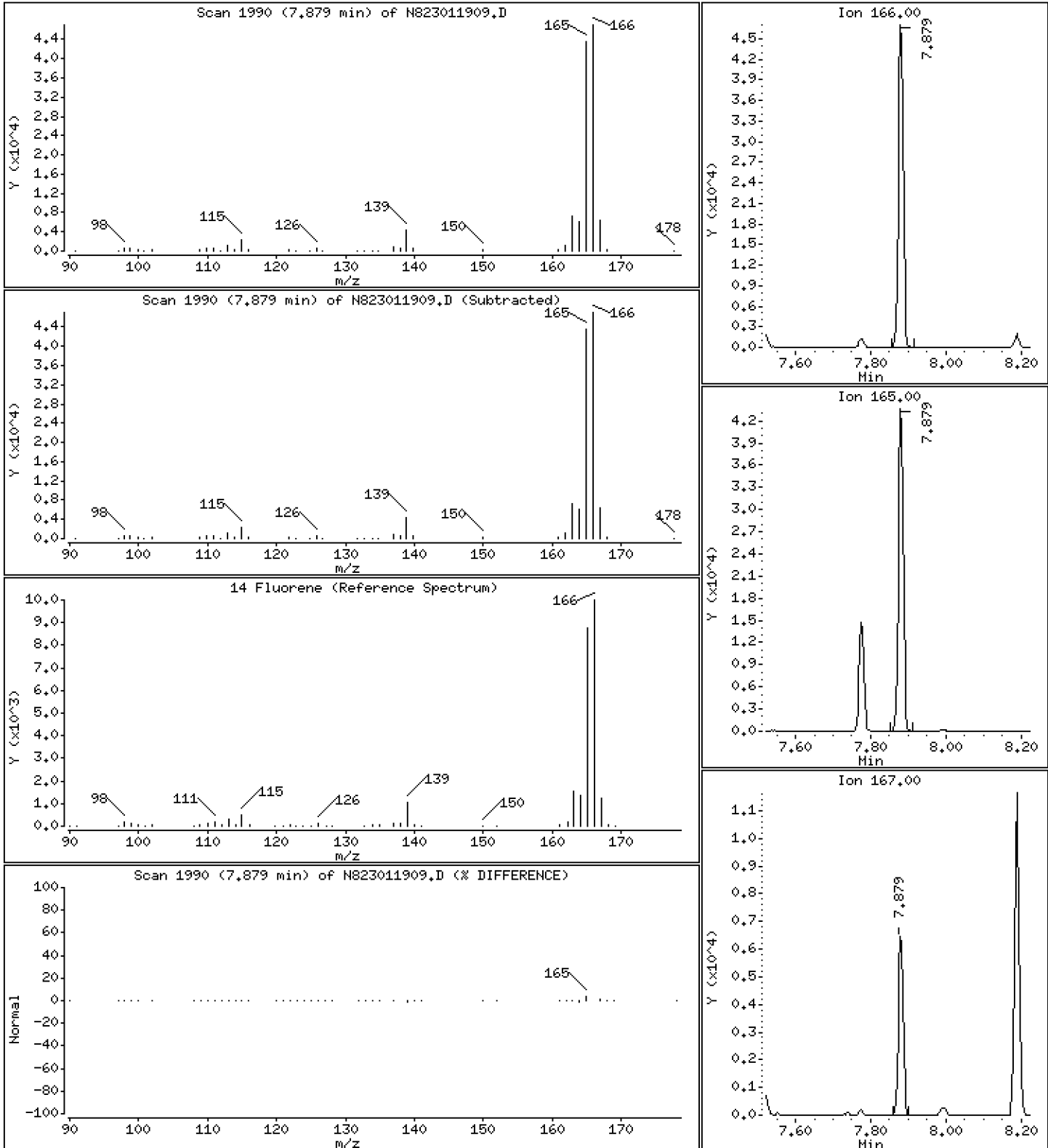
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

14 Fluorene

Concentration: 2,631 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

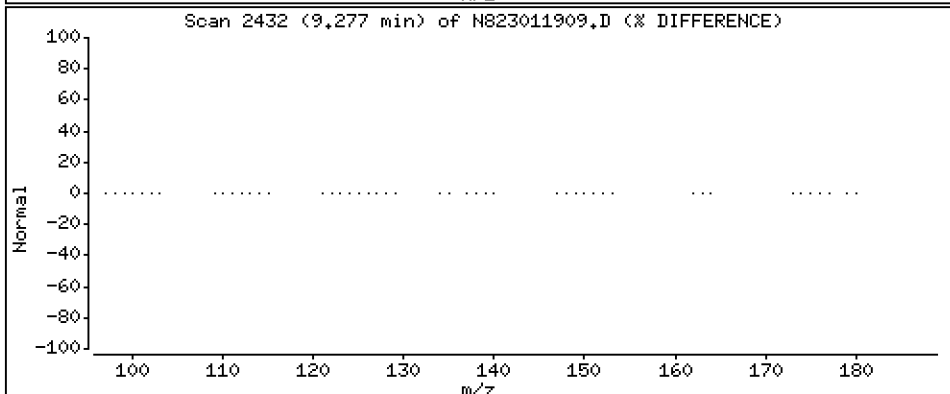
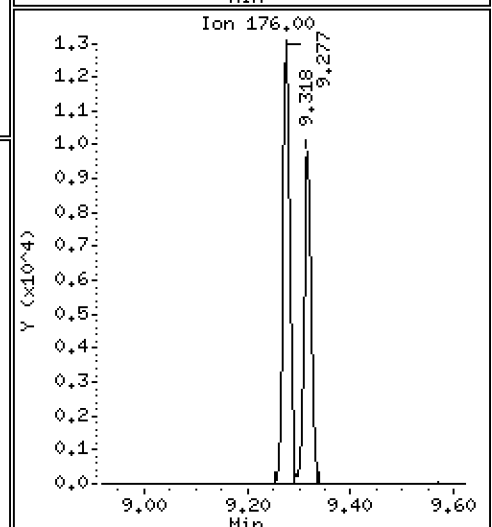
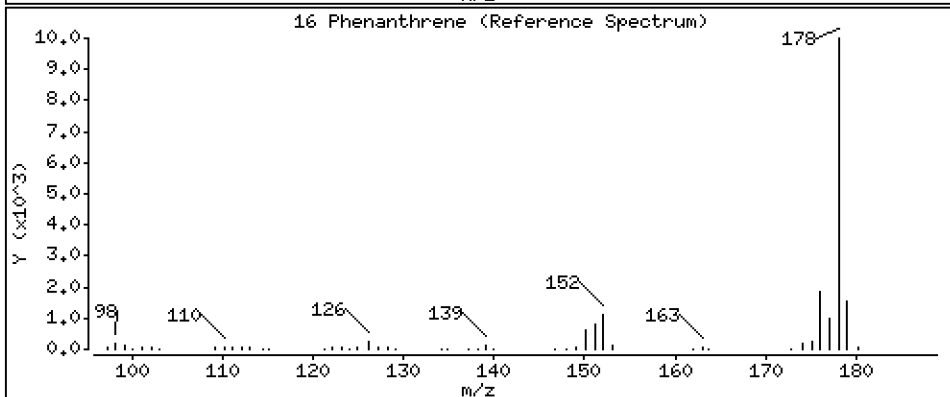
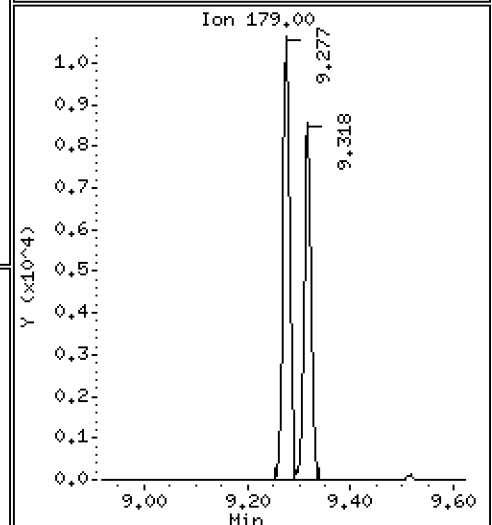
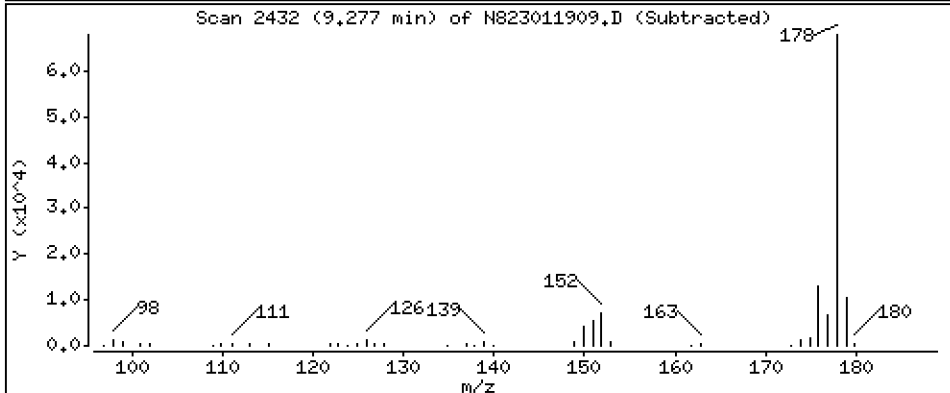
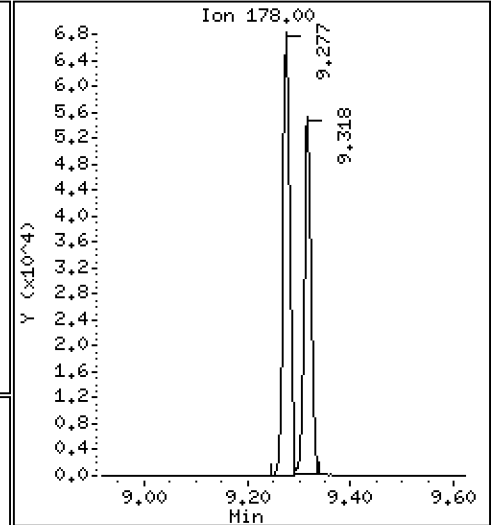
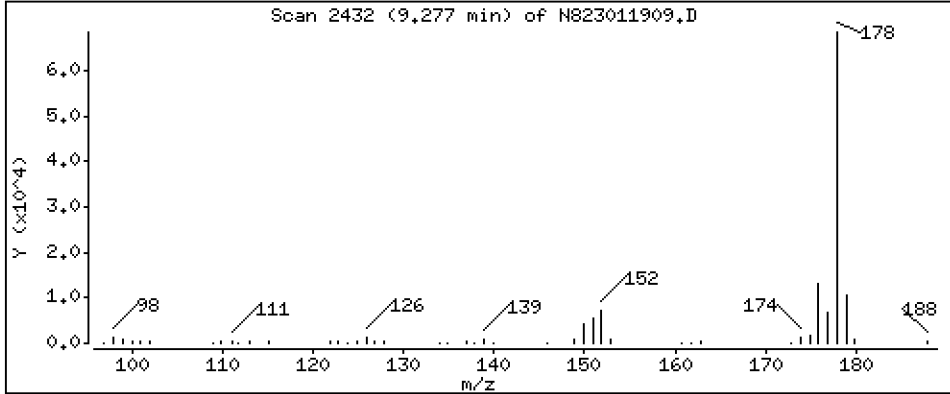
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

16 Phenanthrene

Concentration: 2,448 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

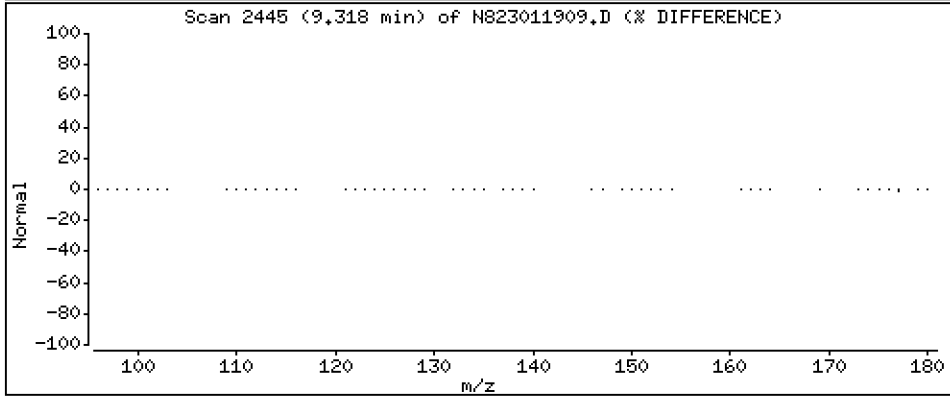
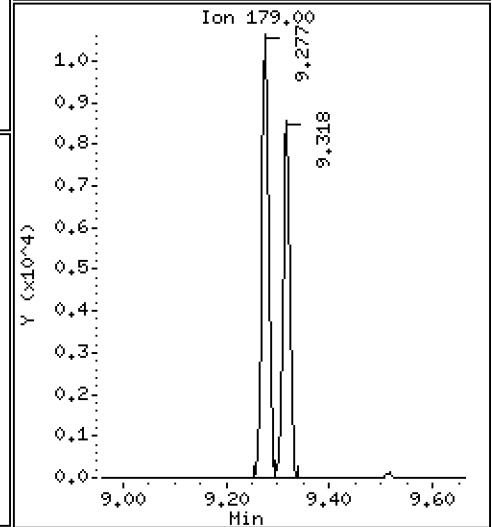
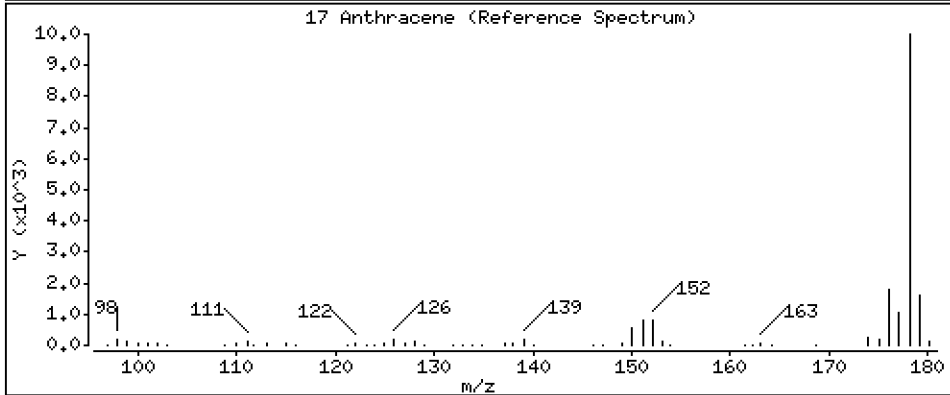
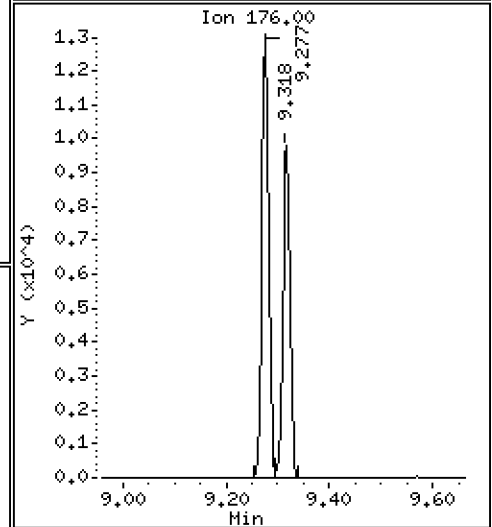
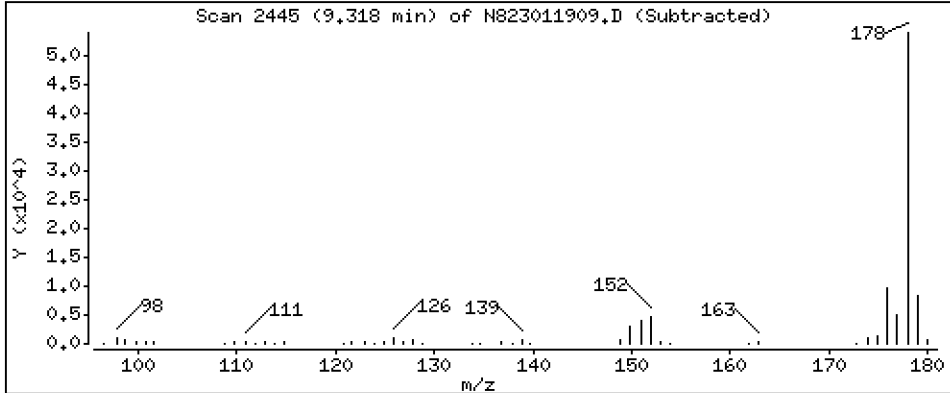
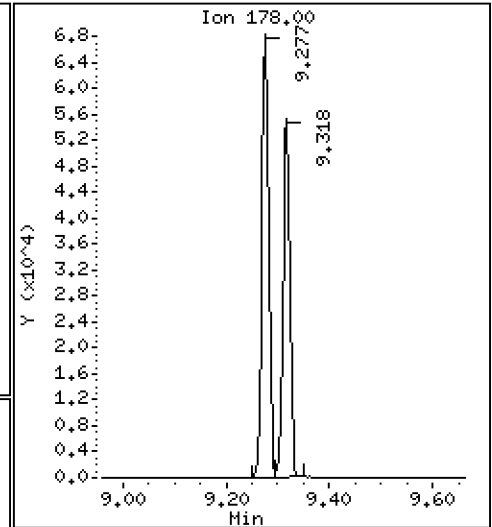
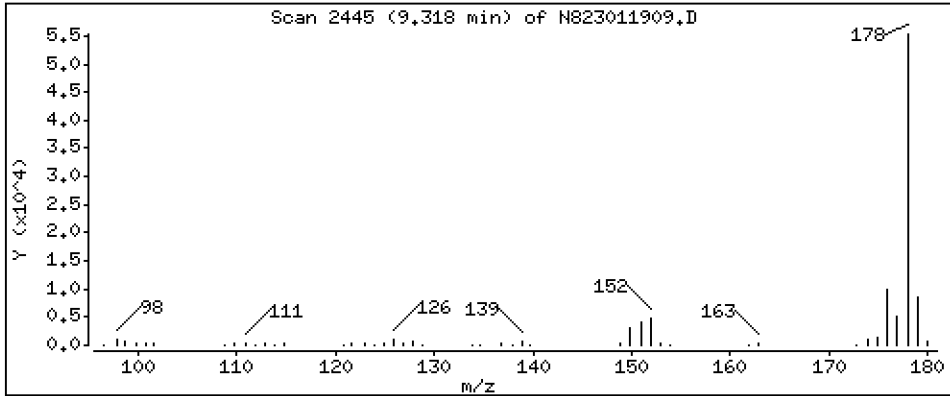
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

17 Anthracene

Concentration: 2,270 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

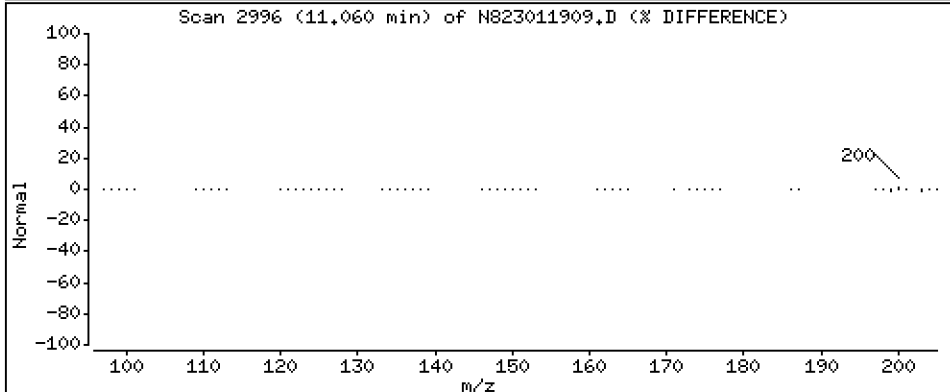
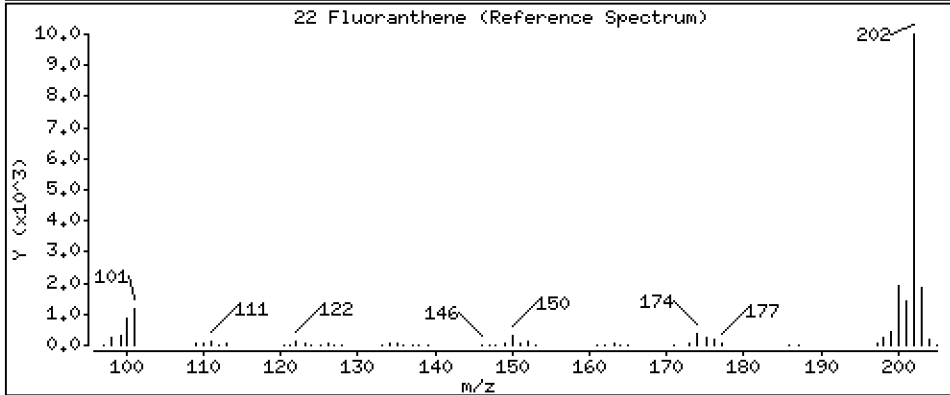
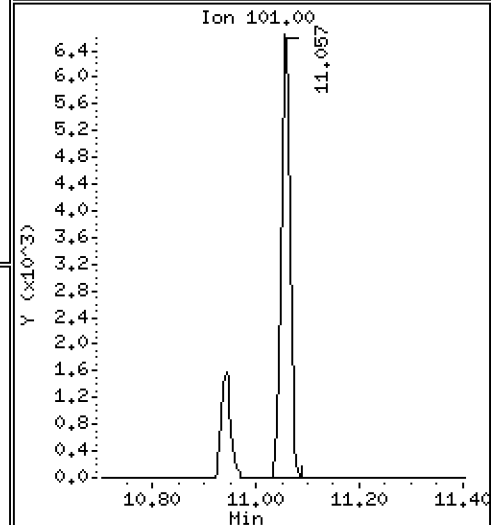
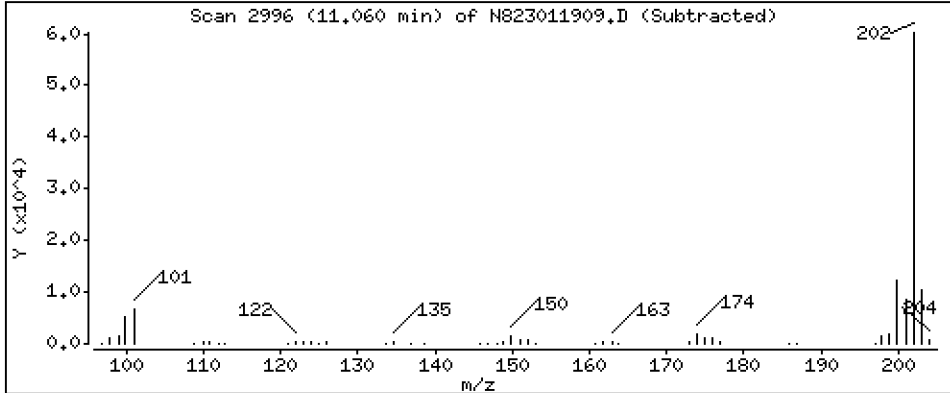
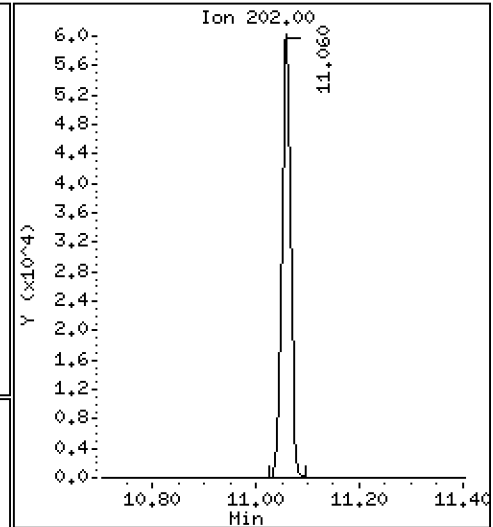
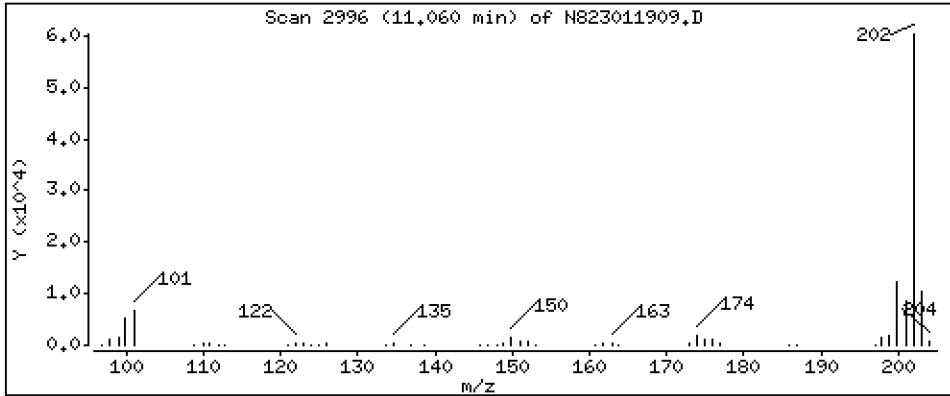
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,653 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

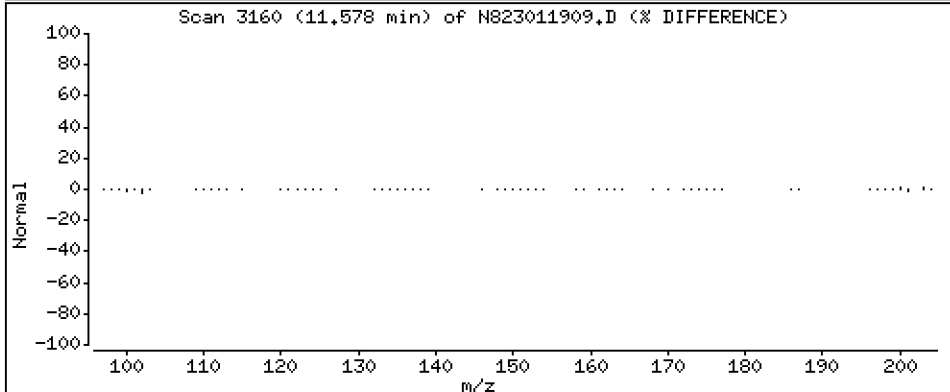
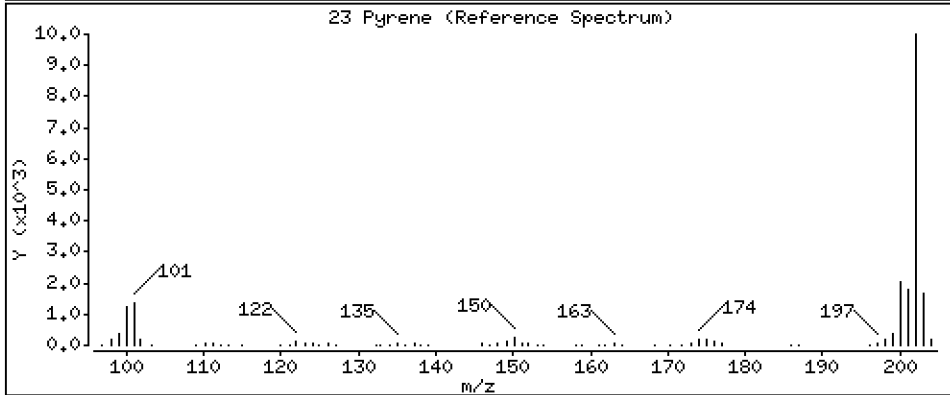
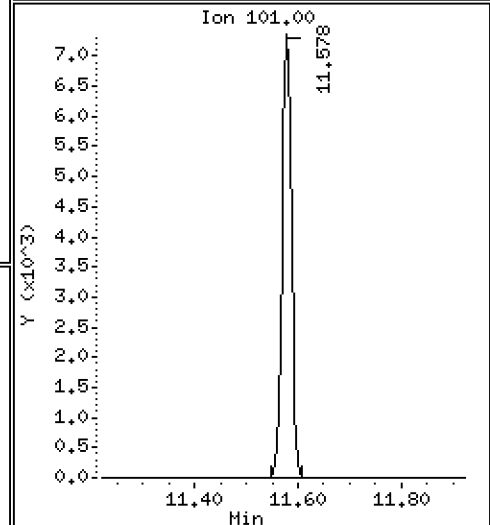
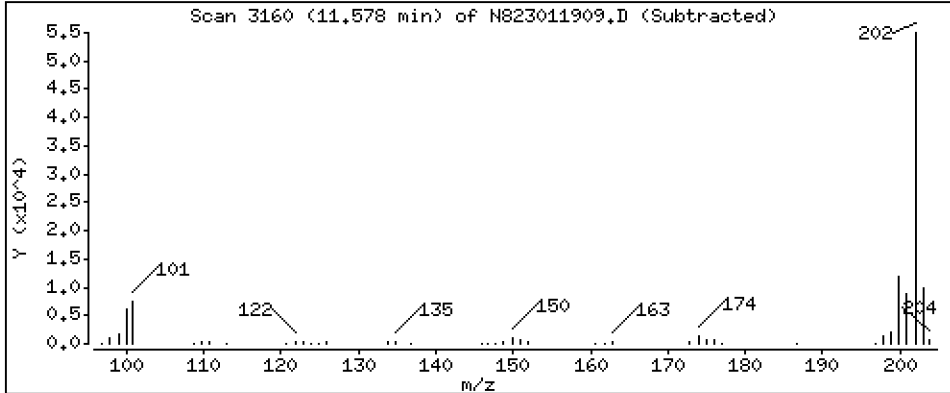
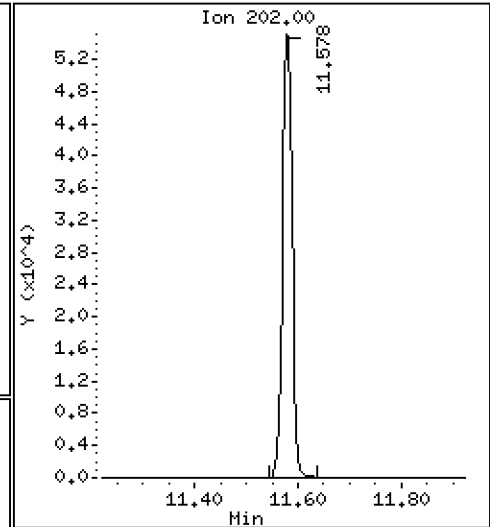
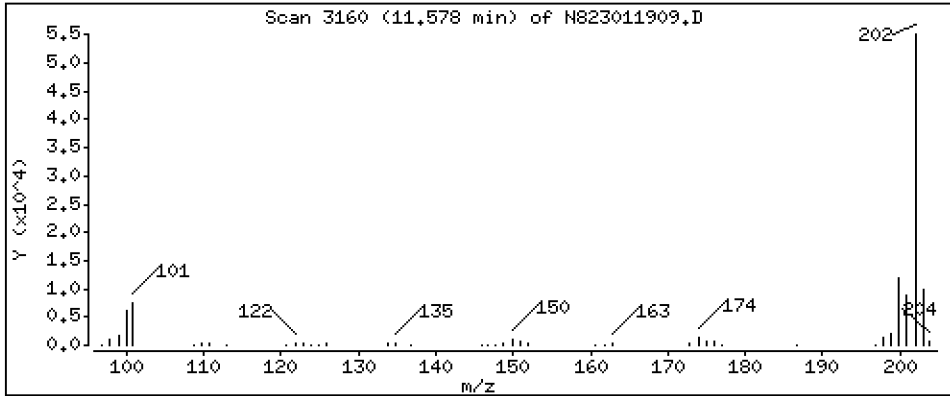
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 2,462 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

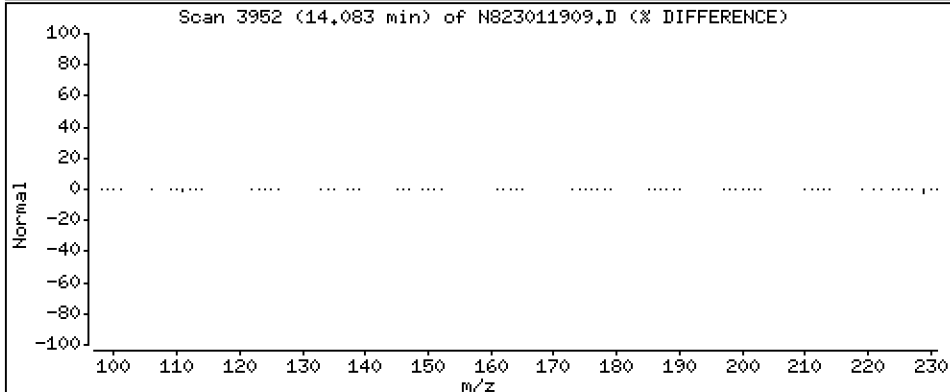
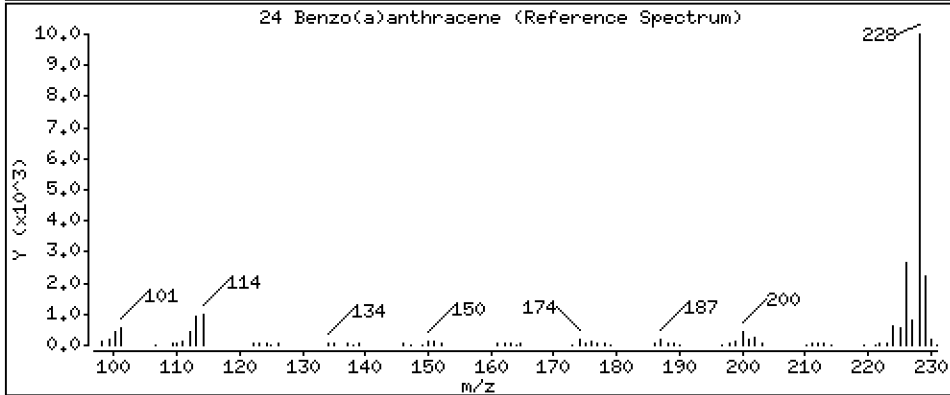
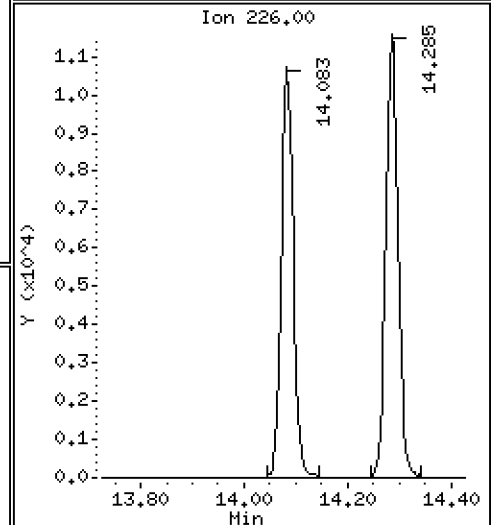
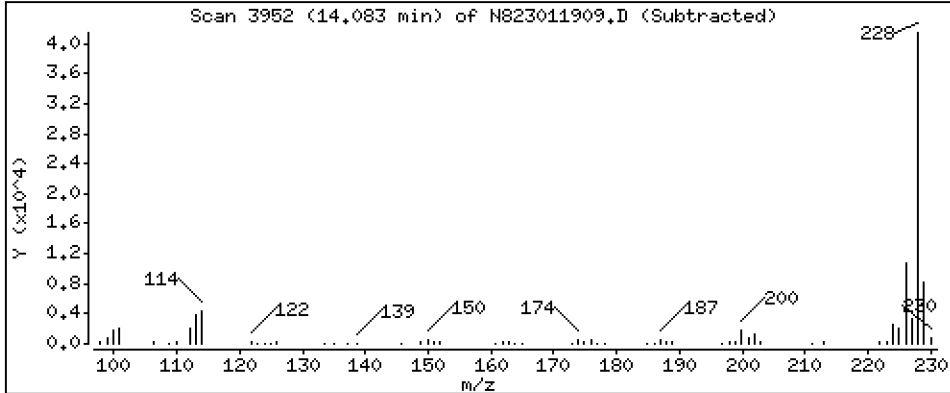
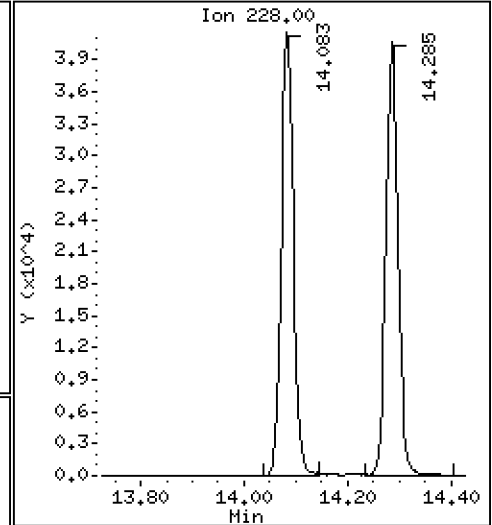
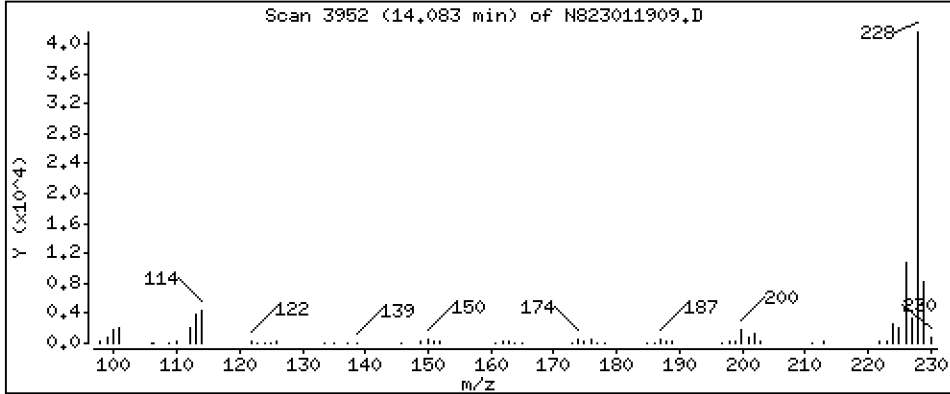
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

24 Benzo(a)anthracene

Concentration: 2,587 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

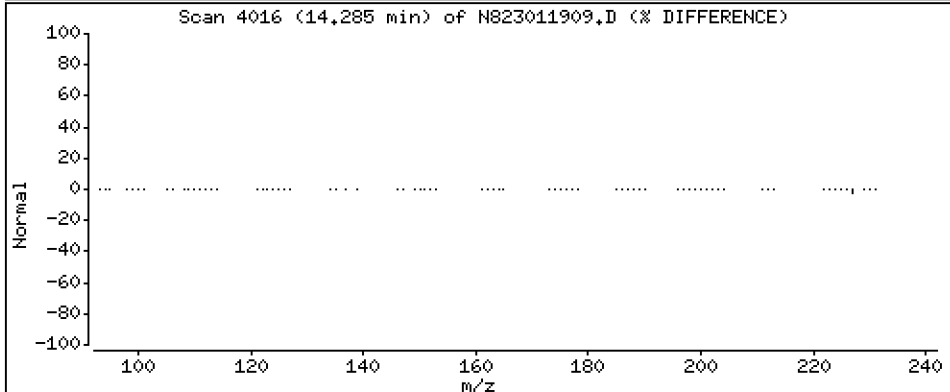
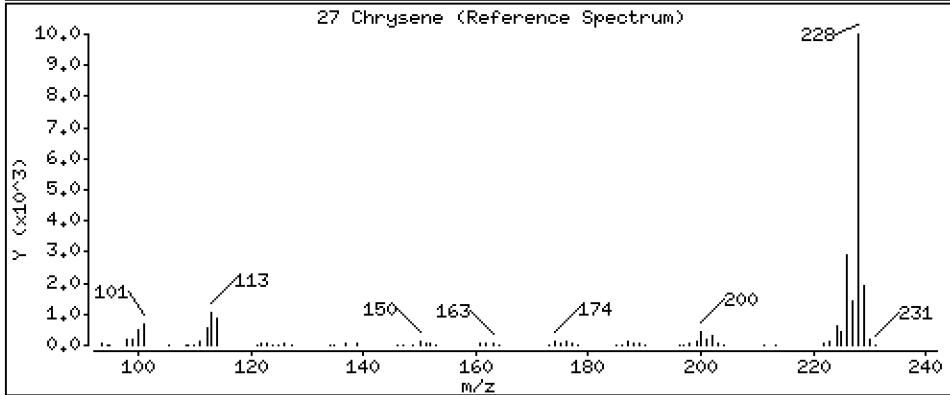
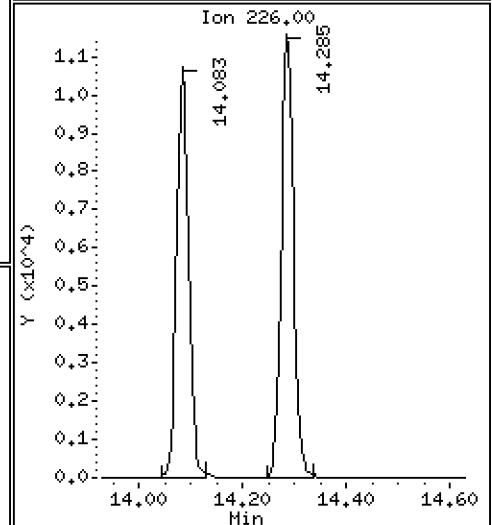
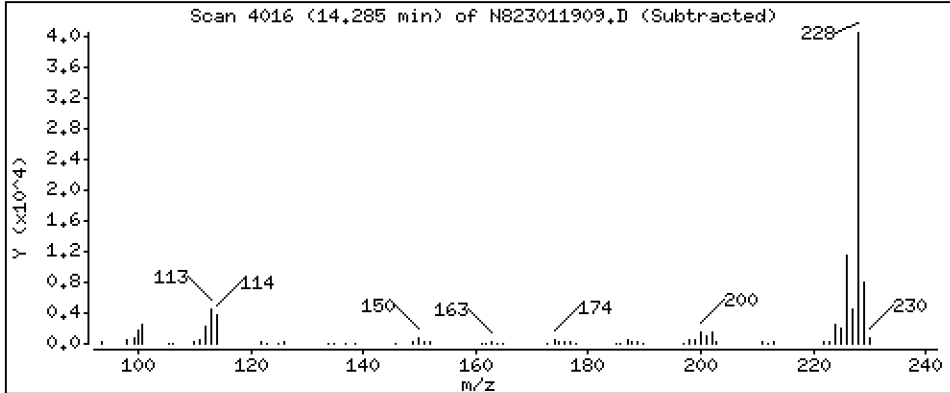
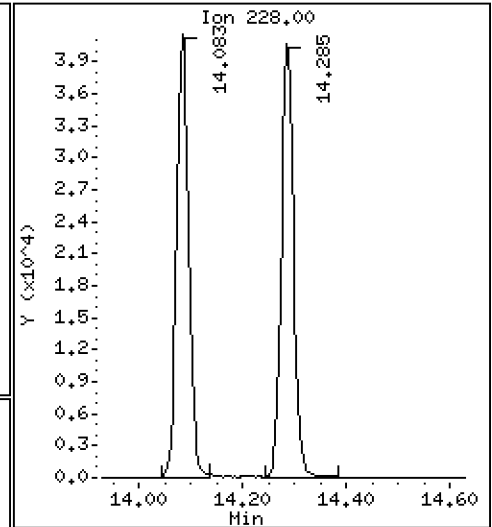
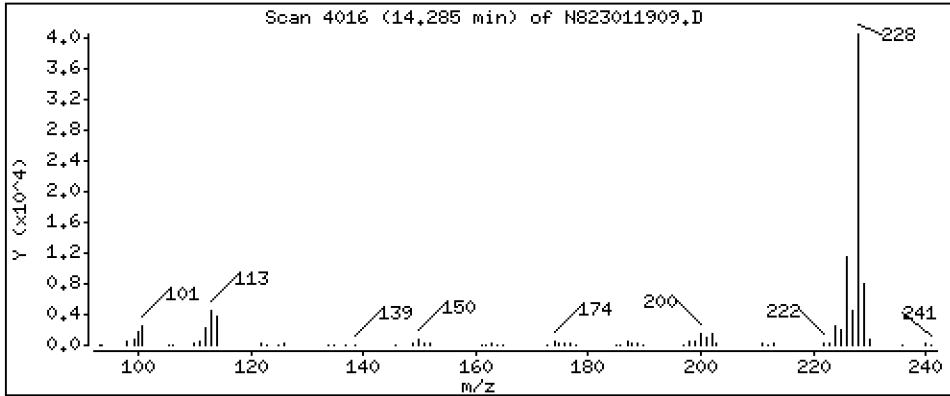
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 2,400 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

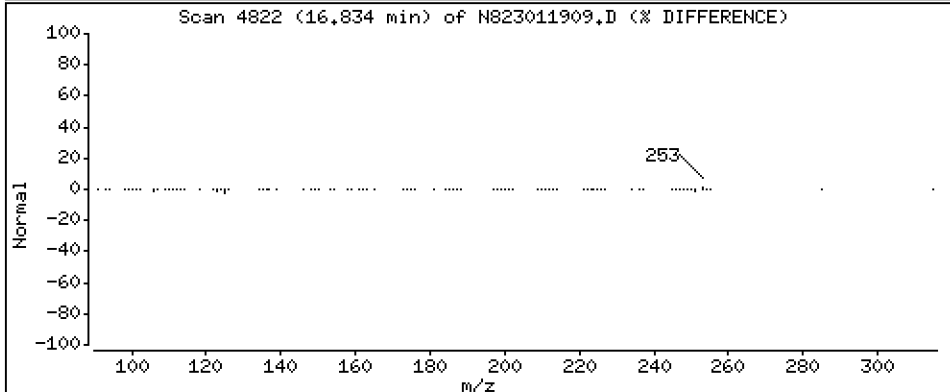
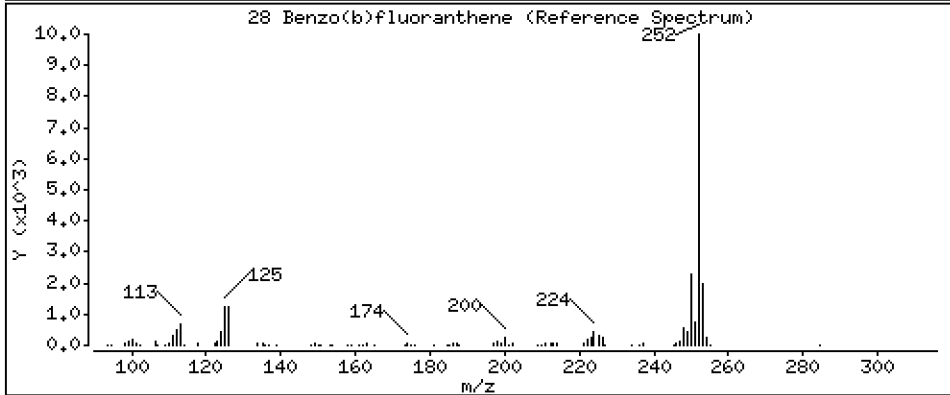
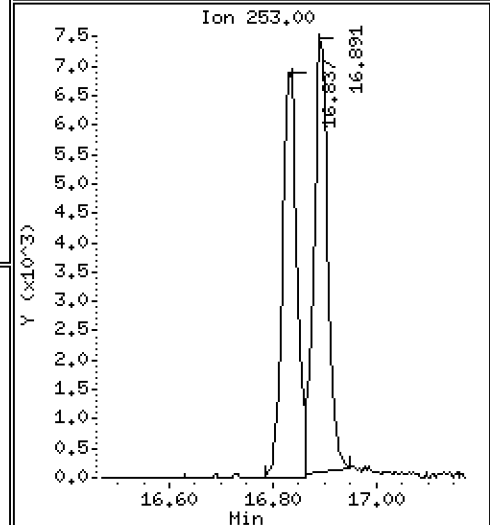
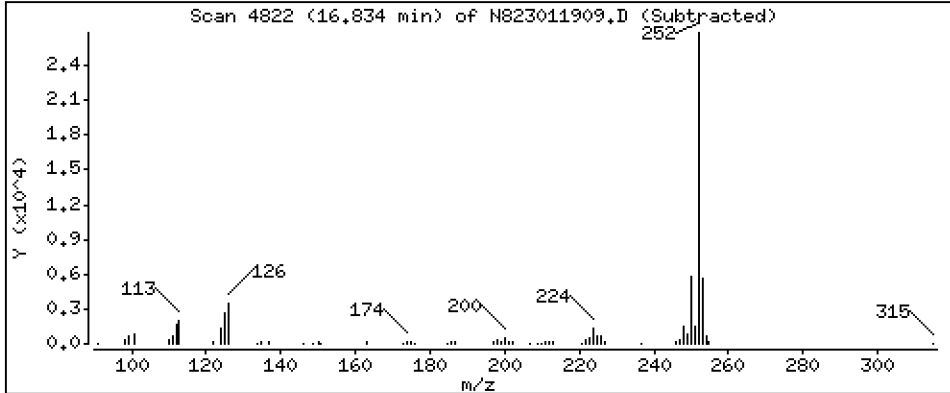
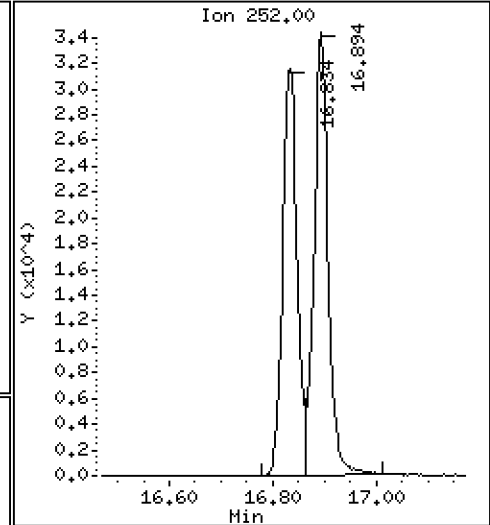
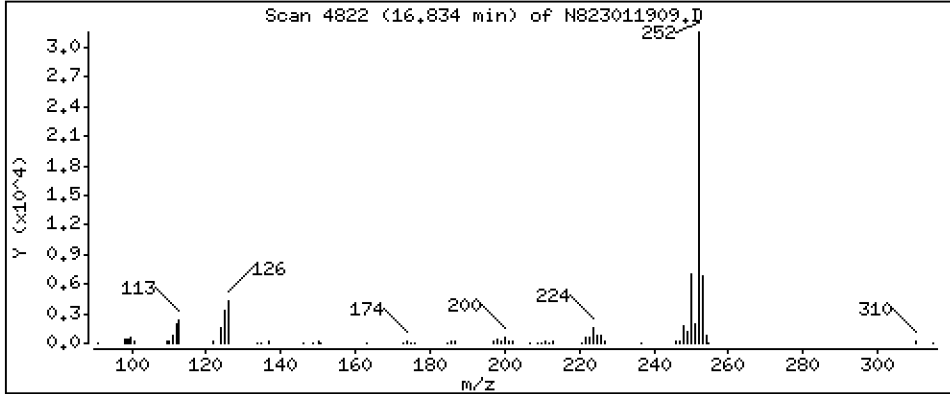
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 2,507 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

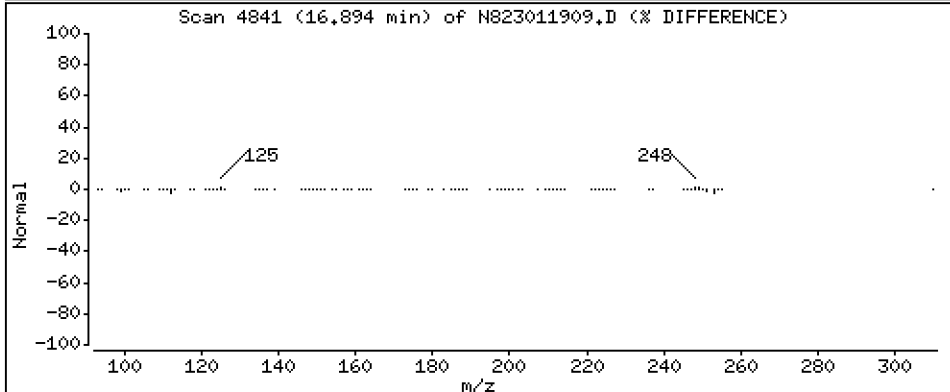
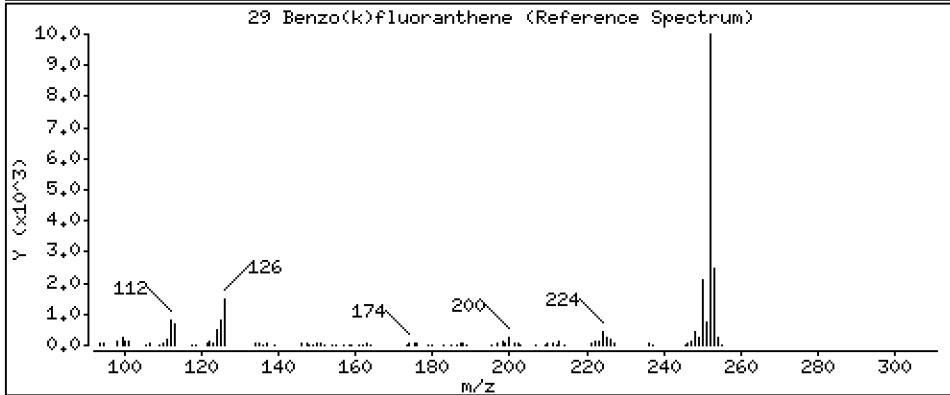
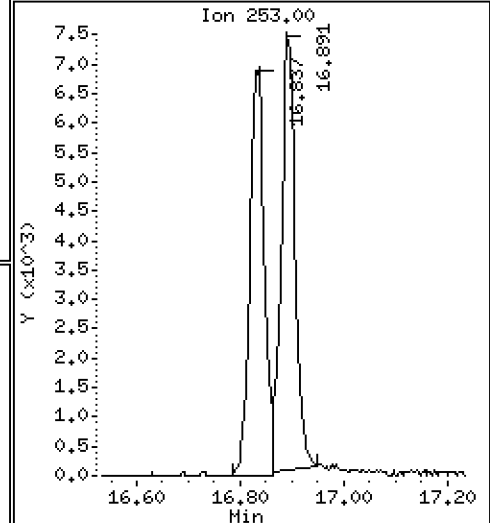
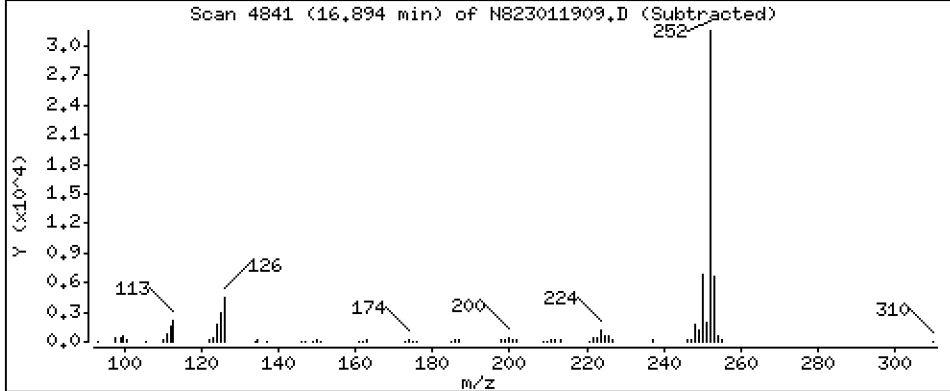
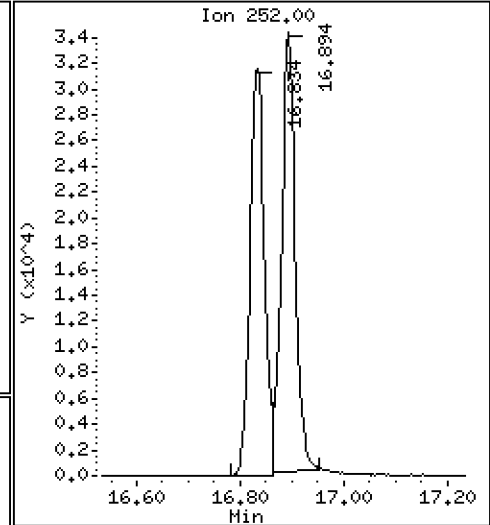
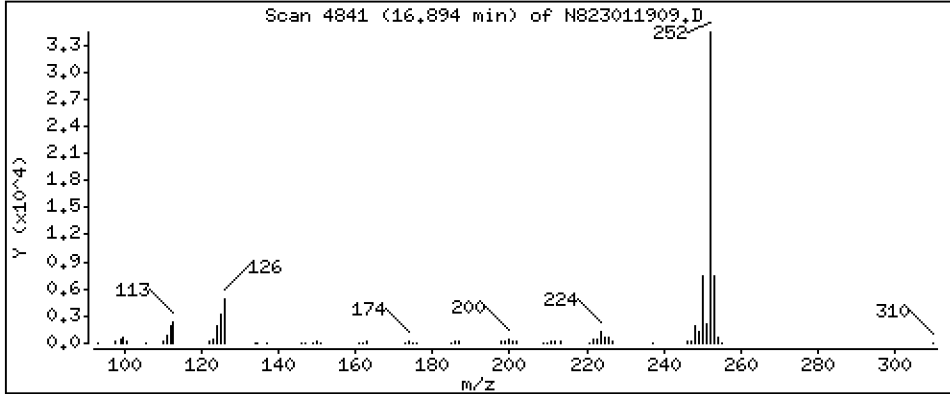
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

29 Benzo(k)fluoranthene

Concentration: 2,656 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

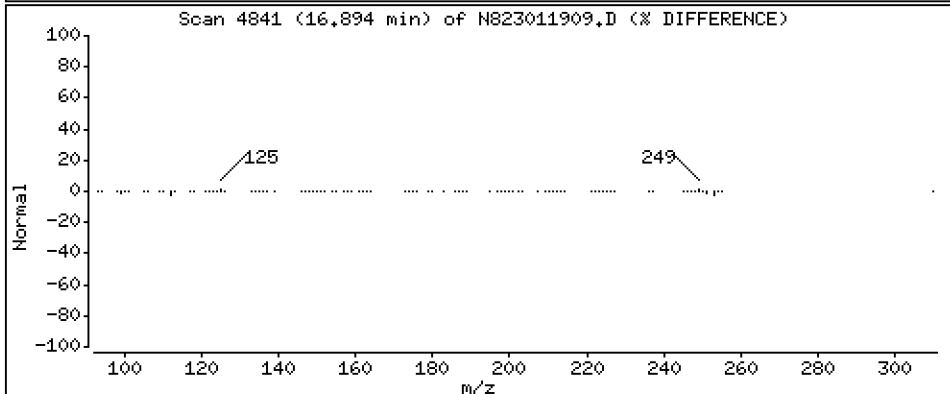
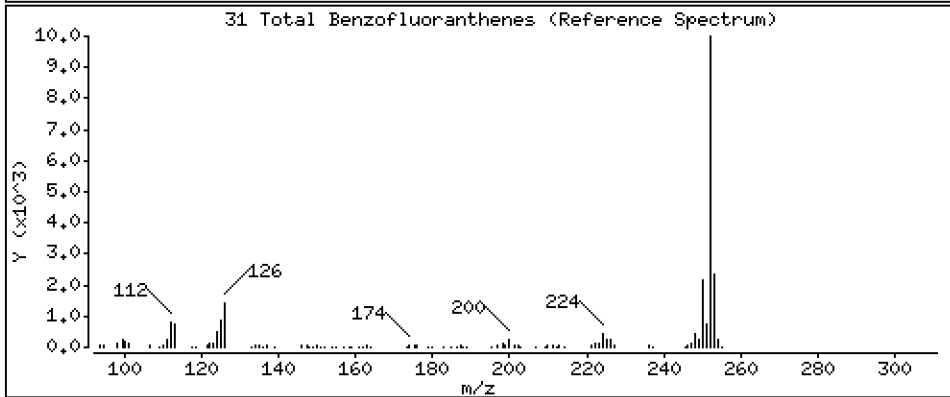
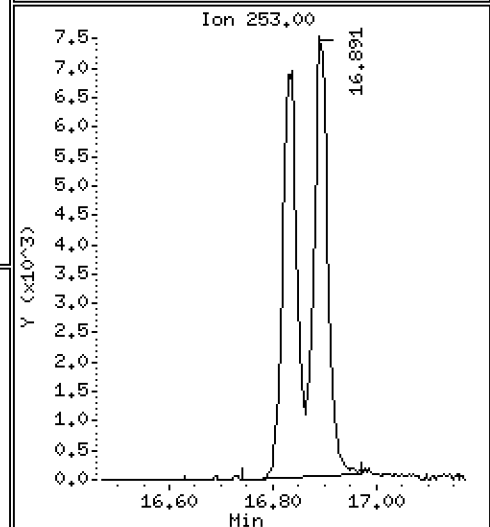
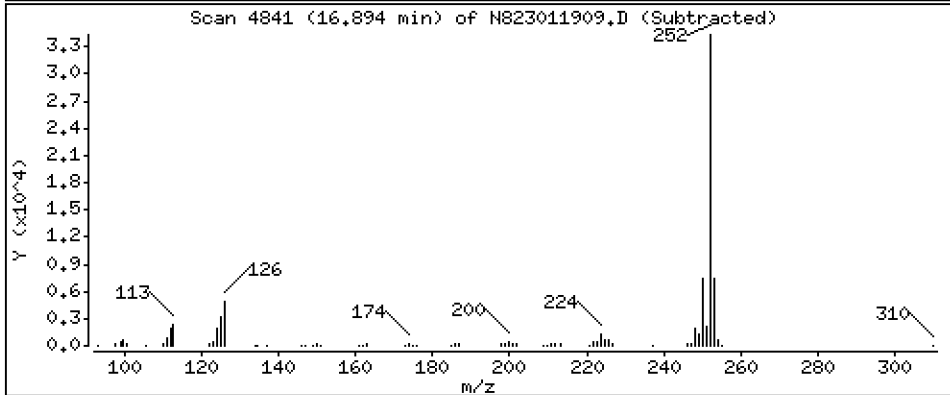
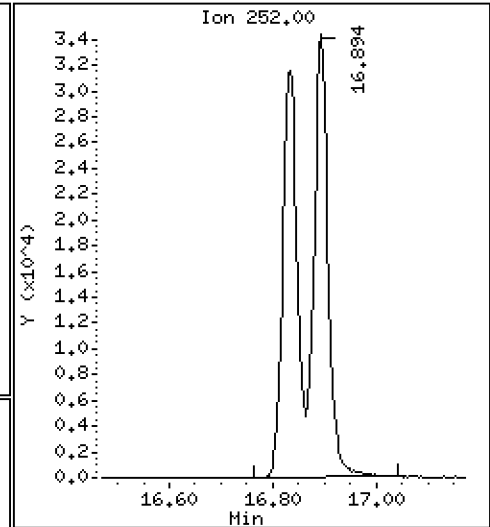
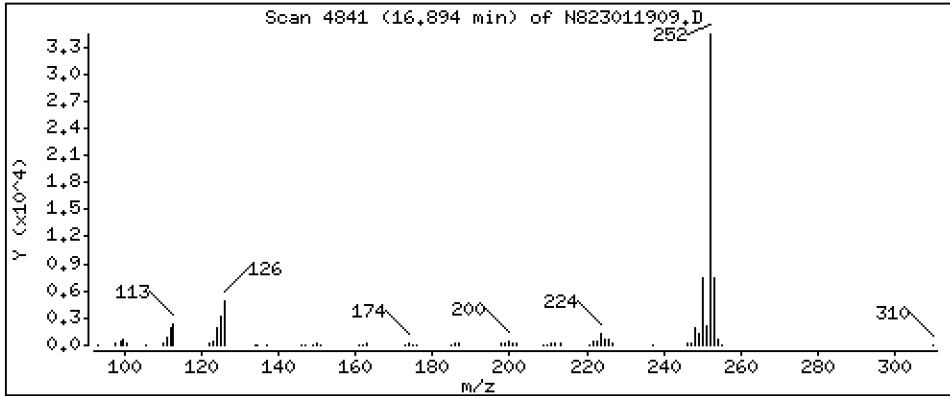
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 5,480 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

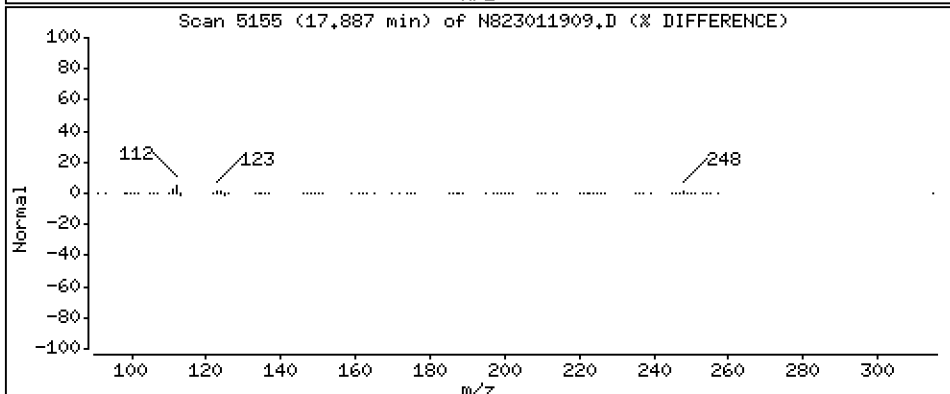
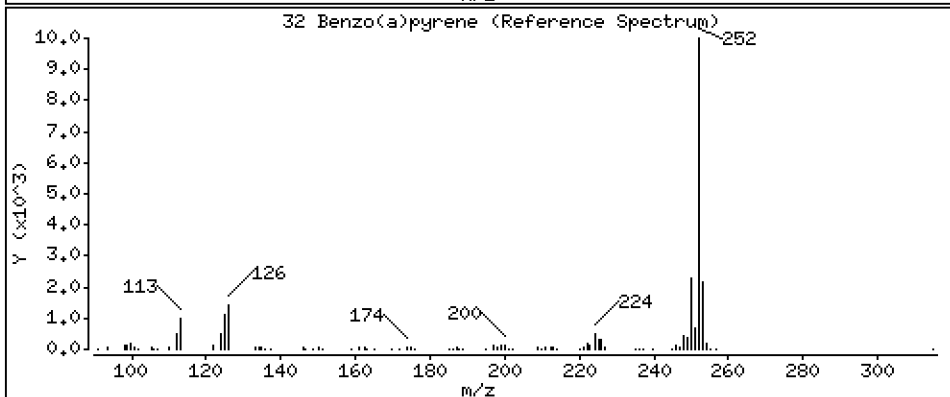
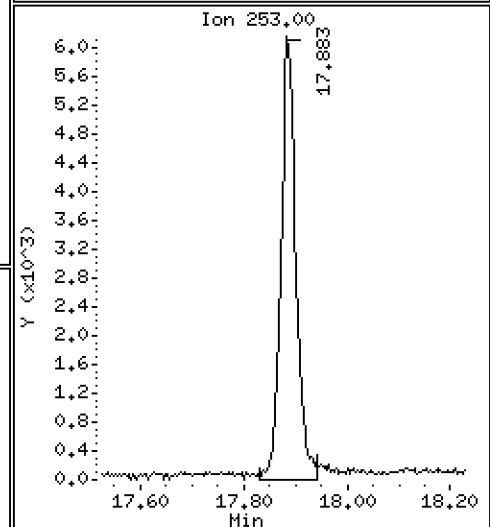
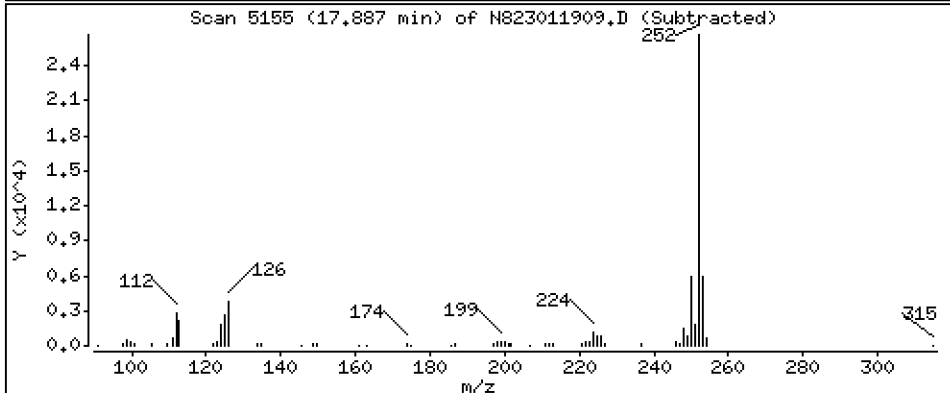
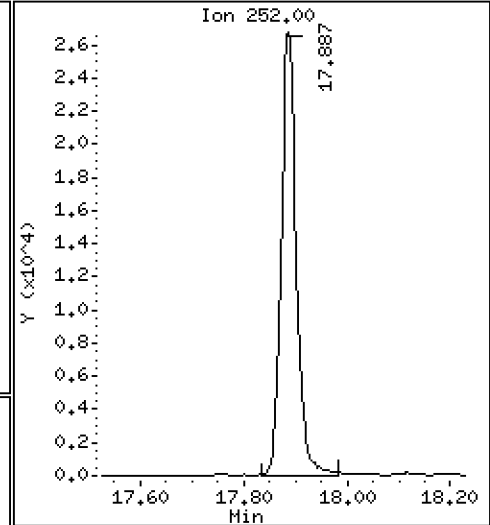
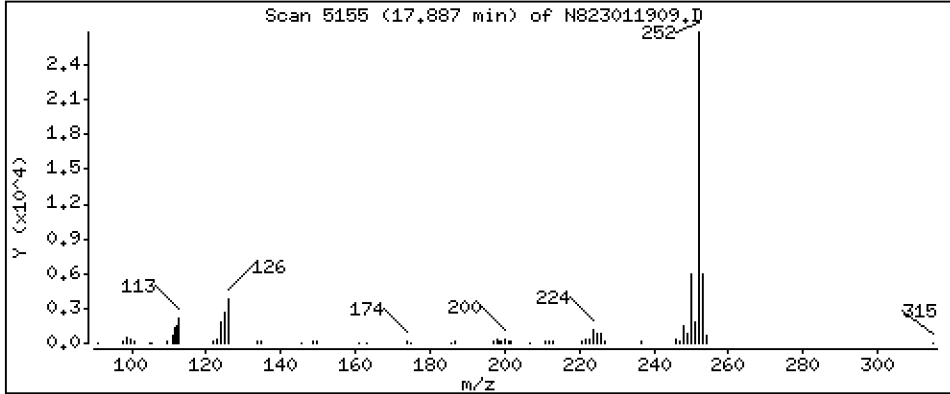
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 2,572 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

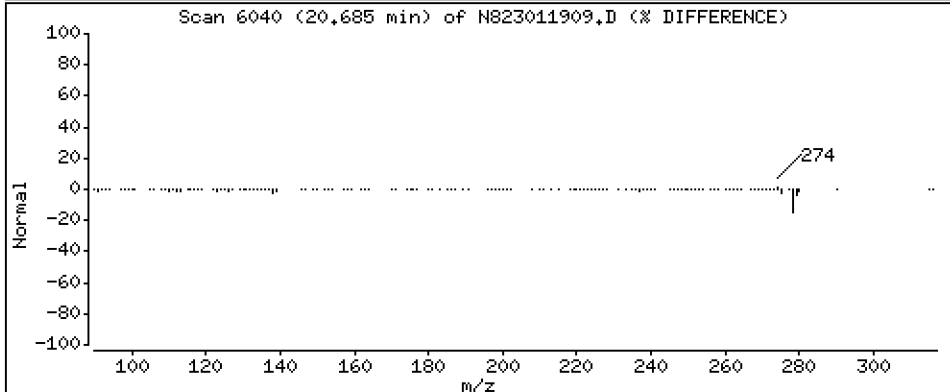
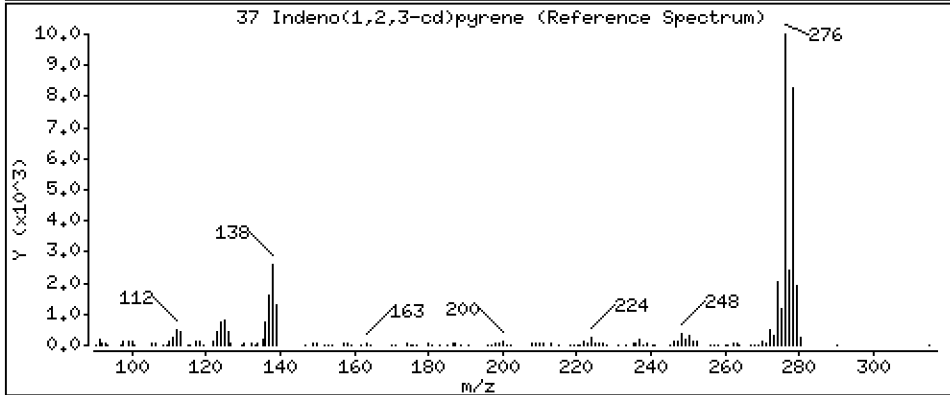
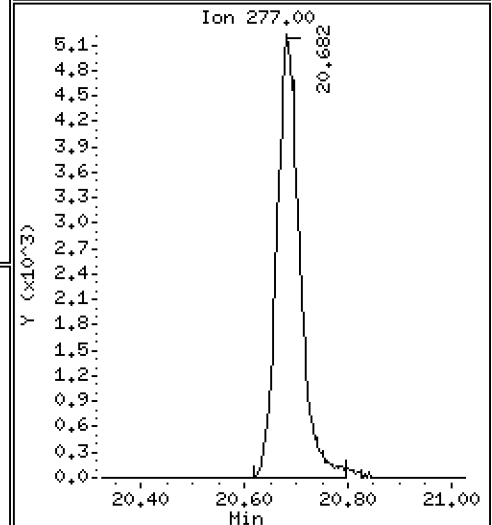
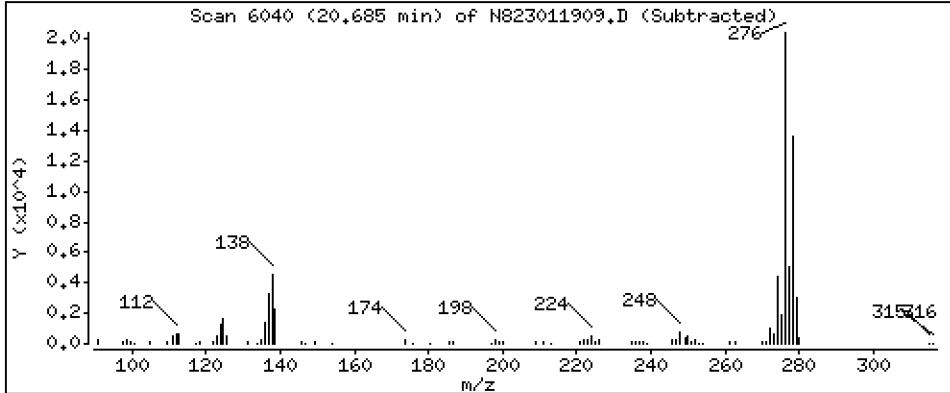
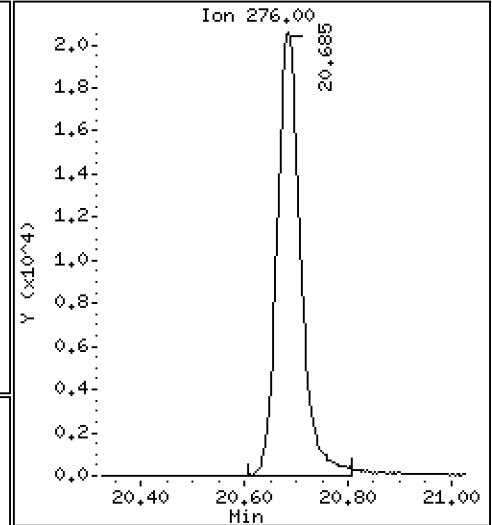
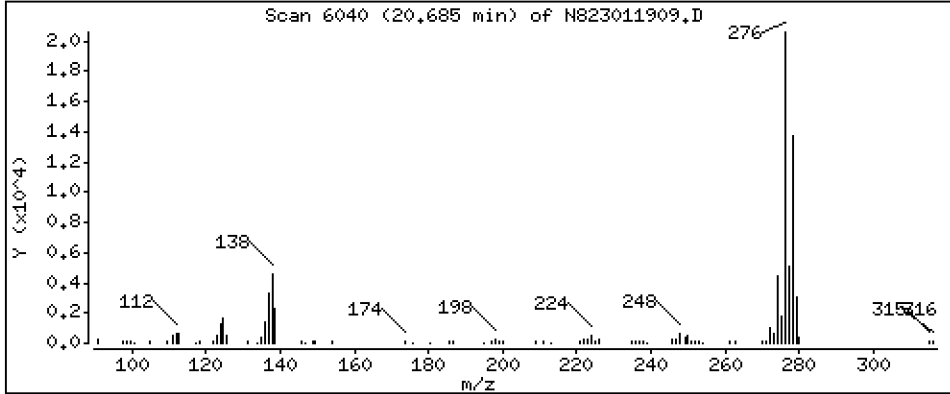
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 2,689 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

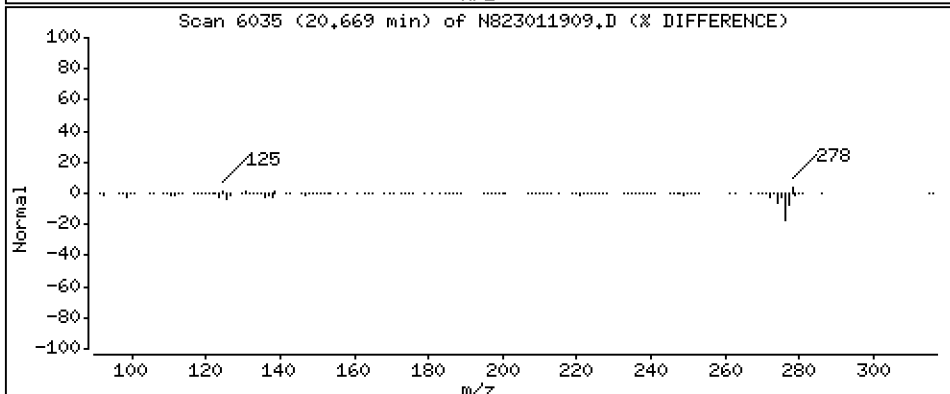
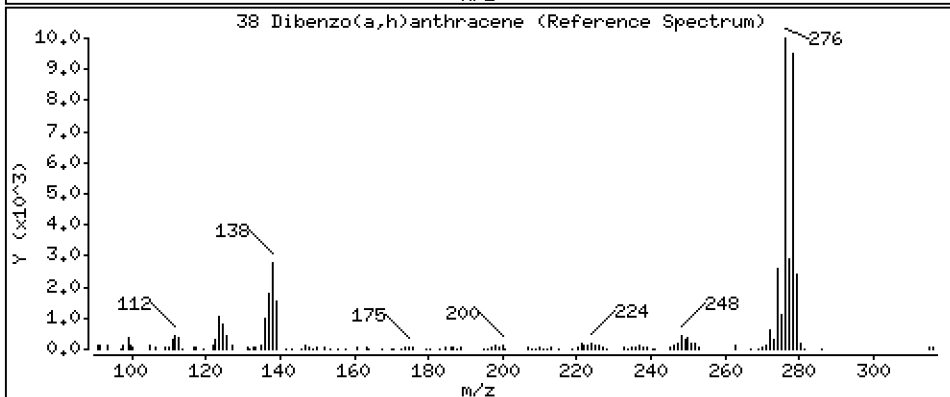
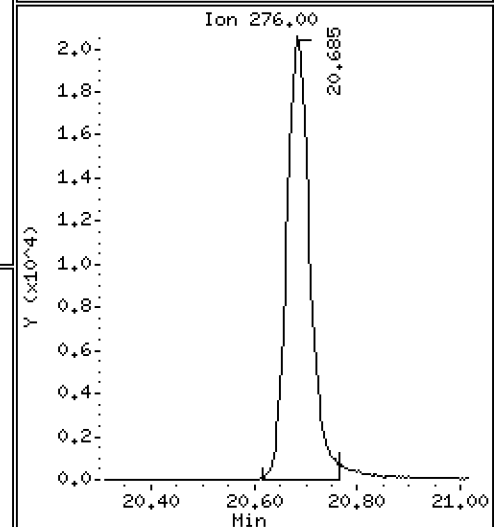
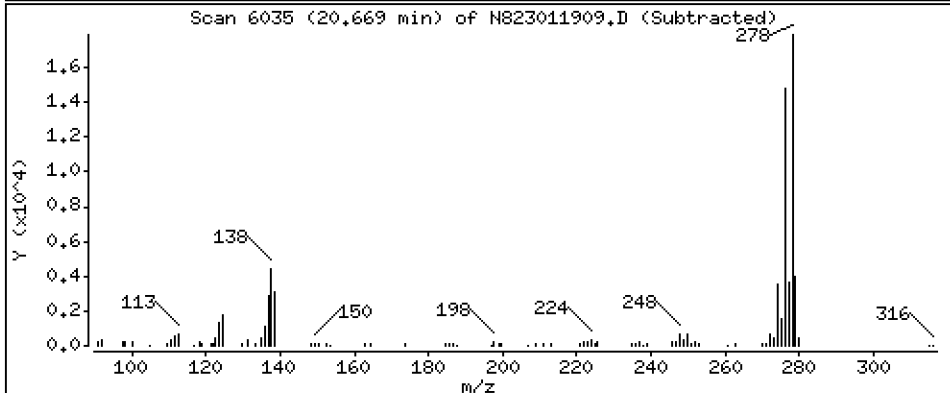
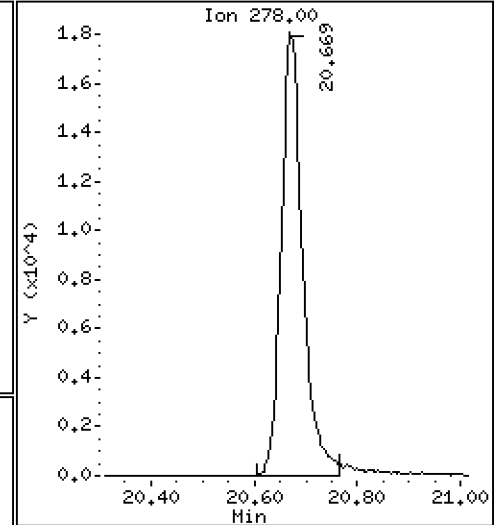
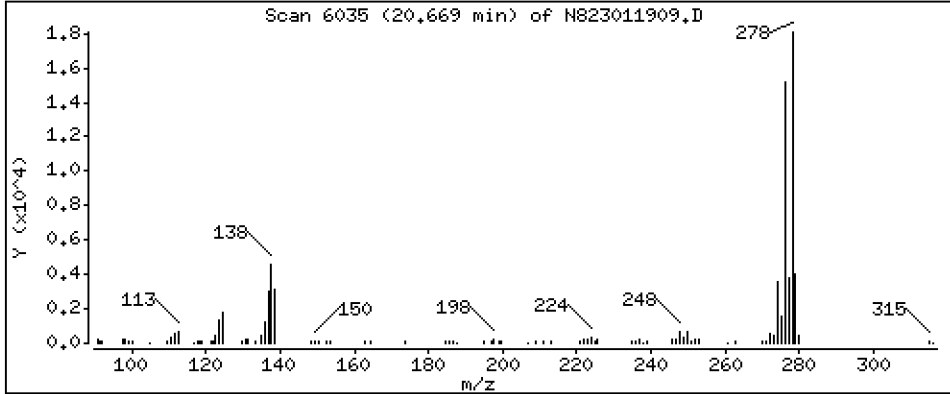
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 2,493 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

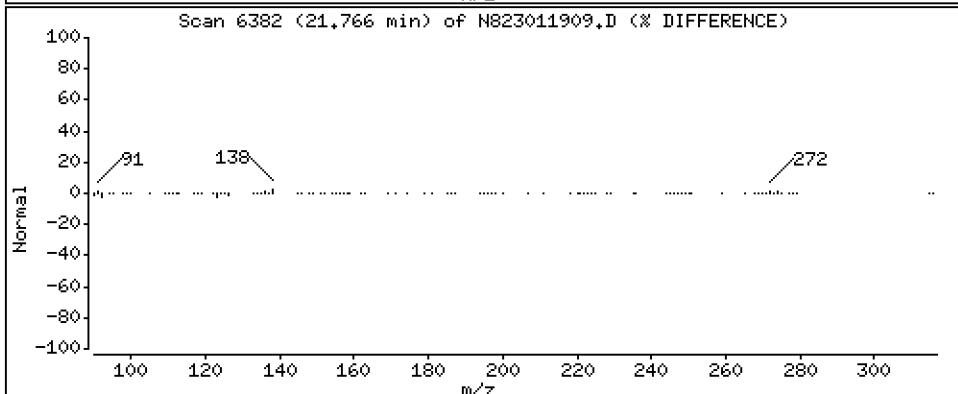
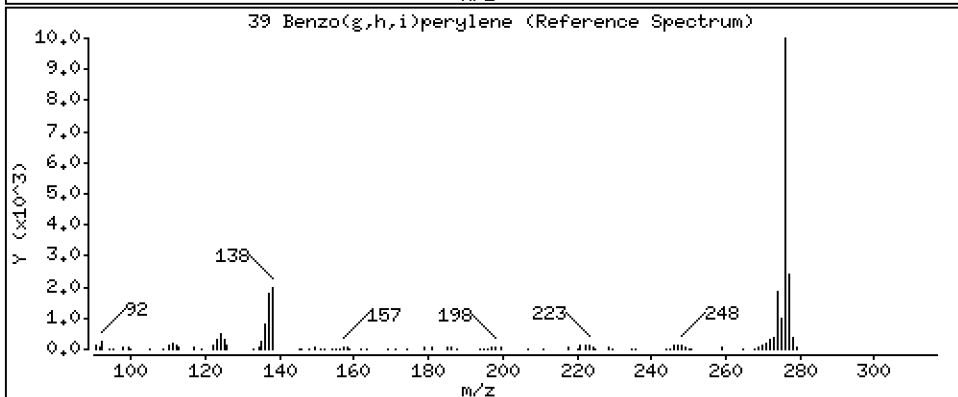
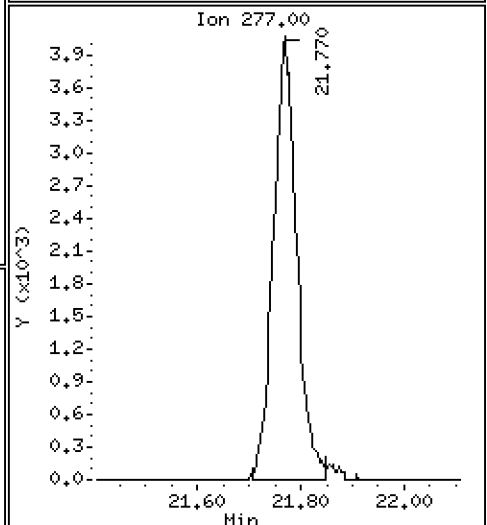
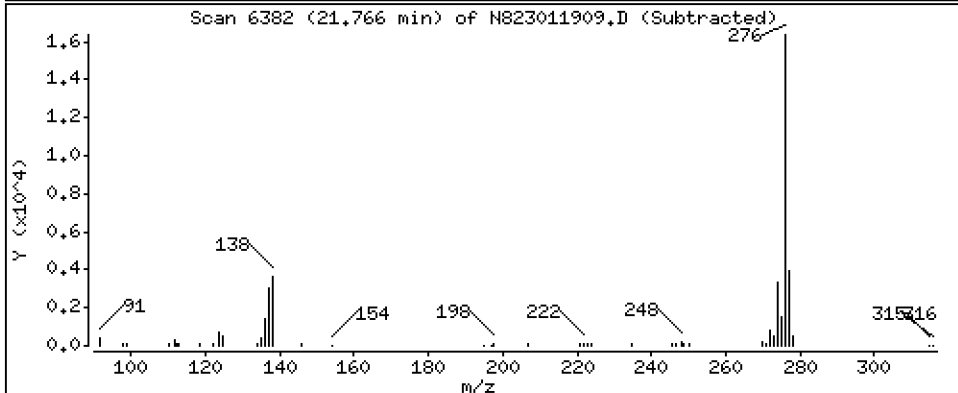
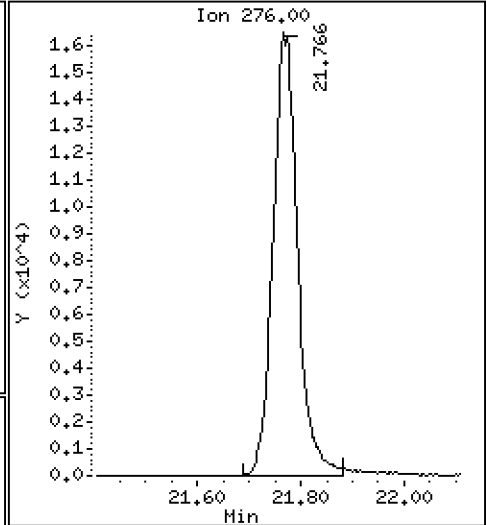
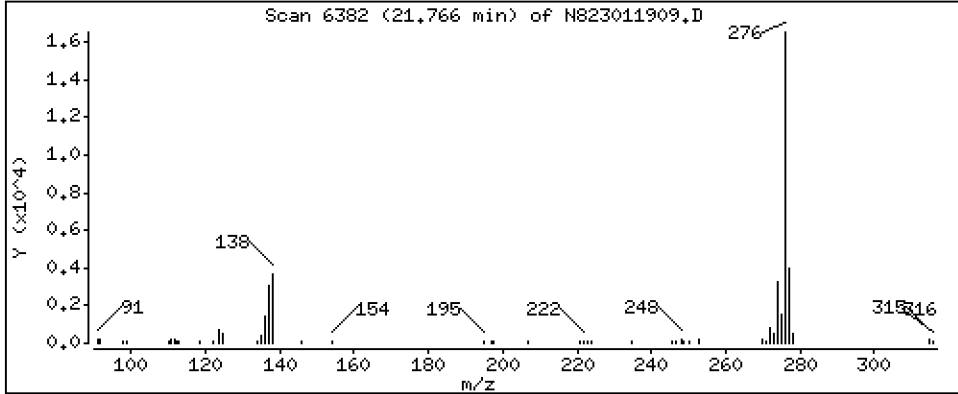
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 2,483 ug/L



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
 Lab Smp Id: SLA0213-SCV1
 Inj Date : 19-JAN-2023 14:58
 Operator : JZ Inst ID: nt8.i
 Smp Info : SCV230119
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 9 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: pnascv.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136		4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128		4.941	4.938	(1.006)	56587	2.62597	2.626
\$ 3 2-Methylnaphthalene-d10	152		Compound Not Detected.					
4 2-Methylnaphthalene	141		5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141		5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152		7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164		7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153		7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168		7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166		7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188		9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178		9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178		9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202		11.059	11.053	(1.197)	72902	2.65276	2.653
\$ 21 Fluoranthene-d10	212		Compound Not Detected.					
23 Pyrene	202		11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228		14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240		14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228		14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252		16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252		16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252		16.893	16.821	(0.932)	126178	5.48025	5.480 (M)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572	
* 33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000		
37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689	
\$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.						
38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493	
39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483	
35 Perylene	252	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011909.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-SCV1
 Analysis Type: SV Level: LOW
 Quant Type: ISTD Sample Type: WATER
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 14:58

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

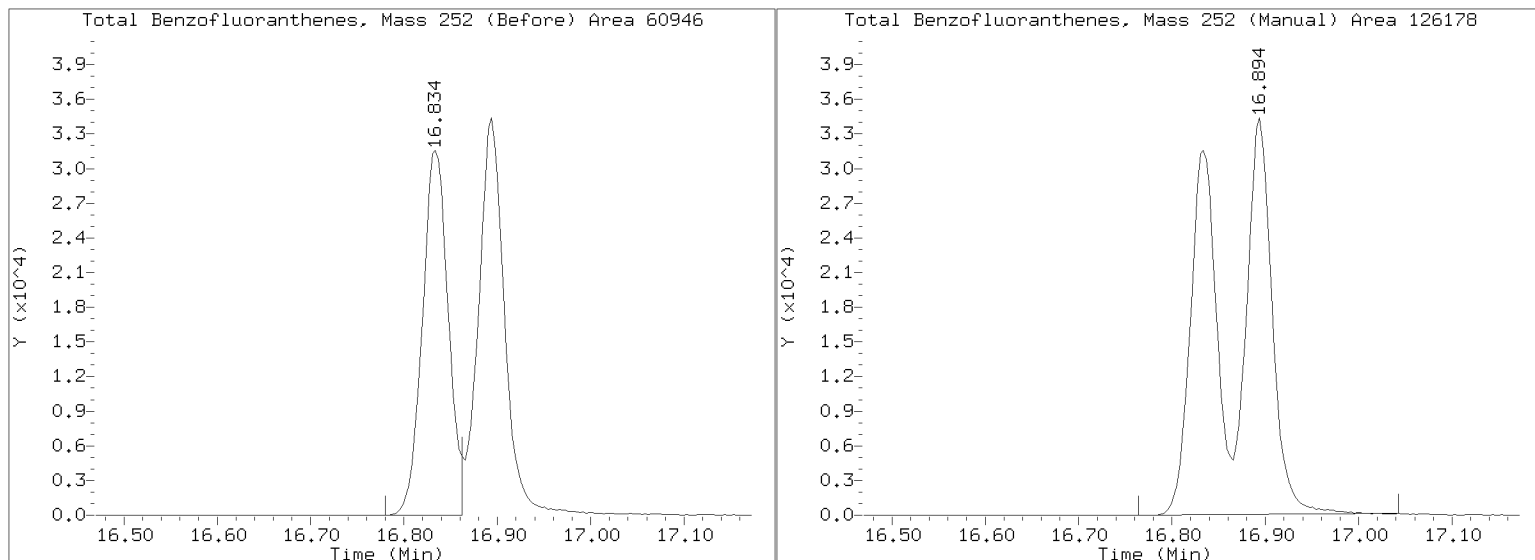
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D

Injection Date: 19-JAN-2023 14:58

Lab ID:SLA0213-SCV1 Client ID:

Report Date: 01/19/2023 20:27





INITIAL CALIBRATION DATA EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00032	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: DS

VTS: added third PDF for raw tune data 07/05/23

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	0.05	1.509234	0.1	1.475802	0.2	1.433728	0.5	1.463954	1	1.407538	2.5	1.403914
1,2-Dichlorobenzene	0.05	1.433632	0.1	1.404559	0.2	1.361924	0.5	1.41	1	1.363267	2.5	1.366655
Benzyl Alcohol	0.05	0.2980883	0.1	0.4078131	0.2	0.6563487	0.5	0.7516883	1	0.8131324	2.5	0.9577245
Benzoic acid					0.8	3.369162E-02	2	6.431557E-02	4	0.1113925	10	0.1735407
2,4-Dimethylphenol	0.1	0.1951669	0.2	0.2260486	0.4	0.2540649	1	0.3054349	2	0.3273273	5	0.3475379
1,2,4-Trichlorobenzene	0.05	0.2888686	0.1	0.2867934	0.2	0.282521	0.5	0.2946068	1	0.2833685	2.5	0.2832806
N-Nitrosodiphenylamine	0.05	0.524197	0.1	0.5824673	0.2	0.622888	0.5	0.6812778	1	0.6451821	2.5	0.6870282
Pentachlorophenol			0.2	2.689676E-02	0.4	3.579405E-02	1	0.0582107	2	8.194985E-02	5	0.1253843
2-Fluorophenol	0.075	1.021853	0.15	1.055547	0.3	1.088445	0.75	1.178357	1.5	1.175199	3.75	1.215826
p-Terphenyl-d14	0.05	0.2668155	0.1	0.2858166	0.2	0.2844553	0.5	0.3178566	1	0.3330721	2.5	0.3637872



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00032	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: DS
VTS: added third PDF for raw tune data 07/05/23

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	5	1.398394	10	1.437899								
1,2-Dichlorobenzene	5	1.363348	10	1.379386								
Benzyl Alcohol	5	1.015627	10	1.093596								
Benzoic acid	20	0.2213574	40	0.2543998								
2,4-Dimethylphenol	10	0.3499605	20	0.3606322								
1,2,4-Trichlorobenzene	5	0.2885383	10	0.2952467								
N-Nitrosodiphenylamine	5	0.7094703	10	0.726266								
Pentachlorophenol	10	0.1569964	20	0.1804073								
2-Fluorophenol	7.5	1.182888	15	1.217708								
p-Terphenyl-d14	5	0.3763732	10	0.3595608								



INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Calibration: GC00032 Instrument: NT10
Calibration Date: 03/01/2023 Column (1): ZB-5MSi

Calibration Comments: DS
VTS: added third PDF for raw tune data 07/05/23

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
1,4-Dichlorobenzene	1.441308	2.7			RSD (15)	
1,2-Dichlorobenzene	1.385346	2.0			RSD (15)	
Benzyl Alcohol	0.7492523	37.9		0.9995	QCOD (0.99)	
Benzoic acid	0.1431163	61.4		0.9938	QCOD (0.99)	
2,4-Dimethylphenol	0.2957717	21.2		0.9999	QCOD (0.99)	
1,2,4-Trichlorobenzene	0.287903	1.7			RSD (15)	
N-Nitrosodiphenylamine	0.6473471	10.6			RSD (15)	
Pentachlorophenol	9.509134E-02	63.3		0.9953	QCOD (0.99)	
2-Fluorophenol	1.141978	6.6			RSD (15)	
p-Terphenyl-d14	0.3234672	12.8			RSD (15)	



ANALYSIS SEQUENCE

SLC0143

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/10/2023 10:34:45AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0143-CAL1	QC		1		K011453	K010831		
SLC0143-CAL2	QC		2		K011452	K010831		
SLC0143-CAL3	QC		3		K011105	K010831		
SLC0143-CAL4	QC		4		K011106	K010831		
SLC0143-CAL5	QC		5		K011107	K010831		
SLC0143-CAL6	QC		6		K011108	K010831		
SLC0143-CAL7	QC		7		K011109	K010831		
SLC0143-CAL8	QC		8		K011110	K010831		
SLC0143-ICB1	QC		9		K005156	K010831		
SLC0143-SCV1	QC		10		K010066	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b\SIM.b

Time	Filename	LabID	ClientId	DF																			
1	1642	NT1003012303S.D	SEQ-CAL8		1	|	9.25	358478	||	11.72	1302515	||	15.31	720687	||	18.40	1243145	||	23.42	1161833	||	26.11	1054384
2	1721	NT1003012304S.D	SEQ-CAL7		1	|	9.25	354441	||	11.72	1288295	||	15.31	739997	||	18.40	1248235	||	23.41	1079945	||	26.11	1086769
3	1759	NT1003012305S.D	SEQ-CAL6		1	|	9.24	334269	||	11.72	1202042	||	15.31	670352	||	18.40	1124281	||	23.41	948691	||	26.11	1004445
4	1837	NT1003012306S.D	SEQ-CAL5		1	|	9.24	320125	||	11.72	1136019	||	15.31	636993	||	18.40	1093620	||	23.41	1000300	||	26.10	1058448
5	1915	NT1003012307S.D	SEQ-CAL4		1	|	9.24	333617	||	11.72	1170292	||	15.31	639612	||	18.40	1094919	||	23.42	1048196	||	26.11	1117593
6	1953	NT1003012308S.D	SEQ-CAL3		1	|	9.25	314467	||	11.72	1088698	||	15.31	568154	||	18.40	979213	||	23.42	963807	||	26.11	1037909
7	2030	NT1003012309S.D	SEQ-CAL2		1	|	9.24	305434	||	11.72	1048978	||	15.31	536796	||	18.40	924275	||	23.42	947041	||	26.11	1060218
8	2109	NT1003012310S.D	SEQ-CAL1		1	|	9.25	370360	||	11.72	1262304	||	15.31	638059	||	18.40	1124768	||	23.42	1114478	||	26.11	1276260
9	2146	NT1003012311S.D	SEQ-SCV1		1	|	9.25	303734	||	11.72	1147551	||	15.31	645730	||	18.40	1151000	||	23.42	1297466	||	26.11	1394899
10	2224	NT1003012312S.D	SEQ-IBL1		1	|	9.25	515340	||	11.72	1787704	||	15.31	879316	||	18.40	1572306	||	23.42	1486349	||	26.11	1674195

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b\SIM.b

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1642	NT1003012303S.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1721	NT1003012304S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1759	NT1003012305S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1837	NT1003012306S.D	SEQ-CAL5		1	Pentachlorophenol,
1915	NT1003012307S.D	SEQ-CAL4		1	Pentachlorophenol,
1953	NT1003012308S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2030	NT1003012309S.D	SEQ-CAL2		1	Benzyl alcohol, Berzoic acid,
2109	NT1003012310S.D	SEQ-CAL1		1	Benzyl alcohol, 2-Methylphenol, 4-Methylphenol, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Hexachlorobenzene,
2146	NT1003012311S.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2224	NT1003012312S.D	SEQ-IBL1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 10-Mar-2023 11:02

NT1003012303S.D	Data Locked	yev, 10-
NT1003012304S.D	Data Locked	yev, 10-
NT1003012305S.D	Data Locked	yev, 10-
NT1003012306S.D	Data Locked	yev, 10-
NT1003012307S.D	Data Locked	yev, 10-
NT1003012308S.D	Data Locked	yev, 10-
NT1003012309S.D	Data Locked	yev, 10-
NT1003012310S.D	Data Locked	yev, 10-
NT1003012311S.D	Data Locked	yev, 10-
NT1003012312S.D	Data Locked	yev, 10-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07 RT08
FILENAME: NT1003012303S NT1003012304S NT1003012305S NT1003012306S NT1003012307S NT1003012308S NT1003012309S NT1003012310S
INJ. DATE: 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023
INJ. TIME: 16:42 17:21 17:59 18:37 19:15 19:53 20:30 21:09

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, RT08, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like 2-Fluorophenol, Chlorobenzilate, Isodrin, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropyl-naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.268	15.768-16.768	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
\$ 2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
3 Phenol	8.525	8.517	8.517	8.518	8.518	8.525	8.525	8.533	8.533	8.033-9.033	8.522	0.006
4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
\$ 5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
7 1,3-Dichlorobenzene	9.143	9.143	9.136	9.136	9.136	9.143	9.144	9.136	9.136	8.636-9.636	9.140	0.004
* 8 1,4-Dichlorobenzene-d4	9.252	9.252	9.244	9.245	9.245	9.252	9.245	9.252	9.252	8.752-9.752	9.248	0.004
9 1,4-Dichlorobenzene	9.283	9.283	9.275	9.276	9.276	9.275	9.276	9.275	9.275	8.775-9.775	9.277	0.003
\$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.230	8.730-9.730	+++++	+++++
11 Benzyl alcohol	9.477	9.477	9.469	9.477	9.477	9.485	9.485	9.508	9.508	9.008-10.008	9.482	0.012
12 1,2-Dichlorobenzene	9.562	9.562	9.562	9.563	9.563	9.562	9.563	9.563	9.563	9.063-10.063	9.562	0.000
13 2-Methylphenol	9.656	9.655	9.656	9.656	9.656	9.663	9.664	9.671	9.671	9.171-10.171	9.660	0.006
14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
15 4-Methylphenol	9.943	9.943	9.943	9.943	9.951	9.950	9.959	9.966	9.966	9.466-10.466	9.950	0.009
16 N-Nitroso-di-n-propyla	9.982	9.982	9.974	9.974	9.974	9.974	9.974	9.982	9.982	9.482-10.482	9.977	0.004
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
\$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
22 2,4-Dimethylphenol	11.006	10.998	10.998	10.998	10.998	10.998	11.007	11.006	11.006	10.506-11.506	11.001	0.004
23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
24 Benzoic acid	11.218	11.159	11.108	11.074	11.058	11.074	11.007	+++++	11.007	10.507-11.507	11.100	0.070
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
26 1,2,4-Trichlorobenzene	11.600	11.600	11.600	11.601	11.601	11.600	11.601	11.600	11.600	11.100-12.100	11.600	0.000
* 27 Naphthalene-d8	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.224-12.224	11.724	0.000
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
30 Hexachlorobutadiene	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.494-12.494	11.994	0.000
31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
\$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
39 Dimethylphthalate	14.749	14.741	14.741	14.742	14.742	14.741	14.742	14.749	14.749	14.249-15.249	14.744	0.004
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
* 42 Acenaphthene-d10	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	14.814-15.814	15.314	0.000
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.248	14.748-15.748	+++++	+++++
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
50 Diethylphthalate	16.219	16.211	16.203	16.203	16.203	16.203	16.211	16.211	16.211	15.711-16.711	16.208	0.006
51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
54 N-Nitrosodiphenylamine	16.698	16.690	16.690	16.691	16.691	16.698	16.698	16.706	16.706	16.206-17.206	16.695	0.006
55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
57 Hexachlorobenzene	17.578	17.578	17.578	17.579	17.579	17.578	17.579	17.579	17.579	17.079-18.079	17.579	0.000
58 Pentachlorophenol	17.989	17.981	17.989	17.989	17.989	17.996	18.004	18.012	18.012	17.512-18.512	17.994	0.010
59 Phenanthrene-d10	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	17.899-18.899	18.399	0.000
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
66 Terphenyl-d14	21.524	21.524	21.524	21.525	21.525	21.524	21.525	21.532	21.532	21.032-22.032	21.526	0.003
67 Butylbenzylphthalate	22.407	22.407	22.407	22.407	22.415	22.415	22.407	22.415	22.415	21.915-22.915	22.410	0.004
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 69 Chrysene-d12	23.421	23.414	23.414	23.414	23.422	23.421	23.422	23.422	23.422	22.922-23.922	23.419	0.004
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.007	22.507-23.507	+++++	+++++
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
* 77 Perylene-d12	26.108	26.108	26.108	26.101	26.108	26.108	26.108	26.108	26.108	25.608-26.608	26.107	0.003
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
79 Dibenzo(a,h)anthracene	28.930	28.914	28.914	28.915	28.930	28.938	28.946	28.946	28.946	28.446-29.446	28.929	0.013
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
\$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
\$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
\$ 88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
90 N-Nitrosodimethylamine	4.732	4.724	4.717	4.725	4.725	4.740	4.740	4.756	4.756	4.256-5.256	4.732	0.012
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
\$ 95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
 Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Calibration File Names:

Level 1: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012310S.D
 Level 2: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012309S.D
 Level 3: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012308S.D
 Level 4: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012307S.D
 Level 5: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012306S.D
 Level 6: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012305S.D
 Level 7: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012304S.D
 Level 8: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012303S.D

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
141 Diallate B	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
142 1,2-Dibromo-3-Chloropropane	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
135 2,3,5,6-Tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
136 2,3,4,5-tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
137 NewCpnd_131	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
133 Butylatedhydroxytoluene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
132 3,6-Dimethylphenanthrene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
127 2-Isopropyl-naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
113 Diphenyl Oxide	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
112 Biphenyl	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	3599	8264	19568	61458	128497	360891					
	767247	1593896					QUAD	0.000e+000	0.59382	-0.00714	0.99994
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.56799	1.52570	1.49198	1.51309	1.44269	1.43612					
	1.43451	1.44742					AVRG		1.48244		3.36989
9 1,4-Dichlorobenzene	1.50923	1.47580	1.43373	1.46395	1.40754	1.40391					
	1.39839	1.43790					AVRG		1.44131		2.72097

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
11 Benzyl alcohol	1380	3114	10320	31347	65076	200086					
	449975	980075					QUAD	0.000e+000	1.07135	-0.05783	0.99978
12 1,2-Dichlorobenzene	1.43363	1.40456	1.36192	1.41000	1.36327	1.36665					
	1.36335	1.37939					AVRG		1.38535		1.96993
13 2-Methylphenol	1789	4548	11161	35755	75957	215648					
	472415	995533					QUAD	0.000e+000	0.98781	-0.03181	0.99992
14 2,2'-oxybis(1-Chloropropane)	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	2062	3746	9608	34768	75243	225735					
	500092	1071975					QUAD	0.000e+000	0.94989	-0.03839	0.99982
16 N-Nitroso-di-n-propylamine	1965	4218	10242	27908	57866	160503					
	338518	699099					QUAD	0.000e+000	1.33351	-0.02653	0.99995
17 Hexachloroethane	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
19 Nitrobenzene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
20 Isophorone	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	6159	11856	27660	89362	185925	522194					
	1127131	2348644					QUAD	0.000e+000	2.94692	-0.09695	0.99996
23 Bis(2-Chloroethoxy)methane	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	++++	++++	7336	37634	126544	521508					
	1425868	3313595					QUAD	0.000e+000	5.37547	-0.57371	0.99759
25 2,4-Dichlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
26 1,2,4-Trichlorobenzene	0.28887|	0.28679|	0.28252|	0.29461|	0.28337|	0.28328|					
	0.28854|	0.29525|					|AVRG|		0.28790|		1.72341|
28 Naphthalene	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
29 4-Chloroaniline	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
30 Hexachlorobutadiene	0.21833|	0.20386|	0.19805|	0.20413|	0.19707|	0.19656|					
	0.20447|	0.21198|					|AVRG|		0.20431|		3.73354|
31 4-Chloro-3-methylphenol	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
32 2-Methylnaphthalene	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
33 Hexachlorocyclopentadiene	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
39 Dimethylphthalate	1.17306|	1.13674|	1.17700|	1.32015|	1.33033|	1.34291|					
	1.32177|	1.35881|					|AVRG|		|1.27010|		|7.15698|
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
43 3-Nitroaniline	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
44 Acenaphthene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
45 2,4-Dinitrophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
46 Dibenzofuran	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
47 4-Nitrophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
48 2,4-Dinitrotoluene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
49 Fluorene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
50 Diethylphthalate	1.10372| 1.26512|	1.06260| 1.31611|	1.10882|	1.22577|	1.23779|	1.26204|					
							|AVRG|		1.19775|		7.73514|
51 4-Chlorophenyl-phenylether	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
52 4-Nitroaniline	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
53 4,6-Dinitro-2-methylphenol	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
54 N-Nitrosodiphenylamine	0.52420| 0.70947|	0.58247| 0.72627|	0.62289|	0.68128|	0.64518|	0.68703|					
							|AVRG|		0.64735|		10.57293|
56 4-Bromophenyl-phenylether	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
57 Hexachlorobenzene	0.29659| 0.31009|	0.29809| 0.31346|	0.29705|	0.31056|	0.29828|	0.29945|					
							|AVRG|		0.30295|		2.34116|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2		
	5.0000	10.0000										
	Level 7	Level 8										
58 Pentachlorophenol	++++ 489921	1243 1121362	3505	15934	44811	176209		QUAD	0.000e+000	7.54611	-2.24262	0.99782
60 Phenanthrene	++++ ++++	++++ ++++	++++	++++	++++	++++		AVRG	0.000e+000			0.000e+000
61 Anthracene	++++ ++++	++++ ++++	++++	++++	++++	++++		AVRG	0.000e+000			0.000e+000
62 Carbazole	++++ ++++	++++ ++++	++++	++++	++++	++++		AVRG	0.000e+000			0.000e+000
63 Di-n-butylphthalate	++++ ++++	++++ ++++	++++	++++	++++	++++		AVRG	0.000e+000			0.000e+000
64 Fluoranthene	++++ ++++	++++ ++++	++++	++++	++++	++++		AVRG	0.000e+000			0.000e+000
65 Pyrene	++++ ++++	++++ ++++	++++	++++	++++	++++		AVRG	0.000e+000			0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
67 Butylbenzylphthalate	4671 915766	8617 1888709	19744	65574	144786	387221					
							QUAD	0.000e+000	1.48043	0.03284	0.99960
68 Benzo(a)anthracene	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
70 3,3'-Dichlorobenzidine	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
71 Chrysene	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
72 bis(2-Ethylhexyl)phthalate	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
73 Di-n-octylphthalate	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
74 Benzo(b)fluoranthene	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
75 Benzo(k)fluoranthene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	10824	20472	39856	120142	236566	599679					
	1371633	2937326					QUAD	0.000e+000	1.07973	-0.06563	0.99996
80 Benzo(g,h,i)perylene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.58127	0.59640	0.65358	0.68722	0.70407	0.73905					
	0.71236	0.73487					AVRG		0.67610		8.92506
91 Aniline	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
101 Cholesterol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
102 beta-Sitosterol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
103 Pyridine	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
\$ 1 2-Fluorophenol	1.02185|	1.05555|	1.08844|	1.17836|	1.17520|	1.21583|					
	1.18289|	1.21771|					|AVRG|		|1.14198|		|6.62406|
\$ 145 d8-1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
\$ 2 Phenol-d5	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
\$ 5 2-Chlorophenol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
\$ 10 1,2-Dichlorobenzene-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 18 Nitrobenzene-d5	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 36 2-Fluorobiphenyl	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 55 2,4,6-Tribromophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 66 Terphenyl-d14	0.26682	0.28582	0.28446	0.31786	0.33307	0.36379					
	0.37637	0.35956					AVRG		0.32347		12.80012
\$ 85 p-Cresol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 86 Anthracene-d10	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
\$ 87 Fluoranthene-d10	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 88 Dibenz(a,h)anthracene-d14	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 89 Diphenyl-d10	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 95 D10-1-methylnaphthalene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

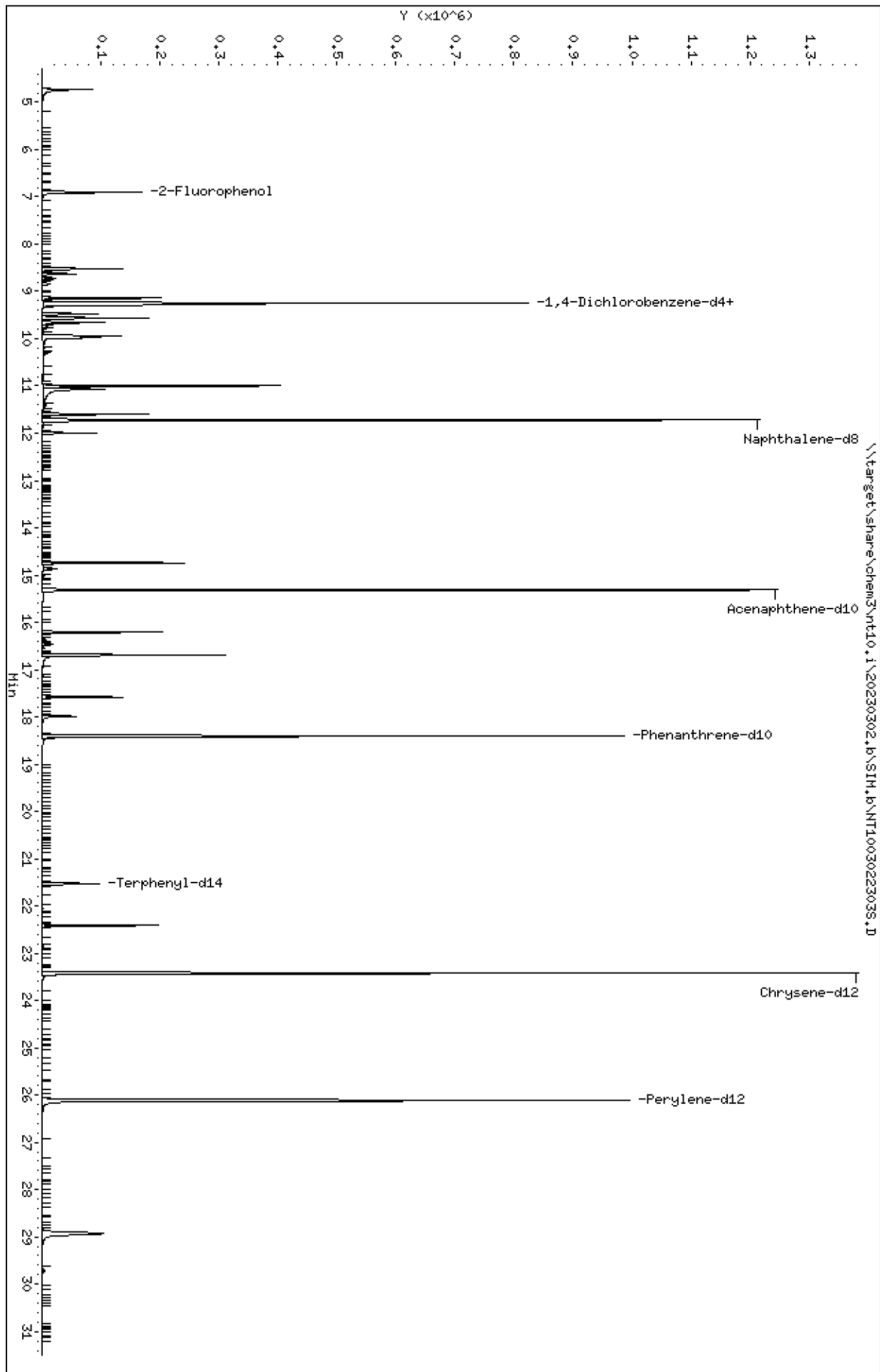
Start Cal Date : 01-MAR-2023 16:42
End Cal Date : 01-MAR-2023 21:09
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIM.1\NT1003022303S.D
Date: 02-MAR-2023 14:13
Client ID:
Sample Info: SED-ICVSIH
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIM.1\NT1003022303S.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022303S.D
 Lab Smp Id: SEQ-ICVSIM
 Inj Date : 02-MAR-2023 14:13 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-ICVSIM
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	226474	1.50000	1.608
3 Phenol	94		8.517	8.517	(0.921)	198101	1.00000	0.9490
7 1,3-Dichlorobenzene	146		9.143	9.143	(0.988)	182702	1.00000	0.9991
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.251	(1.000)	493417	4.00000	
9 1,4-Dichlorobenzene	146		9.282	9.282	(1.003)	176275	1.00000	0.9915
11 Benzyl alcohol	79		9.476	9.476	(1.024)	102049	1.00000	0.8764
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	172200	1.00000	1.008
13 2-Methylphenol	108		9.655	9.655	(1.044)	122736	1.00000	0.9750
15 4-Methylphenol	108		9.942	9.942	(1.075)	121561	1.00000	0.9268
16 N-Nitroso-di-n-propylamine	70		9.981	9.981	(1.079)	89772	1.00000	0.9670
22 2,4-Dimethylphenol	107		10.997	10.997	(0.938)	279299	2.00000	1.841
24 Benzoic acid	105		11.074	11.074	(0.945)	162548	4.00000	1.945
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	127996	1.00000	0.9996
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	1779056	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	84635	1.00000	0.9314
39 Dimethylphthalate	163		14.741	14.741	(0.963)	301592	1.00000	0.9950
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	954569	4.00000	
50 Diethylphthalate	149		16.203	16.203	(1.058)	287740	1.00000	1.007
54 N-Nitrosodiphenylamine	169		16.690	16.690	(0.907)	256566	1.00000	0.9931
57 Hexachlorobenzene	284		17.578	17.578	(0.955)	119208	1.00000	0.9860

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
58 Pentachlorophenol	266		17.988	17.988	(0.977)	71995	2.00000	1.343
* 59 Phenanthrene-d10	188		18.406	18.406	(1.000)	1596290	4.00000	
\$ 66 Terphenyl-d14	244		21.532	21.532	(0.919)	125655	1.00000	0.9422
67 Butylbenzylphthalate	149		22.414	22.414	(0.957)	198566	1.00000	0.7149
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	1649110	4.00000	
* 77 Perylene-d12	264		26.115	26.115	(1.000)	1901958	4.00000	
79 Dibenzo(a,h)anthracene	278		28.929	28.929	(1.108)	380310	1.00000	0.8531
90 N-Nitrosodimethylamine	74		4.732	4.732	(0.511)	187791	2.00000	2.252

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022303S.D
 Lab Smp Id: SEQ-ICVSIM
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	493417	0.00
27 Naphthalene-d8	1779056	889528	3558112	1779056	0.00
42 Acenaphthene-d10	954569	477285	1909138	954569	0.00
59 Phenanthrene-d10	1596290	798145	3192580	1596290	0.00
69 Chrysene-d12	1649110	824555	3298220	1649110	0.00
77 Perylene-d12	1901958	950979	3803916	1901958	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022303S.D

Lab ID: SEQ-ICVSIM

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 14:13

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230302.b\SIM.b

Instrument: nt10.i Date: 02-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

Compound	%RSD or R ²
NO Q-FLAGS	

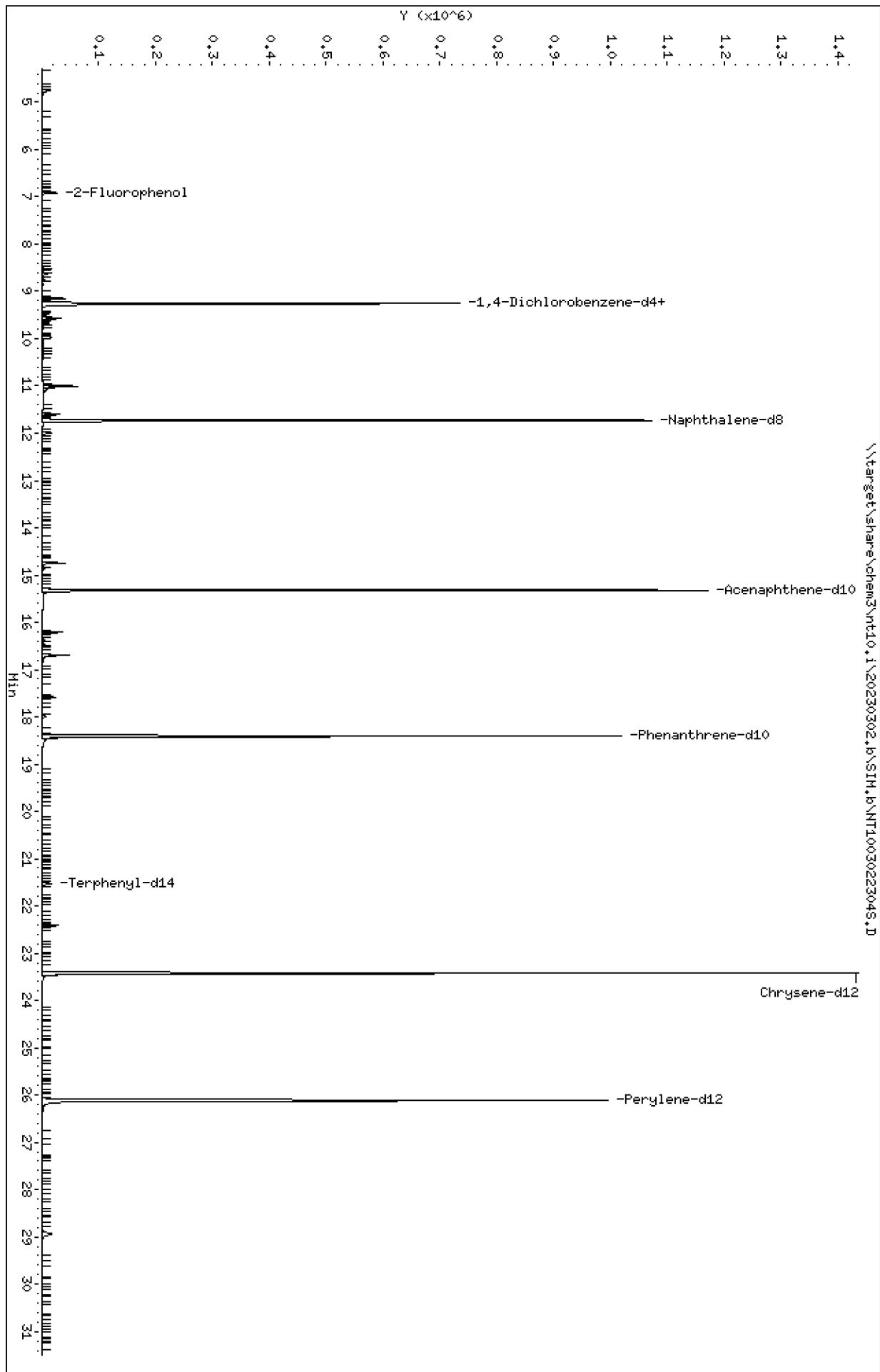
ICV CAL: NT1003022303S.D 02-MAR-2023 14:13

Compound	%D
Benzoic acid	-51.4
Pentachlorophenol	-32.8
Butylbenzylphthalate	-28.5

Data File: \\target\share\chem3\nt10.1\20230302.16\SIH.1\NT1003022304S.D
Date : 02-MAR-2023 16:17
Client ID:
Sample Info: SED-LCV200
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIH.1\NT1003022304S.D



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

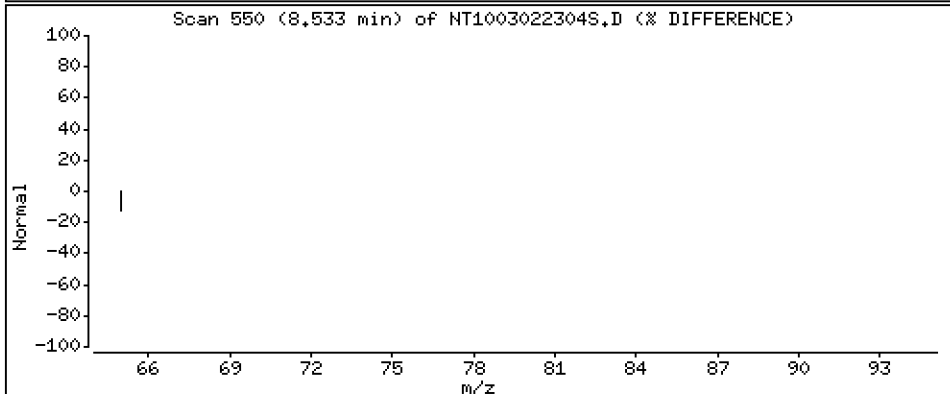
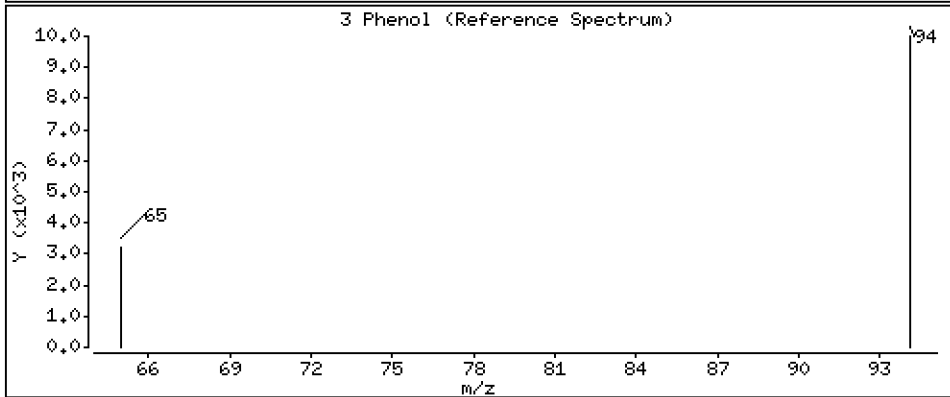
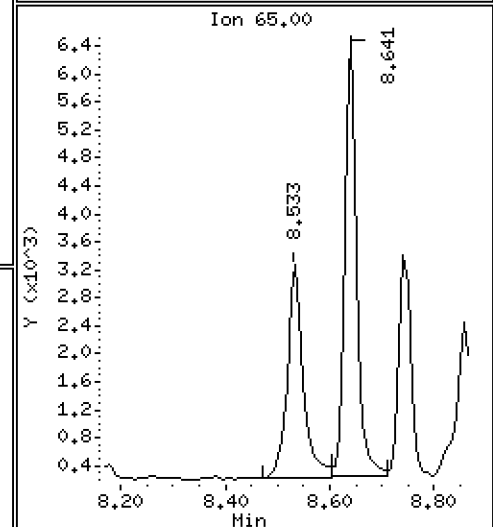
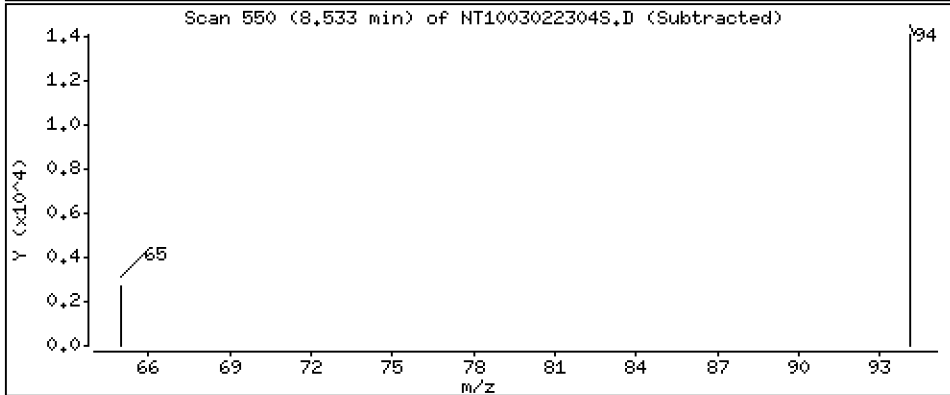
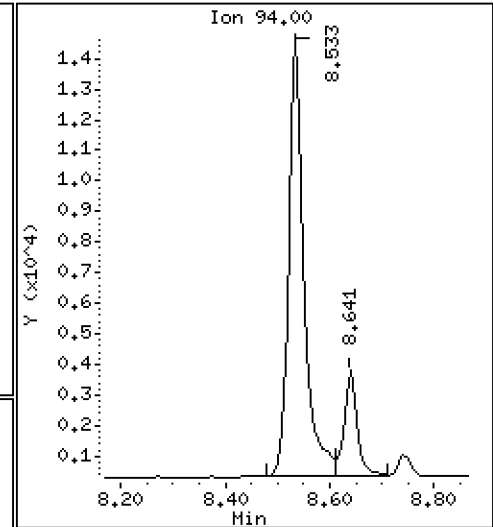
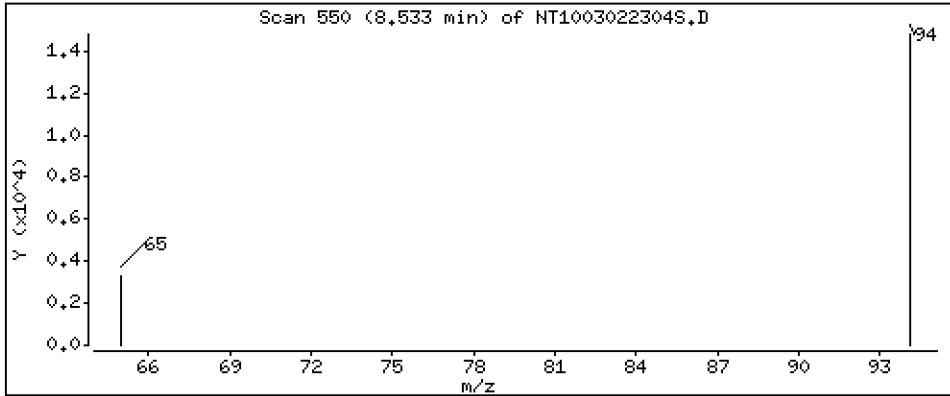
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.1516 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

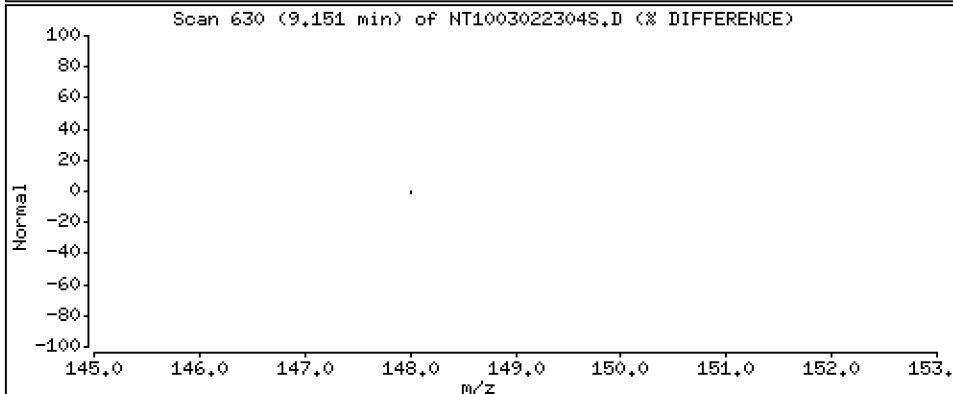
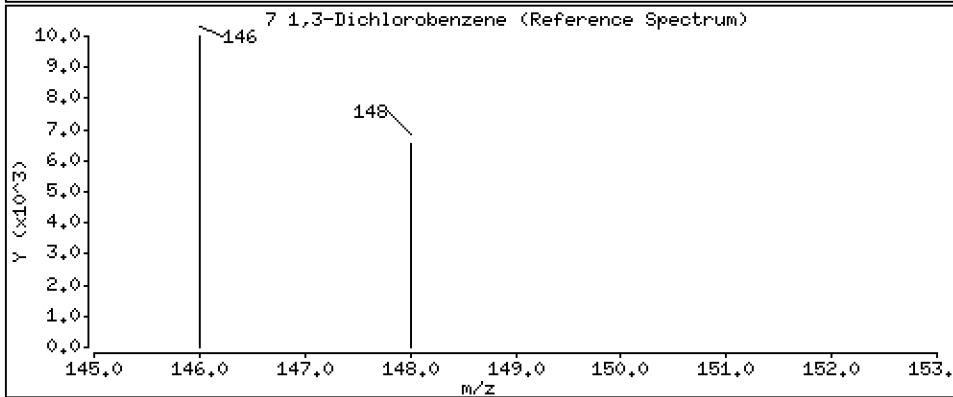
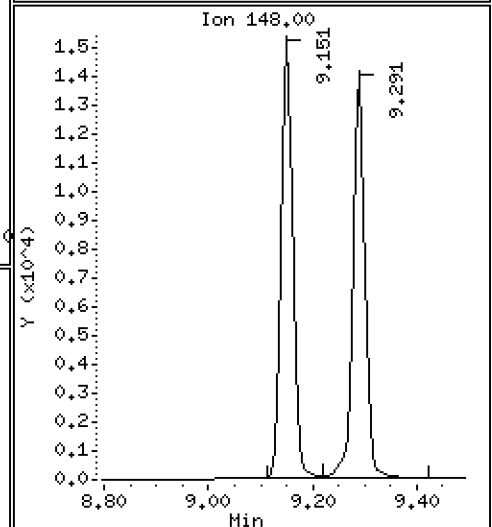
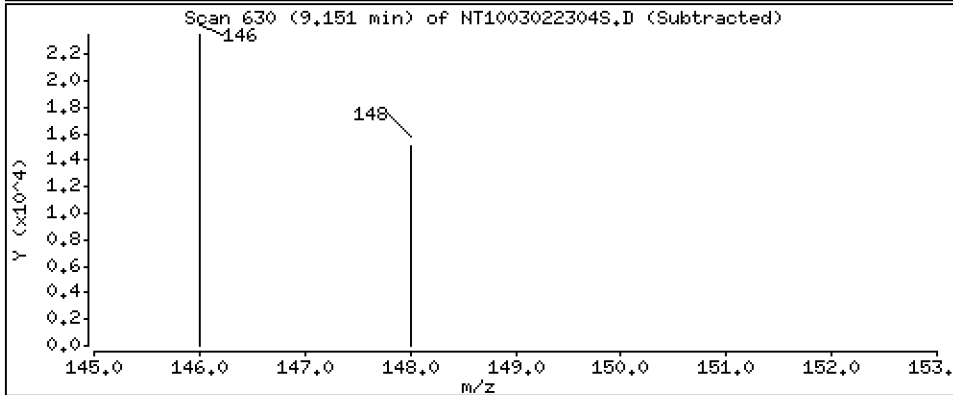
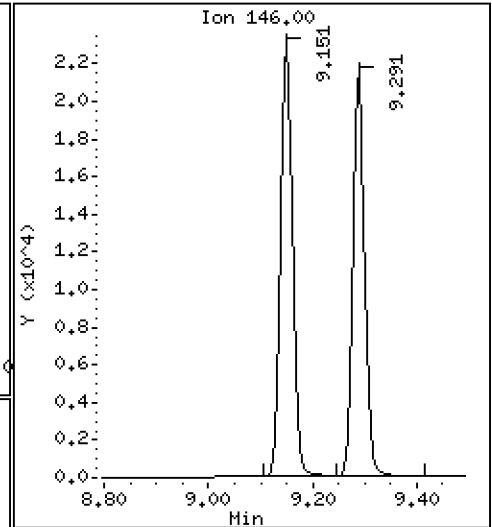
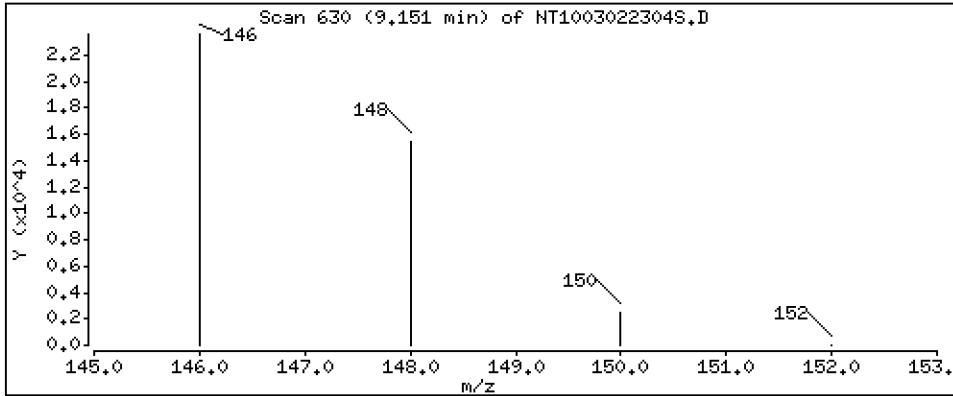
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2034 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

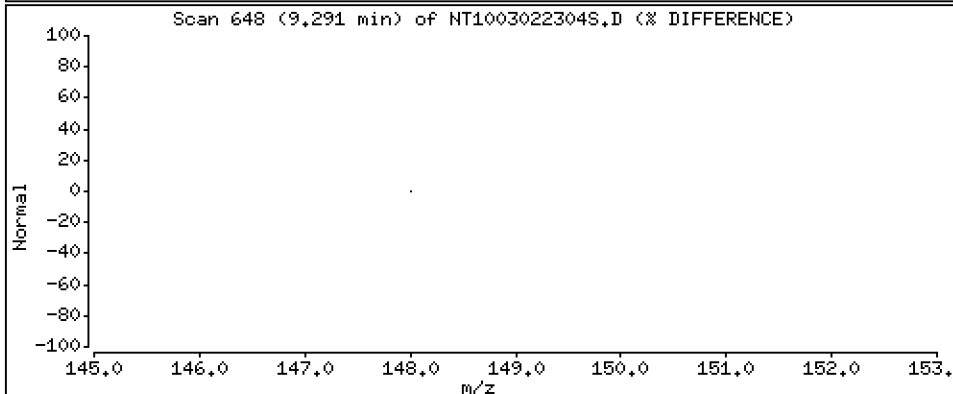
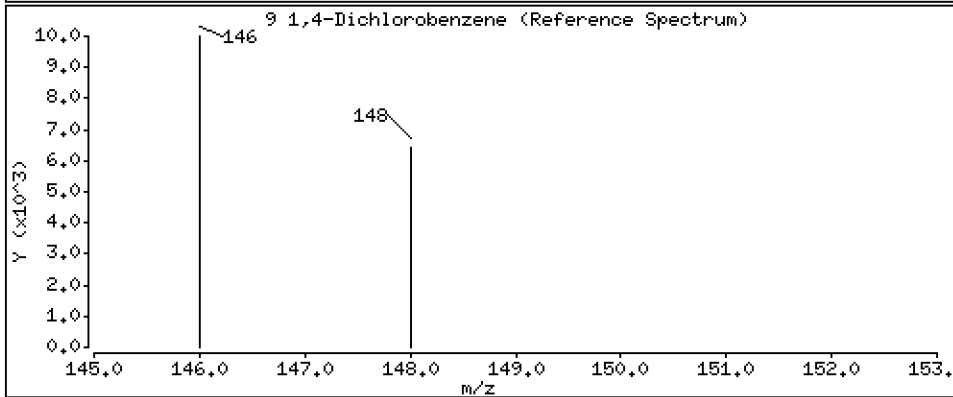
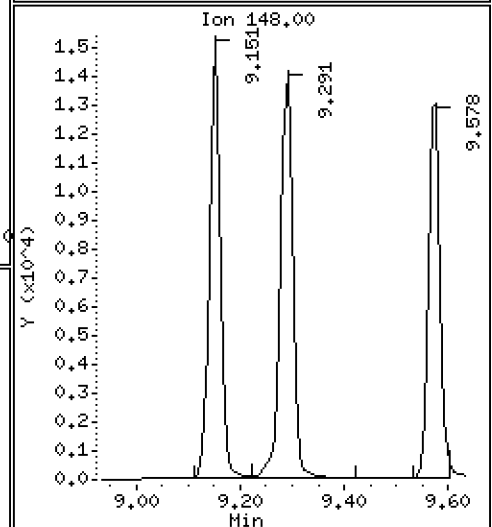
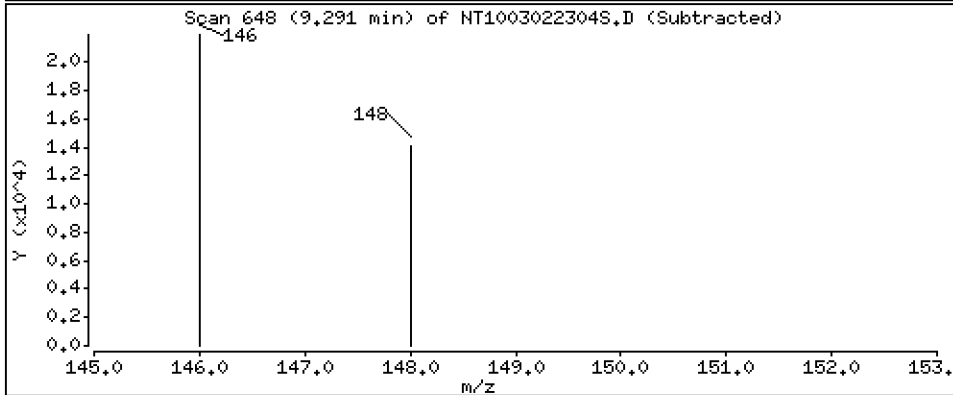
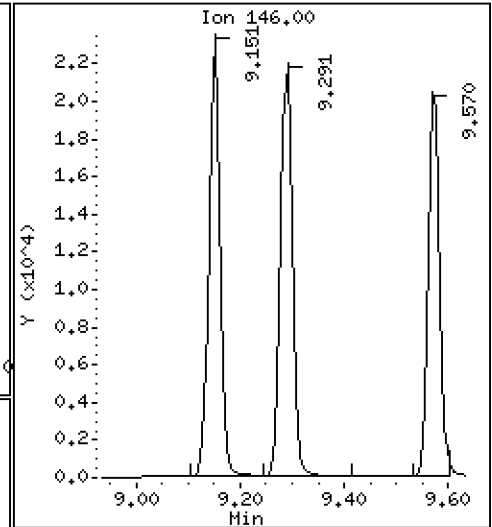
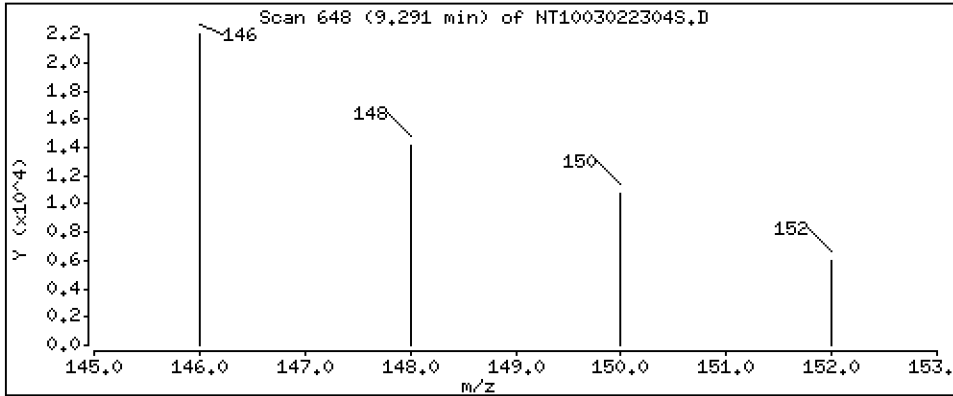
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.1998 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

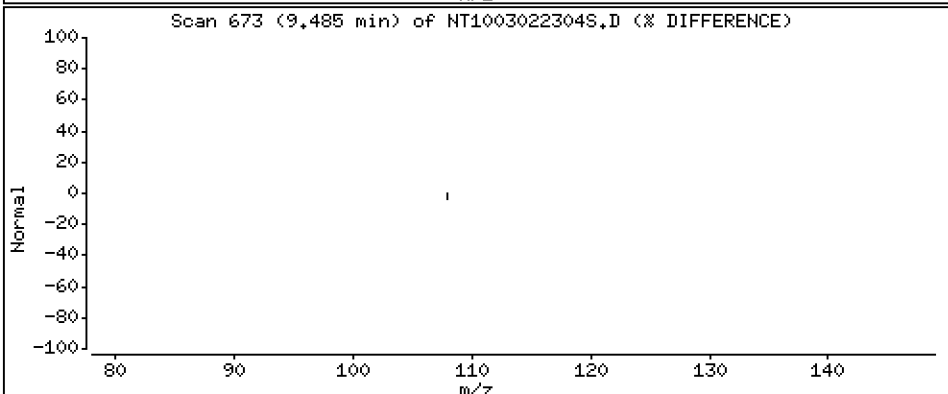
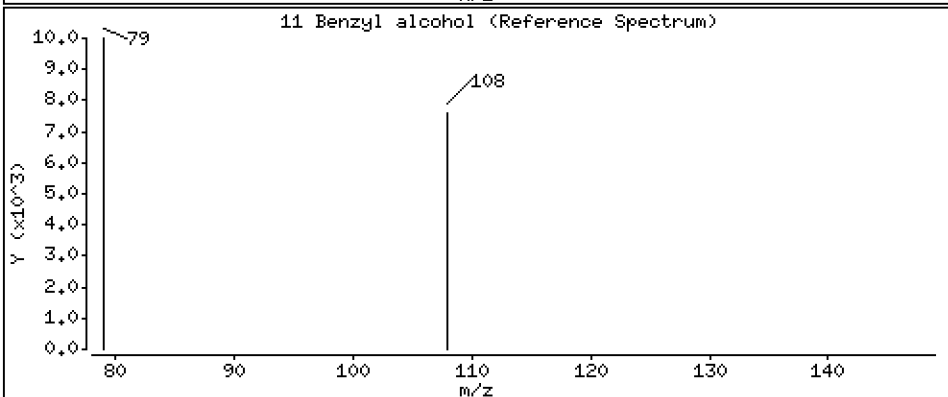
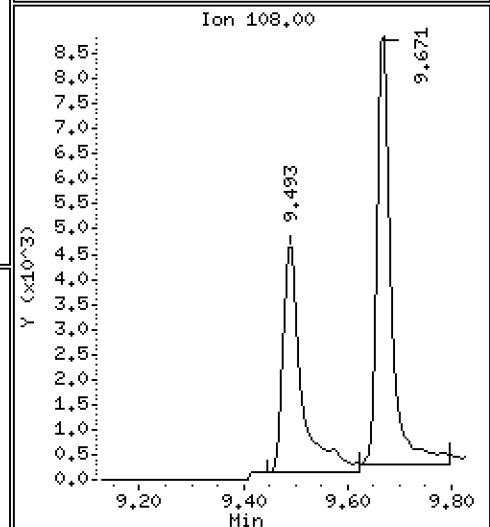
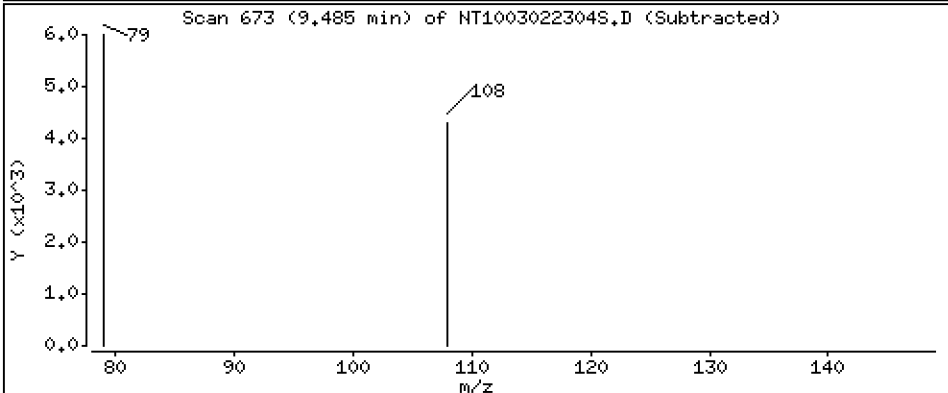
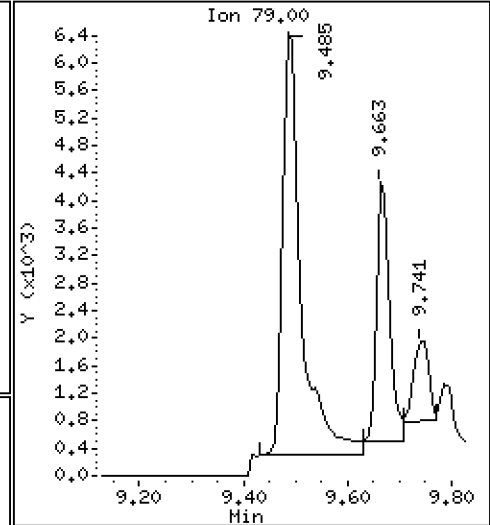
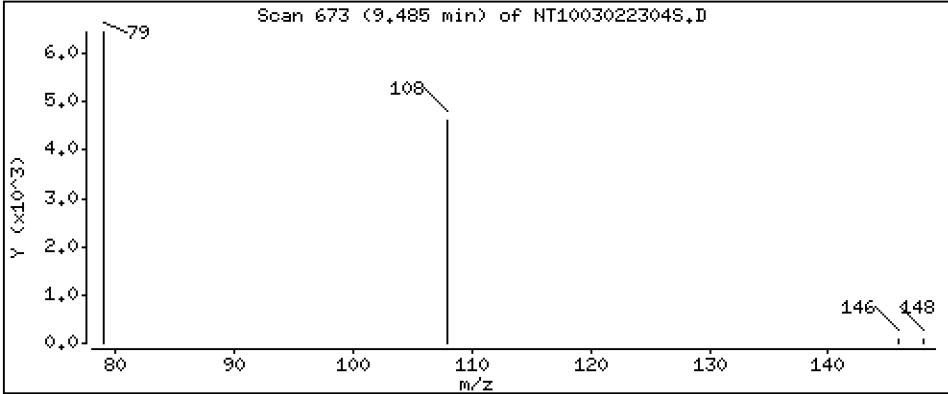
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1392 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

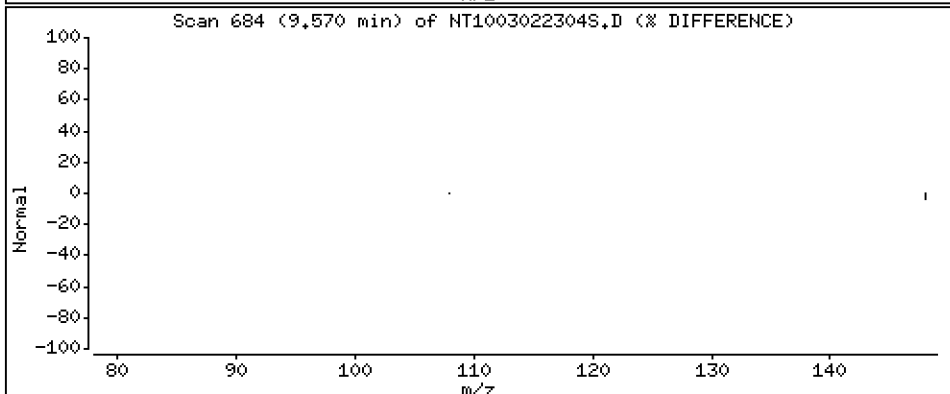
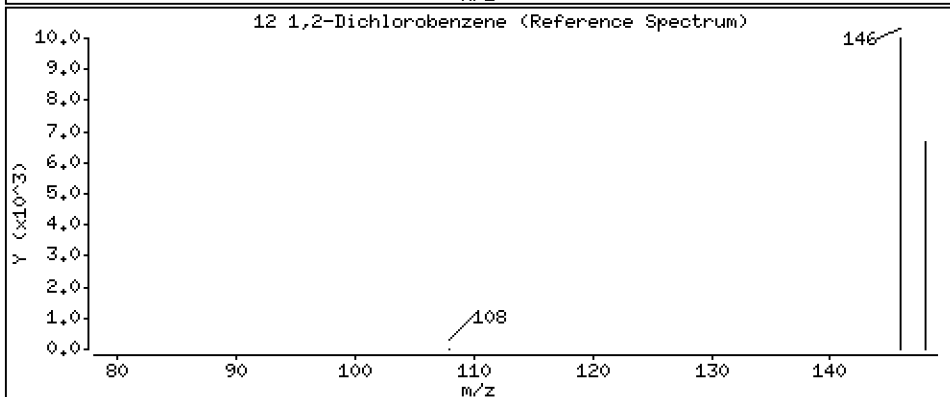
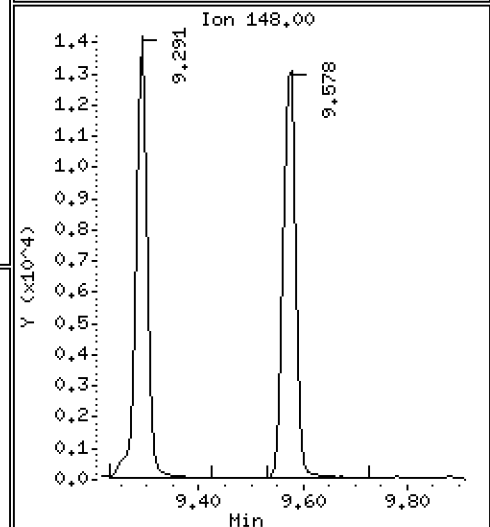
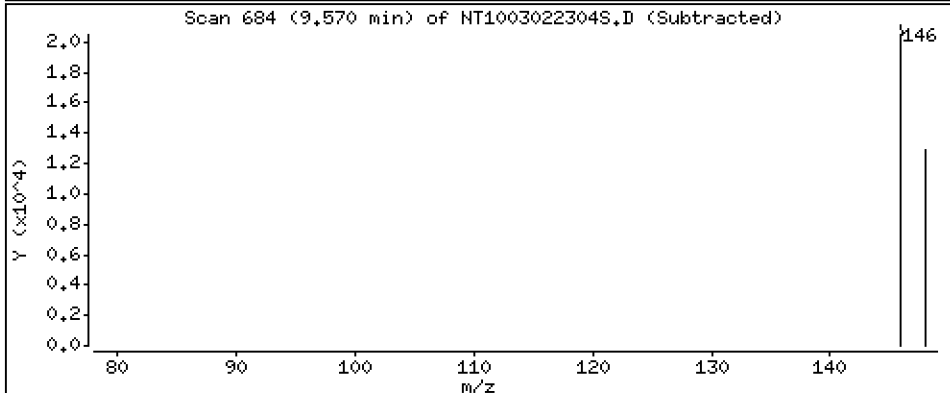
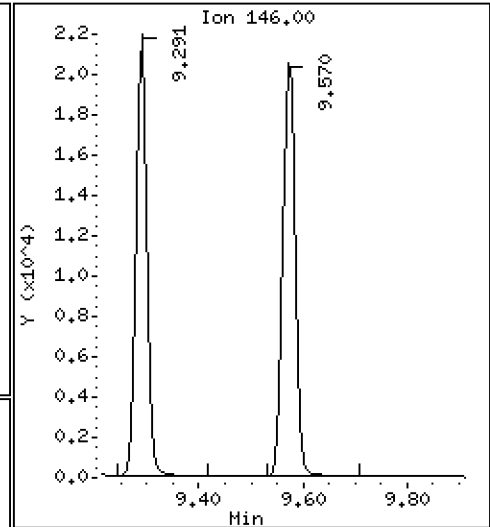
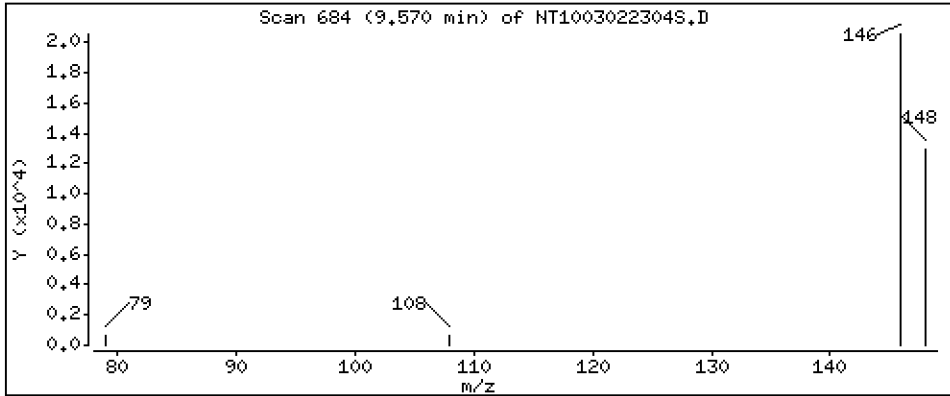
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.2027 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

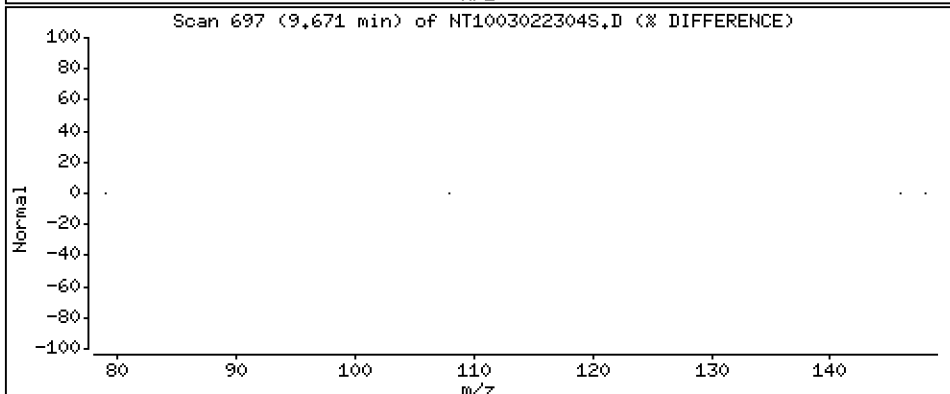
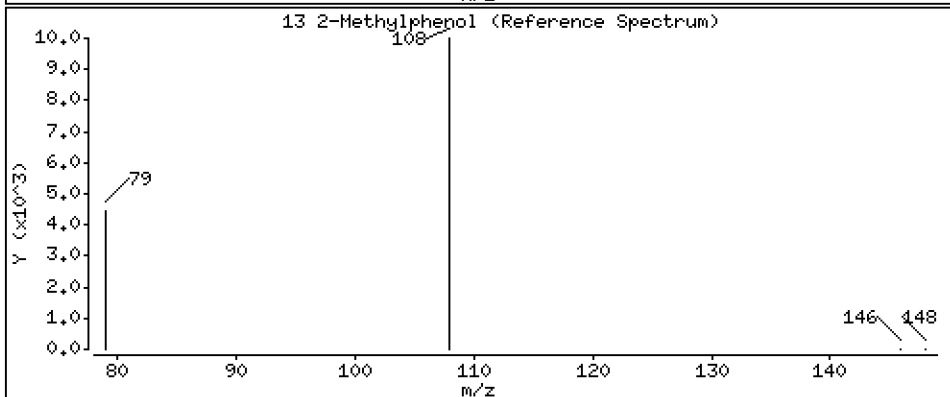
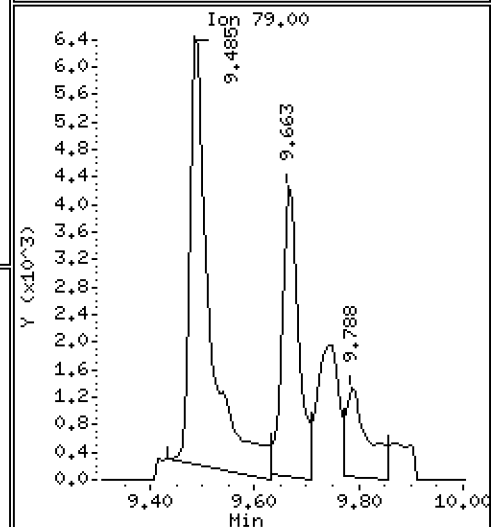
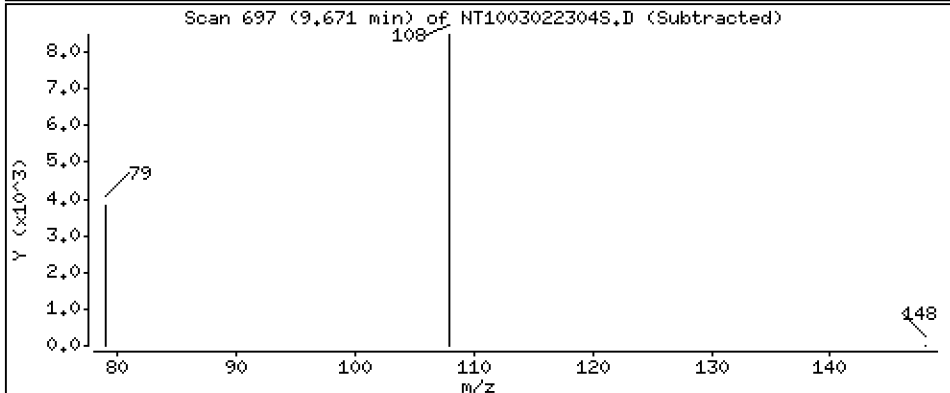
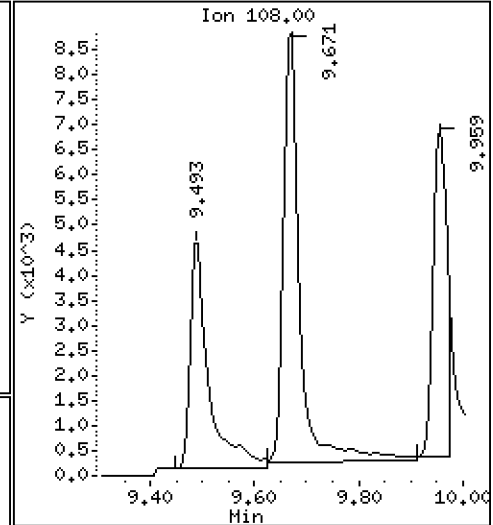
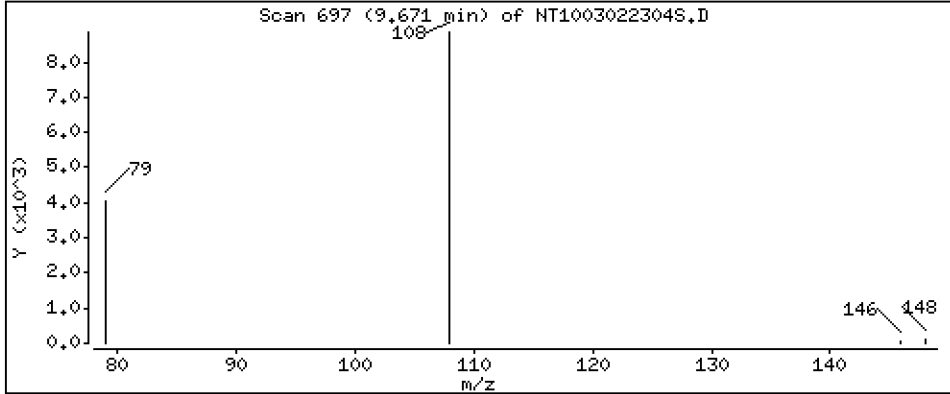
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1561 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

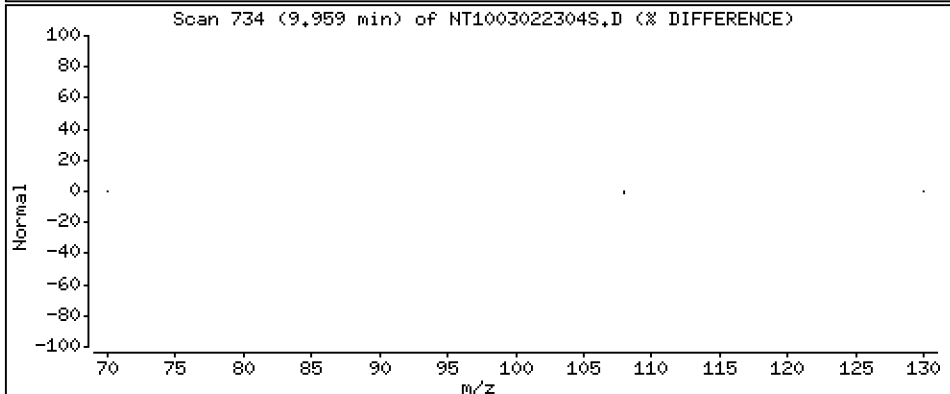
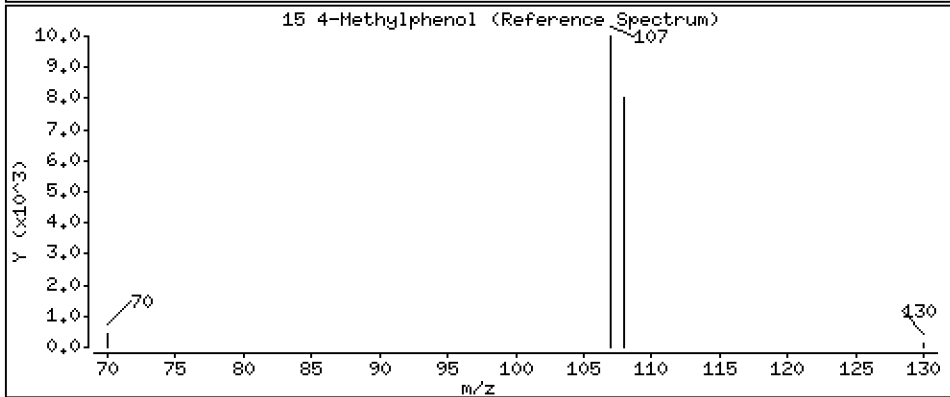
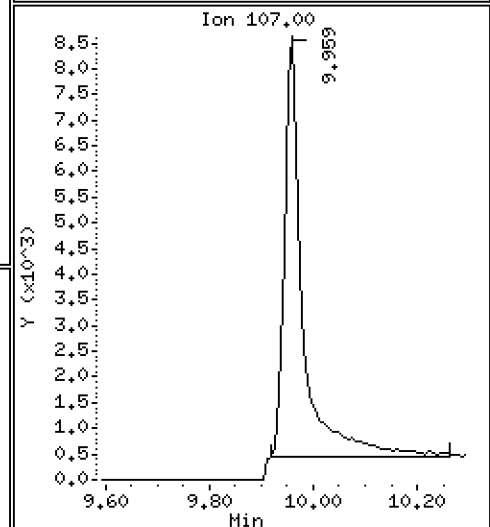
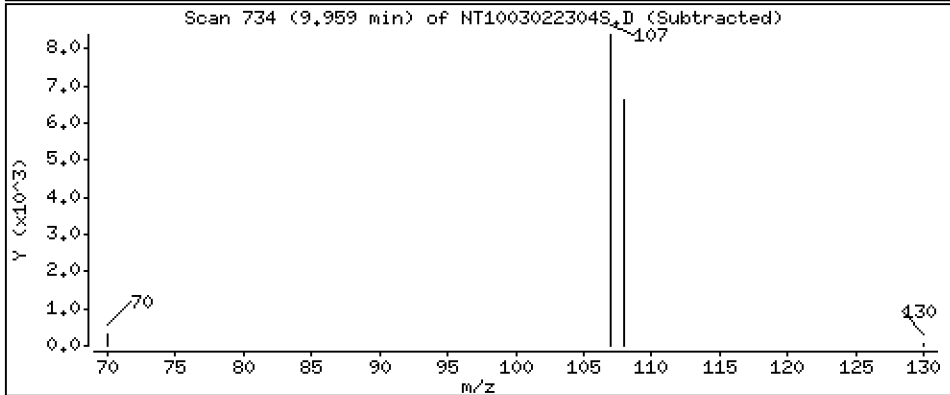
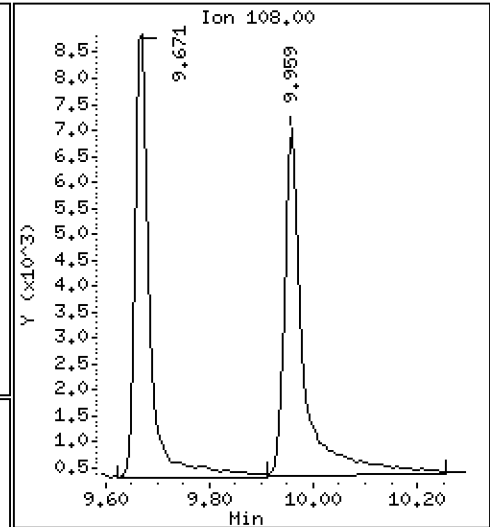
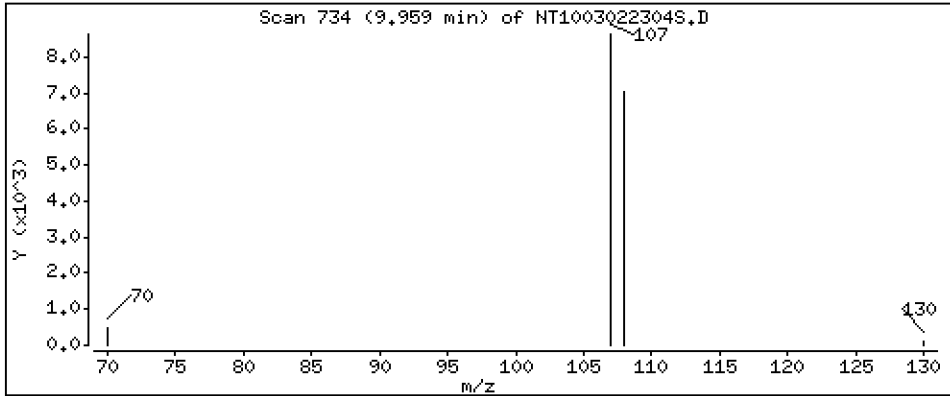
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1404 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

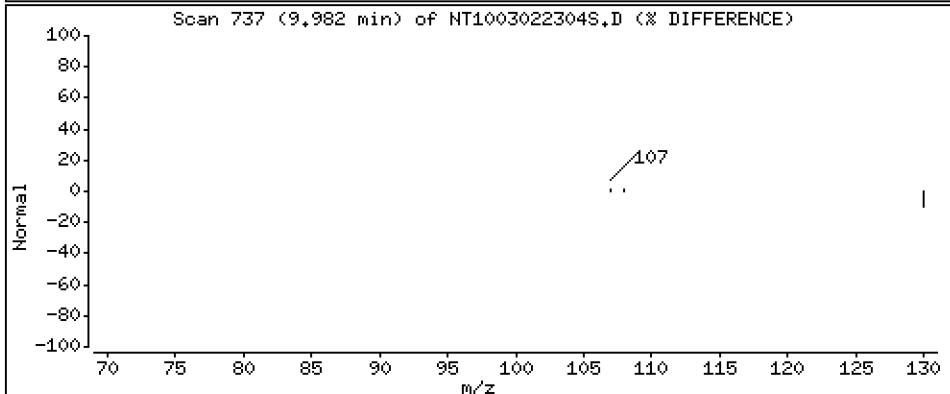
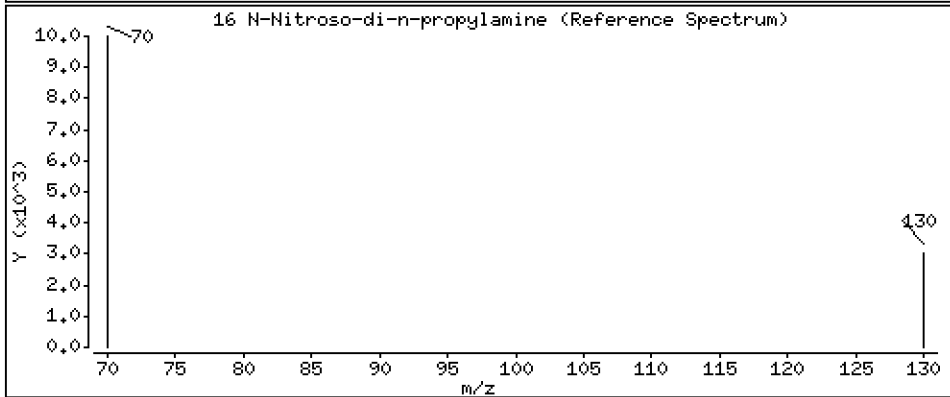
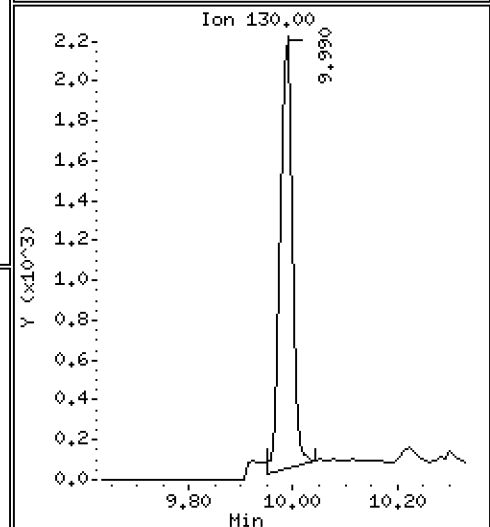
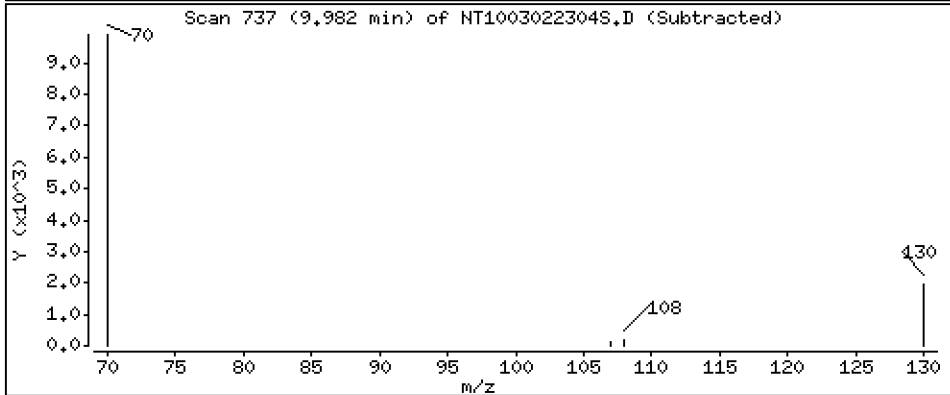
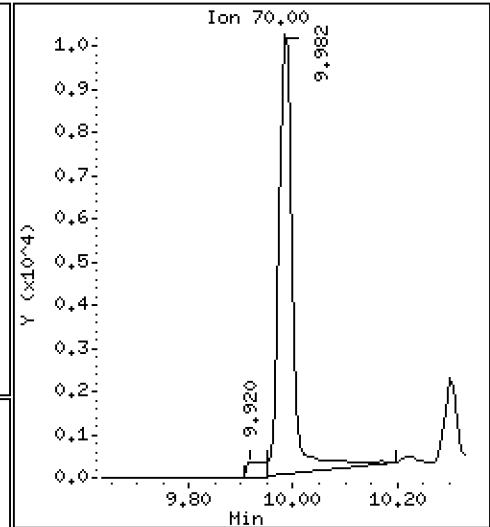
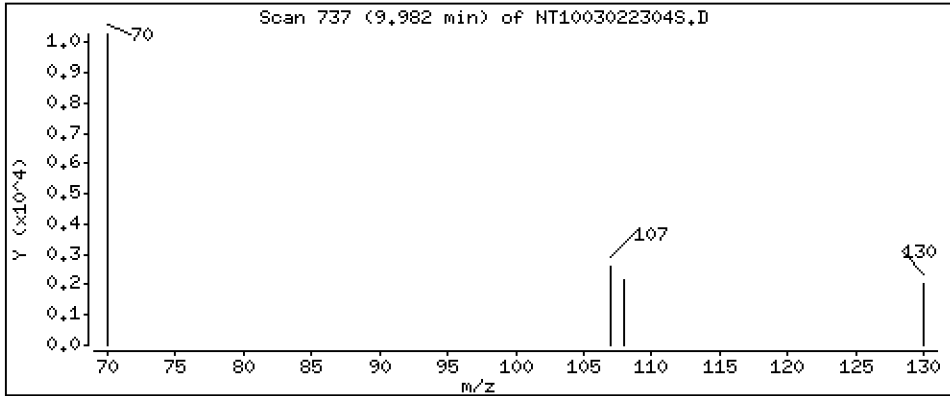
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.2077 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

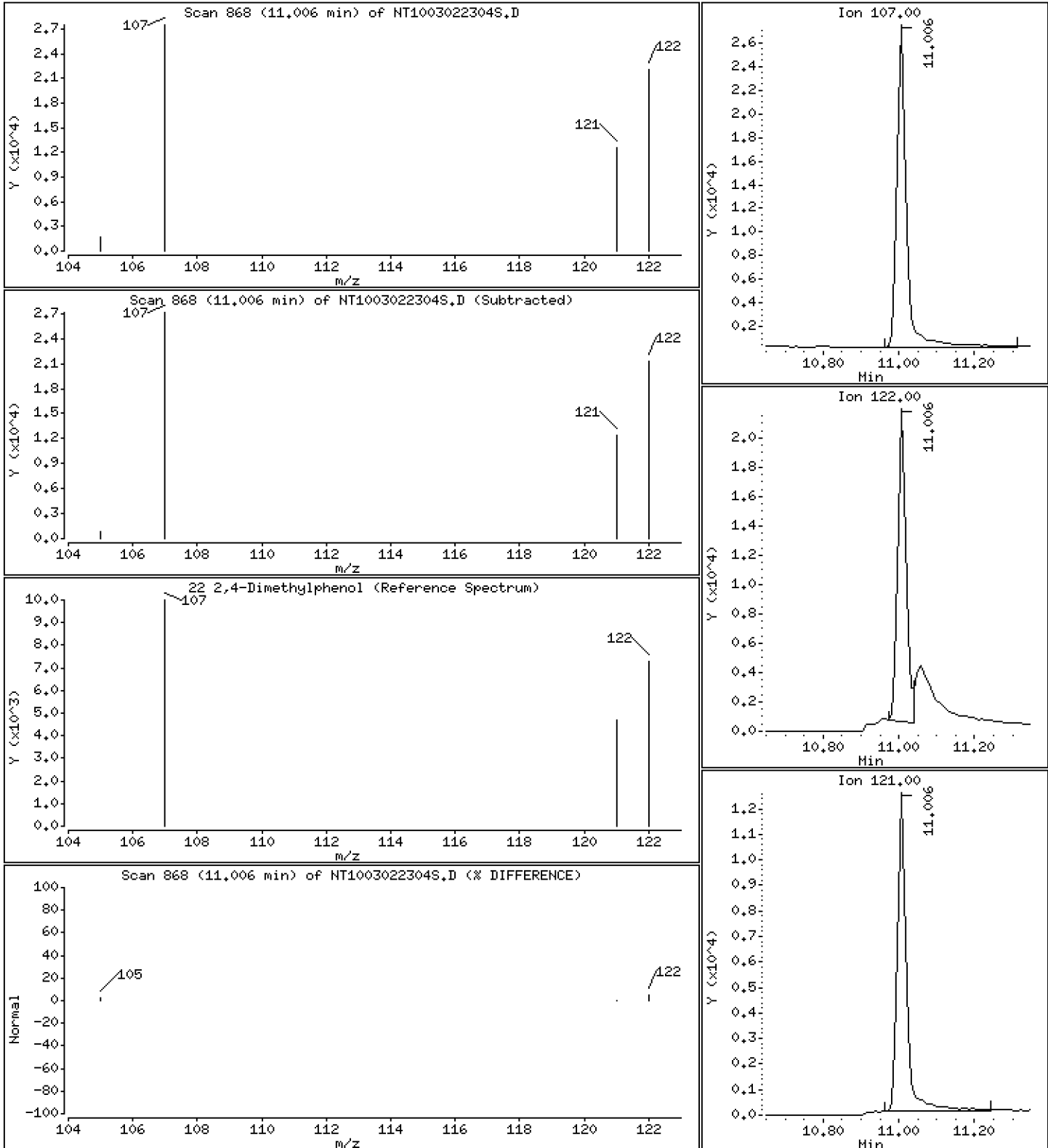
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3273 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

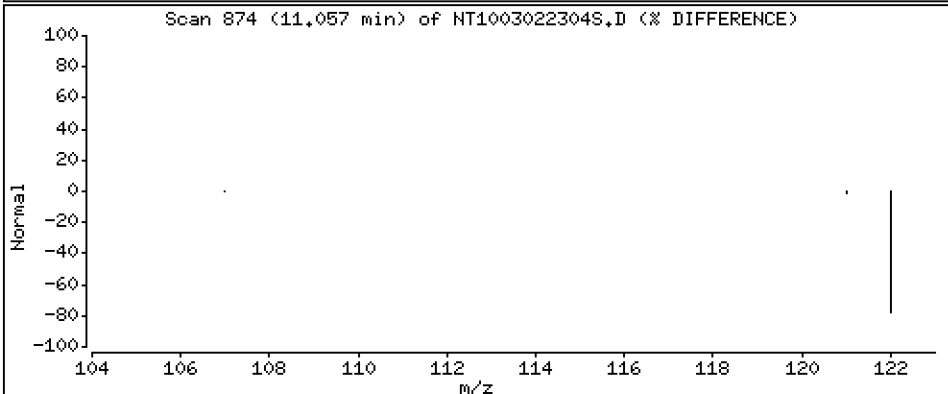
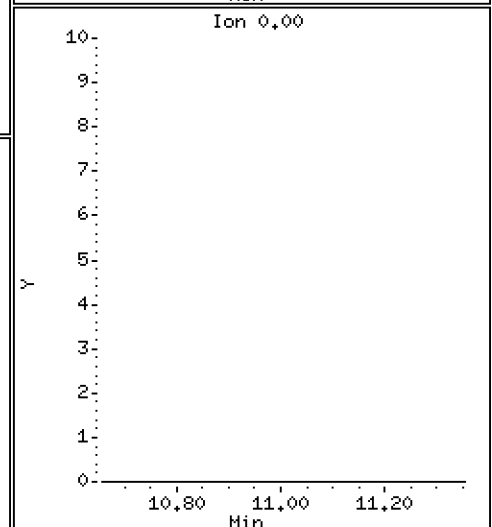
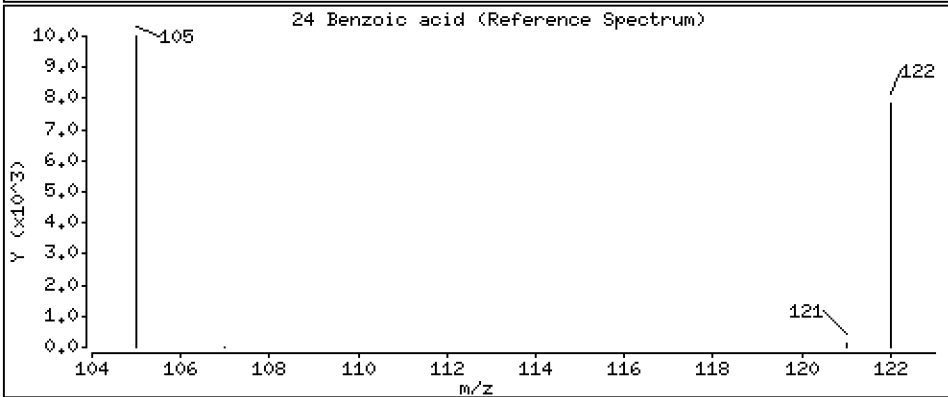
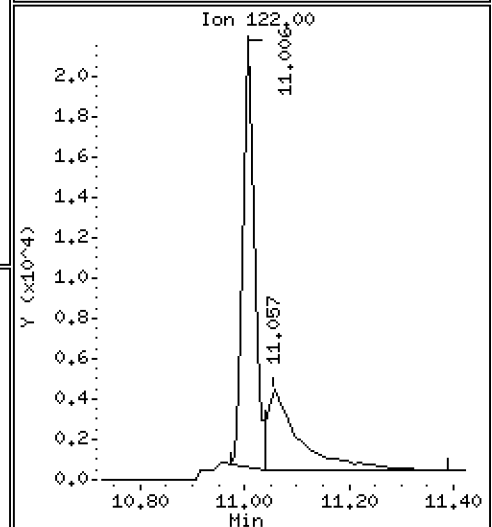
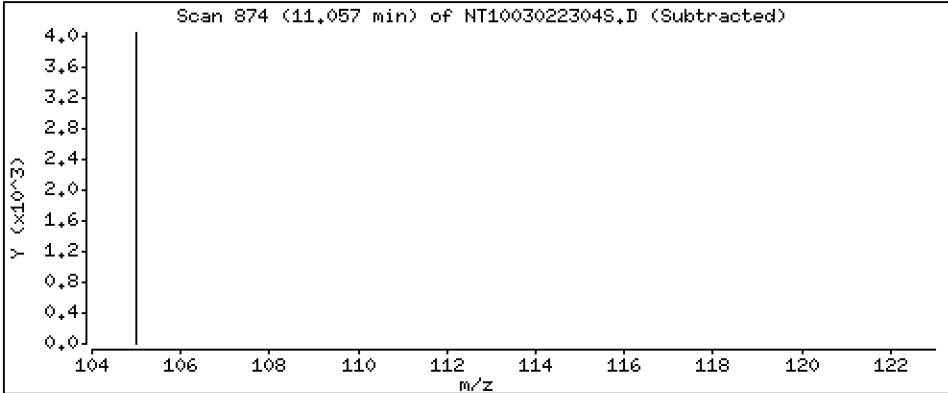
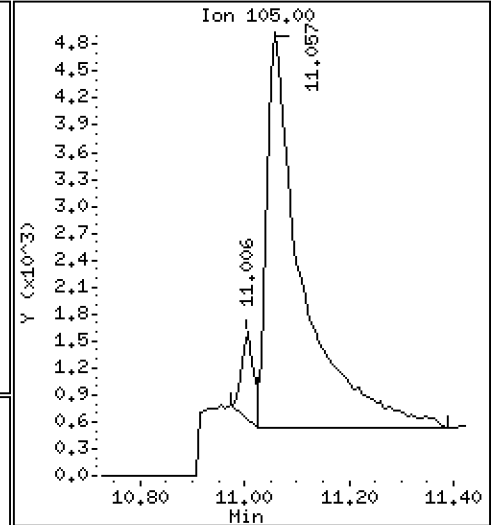
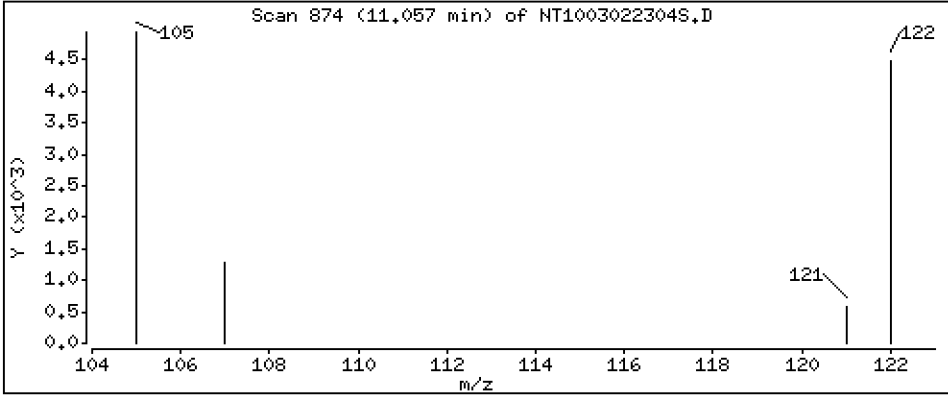
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.2670 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

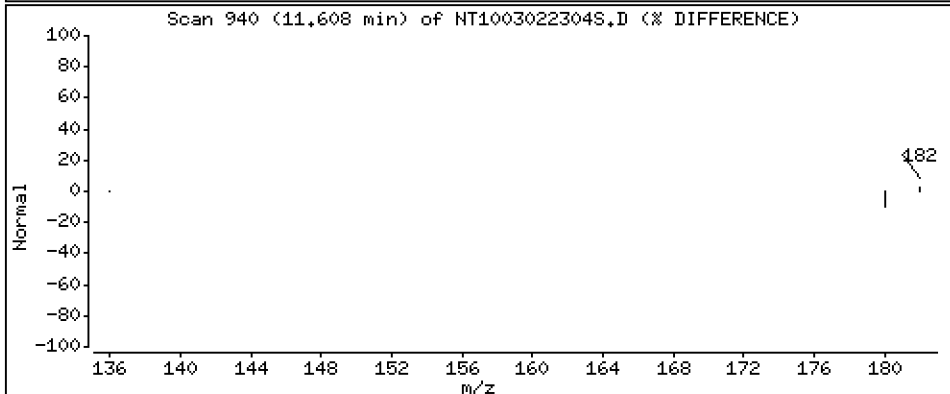
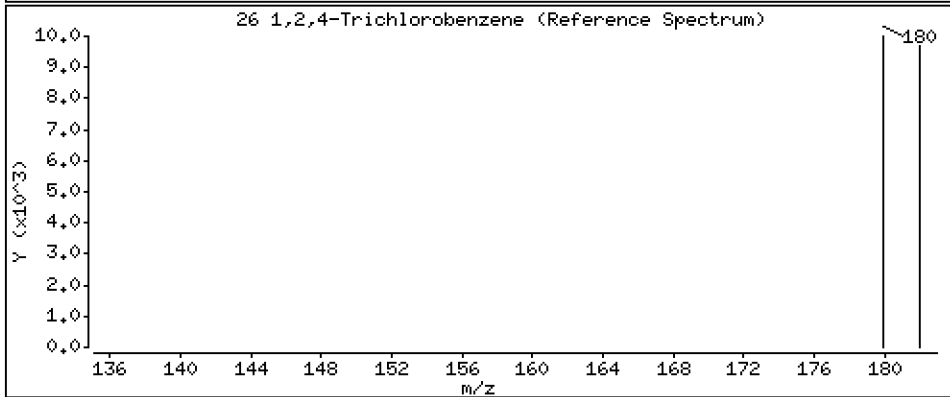
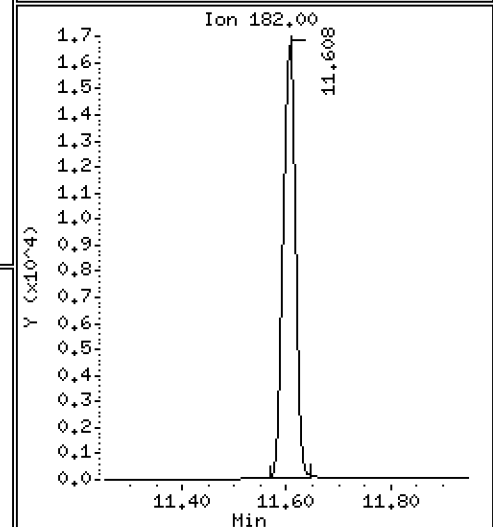
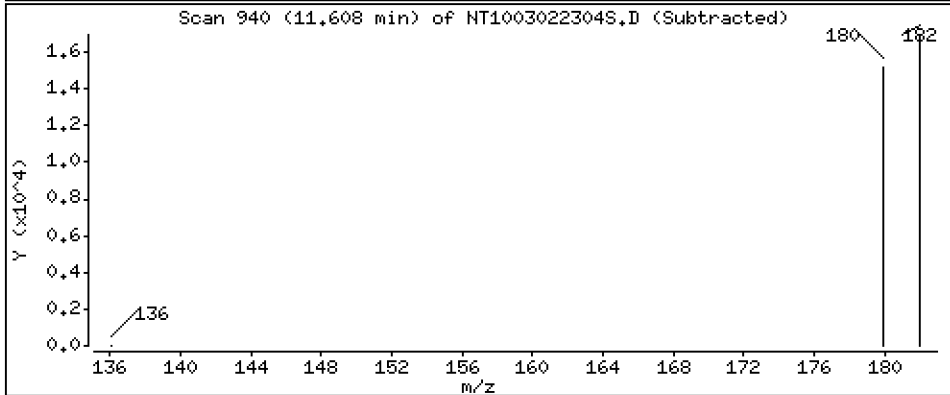
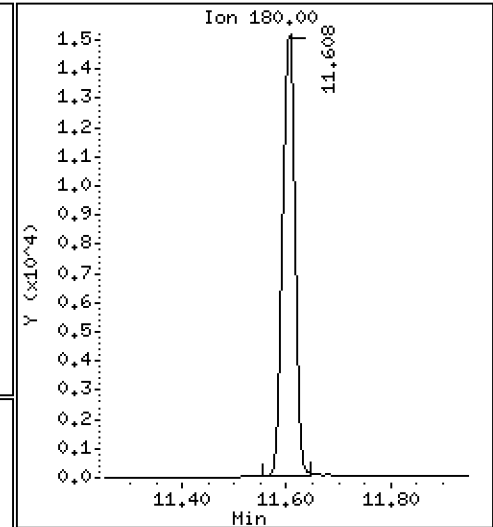
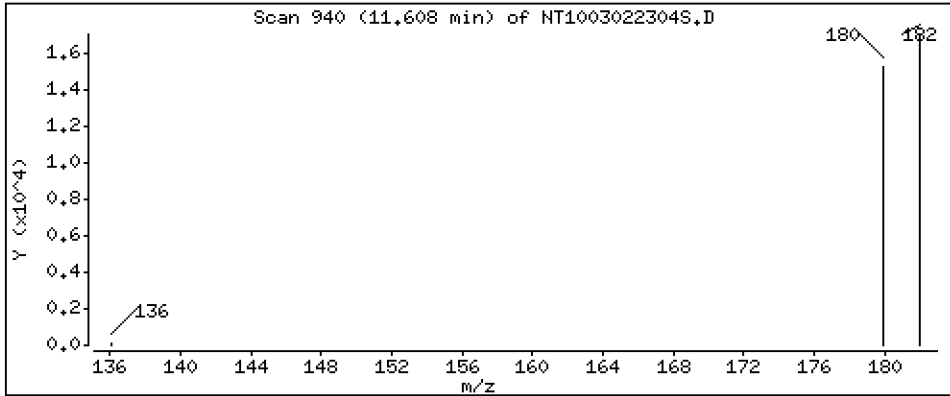
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 0.1965 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

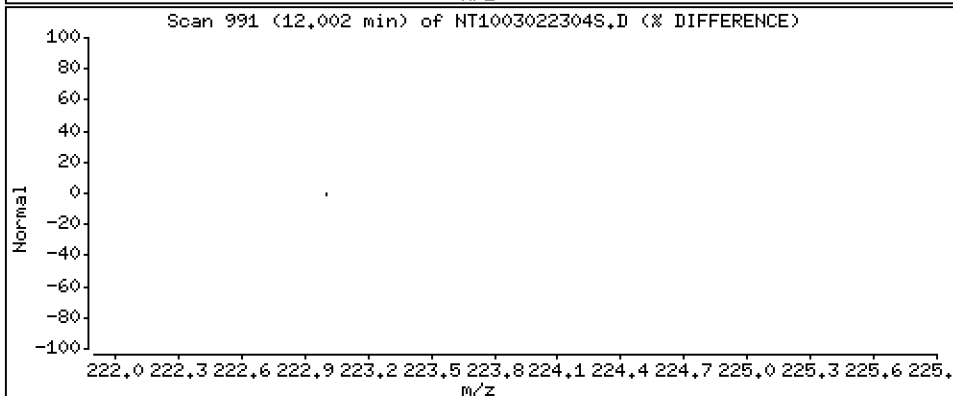
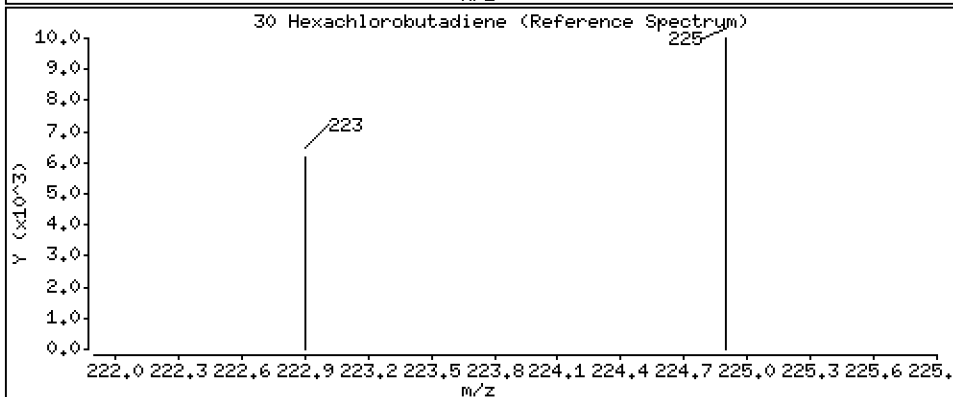
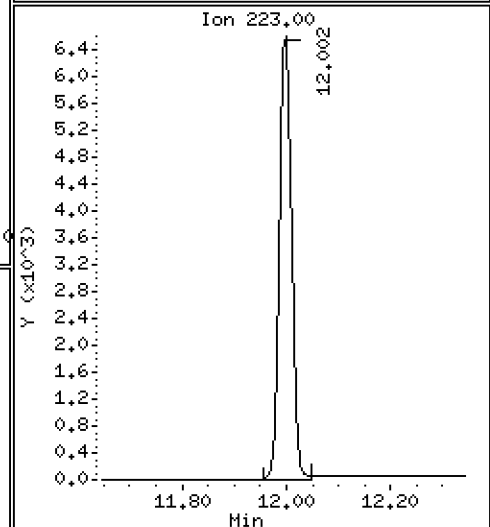
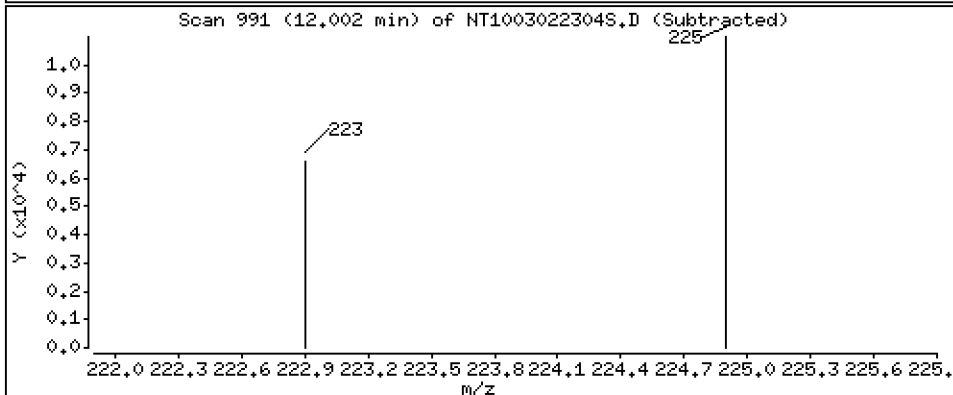
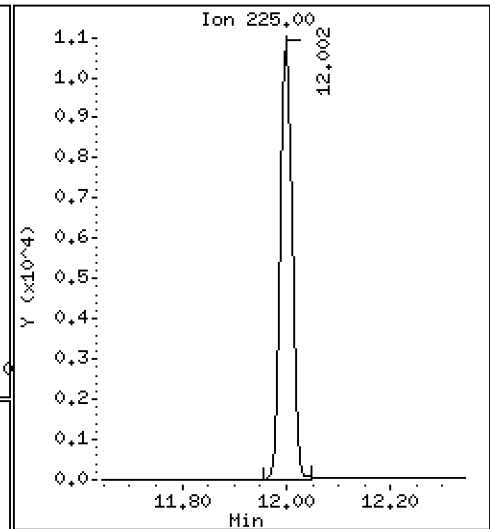
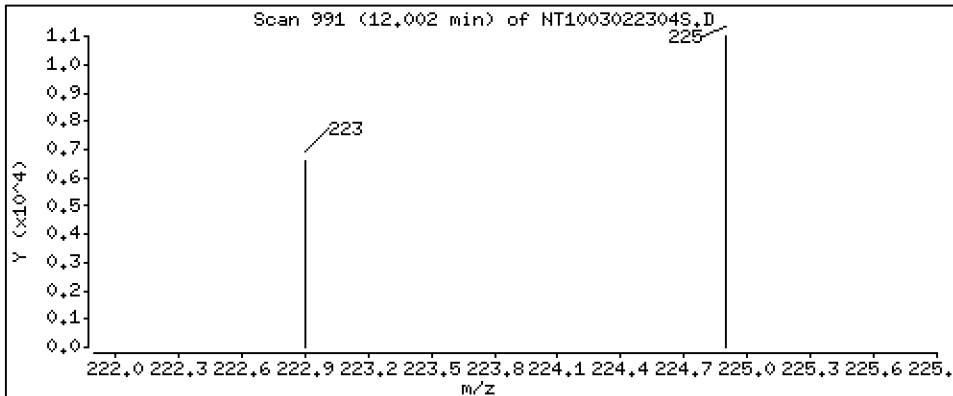
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1890 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

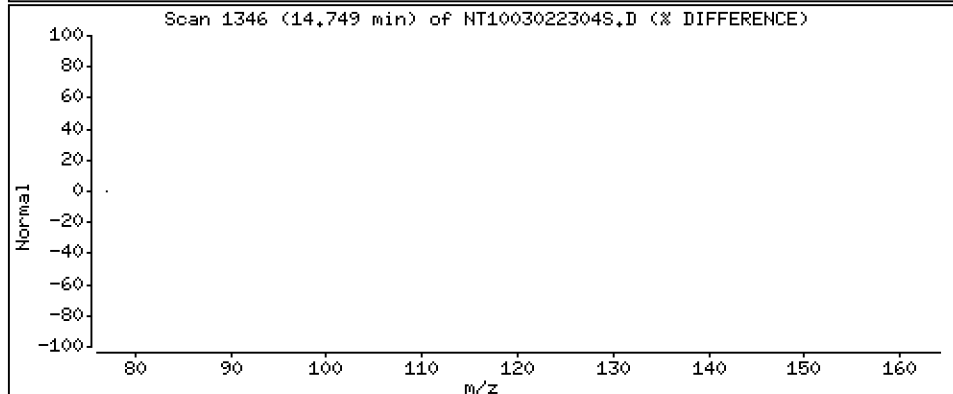
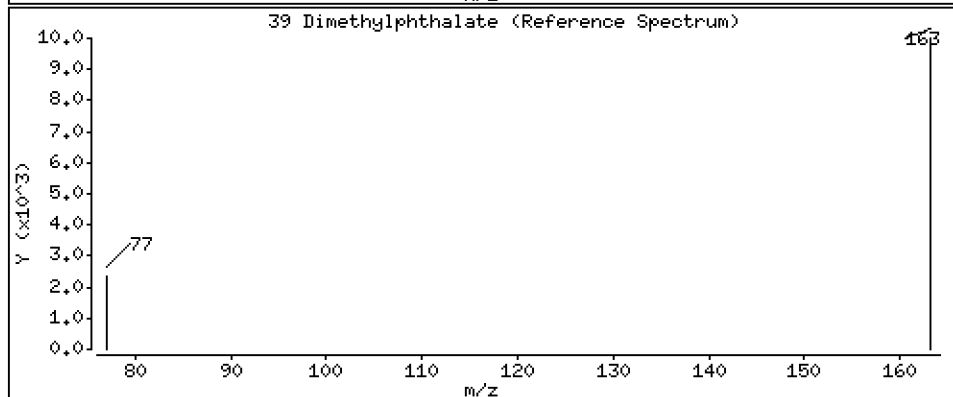
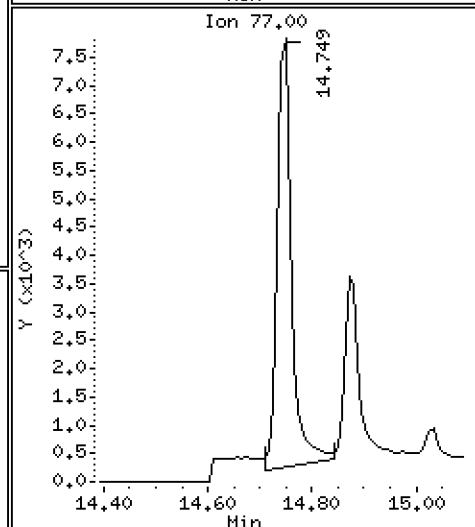
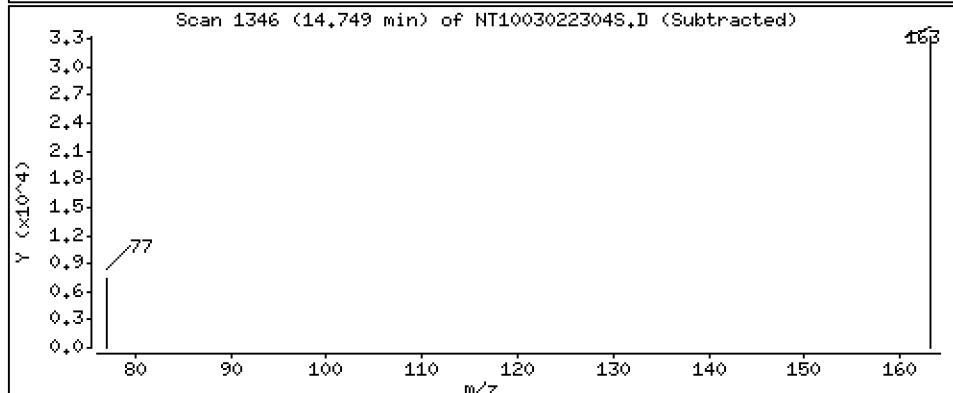
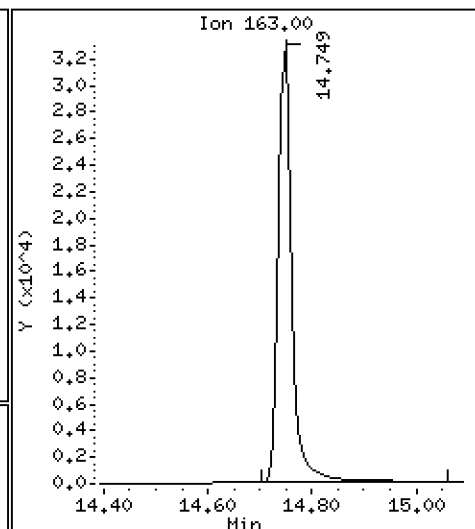
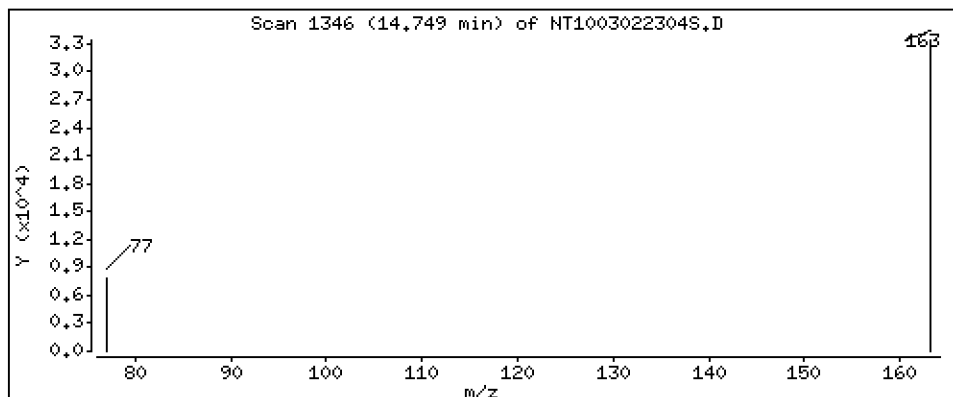
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1960 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

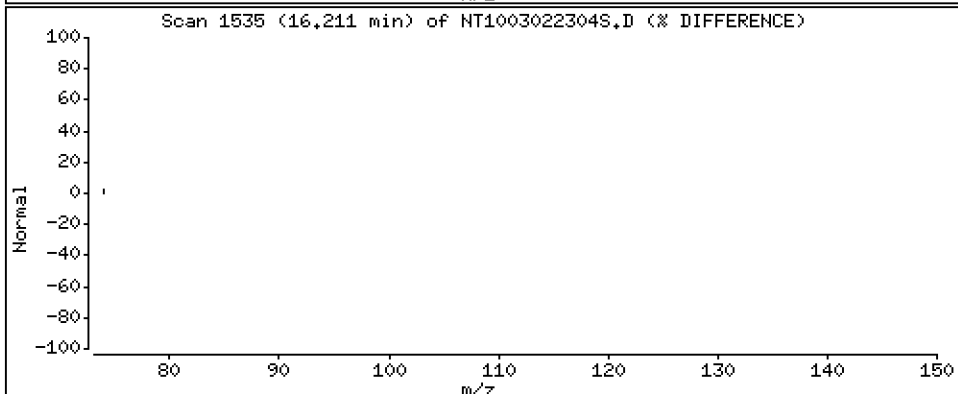
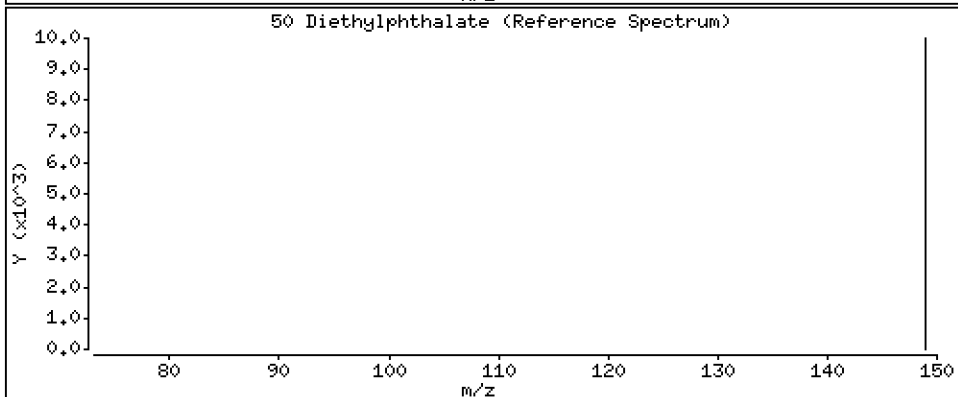
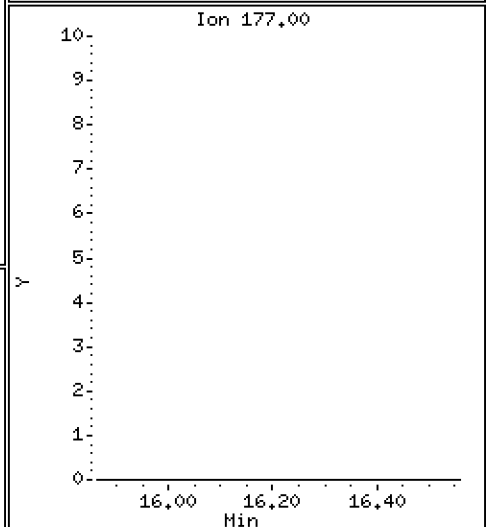
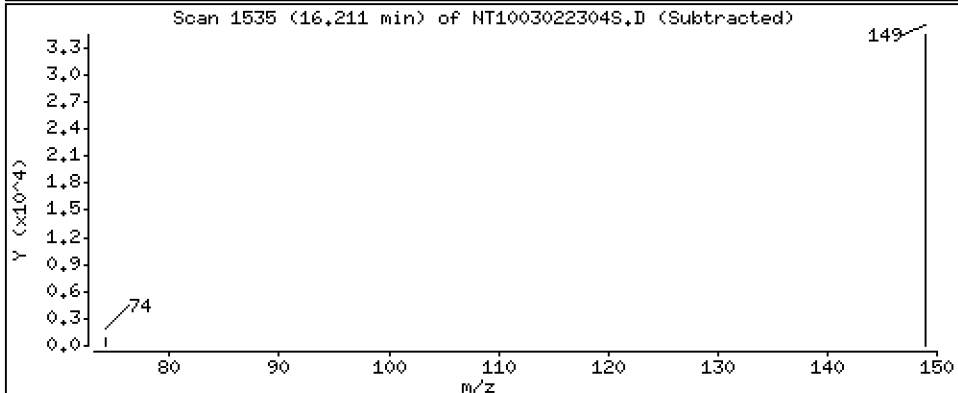
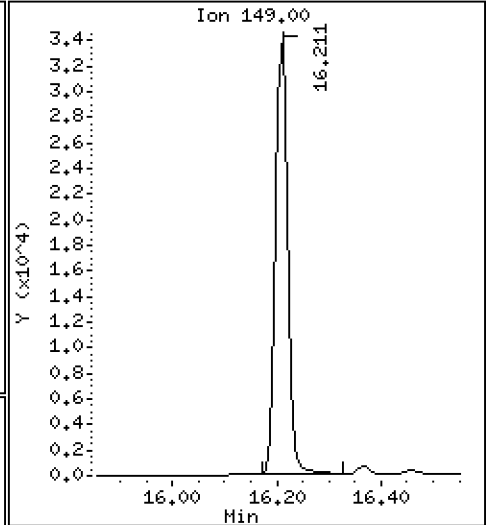
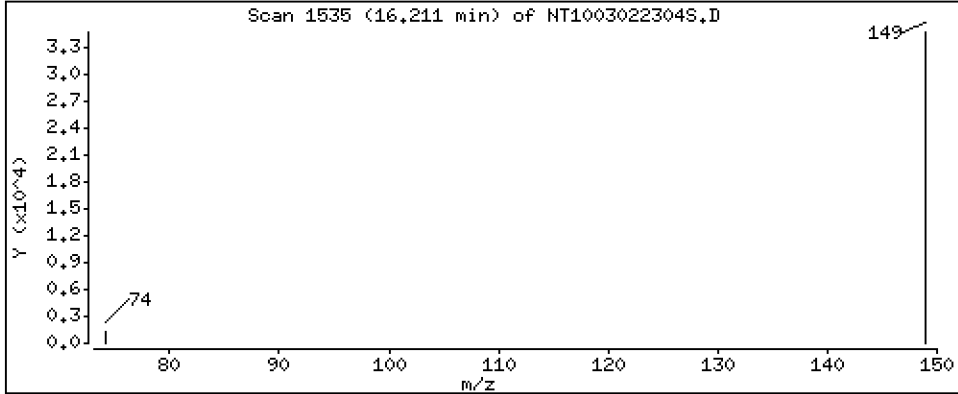
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1894 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

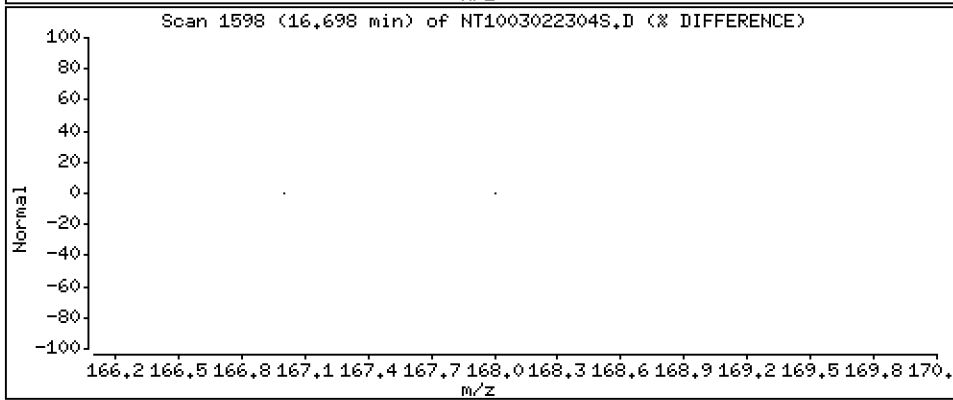
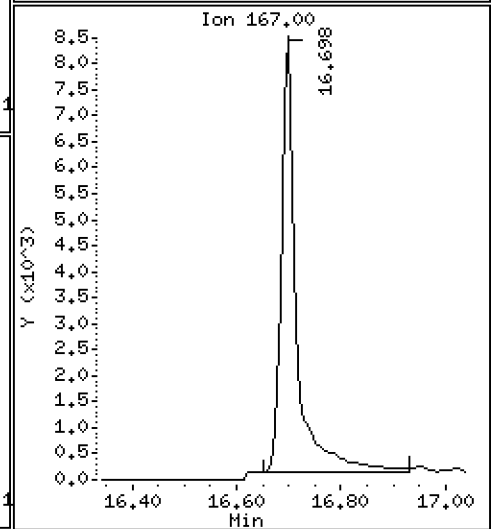
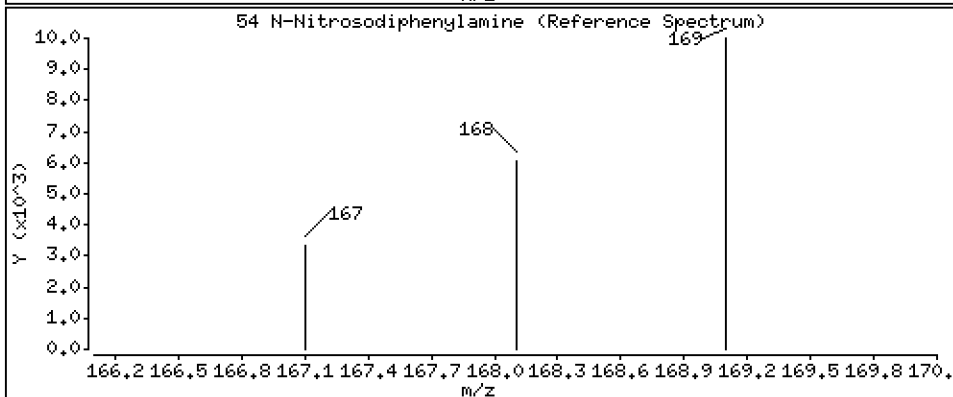
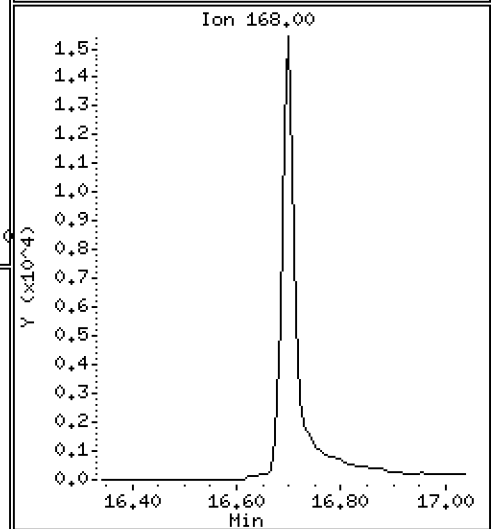
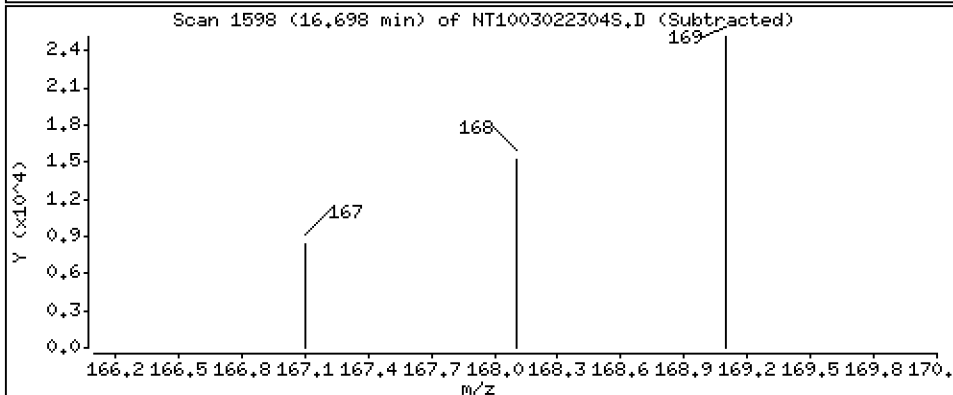
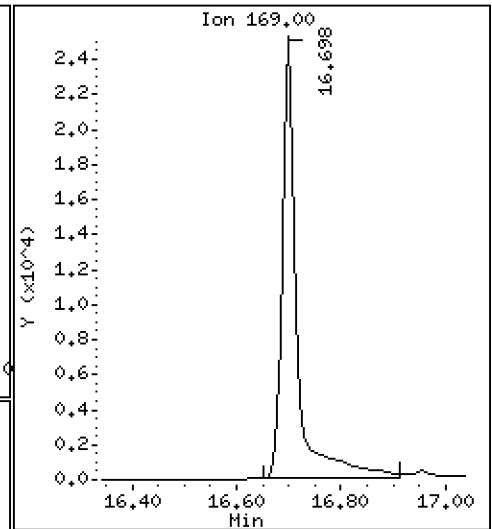
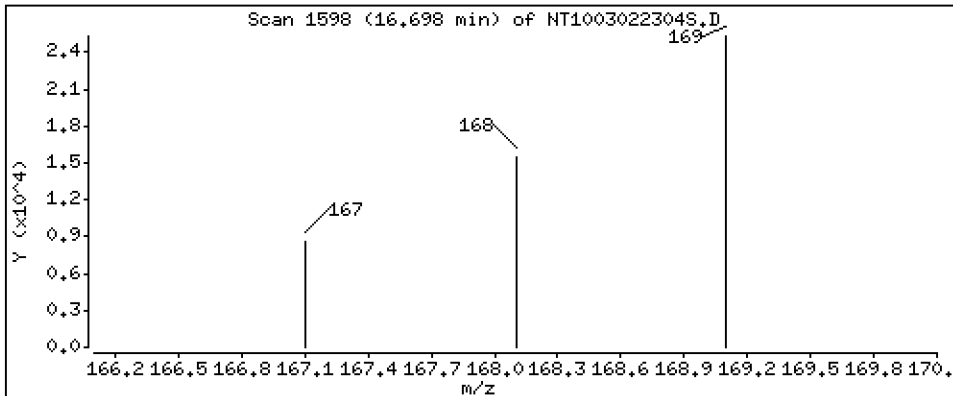
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.1900 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

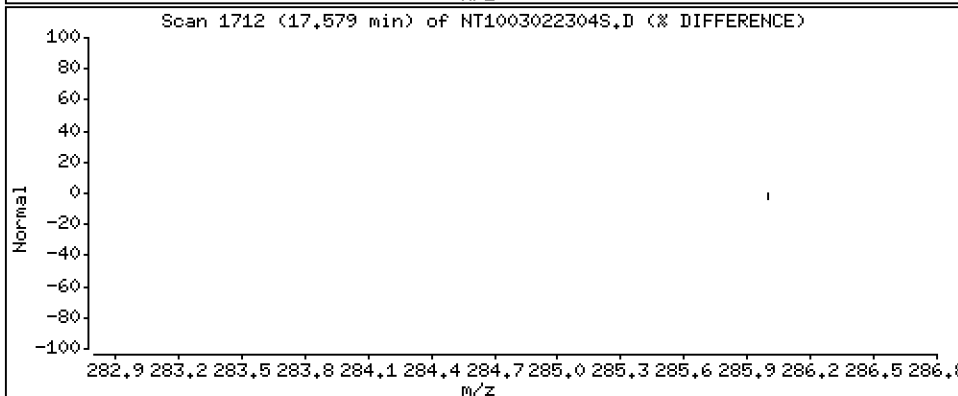
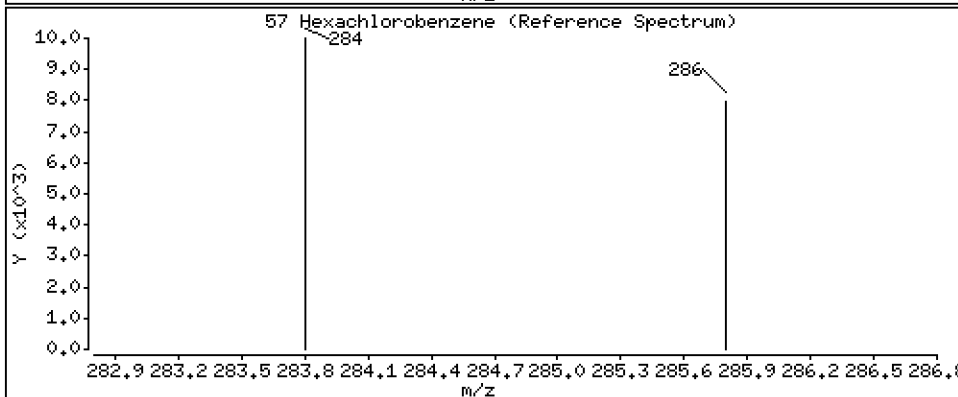
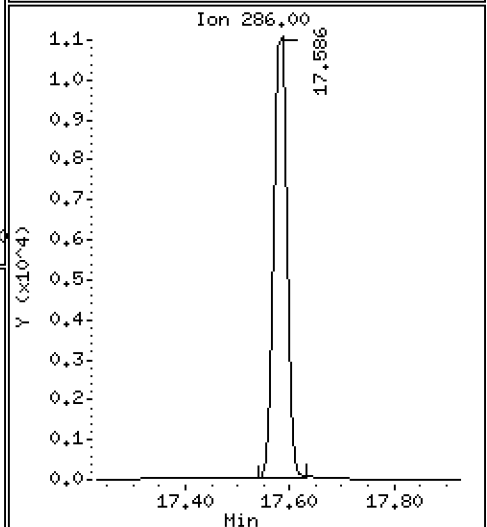
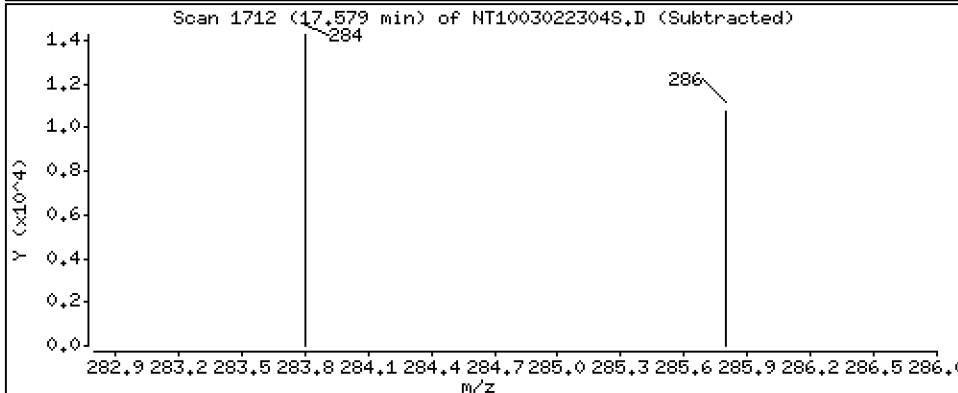
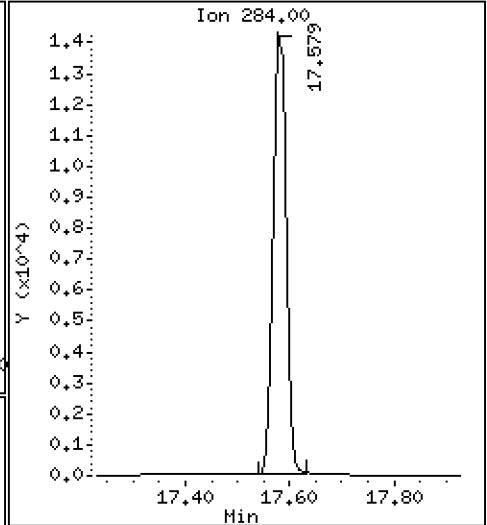
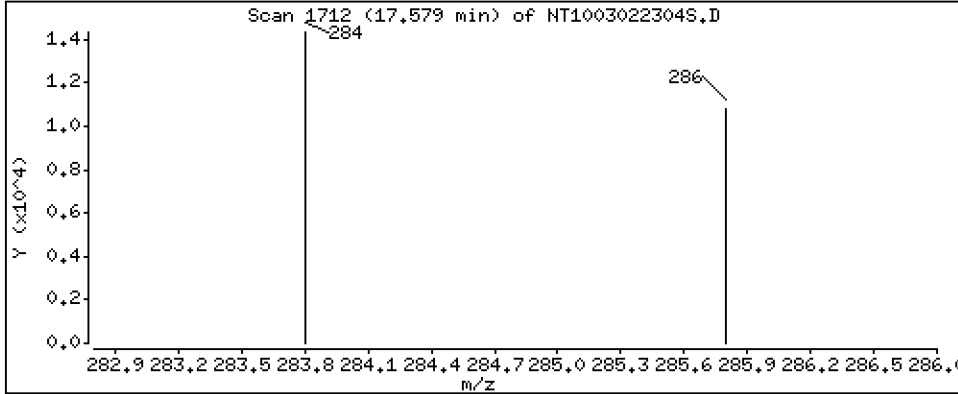
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.1915 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

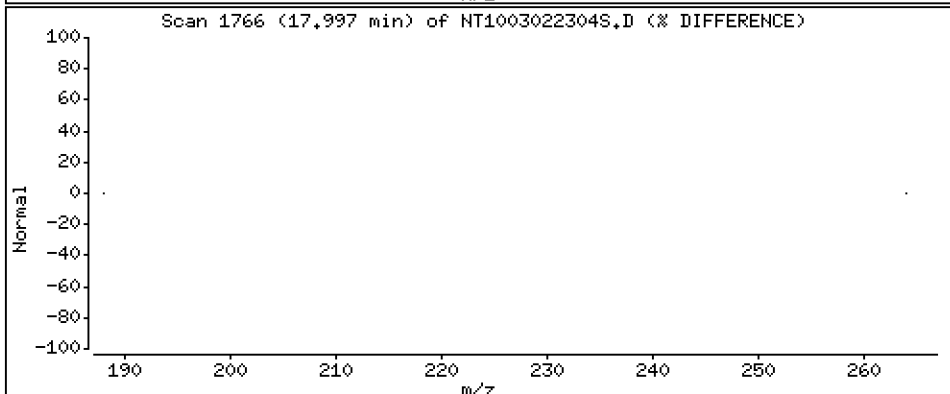
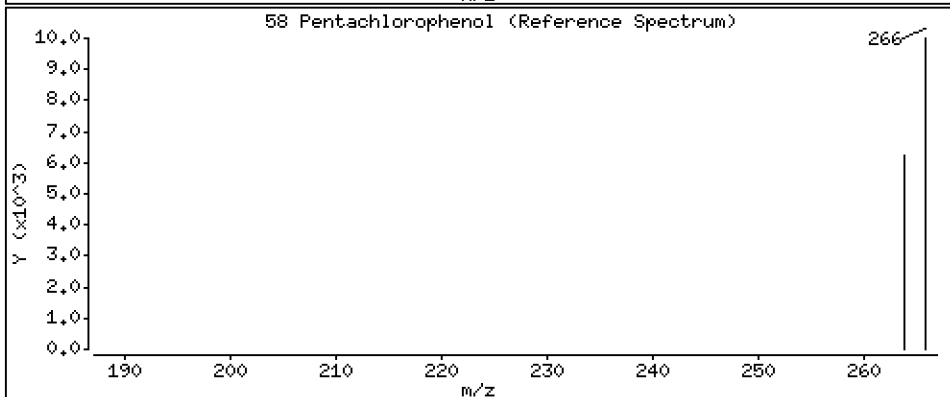
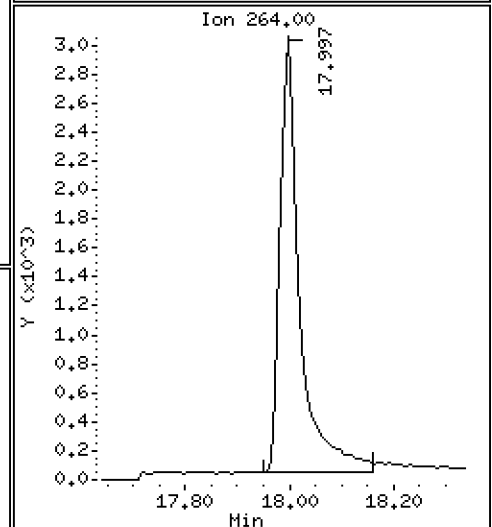
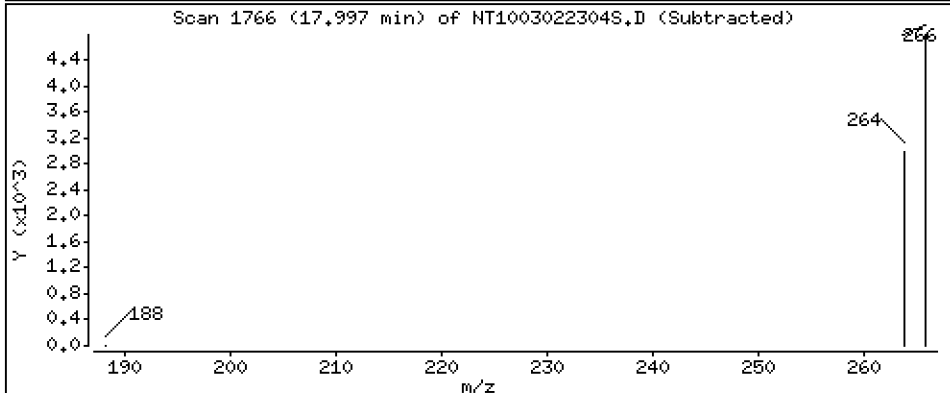
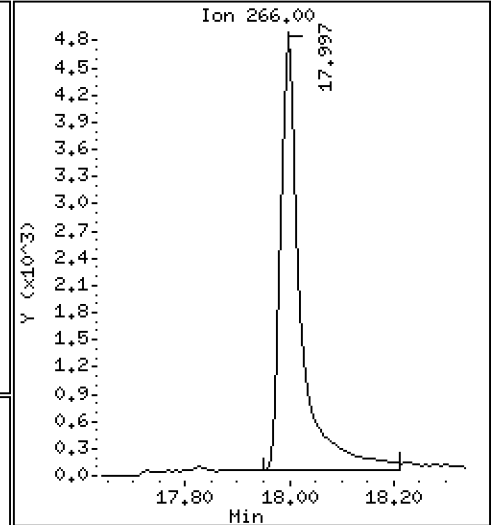
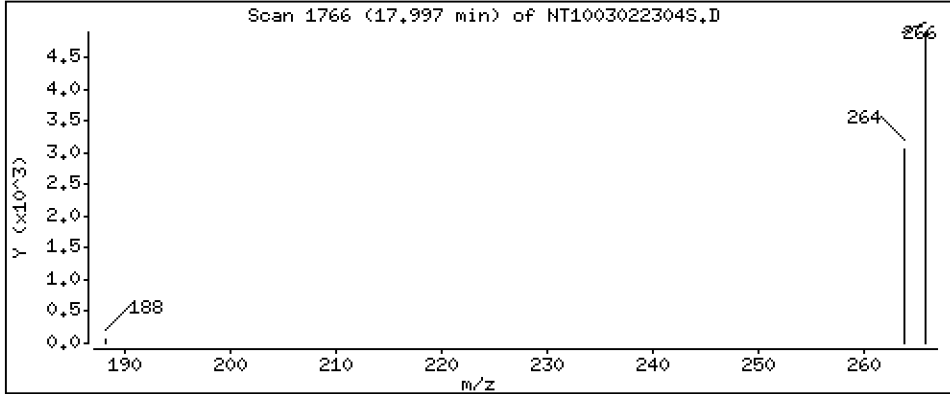
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,2411 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

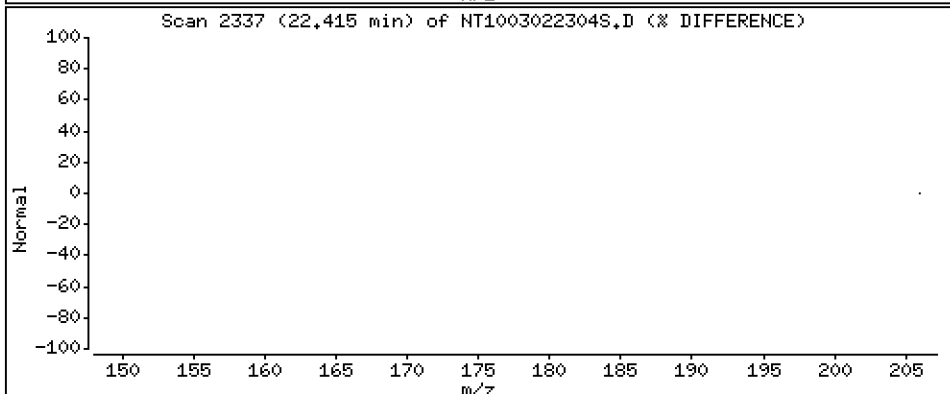
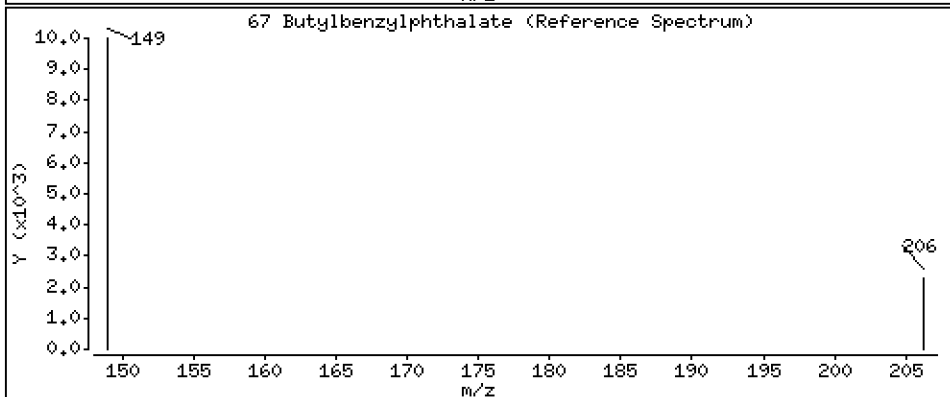
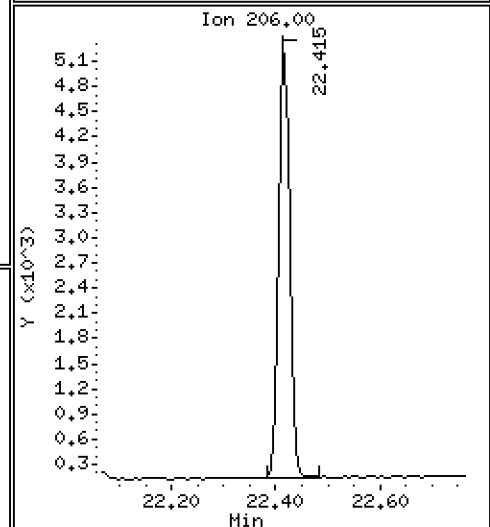
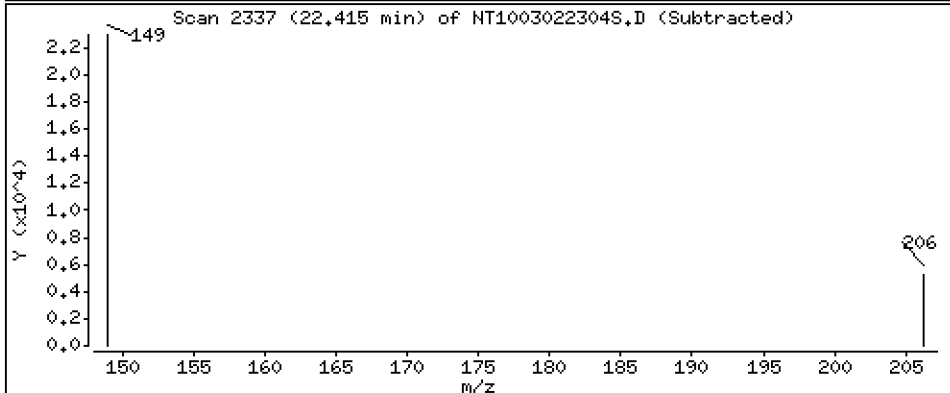
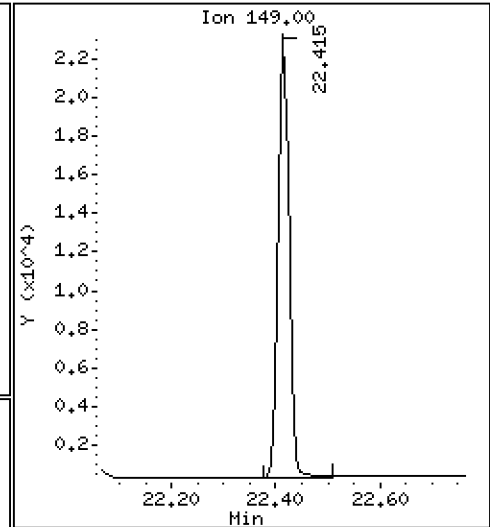
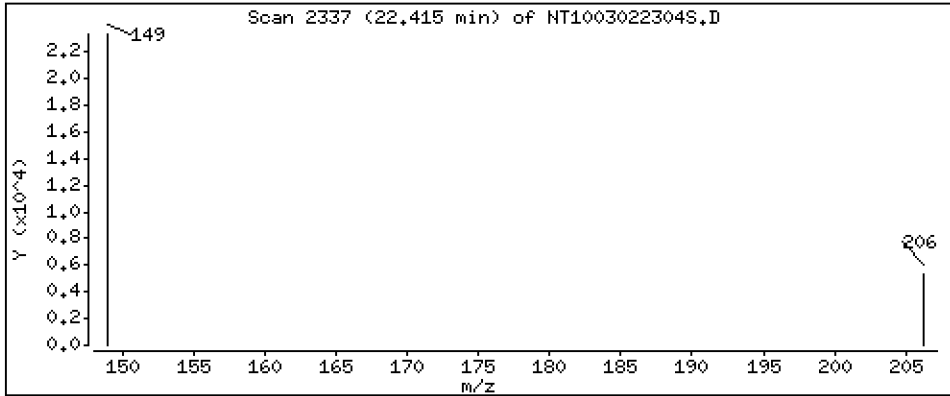
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1126 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

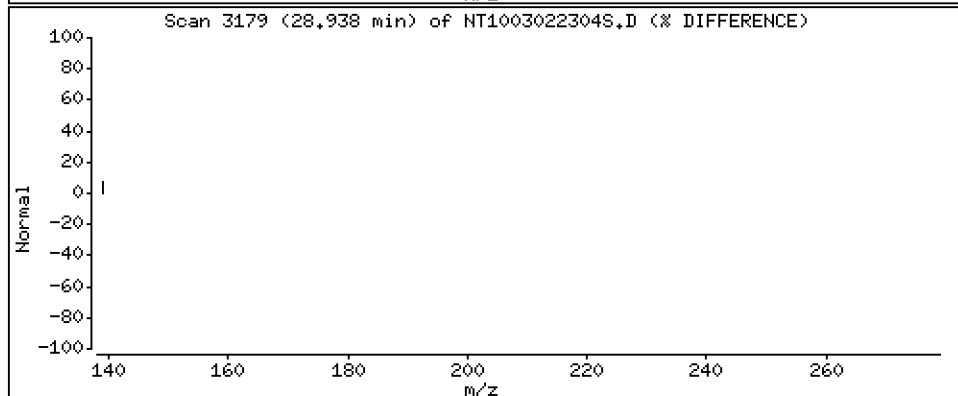
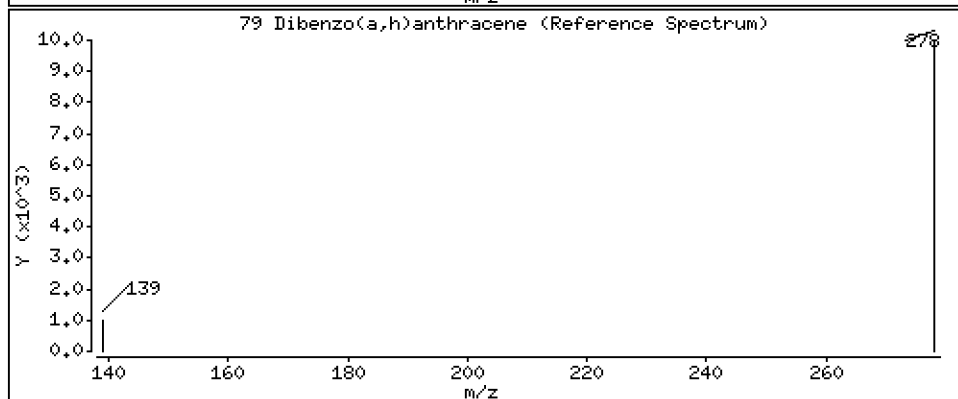
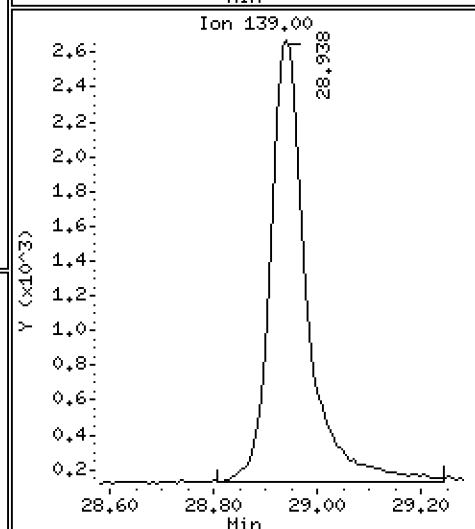
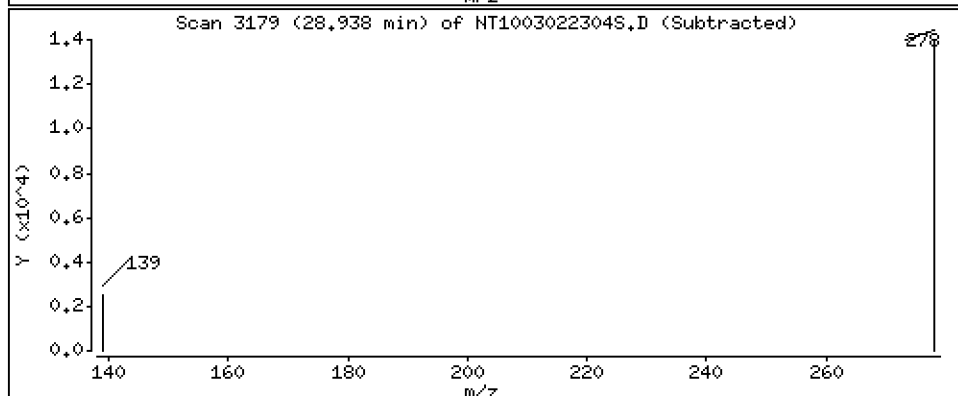
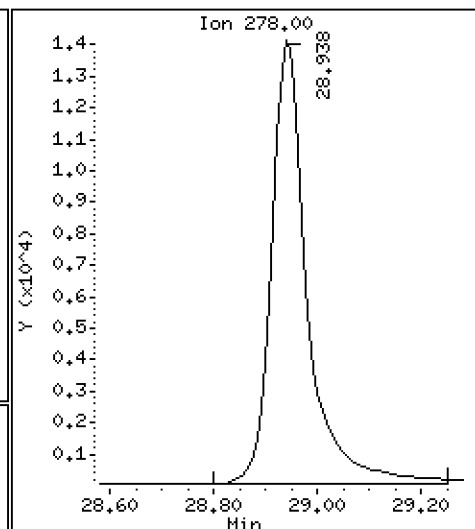
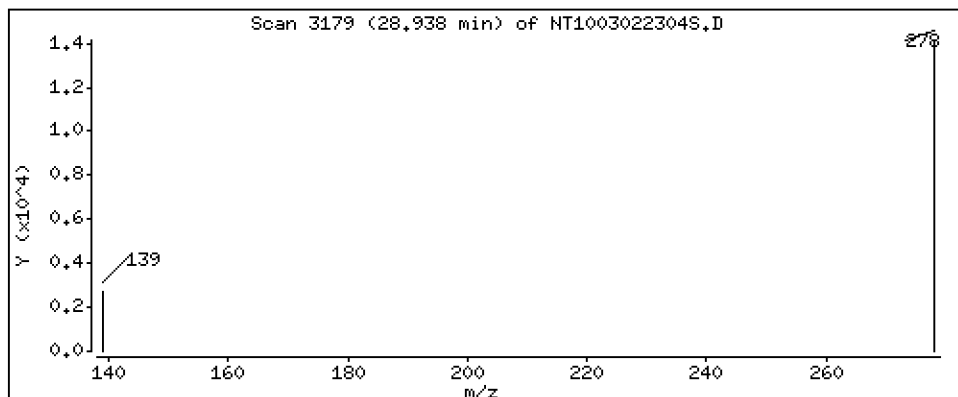
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1592 ug/L



Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

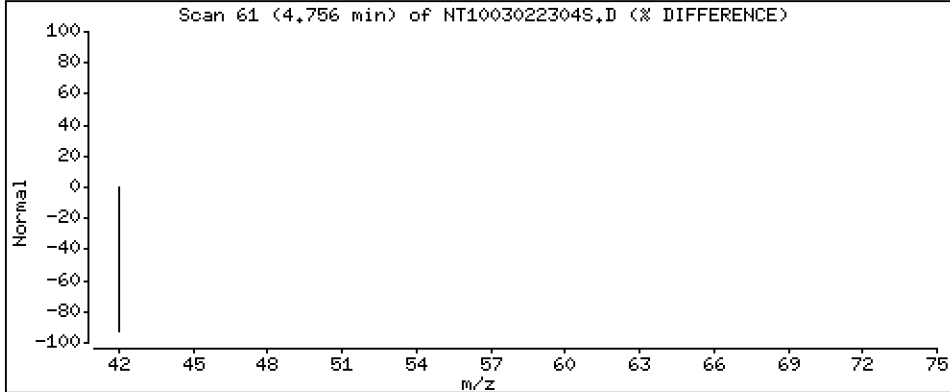
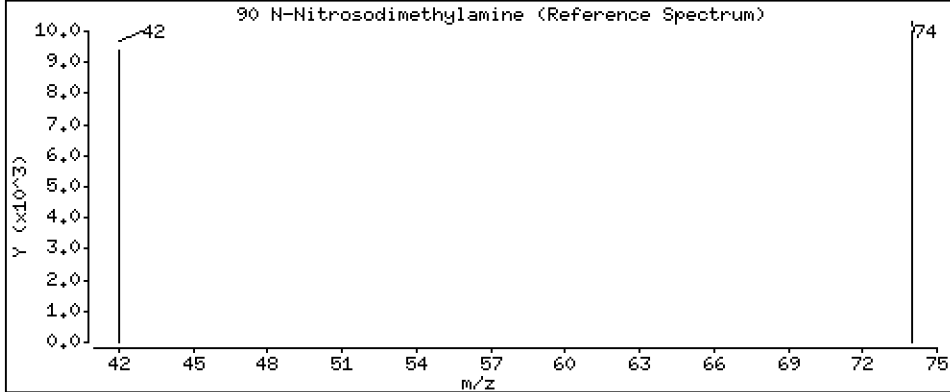
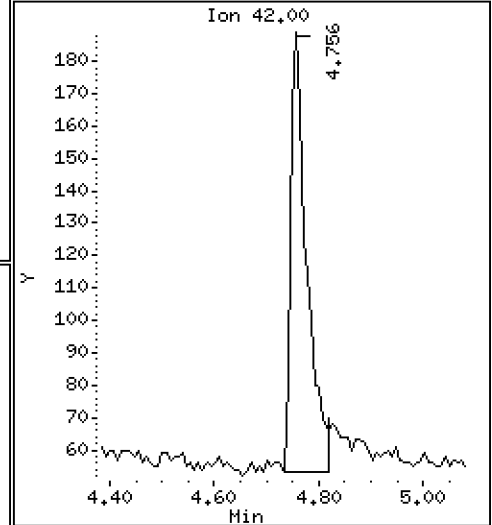
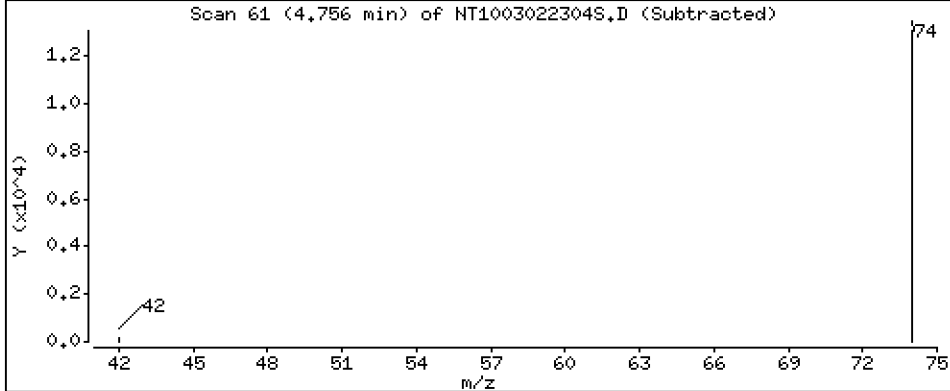
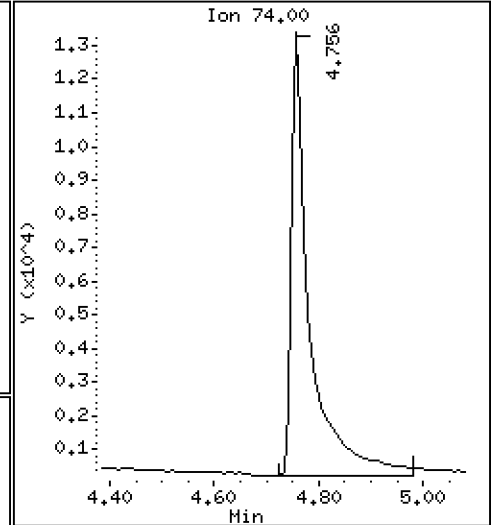
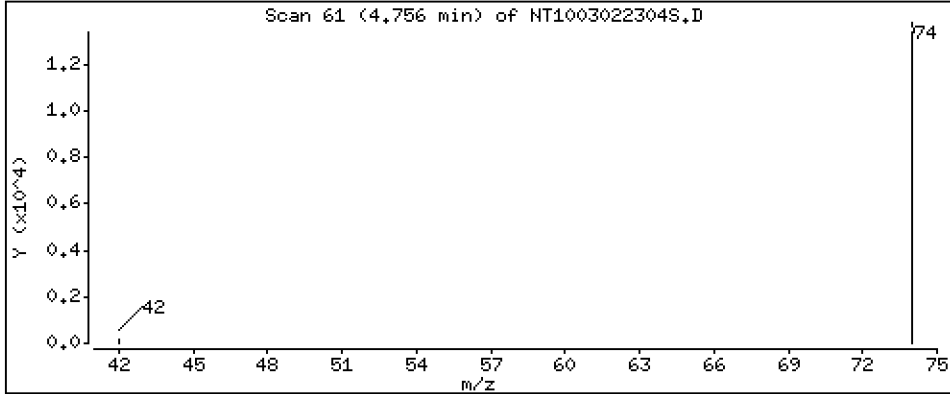
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 0.4218 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D
 Lab Smp Id: SEQ-LCV200
 Inj Date : 02-MAR-2023 16:17 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-LCV200
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.917	6.902	(0.747)	37782	0.28489	0.2849(R)
3 Phenol	94		8.532	8.517	(0.921)	29661	0.15155	0.1516
7 1,3-Dichlorobenzene	146		9.151	9.143	(0.988)	35012	0.20337	0.2034
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.251	(1.000)	464527	4.00000	
9 1,4-Dichlorobenzene	146		9.290	9.282	(1.003)	33436	0.19976	0.1998
11 Benzyl alcohol	79		9.484	9.476	(1.024)	15113	0.13918	0.1392
12 1,2-Dichlorobenzene	146		9.570	9.562	(1.034)	32614	0.20272	0.2027
13 2-Methylphenol	108		9.671	9.655	(1.044)	18381	0.15615	0.1561
15 4-Methylphenol	108		9.958	9.942	(1.075)	17186	0.14036	0.1404
16 N-Nitroso-di-n-propylamine	70		9.981	9.981	(1.078)	18106	0.20774	0.2077
22 2,4-Dimethylphenol	107		11.006	10.997	(0.938)	46903	0.32731	0.3273
24 Benzoic acid	105		11.057	11.074	(0.943)	20985	0.26701	0.2670
26 1,2,4-Trichlorobenzene	180		11.608	11.600	(0.989)	23866	0.19648	0.1965
* 27 Naphthalene-d8	136		11.731	11.723	(1.000)	1687615	4.00000	
30 Hexachlorobutadiene	225		12.001	11.994	(1.023)	16292	0.18901	0.1890
39 Dimethylphthalate	163		14.749	14.741	(0.963)	56888	0.19600	0.1960
* 42 Acenaphthene-d10	162		15.321	15.314	(1.000)	914095	4.00000	
50 Diethylphthalate	149		16.211	16.203	(1.058)	51849	0.18943	0.1894
54 N-Nitrosodiphenylamine	169		16.698	16.690	(0.907)	49282	0.19003	0.1900
57 Hexachlorobenzene	284		17.578	17.578	(0.955)	23243	0.19151	0.1915

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.996	17.988	(0.978)	12831	0.24111	0.2411
* 59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1602467	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	23197	0.17600	0.1760(R)
67 Butylbenzylphthalate	149	22.415	22.414	(0.957)	30986	0.11263	0.1126
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1629844	4.00000	
* 77 Perylene-d12	264	26.115	26.115	(1.000)	1824689	4.00000	
79 Dibenzo(a,h)anthracene	278	28.937	28.929	(1.108)	67394	0.15916	0.1592
90 N-Nitrosodimethylamine	74	4.755	4.732	(0.514)	33119	0.42181	0.4218

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022304S.D
 Lab Smp Id: SEQ-LCV200
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	464527	-5.86
27 Naphthalene-d8	1779056	889528	3558112	1687615	-5.14
42 Acenaphthene-d10	954569	477285	1909138	914095	-4.24
59 Phenanthrene-d10	1596290	798145	3192580	1602467	0.39
69 Chrysene-d12	1649110	824555	3298220	1629844	-1.17
77 Perylene-d12	1901958	950979	3803916	1824689	-4.06

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.09
27 Naphthalene-d8	11.72	11.22	12.22	11.73	0.07
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022304S.D

Lab ID: SEQ-LCV200

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 16:17

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003022303S.D

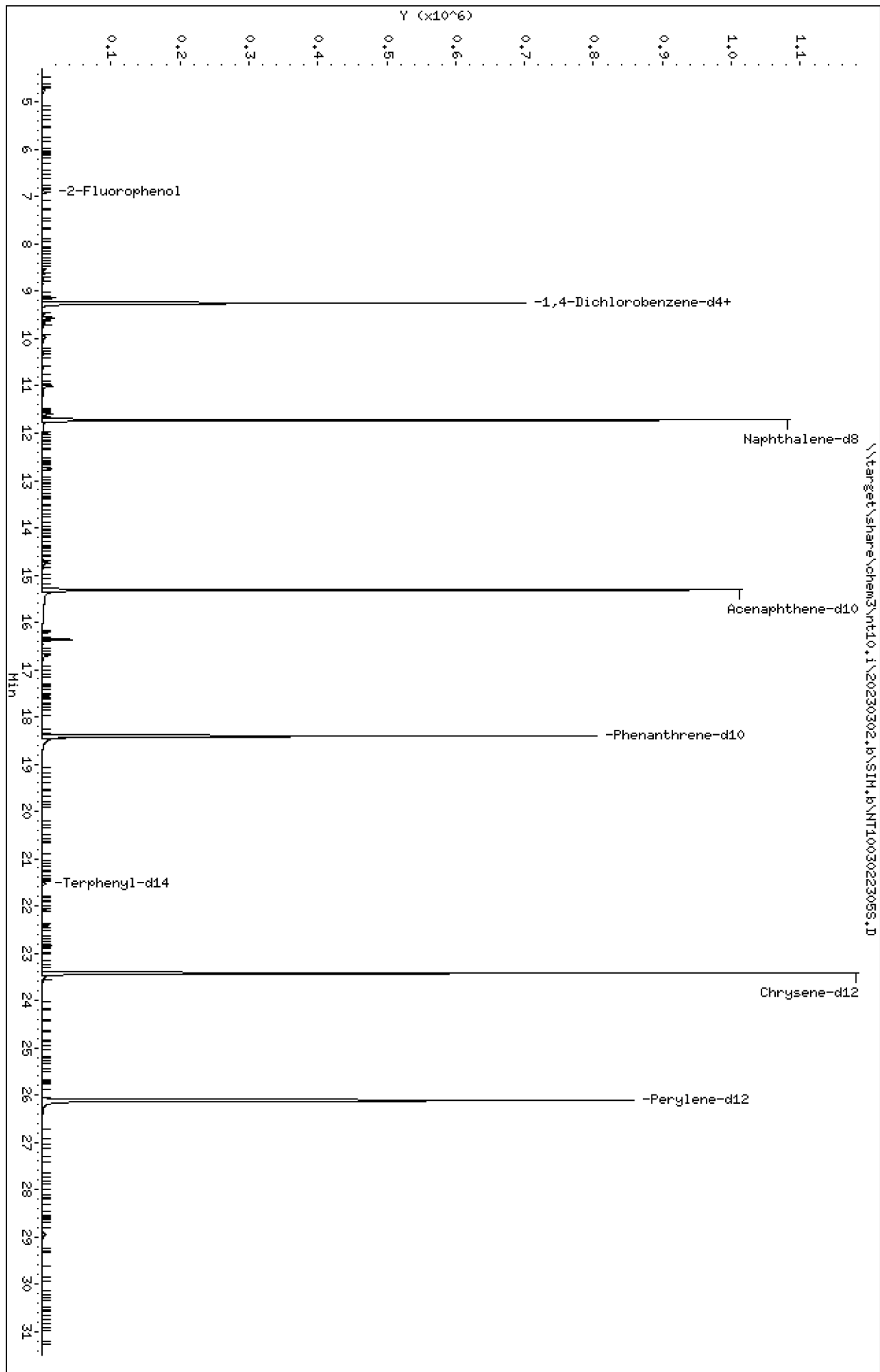
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIH.B\NT1003022305S.D
Date : 02-MAR-2023 16:56
Client ID:
Sample Info: SED-LCV100
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

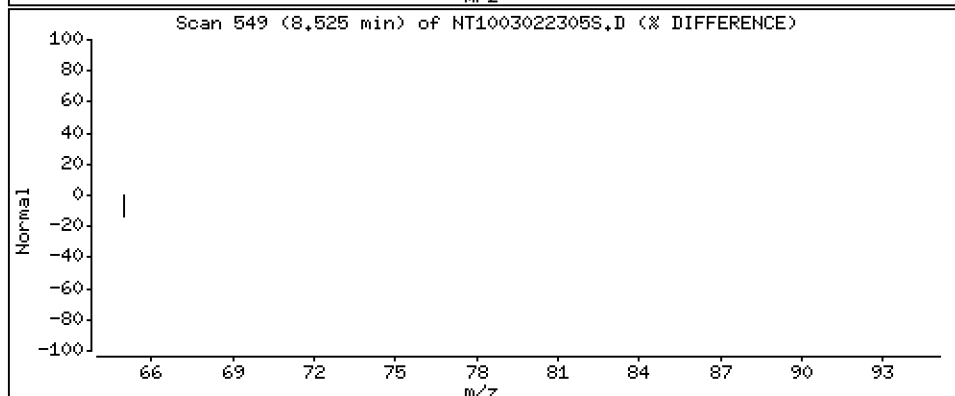
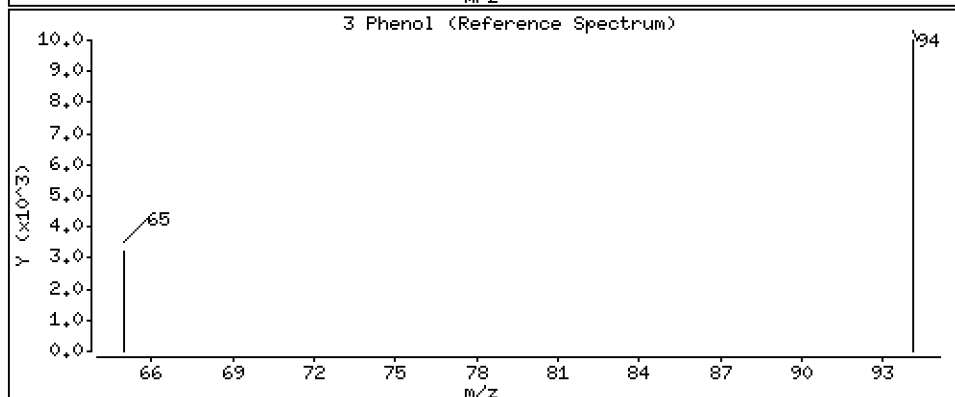
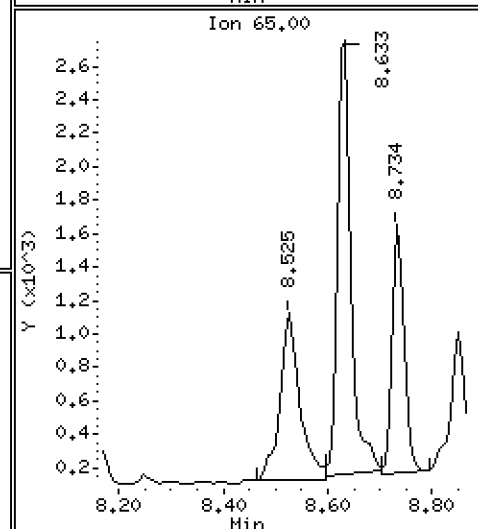
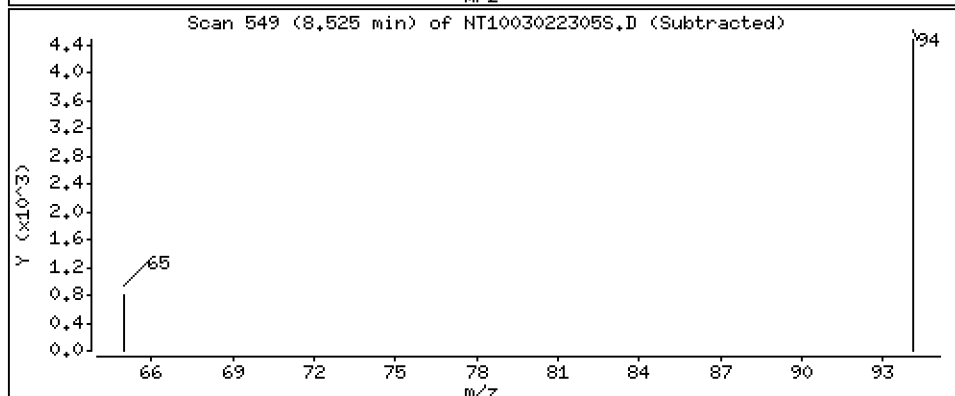
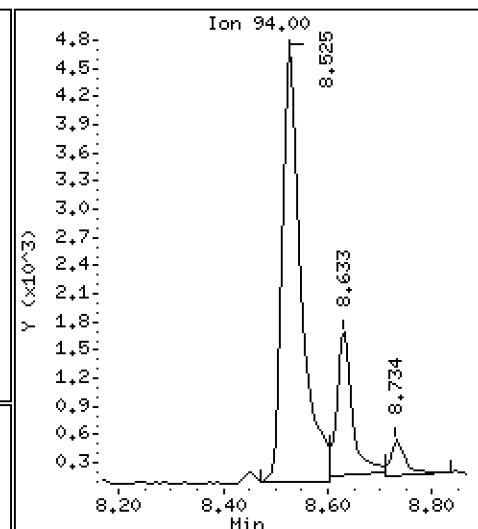
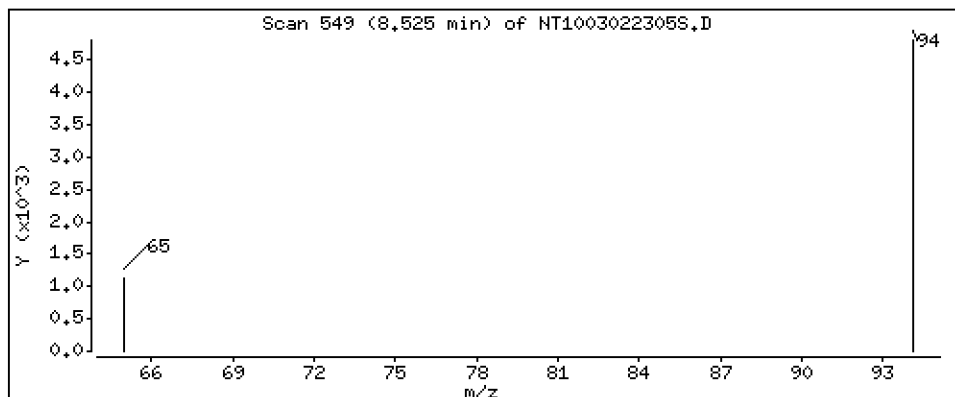
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.06121 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

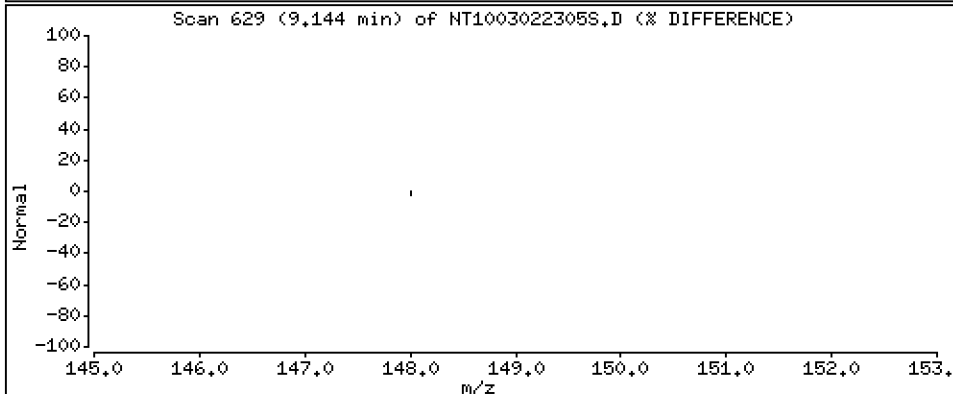
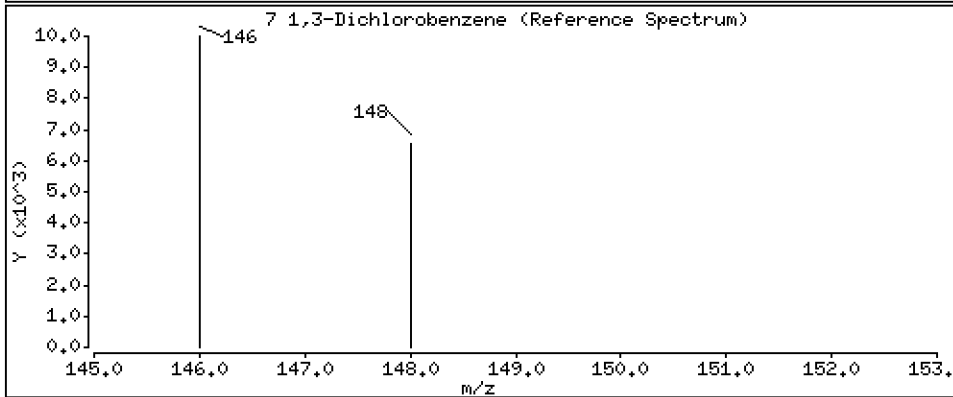
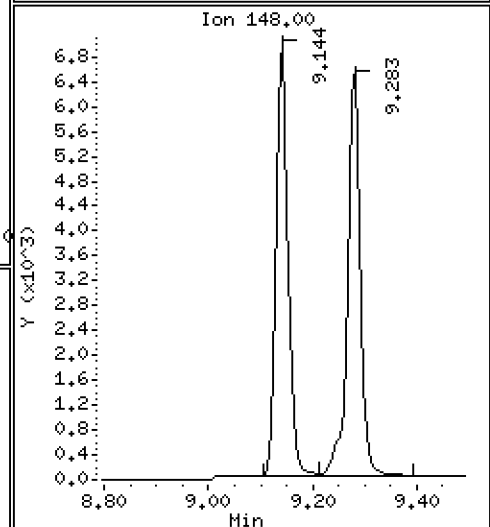
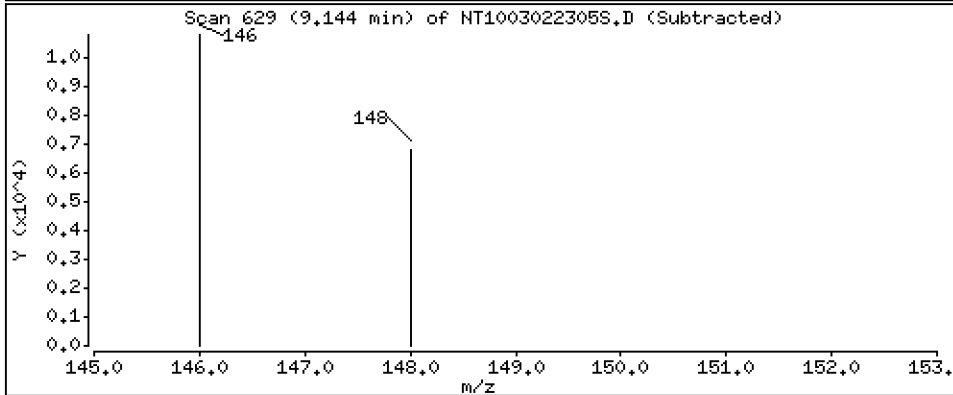
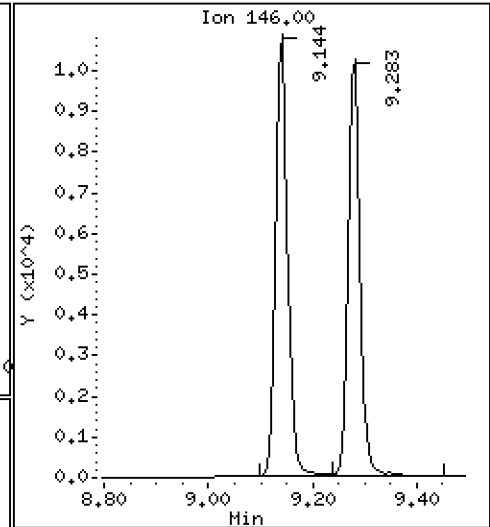
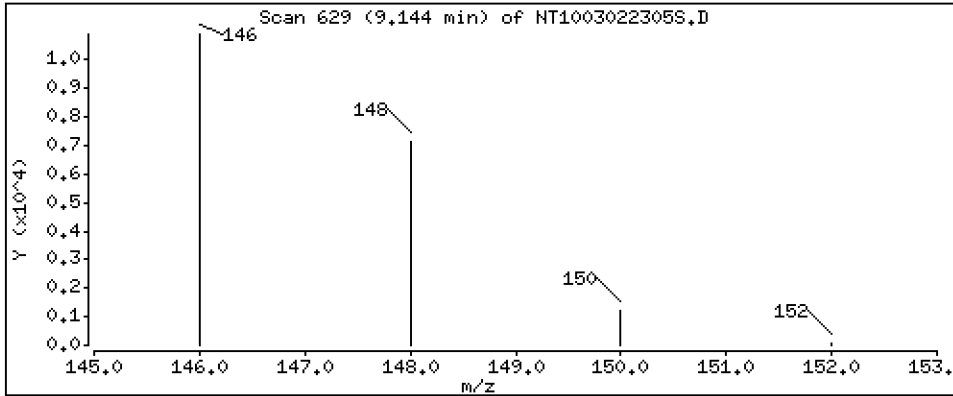
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.1034 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

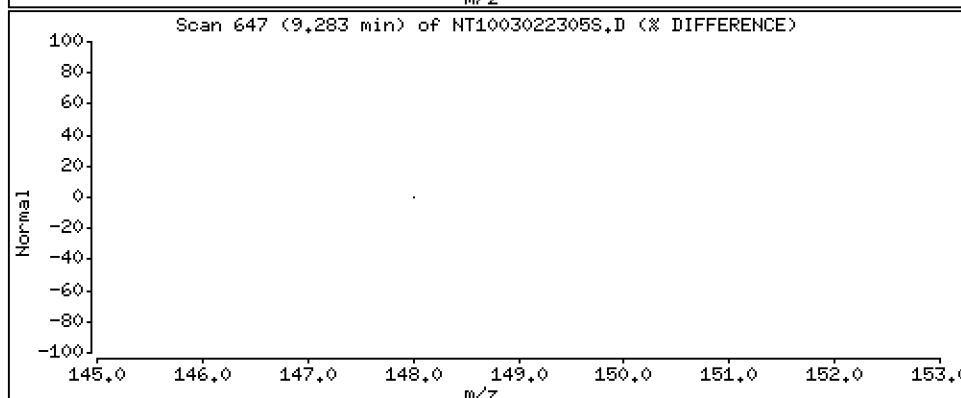
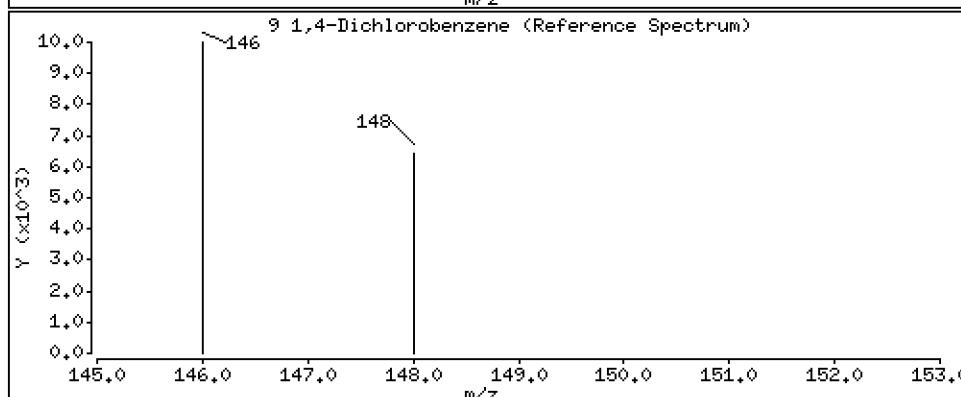
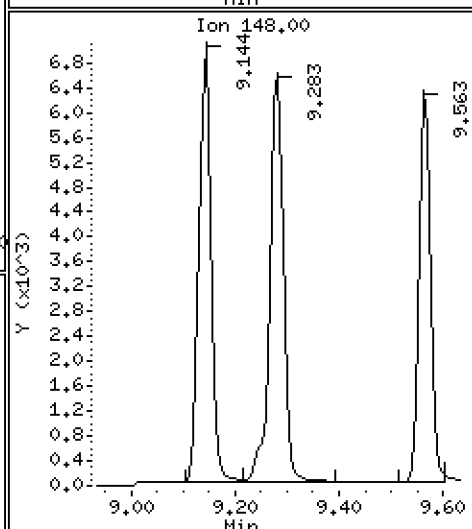
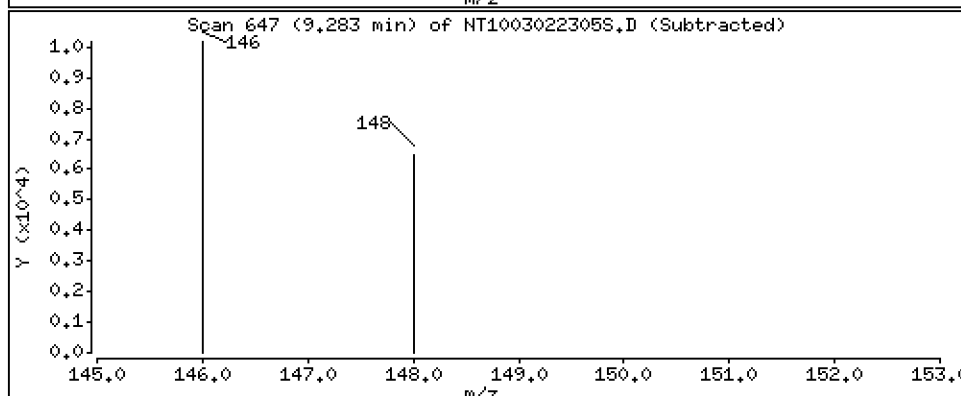
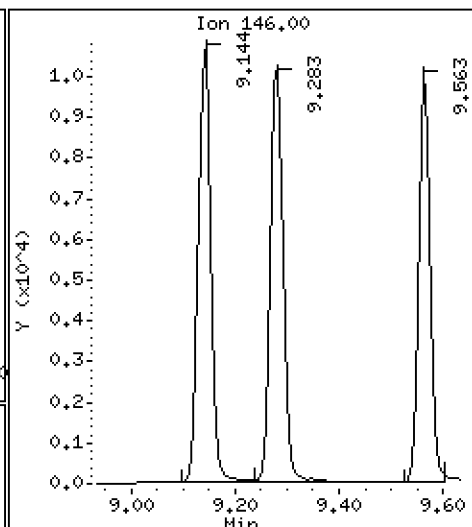
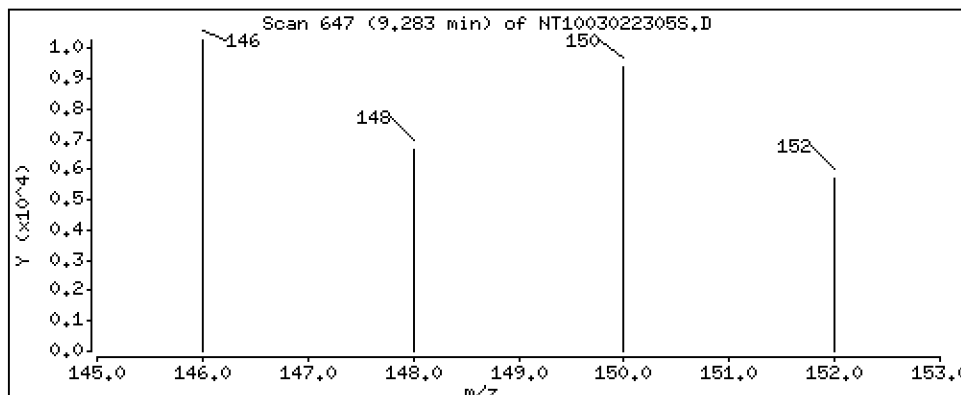
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.1031 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

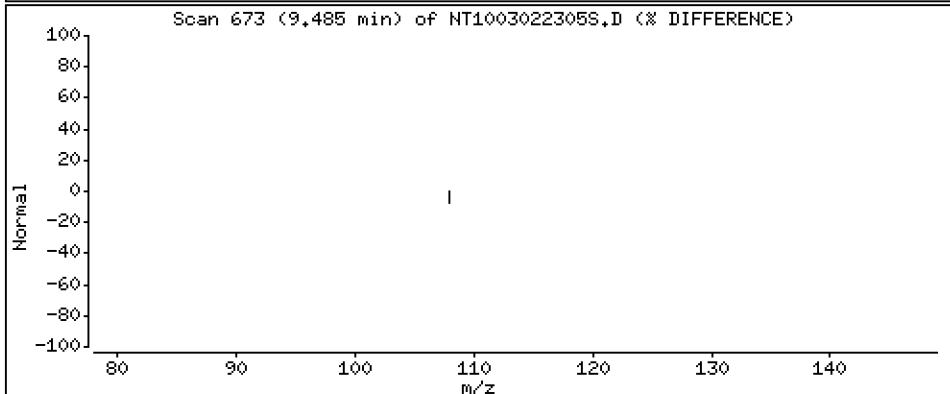
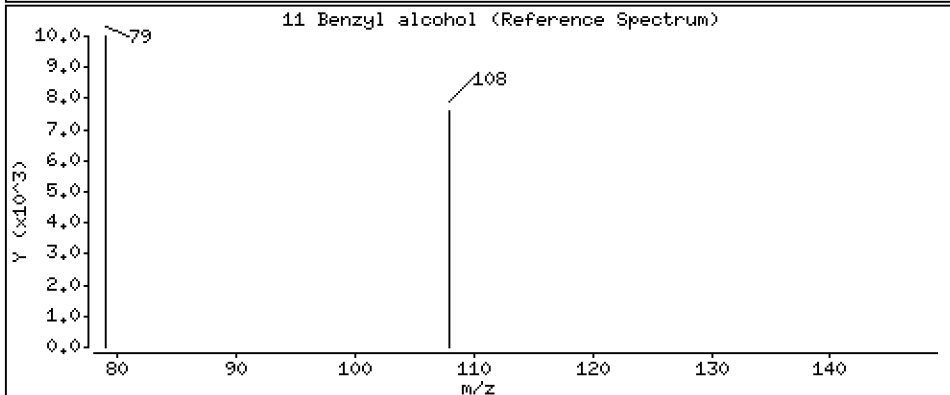
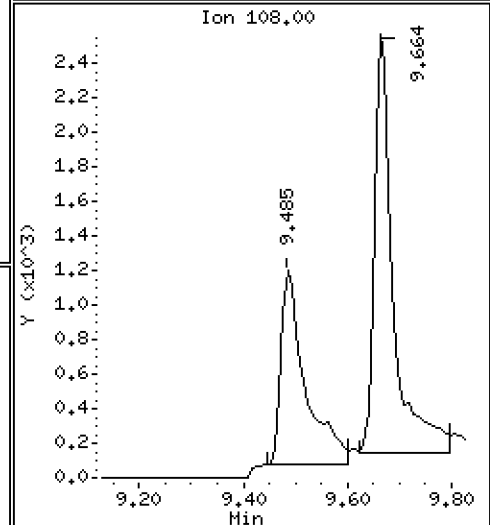
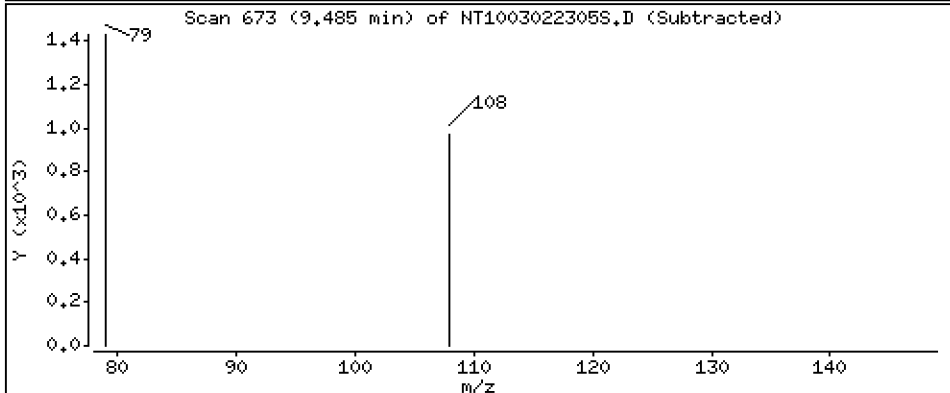
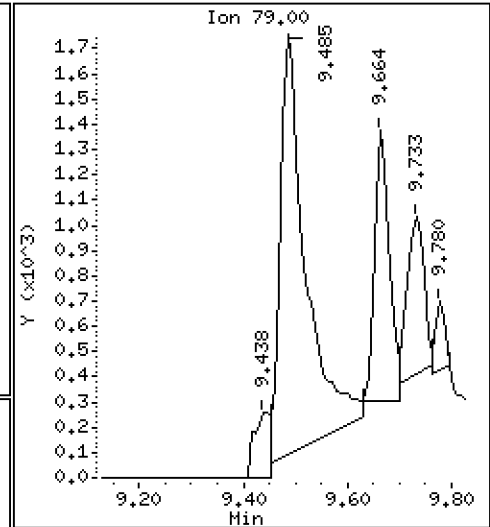
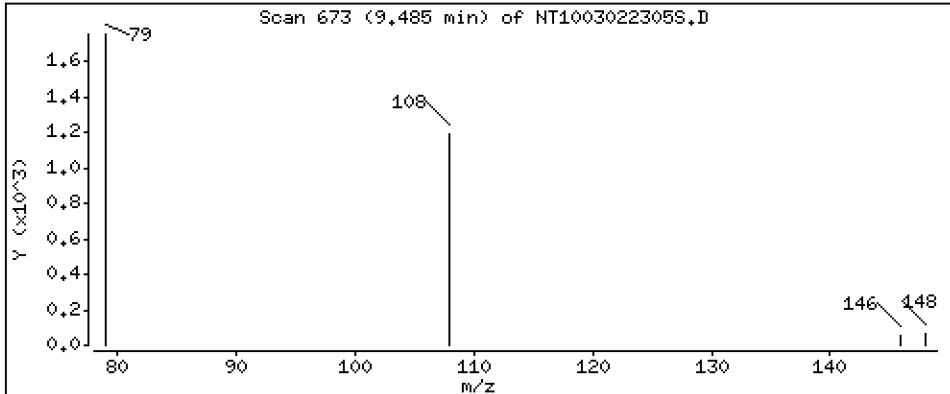
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.05313 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

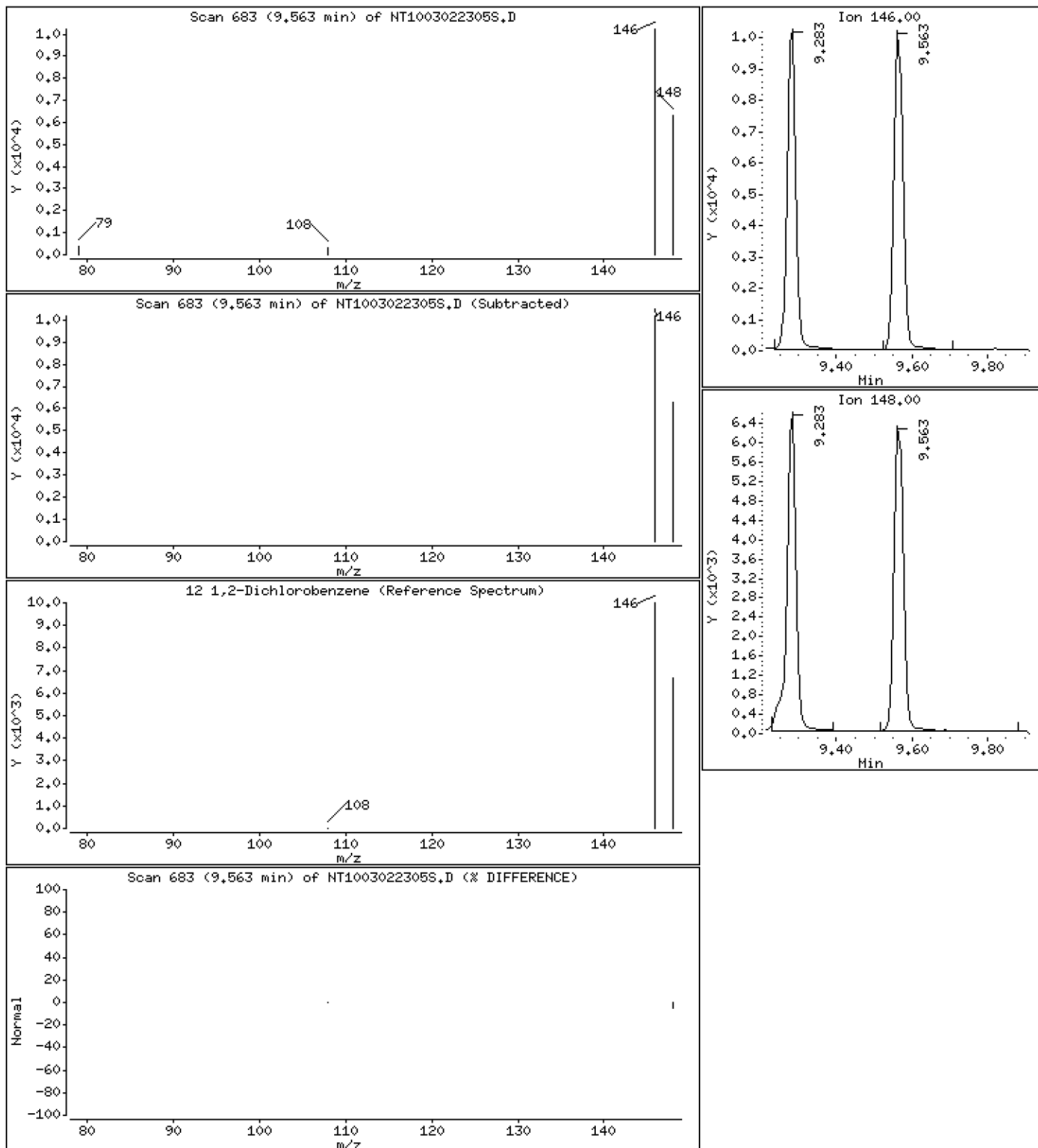
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.1026 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

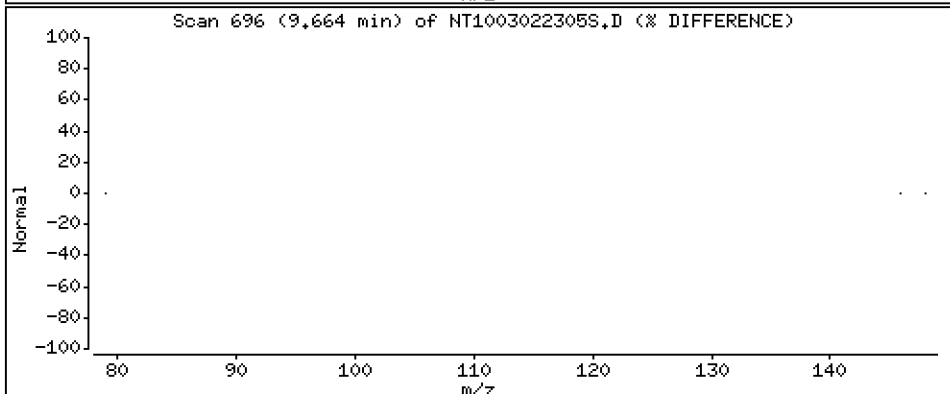
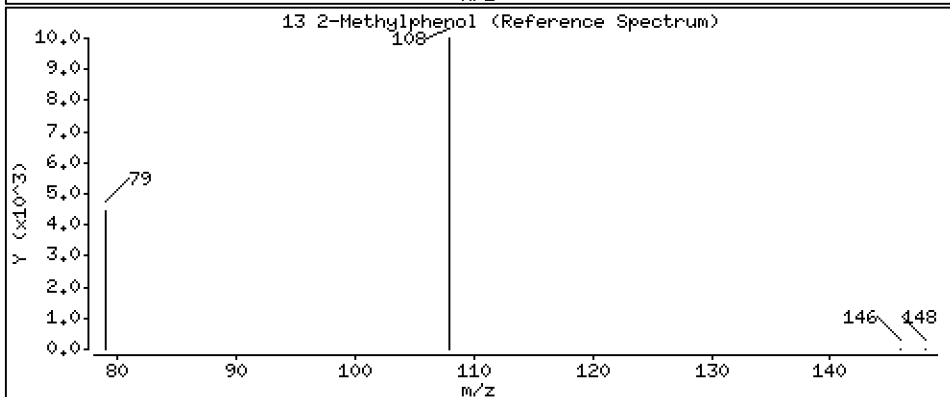
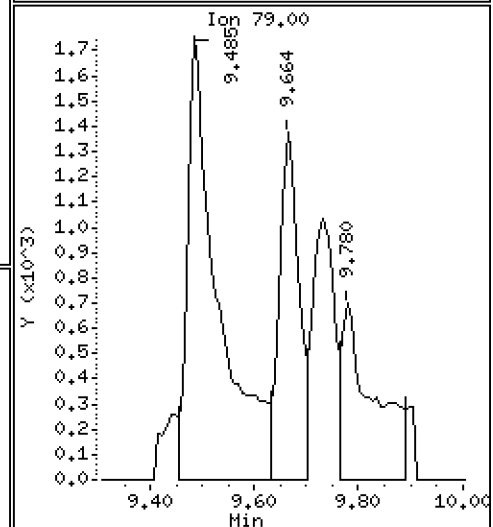
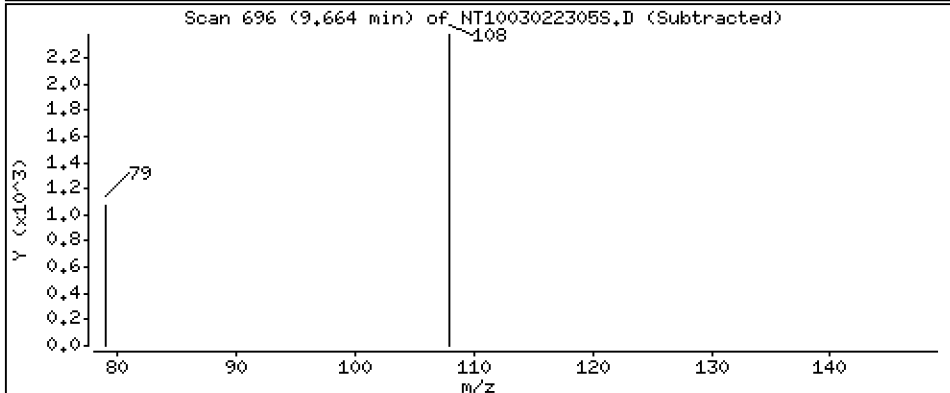
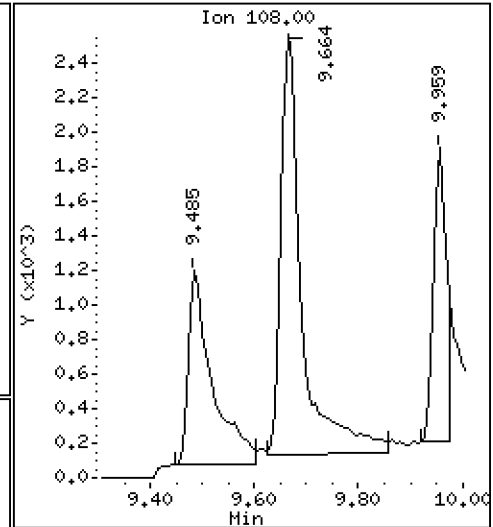
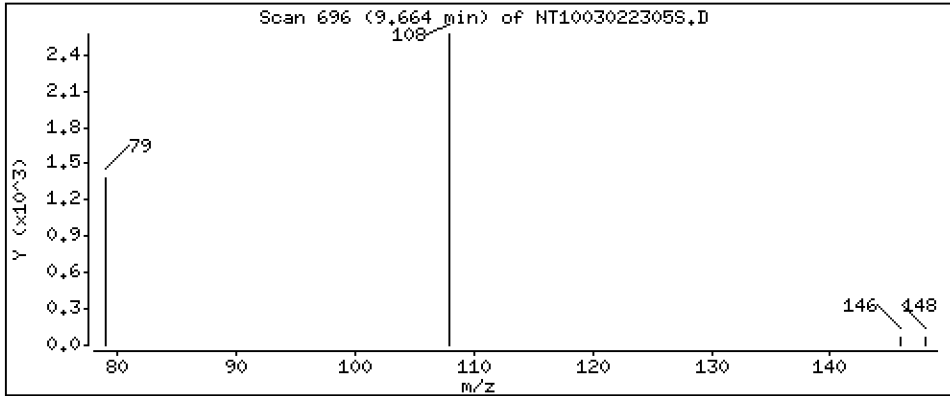
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.05859 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

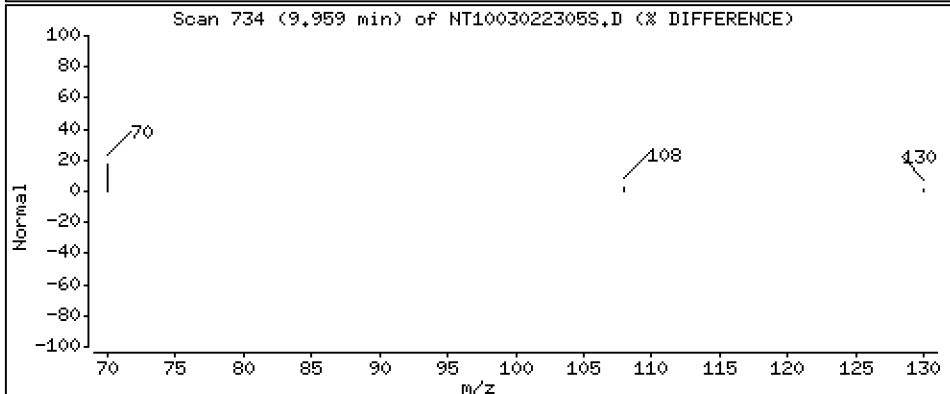
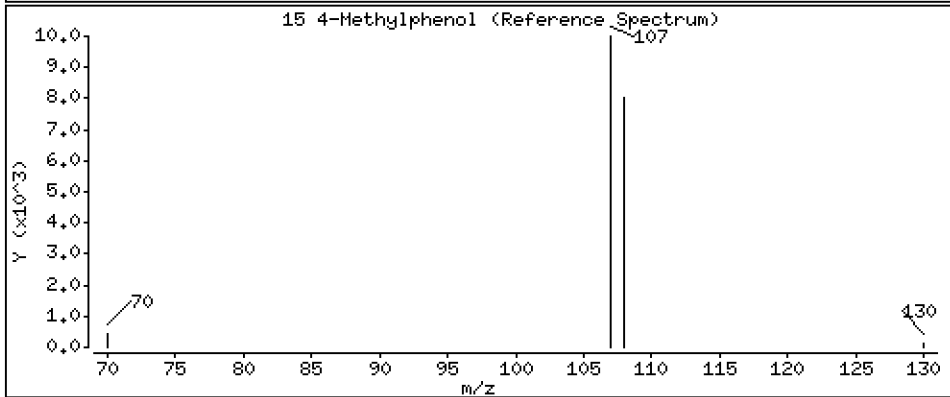
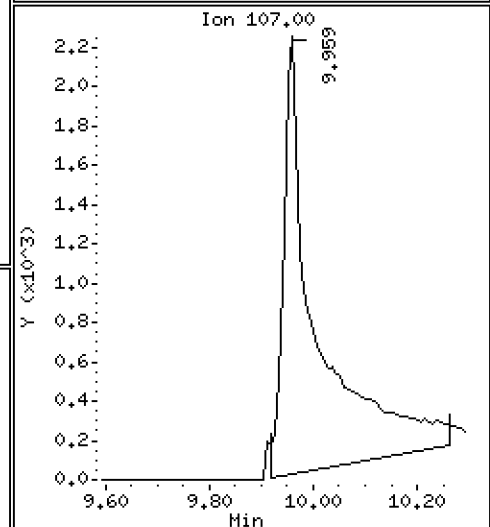
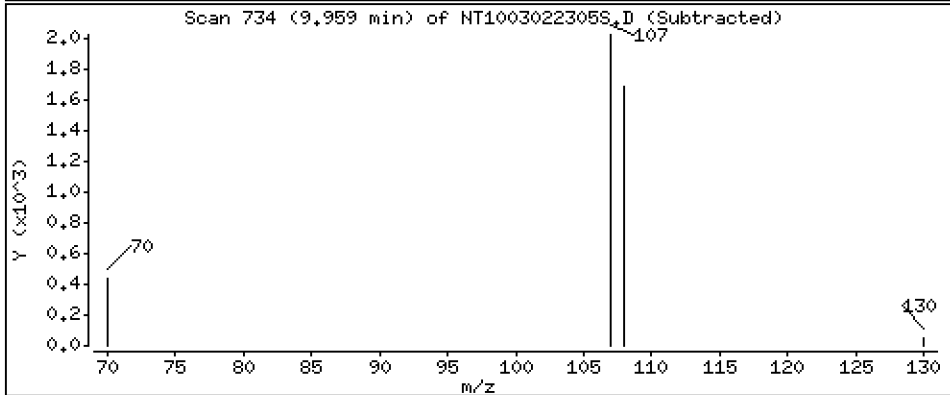
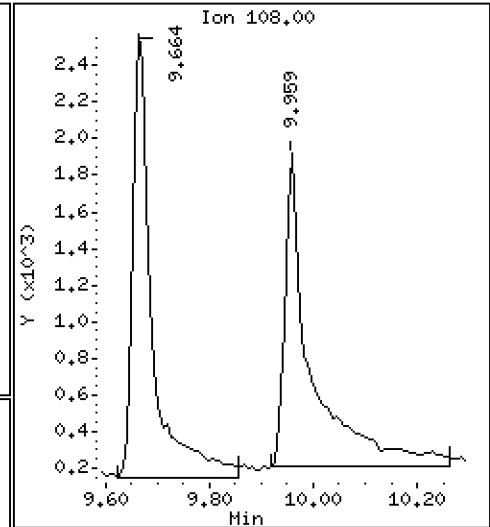
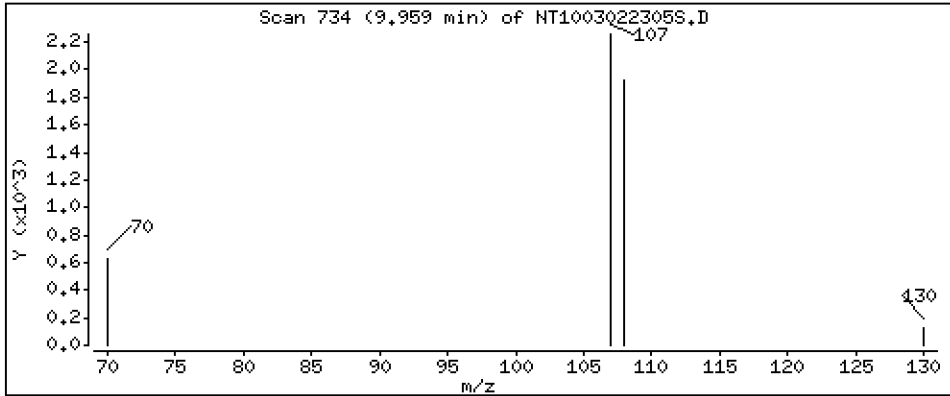
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.05077 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

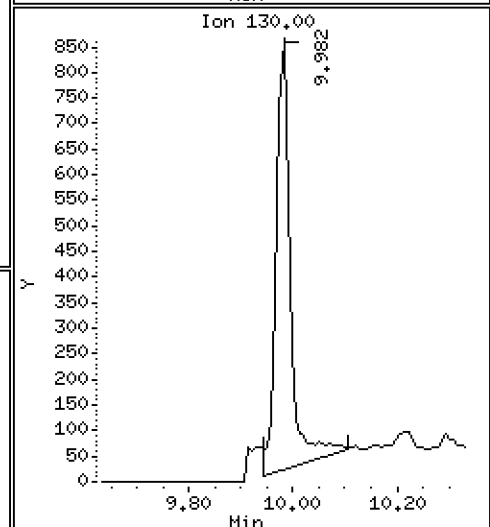
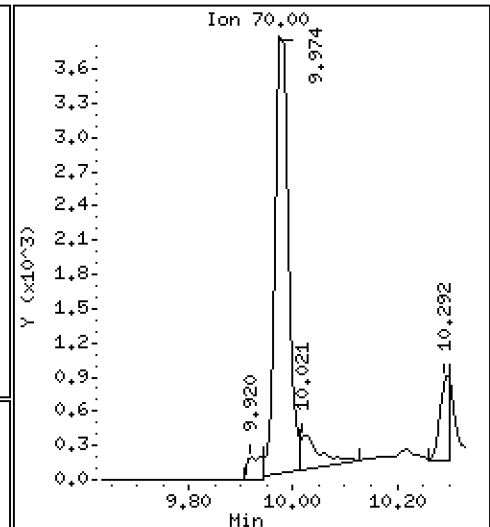
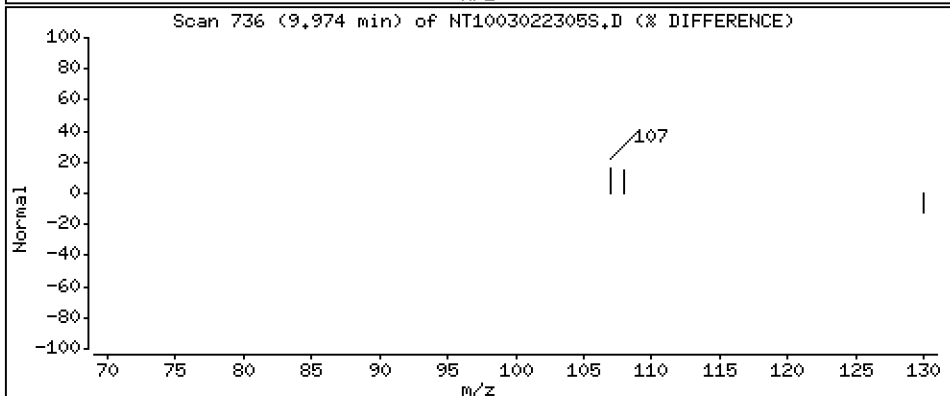
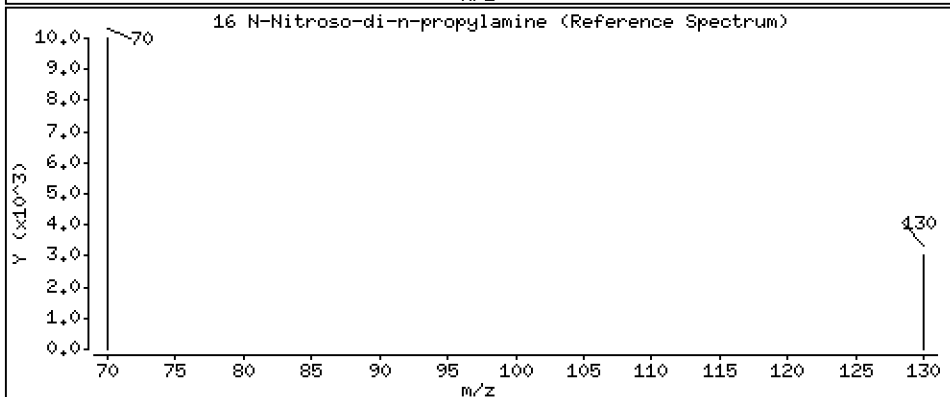
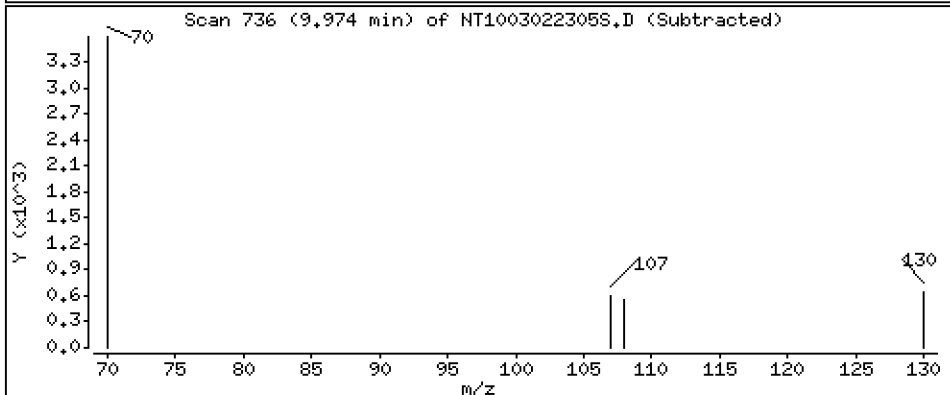
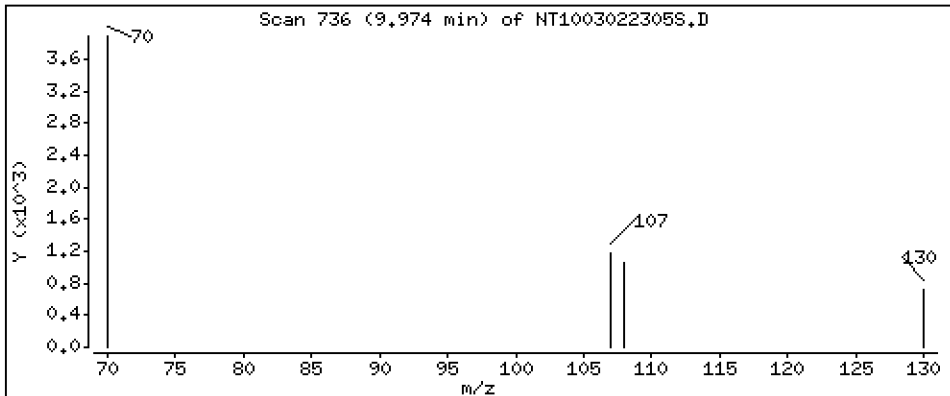
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,07785 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

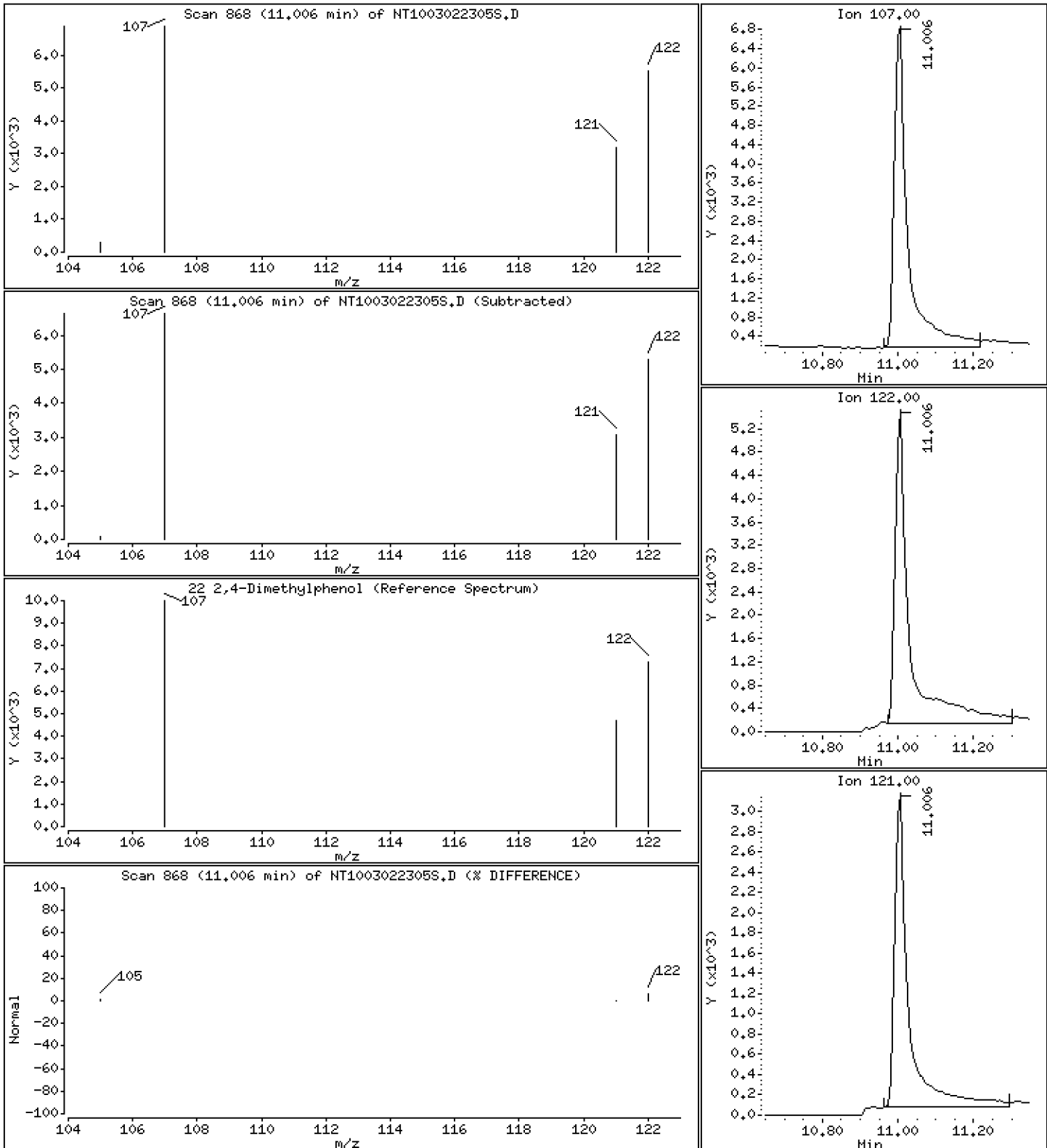
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.1242 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

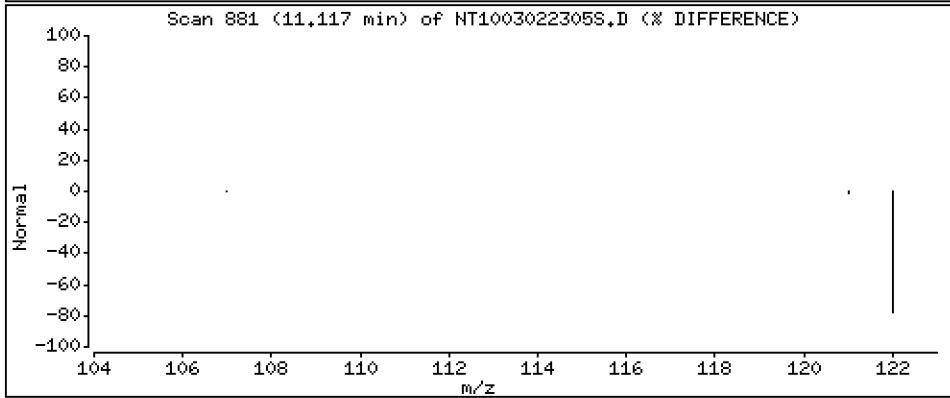
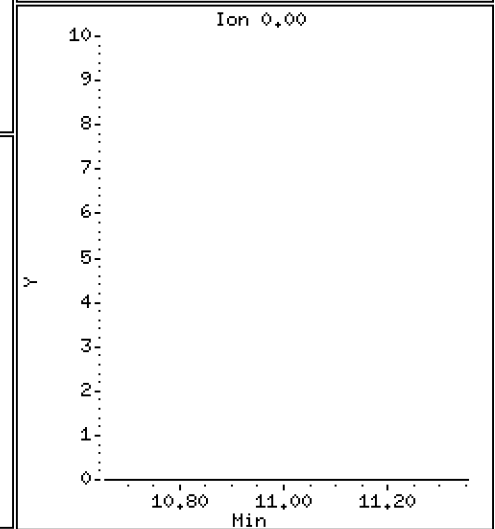
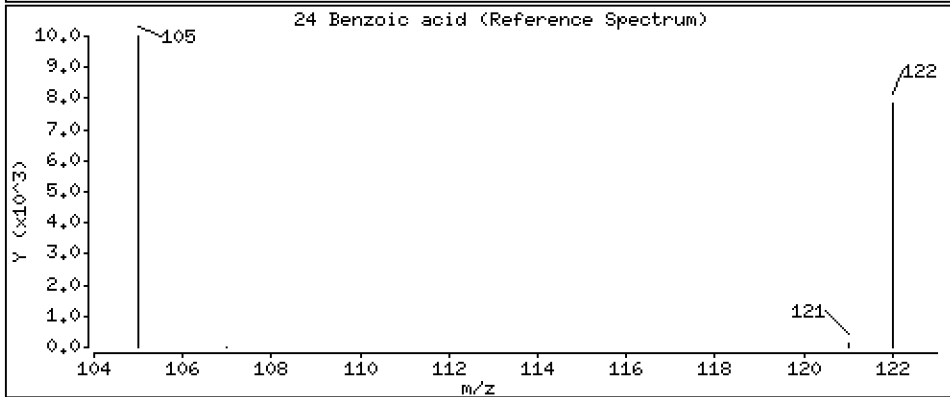
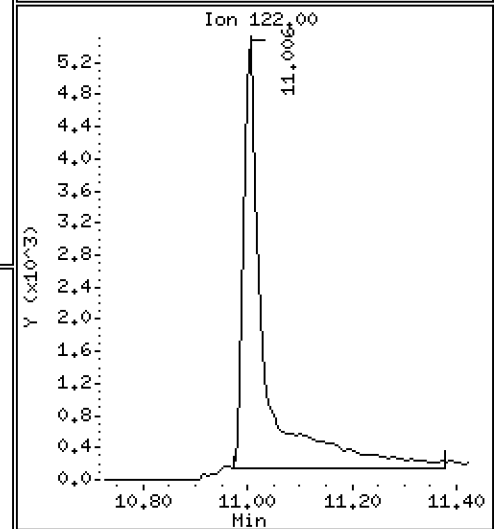
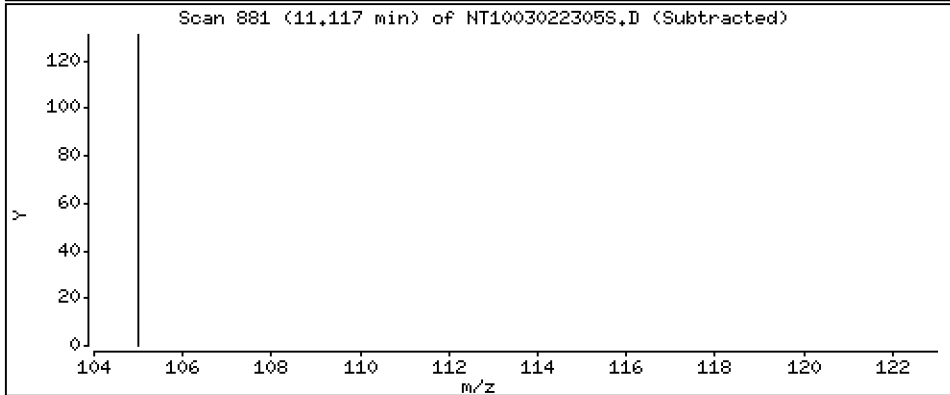
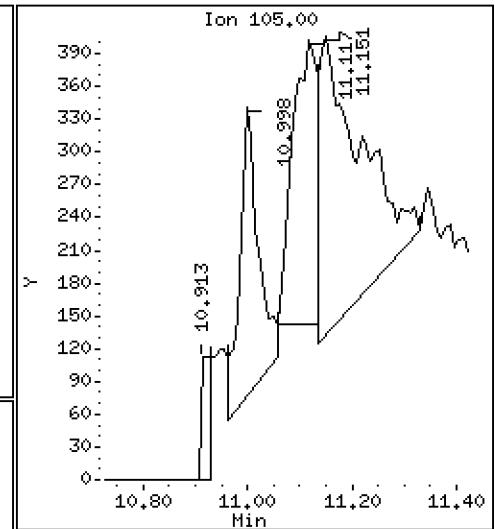
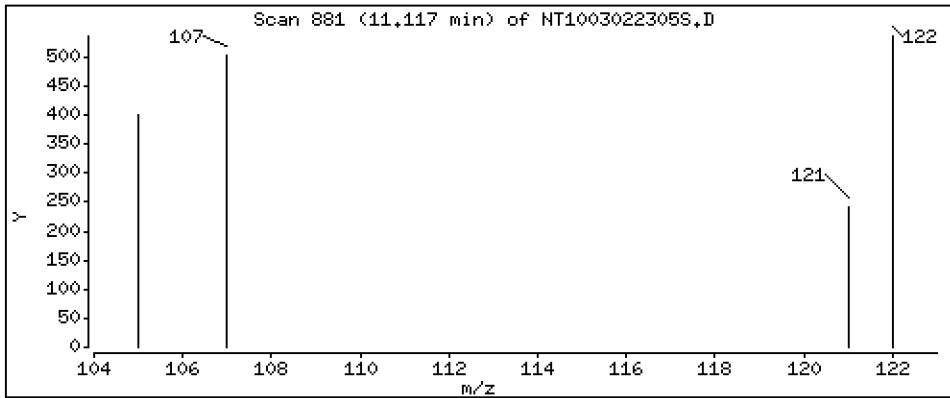
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.01144 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

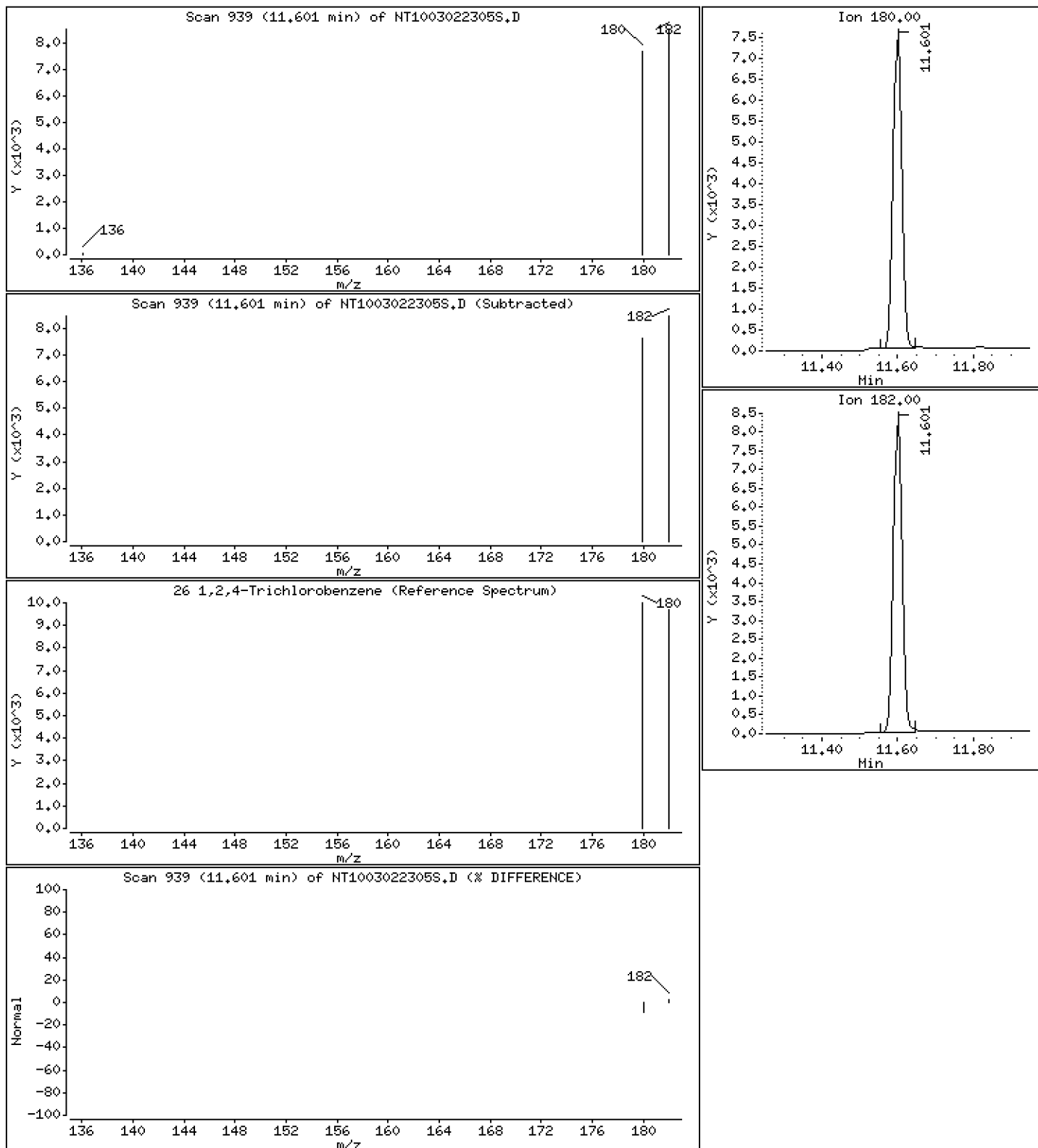
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,09977 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

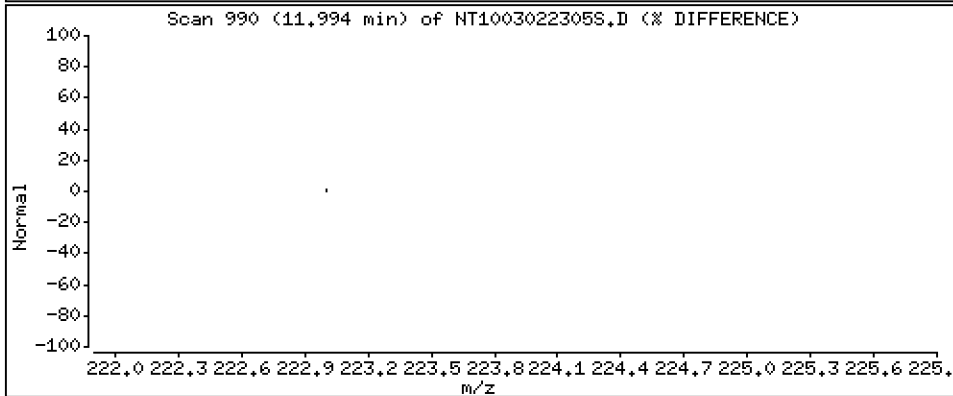
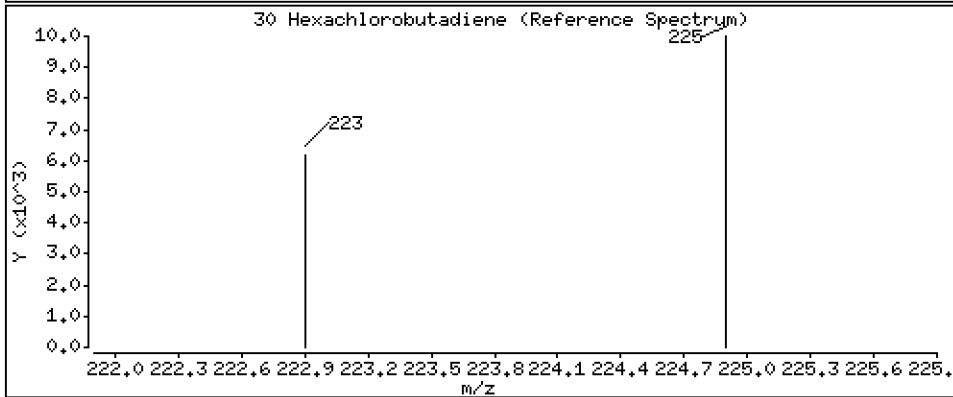
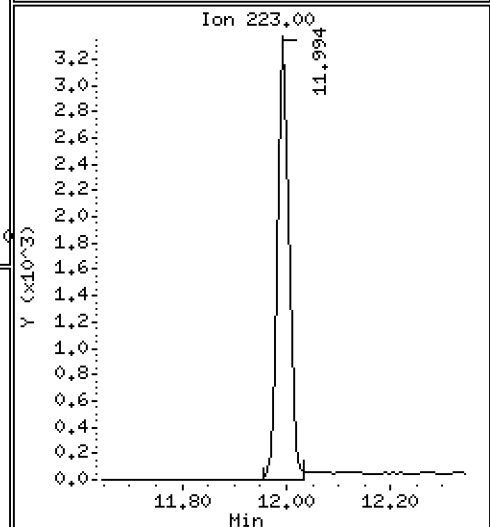
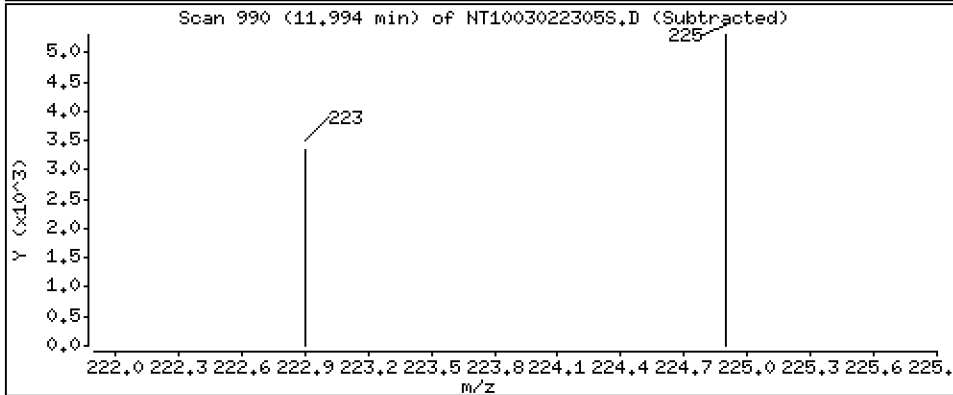
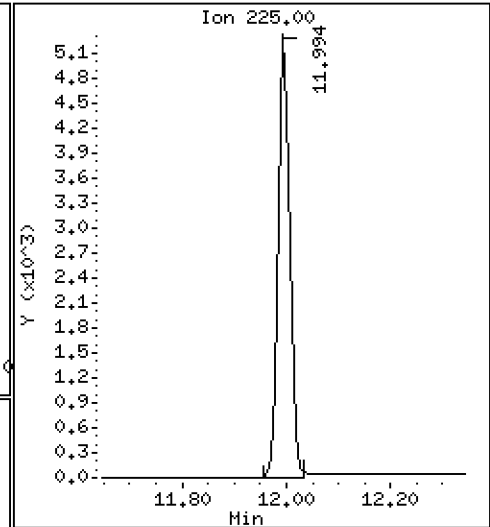
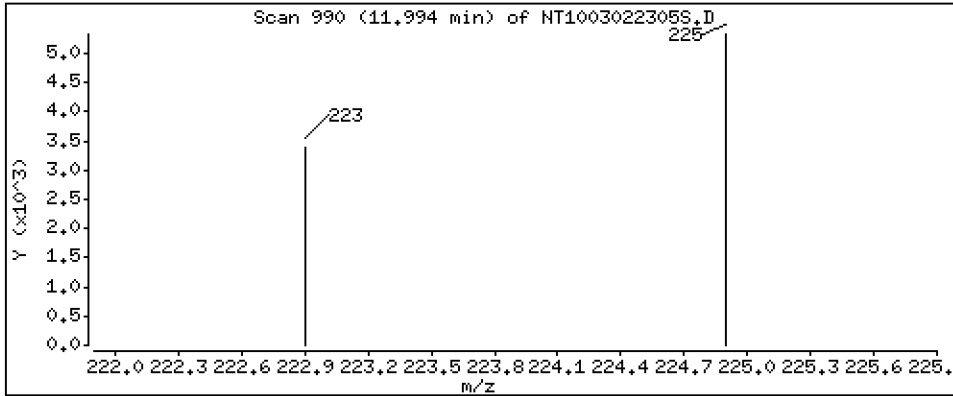
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,09705 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

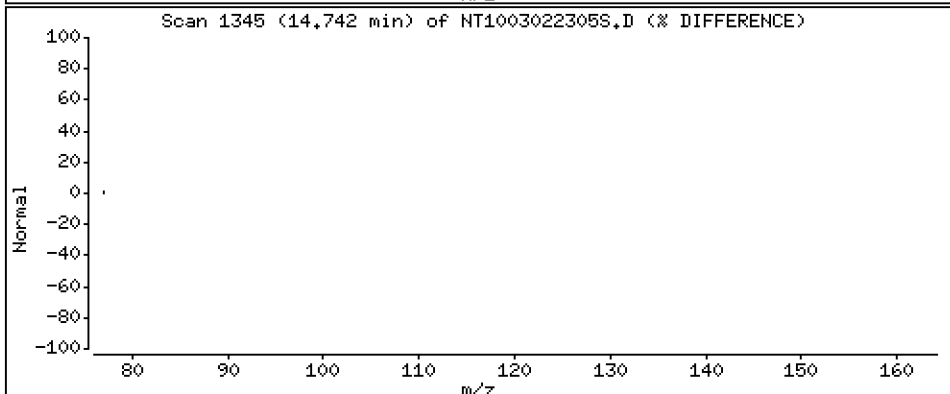
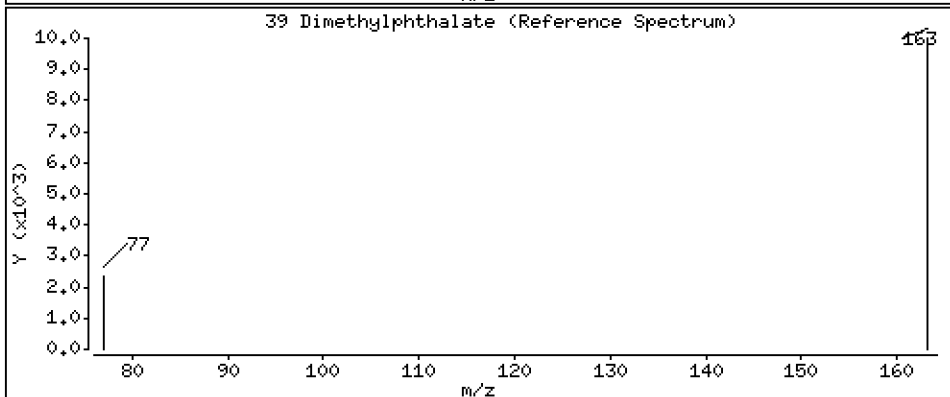
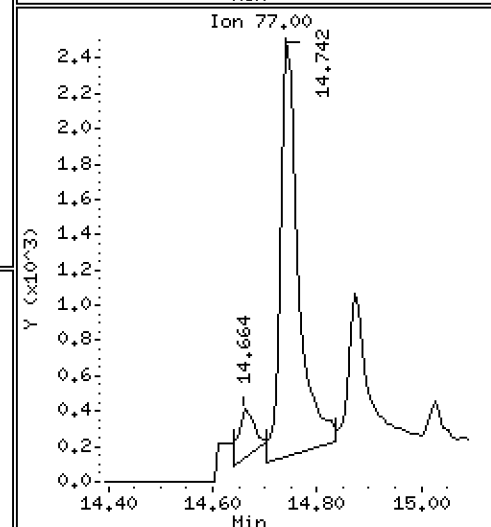
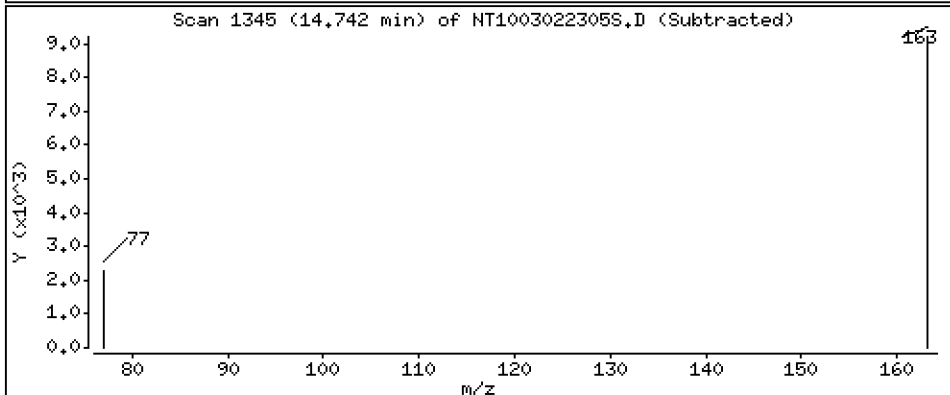
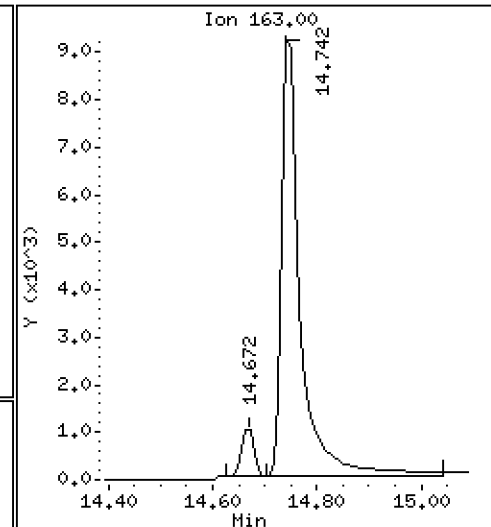
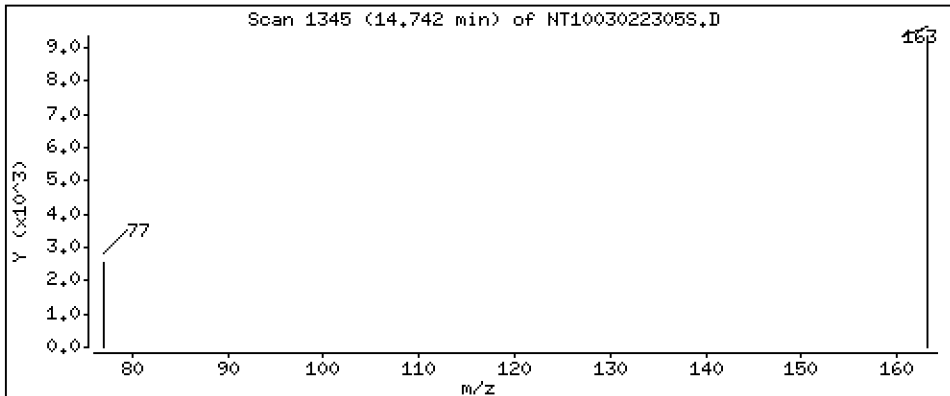
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.08456 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

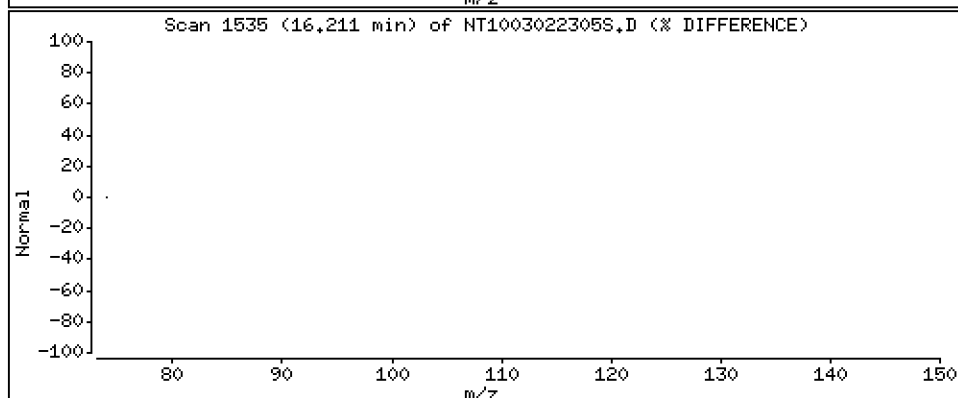
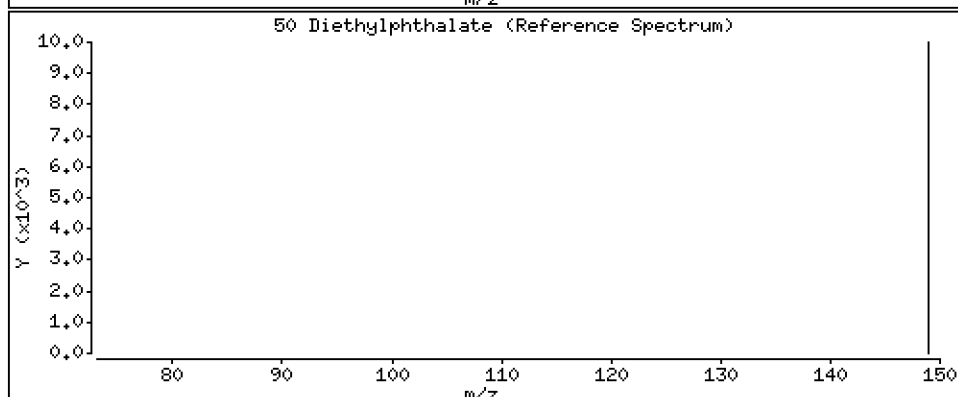
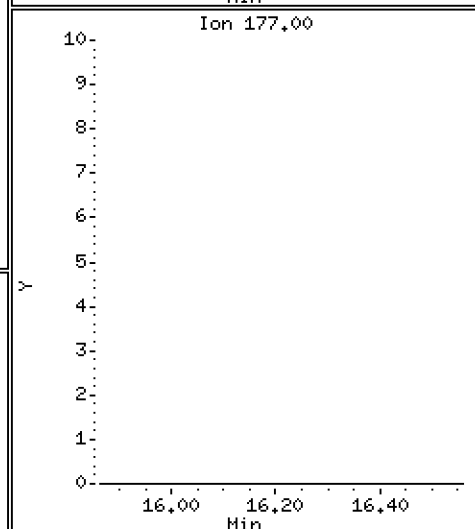
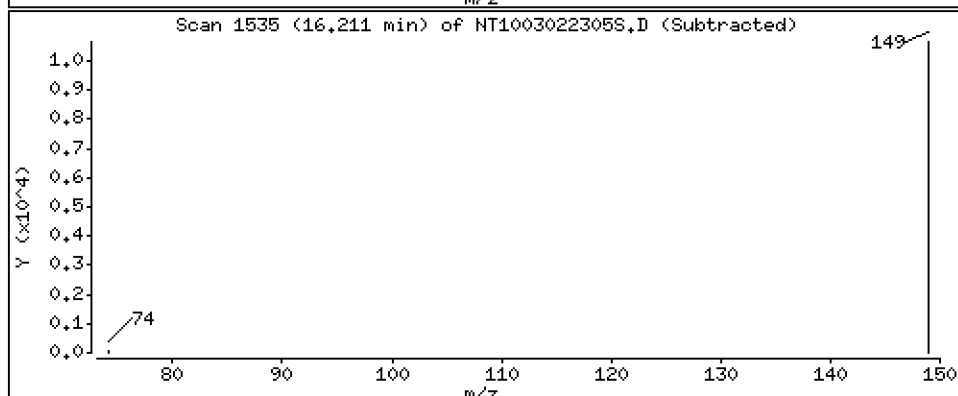
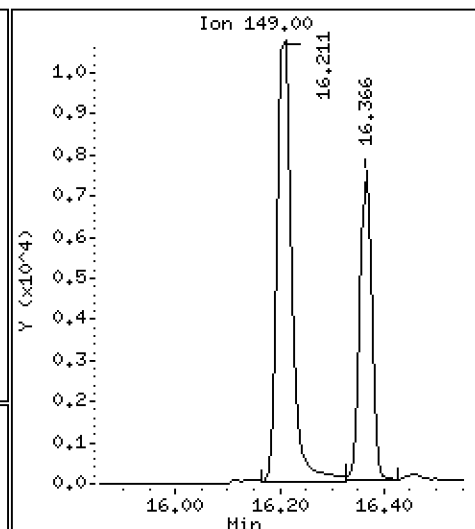
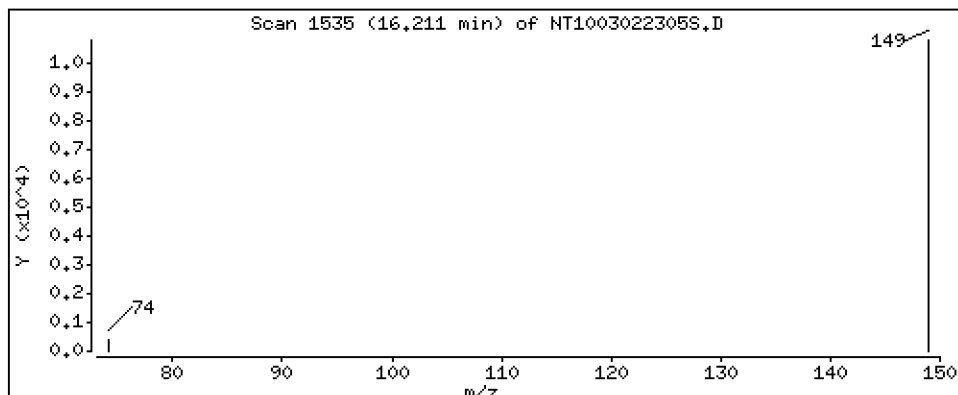
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,08088 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

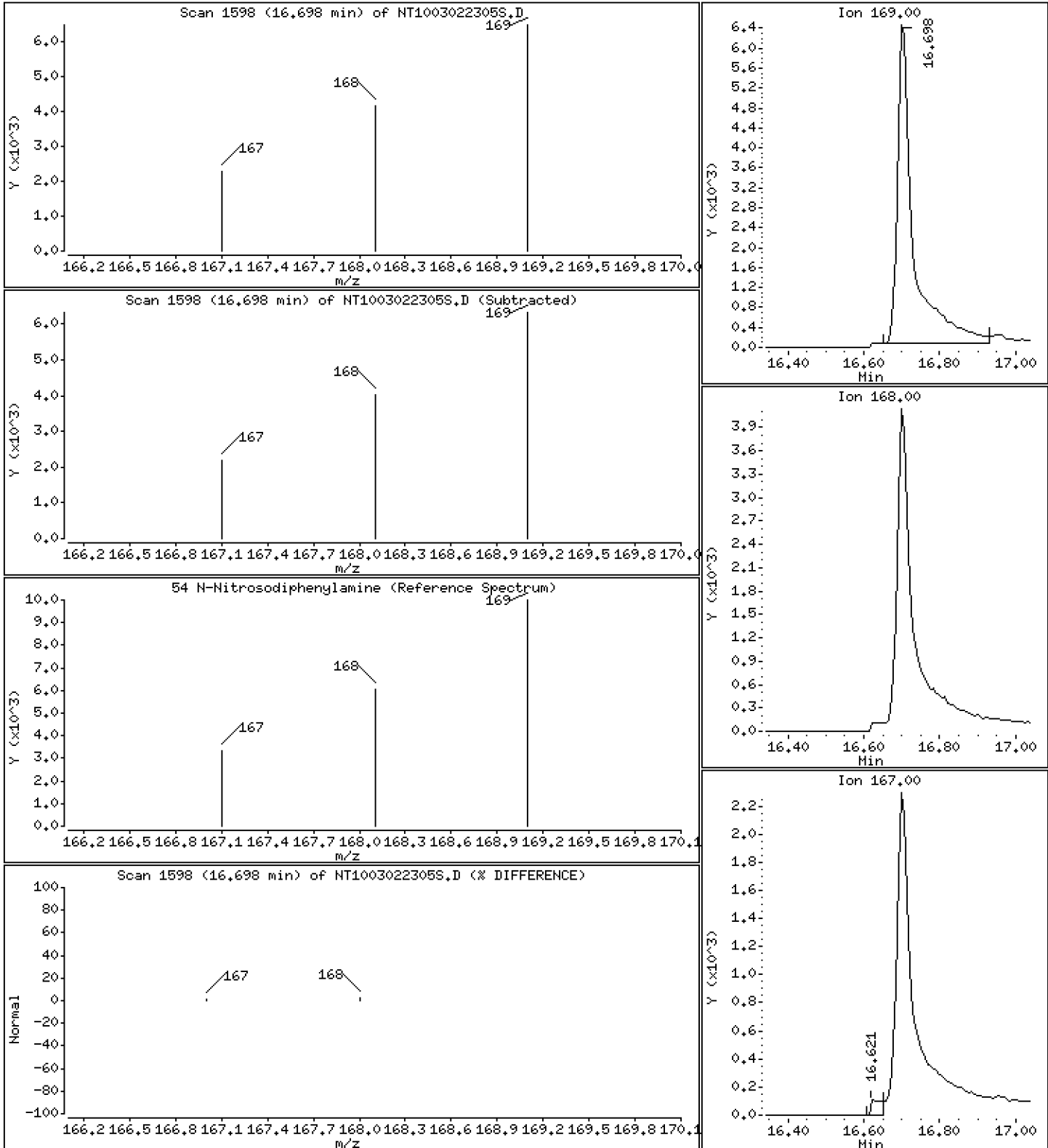
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,08415 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

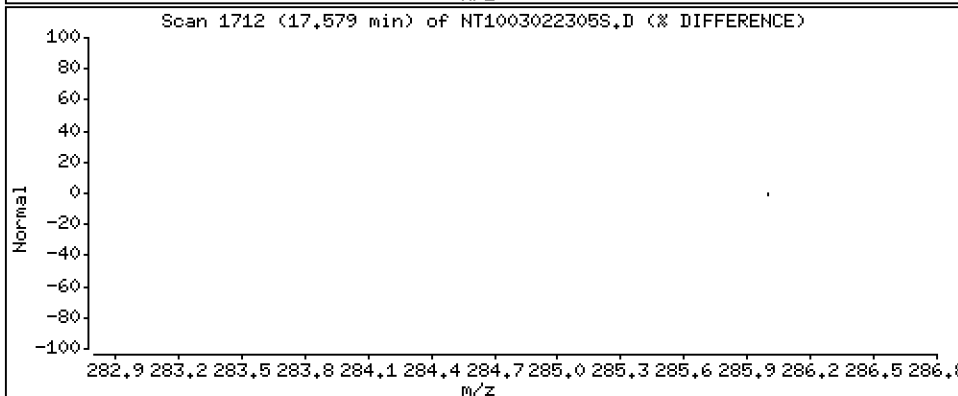
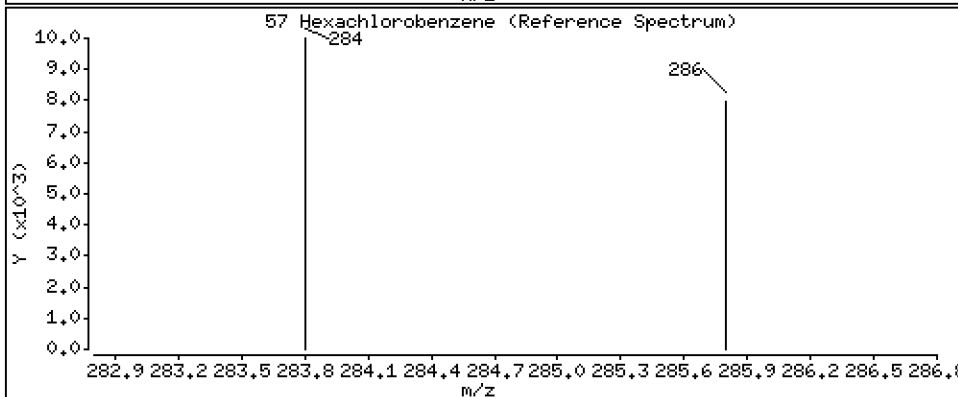
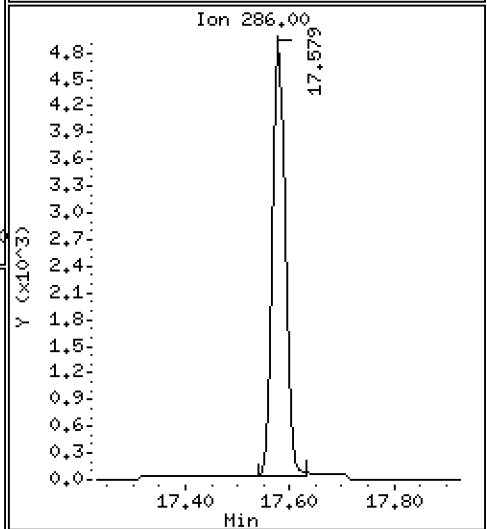
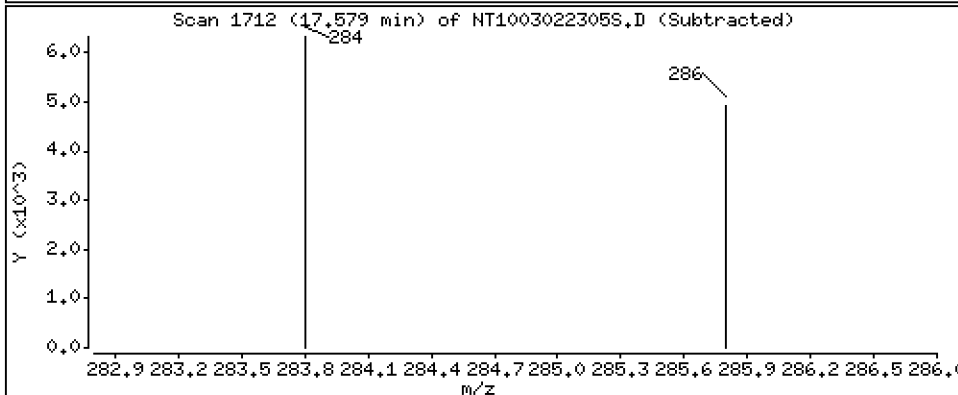
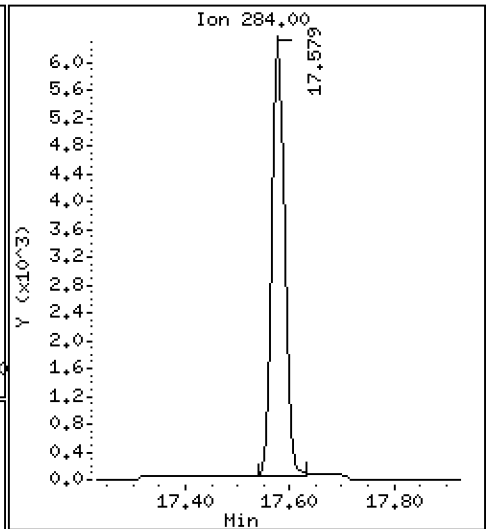
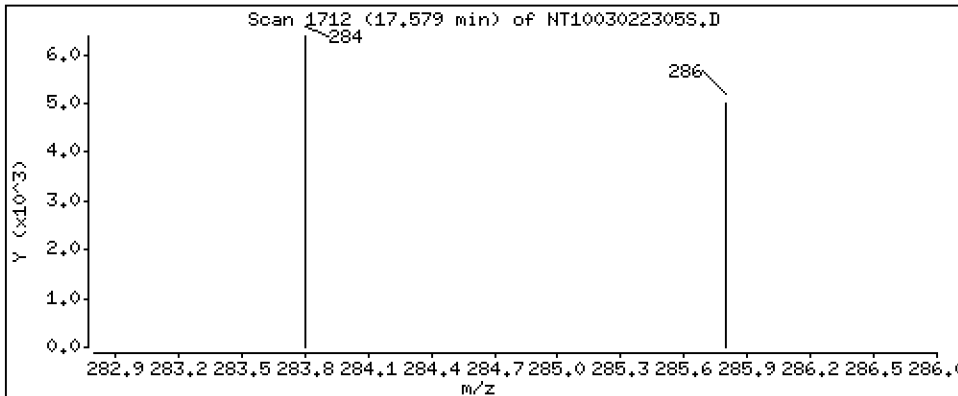
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,09423 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

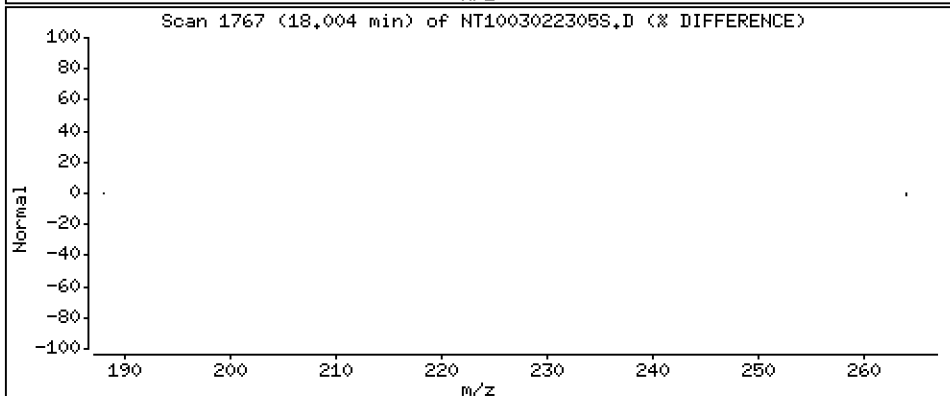
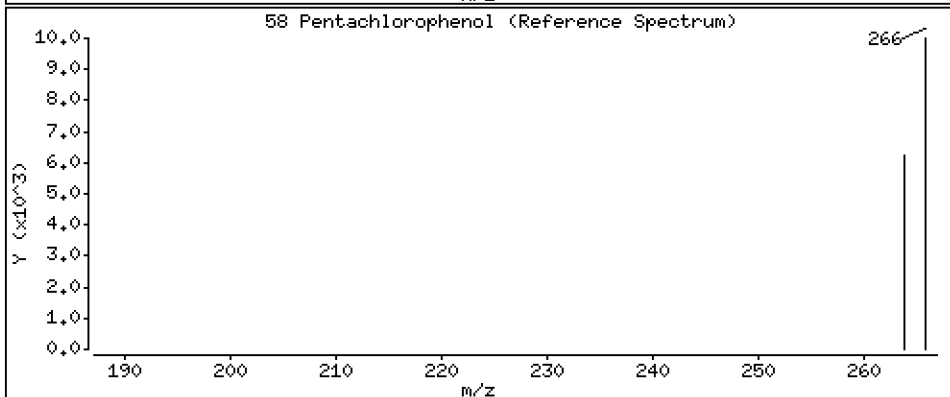
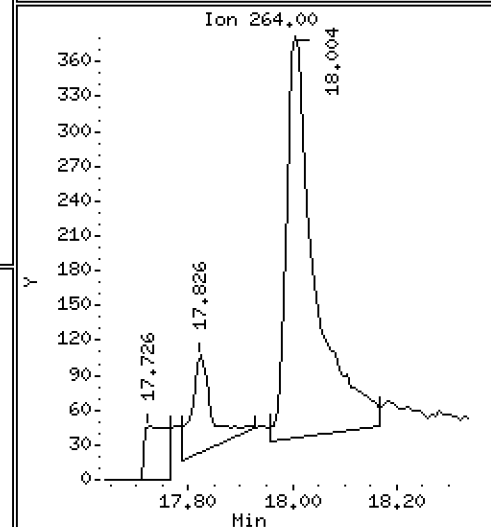
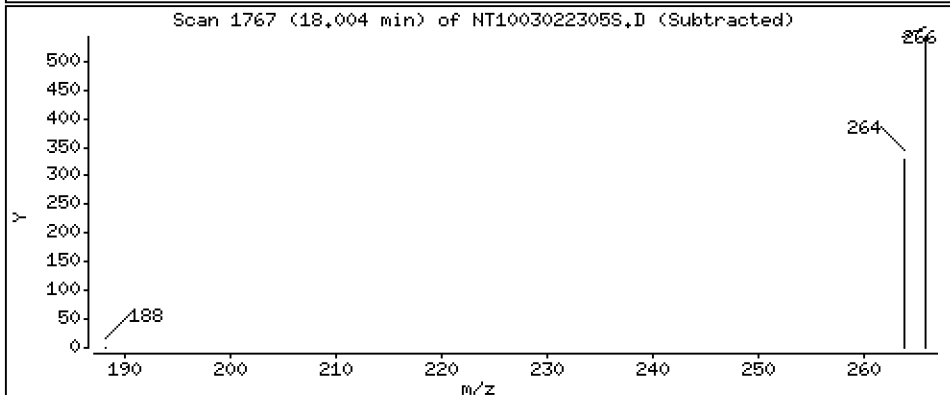
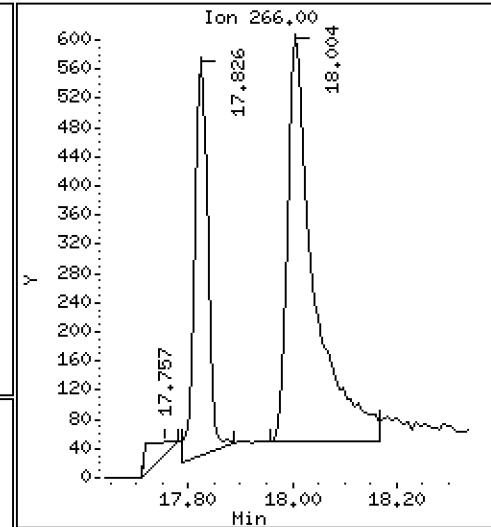
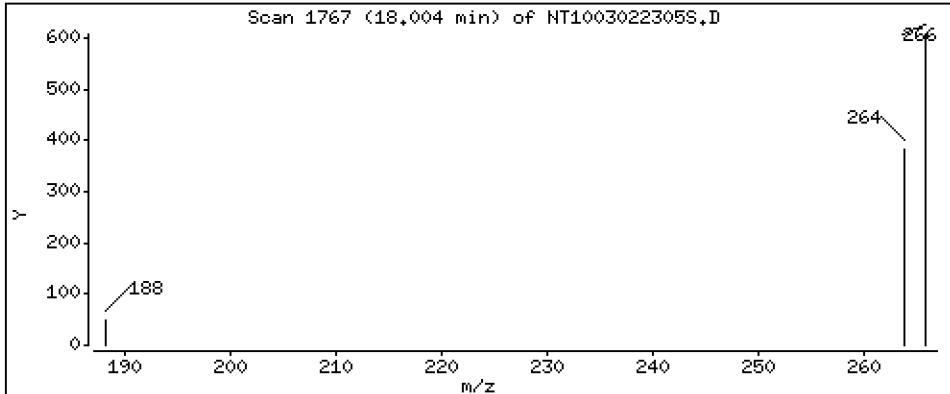
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,04209 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

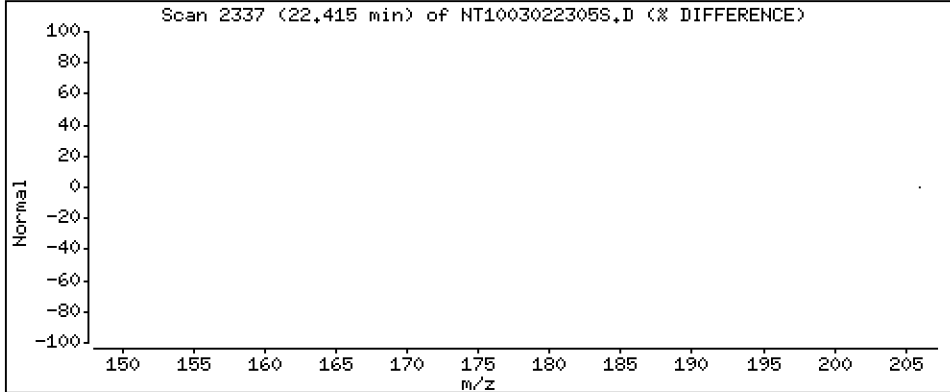
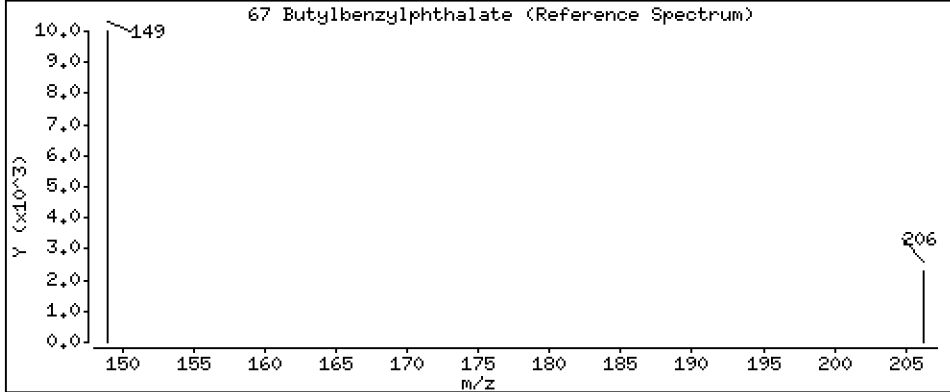
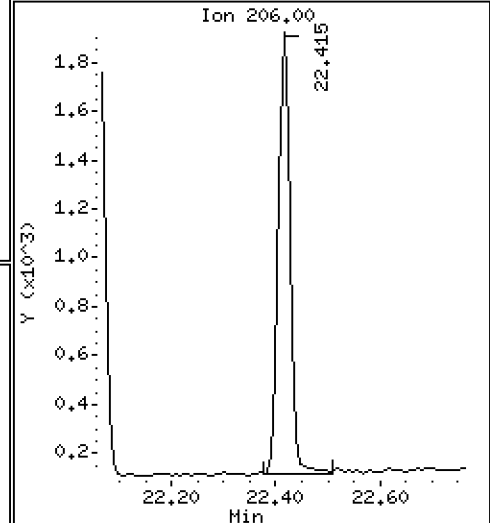
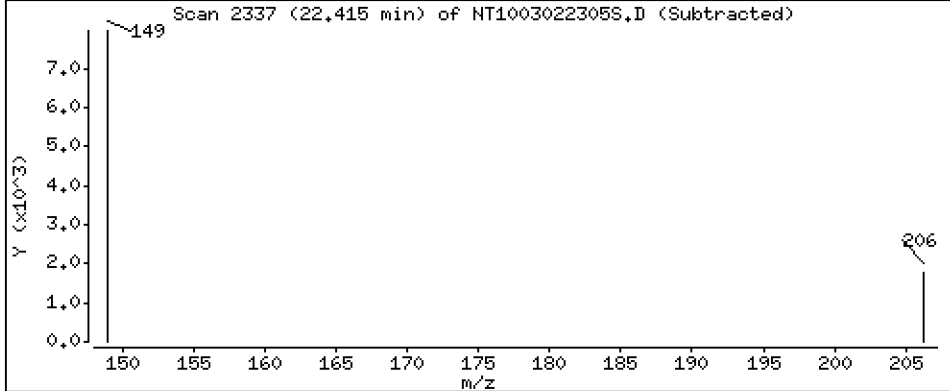
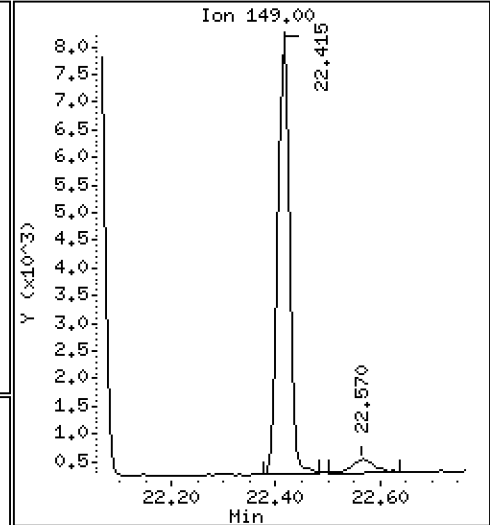
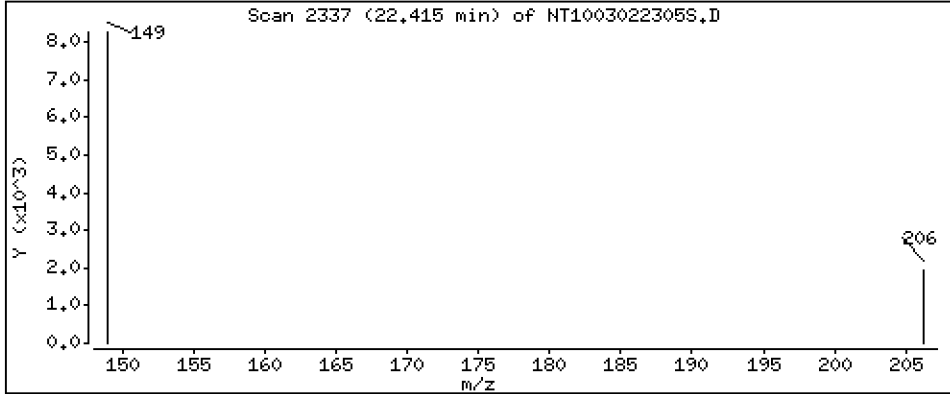
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,04745 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

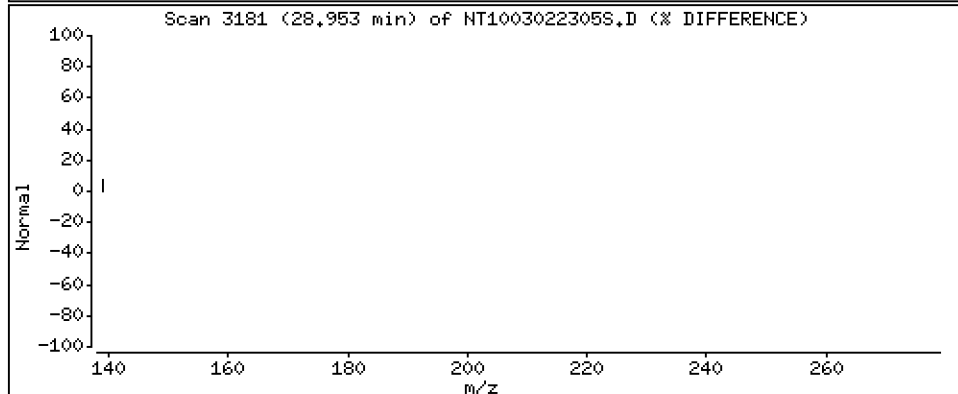
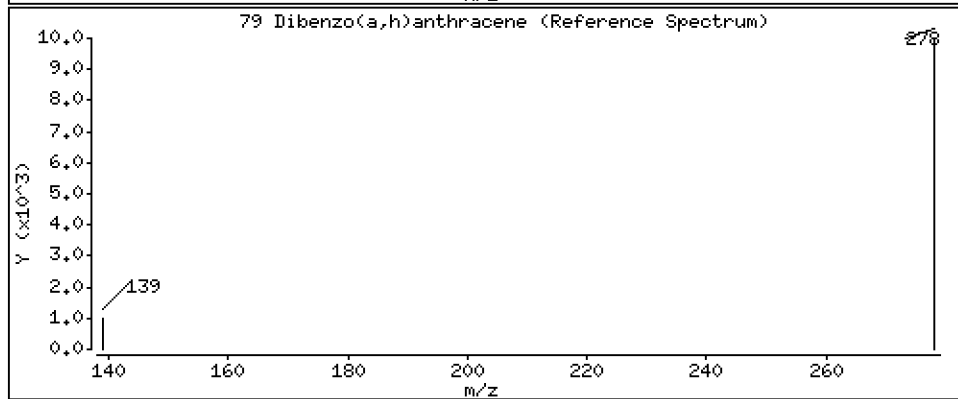
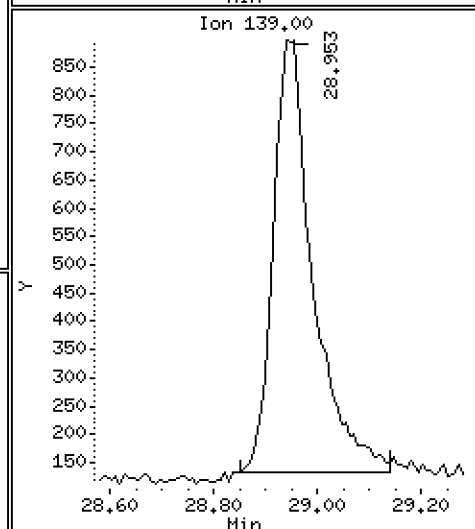
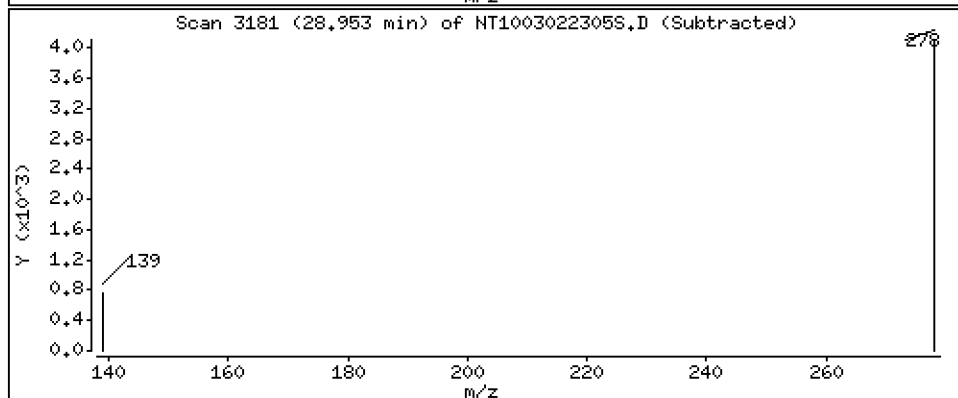
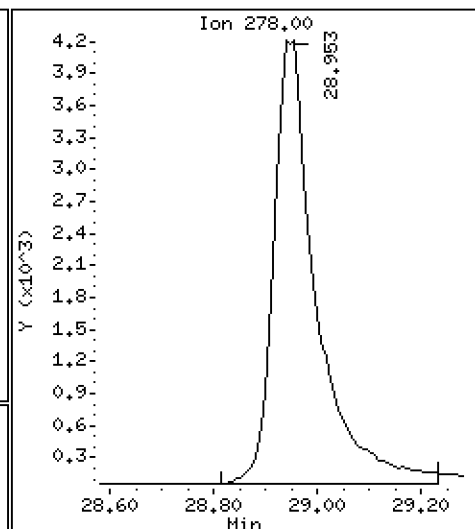
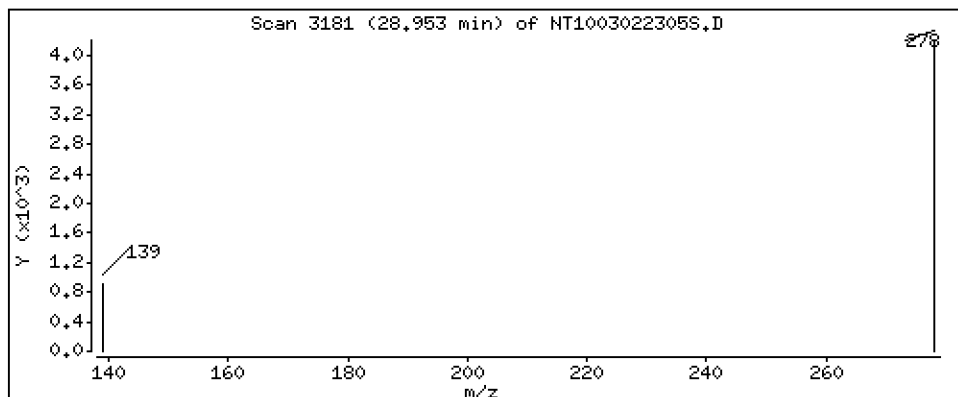
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,05927 ug/L



Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

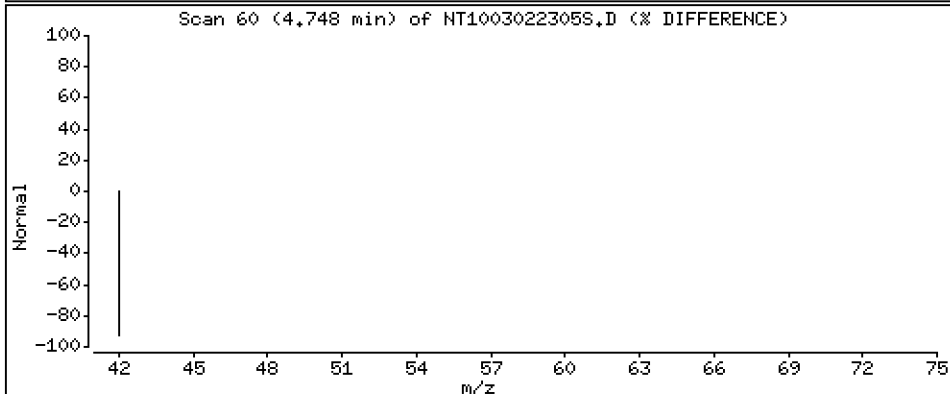
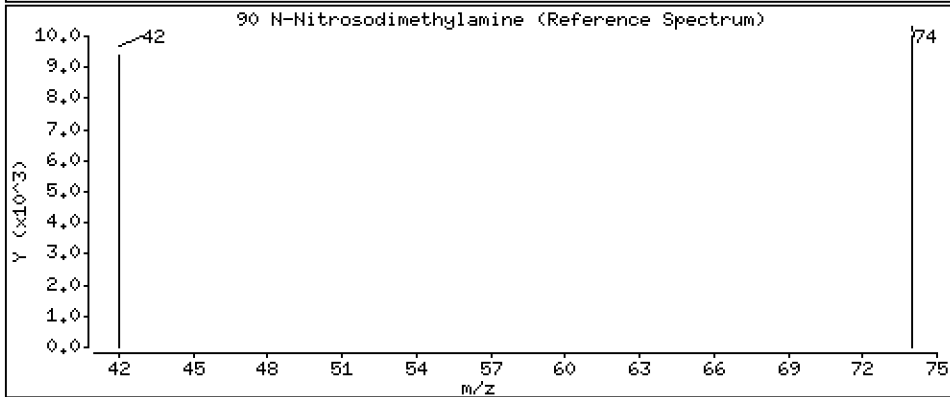
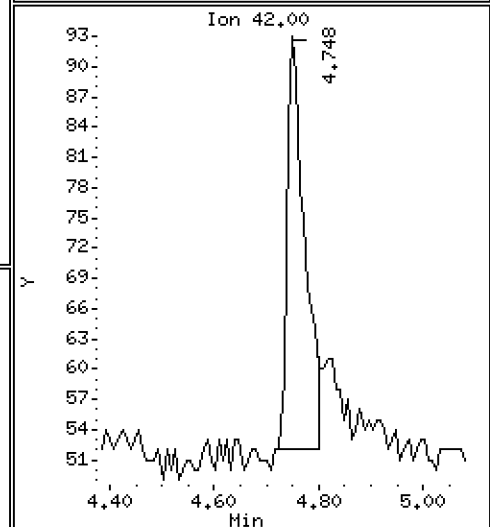
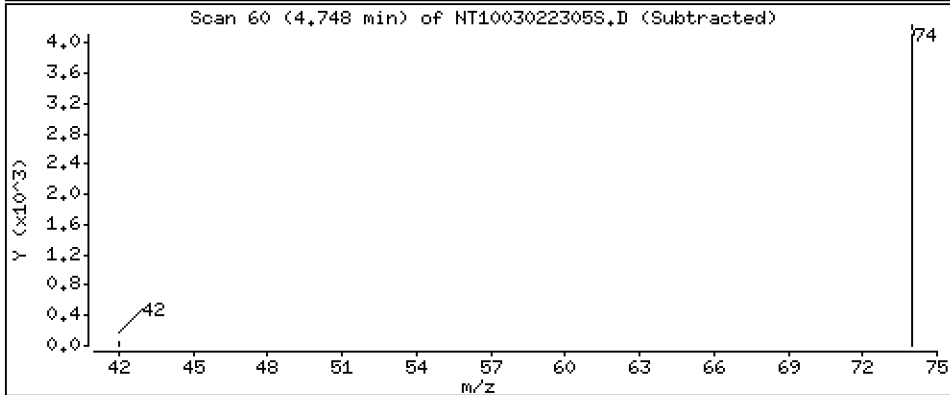
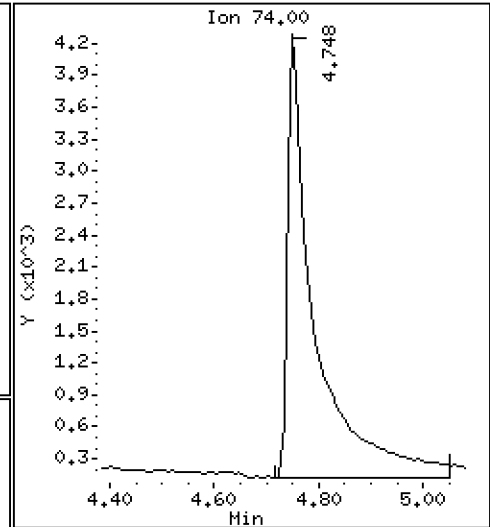
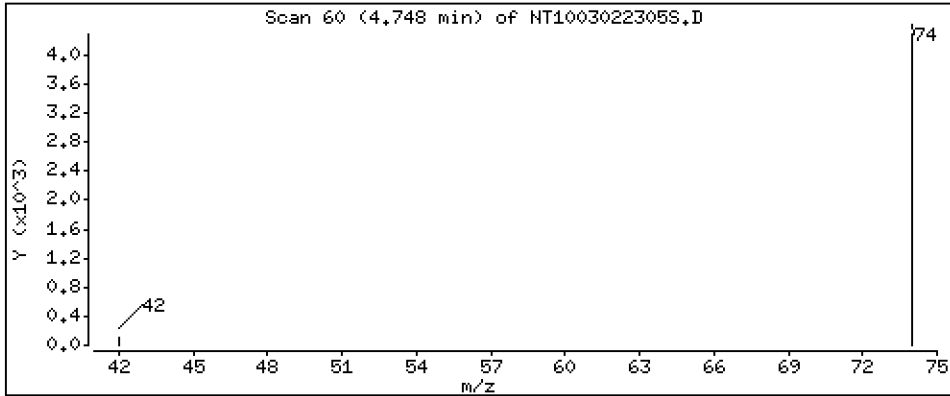
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,2020 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D
 Lab Smp Id: SEQ-LCV100
 Inj Date : 02-MAR-2023 16:56 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-LCV100
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSSDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	16841	0.13125	0.1313 (R)
3 Phenol	94		8.525	8.517	(0.921)	11585	0.06121	0.06121
7 1,3-Dichlorobenzene	146		9.143	9.143	(0.988)	17226	0.10342	0.1034
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.251	(1.000)	449433	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.282	(1.003)	16689	0.10305	0.1031
11 Benzyl alcohol	79		9.485	9.476	(1.025)	5576	0.05313	0.05313
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	15971	0.10261	0.1026
13 2-Methylphenol	108		9.663	9.655	(1.044)	6667	0.05859	0.05859
15 4-Methylphenol	108		9.958	9.942	(1.076)	6008	0.05077	0.05077
16 N-Nitroso-di-n-propylamine	70		9.974	9.981	(1.078)	6561	0.07785	0.07785
22 2,4-Dimethylphenol	107		11.006	10.997	(0.939)	16823	0.12421	0.1242
24 Benzoic acid	105		11.116	11.074	(0.948)	849	0.01144	0.01144
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	11460	0.09977	0.09977
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1595952	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	7911	0.09705	0.09705
39 Dimethylphthalate	163		14.741	14.741	(0.963)	22082	0.08456	0.08456
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	822385	4.00000	
50 Diethylphthalate	149		16.211	16.203	(1.059)	19916	0.08088	0.08088
54 N-Nitrosodiphenylamine	169		16.698	16.690	(0.907)	19183	0.08415	0.08415
57 Hexachlorobenzene	284		17.578	17.578	(0.955)	10053	0.09423	0.09423

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	18.004	17.988	(0.978)	1965	0.04209	0.04209
* 59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1408565	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	9829	0.08388	0.08388 (R)
67 Butylbenzylphthalate	149	22.415	22.414	(0.957)	11608	0.04745	0.04745
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1449074	4.00000	
* 77 Perylene-d12	264	26.116	26.115	(1.000)	1721904	4.00000	
79 Dibenzo(a,h)anthracene	278	28.953	28.929	(1.109)	23649	0.05927	0.05927
90 N-Nitrosodimethylamine	74	4.748	4.732	(0.513)	15343	0.20197	0.2020

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022305S.D
 Lab Smp Id: SEQ-LCV100
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	449433	-8.91
27 Naphthalene-d8	1779056	889528	3558112	1595952	-10.29
42 Acenaphthene-d10	954569	477285	1909138	822385	-13.85
59 Phenanthrene-d10	1596290	798145	3192580	1408565	-11.76
69 Chrysene-d12	1649110	824555	3298220	1449074	-12.13
77 Perylene-d12	1901958	950979	3803916	1721904	-9.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022305S.D

Lab ID: SEQ-LCV100

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 16:56

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003022303S.D

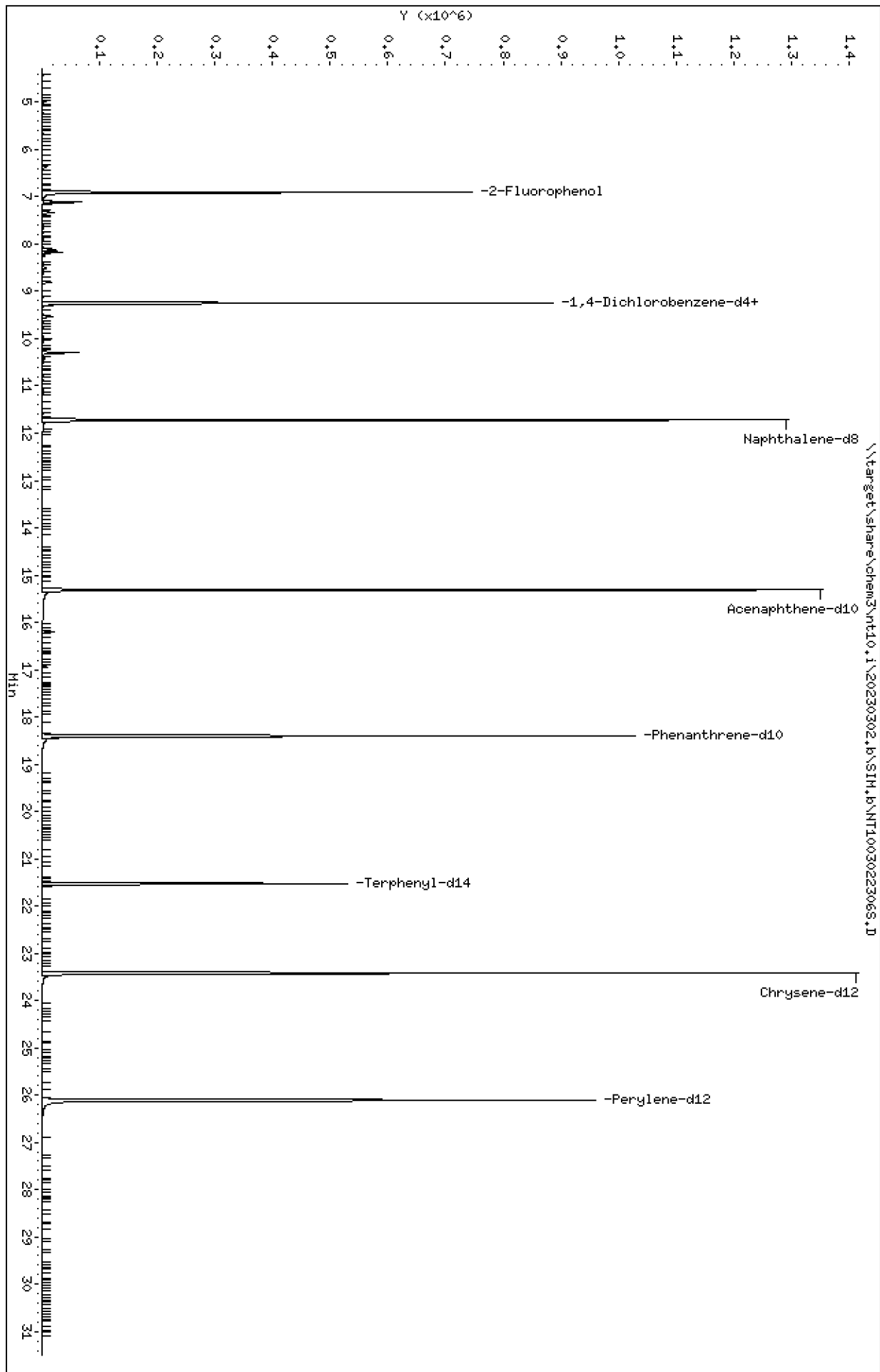
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIM.B\NT1003022306S.D
Date : 02-MAR-2023 17:34
Client ID:
Sample Info: BLR0624-BLK1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

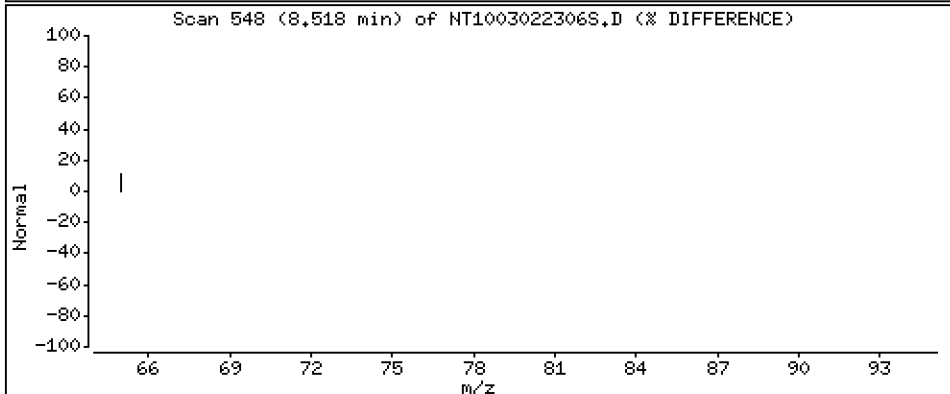
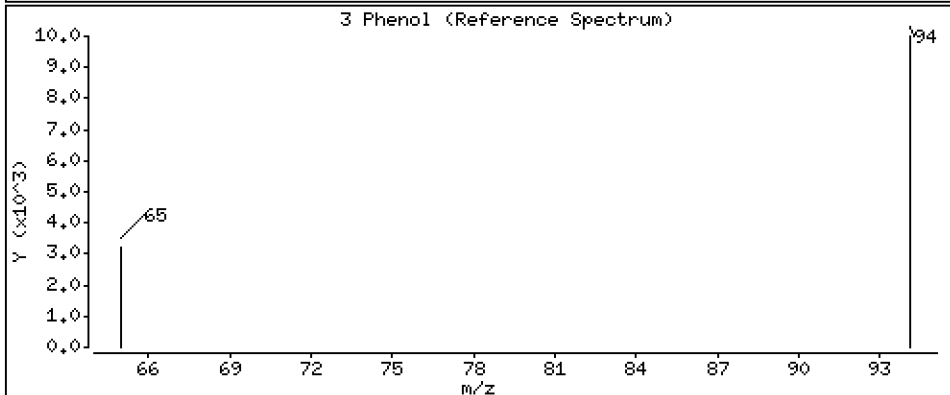
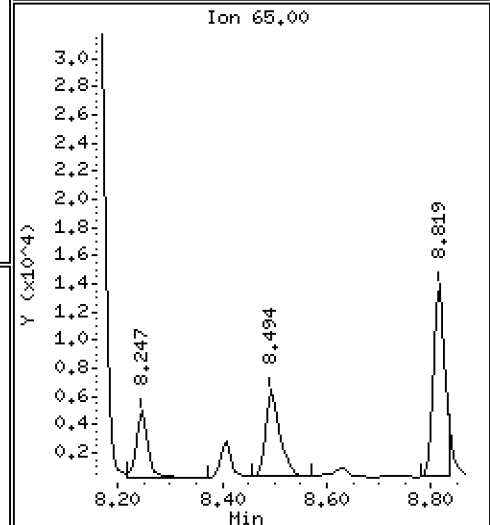
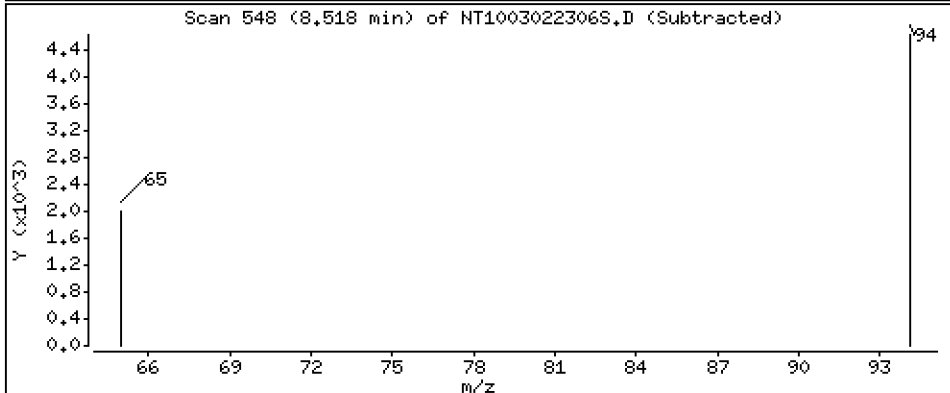
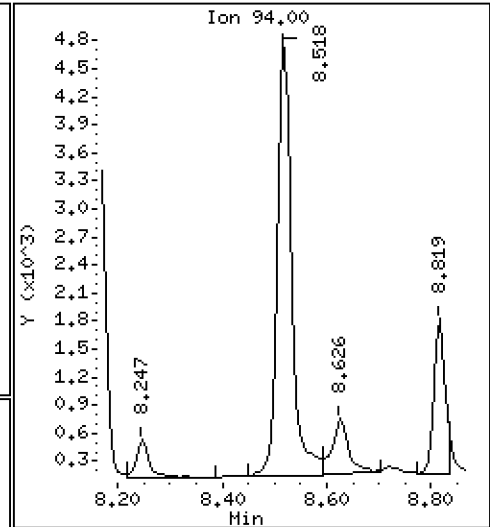
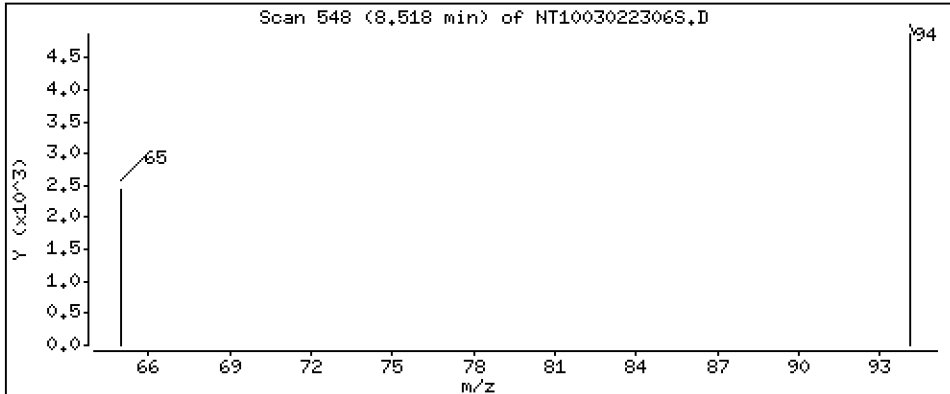
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,03723 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

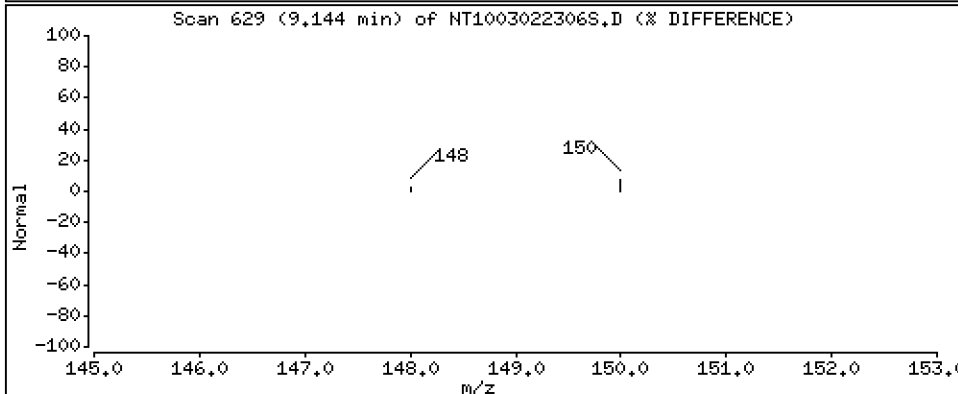
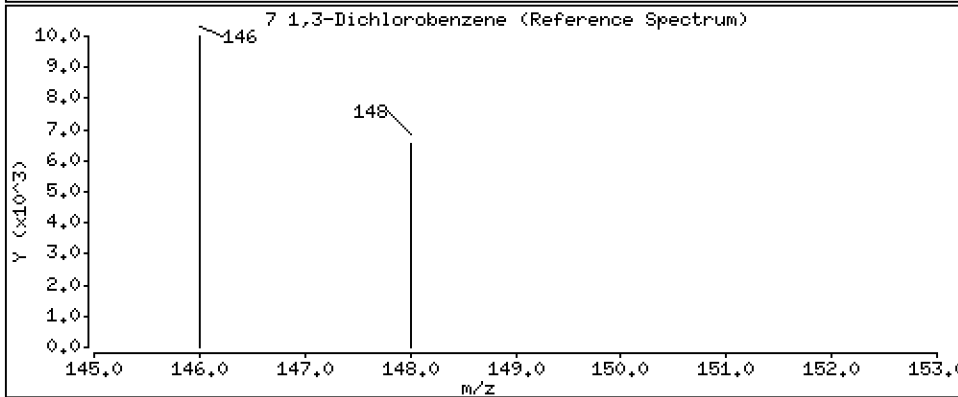
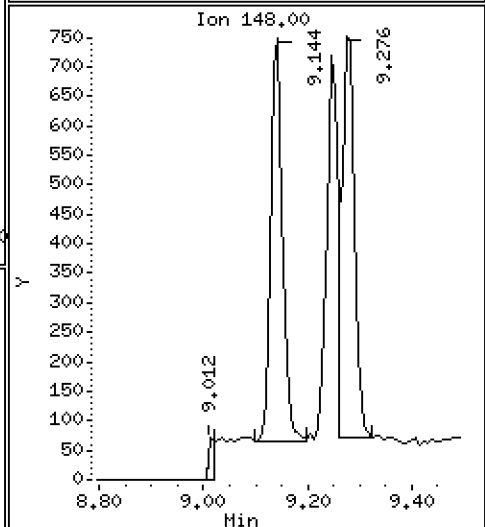
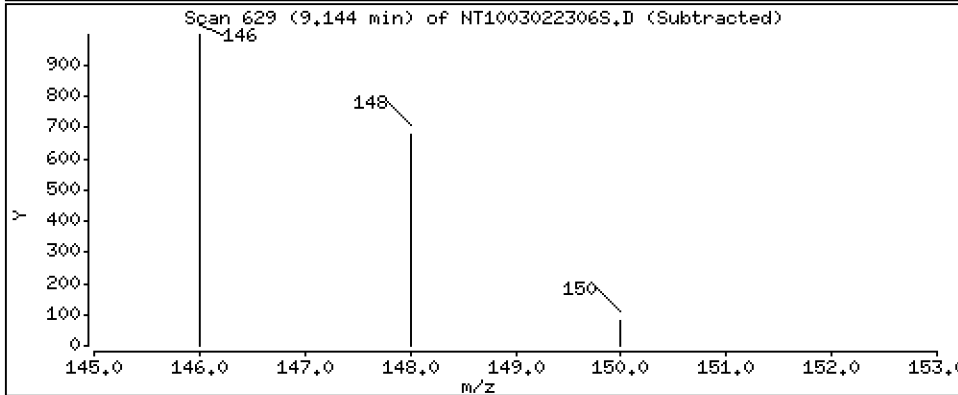
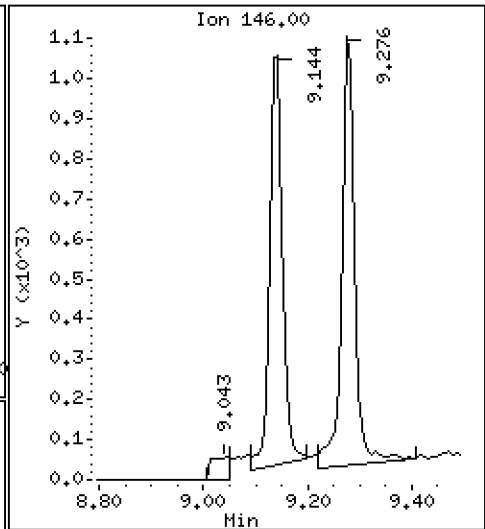
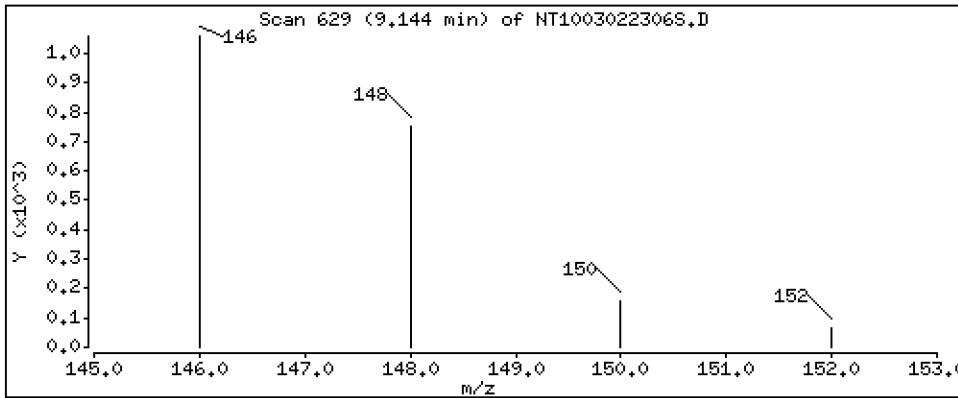
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,008781 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

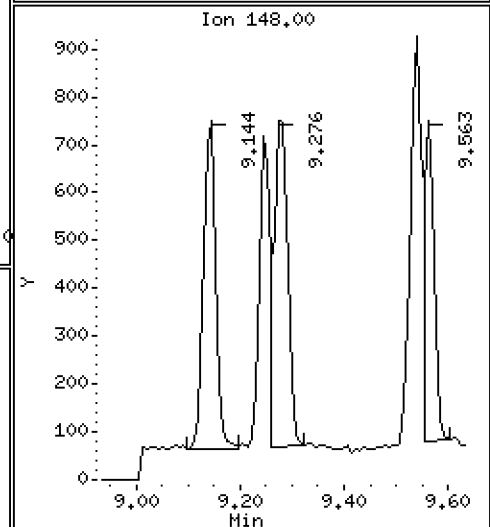
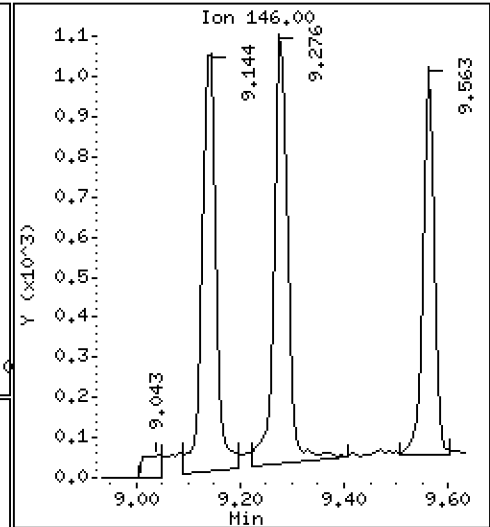
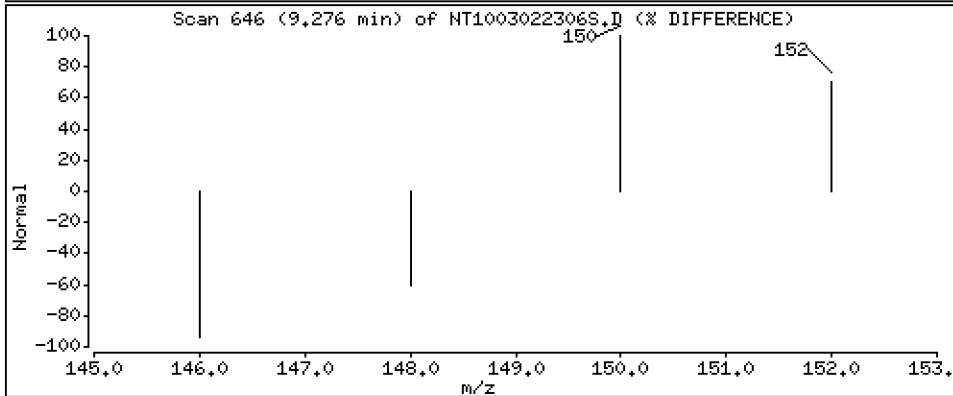
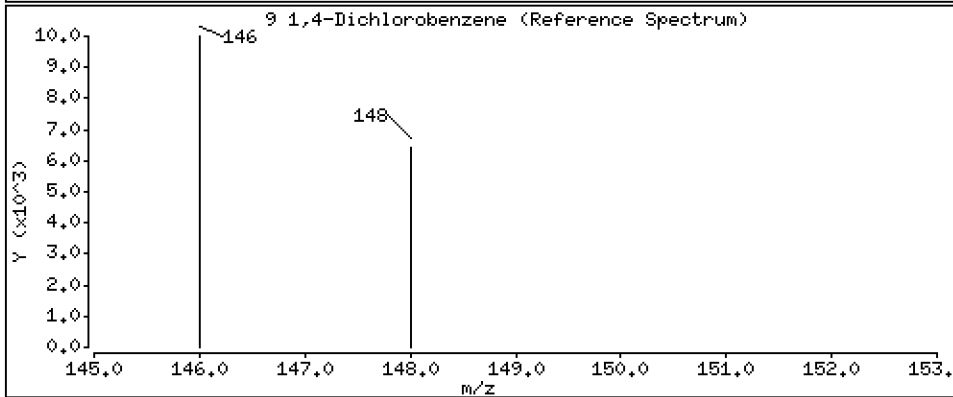
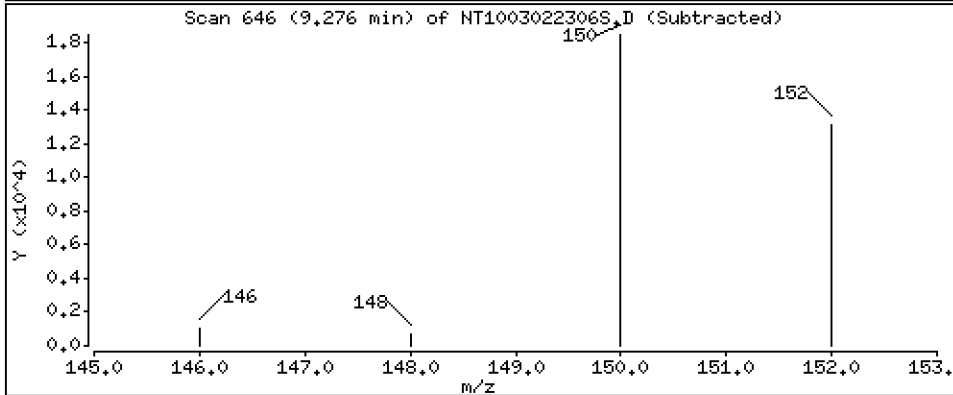
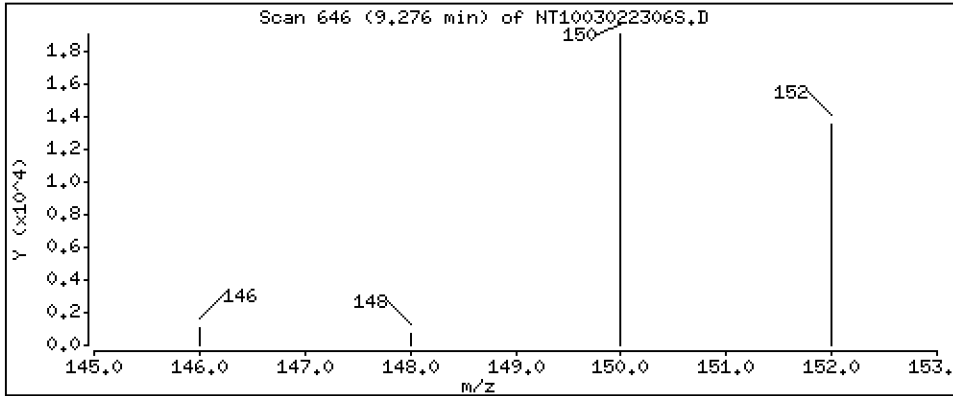
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.009746 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

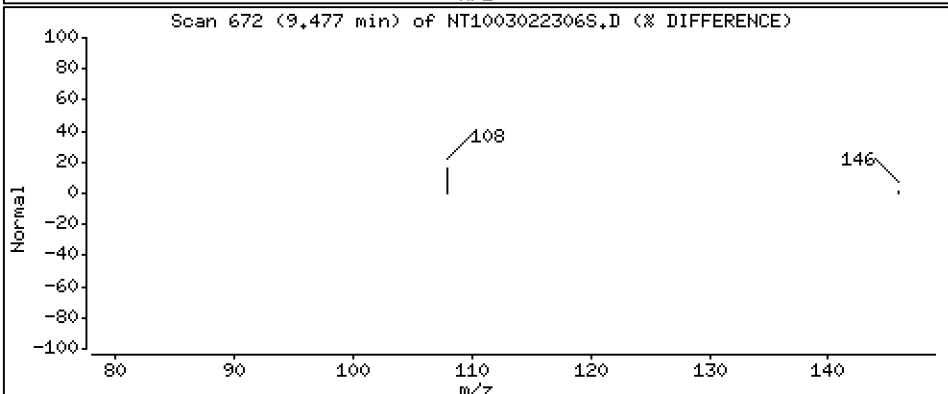
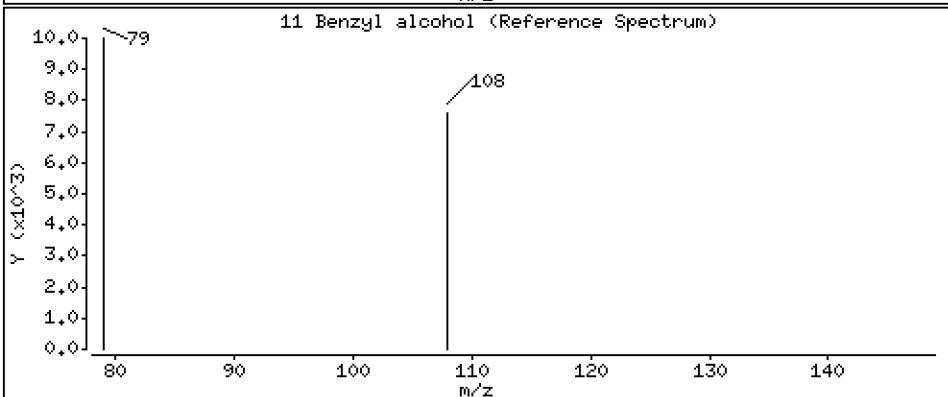
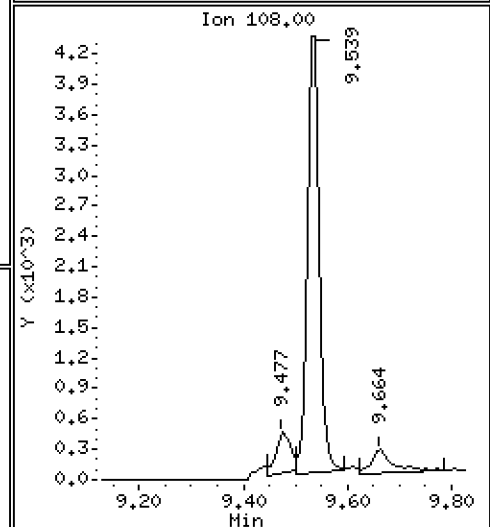
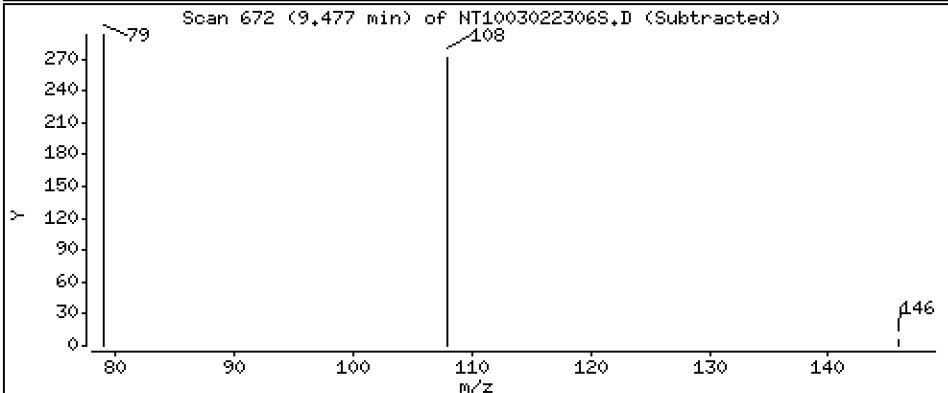
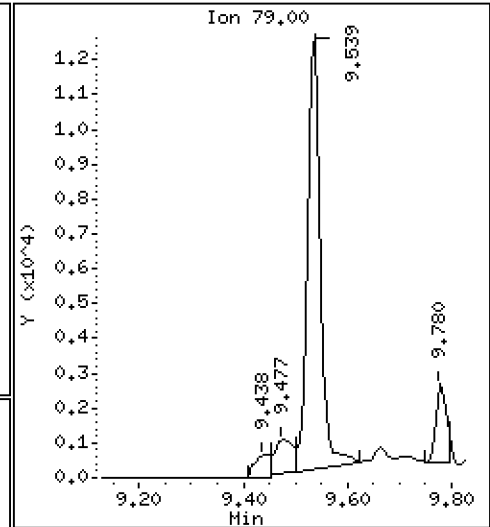
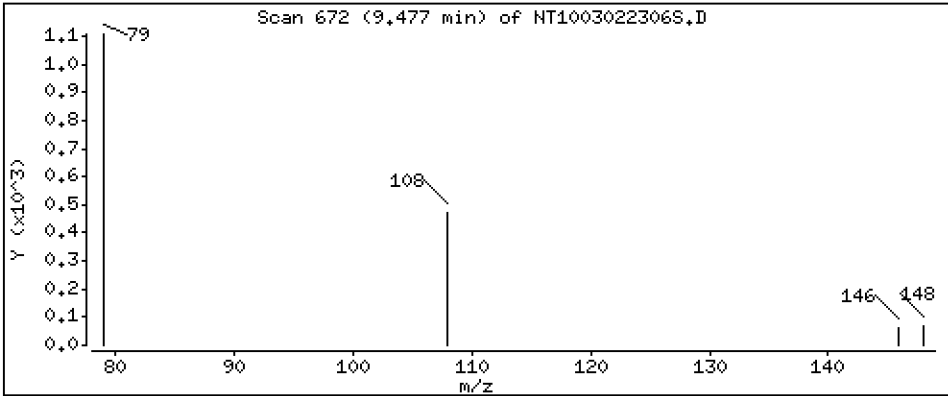
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.01992 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

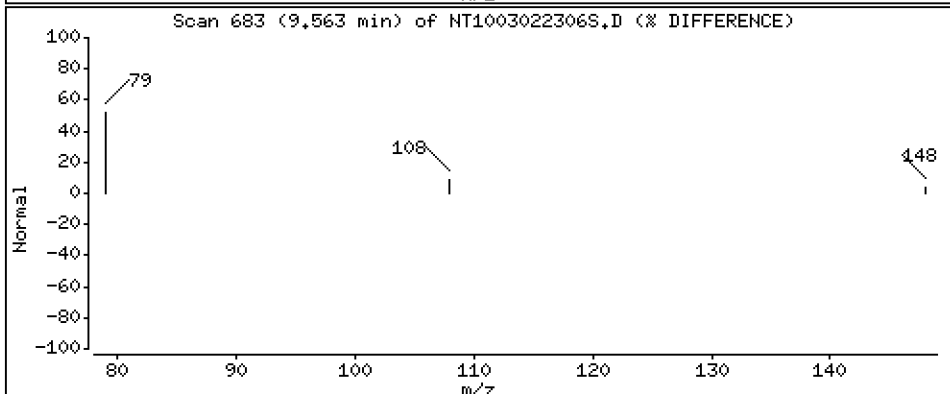
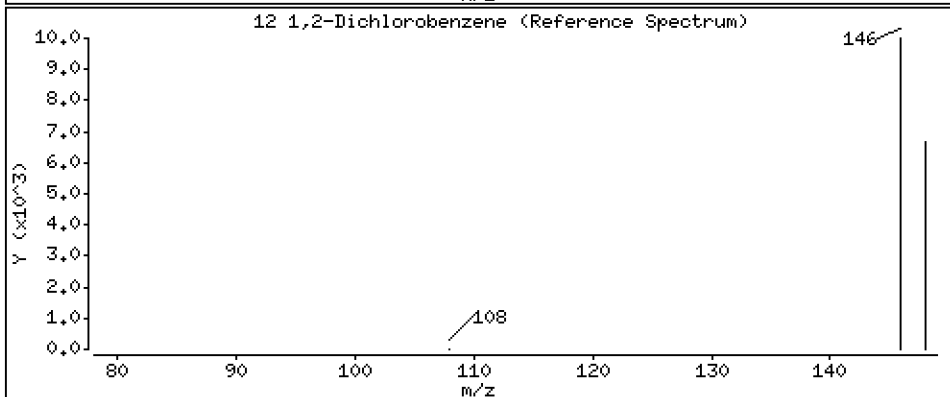
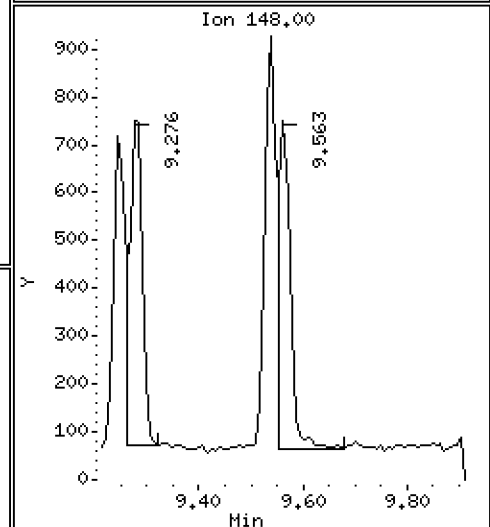
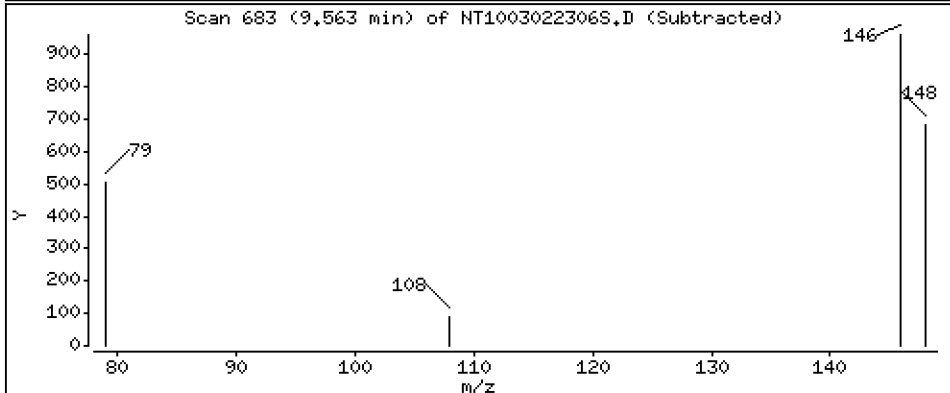
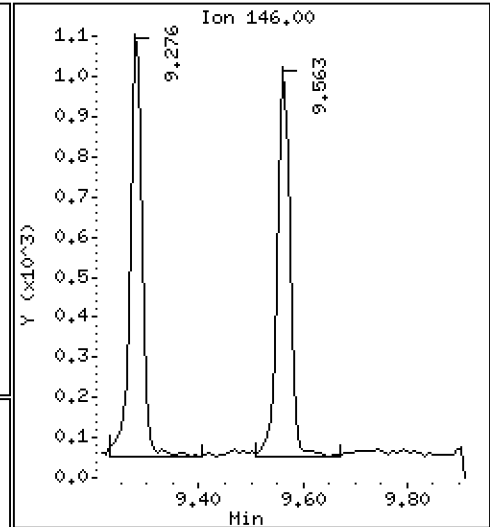
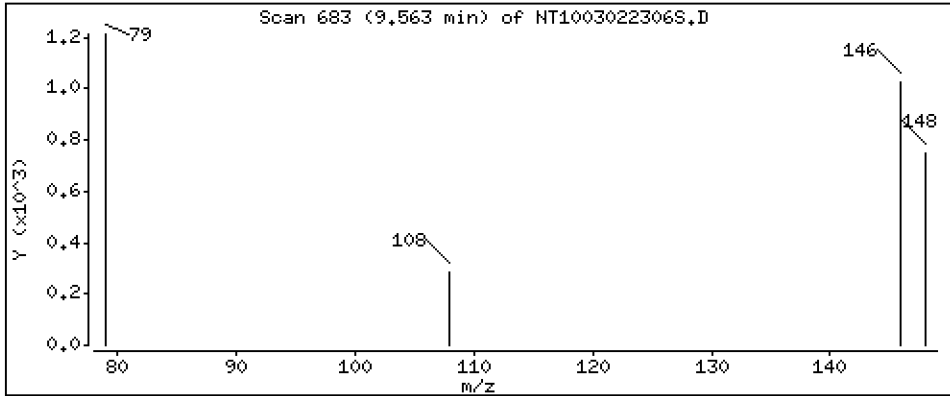
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.008196 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

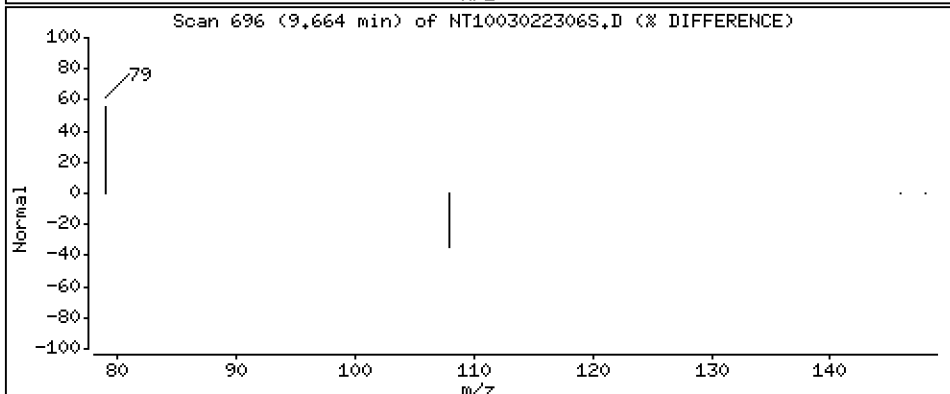
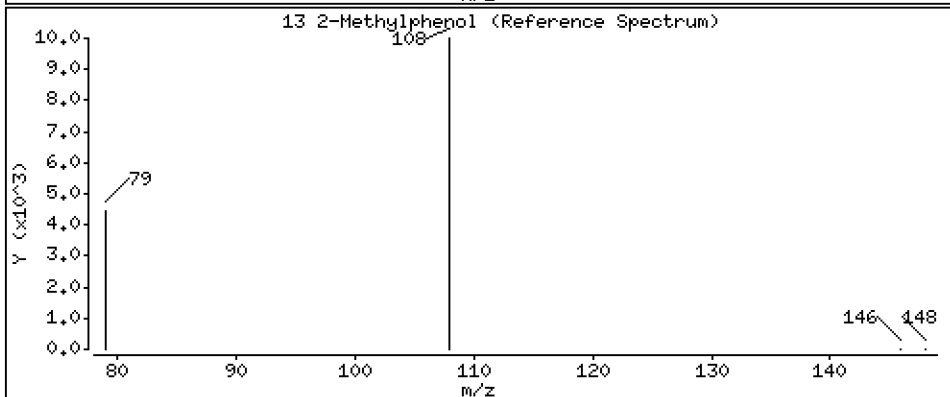
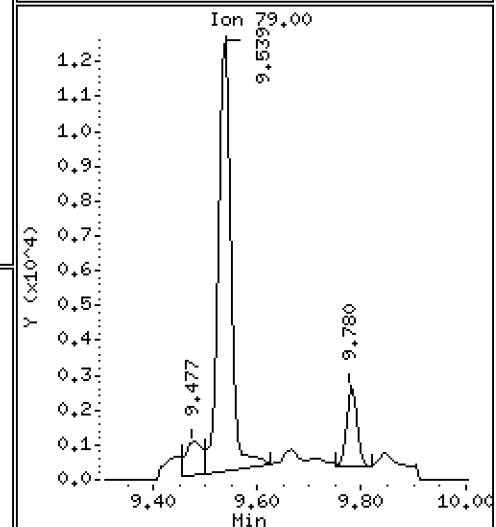
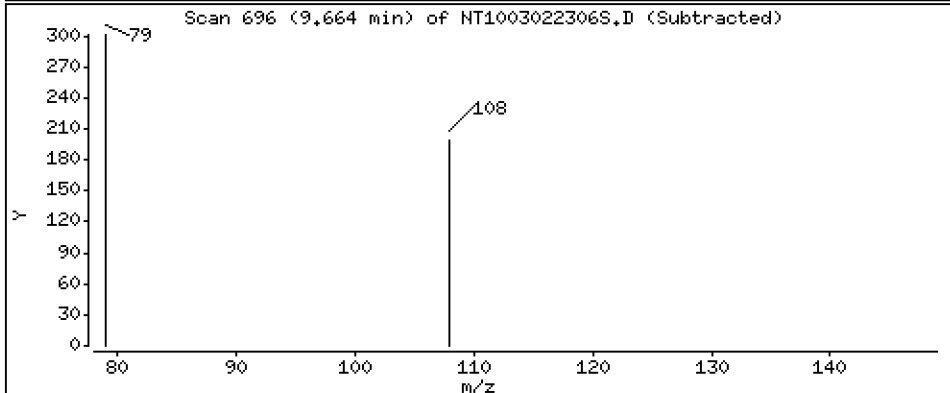
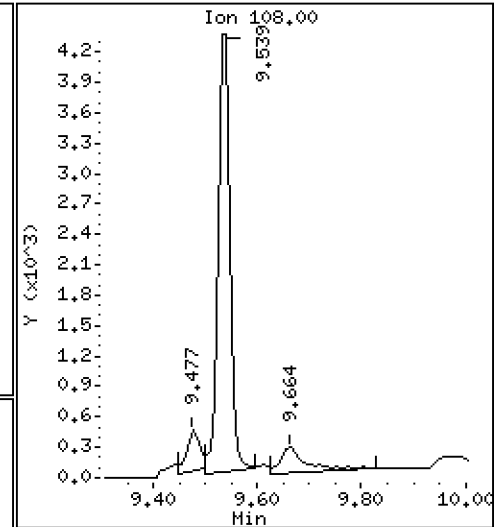
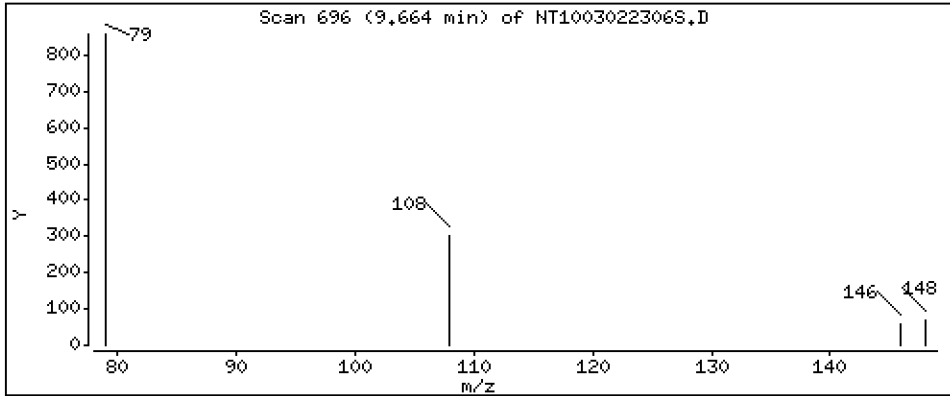
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.005974 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

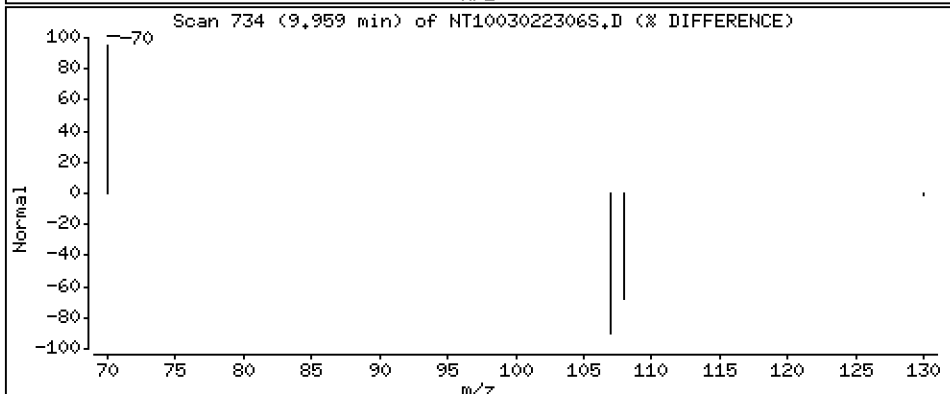
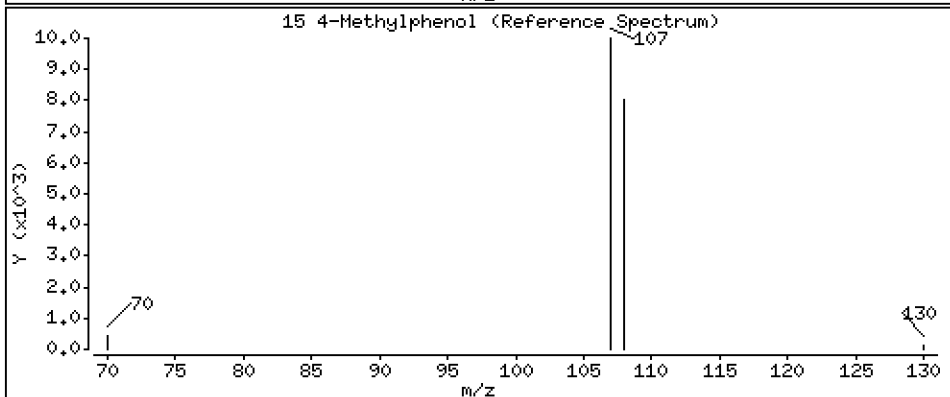
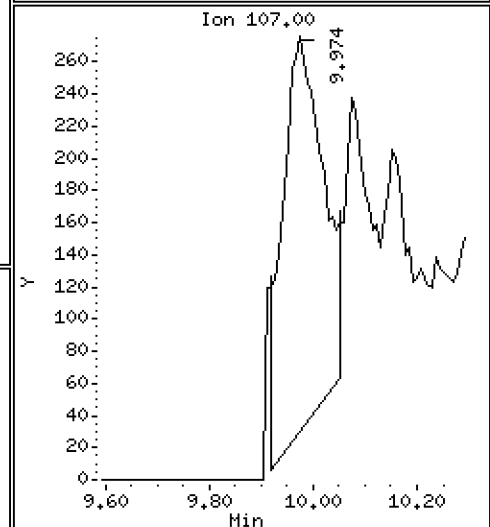
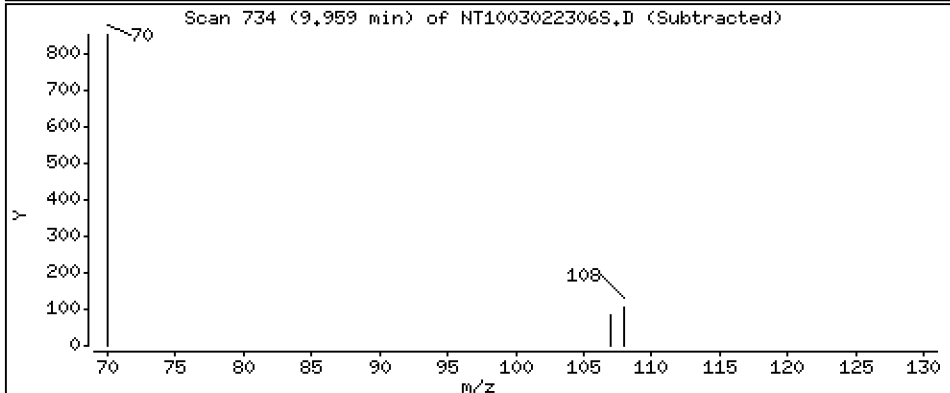
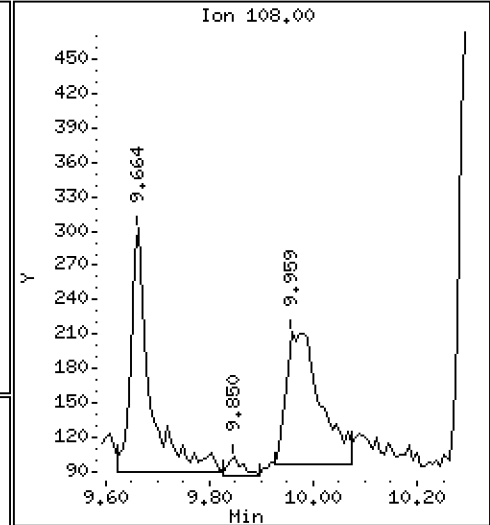
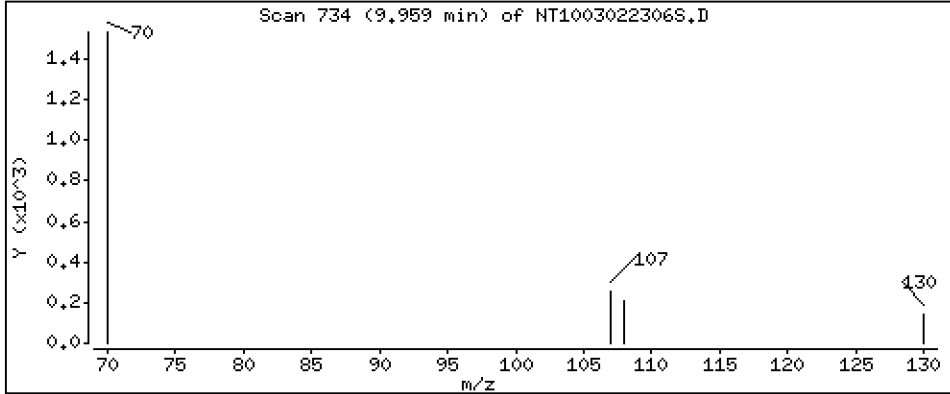
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.003753 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

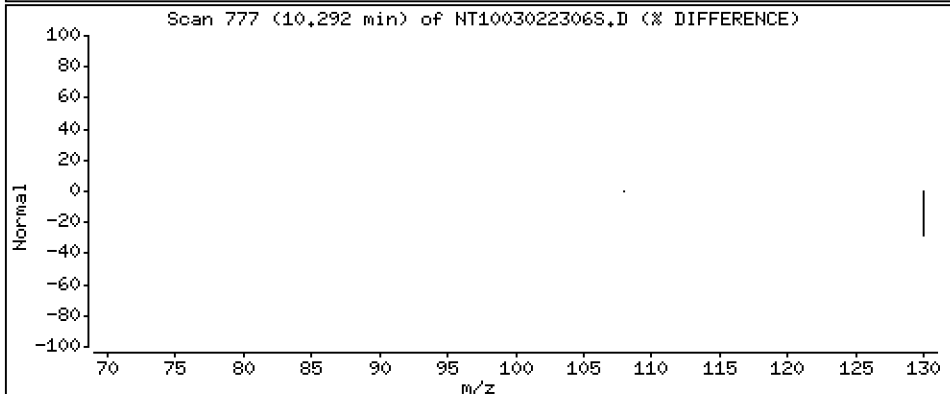
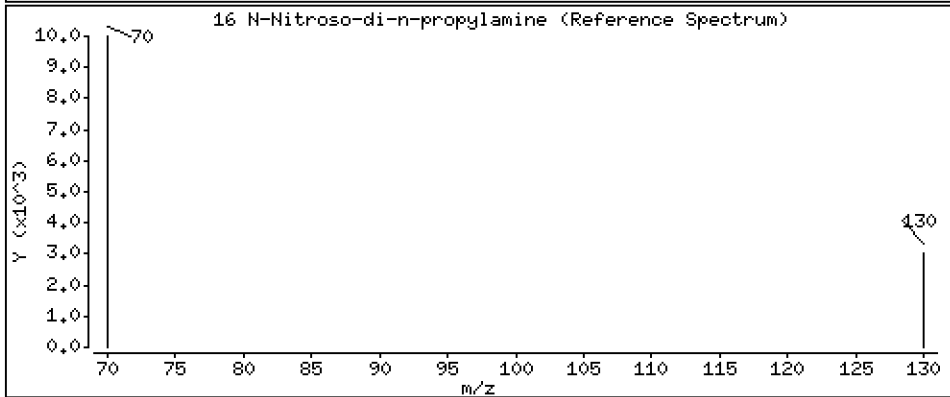
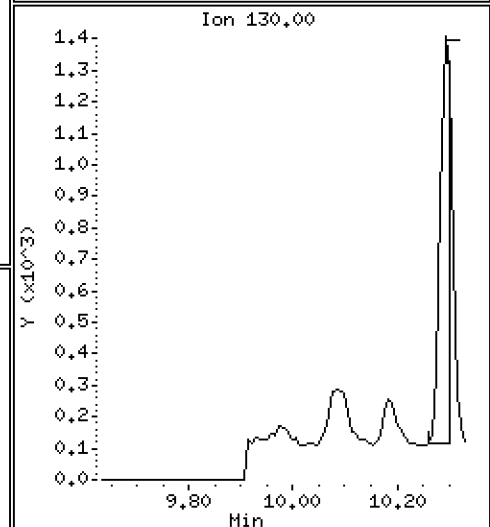
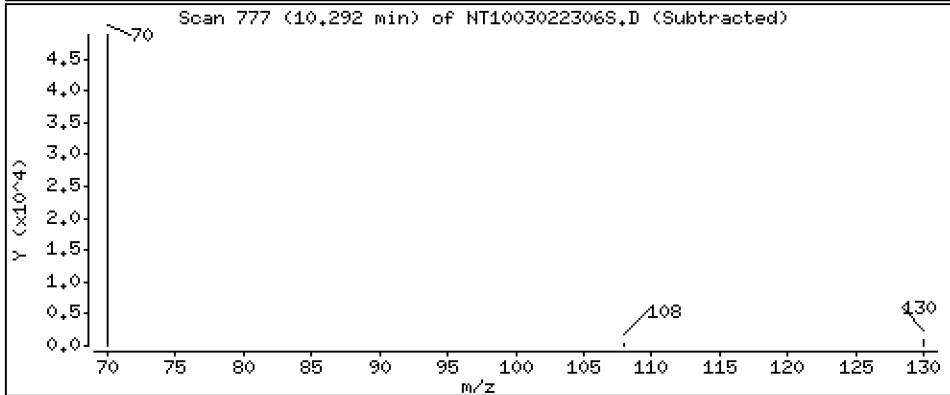
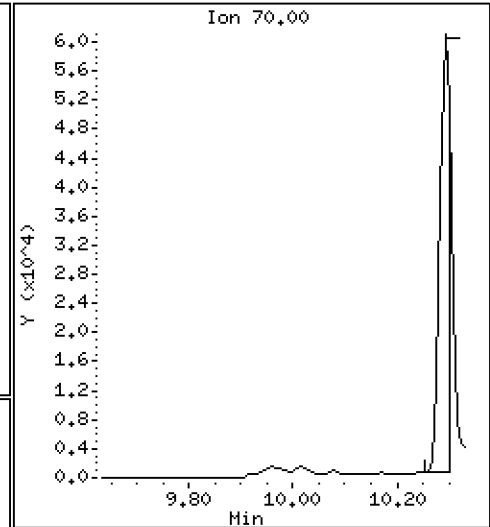
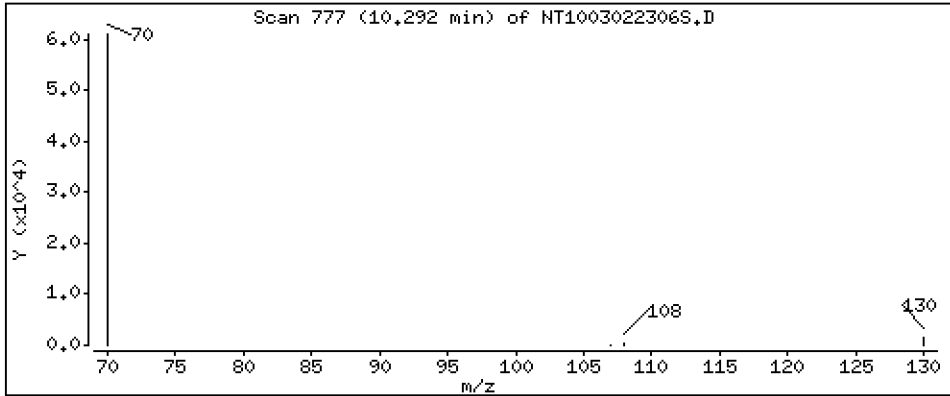
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,7468 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

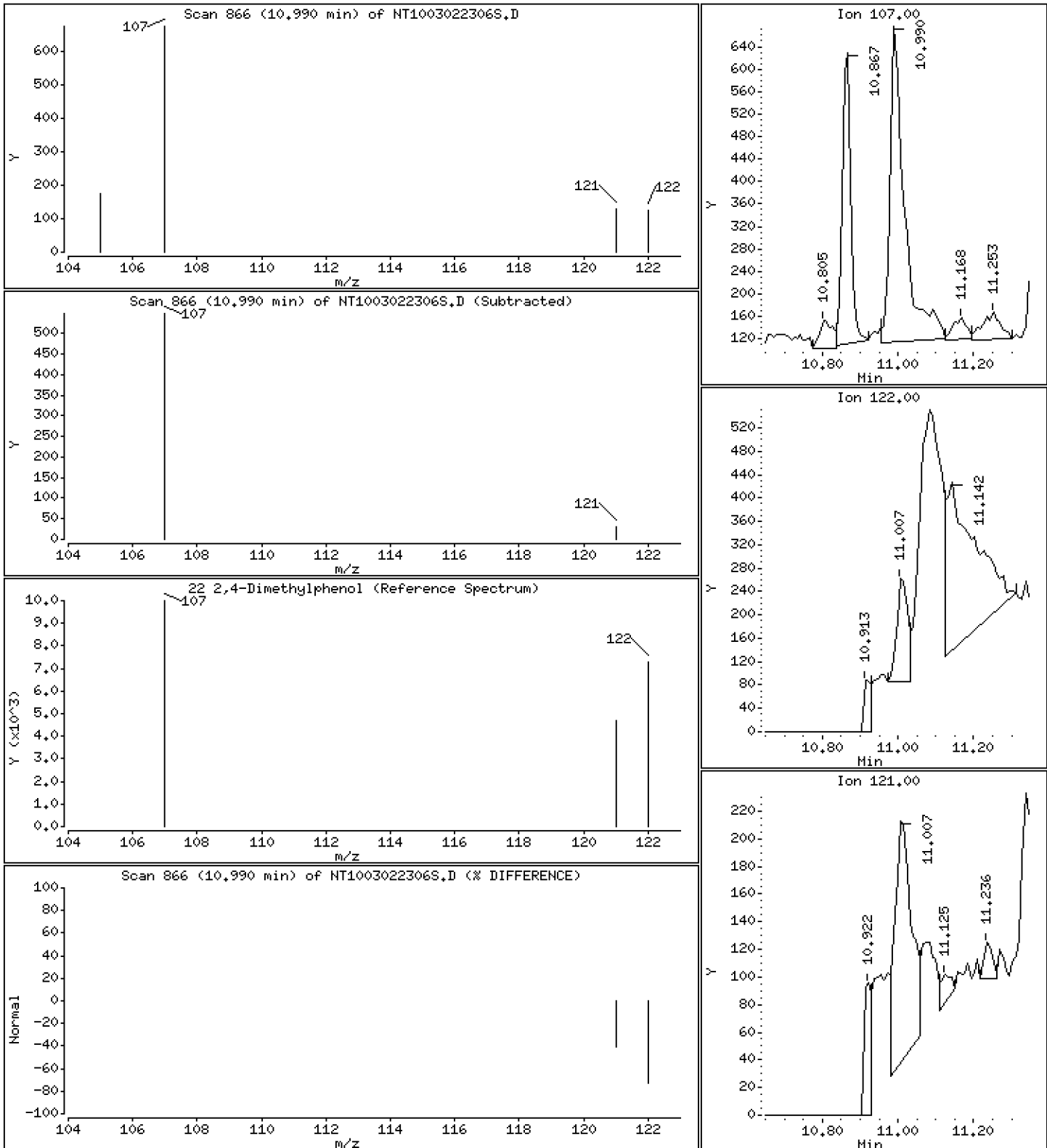
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,008969 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

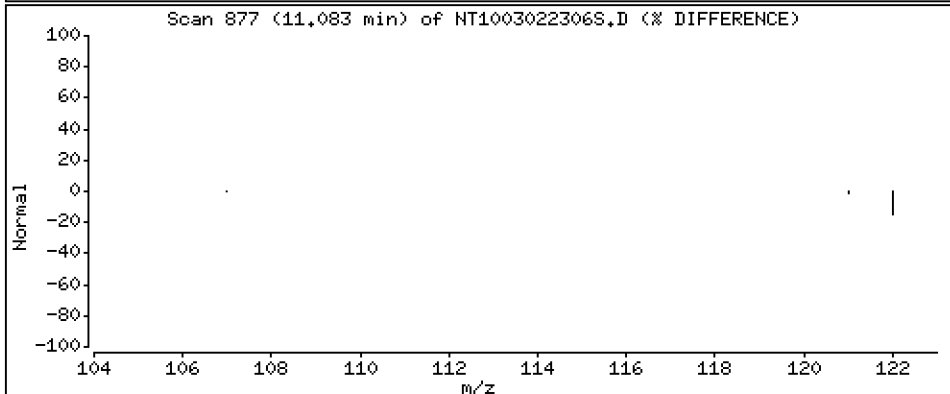
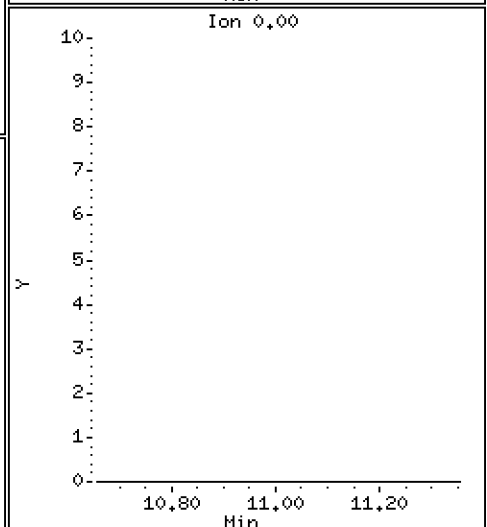
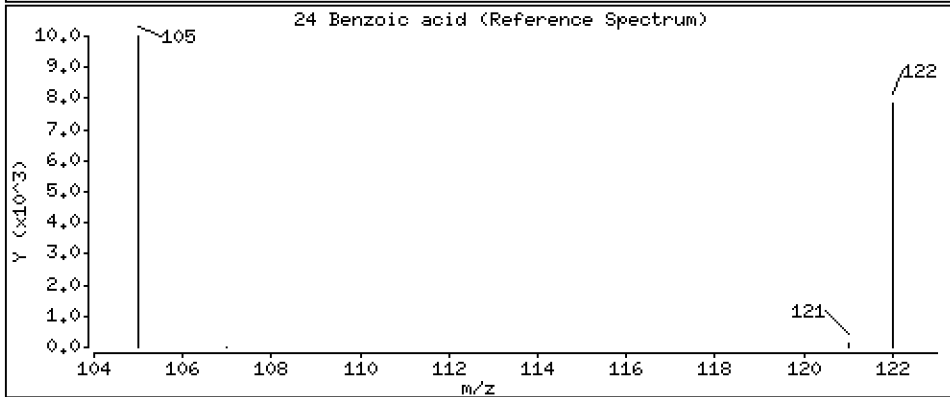
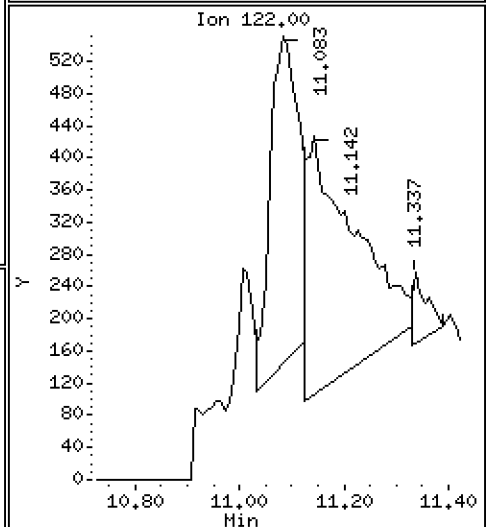
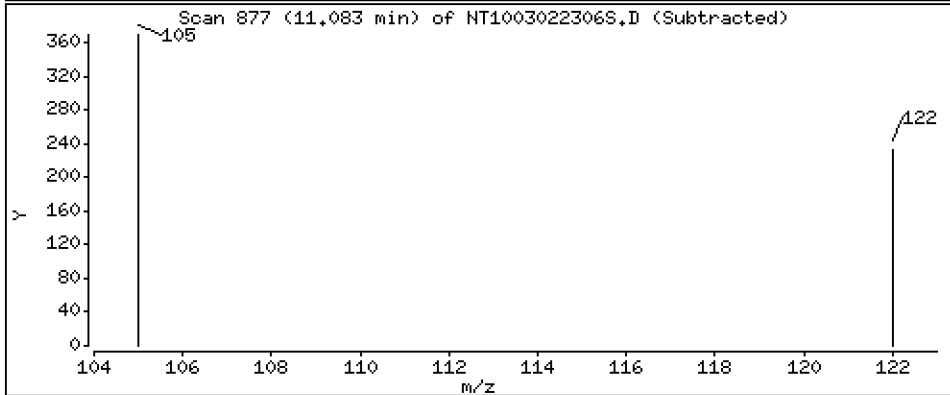
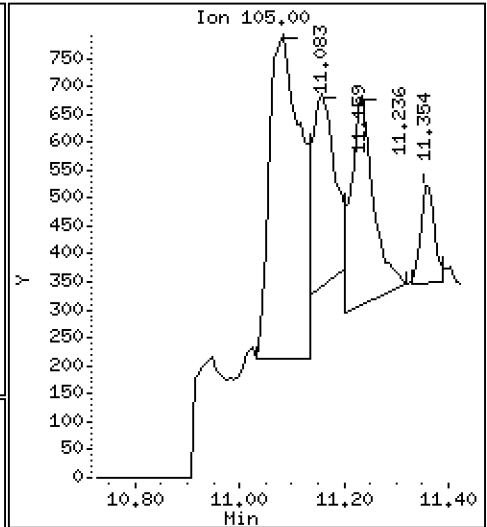
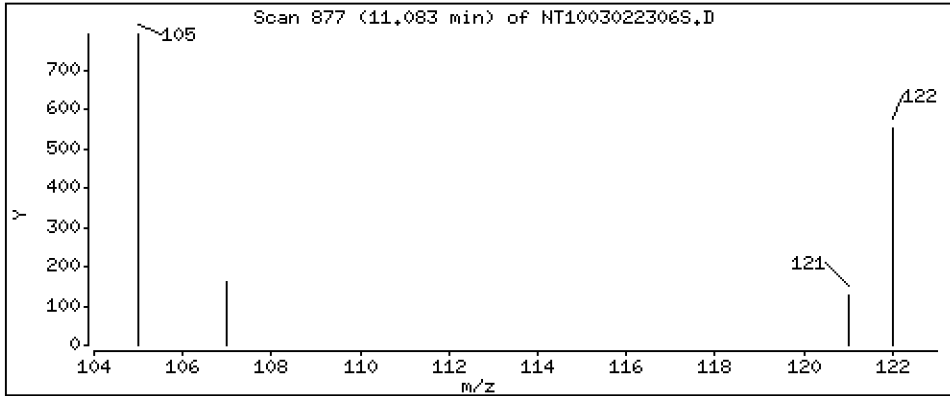
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,02740 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

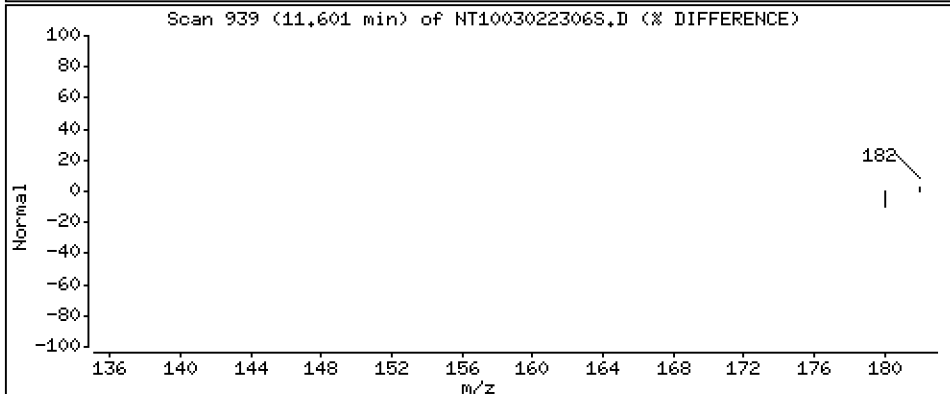
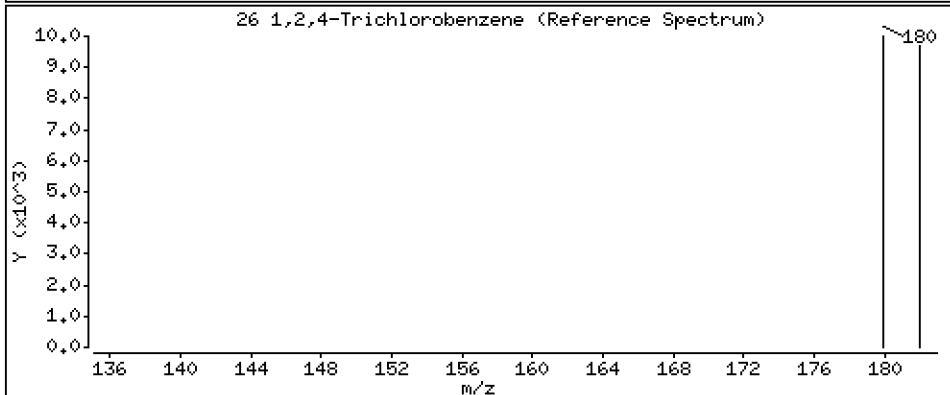
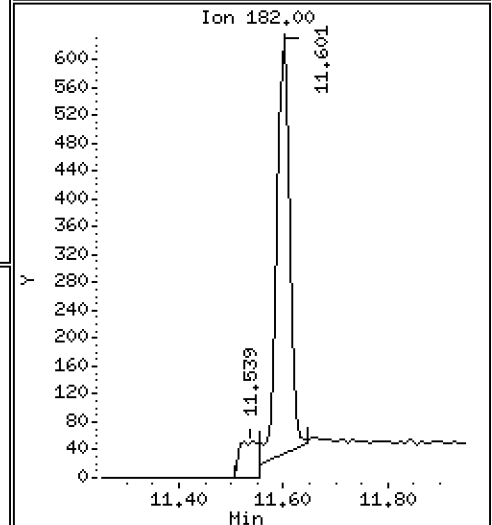
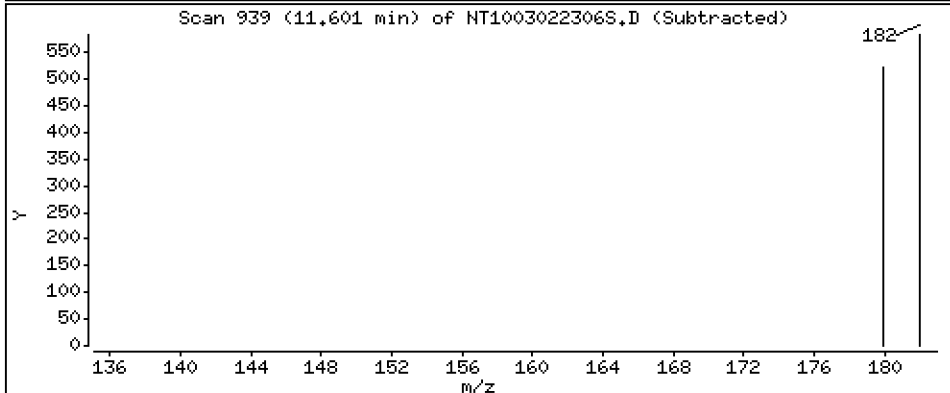
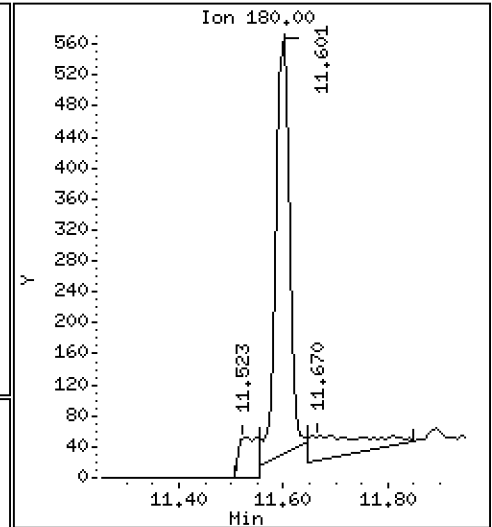
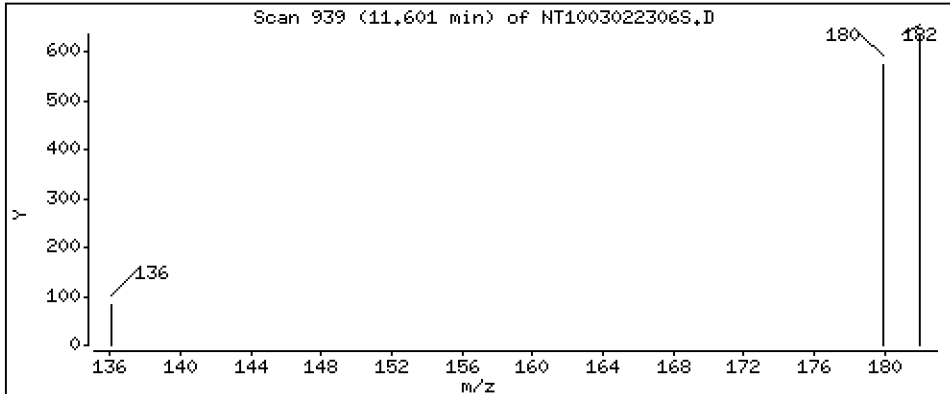
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,006579 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

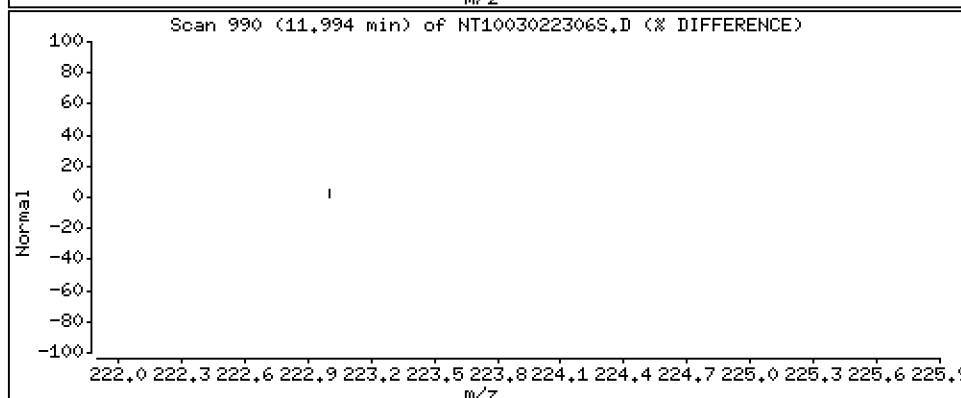
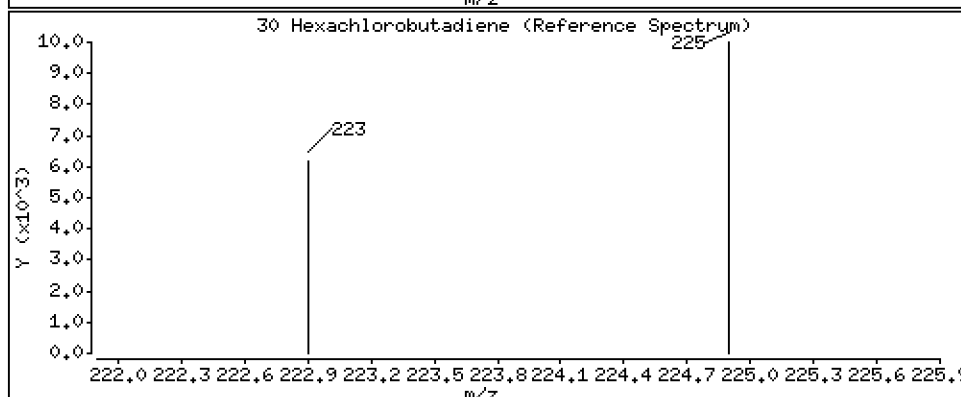
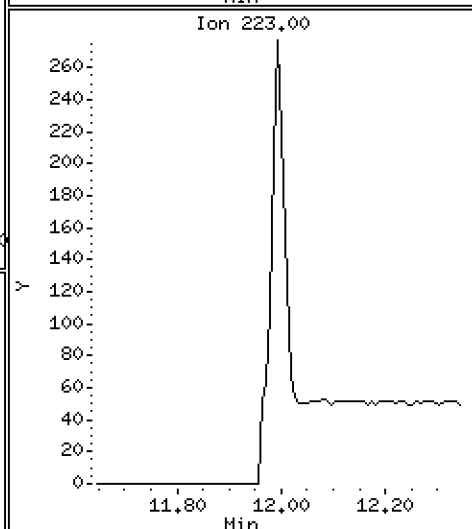
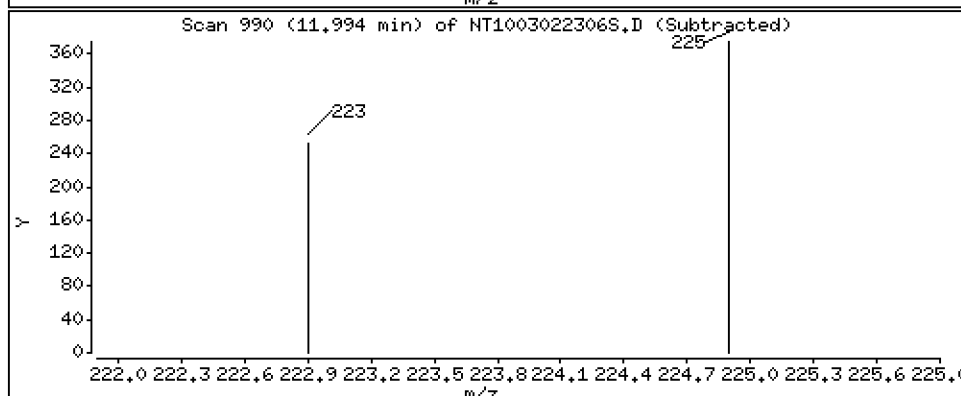
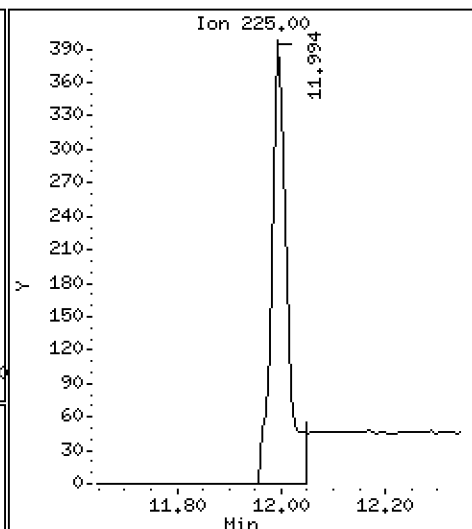
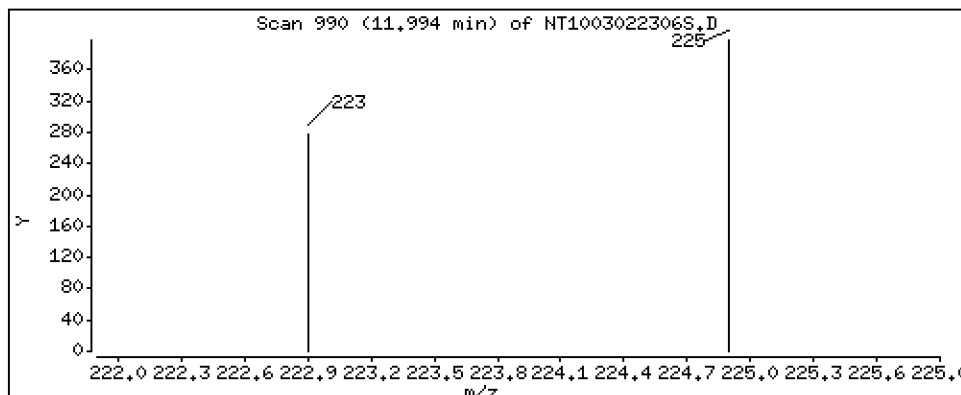
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,007847 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

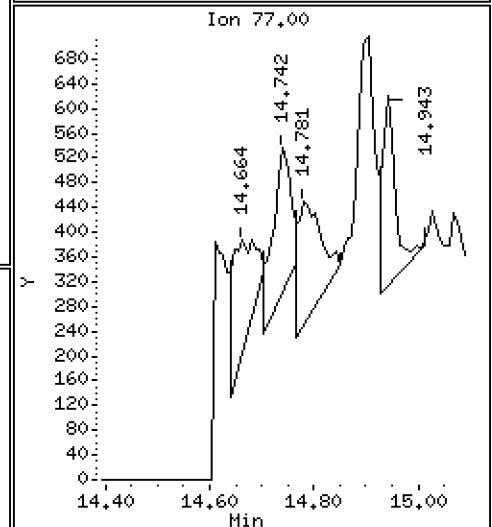
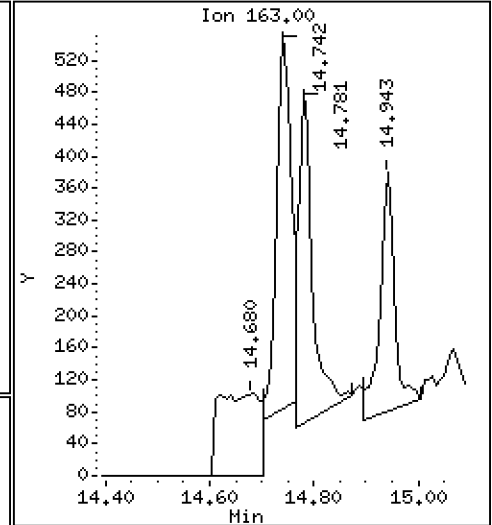
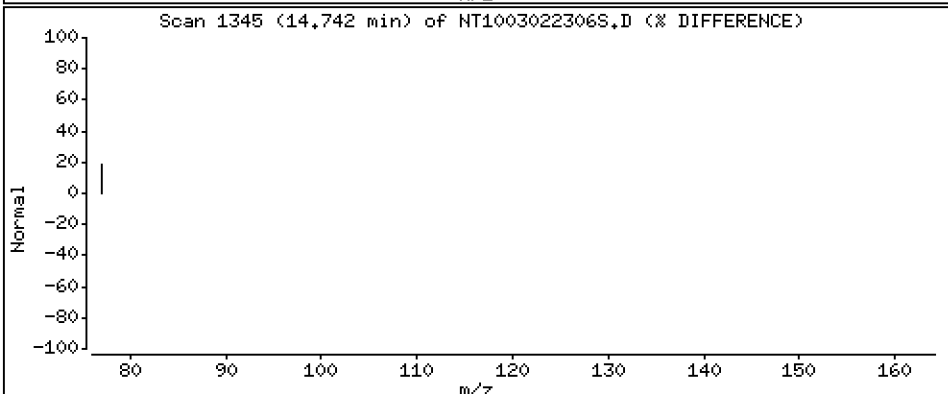
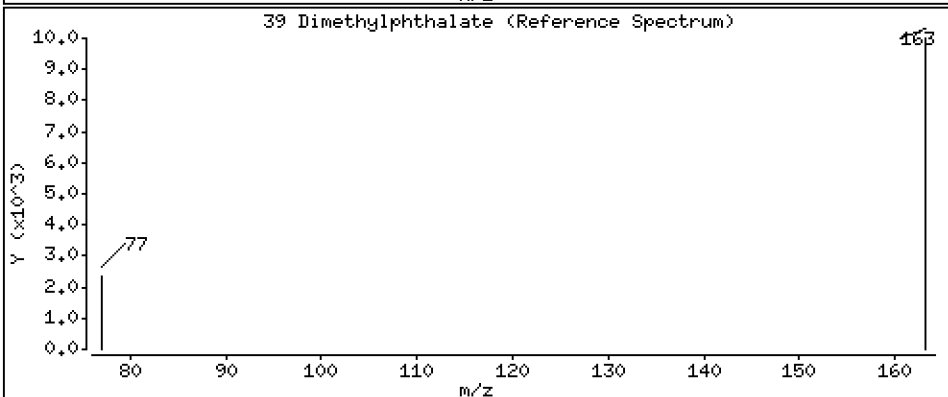
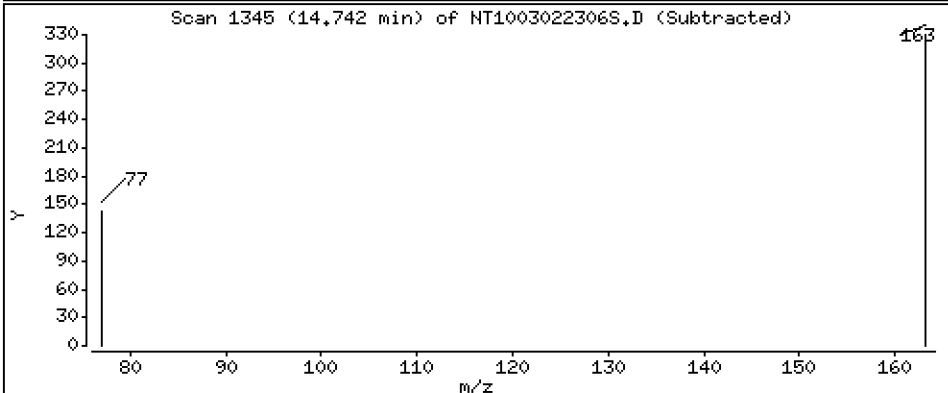
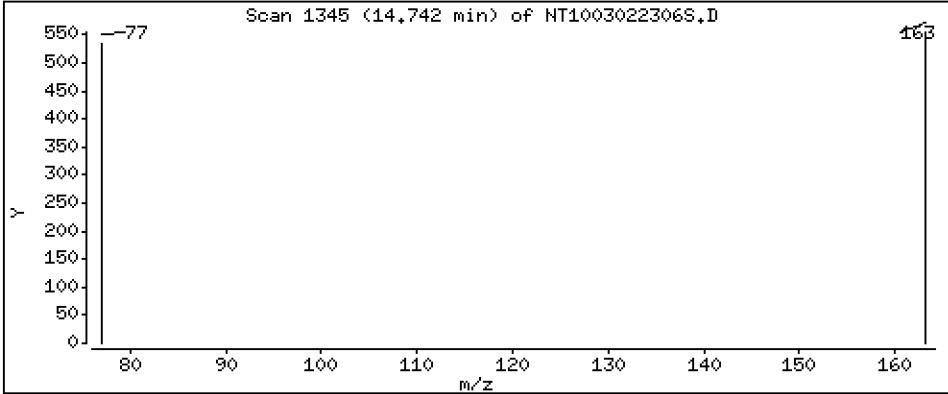
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,002775 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

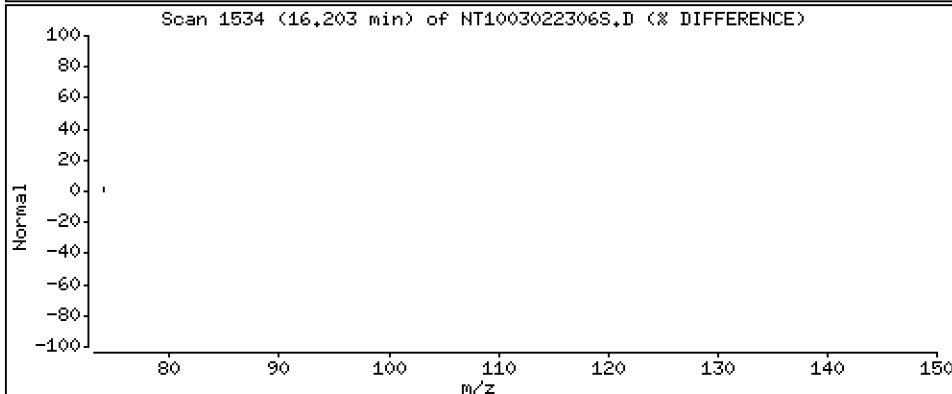
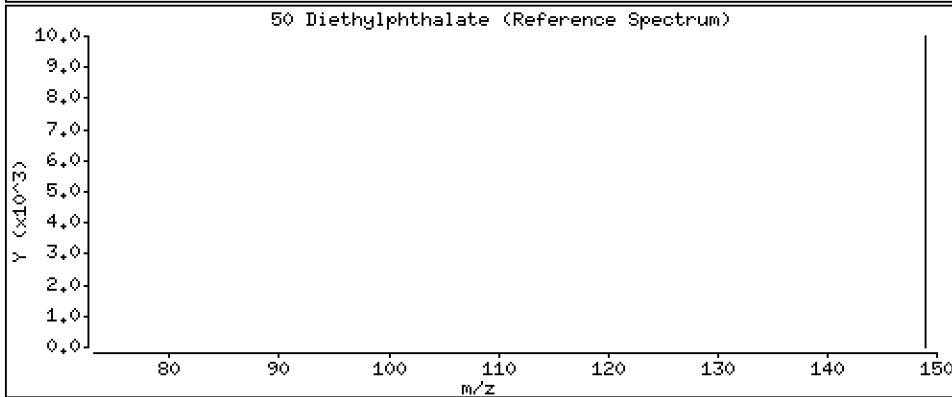
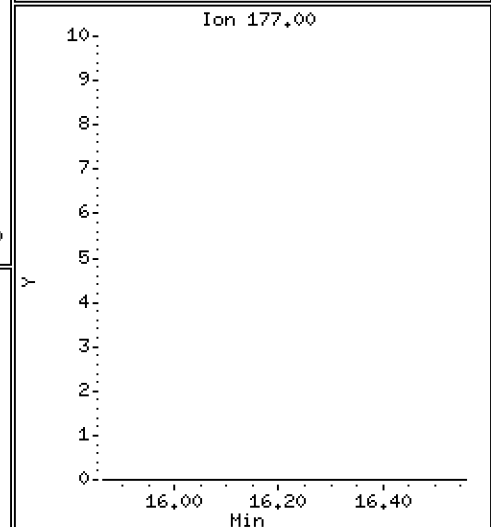
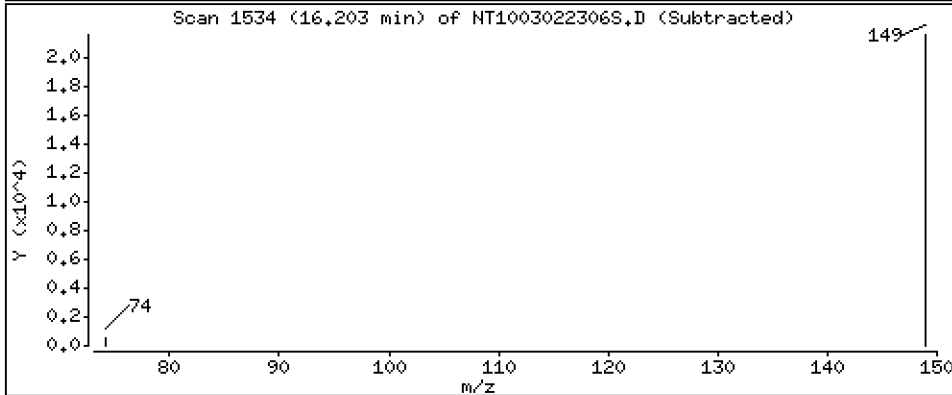
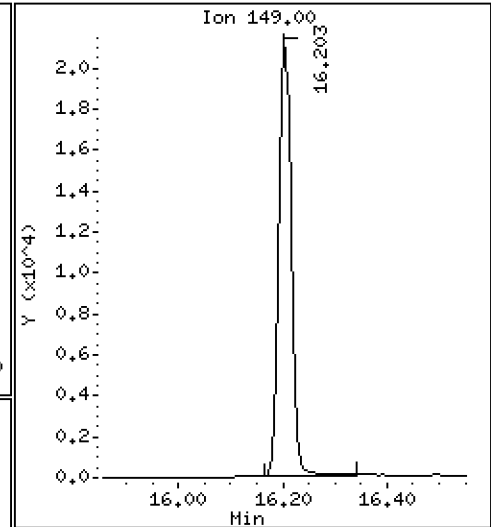
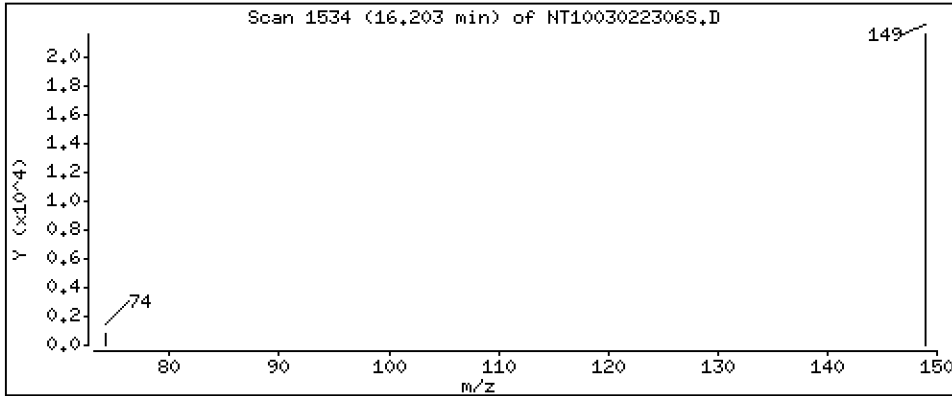
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 0.1080 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

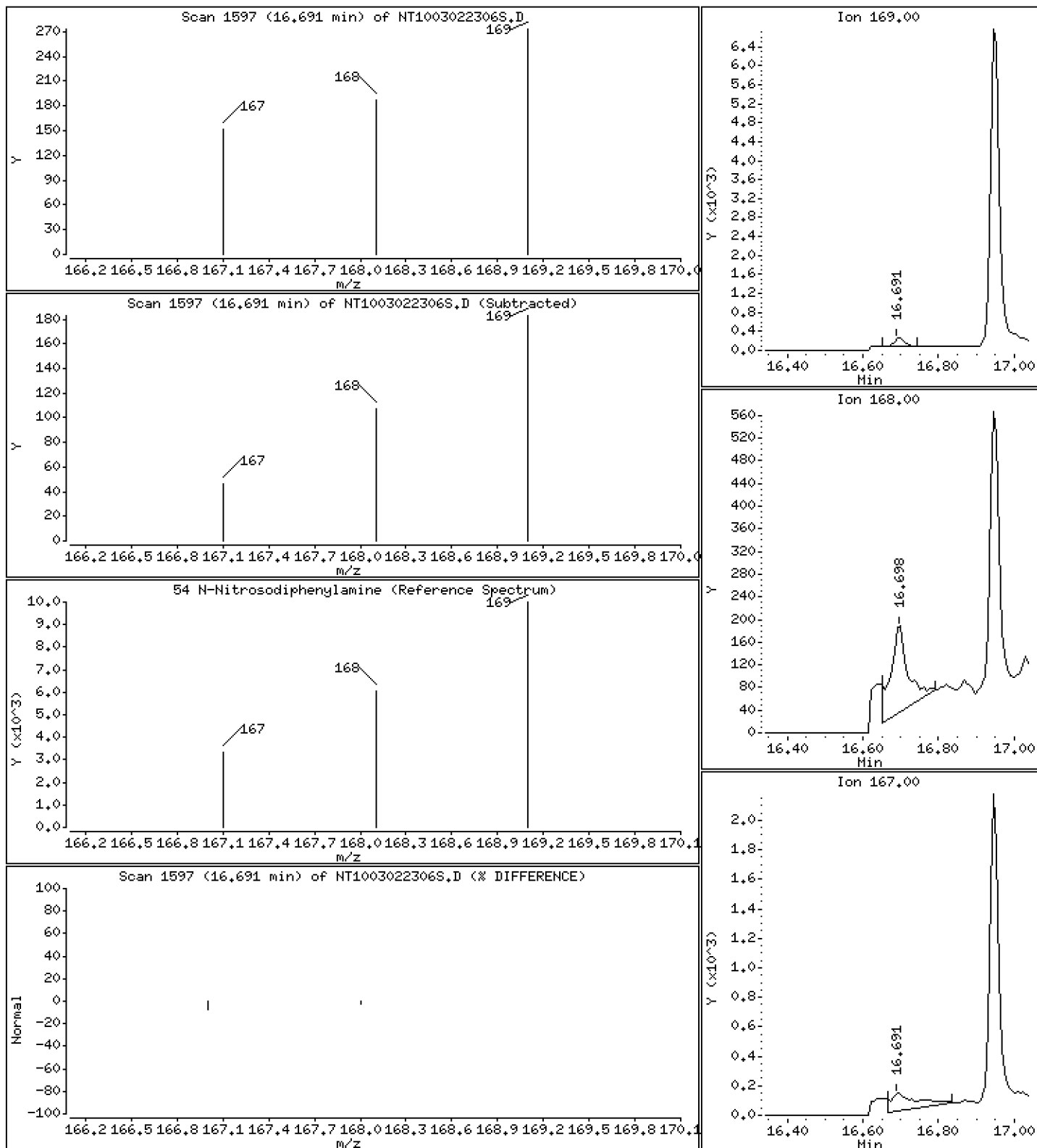
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,001198 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

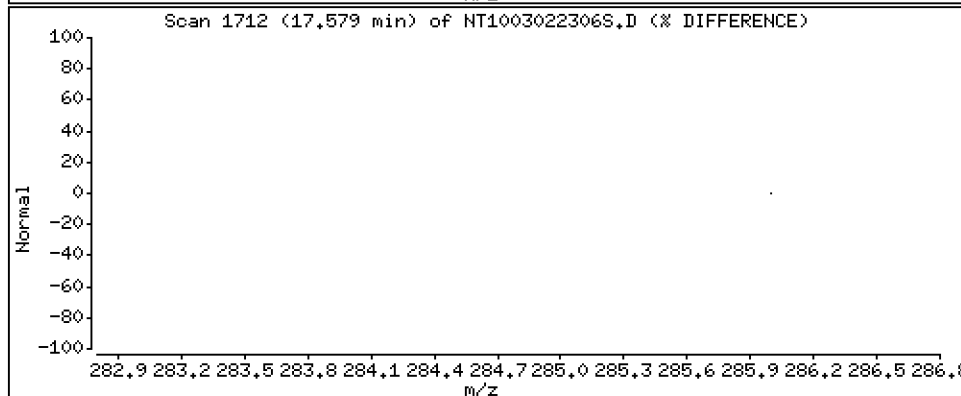
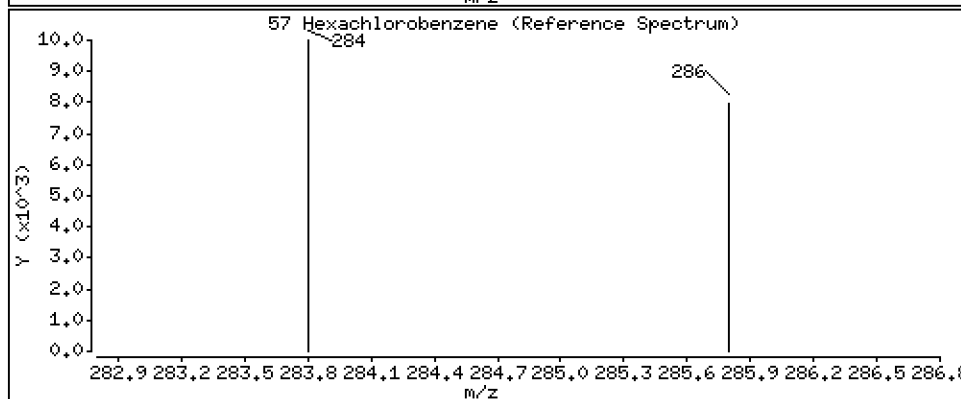
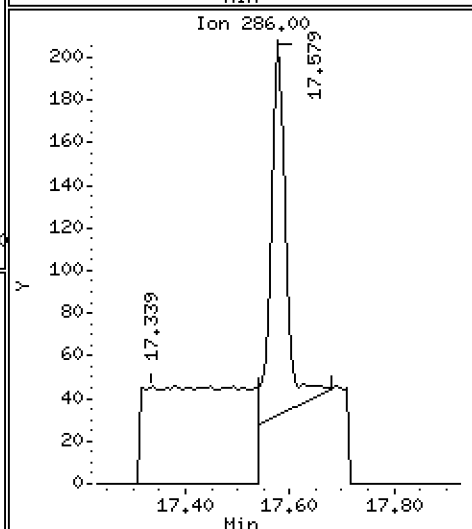
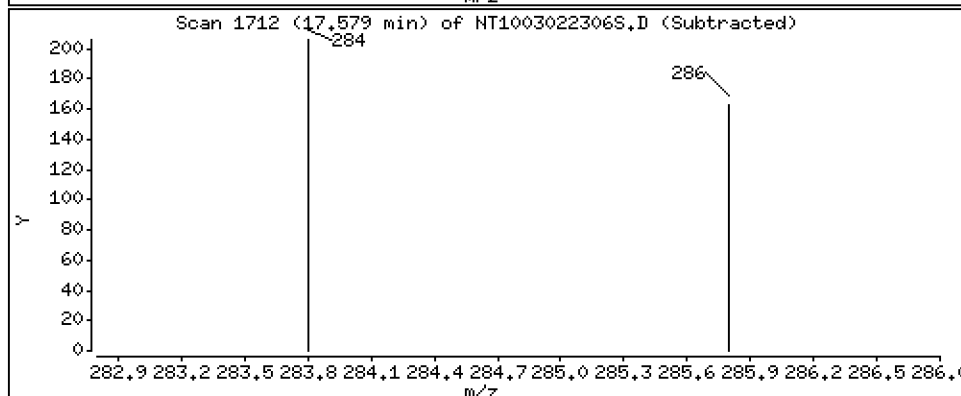
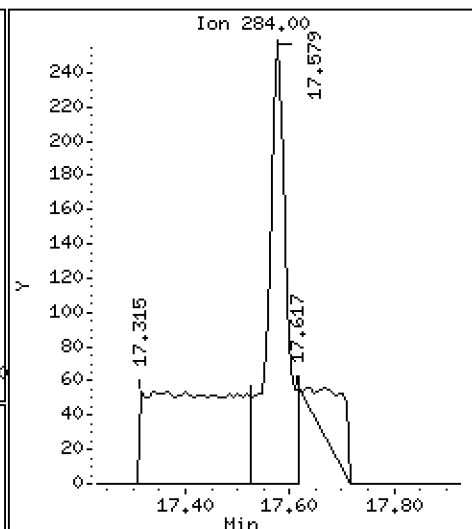
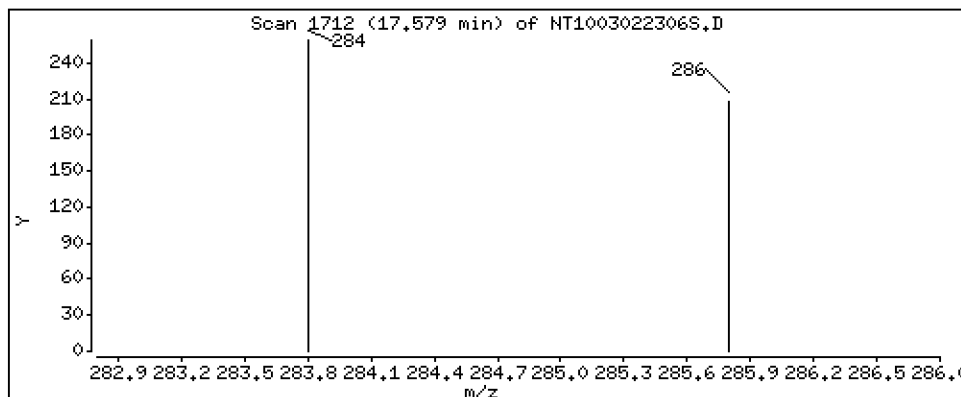
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,004555 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

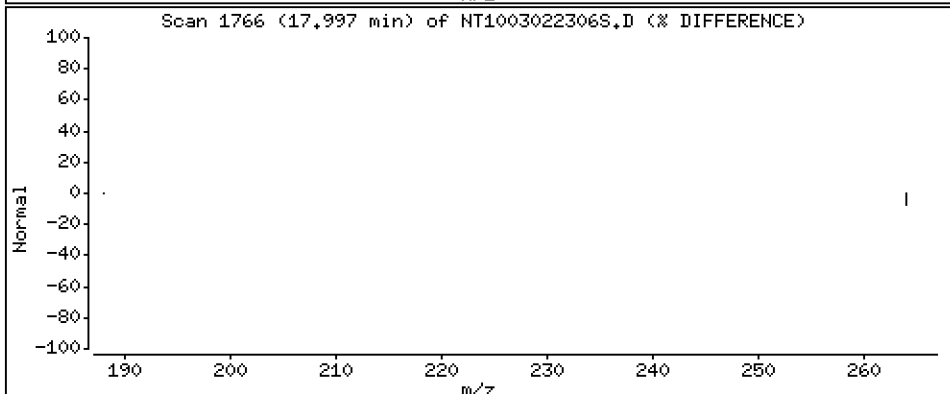
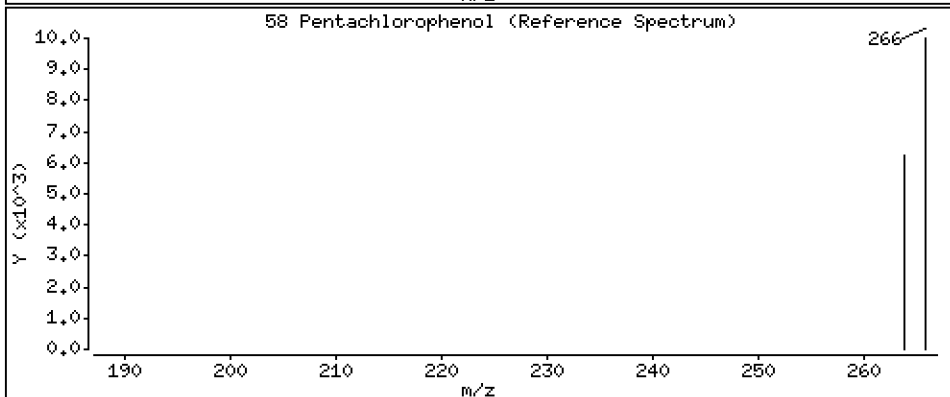
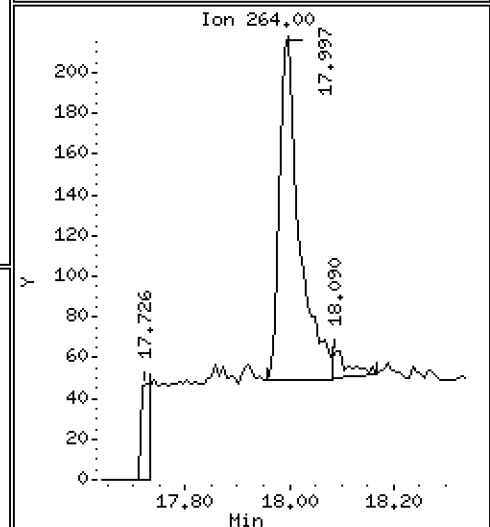
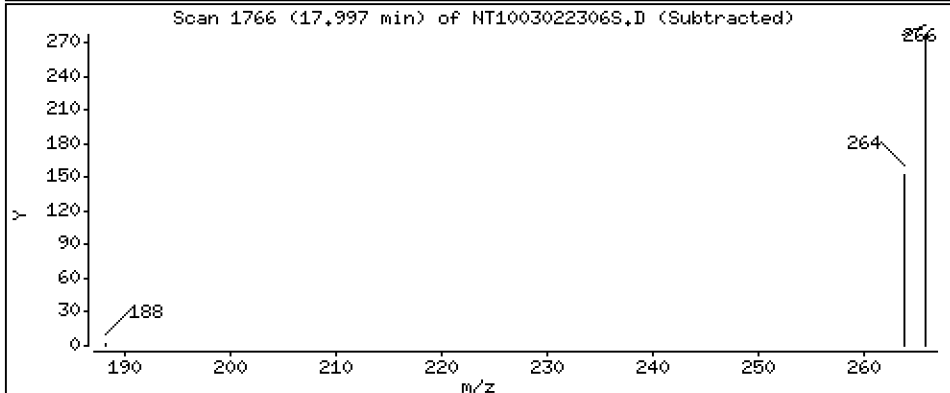
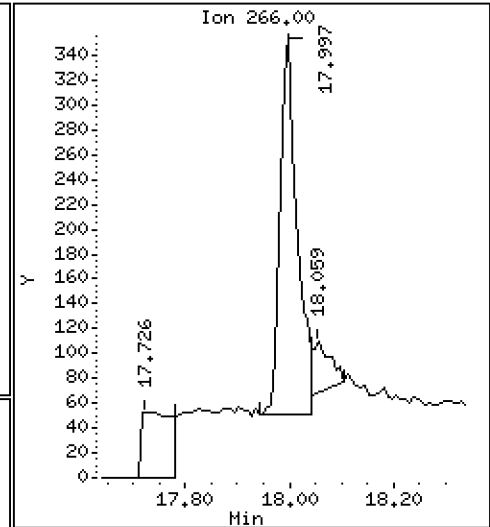
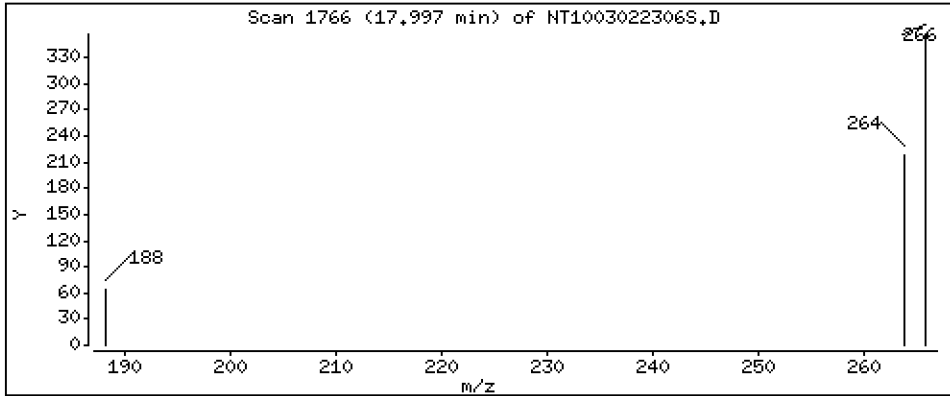
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,01137 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

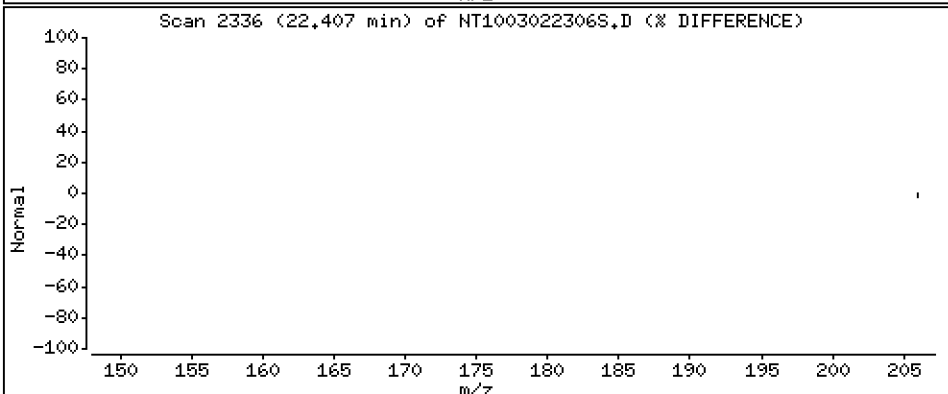
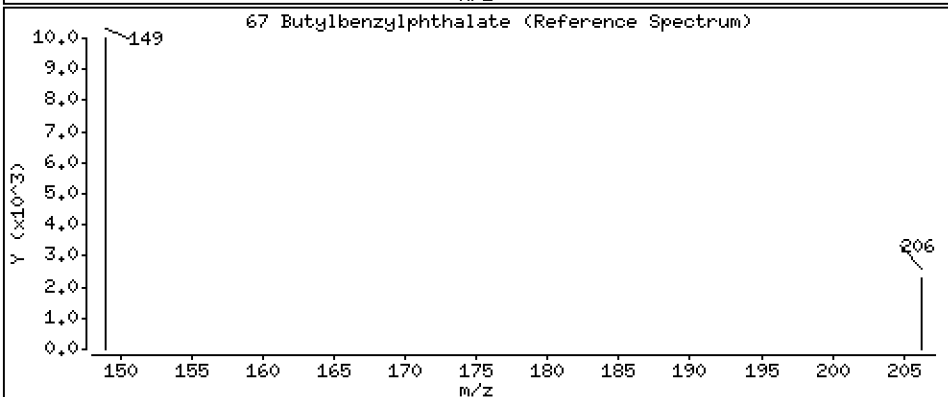
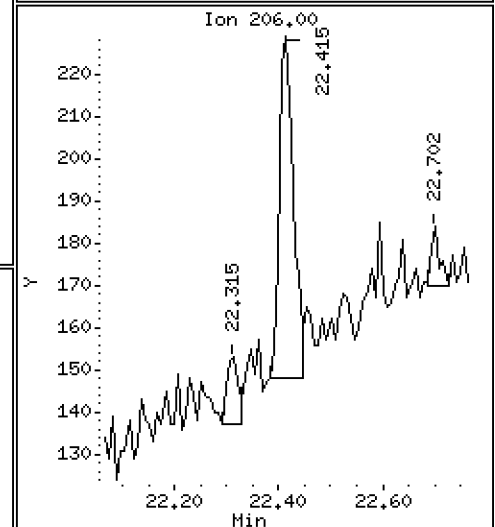
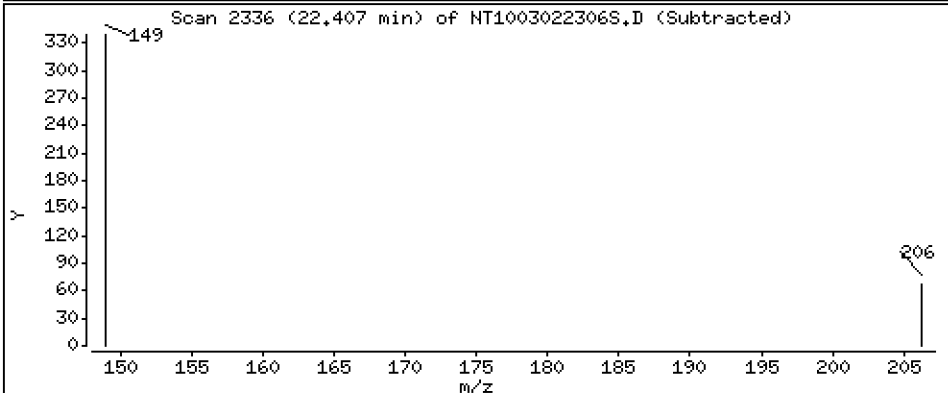
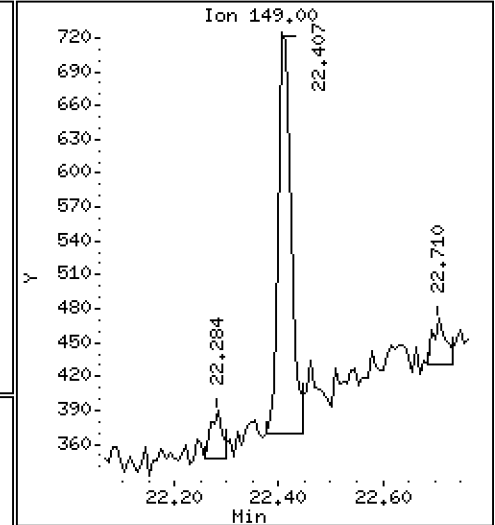
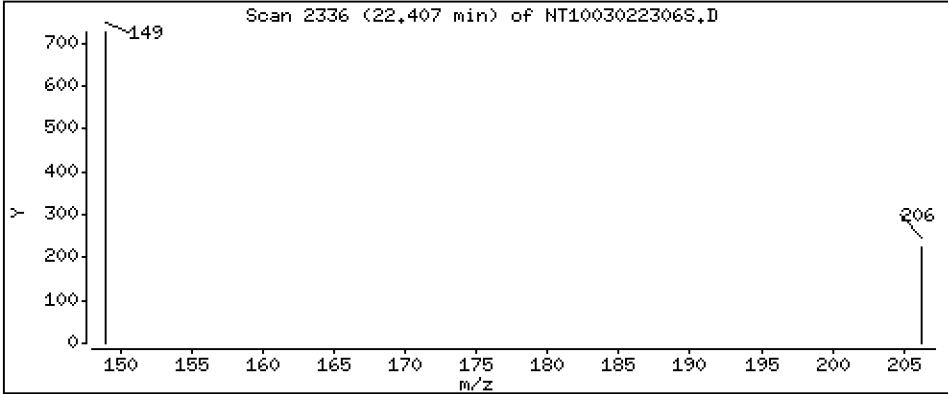
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,001877 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

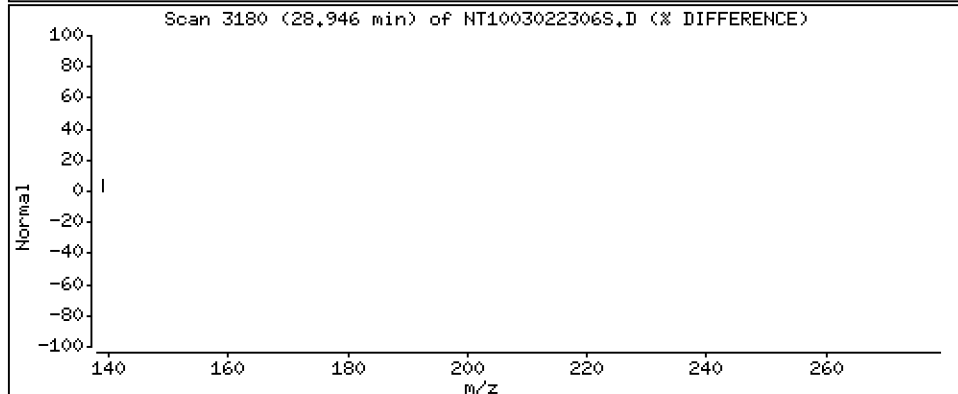
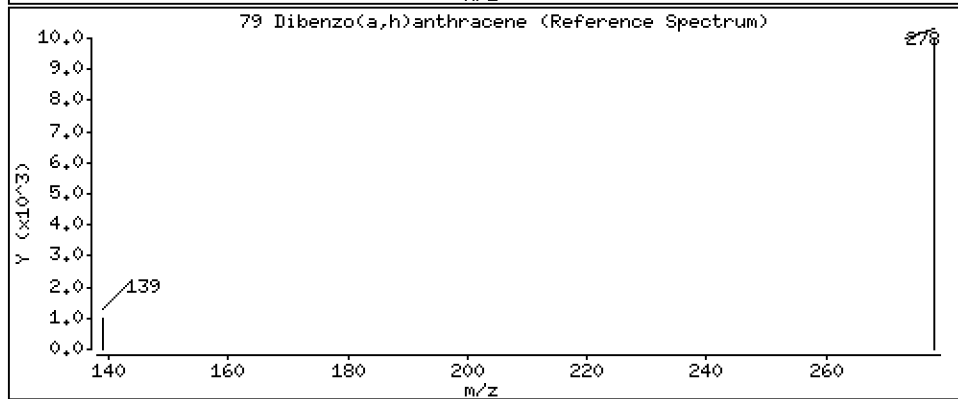
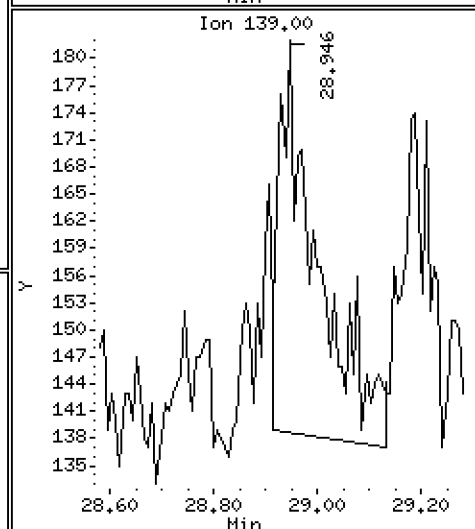
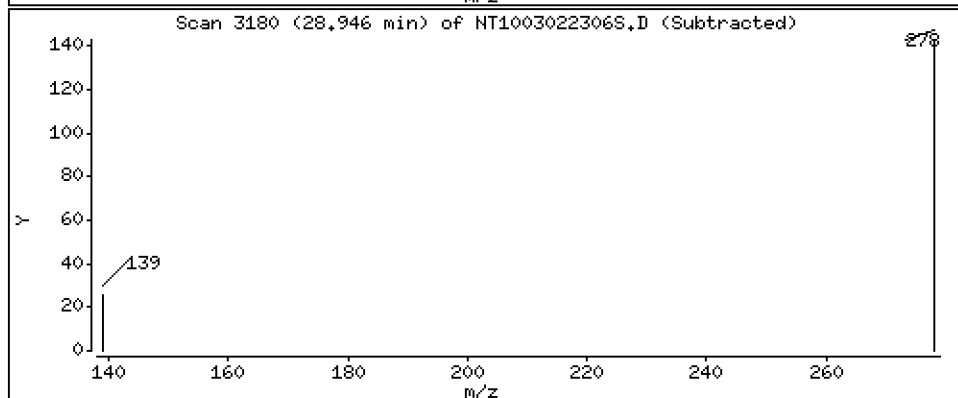
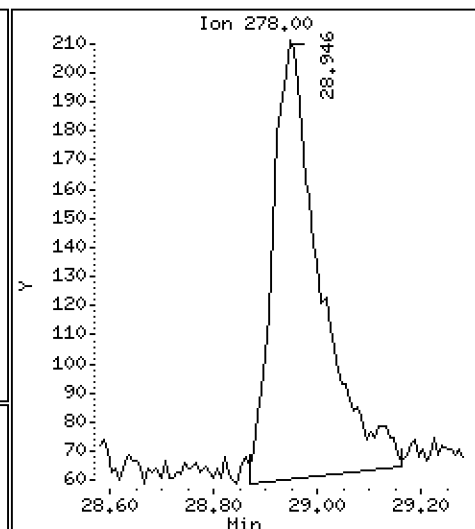
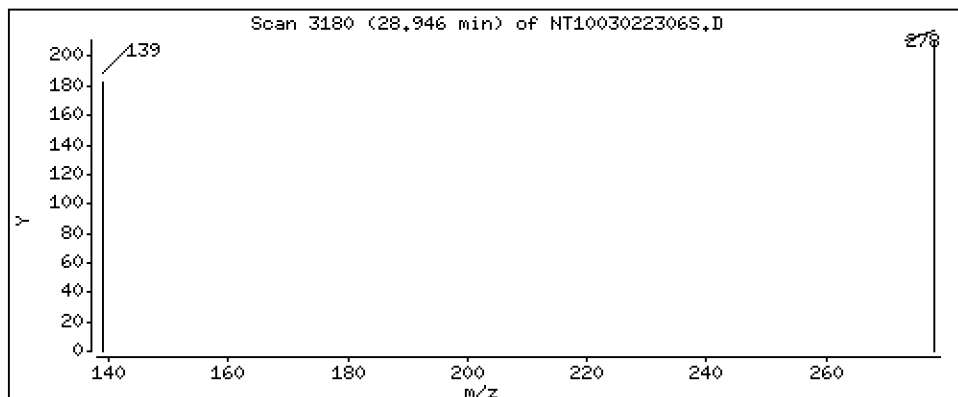
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,002137 ug/L



Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

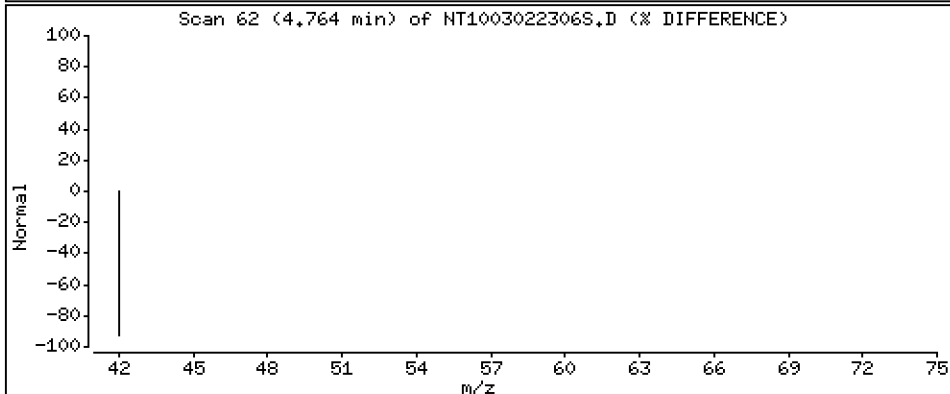
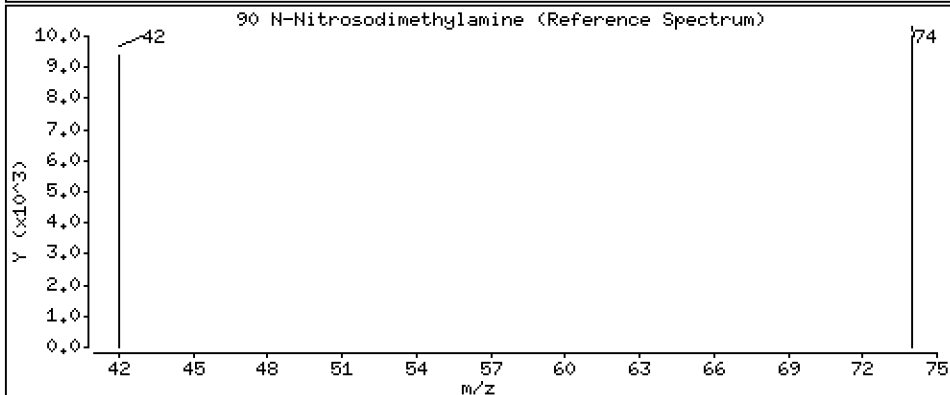
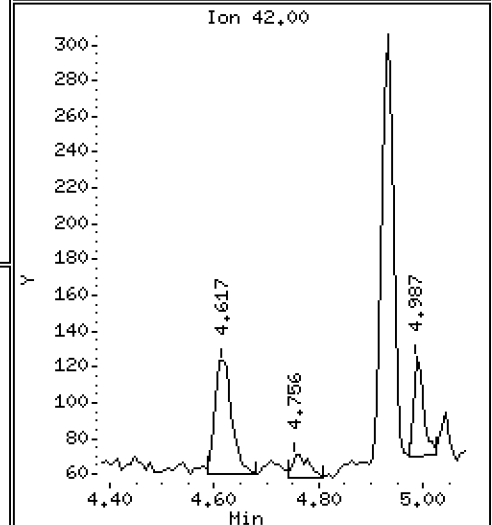
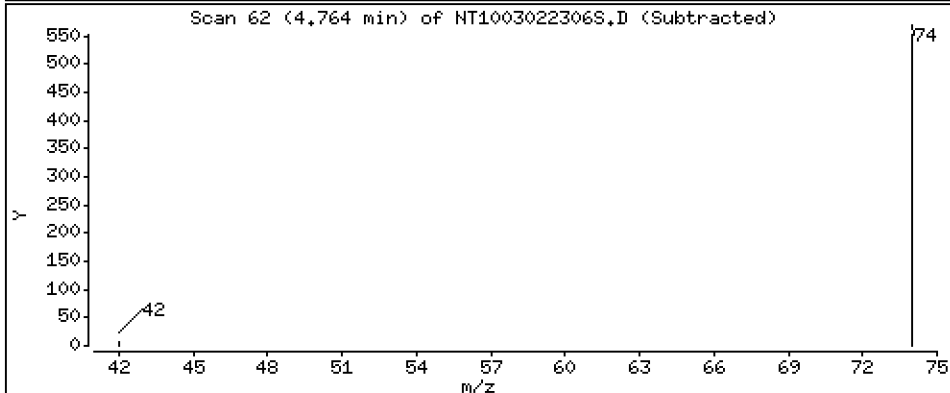
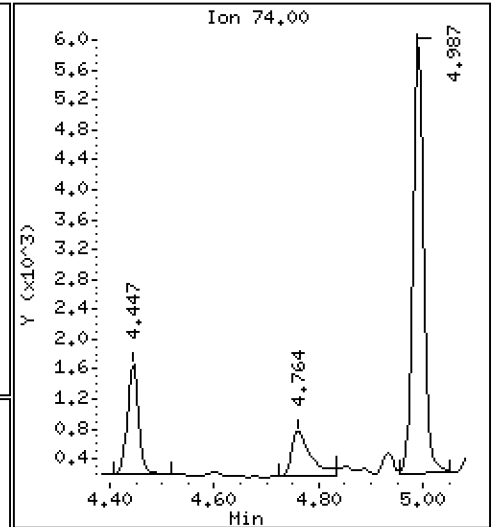
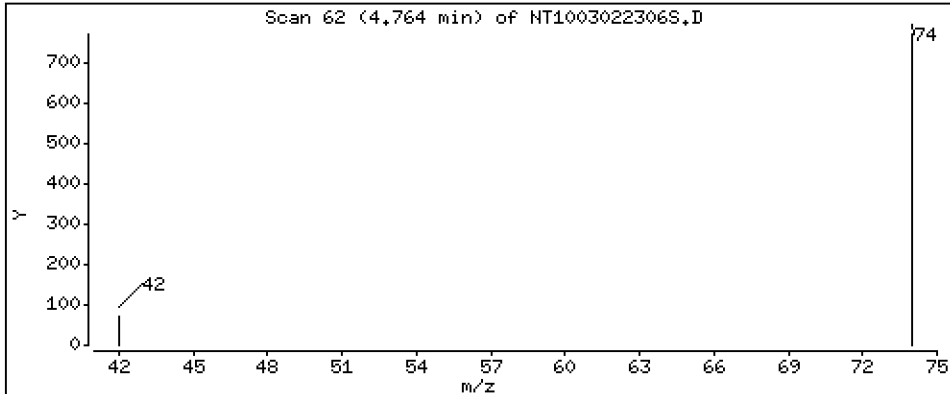
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,01729 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D
 Lab Smp Id: BLA0624-BLK1
 Inj Date : 02-MAR-2023 17:34 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : BLA0624-BLK1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSSDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.747)	862738	5.55899	5.559(R)
3 Phenol	94		8.517	8.517	(0.921)	8521	0.03723	0.03723
7 1,3-Dichlorobenzene	146		9.143	9.143	(0.989)	1769	0.00878	0.008781
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.251	(1.000)	543607	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.282	(1.003)	1909	0.00975	0.009746
11 Benzyl alcohol	79		9.477	9.476	(1.025)	2528	0.01992	0.01992
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	1543	0.00820	0.008196
13 2-Methylphenol	108		9.663	9.655	(1.045)	822	0.00597	0.005974
15 4-Methylphenol	108		9.958	9.942	(1.077)	537	0.00375	0.003753
16 N-Nitroso-di-n-propylamine	70		10.292	9.981	(1.113)	76325	0.74683	0.7468
22 2,4-Dimethylphenol	107		10.989	10.997	(0.937)	1496	0.00897	0.008969
24 Benzoic acid	105		11.082	11.074	(0.945)	2506	0.02740	0.02740
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	931	0.00658	0.006579
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1966158	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	788	0.00785	0.007847
39 Dimethylphthalate	163		14.741	14.741	(0.963)	906	0.00277	0.002775
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	1028261	4.00000	
50 Diethylphthalate	149		16.203	16.203	(1.058)	33257	0.10801	0.1080
54 N-Nitrosodiphenylamine	169		16.690	16.690	(0.907)	354	0.00120	0.001198
57 Hexachlorobenzene	284		17.578	17.578	(0.955)	630	0.00455	0.004555

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.996	17.988	(0.978)	688	0.01137	0.01137
* 59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1826191	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	684314	4.58447	4.584 (R)
67 Butylbenzylphthalate	149	22.407	22.414	(0.957)	585	0.00188	0.001877
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1845847	4.00000	
* 77 Perylene-d12	264	26.108	26.115	(1.000)	1929666	4.00000	
79 Dibenzo(a,h)anthracene	278	28.945	28.929	(1.109)	955	0.00214	0.002137
90 N-Nitrosodimethylamine	74	4.763	4.732	(0.515)	1589	0.01729	0.01729

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022306S.D
 Lab Smp Id: BLA0624-BLK1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	543607	10.17
27 Naphthalene-d8	1779056	889528	3558112	1966158	10.52
42 Acenaphthene-d10	954569	477285	1909138	1028261	7.72
59 Phenanthrene-d10	1596290	798145	3192580	1826191	14.40
69 Chrysene-d12	1649110	824555	3298220	1845847	11.93
77 Perylene-d12	1901958	950979	3803916	1929666	1.46

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.24	-0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.11	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003022306S.D

Lab ID: BLA0624-BLK1

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 17:34

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
1.113	1.079	0.0345		N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

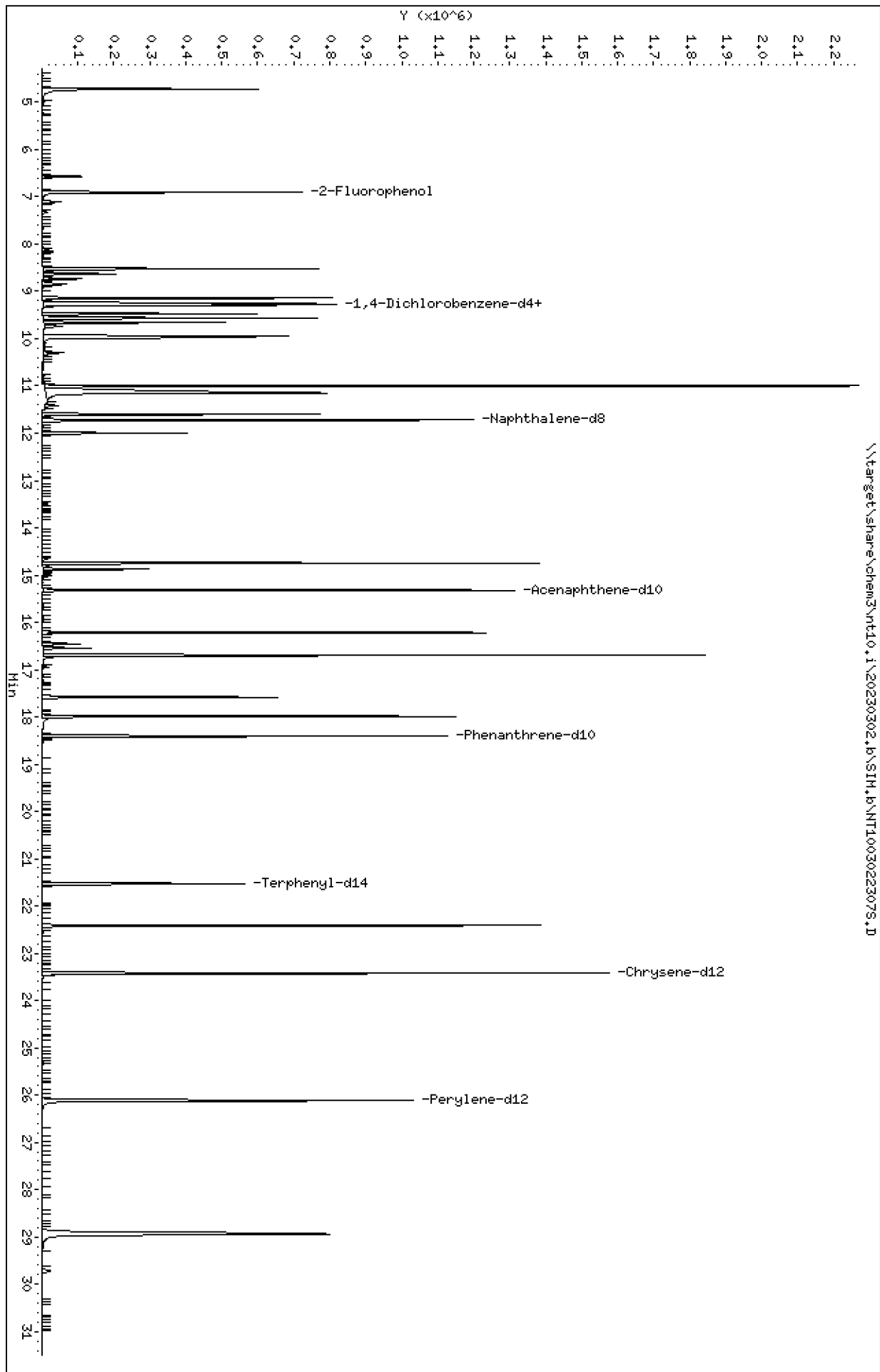
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIM.B\NT1003022307S.D
Date: 02-MAR-2023 18:12
Client ID:
Sample Info: BLR0624-BS1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIM.B\NT1003022307S.D



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

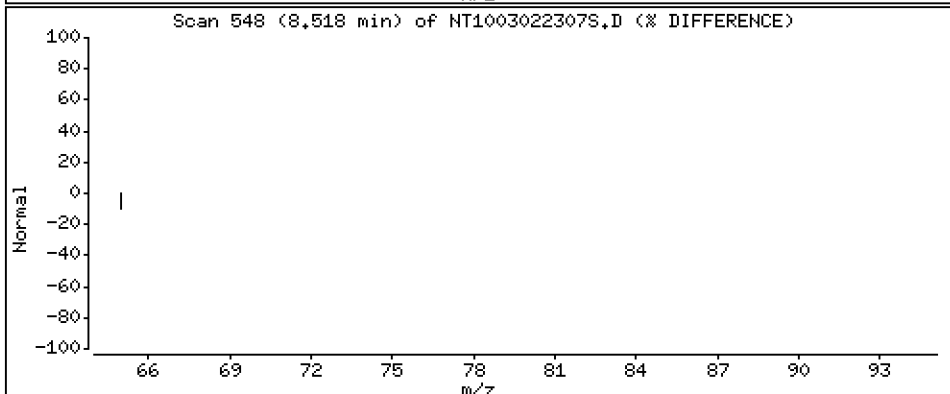
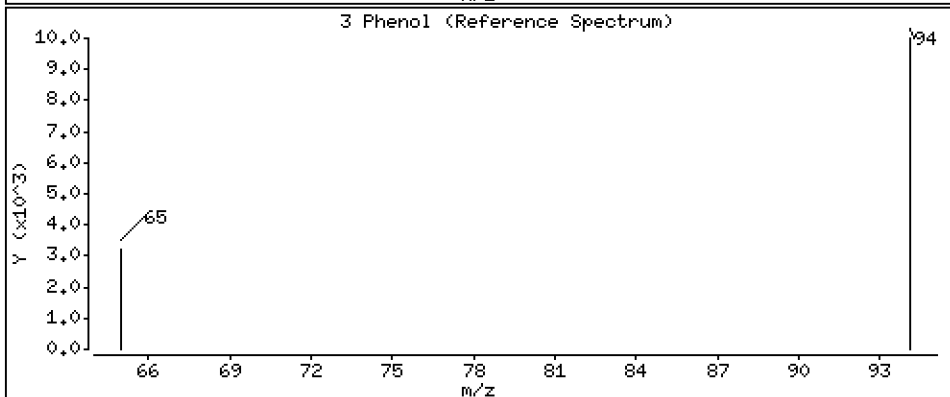
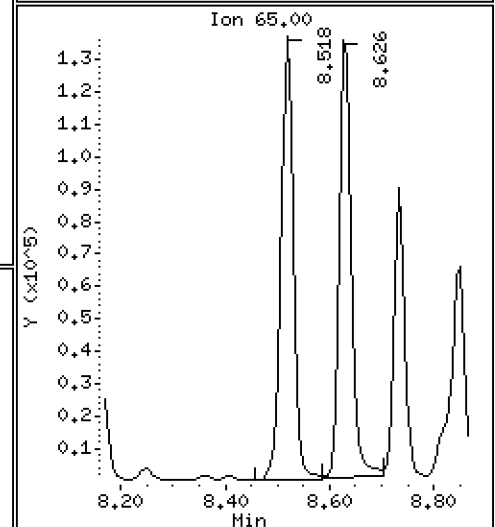
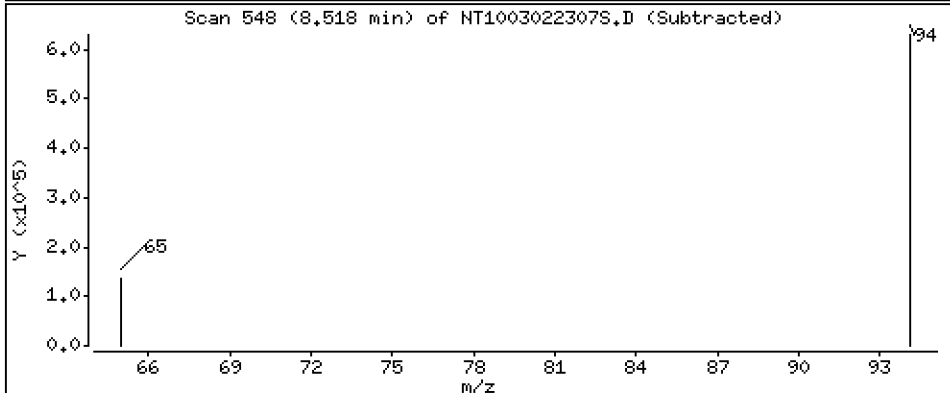
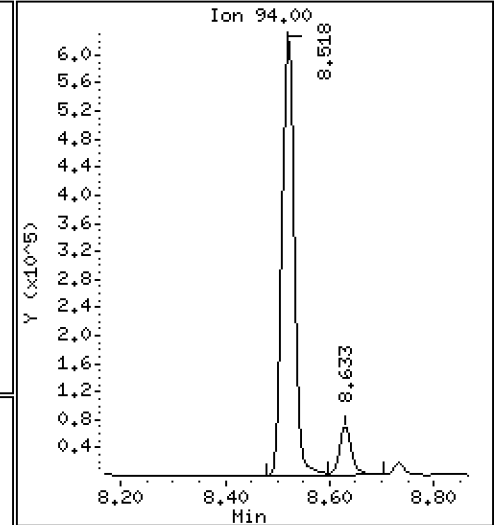
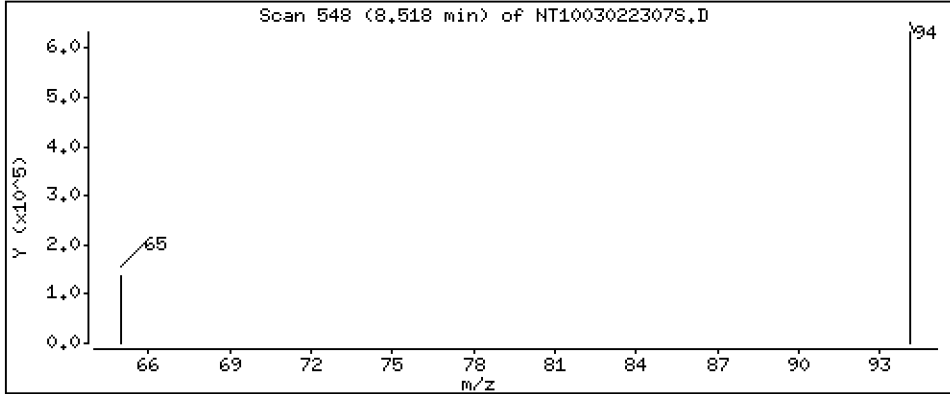
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.985 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

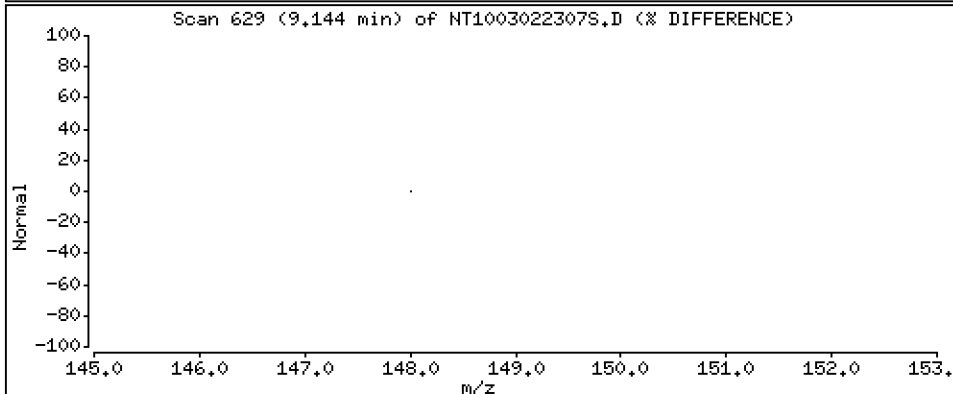
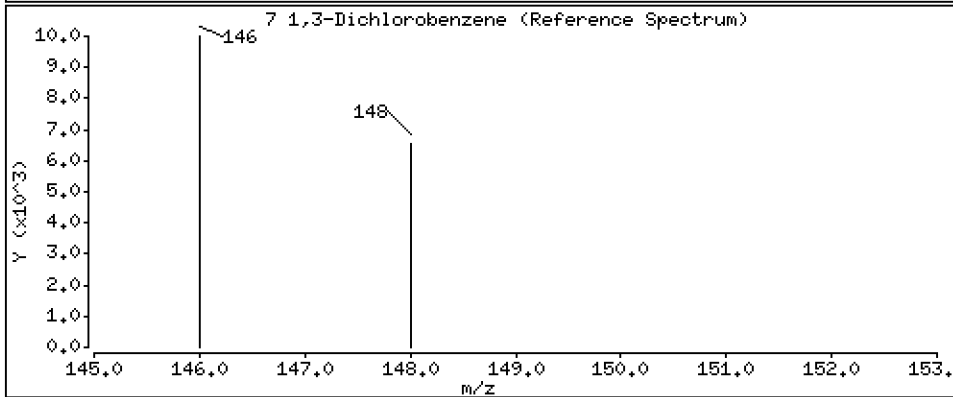
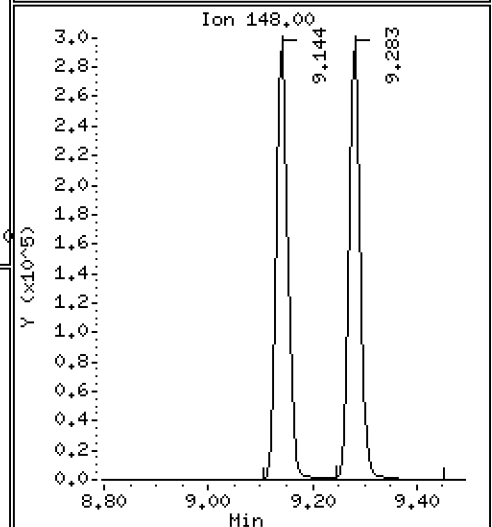
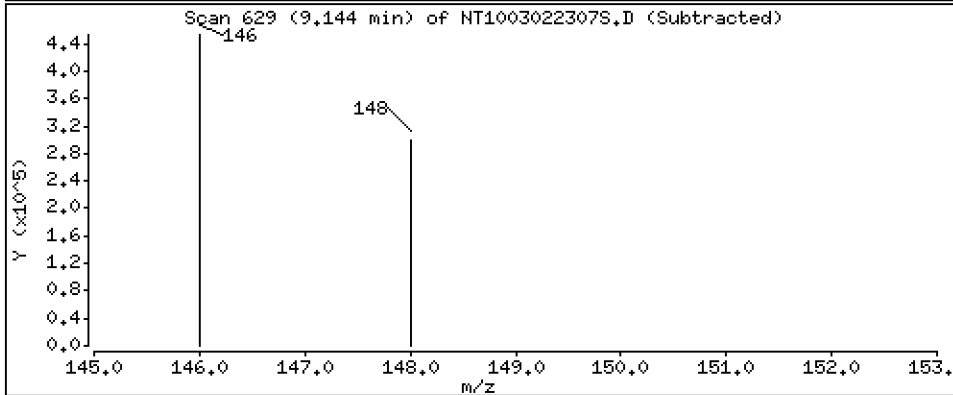
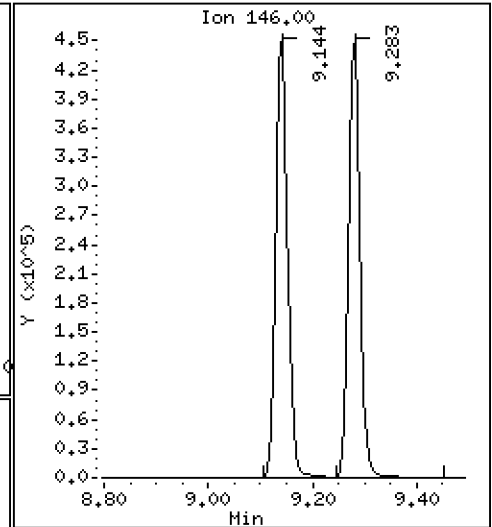
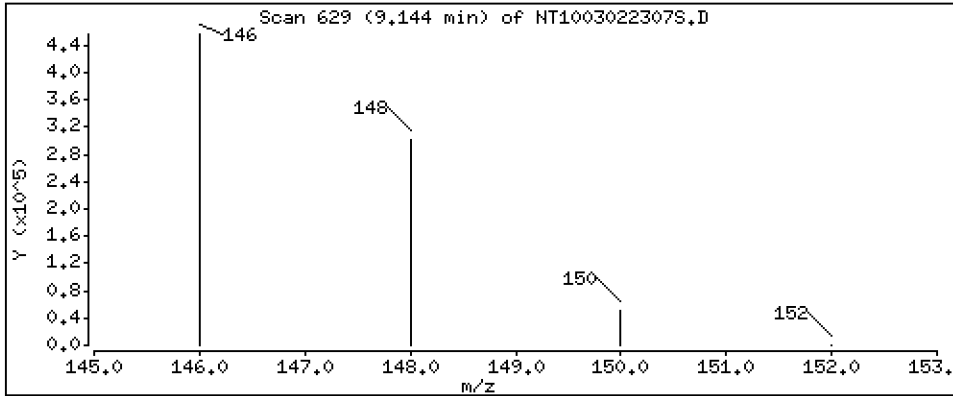
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.235 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

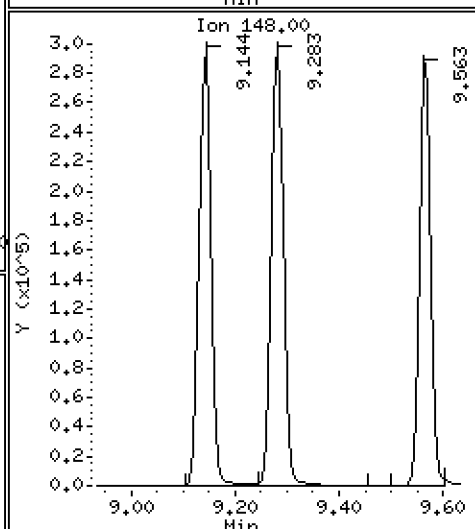
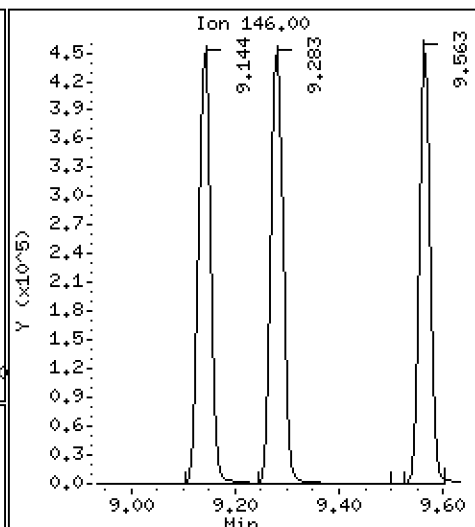
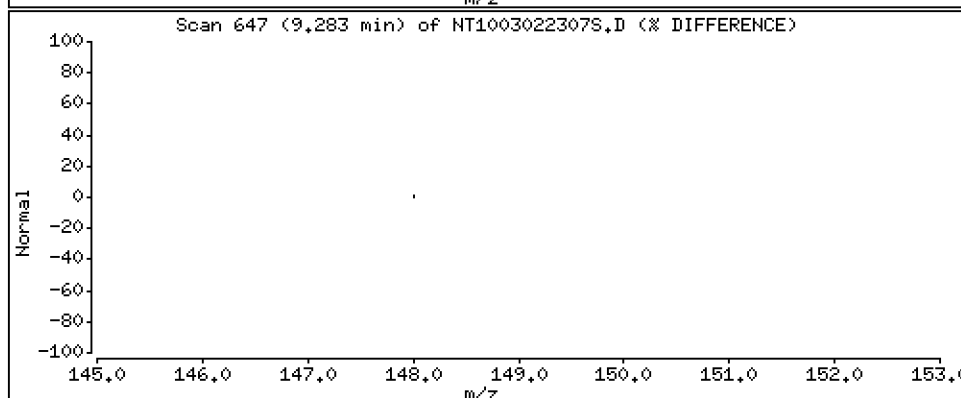
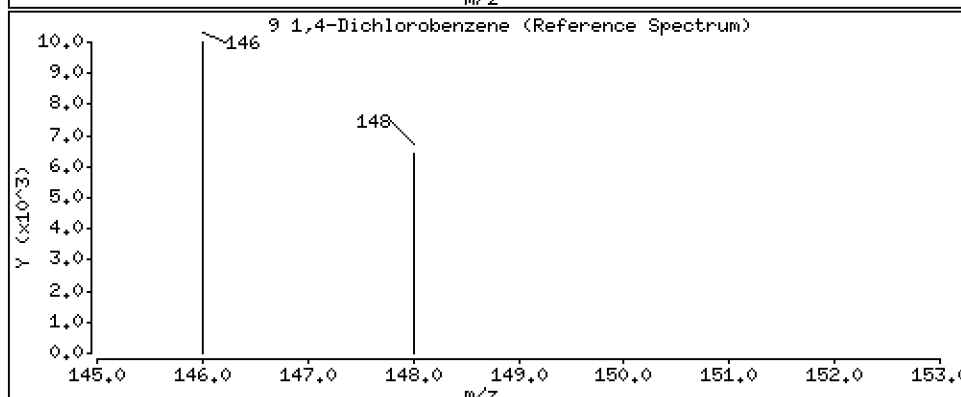
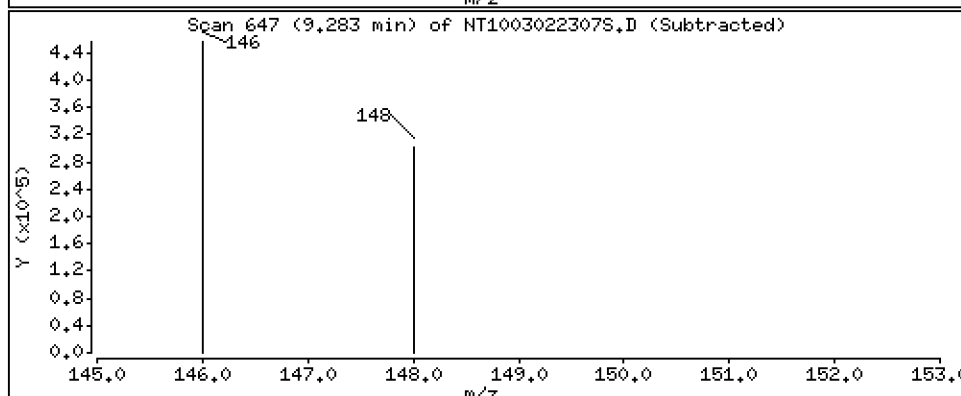
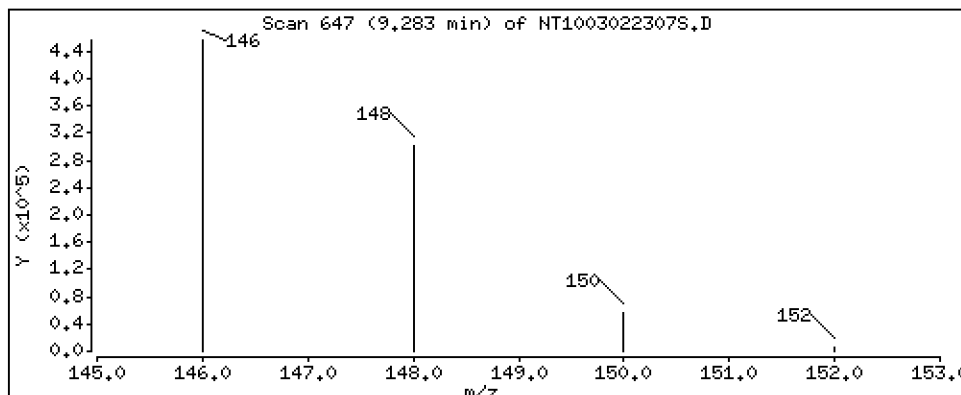
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.398 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

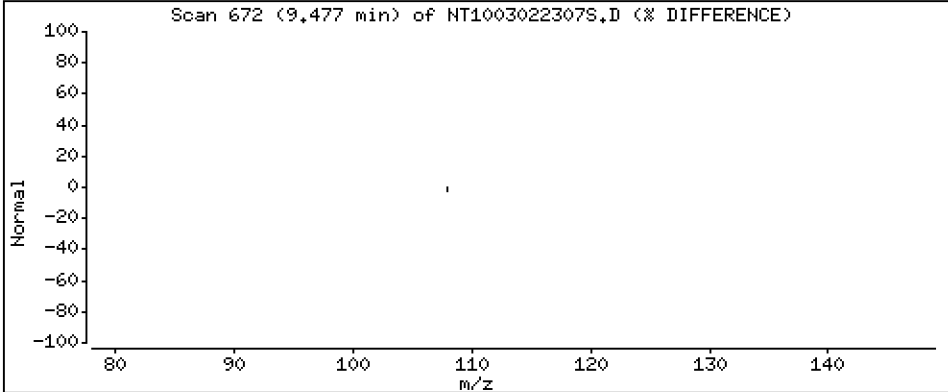
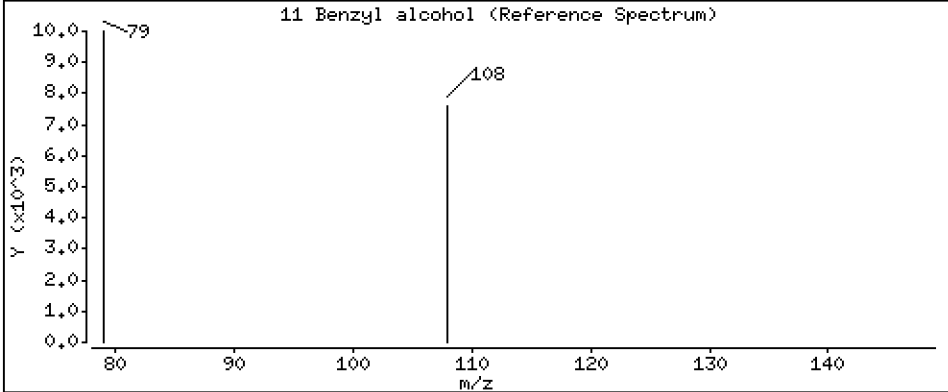
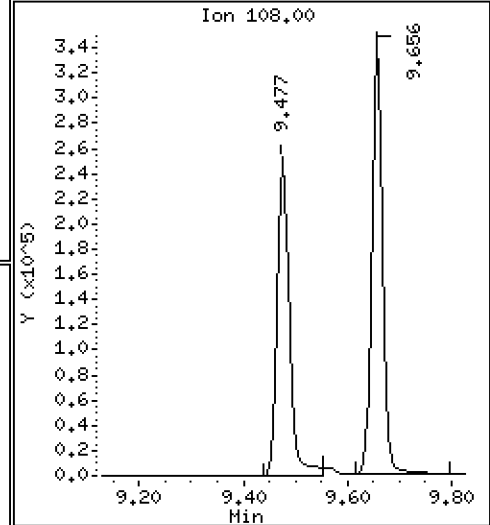
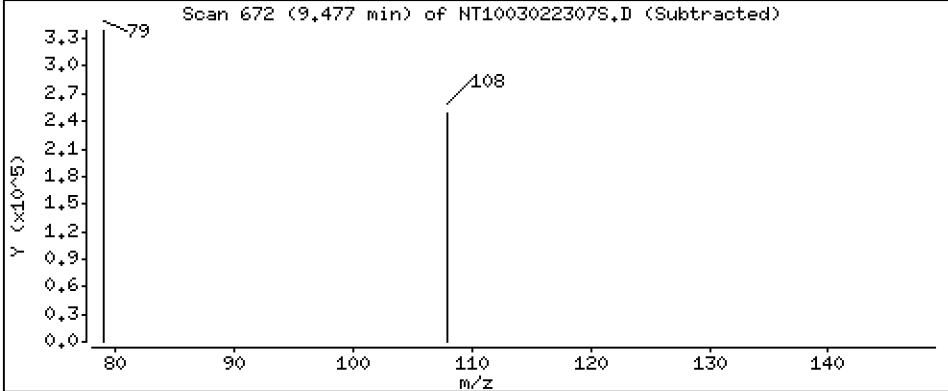
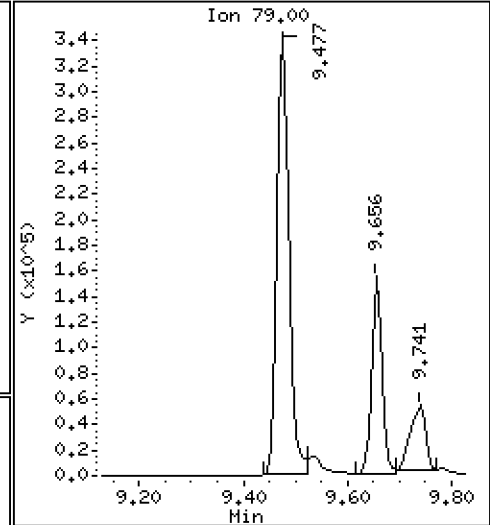
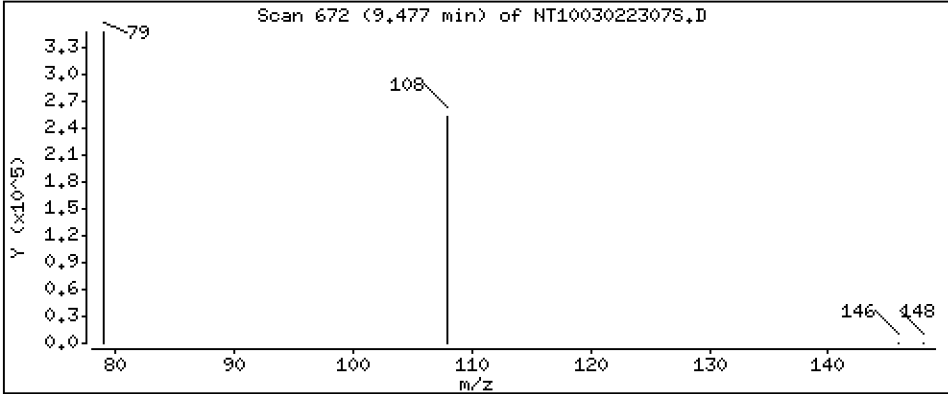
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.665 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

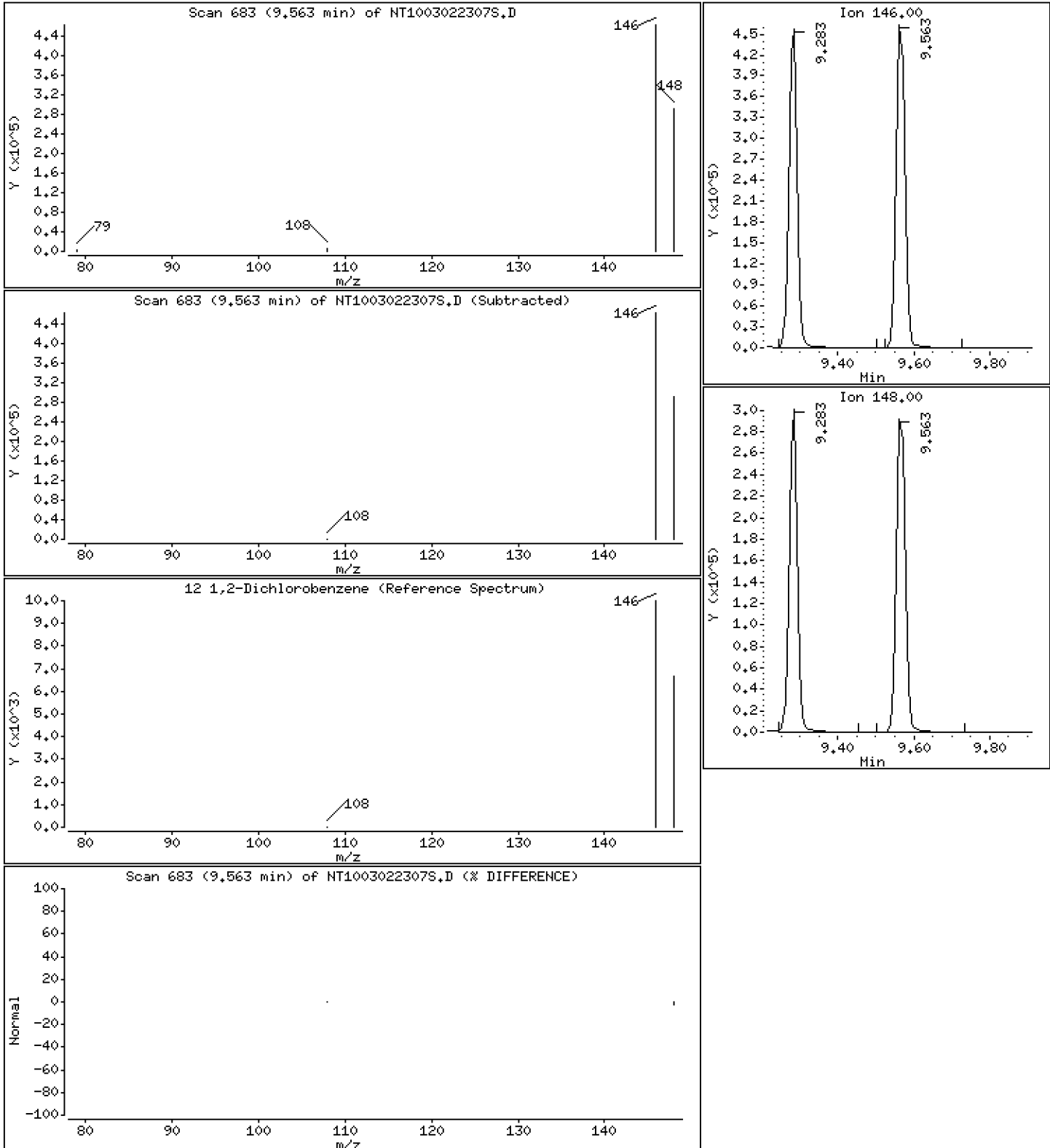
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4.495 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

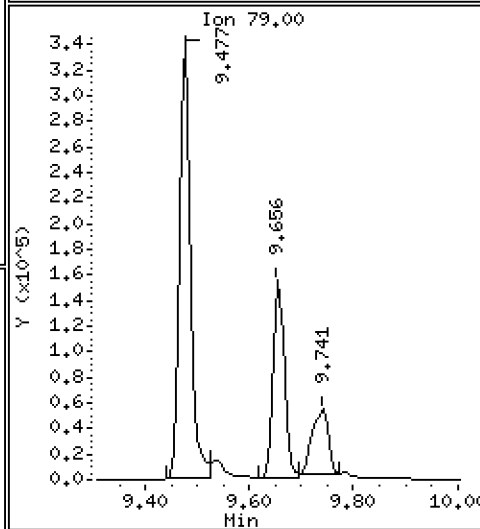
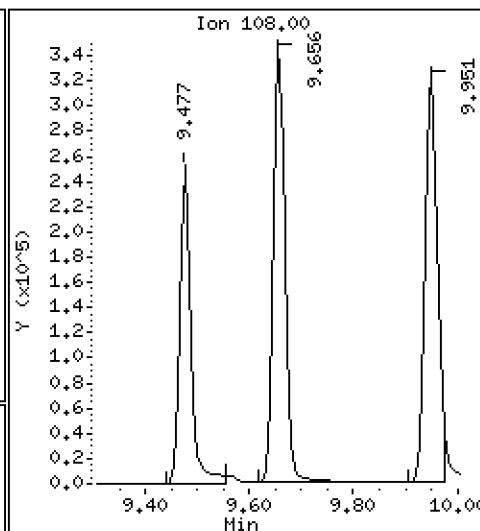
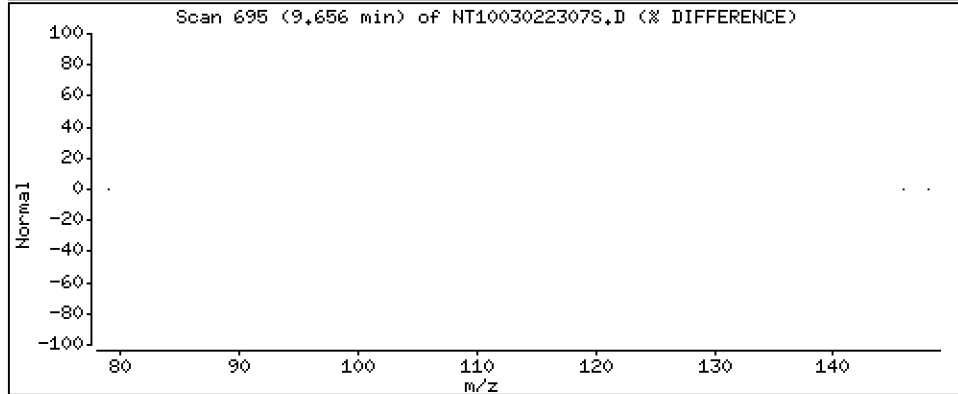
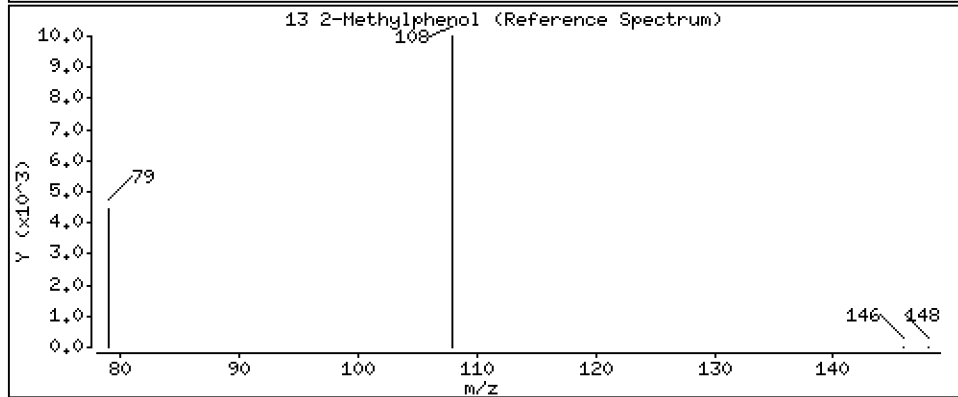
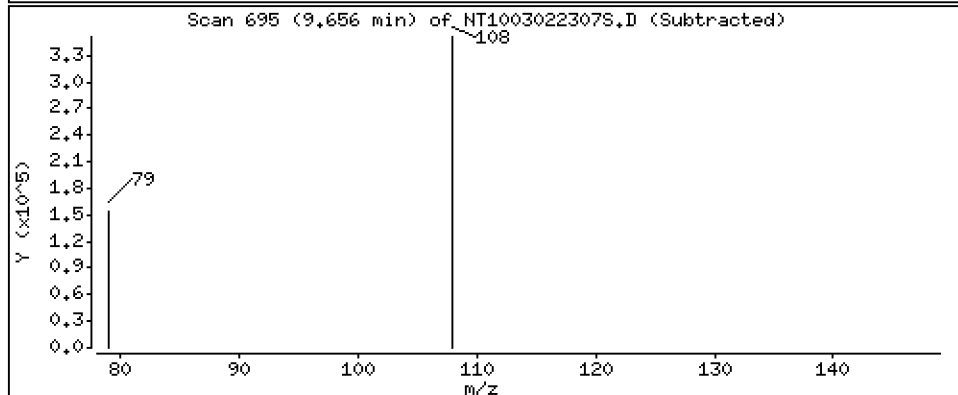
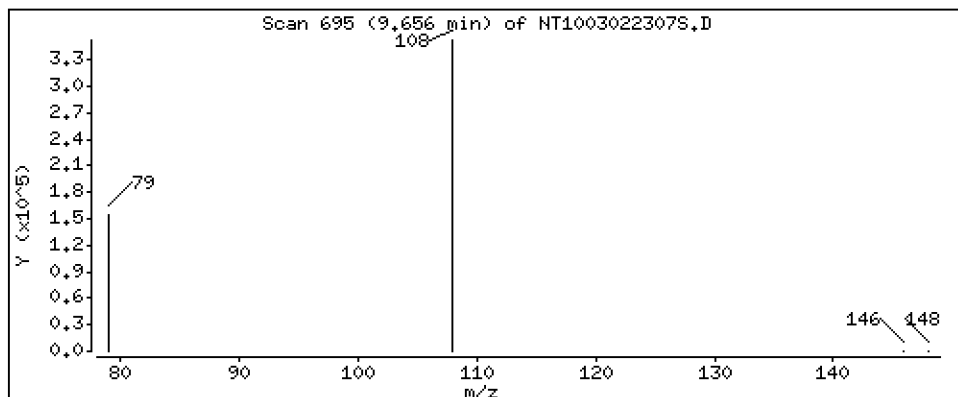
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.274 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

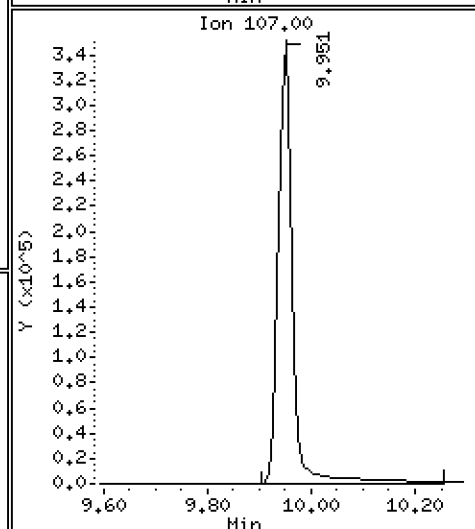
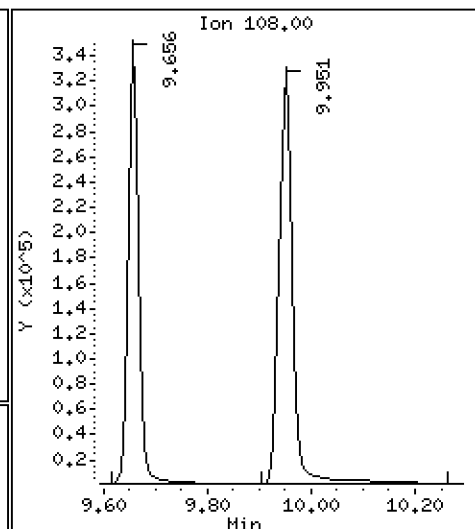
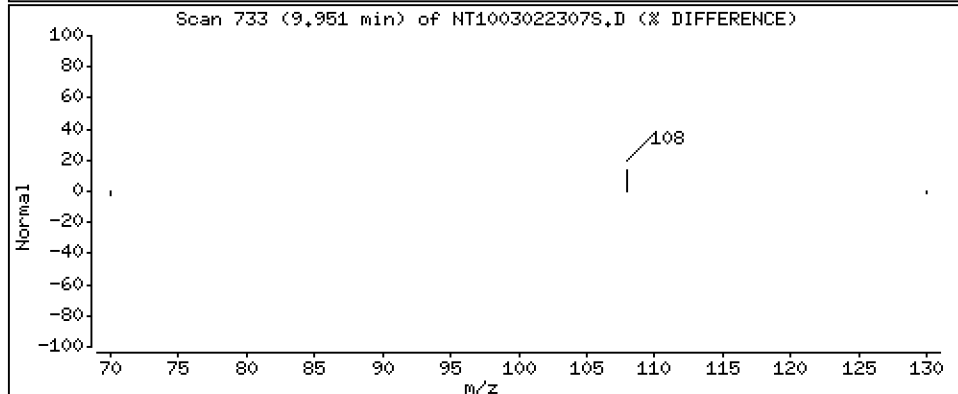
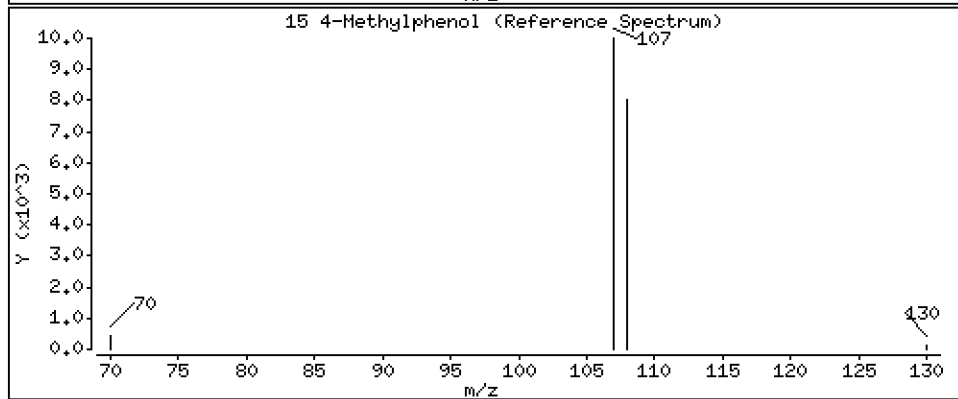
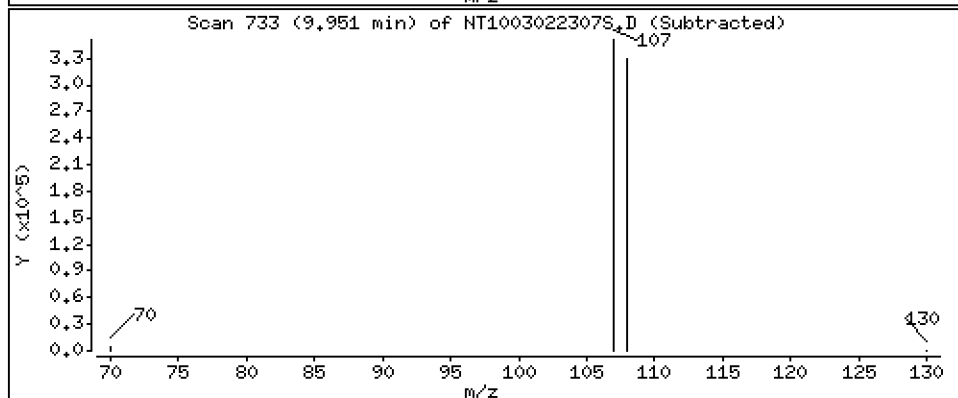
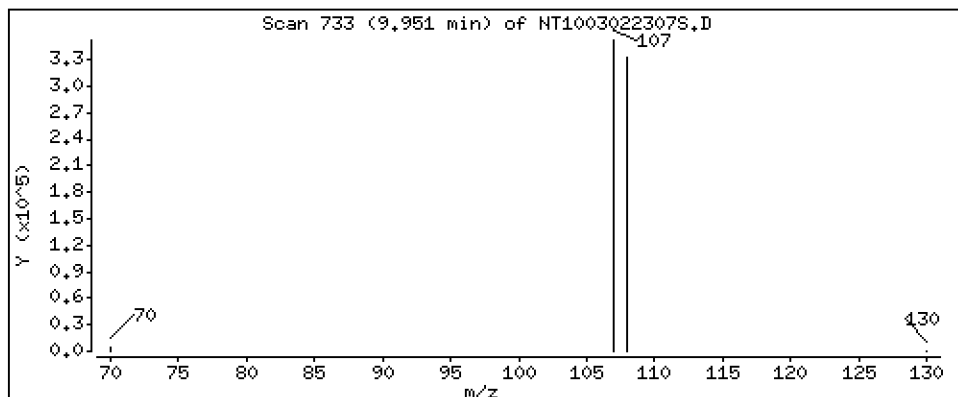
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.613 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

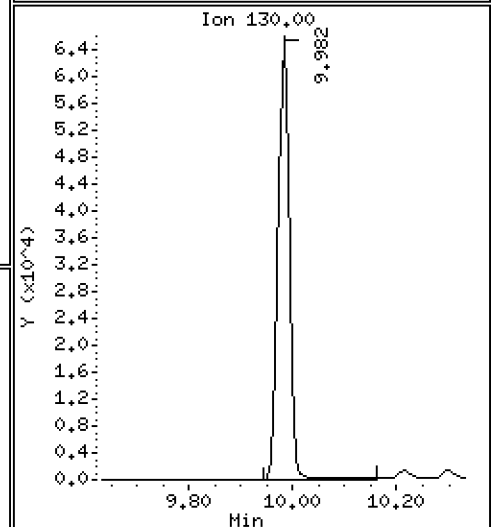
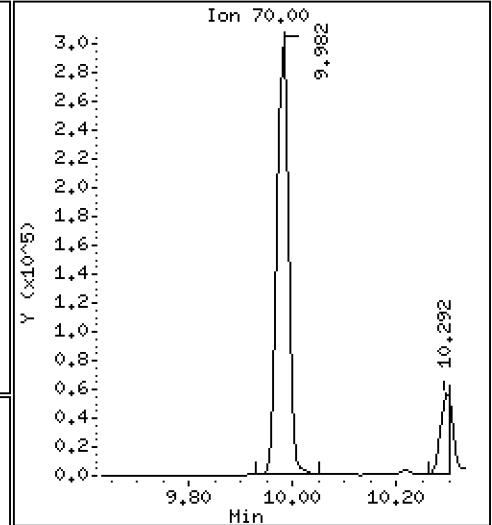
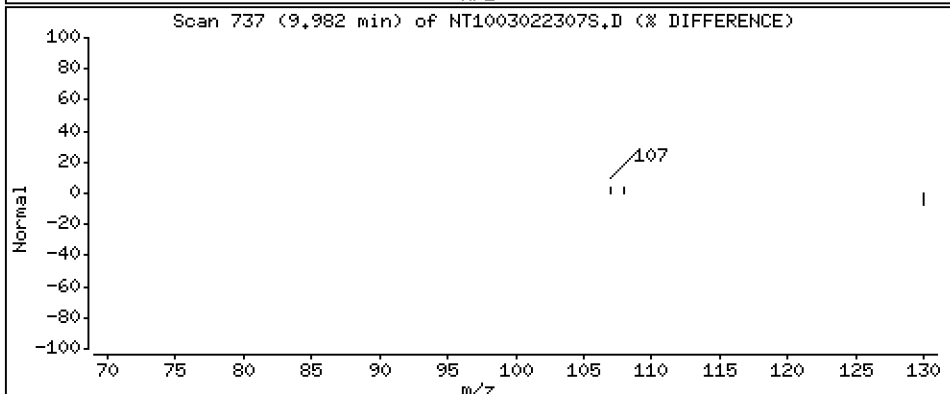
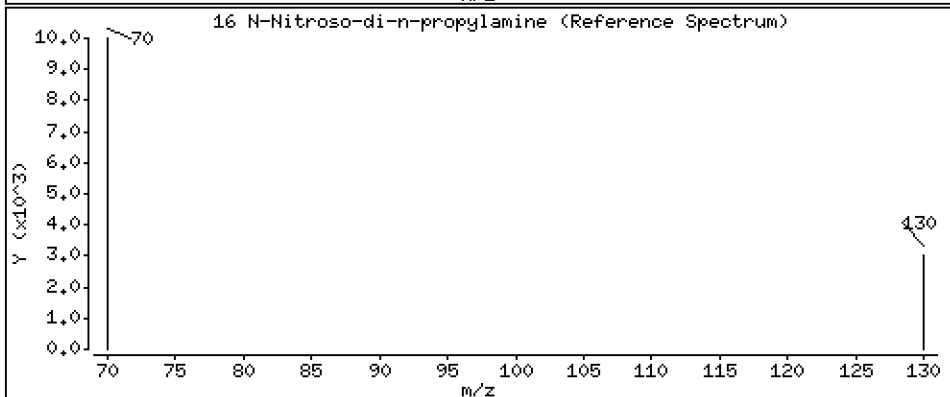
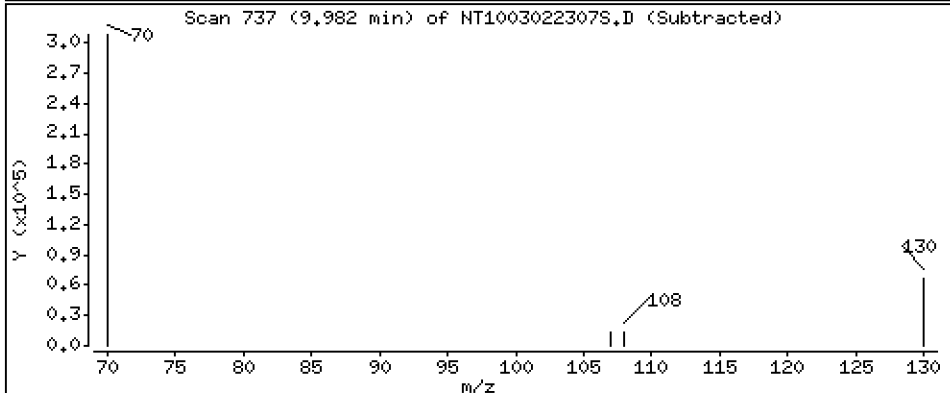
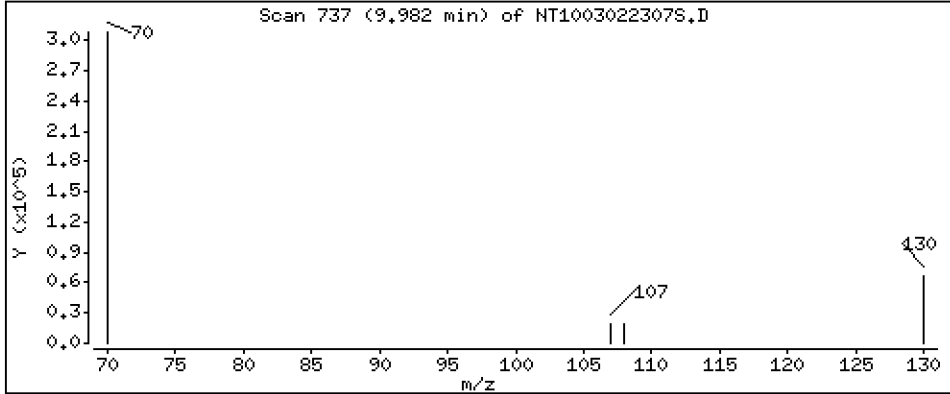
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,077 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

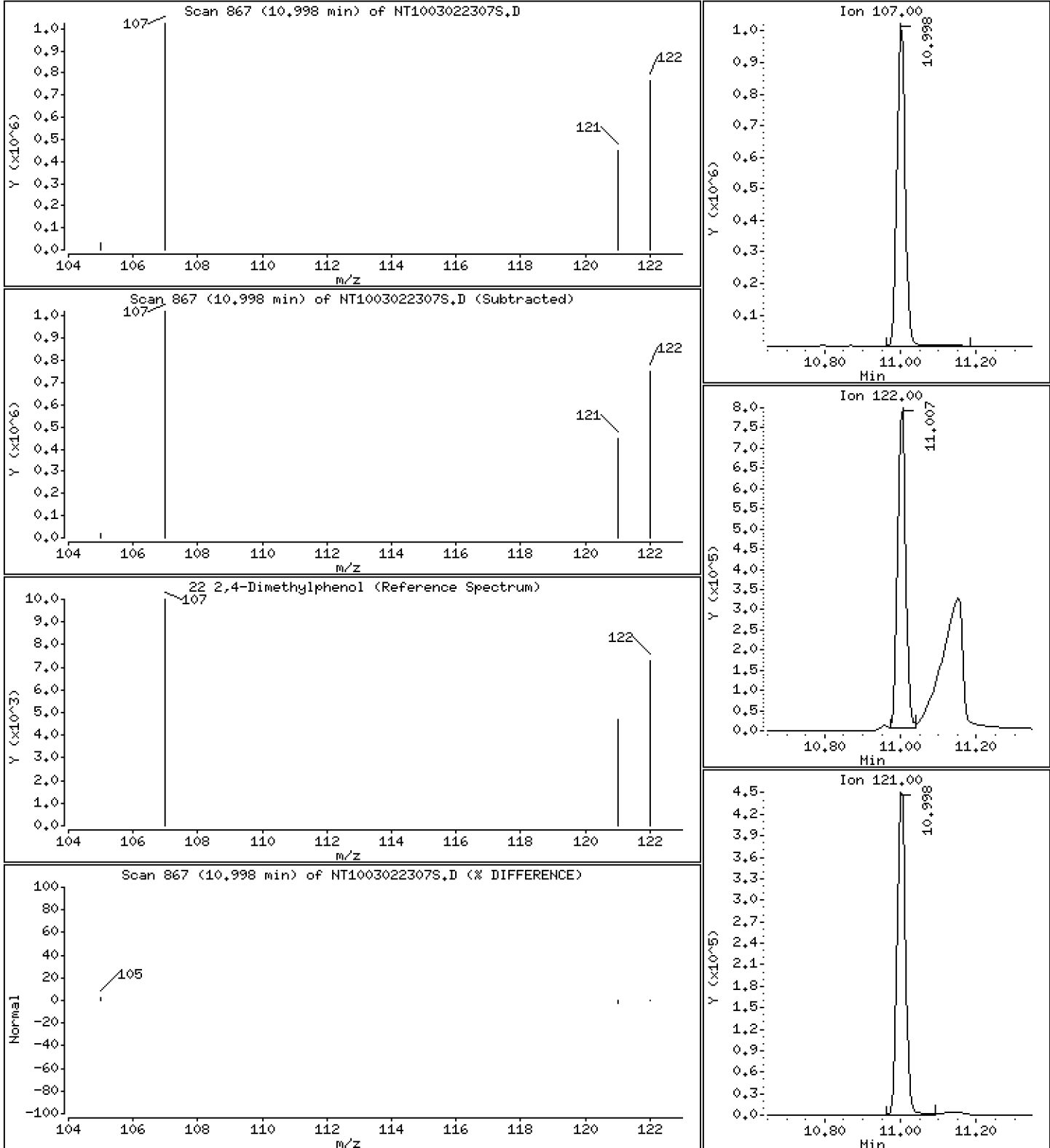
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 10,10 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

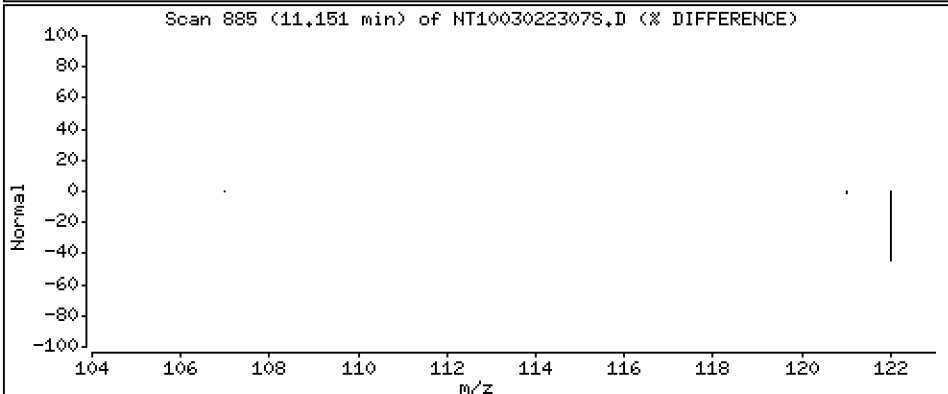
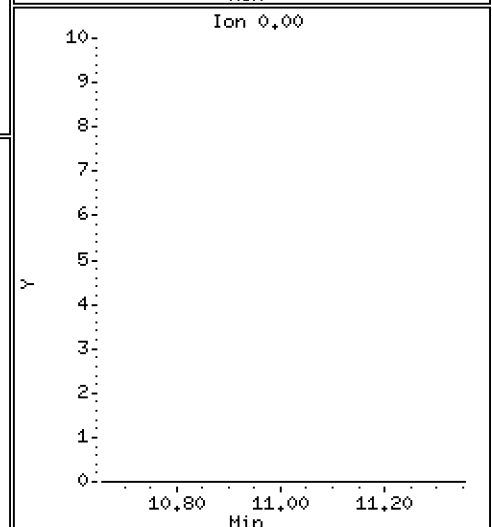
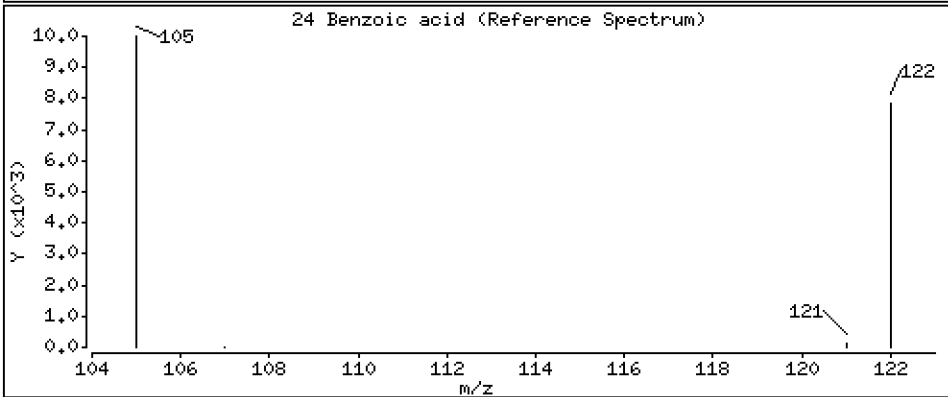
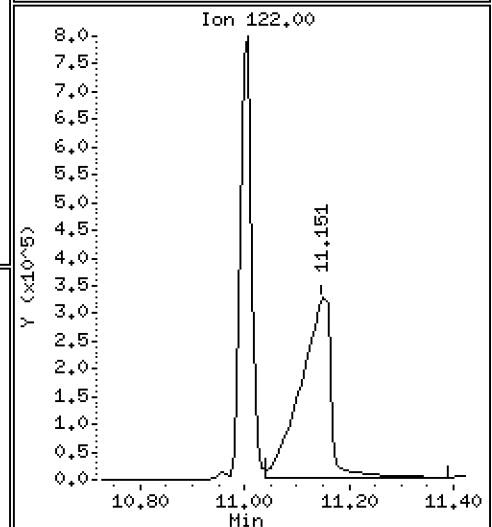
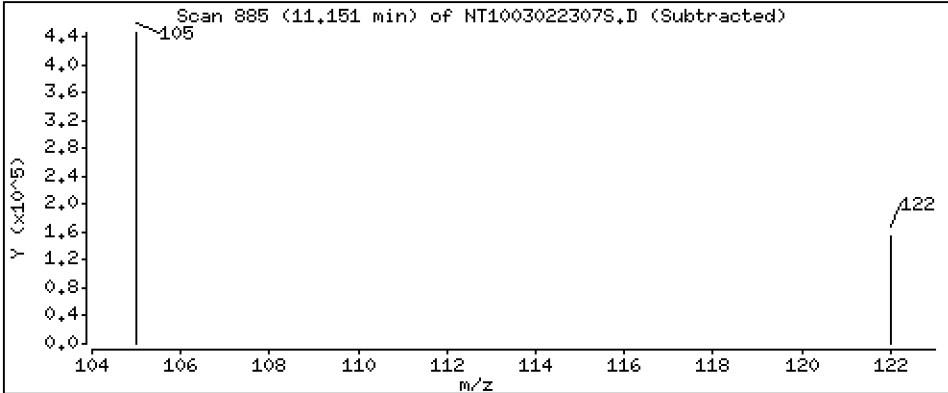
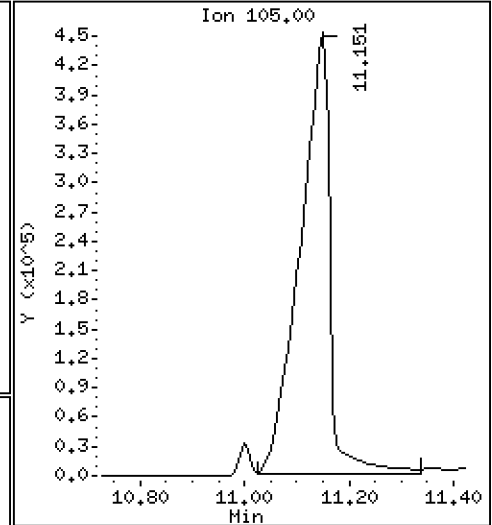
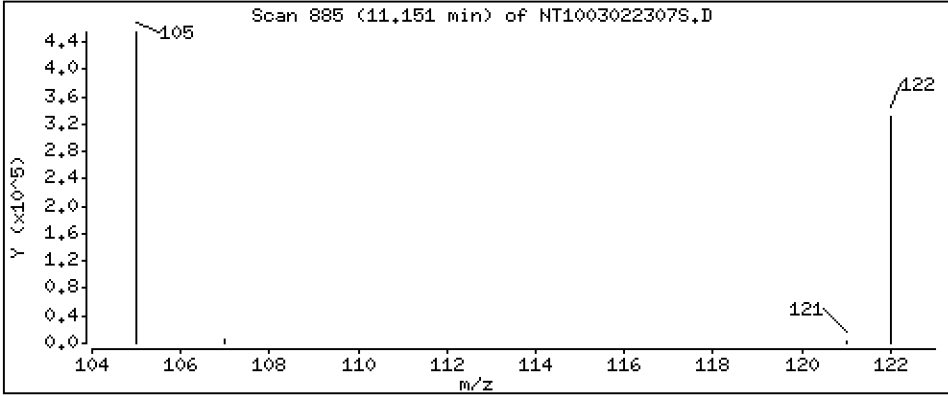
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 19.64 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

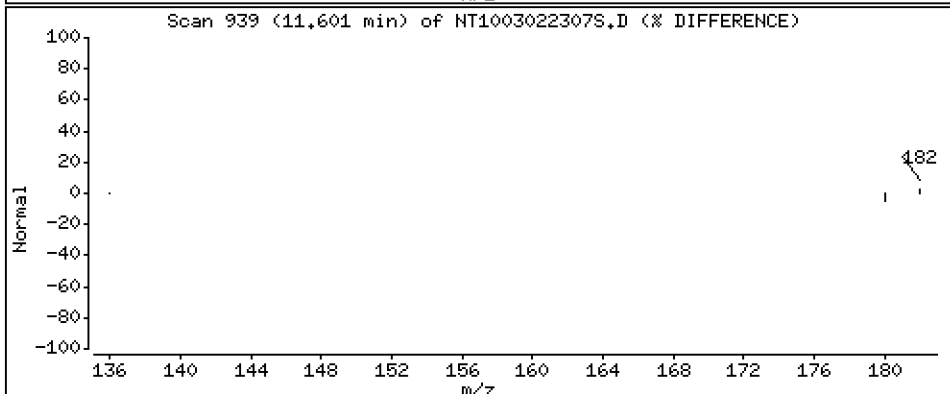
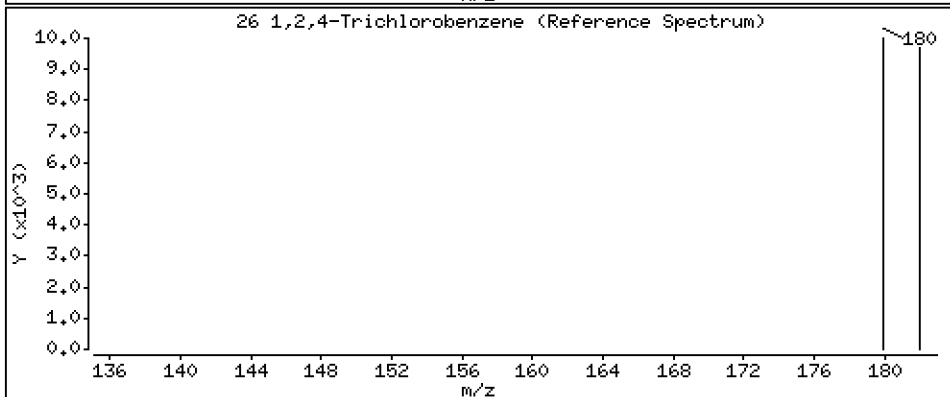
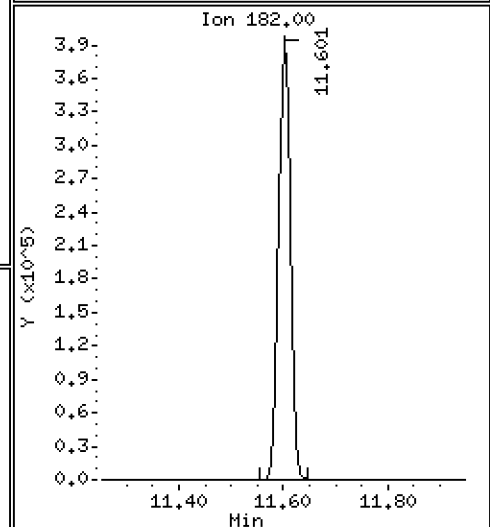
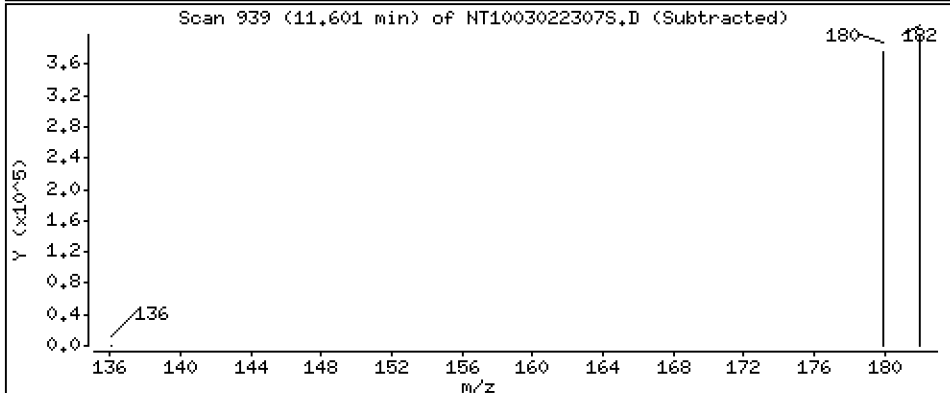
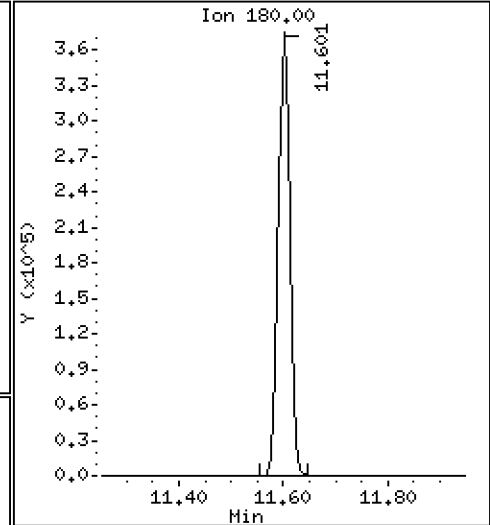
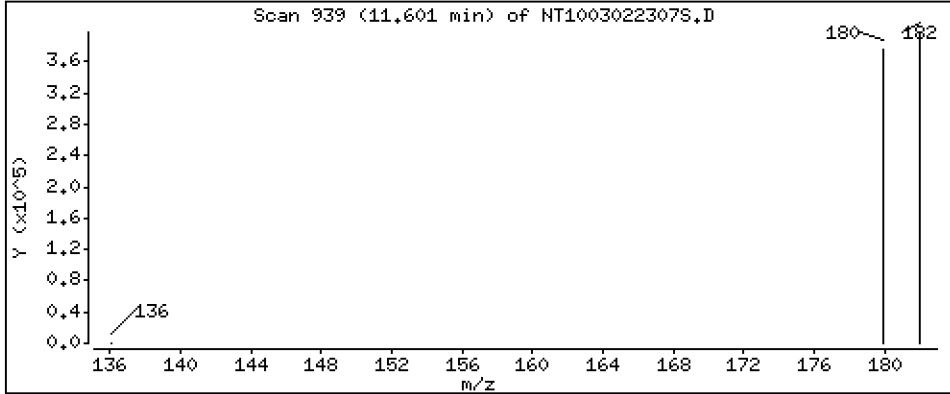
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.348 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

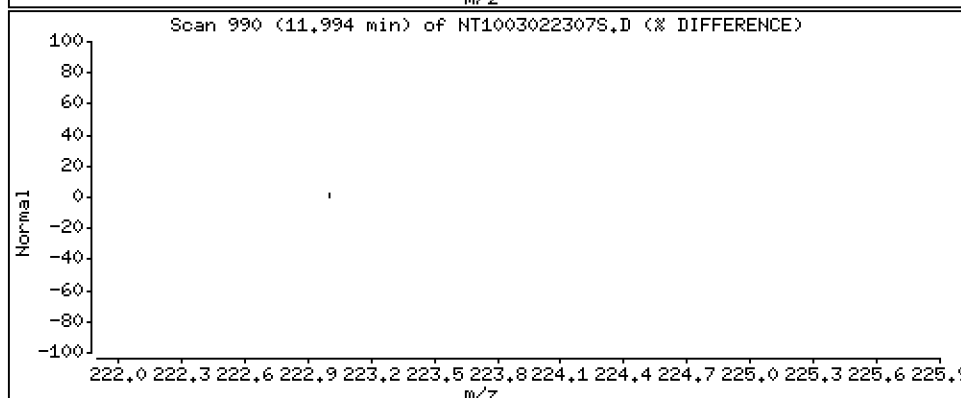
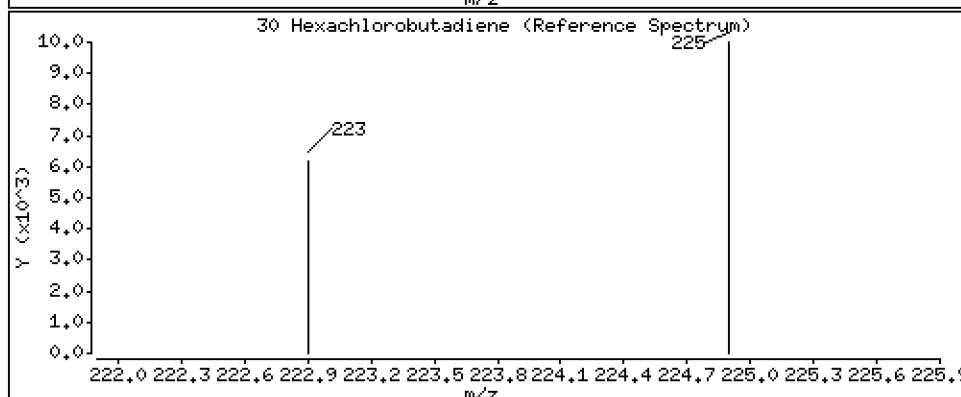
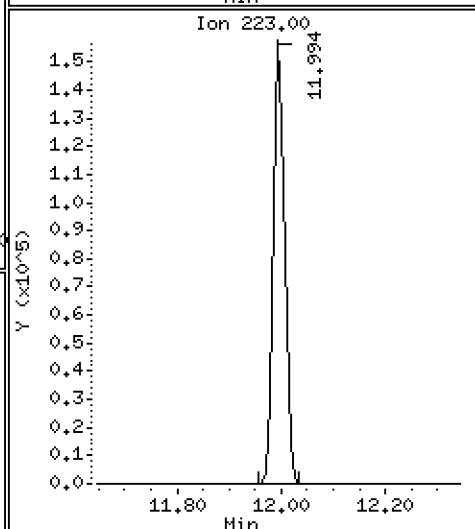
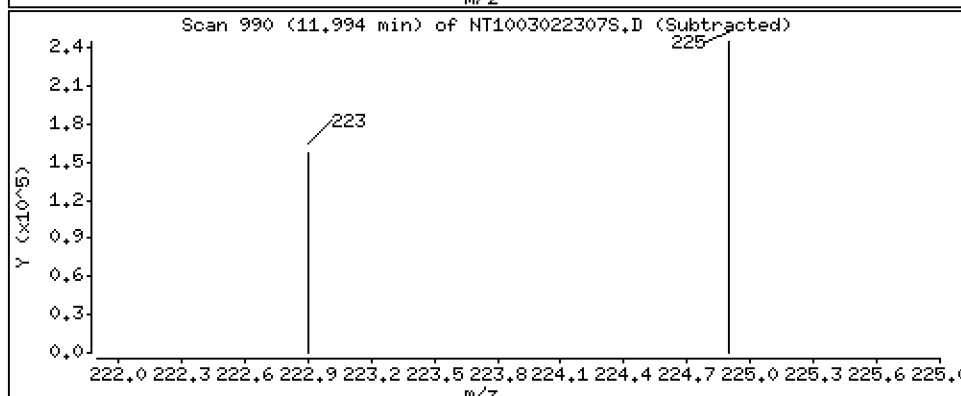
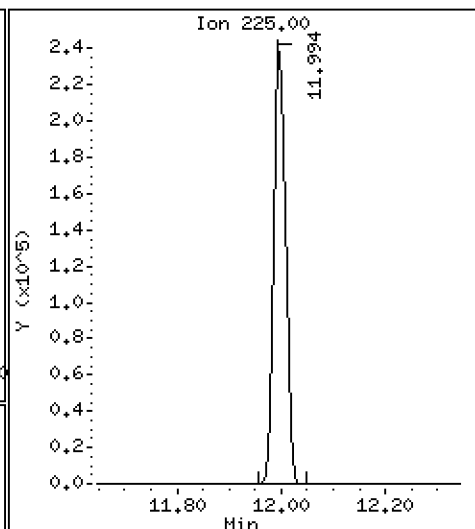
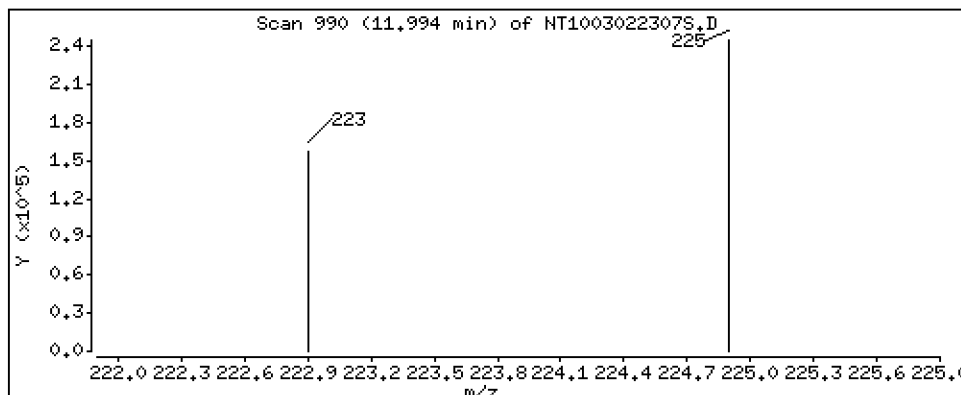
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,117 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

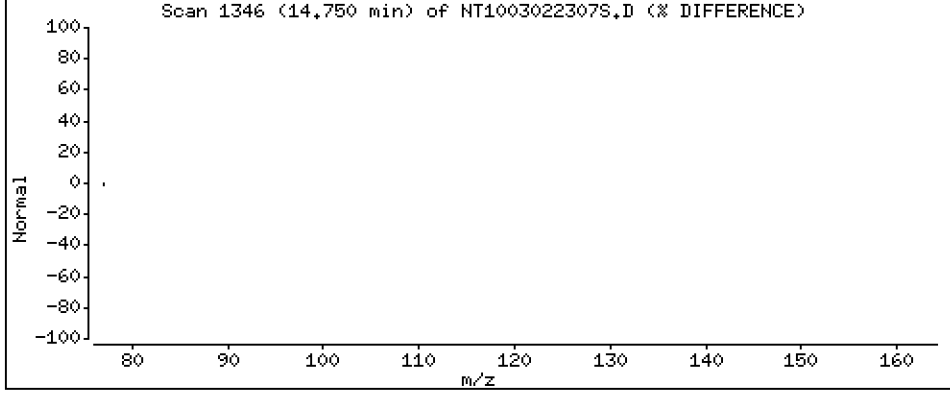
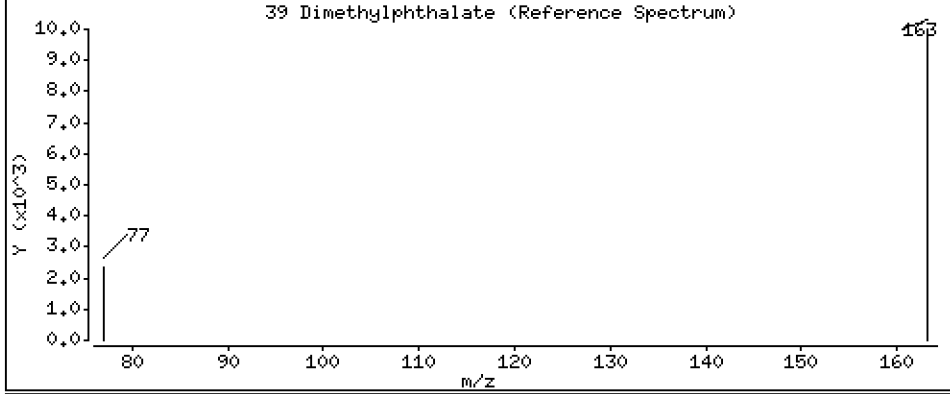
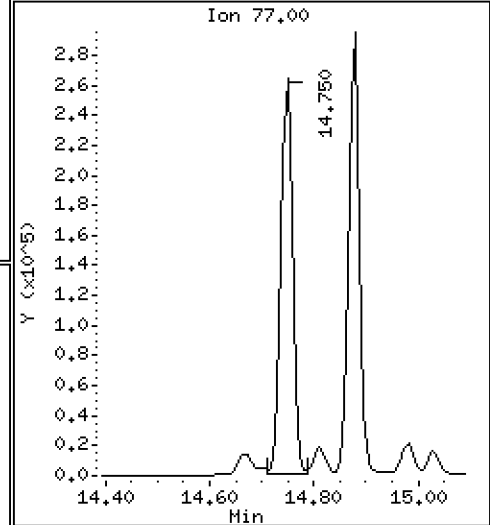
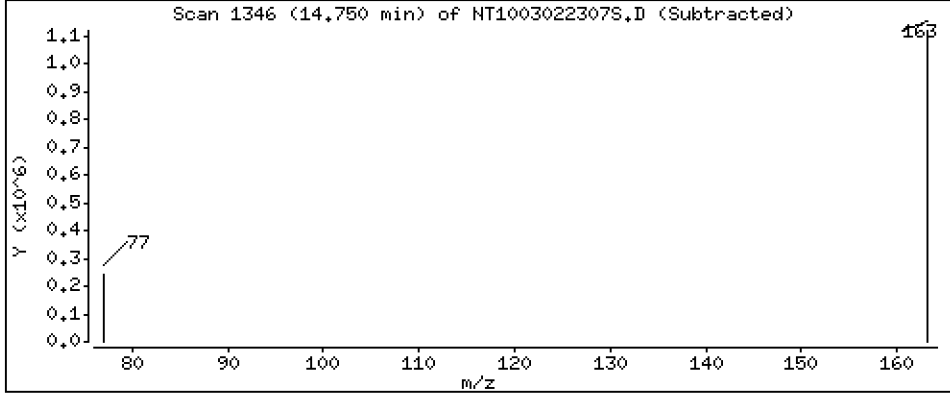
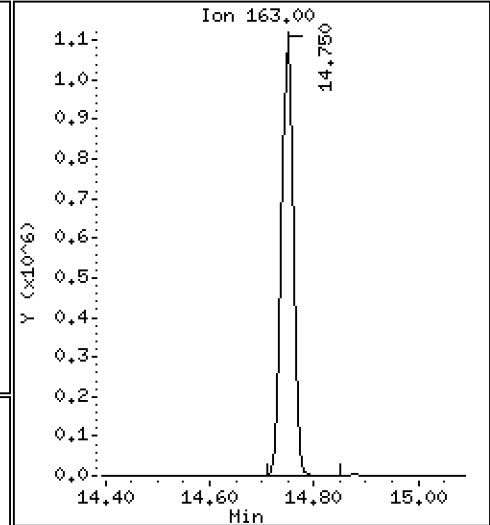
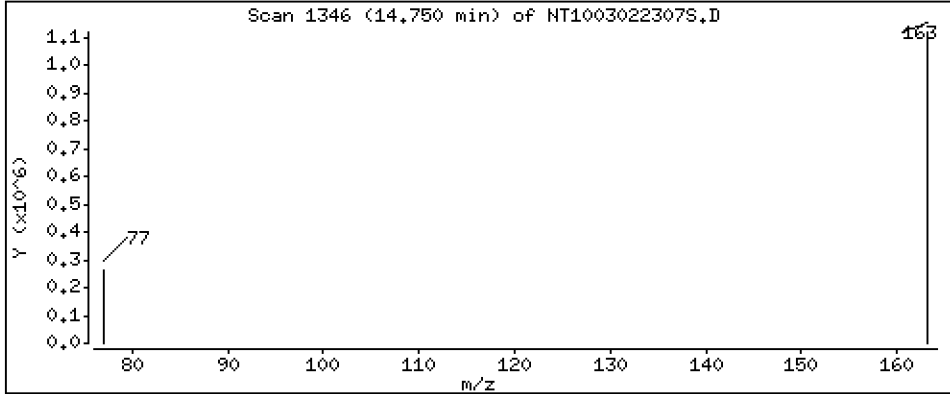
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 5.444 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

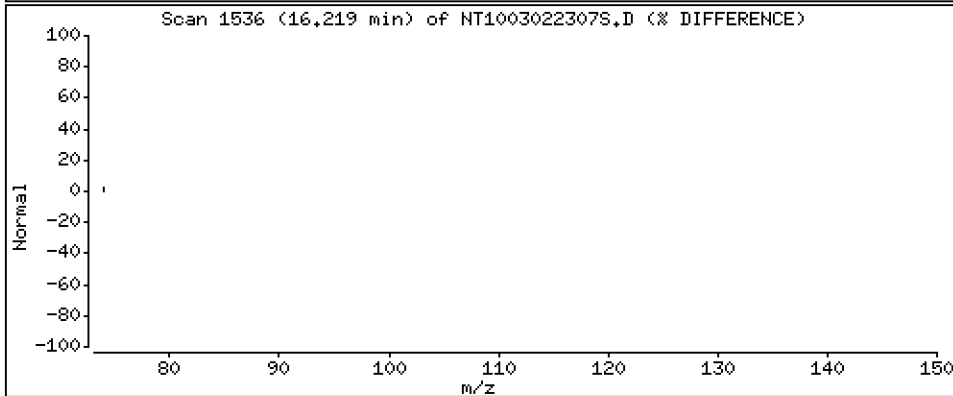
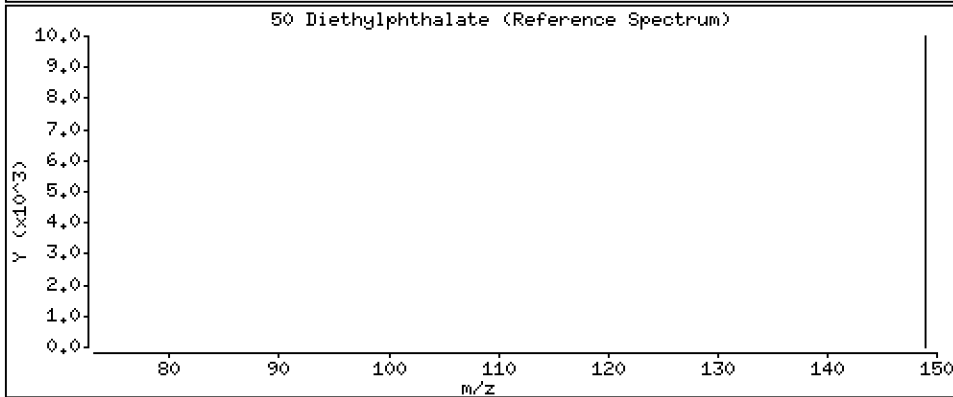
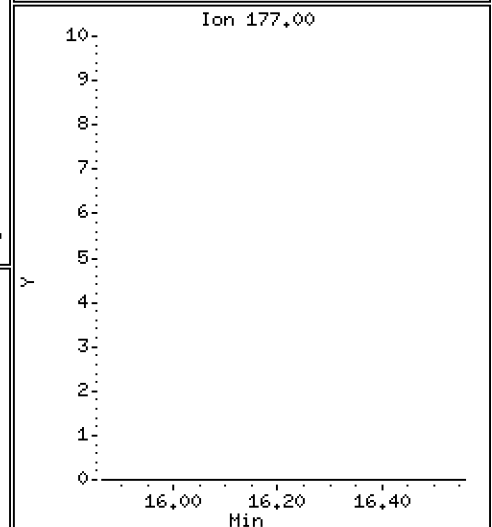
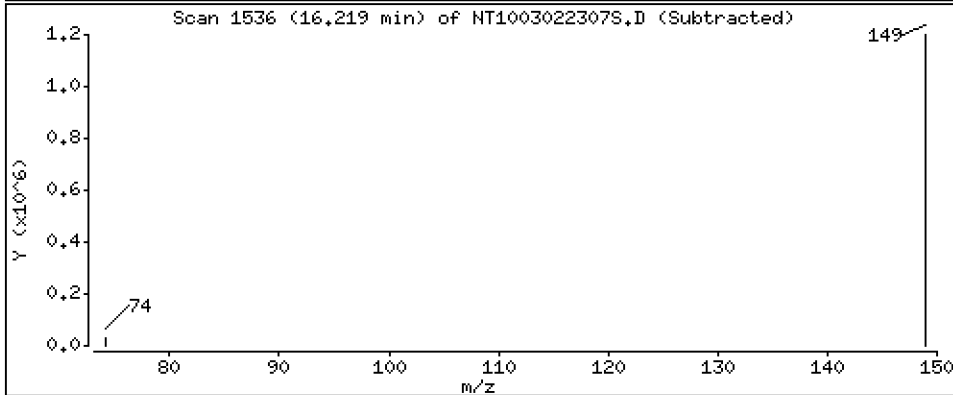
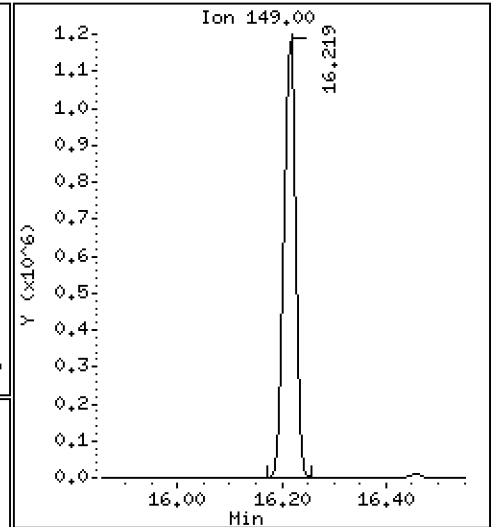
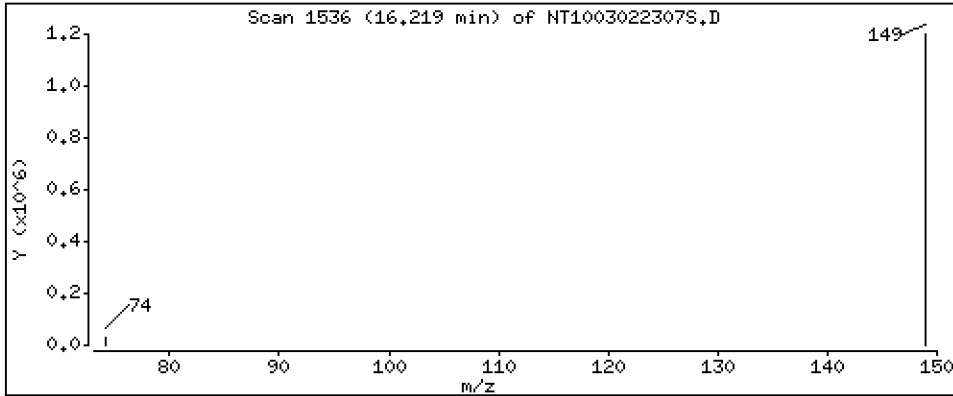
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

50 Diethylphthalate

Concentration: 6.291 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

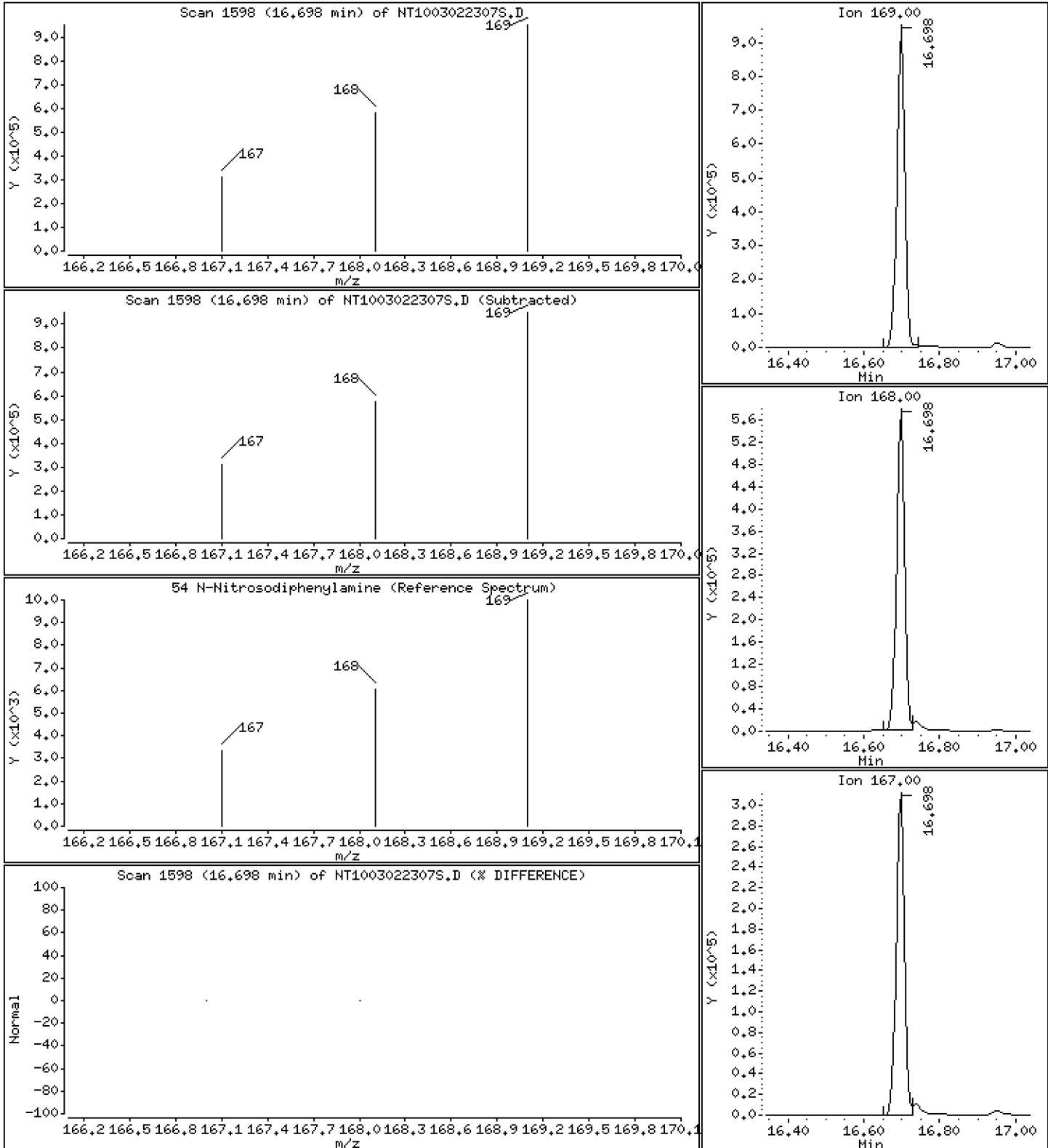
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.947 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

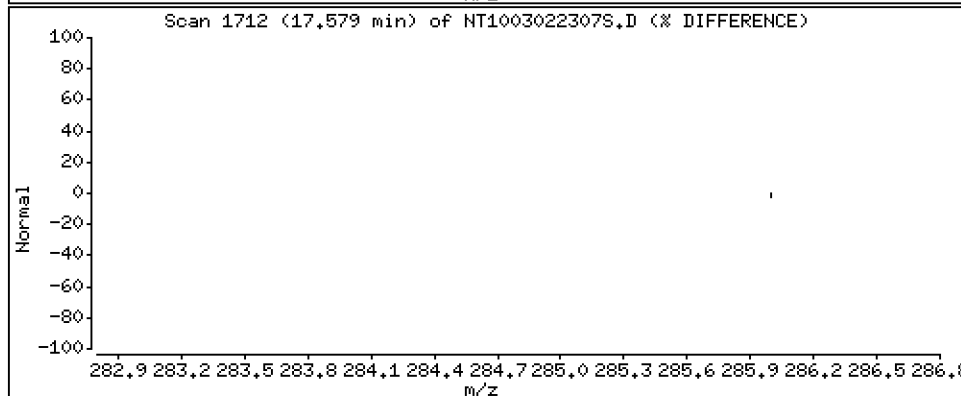
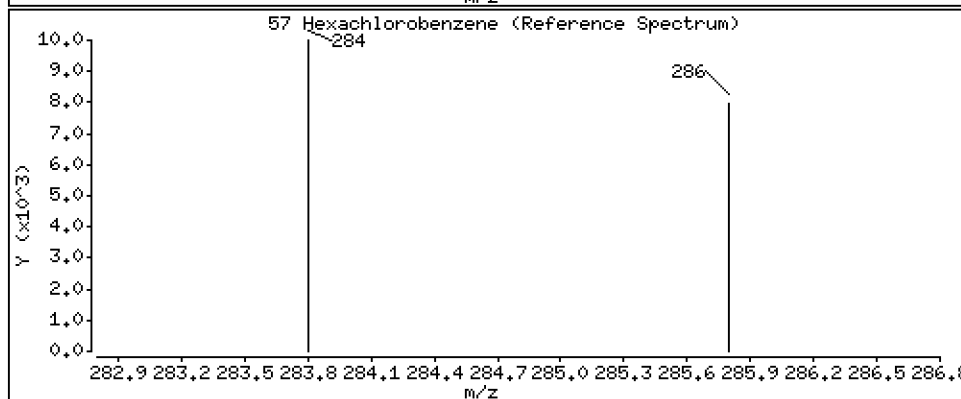
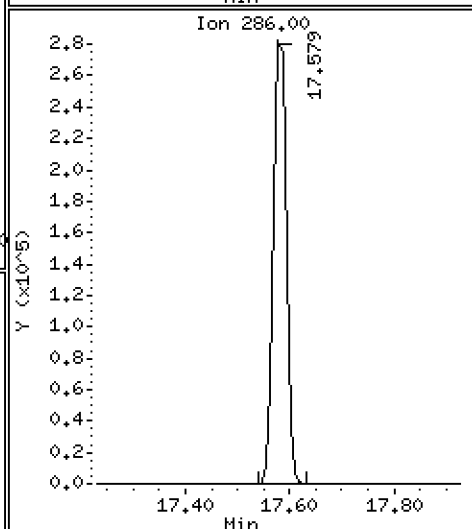
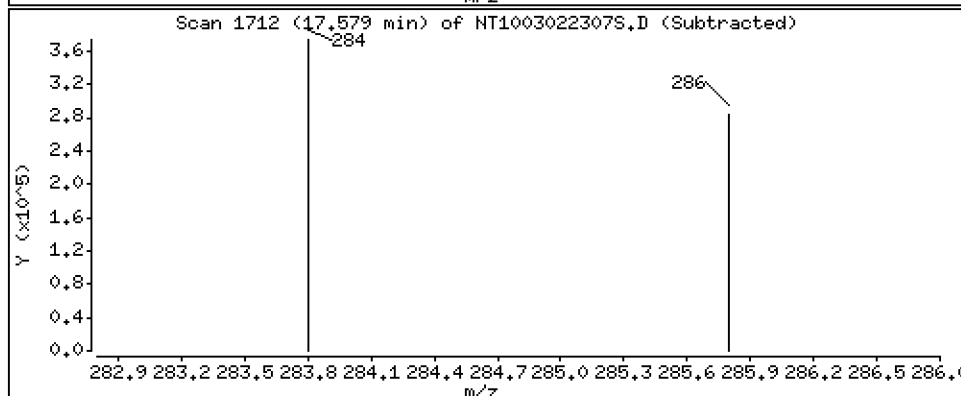
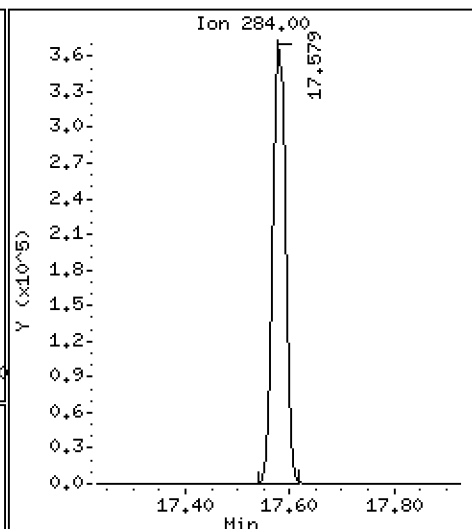
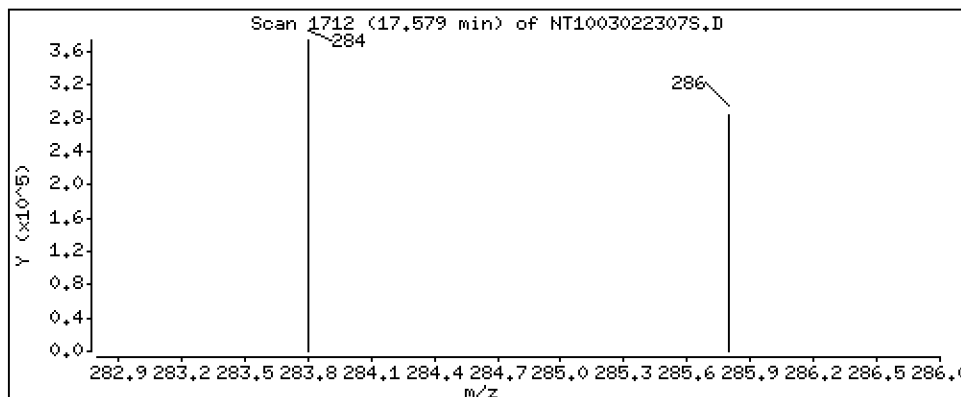
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.546 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

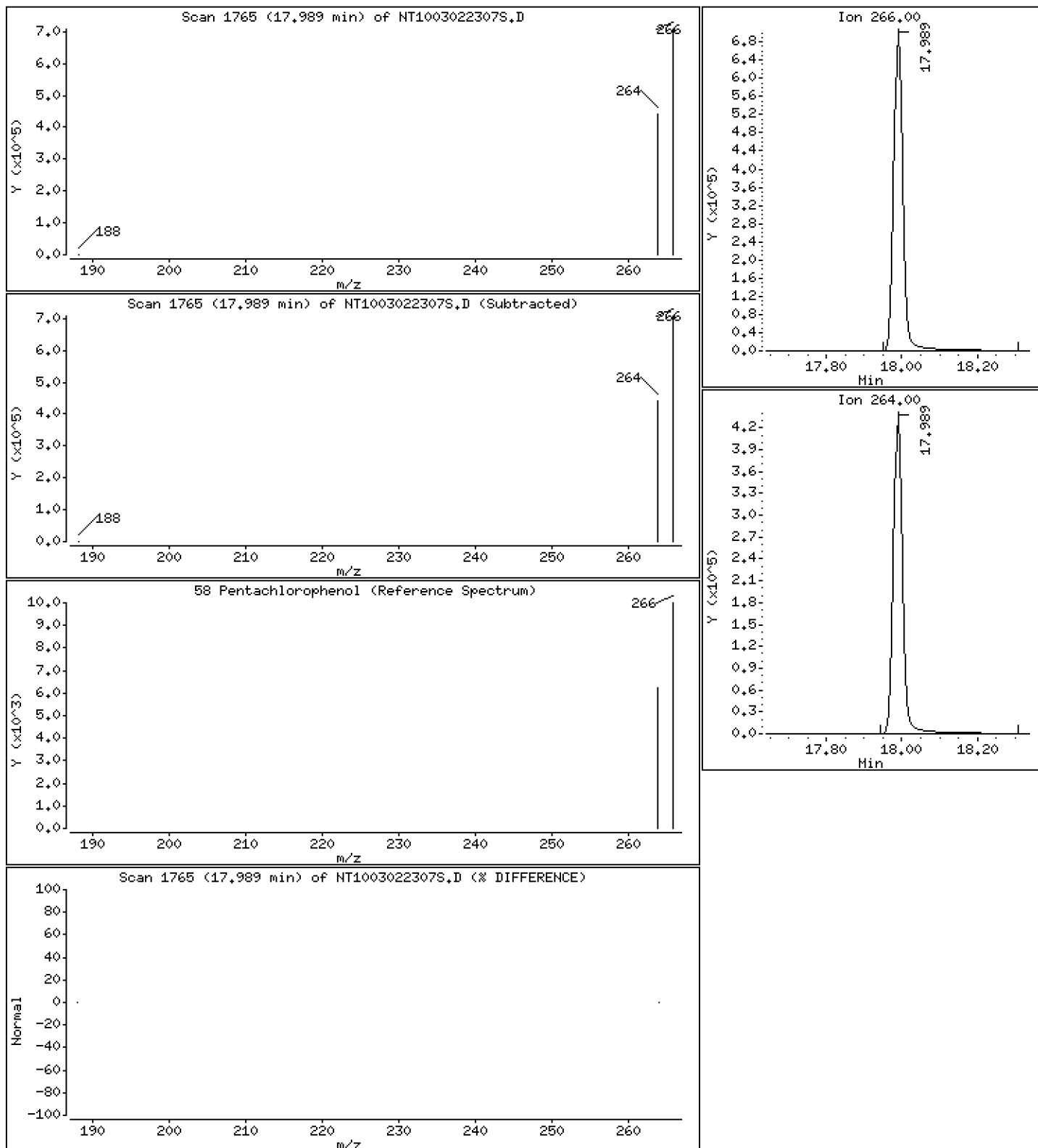
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

58 Pentachlorophenol

Concentration: 16.03 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

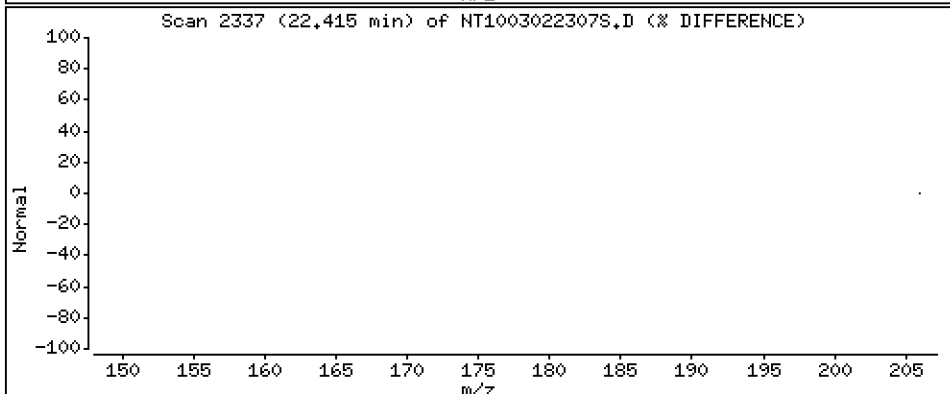
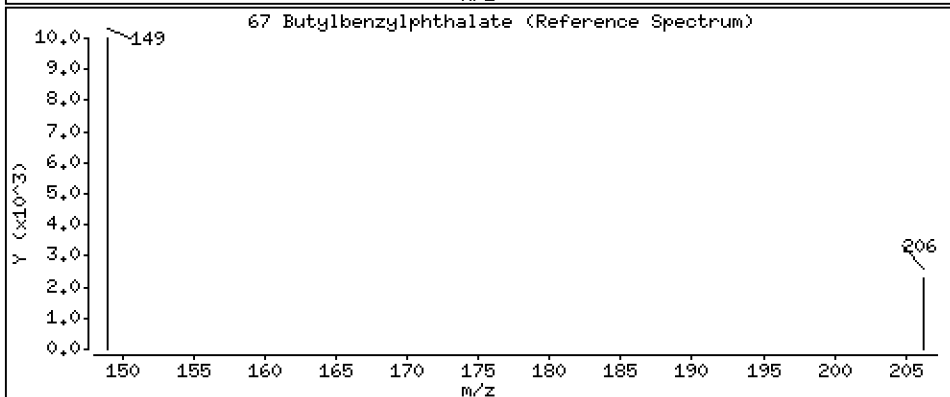
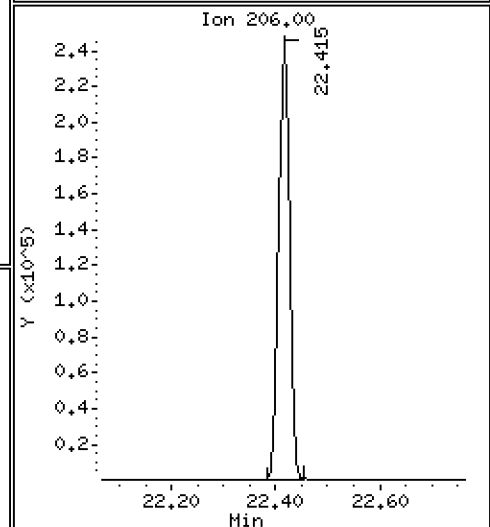
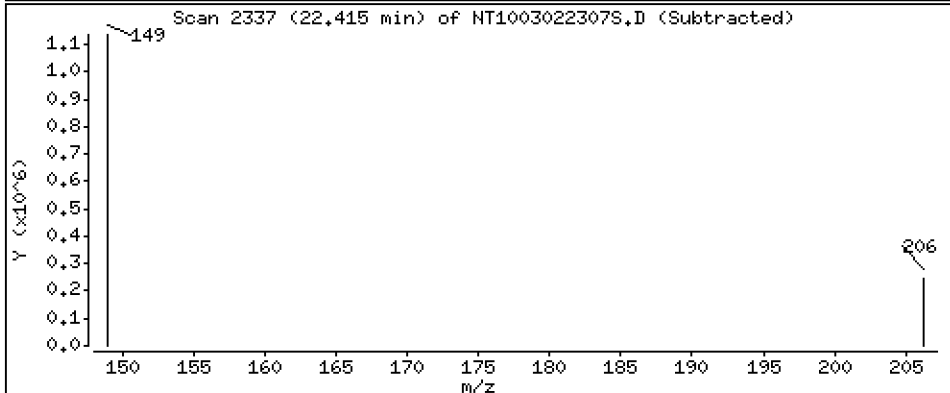
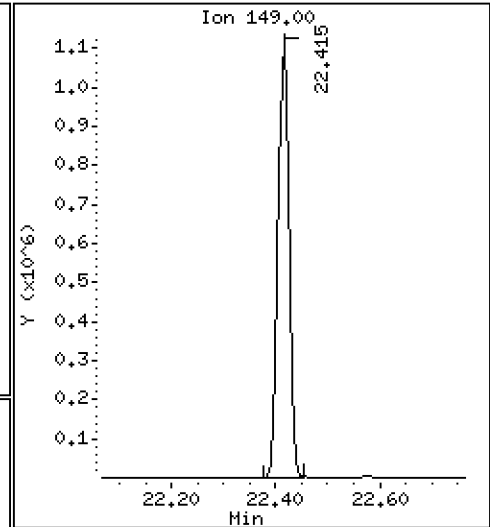
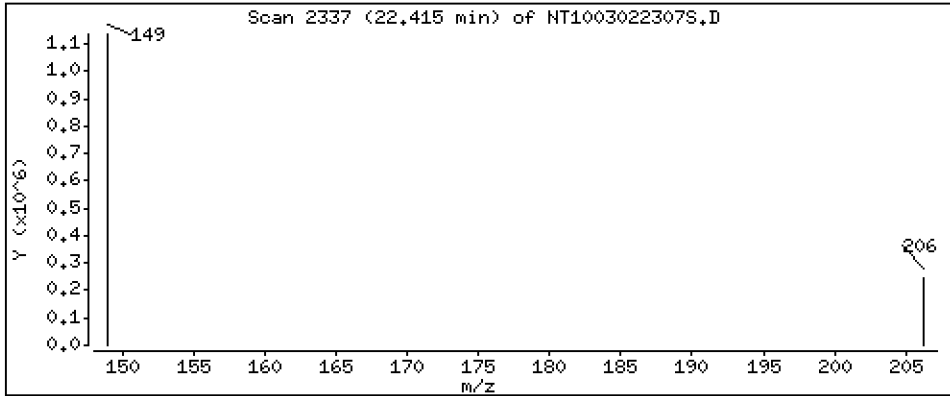
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,813 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

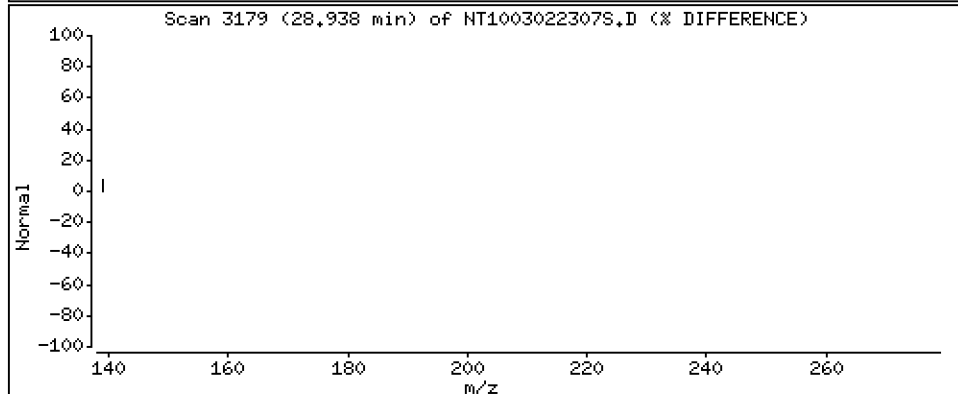
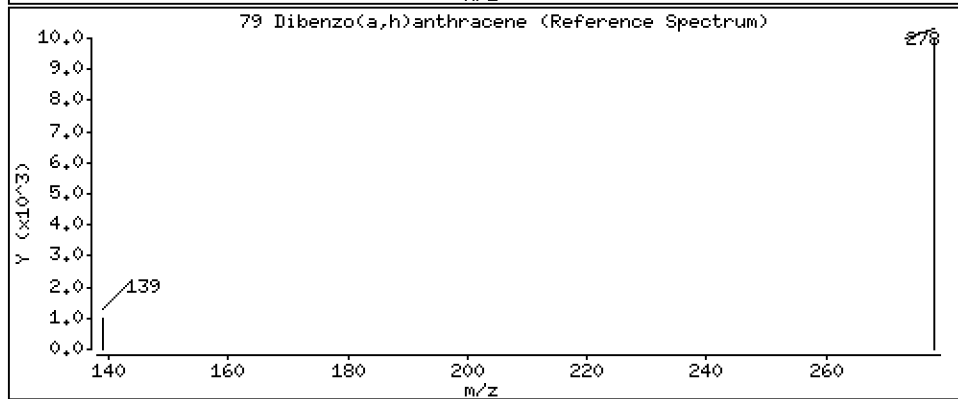
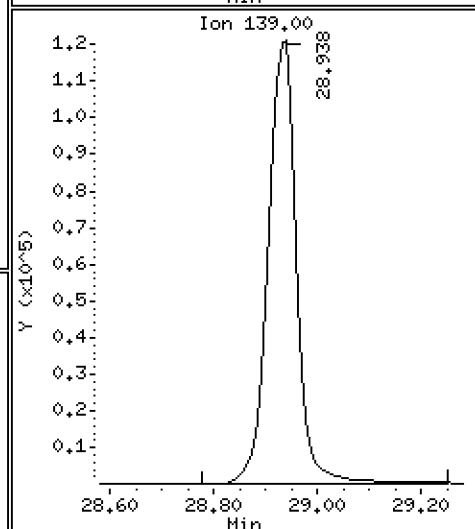
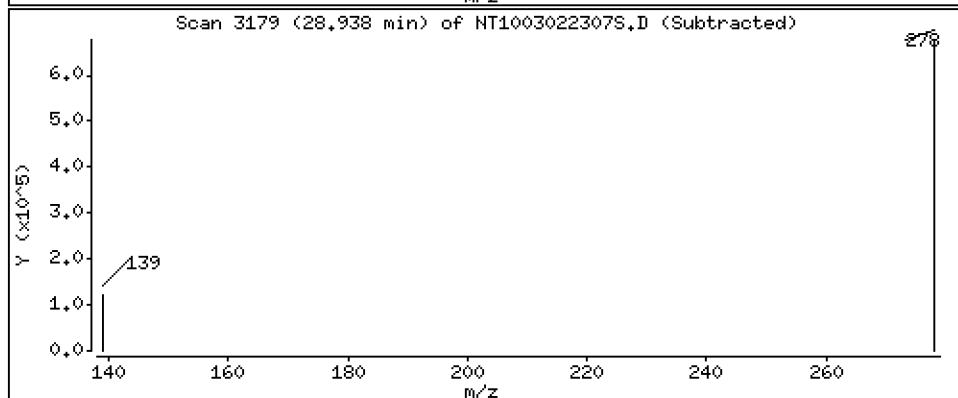
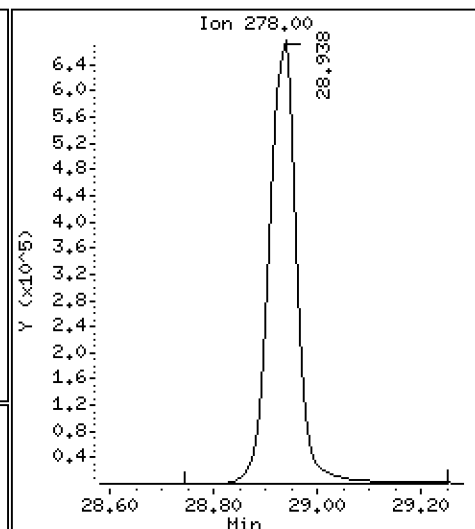
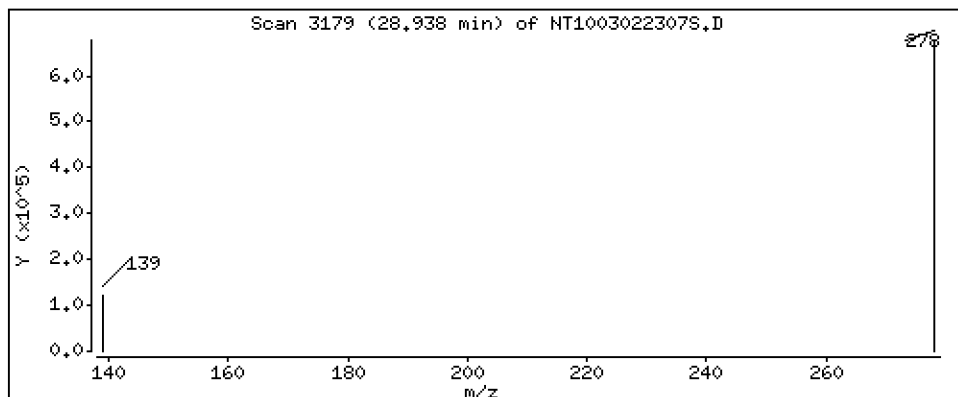
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,147 ug/L



Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

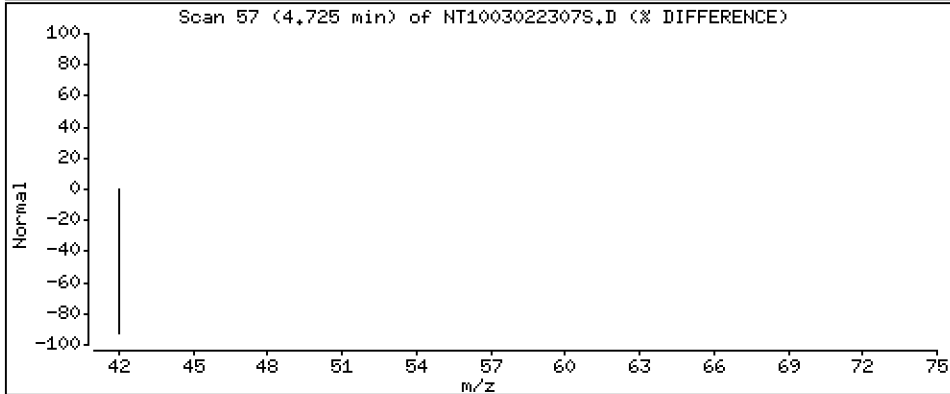
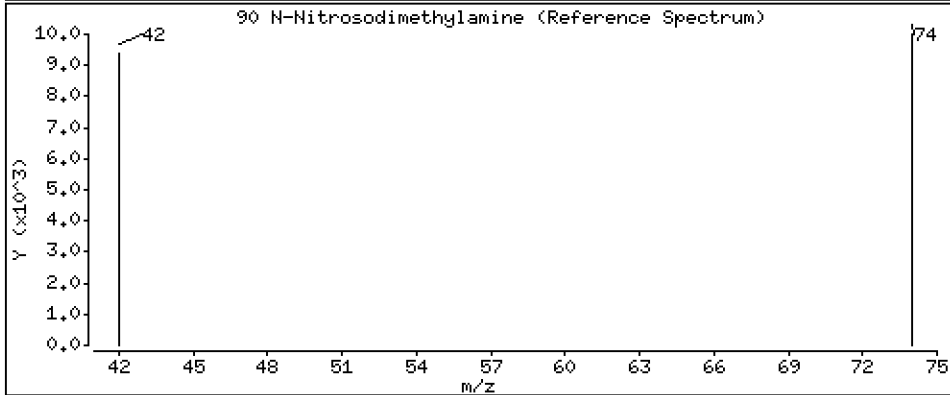
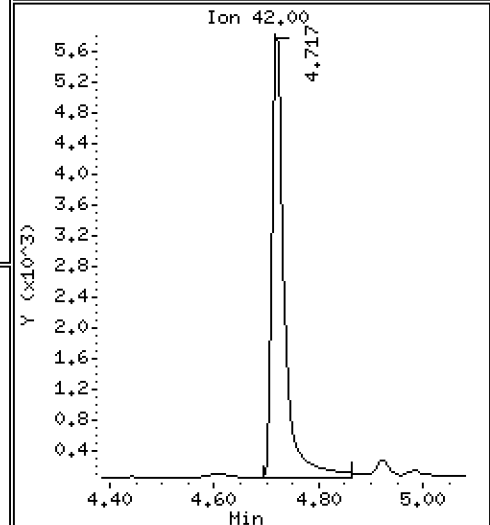
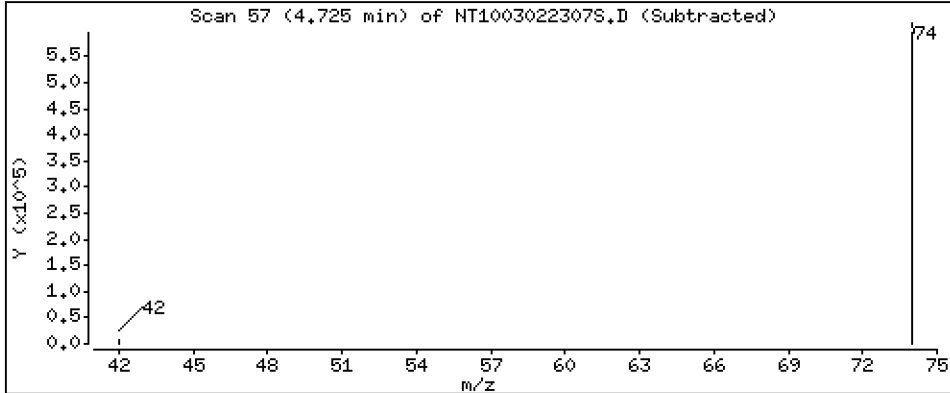
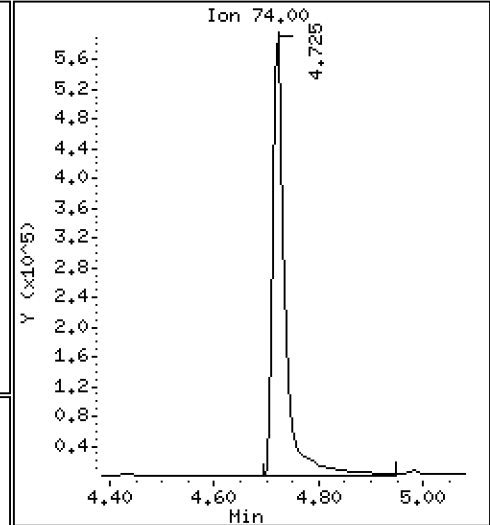
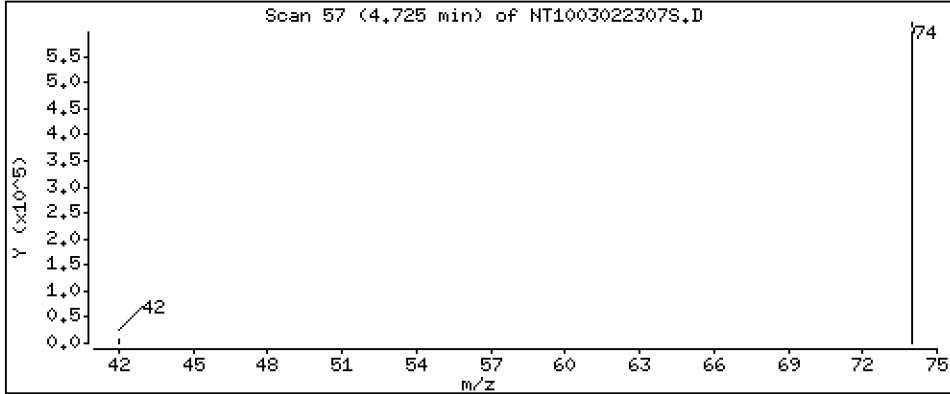
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 12.80 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D
 Lab Smp Id: BLA0624-BS1
 Inj Date : 02-MAR-2023 18:12 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : BLA0624-BS1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902 (0.746)		841468	6.52398	6.524 (R)
3 Phenol	94		8.517	8.517 (0.921)		973358	4.98503	4.985
7 1,3-Dichlorobenzene	146		9.143	9.143 (0.988)		709028	4.23468	4.235
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.251 (1.000)		451780	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.282 (1.003)		715977	4.39820	4.398
11 Benzyl alcohol	79		9.477	9.476 (1.024)		524736	4.66536	4.665
12 1,2-Dichlorobenzene	146		9.562	9.562 (1.034)		703267	4.49464	4.495
13 2-Methylphenol	108		9.655	9.655 (1.044)		506956	4.27355	4.274
15 4-Methylphenol	108		9.950	9.942 (1.076)		578416	4.61288	4.613
16 N-Nitroso-di-n-propylamine	70		9.982	9.981 (1.079)		438478	5.07702	5.077
22 2,4-Dimethylphenol	107		10.998	10.997 (0.938)		1539522	10.1032	10.10
24 Benzoic acid	105		11.150	11.074 (0.951)		1789304	19.6444	19.64
26 1,2,4-Trichlorobenzene	180		11.600	11.600 (0.989)		545737	4.34752	4.348
* 27 Naphthalene-d8	136		11.724	11.723 (1.000)		1744036	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994 (1.023)		366703	4.11657	4.117
39 Dimethylphthalate	163		14.749	14.741 (0.963)		1632680	5.44413	5.444
* 42 Acenaphthene-d10	162		15.322	15.314 (1.000)		944486	4.00000	
50 Diethylphthalate	149		16.218	16.203 (1.059)		1779087	6.29067	6.291
54 N-Nitrosodiphenylamine	169		16.698	16.690 (0.907)		1377595	4.94651	4.947
57 Hexachlorobenzene	284		17.578	17.578 (0.955)		592498	4.54603	4.546

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.989	17.988	(0.977)	1137031	16.0277	16.03
* 59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1720859	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	698523	4.50842	4.508 (R)
67 Butylbenzylphthalate	149	22.415	22.414	(0.957)	1529993	4.81256	4.813
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1915960	4.00000	
* 77 Perylene-d12	264	26.116	26.115	(1.000)	1919174	4.00000	
79 Dibenzo(a,h)anthracene	278	28.938	28.929	(1.108)	2482091	5.14660	5.147
90 N-Nitrosodimethylamine	74	4.724	4.732	(0.511)	977355	12.7989	12.80

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022307S.D
 Lab Smp Id: BLA0624-BS1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	451780	-8.44
27 Naphthalene-d8	1779056	889528	3558112	1744036	-1.97
42 Acenaphthene-d10	954569	477285	1909138	944486	-1.06
59 Phenanthrene-d10	1596290	798145	3192580	1720859	7.80
69 Chrysene-d12	1649110	824555	3298220	1915960	16.18
77 Perylene-d12	1901958	950979	3803916	1919174	0.91

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022307S.D

Lab ID: BLA0624-BS1

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 18:12

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.951	0.945	0.0065	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

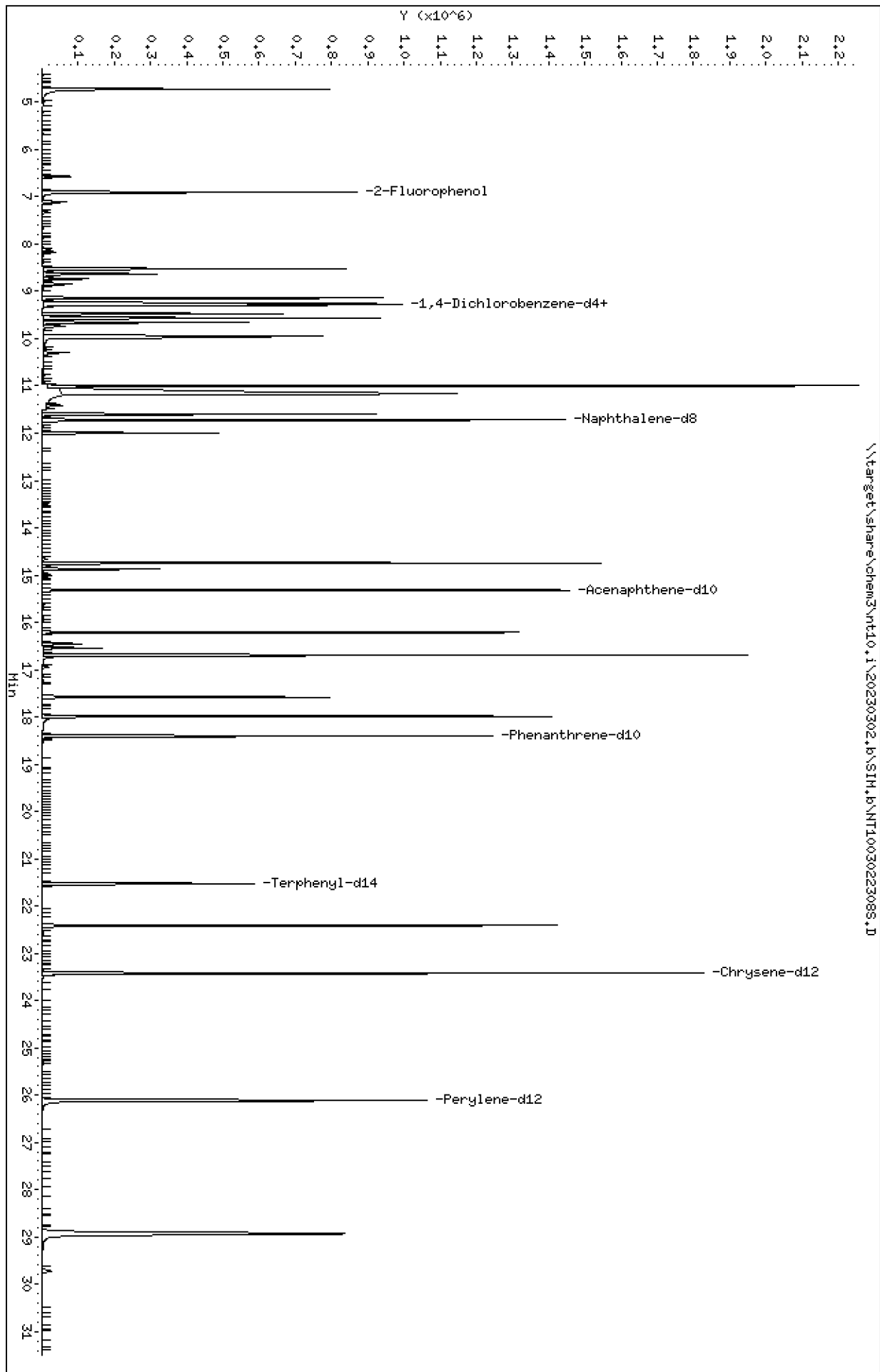
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIM.6\NT1003022308S.D
Date: 02-MAR-2023 18:50
Client ID:
Sample Info: BLR0624-BSM1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIM.6\NT1003022308S.D



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

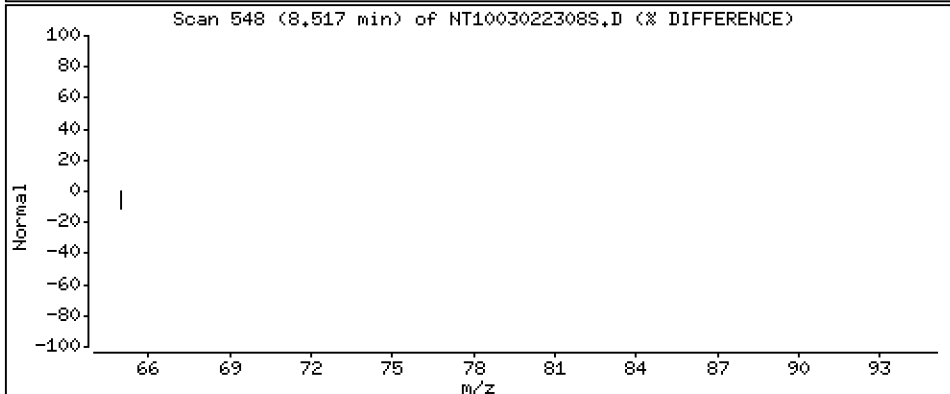
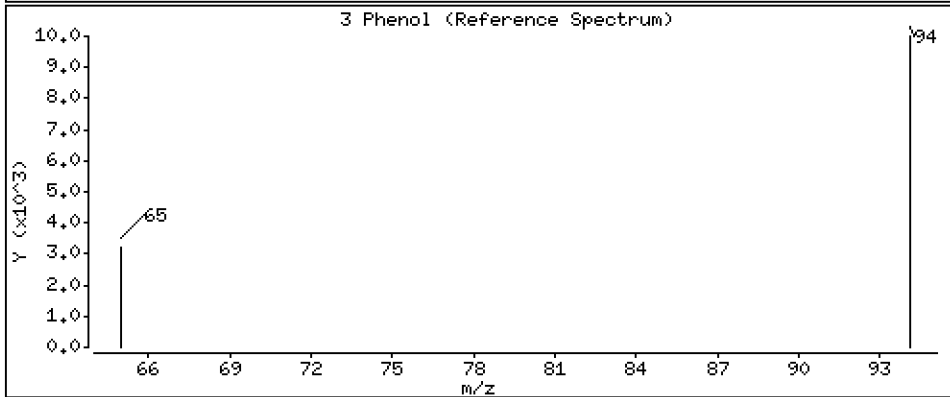
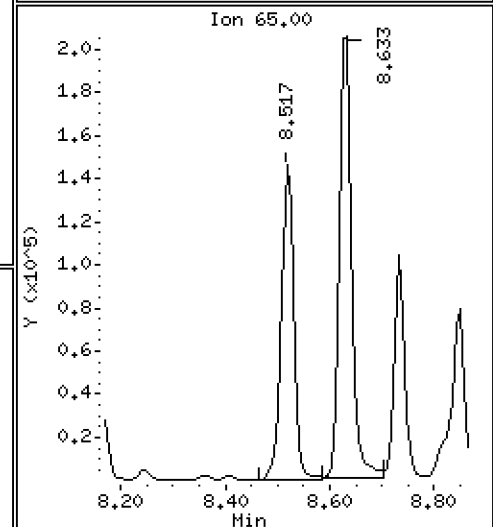
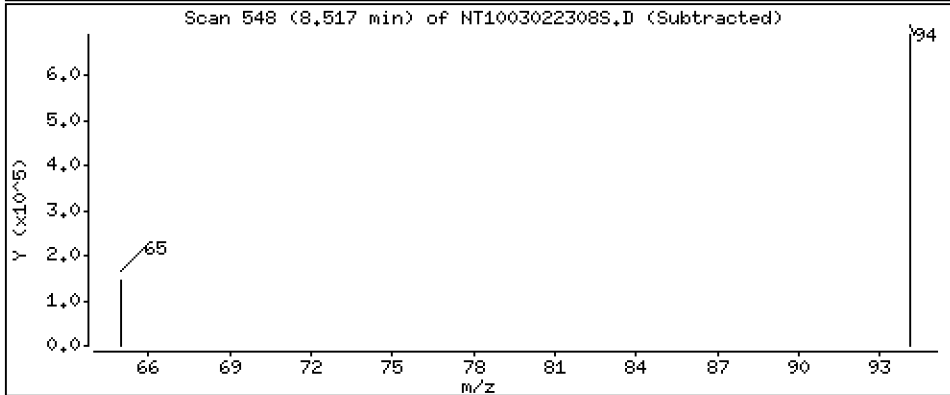
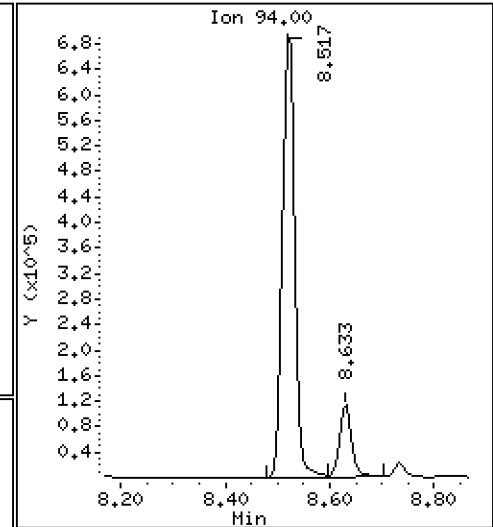
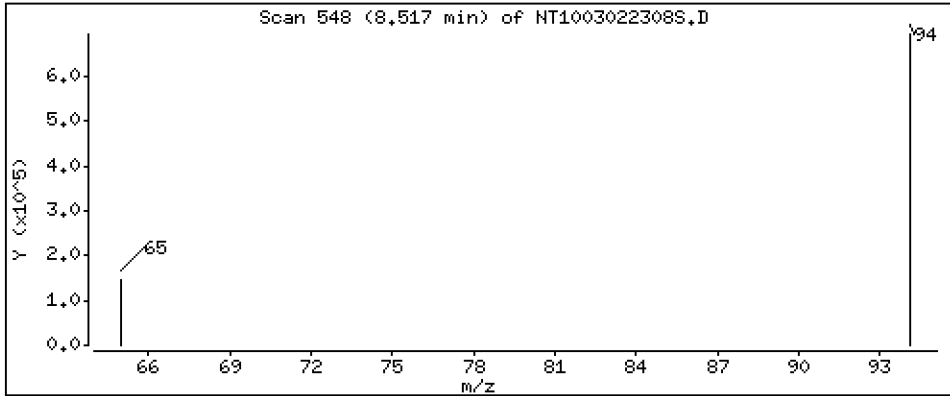
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.489 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

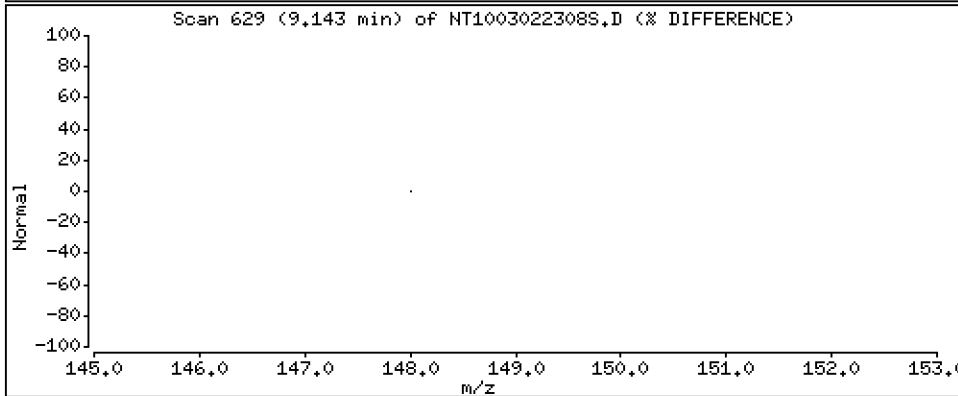
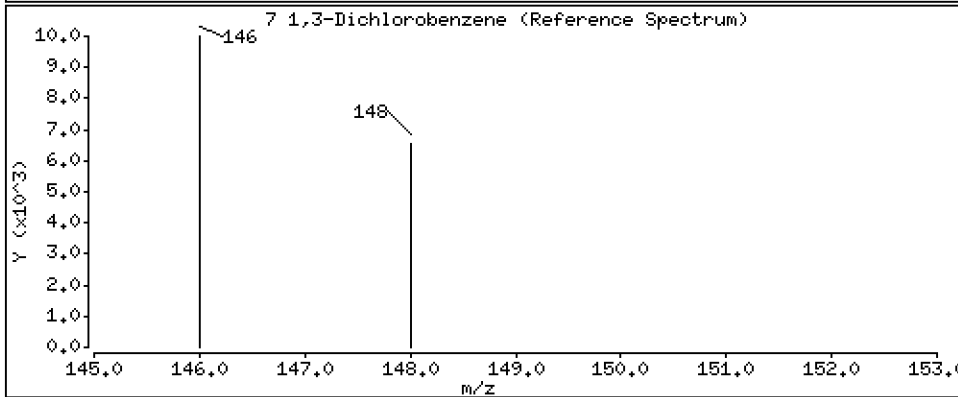
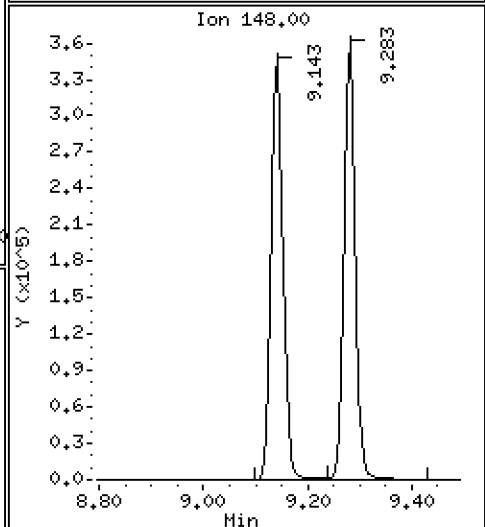
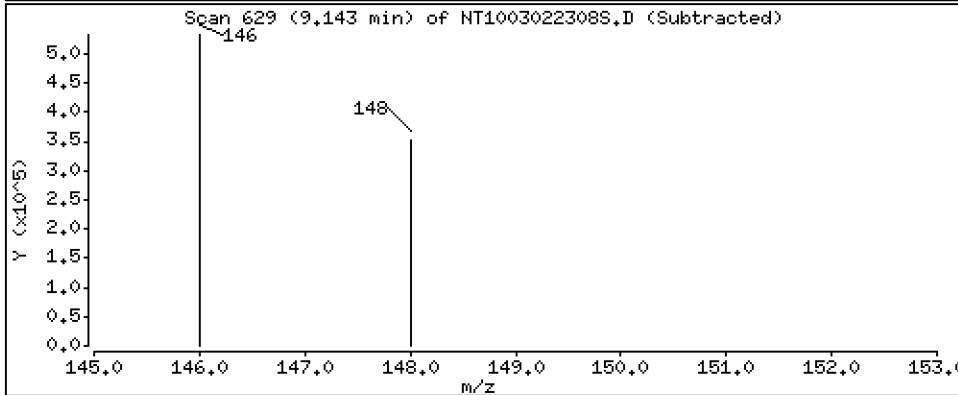
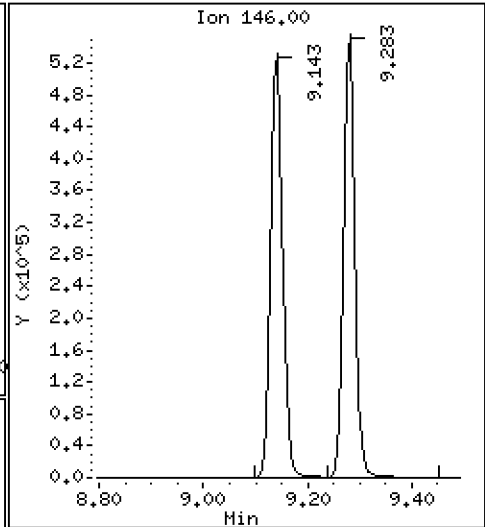
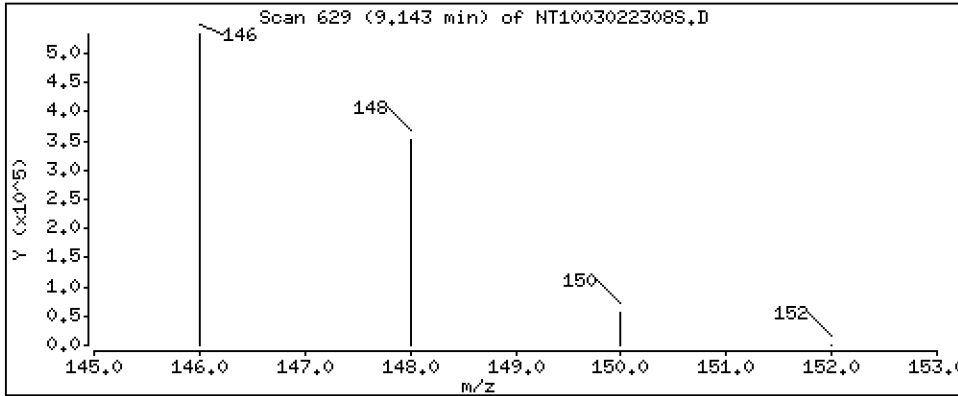
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,111 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

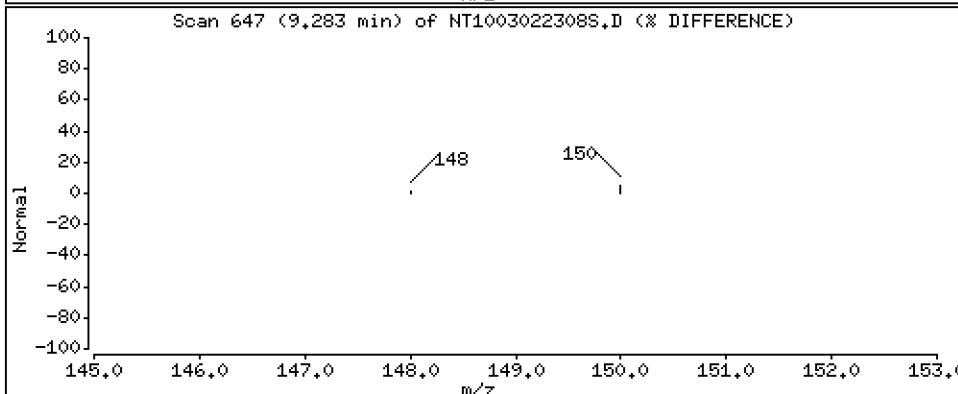
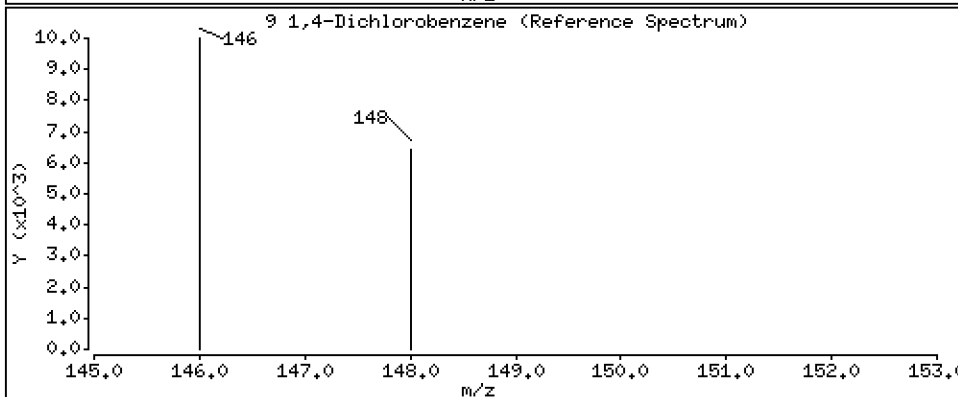
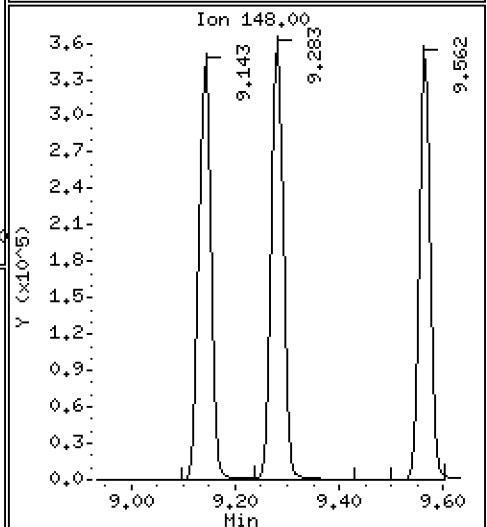
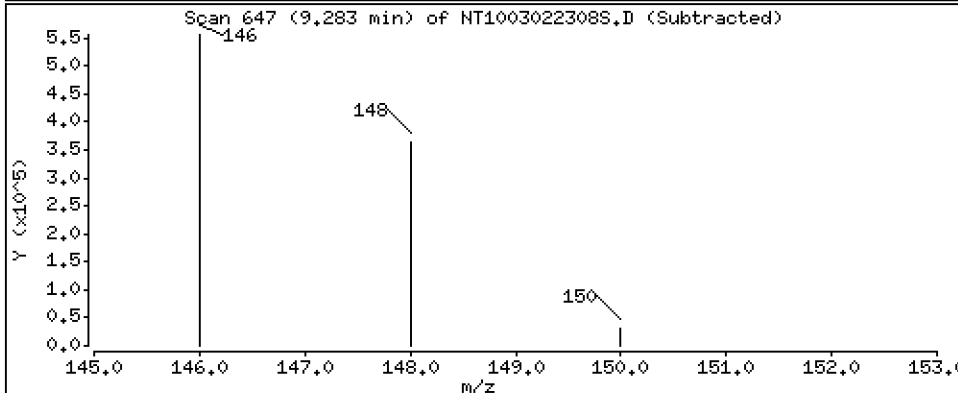
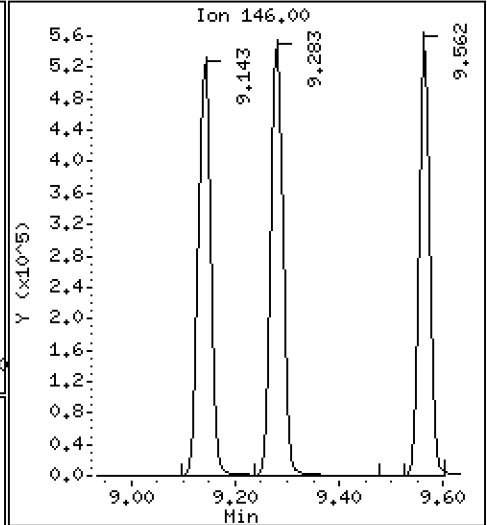
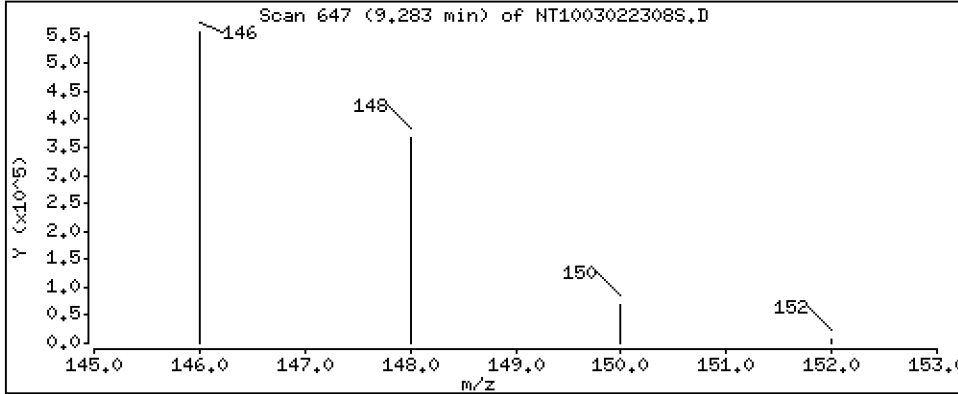
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4.264 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

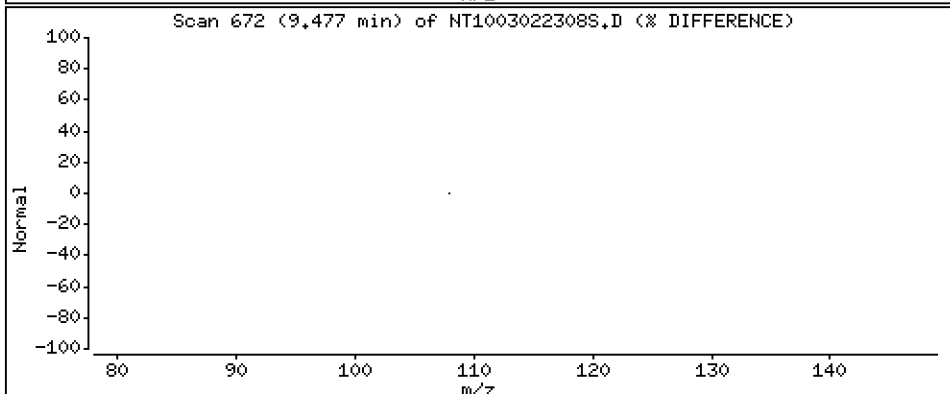
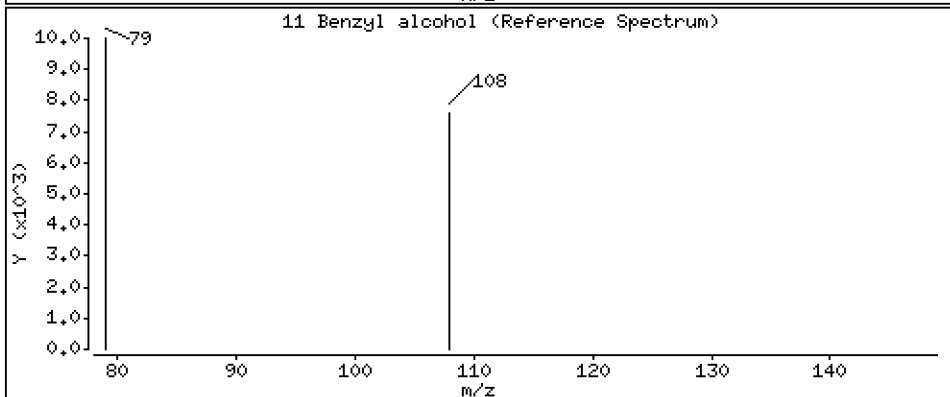
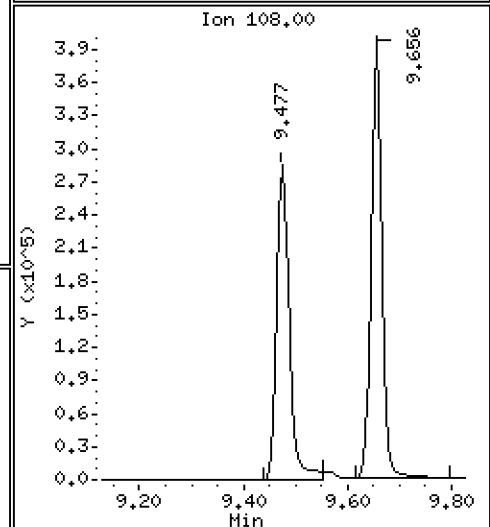
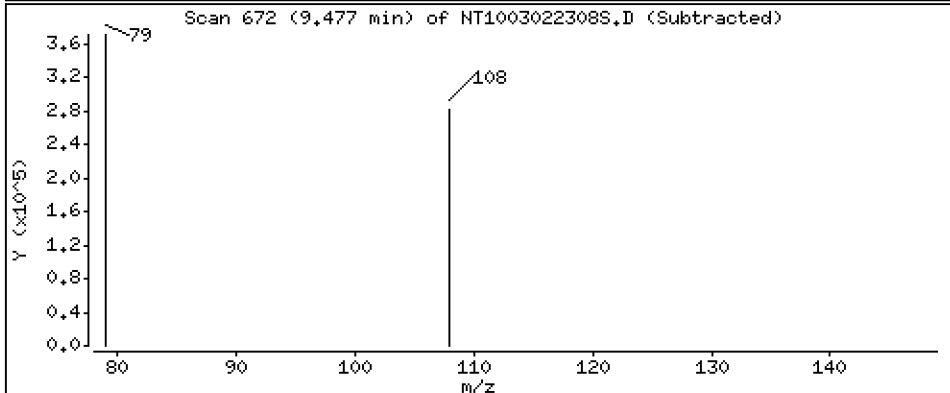
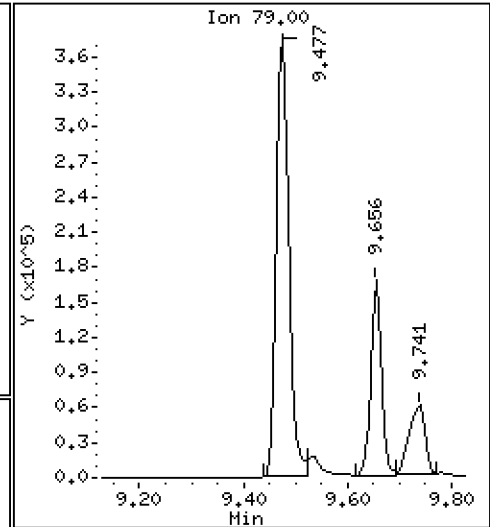
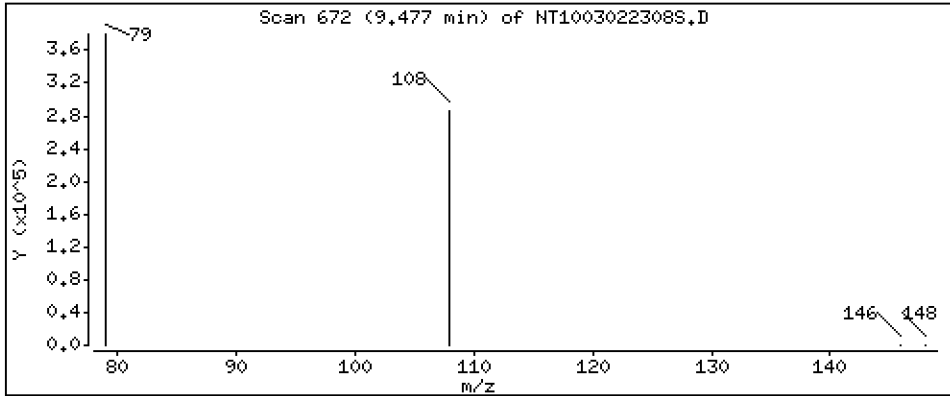
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4,344 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

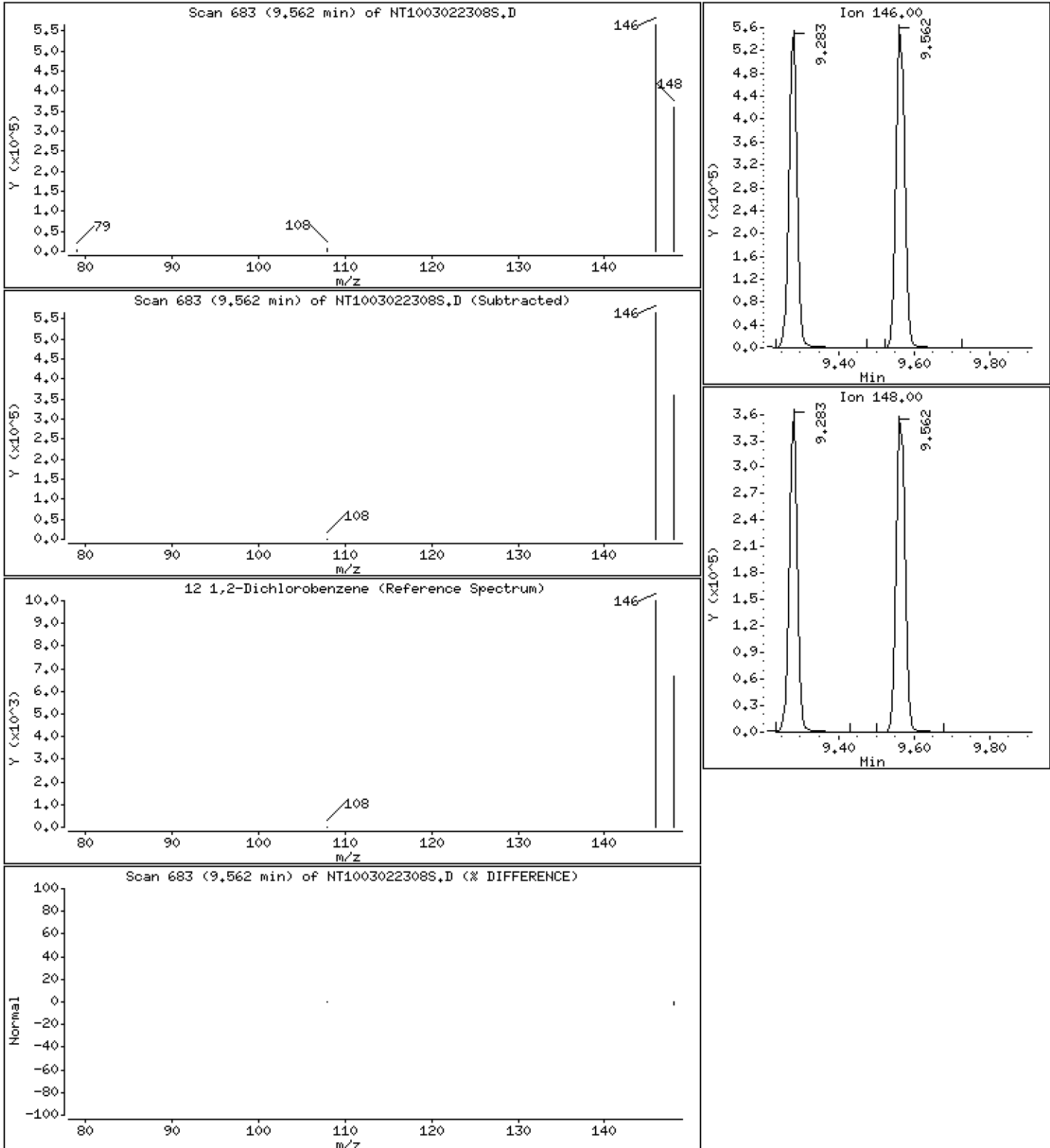
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4.325 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

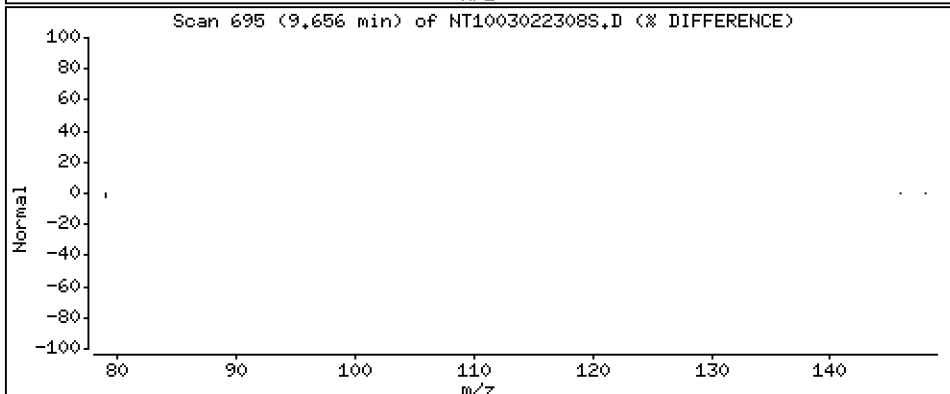
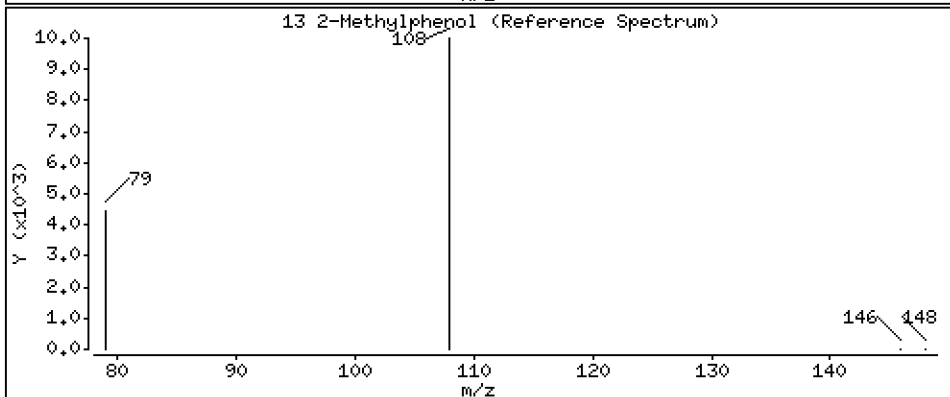
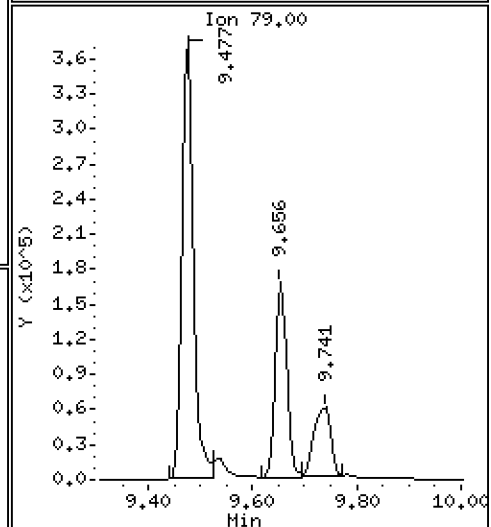
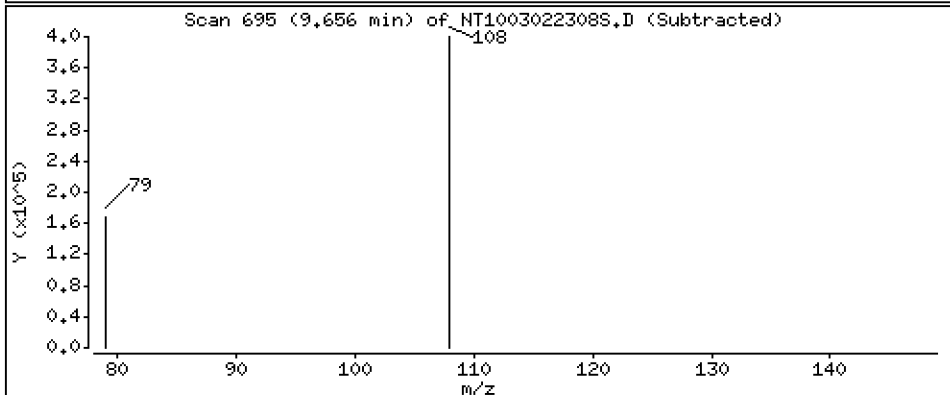
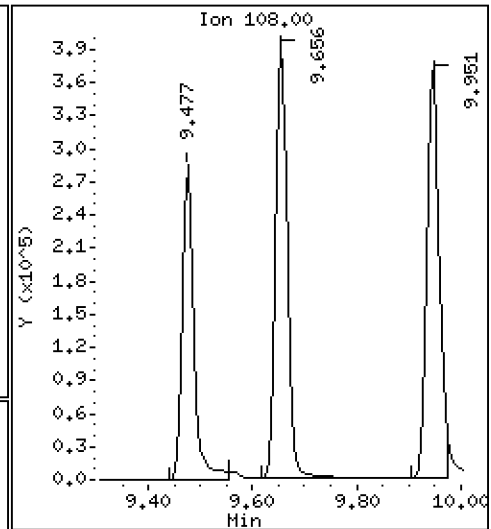
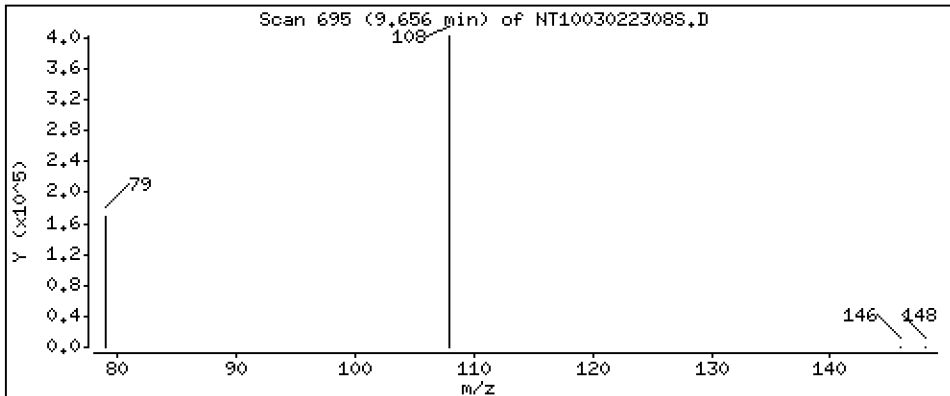
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 3.955 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

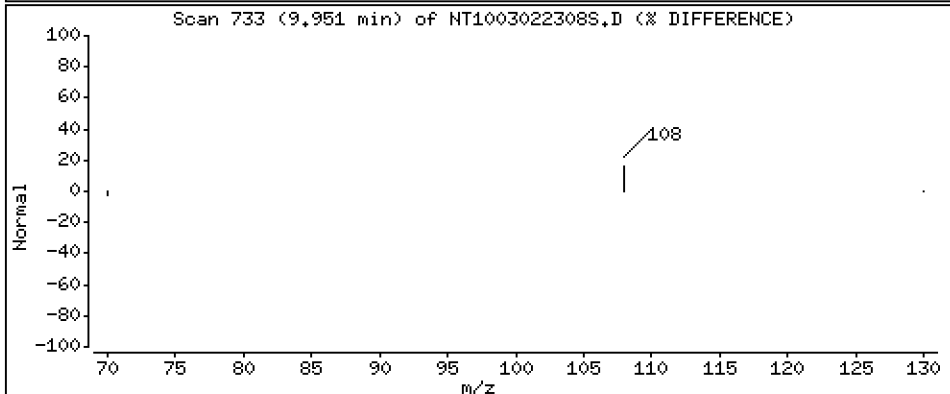
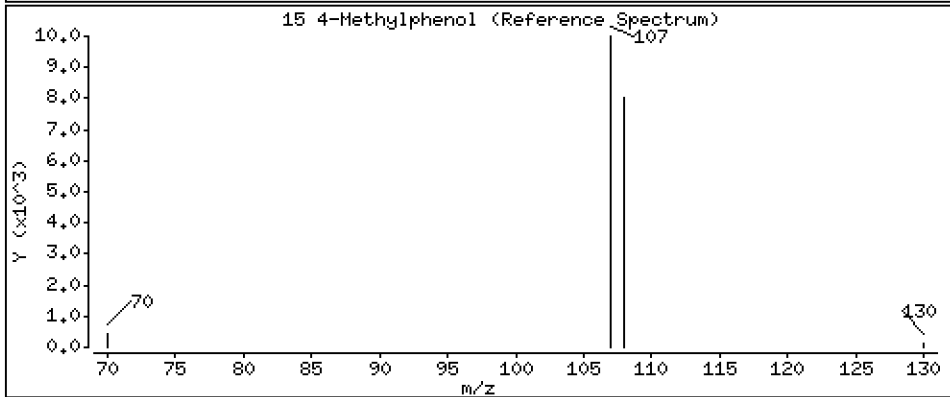
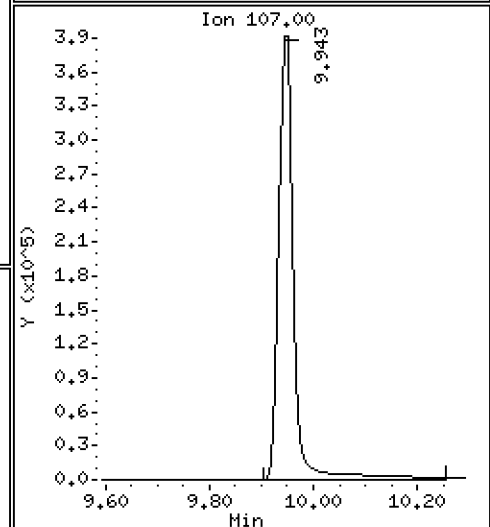
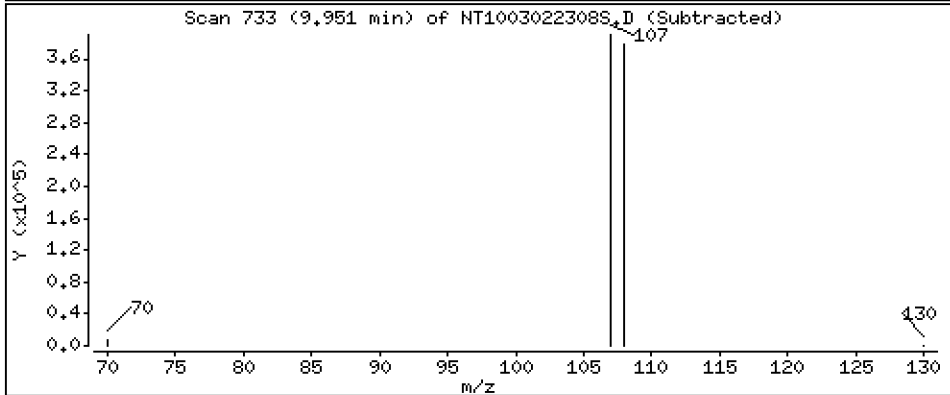
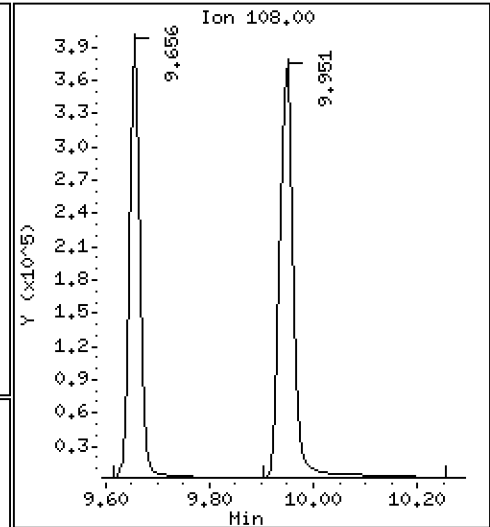
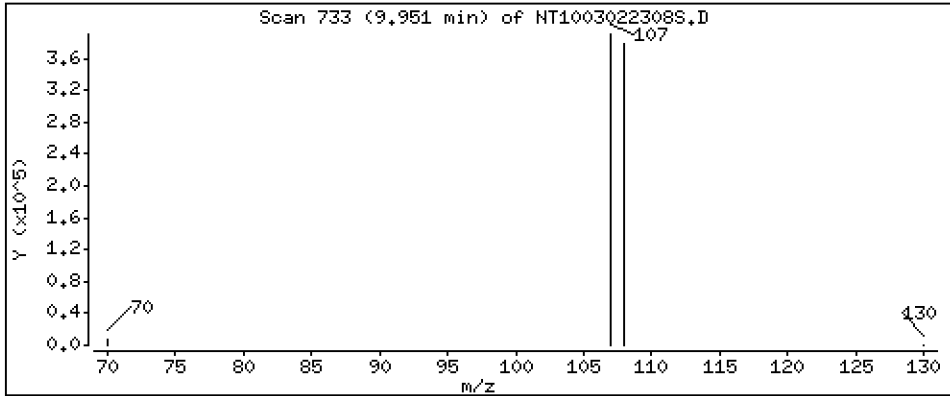
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 4,325 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

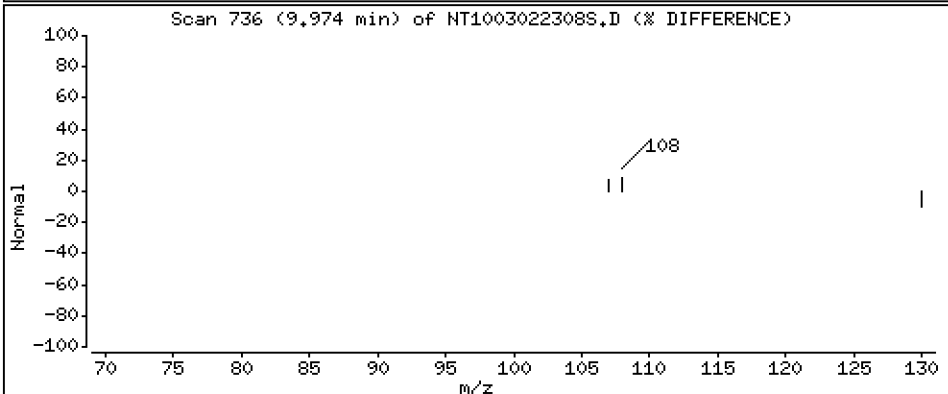
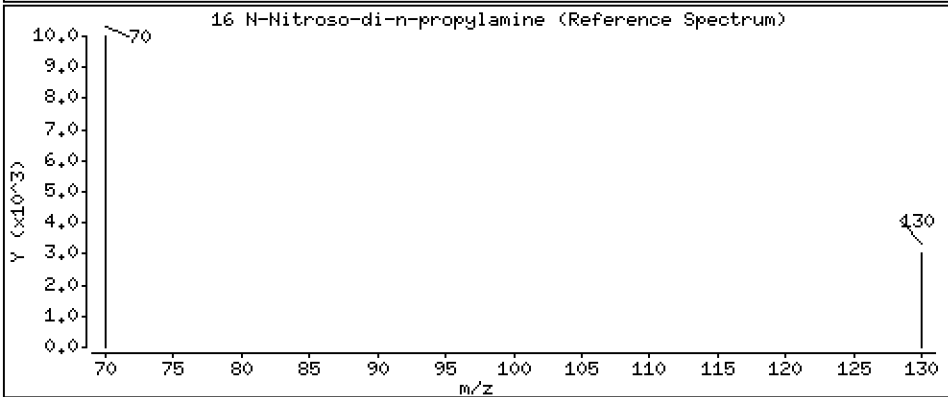
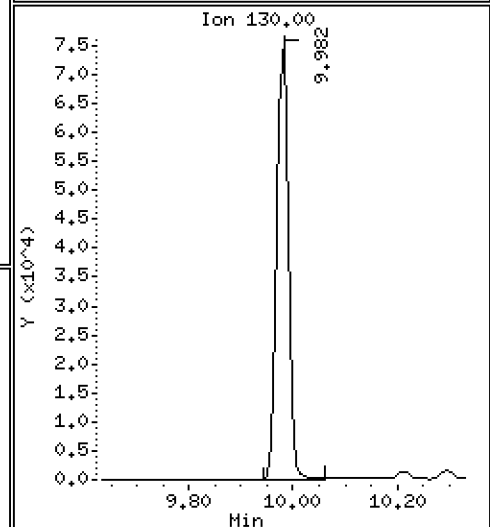
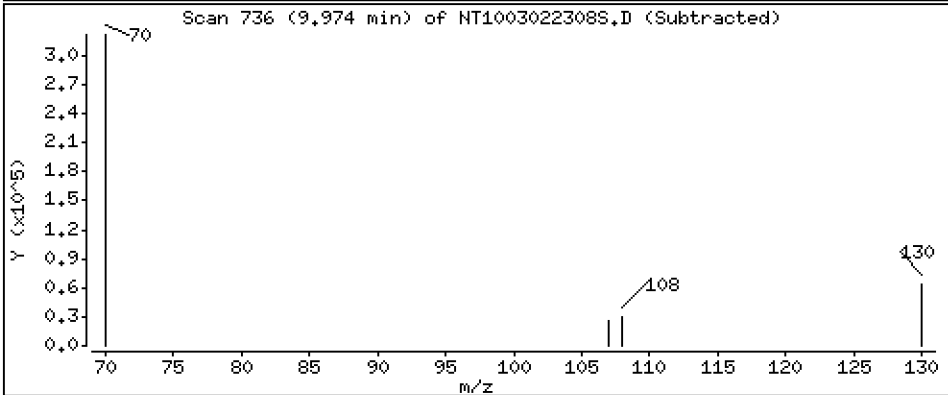
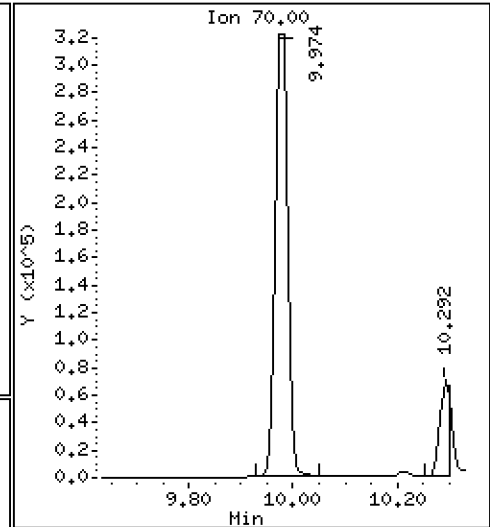
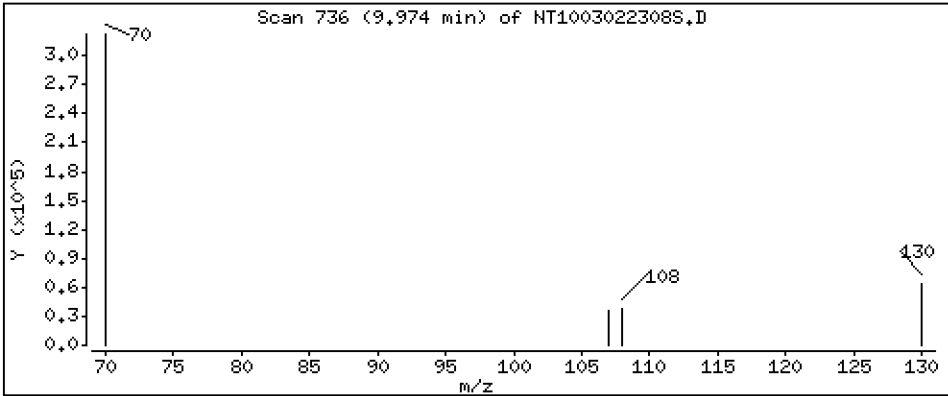
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 4.657 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

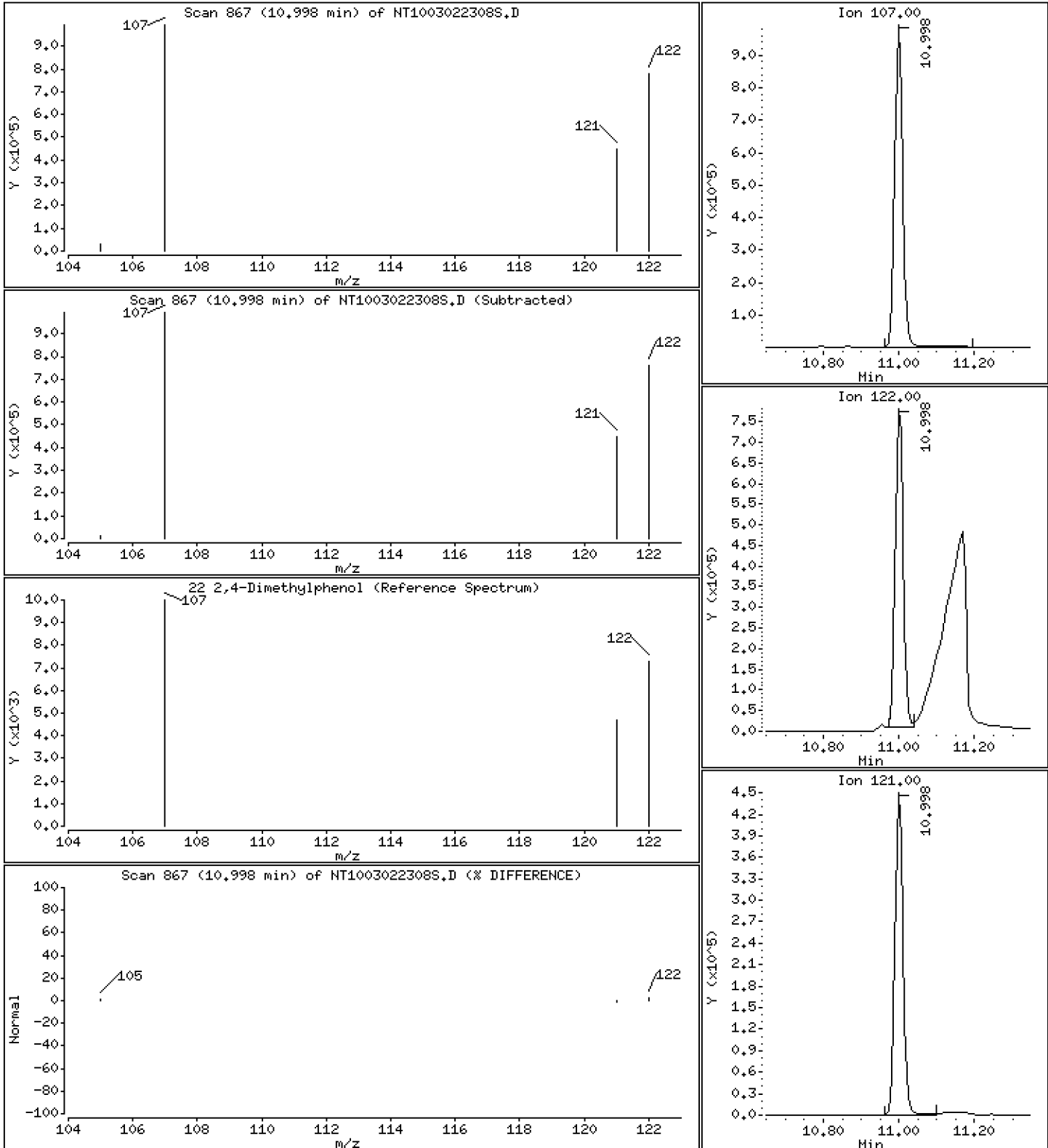
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 7,978 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

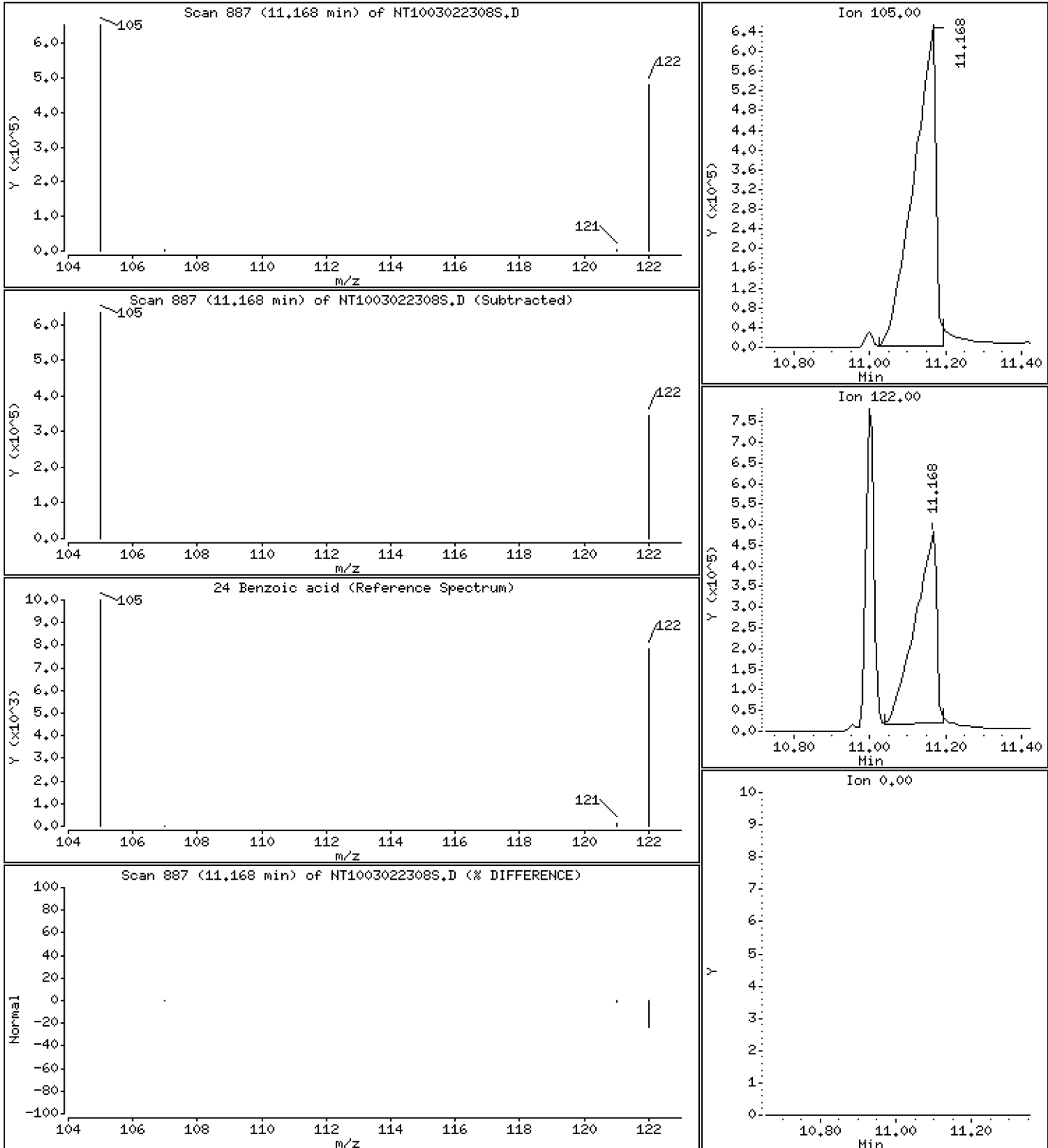
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 23.46 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

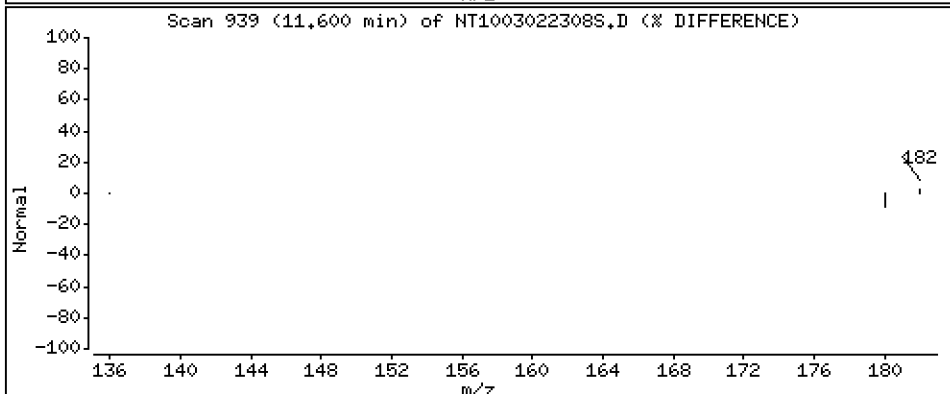
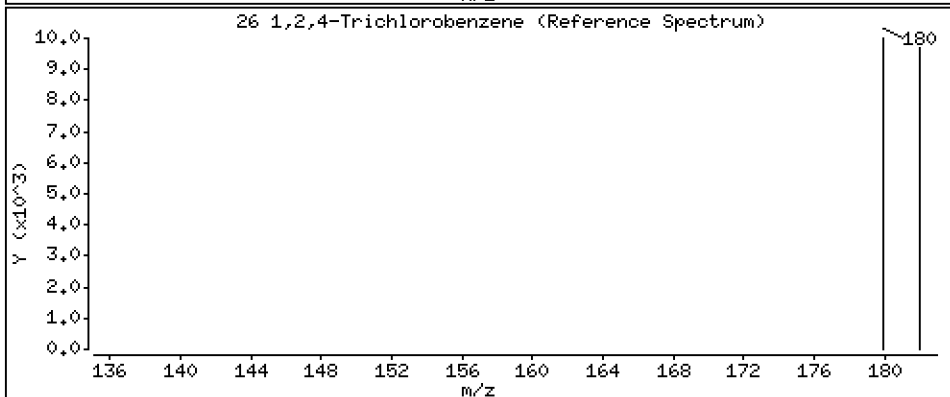
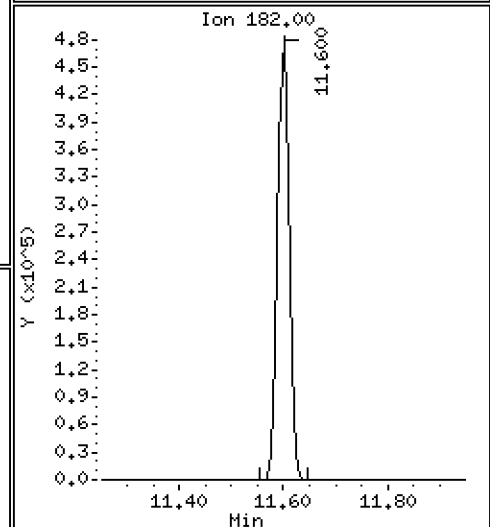
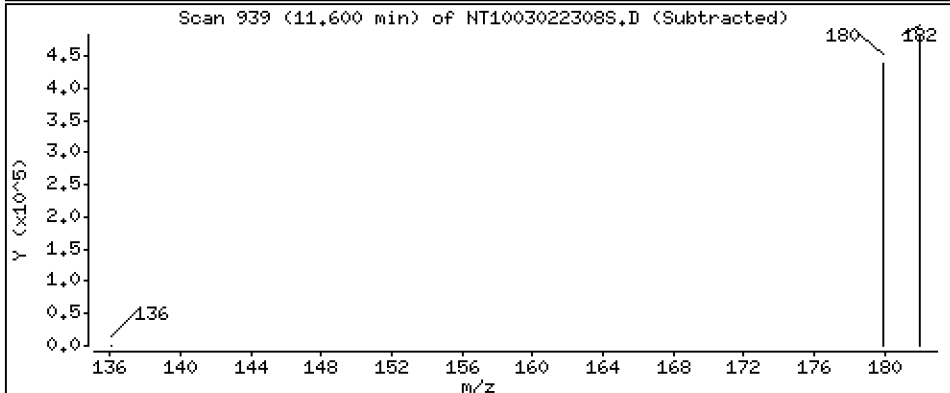
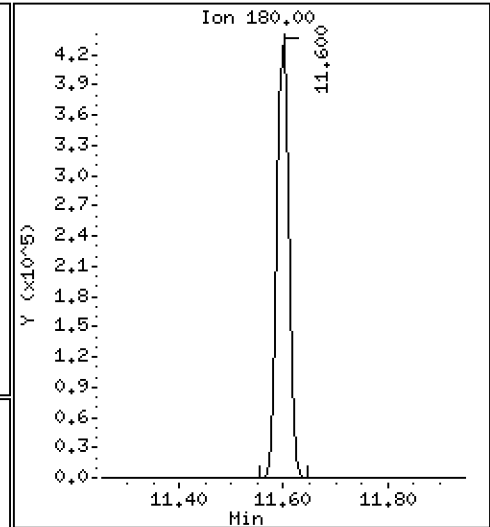
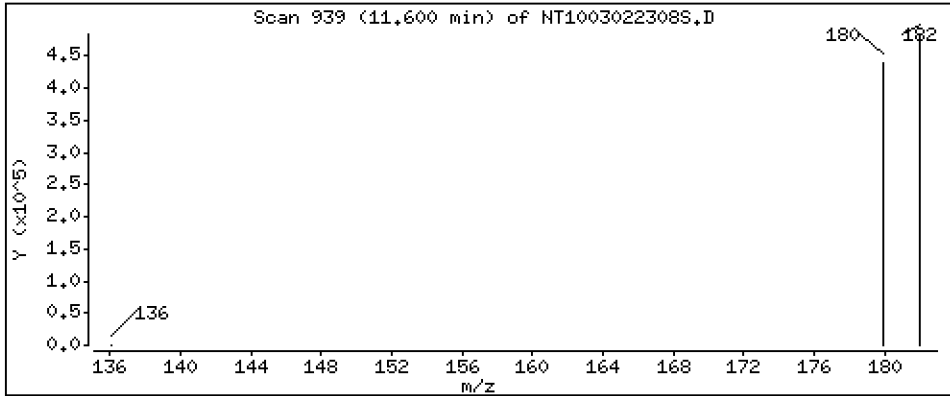
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,336 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

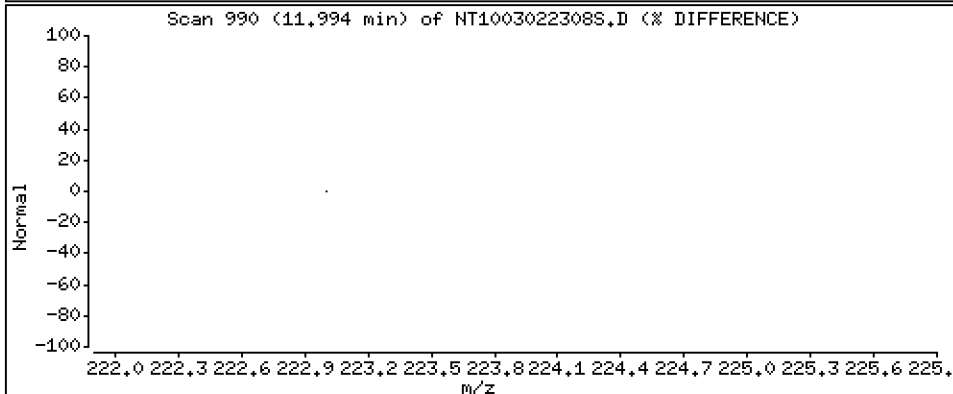
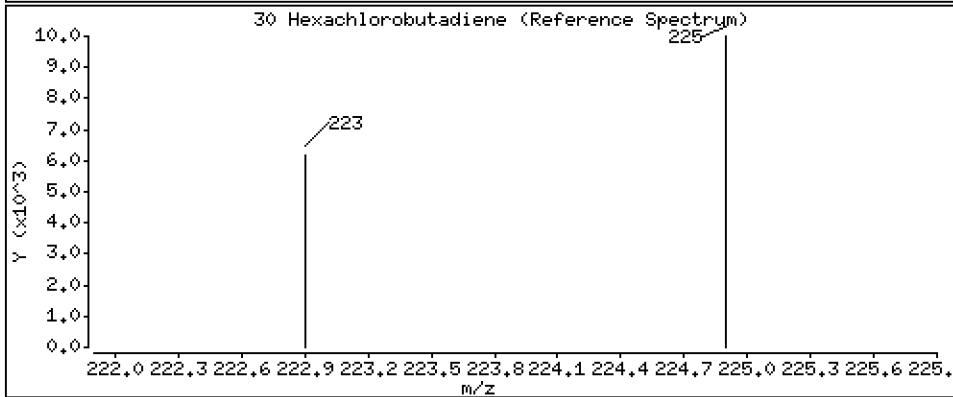
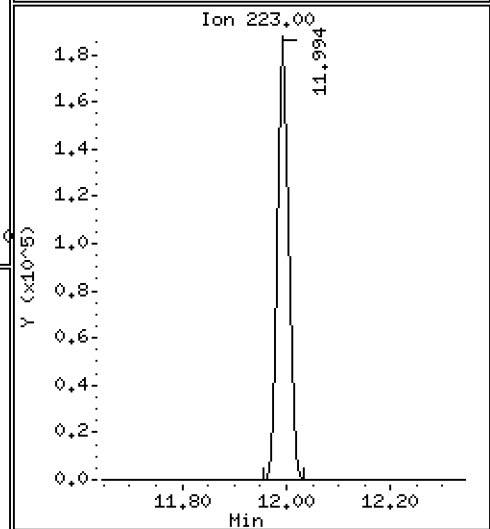
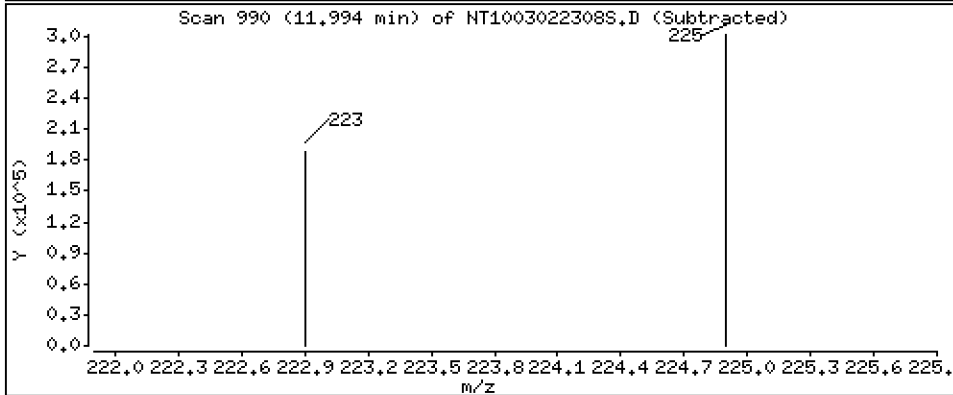
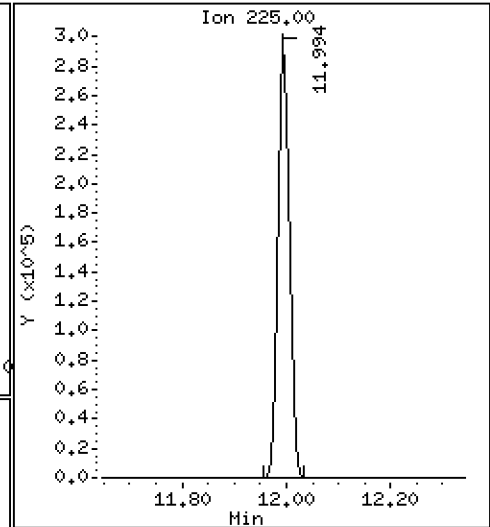
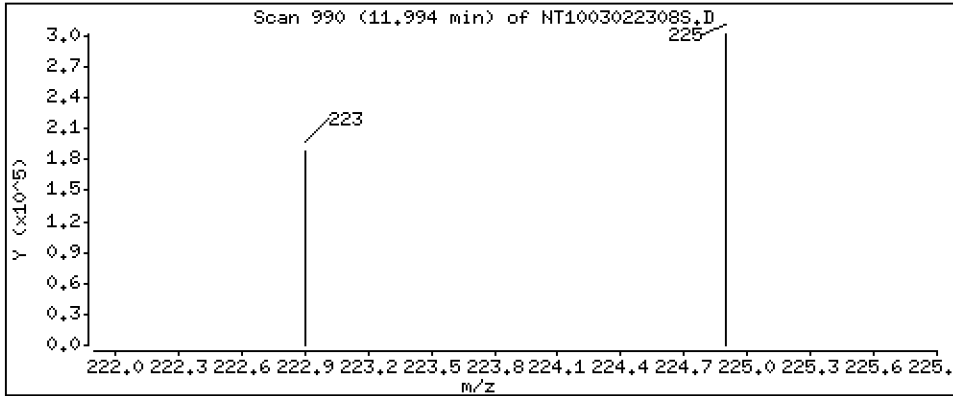
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,139 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

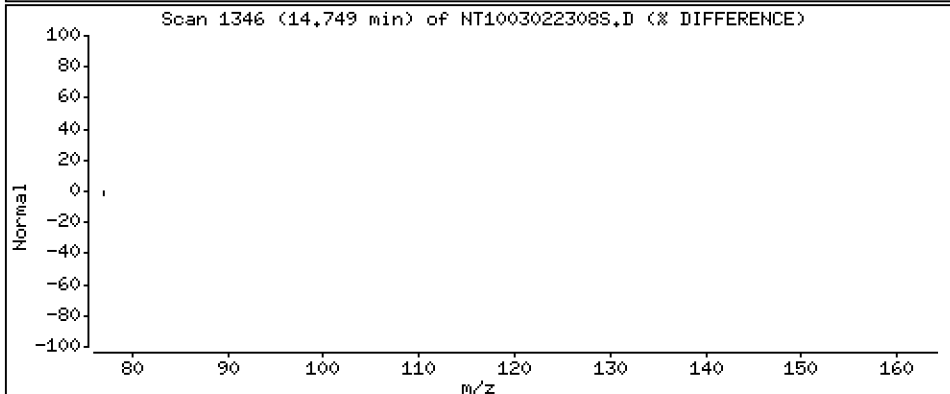
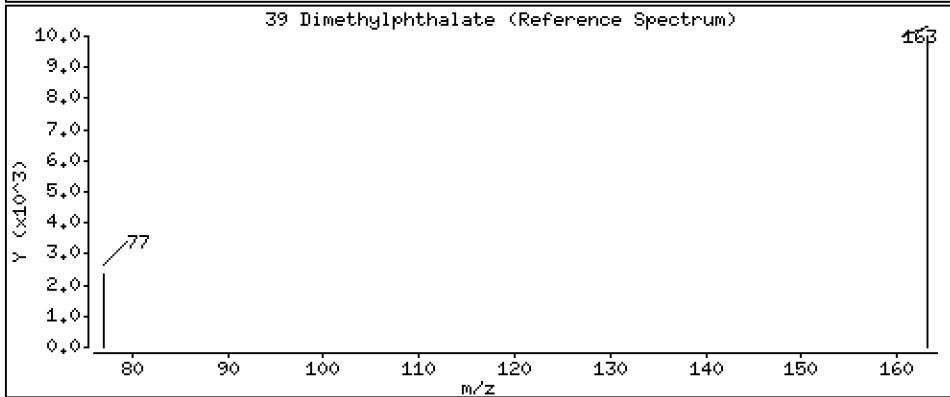
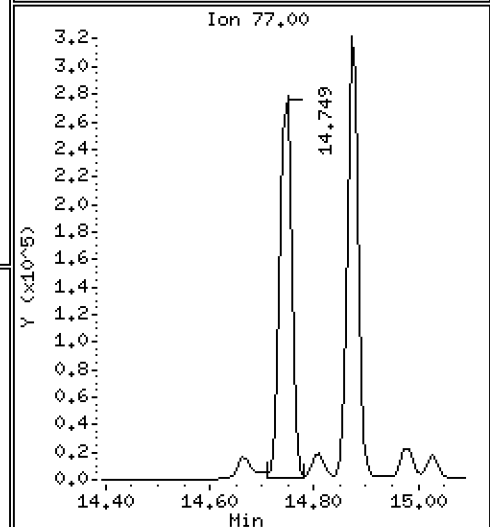
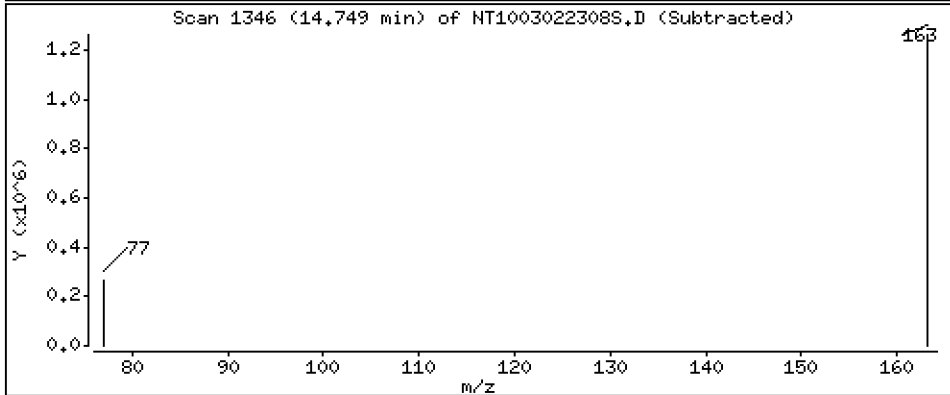
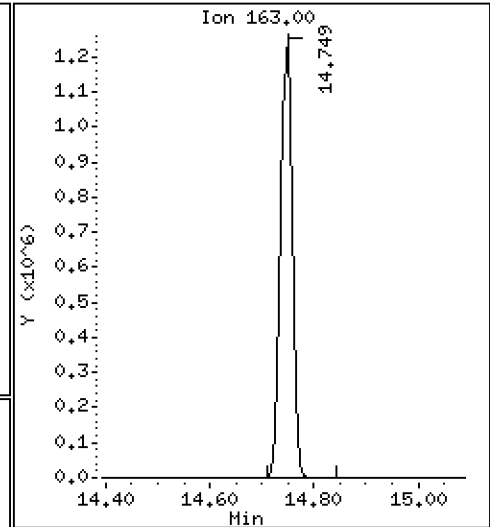
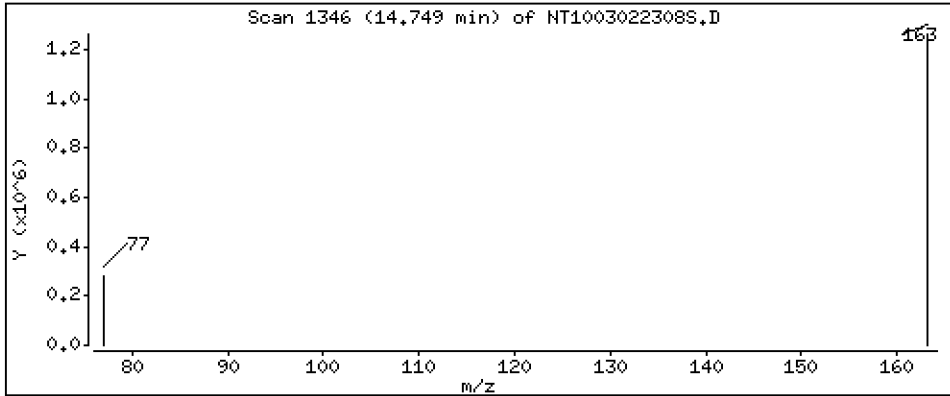
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,228 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

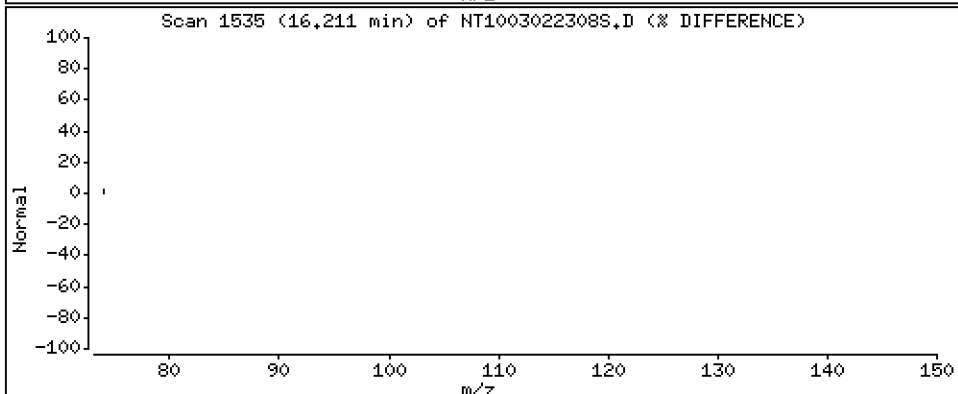
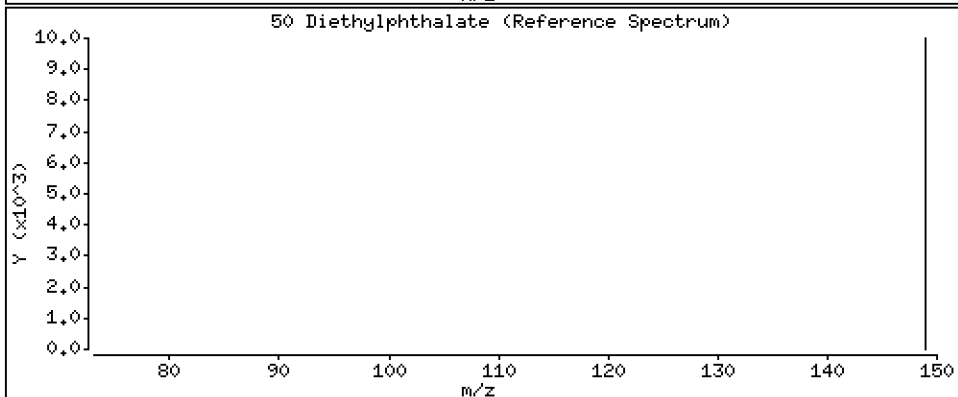
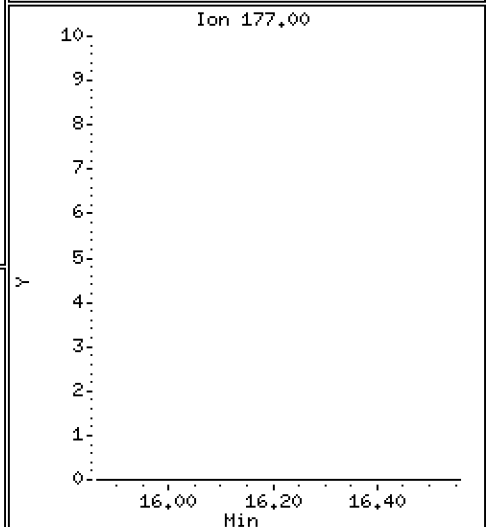
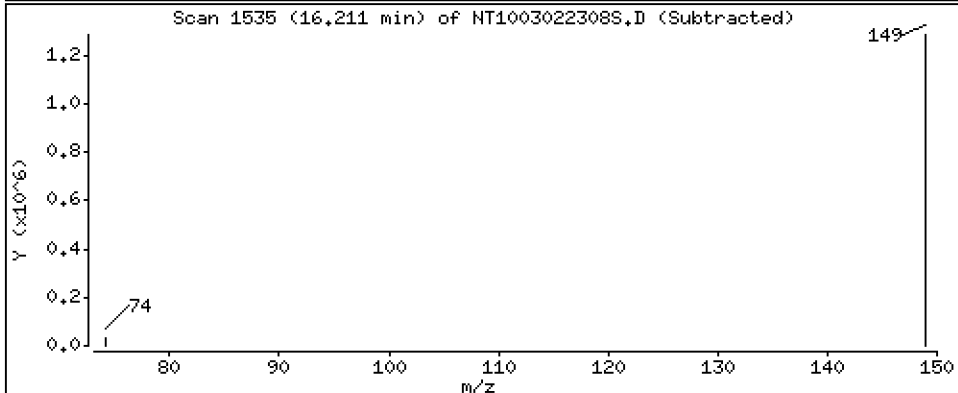
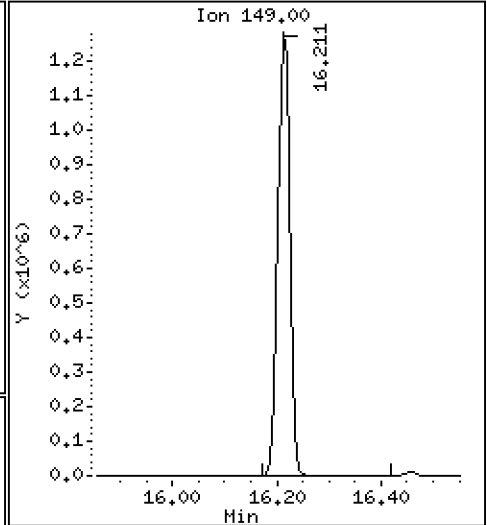
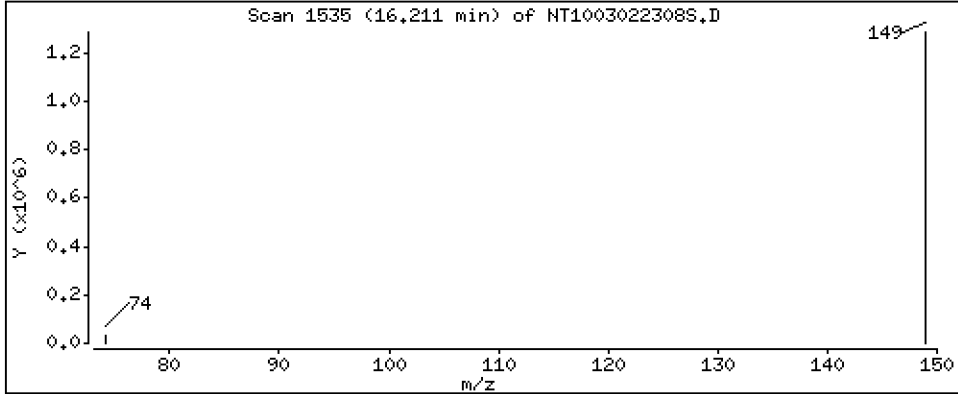
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,823 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

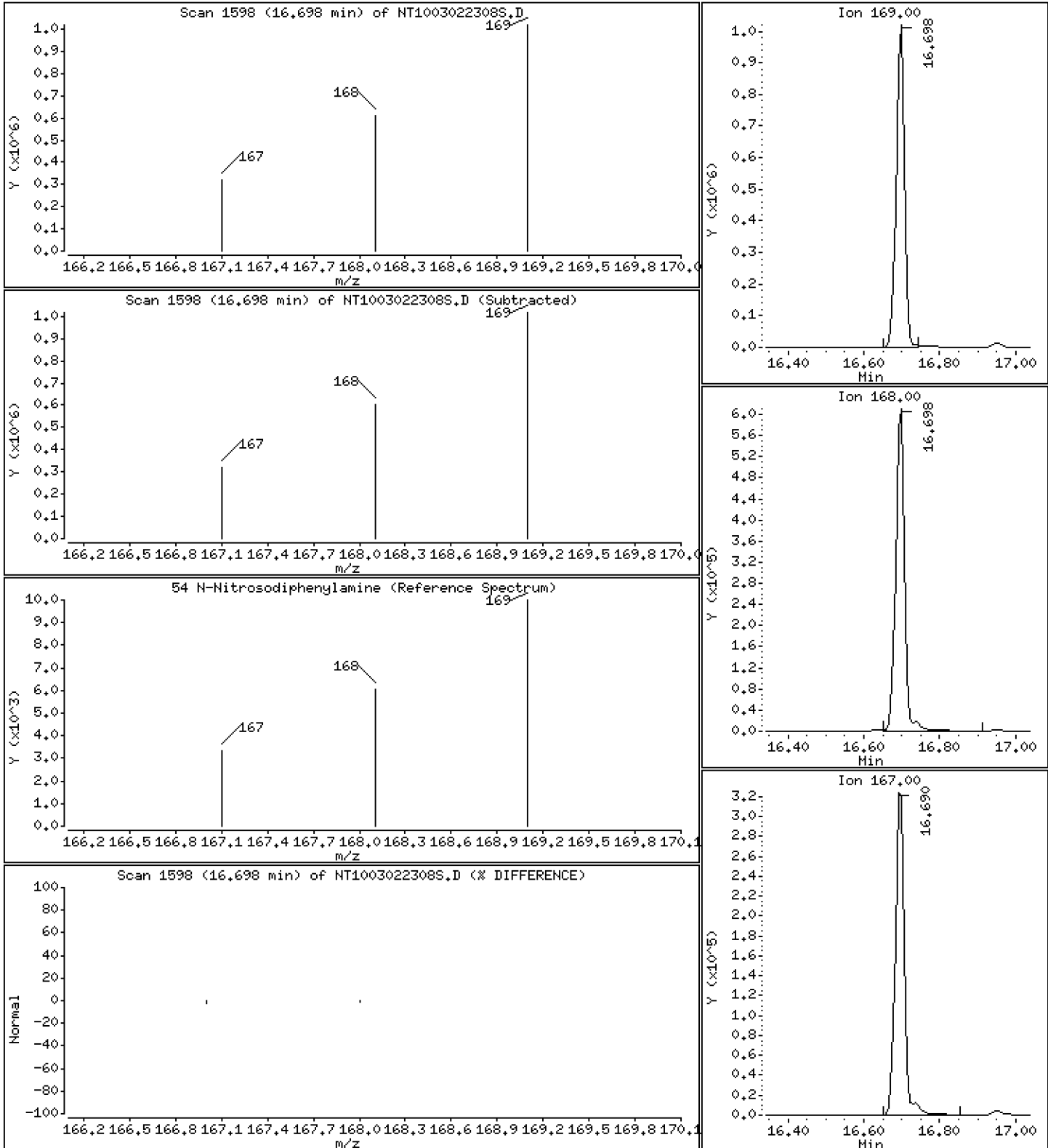
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 4.761 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

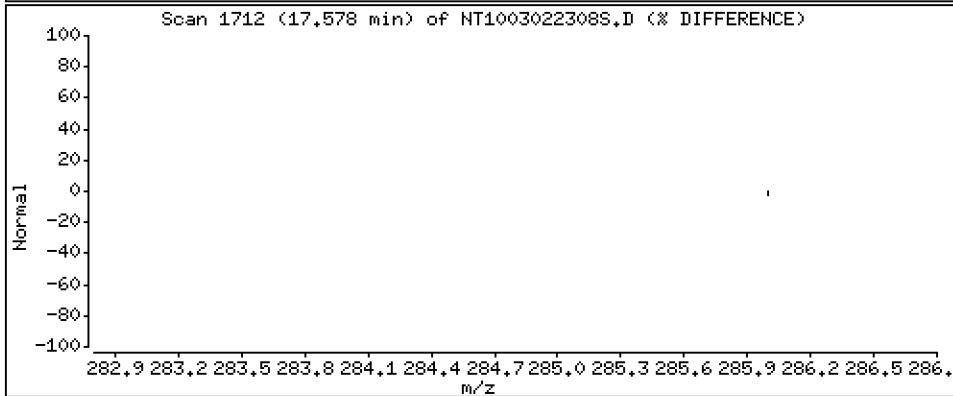
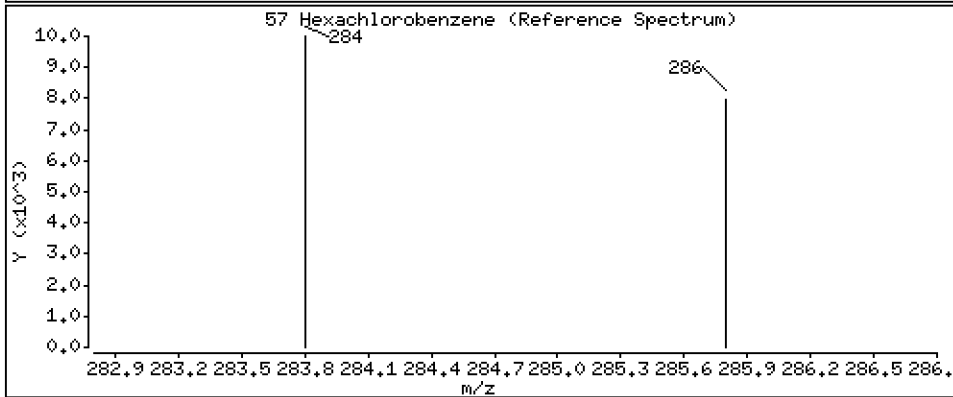
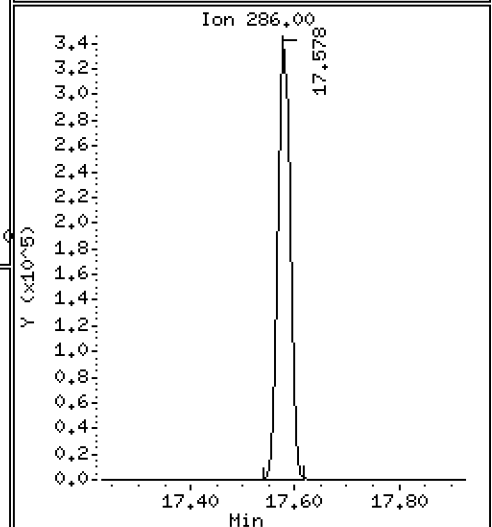
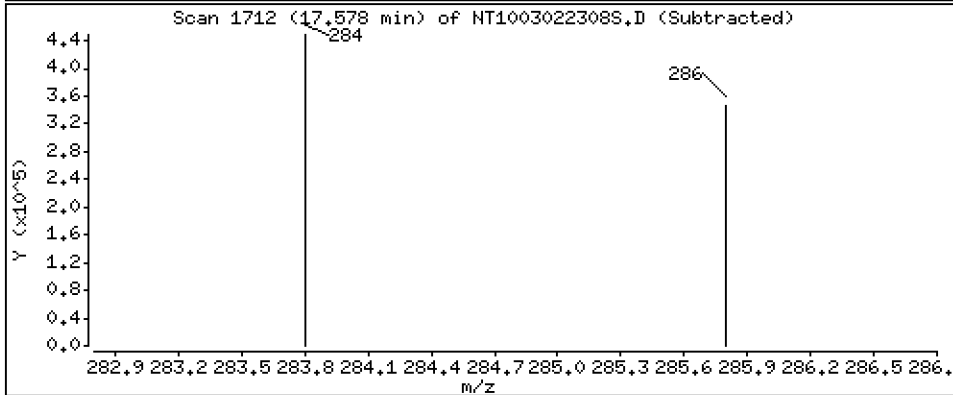
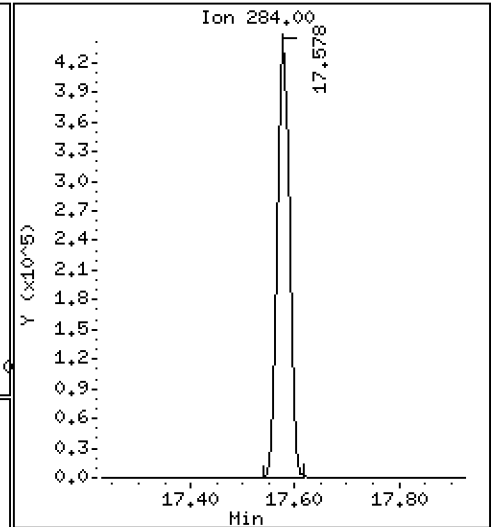
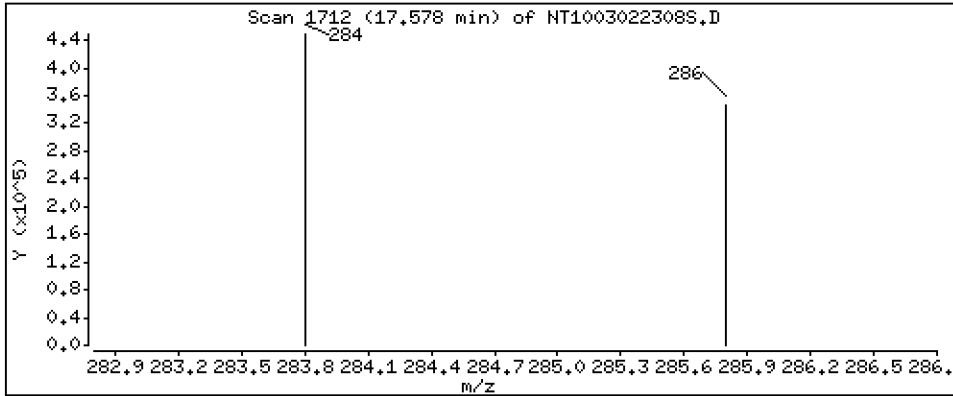
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.467 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

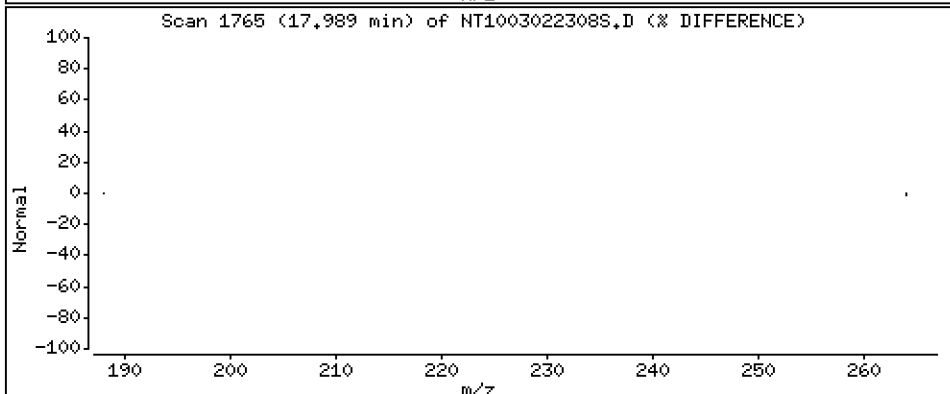
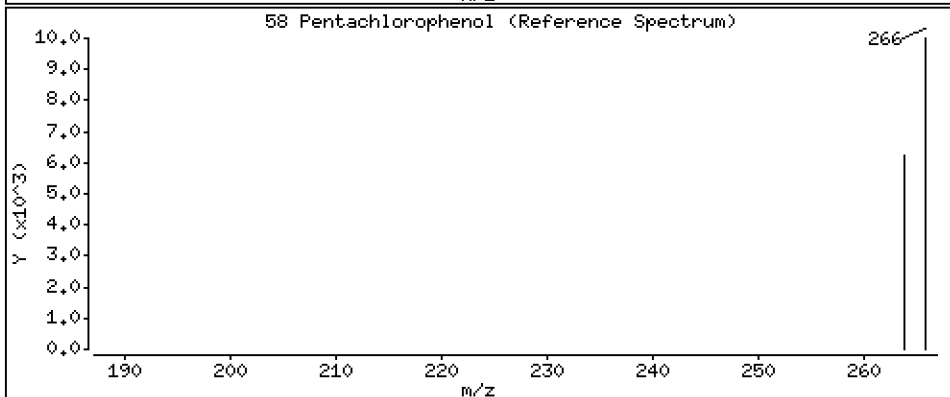
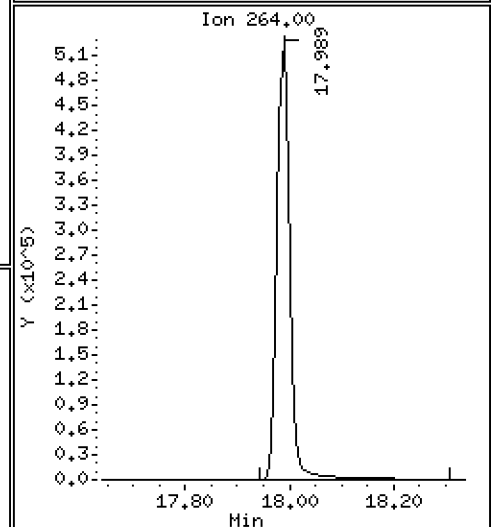
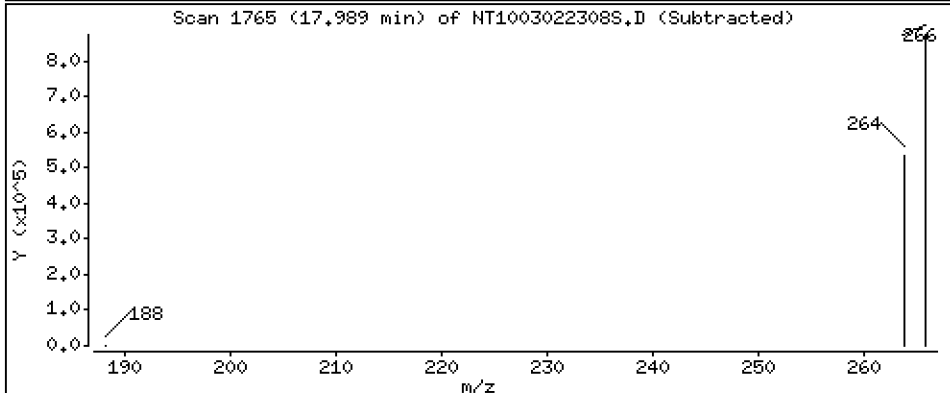
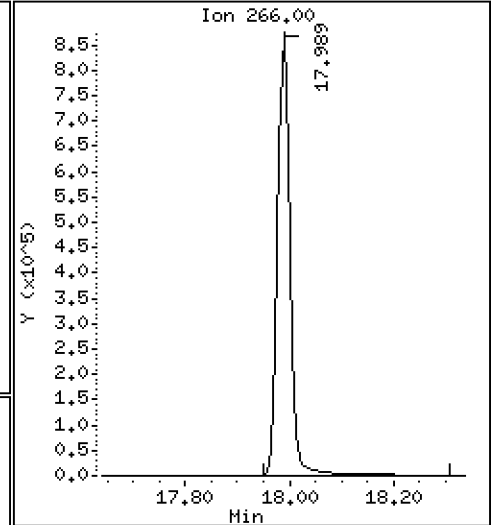
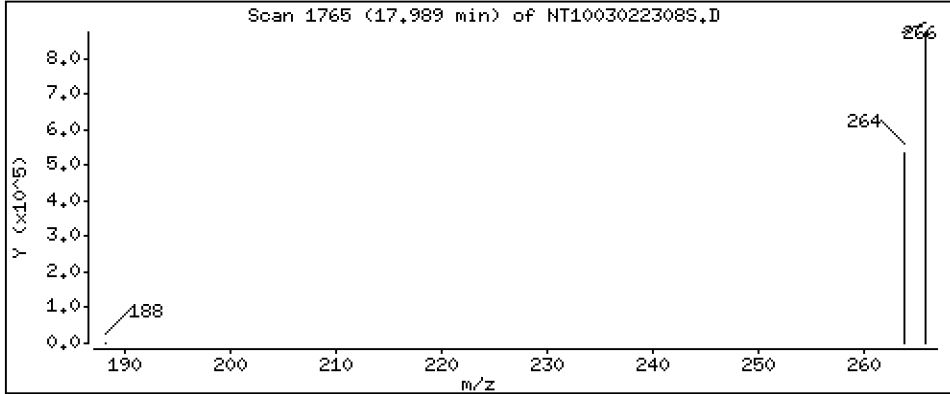
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 16,54 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

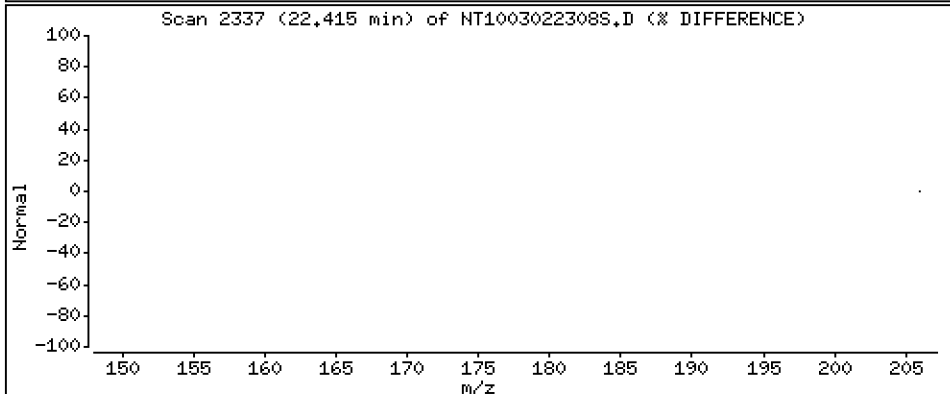
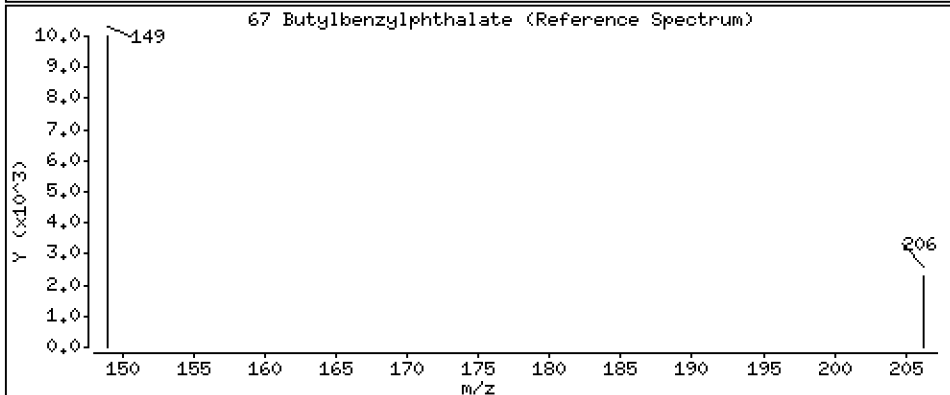
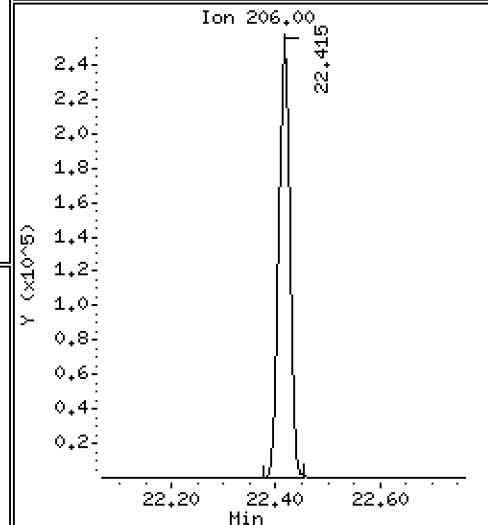
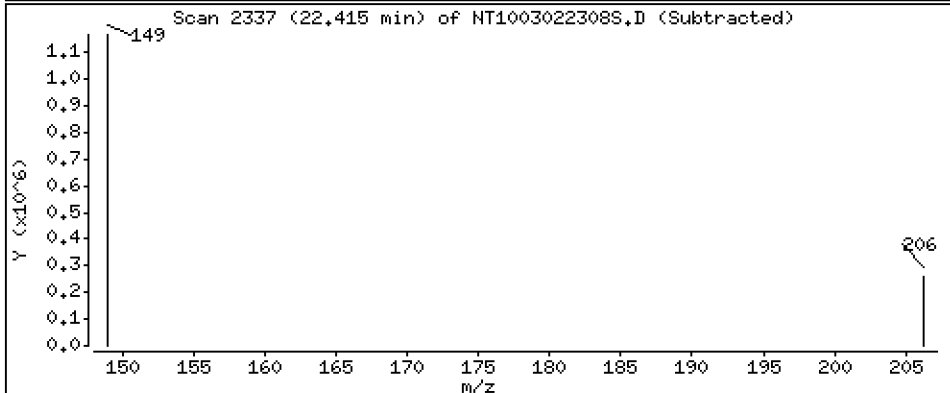
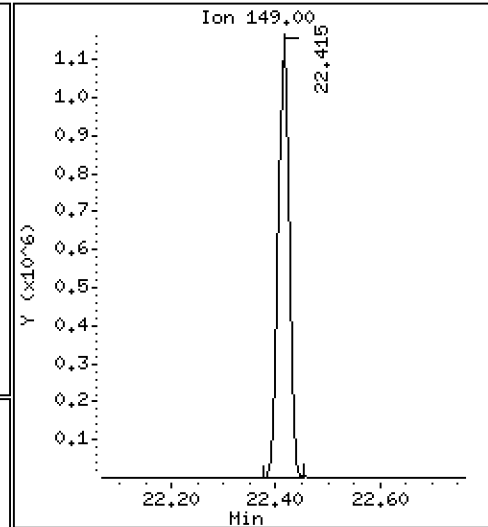
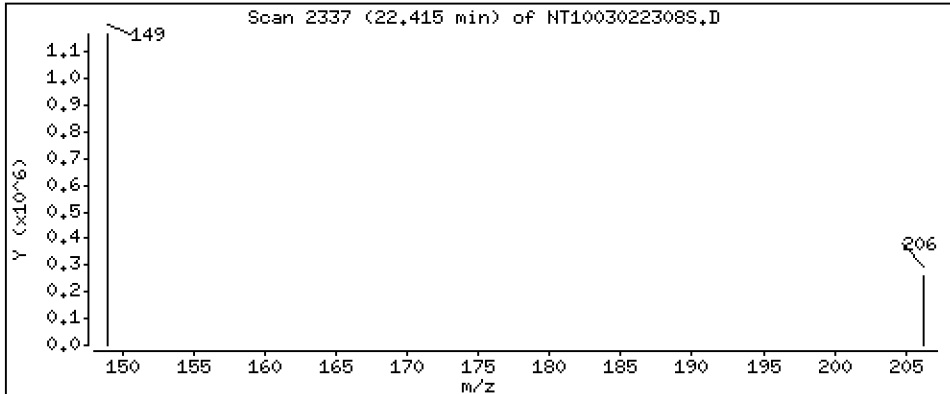
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 4.368 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

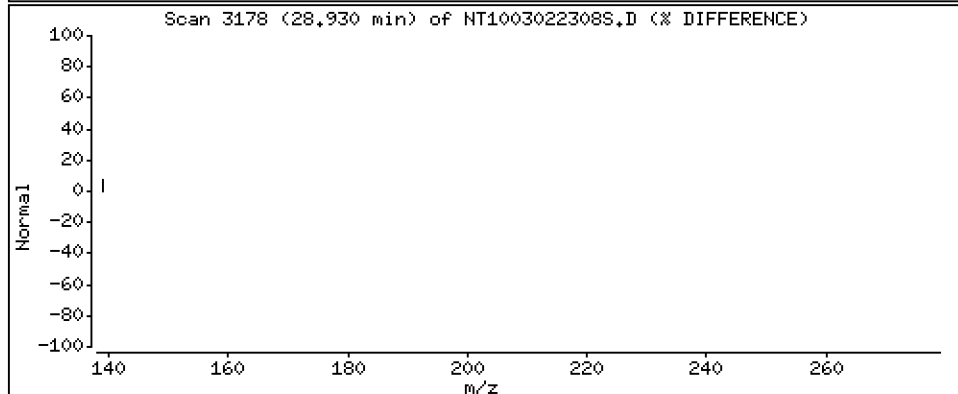
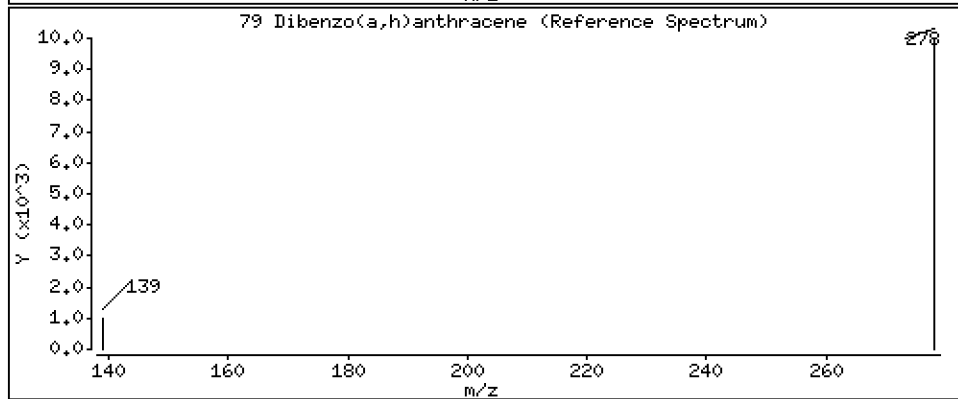
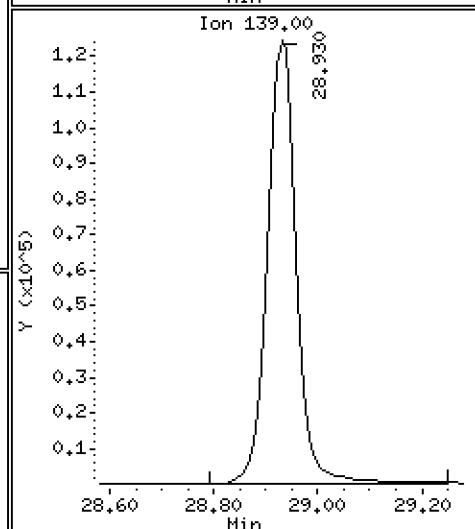
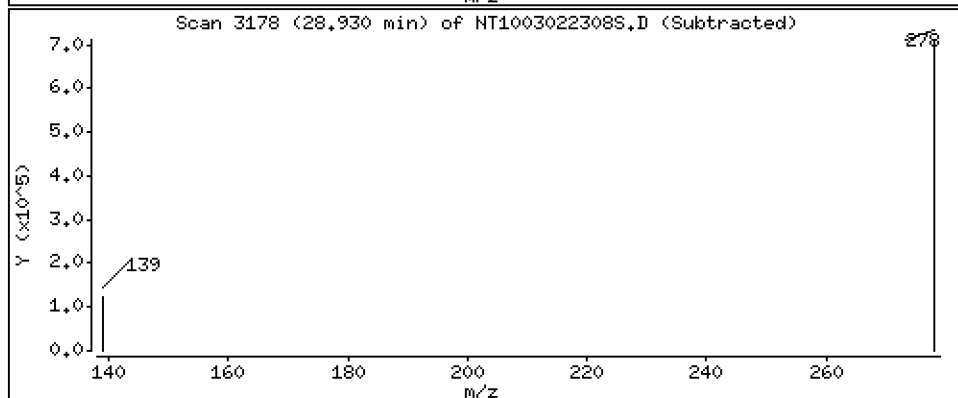
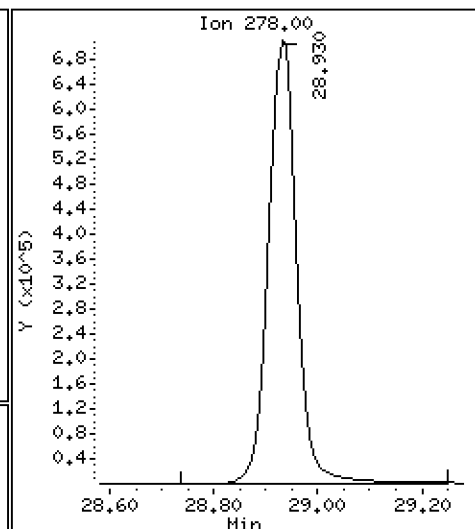
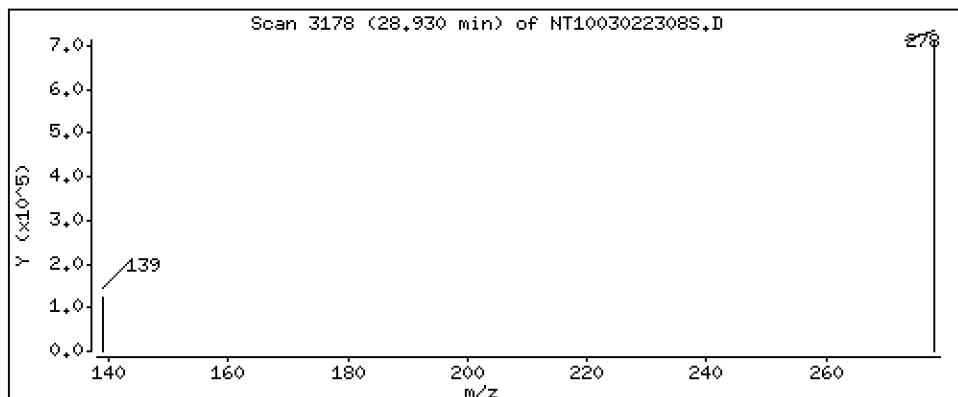
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

79 Dibenzo(a,h)anthracene

Concentration: 4.962 ug/L



Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

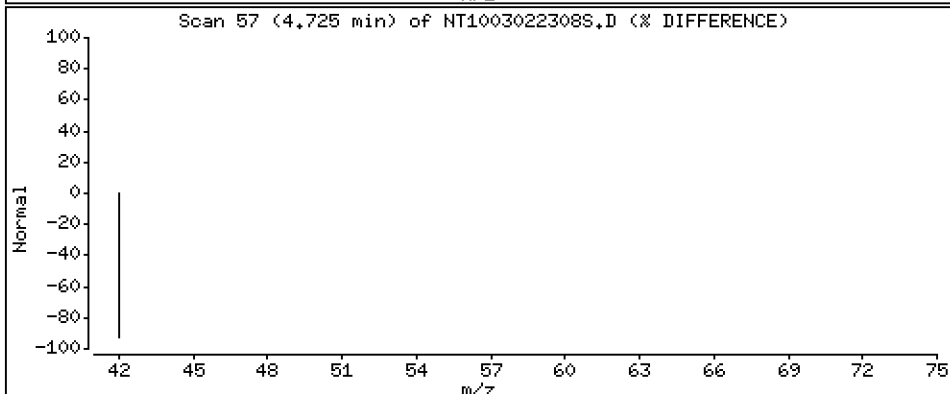
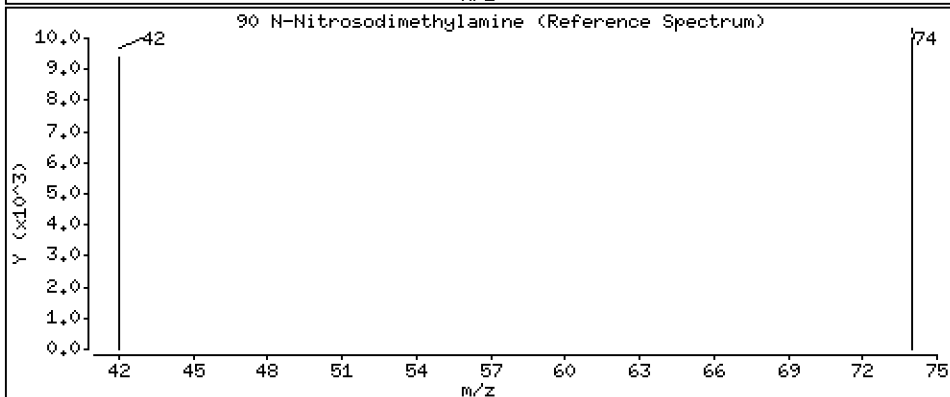
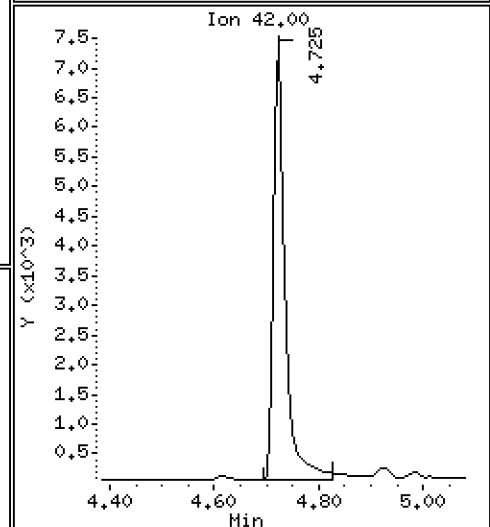
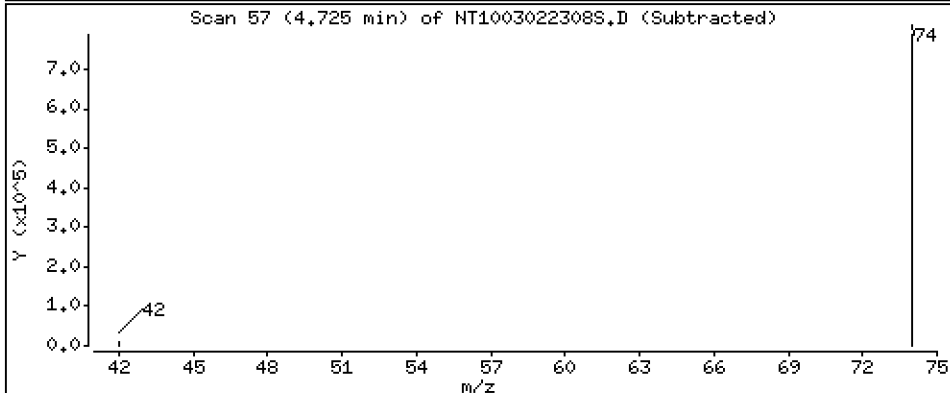
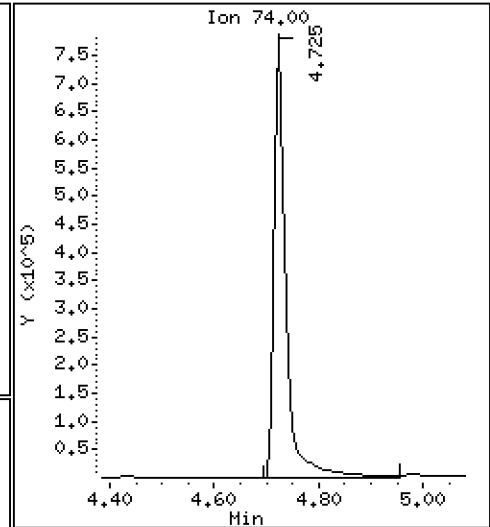
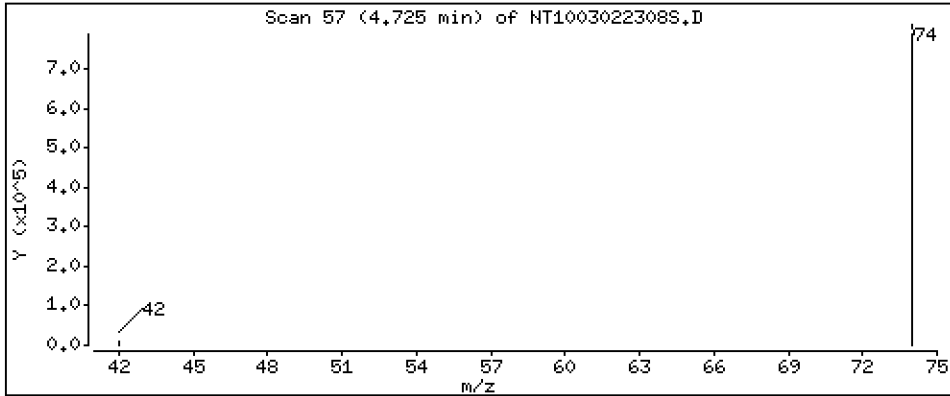
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 12.83 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D
 Lab Smp Id: BLA0624-BSD1
 Inj Date : 02-MAR-2023 18:50 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : BLA0624-BSD1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	1057332	6.60791	6.608 (R)
3 Phenol	94		8.517	8.517	(0.921)	1084422	4.48897	4.489
7 1,3-Dichlorobenzene	146		9.143	9.143	(0.988)	853967	4.11127	4.111
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.251	(1.000)	560466	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.282	(1.003)	861054	4.26368	4.264
11 Benzyl alcohol	79		9.477	9.476	(1.024)	603180	4.34406	4.344
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	839585	4.32531	4.325
13 2-Methylphenol	108		9.655	9.655	(1.044)	580325	3.95480	3.955
15 4-Methylphenol	108		9.950	9.942	(1.076)	670458	4.32548	4.325
16 N-Nitroso-di-n-propylamine	70		9.973	9.981	(1.078)	498084	4.65653	4.657
22 2,4-Dimethylphenol	107		10.997	10.997	(0.938)	1444074	7.97792	7.978
24 Benzoic acid	105		11.167	11.074	(0.953)	2629143	23.4639	23.46
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	650704	4.33589	4.336
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	2085063	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	440778	4.13883	4.139
39 Dimethylphthalate	163		14.749	14.741	(0.963)	1848286	5.22825	5.228
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	1113362	4.00000	
50 Diethylphthalate	149		16.210	16.203	(1.059)	1941262	5.82295	5.823
54 N-Nitrosodiphenylamine	169		16.698	16.690	(0.907)	1541071	4.76088	4.761
57 Hexachlorobenzene	284		17.578	17.578	(0.955)	676633	4.46668	4.467

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.988	17.988	(0.977)	1378551	16.5427	16.54
* 59 Phenanthrene-d10	188	18.406	18.406	(1.000)	2000131	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	763988	4.35620	4.356(R)
67 Butylbenzylphthalate	149	22.414	22.414	(0.957)	1574214	4.36757	4.368
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	2168746	4.00000	
* 77 Perylene-d12	264	26.115	26.115	(1.000)	2165910	4.00000	
79 Dibenzo(a,h)anthracene	278	28.929	28.929	(1.108)	2691548	4.96165	4.962
90 N-Nitrosodimethylamine	74	4.724	4.732	(0.511)	1215136	12.8270	12.83

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022308S.D
 Lab Smp Id: BLA0624-BSD1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	560466	13.59
27 Naphthalene-d8	1779056	889528	3558112	2085063	17.20
42 Acenaphthene-d10	954569	477285	1909138	1113362	16.64
59 Phenanthrene-d10	1596290	798145	3192580	2000131	25.30
69 Chrysene-d12	1649110	824555	3298220	2168746	31.51
77 Perylene-d12	1901958	950979	3803916	2165910	13.88

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022308S.D

Lab ID: BLA0624-BSD1

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 18:50

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.945	0.0080	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

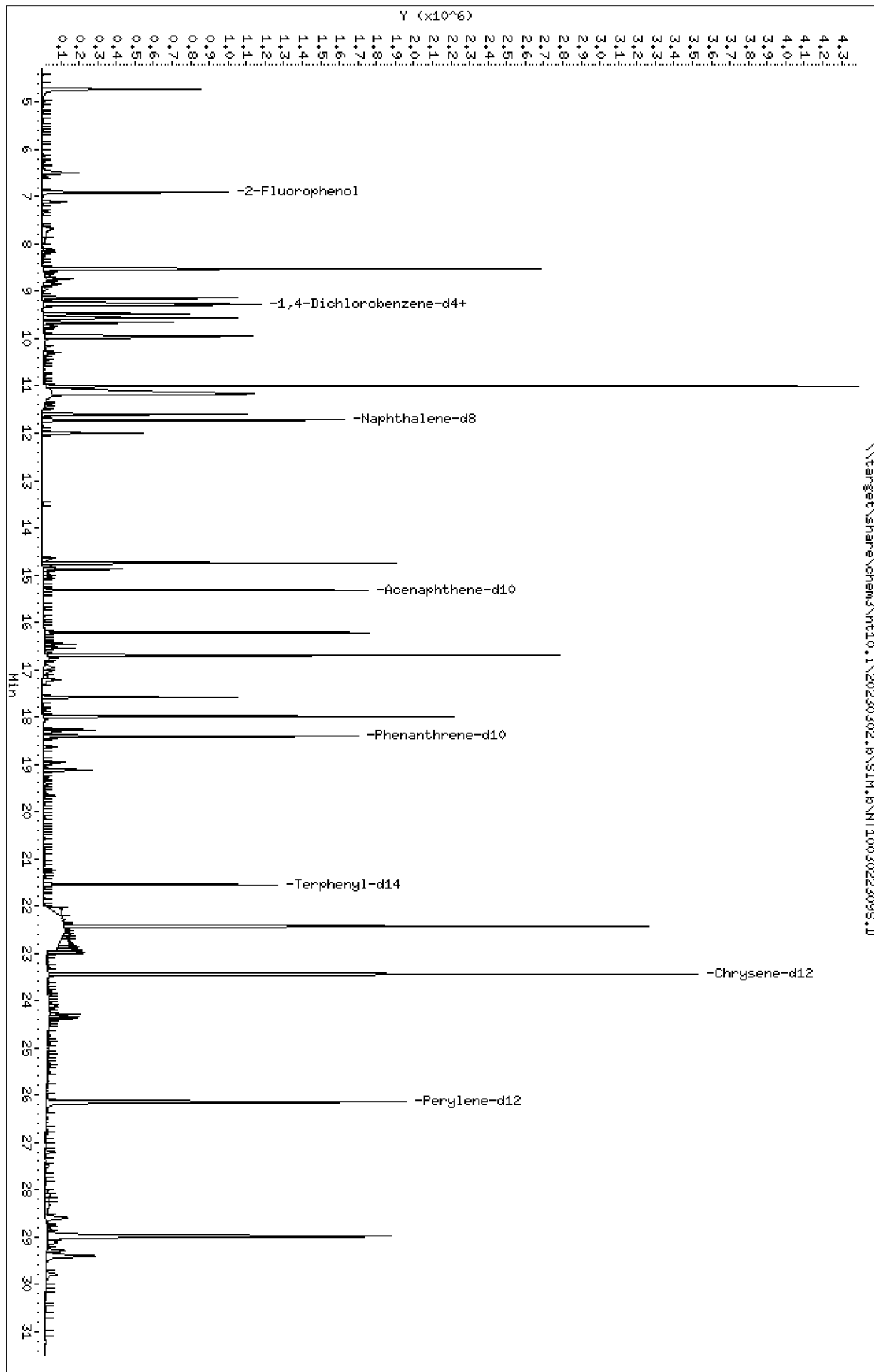
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIH.6\NT1003022309S.D
Date: 02-MAR-2023 19:28
Client ID:
Sample Info: BLR0624-HSI
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIH.6\NT1003022309S.D



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

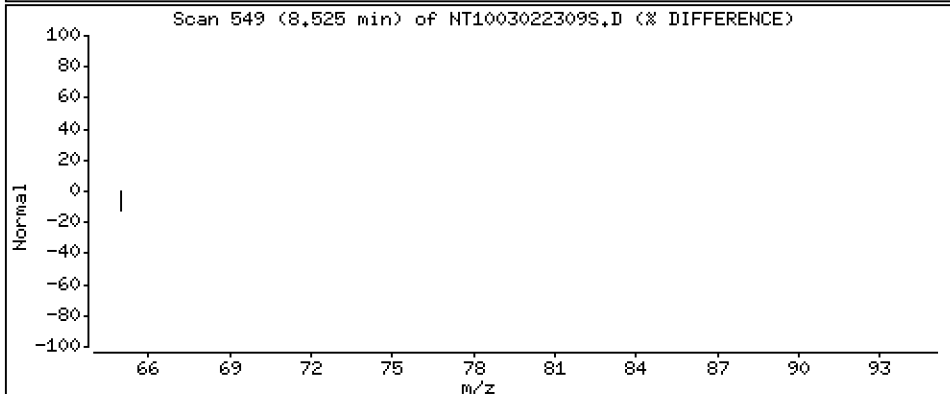
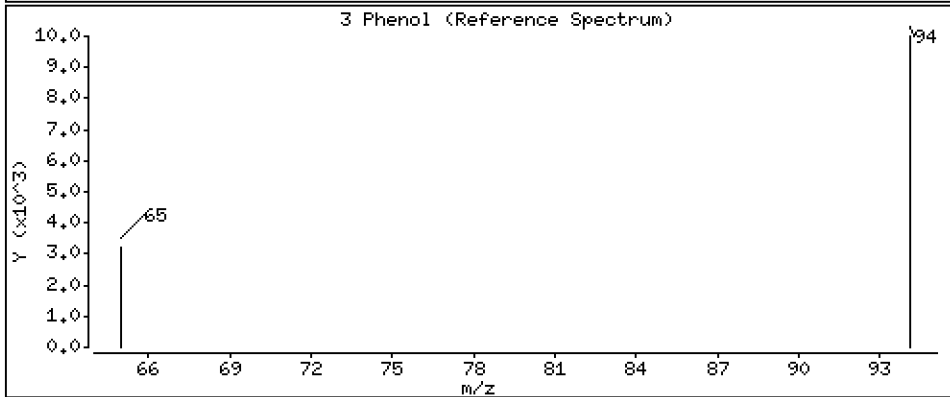
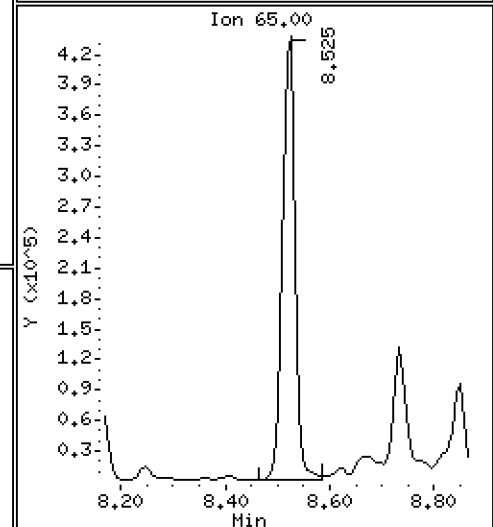
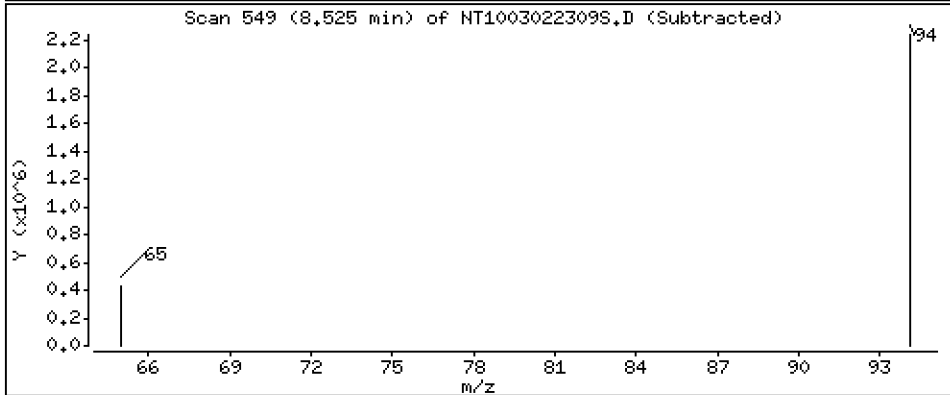
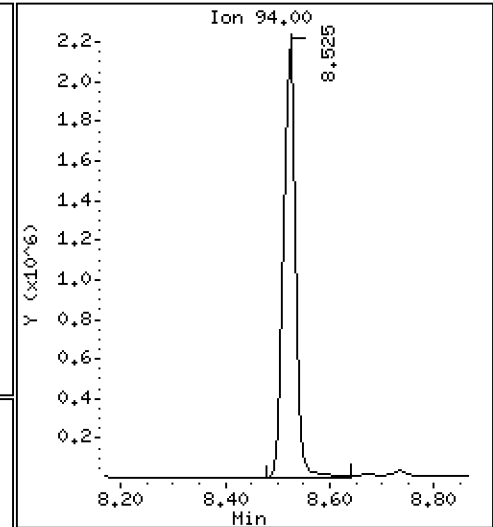
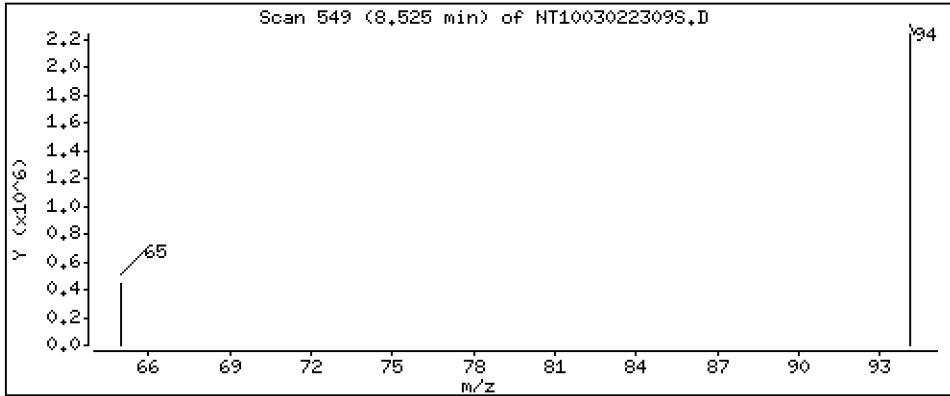
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 11.73 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

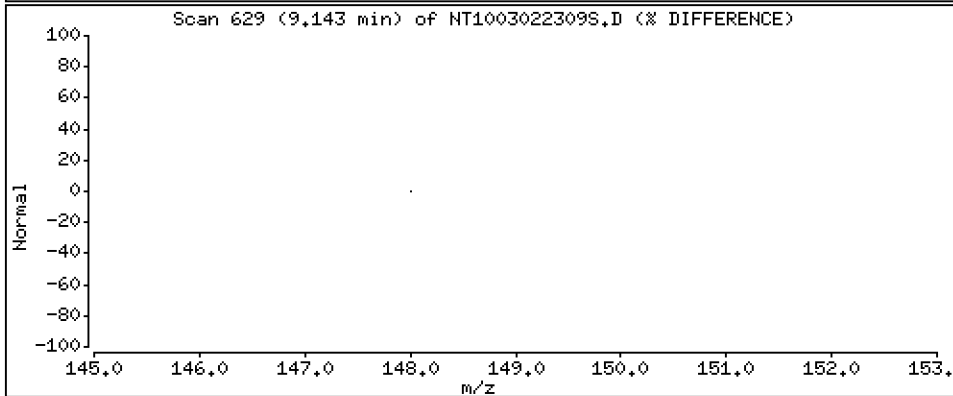
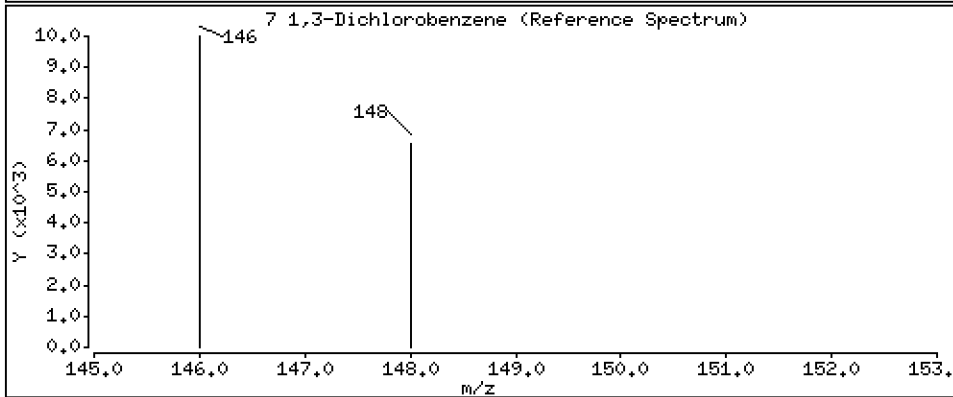
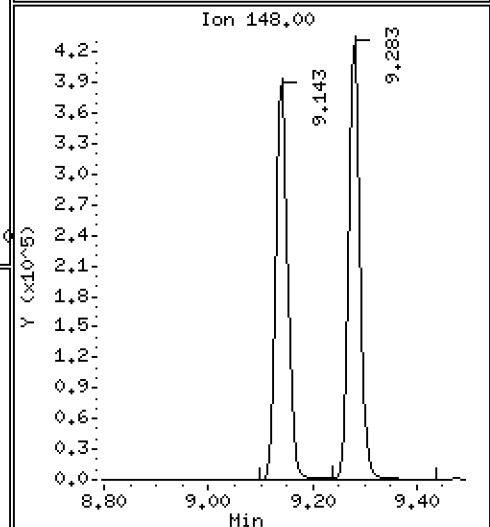
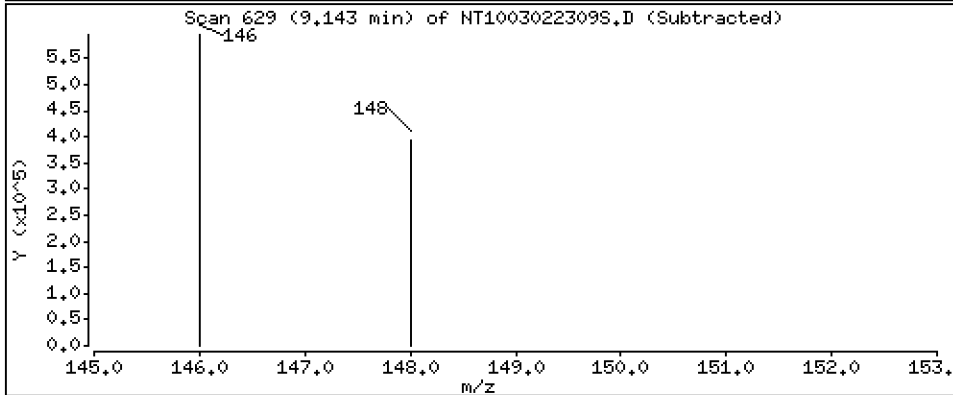
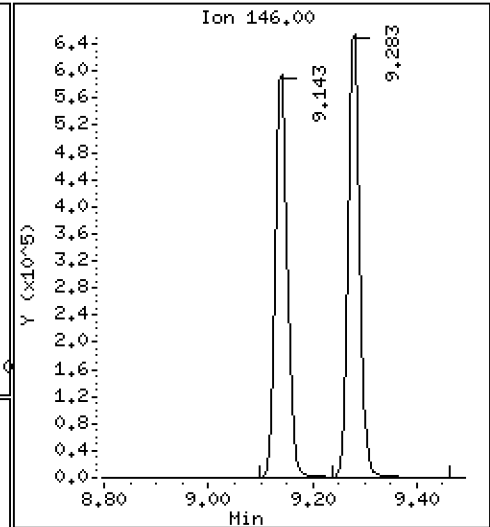
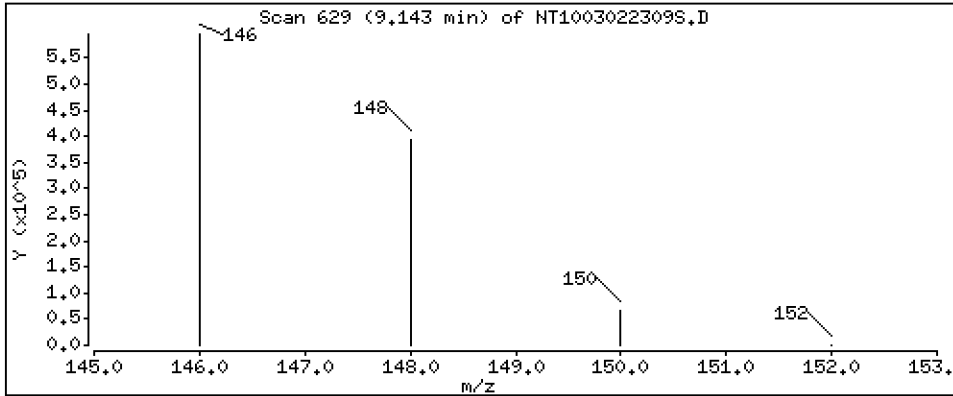
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 4.069 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

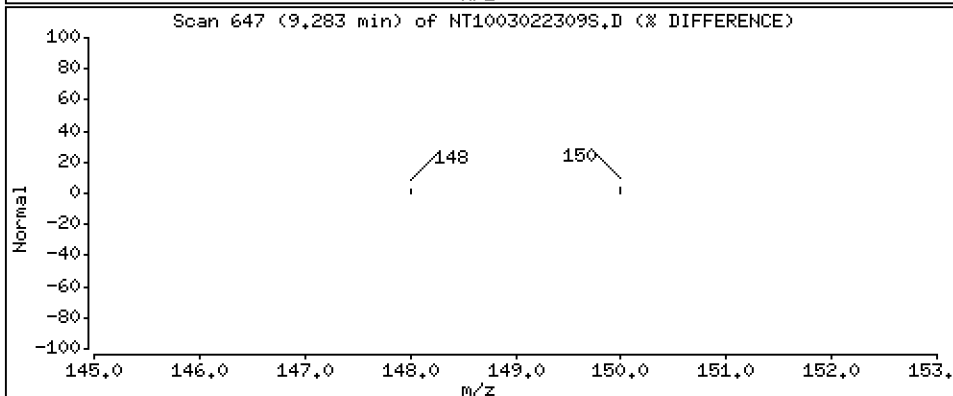
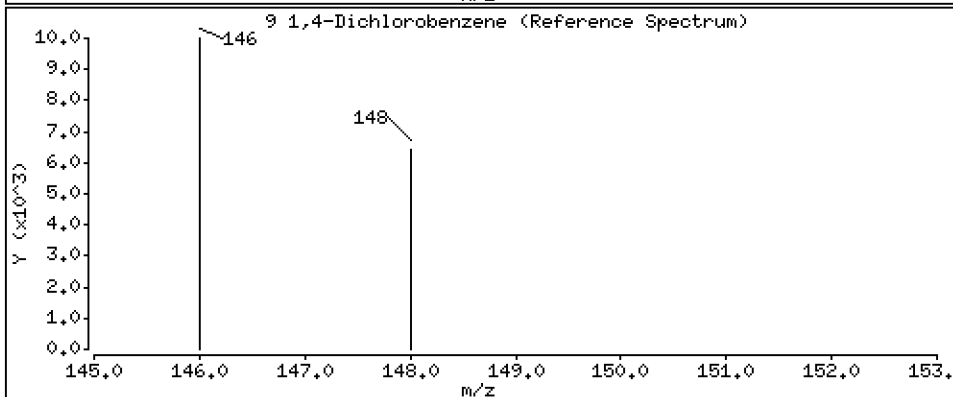
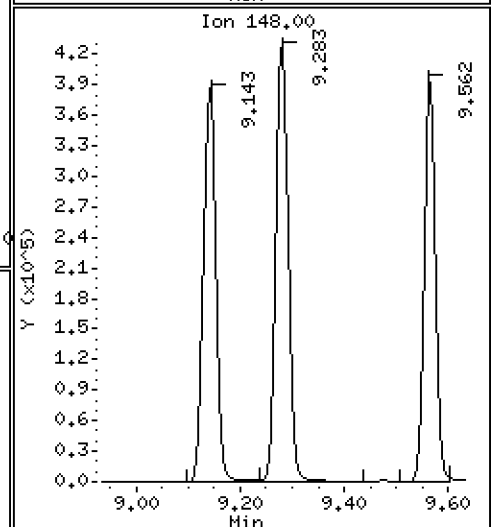
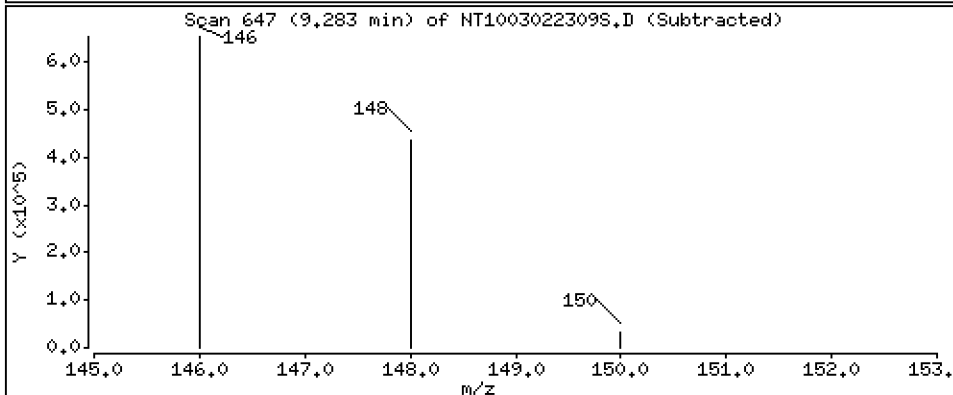
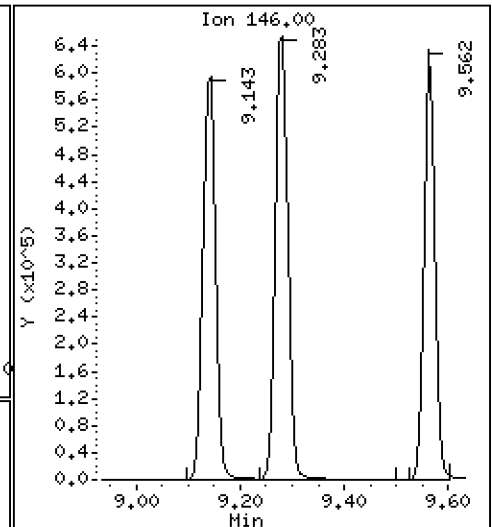
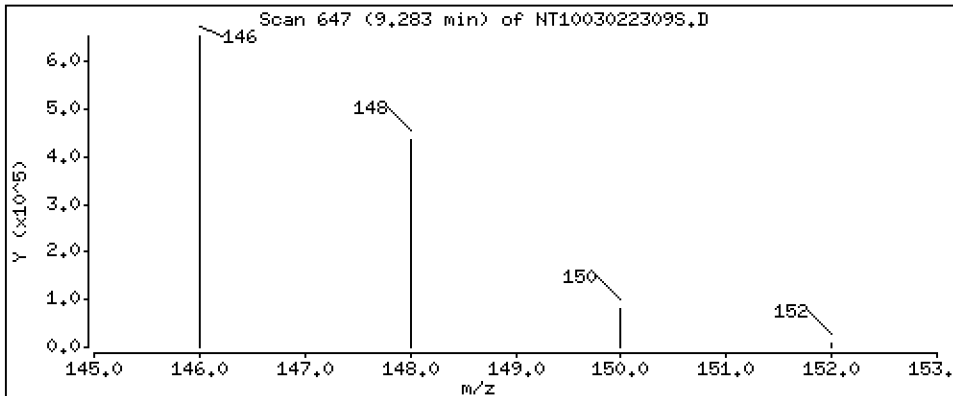
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 4,544 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

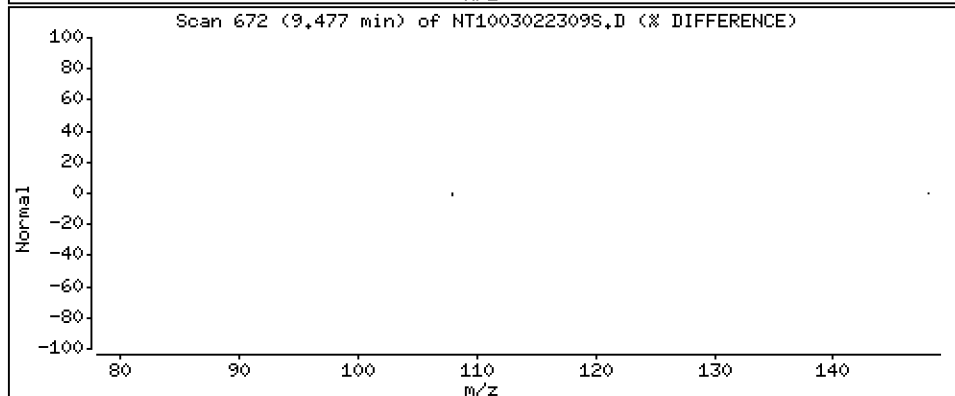
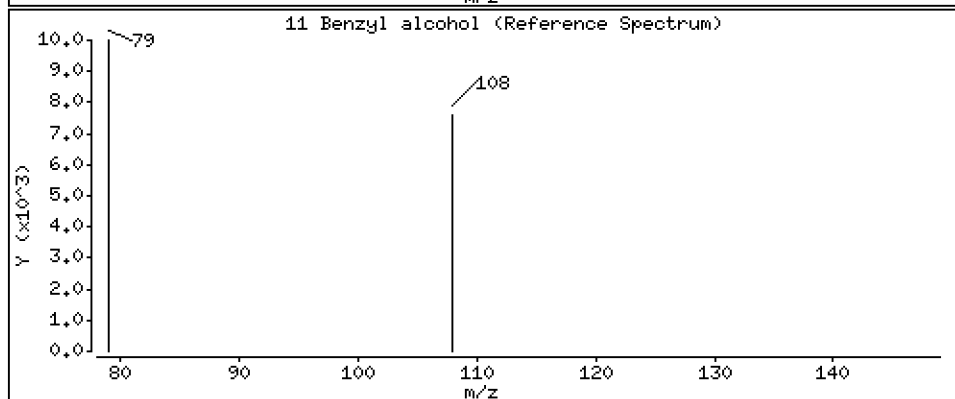
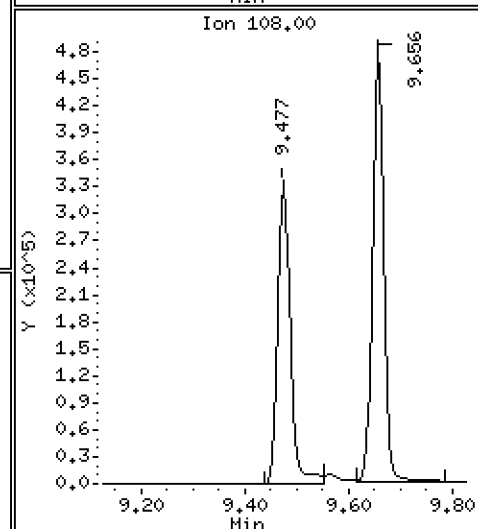
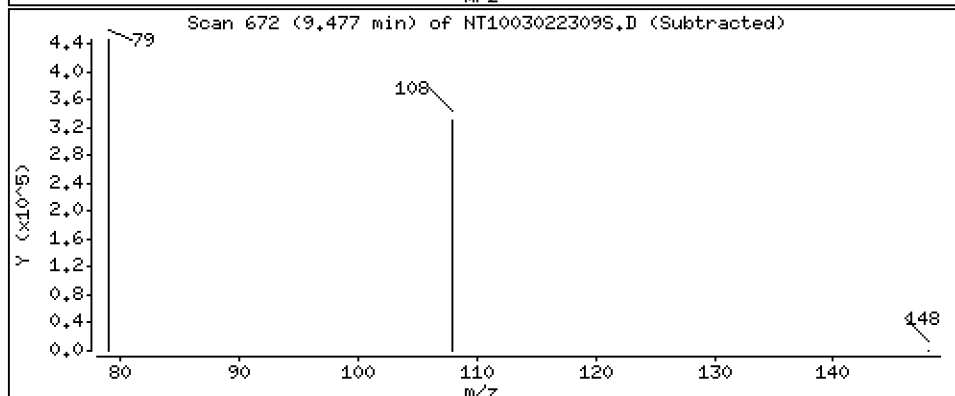
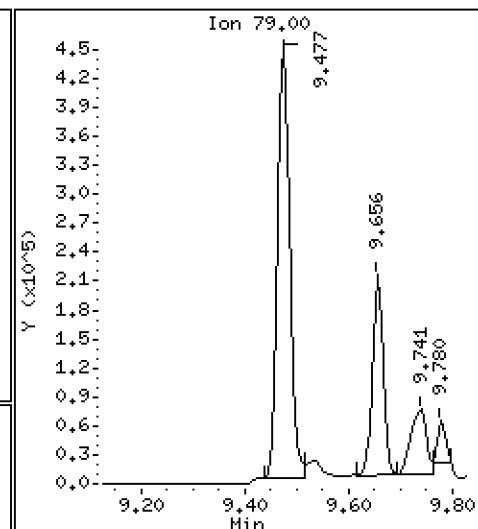
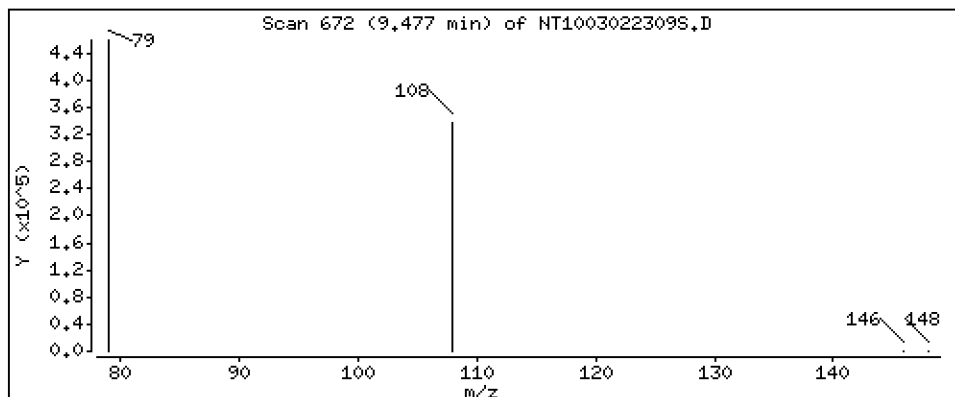
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 4.336 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

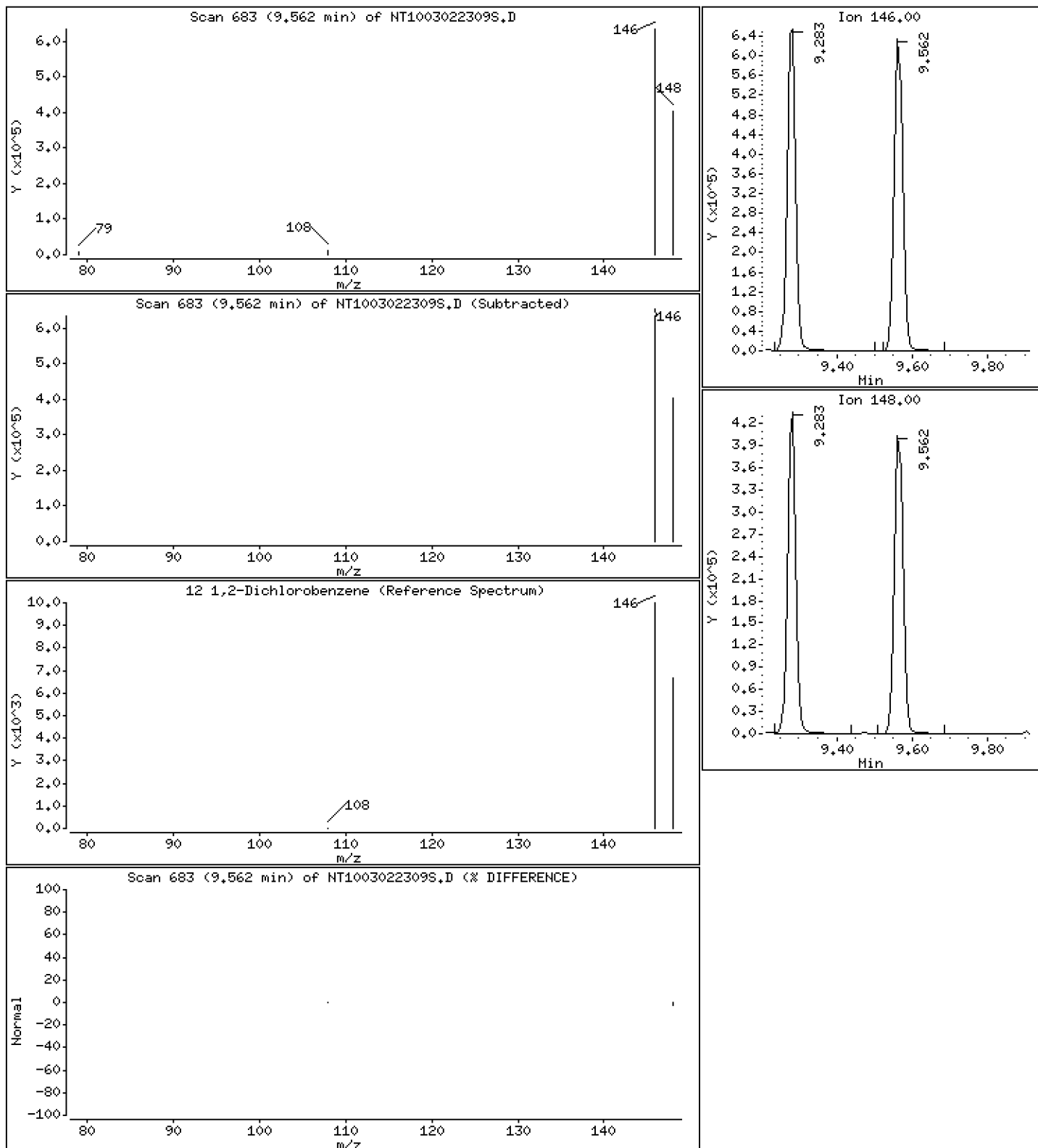
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4.285 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

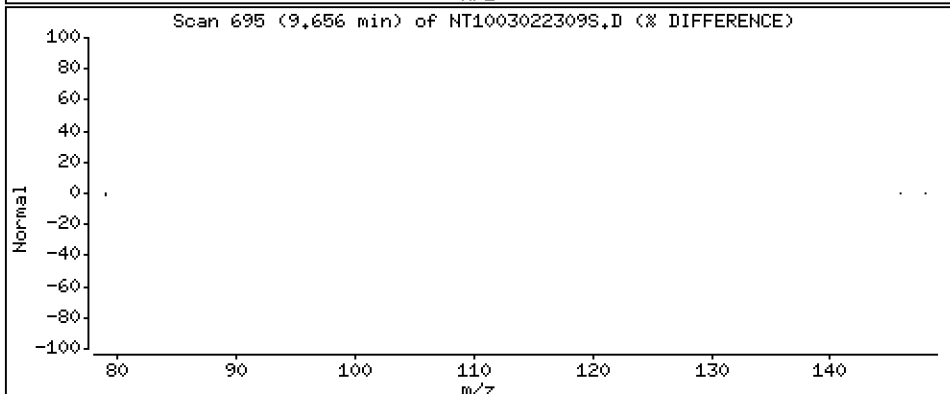
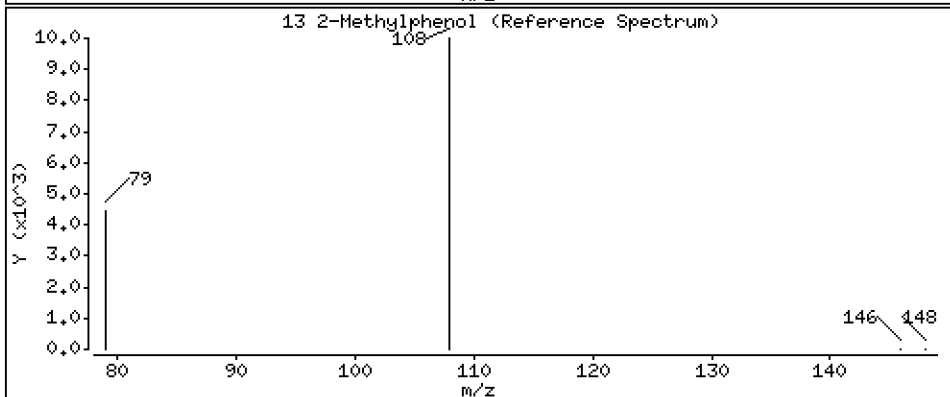
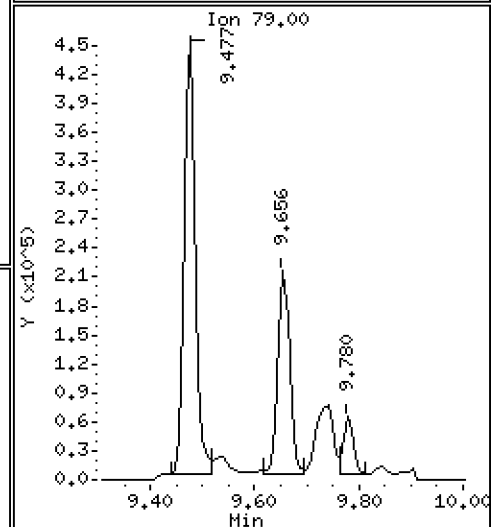
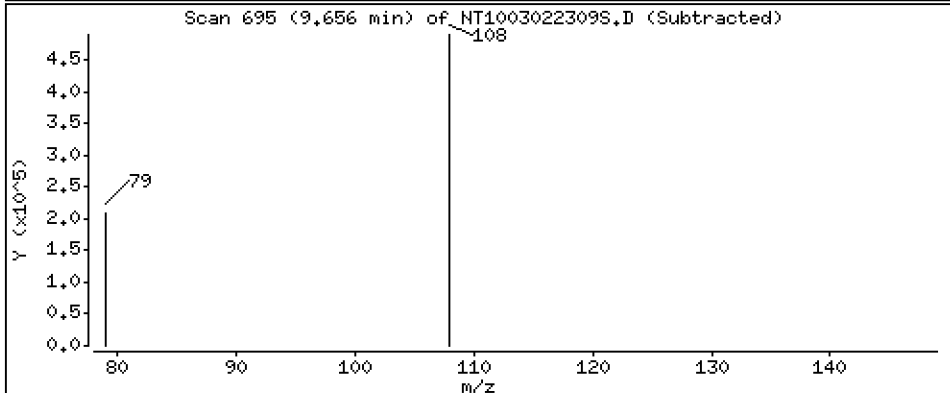
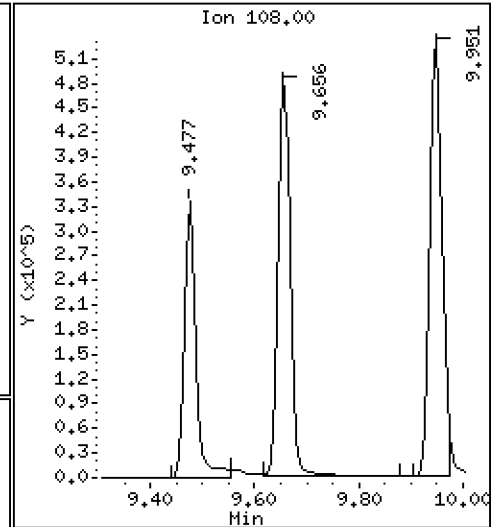
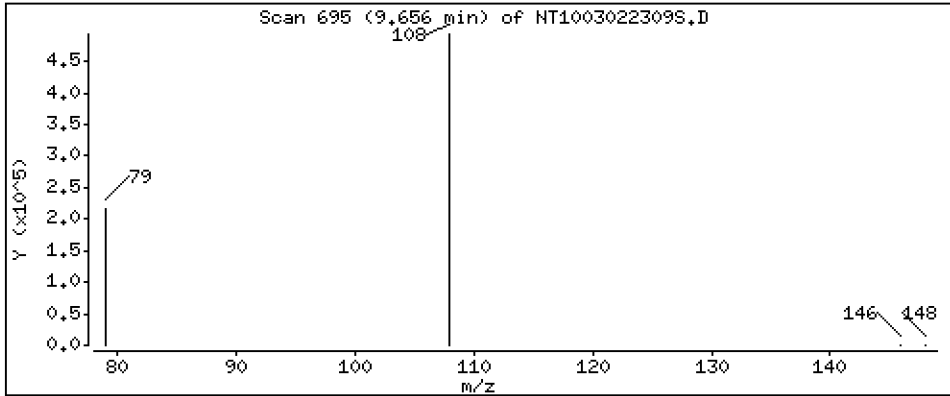
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.357 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

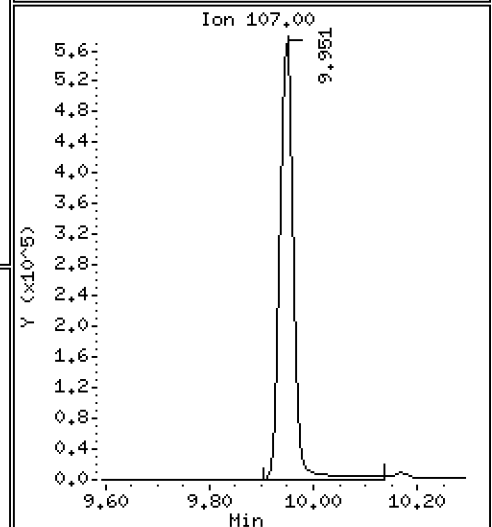
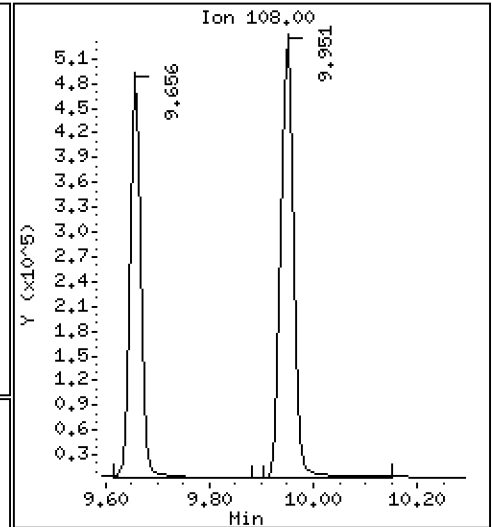
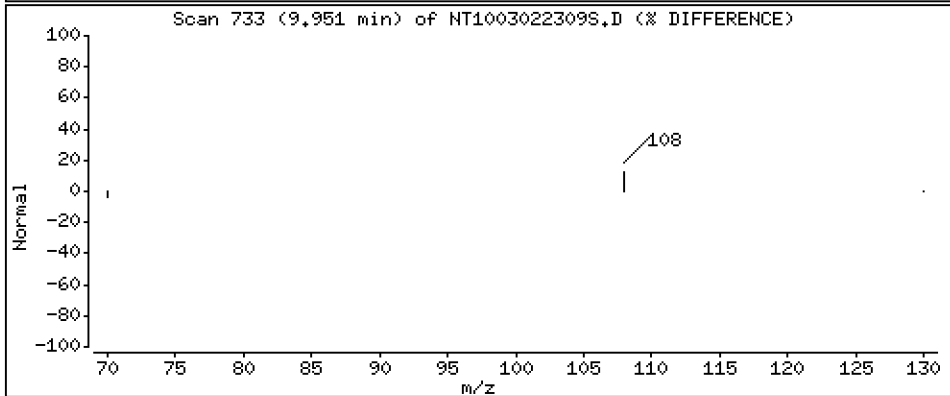
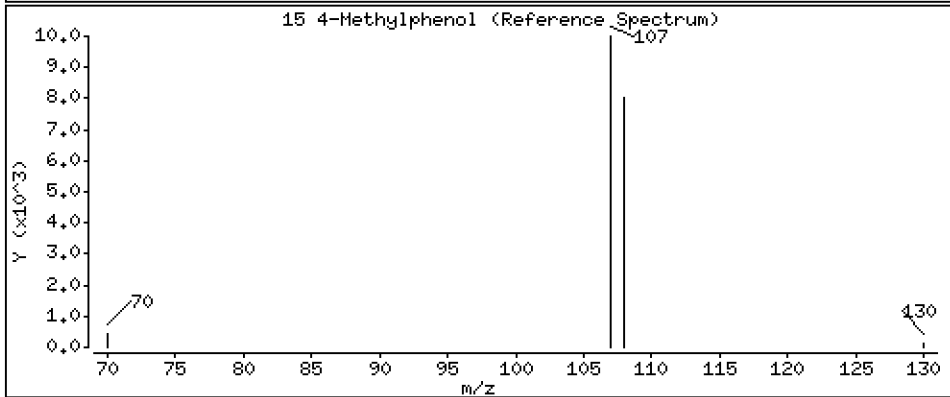
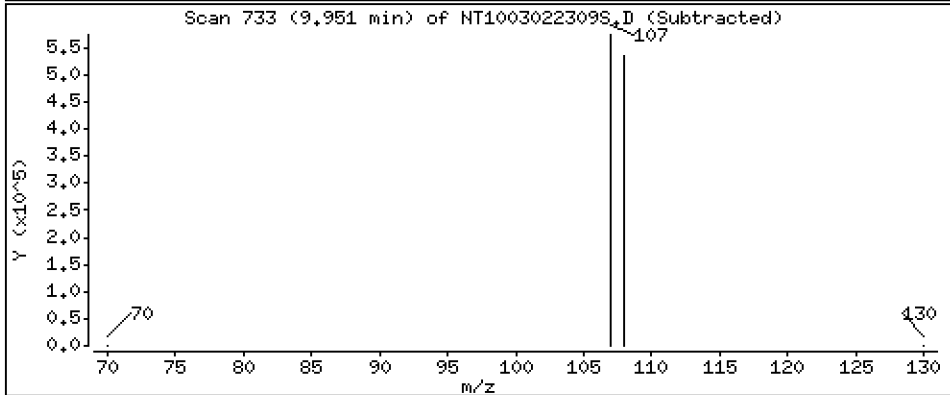
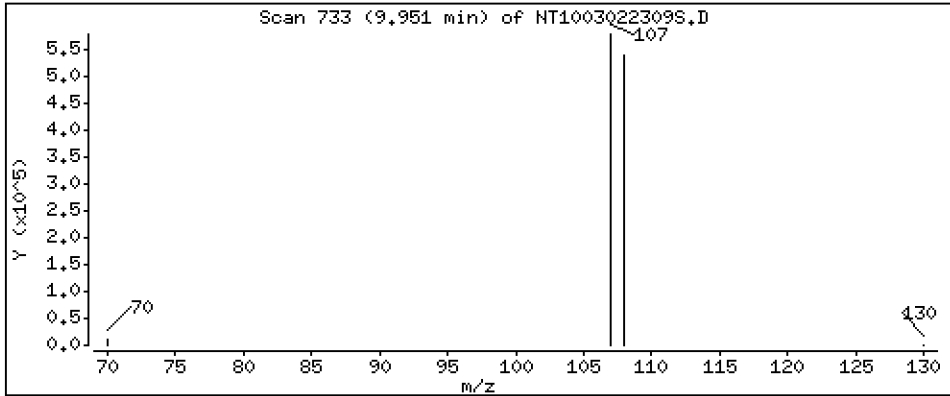
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 5.039 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

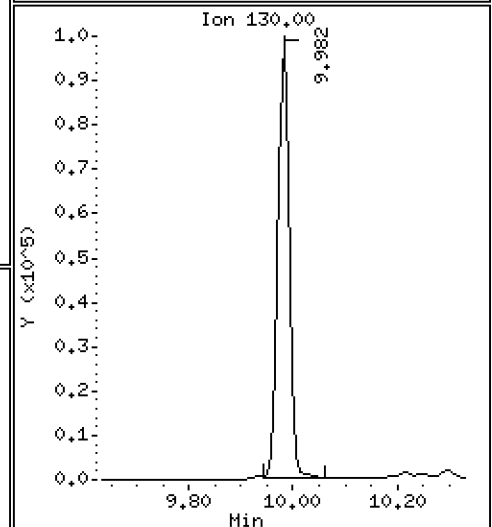
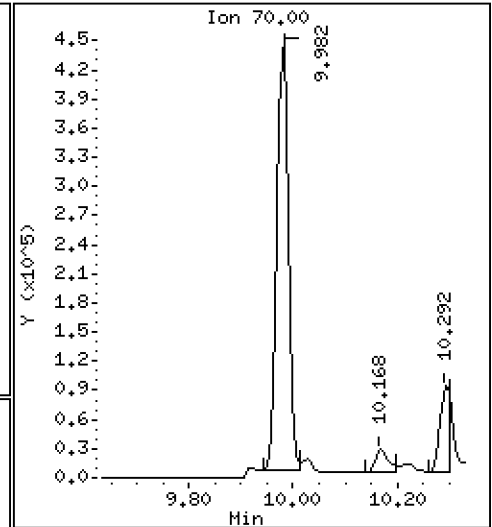
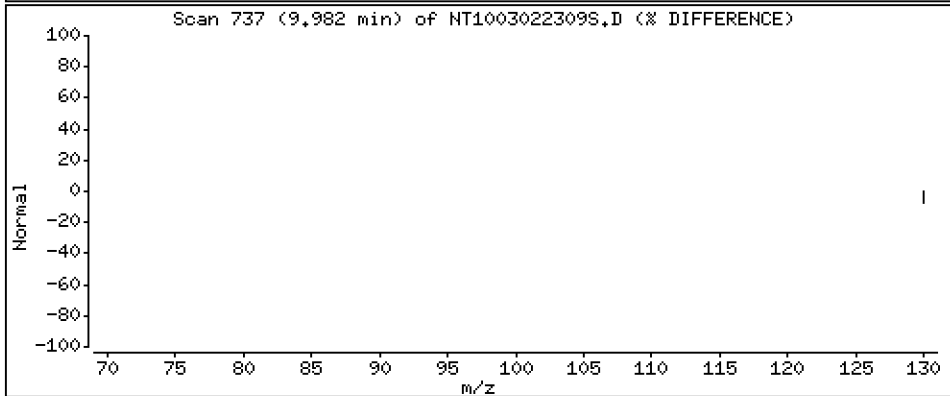
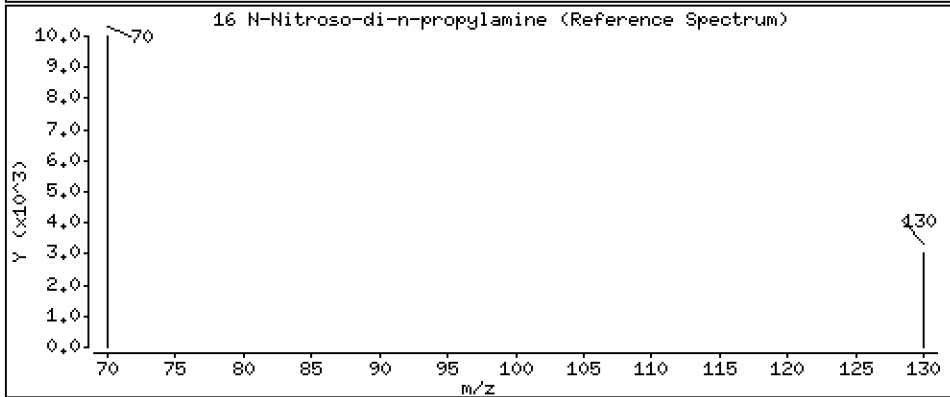
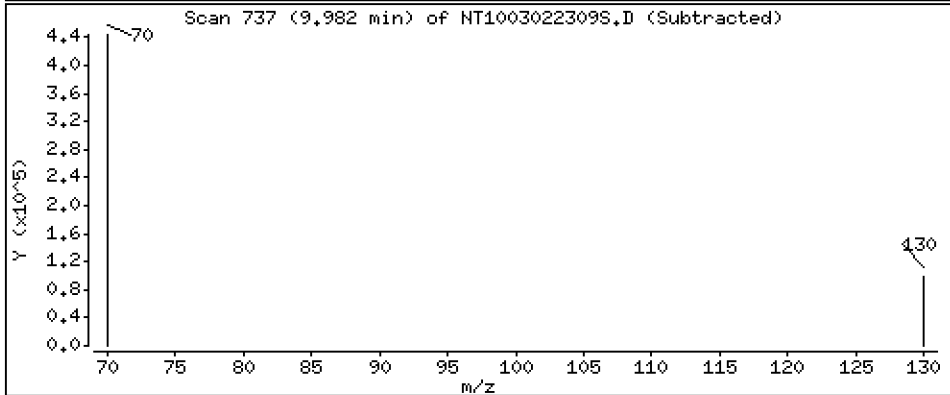
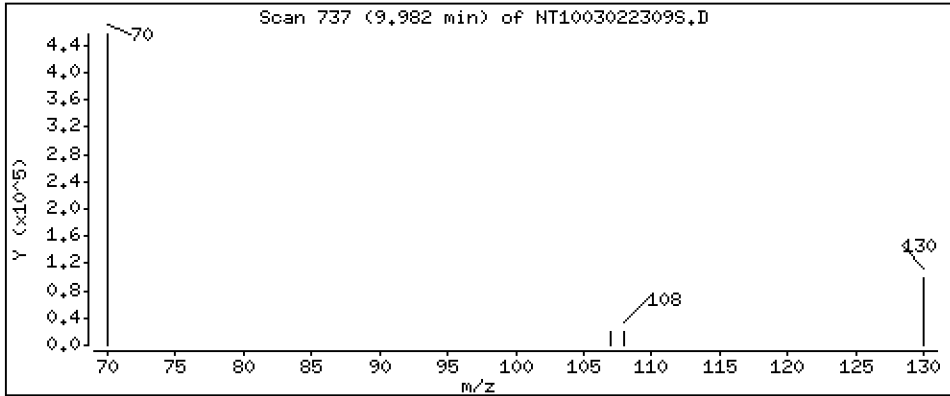
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 5,166 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

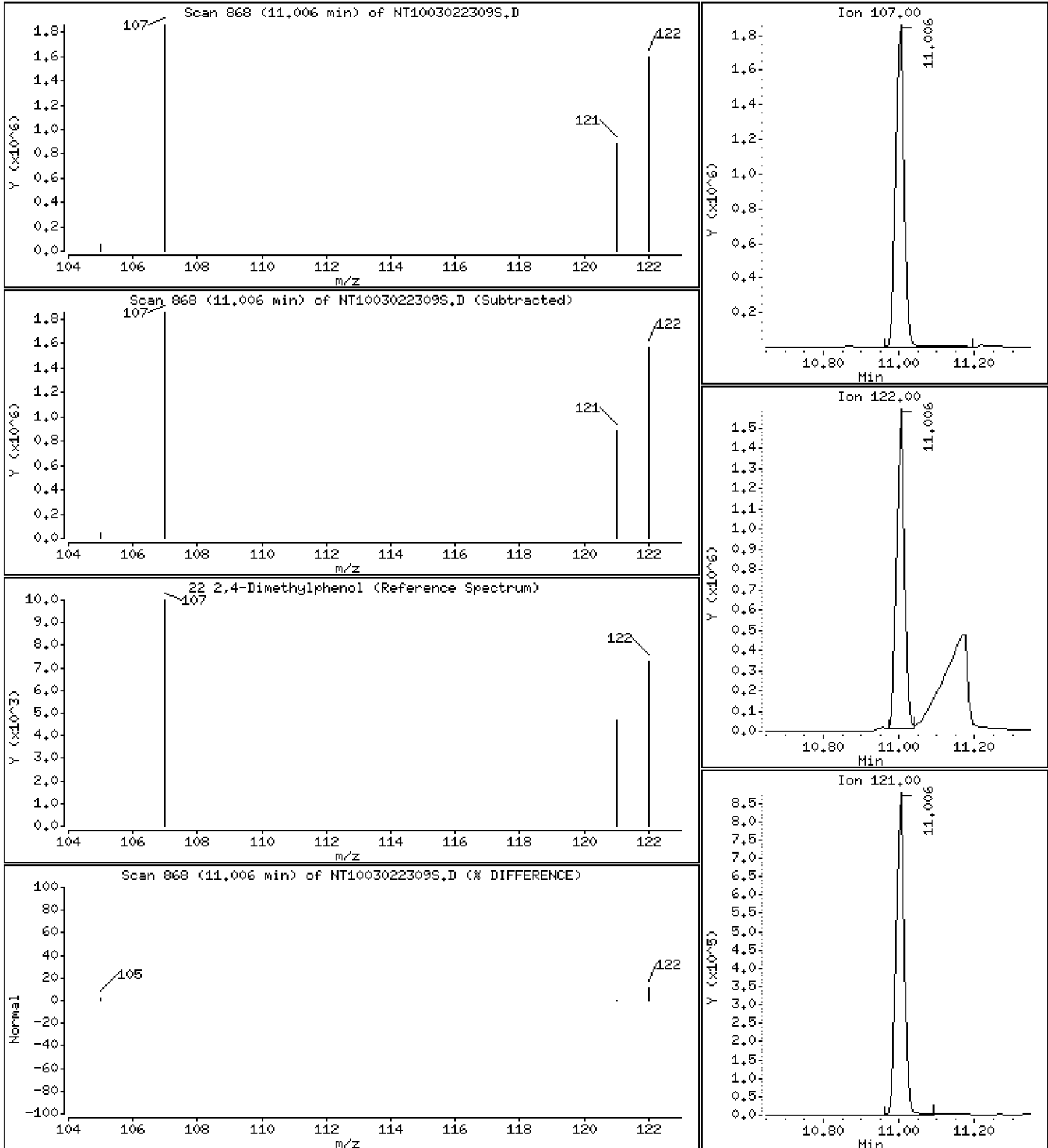
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 13.69 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

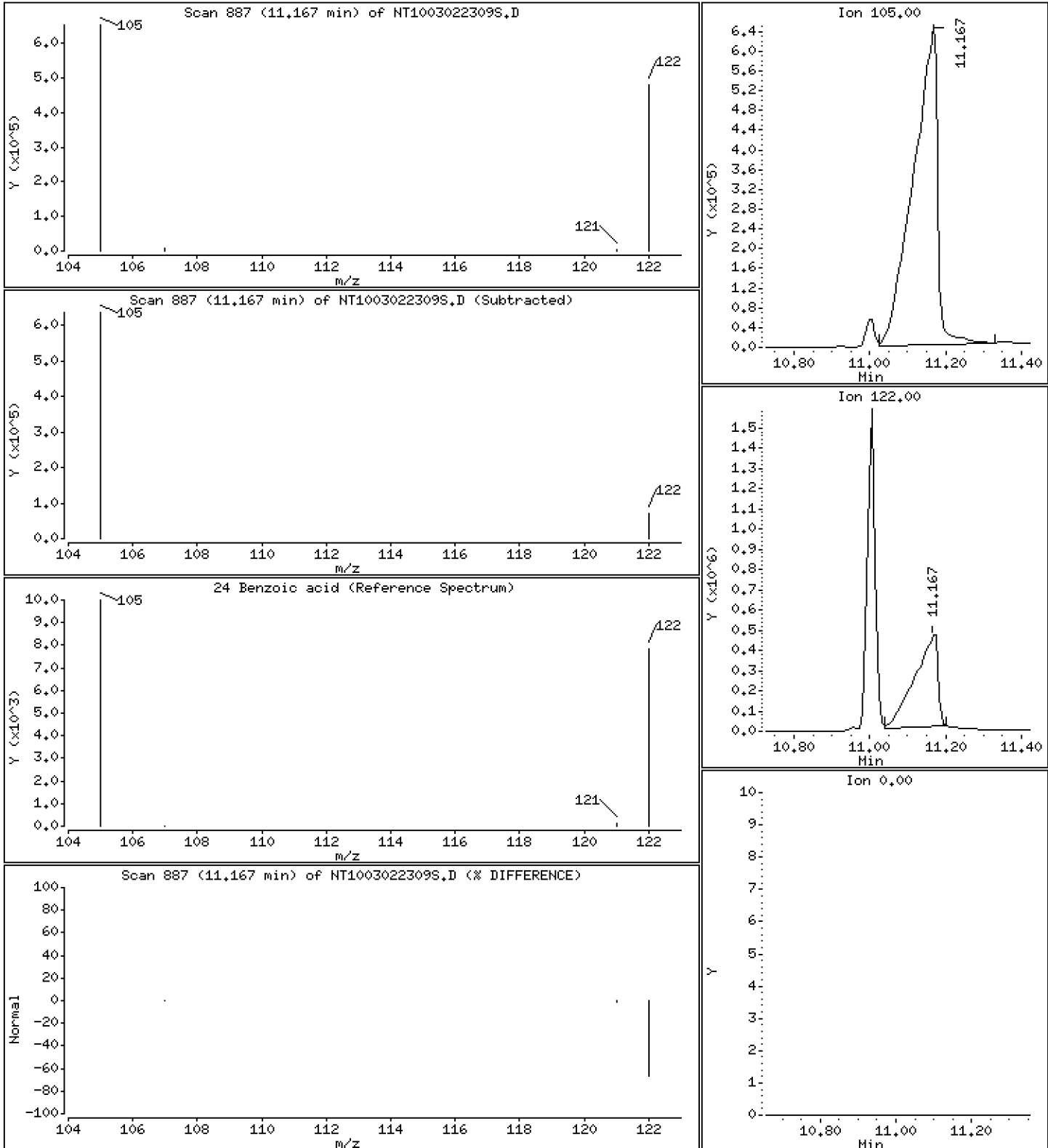
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 22.88 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

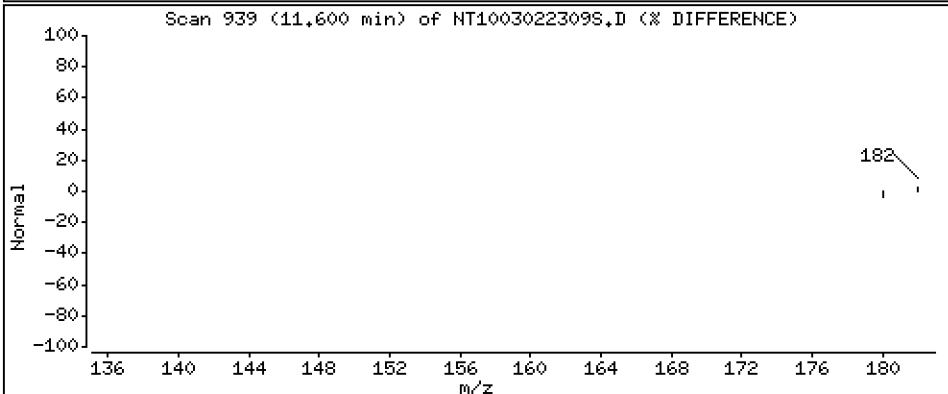
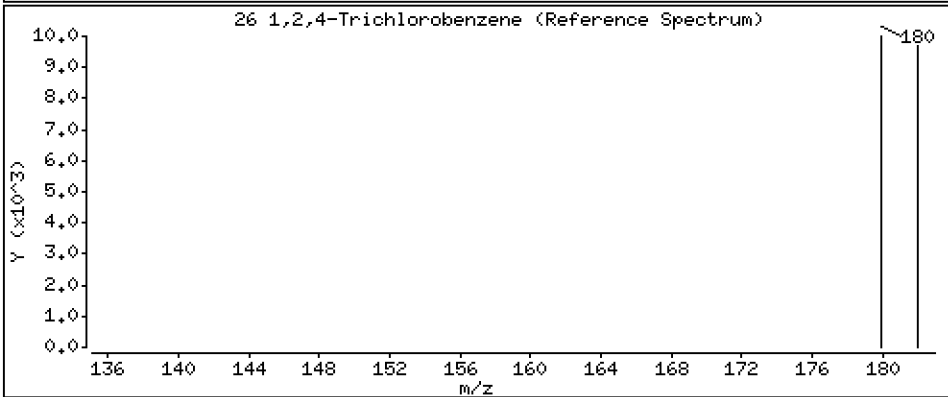
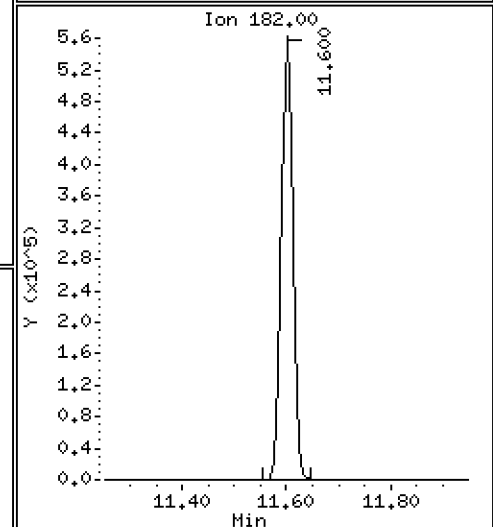
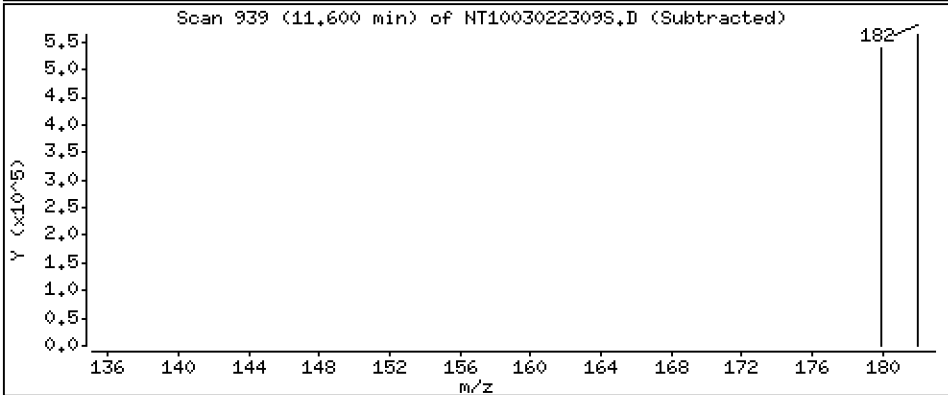
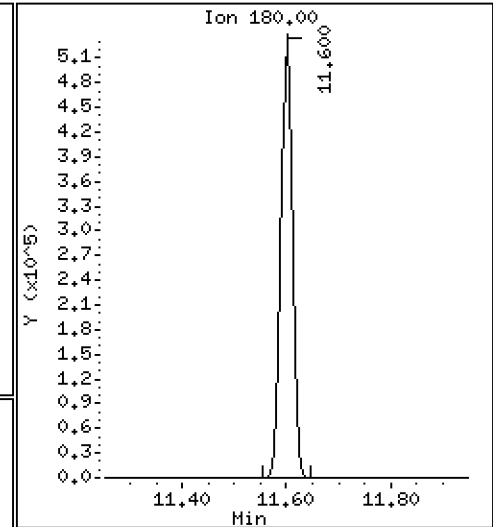
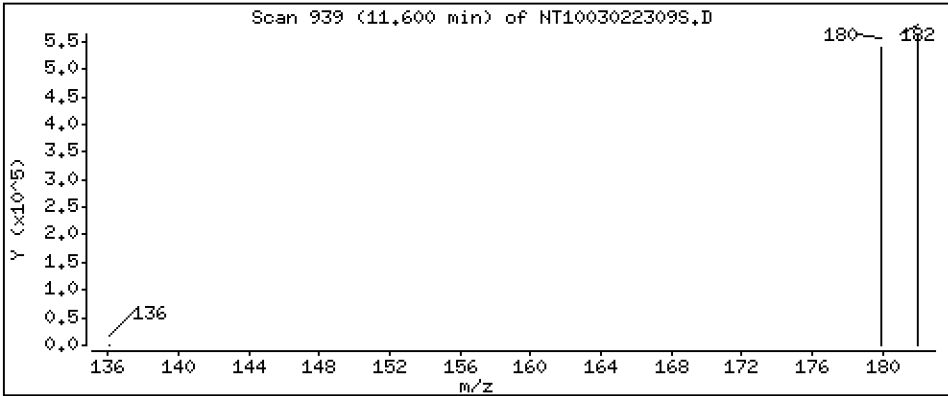
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.511 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

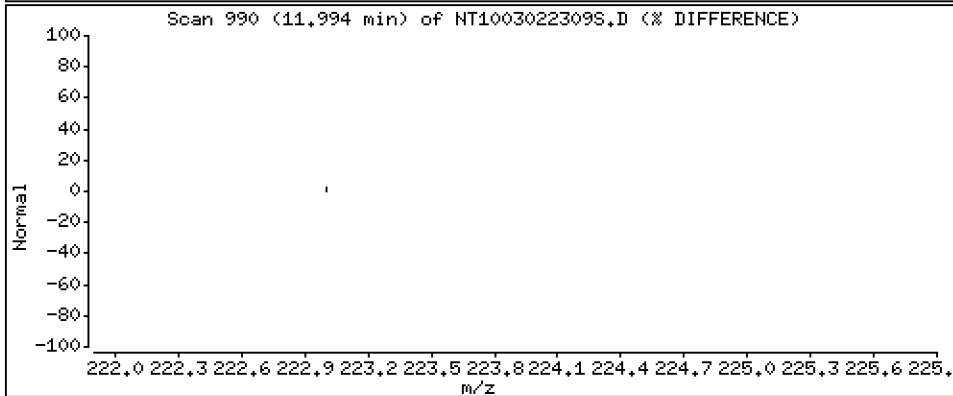
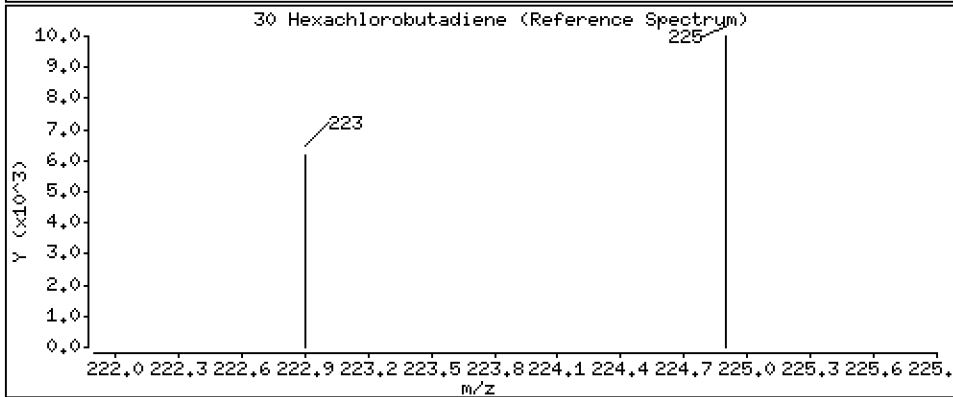
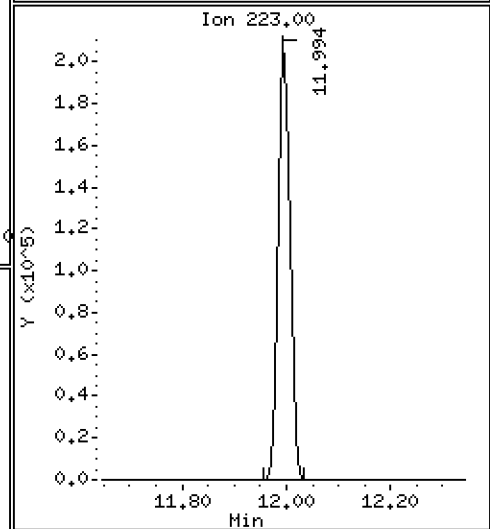
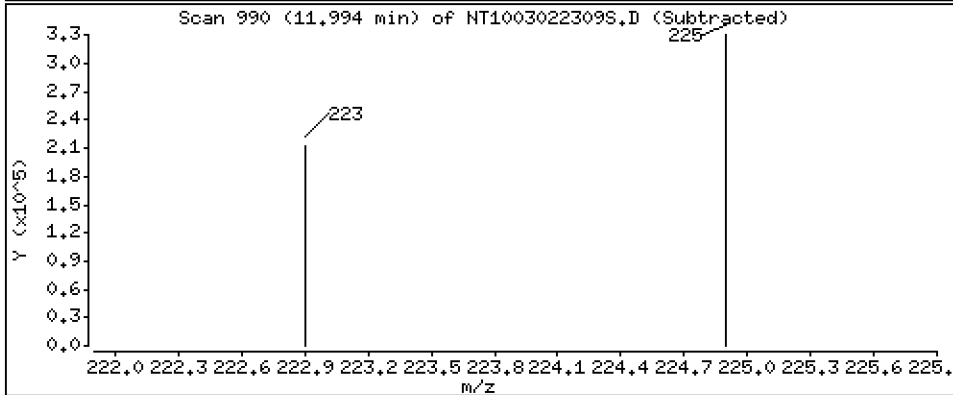
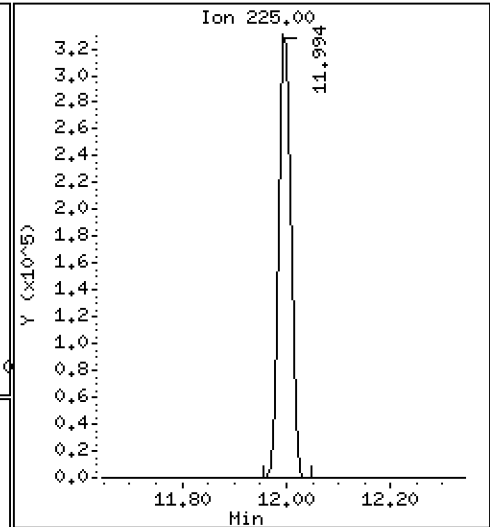
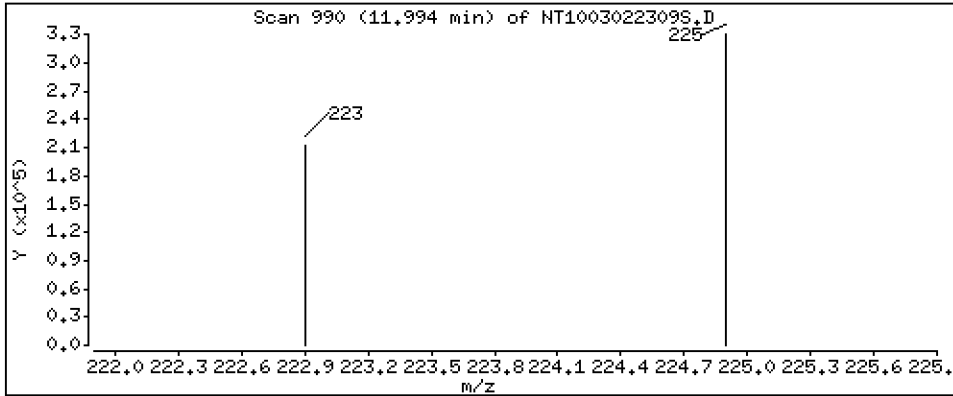
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,276 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

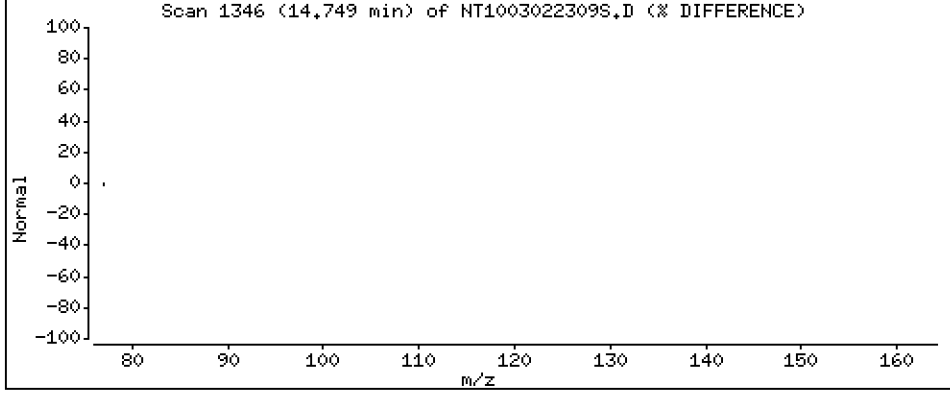
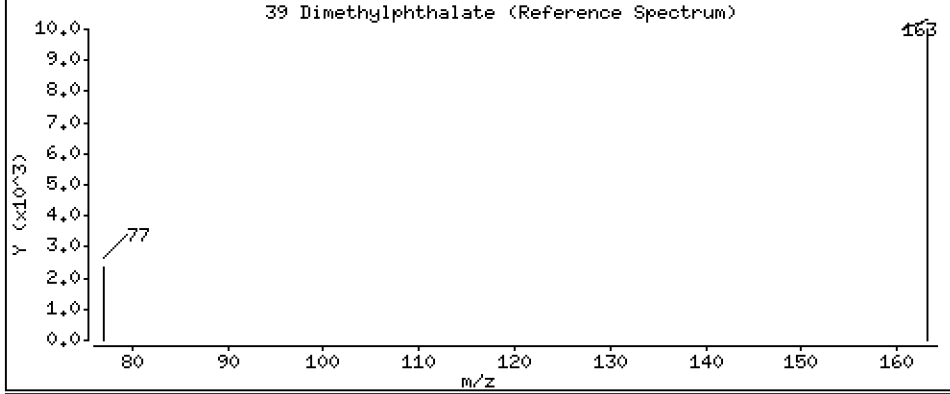
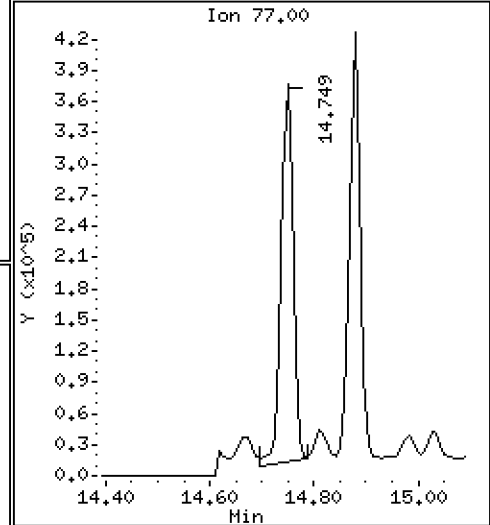
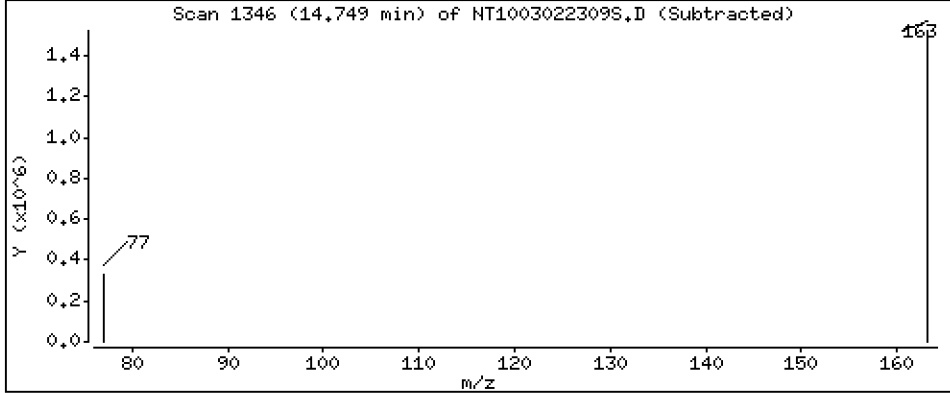
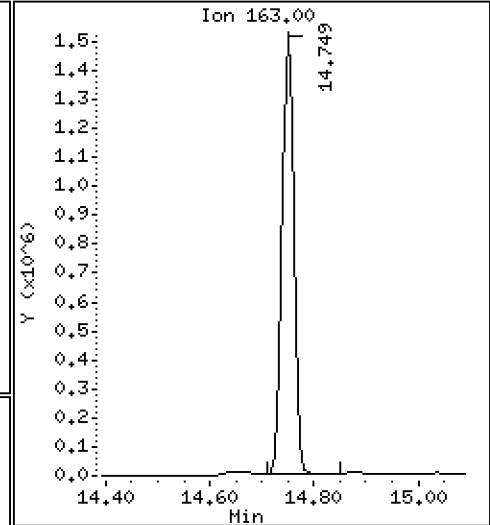
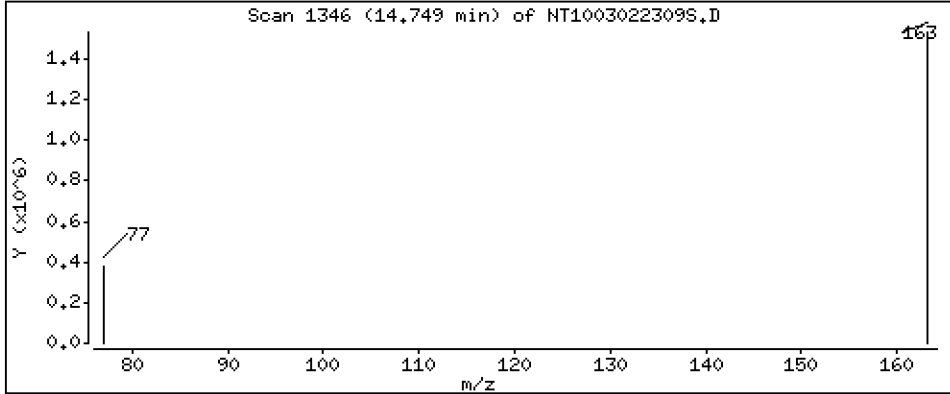
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,604 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

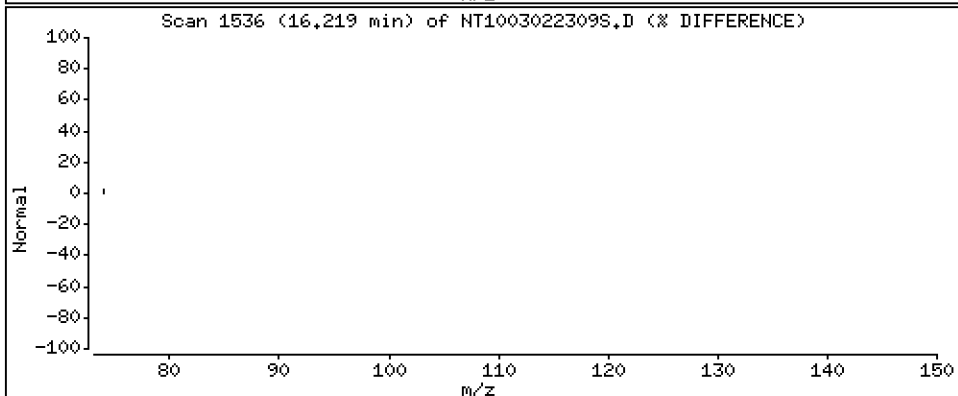
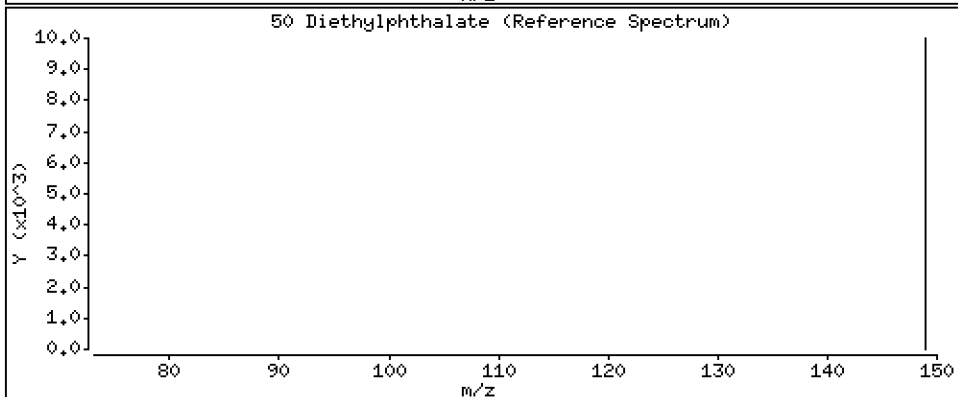
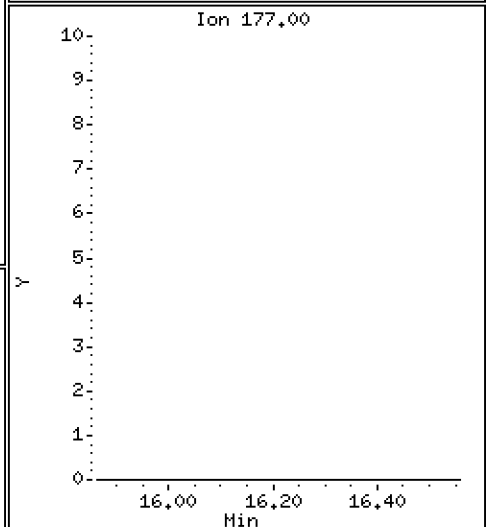
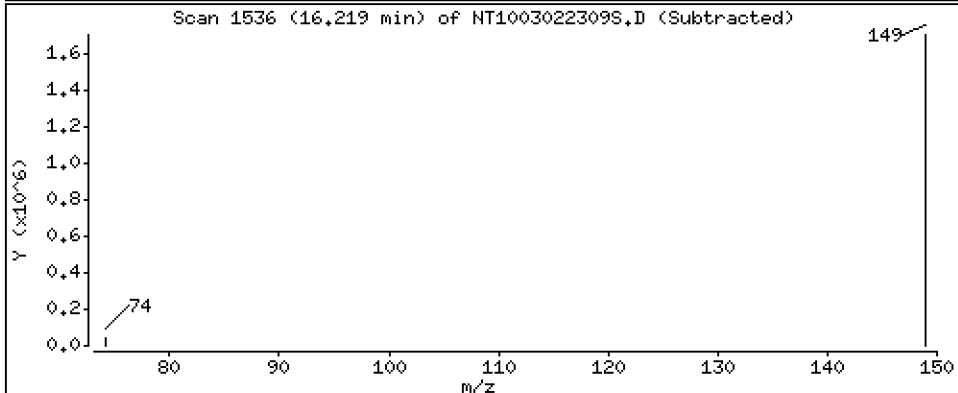
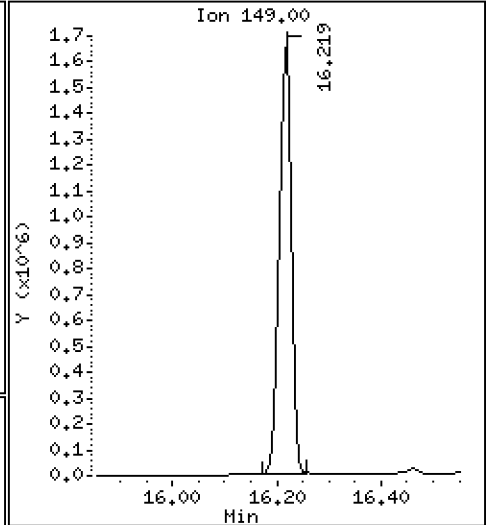
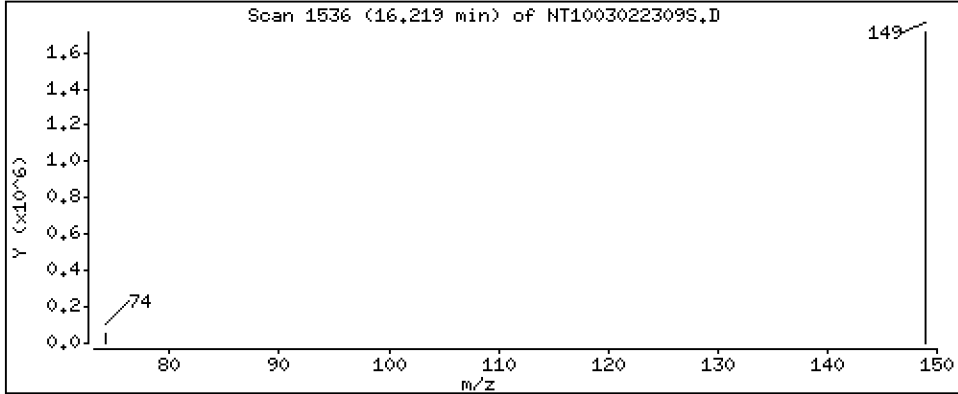
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 6,811 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

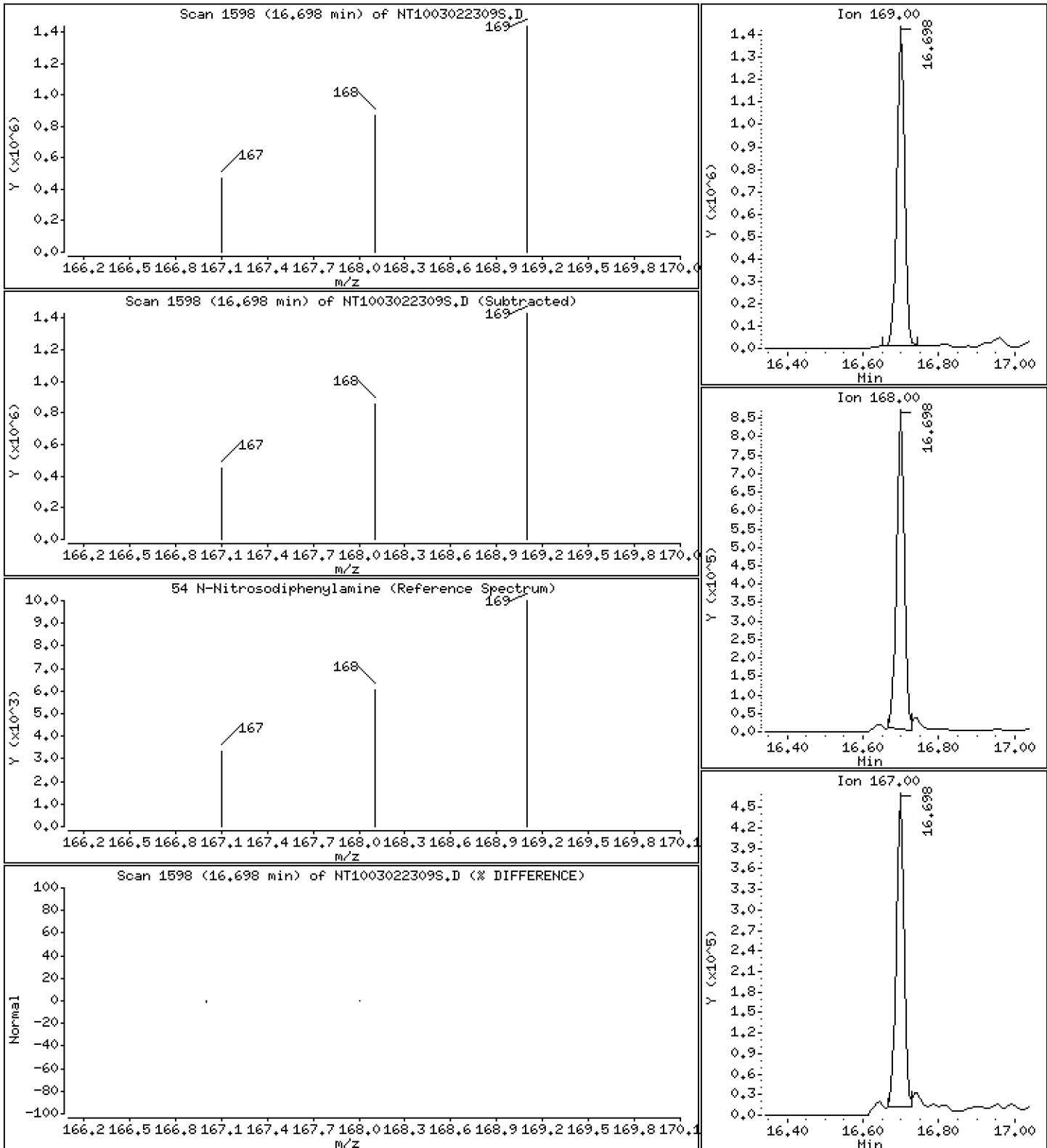
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,515 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

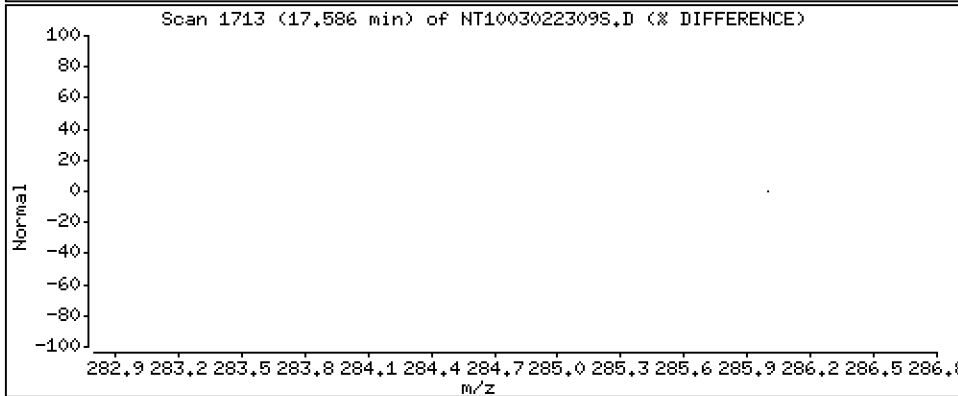
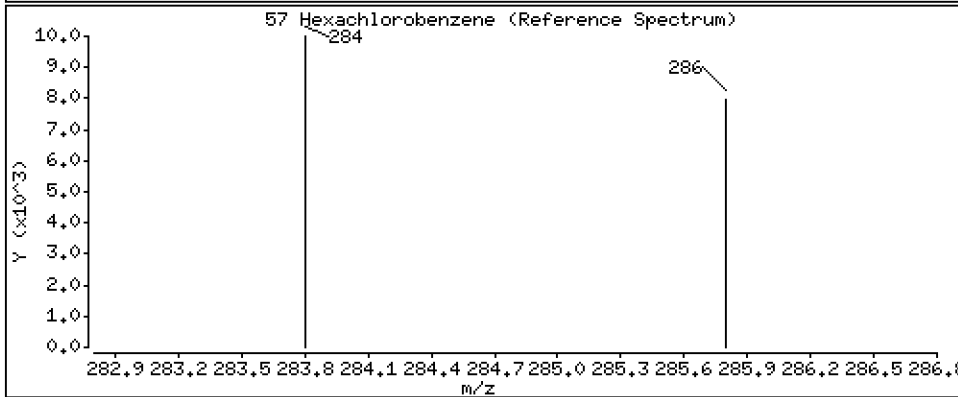
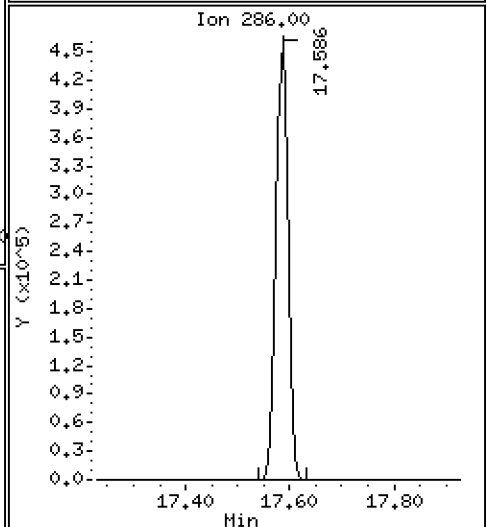
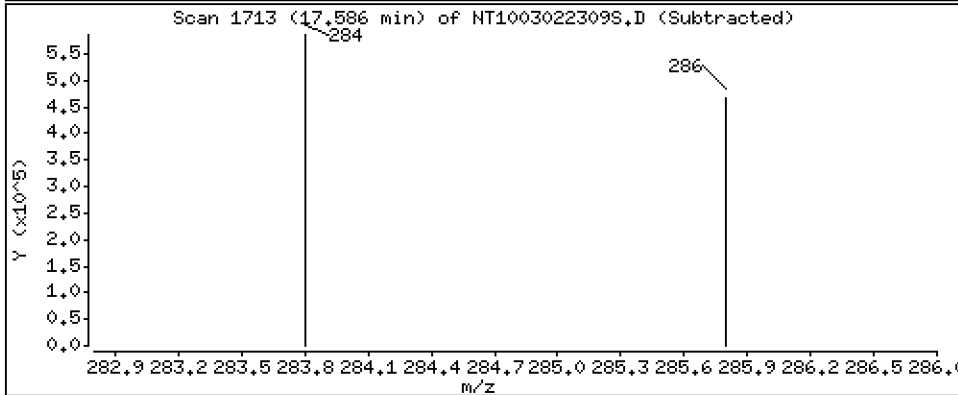
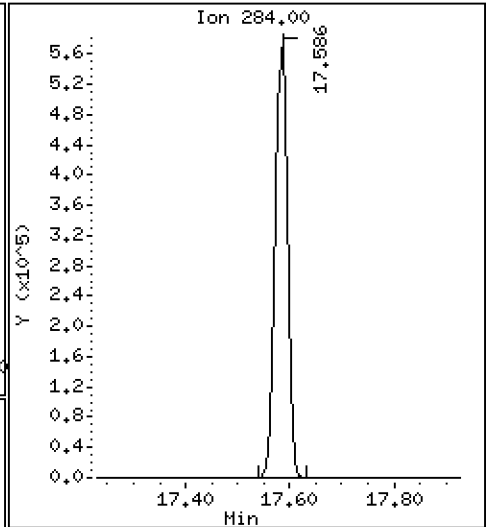
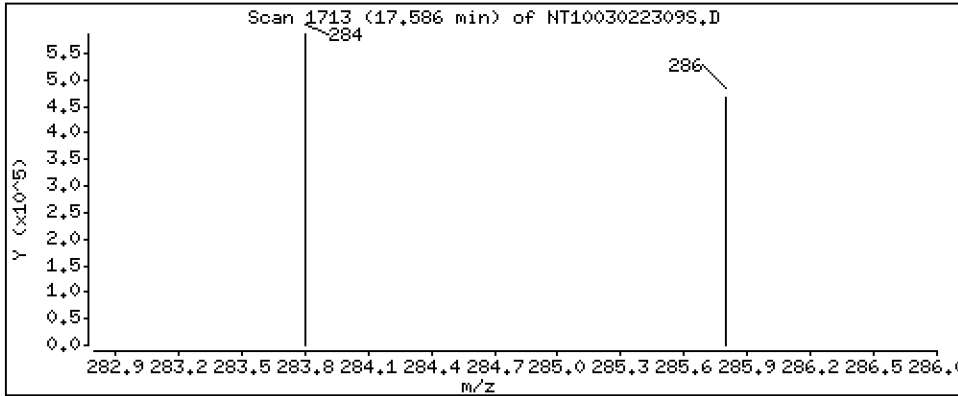
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.208 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

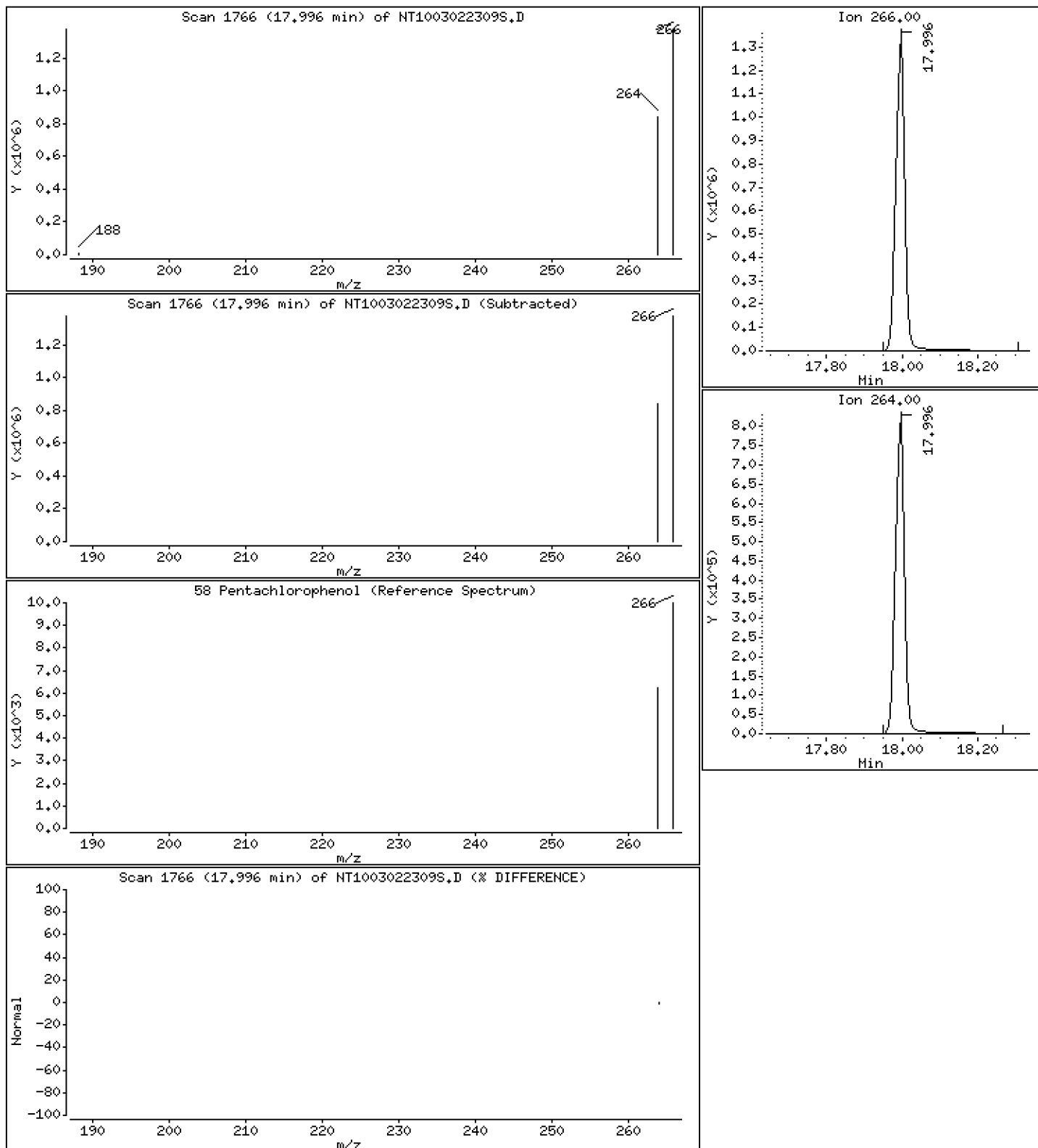
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 17,86 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

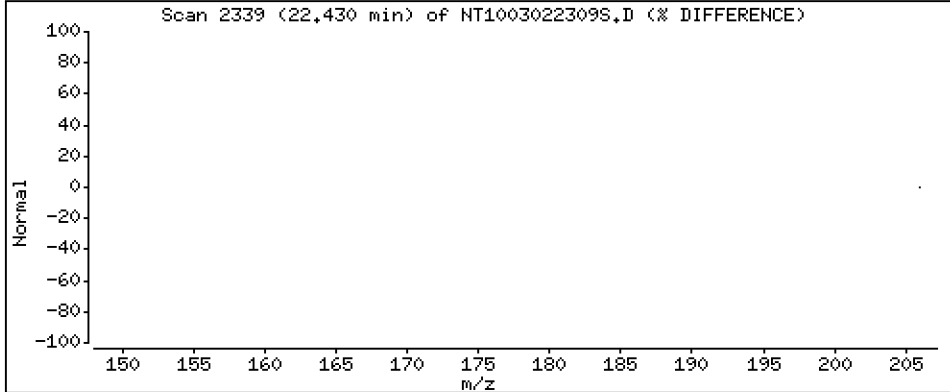
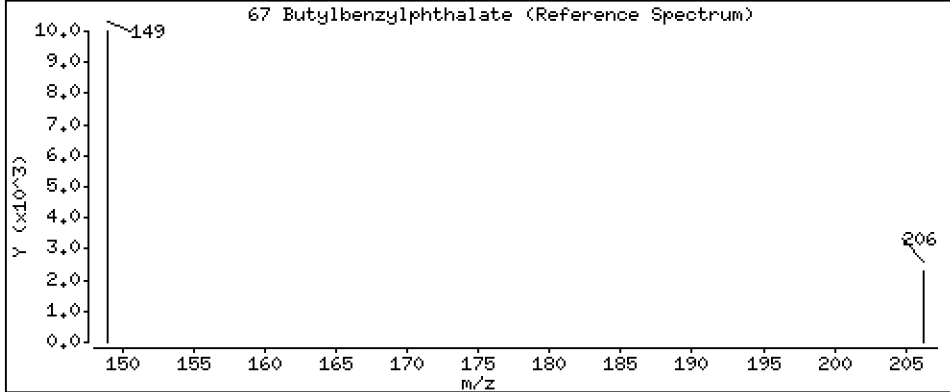
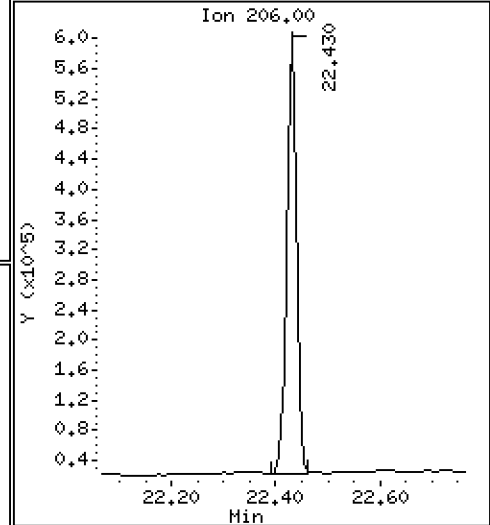
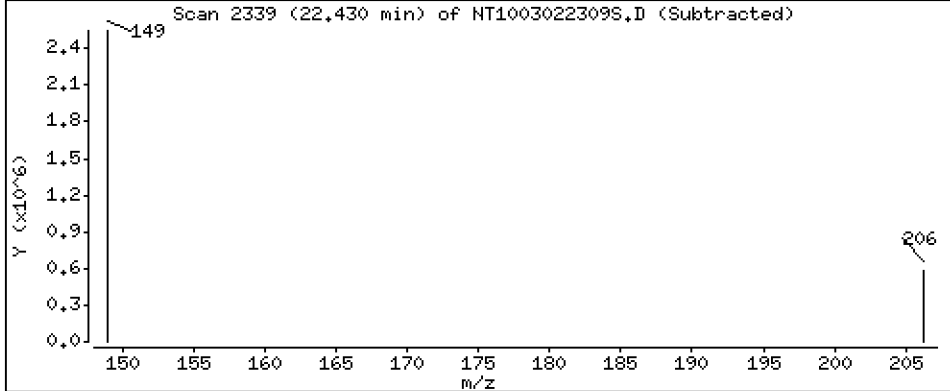
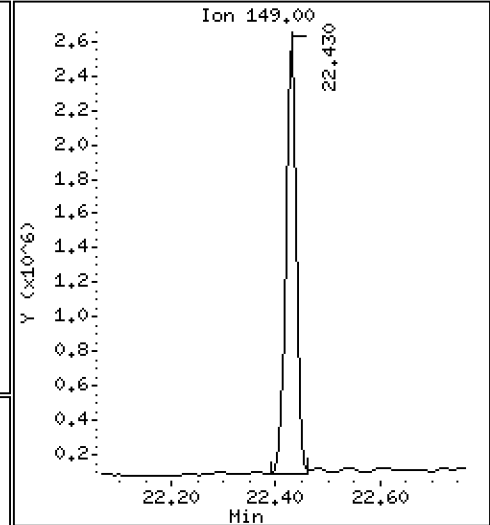
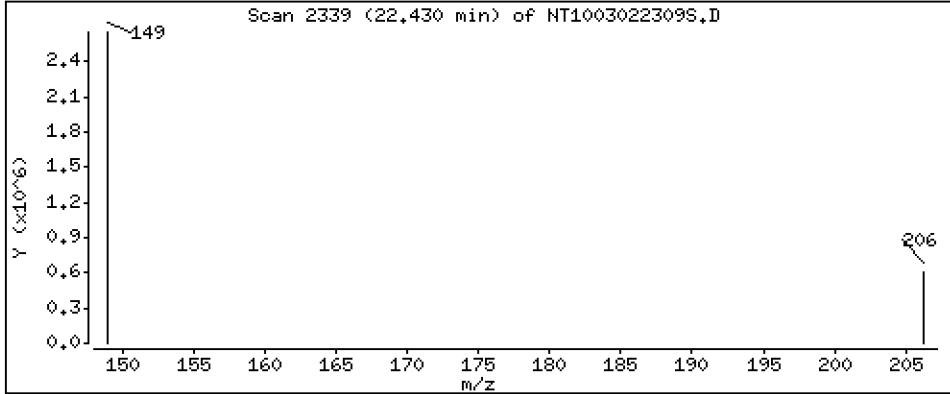
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 5,046 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

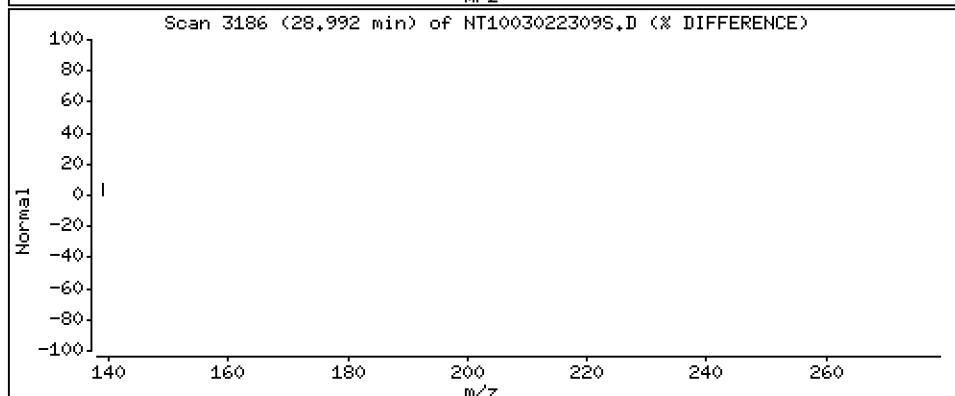
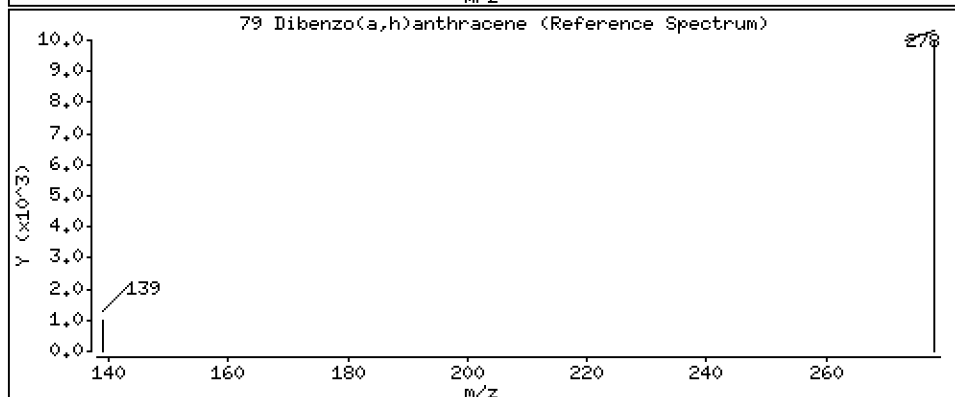
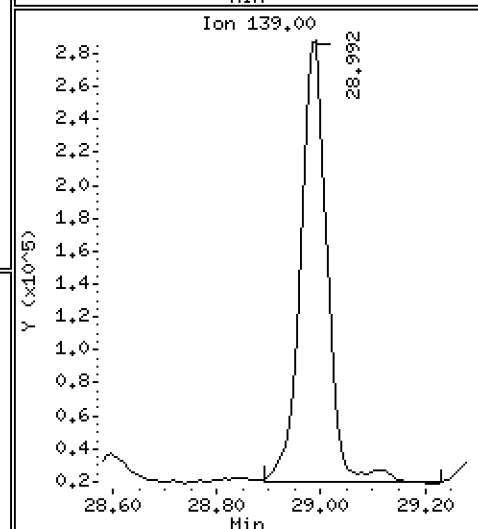
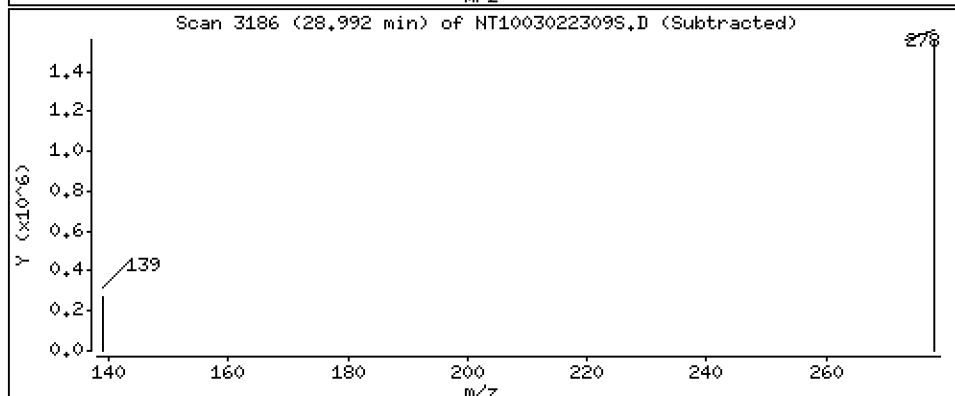
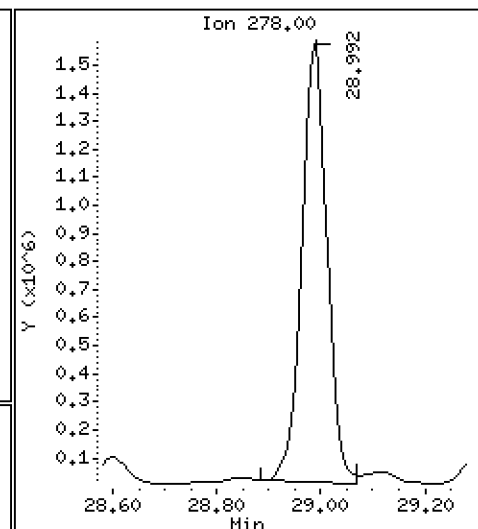
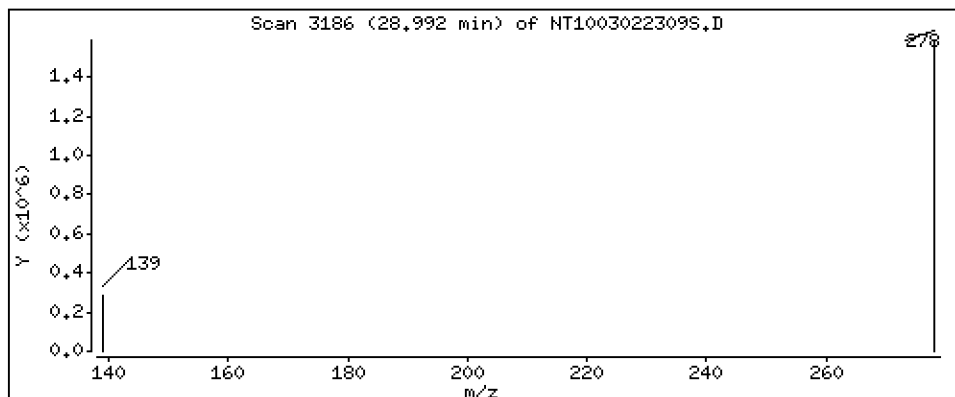
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,564 ug/L



Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

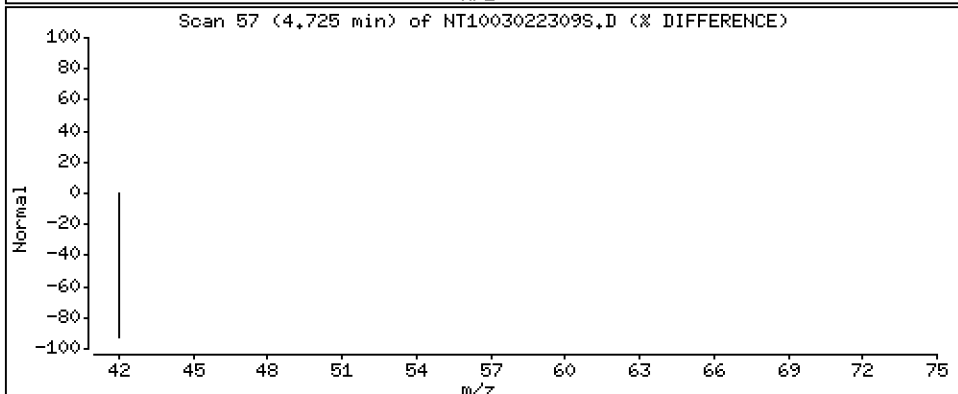
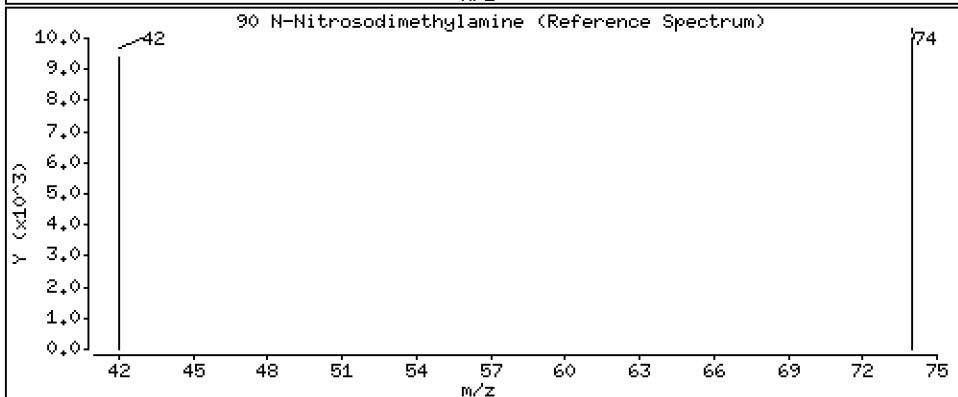
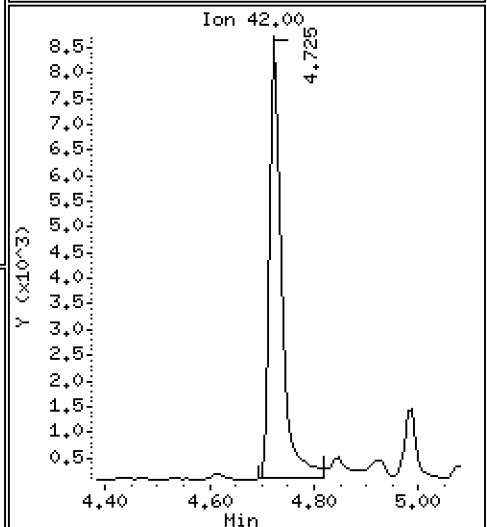
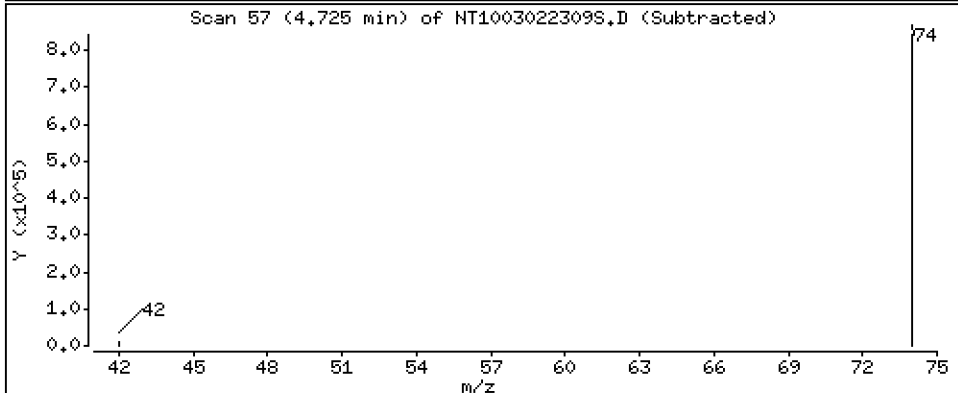
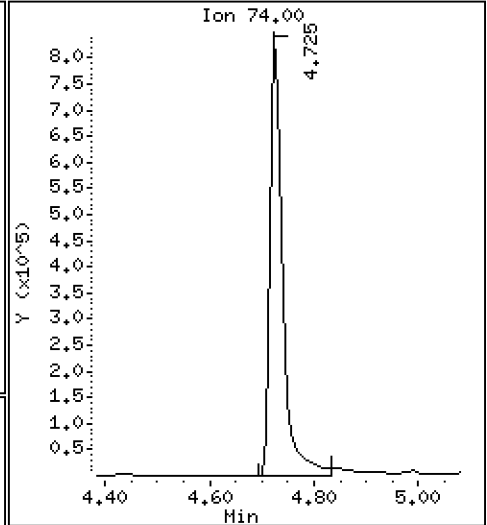
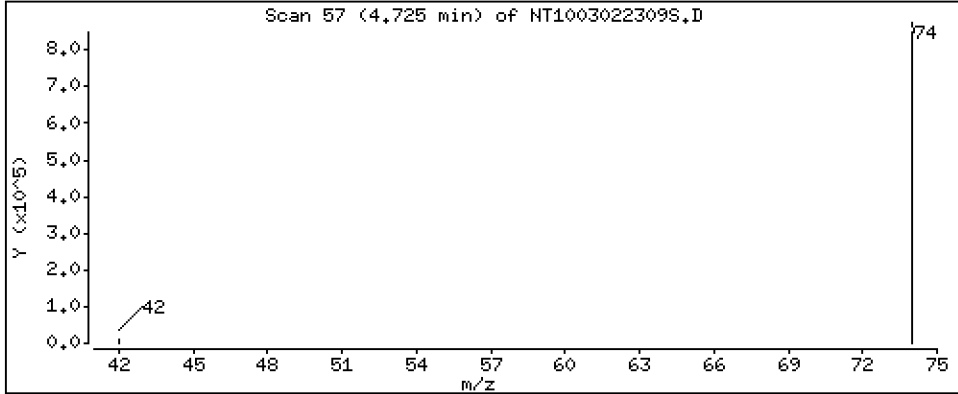
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 12.55 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D
 Lab Smp Id: BLA0624-MS1
 Inj Date : 02-MAR-2023 19:28 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : BLA0624-MS1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	1194756	6.49831	6.498 (R)
3 Phenol	94		8.524	8.517	(0.921)	3395493	11.7302	11.73
7 1,3-Dichlorobenzene	146		9.143	9.143	(0.988)	971170	4.06910	4.069
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.251	(1.000)	643993	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.282	(1.003)	1054529	4.54444	4.544
11 Benzyl alcohol	79		9.476	9.476	(1.024)	691784	4.33648	4.336
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	955792	4.28533	4.285
13 2-Methylphenol	108		9.655	9.655	(1.044)	737264	4.35670	4.357
15 4-Methylphenol	108		9.950	9.942	(1.076)	905455	5.03862	5.039
16 N-Nitroso-di-n-propylamine	70		9.981	9.981	(1.079)	636272	5.16650	5.166
22 2,4-Dimethylphenol	107		11.006	10.997	(0.939)	2870668	13.6862	13.69
24 Benzoic acid	105		11.167	11.074	(0.953)	2905227	22.8756	22.88
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	770771	4.51064	4.511
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	2374110	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	518561	4.27638	4.276
39 Dimethylphthalate	163		14.749	14.741	(0.963)	2238742	5.60374	5.604
* 42 Acenaphthene-d10	162		15.321	15.314	(1.000)	1258198	4.00000	
50 Diethylphthalate	149		16.218	16.203	(1.059)	2566058	6.81103	6.811
54 N-Nitrosodiphenylamine	169		16.698	16.690	(0.907)	2048541	4.51502	4.515
57 Hexachlorobenzene	284		17.586	17.578	(0.955)	893428	4.20768	4.208

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.996	17.988	(0.977)	2148596	17.8641	17.86
* 59 Phenanthrene-d10	188	18.414	18.406	(1.000)	2803544	4.00000	
\$ 66 Terphenyl-d14	244	21.547	21.532	(0.919)	1562782	4.56601	4.566(R)
67 Butylbenzylphthalate	149	22.430	22.414	(0.957)	3541090	5.04637	5.046
* 69 Chrysene-d12	240	23.444	23.421	(1.000)	4232445	4.00000	
* 77 Perylene-d12	264	26.146	26.115	(1.000)	3782979	4.00000	
79 Dibenzo(a,h)anthracene	278	28.992	28.929	(1.109)	5329678	5.56366	5.564
90 N-Nitrosodimethylamine	74	4.724	4.732	(0.511)	1366021	12.5494	12.55

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022309S.D
 Lab Smp Id: BLA0624-MS1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	643993	30.52
27 Naphthalene-d8	1779056	889528	3558112	2374110	33.45
42 Acenaphthene-d10	954569	477285	1909138	1258198	31.81
59 Phenanthrene-d10	1596290	798145	3192580	2803544	75.63
69 Chrysene-d12	1649110	824555	3298220	4232445	156.65
77 Perylene-d12	1901958	950979	3803916	3782979	98.90

<-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.44	0.10
77 Perylene-d12	26.12	25.62	26.62	26.15	0.12

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

REVIEW SUMMARY FOR FILE - NT1003022309S.D

Lab ID: BLA0624-MS1

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 19:28

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.945	0.0080	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

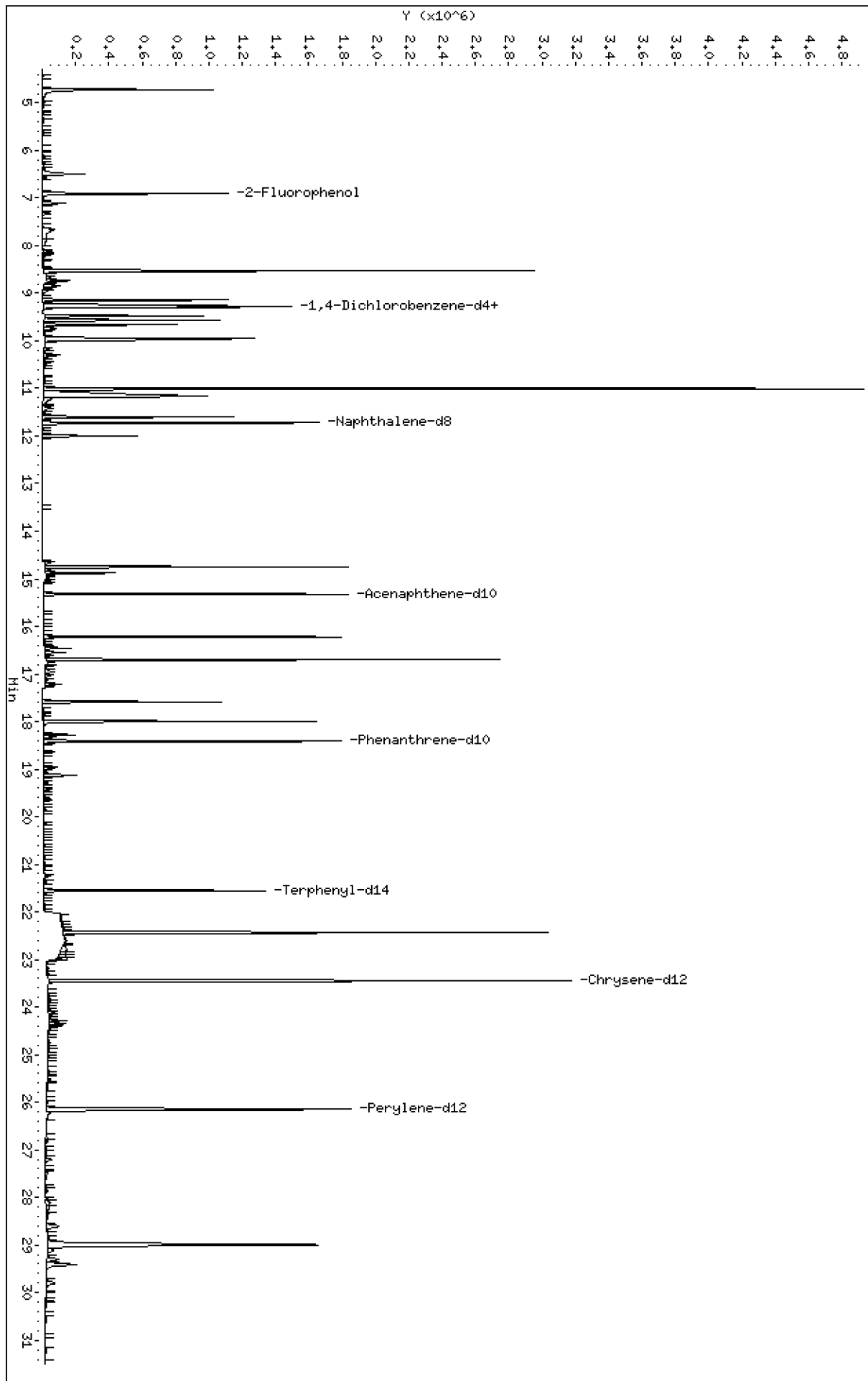
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIH.6\NT1003022310S.D
Date: 02-MAR-2023 20:06
Client ID:
Sample Info: BLR0624-HSD1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIH.6\NT1003022310S.D



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

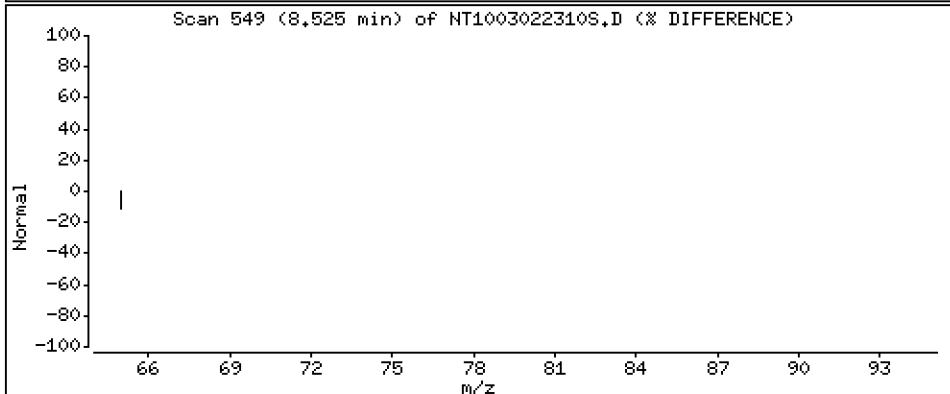
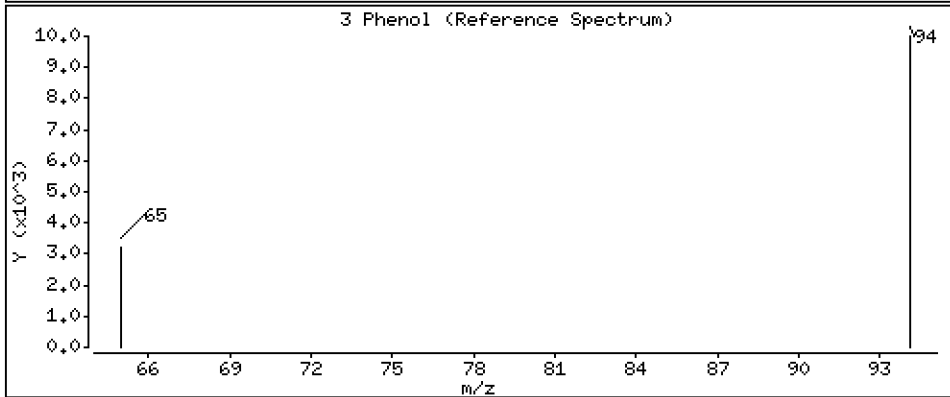
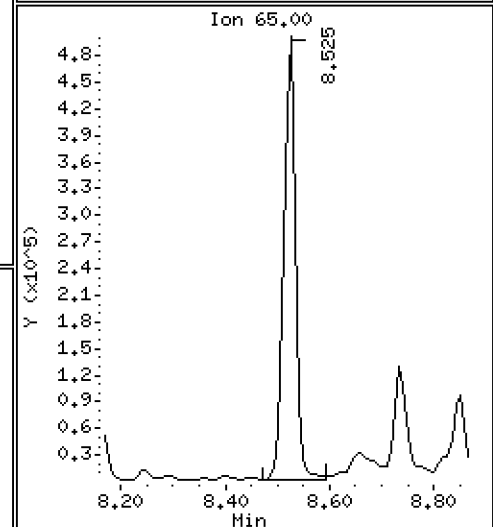
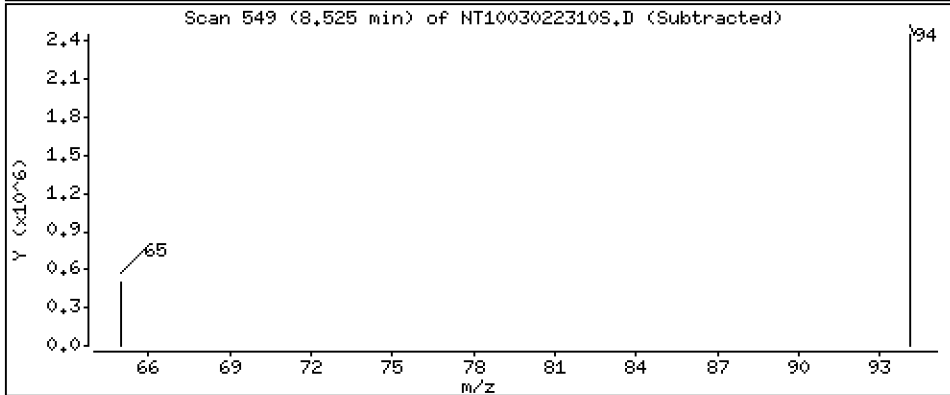
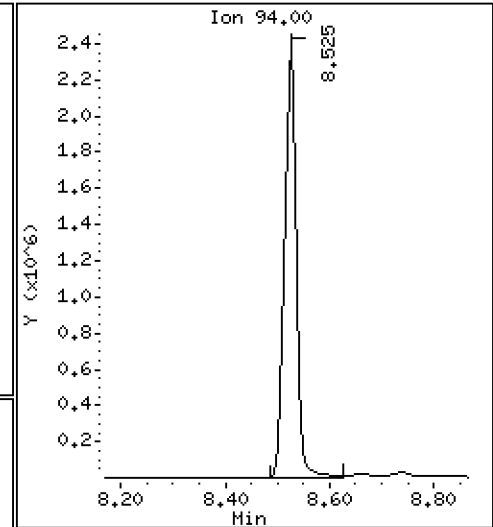
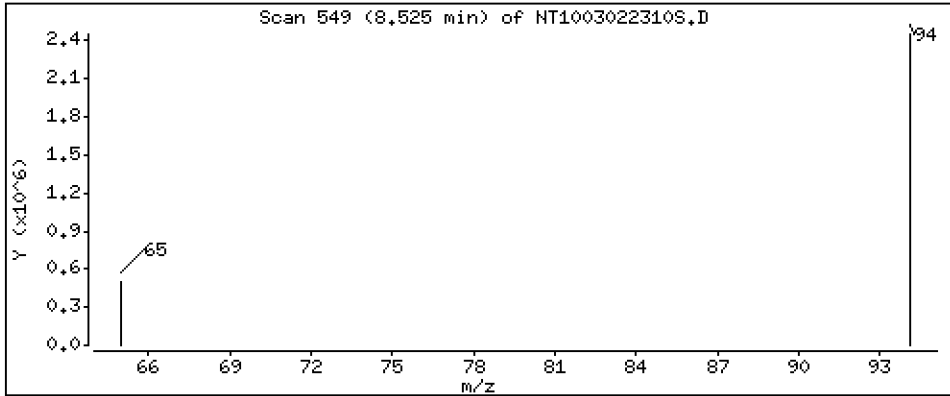
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 11.96 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

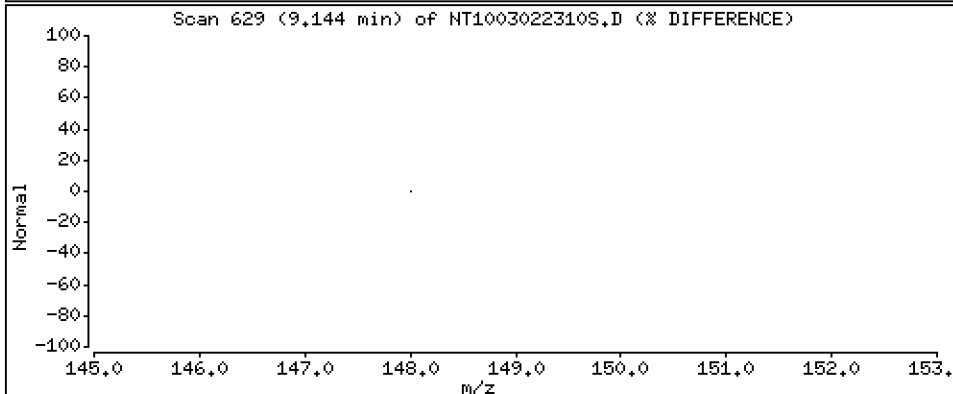
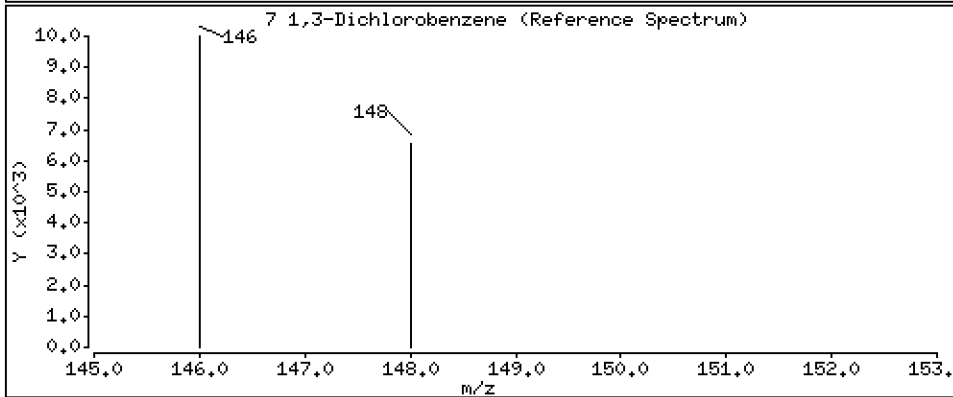
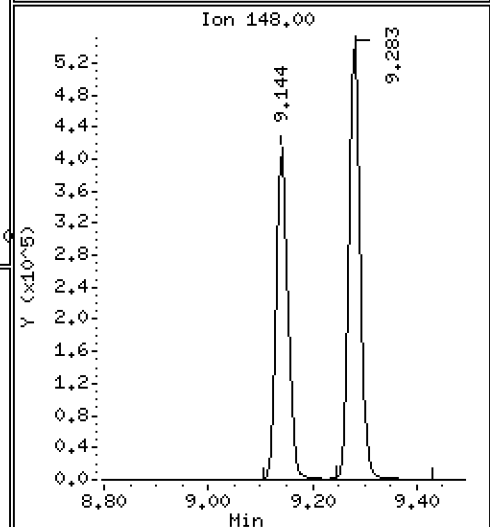
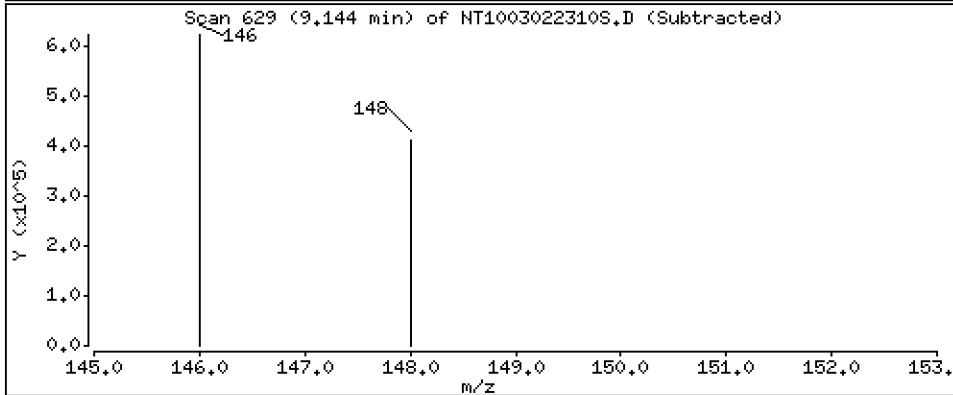
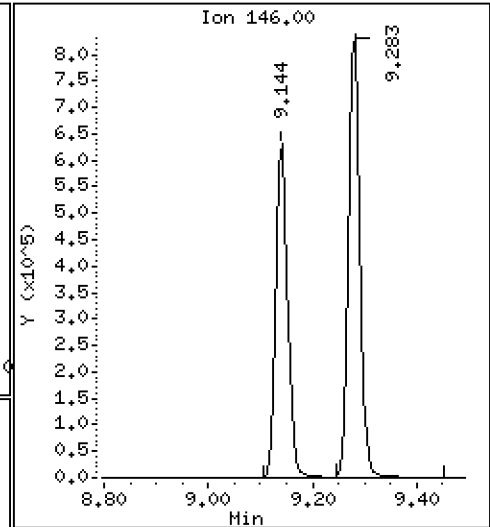
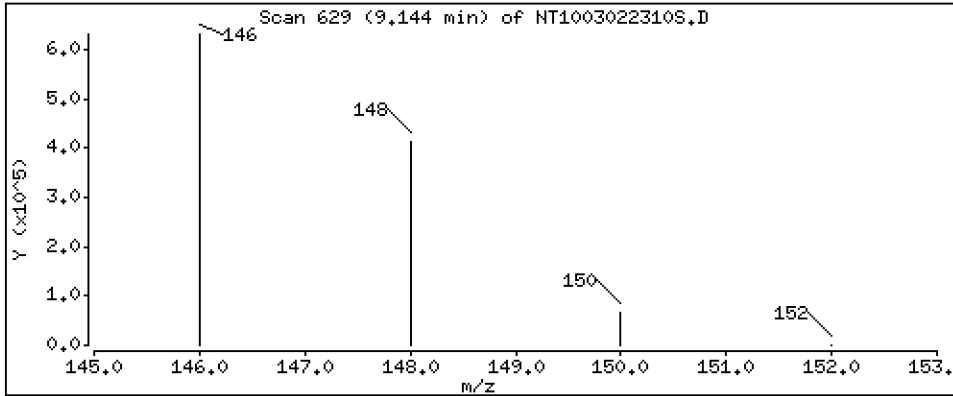
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 4,012 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

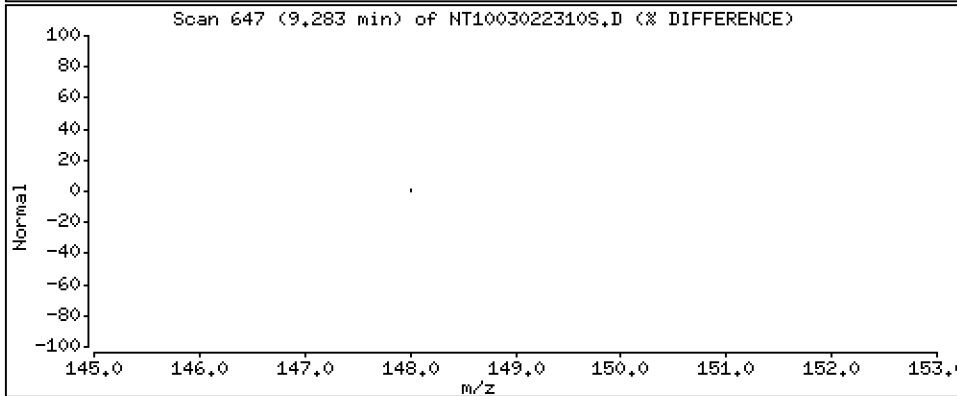
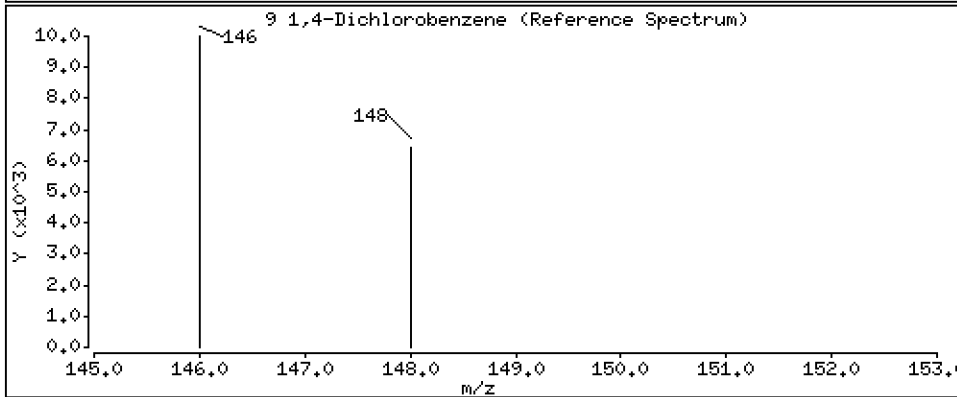
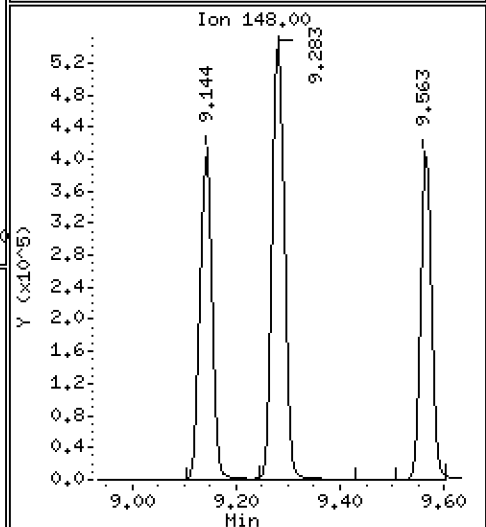
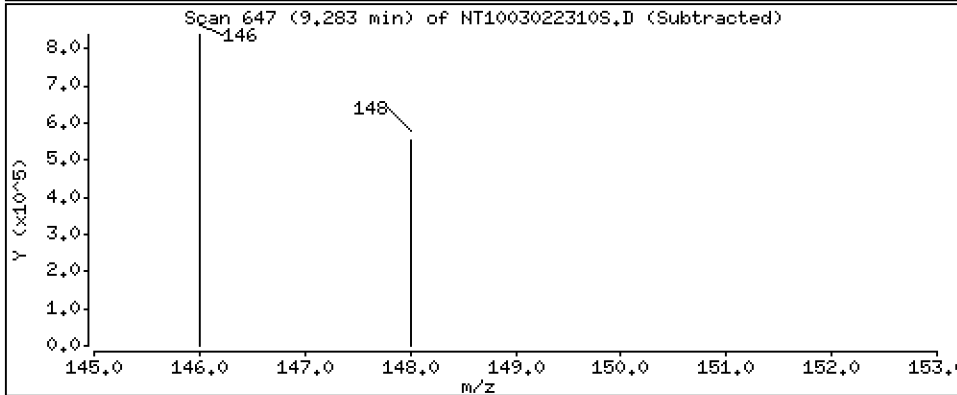
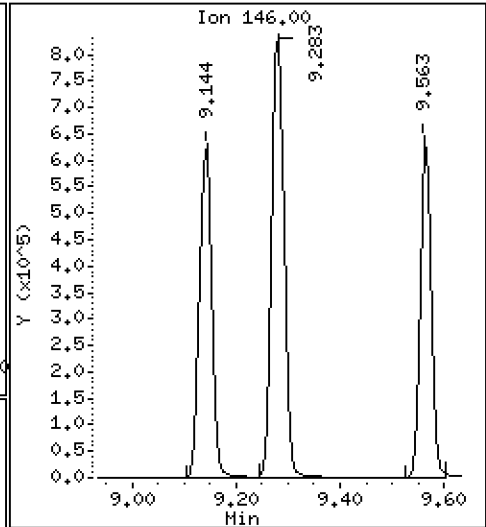
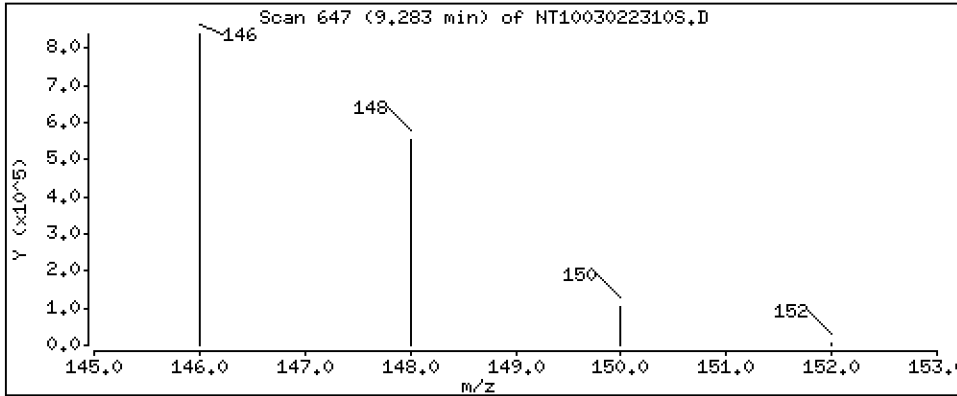
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 5,473 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

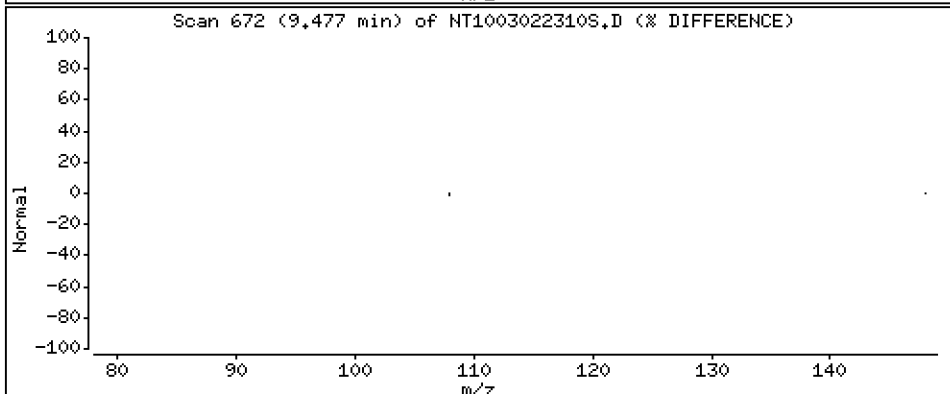
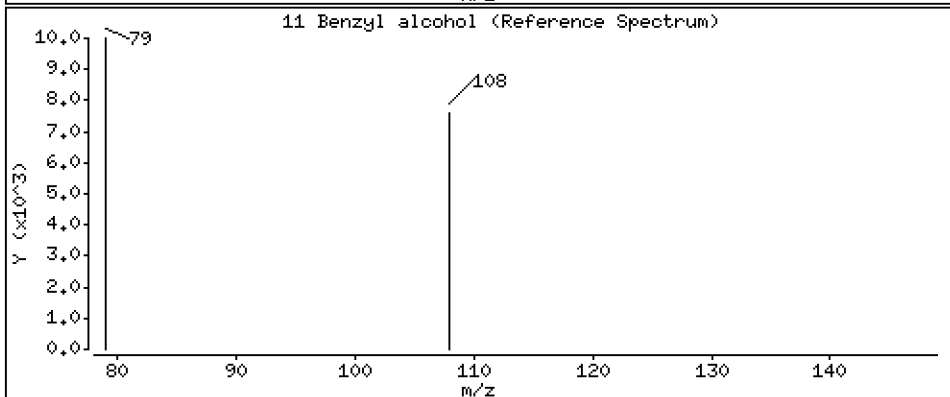
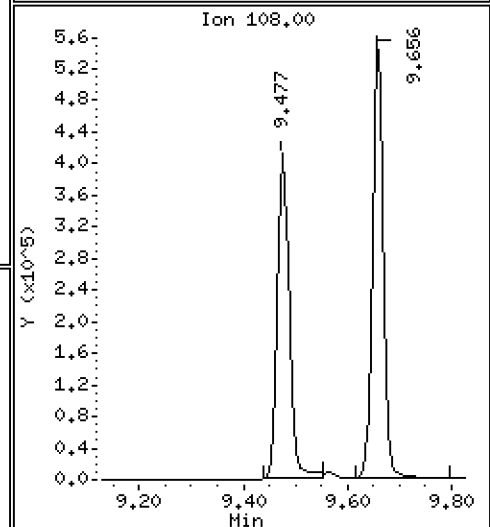
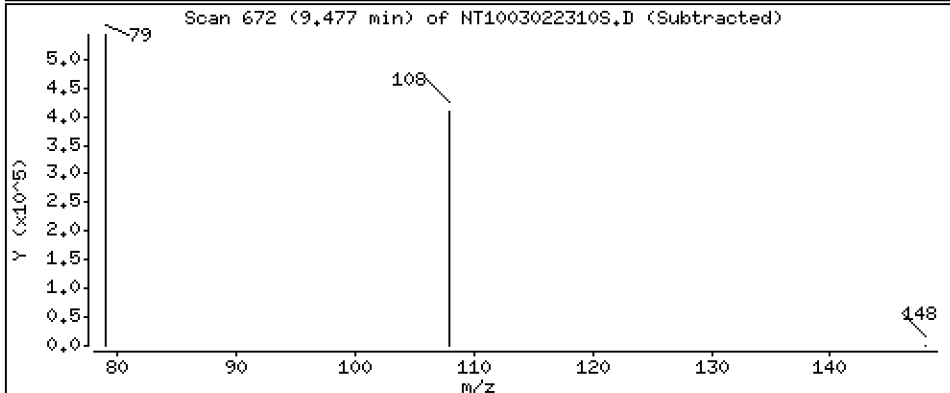
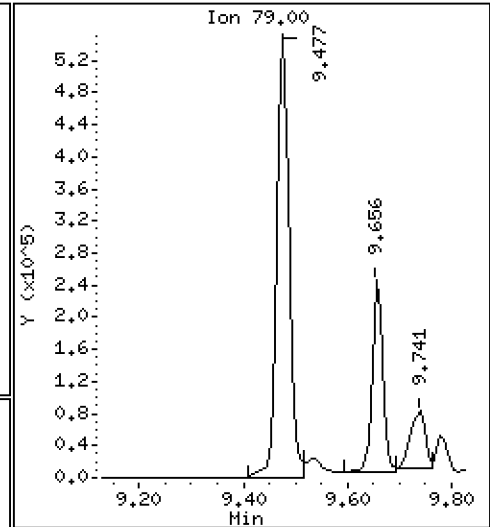
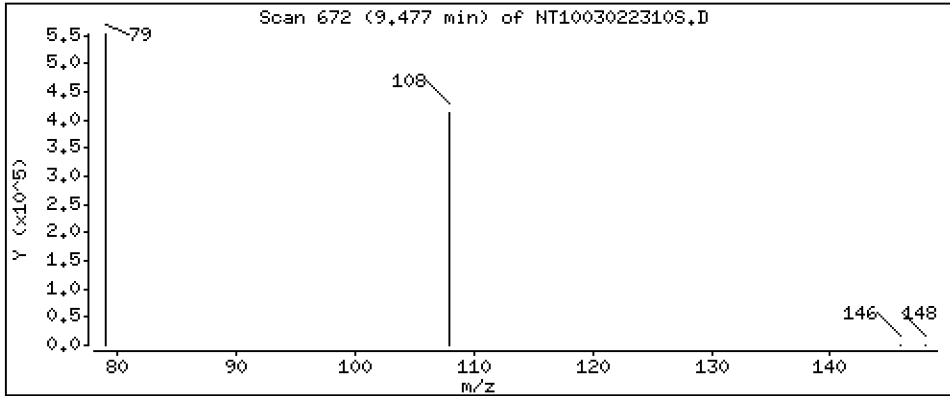
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5.125 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

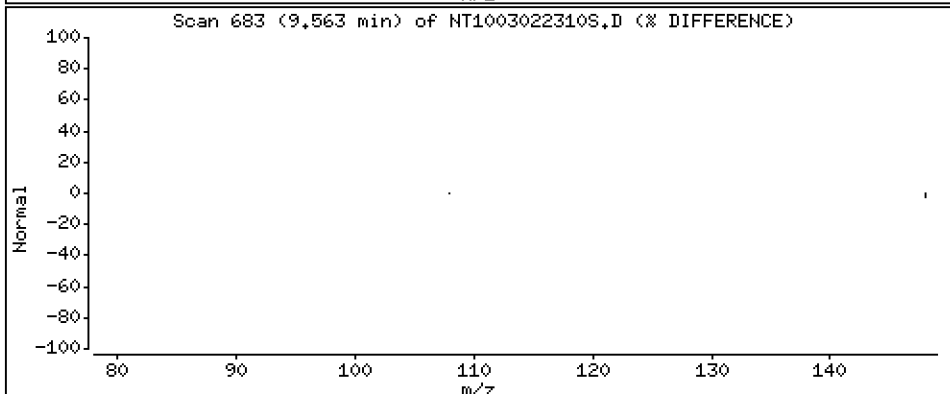
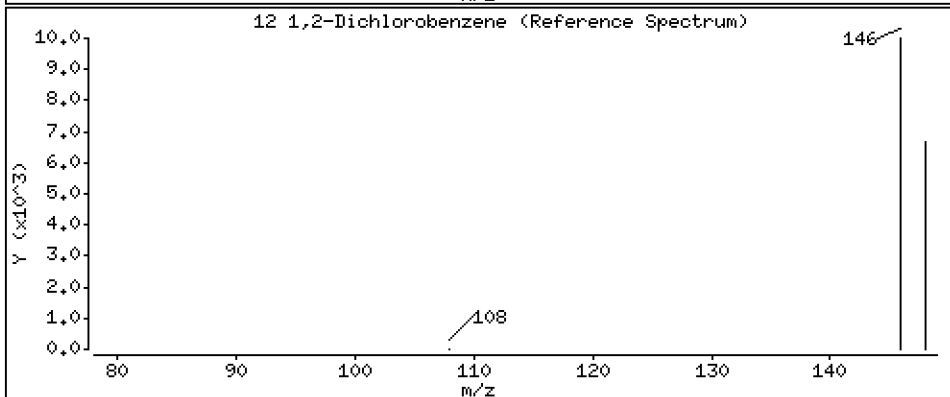
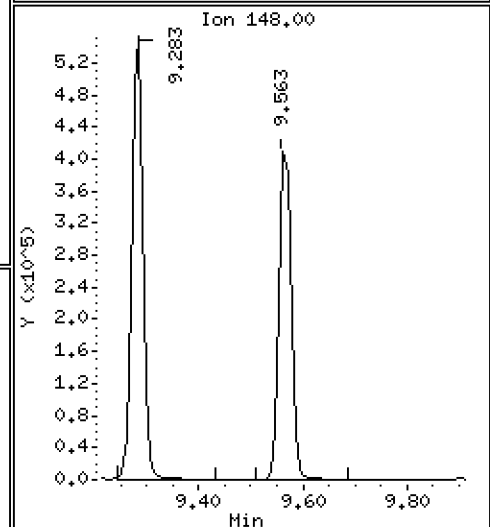
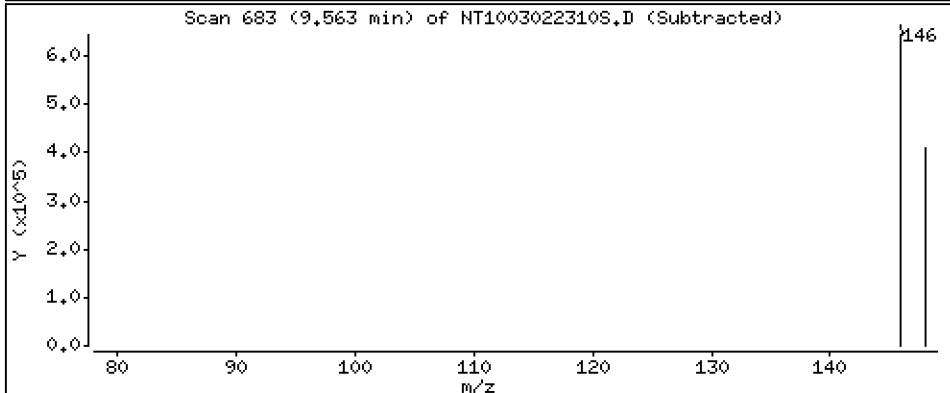
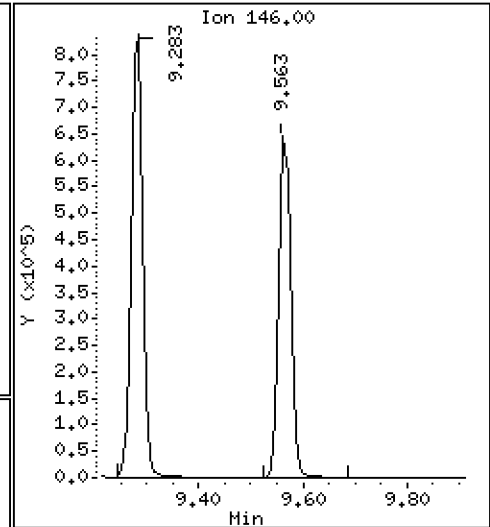
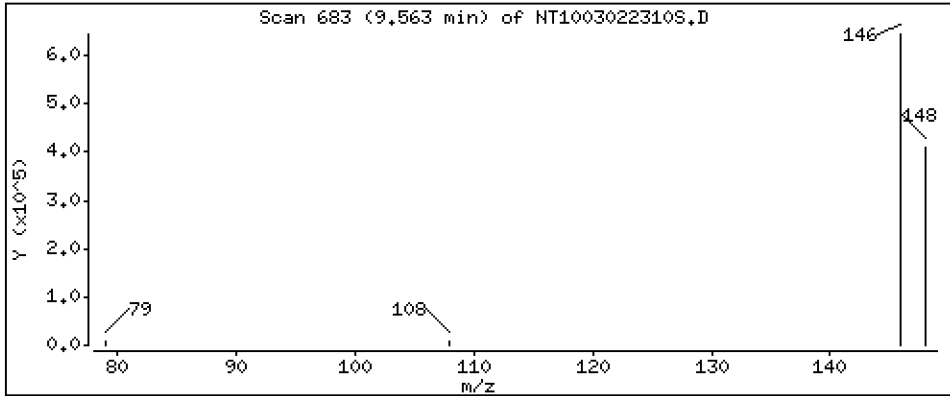
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 4,221 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

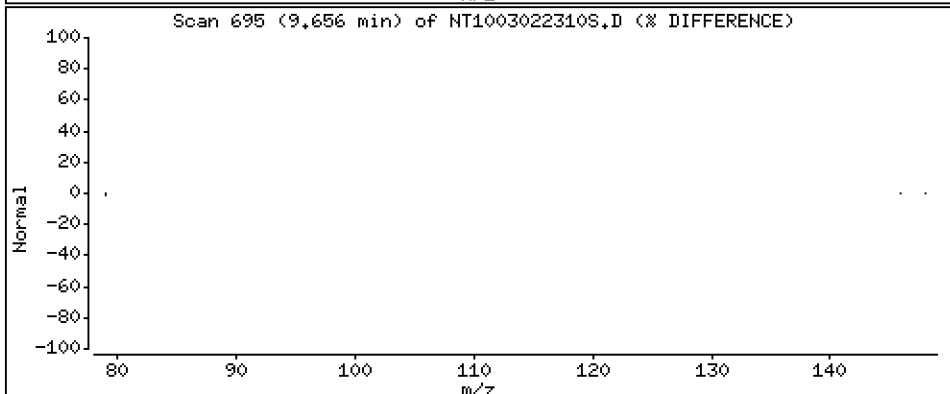
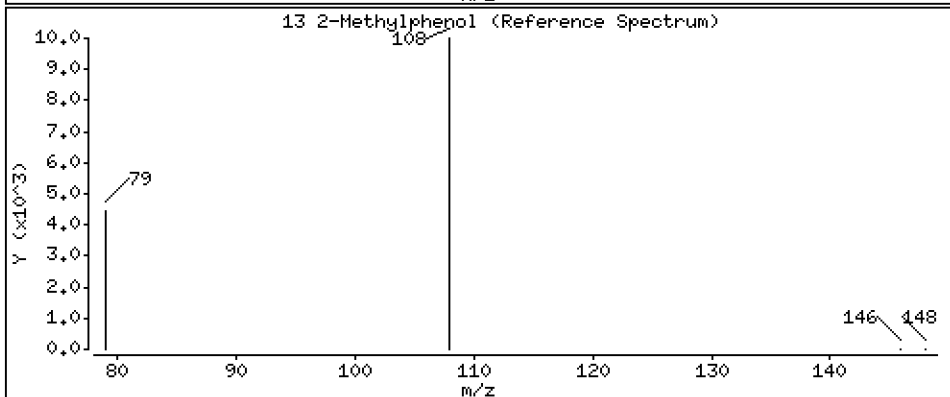
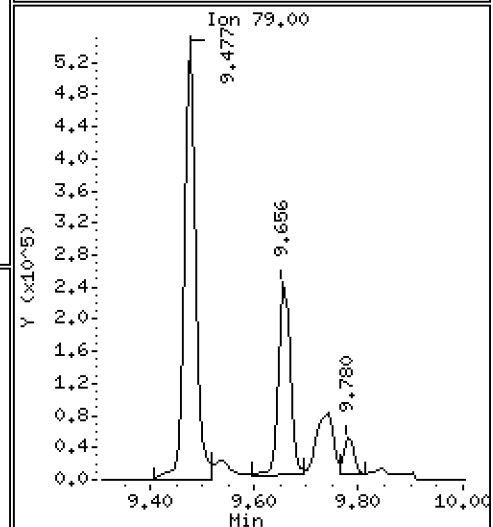
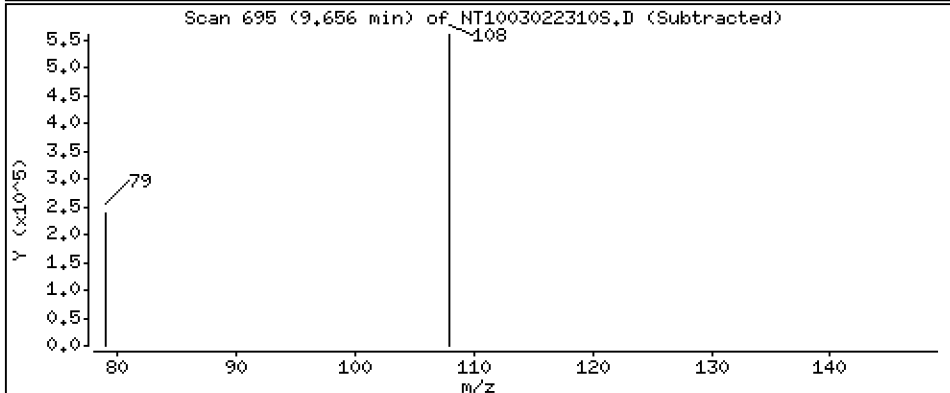
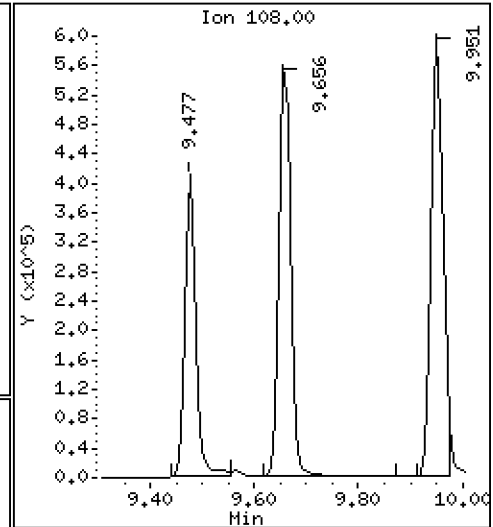
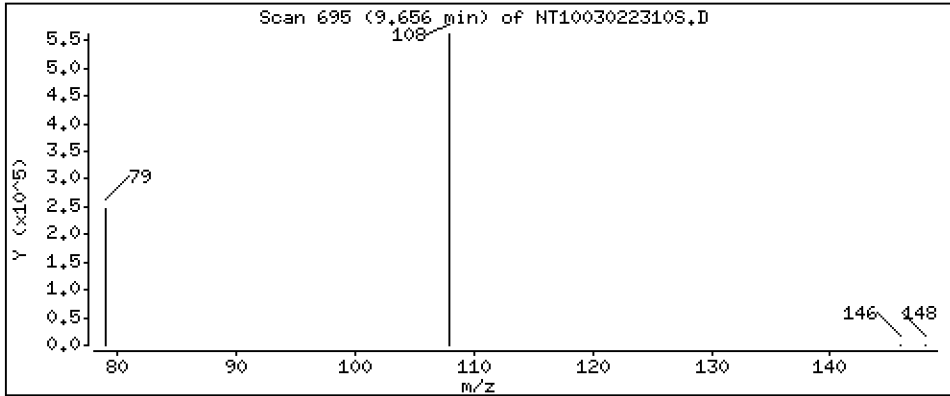
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.648 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

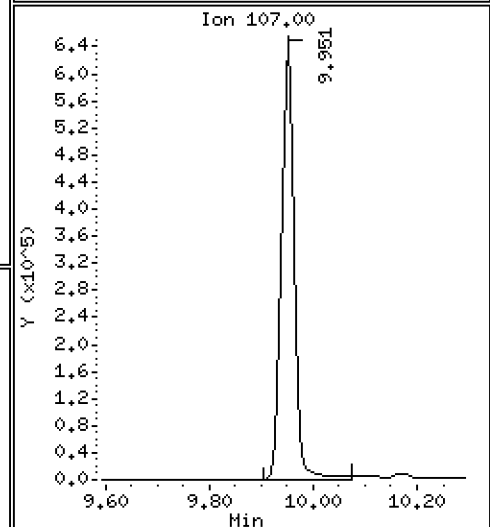
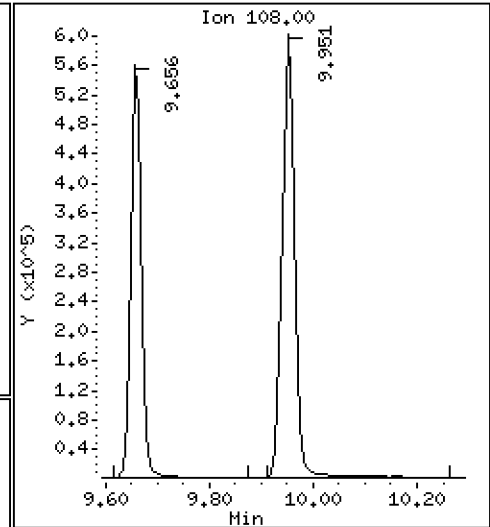
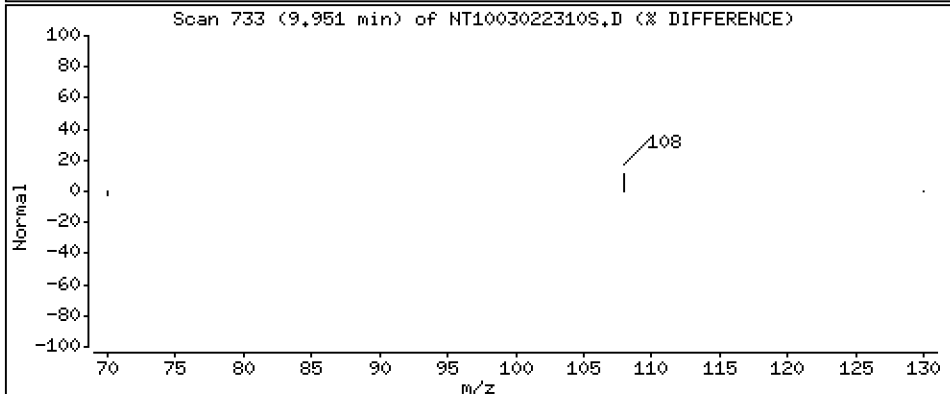
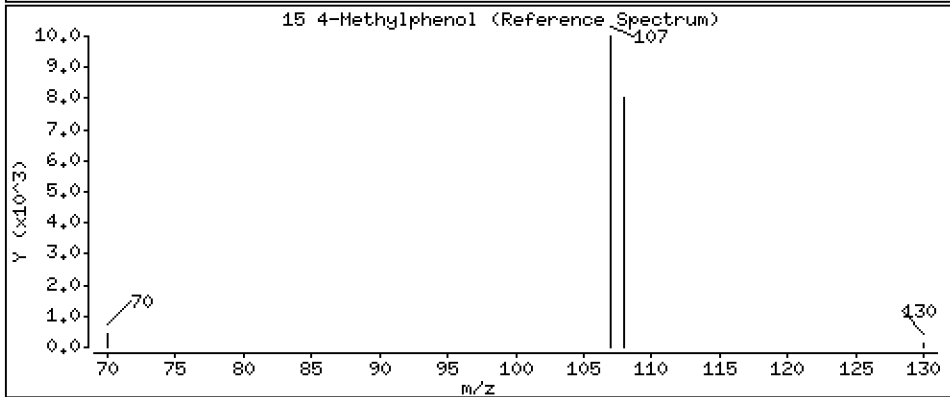
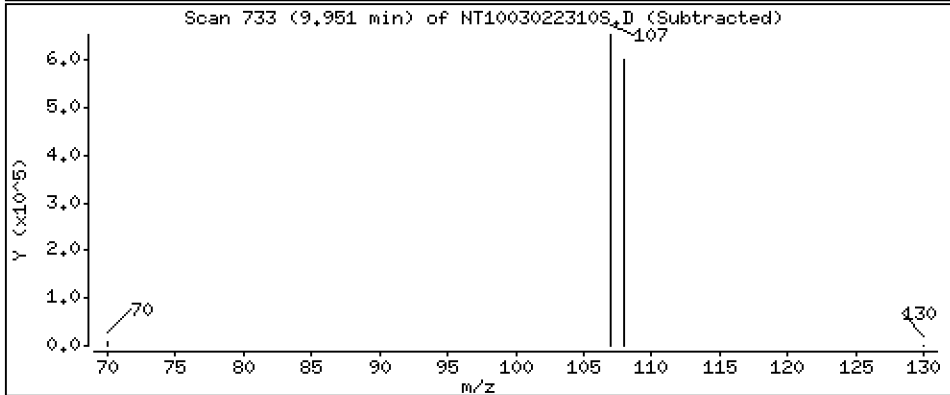
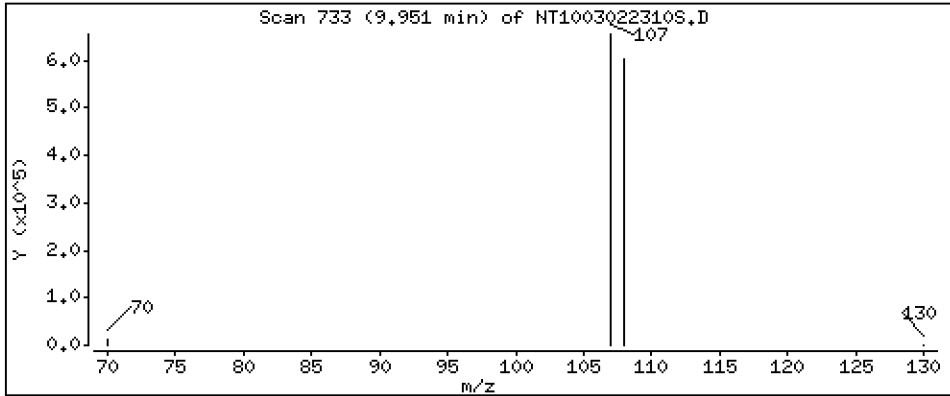
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 5,249 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

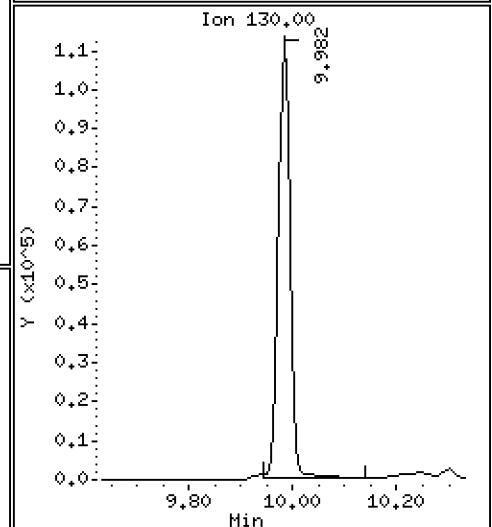
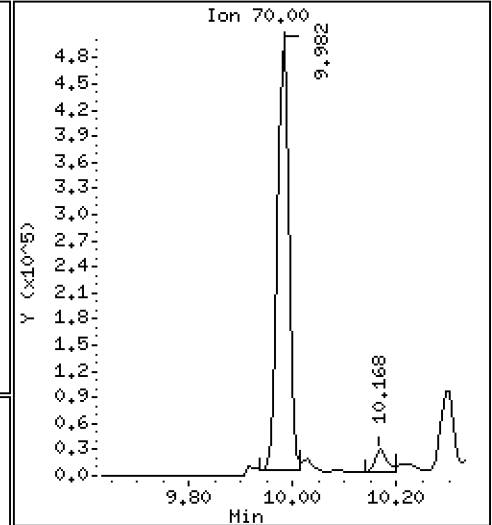
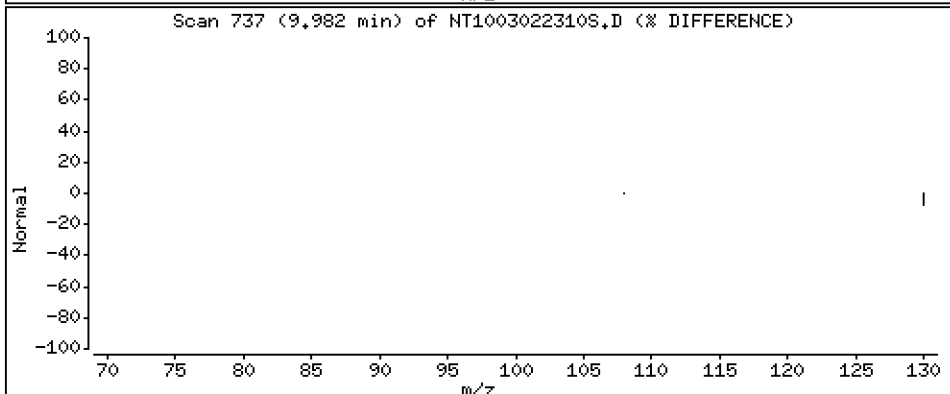
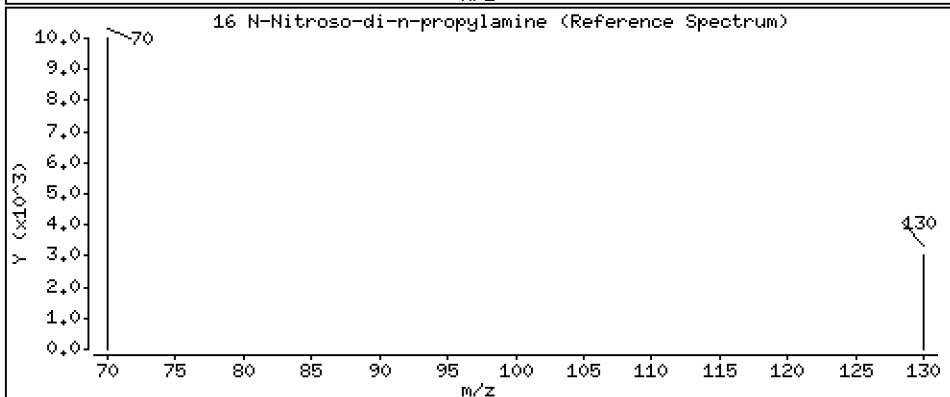
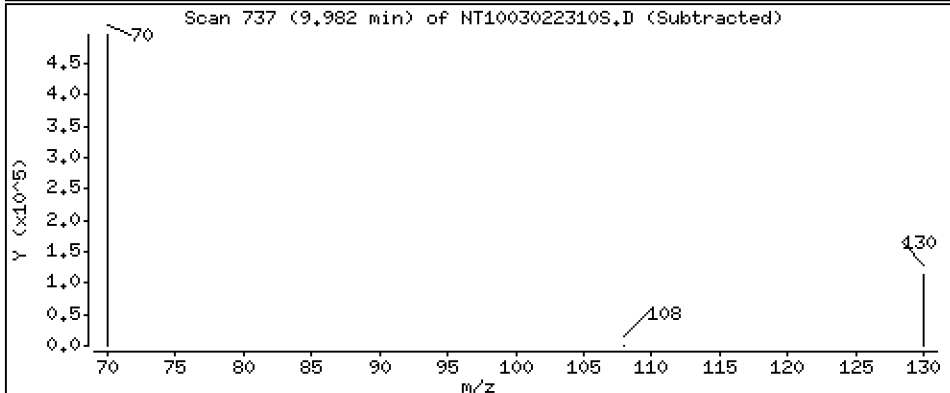
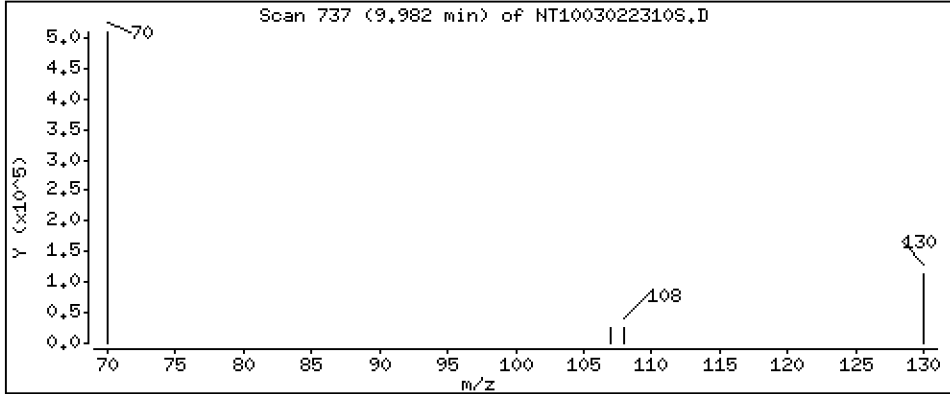
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,488 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

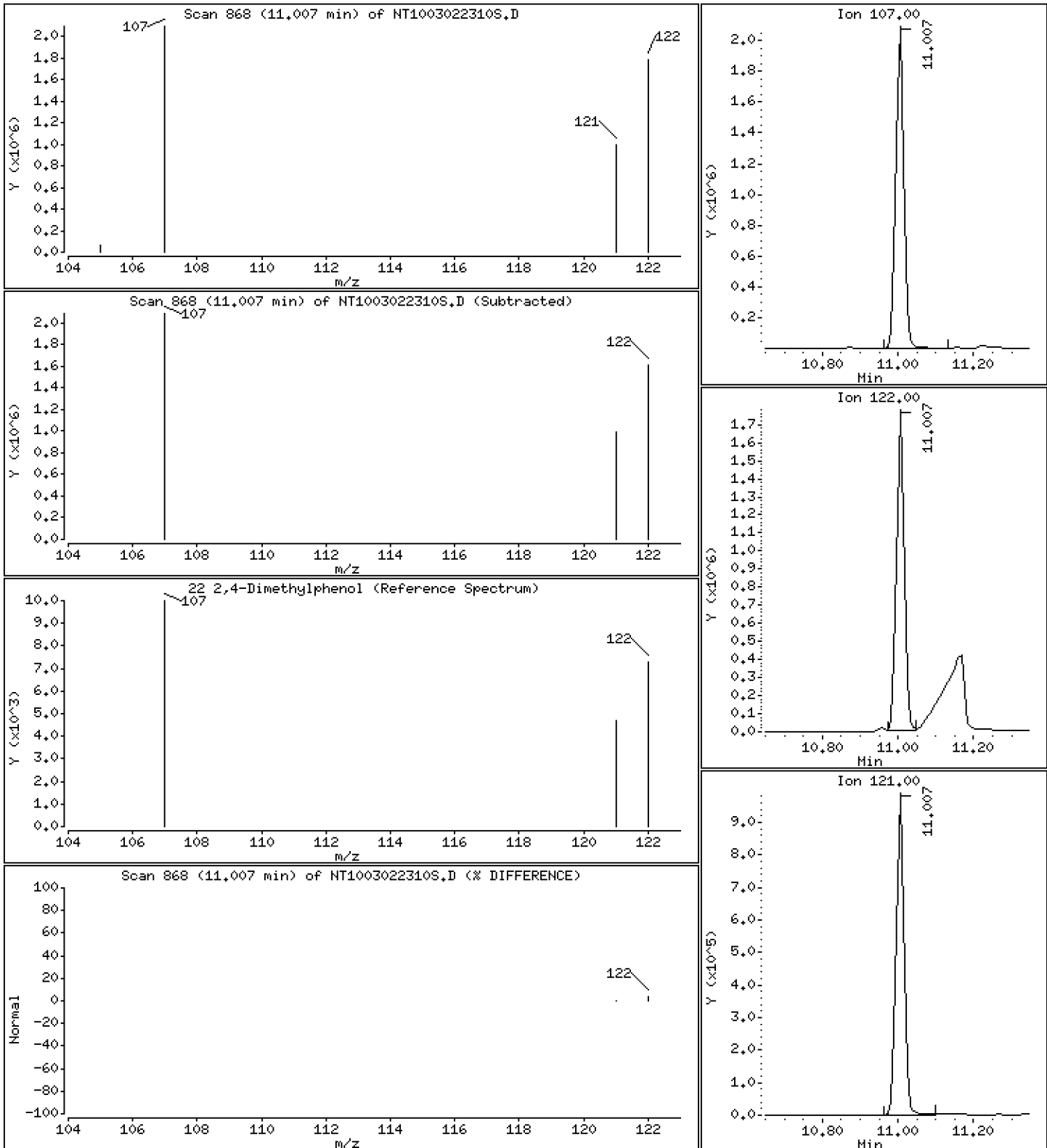
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 14,05 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

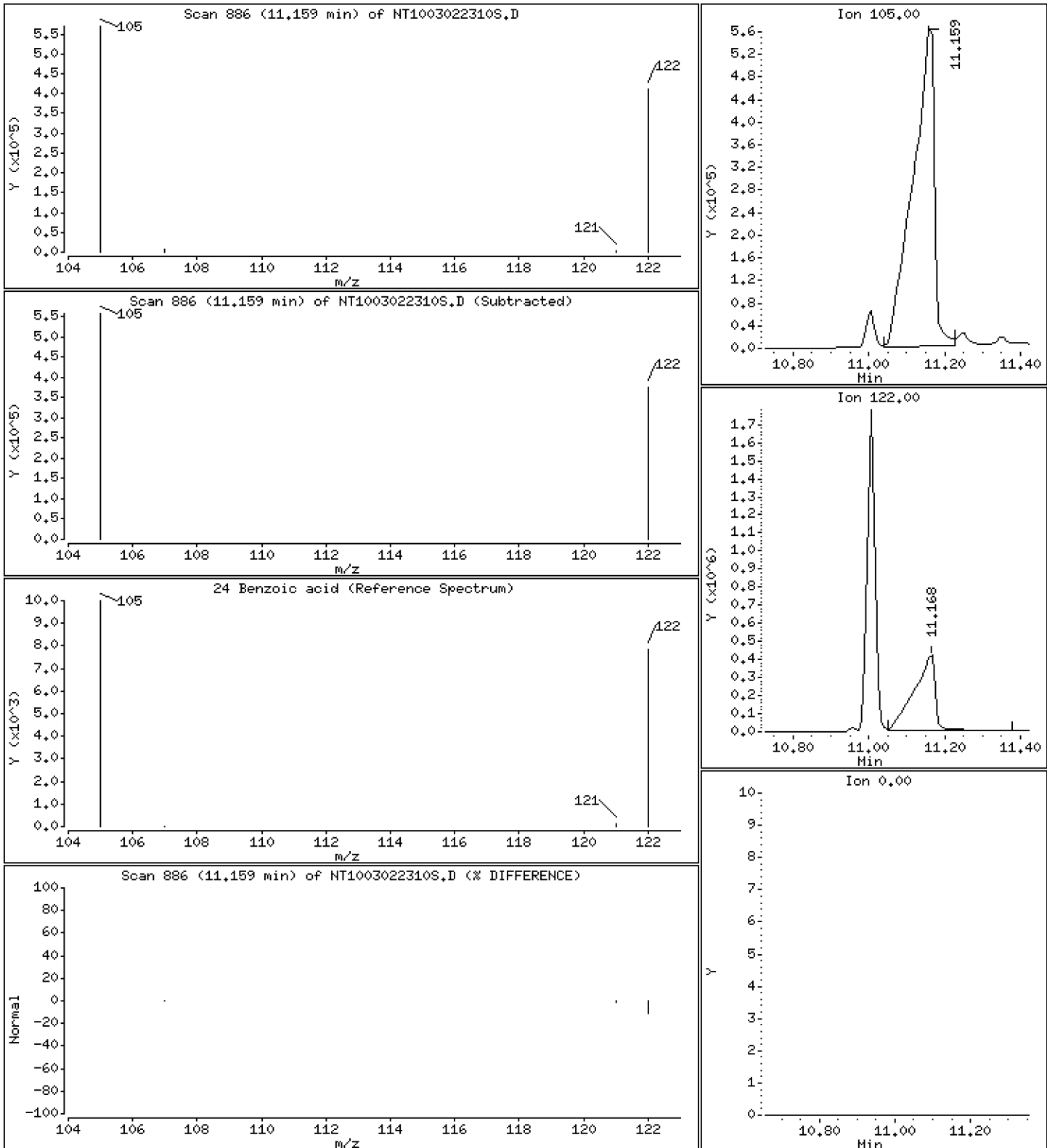
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 17.46 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

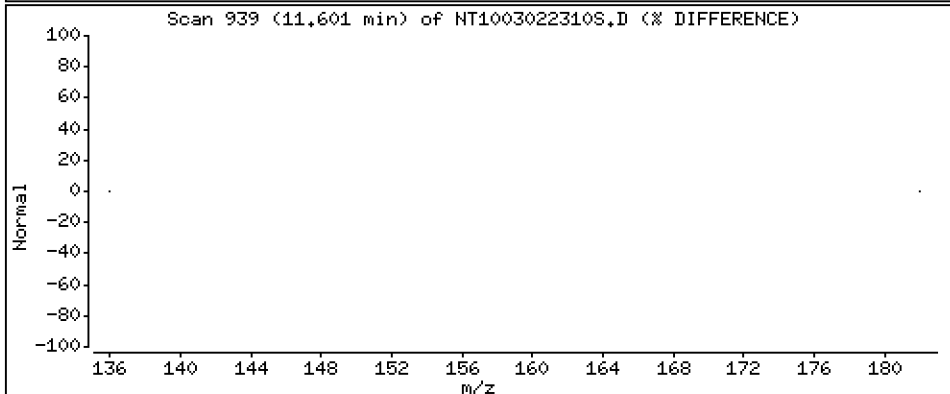
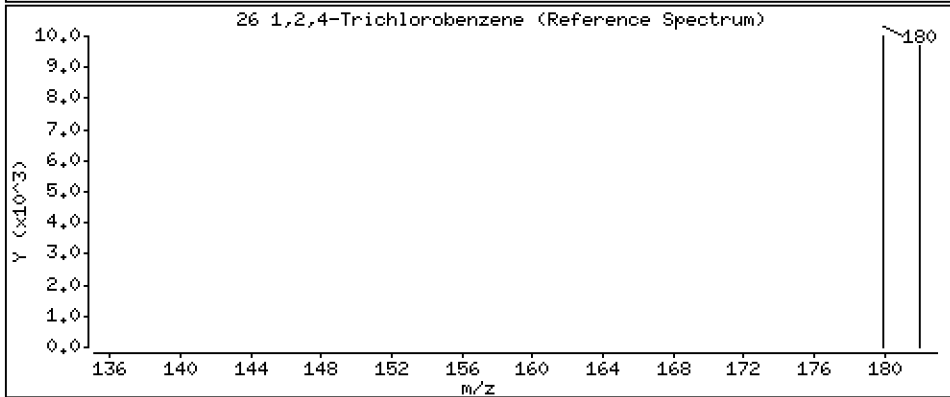
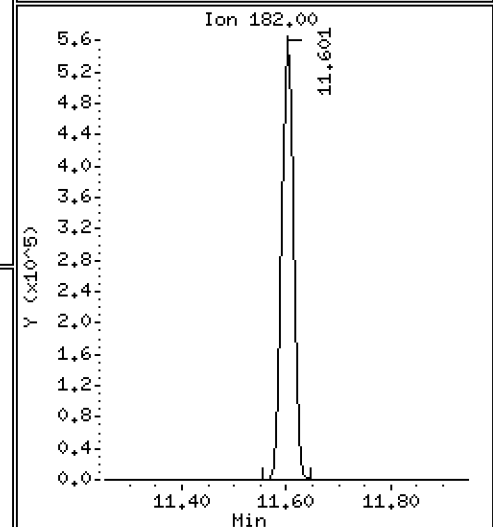
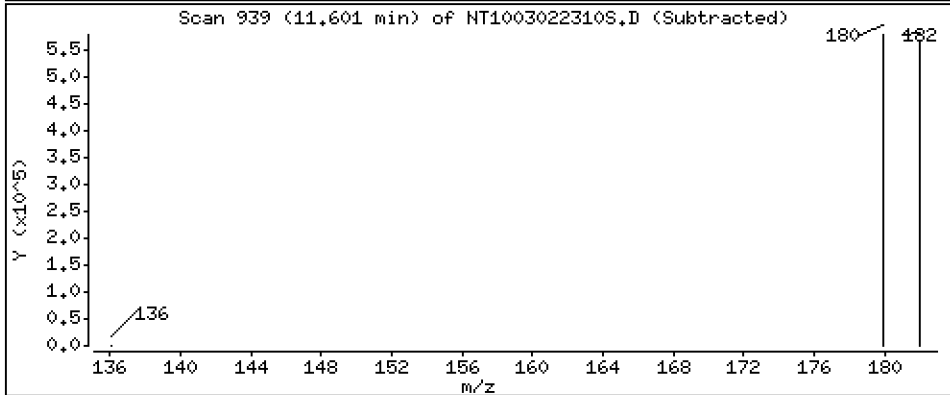
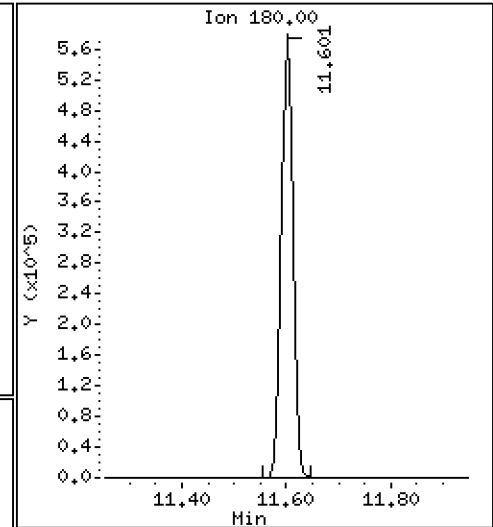
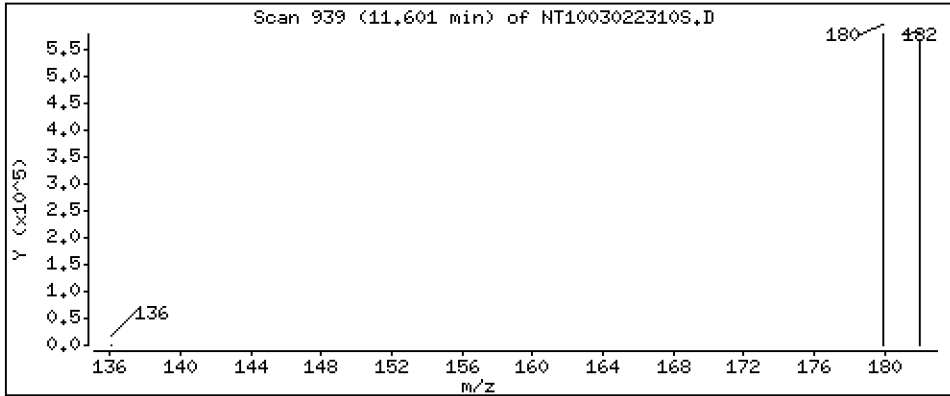
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 4,715 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

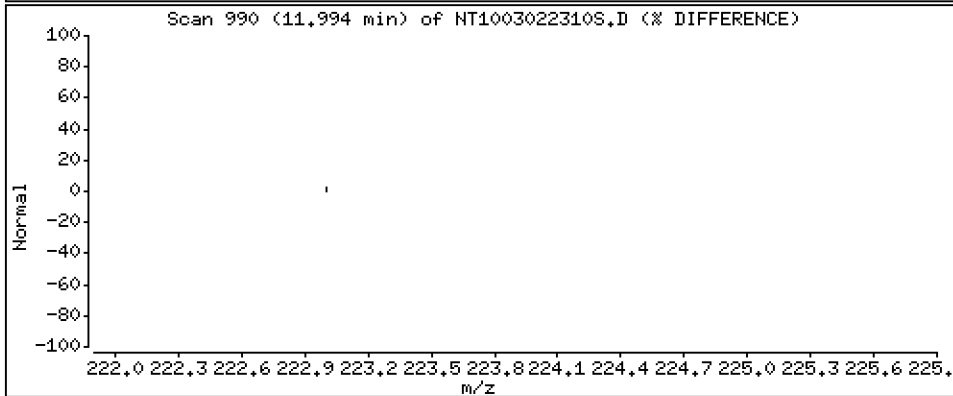
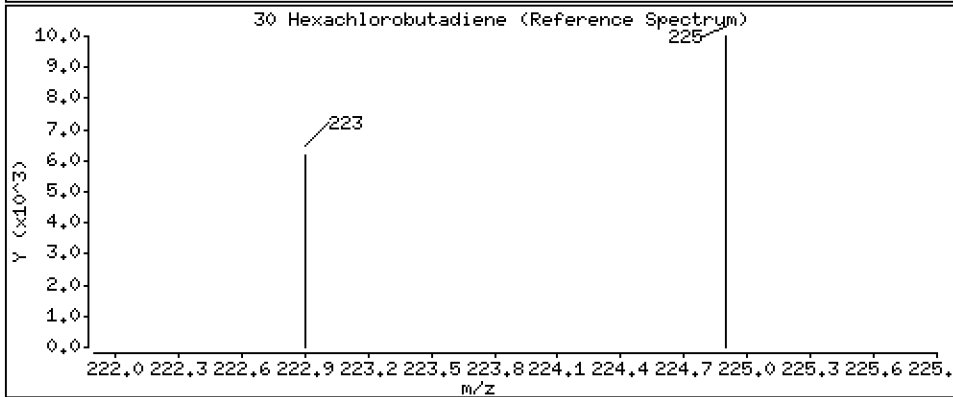
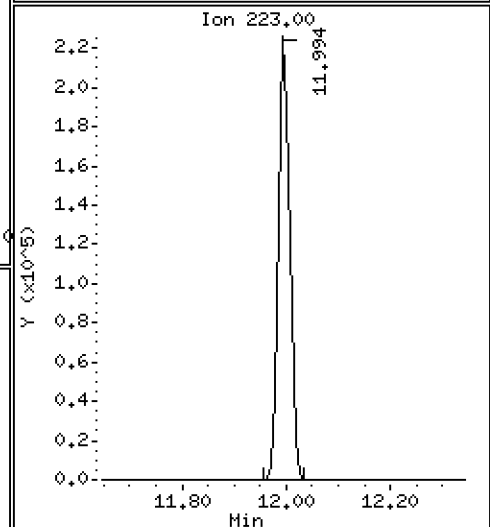
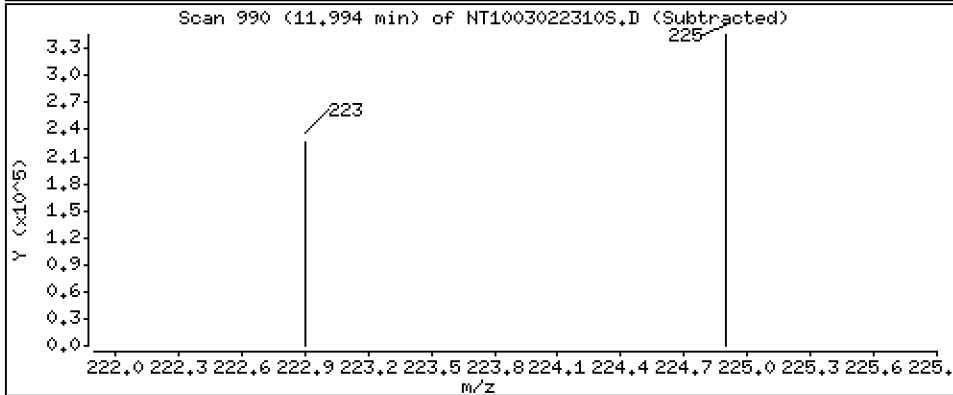
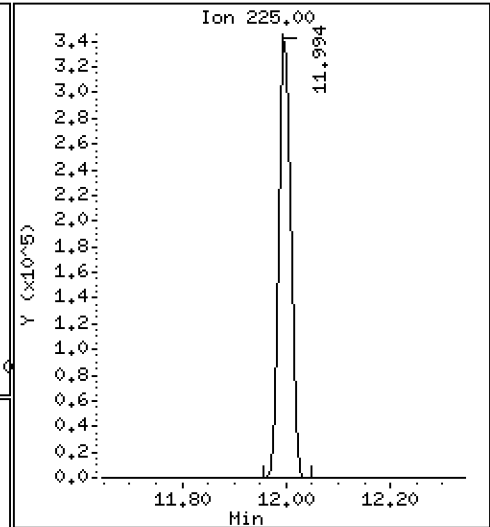
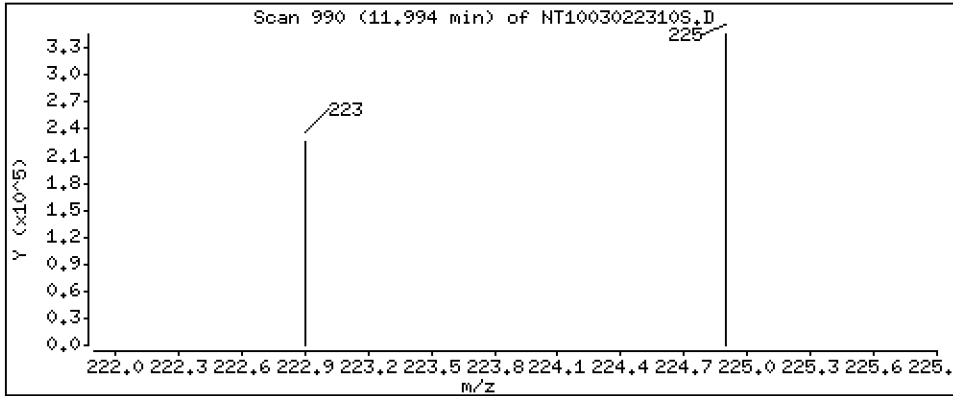
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,167 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

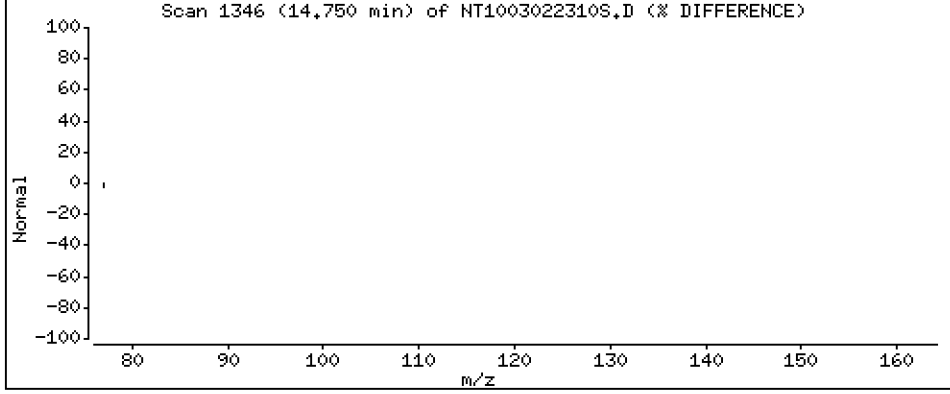
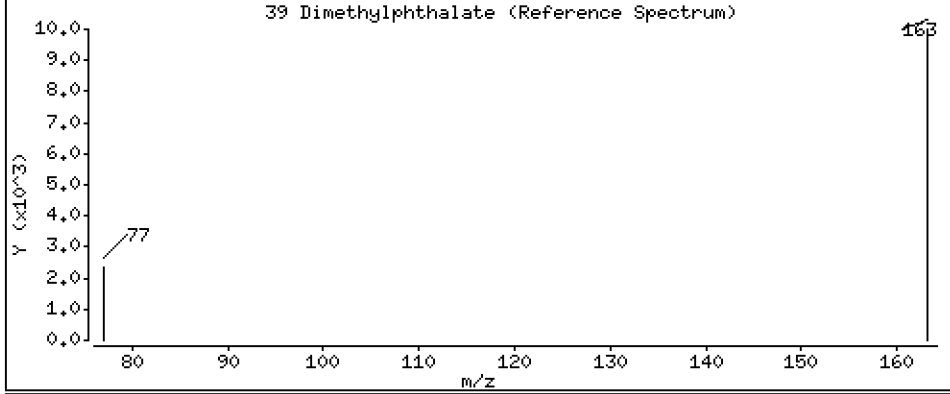
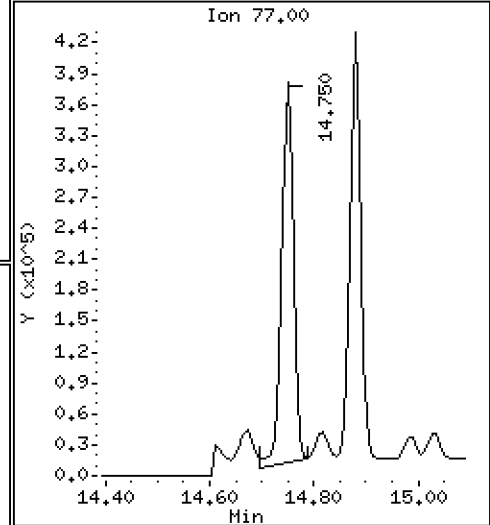
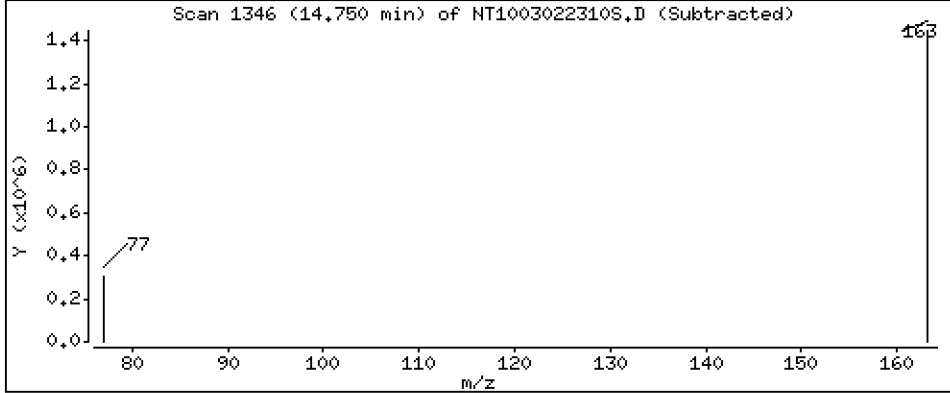
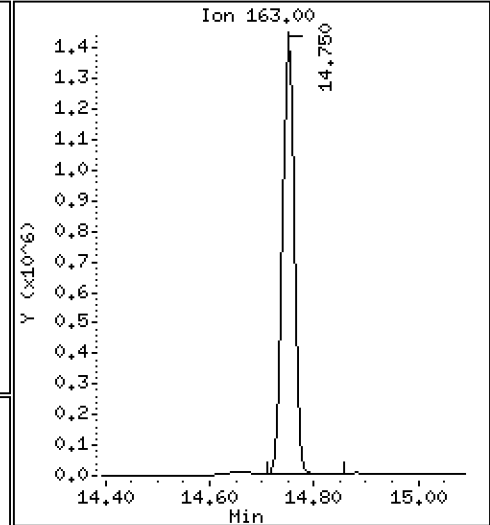
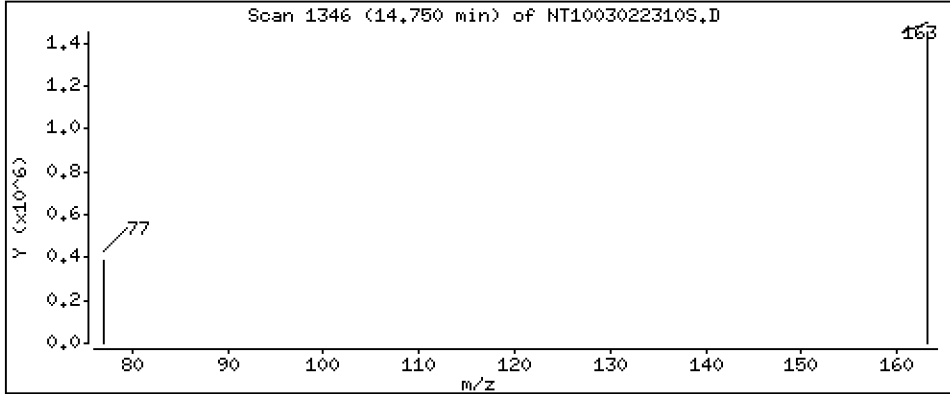
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,158 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

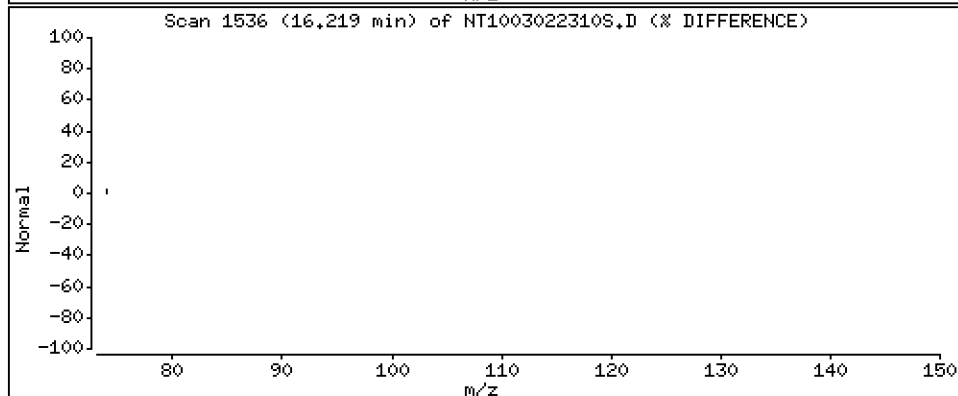
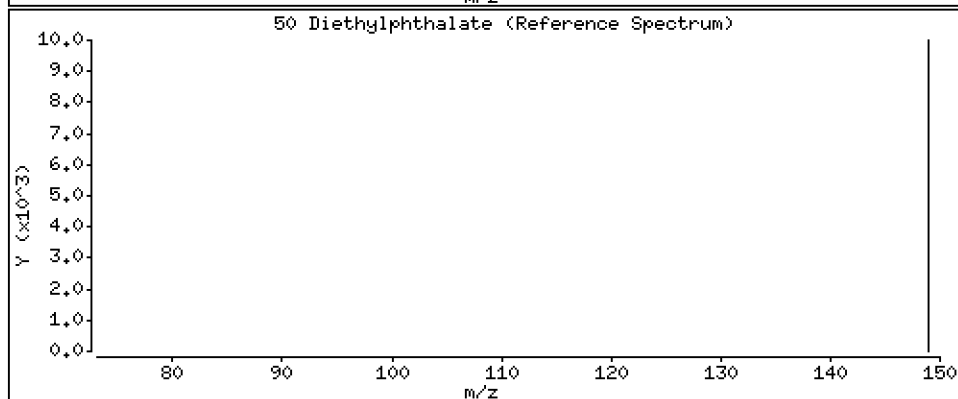
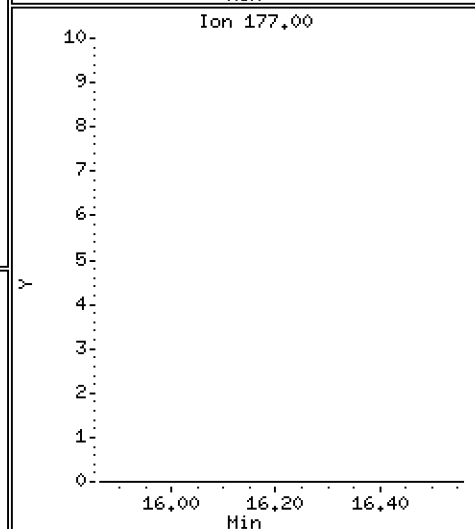
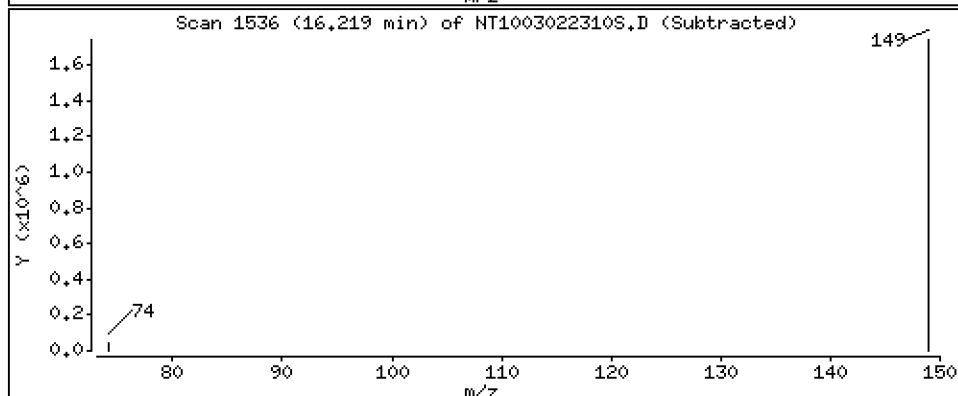
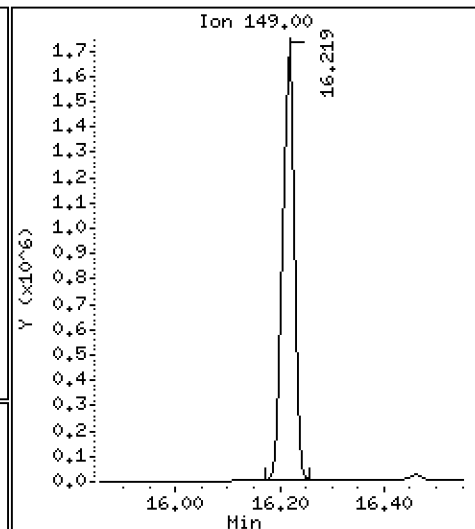
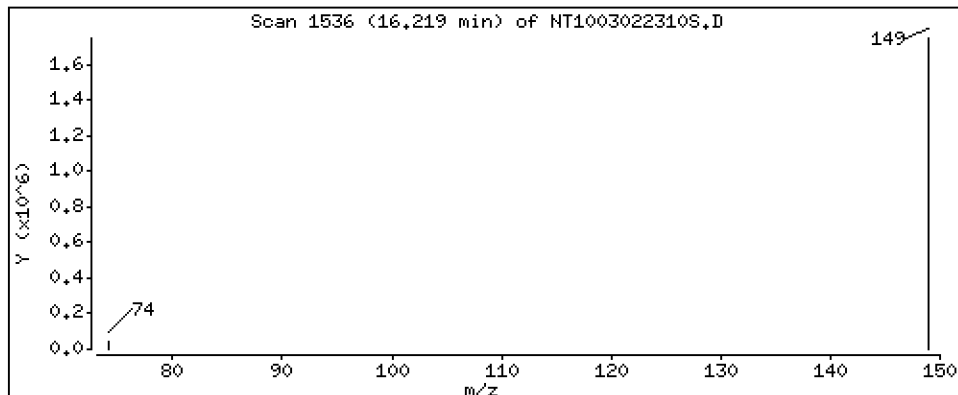
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 6,664 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

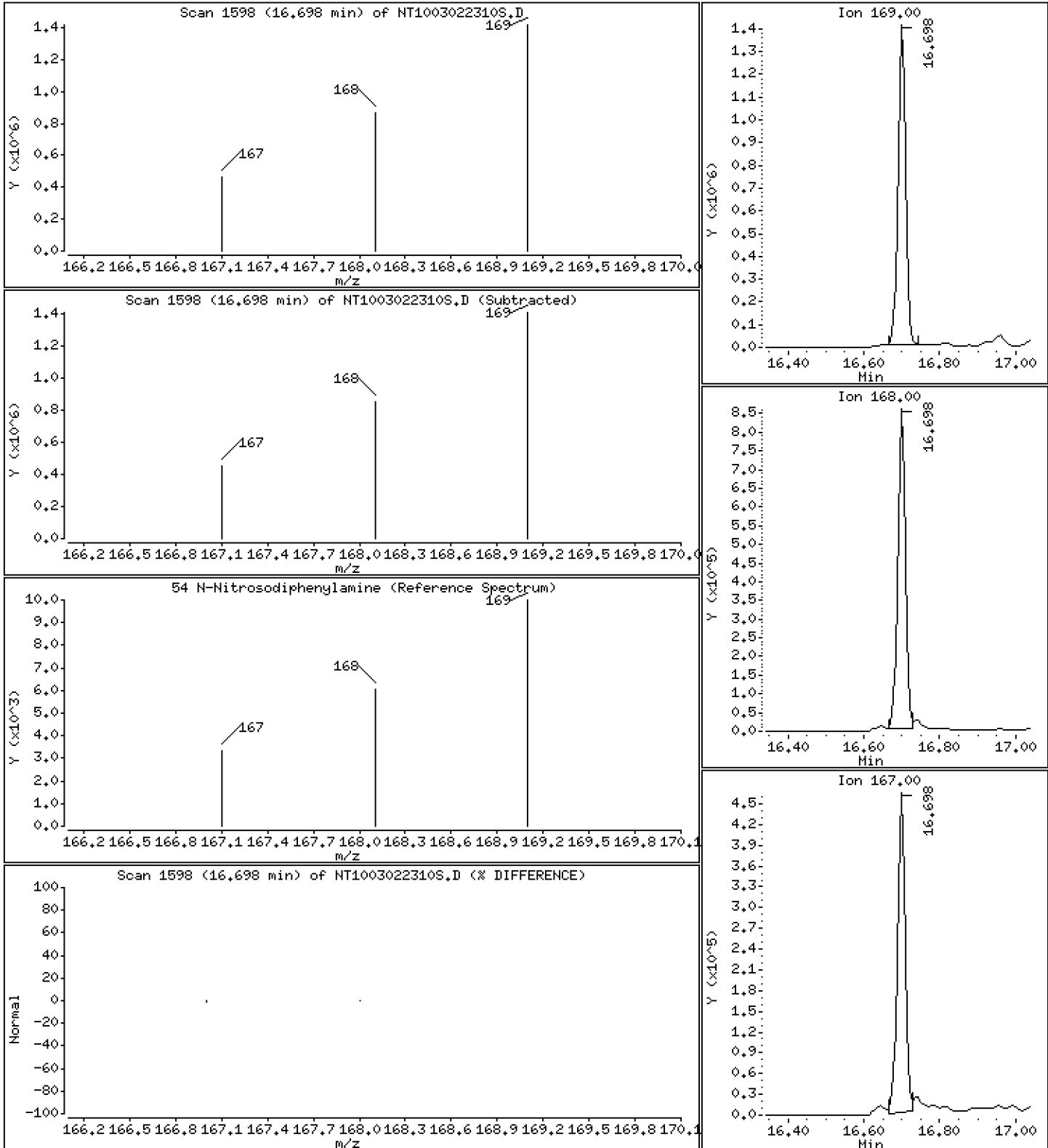
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 4,209 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

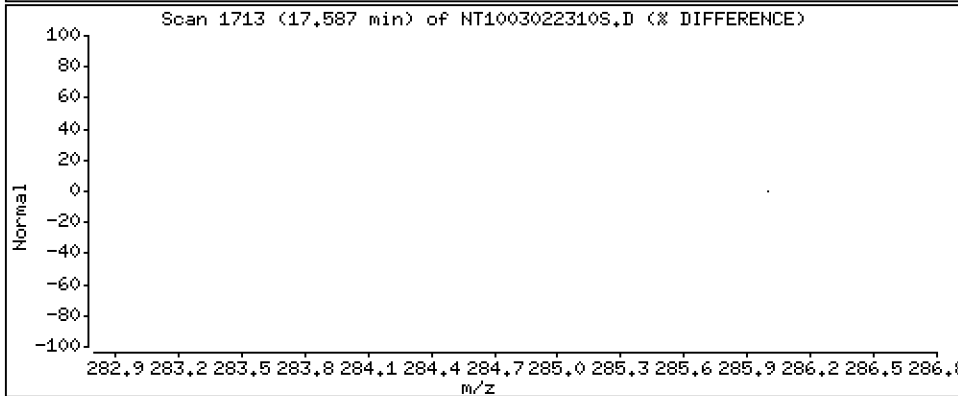
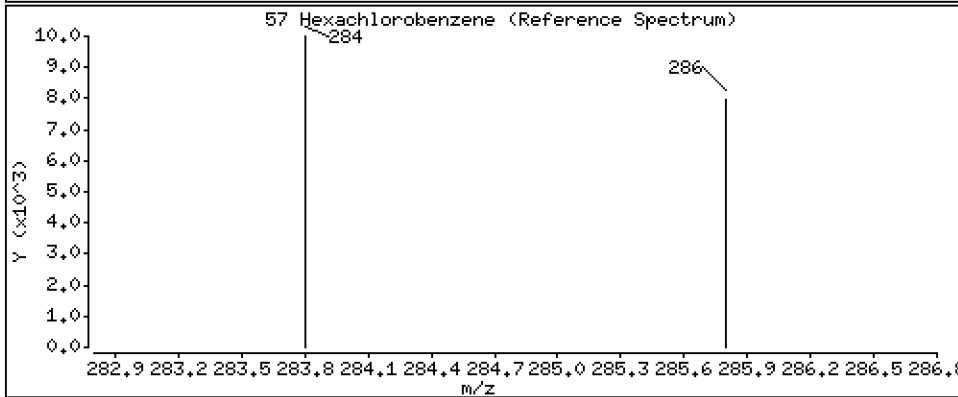
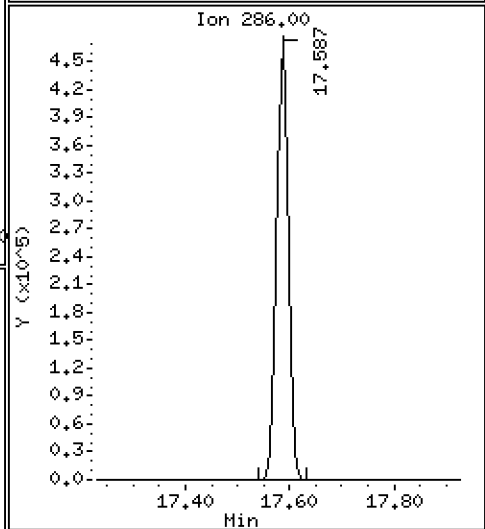
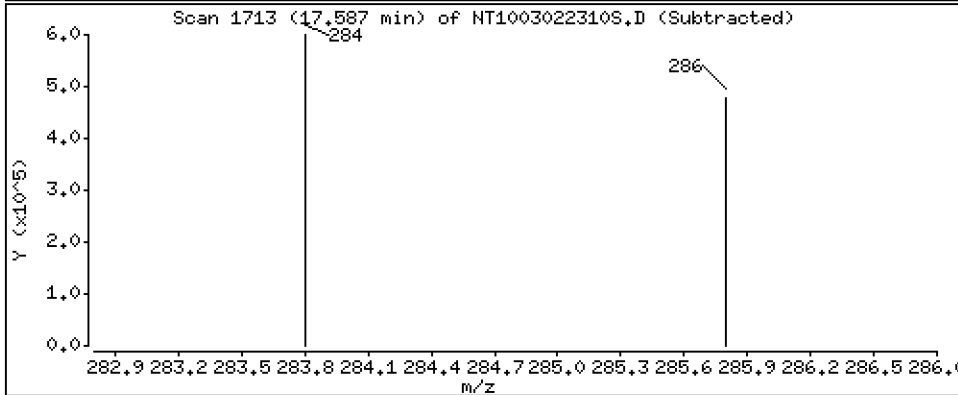
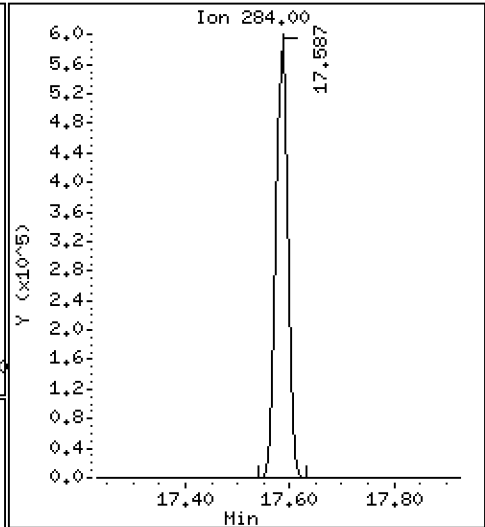
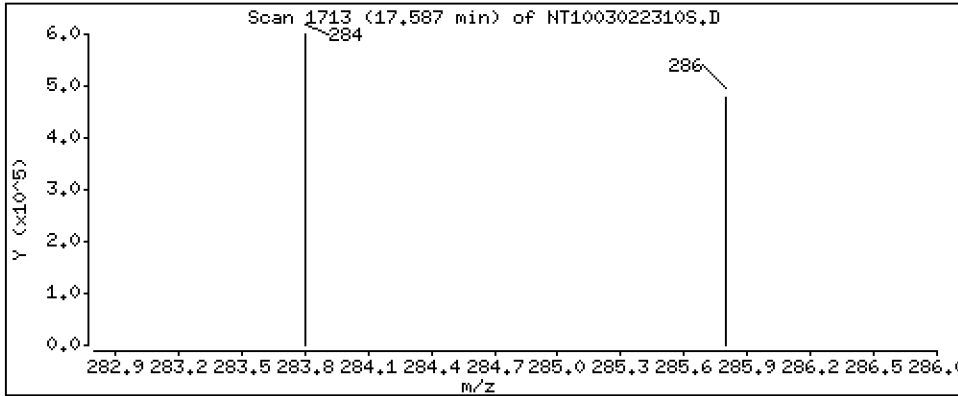
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 4,007 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

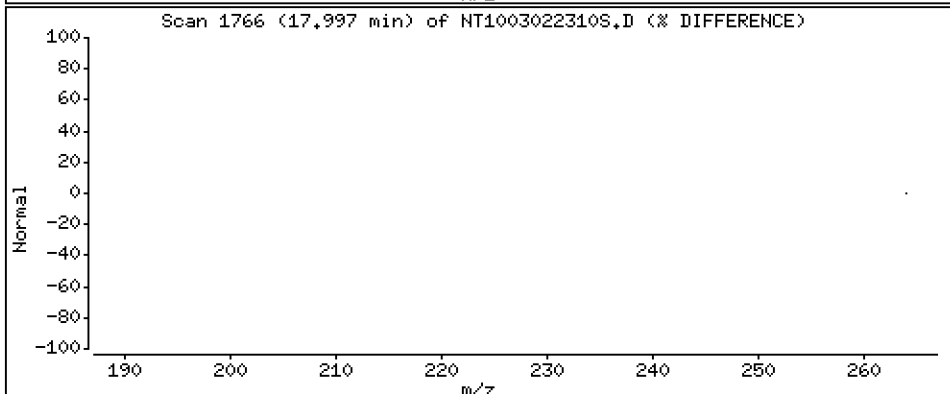
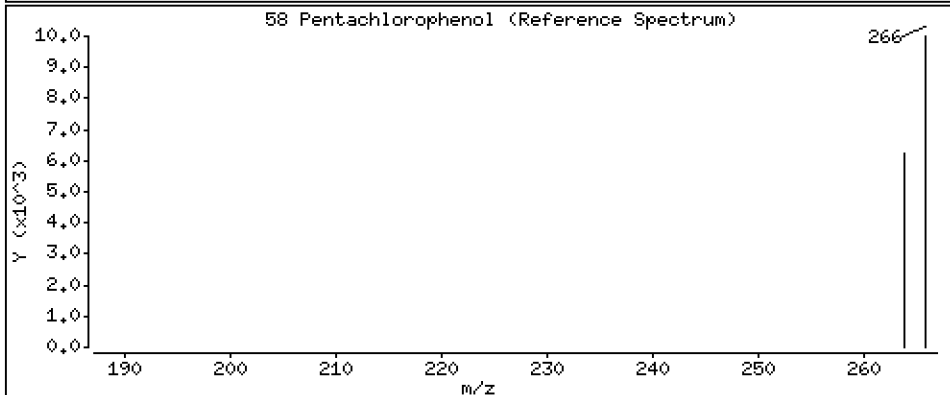
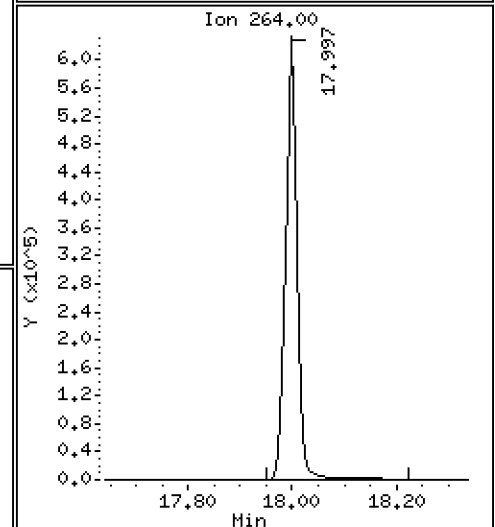
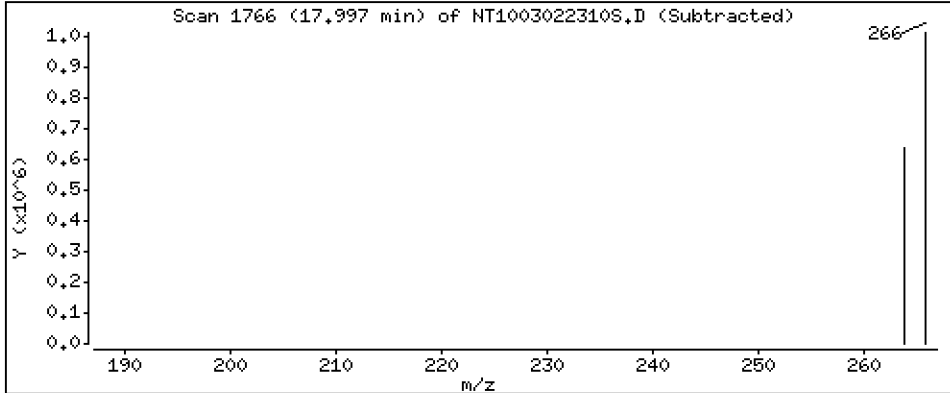
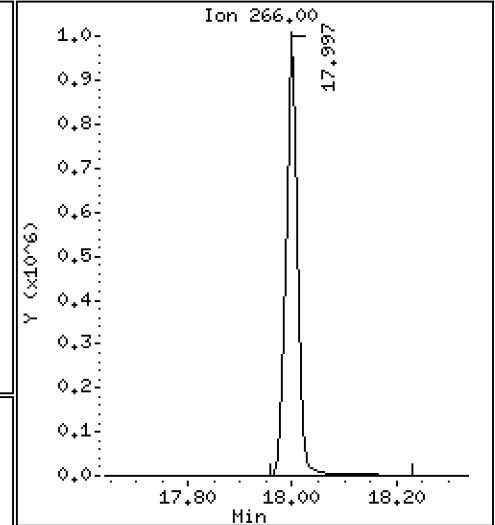
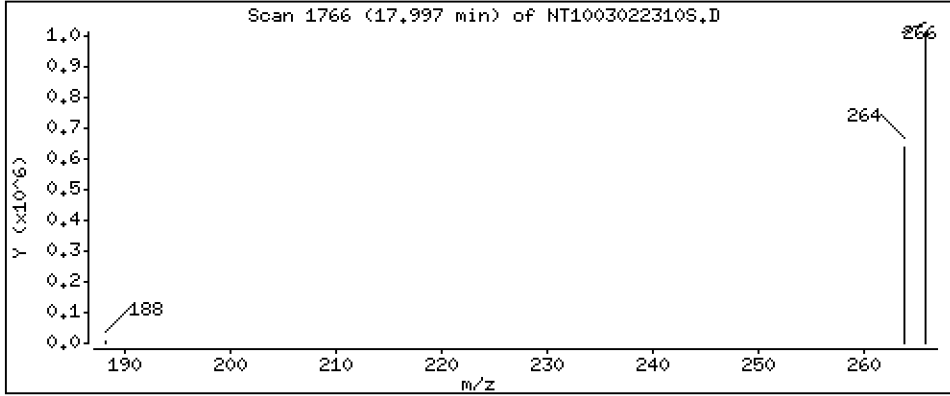
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 13,27 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

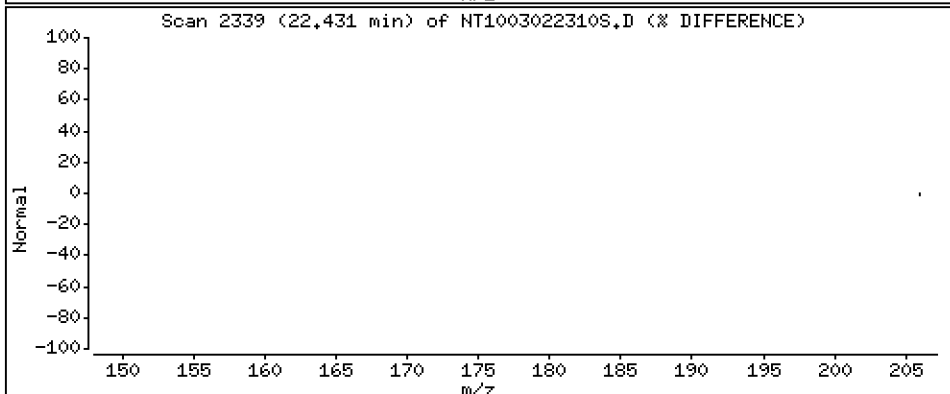
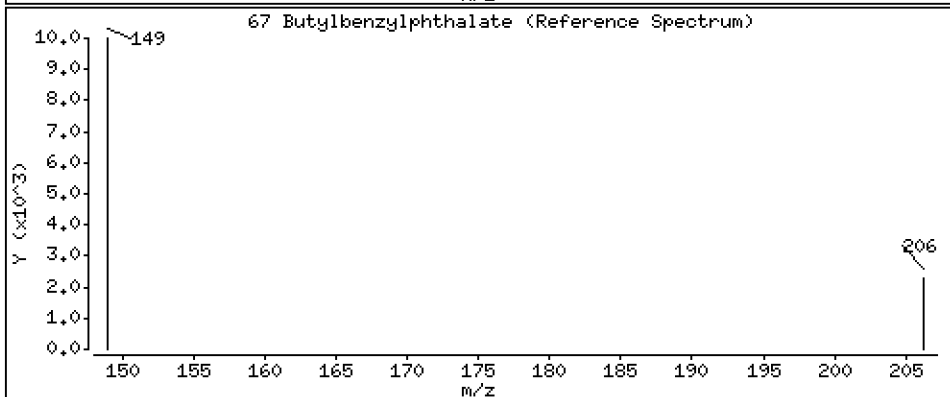
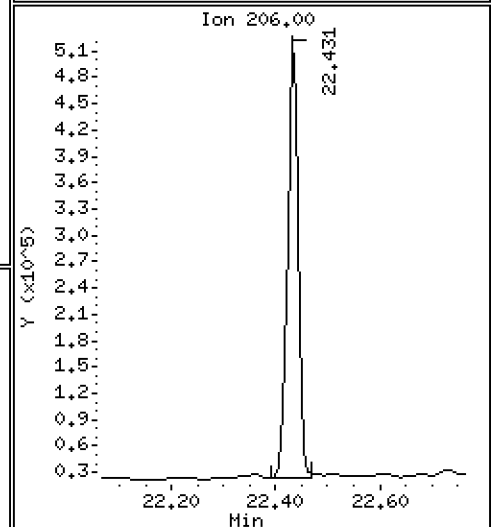
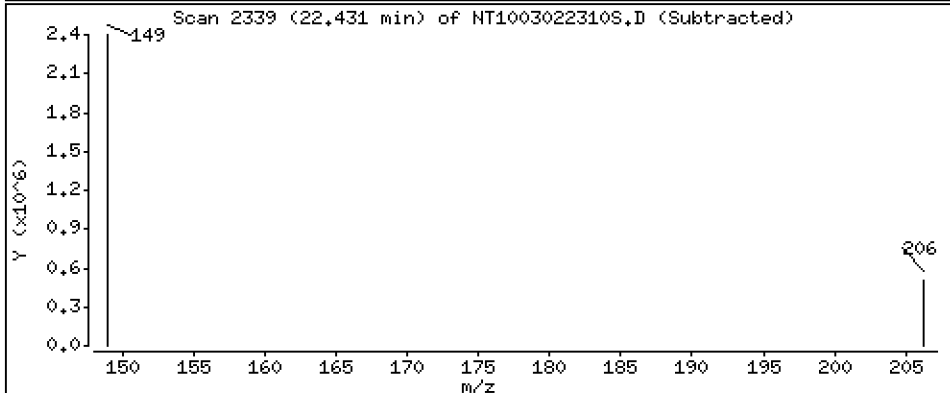
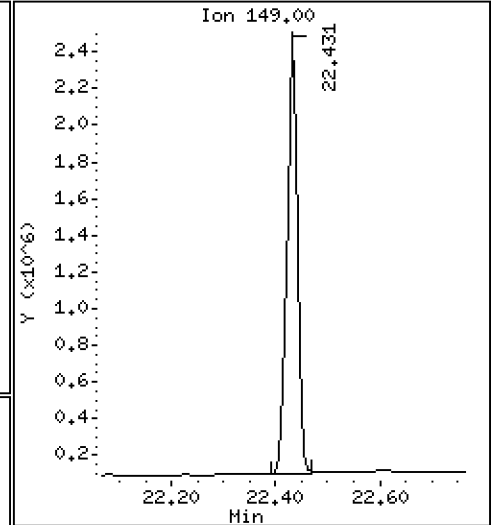
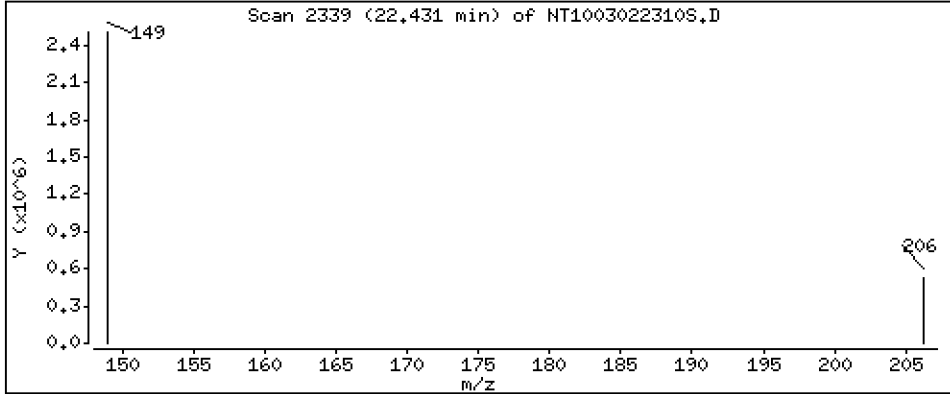
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,838 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

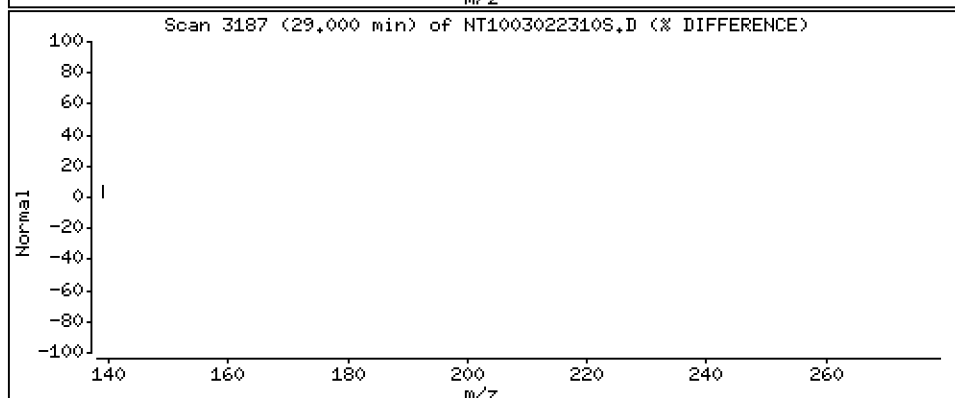
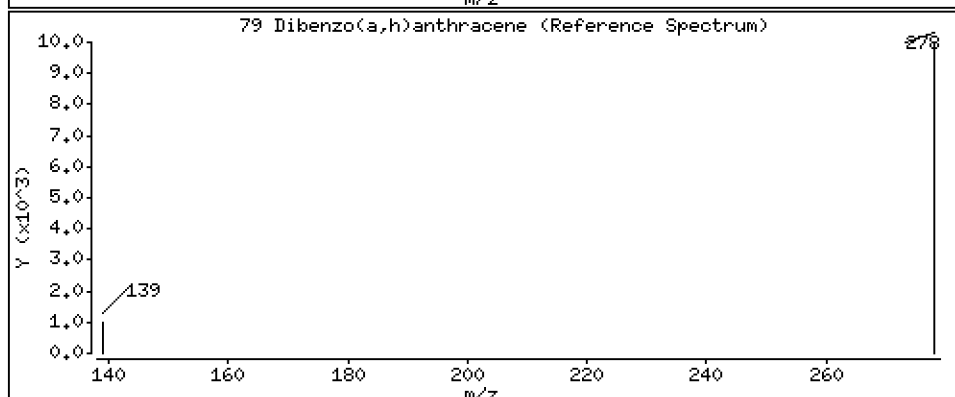
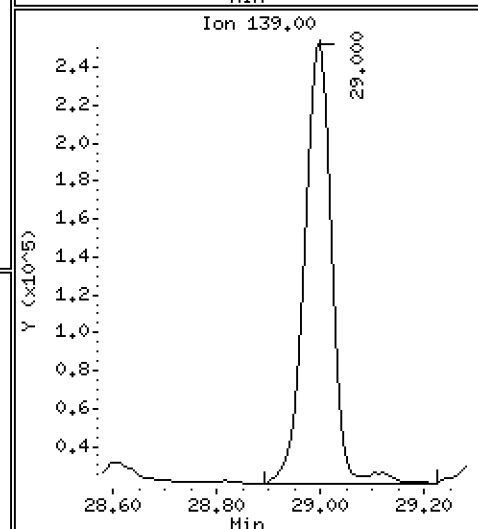
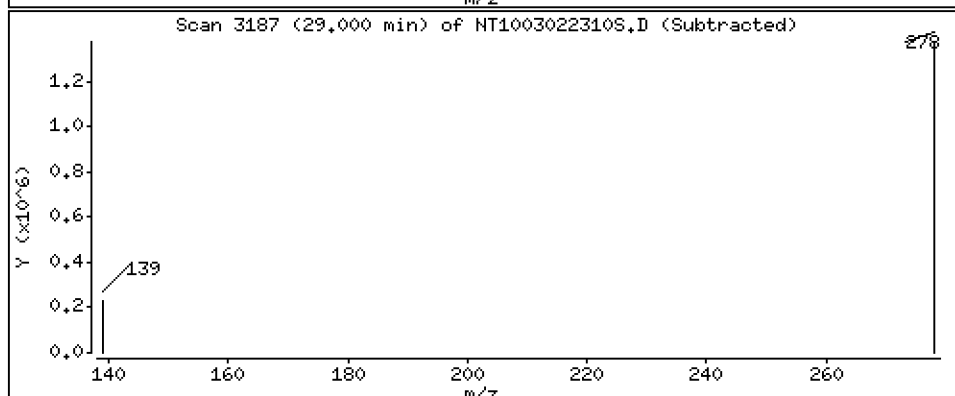
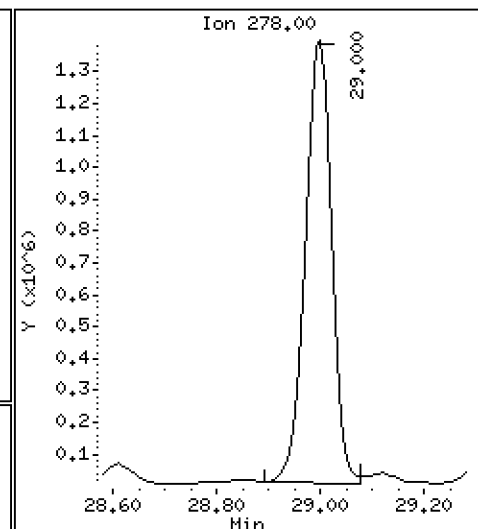
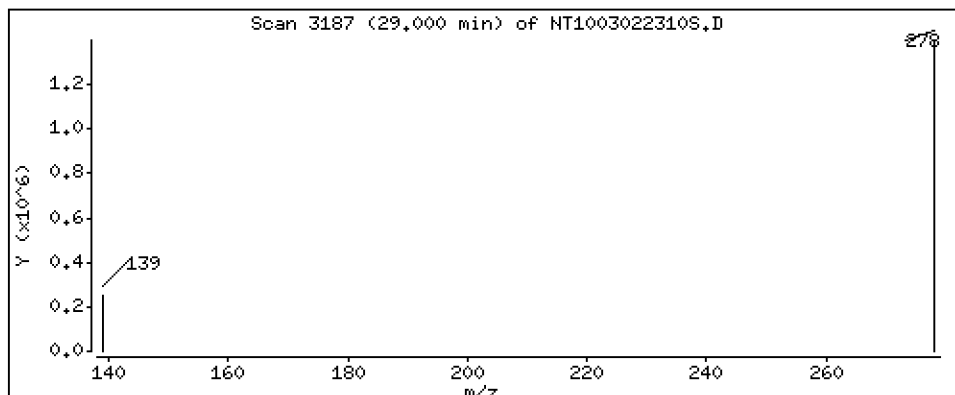
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 5,293 ug/L



Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

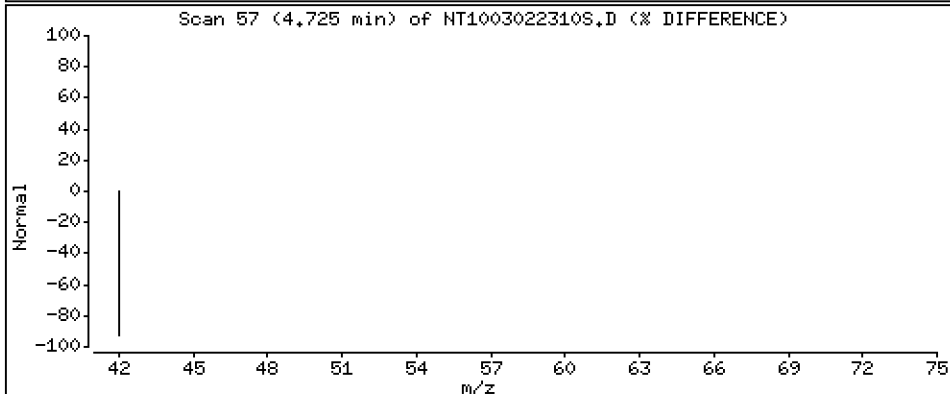
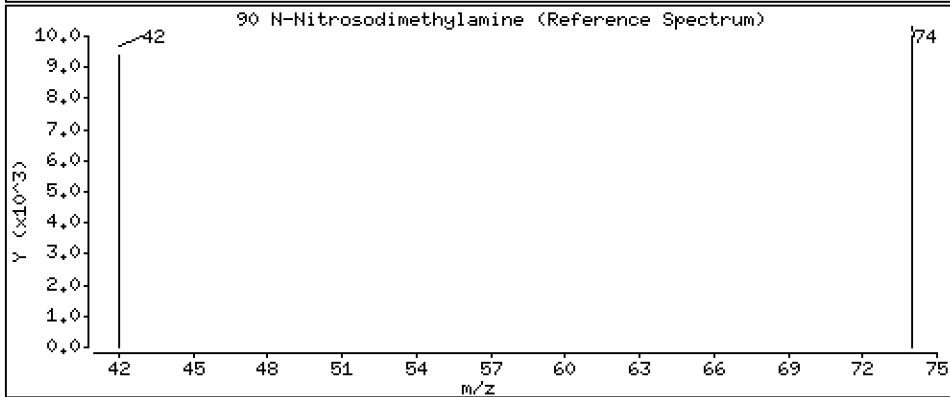
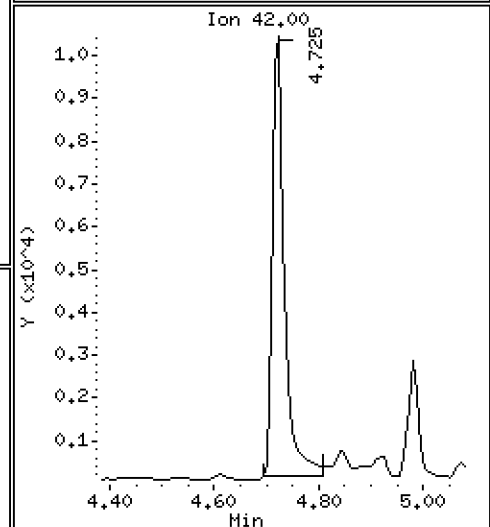
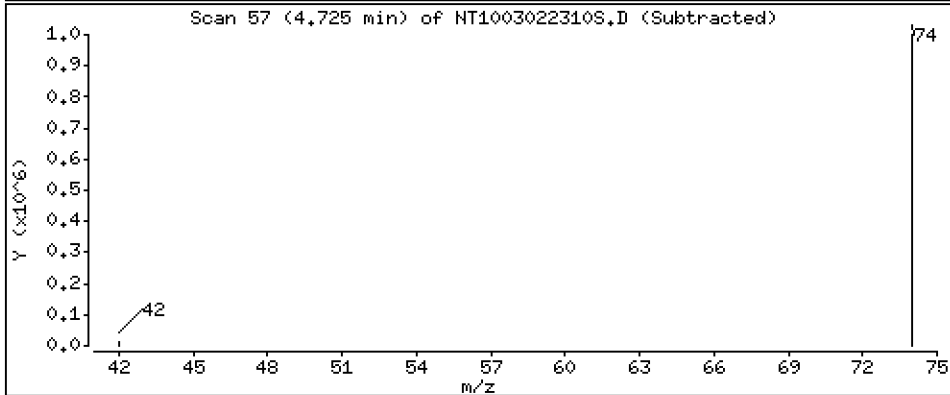
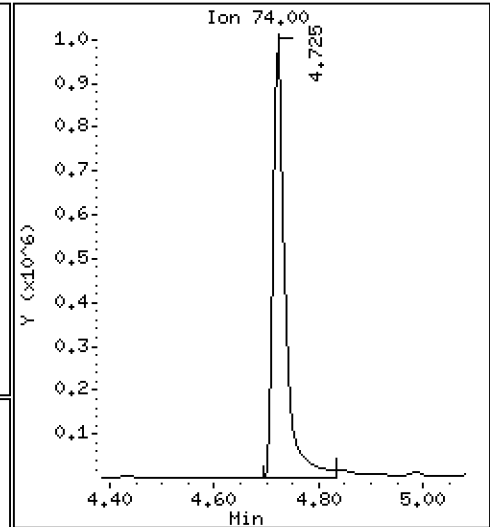
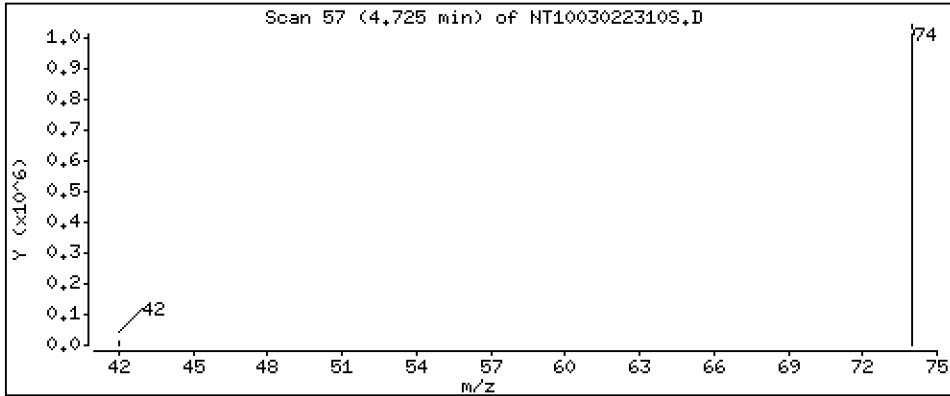
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 14.17 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D
 Lab Smp Id: BLA0624-MSD1
 Inj Date : 02-MAR-2023 20:06 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : BLA0624-MSD1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902 (0.746)		1303007	6.78798	6.788 (R)
3 Phenol	94		8.525	8.517 (0.921)		3620864	11.9635	11.96
7 1,3-Dichlorobenzene	146		9.143	9.143 (0.988)		999770	4.01213	4.012
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.251 (1.000)		672370	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.282 (1.003)		1326016	5.47323	5.473
11 Benzyl alcohol	79		9.477	9.476 (1.024)		864065	5.12515	5.125
12 1,2-Dichlorobenzene	146		9.562	9.562 (1.034)		982974	4.22119	4.221
13 2-Methylphenol	108		9.655	9.655 (1.044)		823389	4.64786	4.648
15 4-Methylphenol	108		9.950	9.942 (1.076)		987540	5.24932	5.249
16 N-Nitroso-di-n-propylamine	70		9.982	9.981 (1.079)		706552	5.48803	5.488
22 2,4-Dimethylphenol	107		11.006	10.997 (0.939)		3078888	14.0520	14.05
24 Benzoic acid	105		11.159	11.074 (0.952)		2224613	17.4589	17.46
26 1,2,4-Trichlorobenzene	180		11.600	11.600 (0.989)		840738	4.71541	4.715
* 27 Naphthalene-d8	136		11.724	11.723 (1.000)		2477168	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994 (1.023)		527257	4.16719	4.167
39 Dimethylphthalate	163		14.749	14.741 (0.963)		2110389	5.15817	5.158
* 42 Acenaphthene-d10	162		15.322	15.314 (1.000)		1288517	4.00000	
50 Diethylphthalate	149		16.218	16.203 (1.059)		2571336	6.66444	6.664
54 N-Nitrosodiphenylamine	169		16.698	16.690 (0.907)		1987335	4.20939	4.209
57 Hexachlorobenzene	284		17.586	17.578 (0.955)		885306	4.00690	4.007

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.996	17.988	(0.977)	1516520	13.2670	13.27
* 59 Phenanthrene-d10	188	18.414	18.406	(1.000)	2917258	4.00000	
\$ 66 Terphenyl-d14	244	21.548	21.532	(0.919)	1626926	4.94335	4.943(R)
67 Butylbenzylphthalate	149	22.430	22.414	(0.957)	3266796	4.83792	4.838
* 69 Chrysene-d12	240	23.445	23.421	(1.000)	4069829	4.00000	
* 77 Perylene-d12	264	26.147	26.115	(1.000)	3624176	4.00000	
79 Dibenzo(a,h)anthracene	278	29.000	28.929	(1.109)	4833039	5.29265	5.293
90 N-Nitrosodimethylamine	74	4.725	4.732	(0.511)	1610808	14.1737	14.17

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022310S.D
 Lab Smp Id: BLA0624-MSD1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	672370	36.27
27 Naphthalene-d8	1779056	889528	3558112	2477168	39.24
42 Acenaphthene-d10	954569	477285	1909138	1288517	34.98
59 Phenanthrene-d10	1596290	798145	3192580	2917258	82.75
69 Chrysene-d12	1649110	824555	3298220	4069829	146.79
77 Perylene-d12	1901958	950979	3803916	3624176	90.55

<-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.45	0.10
77 Perylene-d12	26.12	25.62	26.62	26.15	0.12

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

REVIEW SUMMARY FOR FILE - NT1003022310S.D

Lab ID: BLA0624-MSD1

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 20:06

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.945	0.0072	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

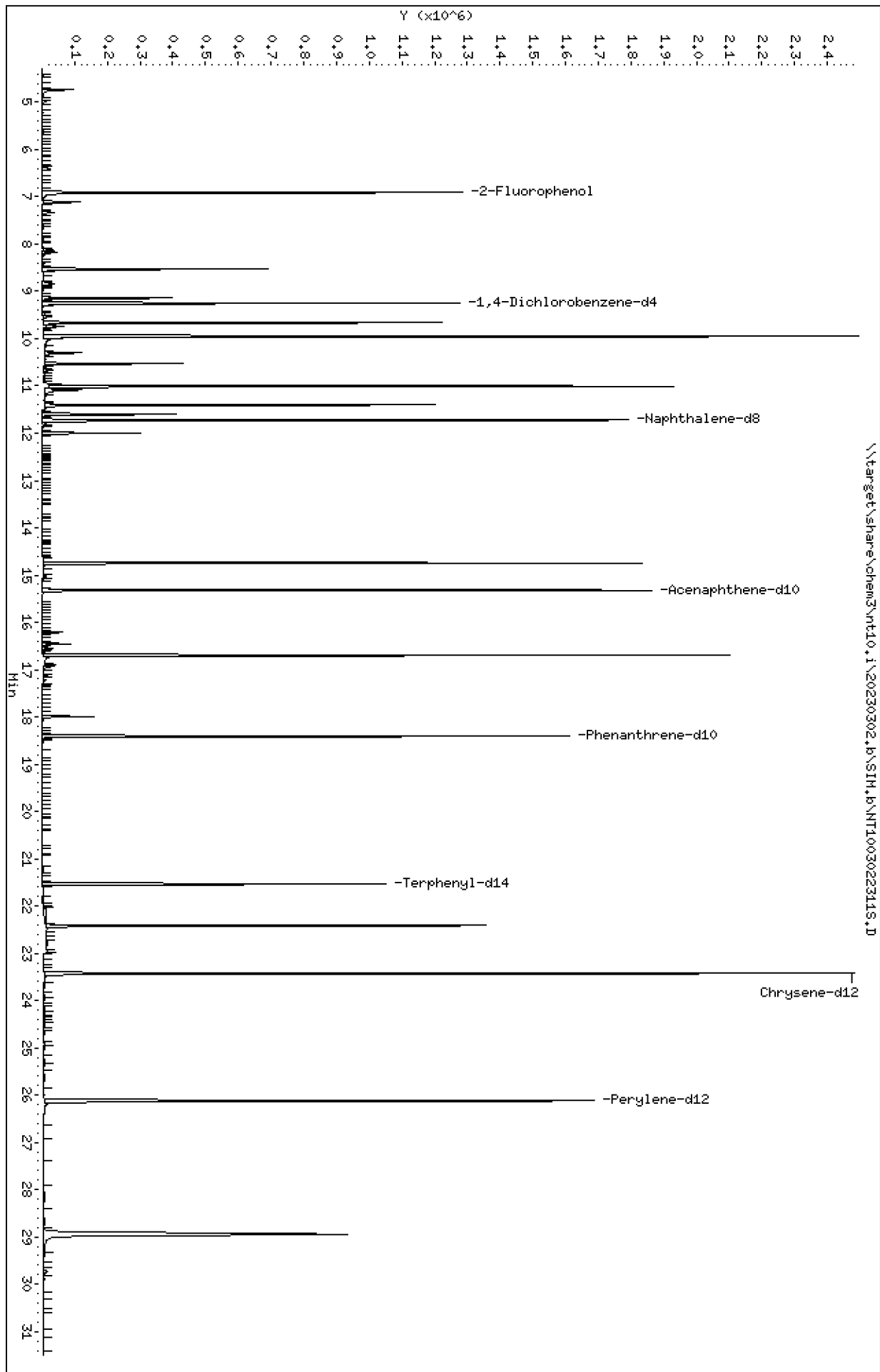
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230302.16\SIM.B\NT10030223115.D
Date: 02-MAR-2023 20:44
Client ID:
Sample Info: BLR0624-SRM1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230302.16\SIM.B\NT10030223115.D



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

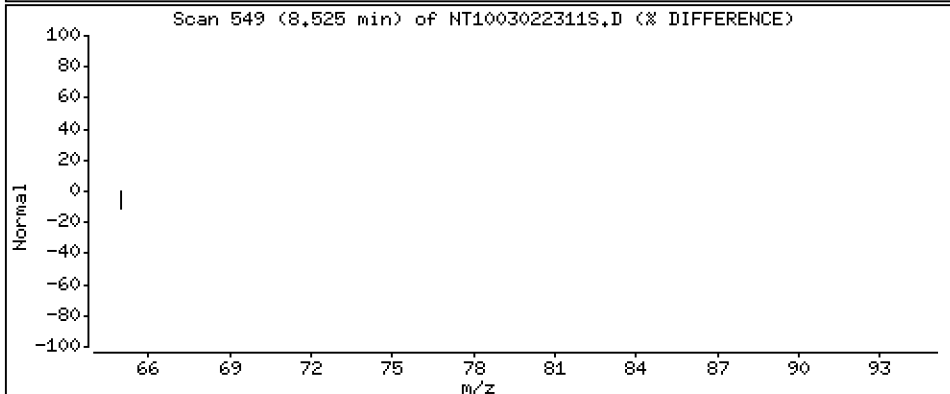
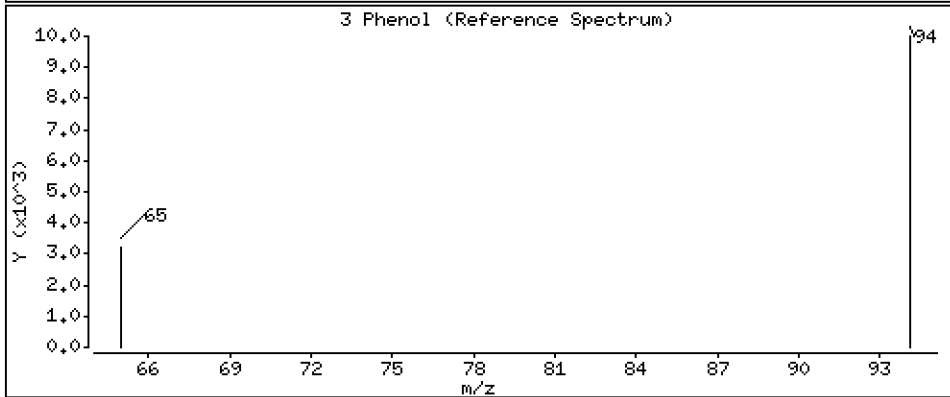
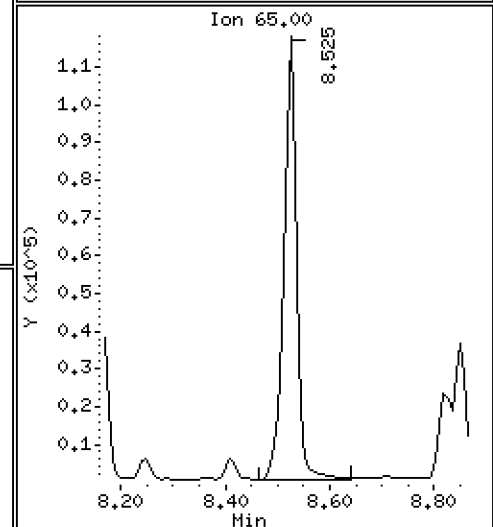
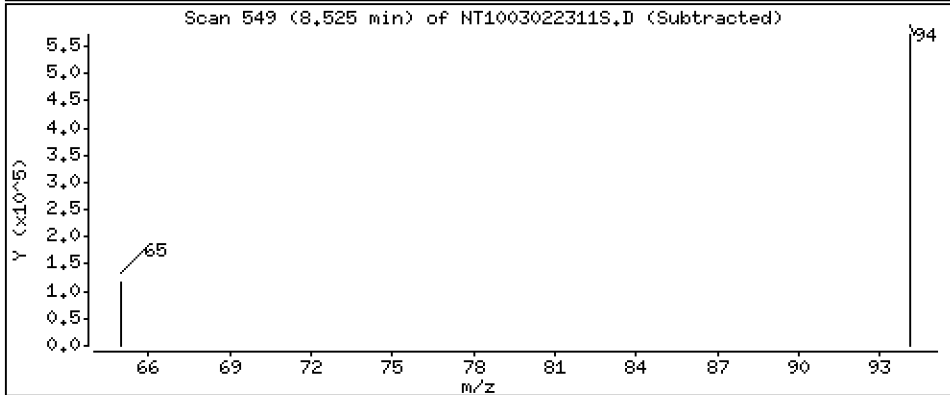
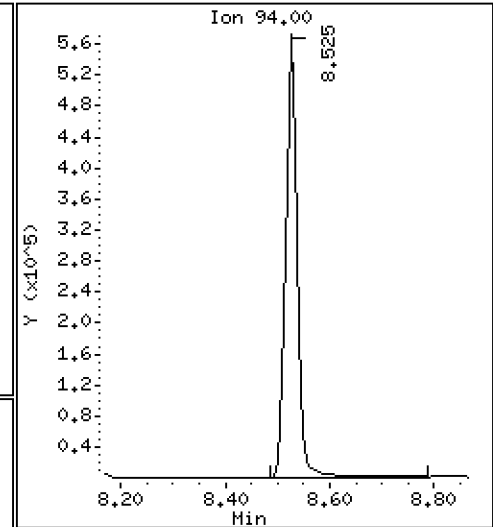
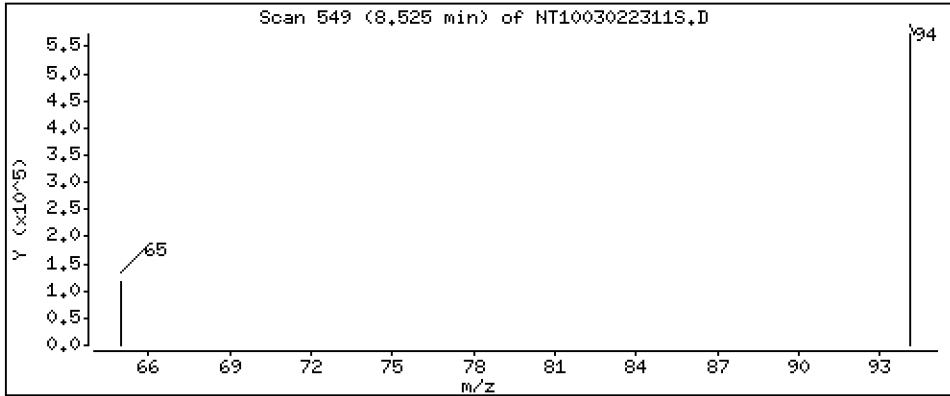
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 2,644 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

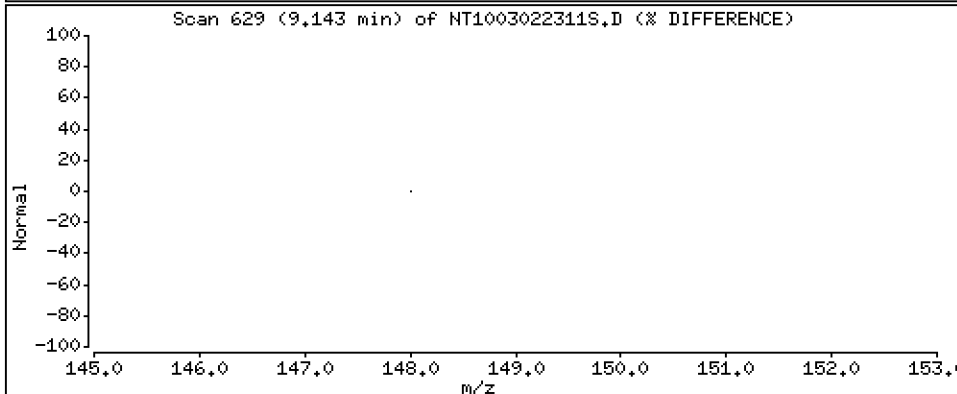
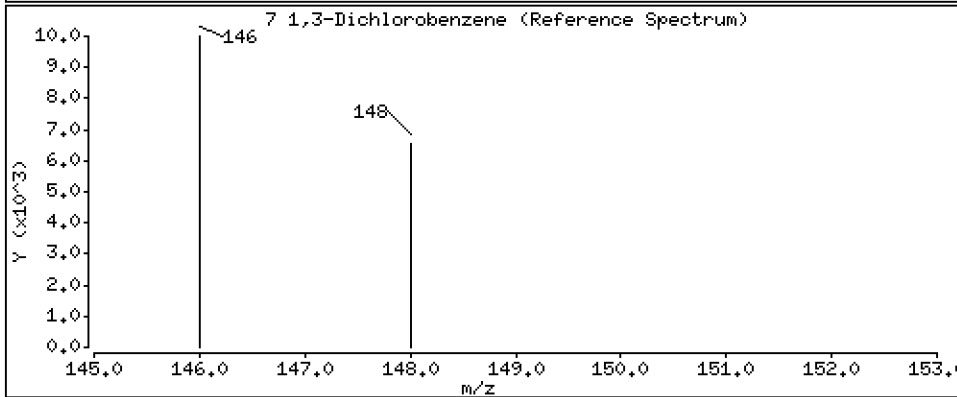
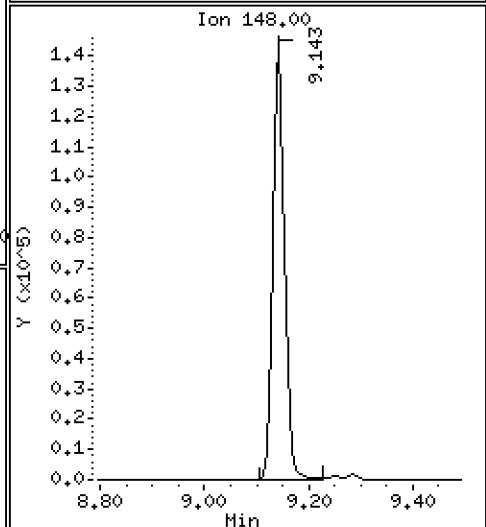
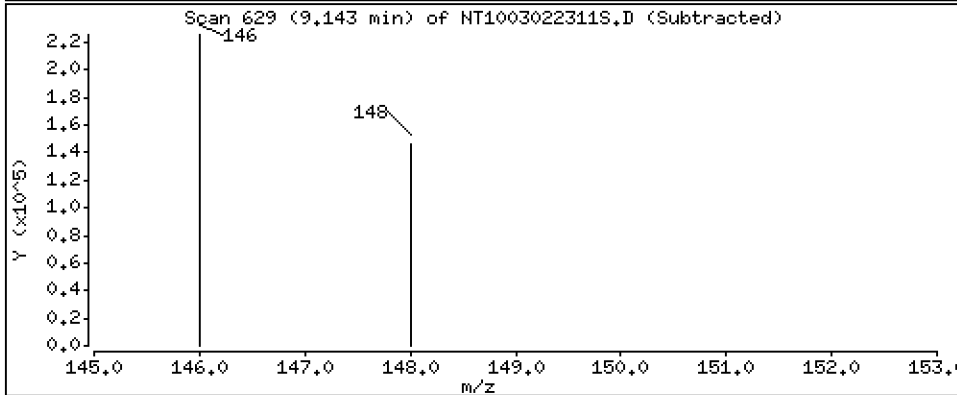
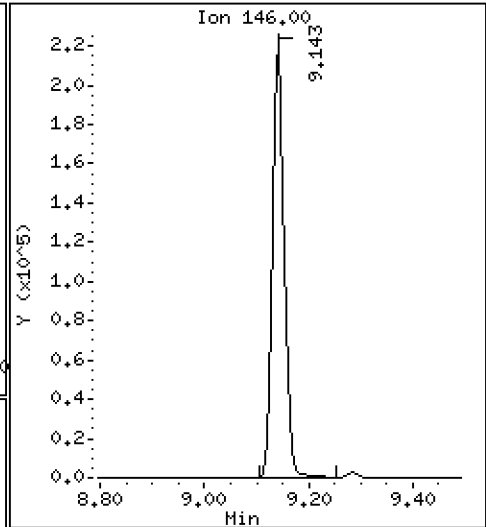
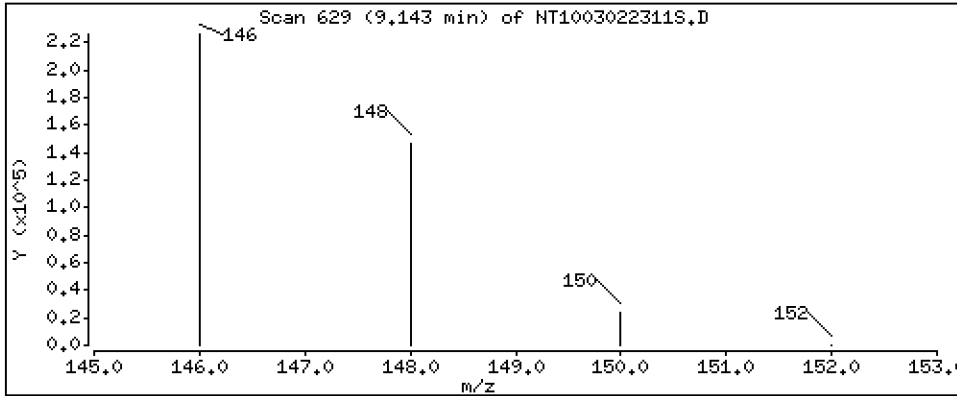
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 1.193 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

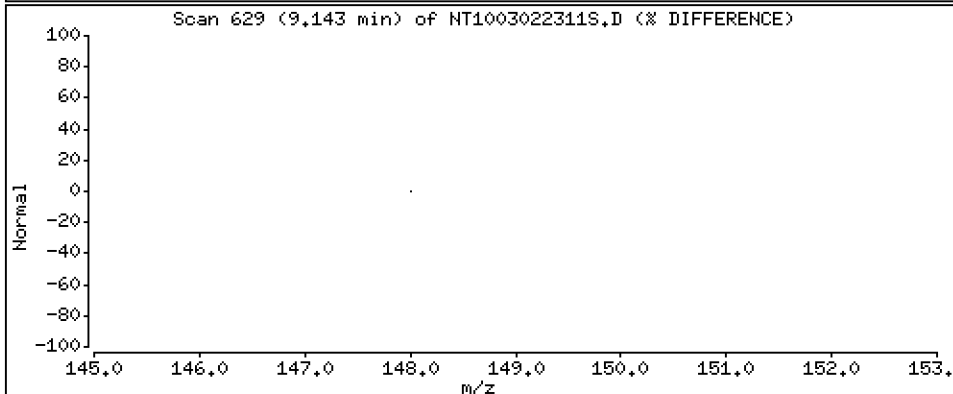
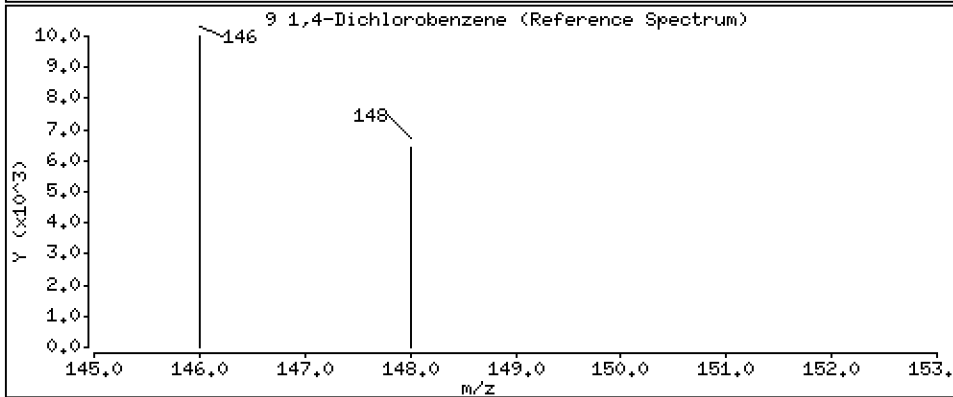
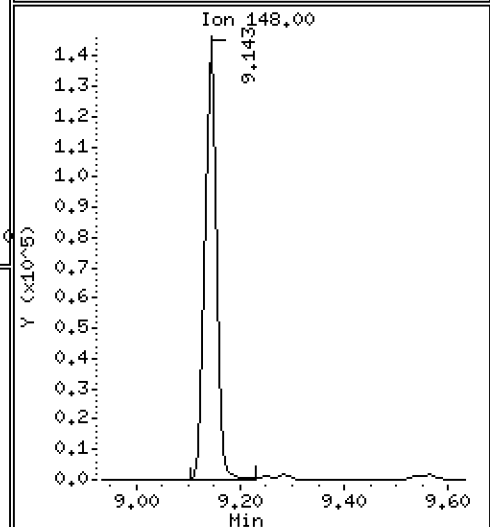
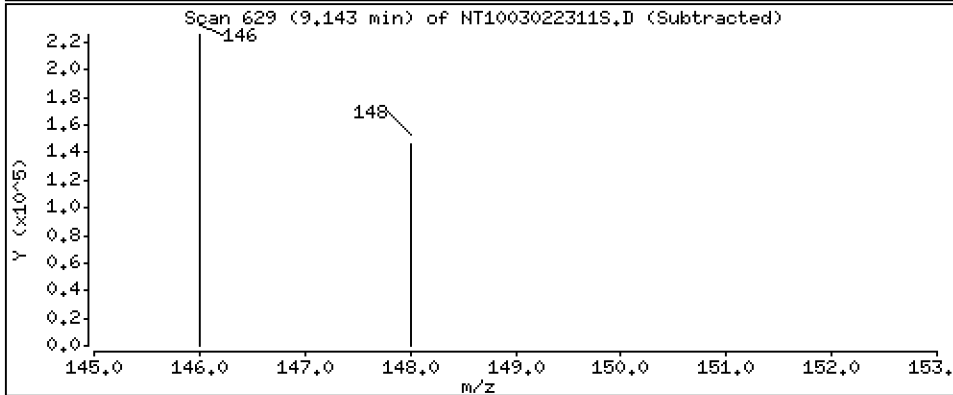
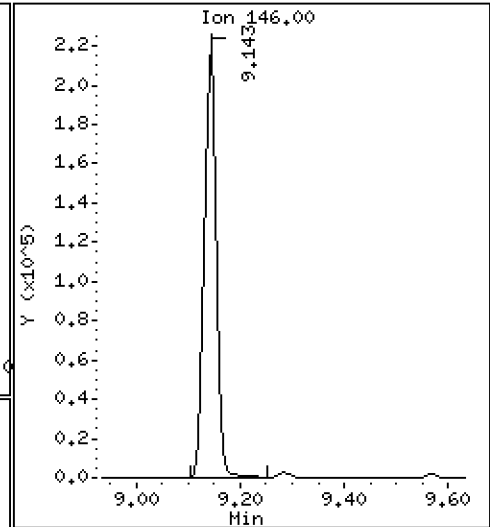
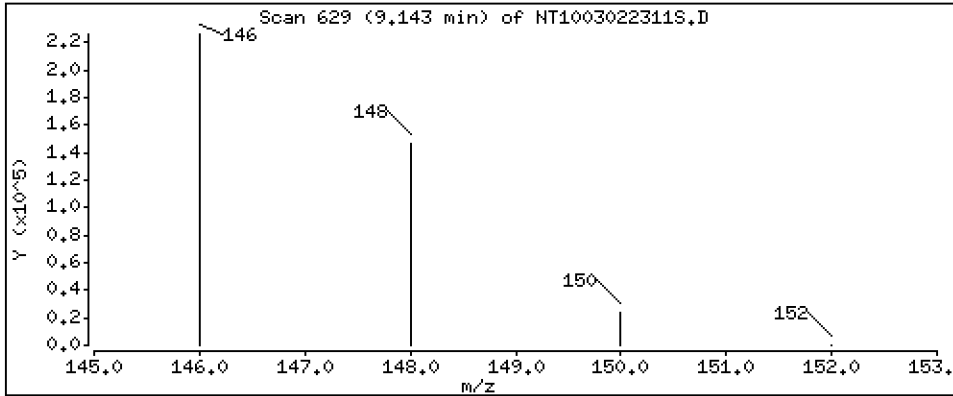
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 1.227 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

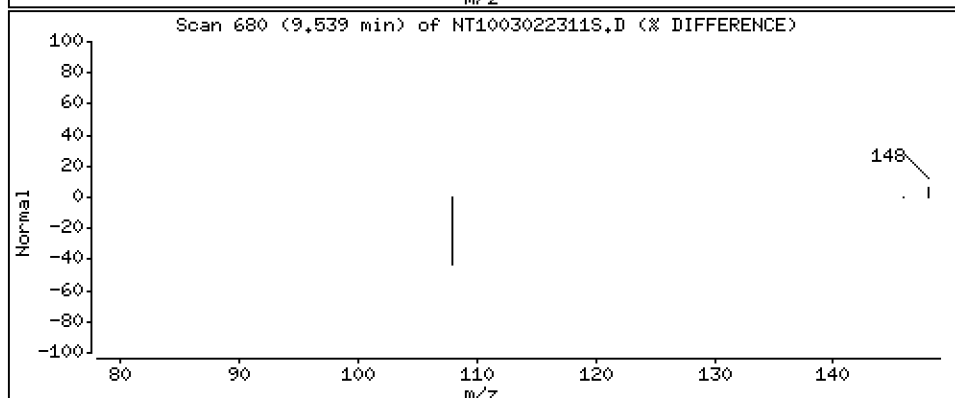
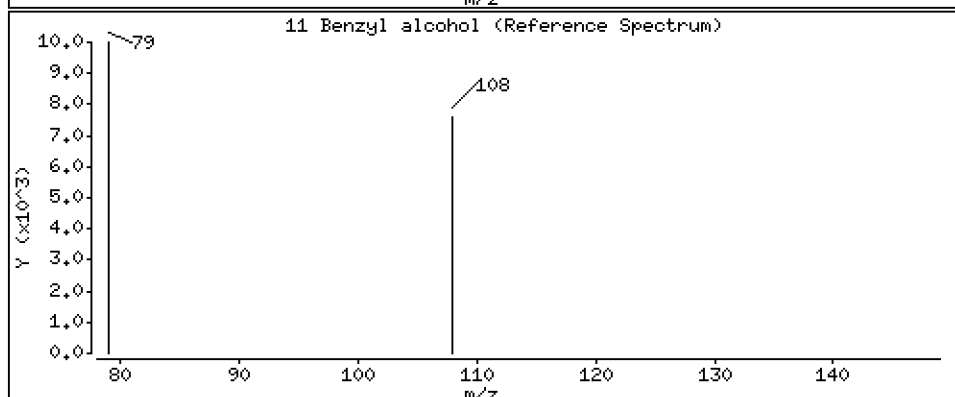
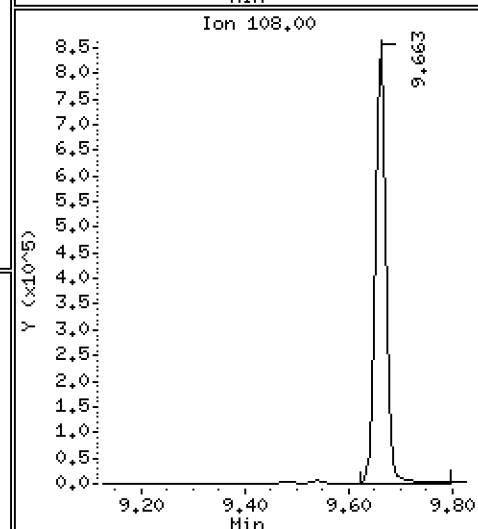
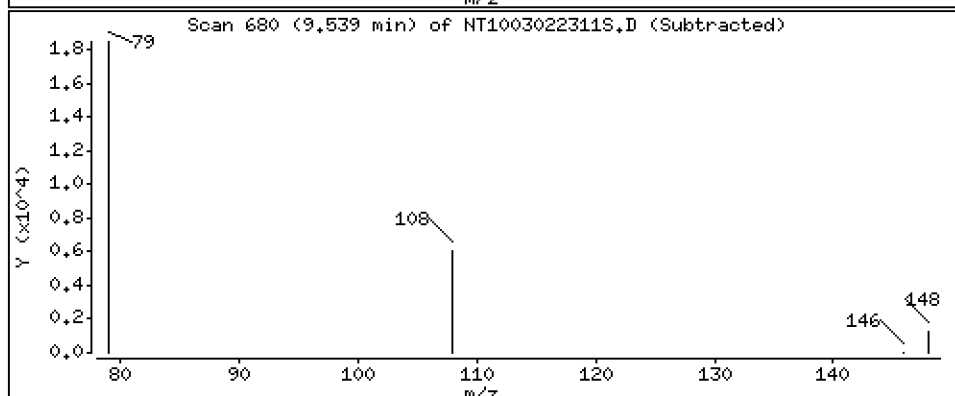
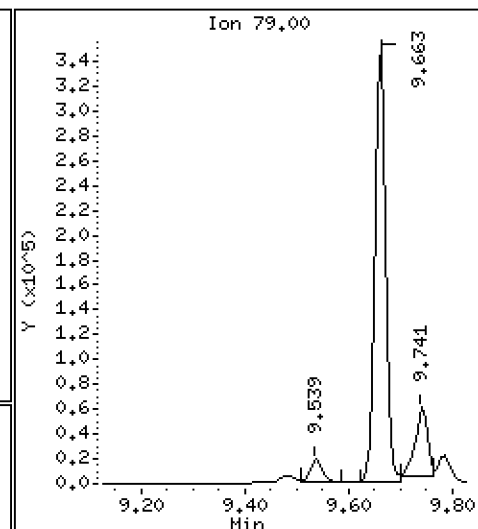
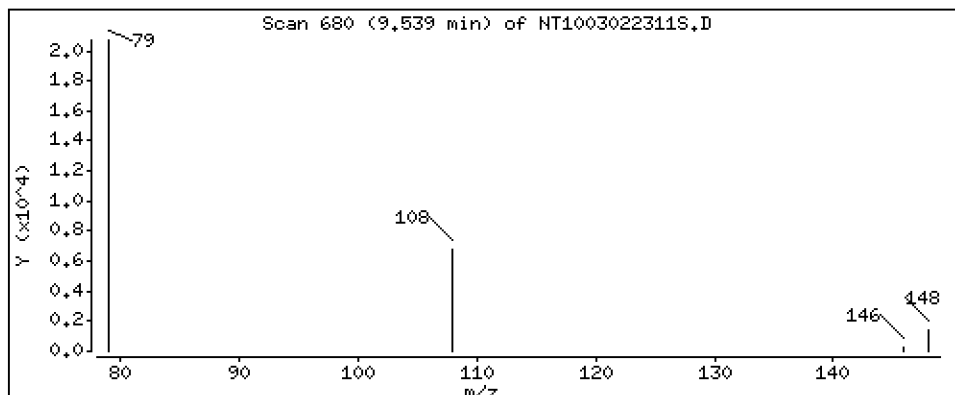
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1750 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

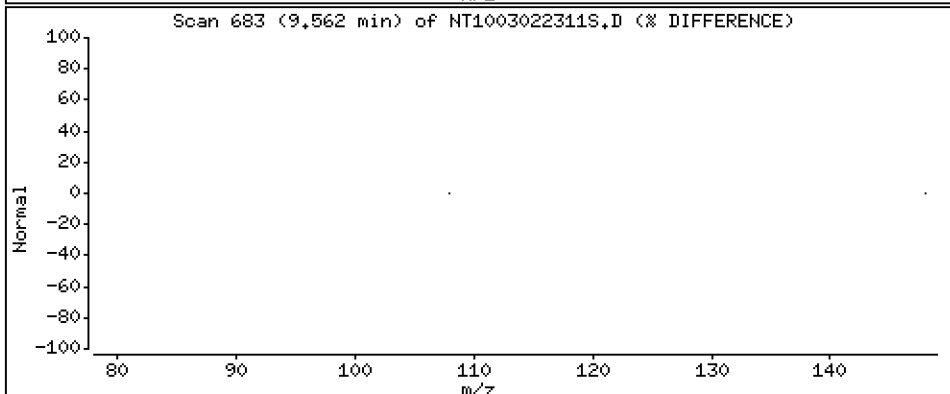
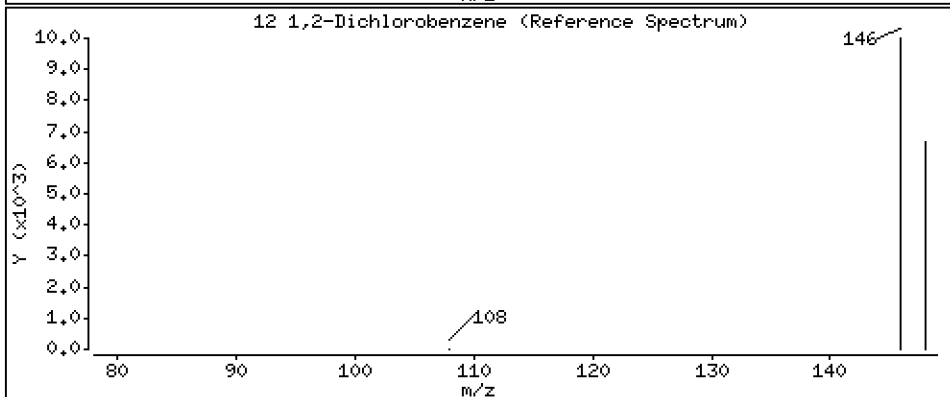
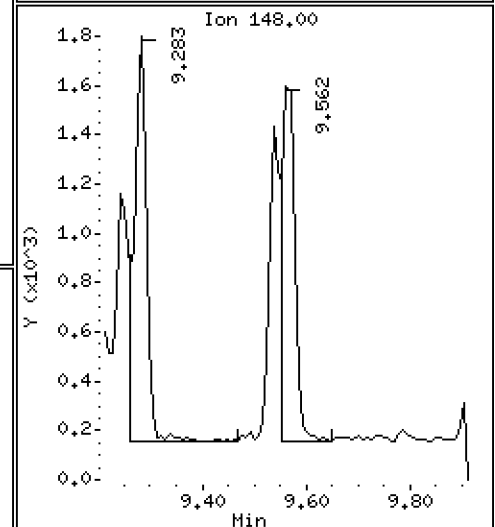
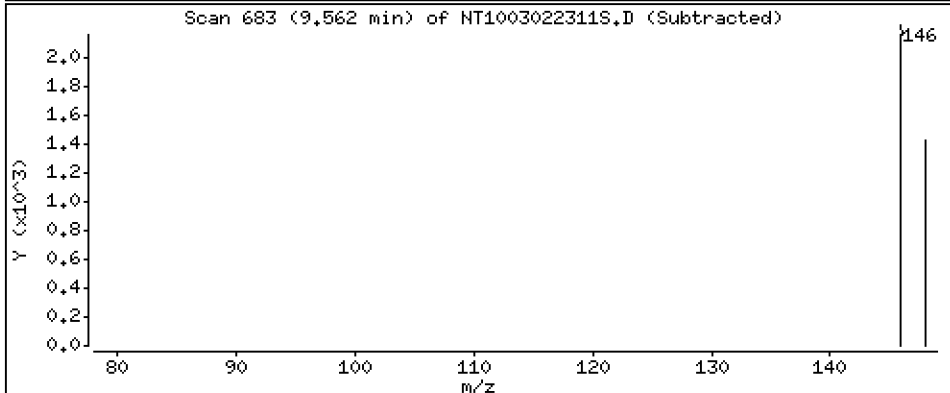
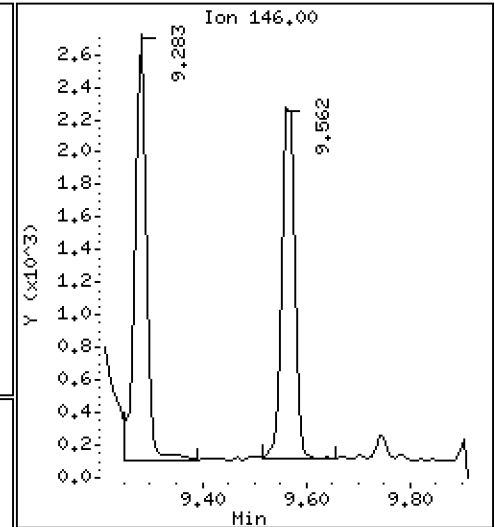
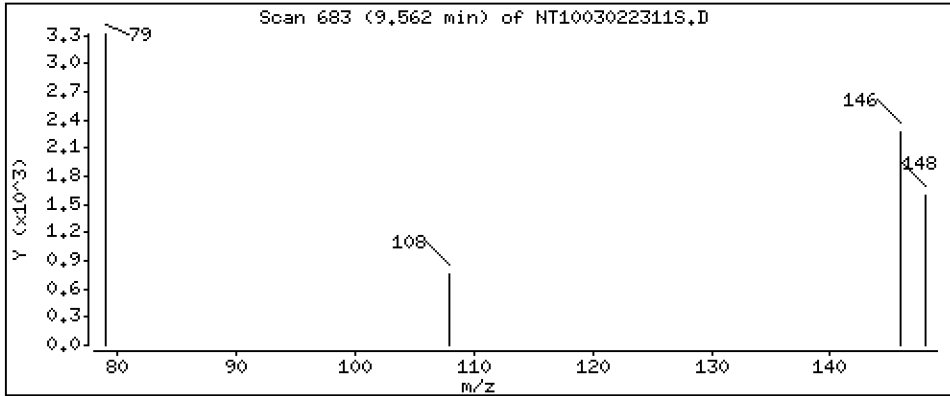
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.01329 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

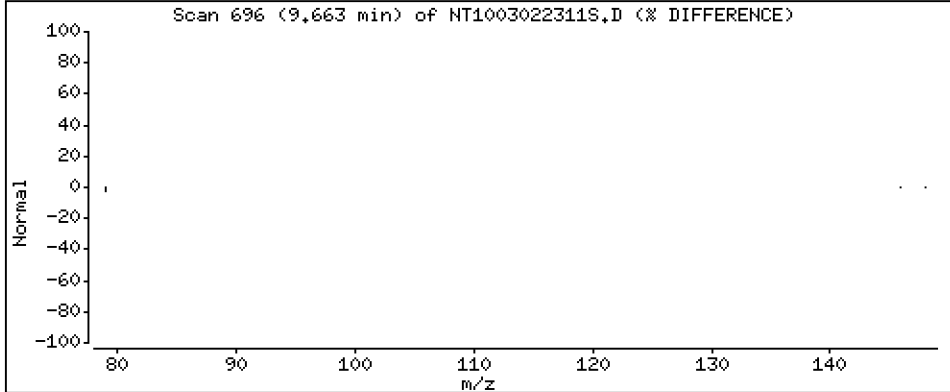
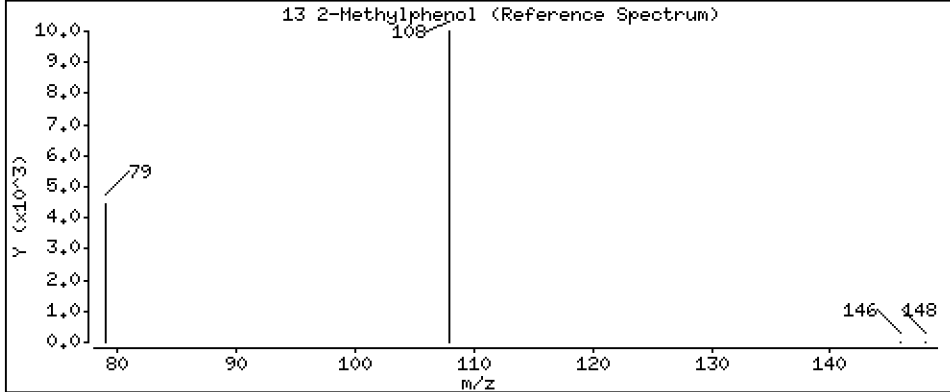
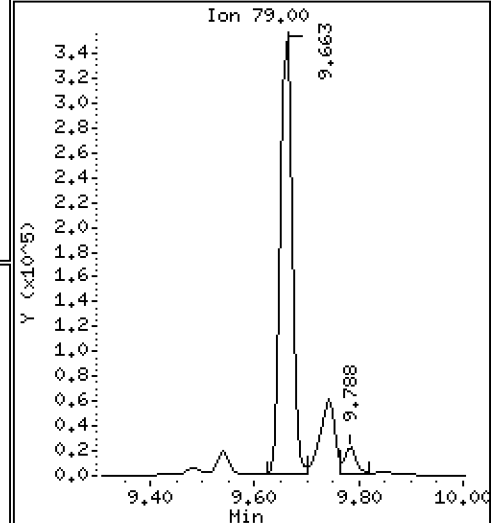
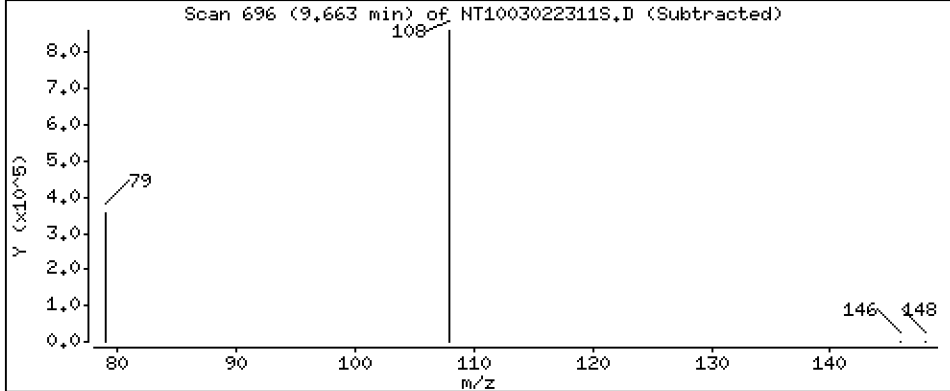
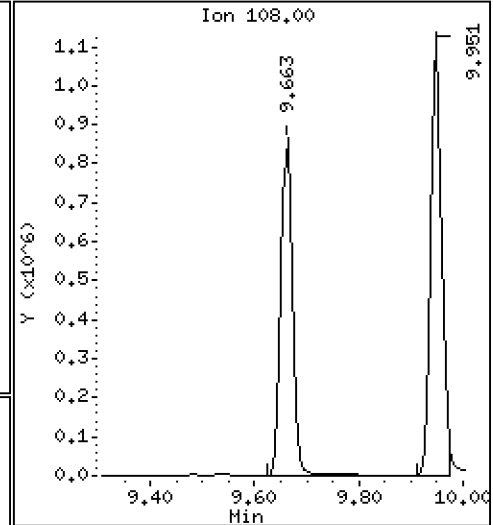
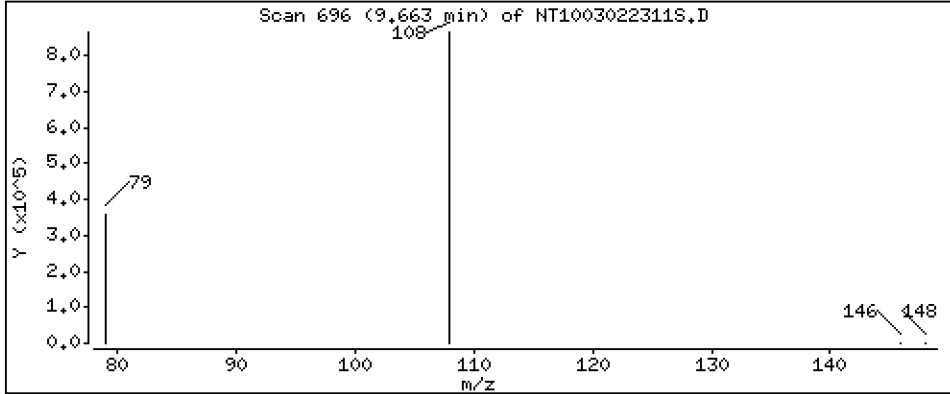
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 6.239 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

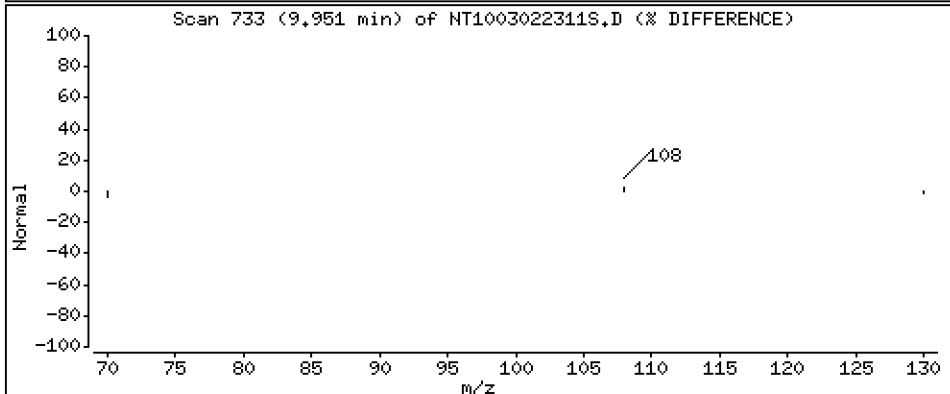
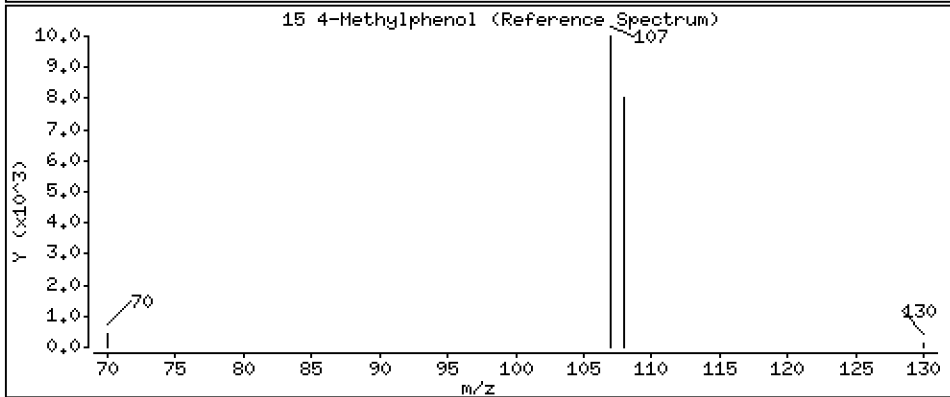
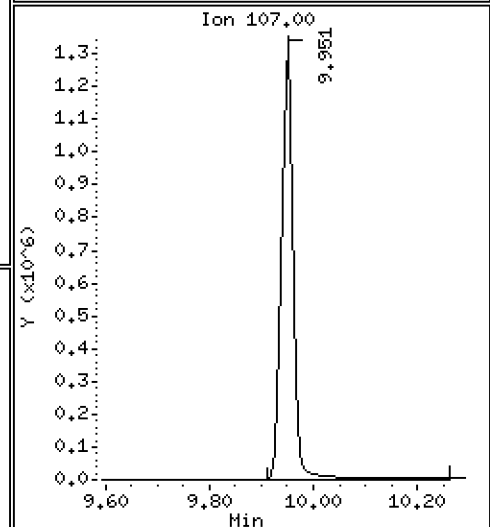
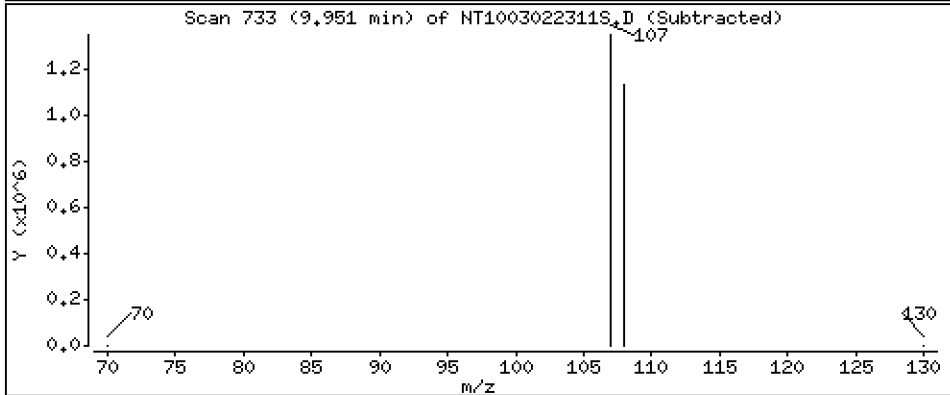
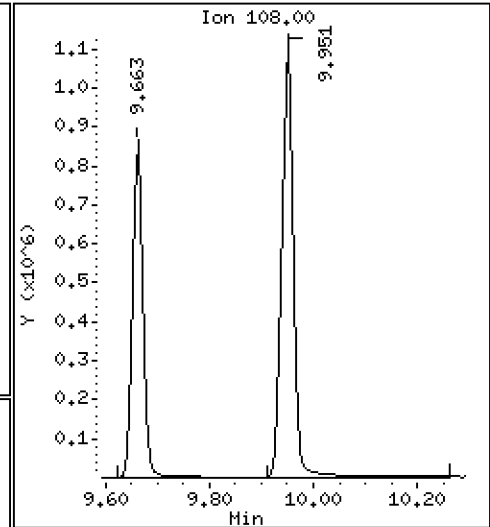
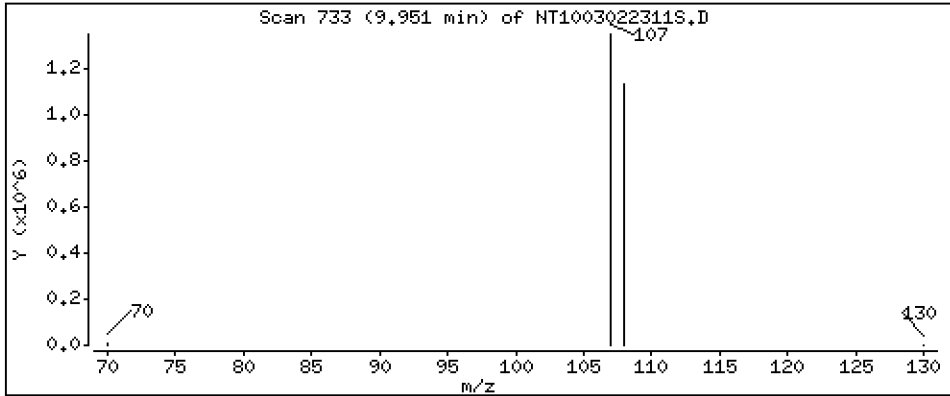
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 7.586 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

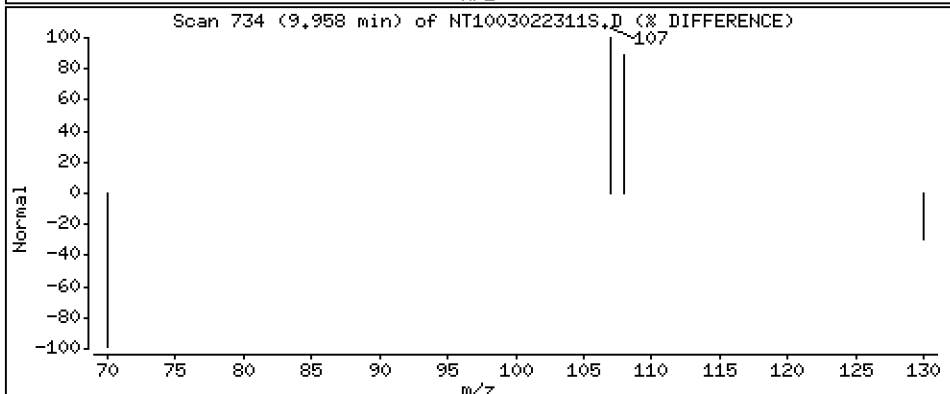
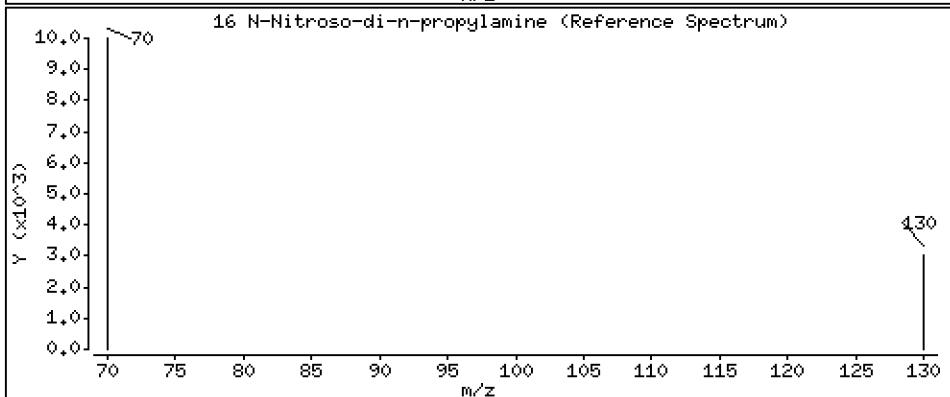
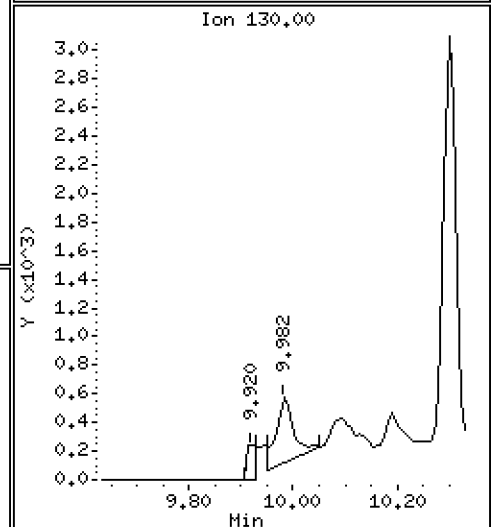
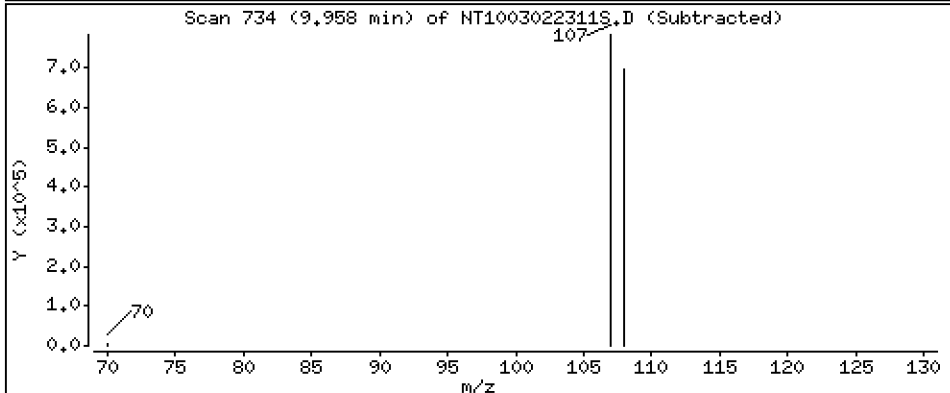
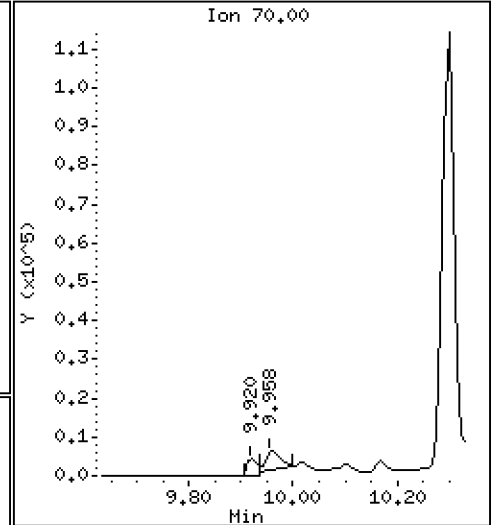
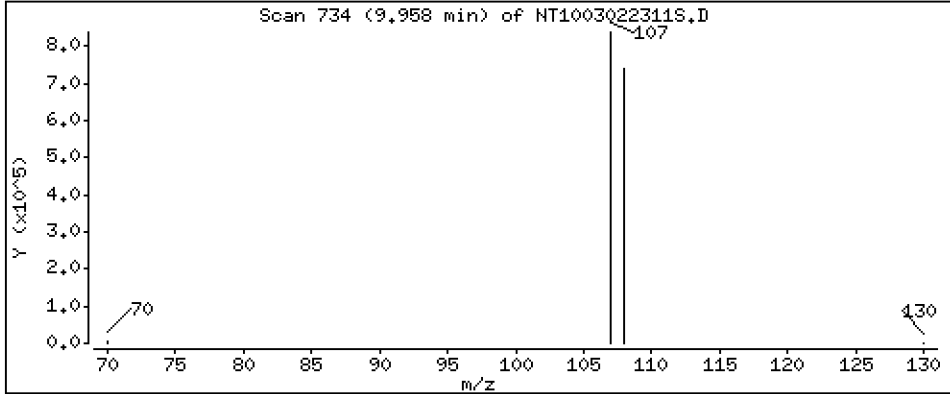
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.07196 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

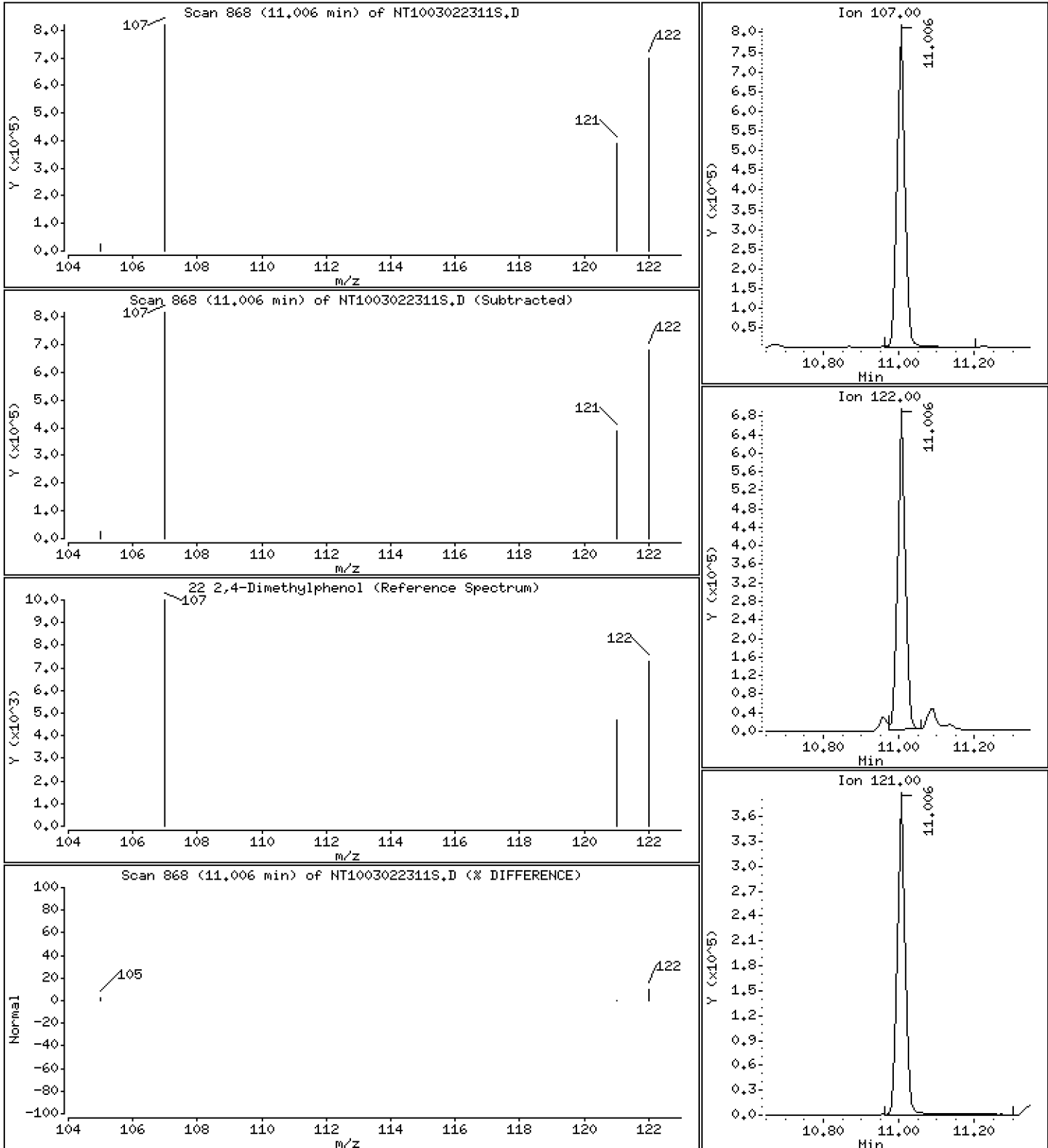
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 4,847 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

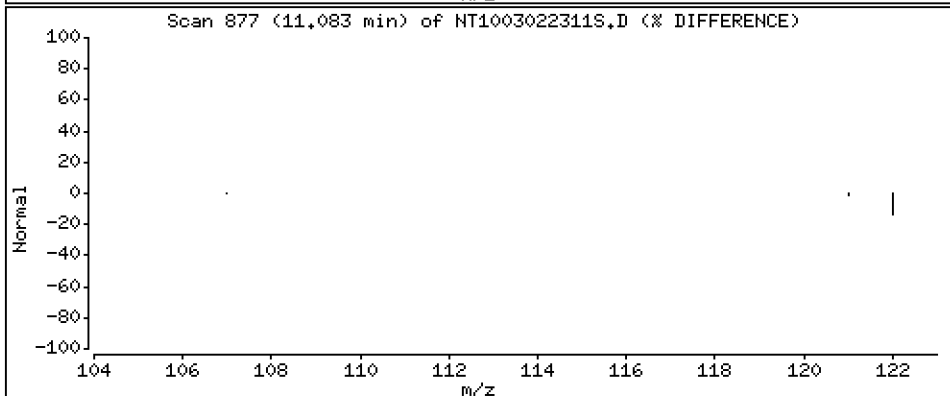
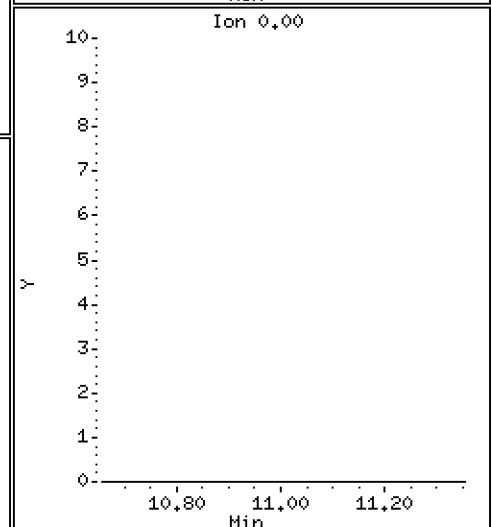
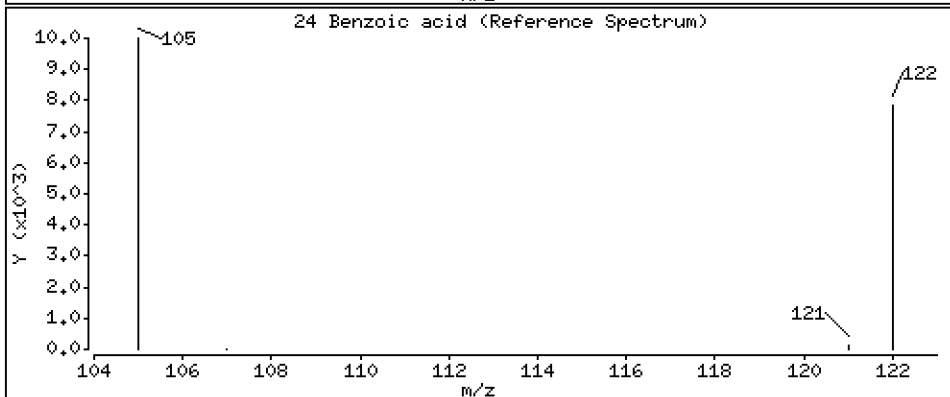
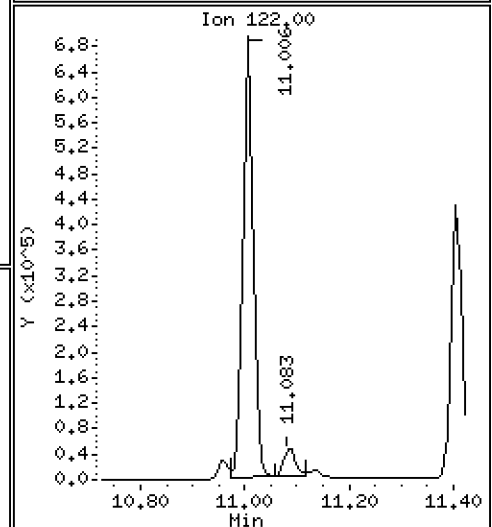
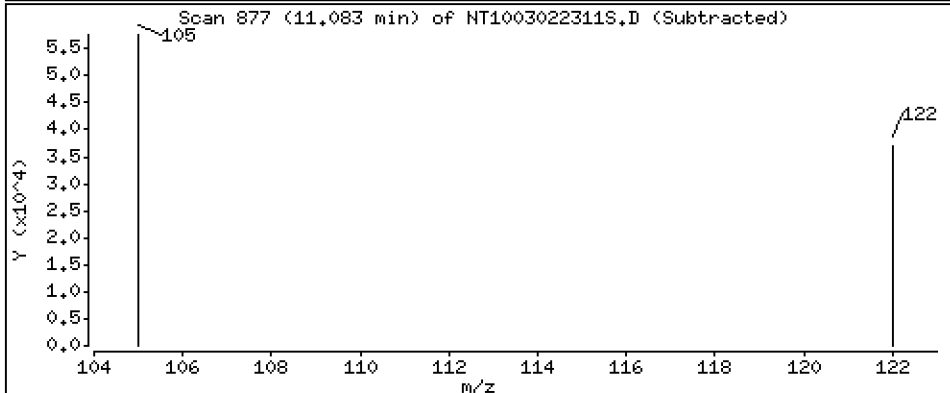
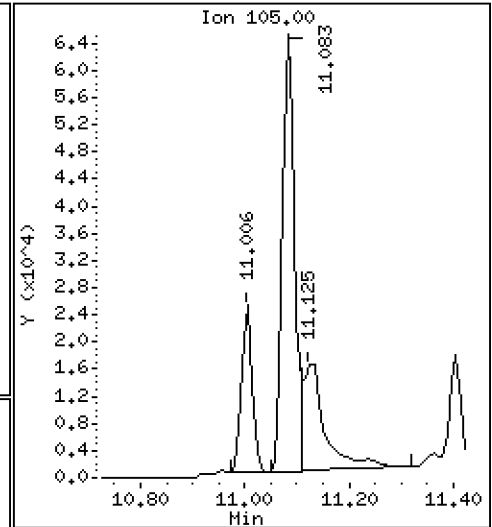
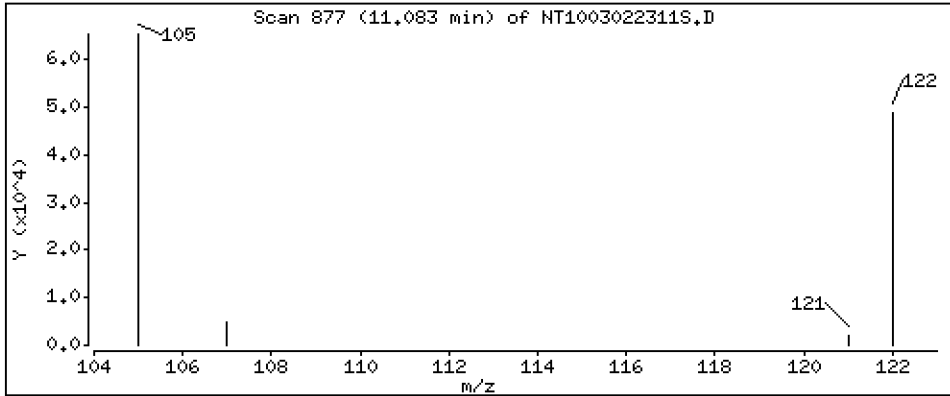
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.8166 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

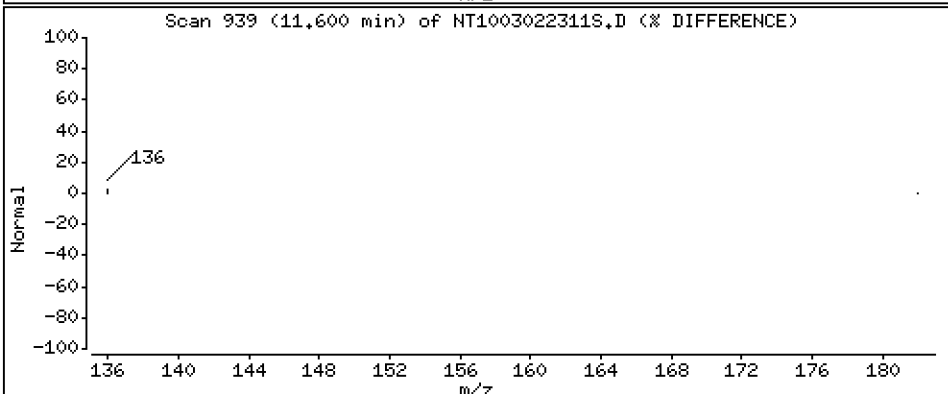
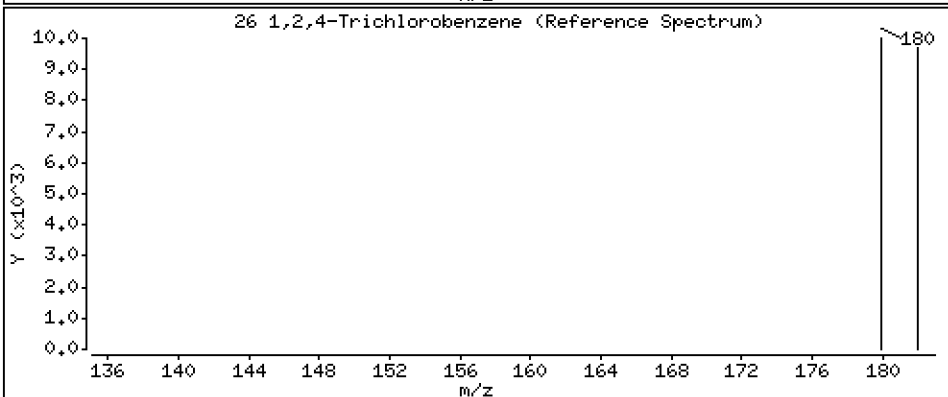
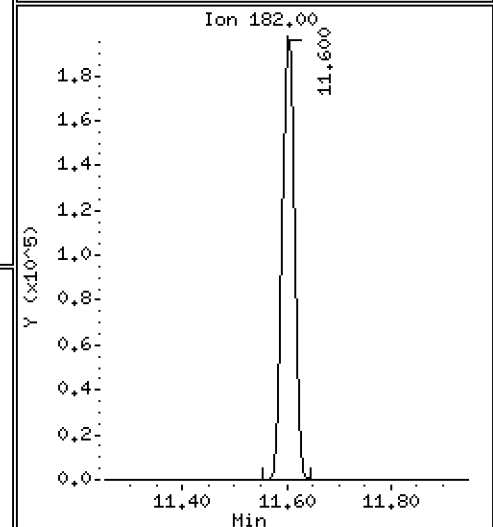
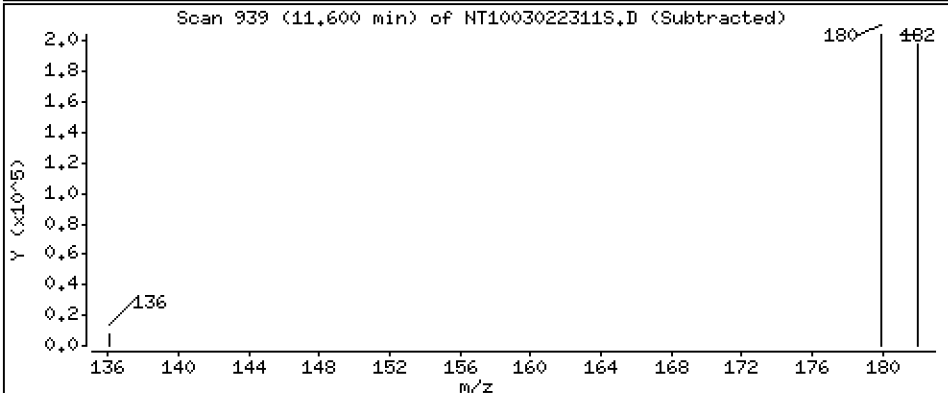
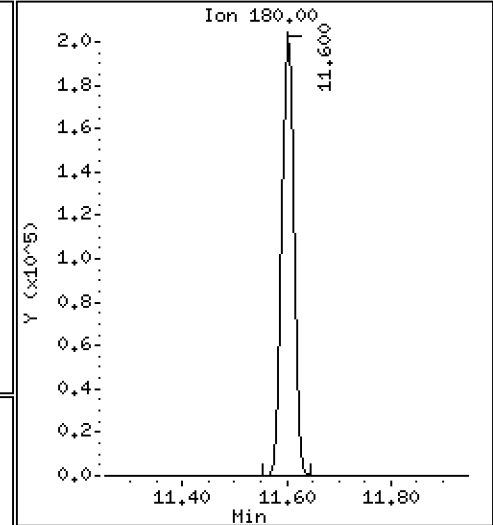
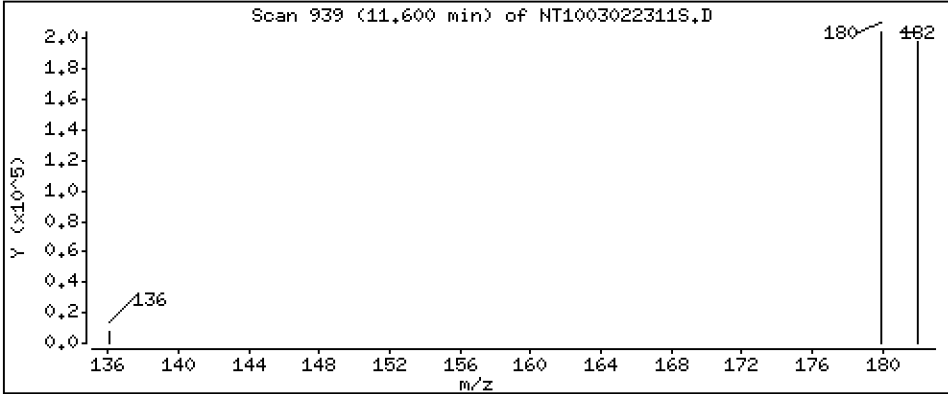
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 1.552 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

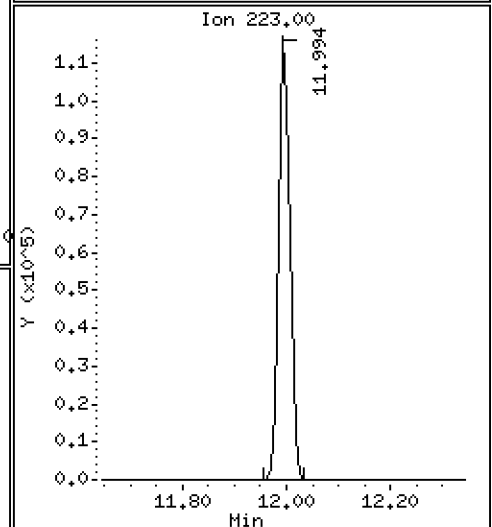
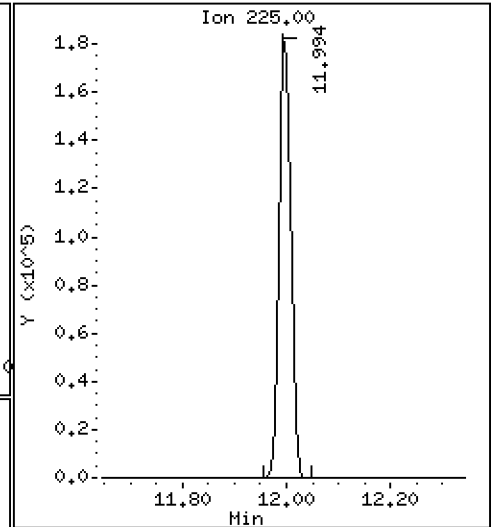
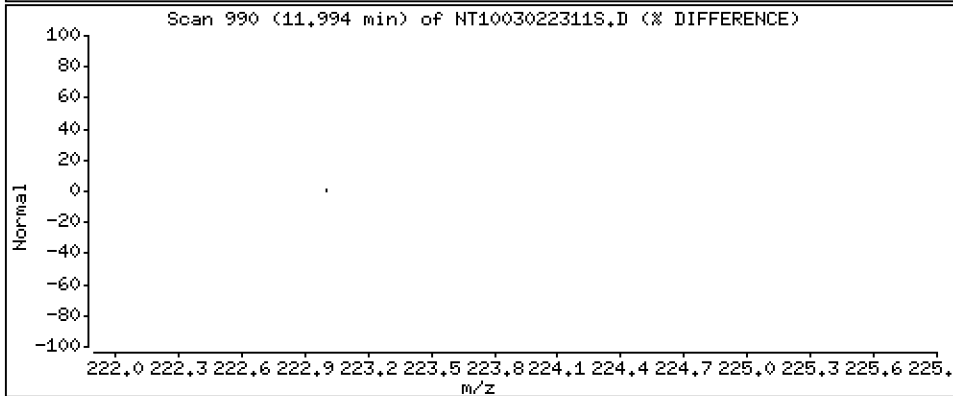
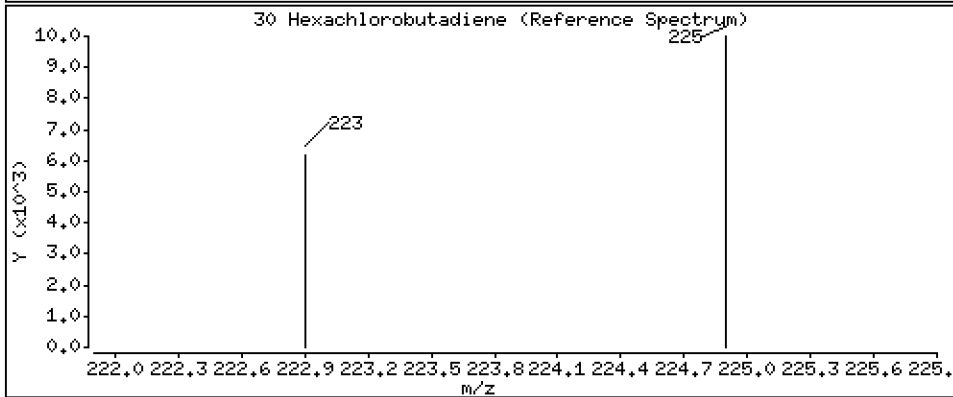
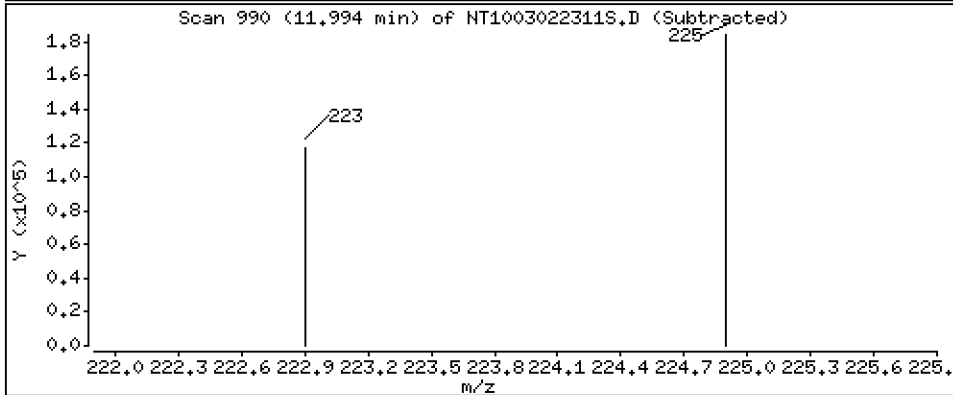
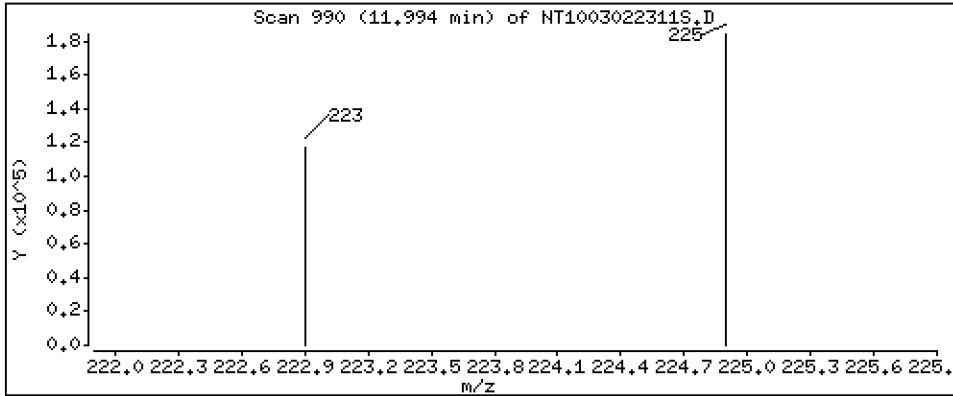
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,926 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

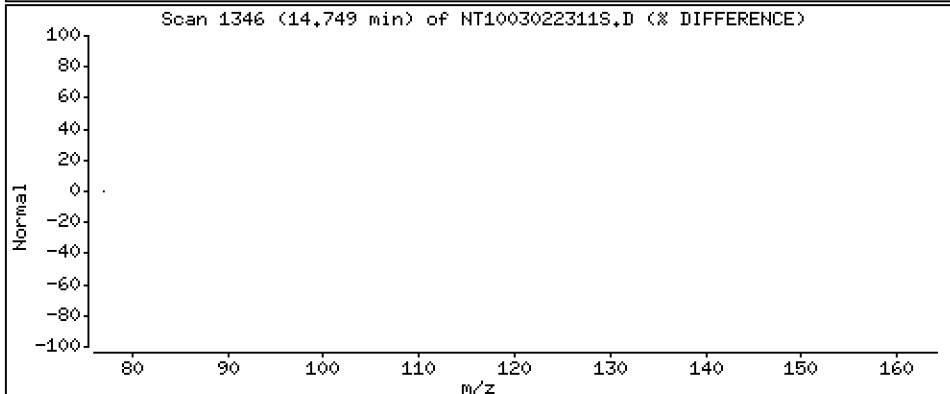
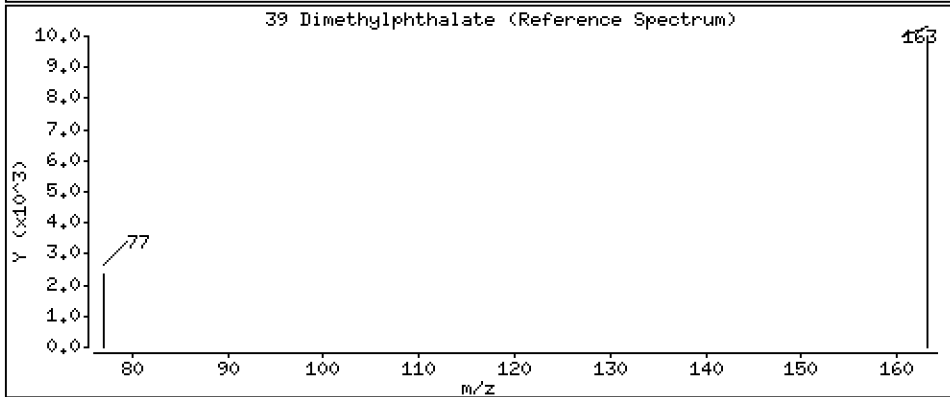
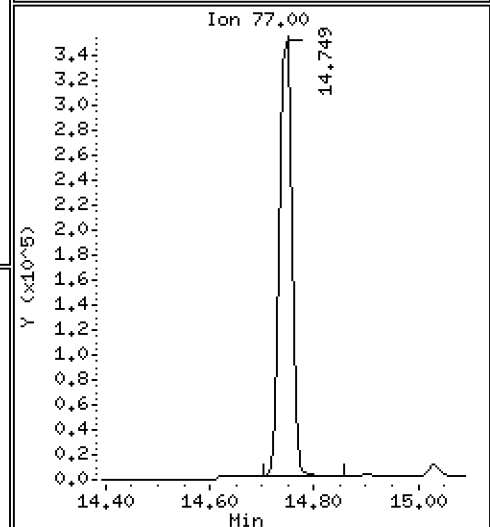
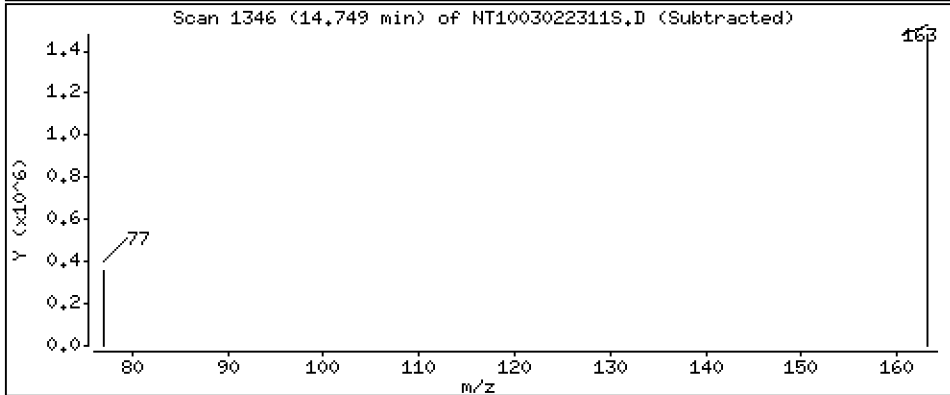
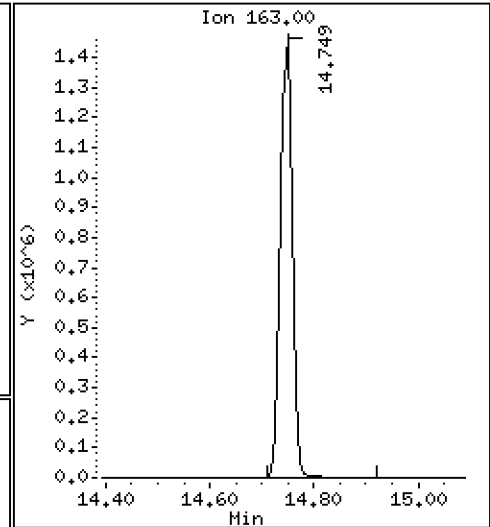
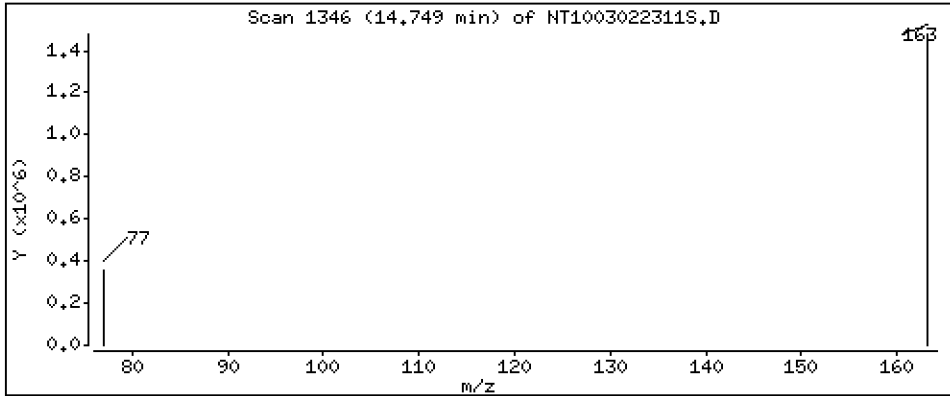
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 4,992 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

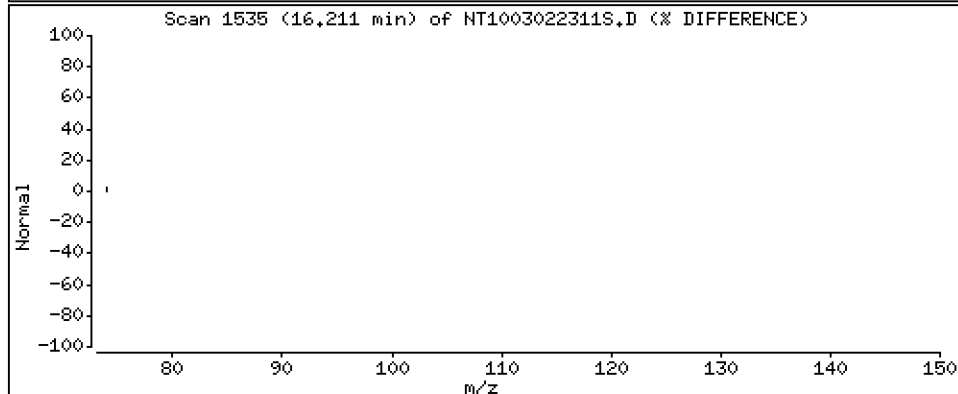
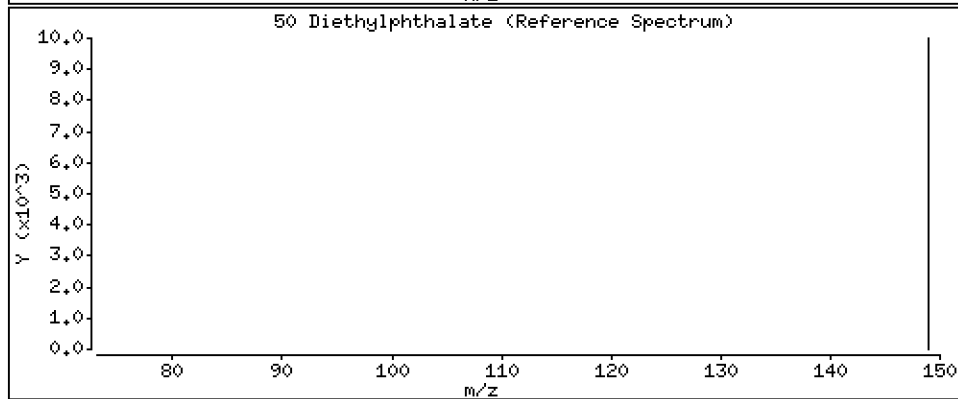
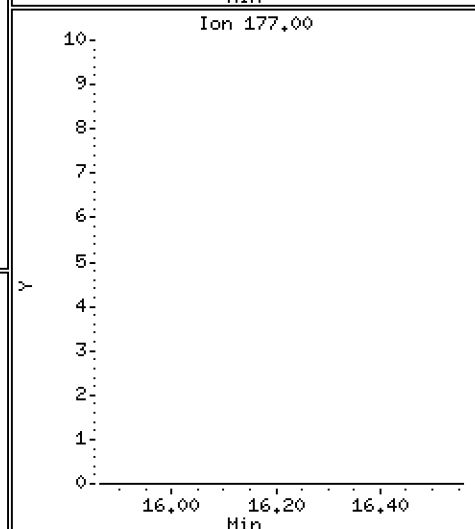
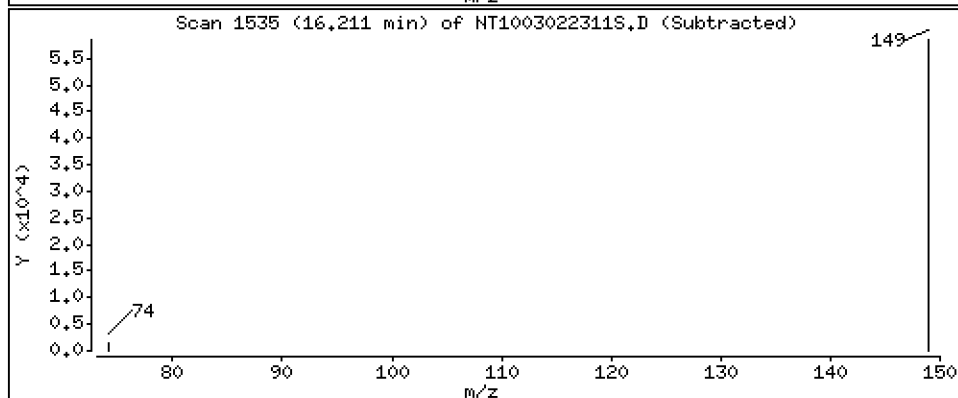
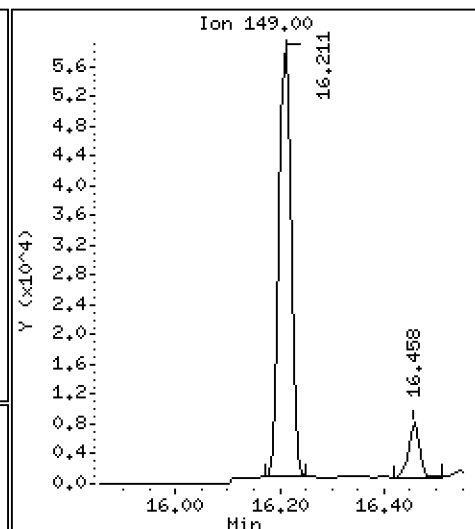
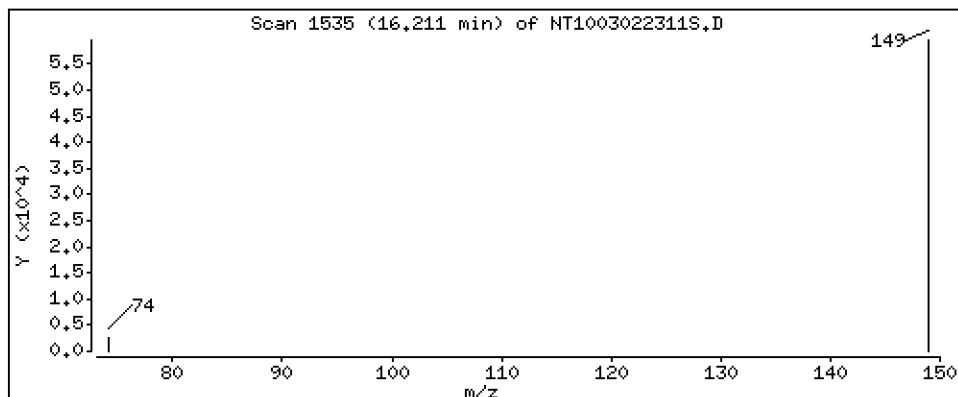
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2121 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

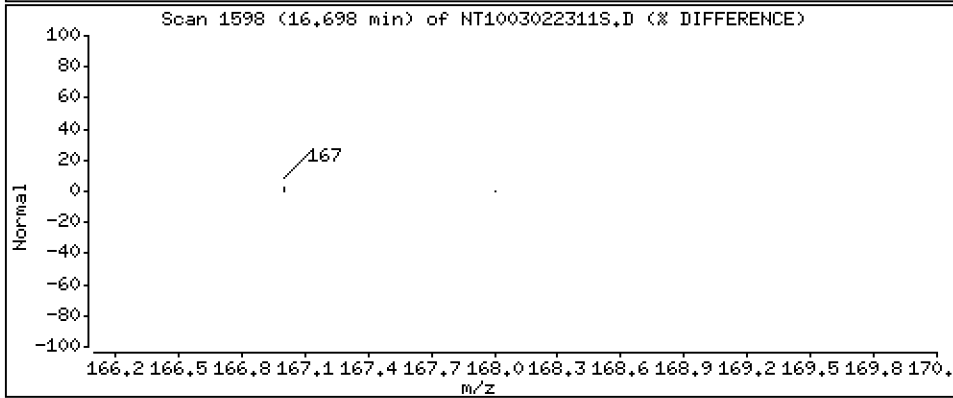
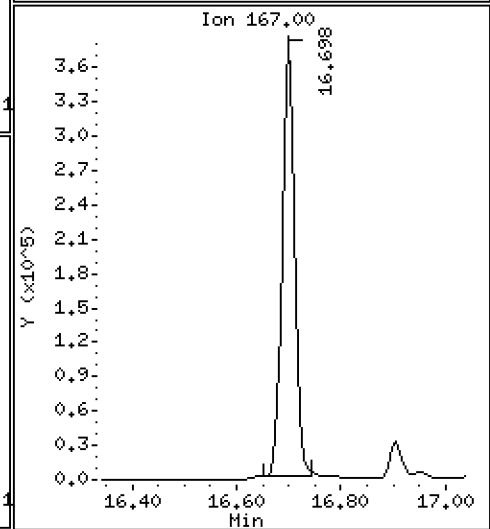
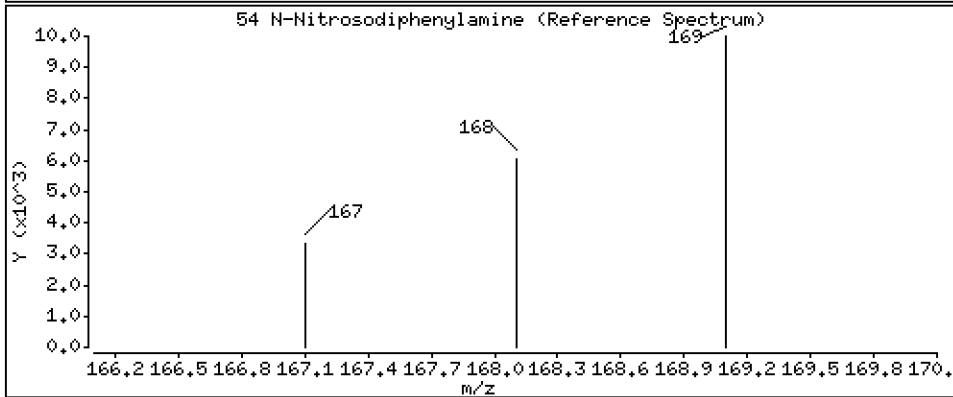
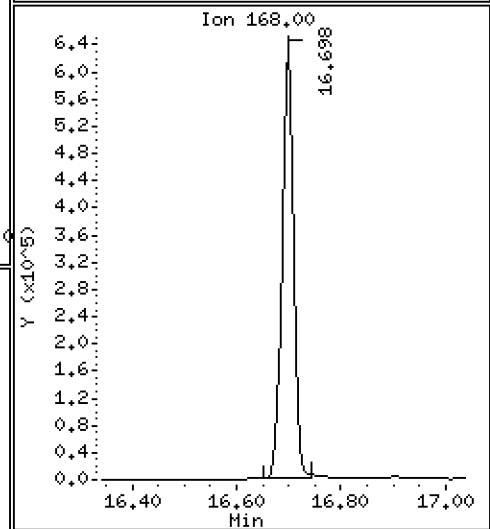
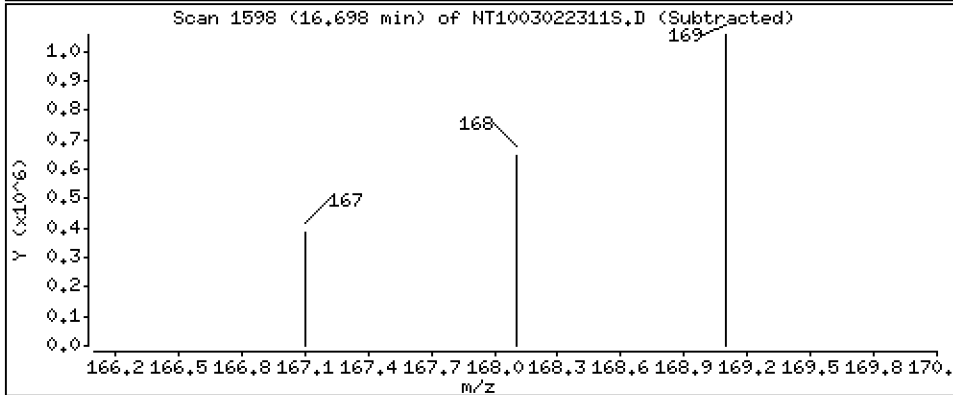
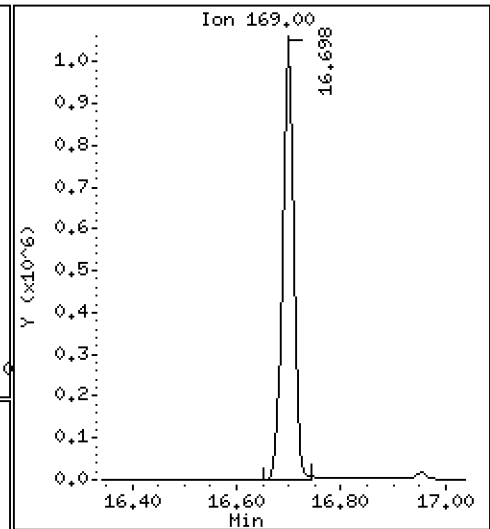
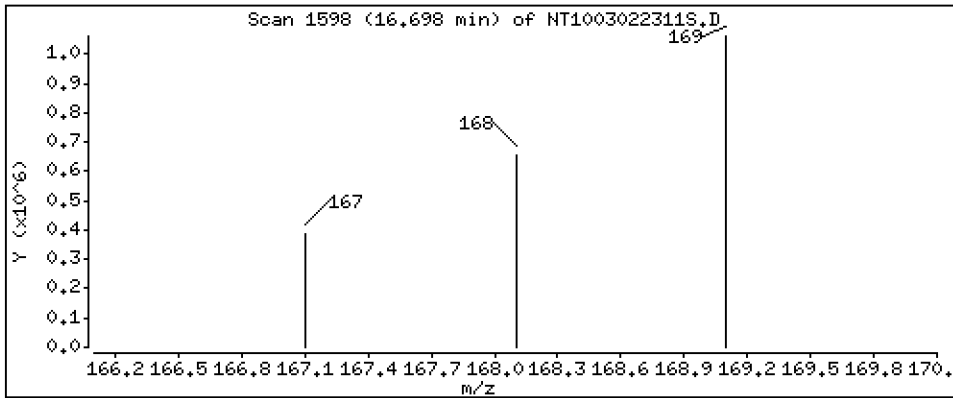
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 3.756 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

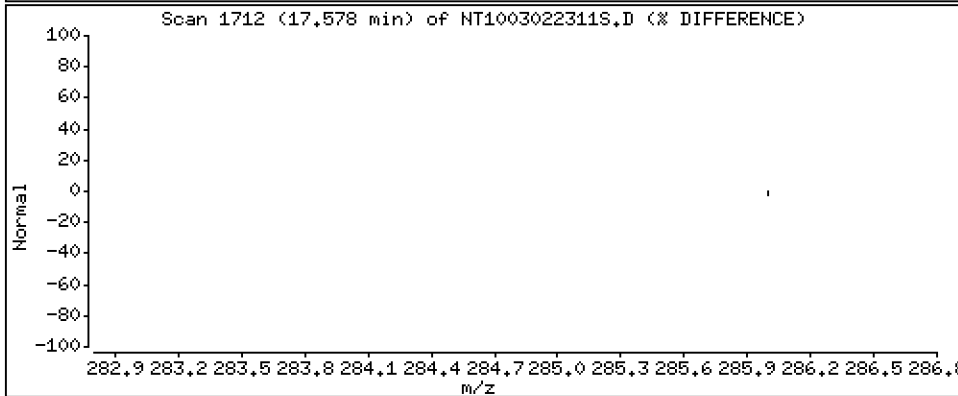
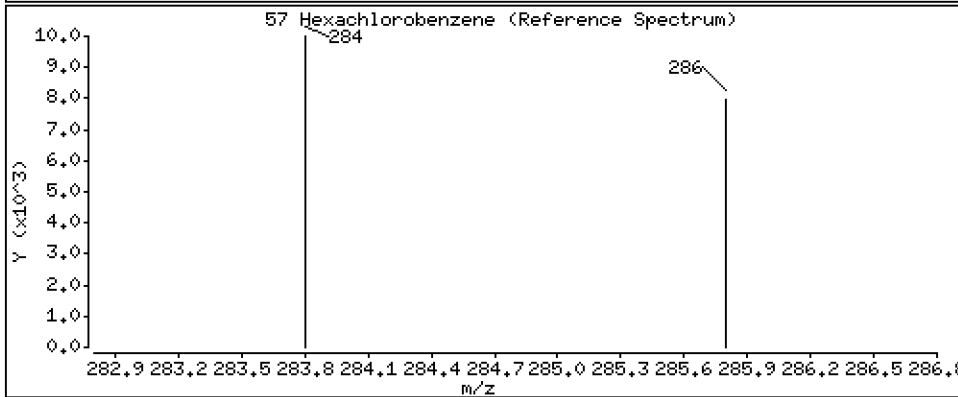
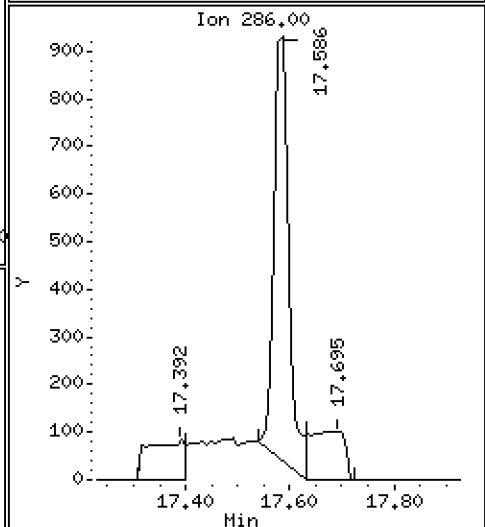
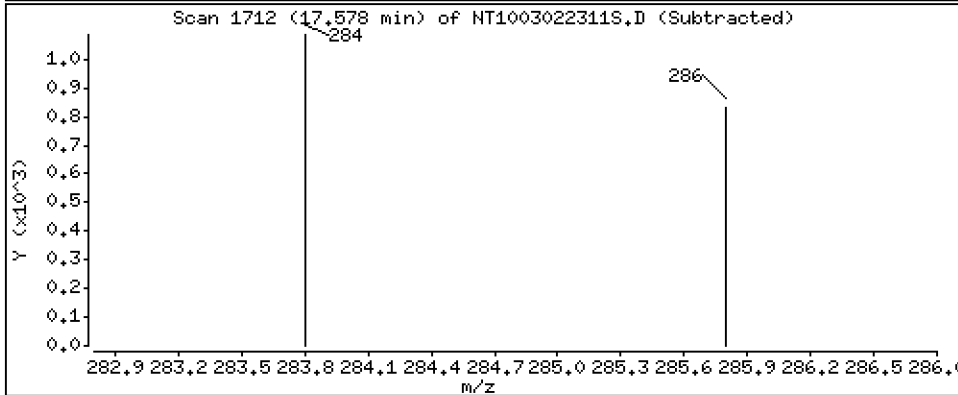
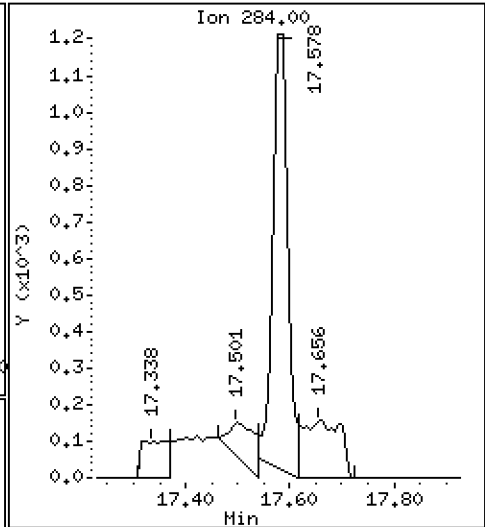
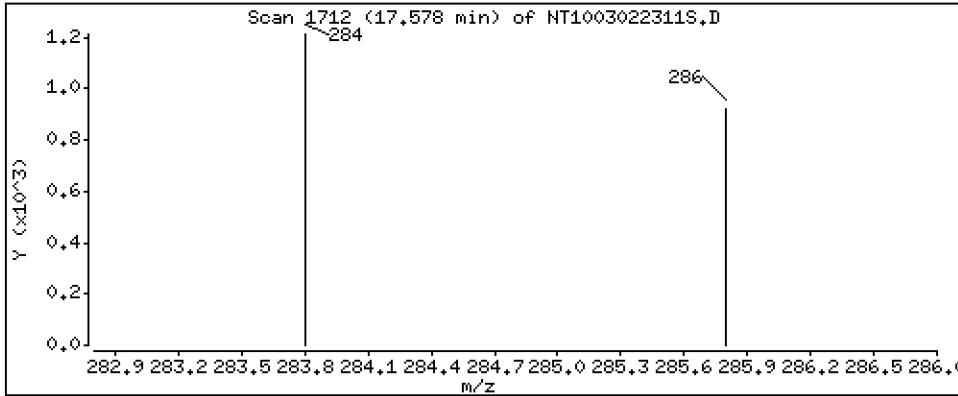
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,01174 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

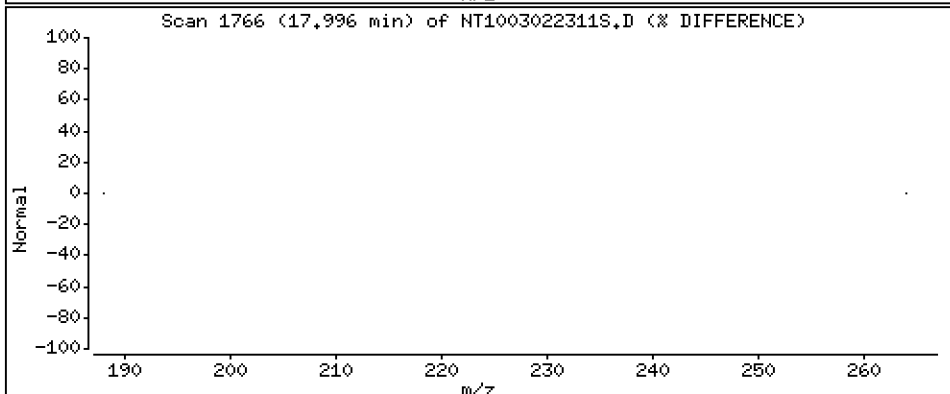
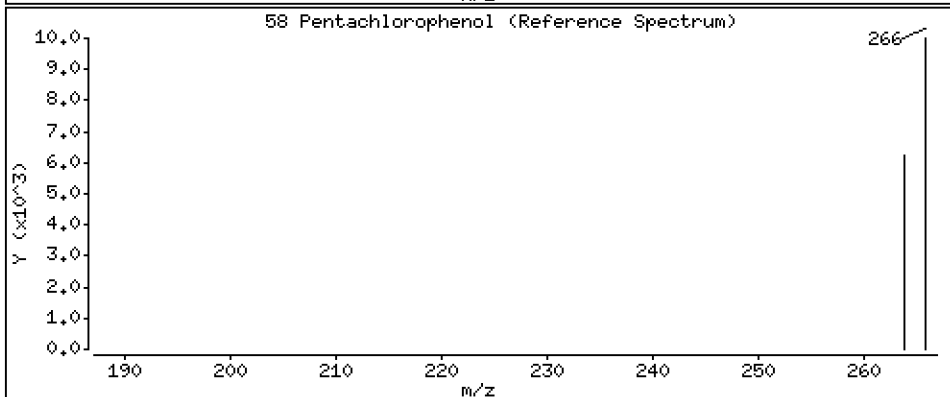
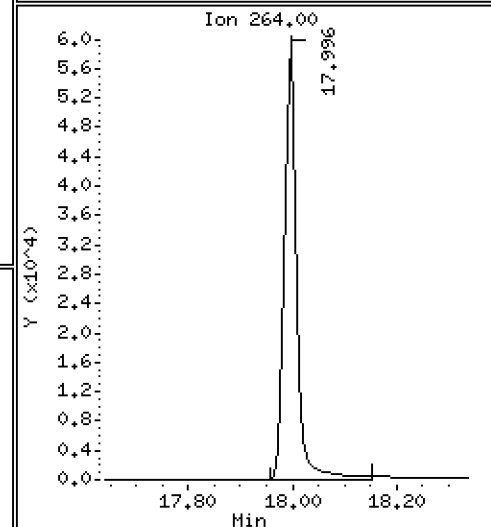
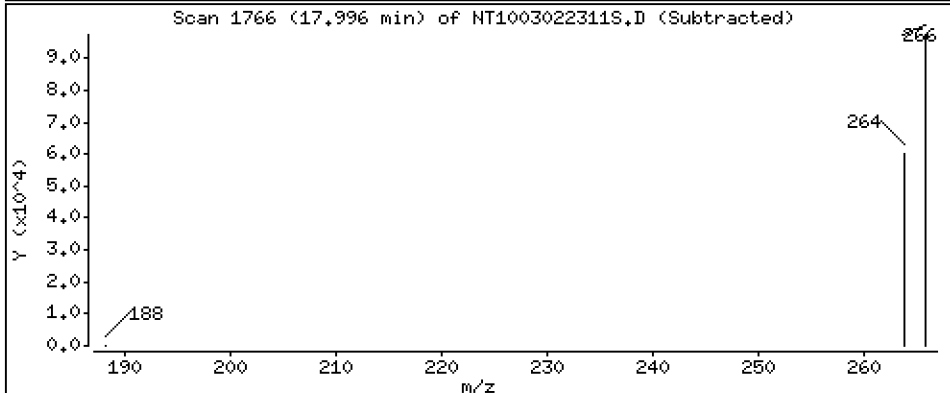
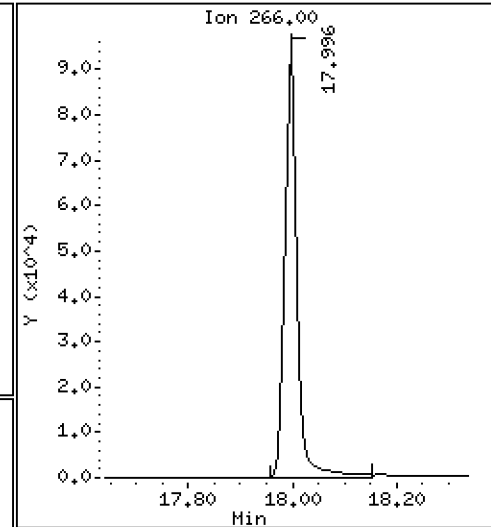
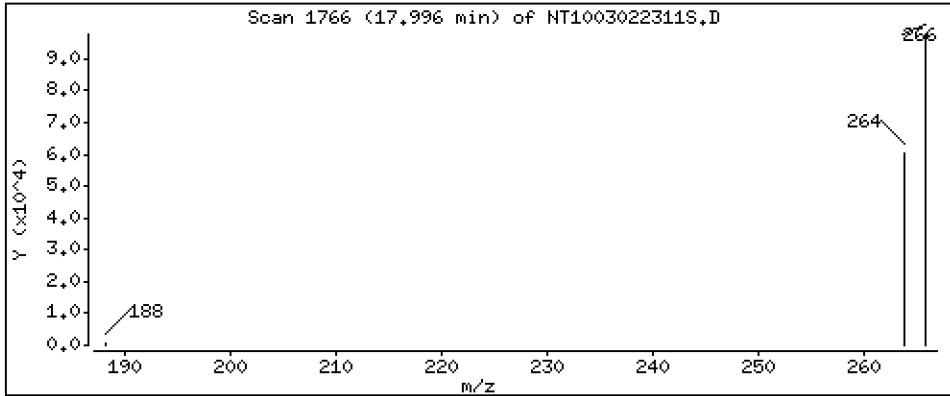
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 1,698 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

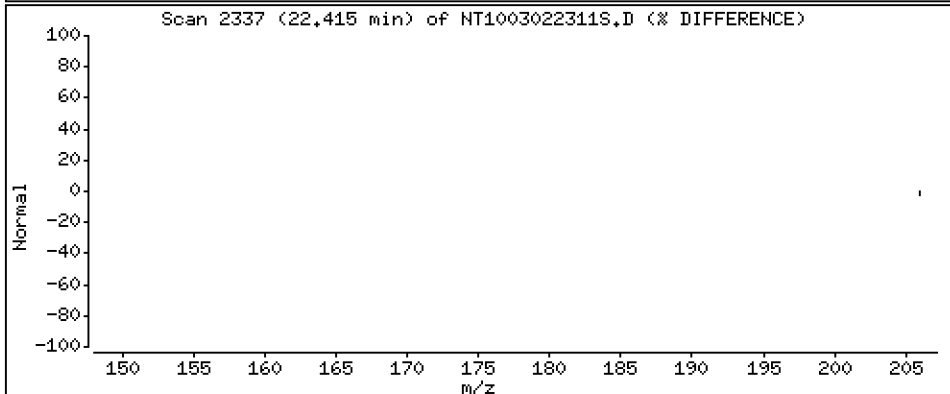
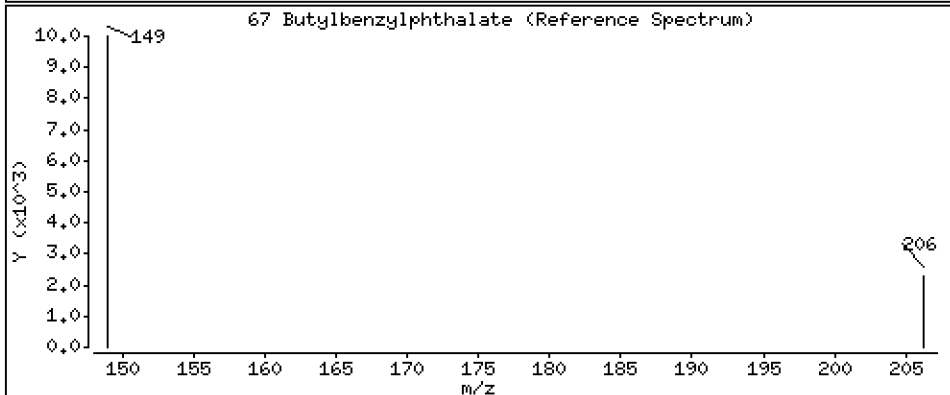
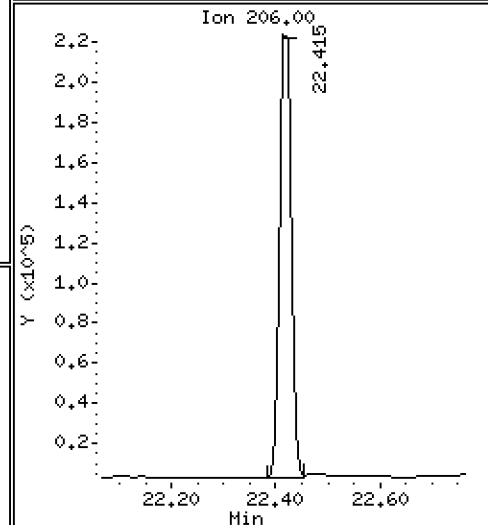
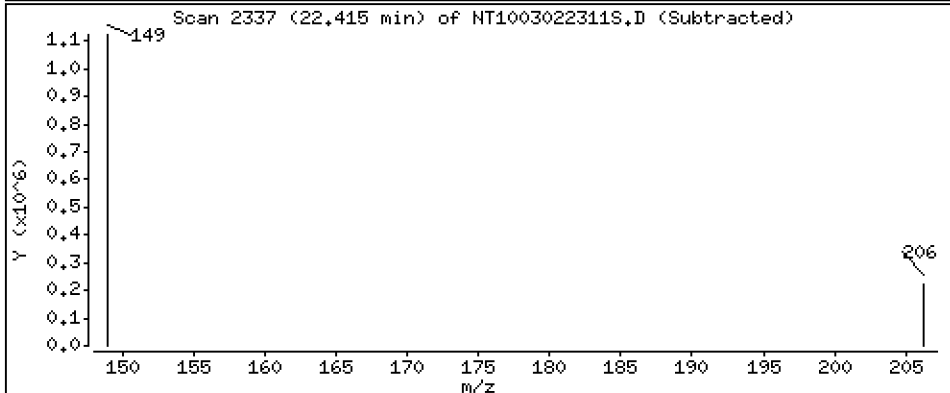
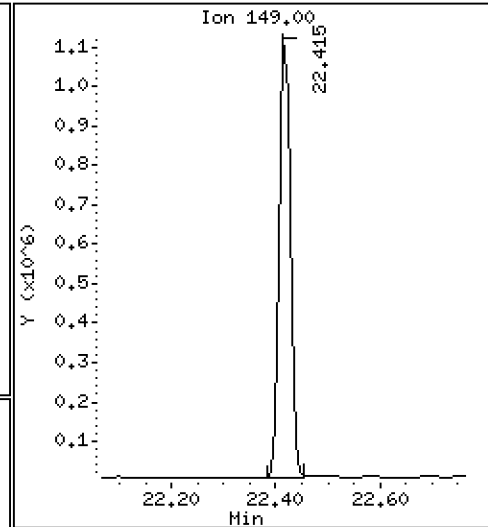
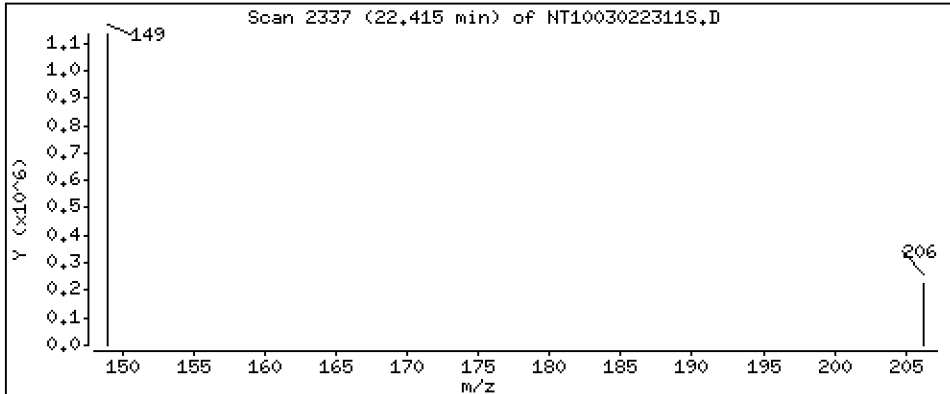
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 3,112 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

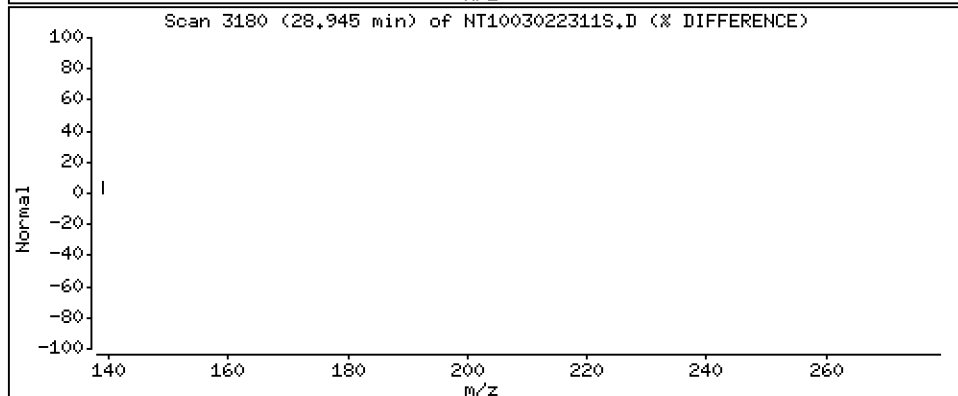
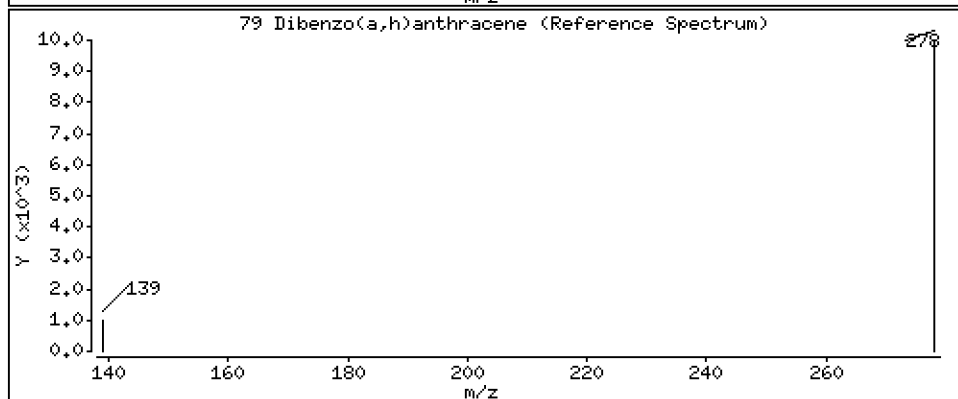
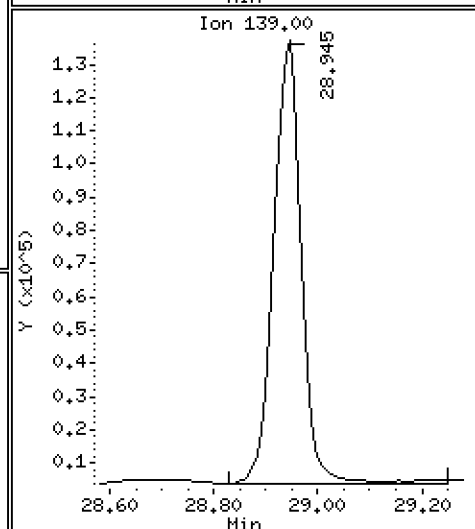
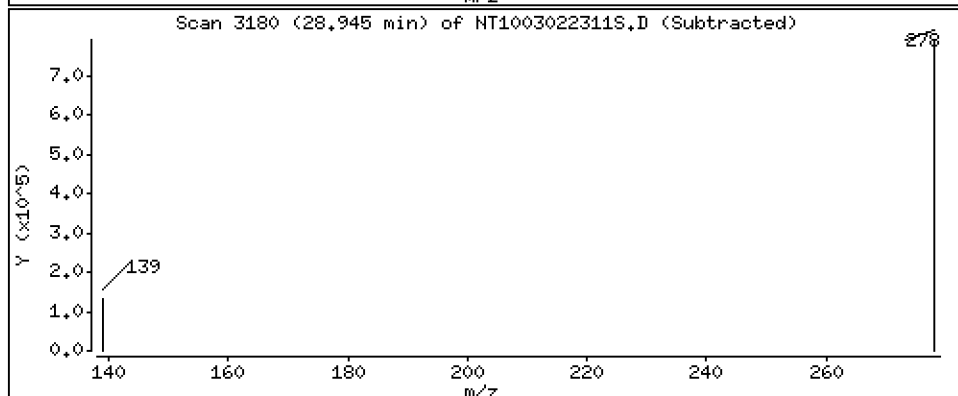
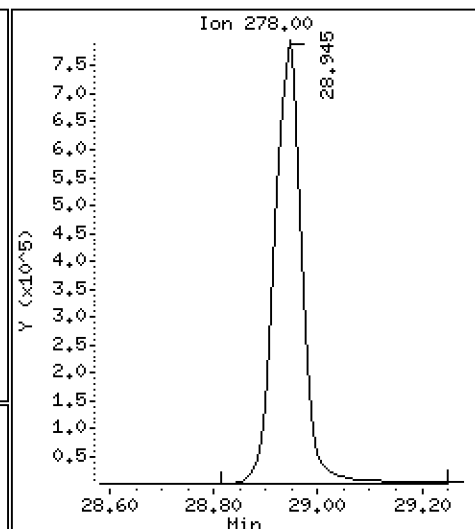
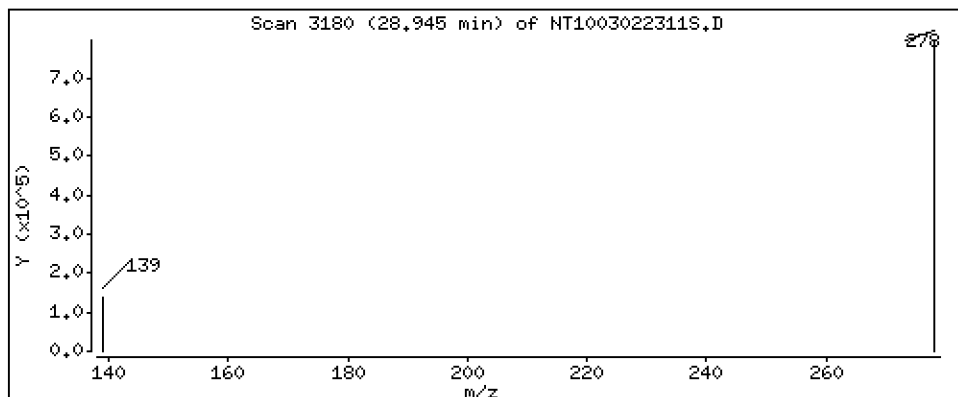
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 3,753 ug/L



Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

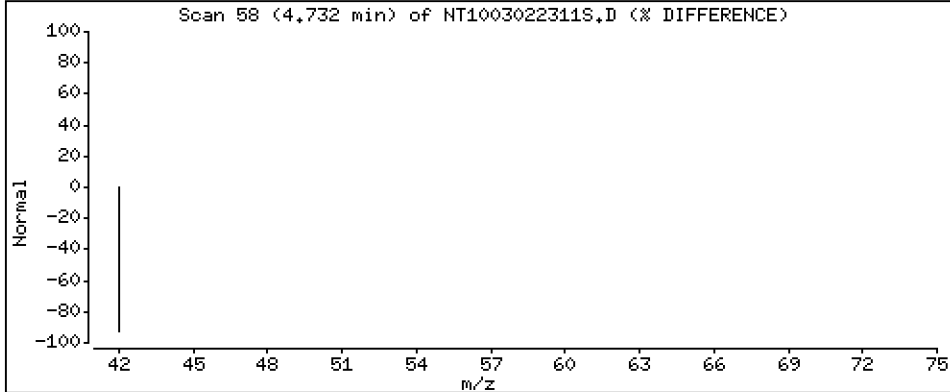
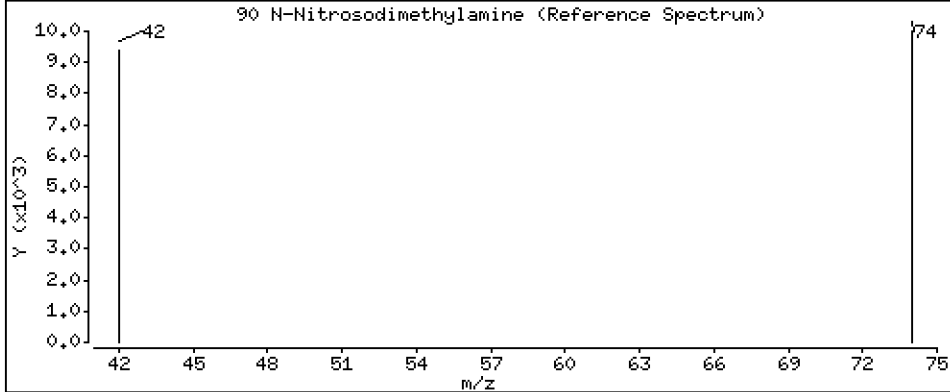
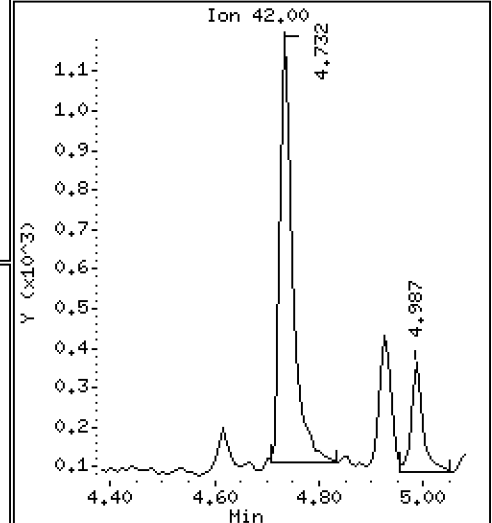
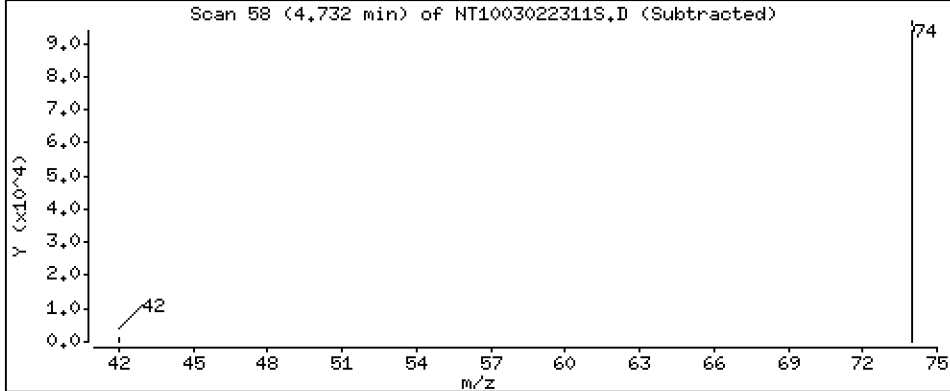
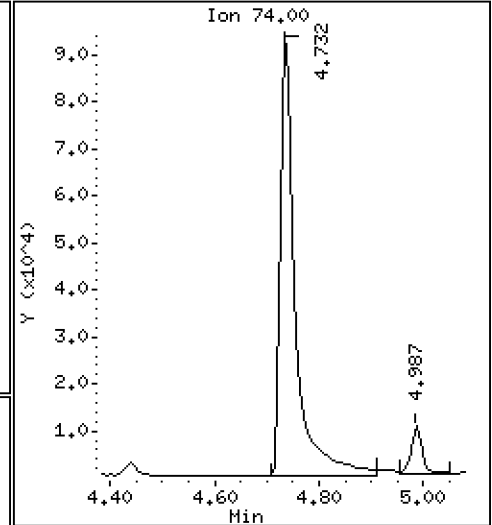
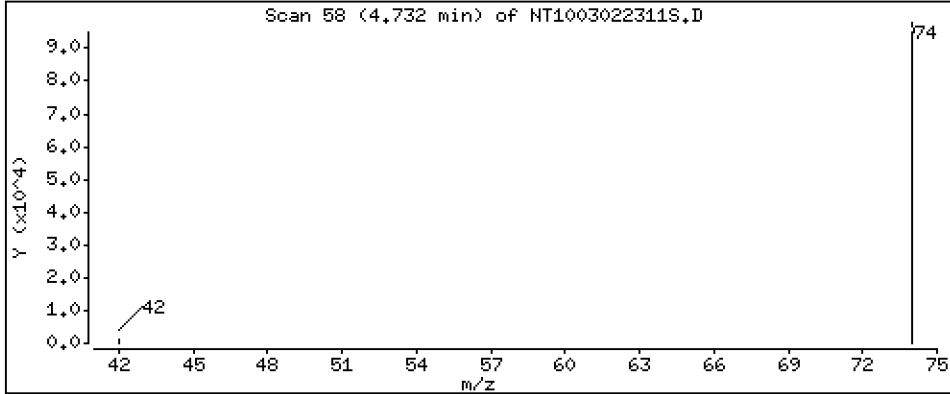
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 1.399 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022311S.D
 Lab Smp Id: BLA0624-SRM1
 Inj Date : 02-MAR-2023 20:44 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : BLA0624-SRM1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
\$ 1 2-Fluorophenol	112		6.910	6.902 (0.747)		1575203	7.19270	7.193 (R)
3 Phenol	94		8.524	8.517 (0.921)		865603	2.64398	2.644
7 1,3-Dichlorobenzene	146		9.143	9.143 (0.988)		339074	1.19270	1.193
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.251 (1.000)		767091	4.00000	
9 1,4-Dichlorobenzene	146		9.143	9.282 (0.988)		339074	1.22674	1.227
11 Benzyl alcohol	79		9.539	9.476 (1.031)		31398	0.17502	0.1750
12 1,2-Dichlorobenzene	146		9.562	9.562 (1.034)		3530	0.01329	0.01329
13 2-Methylphenol	108		9.663	9.655 (1.044)		1279955	6.23865	6.239
15 4-Methylphenol	108		9.950	9.942 (1.076)		1680277	7.58593	7.586
16 N-Nitroso-di-n-propylamine	70		9.958	9.981 (1.076)		10352	0.07196	0.07196
22 2,4-Dimethylphenol	107		11.006	10.997 (0.939)		1162291	4.84672	4.847
24 Benzoic acid	105		11.082	11.074 (0.945)		106321	0.81663	0.8166
26 1,2,4-Trichlorobenzene	180		11.600	11.600 (0.989)		311359	1.55159	1.552
* 27 Naphthalene-d8	136		11.723	11.723 (1.000)		2788036	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994 (1.023)		274250	1.92586	1.926
39 Dimethylphthalate	163		14.749	14.741 (0.963)		2190768	4.99232	4.992
* 42 Acenaphthene-d10	162		15.321	15.314 (1.000)		1382029	4.00000	
50 Diethylphthalate	149		16.210	16.203 (1.058)		87777	0.21211	0.2121
54 N-Nitrosodiphenylamine	169		16.698	16.690 (0.907)		1584342	3.75576	3.756
57 Hexachlorobenzene	284		17.578	17.578 (0.955)		2318	0.01174	0.01174

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.996	17.988	(0.978)	149186	1.69819	1.698
* 59 Phenanthrene-d10	188	18.406	18.406	(1.000)	2606597	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	1234616	5.14744	5.147 (R)
67 Butylbenzylphthalate	149	22.414	22.414	(0.957)	1540899	3.11192	3.112
* 69 Chrysene-d12	240	23.429	23.421	(1.000)	2965995	4.00000	
* 77 Perylene-d12	264	26.123	26.115	(1.000)	3162675	4.00000	
79 Dibenzo(a,h)anthracene	278	28.945	28.929	(1.108)	2910766	3.75254	3.753
90 N-Nitrosodimethylamine	74	4.732	4.732	(0.511)	181438	1.39936	1.399

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022311S.D
 Lab Smp Id: BLA0624-SRM1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	767091	55.47
27 Naphthalene-d8	1779056	889528	3558112	2788036	56.71
42 Acenaphthene-d10	954569	477285	1909138	1382029	44.78
59 Phenanthrene-d10	1596290	798145	3192580	2606597	63.29
69 Chrysene-d12	1649110	824555	3298220	2965995	79.85
77 Perylene-d12	1901958	950979	3803916	3162675	66.29

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.43	0.03
77 Perylene-d12	26.12	25.62	26.62	26.12	0.03

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

REVIEW SUMMARY FOR FILE - NT1003022311S.D

Lab ID: BLA0624-SRM1

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 20:44

RT CO-ELUTION COMPOUNDS

9.143 1,4-Dichlorobenzene and 1,3-Dichlorobenzene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.988	1.003	-0.0151	1,4-Dichlorobenzene
1.031	1.024	0.0067	Benzyl alcohol

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

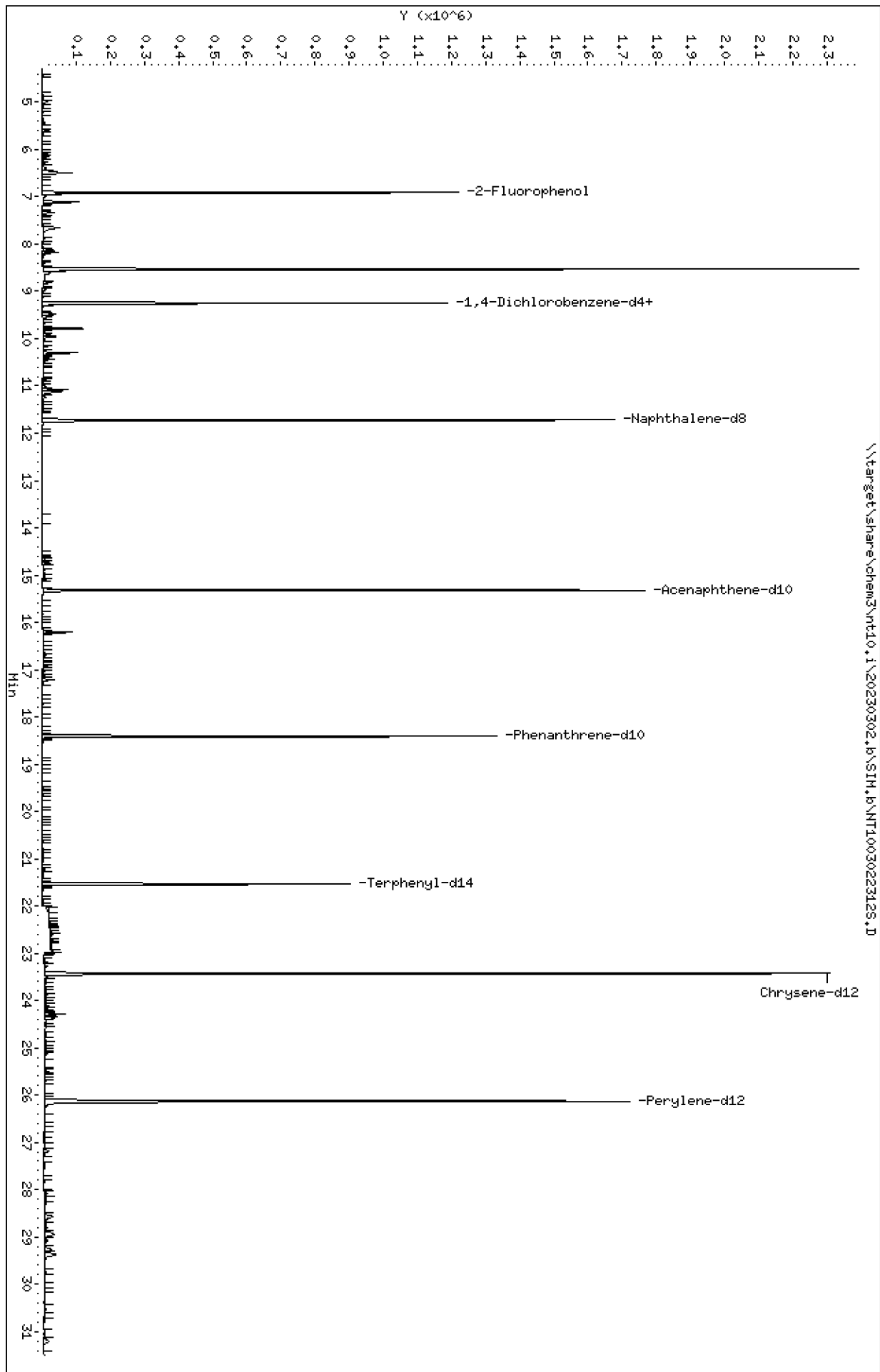
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.B\SIH.B\NT1003022312S.D
Date: 02-MAR-2023 21:22
Client ID:
Sample Info: 23A0206-01
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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

\\target\share\chem3\nt10.i\20230302.B\SIH.B\NT1003022312S.D



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

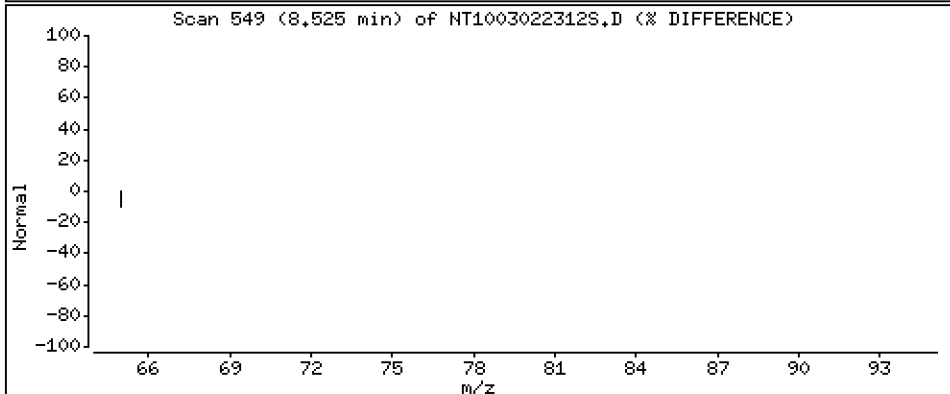
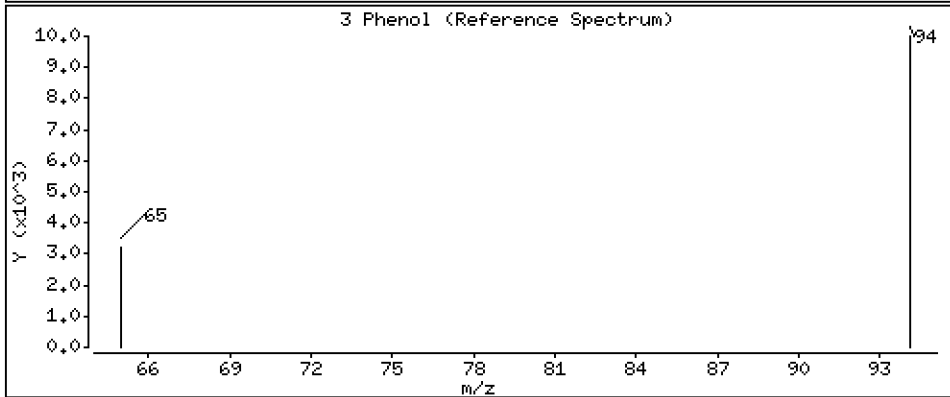
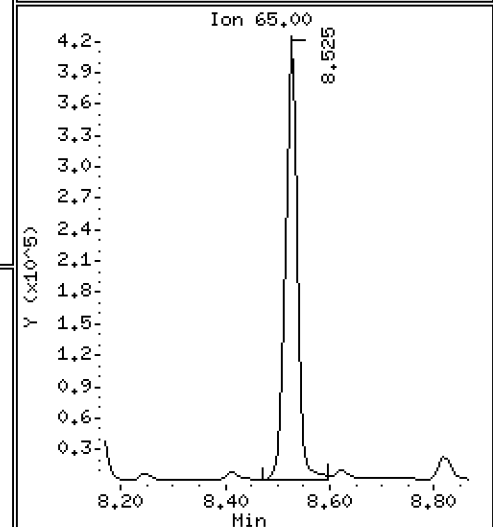
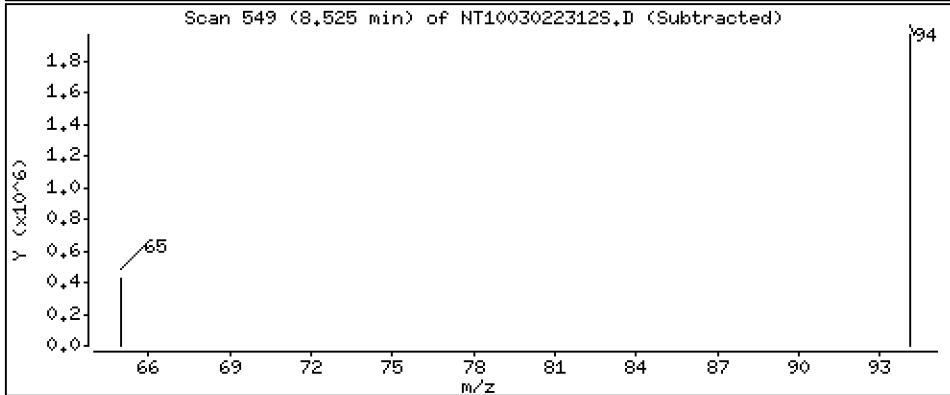
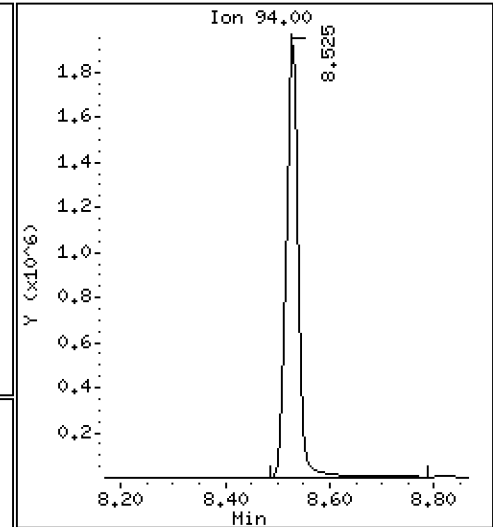
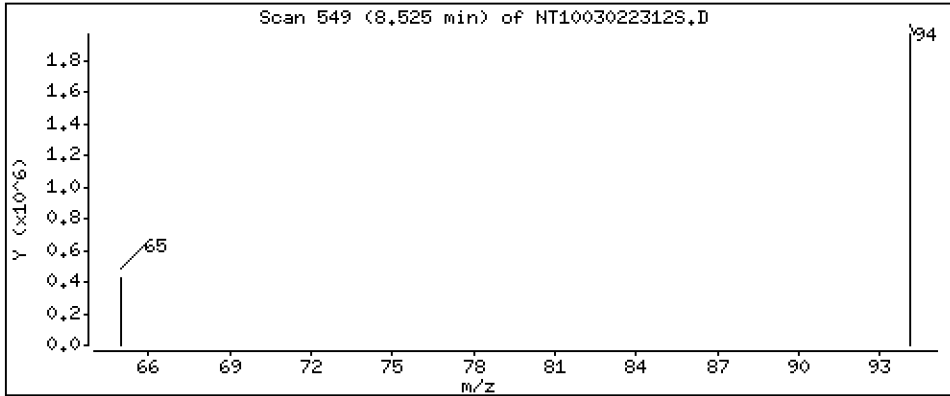
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 9.783 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

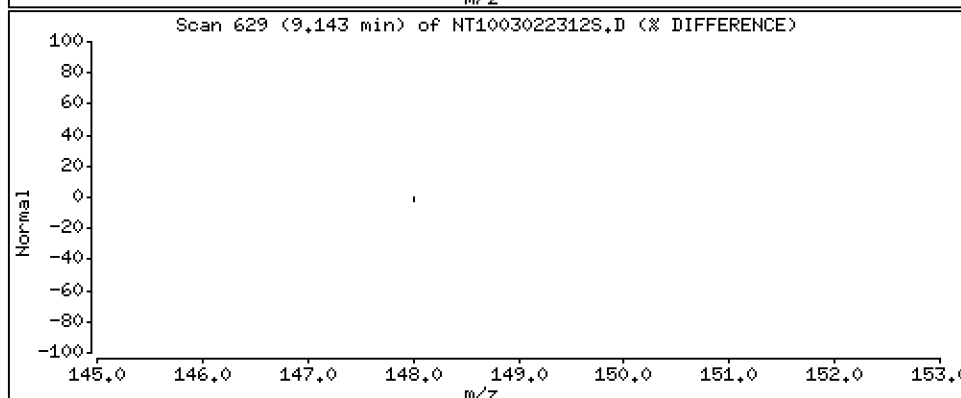
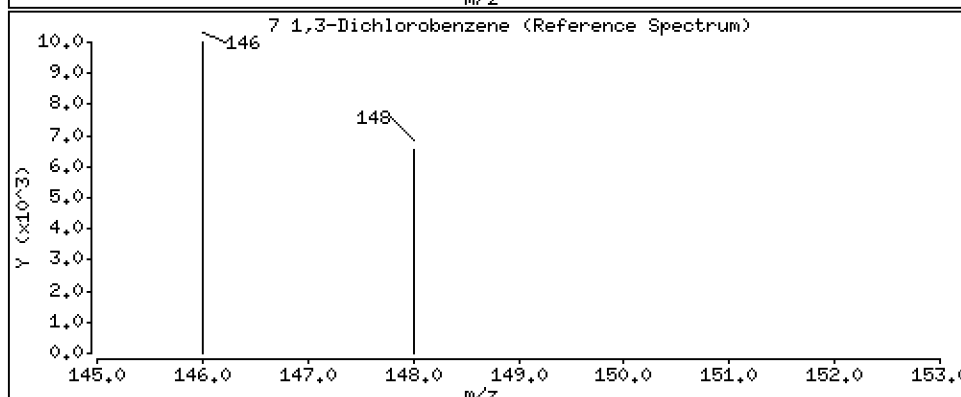
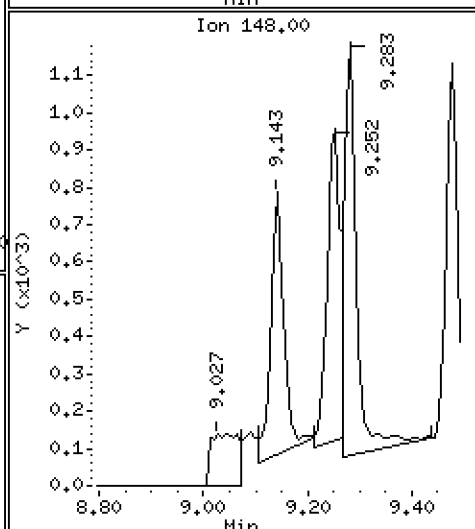
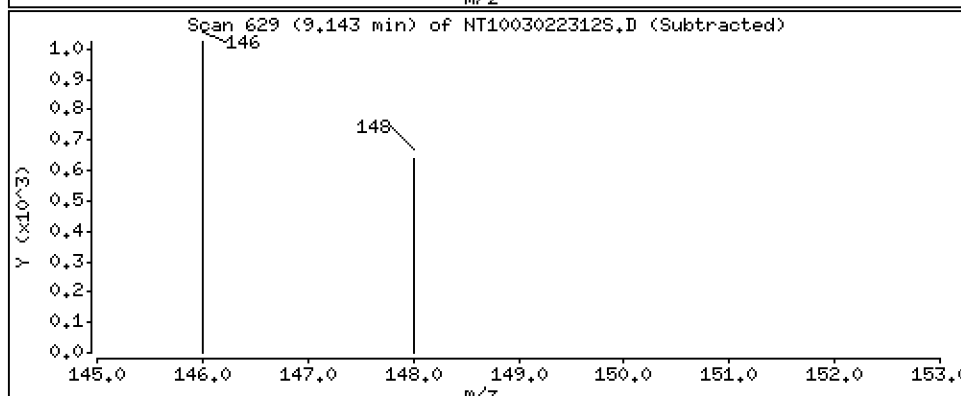
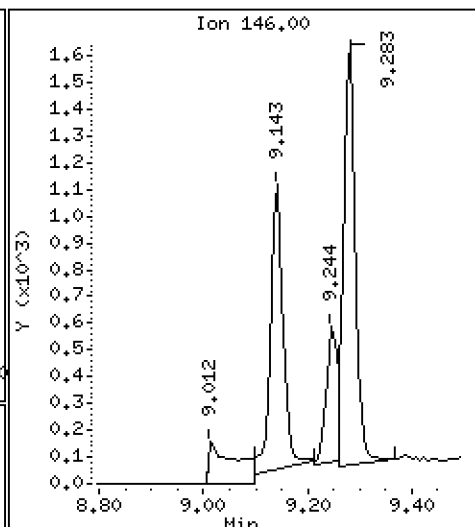
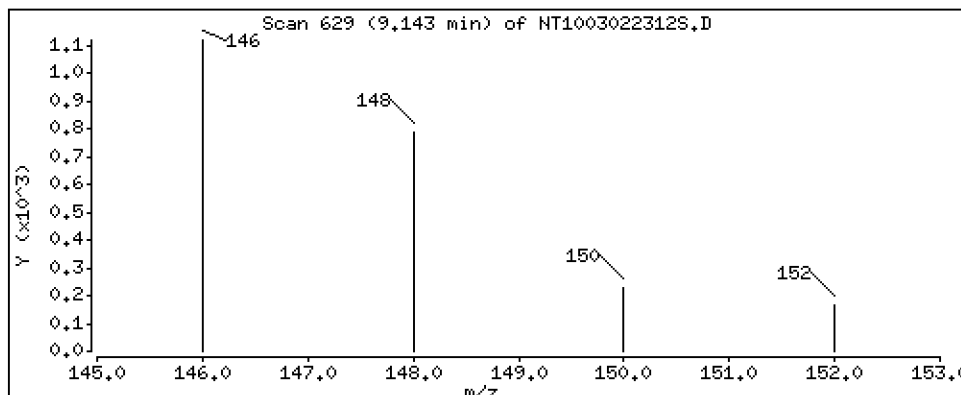
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.006583 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

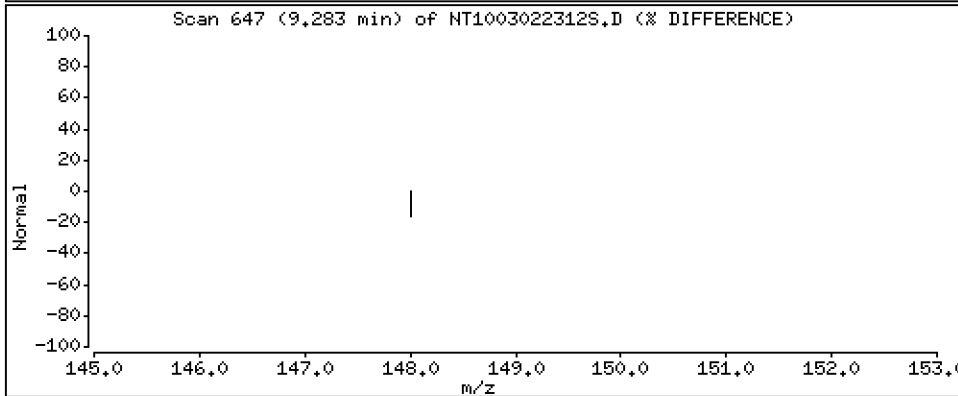
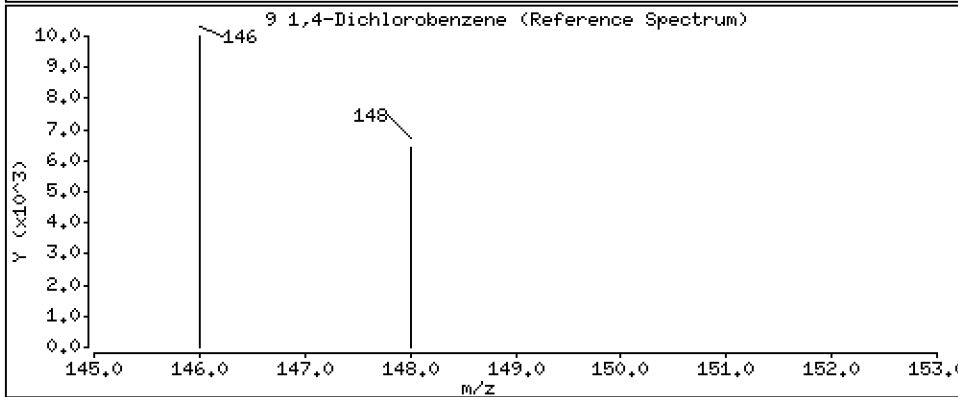
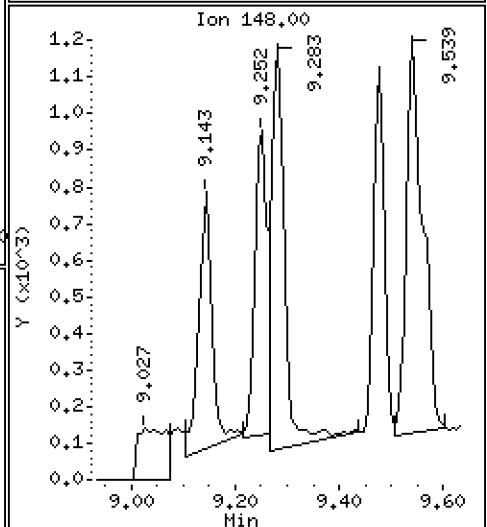
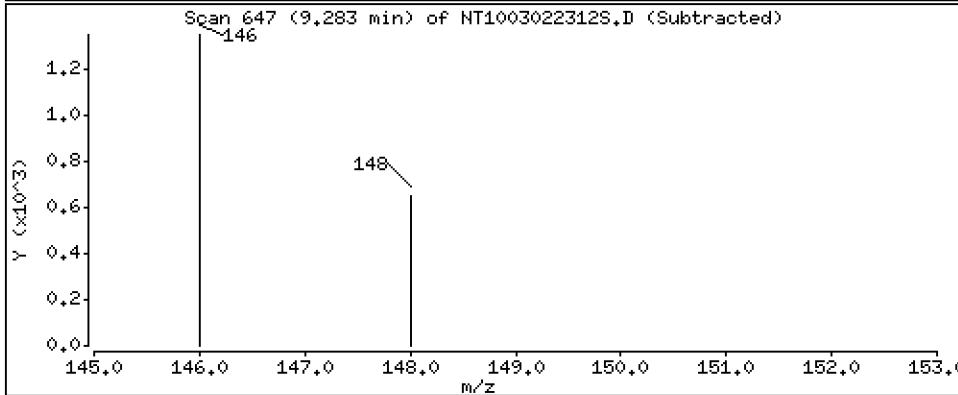
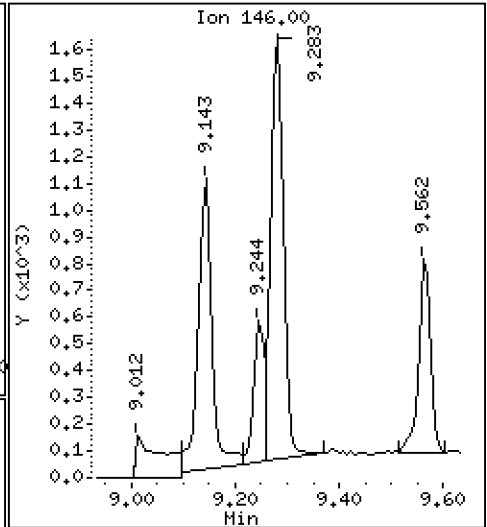
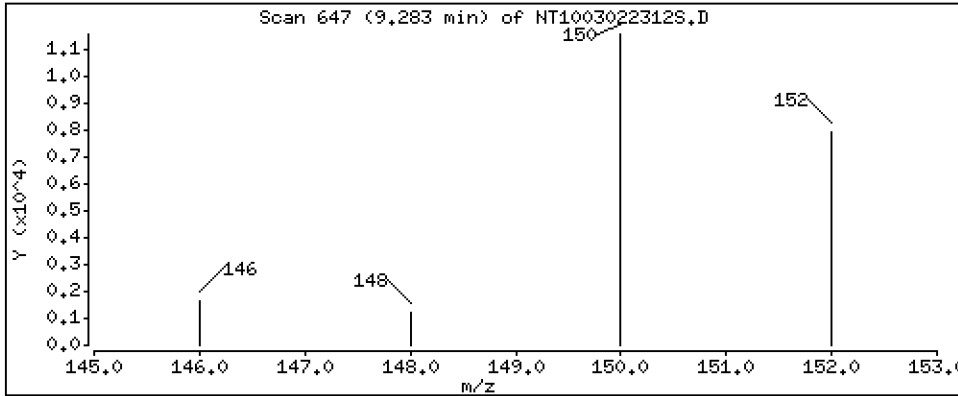
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.009987 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

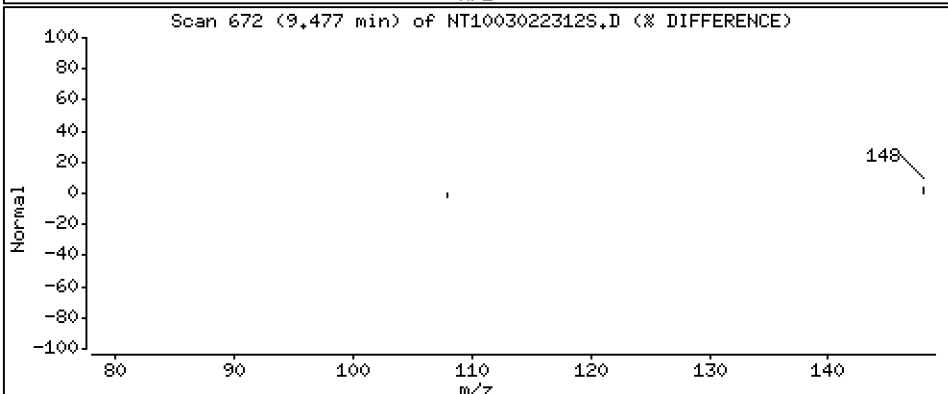
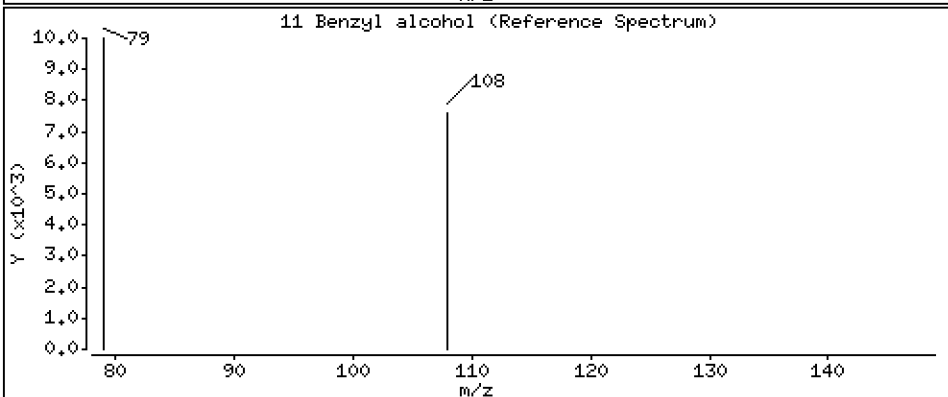
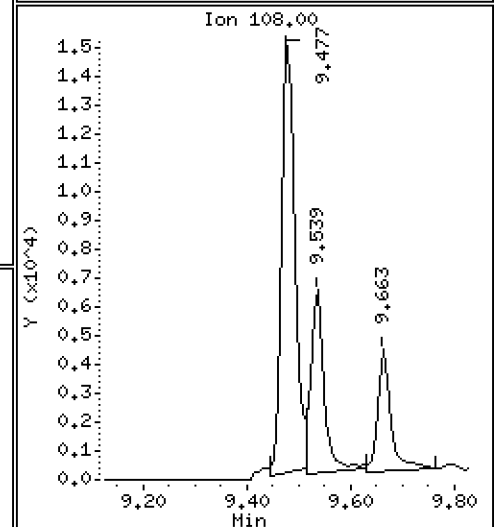
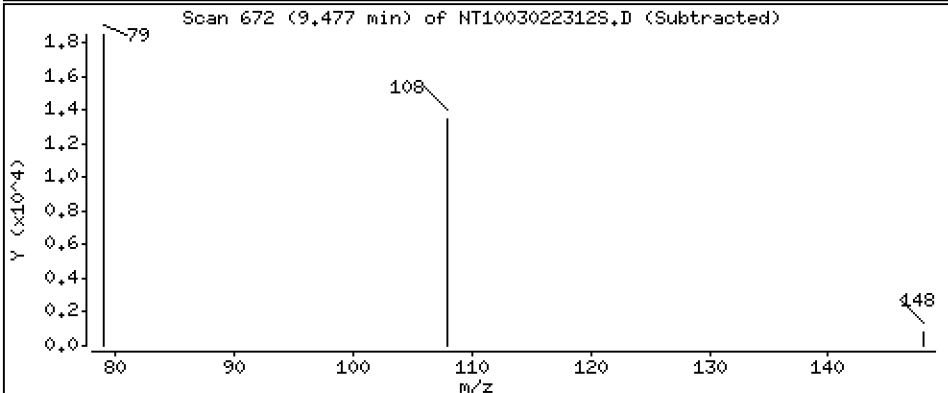
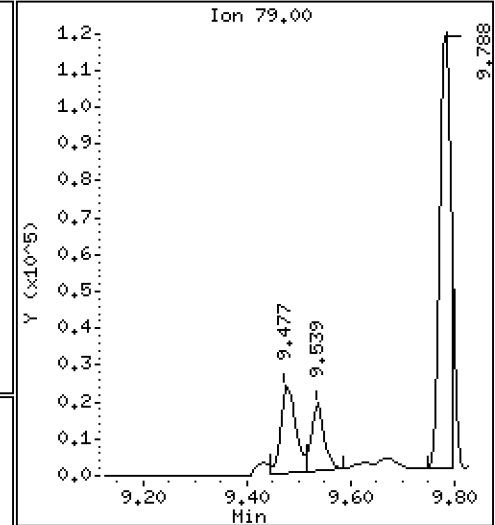
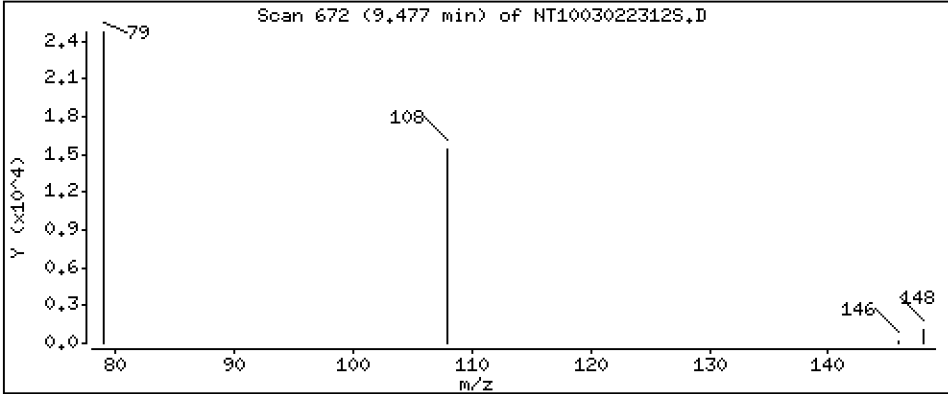
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.2733 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

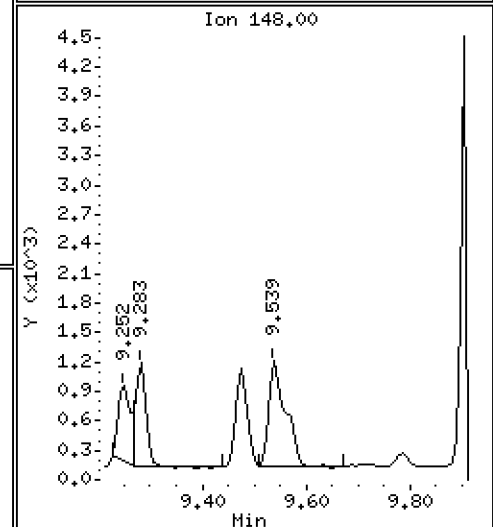
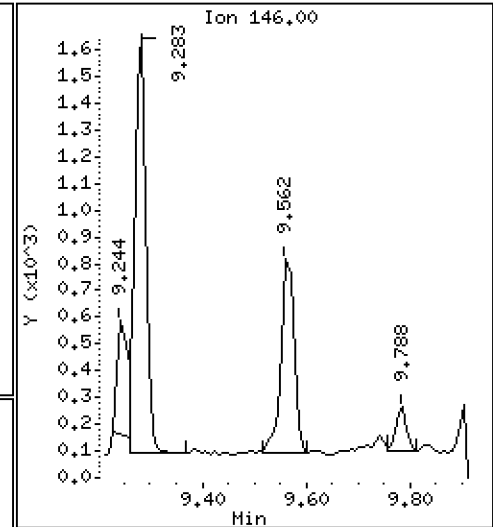
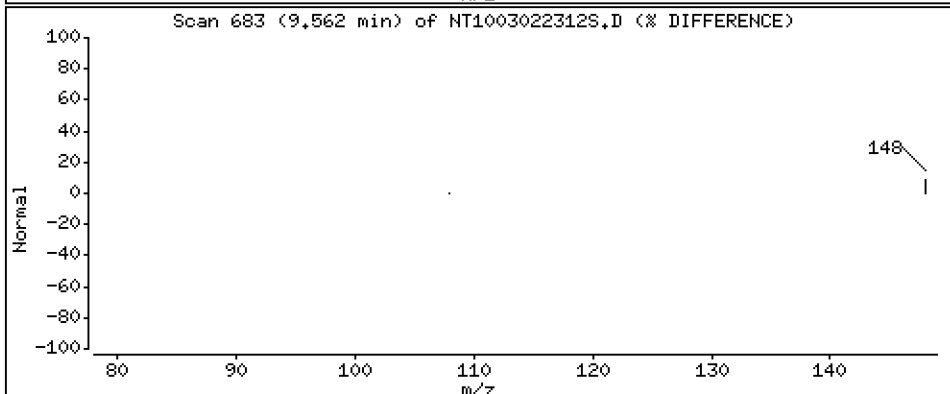
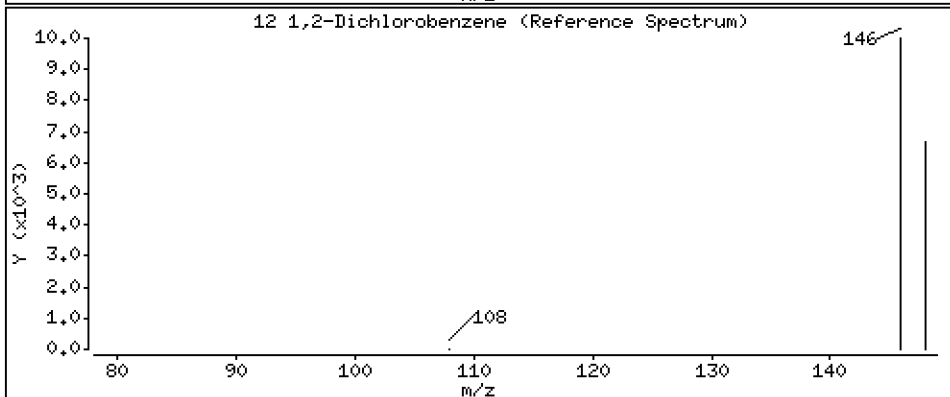
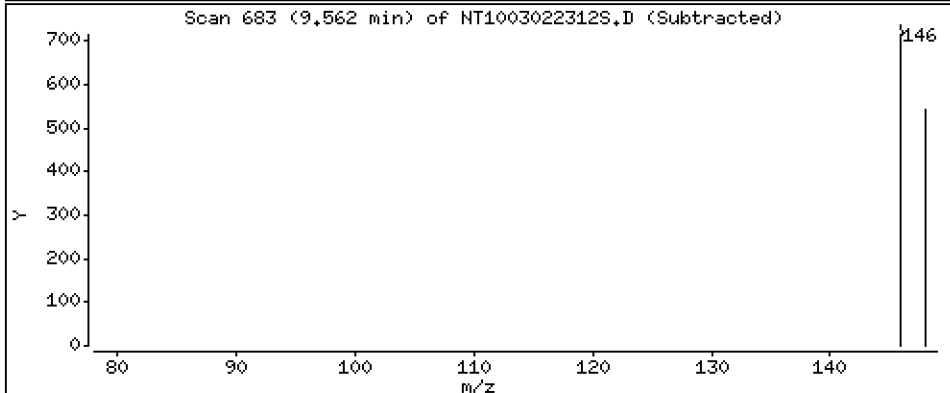
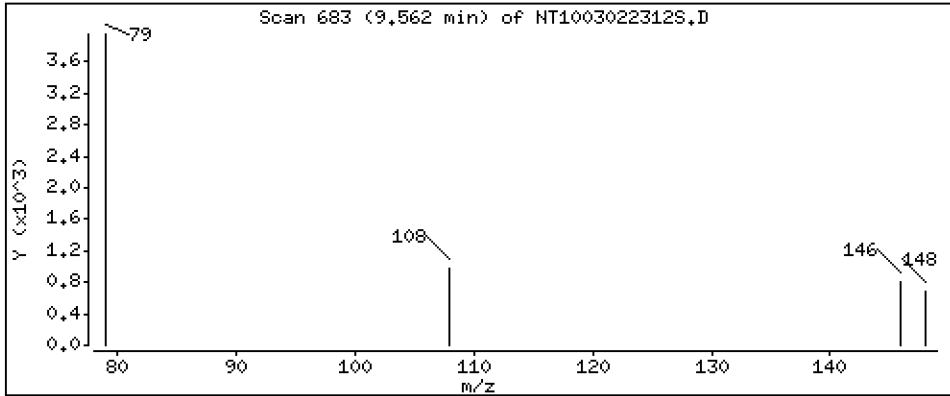
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.004811 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

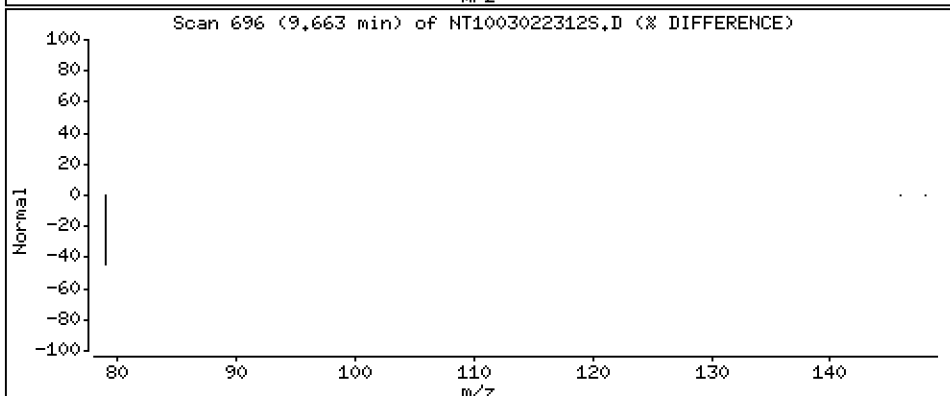
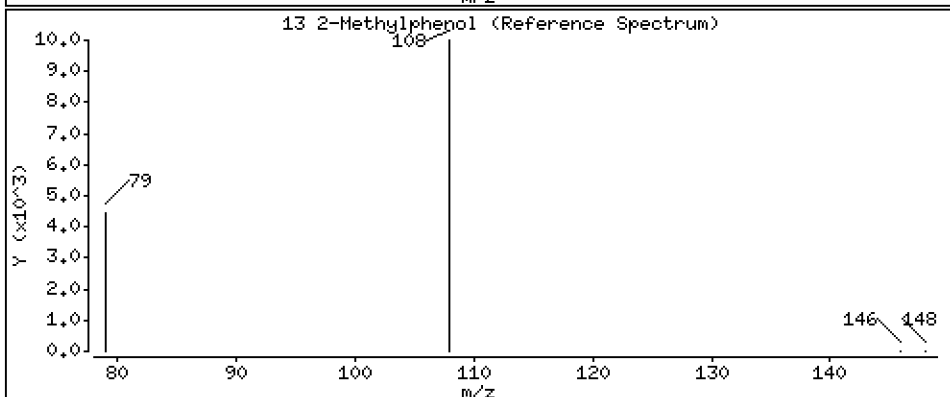
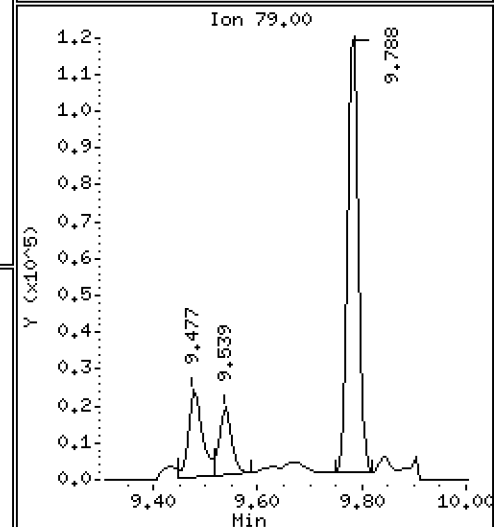
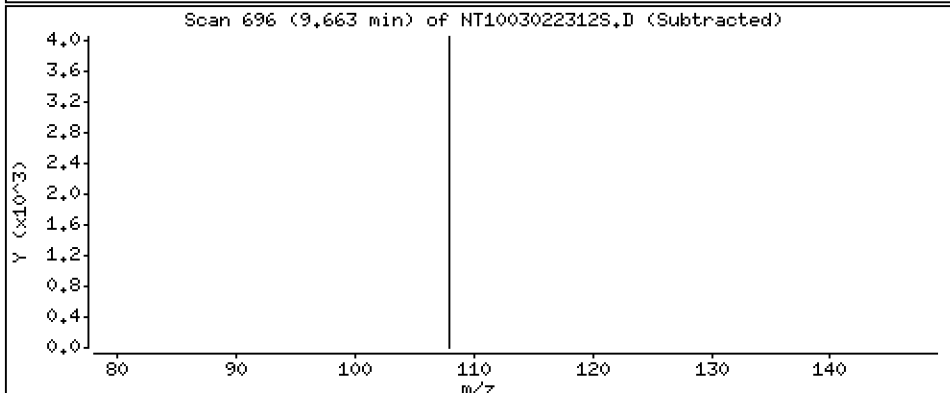
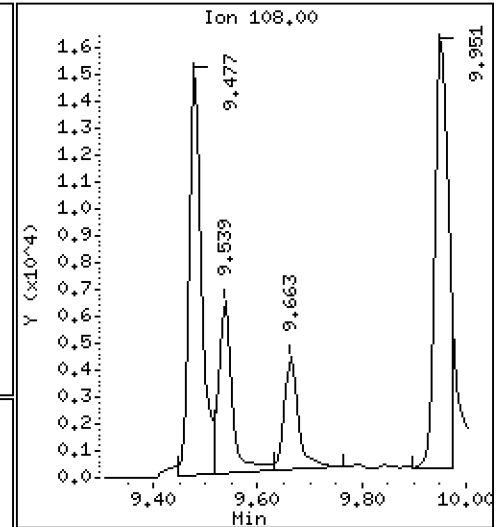
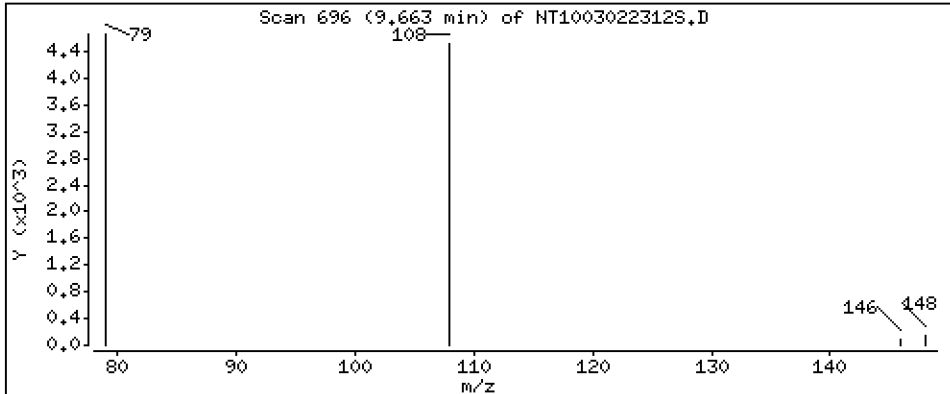
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.04254 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

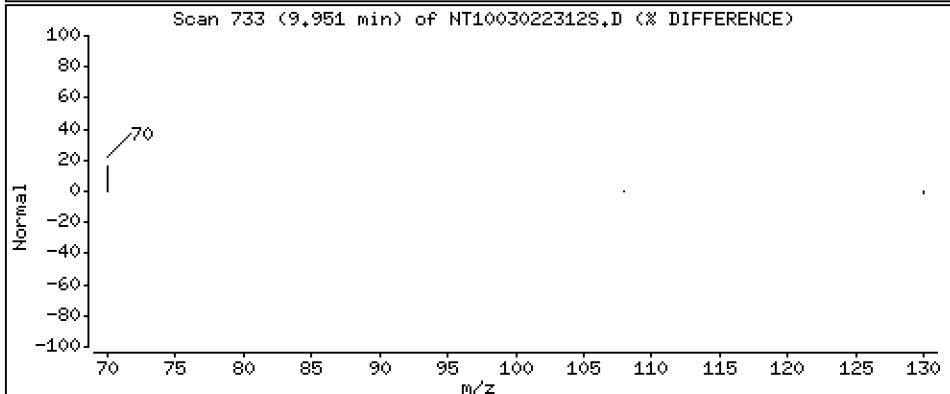
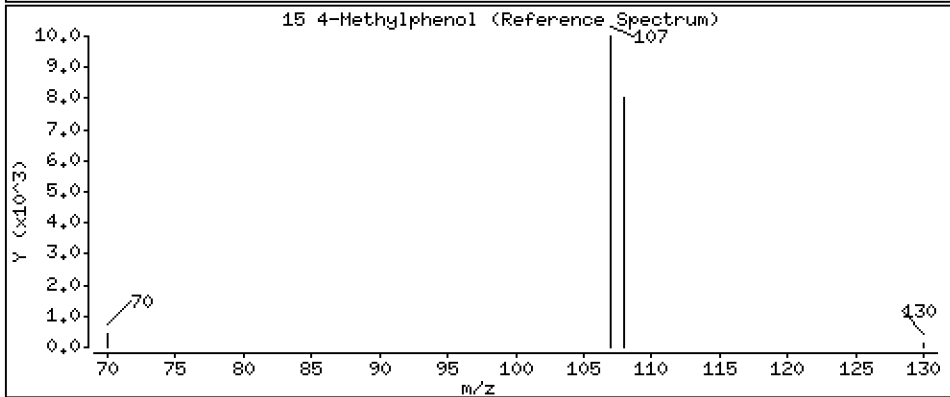
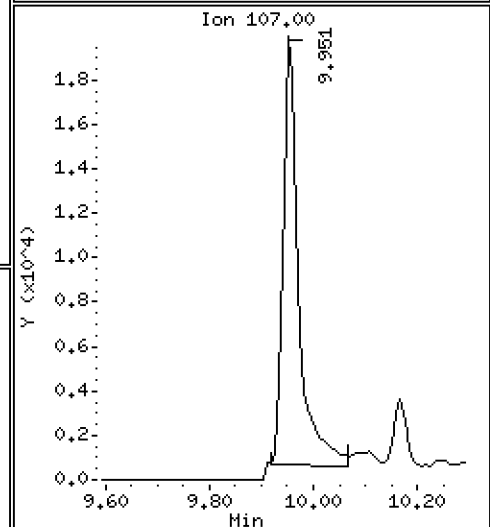
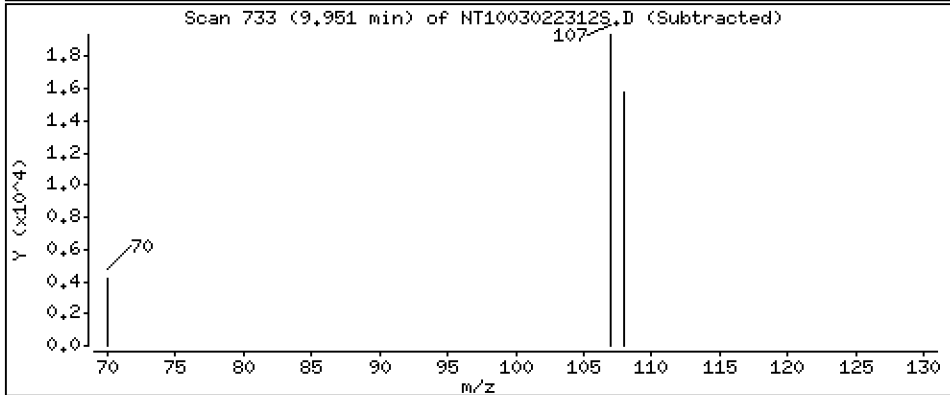
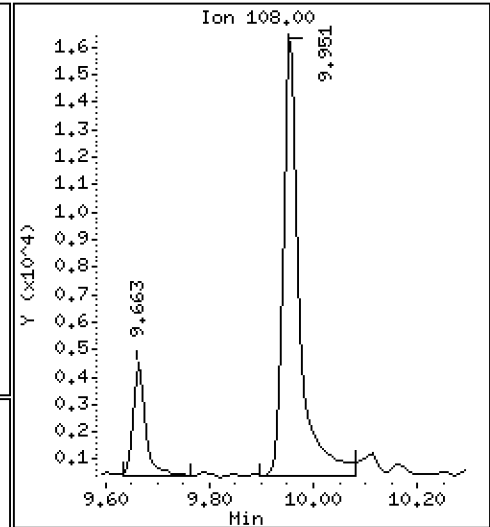
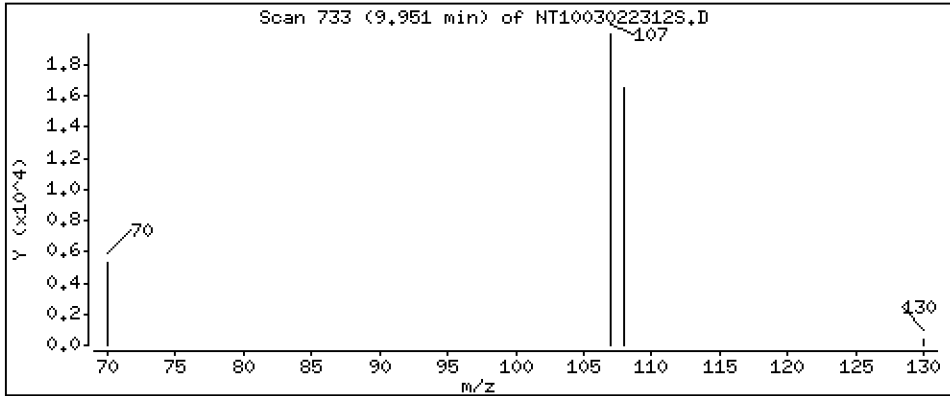
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1843 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

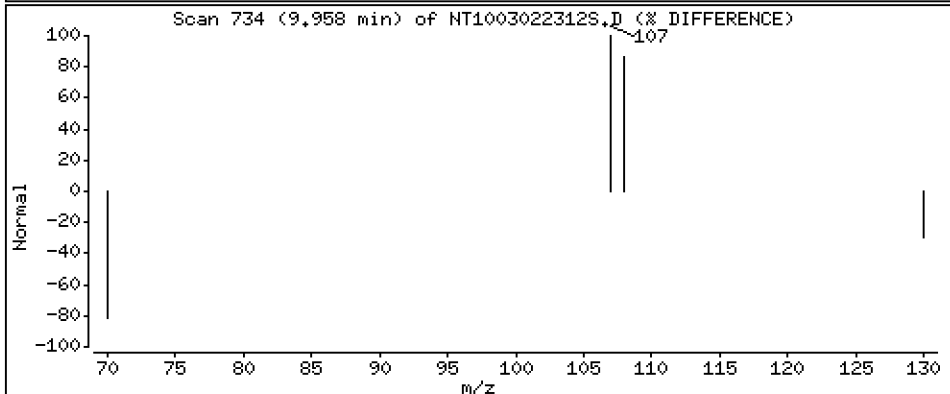
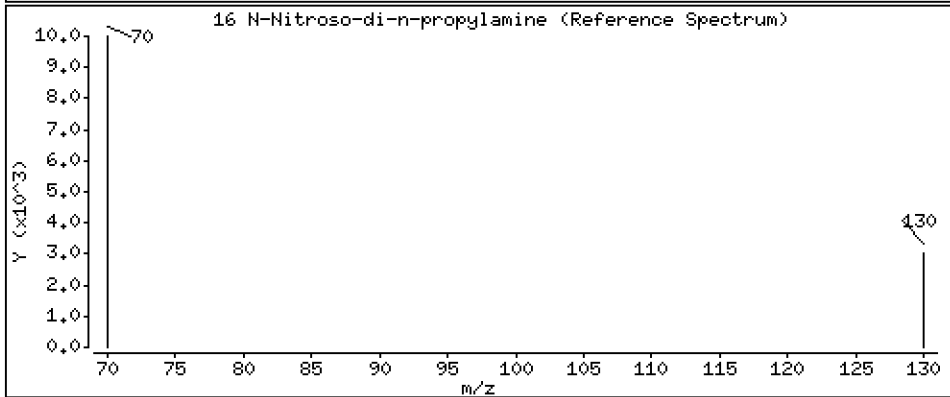
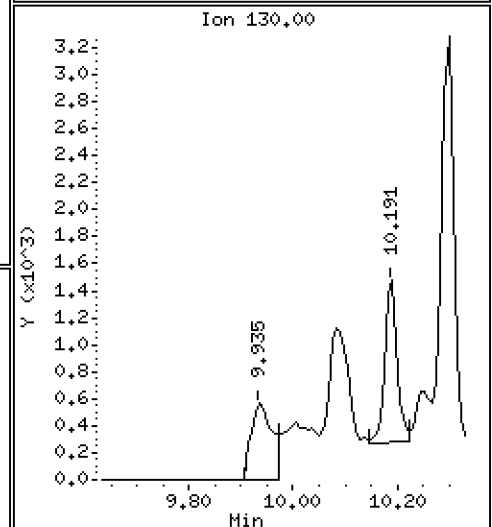
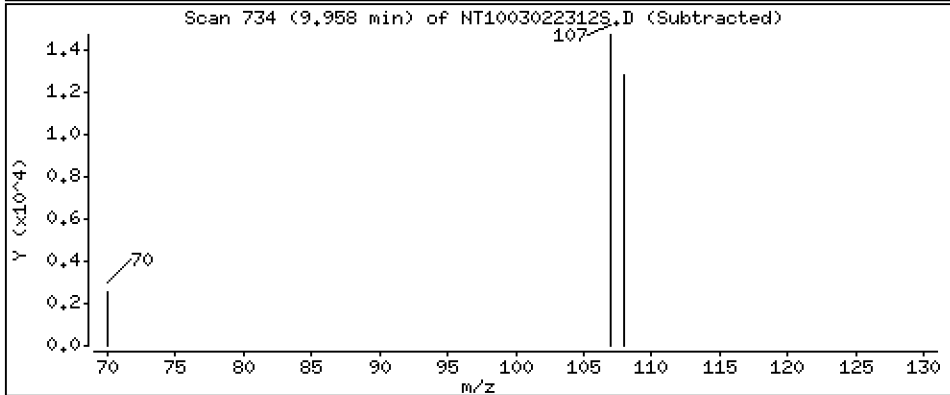
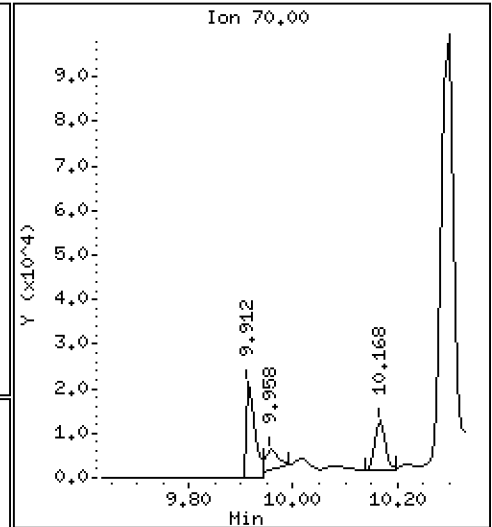
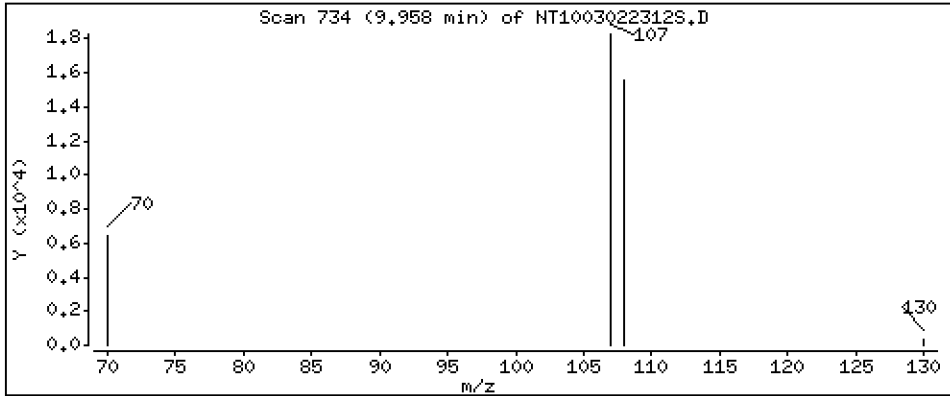
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.05906 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

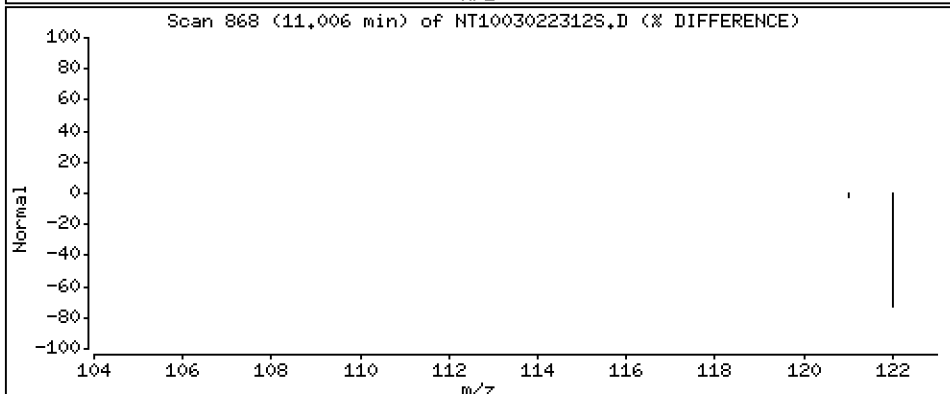
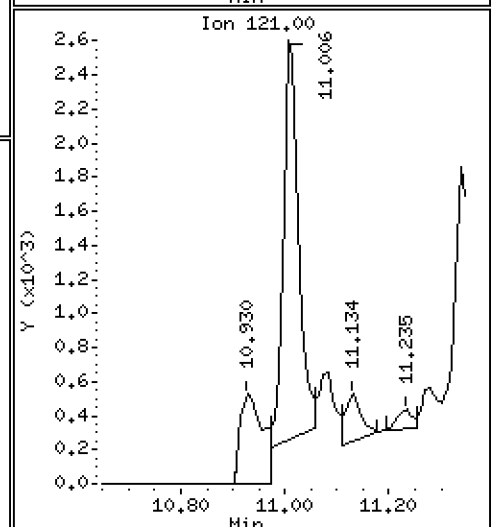
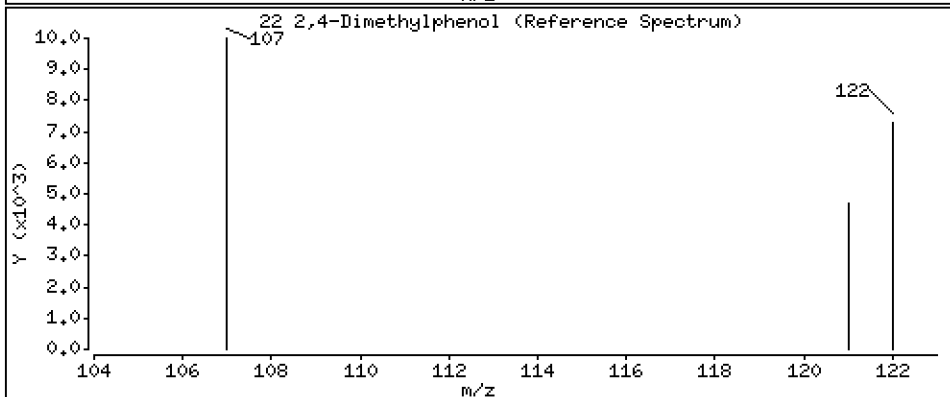
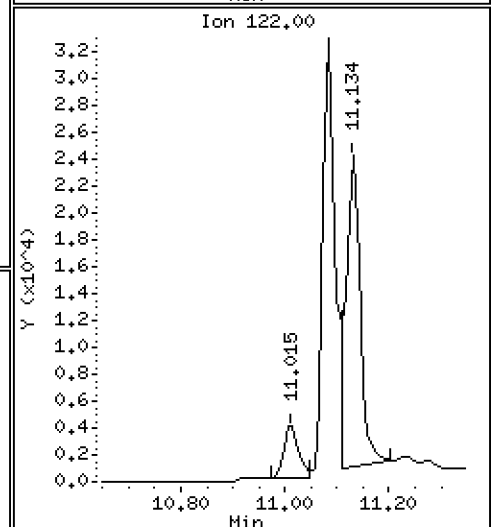
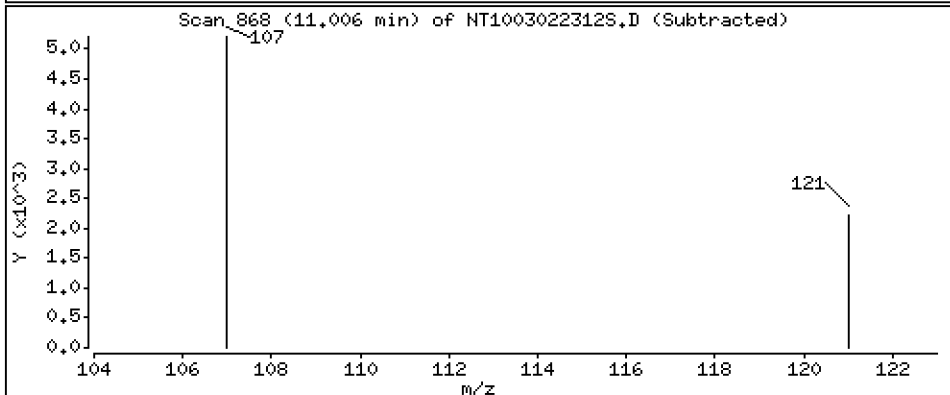
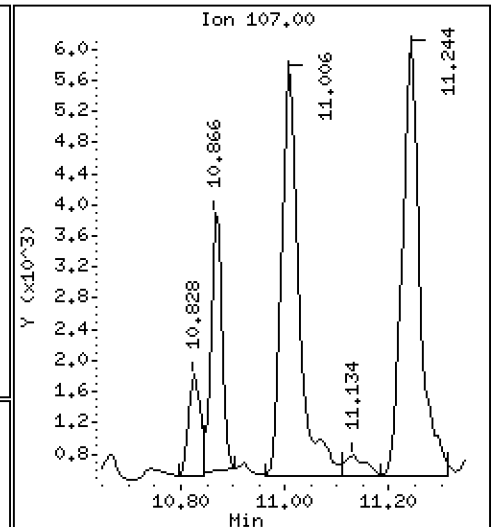
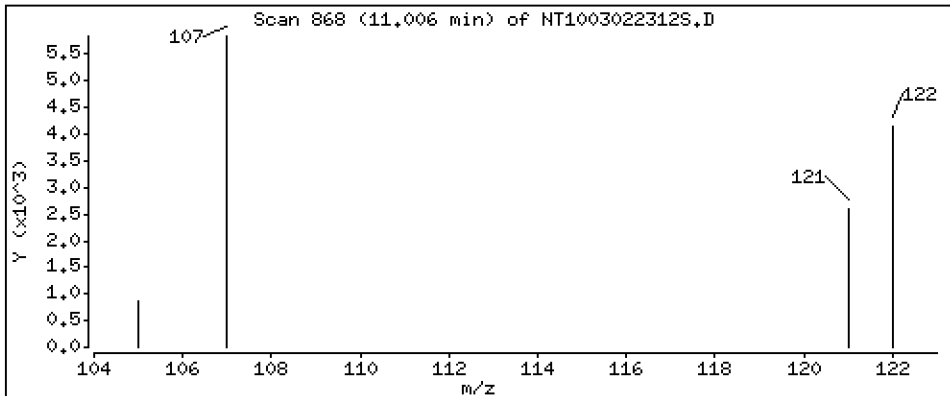
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.05672 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

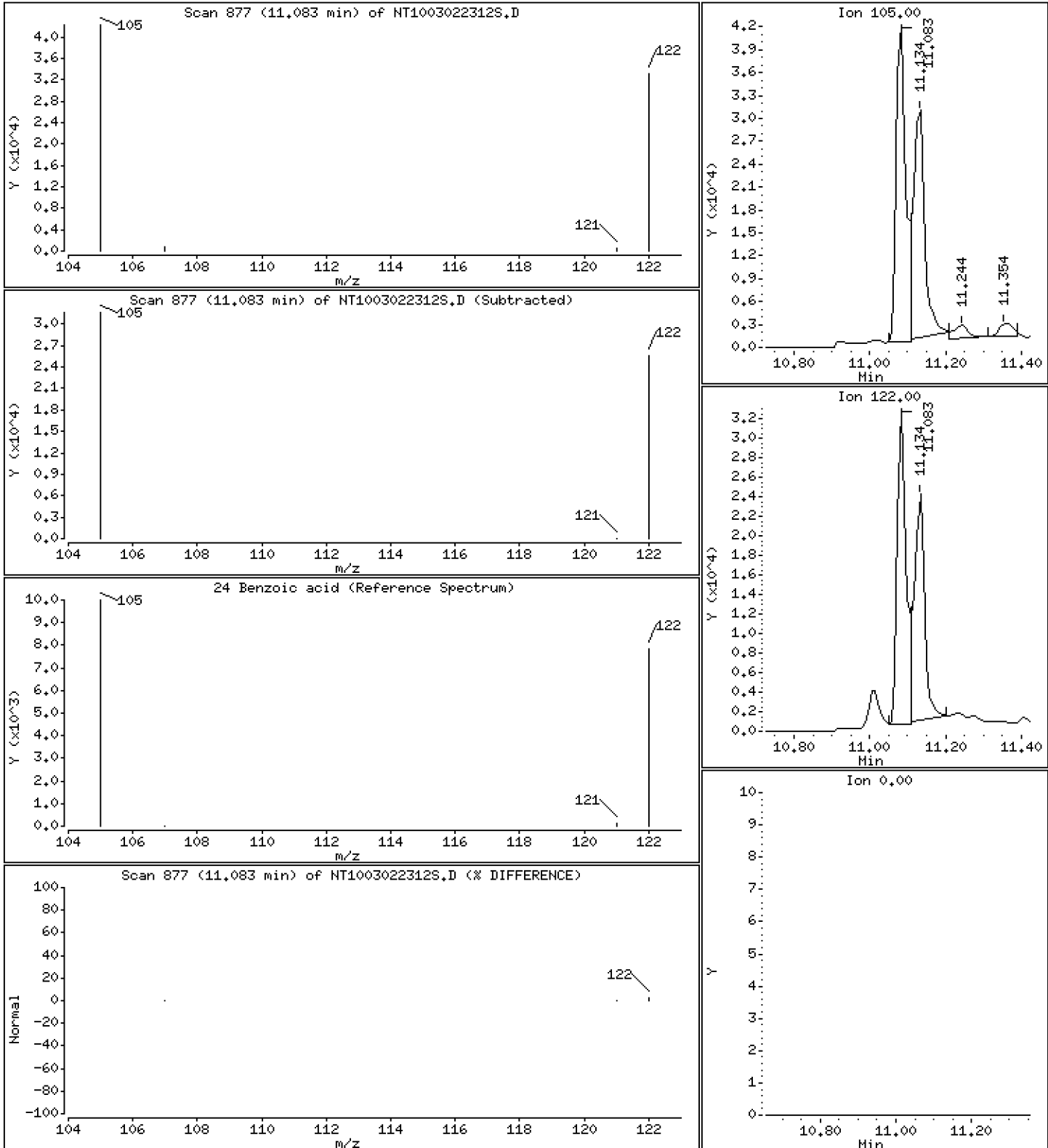
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.6311 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

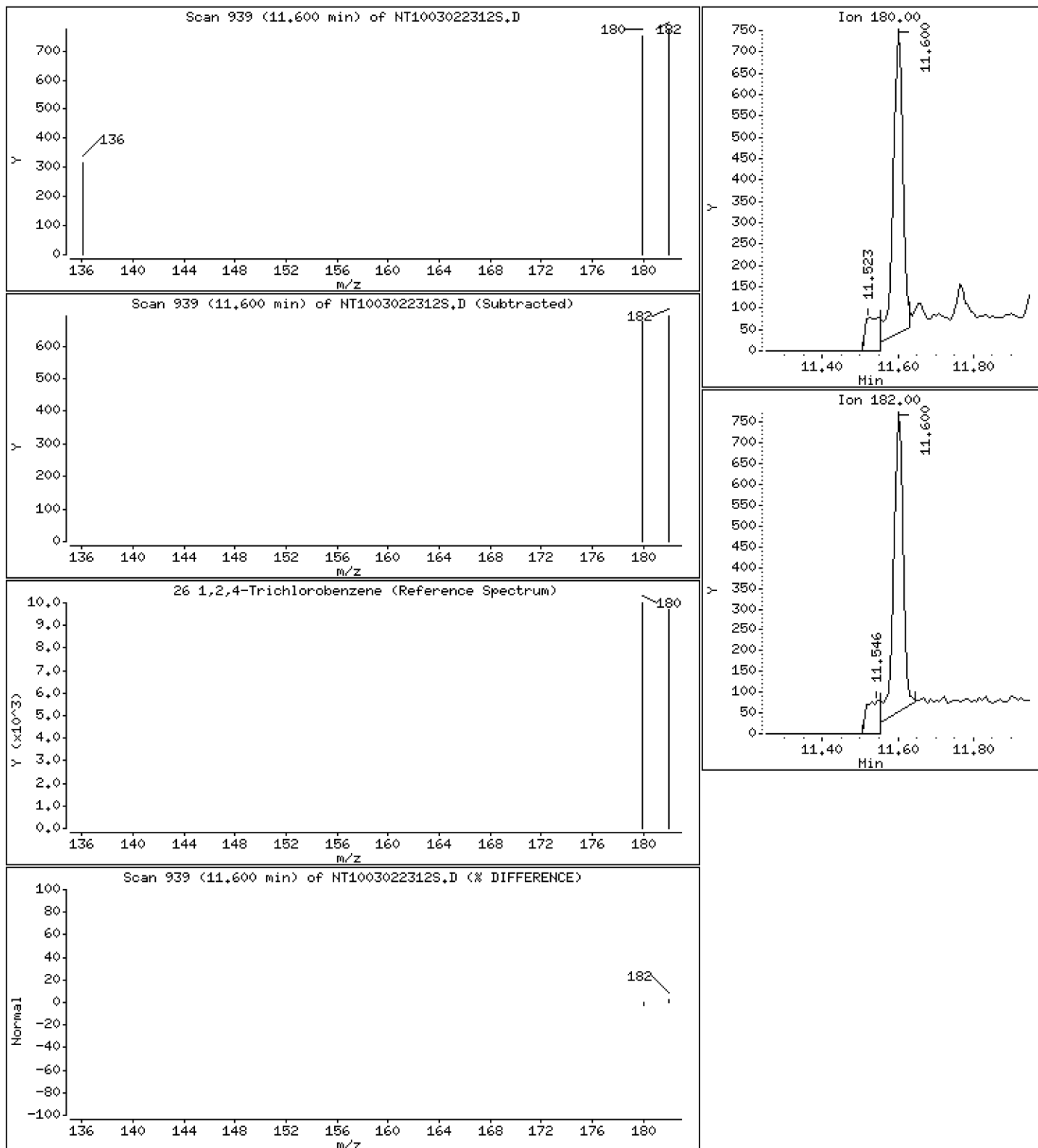
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,006590 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

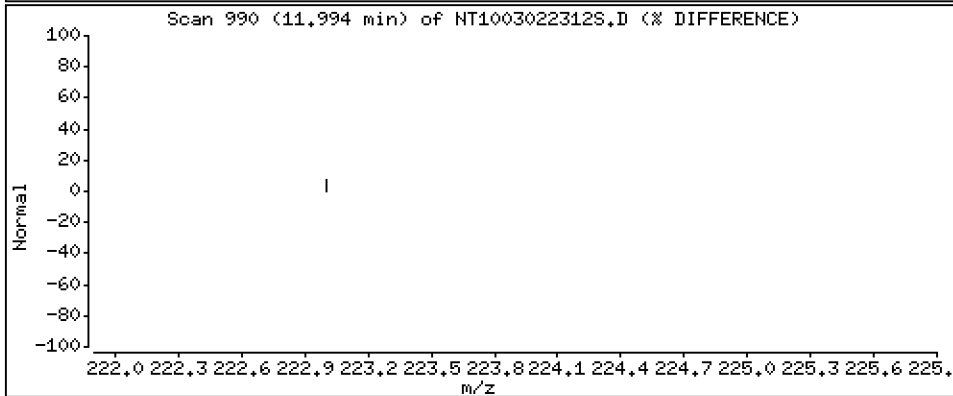
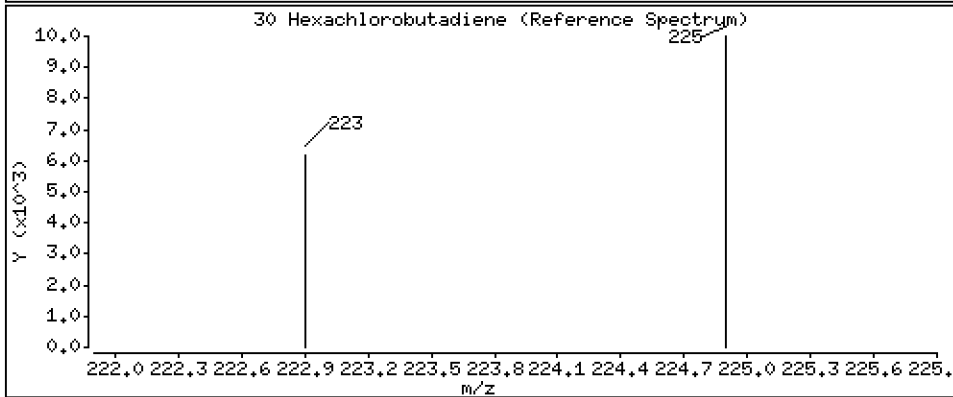
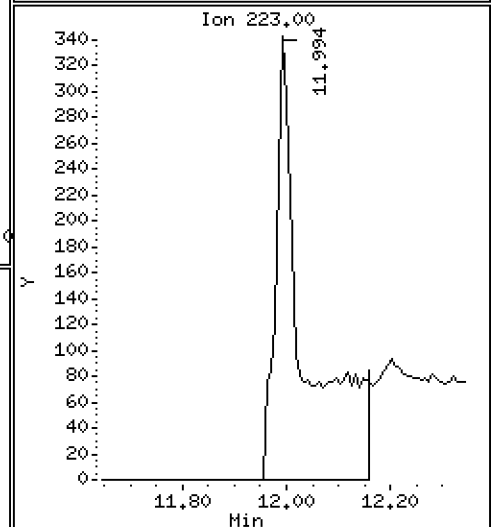
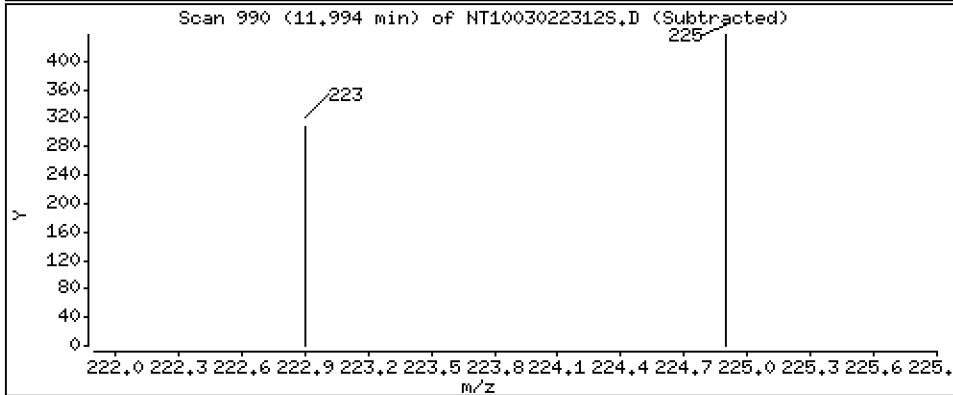
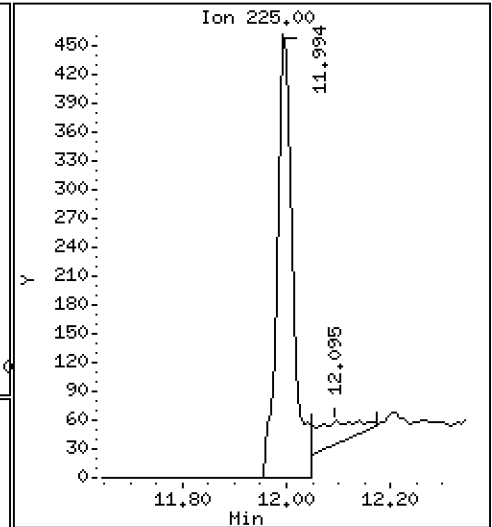
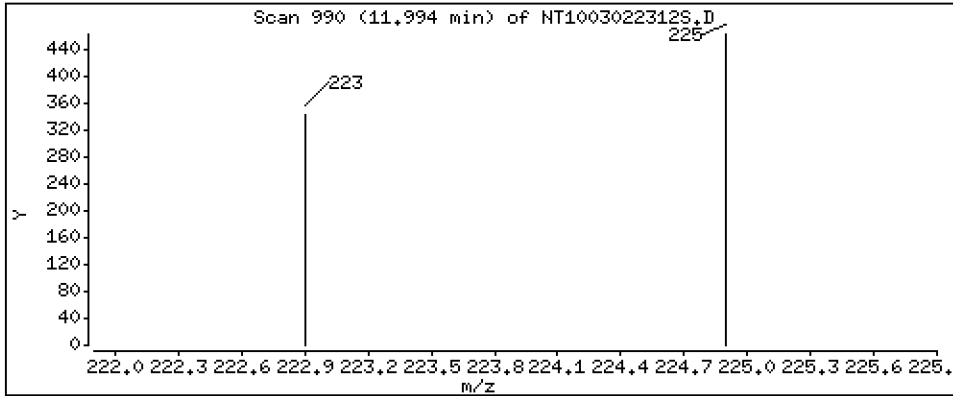
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,007303 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

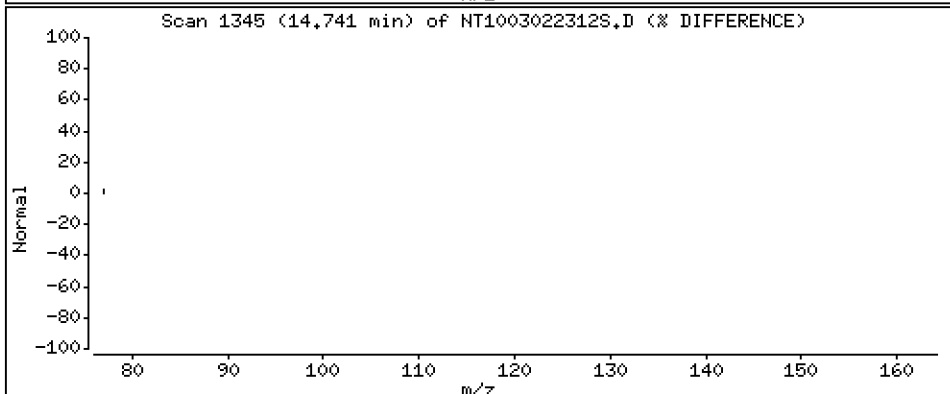
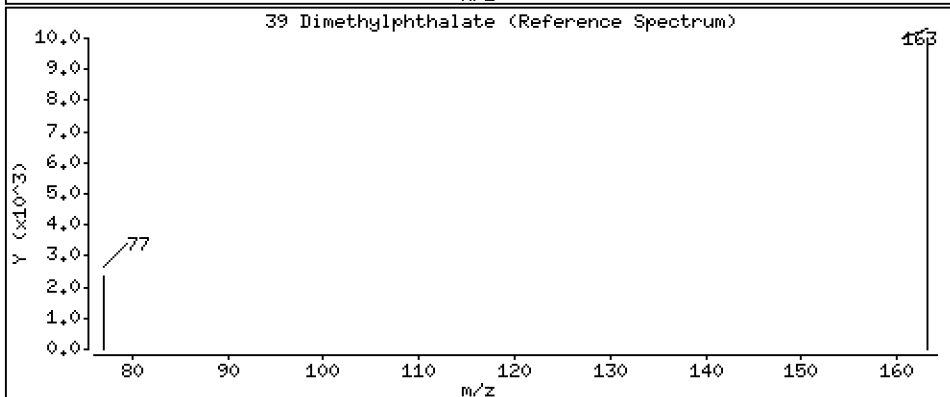
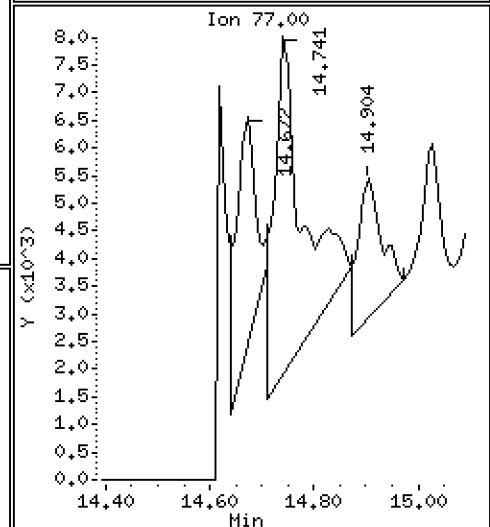
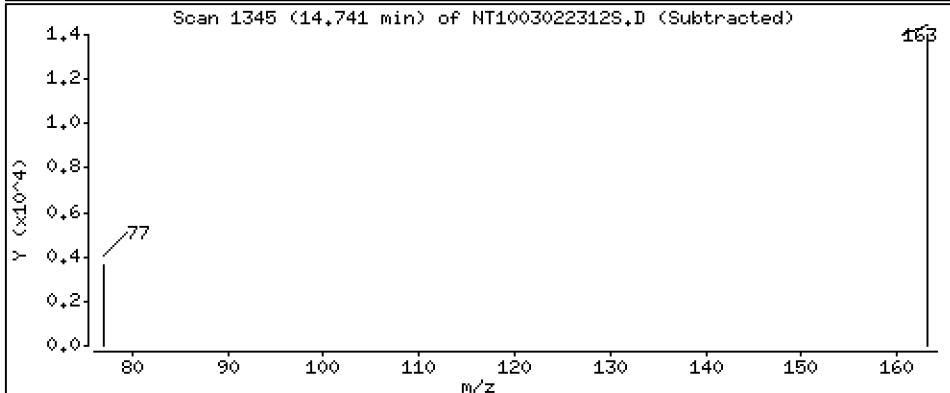
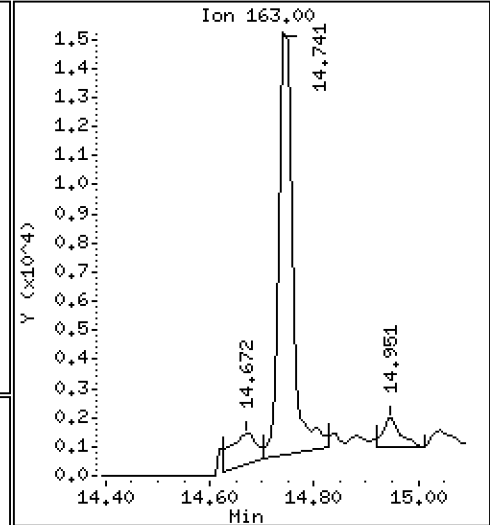
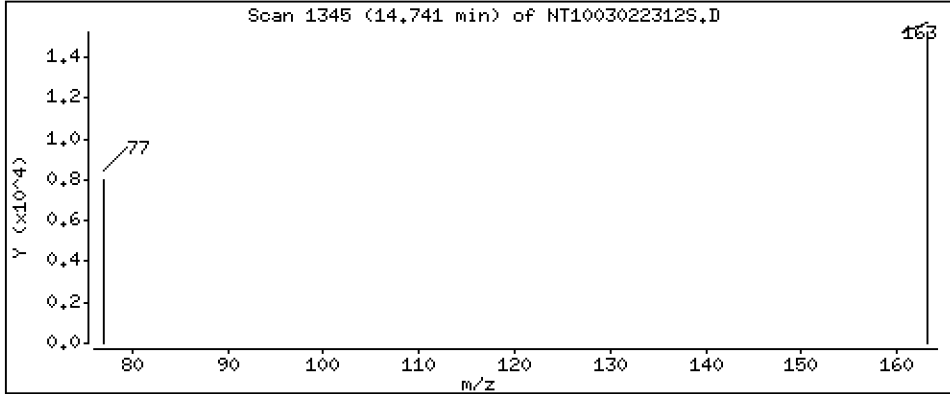
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.06597 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

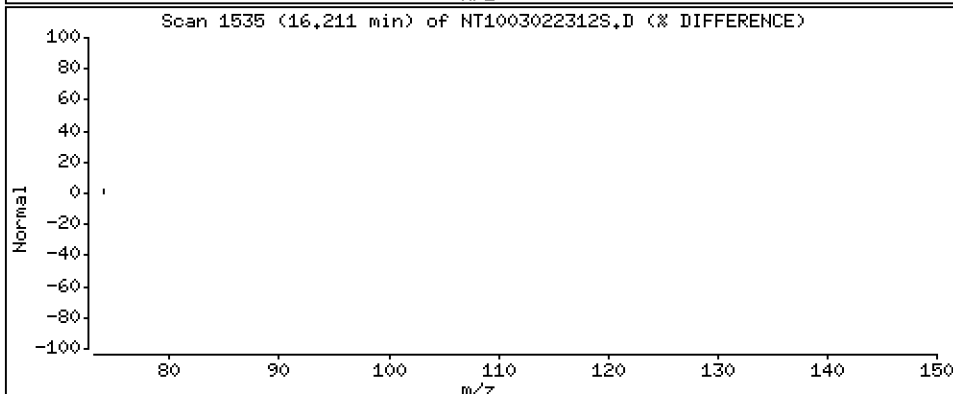
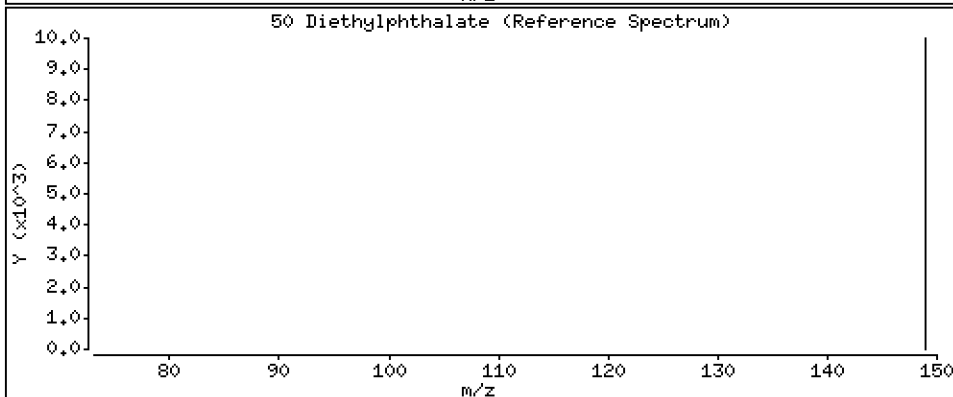
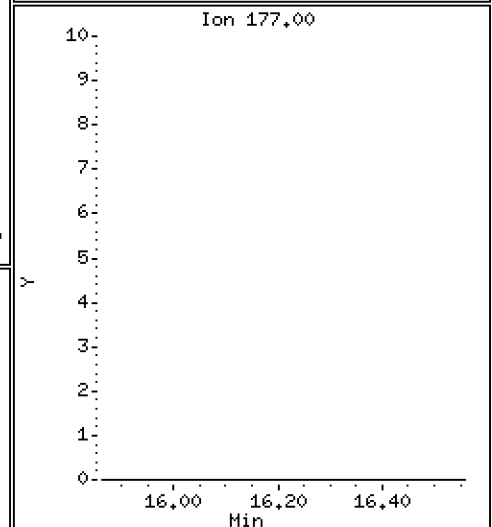
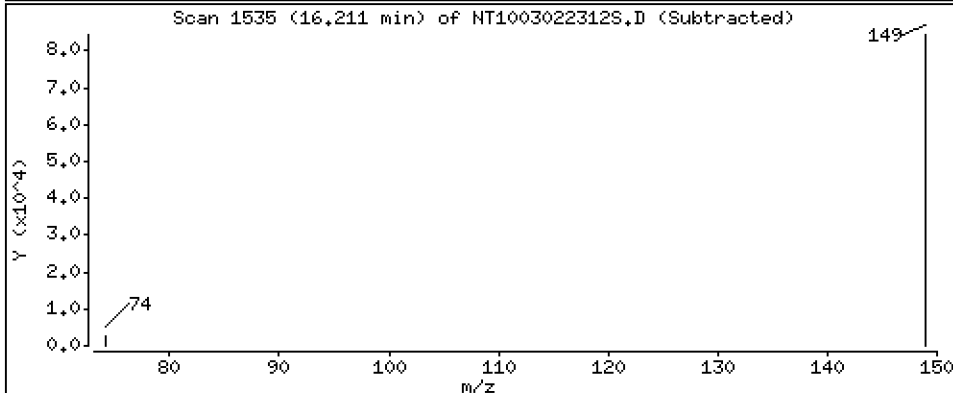
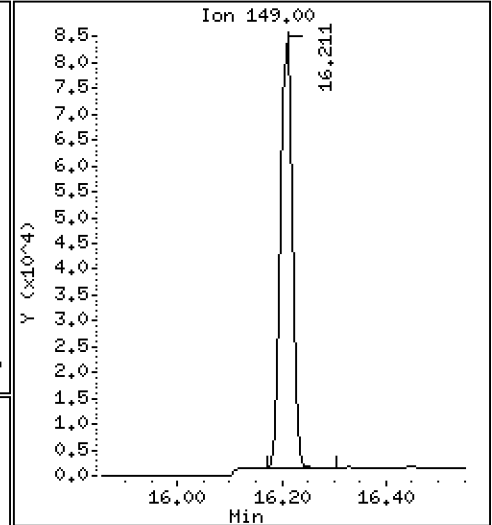
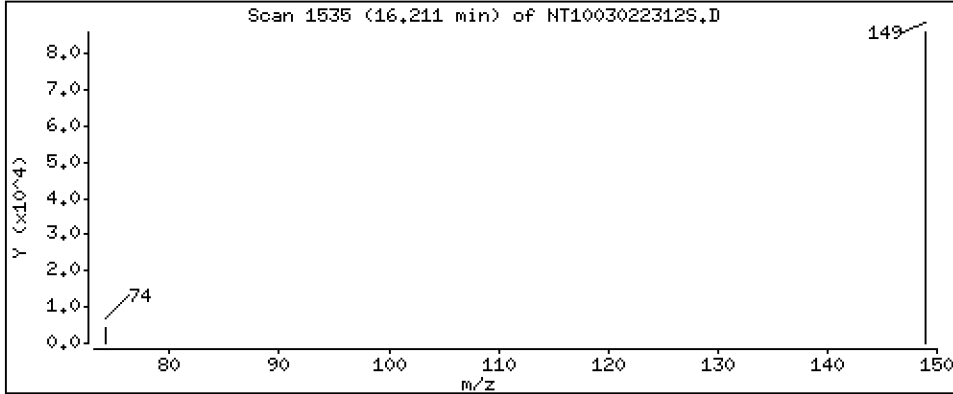
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,3326 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

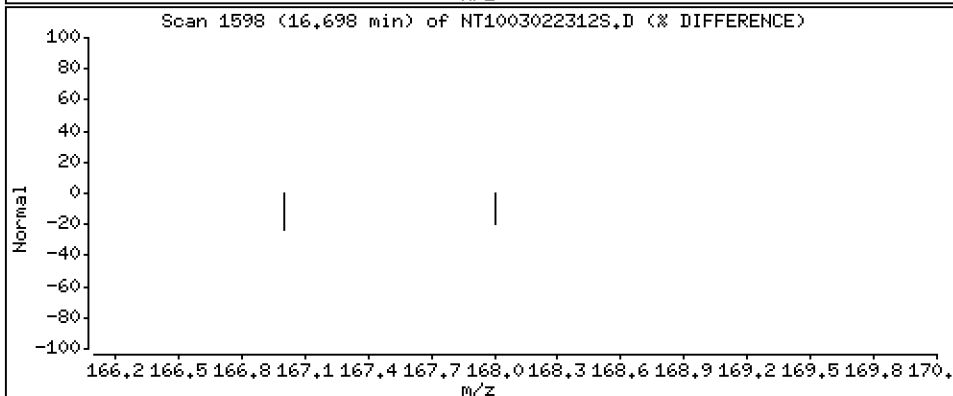
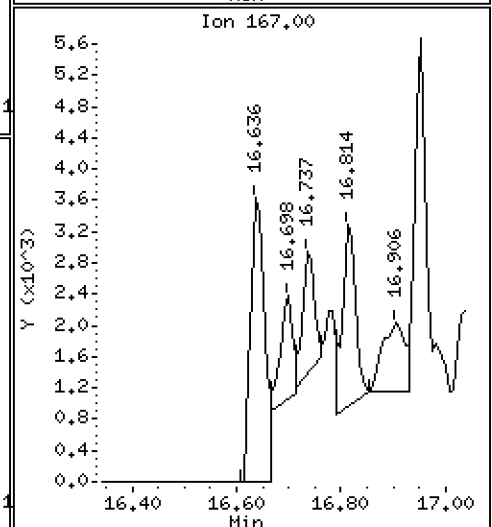
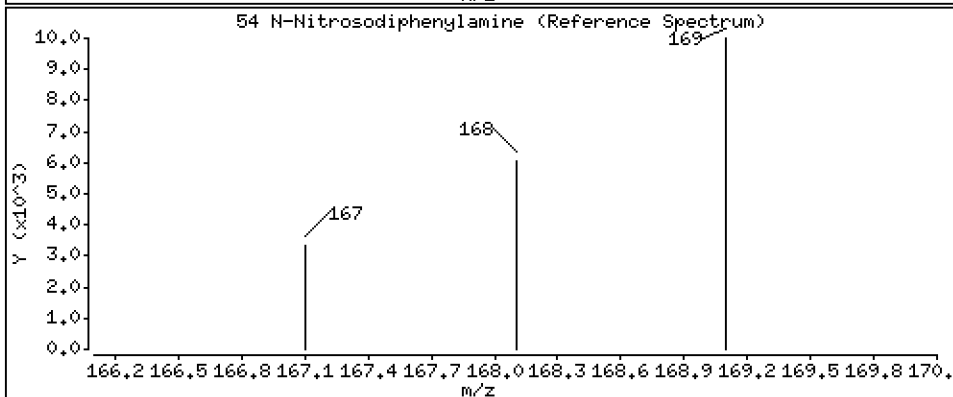
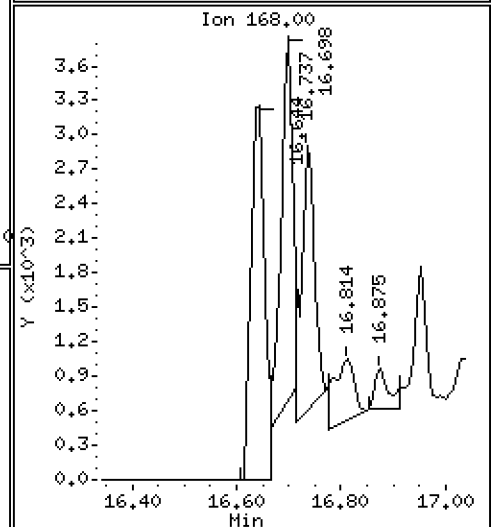
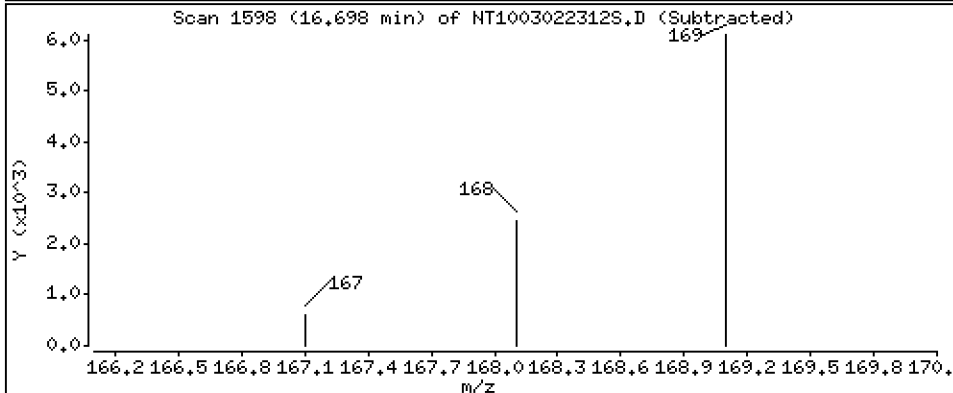
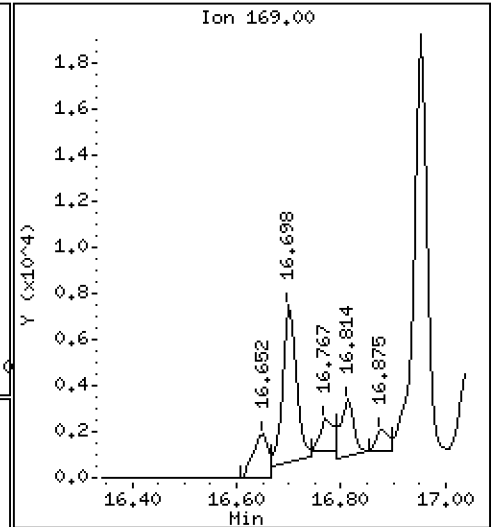
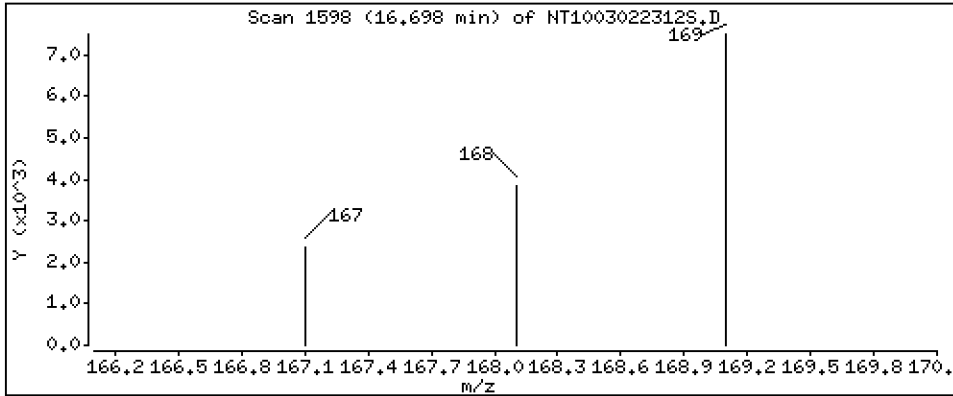
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 0.03481 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

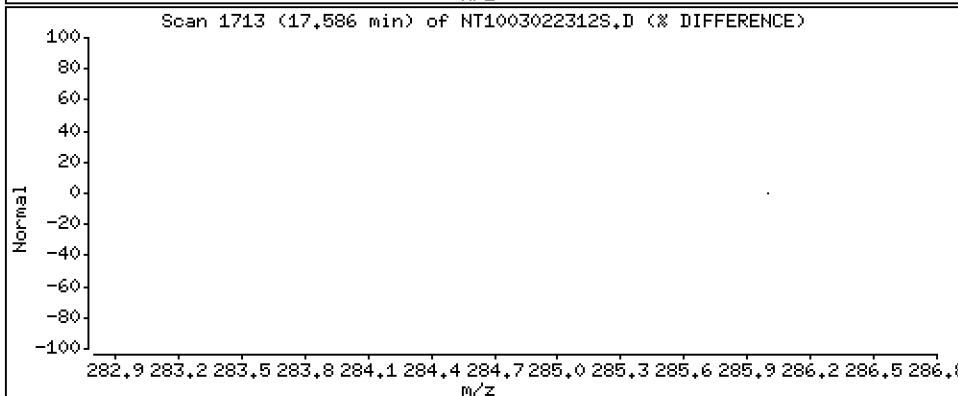
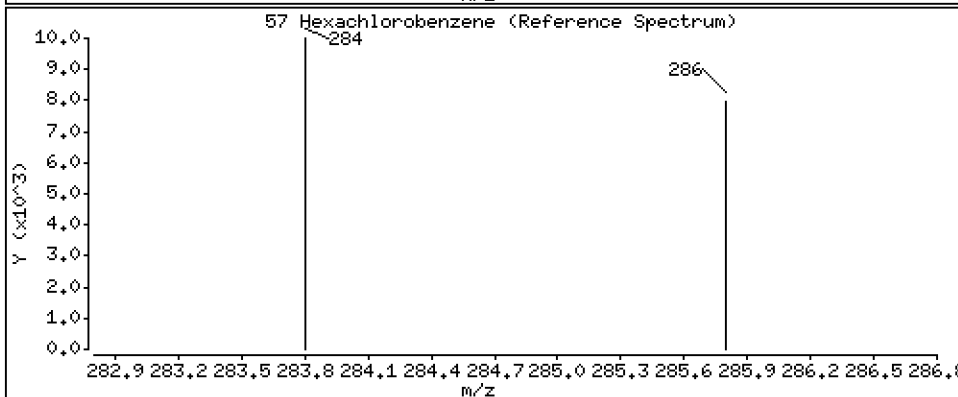
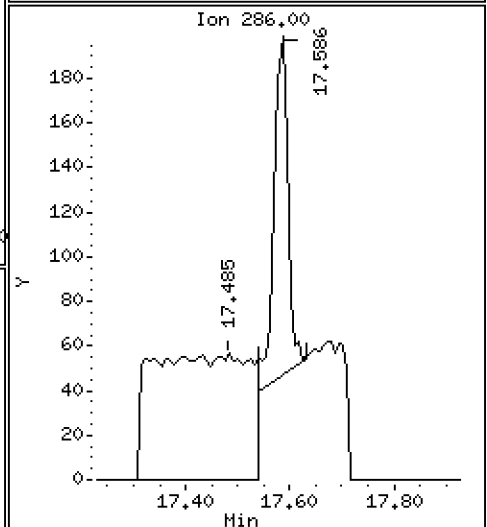
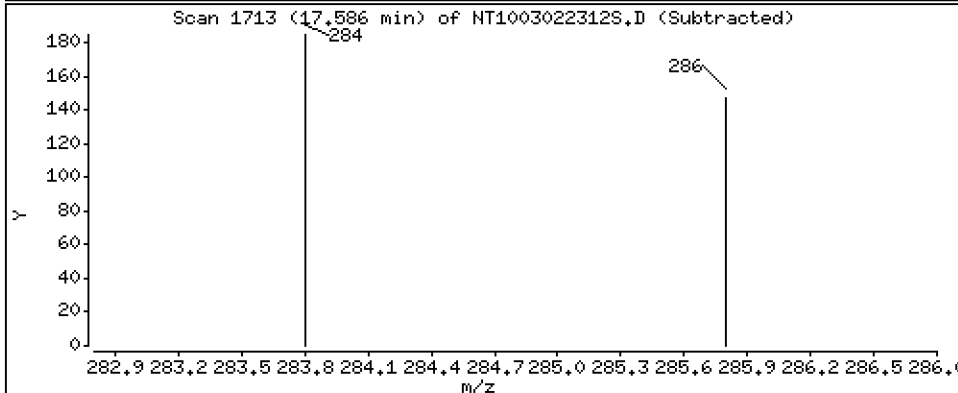
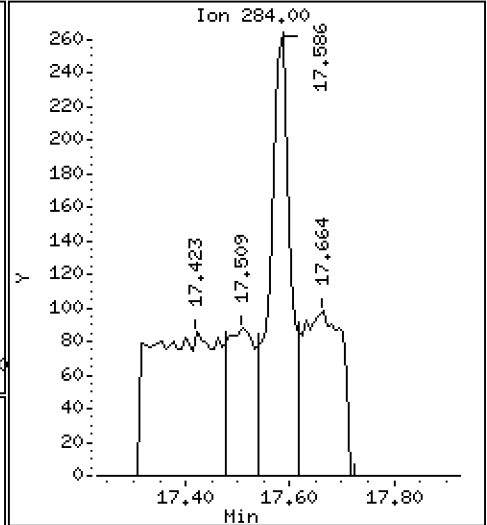
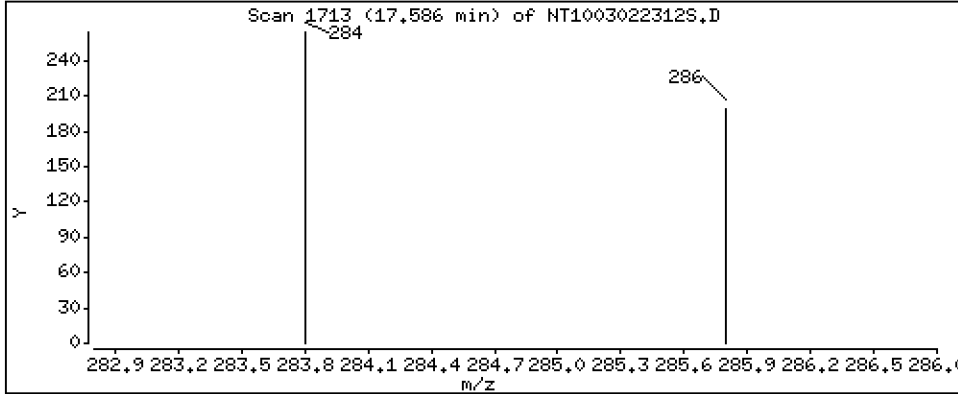
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,004138 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

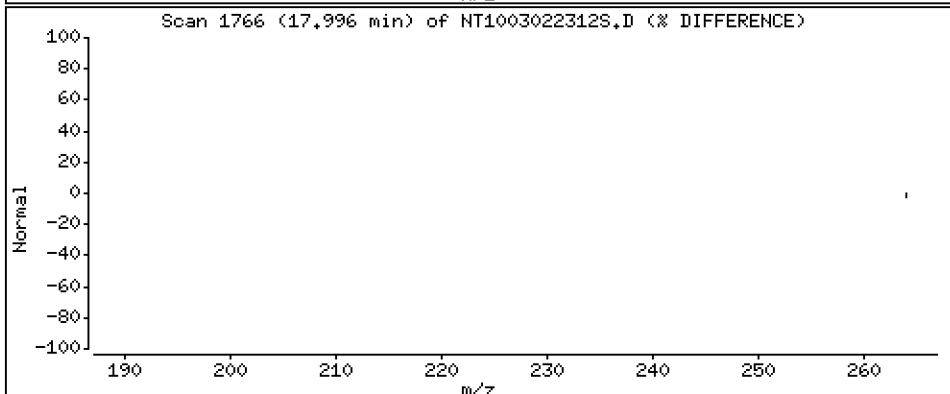
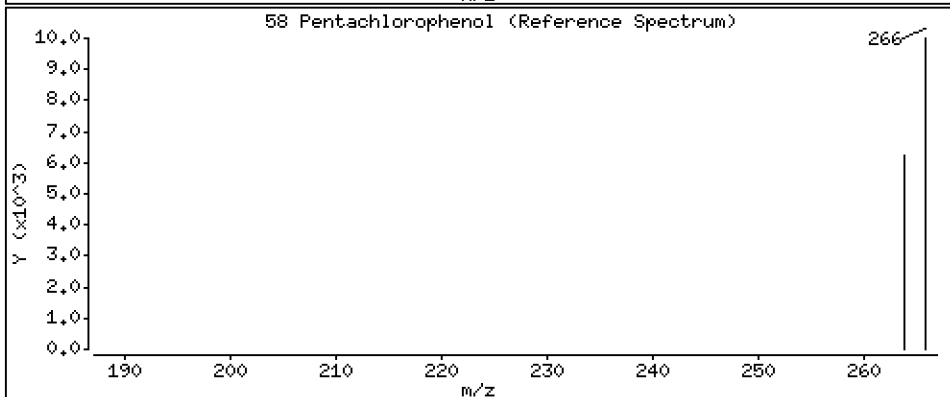
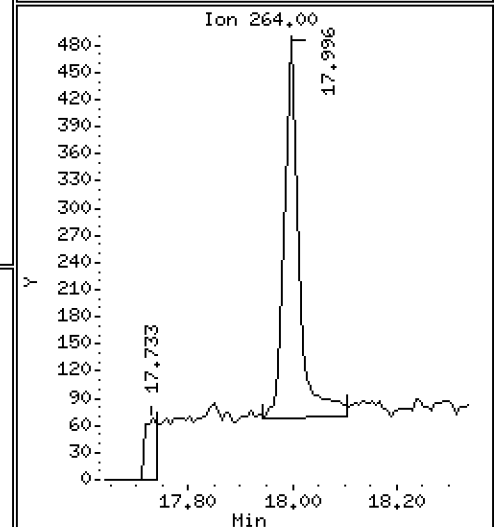
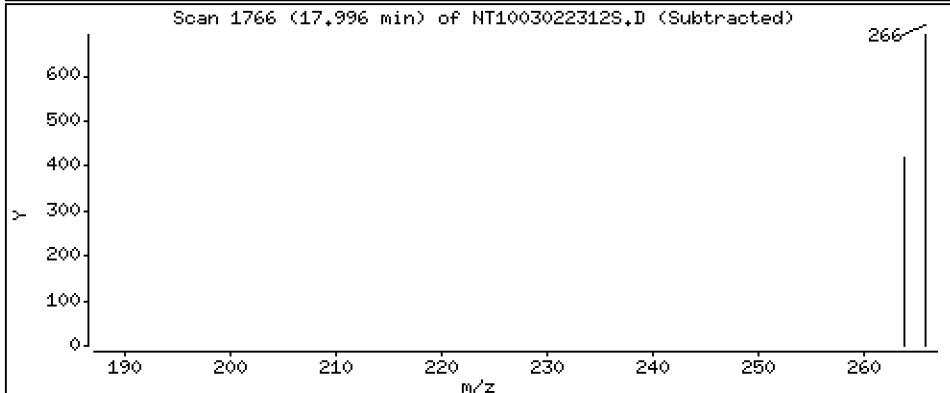
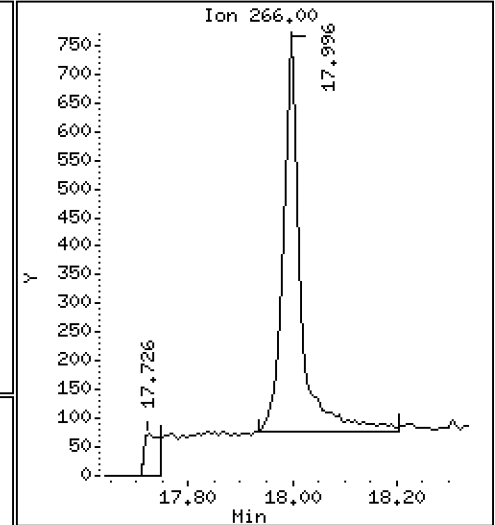
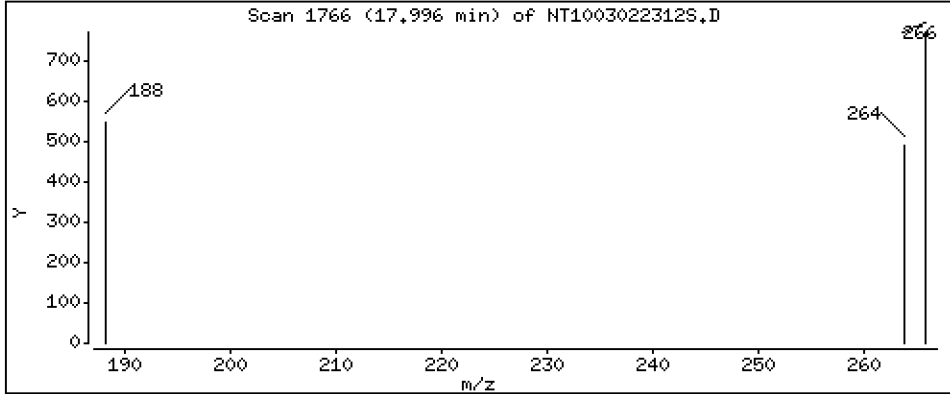
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,02110 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

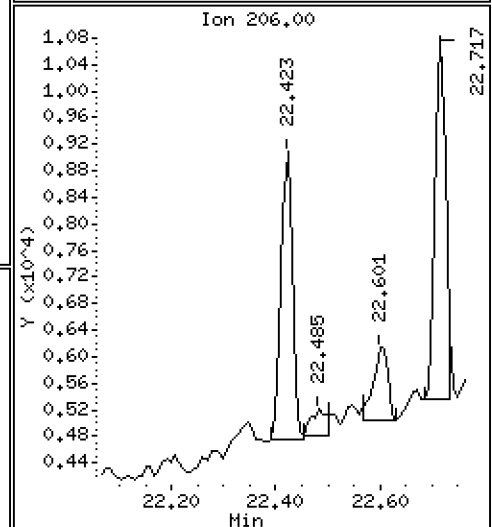
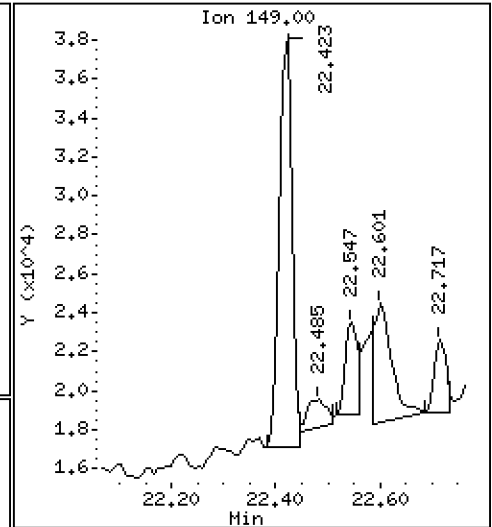
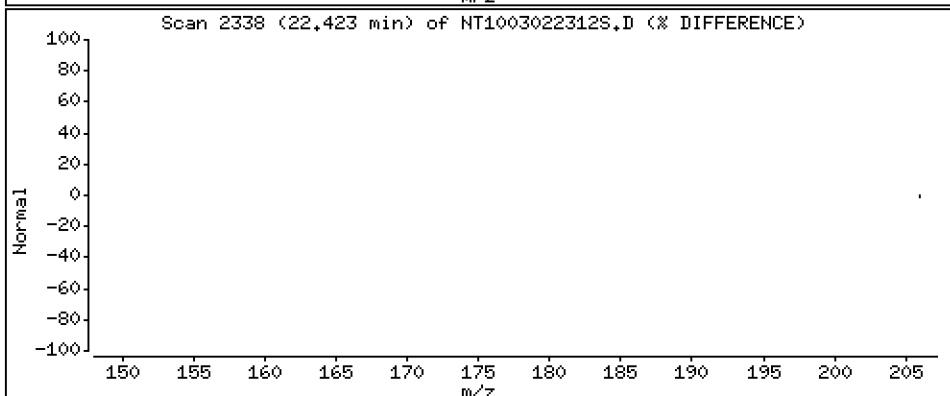
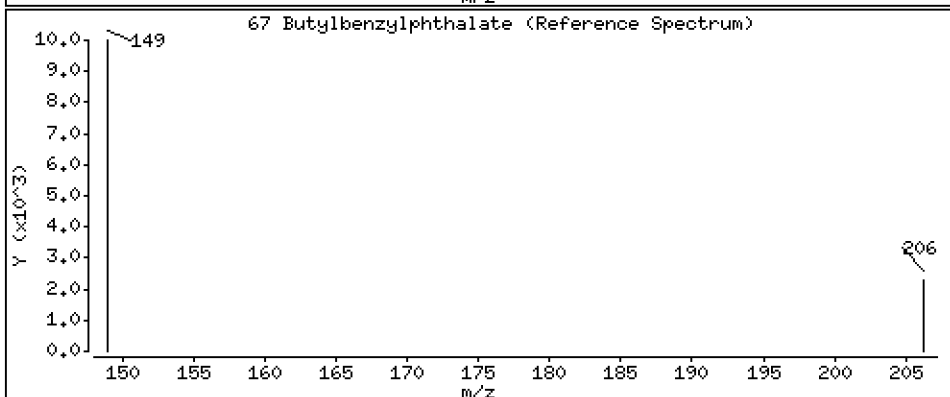
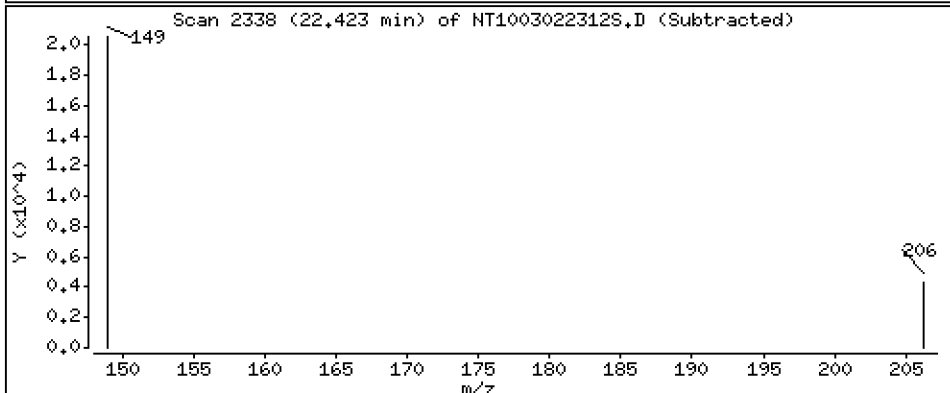
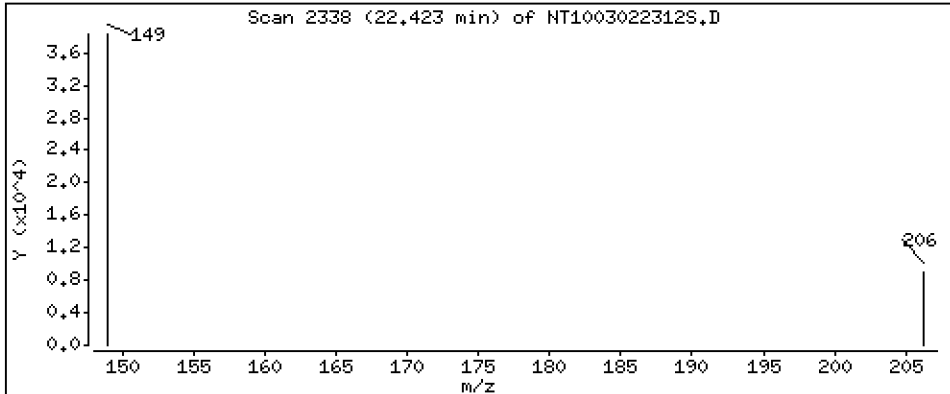
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 0.07165 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

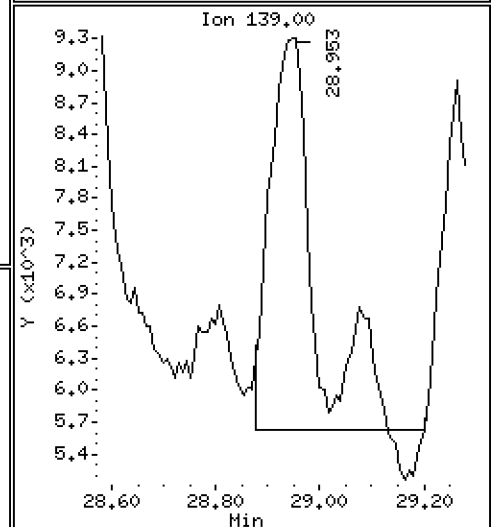
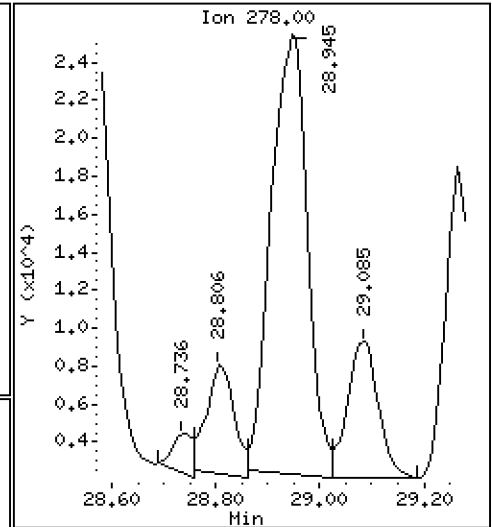
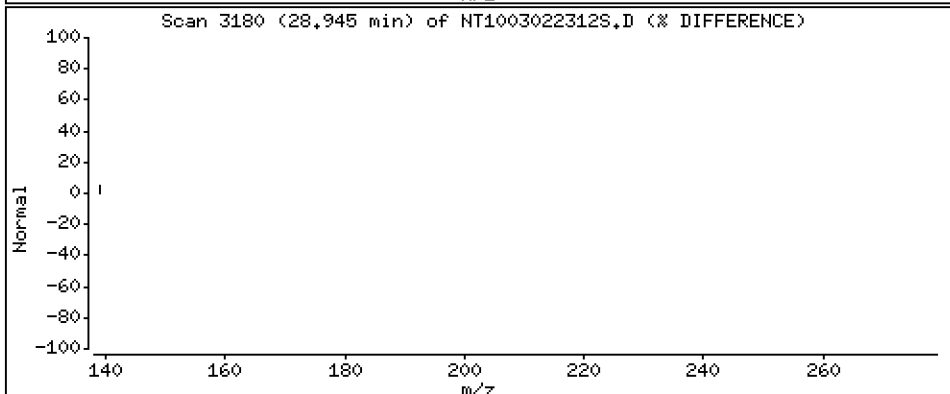
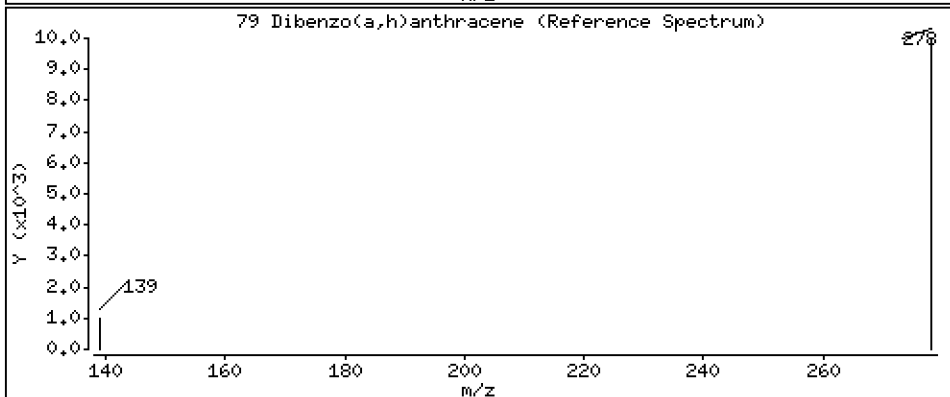
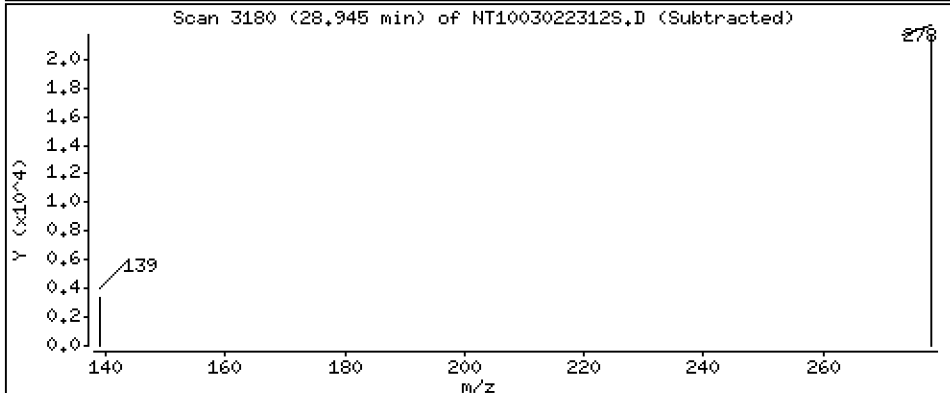
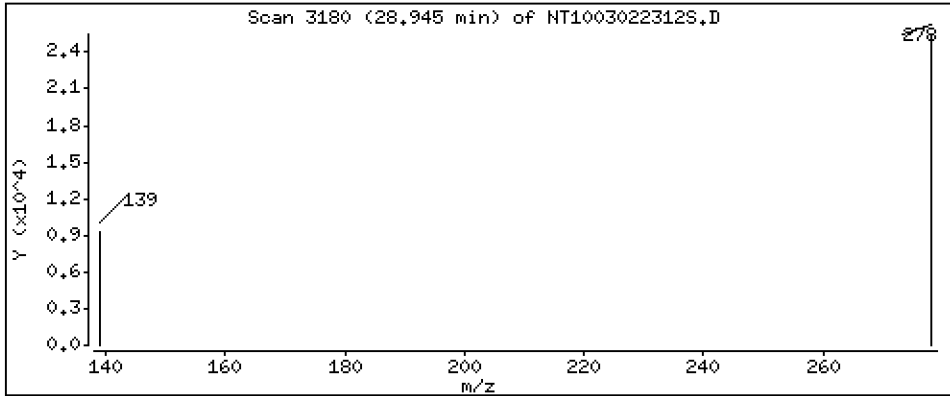
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

79 Dibenzo(a,h)anthracene

Concentration: 0.1597 ug/L



Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

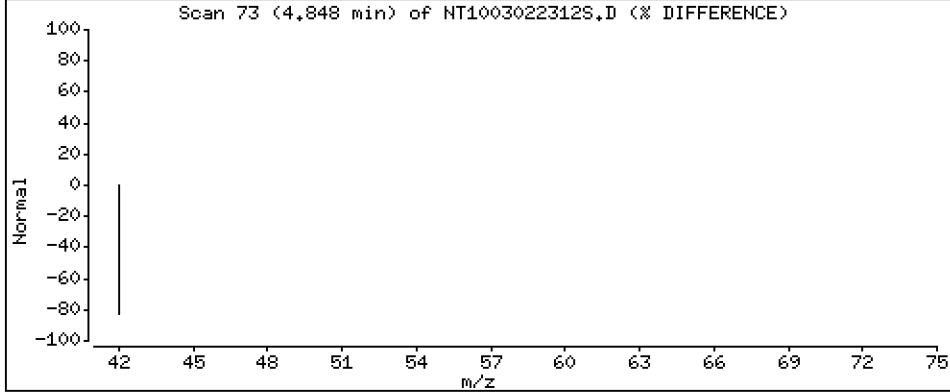
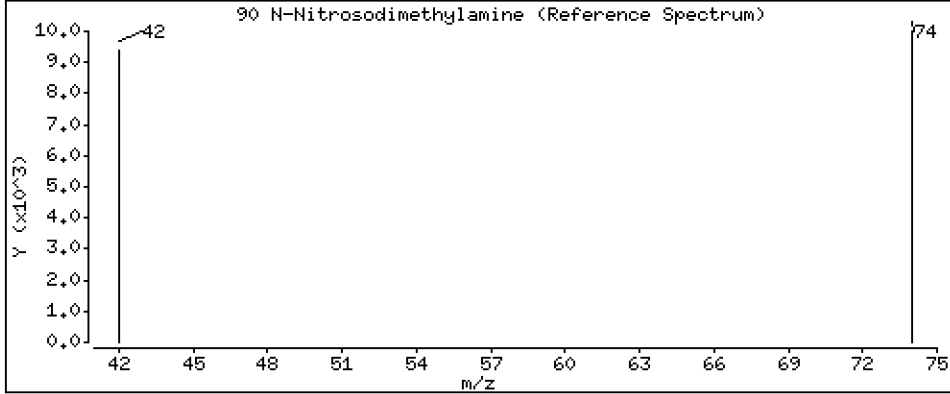
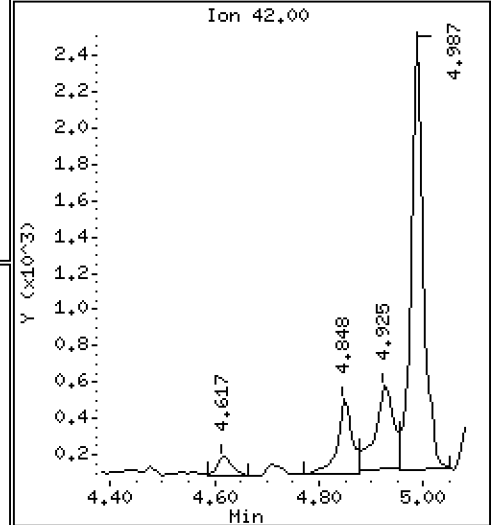
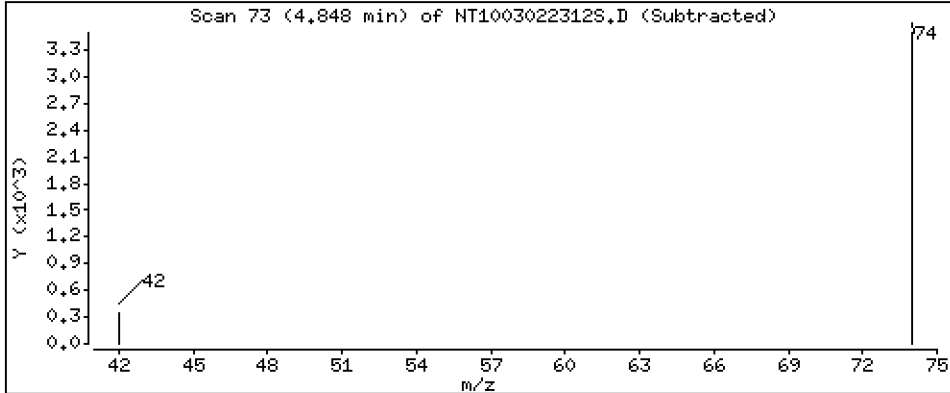
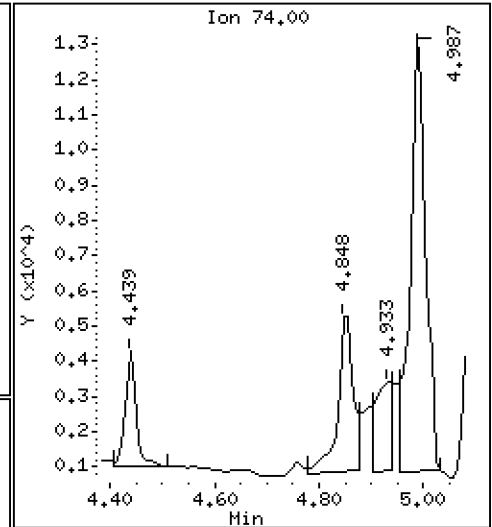
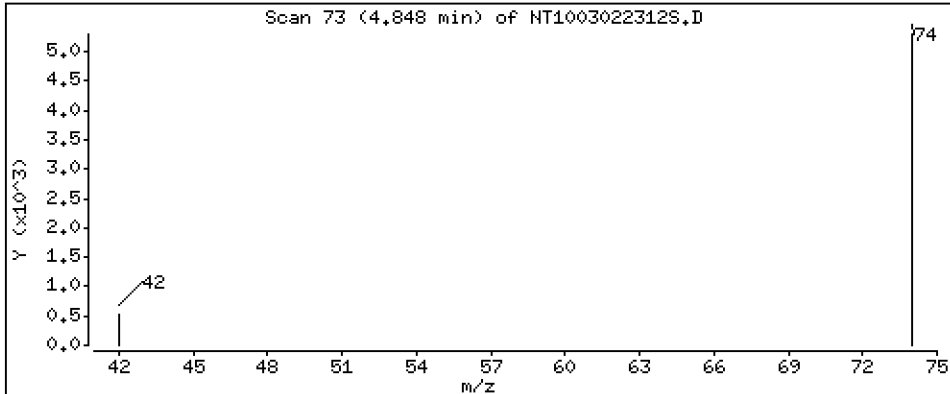
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 0.07999 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022312S.D
 Lab Smp Id: 23A0206-01
 Inj Date : 02-MAR-2023 21:22 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : 23A0206-01
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN	FINAL
								(ug/mL)	(ug/L)
\$ 1	2-Fluorophenol		112	6.910	6.902	(0.747)	1411998	6.85580	6.856(R)
	3 Phenol		94	8.524	8.517	(0.921)	3134940	9.78296	9.783
	7 1,3-Dichlorobenzene		146	9.143	9.143	(0.988)	1760	0.00658	0.006583
* 8	1,4-Dichlorobenzene-d4		152	9.251	9.251	(1.000)	721403	4.00000	
	9 1,4-Dichlorobenzene		146	9.283	9.282	(1.003)	2596	0.00999	0.009987
	11 Benzyl alcohol		79	9.476	9.476	(1.024)	46173	0.27334	0.2733
	12 1,2-Dichlorobenzene		146	9.562	9.562	(1.034)	1202	0.00481	0.004811
	13 2-Methylphenol		108	9.663	9.655	(1.044)	7769	0.04254	0.04254
	15 4-Methylphenol		108	9.950	9.942	(1.076)	35061	0.18430	0.1843
	16 N-Nitroso-di-n-propylamine		70	9.958	9.981	(1.076)	7989	0.05906	0.05906
	22 2,4-Dimethylphenol		107	11.006	10.997	(0.939)	12257	0.05672	0.05672
	24 Benzoic acid		105	11.082	11.074	(0.945)	74985	0.63106	0.6311
	26 1,2,4-Trichlorobenzene		180	11.600	11.600	(0.989)	1208	0.00659	0.006590
* 27	Naphthalene-d8		136	11.723	11.723	(1.000)	2546921	4.00000	
	30 Hexachlorobutadiene		225	11.994	11.994	(1.023)	950	0.00730	0.007303
	39 Dimethylphthalate		163	14.741	14.741	(0.962)	25956	0.06597	0.06597
* 42	Acenaphthene-d10		162	15.321	15.314	(1.000)	1239070	4.00000	
	50 Diethylphthalate		149	16.210	16.203	(1.058)	123384	0.33255	0.3326
	54 N-Nitrosodiphenylamine		169	16.698	16.690	(0.907)	12763	0.03481	0.03481
	57 Hexachlorobenzene		284	17.586	17.578	(0.955)	710	0.00414	0.004138

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.996	17.988	(0.977)	1584	0.02110	0.02110
* 59 Phenanthrene-d10	188	18.414	18.406	(1.000)	2265720	4.00000	
\$ 66 Terphenyl-d14	244	21.532	21.532	(0.919)	1103320	4.89149	4.891(R)
67 Butylbenzylphthalate	149	22.422	22.414	(0.957)	33739	0.07165	0.07165
* 69 Chrysene-d12	240	23.429	23.421	(1.000)	2789268	4.00000	
* 77 Perylene-d12	264	26.131	26.115	(1.000)	3057877	4.00000	
79 Dibenzo(a,h)anthracene	278	28.945	28.929	(1.108)	113304	0.15967	0.1597
90 N-Nitrosodimethylamine	74	4.848	4.732	(0.524)	9754	0.07999	0.07999

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003022312S.D
 Lab Smp Id: 23A0206-01
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 02-MAR-2023
 Calibration Time: 14:13
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	493417	246709	986834	721403	46.21
27 Naphthalene-d8	1779056	889528	3558112	2546921	43.16
42 Acenaphthene-d10	954569	477285	1909138	1239070	29.80
59 Phenanthrene-d10	1596290	798145	3192580	2265720	41.94
69 Chrysene-d12	1649110	824555	3298220	2789268	69.14
77 Perylene-d12	1901958	950979	3803916	3057877	60.78

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.43	0.03
77 Perylene-d12	26.12	25.62	26.62	26.13	0.06

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

REVIEW SUMMARY FOR FILE - NT1003022312S.D

Lab ID: 23A0206-01

nt10.i, 20230302.b\SIM.b\SIMABN2.m, 02-MAR-2023 21:22

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.524	0.511	0.0125	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



ANALYSIS SEQUENCE

SLC0143

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/10/2023 10:34:45AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0143-CAL1	QC		1		K011453	K010831		
SLC0143-CAL2	QC		2		K011452	K010831		
SLC0143-CAL3	QC		3		K011105	K010831		
SLC0143-CAL4	QC		4		K011106	K010831		
SLC0143-CAL5	QC		5		K011107	K010831		
SLC0143-CAL6	QC		6		K011108	K010831		
SLC0143-CAL7	QC		7		K011109	K010831		
SLC0143-CAL8	QC		8		K011110	K010831		
SLC0143-ICB1	QC		9		K005156	K010831		
SLC0143-SCV1	QC		10		K010066	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b\SIM.b

Time	Filename	LabID	ClientId	DF																			
1	1642	NT1003012303S.D	SEQ-CAL8		1	|	9.25	358478	||	11.72	1302515	||	15.31	720687	||	18.40	1243145	||	23.42	1161833	||	26.11	1054384
2	1721	NT1003012304S.D	SEQ-CAL7		1	|	9.25	354441	||	11.72	1288295	||	15.31	739997	||	18.40	1248235	||	23.41	1079945	||	26.11	1086769
3	1759	NT1003012305S.D	SEQ-CAL6		1	|	9.24	334269	||	11.72	1202042	||	15.31	670352	||	18.40	1124281	||	23.41	948691	||	26.11	1004445
4	1837	NT1003012306S.D	SEQ-CAL5		1	|	9.24	320125	||	11.72	1136019	||	15.31	636993	||	18.40	1093620	||	23.41	1000300	||	26.10	1058448
5	1915	NT1003012307S.D	SEQ-CAL4		1	|	9.24	333617	||	11.72	1170292	||	15.31	639612	||	18.40	1094919	||	23.42	1048196	||	26.11	1117593
6	1953	NT1003012308S.D	SEQ-CAL3		1	|	9.25	314467	||	11.72	1088698	||	15.31	568154	||	18.40	979213	||	23.42	963807	||	26.11	1037909
7	2030	NT1003012309S.D	SEQ-CAL2		1	|	9.24	305434	||	11.72	1048978	||	15.31	536796	||	18.40	924275	||	23.42	947041	||	26.11	1060218
8	2109	NT1003012310S.D	SEQ-CAL1		1	|	9.25	370360	||	11.72	1262304	||	15.31	638059	||	18.40	1124768	||	23.42	1114478	||	26.11	1276260
9	2146	NT1003012311S.D	SEQ-SCV1		1	|	9.25	303734	||	11.72	1147551	||	15.31	645730	||	18.40	1151000	||	23.42	1297466	||	26.11	1394899
10	2224	NT1003012312S.D	SEQ-IBL1		1	|	9.25	515340	||	11.72	1787704	||	15.31	879316	||	18.40	1572306	||	23.42	1486349	||	26.11	1674195

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b\SIM.b

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1642	NT1003012303S.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1721	NT1003012304S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1759	NT1003012305S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1837	NT1003012306S.D	SEQ-CAL5		1	Pentachlorophenol,
1915	NT1003012307S.D	SEQ-CAL4		1	Pentachlorophenol,
1953	NT1003012308S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2030	NT1003012309S.D	SEQ-CAL2		1	Benzyl alcohol, Berzoic acid,
2109	NT1003012310S.D	SEQ-CAL1		1	Benzyl alcohol, 2-Methylphenol, 4-Methylphenol, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Hexachlorobenzene,
2146	NT1003012311S.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2224	NT1003012312S.D	SEQ-IBL1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 10-Mar-2023 11:02

NT1003012303S.D	Data Locked	yev, 10-
NT1003012304S.D	Data Locked	yev, 10-
NT1003012305S.D	Data Locked	yev, 10-
NT1003012306S.D	Data Locked	yev, 10-
NT1003012307S.D	Data Locked	yev, 10-
NT1003012308S.D	Data Locked	yev, 10-
NT1003012309S.D	Data Locked	yev, 10-
NT1003012310S.D	Data Locked	yev, 10-
NT1003012311S.D	Data Locked	yev, 10-
NT1003012312S.D	Data Locked	yev, 10-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07 RT08
FILENAME: NT1003012303S NT1003012304S NT1003012305S NT1003012306S NT1003012307S NT1003012308S NT1003012309S NT1003012310S
INJ. DATE: 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023 01-MAR-2023
INJ. TIME: 16:42 17:21 17:59 18:37 19:15 19:53 20:30 21:09

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, RT08, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like 2-Fluorophenol, Chlorobenzilate, Isodrin, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropyl-naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-Diphenylhydrazine)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.268	15.768-16.768	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
\$ 2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
3 Phenol	8.525	8.517	8.517	8.518	8.518	8.525	8.525	8.533	8.533	8.033-9.033	8.522	0.006
4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
\$ 5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
7 1,3-Dichlorobenzene	9.143	9.143	9.136	9.136	9.136	9.143	9.144	9.136	9.136	8.636-9.636	9.140	0.004
* 8 1,4-Dichlorobenzene-d4	9.252	9.252	9.244	9.245	9.245	9.252	9.245	9.252	9.252	8.752-9.752	9.248	0.004
9 1,4-Dichlorobenzene	9.283	9.283	9.275	9.276	9.276	9.275	9.276	9.275	9.275	8.775-9.775	9.277	0.003
\$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.230	8.730-9.730	+++++	+++++
11 Benzyl alcohol	9.477	9.477	9.469	9.477	9.477	9.485	9.485	9.508	9.508	9.008-10.008	9.482	0.012
12 1,2-Dichlorobenzene	9.562	9.562	9.562	9.563	9.563	9.562	9.563	9.563	9.563	9.063-10.063	9.562	0.000
13 2-Methylphenol	9.656	9.655	9.656	9.656	9.656	9.663	9.664	9.671	9.671	9.171-10.171	9.660	0.006
14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
15 4-Methylphenol	9.943	9.943	9.943	9.943	9.951	9.950	9.959	9.966	9.966	9.466-10.466	9.950	0.009
16 N-Nitroso-di-n-propyla	9.982	9.982	9.974	9.974	9.974	9.974	9.974	9.982	9.982	9.482-10.482	9.977	0.004
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
\$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
22 2,4-Dimethylphenol	11.006	10.998	10.998	10.998	10.998	10.998	11.007	11.006	11.006	10.506-11.506	11.001	0.004
23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
24 Benzoic acid	11.218	11.159	11.108	11.074	11.058	11.074	11.007	+++++	11.007	10.507-11.507	11.100	0.070
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
26 1,2,4-Trichlorobenzene	11.600	11.600	11.600	11.601	11.601	11.600	11.601	11.600	11.600	11.100-12.100	11.600	0.000
* 27 Naphthalene-d8	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.224-12.224	11.724	0.000
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
30 Hexachlorobutadiene	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.494-12.494	11.994	0.000
31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
\$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
39 Dimethylphthalate	14.749	14.741	14.741	14.742	14.742	14.741	14.742	14.749	14.749	14.249-15.249	14.744	0.004
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
* 42 Acenaphthene-d10	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	14.814-15.814	15.314	0.000
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.248	14.748-15.748	+++++	+++++
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
50 Diethylphthalate	16.219	16.211	16.203	16.203	16.203	16.203	16.211	16.211	16.211	15.711-16.711	16.208	0.006
51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
54 N-Nitrosodiphenylamine	16.698	16.690	16.690	16.691	16.691	16.698	16.698	16.706	16.706	16.206-17.206	16.695	0.006
55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
57 Hexachlorobenzene	17.578	17.578	17.578	17.579	17.579	17.578	17.579	17.579	17.579	17.079-18.079	17.579	0.000
58 Pentachlorophenol	17.989	17.981	17.989	17.989	17.989	17.996	18.004	18.012	18.012	17.512-18.512	17.994	0.010
59 Phenanthrene-d10	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	17.899-18.899	18.399	0.000
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
66 Terphenyl-d14	21.524	21.524	21.524	21.525	21.525	21.524	21.525	21.532	21.532	21.032-22.032	21.526	0.003
67 Butylbenzylphthalate	22.407	22.407	22.407	22.407	22.415	22.415	22.407	22.415	22.415	21.915-22.915	22.410	0.004
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 69 Chrysene-d12	23.421	23.414	23.414	23.414	23.422	23.421	23.422	23.422	23.422	22.922-23.922	23.419	0.004
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.007	22.507-23.507	+++++	+++++
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
* 77 Perylene-d12	26.108	26.108	26.108	26.101	26.108	26.108	26.108	26.108	26.108	25.608-26.608	26.107	0.003
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
79 Dibenzo(a,h)anthracene	28.930	28.914	28.914	28.915	28.930	28.938	28.946	28.946	28.946	28.446-29.446	28.929	0.013
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
\$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
\$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
\$ 88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
90 N-Nitrosodimethylamine	4.732	4.724	4.717	4.725	4.725	4.740	4.740	4.756	4.756	4.256-5.256	4.732	0.012
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
\$ 95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
 Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Calibration File Names:

Level 1: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012310S.D
 Level 2: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012309S.D
 Level 3: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012308S.D
 Level 4: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012307S.D
 Level 5: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012306S.D
 Level 6: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012305S.D
 Level 7: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012304S.D
 Level 8: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012303S.D

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallyate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
141 Diallate B	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
142 1,2-Dibromo-3-Chloropropane	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
135 2,3,5,6-Tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
136 2,3,4,5-tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
137 NewCpnd_131	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
133 Butylatedhydroxytoluene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
132 3,6-Dimethylphenanthrene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
127 2-Isopropyl-naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
144 alpha-Terpineol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
125 Safrole	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
123 Acetophenone	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
121 Quinoline	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
120 2,3,4,6-Tetrachlorophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
119 7,12-Dimethylbenz(a)anthracen	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
118 Triphenyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
117 Butyl Diphenyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
116 Dibutyl Phenyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
115 Tributyl Phosphate	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
114 Beta-Pinene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	3599	8264	19568	61458	128497	360891					
	767247	1593896					QUAD	0.000e+000	0.59382	-0.00714	0.99994
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.56799	1.52570	1.49198	1.51309	1.44269	1.43612					
	1.43451	1.44742					AVRG		1.48244		3.36989
9 1,4-Dichlorobenzene	1.50923	1.47580	1.43373	1.46395	1.40754	1.40391					
	1.39839	1.43790					AVRG		1.44131		2.72097

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
11 Benzyl alcohol	1380 449975	3114 980075	10320	31347	65076	200086	QUAD	0.000e+000	1.07135	-0.05783	0.99978
12 1,2-Dichlorobenzene	1.43363 1.36335	1.40456 1.37939	1.36192	1.41000	1.36327	1.36665	AVRG		1.38535		1.96993
13 2-Methylphenol	1789 472415	4548 995533	11161	35755	75957	215648	QUAD	0.000e+000	0.98781	-0.03181	0.99992
14 2,2'-oxybis(1-Chloropropane)	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	2062 500092	3746 1071975	9608	34768	75243	225735	QUAD	0.000e+000	0.94989	-0.03839	0.99982
16 N-Nitroso-di-n-propylamine	1965 338518	4218 699099	10242	27908	57866	160503	QUAD	0.000e+000	1.33351	-0.02653	0.99995
17 Hexachloroethane	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	6159	11856	27660	89362	185925	522194					
	1127131	2348644					QUAD	0.000e+000	2.94692	-0.09695	0.99996
23 Bis(2-Chloroethoxy)methane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	+++++	+++++	7336	37634	126544	521508					
	1425868	3313595					QUAD	0.000e+000	5.37547	-0.57371	0.99759
25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
26 1,2,4-Trichlorobenzene	0.28887|	0.28679|	0.28252|	0.29461|	0.28337|	0.28328|					
	0.28854|	0.29525|					|AVRG|		0.28790|		1.72341|
28 Naphthalene	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
29 4-Chloroaniline	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
30 Hexachlorobutadiene	0.21833|	0.20386|	0.19805|	0.20413|	0.19707|	0.19656|					
	0.20447|	0.21198|					|AVRG|		0.20431|		3.73354|
31 4-Chloro-3-methylphenol	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
32 2-Methylnaphthalene	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|
33 Hexachlorocyclopentadiene	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
39 Dimethylphthalate	1.17306|	1.13674|	1.17700|	1.32015|	1.33033|	1.34291|					
	1.32177|	1.35881|					|AVRG|		|1.27010|		|7.15698|
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
43 3-Nitroaniline	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
44 Acenaphthene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
45 2,4-Dinitrophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
46 Dibenzofuran	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
47 4-Nitrophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
48 2,4-Dinitrotoluene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|
49 Fluorene	++++	++++	++++	++++	++++	++++					
	++++	++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
50 Diethylphthalate	1.10372| 1.26512|	1.06260| 1.31611|	1.10882|	1.22577|	1.23779|	1.26204|					
							|AVRG|		1.19775|		7.73514|
51 4-Chlorophenyl-phenylether	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
52 4-Nitroaniline	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
53 4,6-Dinitro-2-methylphenol	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
54 N-Nitrosodiphenylamine	0.52420| 0.70947|	0.58247| 0.72627|	0.62289|	0.68128|	0.64518|	0.68703|					
							|AVRG|		0.64735|		10.57293|
56 4-Bromophenyl-phenylether	++++|	++++|	++++|	++++|	++++|	++++|					
	++++|	++++|					|AVRG|		0.000e+000|		0.000e+000|
57 Hexachlorobenzene	0.29659| 0.31009|	0.29809| 0.31346|	0.29705|	0.31056|	0.29828|	0.29945|					
							|AVRG|		0.30295|		2.34116|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
58 Pentachlorophenol	++++	1243	3505	15934	44811	176209					
	489921	1121362					QUAD	0.000e+000	7.54611	-2.24262	0.99782
60 Phenanthrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
61 Anthracene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
62 Carbazole	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
63 Di-n-butylphthalate	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
64 Fluoranthene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000
65 Pyrene	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG	0.000e+000			0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
67 Butylbenzylphthalate	4671 915766	8617 1888709	19744	65574	144786	387221					
							QUAD	0.000e+000	1.48043	0.03284	0.99960
68 Benzo(a)anthracene	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
70 3,3'-Dichlorobenzidine	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
71 Chrysene	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
72 bis(2-Ethylhexyl)phthalate	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
73 Di-n-octylphthalate	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000
74 Benzo(b)fluoranthene	++++ ++++	++++ ++++	++++	++++	++++	++++					
							AVRG	0.000e+000			0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	10824	20472	39856	120142	236566	599679					
	1371633	2937326					QUAD	0.000e+000	1.07973	-0.06563	0.99996
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.58127	0.59640	0.65358	0.68722	0.70407	0.73905					
	0.71236	0.73487					AVRG		0.67610		8.92506
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
101 Cholesterol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
103 Pyridine	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 1 2-Fluorophenol	1.02185	1.05555	1.08844	1.17836	1.17520	1.21583					
	1.18289	1.21771					AVRG		1.14198		6.62406
\$ 145 d8-1,4-Dioxane	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 2 Phenol-d5	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 5 2-Chlorophenol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
\$ 10 1,2-Dichlorobenzene-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 18 Nitrobenzene-d5	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 36 2-Fluorobiphenyl	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 55 2,4,6-Tribromophenol	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 66 Terphenyl-d14	0.26682	0.28582	0.28446	0.31786	0.33307	0.36379					
	0.37637	0.35956					AVRG		0.32347		12.80012
\$ 85 p-Cresol-d4	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000
\$ 86 Anthracene-d10	++++	++++	++++	++++	++++	++++					
	++++	++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
 End Cal Date : 01-MAR-2023 21:09
 Quant Method : ISTD
 Origin : Force
 Target Version : 4.14
 Integrator : HP RTE
 Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000	0.1000000	0.2000000	0.5000000	1.0000	2.5000	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	5.0000	10.0000									
	Level 7	Level 8									
\$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
\$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
\$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|
\$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					|AVRG|		|0.000e+000|		|0.000e+000|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

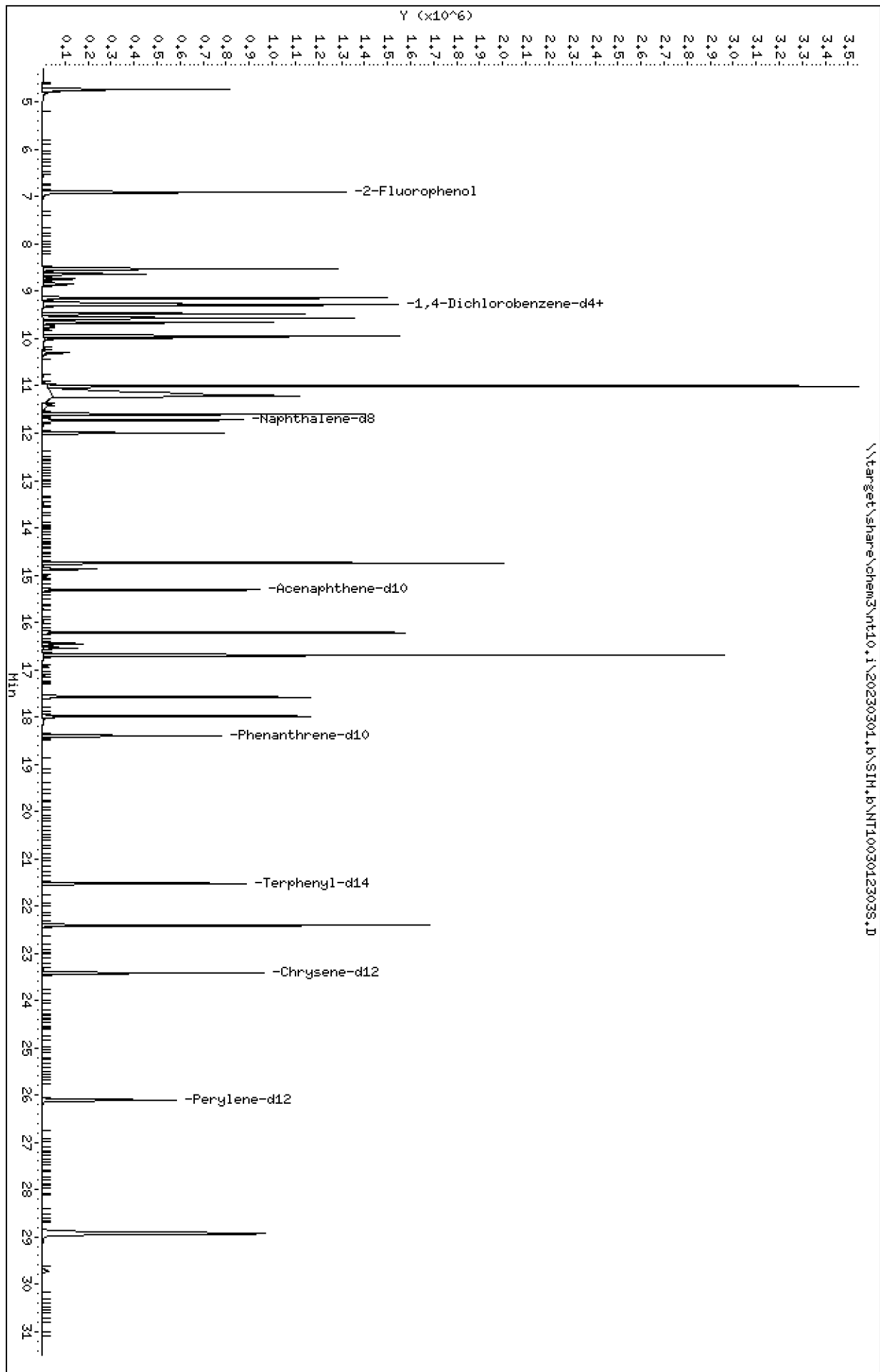
Start Cal Date : 01-MAR-2023 16:42
End Cal Date : 01-MAR-2023 21:09
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

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

Data File: \\target\share\chem3\nt10.1\20230301.B\SIH.B\NT1003012303S.D
Date: 01-HRR-2023 16:42
Client ID:
Sample Info: SED-CAL8
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230301.B\SIH.B\NT1003012303S.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012303S.D
 Lab Smp Id: SLC0143-CAL8
 Inj Date : 01-MAR-2023 16:42 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL8
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 3 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902 (0.746)	1636956	15.0000	15.99	
3 Phenol	94		8.524	8.532 (0.921)	1593896	10.0000	9.997	
7 1,3-Dichlorobenzene	146		9.143	9.136 (0.988)	1297168	10.0000	9.764	
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.252 (1.000)	358478	4.00000		
9 1,4-Dichlorobenzene	146		9.282	9.275 (1.003)	1288638	10.0000	9.976 (H)	
11 Benzyl alcohol	79		9.476	9.508 (1.024)	980075	10.0000	9.987	
12 1,2-Dichlorobenzene	146		9.562	9.563 (1.034)	1236199	10.0000	9.957 (H)	
13 2-Methylphenol	108		9.655	9.671 (1.044)	995533	10.0000	9.992 (H)	
15 4-Methylphenol	108		9.942	9.966 (1.075)	1071975	10.0000	9.989	
16 N-Nitroso-di-n-propylamine	70		9.981	9.982 (1.079)	699099	10.0000	9.999	
22 2,4-Dimethylphenol	107		11.006	11.006 (0.939)	2348644	20.0000	19.99	
24 Benzoic acid	105		11.218	11.007 (0.957)	3313595	40.0000	39.85	
26 1,2,4-Trichlorobenzene	180		11.600	11.600 (0.989)	961408	10.0000	10.26	
* 27 Naphthalene-d8	136		11.723	11.723 (1.000)	1302515	4.00000		
30 Hexachlorobutadiene	225		11.994	11.994 (1.023)	690276	10.0000	10.38	
39 Dimethylphthalate	163		14.749	14.749 (0.963)	2448191	10.0000	10.70	
* 42 Acenaphthene-d10	162		15.314	15.314 (1.000)	720687	4.00000		
50 Diethylphthalate	149		16.218	16.211 (1.059)	2371265	10.0000	10.99	
54 N-Nitrosodiphenylamine	169		16.698	16.705 (0.908)	2257135	10.0000	11.22	
57 Hexachlorobenzene	284		17.578	17.579 (0.955)	974187	10.0000	10.35	

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
58 Pentachlorophenol	266		17.988	18.012	(0.978)	1121362	20.0000	19.93
* 59 Phenanthrene-d10	188		18.398	18.398	(1.000)	1243145	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	1044374	10.0000	11.12
67 Butylbenzylphthalate	149		22.407	22.415	(0.957)	1888709	10.0000	9.974
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	1161833	4.00000	
* 77 Perylene-d12	264		26.108	26.108	(1.000)	1054384	4.00000	
79 Dibenzo(a,h)anthracene	278		28.929	28.946	(1.108)	2937326	10.0000	9.994
90 N-Nitrosodimethylamine	74		4.732	4.755	(0.511)	1317165	20.0000	21.74

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012303S.D
 Lab Smp Id: SLC0143-CAL8
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	358478	11.98
27 Naphthalene-d8	1136019	568010	2272038	1302515	14.66
42 Acenaphthene-d10	636993	318497	1273986	720687	13.14
59 Phenanthrene-d10	1093620	546810	2187240	1243145	13.67
69 Chrysene-d12	1000300	500150	2000600	1161833	16.15
77 Perylene-d12	1058448	529224	2116896	1054384	-0.38

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012303S.D

Lab ID: SLC0143-CAL8

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 16:42

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.957	0.000	0.9569		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

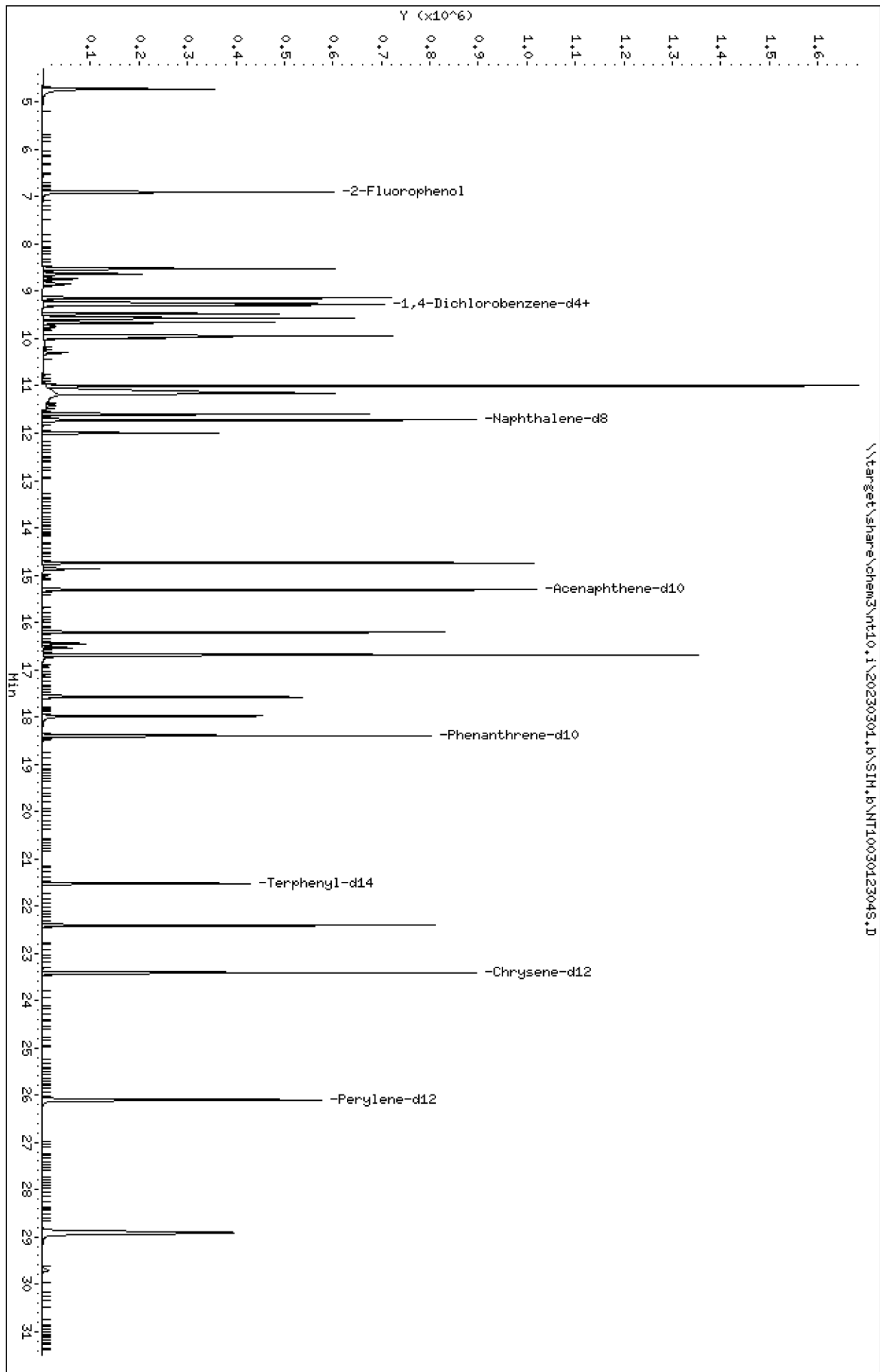
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230304.B\SIM.B\NT1003012304S.D
Date: 01-MAR-2023 17:21
Client ID:
Sample Info: SED-CAL7
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230304.B\SIM.B\NT1003012304S.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012304S.D
 Lab Smp Id: SLC0143-CAL7
 Inj Date : 01-MAR-2023 17:21 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL7
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 4 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	786120	7.50000	7.769
3 Phenol	94		8.517	8.532	(0.921)	767247	5.00000	5.008
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	635562	5.00000	4.838
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.252	(1.000)	354441	4.00000	
9 1,4-Dichlorobenzene	146		9.282	9.275	(1.003)	619560	5.00000	4.851
11 Benzyl alcohol	79		9.476	9.508	(1.024)	449975	5.00000	5.068
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	604033	5.00000	4.921
13 2-Methylphenol	108		9.655	9.671	(1.044)	472415	5.00000	5.040
15 4-Methylphenol	108		9.942	9.966	(1.075)	500092	5.00000	5.055
16 N-Nitroso-di-n-propylamine	70		9.981	9.982	(1.079)	338518	5.00000	4.998
22 2,4-Dimethylphenol	107		10.997	11.006	(0.938)	1127131	10.0000	10.02
24 Benzoic acid	105		11.158	11.007	(0.952)	1425868	20.0000	20.99
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	464653	5.00000	5.011
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	1288295	4.00000	
30 Hexachlorobutadiene	225		11.993	11.994	(1.023)	329266	5.00000	5.004
39 Dimethylphthalate	163		14.741	14.749	(0.963)	1222634	5.00000	5.203
* 42 Acenaphthene-d10	162		15.313	15.314	(1.000)	739997	4.00000	
50 Diethylphthalate	149		16.210	16.211	(1.059)	1170231	5.00000	5.281
54 N-Nitrosodiphenylamine	169		16.690	16.705	(0.907)	1106982	5.00000	5.480
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	483835	5.00000	5.118

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
58 Pentachlorophenol	266		17.980	18.012	(0.977)	489921	10.0000	10.47
* 59 Phenanthrene-d10	188		18.398	18.398	(1.000)	1248235	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	508078	5.00000	5.818
67 Butylbenzylphthalate	149		22.407	22.415	(0.957)	915766	5.00000	5.116
* 69 Chrysene-d12	240		23.413	23.421	(1.000)	1079945	4.00000	
* 77 Perylene-d12	264		26.107	26.108	(1.000)	1086769	4.00000	
79 Dibenzo(a,h)anthracene	278		28.914	28.946	(1.107)	1371633	5.00000	5.033
90 N-Nitrosodimethylamine	74		4.724	4.755	(0.511)	631222	10.0000	10.54

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012304S.D
 Lab Smp Id: SLC0143-CAL7
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	354441	10.72
27 Naphthalene-d8	1136019	568010	2272038	1288295	13.40
42 Acenaphthene-d10	636993	318497	1273986	739997	16.17
59 Phenanthrene-d10	1093620	546810	2187240	1248235	14.14
69 Chrysene-d12	1000300	500150	2000600	1079945	7.96
77 Perylene-d12	1058448	529224	2116896	1086769	2.68

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.41	-0.00
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012304S.D

Lab ID: SLC0143-CAL7

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 17:21

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.952	0.000	0.9518		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

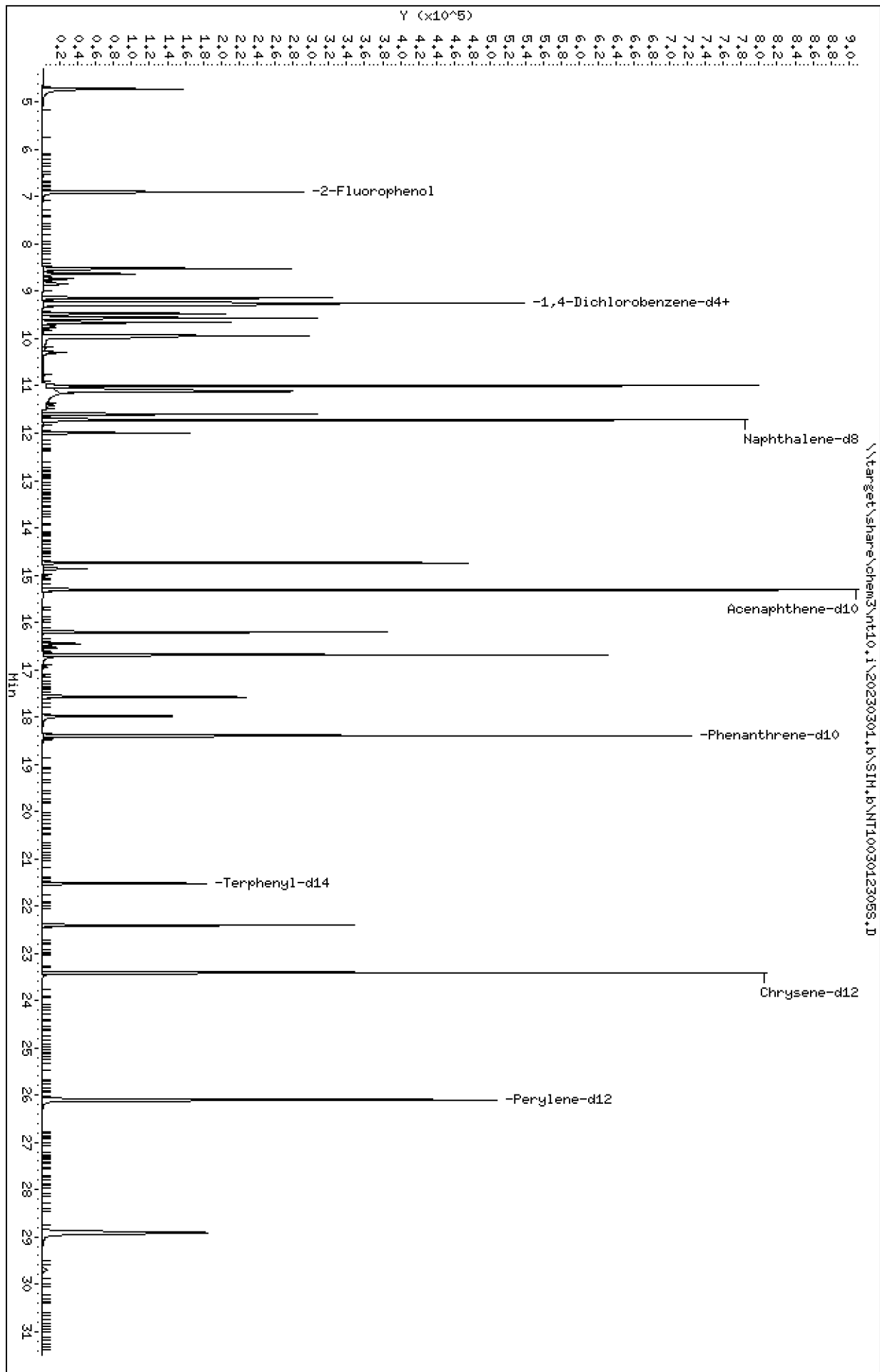
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012305S.D
 Date: 01-MAR-2023 17:59
 Client ID:
 Sample Info: SED-CAL6
 Volume Injected (uL): 1.0
 Column phase: ZB-5msi

Instrument: nt10.1
 Operator: JGR
 Column diameter: 0.25

\\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012305S.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012305S.D
 Lab Smp Id: SLC0143-CAL6
 Inj Date : 01-MAR-2023 17:59 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL6
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 5 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.894	6.902	(0.746)	381012	3.75000	3.992
3 Phenol	94		8.517	8.532	(0.921)	360891	2.50000	2.531
7 1,3-Dichlorobenzene	146		9.135	9.136	(0.988)	300032	2.50000	2.422
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.252	(1.000)	334269	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	293303	2.50000	2.435
11 Benzyl alcohol	79		9.469	9.508	(1.024)	200086	2.50000	2.482
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	285519	2.50000	2.466
13 2-Methylphenol	108		9.655	9.671	(1.044)	215648	2.50000	2.496
15 4-Methylphenol	108		9.942	9.966	(1.076)	225735	2.50000	2.496
16 N-Nitroso-di-n-propylamine	70		9.973	9.982	(1.079)	160503	2.50000	2.537
22 2,4-Dimethylphenol	107		10.997	11.006	(0.938)	522194	5.00000	5.048
24 Benzoic acid	105		11.108	11.007	(0.947)	521508	10.0000	8.897
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	212822	2.50000	2.460
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	1202042	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	147673	2.50000	2.405
39 Dimethylphthalate	163		14.741	14.749	(0.963)	562639	2.50000	2.643
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	670352	4.00000	
50 Diethylphthalate	149		16.203	16.211	(1.058)	528755	2.50000	2.634
54 N-Nitrosodiphenylamine	169		16.690	16.705	(0.907)	482758	2.50000	2.653
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	210419	2.50000	2.471

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
58 Pentachlorophenol	266		17.988	18.012	(0.978)	176209	5.00000	4.510
* 59 Phenanthrene-d10	188		18.398	18.398	(1.000)	1124281	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	215701	2.50000	2.812
67 Butylbenzylphthalate	149		22.407	22.415	(0.957)	387221	2.50000	2.439
* 69 Chrysene-d12	240		23.413	23.421	(1.000)	948691	4.00000	
* 77 Perylene-d12	264		26.108	26.108	(1.000)	1004445	4.00000	
79 Dibenzo(a,h)anthracene	278		28.914	28.946	(1.107)	599679	2.50000	2.485
90 N-Nitrosodimethylamine	74		4.716	4.755	(0.510)	308802	5.00000	5.466

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012305S.D
 Lab Smp Id: SLC0143-CAL6
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	334269	4.42
27 Naphthalene-d8	1136019	568010	2272038	1202042	5.81
42 Acenaphthene-d10	636993	318497	1273986	670352	5.24
59 Phenanthrene-d10	1093620	546810	2187240	1124281	2.80
69 Chrysene-d12	1000300	500150	2000600	948691	-5.16
77 Perylene-d12	1058448	529224	2116896	1004445	-5.10

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.41	-0.00
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012305S.D

Lab ID: SLC0143-CAL6

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 17:59

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.947	0.000	0.9475		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

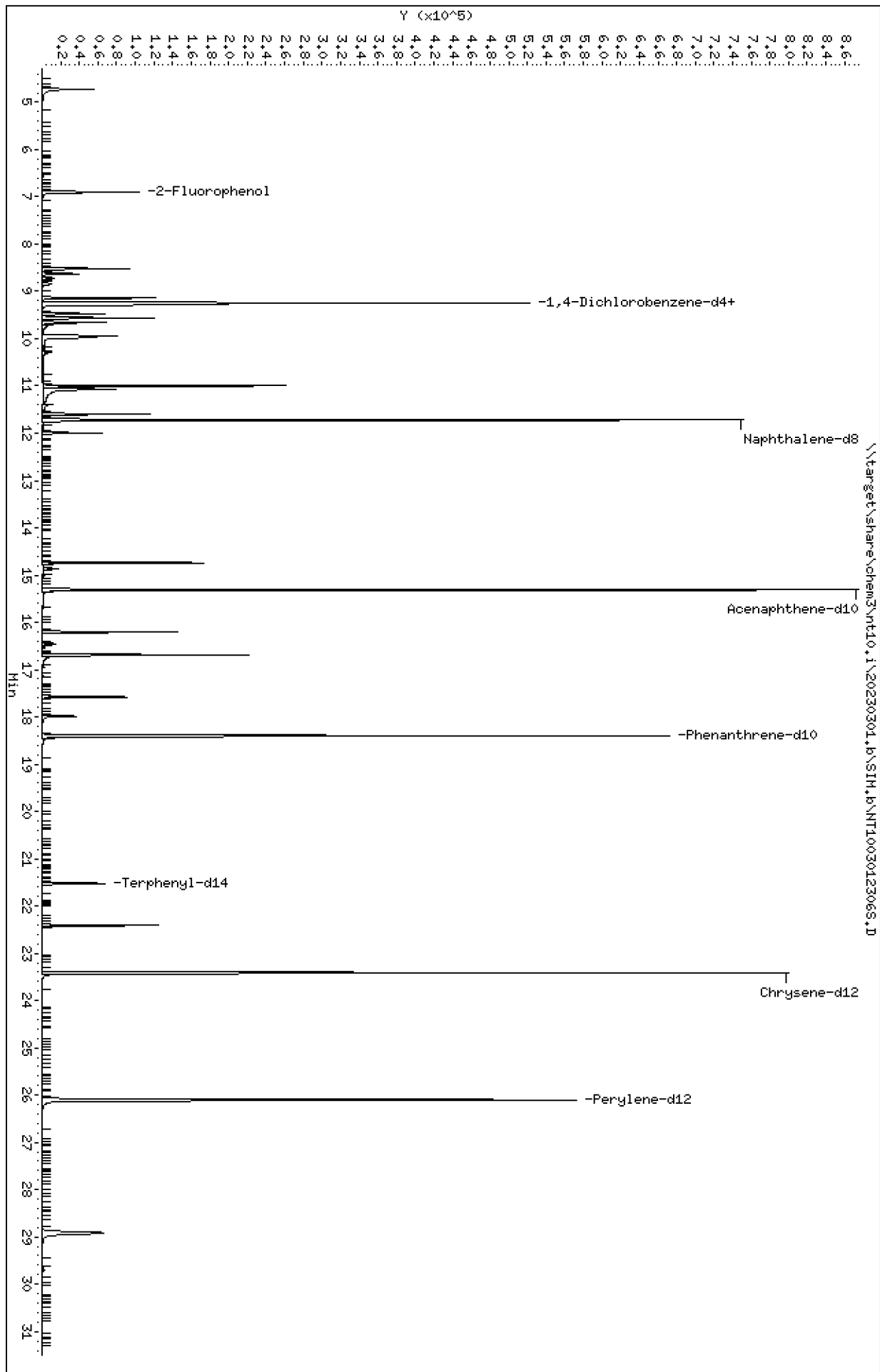
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012306S.D
Date: 01-MAR-2023 18:37
Client ID:
Sample Info: SED-CAL5
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012306S.D
 Lab Smp Id: SLC0143-CAL5
 Inj Date : 01-MAR-2023 18:37 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL5
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 6 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.894	6.902	(0.746)	141079	1.50000	1.544
3 Phenol	94		8.517	8.532	(0.921)	128497	1.00000	0.9488
7 1,3-Dichlorobenzene	146		9.135	9.136	(0.988)	115460	1.00000	0.9732
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.252	(1.000)	320125	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	112647	1.00000	0.9766
11 Benzyl alcohol	79		9.477	9.508	(1.025)	65076	1.00000	0.8616
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	109104	1.00000	0.9841
13 2-Methylphenol	108		9.655	9.671	(1.044)	75957	1.00000	0.9304
15 4-Methylphenol	108		9.943	9.966	(1.076)	75243	1.00000	0.8846
16 N-Nitroso-di-n-propylamine	70		9.974	9.982	(1.079)	57866	1.00000	0.9607
22 2,4-Dimethylphenol	107		10.998	11.006	(0.938)	185925	2.00000	1.919
24 Benzoic acid	105		11.074	11.007	(0.945)	126544	4.00000	2.367
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	80478	1.00000	0.9842
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1136019	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	55969	1.00000	0.9646
39 Dimethylphthalate	163		14.741	14.749	(0.963)	211852	1.00000	1.047
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	636993	4.00000	
50 Diethylphthalate	149		16.203	16.211	(1.058)	197116	1.00000	1.033
54 N-Nitrosodiphenylamine	169		16.690	16.705	(0.907)	176396	1.00000	0.9967
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	81552	1.00000	0.9846

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
58 Pentachlorophenol	266		17.988	18.012	(0.978)	44811	2.00000	1.222 (M)
* 59 Phenanthrene-d10	188		18.399	18.398	(1.000)	1093620	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	83293	1.00000	1.030
67 Butylbenzylphthalate	149		22.407	22.415	(0.957)	144786	1.00000	0.8599
* 69 Chrysene-d12	240		23.414	23.421	(1.000)	1000300	4.00000	
* 77 Perylene-d12	264		26.100	26.108	(1.000)	1058448	4.00000	
79 Dibenzo(a,h)anthracene	278		28.914	28.946	(1.108)	236566	1.00000	0.9522
90 N-Nitrosodimethylamine	74		4.724	4.755	(0.511)	112695	2.00000	2.083

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012306S.D
 Lab Smp Id: SLC0143-CAL5
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	320125	0.00
27 Naphthalene-d8	1136019	568010	2272038	1136019	0.00
42 Acenaphthene-d10	636993	318497	1273986	636993	0.00
59 Phenanthrene-d10	1093620	546810	2187240	1093620	0.00
69 Chrysene-d12	1000300	500150	2000600	1000300	0.00
77 Perylene-d12	1058448	529224	2116896	1058448	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.41	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012306S.D

Lab ID: SLC0143-CAL5

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 18:37

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.945	0.000	0.9446		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

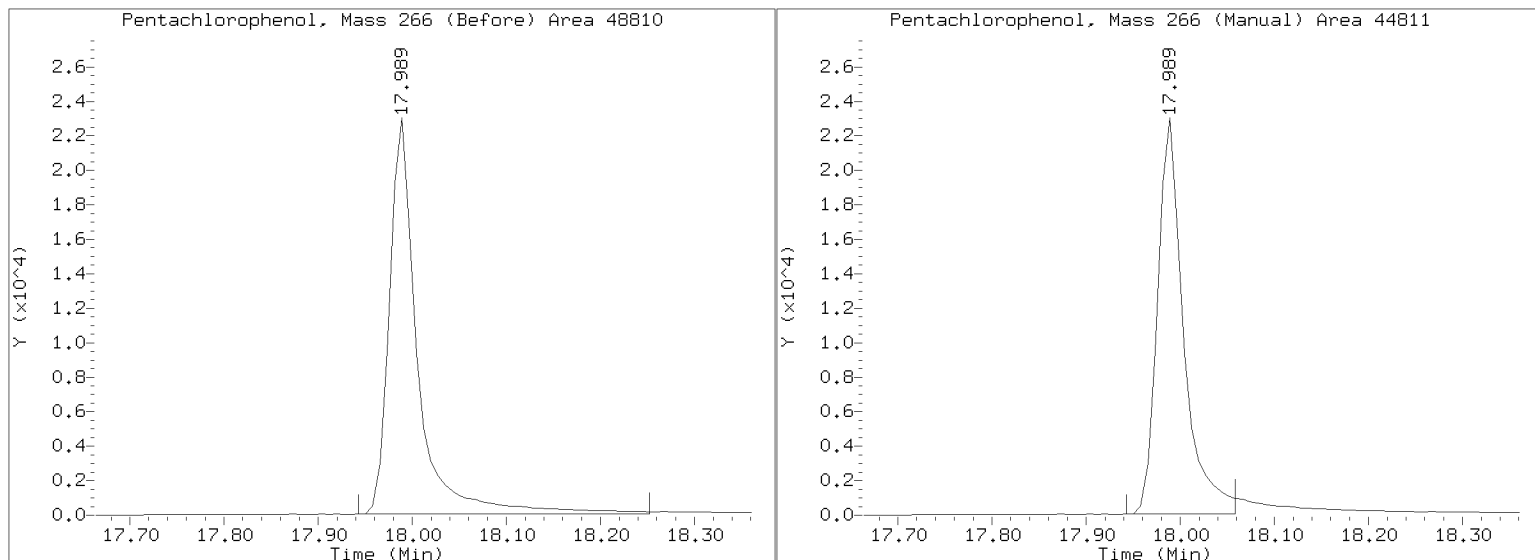
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012306S.D

Injection Date: 01-MAR-2023 18:37

Lab ID: SLC0143-CAL5 Client ID:

Report Date: 03/10/2023 10:37



Data File: \\target\share\chem3\nt10.1\20230301.B\SIH.B\NT1003012307S.D

Date: 01-MAR-2023 19:15

Client ID:

Sample Info: SED-CAL4

Volume Injected (uL): 1.0

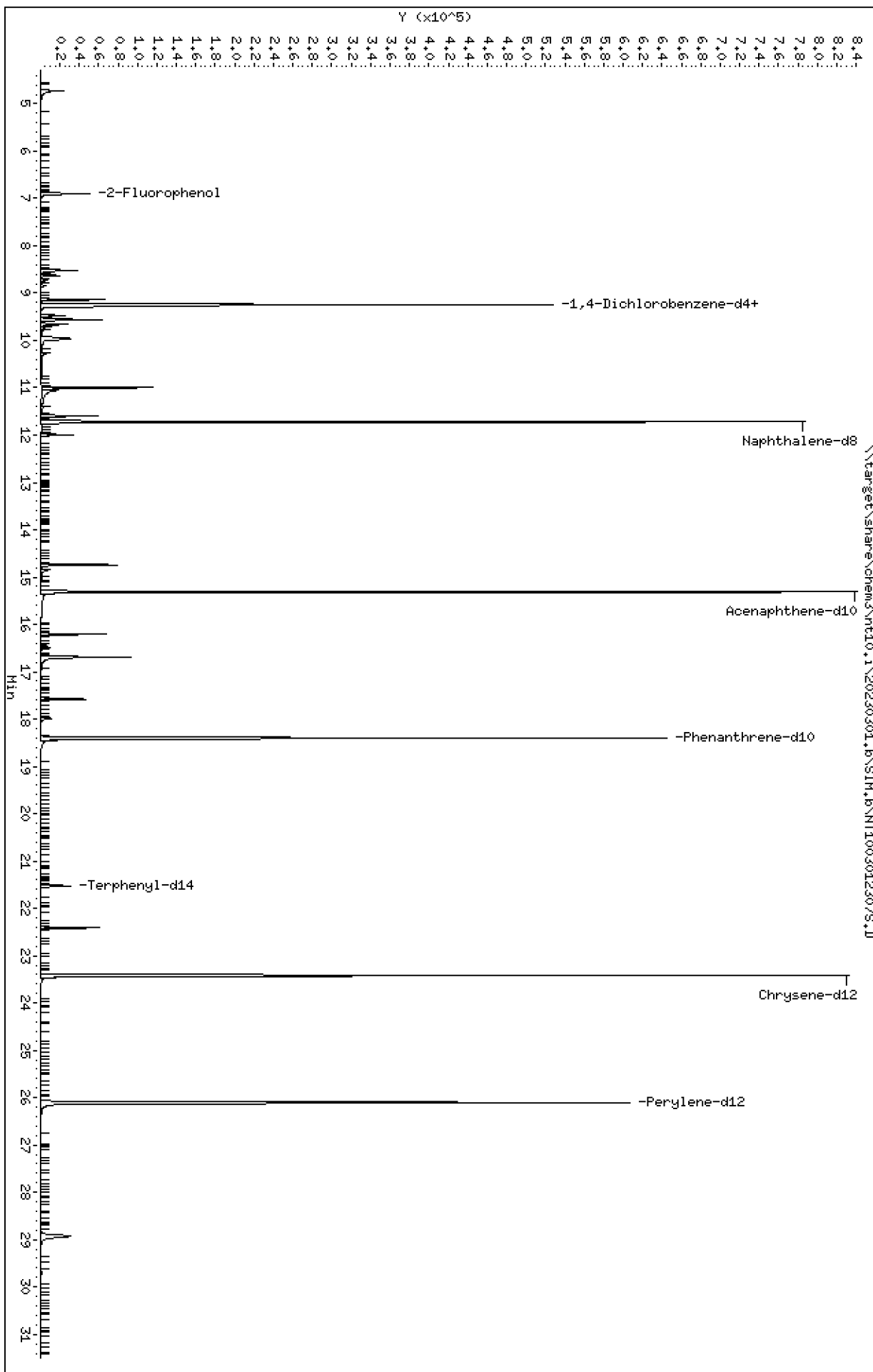
Column phase: ZB-5msi

Instrument: nt10.1

Operator: JGR

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012307S.D
 Lab Smp Id: SLC0143-CAL4
 Inj Date : 01-MAR-2023 19:15 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL4
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 7 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.894	6.902	(0.746)	73710	0.75000	0.7739
3 Phenol	94		8.517	8.532	(0.921)	61458	0.50000	0.4366
7 1,3-Dichlorobenzene	146		9.136	9.136	(0.988)	63099	0.50000	0.5103
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.252	(1.000)	333617	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	61050	0.50000	0.5079
11 Benzyl alcohol	79		9.477	9.508	(1.025)	31347	0.50000	0.4006
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	58800	0.50000	0.5089
13 2-Methylphenol	108		9.655	9.671	(1.044)	35755	0.50000	0.4220
15 4-Methylphenol	108		9.950	9.966	(1.076)	34768	0.50000	0.3943
16 N-Nitroso-di-n-propylamine	70		9.974	9.982	(1.079)	27908	0.50000	0.4455
22 2,4-Dimethylphenol	107		10.998	11.006	(0.938)	89362	1.00000	0.8978
24 Benzoic acid	105		11.057	11.007	(0.943)	37634	2.00000	0.6891
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	43097	0.50000	0.5116
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1170292	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	29862	0.50000	0.4996
39 Dimethylphthalate	163		14.741	14.749	(0.963)	105548	0.50000	0.5197
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	639612	4.00000	
50 Diethylphthalate	149		16.203	16.211	(1.058)	98002	0.50000	0.5117
54 N-Nitrosodiphenylamine	169		16.690	16.705	(0.907)	93243	0.50000	0.5262
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	42505	0.50000	0.5126

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
58 Pentachlorophenol	266		17.989	18.012	(0.978)	15934	1.00000	0.4374 (M)
* 59 Phenanthrene-d10	188		18.399	18.398	(1.000)	1094919	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	41647	0.50000	0.4913
67 Butylbenzylphthalate	149		22.415	22.415	(0.957)	65574	0.50000	0.3710
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	1048196	4.00000	
* 77 Perylene-d12	264		26.108	26.108	(1.000)	1117593	4.00000	
79 Dibenzo(a,h)anthracene	278		28.930	28.946	(1.108)	120142	0.50000	0.4613
90 N-Nitrosodimethylamine	74		4.724	4.755	(0.511)	57317	1.00000	1.016

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012307S.D
 Lab Smp Id: SLC0143-CAL4
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	333617	4.21
27 Naphthalene-d8	1136019	568010	2272038	1170292	3.02
42 Acenaphthene-d10	636993	318497	1273986	639612	0.41
59 Phenanthrene-d10	1093620	546810	2187240	1094919	0.12
69 Chrysene-d12	1000300	500150	2000600	1048196	4.79
77 Perylene-d12	1058448	529224	2116896	1117593	5.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012307S.D

Lab ID: SLC0143-CAL4

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 19:15

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.943	0.000	0.9431		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

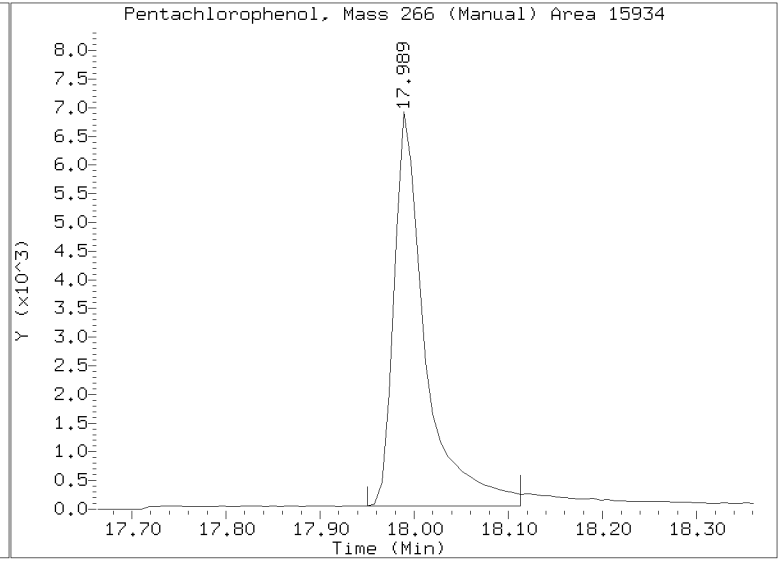
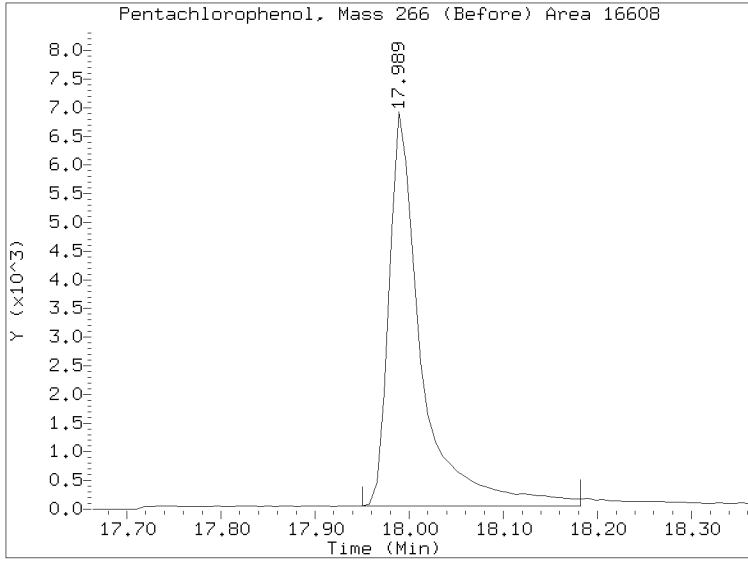
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

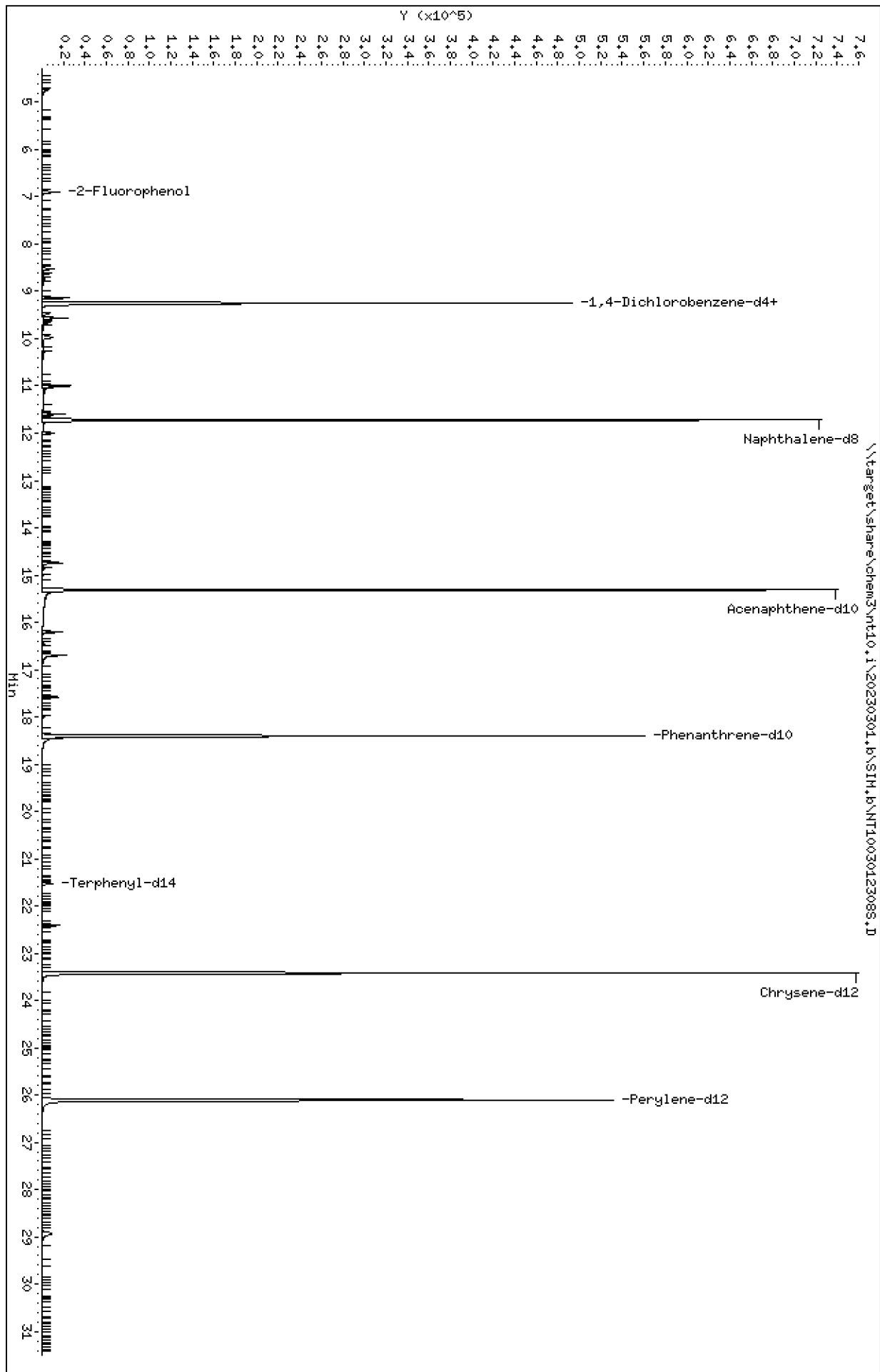
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012307S.D
Injection Date: 01-MAR-2023 19:15
Lab ID: SLC0143-CAL4 Client ID:
Report Date: 03/10/2023 10:37



Data File: \\target\share\chem3\nt10.1\20230301.B\SIH.B\NT1003012308S.D
Date: 01-HRR-2023 19:53
Client ID:
Sample Info: SED-CAL3
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012308S.D
 Lab Smp Id: SLC0143-CAL3
 Inj Date : 01-MAR-2023 19:53 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL3
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 8 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	25671	0.30000	0.2859
3 Phenol	94		8.524	8.532	(0.921)	19568	0.20000	0.1477
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	23459	0.20000	0.2013
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.252	(1.000)	314467	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.002)	22543	0.20000	0.1989
11 Benzyl alcohol	79		9.484	9.508	(1.025)	10320	0.20000	0.1404
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	21414	0.20000	0.1966
13 2-Methylphenol	108		9.663	9.671	(1.044)	11161	0.20000	0.1401
15 4-Methylphenol	108		9.950	9.966	(1.076)	9608	0.20000	0.1159
16 N-Nitroso-di-n-propylamine	70		9.973	9.982	(1.078)	10242	0.20000	0.1736
22 2,4-Dimethylphenol	107		10.997	11.006	(0.938)	27660	0.40000	0.2992
24 Benzoic acid	105		11.074	11.007	(0.945)	7336	0.80000	0.1448
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	15379	0.20000	0.1963
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	1088698	4.00000	
30 Hexachlorobutadiene	225		11.993	11.994	(1.023)	10781	0.20000	0.1939
39 Dimethylphthalate	163		14.741	14.749	(0.963)	33436	0.20000	0.1853
* 42 Acenaphthene-d10	162		15.313	15.314	(1.000)	568154	4.00000	
50 Diethylphthalate	149		16.203	16.211	(1.058)	31499	0.20000	0.1852
54 N-Nitrosodiphenylamine	169		16.698	16.705	(0.908)	30497	0.20000	0.1924
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	14544	0.20000	0.1961

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
58 Pentachlorophenol	266		17.996	18.012	(0.978)	3505	0.40000	0.1079
* 59 Phenanthrene-d10	188		18.398	18.398	(1.000)	979213	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	13708	0.20000	0.1759
67 Butylbenzylphthalate	149		22.414	22.415	(0.957)	19744	0.20000	0.1214
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	963807	4.00000	
* 77 Perylene-d12	264		26.107	26.108	(1.000)	1037909	4.00000	
79 Dibenzo(a,h)anthracene	278		28.937	28.946	(1.108)	39856	0.20000	0.1655
90 N-Nitrosodimethylamine	74		4.739	4.755	(0.512)	20553	0.40000	0.3867

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012308S.D
 Lab Smp Id: SLC0143-CAL3
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	314467	-1.77
27 Naphthalene-d8	1136019	568010	2272038	1088698	-4.17
42 Acenaphthene-d10	636993	318497	1273986	568154	-10.81
59 Phenanthrene-d10	1093620	546810	2187240	979213	-10.46
69 Chrysene-d12	1000300	500150	2000600	963807	-3.65
77 Perylene-d12	1058448	529224	2116896	1037909	-1.94

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012308S.D

Lab ID: SLC0143-CAL3

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 19:53

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.945	0.000	0.9446		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

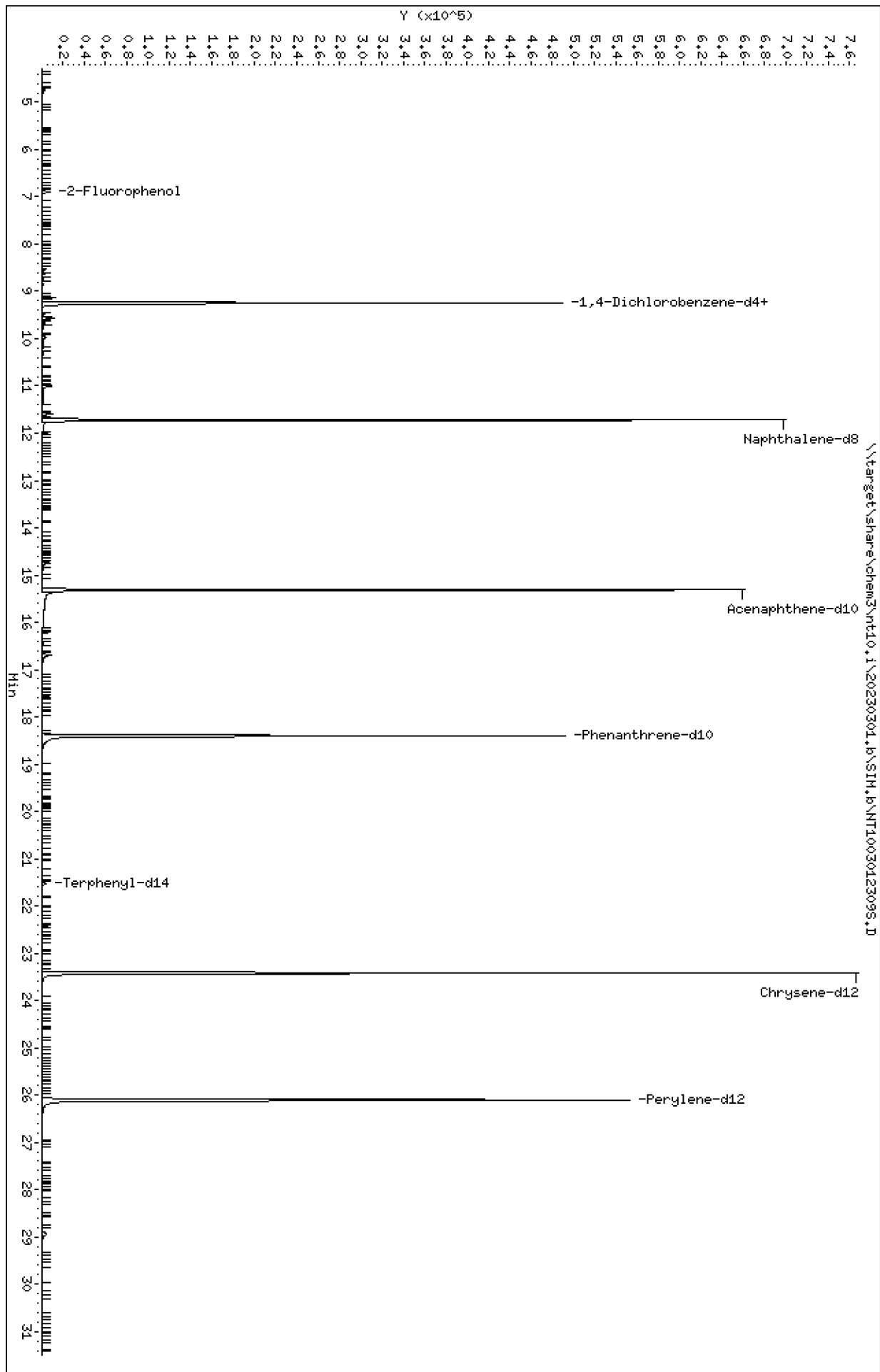
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230301.B\SIH.B\NT1003012309S.D
 Date: 01-MAR-2023 20:30
 Client ID:
 Sample Info: SEQ-CAL2
 Volume Injected (uL): 1.0
 Column phase: ZB-5msi

Instrument: nt10.1
 Operator: JGR
 Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012309S.D
 Lab Smp Id: SLC0143-CAL2
 Inj Date : 01-MAR-2023 20:30 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 9 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.747)	12090	0.15000	0.1386
3 Phenol	94		8.525	8.532	(0.922)	8264	0.10000	0.06425
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.989)	11650	0.10000	0.1029
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.252	(1.000)	305434	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	11269	0.10000	0.1024
11 Benzyl alcohol	79		9.485	9.508	(1.026)	3114	0.10000	0.04367 (M)
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	10725	0.10000	0.1014
13 2-Methylphenol	108		9.663	9.671	(1.045)	4548	0.10000	0.05881
15 4-Methylphenol	108		9.958	9.966	(1.077)	3746	0.10000	0.04658
16 N-Nitroso-di-n-propylamine	70		9.974	9.982	(1.079)	4218	0.10000	0.07364
22 2,4-Dimethylphenol	107		11.006	11.006	(0.939)	11856	0.20000	0.1332
24 Benzoic acid	105		11.006	11.007	(0.939)	172	0.40000	0.003526 (M)
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	7521	0.10000	0.09961
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1048978	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	5346	0.10000	0.09978
39 Dimethylphthalate	163		14.741	14.749	(0.963)	15255	0.10000	0.08950
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	536796	4.00000	
50 Diethylphthalate	149		16.211	16.211	(1.059)	14260	0.10000	0.08872
54 N-Nitrosodiphenylamine	169		16.698	16.705	(0.908)	13459	0.10000	0.08998
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	6888	0.10000	0.09840

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
58 Pentachlorophenol	266		18.004	18.012	(0.979)	1243	0.20000	0.04058
* 59 Phenanthrene-d10	188		18.399	18.398	(1.000)	924275	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	6767	0.10000	0.08836
67 Butylbenzylphthalate	149		22.407	22.415	(0.957)	8617	0.10000	0.05389
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	947041	4.00000	
* 77 Perylene-d12	264		26.108	26.108	(1.000)	1060218	4.00000	
79 Dibenzo(a,h)anthracene	278		28.945	28.946	(1.109)	20472	0.10000	0.08330
90 N-Nitrosodimethylamine	74		4.740	4.755	(0.513)	9108	0.20000	0.1764

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012309S.D
 Lab Smp Id: SLC0143-CAL2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	305434	-4.59
27 Naphthalene-d8	1136019	568010	2272038	1048978	-7.66
42 Acenaphthene-d10	636993	318497	1273986	536796	-15.73
59 Phenanthrene-d10	1093620	546810	2187240	924275	-15.48
69 Chrysene-d12	1000300	500150	2000600	947041	-5.32
77 Perylene-d12	1058448	529224	2116896	1060218	0.17

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012309S.D

Lab ID: SLC0143-CAL2

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 20:30

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.939	0.000	0.9388		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

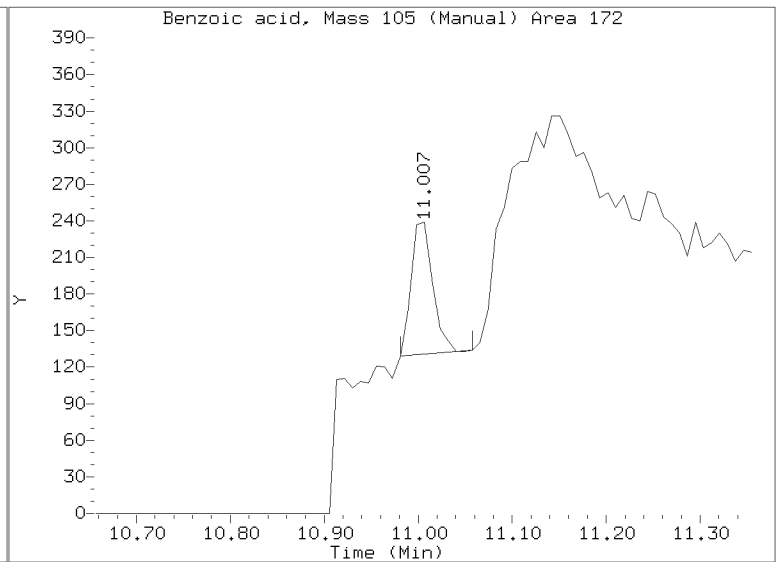
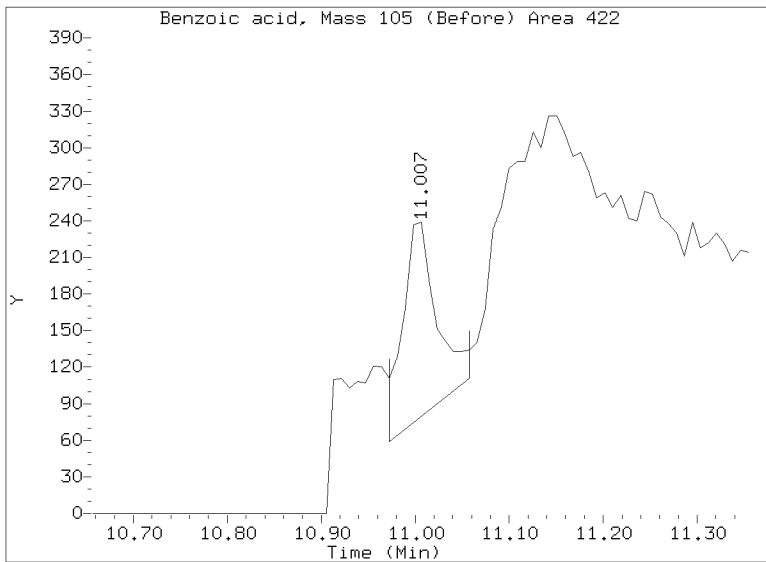
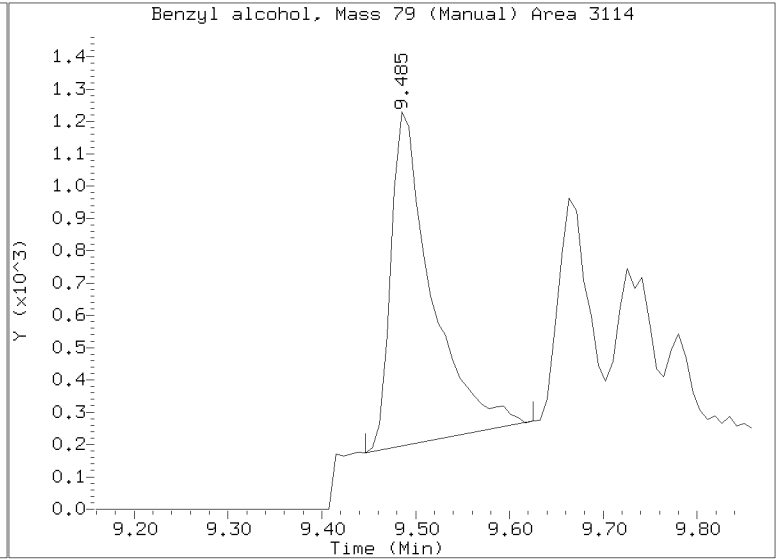
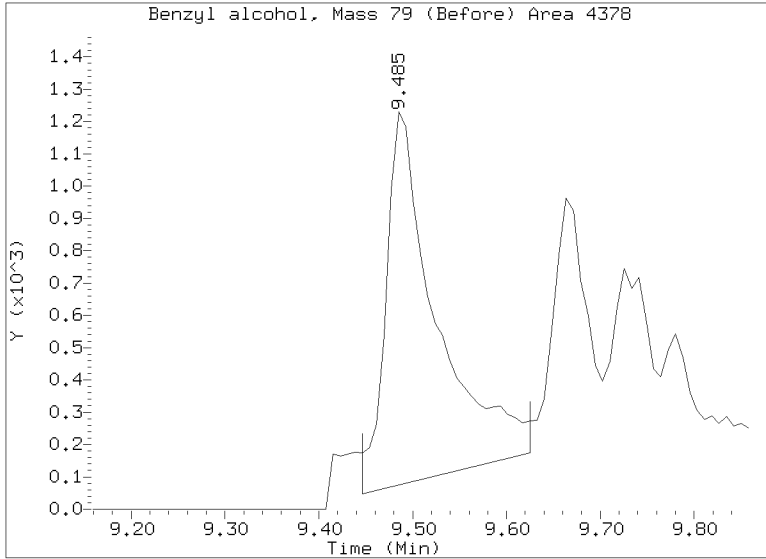
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

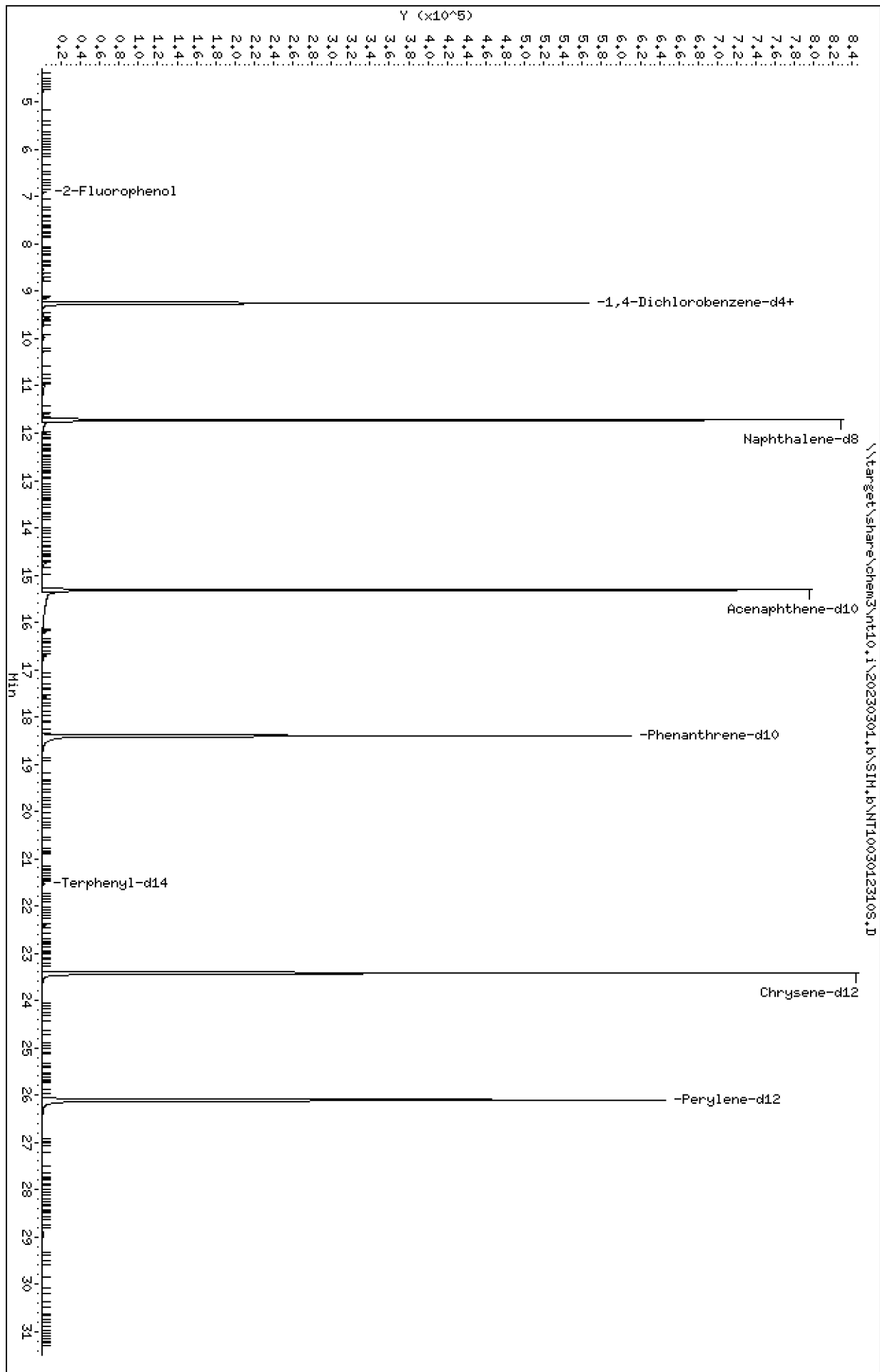
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012309S.D
Injection Date: 01-MAR-2023 20:30
Lab ID: SLC0143-CAL2 Client ID:
Report Date: 03/10/2023 10:37



Data File: \\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012310S.D
Date: 01-MAR-2023 21:09
Client ID:
Sample Info: SED-CAL1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012310S.D
 Lab Smp Id: SLC0143-CAL1
 Inj Date : 01-MAR-2023 21:09 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-CAL1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 10 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	7096	0.07500	0.06711
3 Phenol	94		8.532	8.532	(0.922)	3599	0.05000	0.02308
7 1,3-Dichlorobenzene	146		9.135	9.136	(0.987)	7259	0.05000	0.05289
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.252	(1.000)	370360	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.002)	6987	0.05000	0.05236
11 Benzyl alcohol	79		9.508	9.508	(1.028)	1380	0.05000	0.01596 (M)
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	6637	0.05000	0.05174
13 2-Methylphenol	108		9.671	9.671	(1.045)	1789	0.05000	0.01908 (M)
15 4-Methylphenol	108		9.966	9.966	(1.077)	2062	0.05000	0.02115 (M)
16 N-Nitroso-di-n-propylamine	70		9.981	9.982	(1.079)	1965	0.05000	0.02830 (M)
22 2,4-Dimethylphenol	107		11.006	11.006	(0.939)	6159	0.10000	0.05750
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	4558	0.05000	0.05017
* 27 Naphthalene-d8	136		11.723	11.723	(1.000)	1262304	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	3445	0.05000	0.05343
39 Dimethylphthalate	163		14.749	14.749	(0.963)	9356	0.05000	0.04618
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	638059	4.00000	
50 Diethylphthalate	149		16.211	16.211	(1.059)	8803	0.05000	0.04607
54 N-Nitrosodiphenylamine	169		16.705	16.705	(0.908)	7370	0.05000	0.04049 (M)
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	4170	0.05000	0.04895 (M)

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
58 Pentachlorophenol	266		18.012	18.012	(0.979)	397	0.10000	0.01065
* 59 Phenanthrene-d10	188		18.398	18.398	(1.000)	1124768	4.00000	
\$ 66 Terphenyl-d14	244		21.532	21.532	(0.919)	3717	0.05000	0.04124
67 Butylbenzylphthalate	149		22.415	22.415	(0.957)	4671	0.05000	0.02482
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	1114478	4.00000	
* 77 Perylene-d12	264		26.108	26.108	(1.000)	1276260	4.00000	
79 Dibenzo(a,h)anthracene	278		28.945	28.946	(1.109)	10824	0.05000	0.03661
90 N-Nitrosodimethylamine	74		4.755	4.755	(0.514)	5382	0.10000	0.08597

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012310S.D
 Lab Smp Id: SLC0143-CAL1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	370360	15.69
27 Naphthalene-d8	1136019	568010	2272038	1262304	11.12
42 Acenaphthene-d10	636993	318497	1273986	638059	0.17
59 Phenanthrene-d10	1093620	546810	2187240	1124768	2.85
69 Chrysene-d12	1000300	500150	2000600	1114478	11.41
77 Perylene-d12	1058448	529224	2116896	1276260	20.58

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012310S.D

Lab ID: SLC0143-CAL1

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 21:09

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003012310S.D

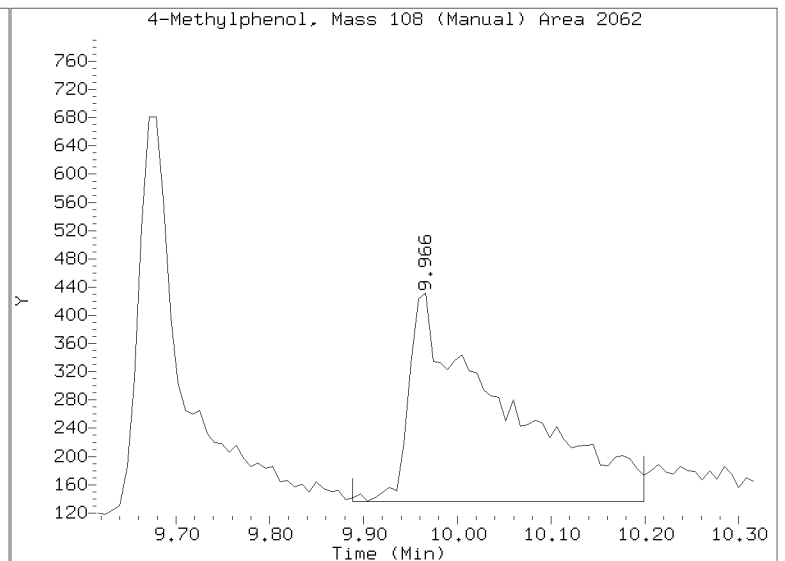
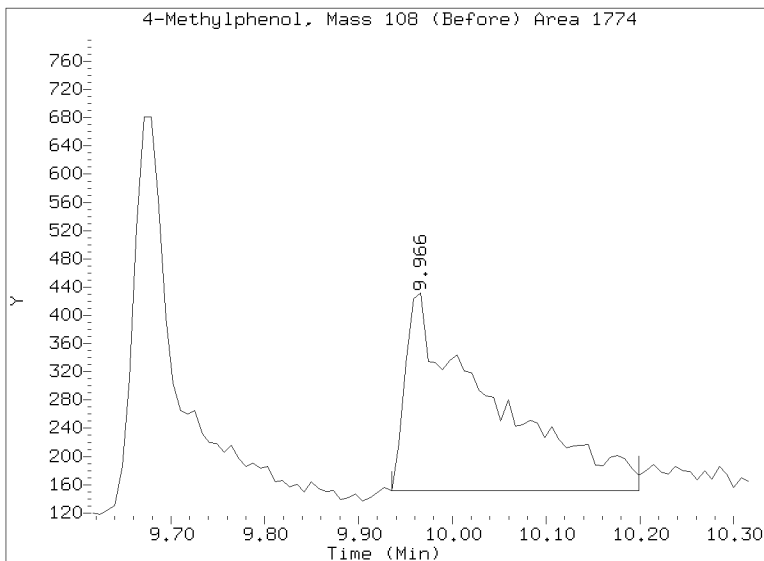
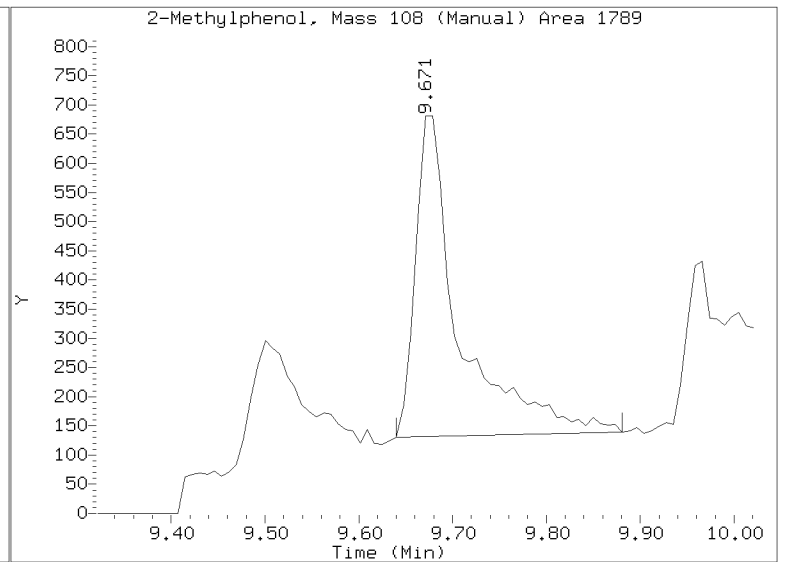
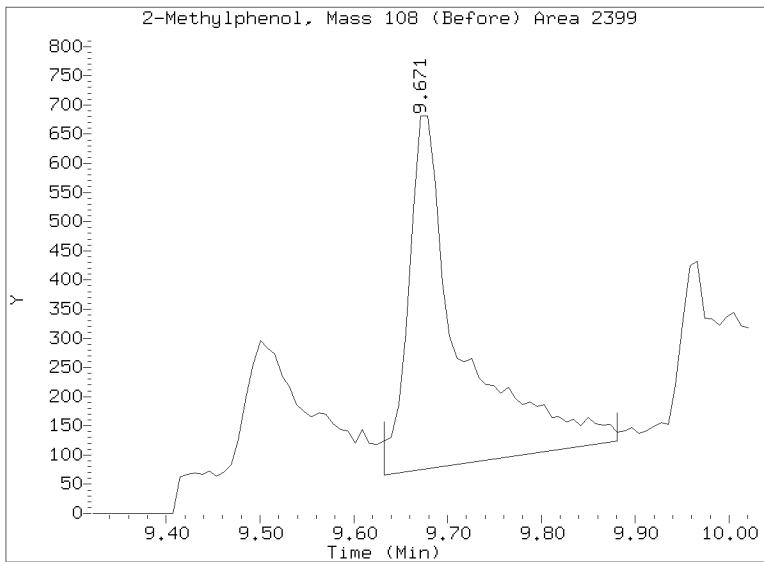
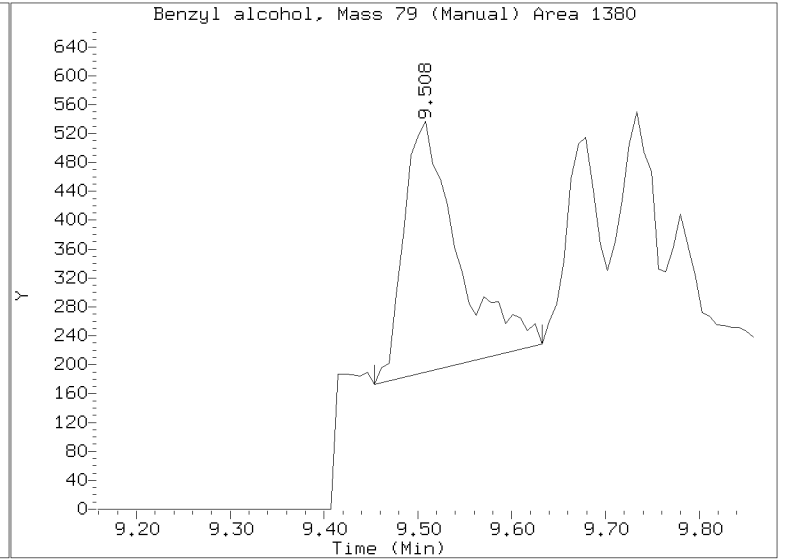
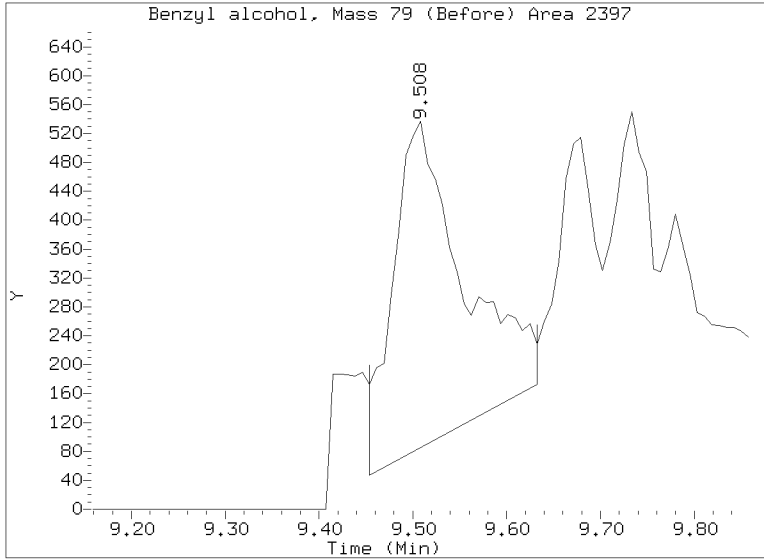
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

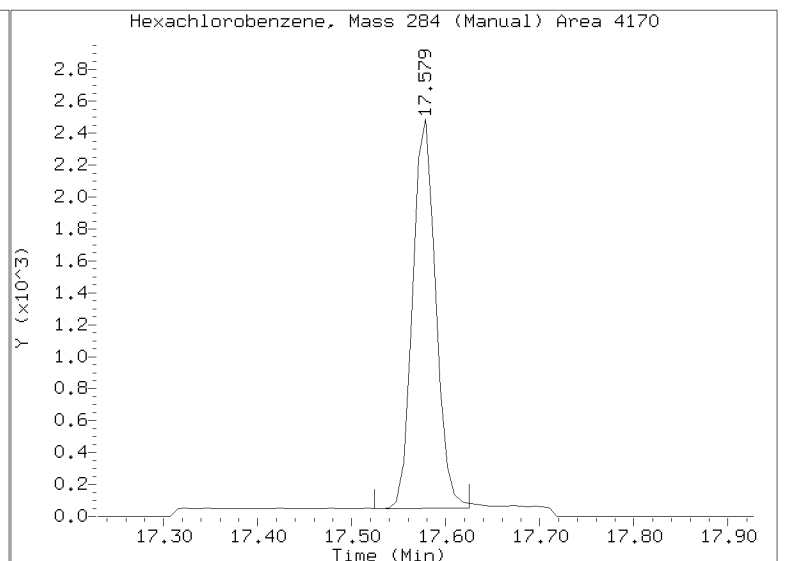
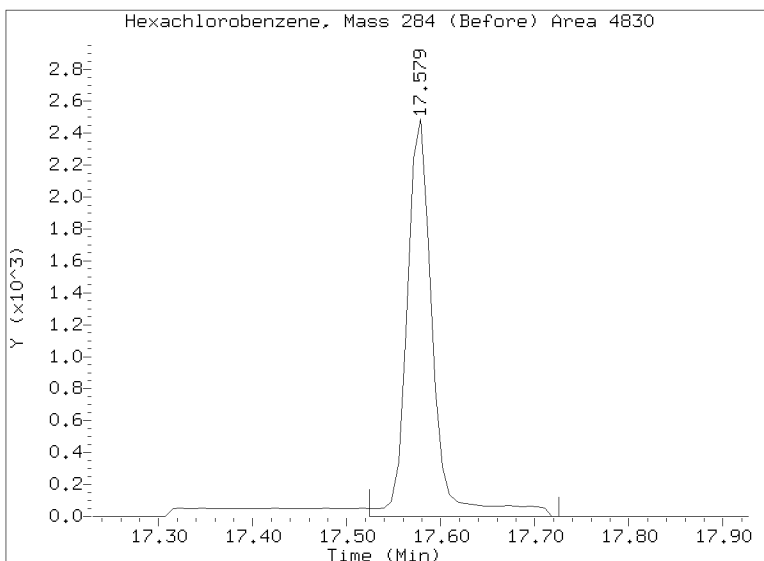
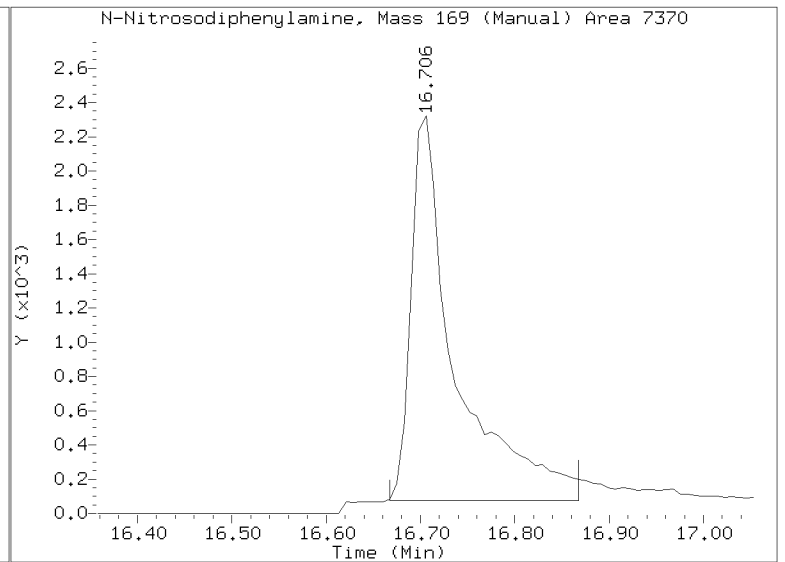
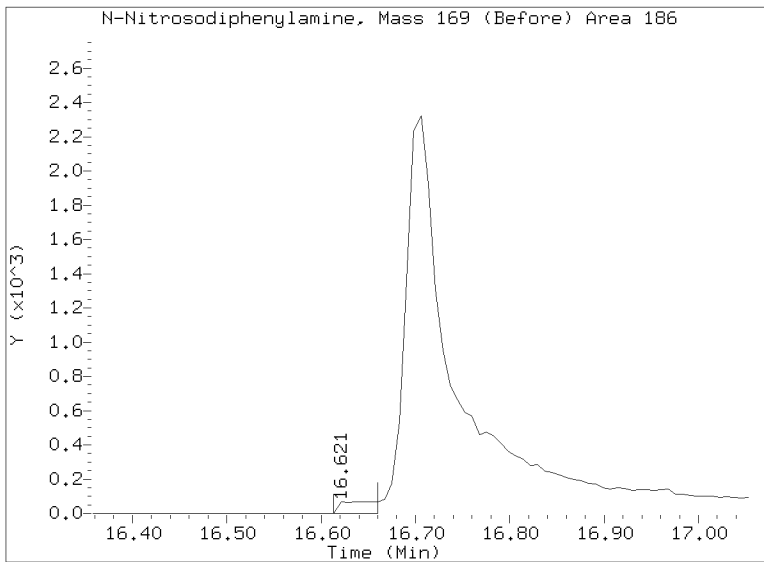
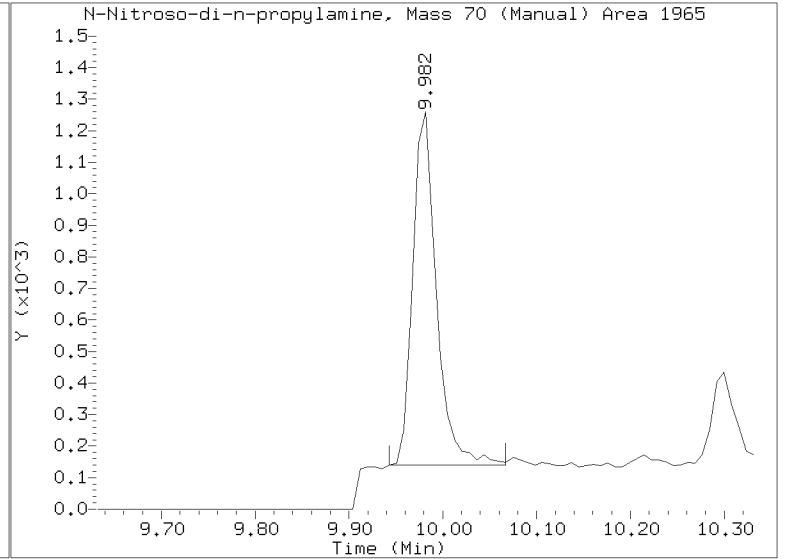
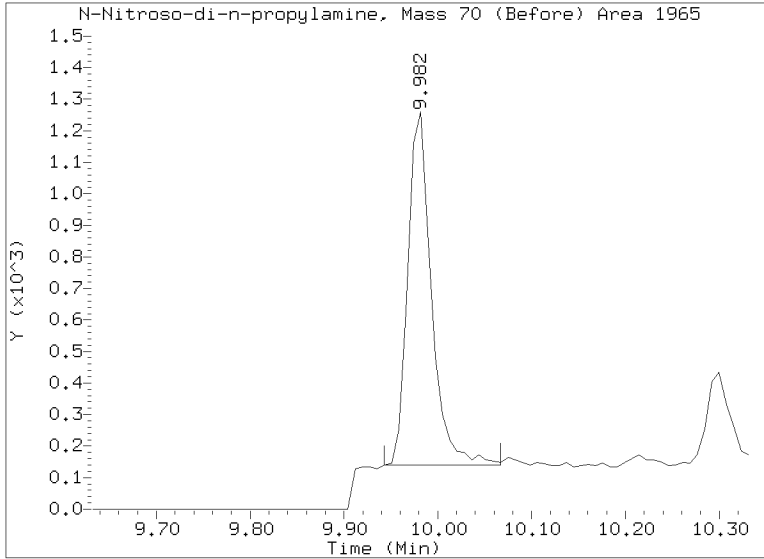
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012310S.D
Injection Date: 01-MAR-2023 21:09
Lab ID: SLC0143-CAL1 Client ID:
Report Date: 03/10/2023 10:37



Quant Ion Manual Peak Adjustment Report

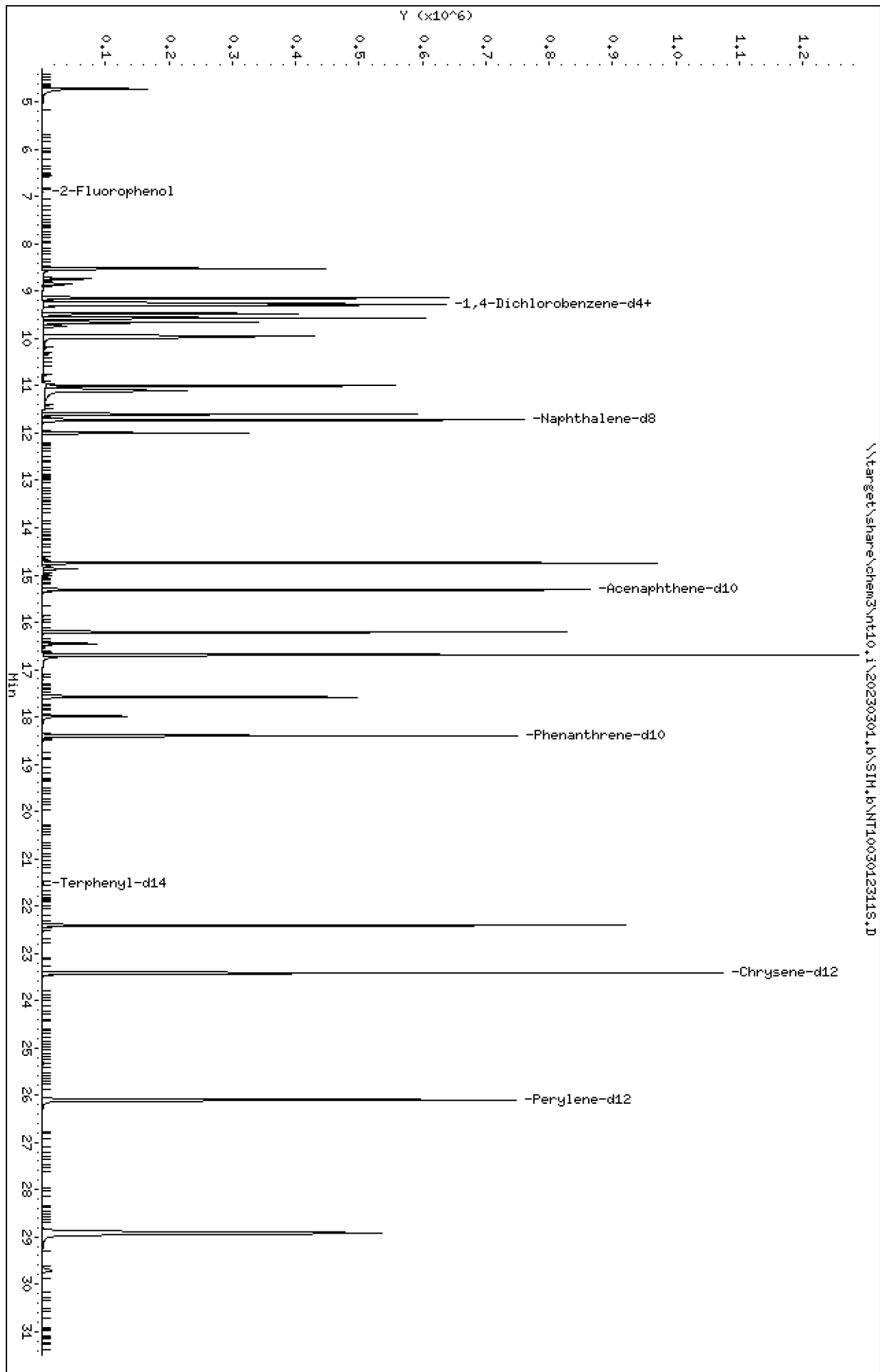
Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012310S.D
Injection Date: 01-MAR-2023 21:09
Lab ID: SLC0143-CAL1 Client ID:
Report Date: 03/10/2023 10:37



Data File: \\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012311S.D
Date: 01-MAR-2023 21:46
Client ID:
Sample Info: SED-SCV1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25

\\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012311S.D



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

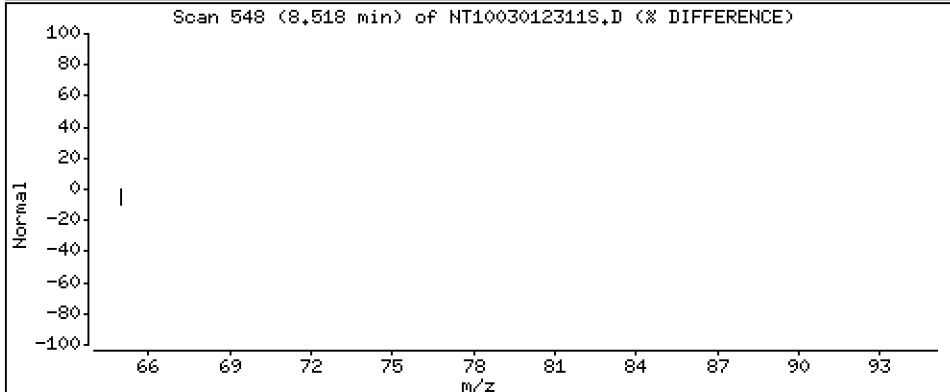
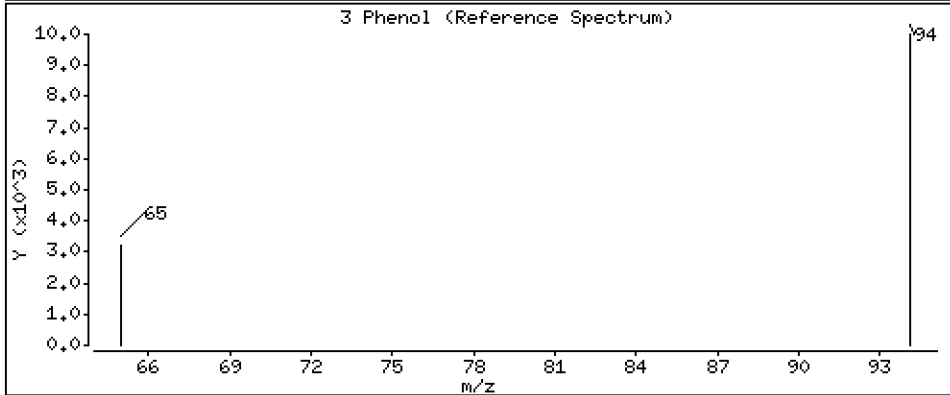
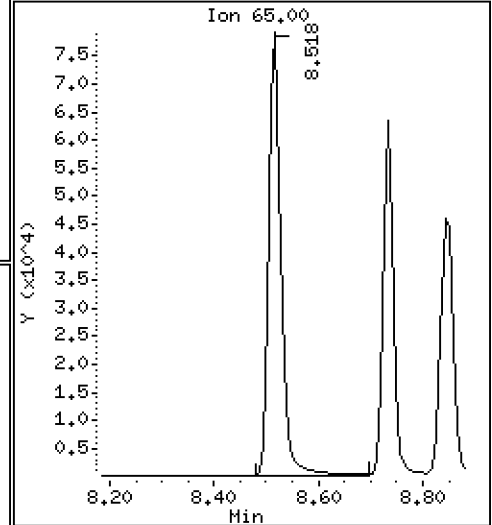
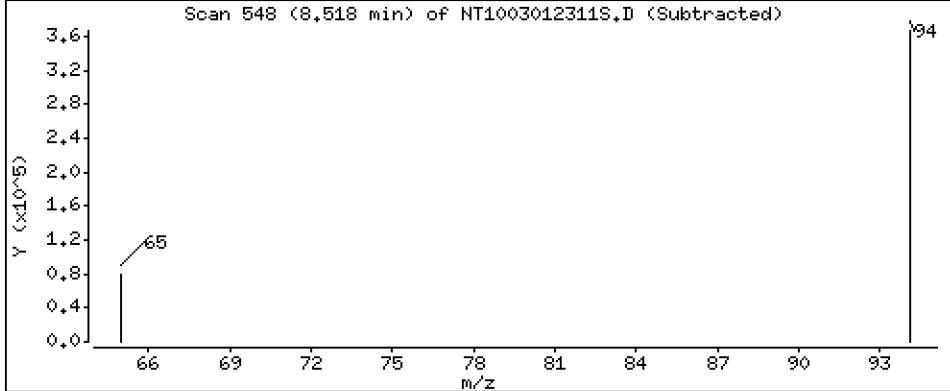
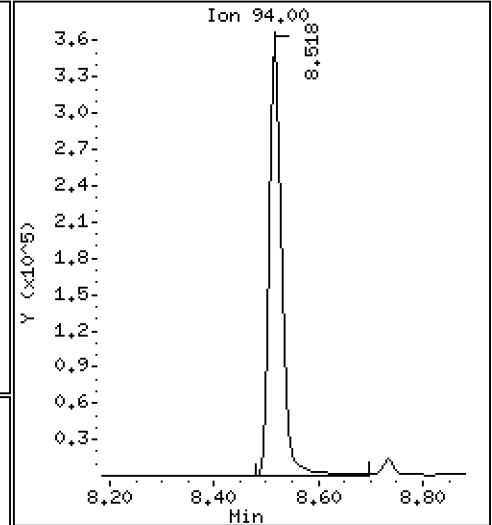
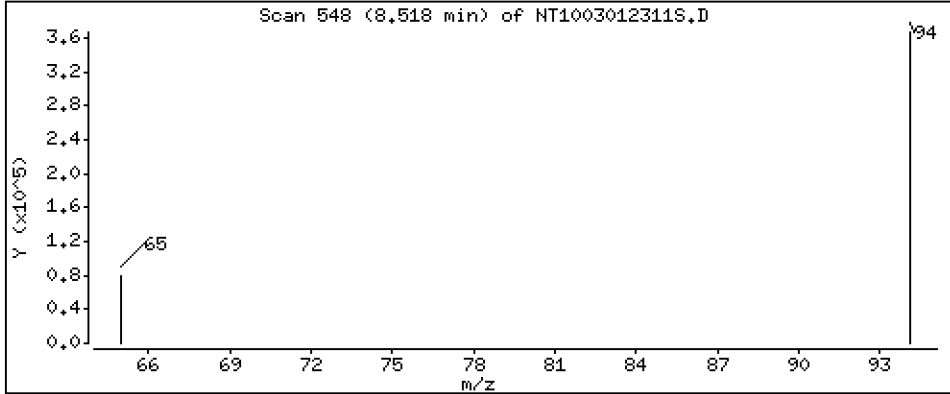
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.507 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

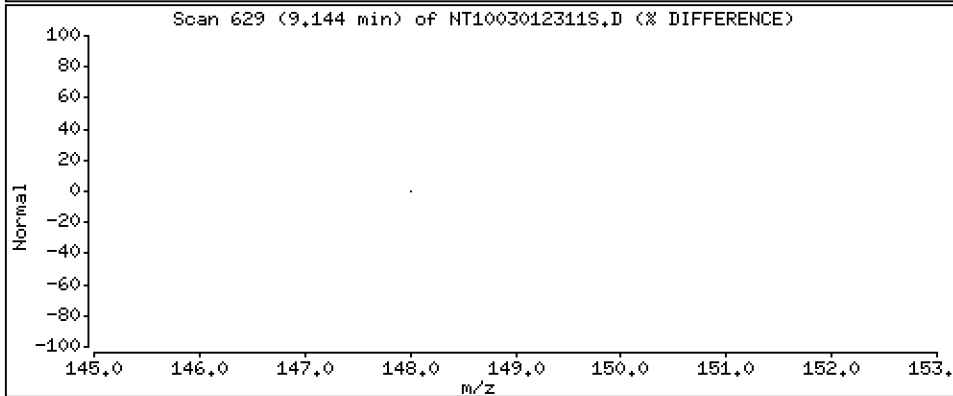
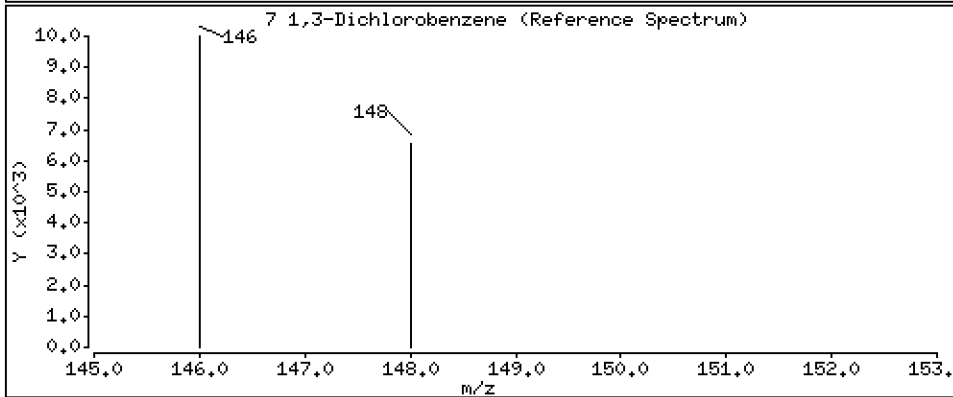
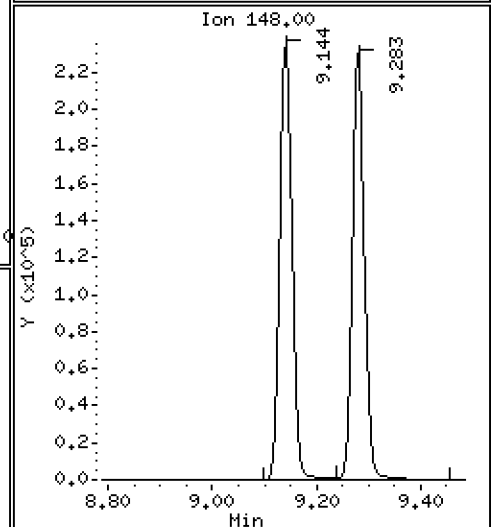
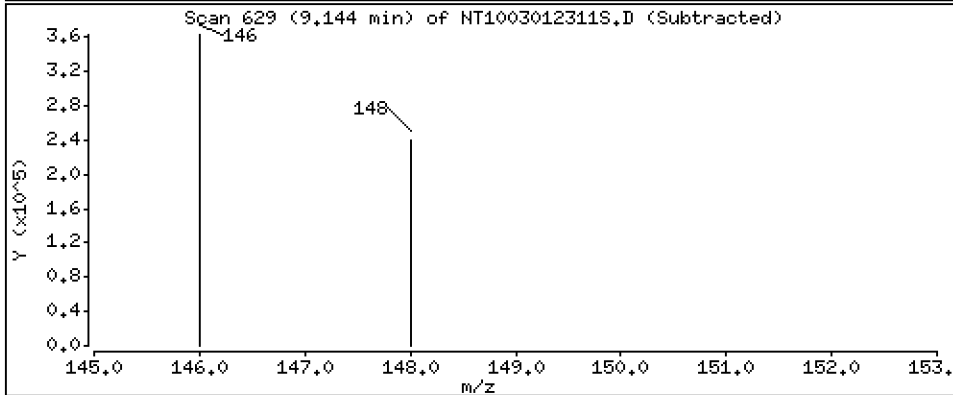
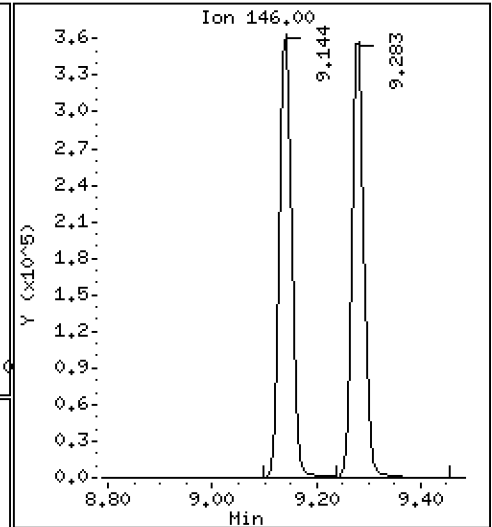
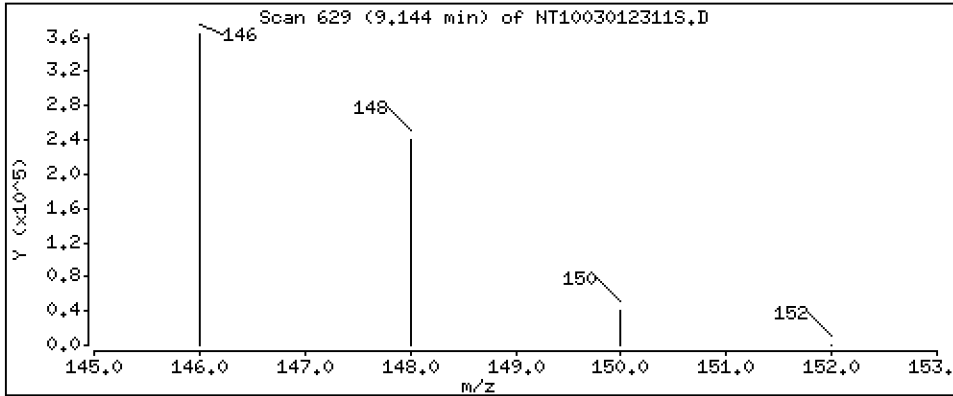
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 5.084 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

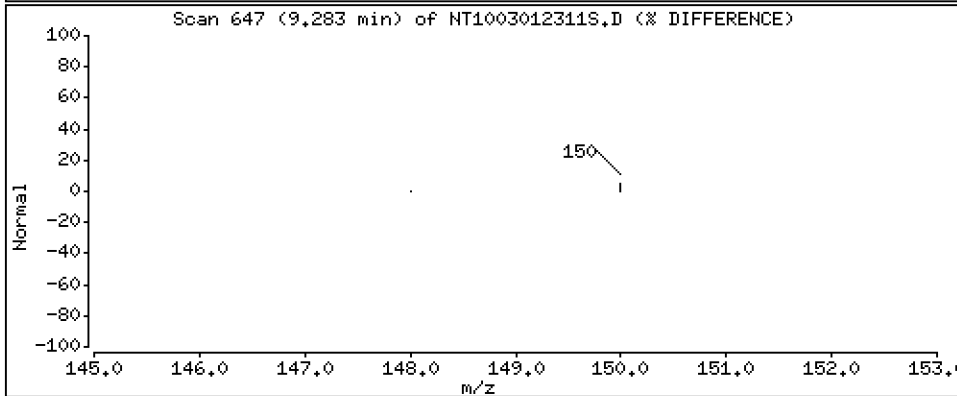
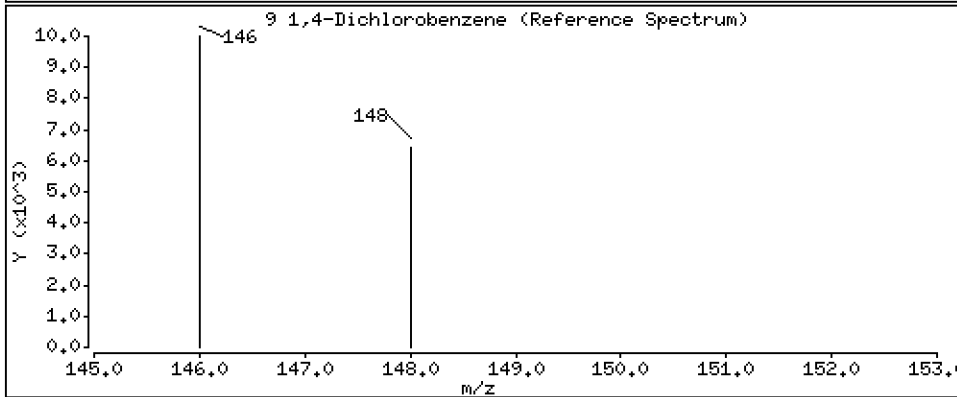
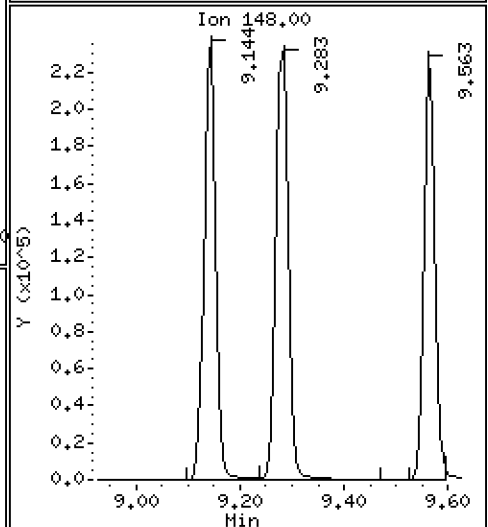
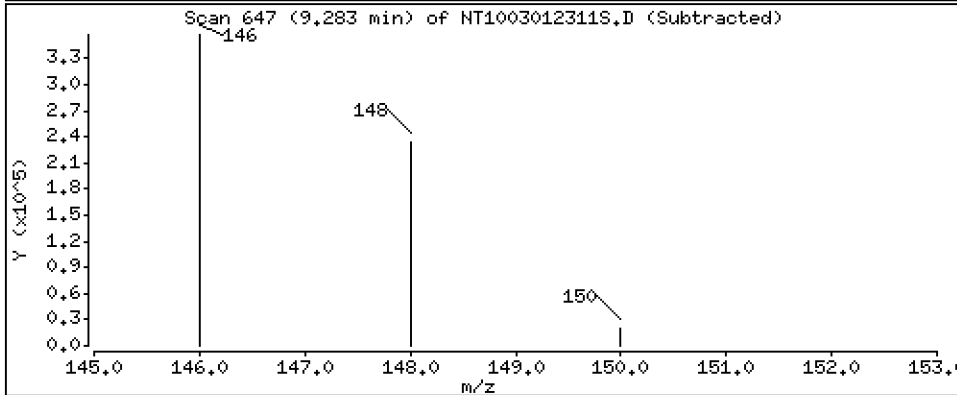
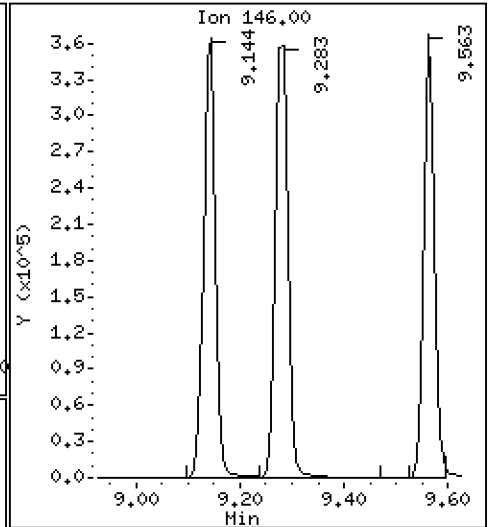
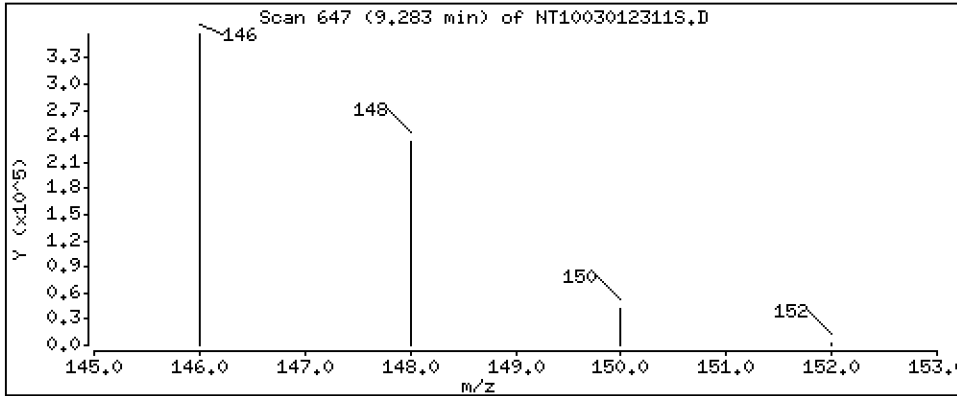
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9,1,4-Dichlorobenzene

Concentration: 5,250 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

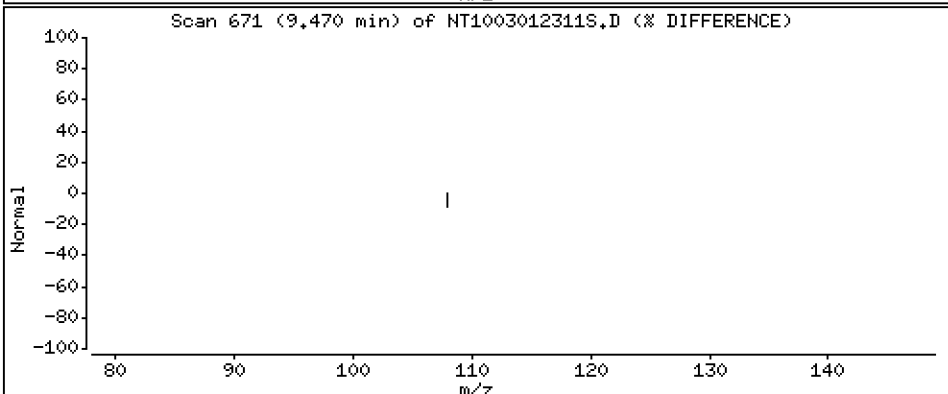
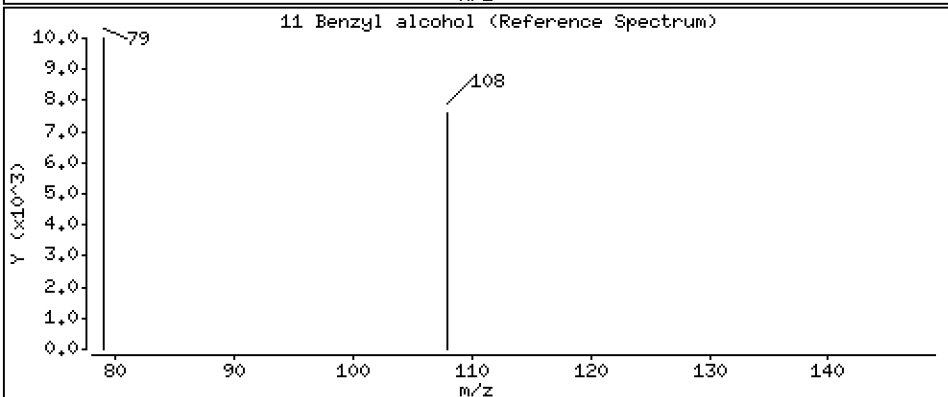
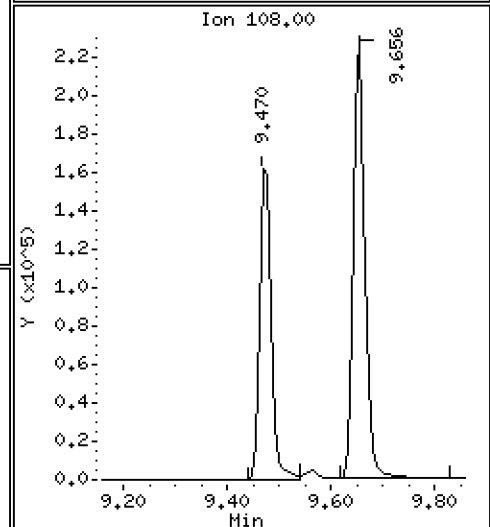
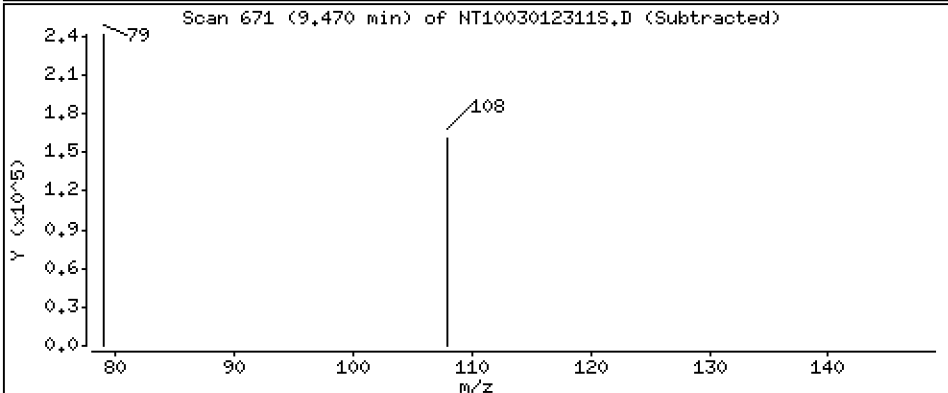
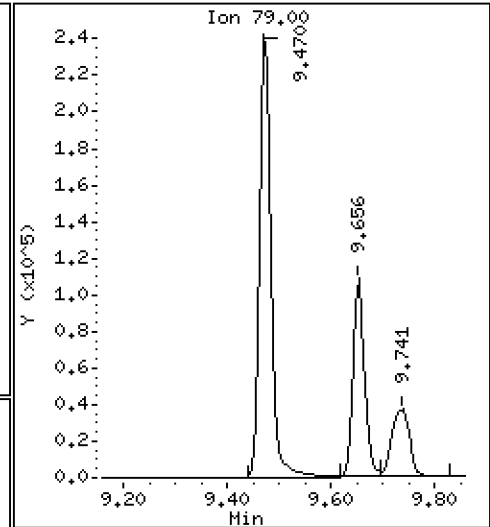
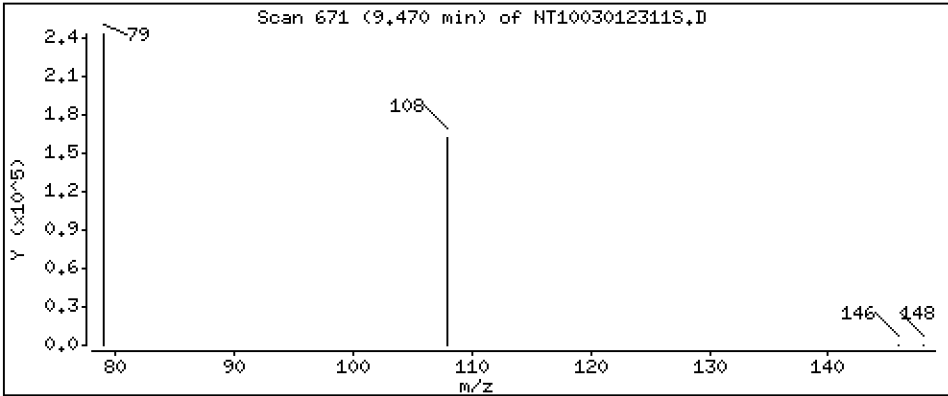
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5,104 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

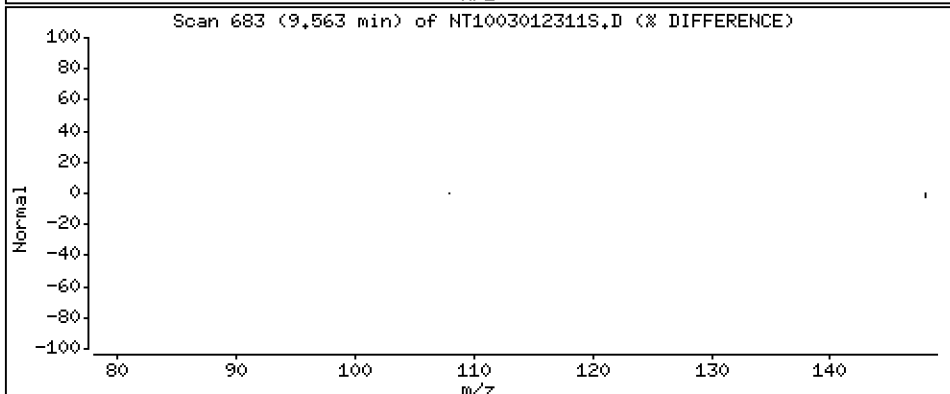
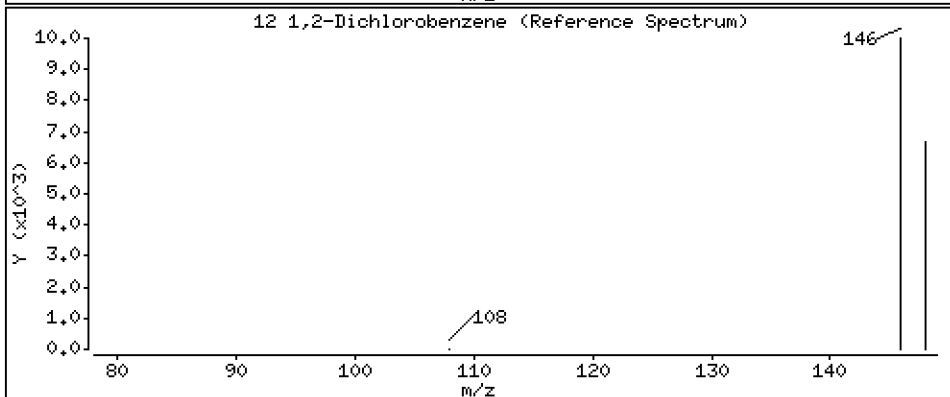
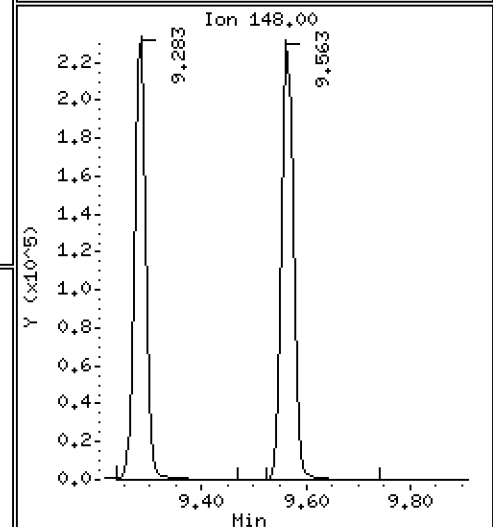
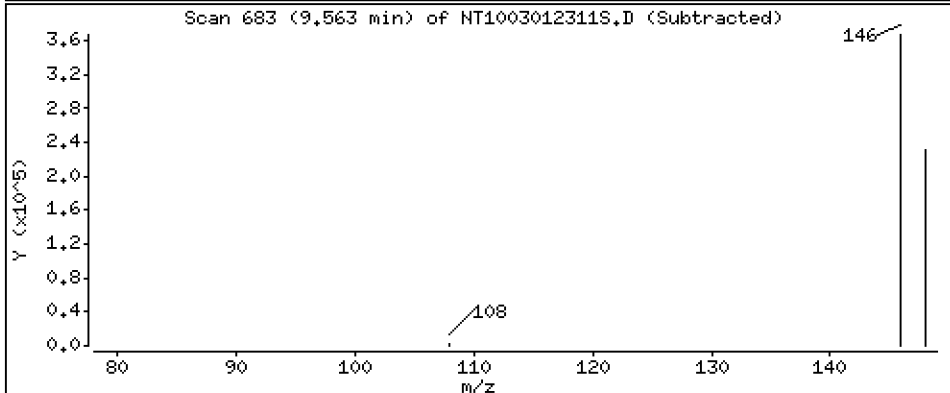
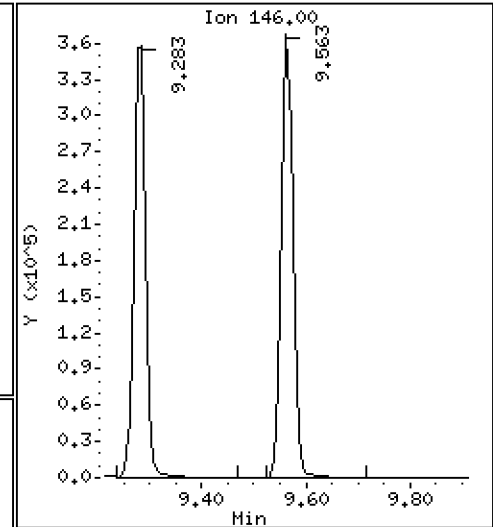
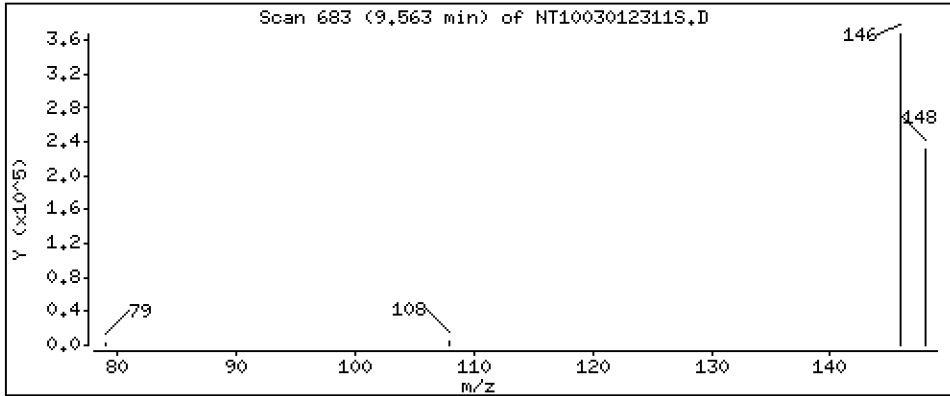
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5,142 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

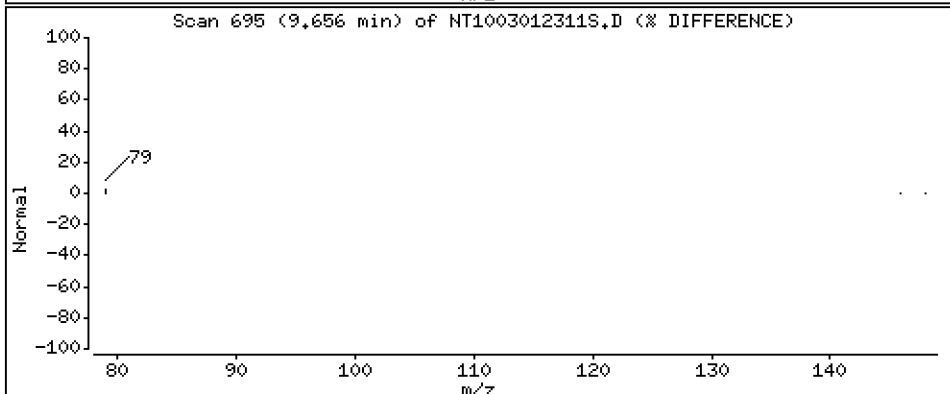
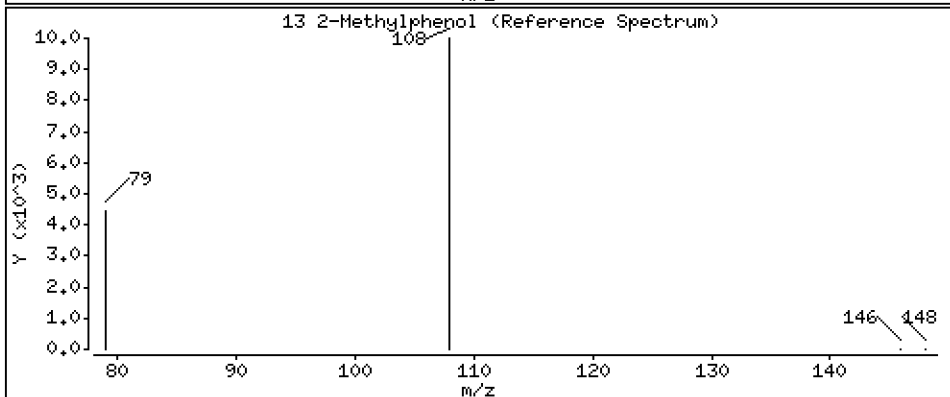
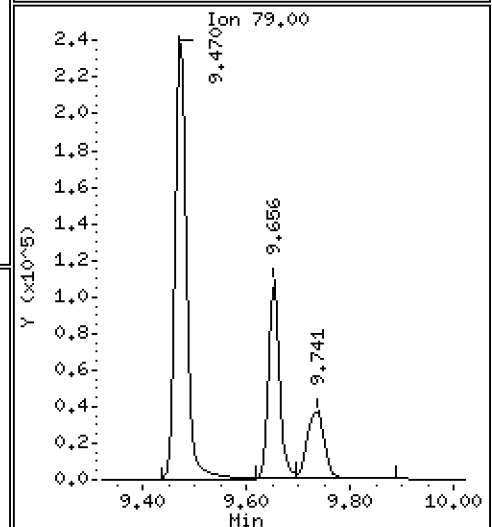
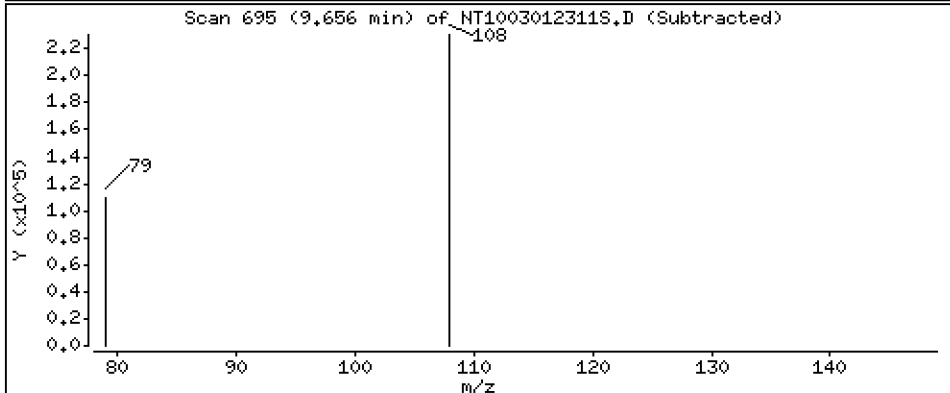
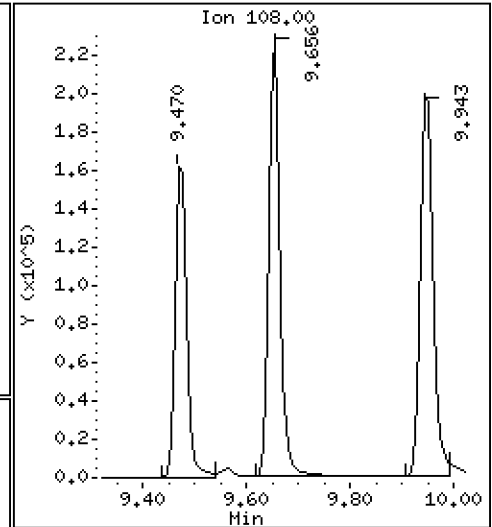
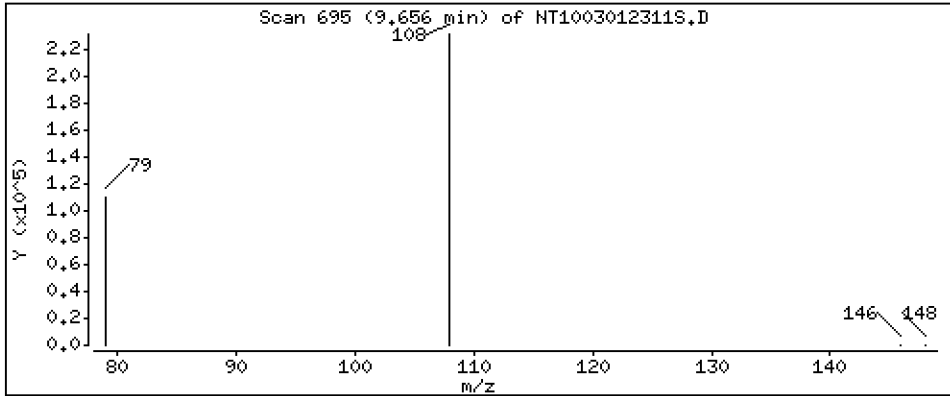
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.365 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

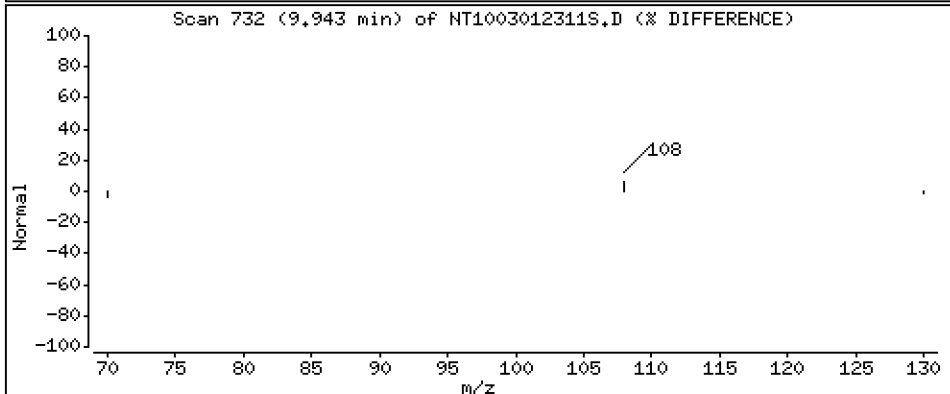
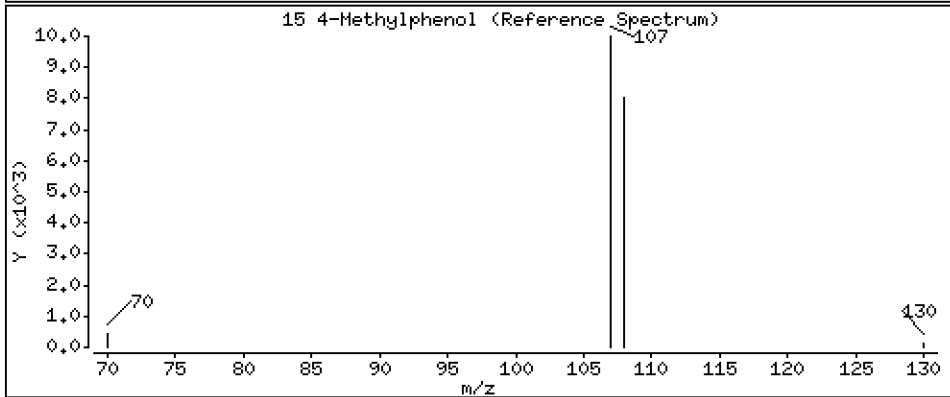
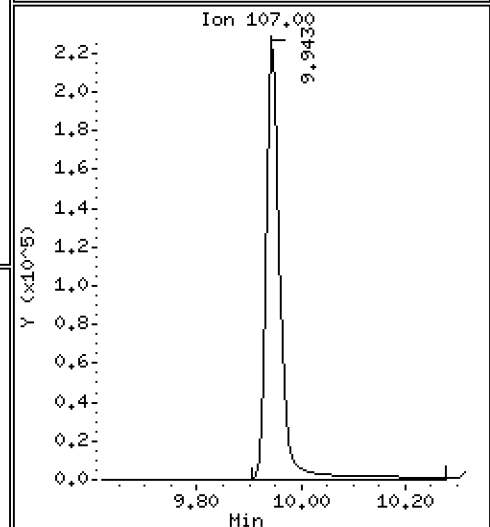
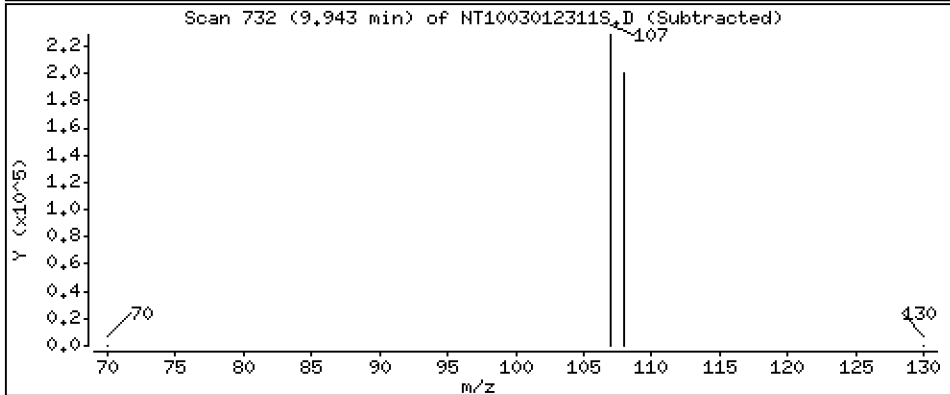
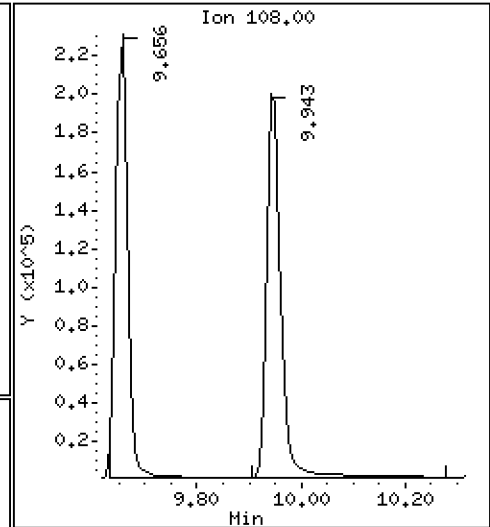
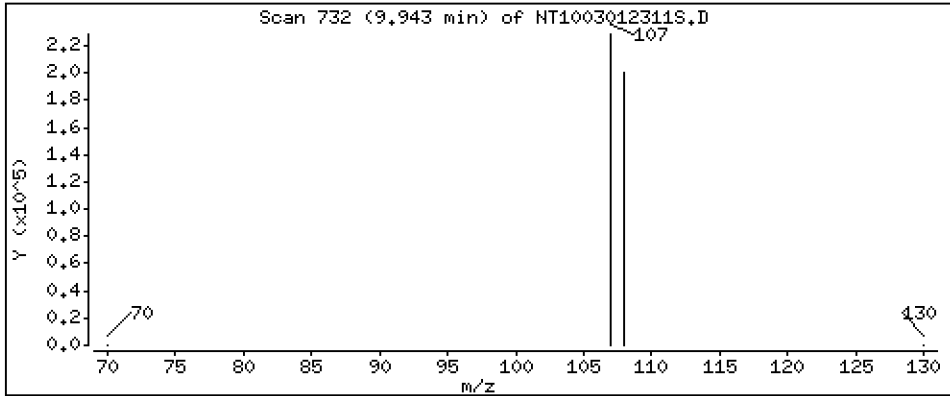
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.505 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

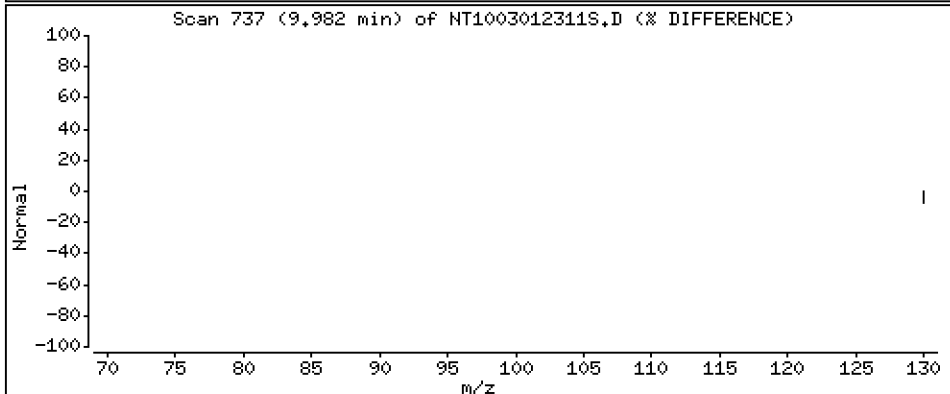
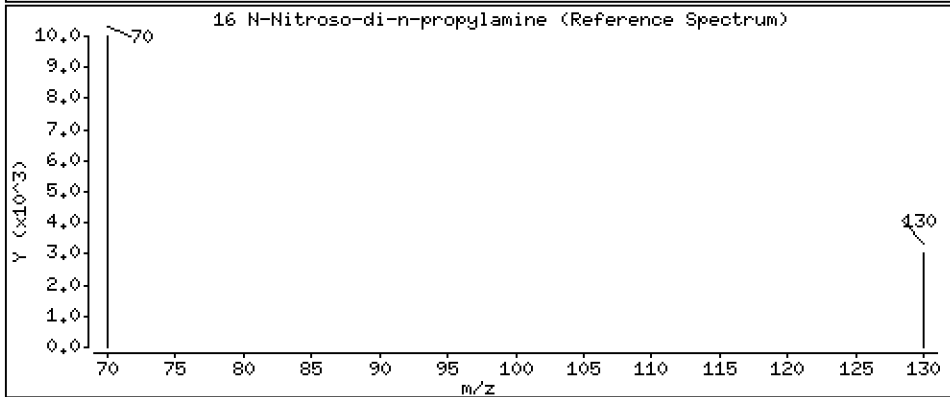
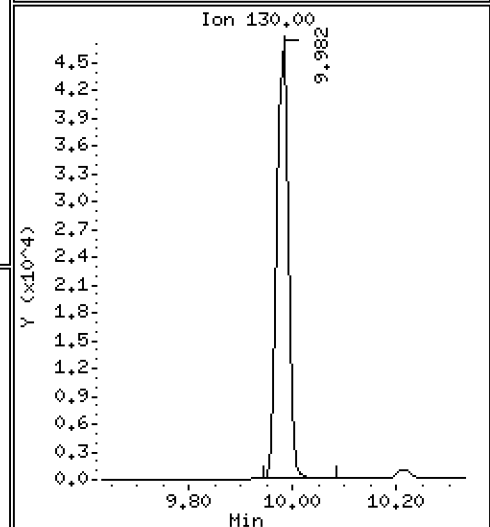
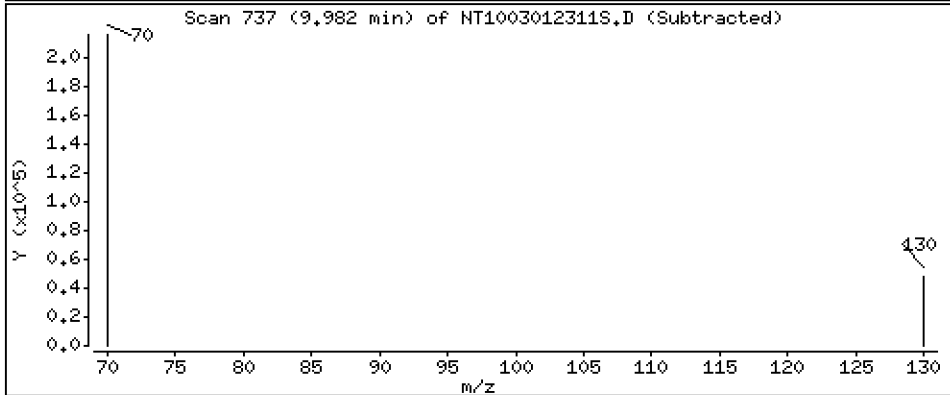
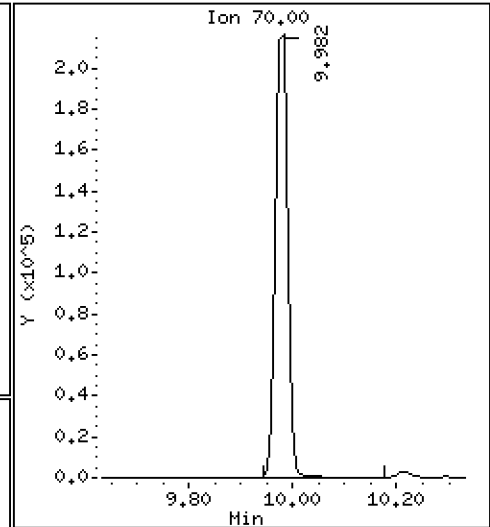
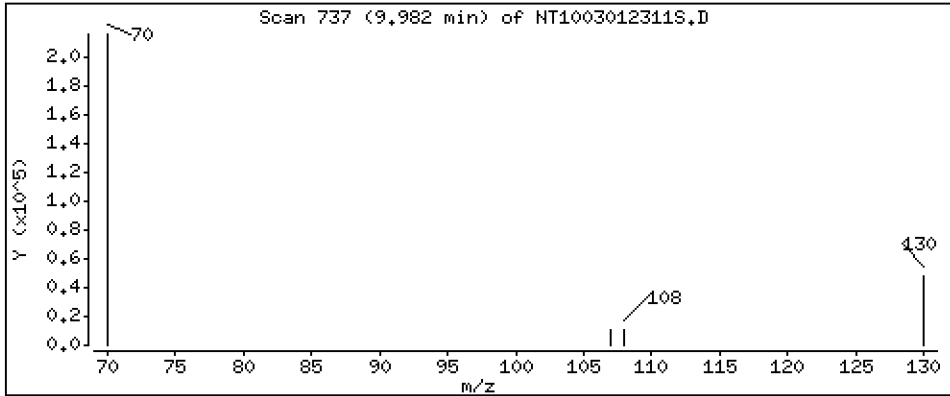
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,685 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

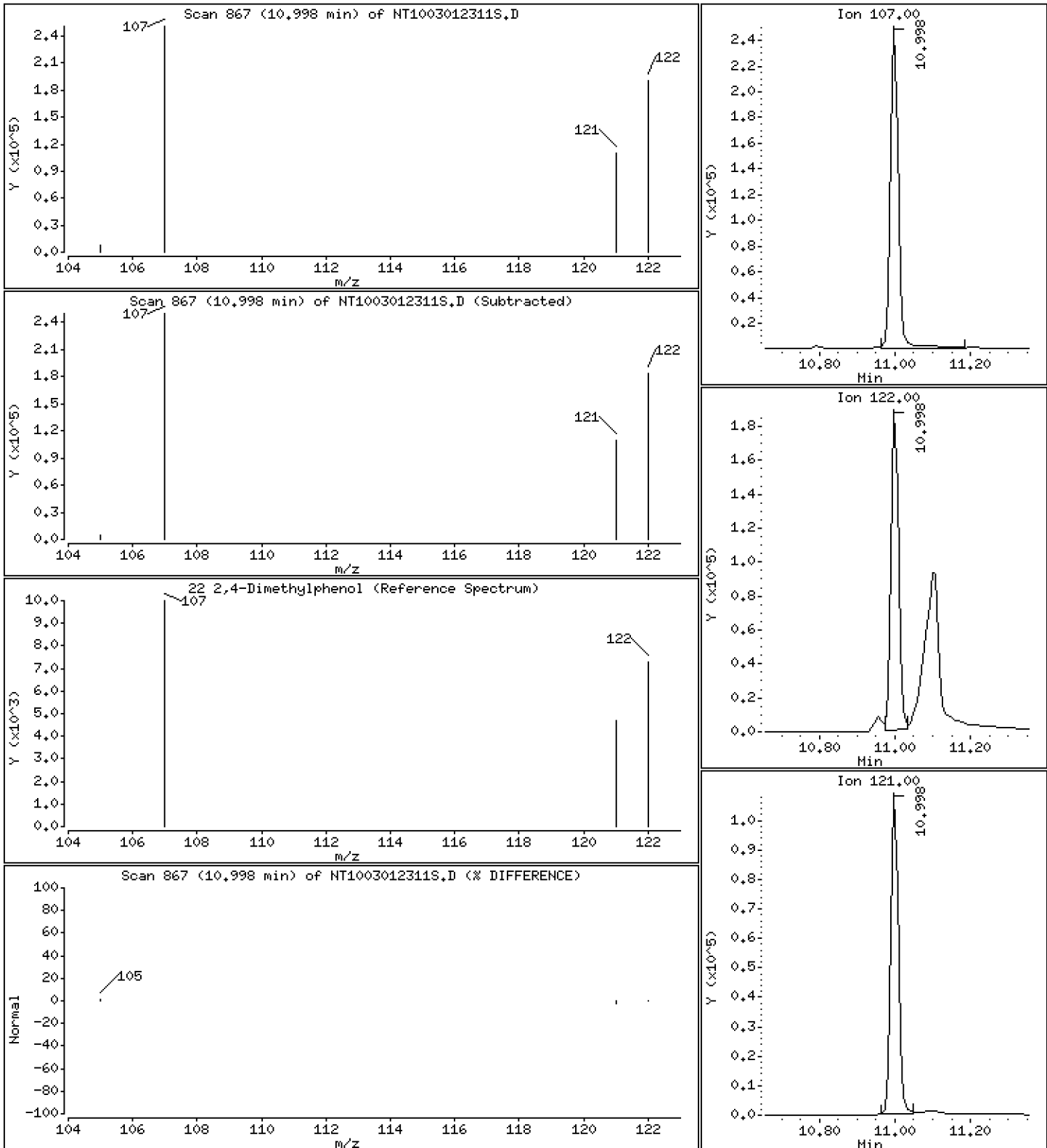
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 3.637 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

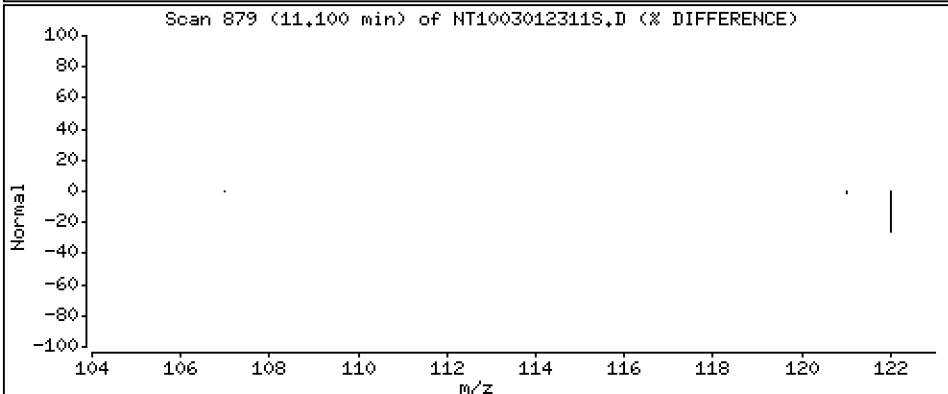
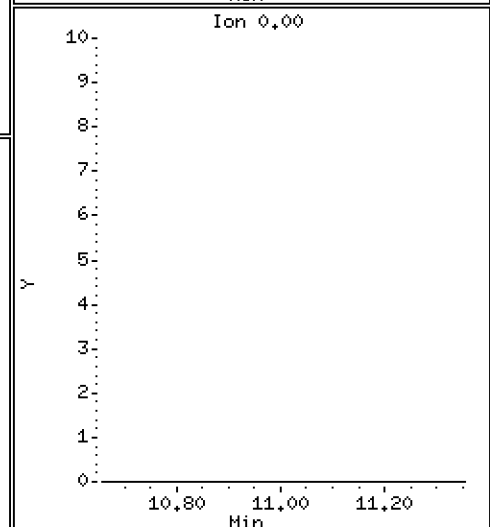
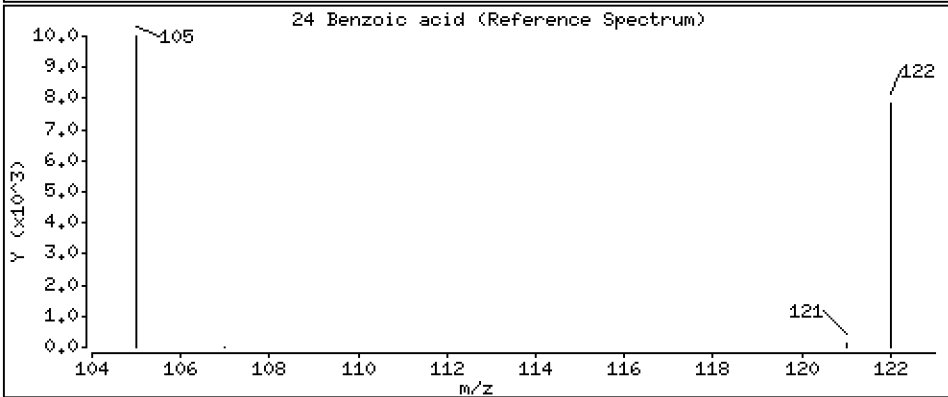
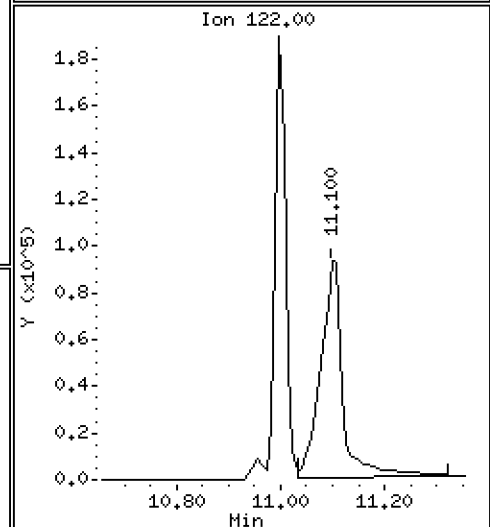
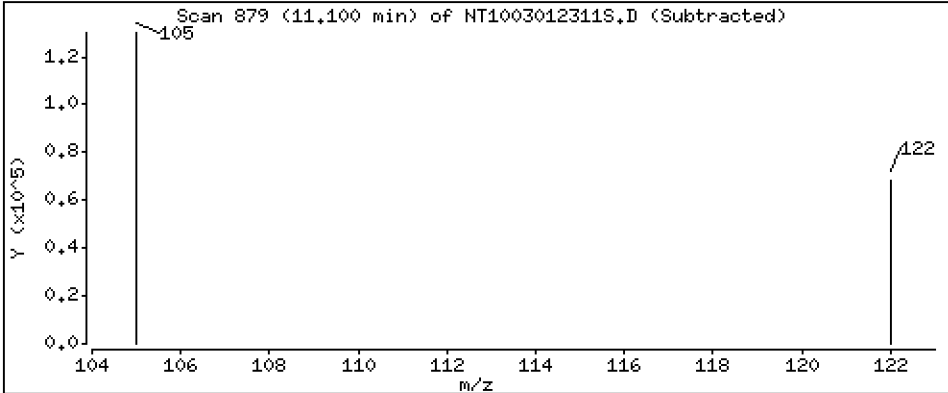
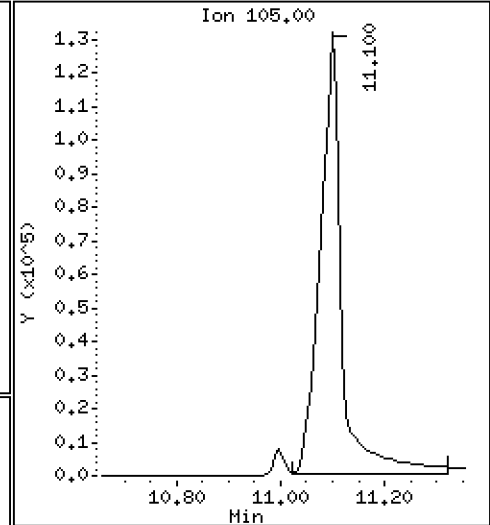
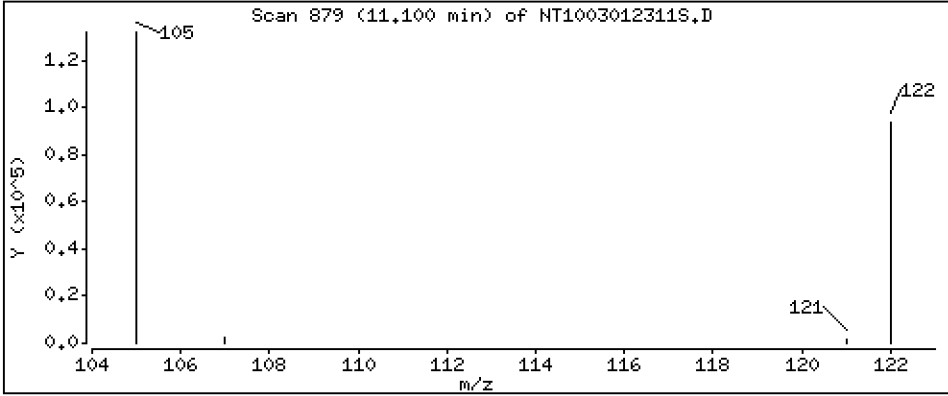
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 6,870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

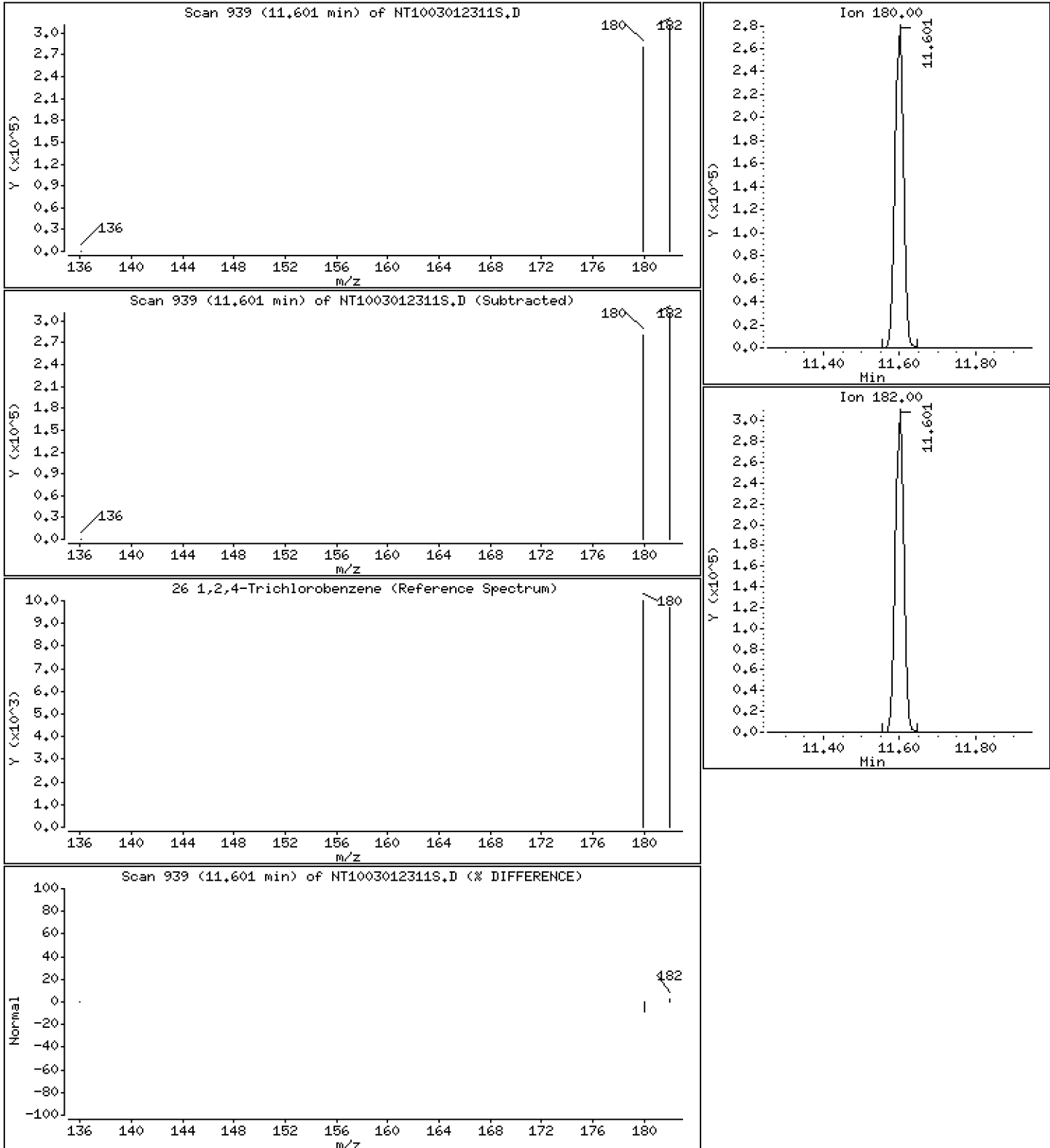
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

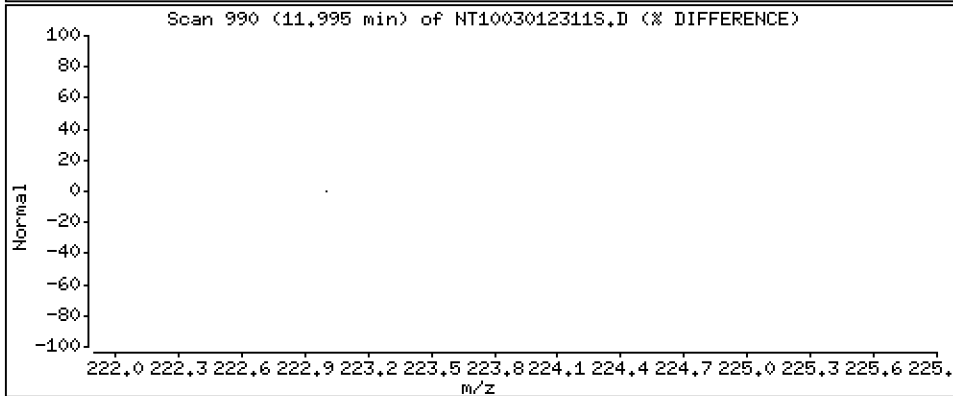
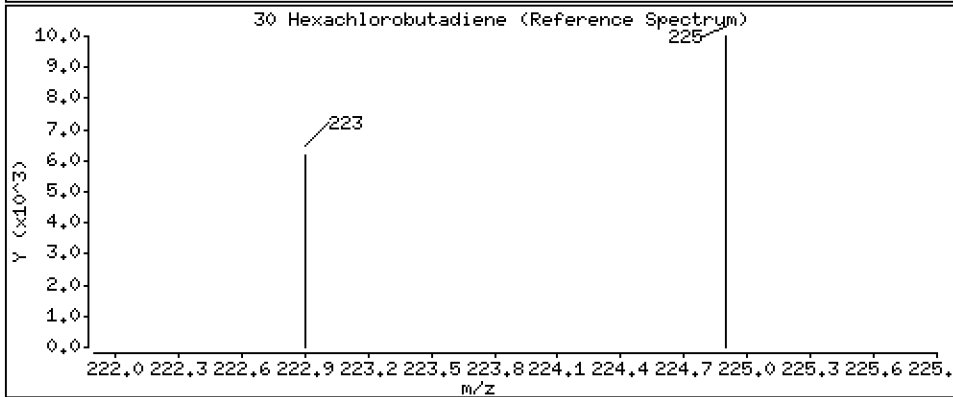
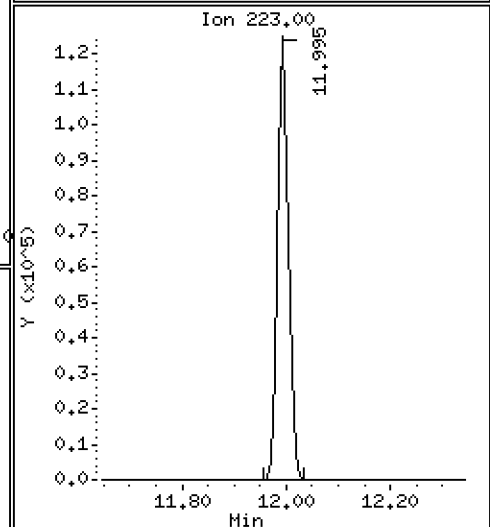
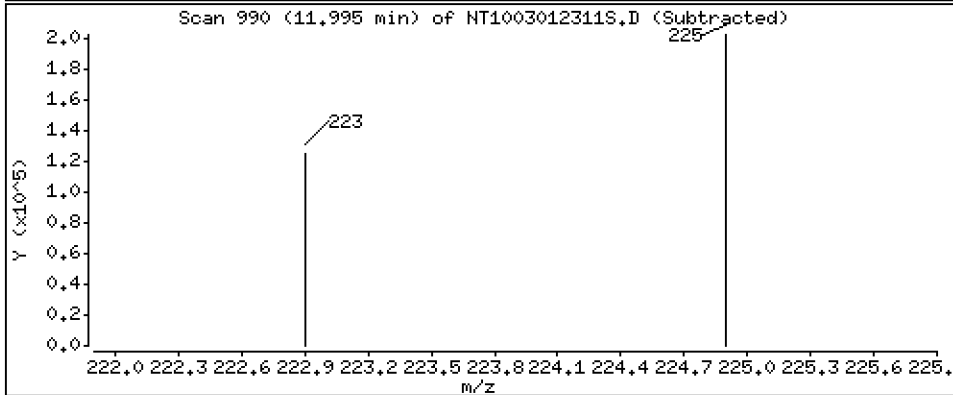
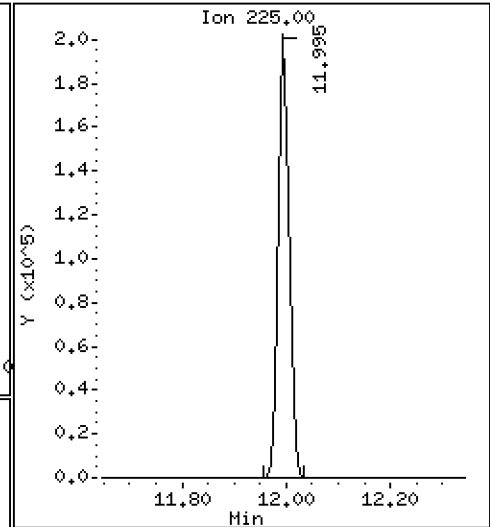
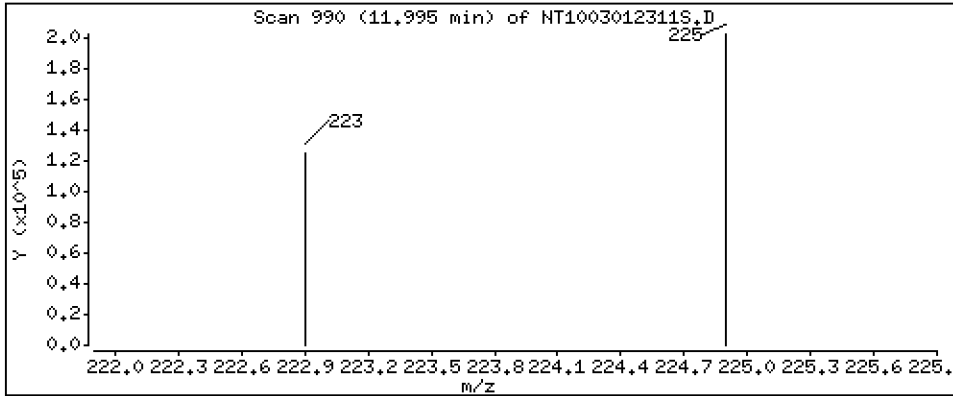
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,862 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

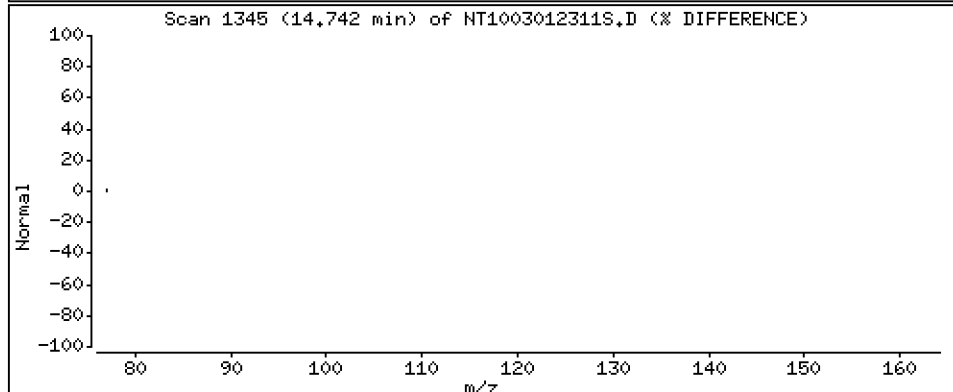
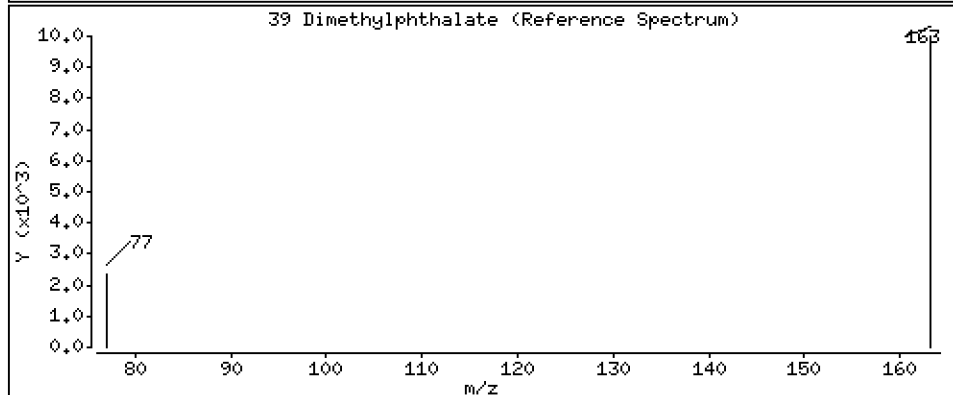
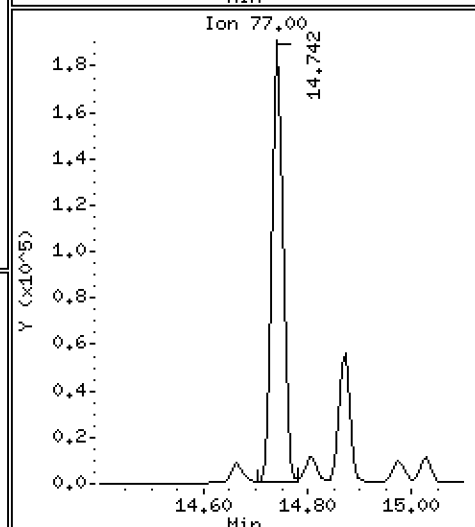
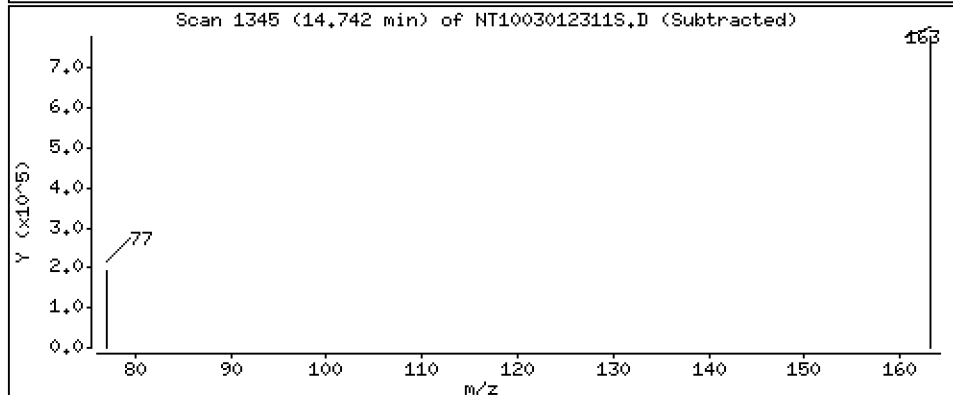
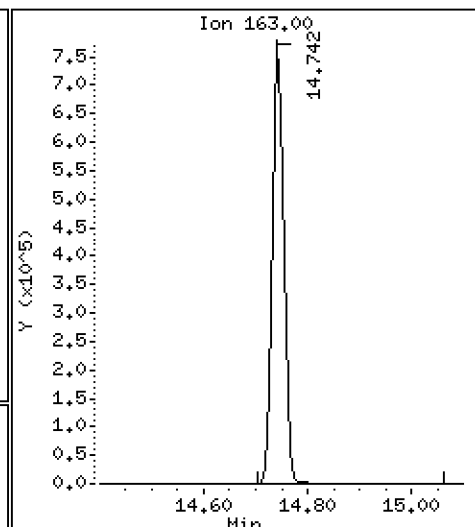
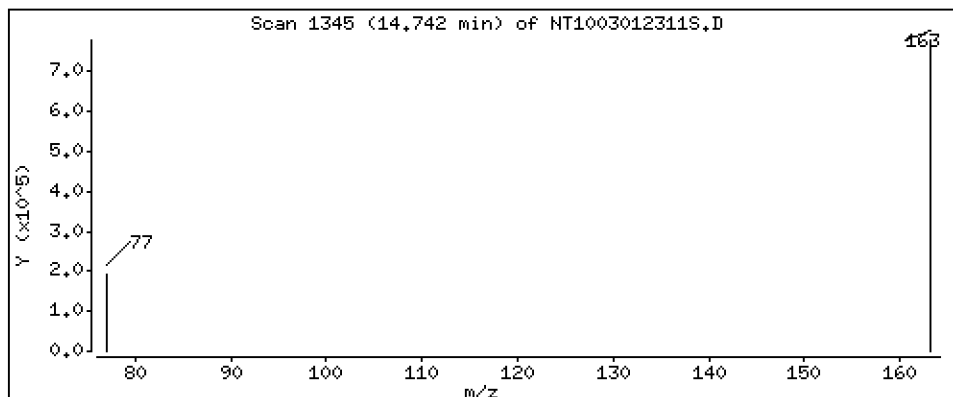
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,571 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

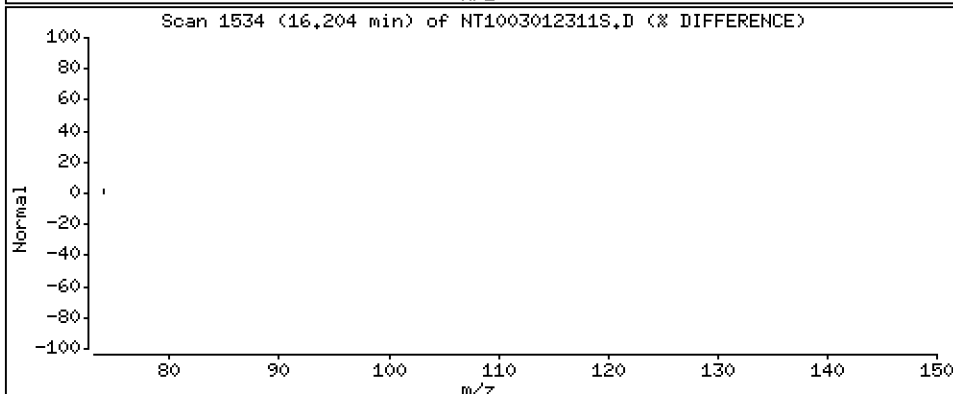
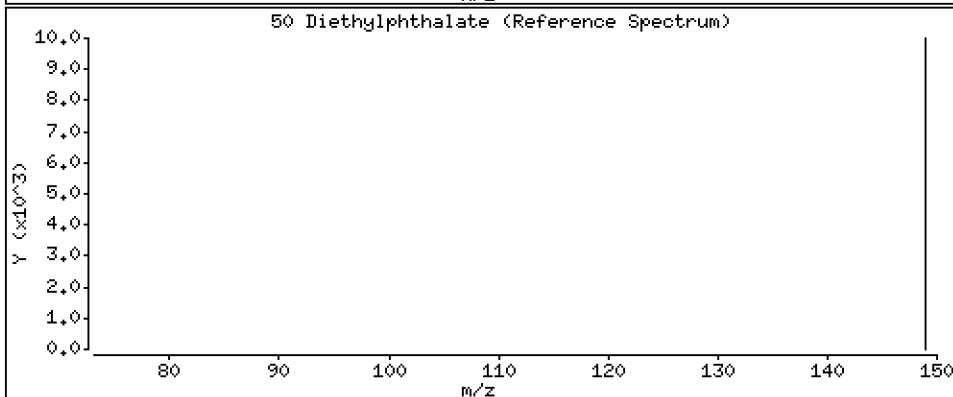
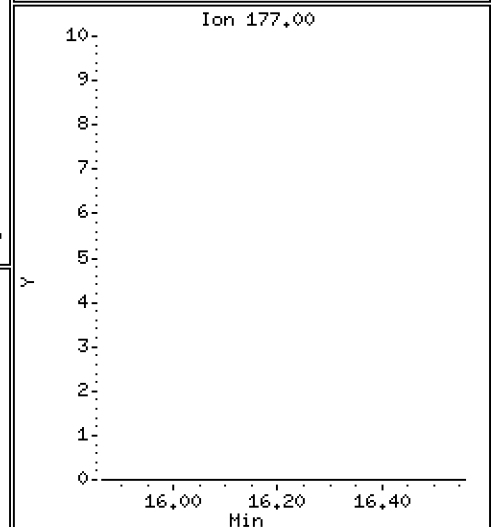
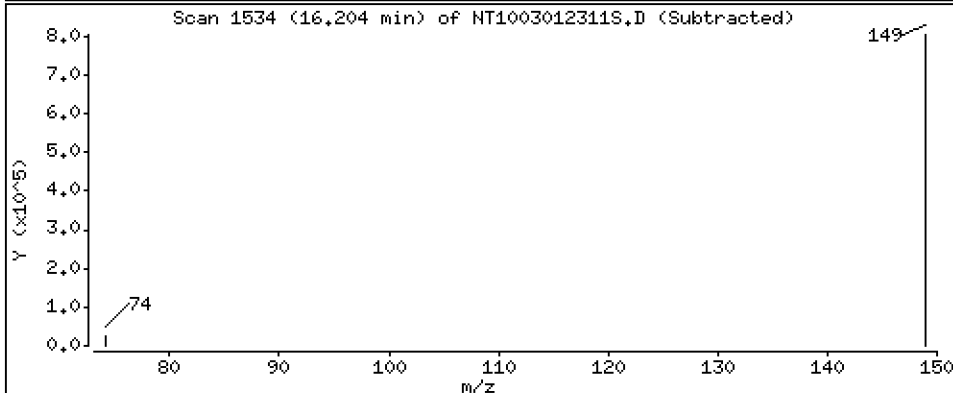
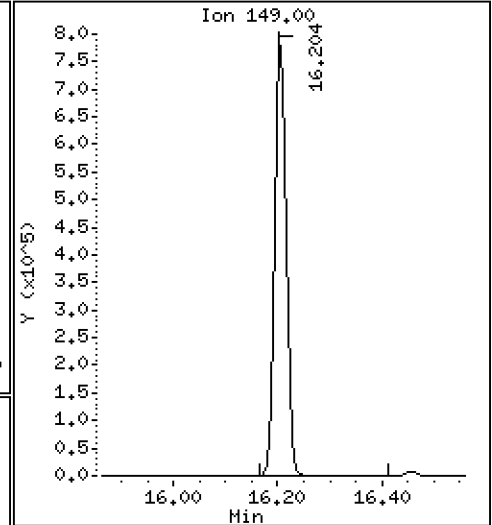
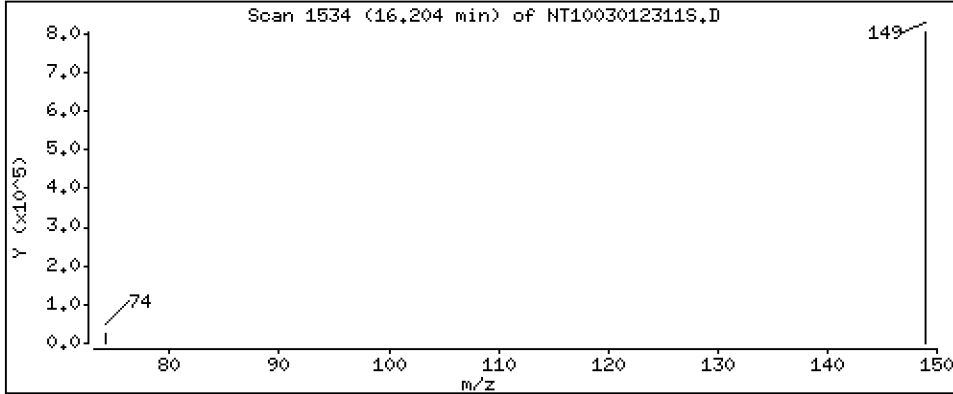
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,979 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

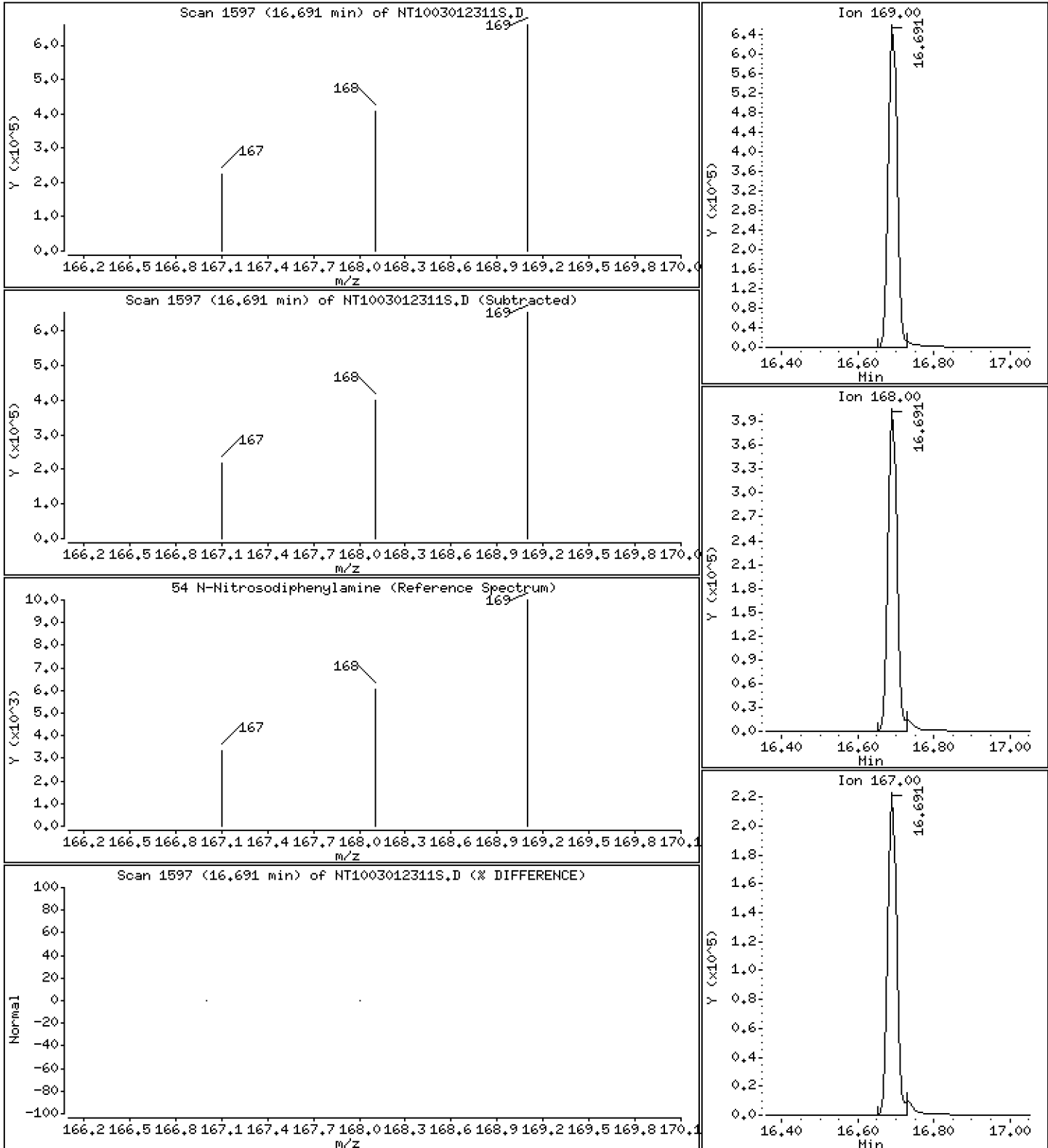
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 5.359 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

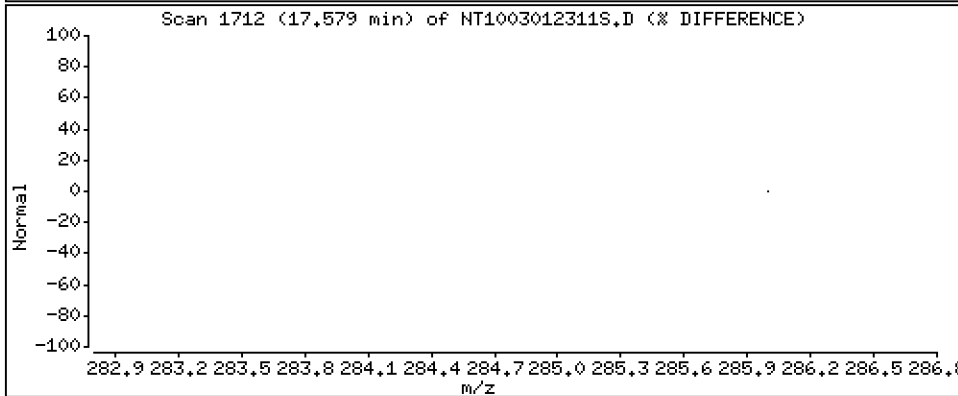
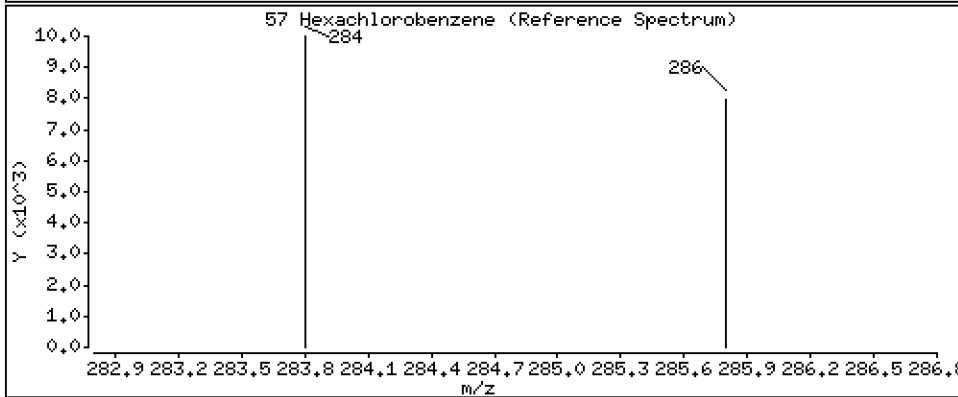
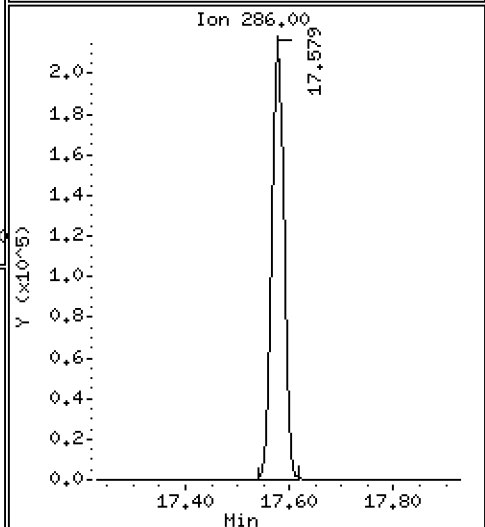
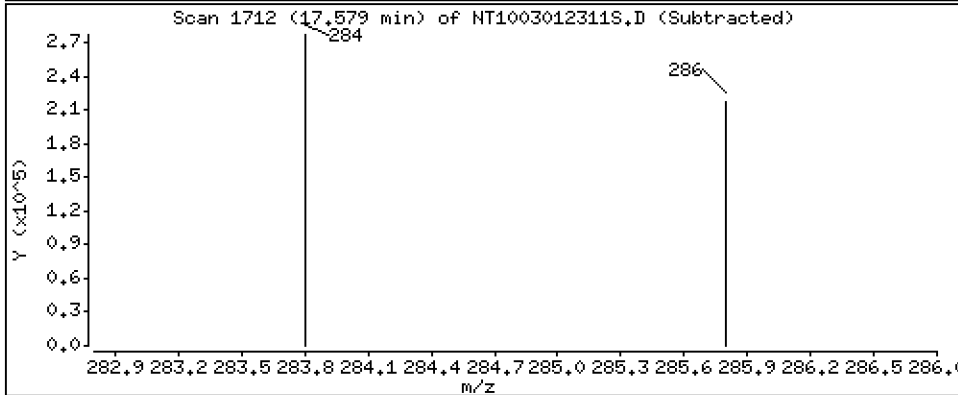
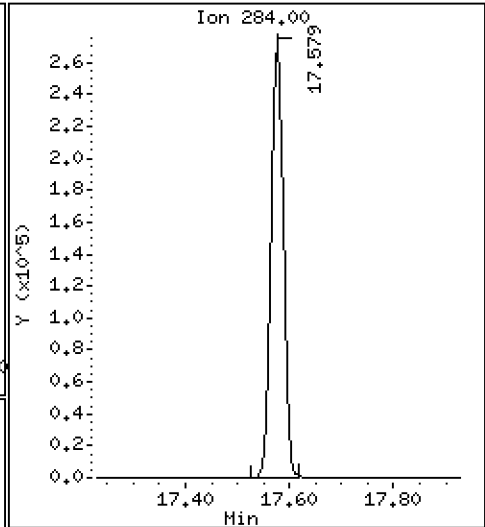
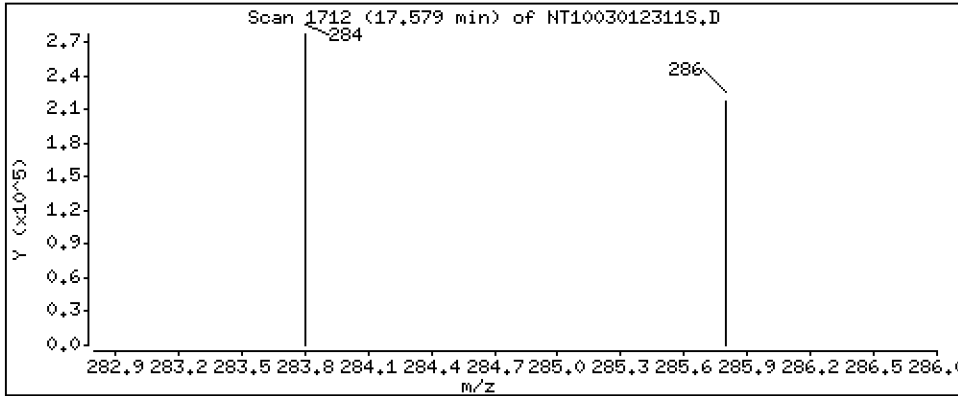
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.866 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

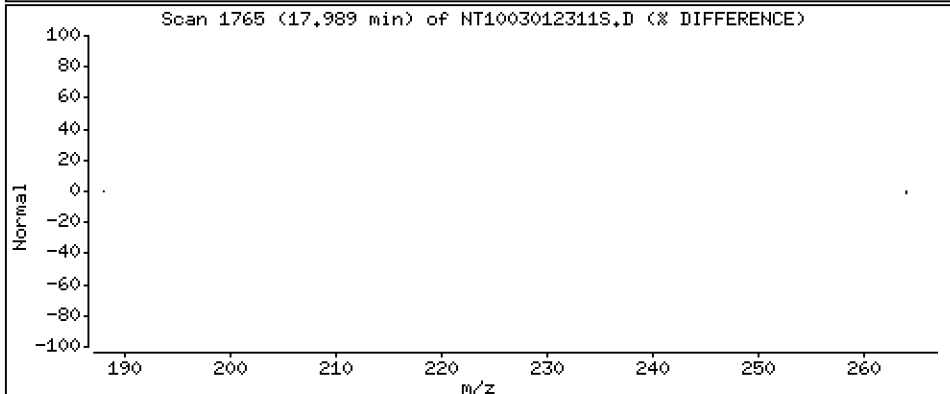
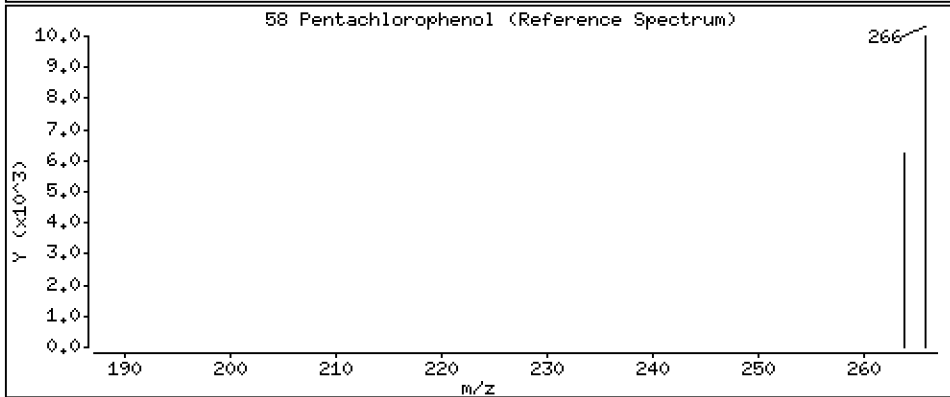
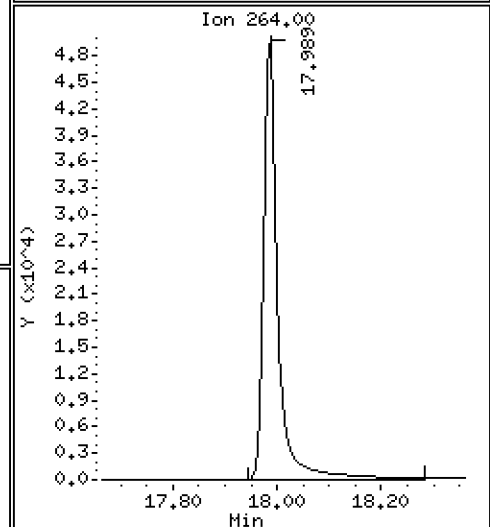
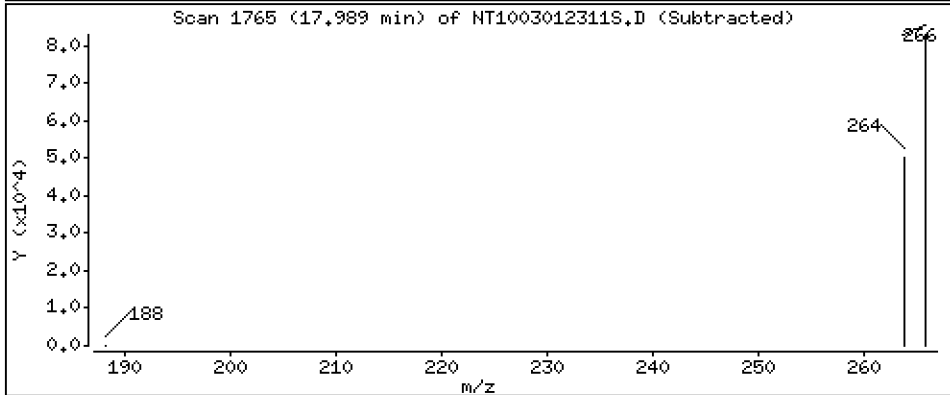
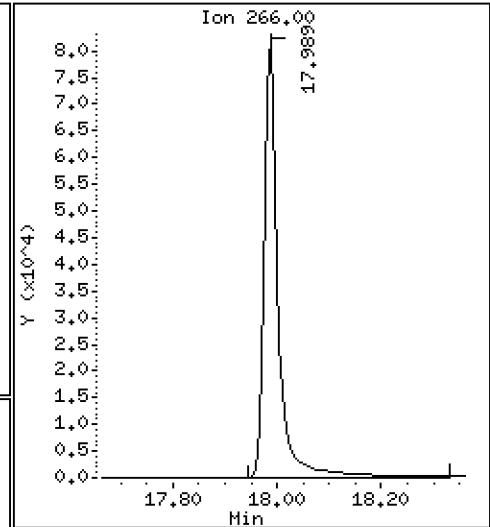
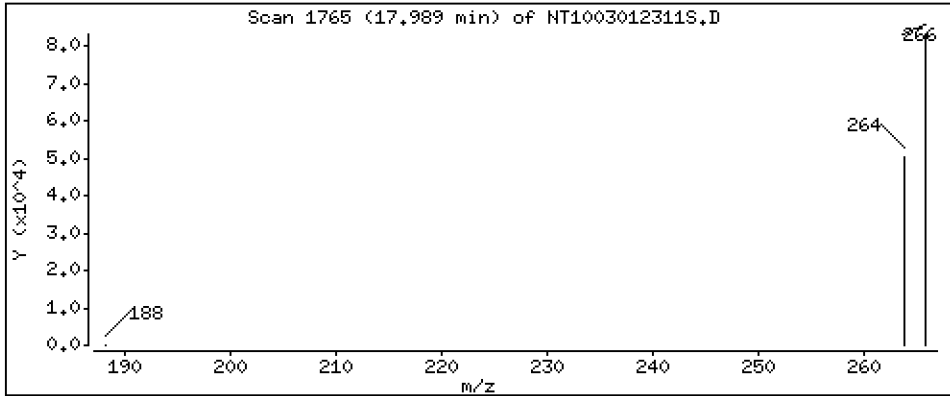
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,912 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

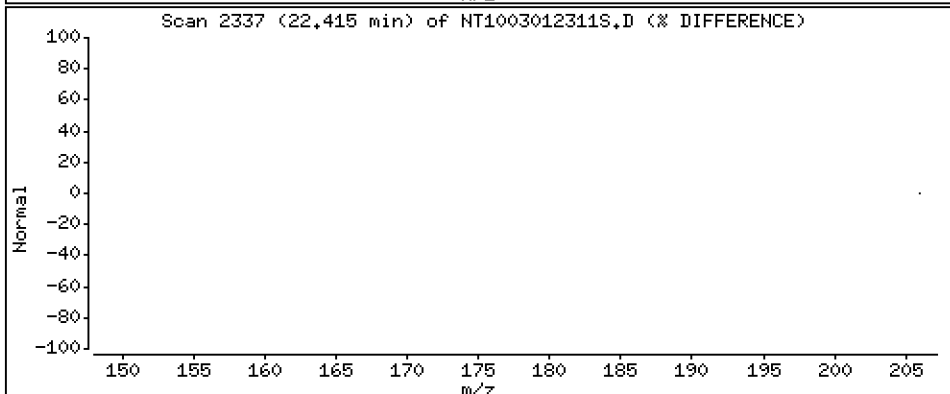
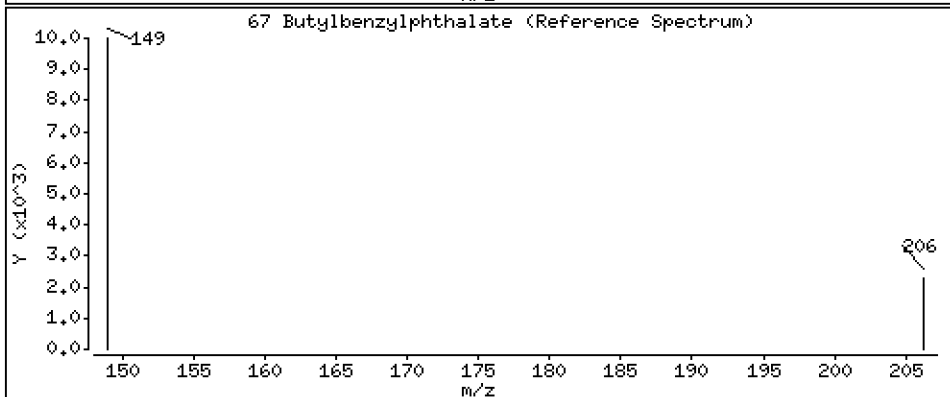
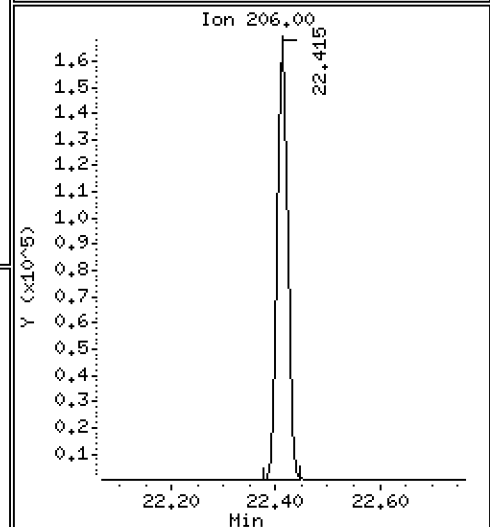
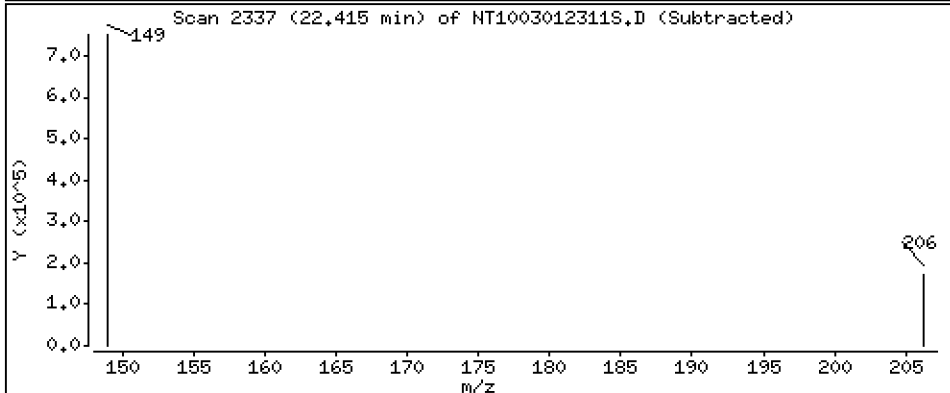
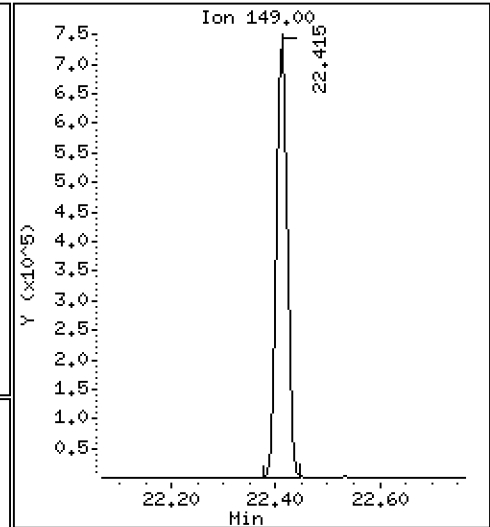
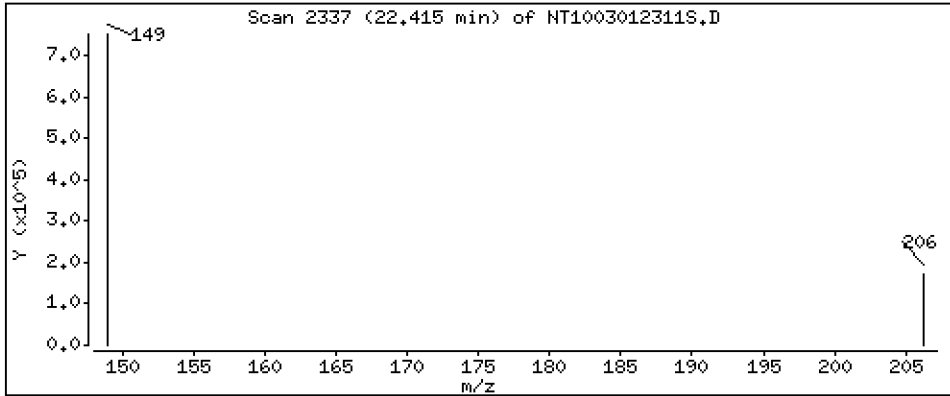
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,689 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

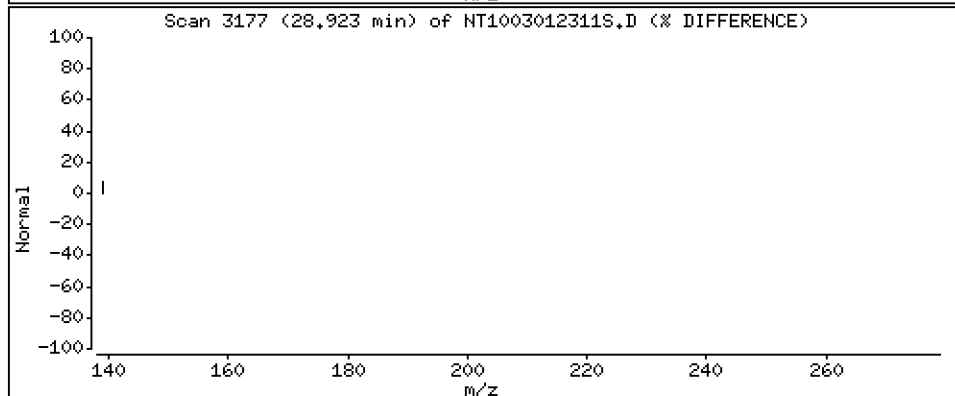
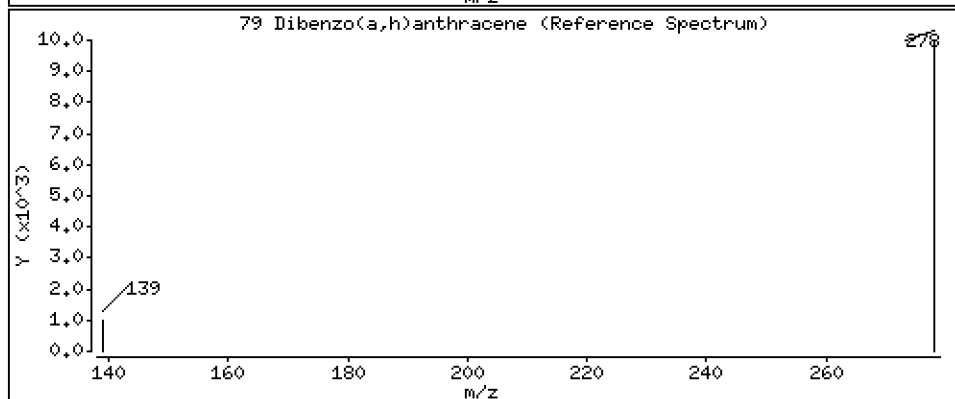
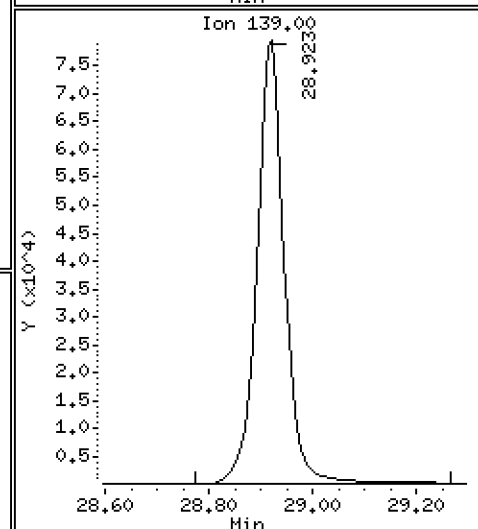
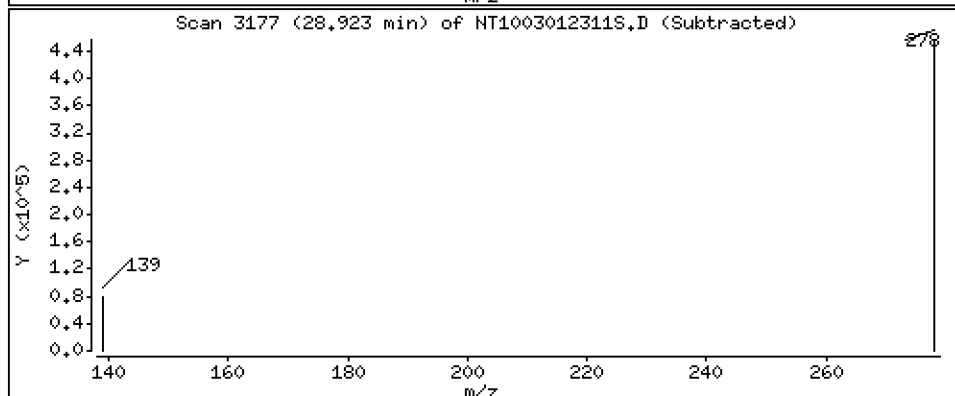
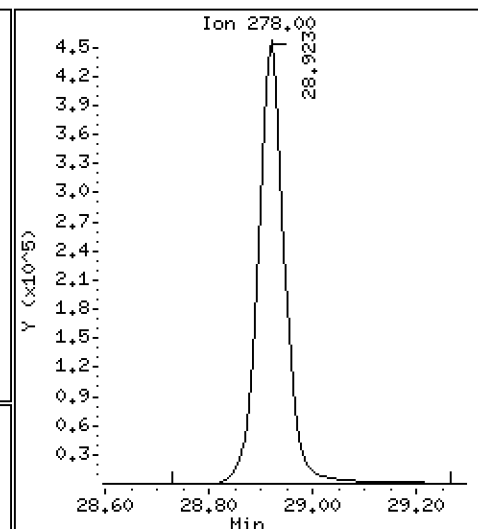
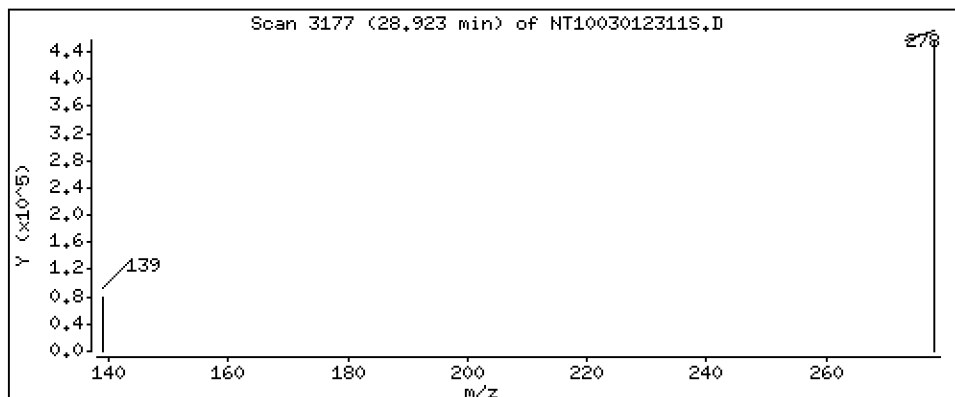
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,760 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

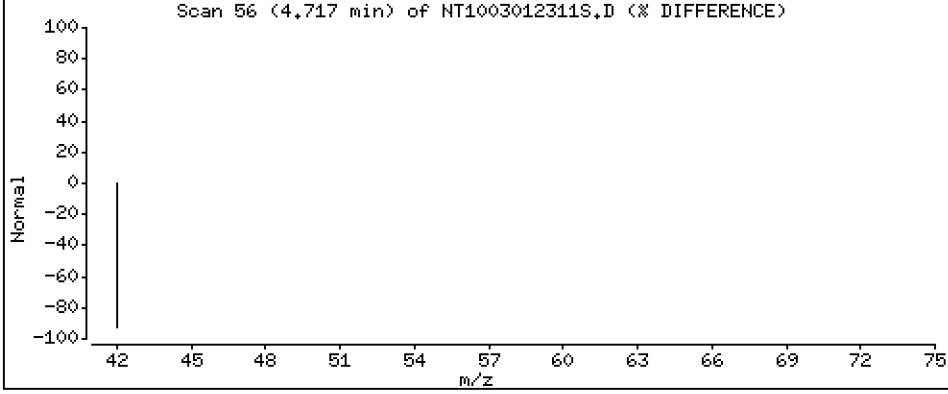
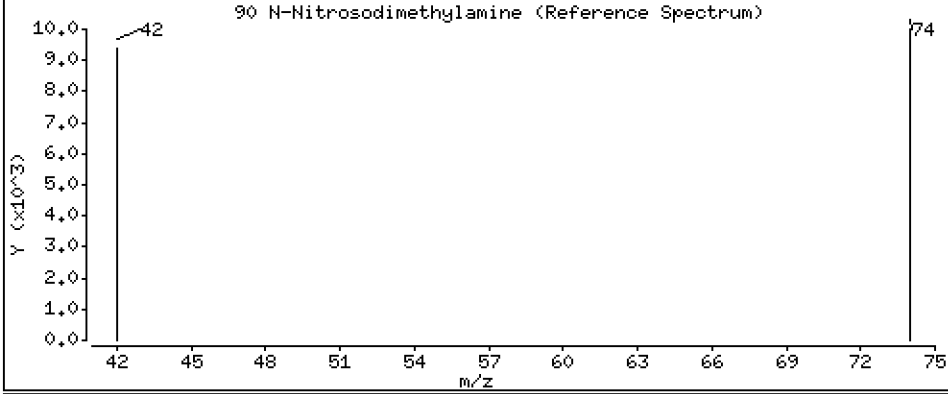
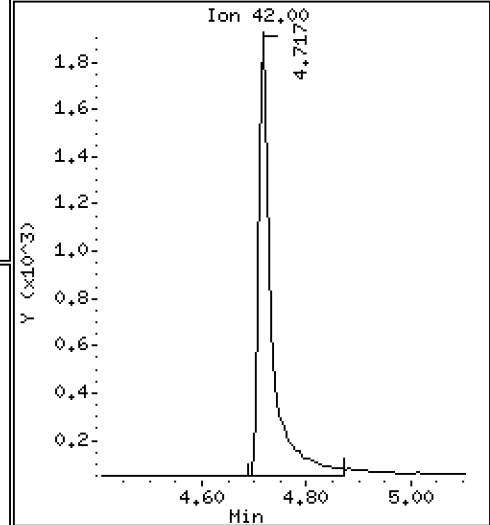
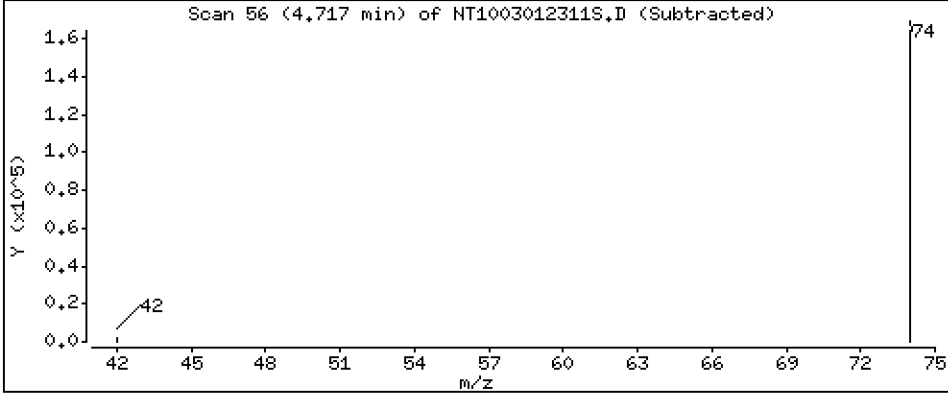
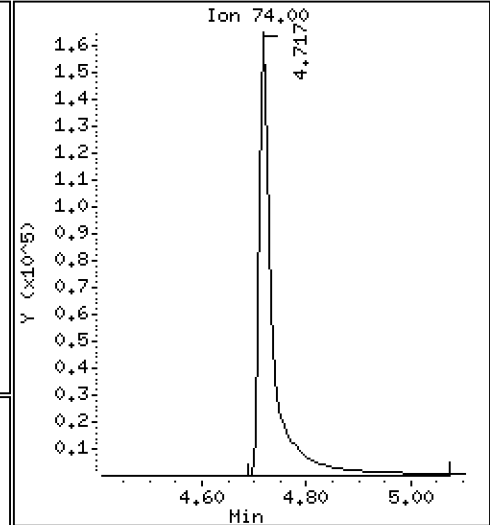
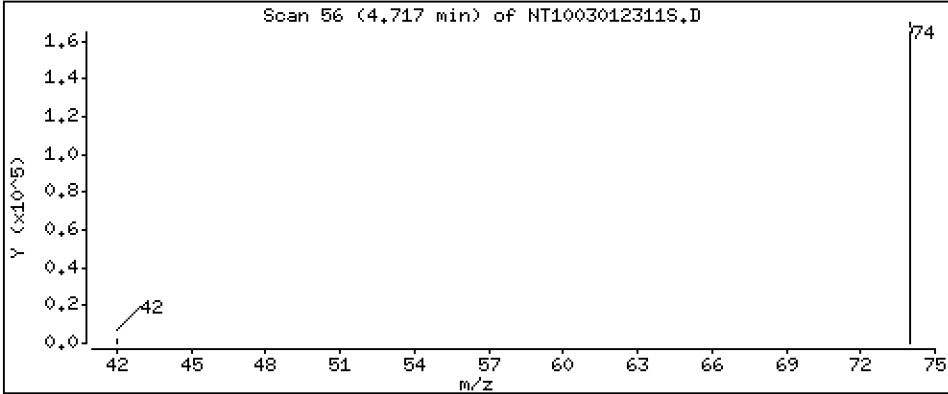
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 6.057 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN	FINAL
								(ug/mL)	(ug/L)
\$ 1	2-Fluorophenol		112	6.902	6.902	(0.746)	3267	0.03768	0.03768 (R)
	3 Phenol		94	8.517	8.532	(0.921)	590047	4.50660	4.507
	7 1,3-Dichlorobenzene		146	9.143	9.136	(0.988)	572299	5.08409	5.084
* 8	1,4-Dichlorobenzene-d4		152	9.252	9.252	(1.000)	303734	4.00000	
	9 1,4-Dichlorobenzene		146	9.283	9.275	(1.003)	574537	5.24962	5.250
	11 Benzyl alcohol		79	9.469	9.508	(1.023)	388582	5.10390	5.104
	12 1,2-Dichlorobenzene		146	9.562	9.563	(1.034)	540938	5.14228	5.142
	13 2-Methylphenol		108	9.655	9.671	(1.044)	348452	4.36547	4.365
	15 4-Methylphenol		108	9.943	9.966	(1.075)	379262	4.50495	4.505
	16 N-Nitroso-di-n-propylamine		70	9.982	9.982	(1.079)	330861	5.68451	5.685
	22 2,4-Dimethylphenol		107	10.998	11.006	(0.938)	357707	3.63670	3.637
	24 Benzoic acid		105	11.099	11.007	(0.947)	380081	6.86990	6.870
	26 1,2,4-Trichlorobenzene		180	11.600	11.600	(0.989)	402252	4.87012	4.870
* 27	Naphthalene-d8		136	11.724	11.723	(1.000)	1147551	4.00000	
	30 Hexachlorobutadiene		225	11.994	11.994	(1.023)	285002	4.86242	4.862
	39 Dimethylphthalate		163	14.741	14.749	(0.963)	1142178	5.57065	5.571
* 42	Acenaphthene-d10		162	15.314	15.314	(1.000)	645730	4.00000	
	50 Diethylphthalate		149	16.203	16.211	(1.058)	1156037	5.97883	5.979
	54 N-Nitrosodiphenylamine		169	16.690	16.705	(0.907)	998237	5.35897	5.359
	57 Hexachlorobenzene		284	17.578	17.579	(0.955)	424193	4.86607	4.866

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
* 59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
\$ 66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712 (R)
67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
* 77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.947	0.000	0.9467		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

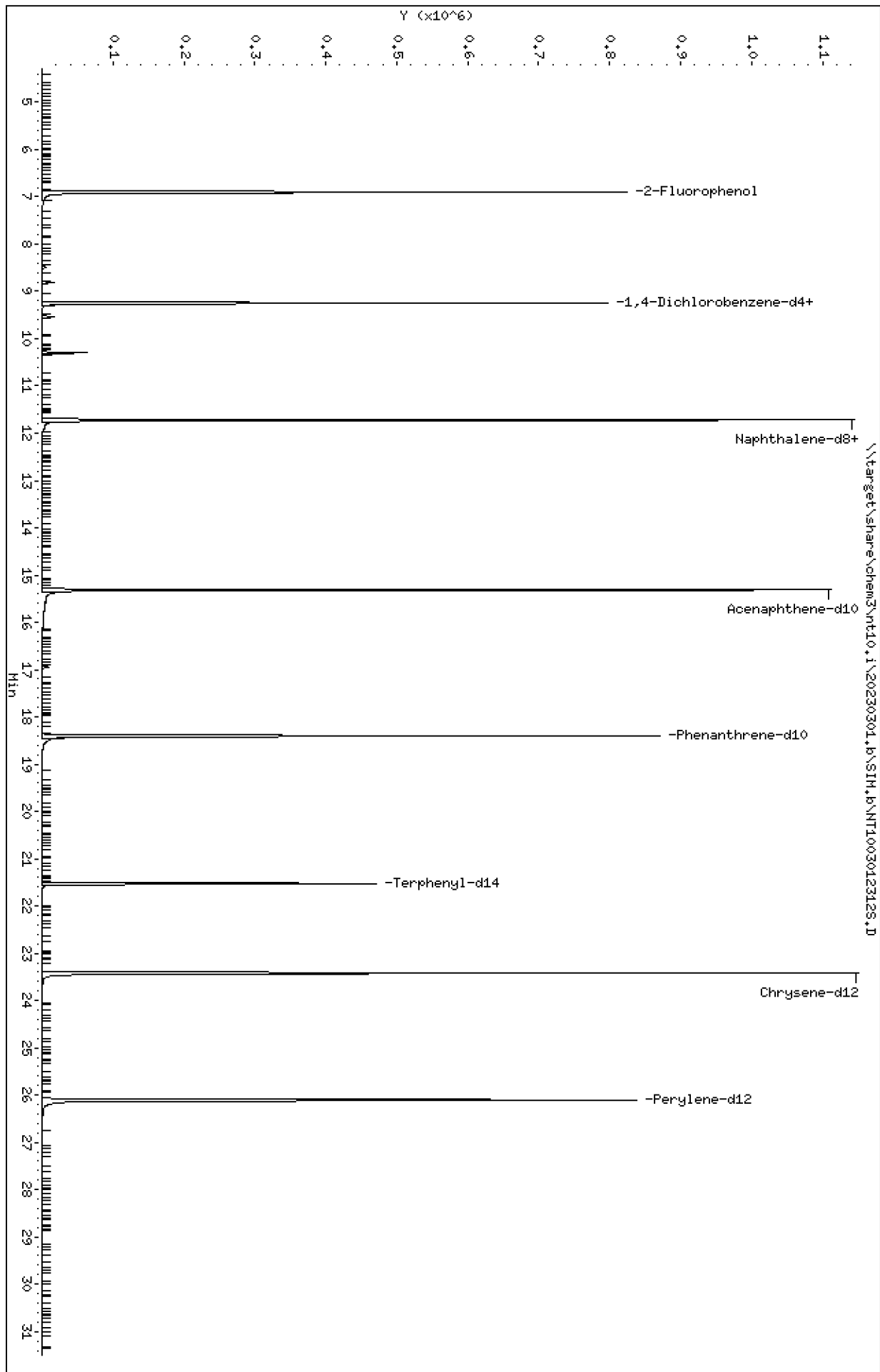
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.1\20230301.B\SIM.B\NT1003012312S.D
Date: 01-MAR-2023 22:24
Client ID:
Sample Info: SEQ-IBL1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt10.1
Operator: JGR
Column diameter: 0.25



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

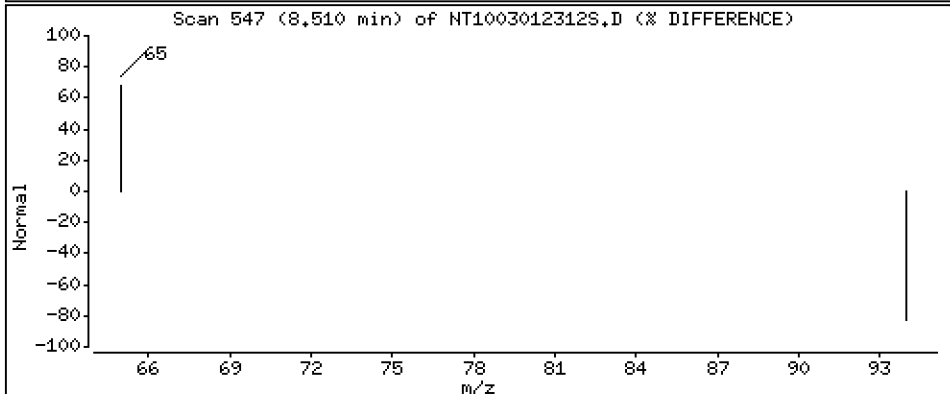
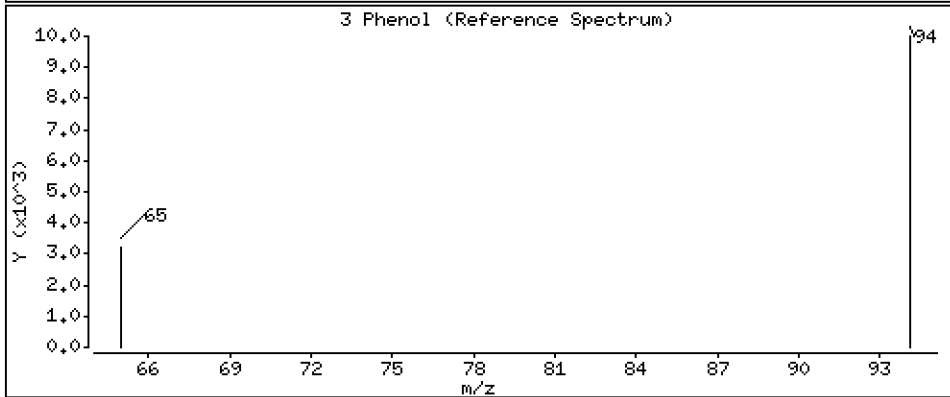
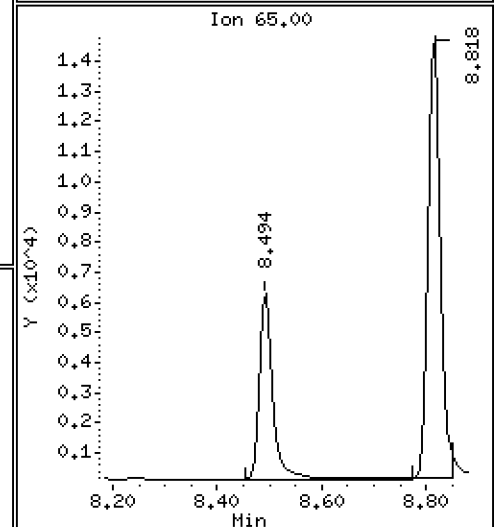
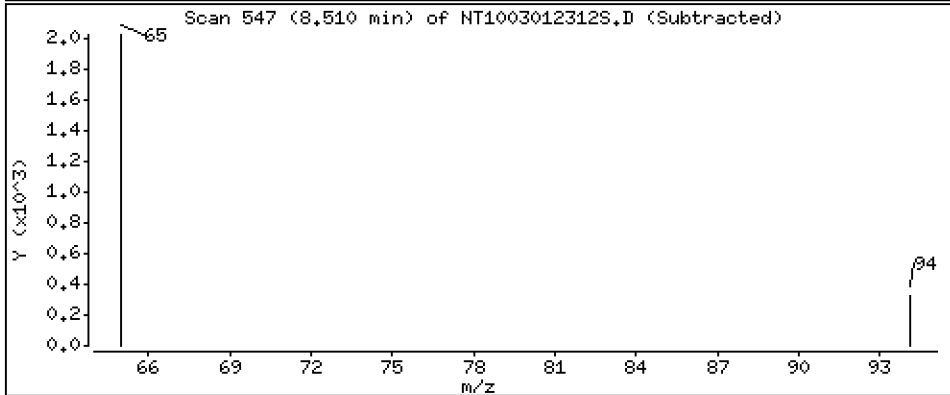
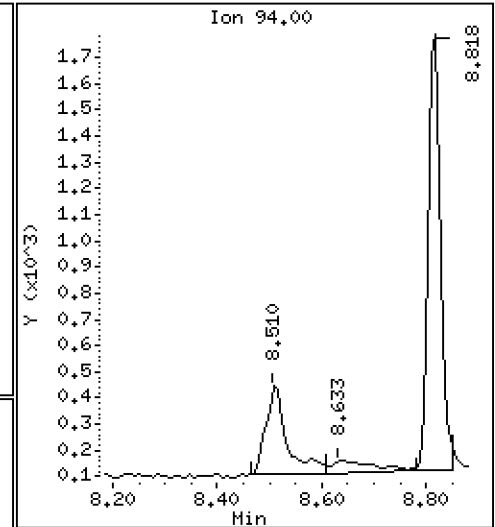
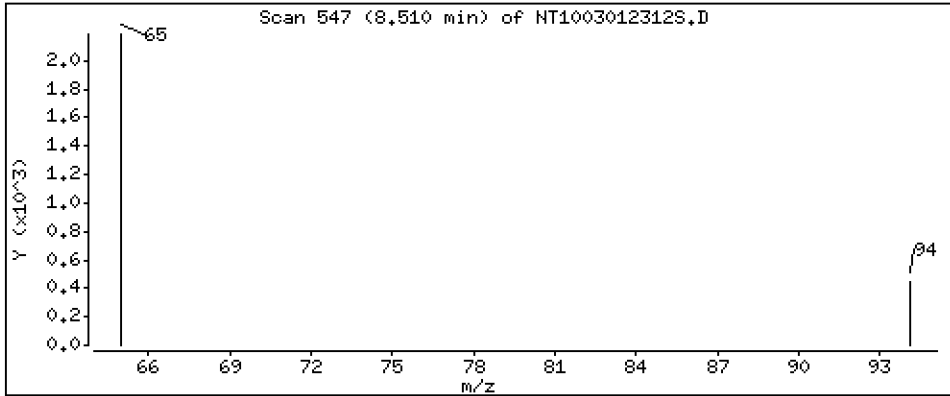
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.004664 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

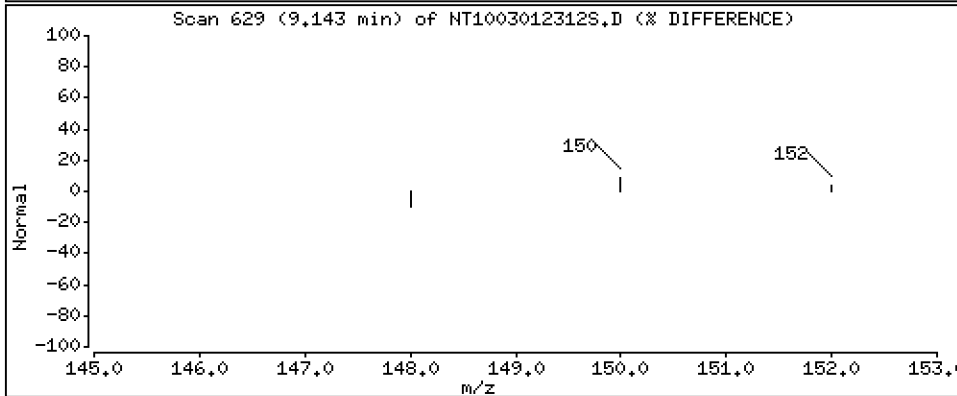
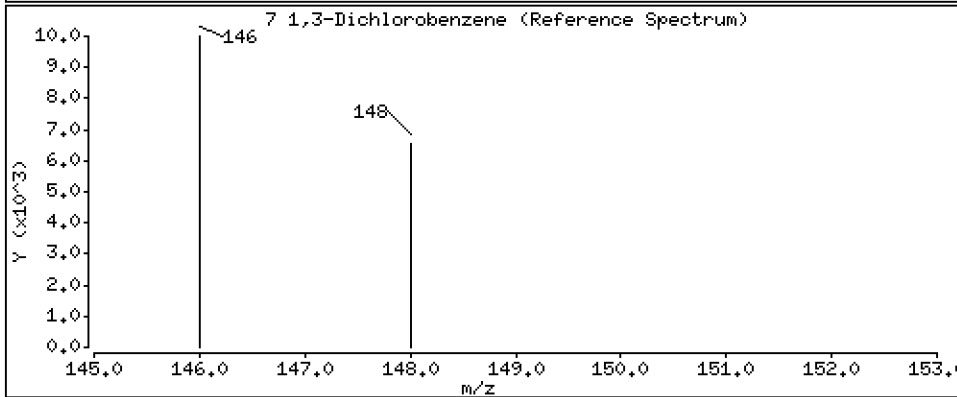
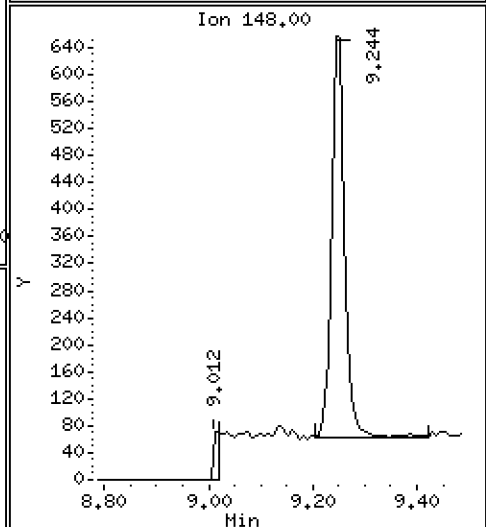
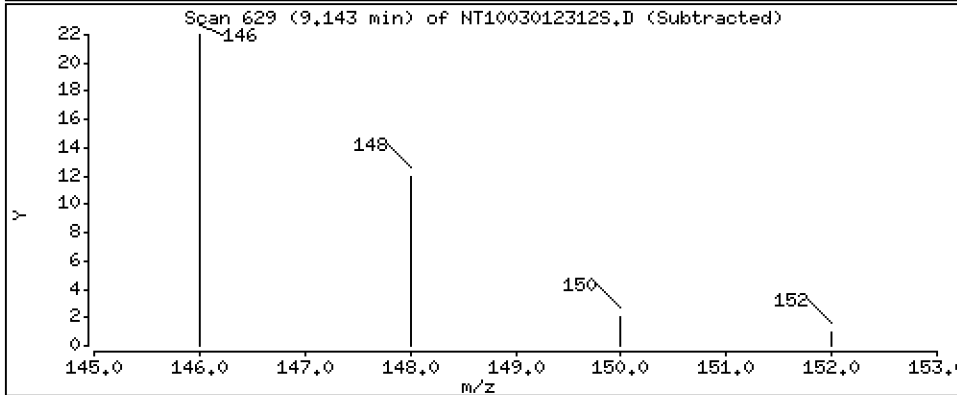
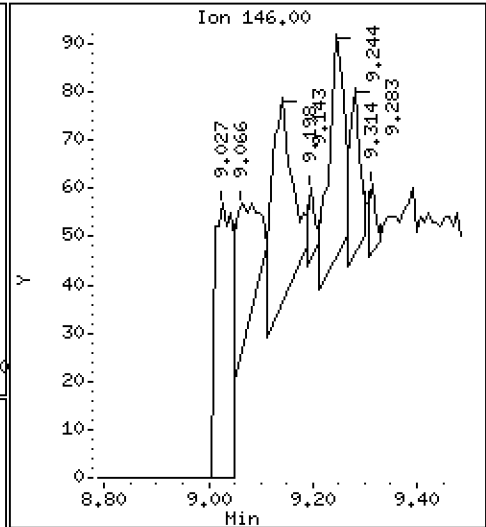
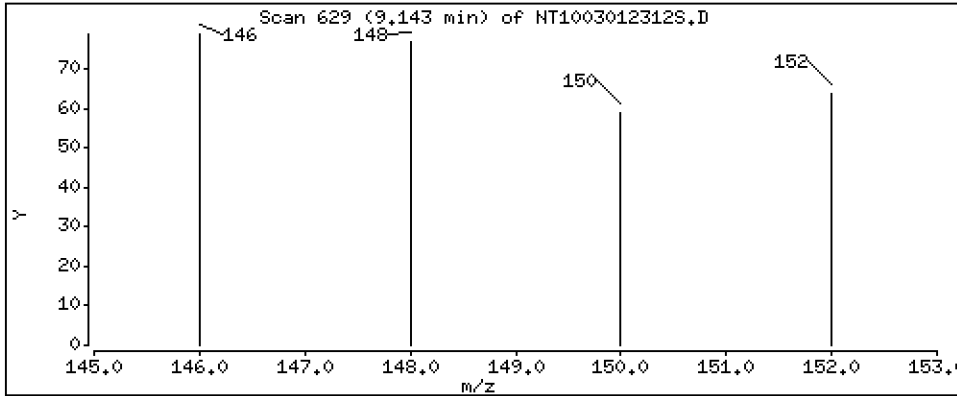
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,0006178 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

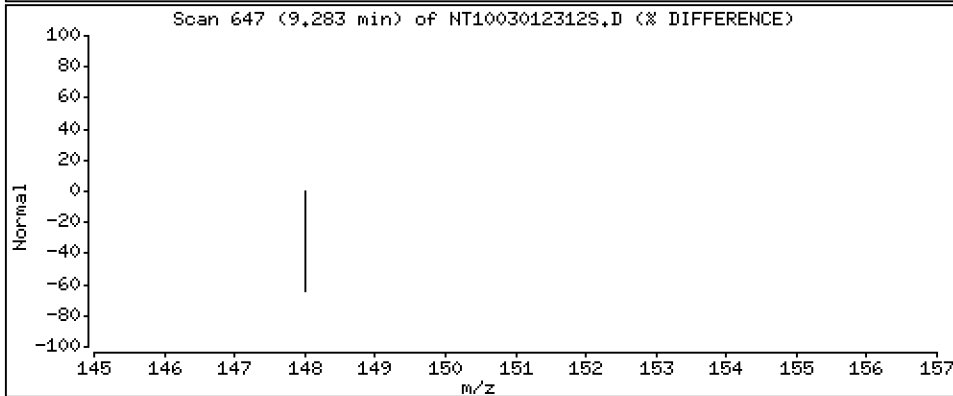
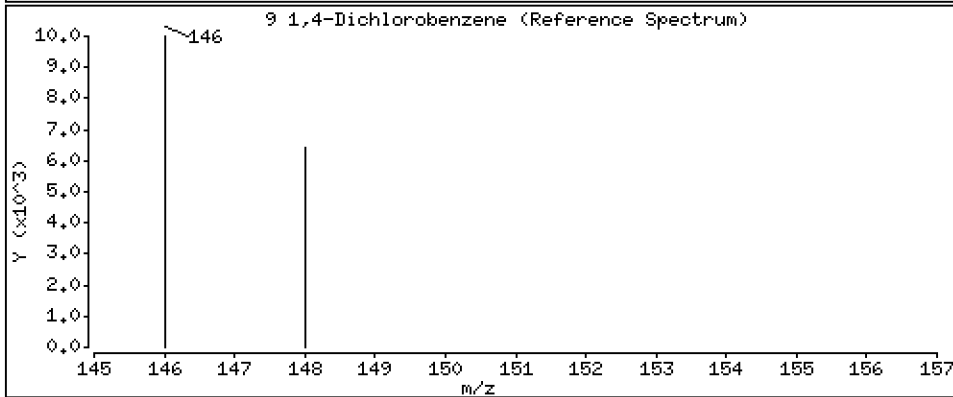
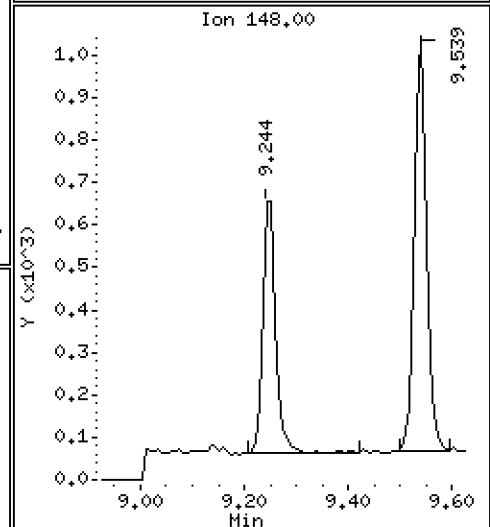
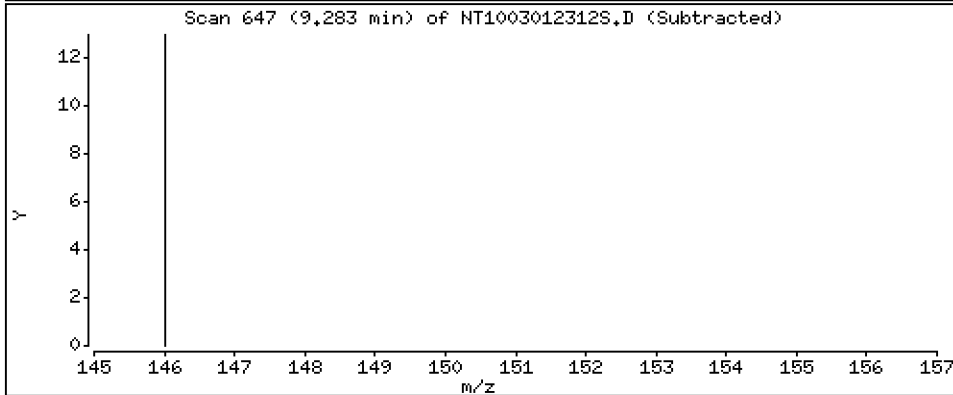
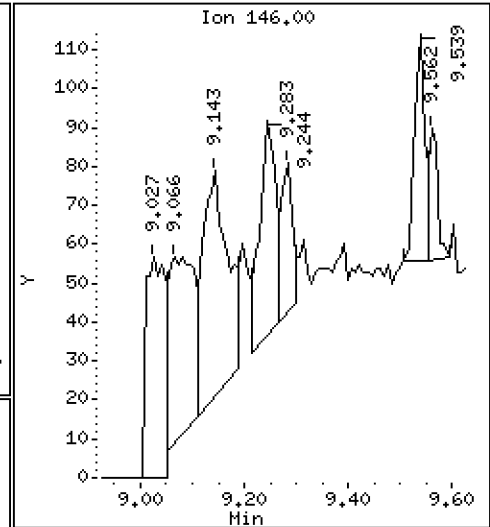
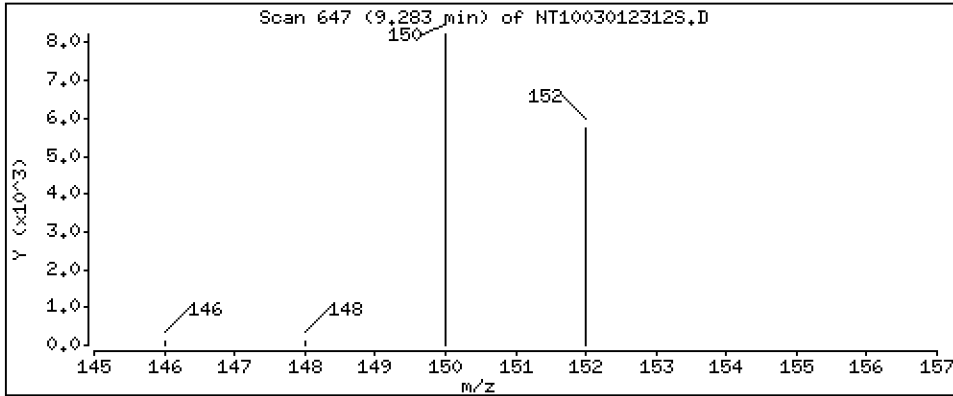
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.0003285 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

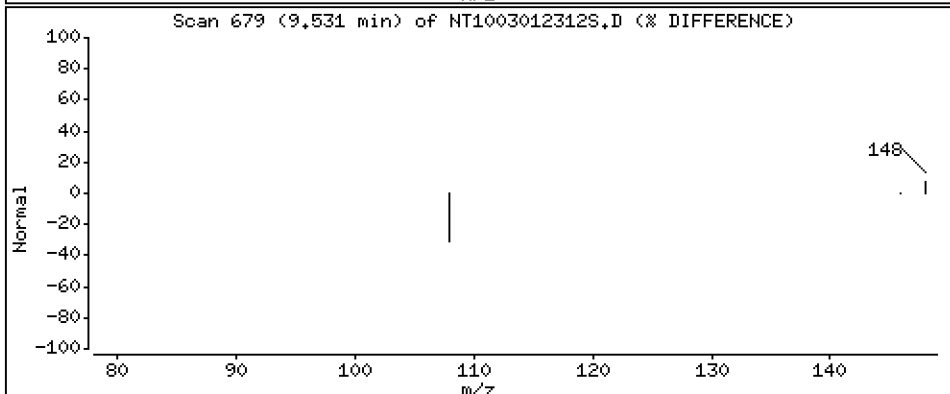
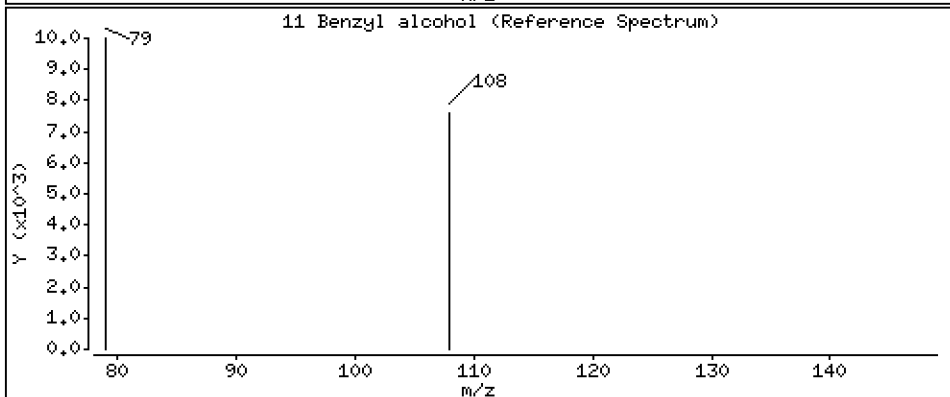
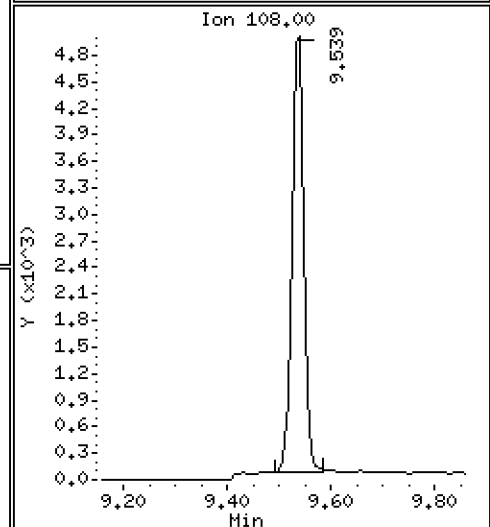
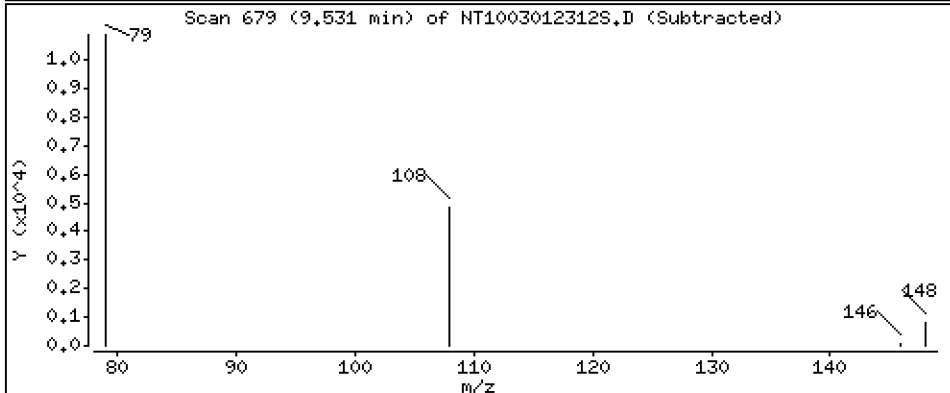
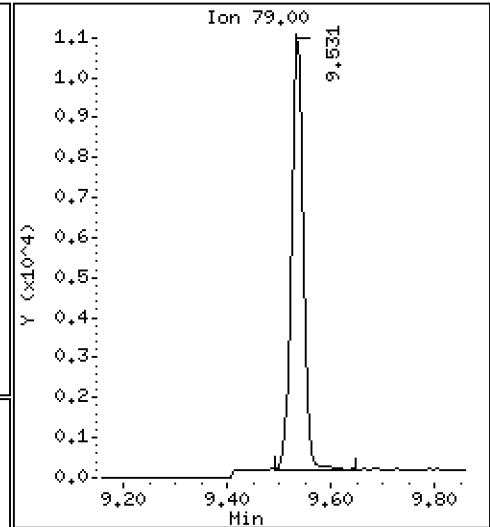
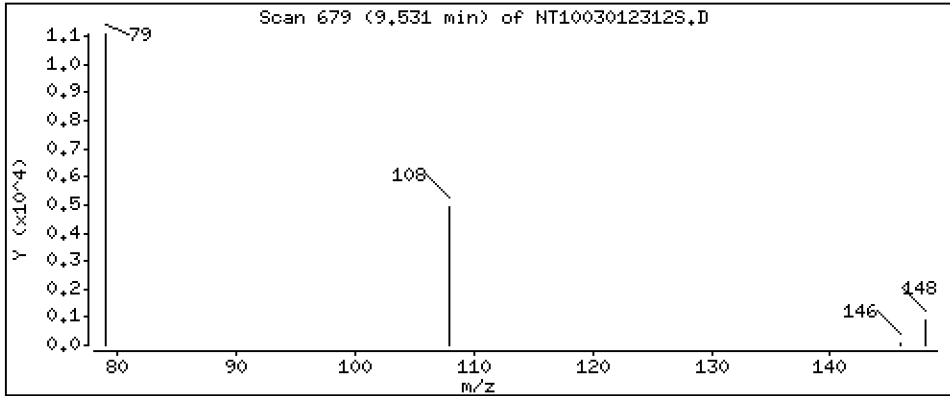
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.1469 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

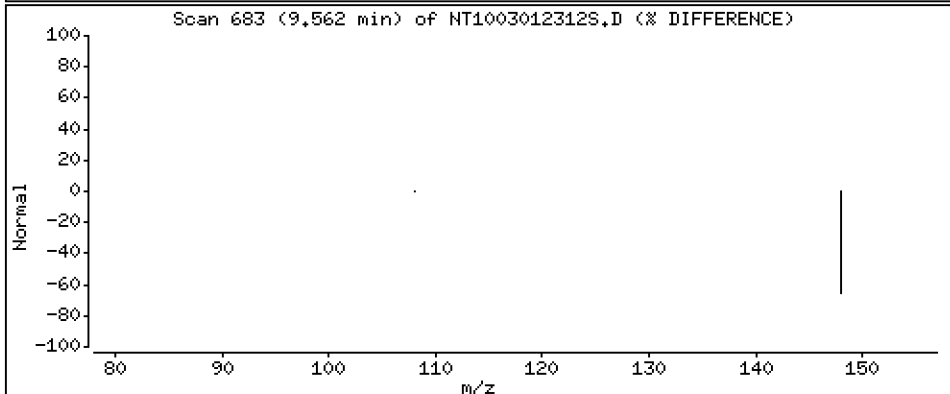
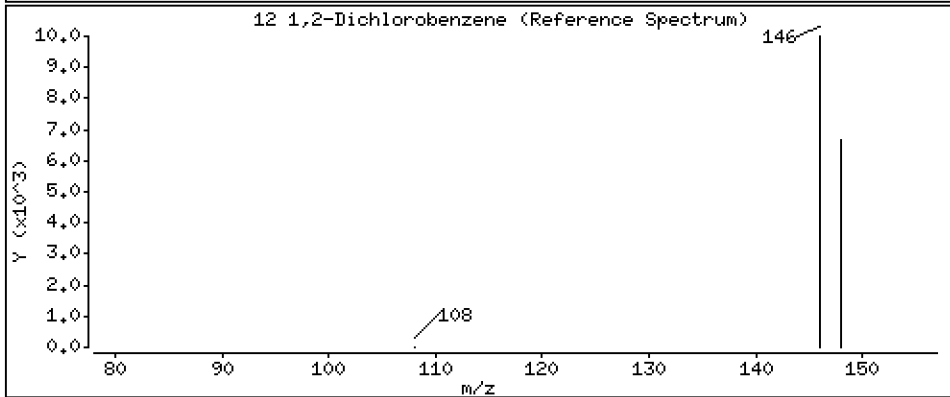
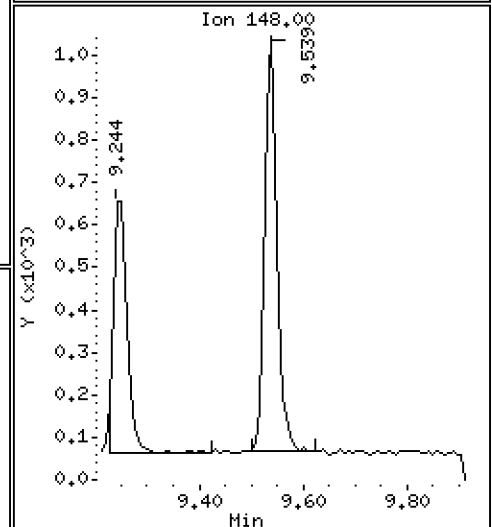
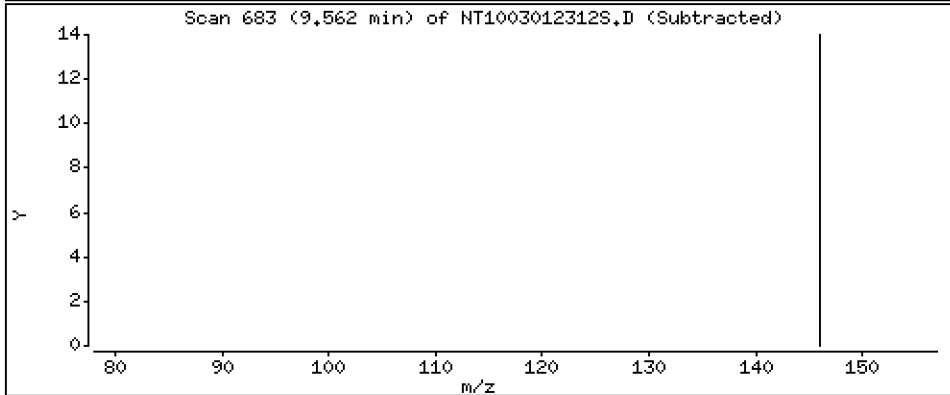
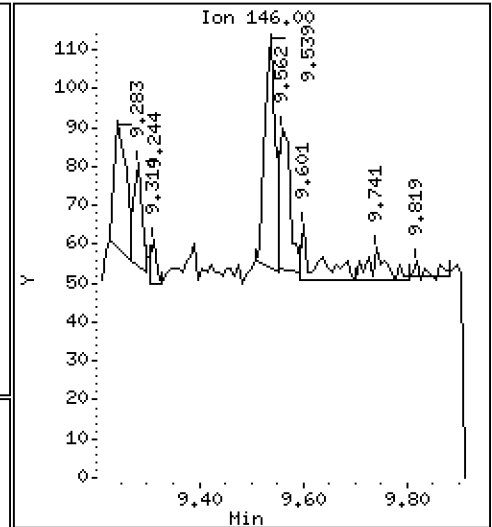
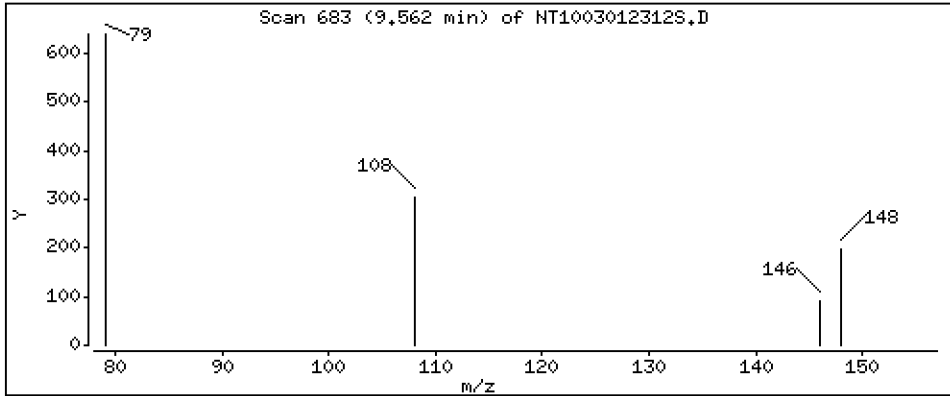
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.0002913 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

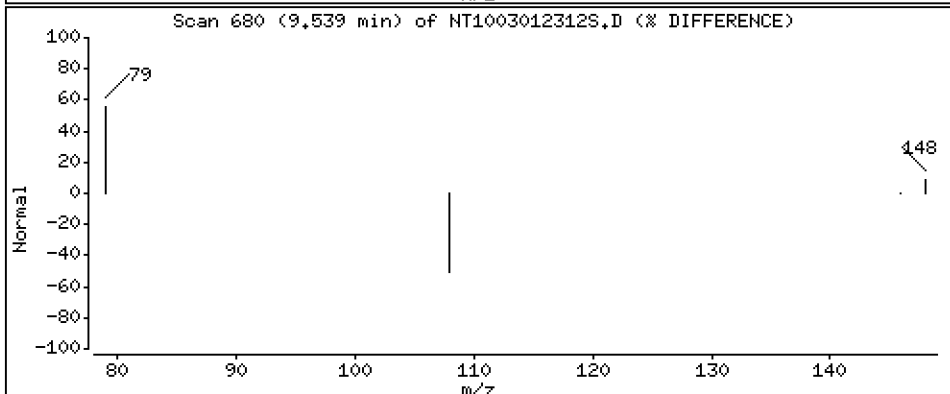
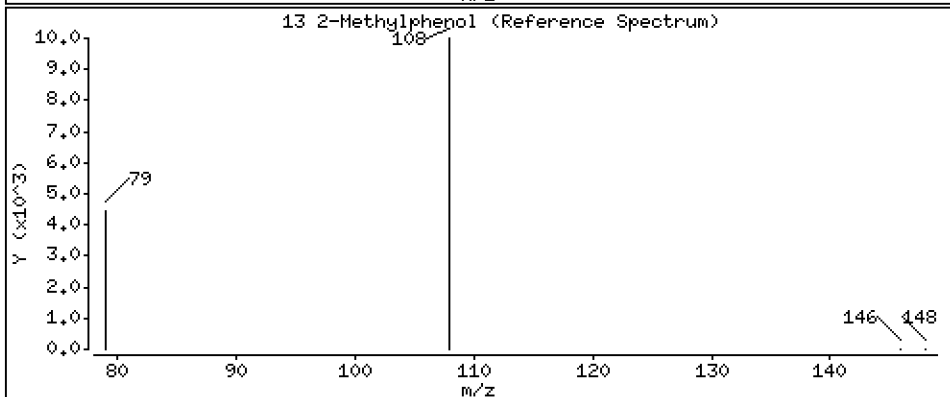
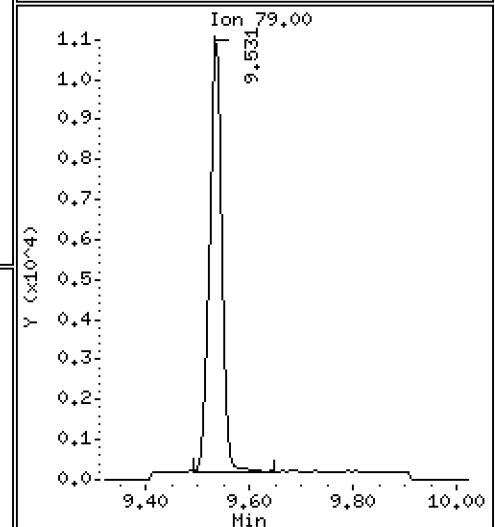
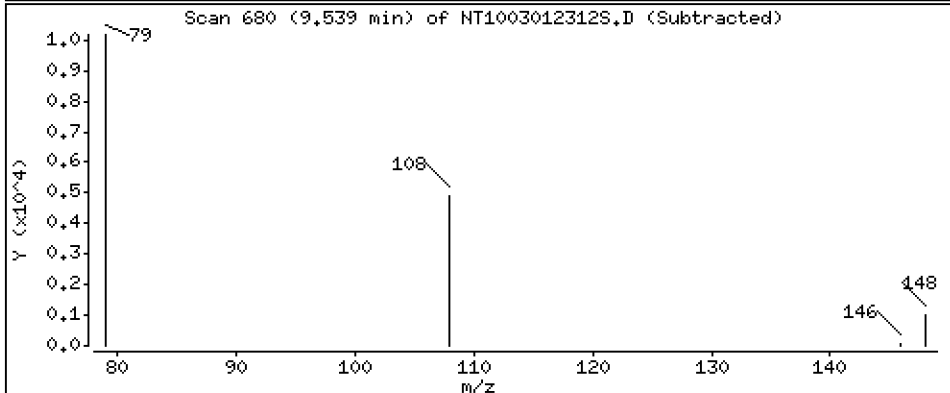
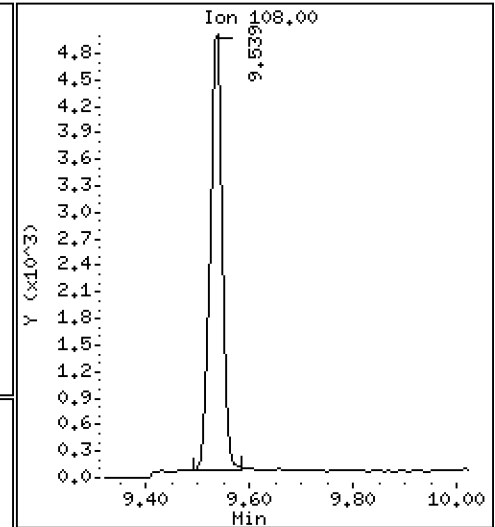
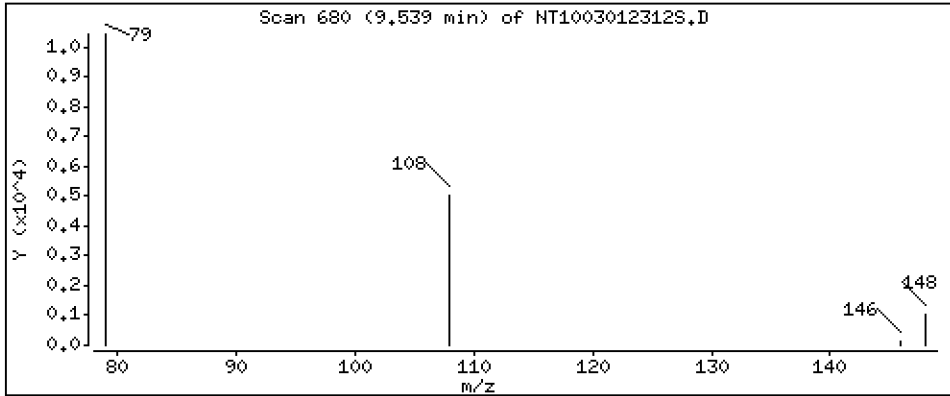
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.06143 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

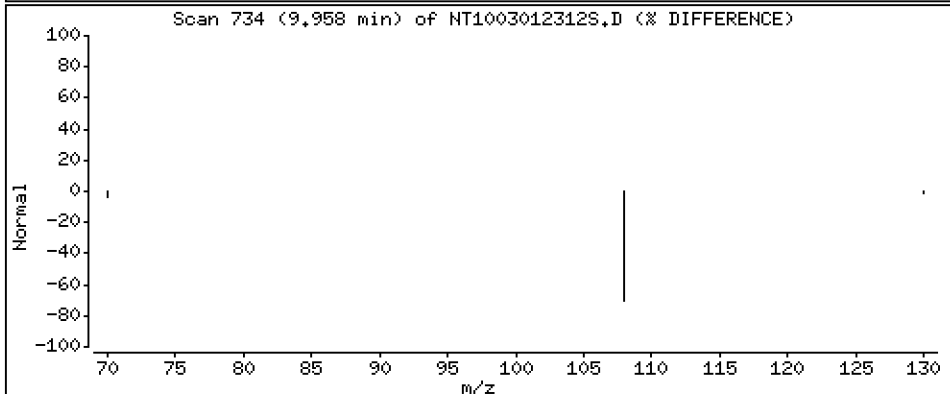
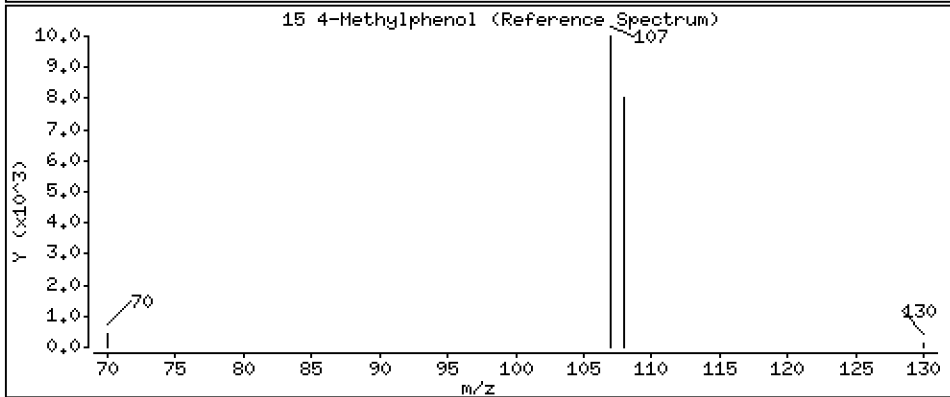
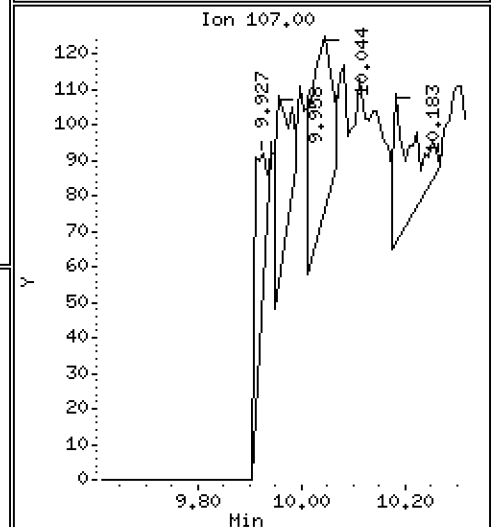
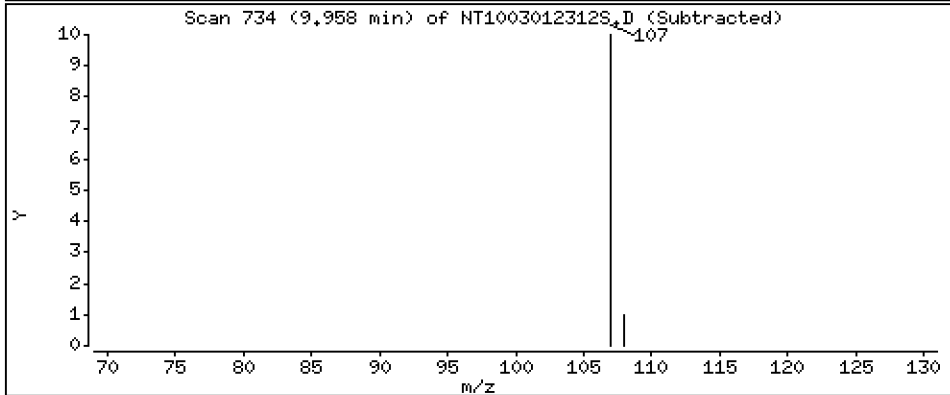
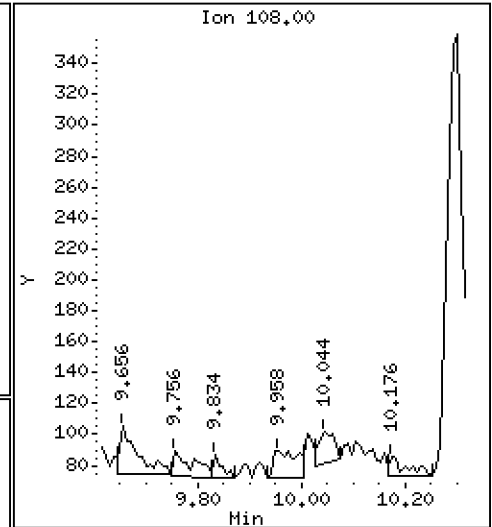
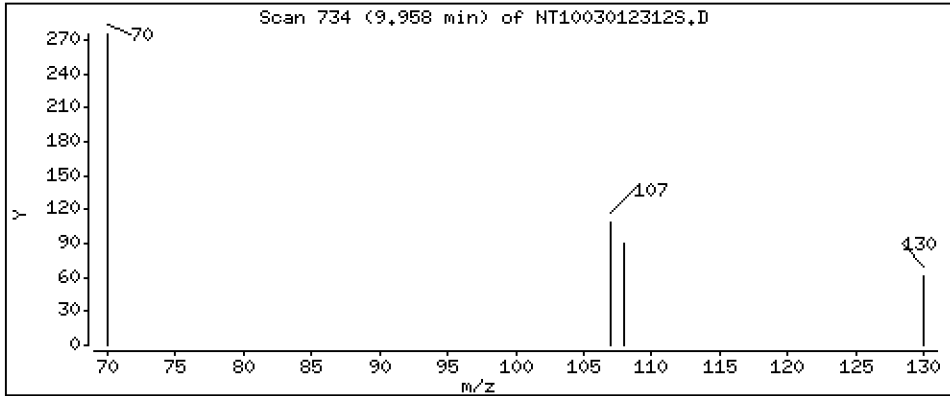
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,0004276 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

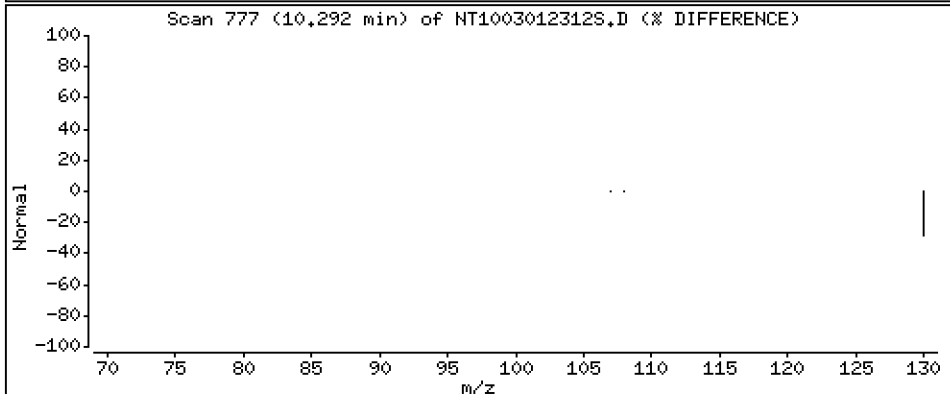
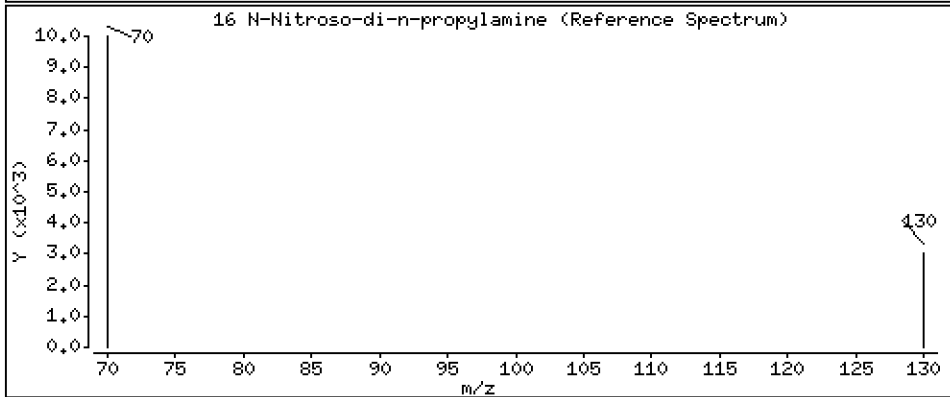
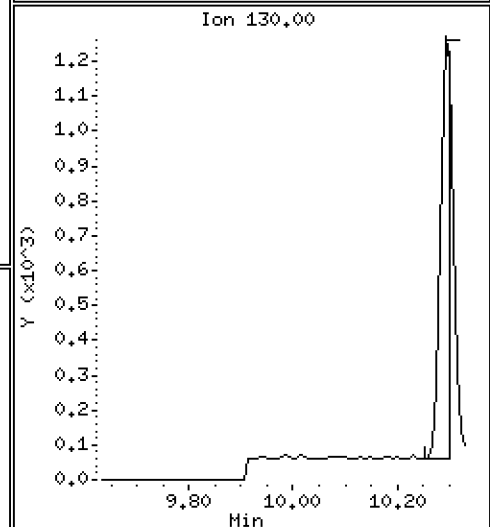
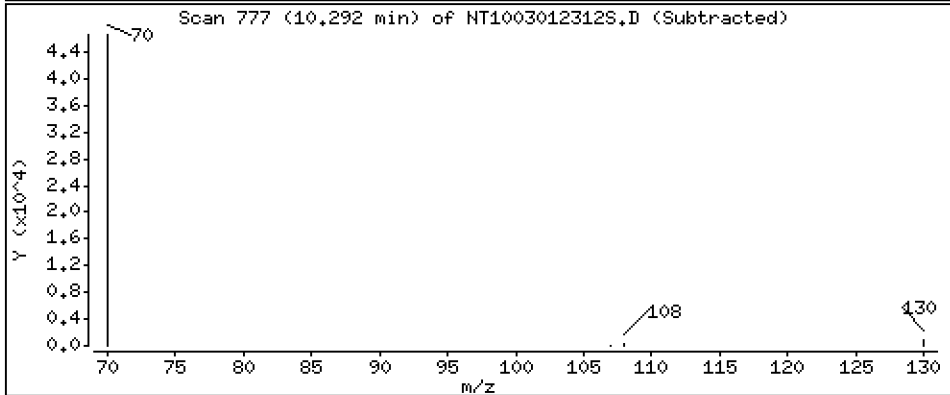
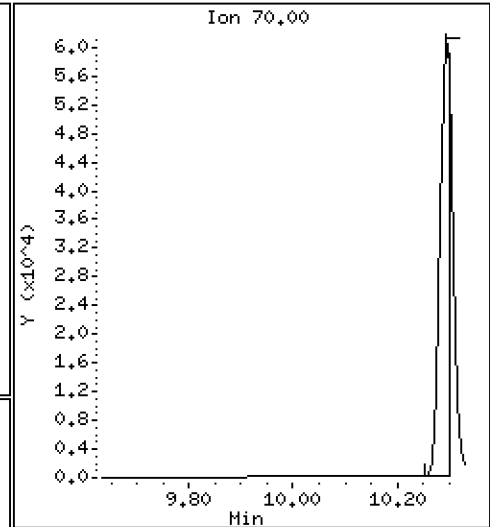
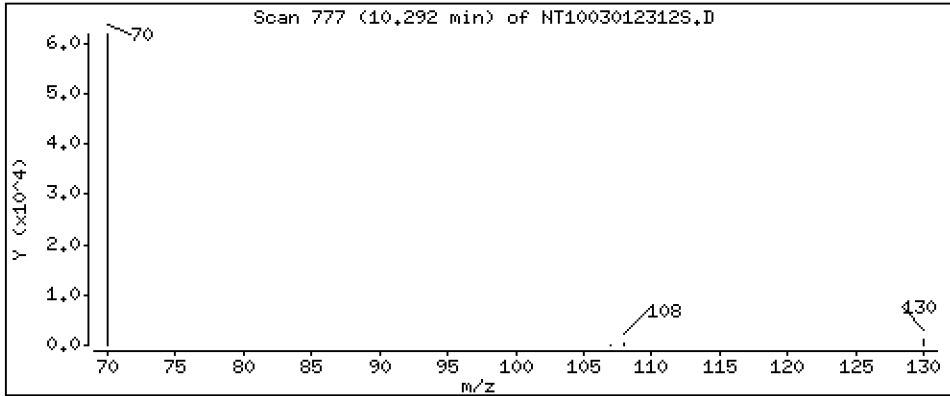
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,8128 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

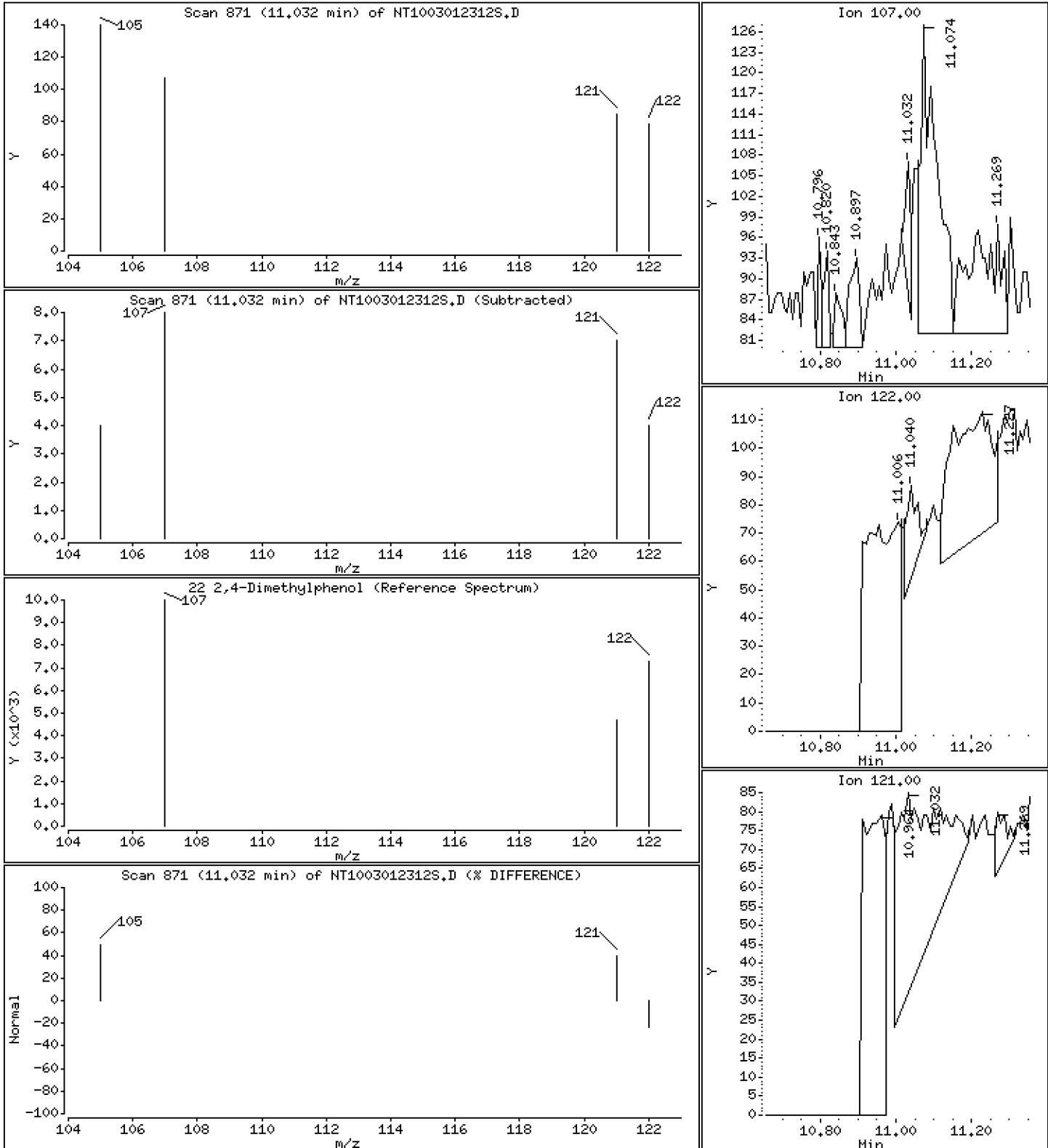
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.0001253 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

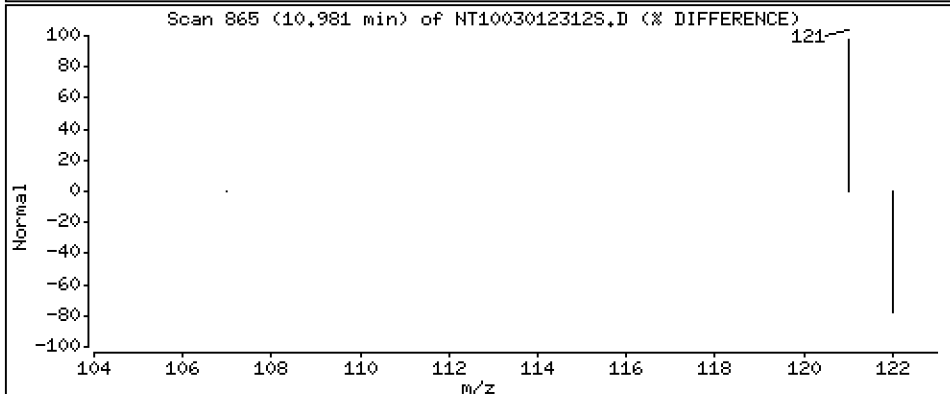
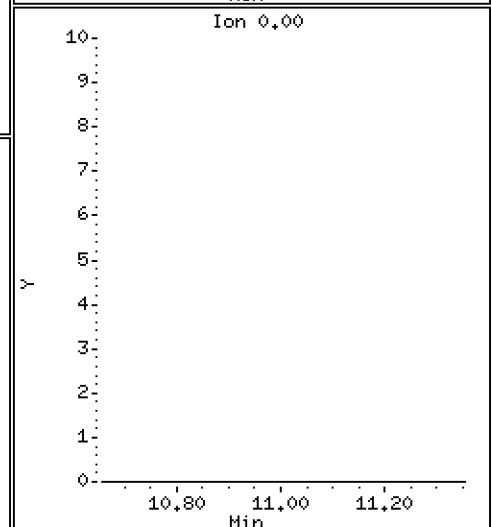
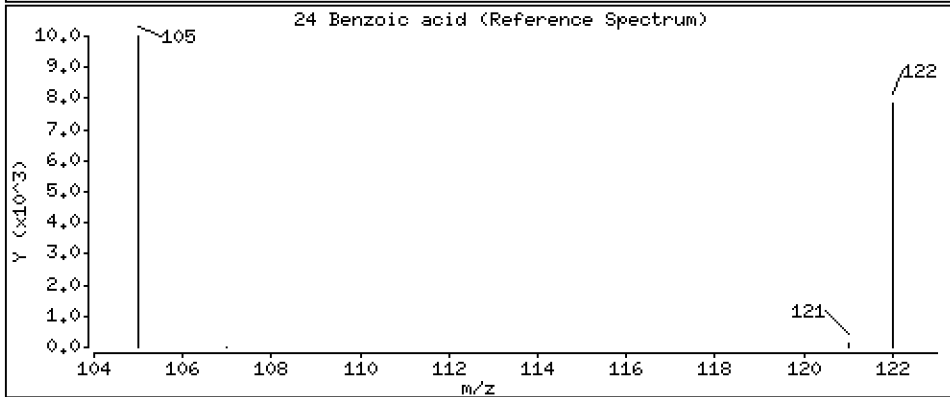
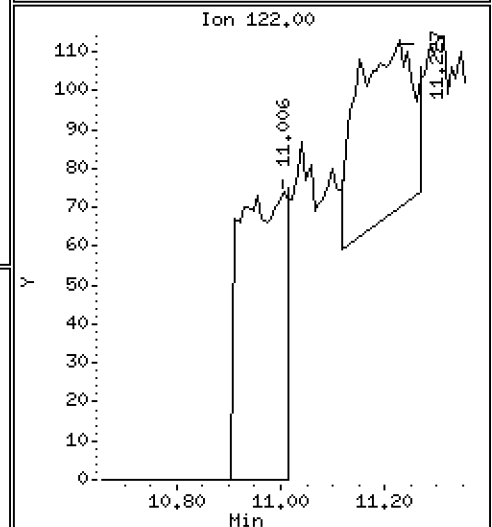
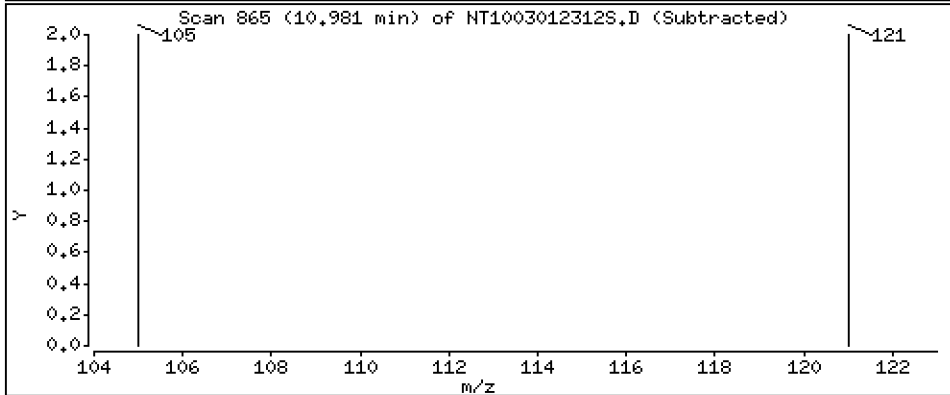
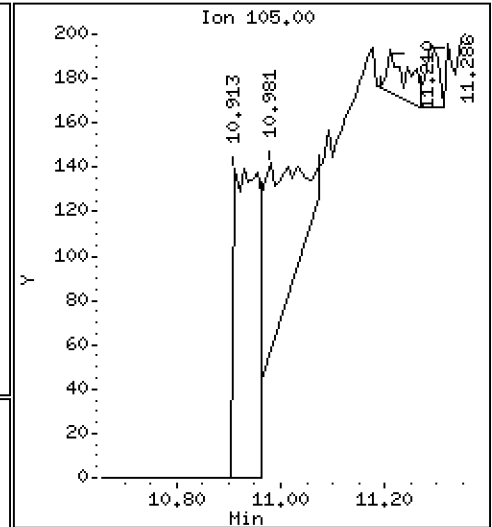
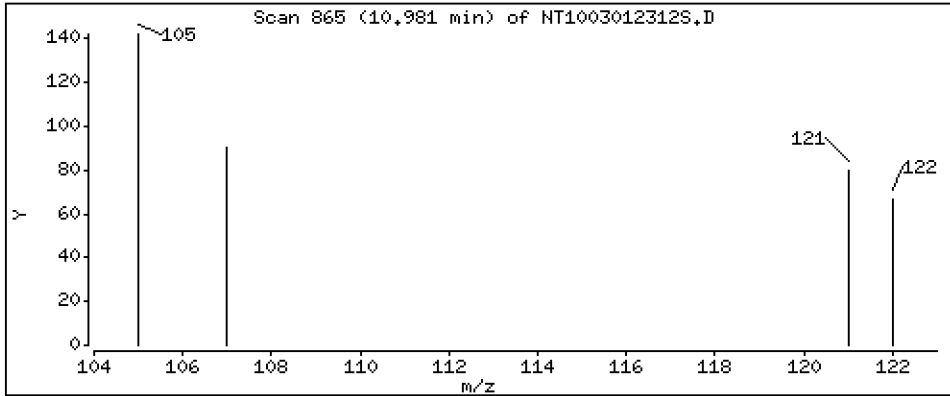
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.004402 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

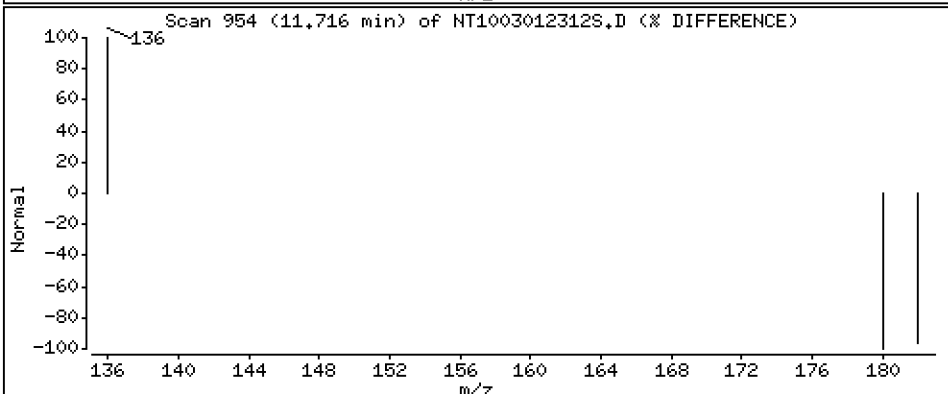
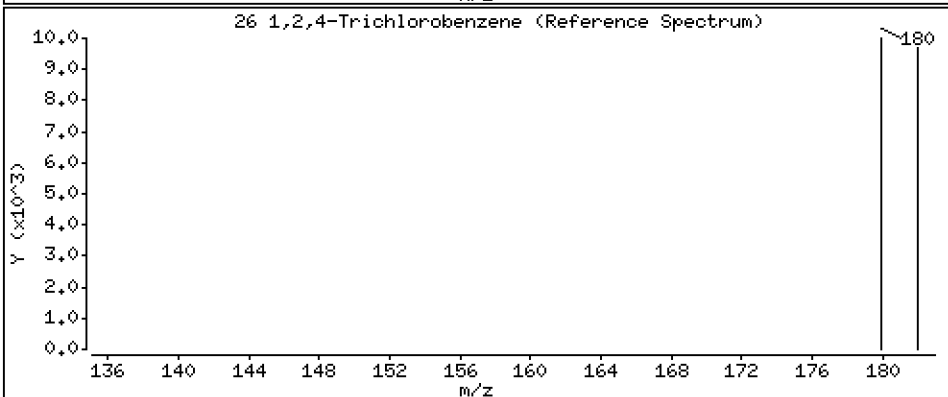
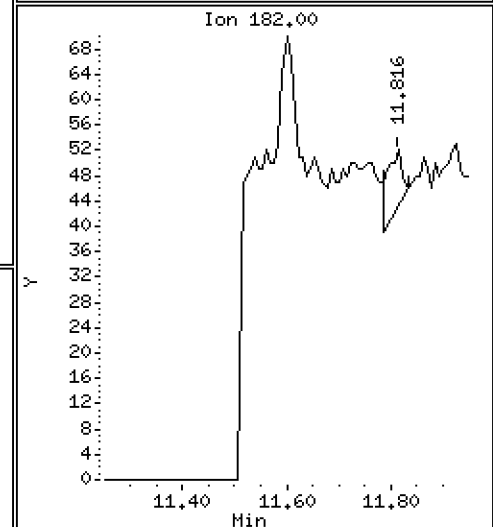
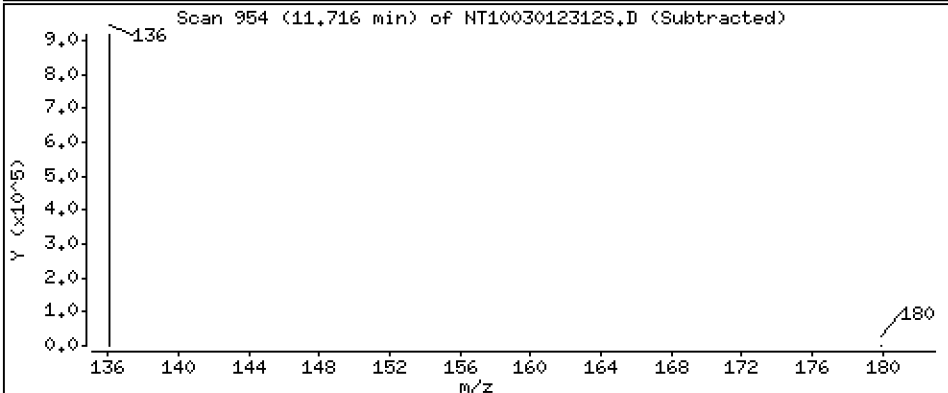
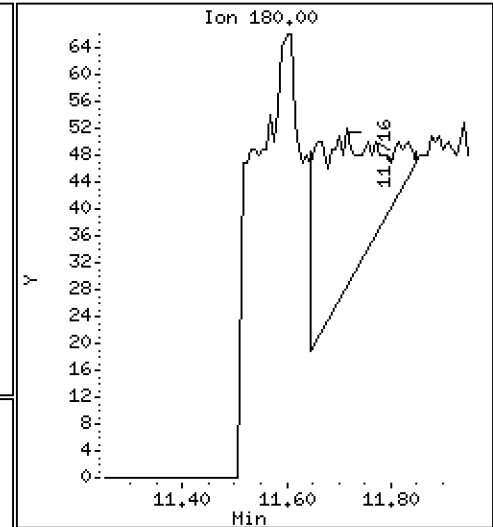
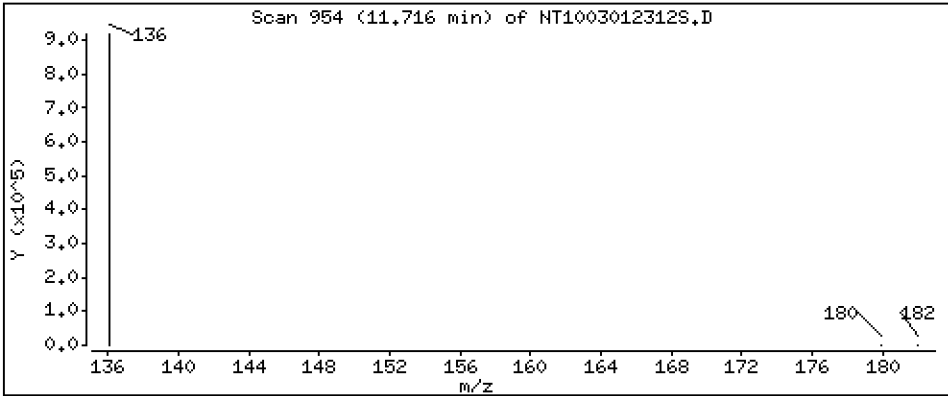
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 0.001531 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

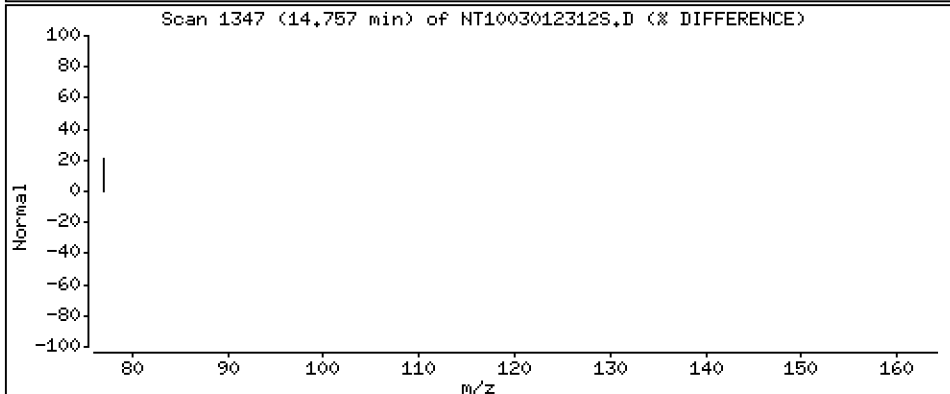
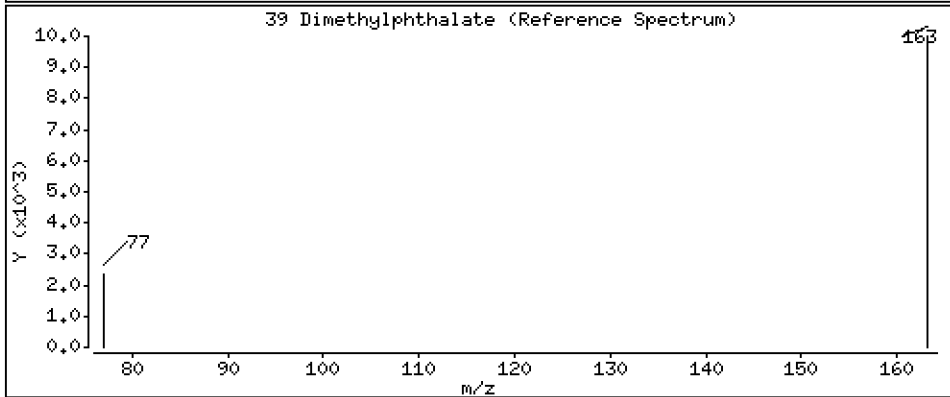
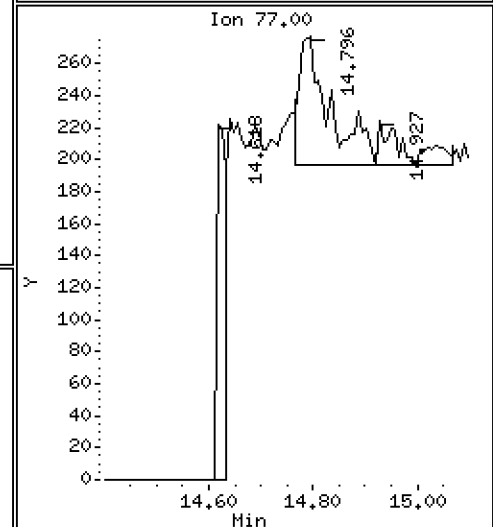
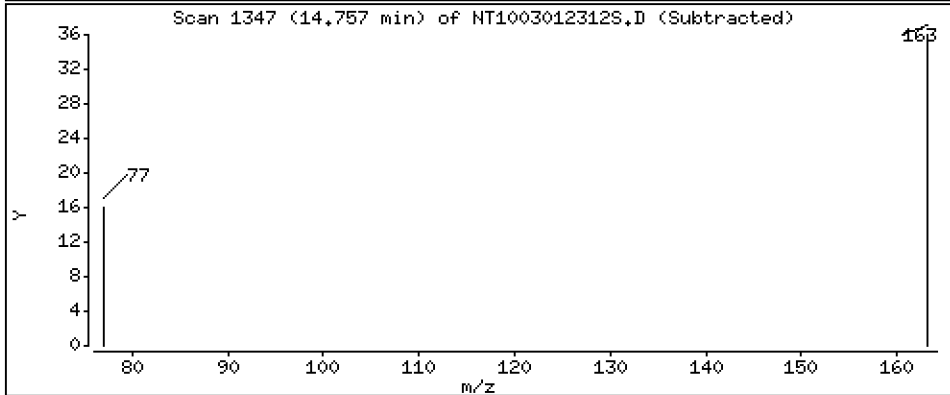
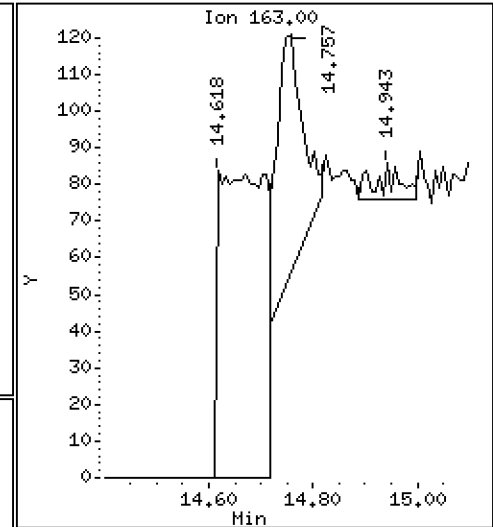
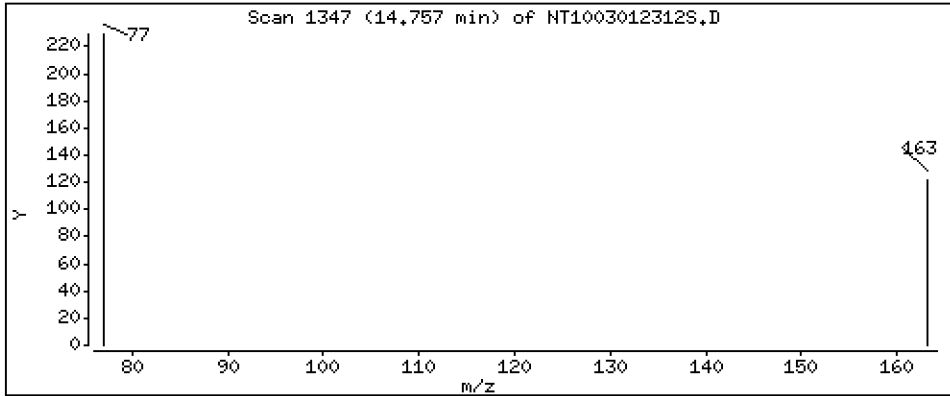
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.0008417 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

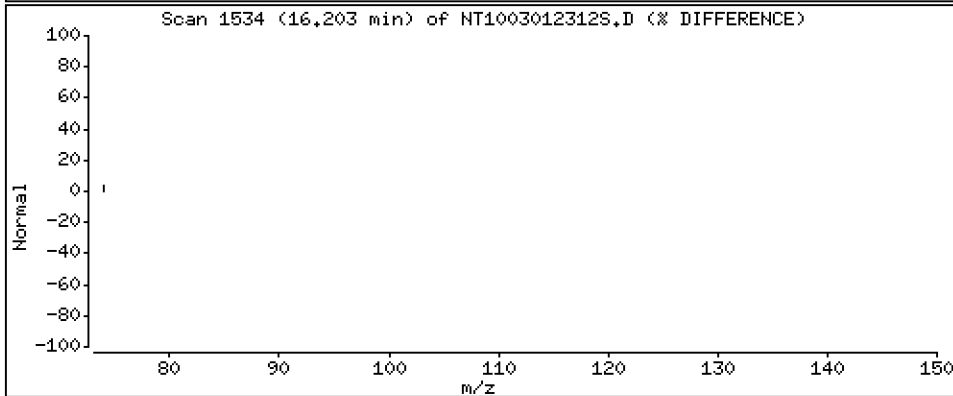
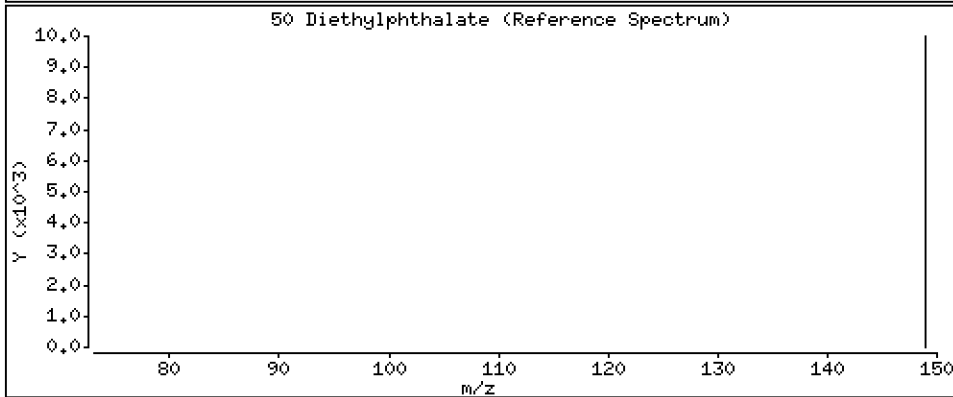
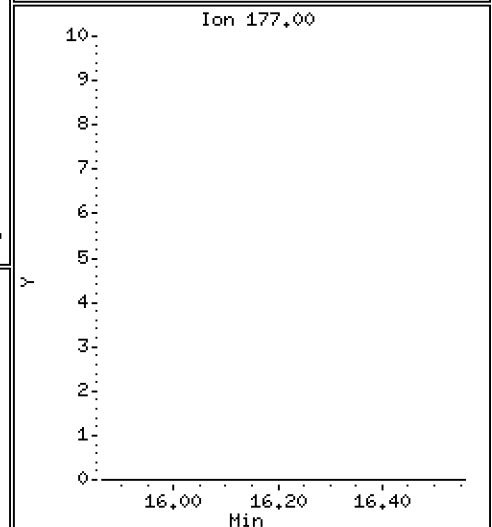
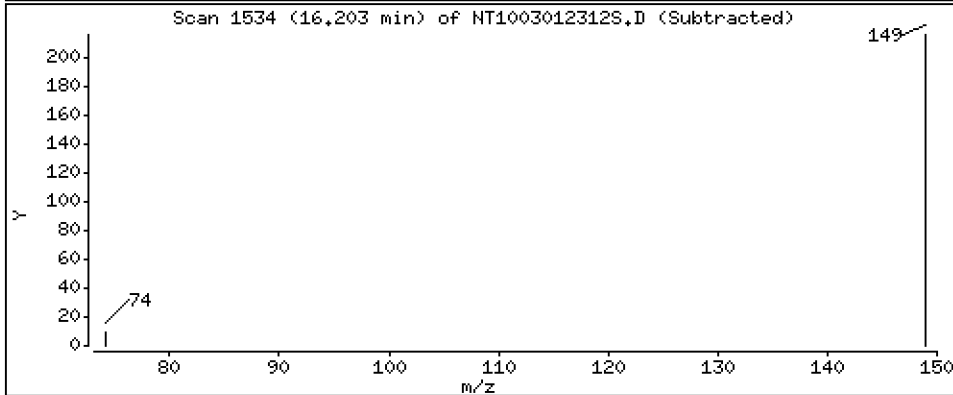
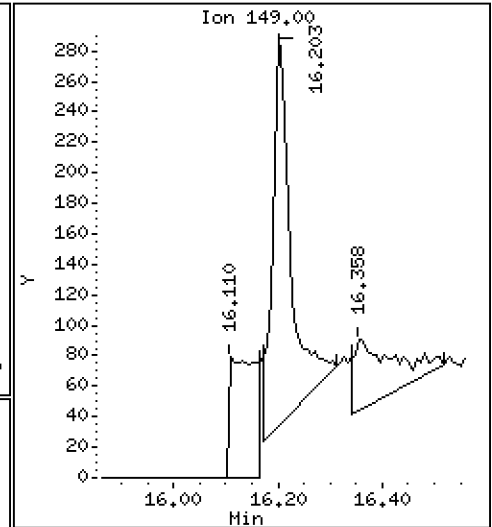
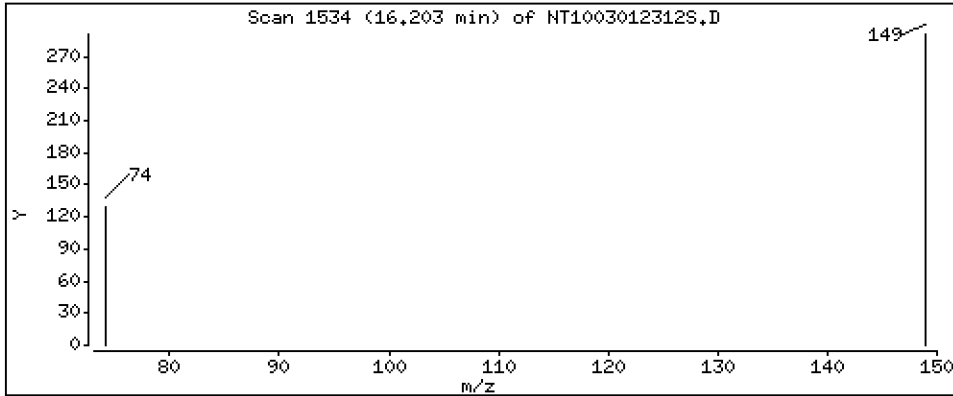
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,002321 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

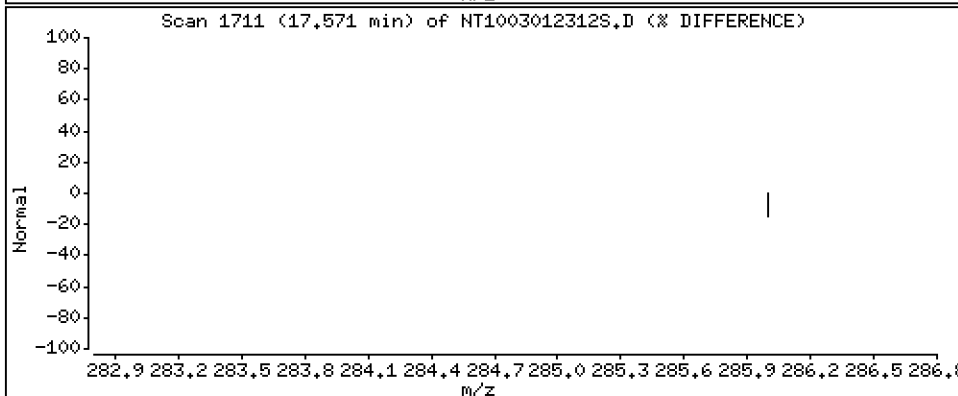
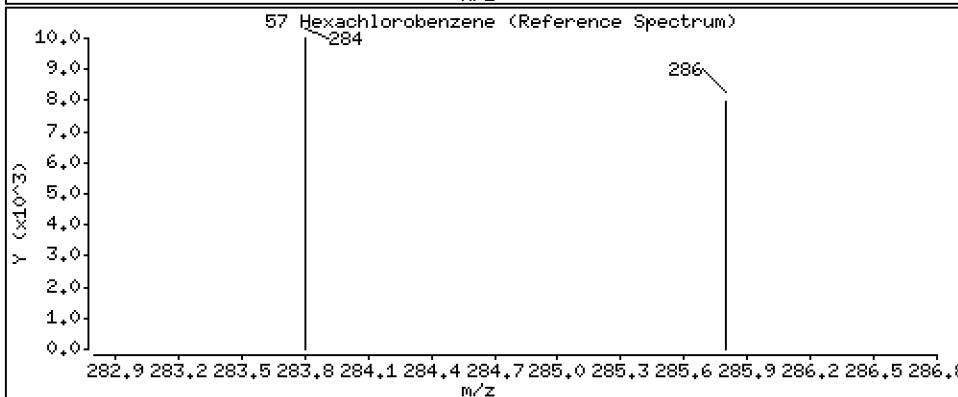
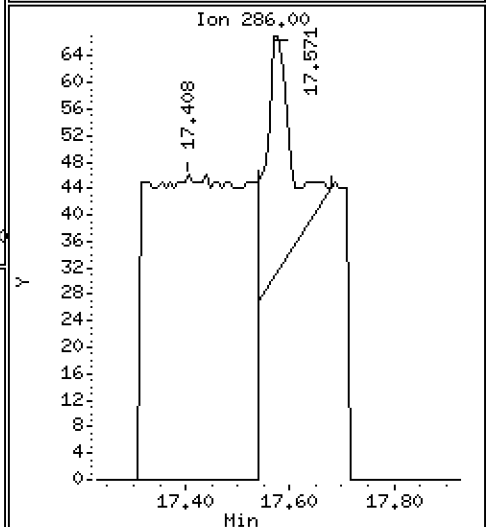
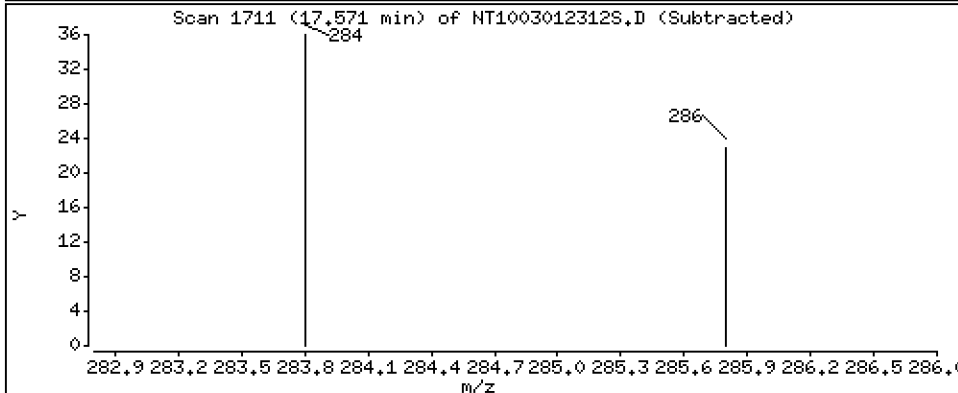
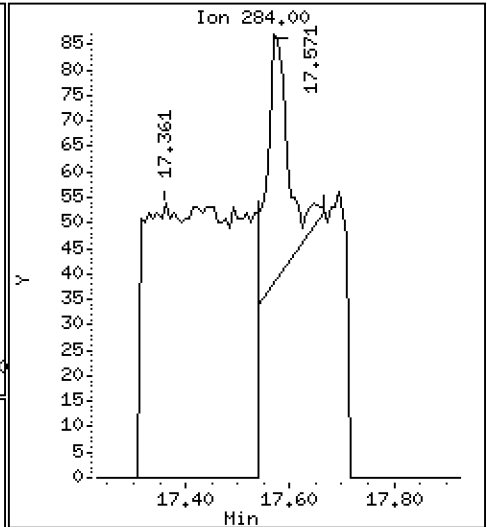
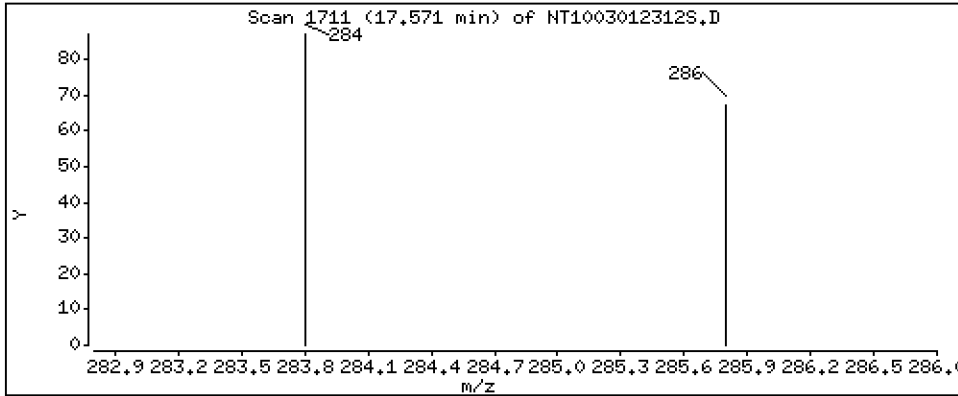
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 0.001117 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

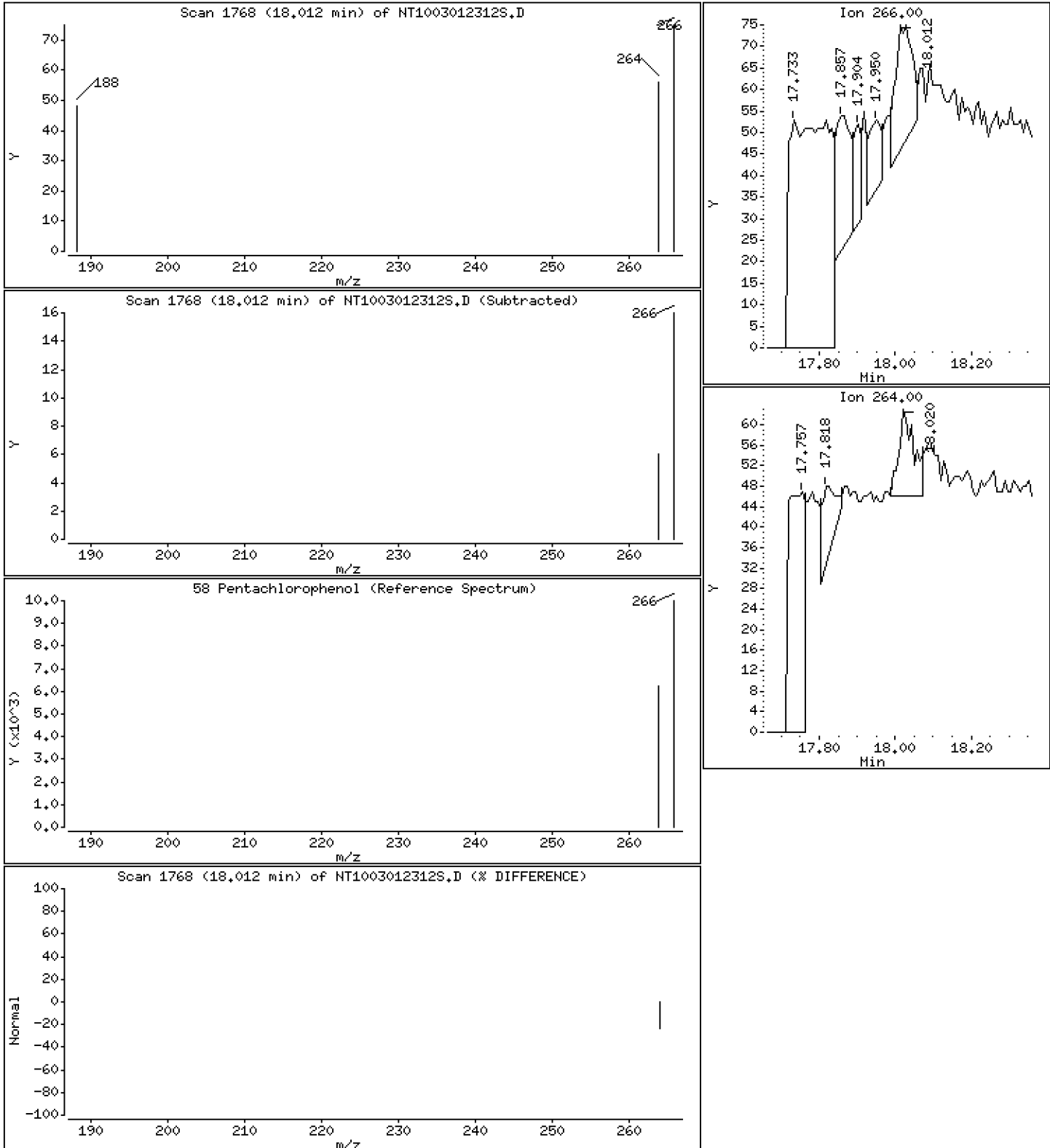
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

58 Pentachlorophenol

Concentration: 0.001689 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

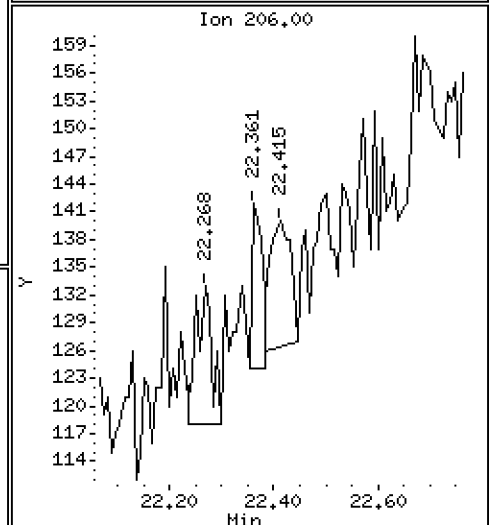
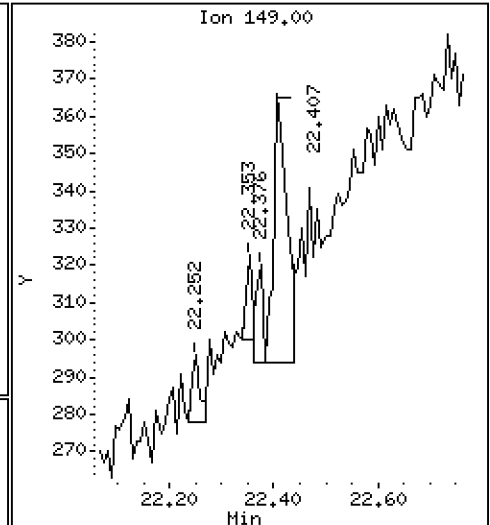
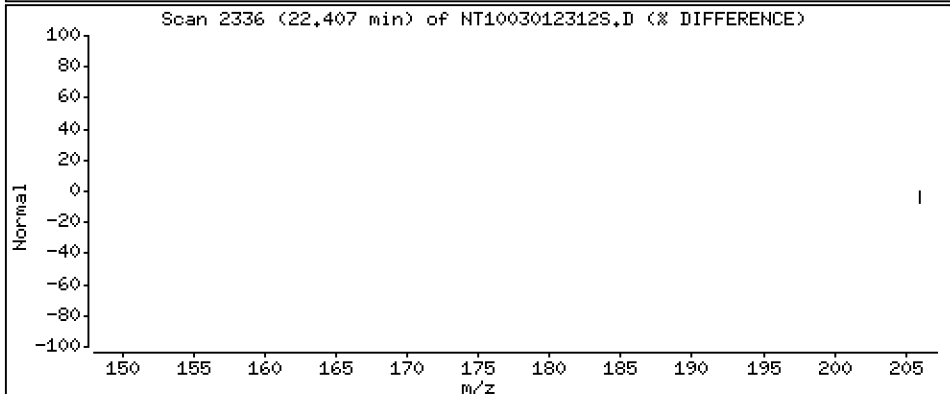
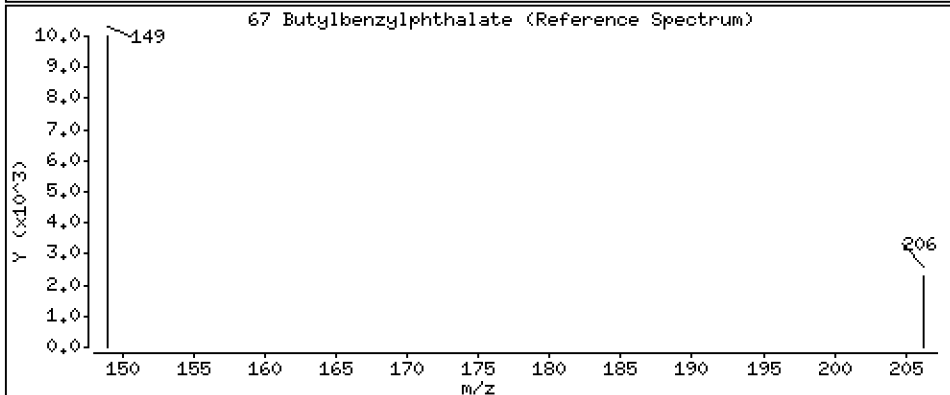
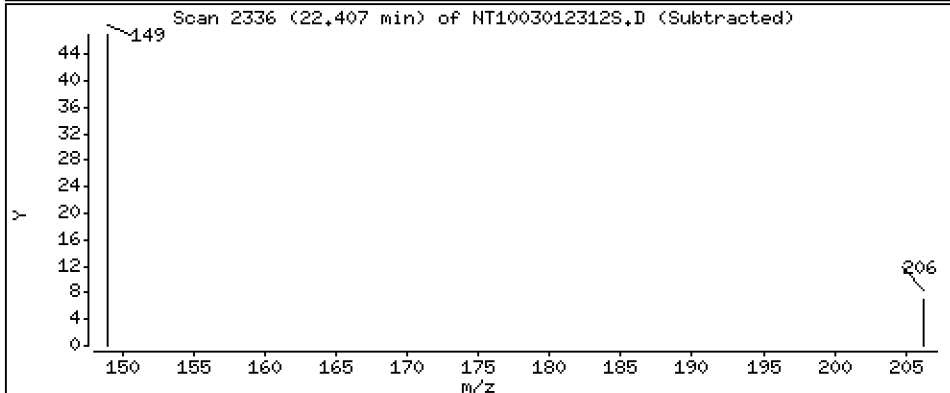
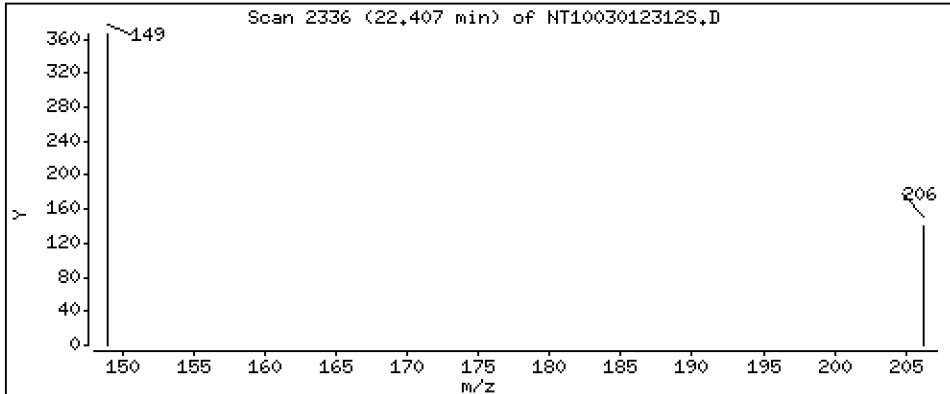
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,0004940 ug/L



Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

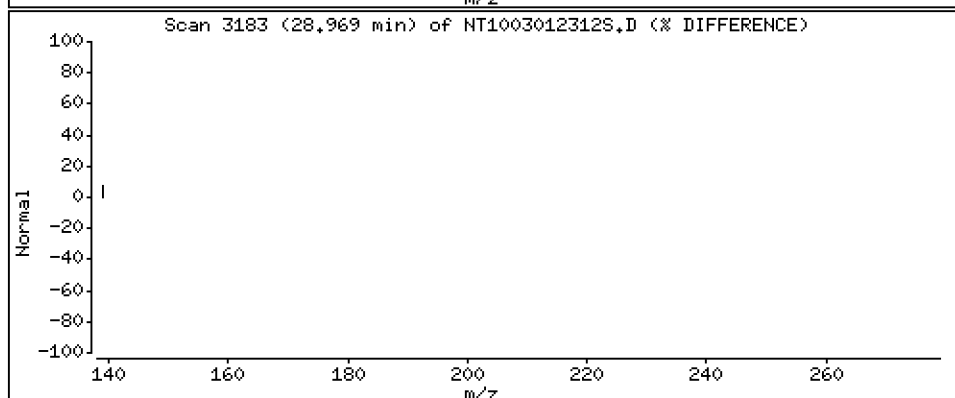
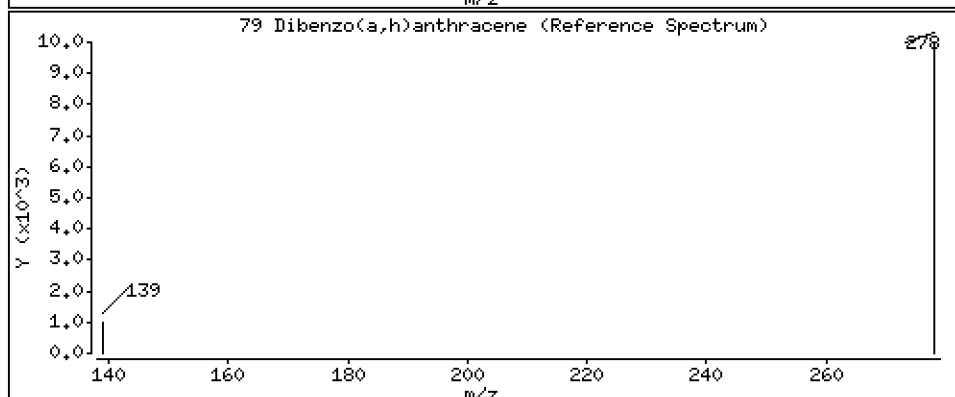
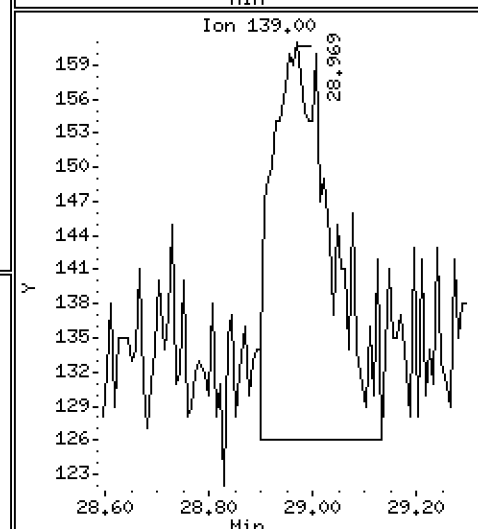
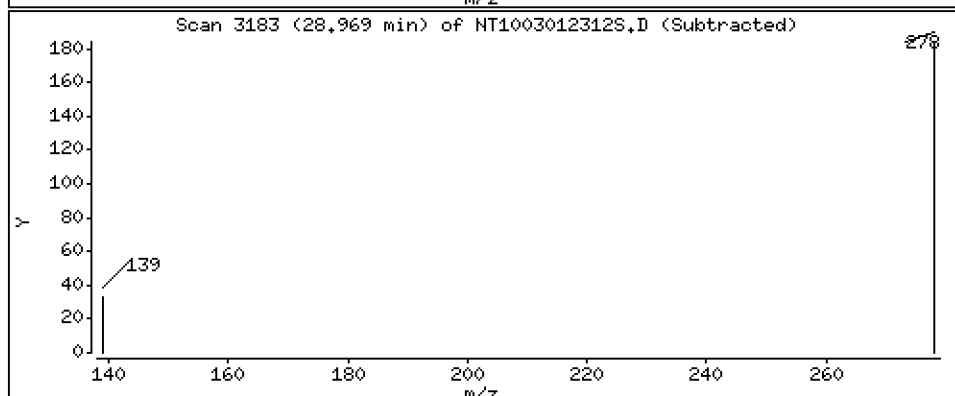
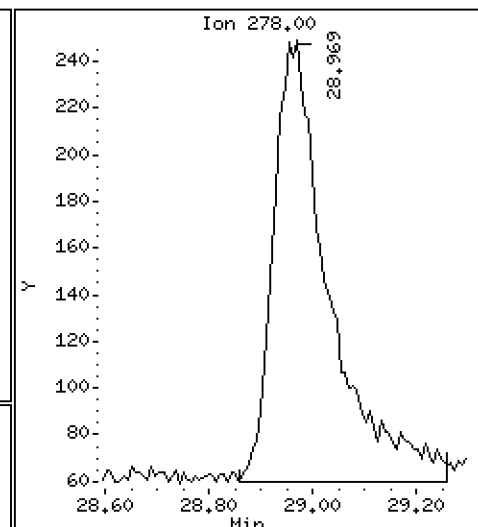
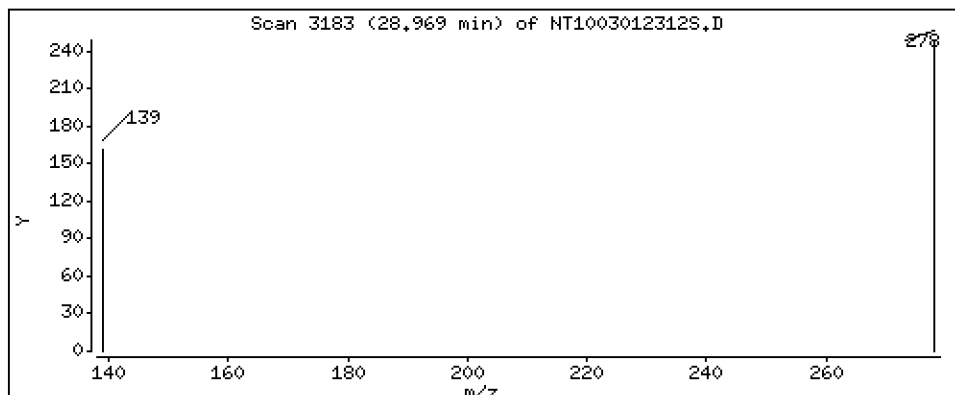
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,003648 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012312S.D
 Lab Smp Id: SLC0143-ICB1
 Inj Date : 01-MAR-2023 22:24 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-IBL1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.894	6.902 (0.745)		1154017	7.84369	7.844 (R)
3 Phenol	94		8.509	8.532 (0.920)		1012	0.00466	0.004664
7 1,3-Dichlorobenzene	146		9.143	9.136 (0.988)		118	6e-004	0.0006178
* 8 1,4-Dichlorobenzene-d4	152		9.251	9.252 (1.000)		515340	4.00000	
9 1,4-Dichlorobenzene	146		9.282	9.275 (1.003)		61	3e-004	0.0003285
11 Benzyl alcohol	79		9.531	9.508 (1.030)		17695	0.14687	0.1469
12 1,2-Dichlorobenzene	146		9.562	9.563 (1.034)		52	3e-004	0.0002913
13 2-Methylphenol	108		9.539	9.671 (1.031)		8016	0.06143	0.06143
15 4-Methylphenol	108		9.958	9.966 (1.076)		58	4e-004	0.0004276
16 N-Nitroso-di-n-propylamine	70		10.292	9.982 (1.112)		78763	0.81276	0.8128
22 2,4-Dimethylphenol	107		11.031	11.006 (0.941)		19	1e-004	0.0001253
24 Benzoic acid	105		10.980	11.007 (0.937)		366	0.00440	0.004402
26 1,2,4-Trichlorobenzene	180		11.716	11.600 (0.999)		197	0.00153	0.001531
* 27 Naphthalene-d8	136		11.723	11.723 (1.000)		1787704	4.00000	
30 Hexachlorobutadiene	225		Compound Not Detected.					
39 Dimethylphthalate	163		14.756	14.749 (0.964)		235	8e-004	0.0008417
* 42 Acenaphthene-d10	162		15.314	15.314 (1.000)		879316	4.00000	
50 Diethylphthalate	149		16.203	16.211 (1.058)		611	0.00232	0.002321
54 N-Nitrosodiphenylamine	169		Compound Not Detected.					
57 Hexachlorobenzene	284		17.570	17.579 (0.955)		133	0.00112	0.001117

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266		18.011	18.012	(0.979)	88	0.00169	0.001689
* 59 Phenanthrene-d10	188		18.398	18.398	(1.000)	1572306	4.00000	
\$ 66 Terphenyl-d14	244		21.524	21.532	(0.919)	589014	4.90043	4.900(R)
67 Butylbenzylphthalate	149		22.407	22.415	(0.957)	124	5e-004	0.0004940
* 69 Chrysene-d12	240		23.421	23.421	(1.000)	1486349	4.00000	
* 77 Perylene-d12	264		26.108	26.108	(1.000)	1674195	4.00000	
79 Dibenzo(a,h)anthracene	278		28.968	28.946	(1.110)	1414	0.00365	0.003648
90 N-Nitrosodimethylamine	74		Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012312S.D
 Lab Smp Id: SLC0143-ICB1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	515340	60.98
27 Naphthalene-d8	1136019	568010	2272038	1787704	57.37
42 Acenaphthene-d10	636993	318497	1273986	879316	38.04
59 Phenanthrene-d10	1093620	546810	2187240	1572306	43.77
69 Chrysene-d12	1000300	500150	2000600	1486349	48.59
77 Perylene-d12	1058448	529224	2116896	1674195	58.17

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012312S.D

Lab ID: SLC0143-ICB1

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 22:24

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.031	1.045	-0.0143	2-Methylphenol
1.112	1.079	0.0335	N-Nitroso-di-n-propylamine
0.937	0.000	0.9366	Benzoic acid
0.999	0.989	0.0099	1,2,4-Trichlorobenzene

RRT check based on Ccal File: SIM.b/NT1003012310S.D

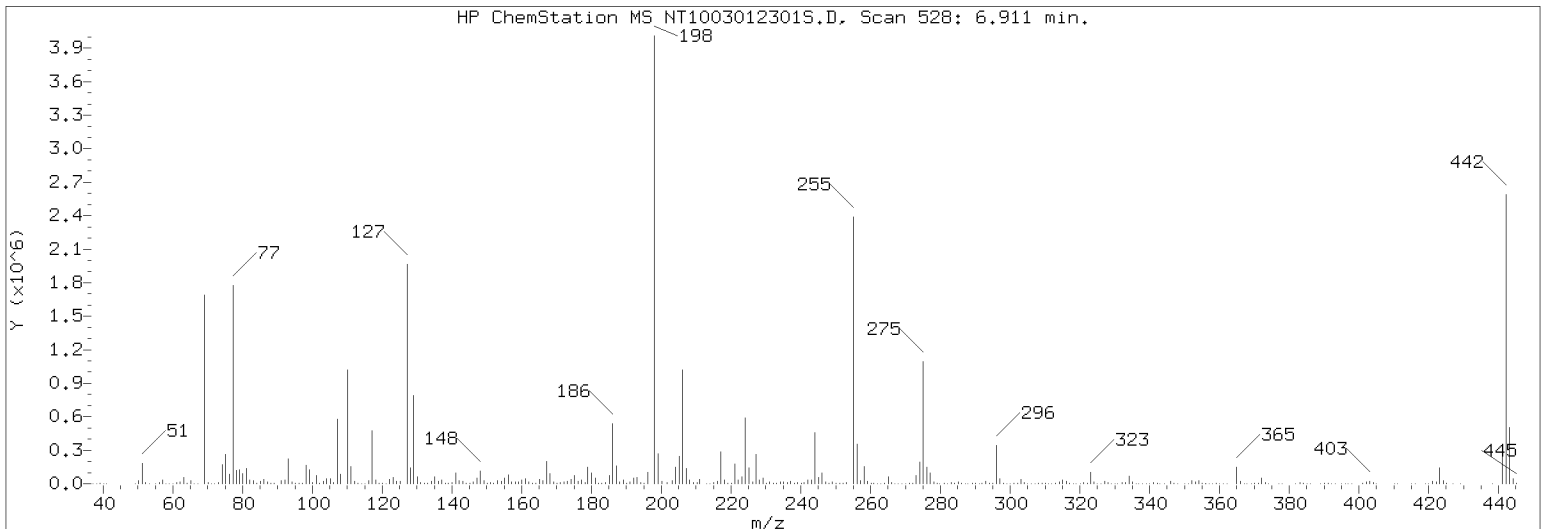
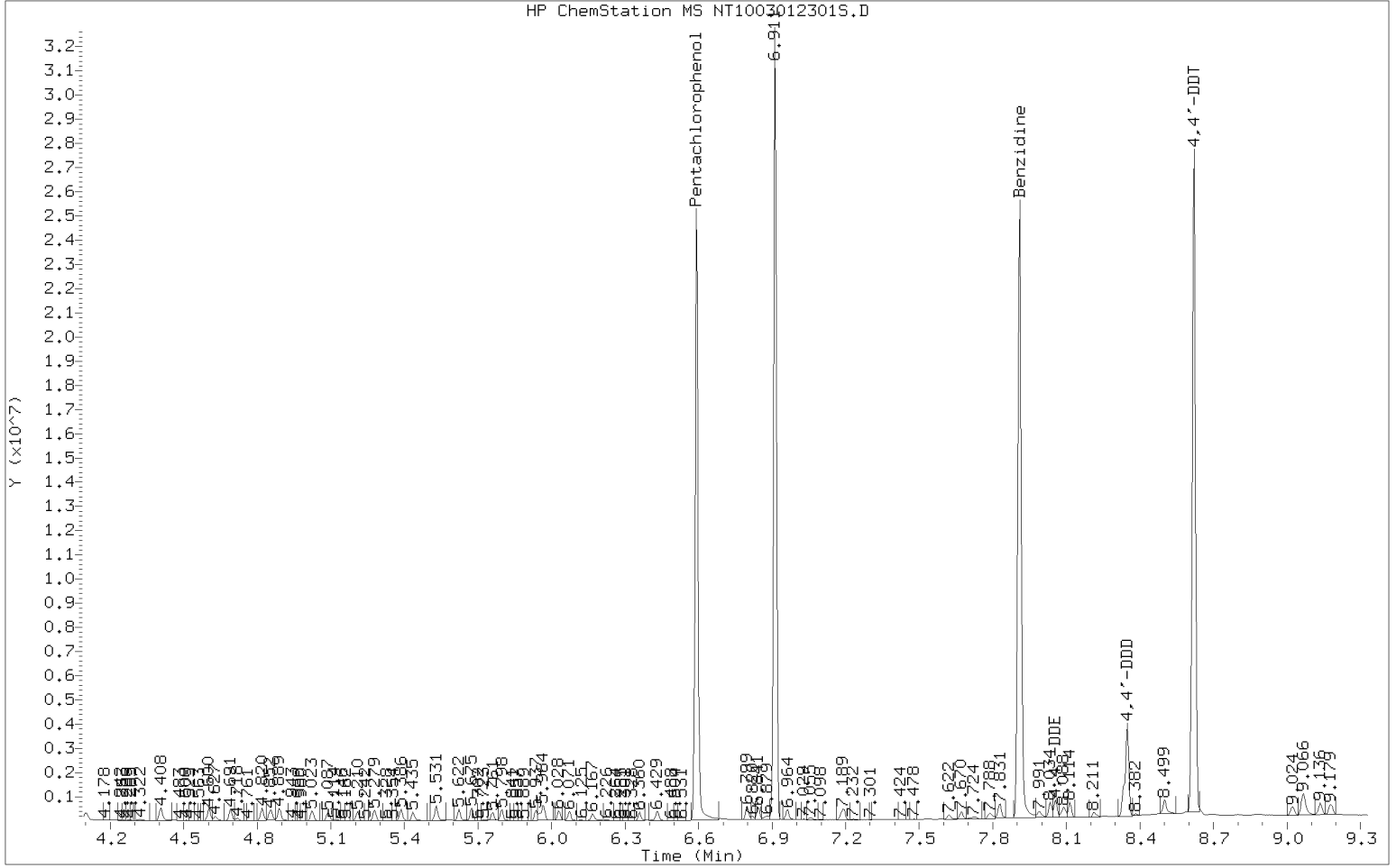
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

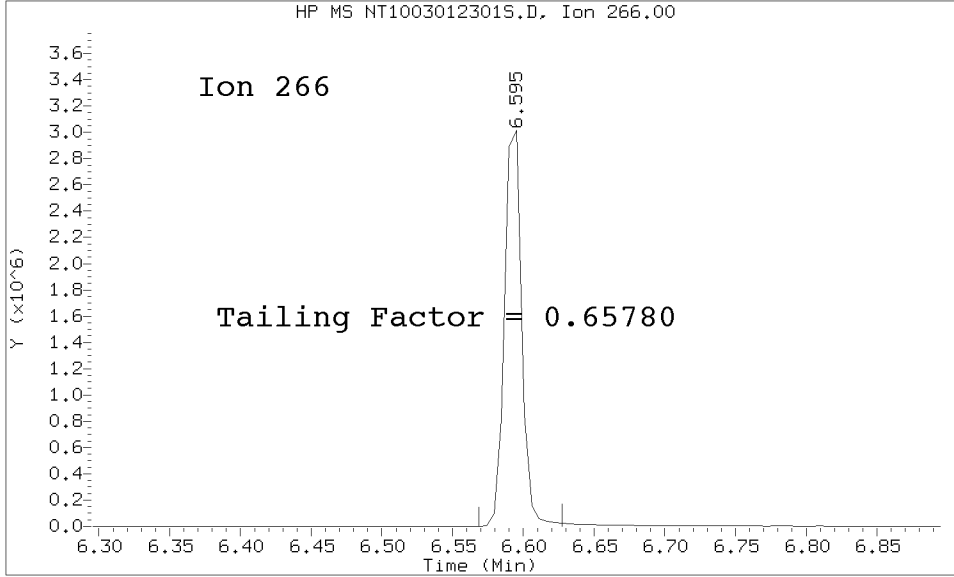
* Only compounds listed in the work order have been verified by the analyst *

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
 Method Used: \20230301.b\SIM.b\DFTPP8270E.m Inst: nt10
 Injection Date: 01-MAR-2023 15:49 Operator: JGR
 Sample Info: SLC0143-TUN1 SLC0143-TUN1
 Report Date: 07/05/2023 09:35



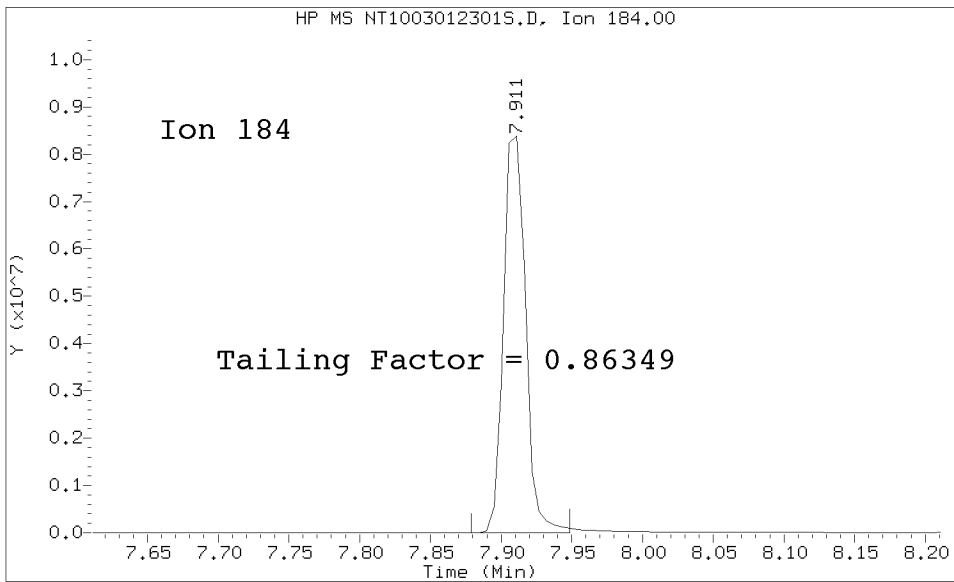
Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 07/05/2023 09:35



Pentachlorophenol

=====
Exp. RT = 6.590
Found RT = 6.595

Tail Factor = 0.658 Maximum Allowed = 2.0



Benzidine

=====
Exp. RT = 7.911
Found RT = 7.911

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.6578035	2.000	PASS
Benzidine	0.8634886	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	4780124			N/A
4,4-DDE	47256	1.0	20.0	PASS
4,4-DDD	542360	10.2	20.0	PASS
4,4-DDD + DDE	589616	11.0	20.0	PASS

Tuning Sample, nt10.i/20230301.b/SIM.b/NT1003012301S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.33 (0.79)
69	Mass 69 relative abundance	41.10
70	Less than 2.00% of mass 69	0.15 (0.37)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.67
365	1.00 - 100.00% of mass 198	4.33
441	Less than 150.00% of mass 443	11.23 (73.44)
442	Less than 200.00% of mass 198	80.08
443	15.00 - 24.00% of mass 442	15.30 (19.10)

Data File: NT1003012301S.D
 Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
 Location of Maximum: 198.00
 Number of points: 369

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	462	140.00	7430	237.00	14976	332.00	6725
38.00	1113	141.00	70248	238.00	2080	333.00	7901
39.00	4743	142.00	22264	239.00	7687	334.00	53800
40.00	108	143.00	15456	240.00	6126	335.00	13827
45.00	84	144.00	4558	241.00	9927	336.00	1422
49.00	890	145.00	3575	242.00	22800	337.00	158
50.00	20560	146.00	12885	243.00	23656	338.00	111
51.00	115400	147.00	37000	244.00	334528	339.00	1435
52.00	5980	148.00	83184	245.00	44200	340.00	1368
53.00	270	151.00	6891	246.00	75208	341.00	9189
55.00	1004	152.00	4801	247.00	14506	342.00	2530
56.00	6893	153.00	21920	248.00	2995	343.00	476
57.00	20032	154.00	16872	249.00	12012	344.00	229
58.00	1173	155.00	39720	250.00	2462	346.00	19040
59.00	381	156.00	58960	251.00	2978	347.00	3868
60.00	603	157.00	10415	252.00	3463	348.00	369
61.00	8555	158.00	12758	253.00	7543	350.00	680
62.00	12181	159.00	10289	254.00	2201	351.00	1509
63.00	36888	160.00	23104	255.00	1779712	352.00	24280
64.00	5850	161.00	32336	256.00	261248	353.00	16313
65.00	19656	162.00	10036	257.00	19960	354.00	23616
66.00	1277	163.00	2211	258.00	115664	355.00	4277
67.00	218	164.00	3370	259.00	18720	356.00	395
68.00	9335	165.00	26672	260.00	3097	357.00	288
69.00	1177088	166.00	21880	261.00	2983	358.00	496
70.00	4303	167.00	140736	262.00	311	359.00	2088
72.00	118	168.00	67144	263.00	1088	360.00	426
73.00	8187	169.00	12299	264.00	2758	361.00	287
74.00	117944	170.00	4307	265.00	46872	362.00	66
75.00	186240	171.00	6152	266.00	6551	363.00	78
76.00	58584	172.00	12323	267.00	641	364.00	312
77.00	1243648	173.00	16696	268.00	1031	365.00	124024
78.00	82568	174.00	30816	269.00	334	366.00	17240
79.00	86720	175.00	56392	270.00	1777	367.00	1640
80.00	67968	176.00	14808	271.00	3758	368.00	51
81.00	95752	177.00	24968	272.00	4667	369.00	81
82.00	22136	178.00	8414	273.00	54184	370.00	2231
83.00	20016	179.00	108176	274.00	145920	371.00	6578
84.00	1703	180.00	69200	275.00	822080	372.00	39896
85.00	15260	181.00	35088	276.00	108424	373.00	10420
86.00	27208	182.00	5707	277.00	76856	374.00	902
87.00	12947	183.00	2410	278.00	12879	377.00	1108
88.00	4317	184.00	9057	281.00	1271	378.00	190
89.00	1969	185.00	53272	282.00	1654	379.00	112
90.00	227	186.00	390848	283.00	8058	382.00	88
91.00	20144	187.00	115736	284.00	6096	383.00	11296
92.00	22872	188.00	12489	285.00	13310	384.00	3498
93.00	159616	189.00	26224	286.00	2664	385.00	1140
94.00	9906	190.00	3820	287.00	301	386.00	187

95.00	2189	191.00	11505	288.00	1049	388.00	81
96.00	5767	192.00	34688	289.00	3146	389.00	105
97.00	2485	193.00	41016	290.00	2684	390.00	4929
98.00	117552	194.00	9131	291.00	1791	391.00	3340
99.00	90792	195.00	3653	292.00	3510	392.00	2390
100.00	7885	196.00	74504	293.00	16520	393.00	475
101.00	52896	198.00	2863616	294.00	4295	395.00	216
102.00	3052	199.00	190976	295.00	4987	396.00	208
103.00	16416	200.00	14335	296.00	267904	397.00	274
104.00	30568	201.00	9948	297.00	37320	398.00	254
105.00	30136	203.00	20560	298.00	2786	401.00	2284
106.00	9766	204.00	107568	299.00	508	402.00	15386
107.00	410176	205.00	182464	300.00	217	403.00	21456
108.00	62280	206.00	743232	301.00	3180	404.00	8460
109.00	6029	207.00	96144	302.00	4702	405.00	1217
110.00	711808	208.00	26352	303.00	29528	408.00	105
111.00	108280	209.00	9347	304.00	7967	410.00	539
112.00	13160	210.00	10562	305.00	1122	411.00	56
113.00	4333	211.00	27120	306.00	358	415.00	1010
114.00	392	212.00	2578	307.00	530	416.00	312
115.00	1356	213.00	2139	308.00	3845	419.00	166
116.00	22112	214.00	764	309.00	2265	420.00	193
117.00	350208	215.00	8027	310.00	3023	421.00	17744
118.00	25424	216.00	16051	311.00	1030	422.00	15463
119.00	2716	217.00	211072	312.00	626	423.00	129392
120.00	4884	218.00	26304	313.00	2222	424.00	25976
121.00	587	219.00	2900	314.00	12766	425.00	2691
122.00	25416	220.00	3351	315.00	29288	426.00	96
123.00	40488	221.00	123968	316.00	15518	427.00	197
124.00	17936	222.00	24608	317.00	2892	429.00	55
125.00	15919	223.00	46856	318.00	260	437.00	78
127.00	1391616	224.00	432000	319.00	629	438.00	106
128.00	102568	225.00	107056	320.00	924	439.00	148
129.00	561152	226.00	10788	321.00	8267	440.00	550
130.00	46696	227.00	195904	322.00	3948	441.00	321664
131.00	8637	228.00	27456	323.00	81096	442.00	2293248
132.00	4190	229.00	39984	324.00	14693	443.00	438016
133.00	1654	230.00	5777	325.00	1371	444.00	39248
134.00	15899	231.00	15009	326.00	1762	445.00	2356
135.00	44024	232.00	3043	327.00	15694	446.00	82
136.00	18272	233.00	3542	328.00	7475	489.00	54
137.00	22936	234.00	12458	329.00	1733		
138.00	5085	235.00	13429	330.00	352		
139.00	2552	236.00	8601	331.00	463		



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00050

Laboratory ID: SLA0213-SCV1

Sequence: SLA0213

Sequence Name: 8270 SIM PNA SCV

Standard ID: L000686

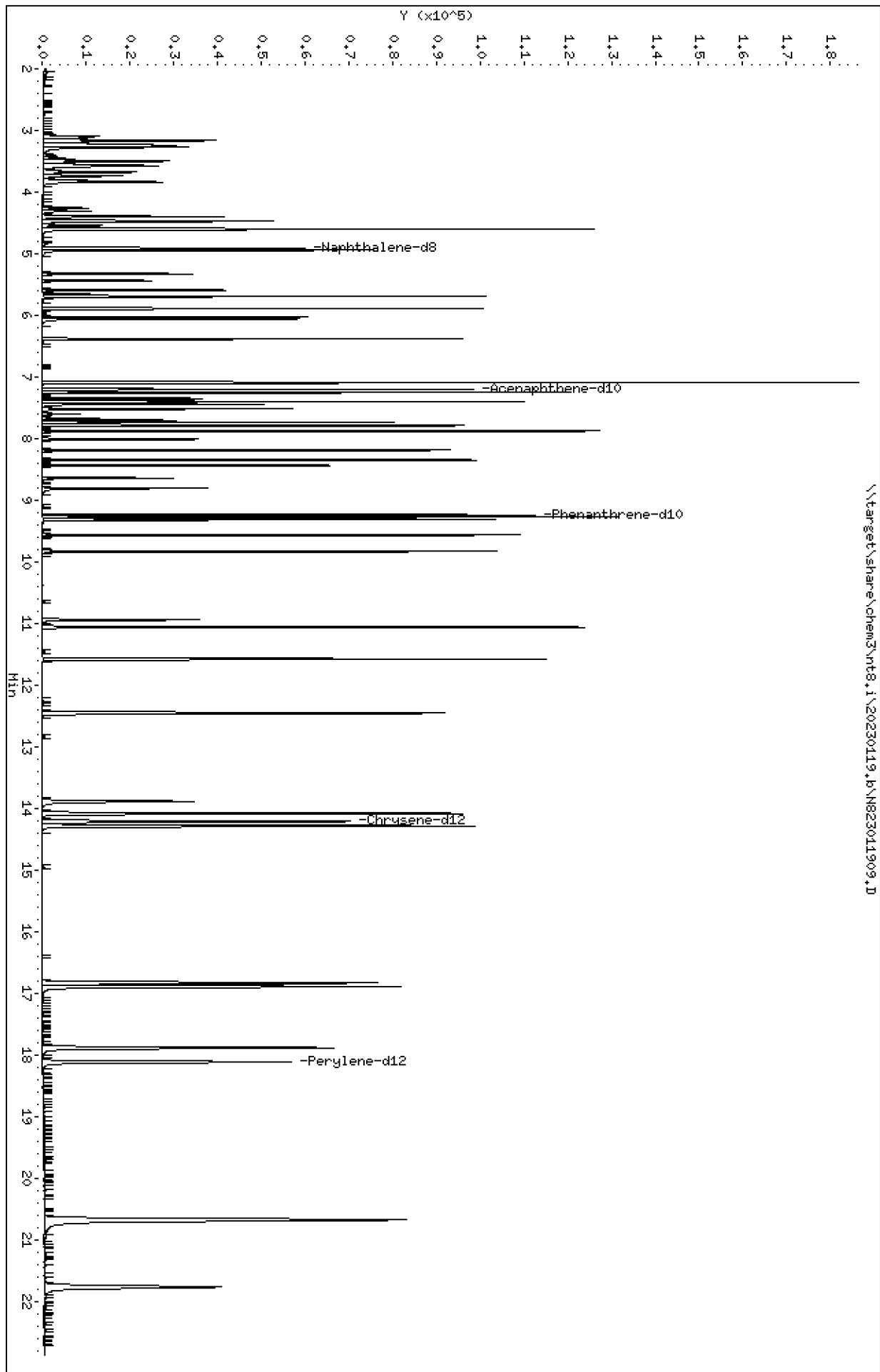
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzo(a)fluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.1\20230119.6\N823011909.D
Date: 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.1
Operator: JZ
Column diameter: 0.25

\\target\share\chem3\nt8.1\20230119.6\N823011909.D



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

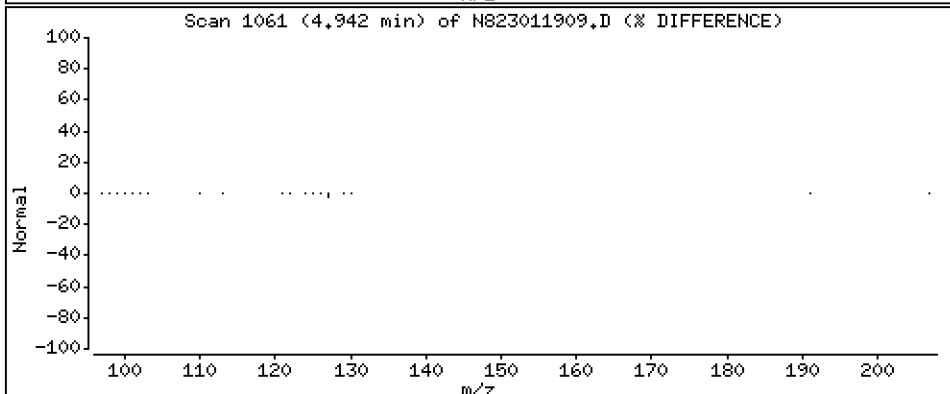
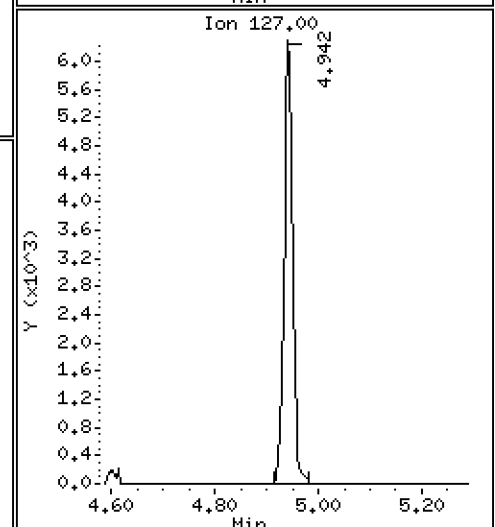
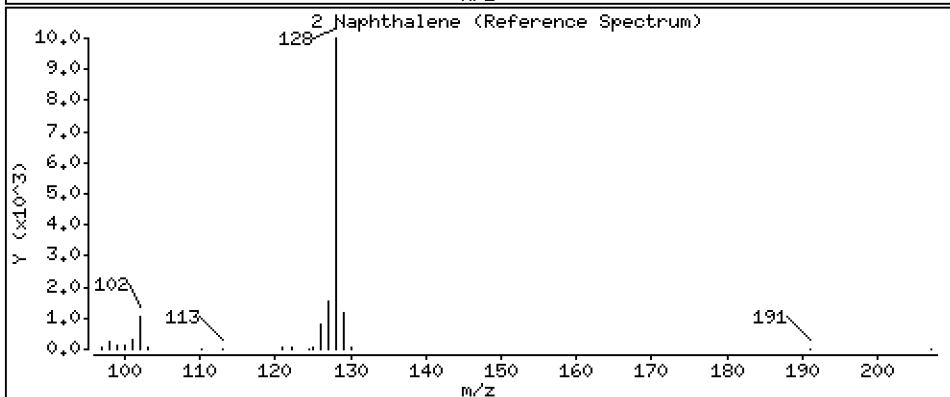
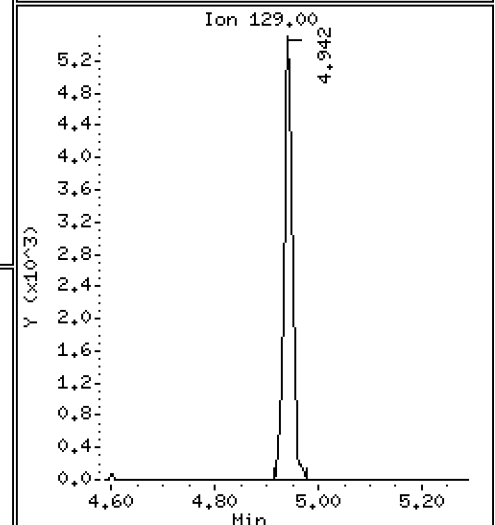
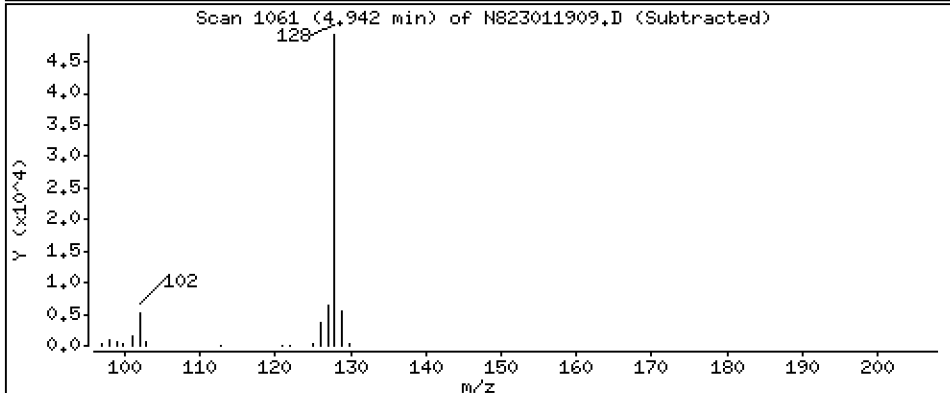
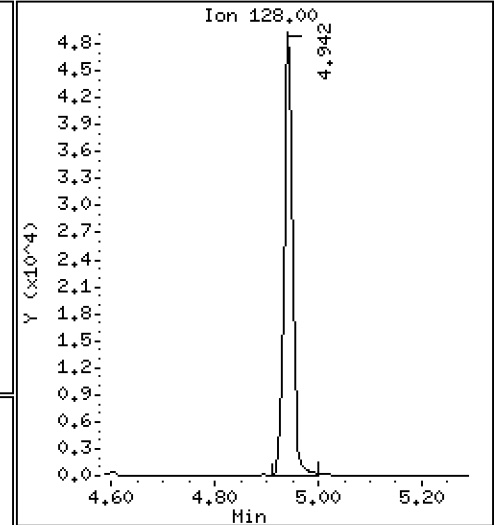
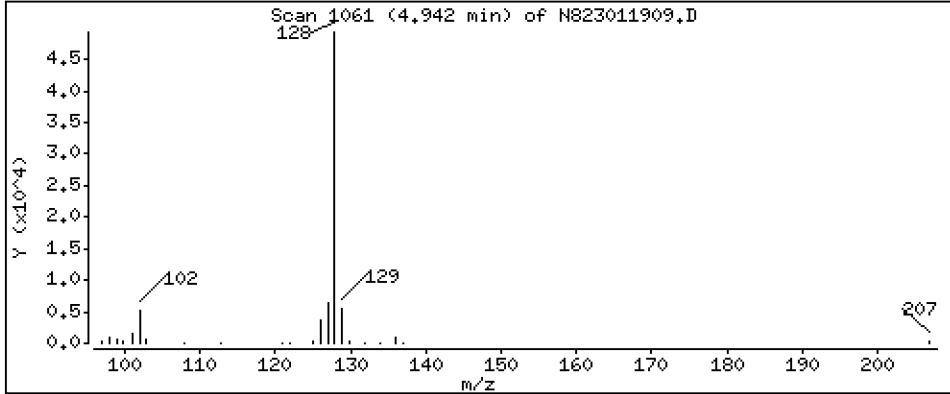
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 2,626 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

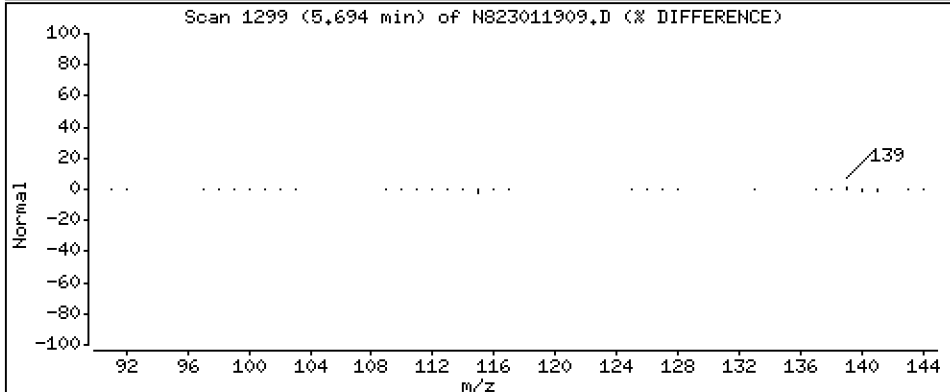
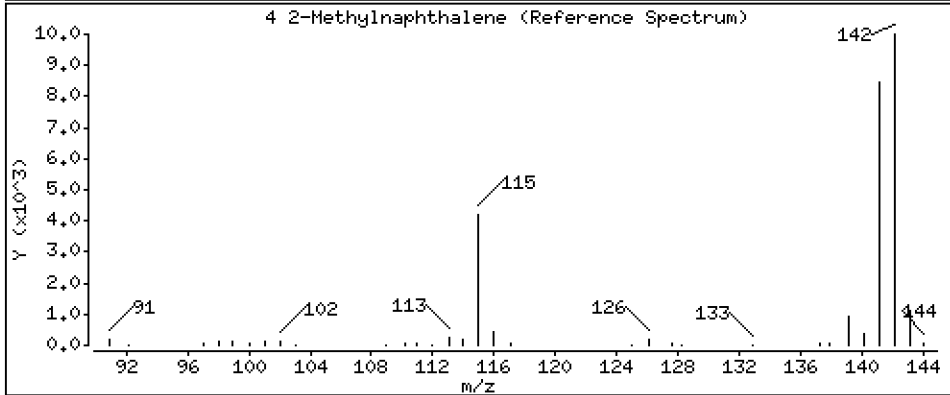
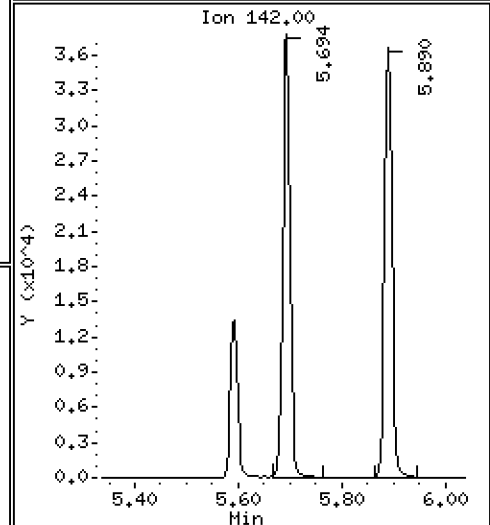
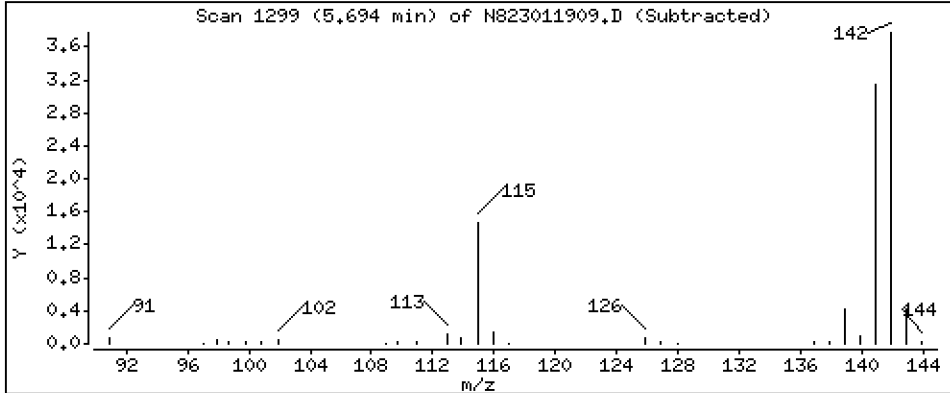
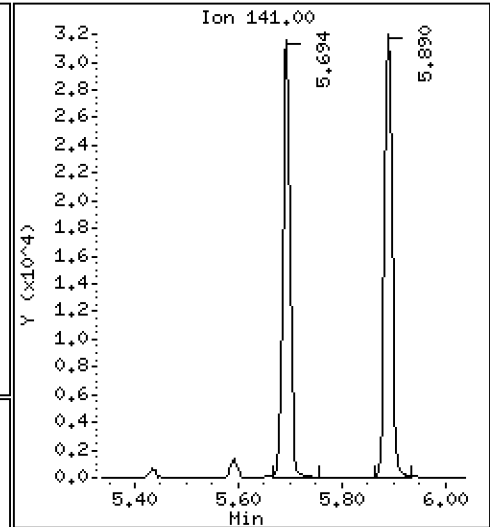
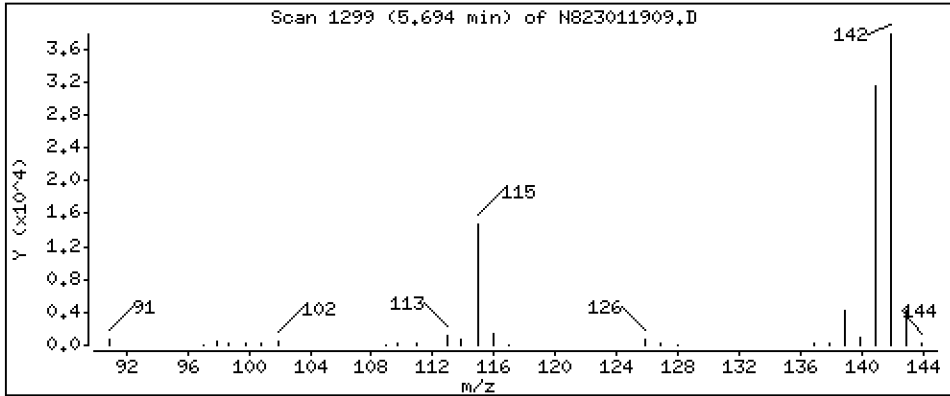
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

4 2-Methylnaphthalene

Concentration: 2,670 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

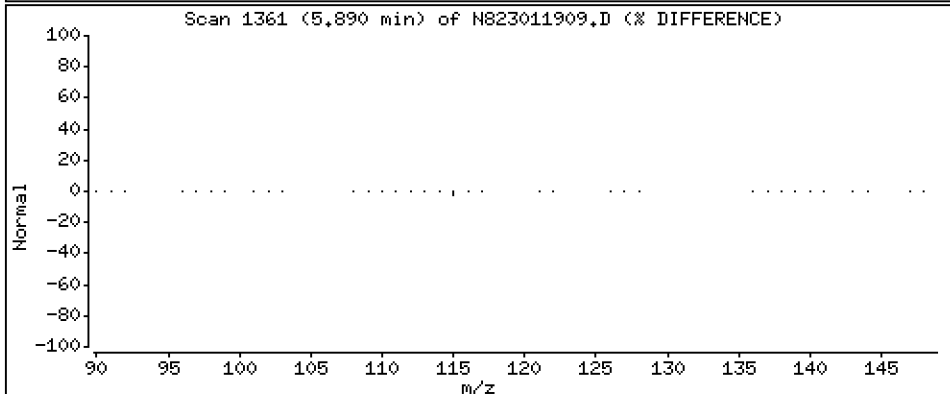
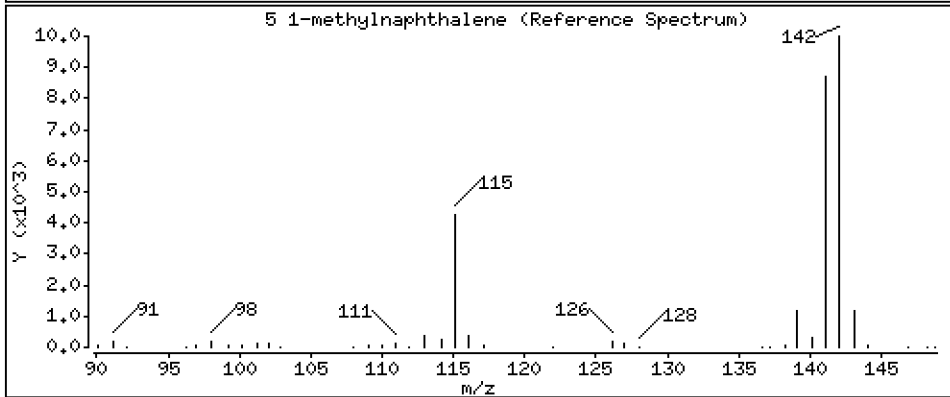
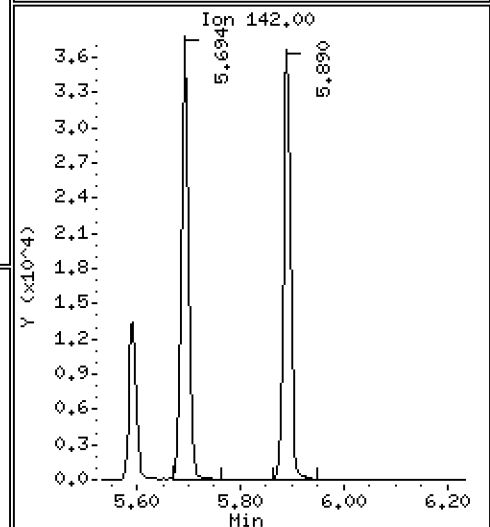
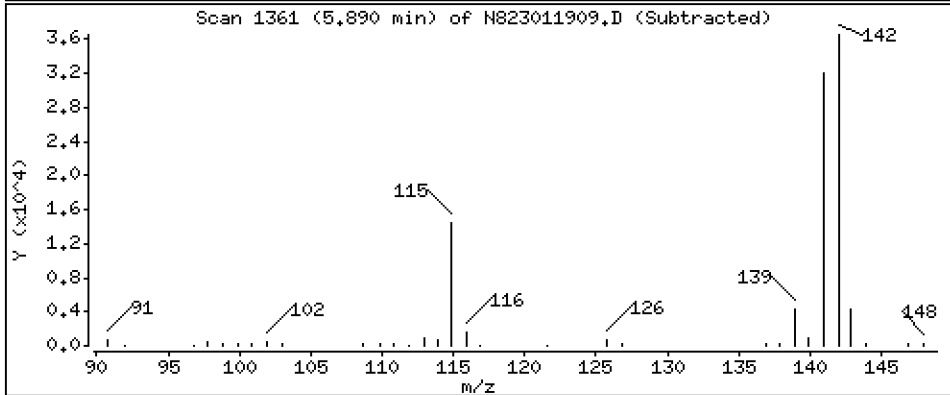
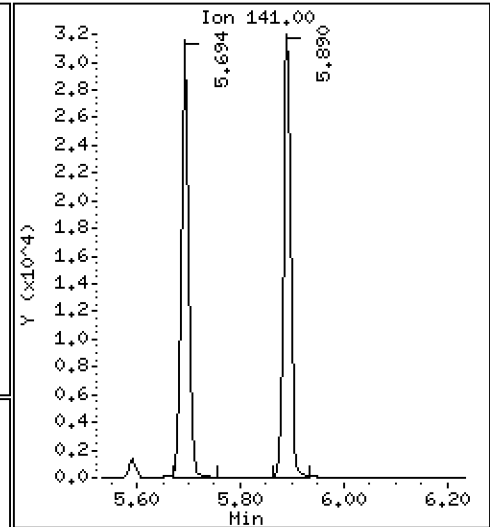
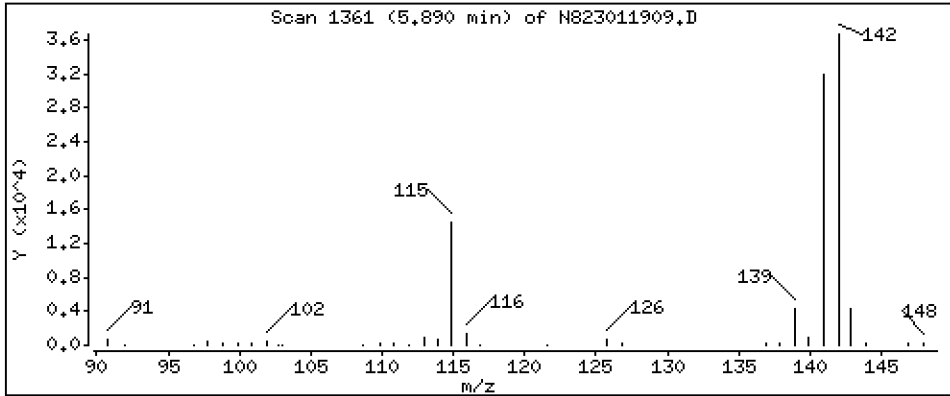
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

5 1-methylnaphthalene

Concentration: 2,649 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

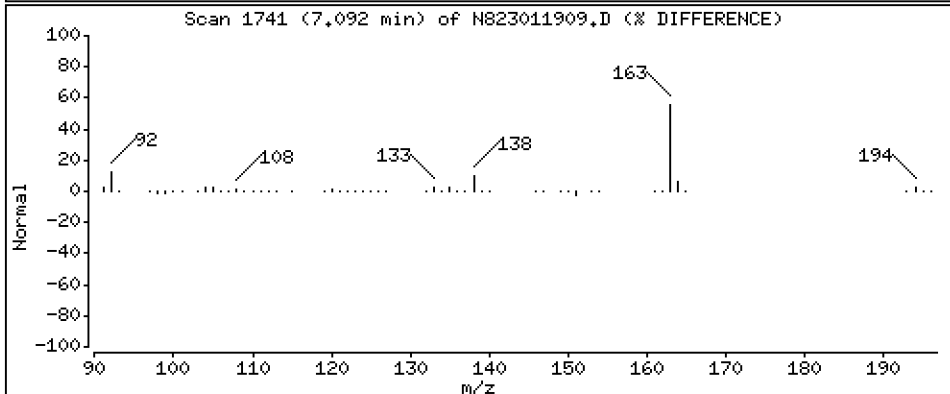
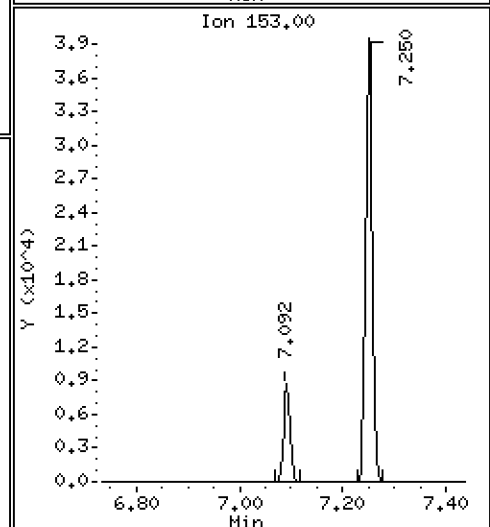
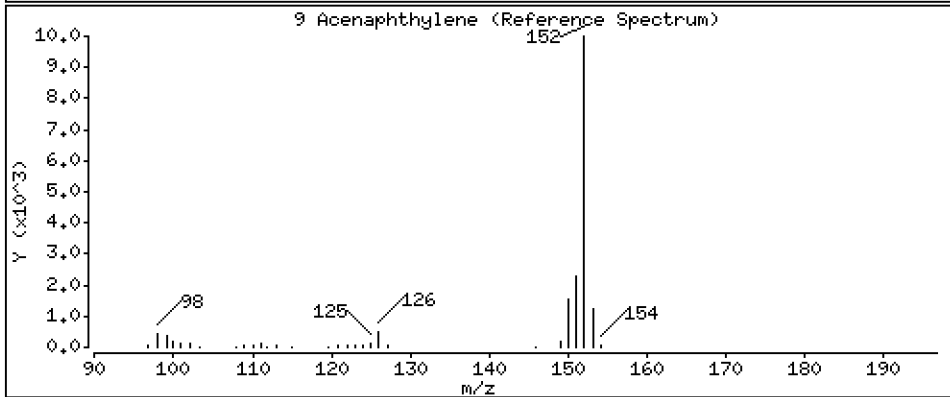
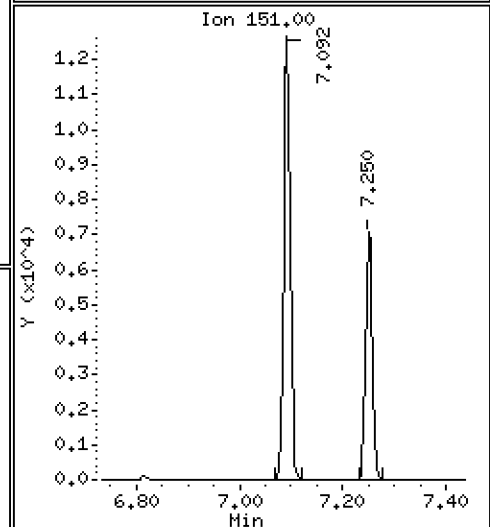
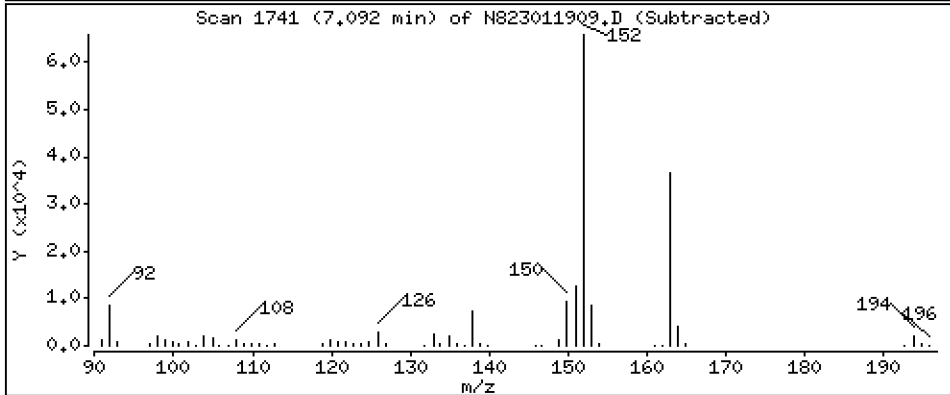
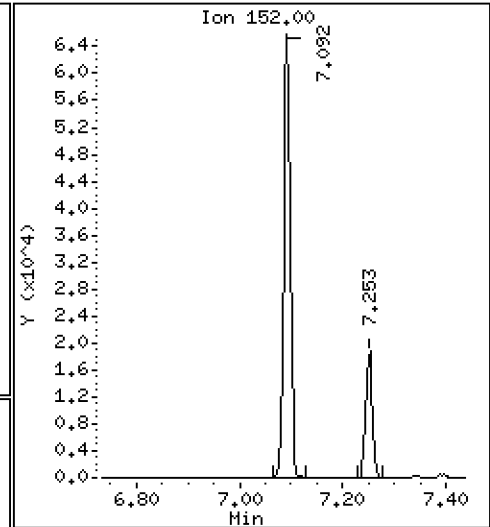
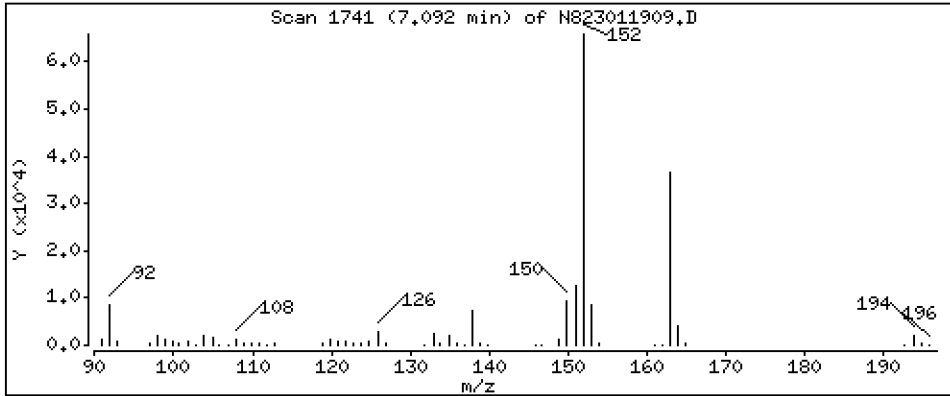
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 2,821 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

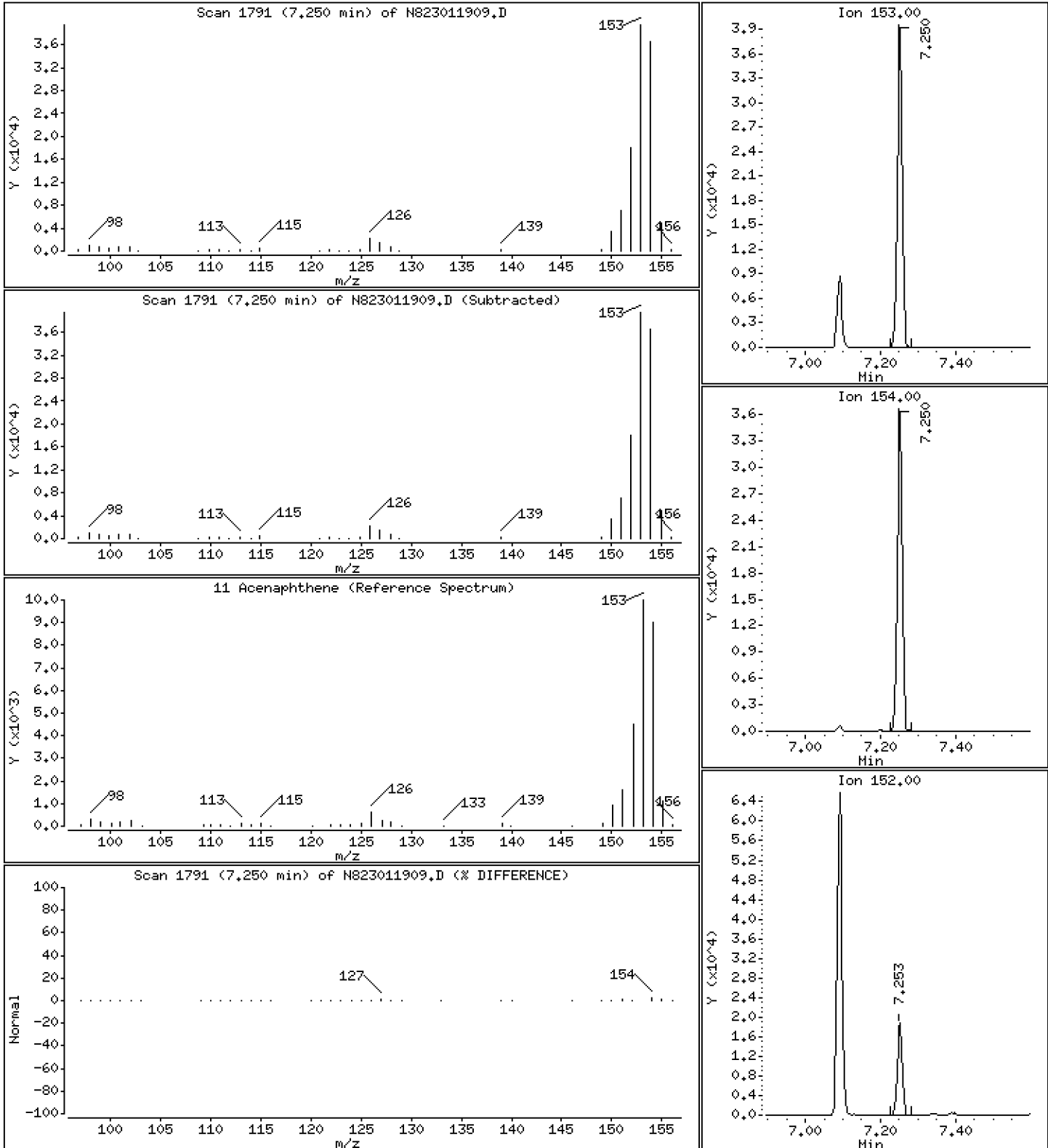
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

11 Acenaphthene

Concentration: 2,600 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

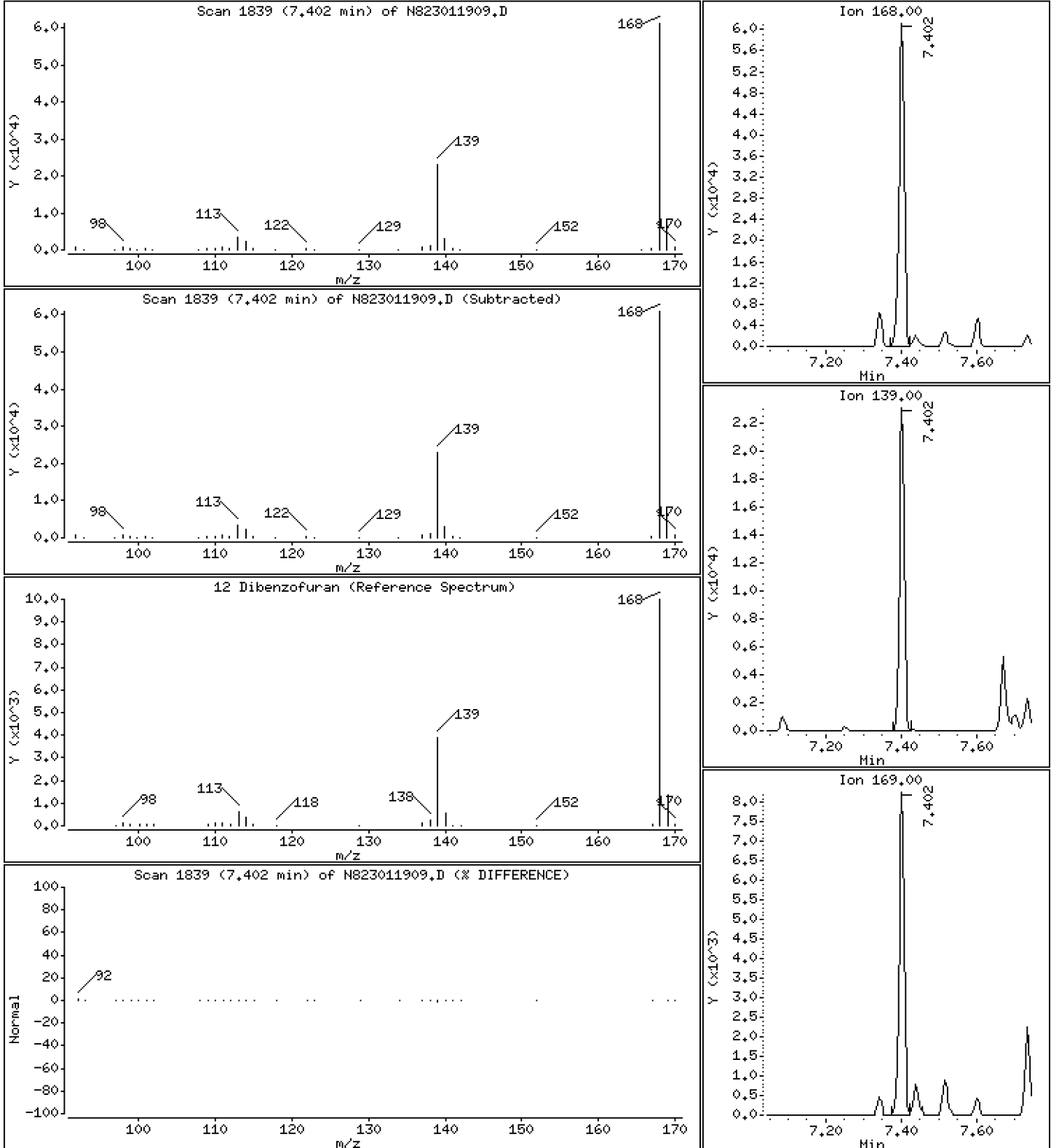
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 2,860 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

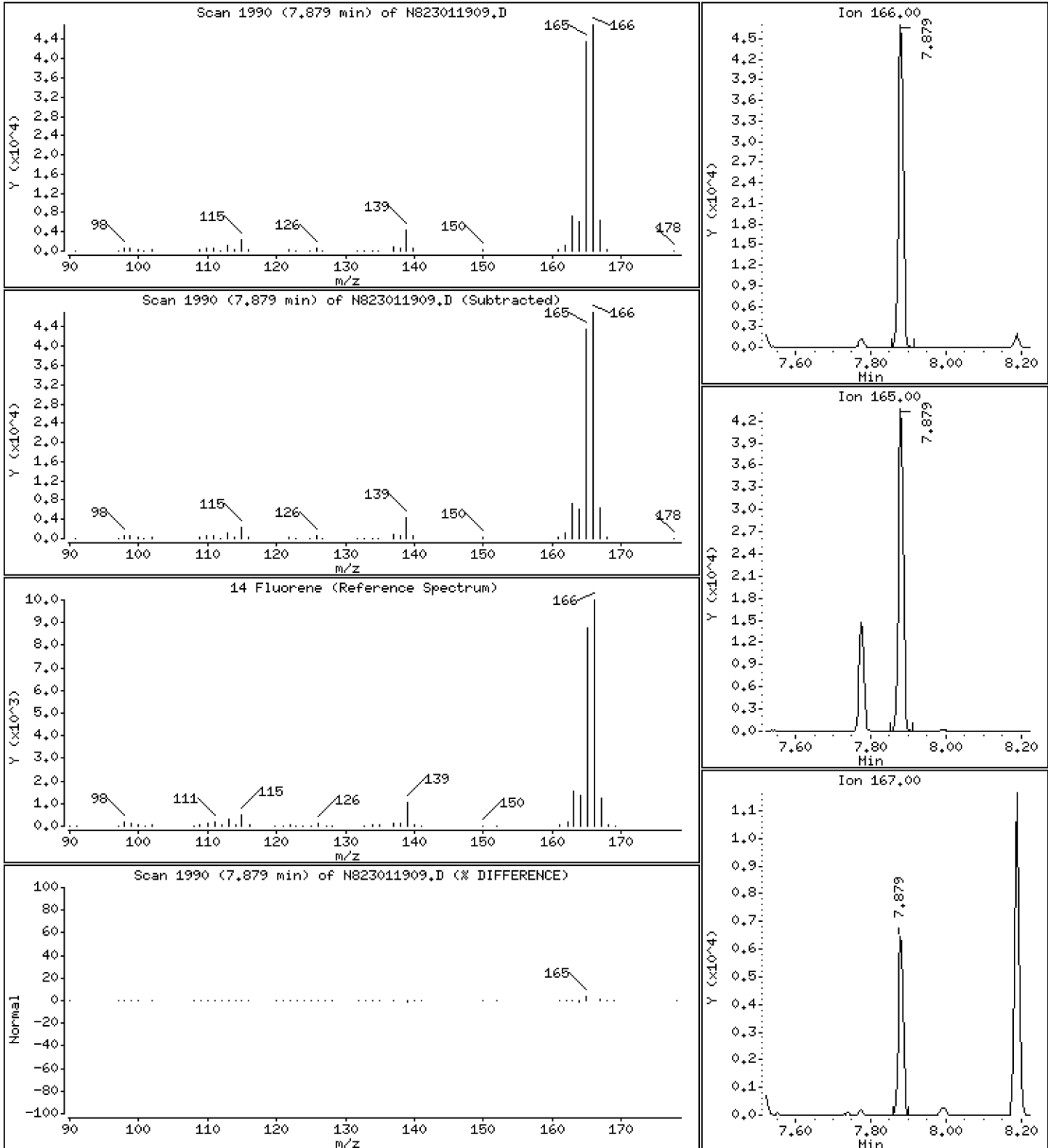
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

14 Fluorene

Concentration: 2,631 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

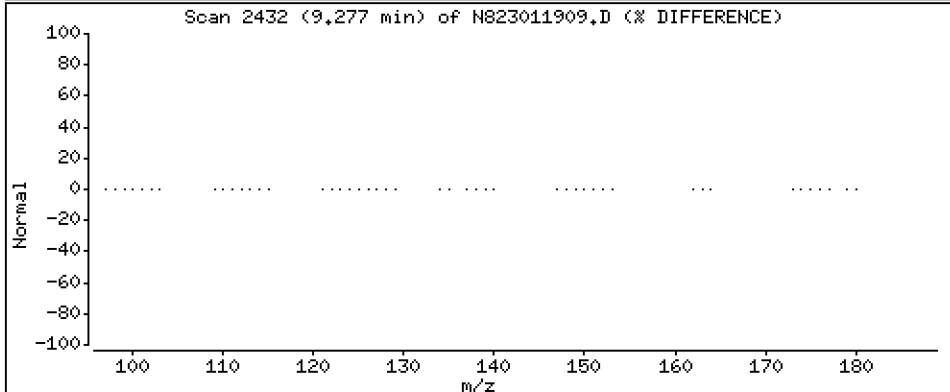
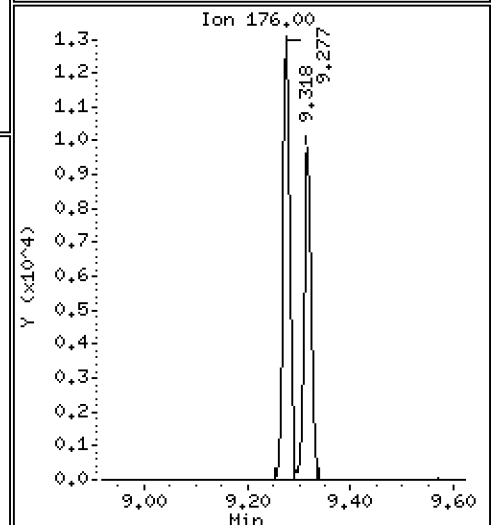
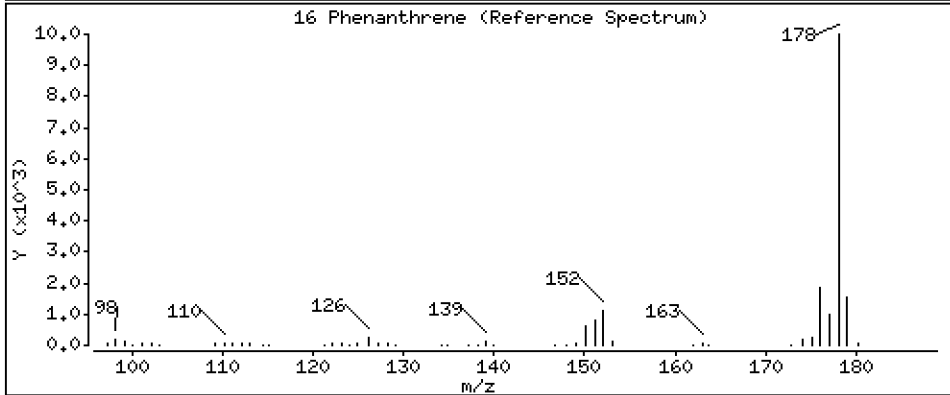
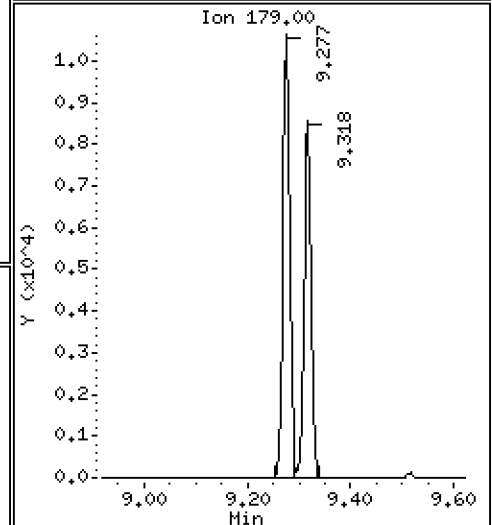
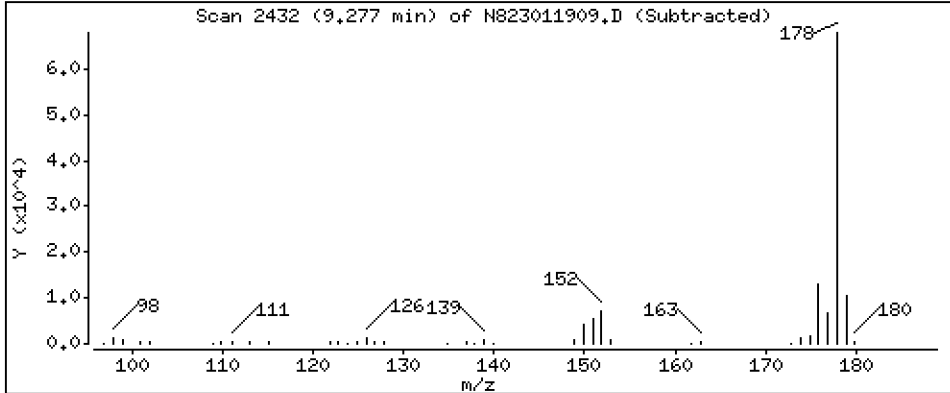
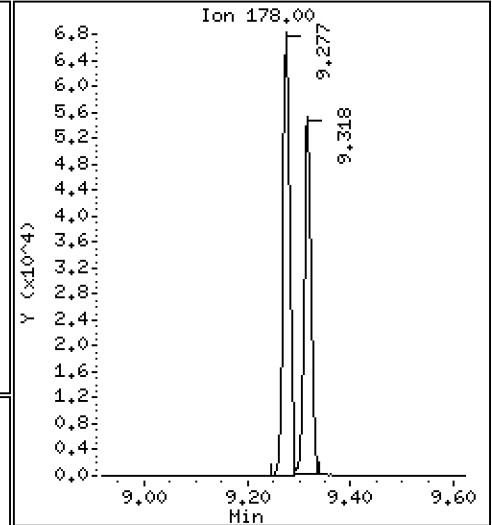
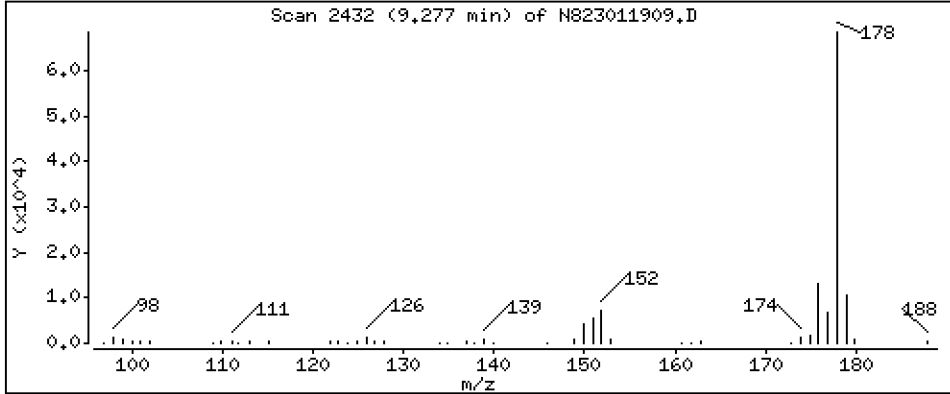
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

16 Phenanthrene

Concentration: 2,448 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

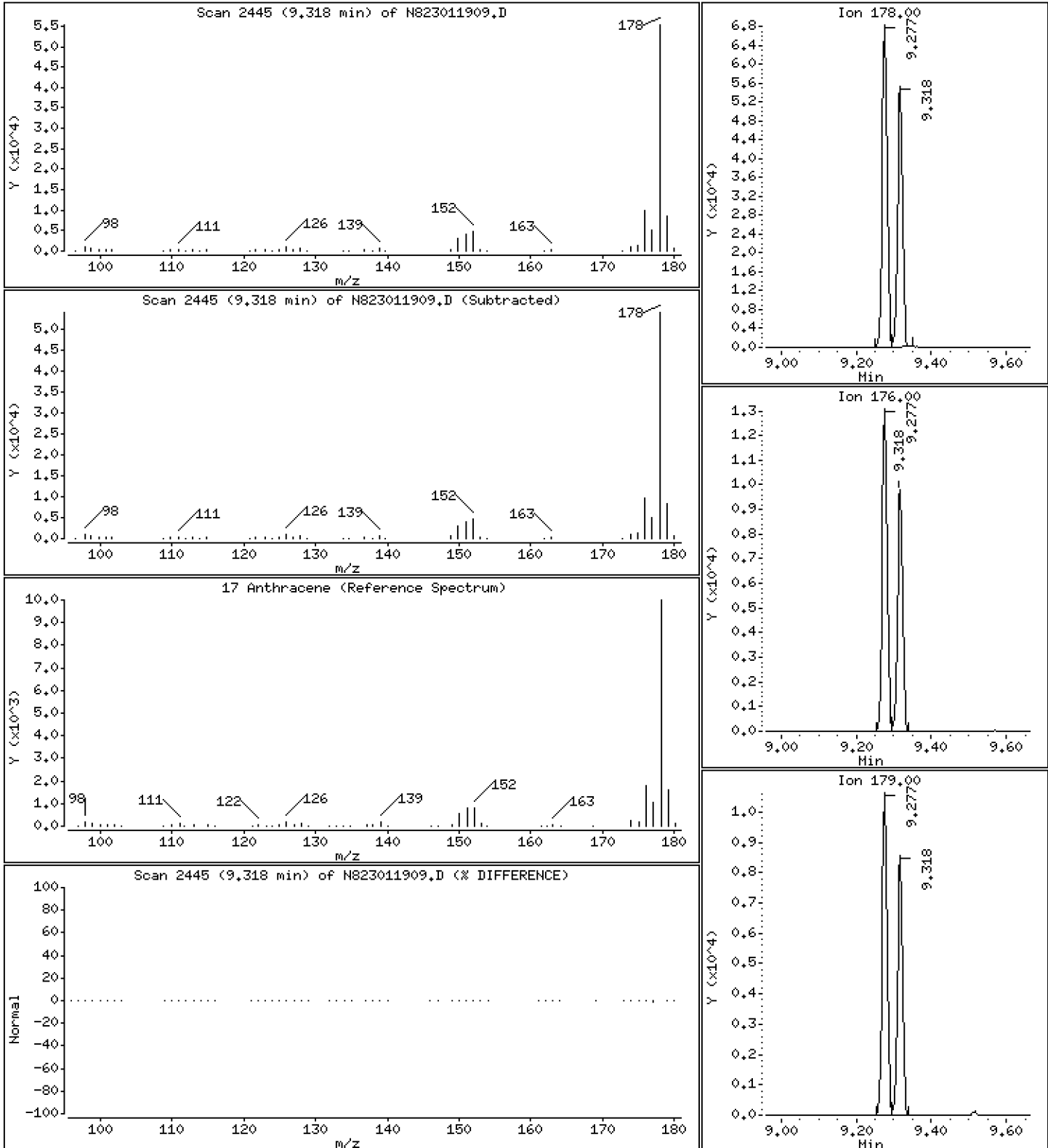
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

17 Anthracene

Concentration: 2,270 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

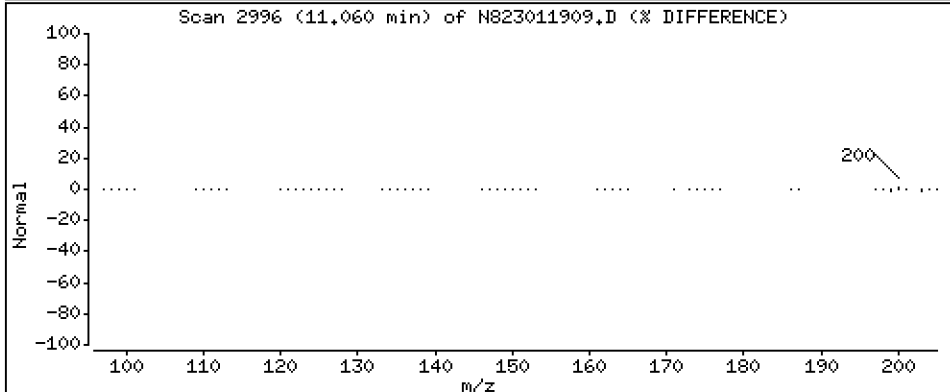
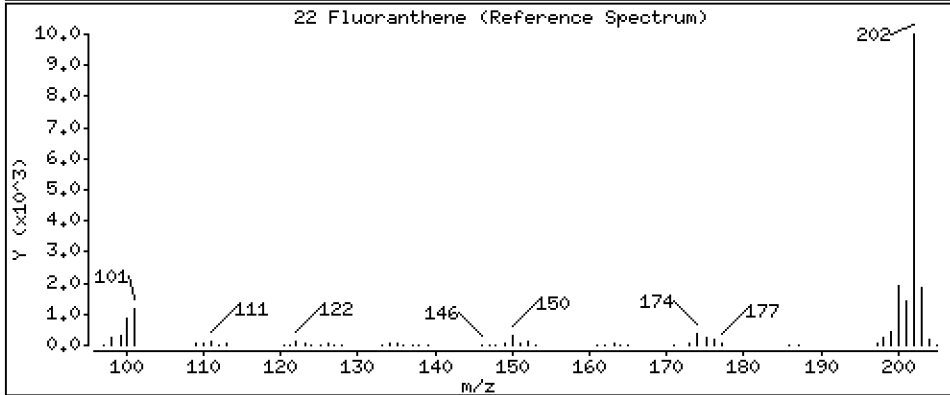
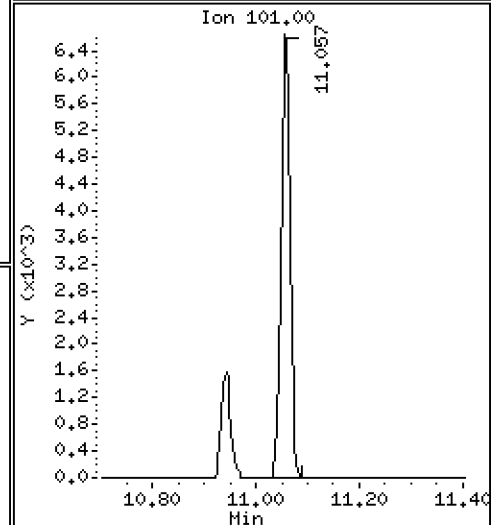
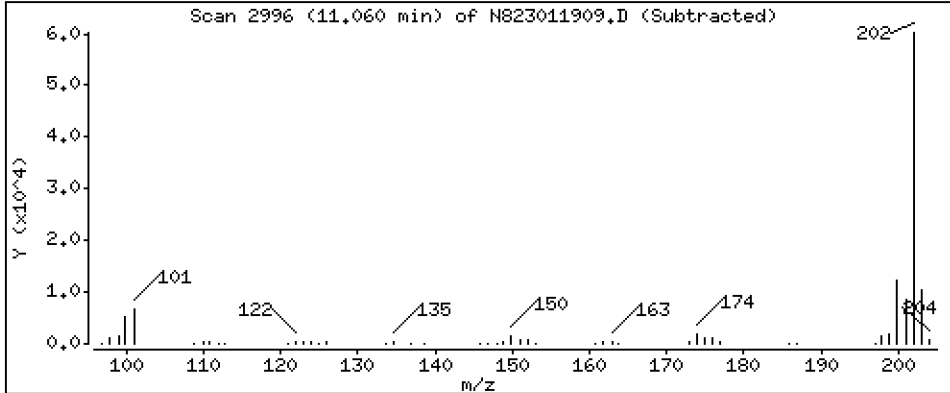
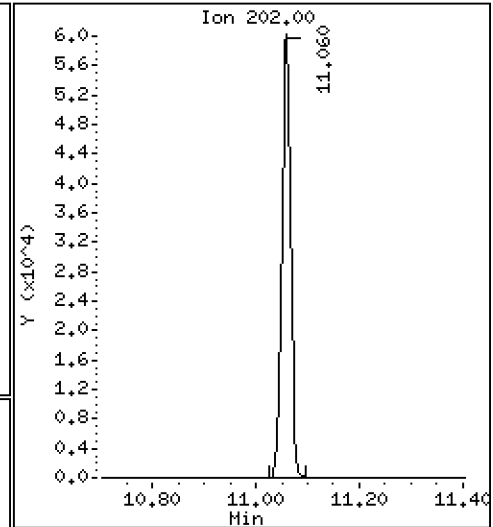
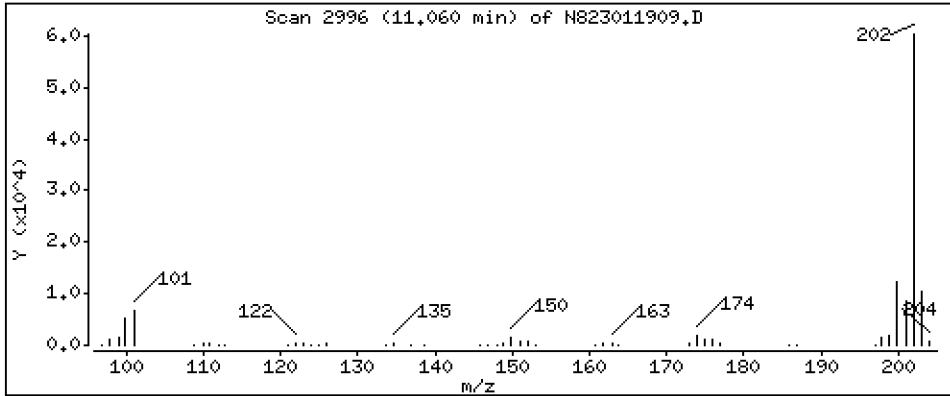
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,653 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

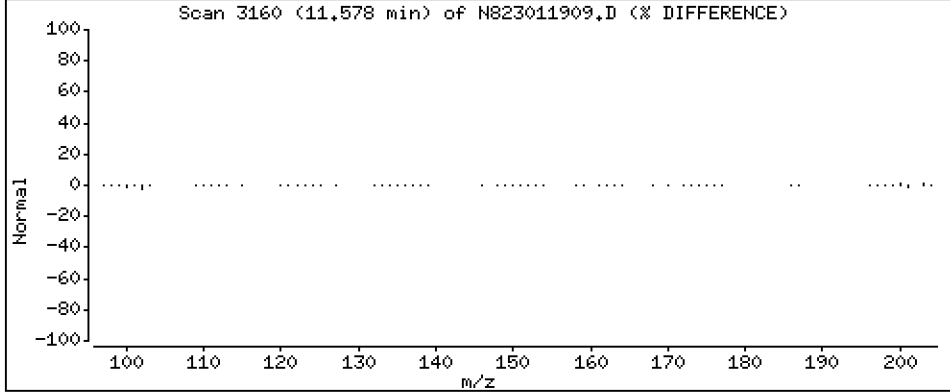
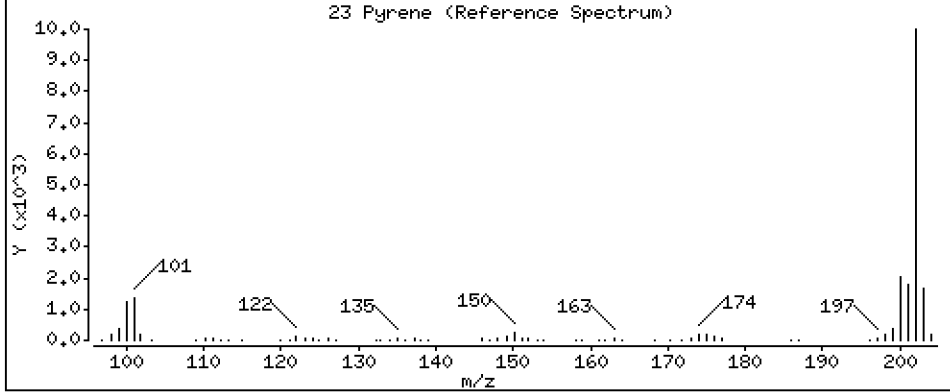
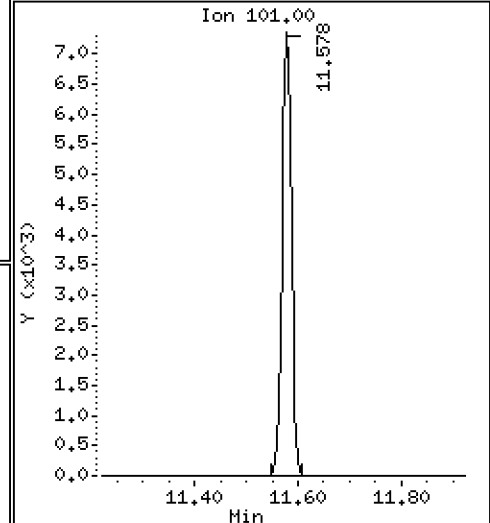
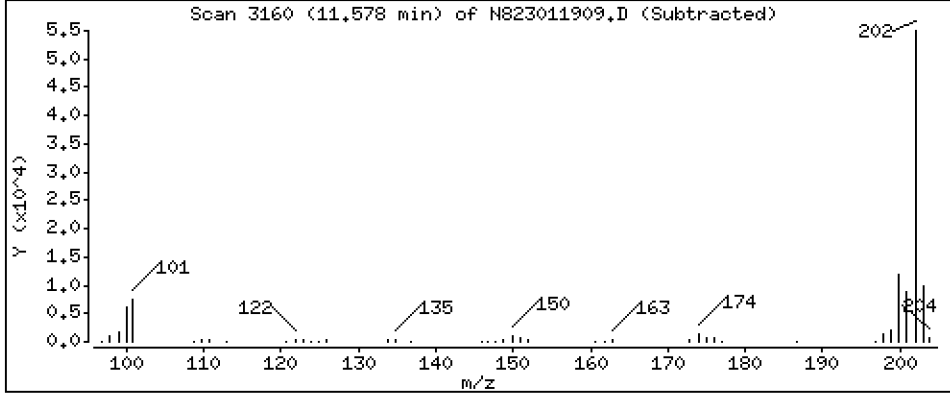
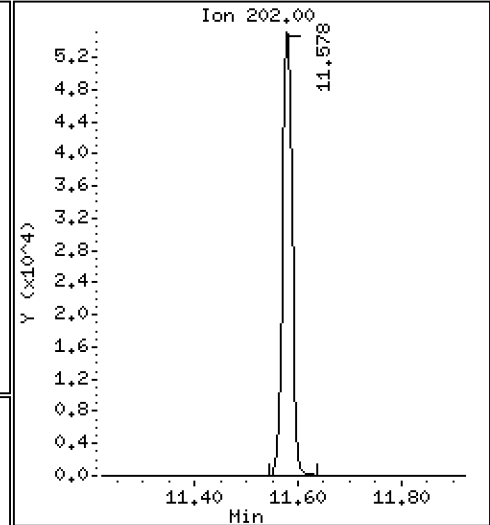
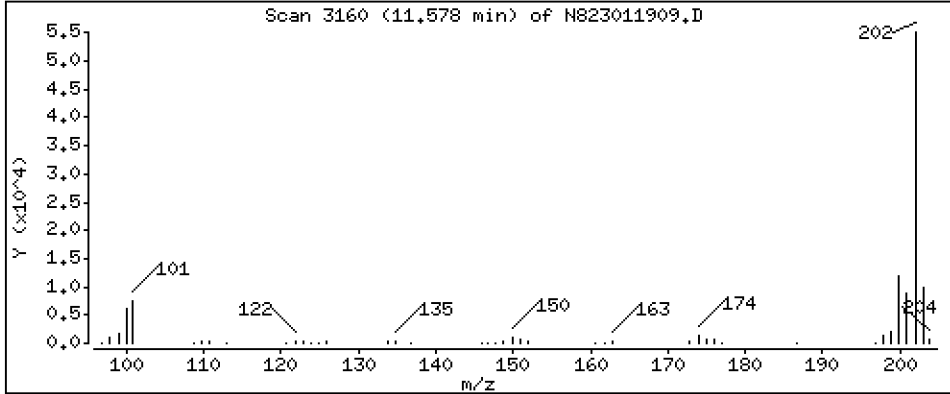
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 2,462 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

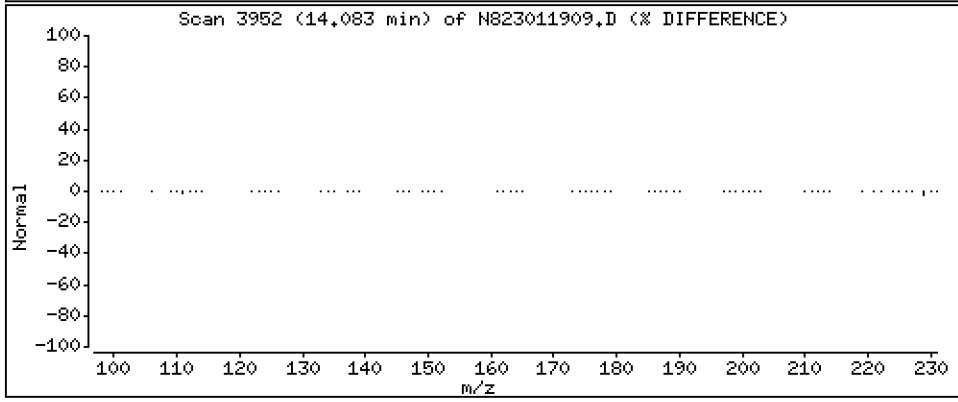
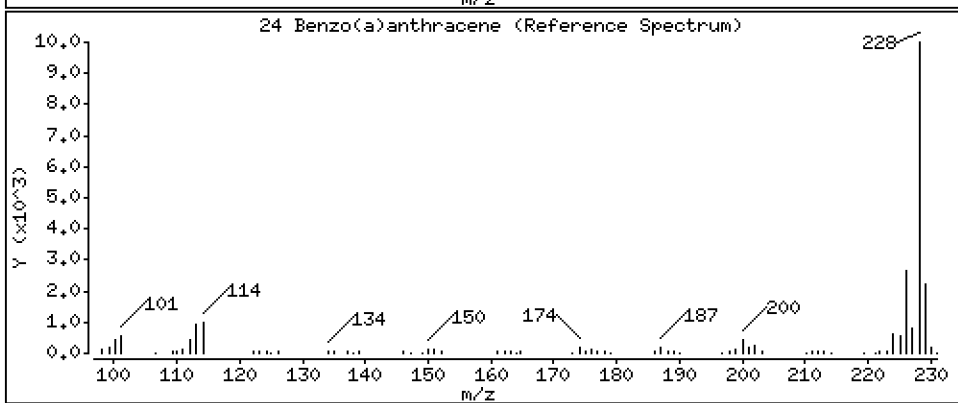
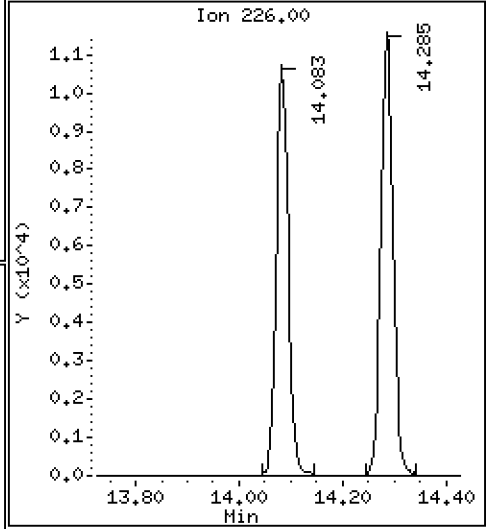
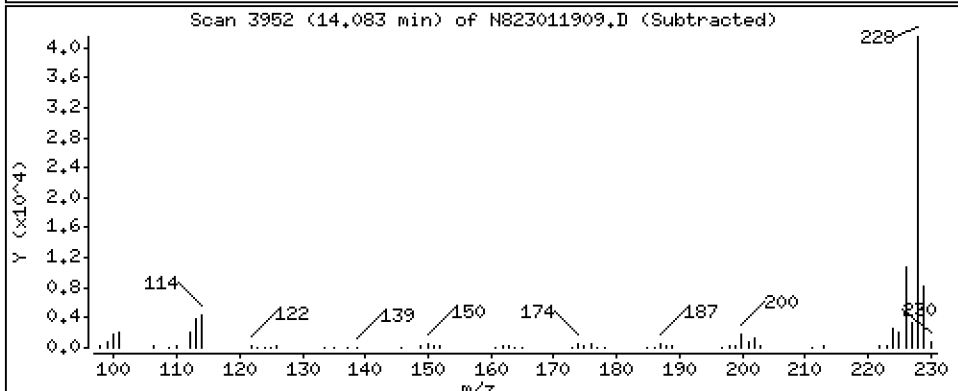
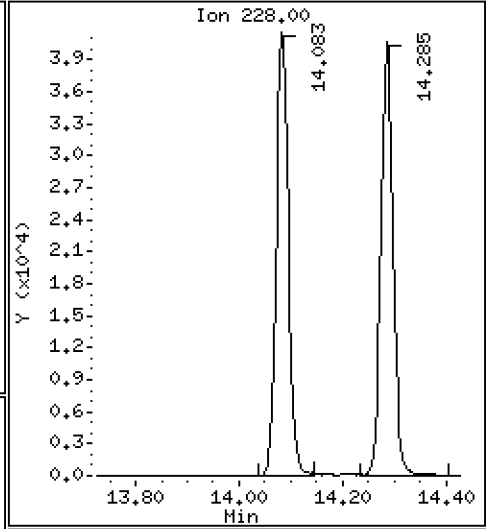
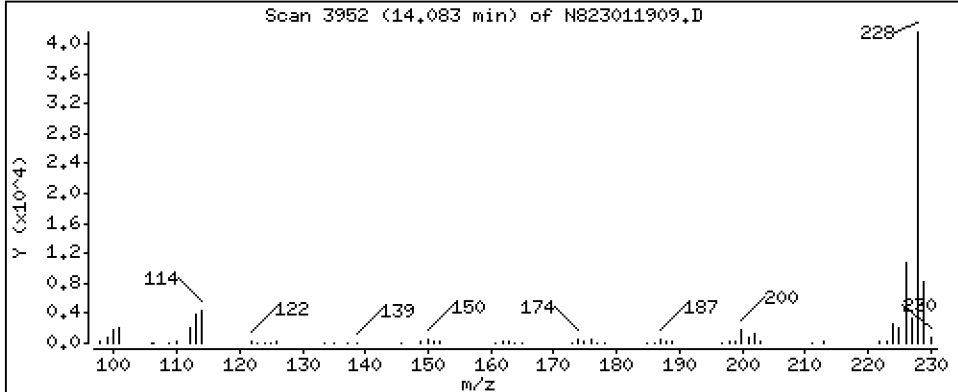
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

24 Benzo(a)anthracene

Concentration: 2,587 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

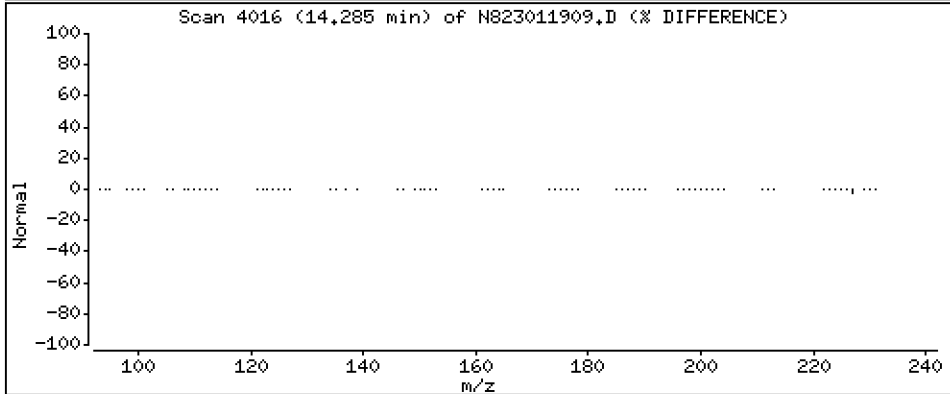
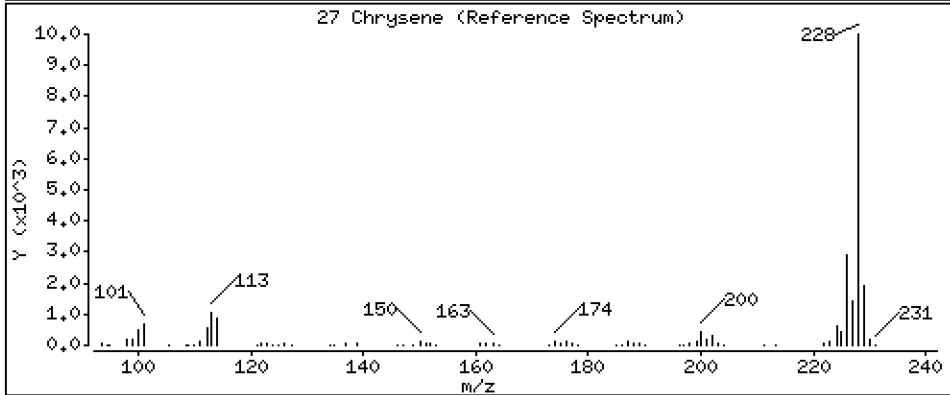
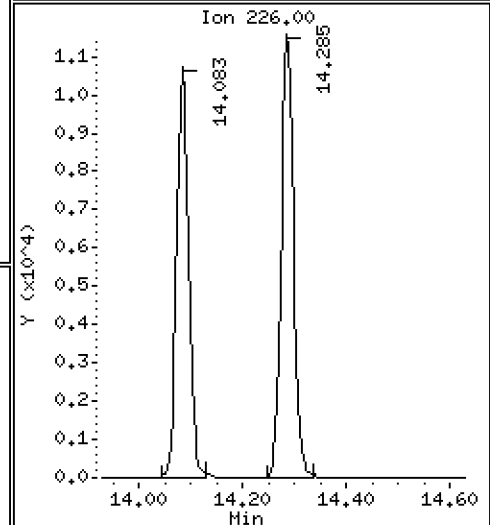
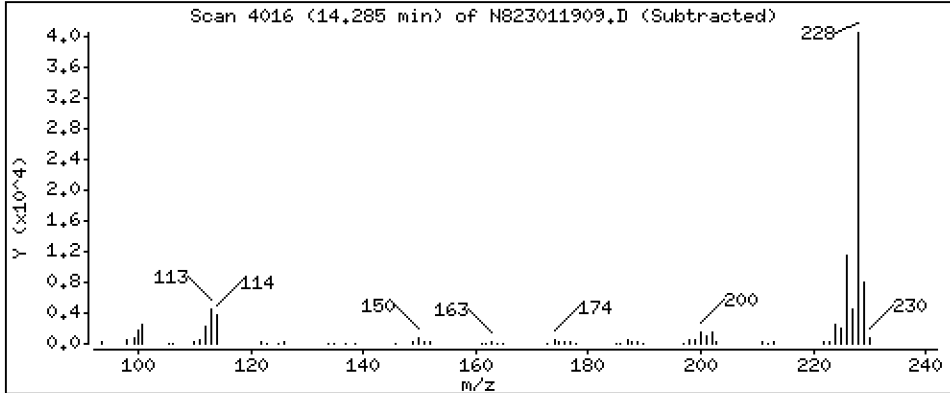
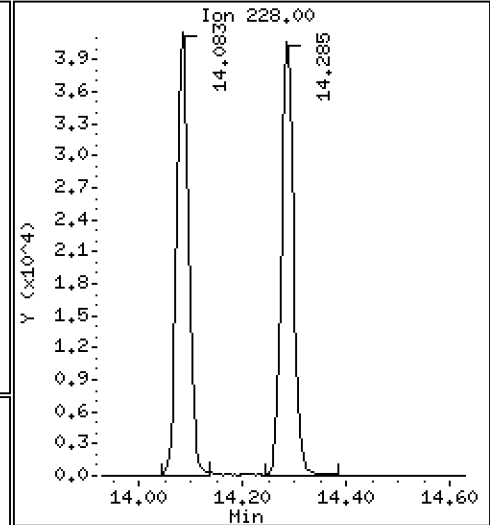
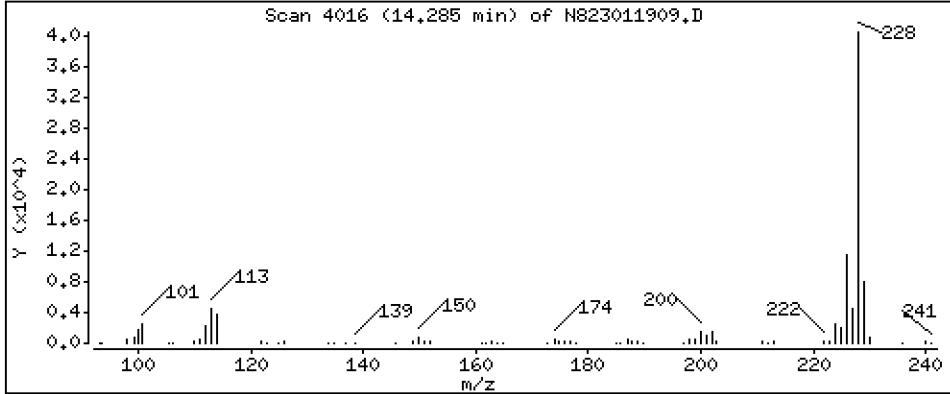
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

27 Chrysene

Concentration: 2,400 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

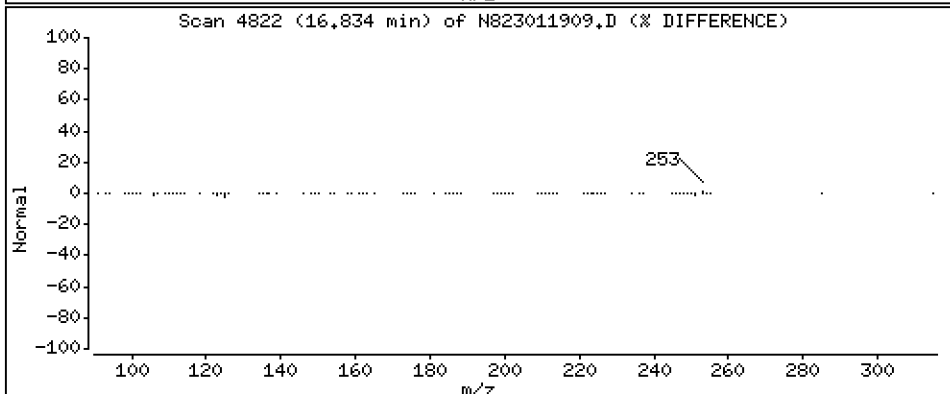
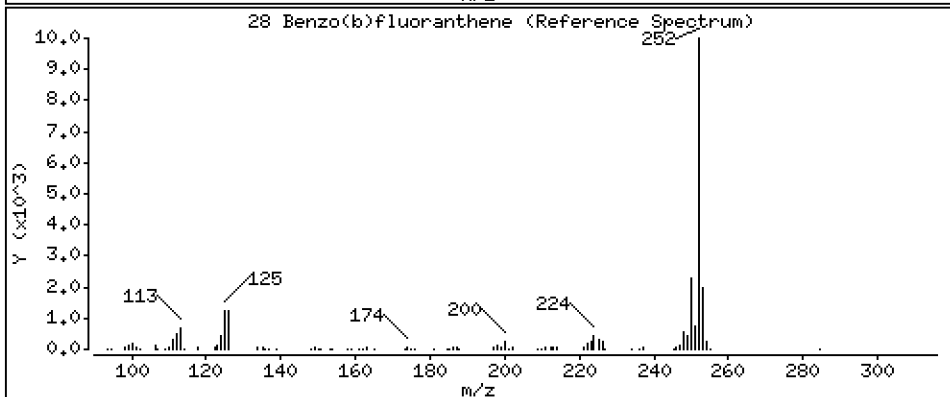
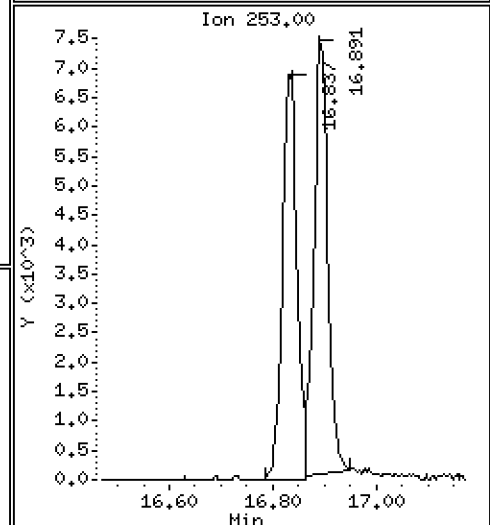
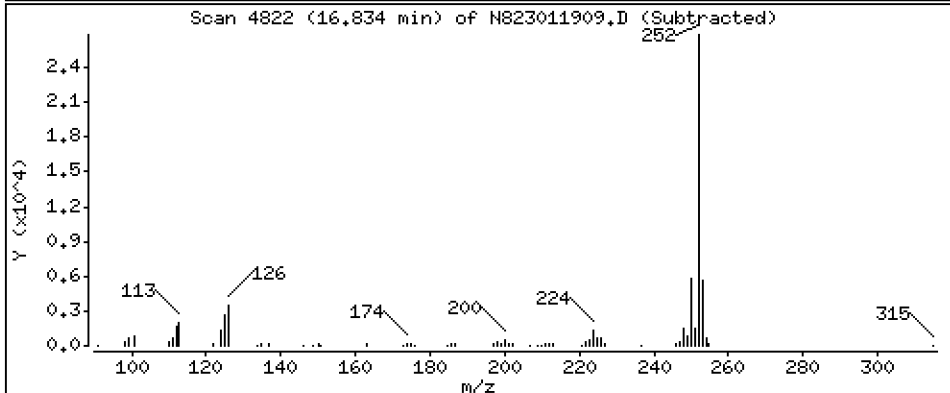
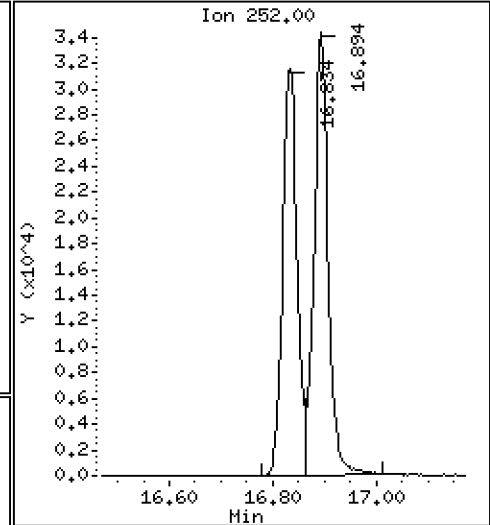
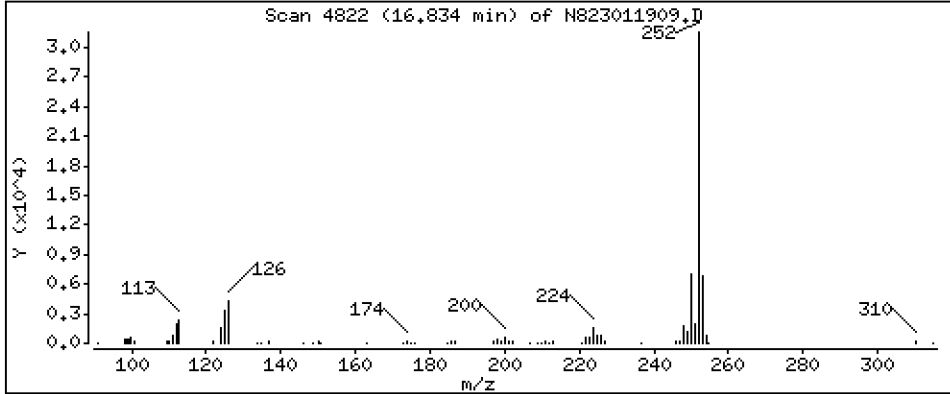
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 2,507 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

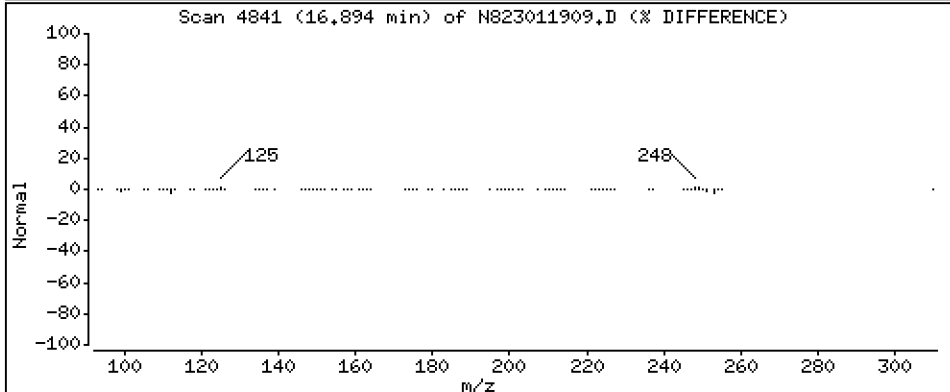
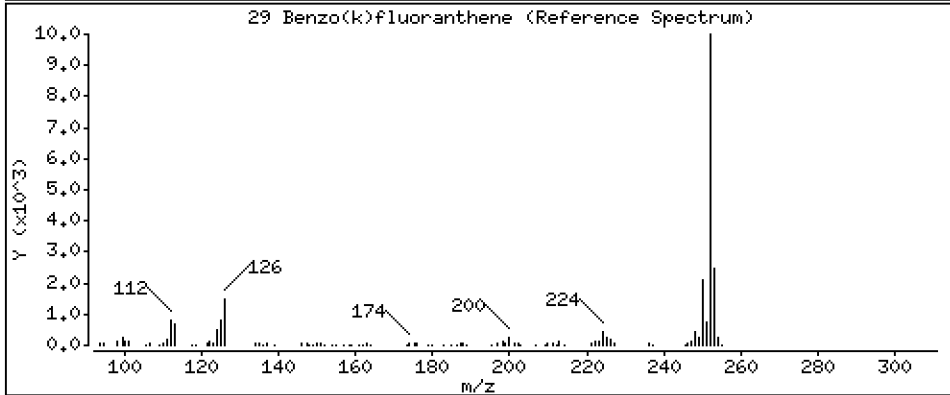
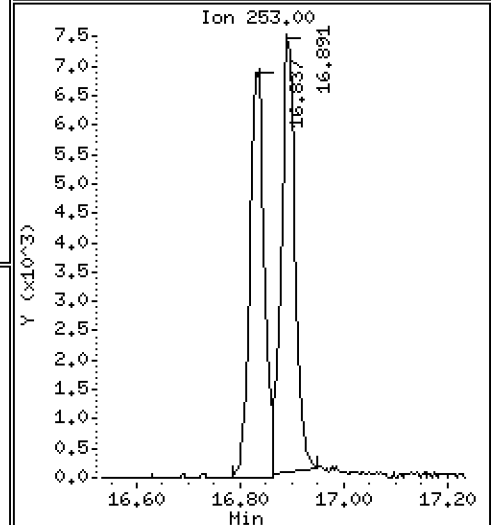
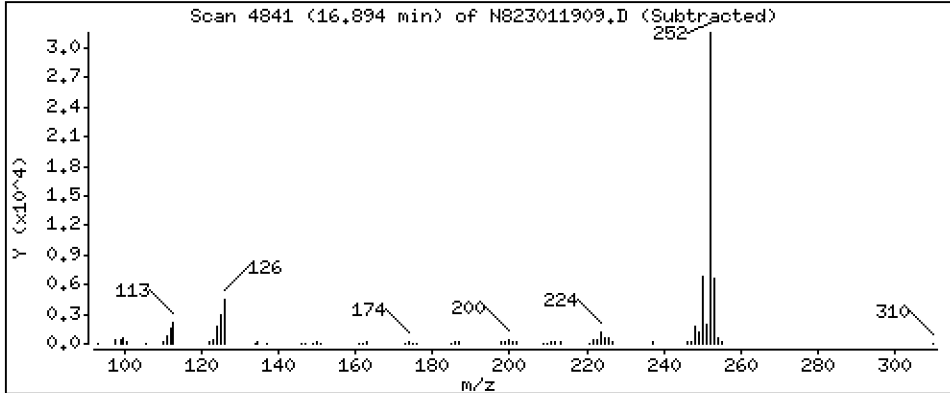
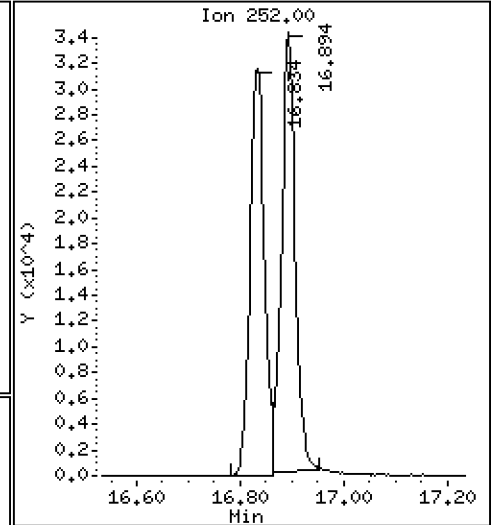
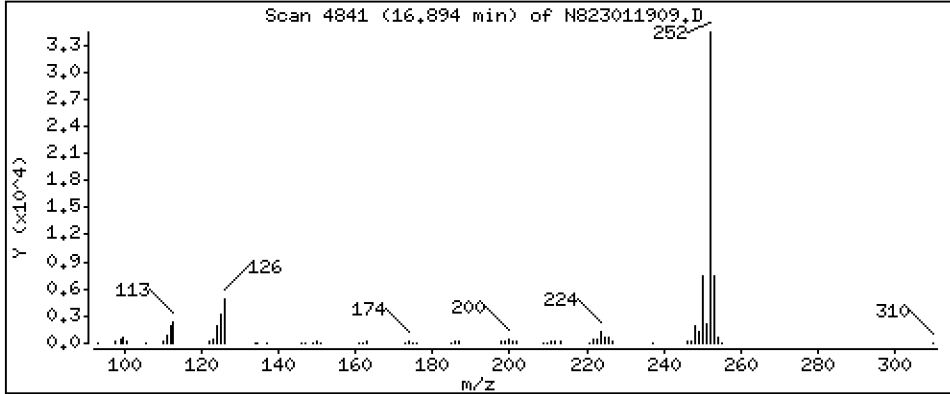
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

29 Benzo(k)fluoranthene

Concentration: 2,656 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

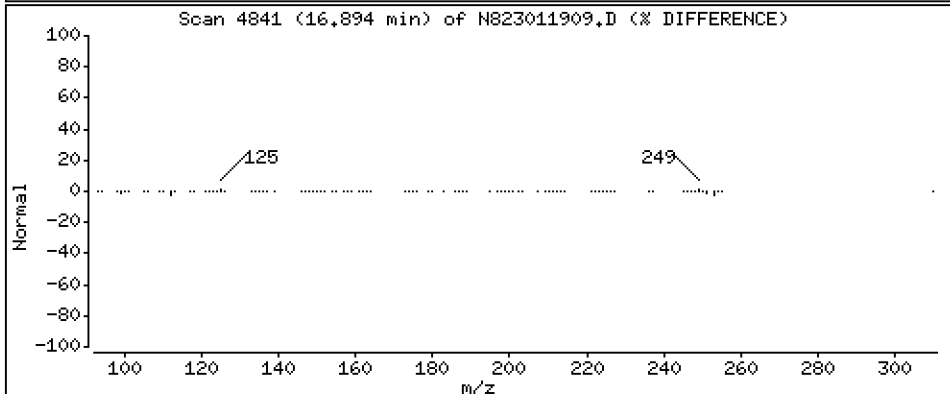
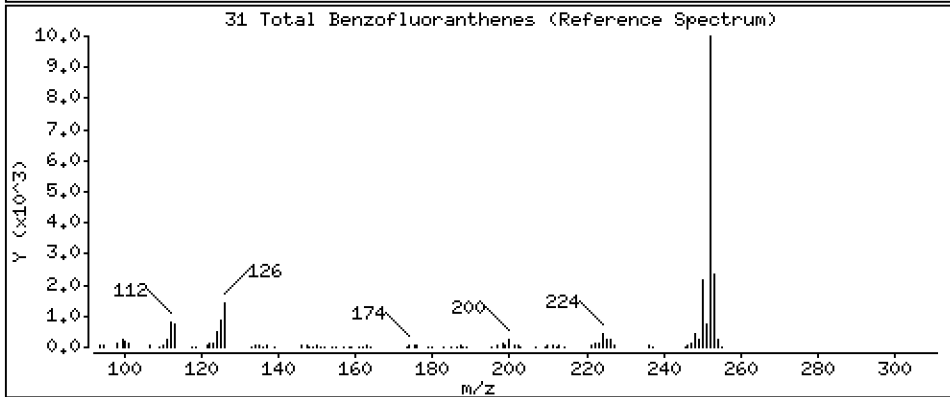
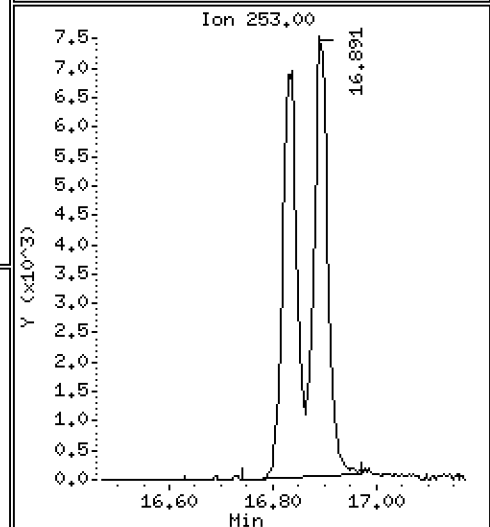
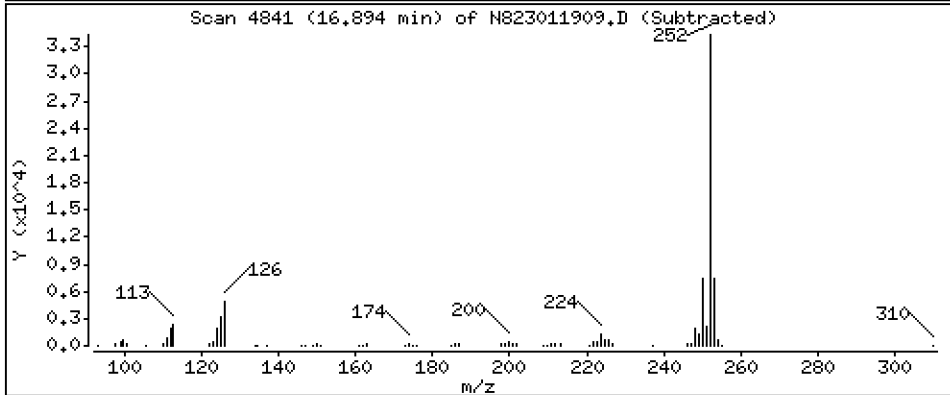
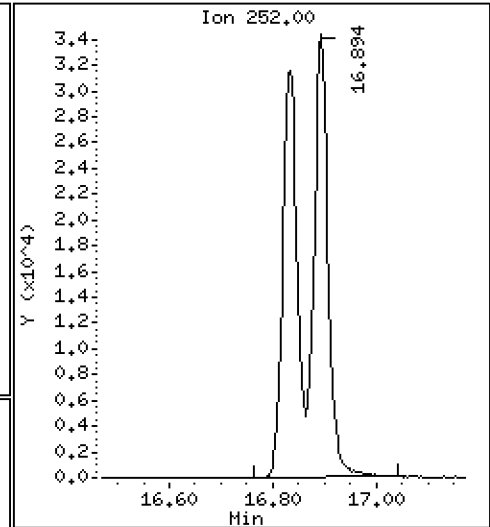
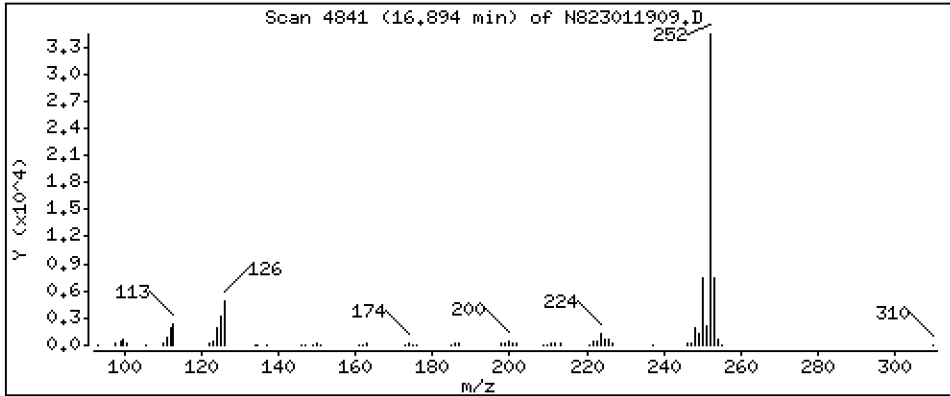
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 5,480 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

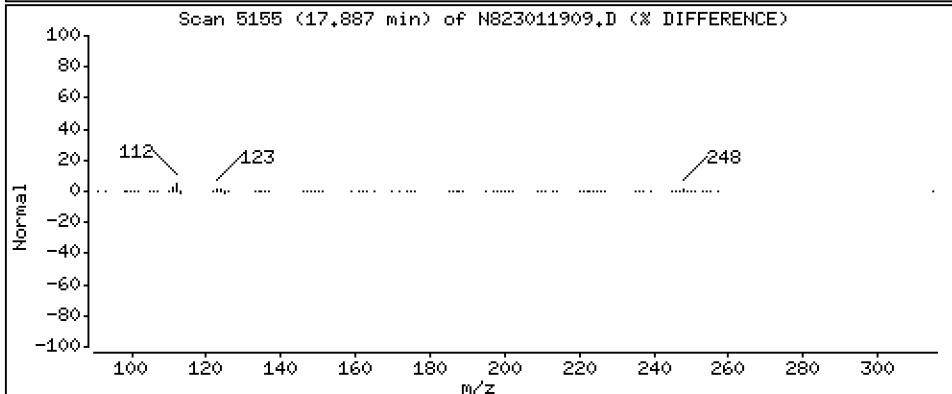
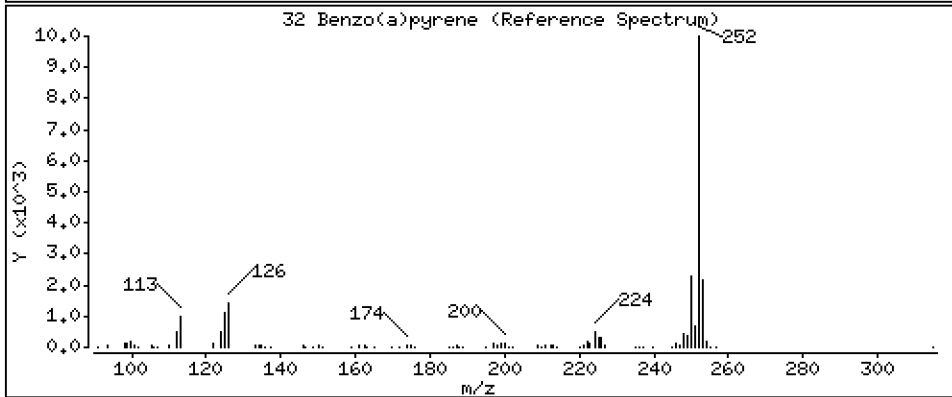
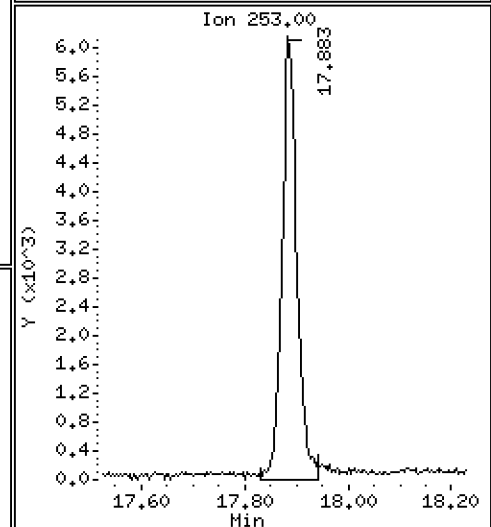
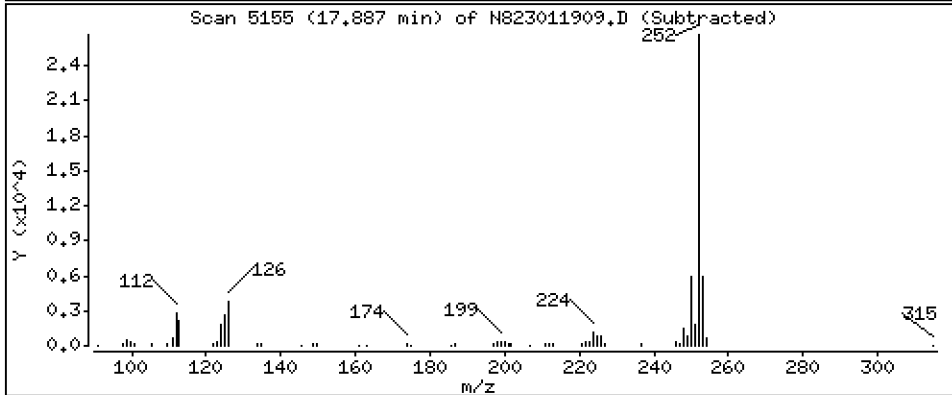
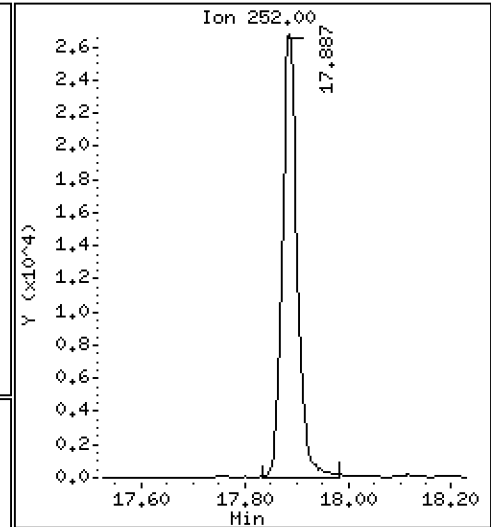
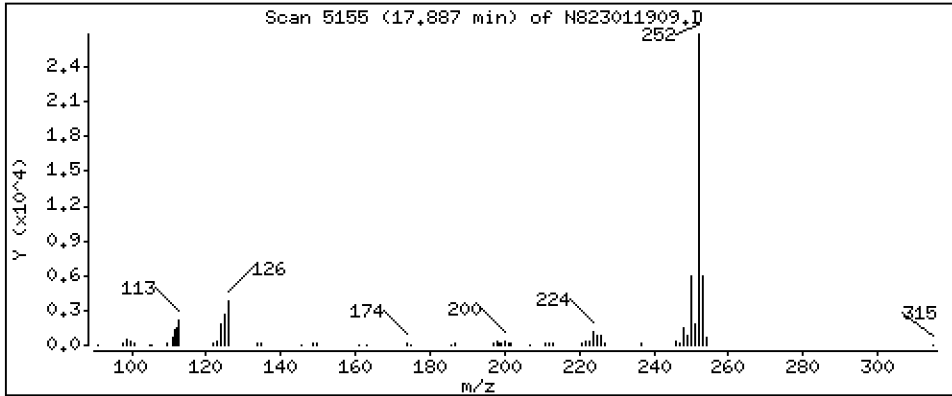
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 2,572 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

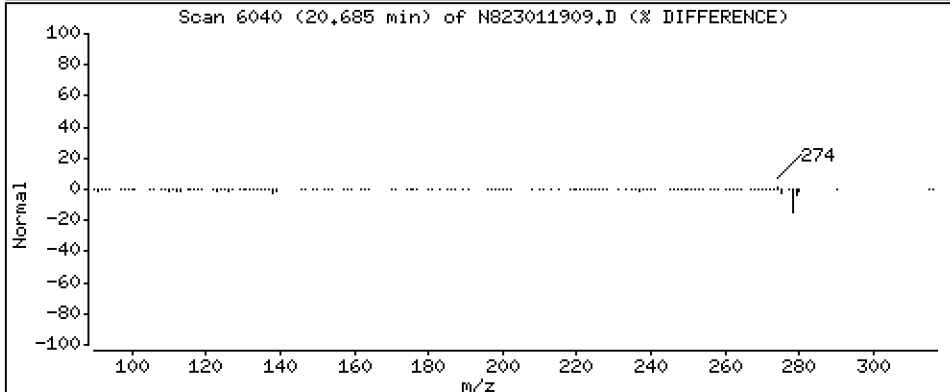
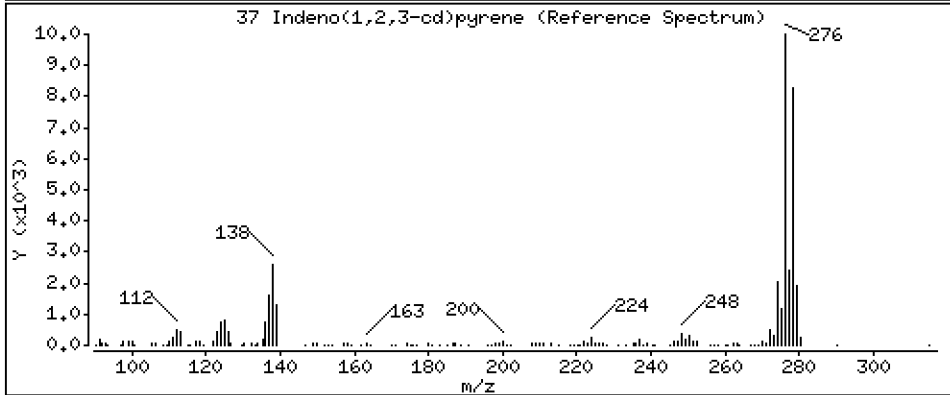
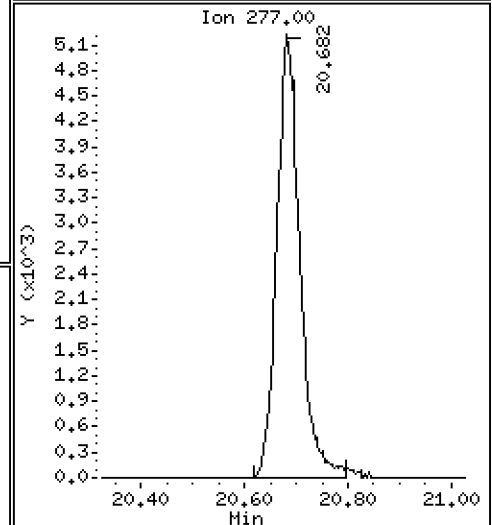
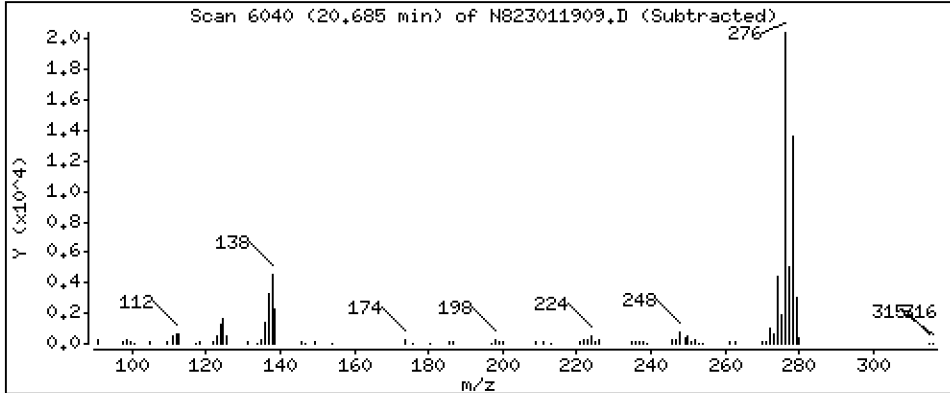
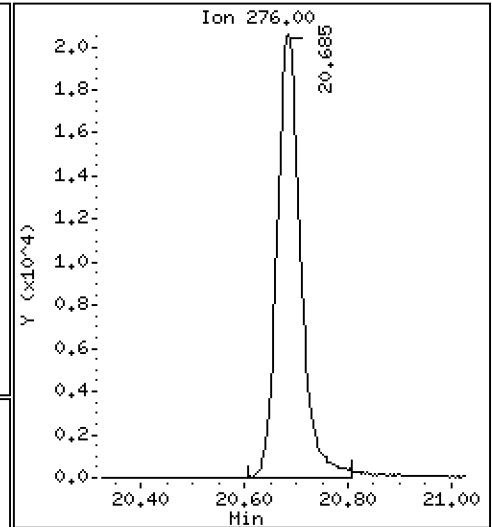
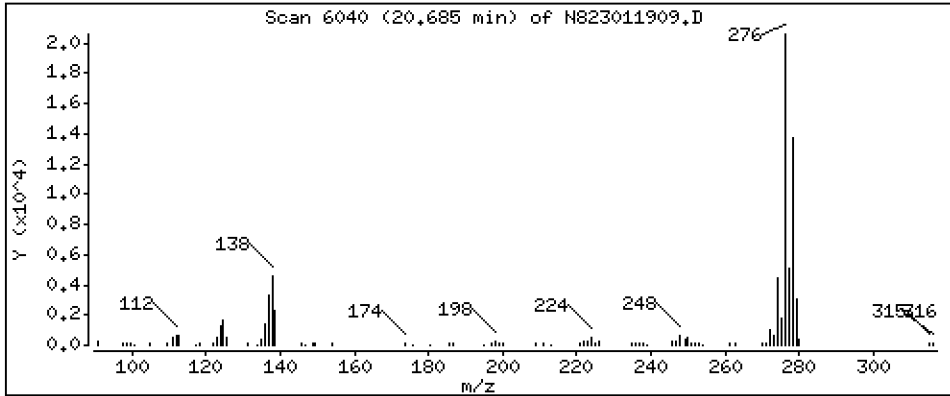
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 2,689 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

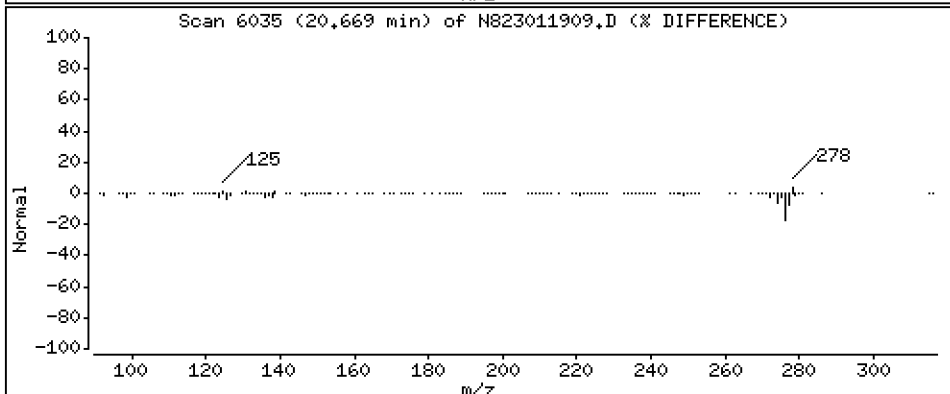
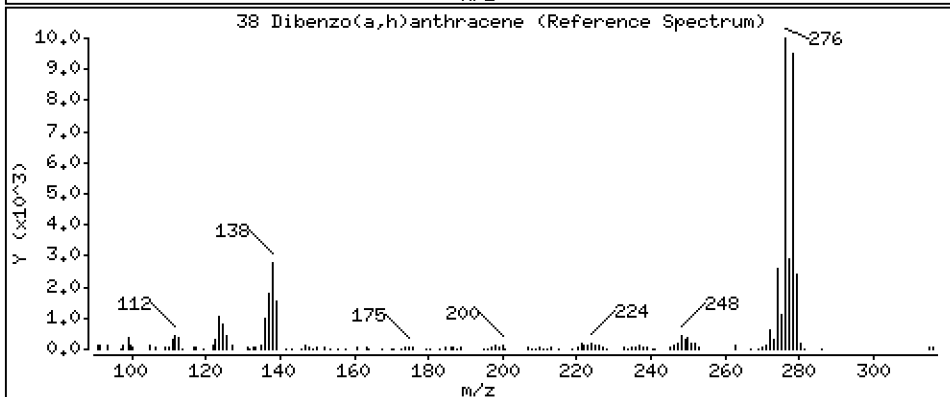
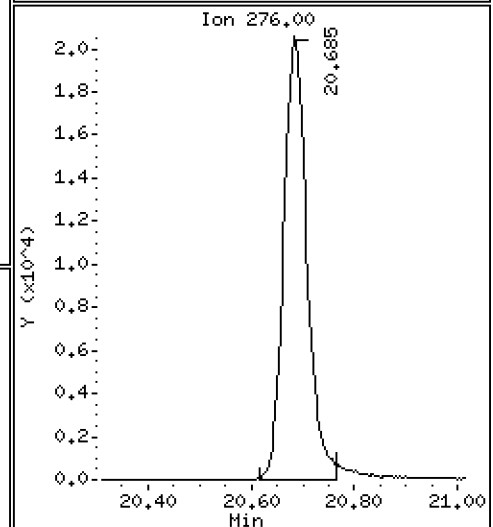
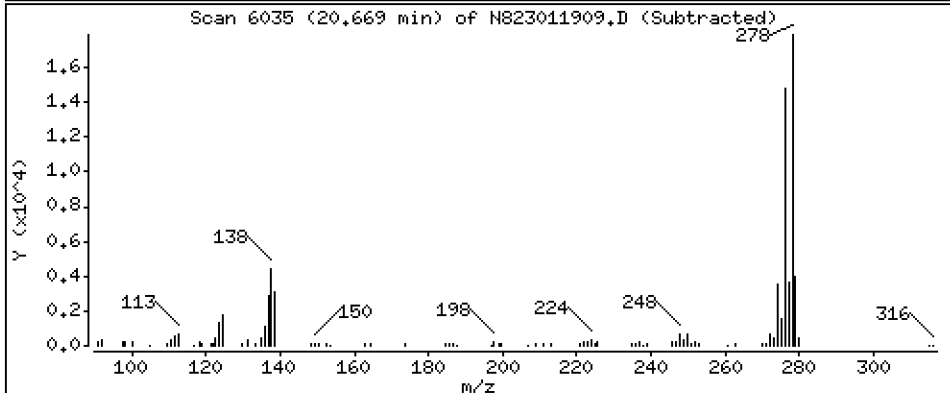
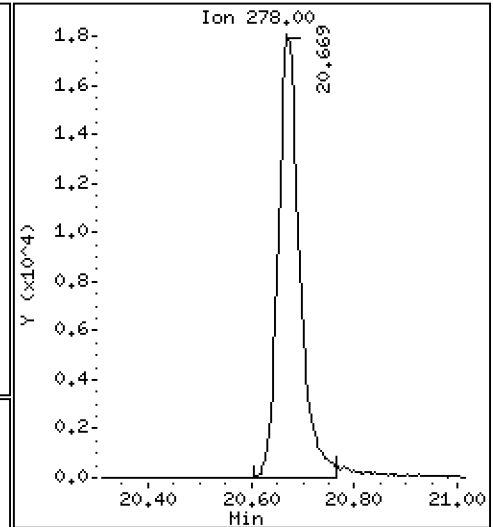
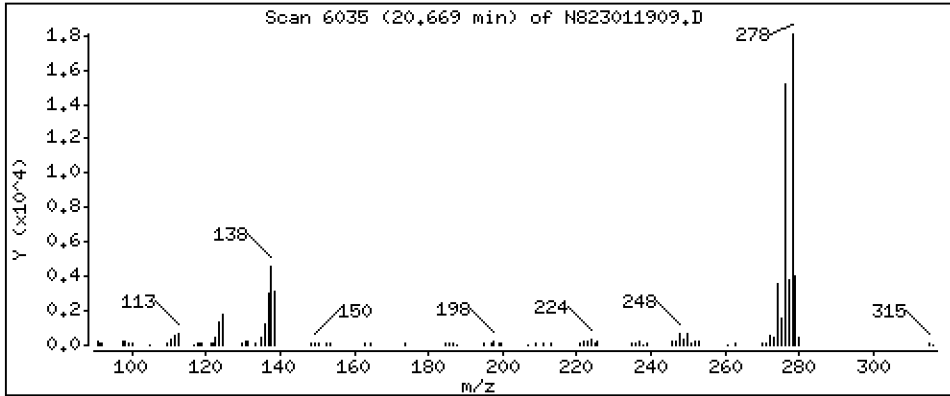
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 2,493 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

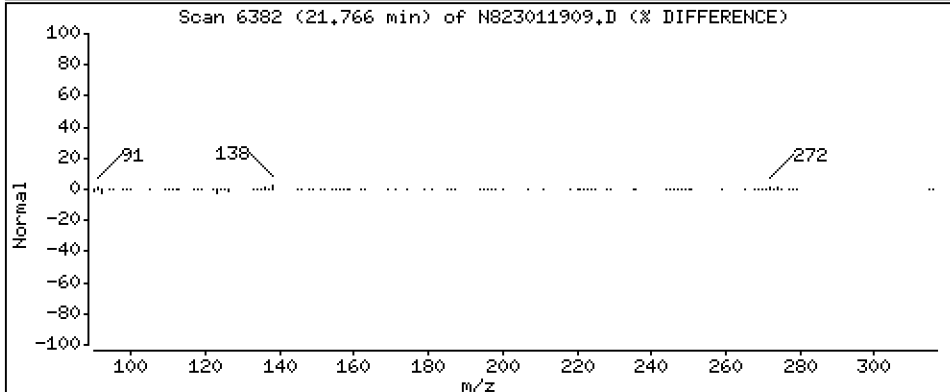
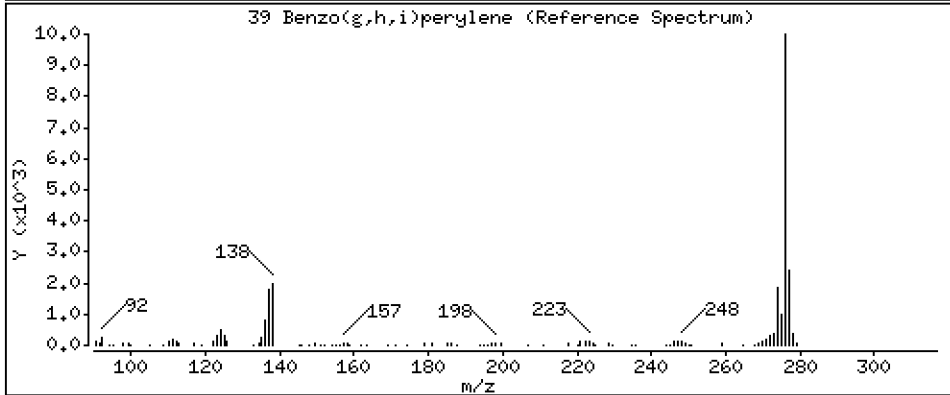
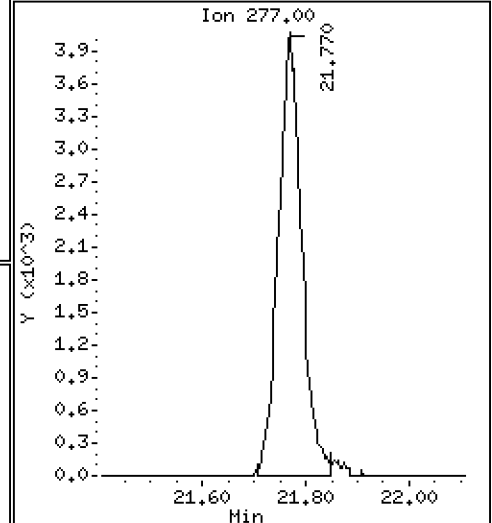
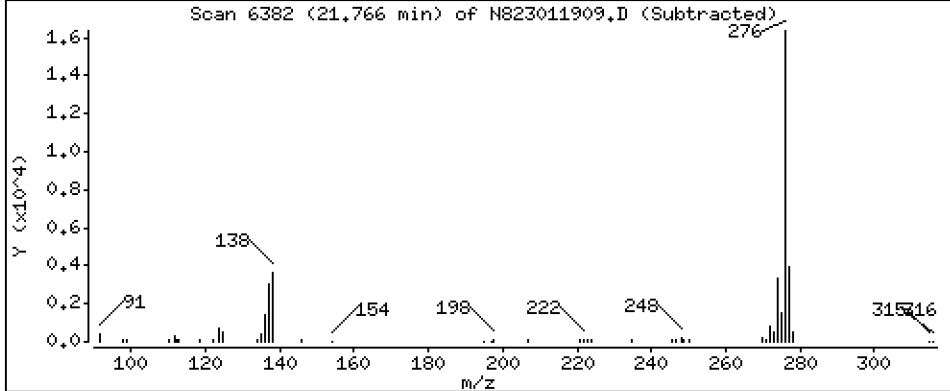
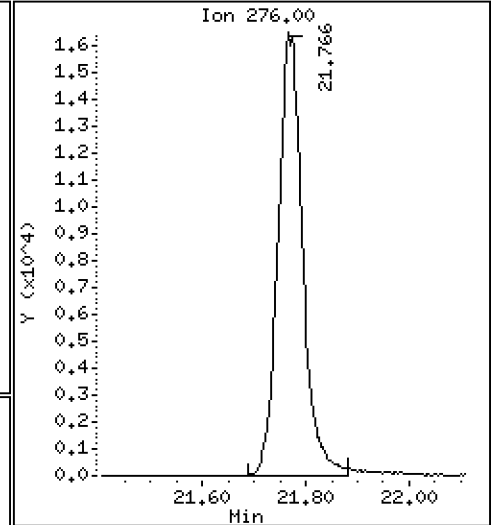
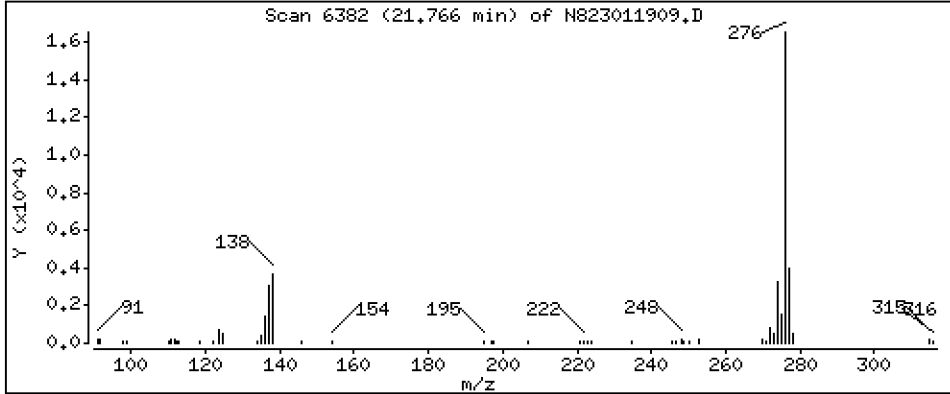
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 2,483 ug/L



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
 Lab Smp Id: SLA0213-SCV1
 Inj Date : 19-JAN-2023 14:58
 Operator : JZ Inst ID: nt8.i
 Smp Info : SCV230119
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 9 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: pnascv.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136		4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128		4.941	4.938	(1.006)	56587	2.62597	2.626
\$ 3 2-Methylnaphthalene-d10	152		Compound Not Detected.					
4 2-Methylnaphthalene	141		5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141		5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152		7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164		7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153		7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168		7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166		7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188		9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178		9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178		9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202		11.059	11.053	(1.197)	72902	2.65276	2.653
\$ 21 Fluoranthene-d10	212		Compound Not Detected.					
23 Pyrene	202		11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228		14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240		14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228		14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252		16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252		16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252		16.893	16.821	(0.932)	126178	5.48025	5.480 (M)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572	
* 33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000		
37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689	
\$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.						
38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493	
39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483	
35 Perylene	252	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011909.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-SCV1 Level: LOW
 Analysis Type: SV Sample Type: WATER
 Quant Type: ISTD Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 14:58

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

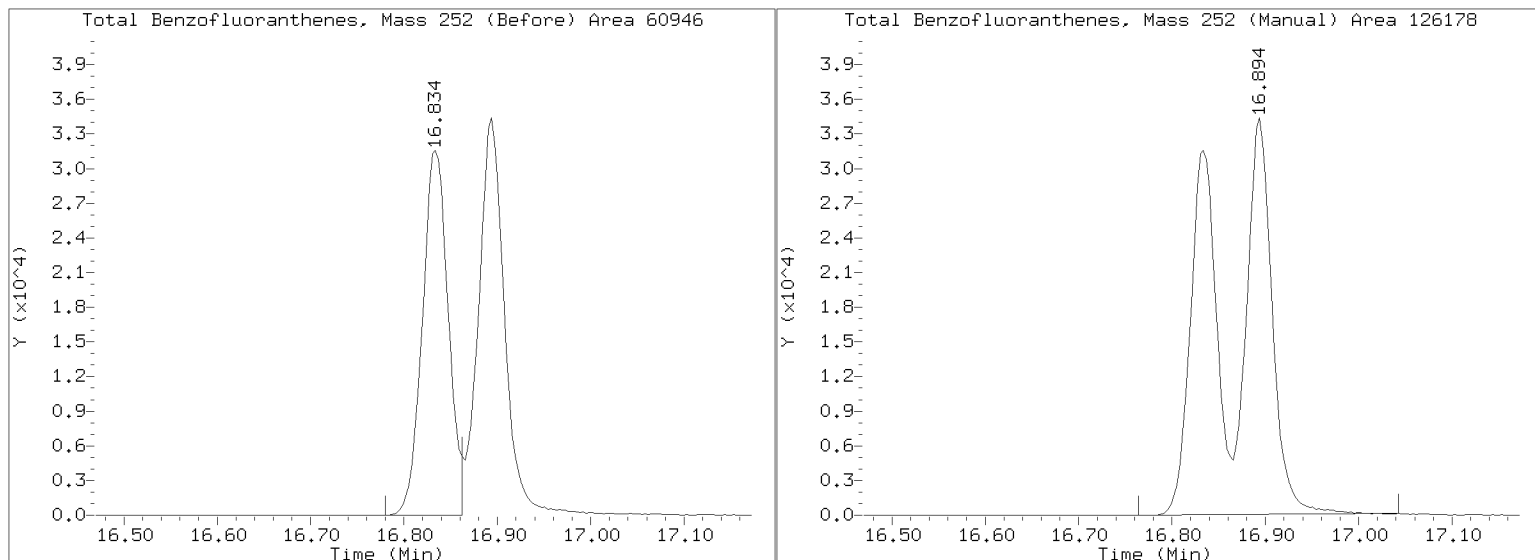
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D

Injection Date: 19-JAN-2023 14:58

Lab ID:SLA0213-SCV1 Client ID:

Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00032

Laboratory ID: SLC0143-SCV1

Sequence: SLC0143

Sequence Name: SCV 5.0

Standard ID: K010066

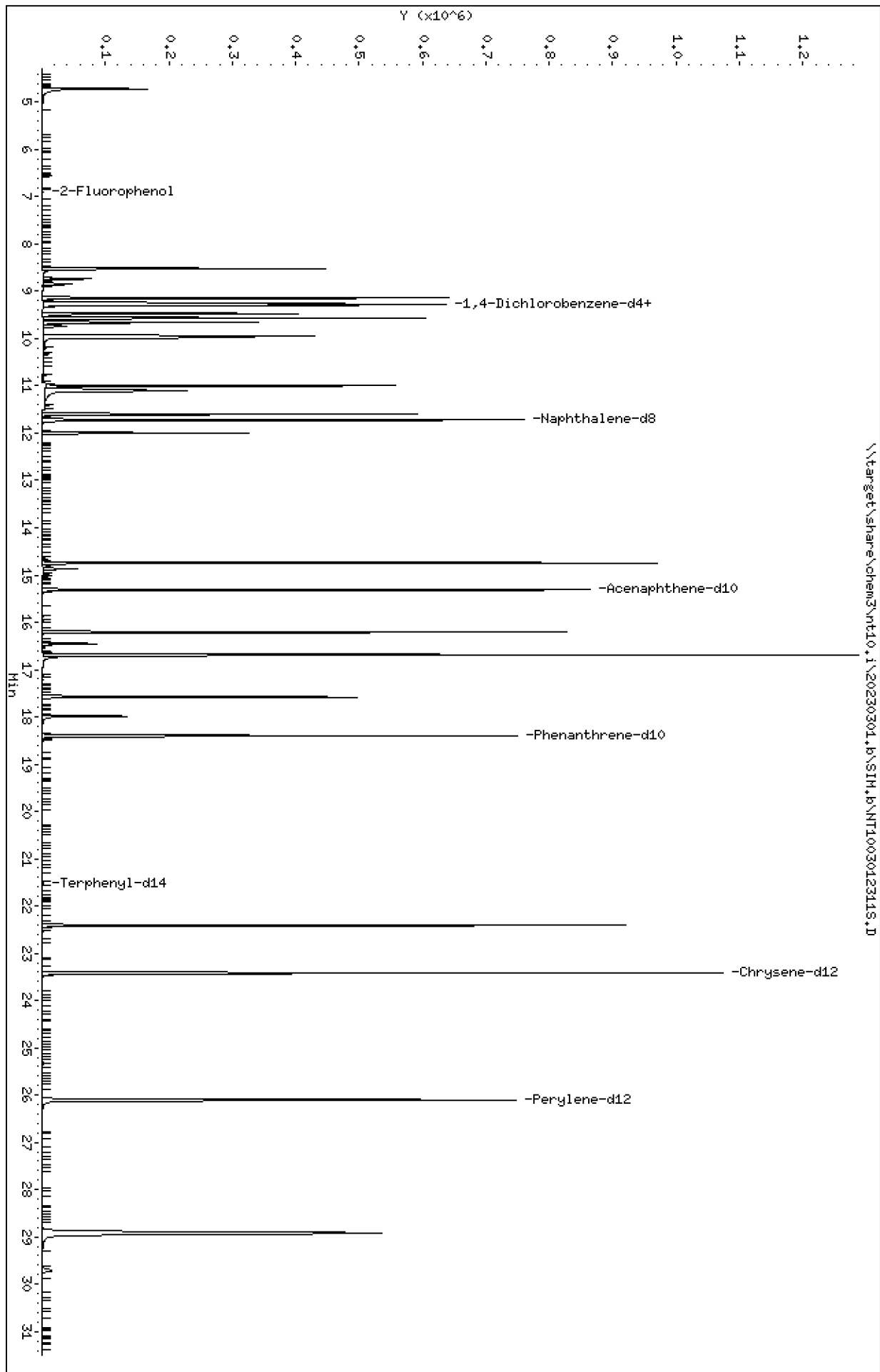
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.2	5.0	20.00
1,2-Dichlorobenzene	5.0000	5.1	2.8	20.00
Benzyl Alcohol	5.0000	5.1	2.1	20.00
Benzoic acid	10.000	6.9	-31.3 *	20.00
2,4-Dimethylphenol	5.0000	3.6	-27.3 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-2.6	20.00
N-Nitrosodiphenylamine	5.0000	5.4	7.2	20.00
Pentachlorophenol	5.0000	3.9	-21.8 *	20.00
2-Fluorophenol	7.5000	0.0377	-99.5	
p-Terphenyl-d14	5.0000	0.0271	-99.5	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.B\SIM.B\NT10030123115.D
Date: 01-MAR-2023 21:46
Client ID:
Sample Info: SED-SCV1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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

\\target\share\chem3\nt10.i\20230301.B\SIM.B\NT10030123115.D



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

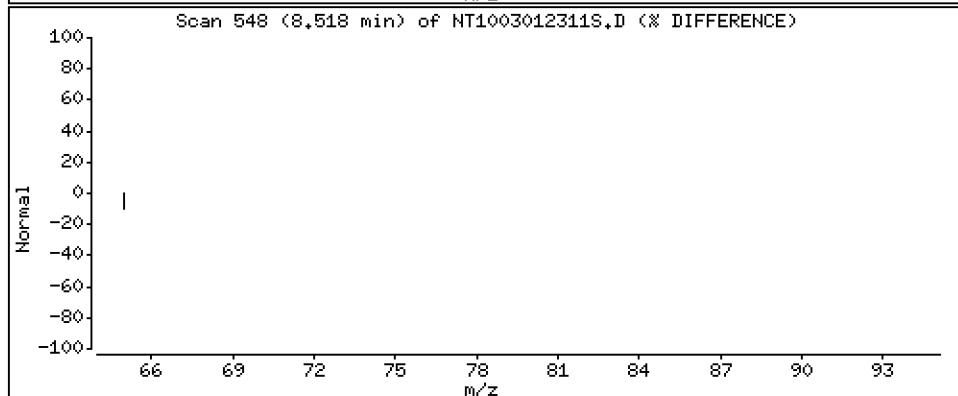
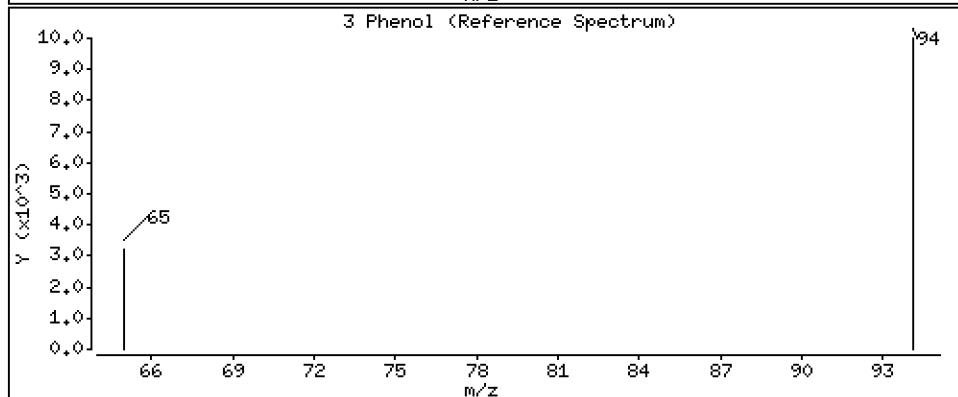
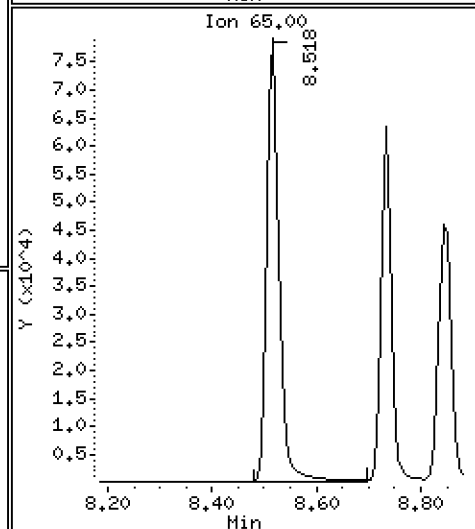
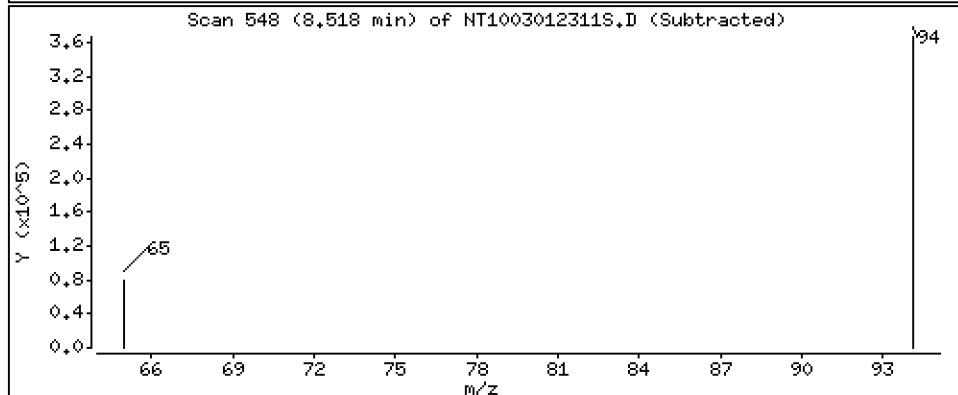
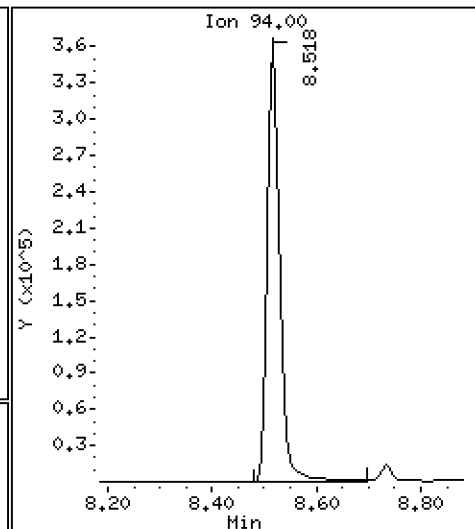
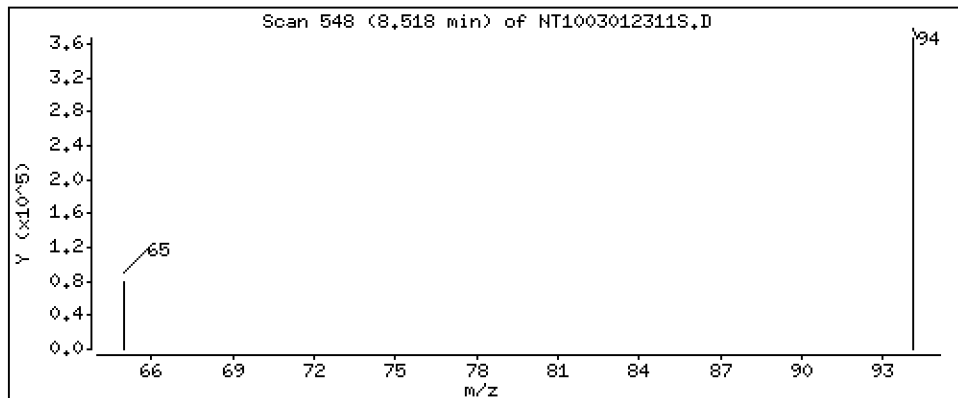
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.507 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

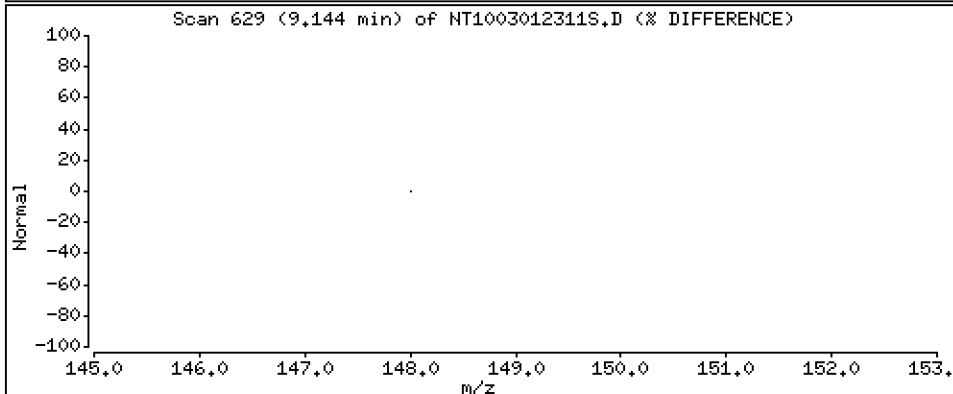
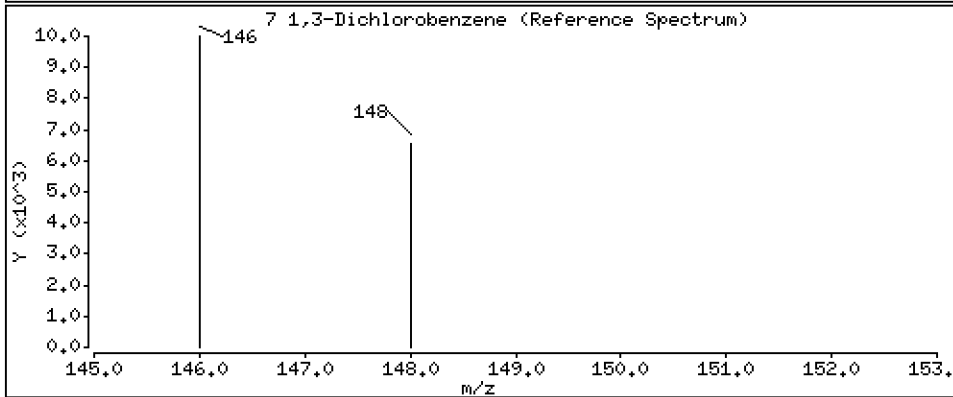
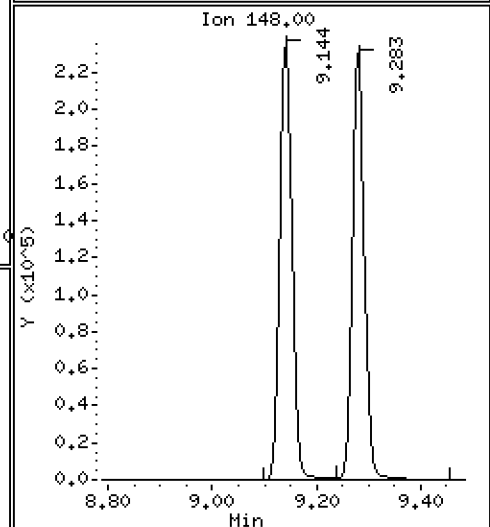
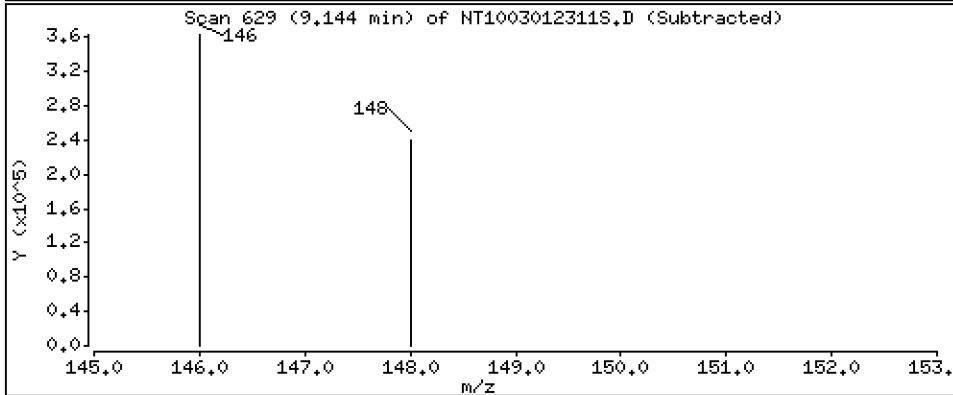
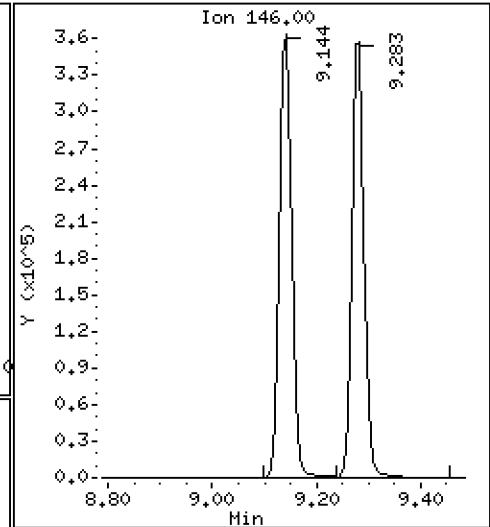
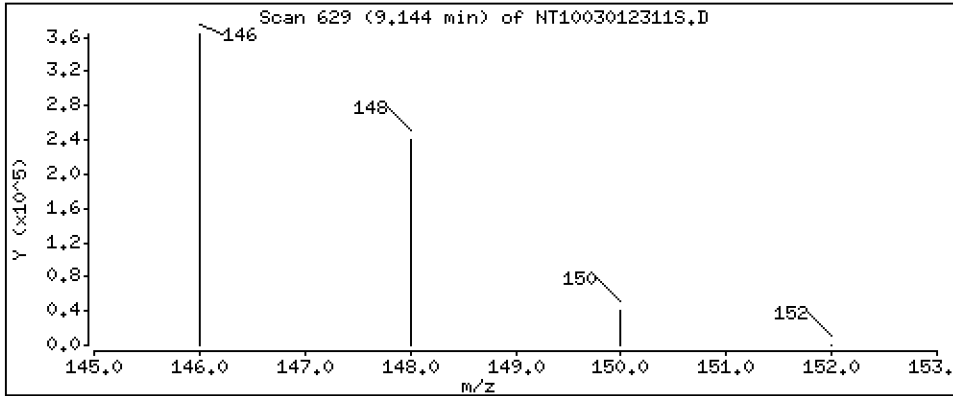
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 5.084 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

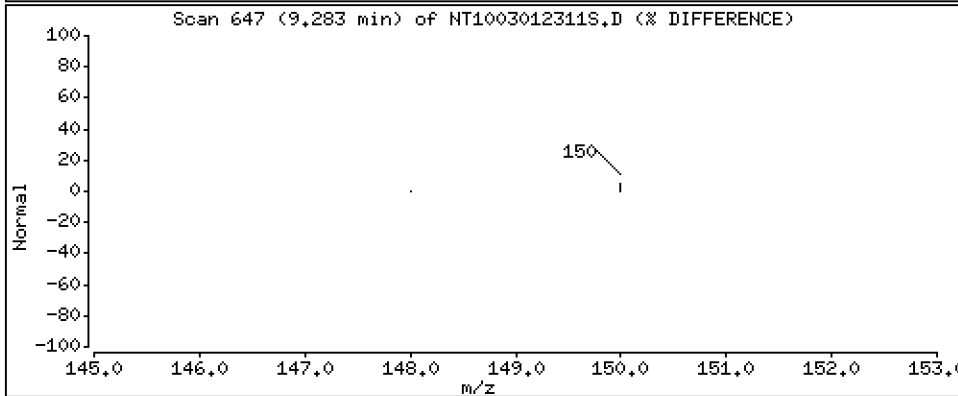
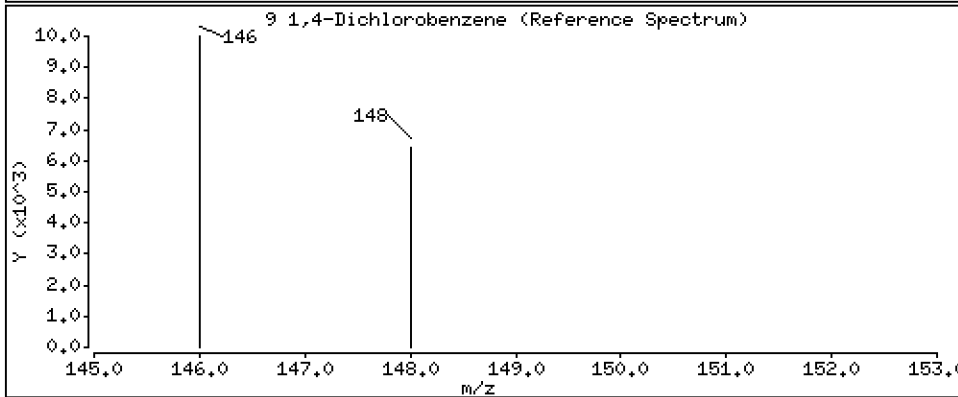
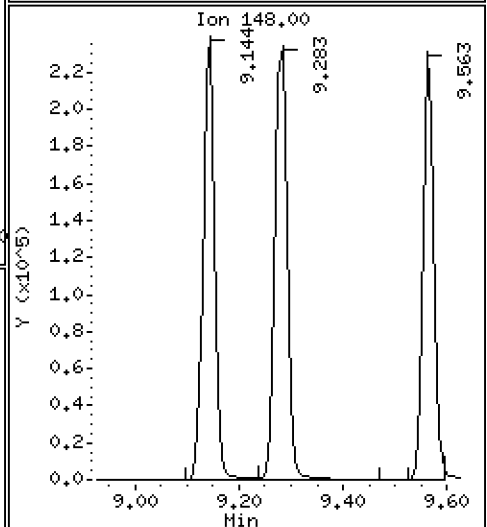
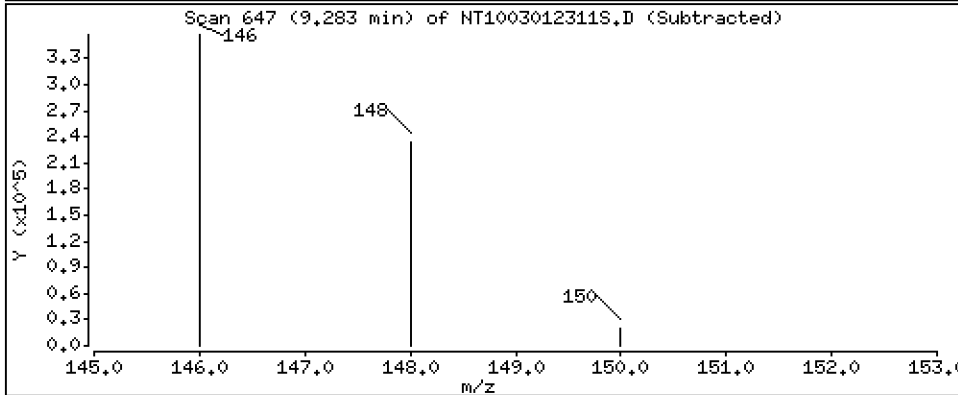
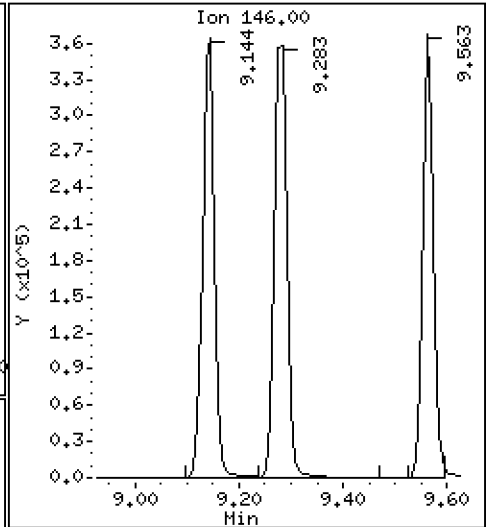
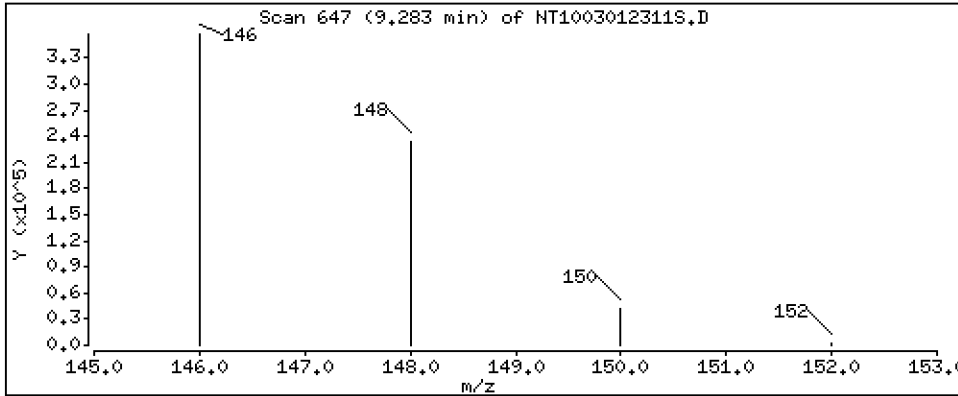
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 5,250 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

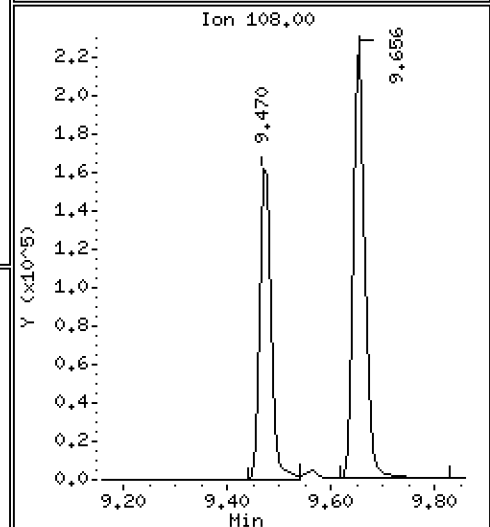
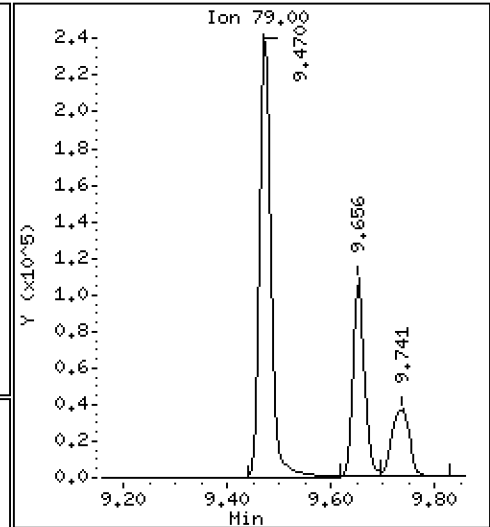
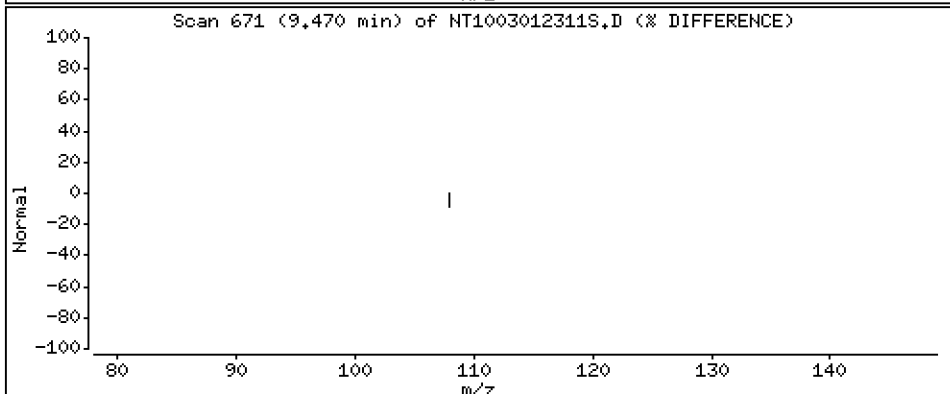
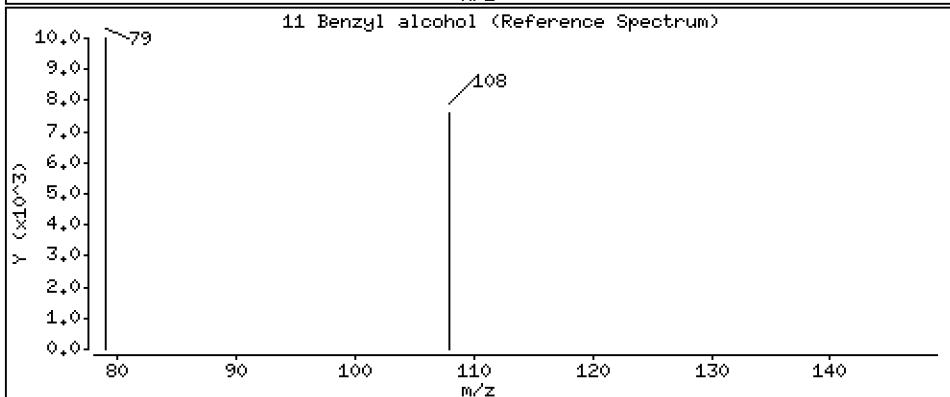
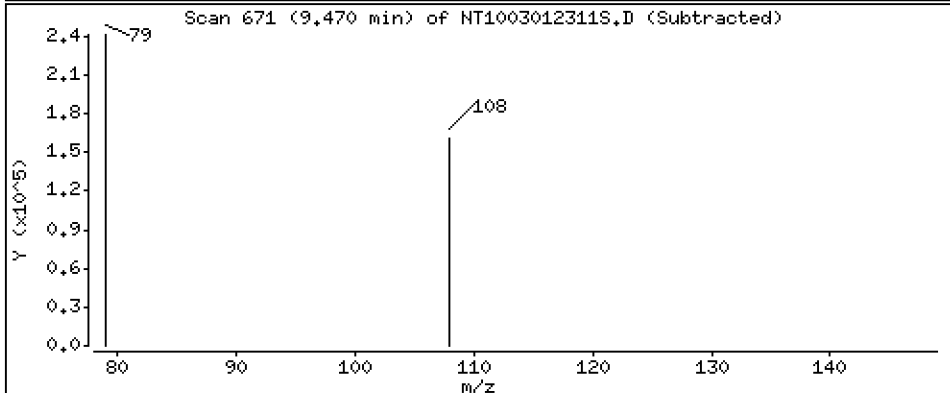
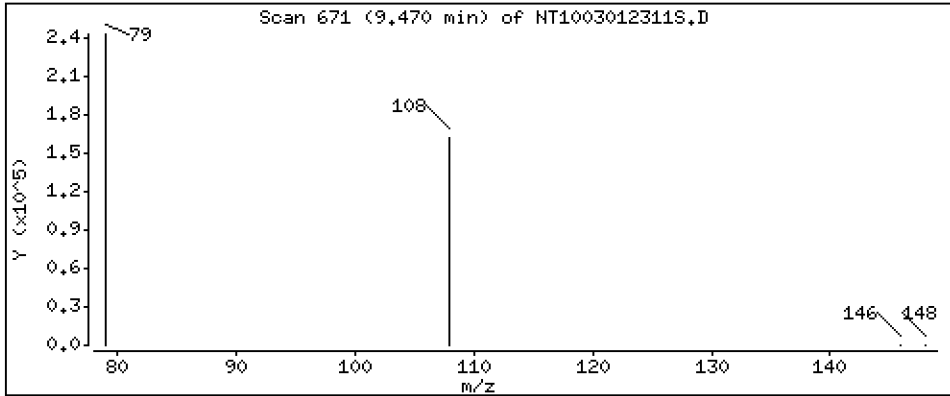
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5,104 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

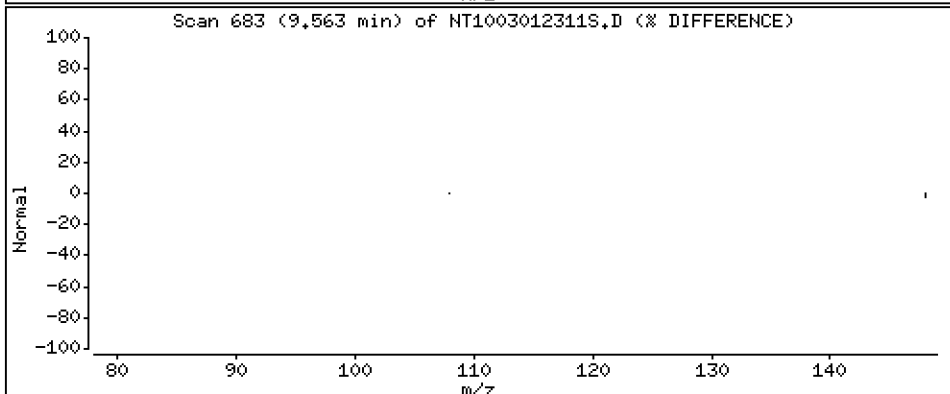
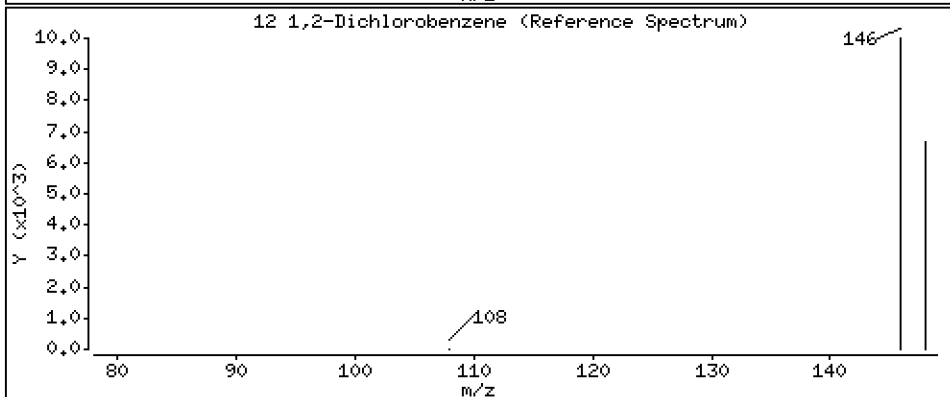
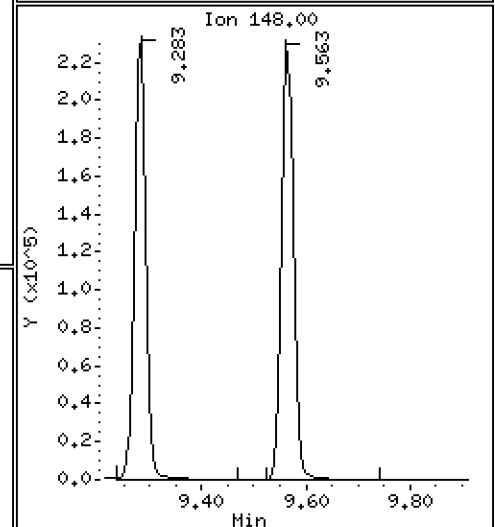
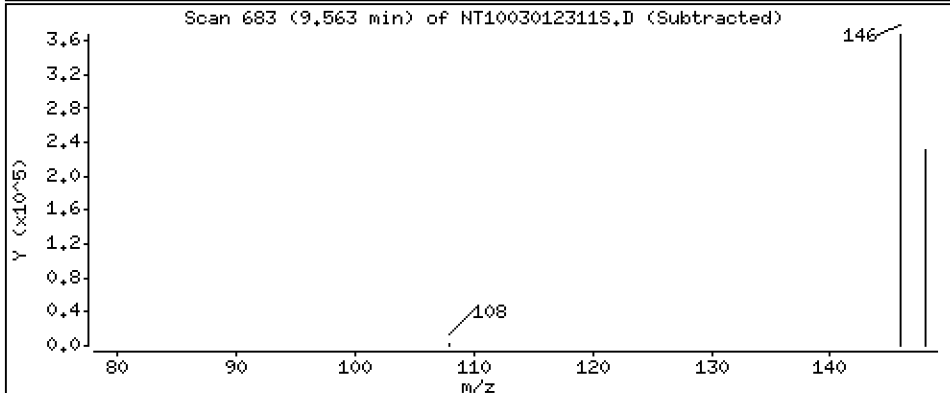
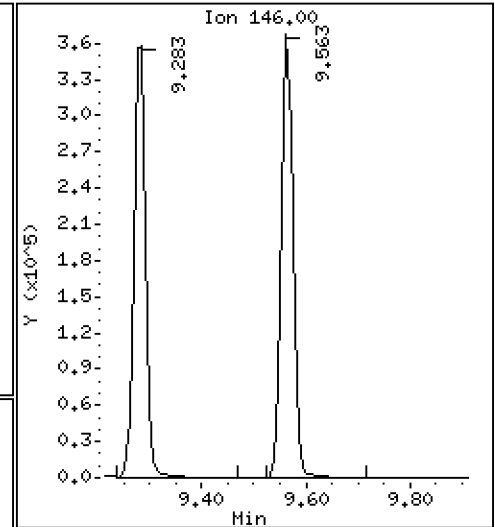
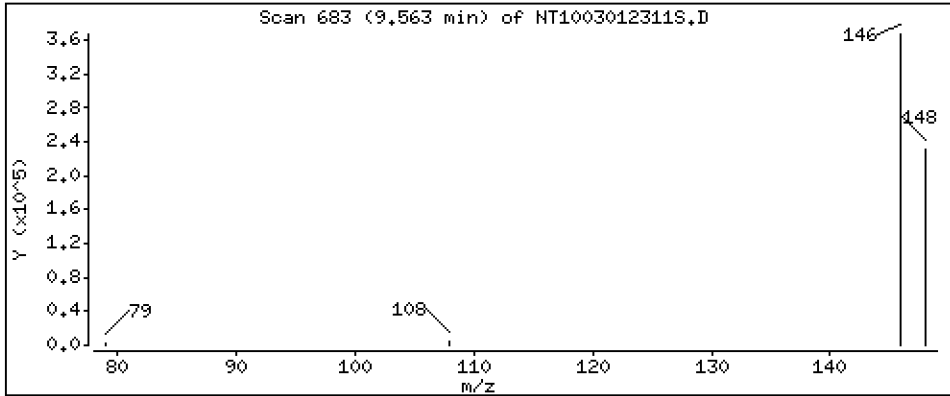
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5,142 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

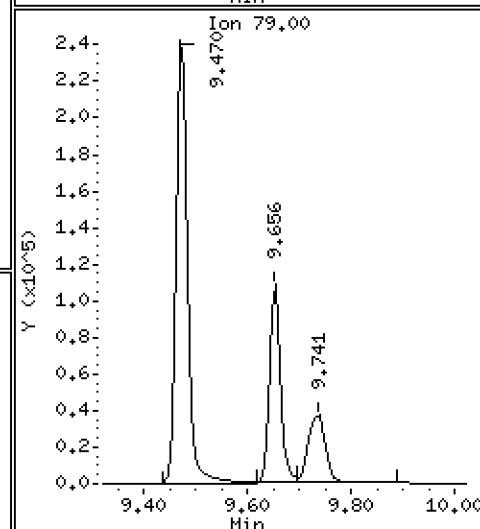
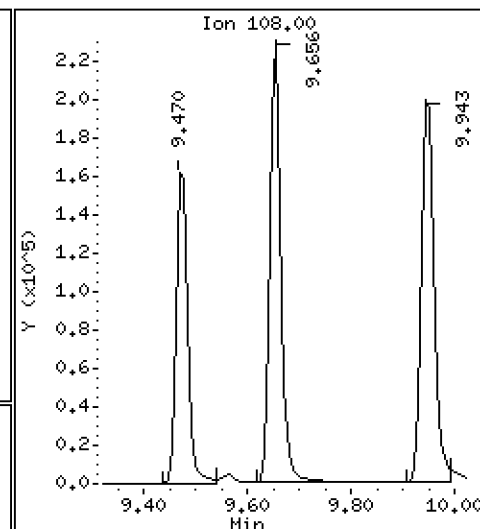
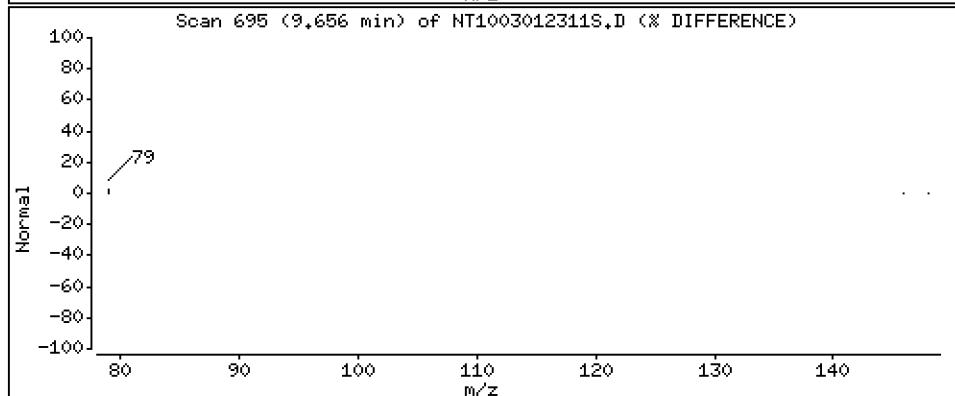
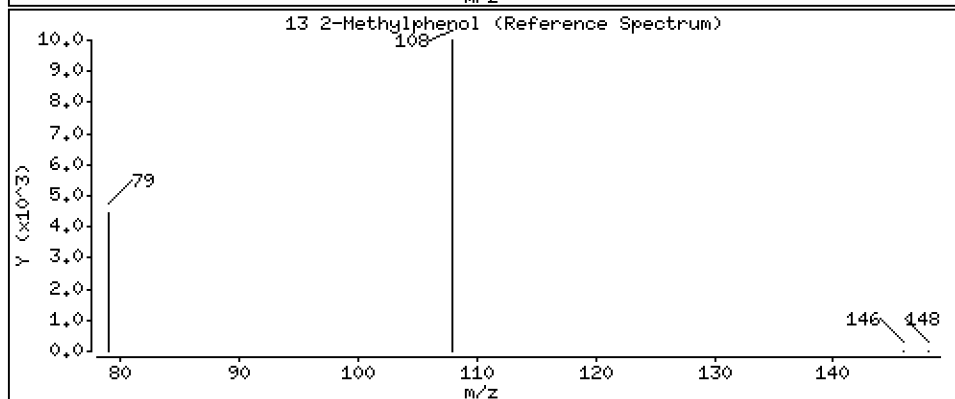
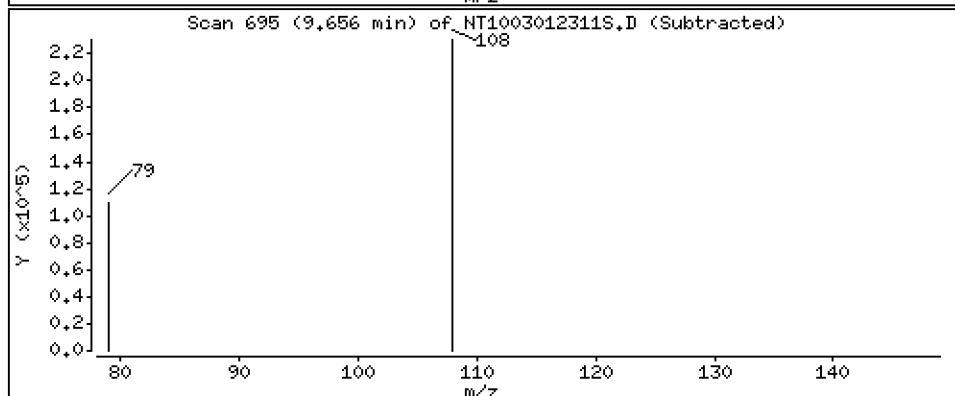
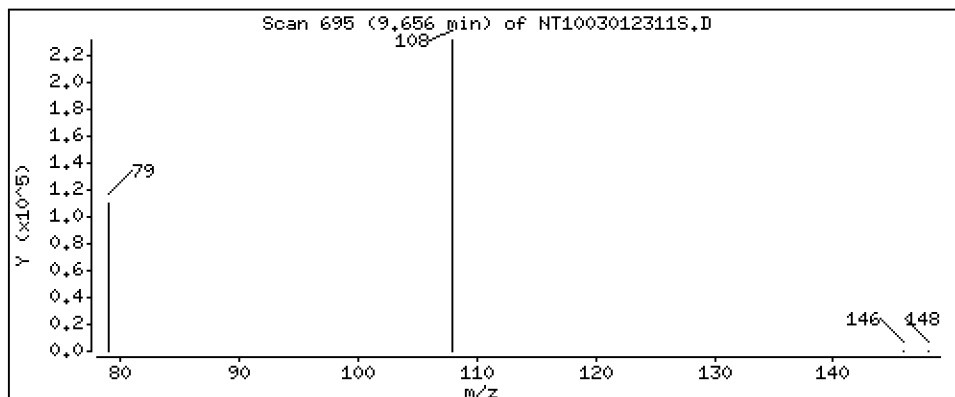
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.365 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

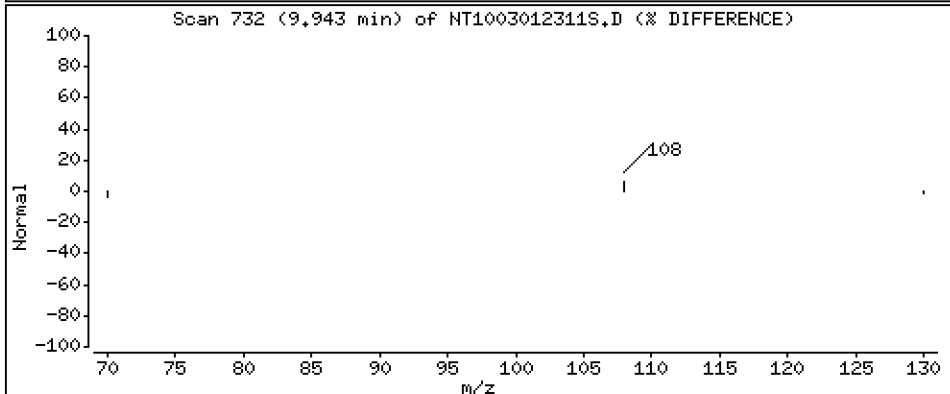
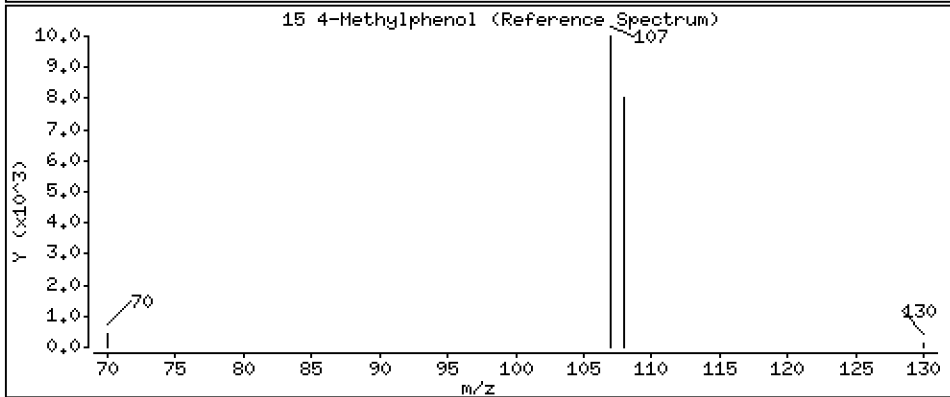
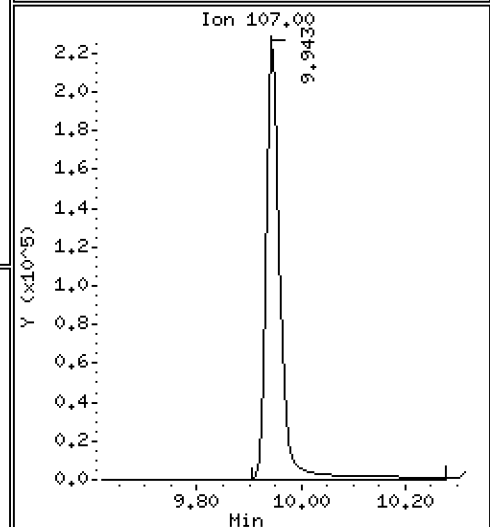
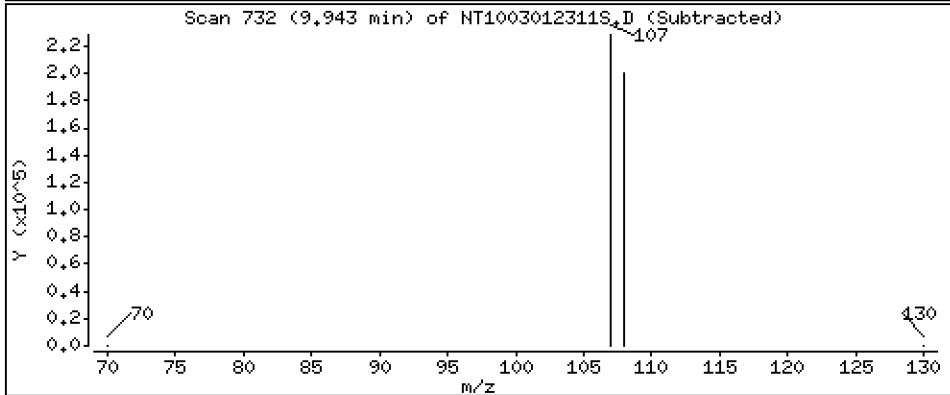
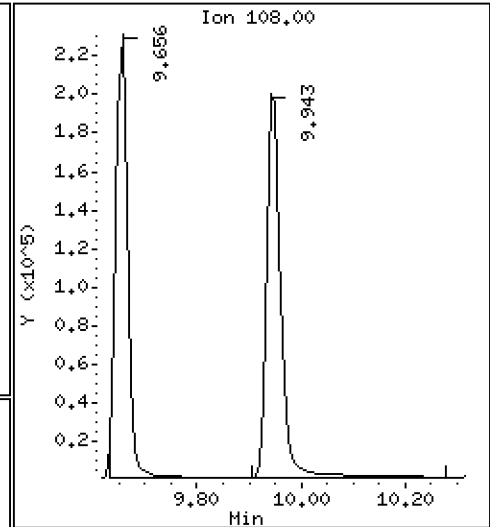
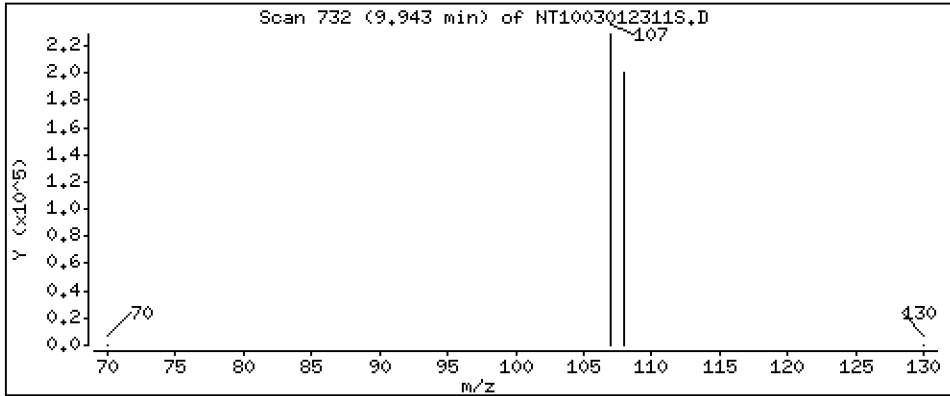
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.505 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

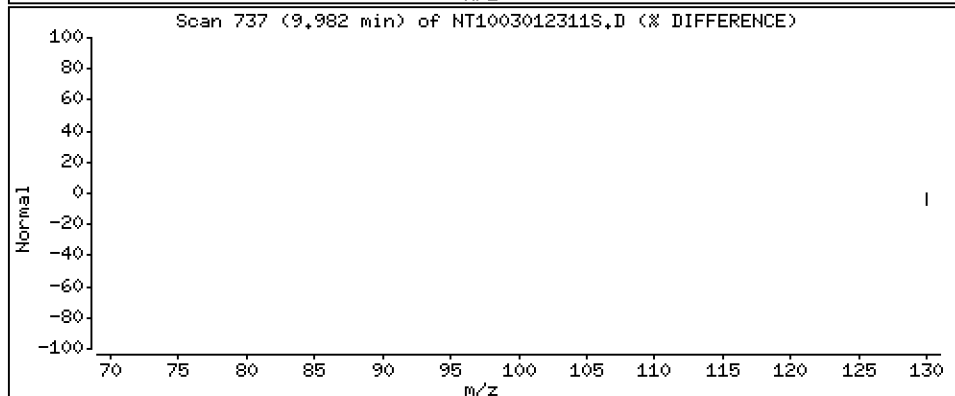
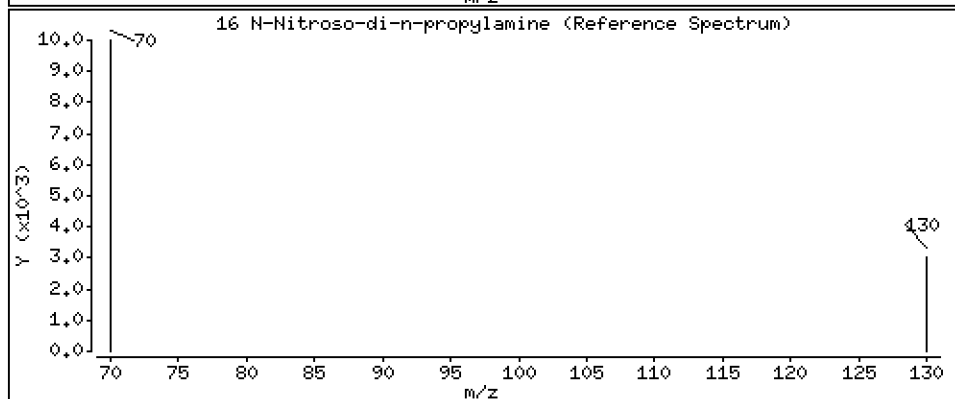
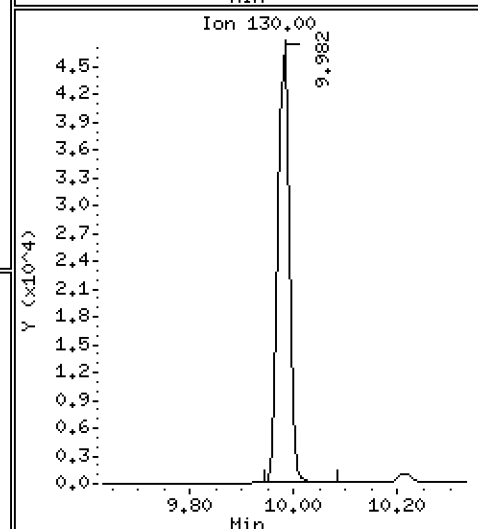
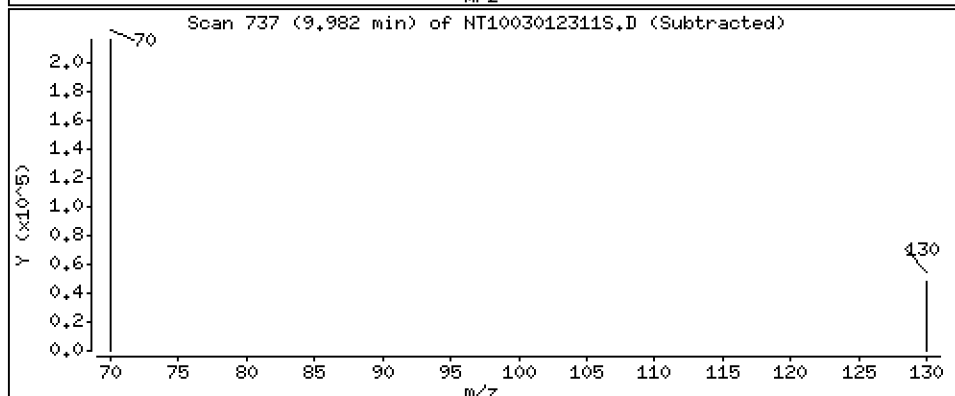
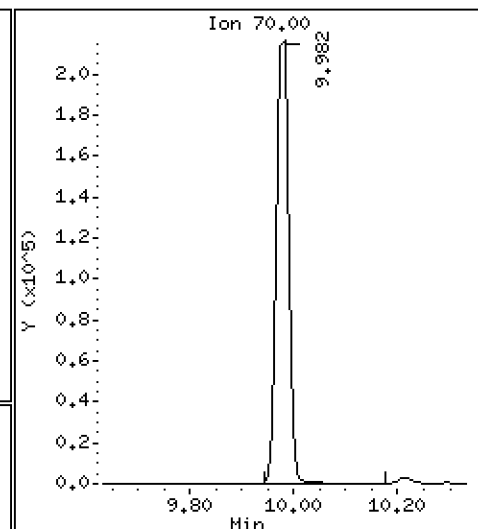
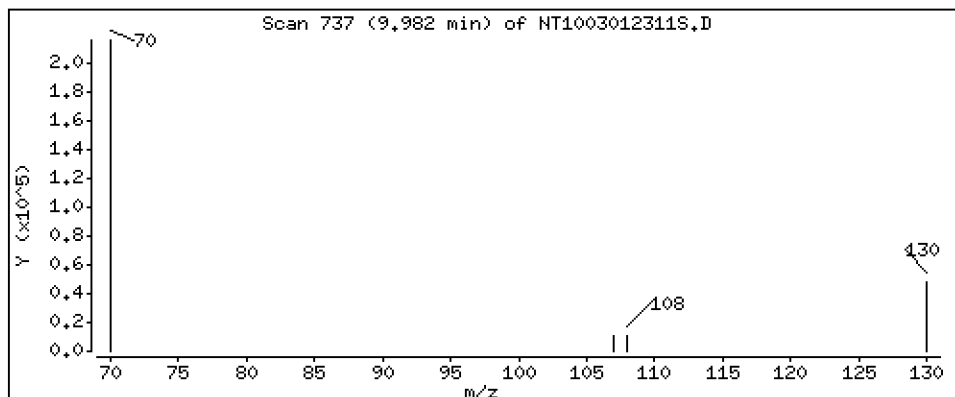
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,685 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

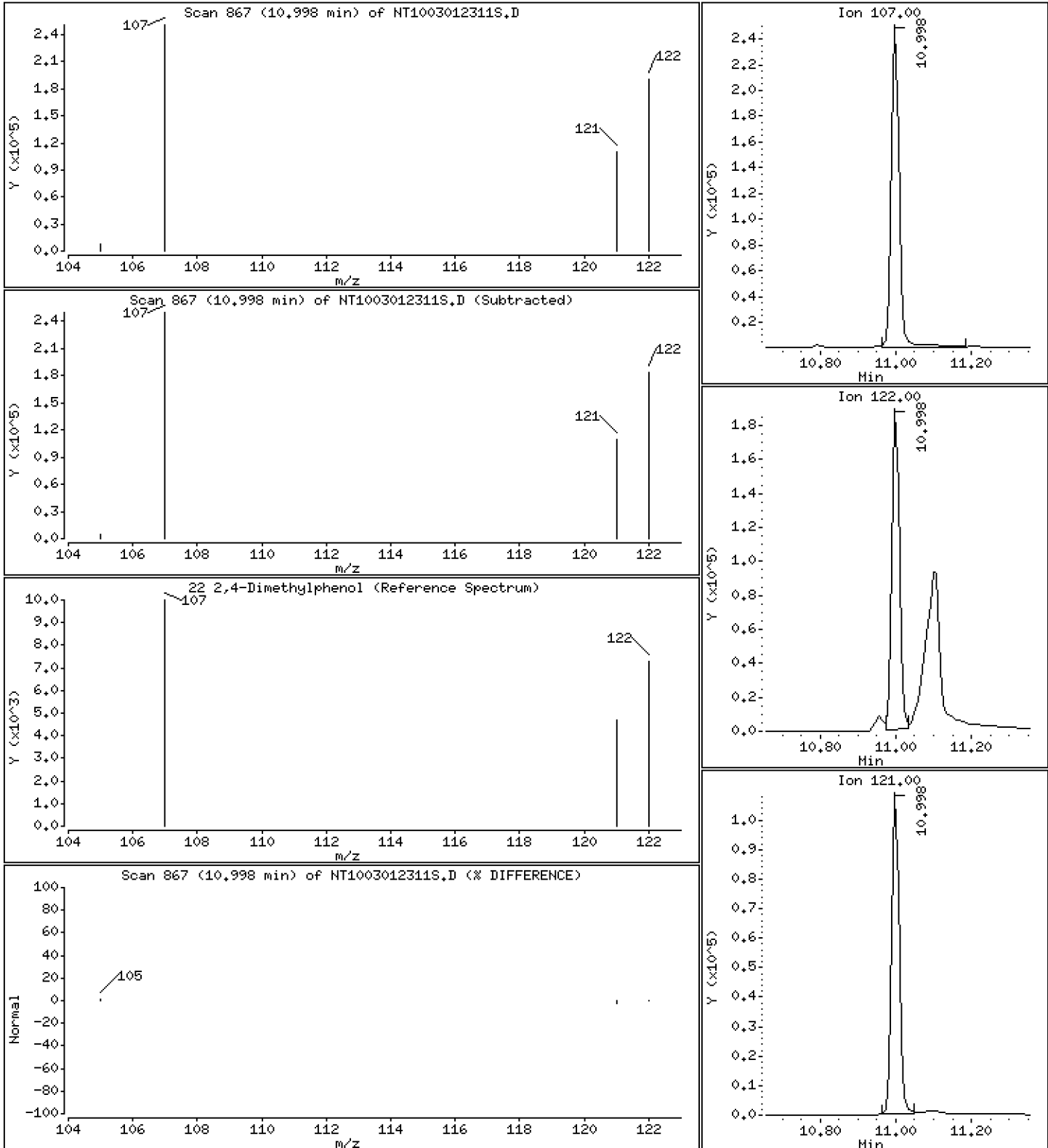
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 3.637 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

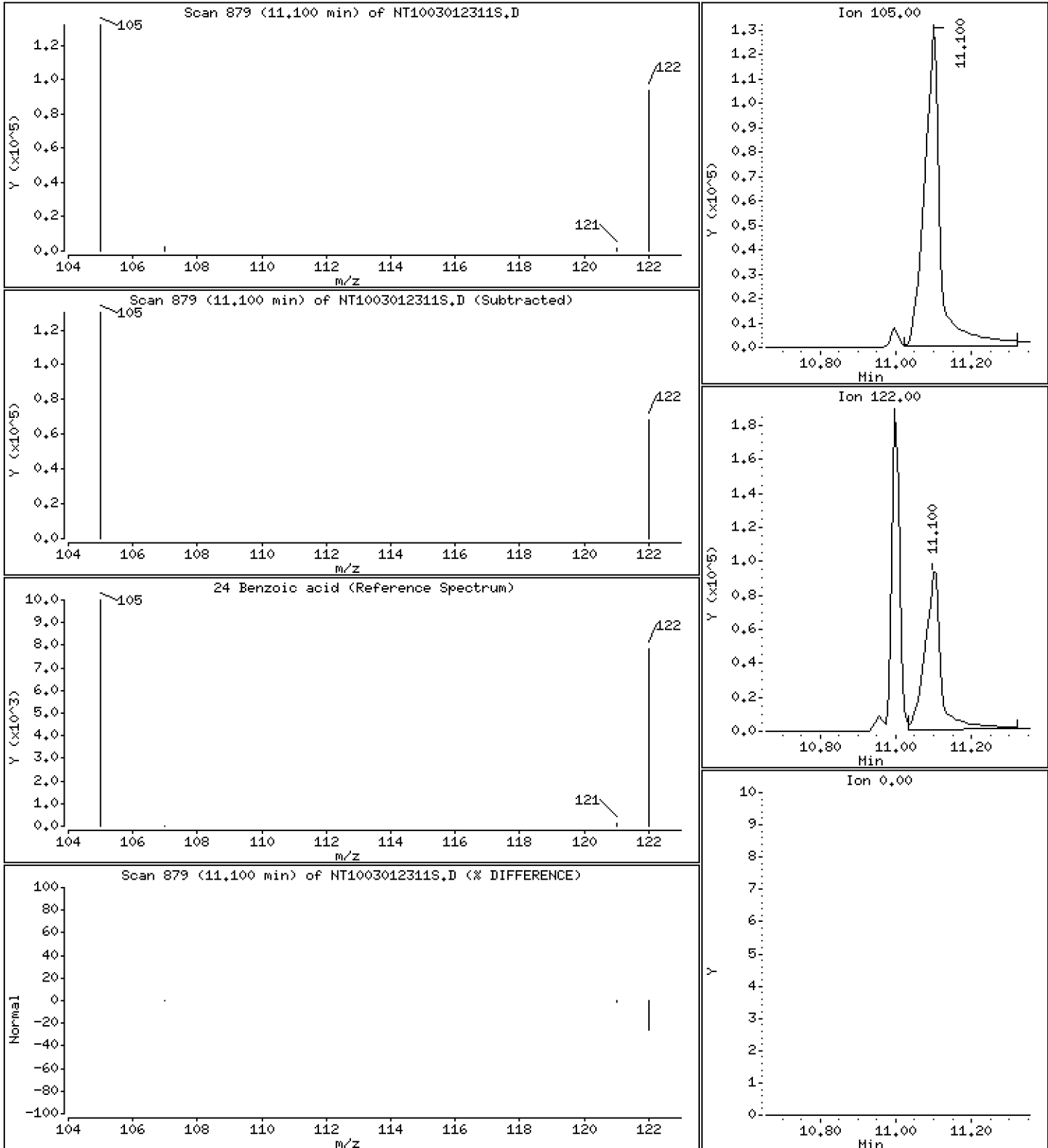
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 6,870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

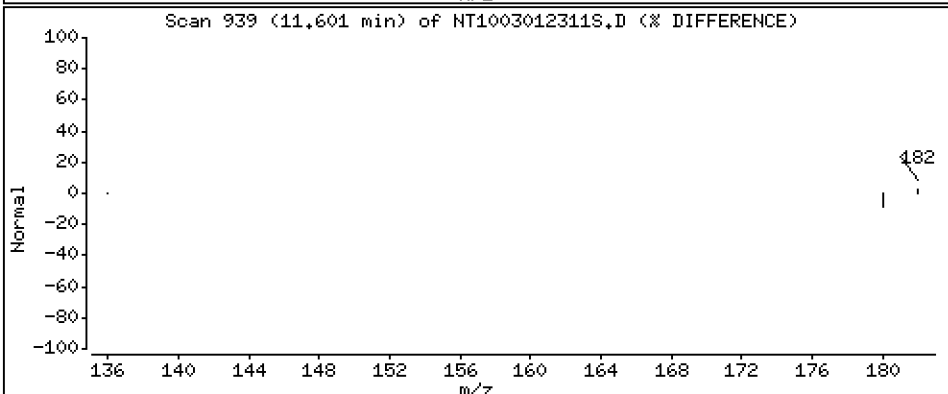
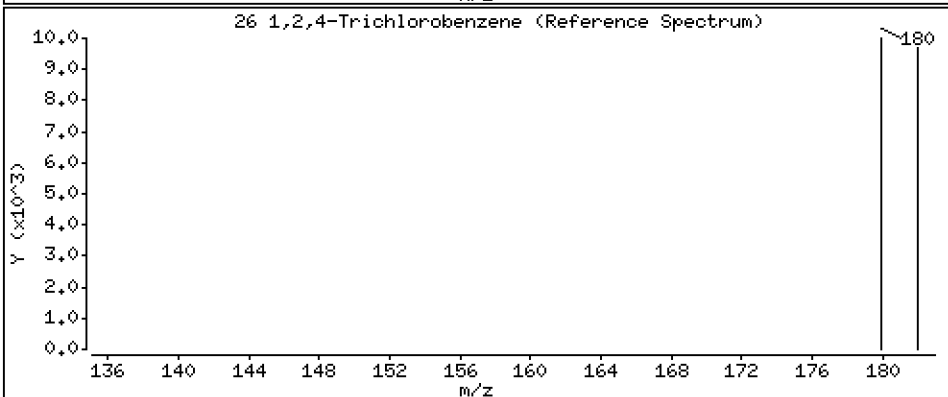
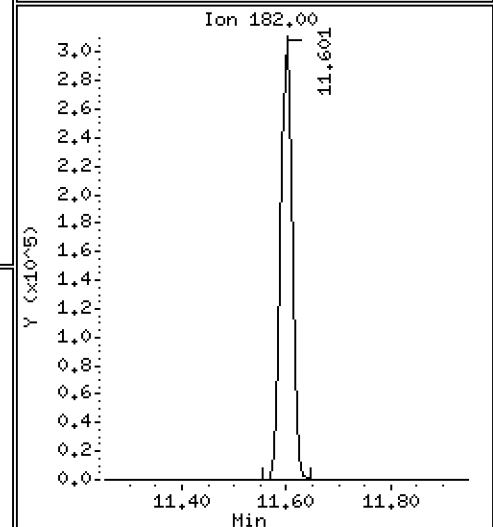
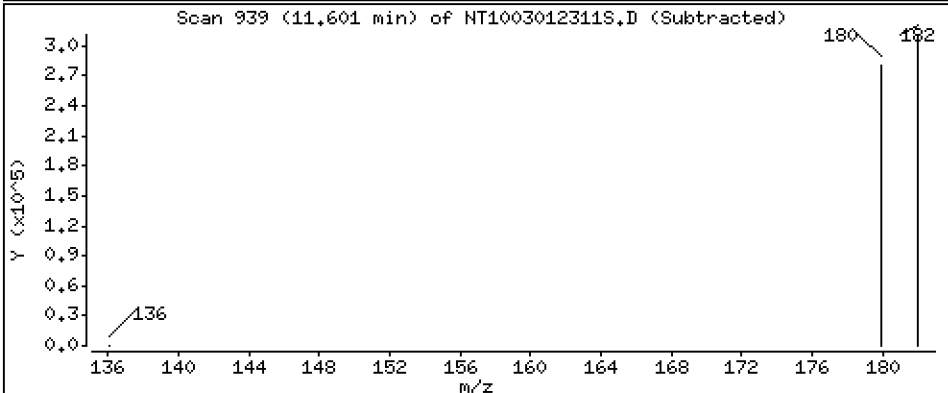
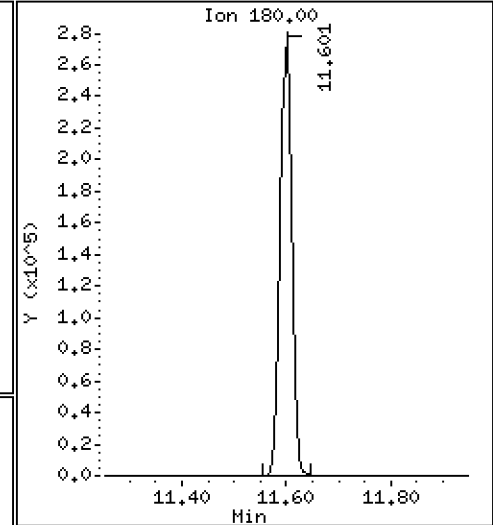
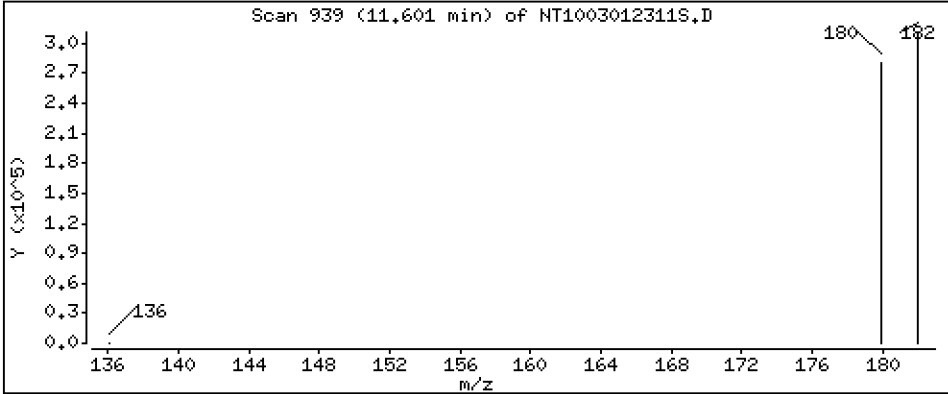
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

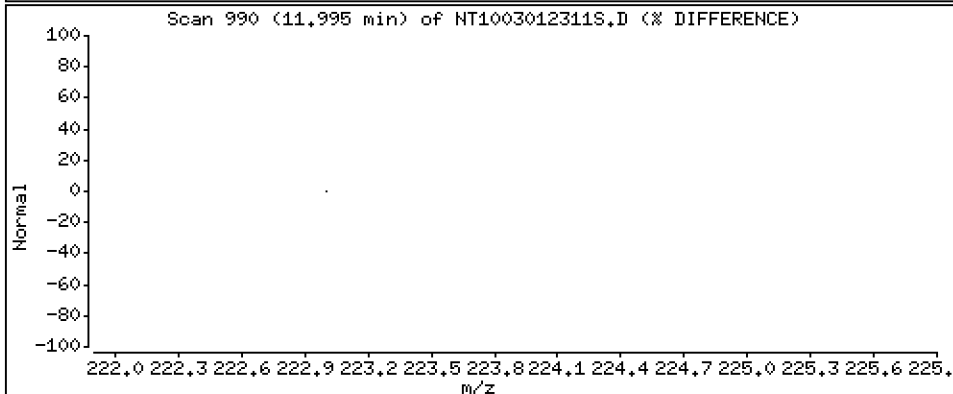
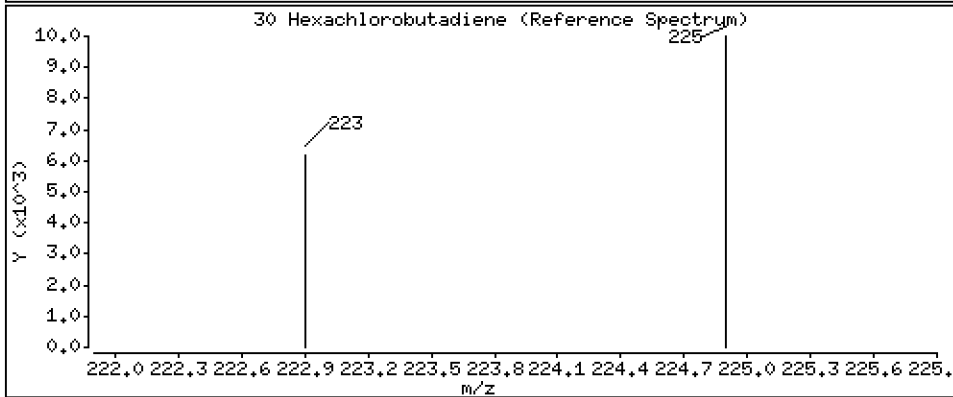
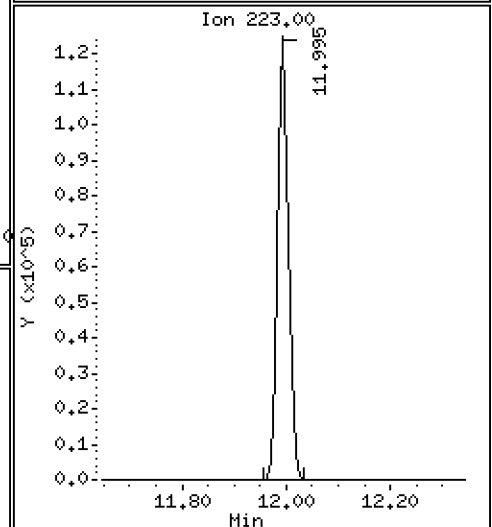
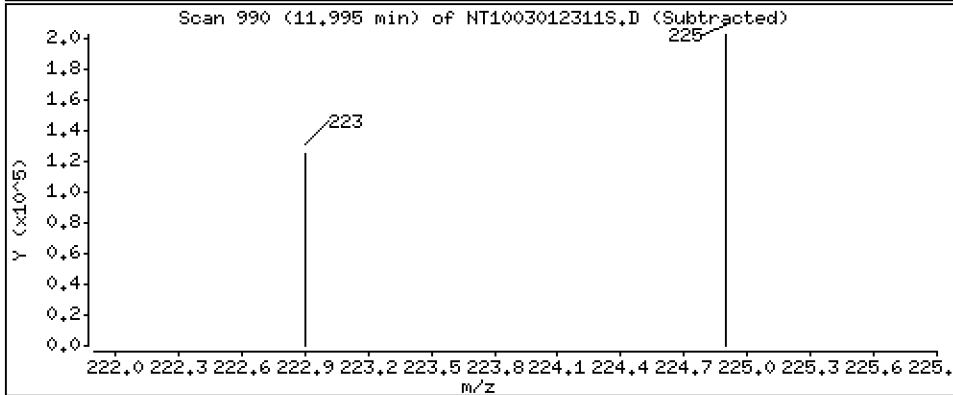
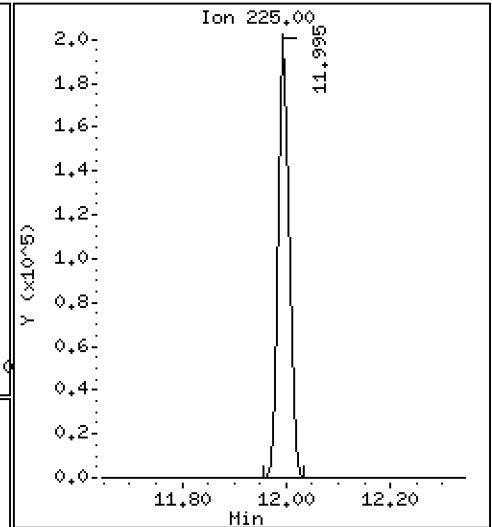
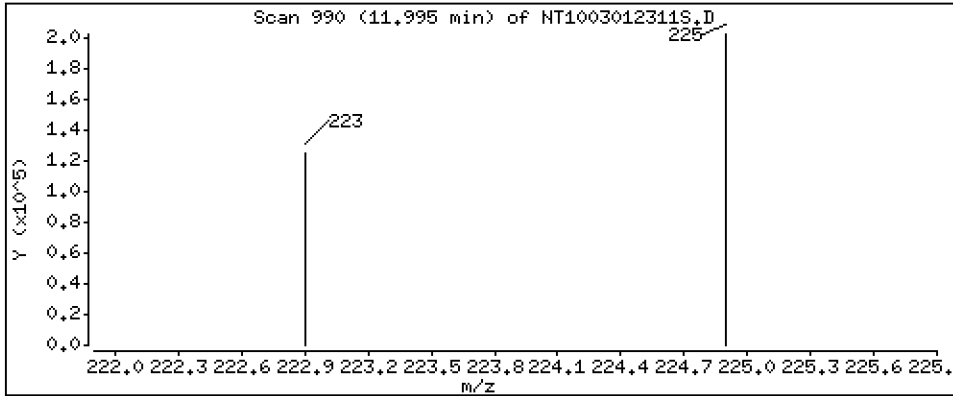
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,862 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

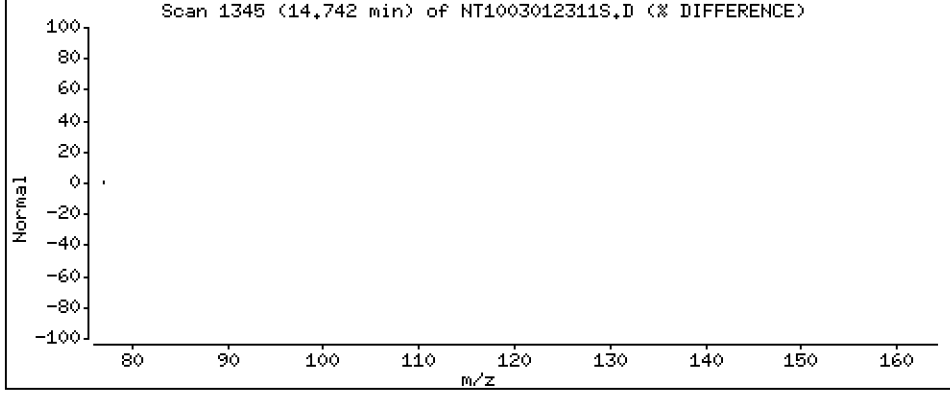
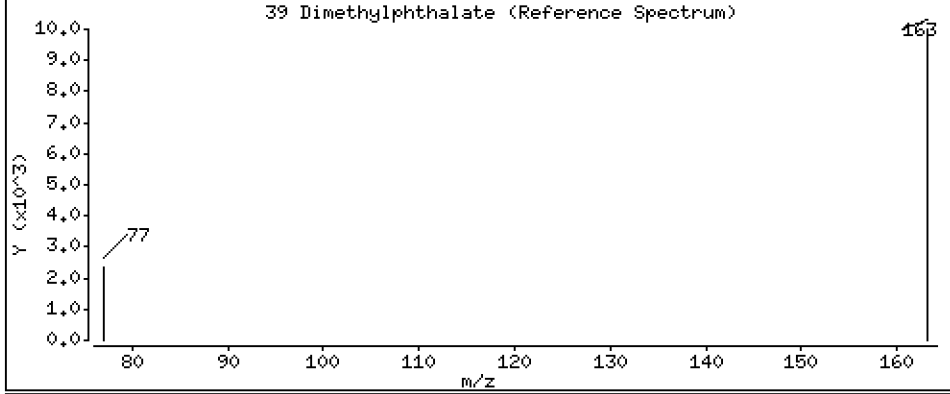
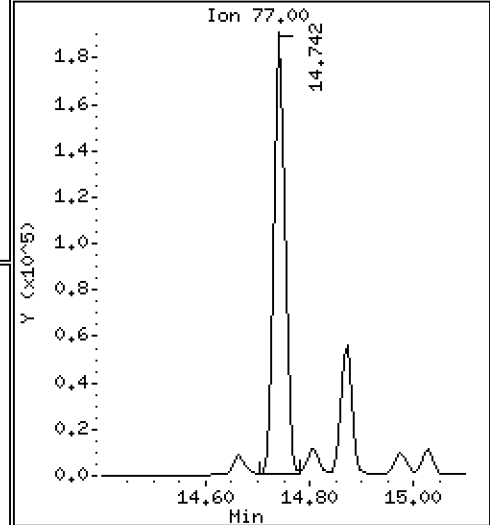
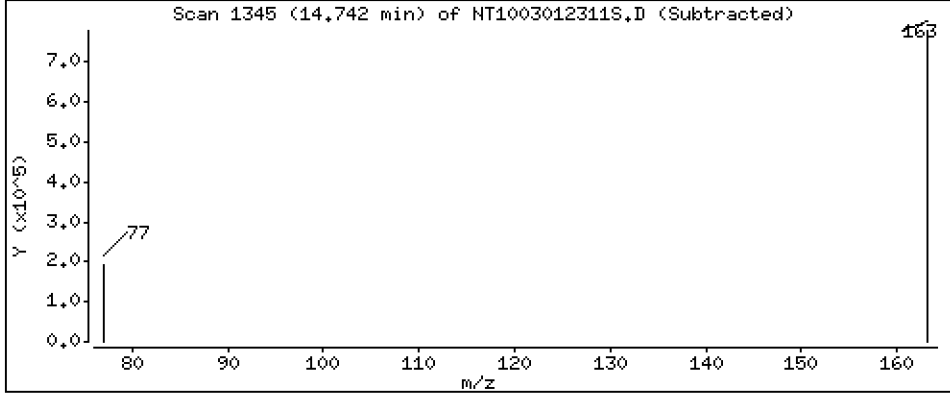
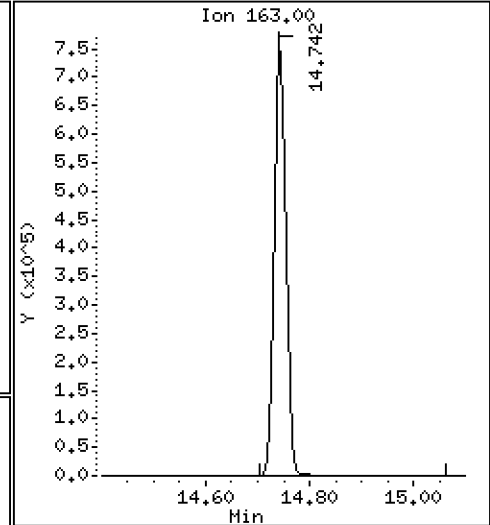
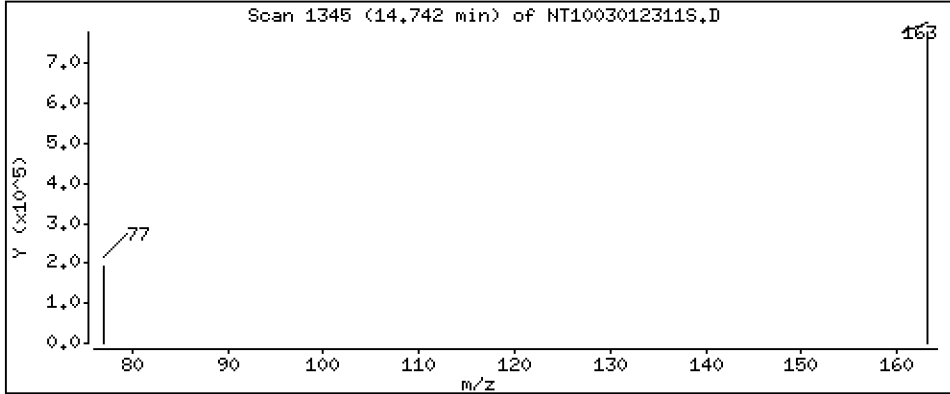
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 5.571 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

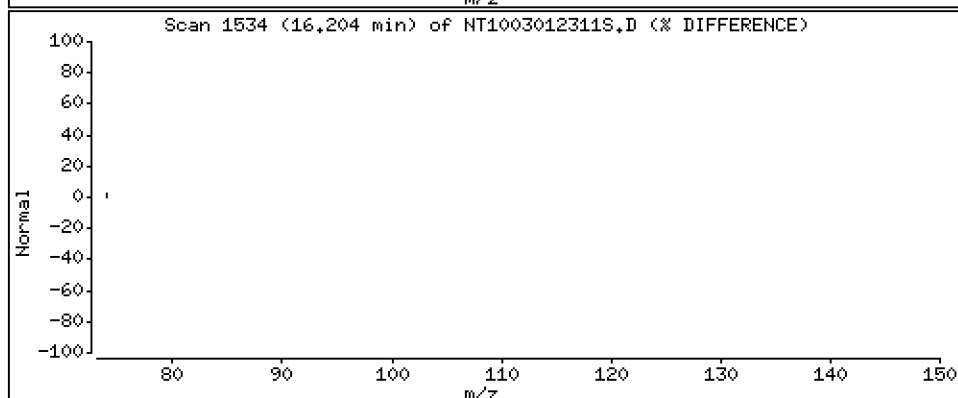
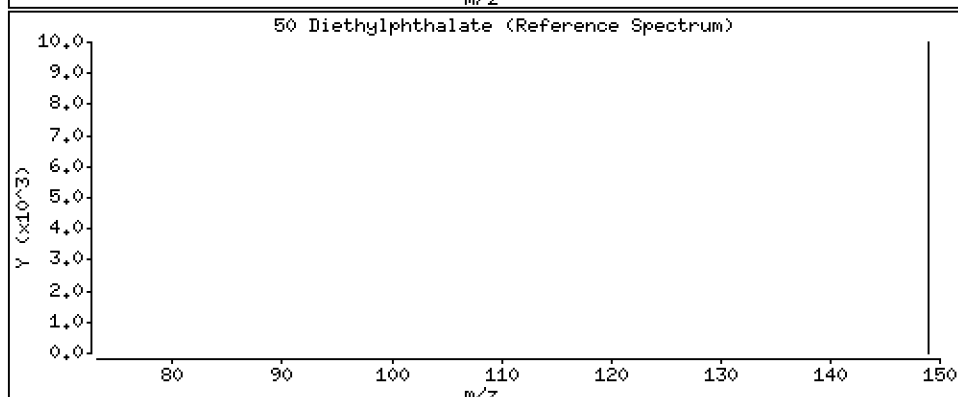
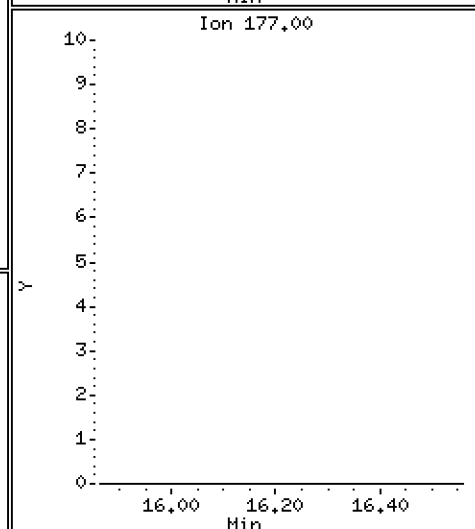
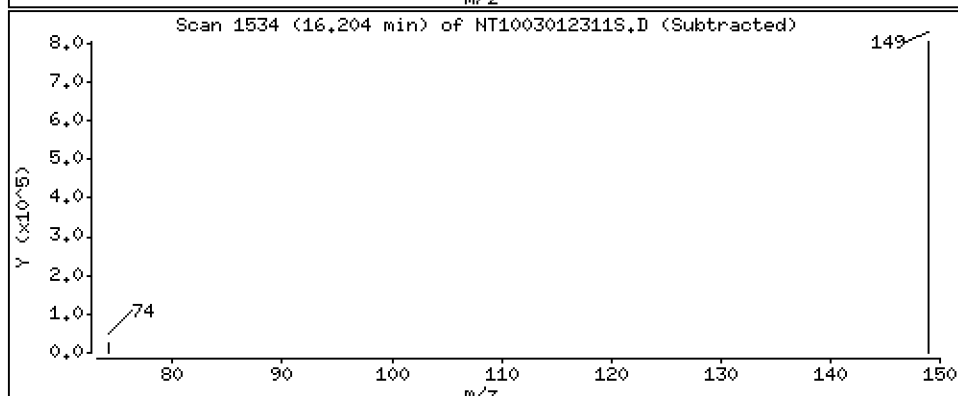
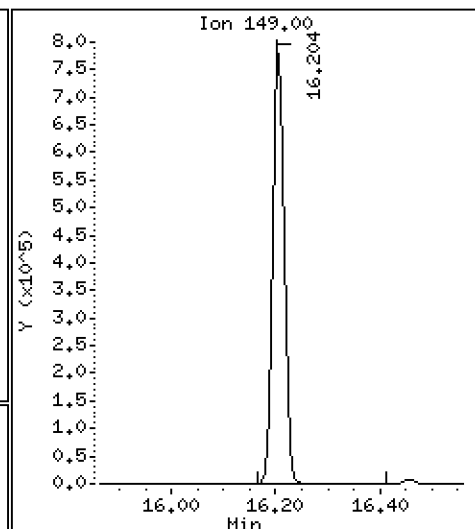
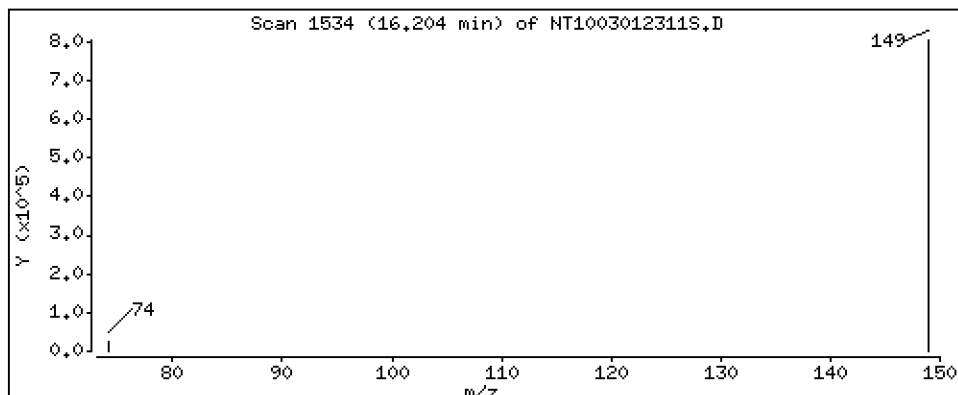
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,979 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

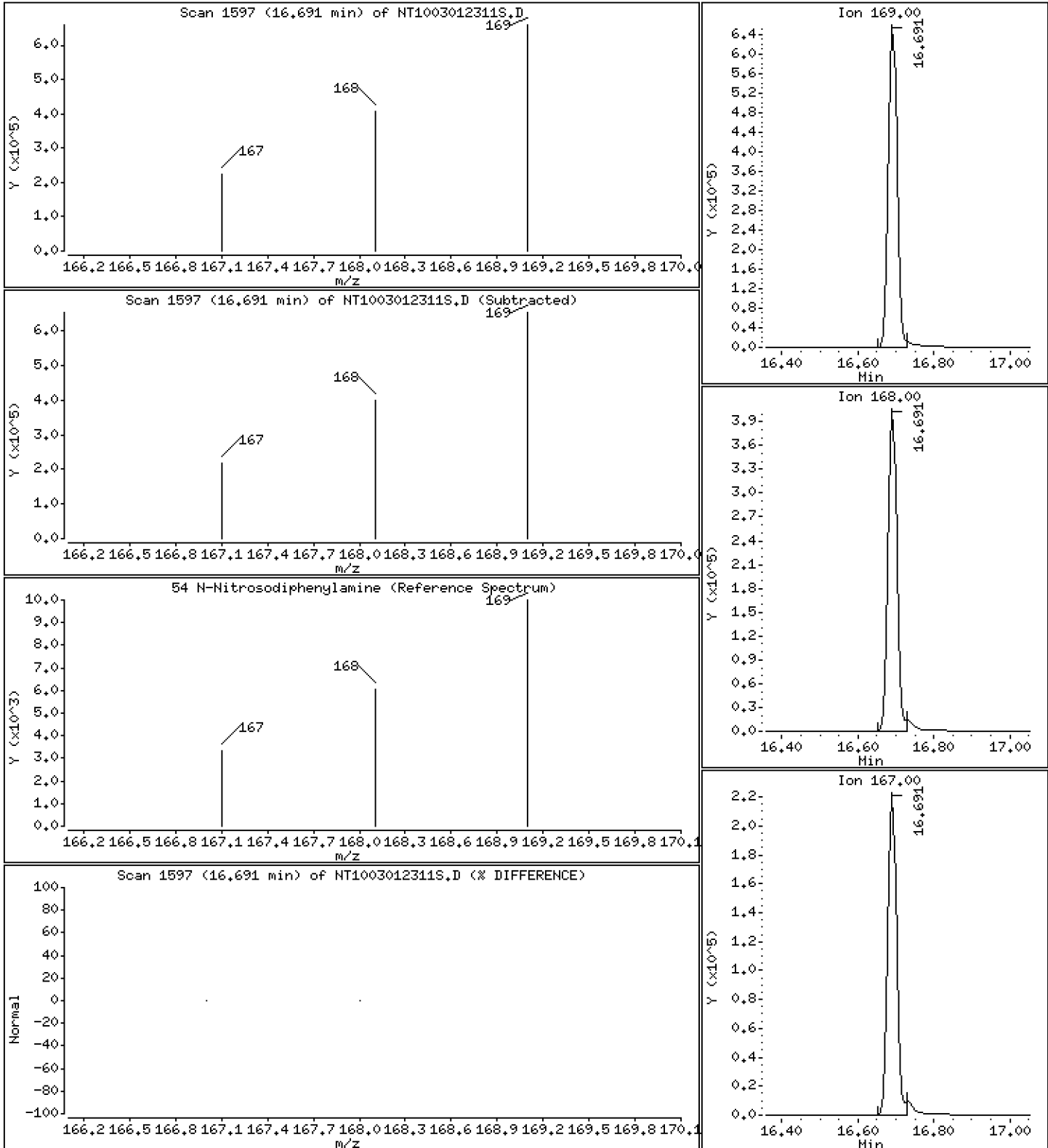
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 5.359 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

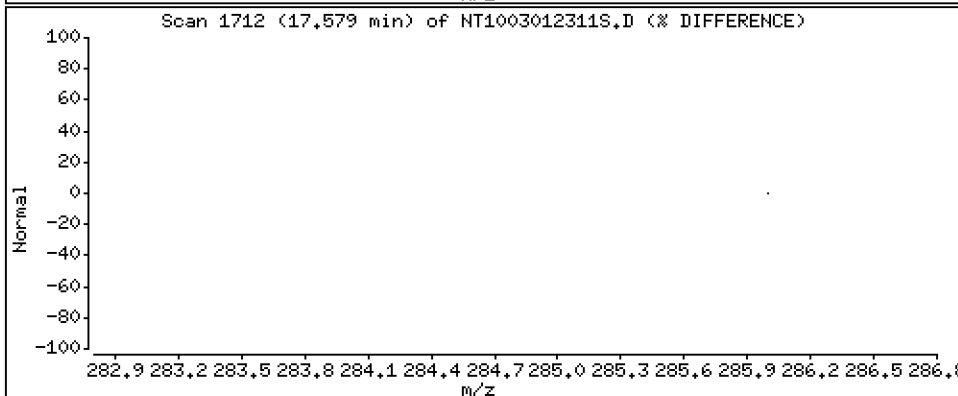
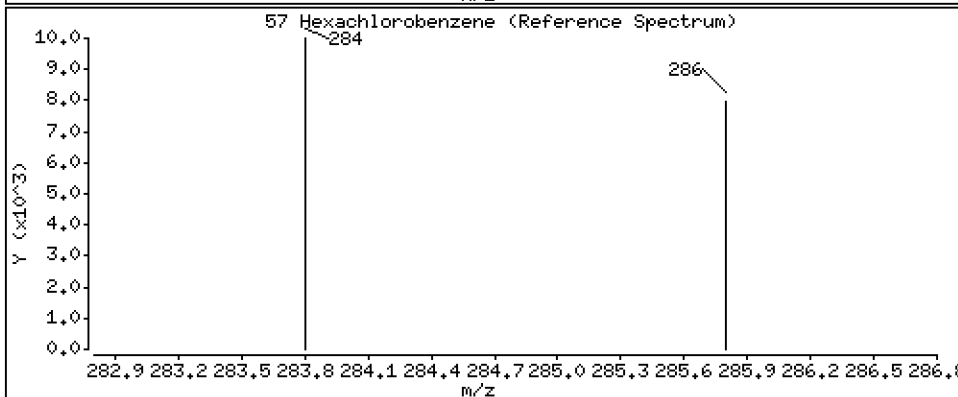
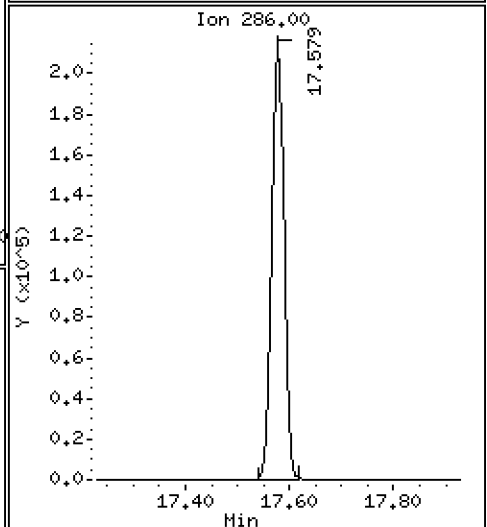
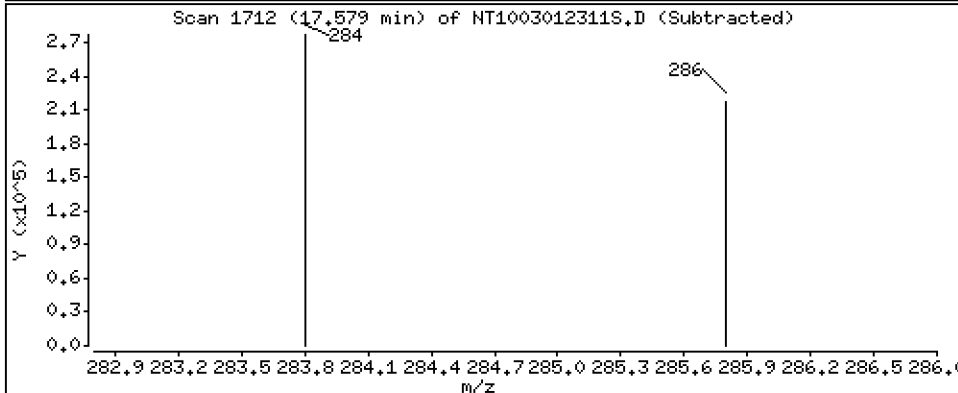
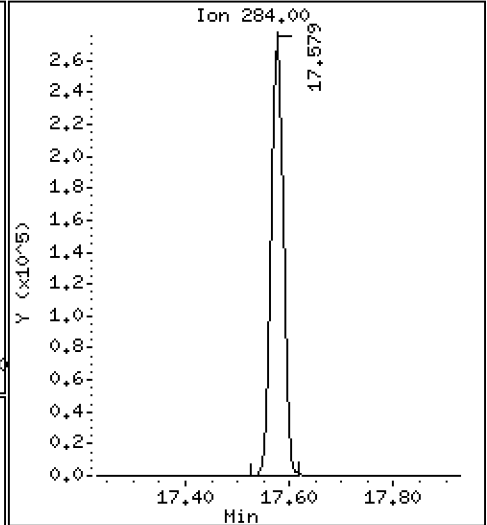
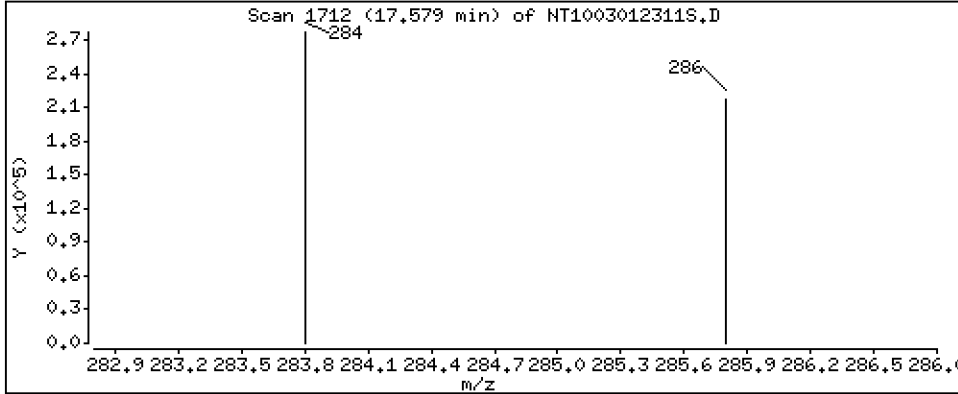
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.866 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

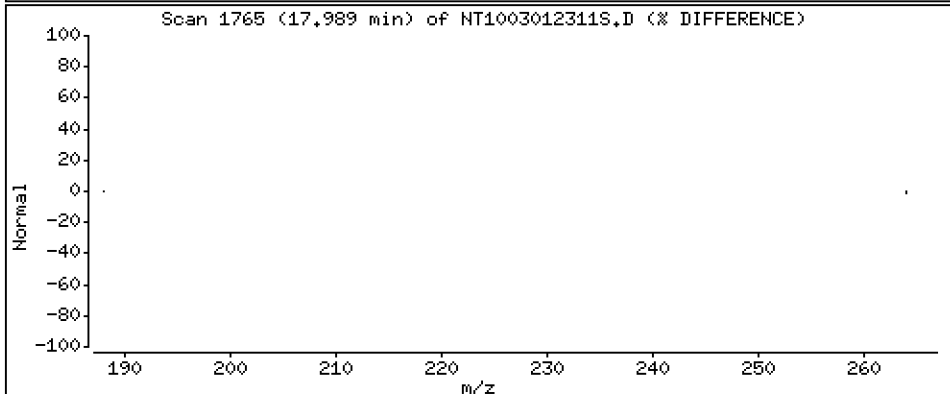
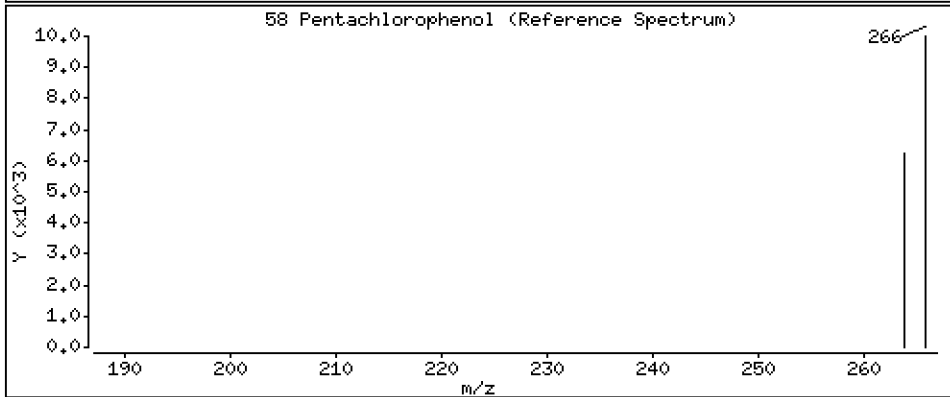
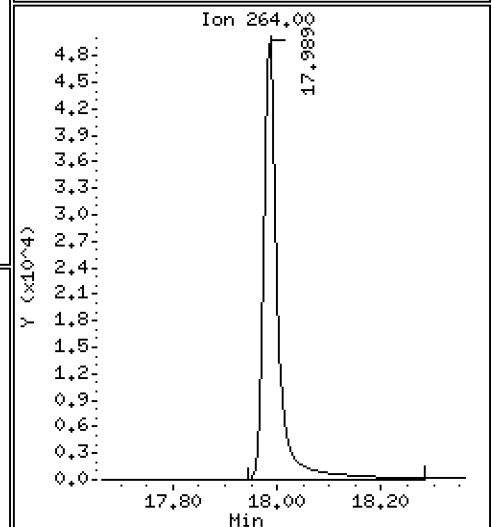
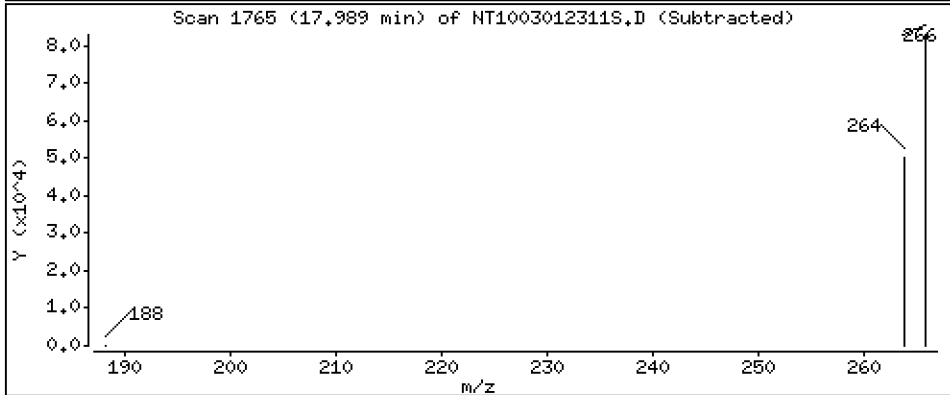
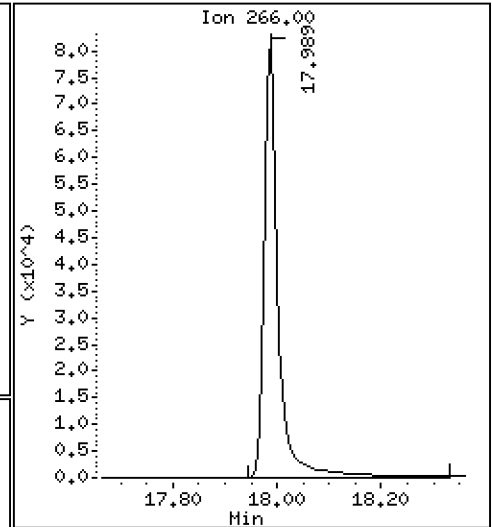
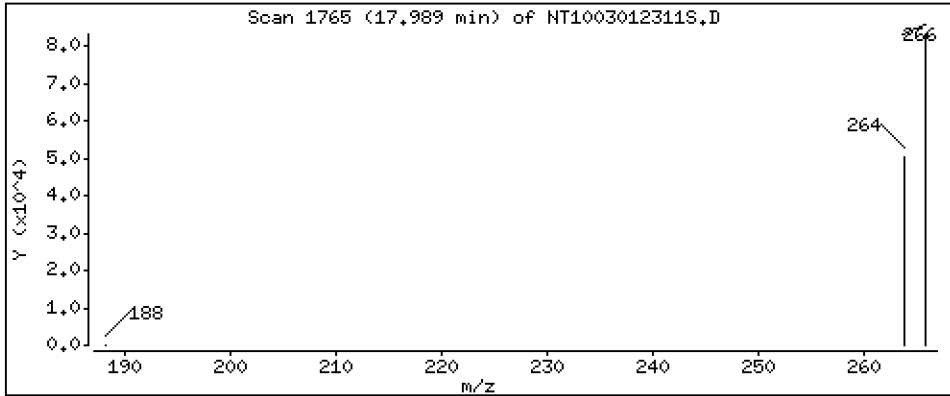
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,912 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

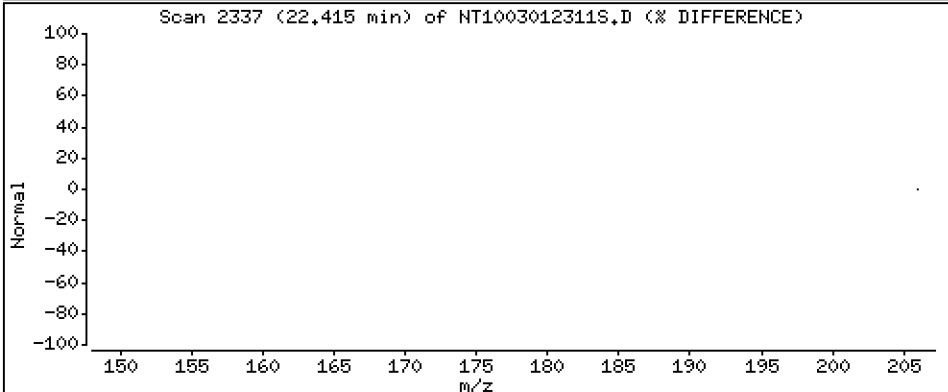
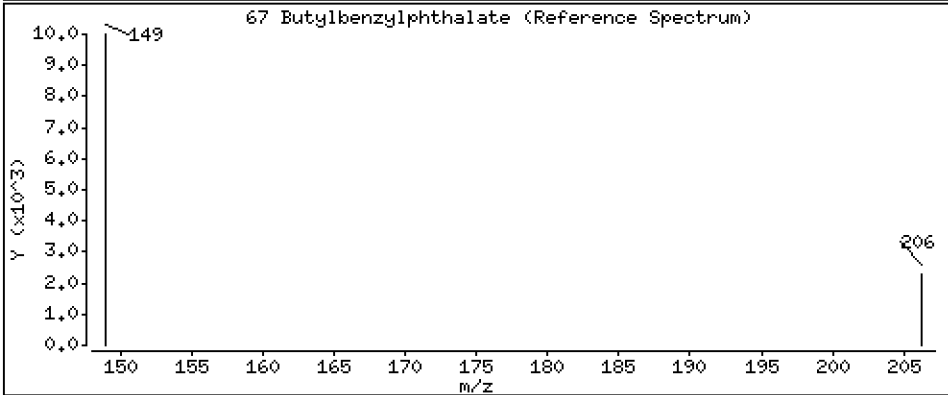
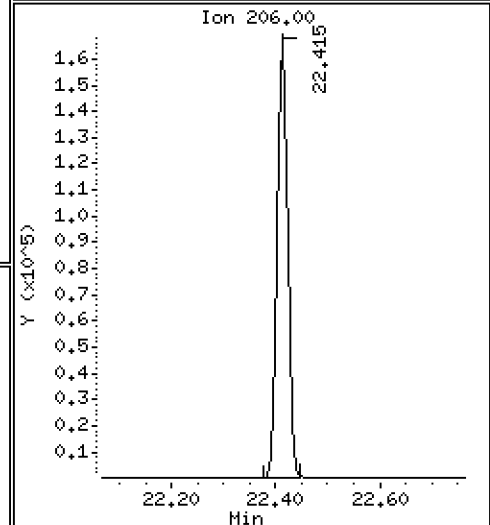
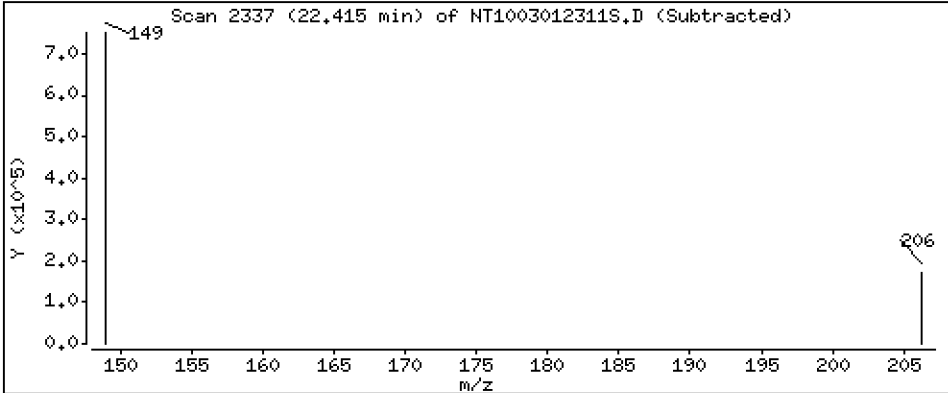
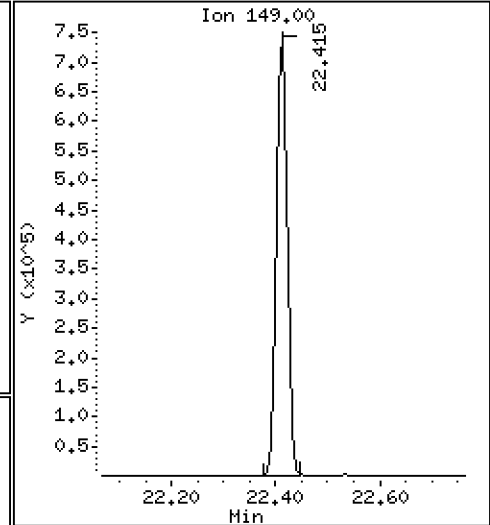
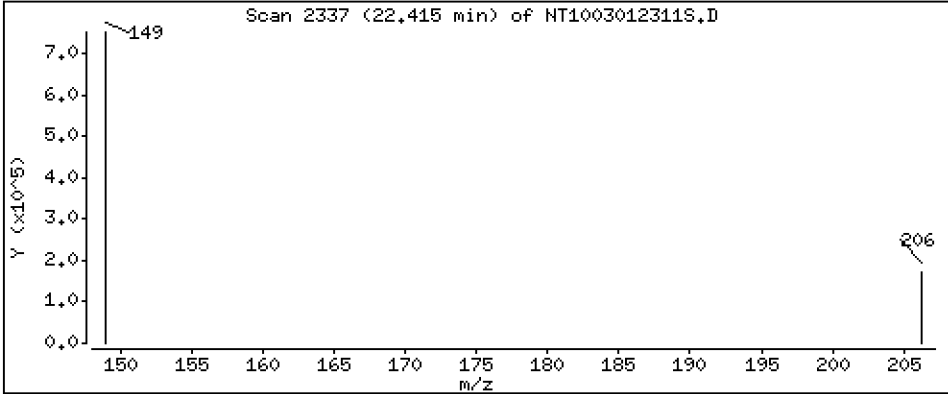
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,689 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

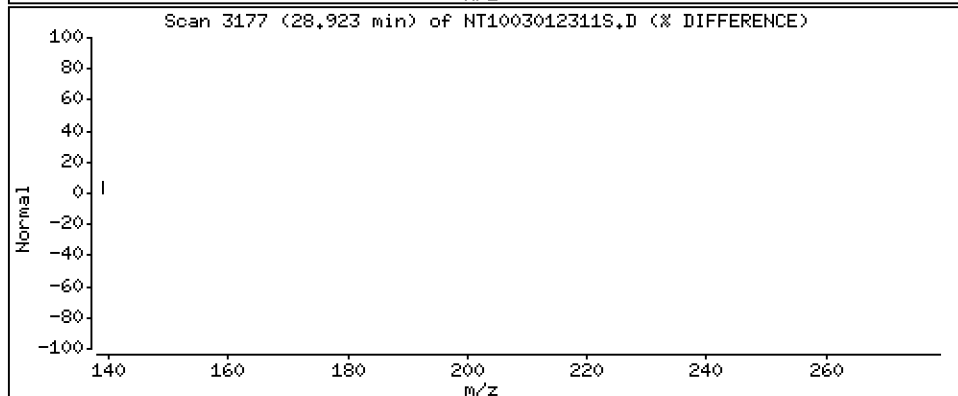
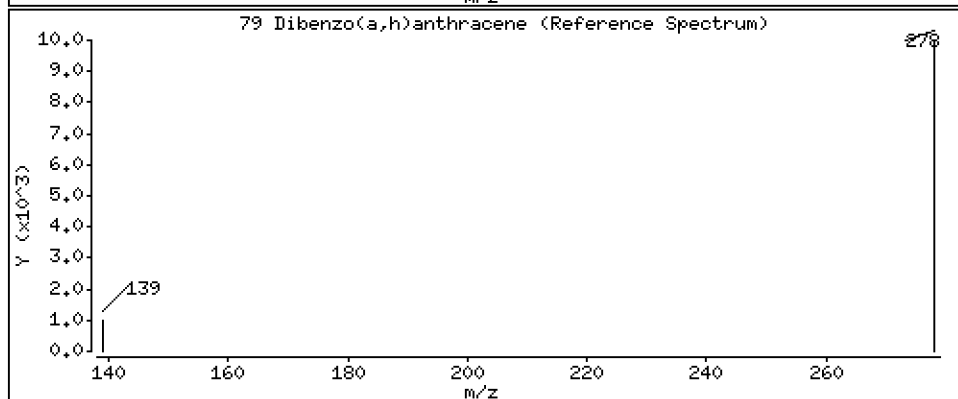
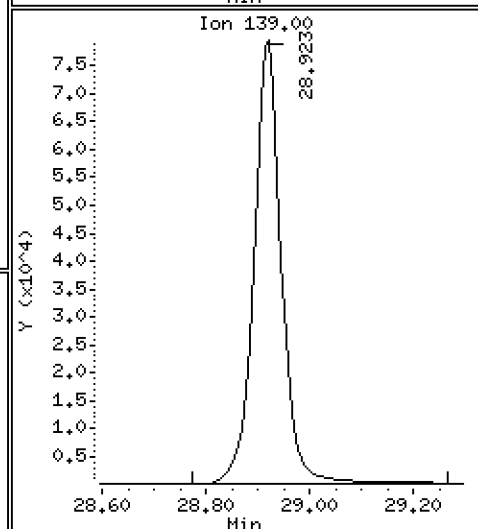
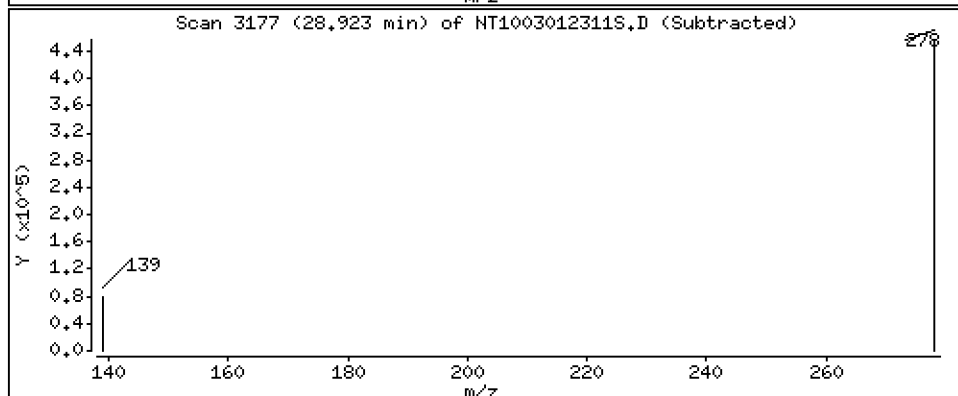
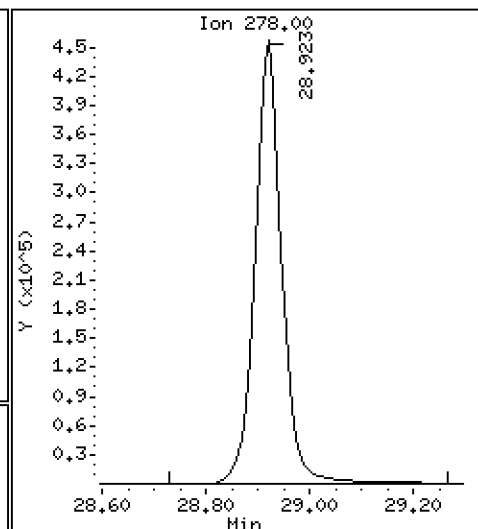
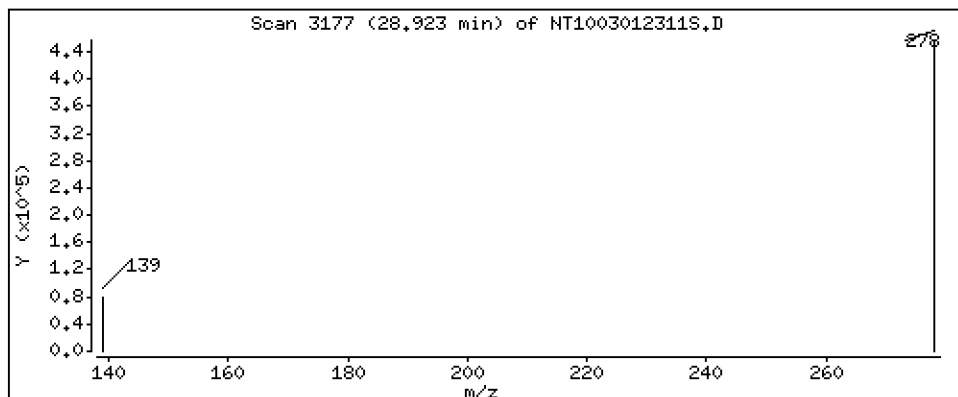
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,760 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

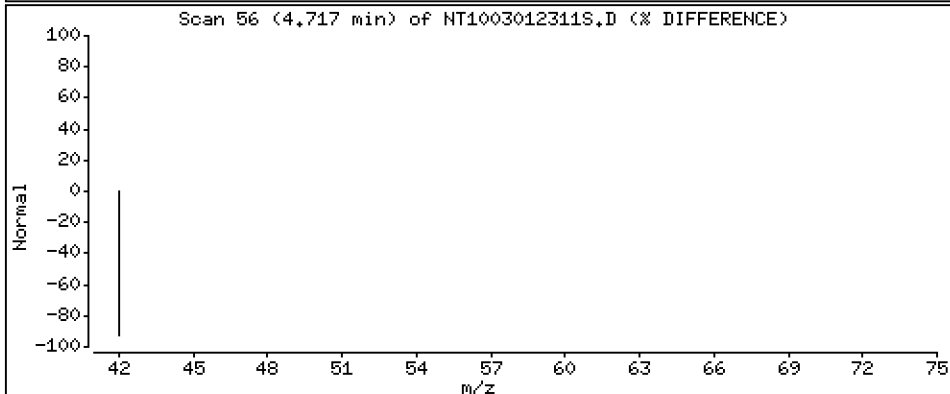
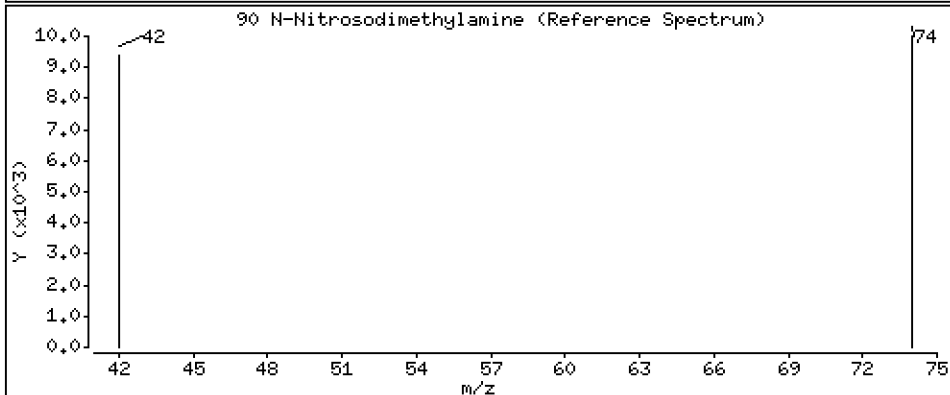
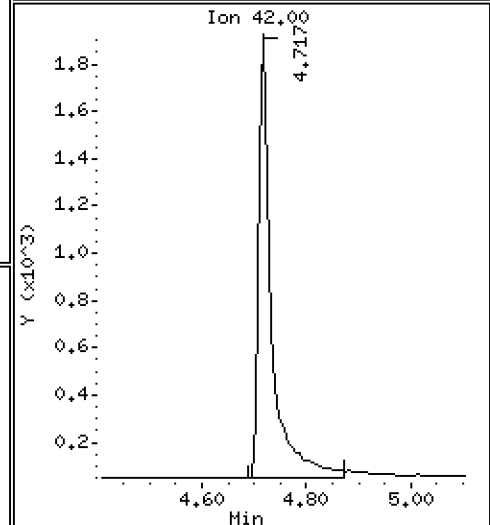
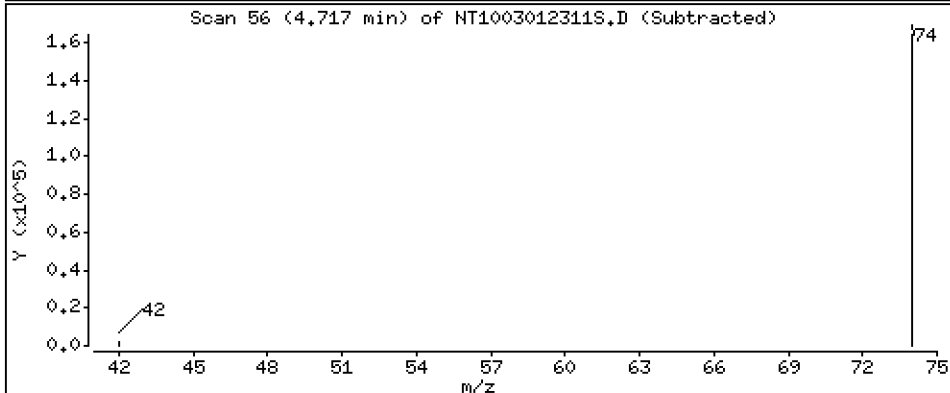
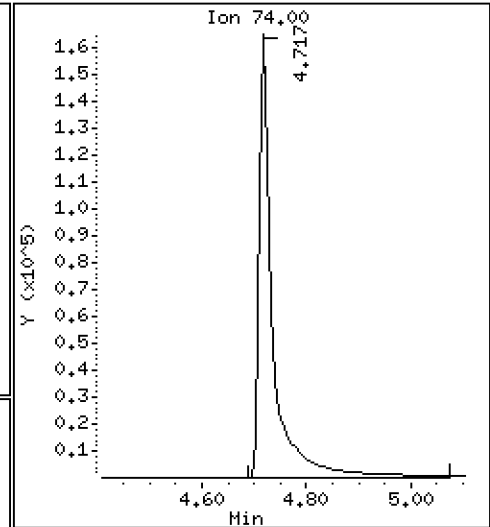
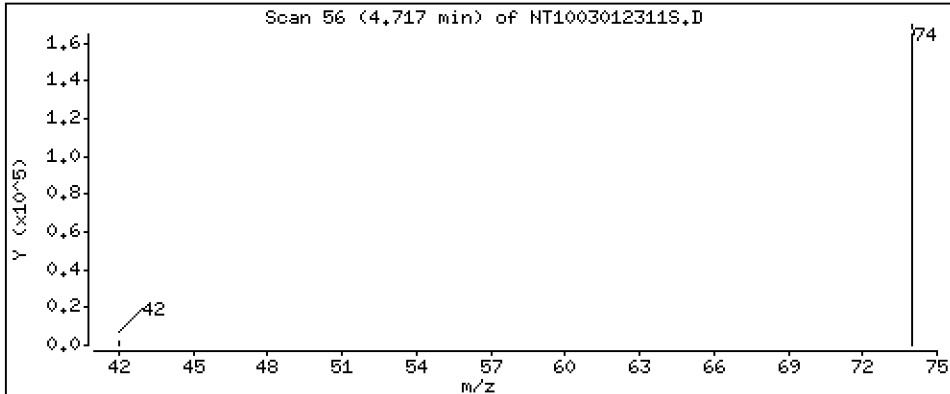
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 6.057 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	3267	0.03768	0.03768 (R)
3 Phenol	94		8.517	8.532	(0.921)	590047	4.50660	4.507
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	572299	5.08409	5.084
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.252	(1.000)	303734	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.275	(1.003)	574537	5.24962	5.250
11 Benzyl alcohol	79		9.469	9.508	(1.023)	388582	5.10390	5.104
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	540938	5.14228	5.142
13 2-Methylphenol	108		9.655	9.671	(1.044)	348452	4.36547	4.365
15 4-Methylphenol	108		9.943	9.966	(1.075)	379262	4.50495	4.505
16 N-Nitroso-di-n-propylamine	70		9.982	9.982	(1.079)	330861	5.68451	5.685
22 2,4-Dimethylphenol	107		10.998	11.006	(0.938)	357707	3.63670	3.637
24 Benzoic acid	105		11.099	11.007	(0.947)	380081	6.86990	6.870
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	402252	4.87012	4.870
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1147551	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	285002	4.86242	4.862
39 Dimethylphthalate	163		14.741	14.749	(0.963)	1142178	5.57065	5.571
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	645730	4.00000	
50 Diethylphthalate	149		16.203	16.211	(1.058)	1156037	5.97883	5.979
54 N-Nitrosodiphenylamine	169		16.690	16.705	(0.907)	998237	5.35897	5.359
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	424193	4.86607	4.866

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
* 59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
\$ 66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712 (R)
67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
* 77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.947	0.000	0.9467		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**SECOND-SOURCE
CALIBRATION VERIFICATION
EPA 8270E-SIM**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00050

Laboratory ID: SLA0213-SCV1

Sequence: SLA0213

Standard ID: L000686

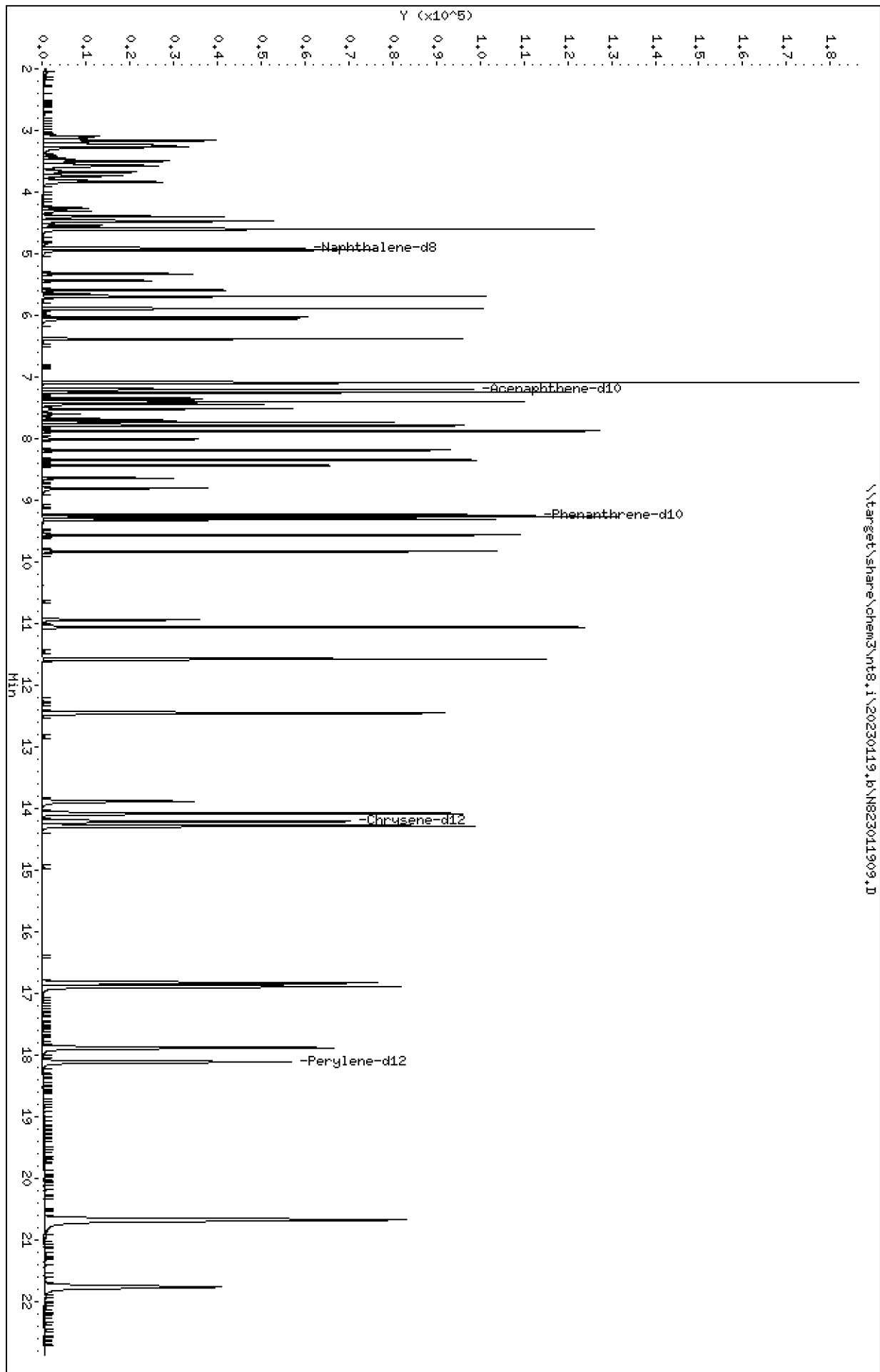
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzo(a)fluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.1\20230119.6\N823011909.D
Date: 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.1
Operator: JZ
Column diameter: 0.25

\\target\share\chem3\nt8.1\20230119.6\N823011909.D



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

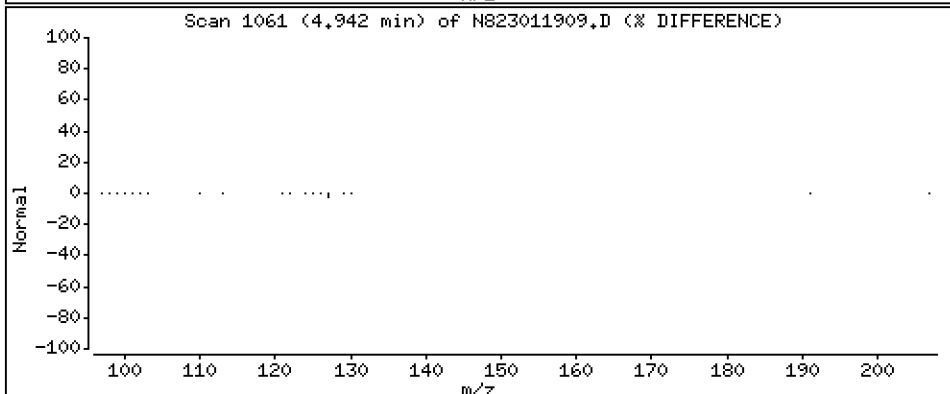
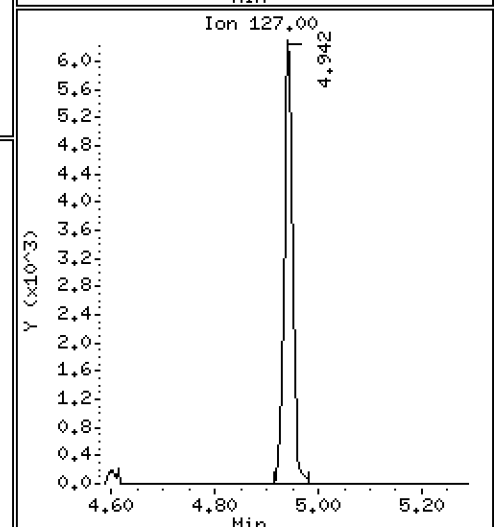
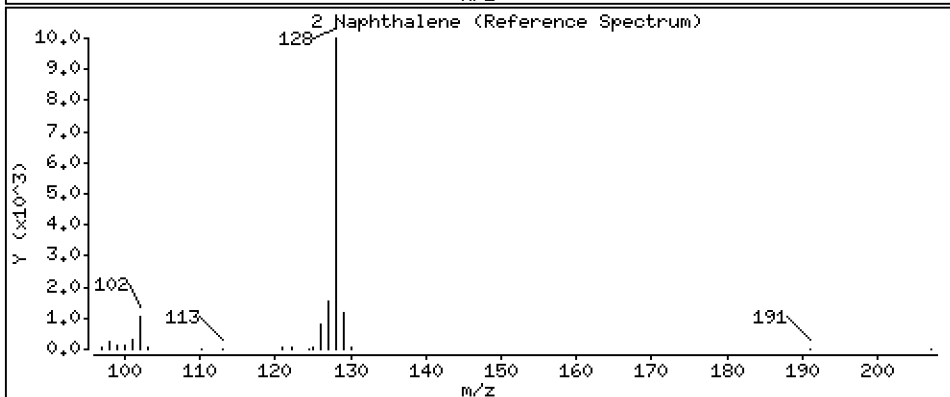
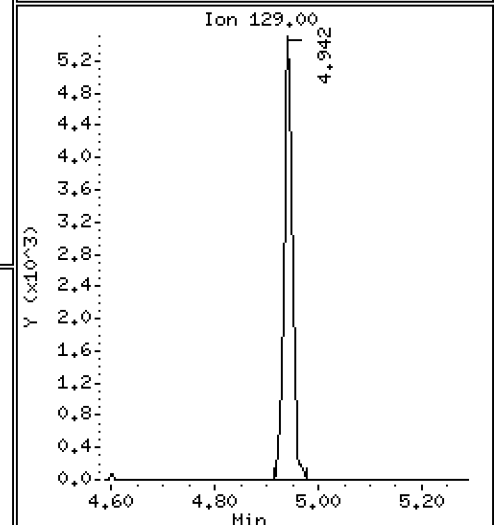
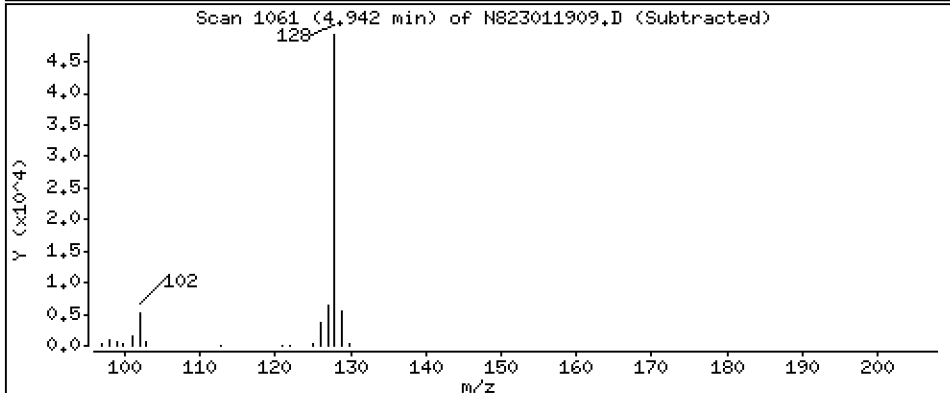
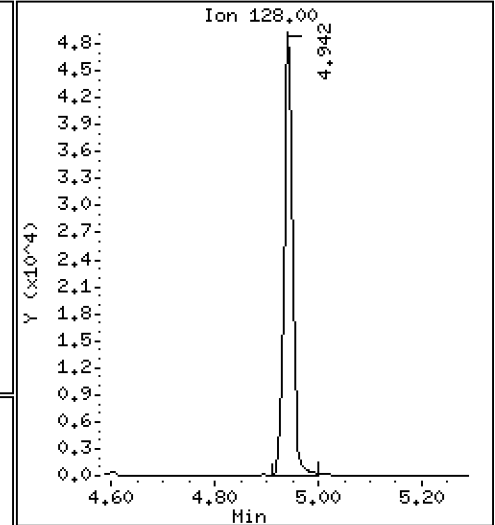
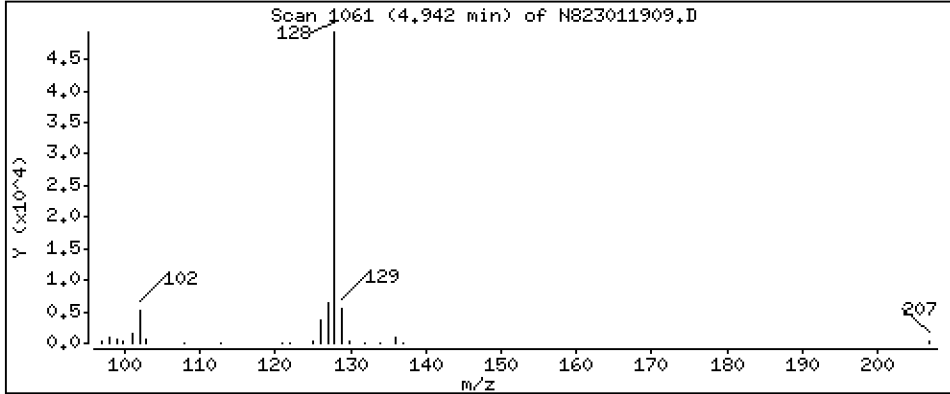
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 2,626 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

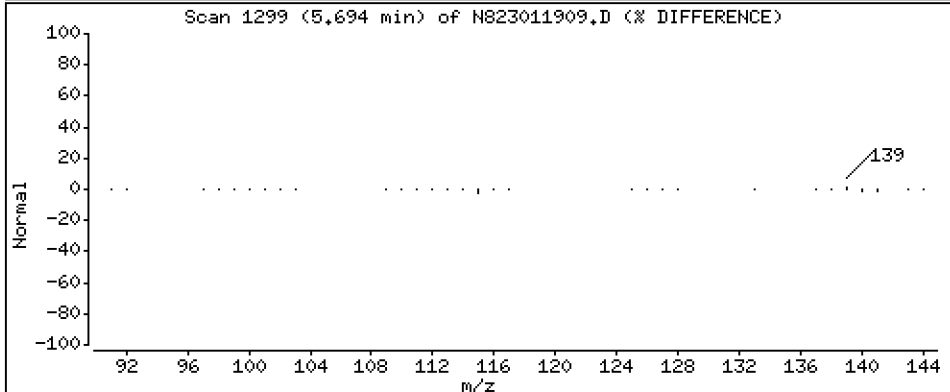
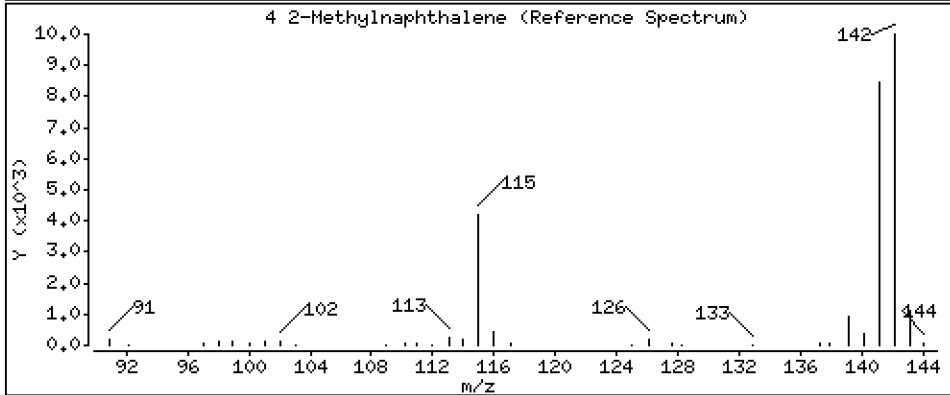
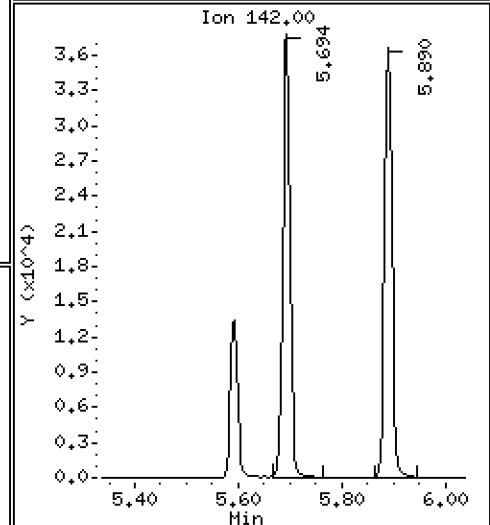
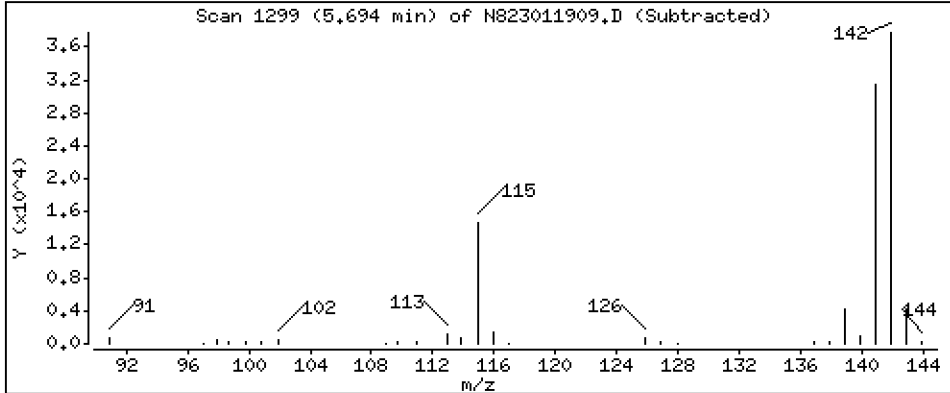
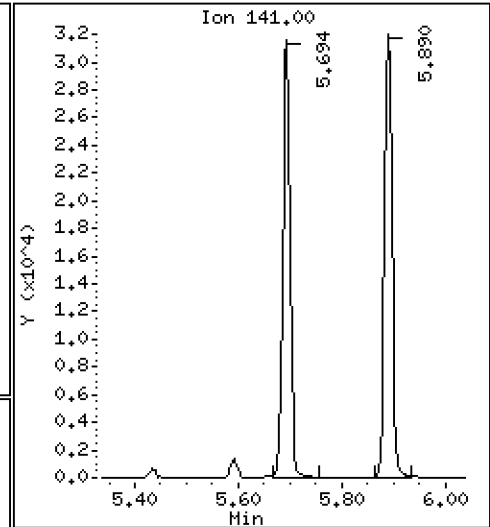
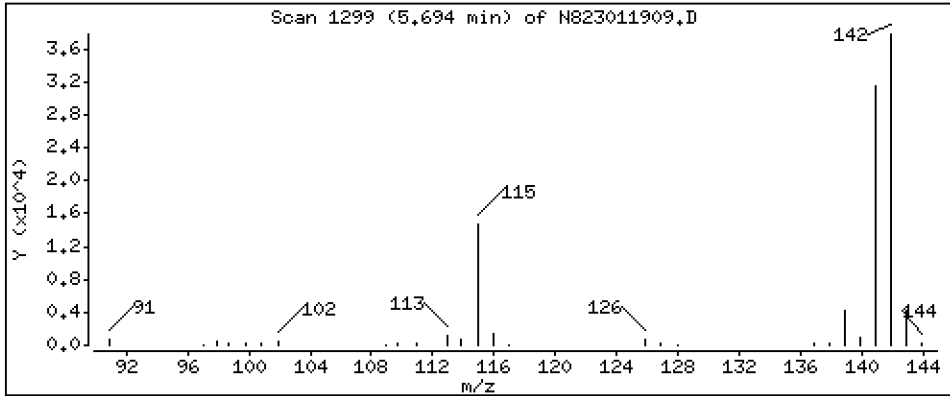
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

4 2-Methylnaphthalene

Concentration: 2,670 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

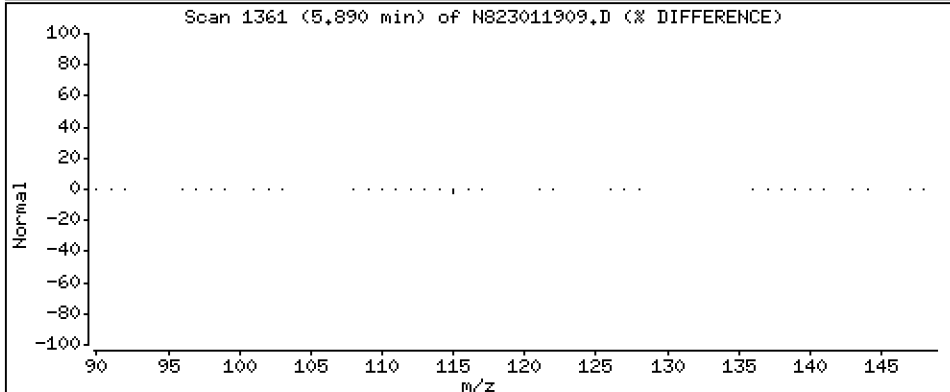
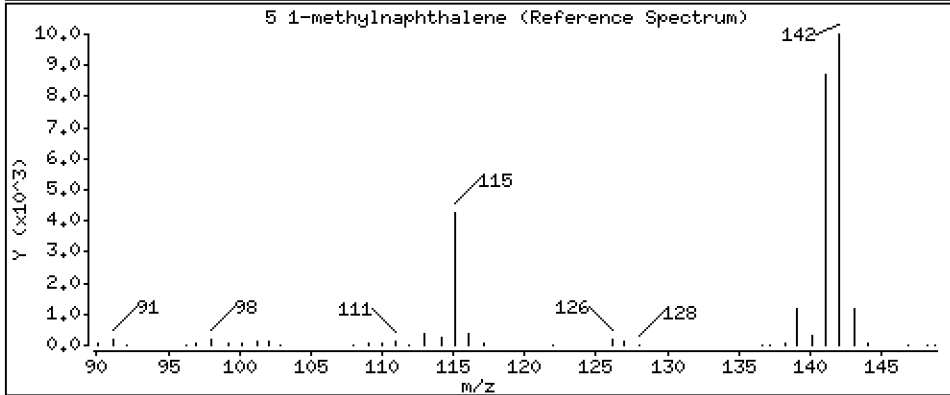
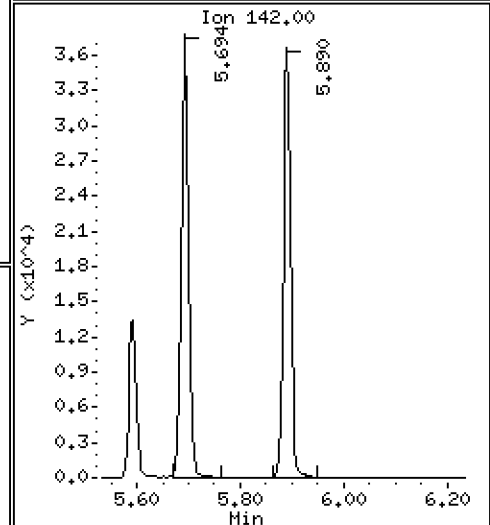
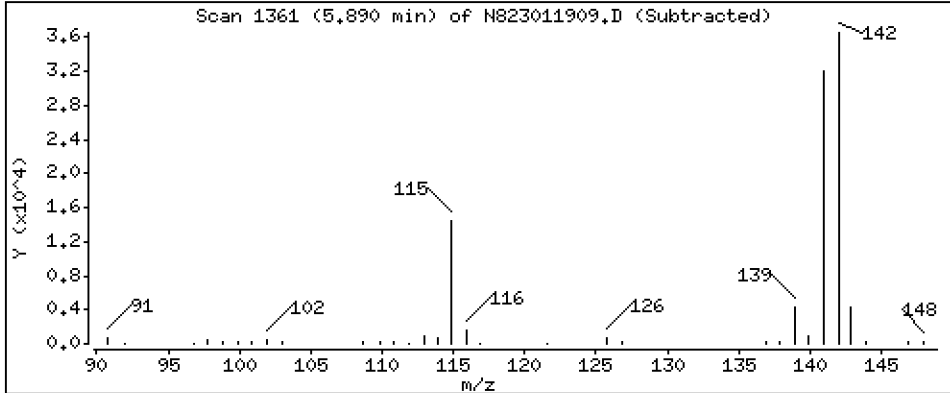
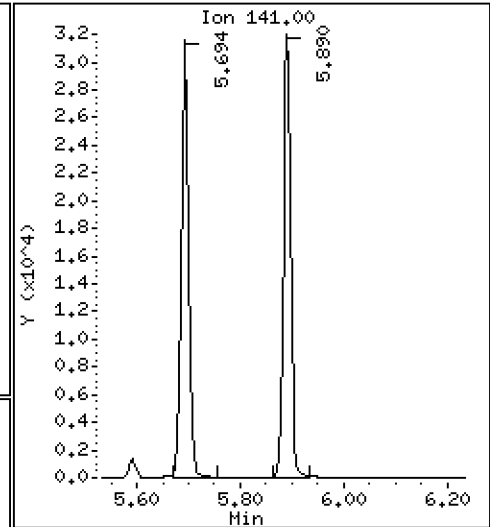
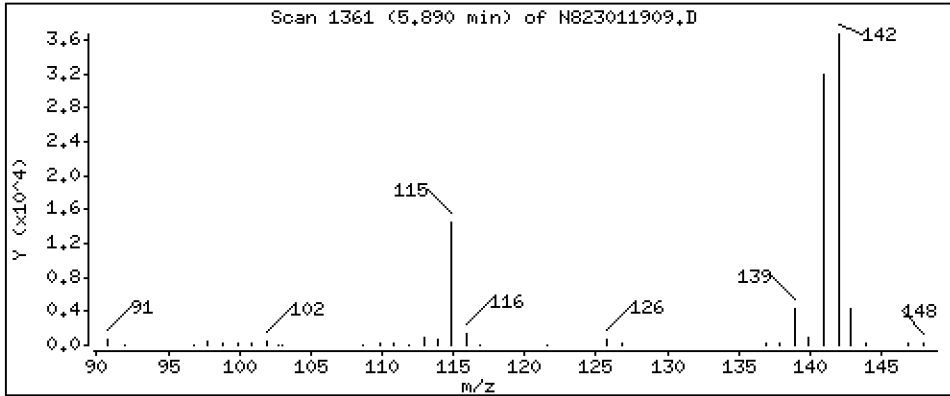
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

5 1-methylnaphthalene

Concentration: 2,649 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

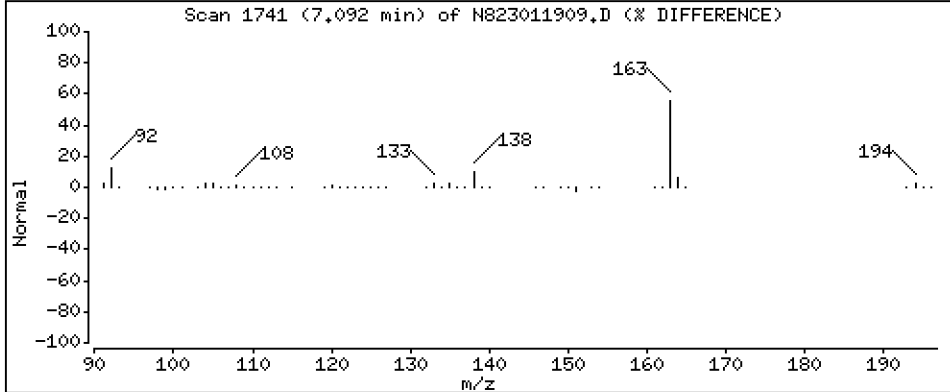
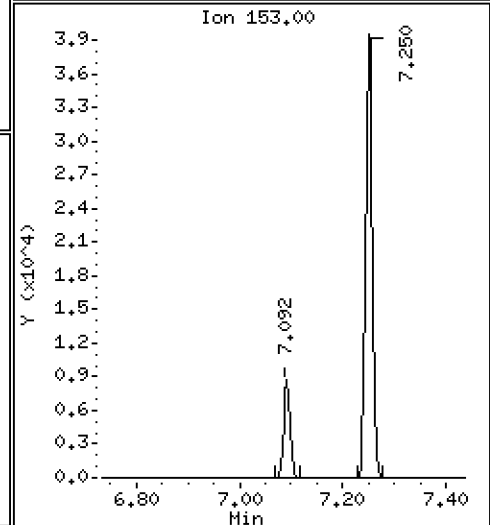
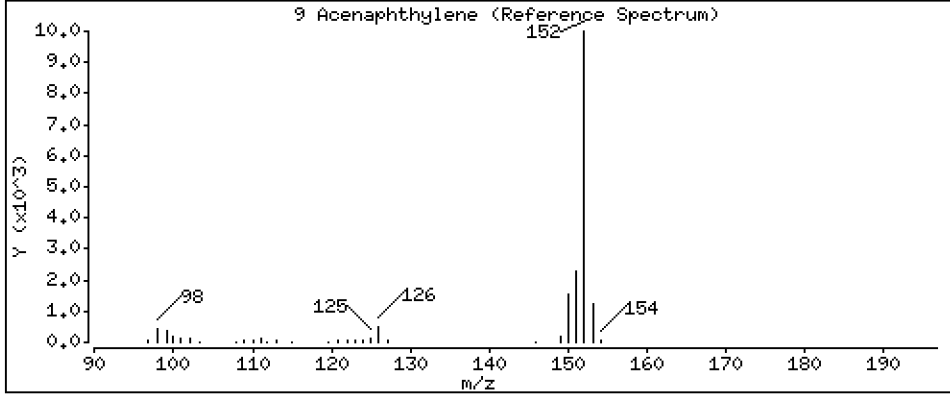
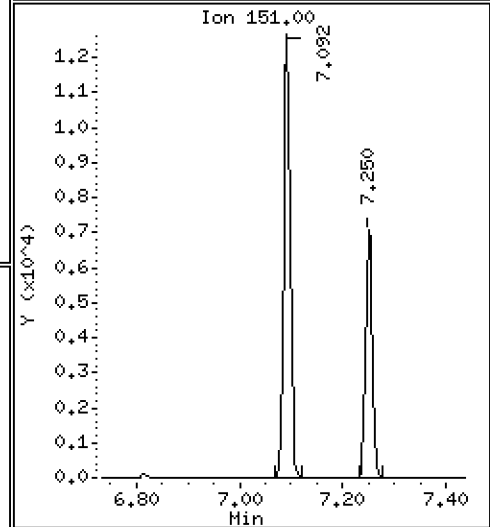
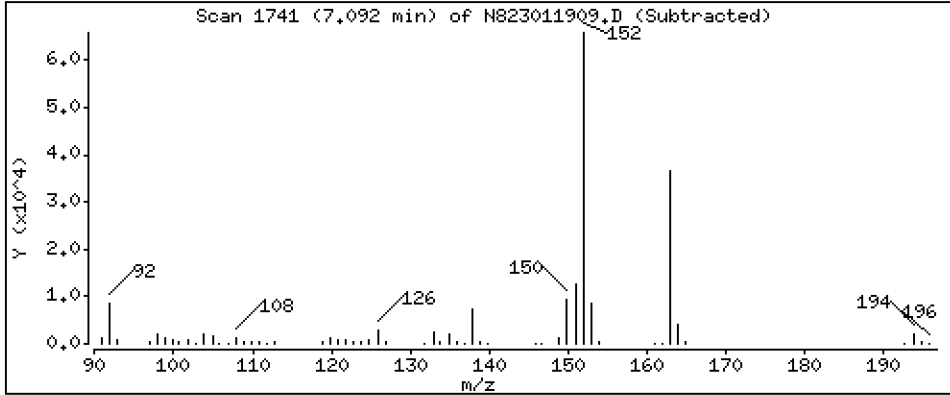
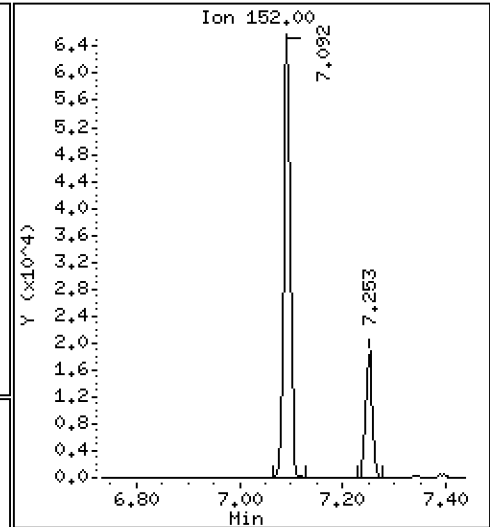
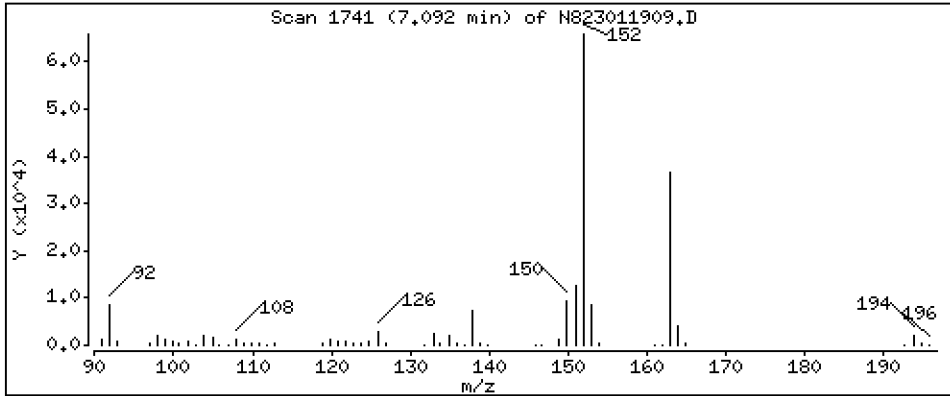
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 2,821 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

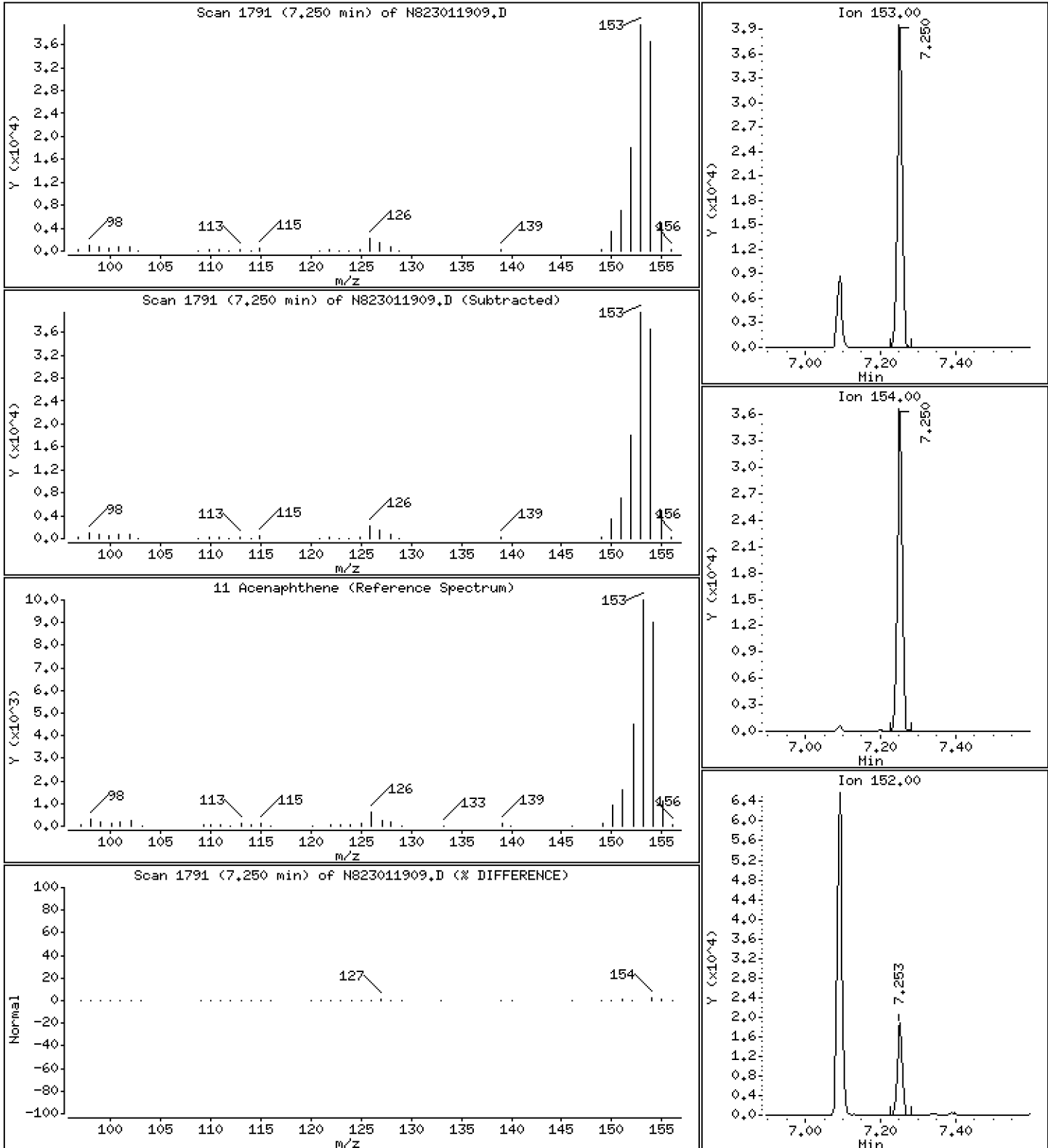
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

11 Acenaphthene

Concentration: 2,600 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

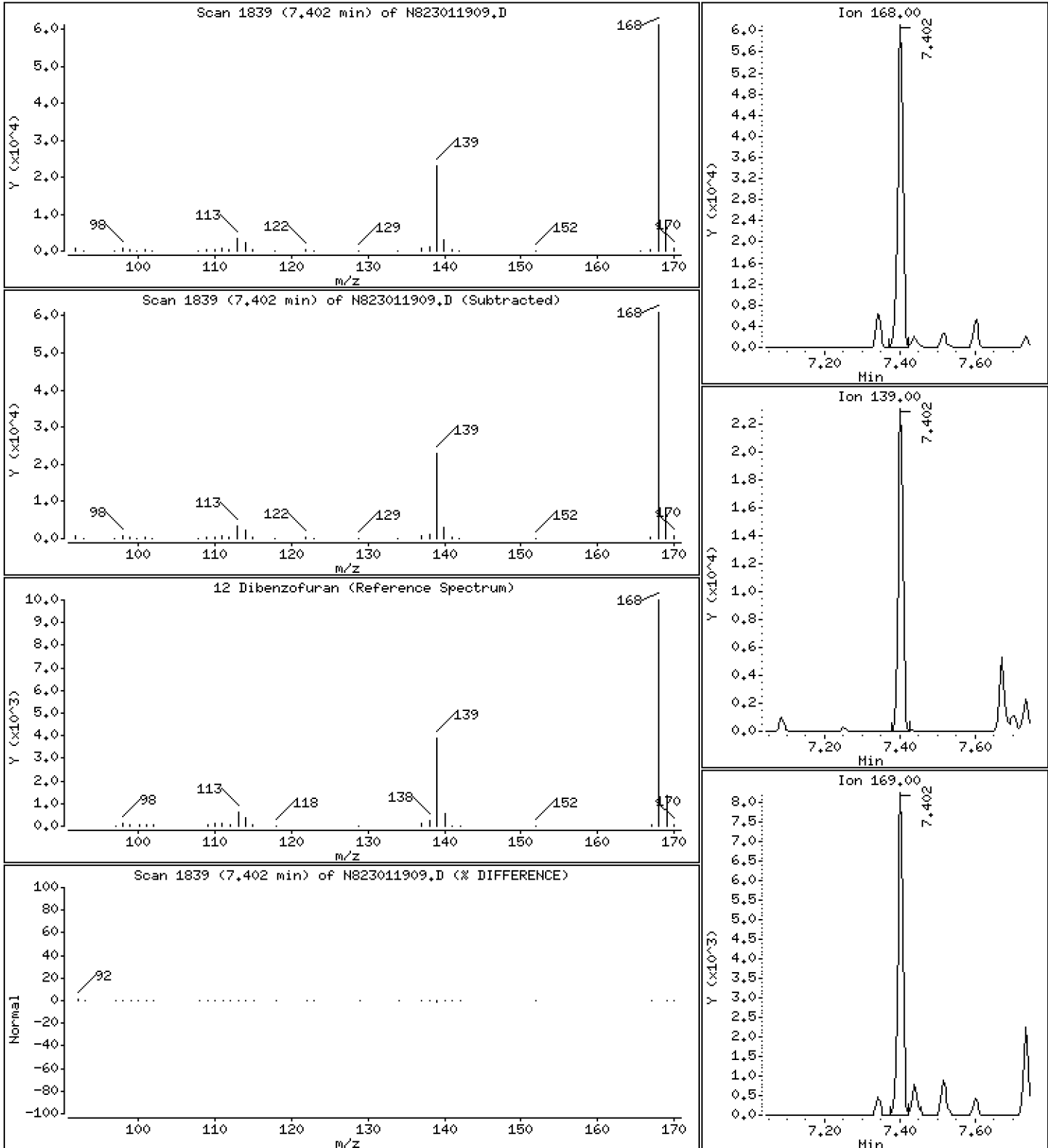
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 2,860 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

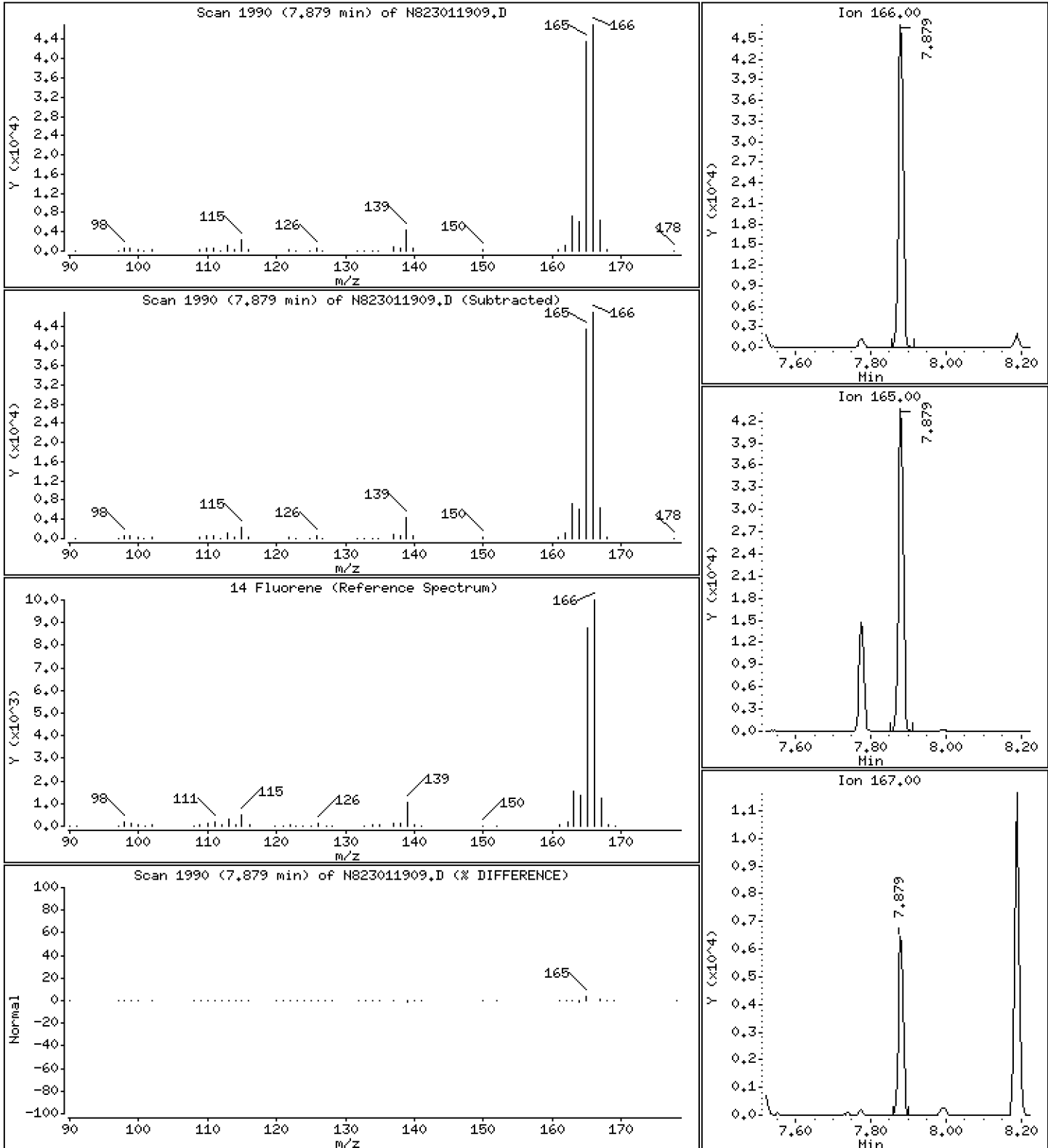
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

14 Fluorene

Concentration: 2,631 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

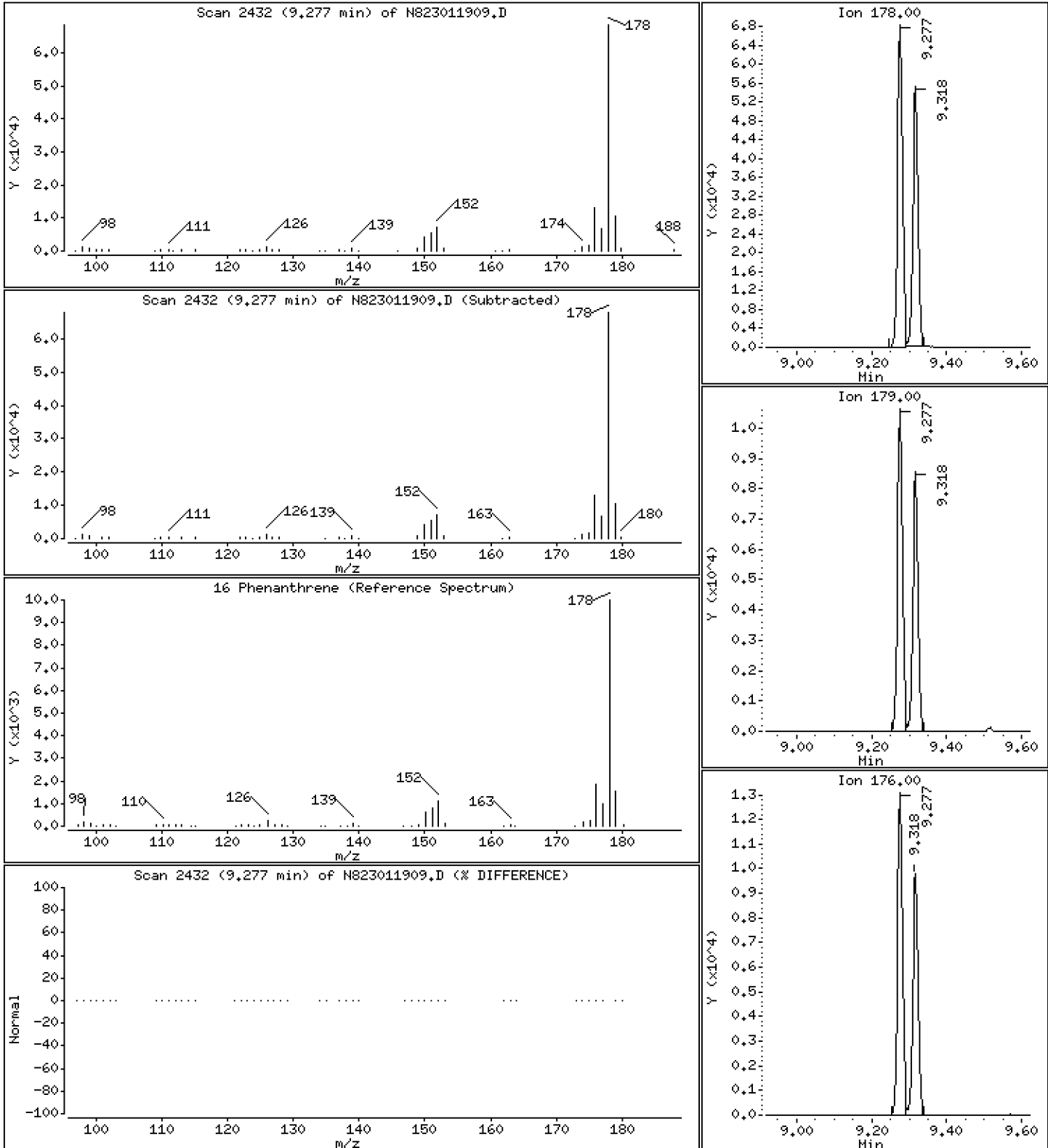
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

16 Phenanthrene

Concentration: 2,448 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

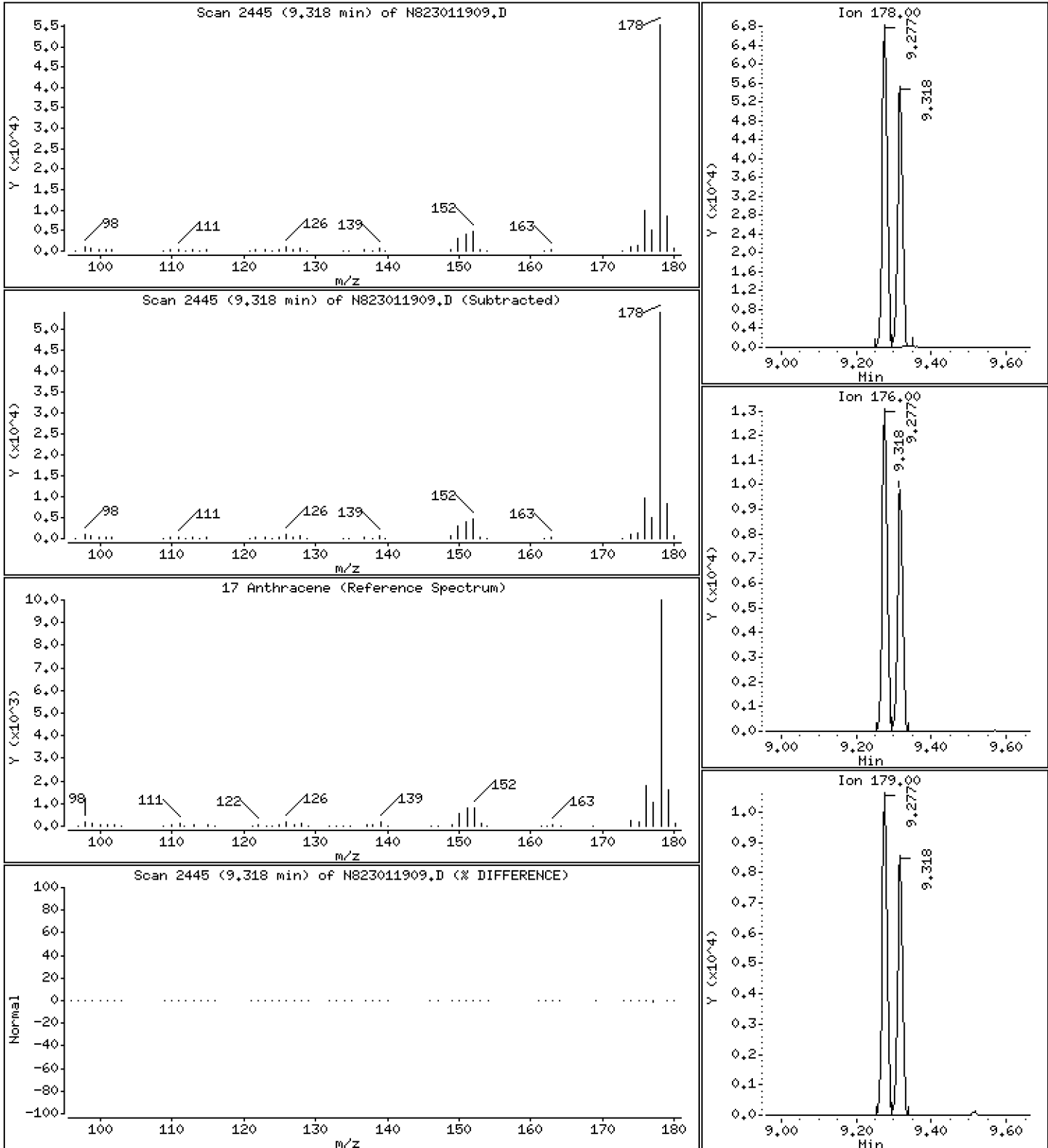
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

17 Anthracene

Concentration: 2,270 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

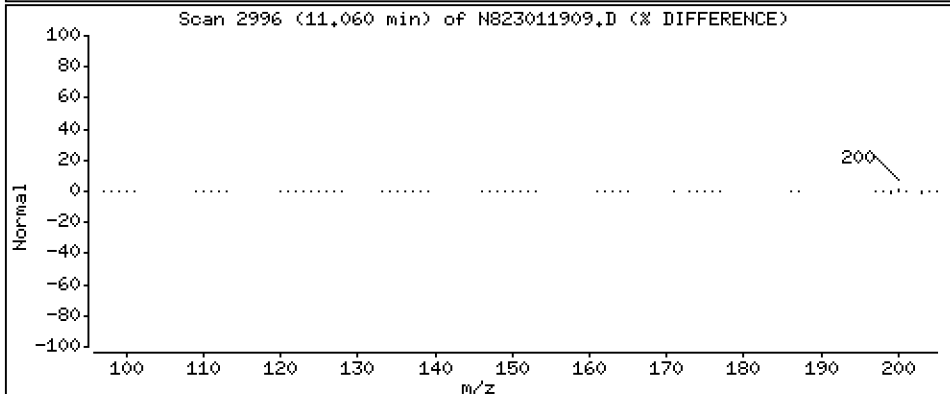
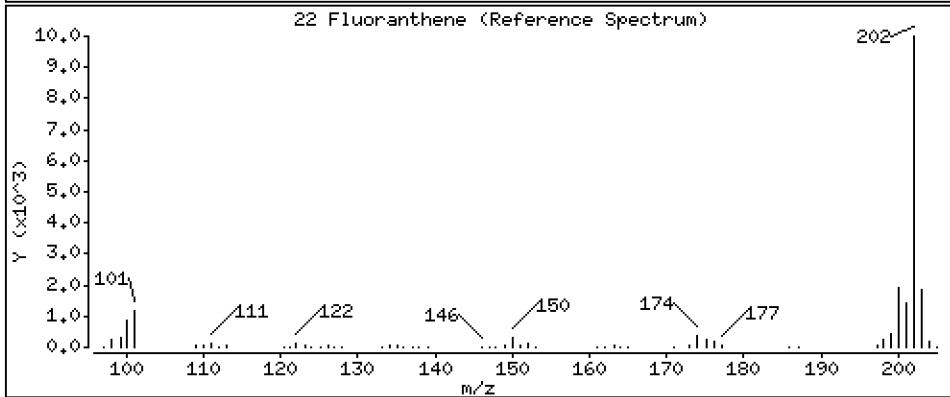
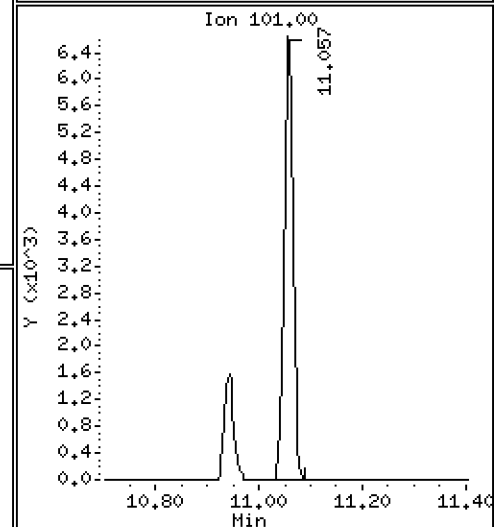
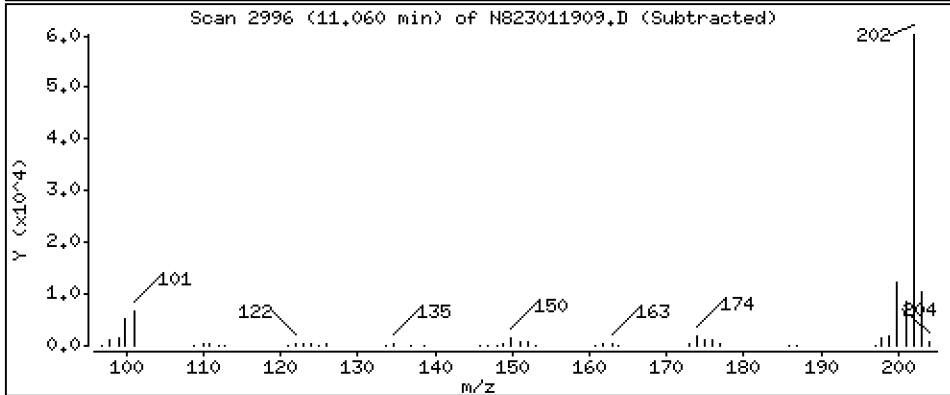
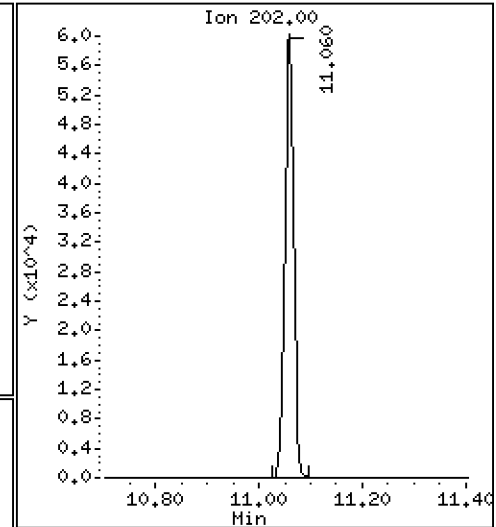
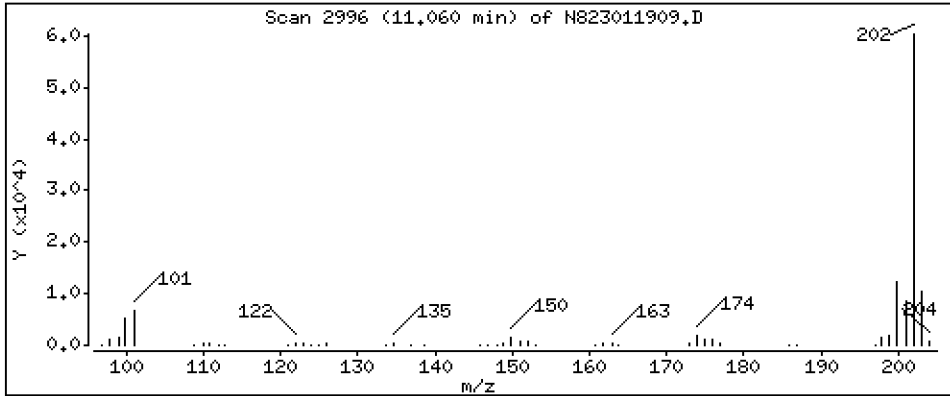
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,653 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

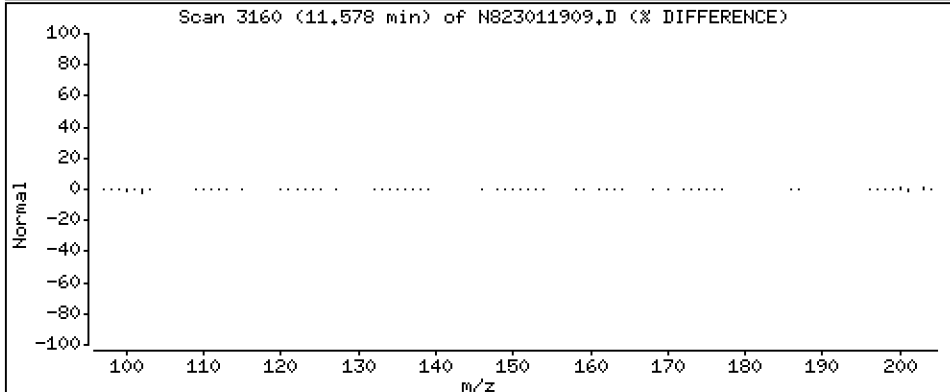
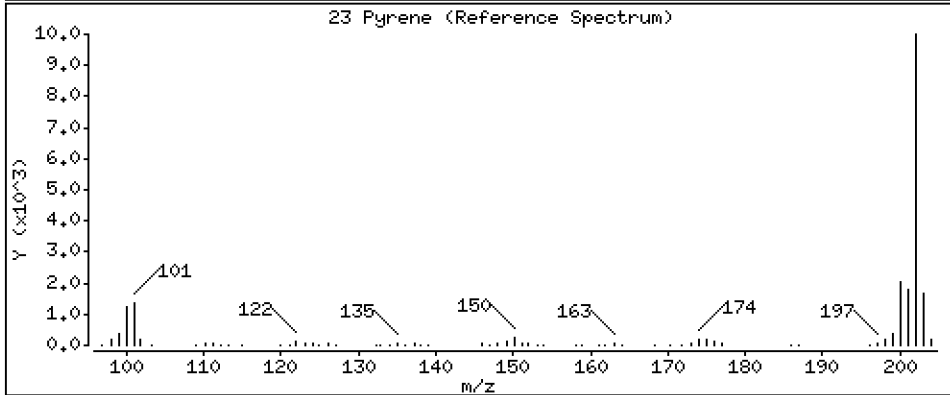
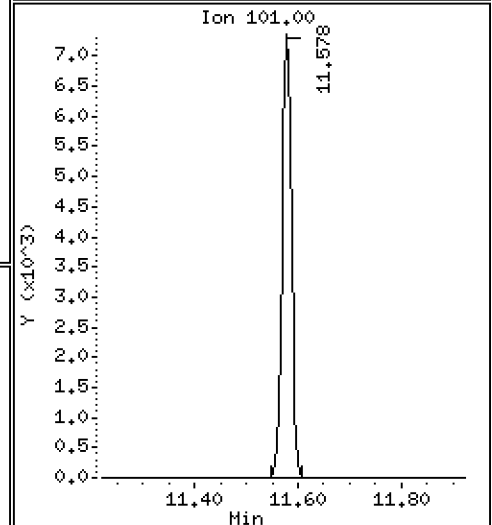
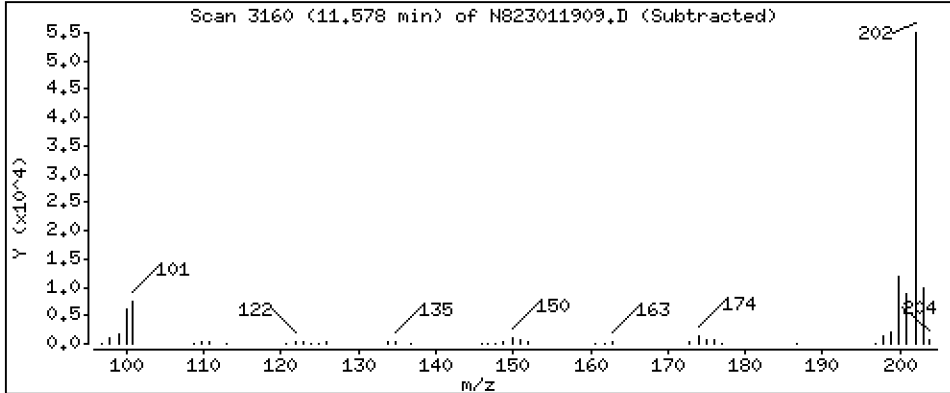
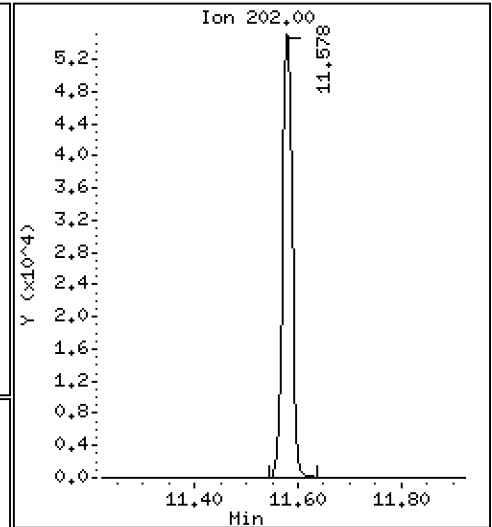
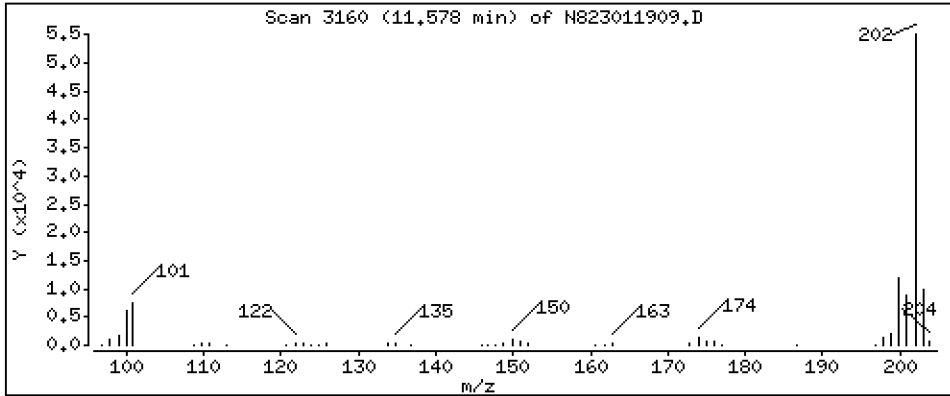
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 2,462 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

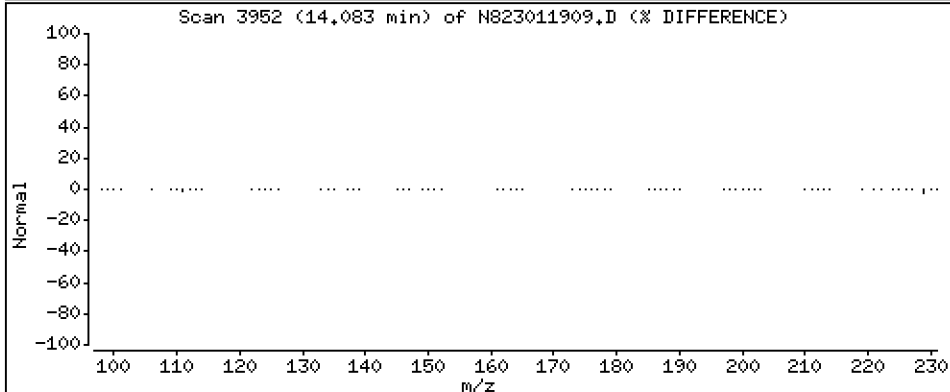
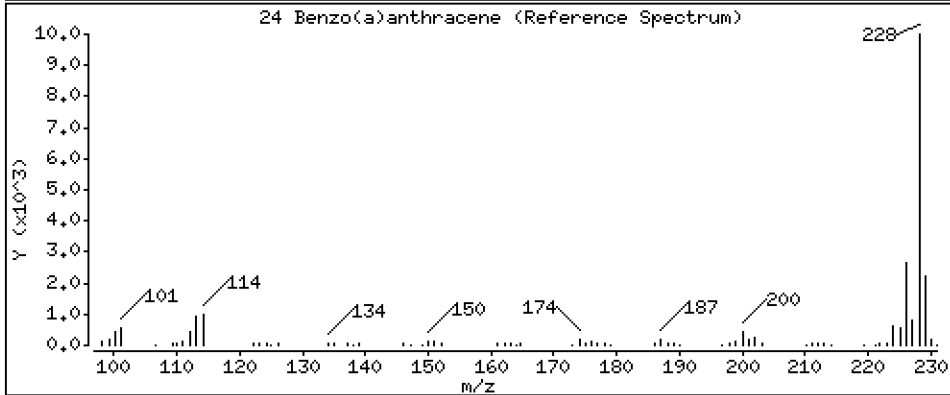
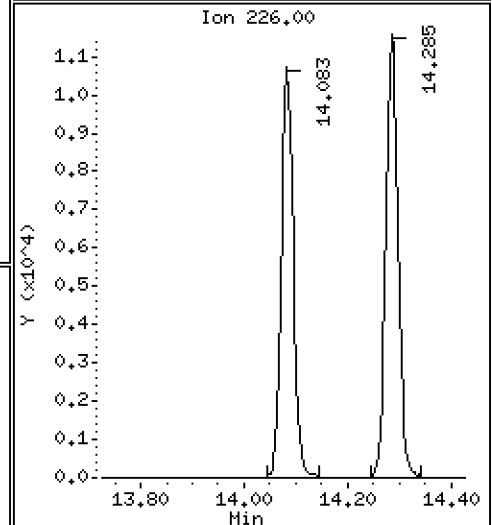
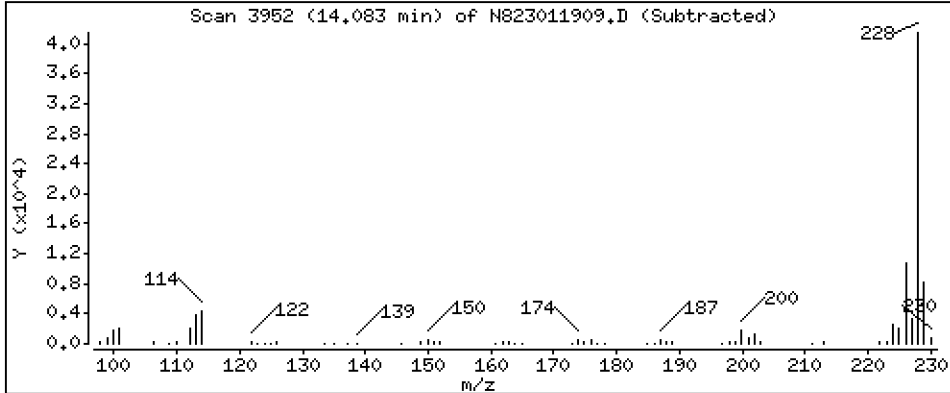
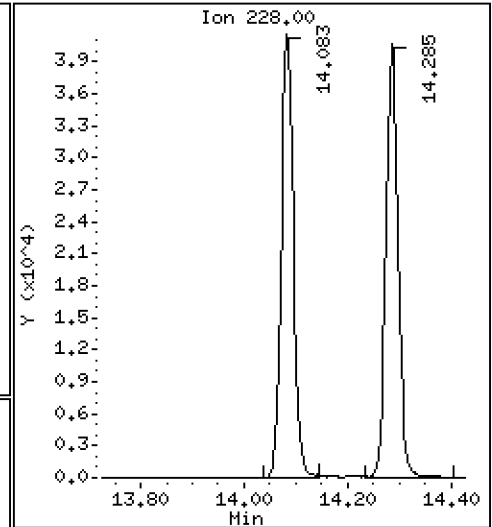
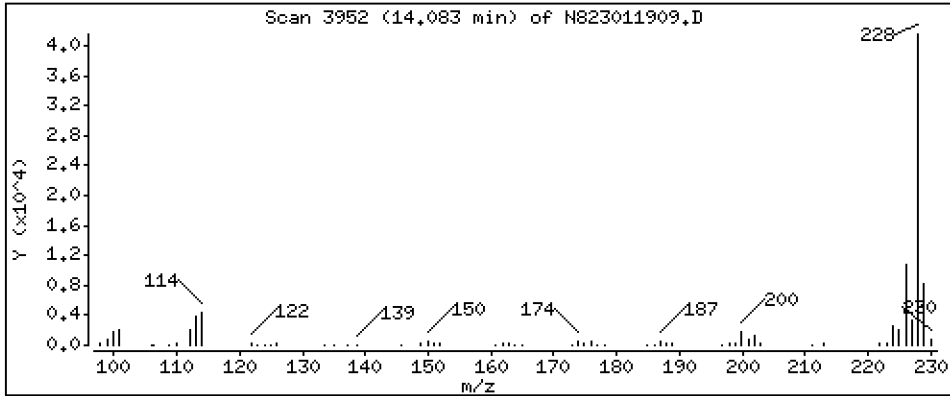
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

24 Benzo(a)anthracene

Concentration: 2,587 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

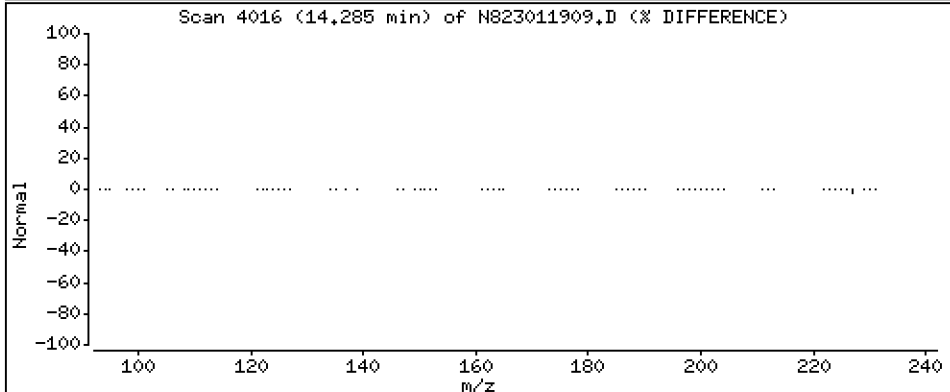
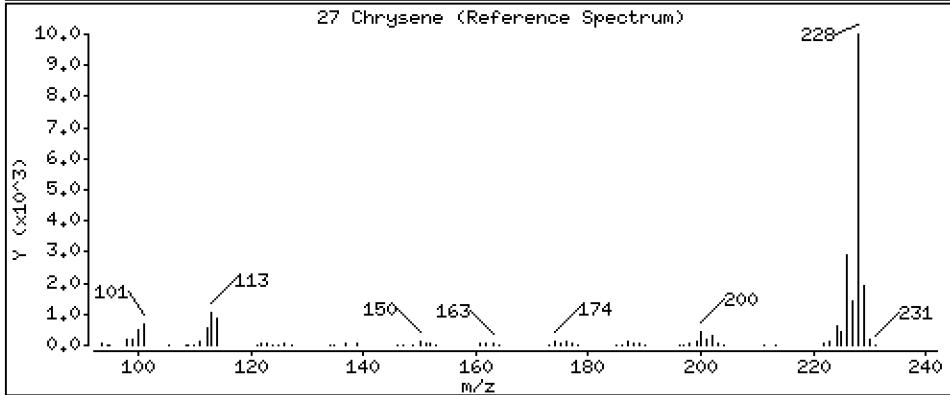
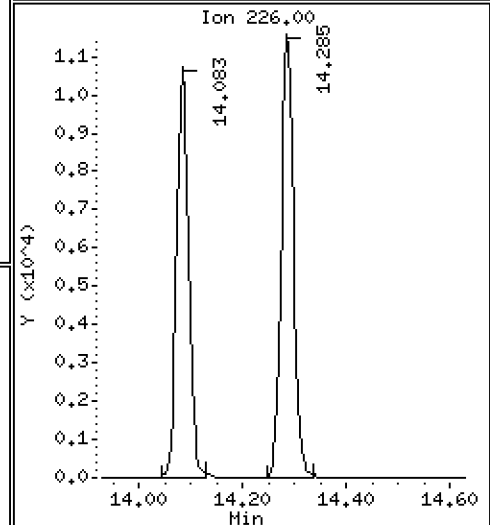
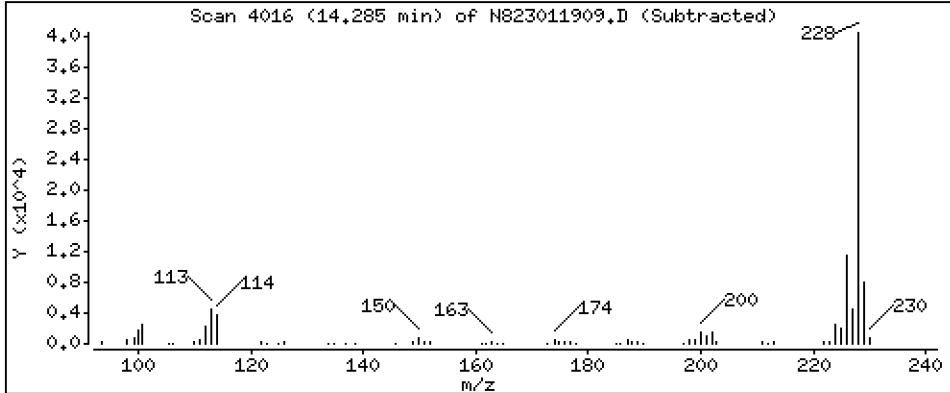
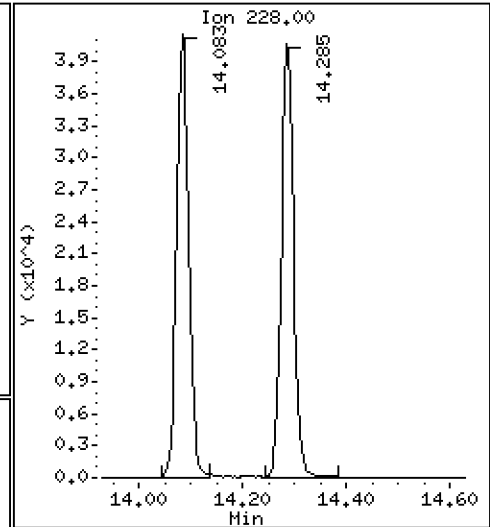
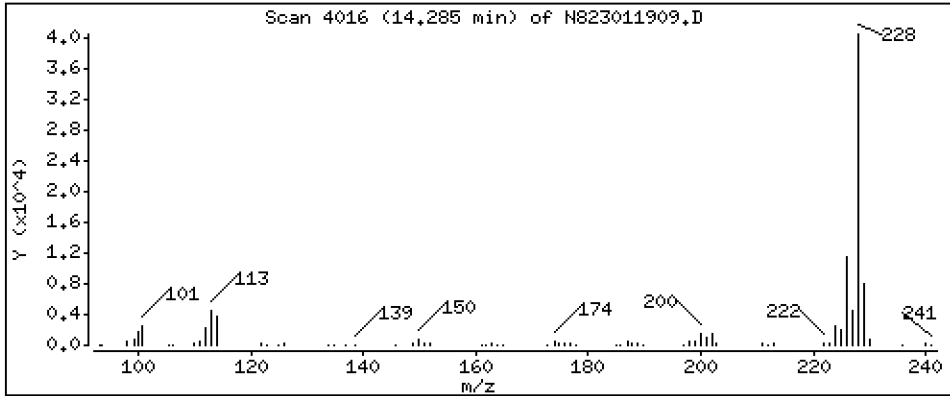
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 2,400 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

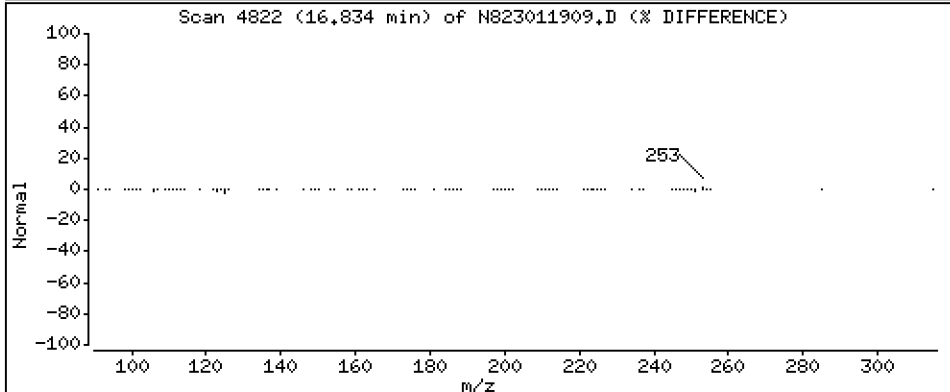
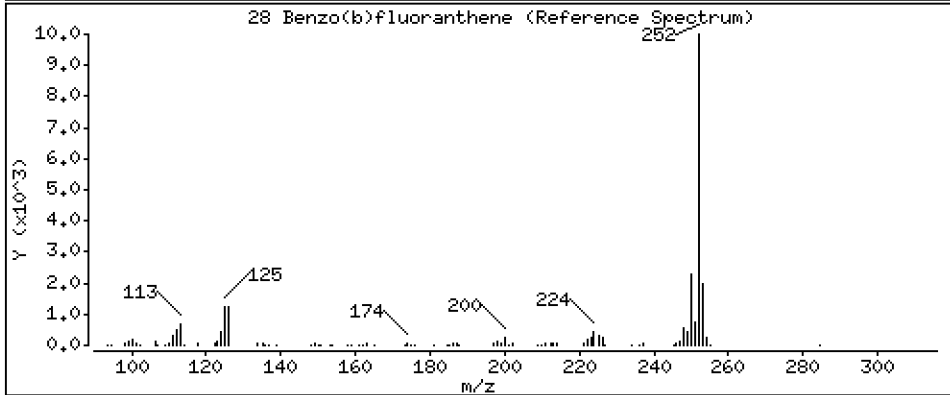
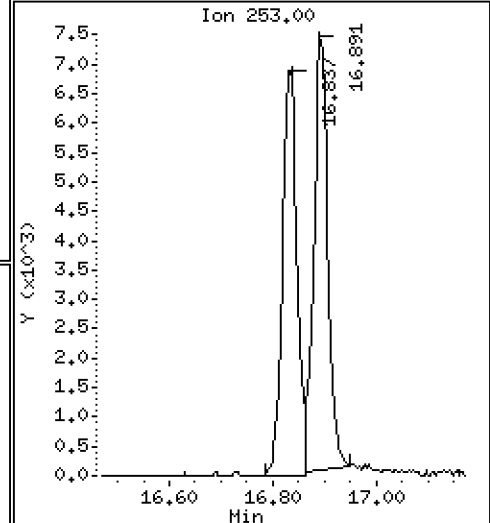
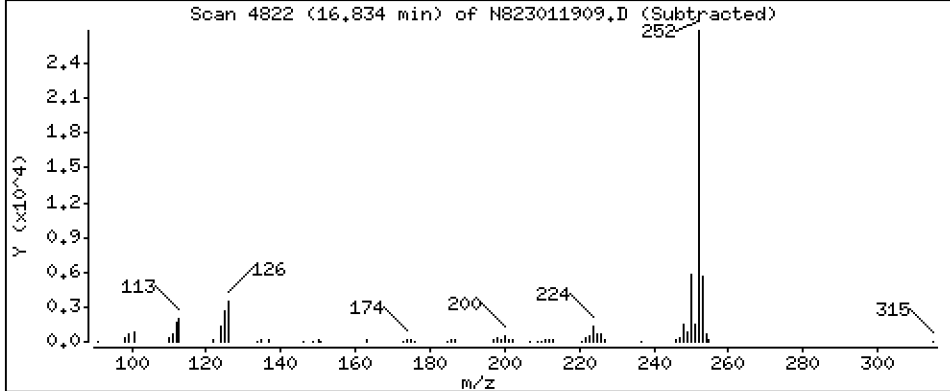
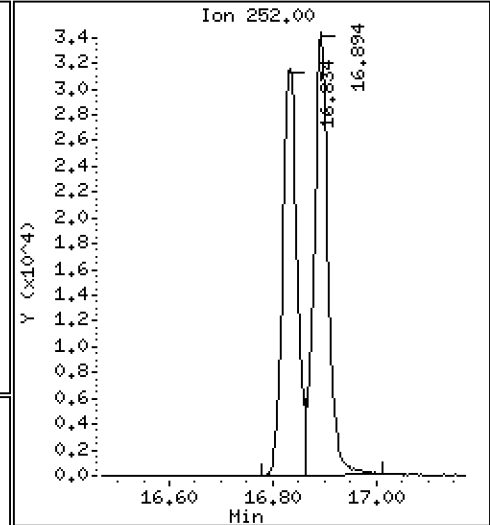
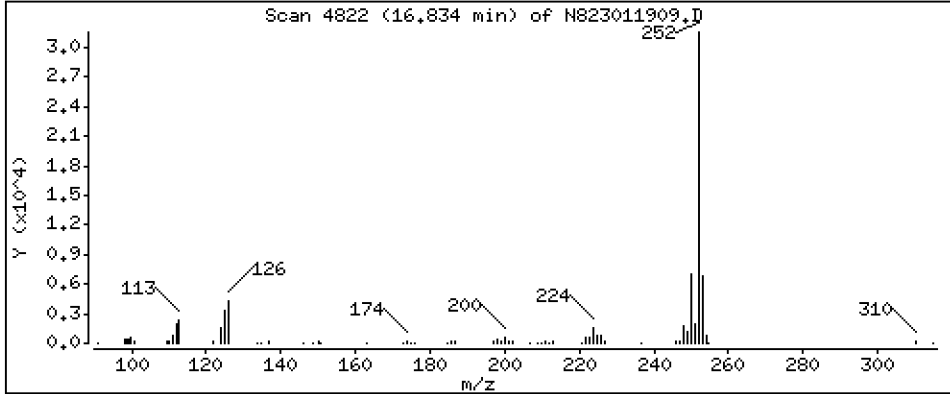
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

28 Benzo(b)fluoranthene

Concentration: 2,507 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

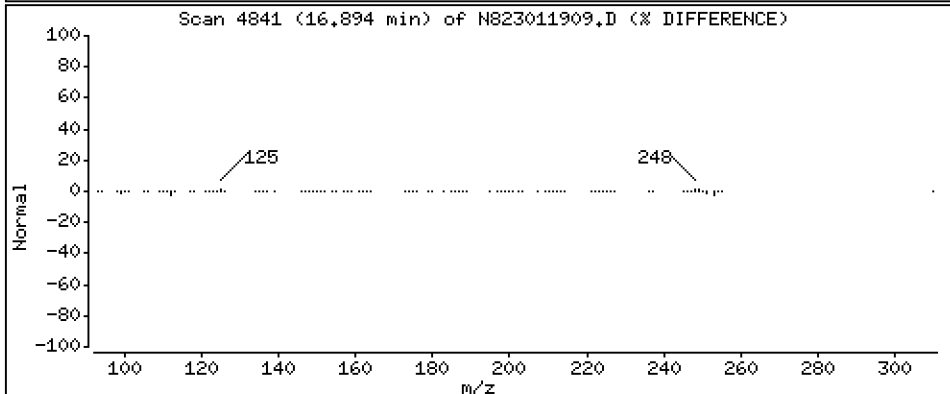
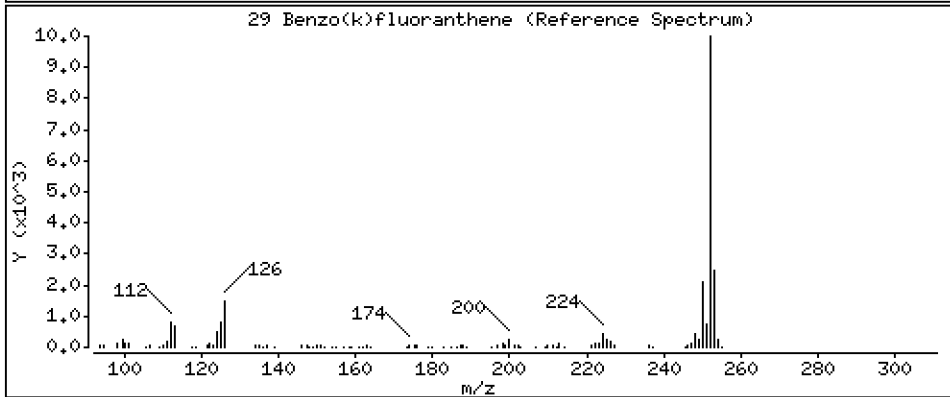
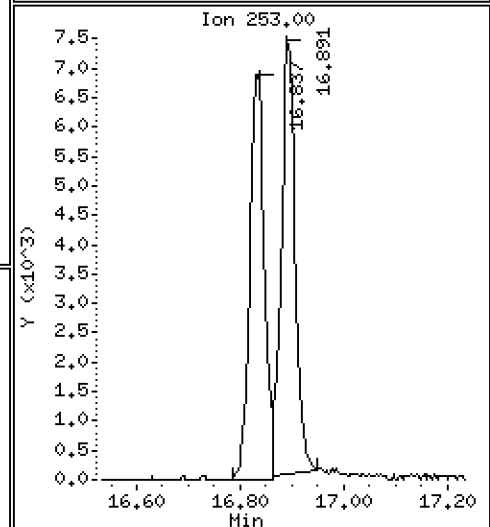
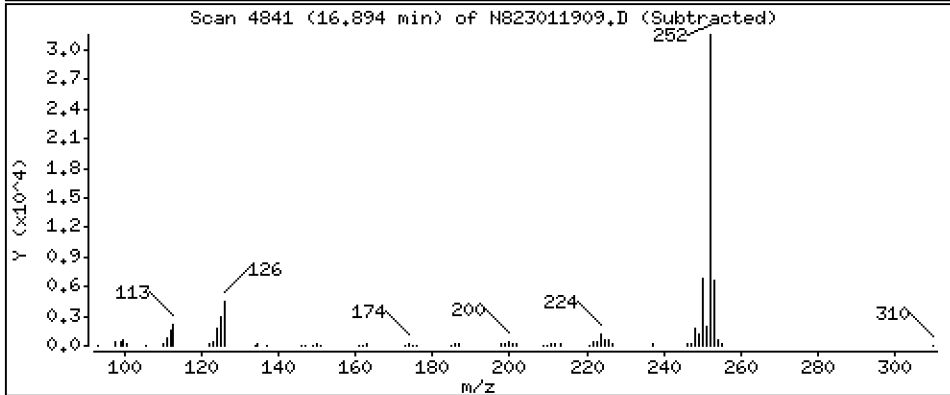
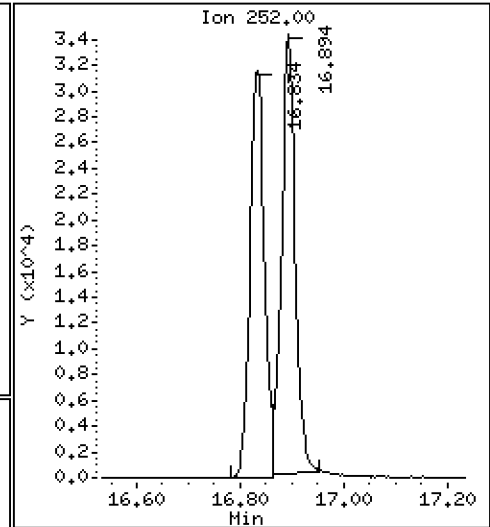
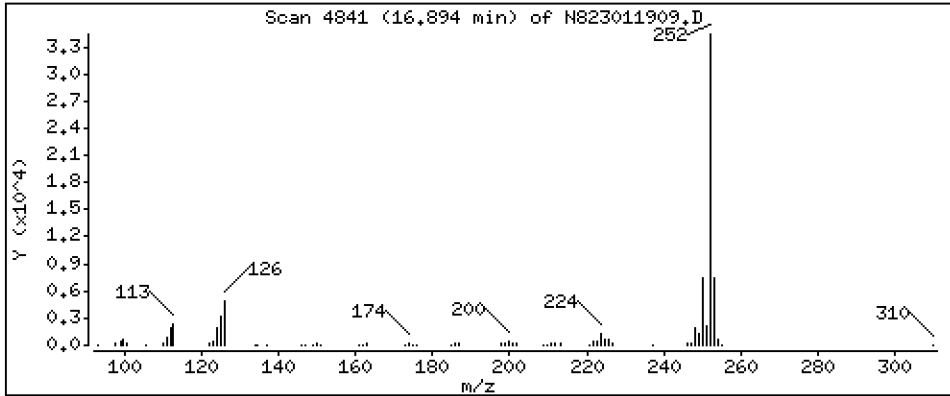
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

29 Benzo(k)fluoranthene

Concentration: 2,656 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

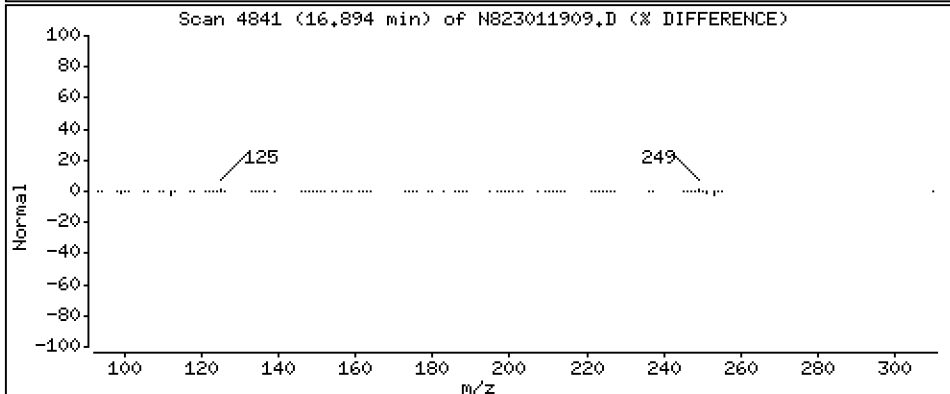
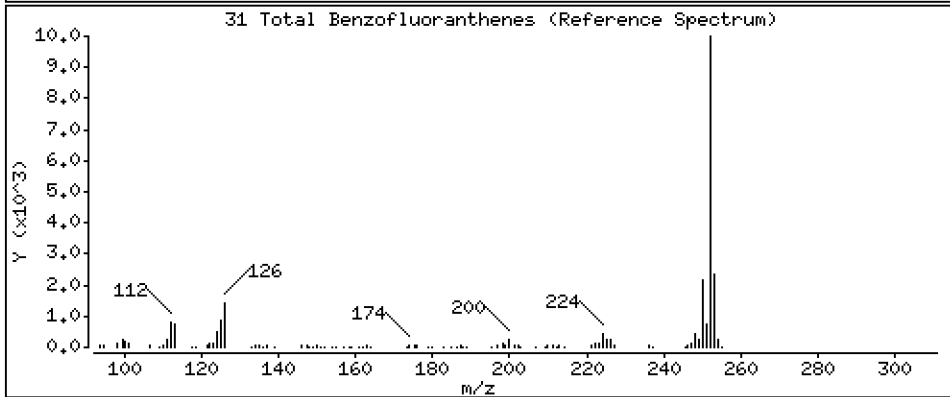
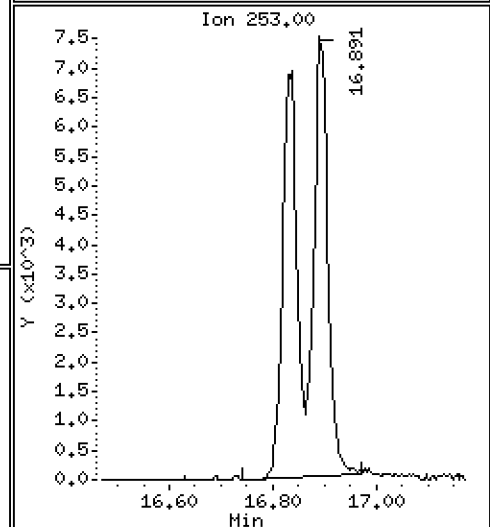
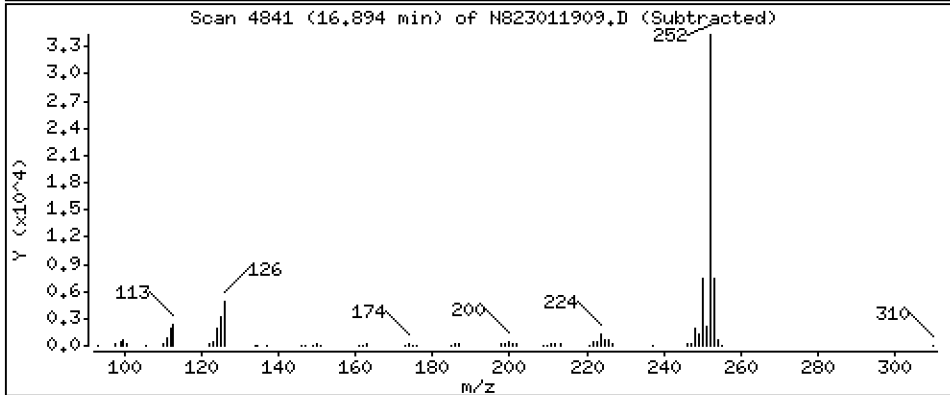
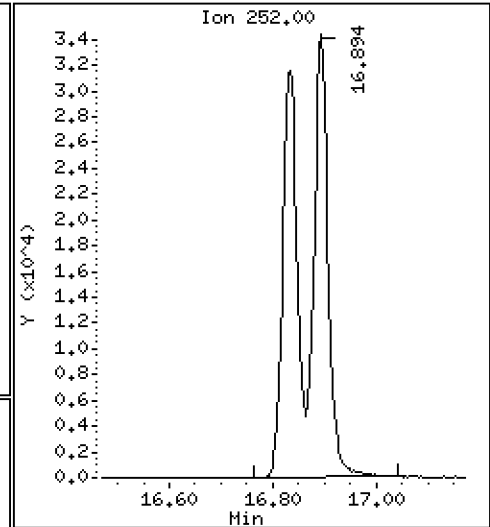
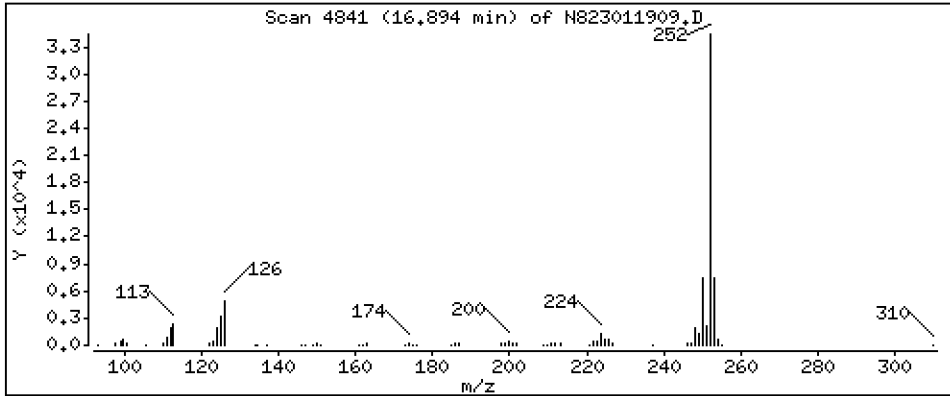
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 5,480 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

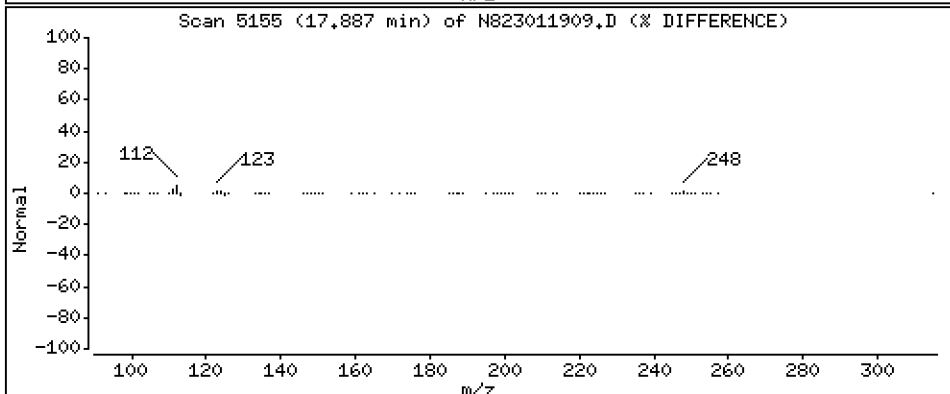
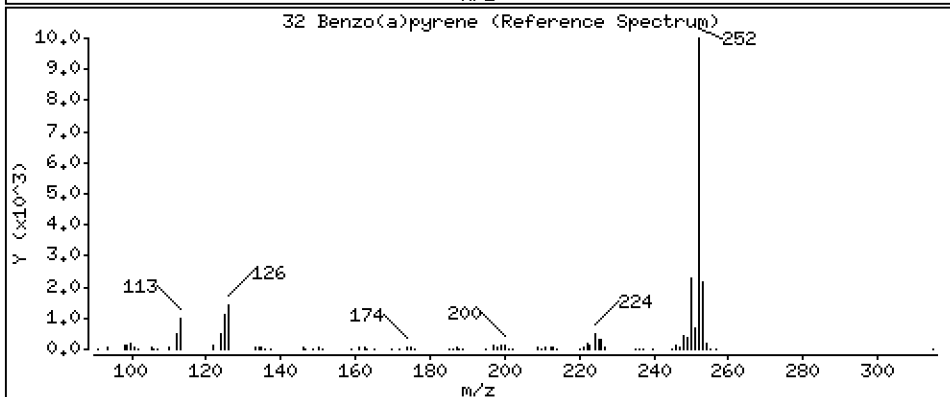
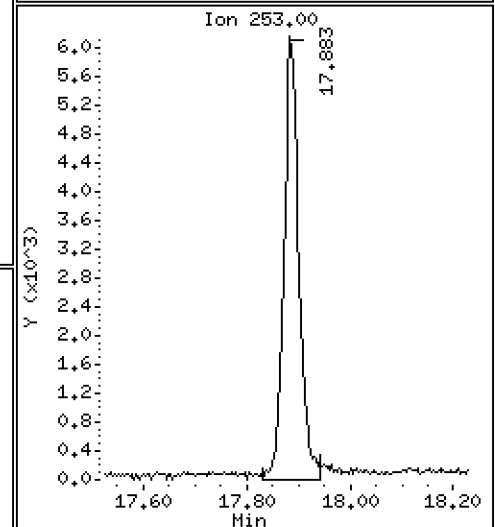
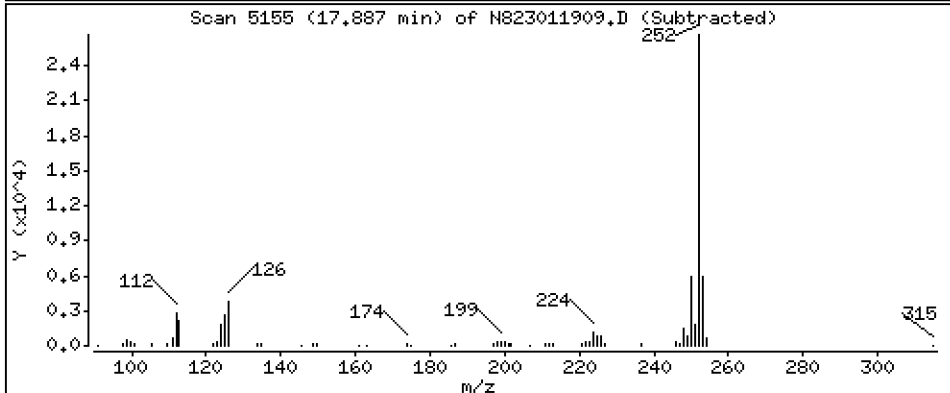
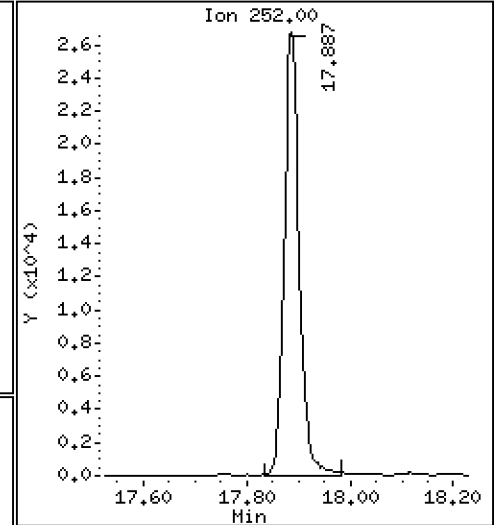
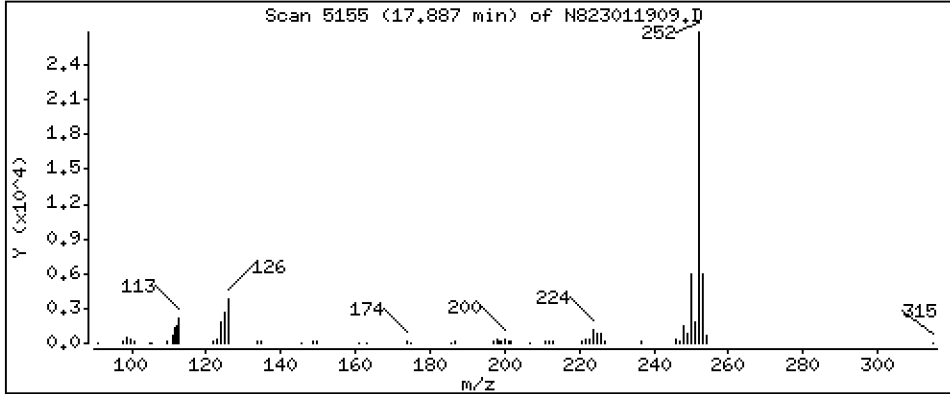
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 2,572 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

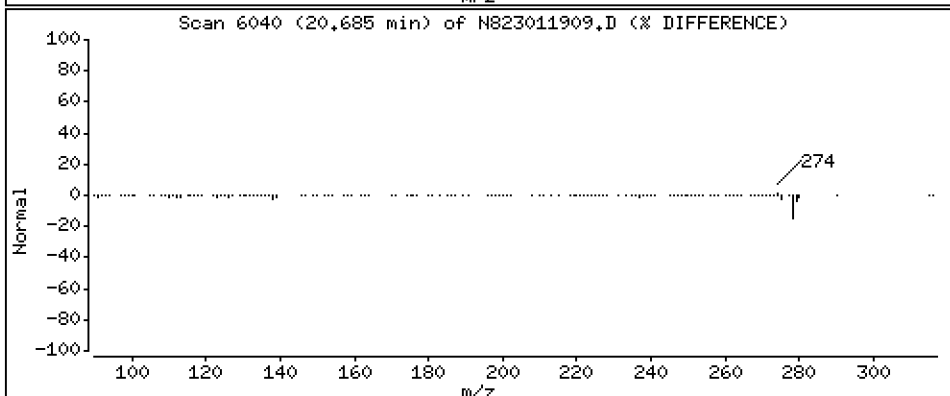
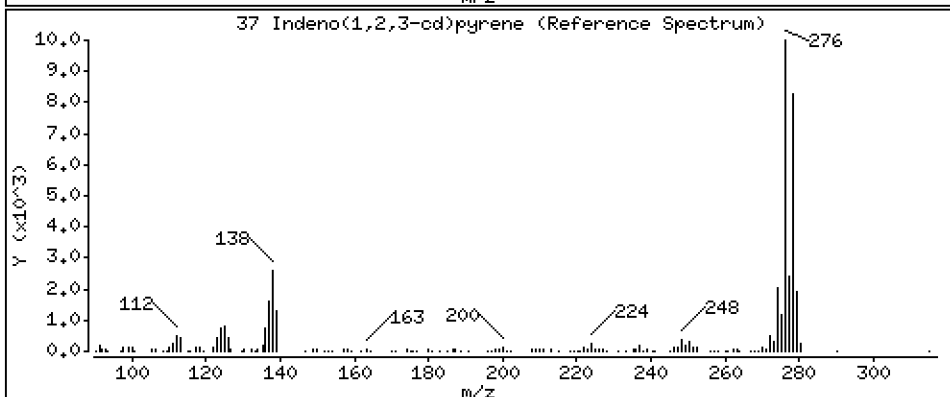
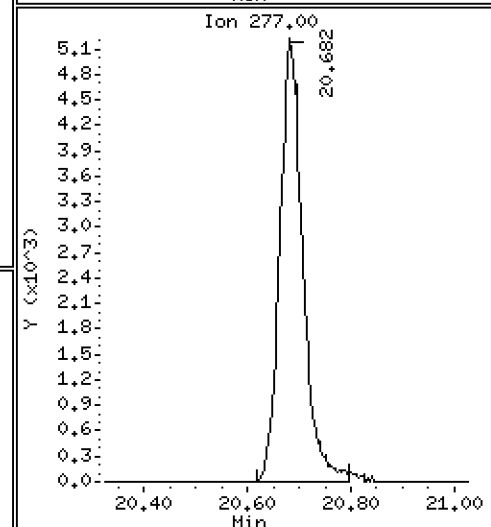
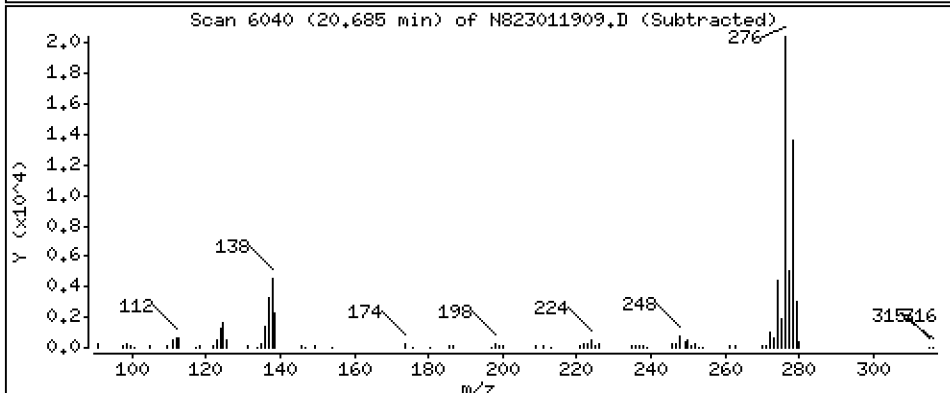
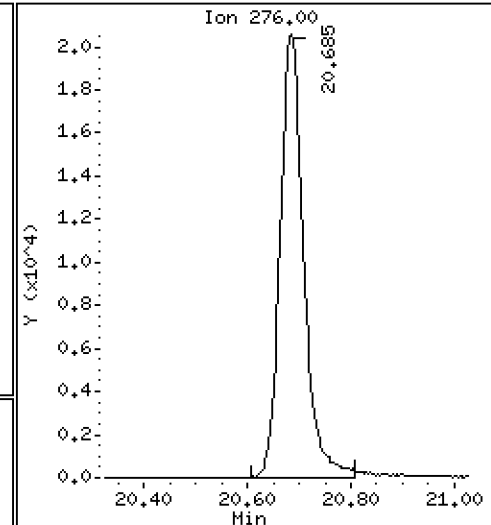
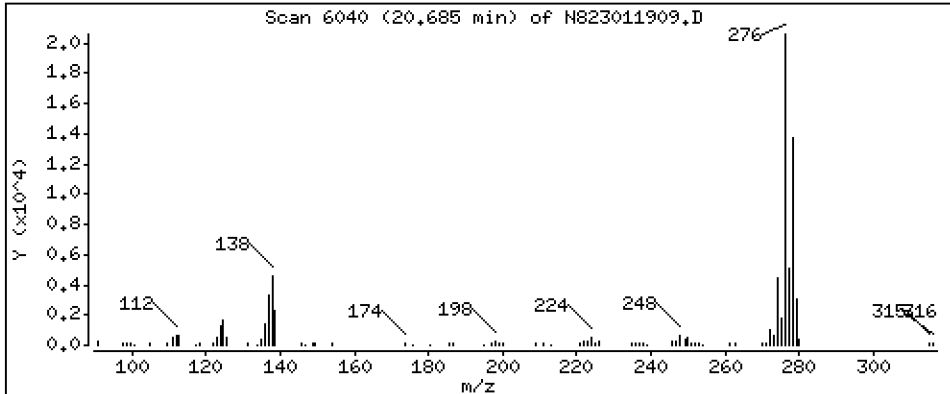
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 2,689 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

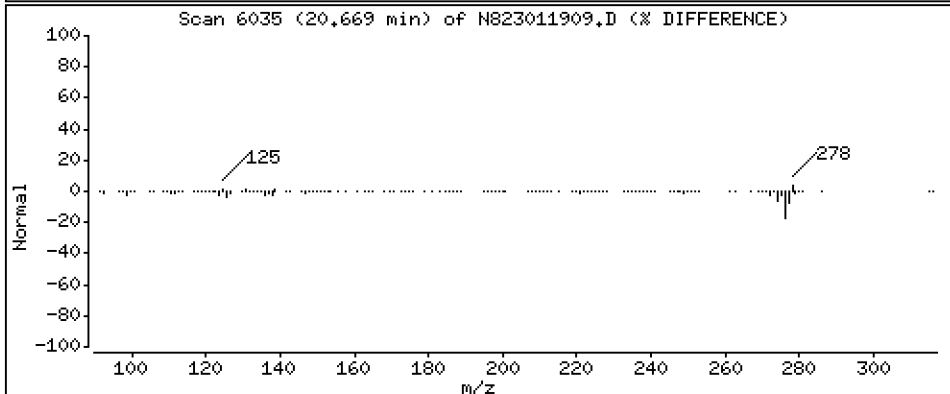
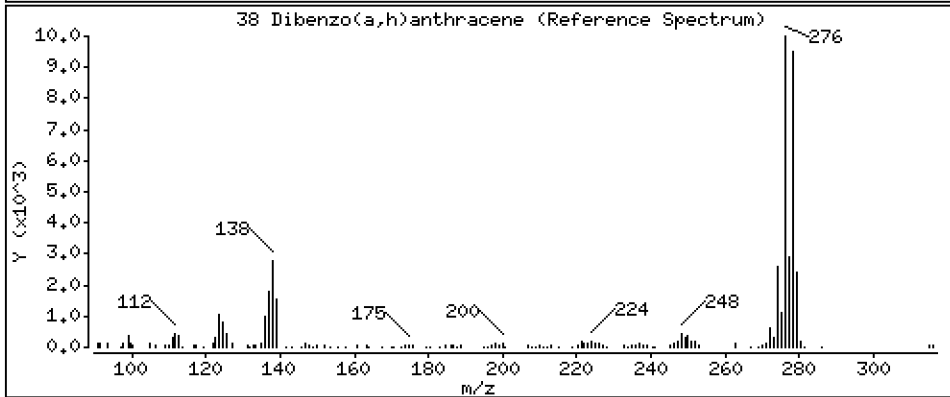
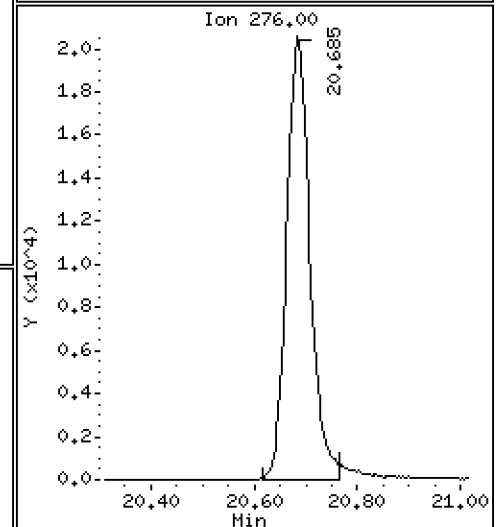
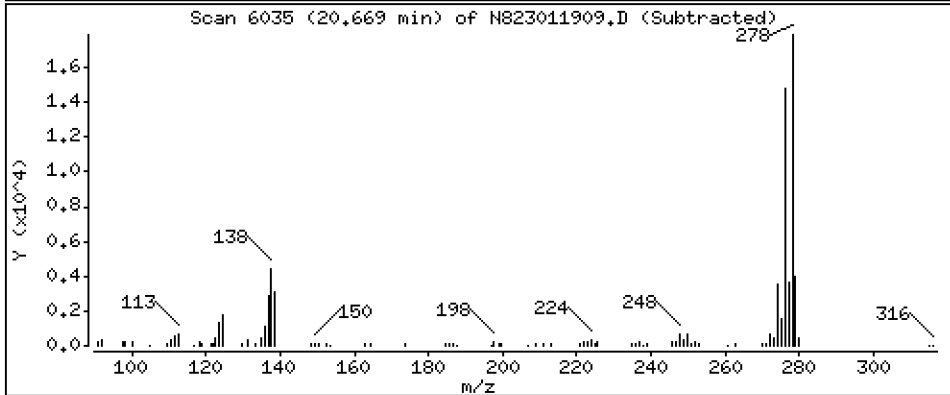
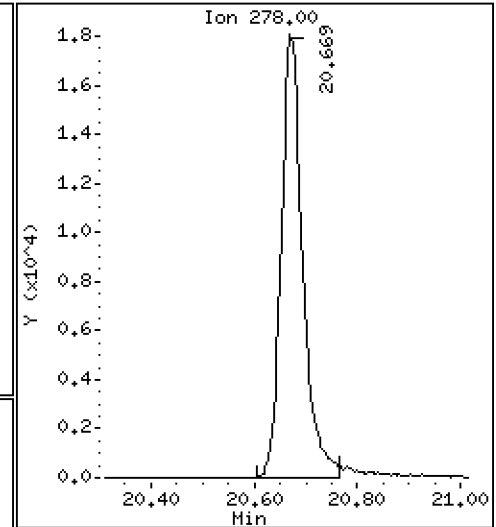
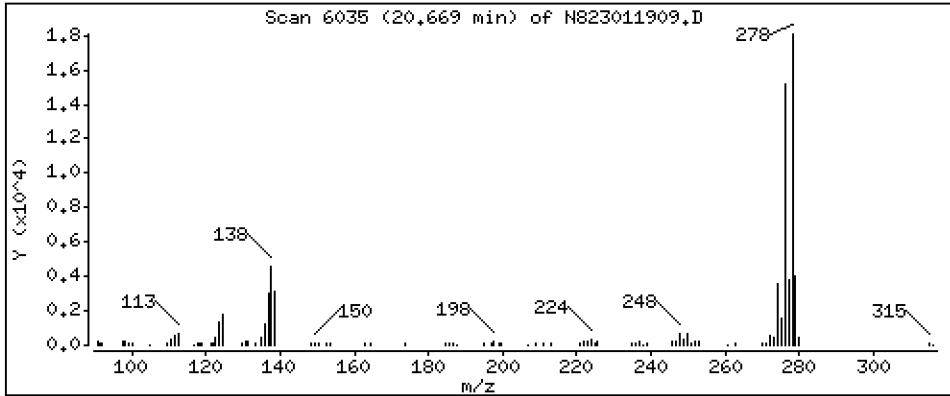
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 2,493 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

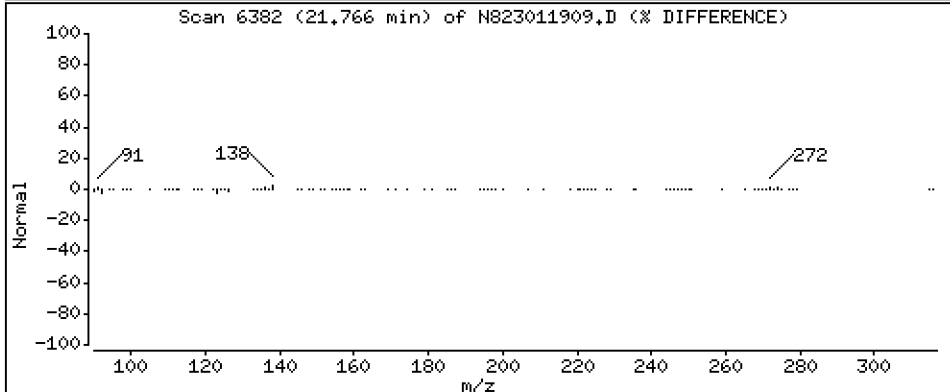
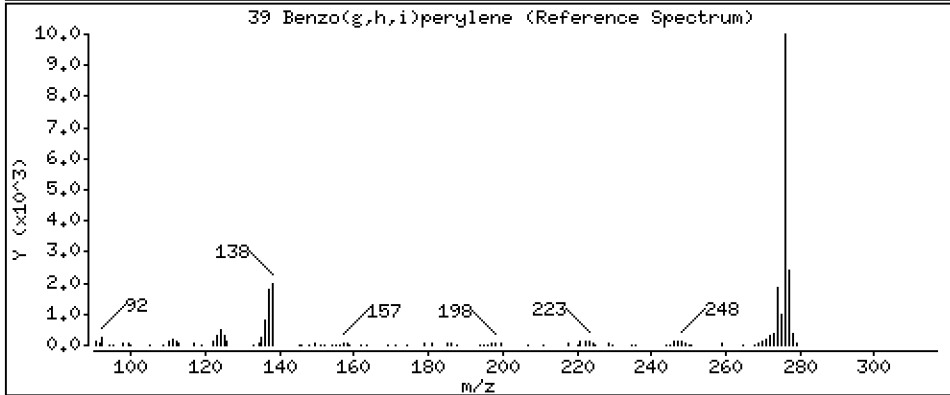
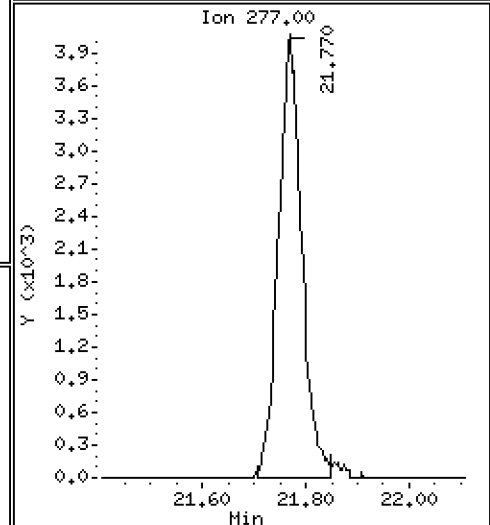
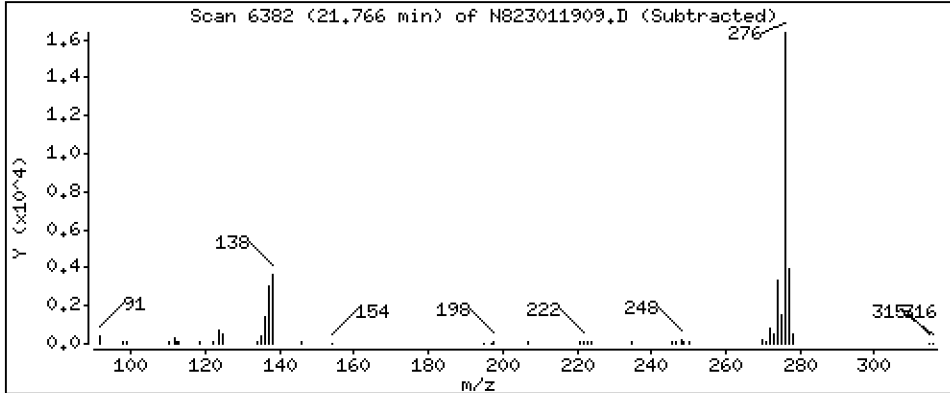
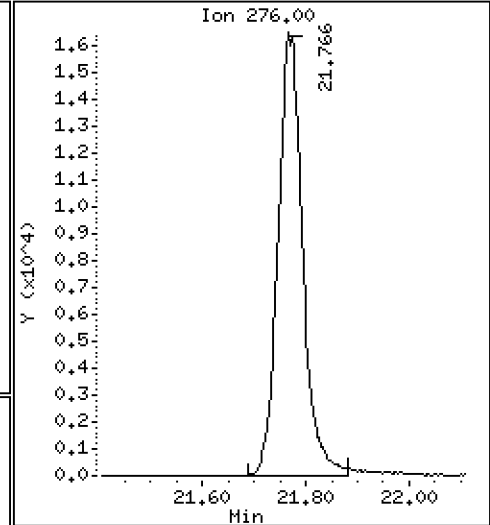
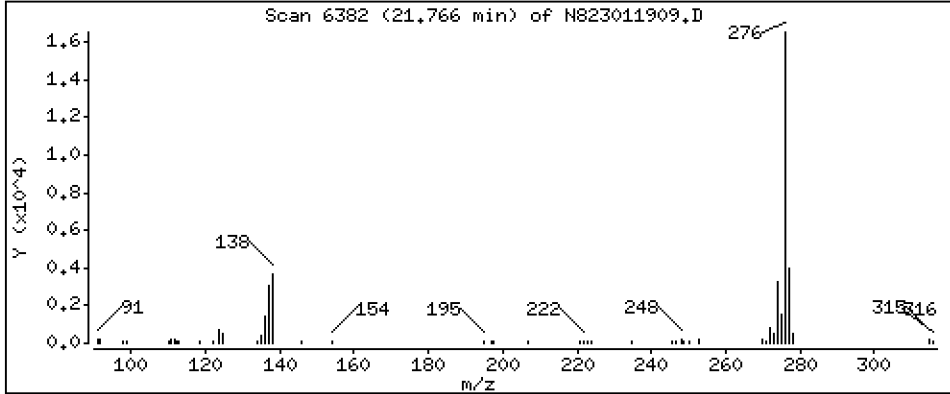
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 2,483 ug/L



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
 Lab Smp Id: SLA0213-SCV1
 Inj Date : 19-JAN-2023 14:58
 Operator : JZ Inst ID: nt8.i
 Smp Info : SCV230119
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 9 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: pnascv.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136		4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128		4.941	4.938	(1.006)	56587	2.62597	2.626
\$ 3 2-Methylnaphthalene-d10	152		Compound Not Detected.					
4 2-Methylnaphthalene	141		5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141		5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152		7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164		7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153		7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168		7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166		7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188		9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178		9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178		9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202		11.059	11.053	(1.197)	72902	2.65276	2.653
\$ 21 Fluoranthene-d10	212		Compound Not Detected.					
23 Pyrene	202		11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228		14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240		14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228		14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252		16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252		16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252		16.893	16.821	(0.932)	126178	5.48025	5.480 (M)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572	
* 33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000		
37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689	
\$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.						
38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493	
39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483	
35 Perylene	252	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011909.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-SCV1
 Analysis Type: SV Level: LOW
 Quant Type: ISTD Sample Type: WATER
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 14:58

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

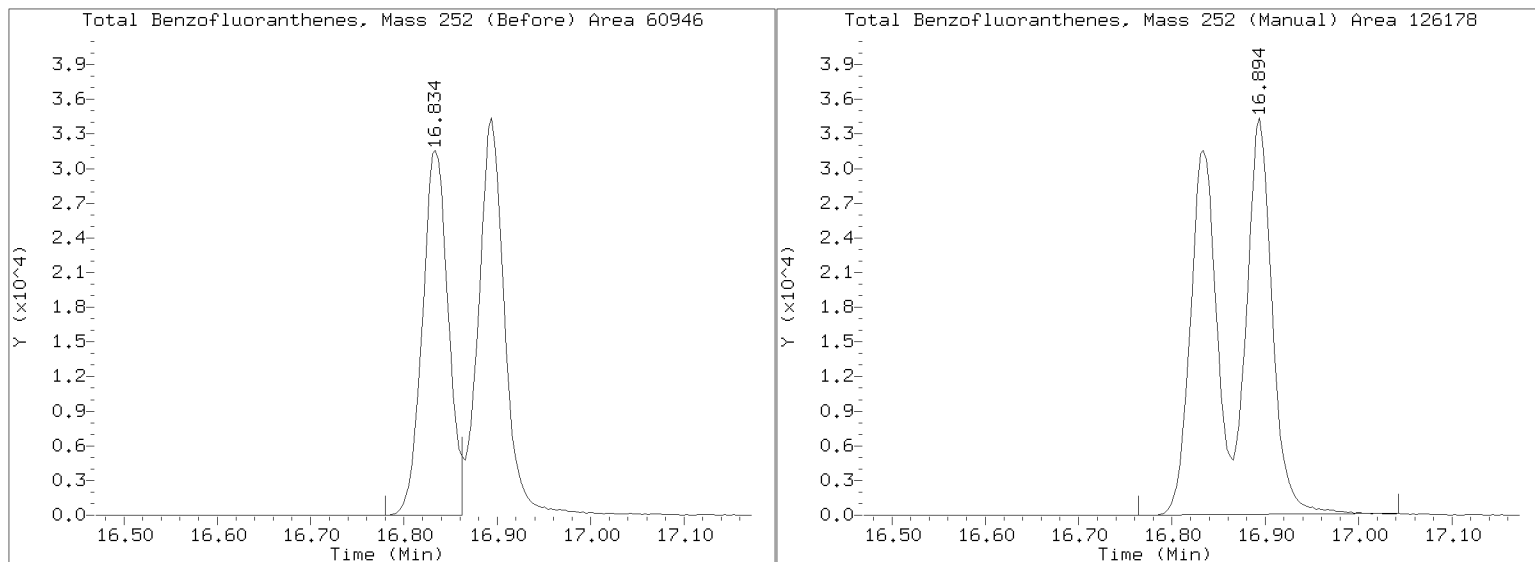
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D

Injection Date: 19-JAN-2023 14:58

Lab ID:SLA0213-SCV1 Client ID:

Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00032

Laboratory ID: SLC0143-SCV1

Sequence: SLC0143

Standard ID: K010066

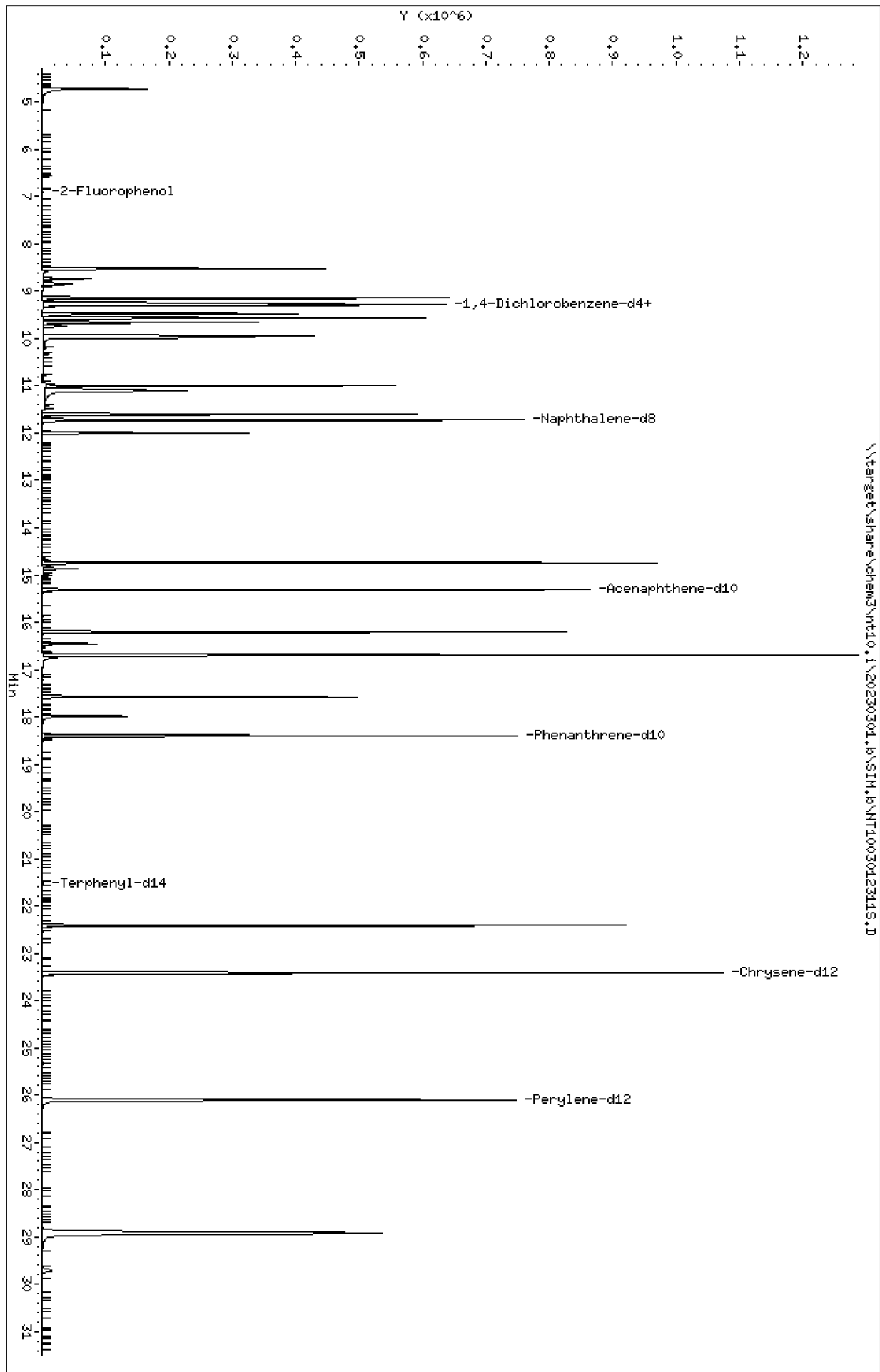
ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.2	5.0	20.00
1,2-Dichlorobenzene	5.0000	5.1	2.8	20.00
Benzyl Alcohol	5.0000	5.1	2.1	20.00
Benzoic acid	10.000	6.9	-31.3 *	20.00
2,4-Dimethylphenol	5.0000	3.6	-27.3 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-2.6	20.00
N-Nitrosodiphenylamine	5.0000	5.4	7.2	20.00
Pentachlorophenol	5.0000	3.9	-21.8 *	20.00
2-Fluorophenol	7.5000	0.0377	-99.5	
p-Terphenyl-d14	5.0000	0.0271	-99.5	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.B\SIM.B\NT1003012311S.D
Date : 01-MAR-2023 21:46
Client ID:
Sample Info: SED-SCV1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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

\\target\share\chem3\nt10.i\20230301.B\SIM.B\NT1003012311S.D



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

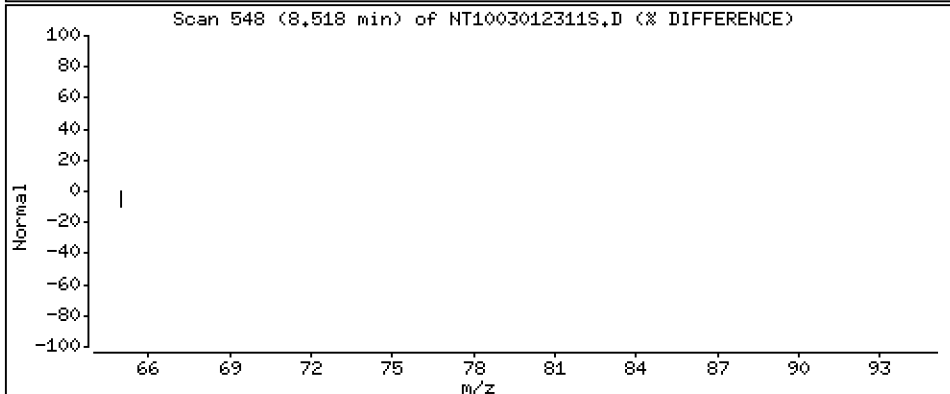
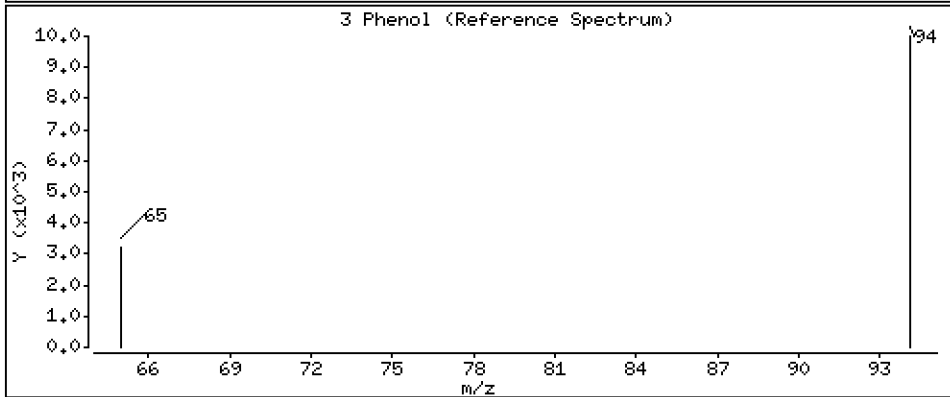
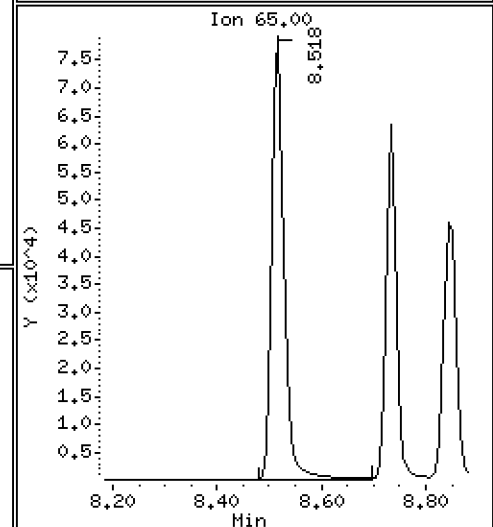
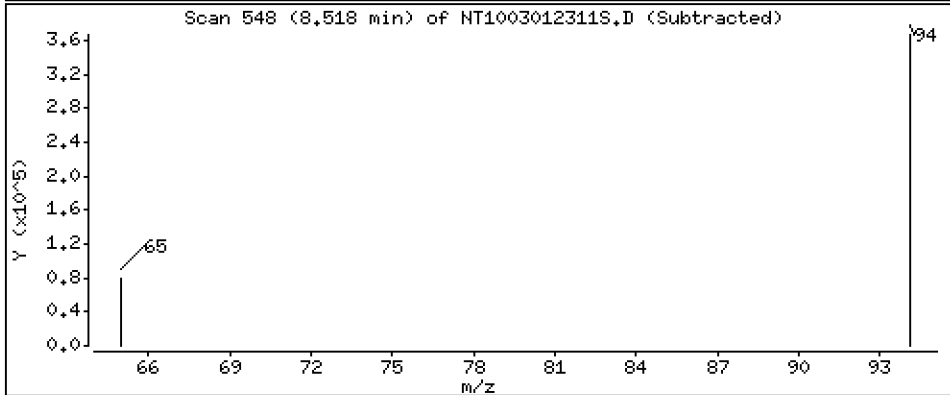
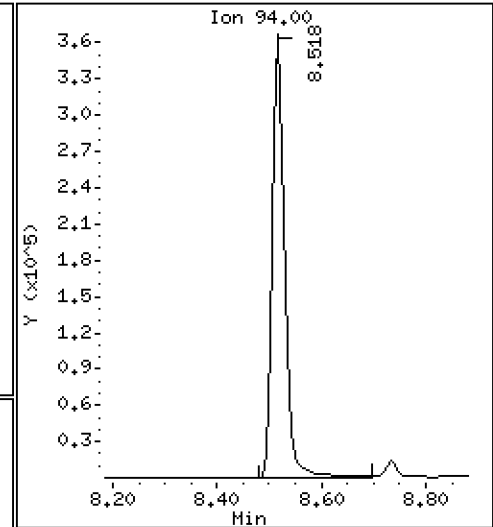
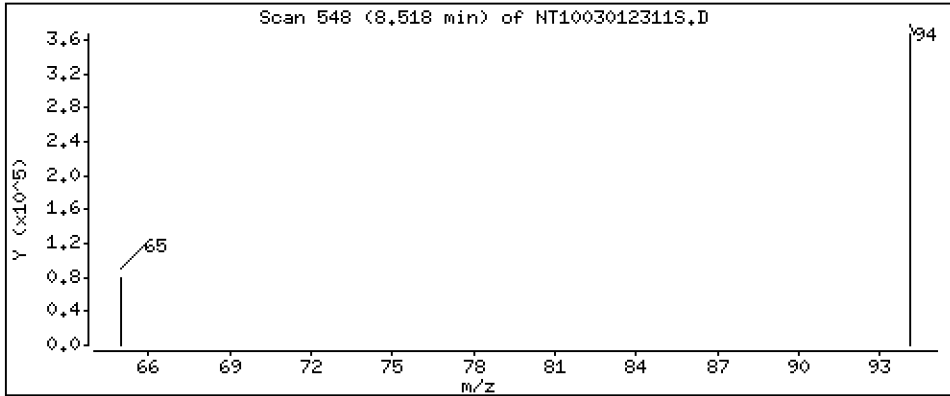
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.507 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

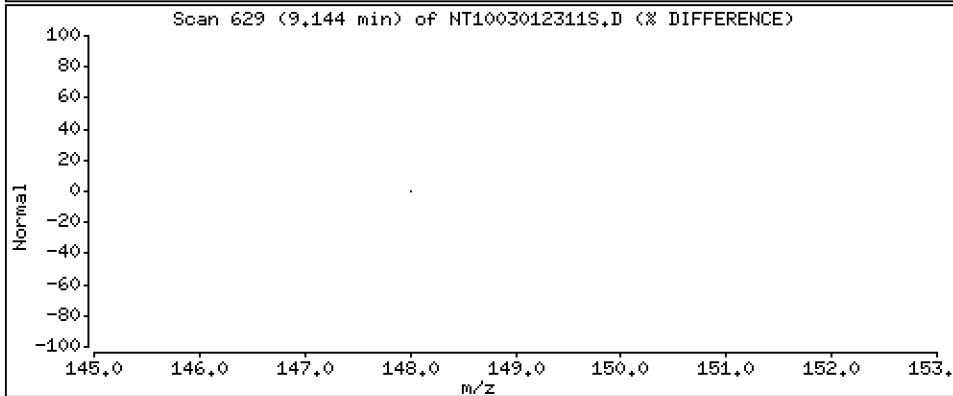
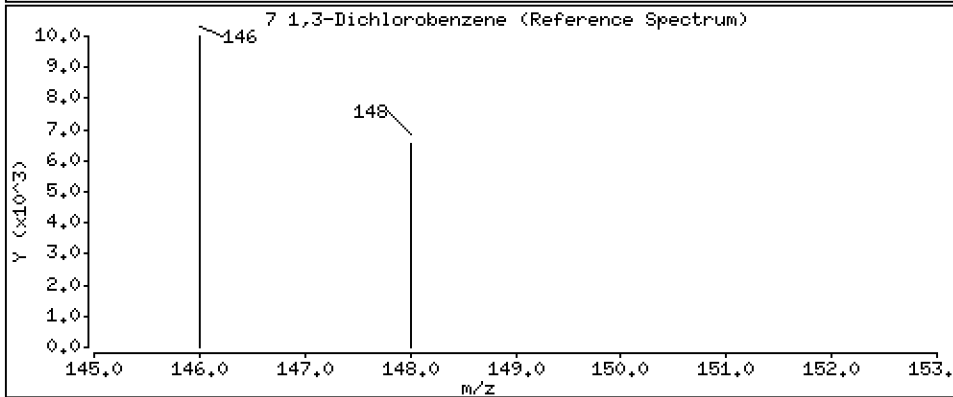
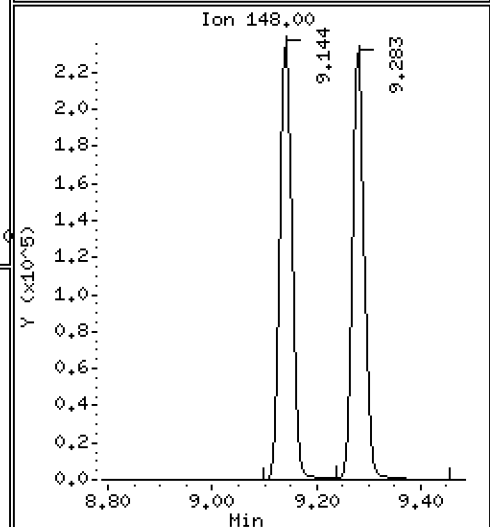
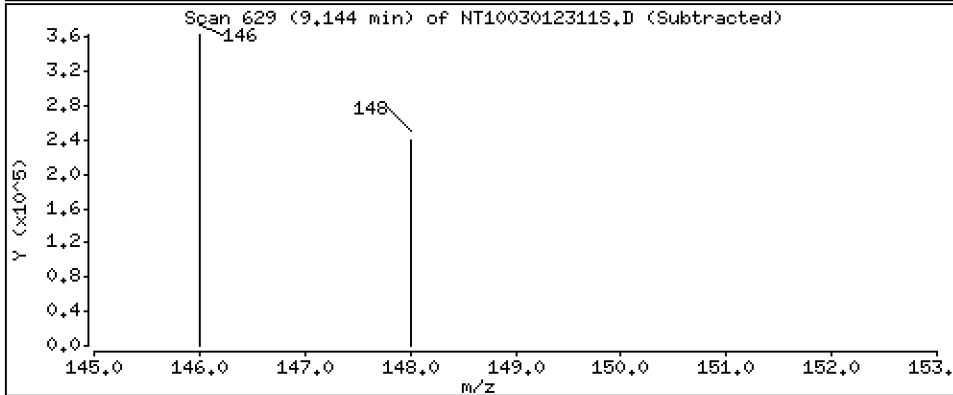
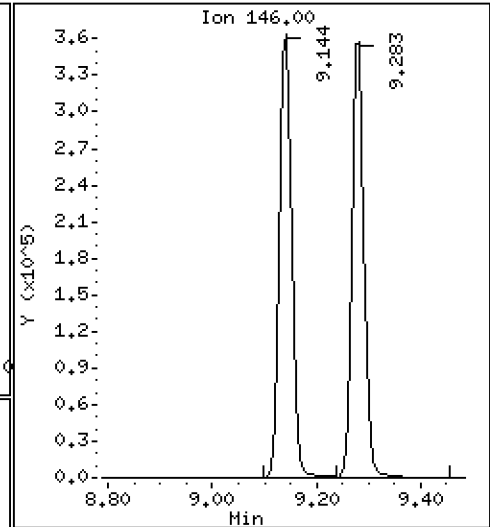
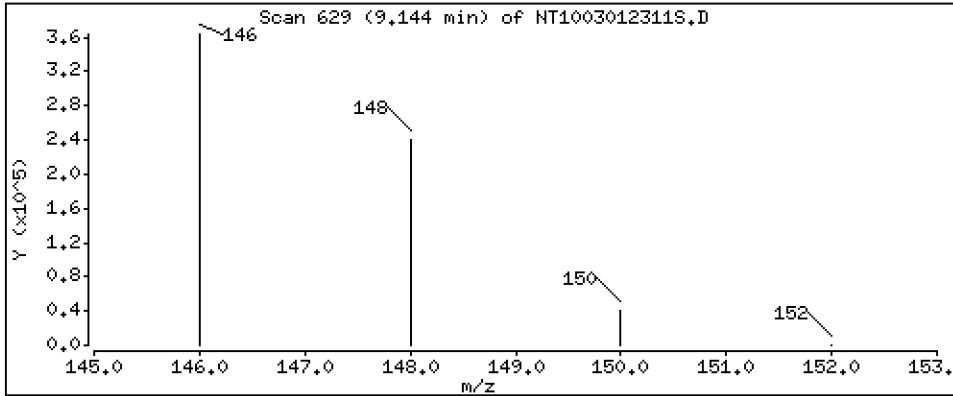
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 5.084 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

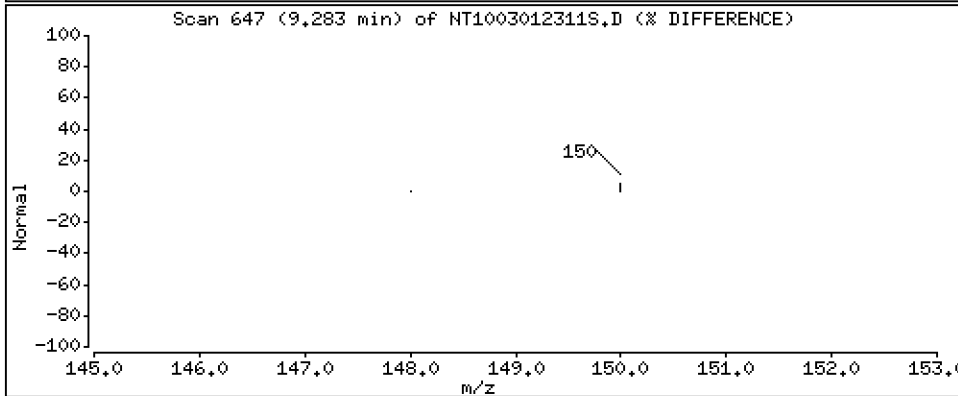
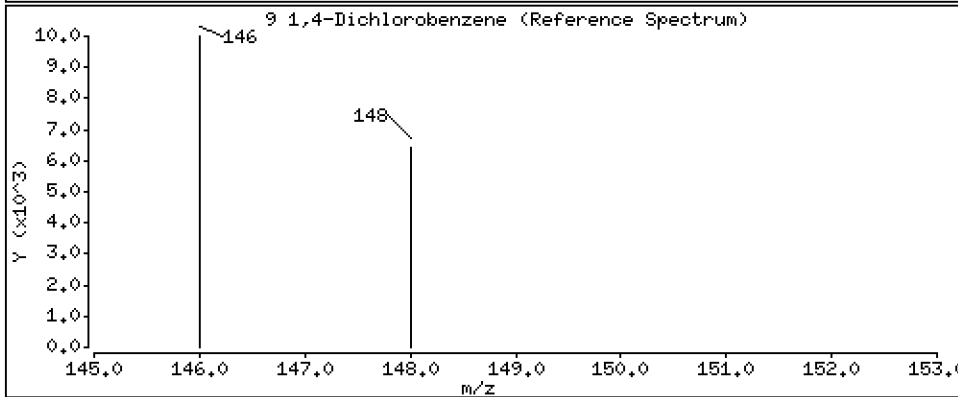
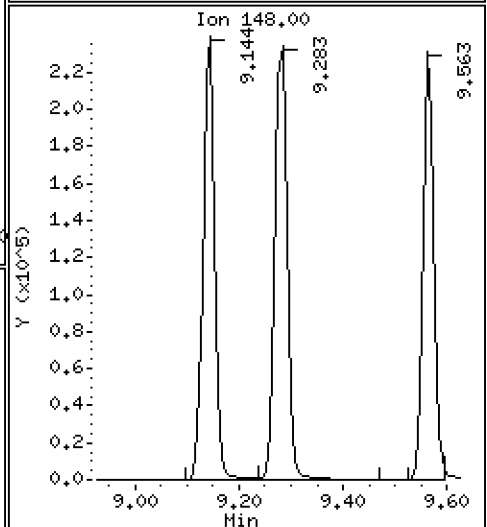
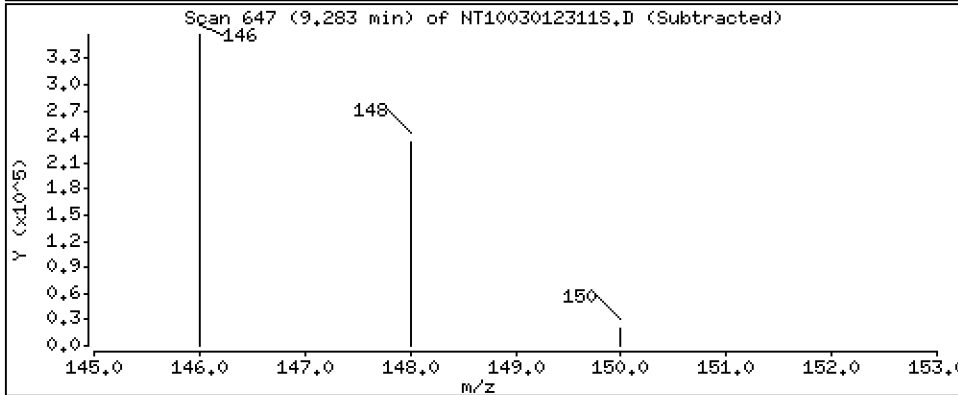
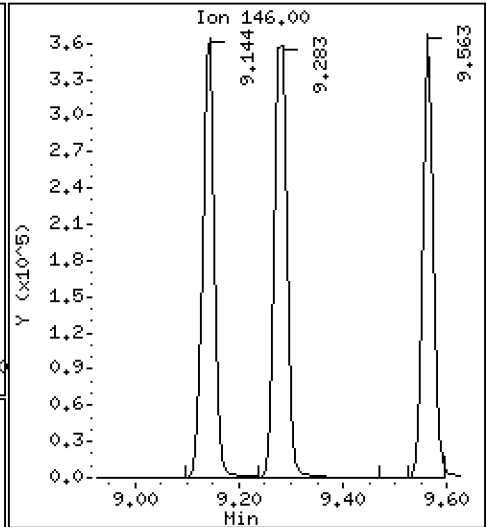
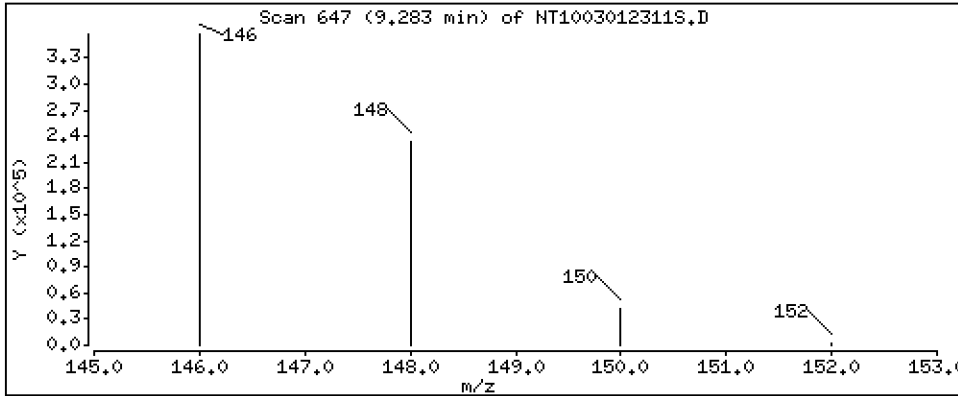
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 5,250 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

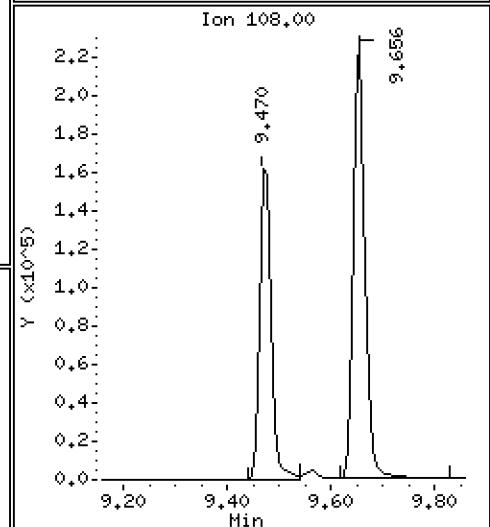
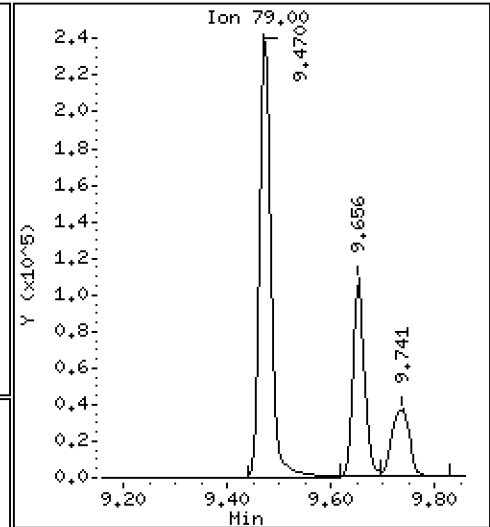
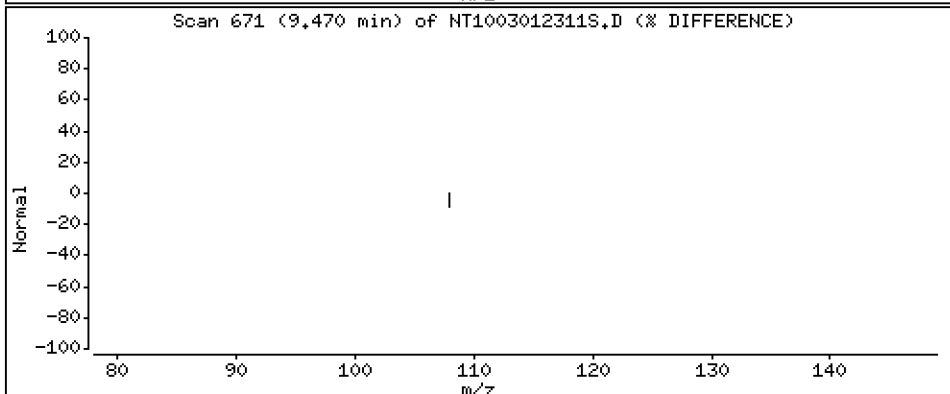
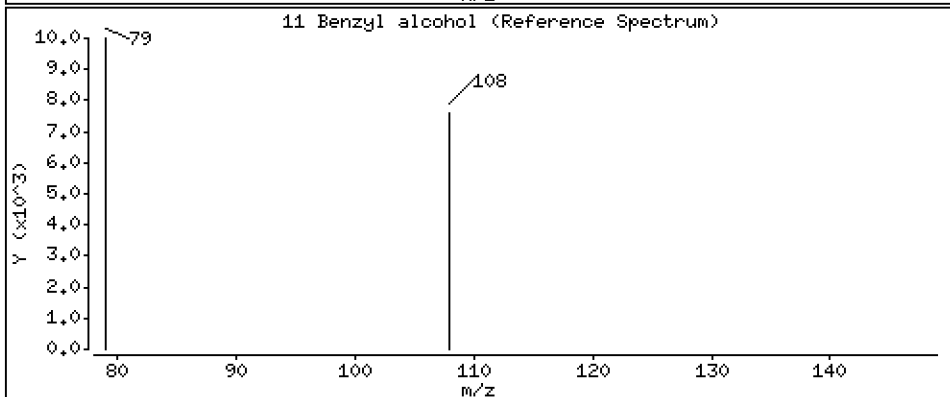
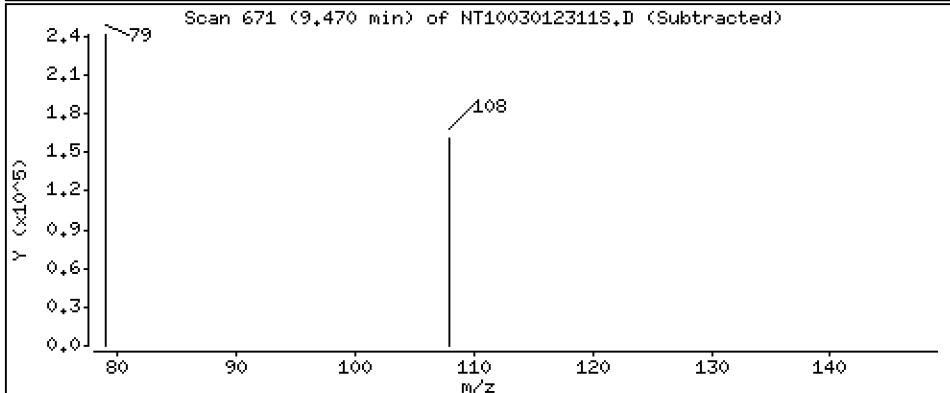
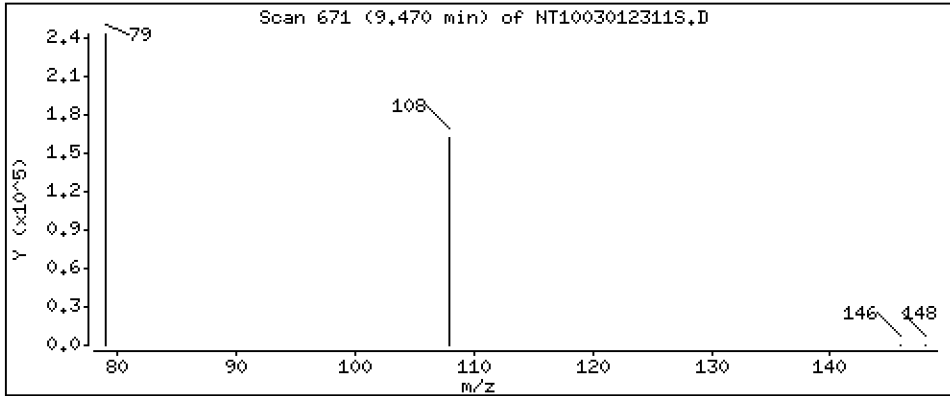
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5,104 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

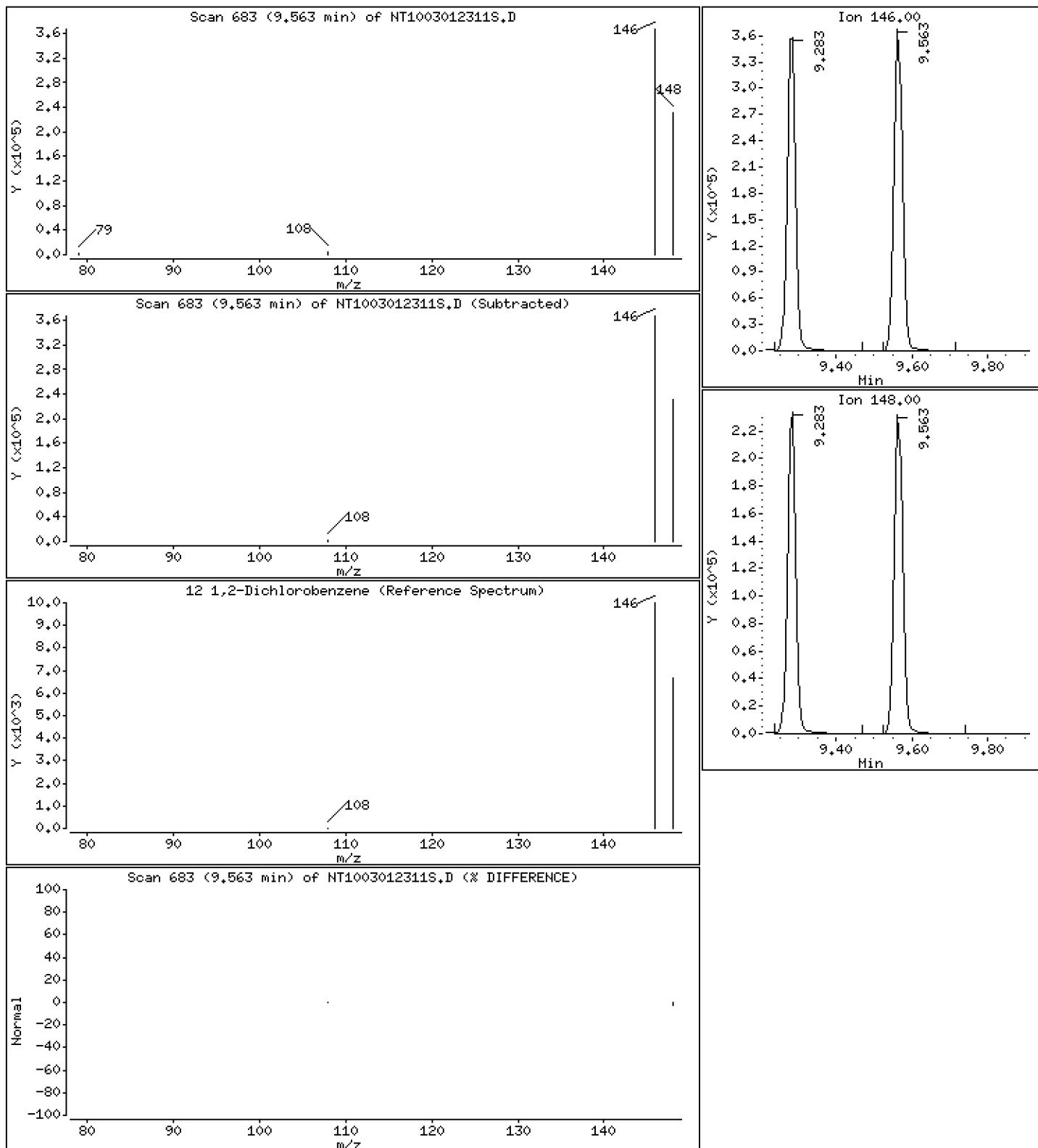
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5,142 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

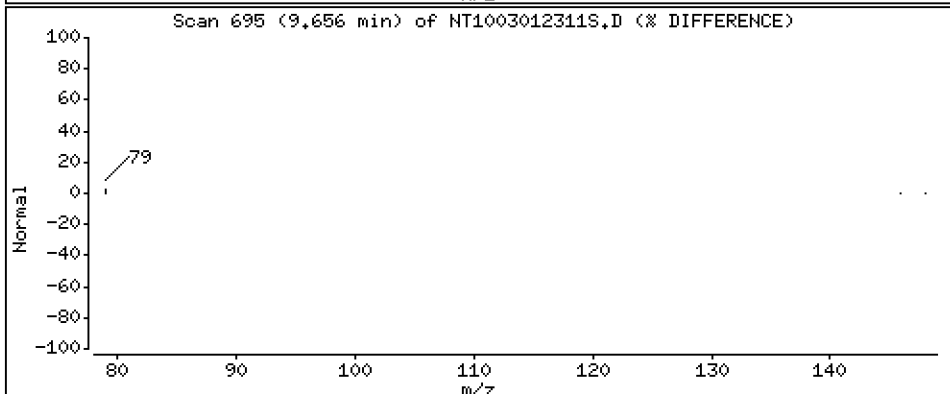
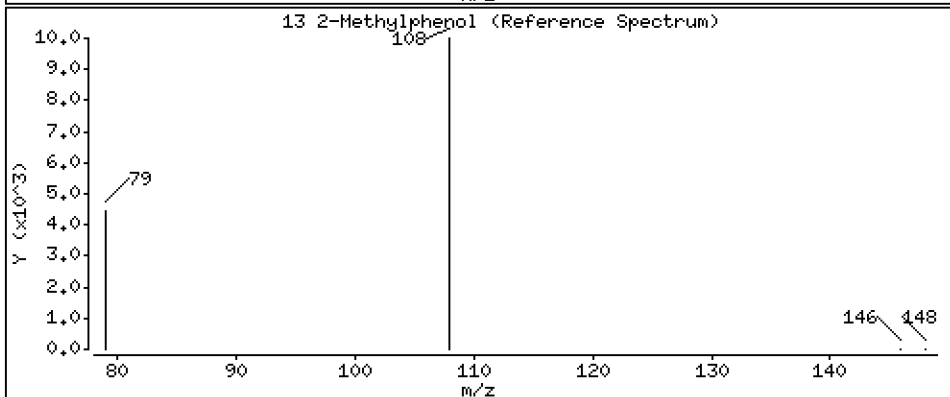
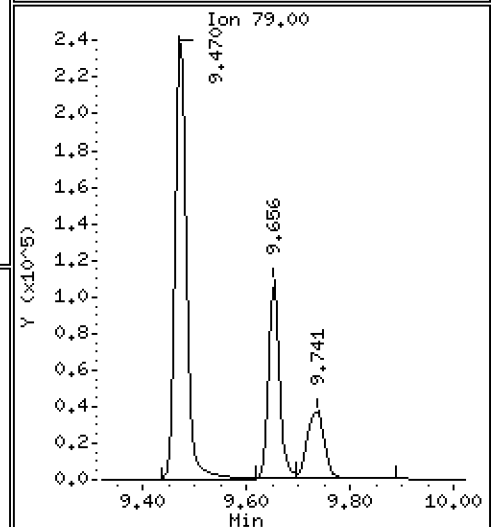
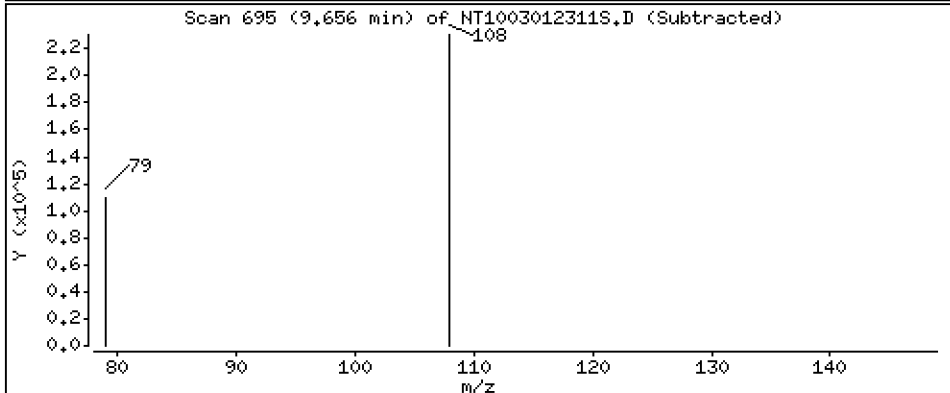
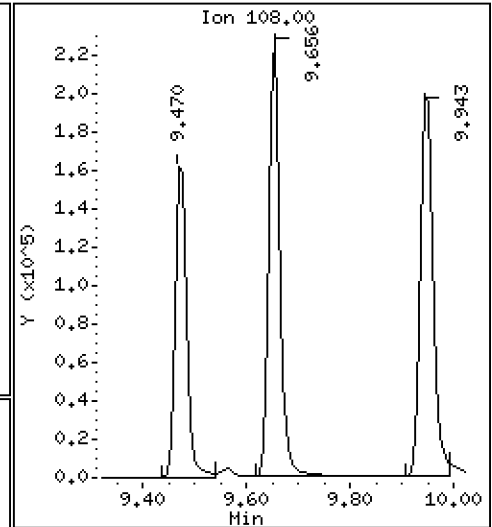
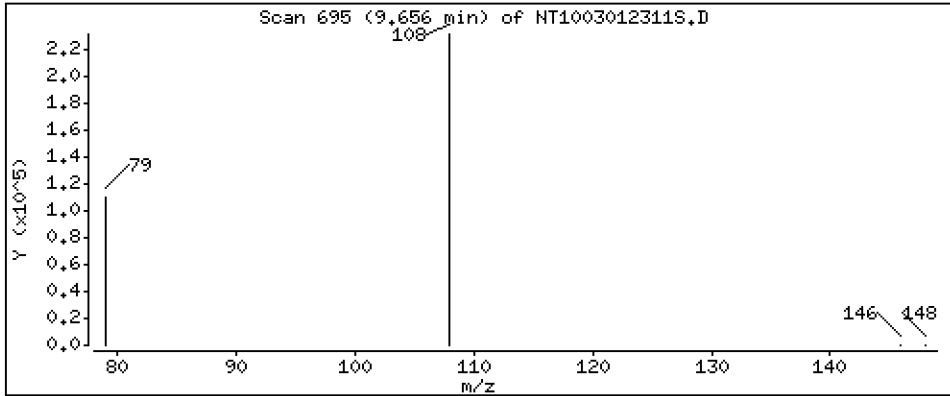
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.365 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

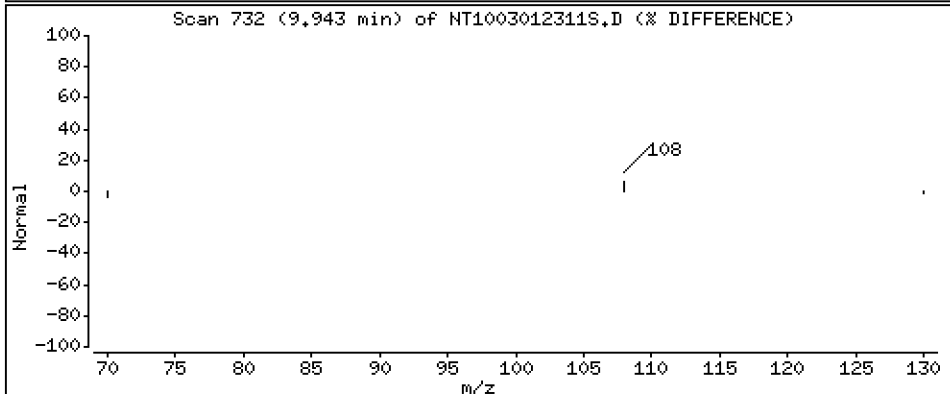
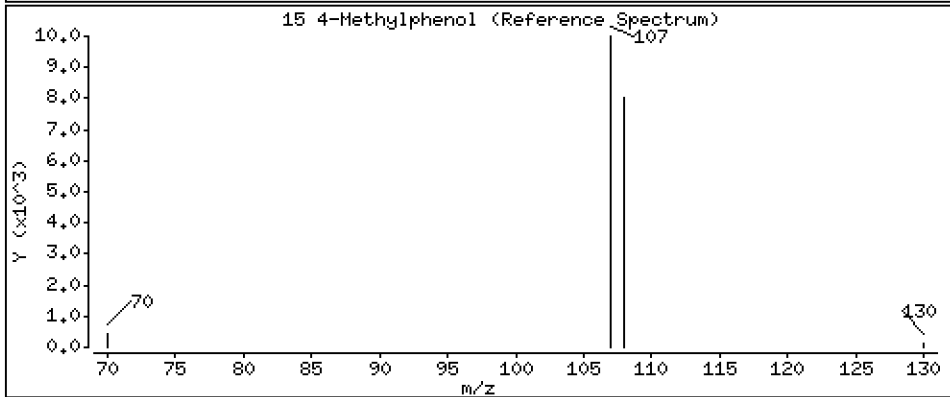
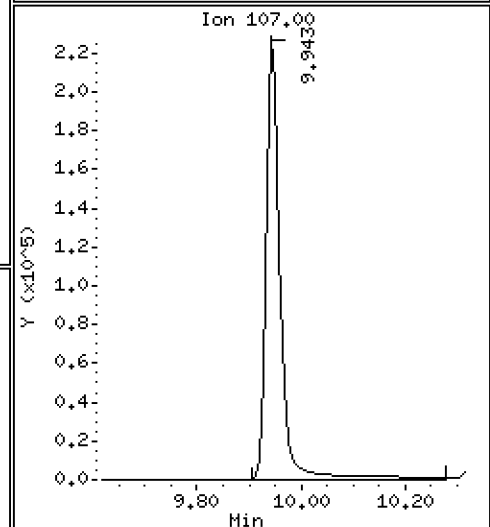
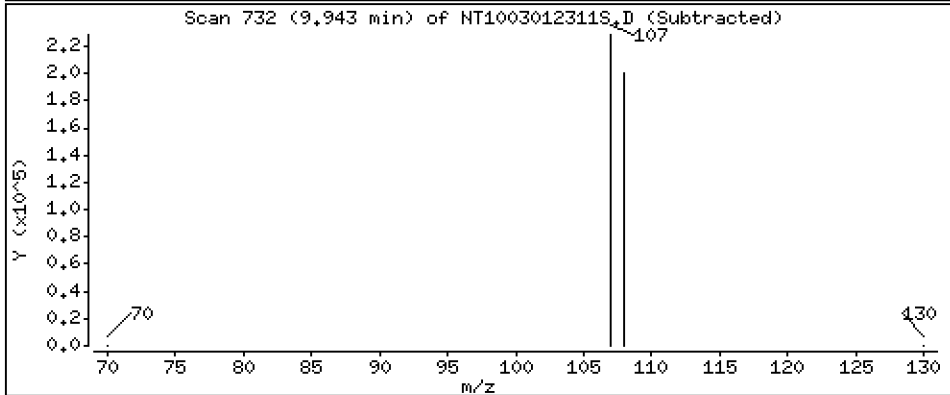
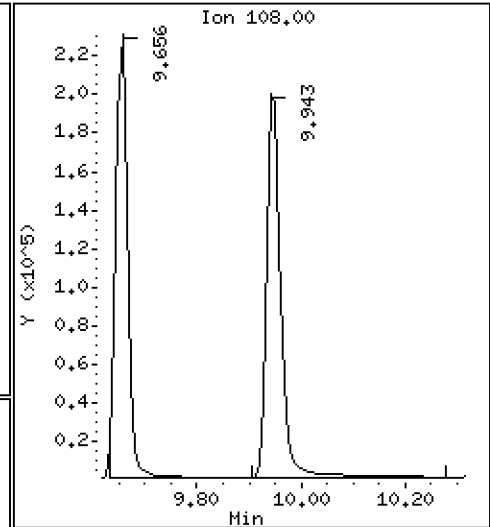
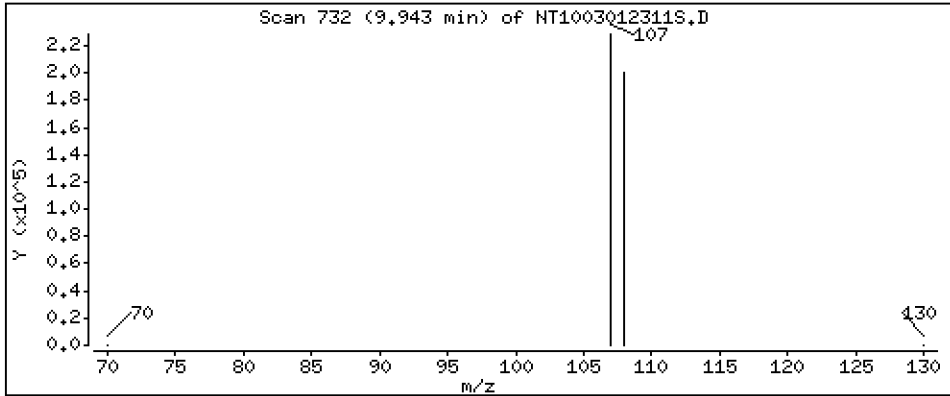
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.505 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

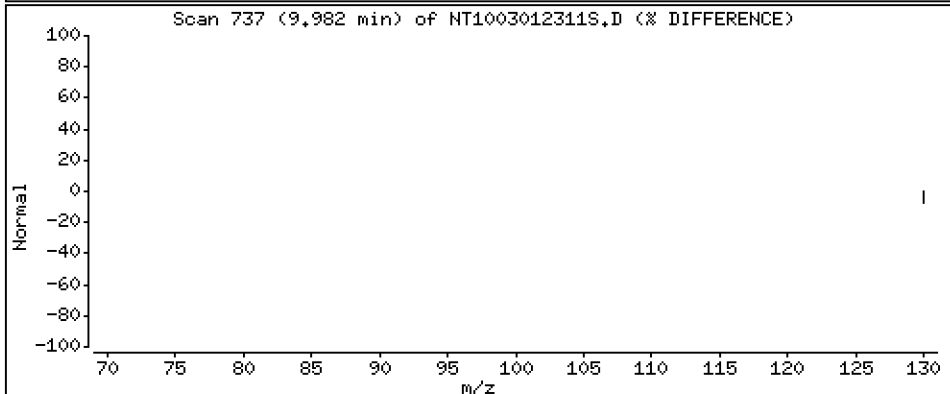
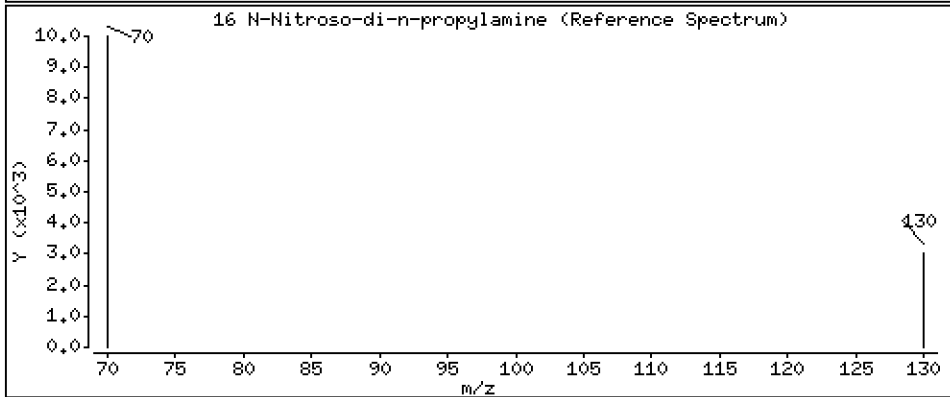
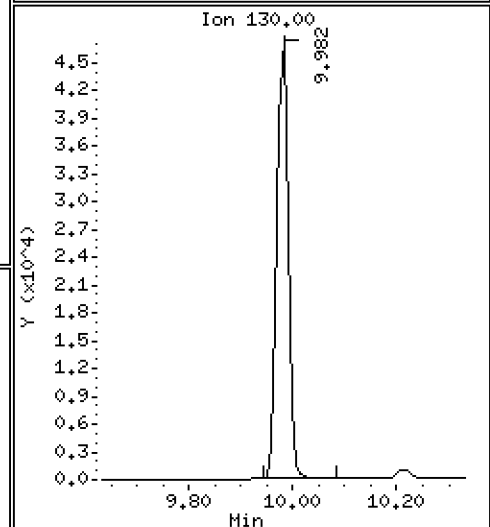
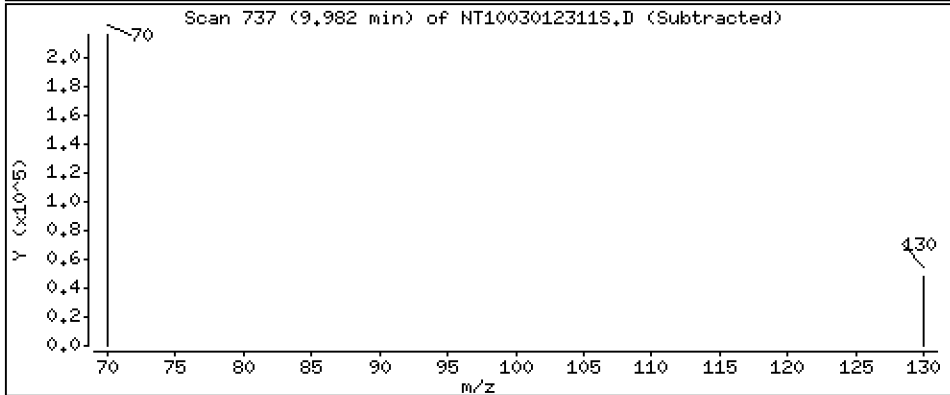
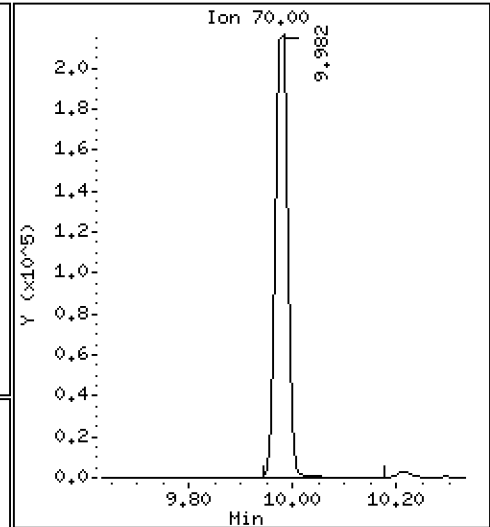
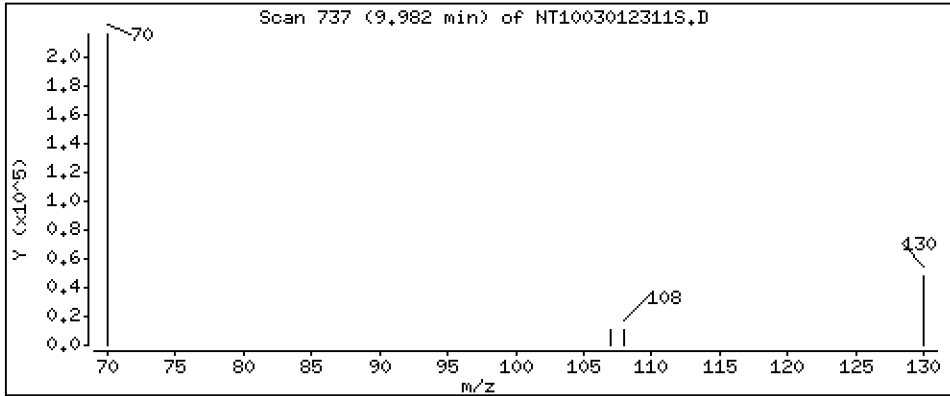
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,685 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

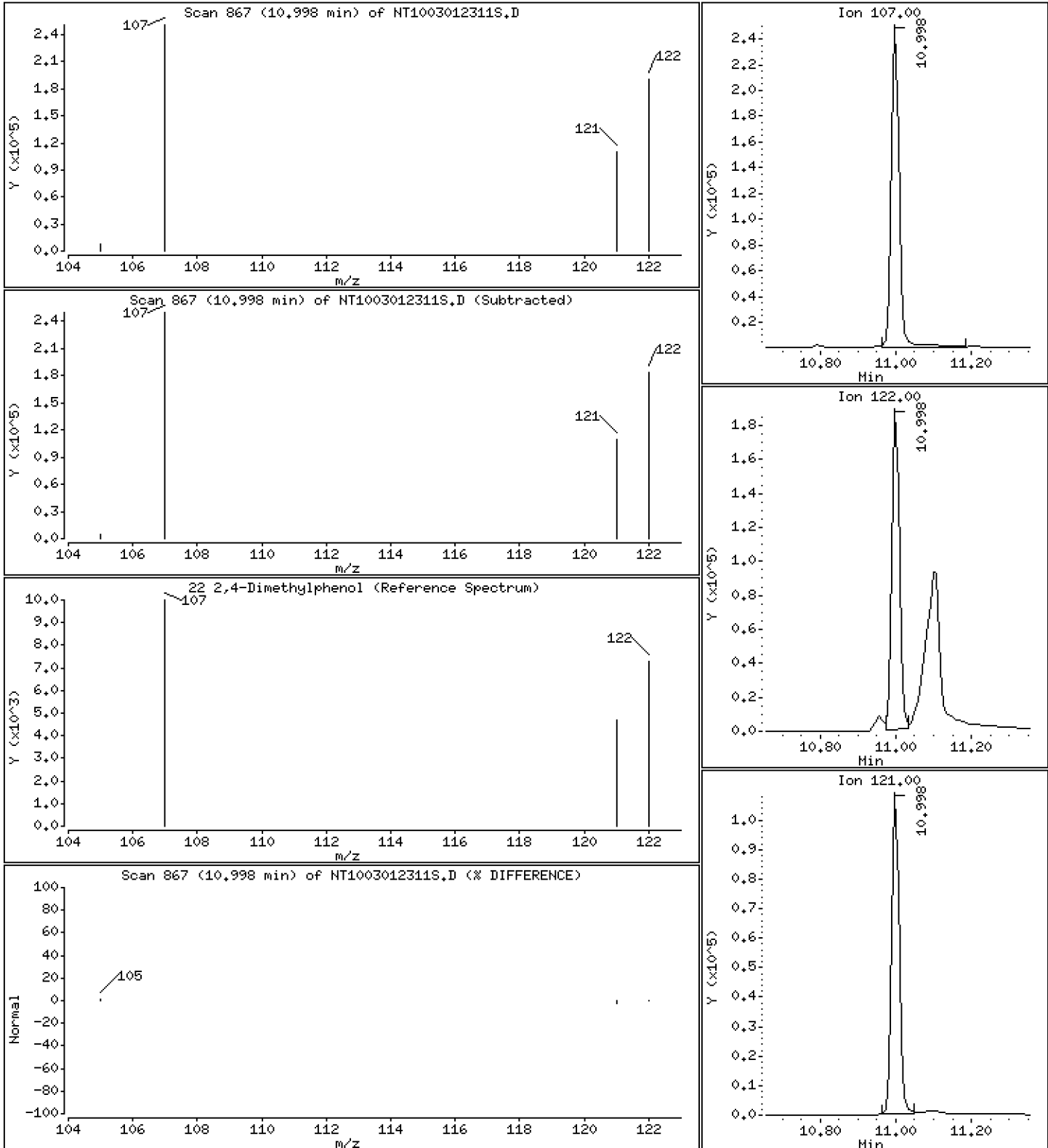
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 3.637 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

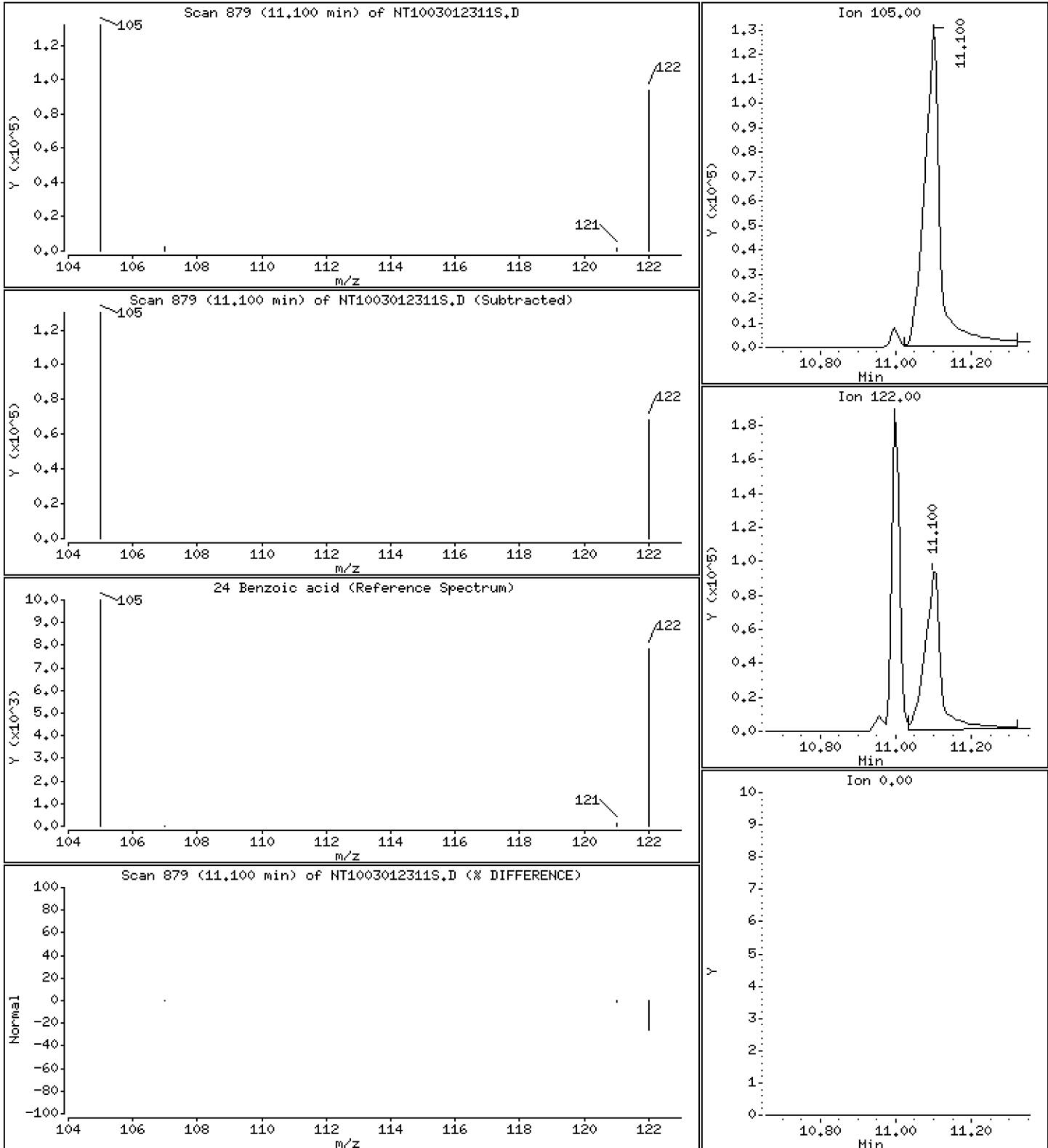
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 6,870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

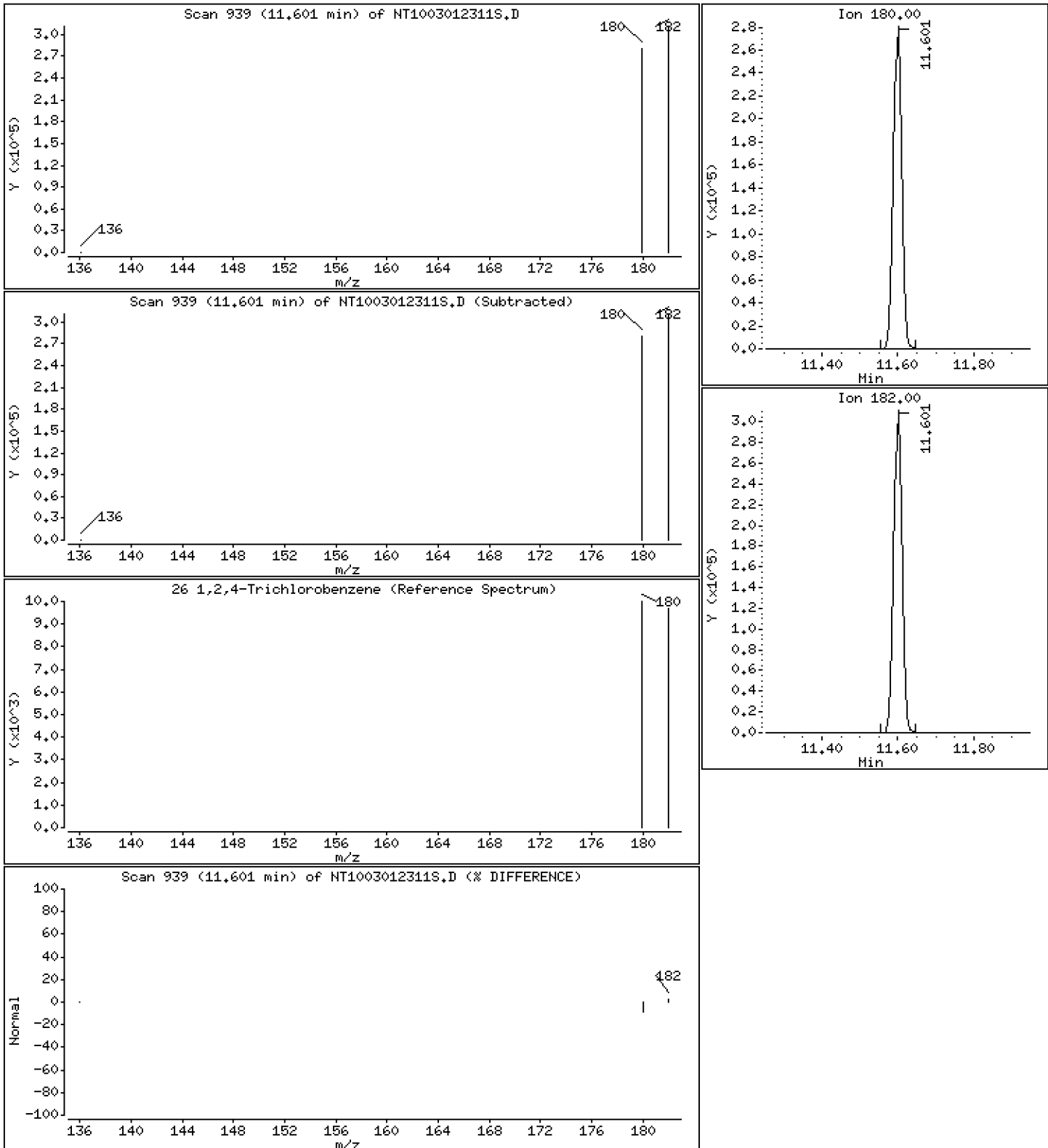
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

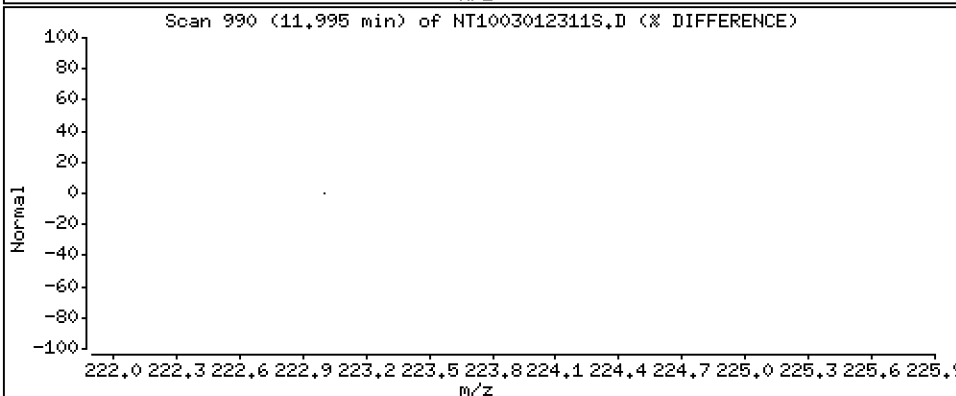
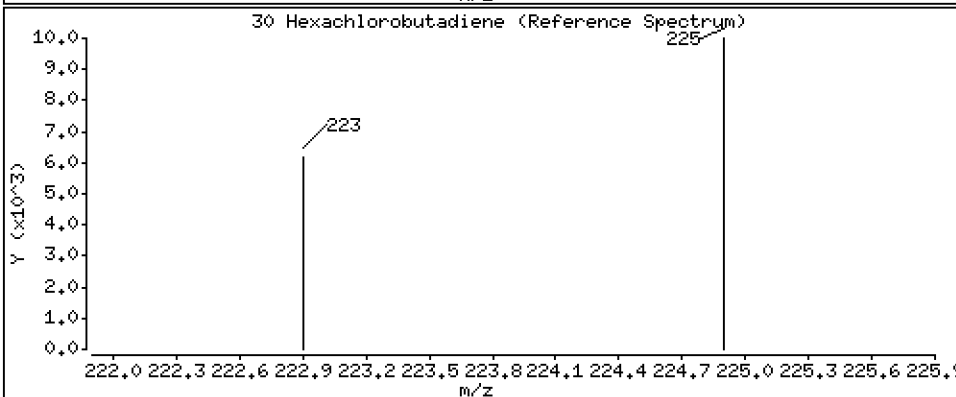
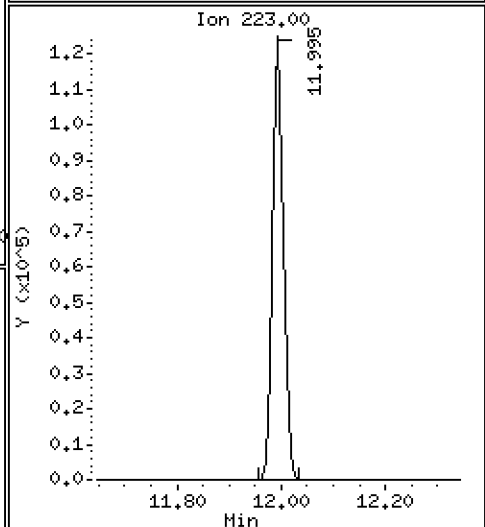
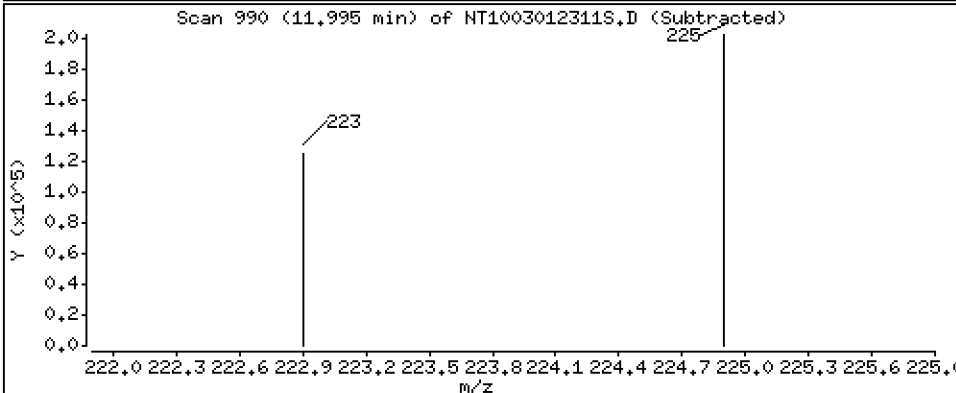
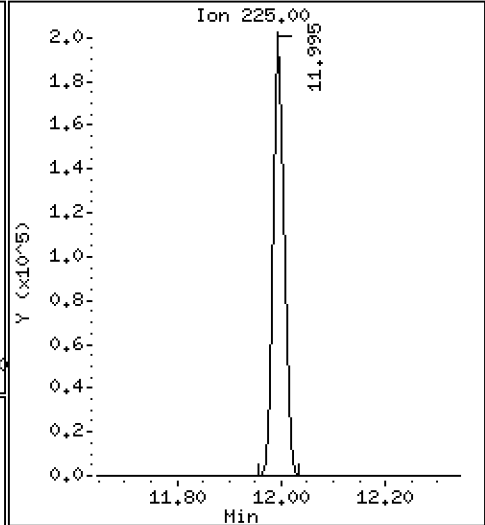
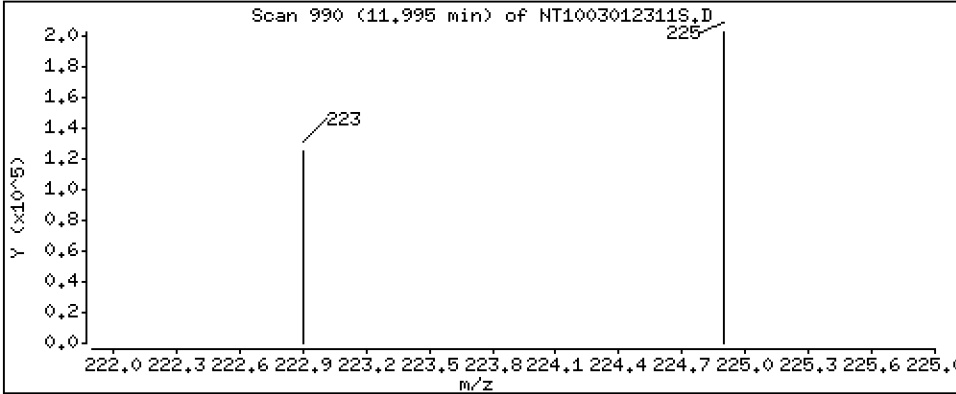
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,862 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

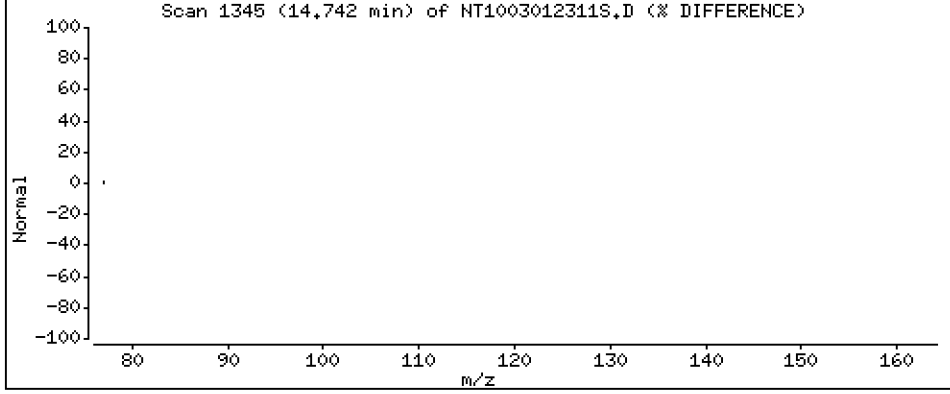
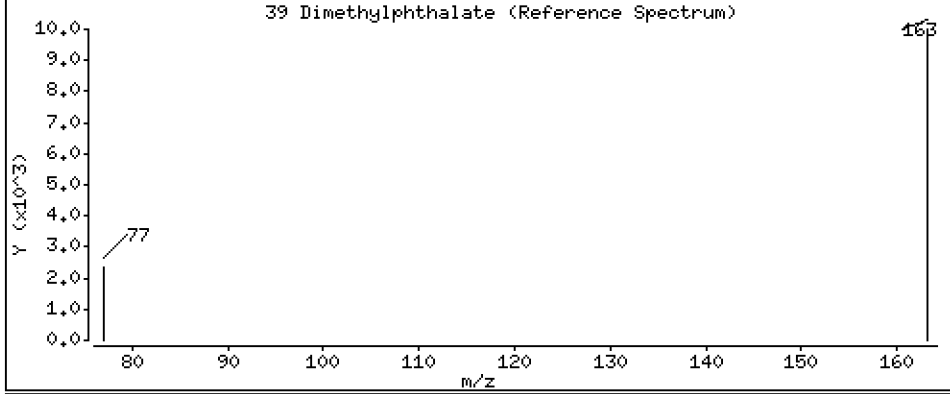
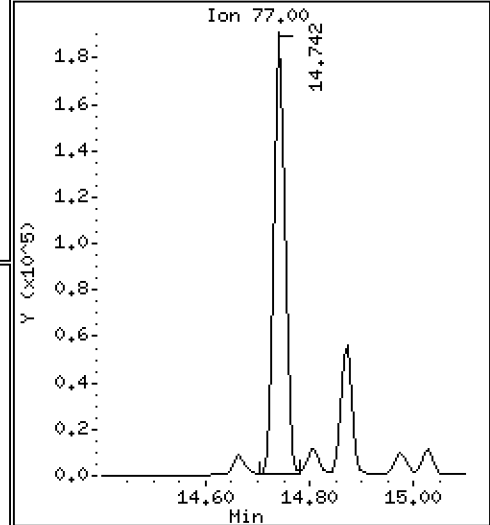
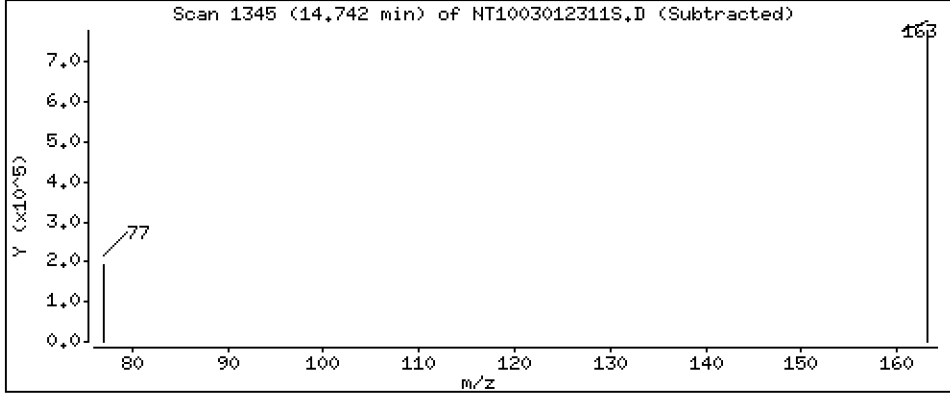
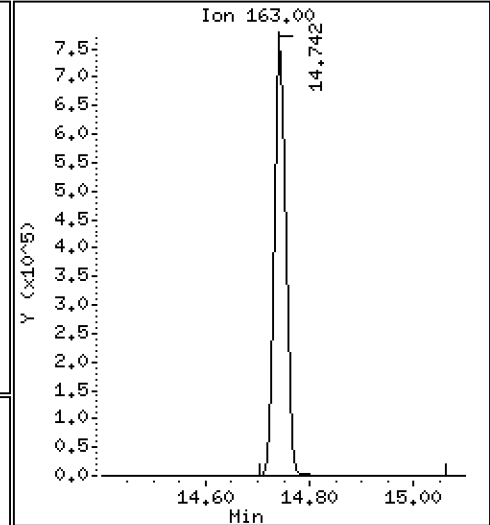
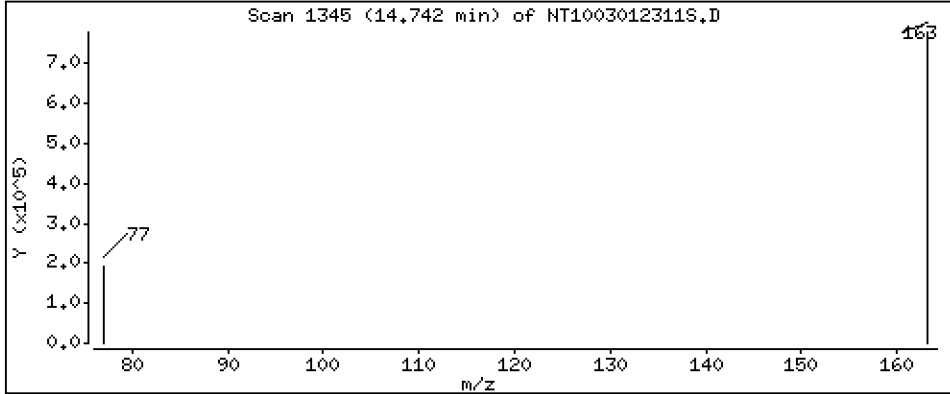
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 5,571 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

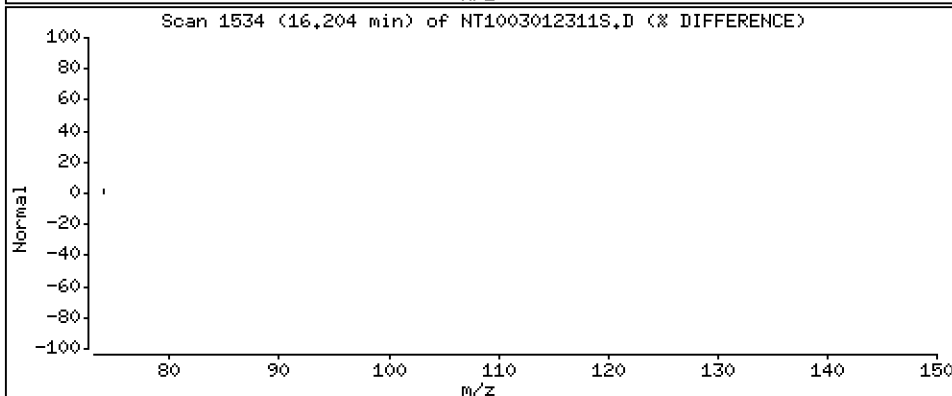
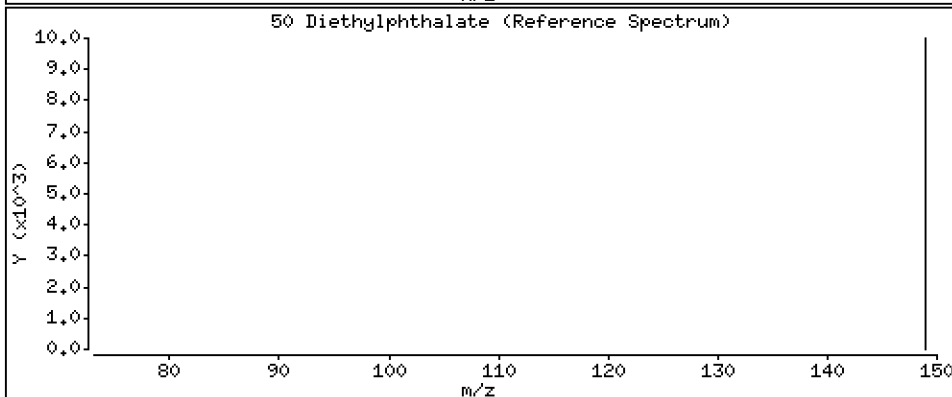
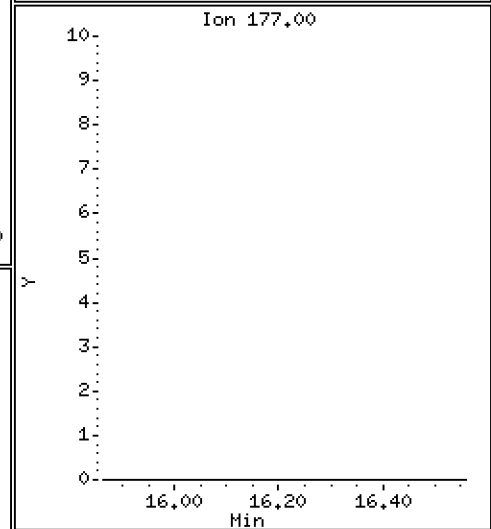
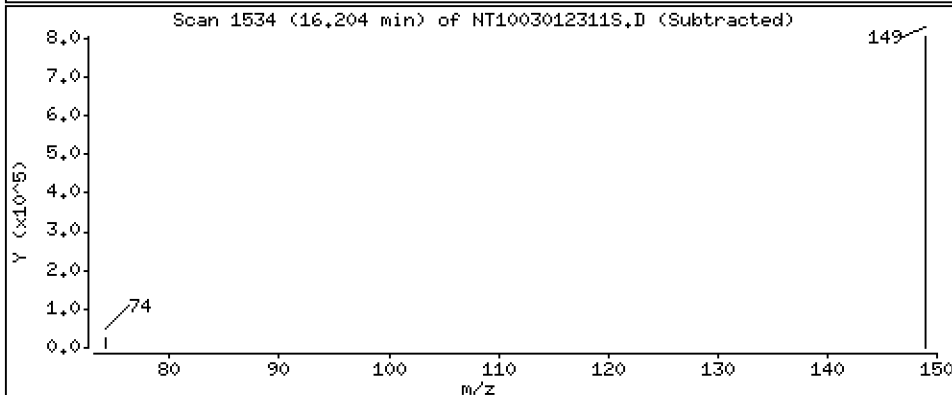
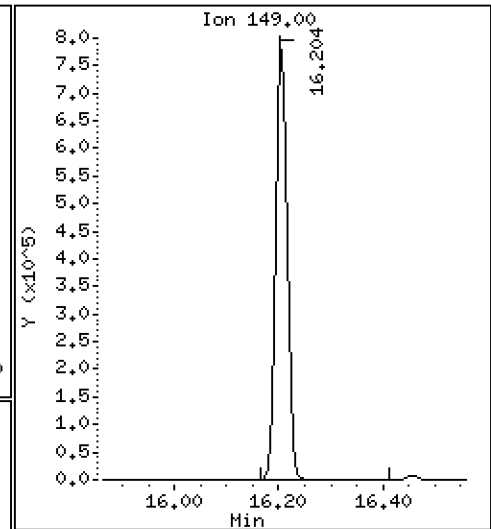
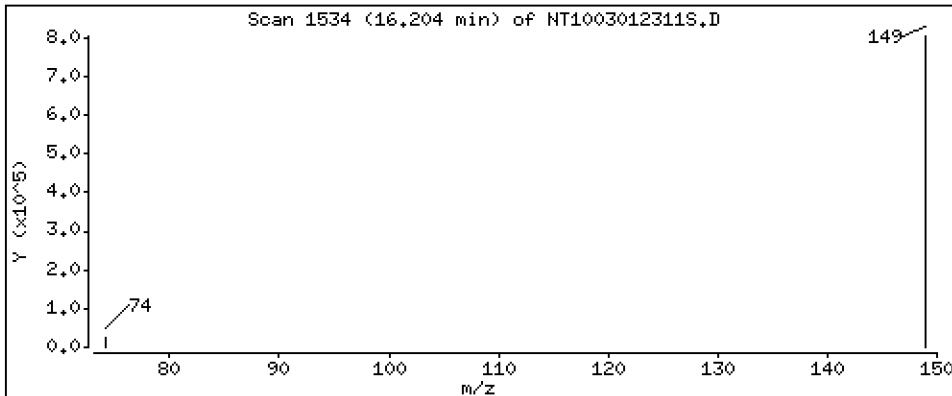
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,979 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

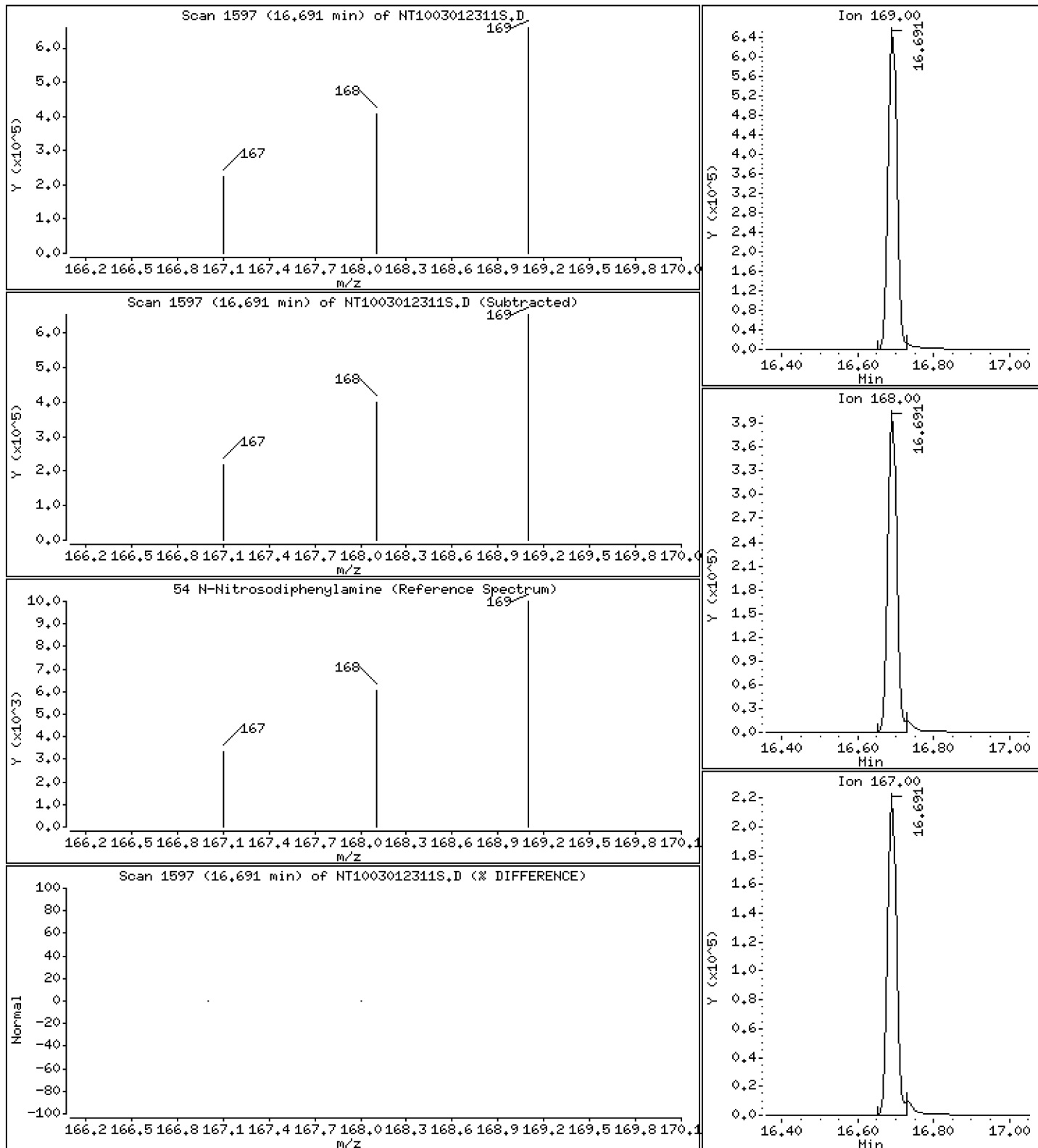
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 5.359 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

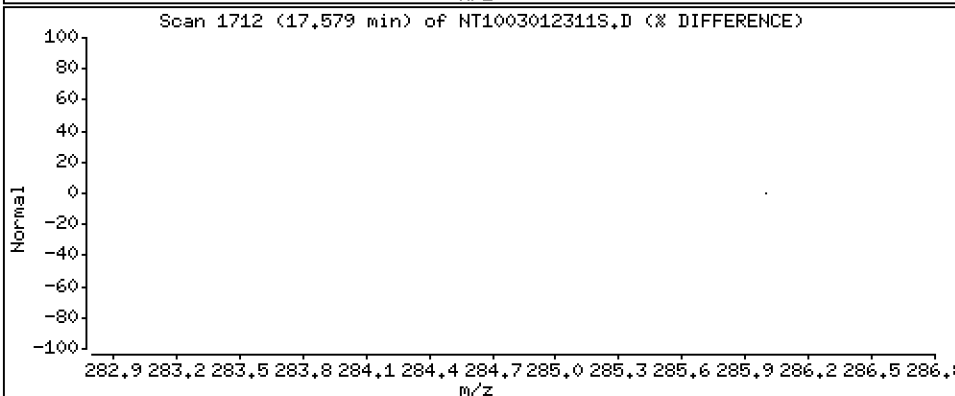
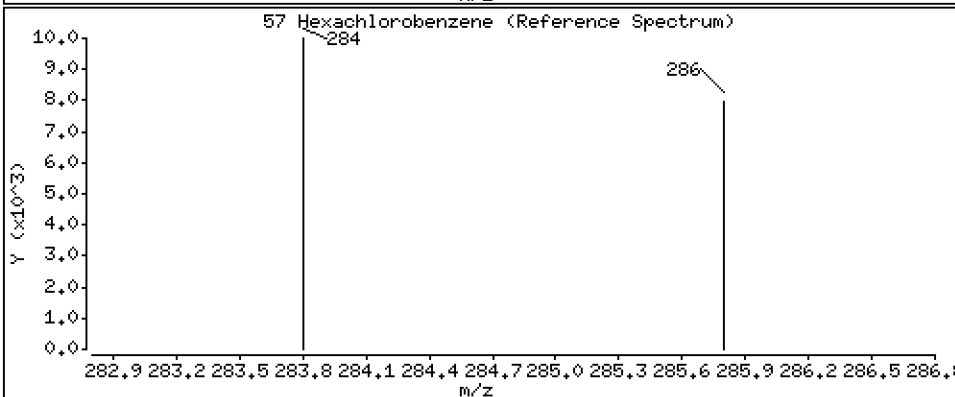
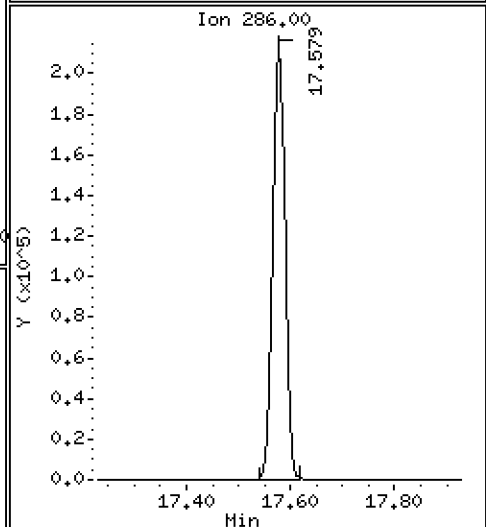
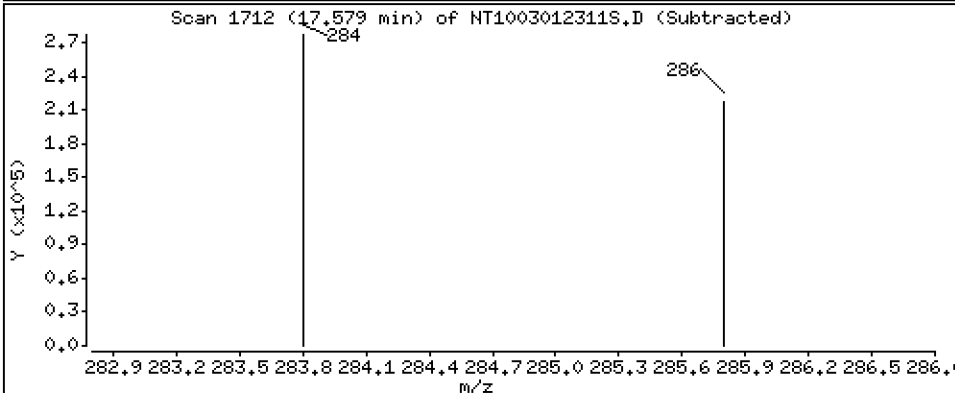
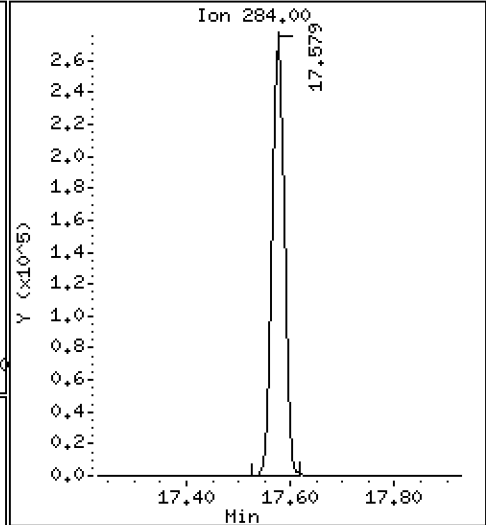
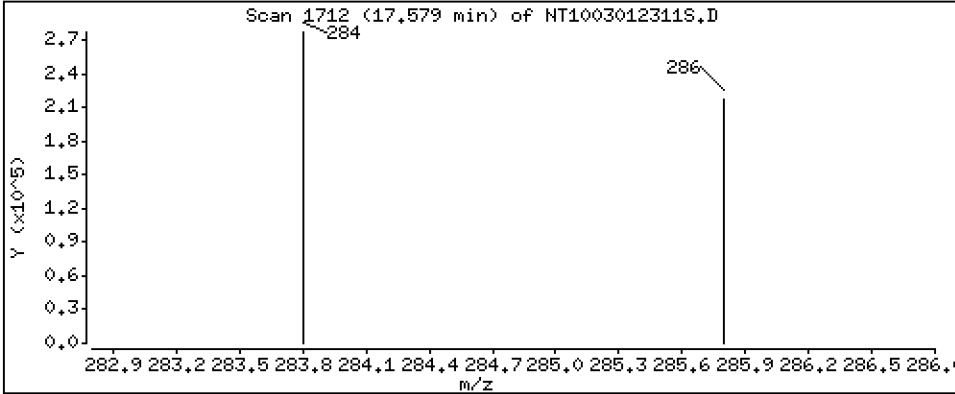
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.866 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

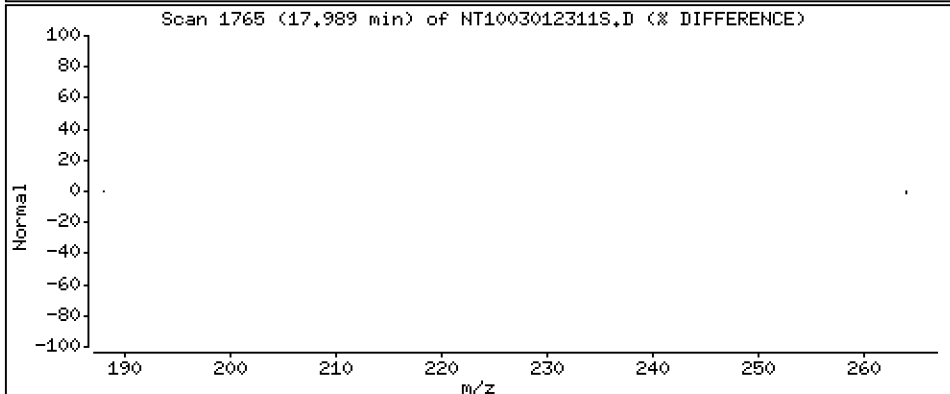
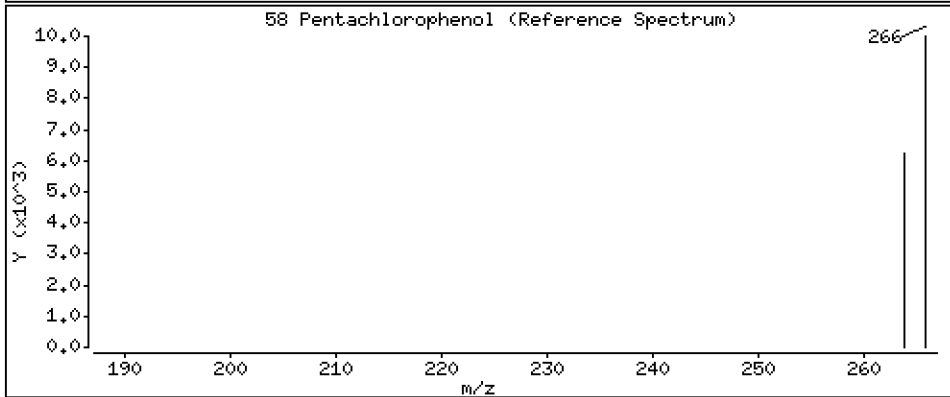
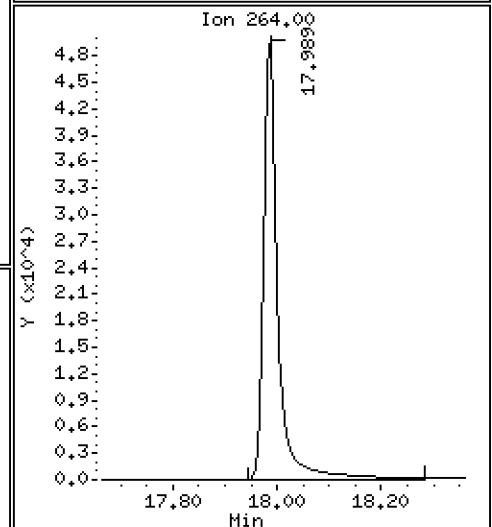
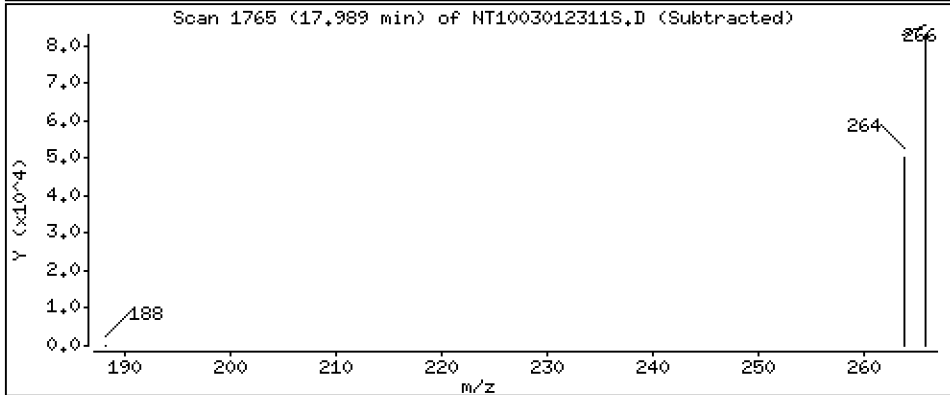
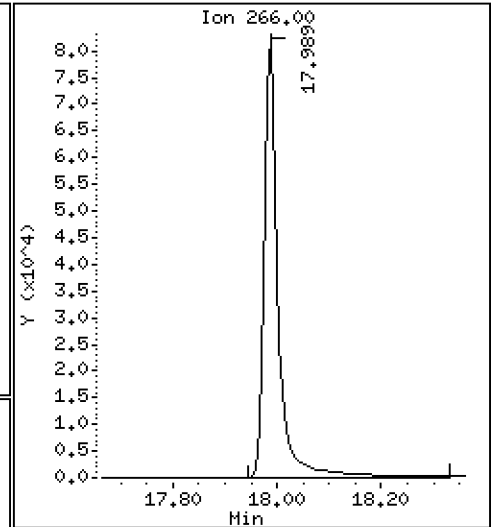
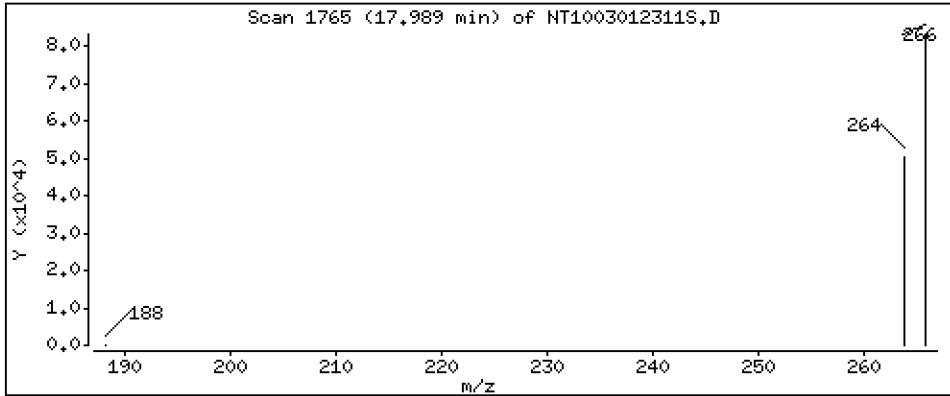
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,912 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

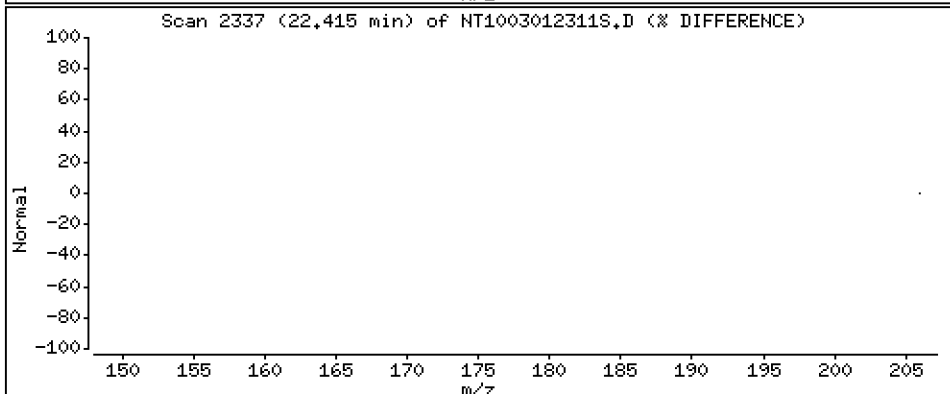
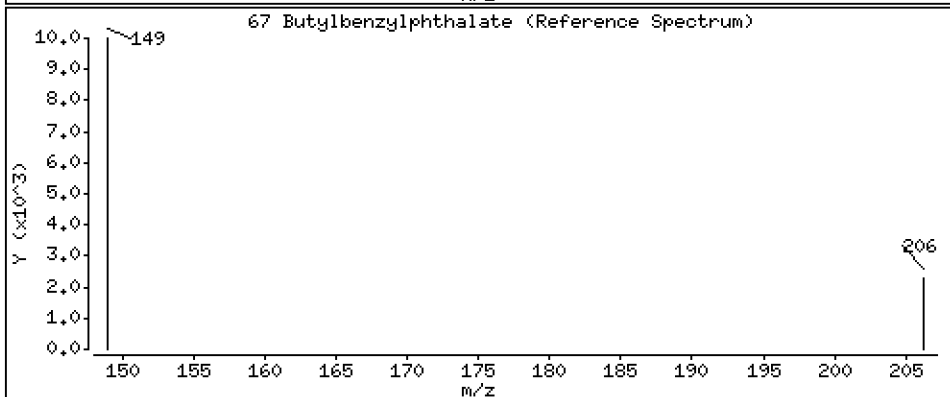
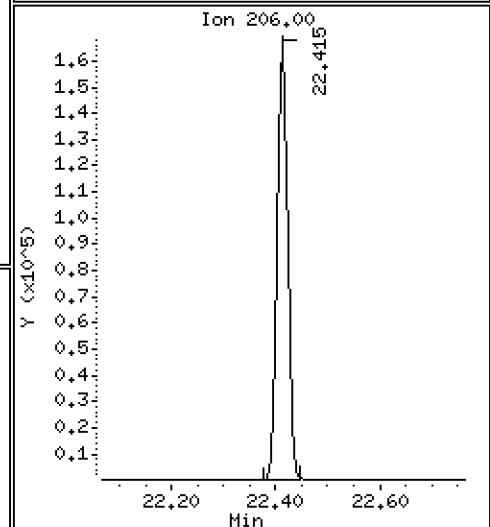
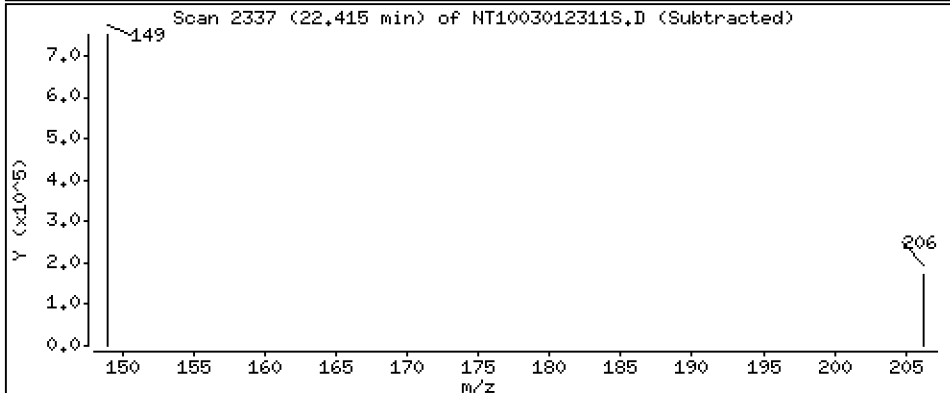
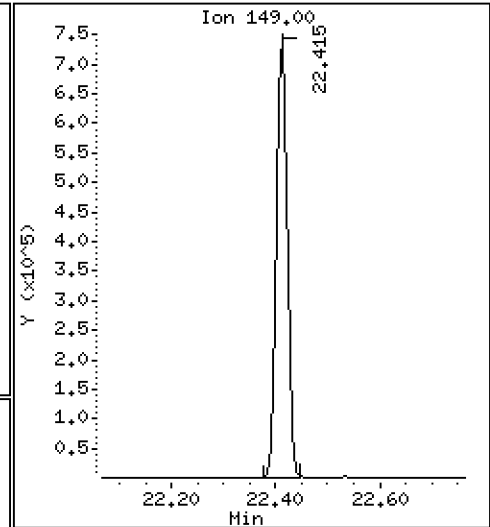
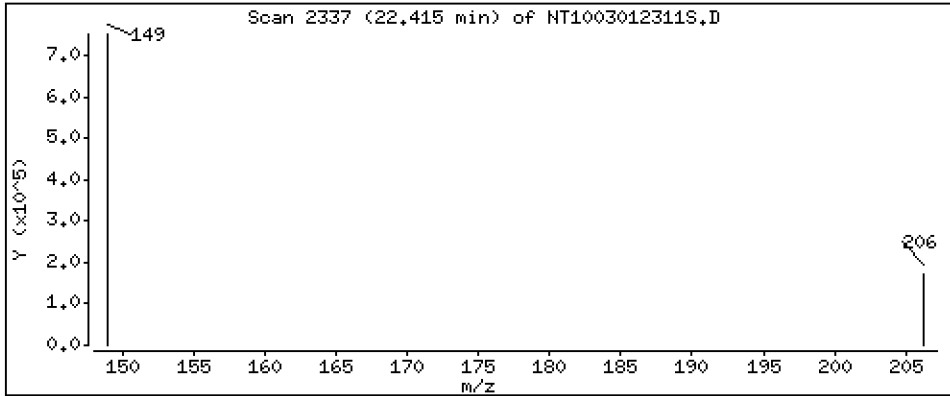
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

67 Butylbenzylphthalate

Concentration: 4.689 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

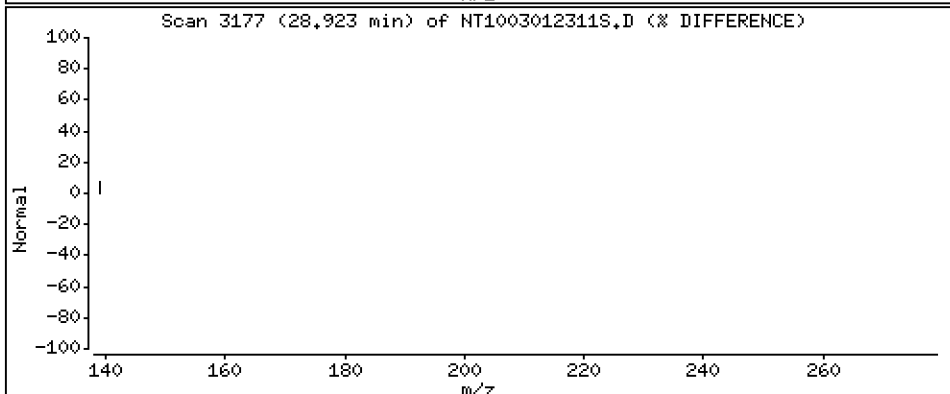
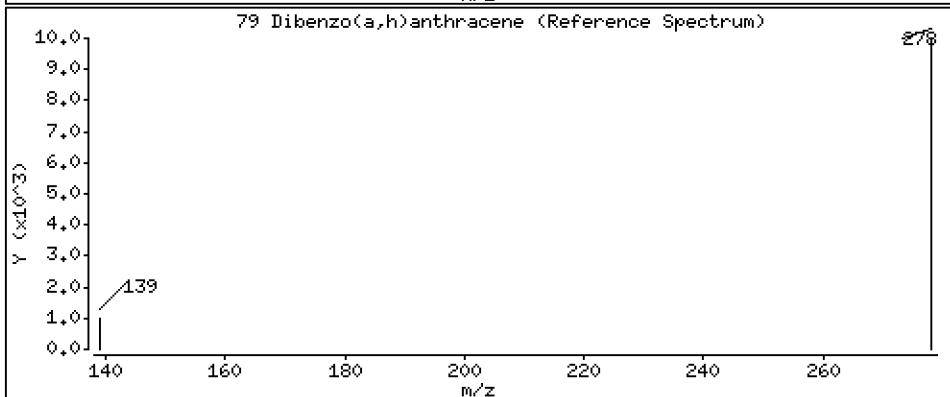
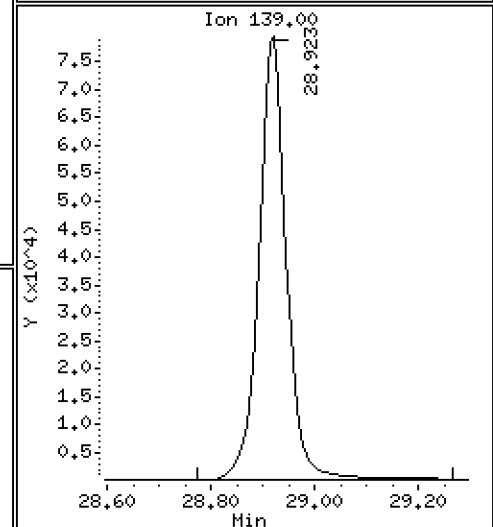
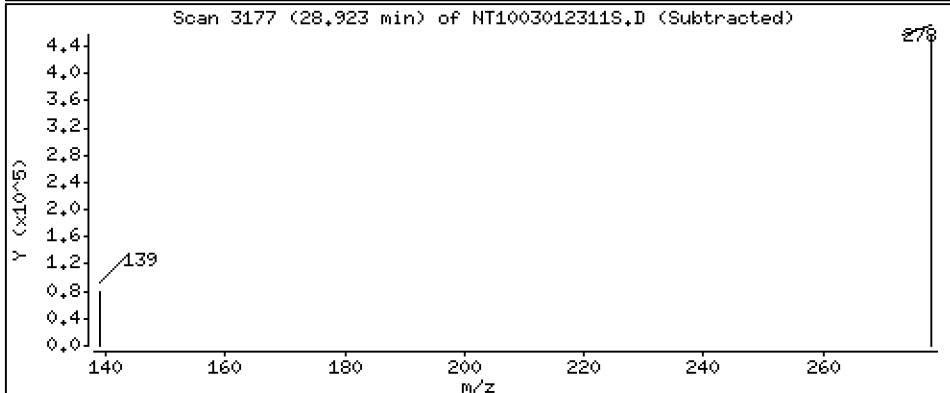
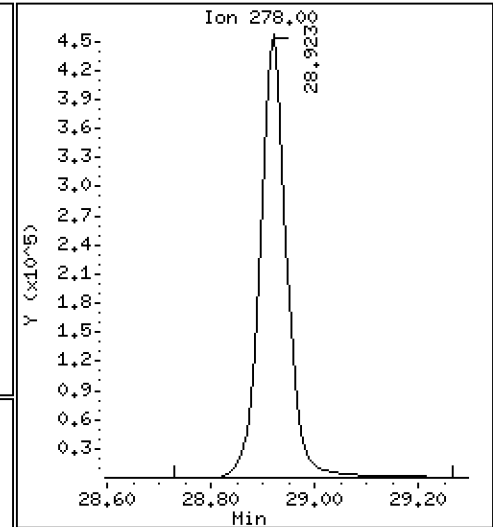
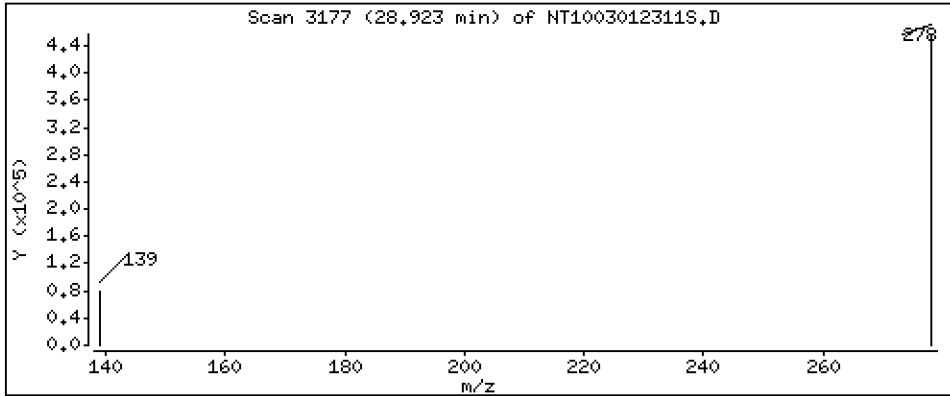
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,760 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

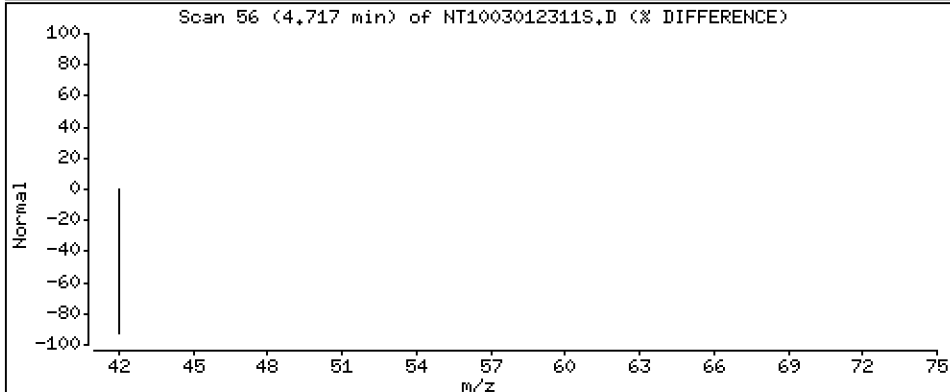
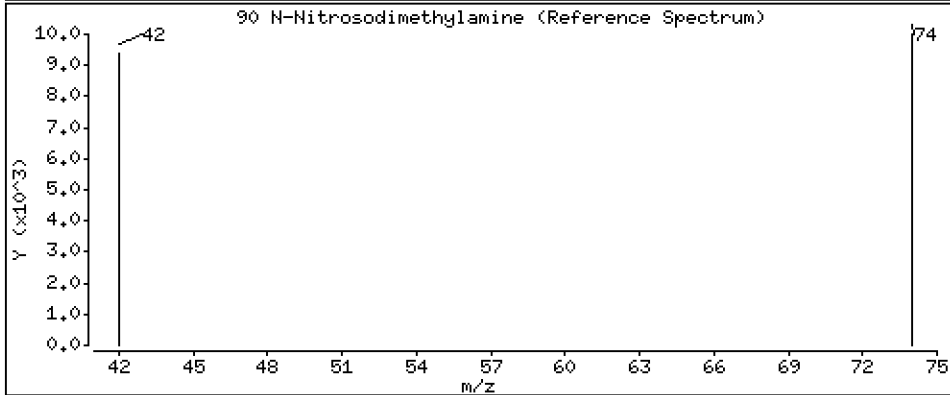
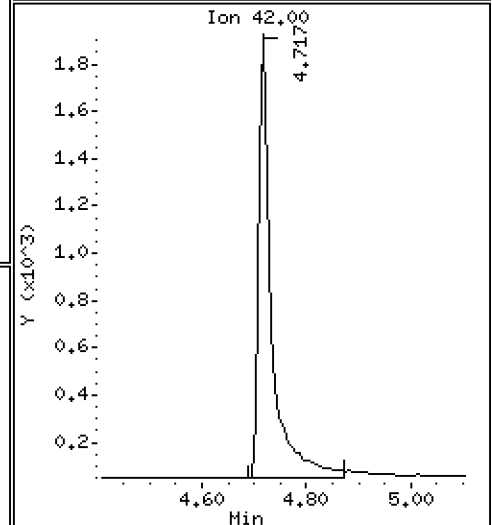
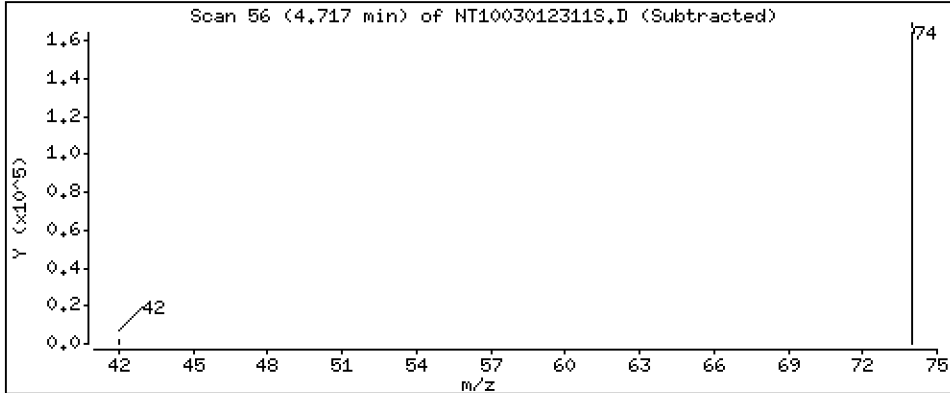
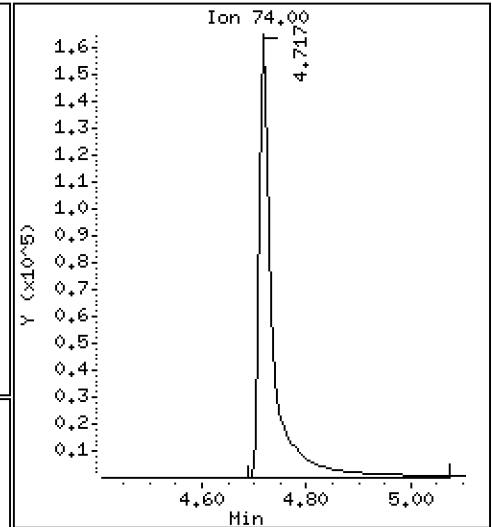
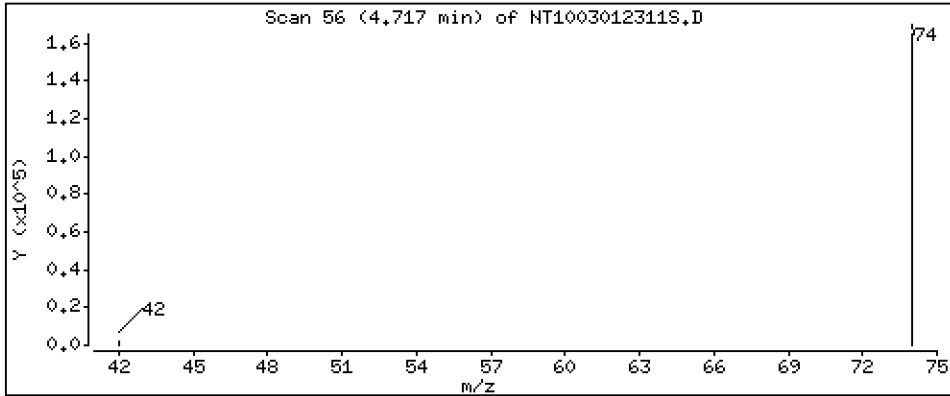
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 6.057 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN	FINAL
								(ug/mL)	(ug/L)
\$ 1	2-Fluorophenol		112	6.902	6.902	(0.746)	3267	0.03768	0.03768 (R)
3	Phenol		94	8.517	8.532	(0.921)	590047	4.50660	4.507
7	1,3-Dichlorobenzene		146	9.143	9.136	(0.988)	572299	5.08409	5.084
* 8	1,4-Dichlorobenzene-d4		152	9.252	9.252	(1.000)	303734	4.00000	
9	1,4-Dichlorobenzene		146	9.283	9.275	(1.003)	574537	5.24962	5.250
11	Benzyl alcohol		79	9.469	9.508	(1.023)	388582	5.10390	5.104
12	1,2-Dichlorobenzene		146	9.562	9.563	(1.034)	540938	5.14228	5.142
13	2-Methylphenol		108	9.655	9.671	(1.044)	348452	4.36547	4.365
15	4-Methylphenol		108	9.943	9.966	(1.075)	379262	4.50495	4.505
16	N-Nitroso-di-n-propylamine		70	9.982	9.982	(1.079)	330861	5.68451	5.685
22	2,4-Dimethylphenol		107	10.998	11.006	(0.938)	357707	3.63670	3.637
24	Benzoic acid		105	11.099	11.007	(0.947)	380081	6.86990	6.870
26	1,2,4-Trichlorobenzene		180	11.600	11.600	(0.989)	402252	4.87012	4.870
* 27	Naphthalene-d8		136	11.724	11.723	(1.000)	1147551	4.00000	
30	Hexachlorobutadiene		225	11.994	11.994	(1.023)	285002	4.86242	4.862
39	Dimethylphthalate		163	14.741	14.749	(0.963)	1142178	5.57065	5.571
* 42	Acenaphthene-d10		162	15.314	15.314	(1.000)	645730	4.00000	
50	Diethylphthalate		149	16.203	16.211	(1.058)	1156037	5.97883	5.979
54	N-Nitrosodiphenylamine		169	16.690	16.705	(0.907)	998237	5.35897	5.359
57	Hexachlorobenzene		284	17.578	17.579	(0.955)	424193	4.86607	4.866

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
* 59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
\$ 66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712 (R)
67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
* 77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.947	0.000	0.9467		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT8</u>	Calibration:	<u>GA00050</u>
Lab File ID:	<u>N823020607A.D</u>	Calibration Date:	<u>01/19/2023</u>
Sequence:	<u>SLB0075</u>	Injection Date:	<u>02/06/23</u>
Lab Sample ID:	<u>SLB0075-ICV1</u>	Injection Time:	<u>15:15</u>
Sequence Name:	<u>Initial Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Benzo(a)anthracene	A	2.5000	2.66	1.1238870	1.1977170		6.6	+/-20
Chrysene	A	2.5000	2.59	1.1964350	1.2401150		3.6	+/-20
Benzo(b)fluoranthene	A	2.5000	2.43	1.1648110	1.1308220		-2.9	+/-20
Benzo(k)fluoranthene	A	2.5000	2.50	1.1409370	1.1390980		-0.2	+/-20
Benzo(a)pyrene	A	2.5000	2.63	1.0250270	1.0773010		5.1	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.75	1.1677520	1.2845510		10.0	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.75	1.0049440	1.1056670		10.0	+/-20
2-Methylnaphthalene-d10	A	2.5000	2.62	0.5454499	0.5707145		4.6	+/-20
Dibenzo[a,h]anthracene-d14	A	2.5000	2.42	0.6679424	0.7585108		-3.2	+/-20
Fluoranthene-d10	A	2.5000	2.58	0.8823923	0.9106613		3.2	+/-20
Naphthalene-d8	A	2.0000	2.00	22973.6700	1.0000		0.0	
Acenaphthene-d10	A	2.0000	2.00	13579.2500	1.0000		0.0	
Phenanthrene-d10	A	2.0000	2.00	25616.1700	1.0000		0.0	
Chrysene-d12	A	2.0000	2.00	22313.2500	1.0000		0.0	
Perylene-d12	A	2.0000	2.00	21012.9200	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.1\20230206A.1\N823020607A.D

Date: 06-FEB-2023 15:15

Client ID:

Sample Info: ICV230206

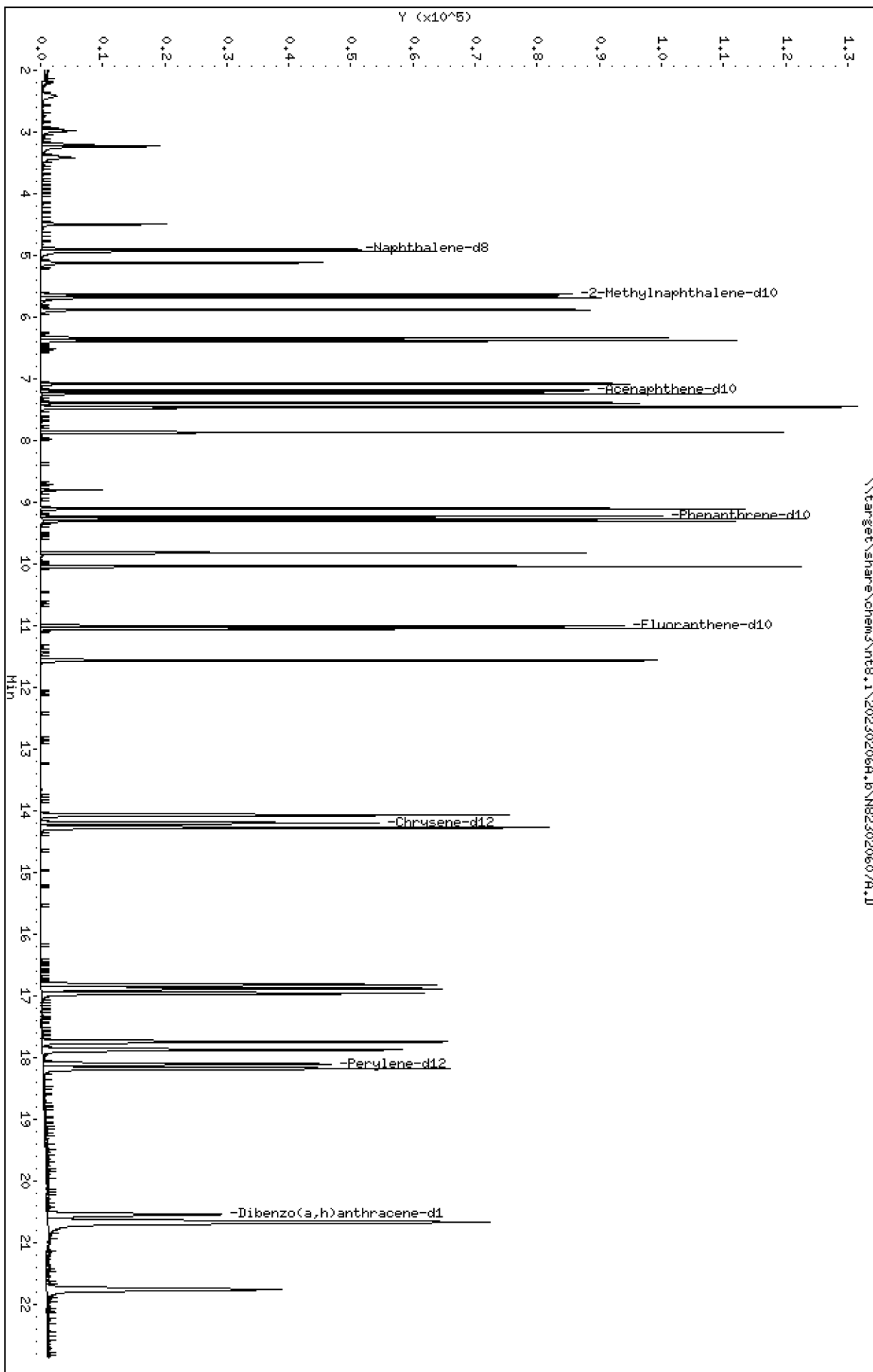
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

\\target\share\chem3\nt8.1\20230206A.1\N823020607A.D



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020607A.D
 Lab Smp Id: SLB0075-ICV1
 Inj Date : 06-FEB-2023 15:15
 Operator : JZ Inst ID: nt8.i
 Smp Info : ICV230206
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 12:57 Jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 7 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 1 Naphthalene-d8	136		4.900	4.900	(1.000)	44336	2.00000	
2 Naphthalene	128		4.928	4.928	(1.006)	51993	2.50000	2.522
§ 3 2-Methylnaphthalene-d10	152		5.634	5.634	(1.150)	31629	2.50000	2.616
4 2-Methylnaphthalene	141		5.681	5.681	(1.159)	29535	2.50000	2.605
5 1-methylnaphthalene	141		5.880	5.880	(1.200)	29856	2.50000	2.594
7 Biphenyl	154		6.339	6.339	(0.882)	43705	2.50000	2.536
8 2,6-Dimethylnaphthalene	156		6.386	6.386	(0.888)	31894	2.50000	2.614
9 Acenaphthylene	152		7.082	7.082	(0.985)	53491	2.50000	2.711
* 10 Acenaphthene-d10	164		7.189	7.189	(1.000)	26127	2.00000	
11 Acenaphthene	153		7.240	7.240	(1.007)	33973	2.50000	2.570
12 Dibenzofuran	168		7.392	7.392	(1.028)	49788	2.50000	2.480
13 1,6,7-Trimethylnaphthalene	170		7.455	7.455	(1.037)	33062	2.50000	2.611
14 Fluorene	166		7.869	7.869	(1.095)	40694	2.50000	2.610
18 Dibenzothiophene	184		9.105	9.105	(0.986)	53838	2.50000	2.569
* 15 Phenanthrene-d10	188		9.232	9.232	(1.000)	47424	2.00000	
16 Phenanthrene	178		9.267	9.267	(1.004)	57495	2.50000	2.482
17 Anthracene	178		9.308	9.308	(1.008)	54725	2.50000	2.600
19 Carbazole	167		9.823	9.823	(1.064)	48982	2.50000	2.539
20 1-Methylphenanthrene	192		10.044	10.044	(1.088)	42941	2.50000	2.572
22 Fluoranthene	202		11.050	11.050	(1.197)	62701	2.50000	2.487
§ 21 Fluoranthene-d10	212		11.009	11.009	(1.192)	53984	2.50000	2.580
23 Pyrene	202		11.569	11.569	(0.815)	63466	2.50000	2.782
24 Benzo(a)anthracene	228		14.070	14.070	(0.991)	55086	2.50000	2.664
* 25 Chrysene-d12	240		14.202	14.202	(1.000)	36794	2.00000	
27 Chrysene	228		14.275	14.275	(1.005)	57036	2.50000	2.591
28 Benzo(b)fluoranthene	252		16.824	16.824	(0.929)	51786	2.50000	2.427
29 Benzo(k)fluoranthene	252		16.887	16.887	(0.933)	52165	2.50000	2.496
30 Benzo(j)fluoranthene	252		16.963	16.963	(0.937)	47288	2.50000	2.513
31 Total Benzofluoranthenes	252		16.824	16.824	(0.929)	152122	7.50000	7.528 (M)
34 Benzo(e)pyrene	252		17.750	17.750	(0.980)	51675	2.50000	2.429
32 Benzo(a)pyrene	252		17.877	17.877	(0.987)	49335	2.50000	2.627
* 33 Perylene-d12	264		18.107	18.107	(1.000)	36636	2.00000	
35 Perylene	252		18.183	18.183	(1.004)	51027	2.50000	2.532

Compounds	QUANT SIG		AMOUNTS					
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
=====	=====		=====	=====	=====	=====	=====	=====
\$ 36 Dibenzo(a,h)anthracene-d14	292		20.549	20.549	(1.135)	34736	2.50000	2.420
37 Indeno(1,2,3-cd)pyrene	276		20.684	20.684	(1.142)	58826	2.50000	2.750
38 Dibenzo(a,h)anthracene	278		20.666	20.666	(1.141)	50634	2.50000	2.751
39 Benzo(g,h,i)perylene	276		21.763	21.763	(1.202)	50628	2.50000	2.612

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020607A.D Calibration Time: 11:54
 Lab Smp Id: SLB0075-ICV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	44336	-0.82
10 Acenaphthene-d10	26411	13206	52822	26127	-1.08
15 Phenanthrene-d10	49210	24605	98420	47424	-3.63
25 Chrysene-d12	42994	21497	85988	36794	-14.42
33 Perylene-d12	40520	20260	81040	36636	-9.59

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.90	0.00
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	0.00
15 Phenanthrene-d10	9.23	8.73	9.73	9.23	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823020607A.D

Lab ID: SLB0075-ICV1

nt8.i, 20230206A.b\FSIMPNA230119.m, 06-FEB-2023 15:15

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

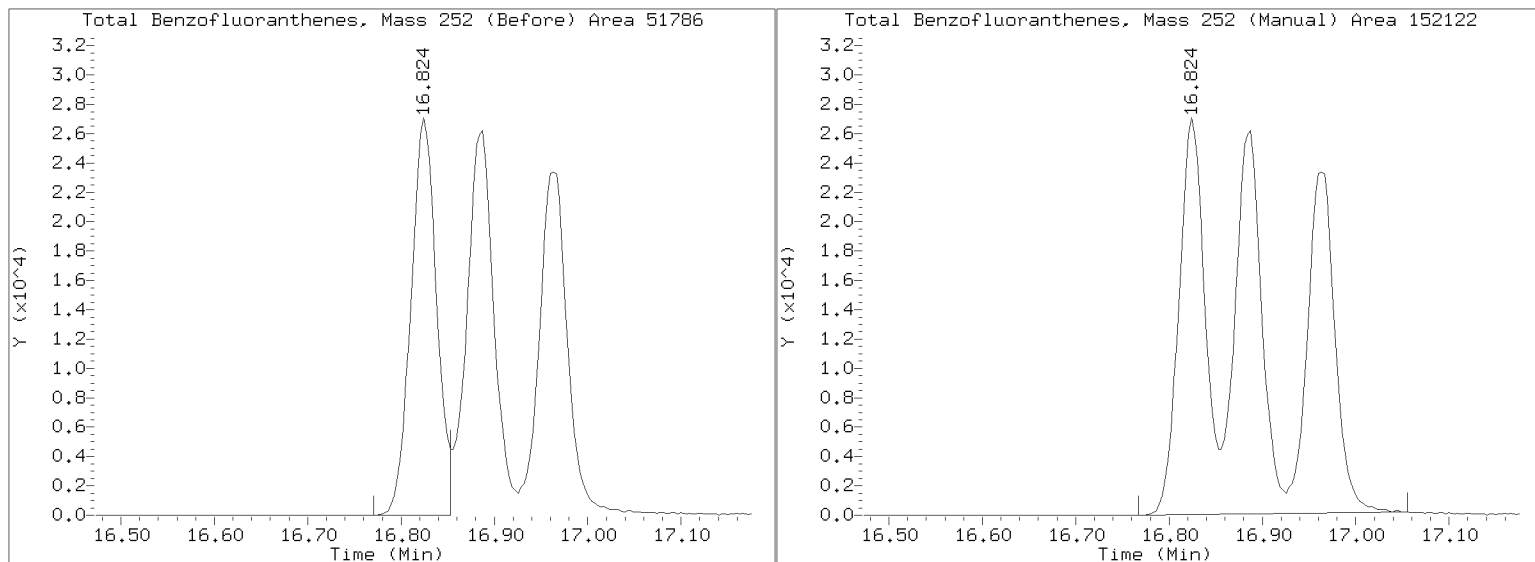
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020607A.D

Injection Date: 06-FEB-2023 15:15

Lab ID:SLB0075-ICV1 Client ID:

Report Date: 02/07/2023 12:57



Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

Instrument: nt8.i Date: 06-FEB-2023 Method: 20230206A.b\FSIMPNA230119.m

INITIAL CAL: 19-JAN-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: N823020607A.D 06-FEB-2023 15:15

Compound	%D

NO Q-FLAGS	



INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052303S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0435</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0435-ICV1</u>	Injection Time:	<u>14:40</u>
Sequence Name:	<u>Initial Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.4413080	1.3972170		-3.1	+/-20
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3964080		0.8	+/-20
Benzyl Alcohol	A	1.0000	0.9	0.7492523	0.8210072		-13.0	+/-20
Benzoic acid	A	4.0000	1.7	0.1431163	0.0776340		-58.6	+/-20 *
2,4-Dimethylphenol	A	2.0000	2.1	0.2957717	0.3617131		6.0	+/-20
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3359287		16.7	+/-20
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5809654		-10.3	+/-20
Pentachlorophenol	A	2.0000	0.5	0.0950913	0.0316002		-76.3	+/-20 *
2-Fluorophenol	A	1.5000	1.53	1.1419780	1.1632310		1.9	+/-20
p-Terphenyl-d14	A	1.0000	1.49	0.3234672	0.4819341		49.0	+/-20 *
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84099.7200	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	296848.2000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	160957.8000	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	276014.3000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	258259.1000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	271750.8000	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.B\SIM.B\NT1003052303S.D

Date: 05-MAR-2023 14:40

Client ID:

Sample Info: SLC0435-ICW1

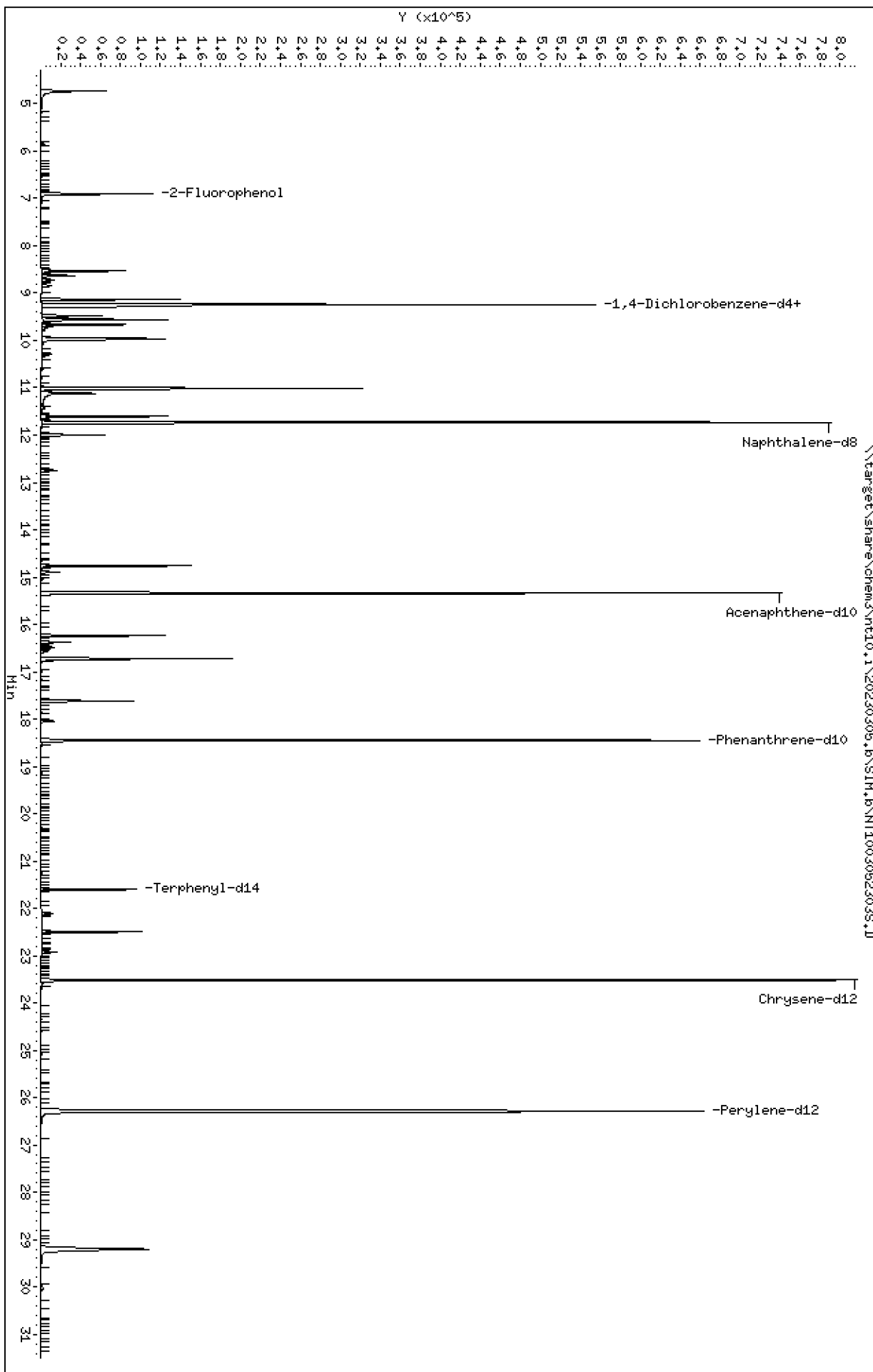
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052303S.D
 Lab Smp Id: SLC0435-ICV1
 Inj Date : 05-MAR-2023 14:40
 Operator : YZ
 Smp Info : SLC0435-ICV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D
 Continuing Calibration Sample

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.747)	140188	1.50000	1.528
3 Phenol	94		8.533	8.533	(0.923)	114666	1.00000	0.8439
7 1,3-Dichlorobenzene	146		9.136	9.136	(0.988)	117909	1.00000	0.9900
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.244	(1.000)	321376	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	112258	1.00000	0.9694
11 Benzyl alcohol	79		9.485	9.485	(1.026)	65963	1.00000	0.8698 (M)
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	112193	1.00000	1.008
13 2-Methylphenol	108		9.663	9.663	(1.045)	91736	1.00000	1.117
15 4-Methylphenol	108		9.958	9.958	(1.077)	93493	1.00000	1.092
16 N-Nitroso-di-n-propylamine	70		9.982	9.982	(1.080)	69265	1.00000	1.145
22 2,4-Dimethylphenol	107		11.015	11.015	(0.939)	204898	2.00000	2.119
24 Benzoic acid	105		11.116	11.116	(0.948)	87954	4.00000	1.655
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	95146	1.00000	1.167
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1132931	4.00000	
30 Hexachlorobutadiene	225		12.002	12.002	(1.023)	61666	1.00000	1.066
39 Dimethylphthalate	163		14.765	14.765	(0.963)	173463	1.00000	0.9728
* 42 Acenaphthene-d10	162		15.337	15.337	(1.000)	561597	4.00000	
50 Diethylphthalate	149		16.234	16.234	(1.058)	182212	1.00000	1.084 (H)
54 N-Nitrosodiphenylamine	169		16.729	16.729	(0.907)	155150	1.00000	0.8975
57 Hexachlorobenzene	284		17.617	17.617	(0.955)	83301	1.00000	1.030
58 Pentachlorophenol	266		18.043	18.043	(0.978)	16878	2.00000	0.4747
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	1068222	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.602	(0.919)	120191	1.00000	1.490
67 Butylbenzylphthalate	149		22.492	22.492	(0.957)	117407	1.00000	0.6988
* 69 Chrysene-d12	240		23.514	23.514	(1.000)	997572	4.00000	
* 77 Perylene-d12	264		26.286	26.286	(1.000)	1245490	4.00000	
79 Dibenzo(a,h)anthracene	278		29.202	29.202	(1.111)	344110	1.00000	1.173 (M)
90 N-Nitrosodimethylamine	74		4.724	4.724	(0.511)	139664	2.00000	2.571

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052303S.D
 Lab Smp Id: SLC0435-ICV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	321376	0.00
27 Naphthalene-d8	1132931	566466	2265862	1132931	0.00
42 Acenaphthene-d10	561597	280799	1123194	561597	0.00
59 Phenanthrene-d10	1068222	534111	2136444	1068222	0.00
69 Chrysene-d12	997572	498786	1995144	997572	0.00
77 Perylene-d12	1245490	622745	2490980	1245490	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.29	25.79	26.79	26.29	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052303S.D

Lab ID: SLC0435-ICV1

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 14:40

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

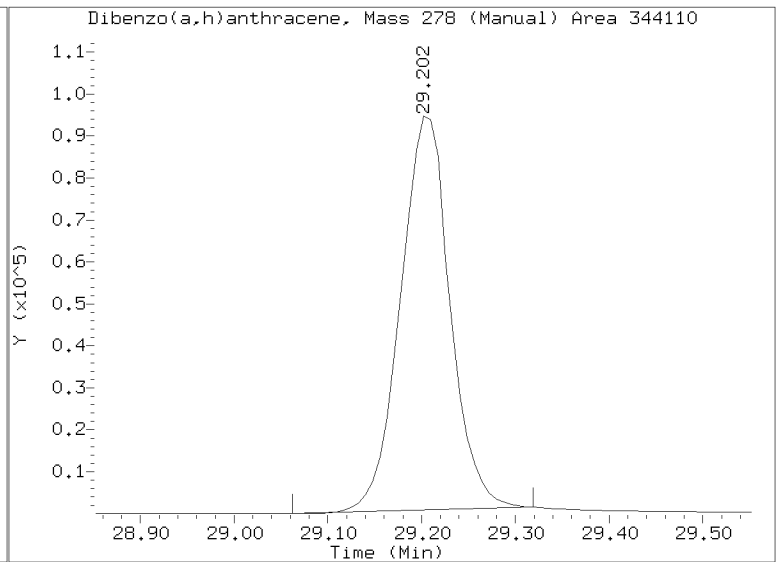
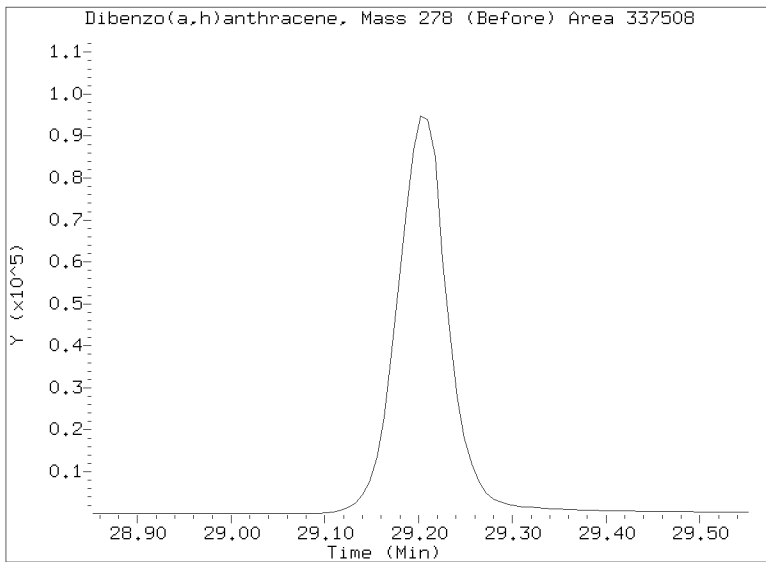
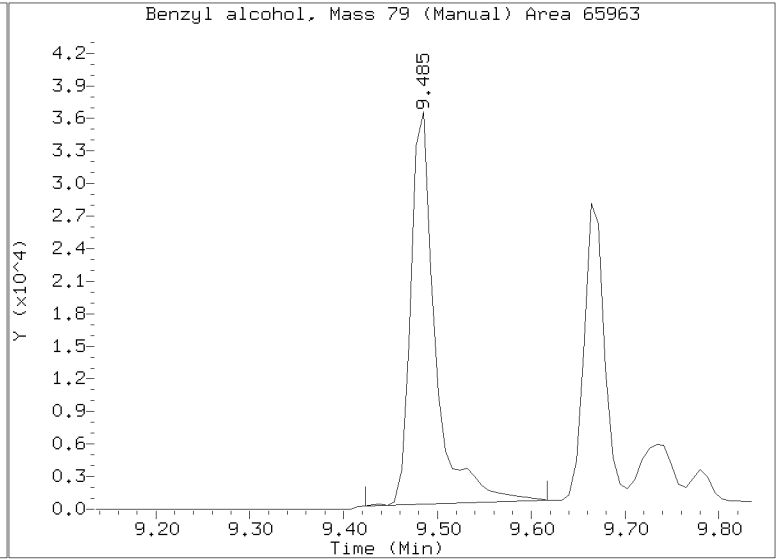
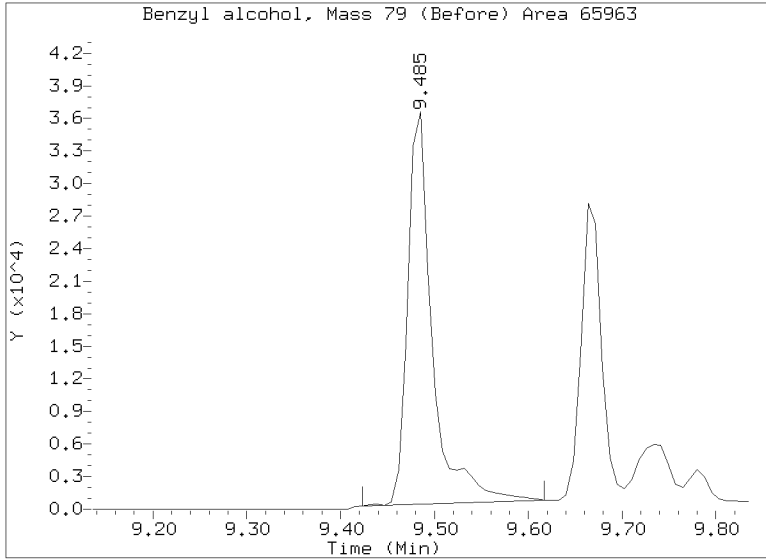
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052303S.D
Injection Date: 05-MAR-2023 14:40
Lab ID:SLC0435-ICV1 Client ID:
Report Date: 03/28/2023 11:00



APPROVED
By Deenay Dunmore at 12:03 pm, Mar 28, 2023

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305.b\SIM.b

Instrument: nt10.i Date: 05-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1003052303S.D 05-MAR-2023 14:40

Compound	%D

Benzoic acid	-58.6
N-Nitrosodimethylamine	28.6
Pentachlorophenol	-76.3
Butylbenzylphthalate	-30.1
Terphenyl-d14	49.0



INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052315SA.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0440</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0440-ICV1</u>	Injection Time:	<u>22:16</u>
Sequence Name:	<u>Initial Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.4413080	1.4039480		-2.6	+/-20
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3921730		0.5	+/-20
Benzyl Alcohol	A	1.0000	1.0	0.7492523	0.9105636		-3.7	+/-20
Benzoic acid	A	4.0000	0.7	0.1431163	0.0332159		-82.2	+/-20 *
2,4-Dimethylphenol	A	2.0000	2.1	0.2957717	0.3638503		6.6	+/-20
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3415521		18.6	+/-20
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5842969		-9.7	+/-20
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0126209		-90.5	+/-20 *
2-Fluorophenol	A	1.5000	1.65	1.1419780	1.2529		9.7	+/-20
p-Terphenyl-d14	A	1.0000	1.57	0.3234672	0.5071780		56.8	+/-20 *
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84099.7200	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	296848.2000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	160957.8000	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	276014.3000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	258259.1000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	271750.8000	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A.b\SIH.b\NT10030523159A.D

Date: 05-MAR-2023 22:16

Client ID:

Sample Info: SLC0440-ICV1

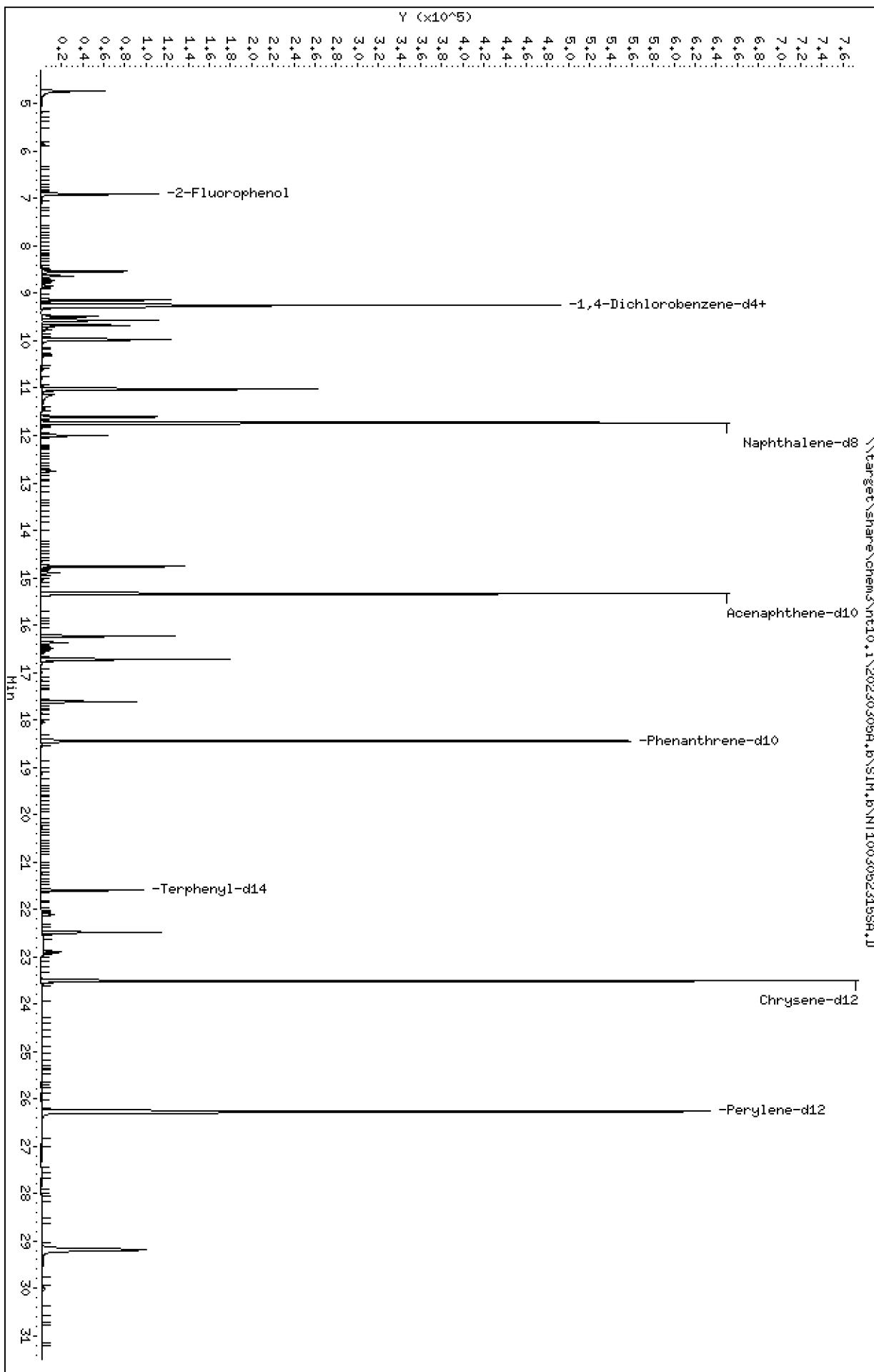
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052315SA.D
 Lab Smp Id: SLC0440-ICV1
 Inj Date : 05-MAR-2023 22:16
 Operator : YZ
 Smp Info : SLC0440-ICV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:18 deenayd
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D
 Continuing Calibration Sample

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	138057	1.50000	1.646
3 Phenol	94		8.532	8.532	(0.922)	113090	1.00000	0.9099
7 1,3-Dichlorobenzene	146		9.143	9.143	(0.988)	108511	1.00000	0.9964
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.252	(1.000)	293840	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.283	(1.003)	103134	1.00000	0.9741
11 Benzyl alcohol	79		9.484	9.484	(1.025)	66890	1.00000	0.9635
12 1,2-Dichlorobenzene	146		9.570	9.570	(1.034)	102269	1.00000	1.005
13 2-Methylphenol	108		9.671	9.671	(1.045)	89685	1.00000	1.194
15 4-Methylphenol	108		9.966	9.966	(1.077)	91675	1.00000	1.170
16 N-Nitroso-di-n-propylamine	70		9.981	9.981	(1.079)	68520	1.00000	1.238
22 2,4-Dimethylphenol	107		11.014	11.014	(0.939)	187863	2.00000	2.132
24 Benzoic acid	105		11.133	11.133	(0.949)	34300	4.00000	0.7117
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	88175	1.00000	1.186
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1032639	4.00000	
30 Hexachlorobutadiene	225		12.001	12.001	(1.023)	57432	1.00000	1.089
39 Dimethylphthalate	163		14.764	14.764	(0.963)	163122	1.00000	1.023
* 42 Acenaphthene-d10	162		15.337	15.337	(1.000)	502349	4.00000	
50 Diethylphthalate	149		16.234	16.234	(1.058)	178603	1.00000	1.187 (MH)
54 N-Nitrosodiphenylamine	169		16.729	16.729	(0.907)	142568	1.00000	0.9026
57 Hexachlorobenzene	284		17.617	17.617	(0.955)	78174	1.00000	1.058
58 Pentachlorophenol	266		18.042	18.042	(0.978)	6159	2.00000	0.1901
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	975997	4.00000	
\$ 66 Terphenyl-d14	244		21.594	21.594	(0.918)	124074	1.00000	1.568
67 Butylbenzylphthalate	149		22.484	22.484	(0.956)	140781	1.00000	0.8547
* 69 Chrysene-d12	240		23.514	23.514	(1.000)	978544	4.00000	
* 77 Perylene-d12	264		26.270	26.270	(1.000)	1201606	4.00000	
79 Dibenzo(a,h)anthracene	278		29.186	29.186	(1.111)	359657	1.00000	1.269
90 N-Nitrosodimethylamine	74		4.724	4.724	(0.511)	125707	2.00000	2.531

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052315SA.D
 Lab Smp Id: SLC0440-ICV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	293840	-8.57
27 Naphthalene-d8	1132931	566466	2265862	1032639	-8.85
42 Acenaphthene-d10	561597	280799	1123194	502349	-10.55
59 Phenanthrene-d10	1068222	534111	2136444	975997	-8.63
69 Chrysene-d12	997572	498786	1995144	978544	-1.91
77 Perylene-d12	1245490	622745	2490980	1201606	-3.52

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.29	25.79	26.79	26.27	-0.06

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

REVIEW SUMMARY FOR FILE - NT1003052315SA.D

Lab ID: SLC0440-ICV1

nt10.i, 20230305A.b\SIM.b\SIMABN2.m,

05-MAR-2023 22:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b\SIM.b

Instrument: nt10.i Date: 05-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1003052315SA.D 05-MAR-2023 22:16

Compound	%D

N-Nitroso-di-n-propylamine	23.8
Benzoic acid	-82.2
N-Nitrosodimethylamine	26.6
Pentachlorophenol	-90.5
Dibenzo(a,h)anthracene	26.9
Terphenyl-d14	56.8



INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: NT10

Calibration: GC00032

Lab File ID: NT1003052326SB.D

Calibration Date: 03/01/2023

Sequence: SLC0447

Injection Date: 03/06/23

Lab Sample ID: SLC0447-ICV1

Injection Time: 05:10

Sequence Name: Initial Cal Check

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.4413080	1.4161780		-1.7	+/-20
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3947610		0.7	+/-20
Benzyl Alcohol	A	1.0000	0.9	0.7492523	0.8806529		-6.8	+/-20
Benzoic acid	A	4.0000	0.5	0.1431163	0.0228843		-87.7	+/-20 *
2,4-Dimethylphenol	A	2.0000	2.2	0.2957717	0.3675444		7.7	+/-20
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3432922		19.2	+/-20
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5844576		-9.7	+/-20
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0108666		-91.8	+/-20 *
2-Fluorophenol	A	1.5000	1.74	1.1419780	1.3229980		15.9	+/-20
p-Terphenyl-d14	A	1.0000	1.59	0.3234672	0.5149517		59.2	+/-20 *
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84099.7200	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.0	296848.2000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	160957.8000	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	276014.3000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	258259.1000	1.0000		0.0	
Perylene-d12	A	4.0000	4.0	271750.8000	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.B\SIM.B\NT1003052326SB.D

Date : 06-HR-2023 05:10

Client ID:

Sample Info: SLC0447-ICV1

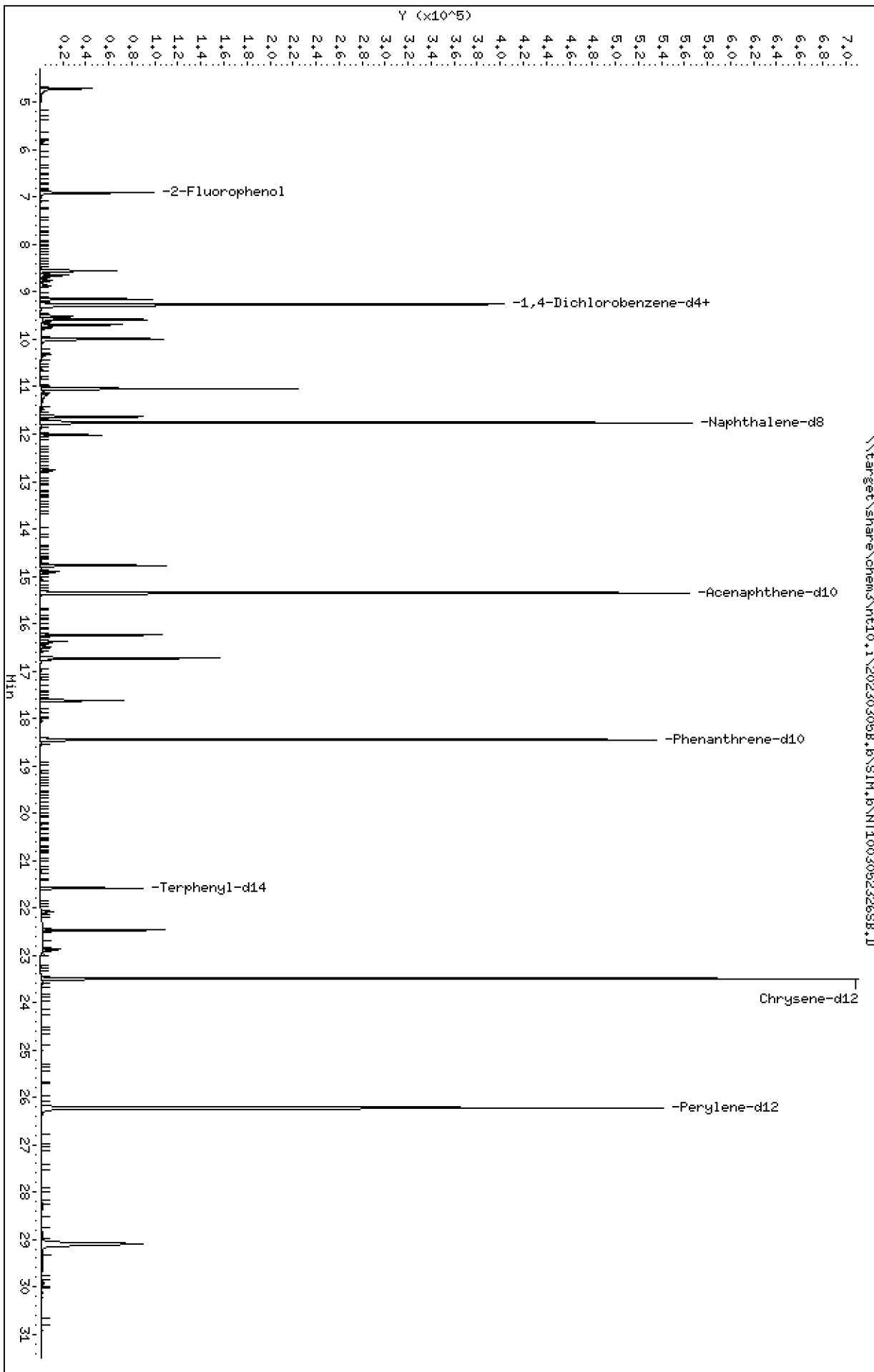
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

\\target\share\chem3\nt10.1\20230305B.B\SIM.B\NT1003052326SB.D



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052326SB.D
 Lab Smp Id: SLC0447-ICV1
 Inj Date : 06-MAR-2023 05:10
 Operator : YZ
 Smp Info : SLC0447-ICV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D
 Continuing Calibration Sample

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.745)	118790	1.50000	1.738
3 Phenol	94		8.556	8.556	(0.924)	95309	1.00000	0.9410
7 1,3-Dichlorobenzene	146		9.151	9.151	(0.988)	88712	1.00000	0.9997
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.259	(1.000)	239436	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.004)	84771	1.00000	0.9826
11 Benzyl alcohol	79		9.515	9.515	(1.028)	52715	1.00000	0.9323
12 1,2-Dichlorobenzene	146		9.585	9.585	(1.035)	83489	1.00000	1.007
13 2-Methylphenol	108		9.694	9.694	(1.047)	74459	1.00000	1.216
15 4-Methylphenol	108		9.989	9.989	(1.079)	75285	1.00000	1.180
16 N-Nitroso-di-n-propylamine	70		10.005	10.005	(1.080)	57375	1.00000	1.272
22 2,4-Dimethylphenol	107		11.040	11.040	(0.939)	156113	2.00000	2.153
24 Benzoic acid	105		11.167	11.167	(0.950)	19440	4.00000	0.4909
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	72906	1.00000	1.192
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	849492	4.00000	
30 Hexachlorobutadiene	225		12.017	12.017	(1.022)	48058	1.00000	1.108
39 Dimethylphthalate	163		14.780	14.780	(0.963)	138152	1.00000	1.032
* 42 Acenaphthene-d10	162		15.352	15.352	(1.000)	421435	4.00000	
50 Diethylphthalate	149		16.241	16.241	(1.058)	149985	1.00000	1.189 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.736	(0.907)	122091	1.00000	0.9029
57 Hexachlorobenzene	284		17.625	17.625	(0.955)	67100	1.00000	1.060
58 Pentachlorophenol	266		18.050	18.050	(0.978)	4540	2.00000	0.1637
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	835585	4.00000	
\$ 66 Terphenyl-d14	244		21.586	21.586	(0.919)	112596	1.00000	1.592
67 Butylbenzylphthalate	149		22.469	22.469	(0.956)	119714	1.00000	0.8130
* 69 Chrysene-d12	240		23.491	23.491	(1.000)	874614	4.00000	
* 77 Perylene-d12	264		26.224	26.224	(1.000)	1035818	4.00000	
79 Dibenzo(a,h)anthracene	278		29.093	29.093	(1.109)	303680	1.00000	1.244
90 N-Nitrosodimethylamine	74		4.701	4.701	(0.508)	102170	2.00000	2.525

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052326SB.D
 Lab Smp Id: SLC0447-ICV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	239436	0.00
27 Naphthalene-d8	849492	424746	1698984	849492	0.00
42 Acenaphthene-d10	421435	210718	842870	421435	0.00
59 Phenanthrene-d10	835585	417793	1671170	835585	0.00
69 Chrysene-d12	874614	437307	1749228	874614	0.00
77 Perylene-d12	1035818	517909	2071636	1035818	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.49	0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052326SB.D

Lab ID: SLC0447-ICV1

nt10.i, 20230305B.b\SIM.b\SIMABN2.m,

06-MAR-2023 05:10

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305B.b\SIM.b

Instrument: nt10.i Date: 06-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

Compound	%RSD or R ²

NO Q-FLAGS	

ICV CAL: NT1003052326SB.D 06-MAR-2023 05:10

Compound	%D

2-Methylphenol	21.6
N-Nitroso-di-n-propylamine	27.2
Benzoic acid	-87.7
N-Nitrosodimethylamine	26.2
Pentachlorophenol	-91.8
Dibenzo(a,h)anthracene	24.4
Terphenyl-d14	59.2



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

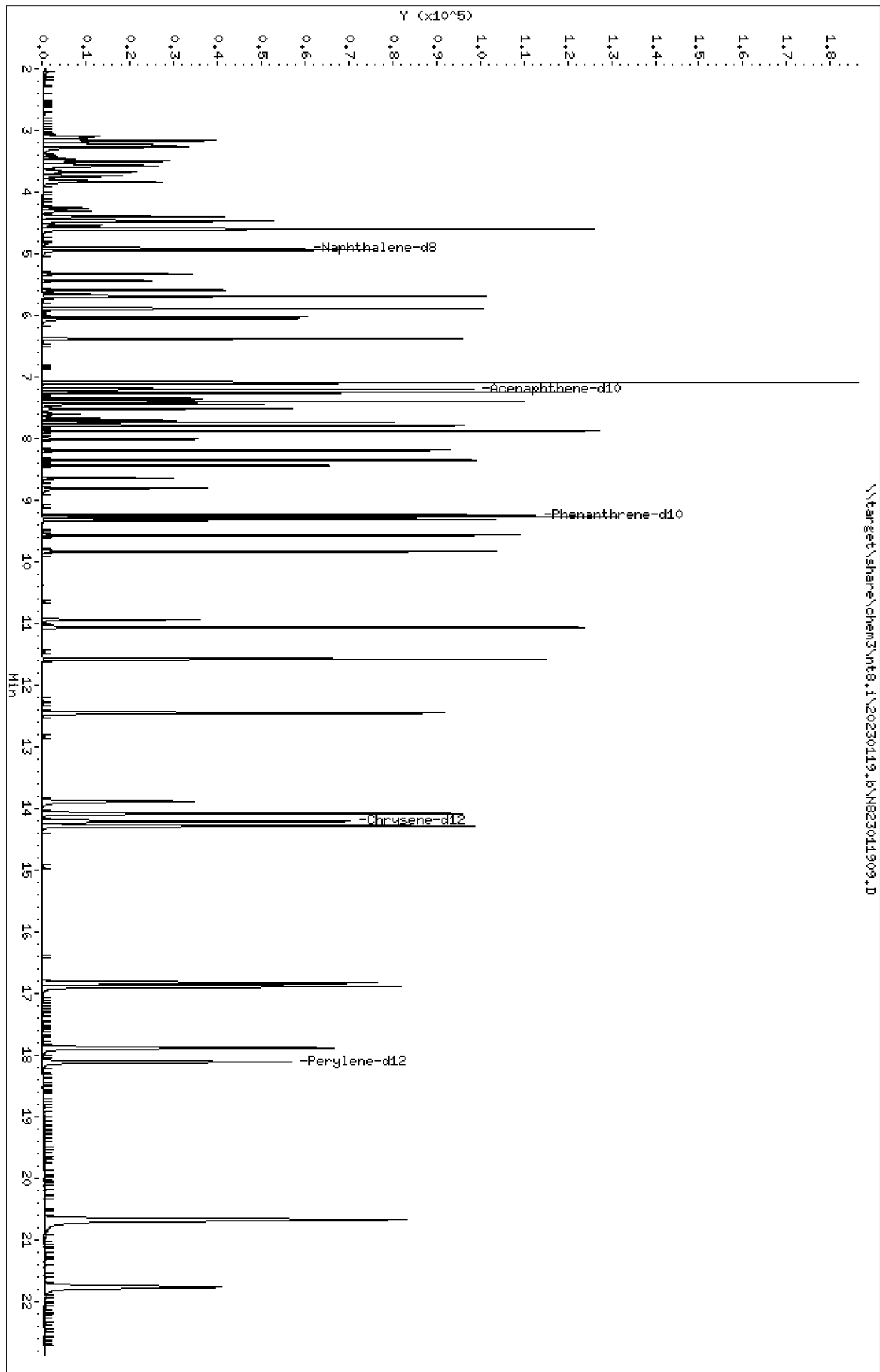
Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT8</u>	Calibration:	<u>GA00050</u>
Lab File ID:	<u>N823011909.D</u>	Calibration Date:	<u>01/19/2023</u>
Sequence:	<u>SLA0213</u>	Injection Date:	<u>01/19/23</u>
Lab Sample ID:	<u>SLA0213-SCV1</u>	Injection Time:	<u>14:58</u>
Sequence Name:	<u>8270 SIM PNA SCV</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Naphthalene	A	2.5000	2.63	0.9299181	0.9767747		5.0	
2-Methylnaphthalene	A	2.5000	2.67	0.5115033	0.5463255		6.8	
1-Methylnaphthalene	A	2.5000	2.65	0.5191318	0.5501748		6.0	
Acenaphthylene	A	2.5000	2.82	1.5102600	1.7039370		12.8	
Acenaphthene	A	2.5000	2.60	1.0119150	1.0524810		4.0	
Dibenzofuran	A	2.5000	2.86	1.5369690	1.7582160		14.4	
Fluorene	A	2.5000	2.63	1.1937240	1.2561120		5.2	
Phenanthrene	A	2.5000	2.45	0.9769567	0.9567960		-2.1	
Anthracene	A	2.5000	2.27	0.8874960	0.8058663		-9.2	
Fluoranthene	A	2.5000	2.65	1.0634260	1.1284050		6.1	
Pyrene	A	2.5000	2.46	1.2399700	1.2213300		-1.5	
Benzo(a)anthracene	A	2.5000	2.59	1.1238870	1.1631100		3.5	
Chrysene	A	2.5000	2.40	1.1964350	1.1484610		-4.0	
Benzo(b)fluoranthene	A	2.5000	2.51	1.1648110	1.1680230		0.3	
Benzo(k)fluoranthene	A	2.5000	2.66	1.1409370	1.2121600		6.2	
Benzofluoranthenes, Total	A	5.0000	5.48	1.1031370	1.2090940		9.6	
Benzo(a)pyrene	A	2.5000	2.57	1.0250270	1.0545670		2.9	
Indeno(1,2,3-cd)pyrene	A	2.5000	2.69	1.1677520	1.2561630		7.6	
Dibenzo(a,h)anthracene	A	2.5000	2.49	1.0049440	1.0021900		-0.3	
Benzo(g,h,i)perylene	A	2.5000	2.48	1.0580110	1.0506380		-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.1\20230119.6\N823011909.D
Date: 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.1
Operator: JZ
Column diameter: 0.25



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

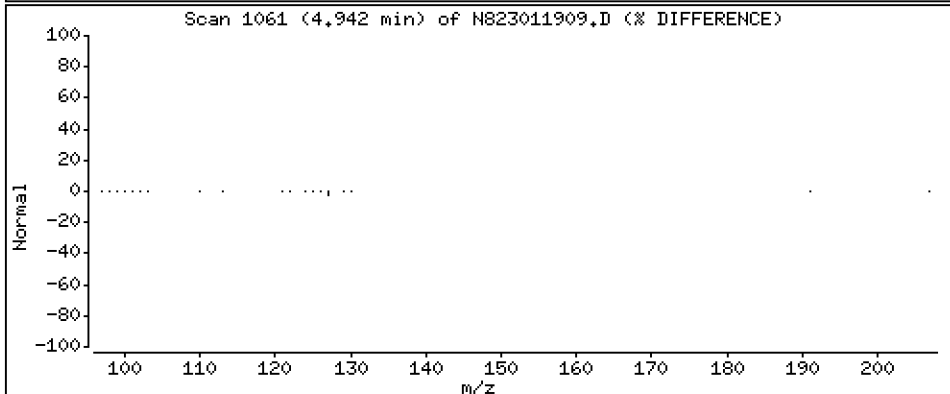
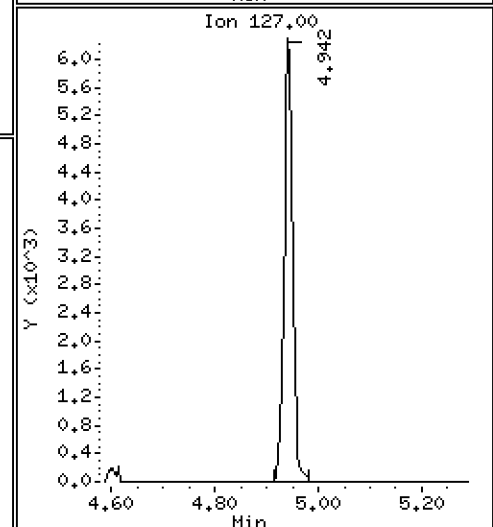
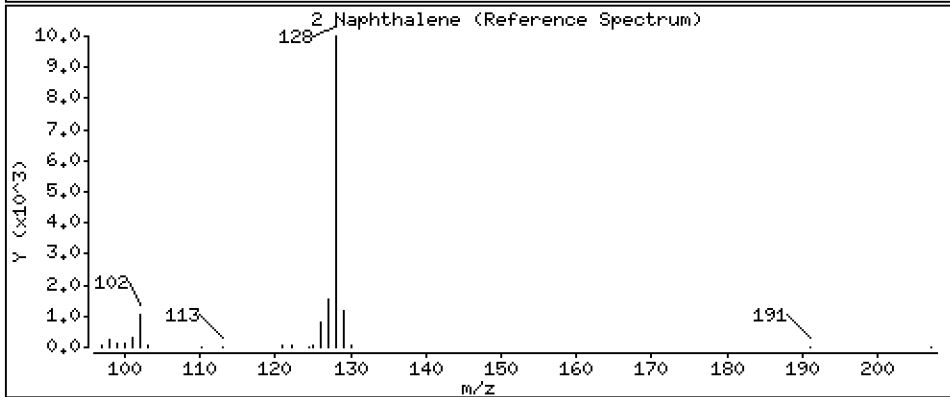
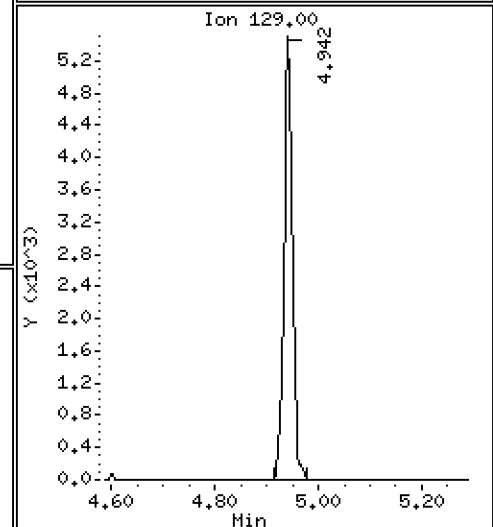
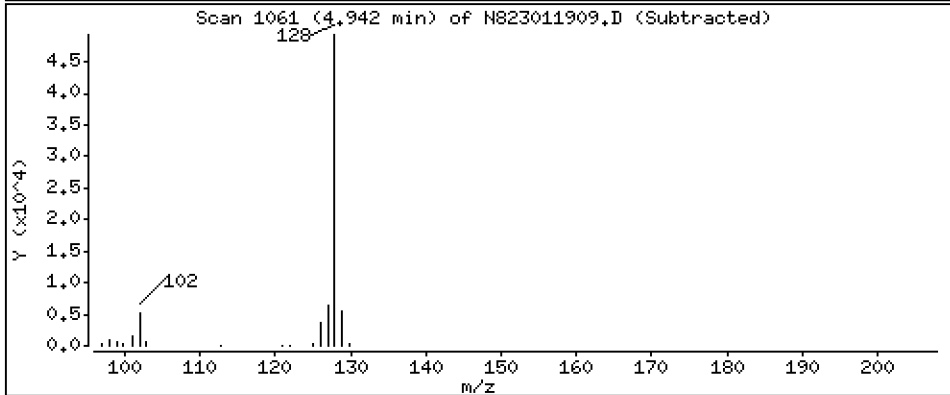
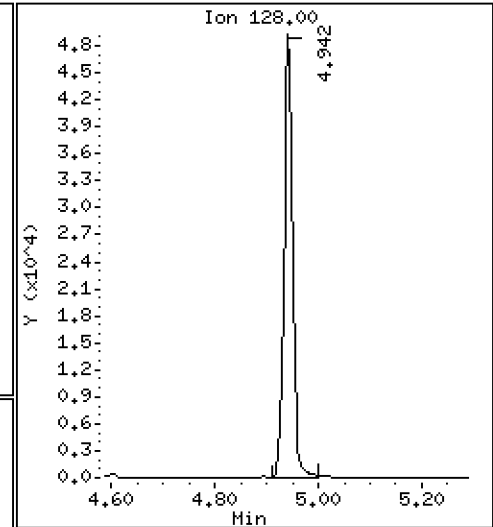
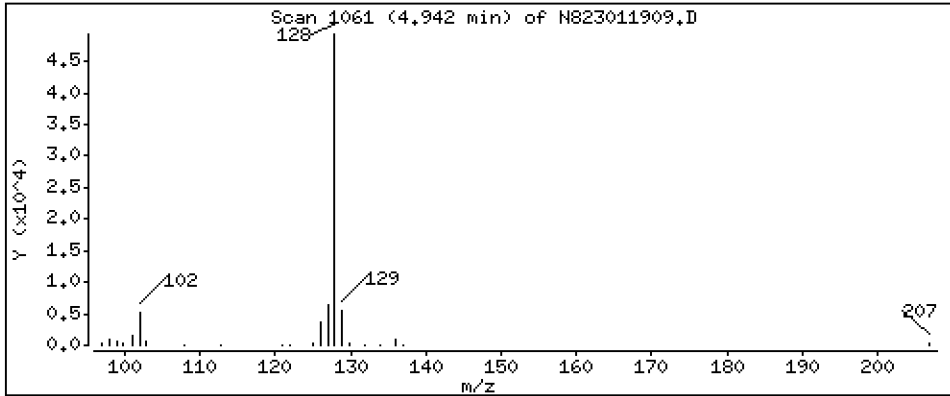
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

2 Naphthalene

Concentration: 2,626 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

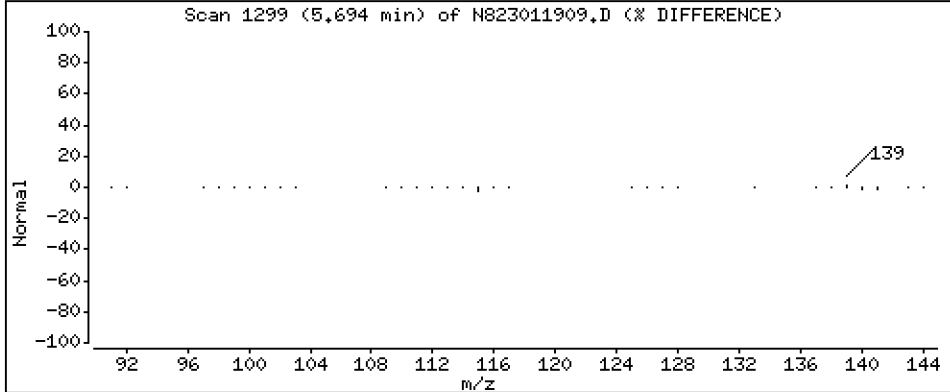
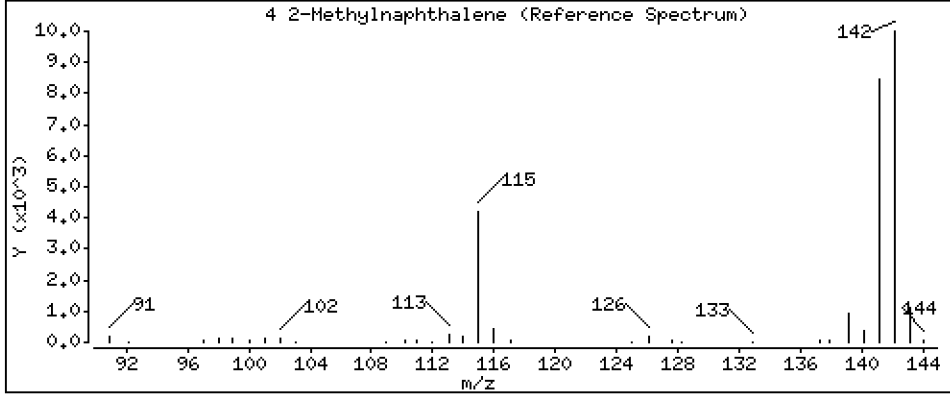
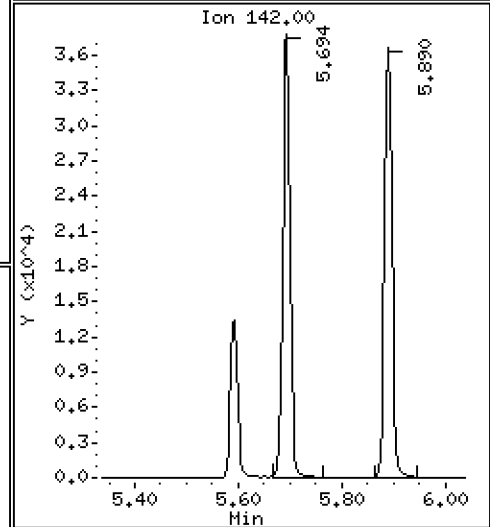
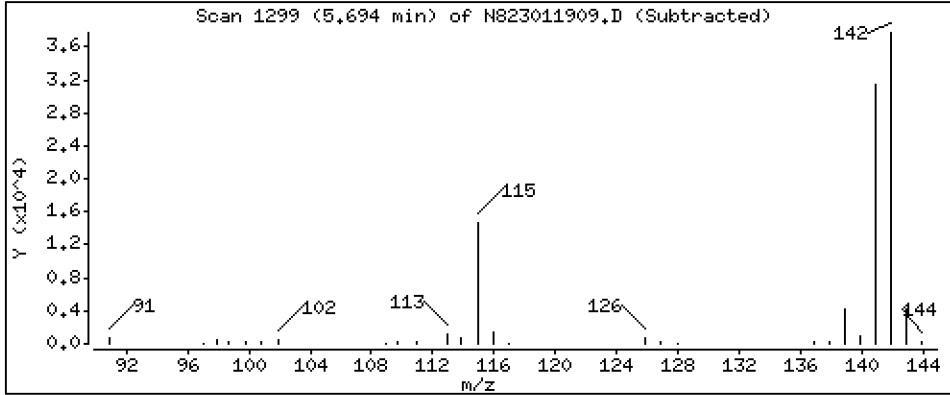
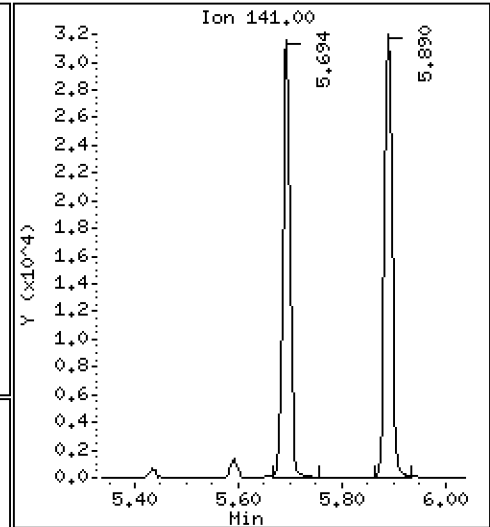
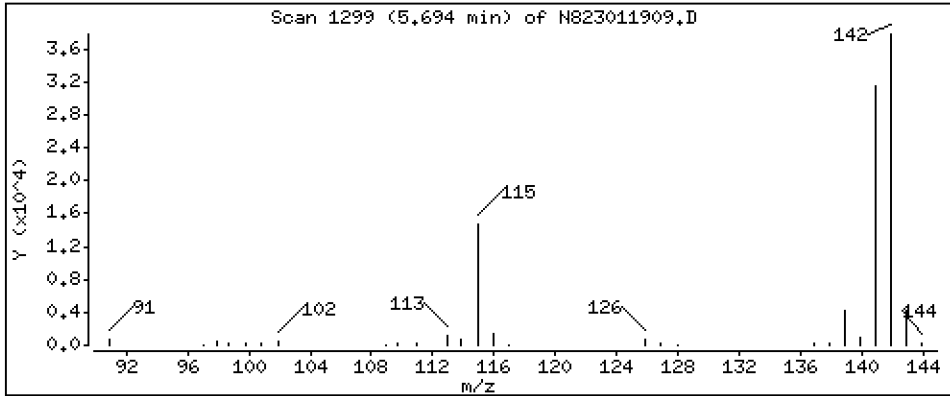
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

4 2-Methylnaphthalene

Concentration: 2,670 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

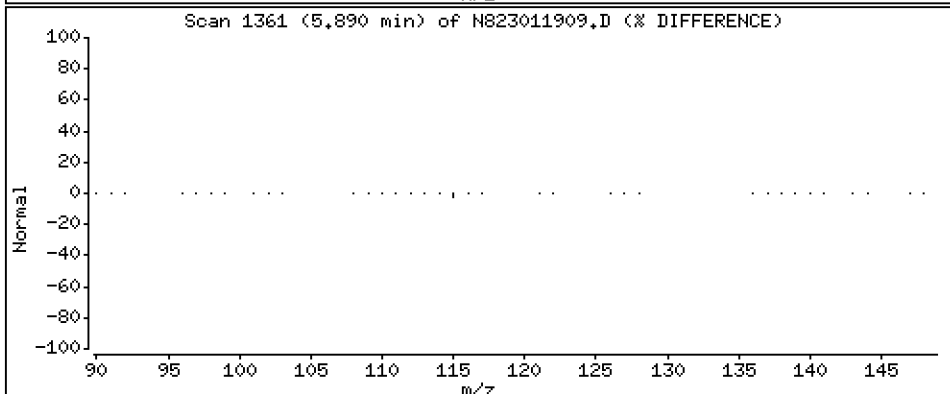
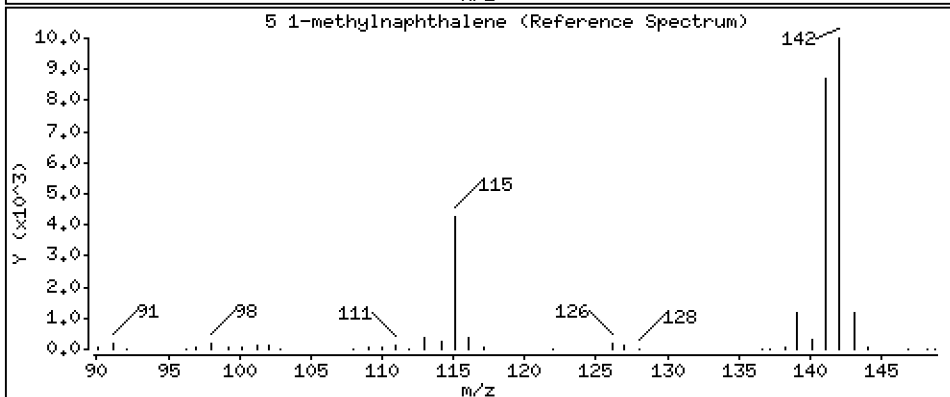
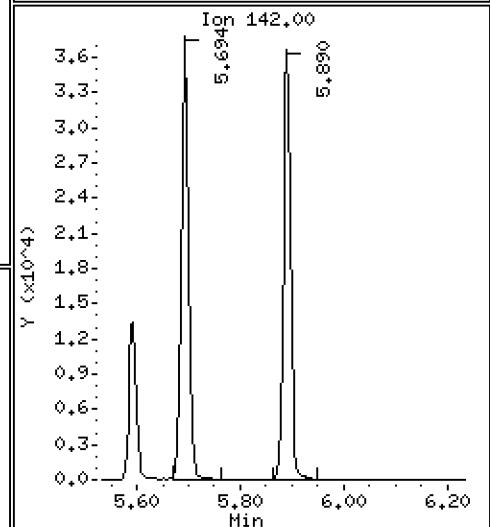
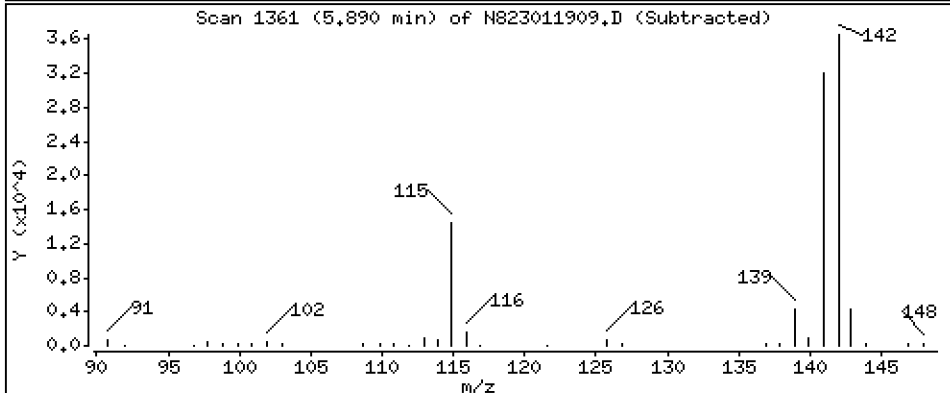
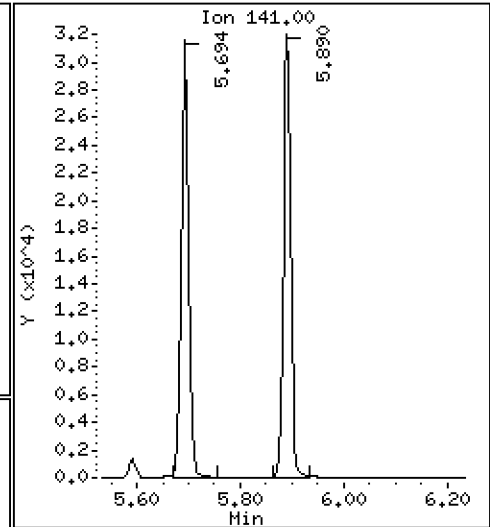
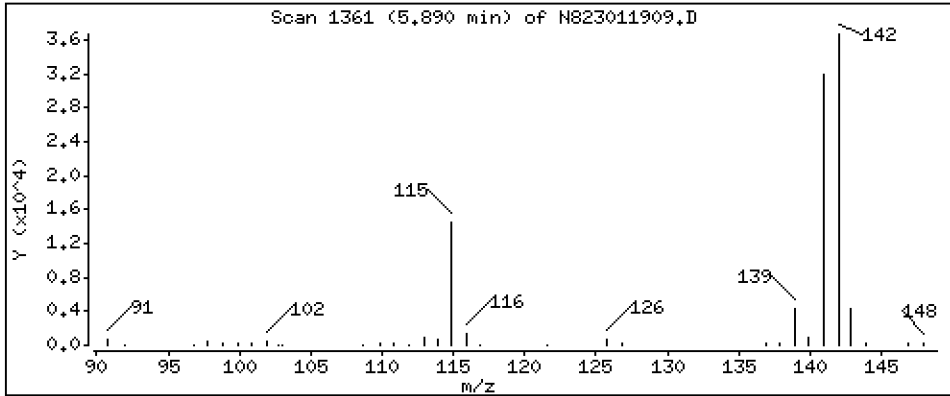
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

5 1-methylnaphthalene

Concentration: 2,649 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

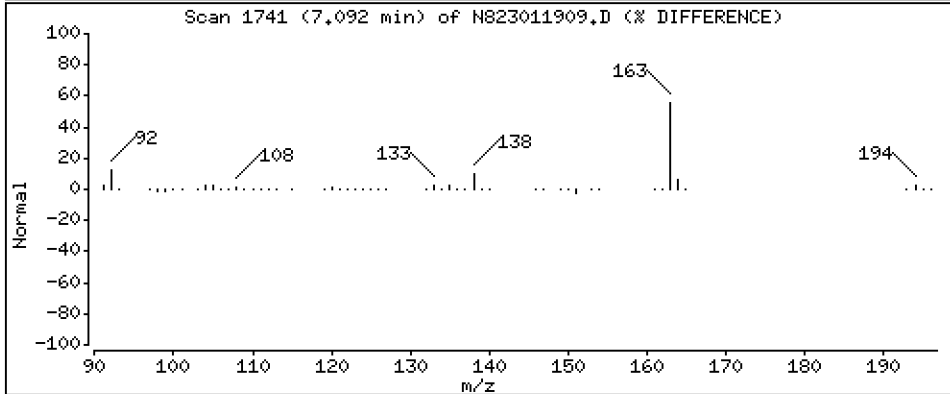
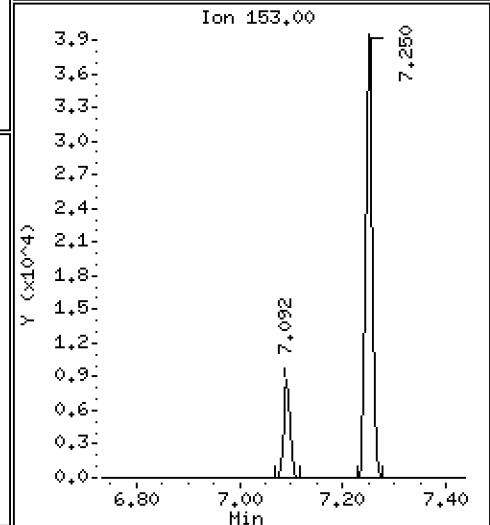
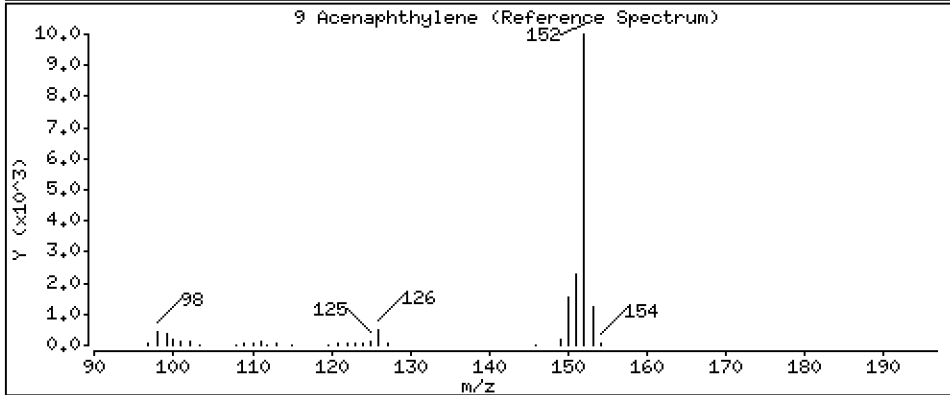
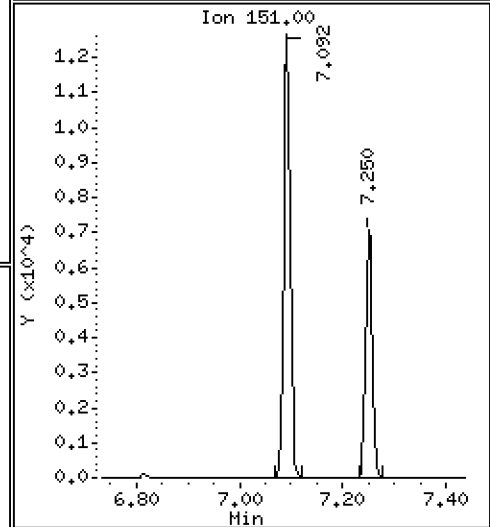
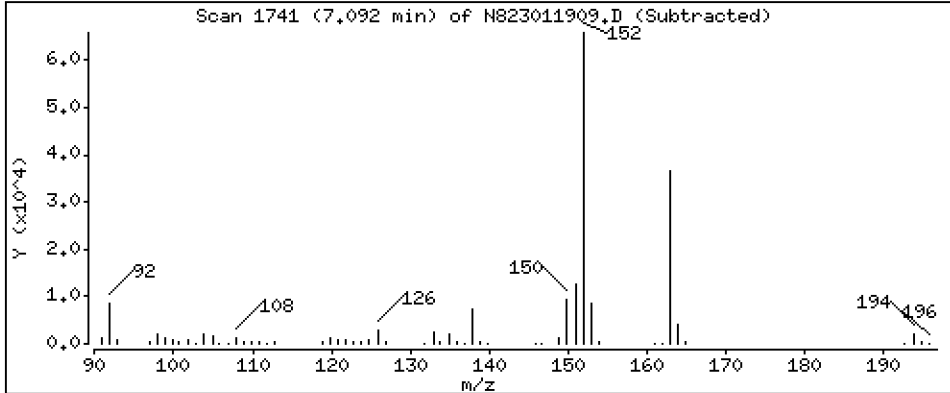
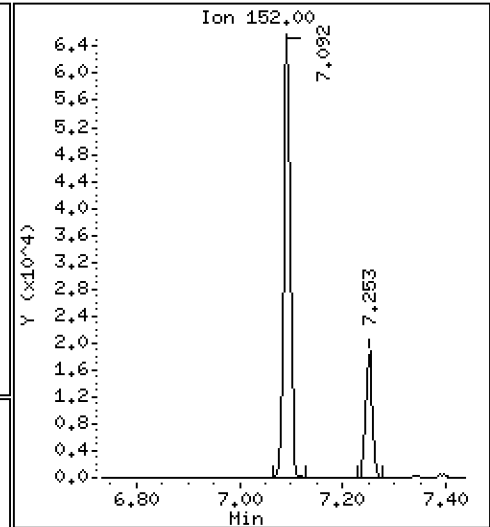
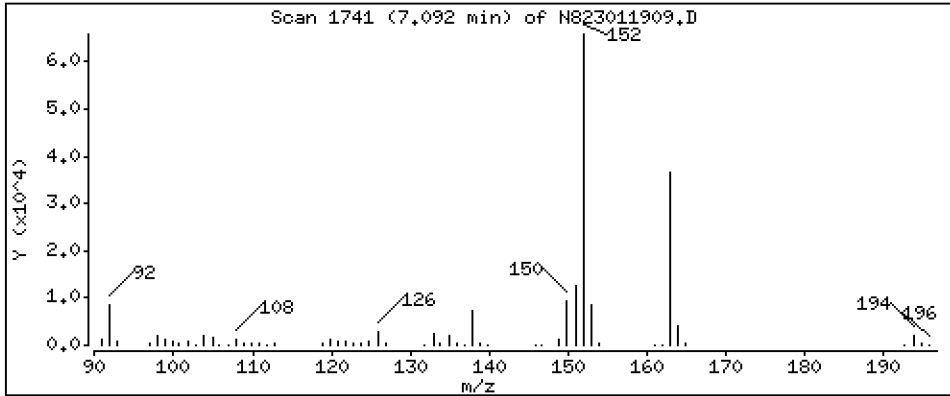
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 2,821 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

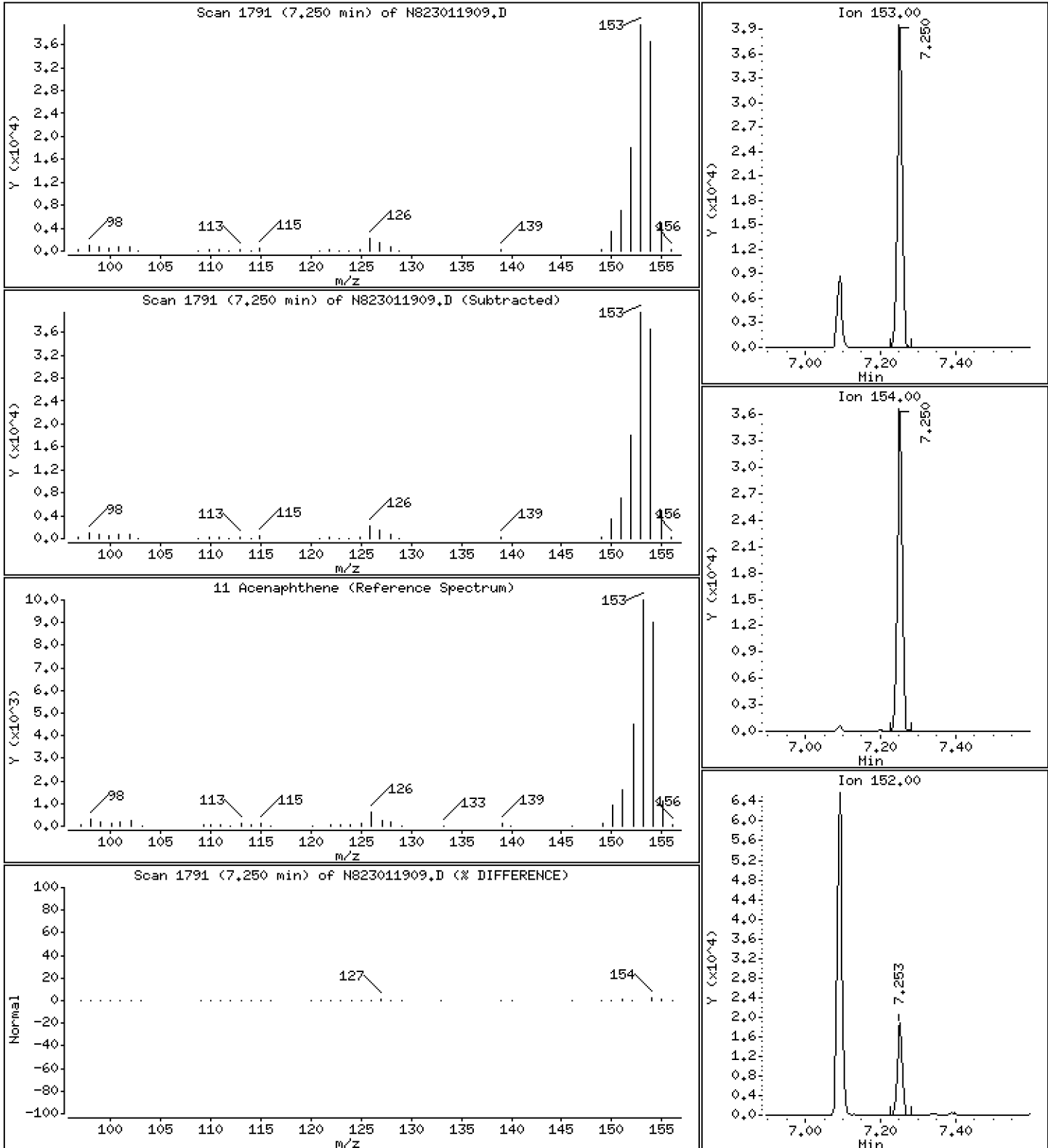
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

11 Acenaphthene

Concentration: 2,600 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

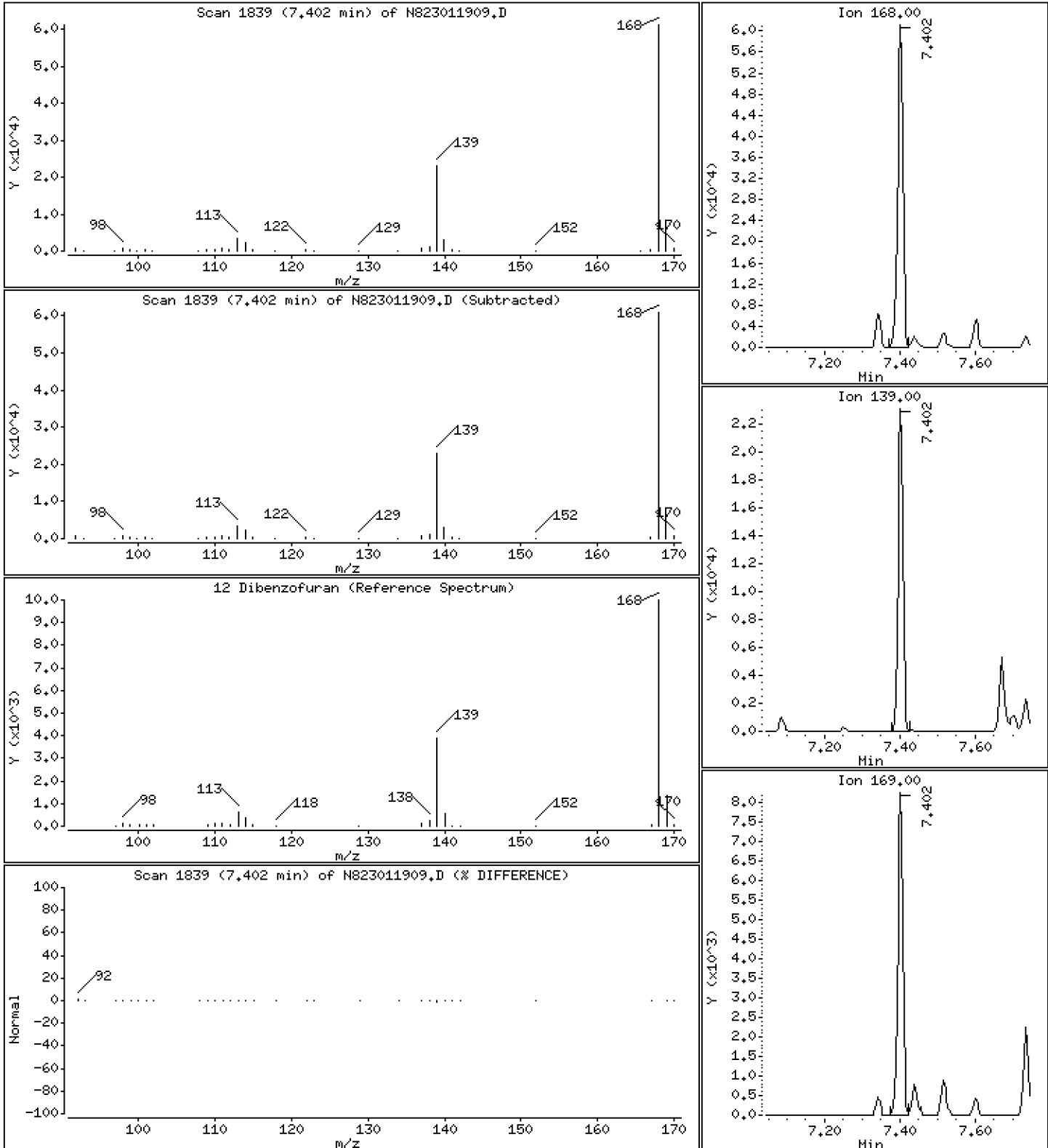
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 2,860 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

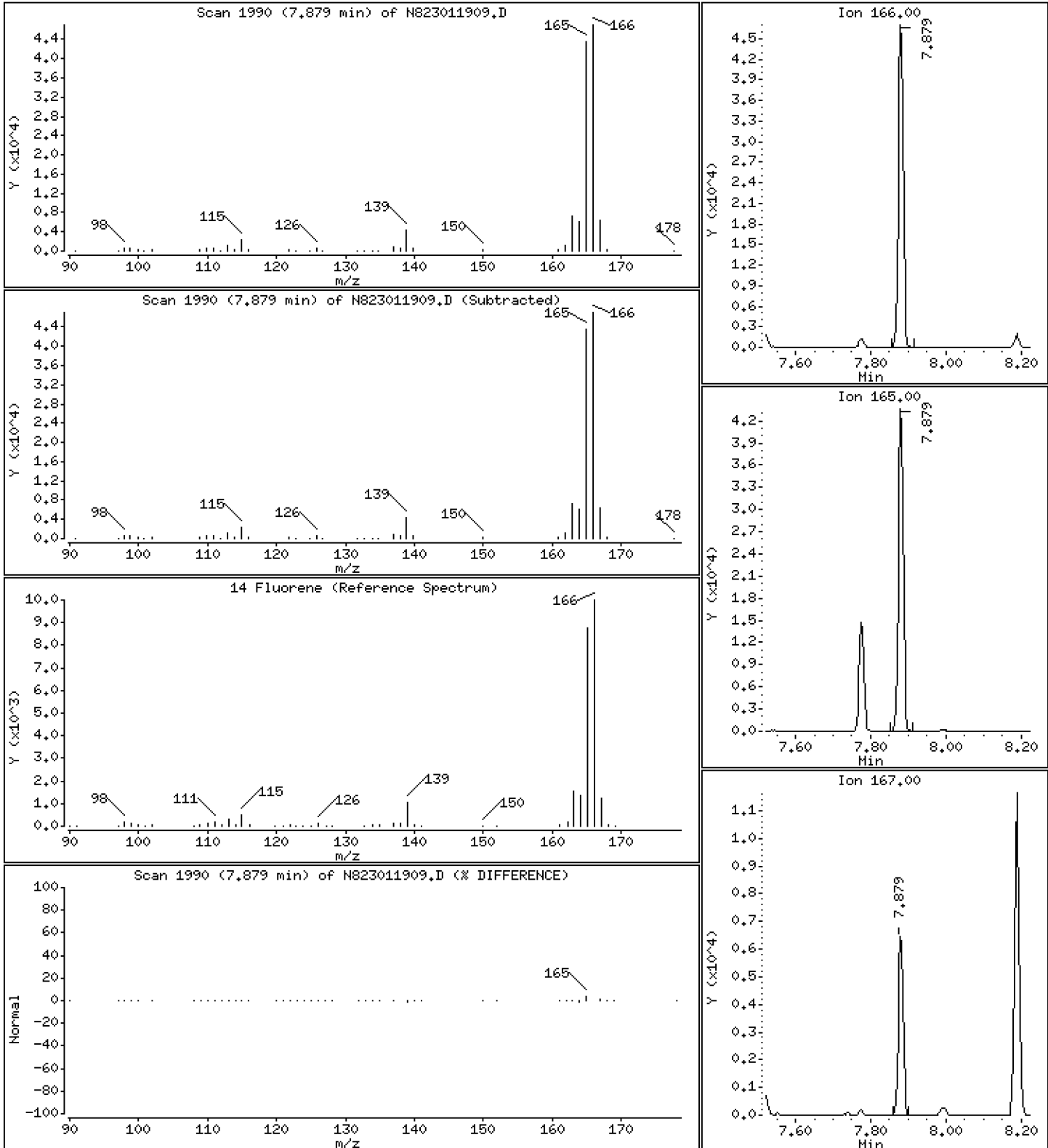
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

14 Fluorene

Concentration: 2,631 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

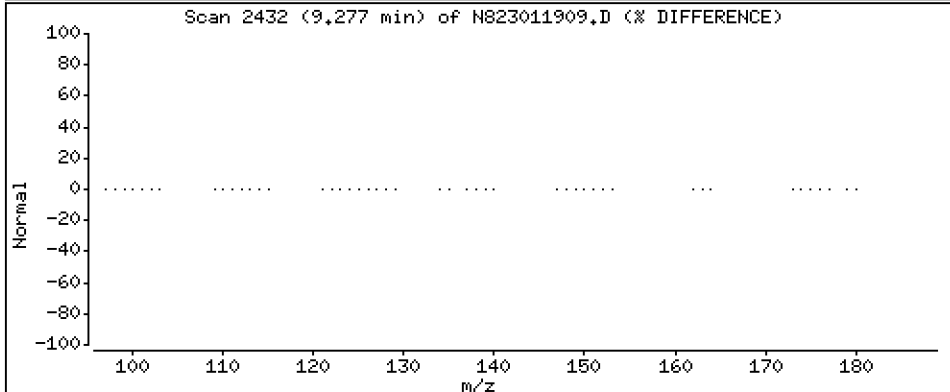
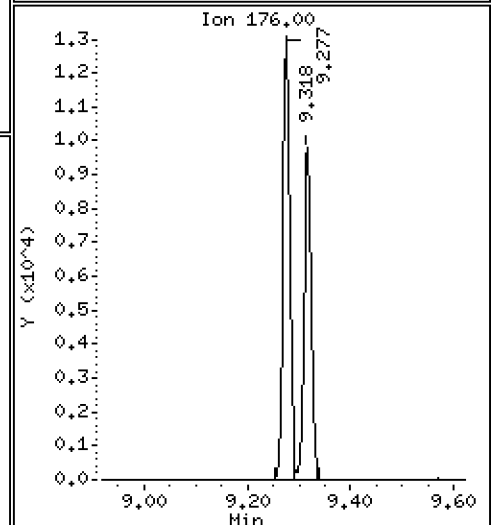
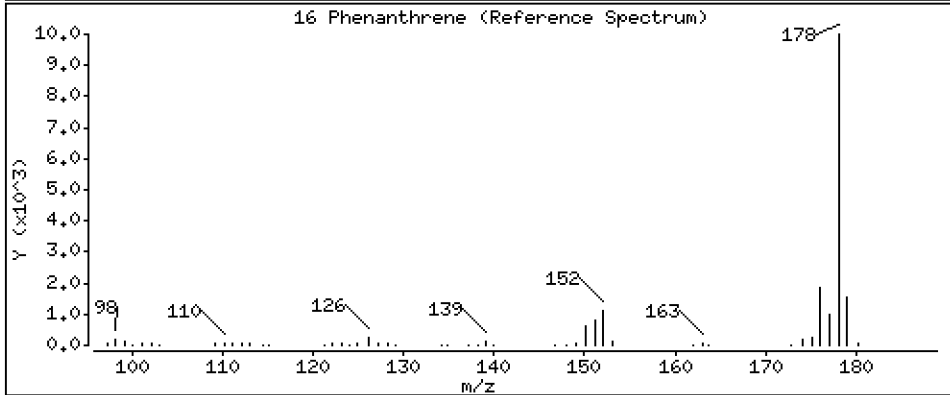
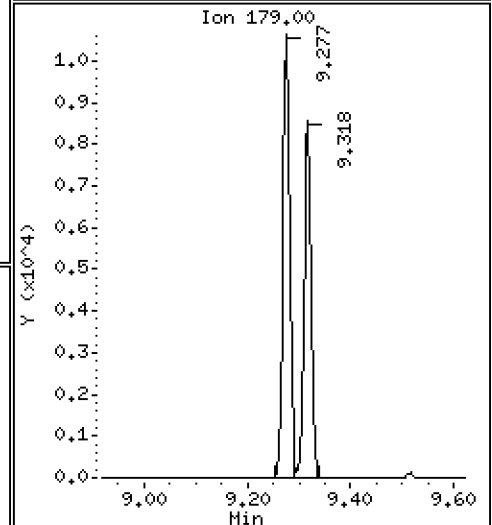
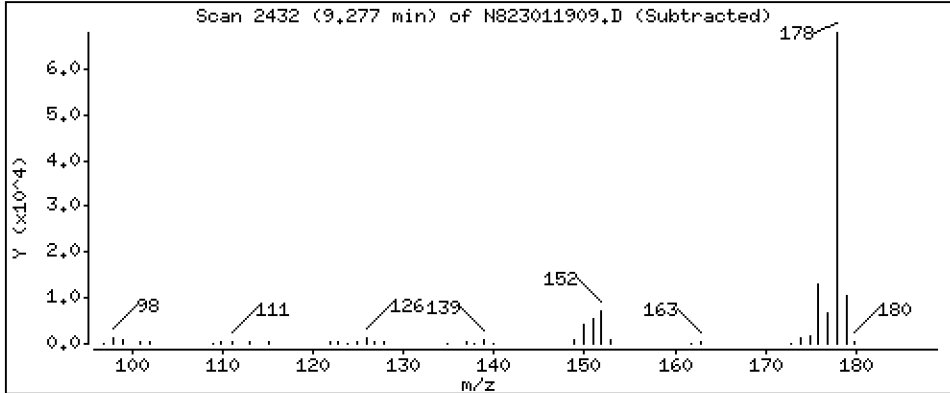
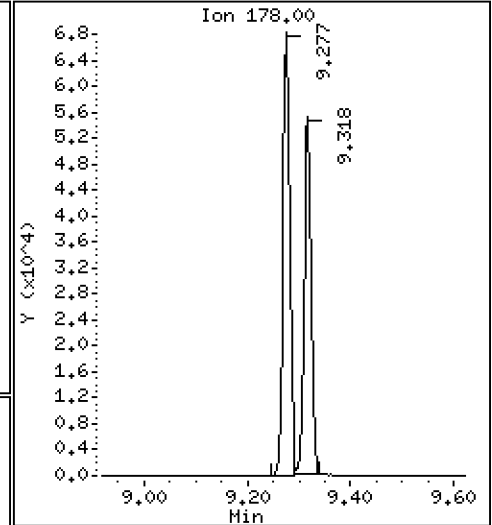
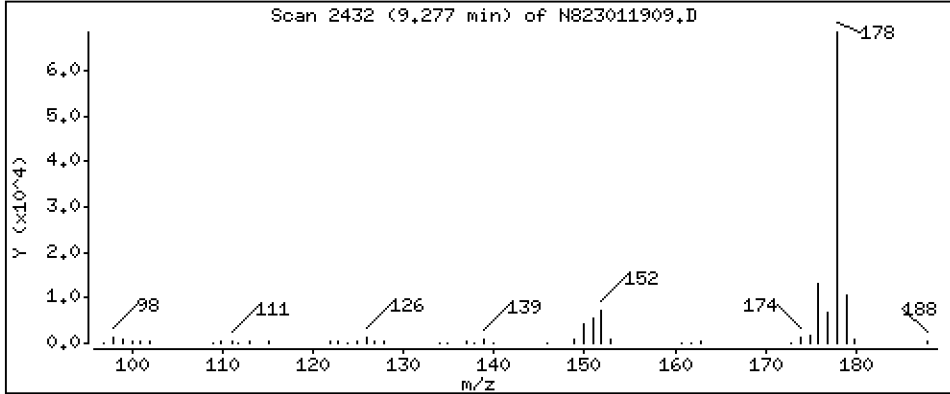
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

16 Phenanthrene

Concentration: 2,448 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

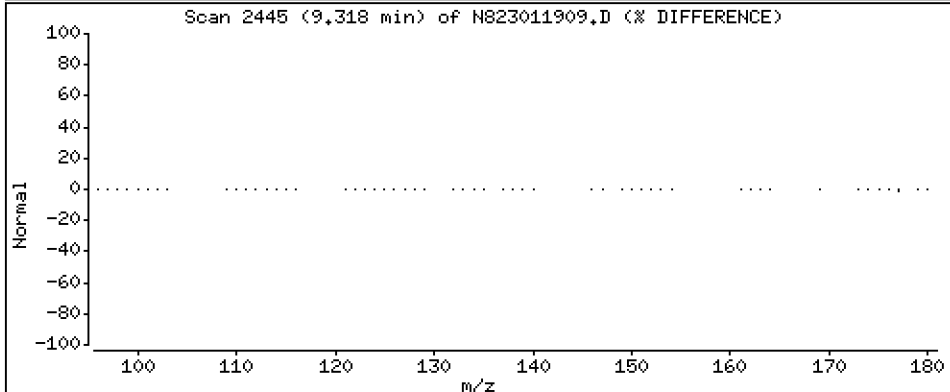
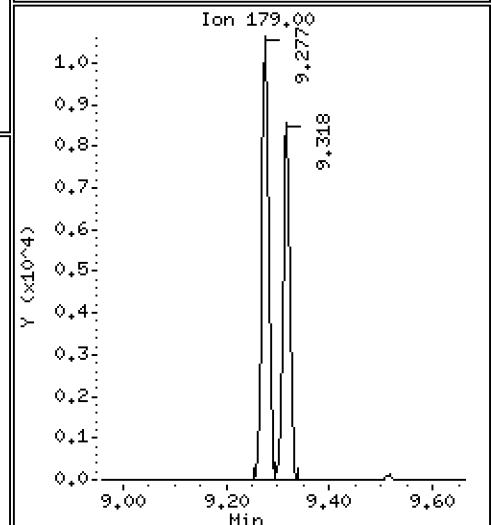
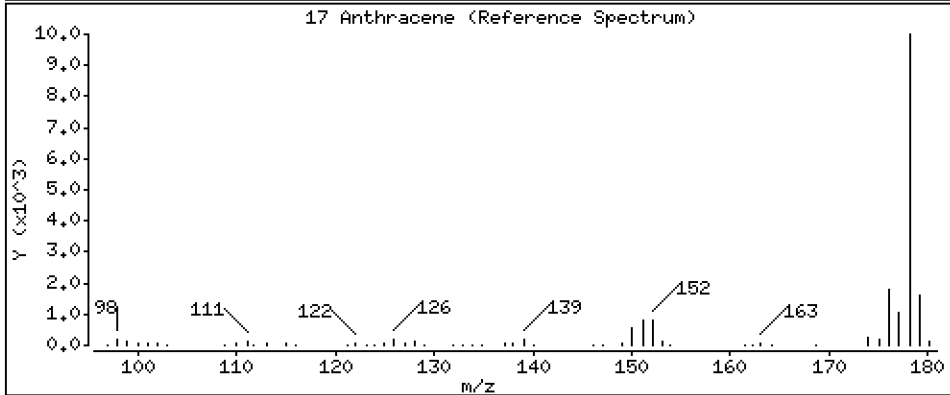
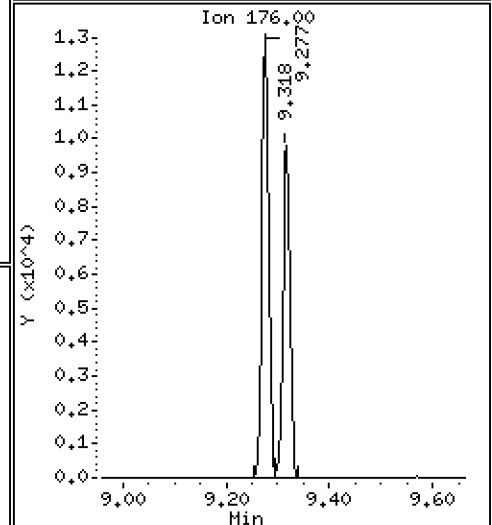
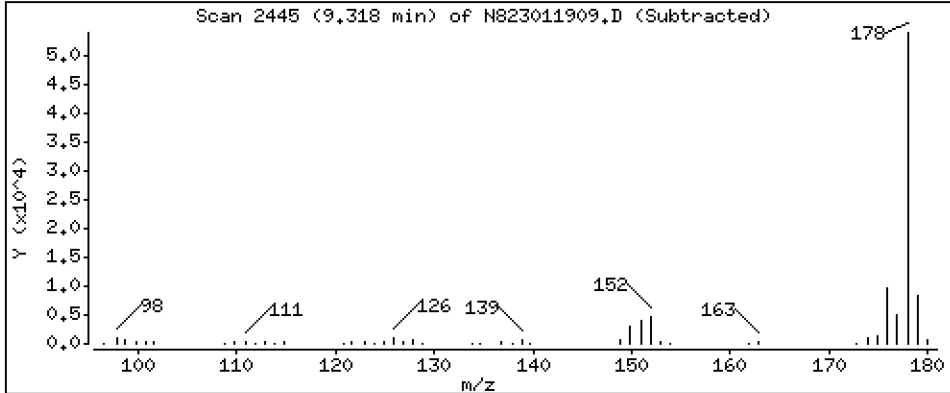
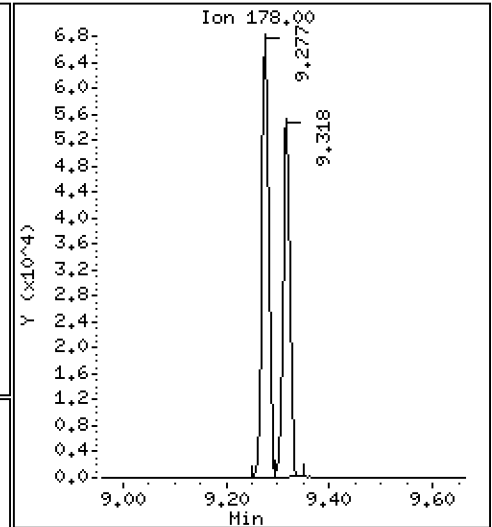
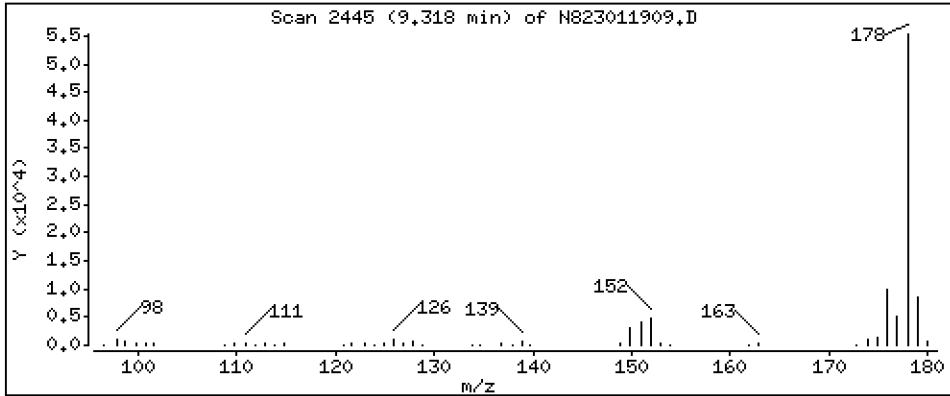
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

17 Anthracene

Concentration: 2,270 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

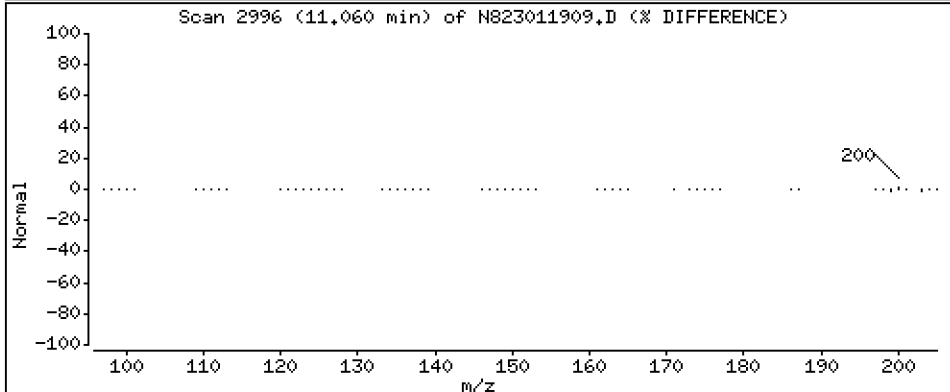
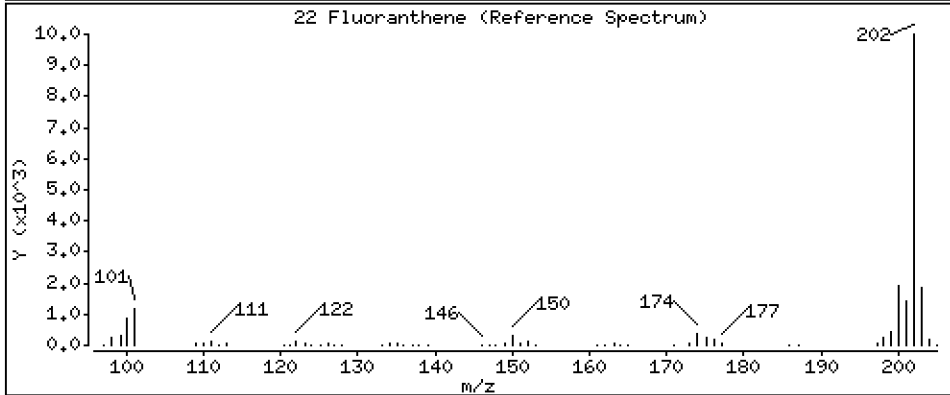
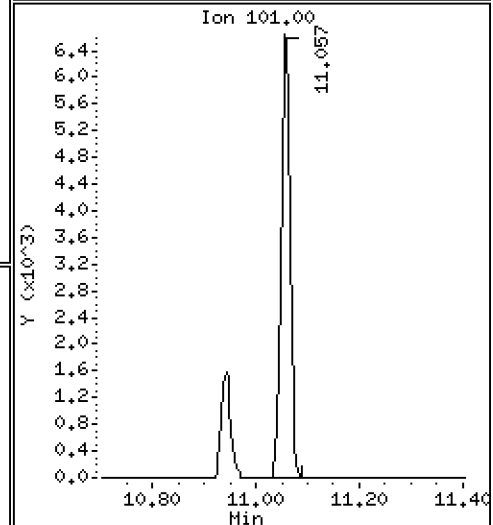
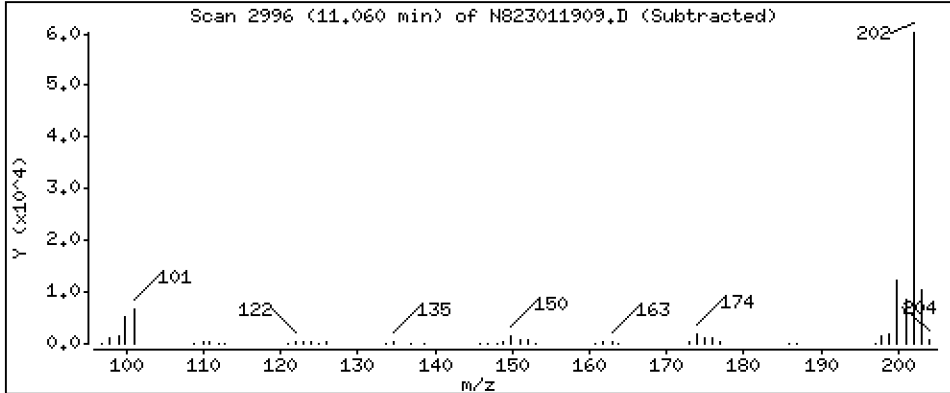
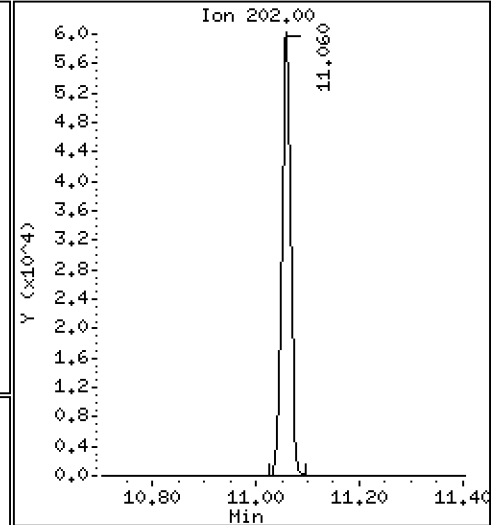
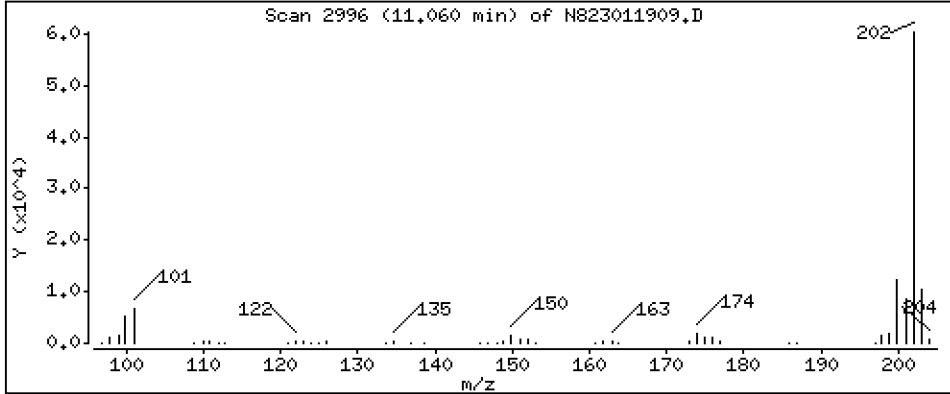
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,653 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

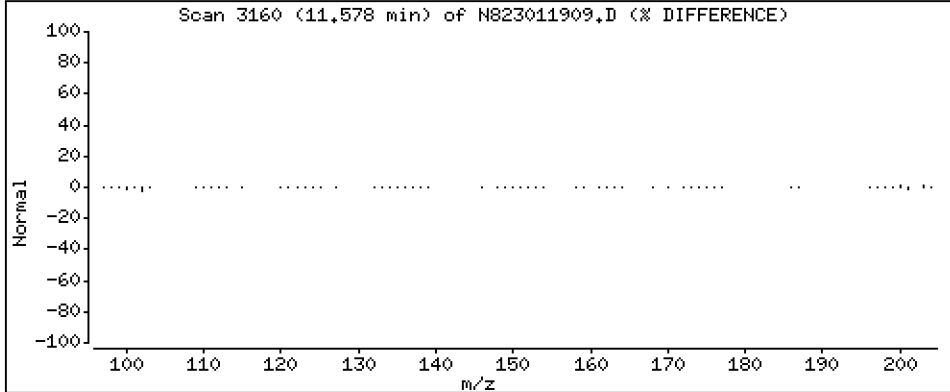
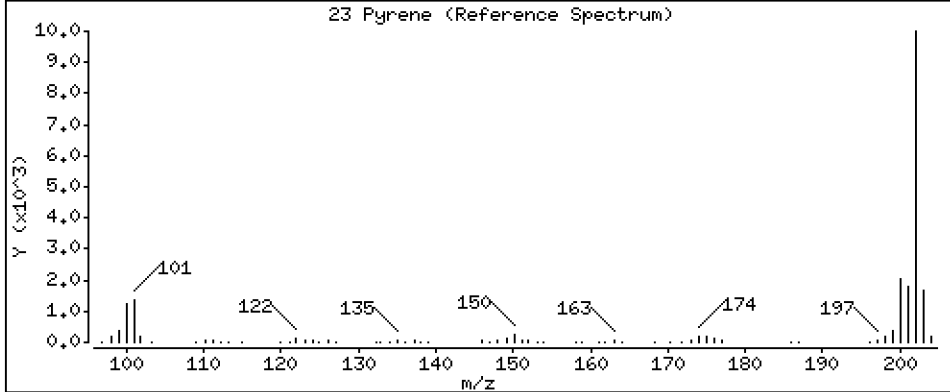
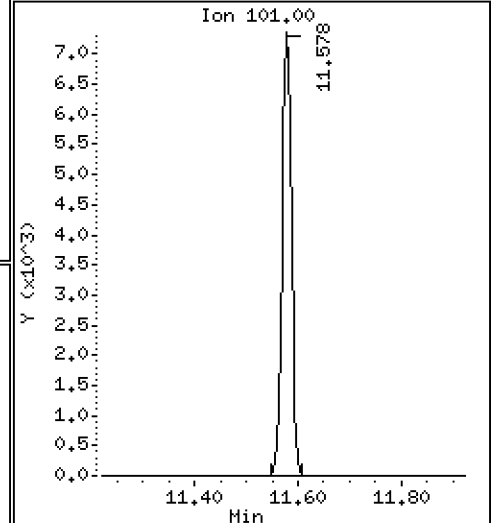
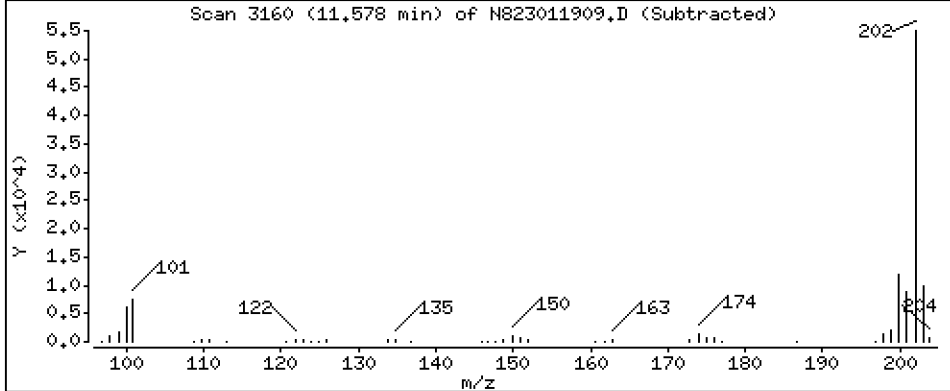
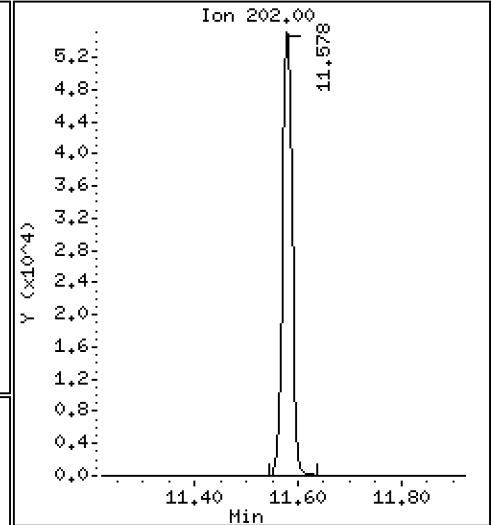
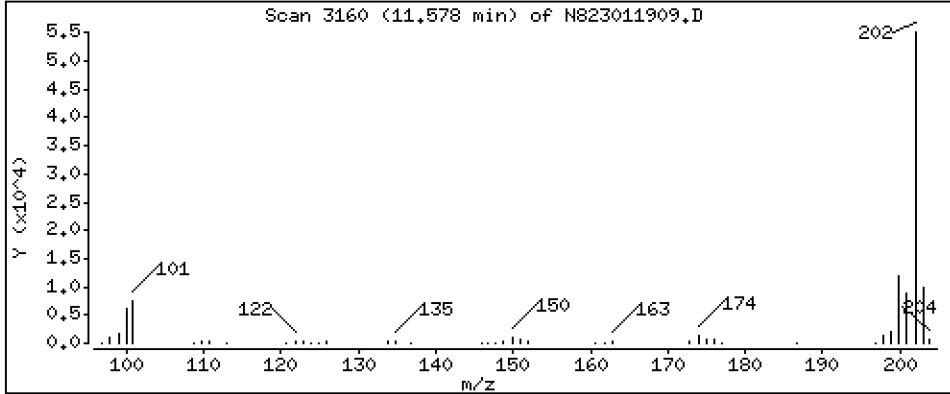
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 2,462 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

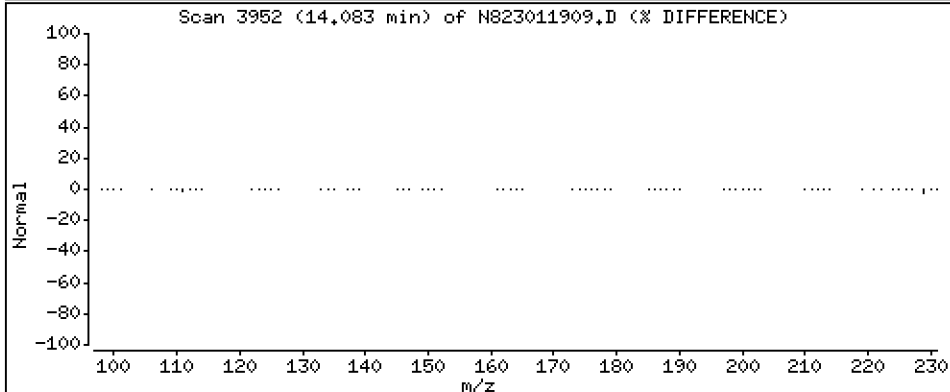
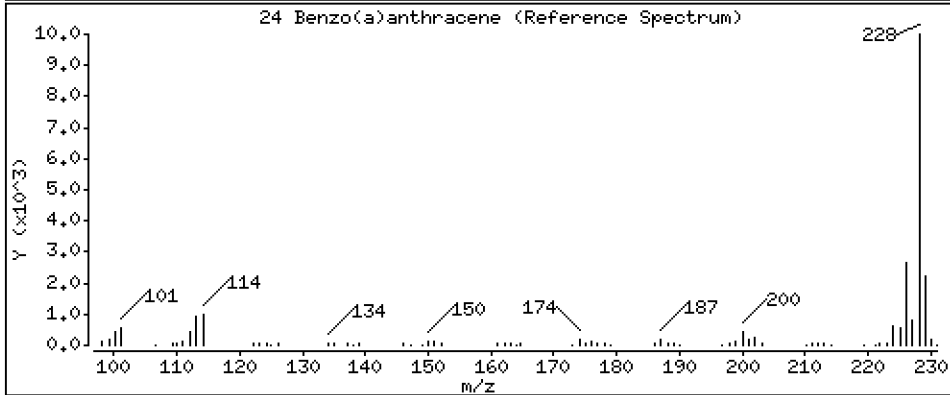
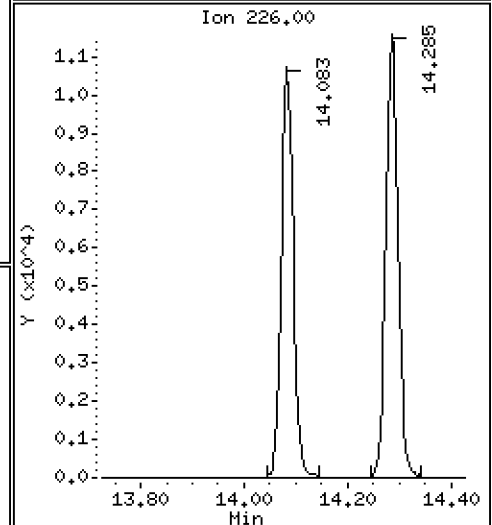
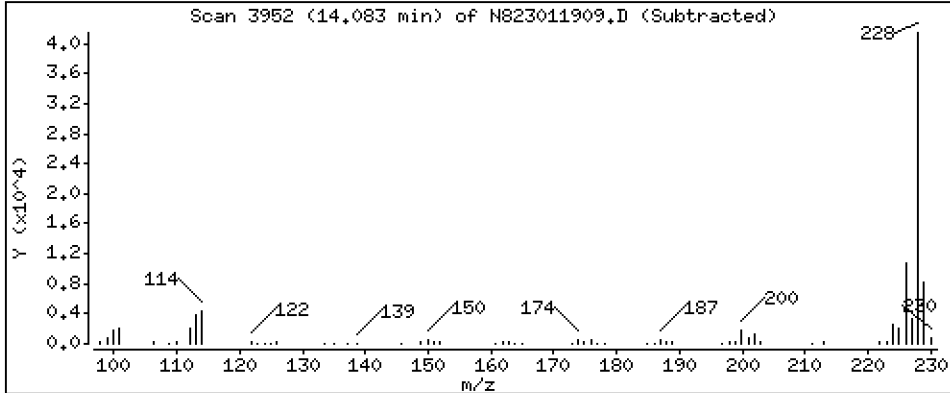
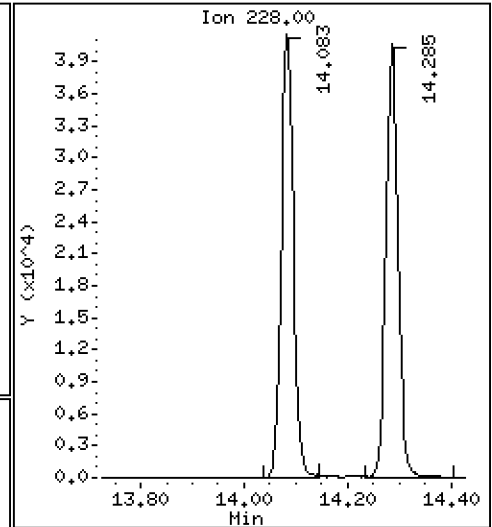
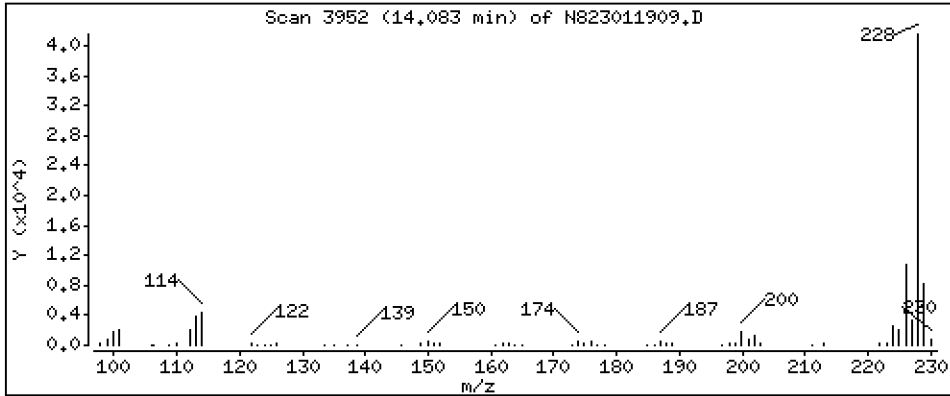
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

24 Benzo(a)anthracene

Concentration: 2,587 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

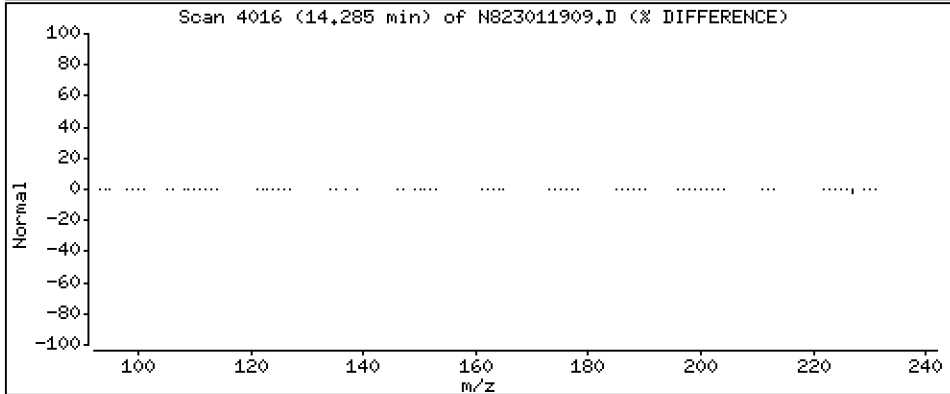
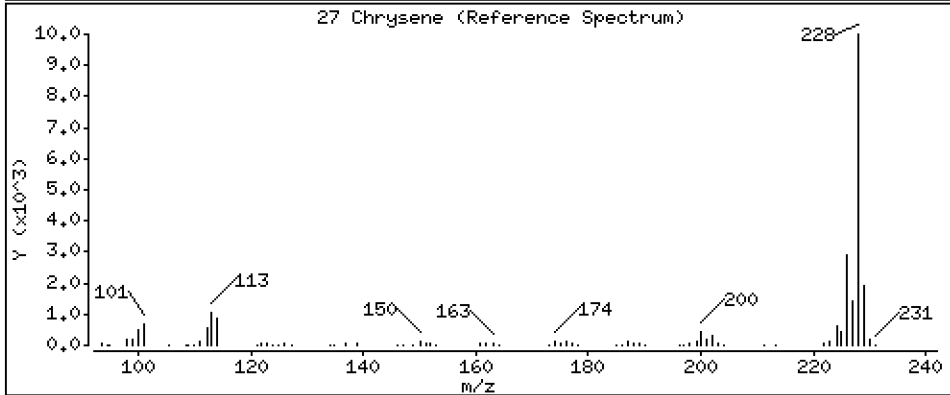
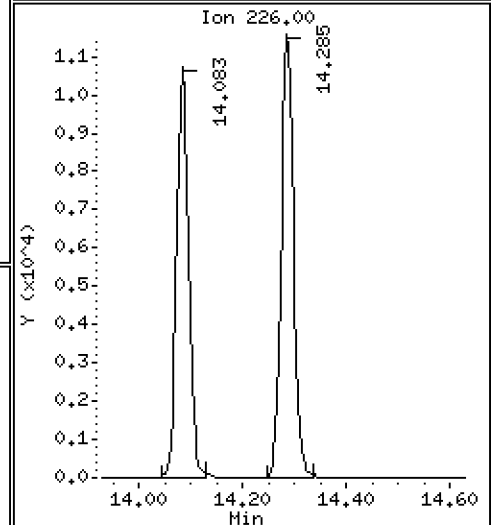
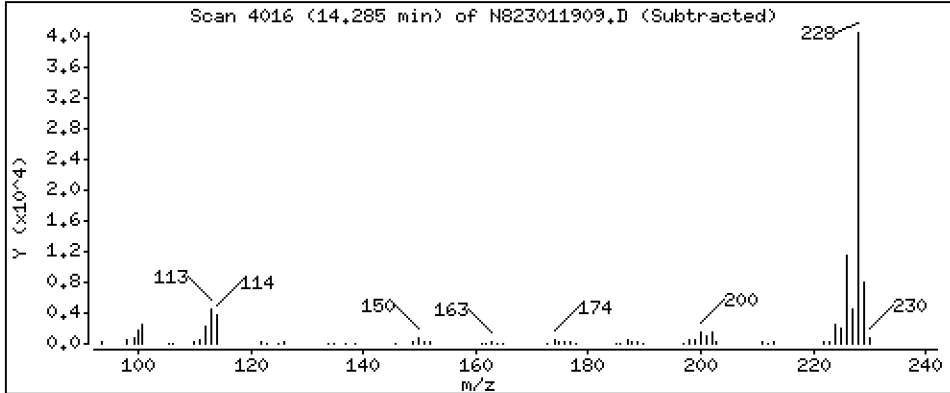
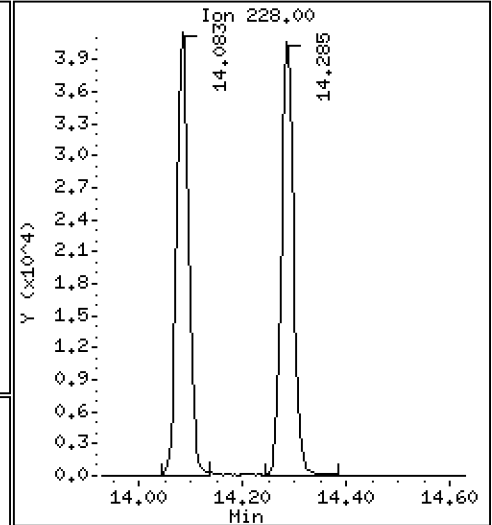
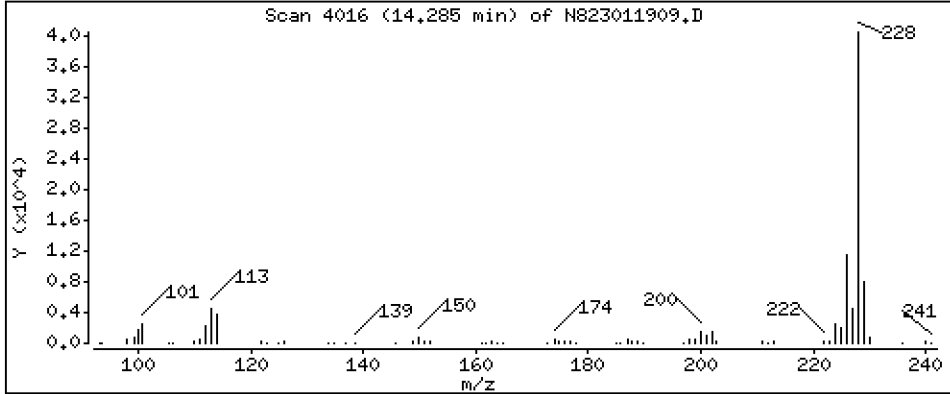
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

27 Chrysene

Concentration: 2,400 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

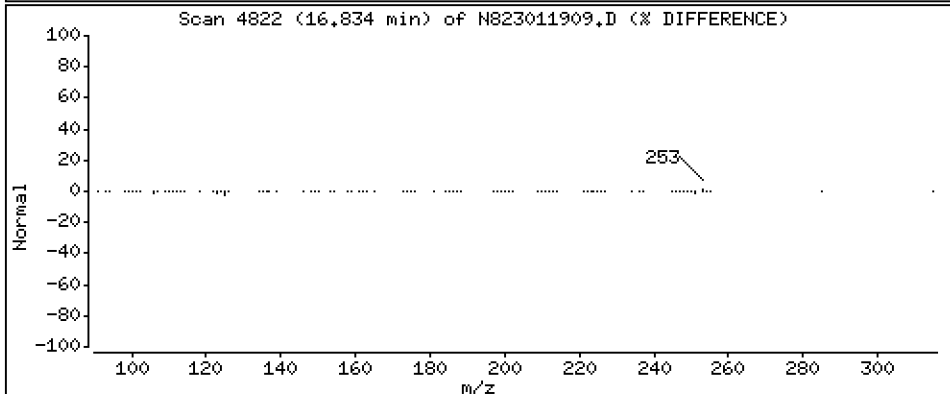
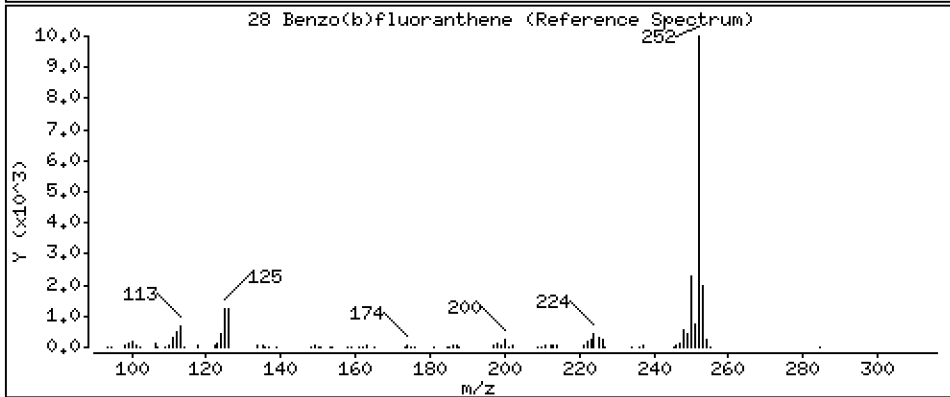
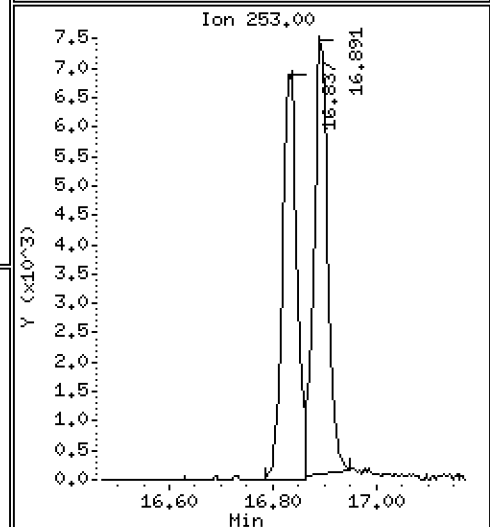
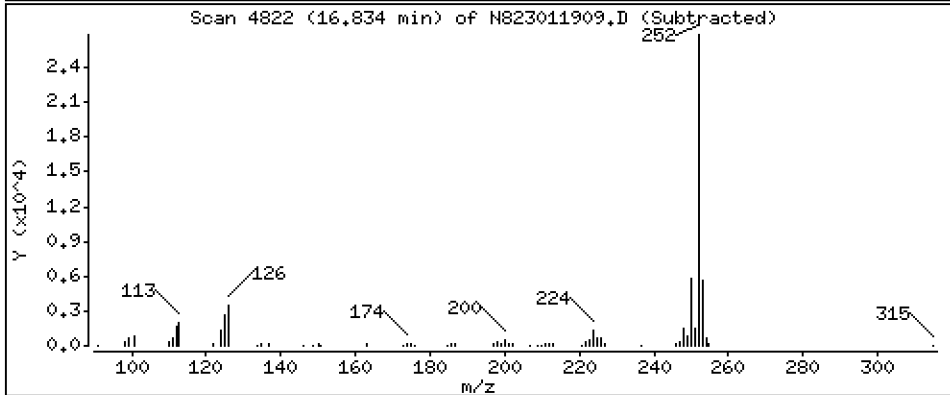
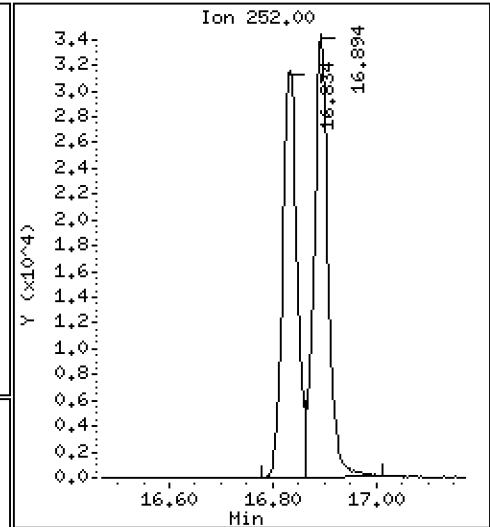
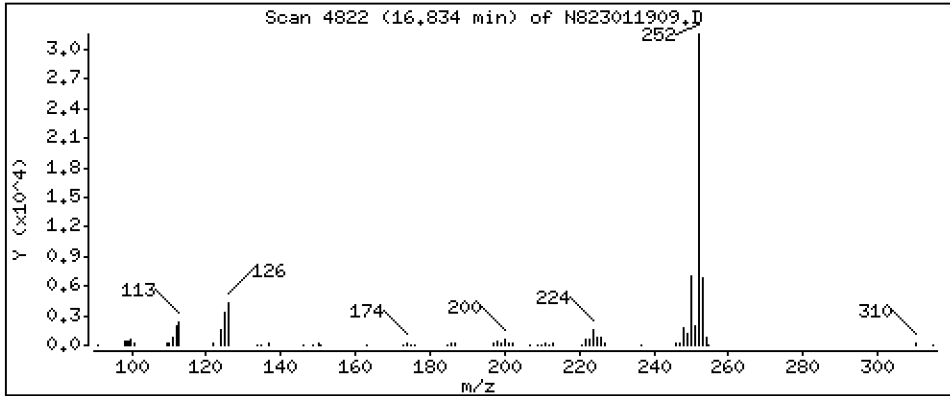
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

28 Benzo(b)fluoranthene

Concentration: 2,507 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

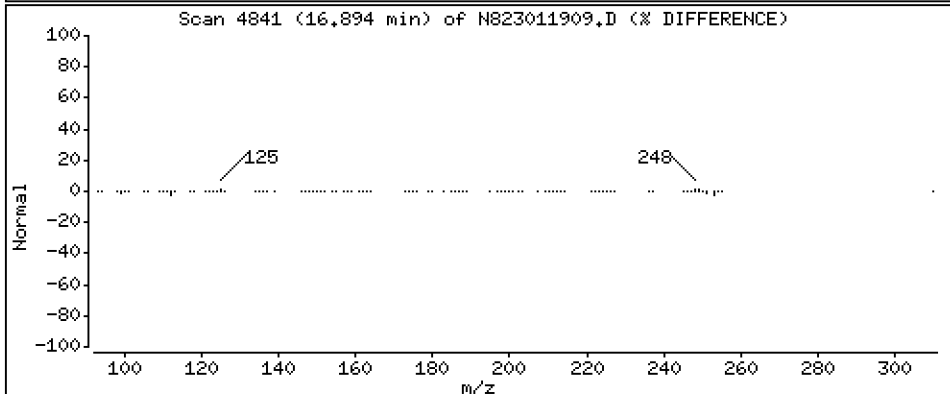
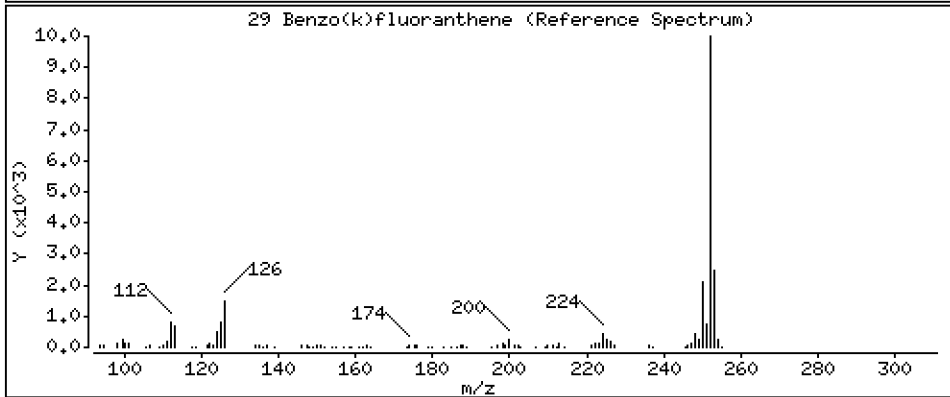
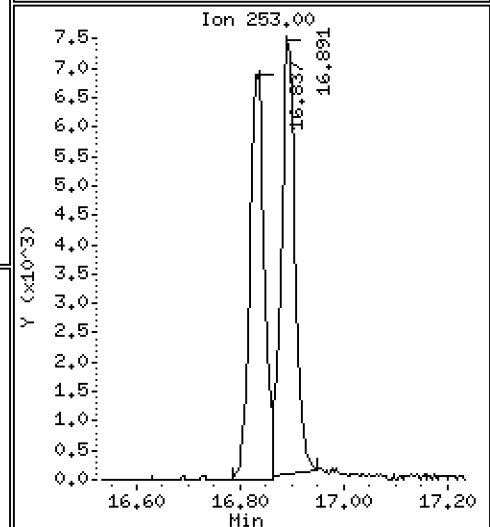
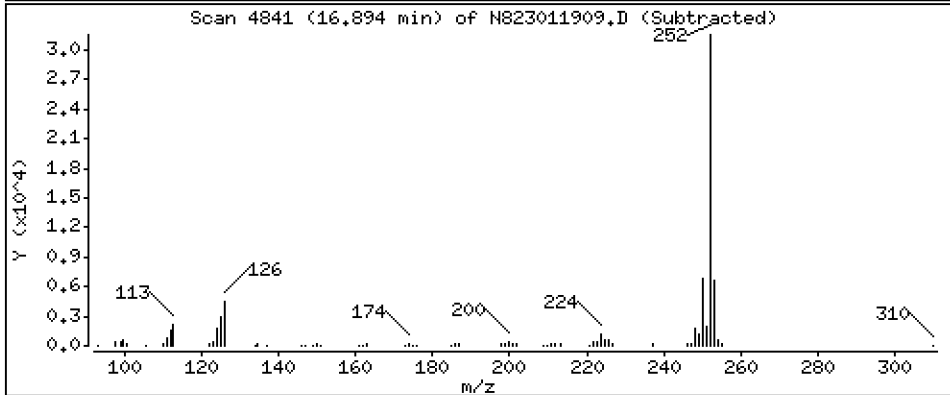
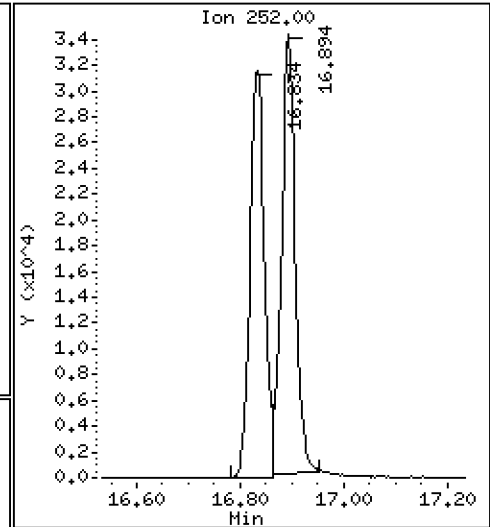
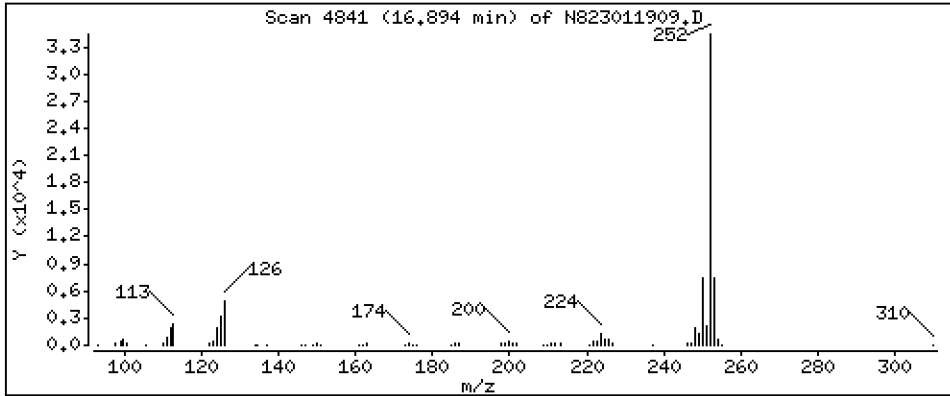
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

29 Benzo(k)fluoranthene

Concentration: 2,656 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

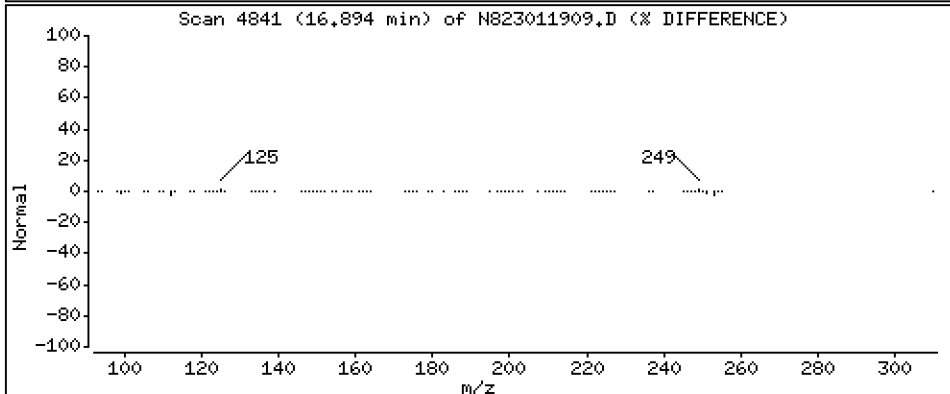
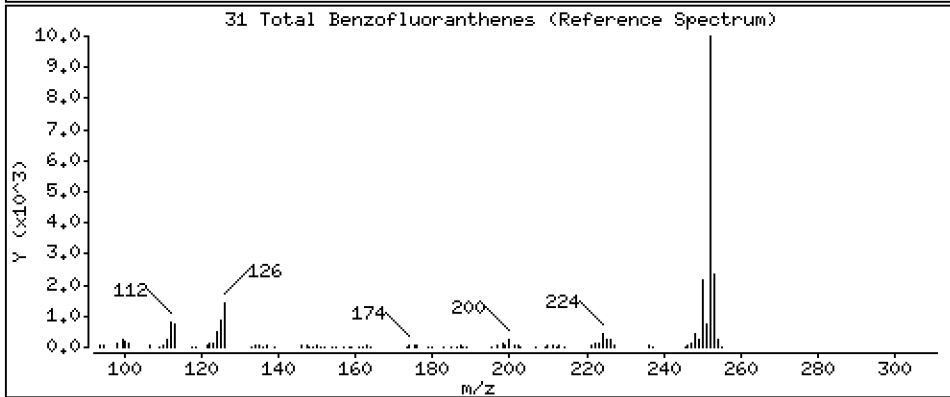
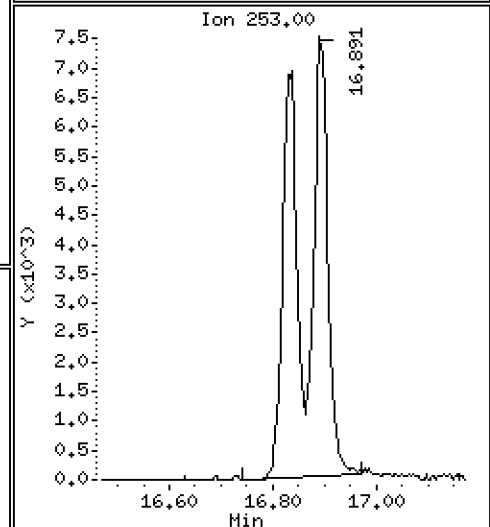
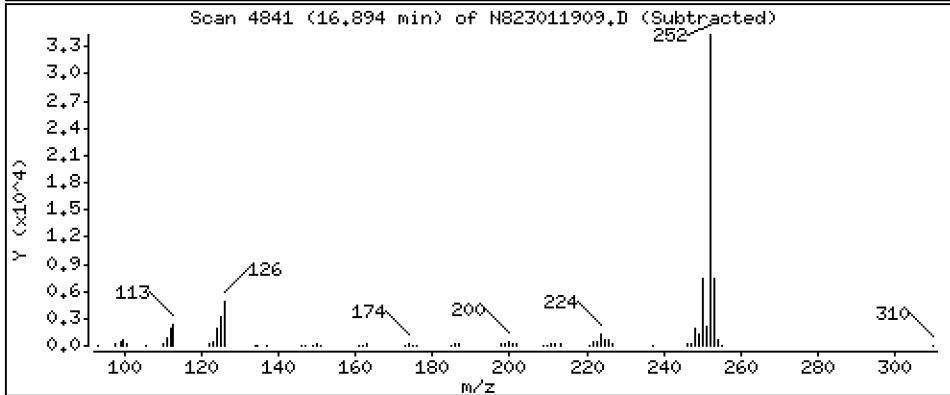
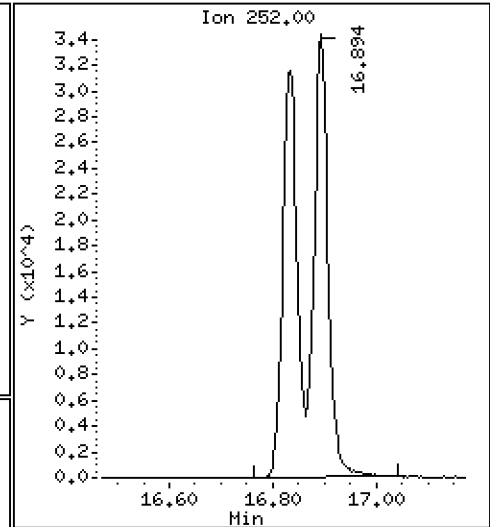
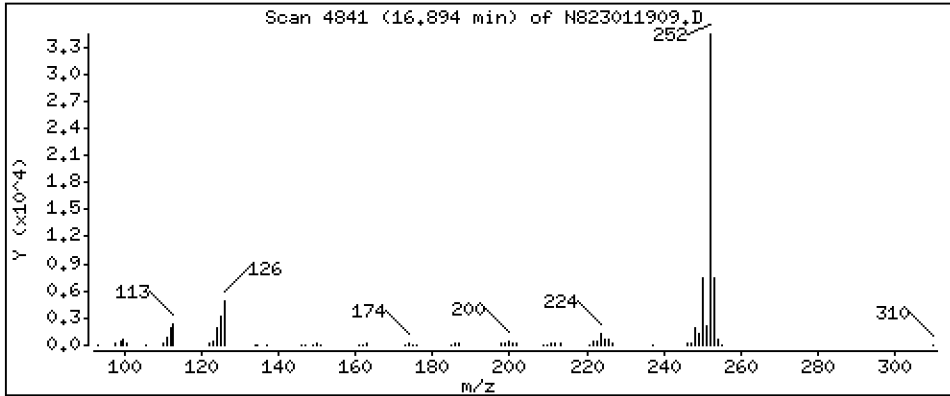
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

31 Total Benzofluoranthenes

Concentration: 5,480 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

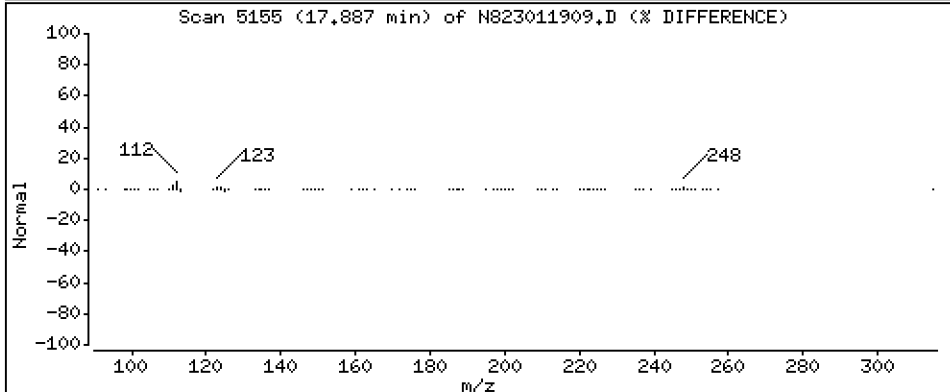
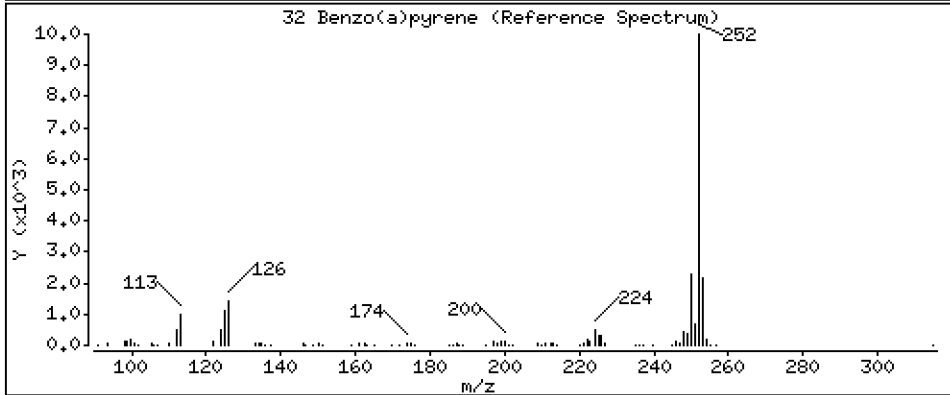
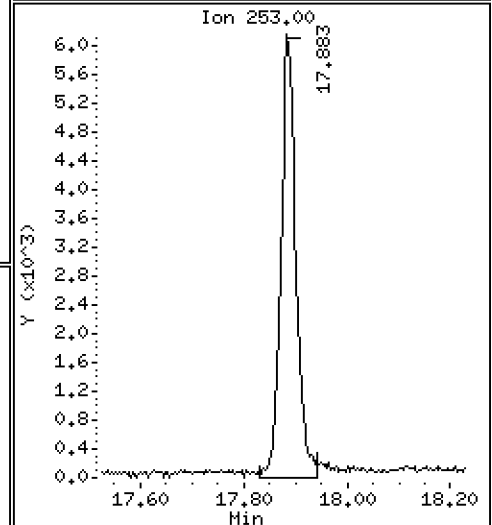
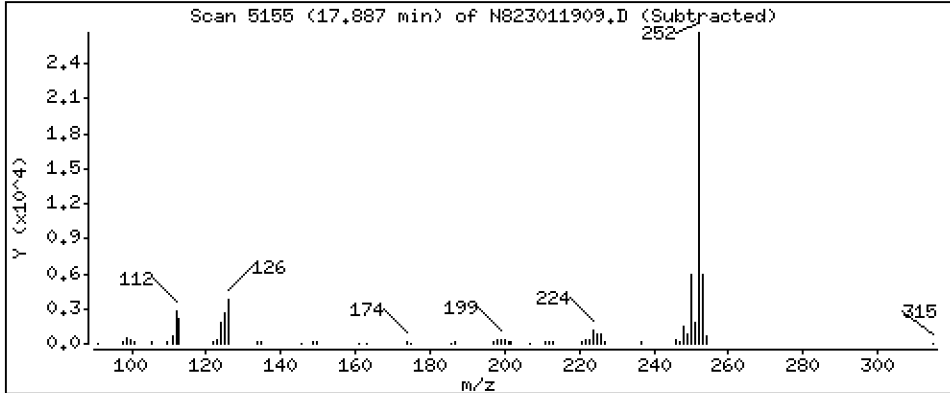
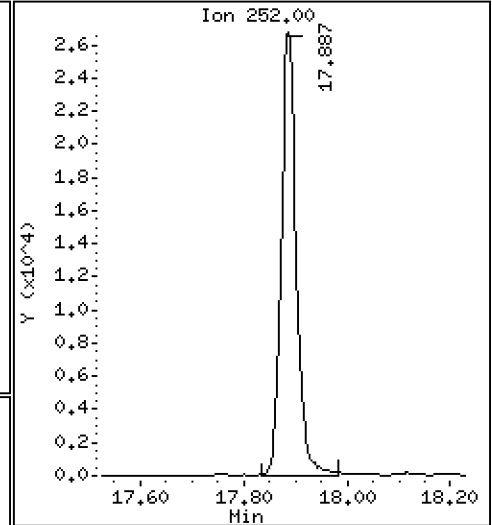
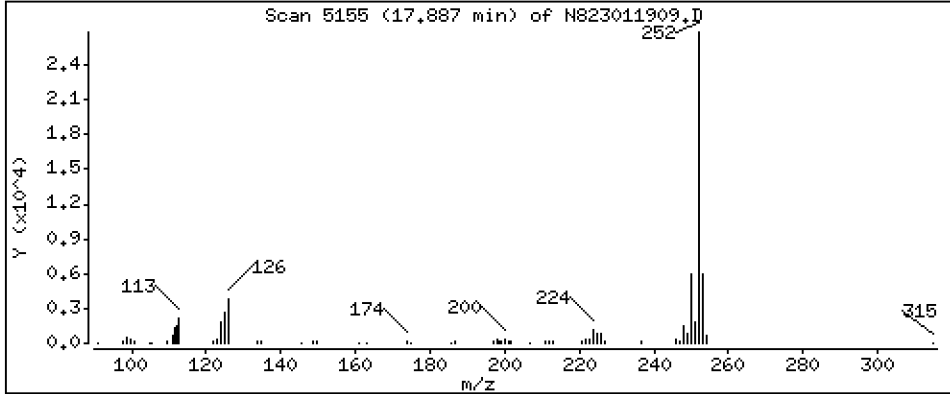
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 2,572 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

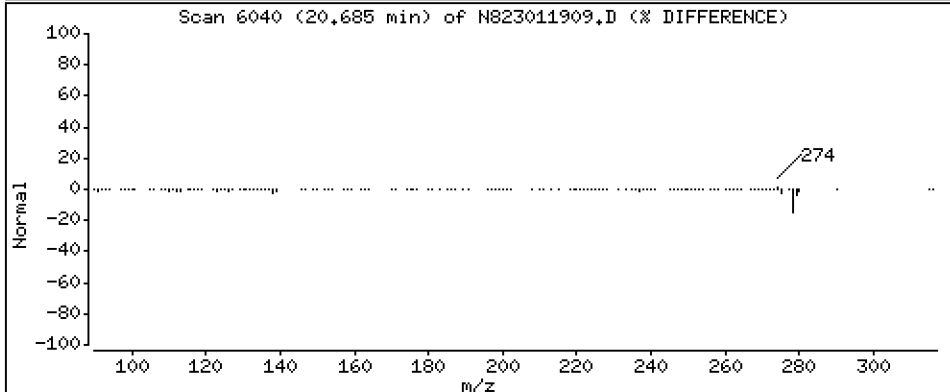
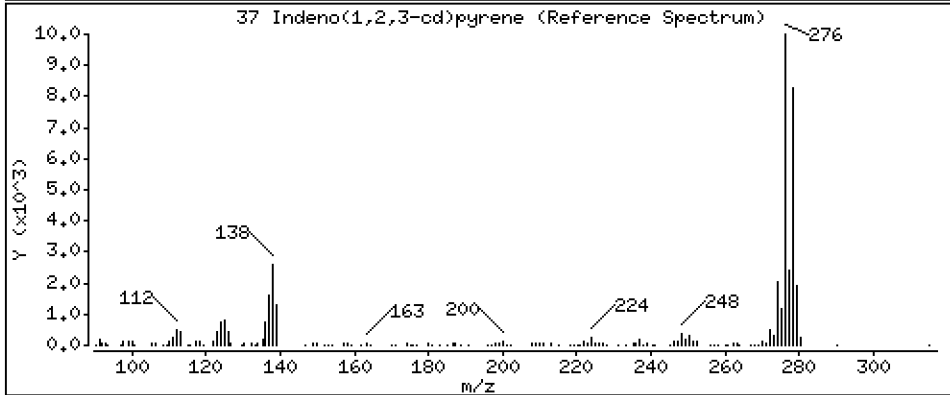
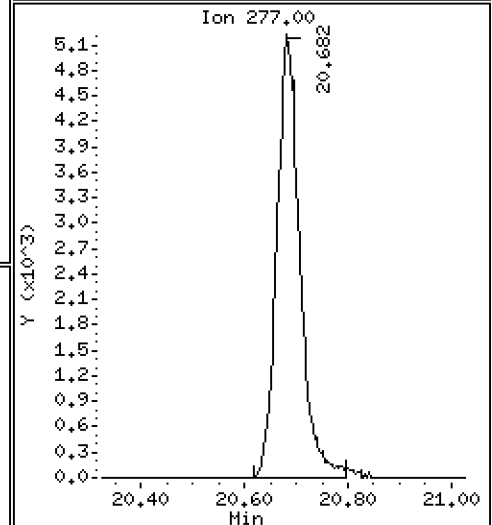
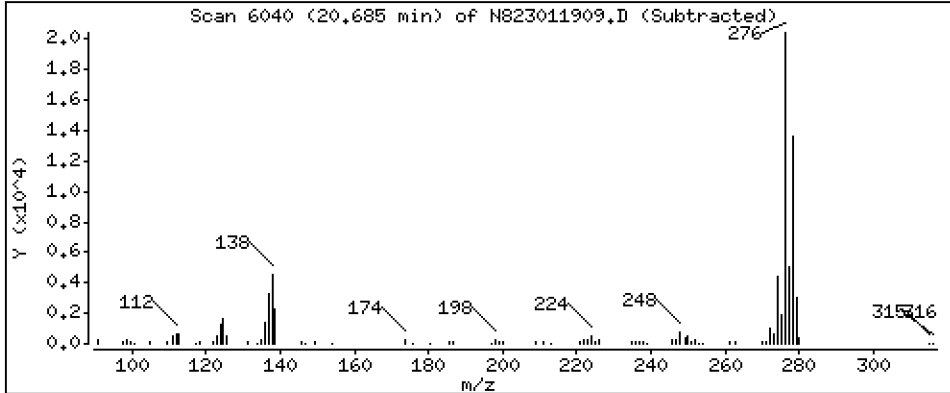
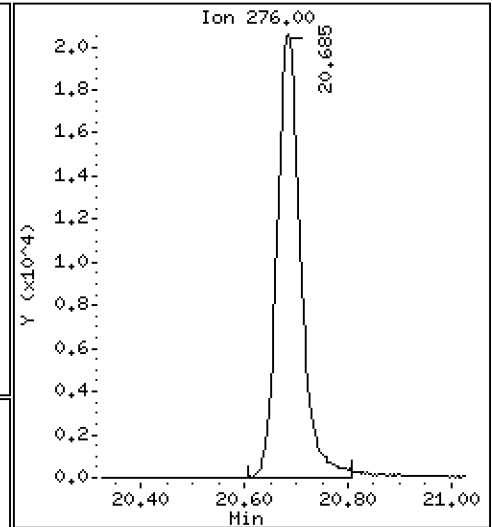
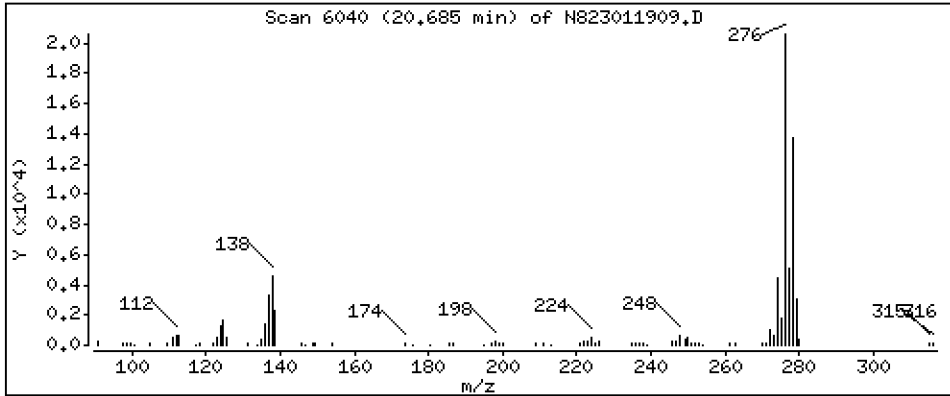
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 2,689 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

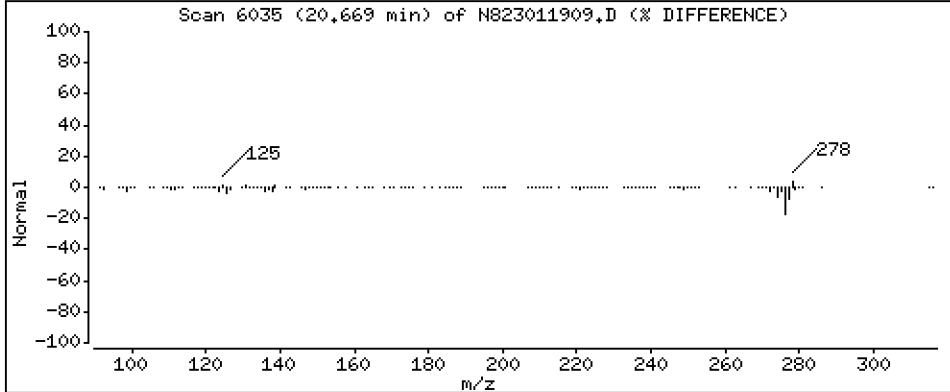
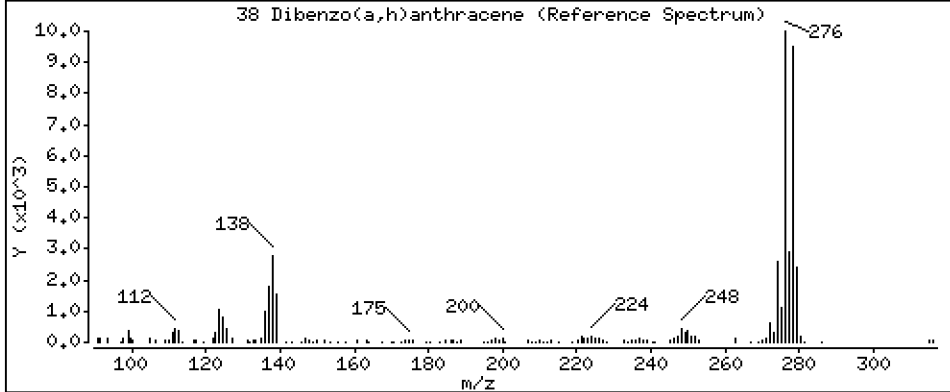
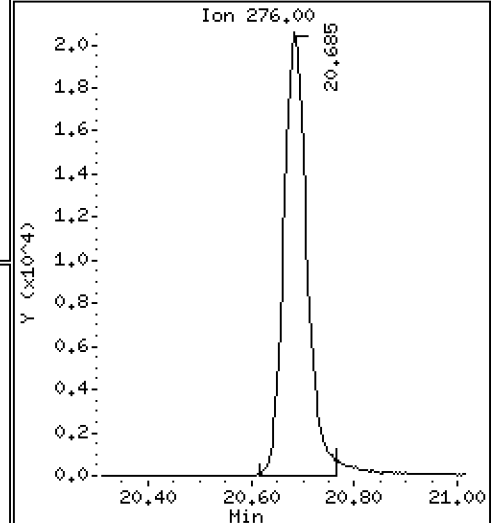
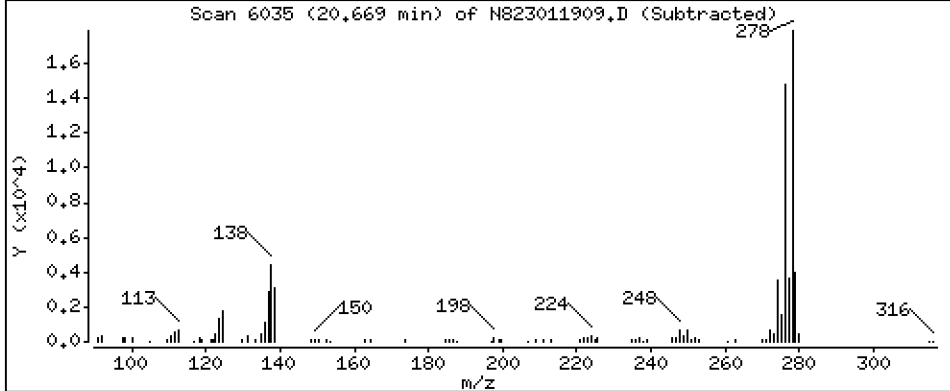
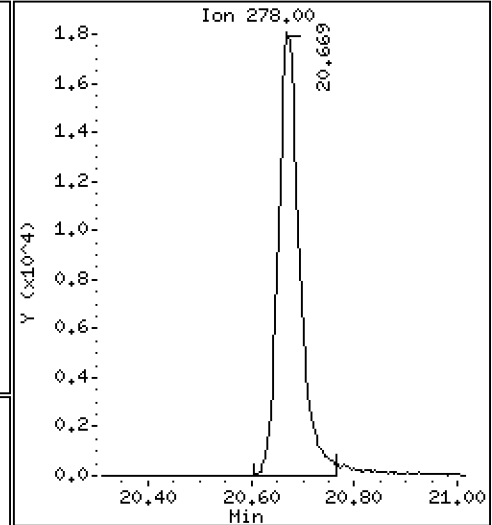
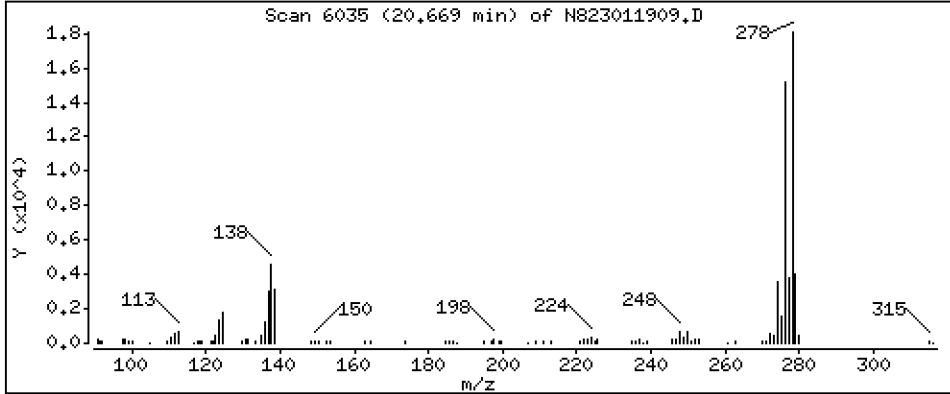
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 2,493 ug/L



Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

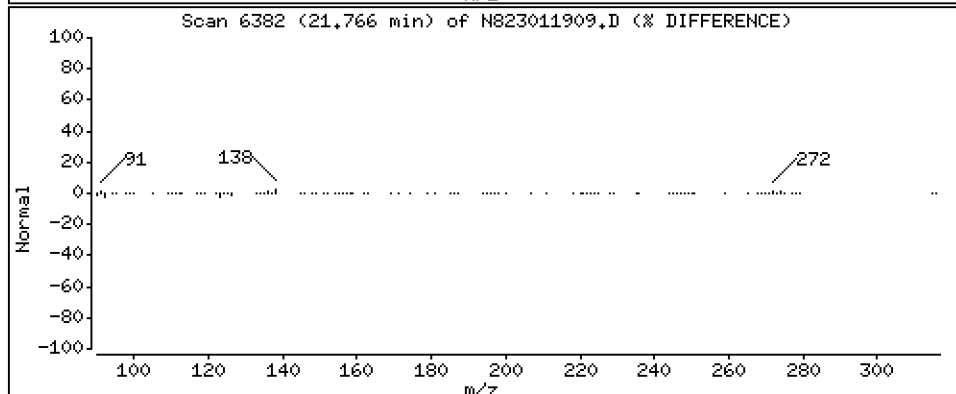
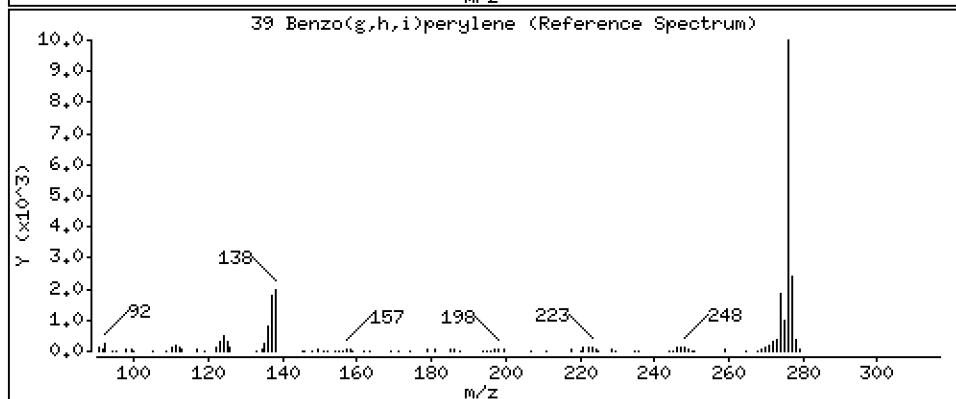
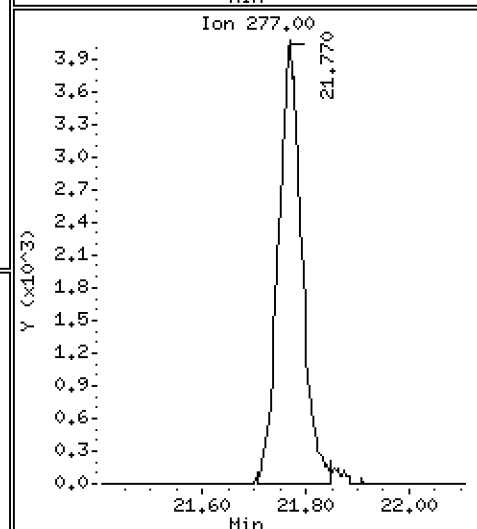
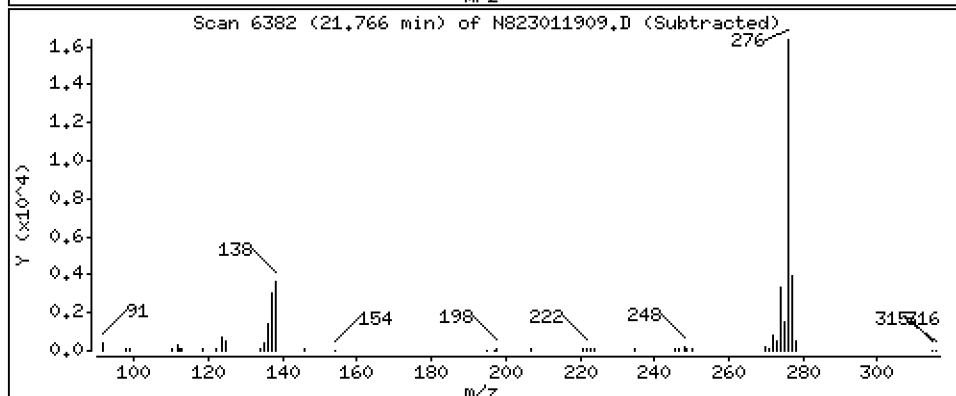
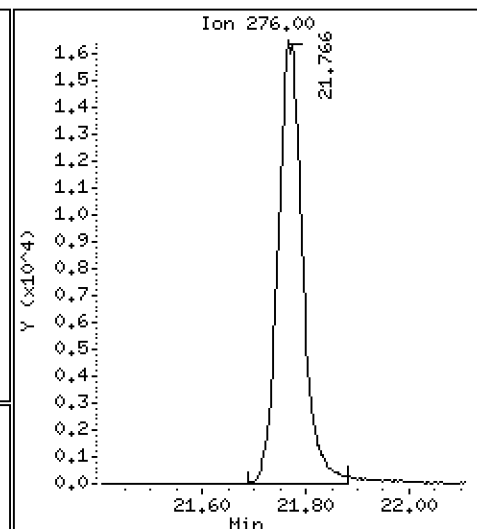
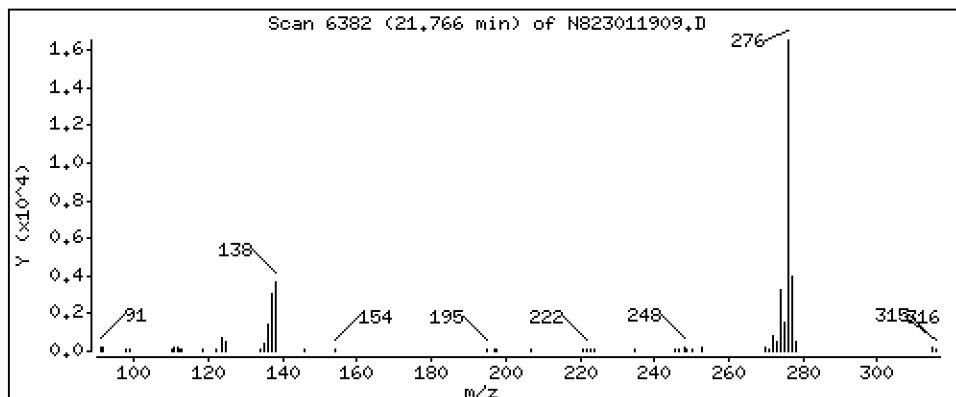
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 2,483 ug/L



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
 Lab Smp Id: SLA0213-SCV1
 Inj Date : 19-JAN-2023 14:58
 Operator : JZ Inst ID: nt8.i
 Smp Info : SCV230119
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 9 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: pnascv.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136		4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128		4.941	4.938	(1.006)	56587	2.62597	2.626
\$ 3 2-Methylnaphthalene-d10	152		Compound Not Detected.					
4 2-Methylnaphthalene	141		5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141		5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152		7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164		7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153		7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168		7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166		7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188		9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178		9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178		9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202		11.059	11.053	(1.197)	72902	2.65276	2.653
\$ 21 Fluoranthene-d10	212		Compound Not Detected.					
23 Pyrene	202		11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228		14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240		14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228		14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252		16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252		16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252		16.893	16.821	(0.932)	126178	5.48025	5.480 (M)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ug/mL)	FINAL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572	
* 33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000		
37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689	
\$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.						
38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493	
39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483	
35 Perylene	252	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 19-JAN-2023
 Lab File ID: N823011909.D Calibration Time: 12:52
 Lab Smp Id: SLA0213-SCV1
 Analysis Type: SV Level: LOW
 Quant Type: ISTD Sample Type: WATER
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1

nt8.i, 20230119.b\FSIMPNA230119.m, 19-JAN-2023 14:58

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

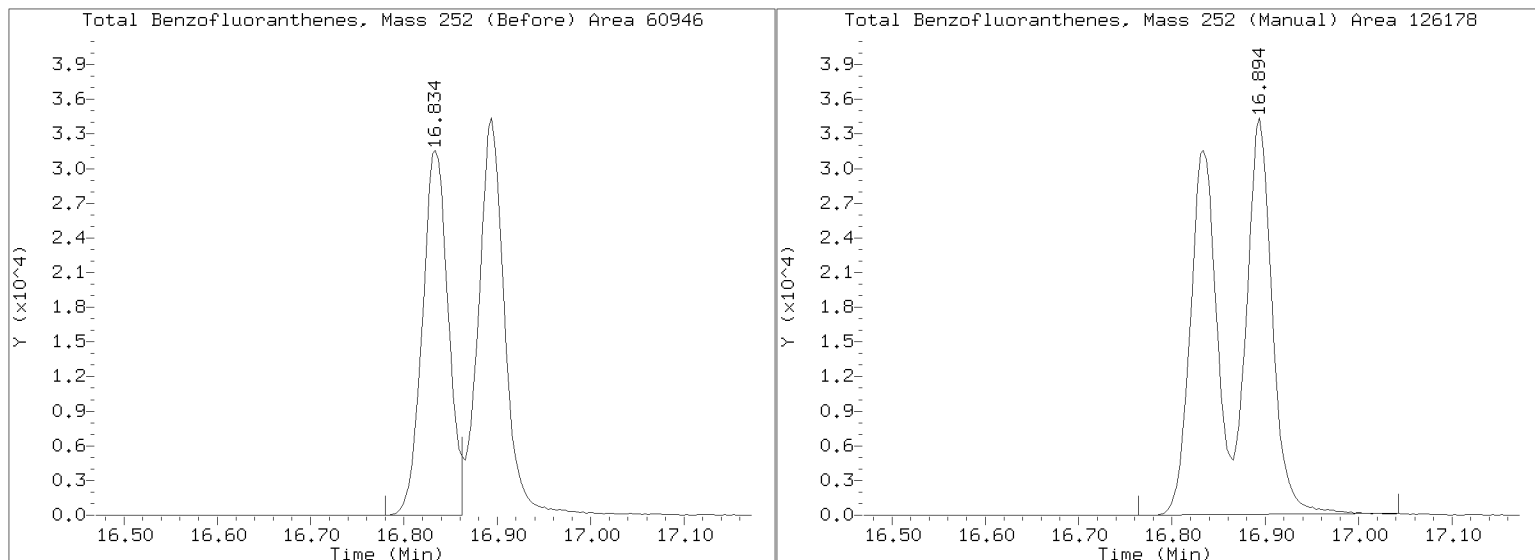
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D

Injection Date: 19-JAN-2023 14:58

Lab ID:SLA0213-SCV1 Client ID:

Report Date: 01/25/2023 22:00





CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT8</u>	Calibration:	<u>GA00050</u>
Lab File ID:	<u>N823020633.D</u>	Calibration Date:	<u>01/19/2023</u>
Sequence:	<u>SLB0075</u>	Injection Date:	<u>02/07/23</u>
Lab Sample ID:	<u>SLB0075-CCV1</u>	Injection Time:	<u>03:09</u>
Sequence Name:	<u>Calibration Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Benzo(a)anthracene	A	2.5000	2.85	1.1238870	1.2807120		14.0	+/-50
Chrysene	A	2.5000	2.46	1.1964350	1.1765240		-1.7	+/-50
Benzo(b)fluoranthene	A	2.5000	2.93	1.1648110	1.3636180		17.1	+/-50
Benzo(k)fluoranthene	A	2.5000	2.72	1.1409370	1.2422350		8.9	+/-50
Benzo(a)pyrene	A	2.5000	2.65	1.0250270	1.0880440		6.1	+/-50
Indeno(1,2,3-cd)pyrene	A	2.5000	2.26	1.1677520	1.0535810		-9.8	+/-50
Dibenzo(a,h)anthracene	A	2.5000	2.35	1.0049440	0.9451614		-5.9	+/-50
2-Methylnaphthalene-d10	A	2.5000	2.69	0.5454499	0.5877536		7.8	+/-50
Dibenzo[a,h]anthracene-d14	A	2.5000	2.20	0.6679424	0.6893016		-12.0	+/-50
Fluoranthene-d10	A	2.5000	2.73	0.8823923	0.9648554		9.3	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.1\20230206A.1\N823020633.D

Date: 07-FEB-2023 03:09

Client ID:

Sample Info: CCV230206A

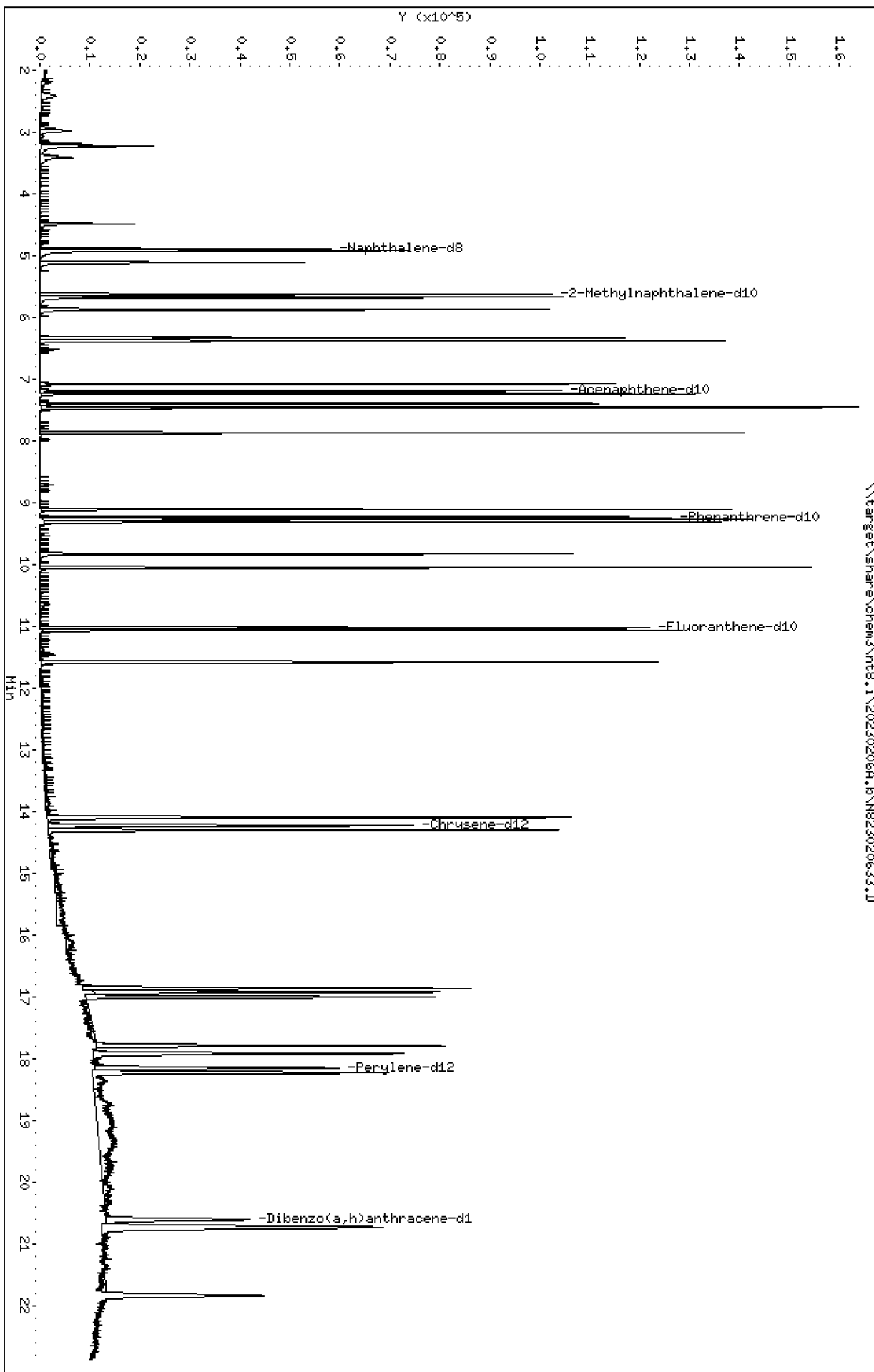
Column phase: Rxi-17s11

Instrument: nt8.1

Operator: JZ

Column diameter: 0.25

\\target\share\chem3\nt8.1\20230206A.1\N823020633.D



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

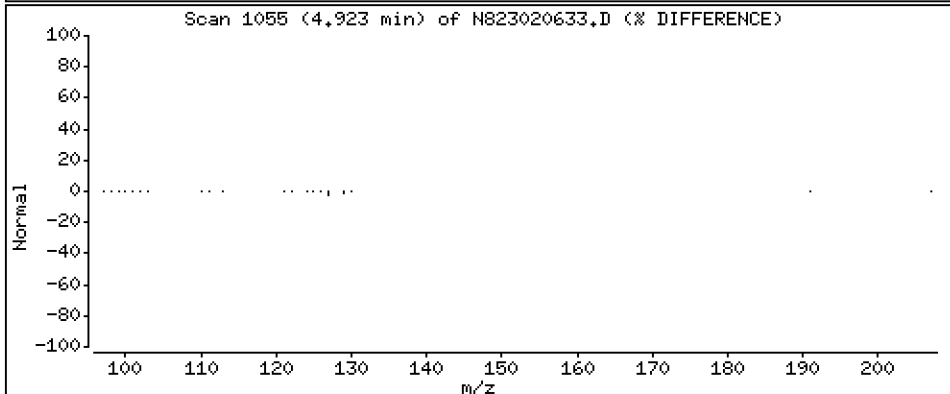
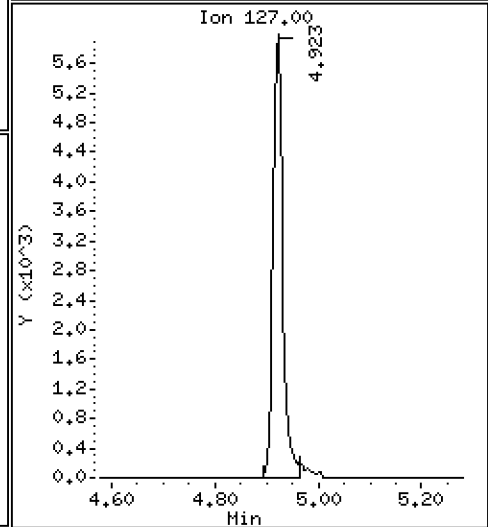
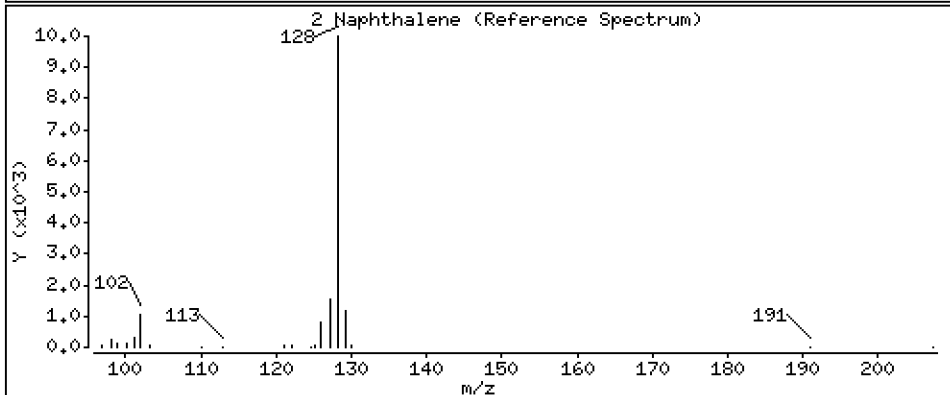
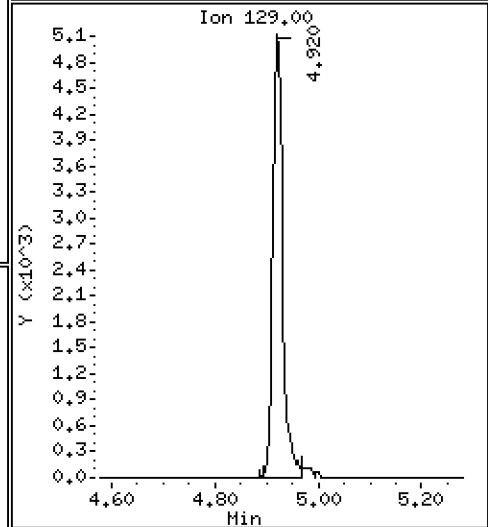
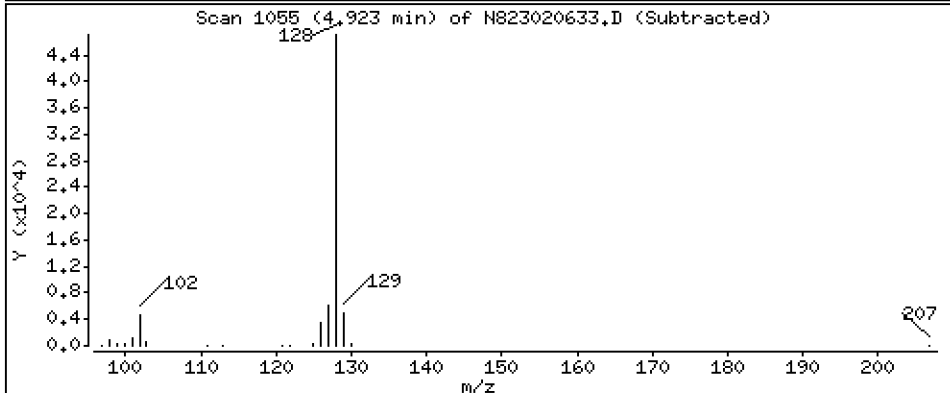
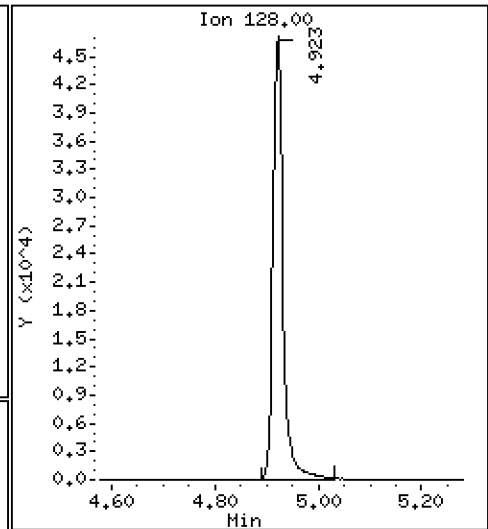
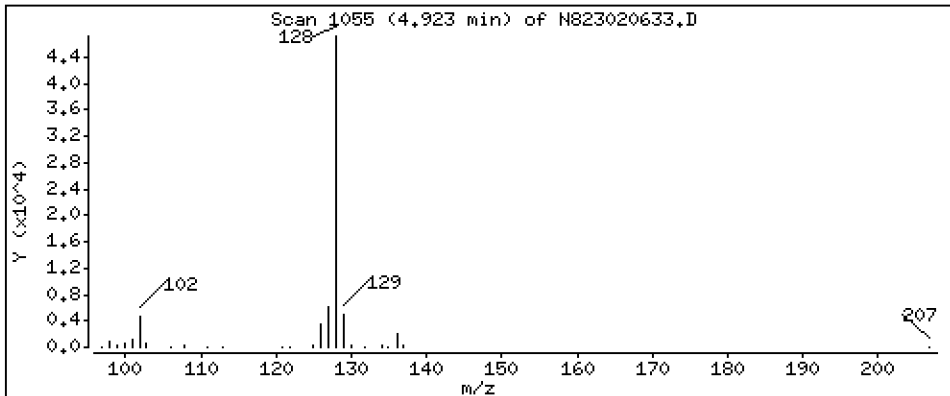
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

2 Naphthalene

Concentration: 2,576 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

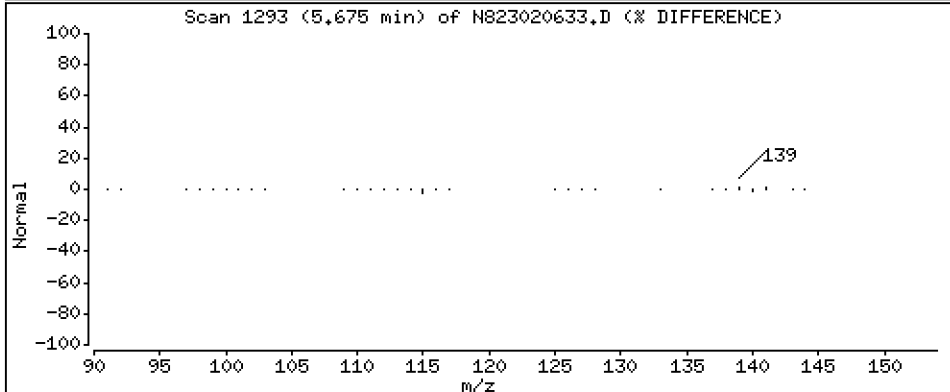
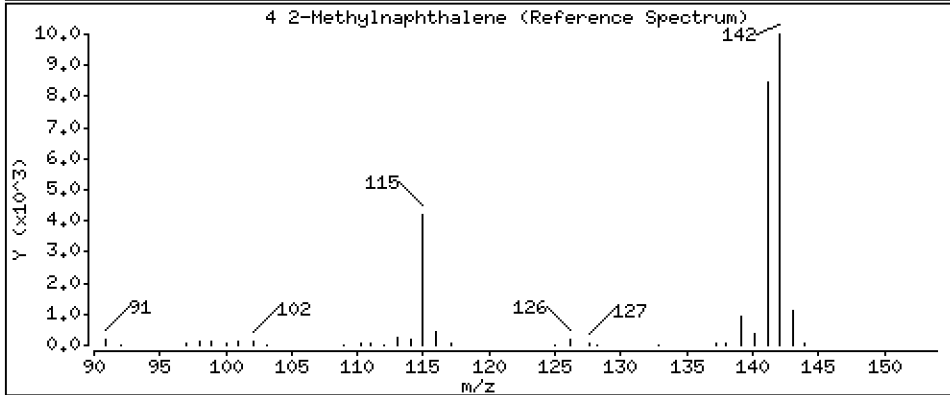
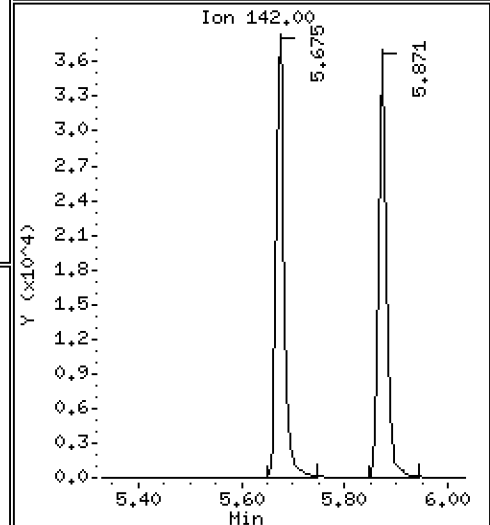
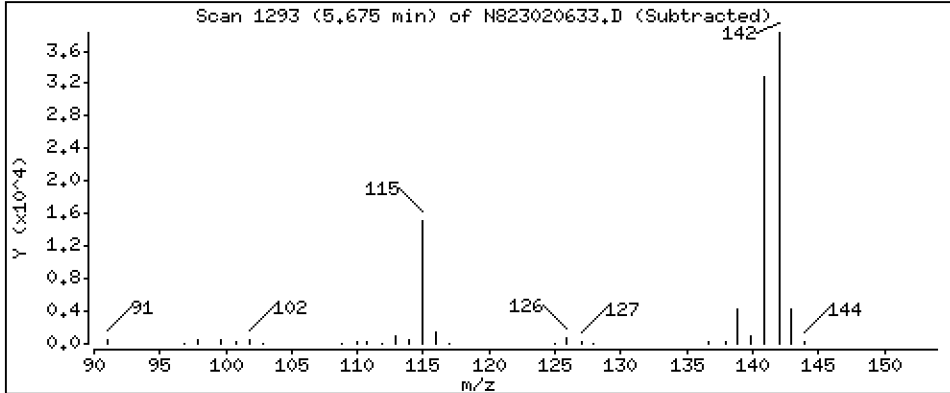
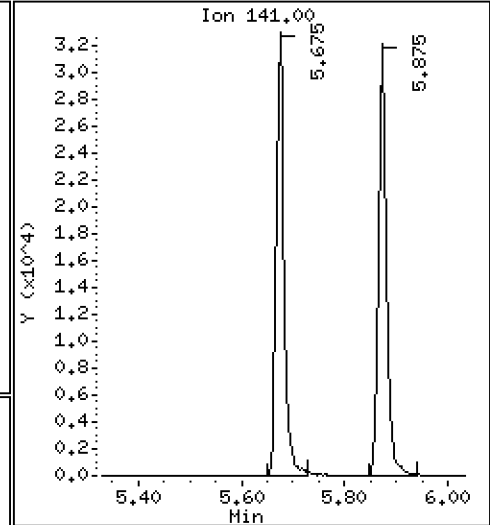
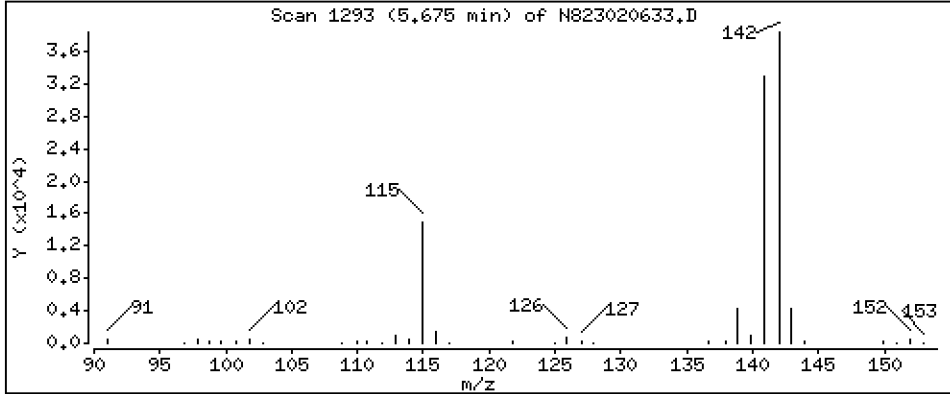
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

4 2-Methylnaphthalene

Concentration: 2,611 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

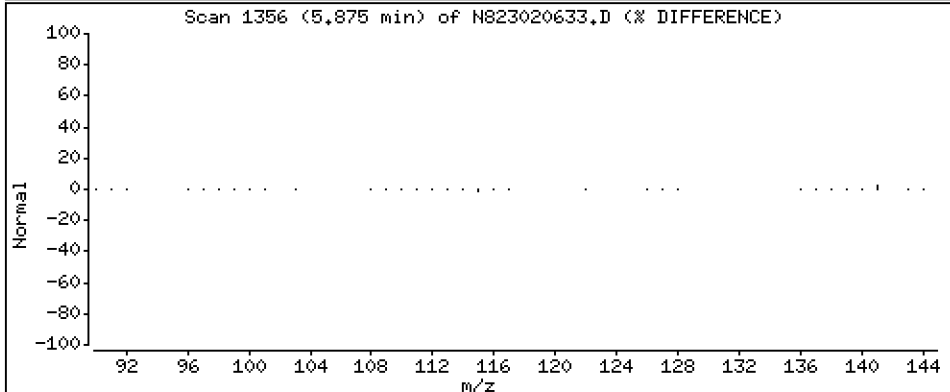
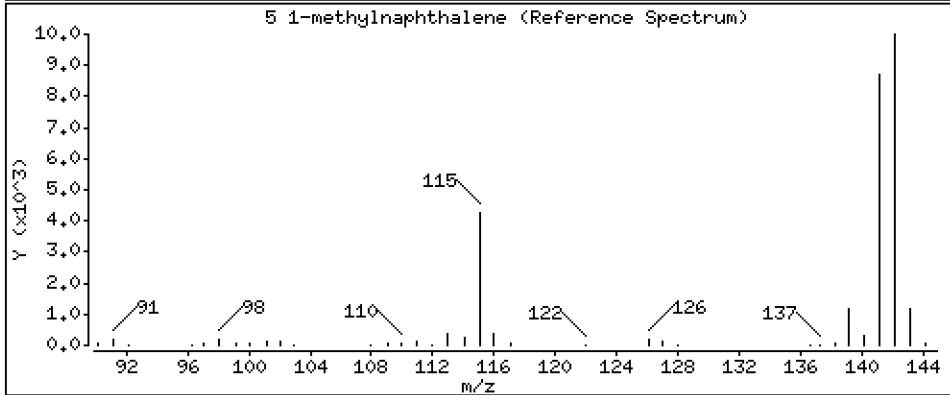
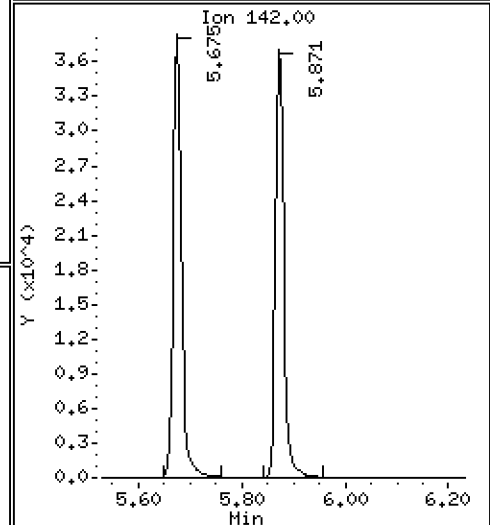
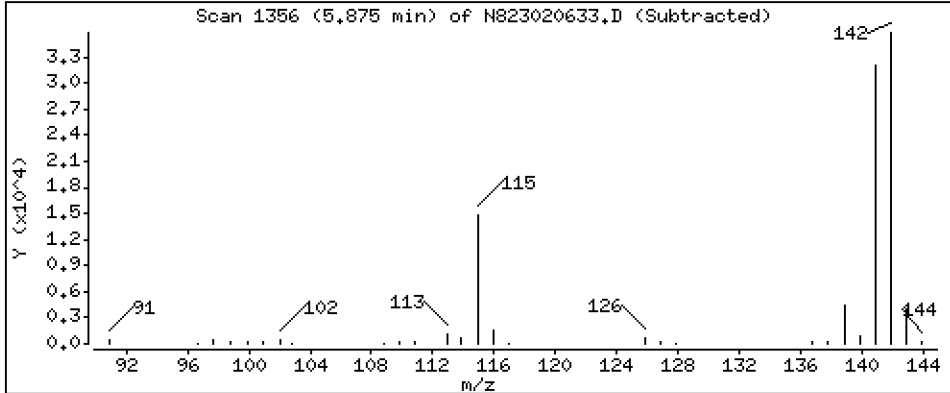
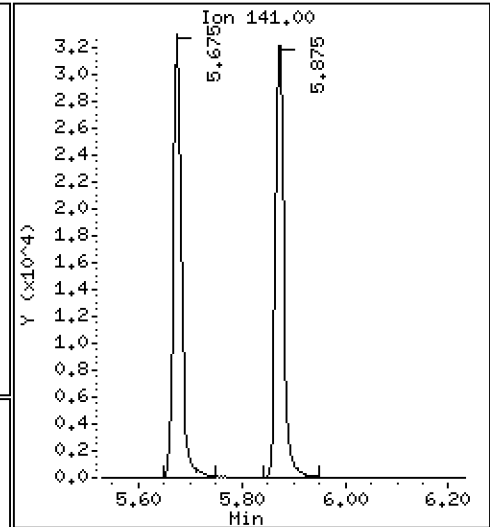
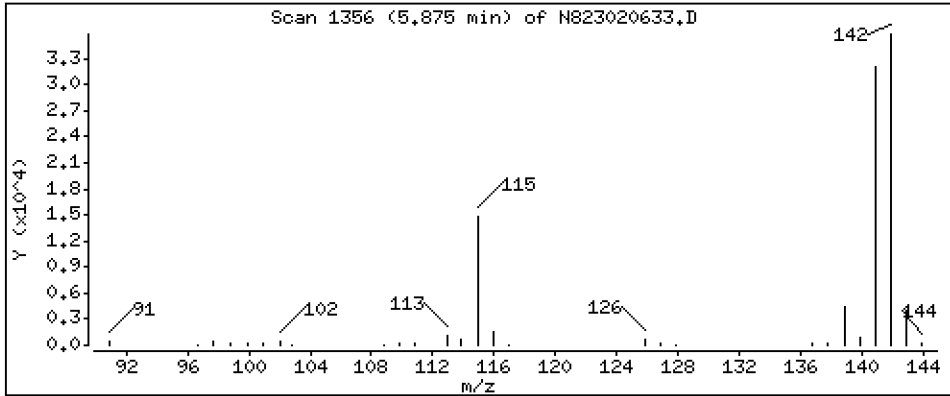
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

5 1-methylnaphthalene

Concentration: 2,603 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

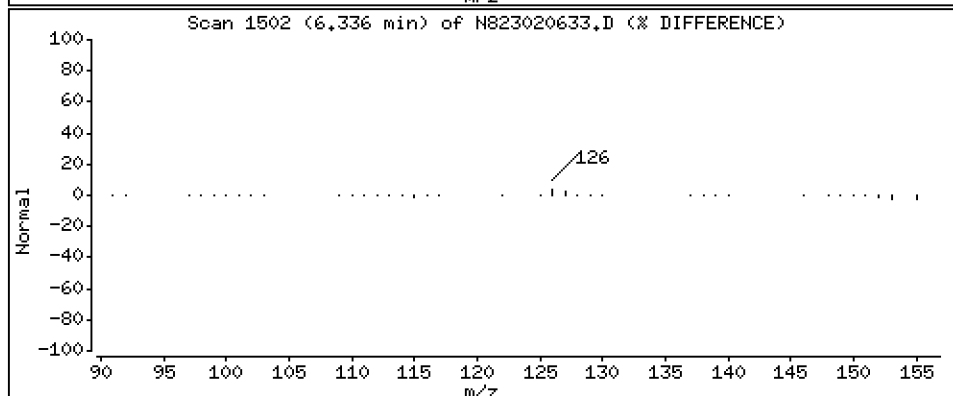
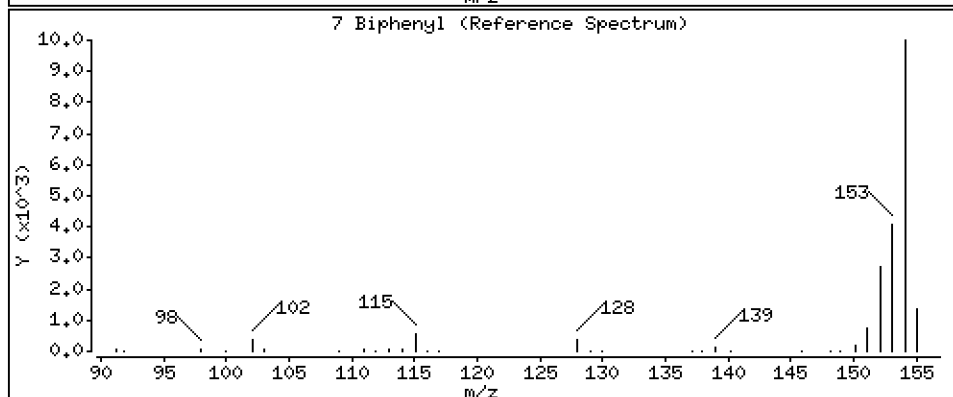
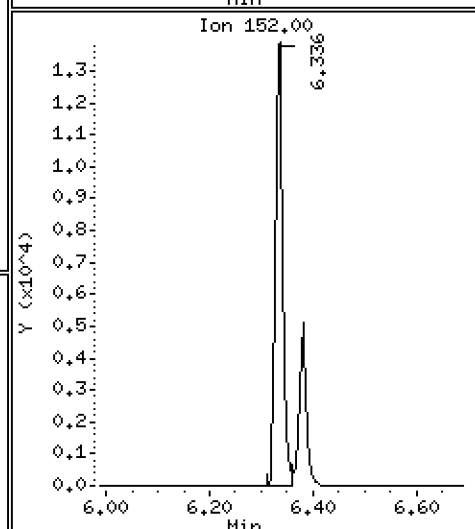
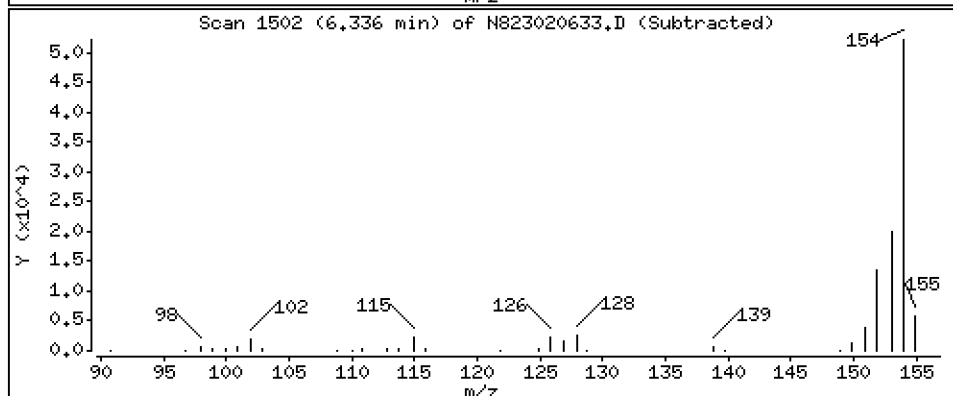
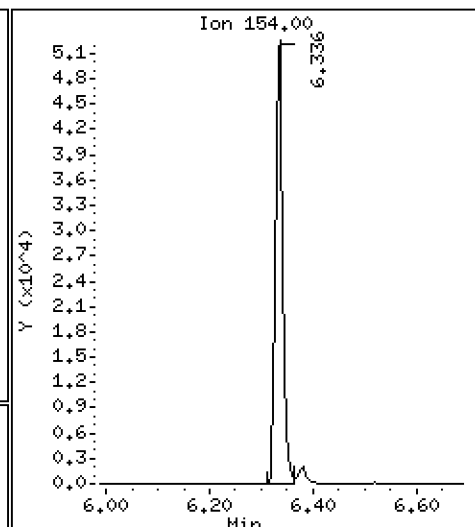
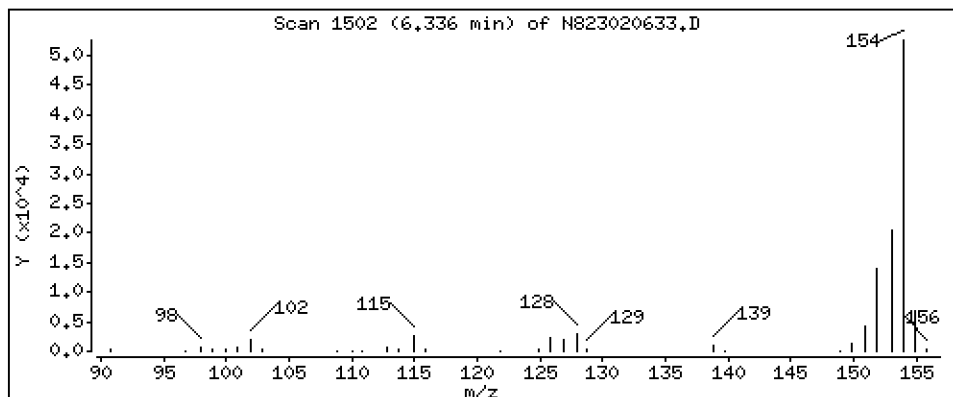
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

7 Biphenyl

Concentration: 2,532 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

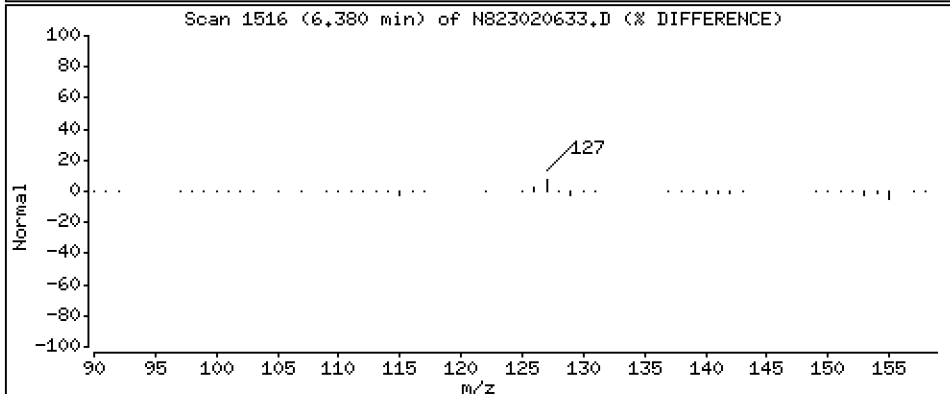
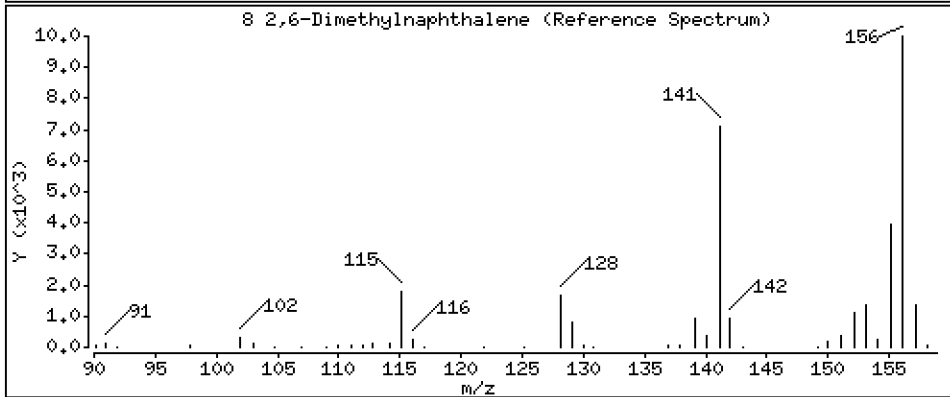
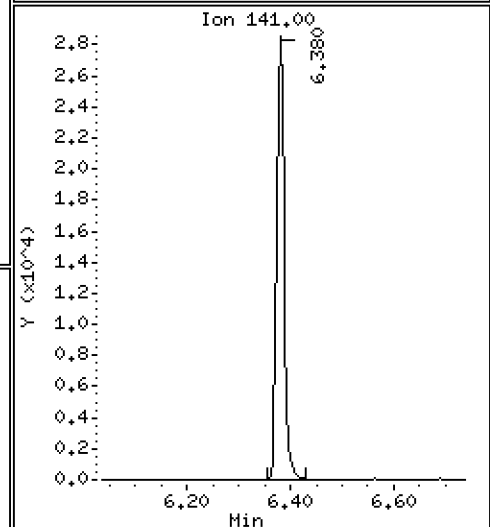
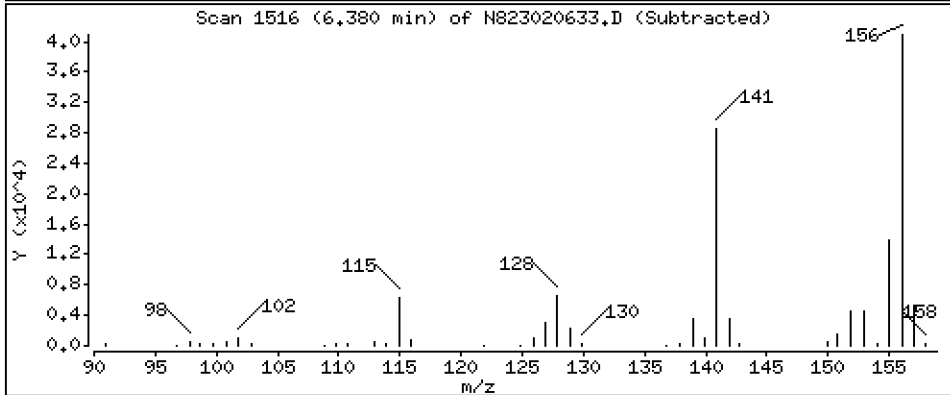
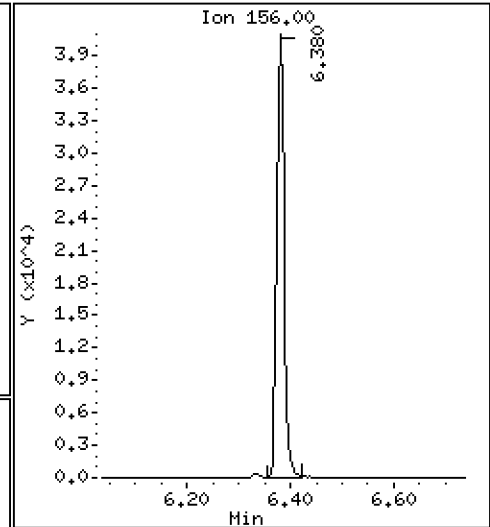
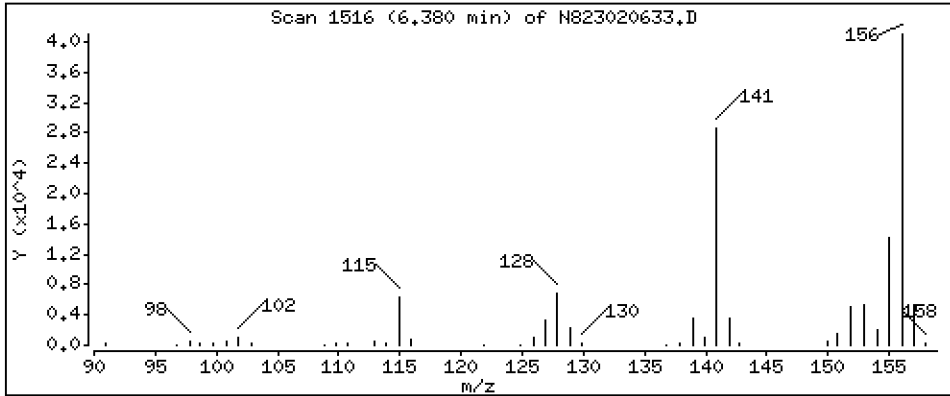
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

8 2,6-Dimethylnaphthalene

Concentration: 2,669 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

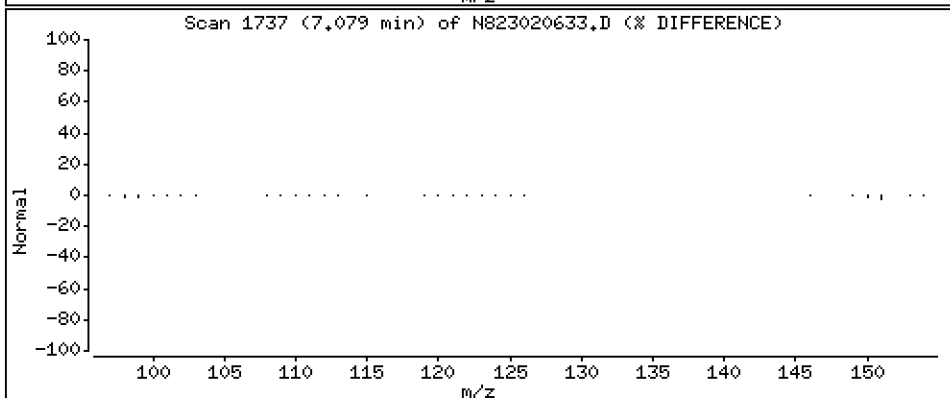
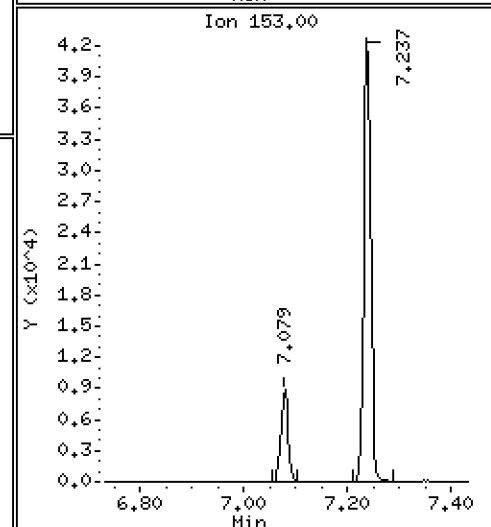
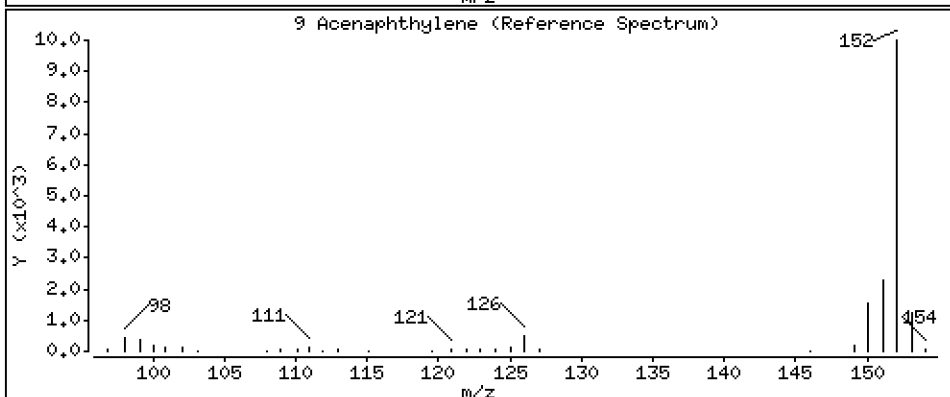
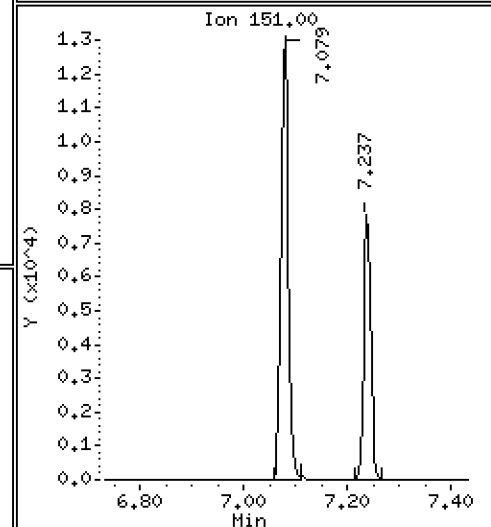
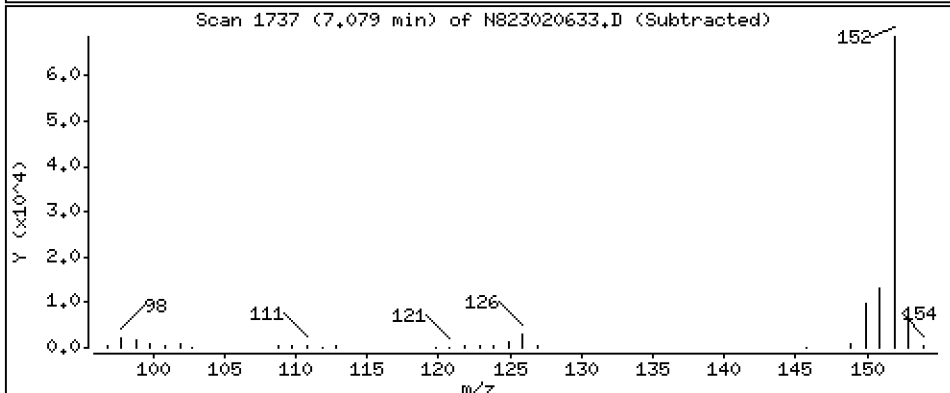
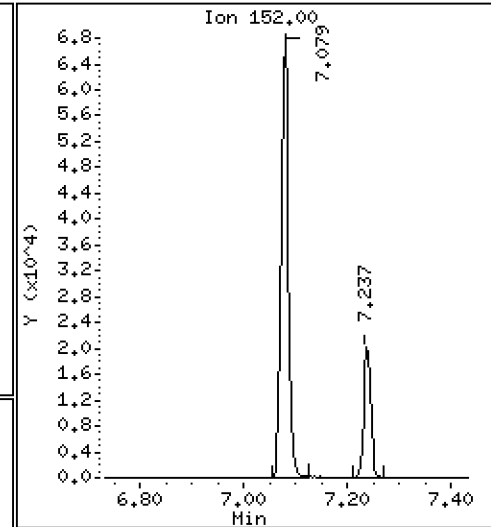
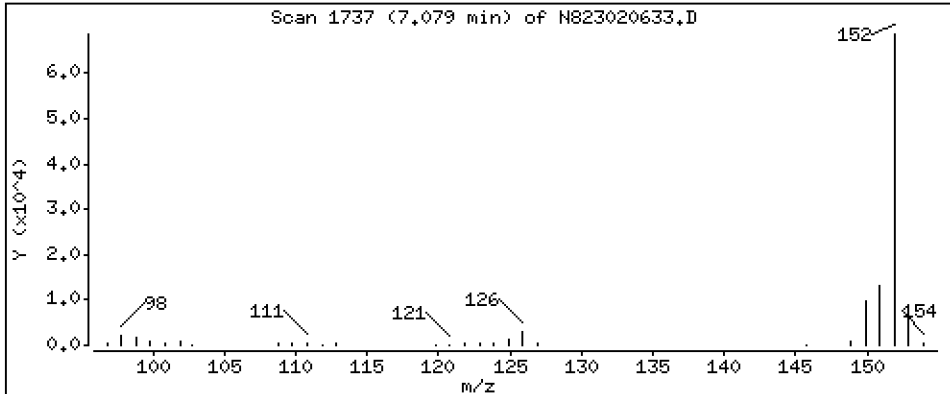
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

9 Acenaphthylene

Concentration: 2,741 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

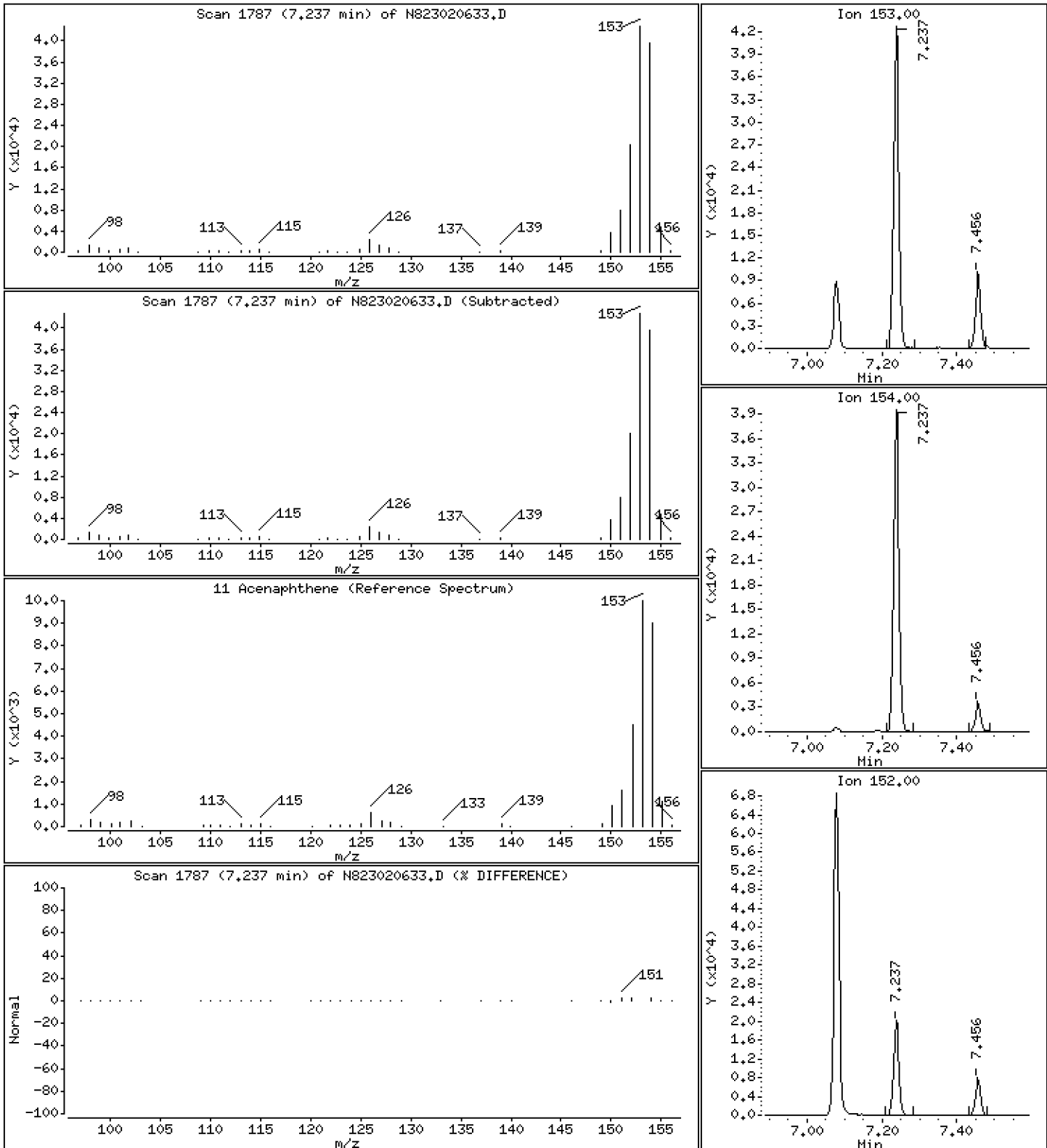
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

11 Acenaphthene

Concentration: 2,545 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

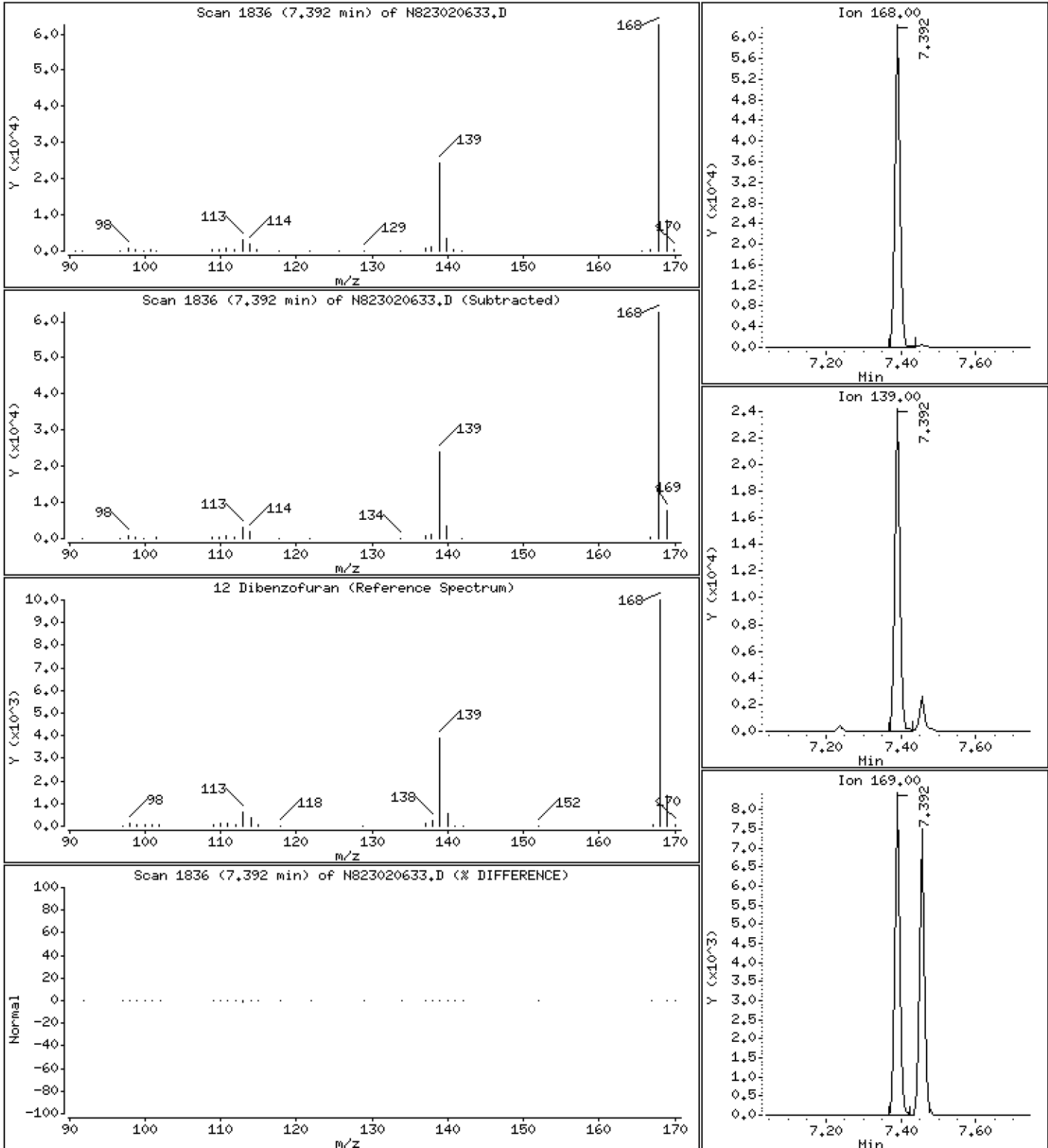
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

12 Dibenzofuran

Concentration: 2,493 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

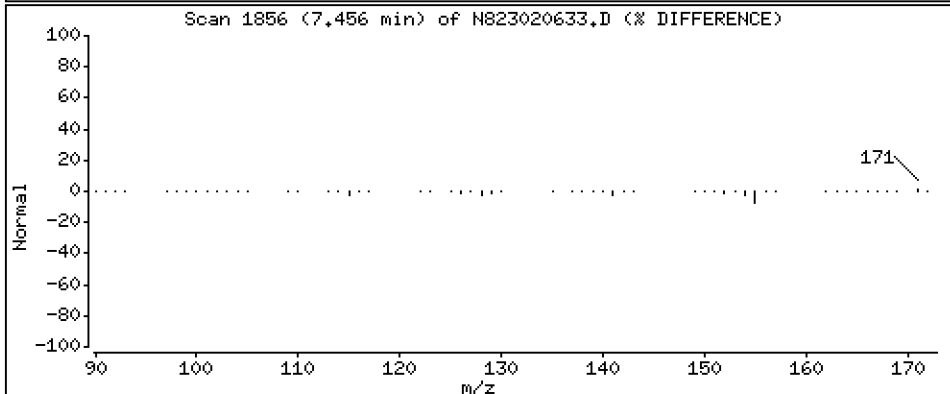
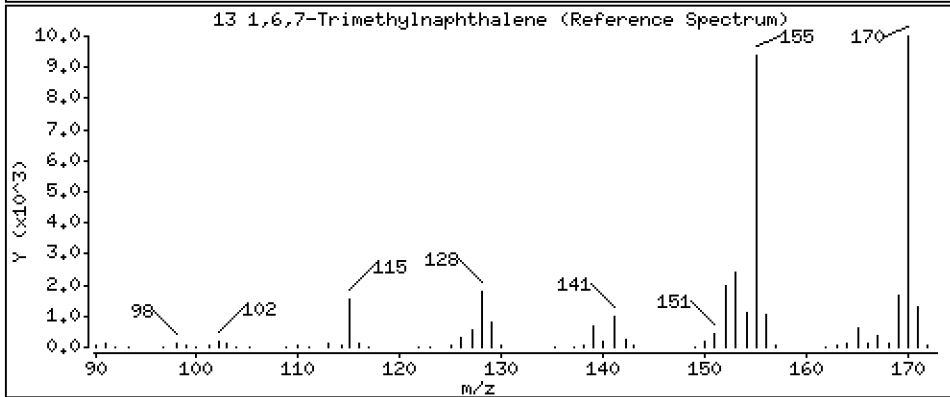
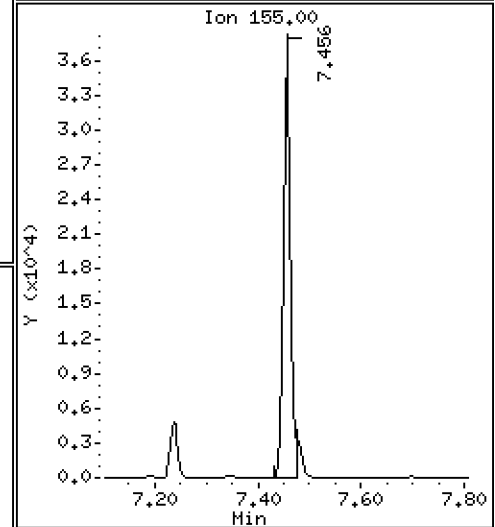
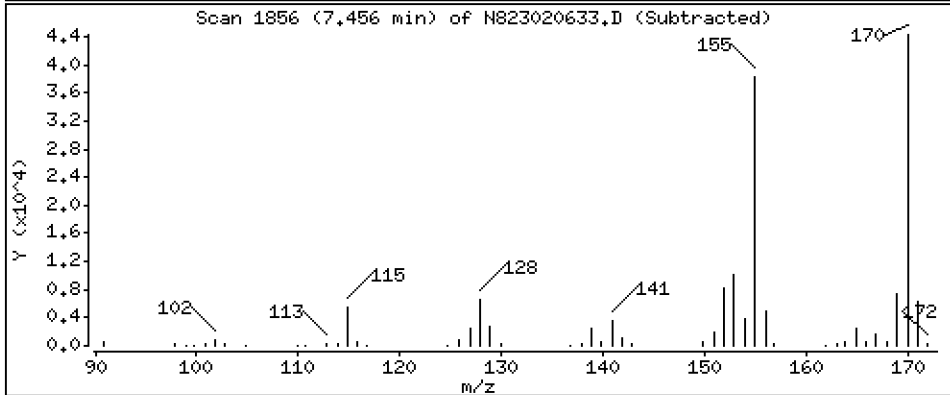
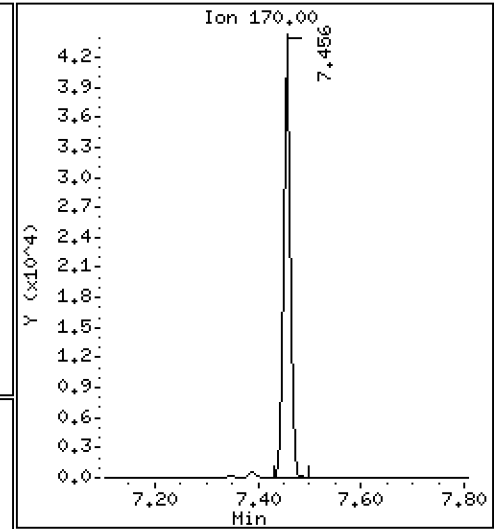
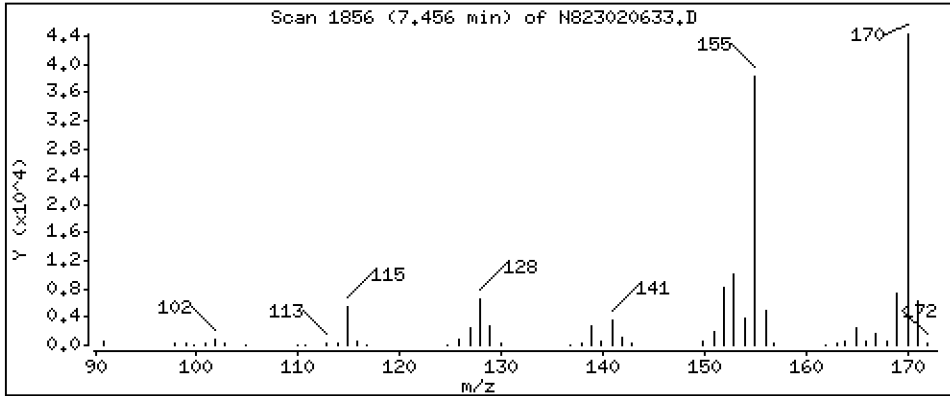
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

13 1,6,7-Trimethylnaphthalene

Concentration: 2,660 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

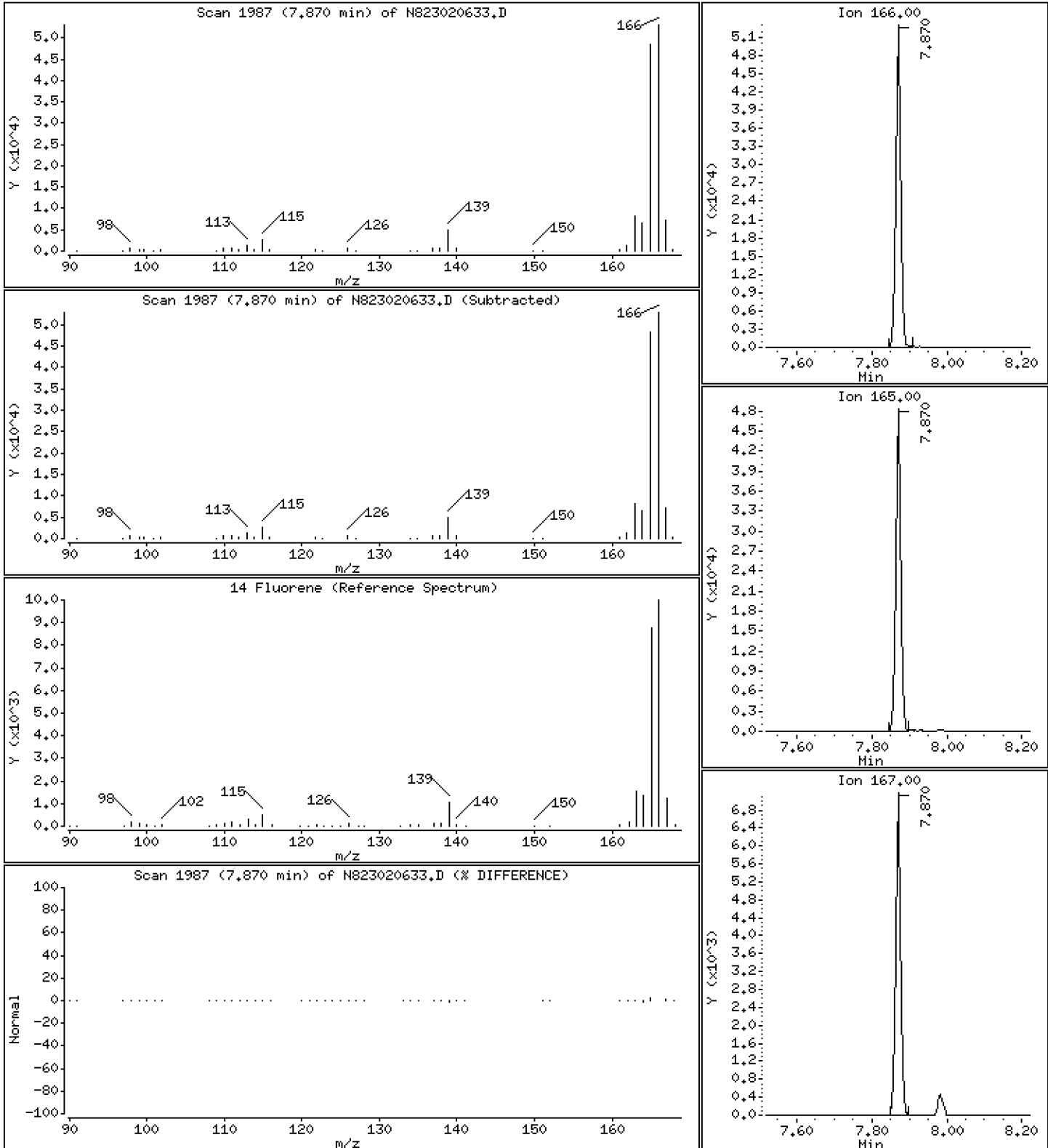
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

14 Fluorene

Concentration: 2,623 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

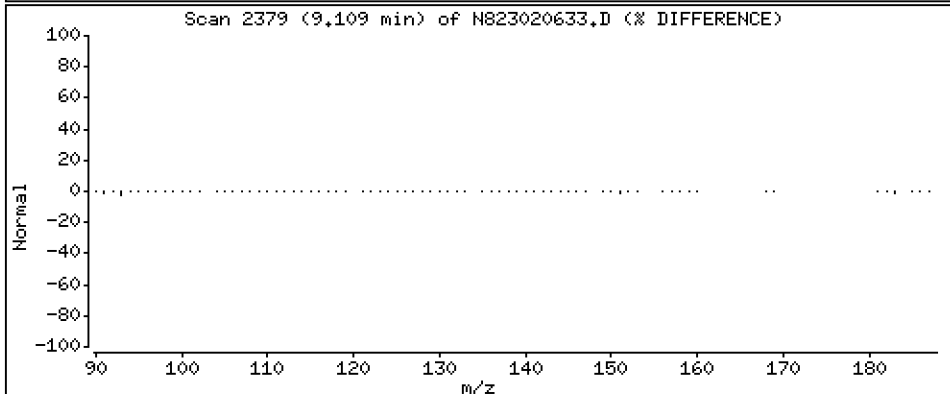
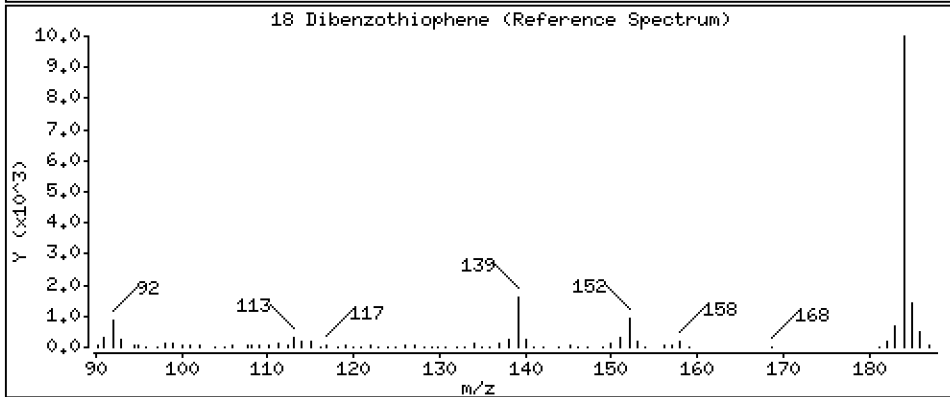
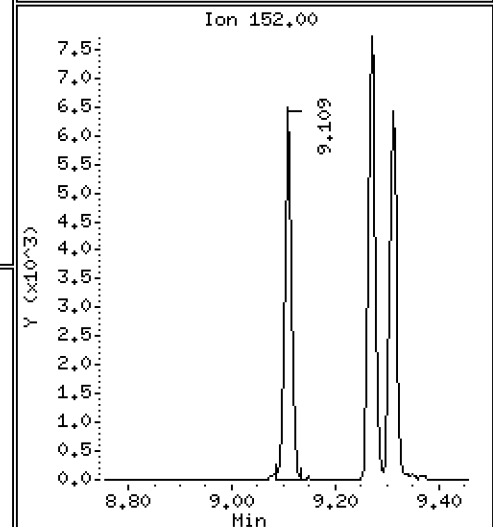
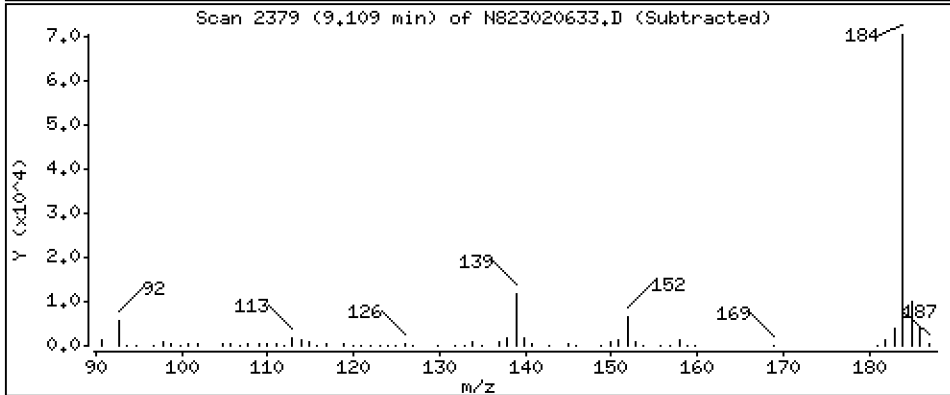
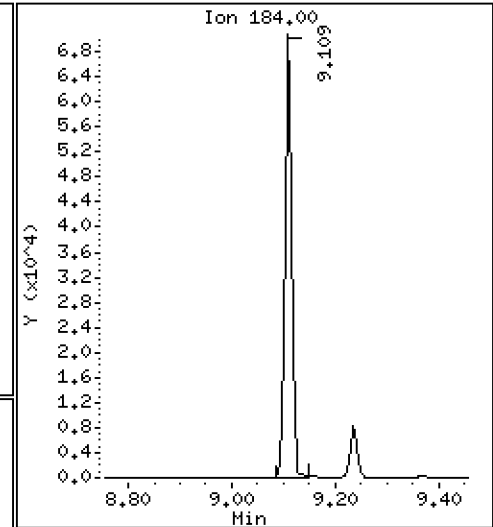
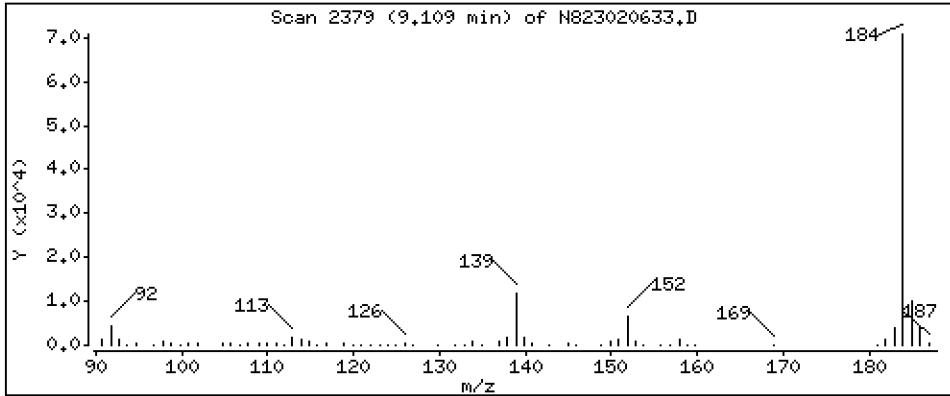
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

18 Dibenzothiophene

Concentration: 2,606 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

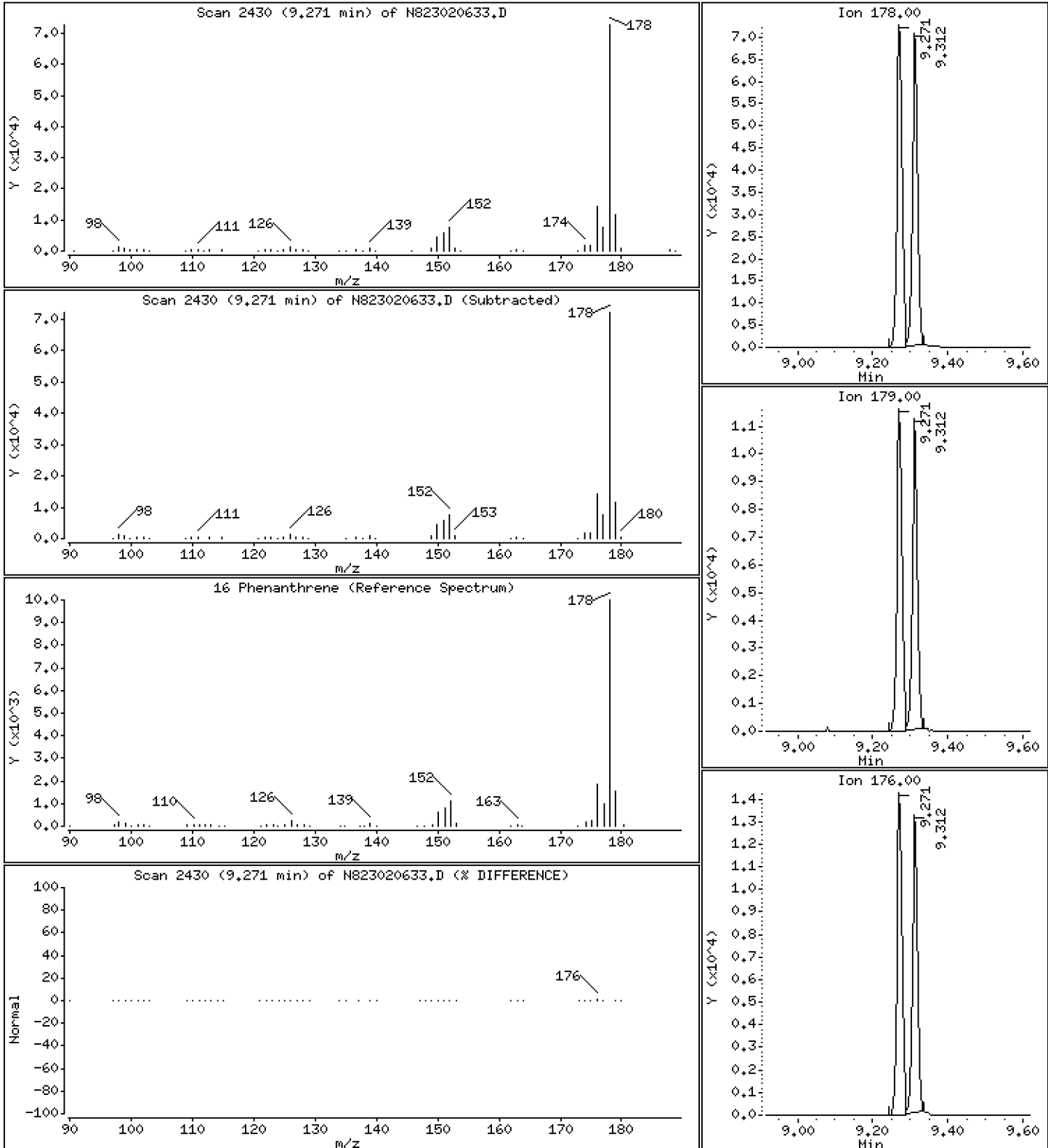
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

16 Phenanthrene

Concentration: 2,454 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

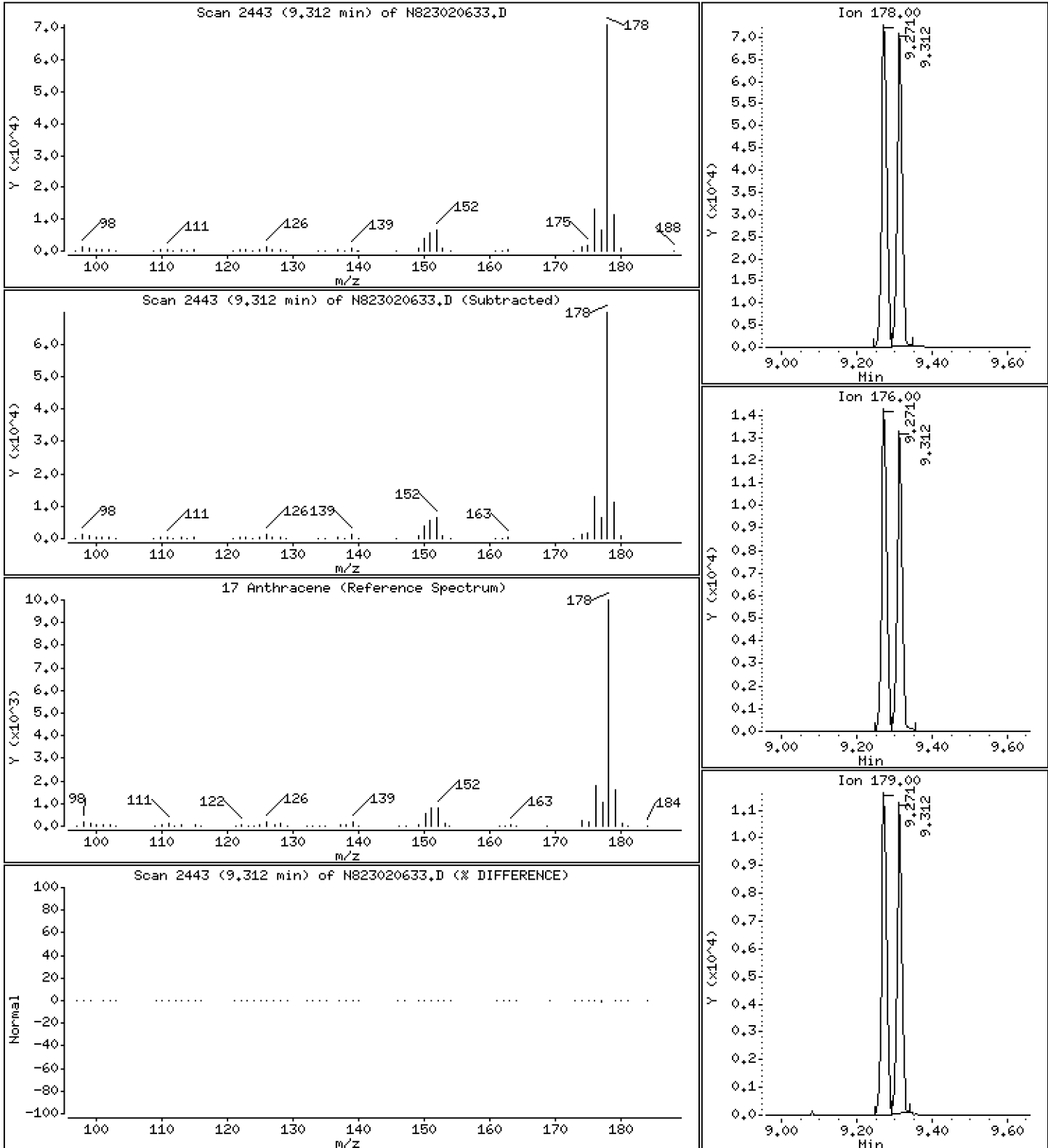
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25

17 Anthracene

Concentration: 2.634 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

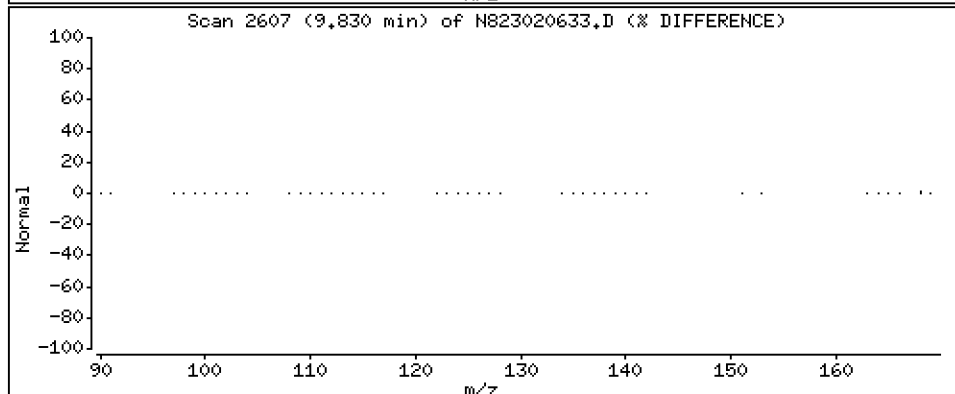
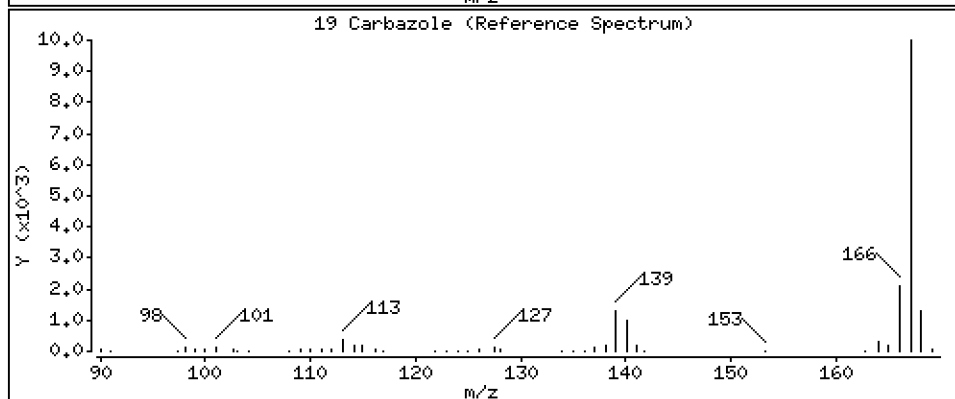
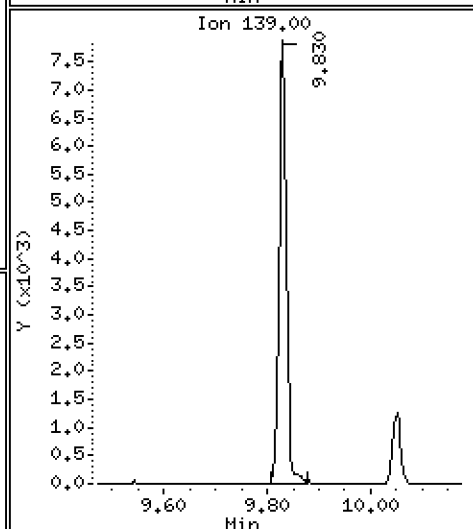
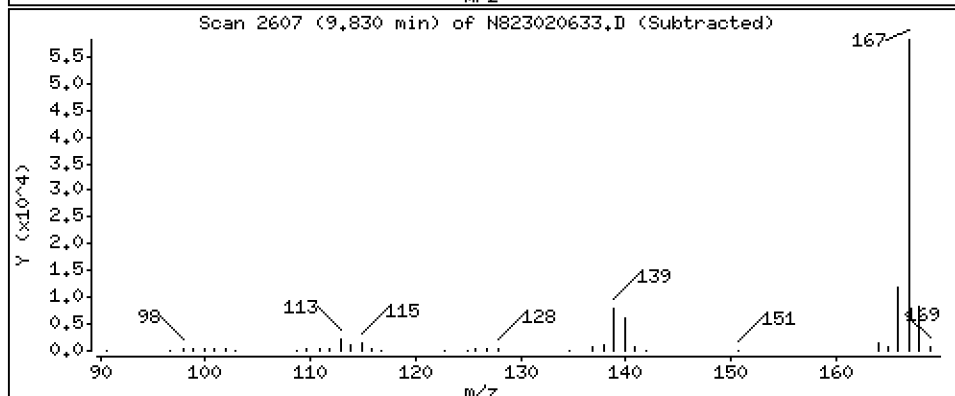
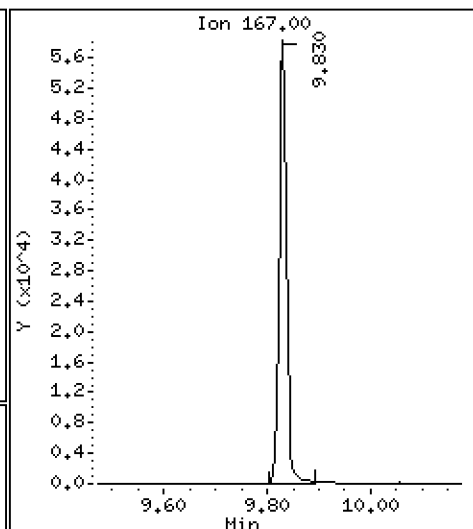
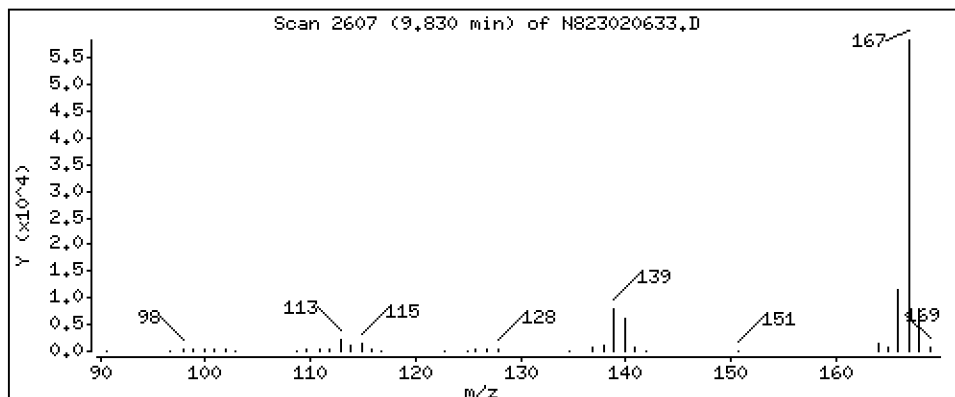
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

19 Carbazole

Concentration: 2,534 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

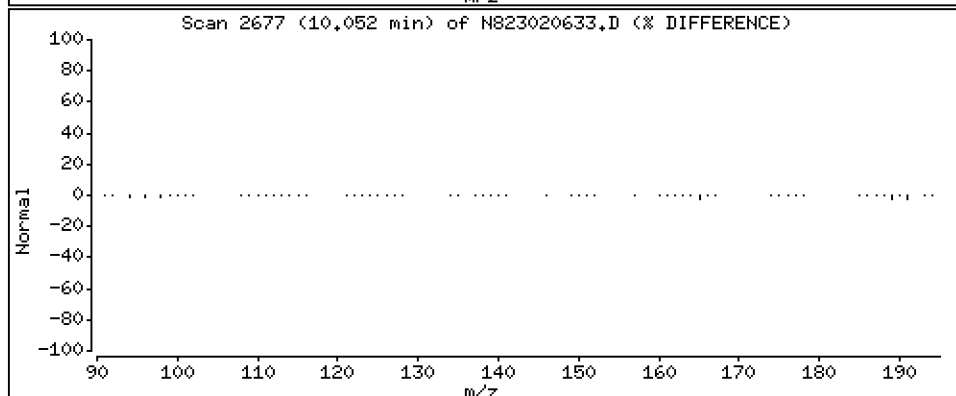
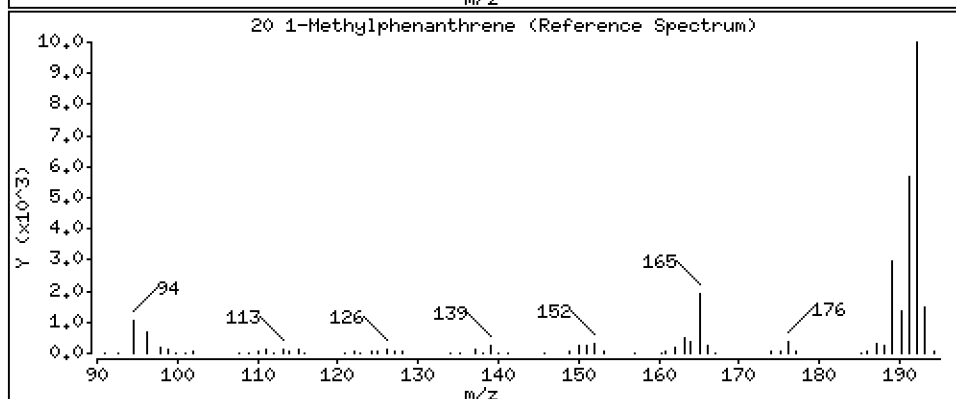
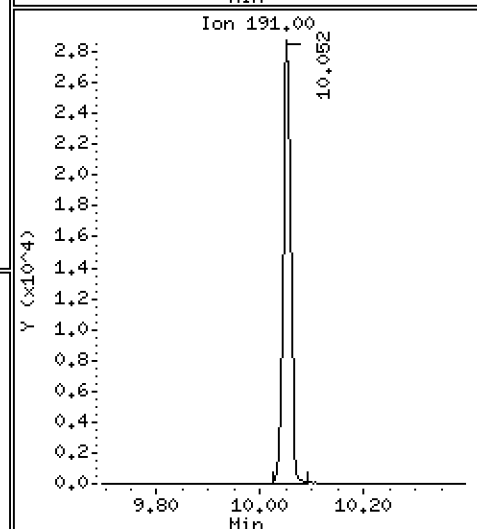
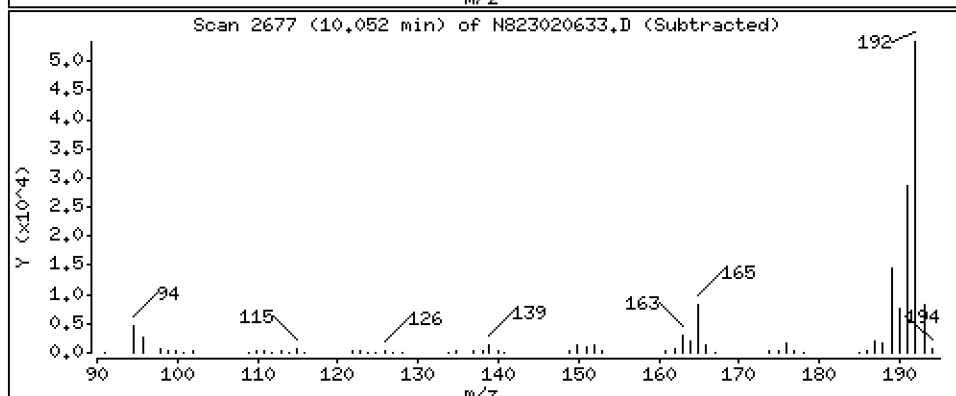
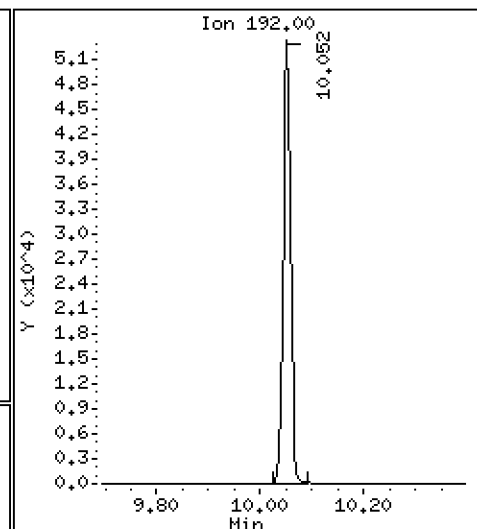
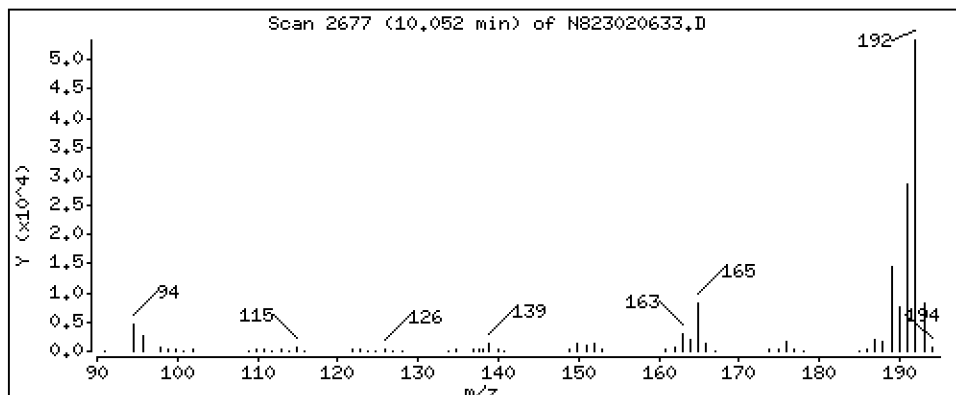
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

20 1-Methylphenanthrene

Concentration: 2,660 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

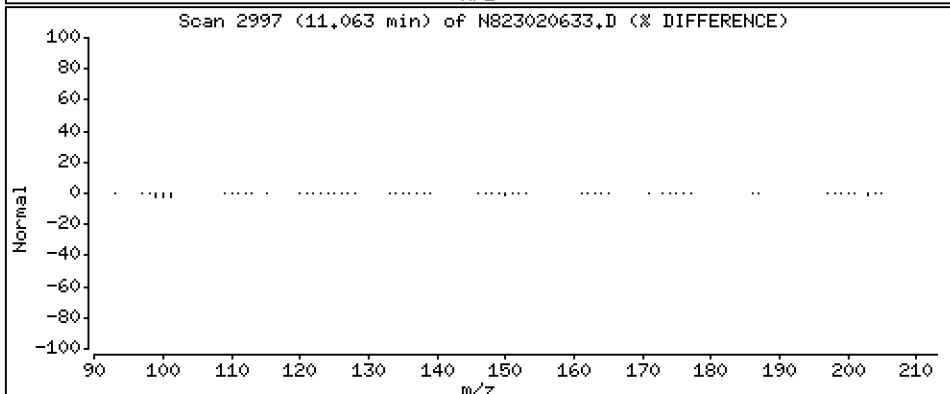
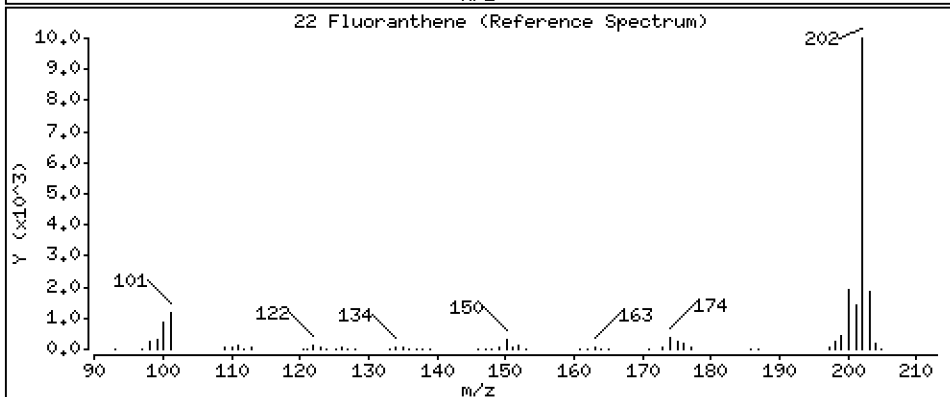
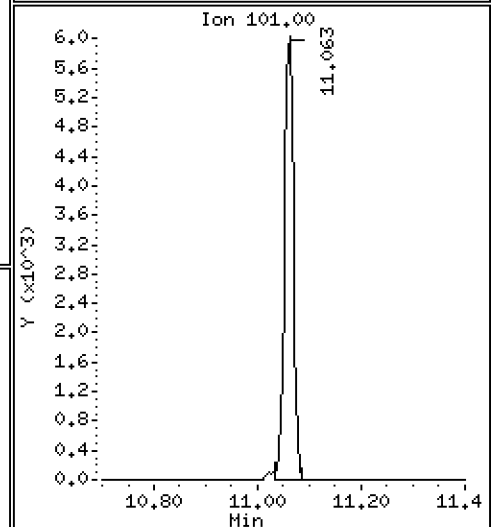
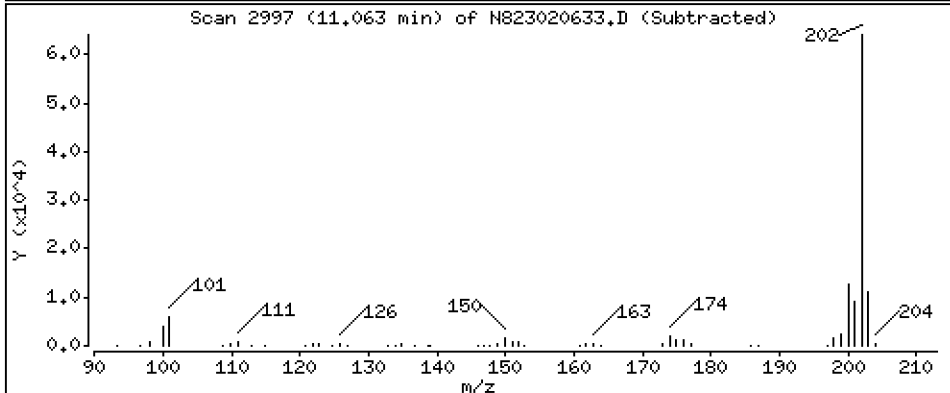
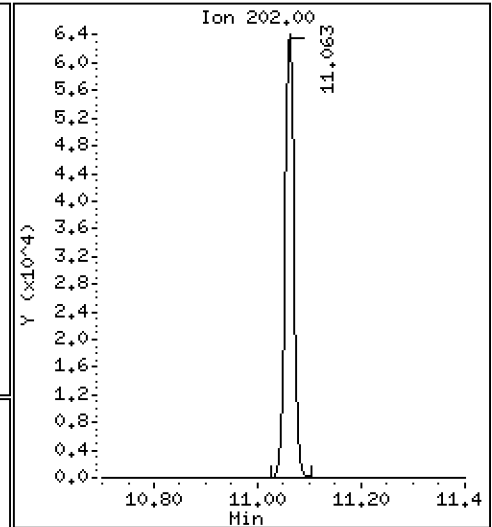
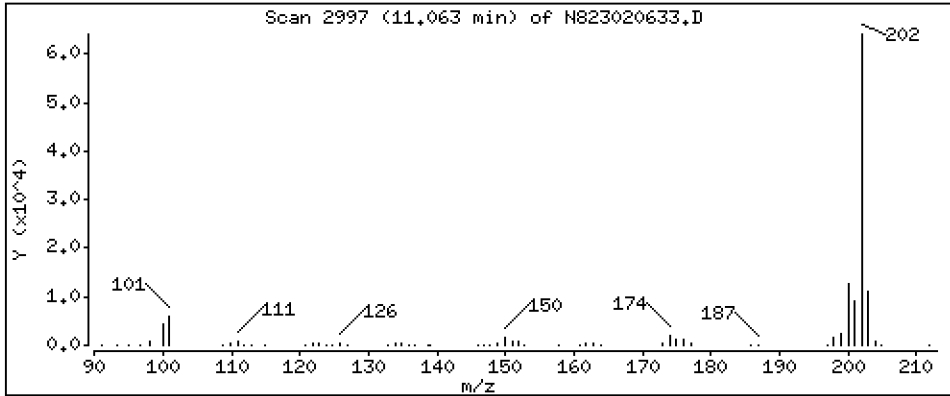
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

22 Fluoranthene

Concentration: 2,561 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

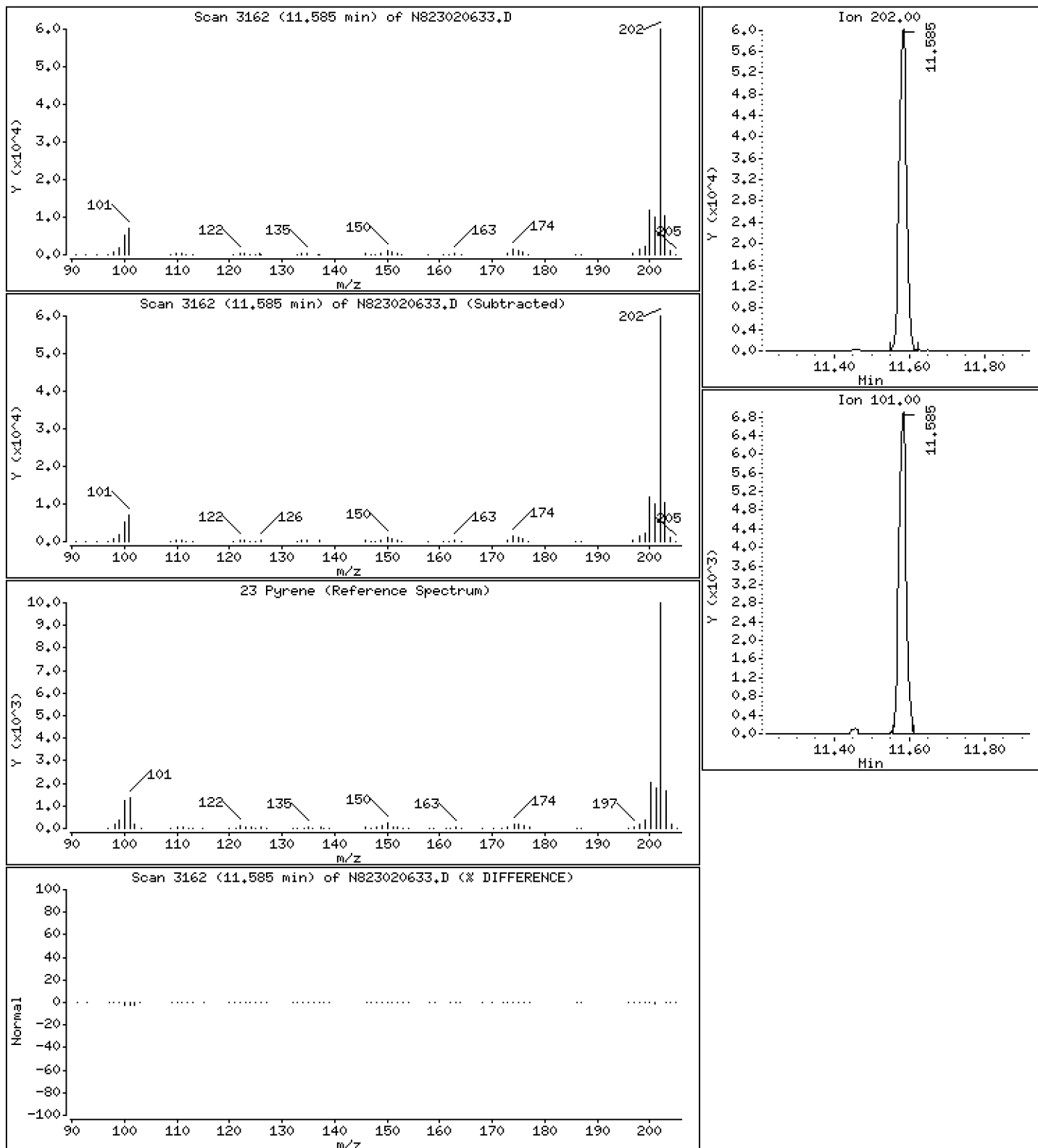
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

23 Pyrene

Concentration: 2,763 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

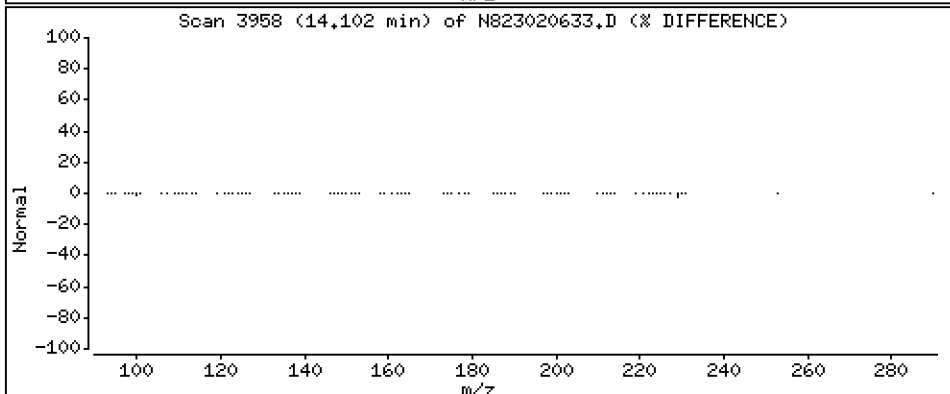
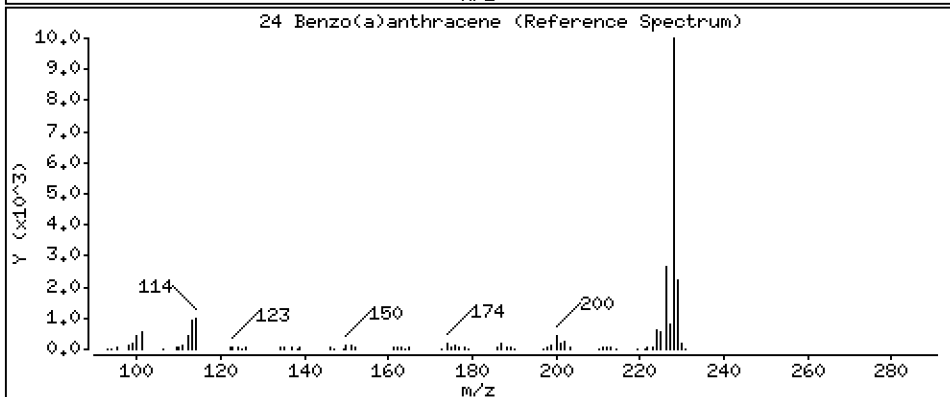
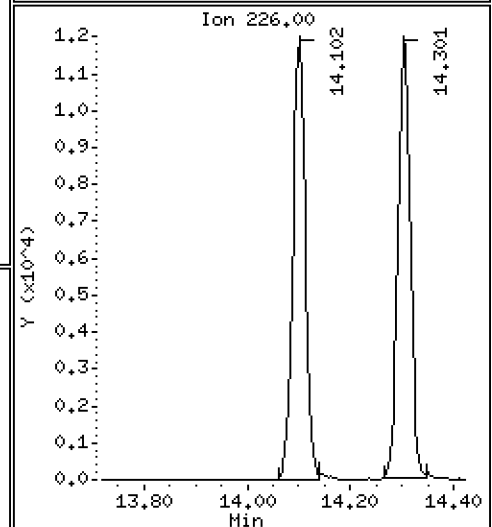
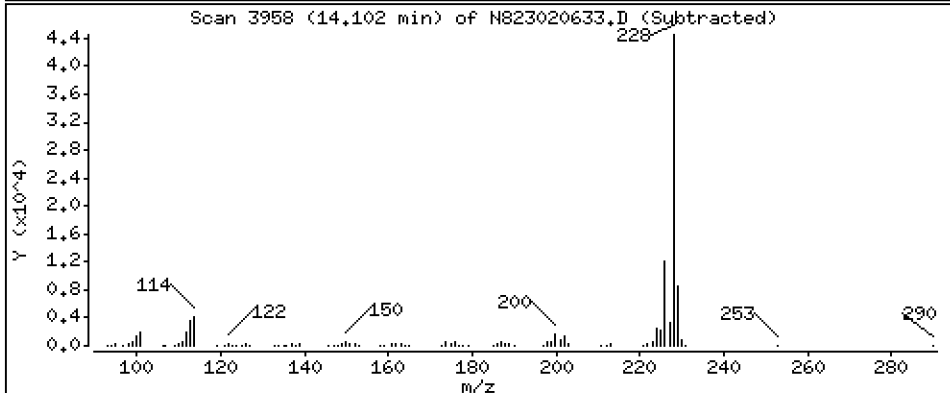
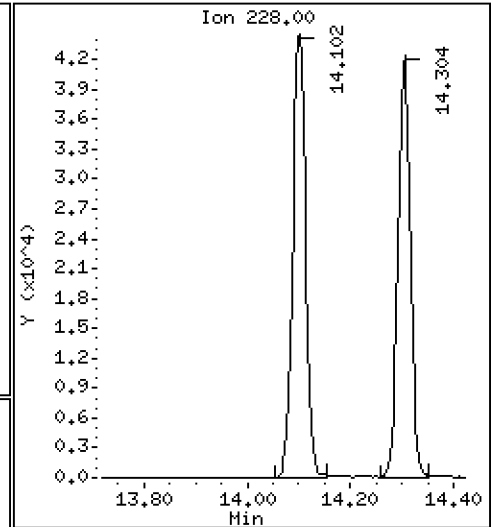
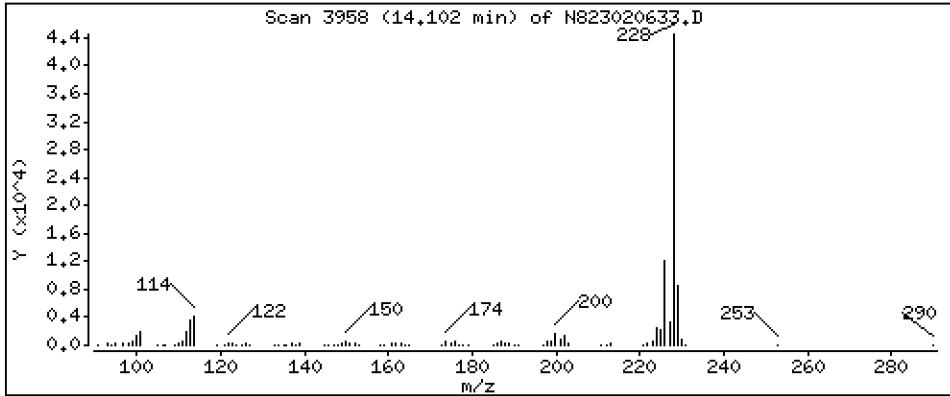
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

24 Benzo(a)anthracene

Concentration: 2,849 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

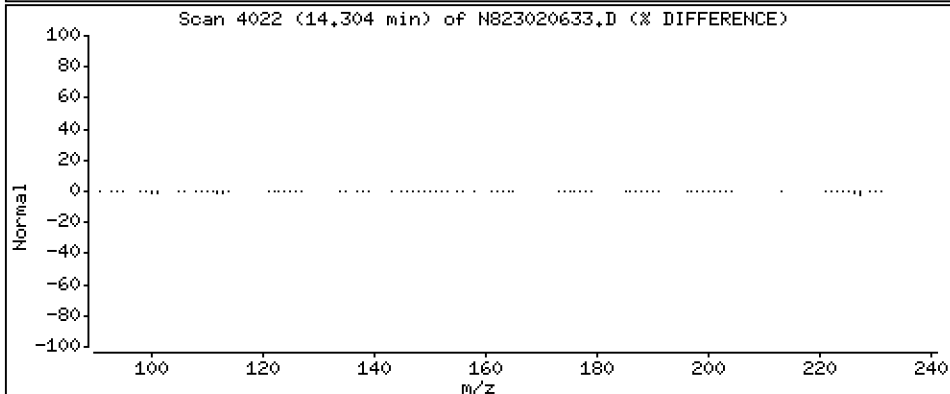
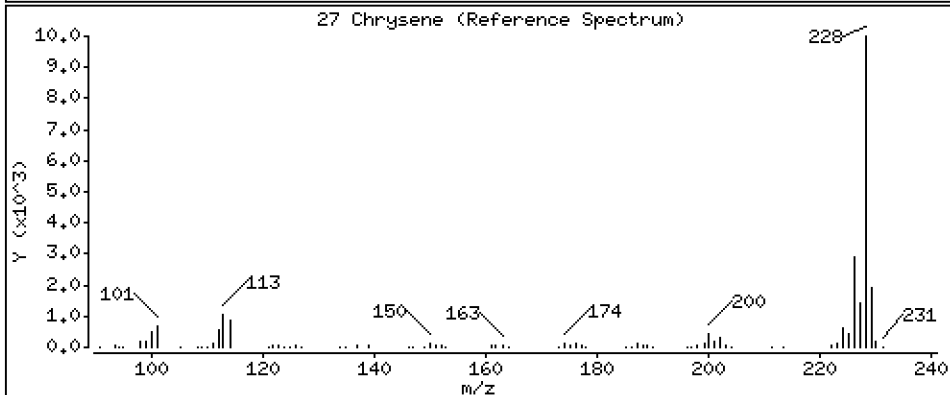
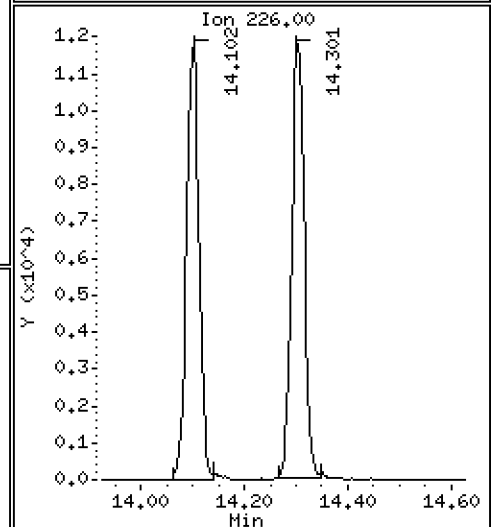
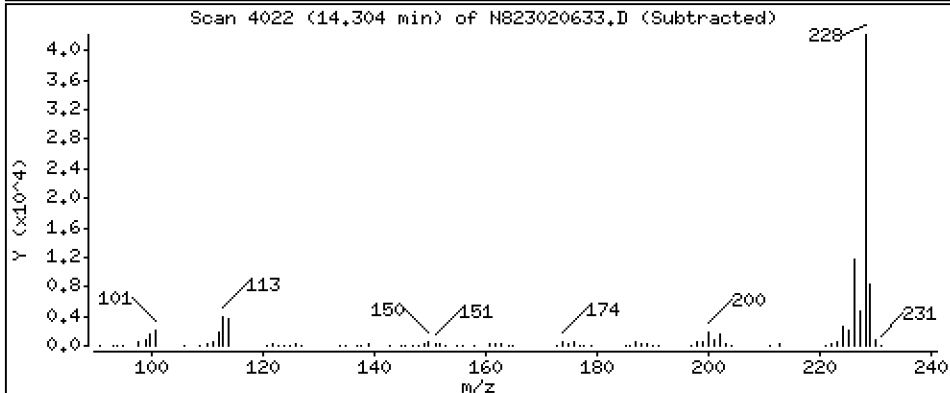
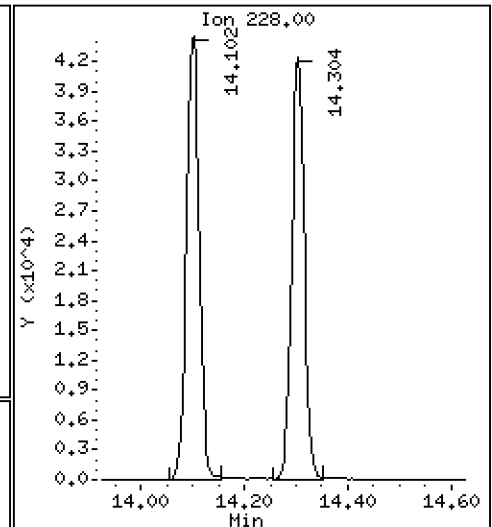
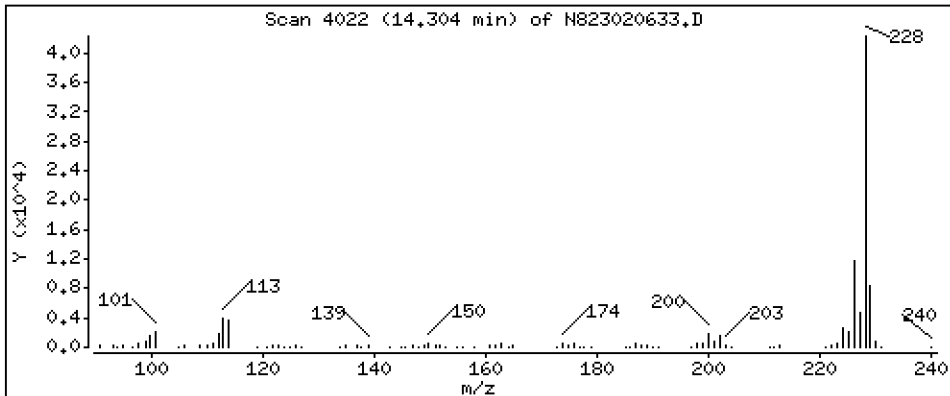
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

27 Chrysene

Concentration: 2,458 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

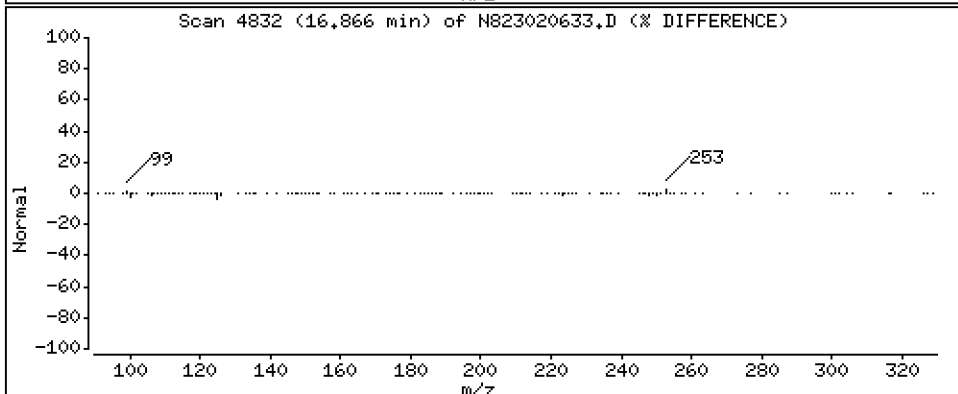
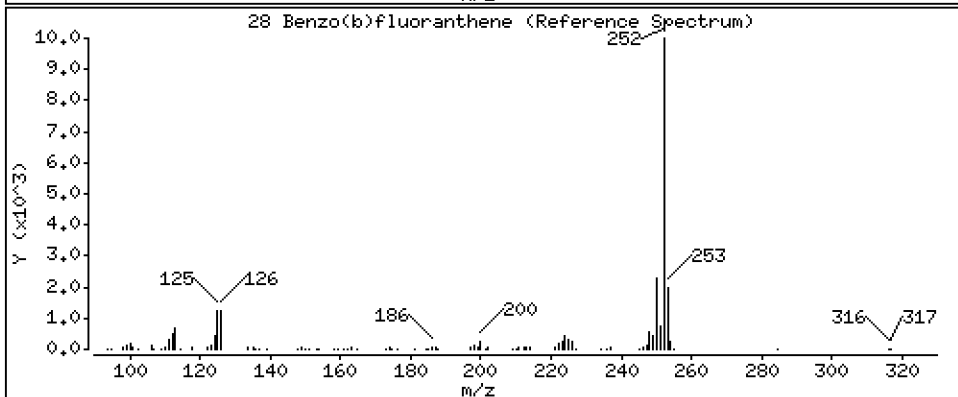
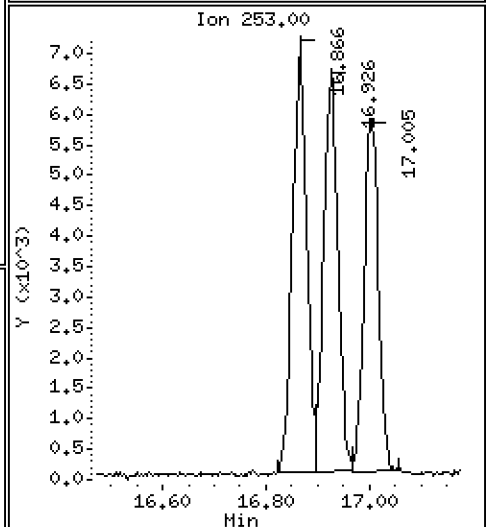
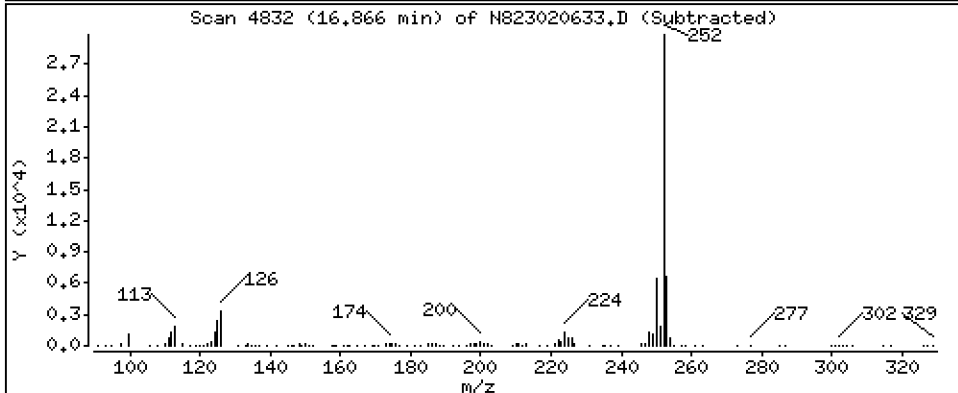
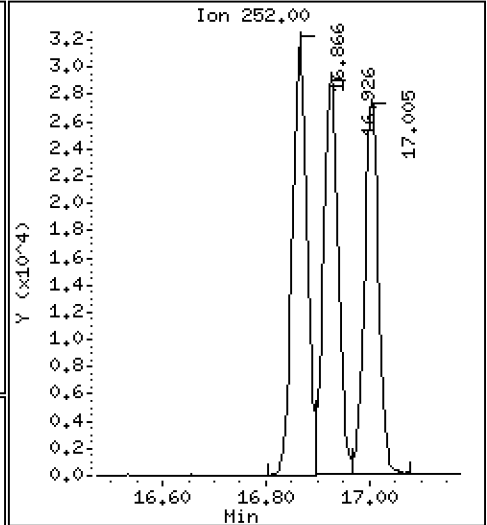
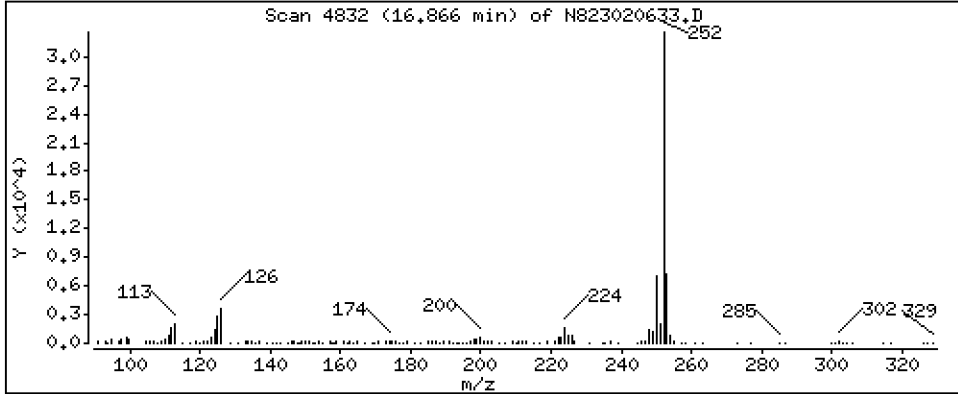
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

28 Benzo(b)fluoranthene

Concentration: 2,927 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

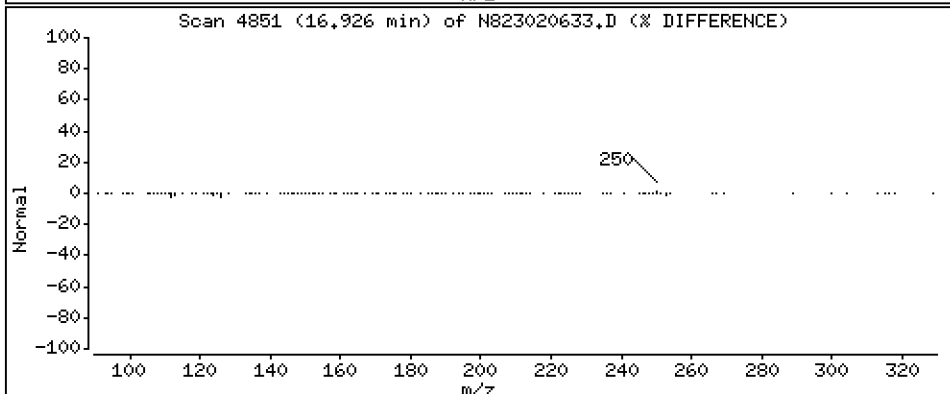
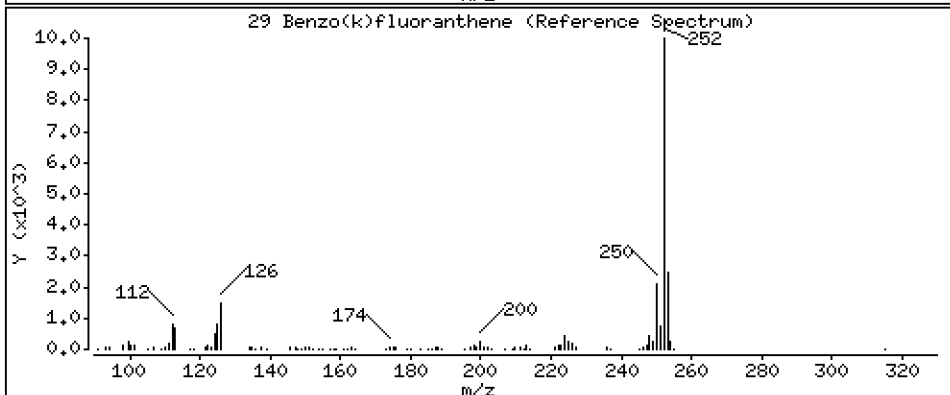
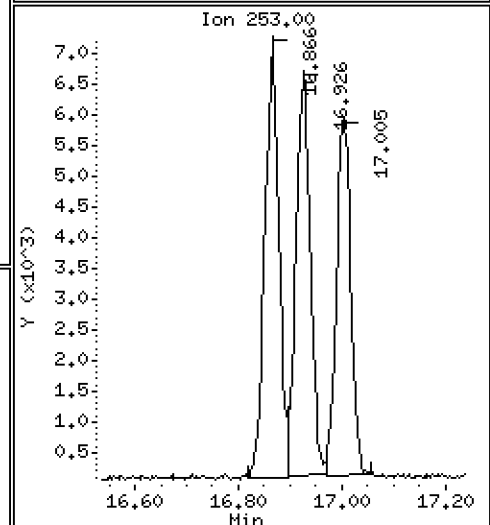
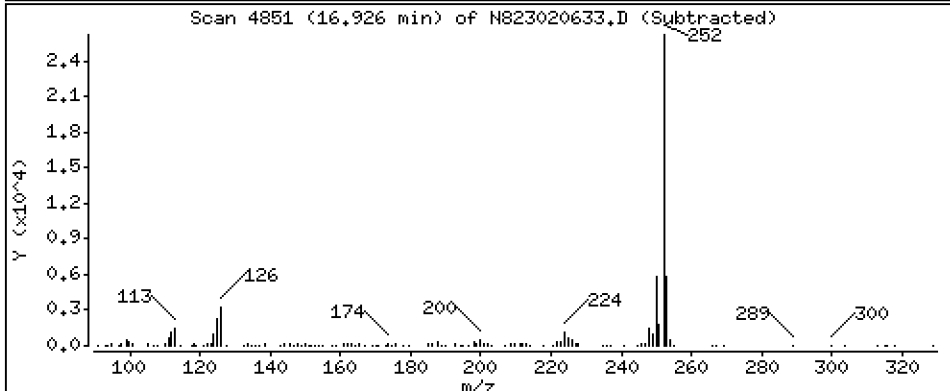
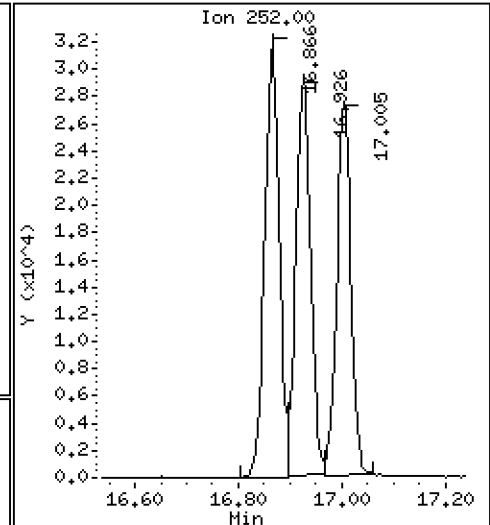
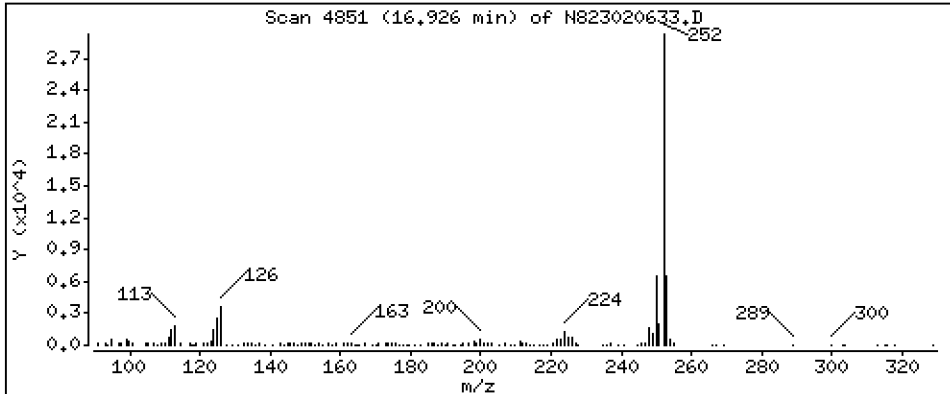
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

29 Benzo(k)fluoranthene

Concentration: 2,722 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

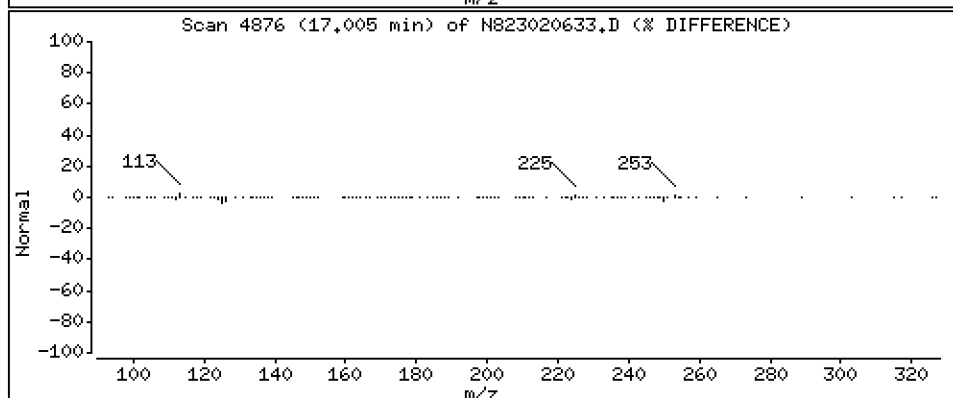
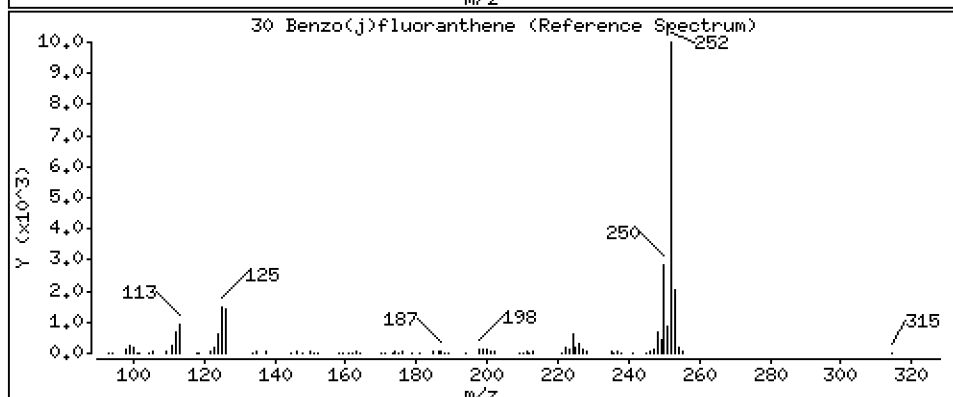
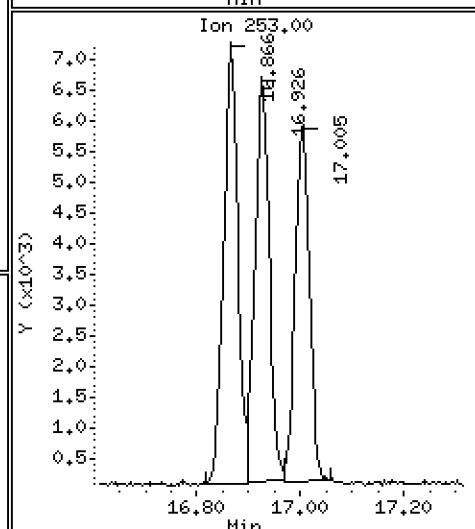
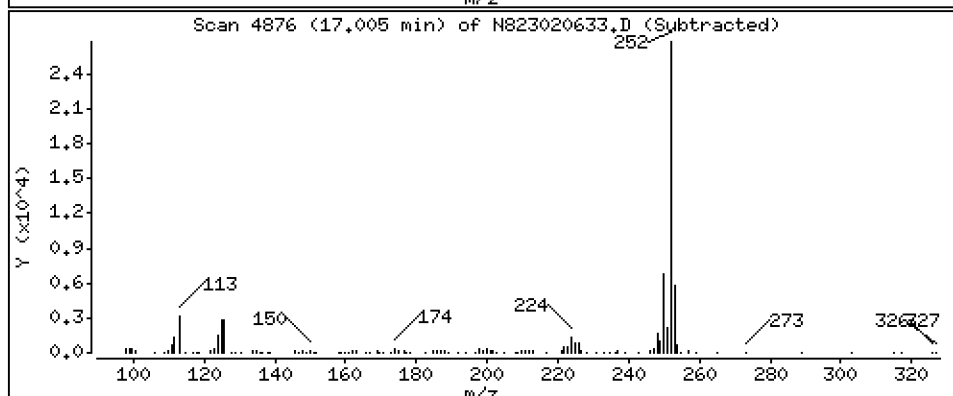
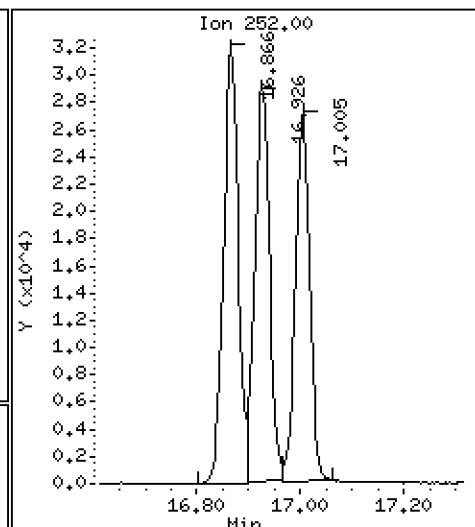
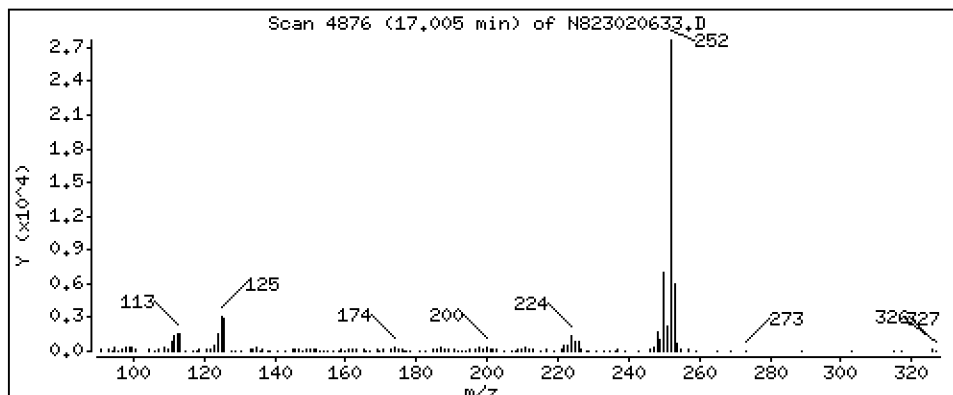
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

30 Benzo(j)fluoranthene

Concentration: 2,719 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

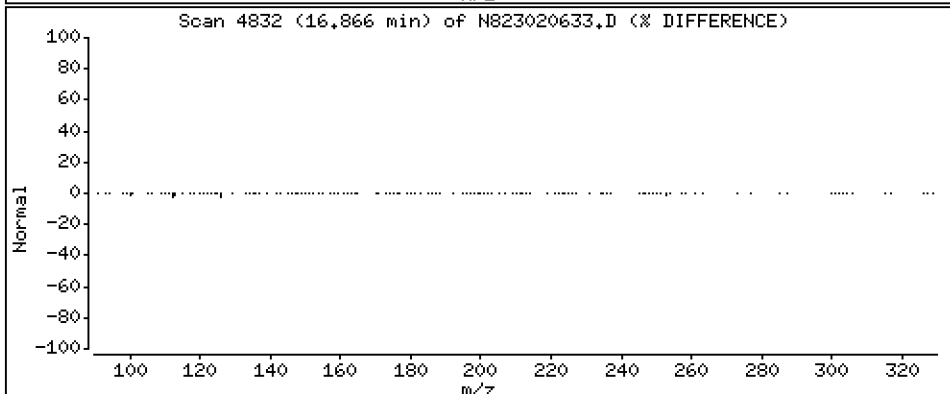
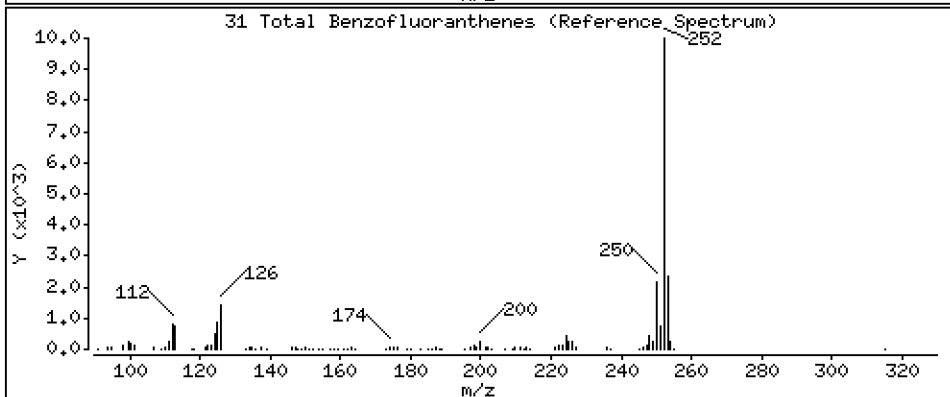
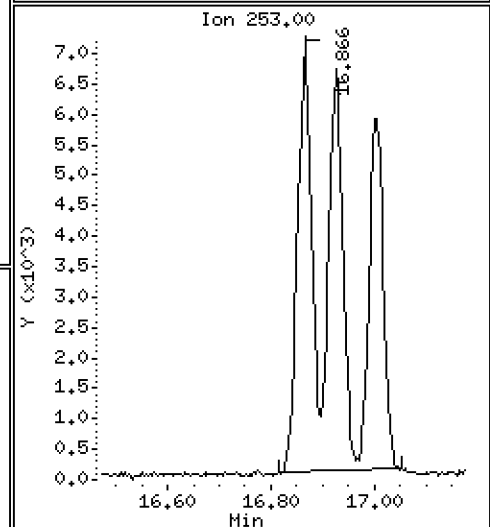
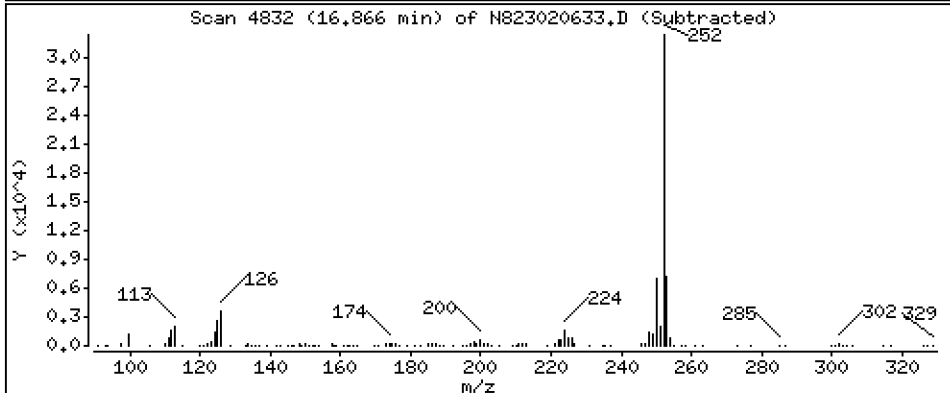
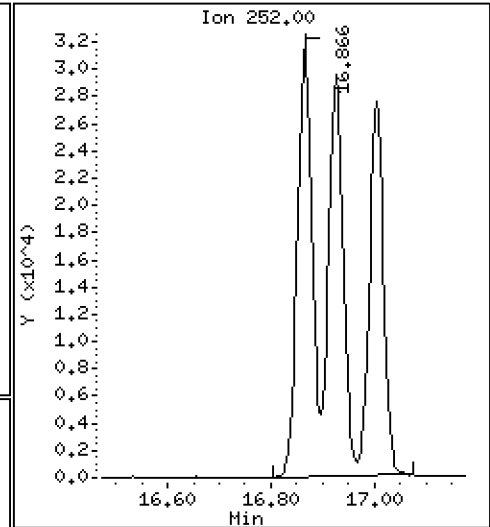
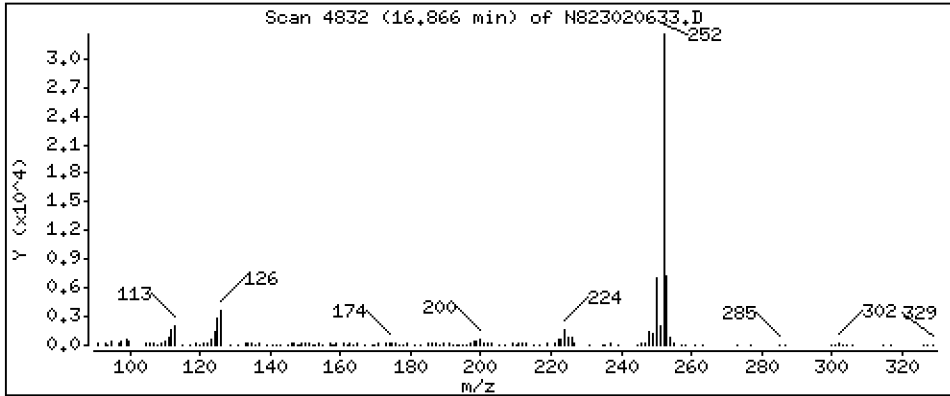
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

31 Total Benzofluoranthenes

Concentration: 8,381 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

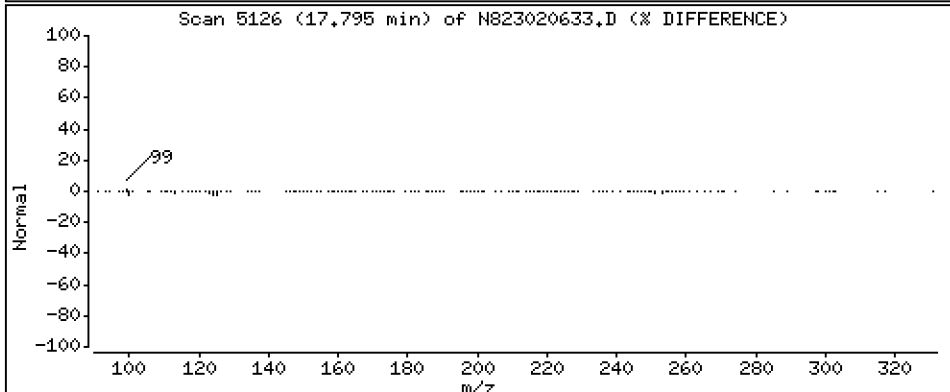
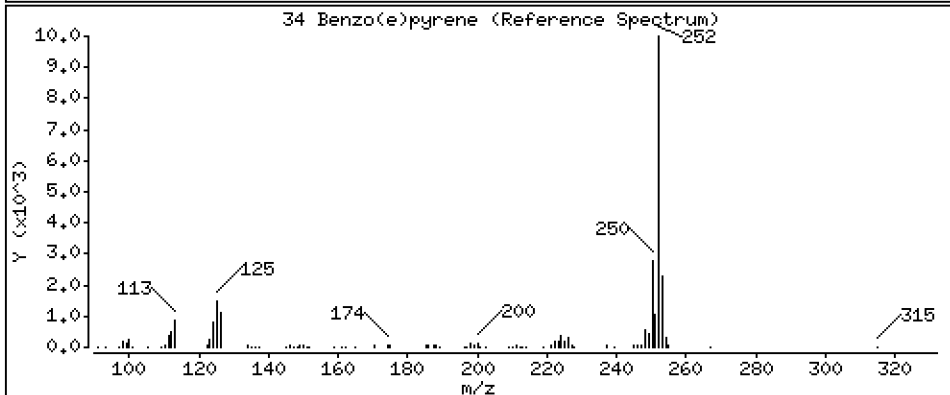
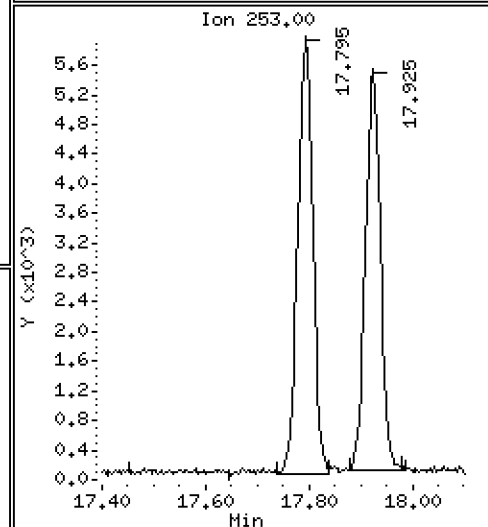
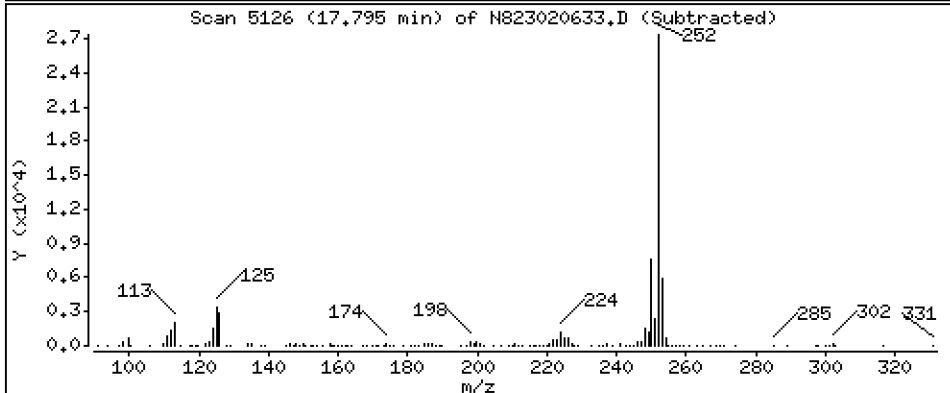
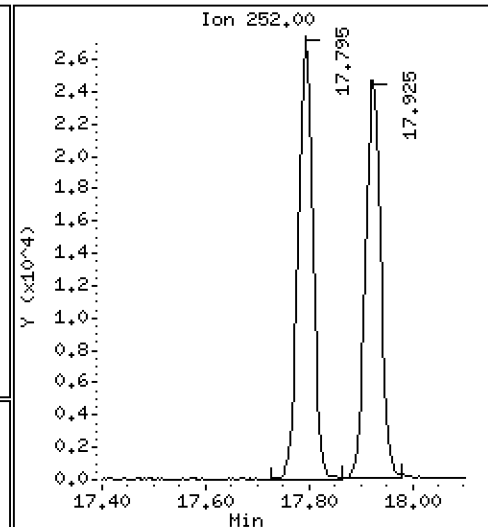
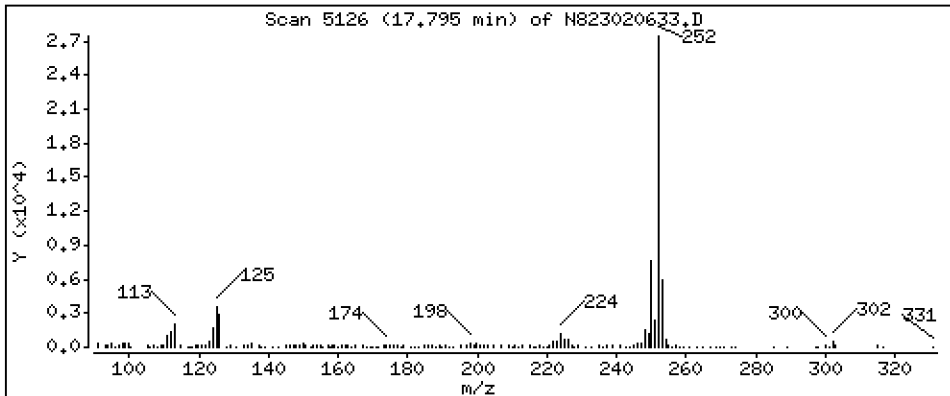
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

34 Benzo(e)pyrene

Concentration: 2,516 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

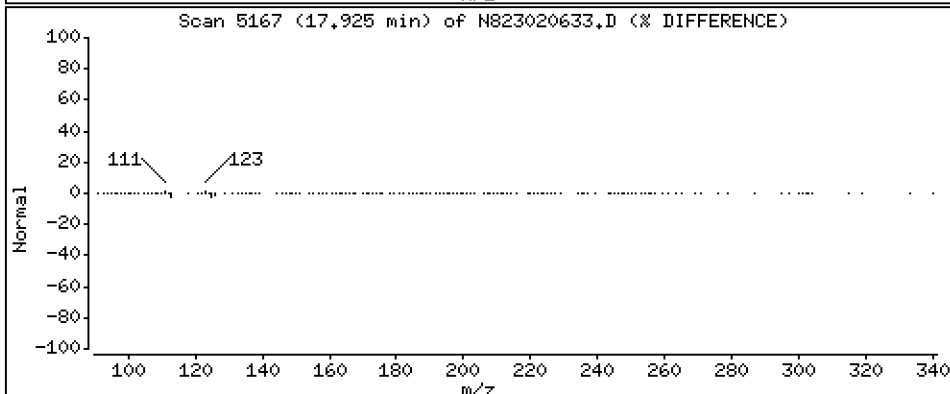
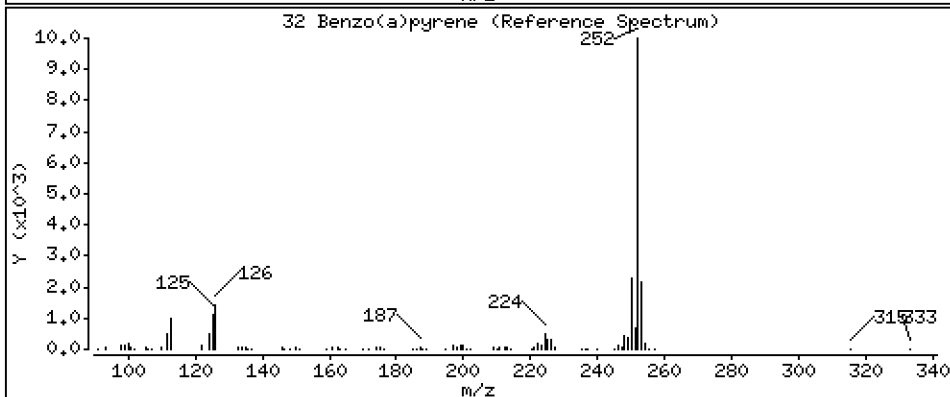
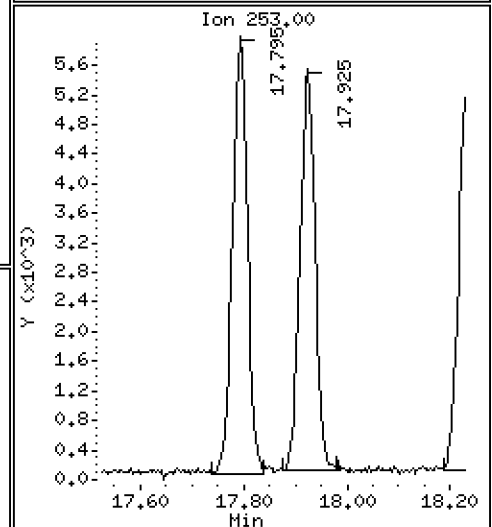
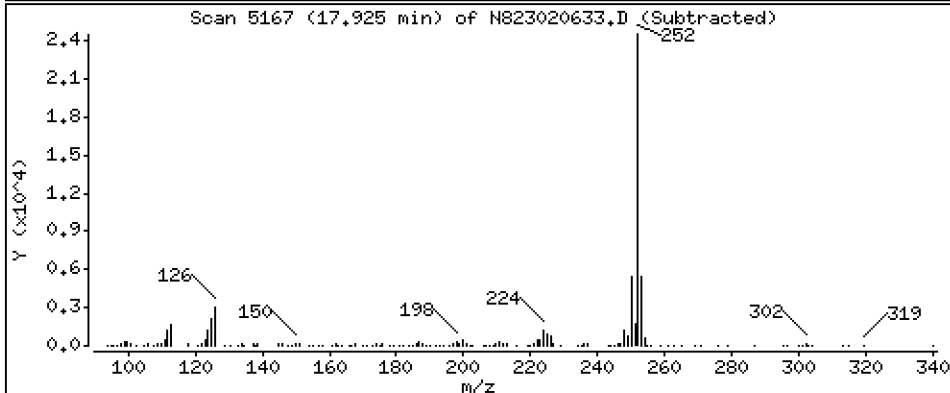
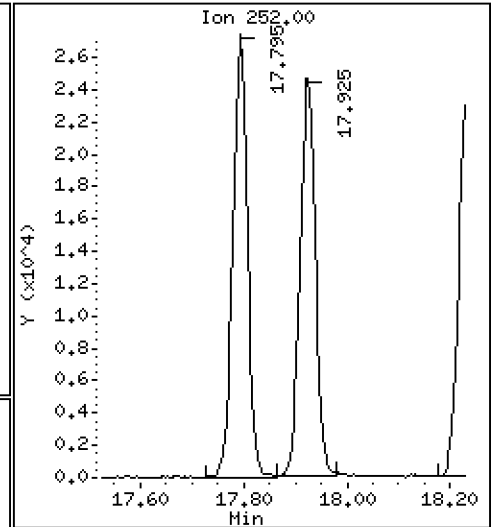
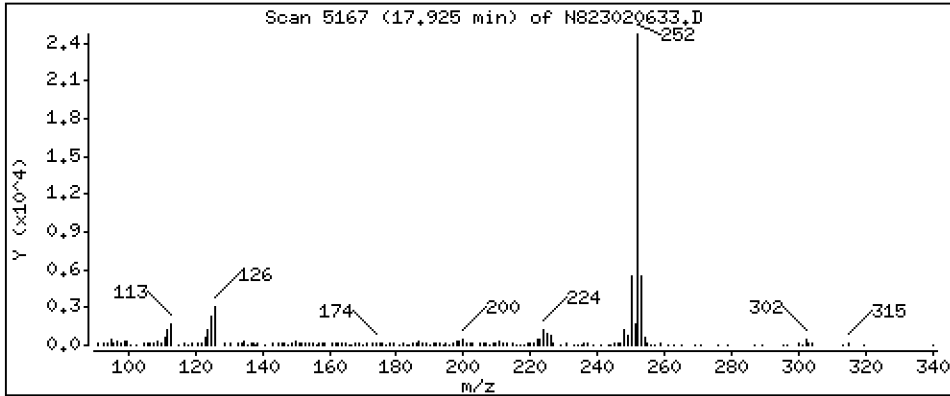
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

32 Benzo(a)pyrene

Concentration: 2,654 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

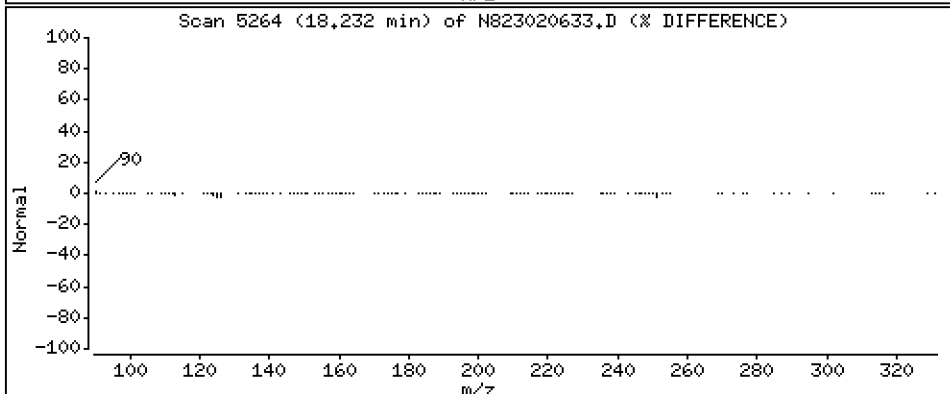
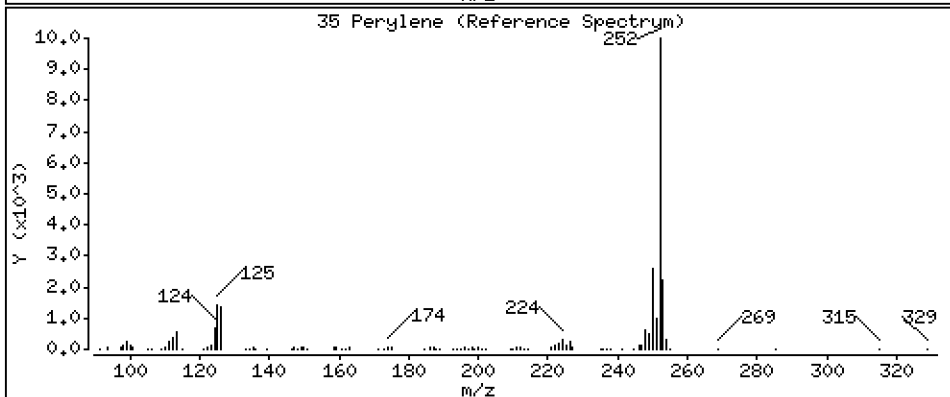
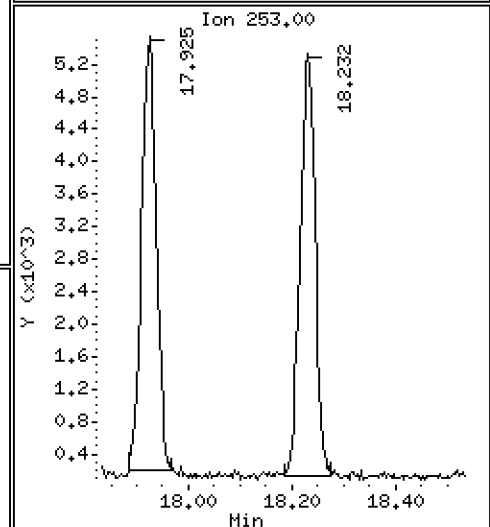
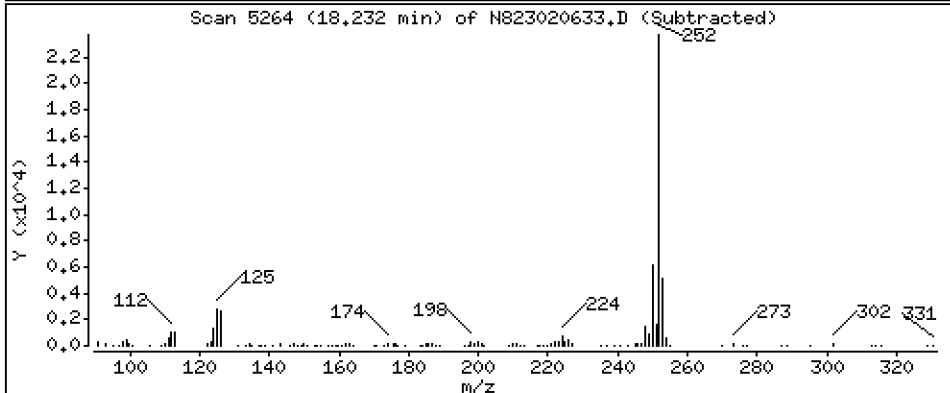
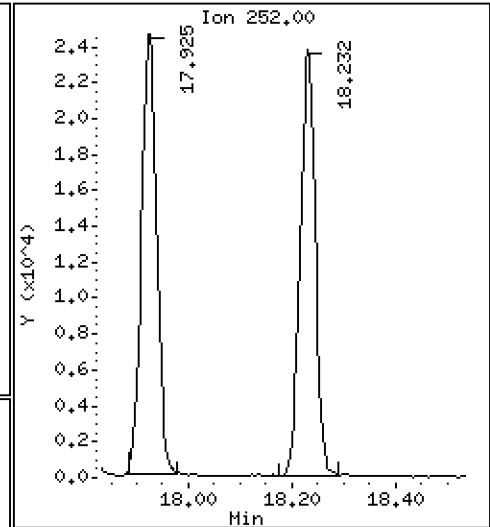
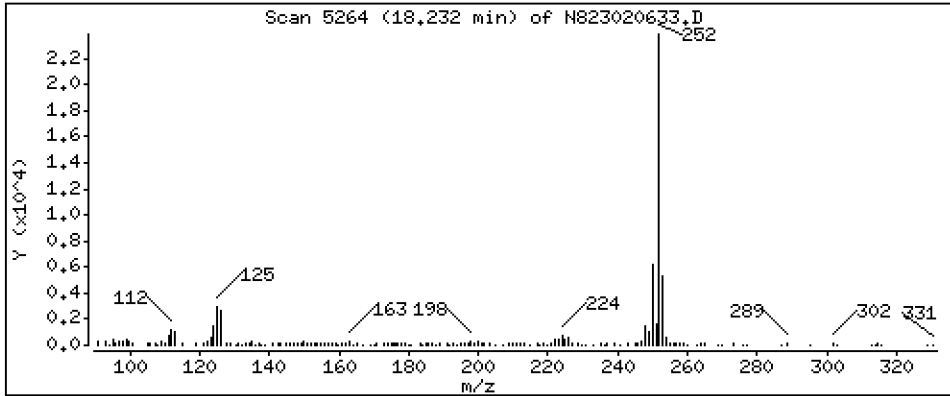
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

35 Perylene

Concentration: 2,357 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

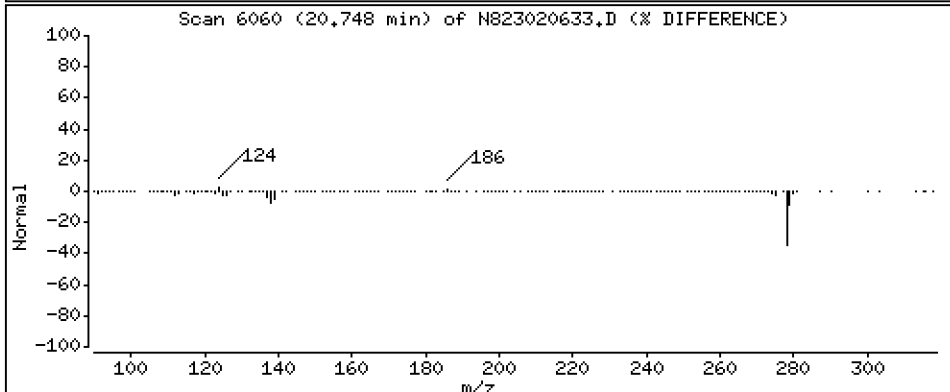
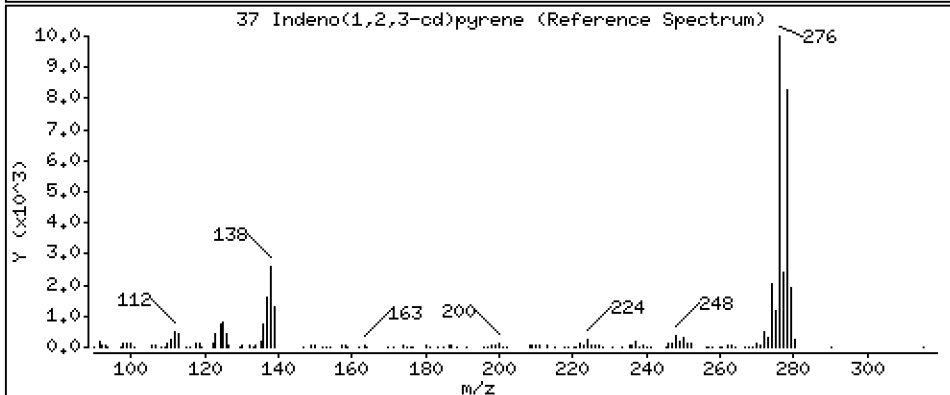
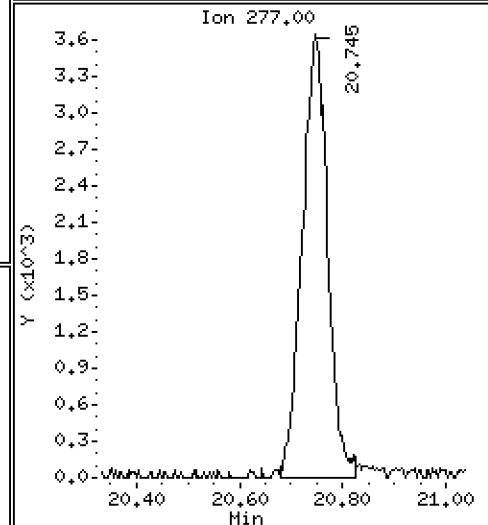
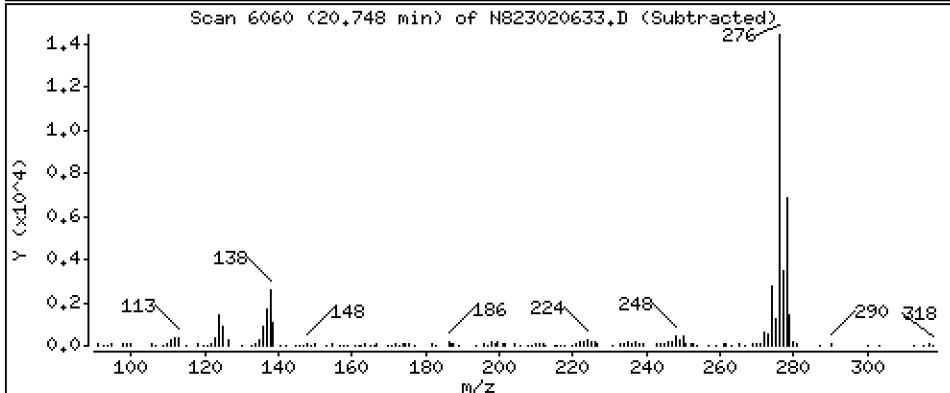
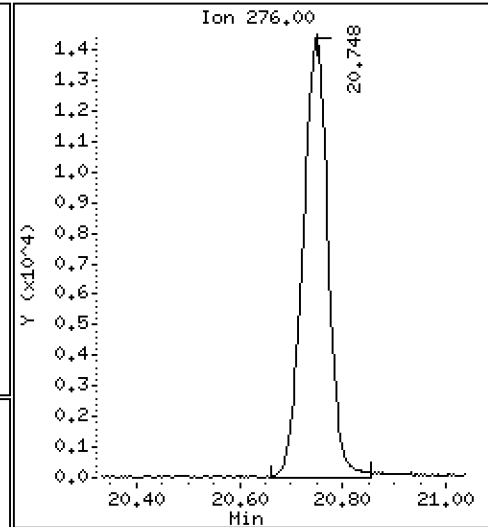
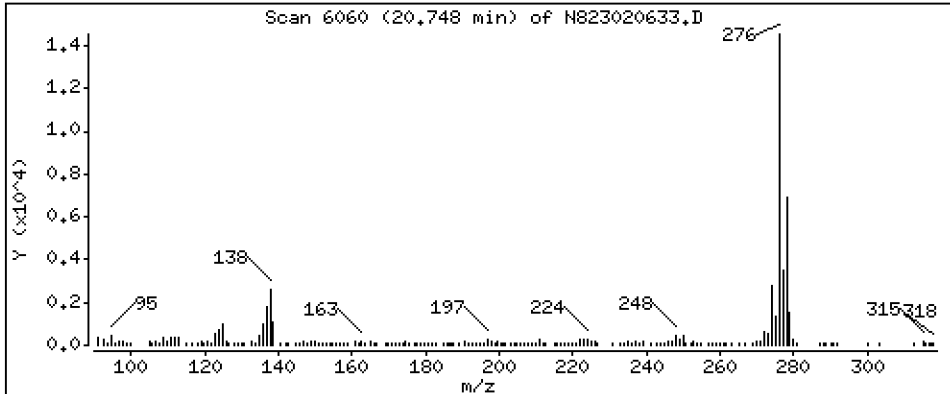
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

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

Concentration: 2,256 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

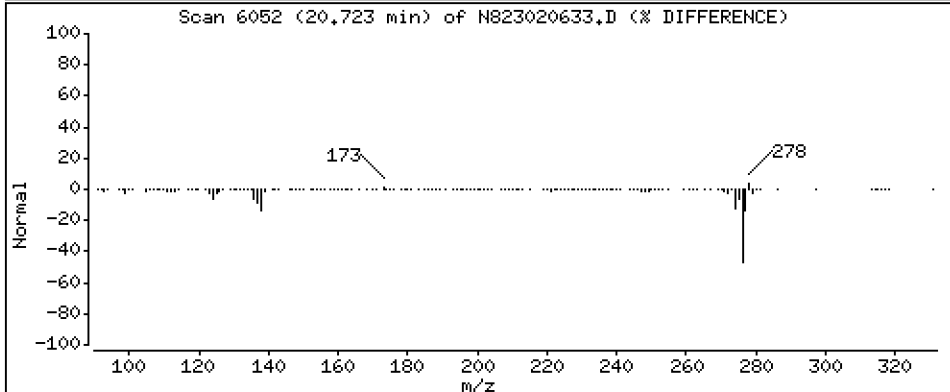
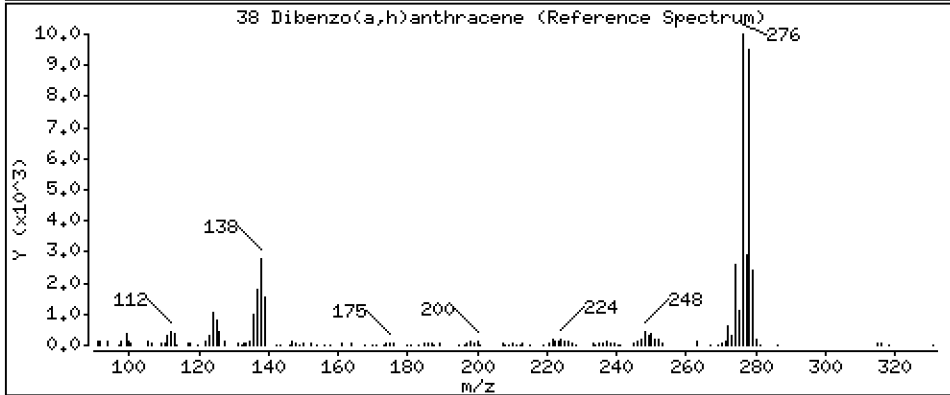
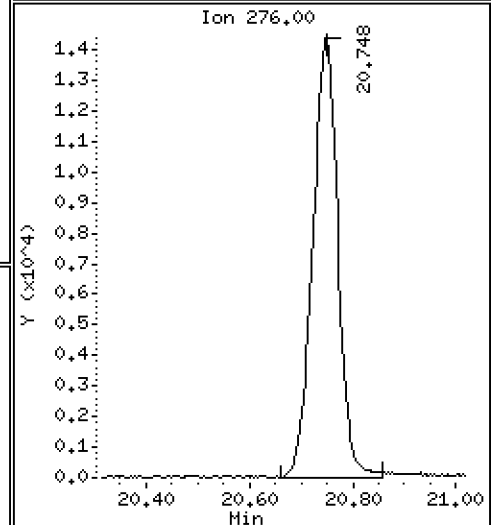
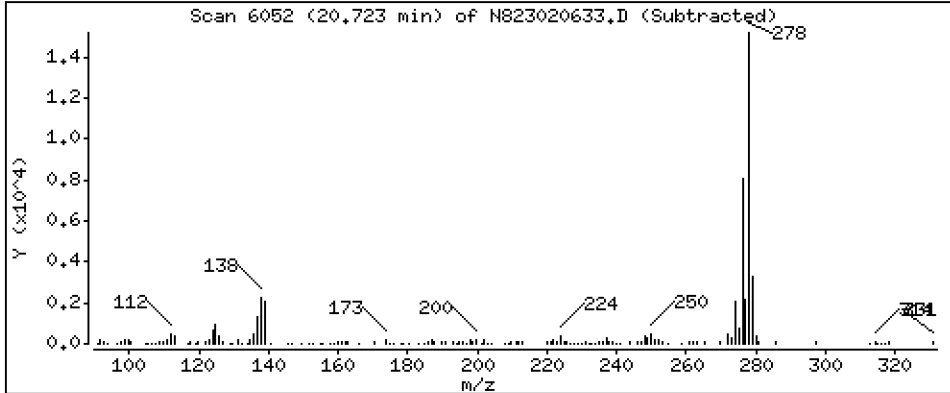
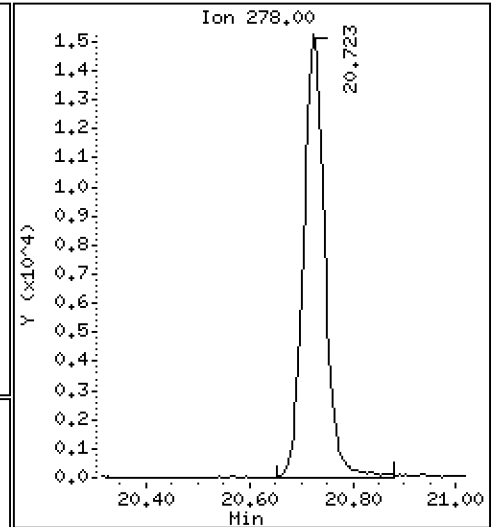
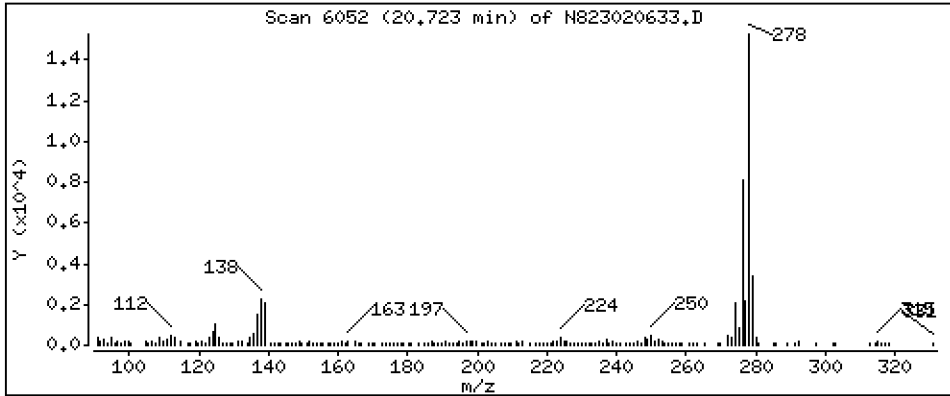
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

38 Dibenzo(a,h)anthracene

Concentration: 2,351 ug/mL



Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

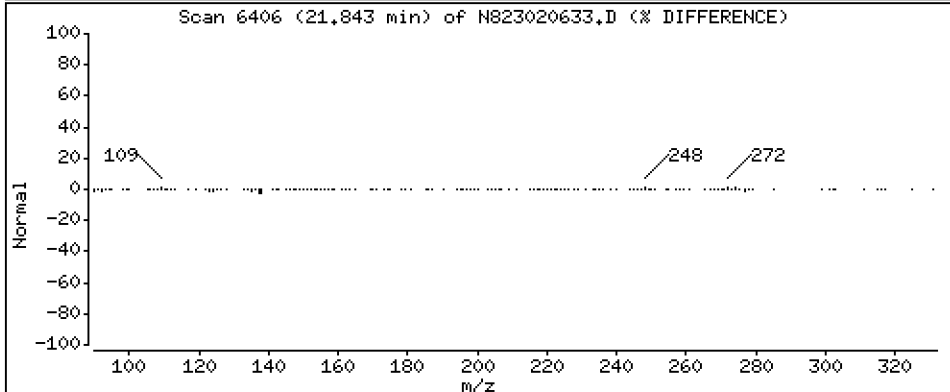
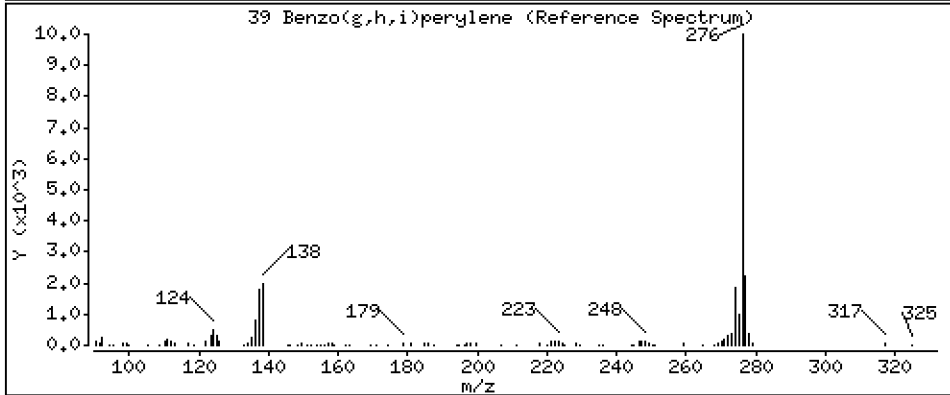
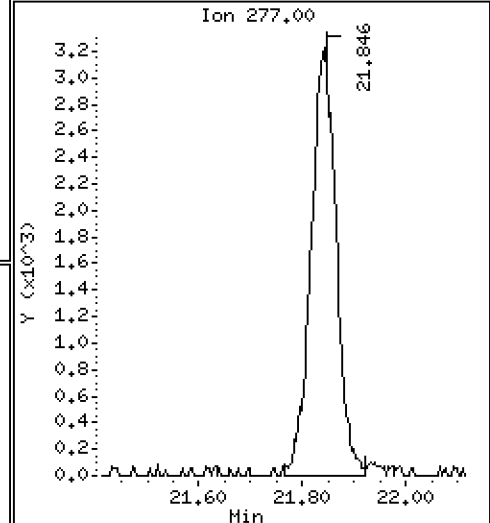
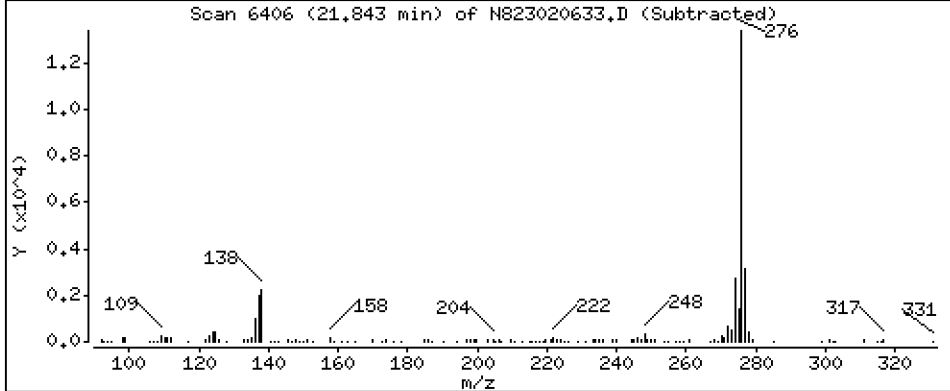
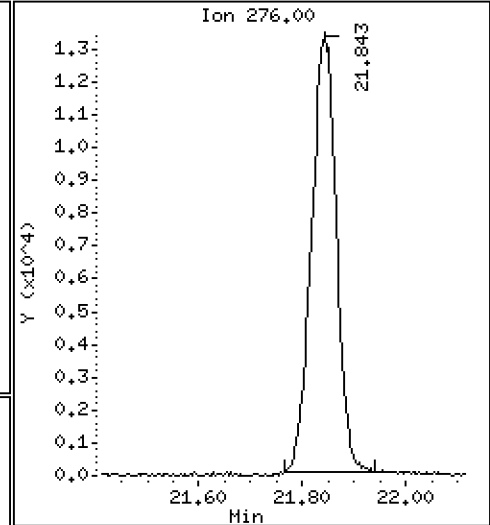
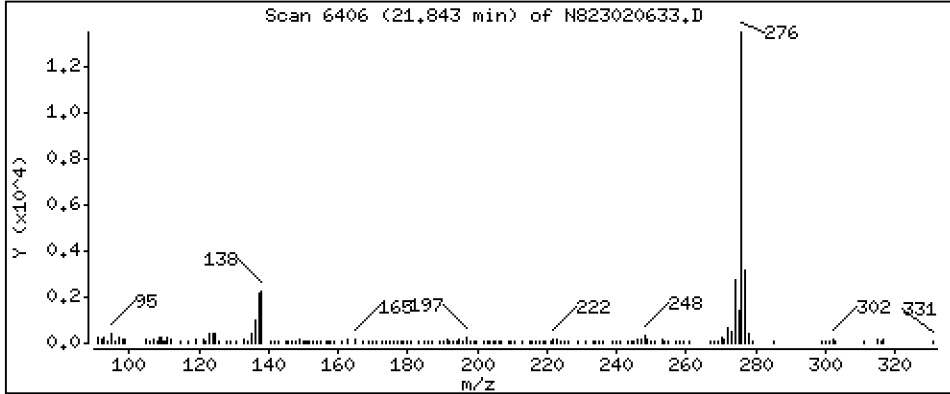
Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0,25

39 Benzo(g,h,i)perylene

Concentration: 2,282 ug/mL



ARI Labs, Inc.

Semivolatle Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020633.D
 Lab Smp Id: SLB0075-CCV1
 Inj Date : 07-FEB-2023 03:09
 Operator : JZ Inst ID: nt8.i
 Smp Info : CCV230206A
 Misc Info : 23-
 Comment : lul Injection
 Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
 Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
 Als bottle: 33
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
 Target Version: 4.14
 Processing Host: JIANQING-202105

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
* 1 Naphthalene-d8	136		4.891	4.900	(1.000)	52897	2.00000	
2 Naphthalene	128		4.922	4.928	(1.006)	63361	2.57618	2.576
§ 3 2-Methylnaphthalene-d10	152		5.627	5.634	(1.151)	38863	2.69389	2.694
4 2-Methylnaphthalene	141		5.675	5.681	(1.160)	35322	2.61093	2.611
5 1-methylnaphthalene	141		5.874	5.880	(1.201)	35734	2.60257	2.603
7 Biphenyl	154		6.336	6.339	(0.882)	52884	2.53205	2.532
8 2,6-Dimethylnaphthalene	156		6.380	6.386	(0.888)	39449	2.66873	2.669
9 Acenaphthylene	152		7.079	7.082	(0.985)	65531	2.74112	2.741
* 10 Acenaphthene-d10	164		7.186	7.189	(1.000)	31659	2.00000	
11 Acenaphthene	153		7.237	7.240	(1.007)	40761	2.54468	2.545
12 Dibenzofuran	168		7.392	7.392	(1.029)	60656	2.49311	2.493
13 1,6,7-Trimethylnaphthalene	170		7.455	7.455	(1.037)	40805	2.65970	2.660
14 Fluorene	166		7.869	7.869	(1.095)	49570	2.62330	2.623
18 Dibenzothiophene	184		9.109	9.105	(0.986)	66534	2.60645	2.606
* 15 Phenanthrene-d10	188		9.235	9.232	(1.000)	57767	2.00000	
16 Phenanthrene	178		9.270	9.267	(1.004)	69258	2.45440	2.454
17 Anthracene	178		9.311	9.308	(1.008)	67531	2.63443	2.634
19 Carbazole	167		9.830	9.823	(1.064)	59552	2.53414	2.534
20 1-Methylphenanthrene	192		10.051	10.044	(1.088)	54096	2.66030	2.660
22 Fluoranthene	202		11.063	11.050	(1.198)	78660	2.56093	2.561
§ 21 Fluoranthene-d10	212		11.025	11.009	(1.194)	69671	2.73363	2.734
23 Pyrene	202		11.585	11.569	(0.814)	82339	2.76298	2.763
24 Benzo(a)anthracene	228		14.102	14.070	(0.991)	76950	2.84885	2.849
* 25 Chrysene-d12	240		14.228	14.202	(1.000)	48067	2.00000	
27 Chrysene	228		14.304	14.275	(1.005)	70690	2.45840	2.458
28 Benzo(b)fluoranthene	252		16.865	16.824	(0.929)	63427	2.92669	2.927
29 Benzo(k)fluoranthene	252		16.925	16.887	(0.932)	57781	2.72196	2.722
30 Benzo(j)fluoranthene	252		17.004	16.963	(0.937)	51952	2.71859	2.719
31 Total Benzofluoranthenes	252		16.865	16.824	(0.929)	172015	8.38100	8.381 (M)
34 Benzo(e)pyrene	252		17.795	17.750	(0.980)	54383	2.51644	2.516
32 Benzo(a)pyrene	252		17.924	17.877	(0.987)	50609	2.65370	2.654
* 33 Perylene-d12	264		18.155	18.107	(1.000)	37211	2.00000	
35 Perylene	252		18.231	18.183	(1.004)	48227	2.35653	2.357

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/mL)
\$ 36 Dibenzo(a,h)anthracene-d14	292	20.609	20.549	(1.135)	32062	2.19903	2.199
37 Indeno(1,2,3-cd)pyrene	276	20.748	20.684	(1.143)	49006	2.25558	2.256
38 Dibenzo(a,h)anthracene	278	20.723	20.666	(1.141)	43963	2.35128	2.351
39 Benzo(g,h,i)perylene	276	21.842	21.763	(1.203)	44913	2.28160	2.282

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt8.i Calibration Date: 06-FEB-2023
 Lab File ID: N823020633.D Calibration Time: 15:15
 Lab Smp Id: SLB0075-CCV1
 Analysis Type: SV Level:
 Quant Type: ISTD Sample Type:
 Operator: JZ
 Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
 Misc Info: 23-

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	44336	22168	88672	52897	19.31
10 Acenaphthene-d10	26127	13064	52254	31659	21.17
15 Phenanthrene-d10	47424	23712	94848	57767	21.81
25 Chrysene-d12	36794	18397	73588	48067	30.64
33 Perylene-d12	36636	18318	73272	37211	1.57

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Naphthalene-d8	4.90	4.40	5.40	4.89	-0.19
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	-0.04
15 Phenanthrene-d10	9.23	8.73	9.73	9.24	0.04
25 Chrysene-d12	14.20	13.70	14.70	14.23	0.18
33 Perylene-d12	18.11	17.61	18.61	18.16	0.26

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

REVIEW SUMMARY FOR FILE - N823020633.D

Lab ID: SLB0075-CCV1

nt8.i, 20230206A.b\FSIMPNA230119.m, 07-FEB-2023 03:09

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check performed

On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

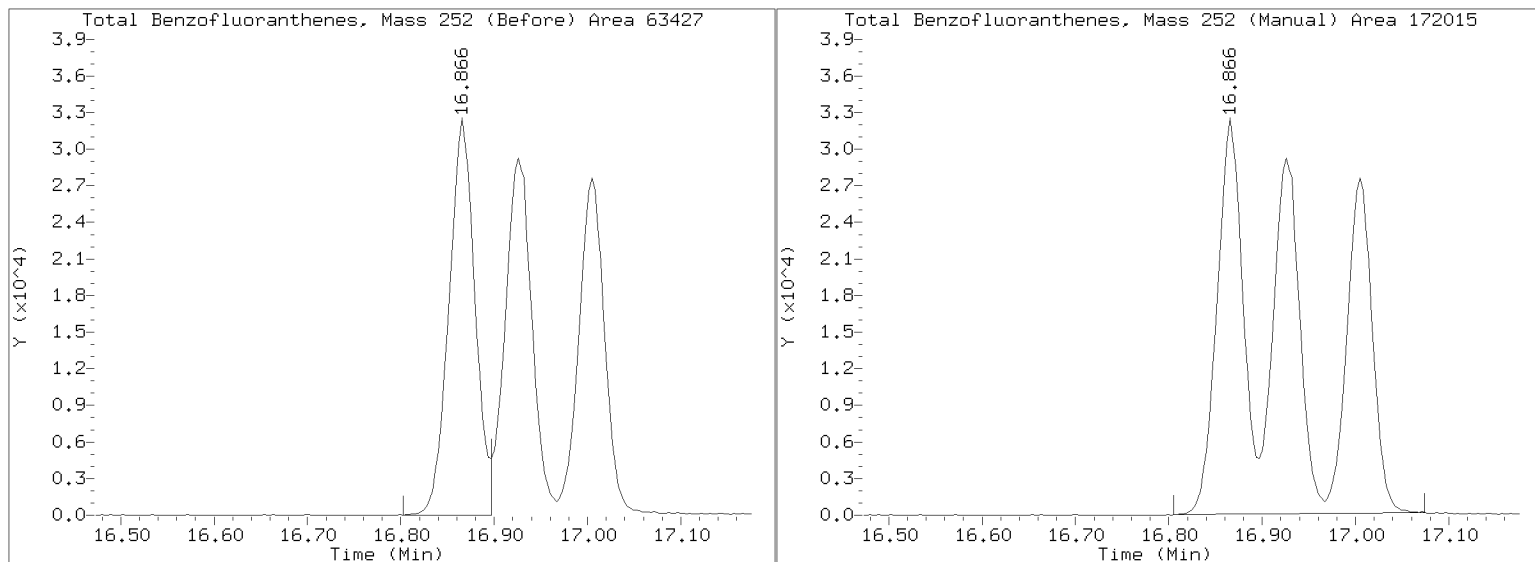
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020633.D

Injection Date: 07-FEB-2023 03:09

Lab ID:SLB0075-CCV1 Client ID:

Report Date: 02/07/2023 19:38





**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003012311S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0143</u>	Injection Date:	<u>03/01/23</u>
Lab Sample ID:	<u>SLC0143-SCV1</u>	Injection Time:	<u>21:46</u>
Sequence Name:	<u>SCV 5.0</u>		

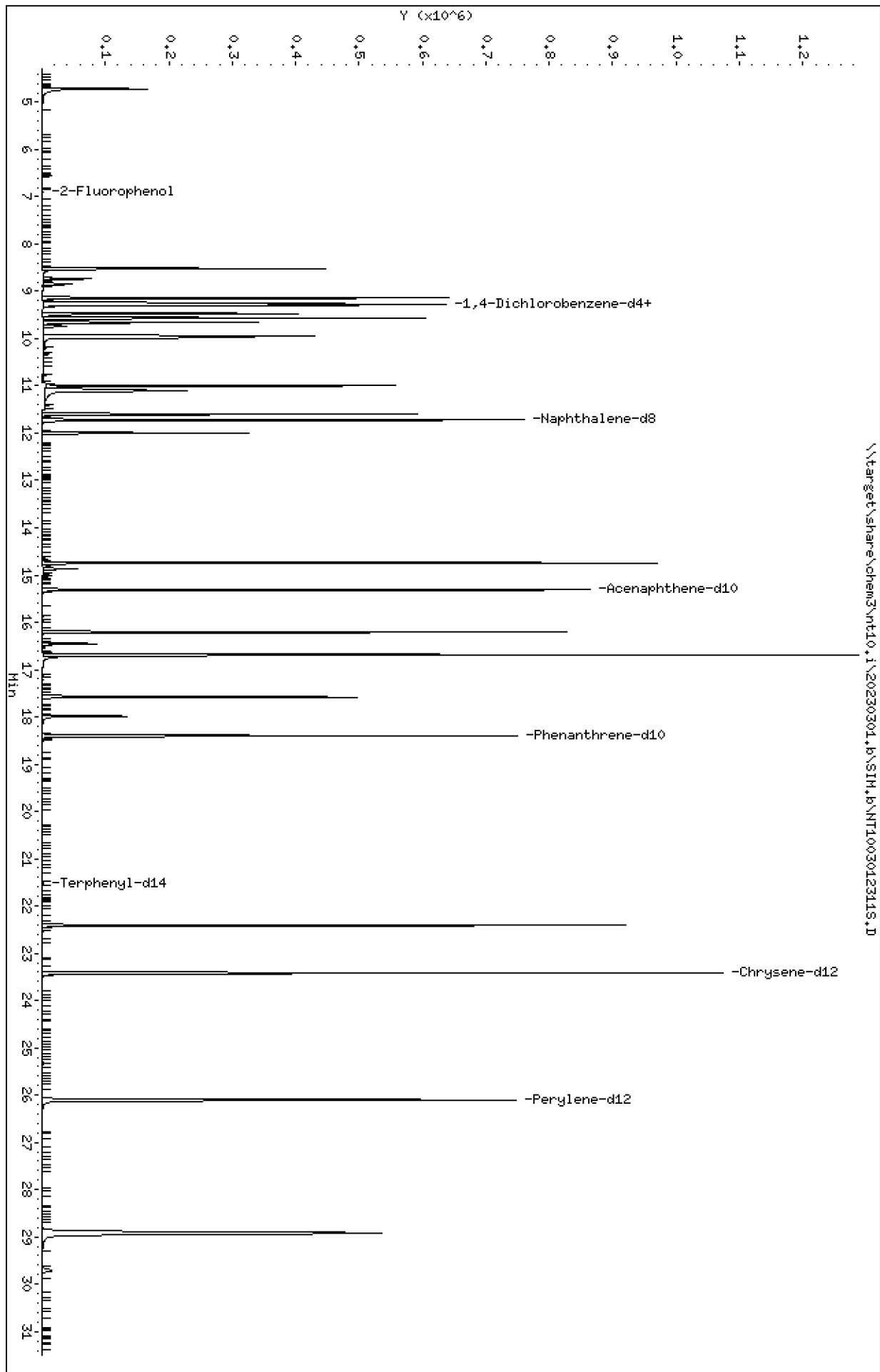
COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	5.0000	5.2	1.4413080	1.5132640		5.0	+/-20
1,2-Dichlorobenzene	A	5.0000	5.1	1.3853460	1.4247680		2.8	+/-20
Benzyl Alcohol	A	5.0000	5.1	0.7492523	1.0234800		2.1	+/-20
Benzoic acid	A	10.000	6.9	0.1431163	0.1324842		-31.3	+/-20 *
2,4-Dimethylphenol	A	5.0000	3.6	0.2957717	0.2493707		-27.3	+/-20 *
1,2,4-Trichlorobenzene	A	5.0000	4.9	0.2879030	0.2804247		-2.6	+/-20
N-Nitrosodiphenylamine	A	5.0000	5.4	0.6473471	0.6938224		7.2	+/-20
Pentachlorophenol	A	5.0000	3.9	0.0950913	0.1080188		-21.8	+/-20 *
2-Fluorophenol	A	7.5000	0.0377	1.1419780	0.0057366		-99.5	
p-Terphenyl-d14	A	5.0000	0.0271	0.3234672	0.0017548		-99.5	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.B\SIM.B\NT1003012311S.D
Date : 01-MAR-2023 21:46
Client ID:
Sample Info: SED-SCV1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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

\\target\share\chem3\nt10.i\20230301.B\SIM.B\NT1003012311S.D



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

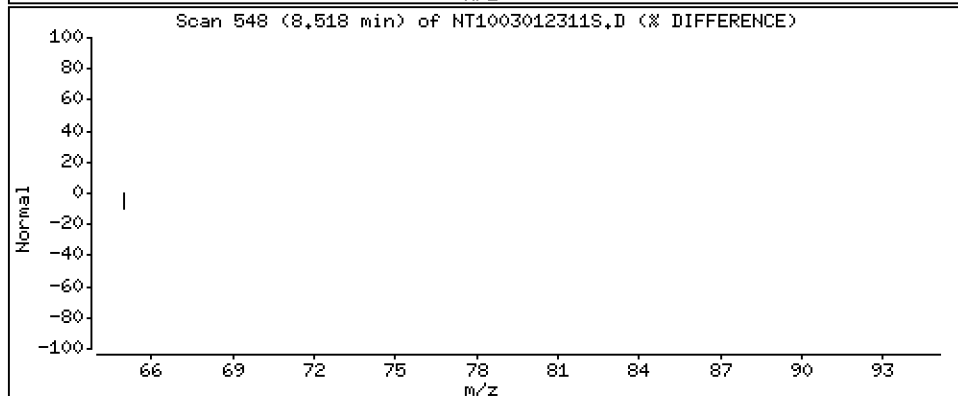
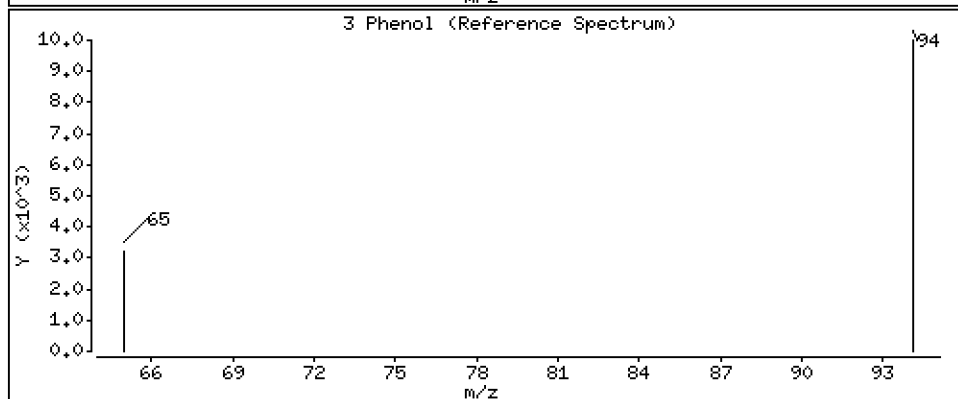
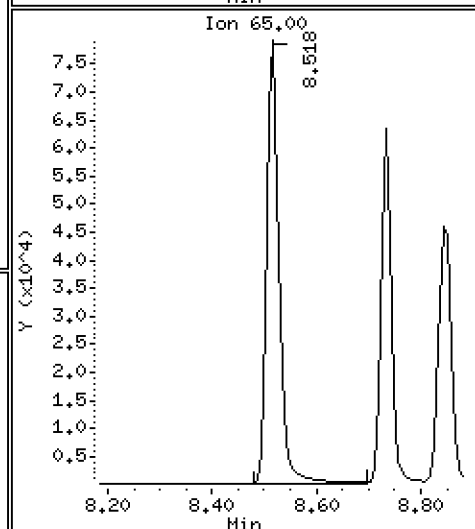
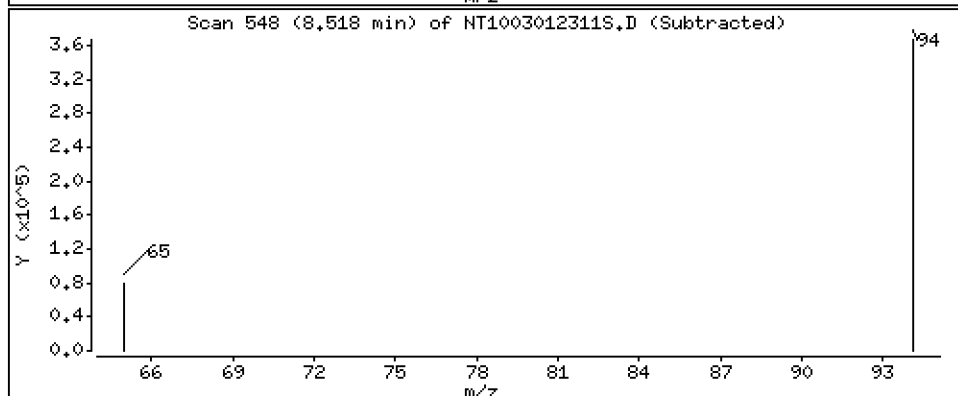
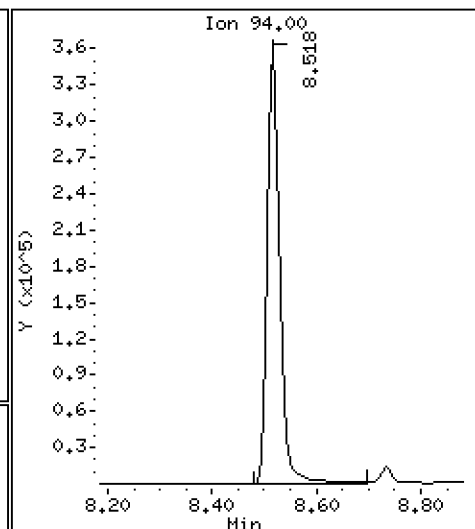
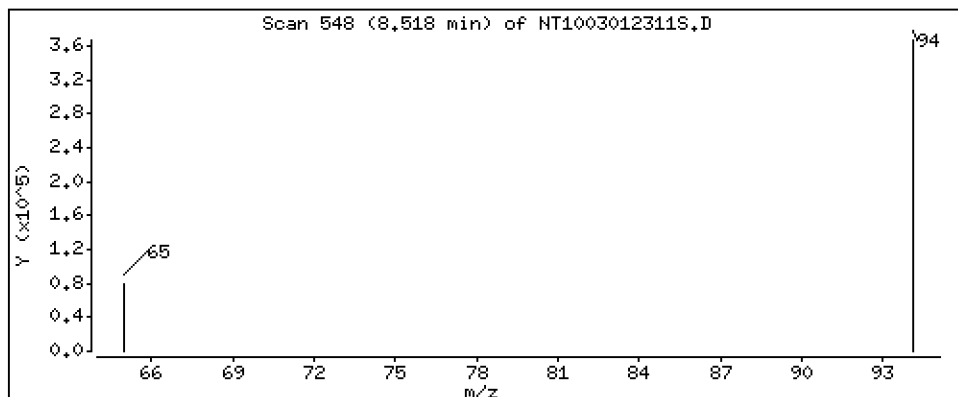
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 4.507 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

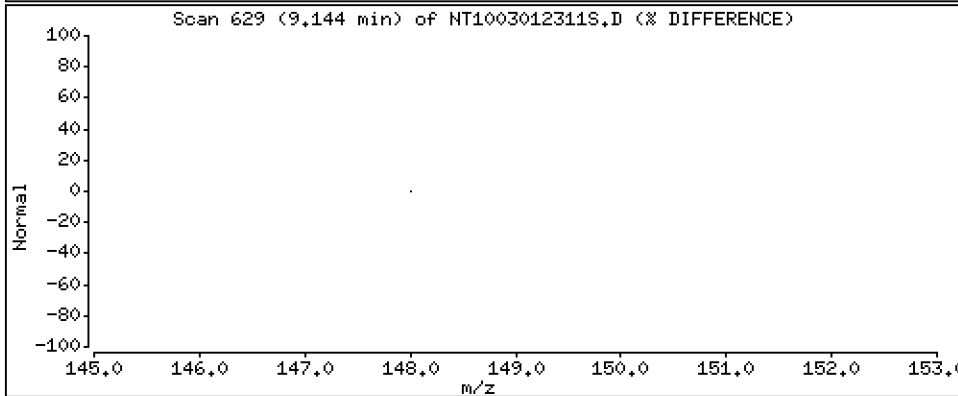
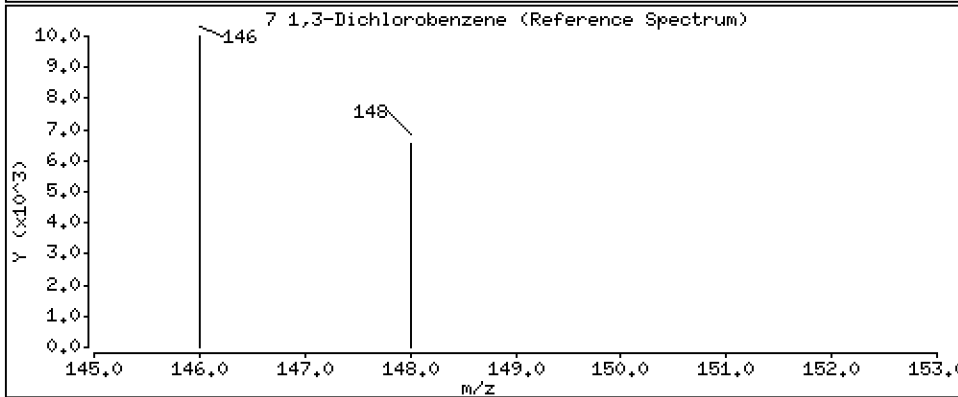
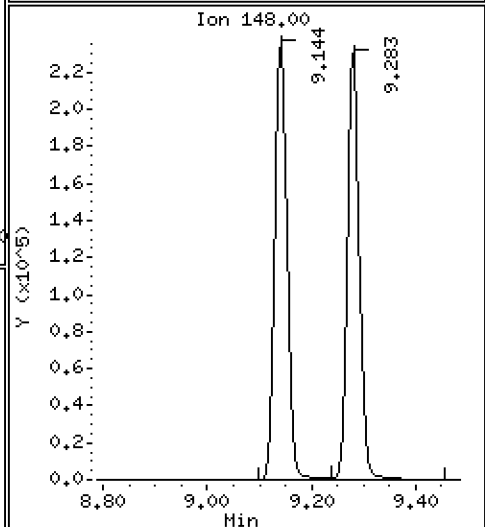
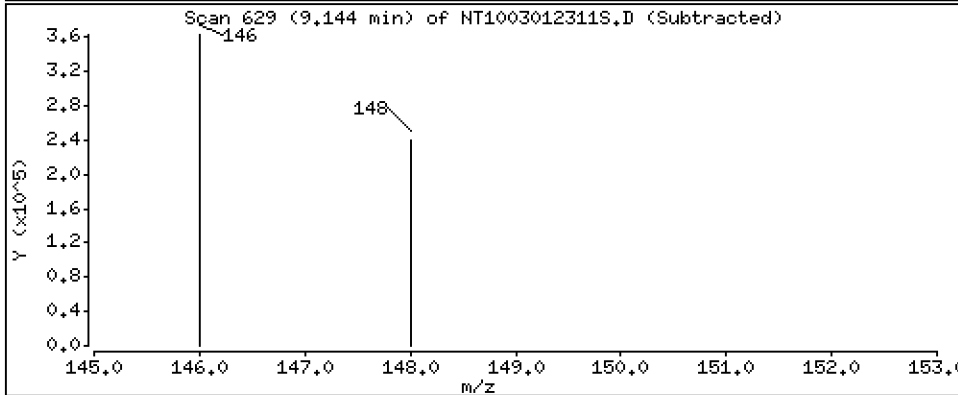
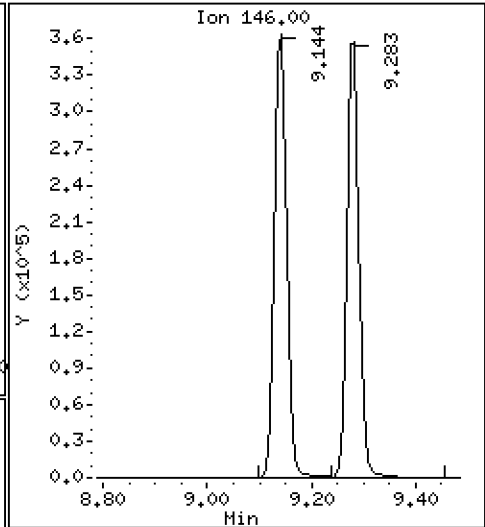
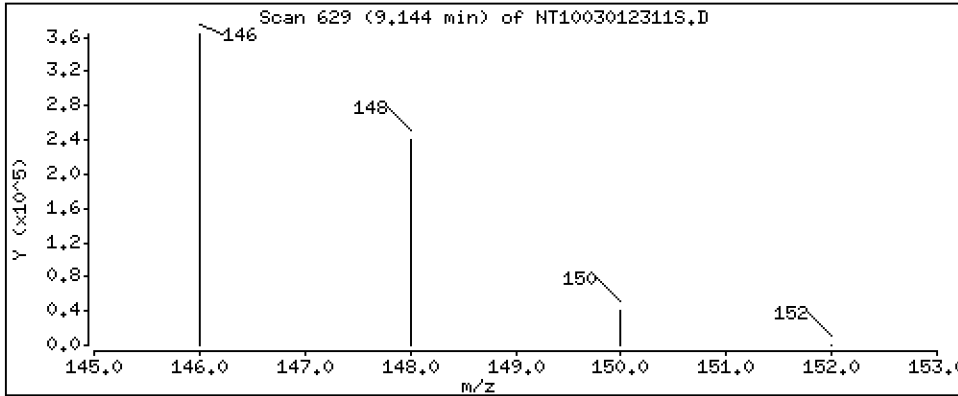
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 5.084 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

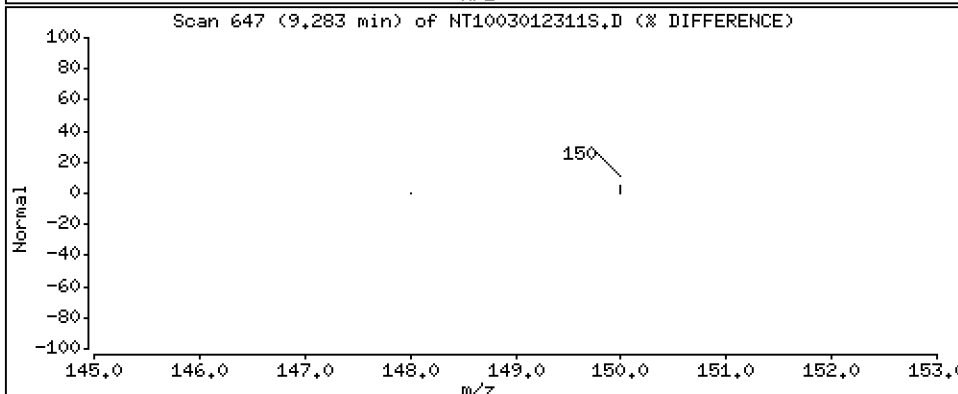
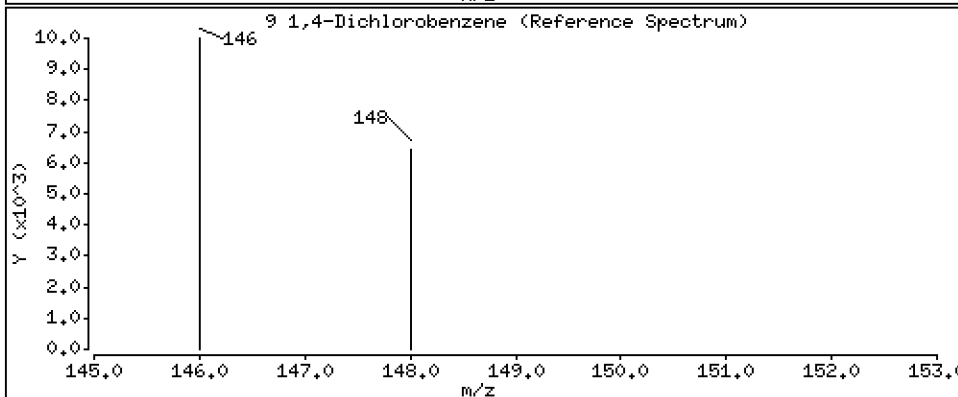
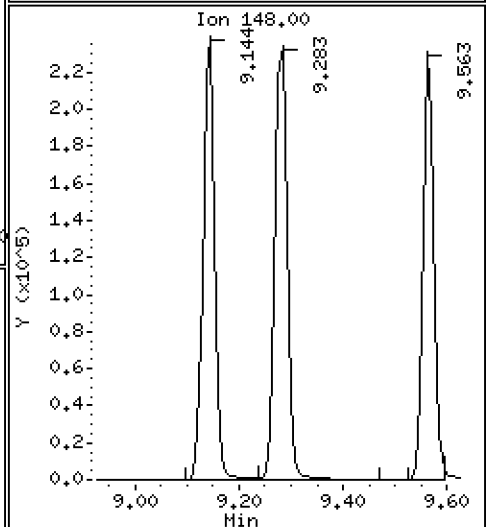
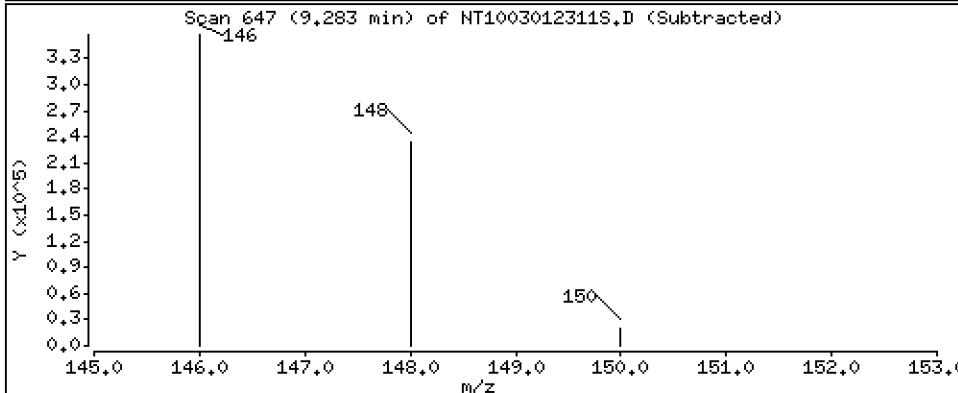
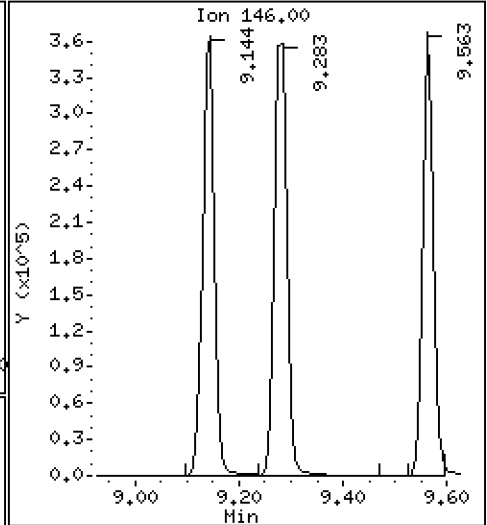
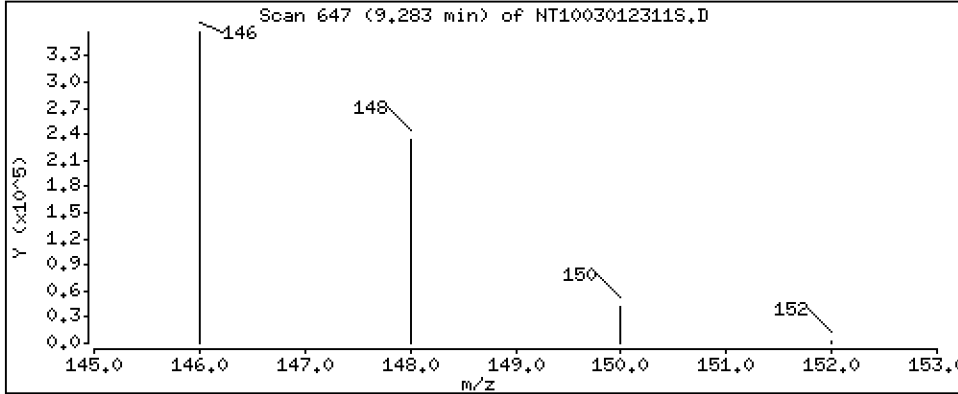
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 5,250 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

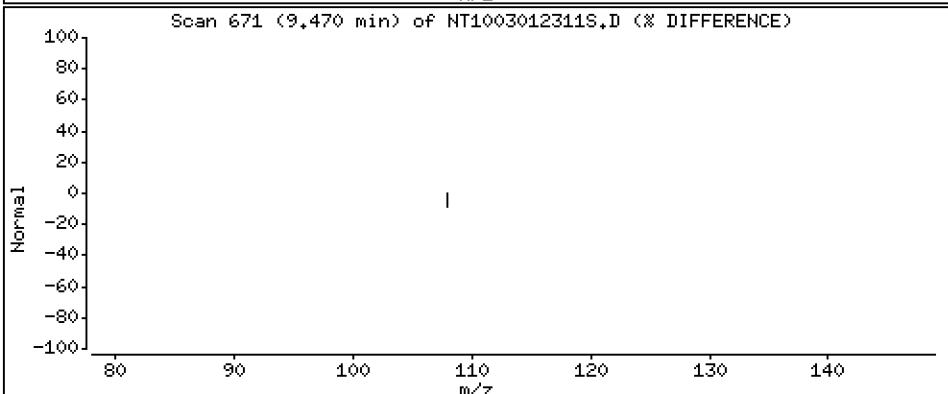
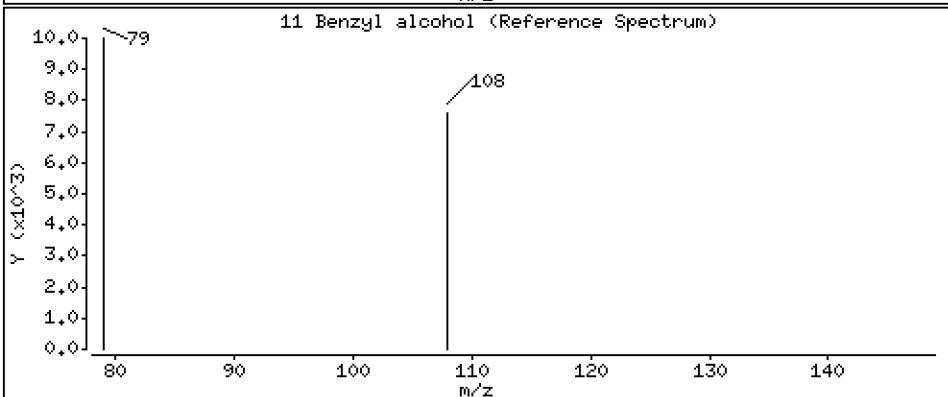
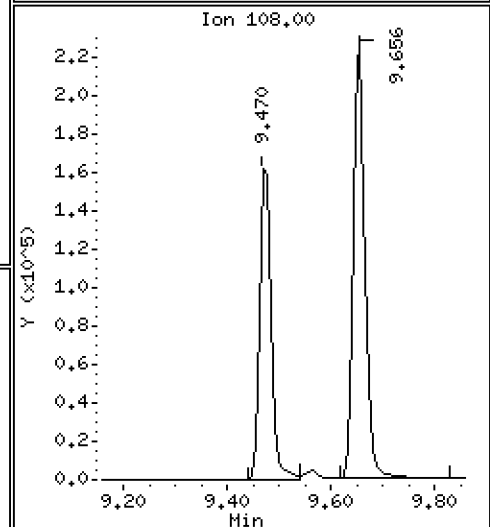
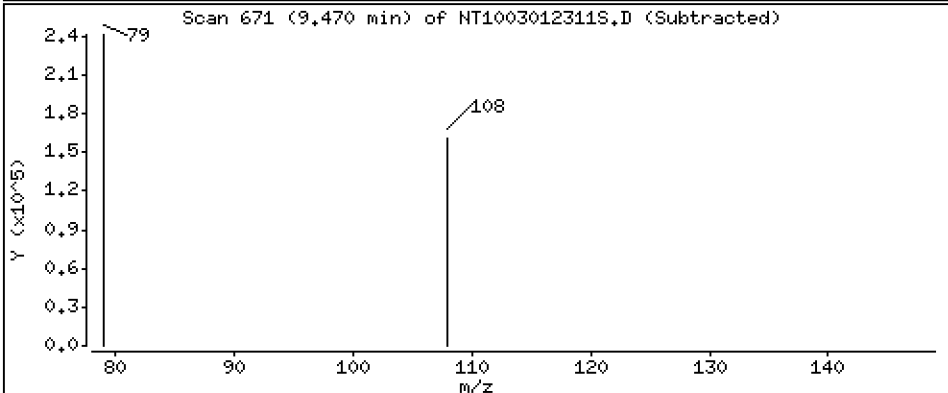
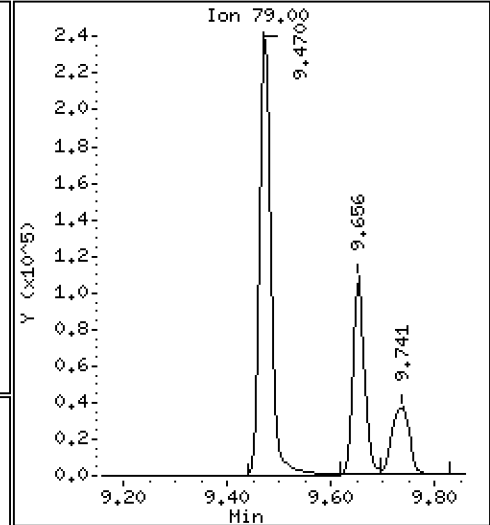
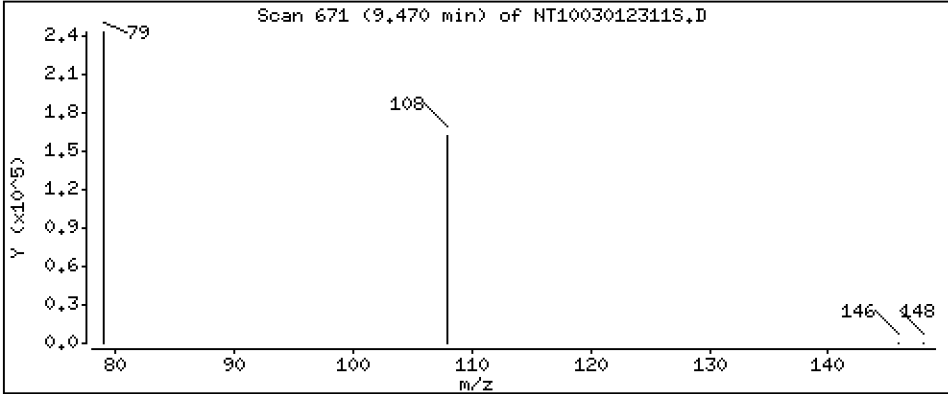
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 5,104 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

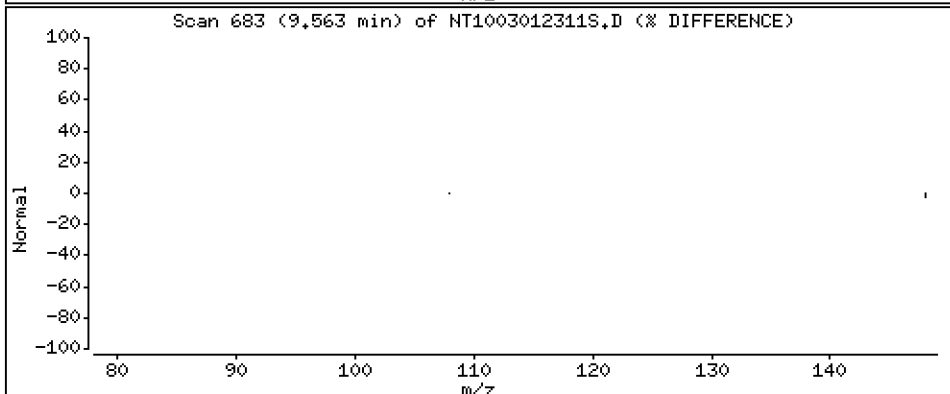
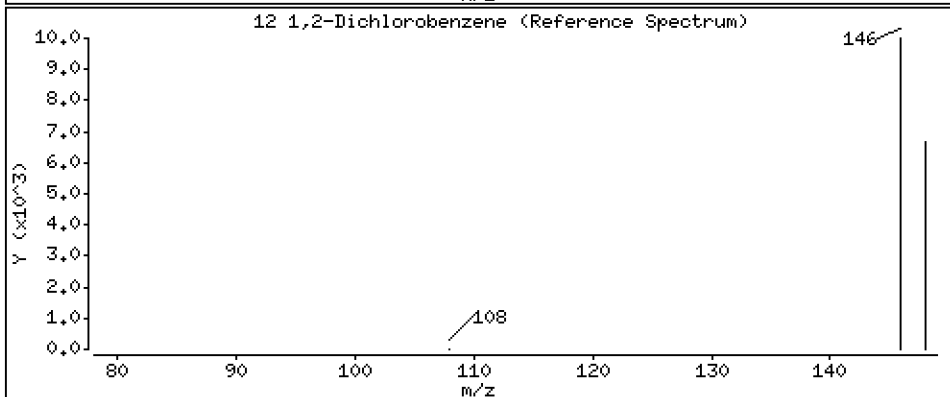
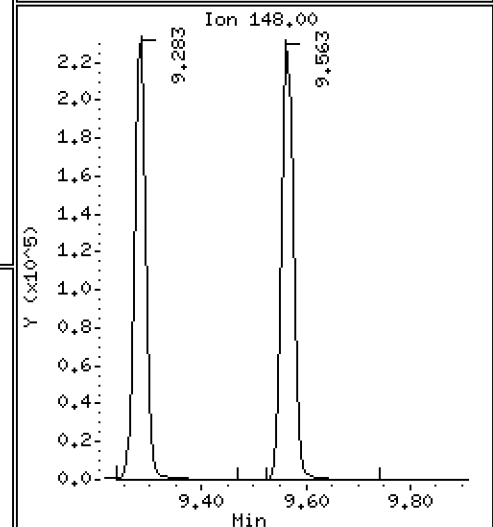
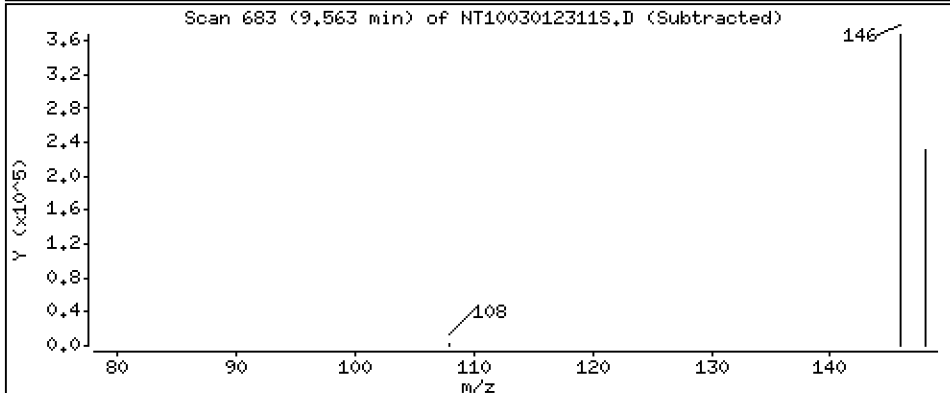
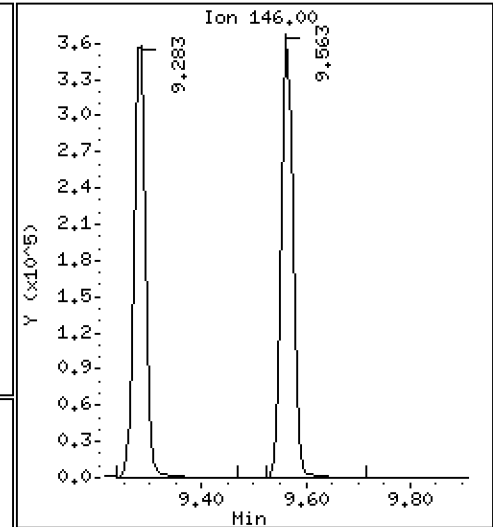
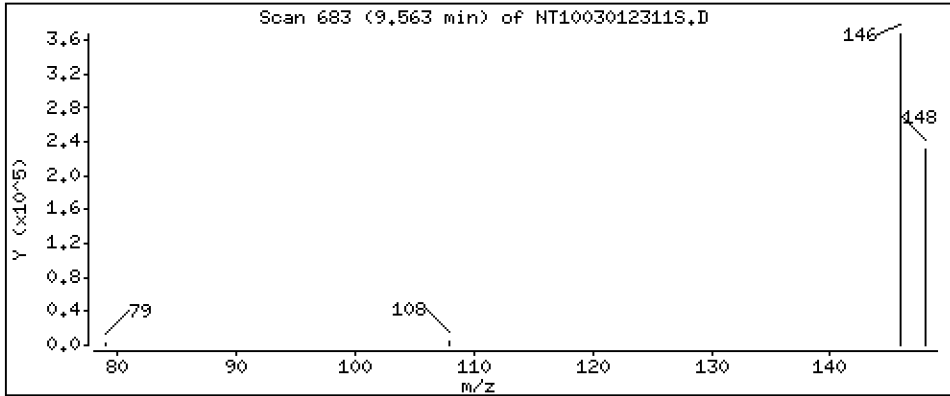
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 5,142 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

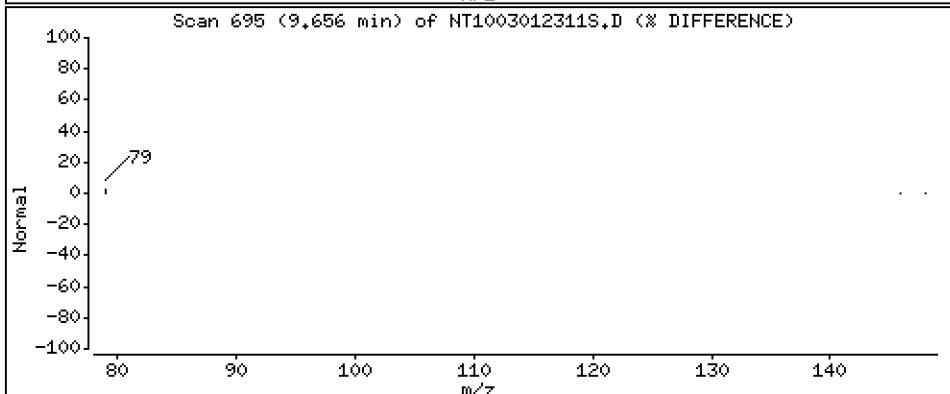
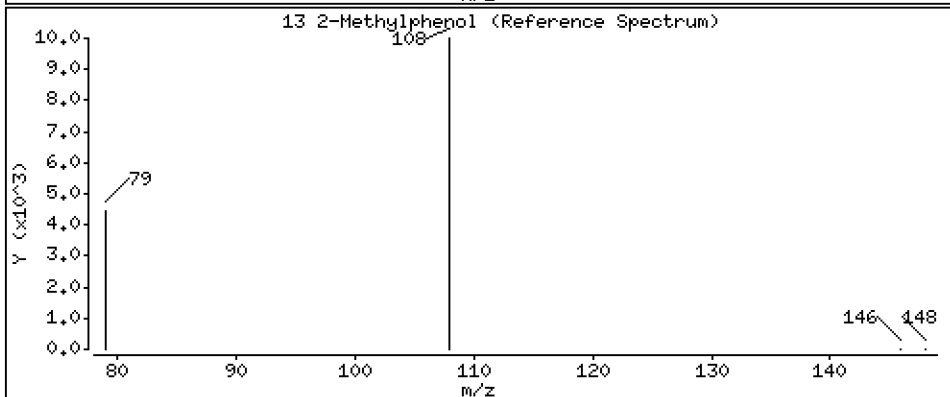
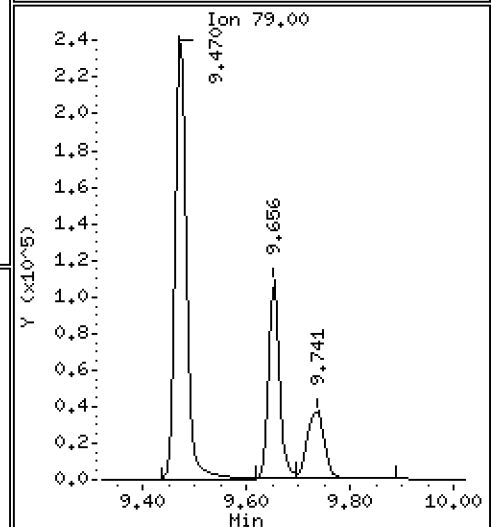
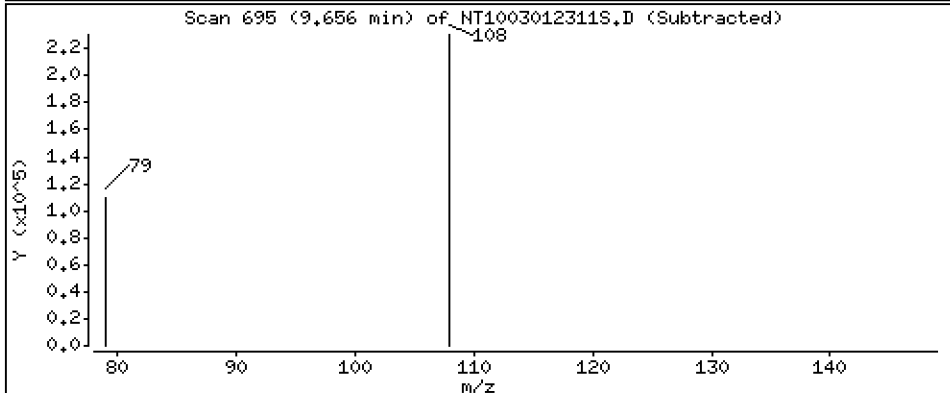
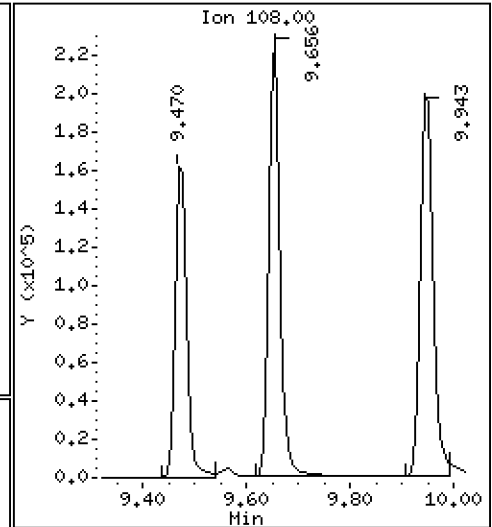
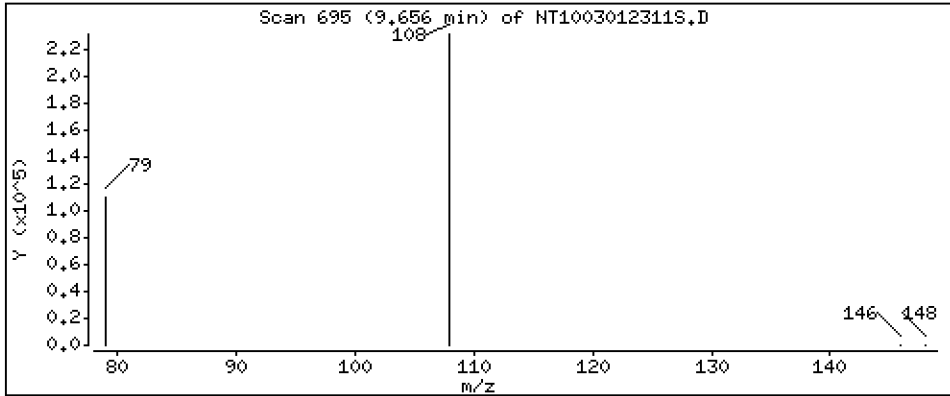
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 4.365 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

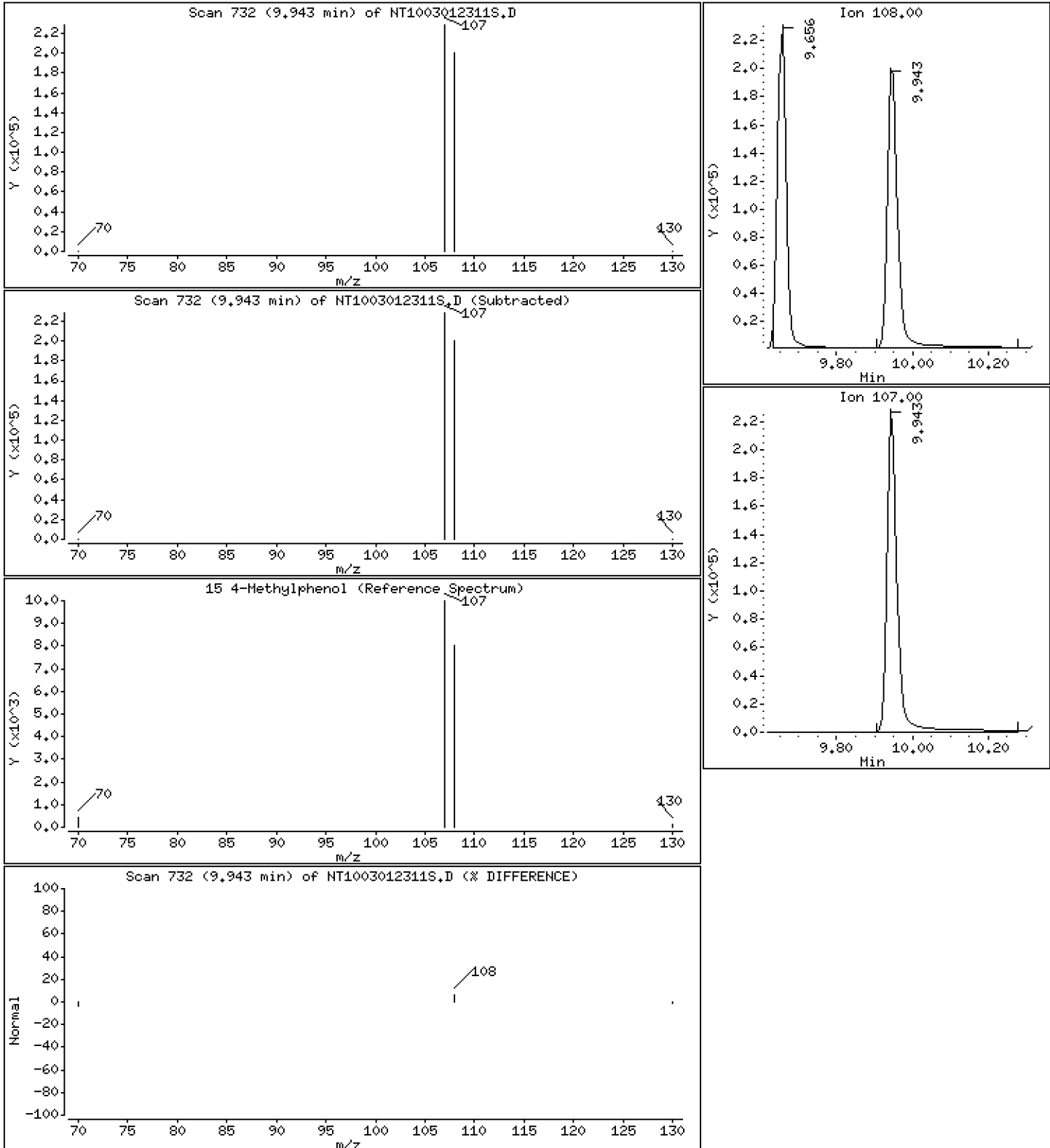
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 4.505 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

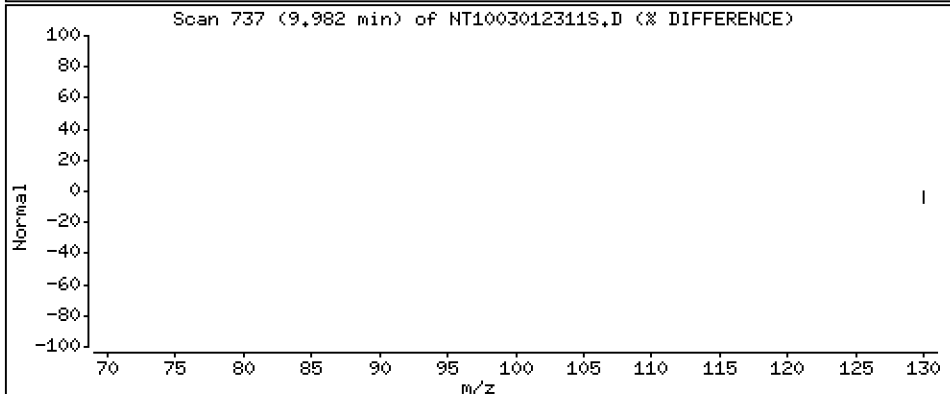
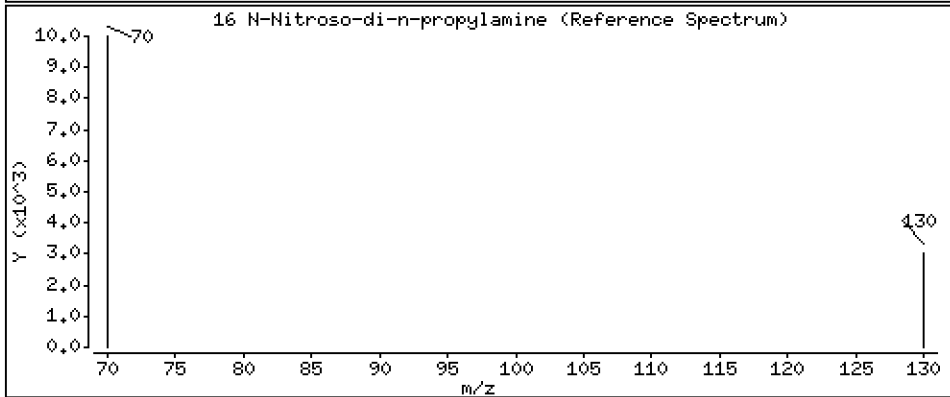
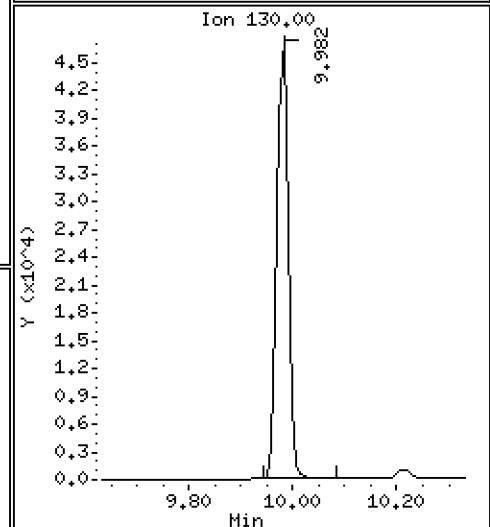
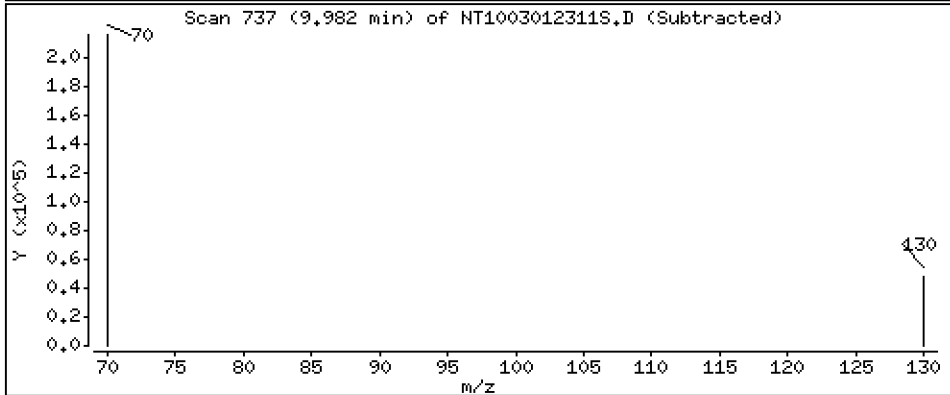
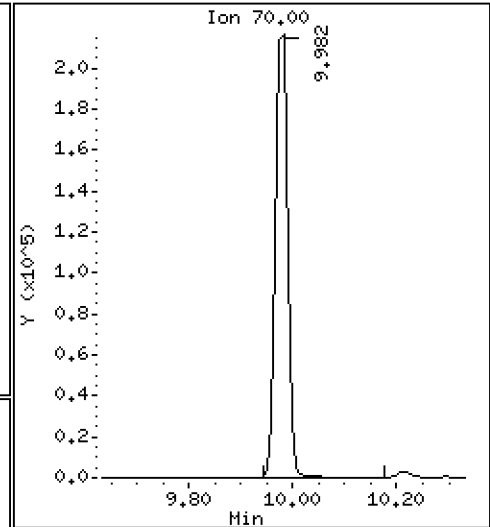
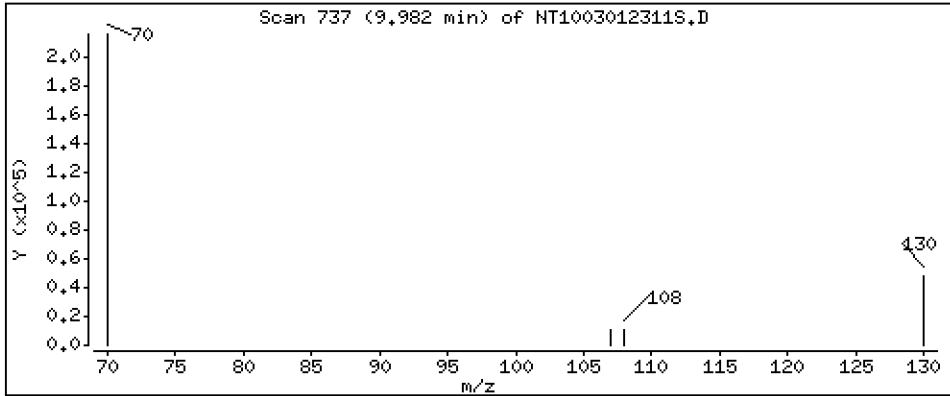
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 5,685 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

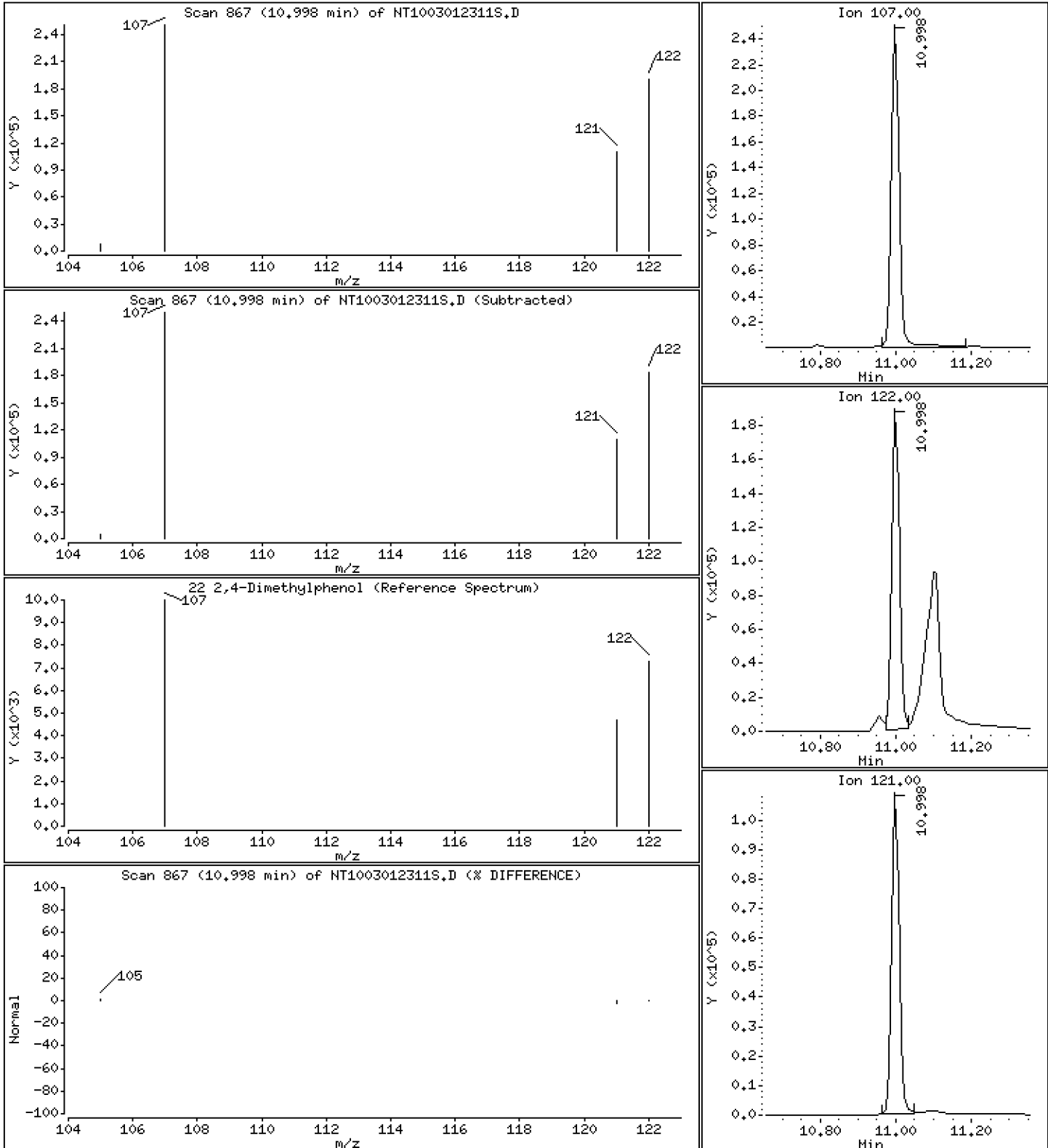
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 3.637 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

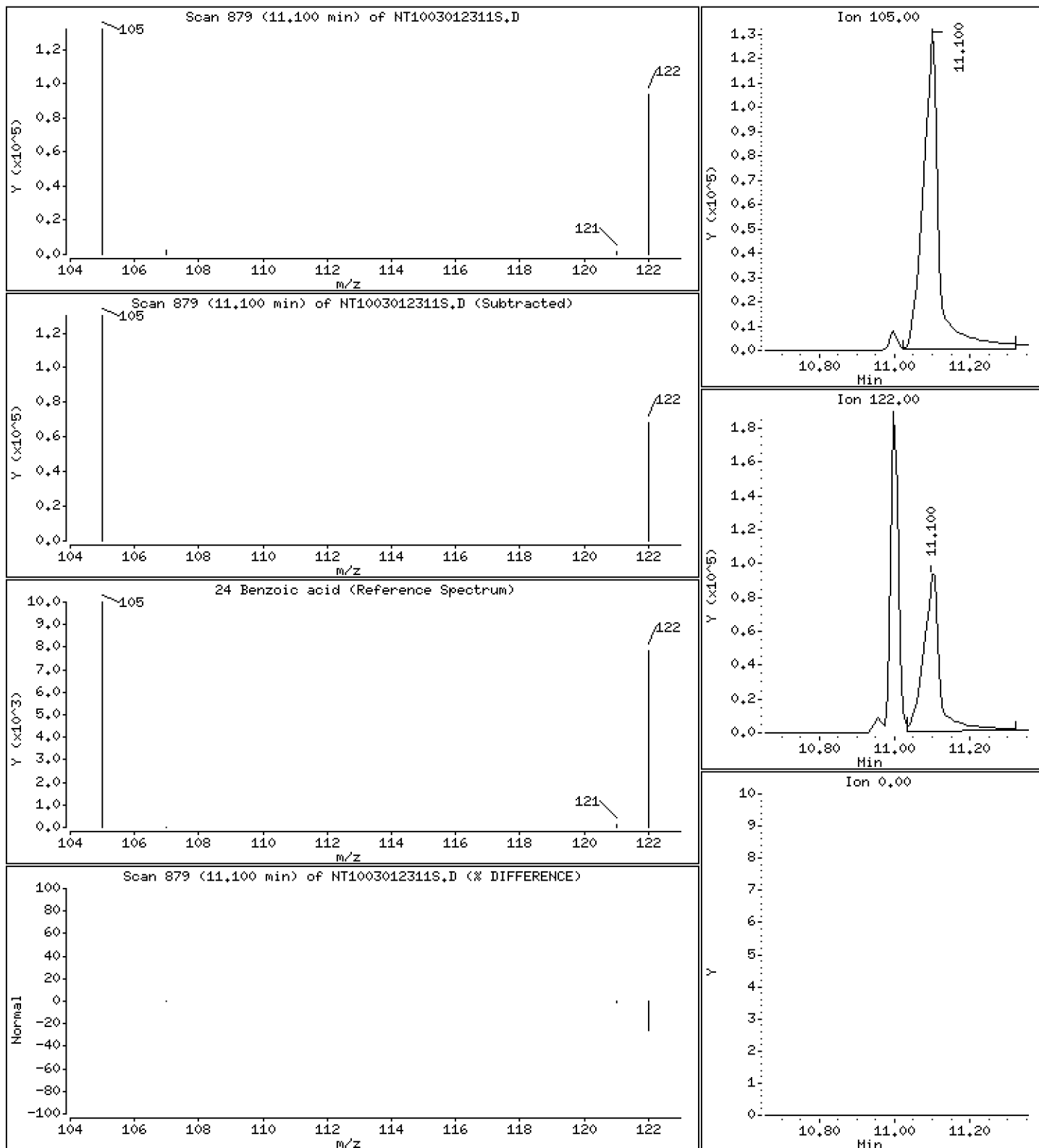
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 6.870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

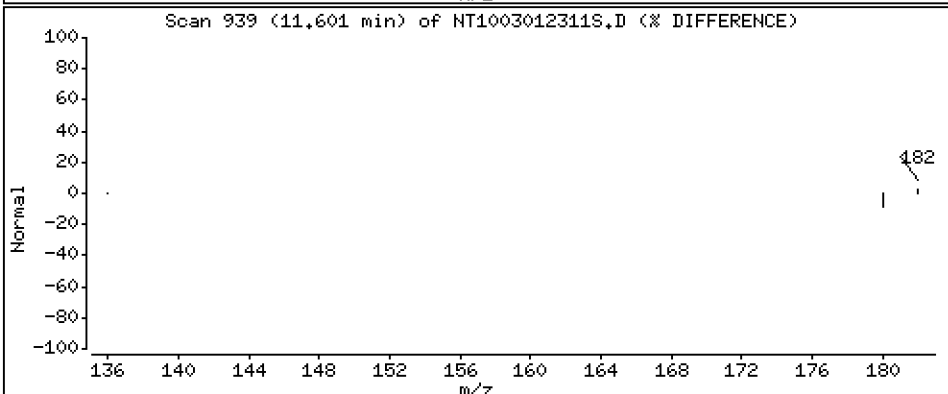
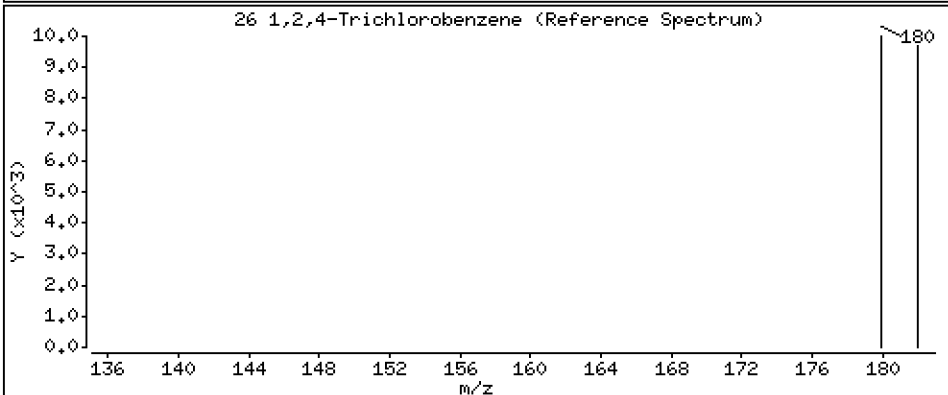
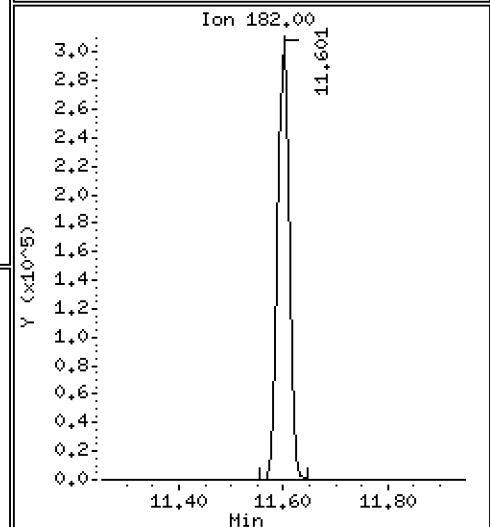
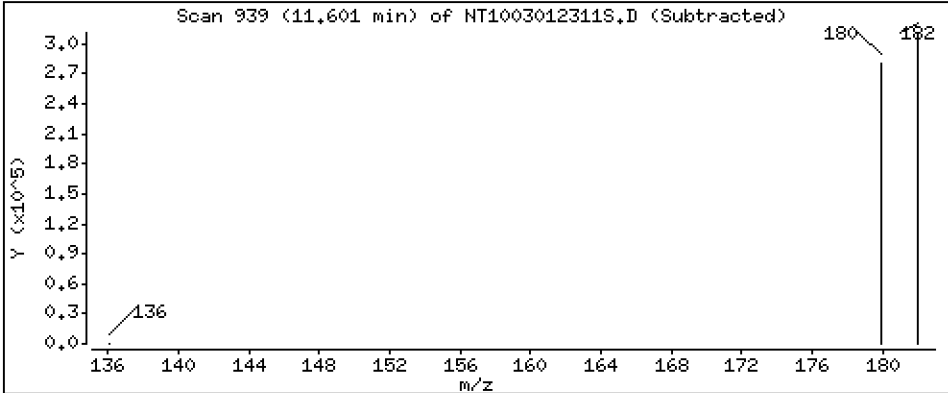
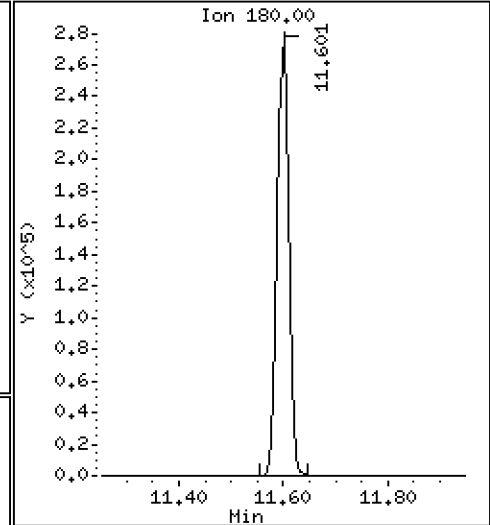
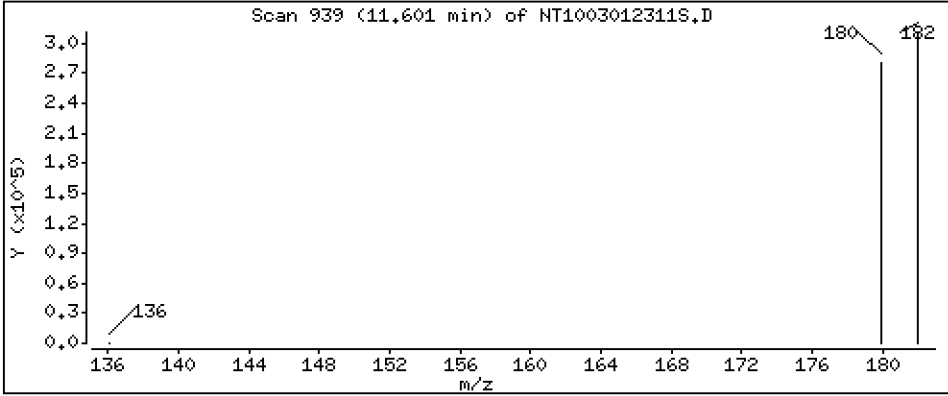
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 4.870 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

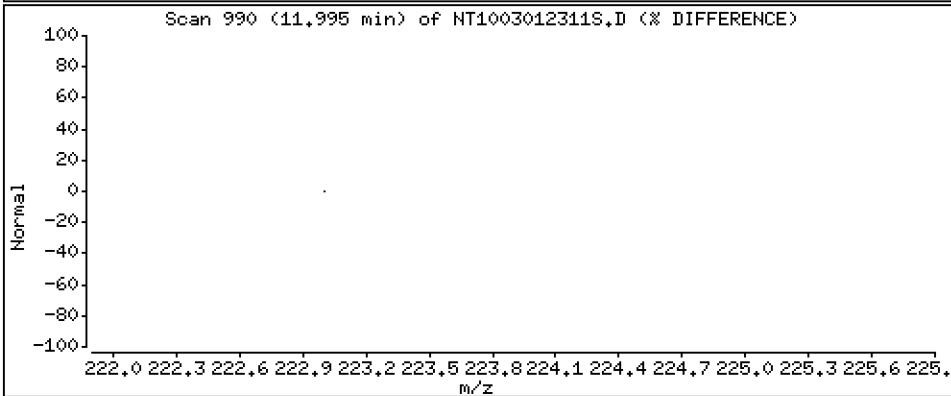
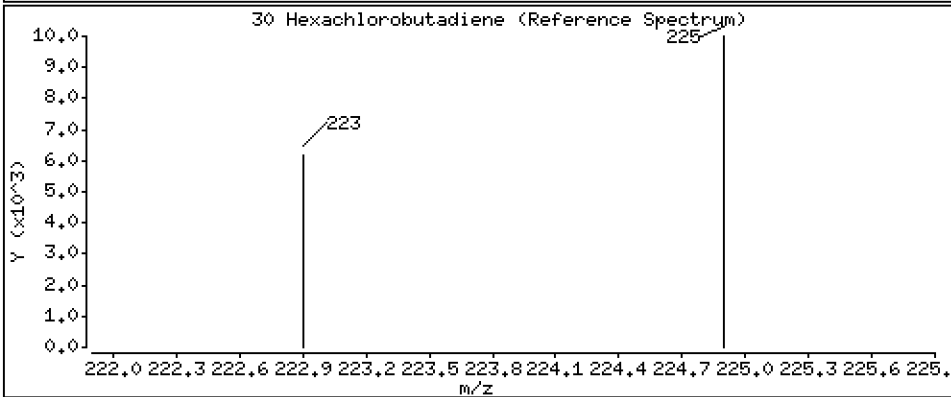
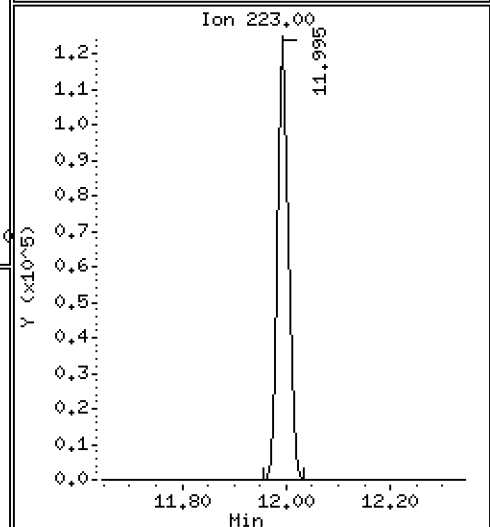
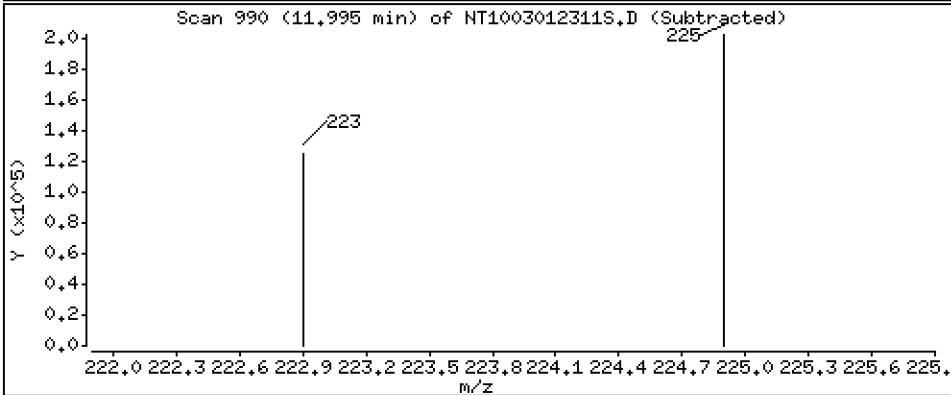
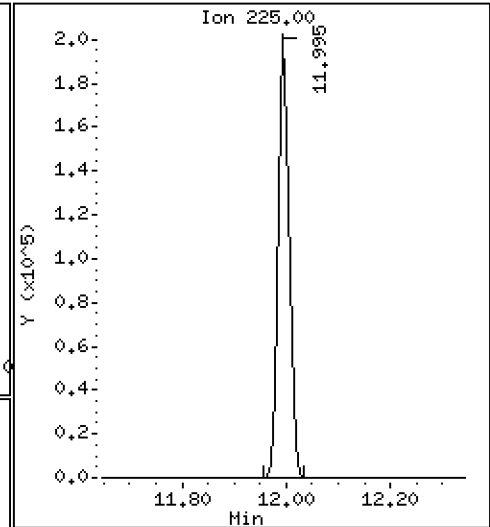
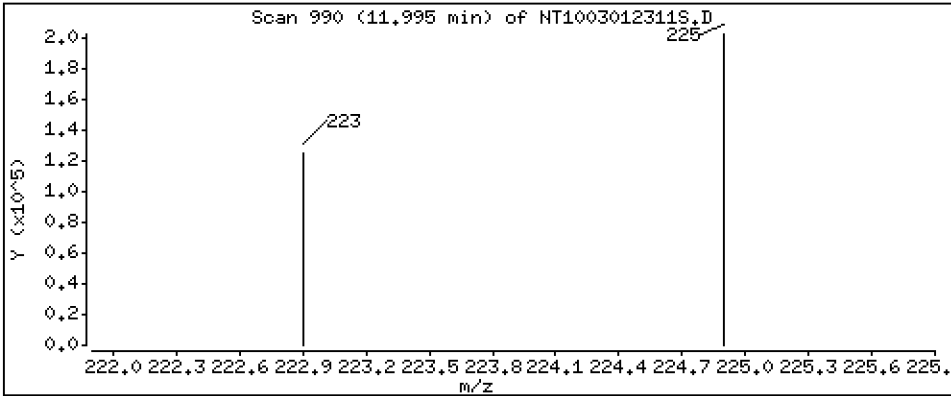
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 4,862 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

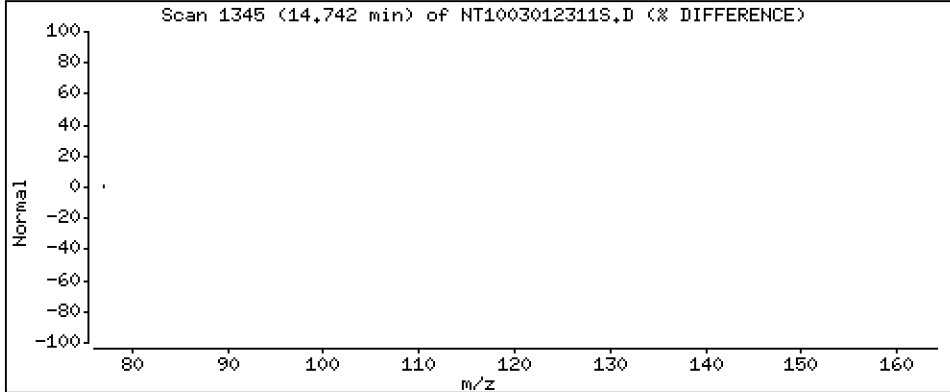
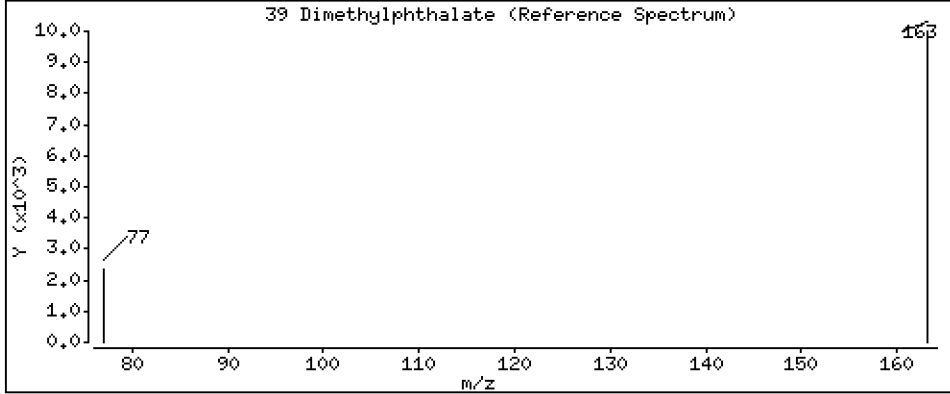
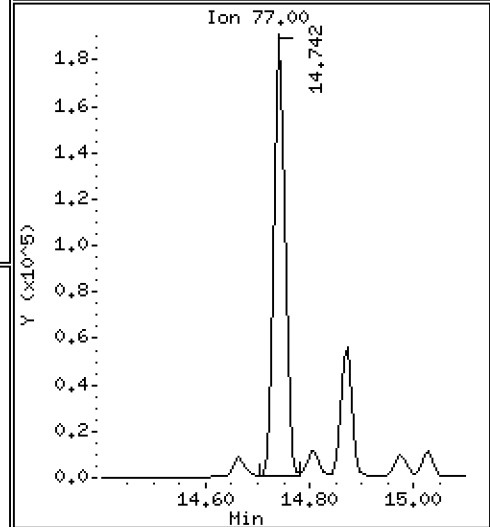
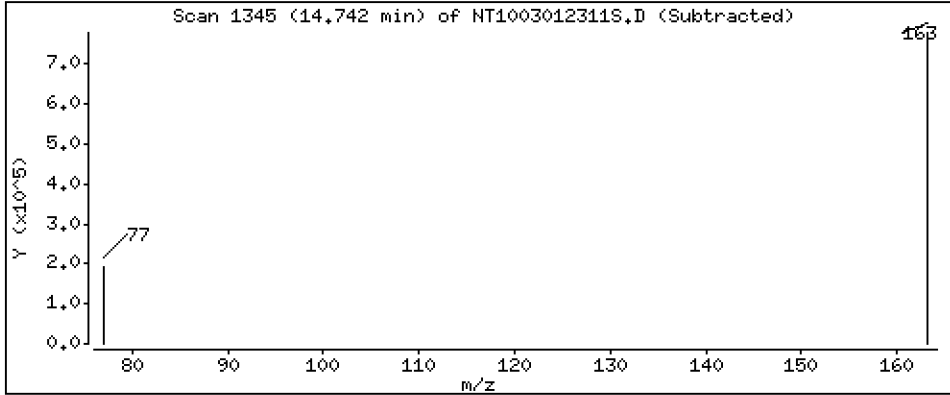
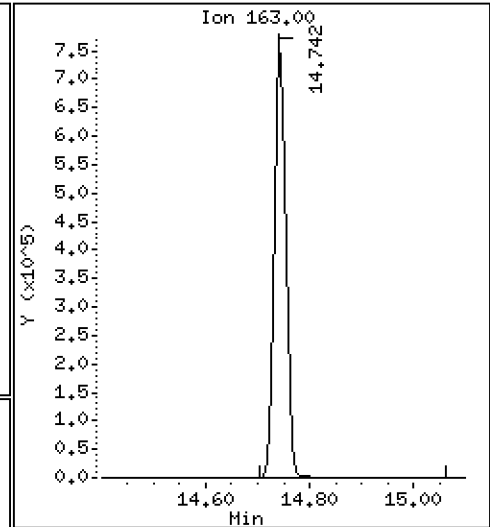
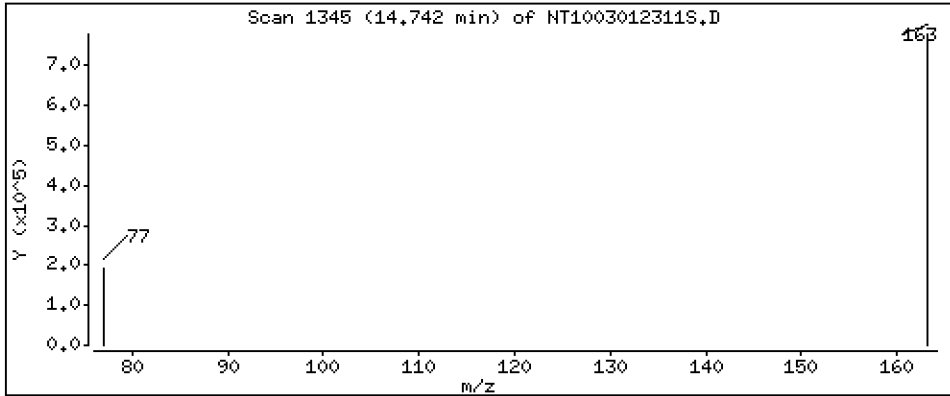
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 5.571 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

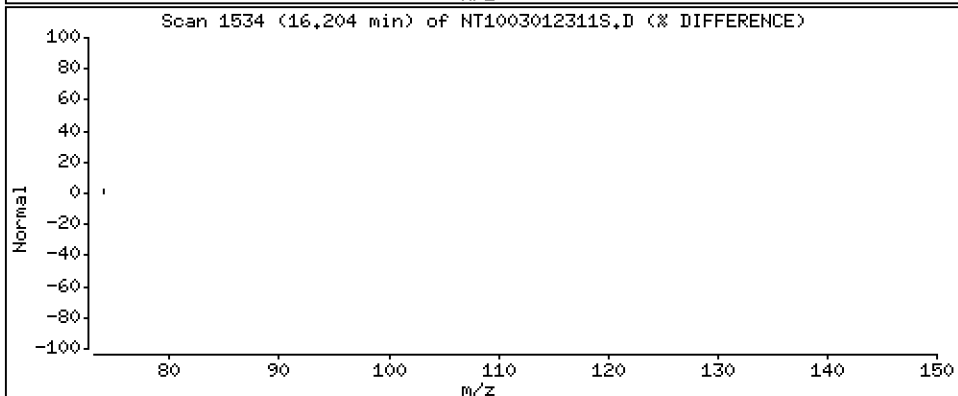
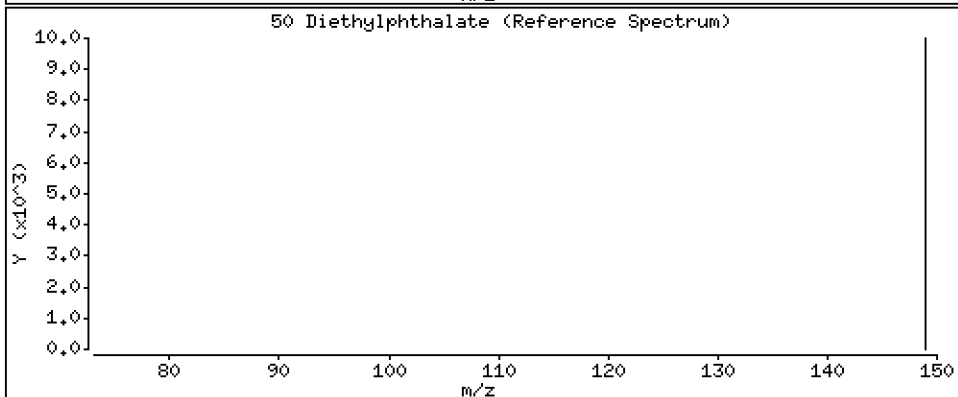
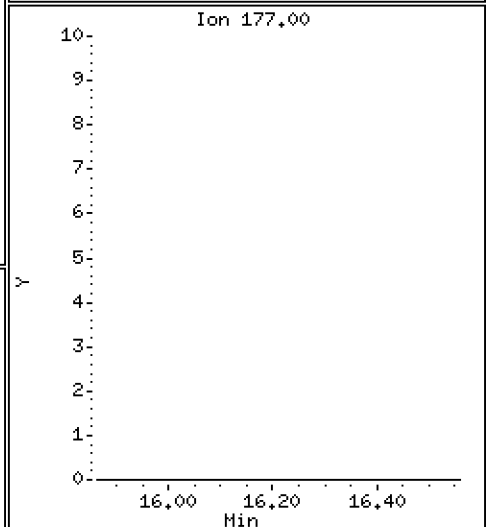
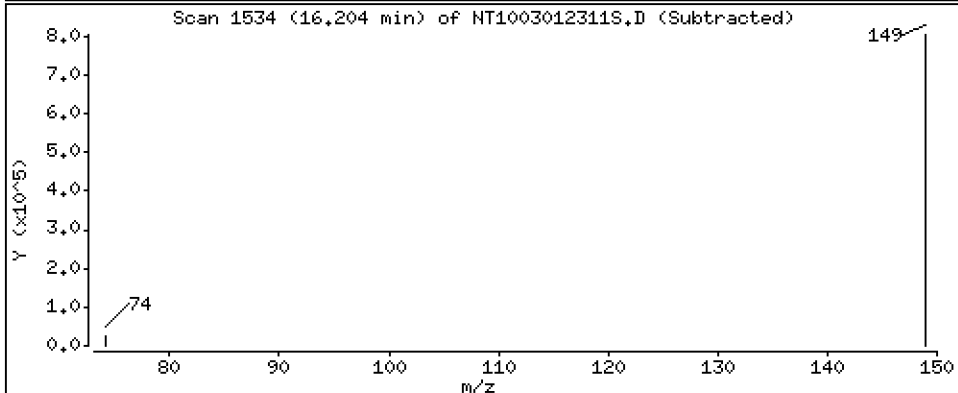
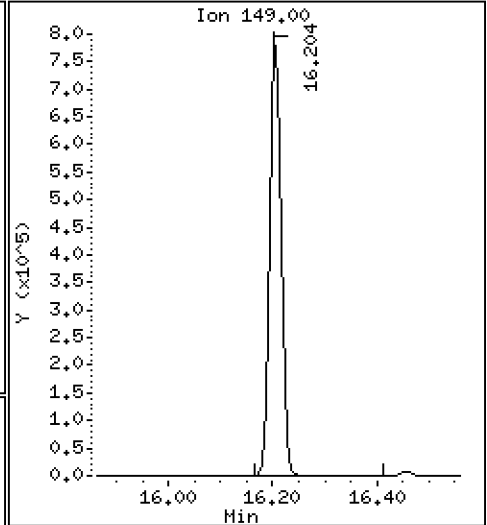
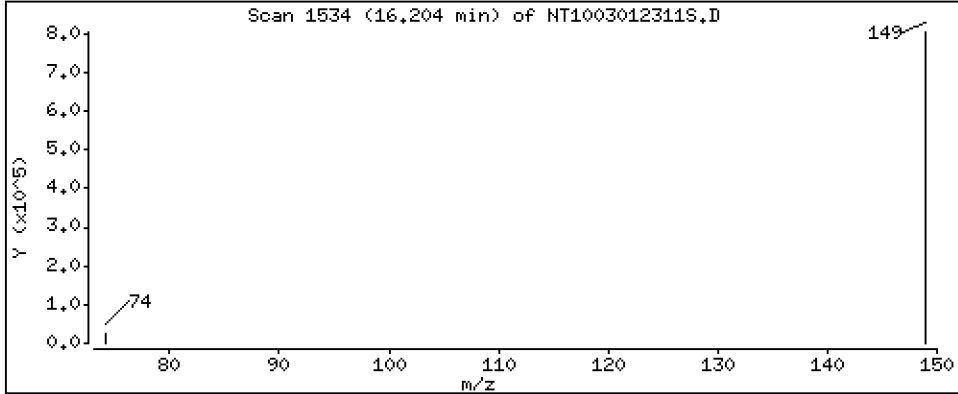
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 5,979 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

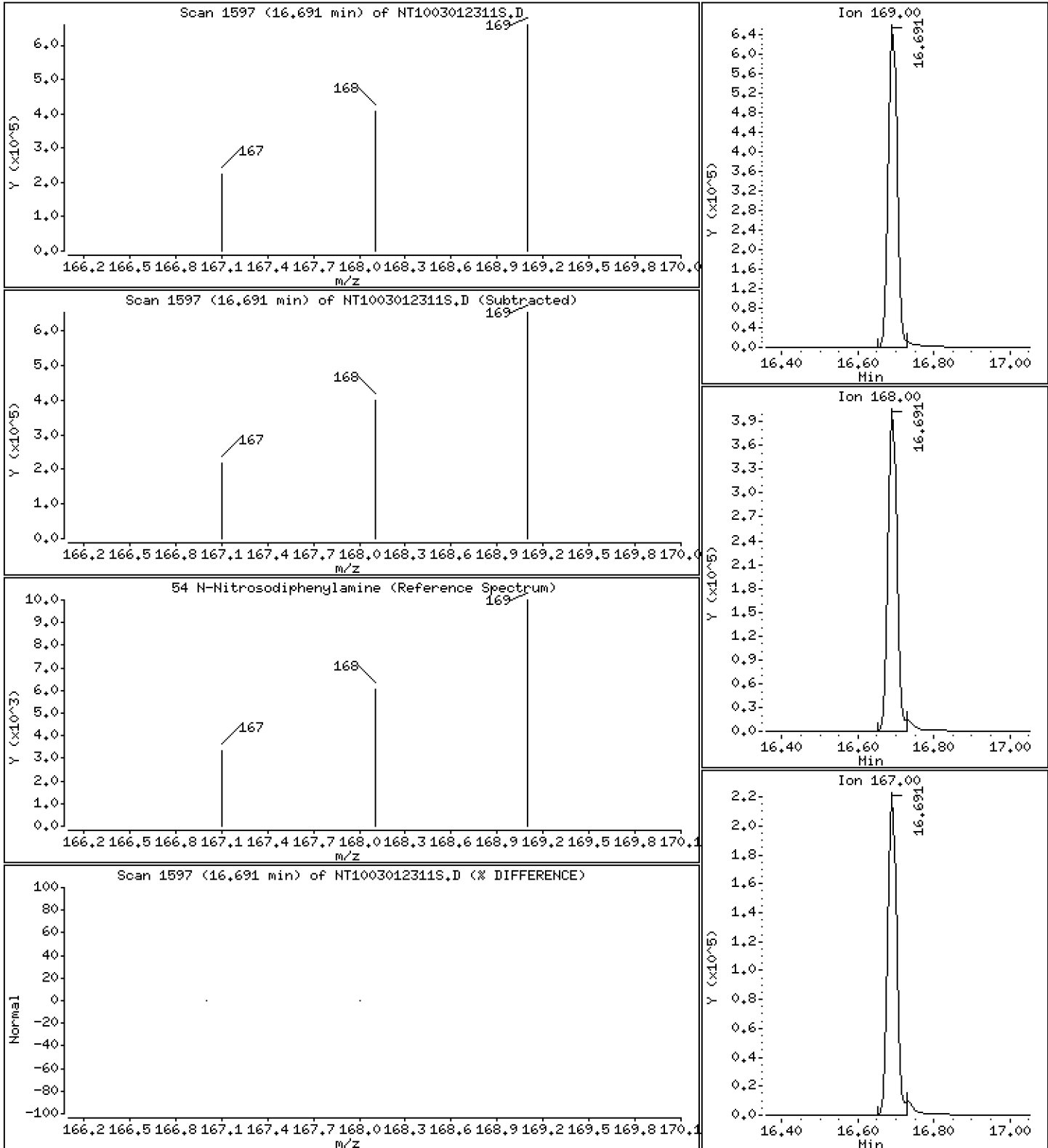
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

54 N-Nitrosodiphenylamine

Concentration: 5.359 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

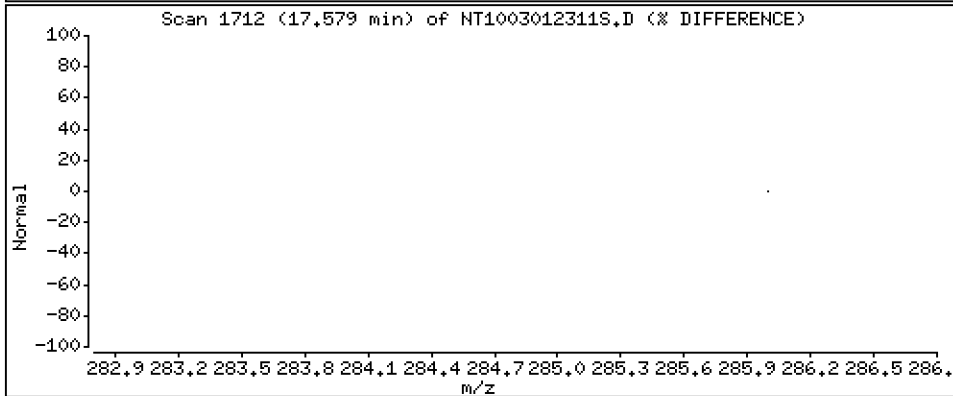
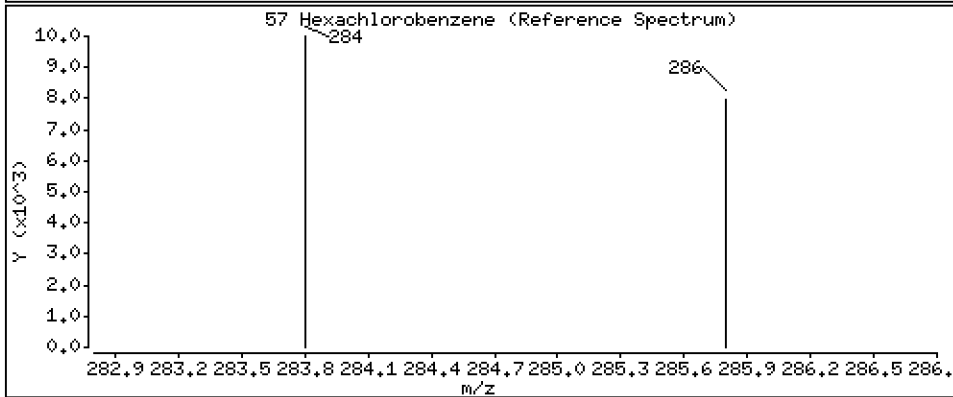
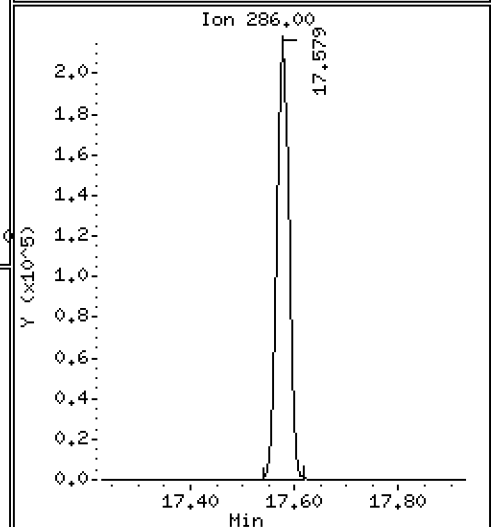
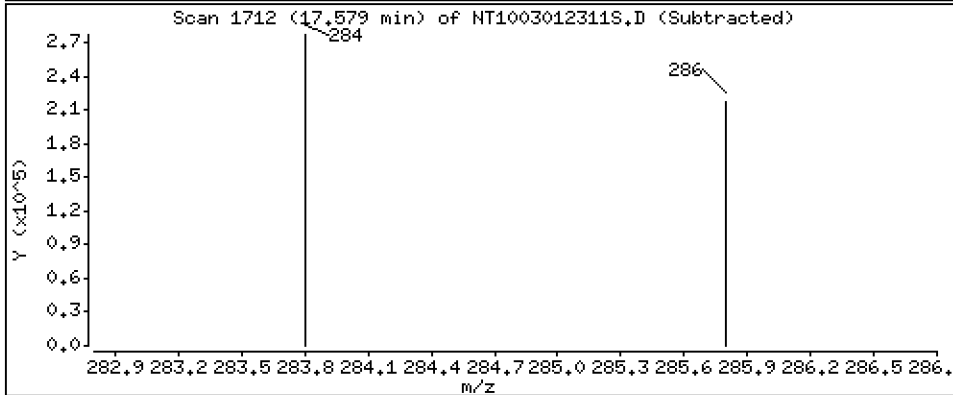
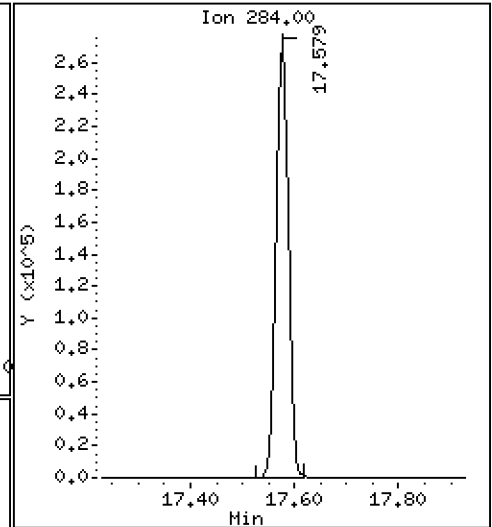
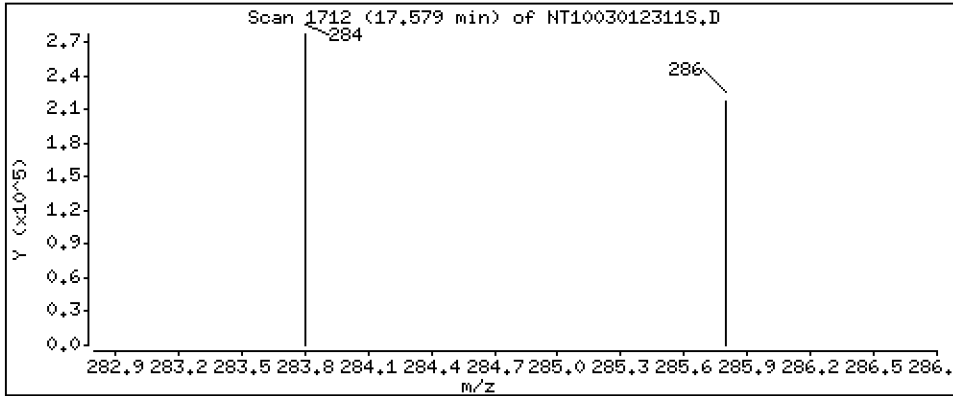
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

57 Hexachlorobenzene

Concentration: 4.866 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

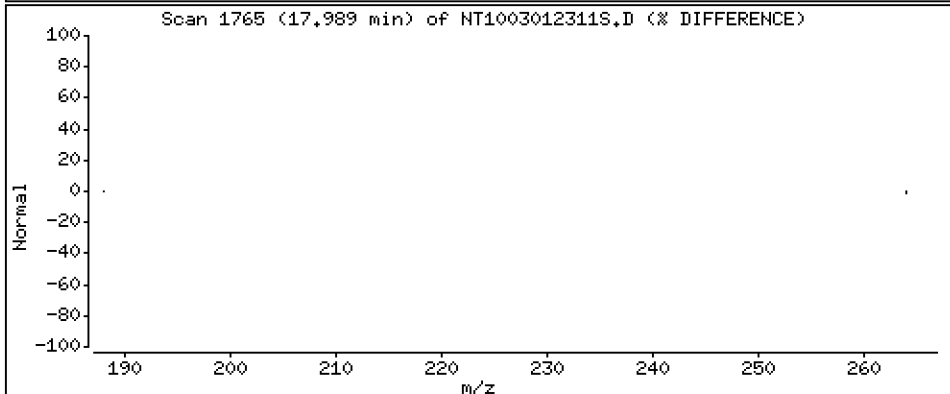
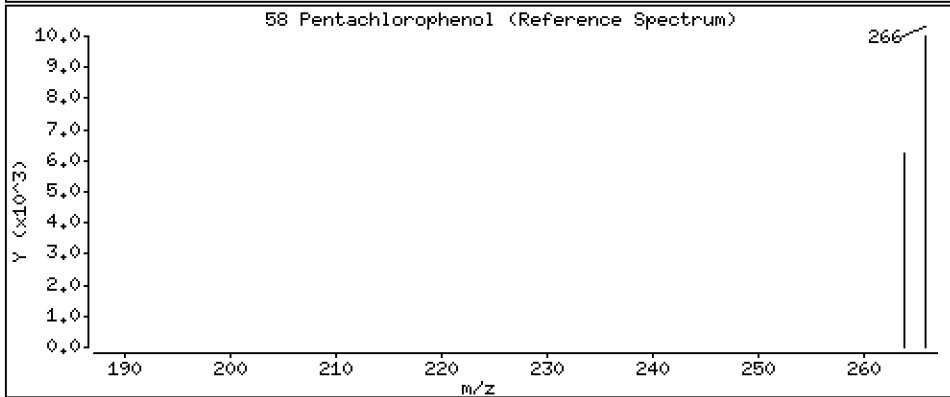
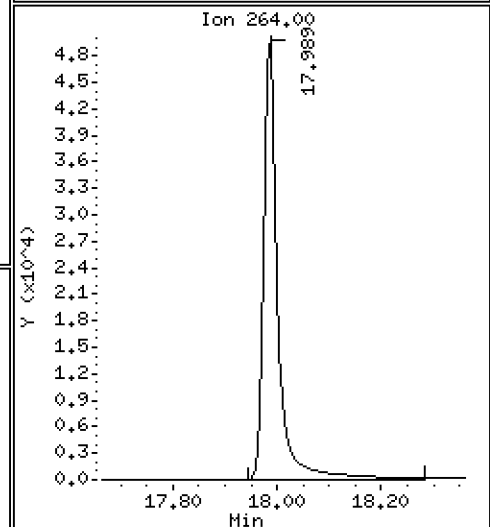
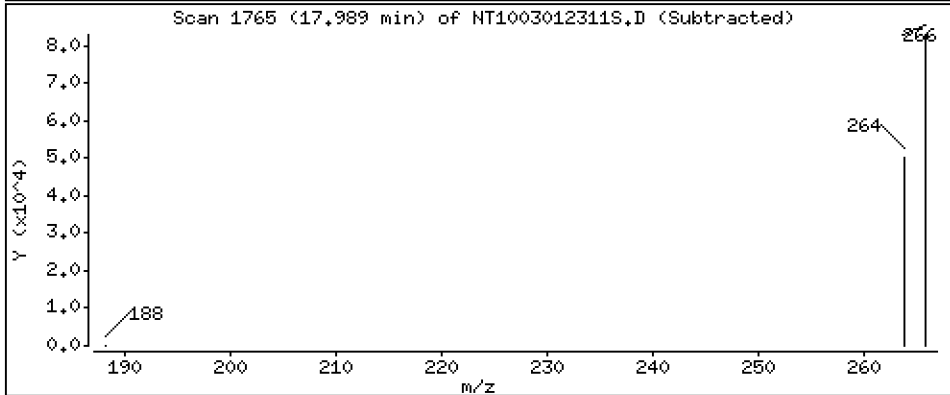
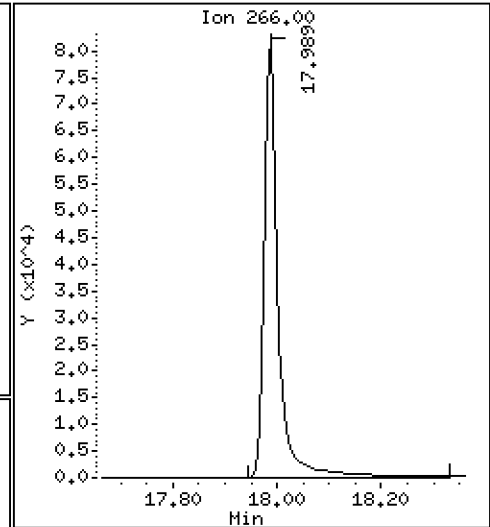
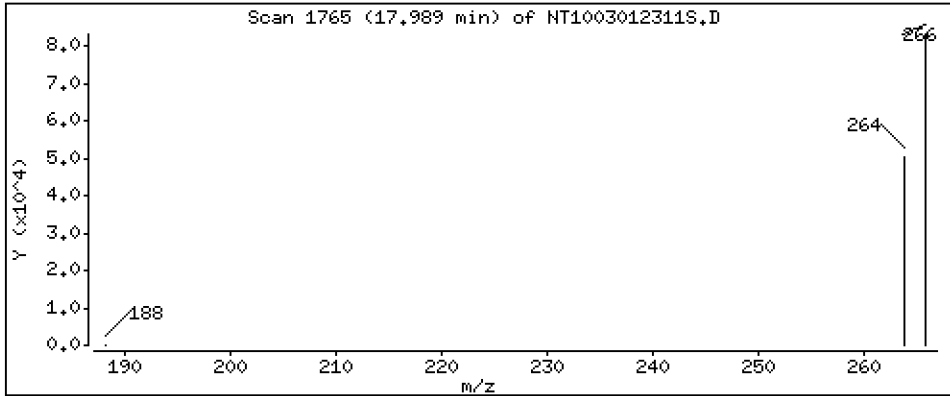
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 3,912 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

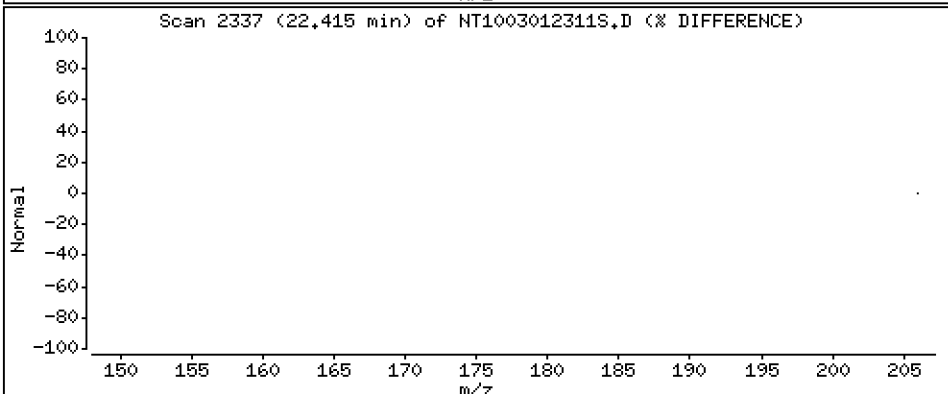
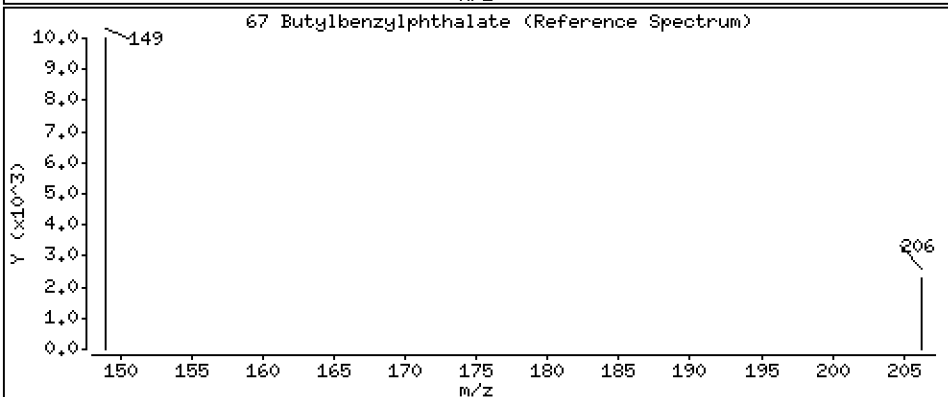
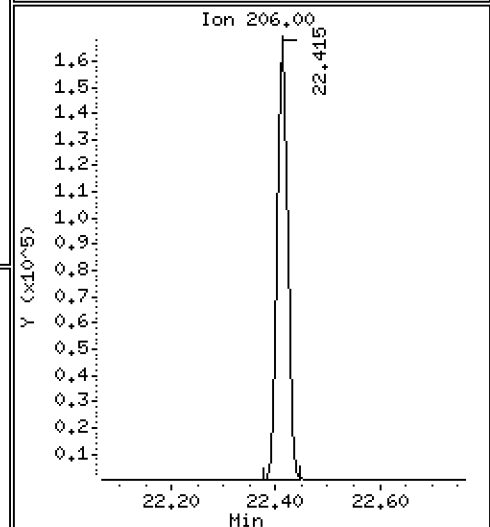
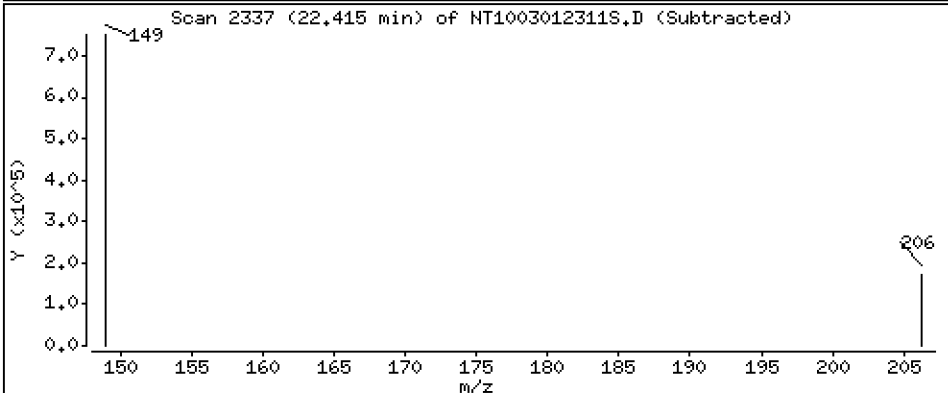
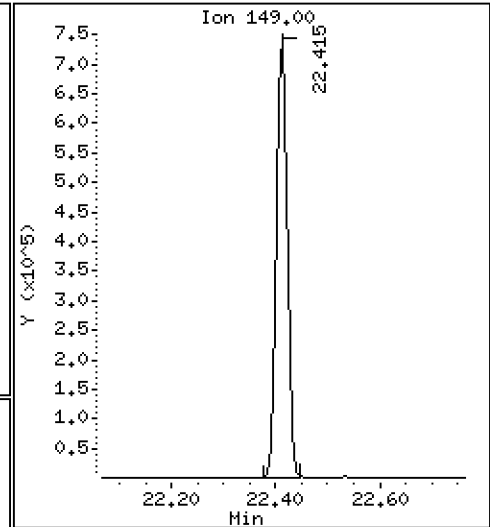
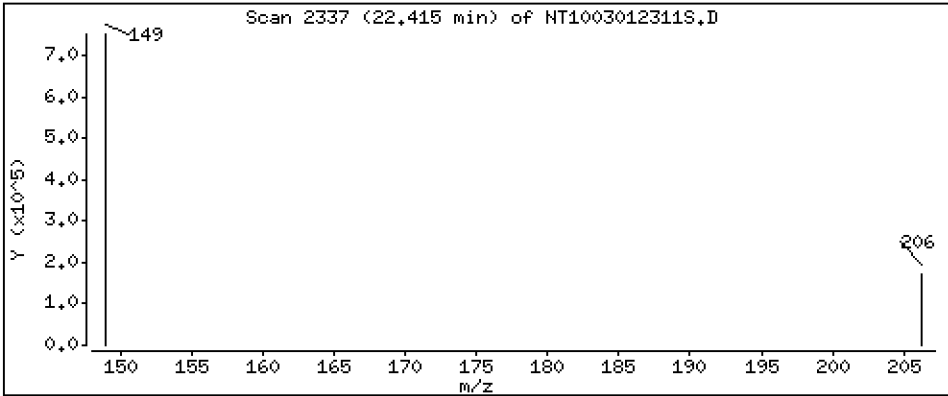
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 4,689 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

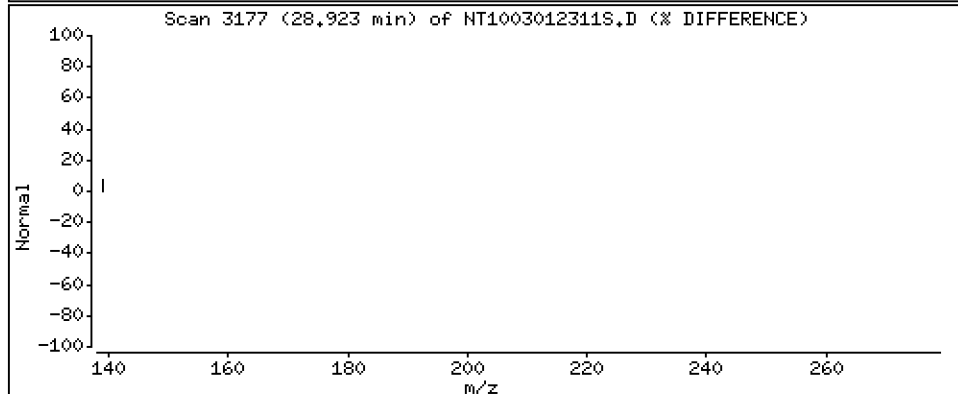
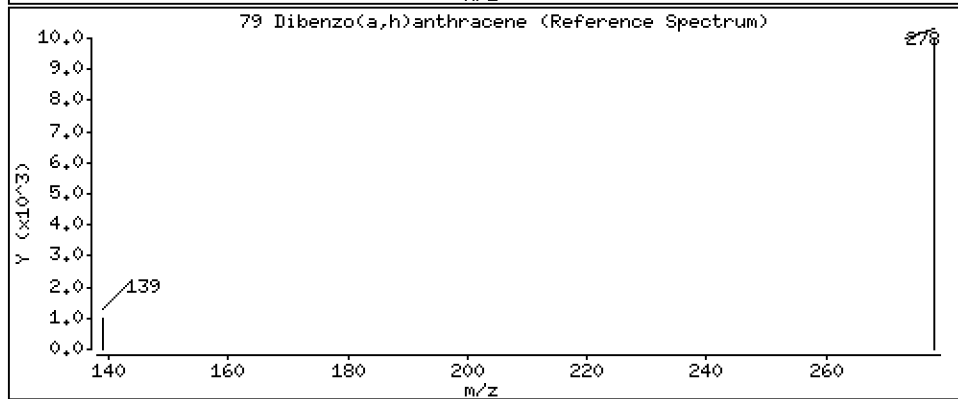
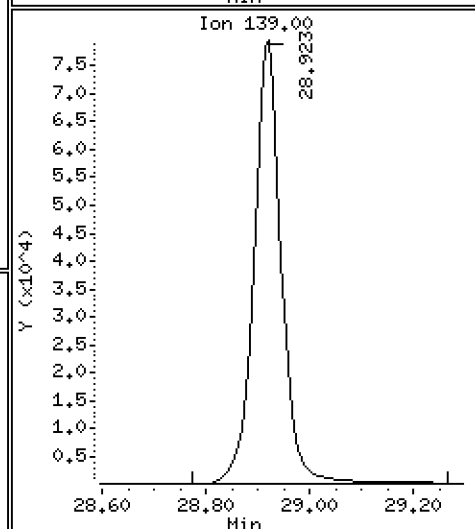
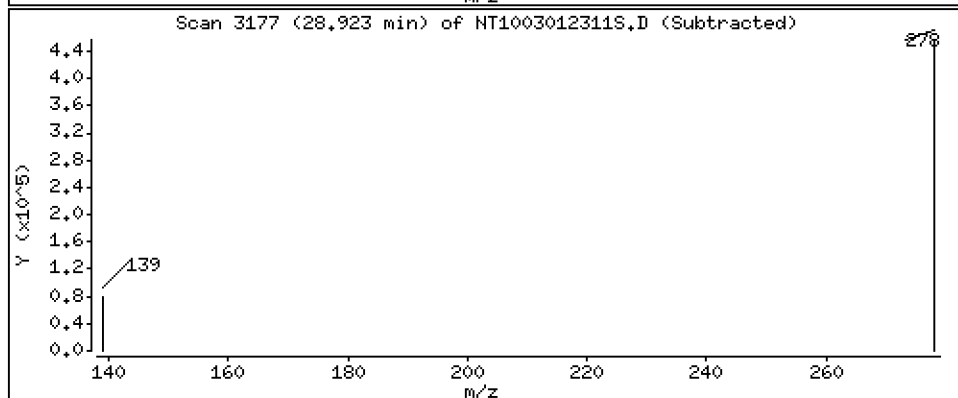
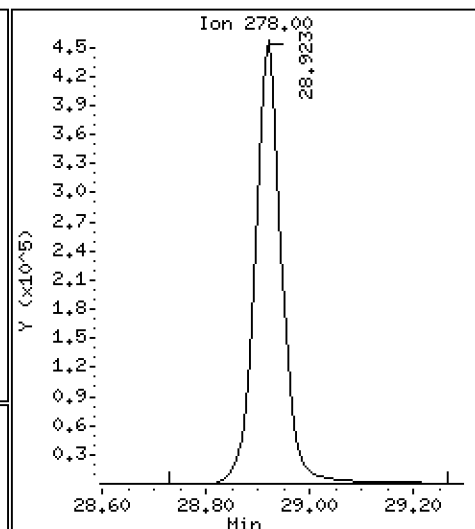
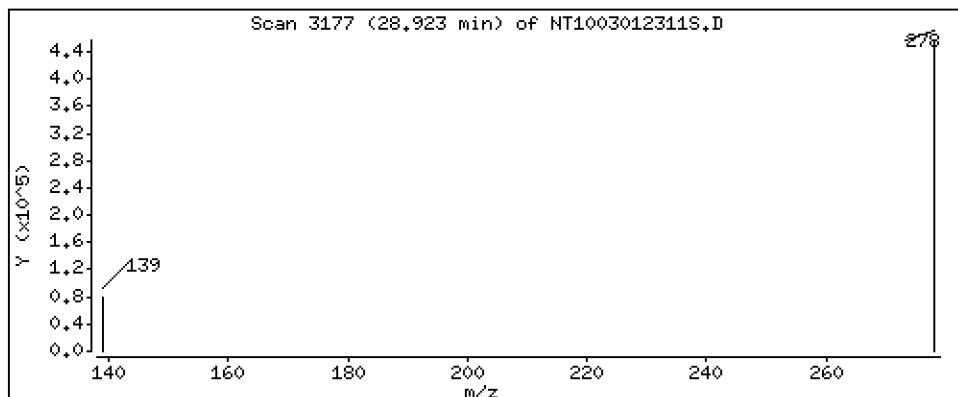
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 4,760 ug/L



Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

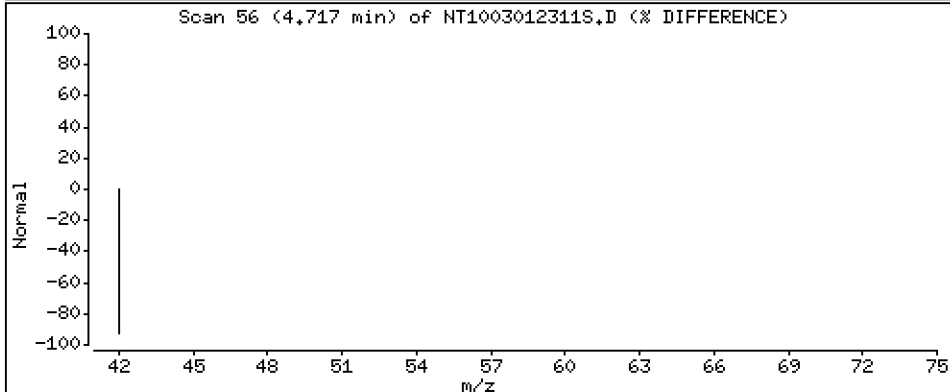
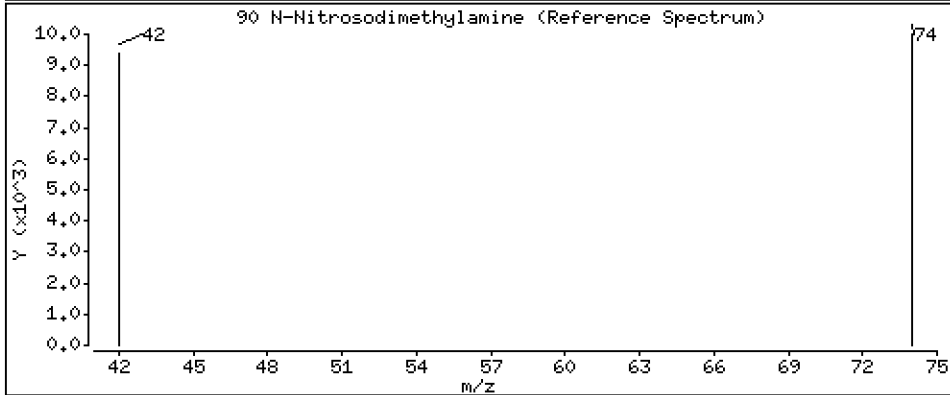
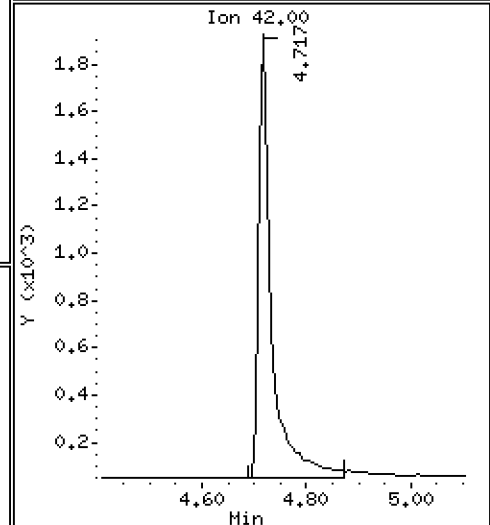
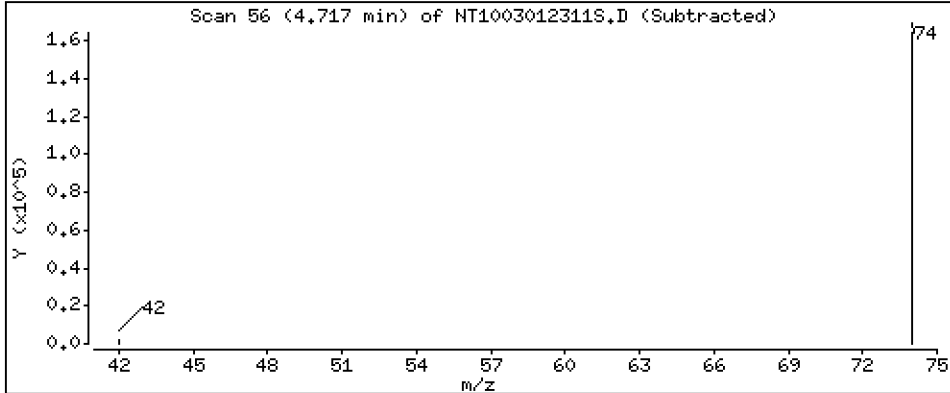
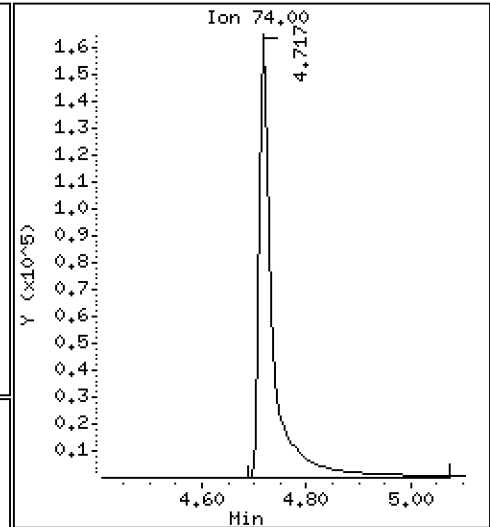
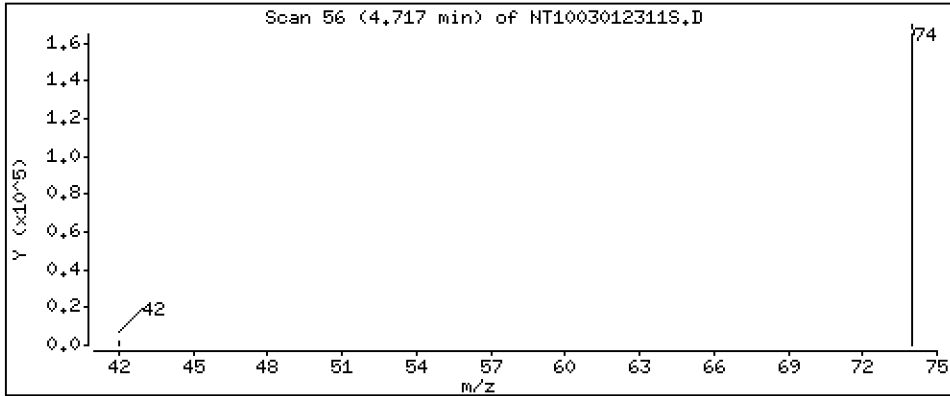
Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25

90 N-Nitrosodimethylamine

Concentration: 6.057 ug/L



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
 Operator : JGR Inst ID: nt10.i
 Smp Info : SEQ-SCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: PSDDA.sub
 Target Version: 4.14
 Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/mL)	FINAL (ug/L)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	3267	0.03768	0.03768 (R)
3 Phenol	94		8.517	8.532	(0.921)	590047	4.50660	4.507
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	572299	5.08409	5.084
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.252	(1.000)	303734	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.275	(1.003)	574537	5.24962	5.250
11 Benzyl alcohol	79		9.469	9.508	(1.023)	388582	5.10390	5.104
12 1,2-Dichlorobenzene	146		9.562	9.563	(1.034)	540938	5.14228	5.142
13 2-Methylphenol	108		9.655	9.671	(1.044)	348452	4.36547	4.365
15 4-Methylphenol	108		9.943	9.966	(1.075)	379262	4.50495	4.505
16 N-Nitroso-di-n-propylamine	70		9.982	9.982	(1.079)	330861	5.68451	5.685
22 2,4-Dimethylphenol	107		10.998	11.006	(0.938)	357707	3.63670	3.637
24 Benzoic acid	105		11.099	11.007	(0.947)	380081	6.86990	6.870
26 1,2,4-Trichlorobenzene	180		11.600	11.600	(0.989)	402252	4.87012	4.870
* 27 Naphthalene-d8	136		11.724	11.723	(1.000)	1147551	4.00000	
30 Hexachlorobutadiene	225		11.994	11.994	(1.023)	285002	4.86242	4.862
39 Dimethylphthalate	163		14.741	14.749	(0.963)	1142178	5.57065	5.571
* 42 Acenaphthene-d10	162		15.314	15.314	(1.000)	645730	4.00000	
50 Diethylphthalate	149		16.203	16.211	(1.058)	1156037	5.97883	5.979
54 N-Nitrosodiphenylamine	169		16.690	16.705	(0.907)	998237	5.35897	5.359
57 Hexachlorobenzene	284		17.578	17.579	(0.955)	424193	4.86607	4.866

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/mL)	FINAL (ug/L)
58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
* 59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
\$ 66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712 (R)
67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
* 69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
* 77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003012311S.D
 Lab Smp Id: SLC0143-SCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JGR
 Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 01-MAR-2023
 Calibration Time: 18:37
 Level: LOW
 Sample Type: AIR

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1

nt10.i, 20230301.b\SIM.b\SIMABN2.m, 01-MAR-2023 21:46

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
0.947	0.000	0.9467		Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052315S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0435</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0435-CCV1</u>	Injection Time:	<u>22:16</u>
Sequence Name:	<u>Calibration Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.4413080	1.4039480		-2.6	+/-50
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3921730		0.5	+/-50
Benzyl Alcohol	A	1.0000	1.0	0.7492523	0.9105636		-3.6	+/-50
Benzoic acid	A	4.0000	0.7	0.1431163	0.0332159		-82.2	+/-50 *
2,4-Dimethylphenol	A	2.0000	2.1	0.2957717	0.3638503		6.6	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3415521		18.6	+/-50
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5842969		-9.7	+/-50
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0126209		-90.5	+/-50 *
2-Fluorophenol	A	1.5000	1.65	1.1419780	1.2529000		9.7	+/-50
p-Terphenyl-d14	A	1.0000	1.57	0.3234672	0.5071780		56.8	+/-50 *

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.1\SIH.1\NT1003052315S.D

Date: 05-MAR-2023 22:16

Client ID:

Sample Info: SLC0435-CCW1

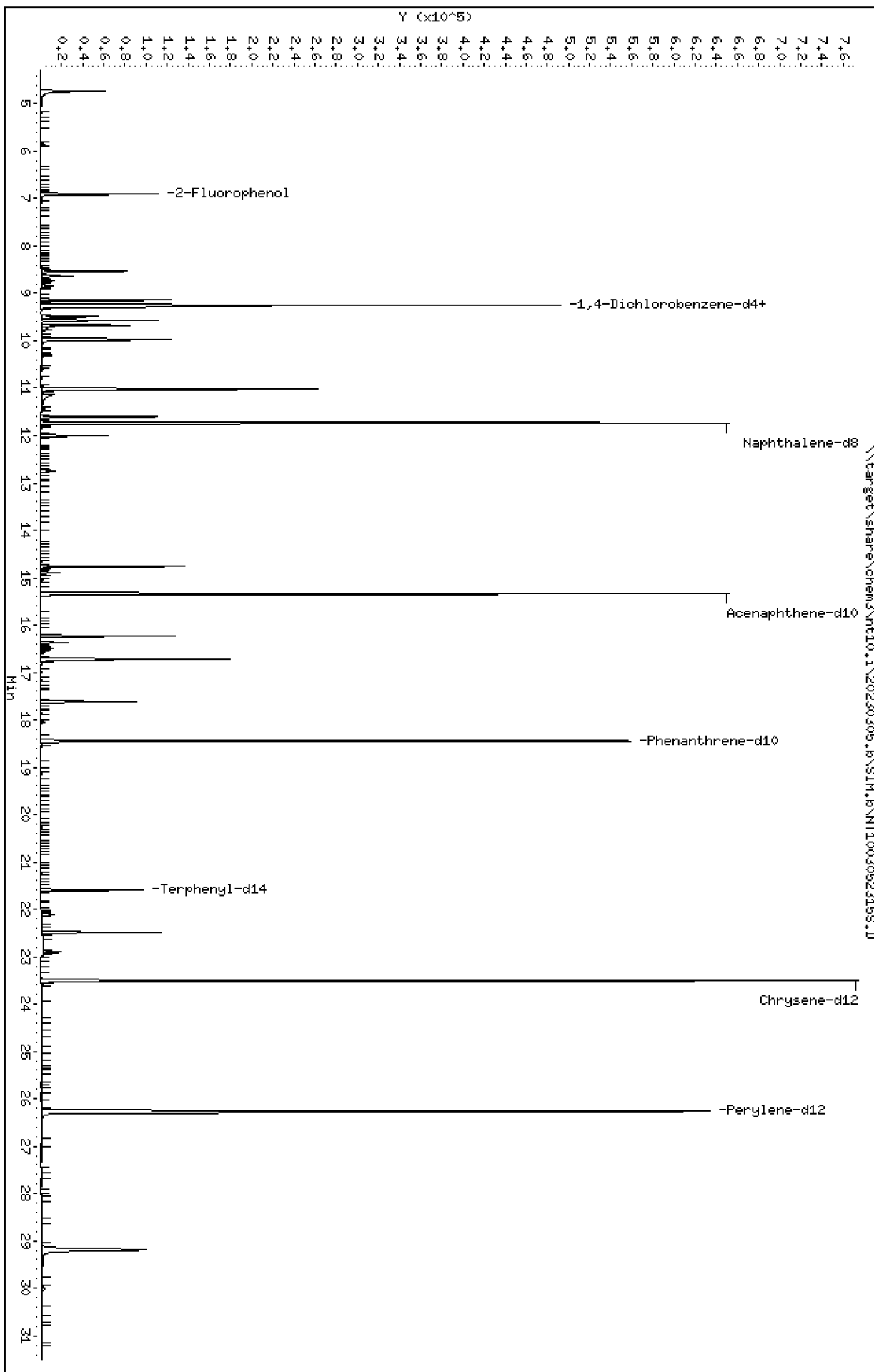
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

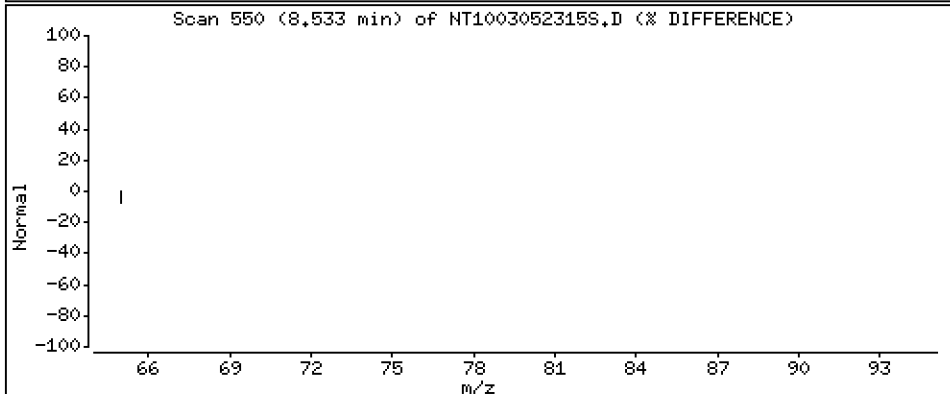
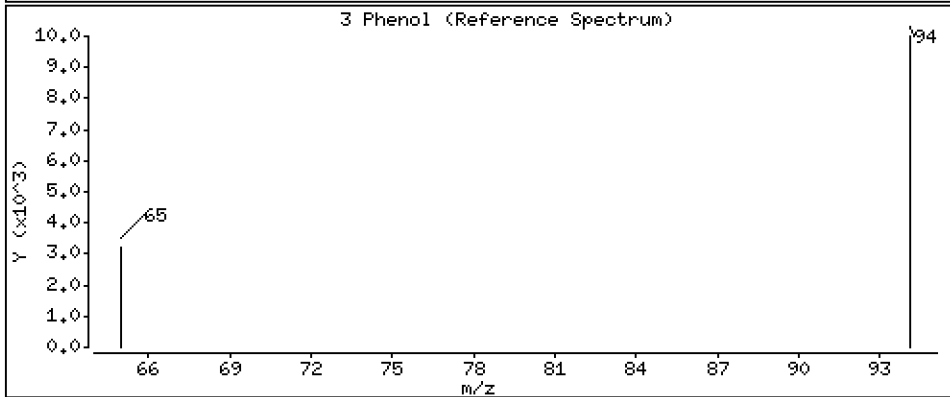
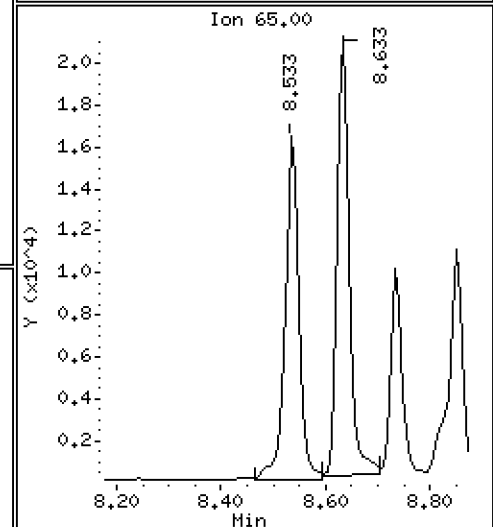
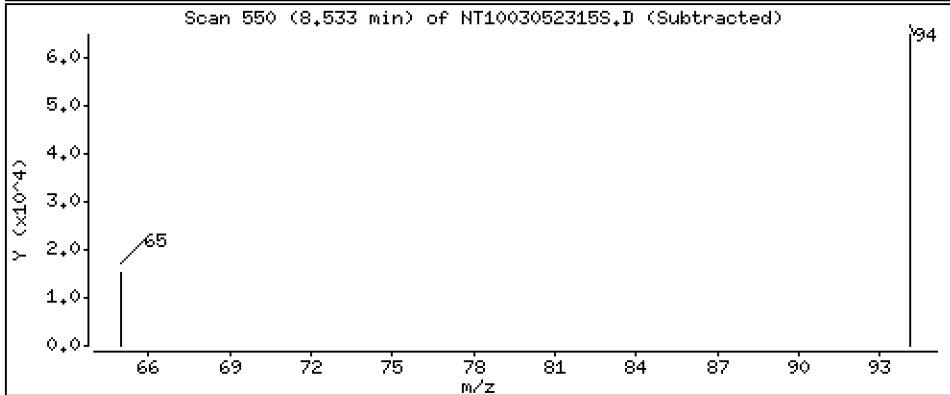
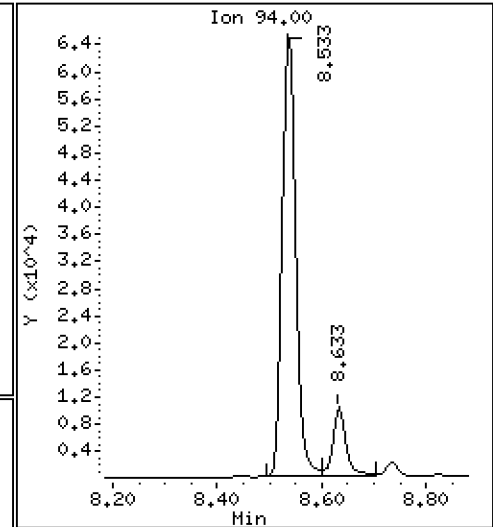
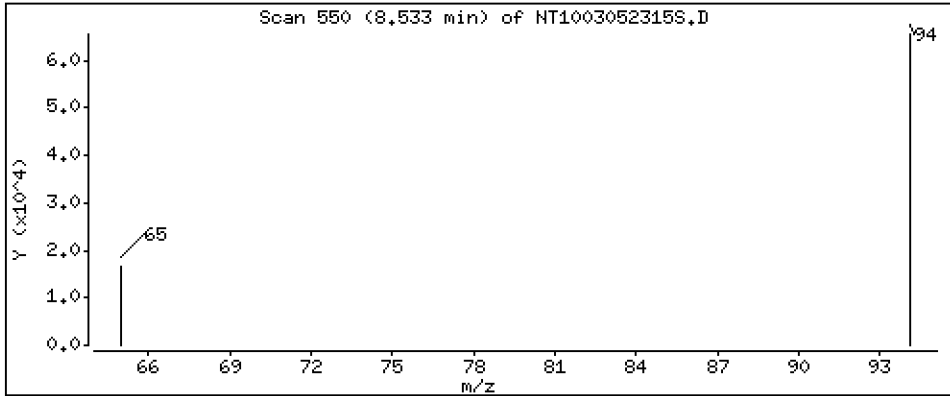
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,9099 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

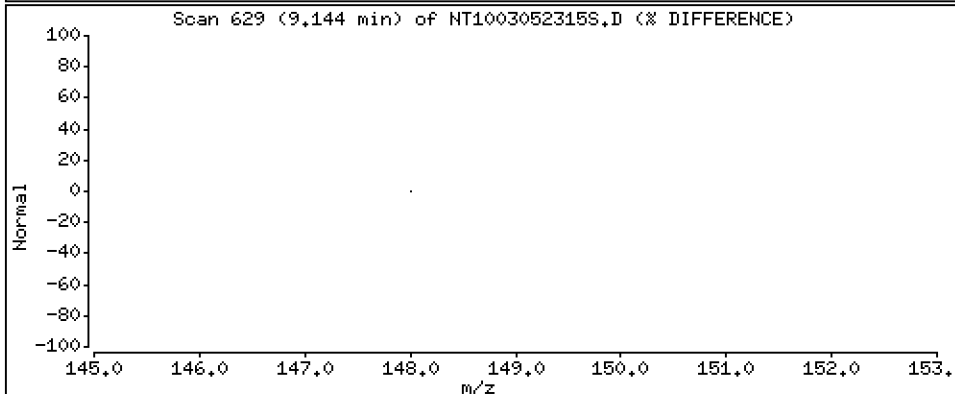
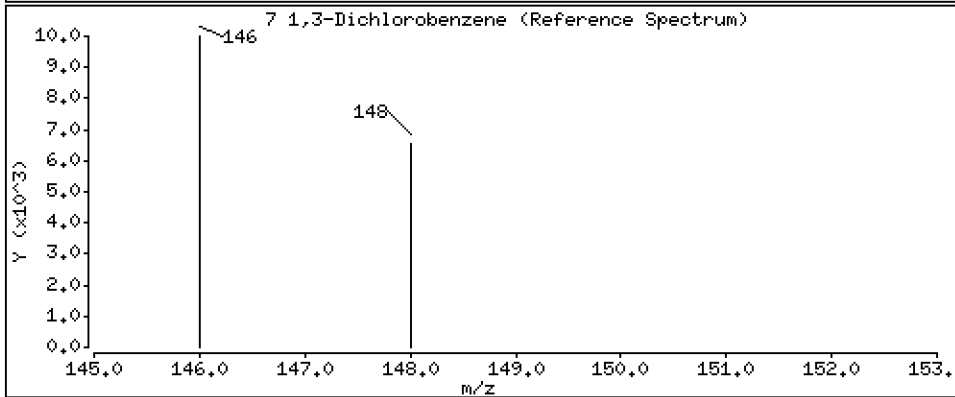
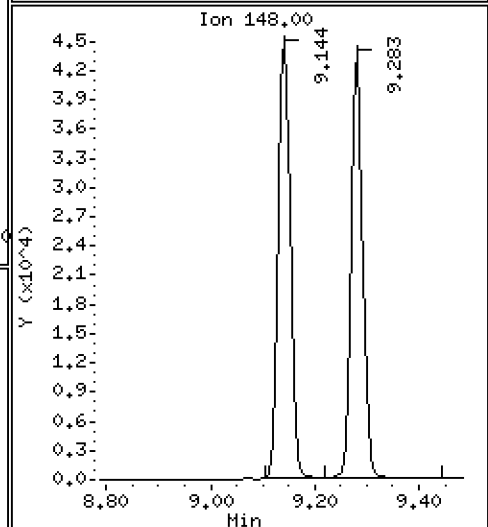
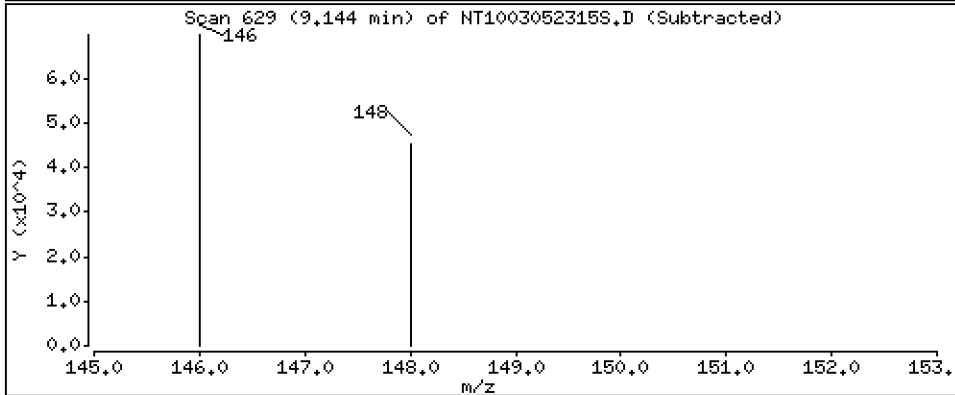
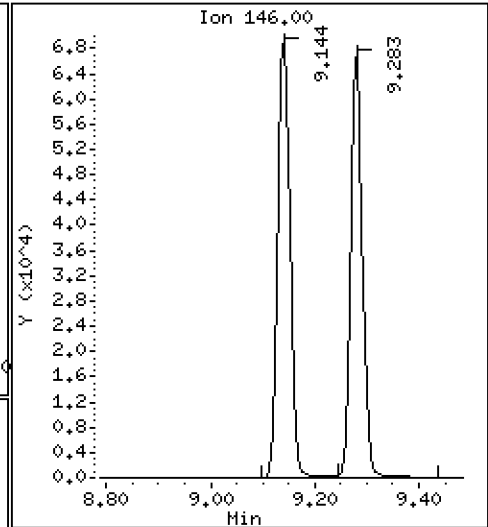
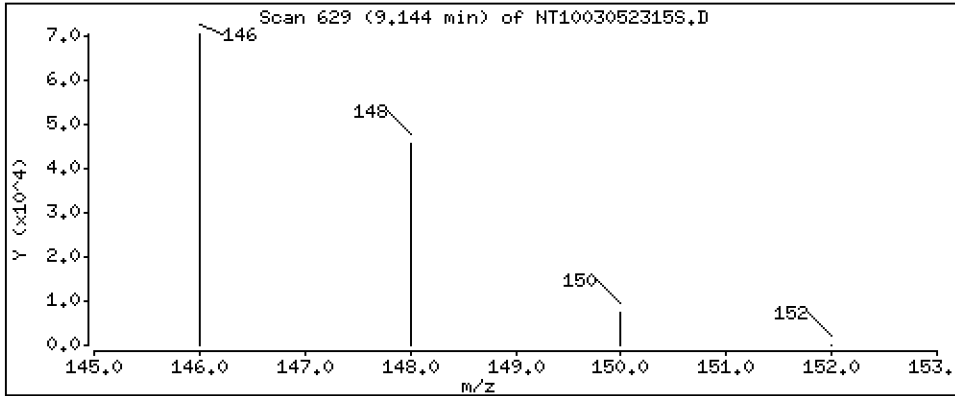
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,9964 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

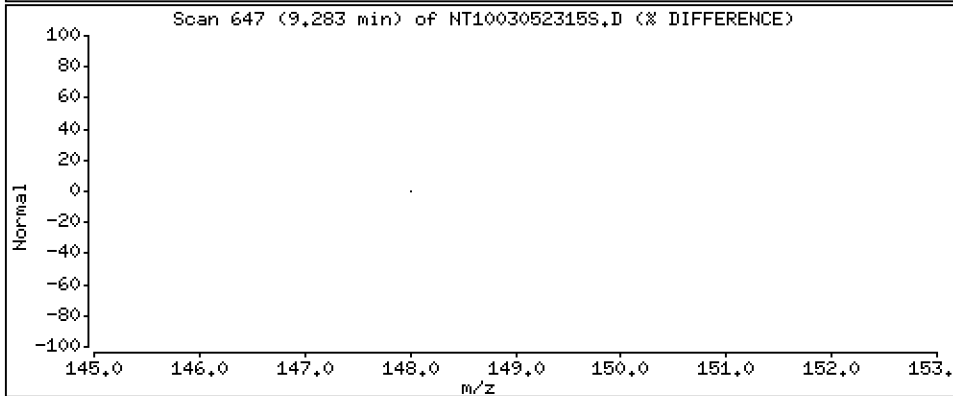
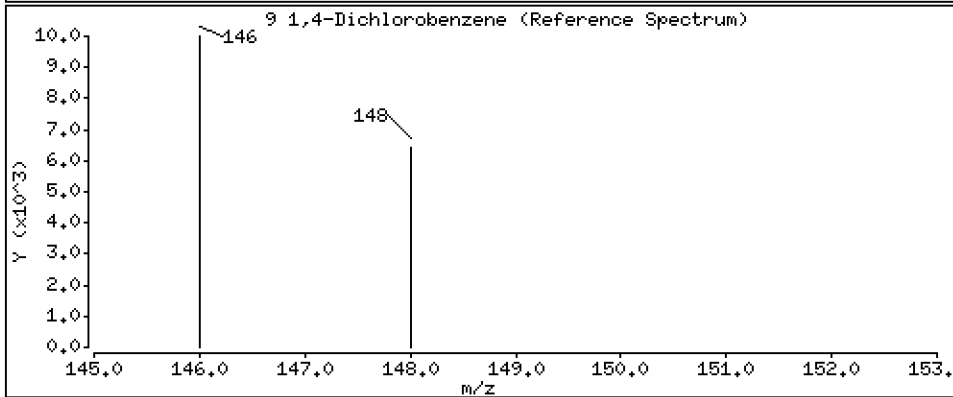
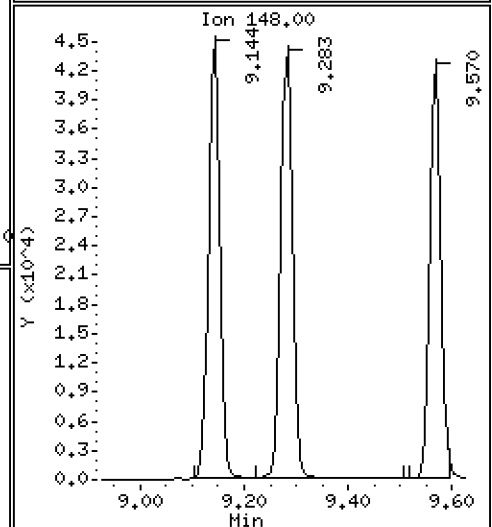
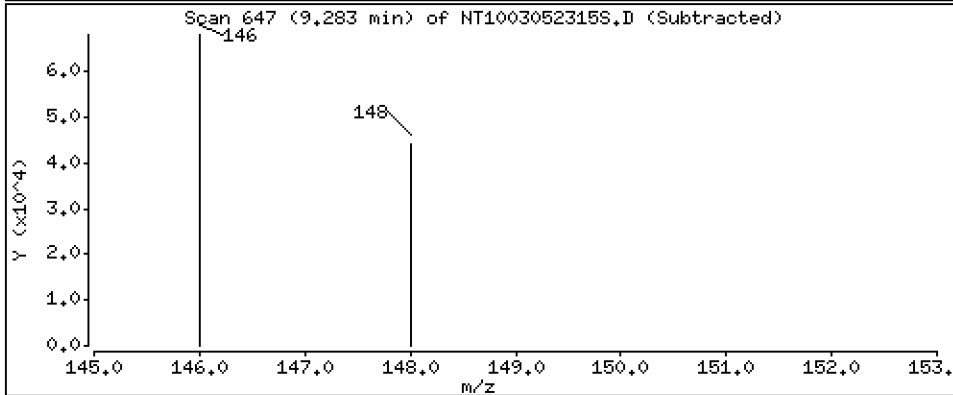
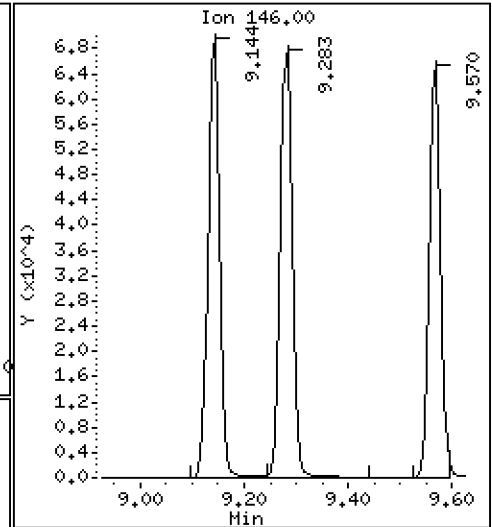
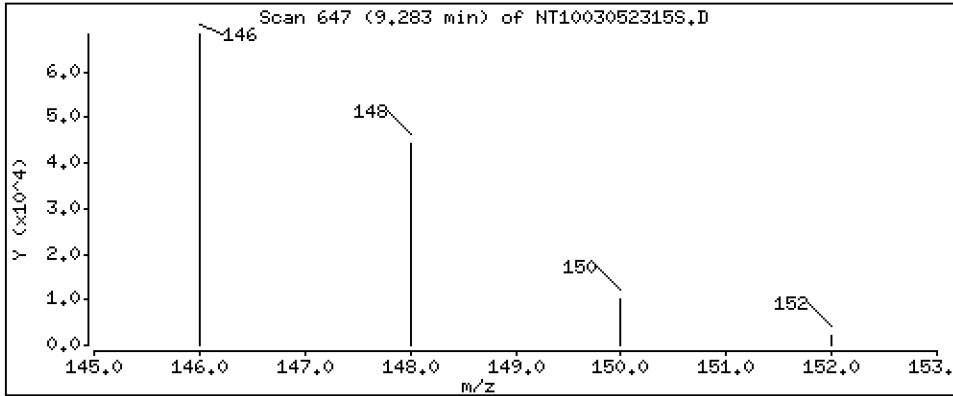
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.9741 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

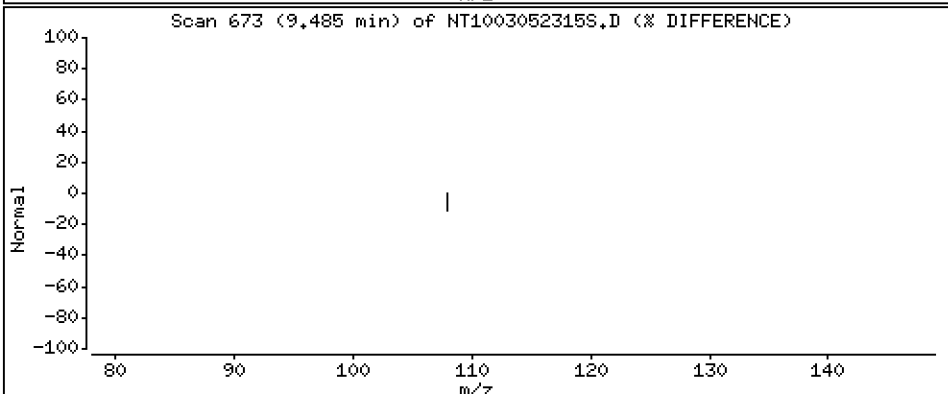
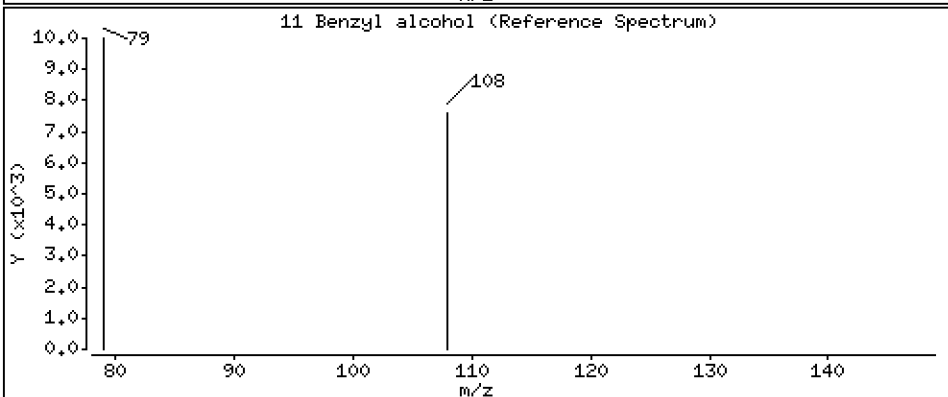
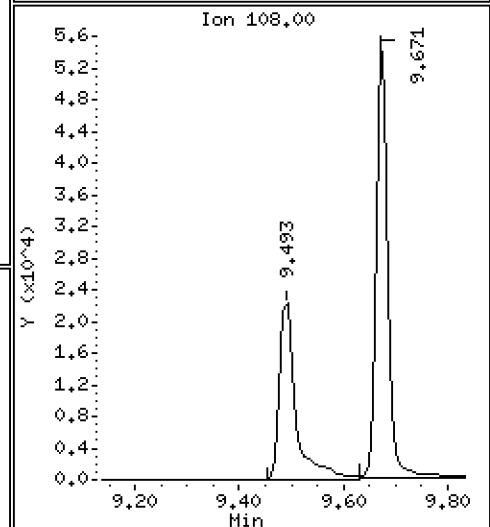
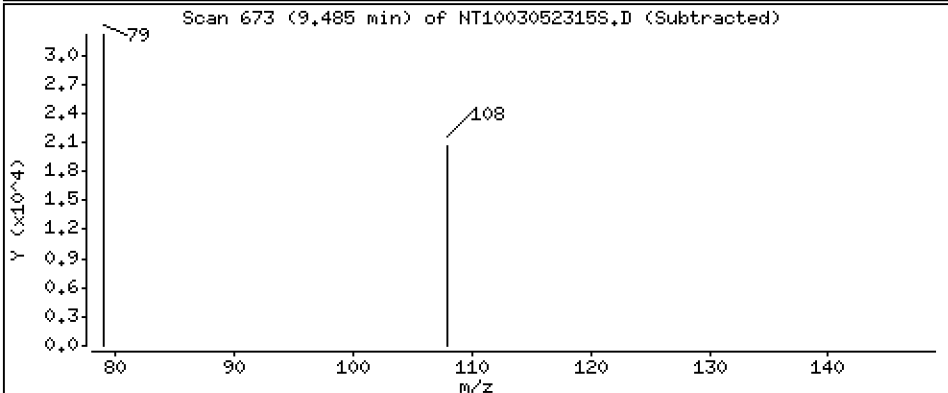
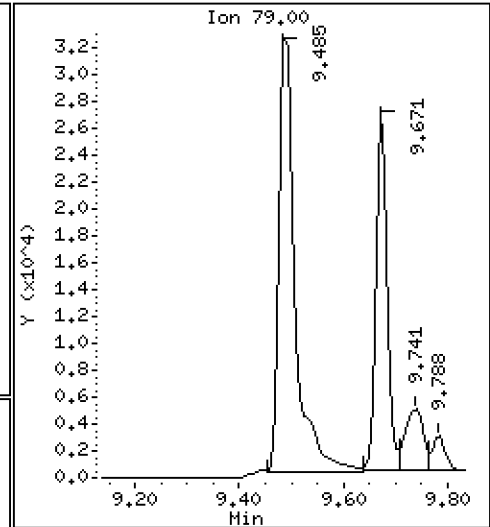
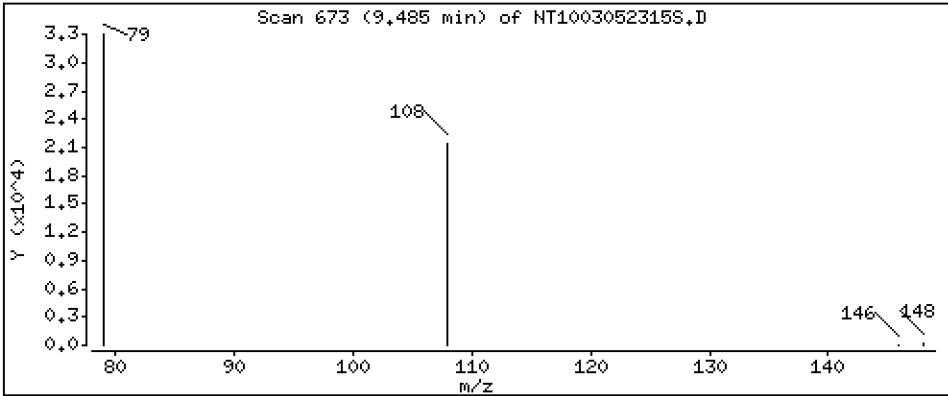
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,9635 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

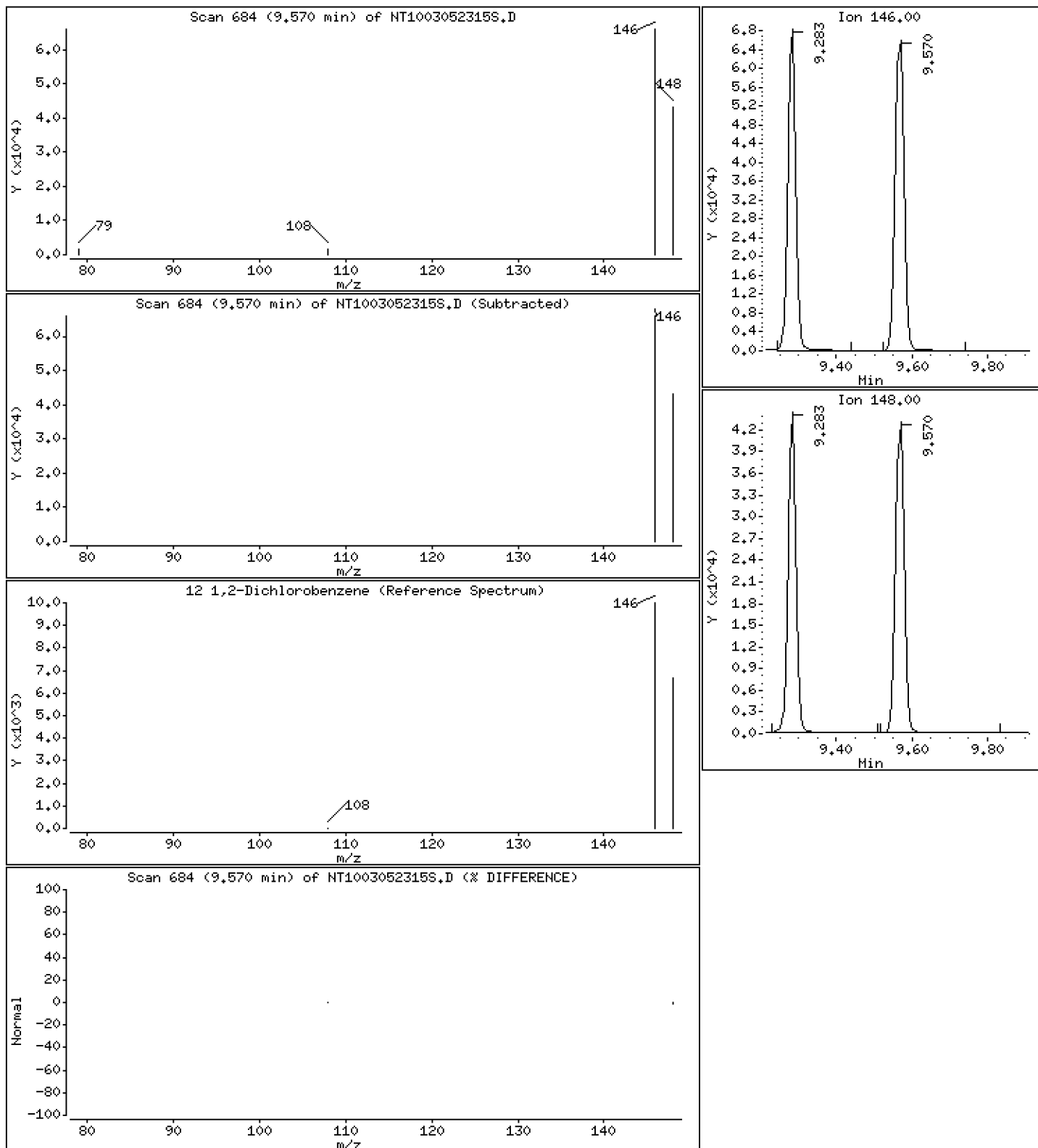
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 1,005 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

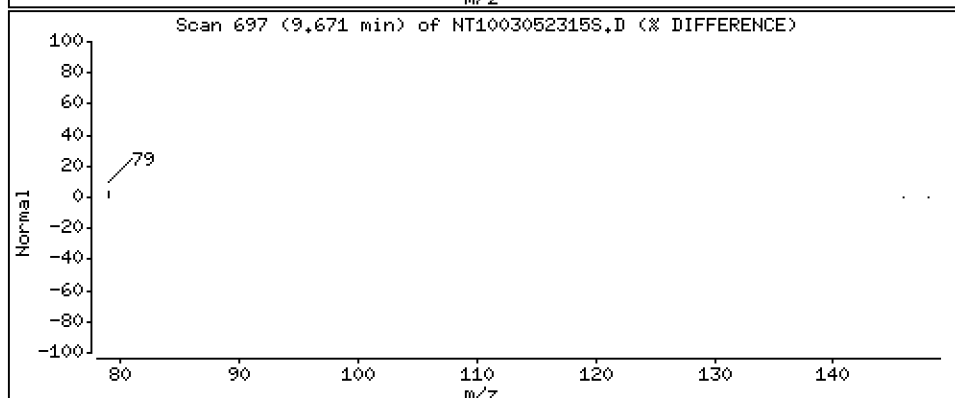
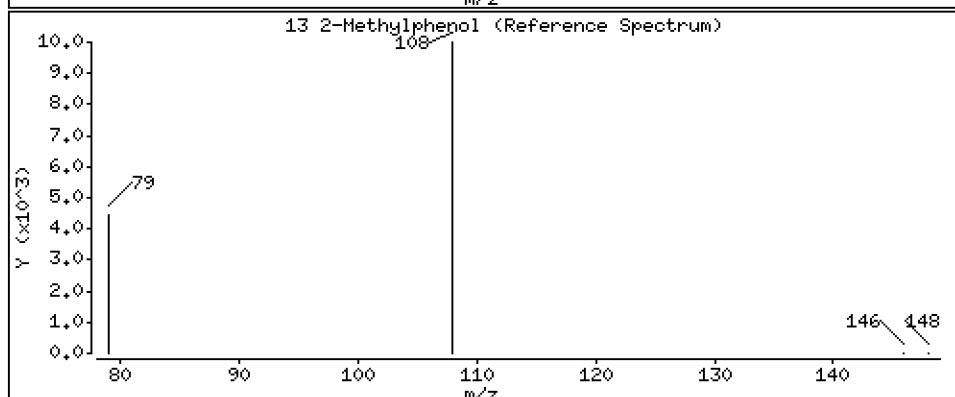
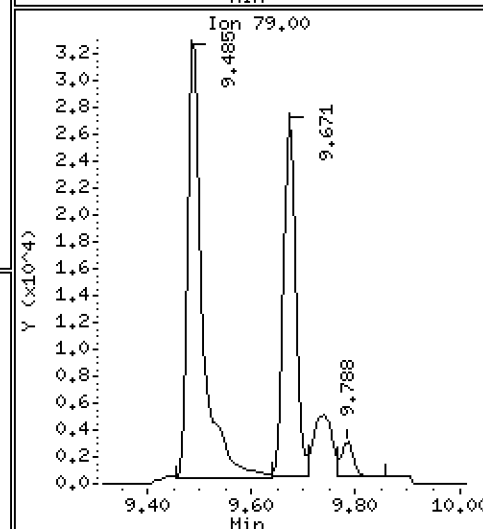
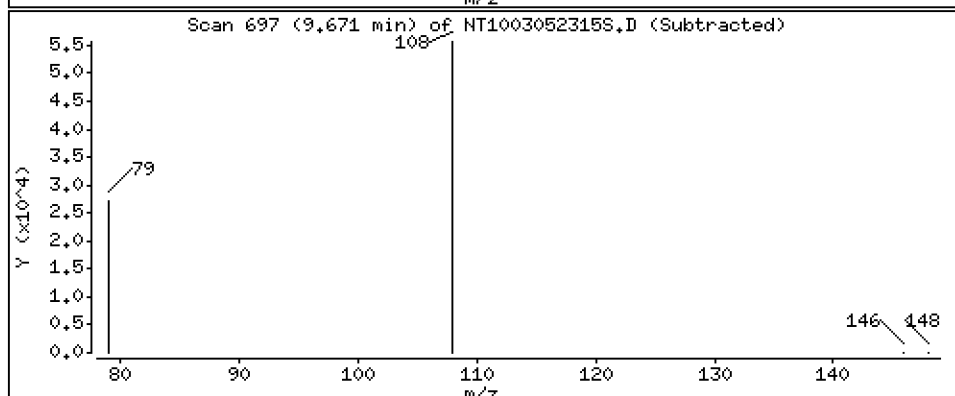
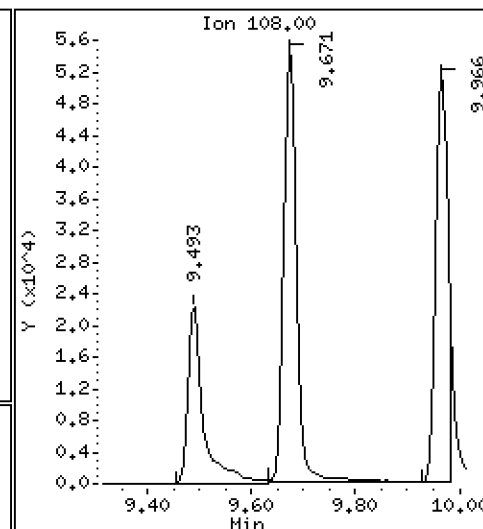
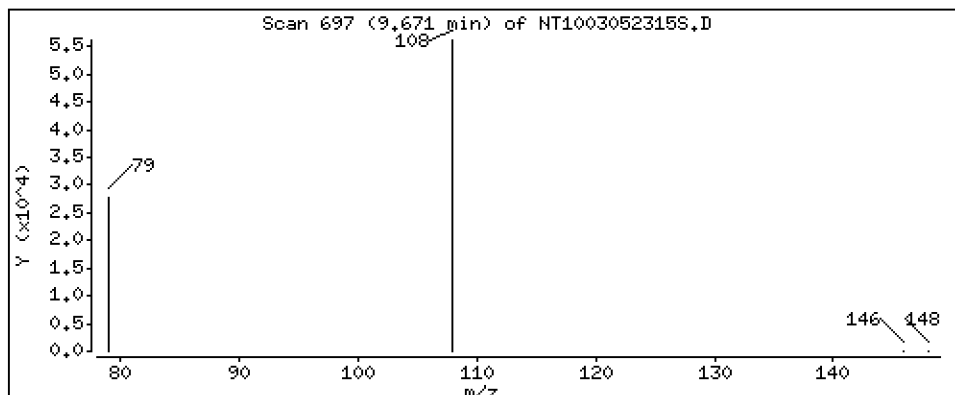
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 1,194 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

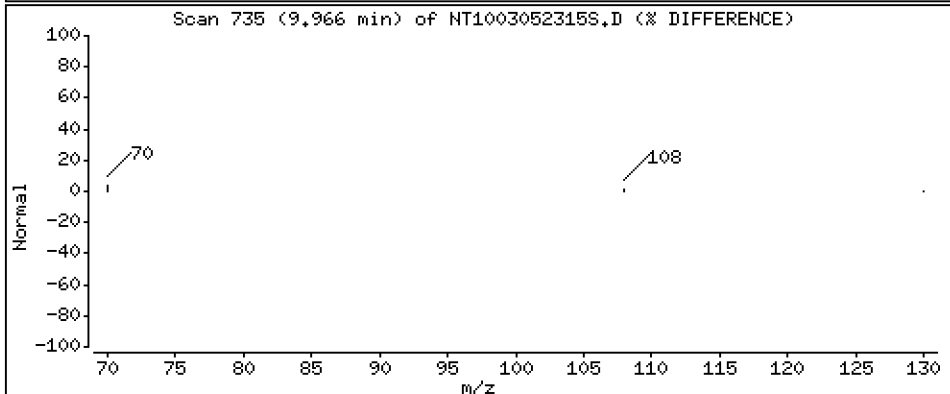
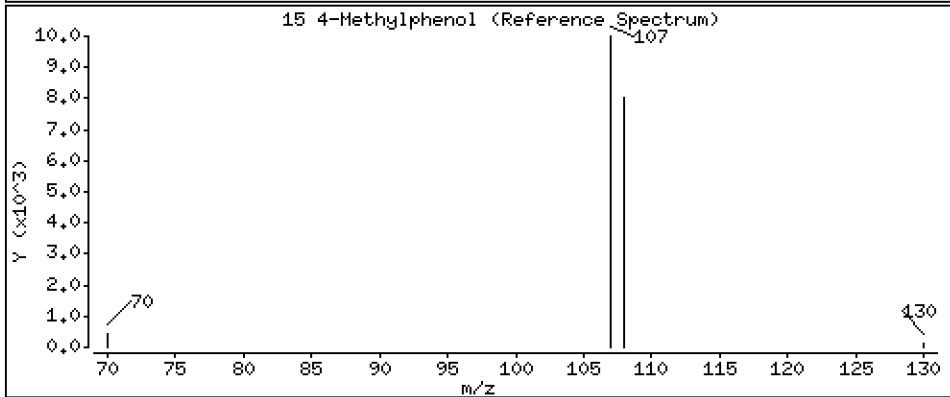
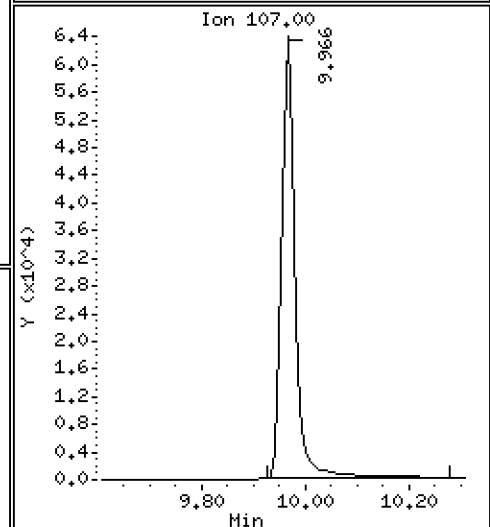
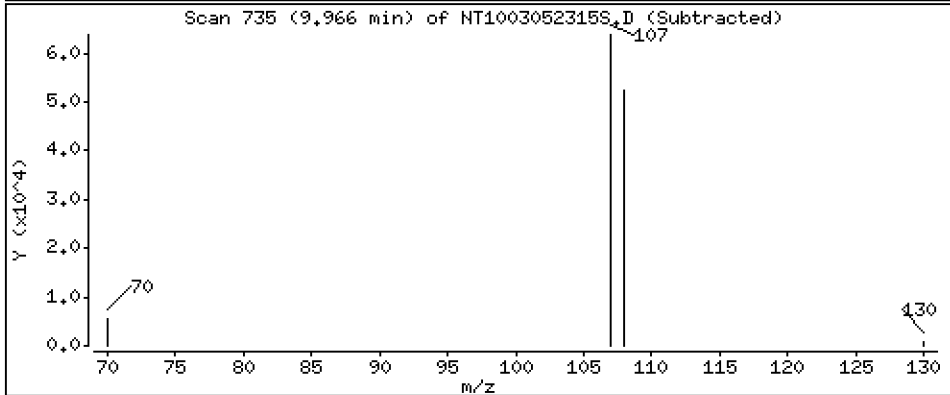
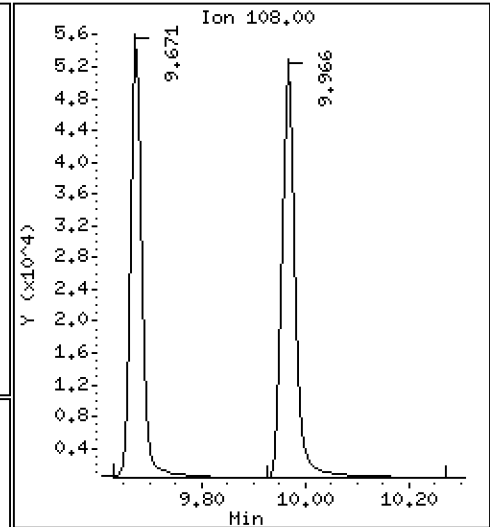
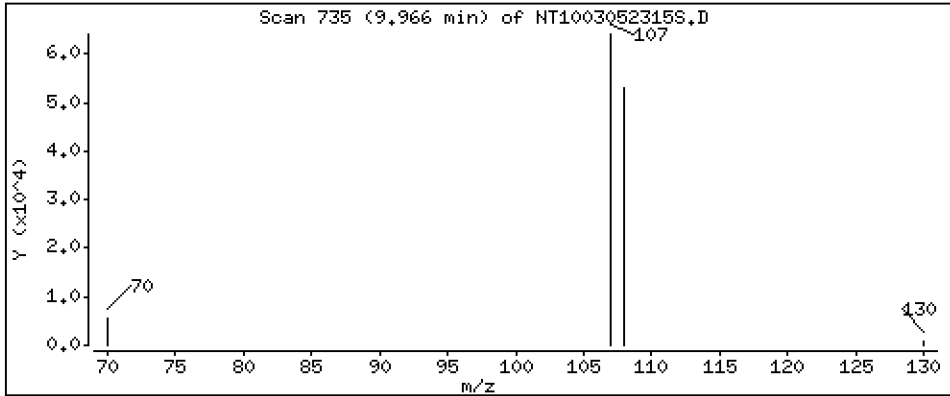
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 1.170 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

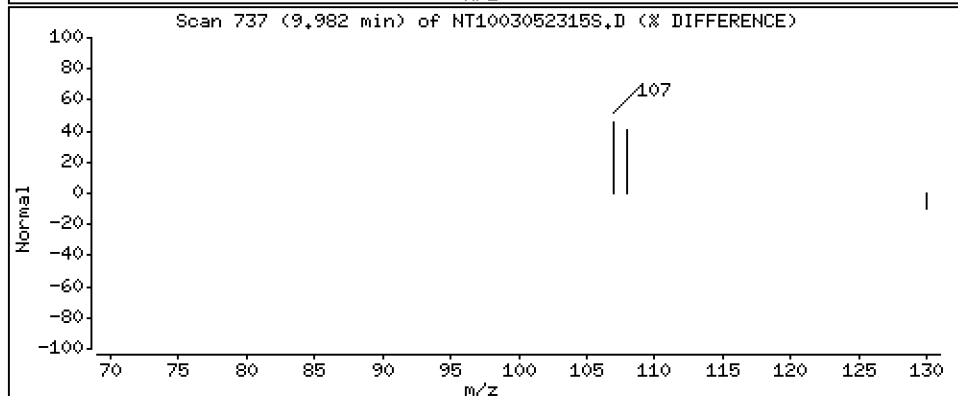
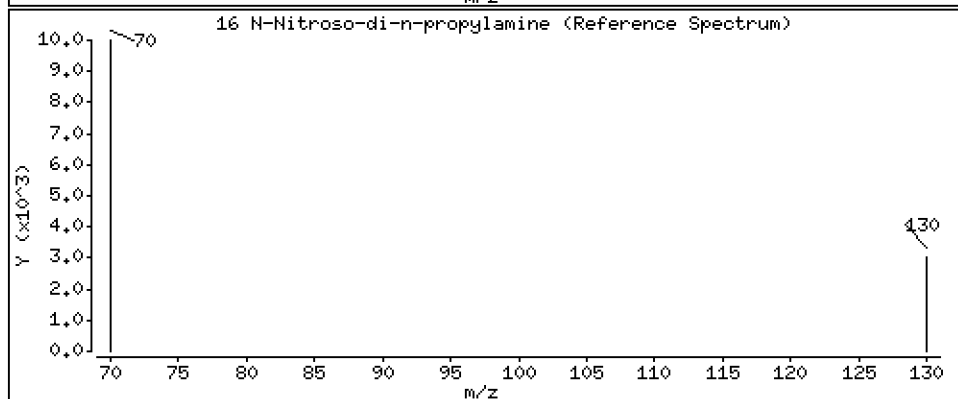
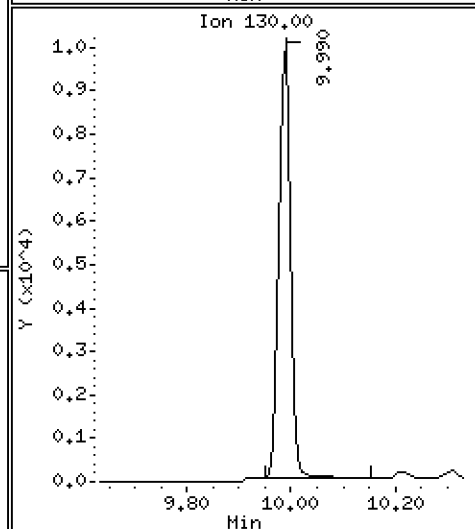
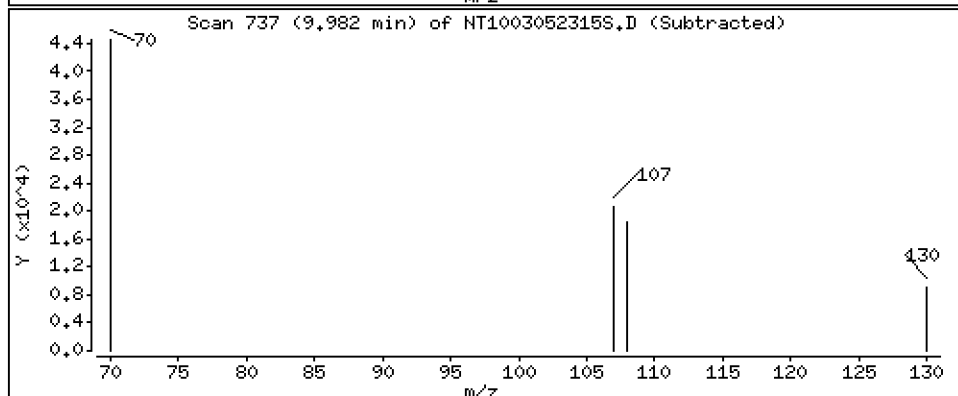
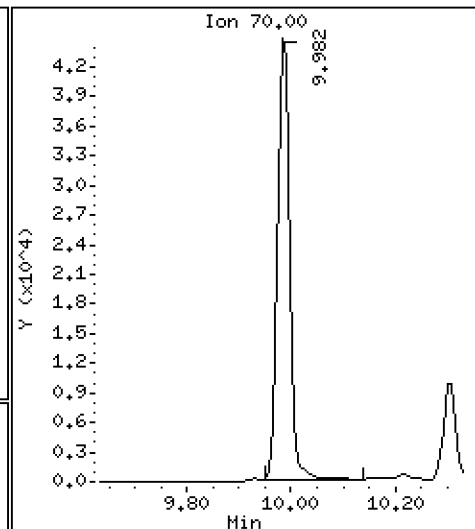
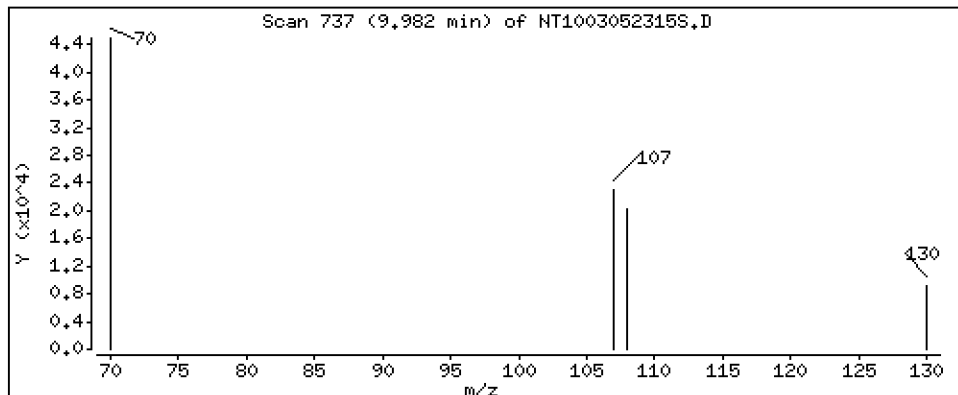
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 1,238 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

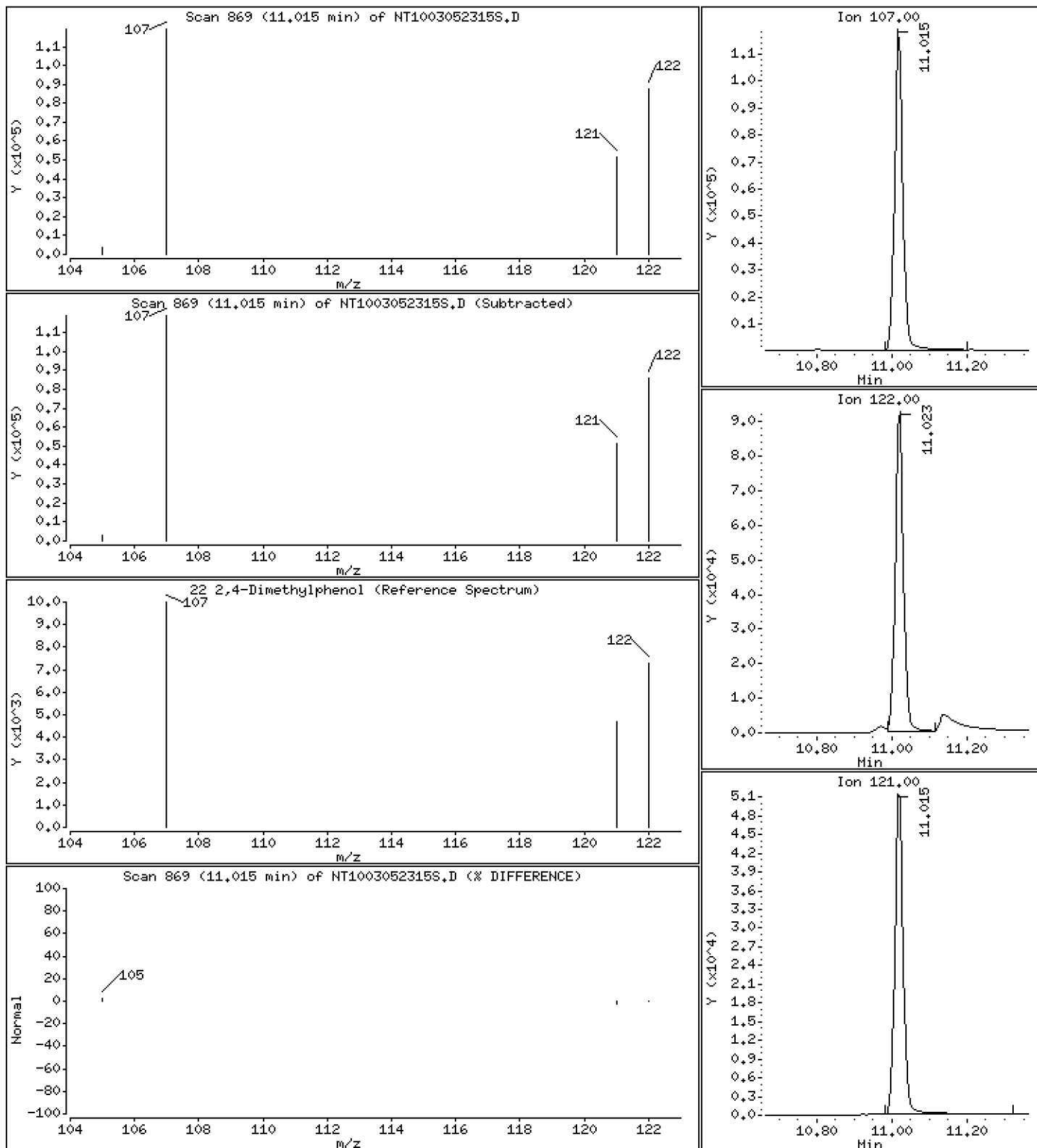
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 2,132 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

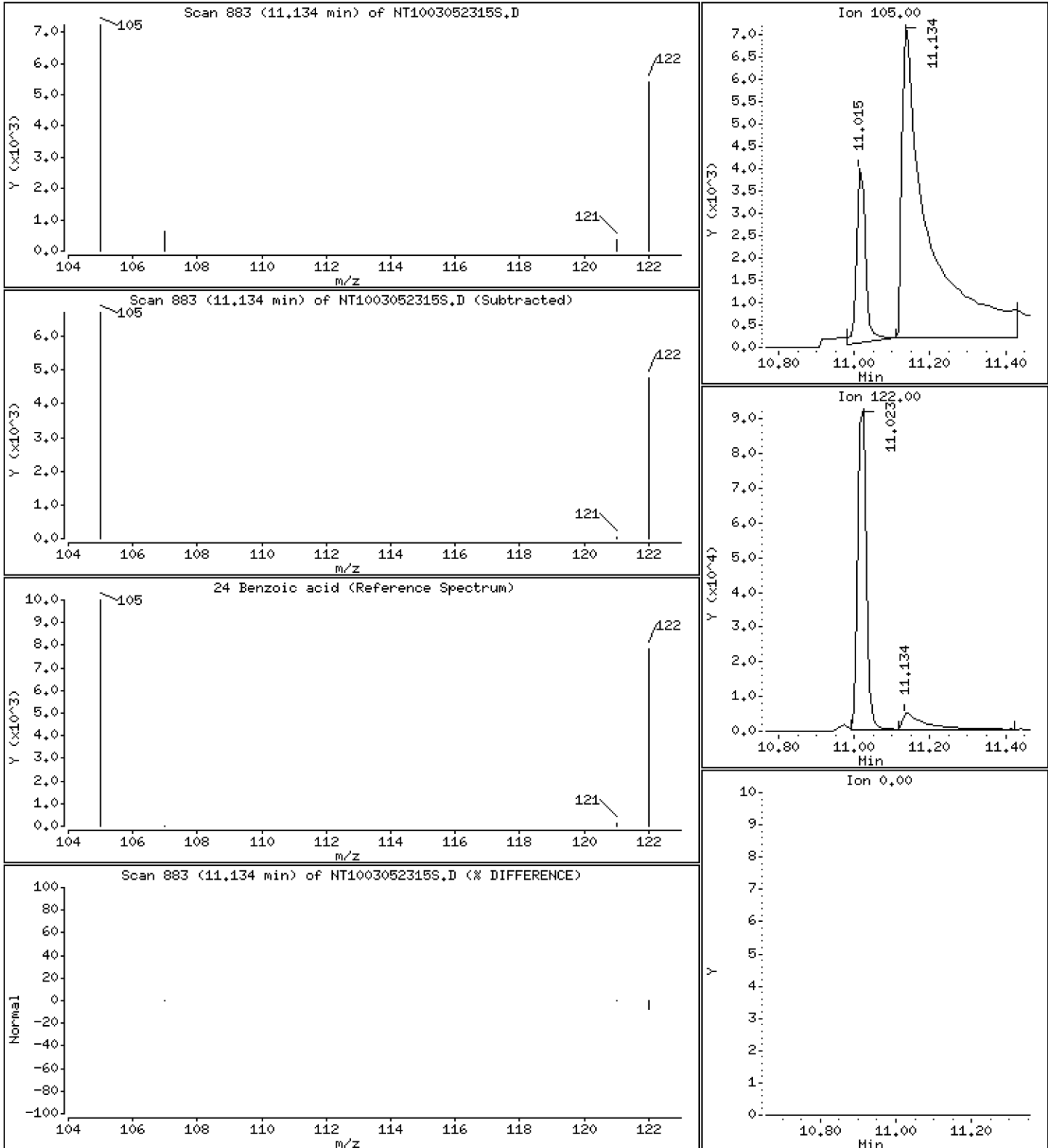
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,7117 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

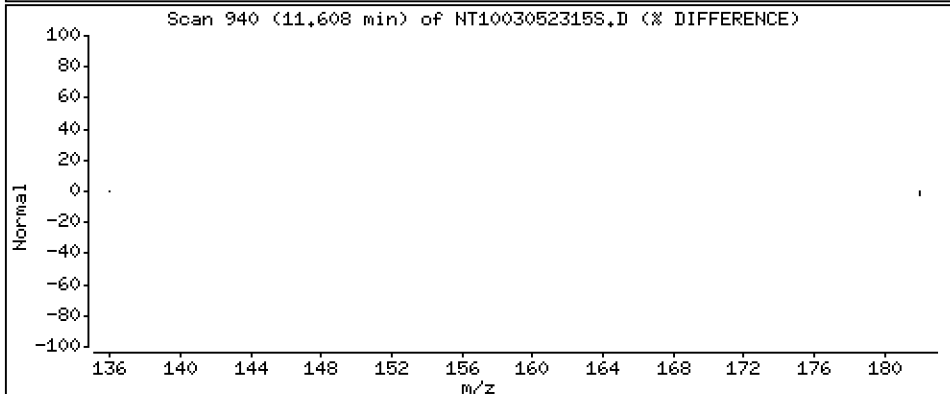
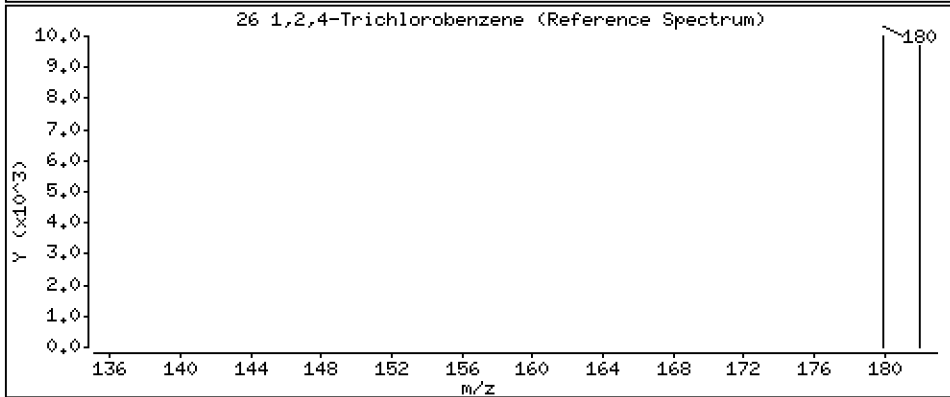
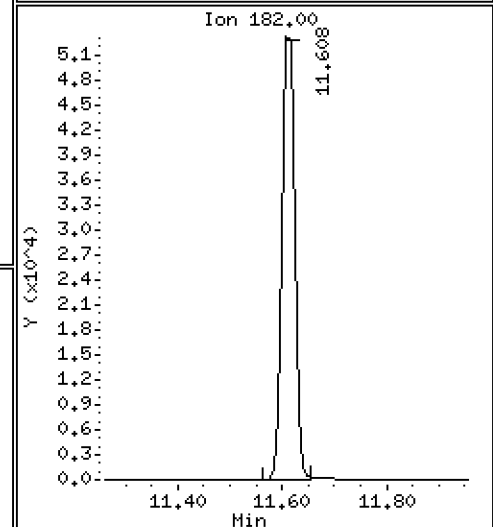
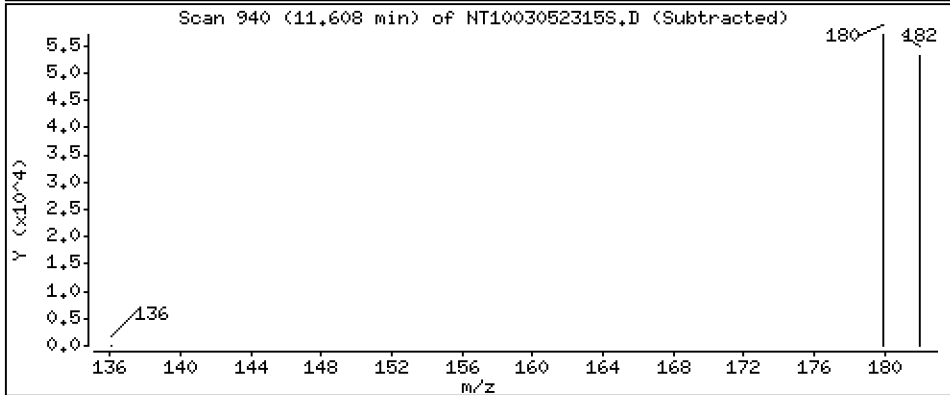
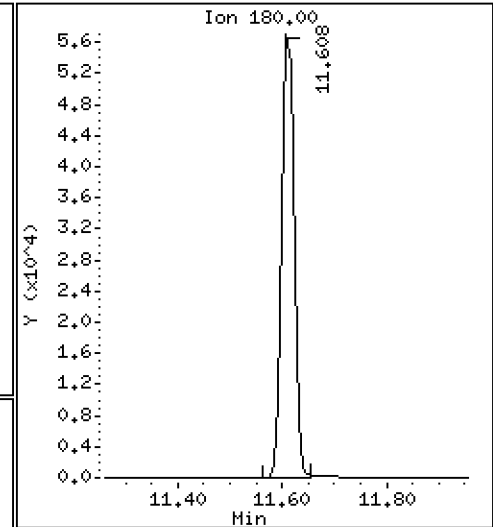
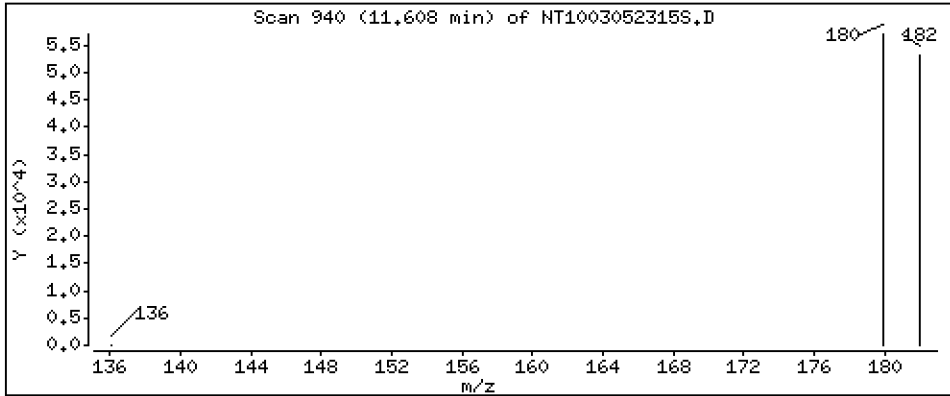
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 1,186 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

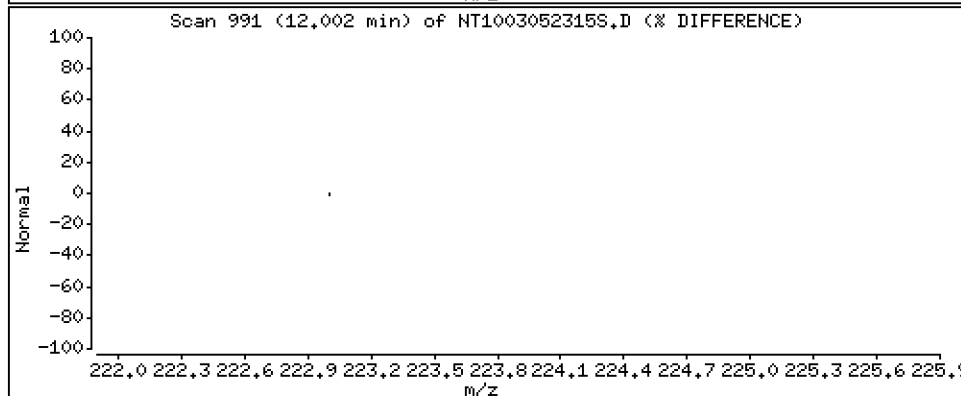
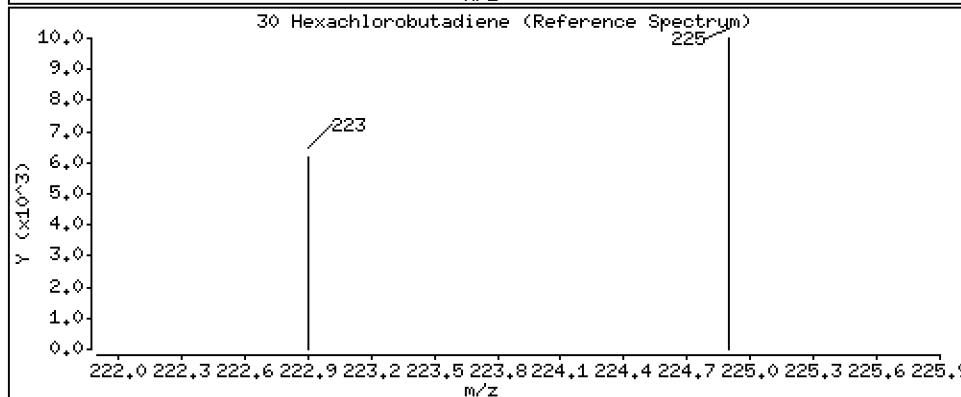
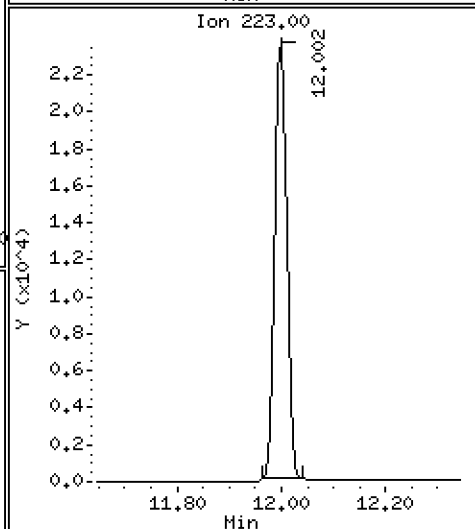
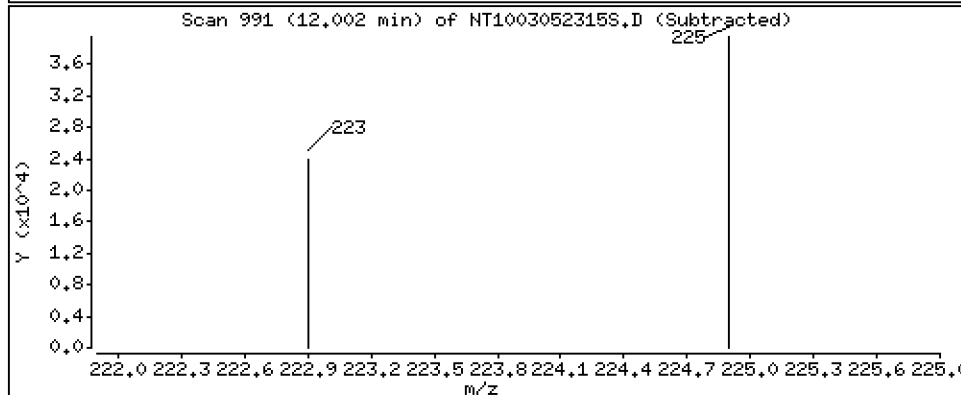
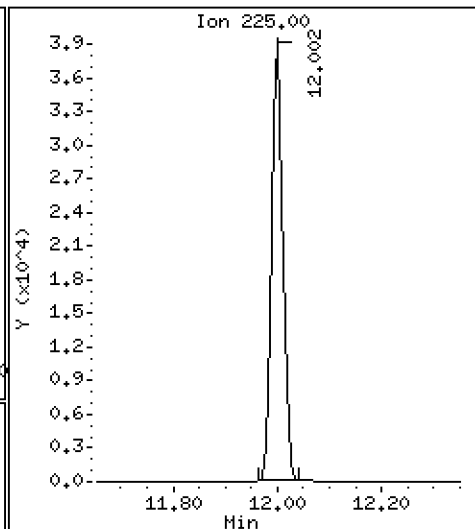
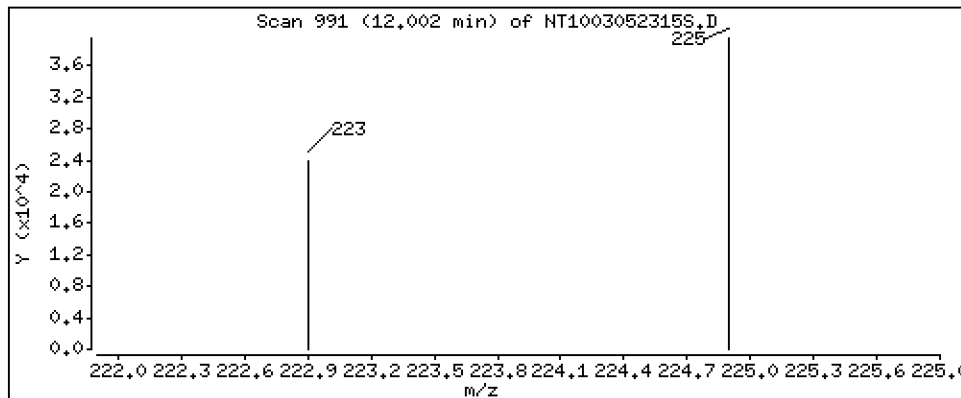
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,089 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

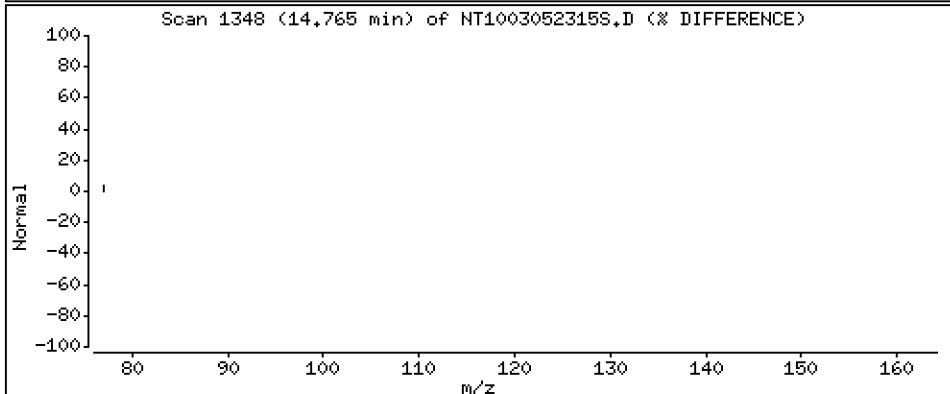
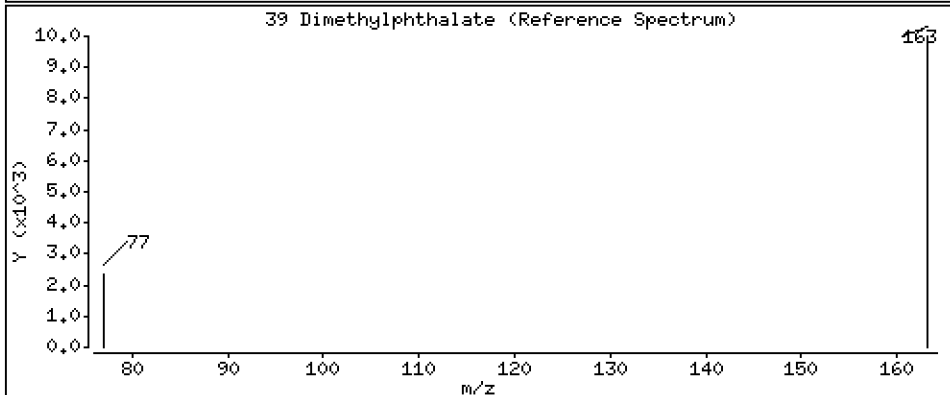
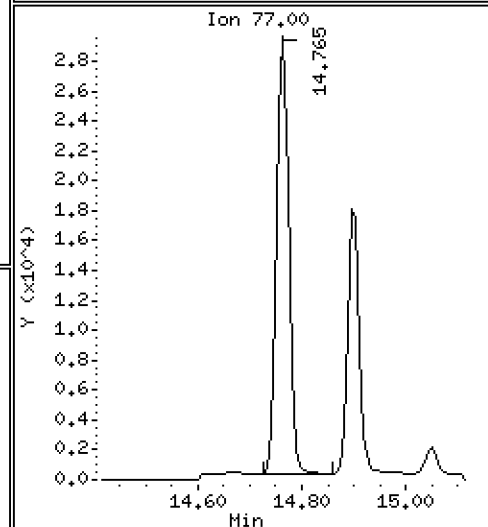
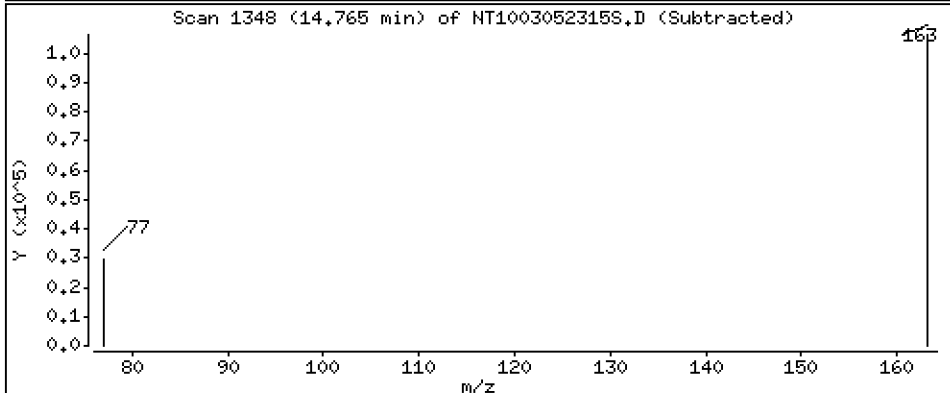
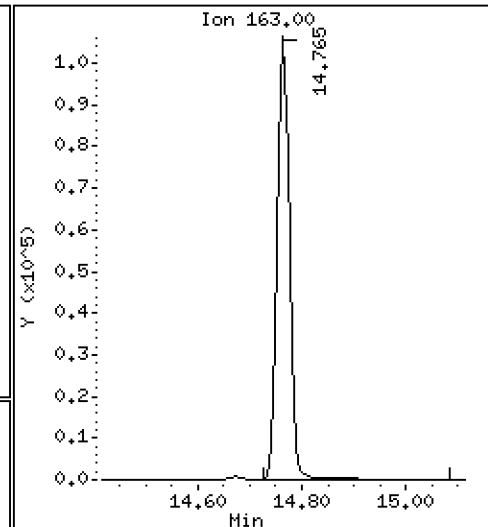
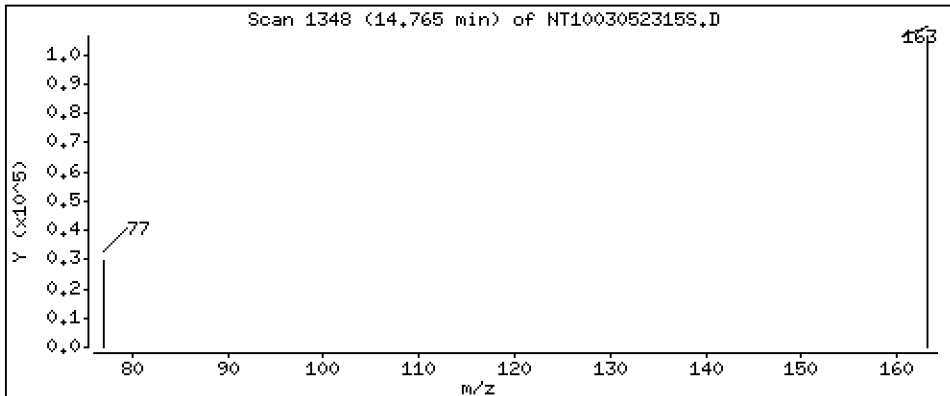
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 1,023 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

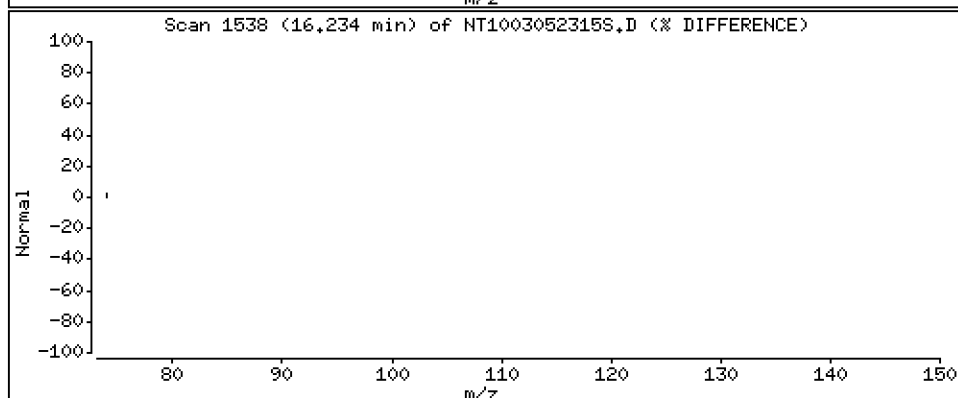
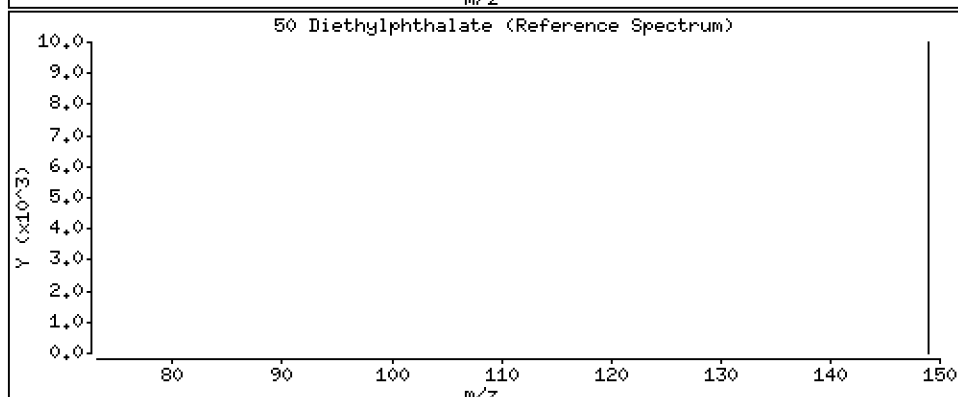
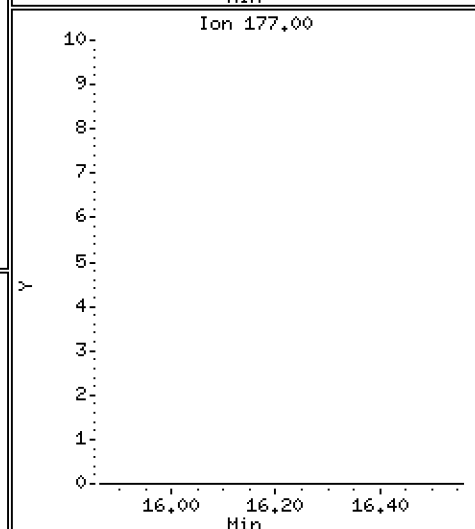
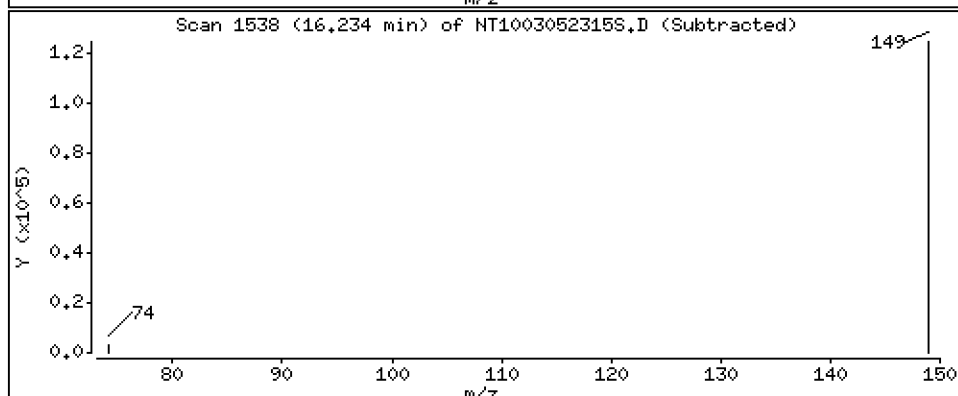
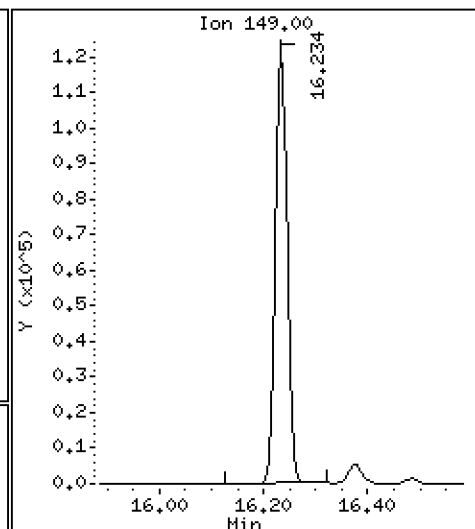
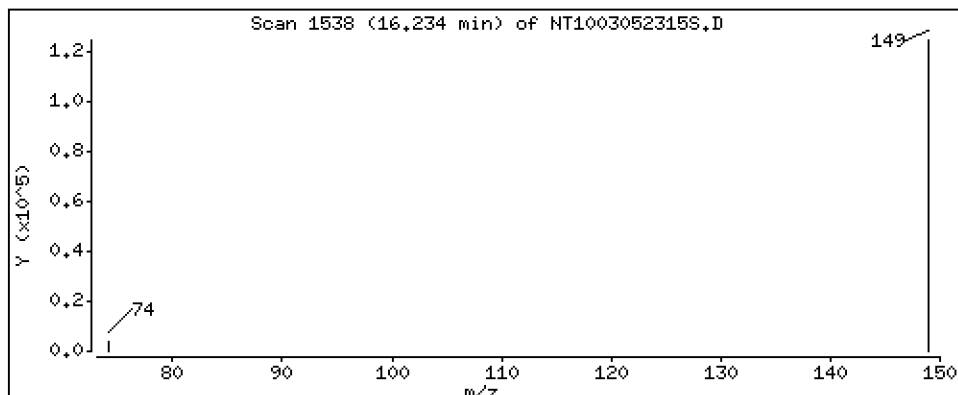
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 1,187 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

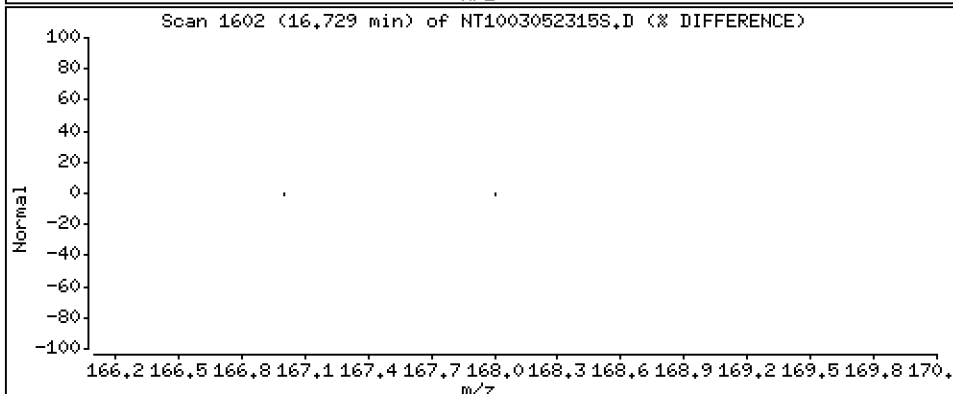
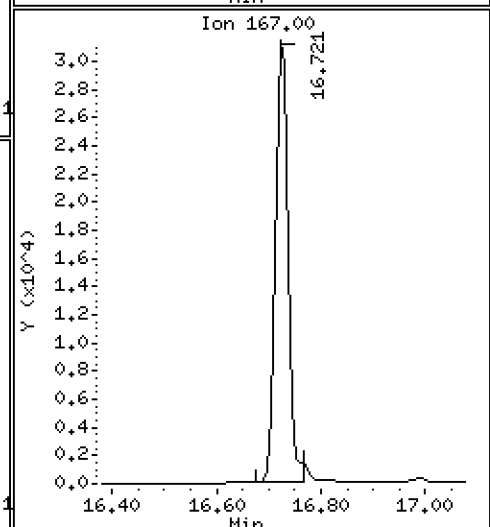
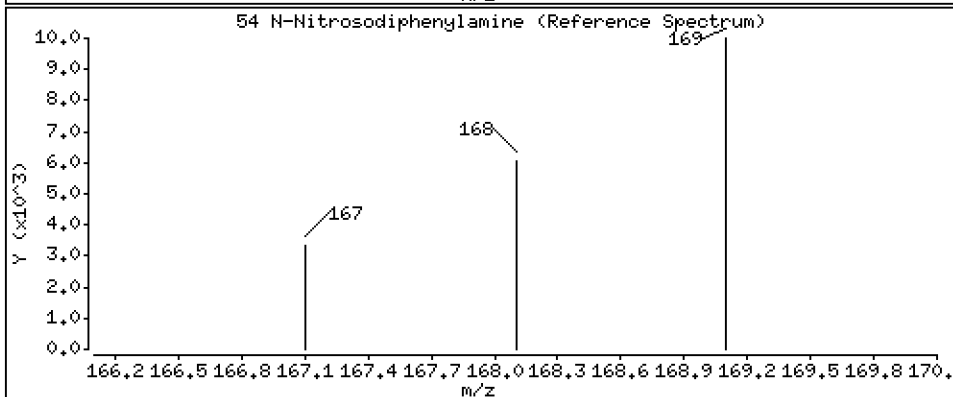
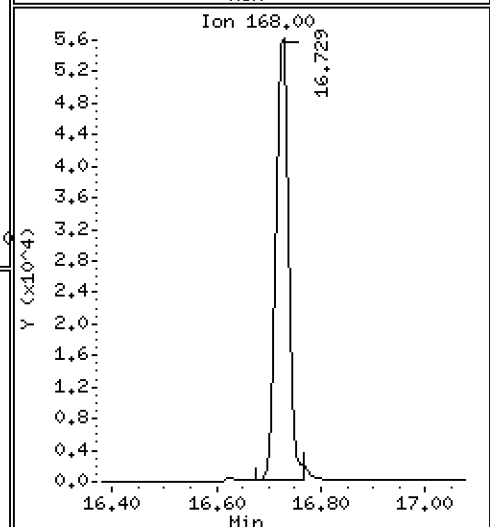
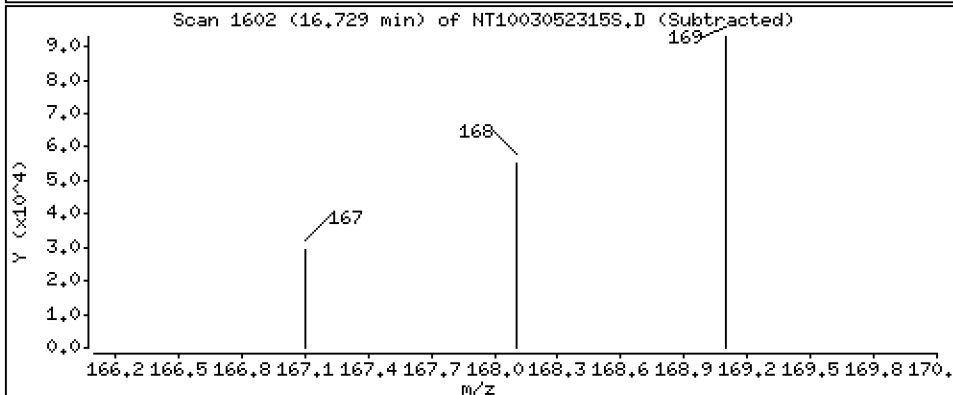
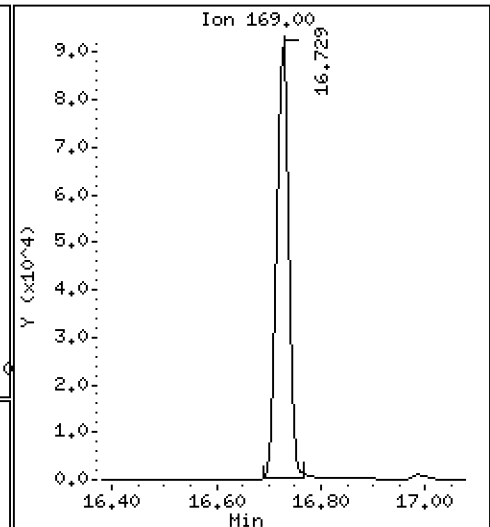
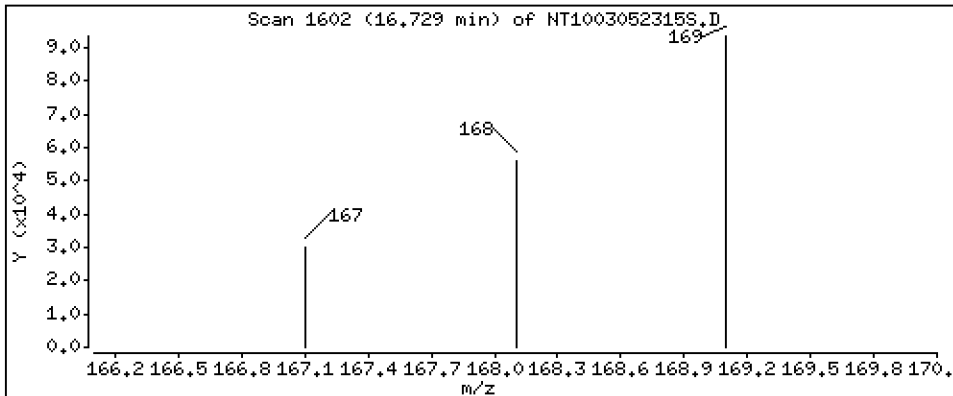
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,9026 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

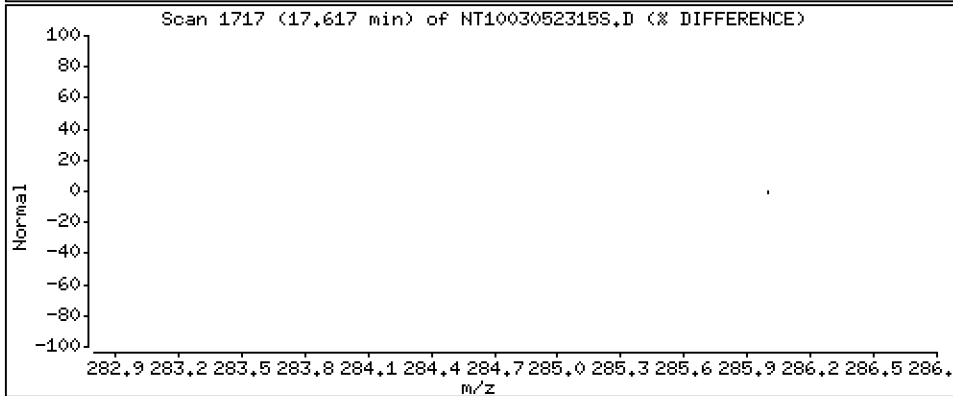
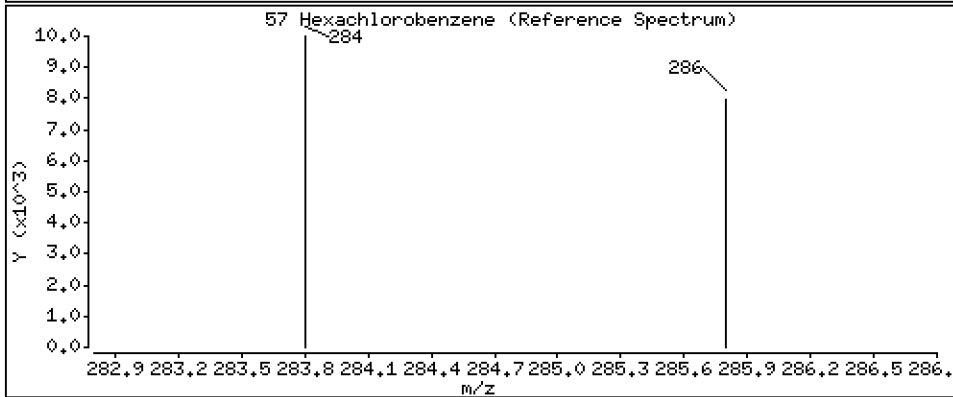
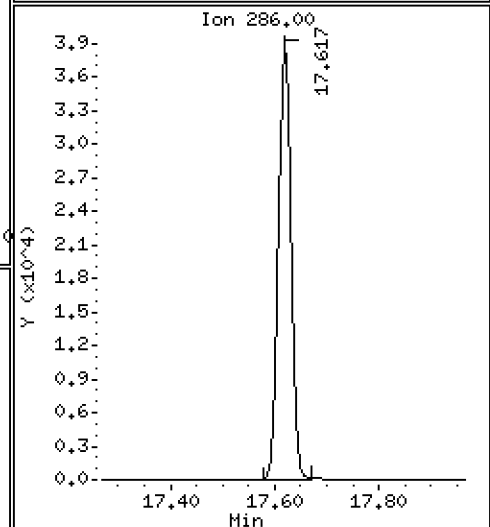
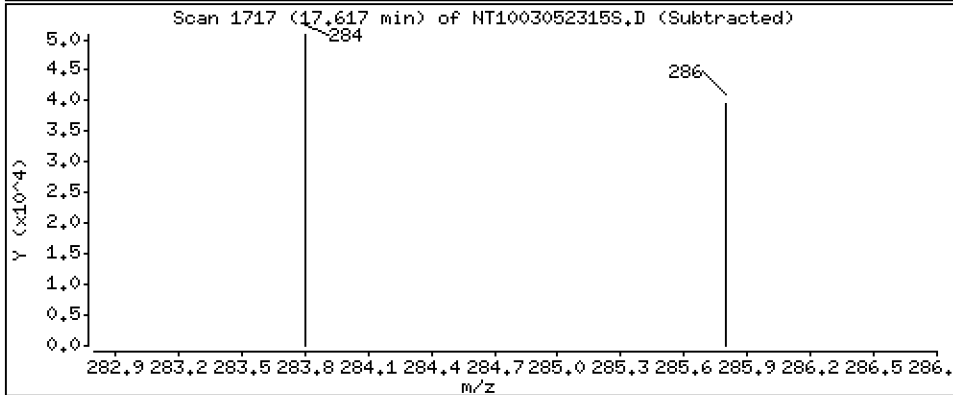
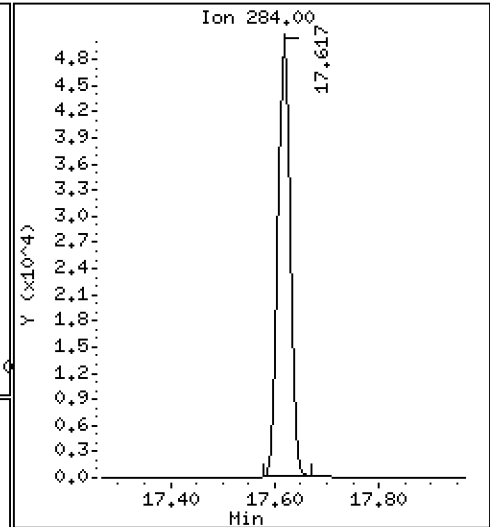
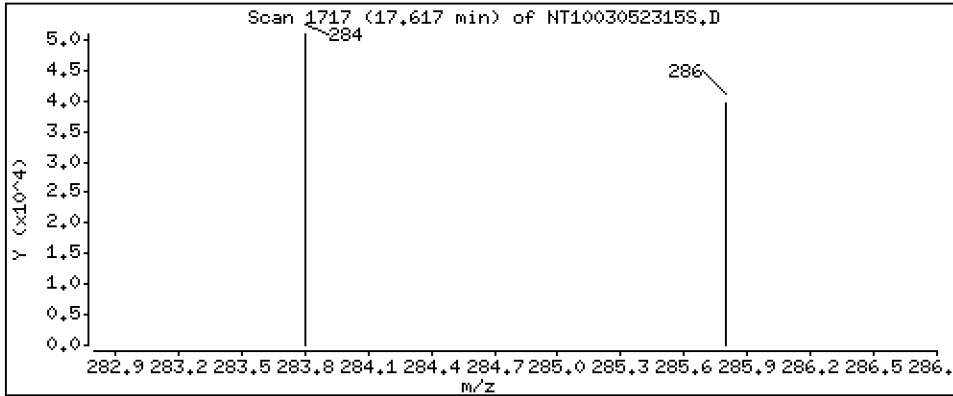
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 1,058 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

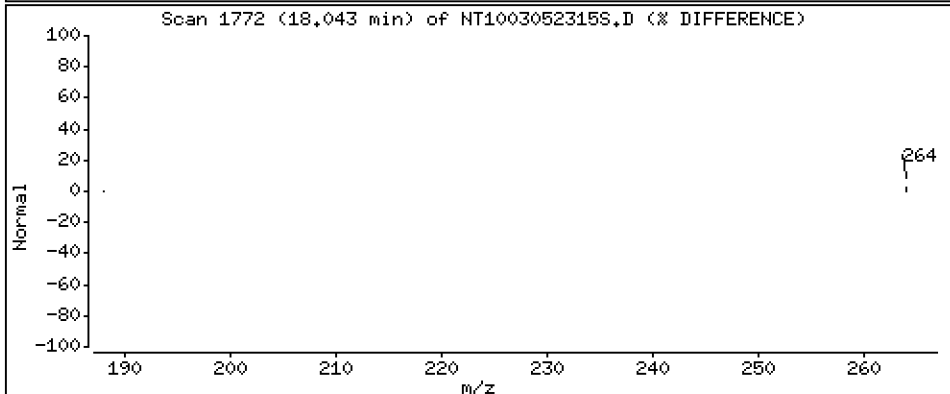
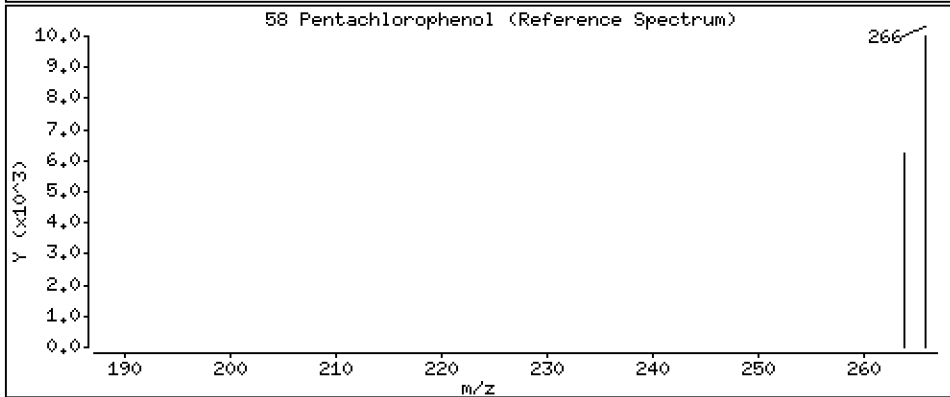
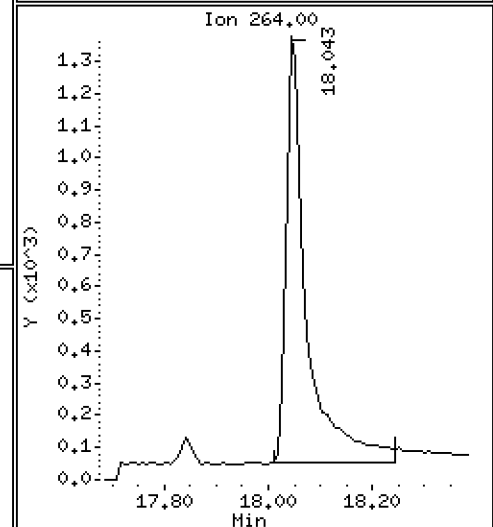
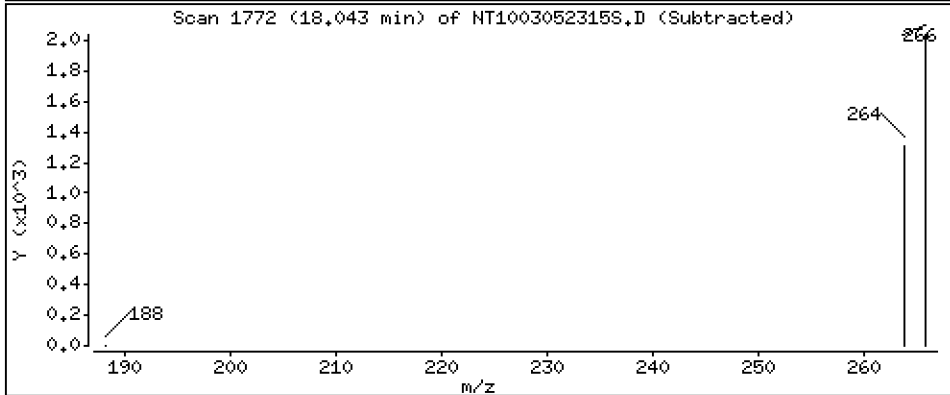
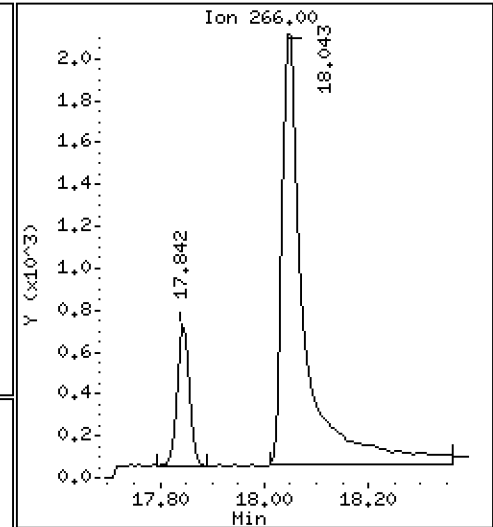
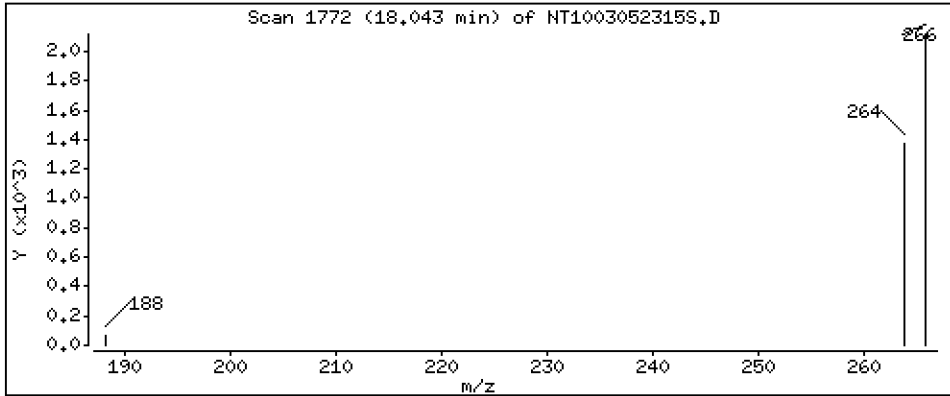
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1901 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

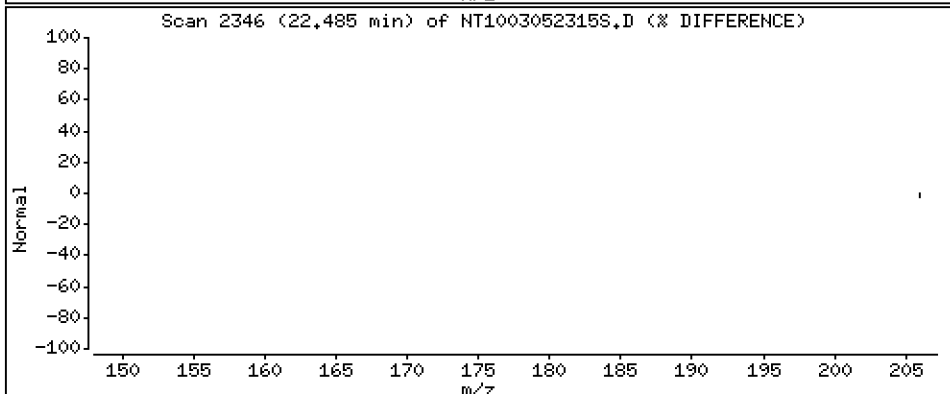
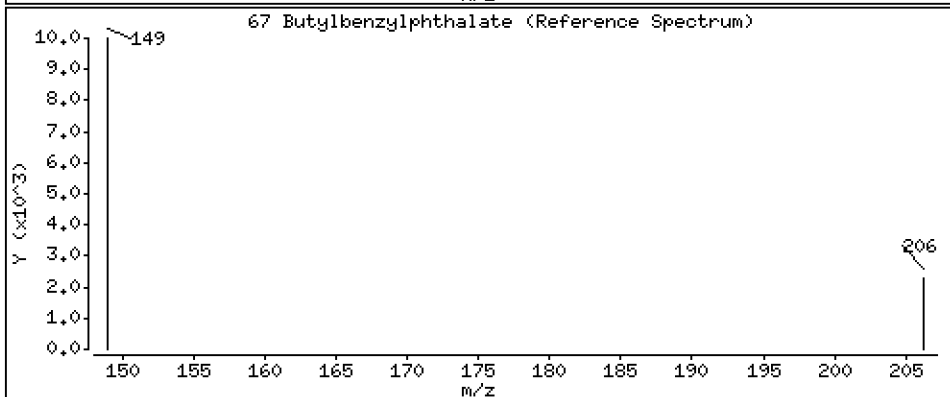
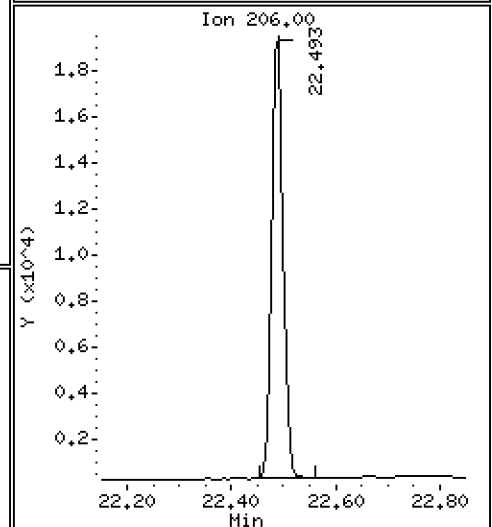
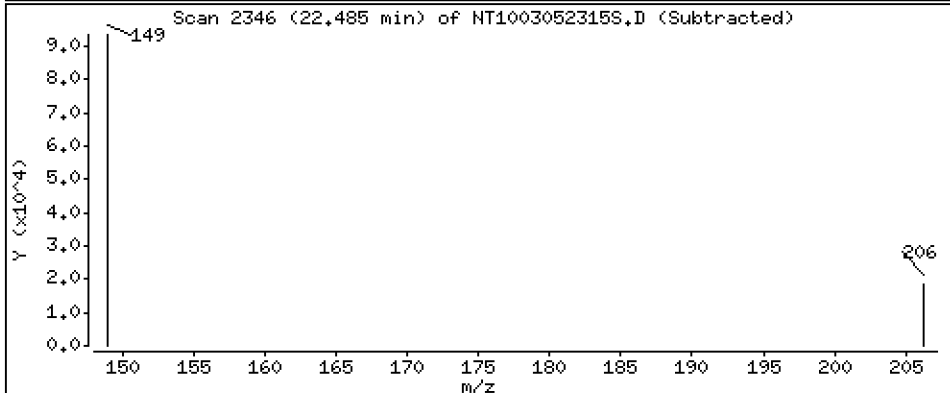
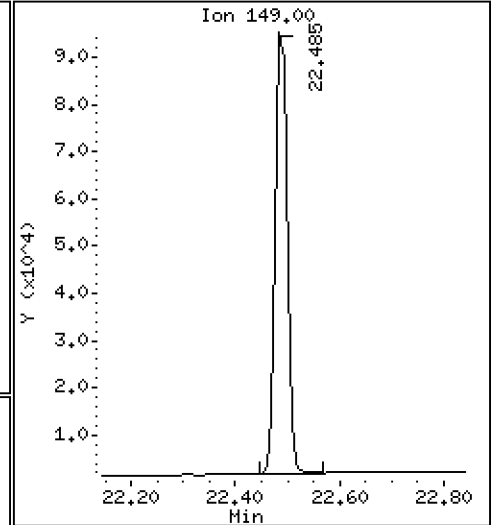
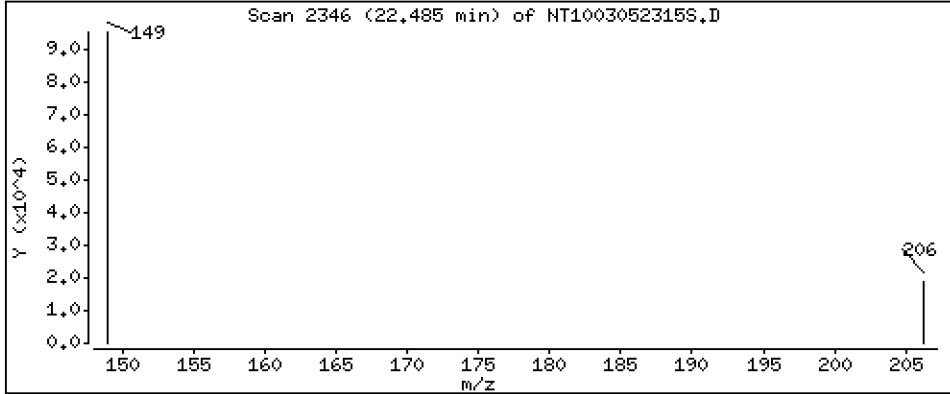
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,8547 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

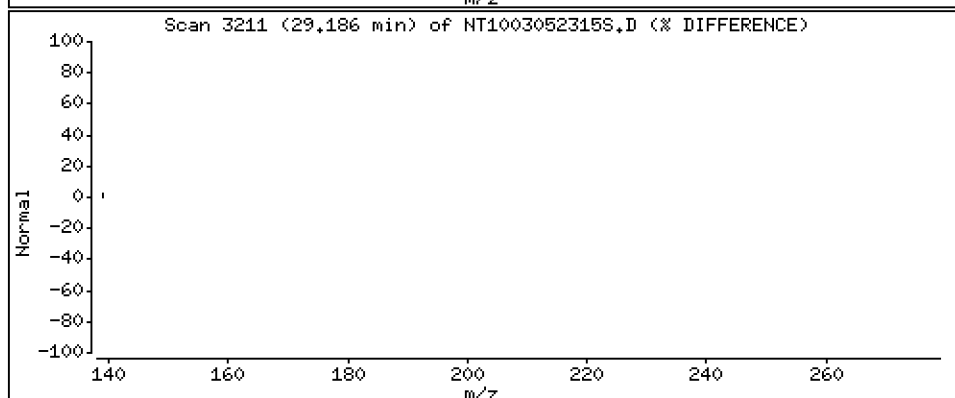
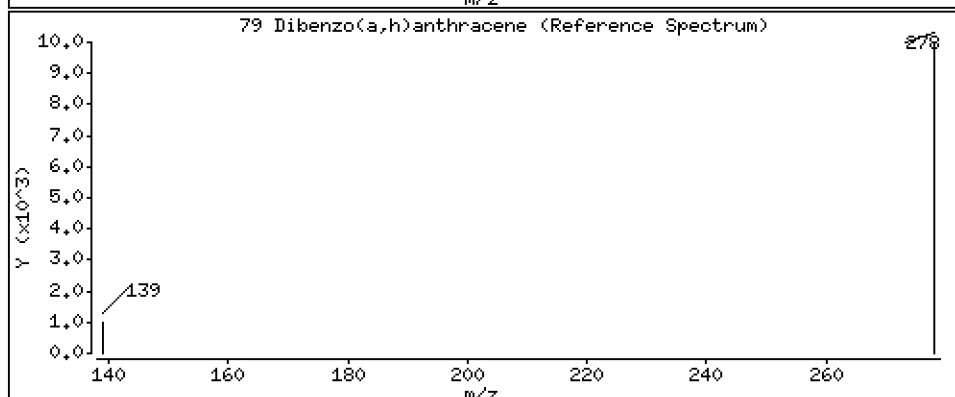
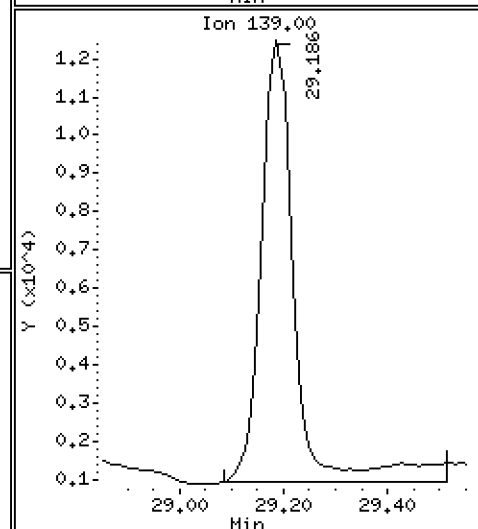
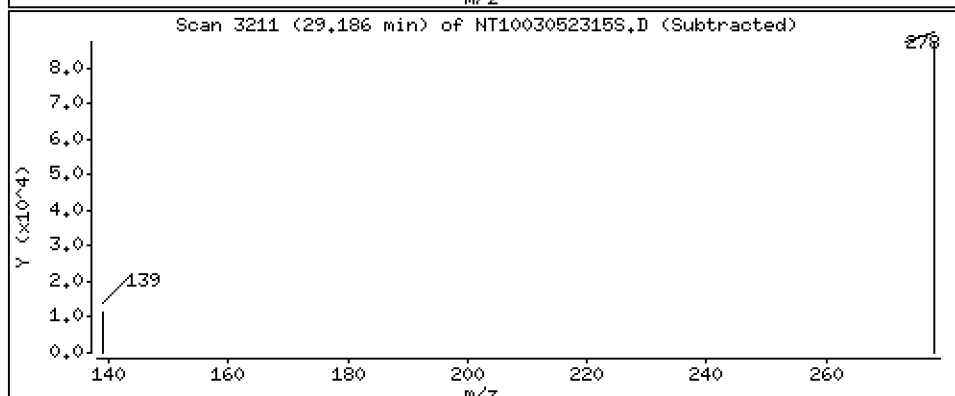
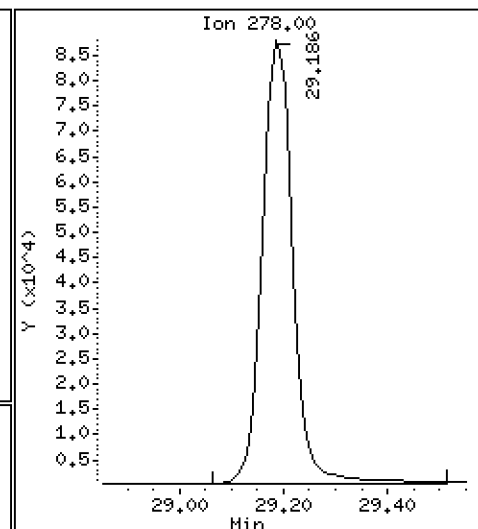
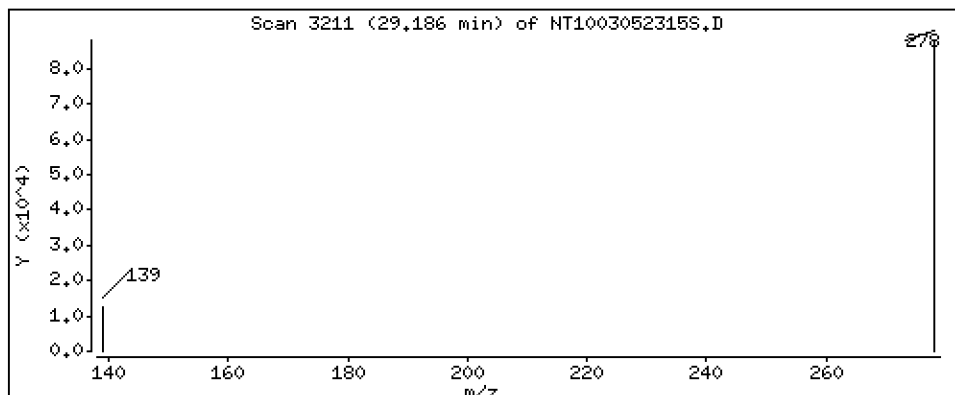
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 1,269 ug/mL



Date : 05-MAR-2023 22:16

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-CCV1

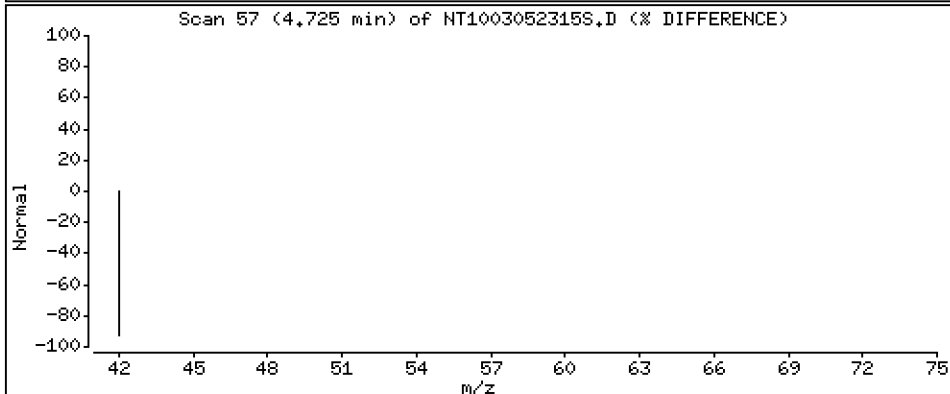
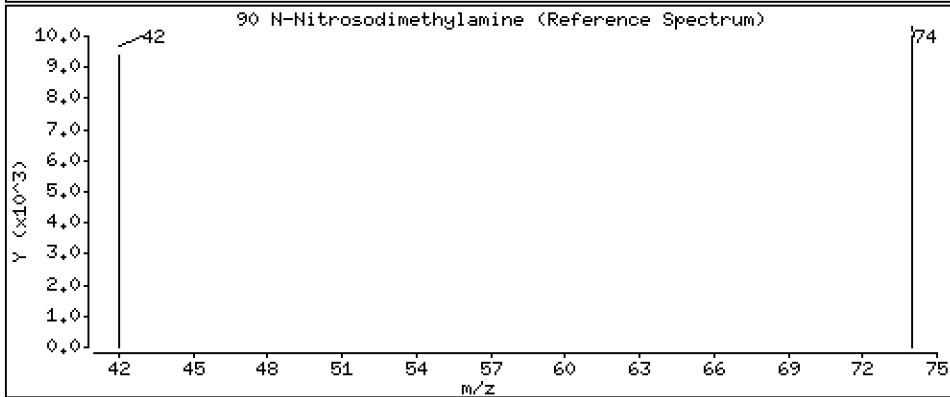
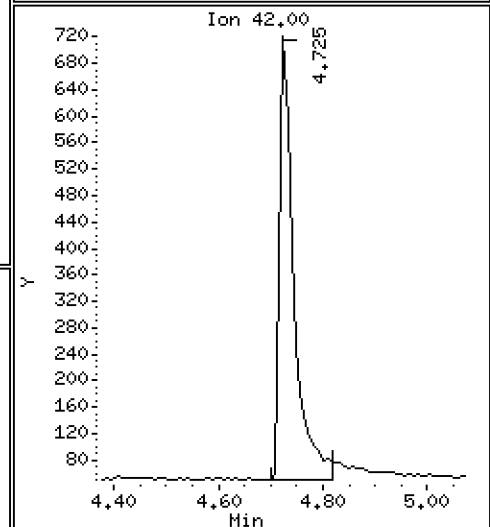
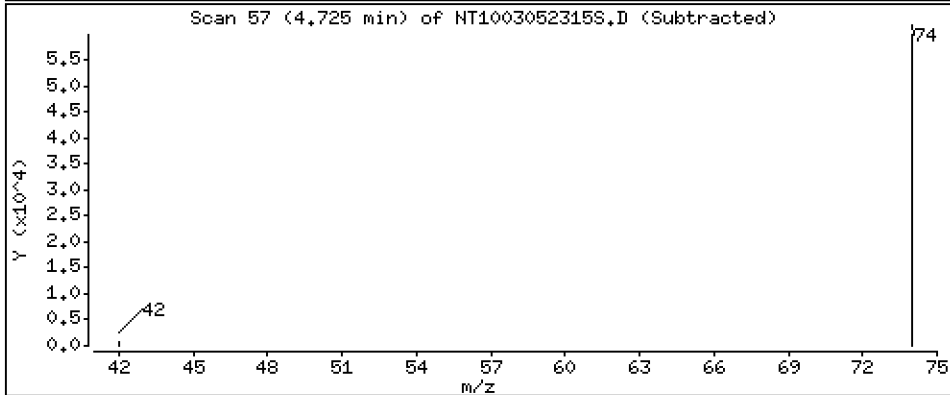
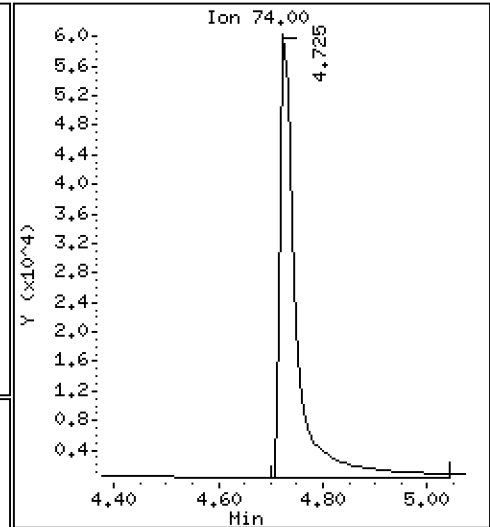
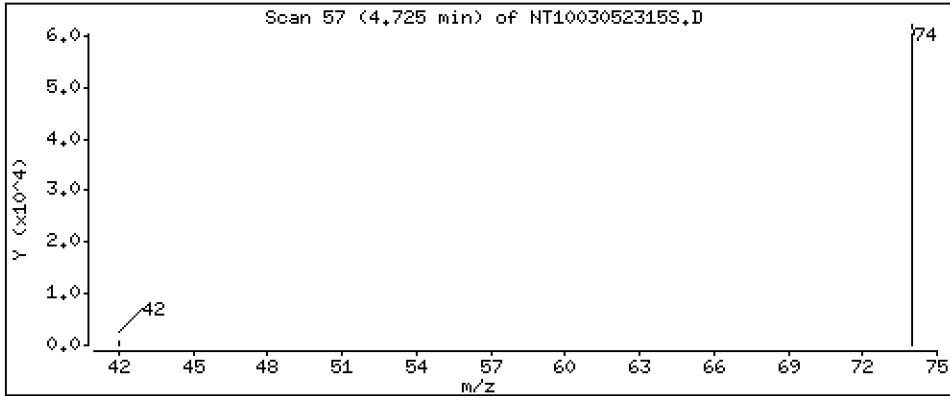
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 2,531 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052315S.D
 Lab Smp Id: SLC0435-CCV1
 Inj Date : 05-MAR-2023 22:16
 Operator : YZ
 Smp Info : SLC0435-CCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.746)	138057	1.64570	1.646 (R)
3 Phenol	94		8.532	8.533	(0.922)	113090	0.90995	0.9099
7 1,3-Dichlorobenzene	146		9.143	9.136	(0.988)	108511	0.99643	0.9964
* 8 1,4-Dichlorobenzene-d4	152		9.252	9.244	(1.000)	293840	4.00000	
9 1,4-Dichlorobenzene	146		9.283	9.275	(1.003)	103134	0.97408	0.9741
11 Benzyl alcohol	79		9.484	9.485	(1.025)	66890	0.96354	0.9635
12 1,2-Dichlorobenzene	146		9.570	9.562	(1.034)	102269	1.00493	1.005
13 2-Methylphenol	108		9.671	9.663	(1.045)	89685	1.19413	1.194
15 4-Methylphenol	108		9.966	9.958	(1.077)	91675	1.17048	1.170
16 N-Nitroso-di-n-propylamine	70		9.981	9.982	(1.079)	68520	1.23806	1.238
22 2,4-Dimethylphenol	107		11.014	11.015	(0.939)	187863	2.13164	2.132
24 Benzoic acid	105		11.133	11.116	(0.949)	34300	0.71167	0.7117
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	88175	1.18634	1.186
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1032639	4.00000	
30 Hexachlorobutadiene	225		12.001	12.002	(1.023)	57432	1.08889	1.089
39 Dimethylphthalate	163		14.764	14.765	(0.963)	163122	1.02266	1.023
* 42 Acenaphthene-d10	162		15.337	15.337	(1.000)	502349	4.00000	
50 Diethylphthalate	149		16.234	16.234	(1.058)	178603	1.18735	1.187 (MH)
54 N-Nitrosodiphenylamine	169		16.729	16.729	(0.907)	142568	0.90260	0.9026
57 Hexachlorobenzene	284		17.617	17.617	(0.955)	78174	1.05756	1.058
58 Pentachlorophenol	266		18.042	18.043	(0.978)	6159	0.19012	0.1901
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	975997	4.00000	
\$ 66 Terphenyl-d14	244		21.594	21.602	(0.918)	124074	1.56794	1.568 (R)
67 Butylbenzylphthalate	149		22.484	22.492	(0.956)	140781	0.85467	0.8547
* 69 Chrysene-d12	240		23.514	23.514	(1.000)	978544	4.00000	
* 77 Perylene-d12	264		26.270	26.286	(1.000)	1201606	4.00000	
79 Dibenzo(a,h)anthracene	278		29.186	29.202	(1.111)	359657	1.26919	1.269
90 N-Nitrosodimethylamine	74		4.724	4.724	(0.511)	125707	2.53103	2.531

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052315S.D
 Lab Smp Id: SLC0435-CCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	293840	-8.57
27 Naphthalene-d8	1132931	566466	2265862	1032639	-8.85
42 Acenaphthene-d10	561597	280799	1123194	502349	-10.55
59 Phenanthrene-d10	1068222	534111	2136444	975997	-8.63
69 Chrysene-d12	997572	498786	1995144	978544	-1.91
77 Perylene-d12	1245490	622745	2490980	1201606	-3.52

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.29	25.79	26.79	26.27	-0.06

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

REVIEW SUMMARY FOR FILE - NT1003052315S.D

Lab ID: SLC0435-CCV1

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 22:16

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

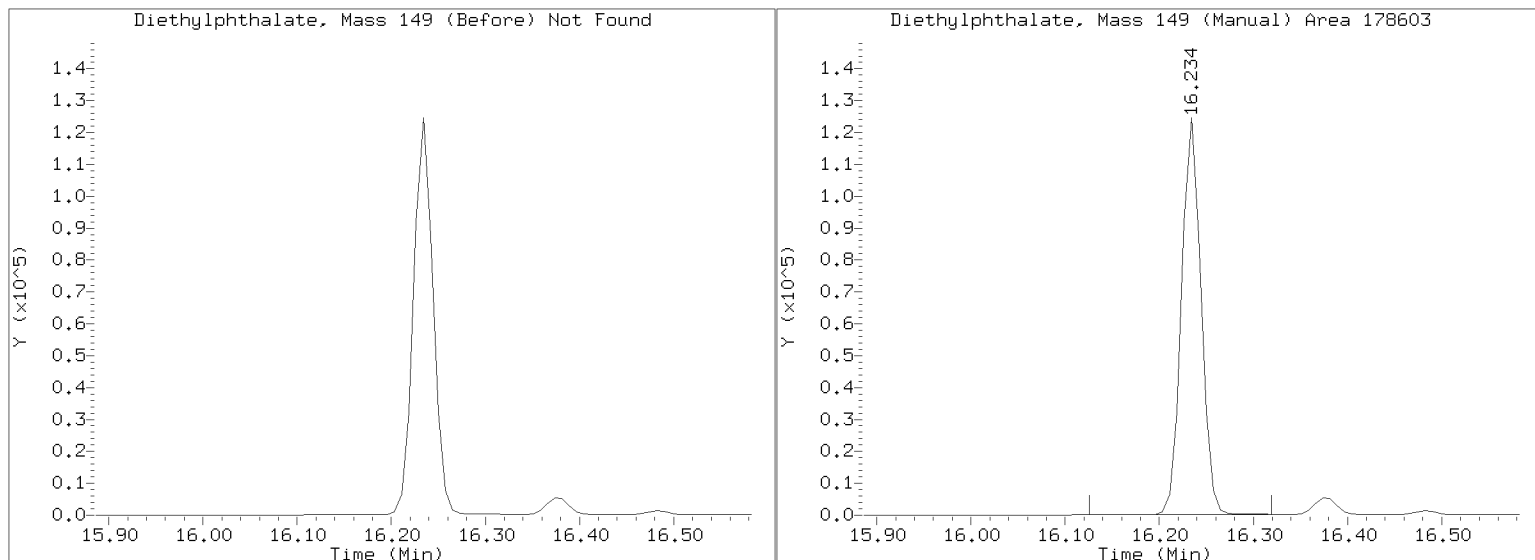
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052315S.D

Injection Date: 05-MAR-2023 22:16

Lab ID: SLC0435-CCV1 Client ID:

Report Date: 03/28/2023 12:12



APPROVED

By Deenay Dunmore at 12:12 pm, Mar 28, 2023



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052305S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0435</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0435-LCV1</u>	Injection Time:	<u>15:56</u>
Sequence Name:	<u>Low Cal Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.4413080	1.4291240		-0.9	
1,2-Dichlorobenzene	A	0.10000	0.1	1.3853460	1.4221120		2.7	
Benzyl Alcohol	A	0.10000	0.05	0.7492523	0.4293592		-54.0	
Benzoic acid	A	0.40000	0.0	0.1431163				
2,4-Dimethylphenol	A	0.20000	0.2	0.2957717	0.3031408		-10.7	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.2879030	0.3384565		17.6	
N-Nitrosodiphenylamine	A	0.10000	0.07	0.6473471	0.4614580		-28.7	
Pentachlorophenol	A	0.20000	0.0	0.0950913				
2-Fluorophenol	A	0.15000	0.112	1.1419780	0.8490153		-25.7	
p-Terphenyl-d14	A	0.10000	0.161	0.3234672	0.5197935		60.7	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.B\SIH.B\NT1003052305S.D

Date: 05-MAR-2023 15:56

Client ID:

Sample Info: SLC0435-LCW1

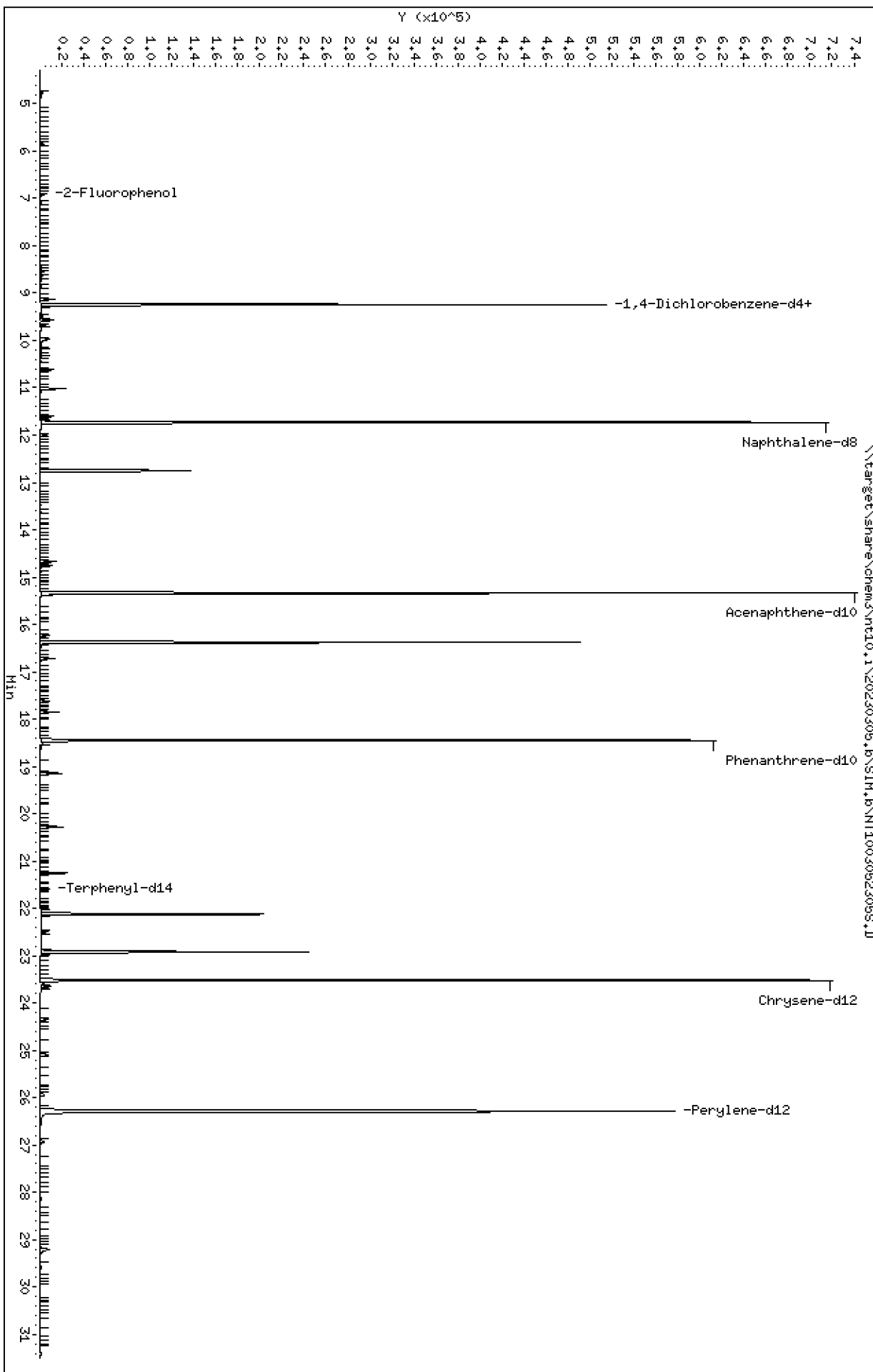
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

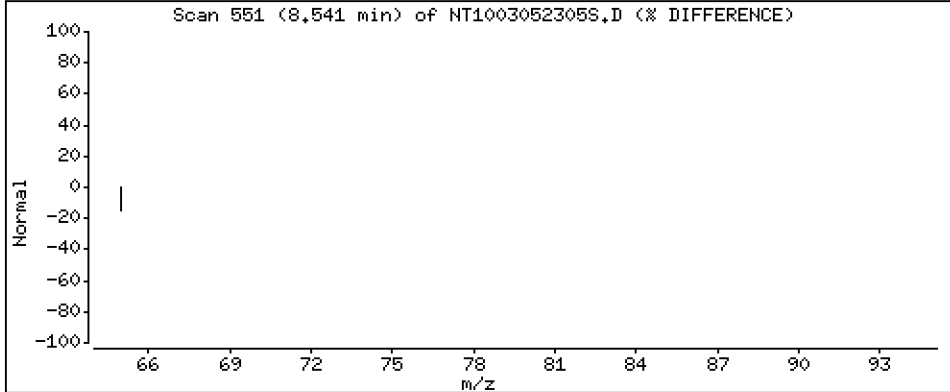
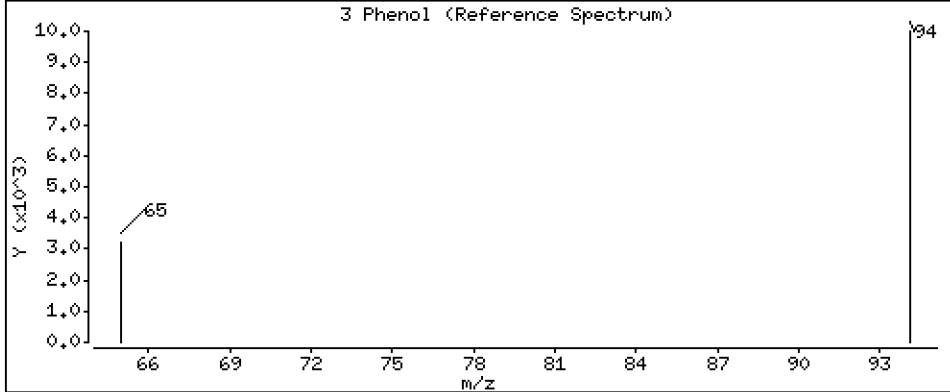
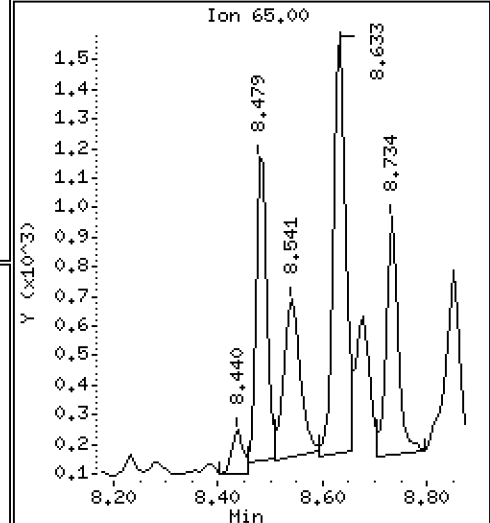
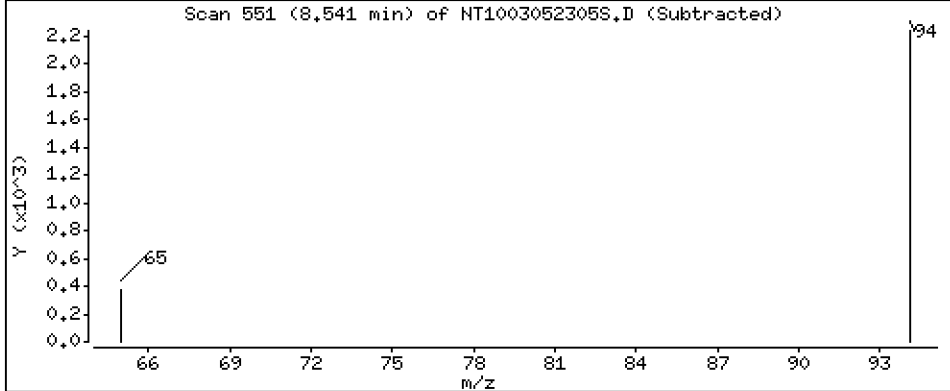
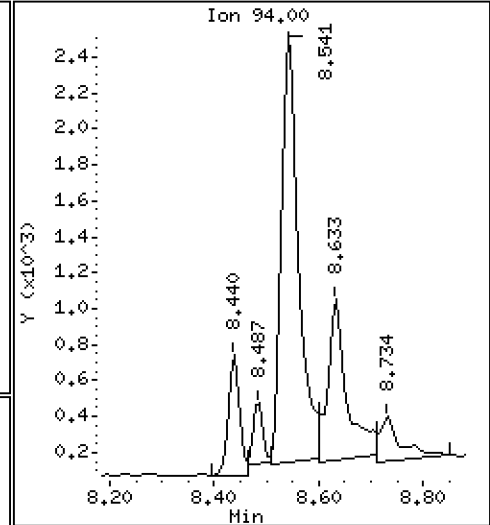
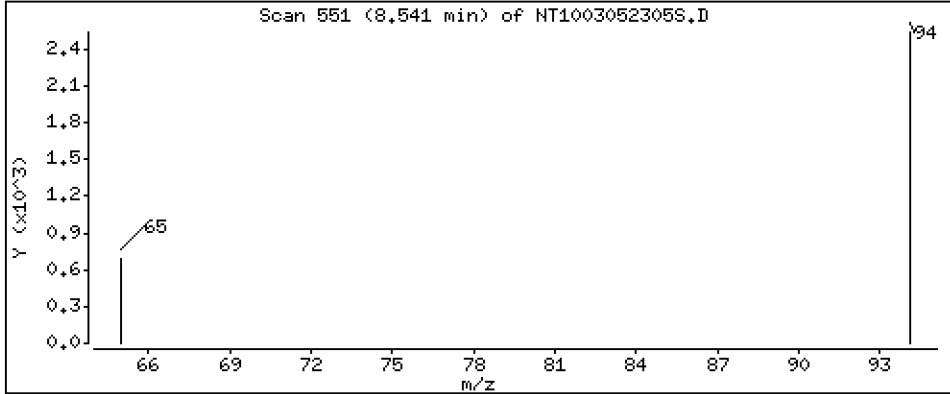
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,04280 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

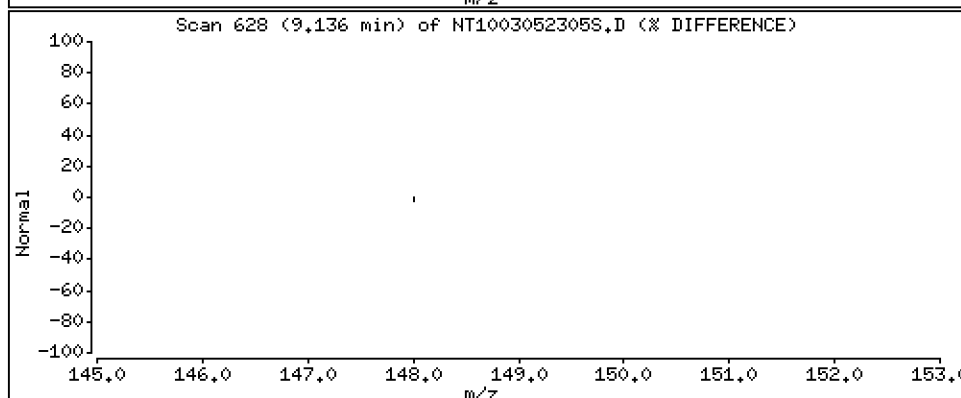
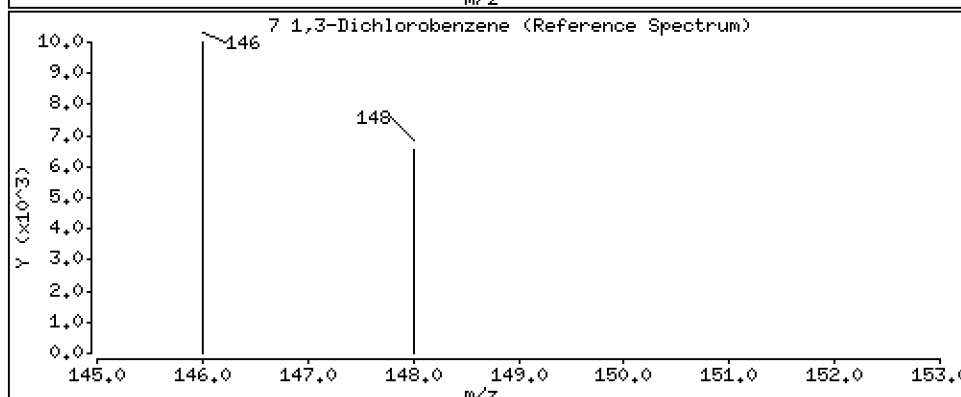
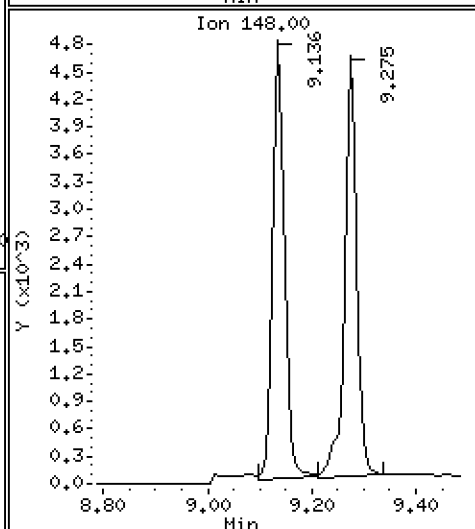
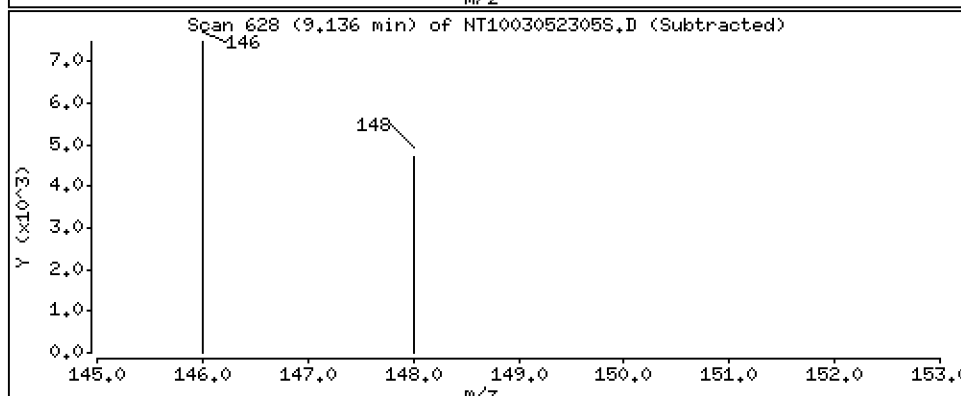
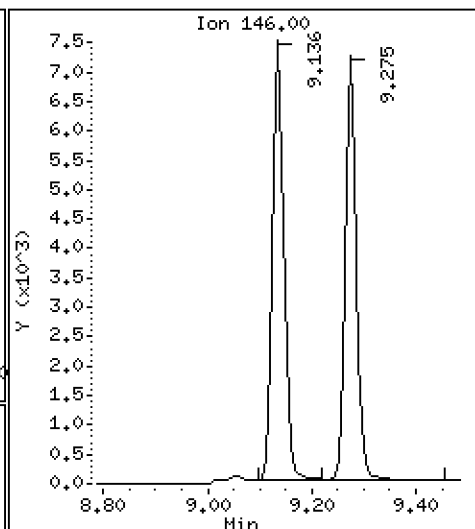
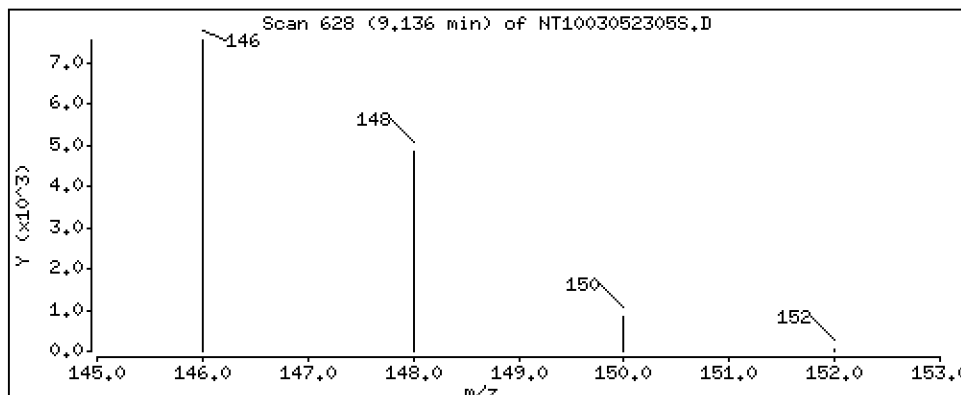
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.09939 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

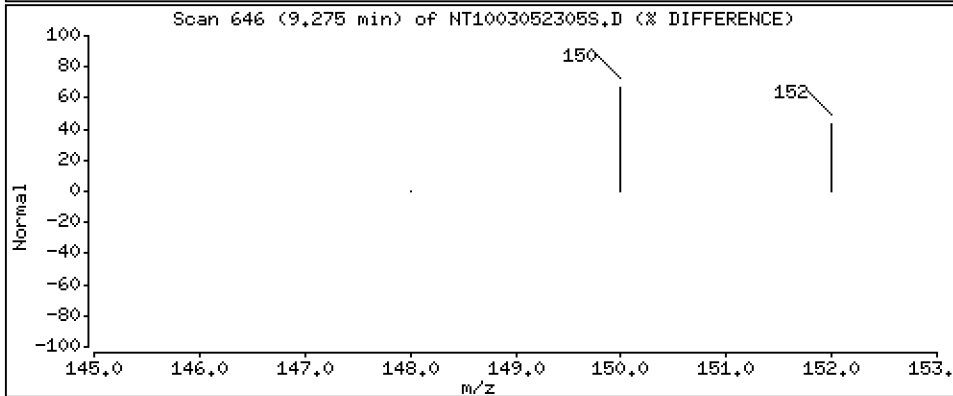
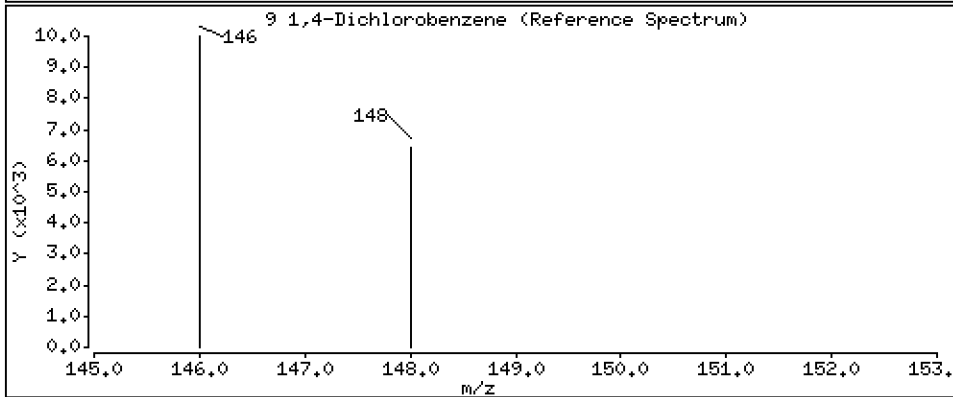
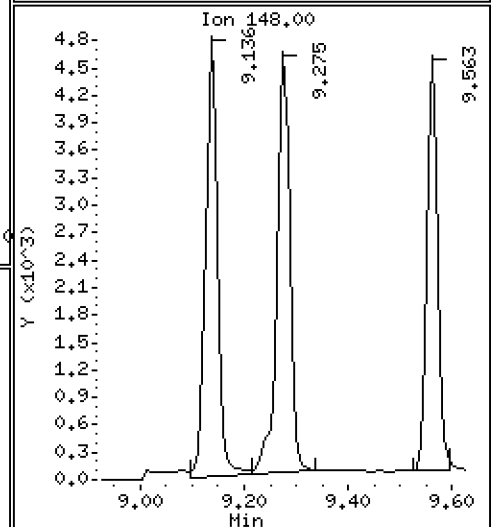
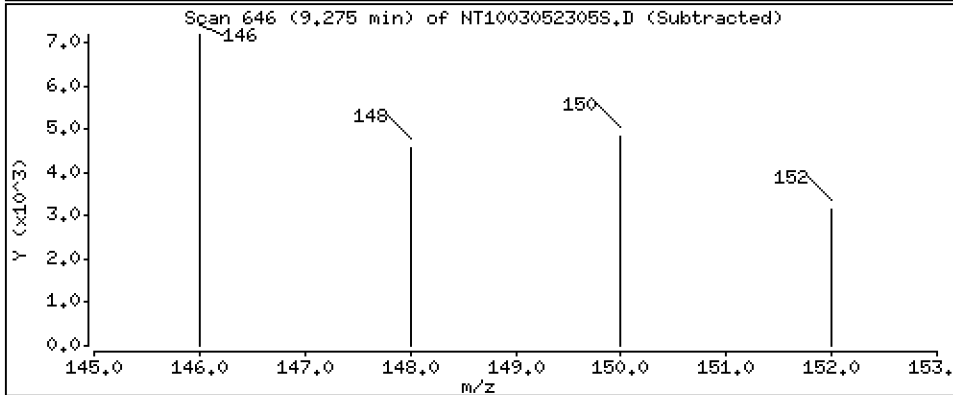
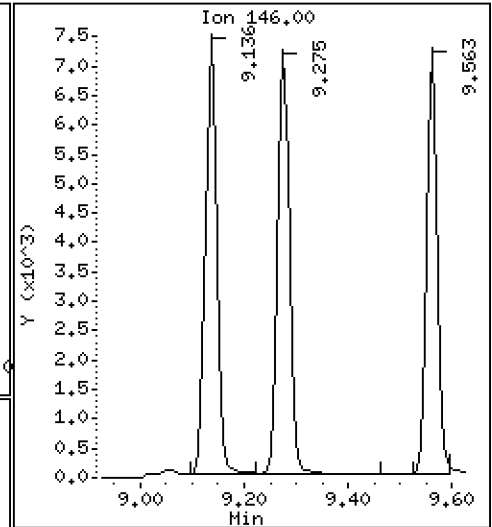
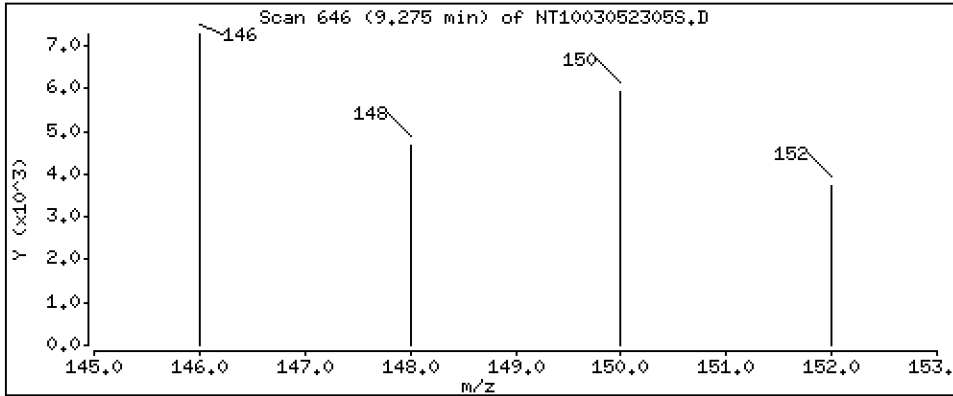
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.09915 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

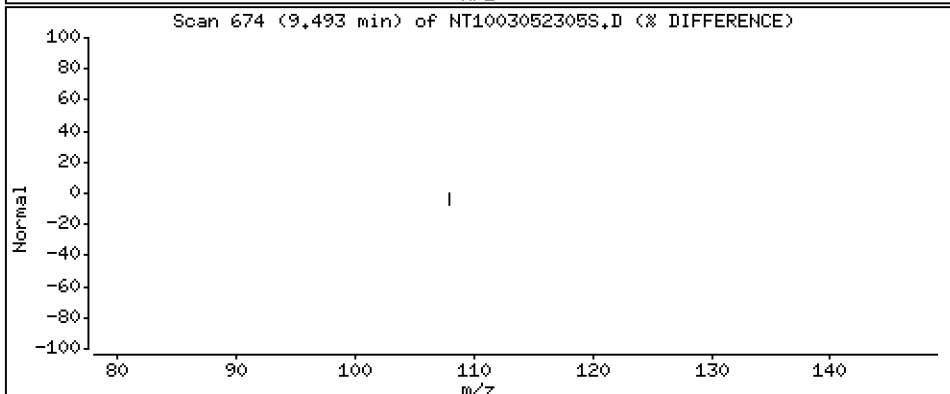
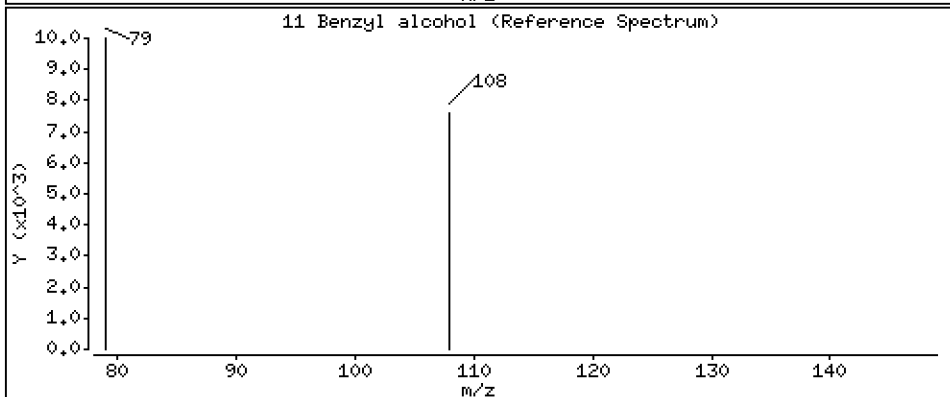
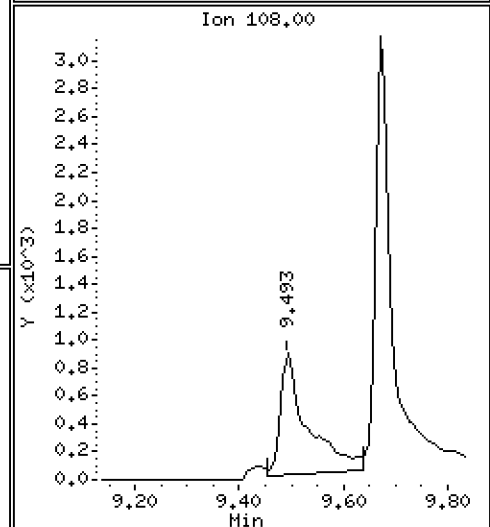
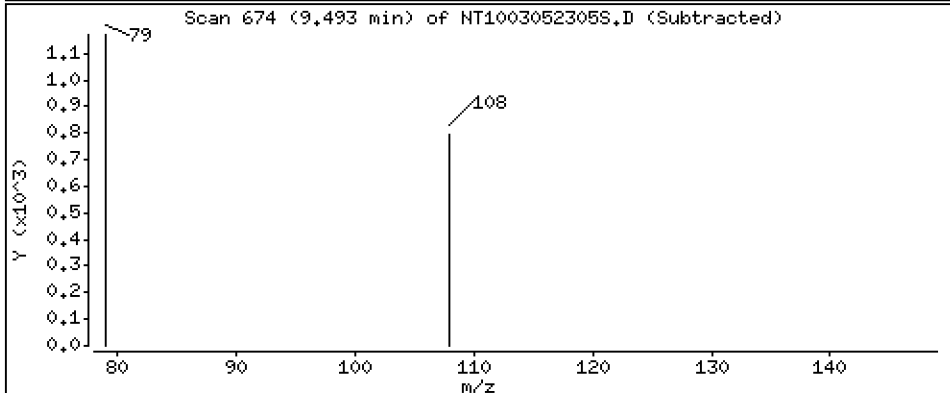
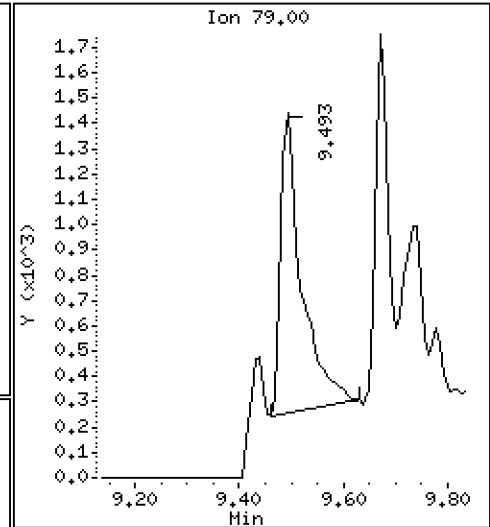
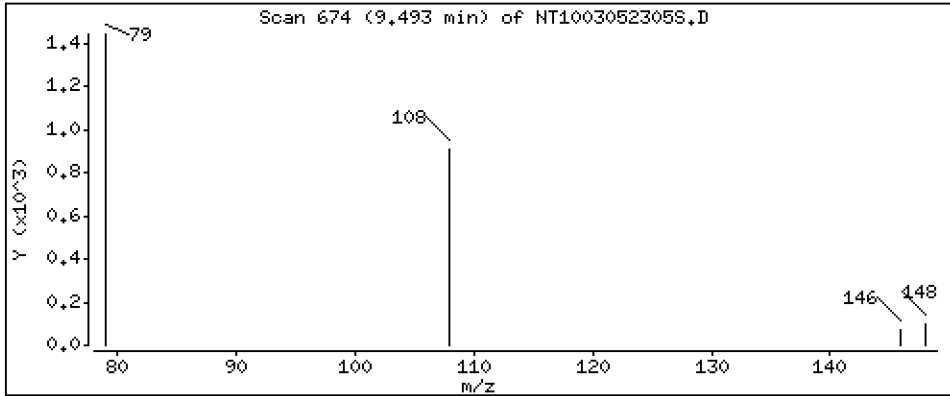
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,04597 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

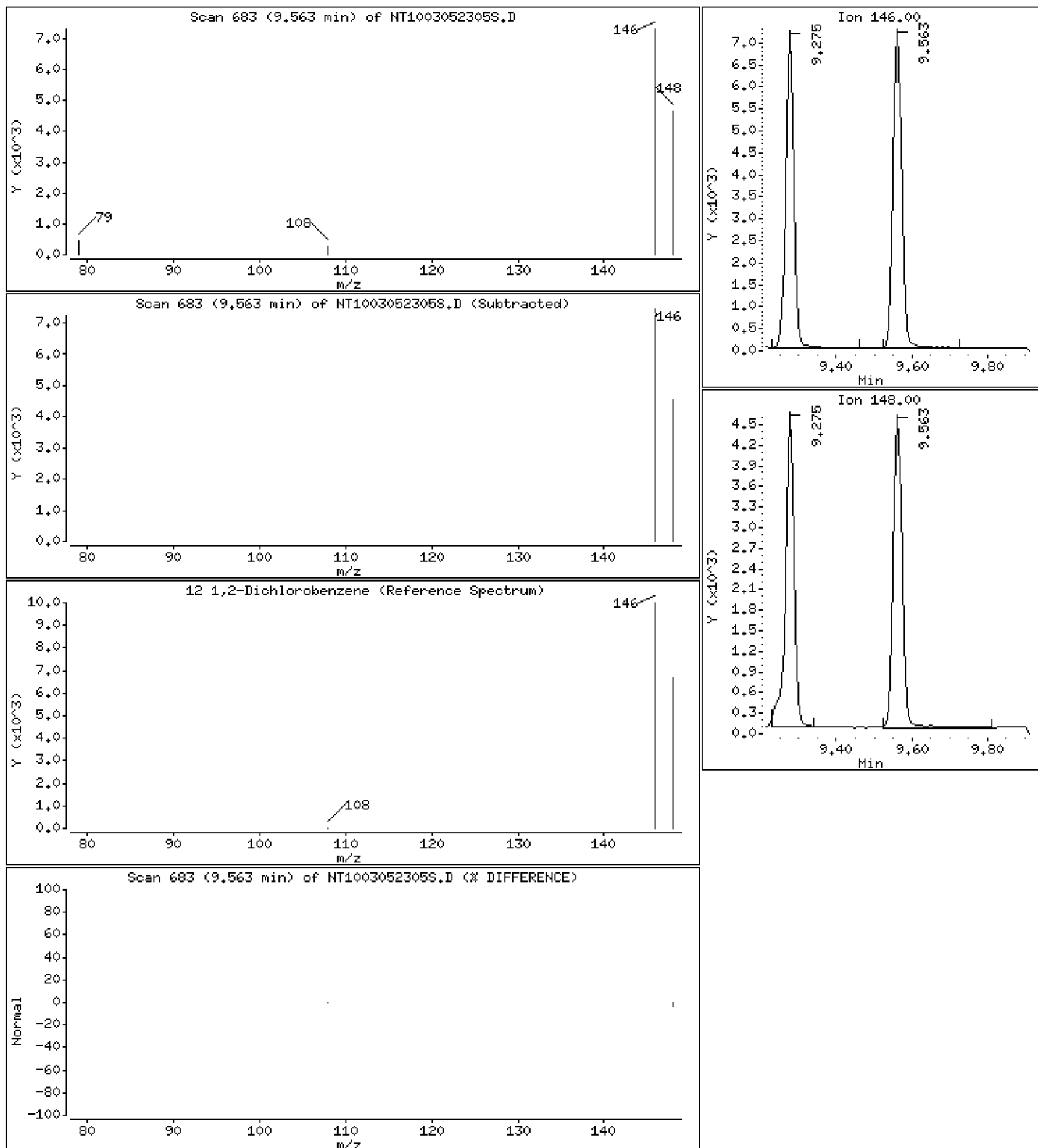
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

12 1,2-Dichlorobenzene

Concentration: 0.1027 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

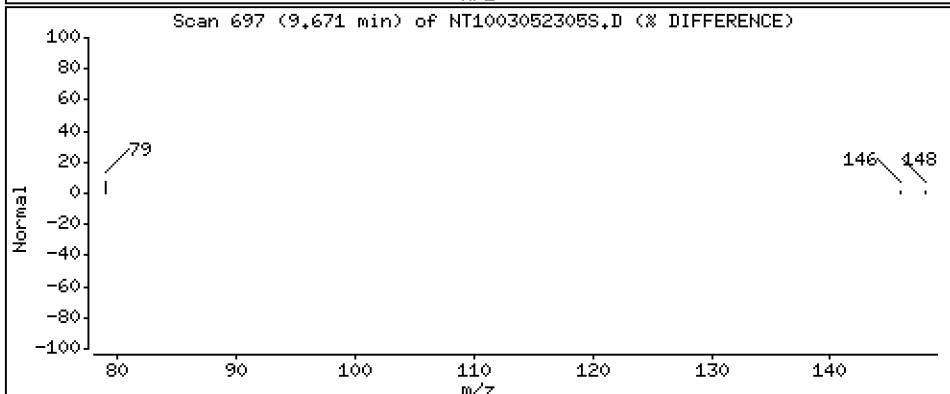
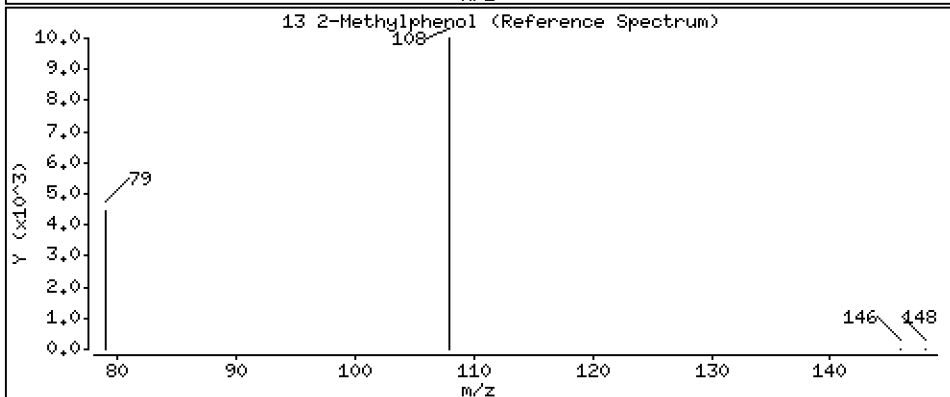
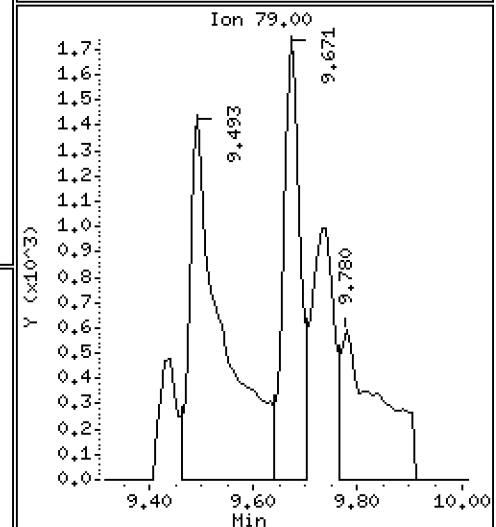
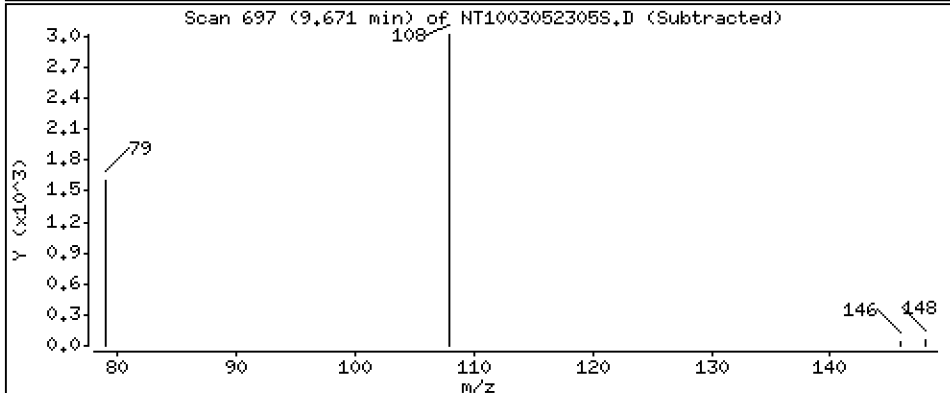
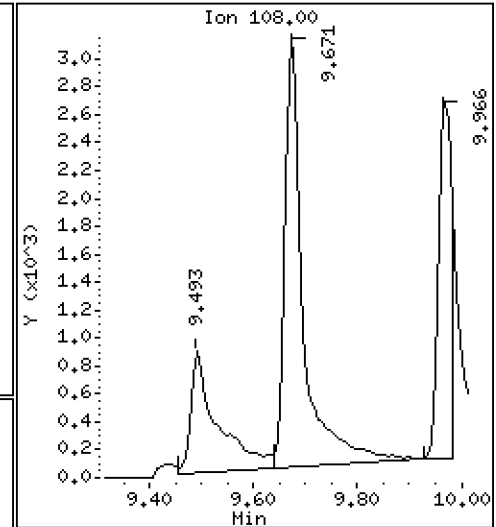
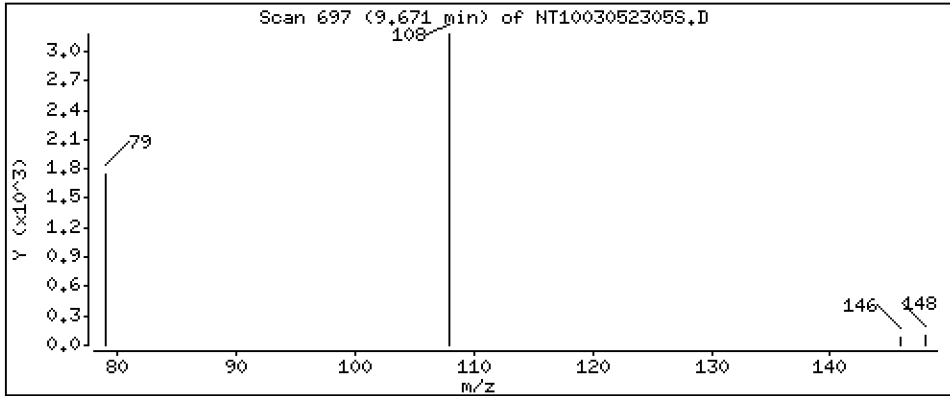
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.09622 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

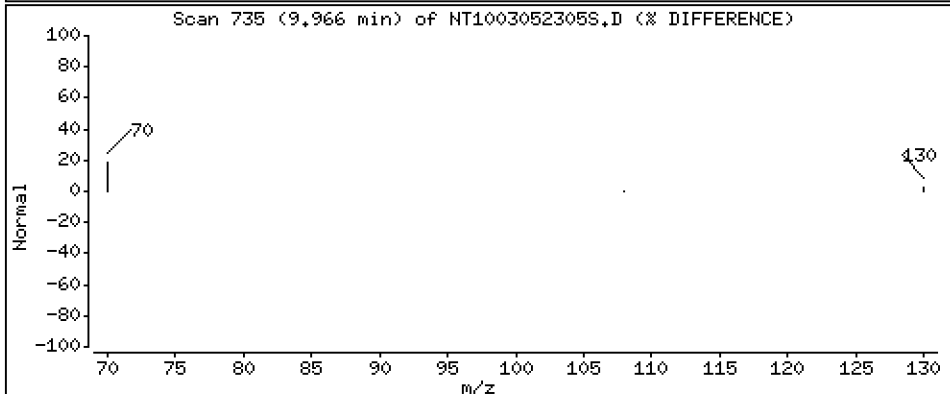
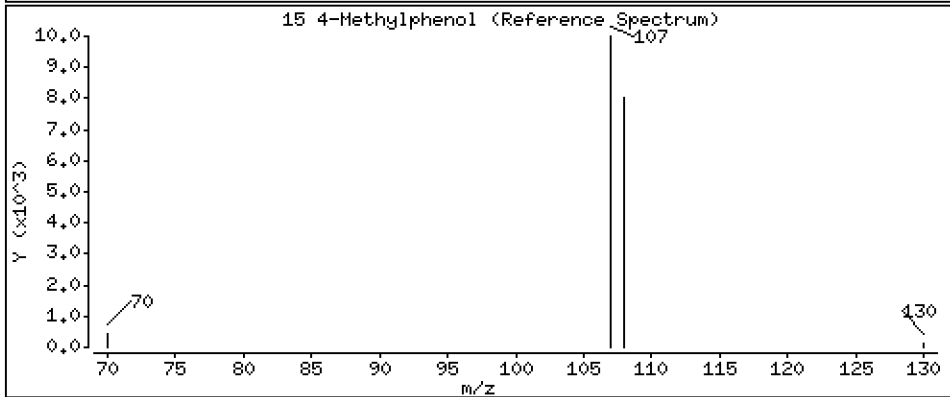
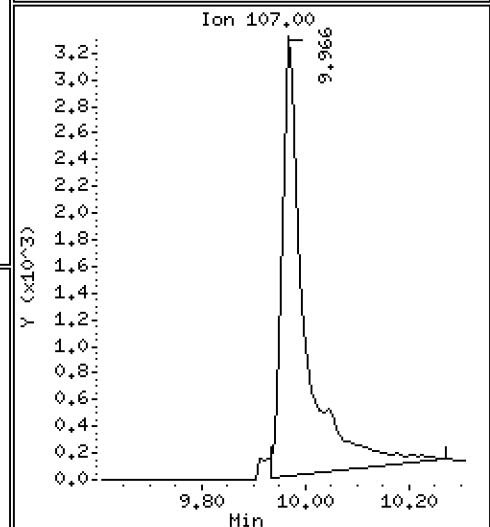
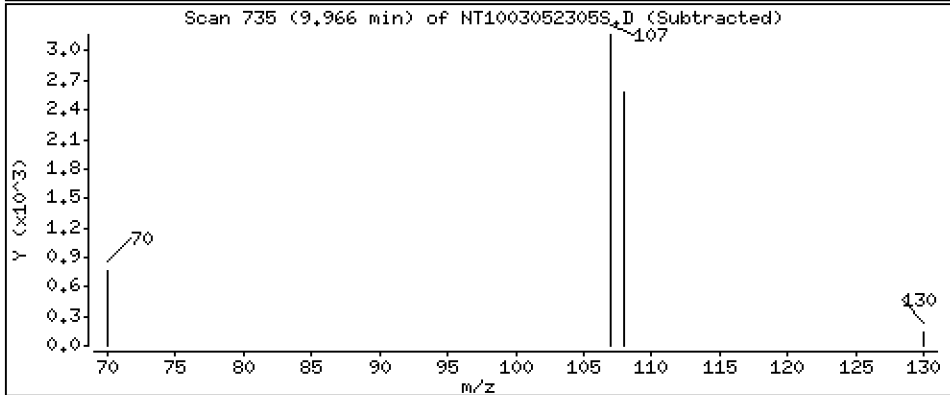
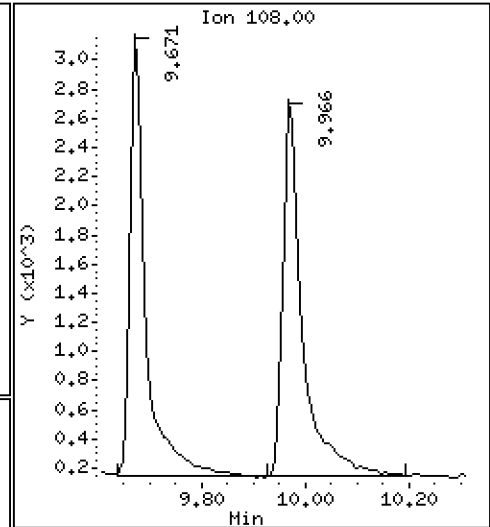
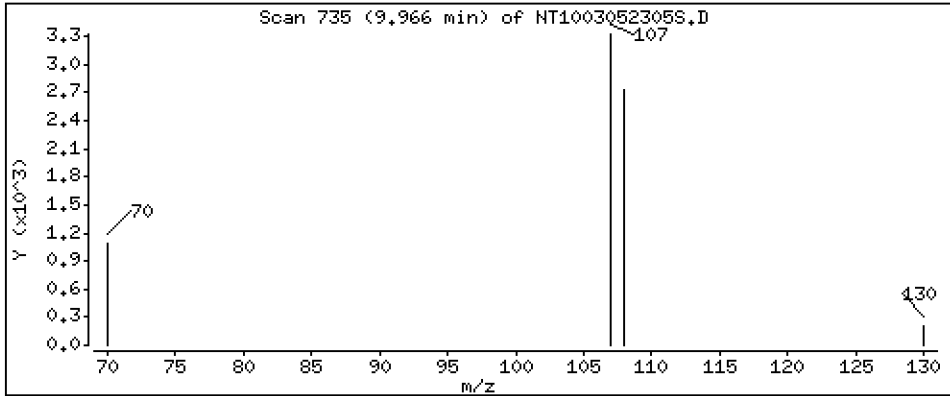
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.08591 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

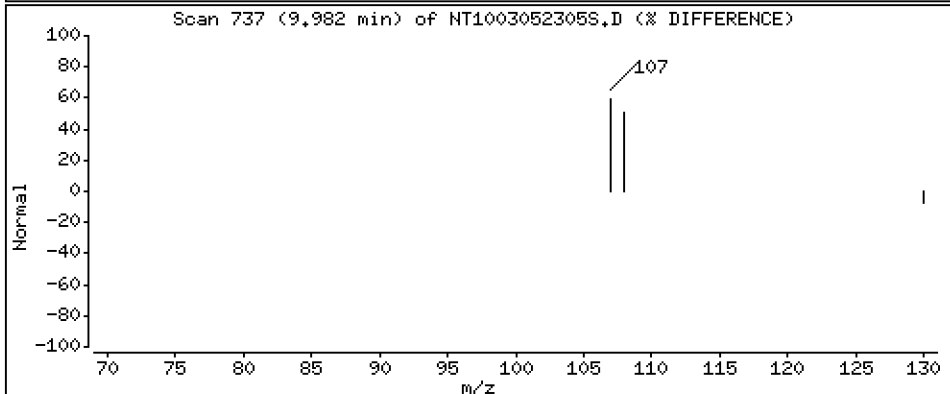
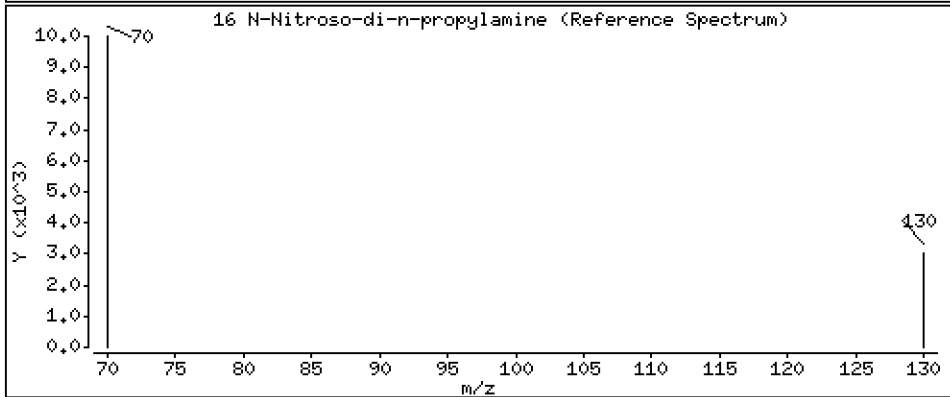
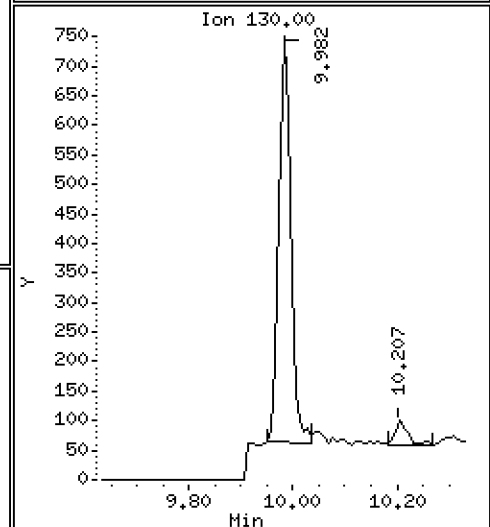
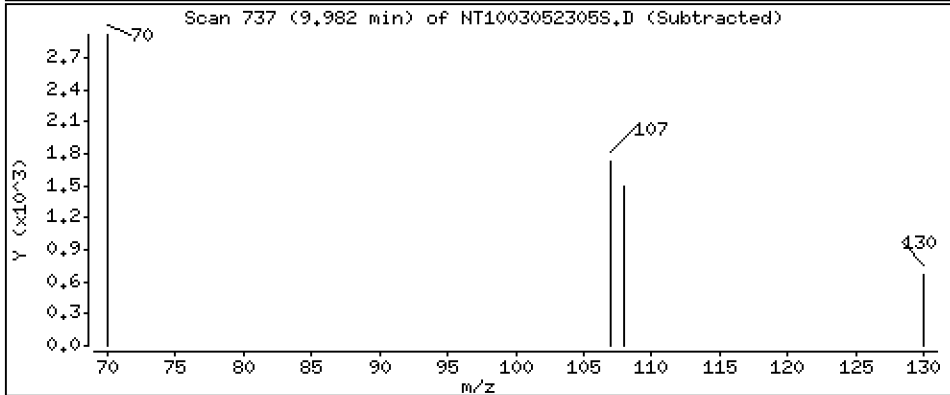
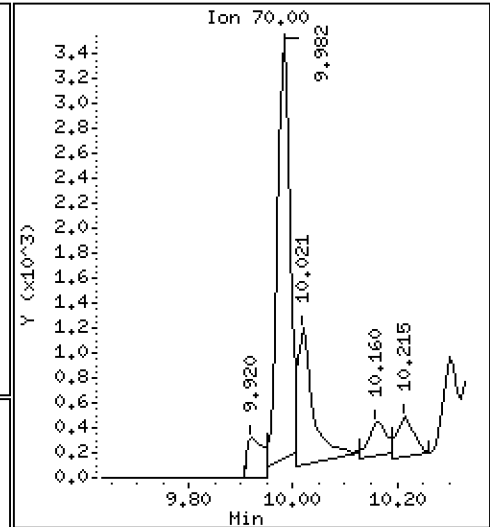
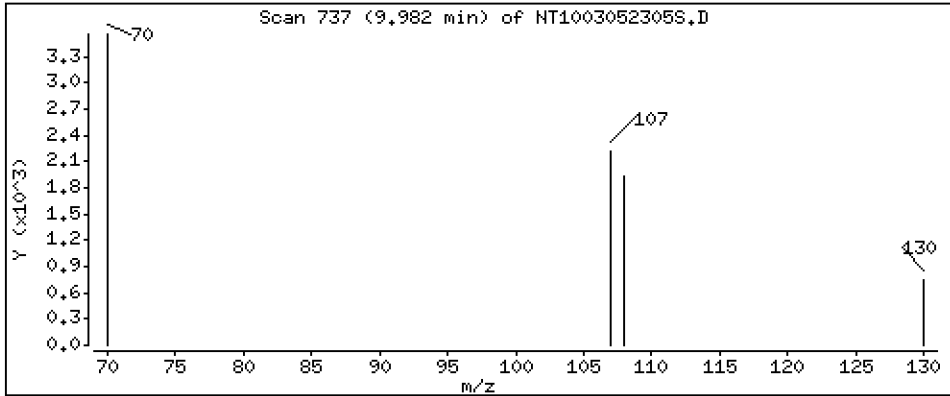
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,09512 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

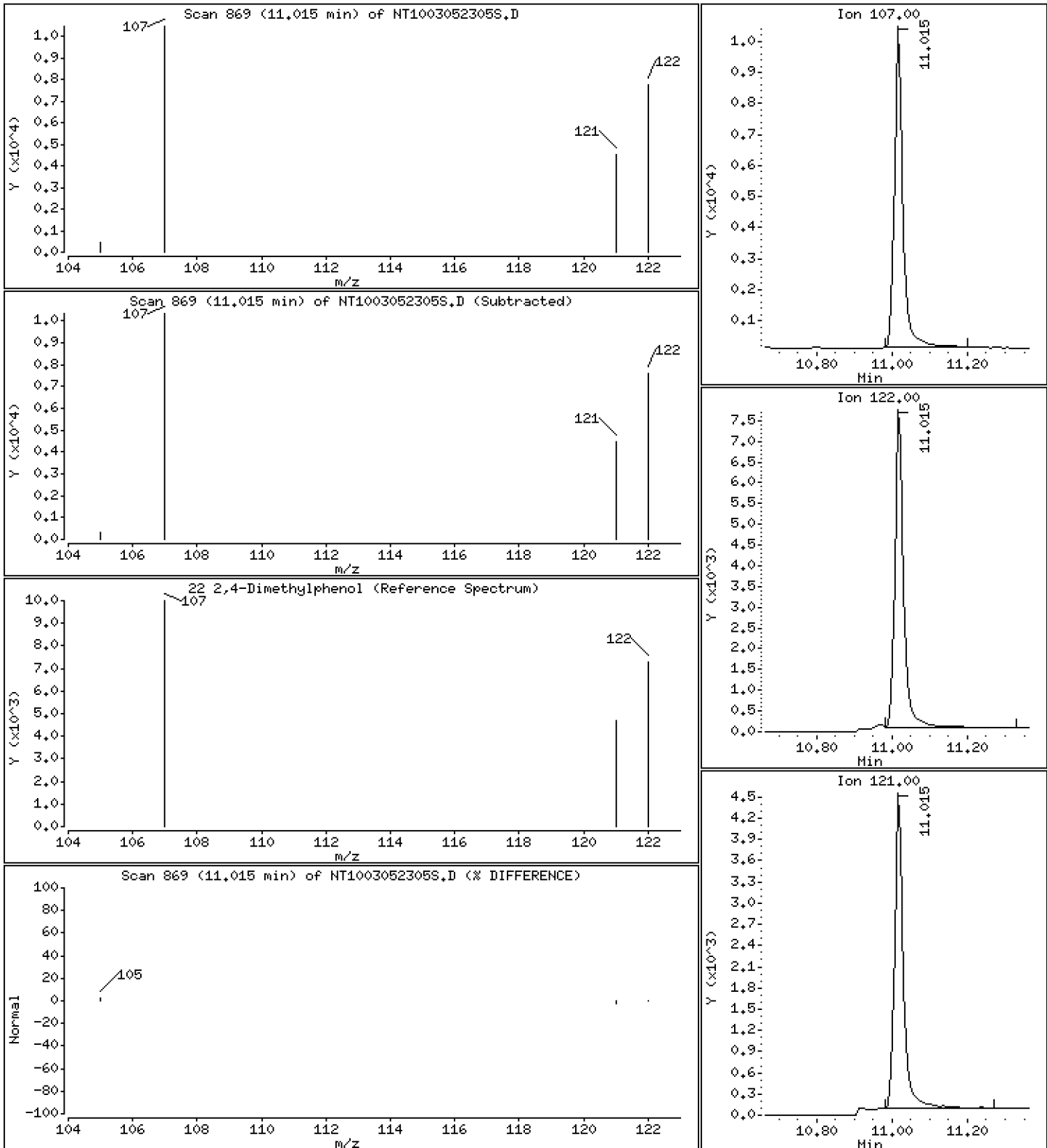
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.1786 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

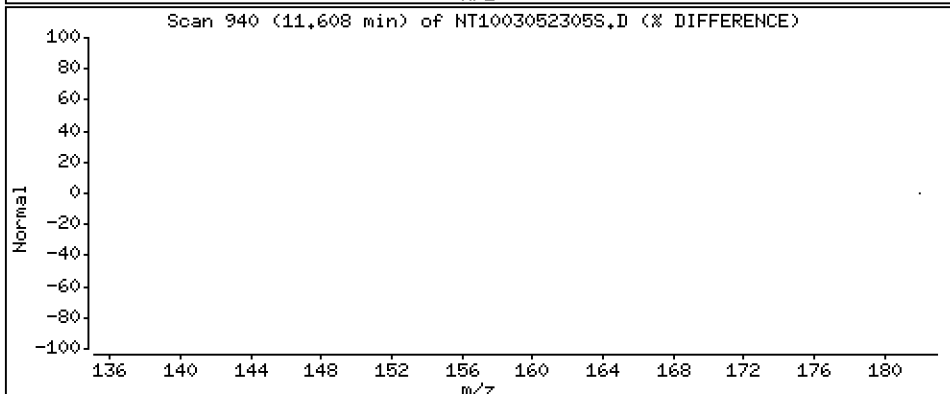
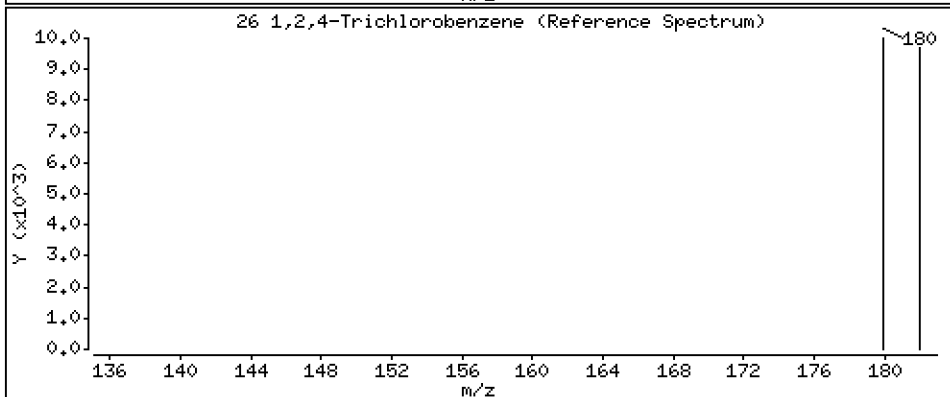
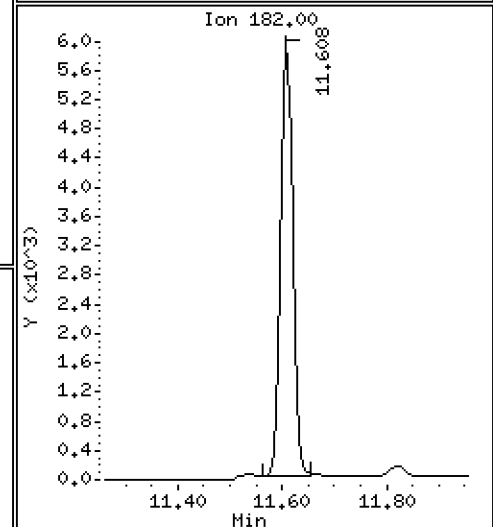
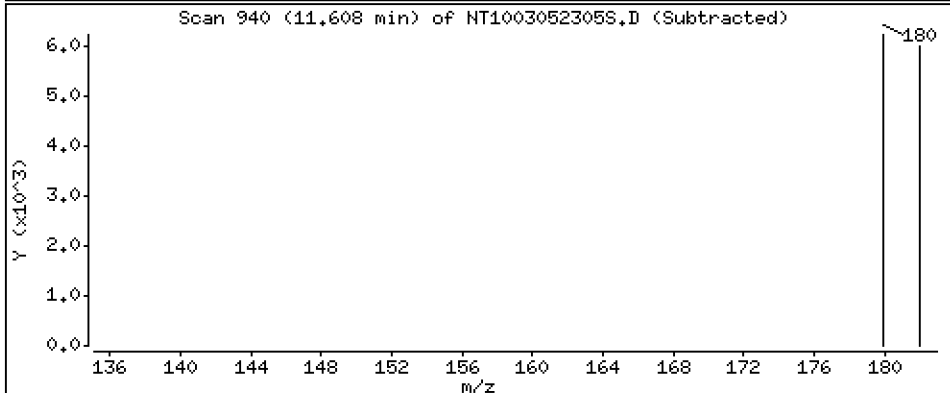
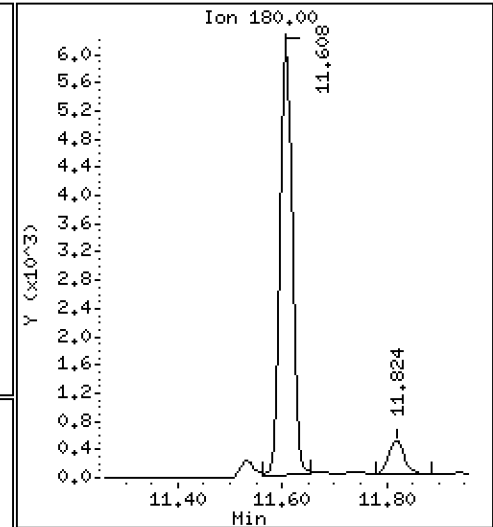
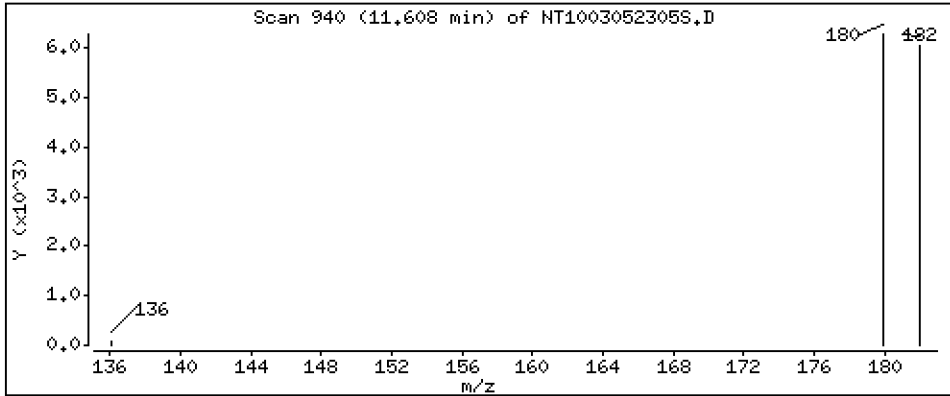
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,1176 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

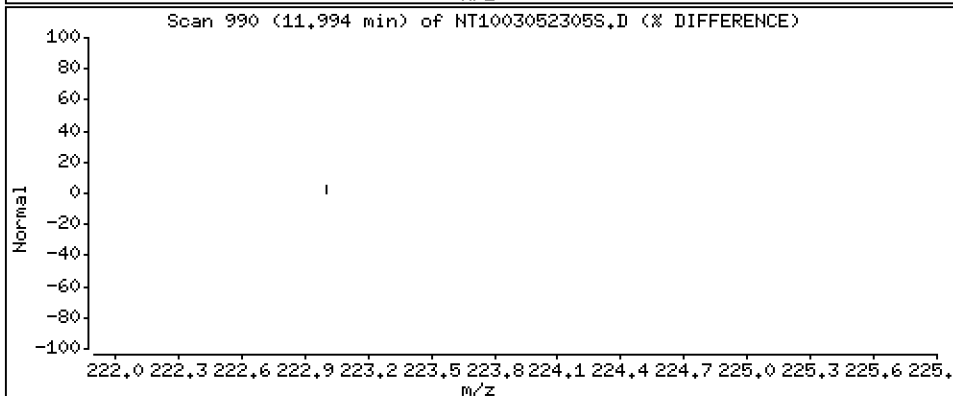
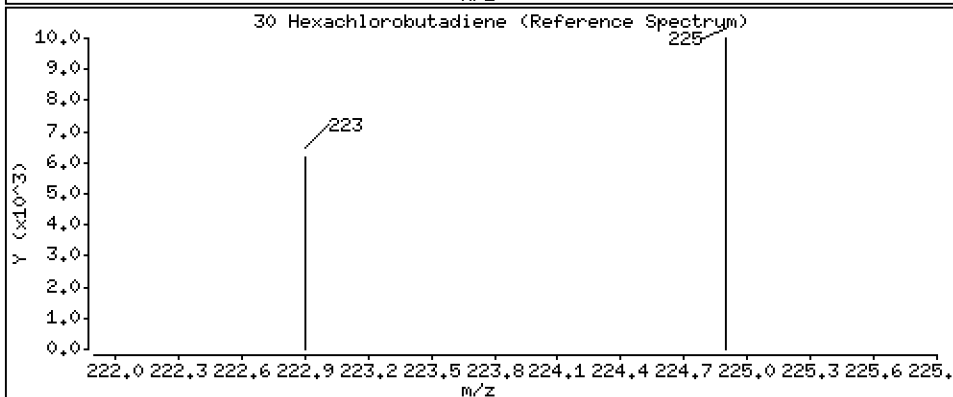
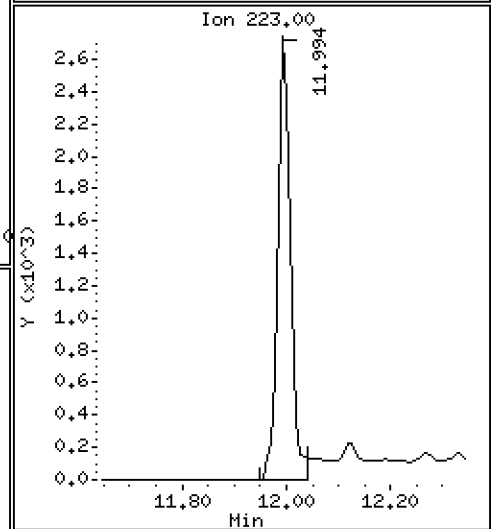
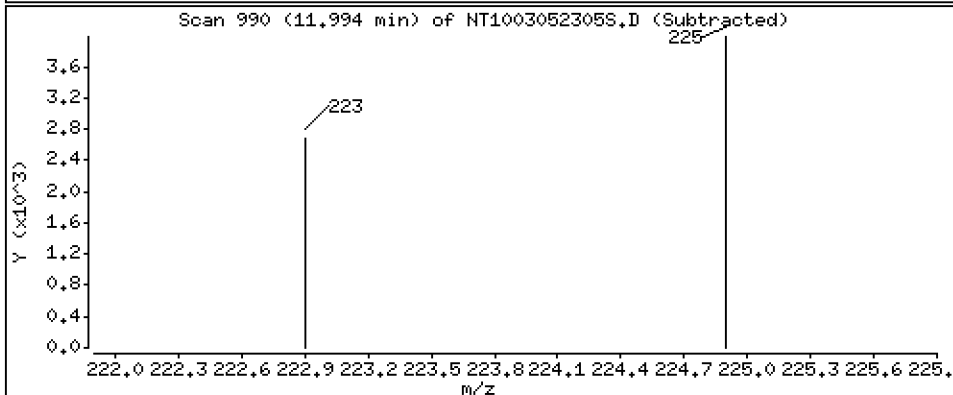
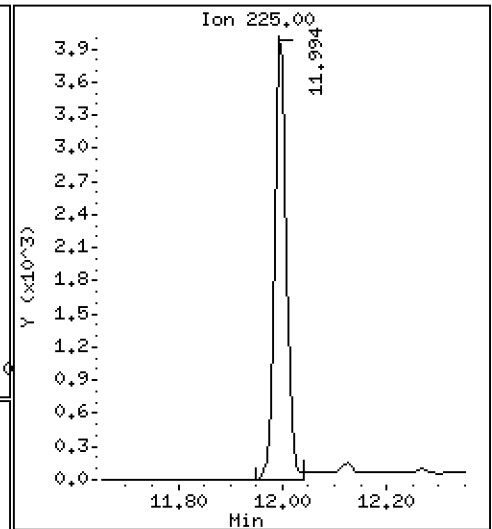
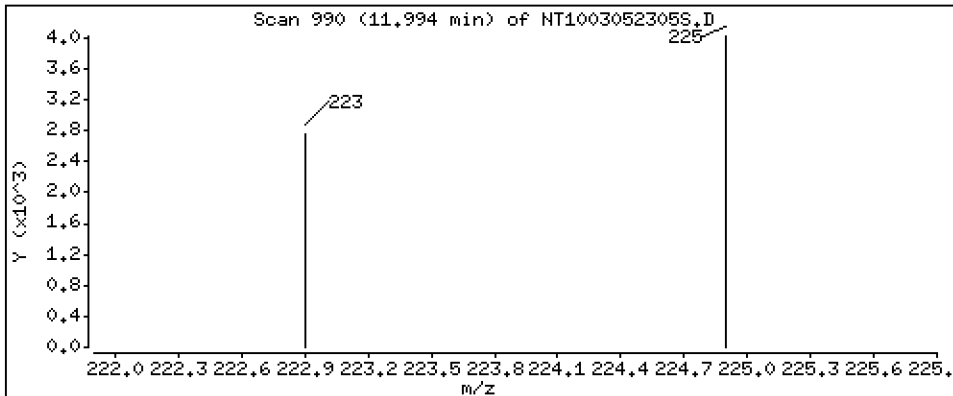
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1123 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

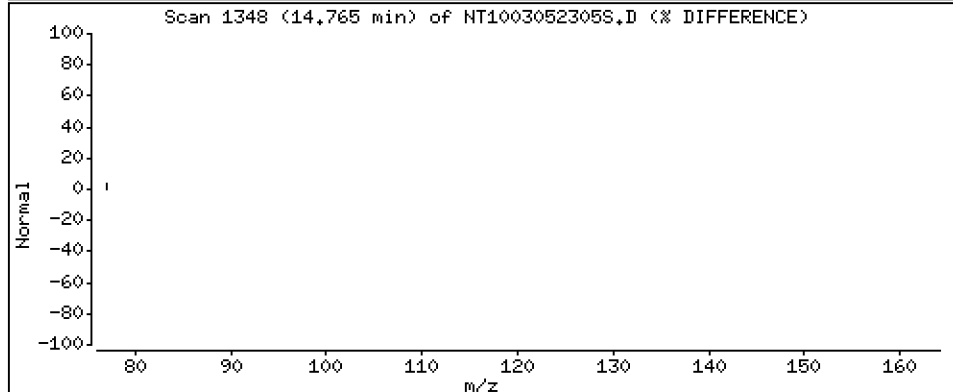
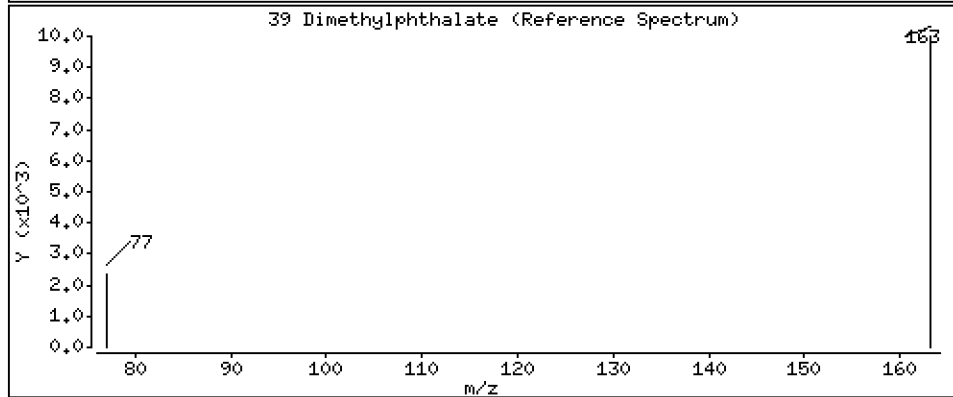
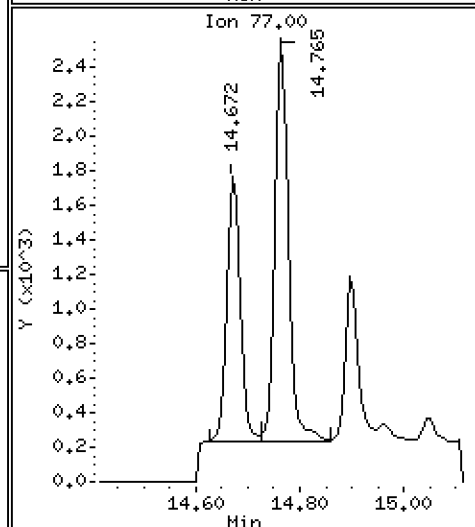
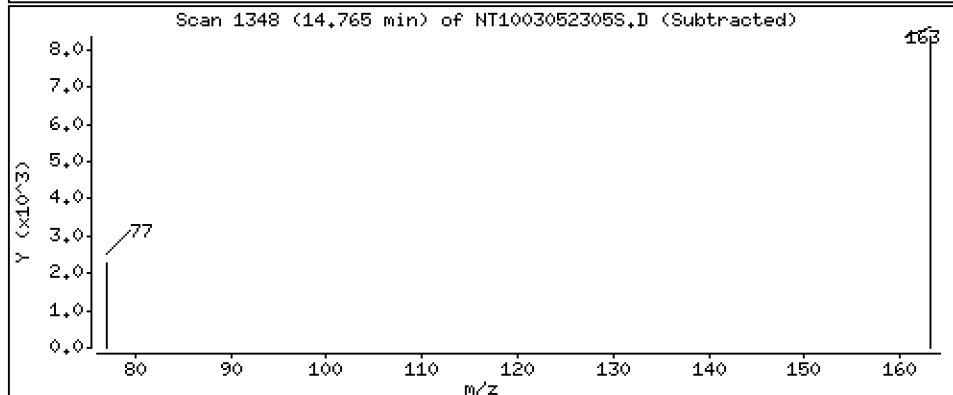
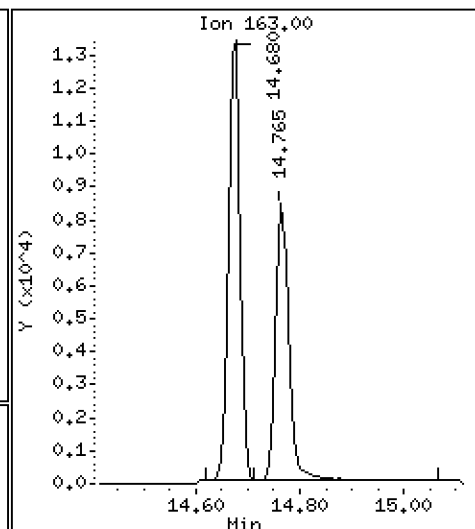
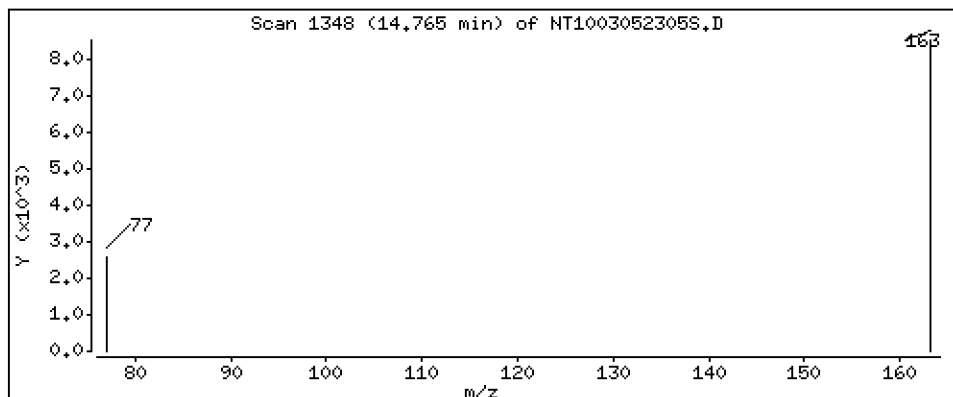
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,08286 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

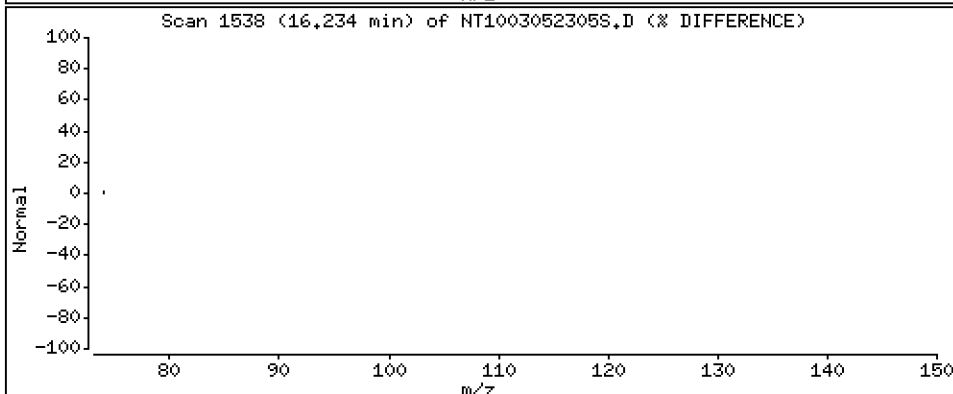
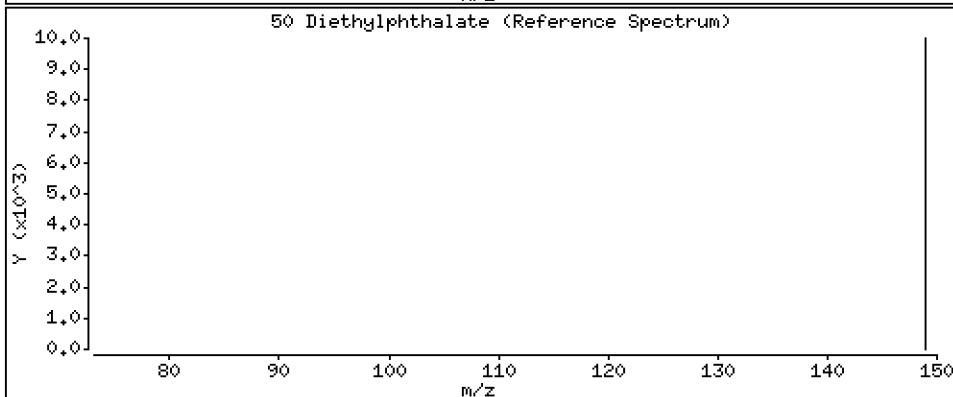
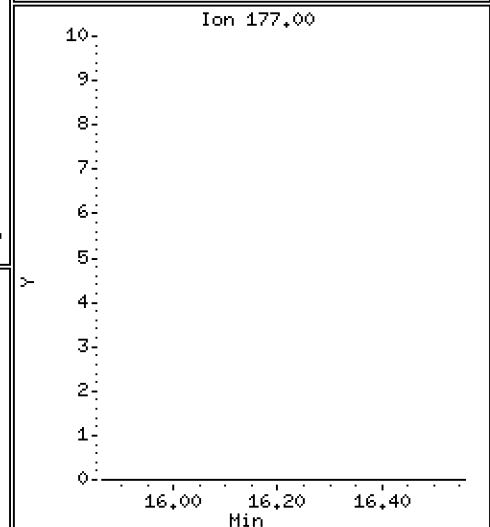
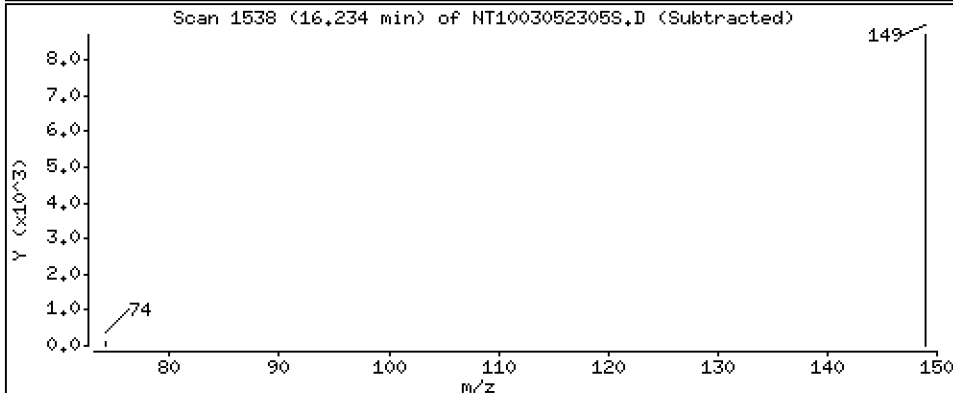
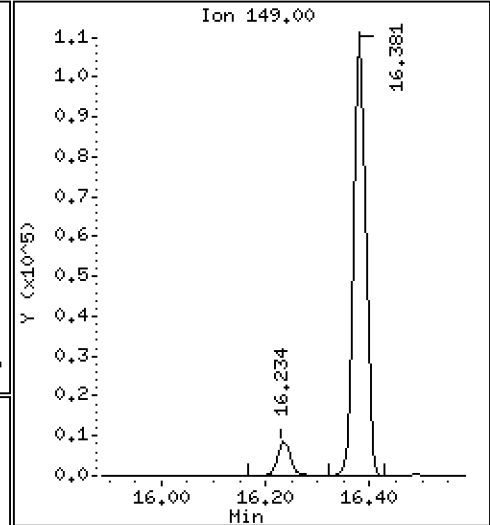
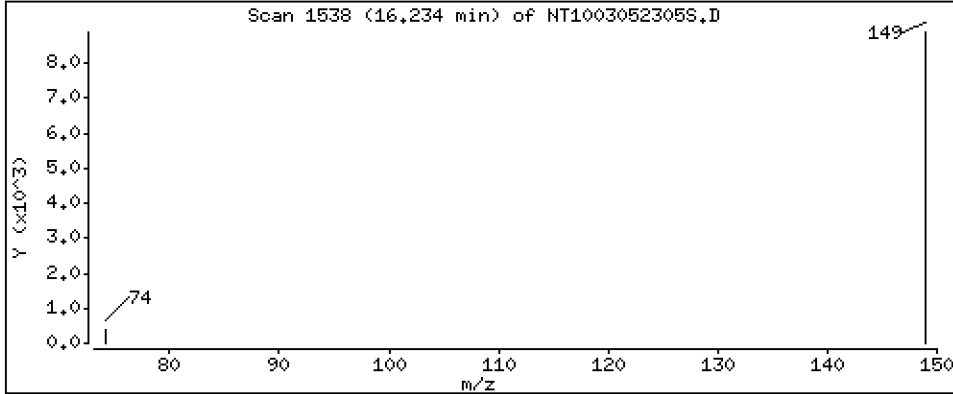
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,08409 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

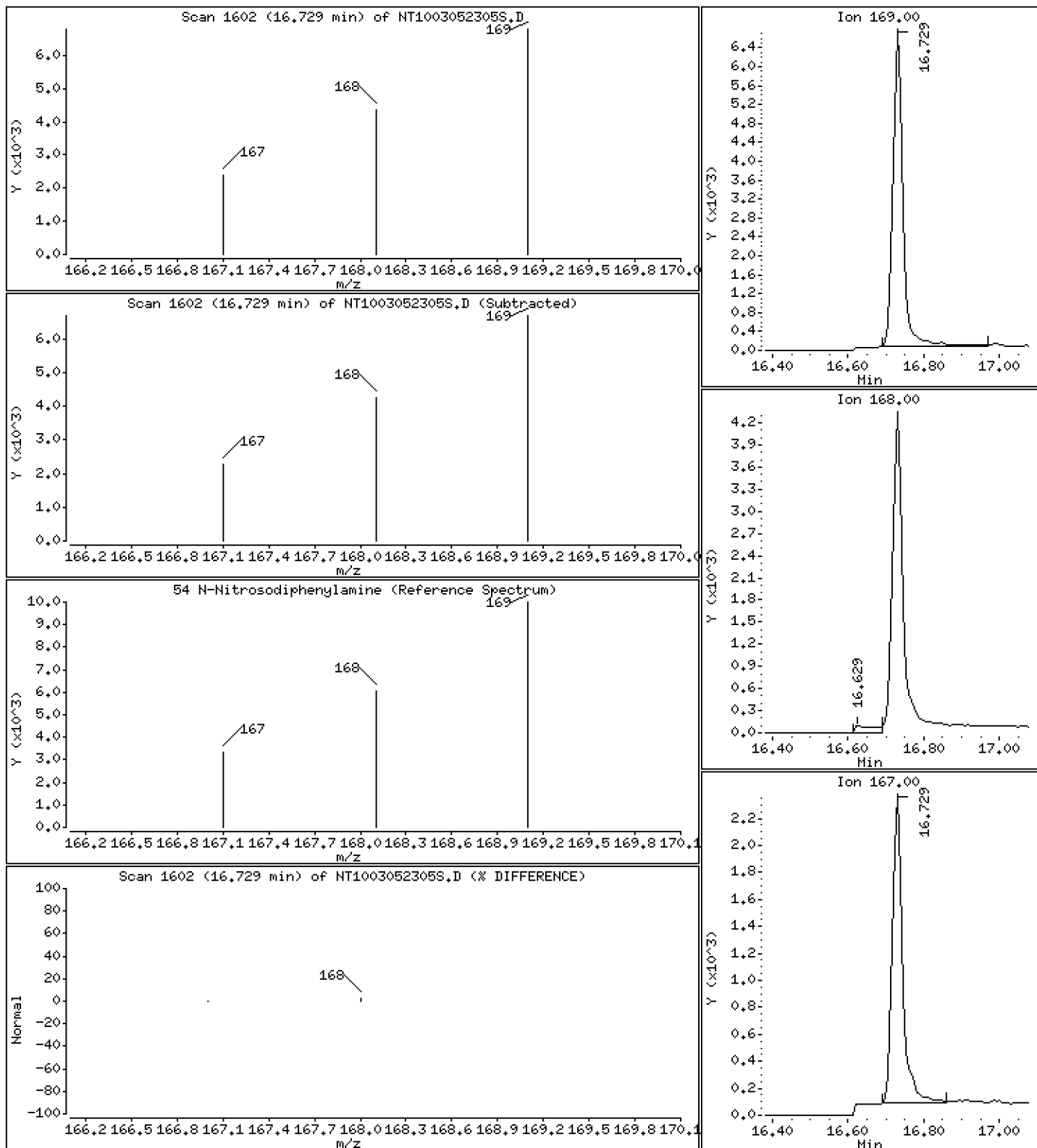
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,07128 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

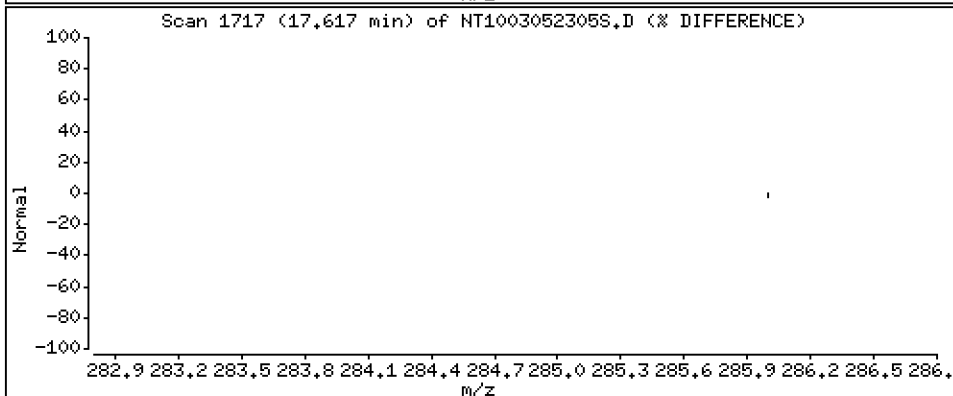
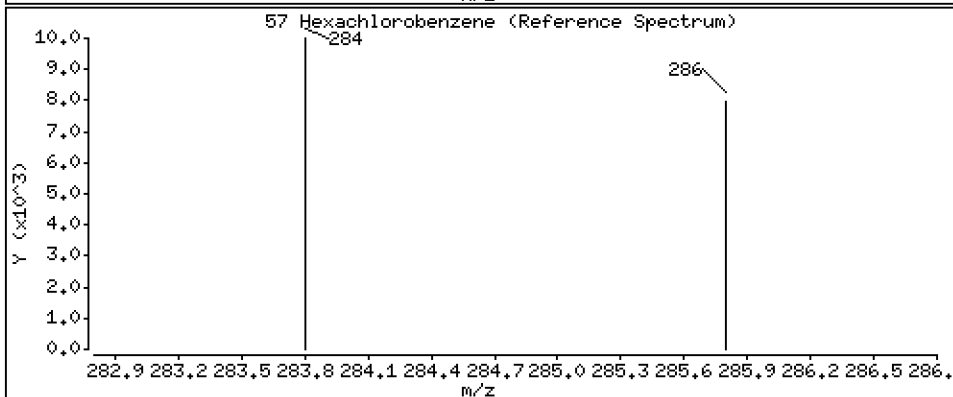
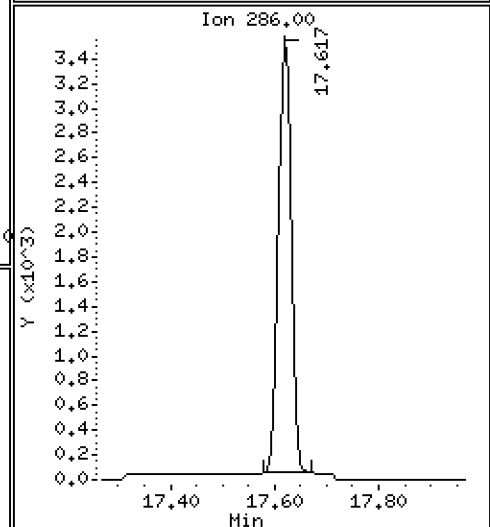
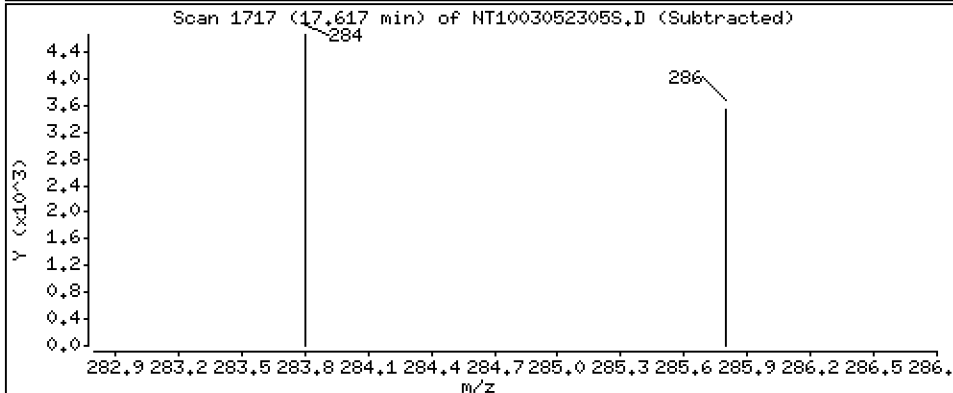
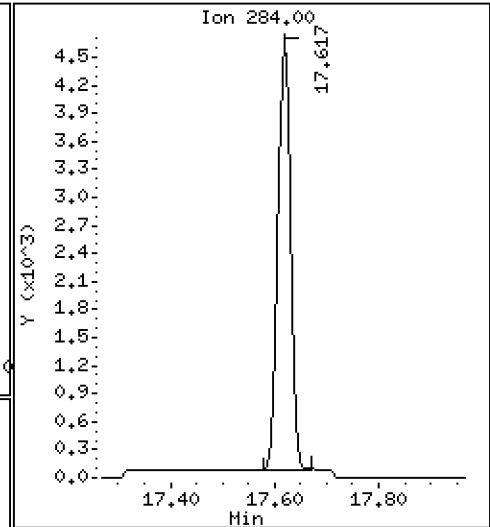
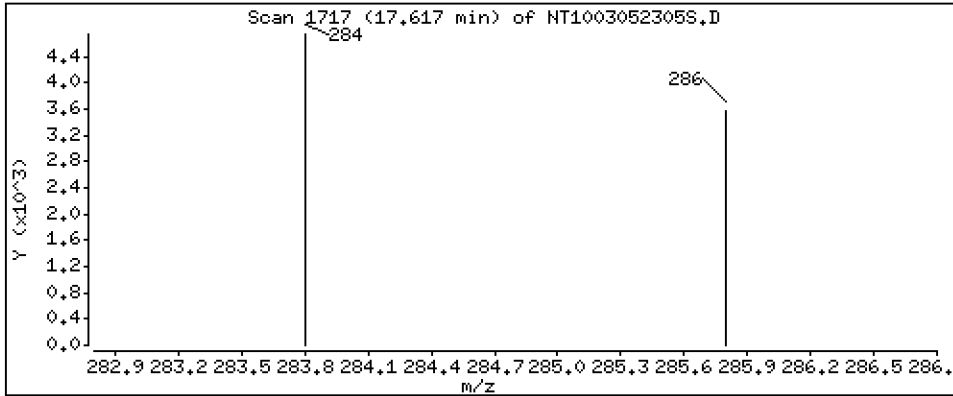
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,09455 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

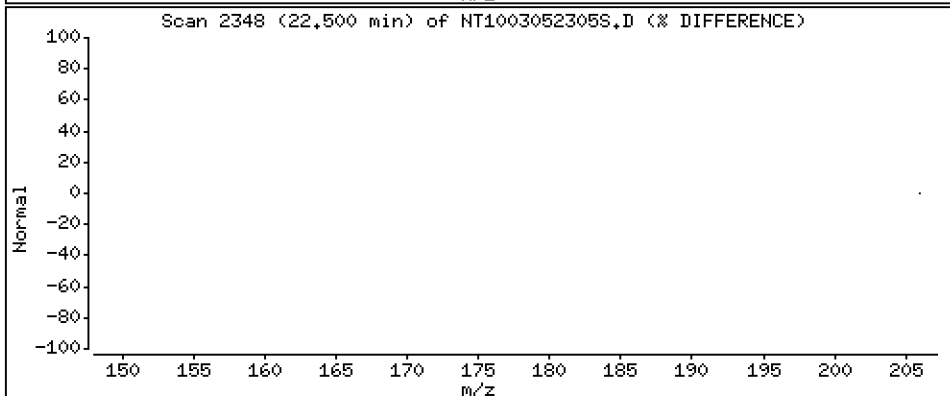
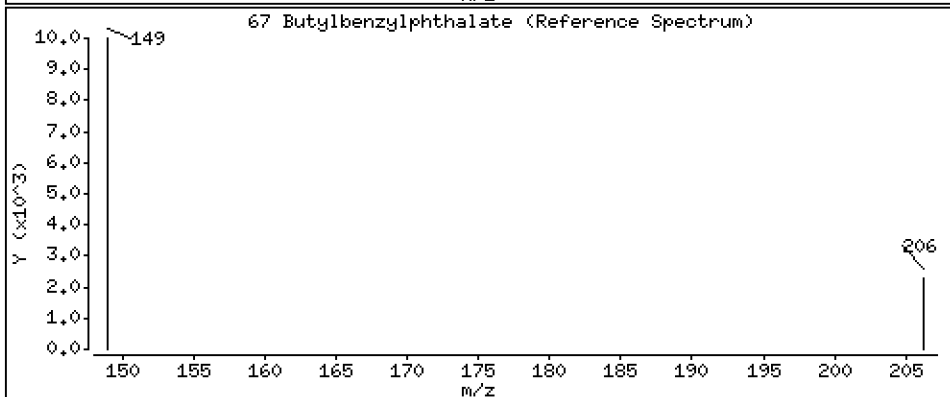
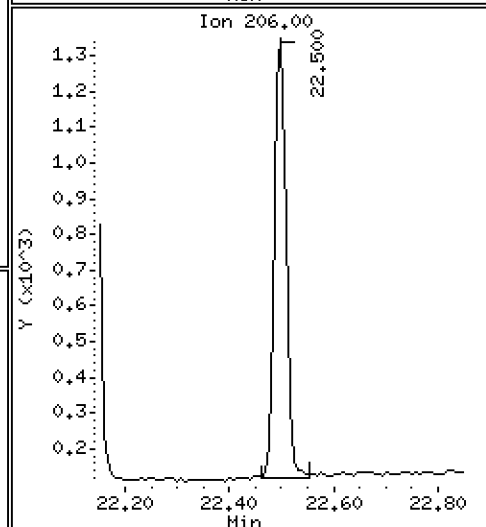
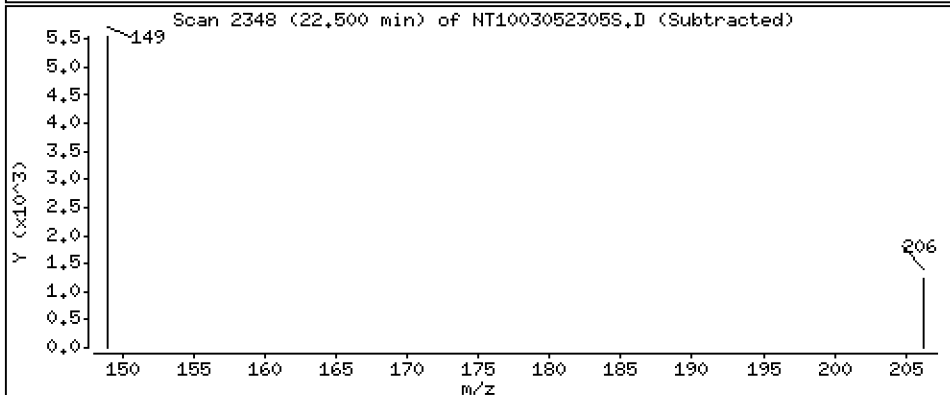
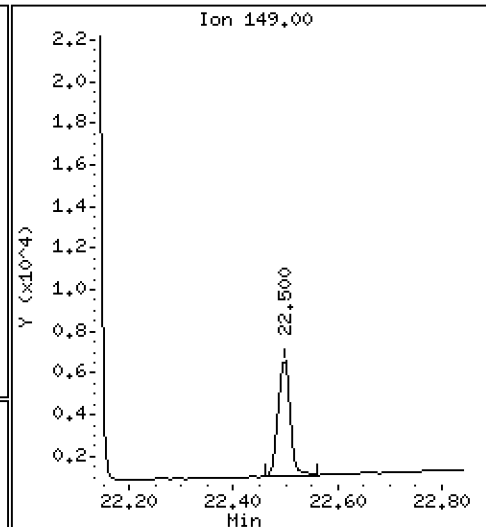
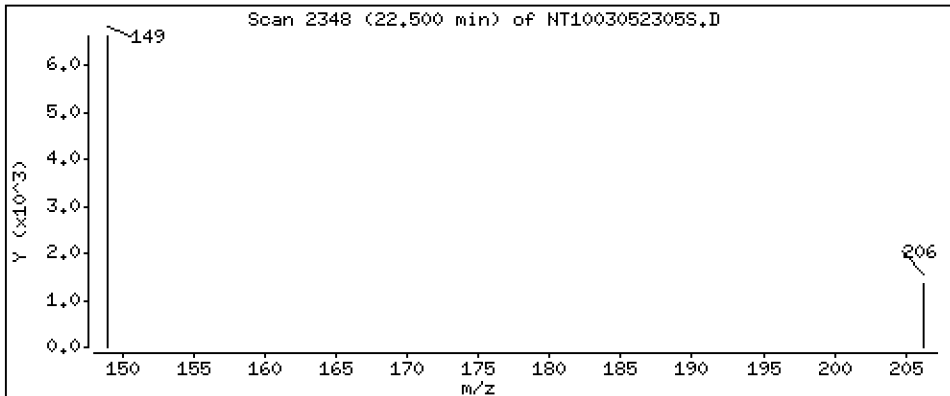
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,05717 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

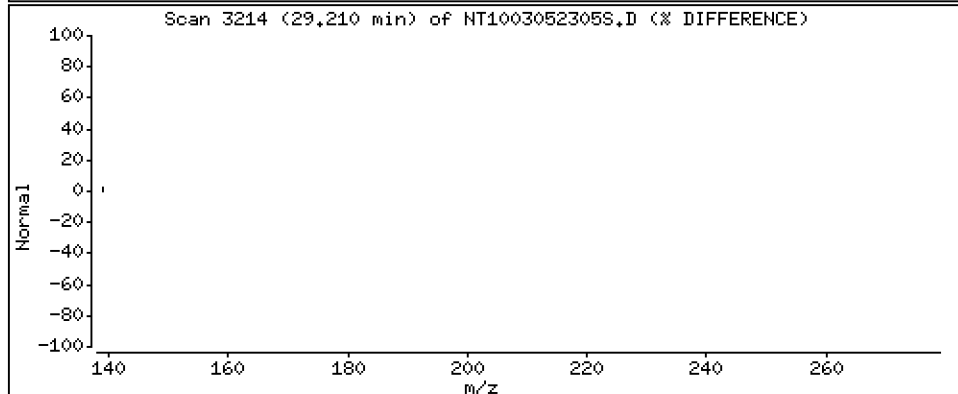
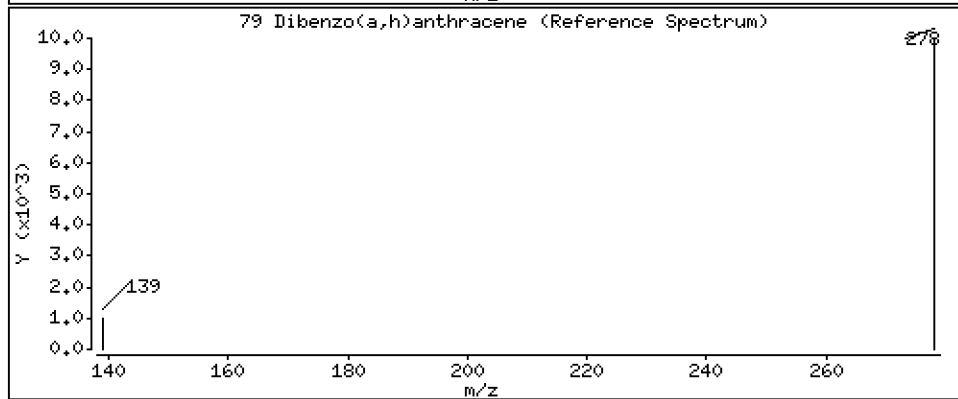
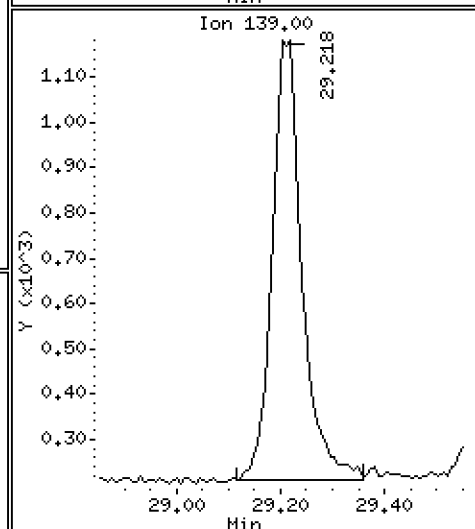
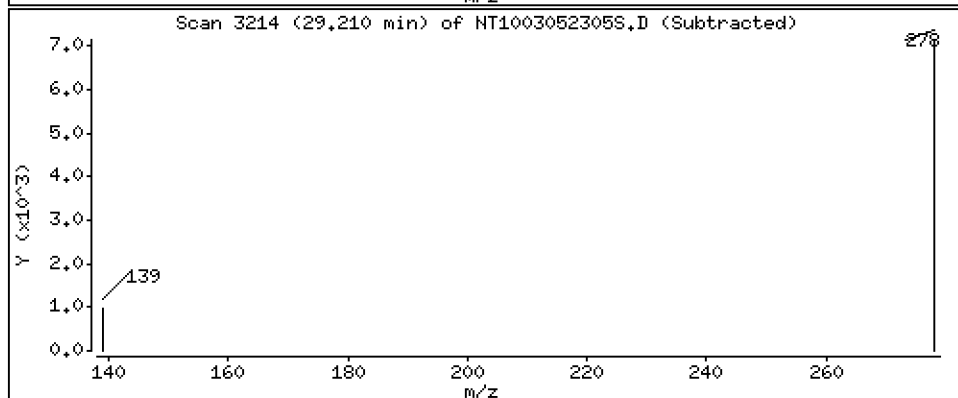
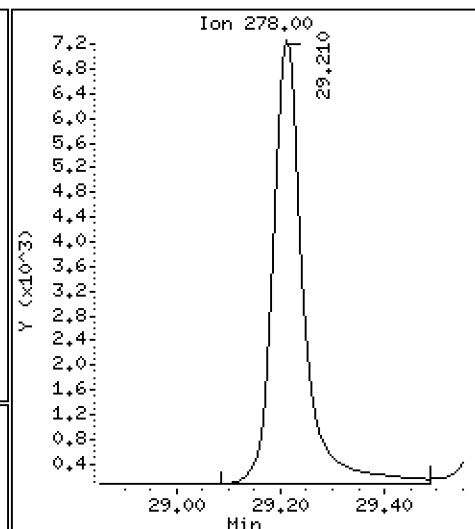
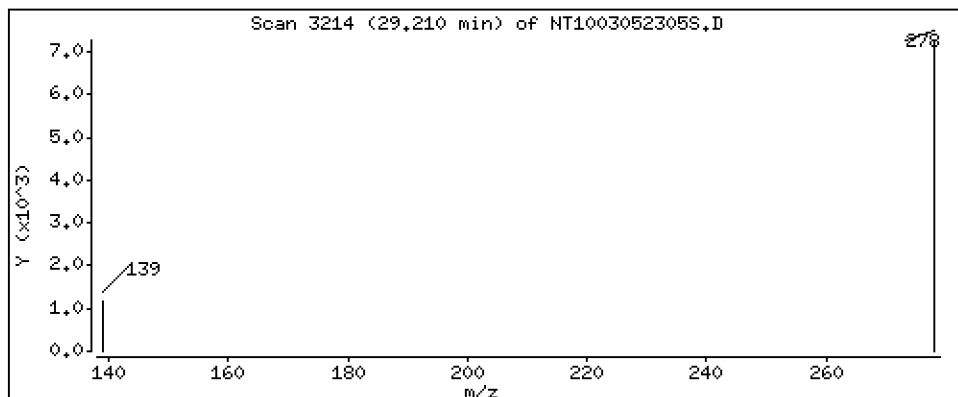
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1178 ug/mL



Date : 05-MAR-2023 15:56

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV1

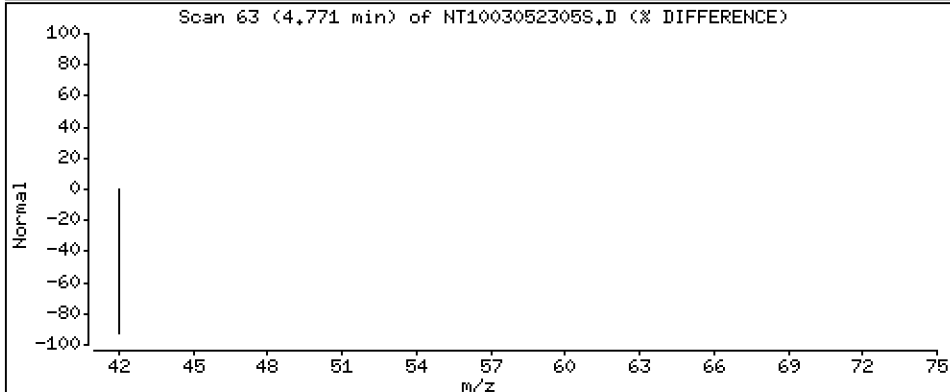
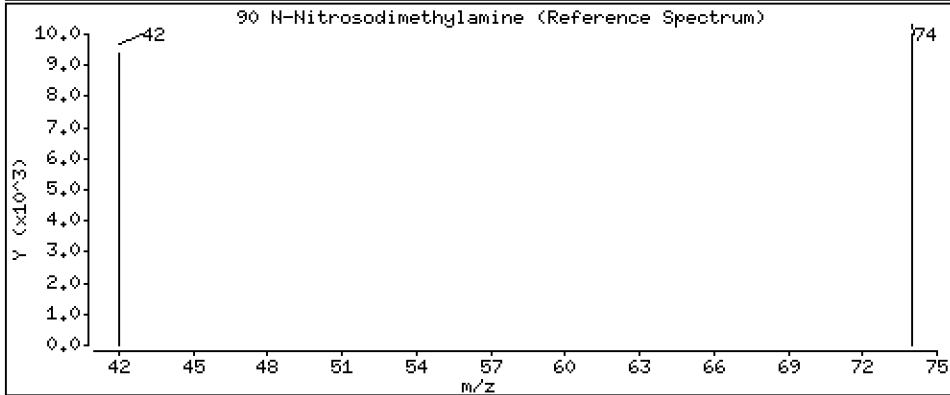
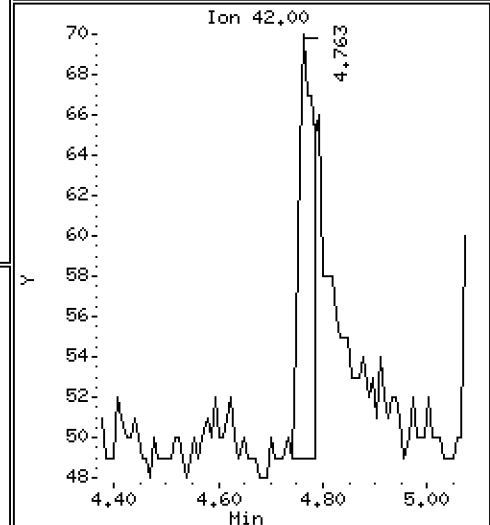
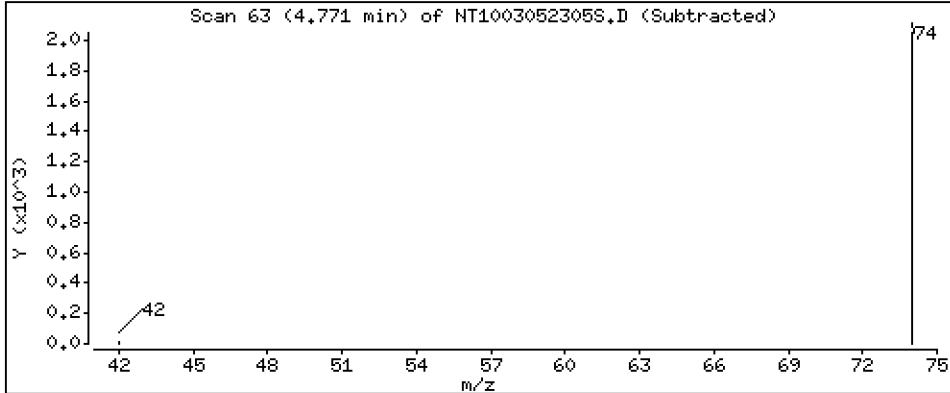
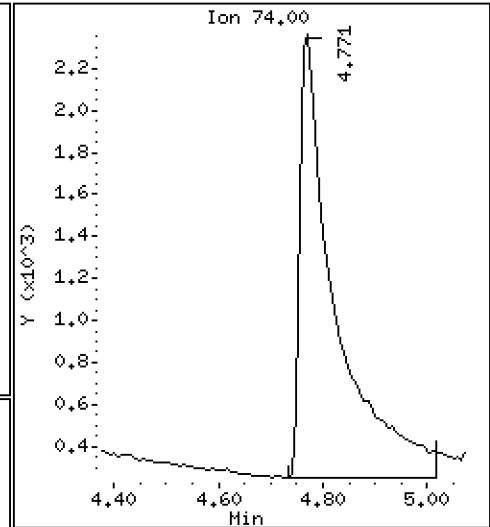
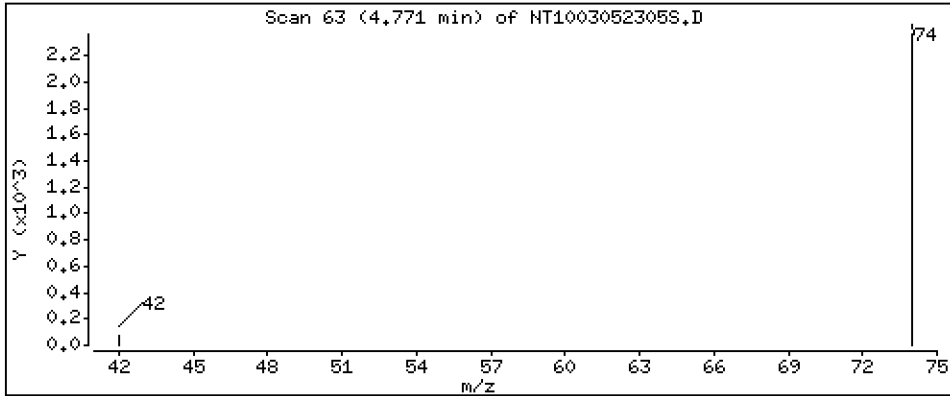
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,1961 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052305S.D
 Lab Smp Id: SLC0435-LCV1
 Inj Date : 05-MAR-2023 15:56
 Operator : YZ
 Smp Info : SLC0435-LCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.748)	9625	0.11152	0.1115 (R)
3 Phenol	94		8.540	8.533	(0.924)	5449	0.04280	0.04280
7 1,3-Dichlorobenzene	146		9.135	9.136	(0.988)	11136	0.09939	0.09939
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.244	(1.000)	302311	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	10801	0.09915	0.09915
11 Benzyl alcohol	79		9.492	9.485	(1.027)	3245	0.04597	0.04597 (M)
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	10748	0.10265	0.1027
13 2-Methylphenol	108		9.671	9.663	(1.046)	7368	0.09622	0.09622
15 4-Methylphenol	108		9.966	9.958	(1.078)	6842	0.08591	0.08591
16 N-Nitroso-di-n-propylamine	70		9.981	9.982	(1.080)	5393	0.09512	0.09512
22 2,4-Dimethylphenol	107		11.014	11.015	(0.939)	16704	0.17858	0.1786
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	9325	0.11756	0.1176
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1102062	4.00000	
30 Hexachlorobutadiene	225		11.994	12.002	(1.022)	6324	0.11235	0.1123
39 Dimethylphthalate	163		14.764	14.765	(0.963)	14206	0.08286	0.08286
* 42 Acenaphthene-d10	162		15.337	15.337	(1.000)	539935	4.00000	
50 Diethylphthalate	149		16.234	16.234	(1.058)	13596	0.08409	0.08409 (H)
54 N-Nitrosodiphenylamine	169		16.729	16.729	(0.907)	11819	0.07128	0.07128
57 Hexachlorobenzene	284		17.617	17.617	(0.955)	7336	0.09455	0.09455
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	1024492	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.602	(0.918)	11841	0.16069	0.1607 (R)
67 Butylbenzylphthalate	149		22.500	22.492	(0.957)	8795	0.05717	0.05717
* 69 Chrysene-d12	240		23.522	23.514	(1.000)	911208	4.00000	
* 77 Perylene-d12	264		26.286	26.286	(1.000)	1065211	4.00000	
79 Dibenzo(a,h)anthracene	278		29.209	29.202	(1.111)	29092	0.11776	0.1178
90 N-Nitrosodimethylamine	74		4.771	4.724	(0.516)	10019	0.19607	0.1961

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052305S.D
 Lab Smp Id: SLC0435-LCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	302311	-5.93
27 Naphthalene-d8	1132931	566466	2265862	1102062	-2.72
42 Acenaphthene-d10	561597	280799	1123194	539935	-3.86
59 Phenanthrene-d10	1068222	534111	2136444	1024492	-4.09
69 Chrysene-d12	997572	498786	1995144	911208	-8.66
77 Perylene-d12	1245490	622745	2490980	1065211	-14.47

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.52	0.03
77 Perylene-d12	26.29	25.79	26.79	26.29	-0.00

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

REVIEW SUMMARY FOR FILE - NT1003052305S.D

Lab ID: SLC0435-LCV1

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 15:56

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.516	0.511	0.0050	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003052303S.D

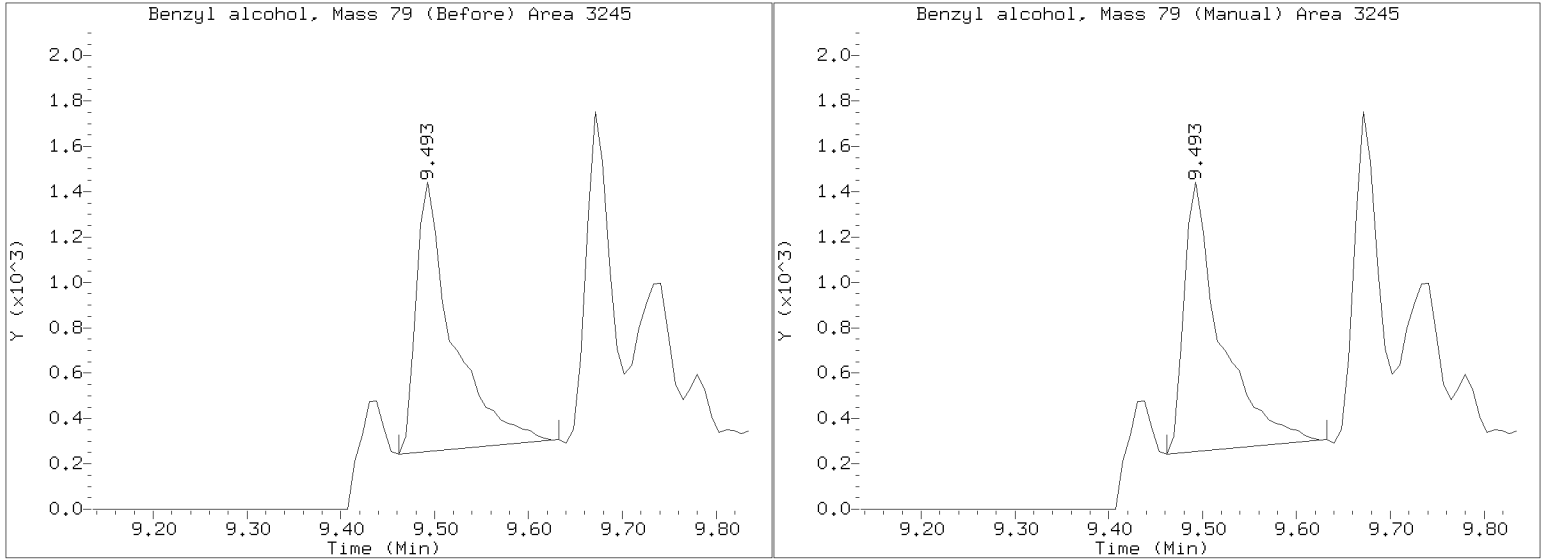
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052305S.D
Injection Date: 05-MAR-2023 15:56
Lab ID:SLC0435-LCV1 Client ID:
Report Date: 03/28/2023 11:00



APPROVED

By Deenay Dunmore at 12:02 pm, Mar 28, 2023



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052304S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0435</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0435-LCV2</u>	Injection Time:	<u>15:18</u>
Sequence Name:	<u>ABN 0.2</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.20000	0.2	1.4413080	1.4143400		-1.9	
1,2-Dichlorobenzene	A	0.20000	0.2	1.3853460	1.4302170		3.2	
Benzyl Alcohol	A	0.20000	0.1	0.7492523	0.6145958		-34.3	
Benzoic acid	A	0.80000	0.02	0.1431163	0.0053539		-97.1	
2,4-Dimethylphenol	A	0.40000	0.4	0.2957717	0.3296730		-3.0	
1,2,4-Trichlorobenzene	A	0.20000	0.2	0.2879030	0.3384332		17.6	
N-Nitrosodiphenylamine	A	0.20000	0.2	0.6473471	0.5242603		-19.0	
Pentachlorophenol	A	0.40000	0.02	0.0950913	0.0058987		-95.6	
2-Fluorophenol	A	0.30000	0.246	1.1419780	0.9346170		-18.2	
p-Terphenyl-d14	A	0.20000	0.288	0.3234672	0.4656808		44.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305.B\SIH.B\NT1003052304S.D

Date: 05-MAR-2023 15:18

Client ID:

Sample Info: SLC0435-LCW2

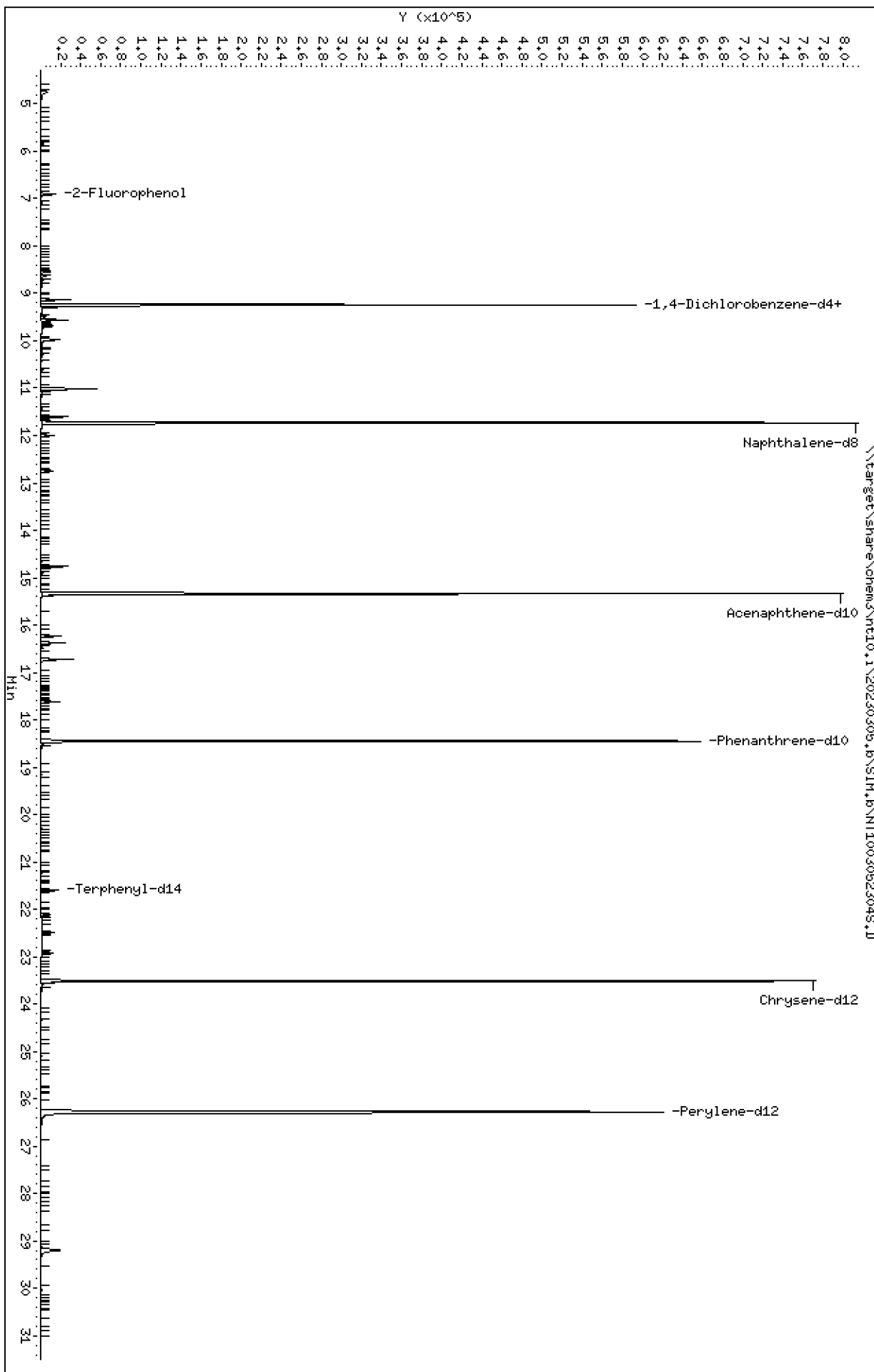
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

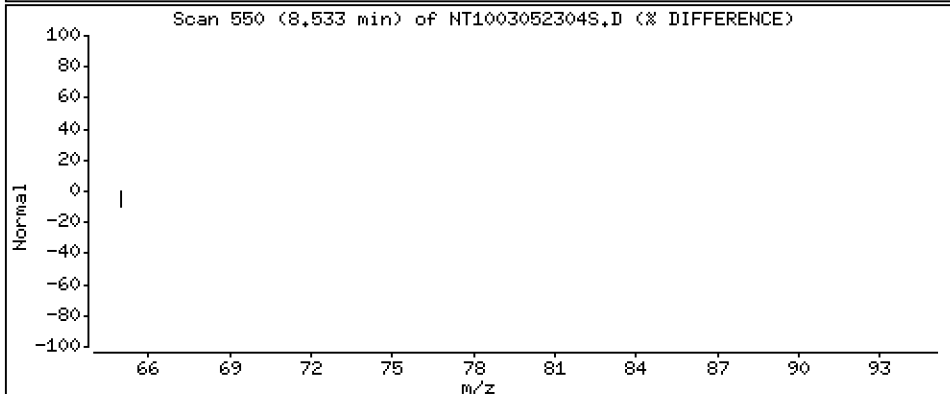
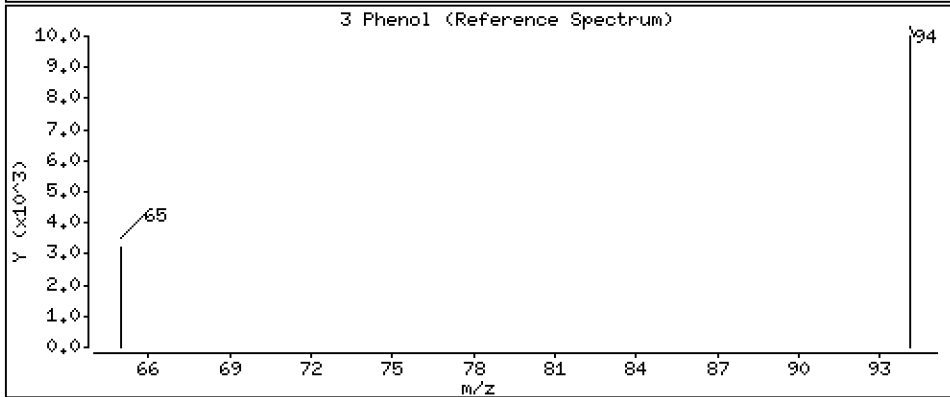
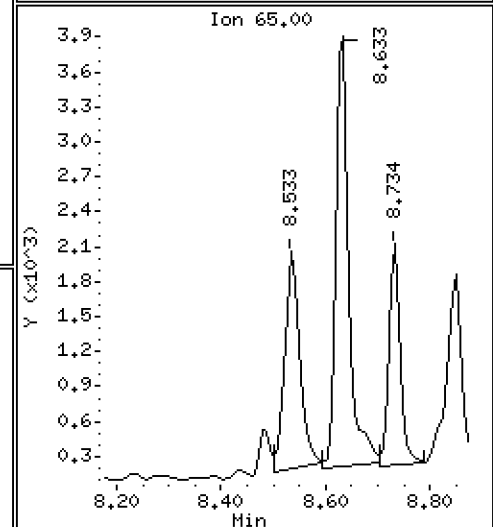
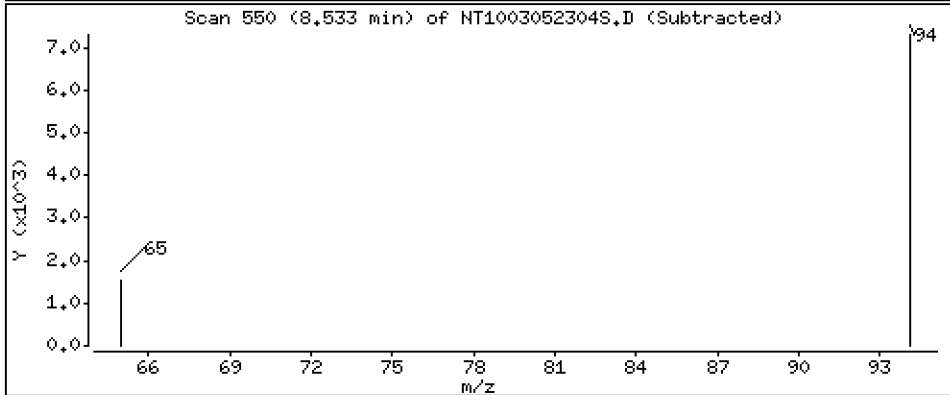
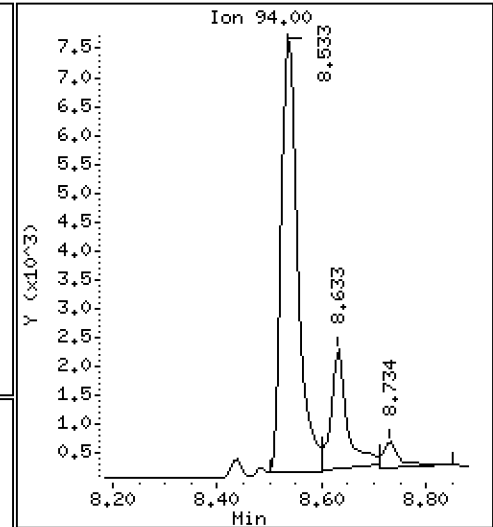
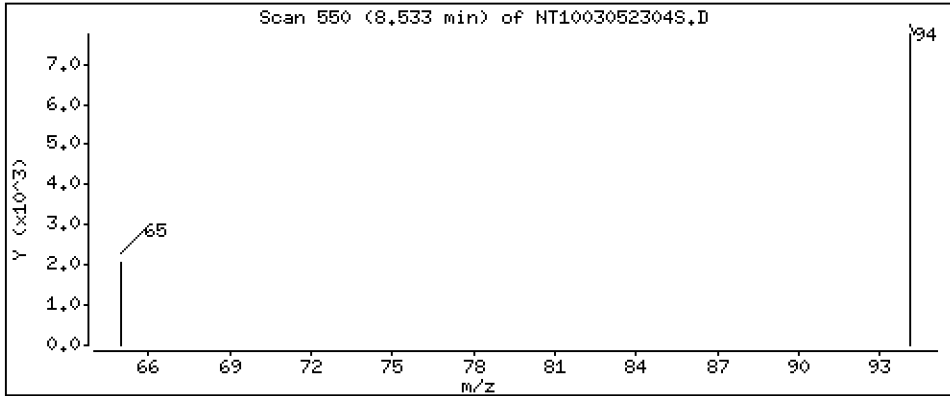
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1151 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

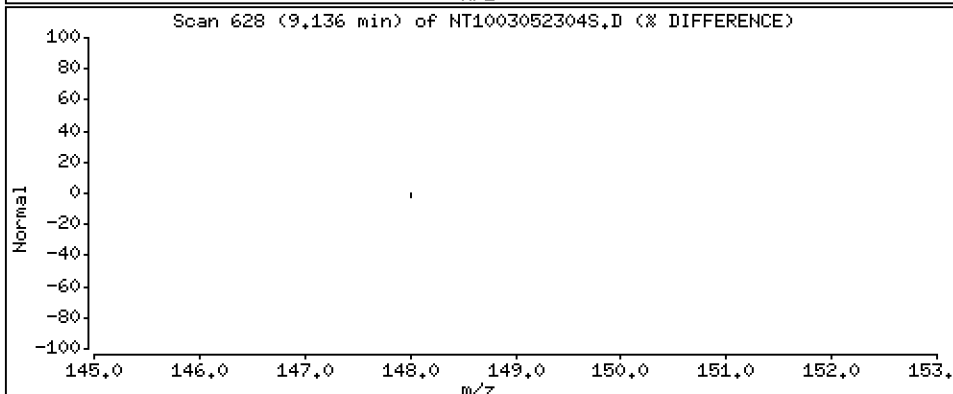
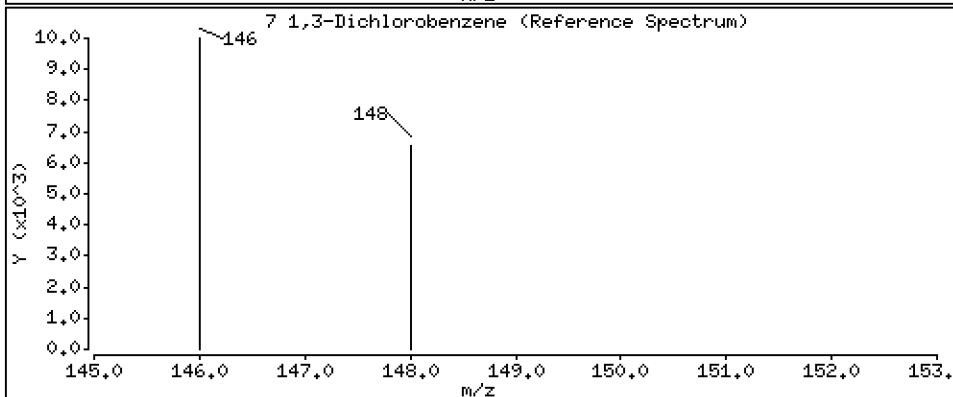
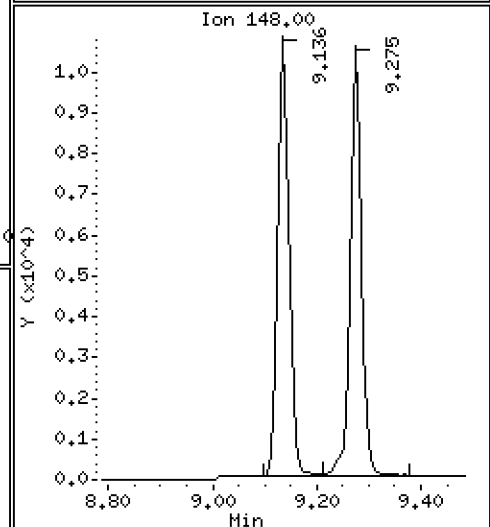
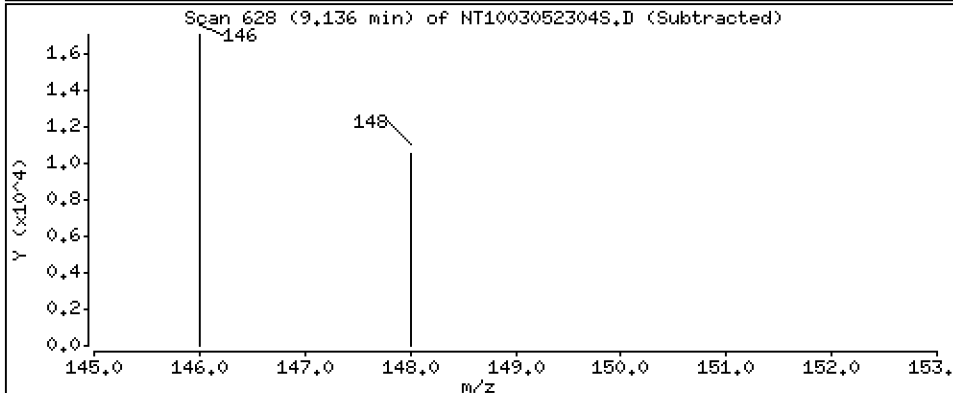
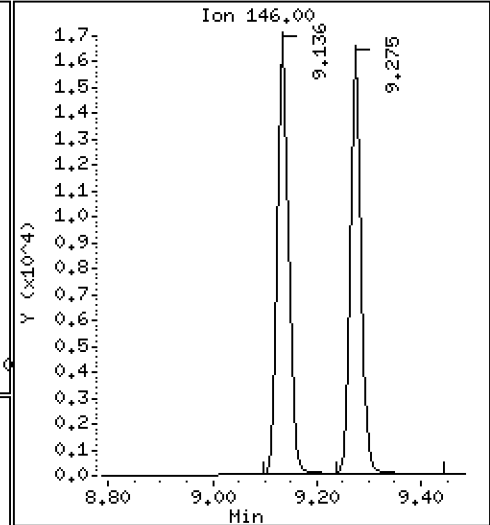
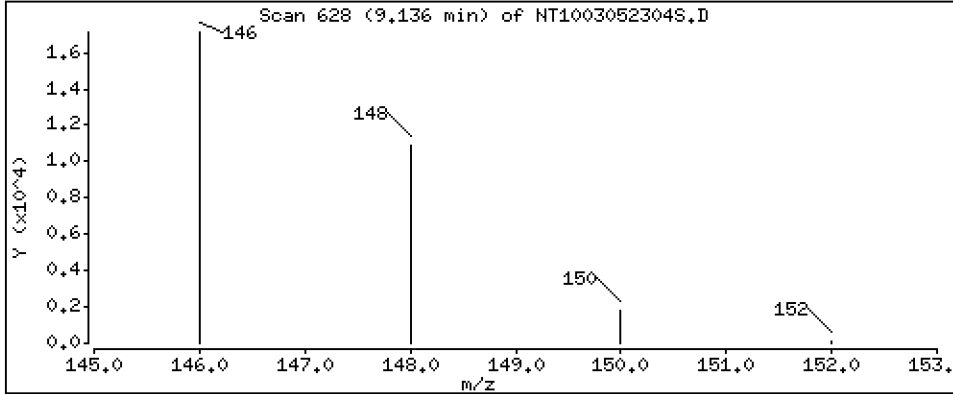
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,2009 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

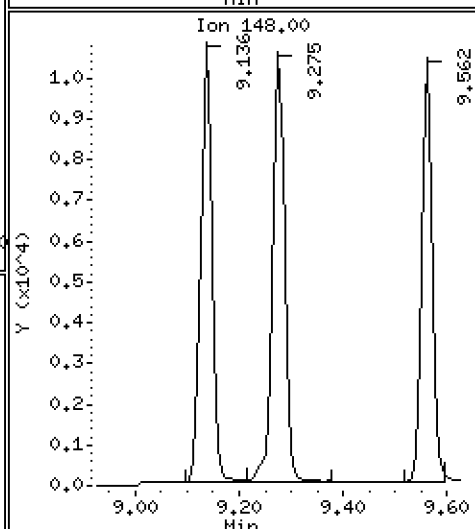
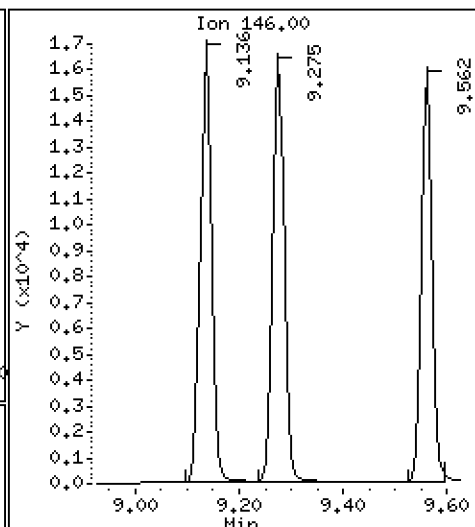
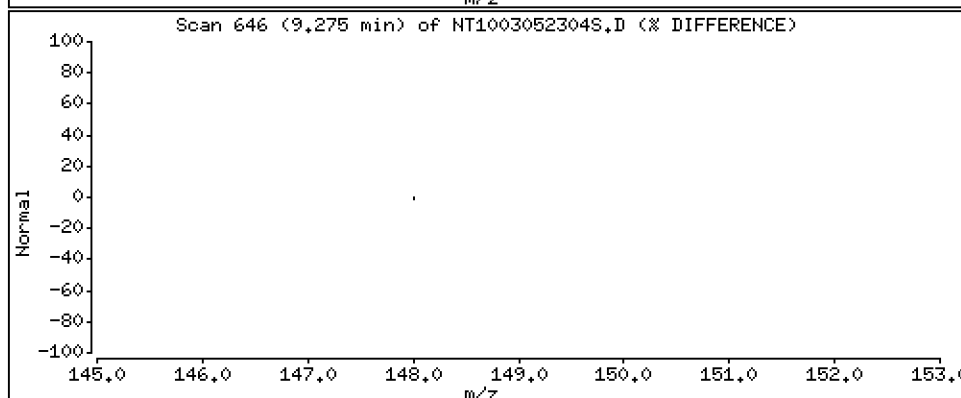
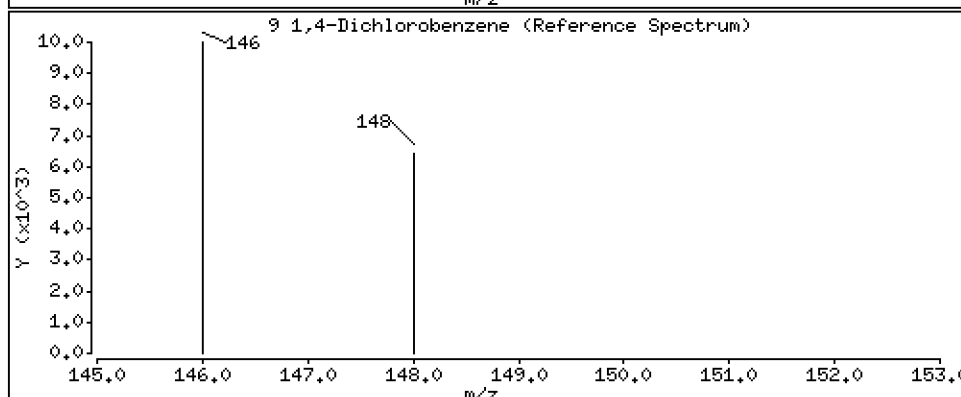
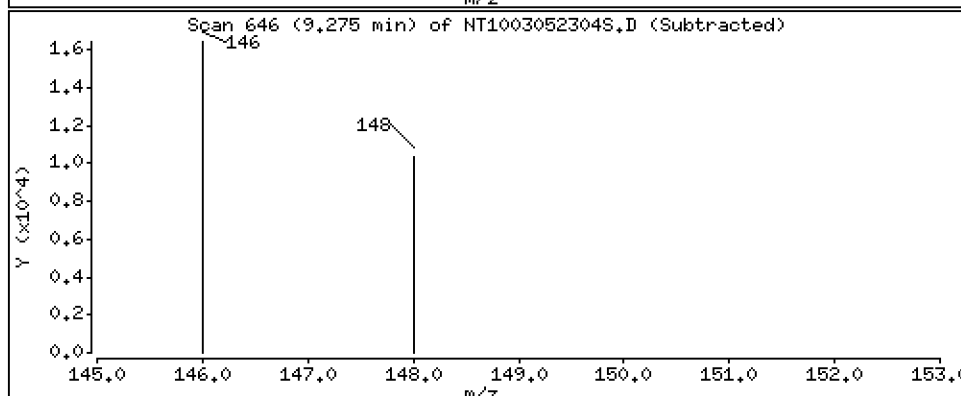
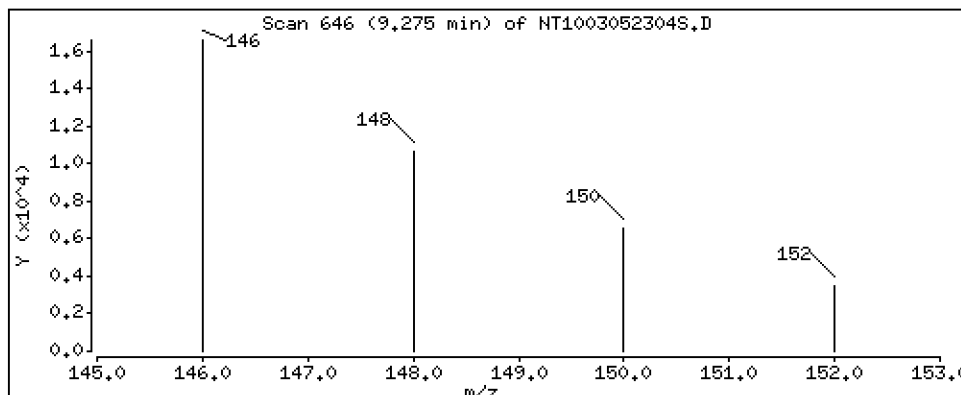
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,1963 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

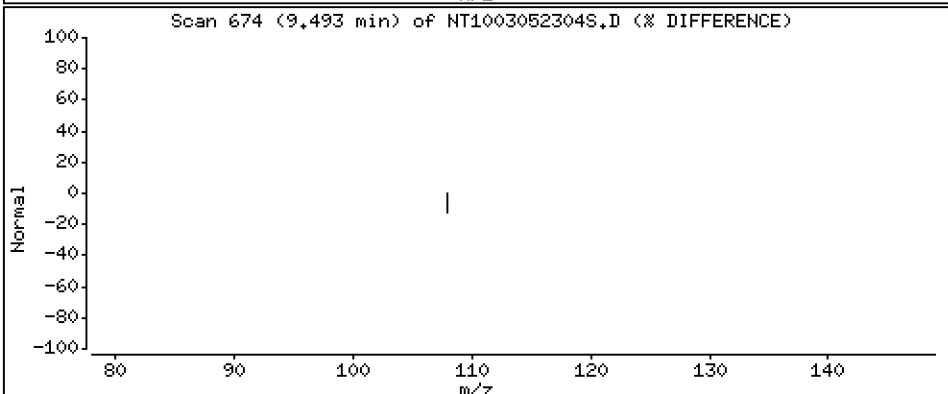
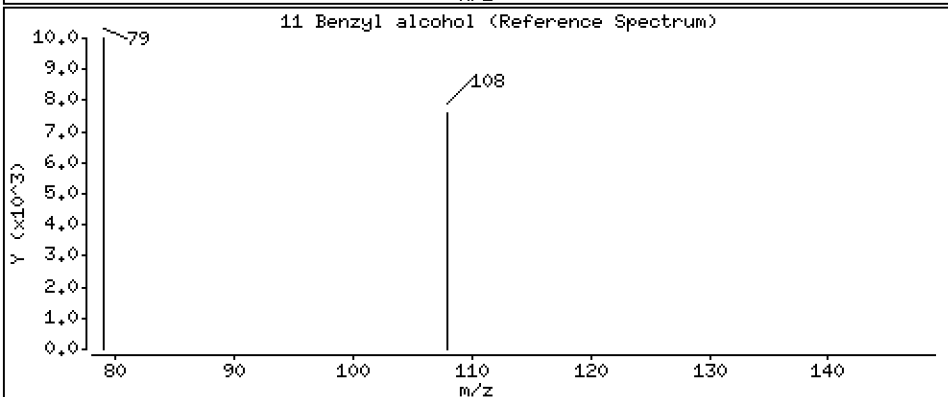
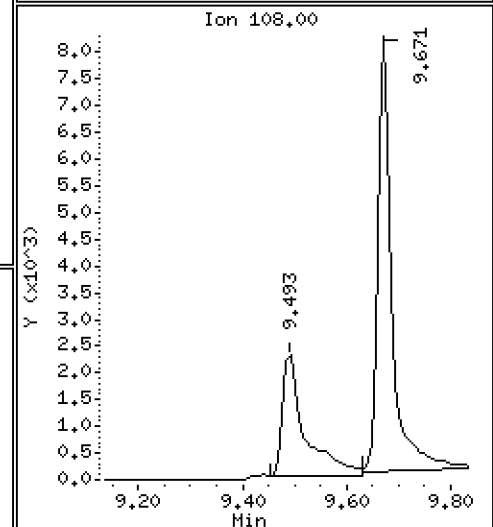
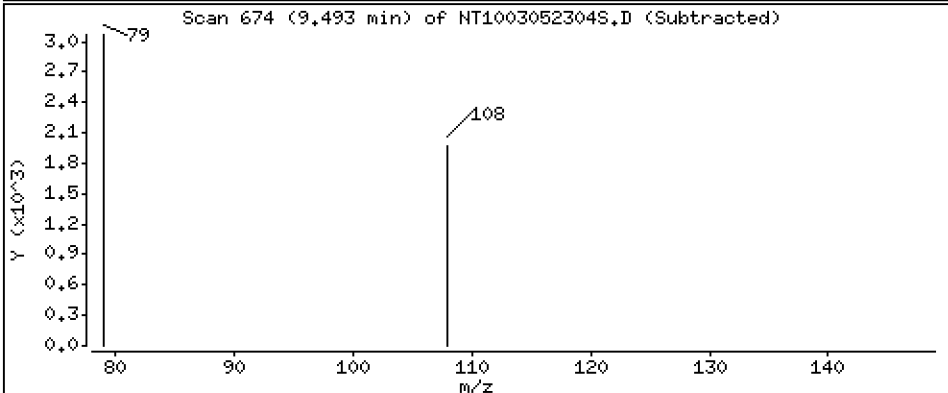
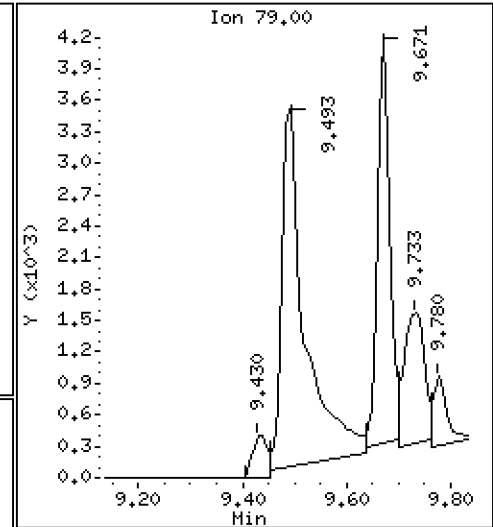
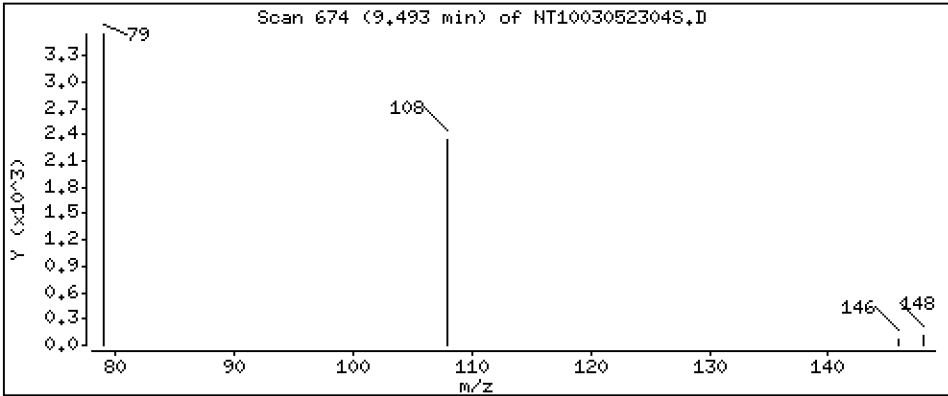
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1315 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

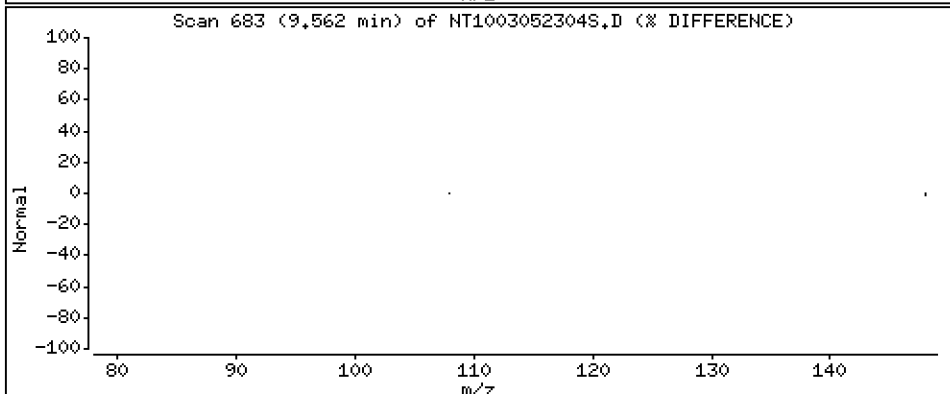
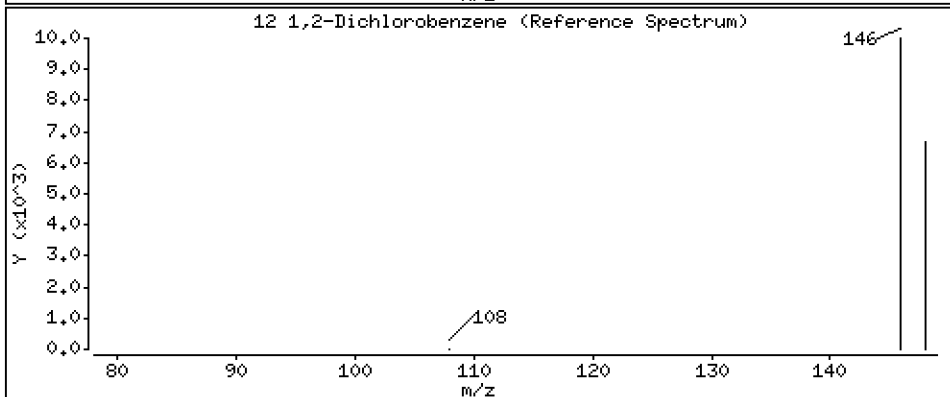
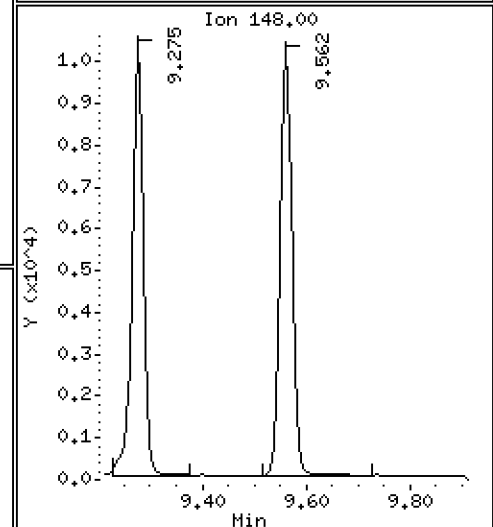
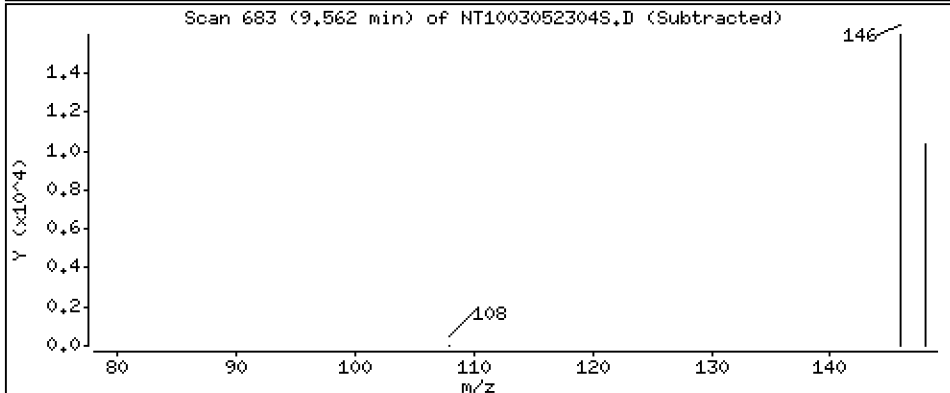
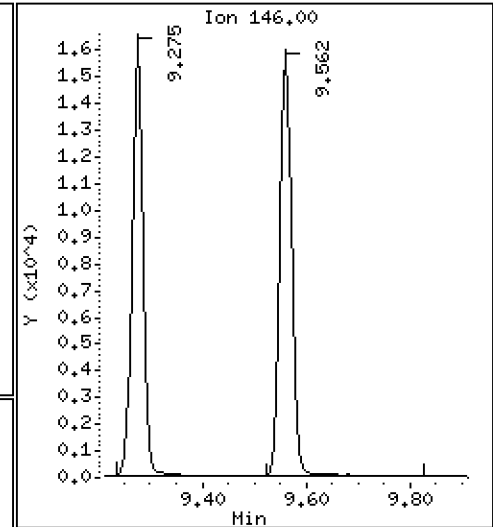
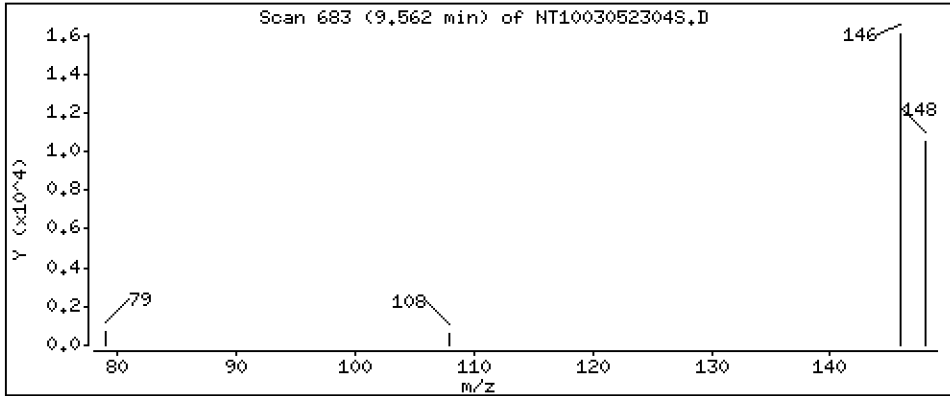
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2065 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

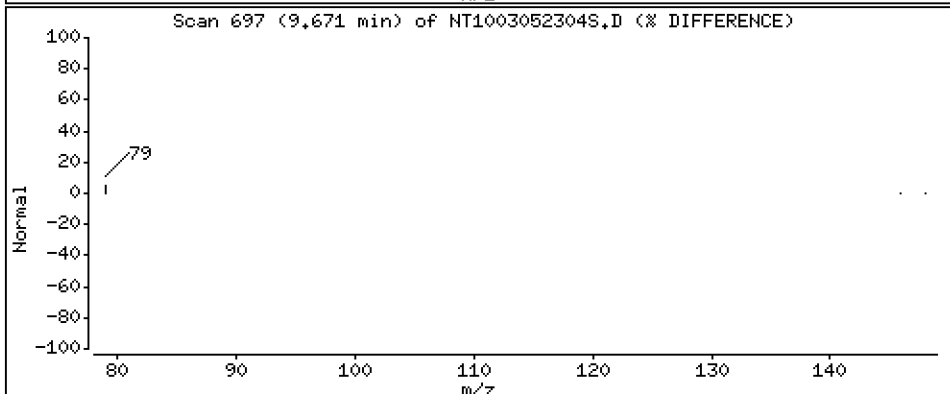
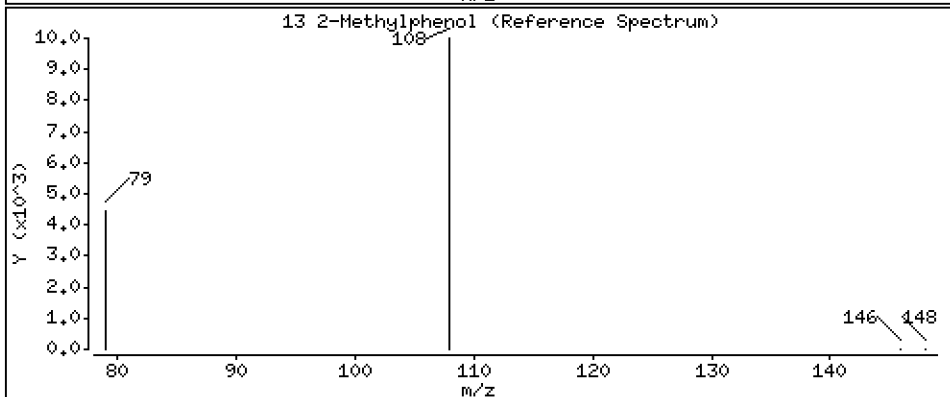
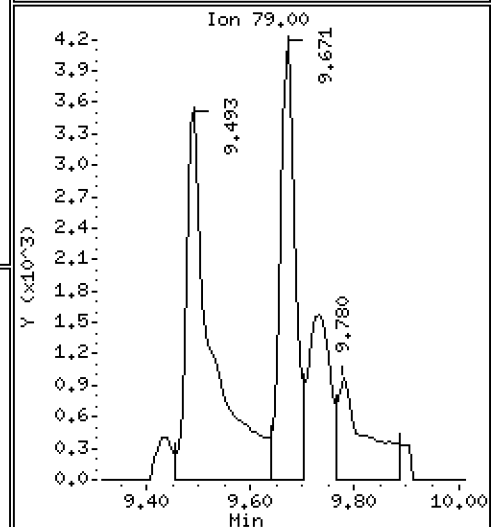
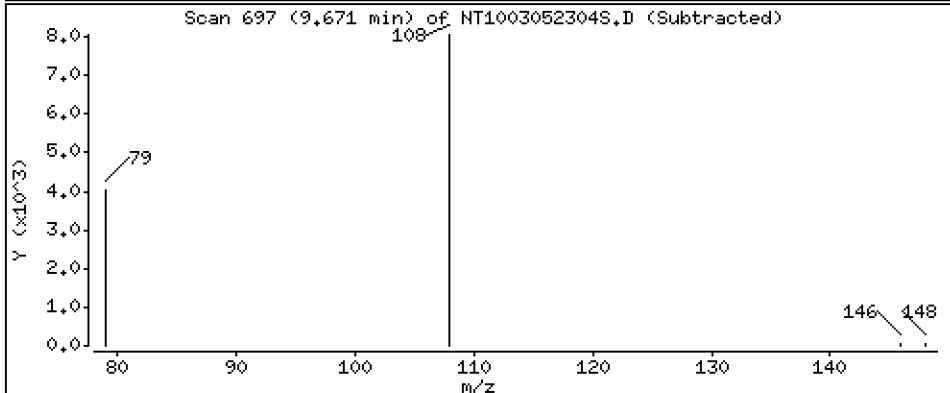
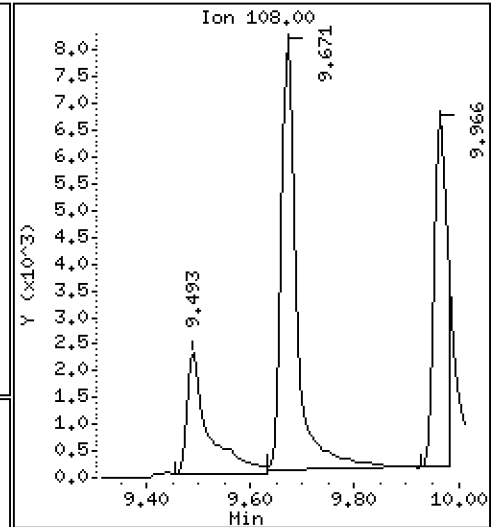
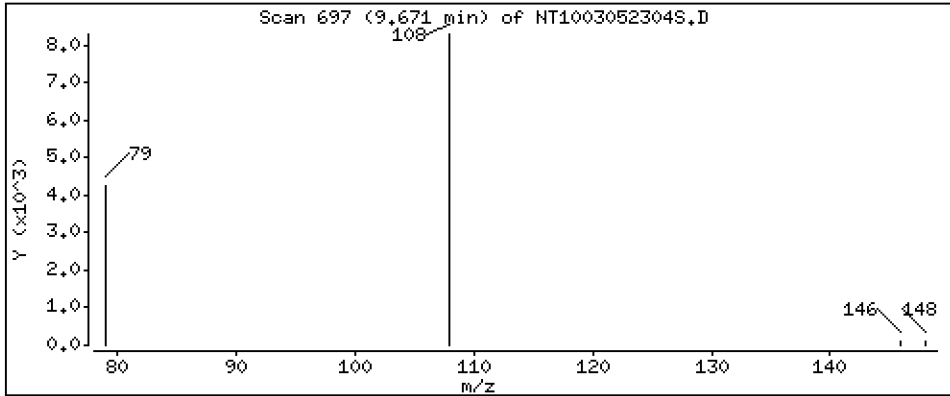
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,1910 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

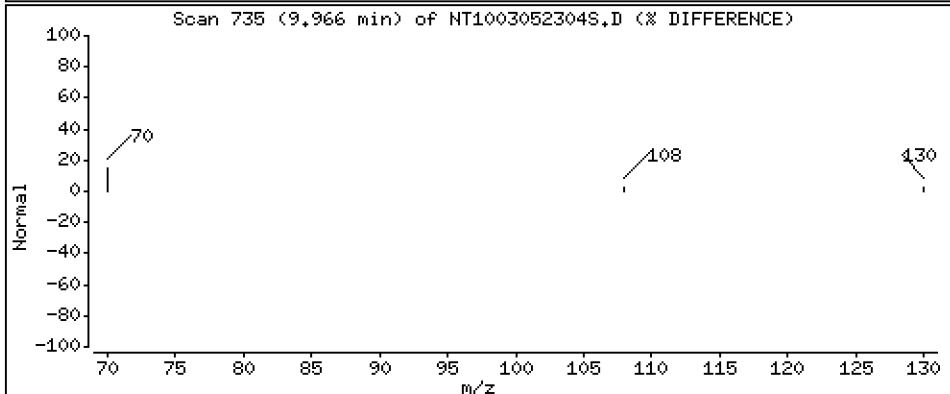
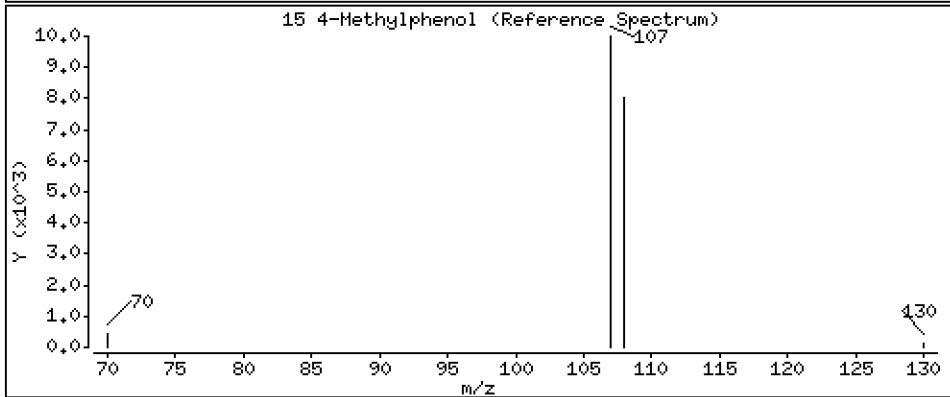
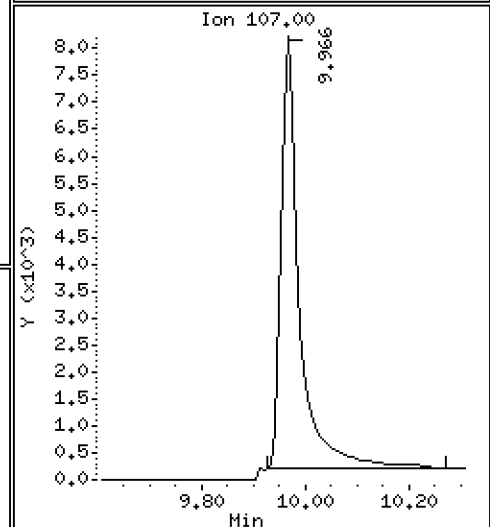
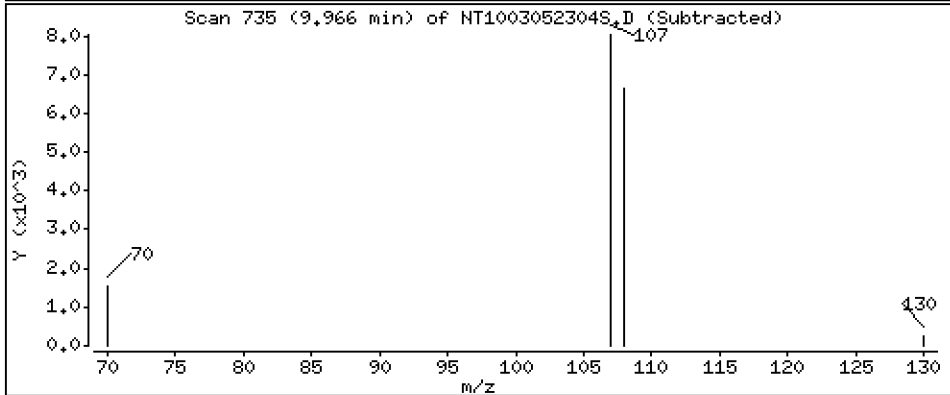
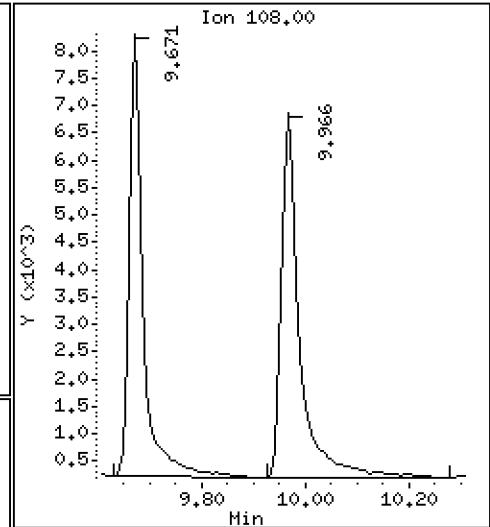
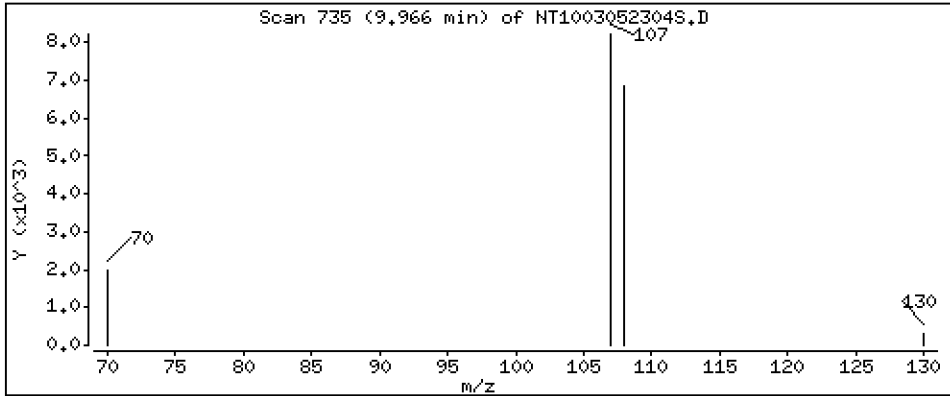
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.1807 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

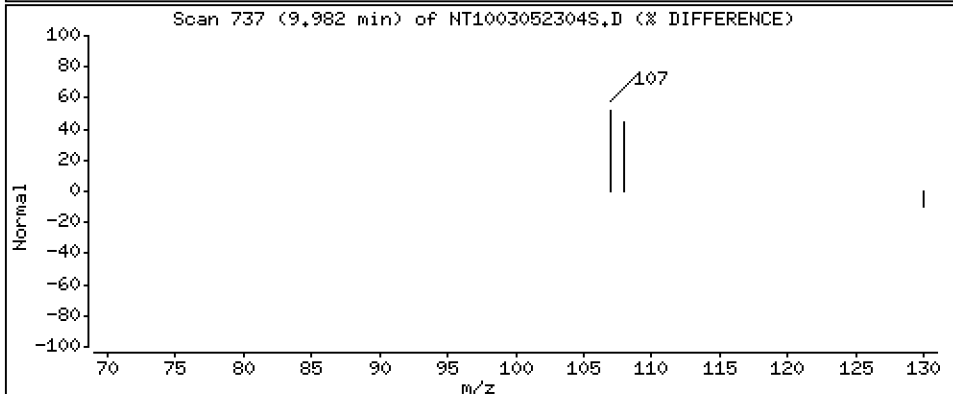
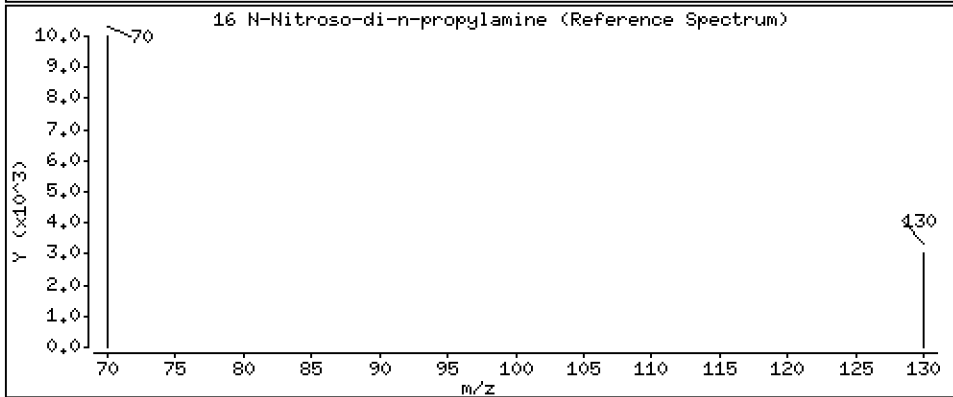
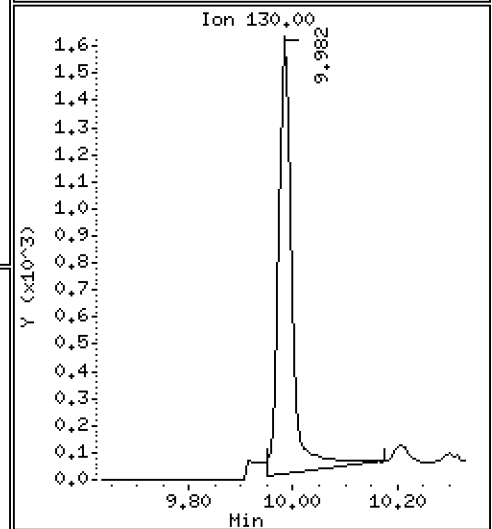
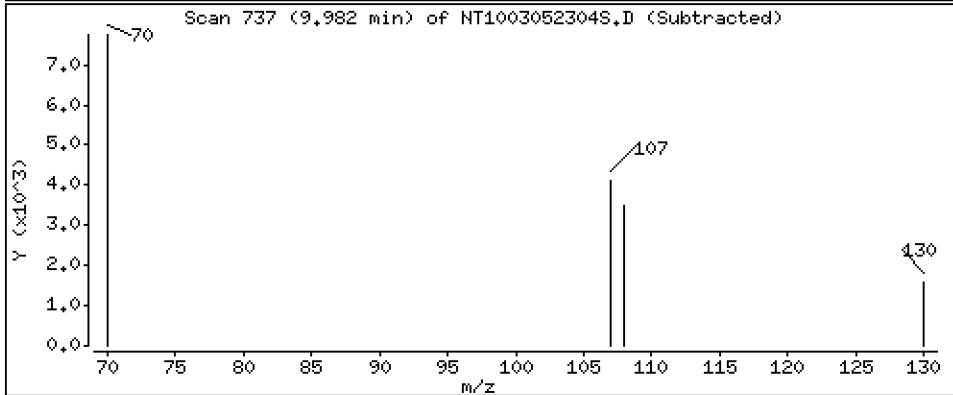
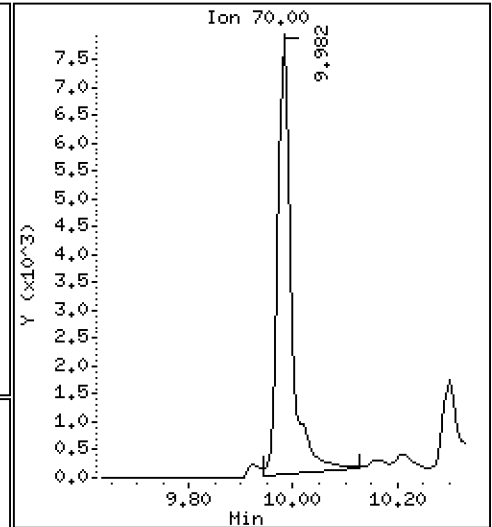
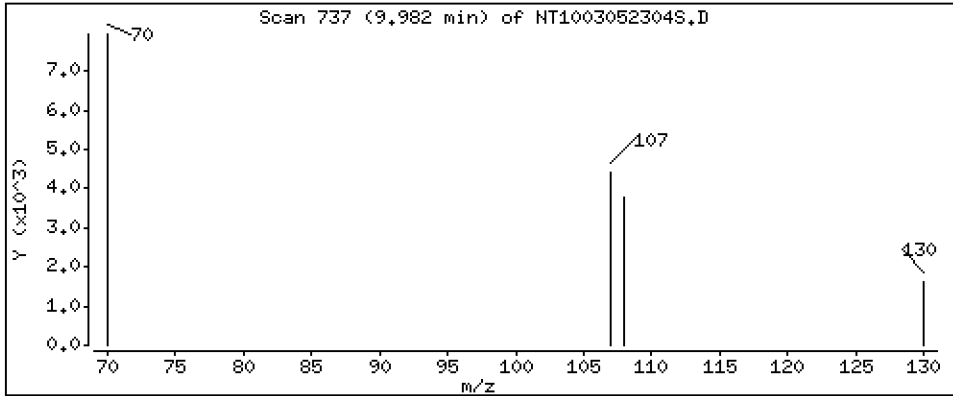
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,2174 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

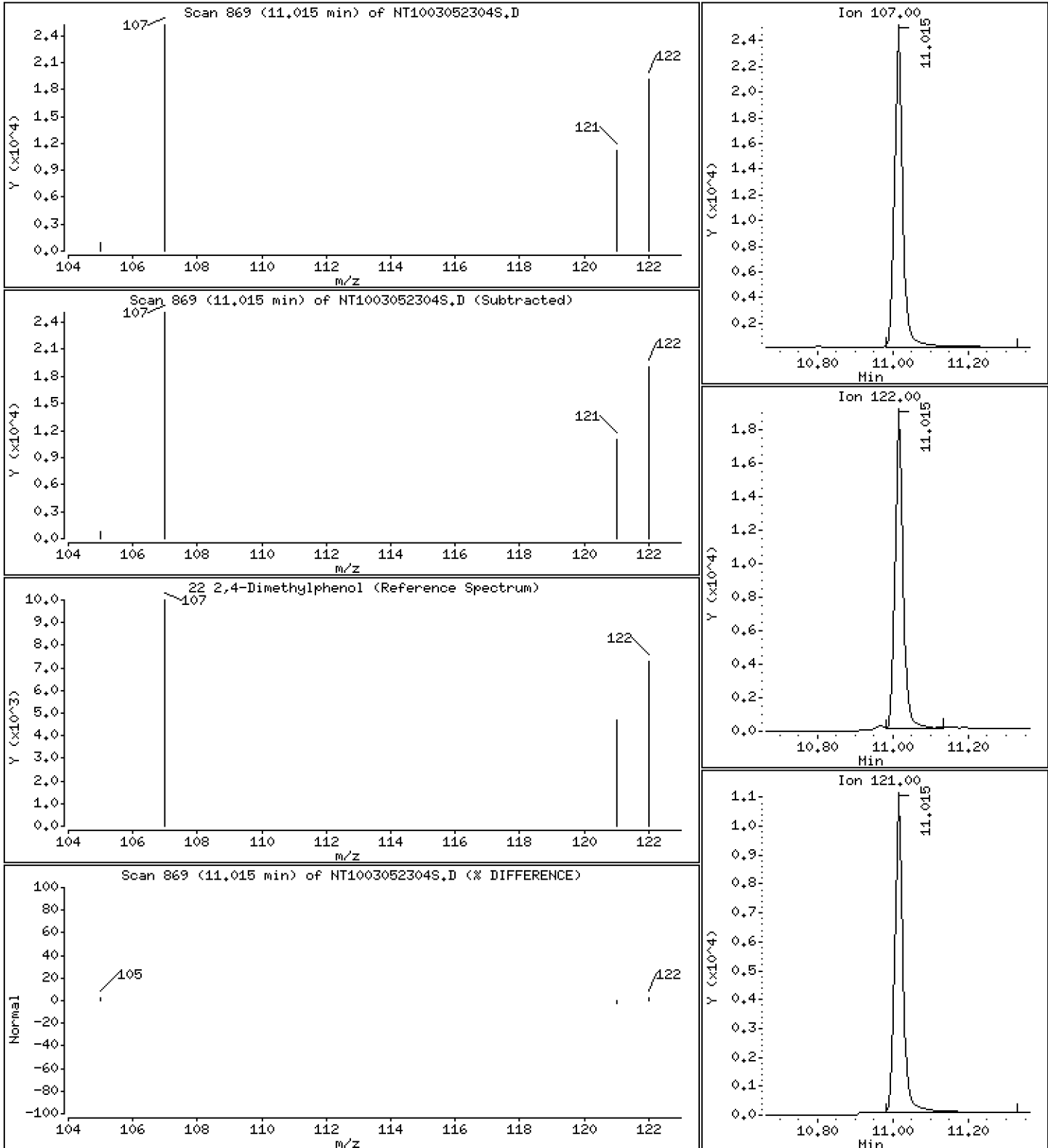
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,3882 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

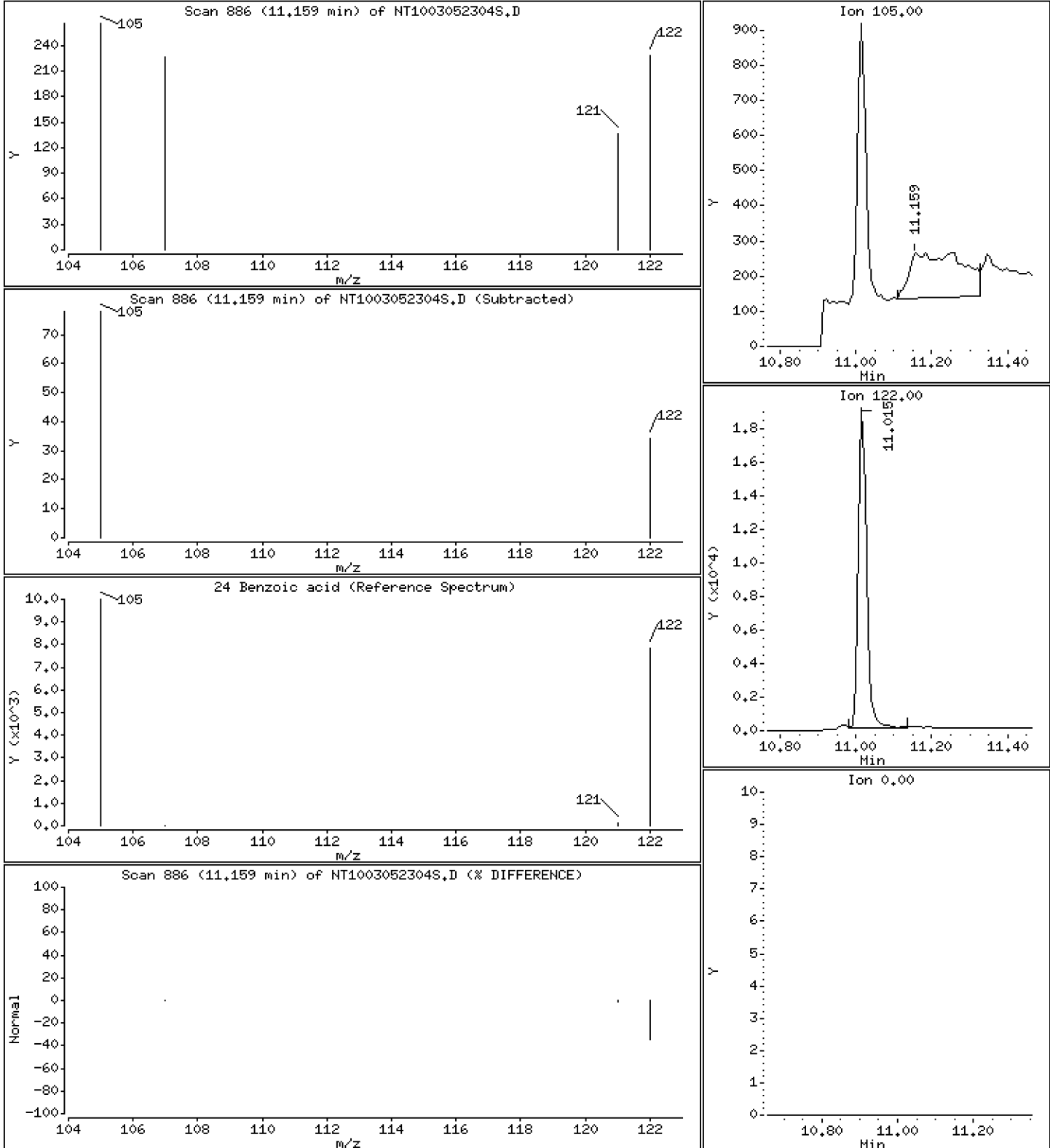
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,02302 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

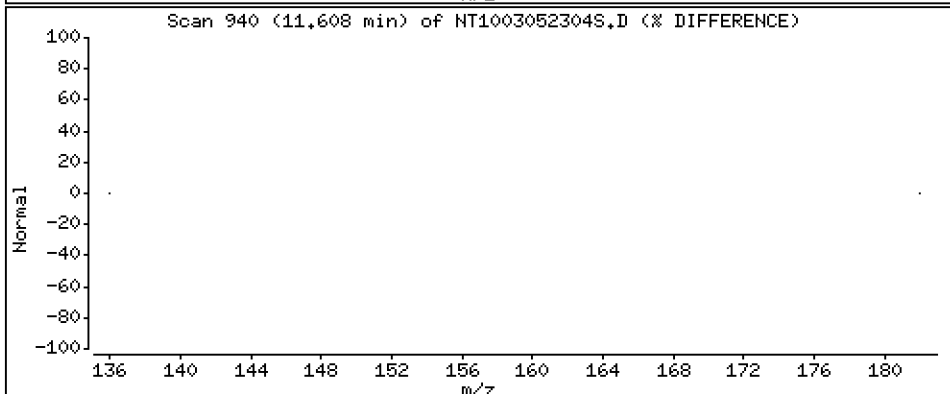
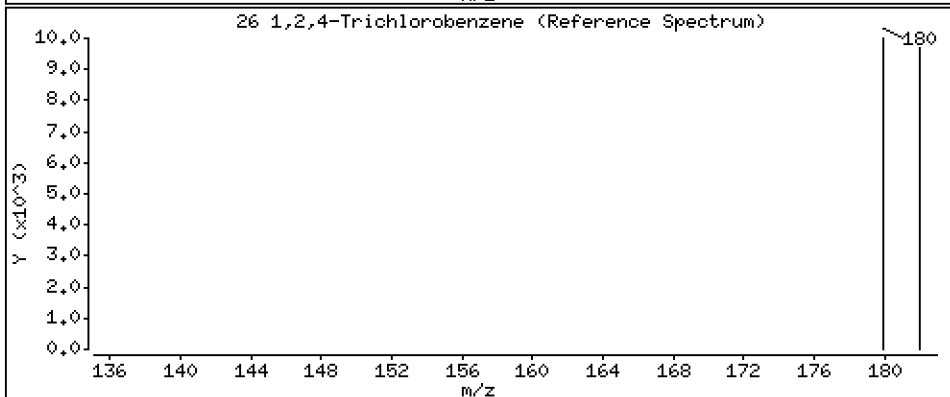
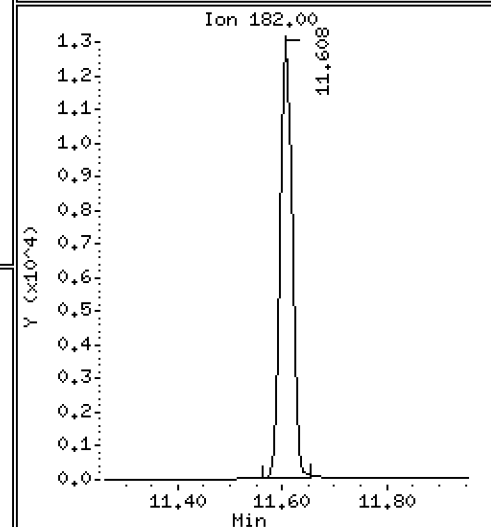
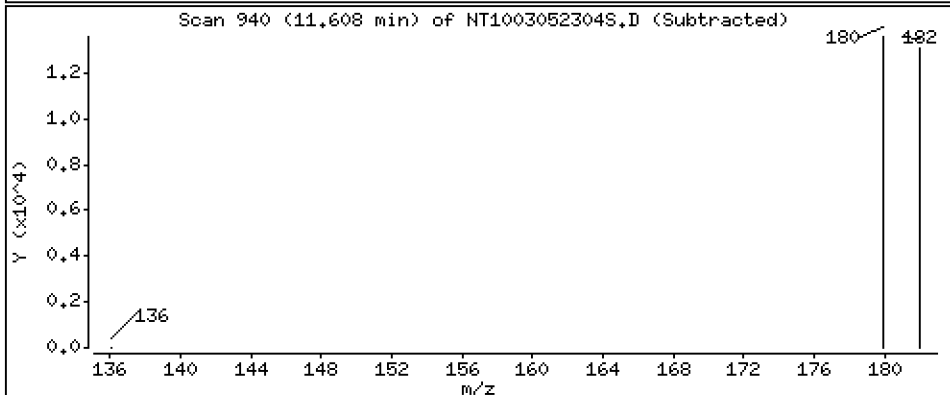
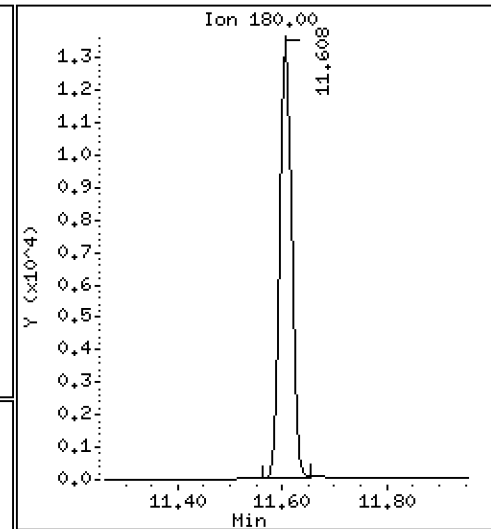
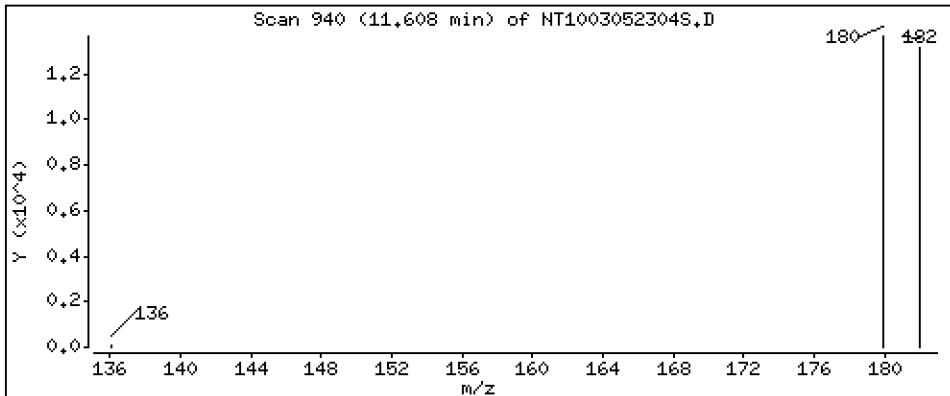
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2351 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

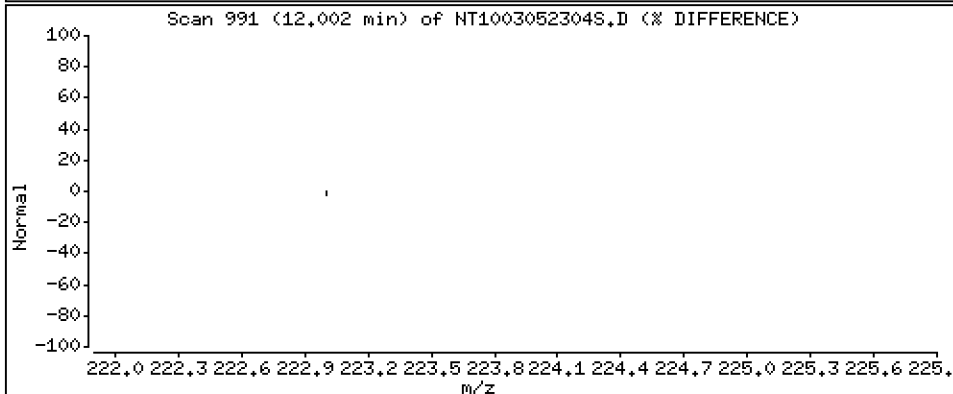
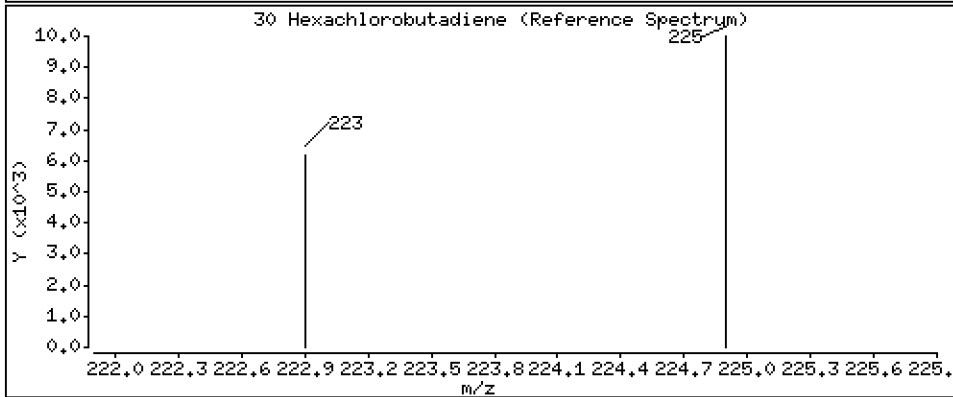
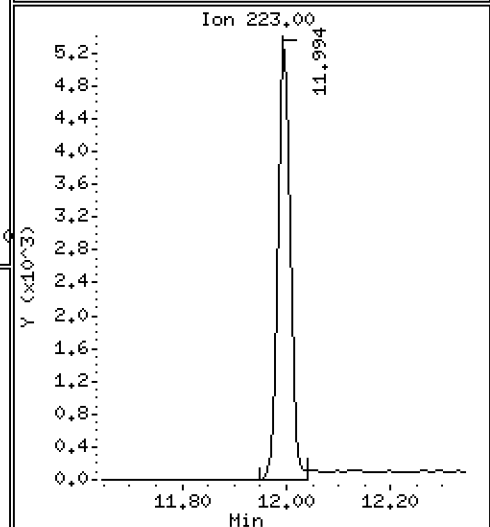
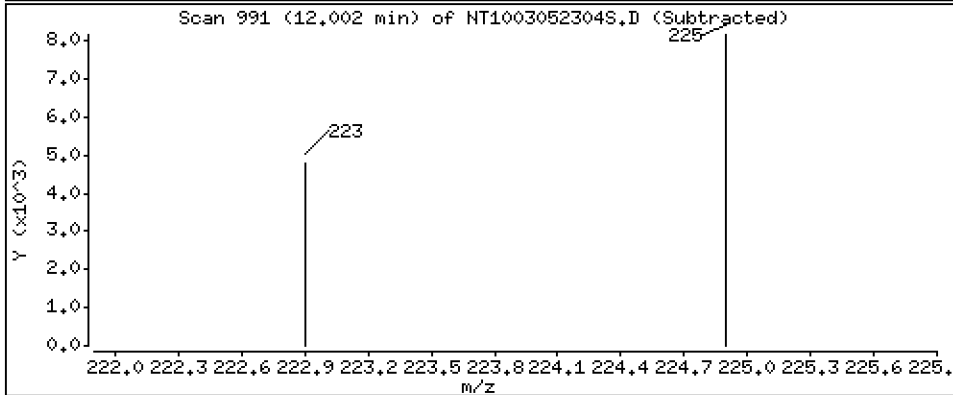
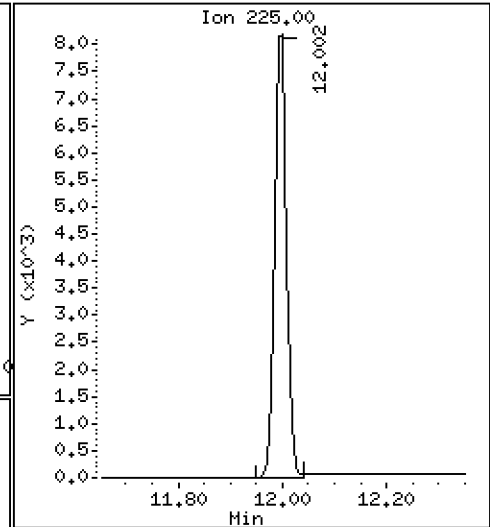
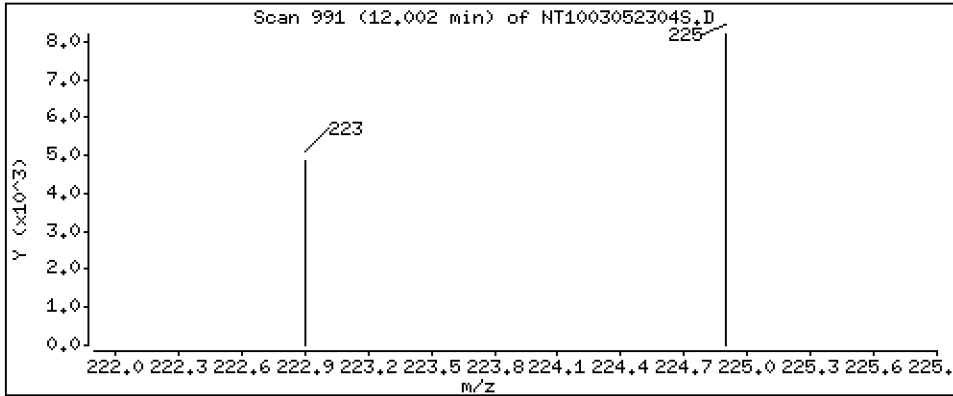
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2156 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

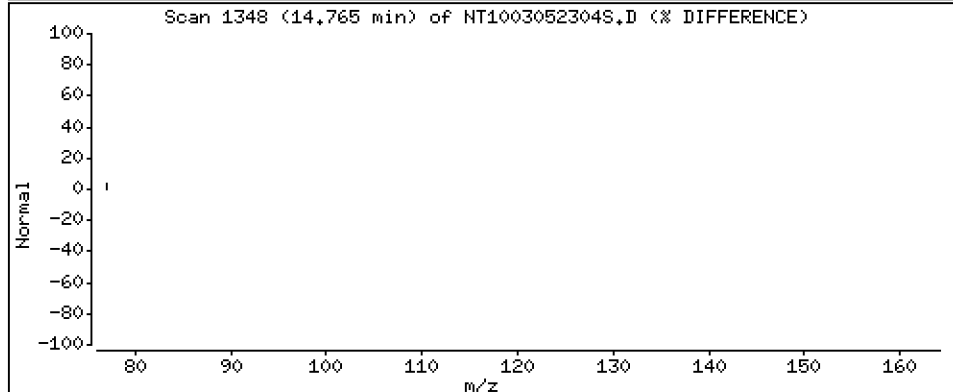
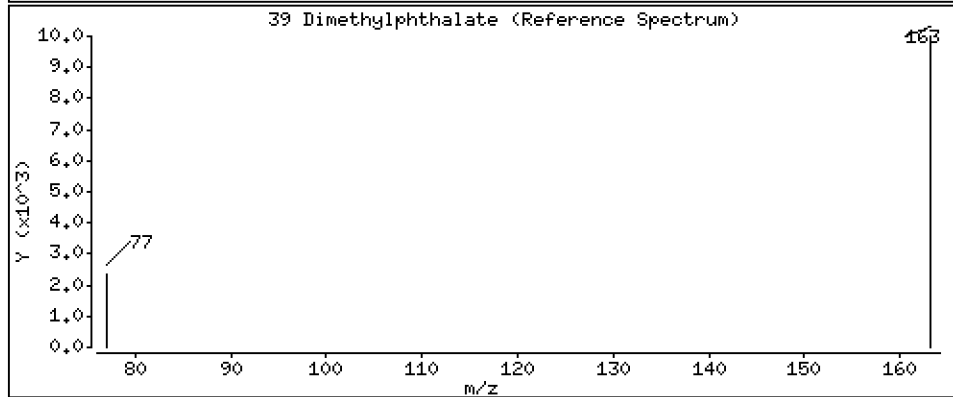
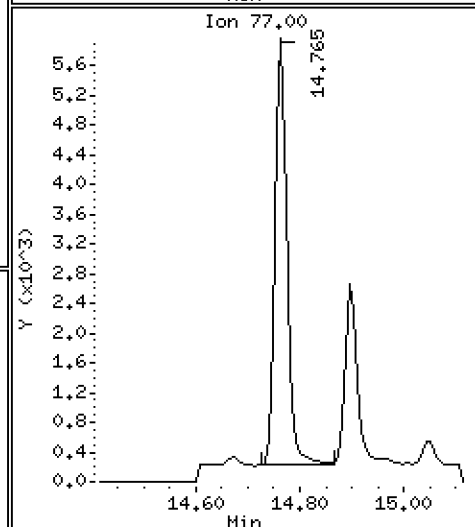
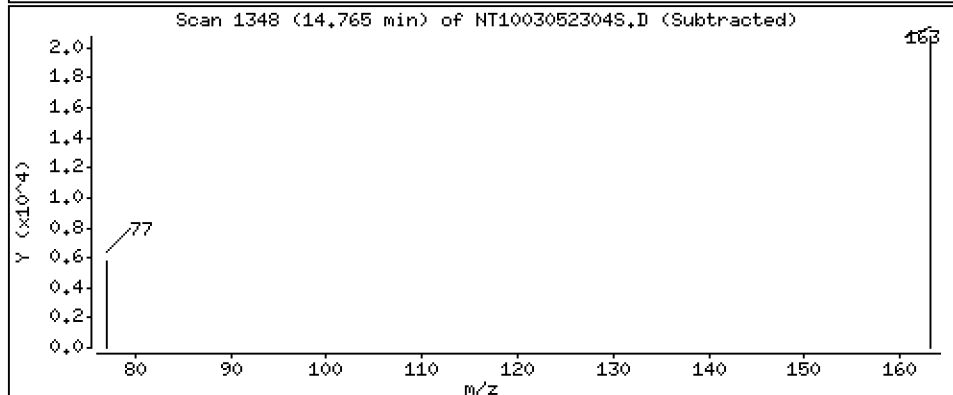
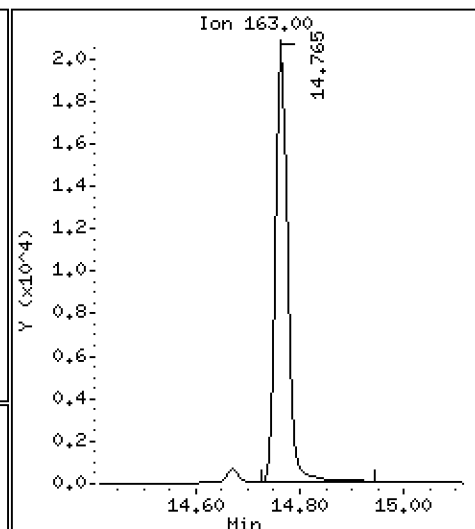
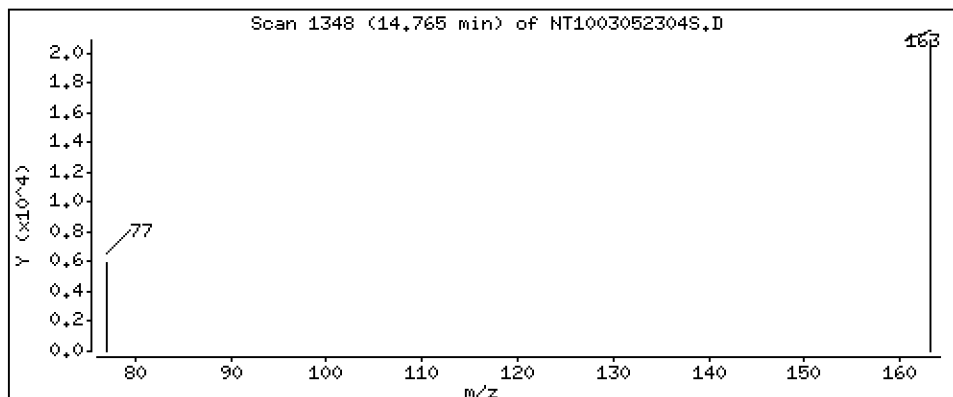
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1740 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

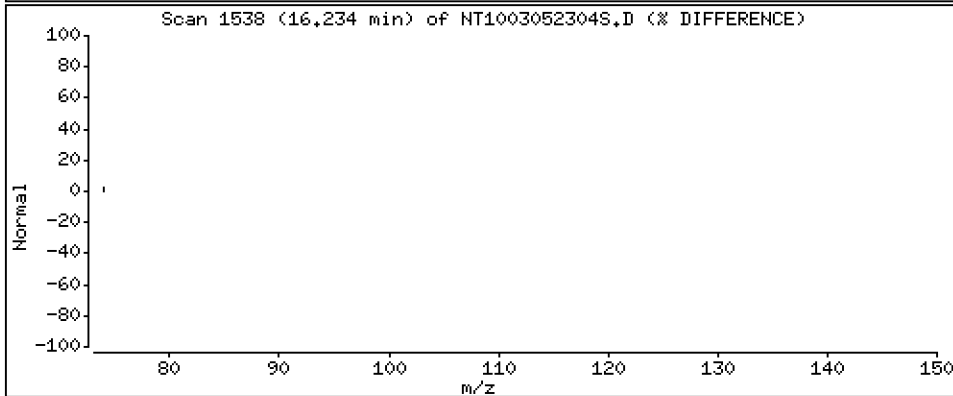
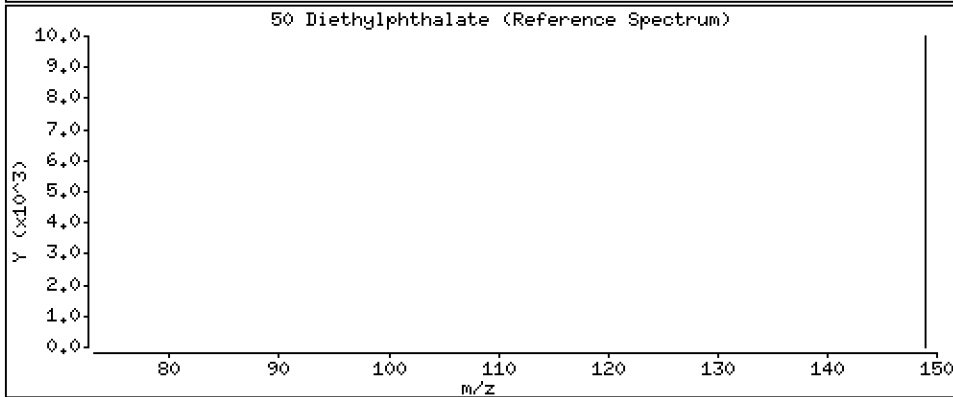
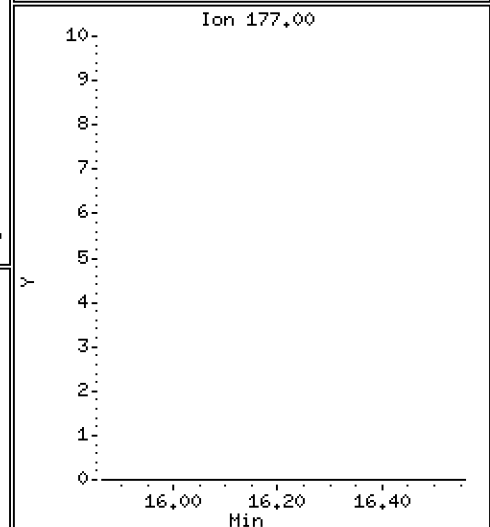
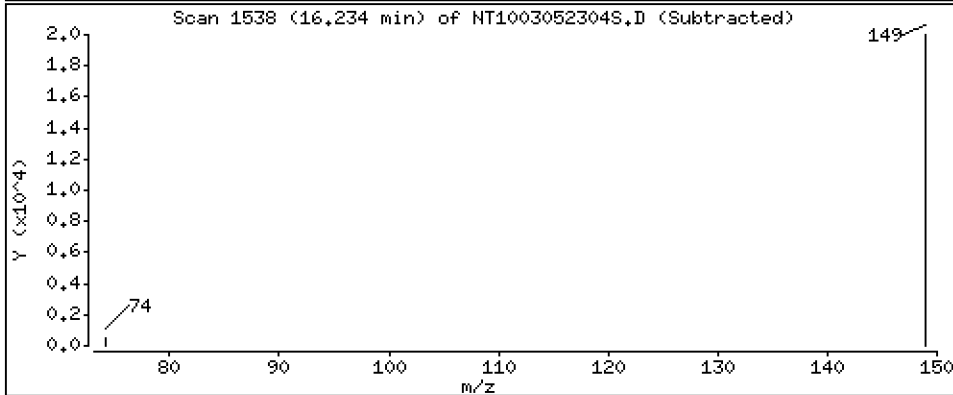
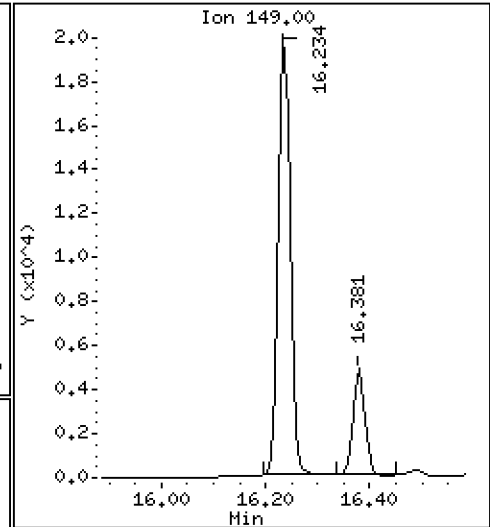
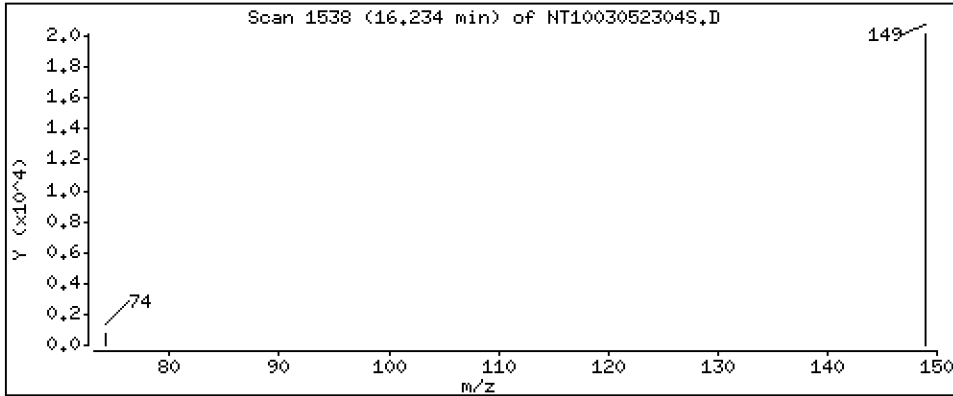
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1762 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

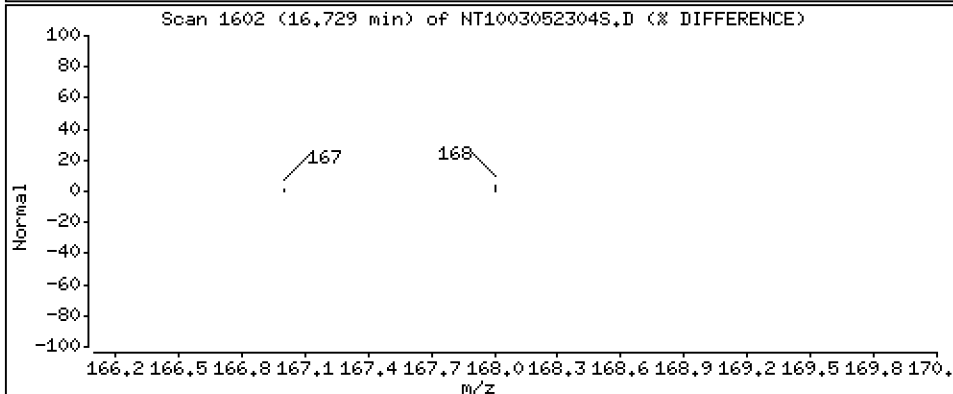
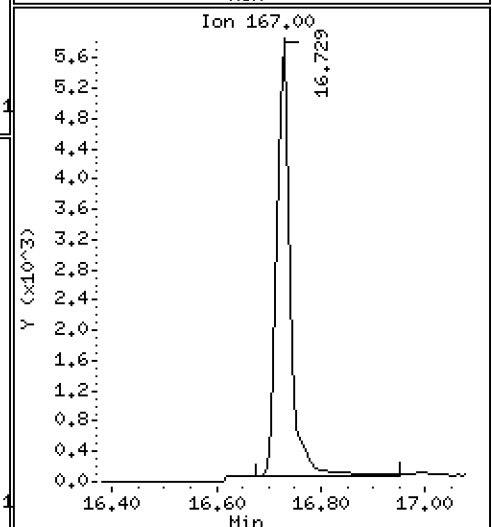
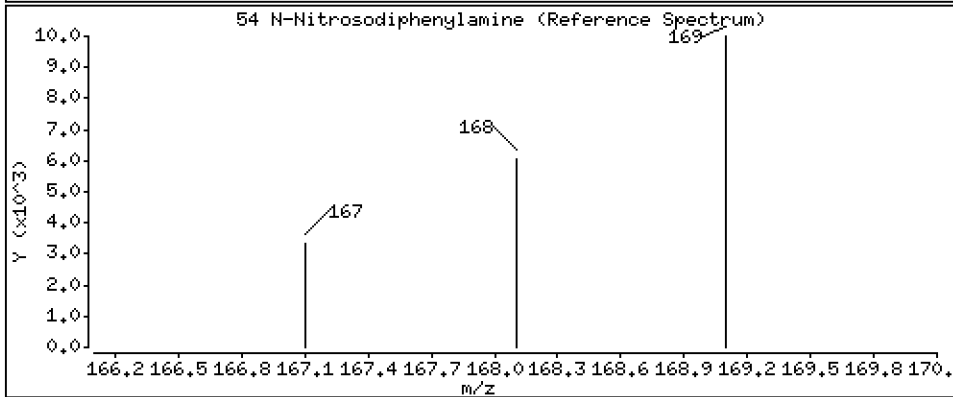
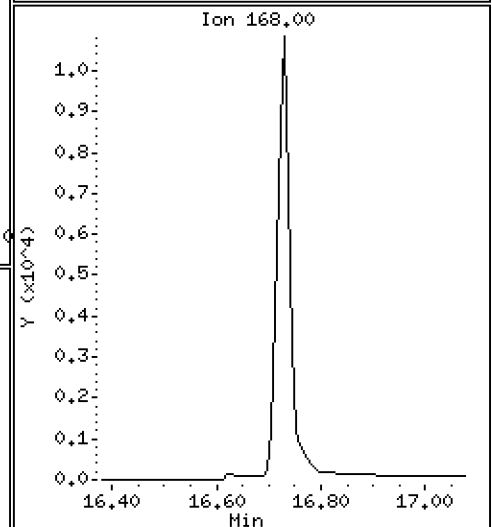
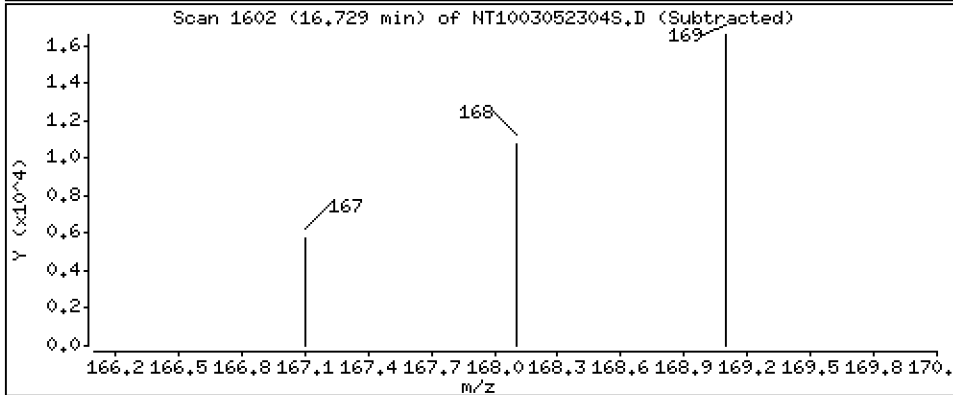
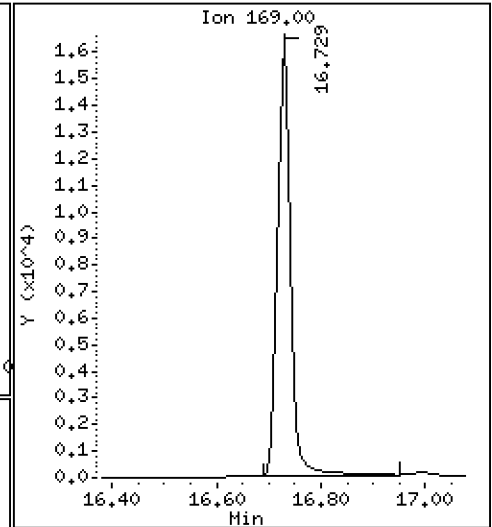
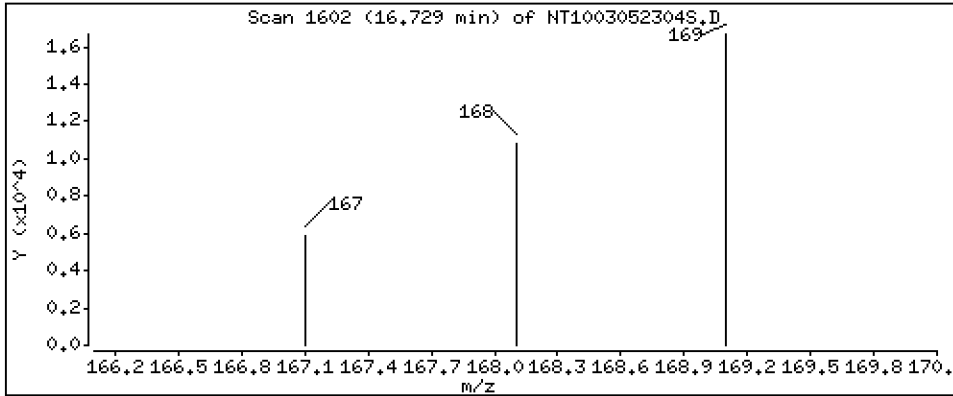
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,1620 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

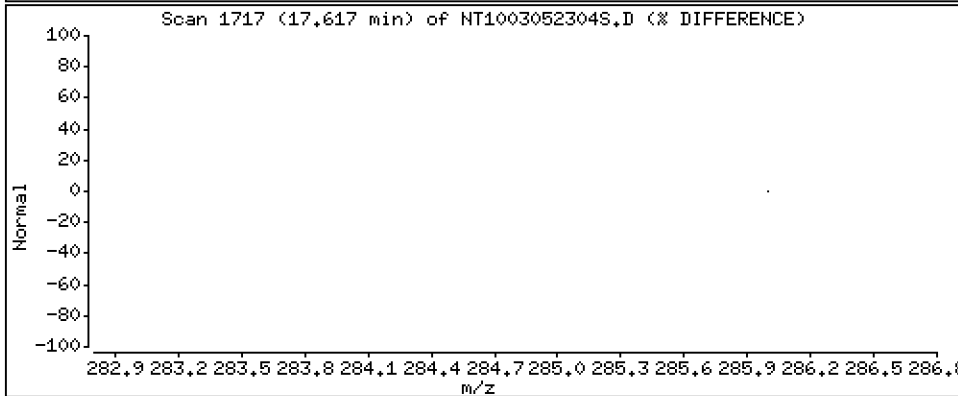
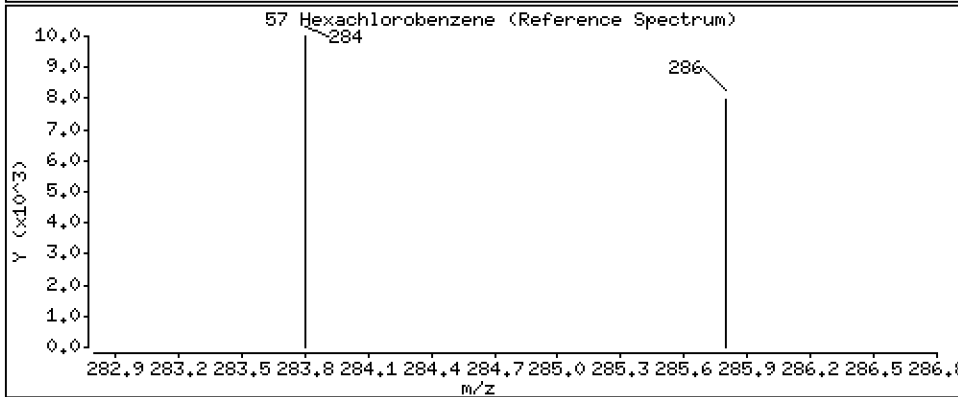
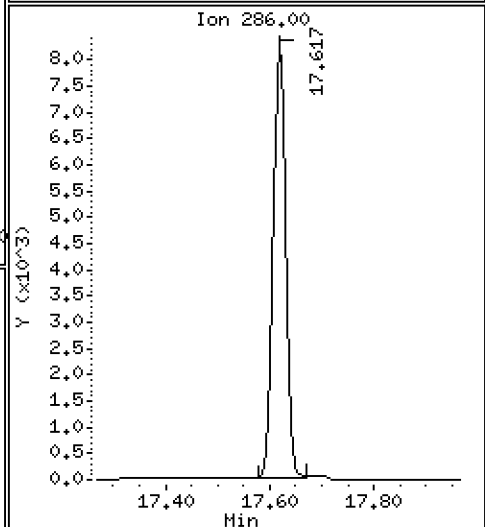
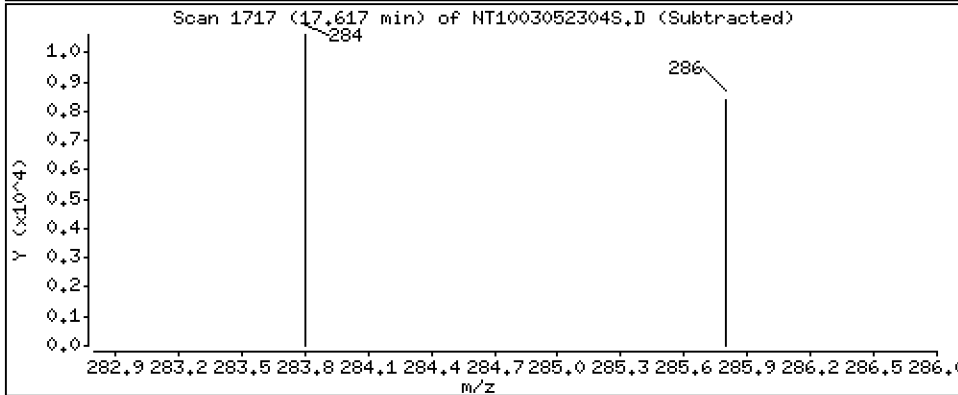
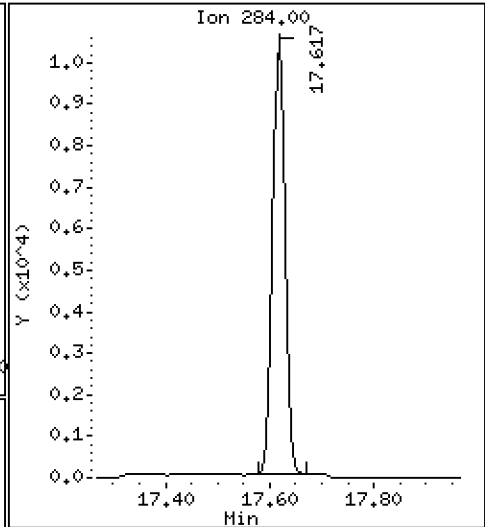
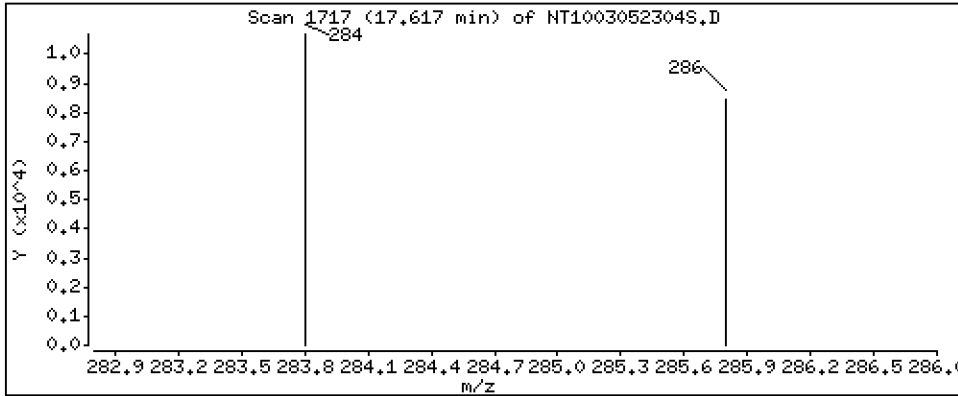
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2047 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

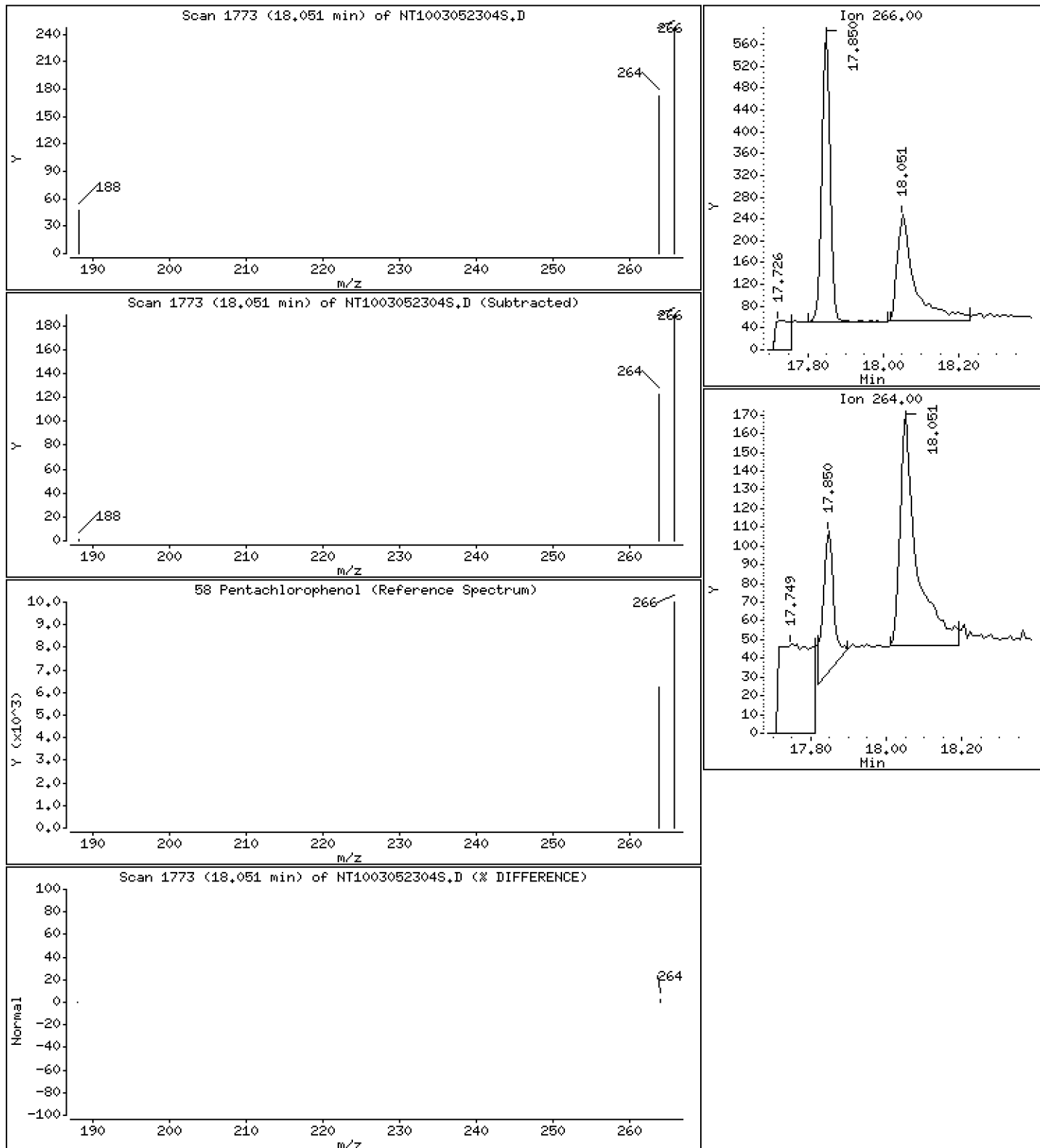
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,01780 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

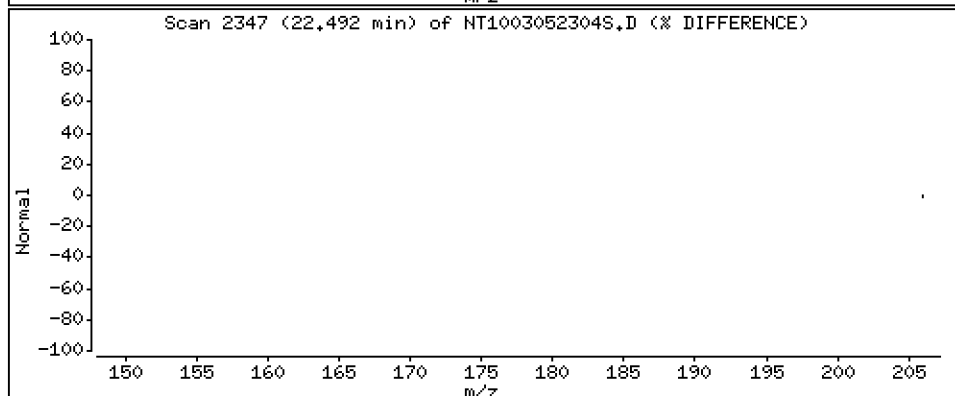
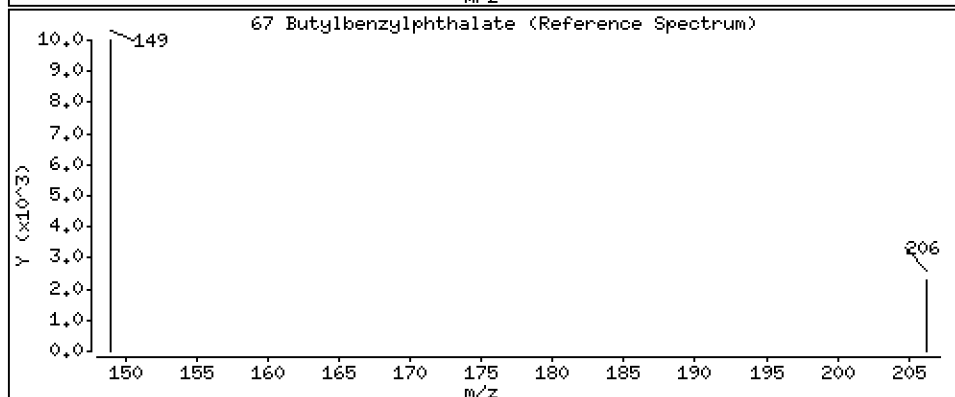
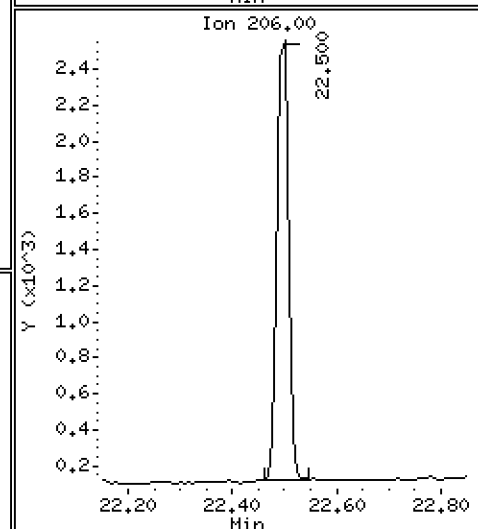
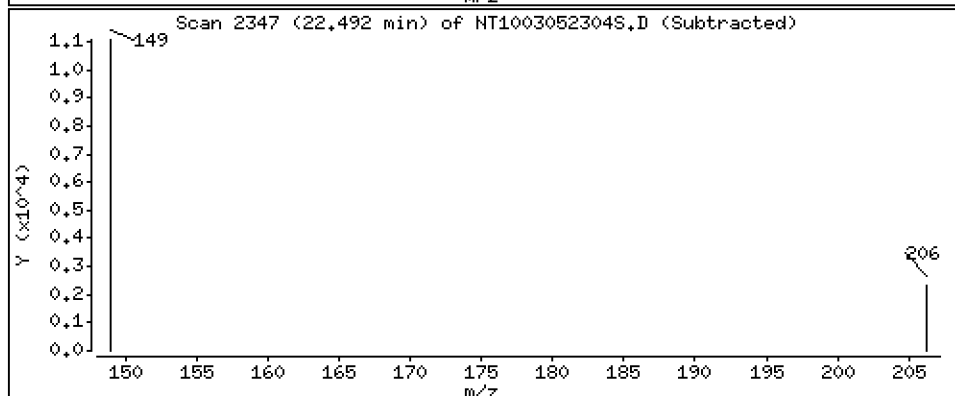
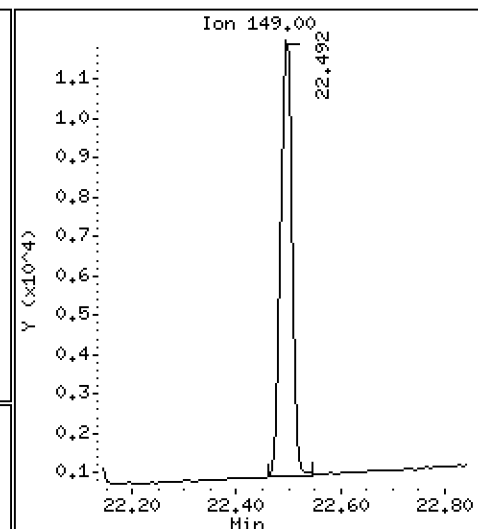
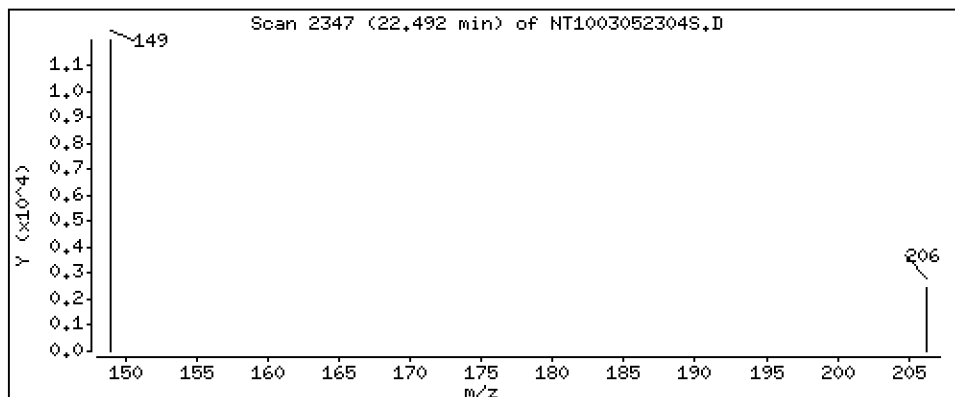
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,09924 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

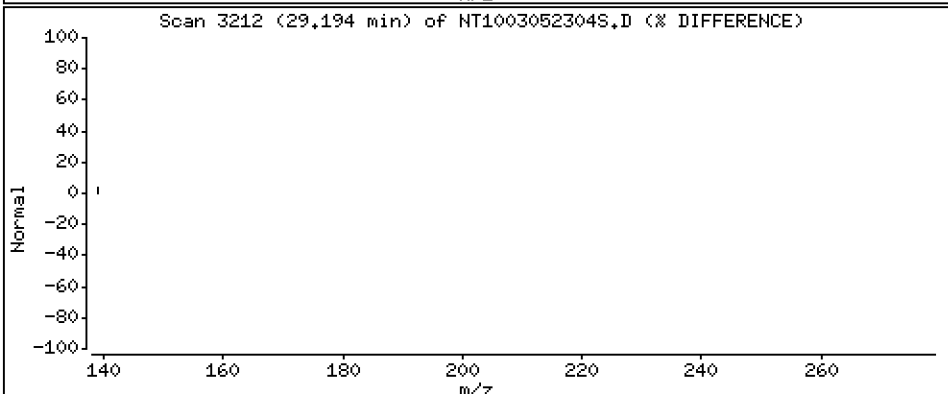
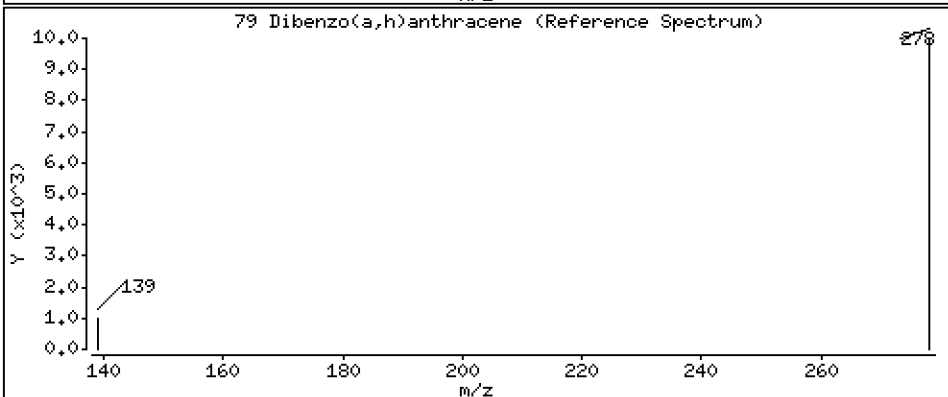
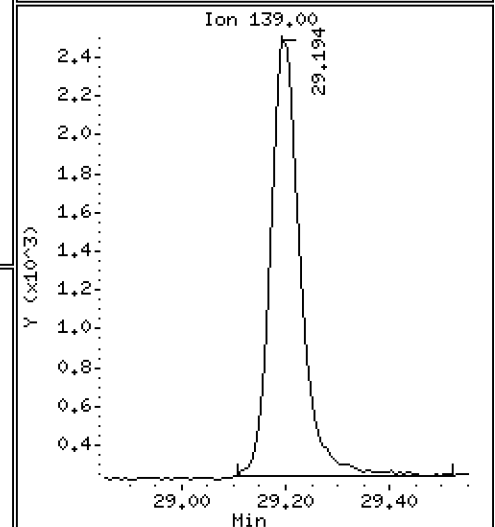
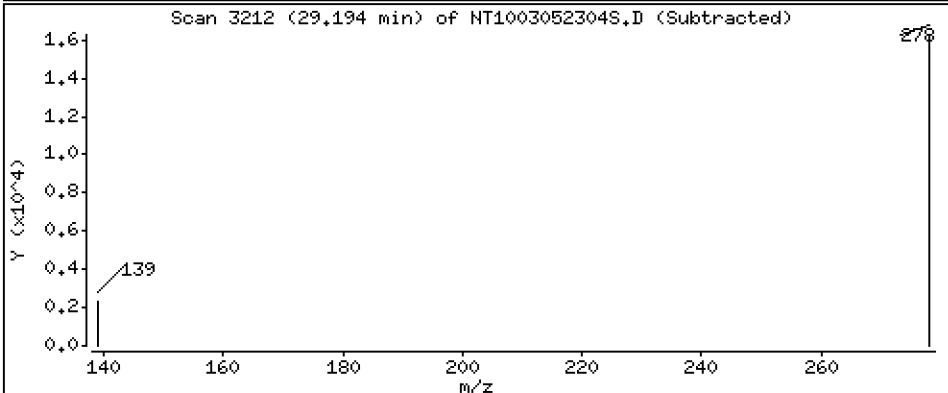
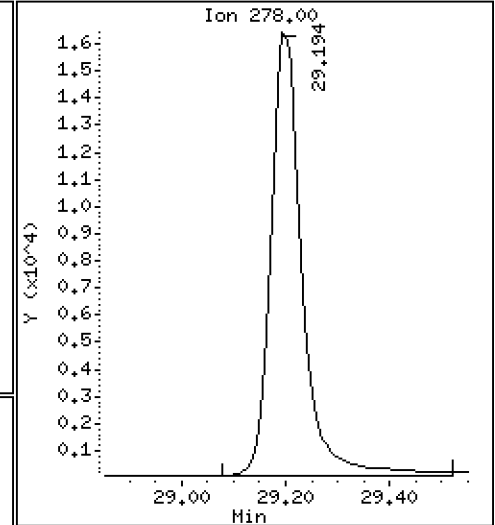
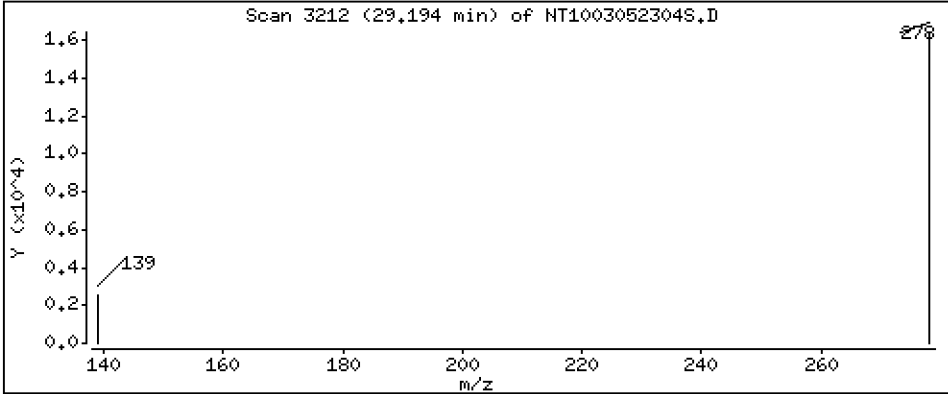
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2452 ug/mL



Date : 05-MAR-2023 15:18

Client ID:

Instrument: nt10.i

Sample Info: SLC0435-LCV2

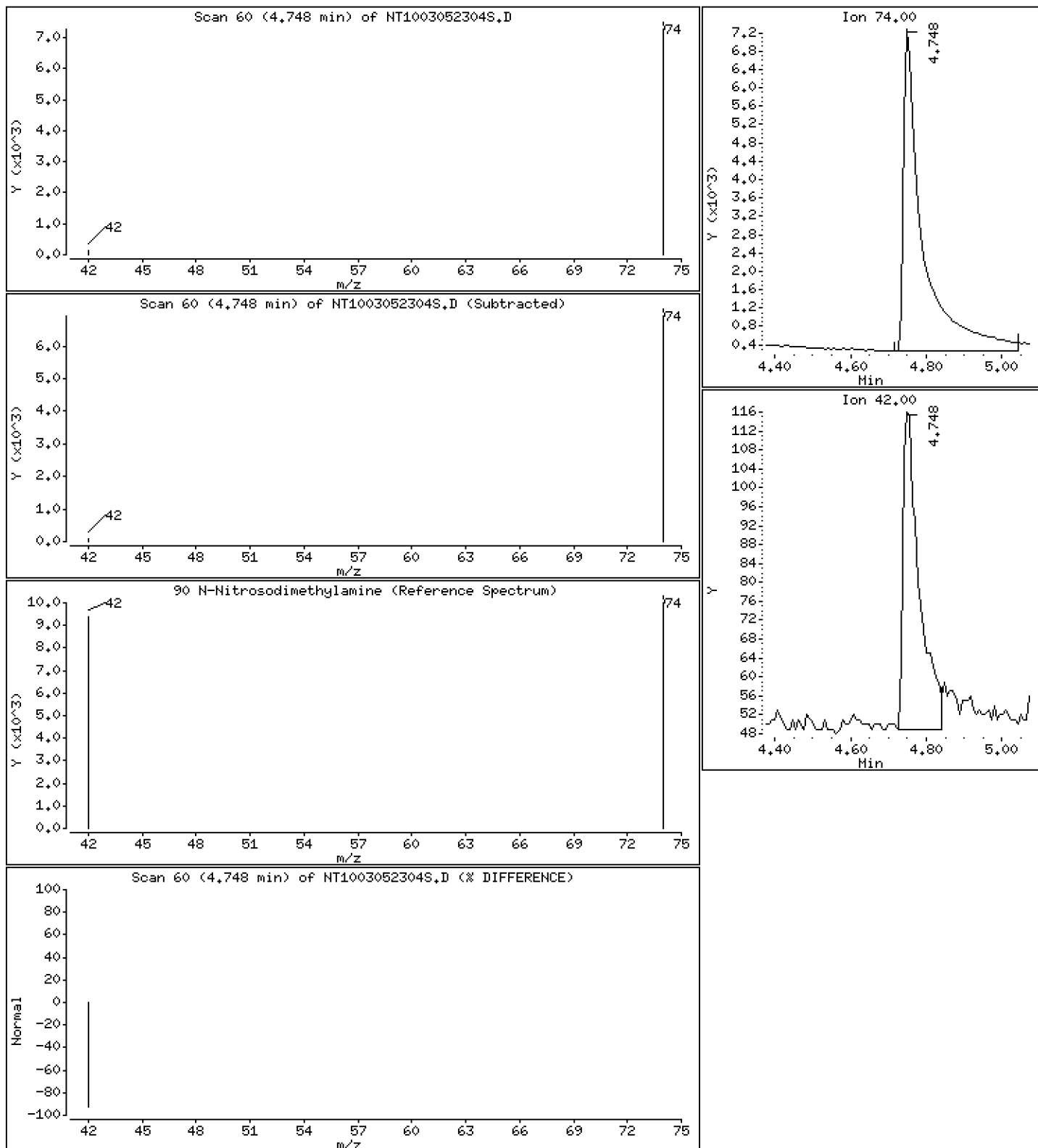
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,4441 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305.b\SIM.b\NT1003052304S.D
 Lab Smp Id: SLC0435-LCV2
 Inj Date : 05-MAR-2023 15:18
 Operator : YZ
 Smp Info : SLC0435-LCV2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:00 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: VANS-201906

Inst ID: nt10.i

Compound Sublist: PSSDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.747)	23488	0.24553	0.2455 (R)
3 Phenol	94		8.532	8.533	(0.923)	16245	0.11509	0.1151
7 1,3-Dichlorobenzene	146		9.135	9.136	(0.988)	24945	0.20087	0.2009
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.244	(1.000)	335082	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.275	(1.003)	23696	0.19626	0.1963
11 Benzyl alcohol	79		9.492	9.485	(1.027)	10297	0.13147	0.1315
12 1,2-Dichlorobenzene	146		9.562	9.562	(1.034)	23962	0.20648	0.2065
13 2-Methylphenol	108		9.671	9.663	(1.046)	16222	0.19099	0.1910
15 4-Methylphenol	108		9.966	9.958	(1.078)	15966	0.18069	0.1807
16 N-Nitroso-di-n-propylamine	70		9.981	9.982	(1.080)	13665	0.21735	0.2174
22 2,4-Dimethylphenol	107		11.014	11.015	(0.939)	39101	0.38819	0.3882
24 Benzoic acid	105		11.159	11.116	(0.951)	1270	0.02302	0.02302 (M)
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	20070	0.23510	0.2351
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1186054	4.00000	
30 Hexachlorobutadiene	225		12.001	12.002	(1.023)	13063	0.21563	0.2156
39 Dimethylphthalate	163		14.764	14.765	(0.963)	31357	0.17396	0.1740
* 42 Acenaphthene-d10	162		15.337	15.337	(1.000)	567675	4.00000	
50 Diethylphthalate	149		16.234	16.234	(1.058)	29946	0.17617	0.1762 (H)
54 N-Nitrosodiphenylamine	169		16.729	16.729	(0.907)	27774	0.16197	0.1620
57 Hexachlorobenzene	284		17.617	17.617	(0.955)	16425	0.20468	0.2047
58 Pentachlorophenol	266		18.050	18.043	(0.978)	625	0.01780	0.01780
* 59 Phenanthrene-d10	188		18.452	18.453	(1.000)	1059550	4.00000	
\$ 66 Terphenyl-d14	244		21.602	21.602	(0.919)	22329	0.28793	0.2879 (R)
67 Butylbenzylphthalate	149		22.492	22.492	(0.957)	16066	0.09924	0.09924
* 69 Chrysene-d12	240		23.514	23.514	(1.000)	958983	4.00000	
* 77 Perylene-d12	264		26.278	26.286	(1.000)	1190912	4.00000	
79 Dibenzo(a,h)anthracene	278		29.194	29.202	(1.111)	67849	0.24521	0.2452
90 N-Nitrosodimethylamine	74		4.747	4.724	(0.514)	25154	0.44412	0.4441

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

Data File: NT1003052304S.D
Report Date: 29-Mar-2023 10:42

Page 2

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052304S.D
 Lab Smp Id: SLC0435-LCV2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 14:40
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	321376	160688	642752	335082	4.26
27 Naphthalene-d8	1132931	566466	2265862	1186054	4.69
42 Acenaphthene-d10	561597	280799	1123194	567675	1.08
59 Phenanthrene-d10	1068222	534111	2136444	1059550	-0.81
69 Chrysene-d12	997572	498786	1995144	958983	-3.87
77 Perylene-d12	1245490	622745	2490980	1190912	-4.38

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.29	25.79	26.79	26.28	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003052304S.D

Lab ID: SLC0435-LCV2

nt10.i, 20230305.b\SIM.b\SIMABN2.m, 05-MAR-2023 15:18

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052303S.D

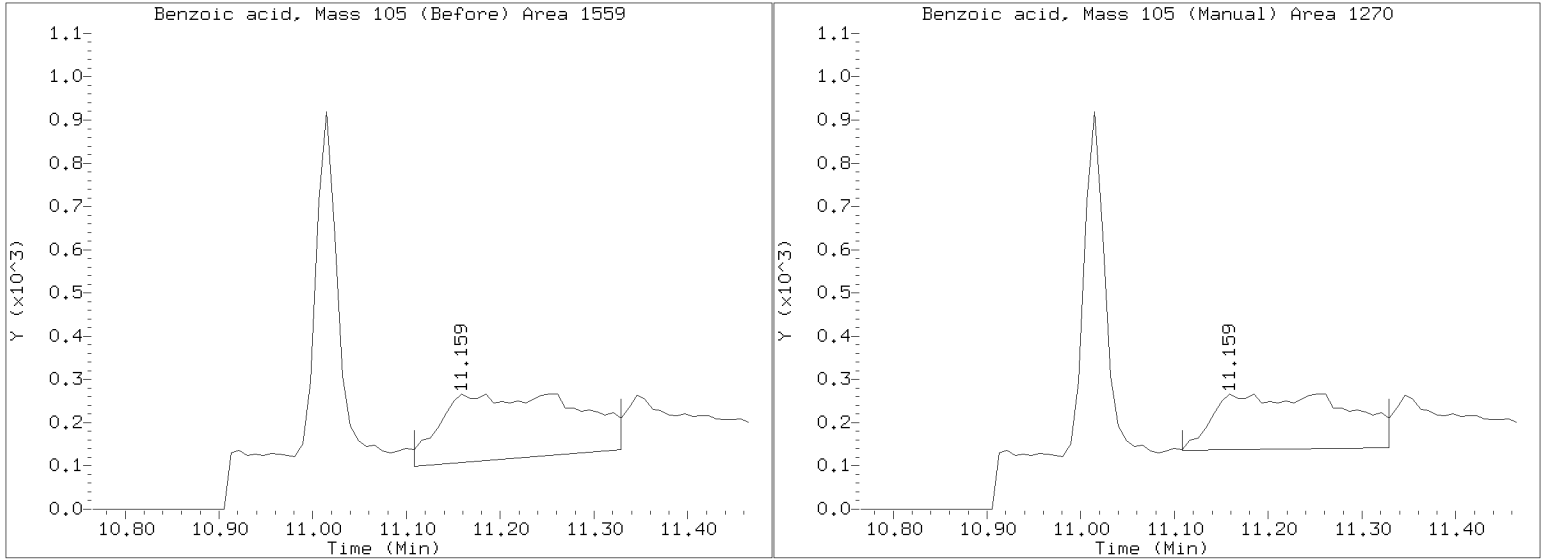
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305.b/SIM.b/NT1003052304S.D
Injection Date: 05-MAR-2023 15:18
Lab ID: SLC0435-LCV2 Client ID:
Report Date: 03/29/2023 10:42





CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052326S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0440</u>	Injection Date:	<u>03/06/23</u>
Lab Sample ID:	<u>SLC0440-CCV1</u>	Injection Time:	<u>05:10</u>
Sequence Name:	<u>Calibration Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.4413080	1.4161780		-1.7	+/-50
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3947610		0.7	+/-50
Benzyl Alcohol	A	1.0000	0.9	0.7492523	0.8806529		-6.8	+/-50
Benzoic acid	A	4.0000	0.5	0.1431163	0.0228843		-87.7	+/-50 *
2,4-Dimethylphenol	A	2.0000	2.2	0.2957717	0.3675444		7.7	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3432922		19.2	+/-50
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5844576		-9.7	+/-50
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0108666		-91.8	+/-50 *
2-Fluorophenol	A	1.5000	1.74	1.1419780	1.3229980		15.9	+/-50
p-Terphenyl-d14	A	1.0000	1.59	0.3234672	0.5149517		59.2	+/-50 *

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A_b\SIH_b\NT1003052326S.D

Date: 06-MAR-2023 05:10

Client ID:

Sample Info: SLC0440-CCV1

Page 1

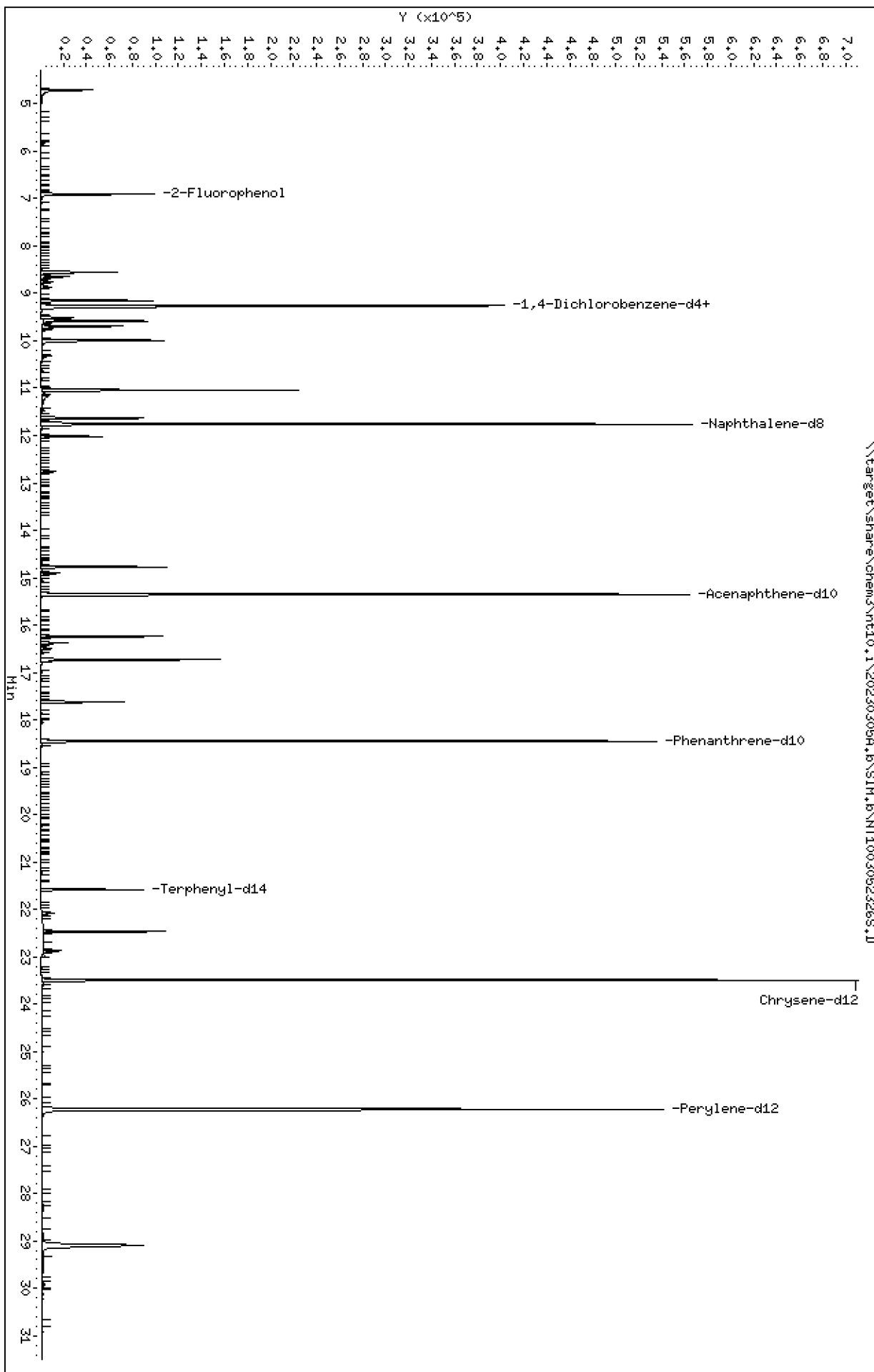
Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Column phase: ZB-Smsi

\\target\share\chem3\nt10.1\20230305A_b\SIH_b\NT1003052326S.D



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

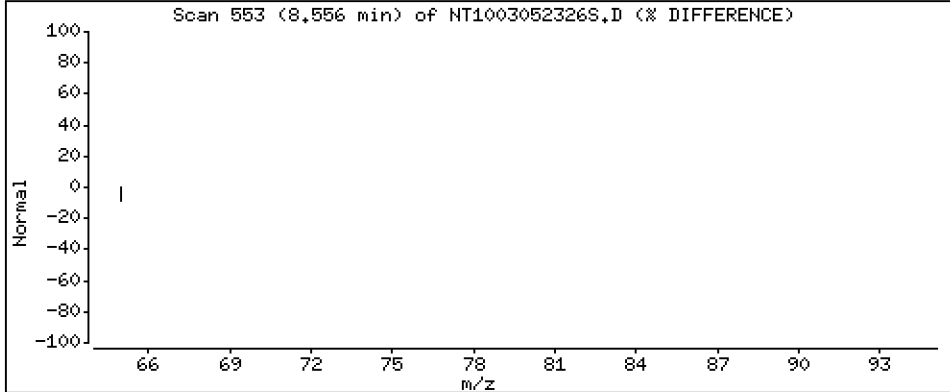
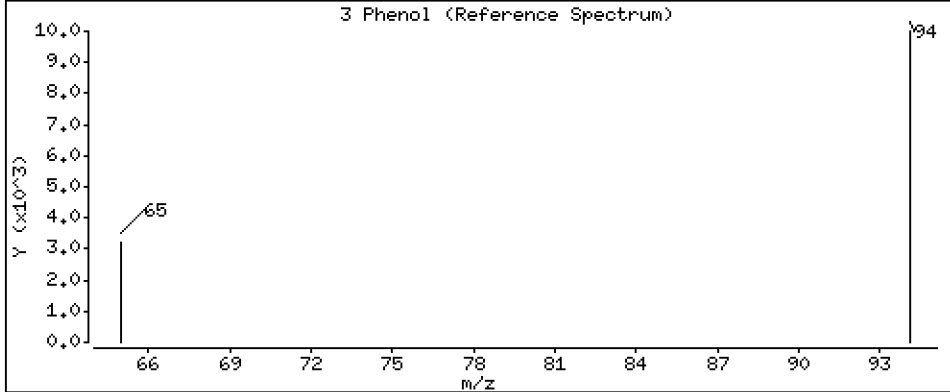
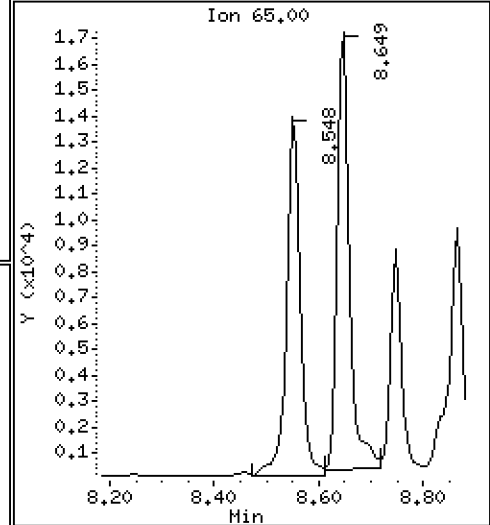
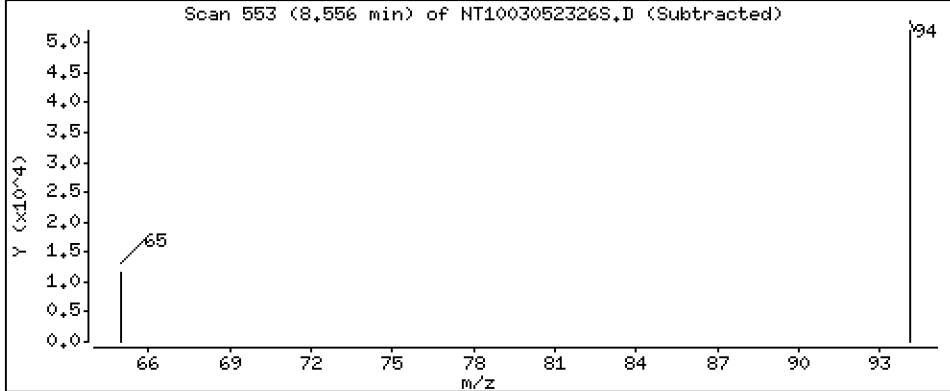
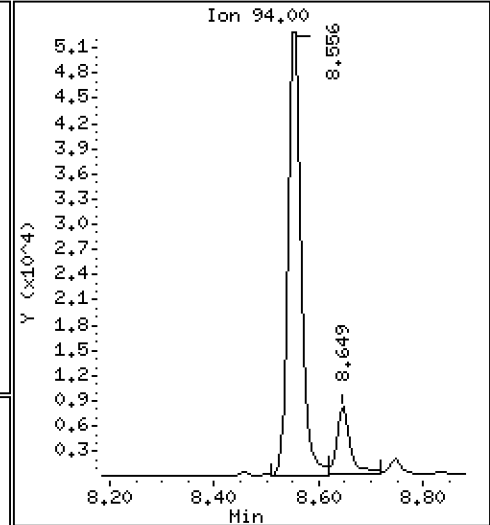
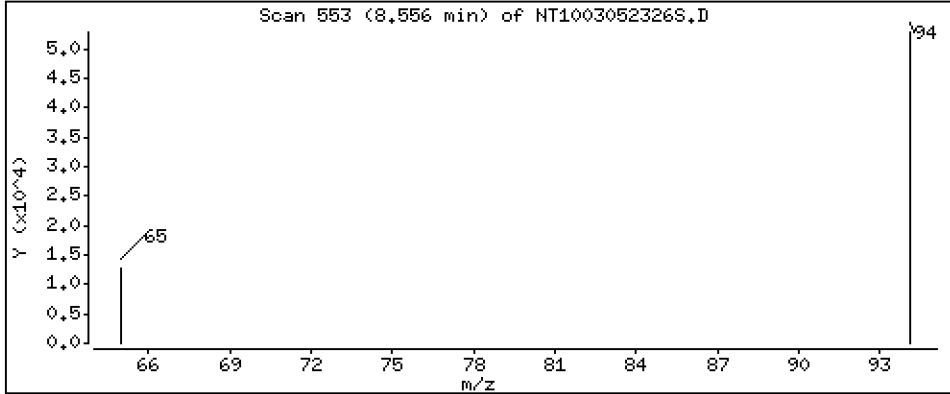
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,9410 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

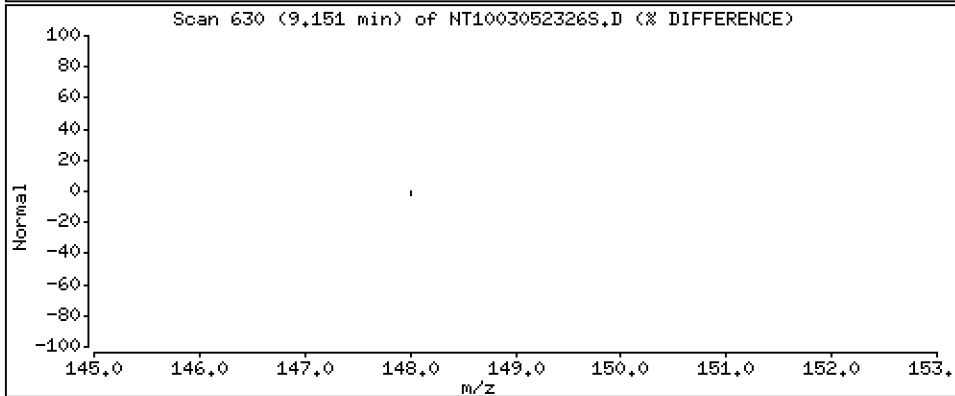
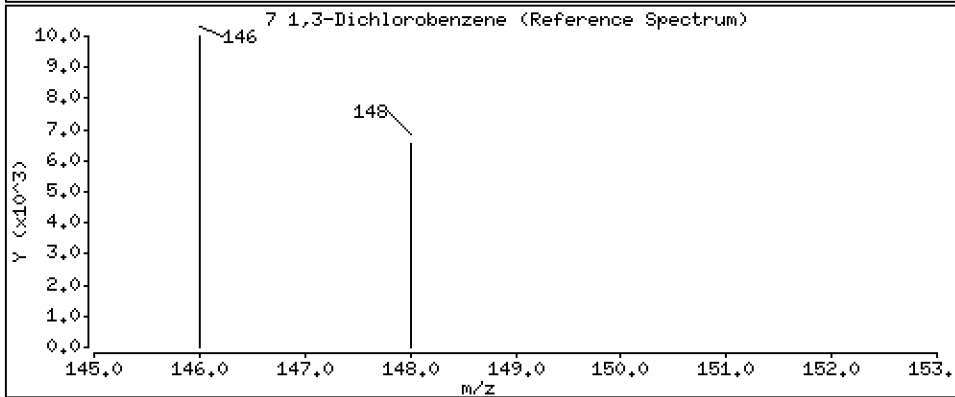
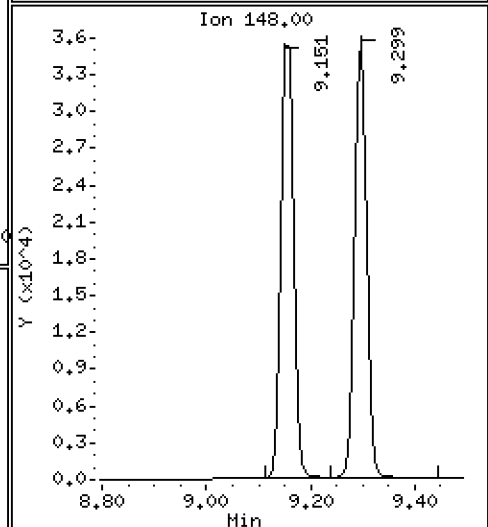
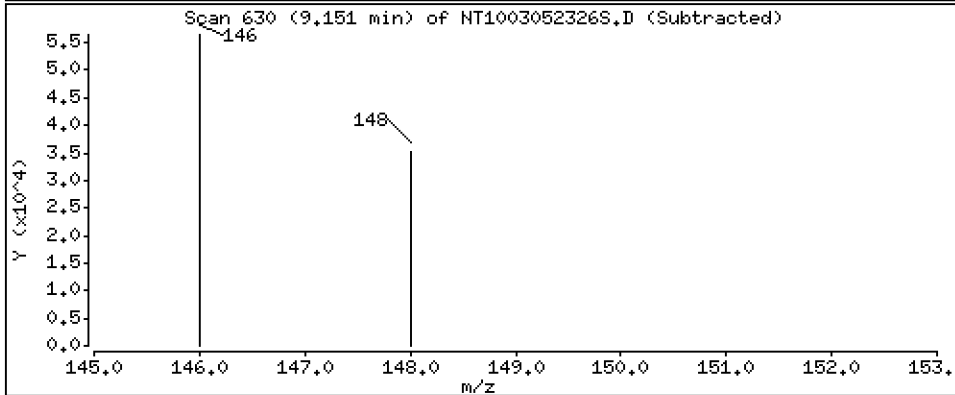
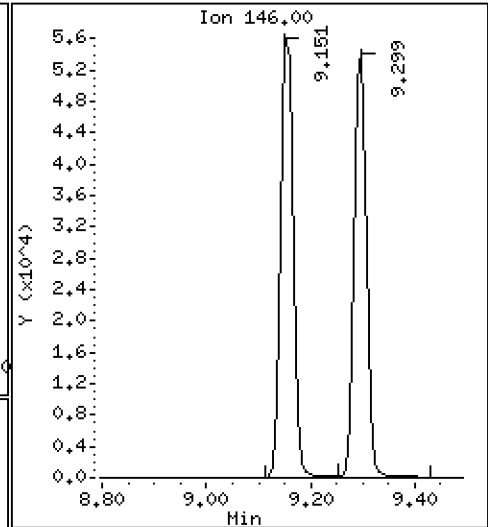
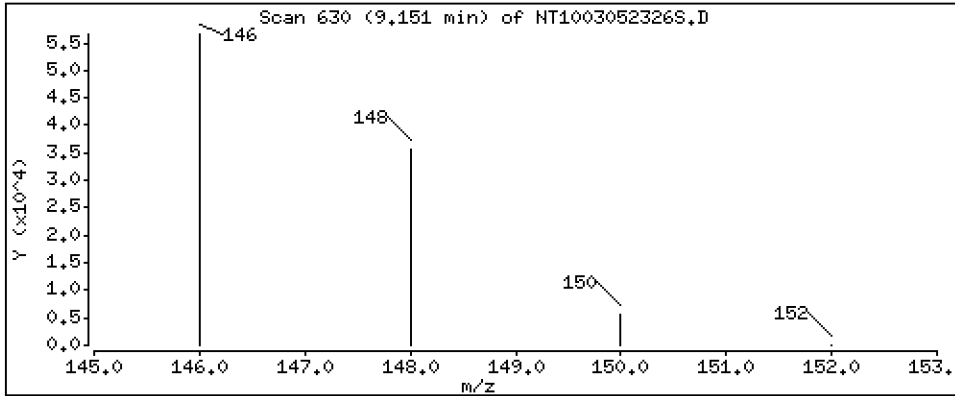
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,9997 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

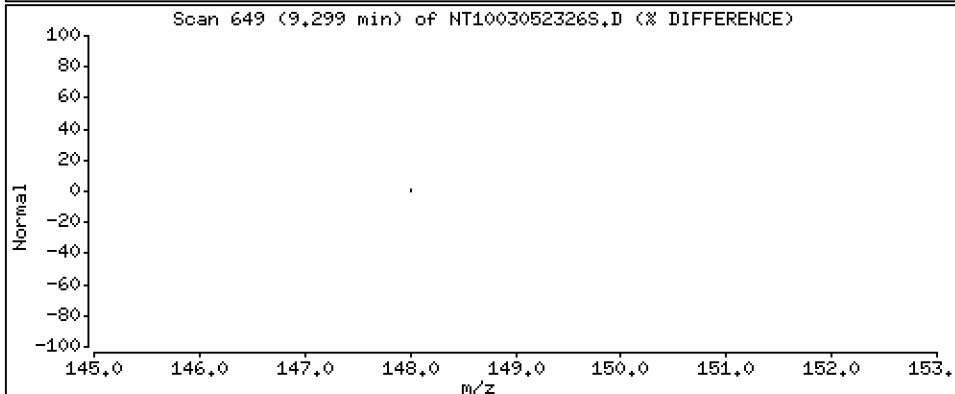
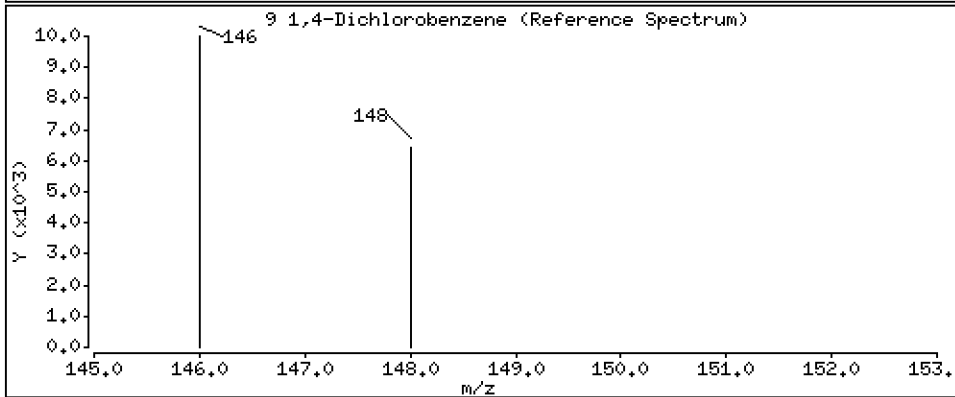
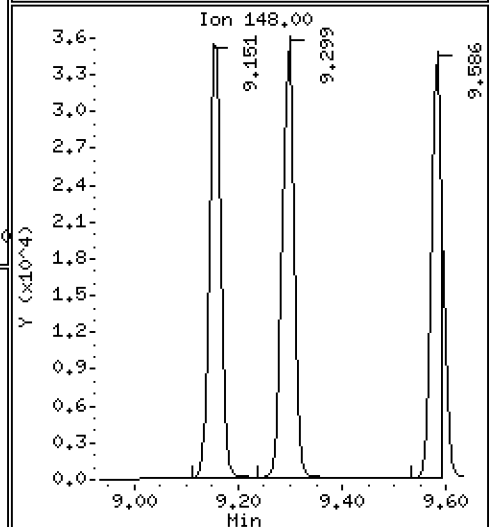
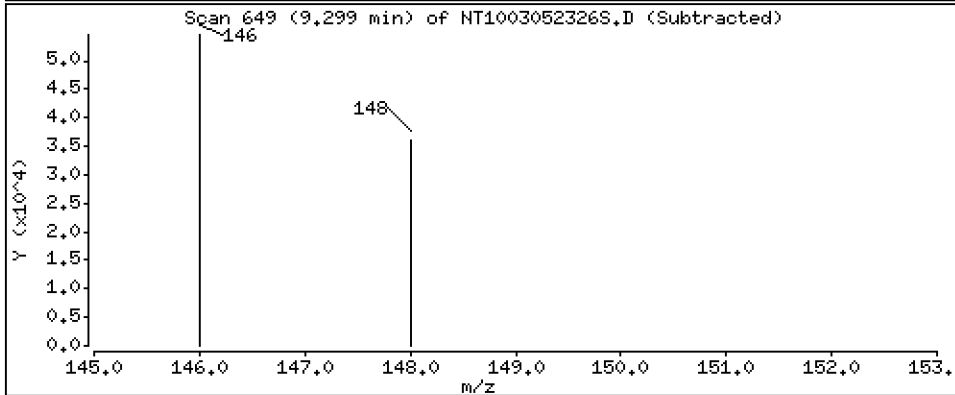
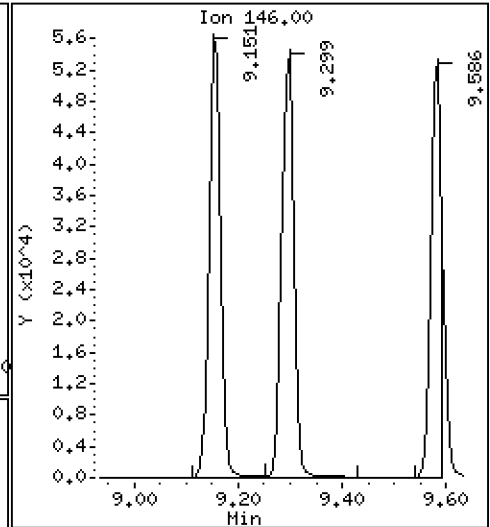
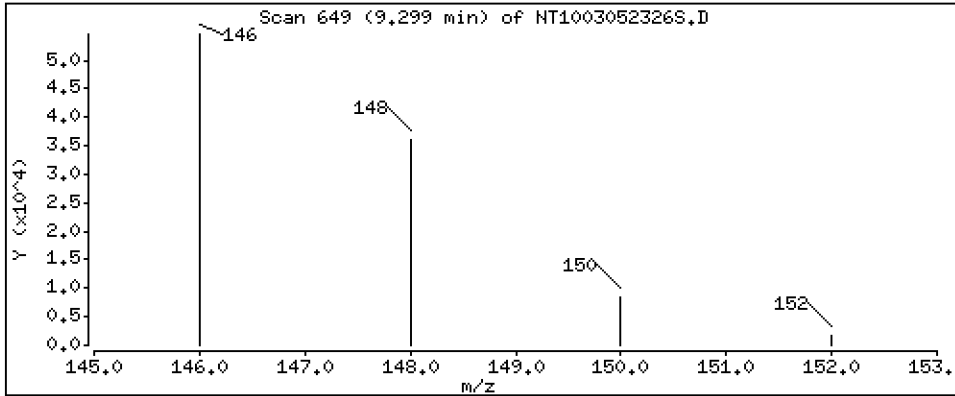
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,9826 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

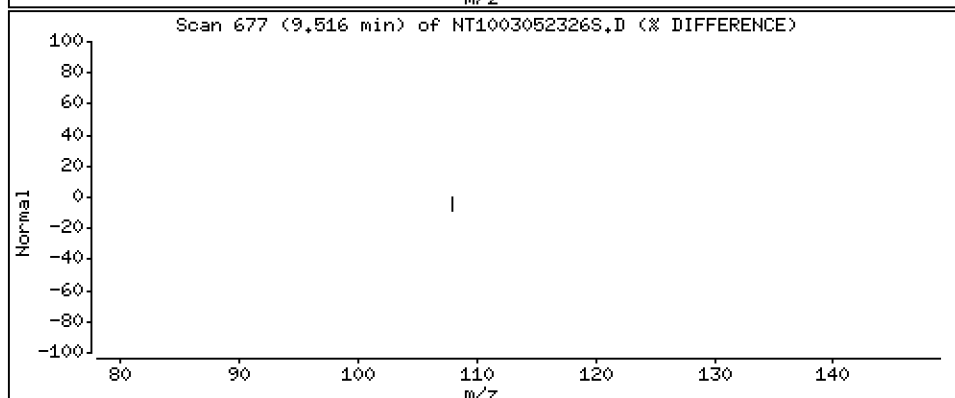
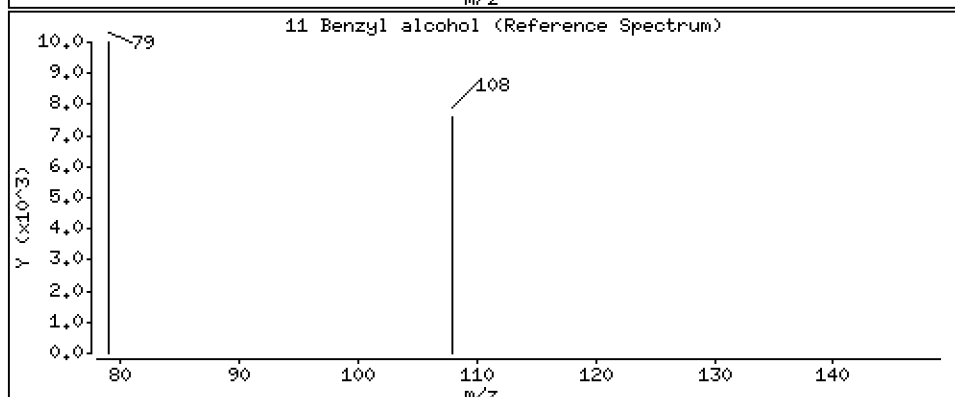
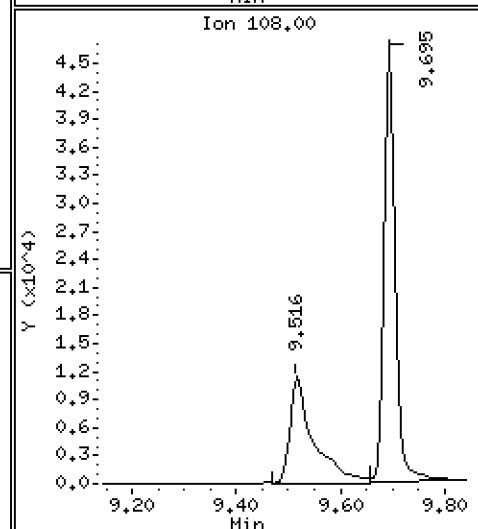
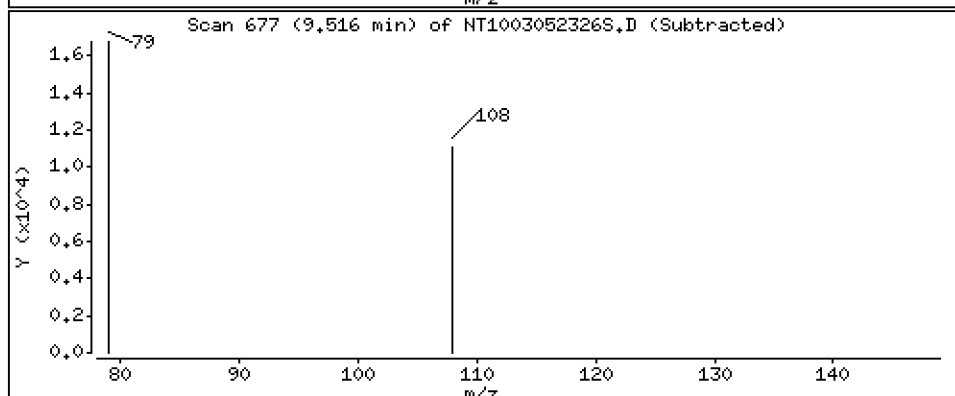
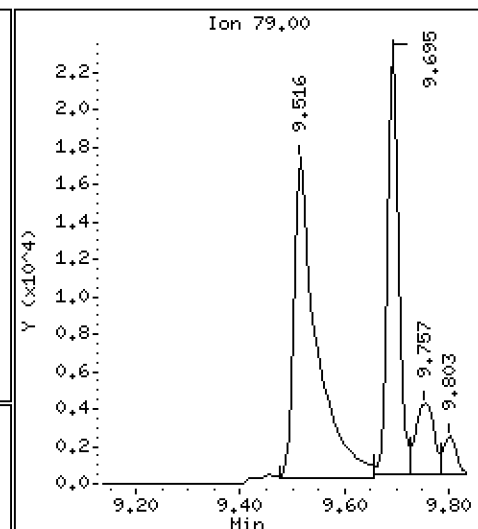
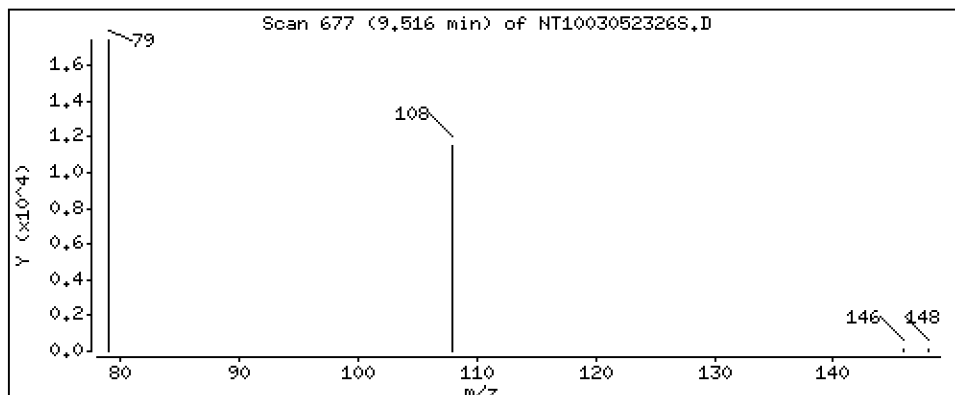
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,9323 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

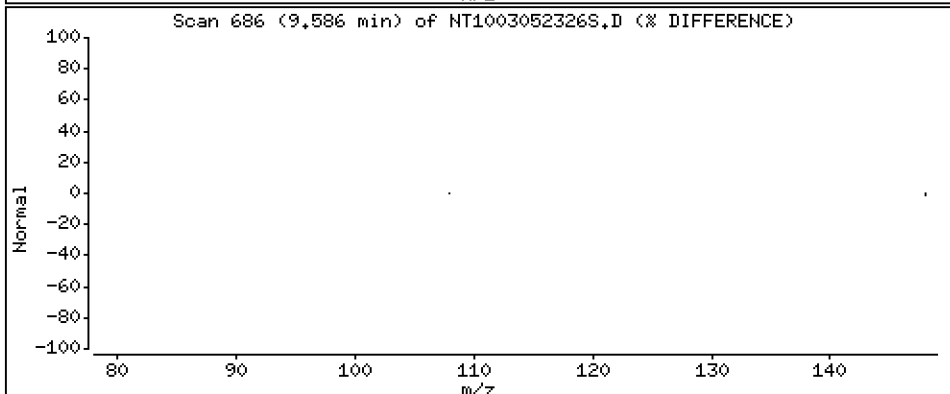
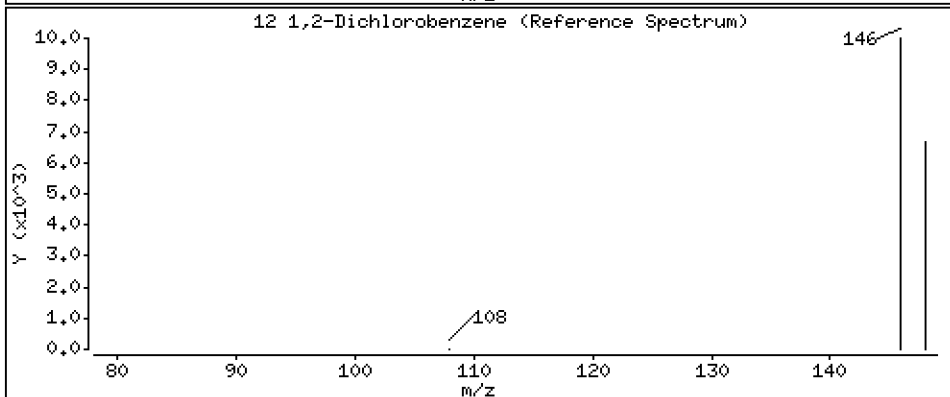
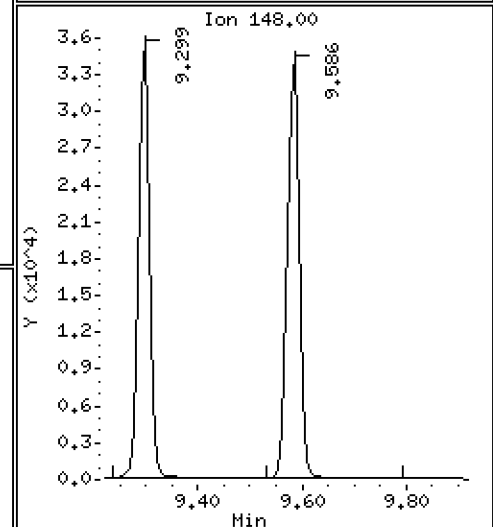
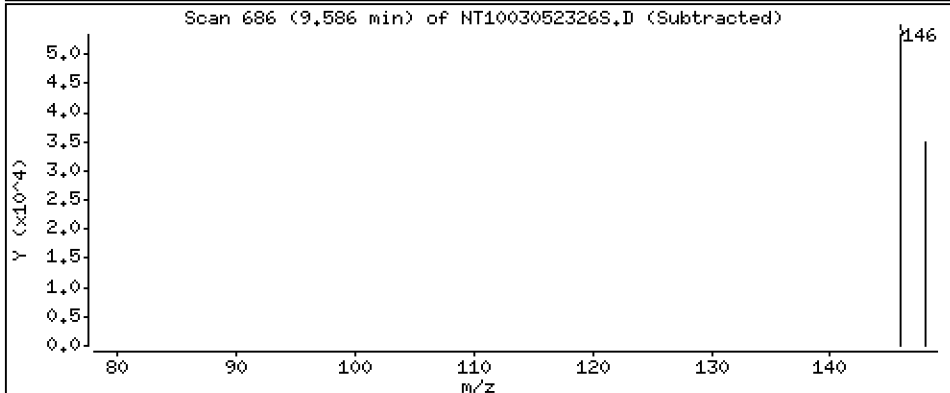
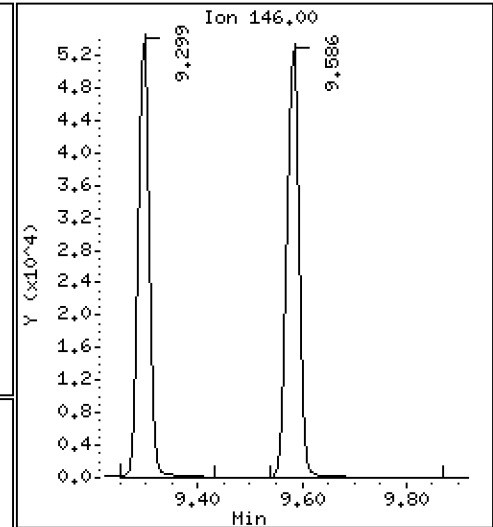
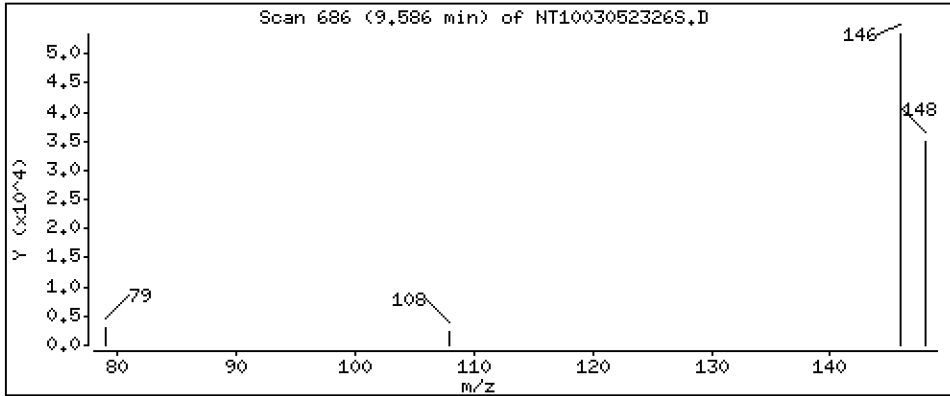
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 1,007 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

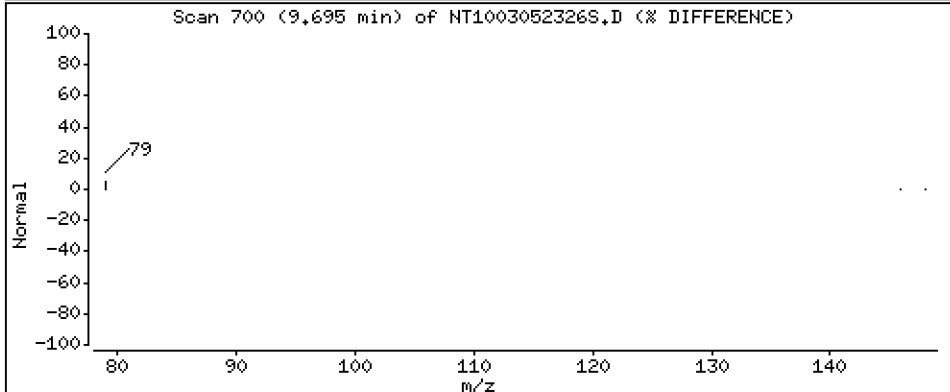
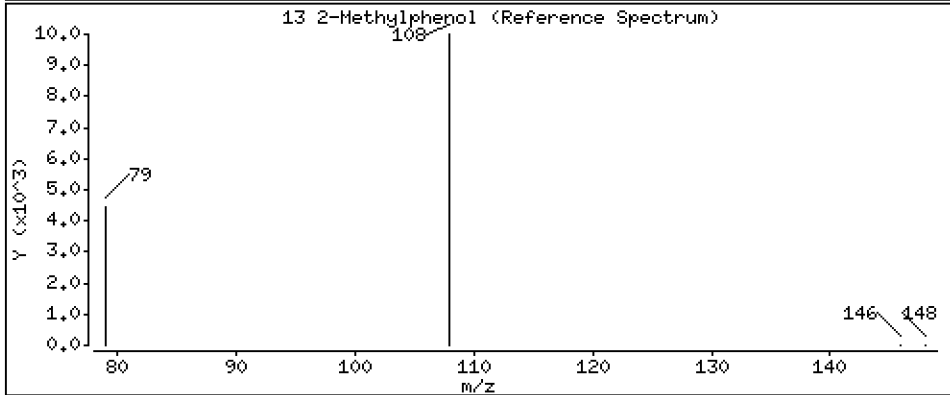
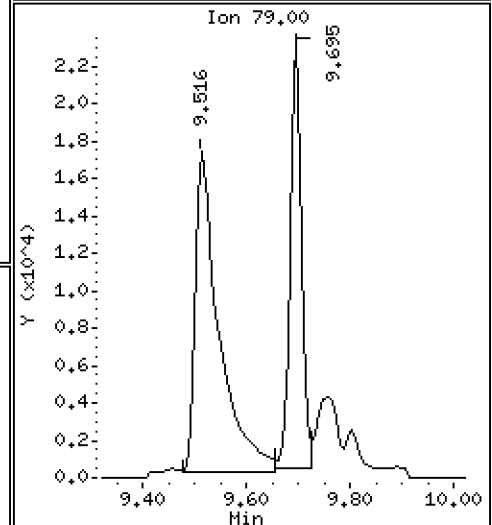
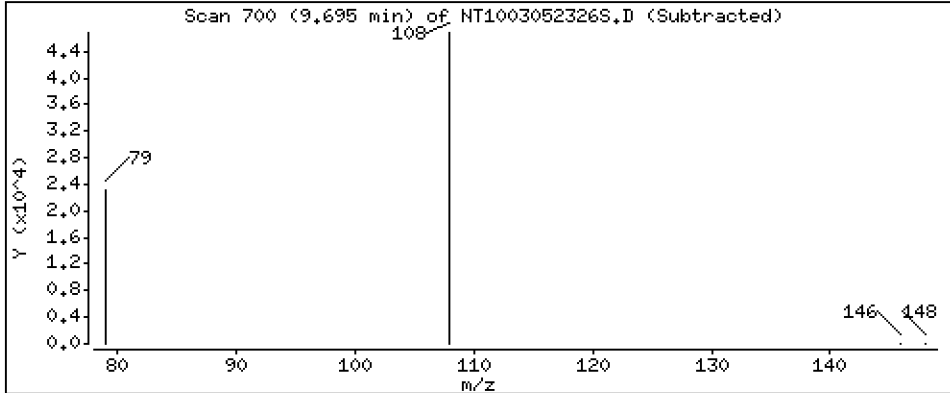
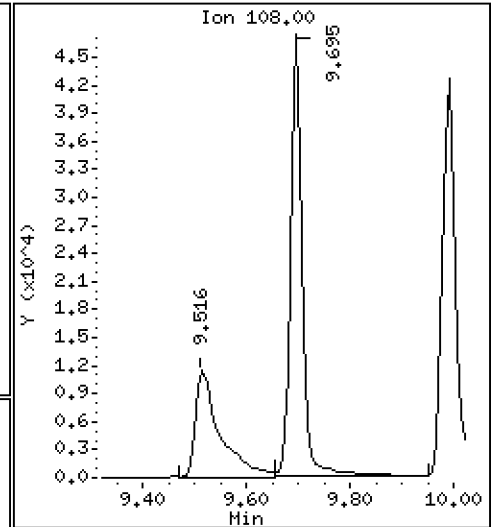
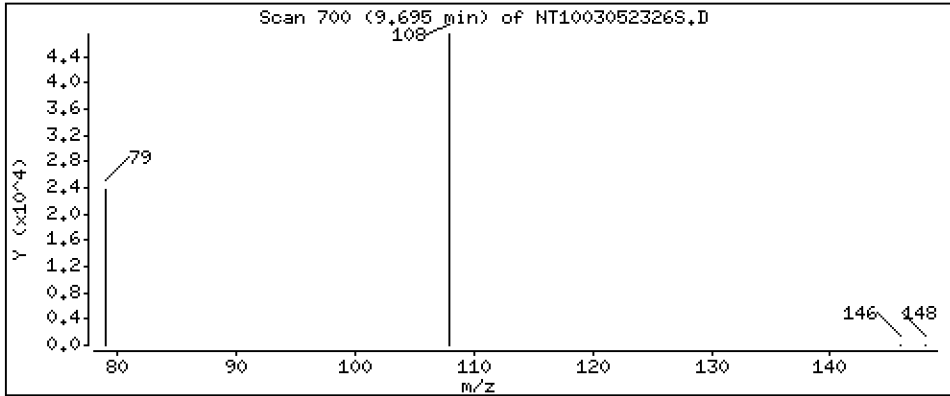
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 1,216 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

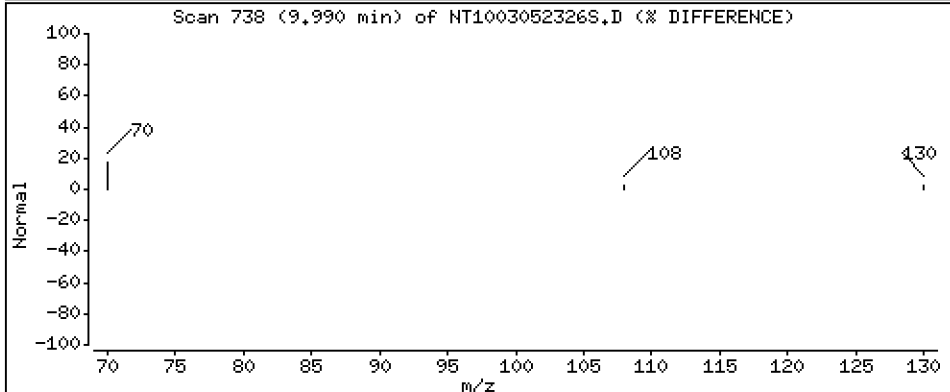
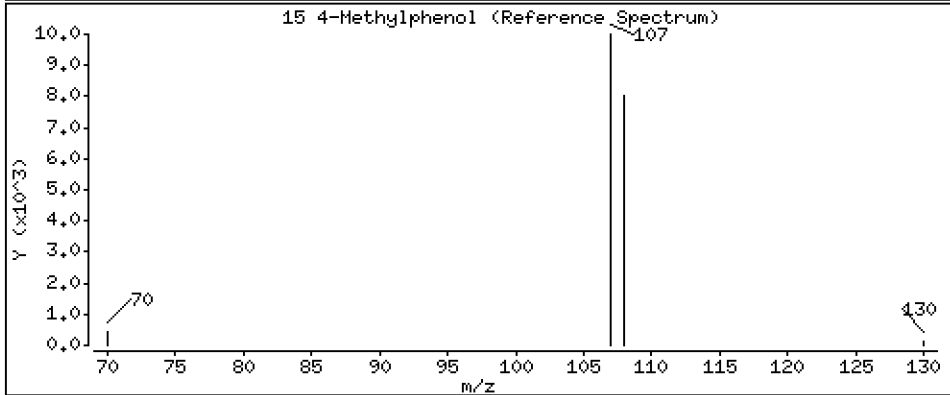
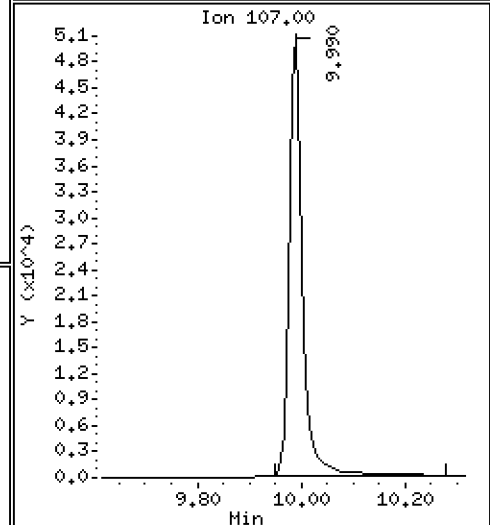
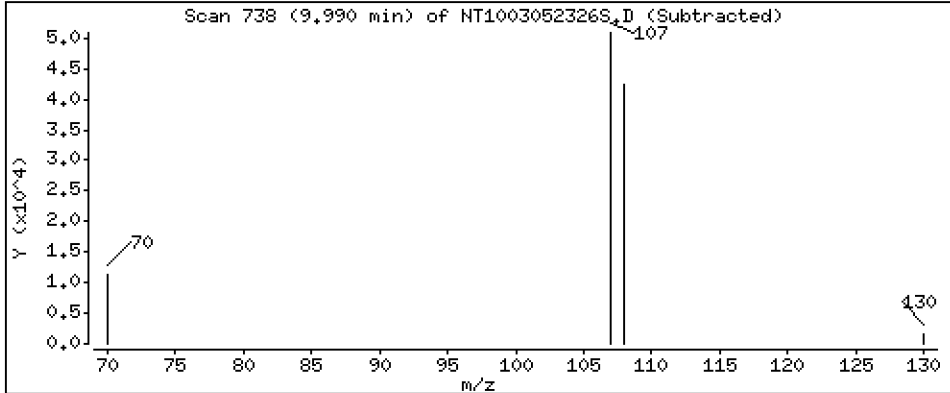
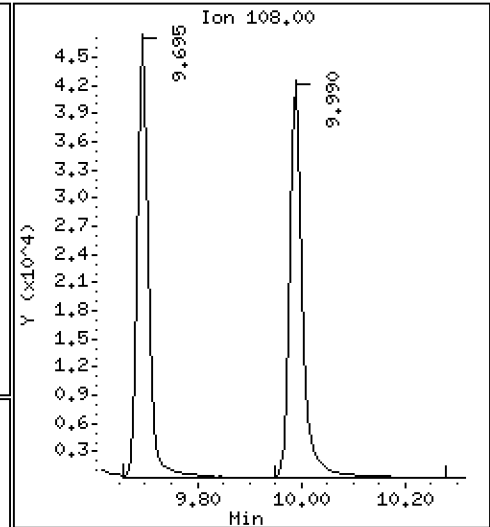
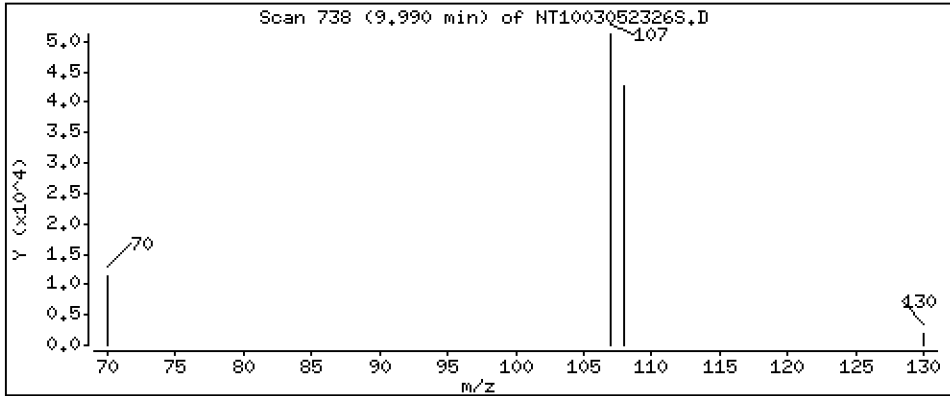
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 1.180 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

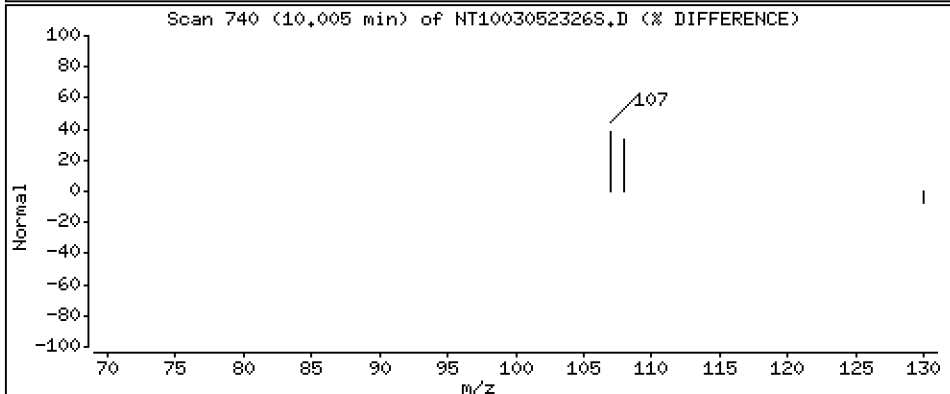
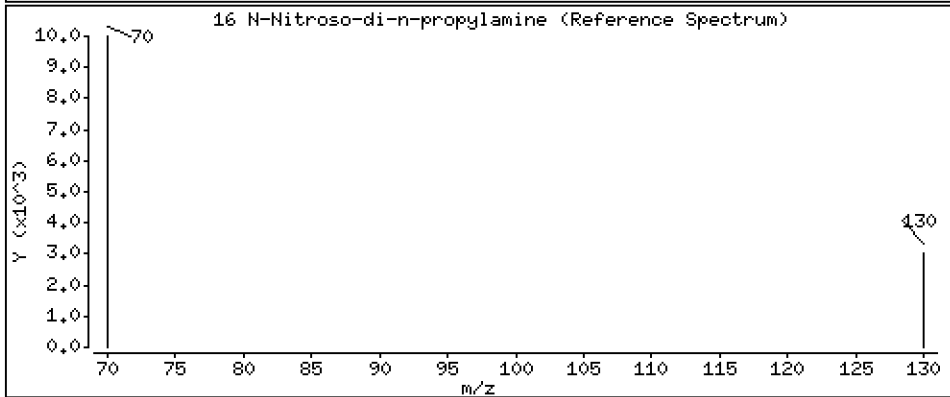
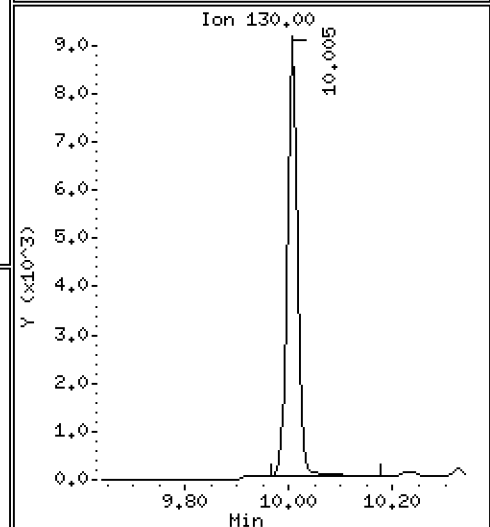
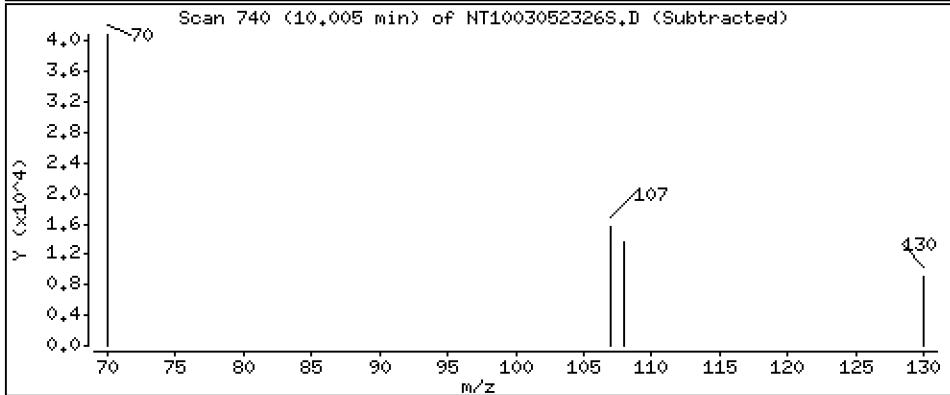
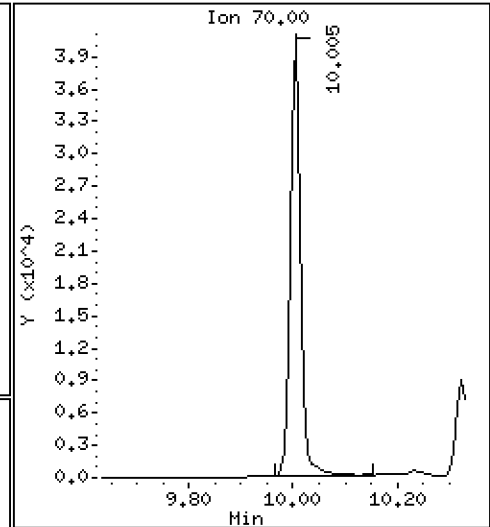
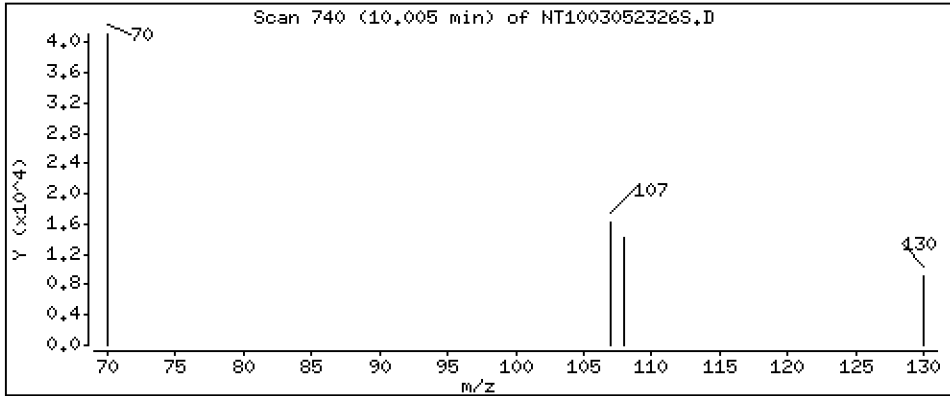
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 1,272 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

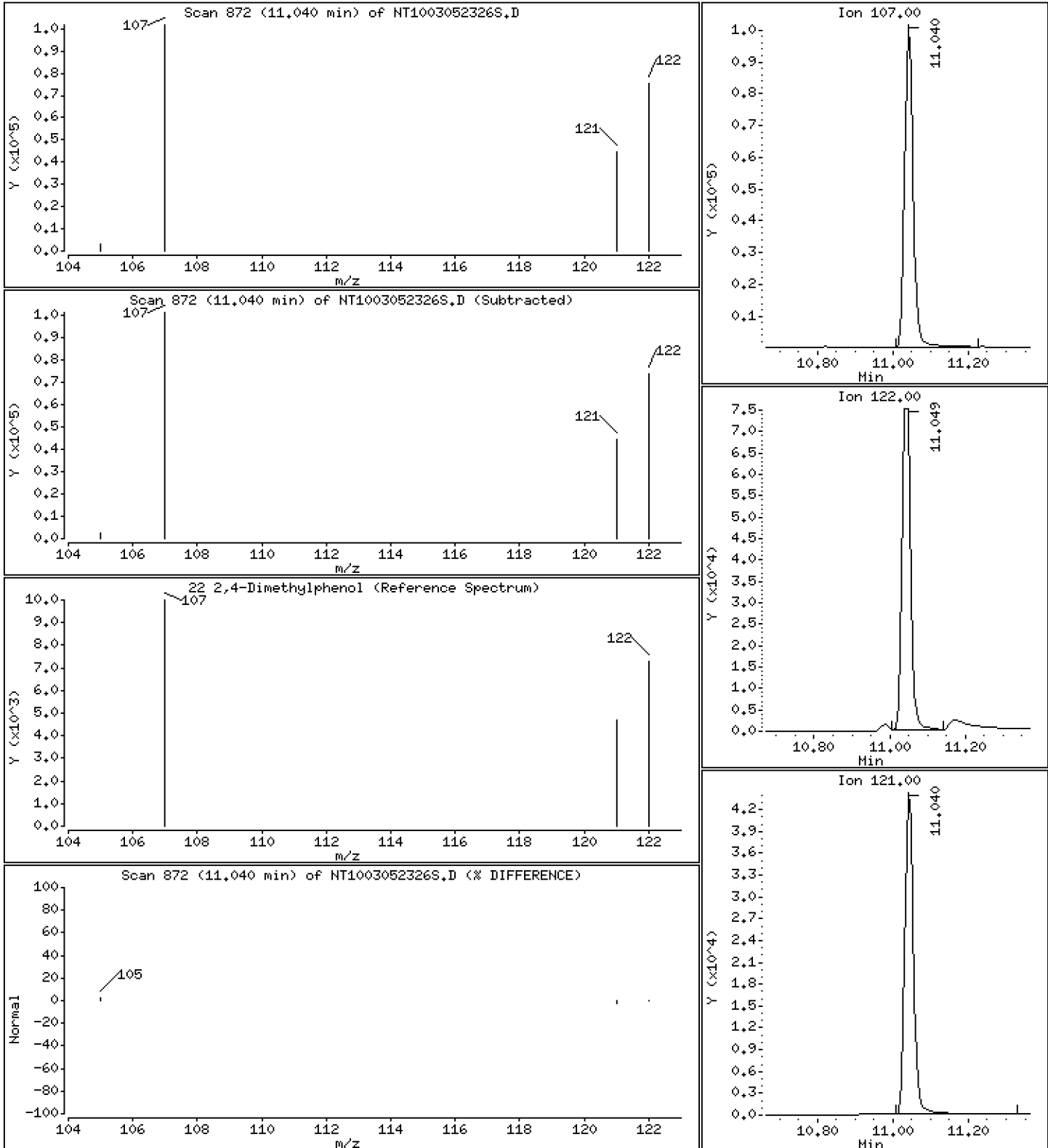
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 2,153 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

24 Benzoic acid

Concentration: 0.4909 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

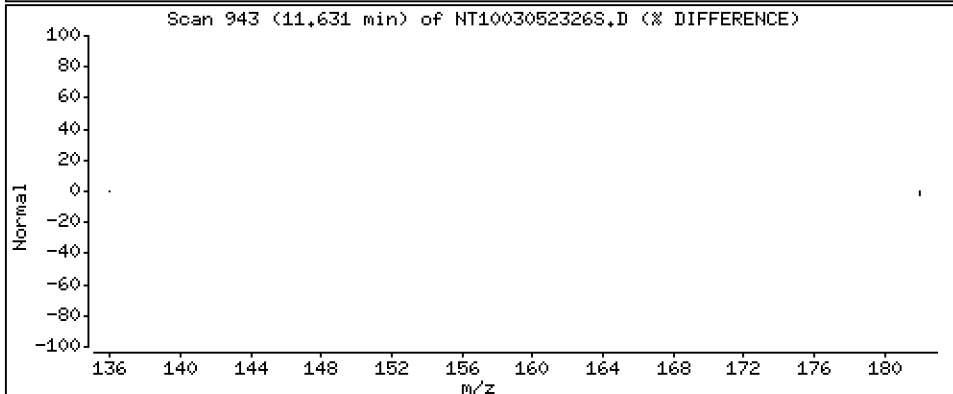
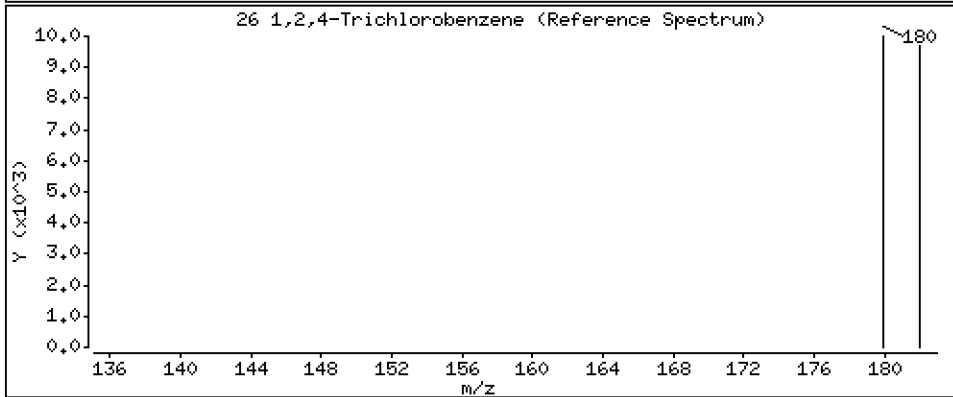
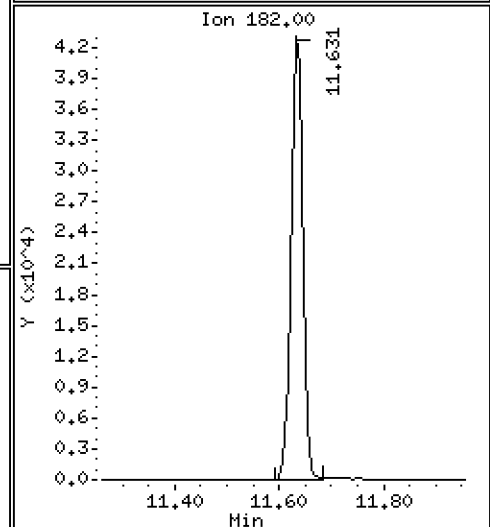
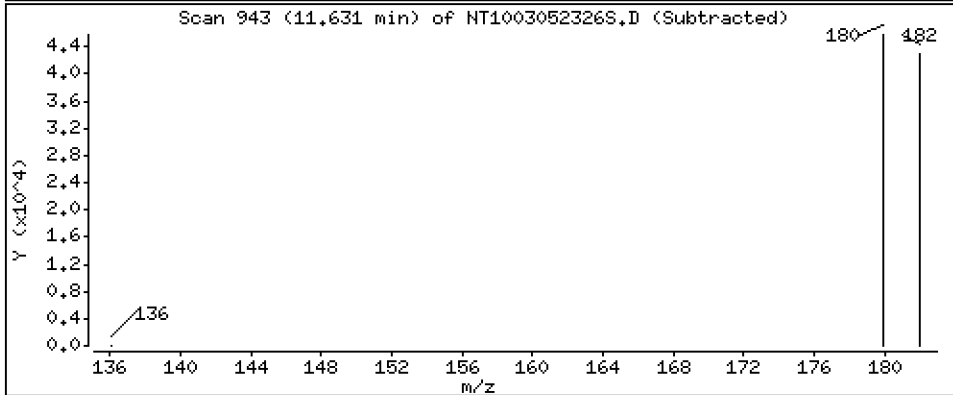
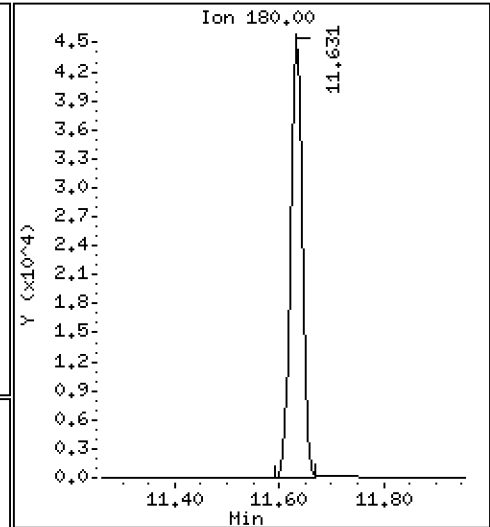
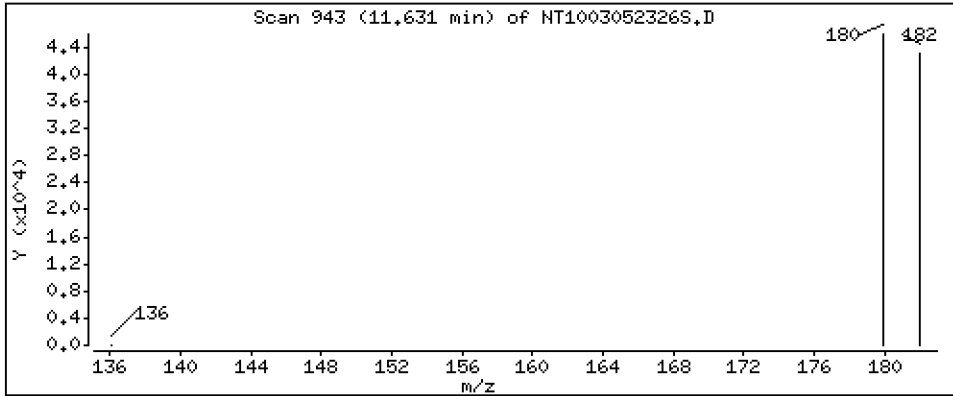
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 1,192 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

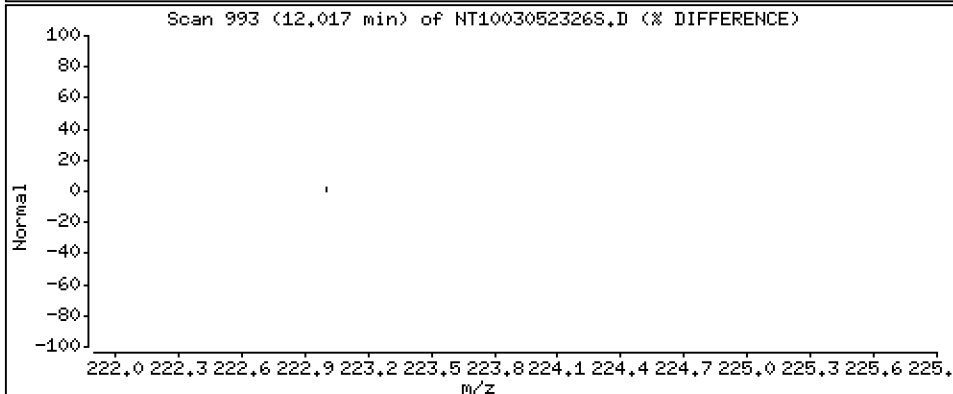
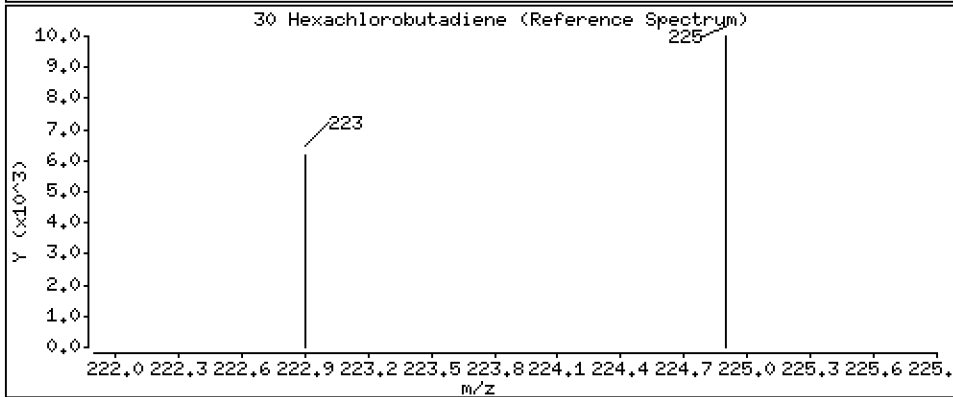
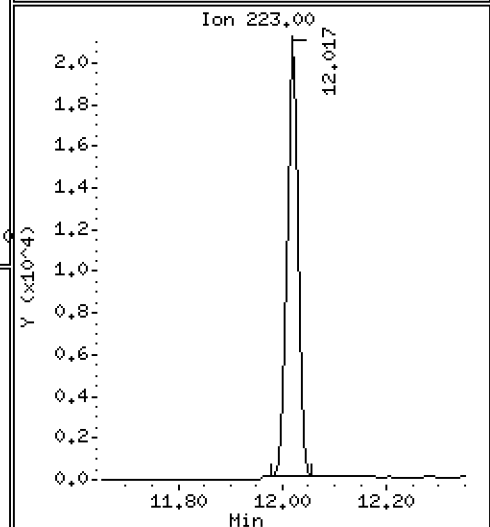
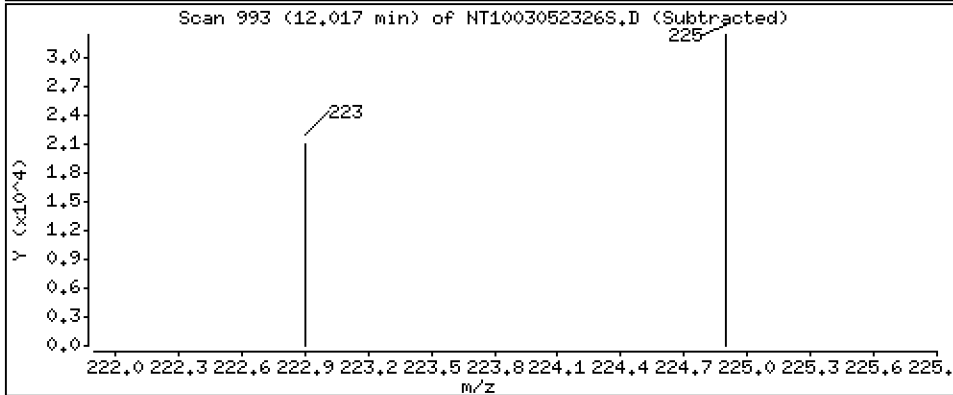
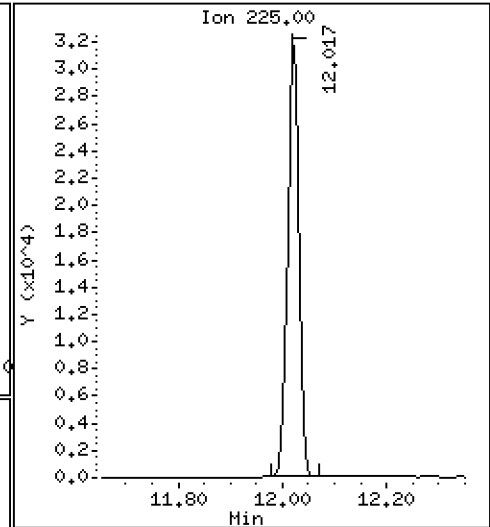
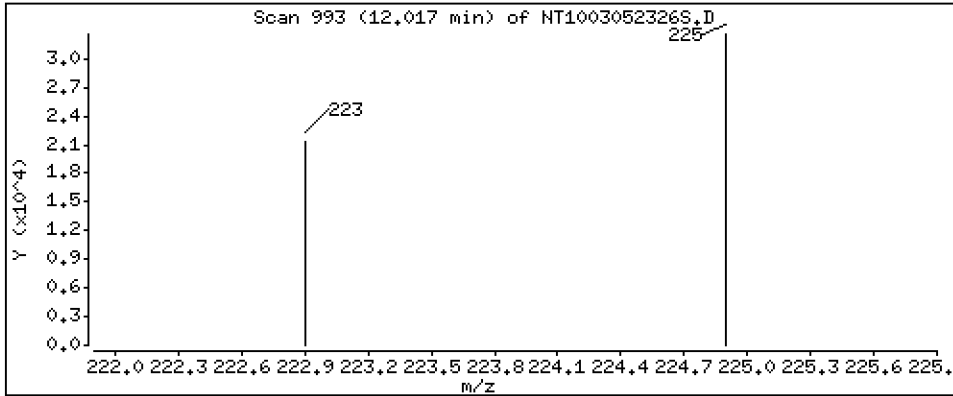
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,108 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

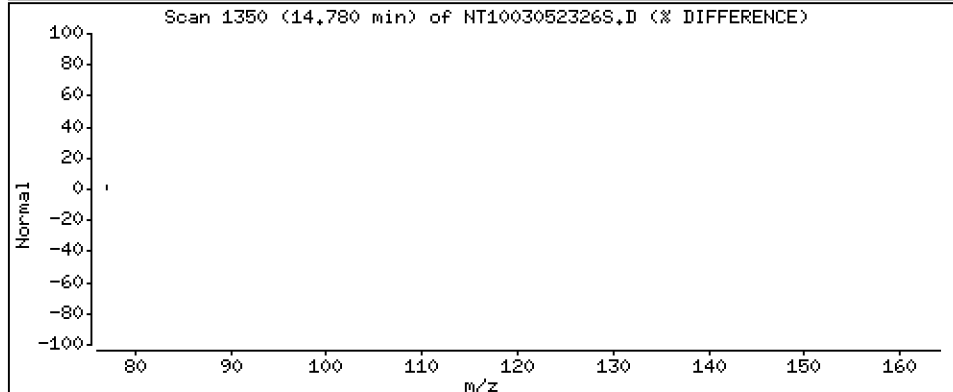
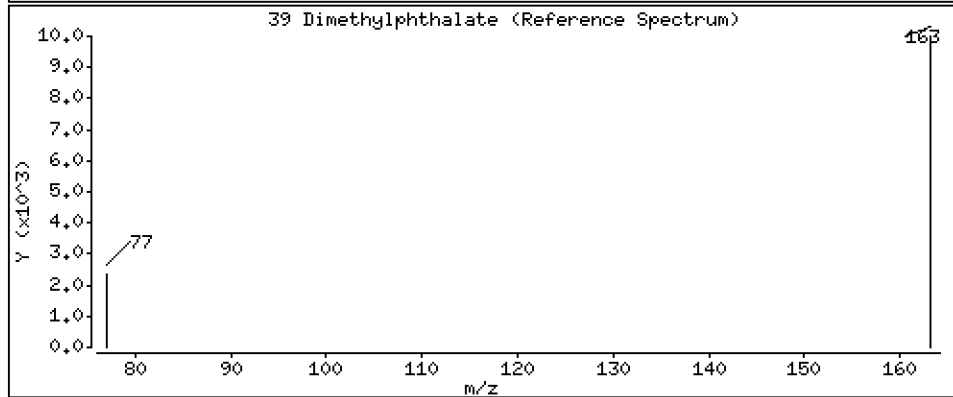
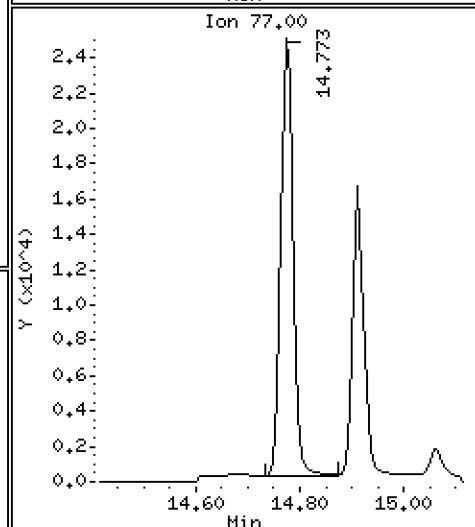
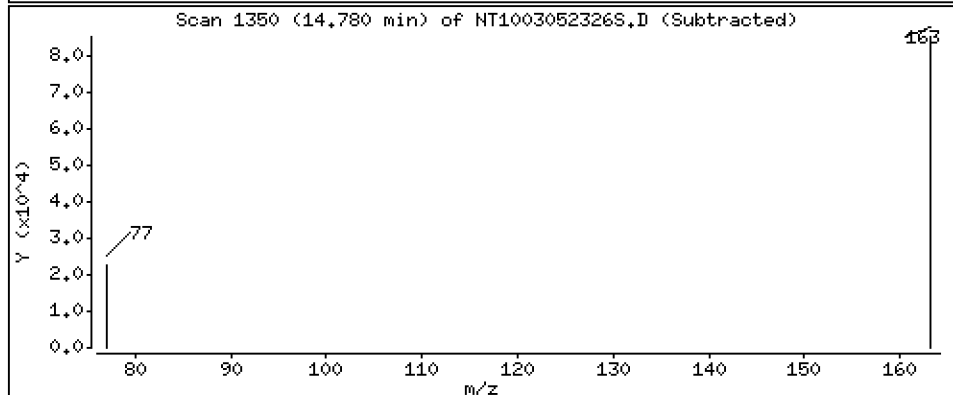
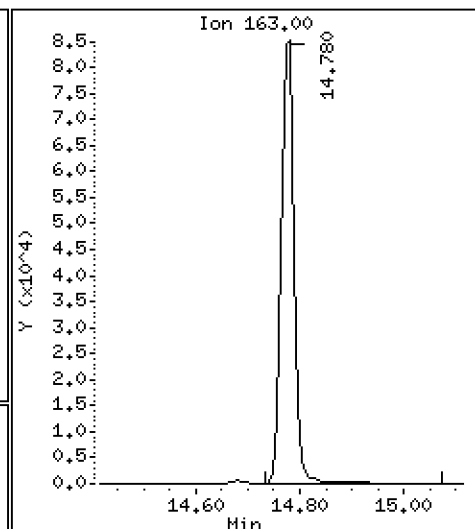
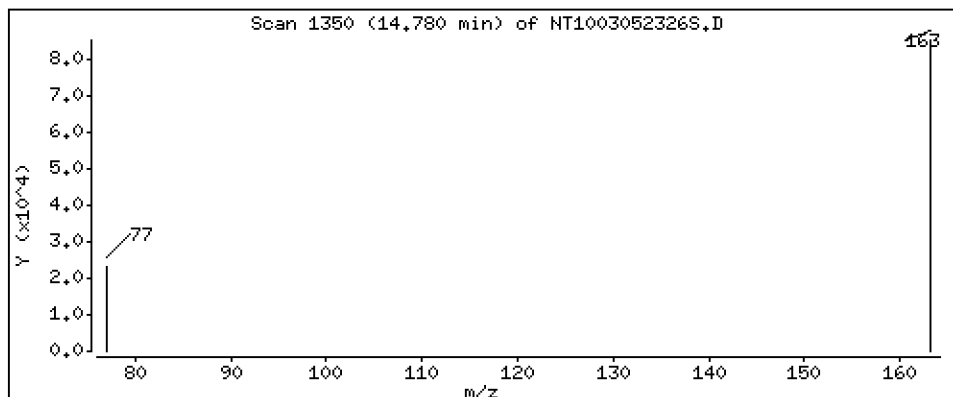
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 1,032 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

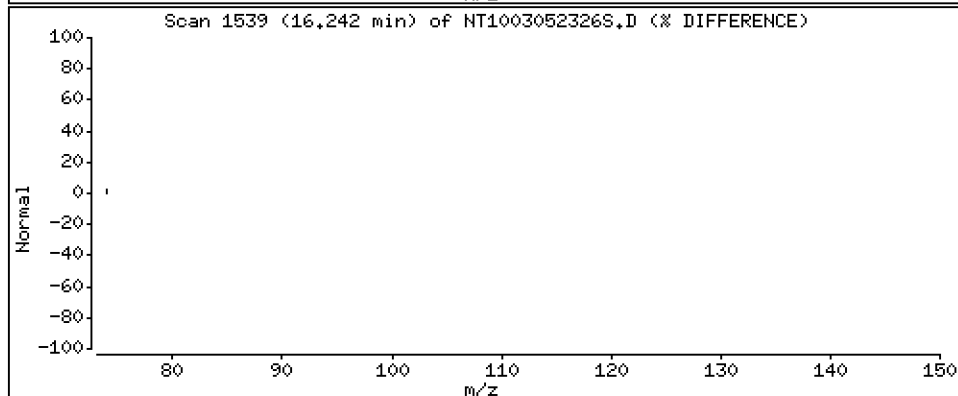
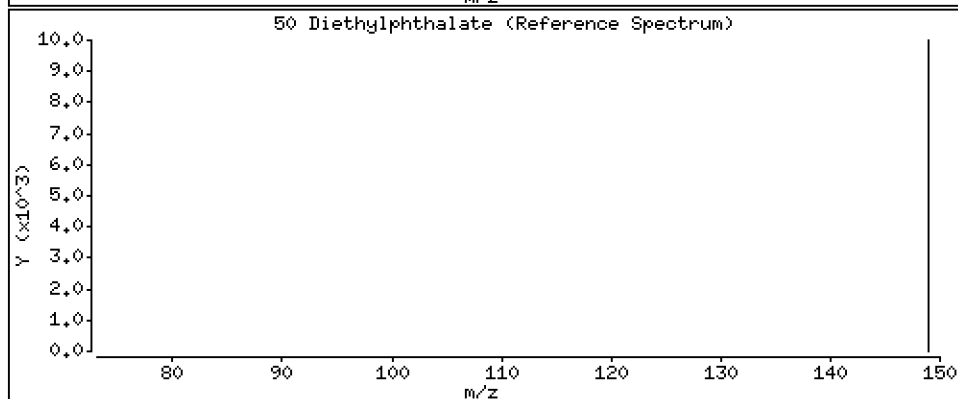
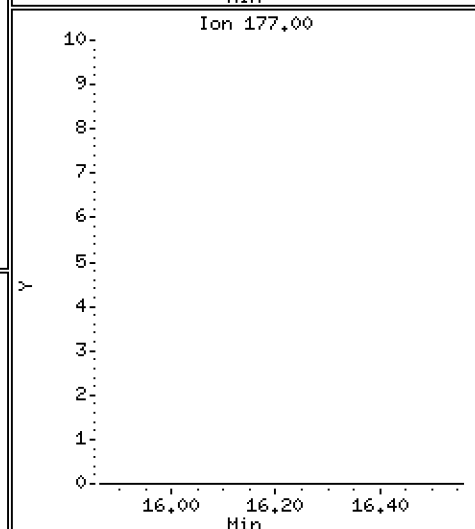
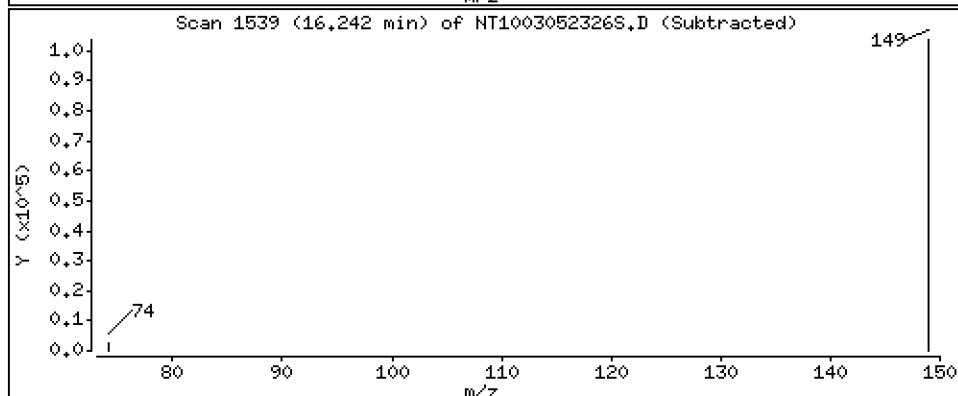
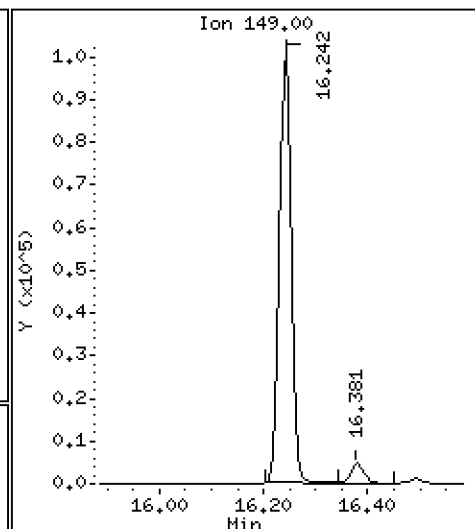
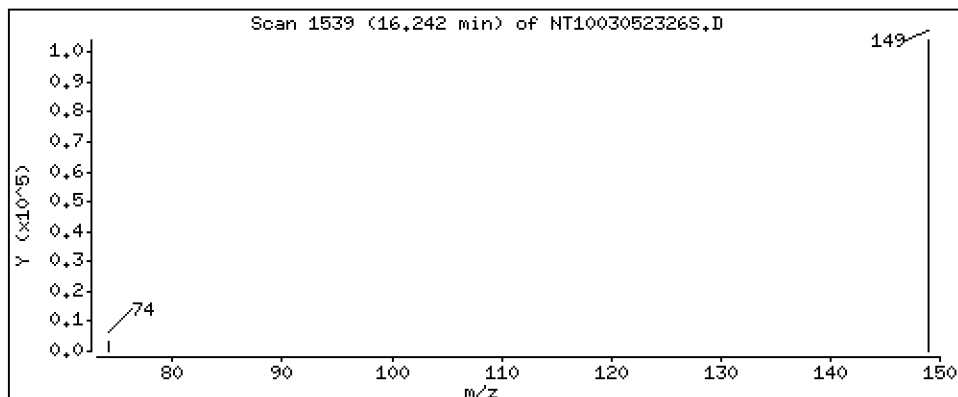
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 1,189 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

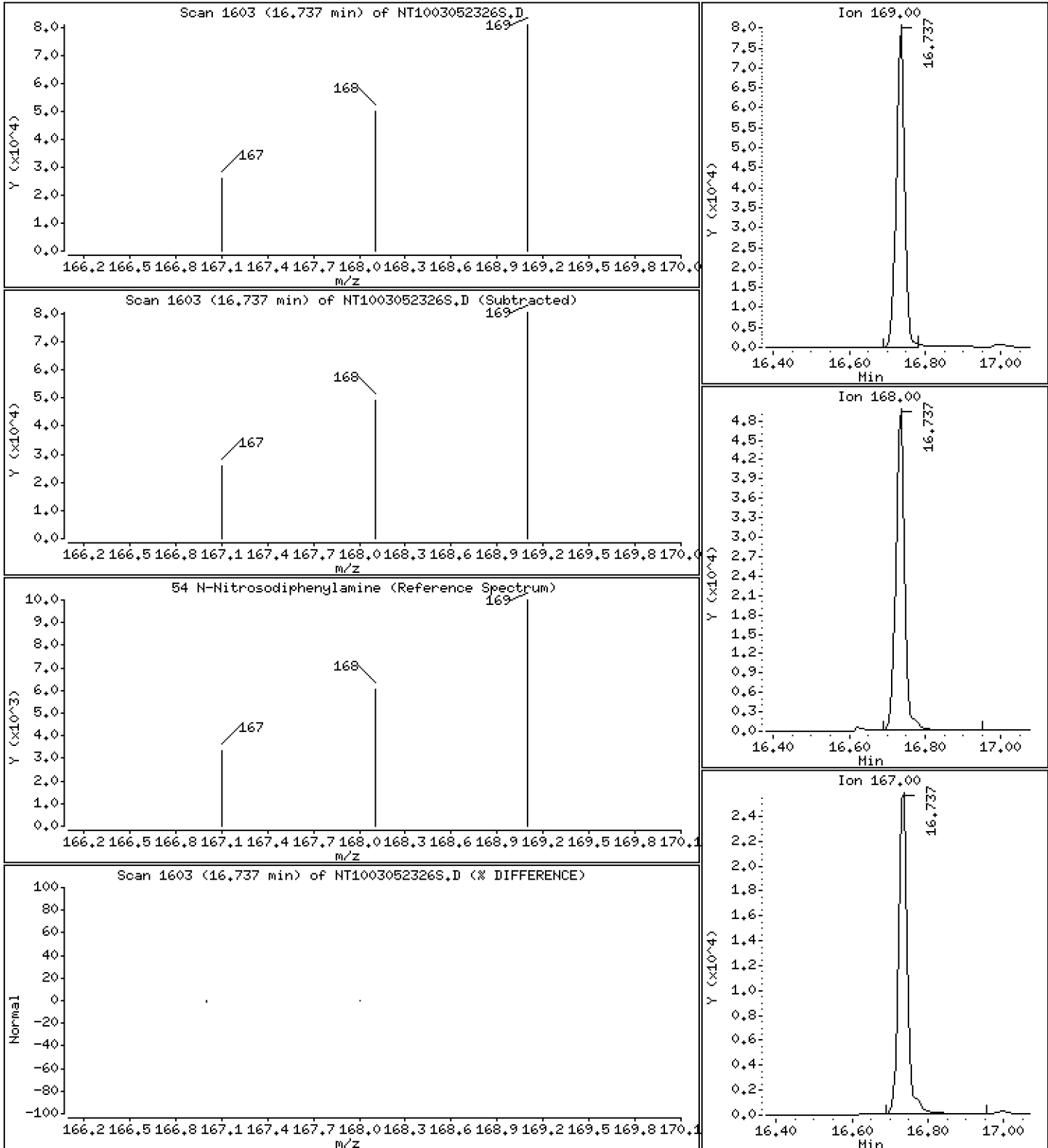
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,9029 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

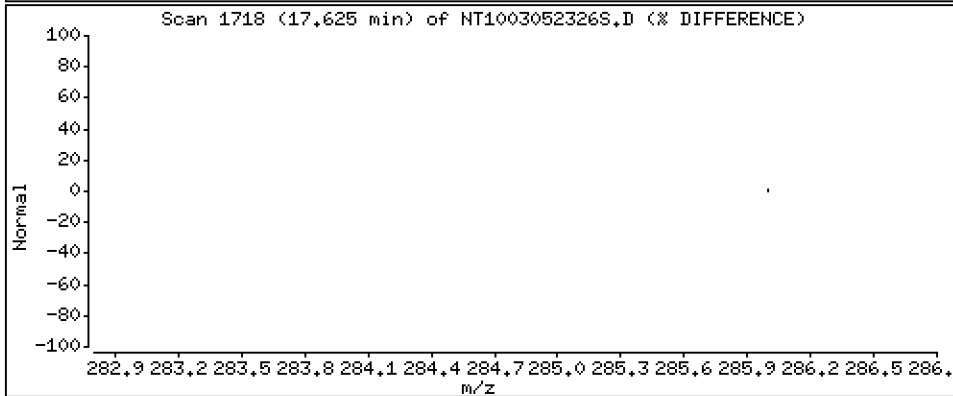
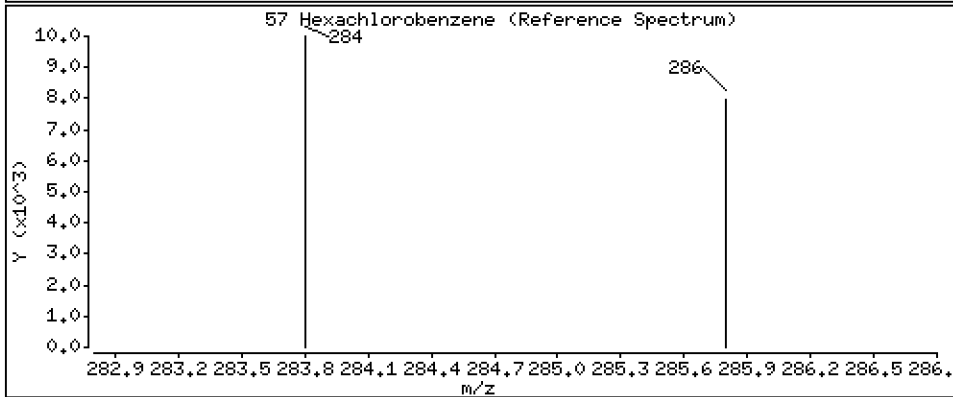
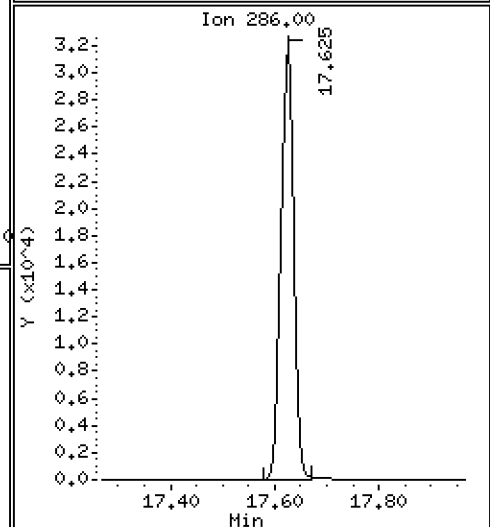
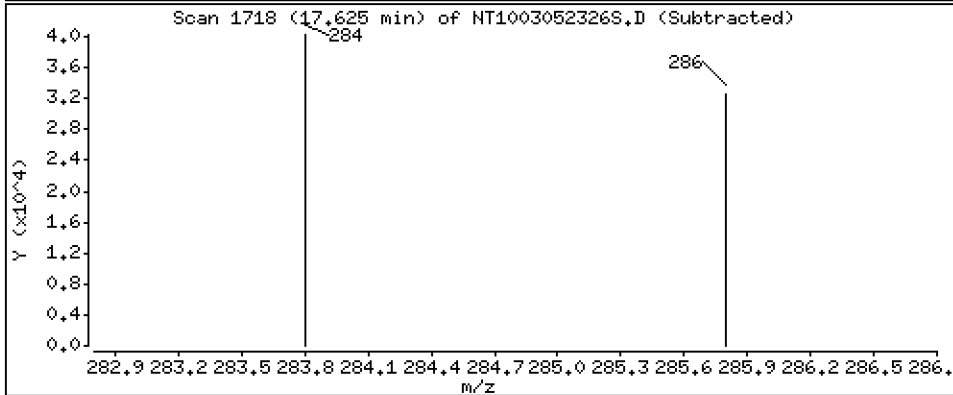
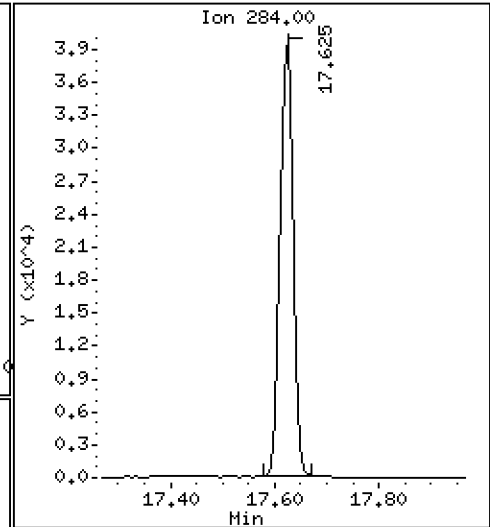
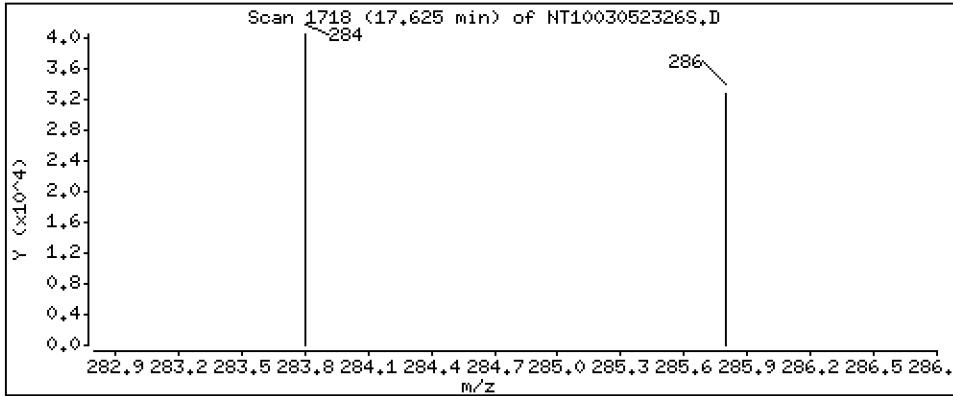
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 1,060 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

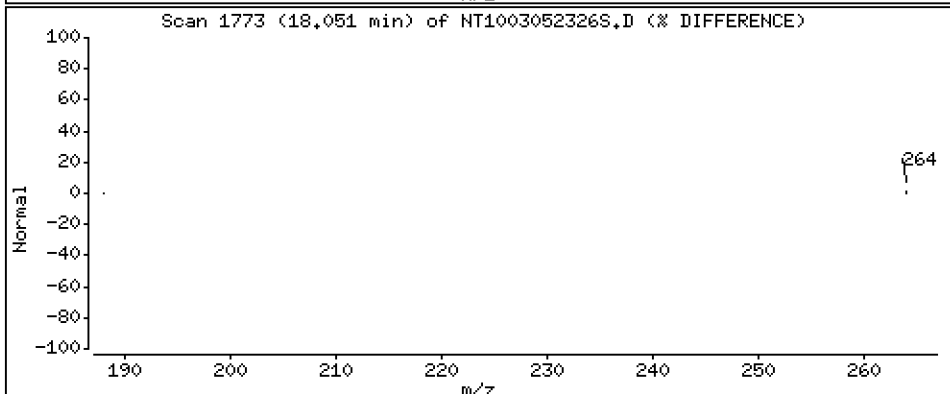
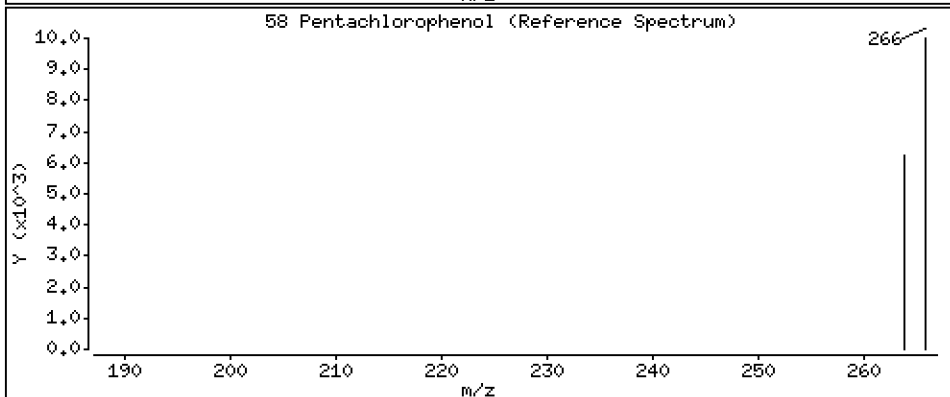
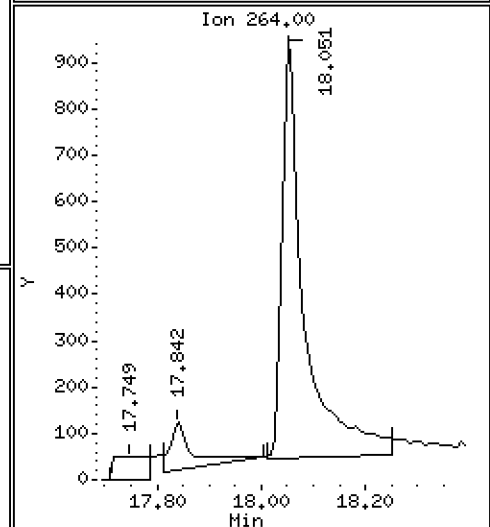
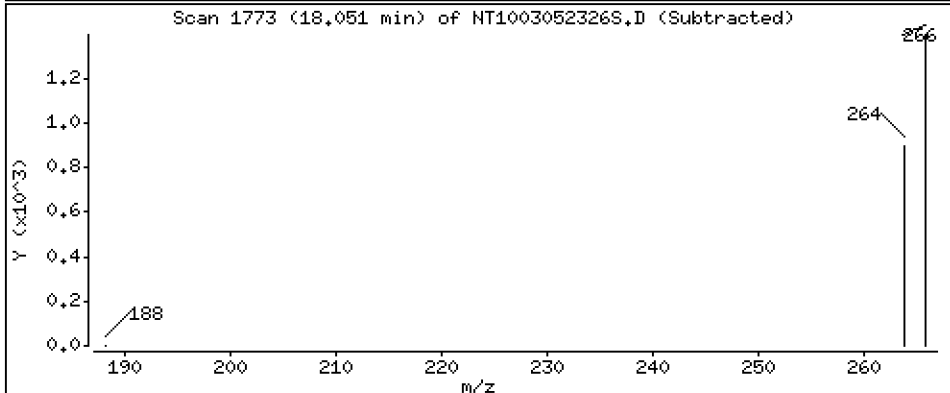
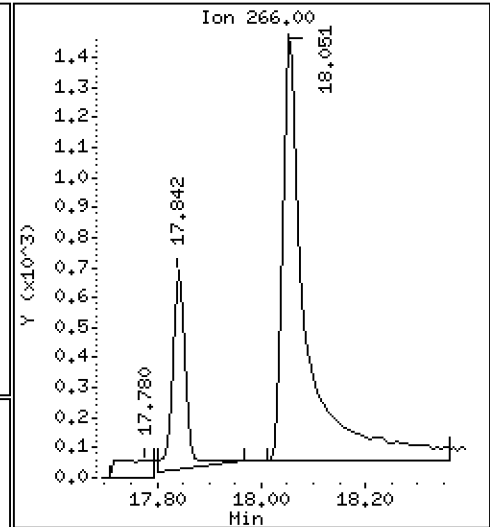
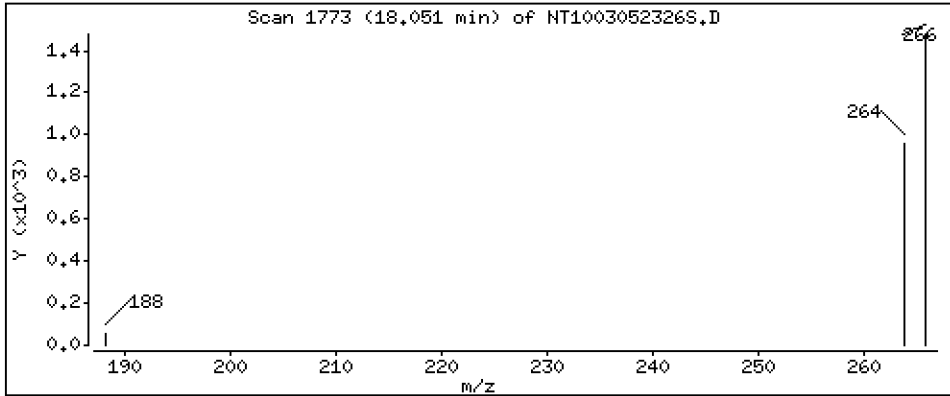
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1637 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

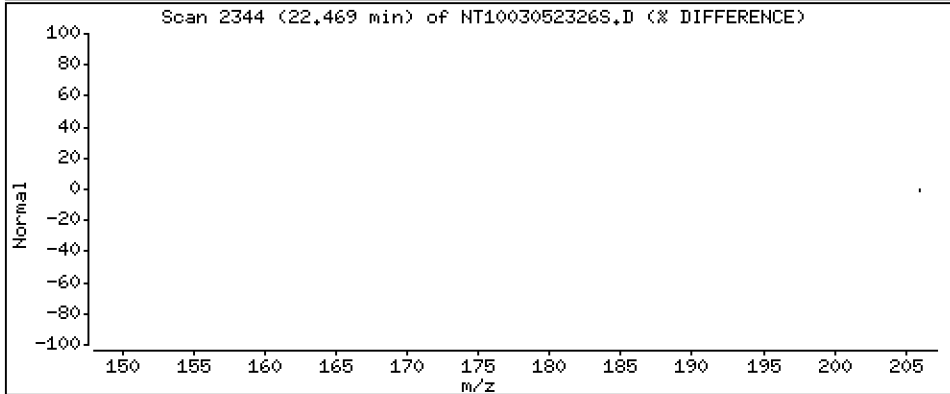
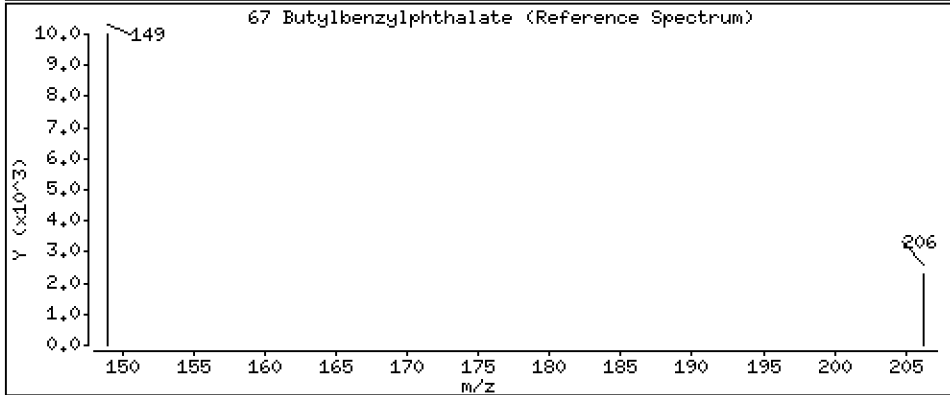
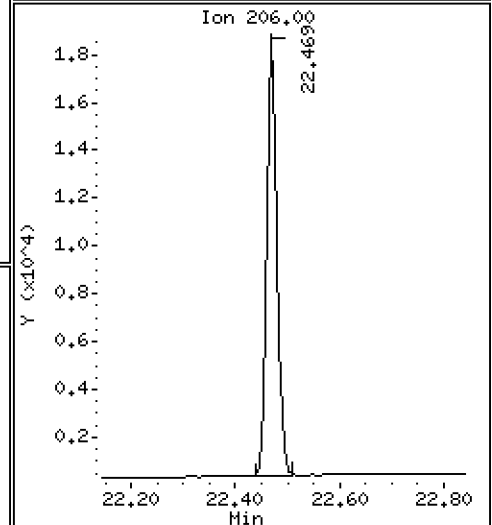
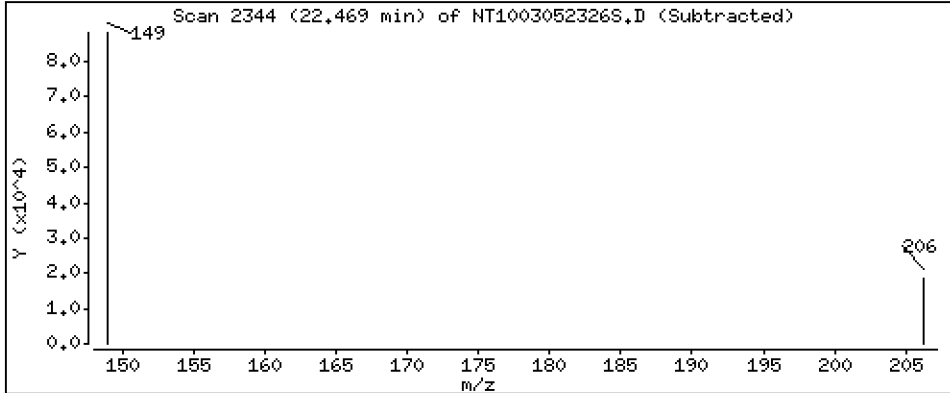
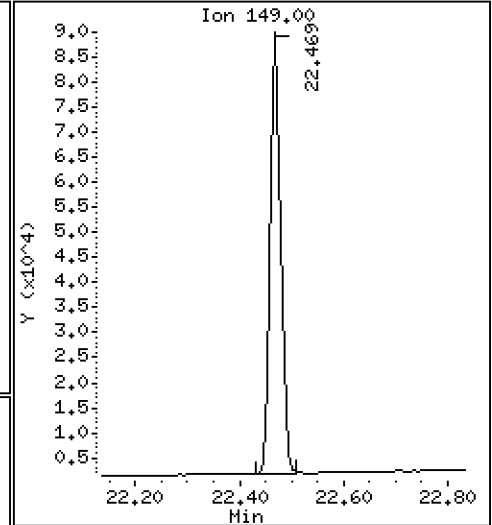
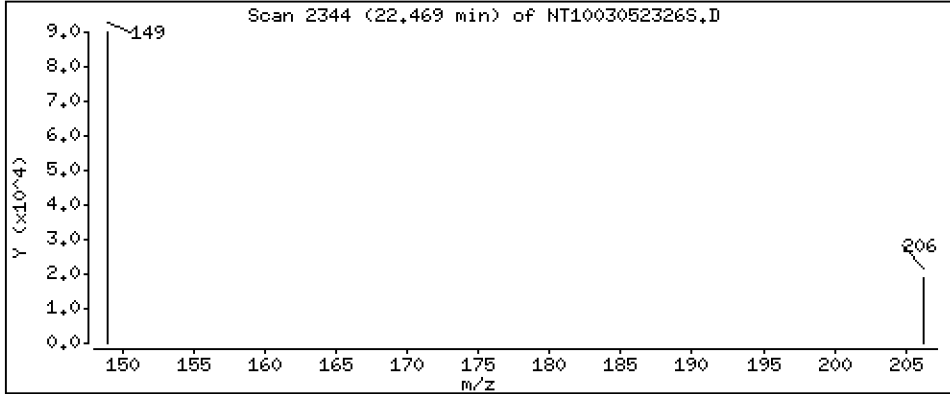
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,8130 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

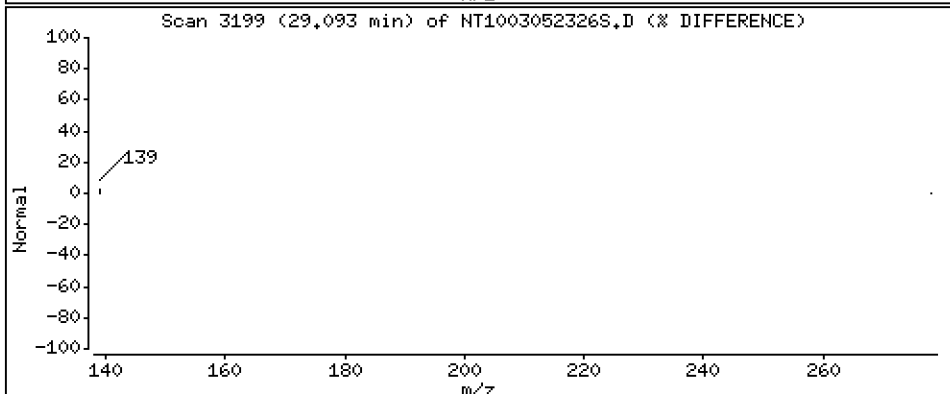
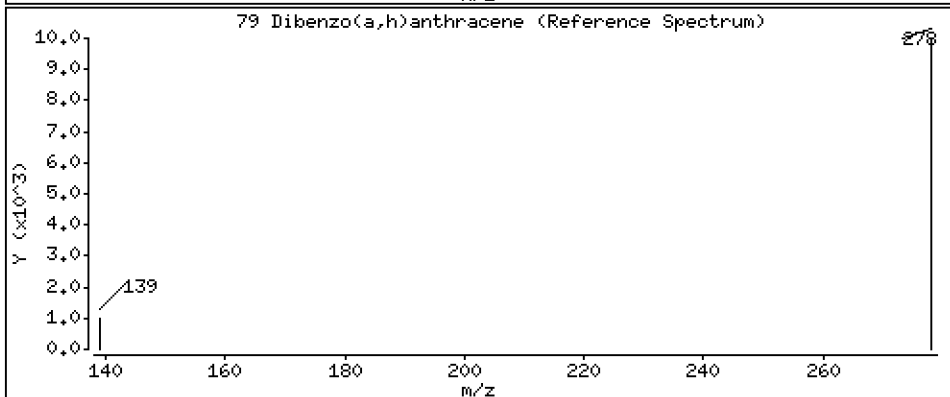
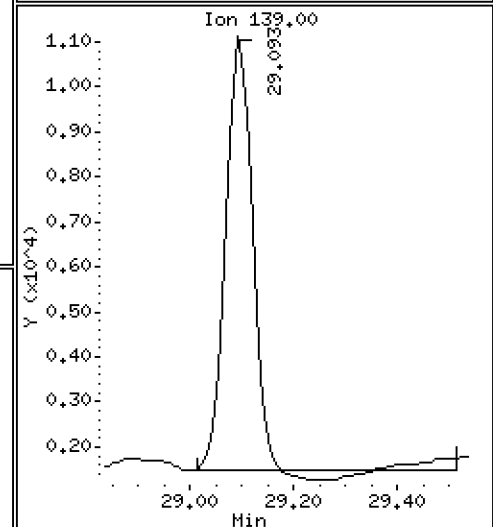
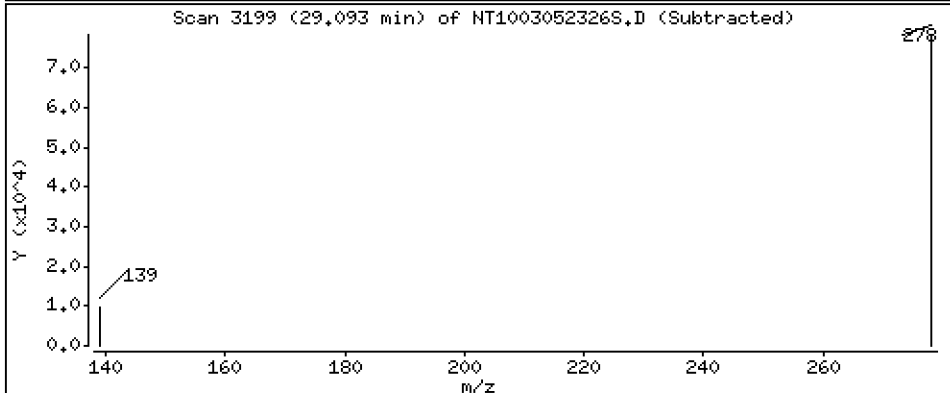
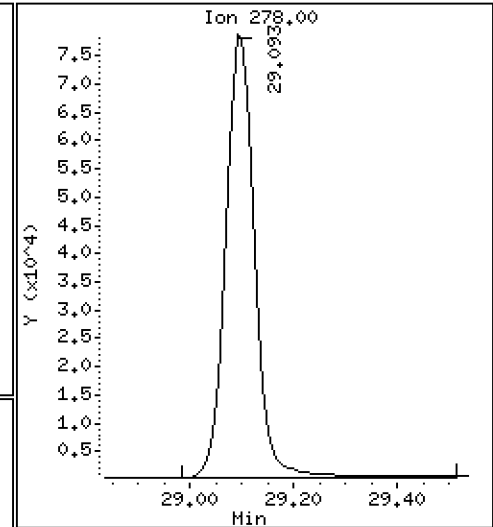
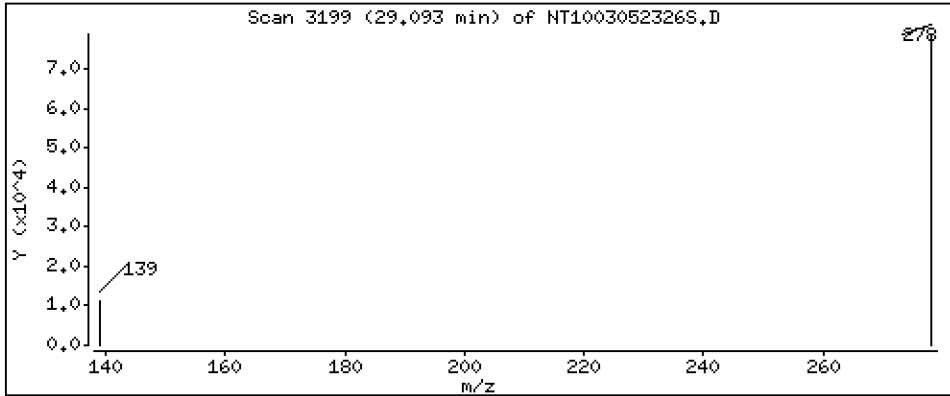
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 1,244 ug/mL



Date : 06-MAR-2023 05:10

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-CCV1

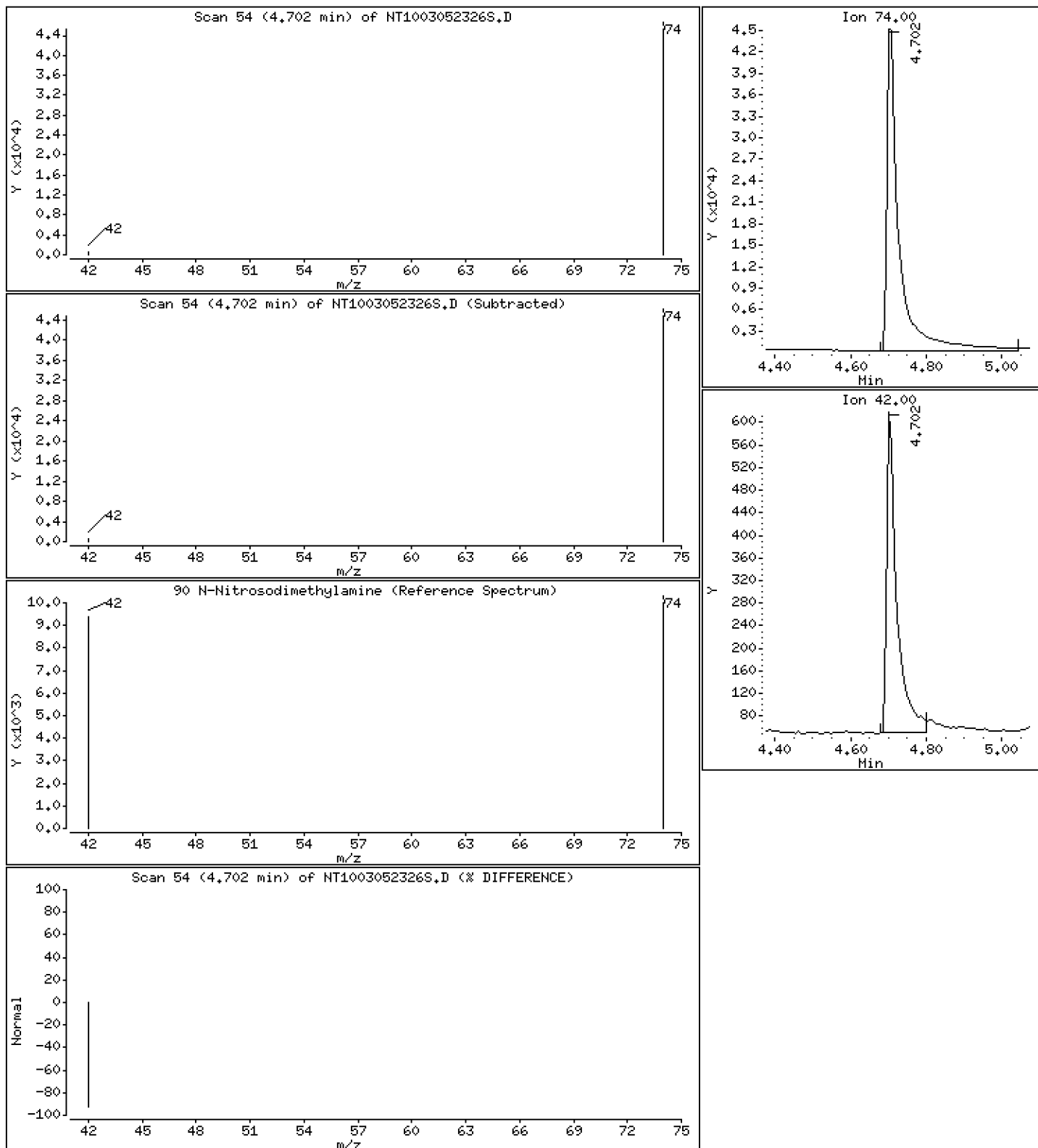
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 2,525 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052326S.D
 Lab Smp Id: SLC0440-CCV1
 Inj Date : 06-MAR-2023 05:10
 Operator : YZ
 Smp Info : SLC0440-CCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:18 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.745)	118790	1.73777	1.738 (R)
3 Phenol	94		8.556	8.532	(0.924)	95309	0.94098	0.9410
7 1,3-Dichlorobenzene	146		9.151	9.143	(0.988)	88712	0.99972	0.9997
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.252	(1.000)	239436	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.283	(1.004)	84771	0.98256	0.9826
11 Benzyl alcohol	79		9.515	9.484	(1.028)	52715	0.93227	0.9323
12 1,2-Dichlorobenzene	146		9.585	9.570	(1.035)	83489	1.00680	1.007
13 2-Methylphenol	108		9.694	9.671	(1.047)	74459	1.21643	1.216
15 4-Methylphenol	108		9.989	9.966	(1.079)	75285	1.17950	1.180
16 N-Nitroso-di-n-propylamine	70		10.005	9.981	(1.080)	57375	1.27208	1.272
22 2,4-Dimethylphenol	107		11.040	11.014	(0.939)	156113	2.15315	2.153
24 Benzoic acid	105		11.167	11.133	(0.950)	19440	0.49085	0.4909
26 1,2,4-Trichlorobenzene	180		11.631	11.608	(0.989)	72906	1.19239	1.192
* 27 Naphthalene-d8	136		11.754	11.731	(1.000)	849492	4.00000	
30 Hexachlorobutadiene	225		12.017	12.001	(1.022)	48058	1.10760	1.108
39 Dimethylphthalate	163		14.780	14.764	(0.963)	138152	1.03240	1.032
* 42 Acenaphthene-d10	162		15.352	15.337	(1.000)	421435	4.00000	
50 Diethylphthalate	149		16.241	16.234	(1.058)	149985	1.18854	1.189 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.729	(0.907)	122091	0.90285	0.9029
57 Hexachlorobenzene	284		17.625	17.617	(0.955)	67100	1.06028	1.060
58 Pentachlorophenol	266		18.050	18.042	(0.978)	4540	0.16374	0.1637
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	835585	4.00000	
\$ 66 Terphenyl-d14	244		21.586	21.594	(0.919)	112596	1.59198	1.592 (R)
67 Butylbenzylphthalate	149		22.469	22.484	(0.956)	119714	0.81301	0.8130
* 69 Chrysene-d12	240		23.491	23.514	(1.000)	874614	4.00000	
* 77 Perylene-d12	264		26.224	26.270	(1.000)	1035818	4.00000	
79 Dibenzo(a,h)anthracene	278		29.093	29.186	(1.109)	303680	1.24365	1.244
90 N-Nitrosodimethylamine	74		4.701	4.724	(0.508)	102170	2.52454	2.525

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052326S.D
 Lab Smp Id: SLC0440-CCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	293840	146920	587680	239436	-18.51
27 Naphthalene-d8	1032639	516320	2065278	849492	-17.74
42 Acenaphthene-d10	502349	251175	1004698	421435	-16.11
59 Phenanthrene-d10	975997	487999	1951994	835585	-14.39
69 Chrysene-d12	978544	489272	1957088	874614	-10.62
77 Perylene-d12	1201606	600803	2403212	1035818	-13.80

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.75	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.35	0.10
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.49	-0.10
77 Perylene-d12	26.27	25.77	26.77	26.22	-0.18

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

REVIEW SUMMARY FOR FILE - NT1003052326S.D

Lab ID: SLC0440-CCV1

nt10.i, 20230305A.b\SIM.b\SIMABN2.m,

06-MAR-2023 05:10

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052315S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052317S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0440</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0440-LCV1</u>	Injection Time:	<u>23:32</u>
Sequence Name:	<u>ABN 0.1</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.4413080	1.4217430		-1.4	
1,2-Dichlorobenzene	A	0.10000	0.1	1.3853460	1.4141480		2.1	
Benzyl Alcohol	A	0.10000	0.07	0.7492523	0.6217753		-33.4	
Benzoic acid	A	0.40000	0.0	0.1431163				
2,4-Dimethylphenol	A	0.20000	0.2	0.2957717	0.3261509		-3.9	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.2879030	0.3456621		20.1	
N-Nitrosodiphenylamine	A	0.10000	0.08	0.6473471	0.5119664		-20.9	
Pentachlorophenol	A	0.20000	0.0	0.0950913				
2-Fluorophenol	A	0.15000	0.146	1.1419780	1.1130710		-2.5	
p-Terphenyl-d14	A	0.10000	0.161	0.3234672	0.5217174		61.3	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305R.b\SIM.b\NT1003052317S.D

Date: 05-MAR-2023 23:32

Client ID:

Sample Info: SLC0440-LCW1

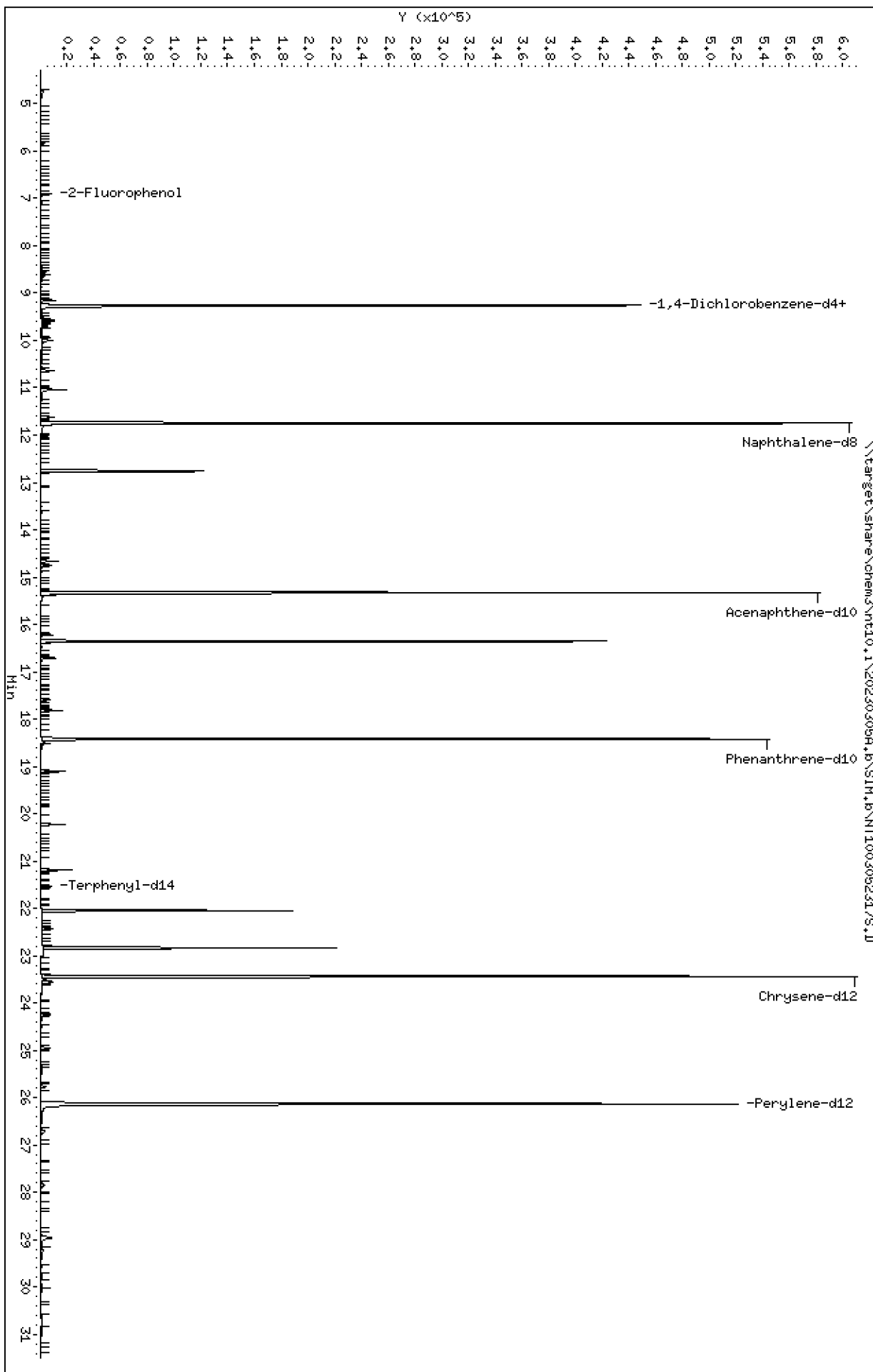
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

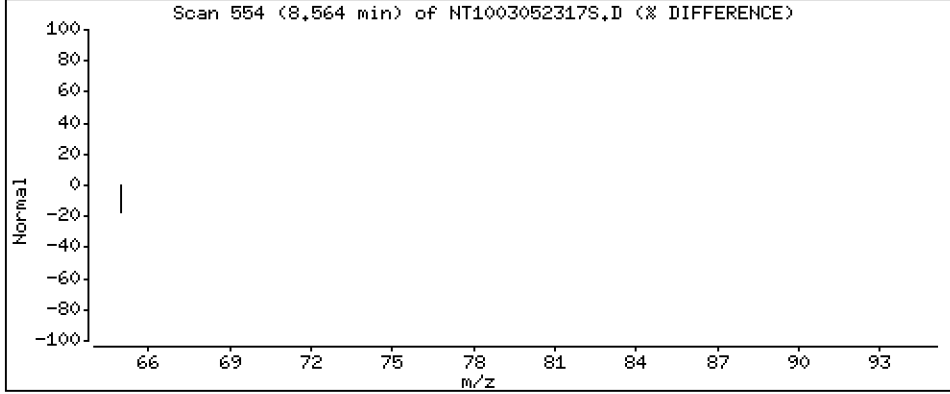
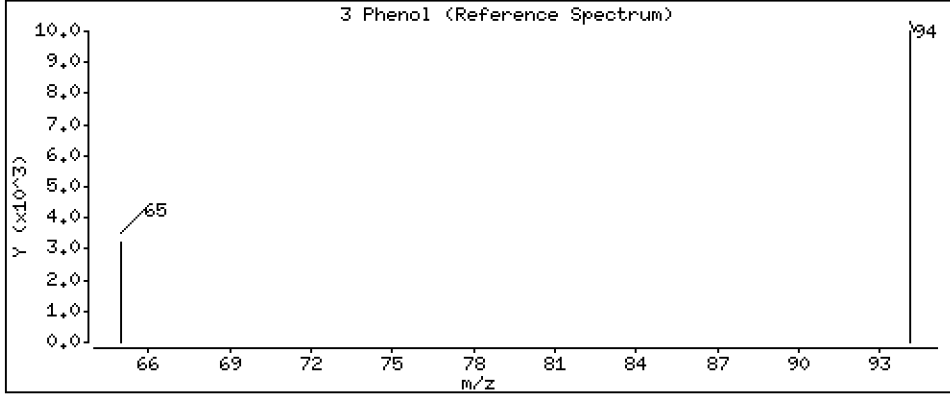
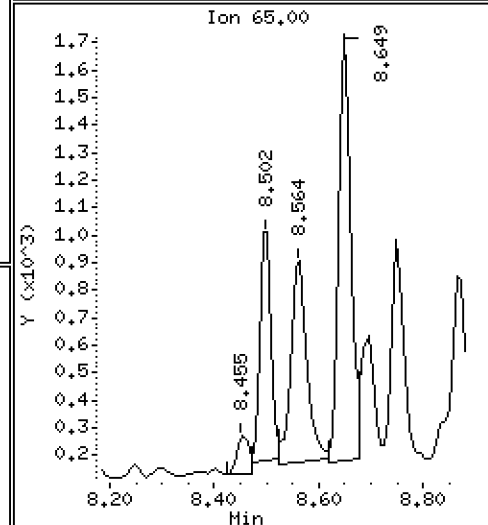
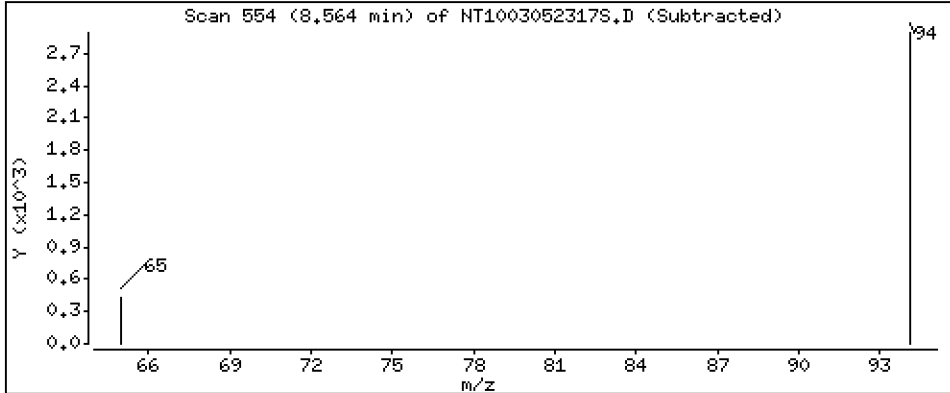
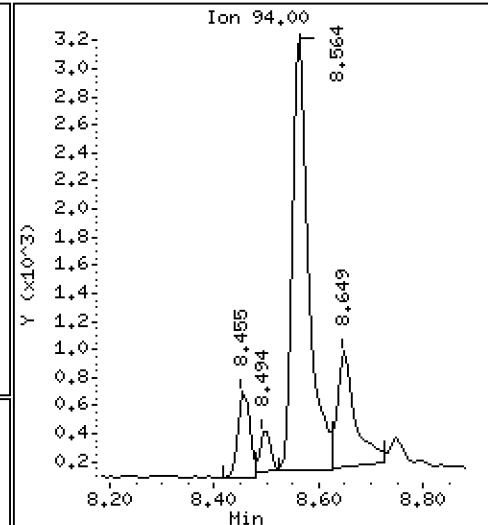
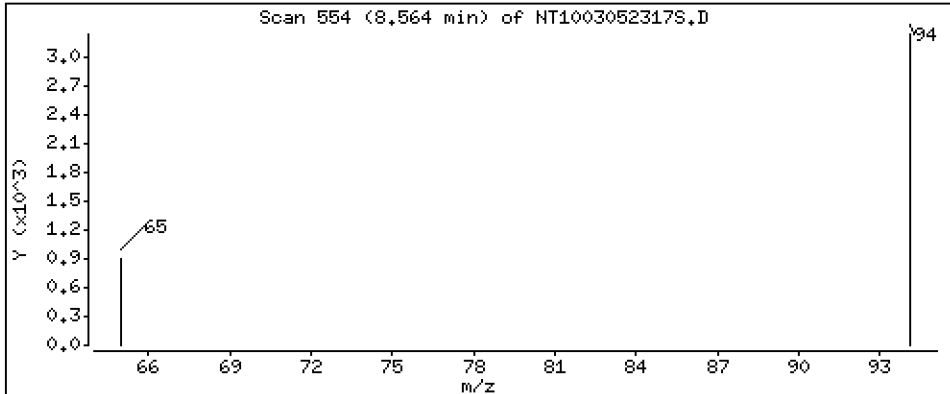
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

3 Phenol

Concentration: 0.06034 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

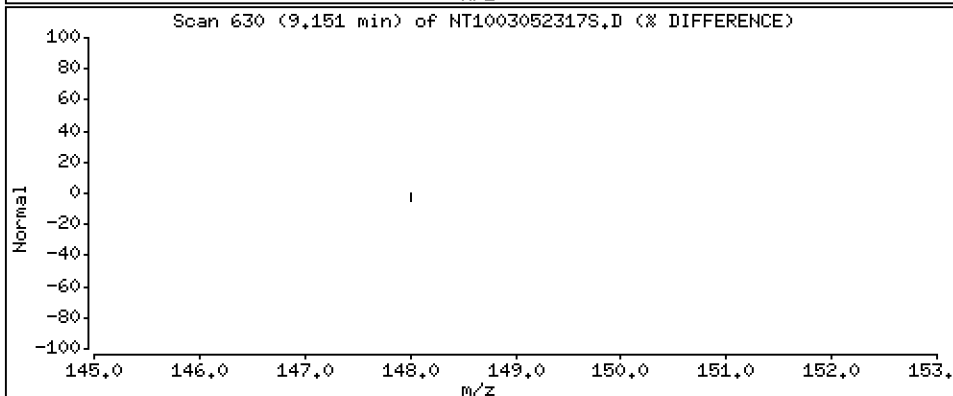
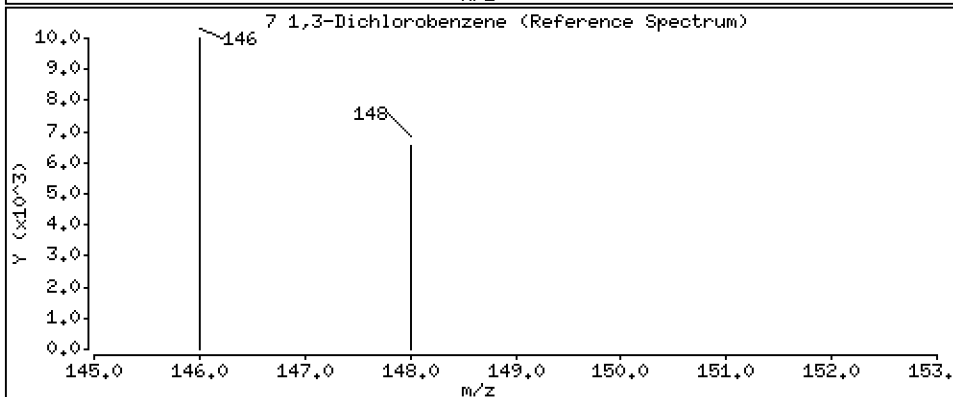
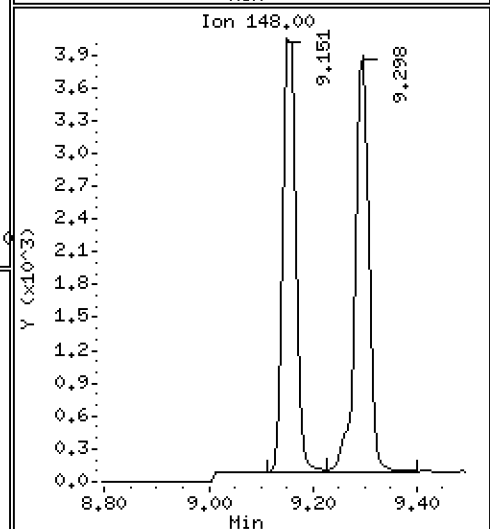
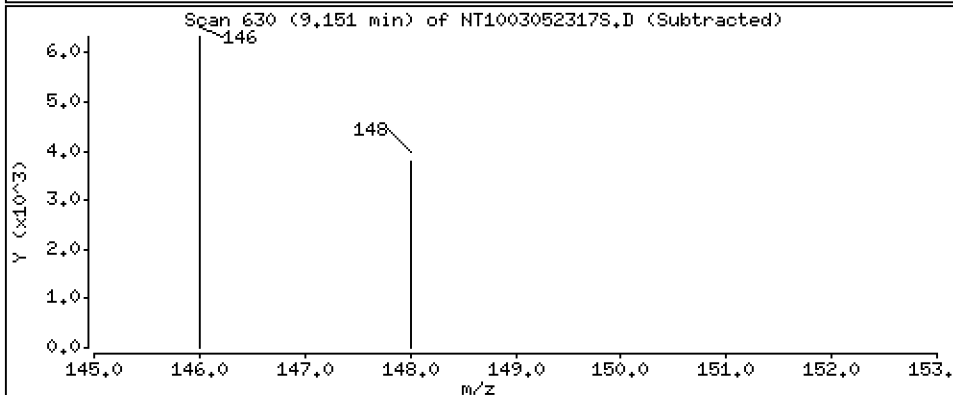
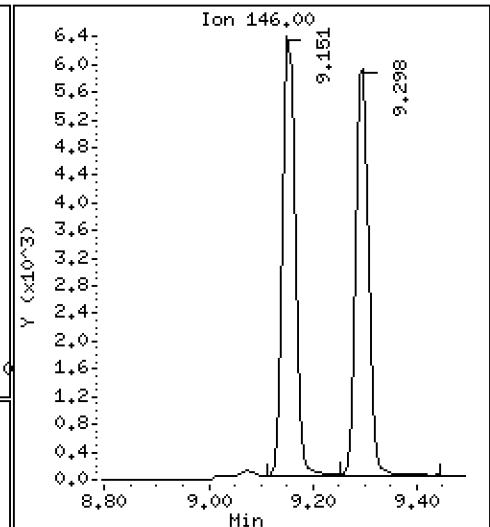
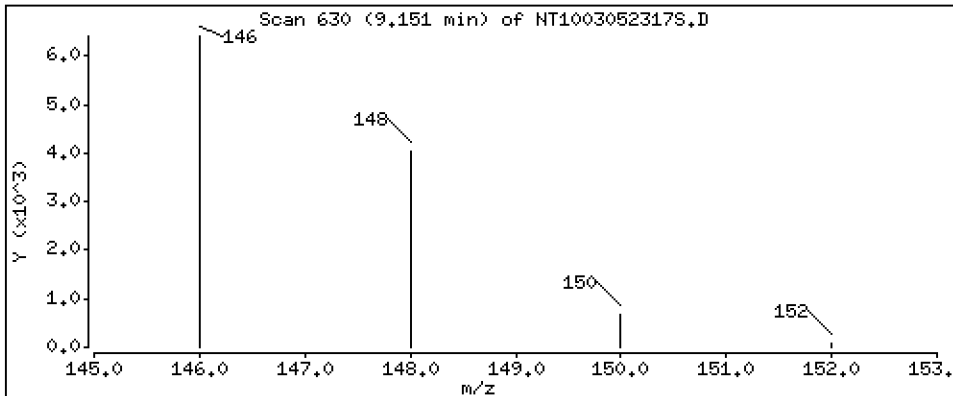
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,1006 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

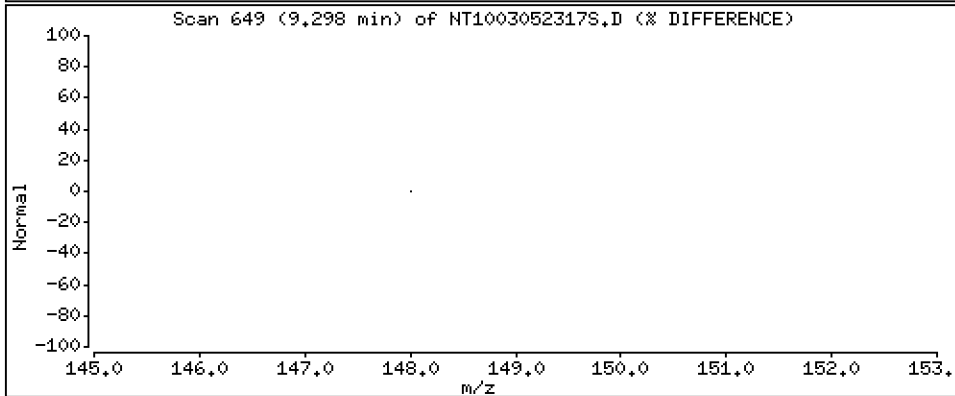
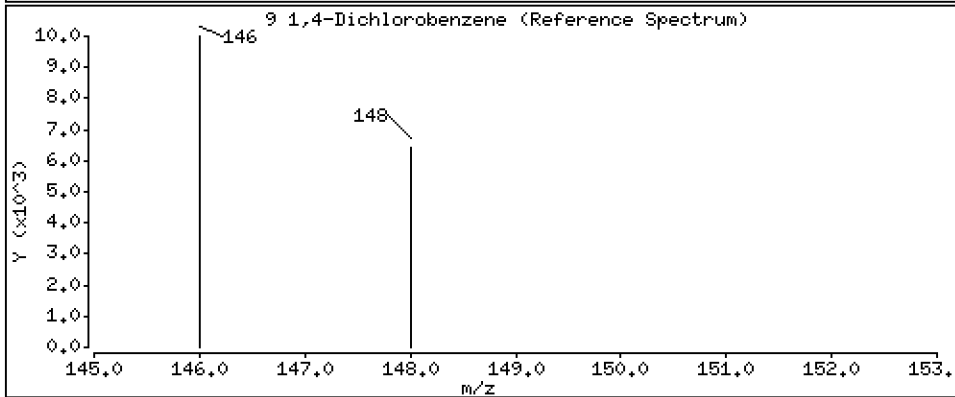
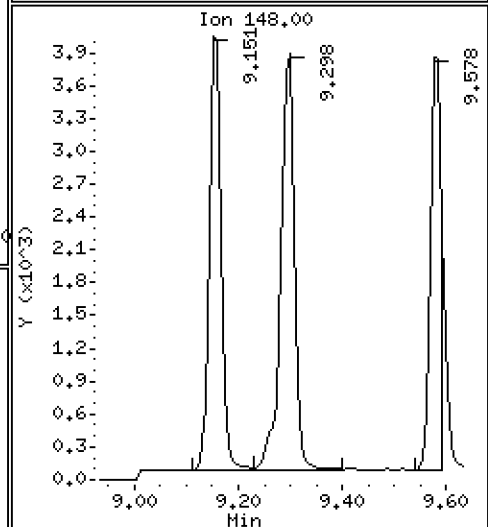
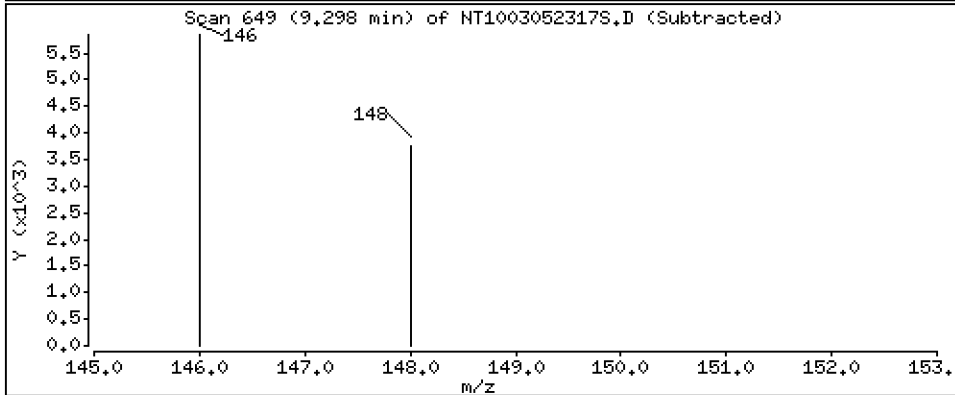
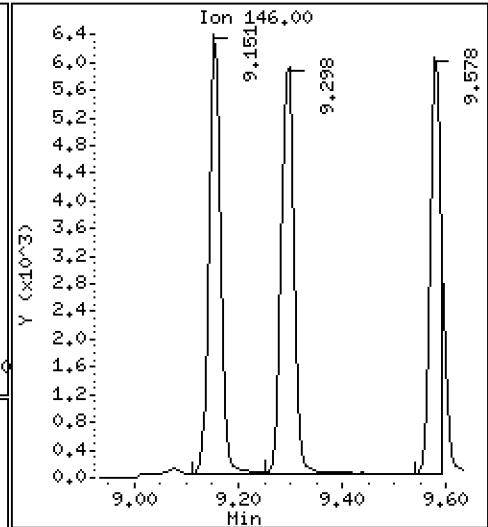
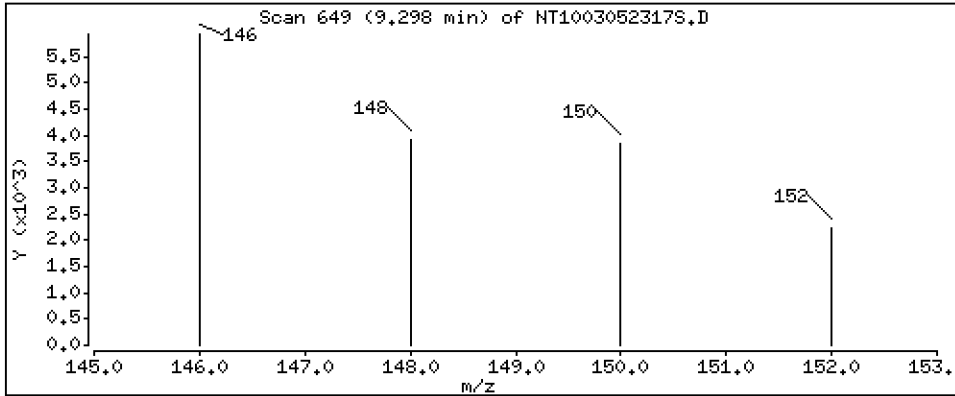
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,09864 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

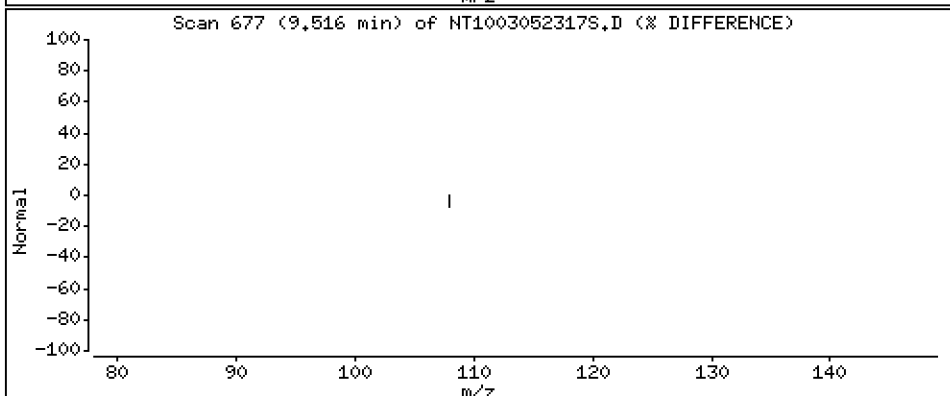
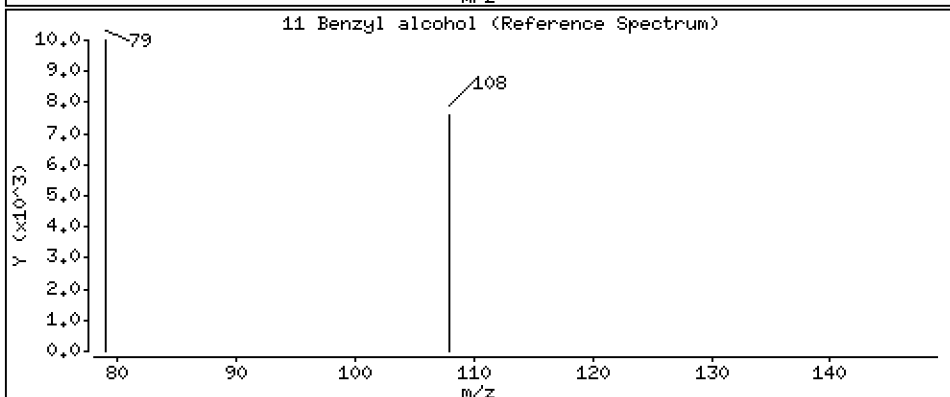
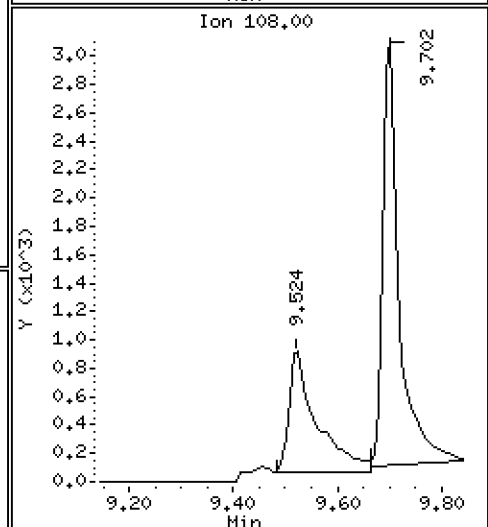
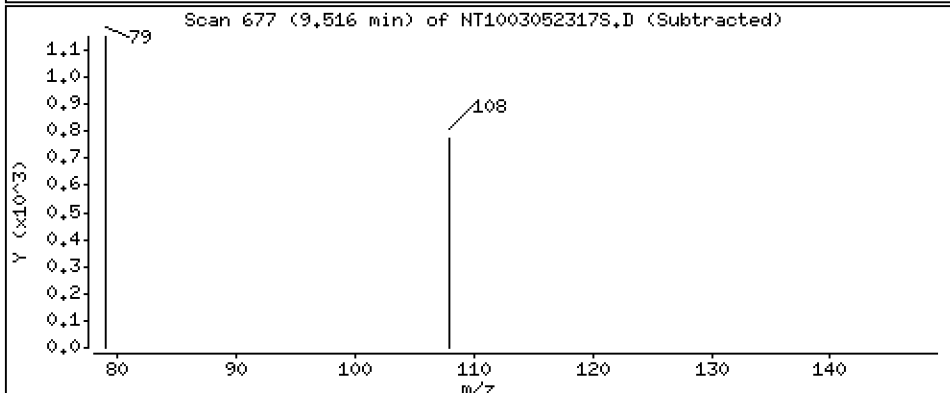
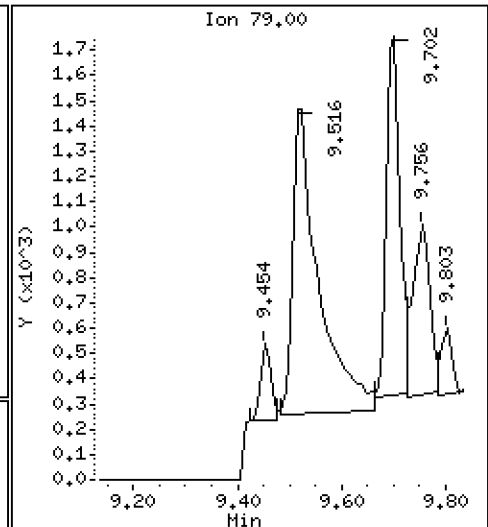
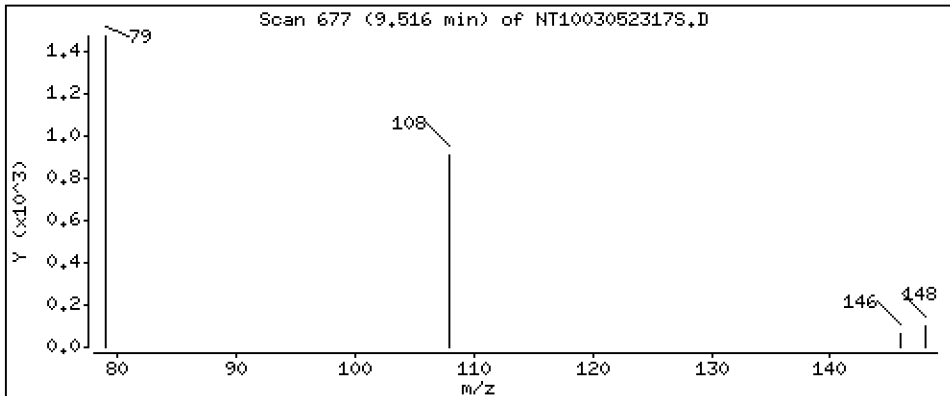
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.06656 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

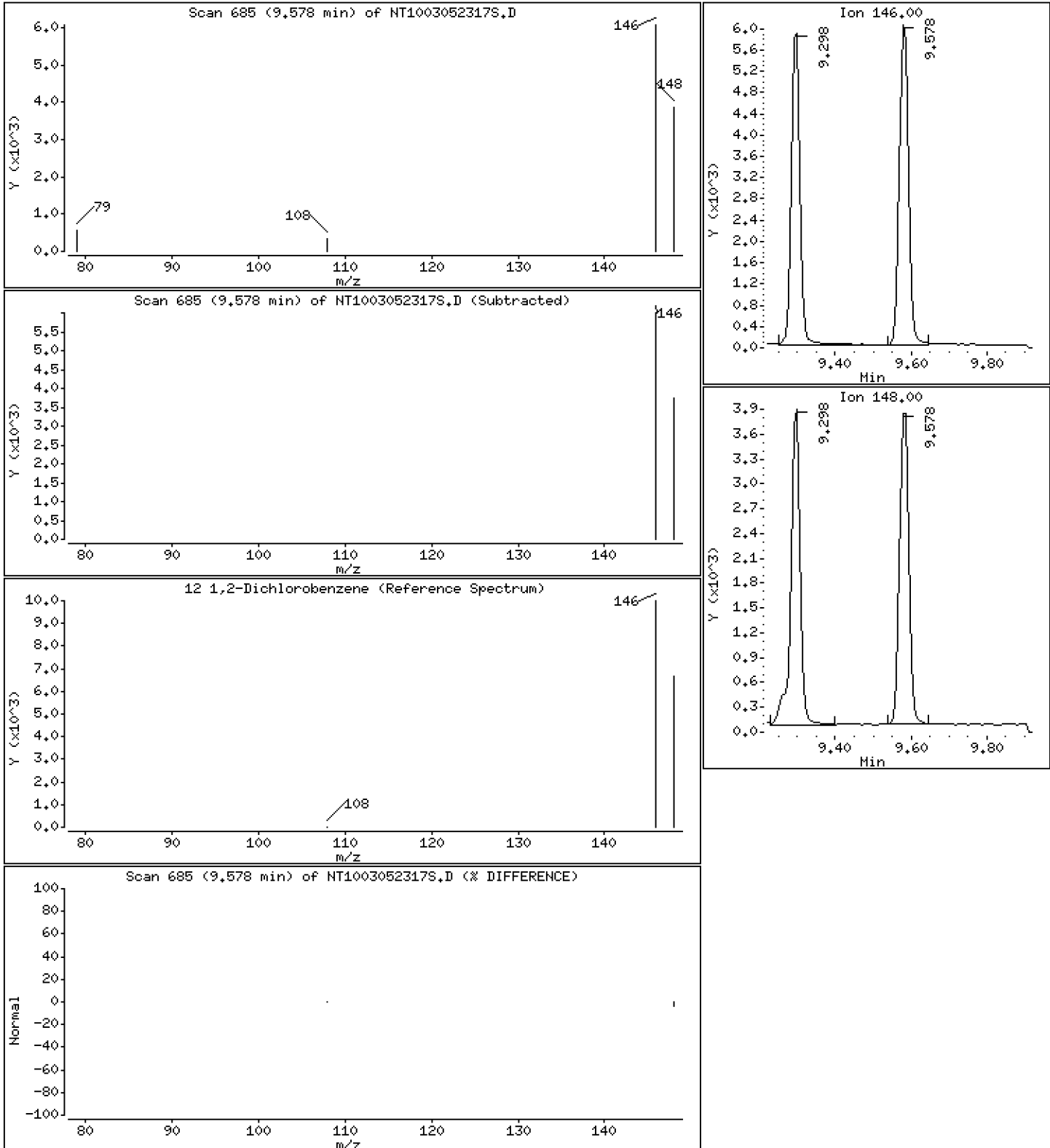
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,1021 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

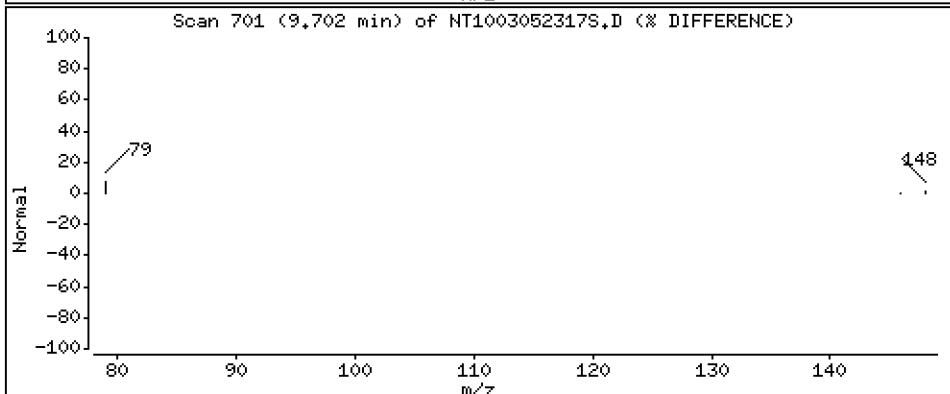
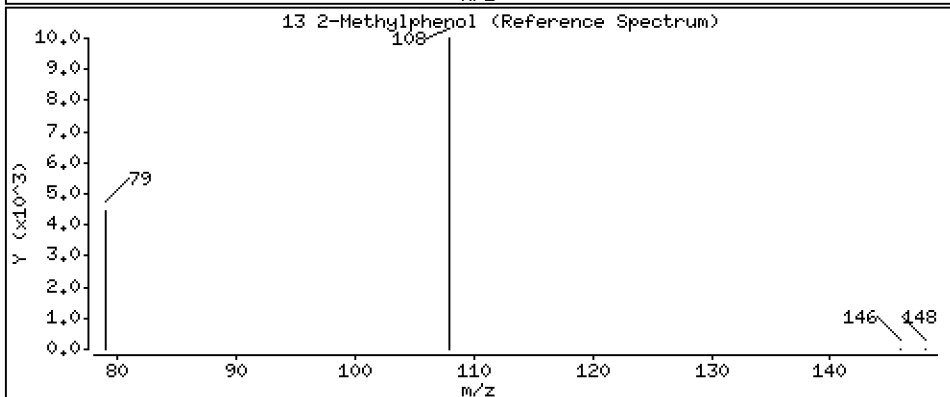
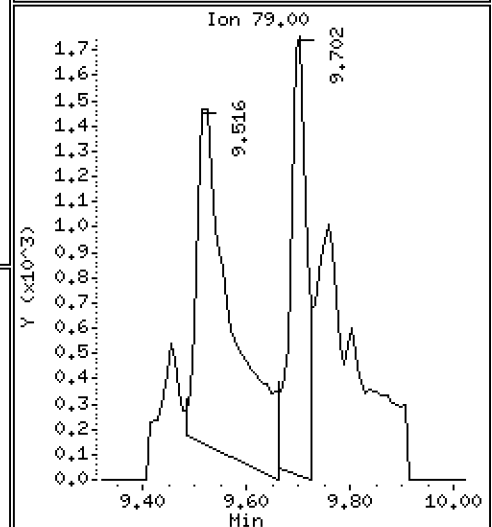
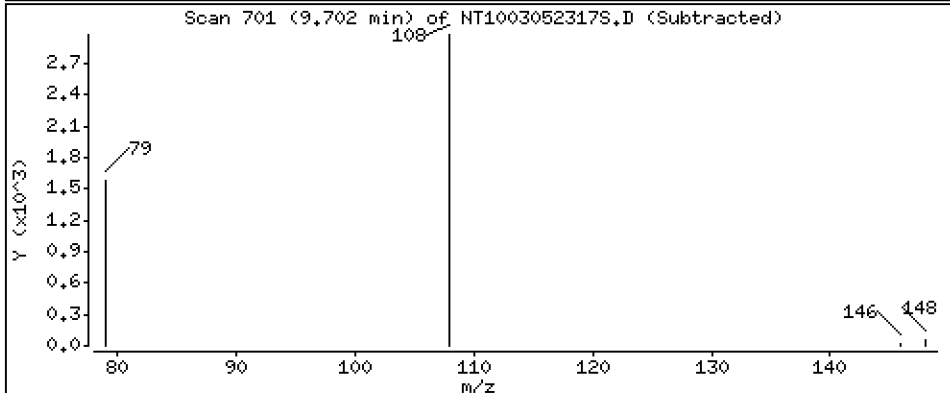
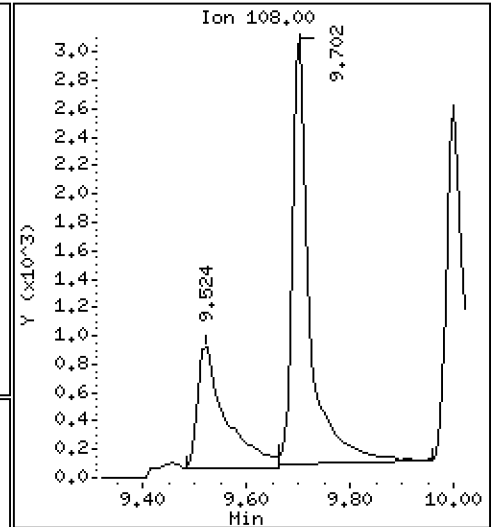
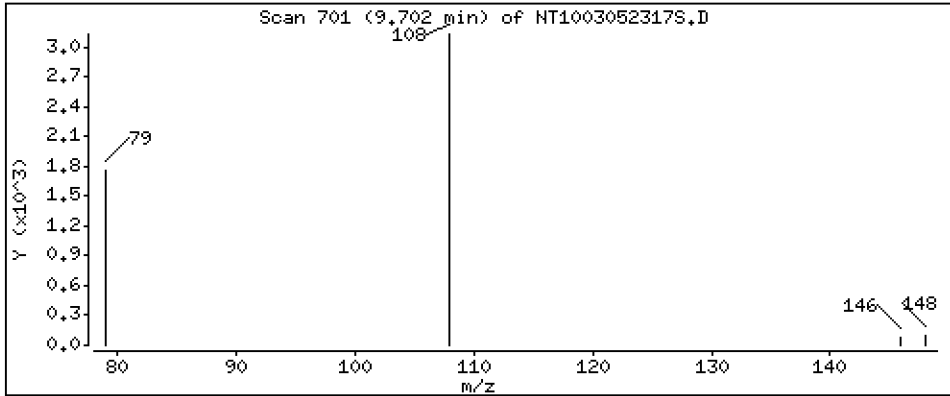
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,1029 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

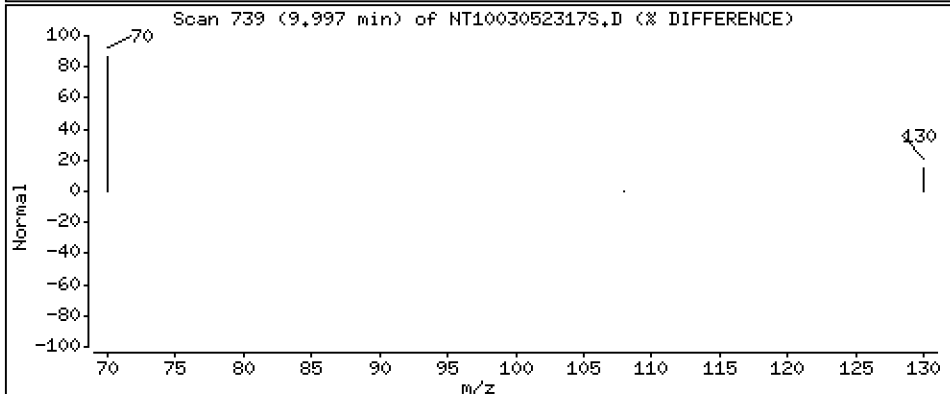
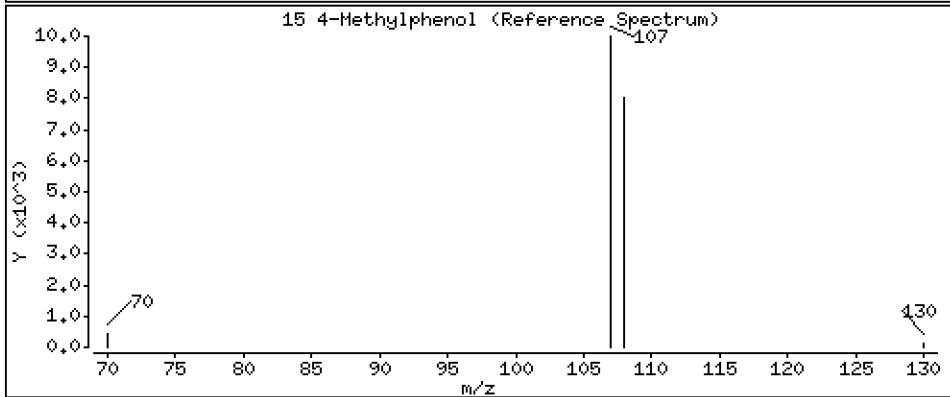
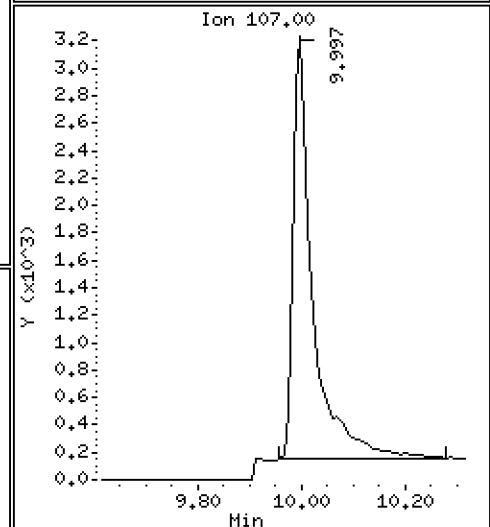
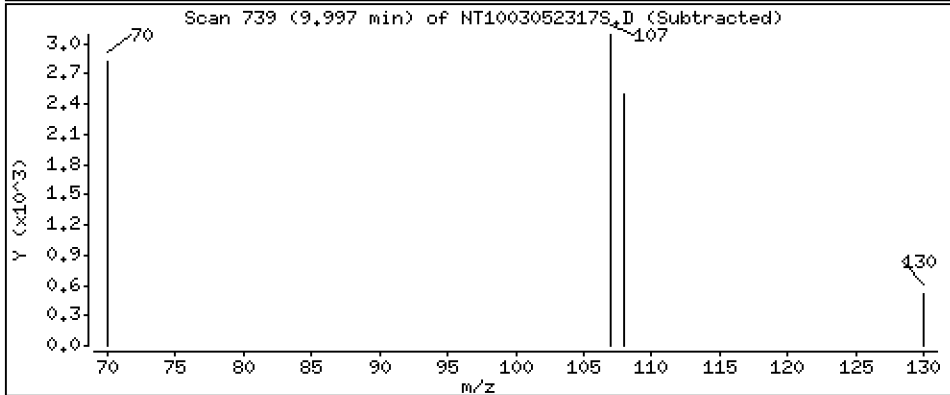
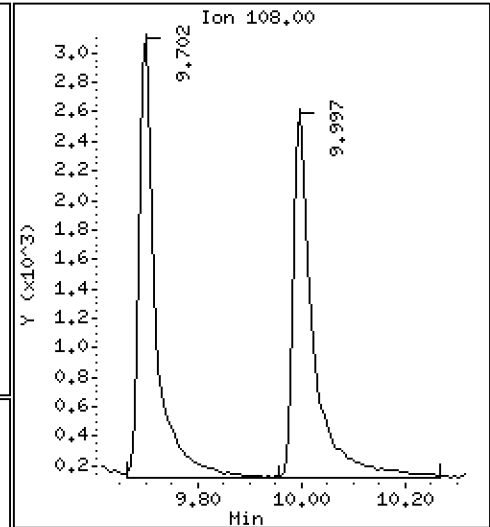
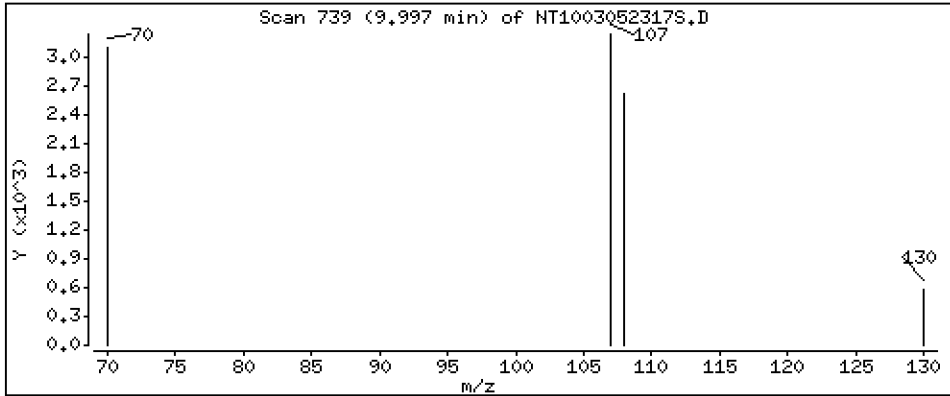
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,09421 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

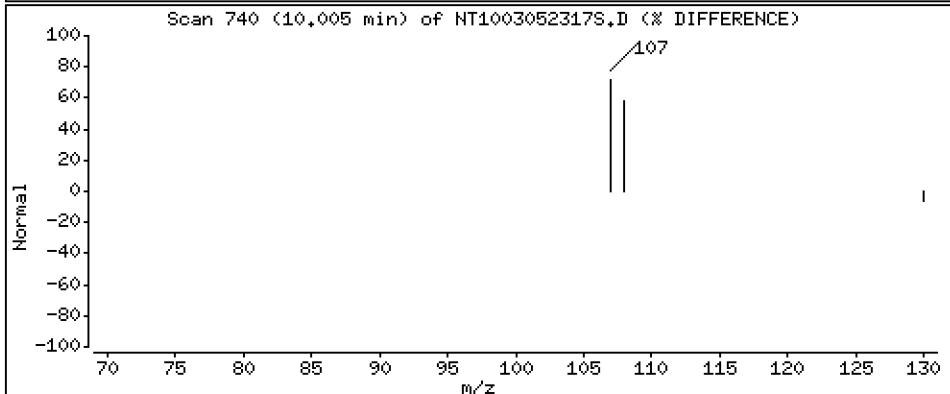
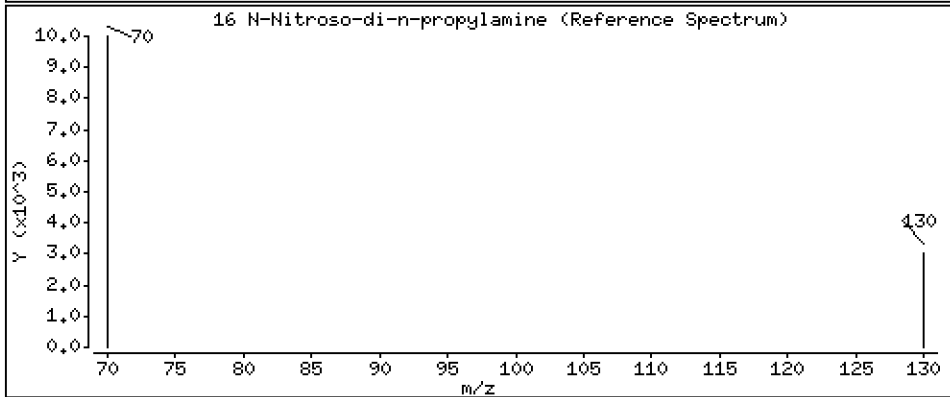
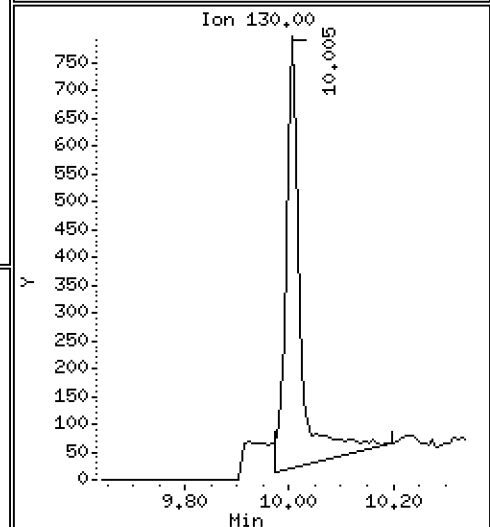
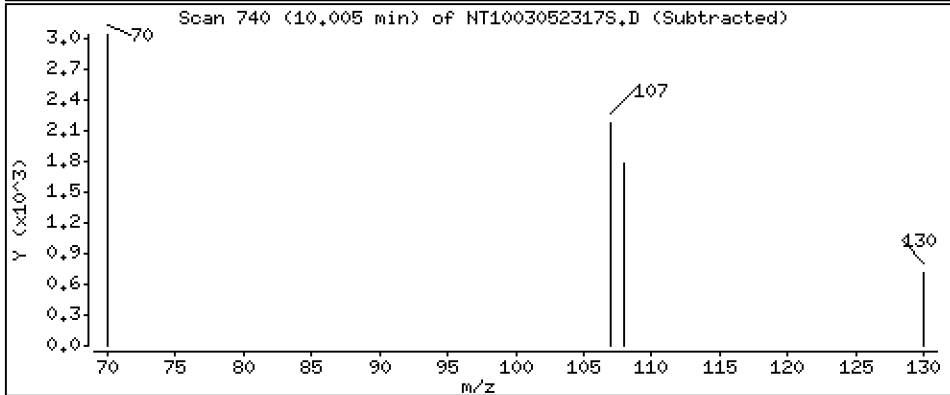
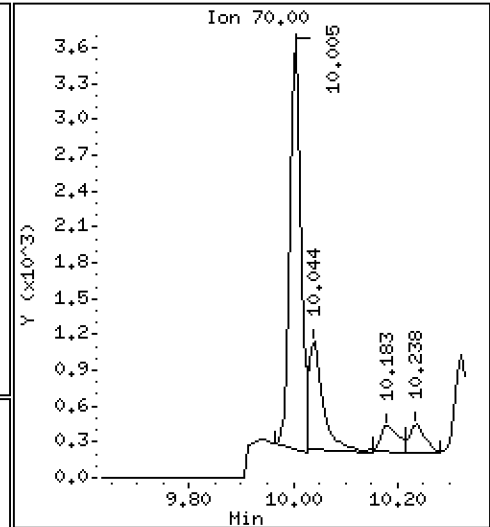
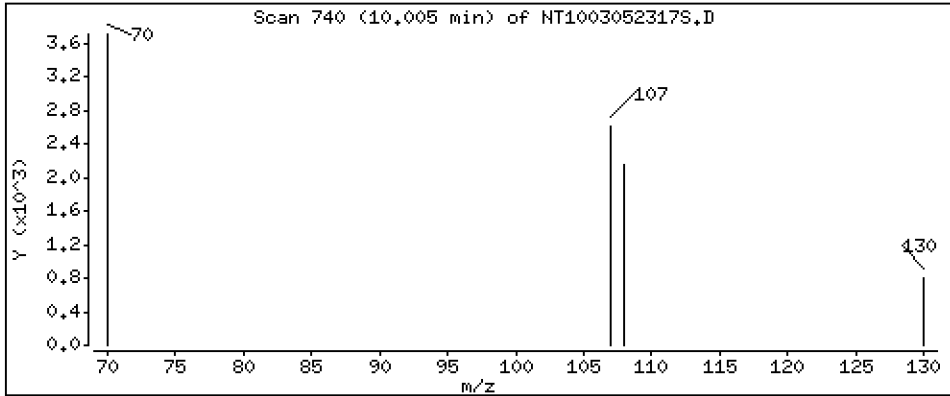
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,1050 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

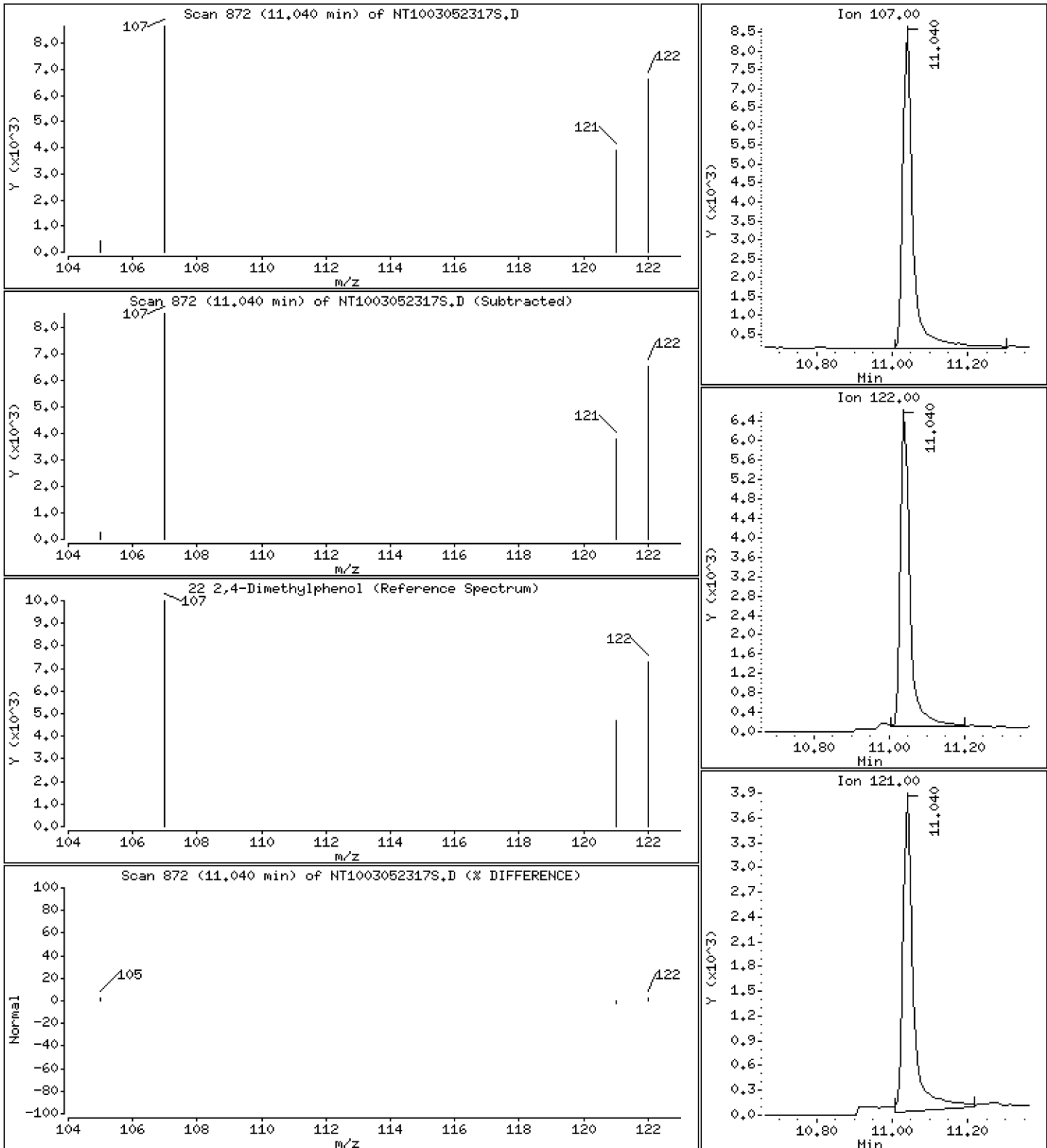
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.1921 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

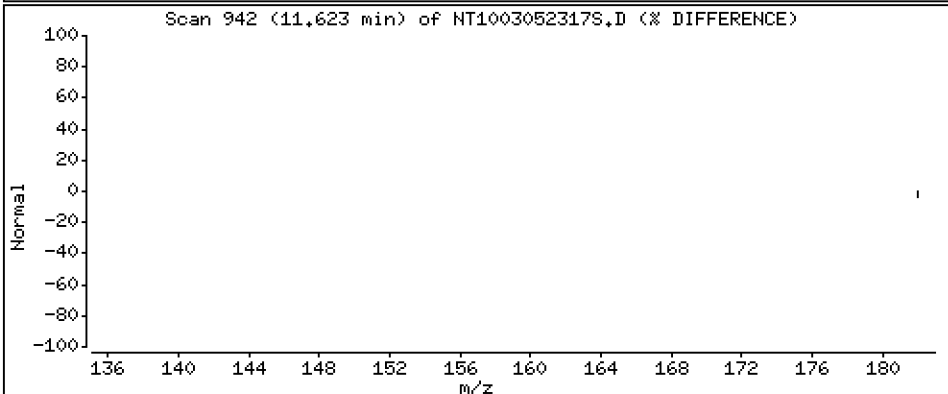
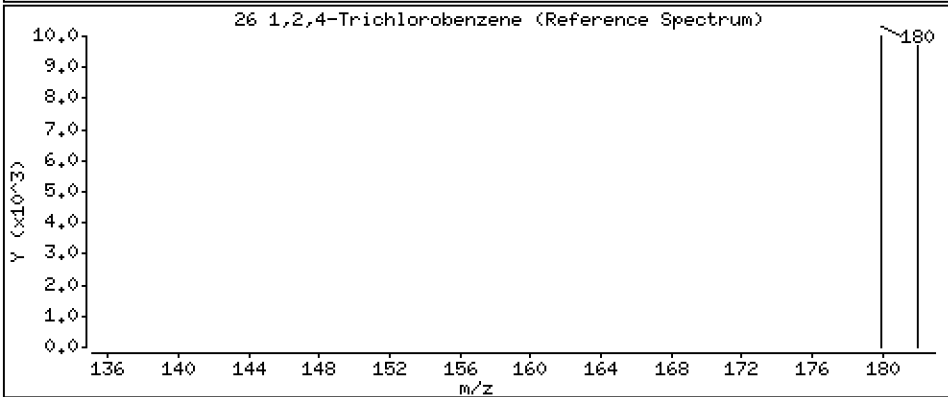
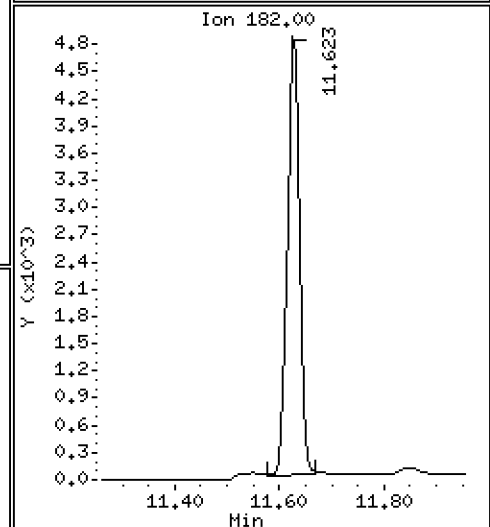
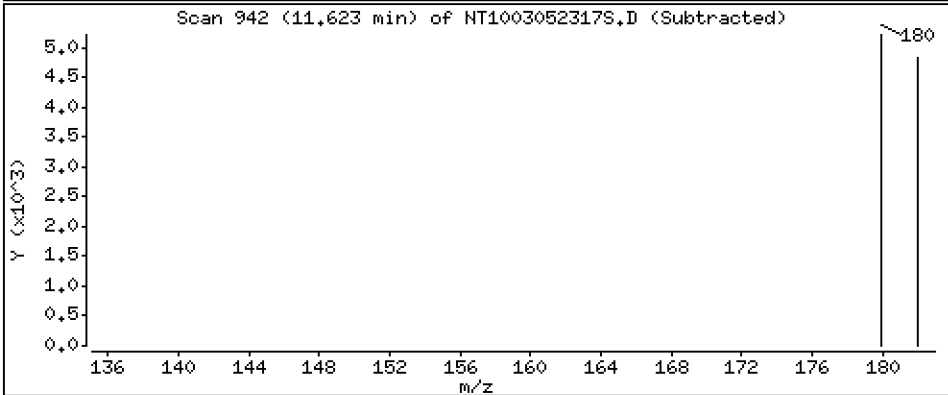
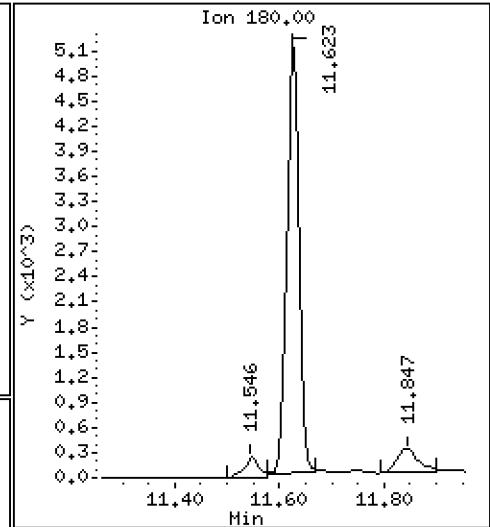
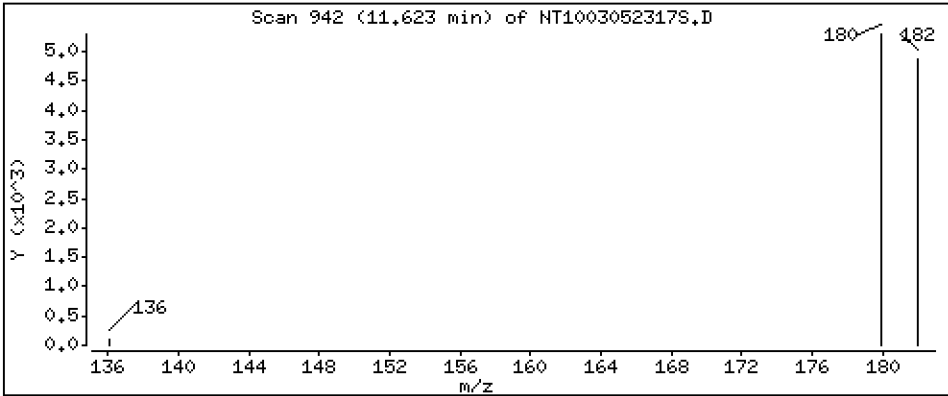
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

26 1,2,4-Trichlorobenzene

Concentration: 0.1201 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

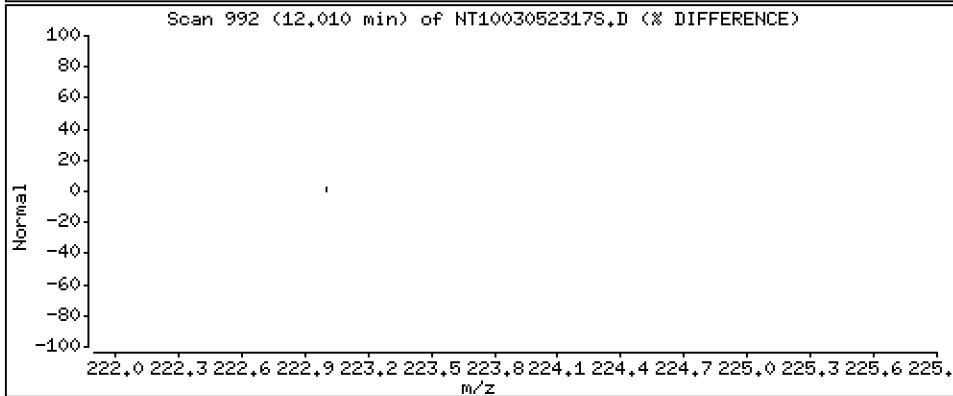
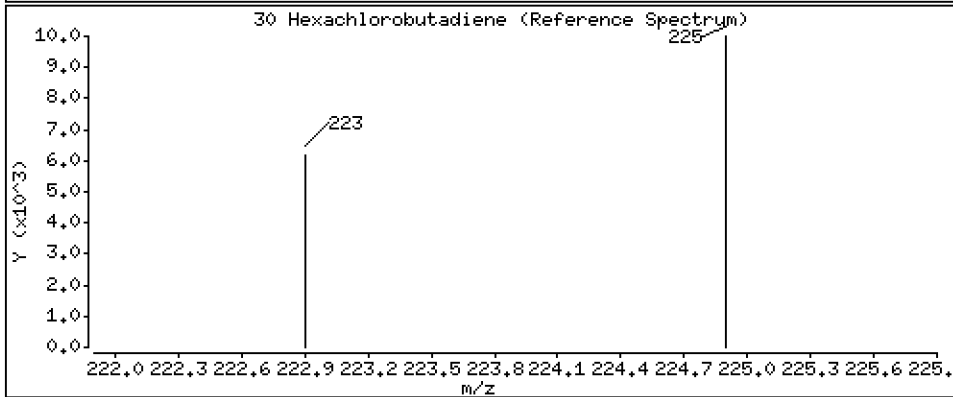
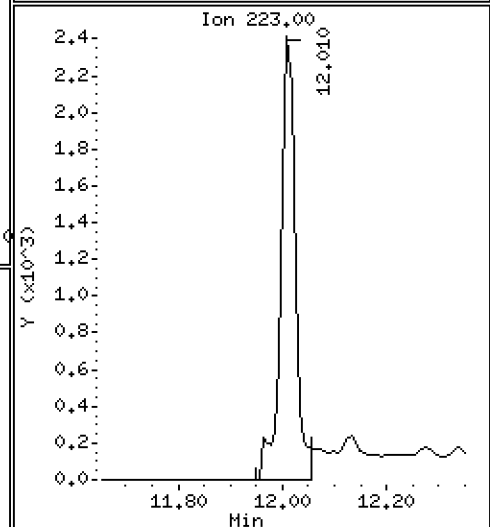
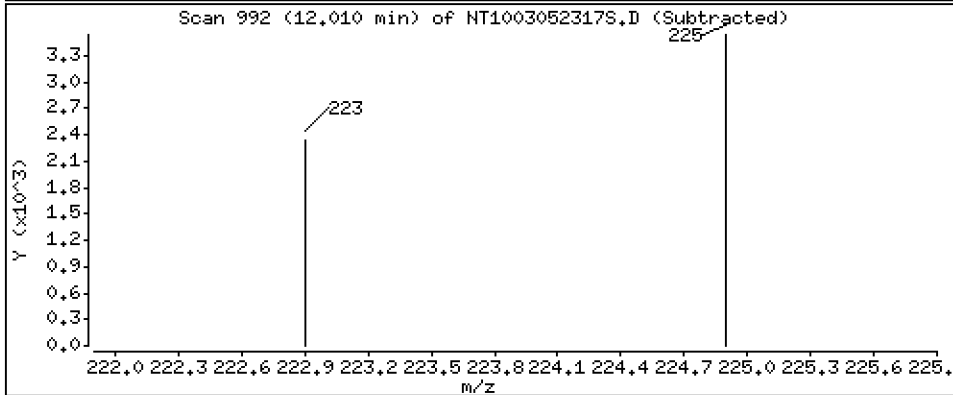
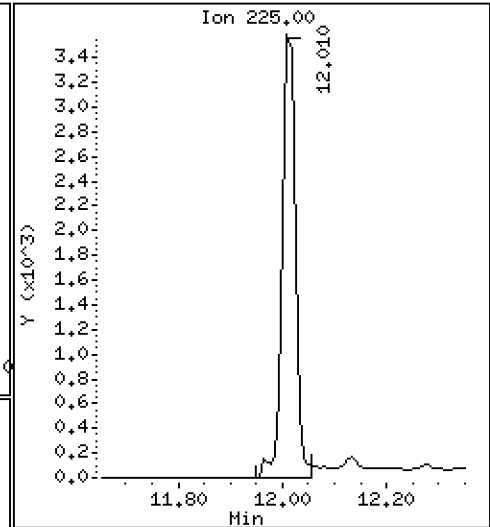
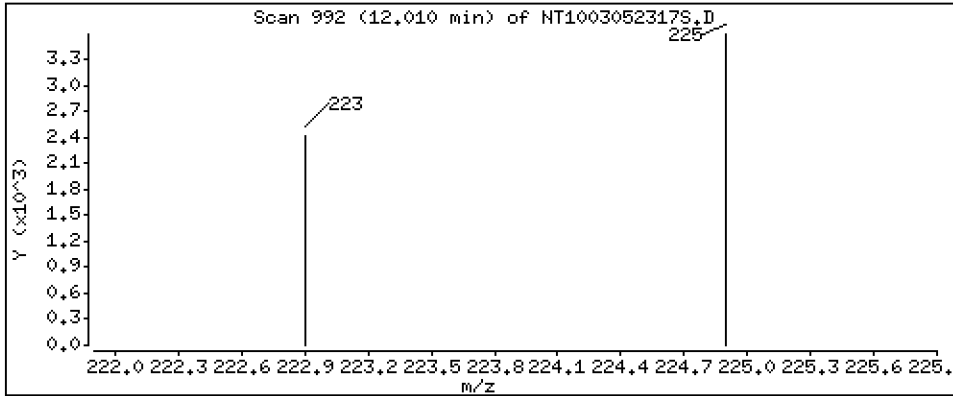
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1238 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

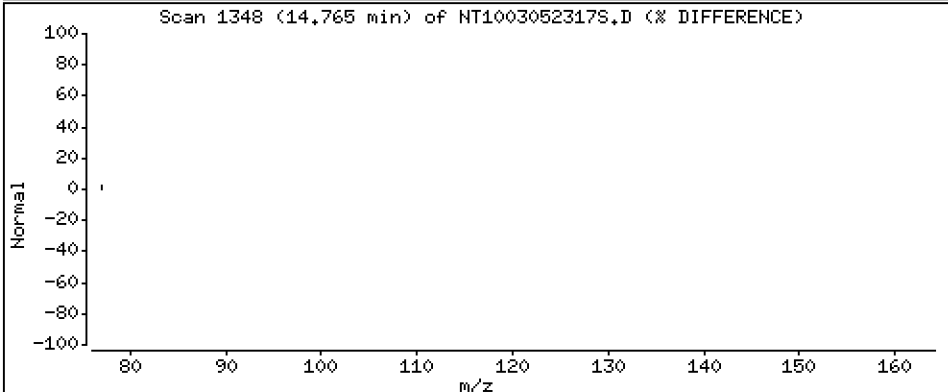
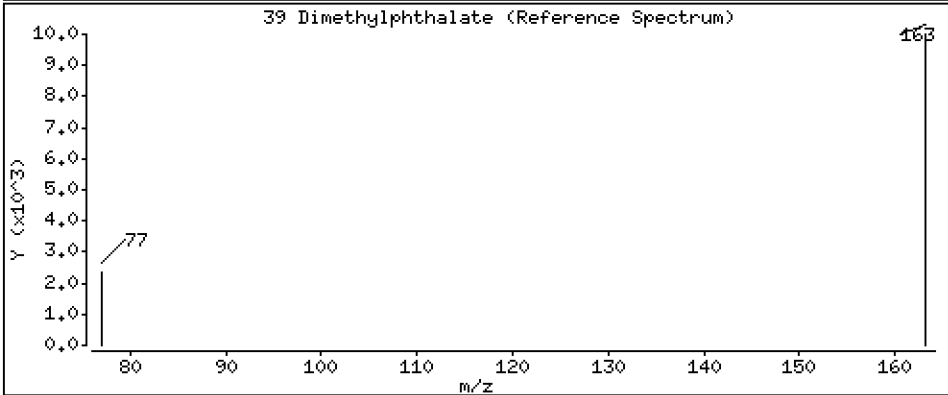
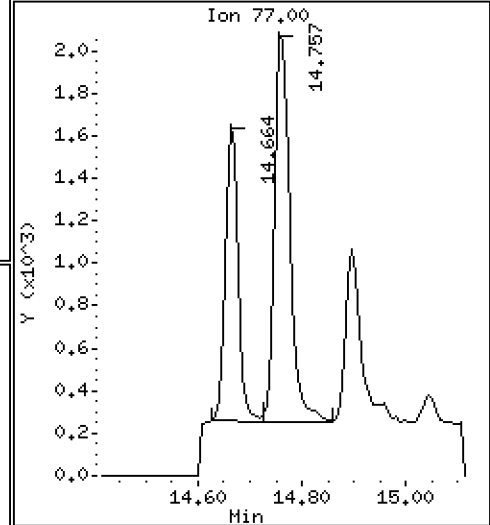
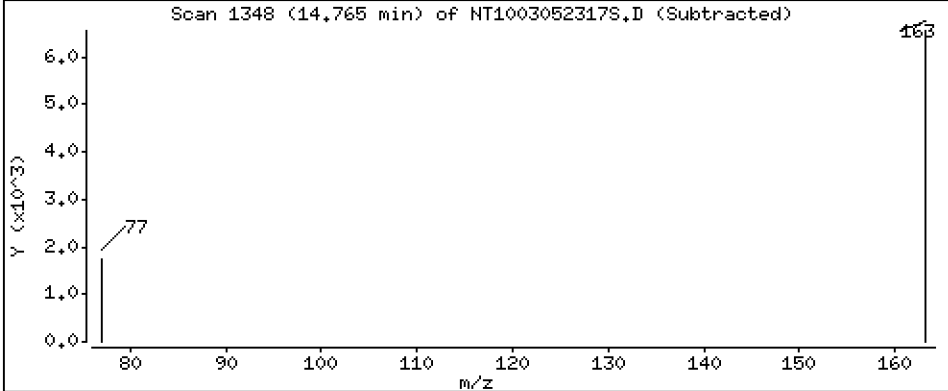
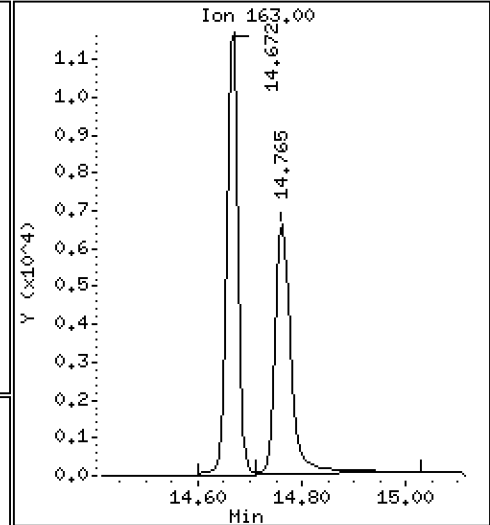
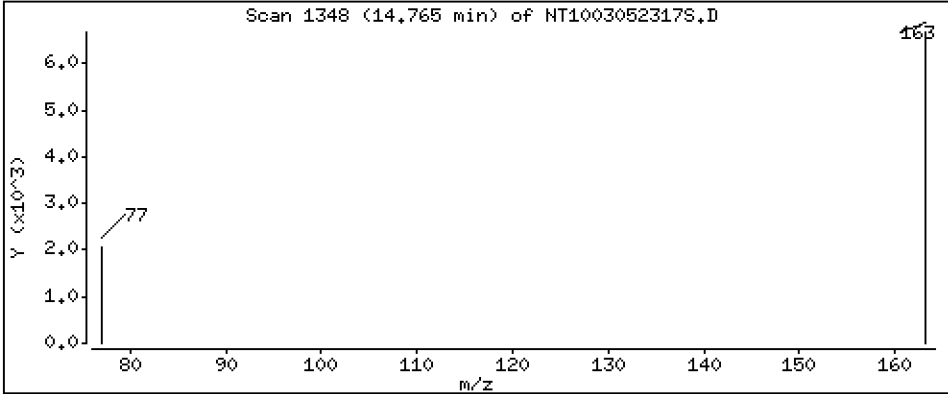
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.09536 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

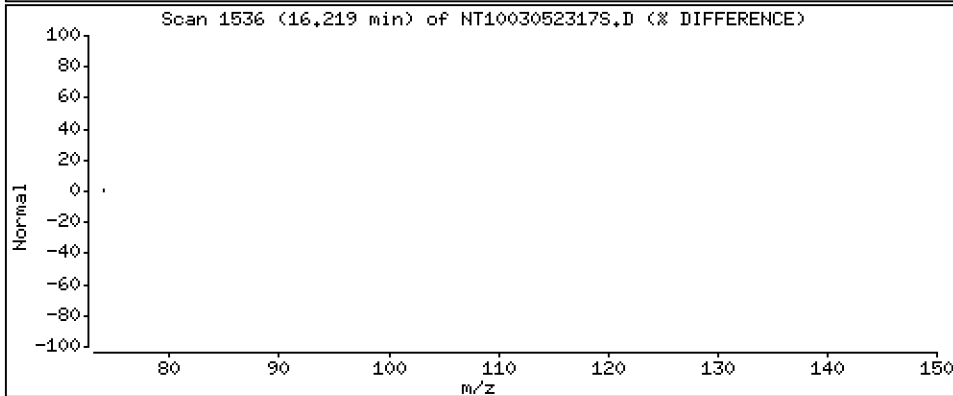
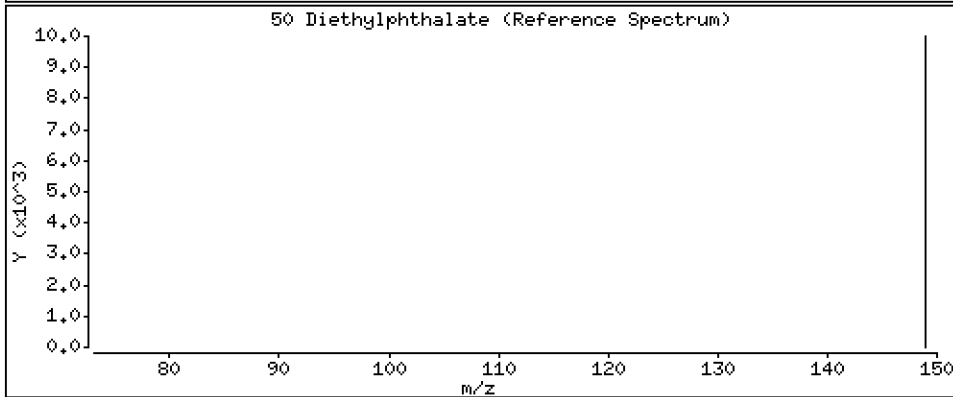
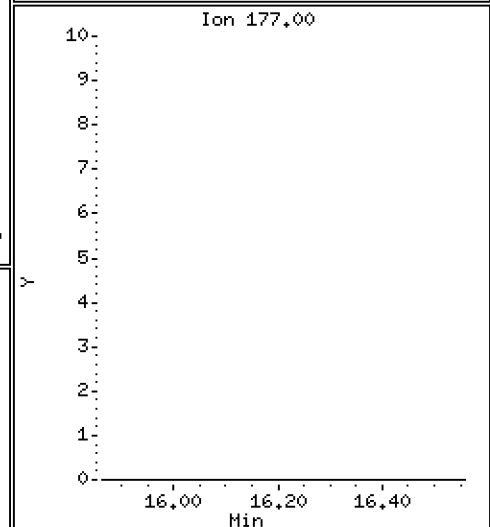
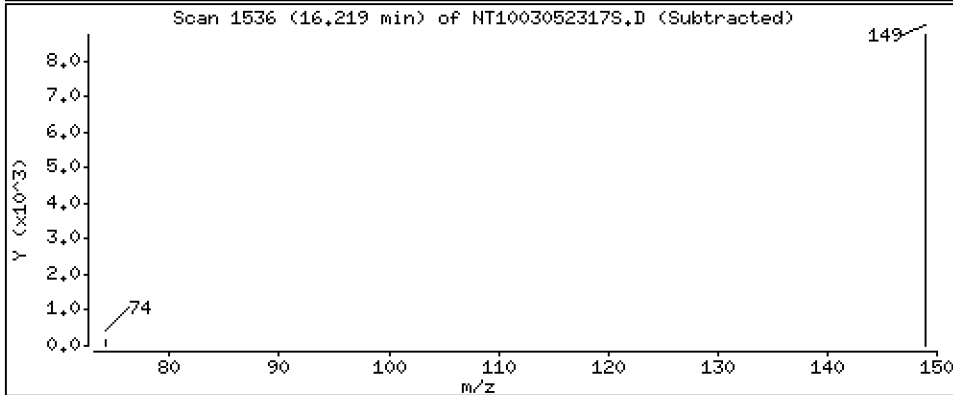
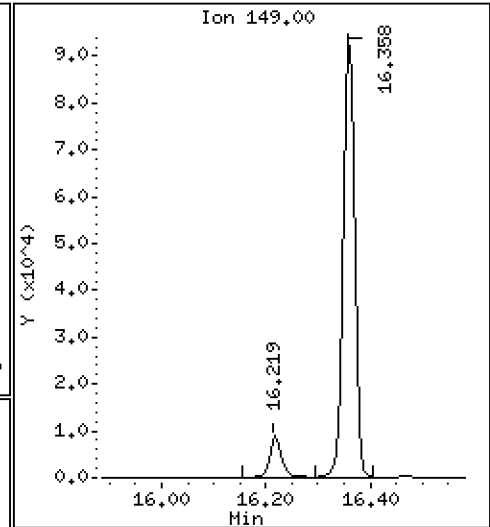
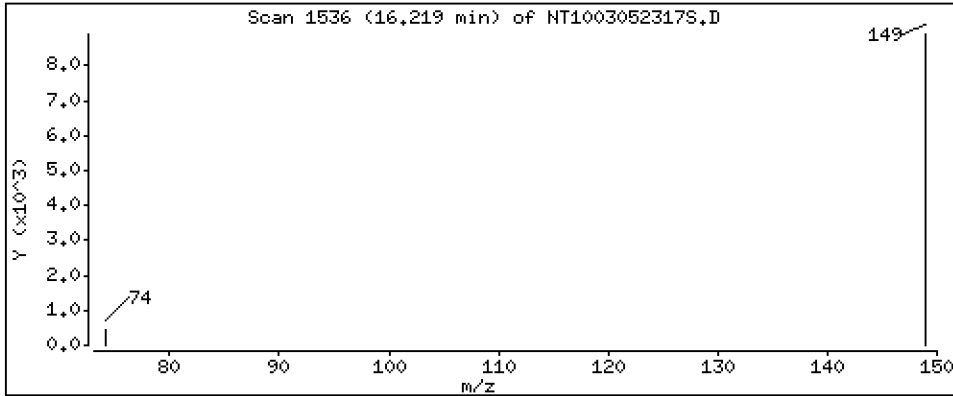
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1002 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

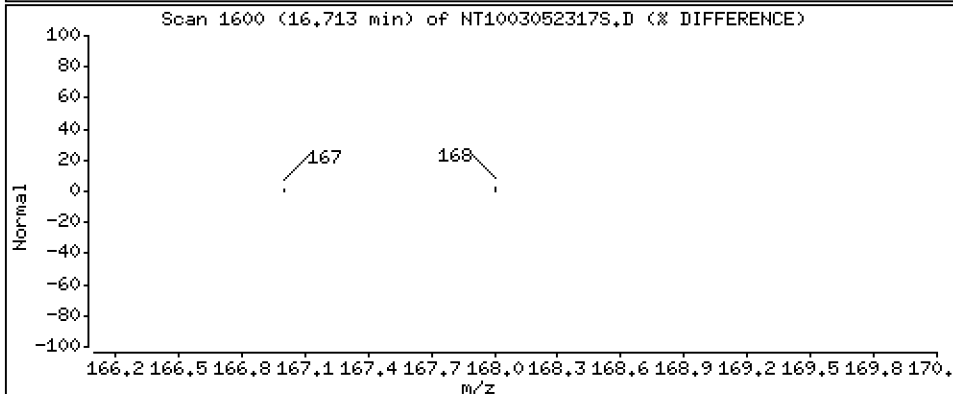
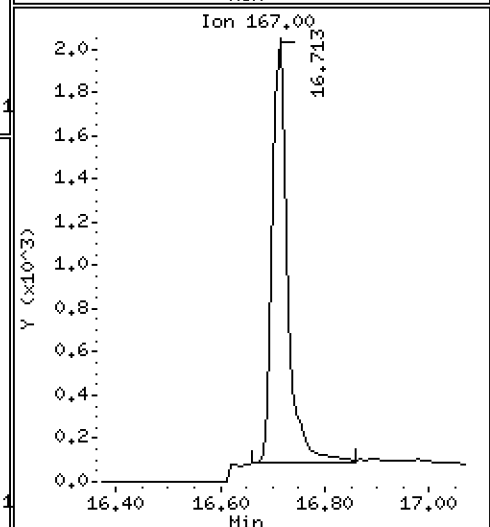
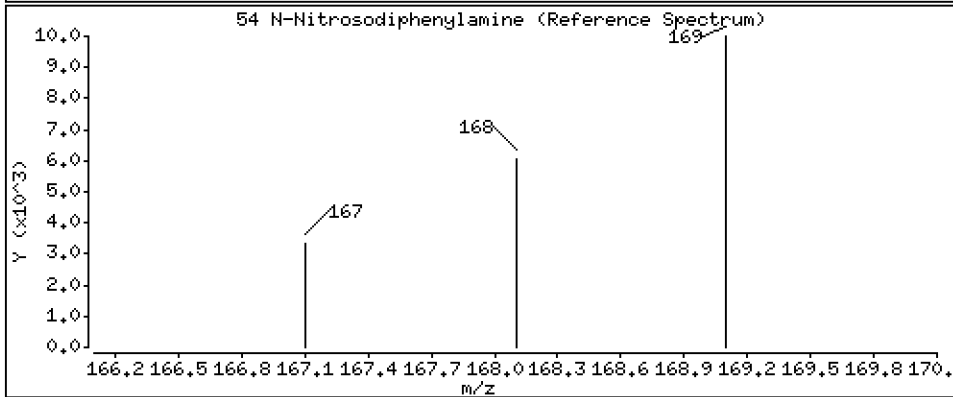
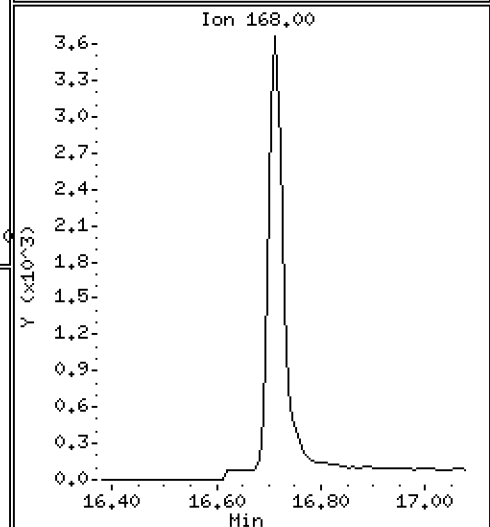
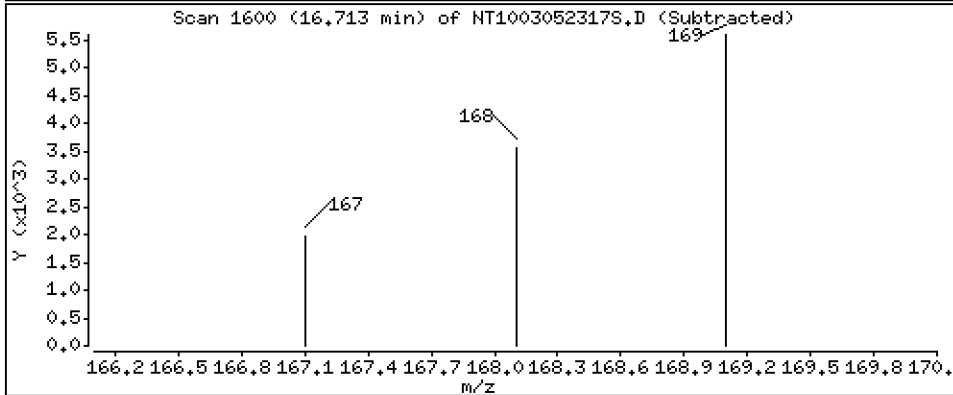
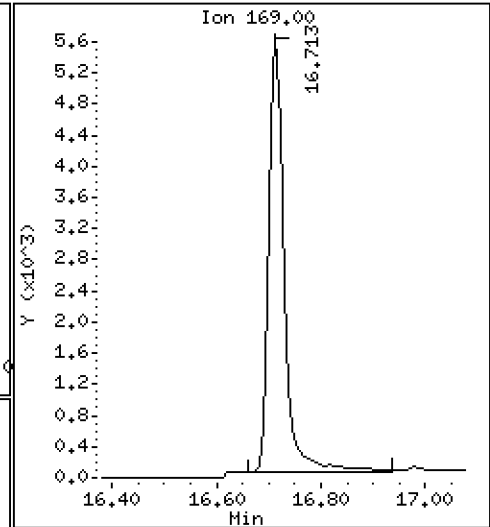
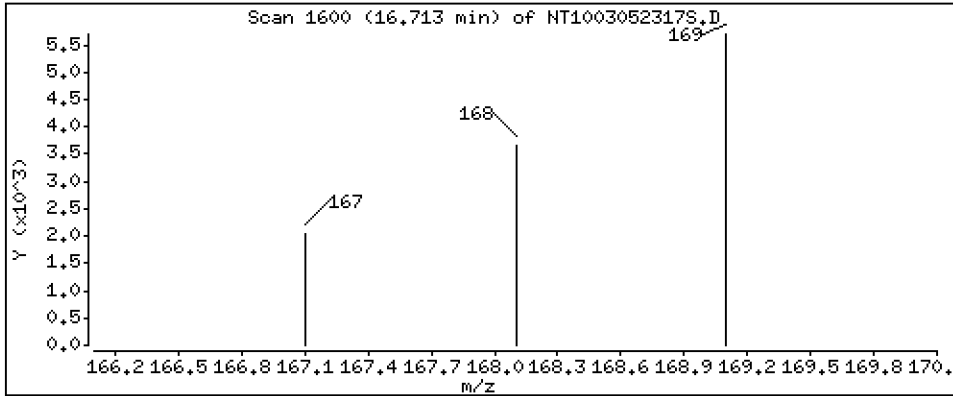
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,07909 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

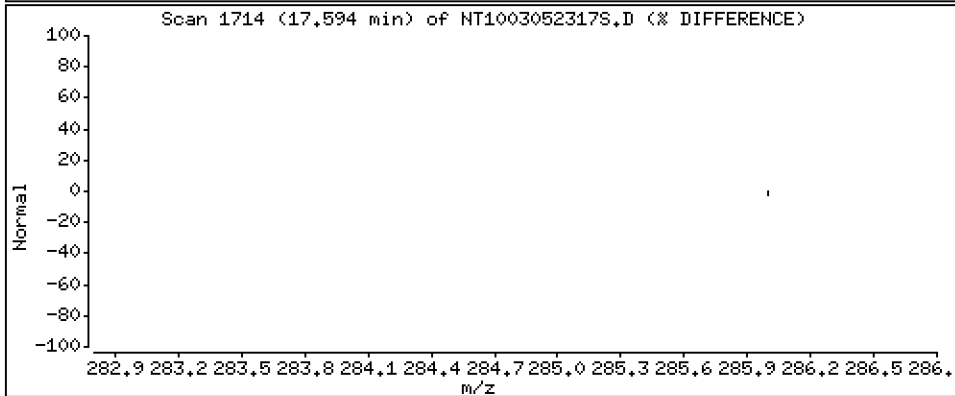
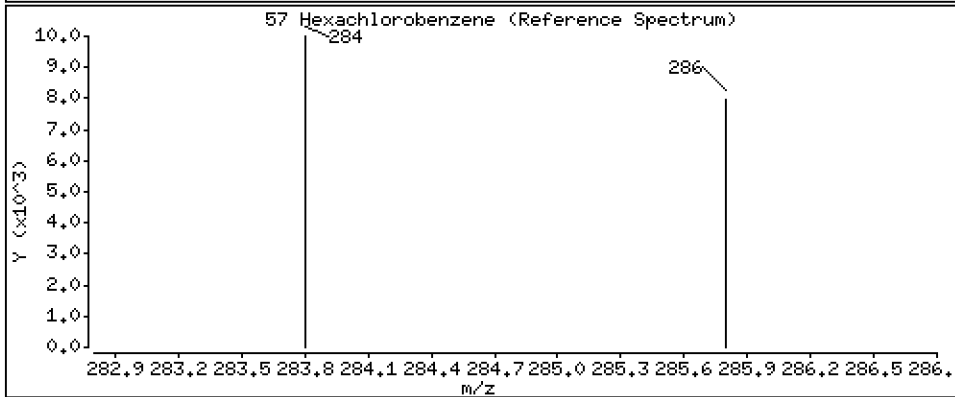
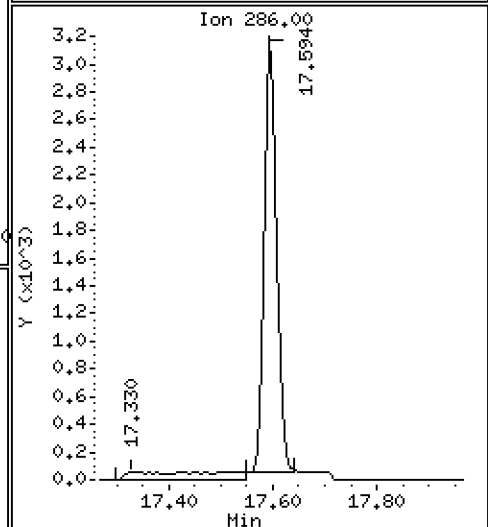
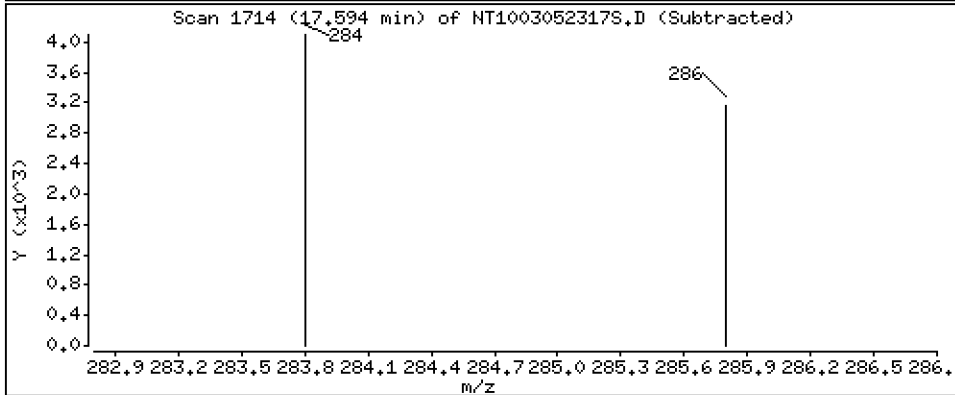
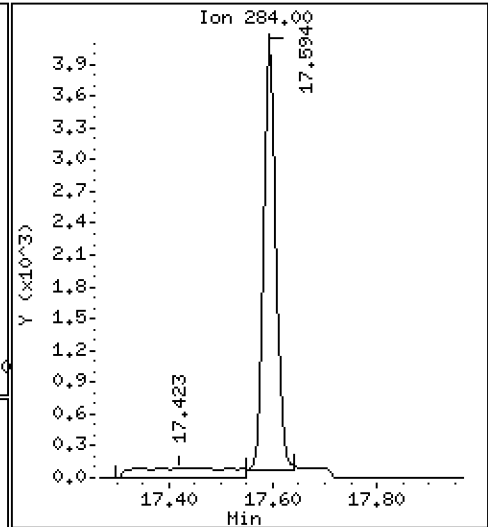
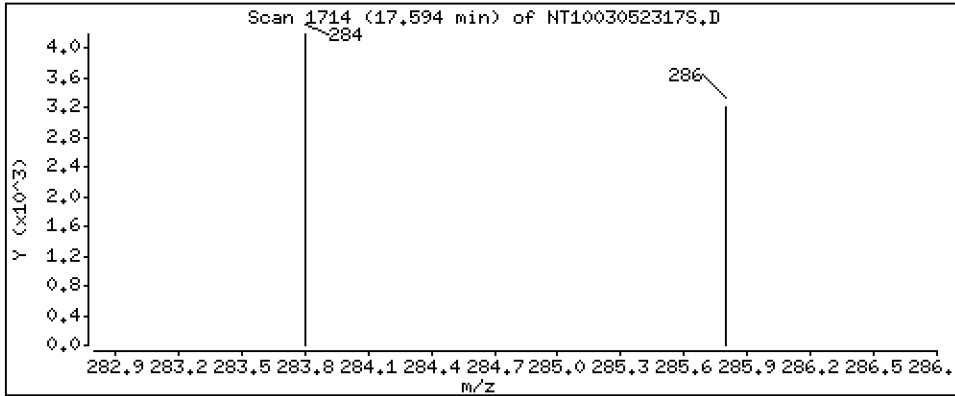
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,1025 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

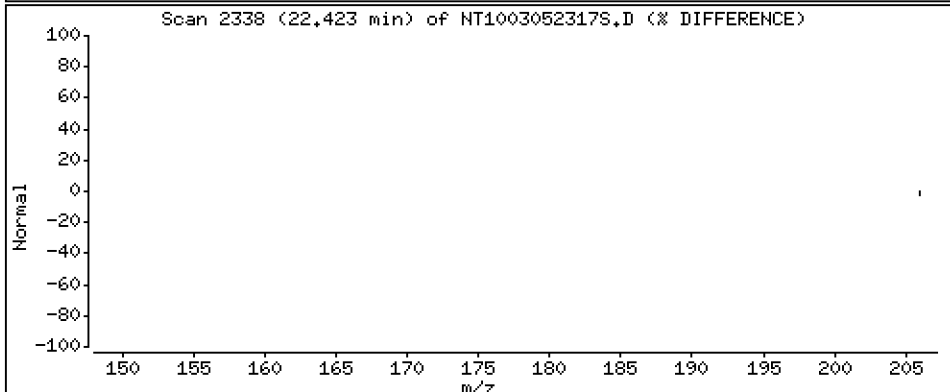
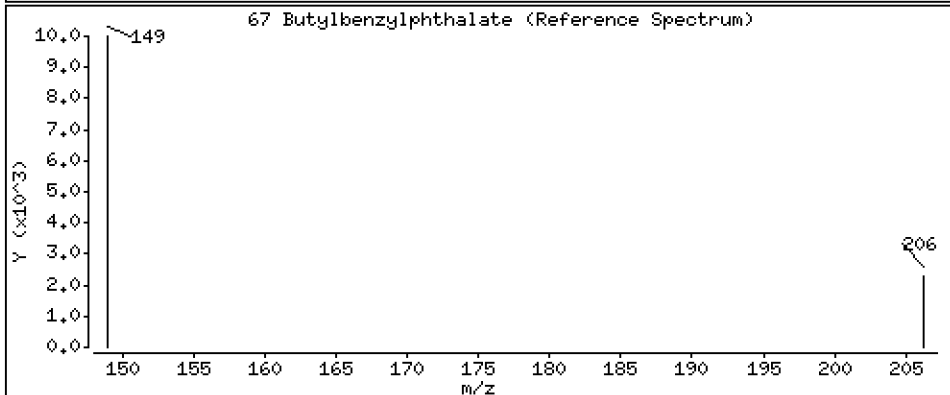
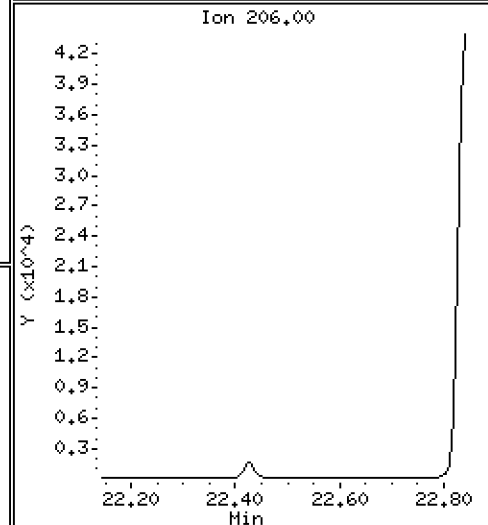
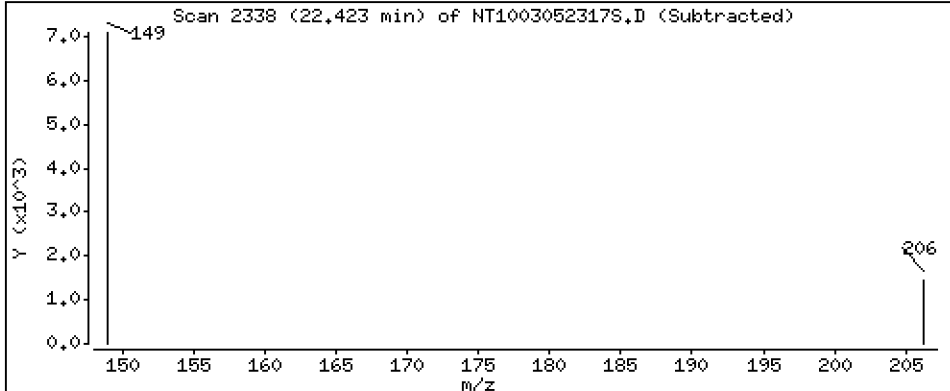
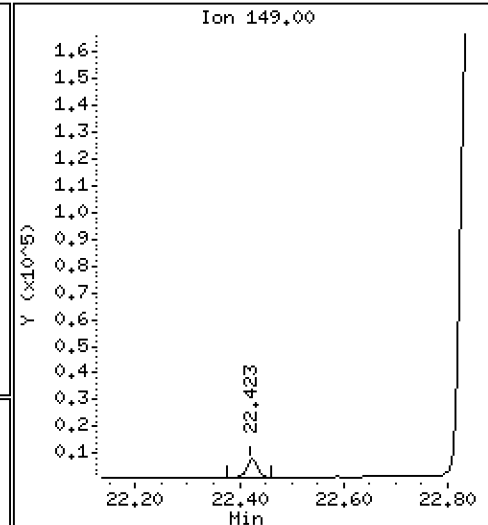
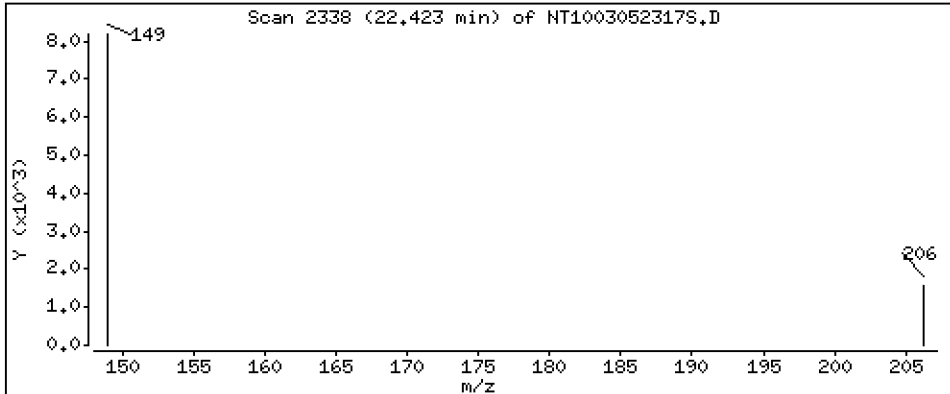
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,07240 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

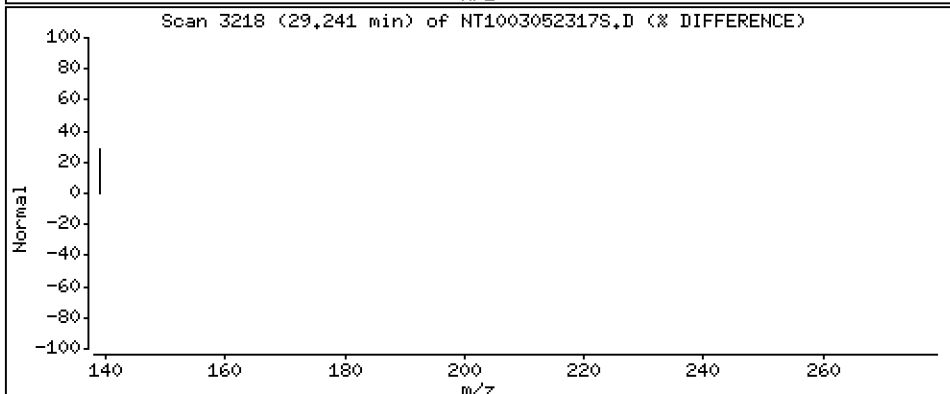
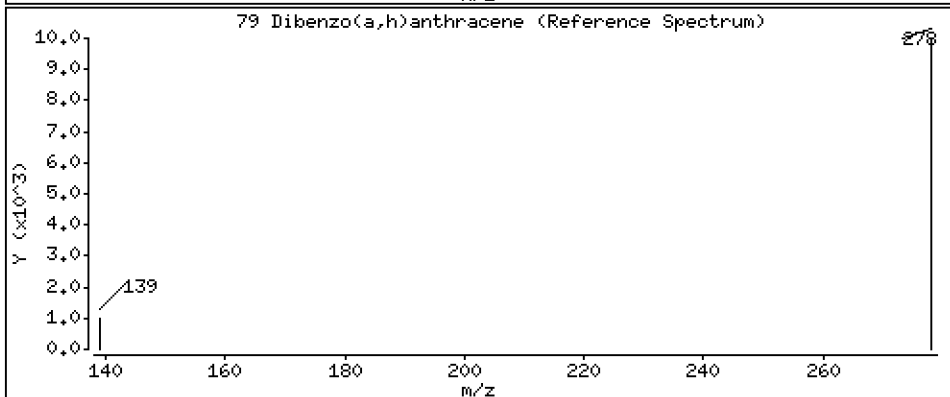
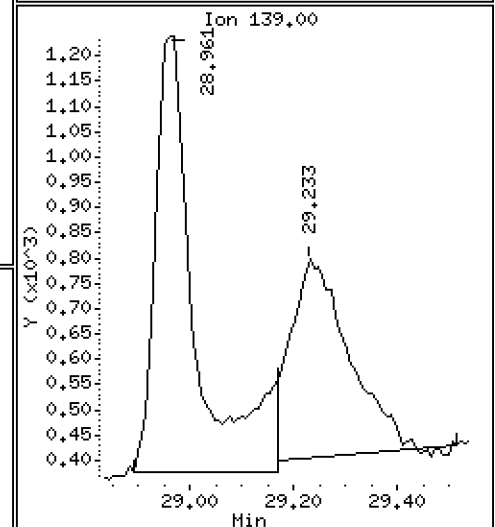
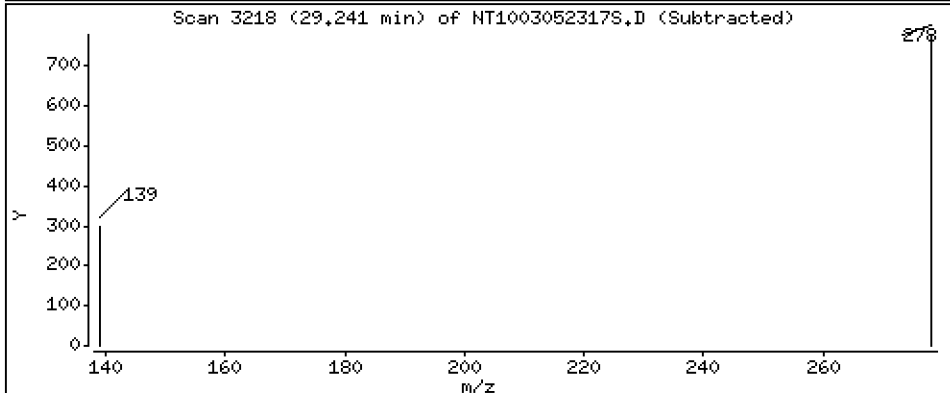
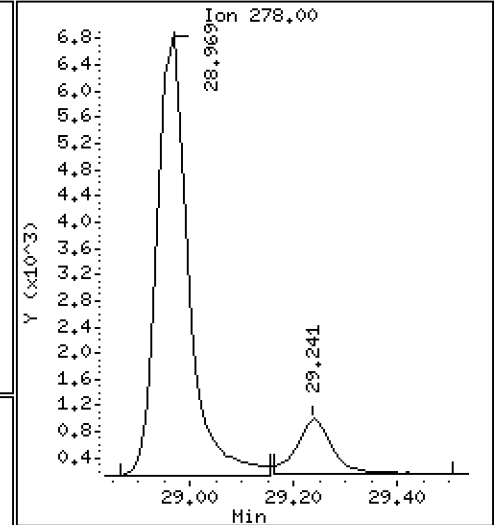
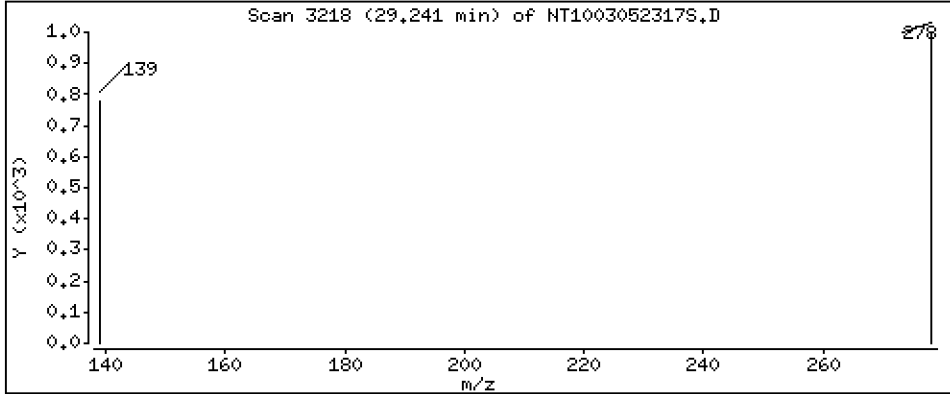
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,01900 ug/mL



Date : 05-MAR-2023 23:32

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV1

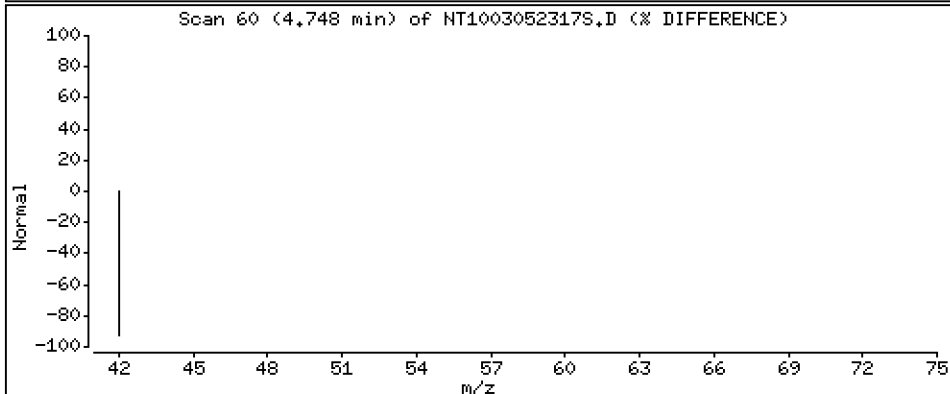
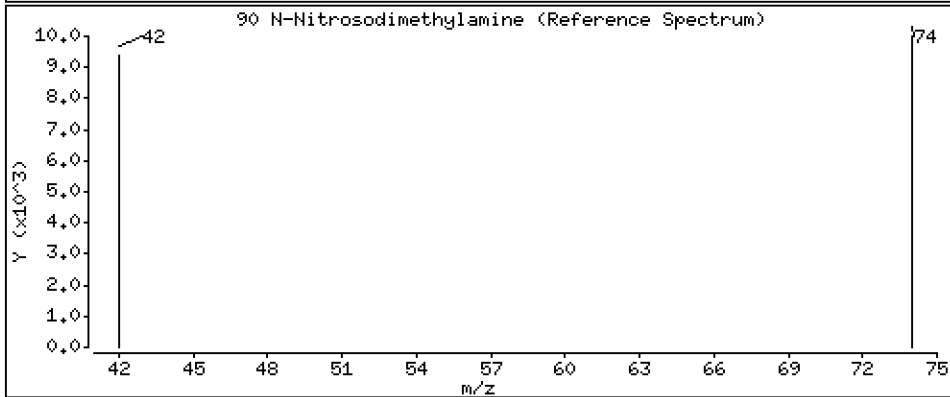
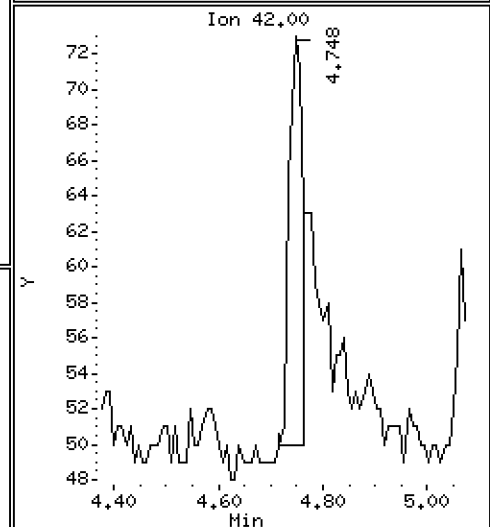
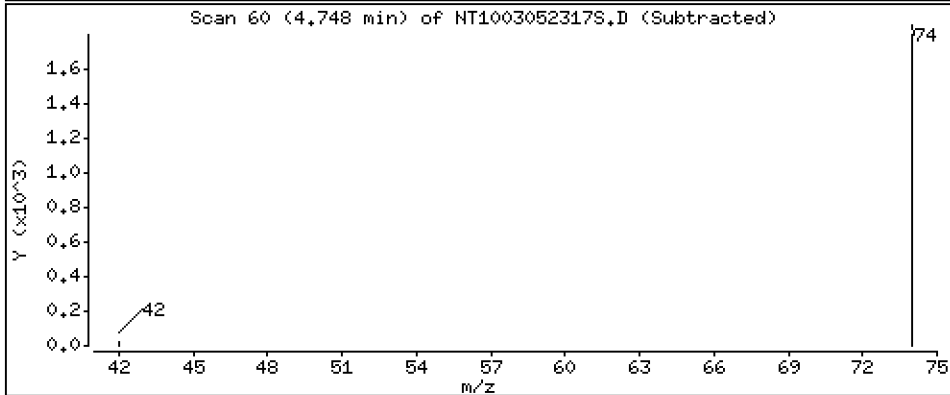
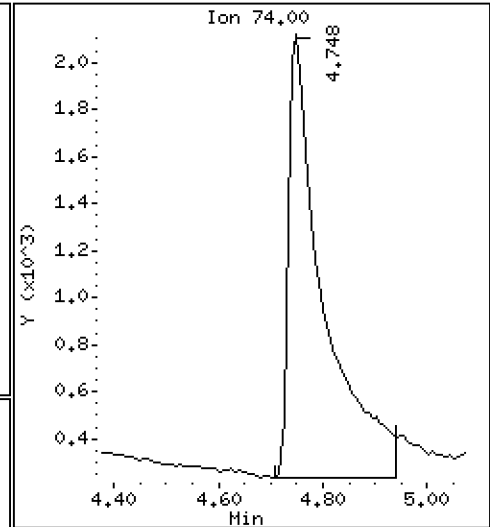
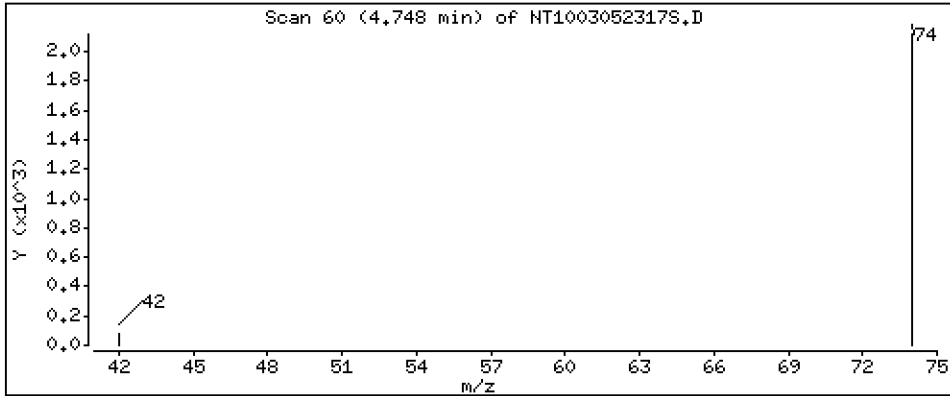
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,1910 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052317S.D
 Lab Smp Id: SLC0440-LCV1
 Inj Date : 05-MAR-2023 23:32
 Operator : YZ
 Smp Info : SLC0440-LCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 28-Mar-2023 11:18 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.909	6.902	(0.746)	11431	0.14620	0.1462 (R)
3 Phenol	94		8.563	8.532	(0.925)	6959	0.06034	0.06034
7 1,3-Dichlorobenzene	146		9.151	9.143	(0.988)	10212	0.10062	0.1006
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.252	(1.000)	273861	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.283	(1.004)	9734	0.09864	0.09864
11 Benzyl alcohol	79		9.515	9.484	(1.028)	4257	0.06656	0.06656
12 1,2-Dichlorobenzene	146		9.577	9.570	(1.034)	9682	0.10208	0.1021
13 2-Methylphenol	108		9.702	9.671	(1.048)	7136	0.10287	0.1029
15 4-Methylphenol	108		9.997	9.966	(1.080)	6797	0.09421	0.09421
16 N-Nitroso-di-n-propylamine	70		10.004	9.981	(1.080)	5392	0.10498	0.1050
22 2,4-Dimethylphenol	107		11.040	11.014	(0.940)	15546	0.19213	0.1921
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.623	11.608	(0.989)	8238	0.12006	0.1201
* 27 Naphthalene-d8	136		11.746	11.731	(1.000)	953301	4.00000	
30 Hexachlorobutadiene	225		12.009	12.001	(1.022)	6028	0.12380	0.1238
39 Dimethylphthalate	163		14.764	14.764	(0.963)	13765	0.09536	0.09536
* 42 Acenaphthene-d10	162		15.329	15.337	(1.000)	454624	4.00000	
50 Diethylphthalate	149		16.218	16.234	(1.058)	13643	0.10022	0.1002 (H)
54 N-Nitrosodiphenylamine	169		16.713	16.729	(0.907)	11012	0.07909	0.07909
57 Hexachlorobenzene	284		17.593	17.617	(0.955)	6678	0.10248	0.1025
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.421	18.453	(1.000)	860369	4.00000	
\$ 66 Terphenyl-d14	244		21.539	21.594	(0.919)	10456	0.16129	0.1613 (R)
67 Butylbenzylphthalate	149		22.422	22.484	(0.957)	9799	0.07240	0.07240
* 69 Chrysene-d12	240		23.436	23.514	(1.000)	801660	4.00000	
* 77 Perylene-d12	264		26.138	26.270	(1.000)	976489	4.00000	
79 Dibenzo(a,h)anthracene	278		29.240	29.186	(1.119)	4296	0.01900	0.01900
90 N-Nitrosodimethylamine	74		4.747	4.724	(0.513)	8839	0.19095	0.1910

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052317S.D
 Lab Smp Id: SLC0440-LCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	293840	146920	587680	273861	-6.80
27 Naphthalene-d8	1032639	516320	2065278	953301	-7.68
42 Acenaphthene-d10	502349	251175	1004698	454624	-9.50
59 Phenanthrene-d10	975997	487999	1951994	860369	-11.85
69 Chrysene-d12	978544	489272	1957088	801660	-18.08
77 Perylene-d12	1201606	600803	2403212	976489	-18.73

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.75	0.13
42 Acenaphthene-d10	15.34	14.84	15.84	15.33	-0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.42	-0.17
69 Chrysene-d12	23.51	23.01	24.01	23.44	-0.33
77 Perylene-d12	26.27	25.77	26.77	26.14	-0.50

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

REVIEW SUMMARY FOR FILE - NT1003052317S.D

Lab ID: SLC0440-LCV1

nt10.i, 20230305A.b\SIM.b\SIMABN2.m,

05-MAR-2023 23:32

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
-----	---------	-------	----------

1.119	1.111	0.0077	Dibenzo(a,h)anthracene
-------	-------	--------	------------------------

RRT check based on Ccal File: SIM.b/NT1003052315S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052316S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0440</u>	Injection Date:	<u>03/05/23</u>
Lab Sample ID:	<u>SLC0440-LCV2</u>	Injection Time:	<u>22:54</u>
Sequence Name:	<u>ABN 0.2</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.20000	0.2	1.4413080	1.4351650		-0.4	
1,2-Dichlorobenzene	A	0.20000	0.2	1.3853460	1.4047050		1.4	
Benzyl Alcohol	A	0.20000	0.2	0.7492523	0.7319680		-21.7	
Benzoic acid	A	0.80000	0.0	0.1431163				
2,4-Dimethylphenol	A	0.40000	0.4	0.2957717	0.3399187		0.06	
1,2,4-Trichlorobenzene	A	0.20000	0.2	0.2879030	0.3534432		22.8	
N-Nitrosodiphenylamine	A	0.20000	0.2	0.6473471	0.5670888		-12.4	
Pentachlorophenol	A	0.40000	0.002	0.0950913	0.0007662		-99.4	
2-Fluorophenol	A	0.30000	0.294	1.1419780	1.1197340		-1.9	
p-Terphenyl-d14	A	0.20000	0.313	0.3234672	0.5058780		56.4	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A.b\SIH.b\NT1003052316S.D

Date: 05-MAR-2023 22:54

Client ID:

Sample Info: SLC0440-LCW2

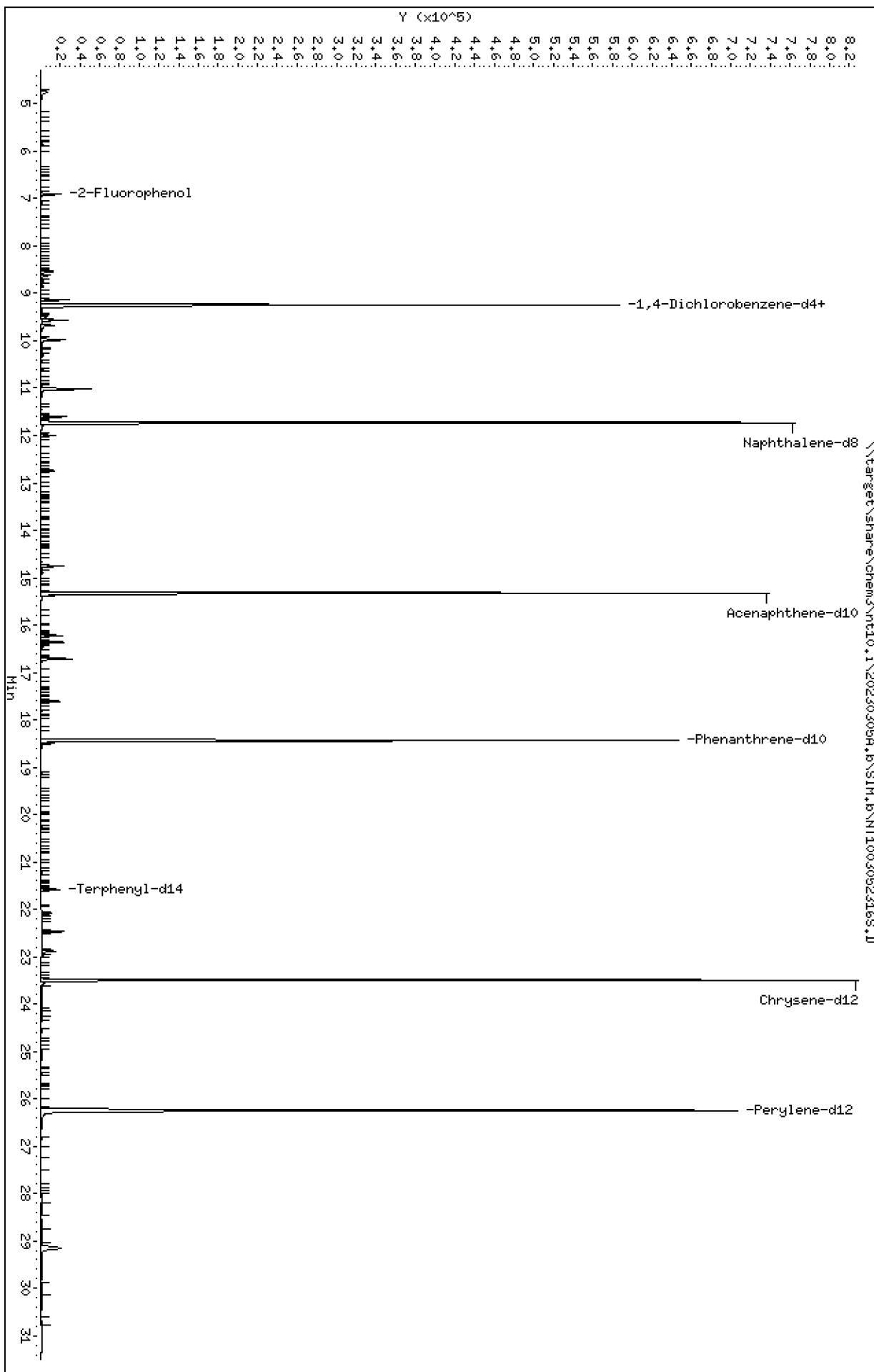
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

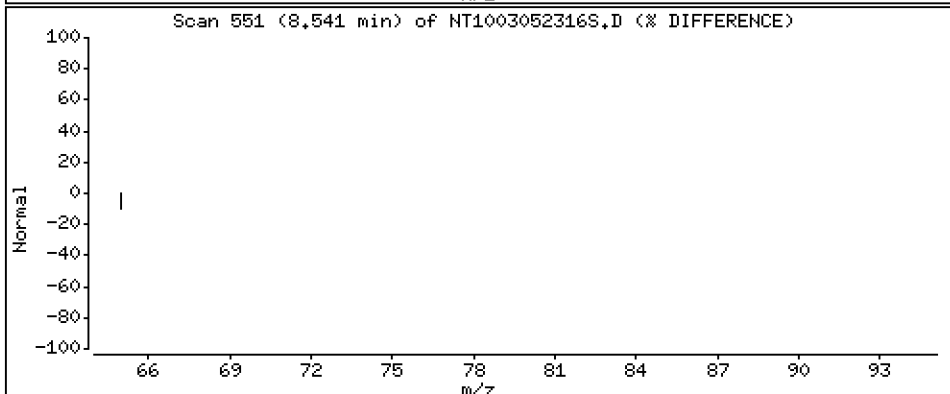
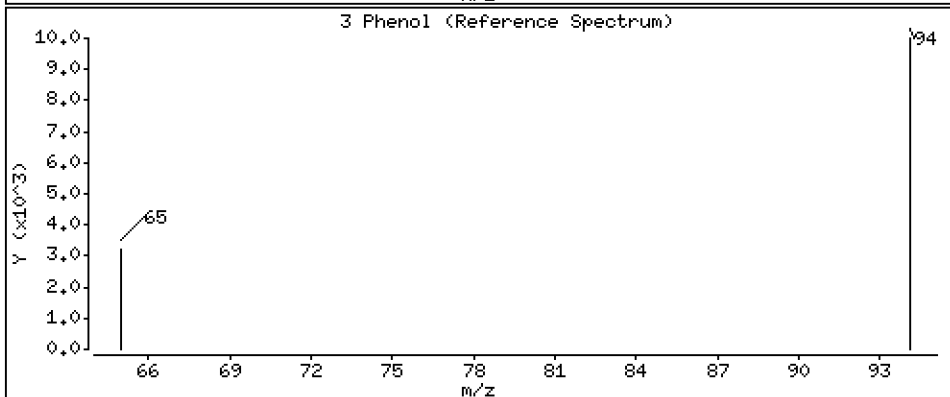
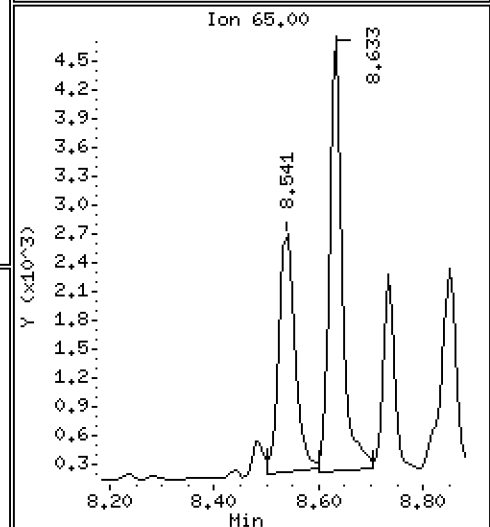
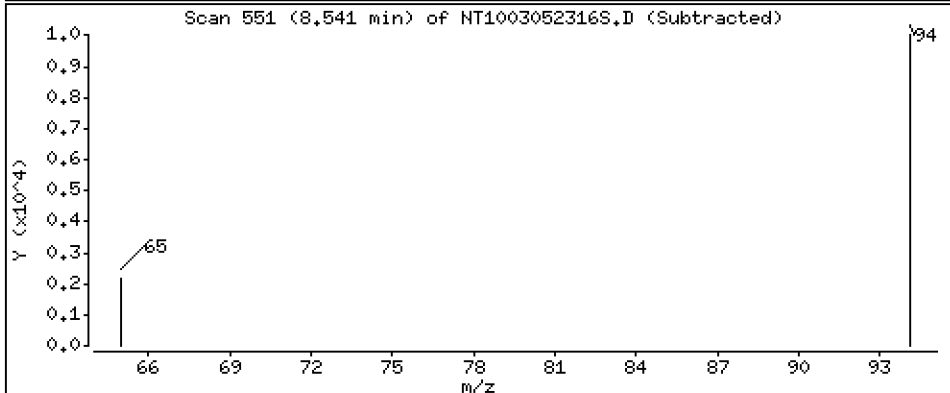
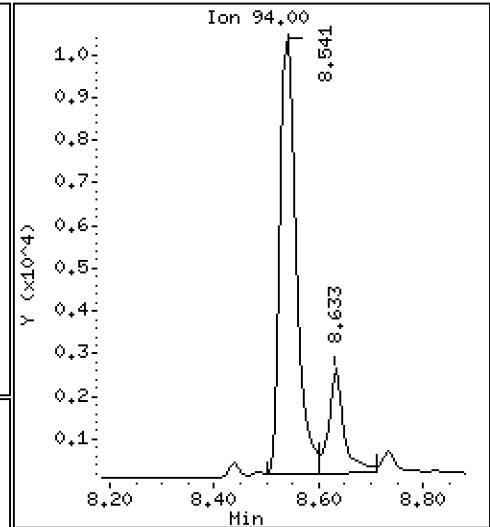
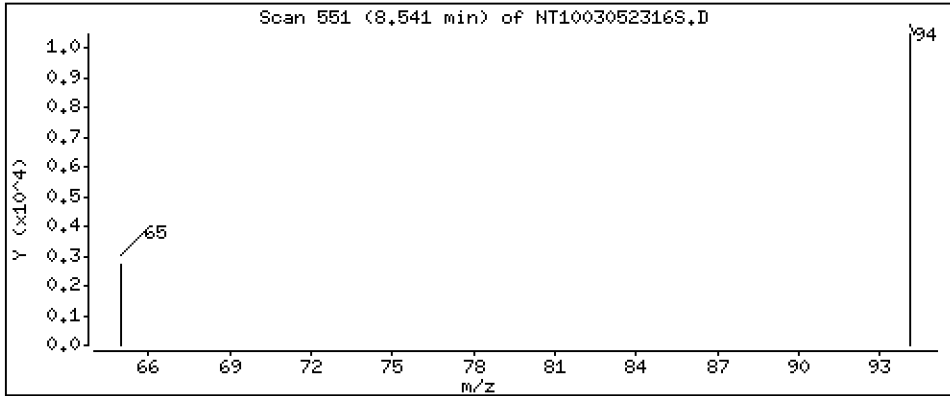
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,1498 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

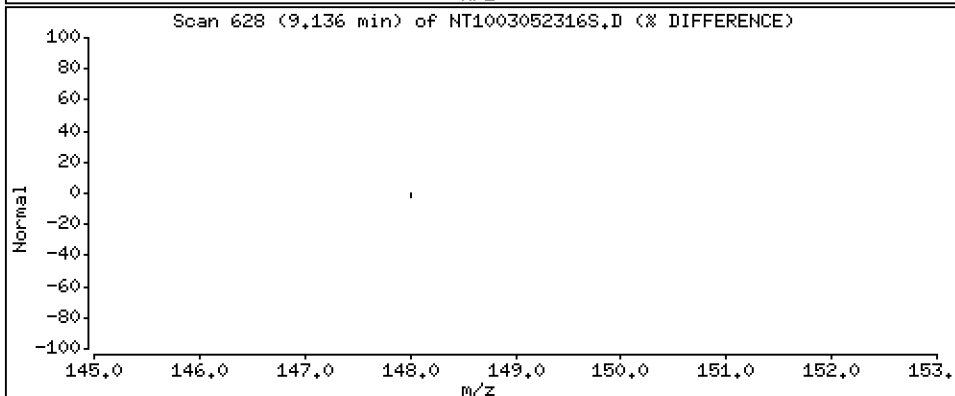
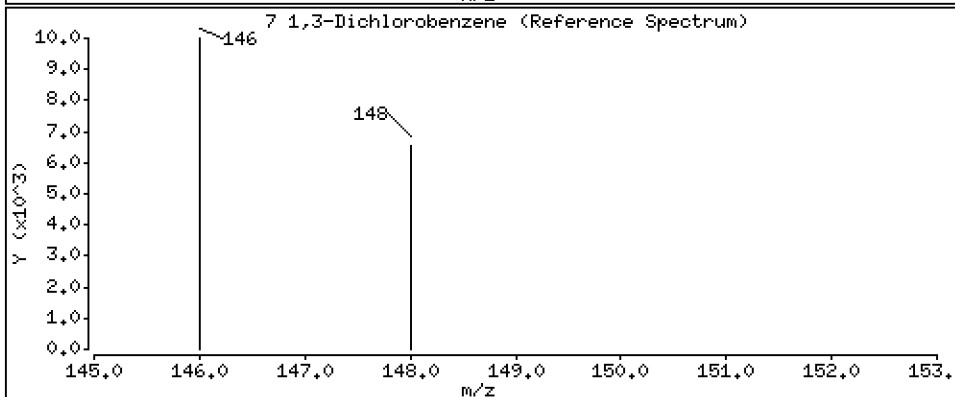
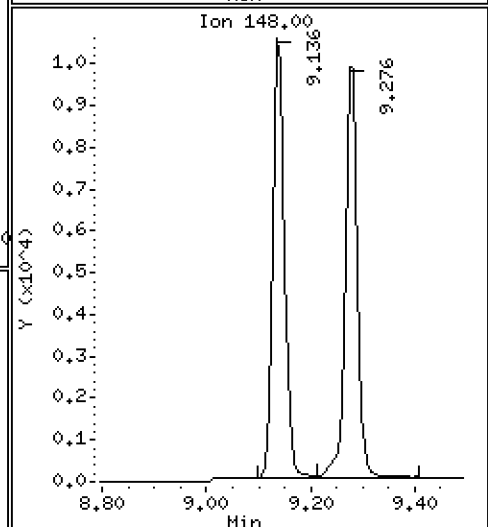
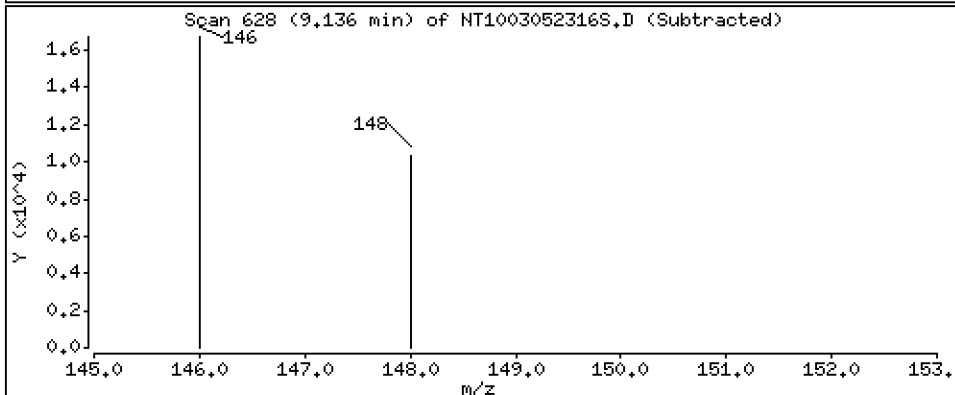
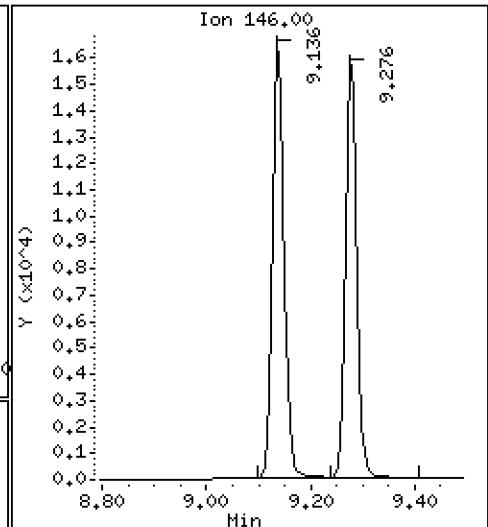
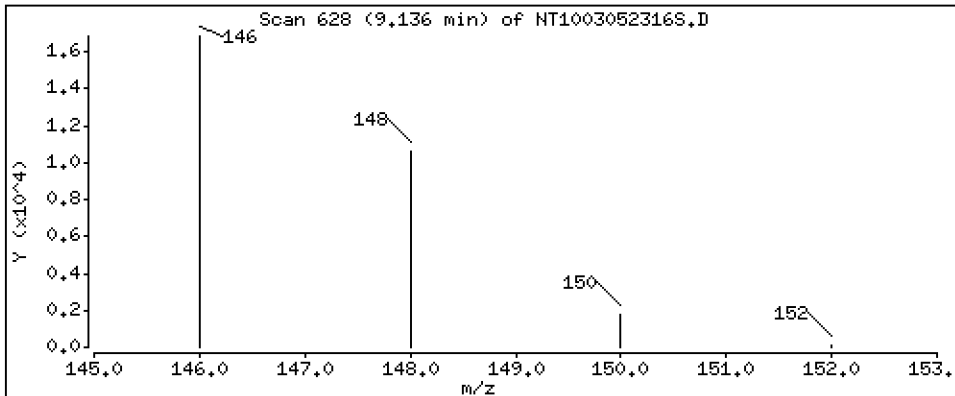
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.2018 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

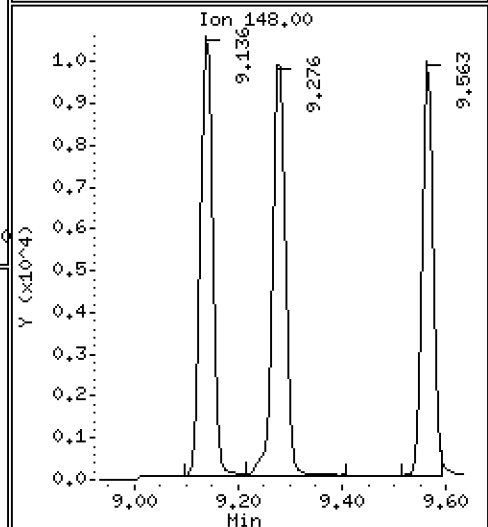
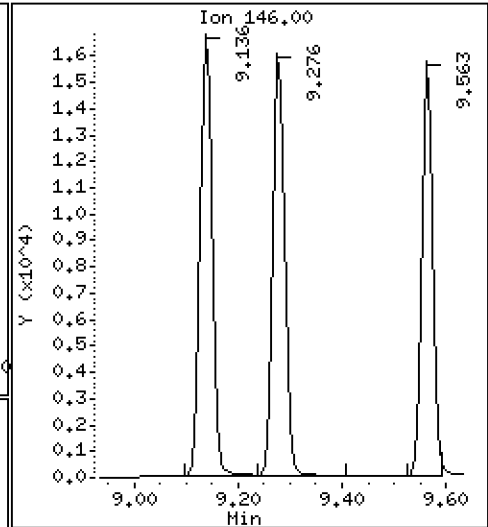
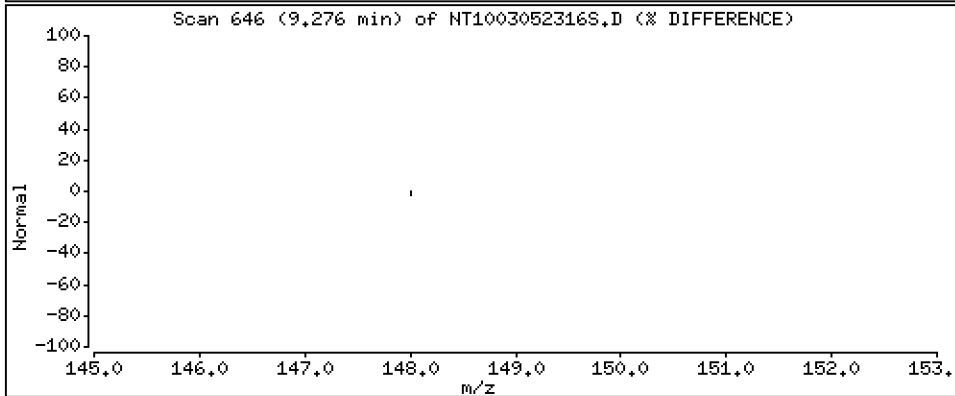
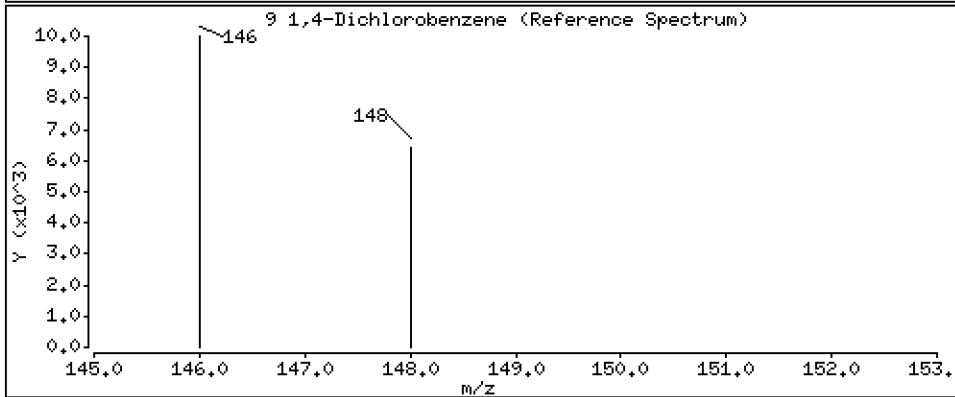
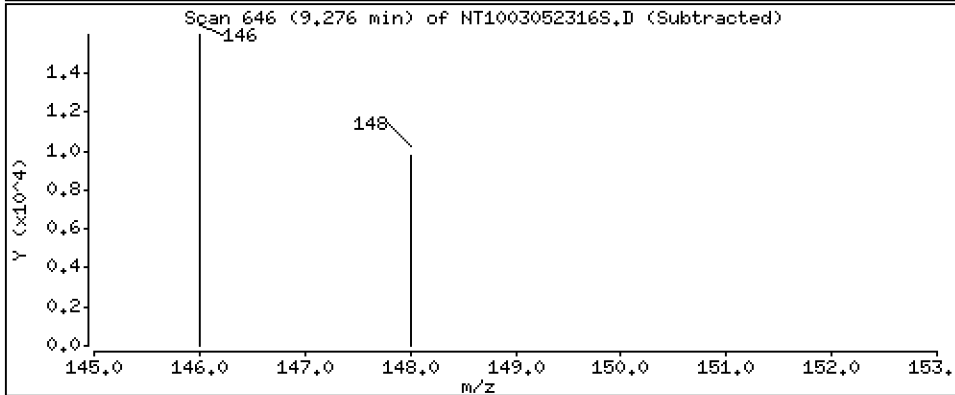
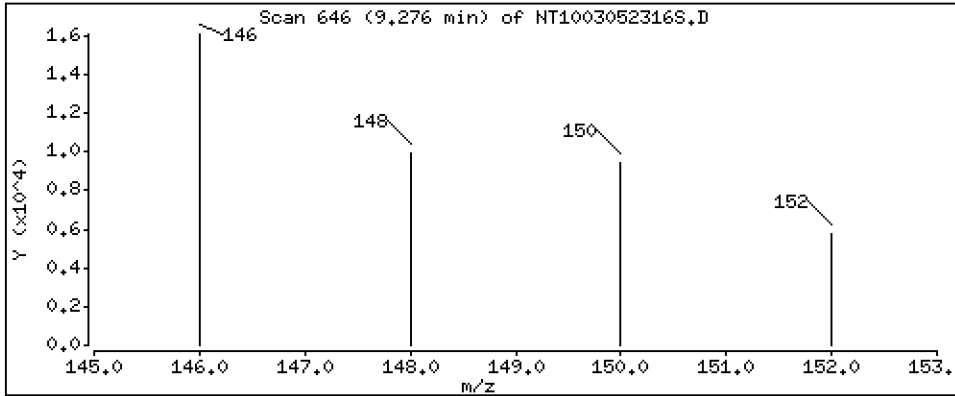
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.1991 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

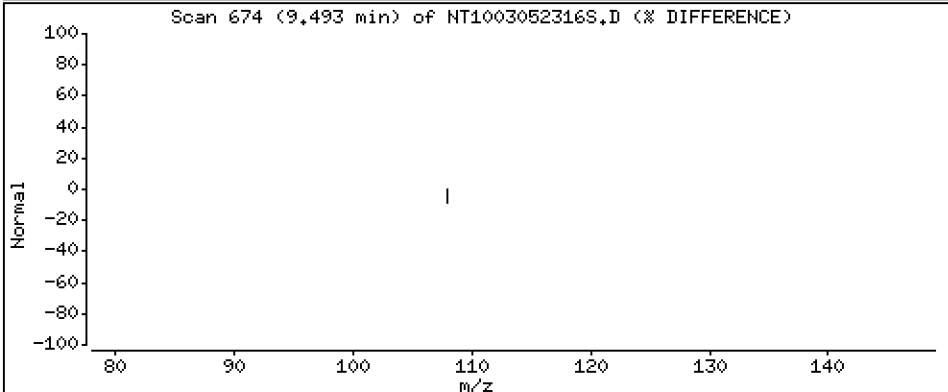
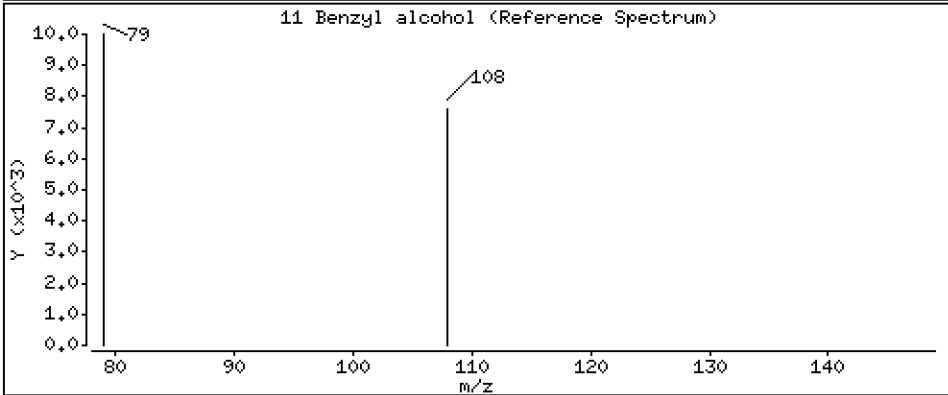
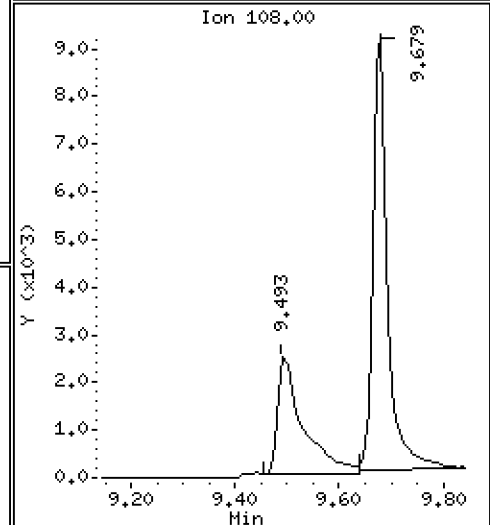
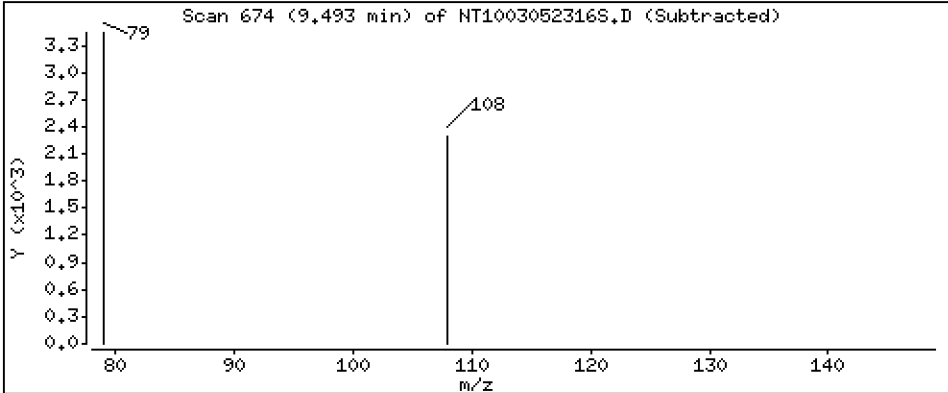
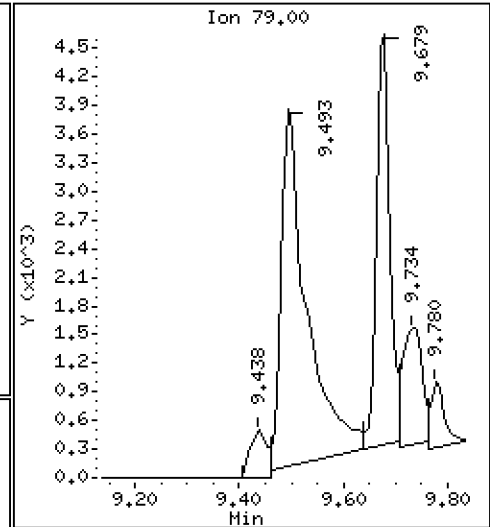
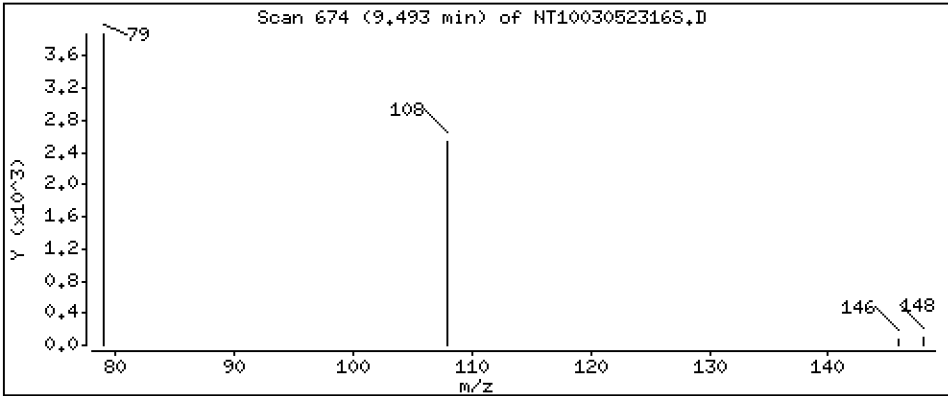
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,1565 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

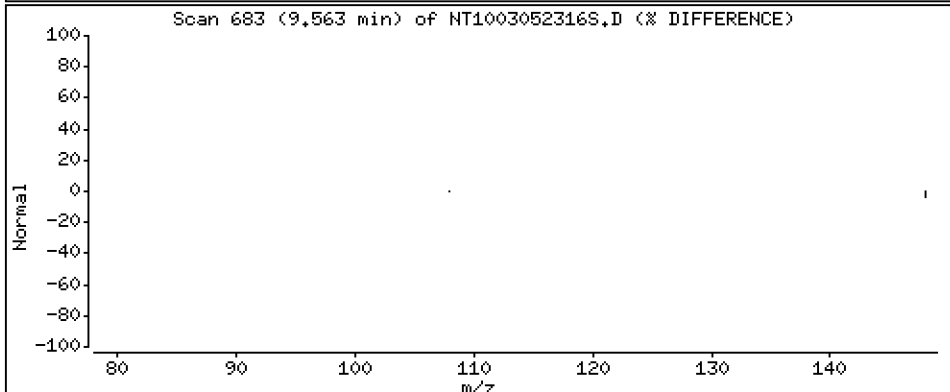
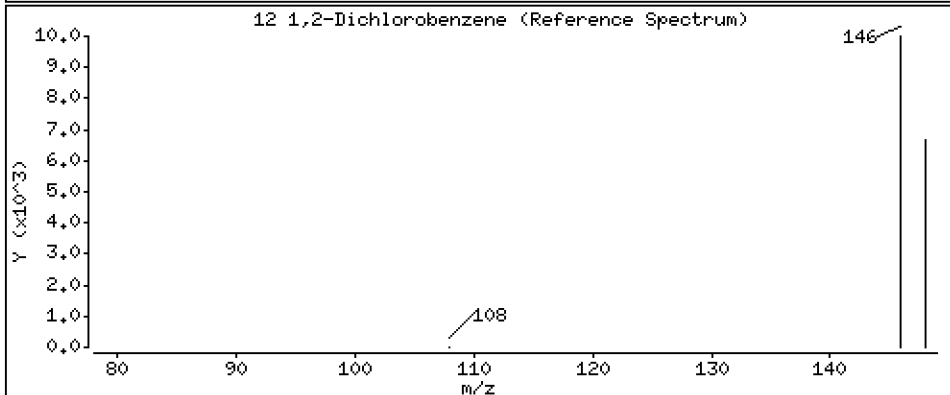
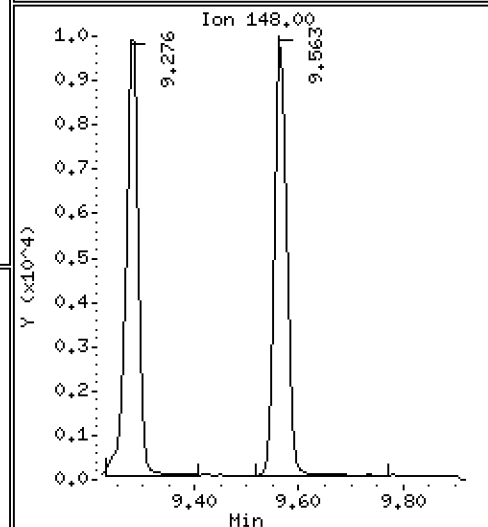
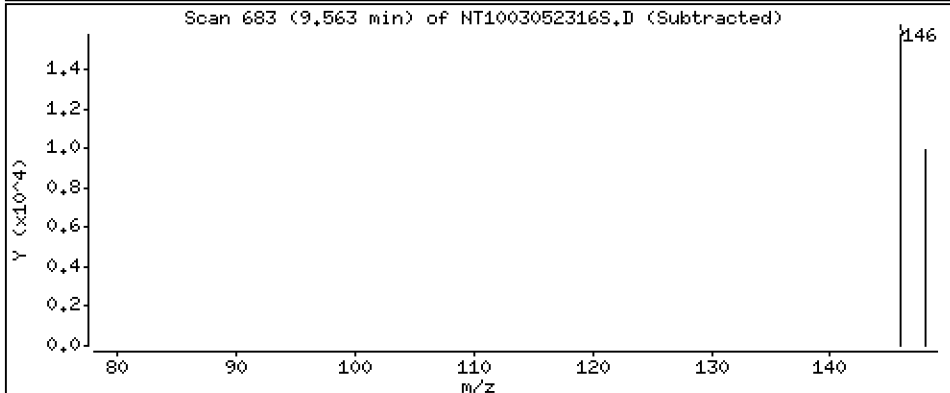
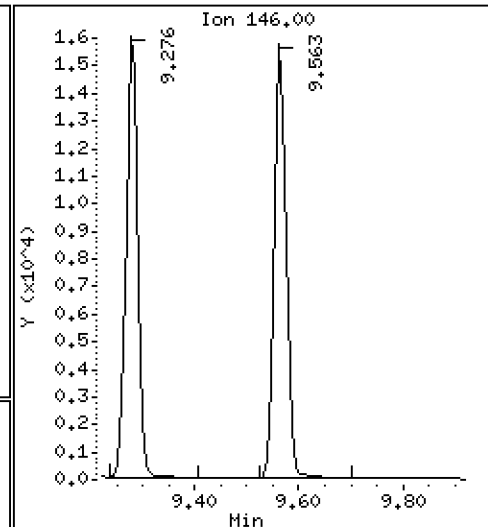
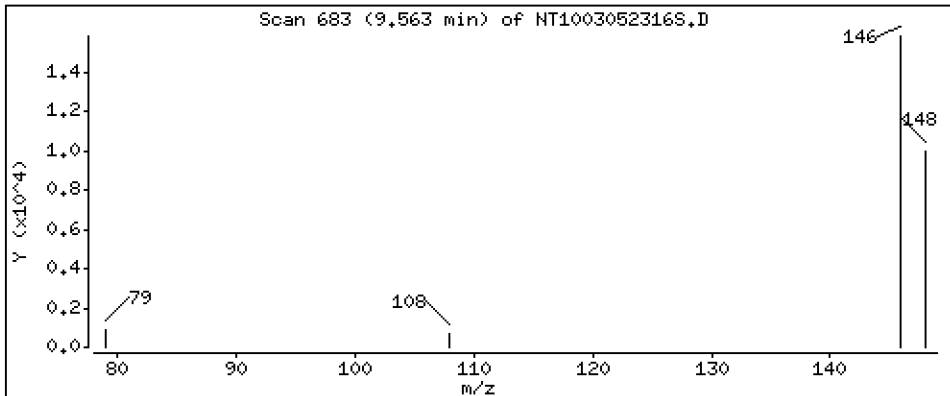
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,2028 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

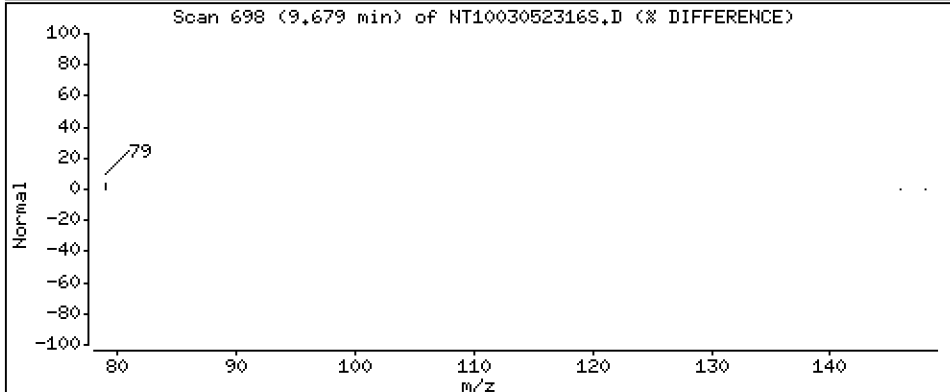
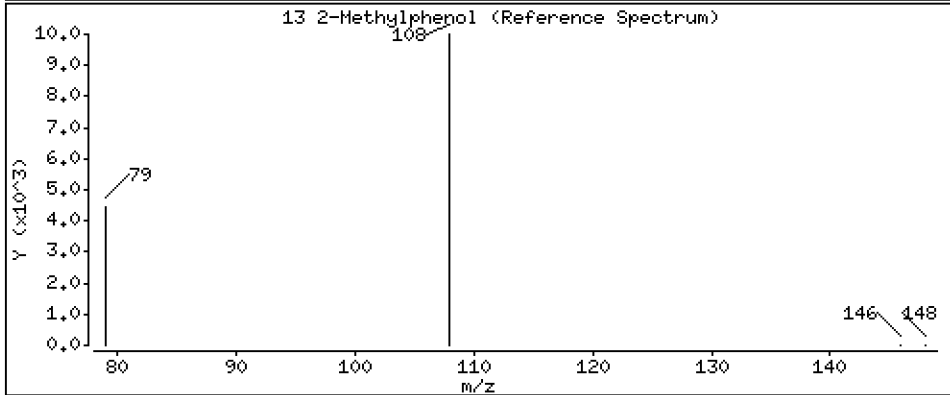
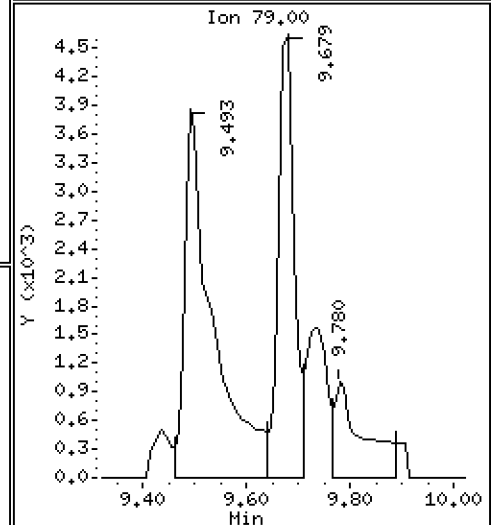
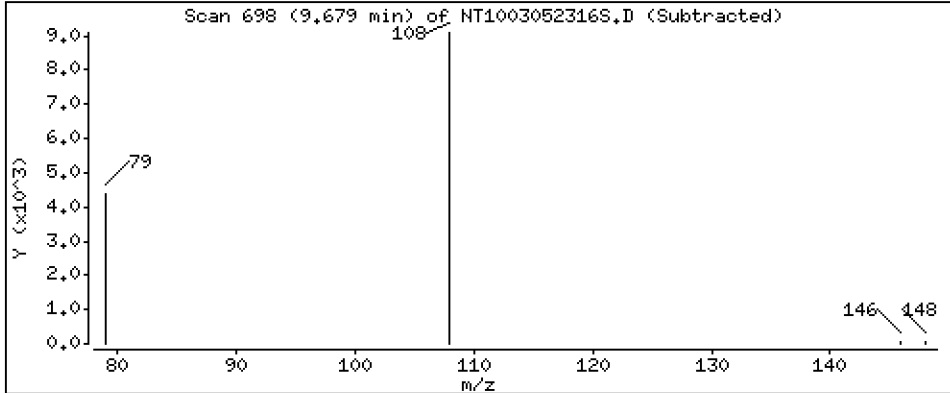
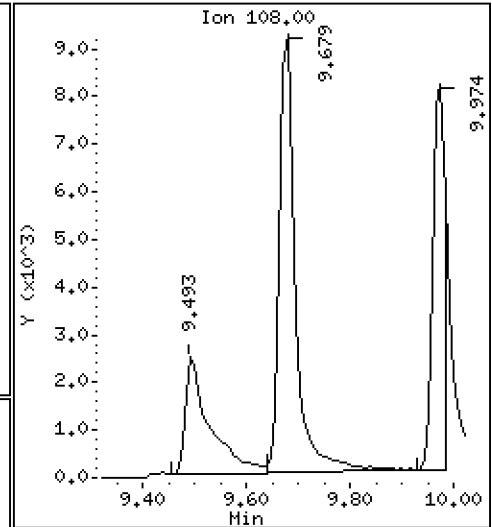
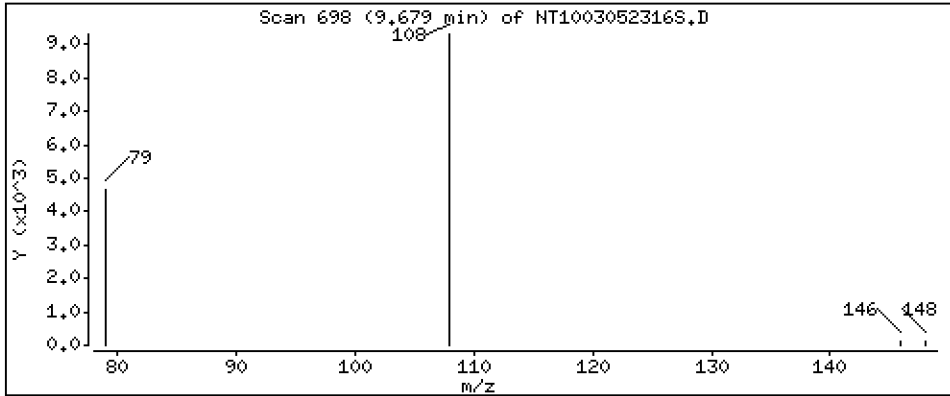
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

13 2-Methylphenol

Concentration: 0,2146 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

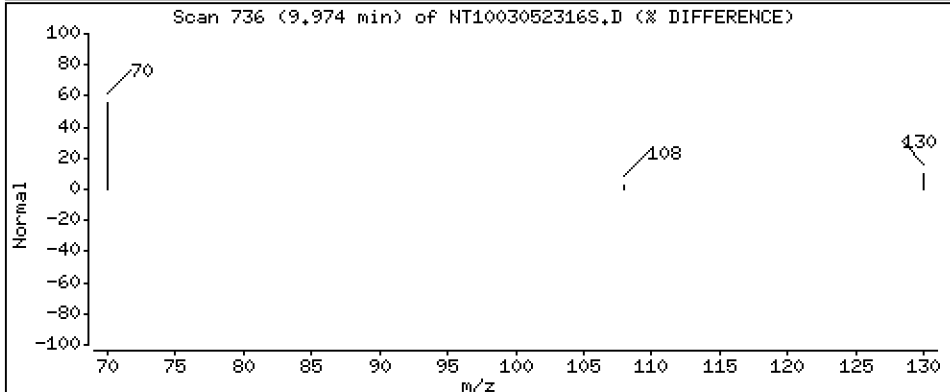
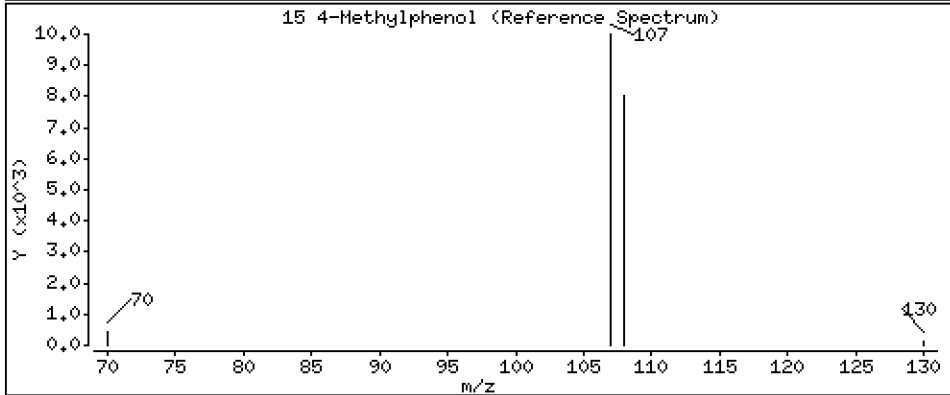
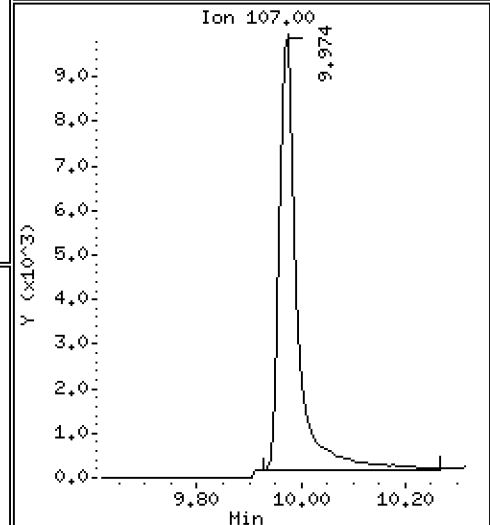
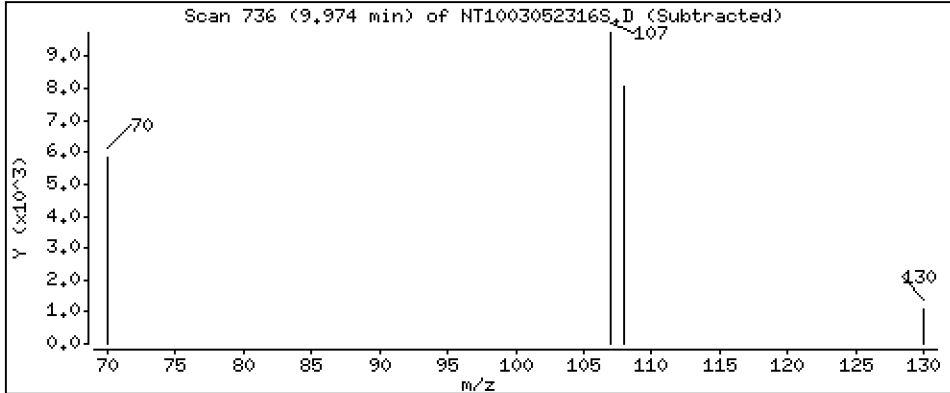
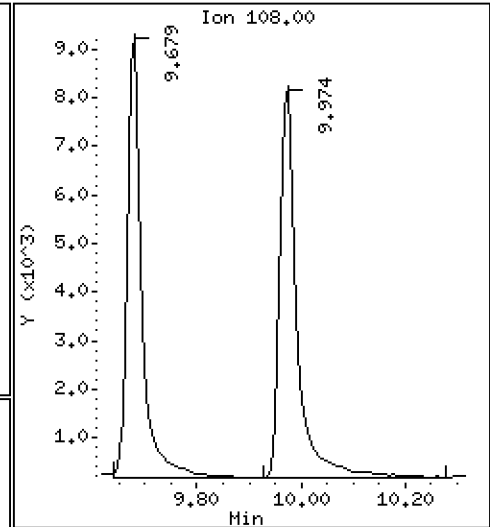
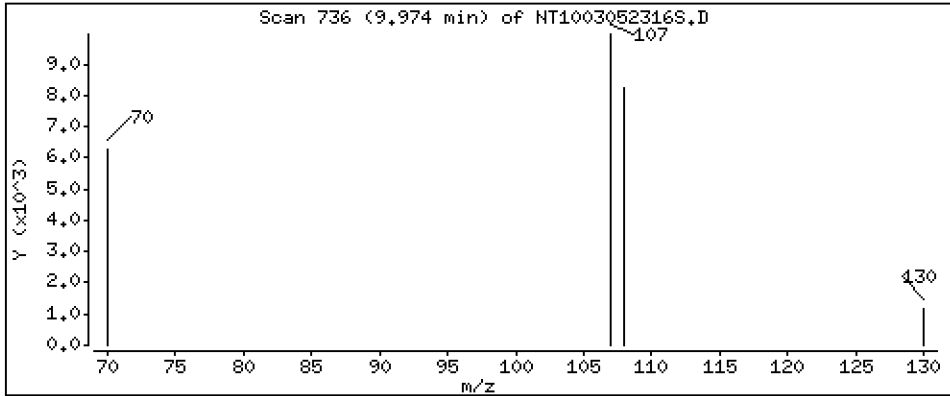
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,2009 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

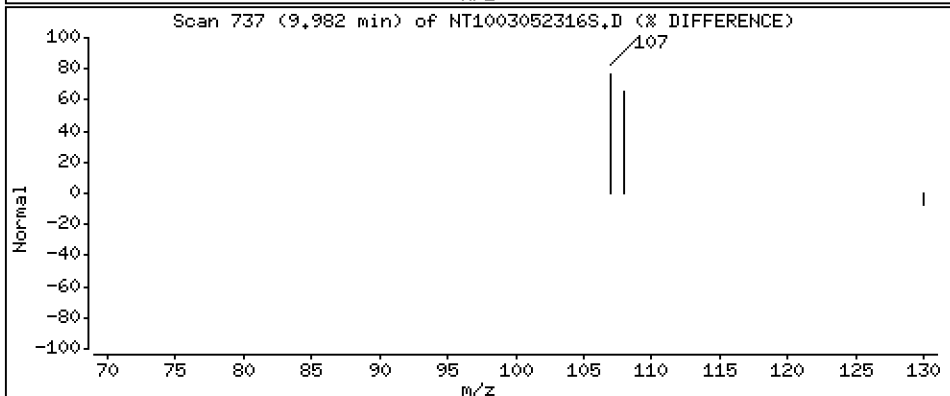
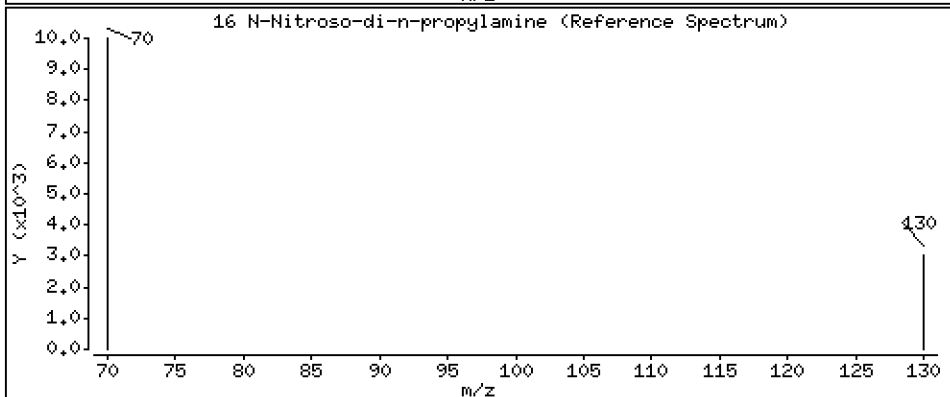
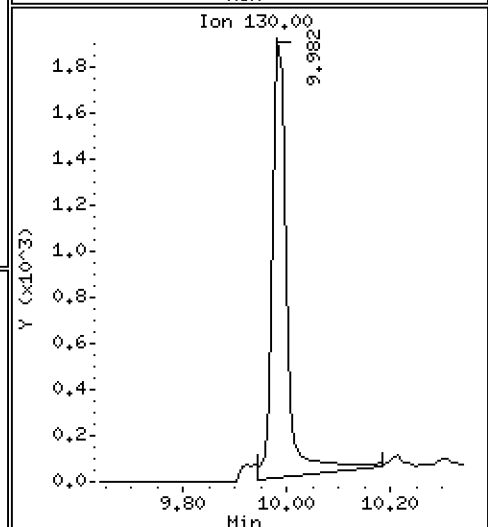
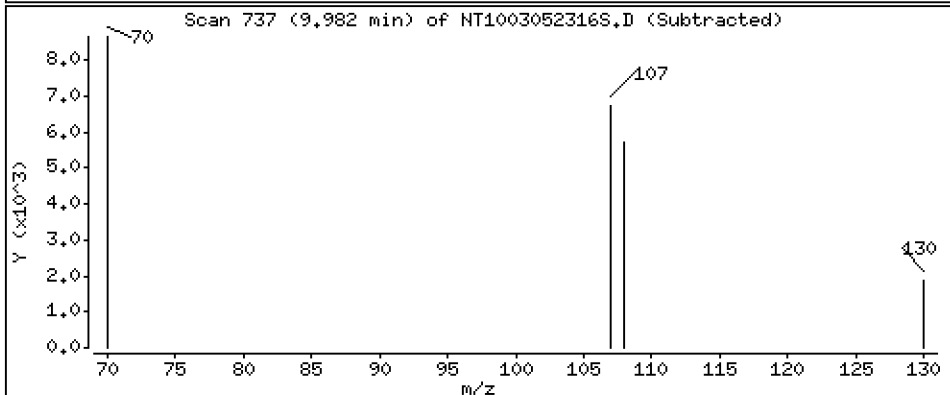
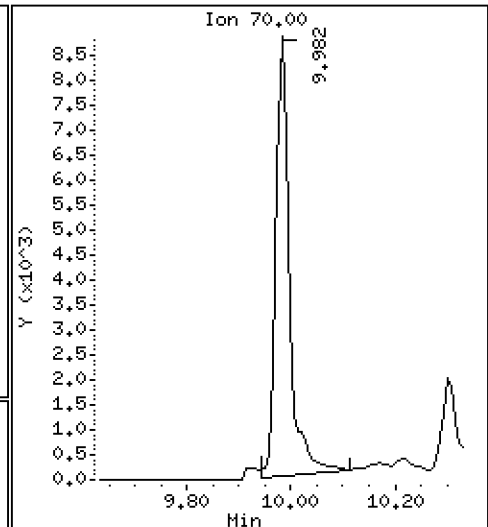
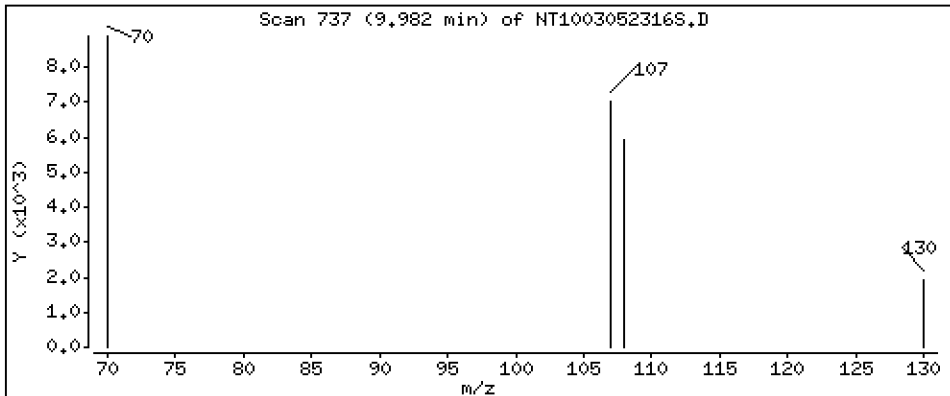
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,2375 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

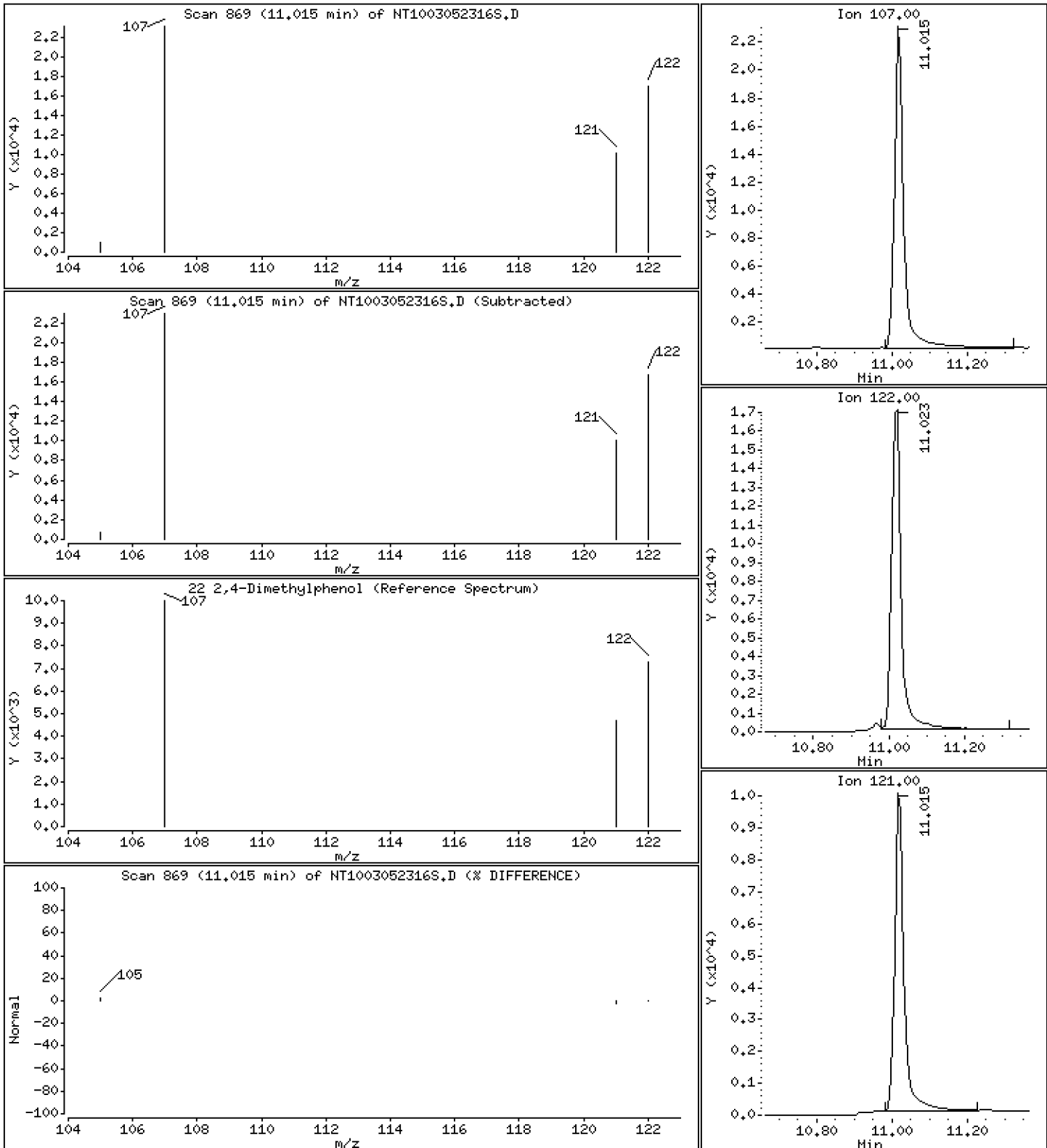
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 0,4002 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

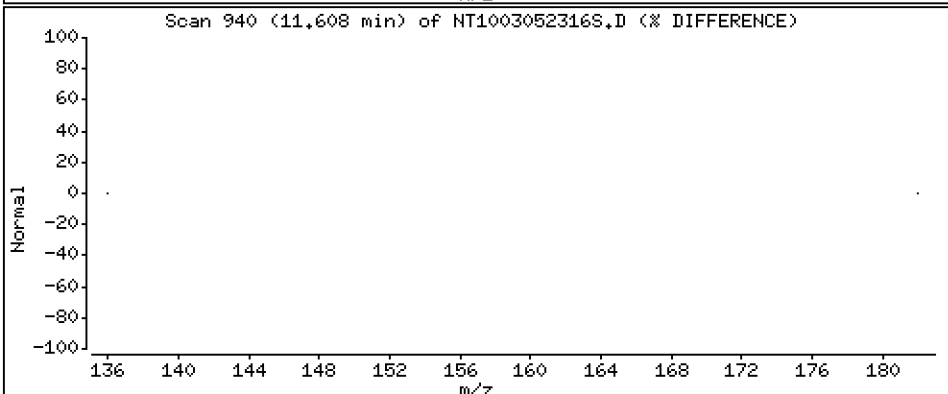
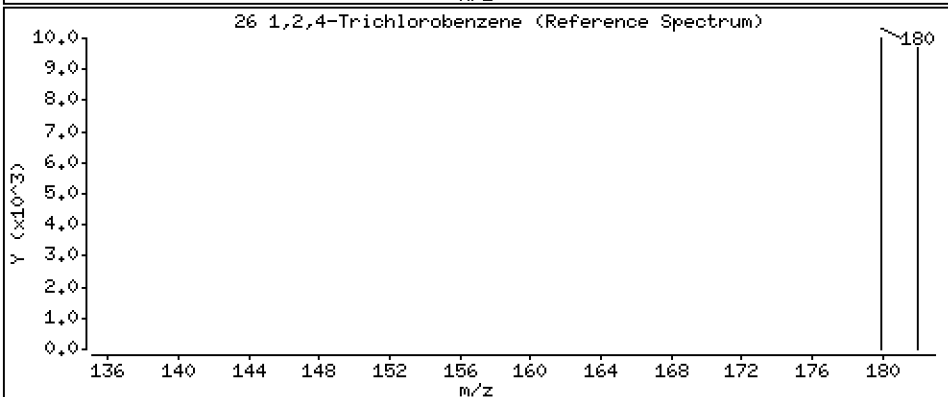
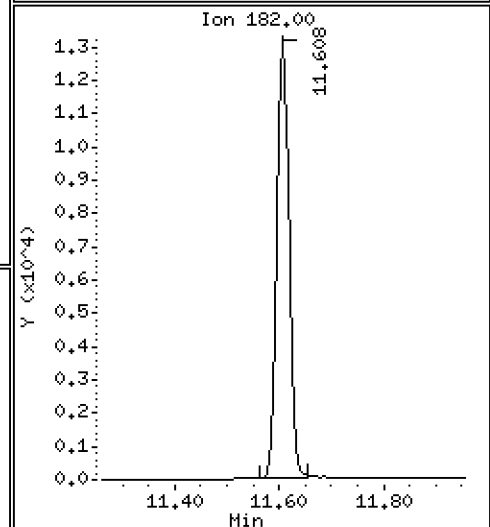
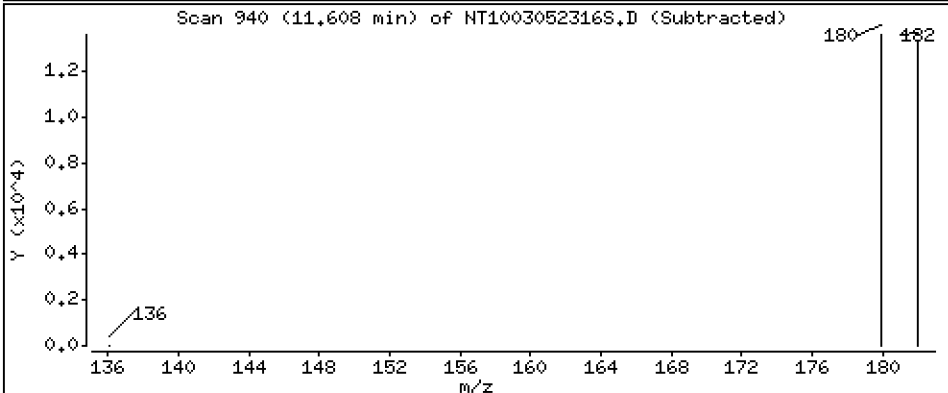
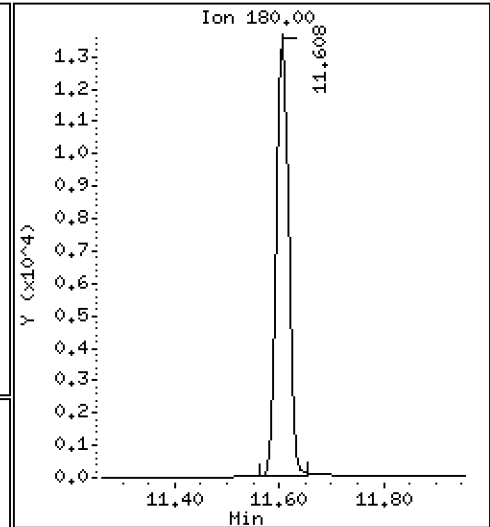
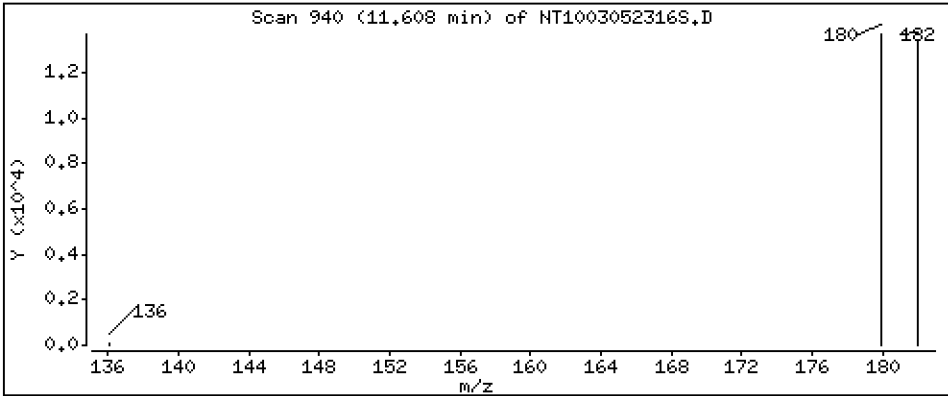
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,2455 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

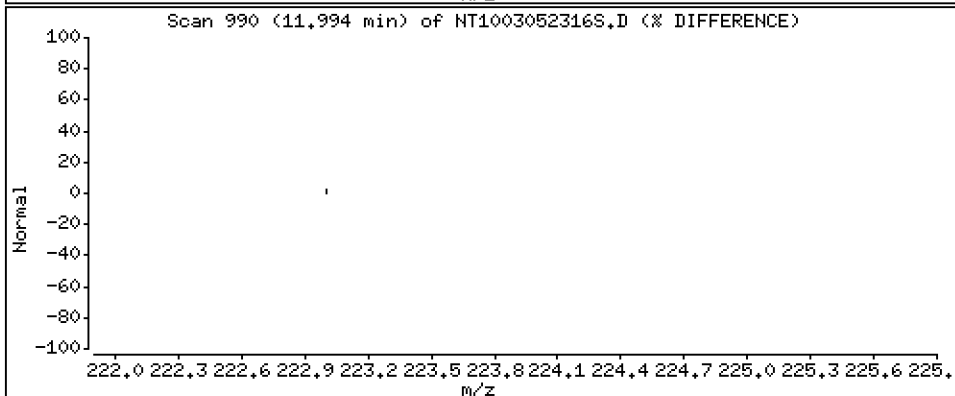
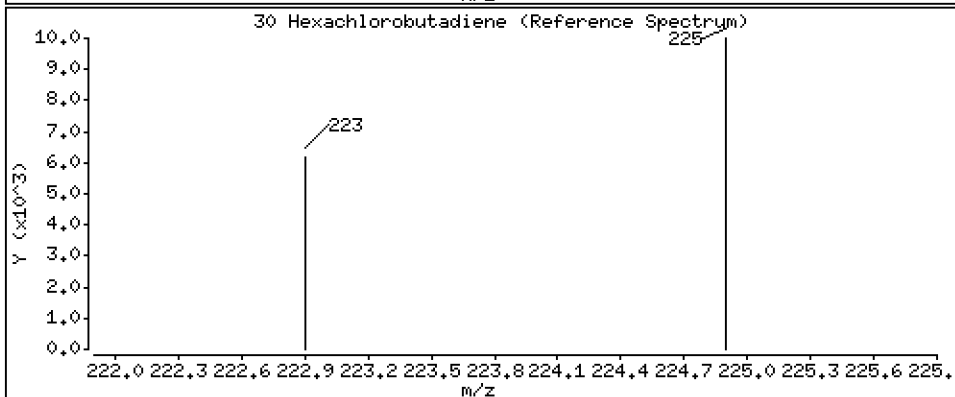
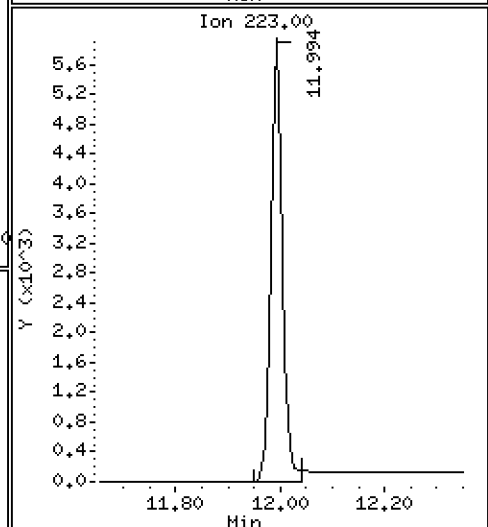
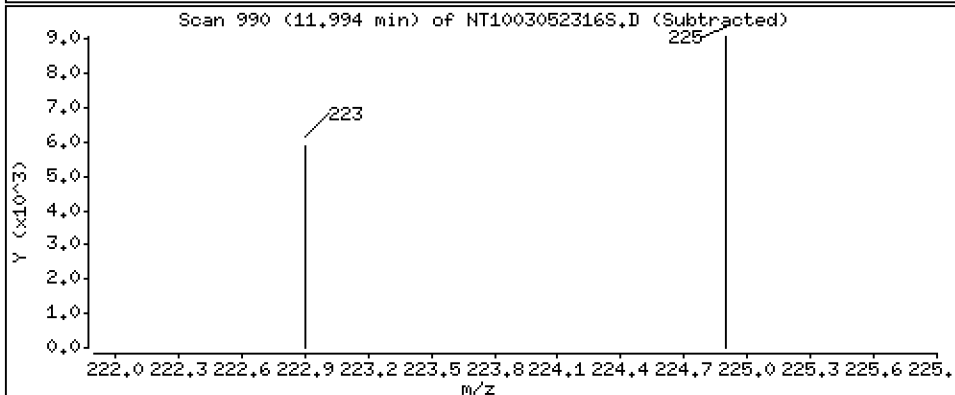
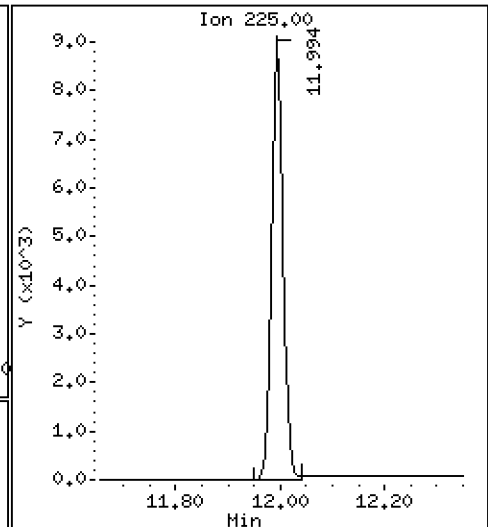
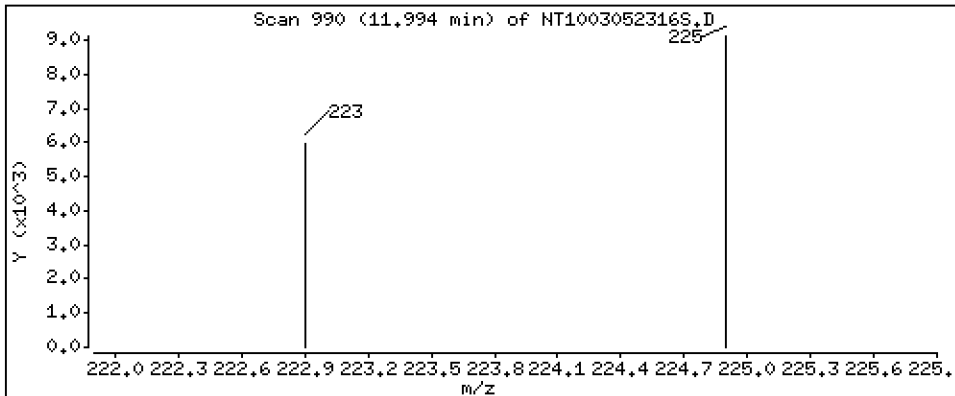
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,2291 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

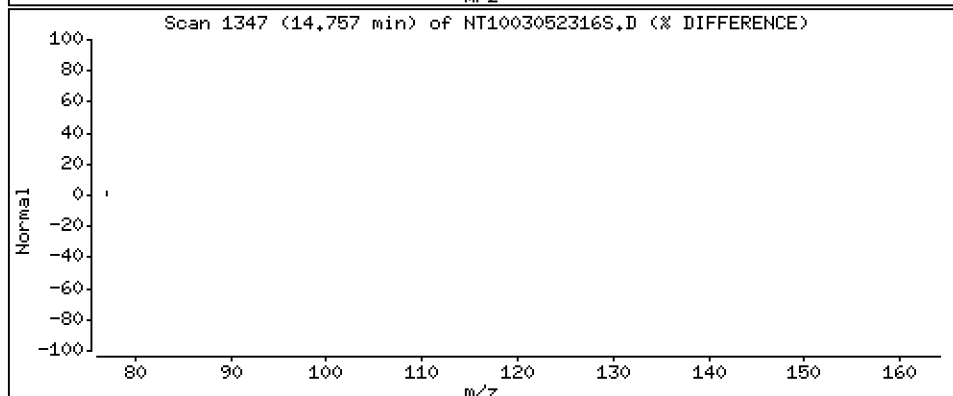
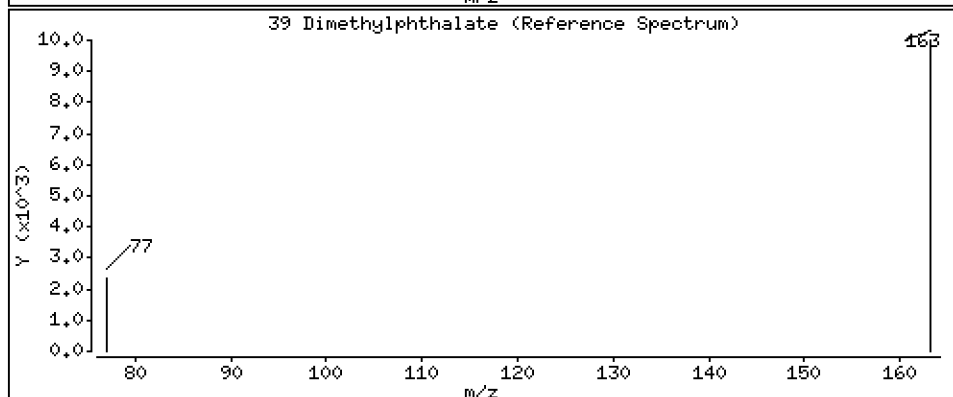
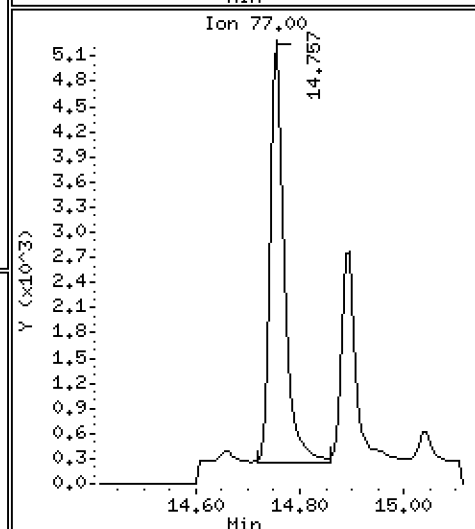
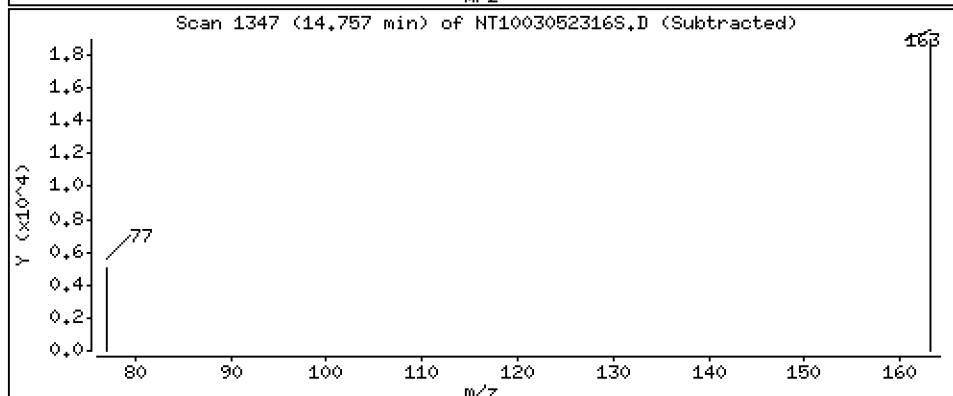
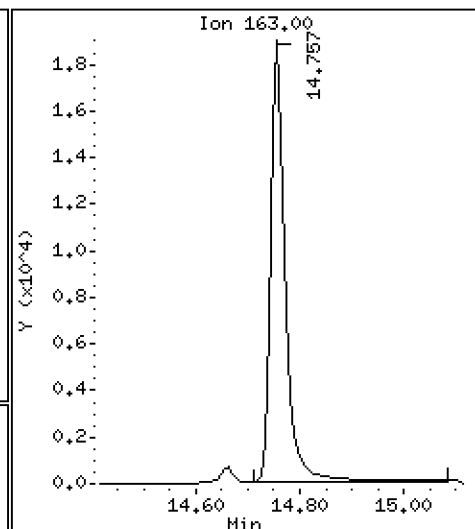
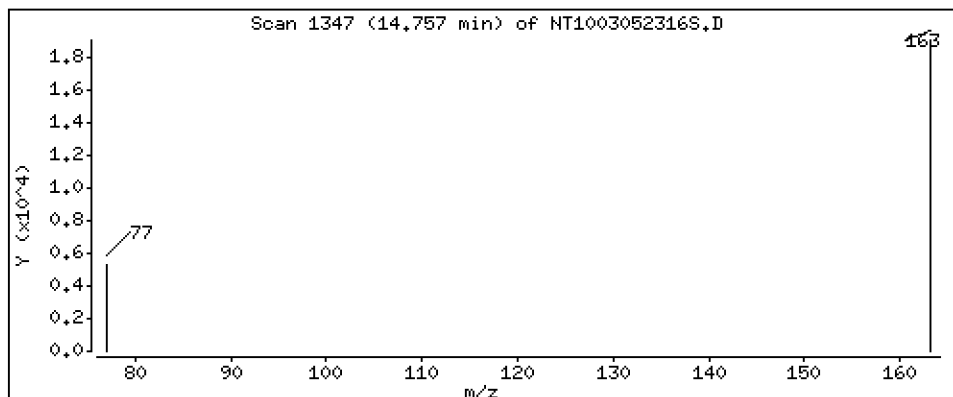
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,1954 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

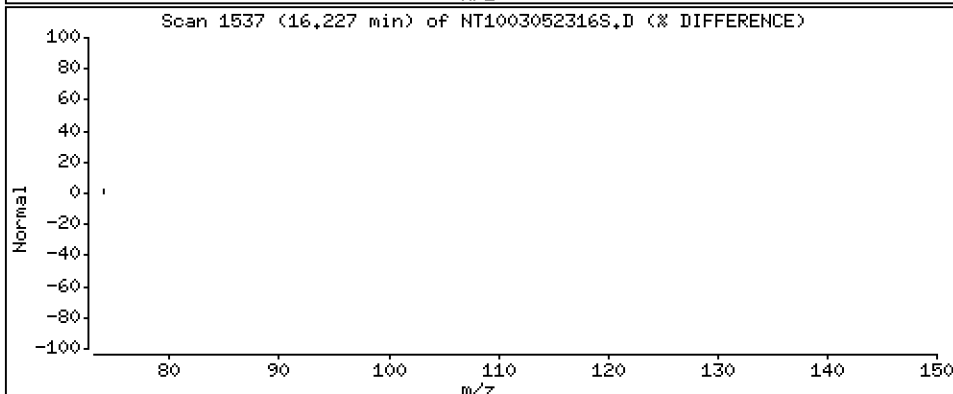
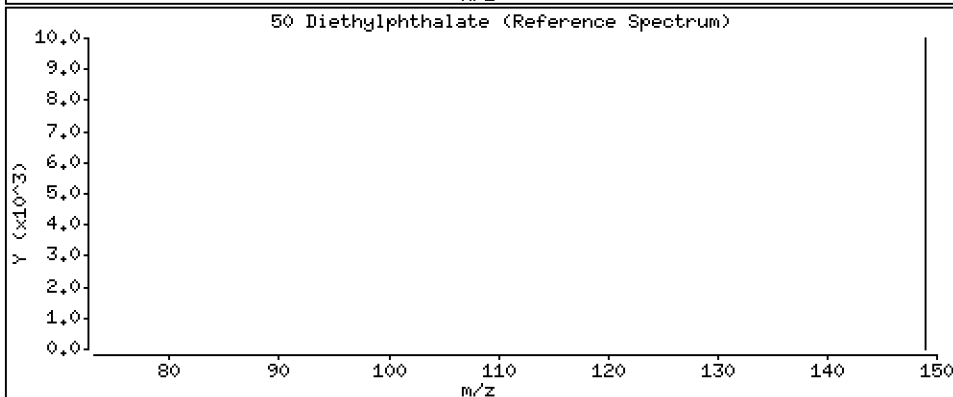
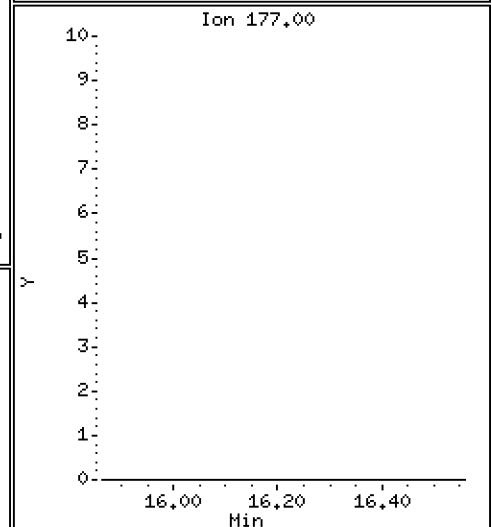
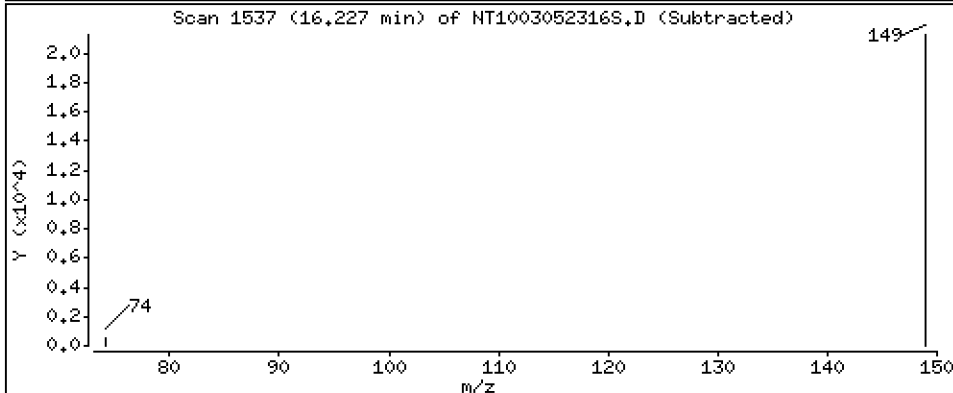
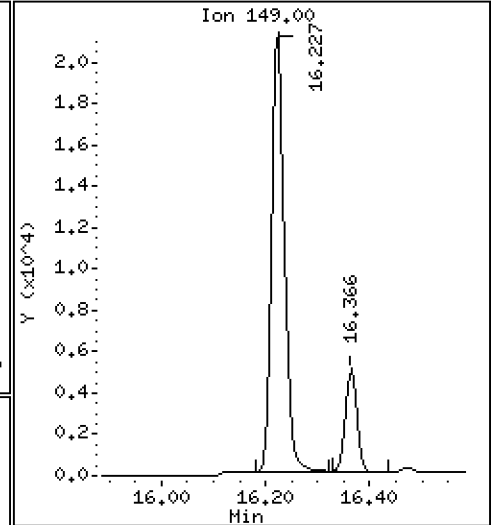
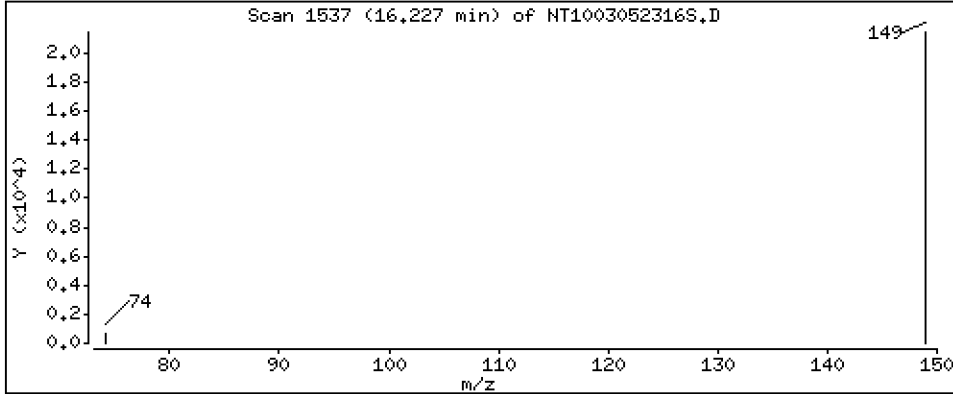
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,2107 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

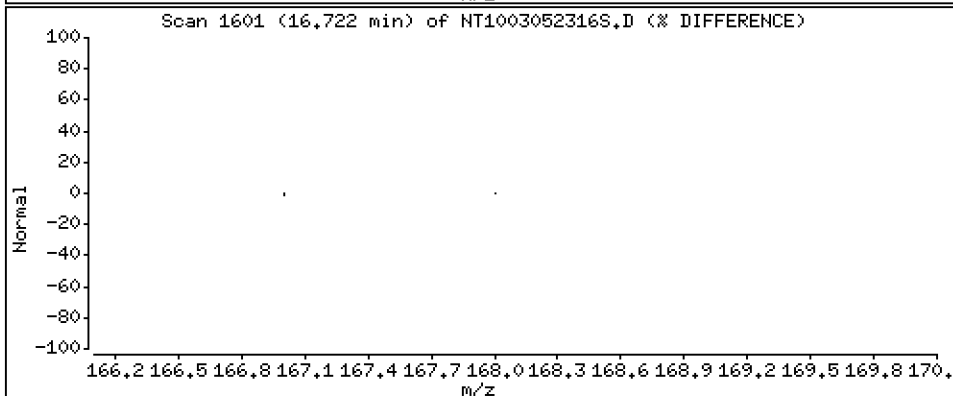
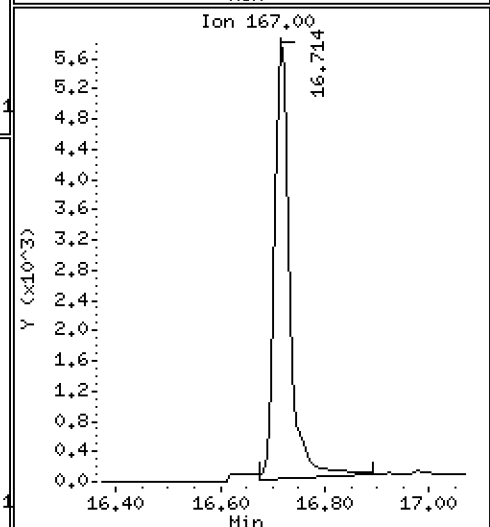
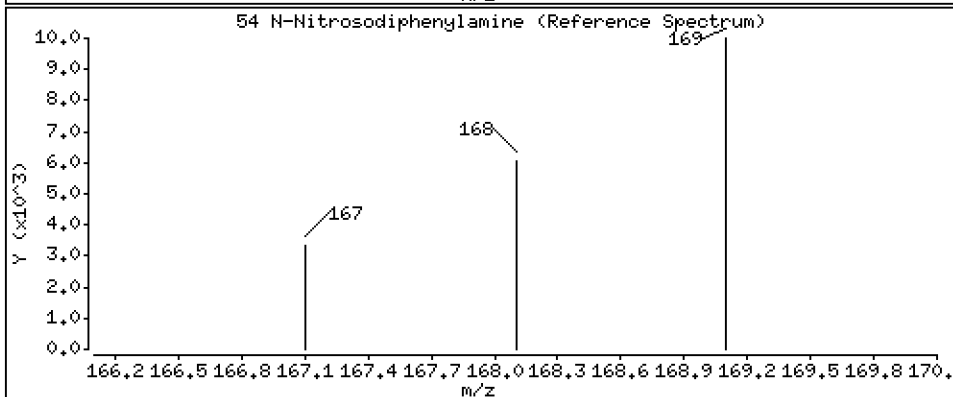
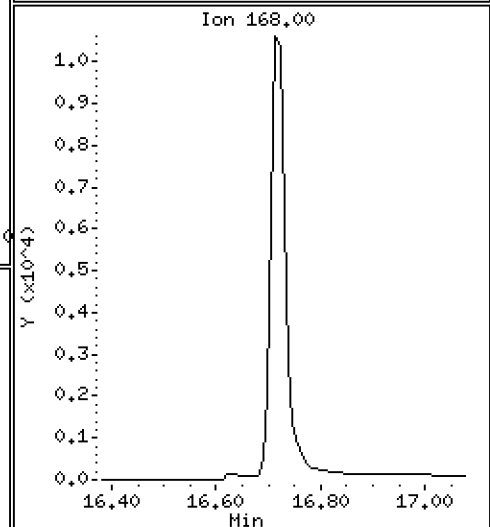
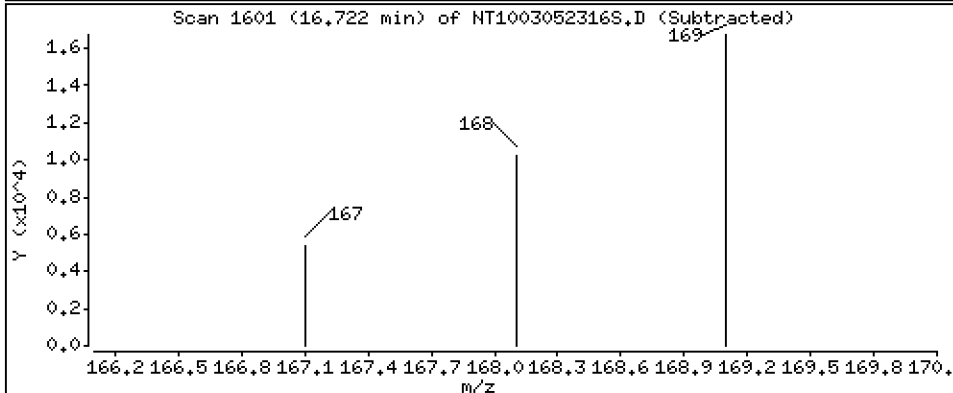
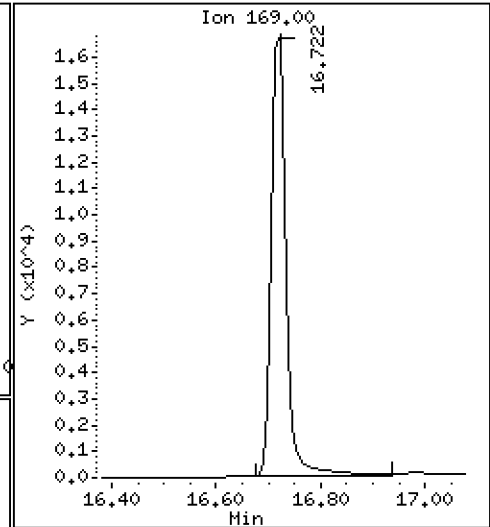
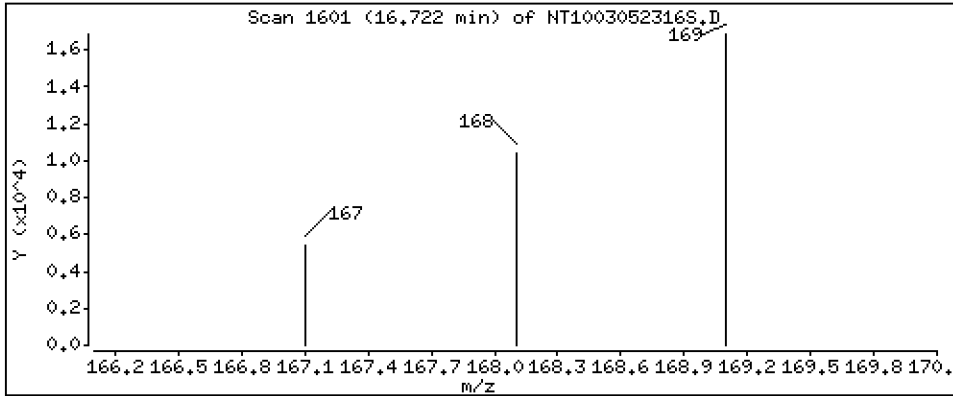
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,1752 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

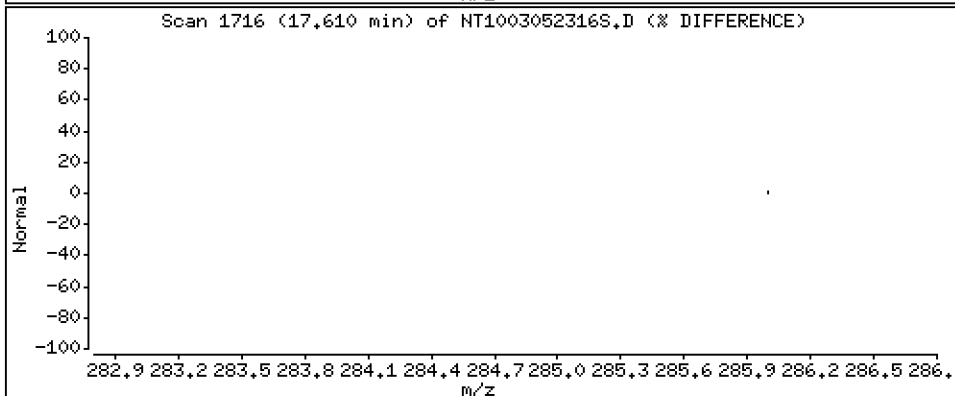
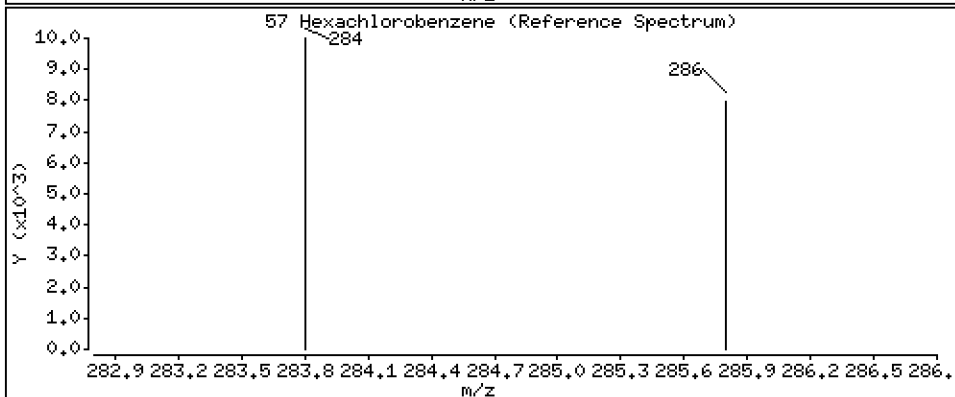
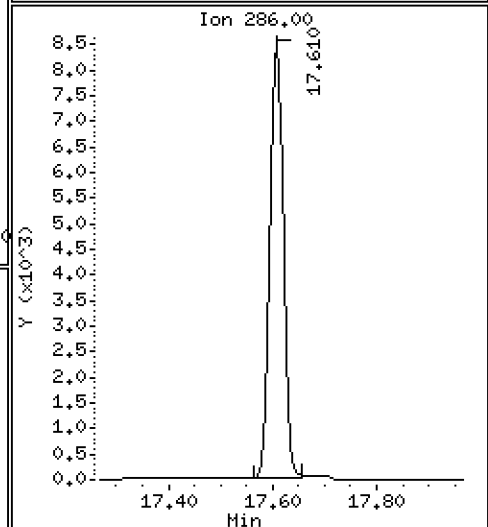
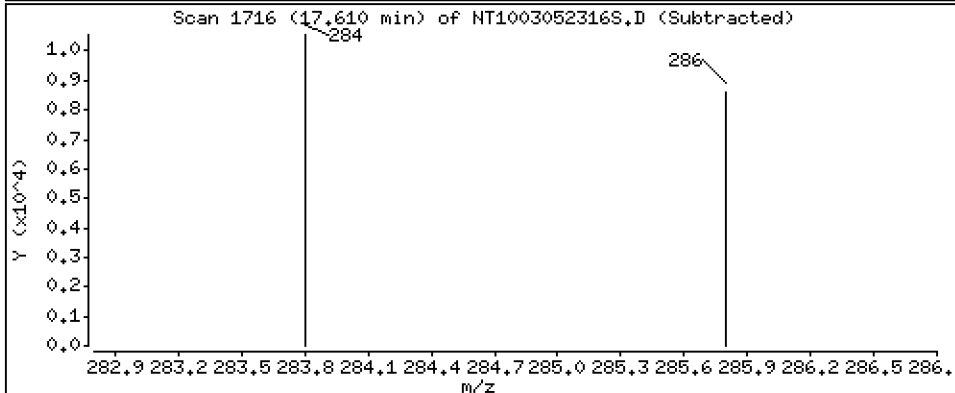
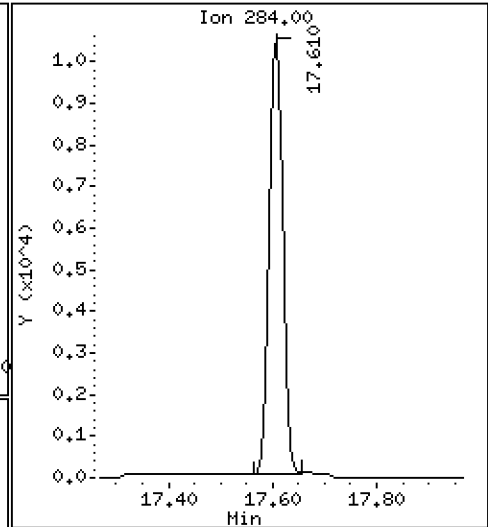
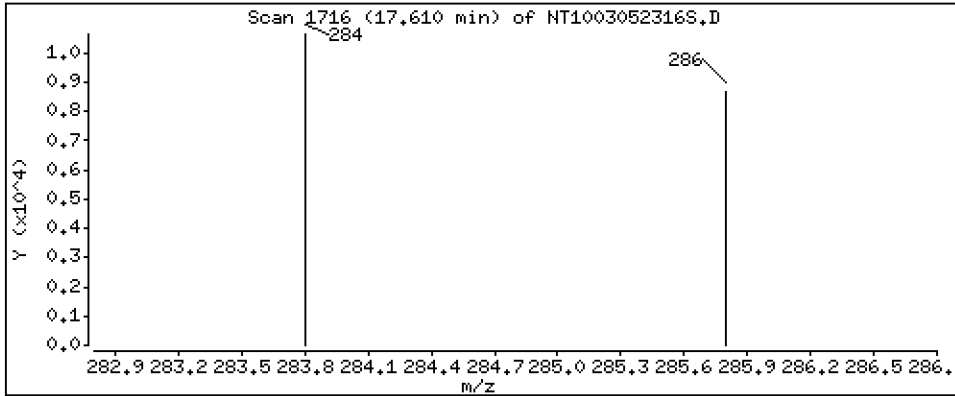
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,2197 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

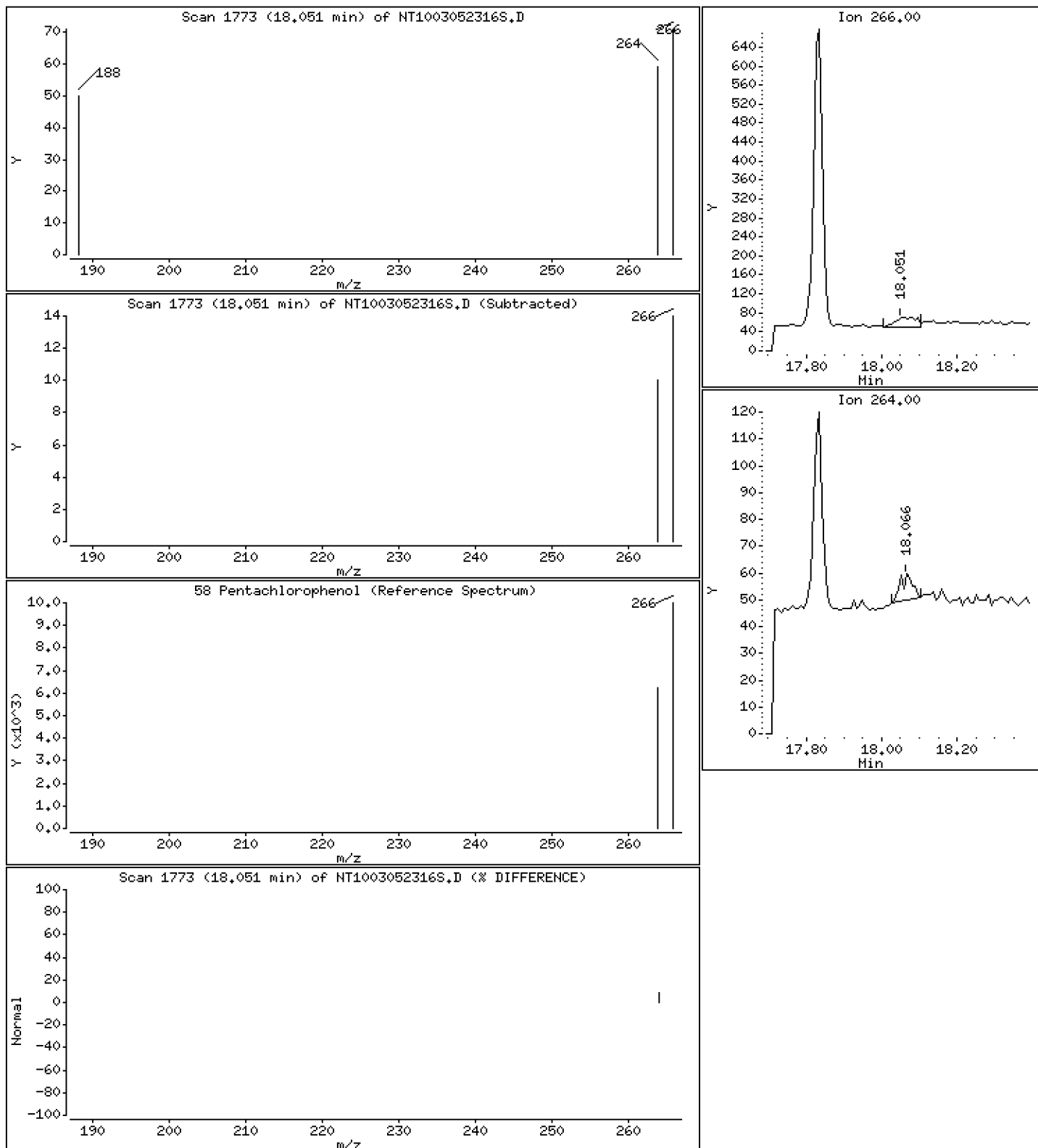
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,002313 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

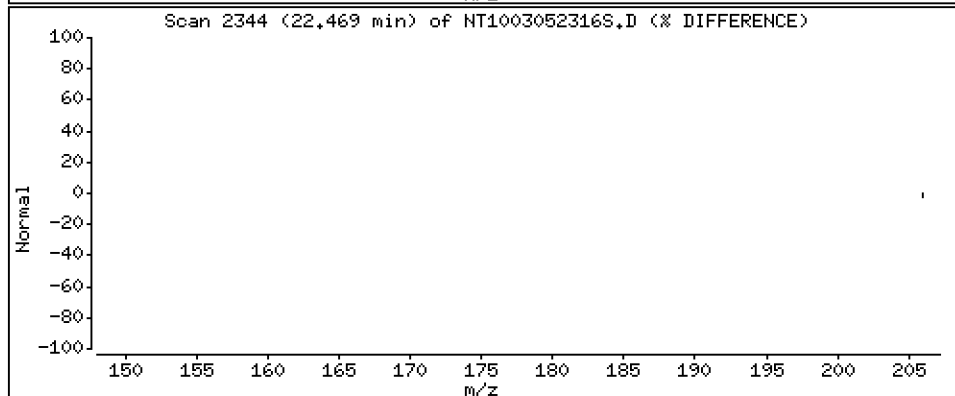
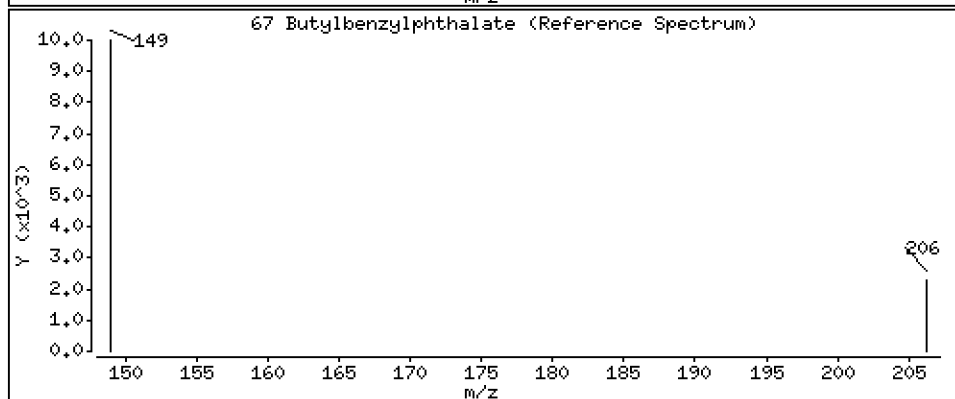
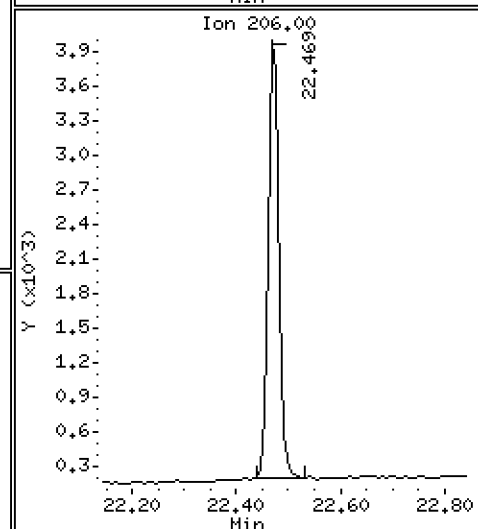
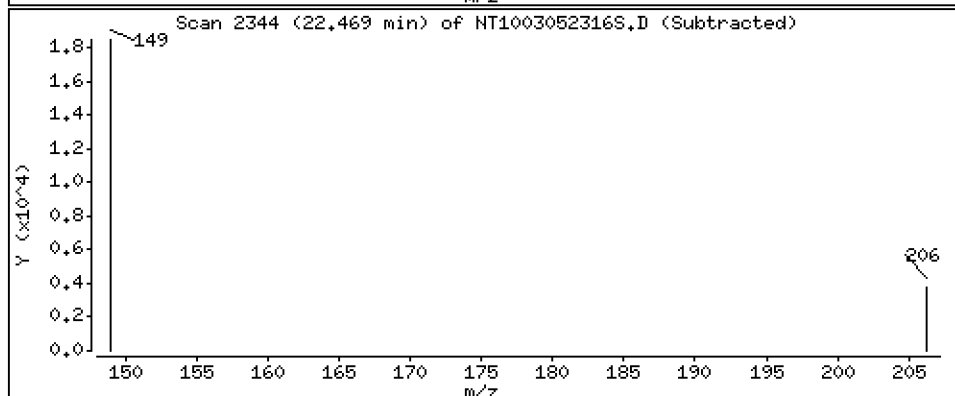
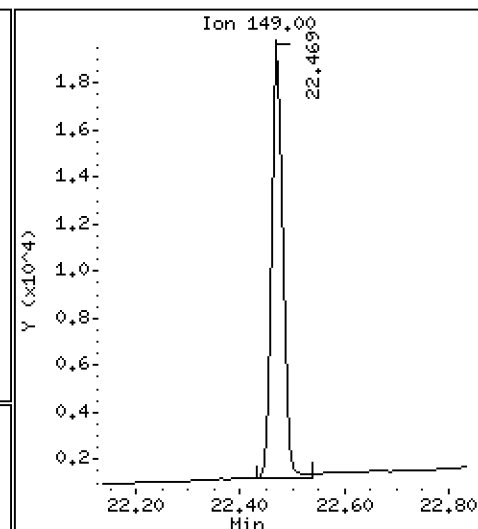
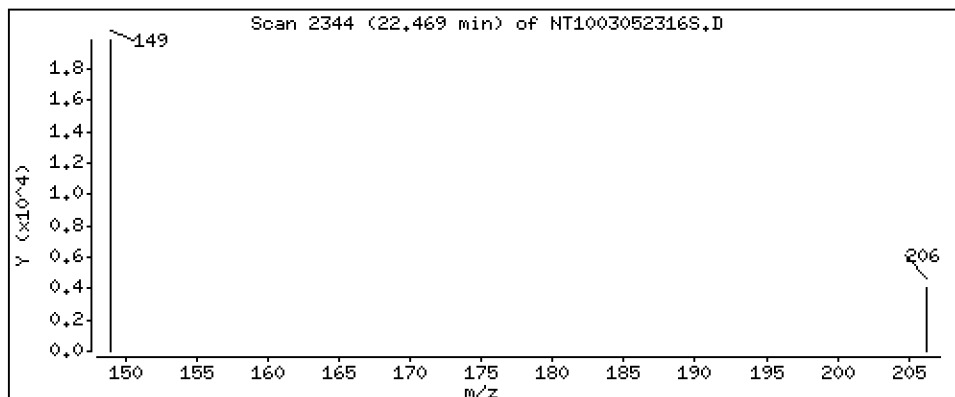
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,1517 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

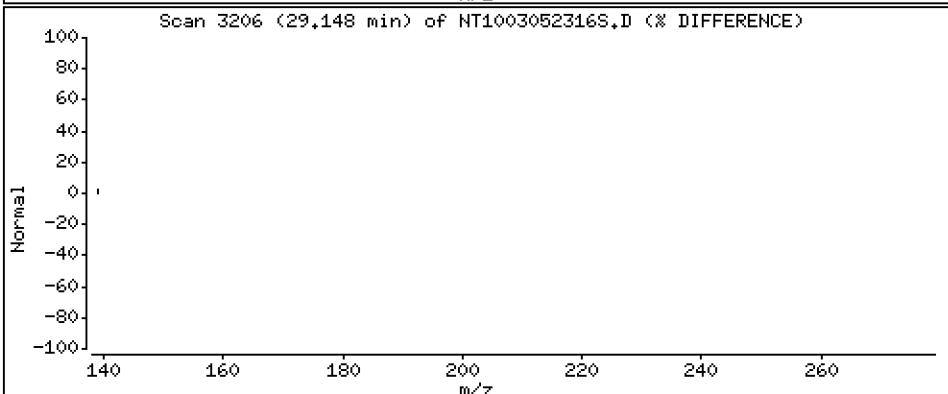
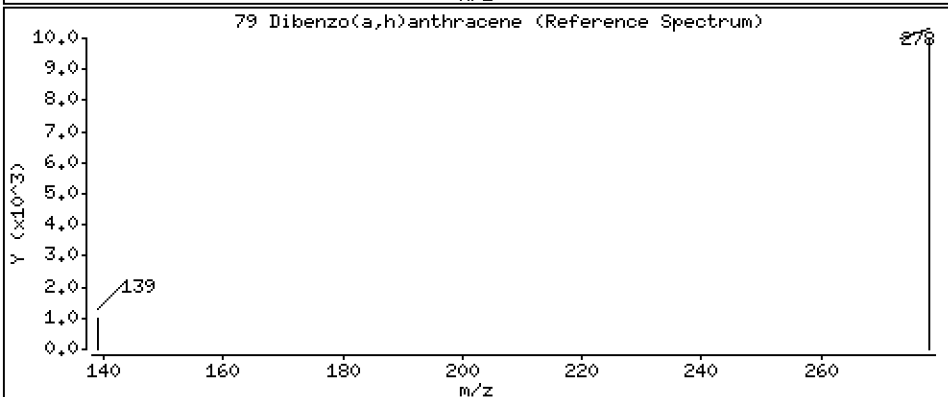
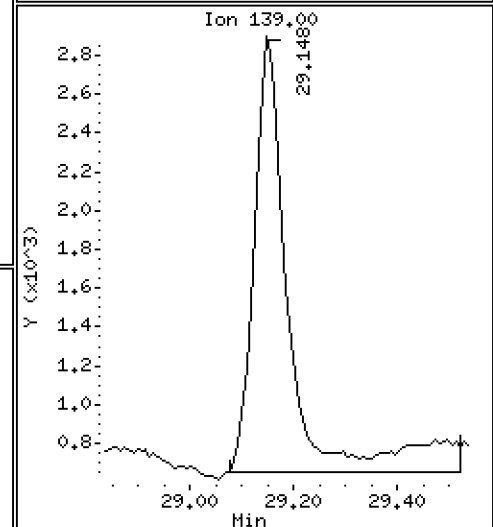
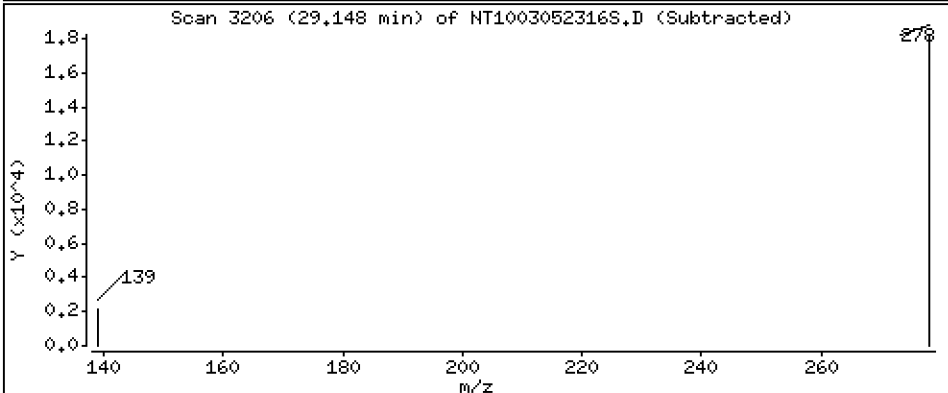
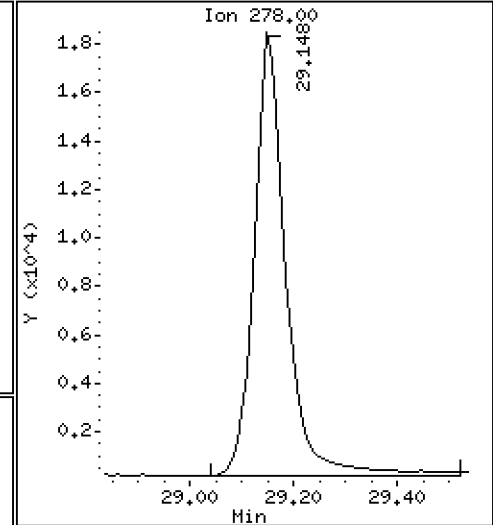
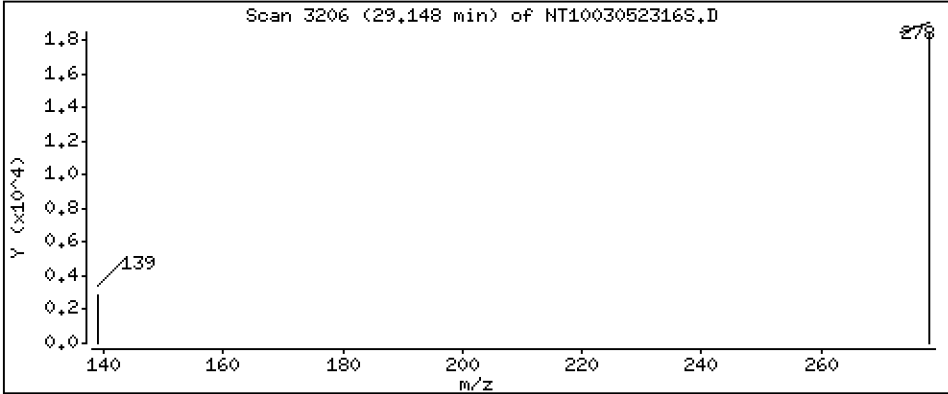
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,2594 ug/mL



Date : 05-MAR-2023 22:54

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV2

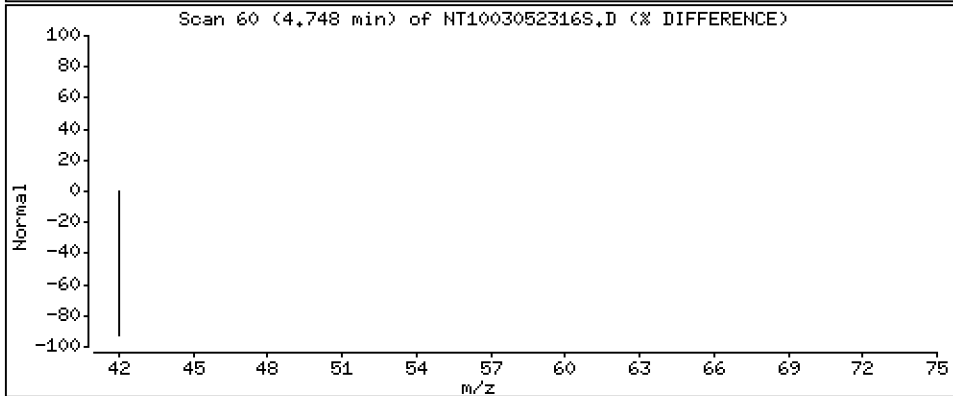
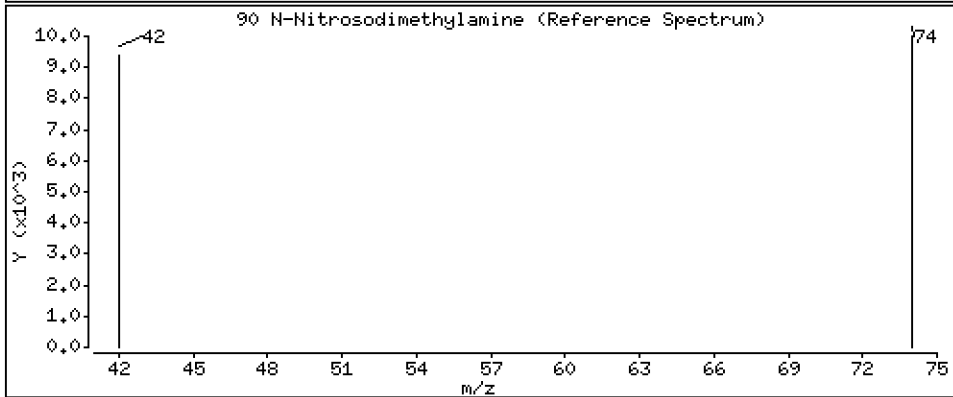
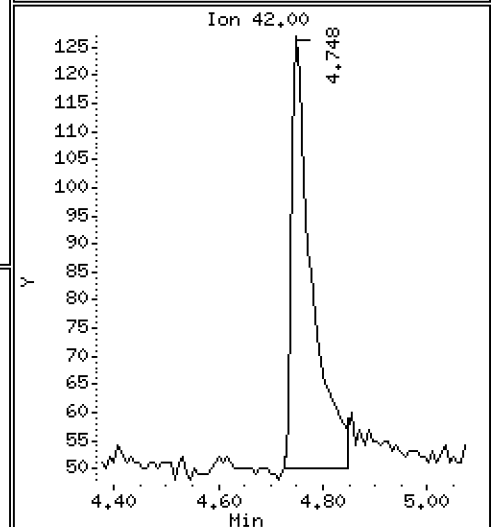
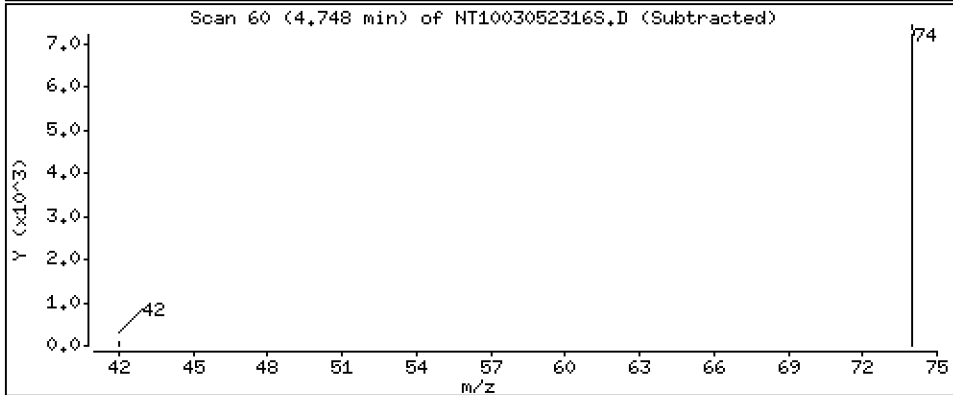
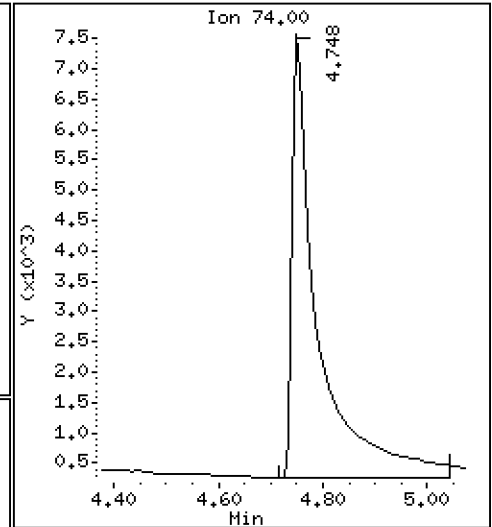
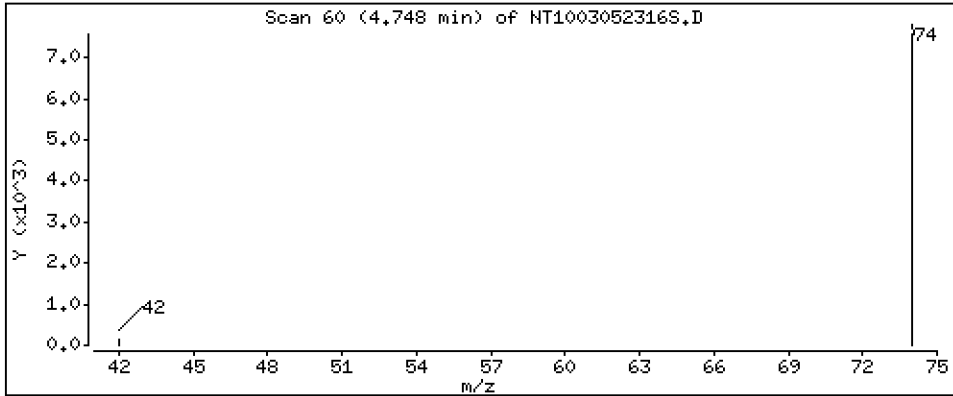
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,4414 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052316S.D
 Lab Smp Id: SLC0440-LCV2
 Inj Date : 05-MAR-2023 22:54
 Operator : YZ
 Smp Info : SLC0440-LCV2
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 29-Mar-2023 11:59 van
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: VANS-201906

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.747)	28839	0.29416	0.2942 (R)
3 Phenol	94		8.540	8.532	(0.924)	21680	0.14984	0.1498
7 1,3-Dichlorobenzene	146		9.135	9.143	(0.988)	25681	0.20179	0.2018
* 8 1,4-Dichlorobenzene-d4	152		9.244	9.252	(1.000)	343403	4.00000	
9 1,4-Dichlorobenzene	146		9.275	9.283	(1.003)	24642	0.19915	0.1991
11 Benzyl alcohol	79		9.492	9.484	(1.027)	12568	0.15653	0.1565
12 1,2-Dichlorobenzene	146		9.562	9.570	(1.034)	24119	0.20279	0.2028
13 2-Methylphenol	108		9.679	9.671	(1.047)	18687	0.21464	0.2146
15 4-Methylphenol	108		9.974	9.966	(1.079)	18199	0.20093	0.2009
16 N-Nitroso-di-n-propylamine	70		9.981	9.981	(1.080)	15306	0.23754	0.2375
22 2,4-Dimethylphenol	107		11.015	11.014	(0.939)	40239	0.40024	0.4002
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.608	11.608	(0.989)	20920	0.24553	0.2455
* 27 Naphthalene-d8	136		11.731	11.731	(1.000)	1183783	4.00000	
30 Hexachlorobutadiene	225		11.994	12.001	(1.022)	13854	0.22913	0.2291
39 Dimethylphthalate	163		14.757	14.764	(0.963)	35615	0.19545	0.1954
* 42 Acenaphthene-d10	162		15.329	15.337	(1.000)	573890	4.00000	
50 Diethylphthalate	149		16.226	16.234	(1.059)	36209	0.21071	0.2107 (H)
54 N-Nitrosodiphenylamine	169		16.721	16.729	(0.907)	31085	0.17520	0.1752
57 Hexachlorobenzene	284		17.609	17.617	(0.955)	18239	0.21967	0.2197
58 Pentachlorophenol	266		18.050	18.042	(0.979)	84	0.00231	0.002313 (M)
* 59 Phenanthrene-d10	188		18.437	18.453	(1.000)	1096301	4.00000	
\$ 66 Terphenyl-d14	244		21.578	21.594	(0.919)	26301	0.31278	0.3128 (R)
67 Butylbenzylphthalate	149		22.469	22.484	(0.956)	26624	0.15171	0.1517
* 69 Chrysene-d12	240		23.491	23.514	(1.000)	1039816	4.00000	
* 77 Perylene-d12	264		26.247	26.270	(1.000)	1308865	4.00000	
79 Dibenzo(a,h)anthracene	278		29.147	29.186	(1.110)	78908	0.25942	0.2594
90 N-Nitrosodimethylamine	74		4.748	4.724	(0.514)	25620	0.44139	0.4414

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052316S.D
 Lab Smp Id: SLC0440-LCV2
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	293840	146920	587680	343403	16.87
27 Naphthalene-d8	1032639	516320	2065278	1183783	14.64
42 Acenaphthene-d10	502349	251175	1004698	573890	14.24
59 Phenanthrene-d10	975997	487999	1951994	1096301	12.33
69 Chrysene-d12	978544	489272	1957088	1039816	6.26
77 Perylene-d12	1201606	600803	2403212	1308865	8.93

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.24	-0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.34	14.84	15.84	15.33	-0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.44	-0.08
69 Chrysene-d12	23.51	23.01	24.01	23.49	-0.10
77 Perylene-d12	26.27	25.77	26.77	26.25	-0.09

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

REVIEW SUMMARY FOR FILE - NT1003052316S.D

Lab ID: SLC0440-LCV2

nt10.i, 20230305A.b\SIM.b\SIMABN2.m,

05-MAR-2023 22:54

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052315SA.D

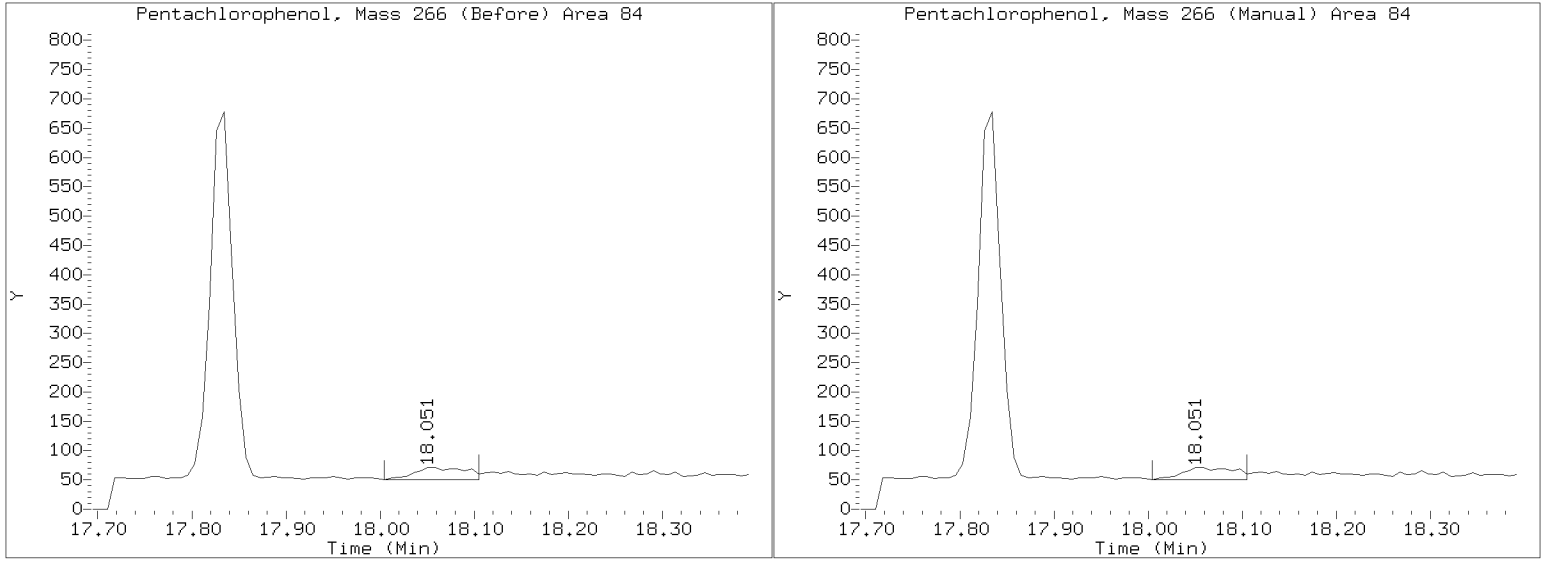
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230305A.b/SIM.b/NT1003052316S.D
Injection Date: 05-MAR-2023 22:54
Lab ID:SLC0440-LCV2 Client ID:
Report Date: 03/29/2023 11:59





**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052318S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0440</u>	Injection Date:	<u>03/06/23</u>
Lab Sample ID:	<u>SLC0440-LCV3</u>	Injection Time:	<u>00:09</u>
Sequence Name:	<u>ABN 0.5</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.50000	0.5	1.4413080	1.4946660		3.7	
1,2-Dichlorobenzene	A	0.50000	0.5	1.3853460	1.4708570		6.2	
Benzyl Alcohol	A	0.50000	0.4	0.7492523	0.7734909		-17.6	
Benzoic acid	A	2.0000	0.01	0.1431163	0.0010604		-99.4	
2,4-Dimethylphenol	A	1.0000	1.0	0.2957717	0.3407436		0.1	
1,2,4-Trichlorobenzene	A	0.50000	0.6	0.2879030	0.3564386		23.8	
N-Nitrosodiphenylamine	A	0.50000	0.5	0.6473471	0.5902534		-8.8	
Pentachlorophenol	A	1.0000	0.01	0.0950913	0.0014537		-98.9	
2-Fluorophenol	A	0.75000	0.804	1.1419780	1.2238880		7.2	
p-Terphenyl-d14	A	0.50000	0.813	0.3234672	0.5256901		62.5	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305A.b\SIH.b\NT10030523189.D

Date: 06-HPR-2023 00:09

Client ID:

Sample Info: SLC0440-LCV3

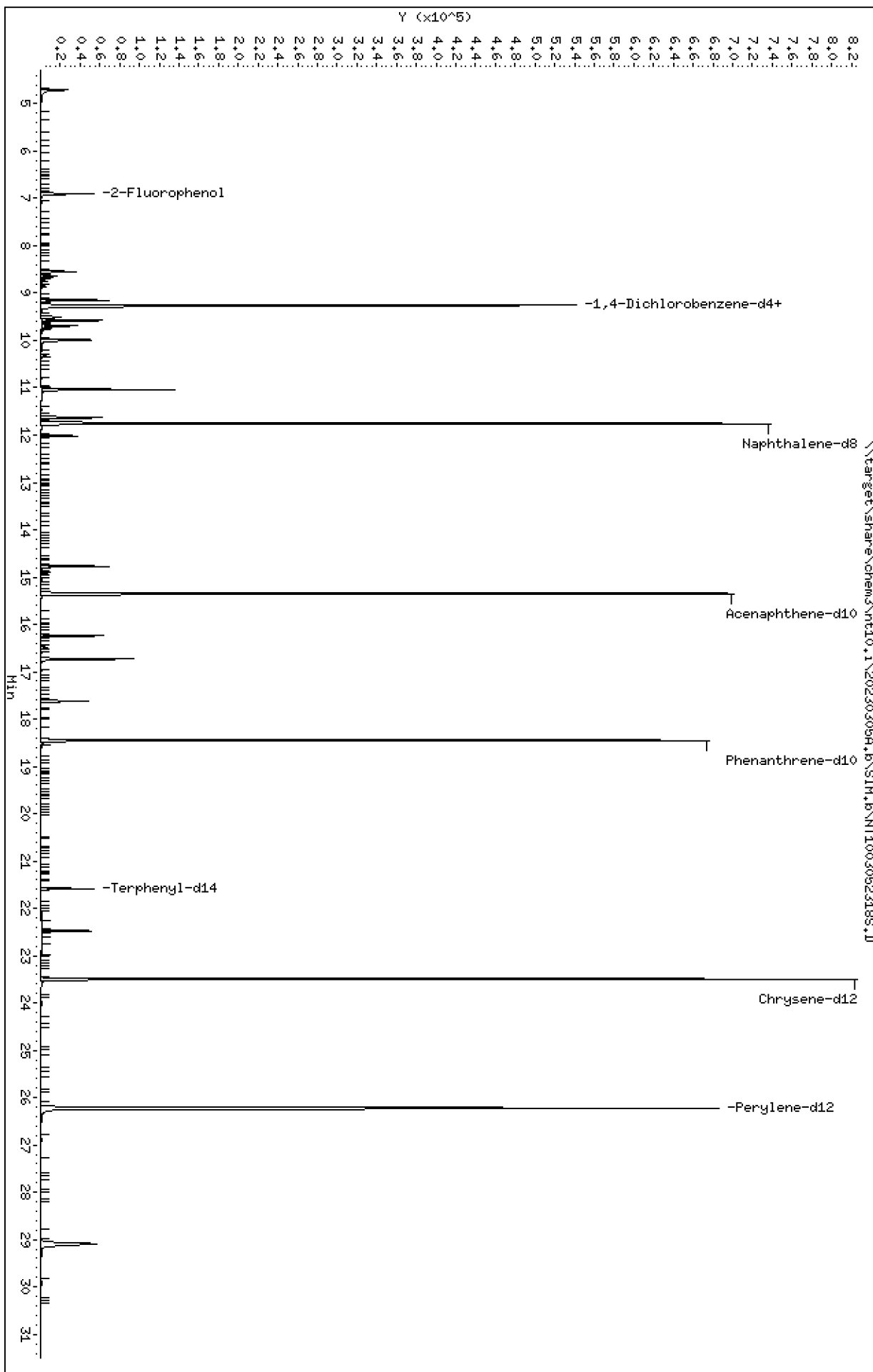
Column phase: ZB-5msi

Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Page 1



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

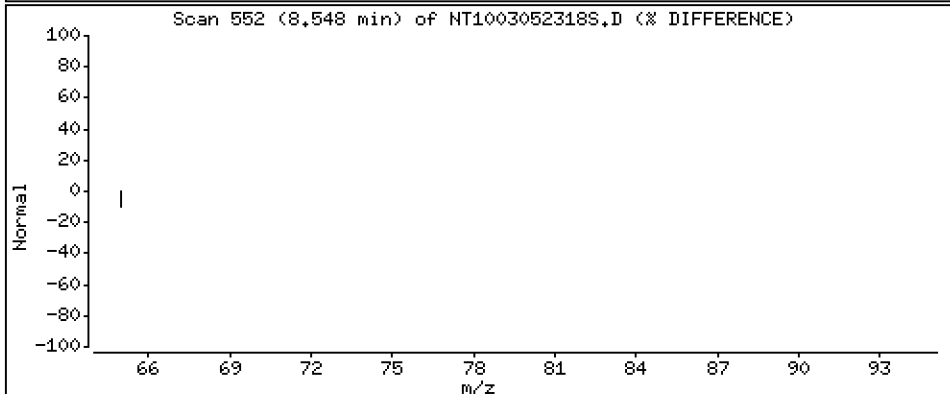
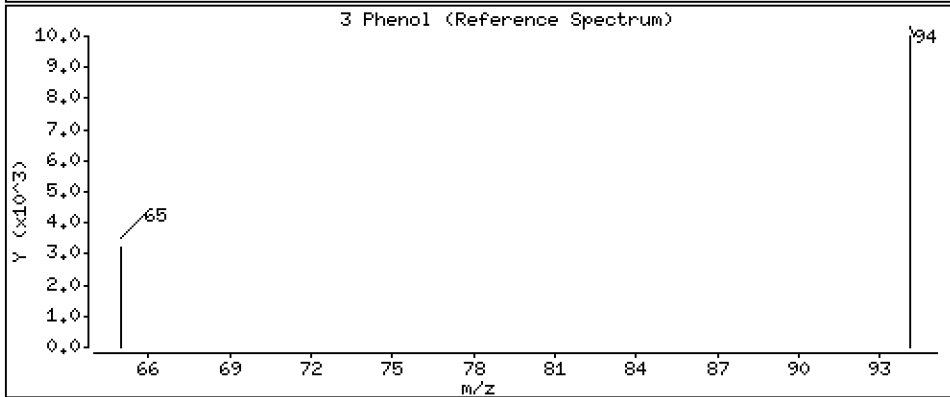
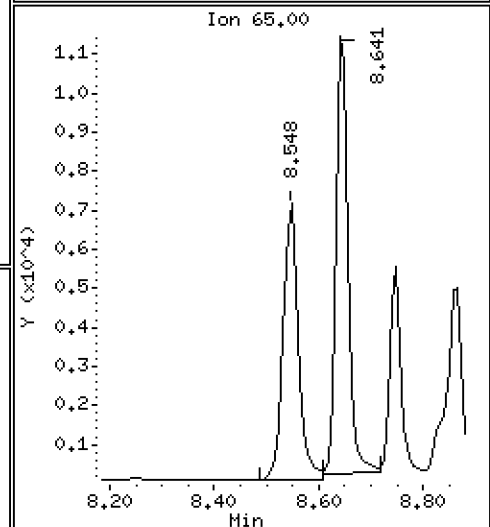
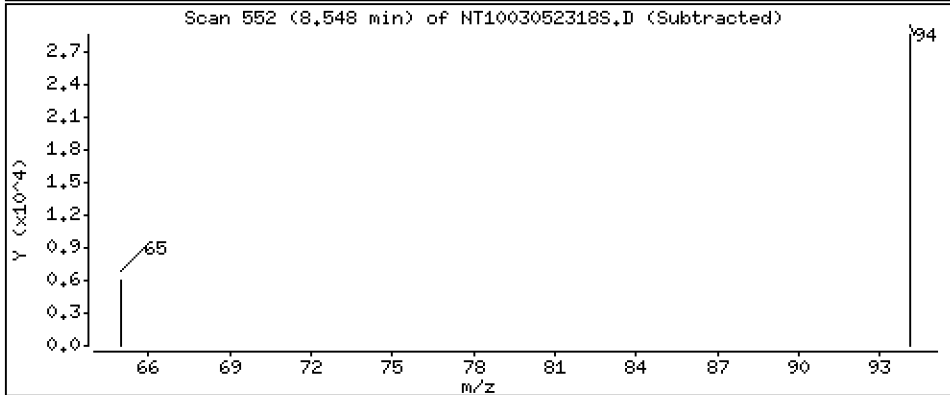
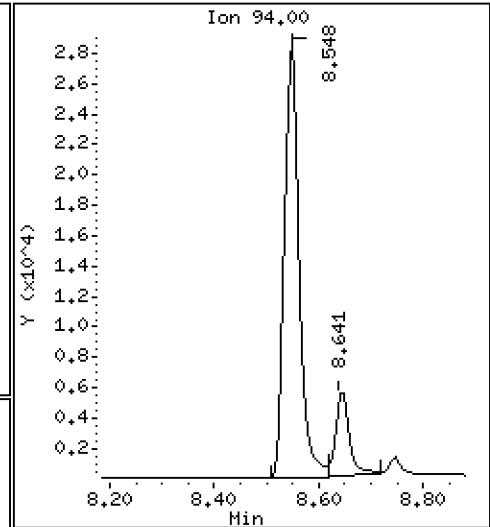
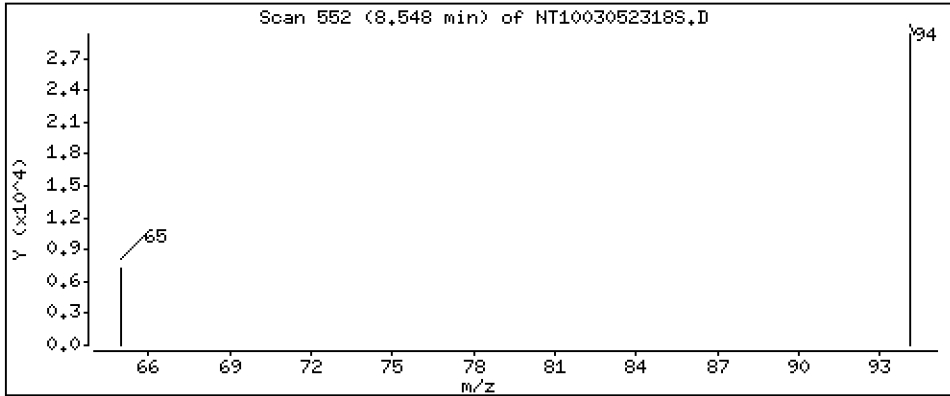
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,4157 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

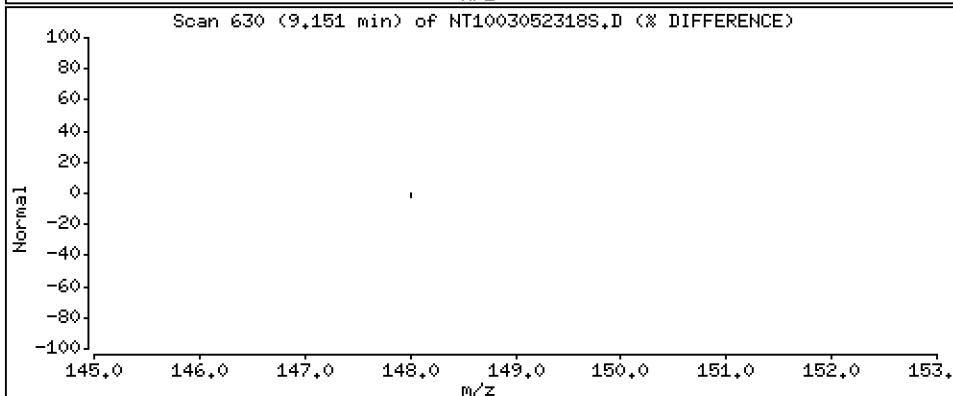
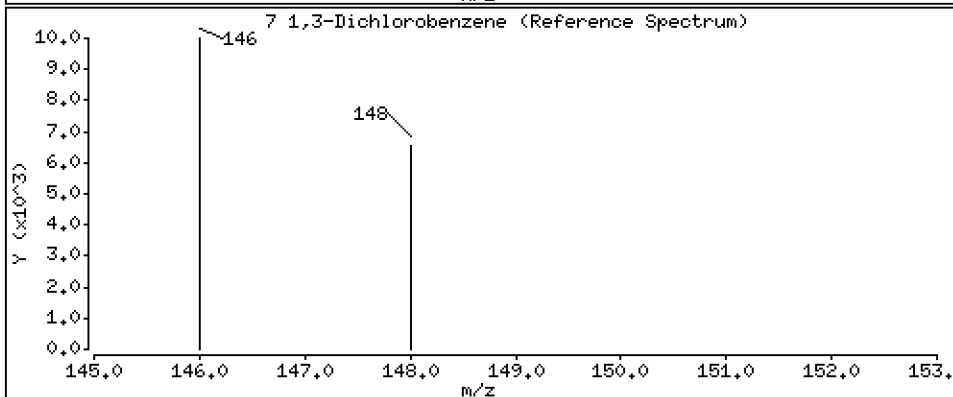
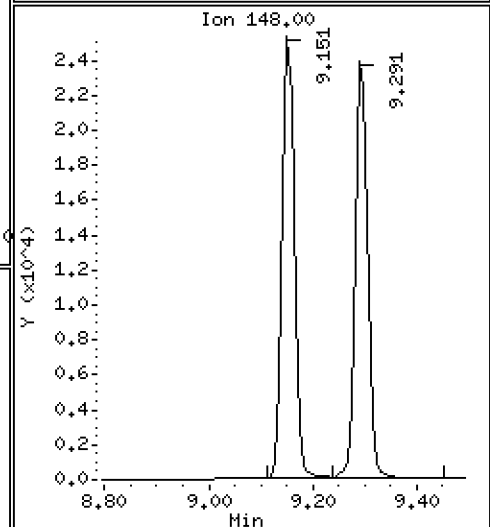
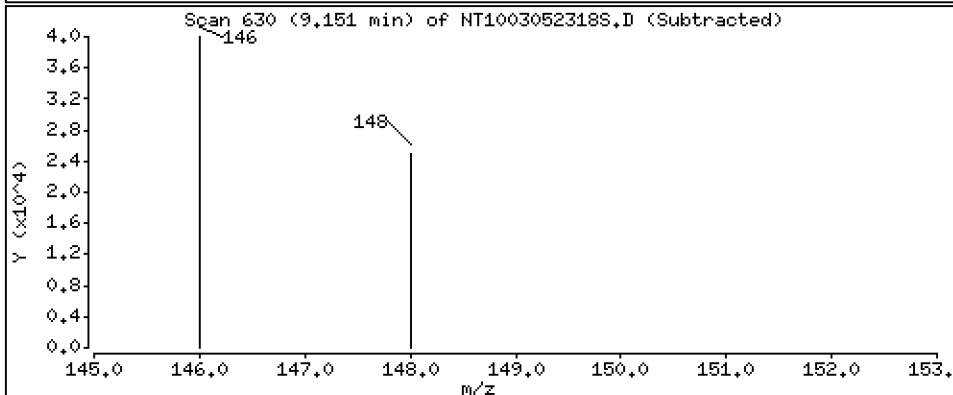
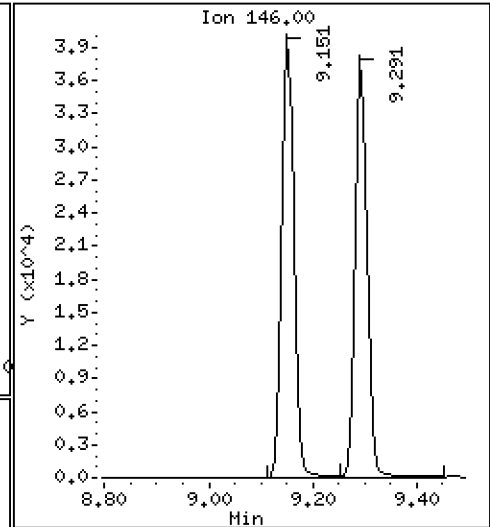
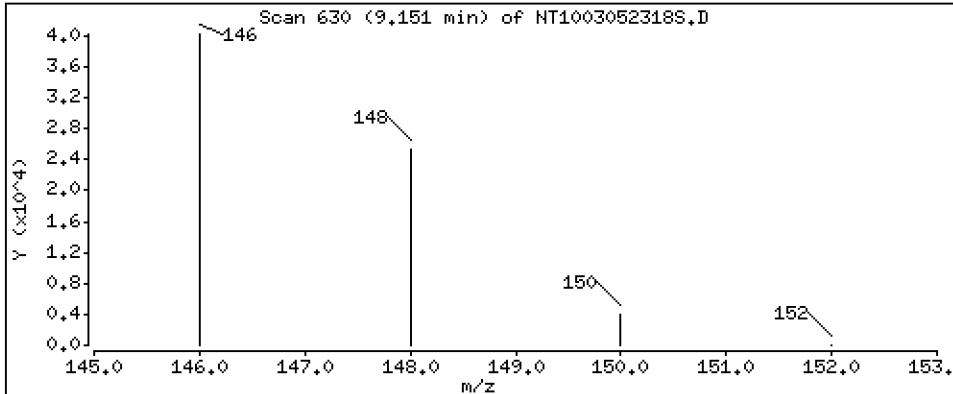
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,5303 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

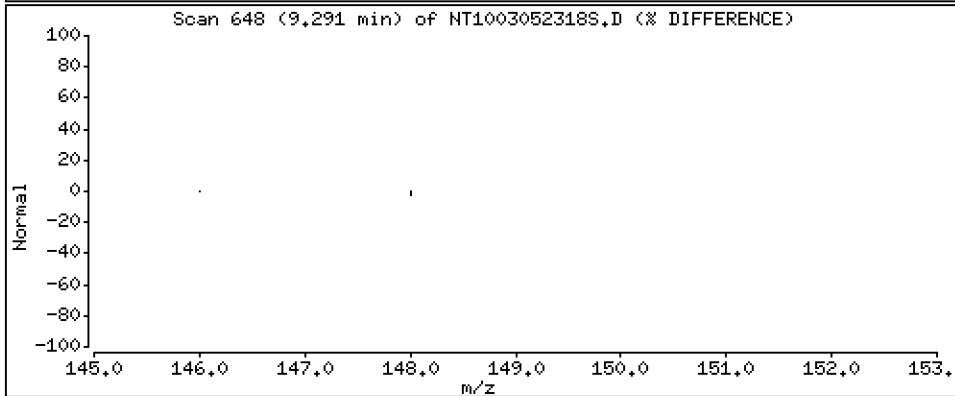
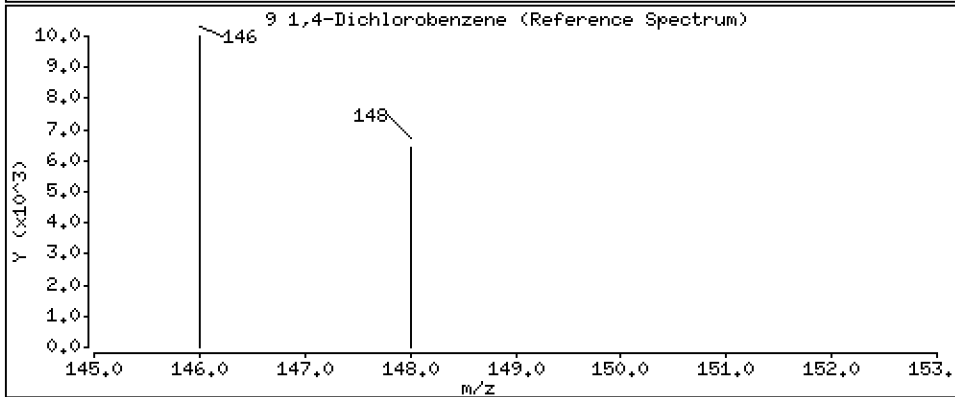
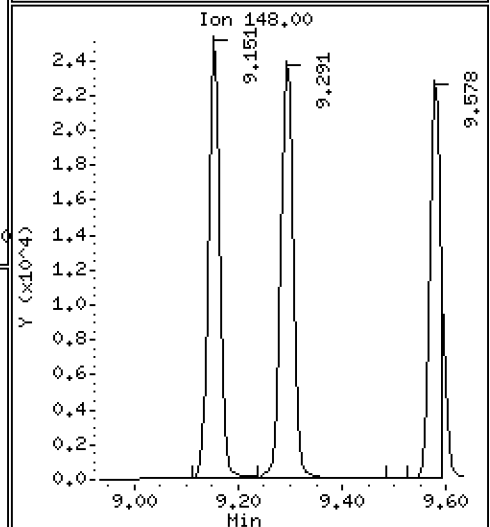
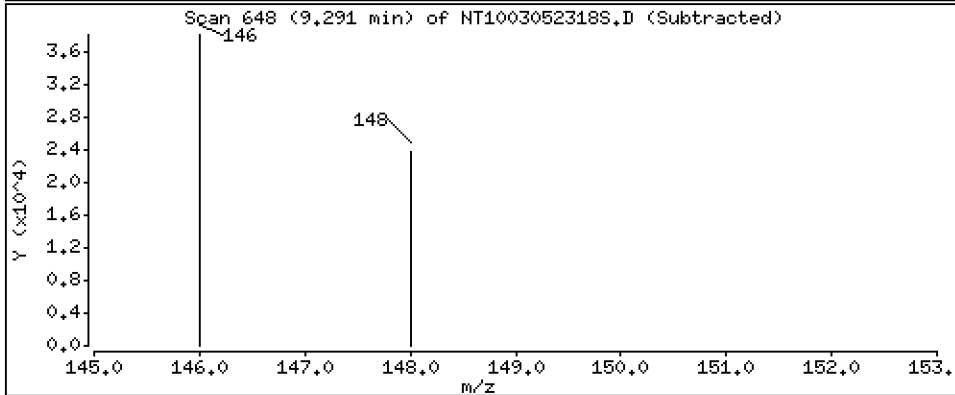
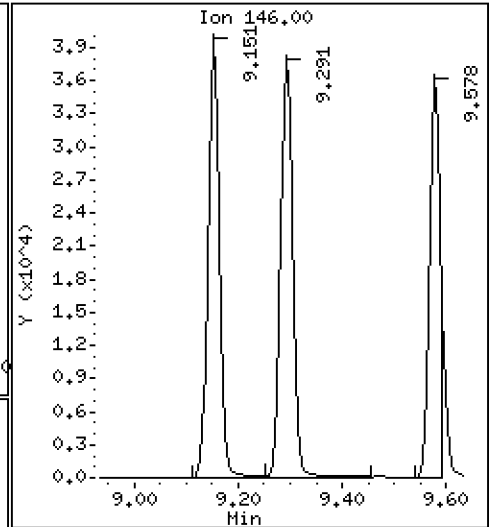
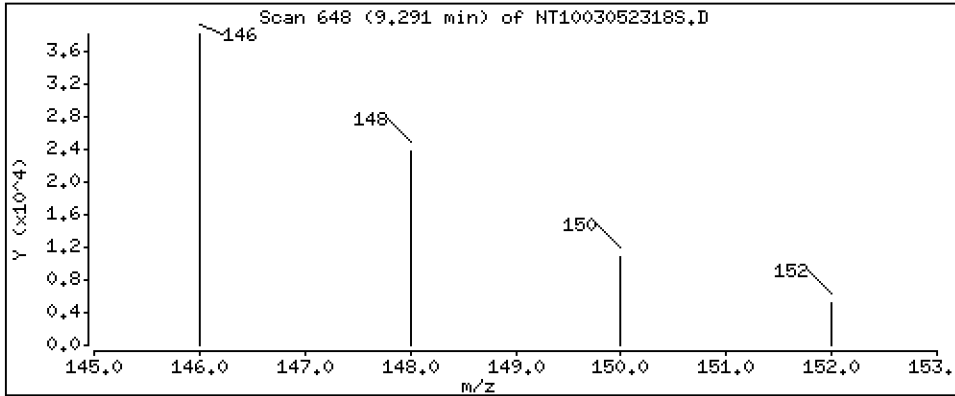
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

9 1,4-Dichlorobenzene

Concentration: 0,5185 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

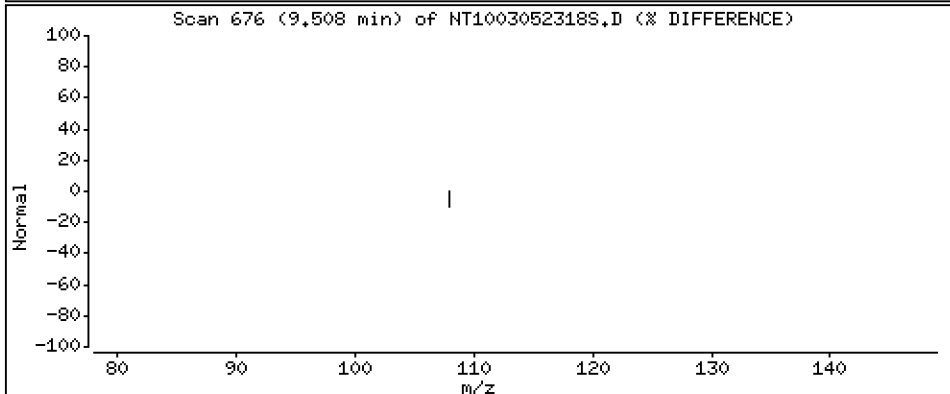
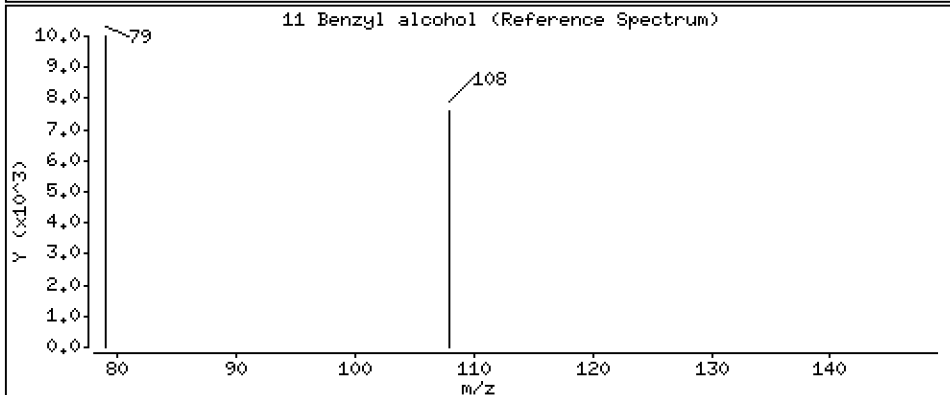
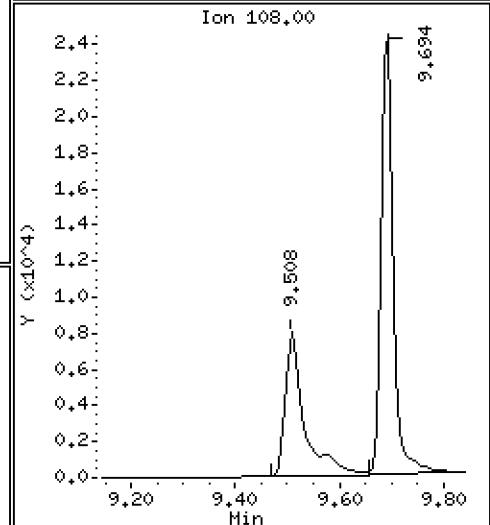
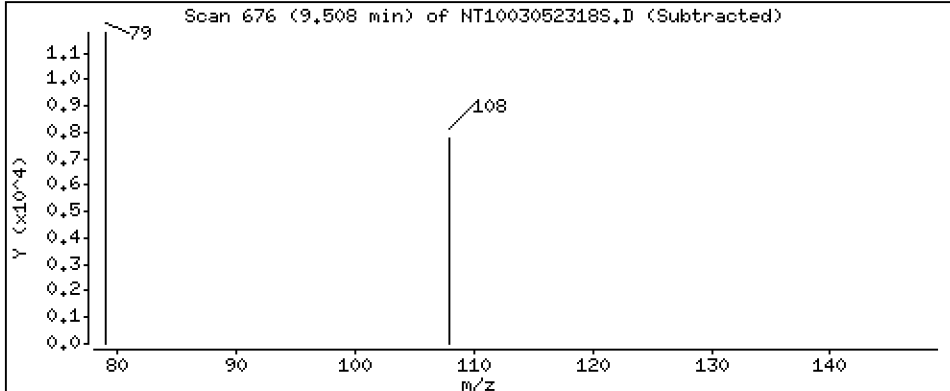
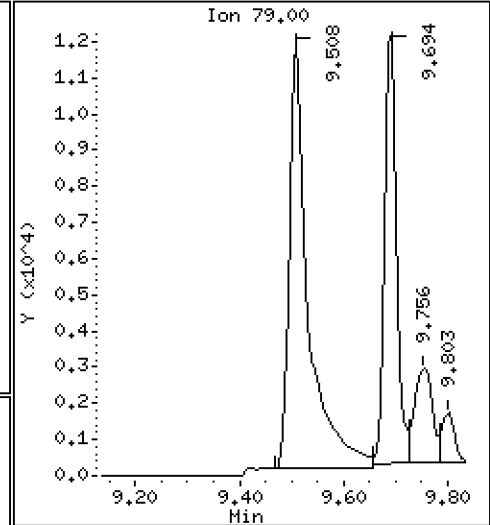
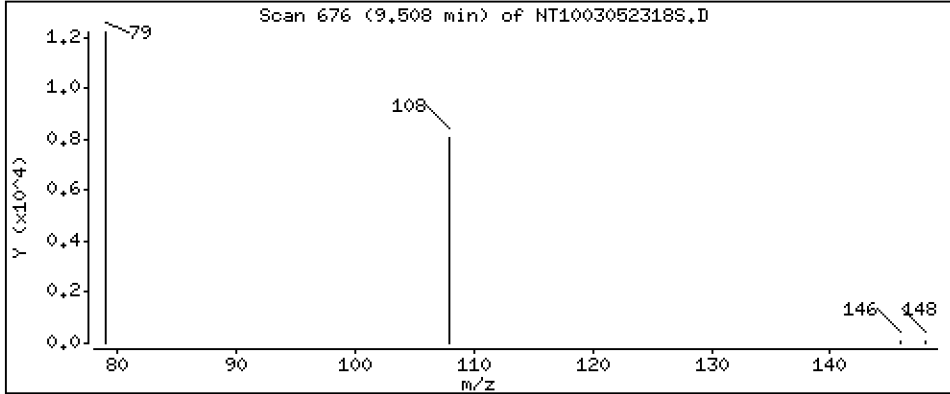
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

11 Benzyl alcohol

Concentration: 0.4122 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

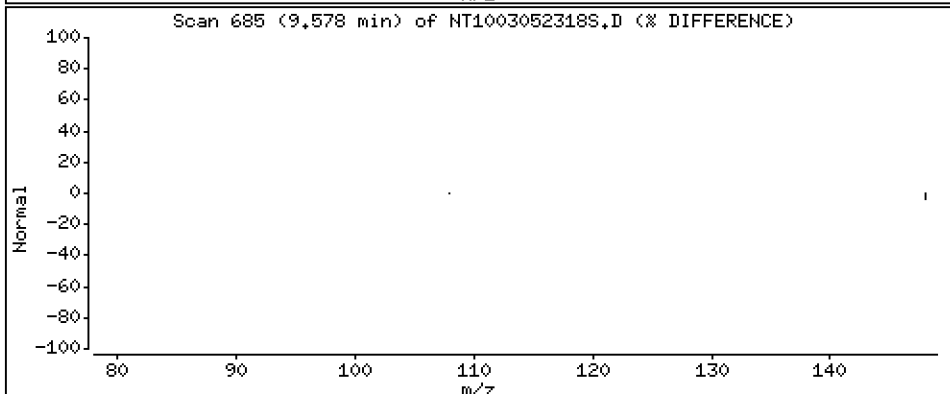
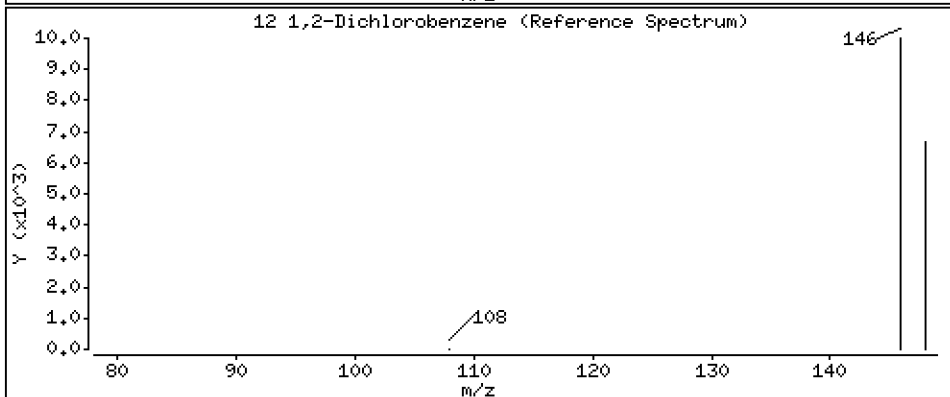
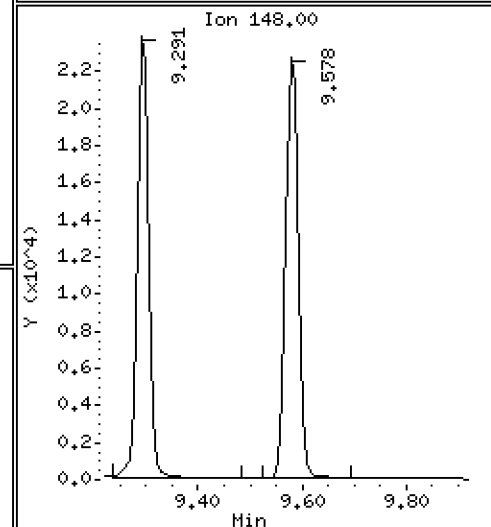
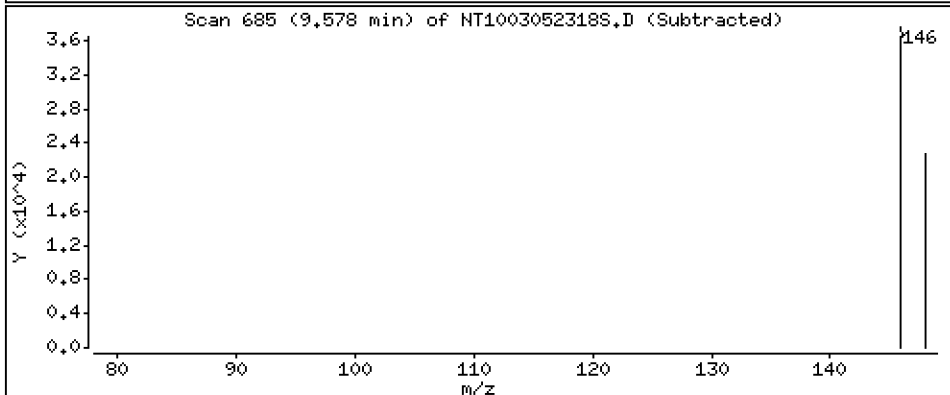
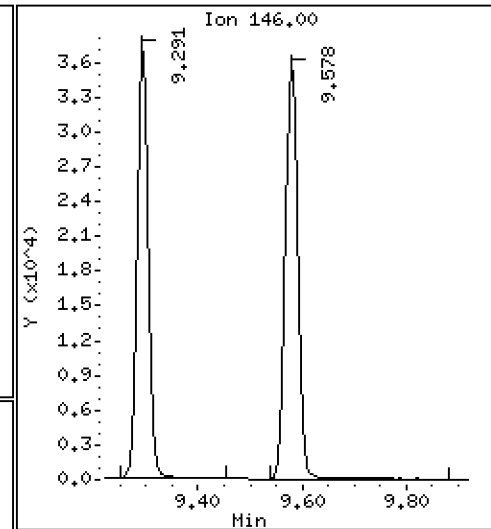
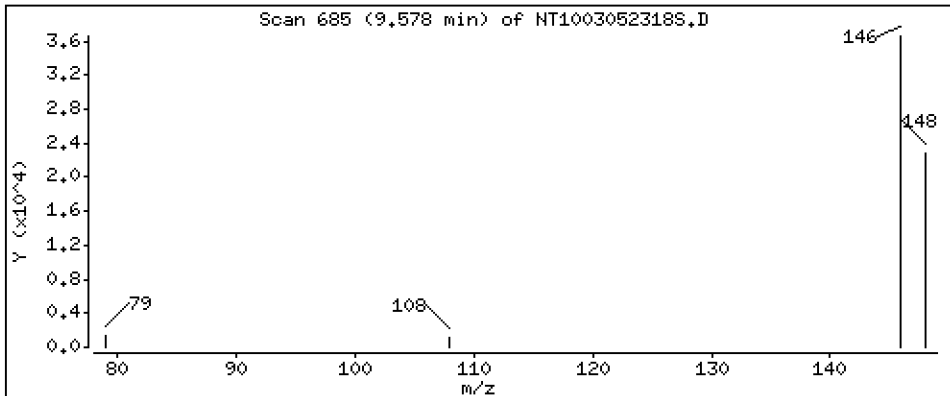
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,5309 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

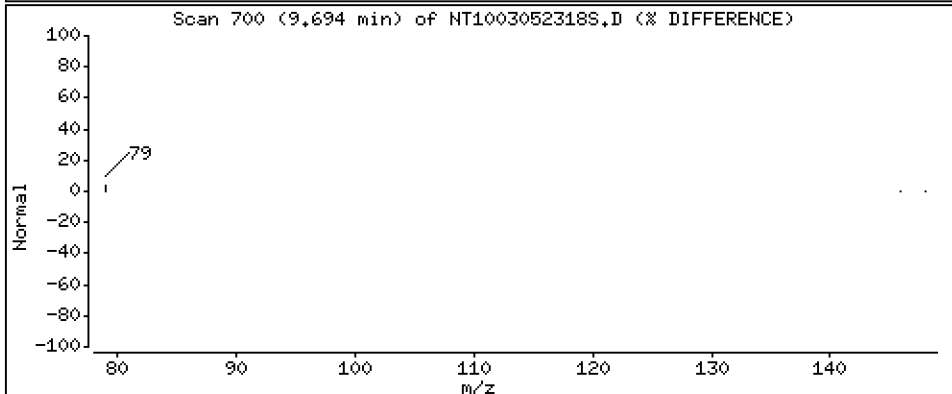
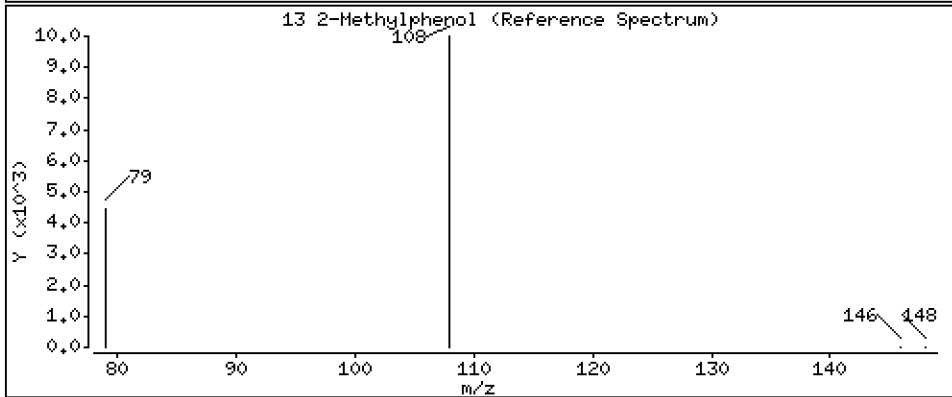
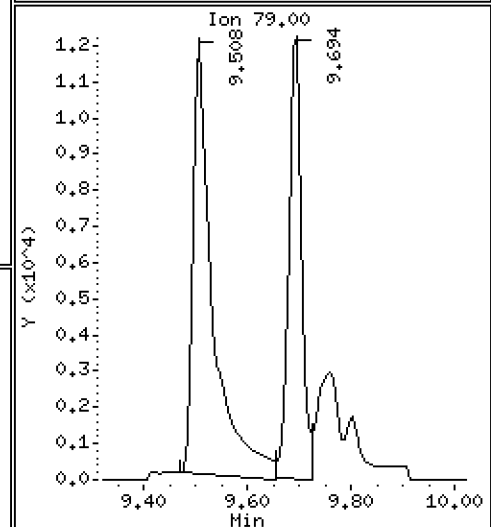
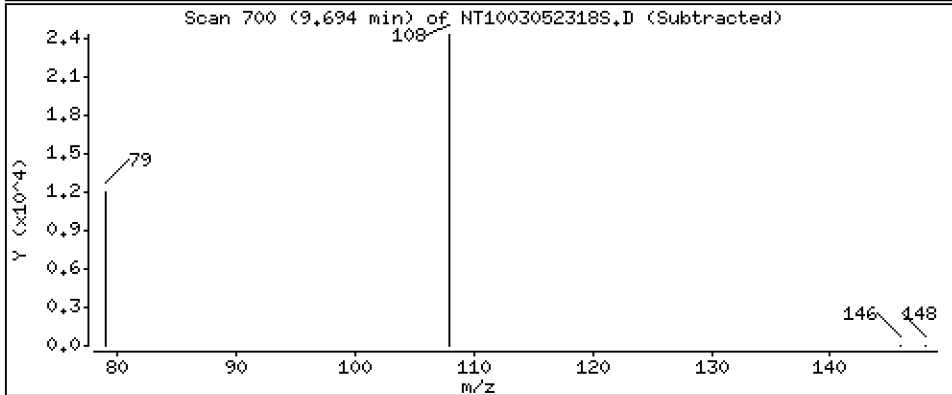
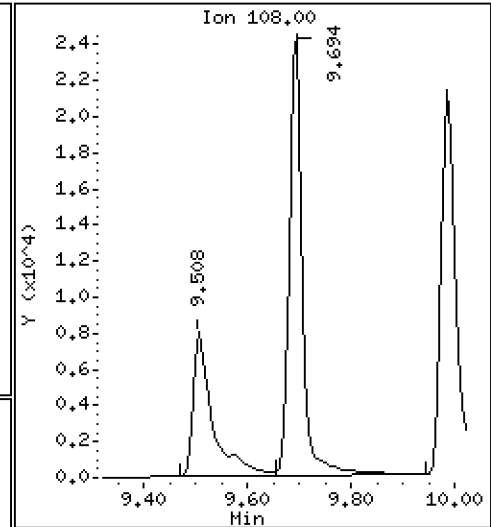
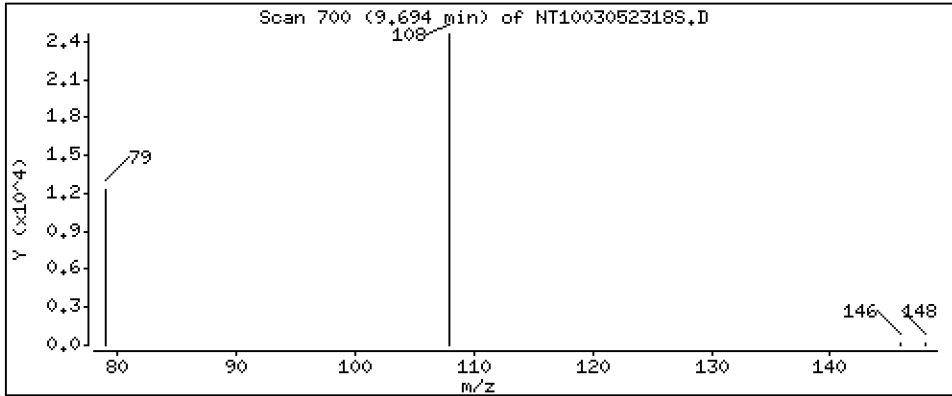
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

Concentration: 0.5400 ug/mL

13 2-Methylphenol



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

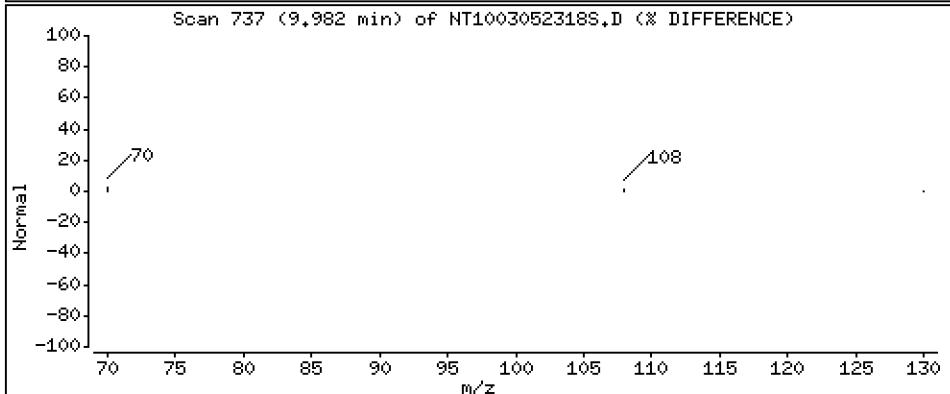
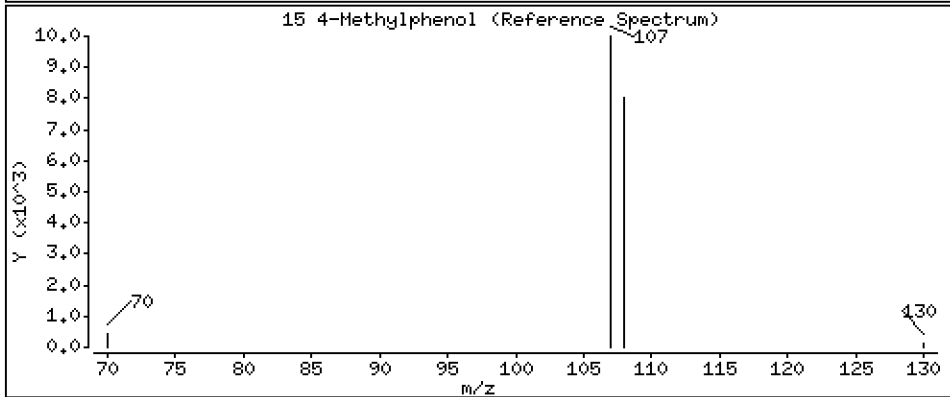
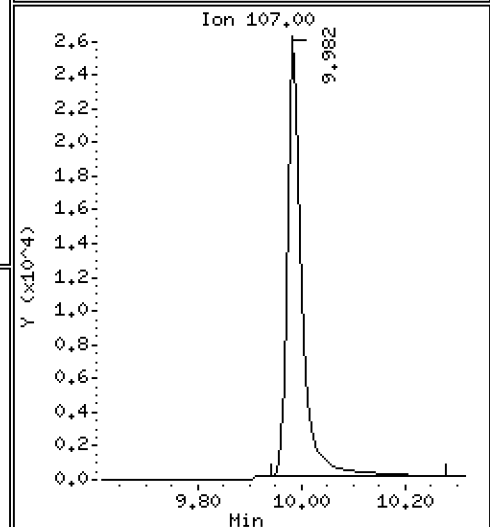
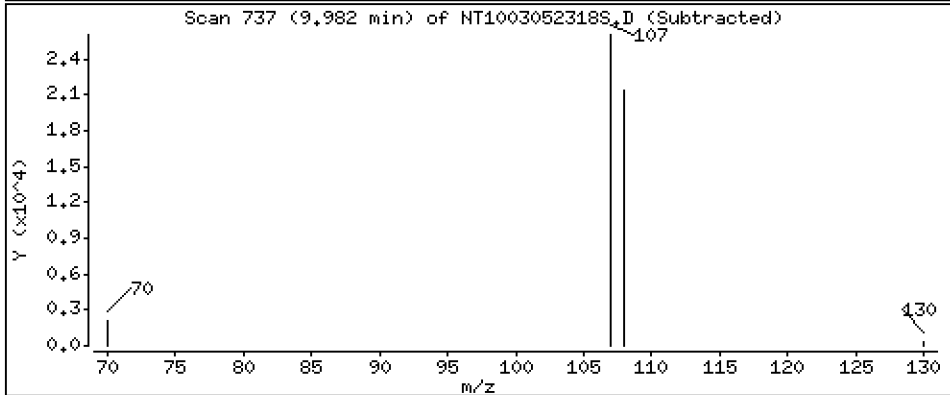
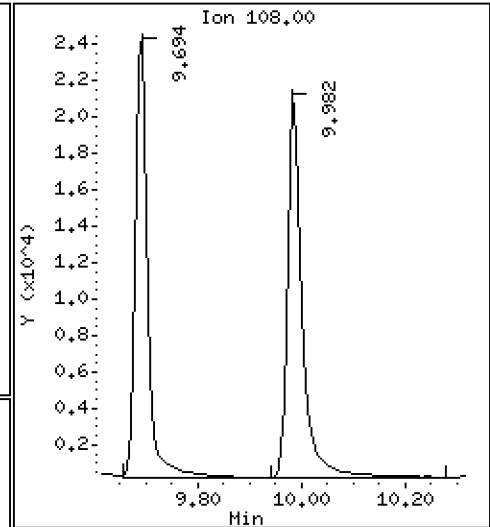
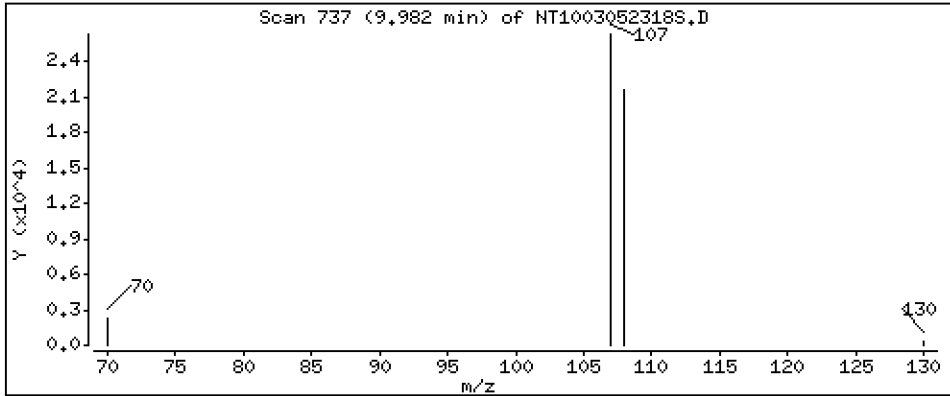
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

15 4-Methylphenol

Concentration: 0.5142 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

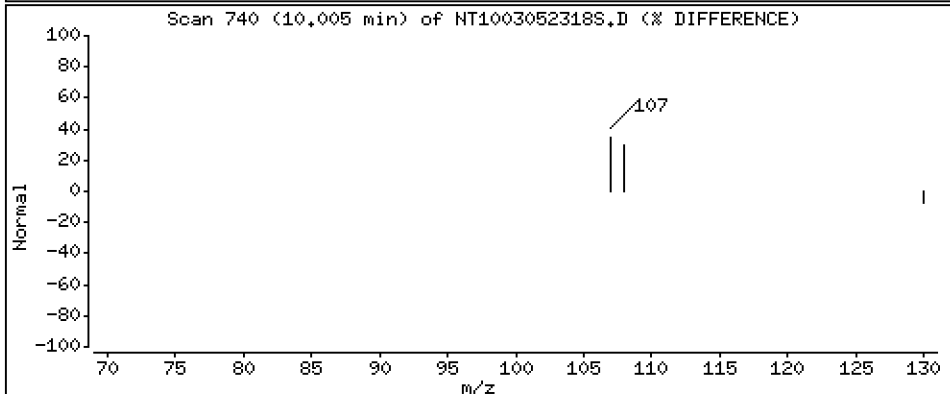
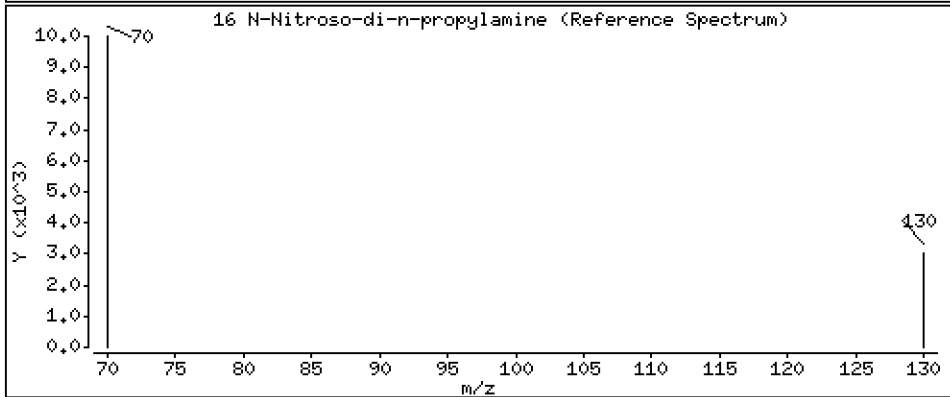
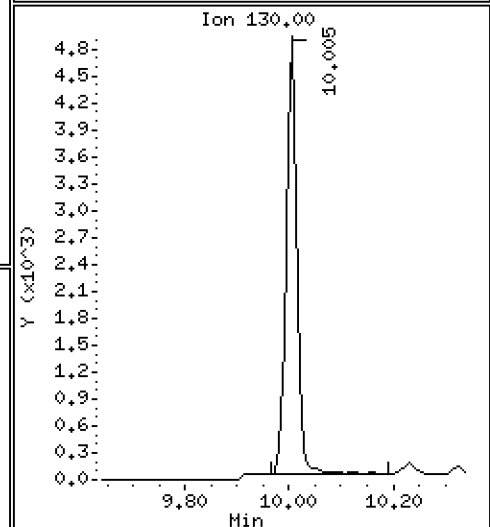
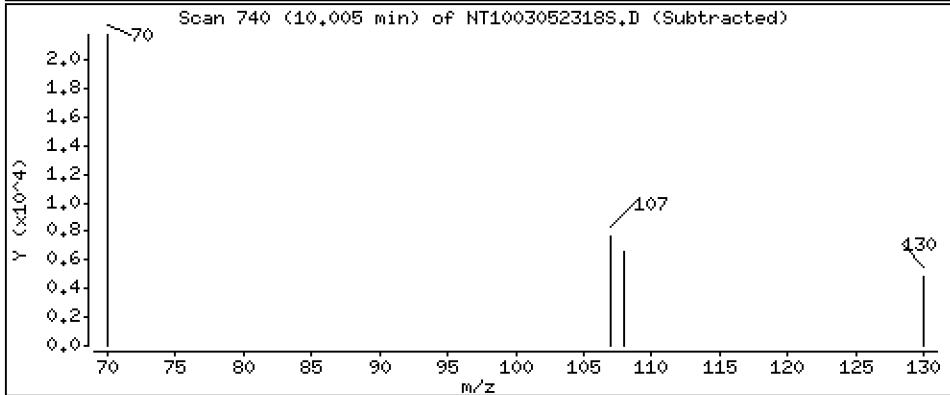
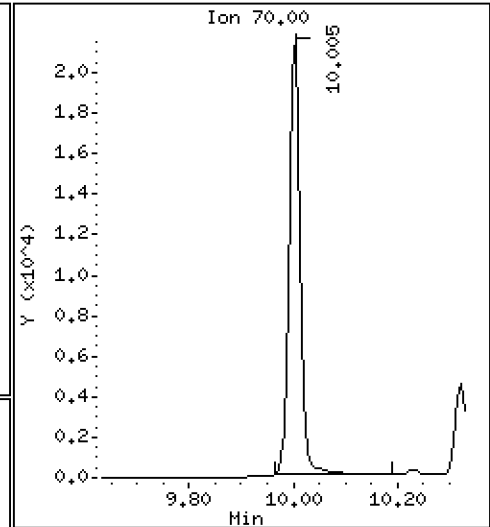
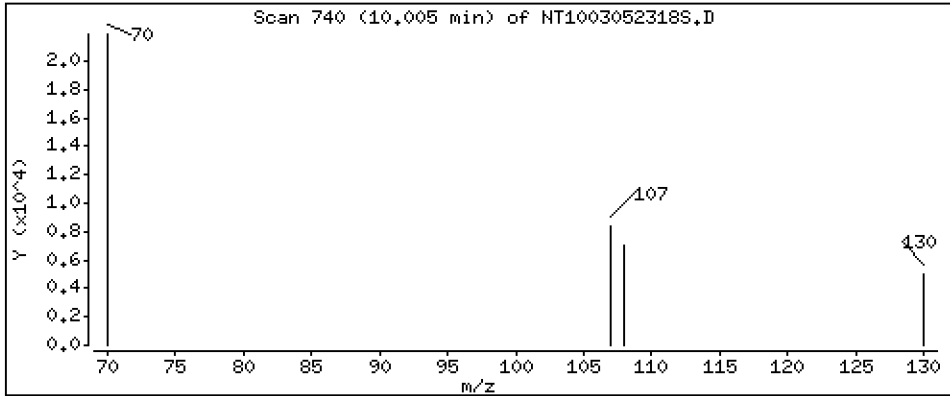
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 0,5665 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

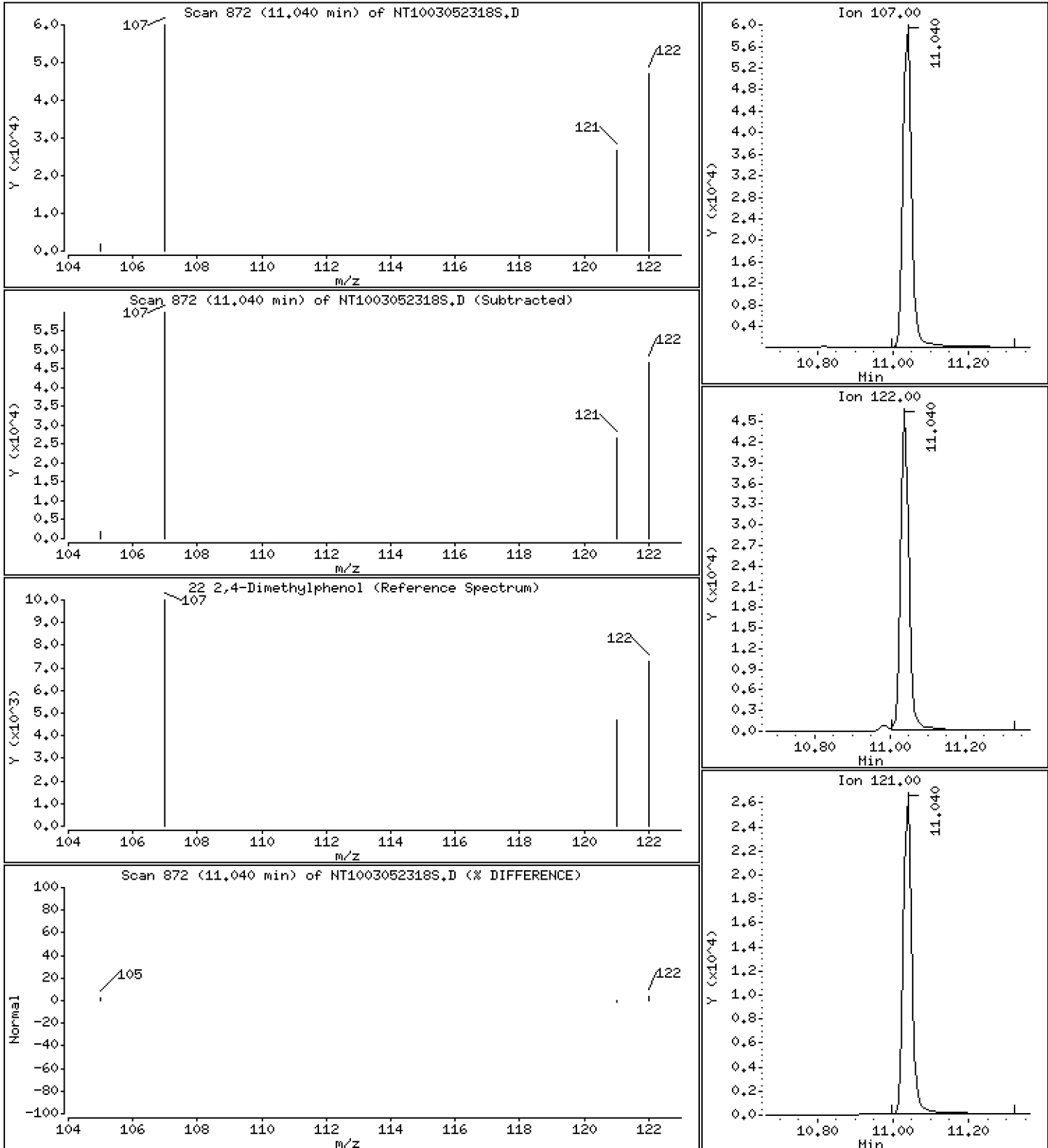
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 1,001 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

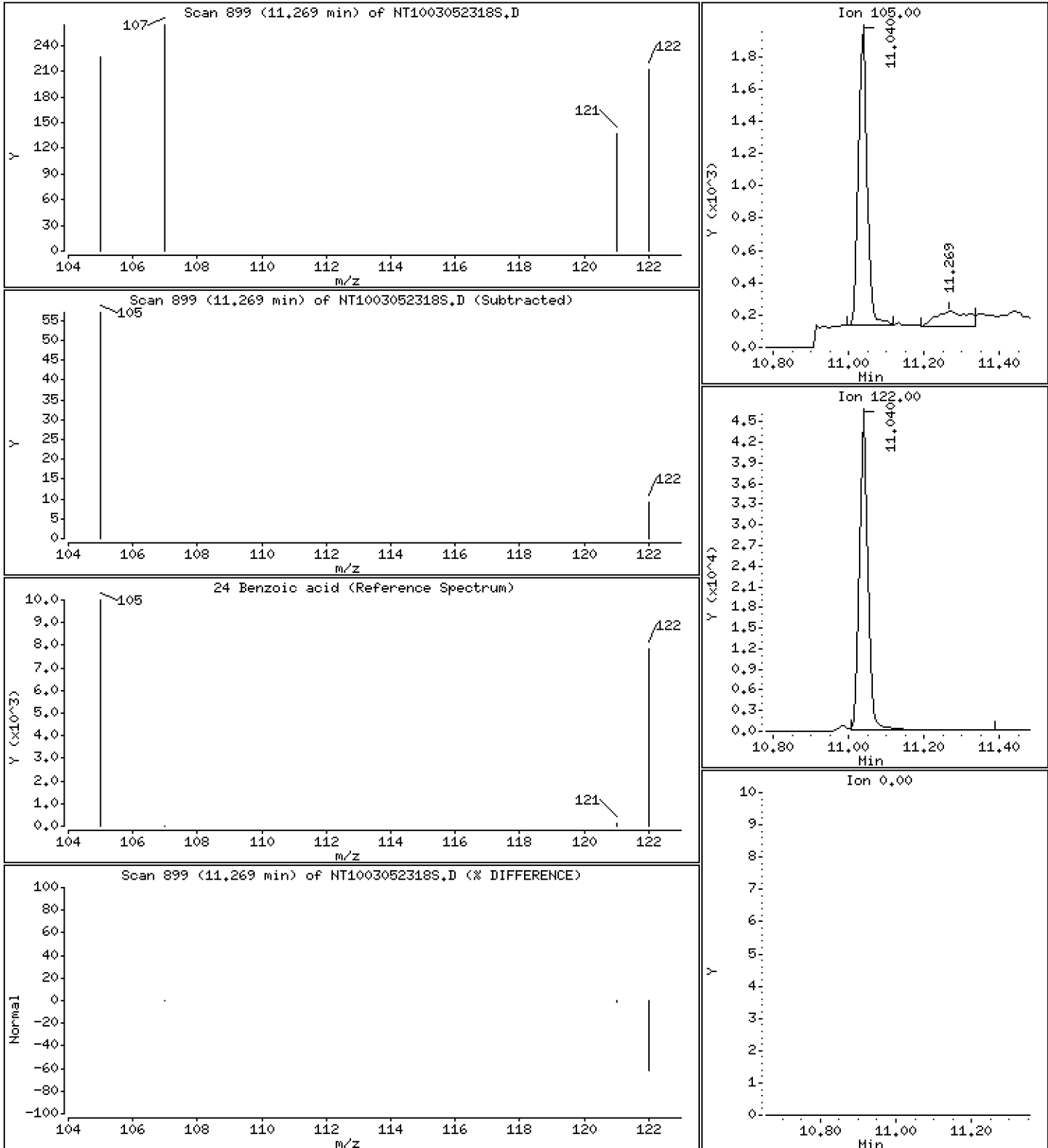
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,01140 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

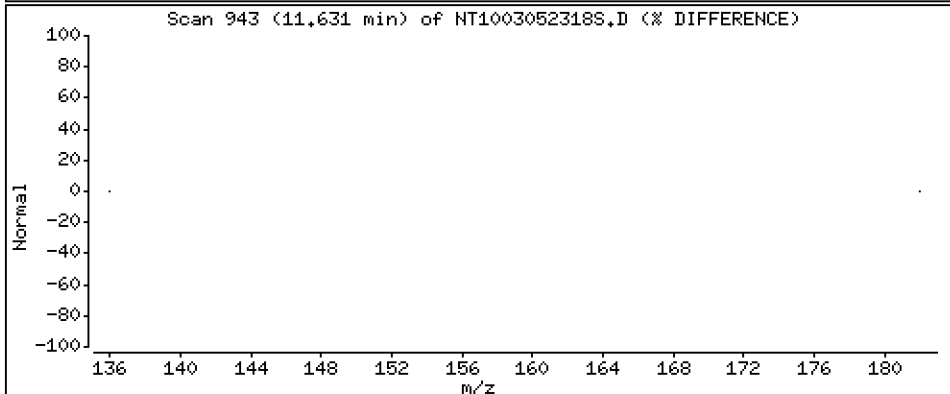
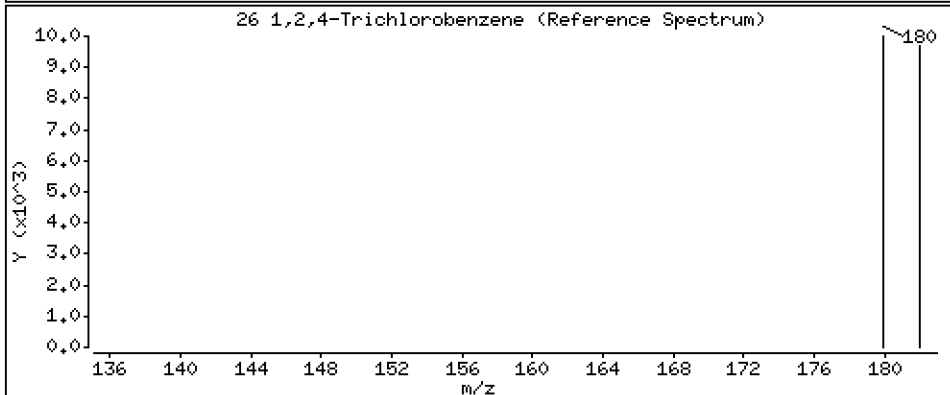
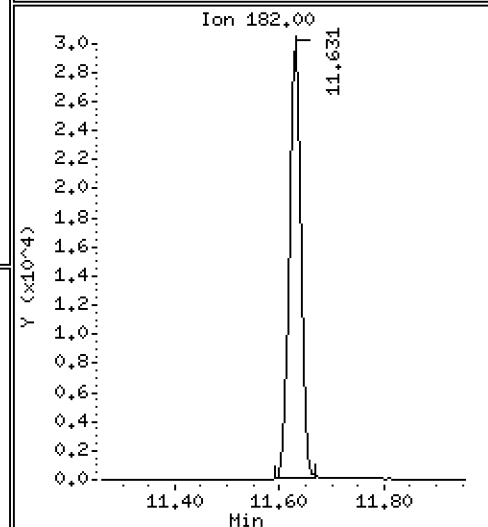
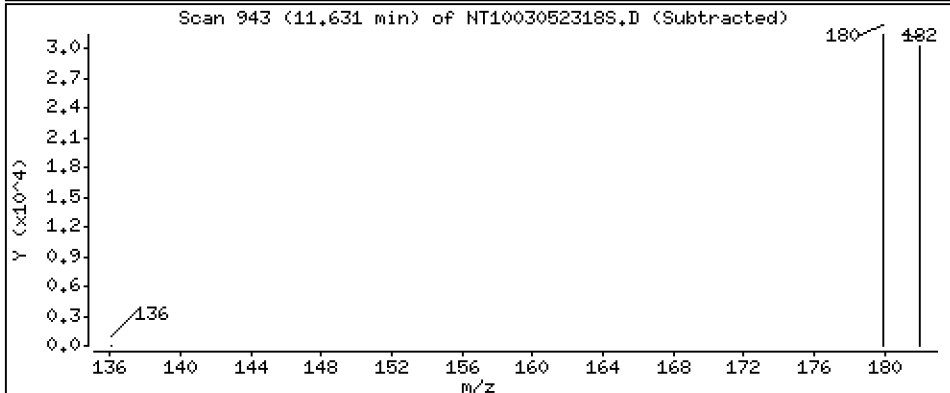
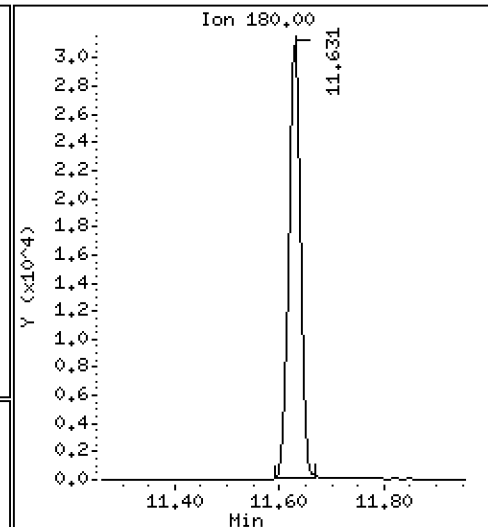
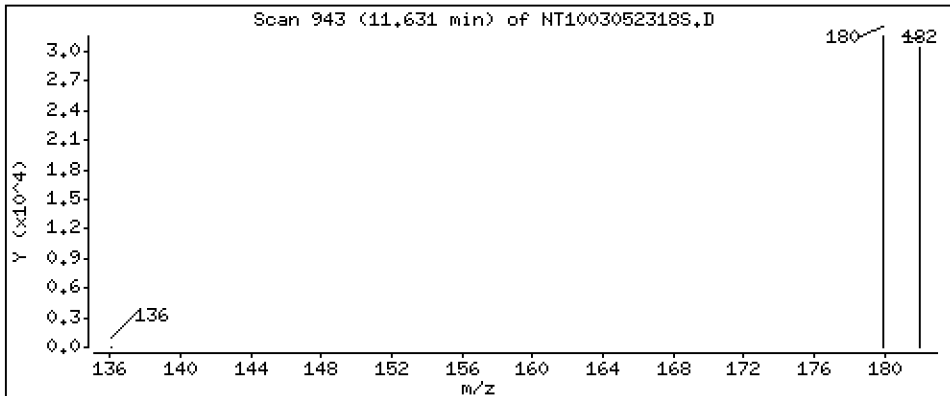
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,6190 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

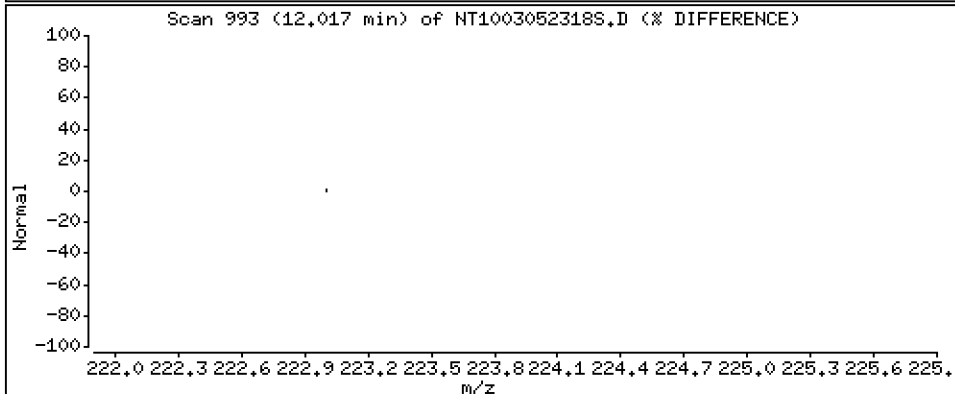
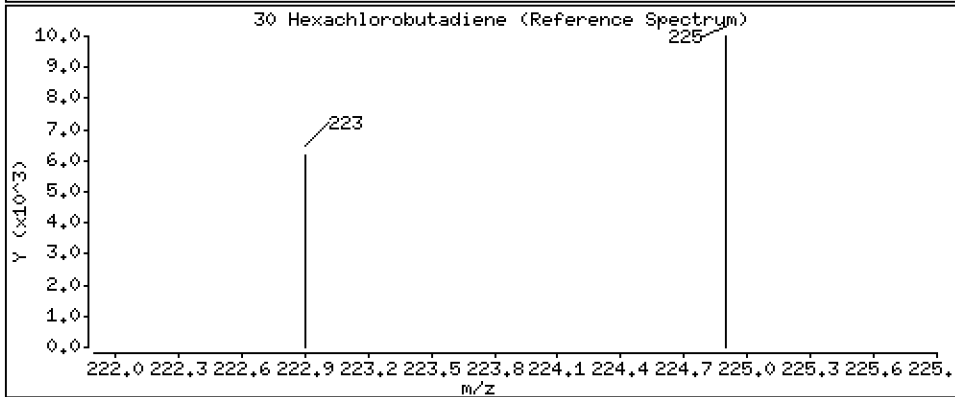
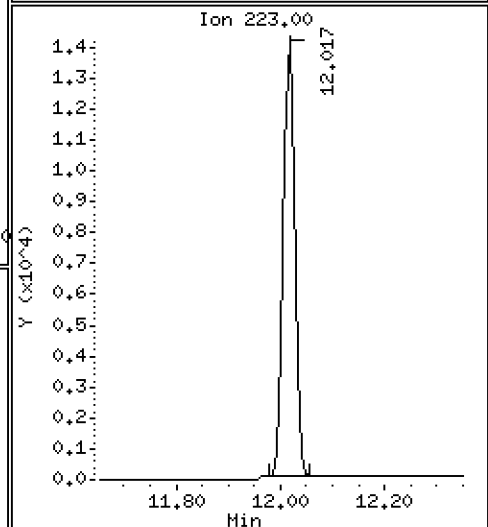
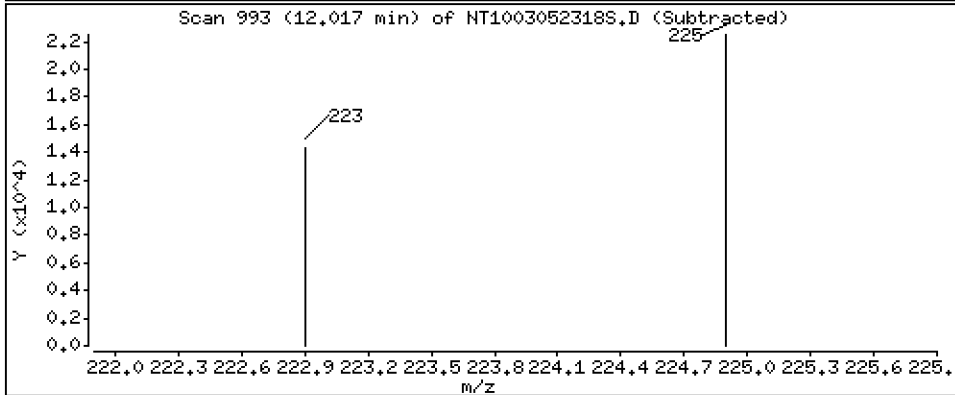
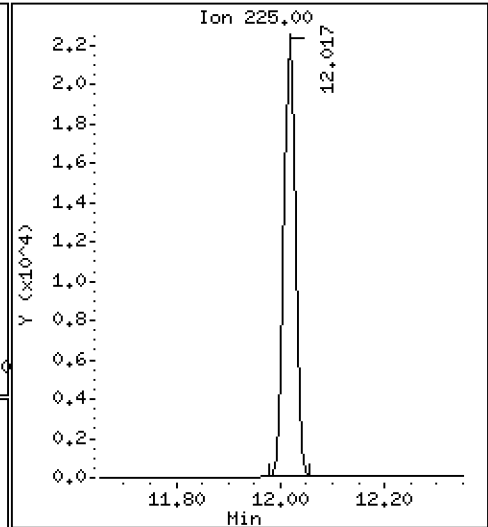
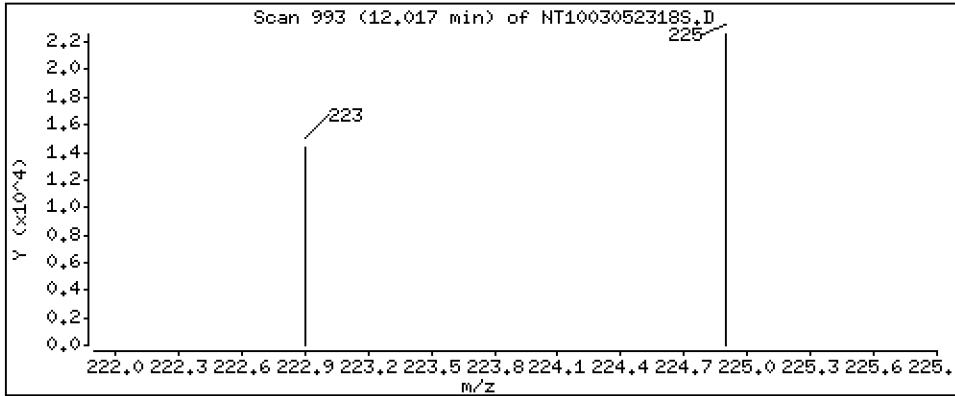
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,5732 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

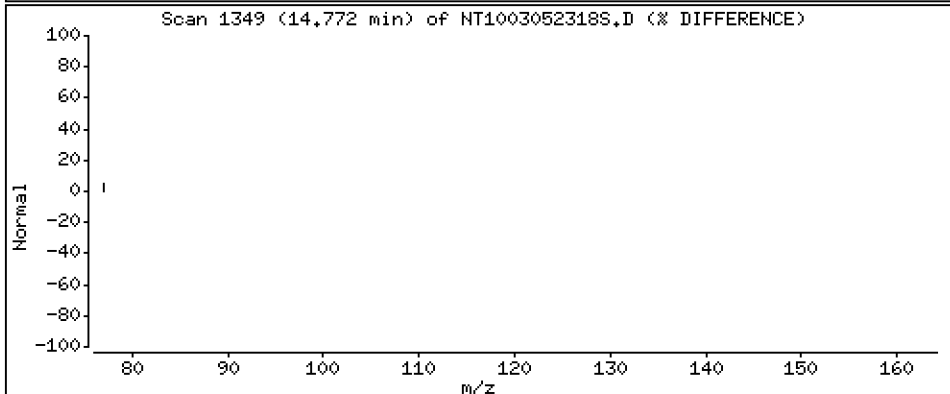
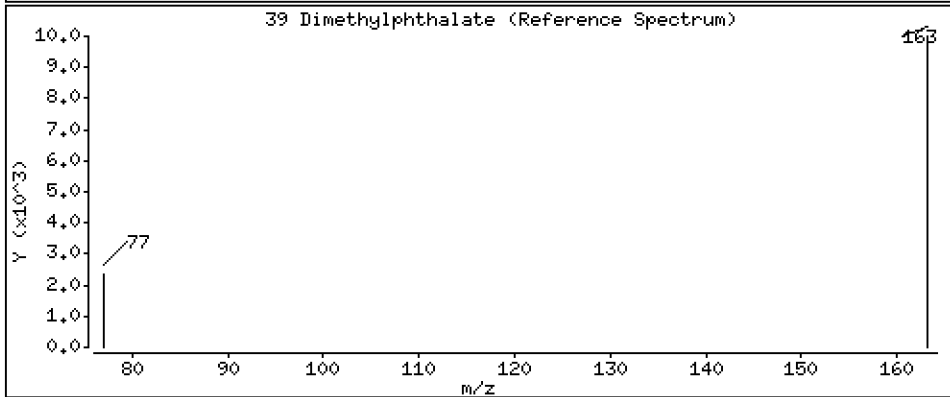
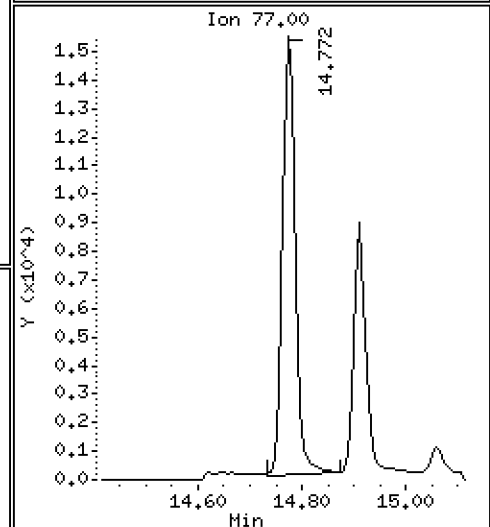
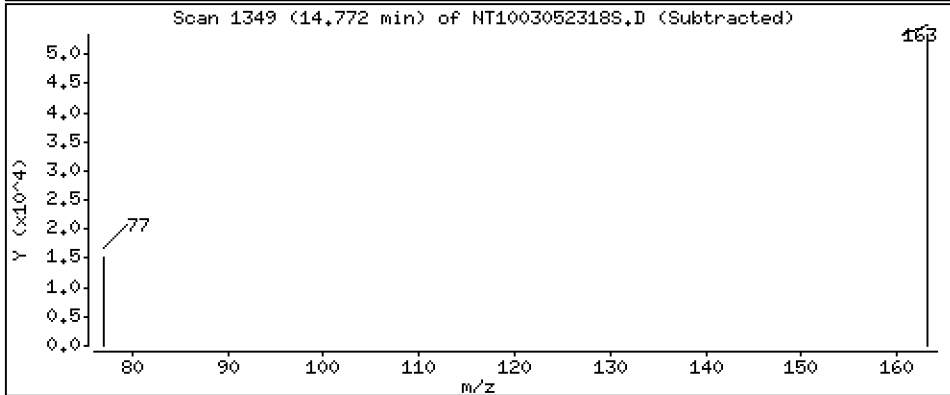
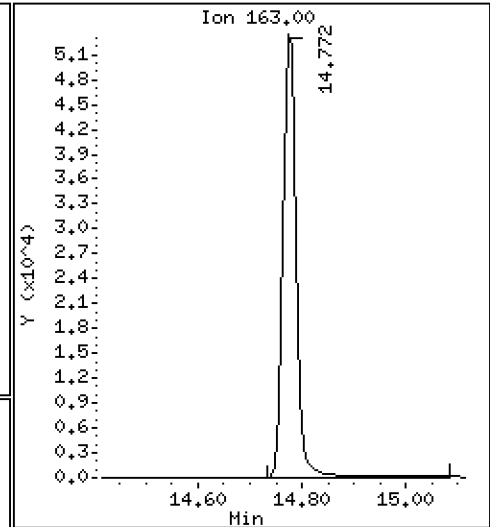
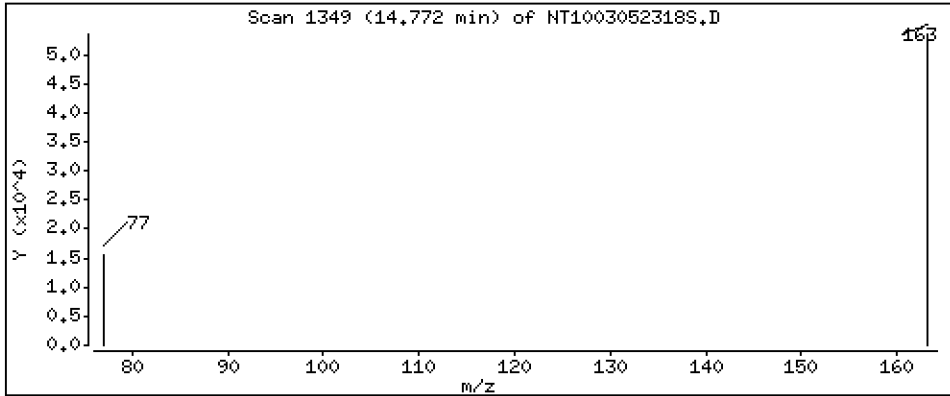
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 0,5101 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

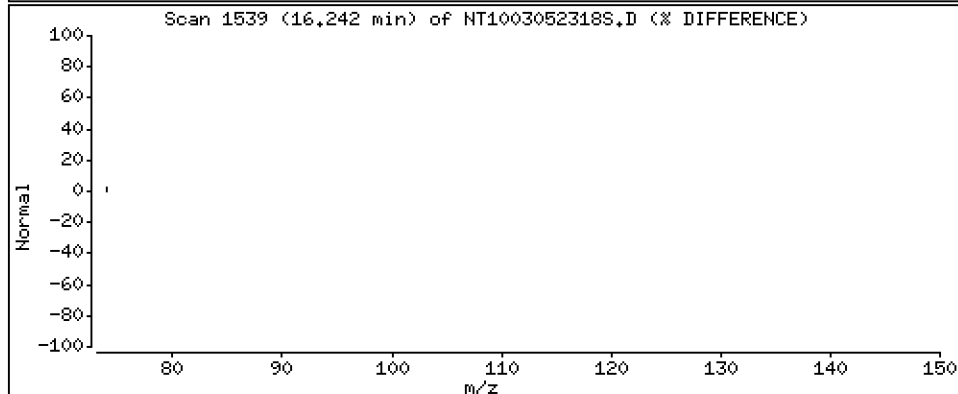
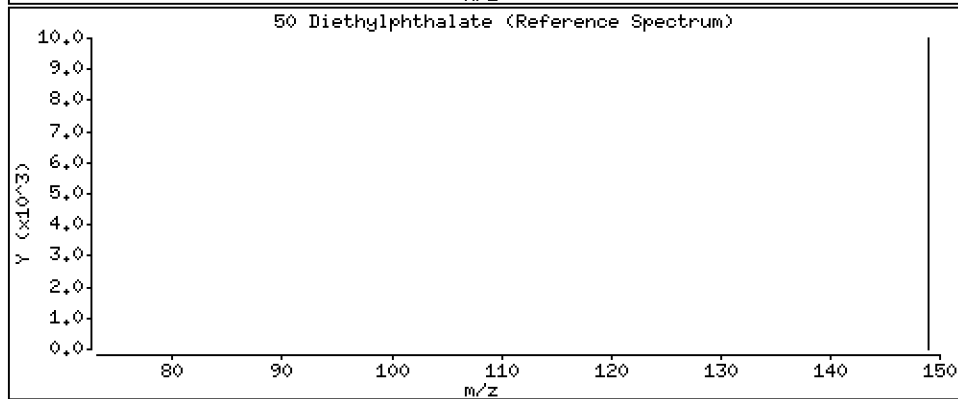
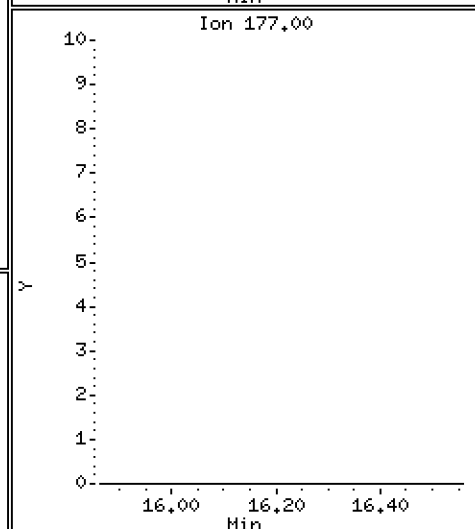
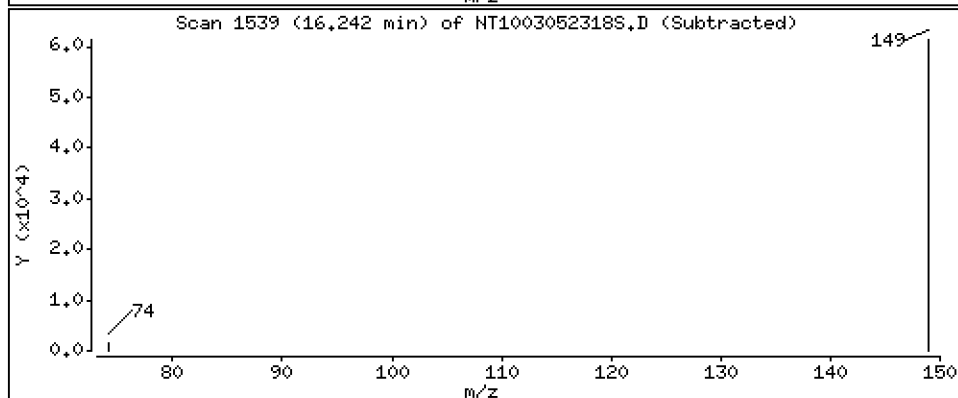
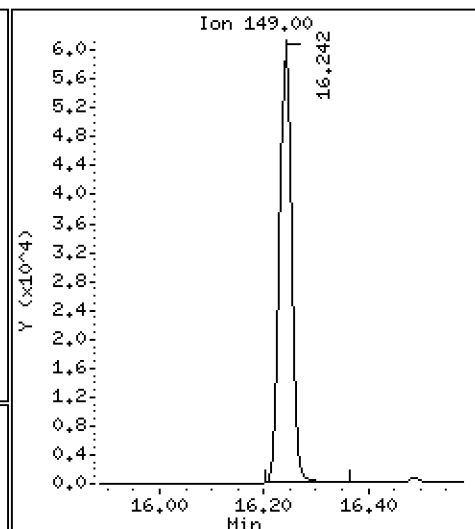
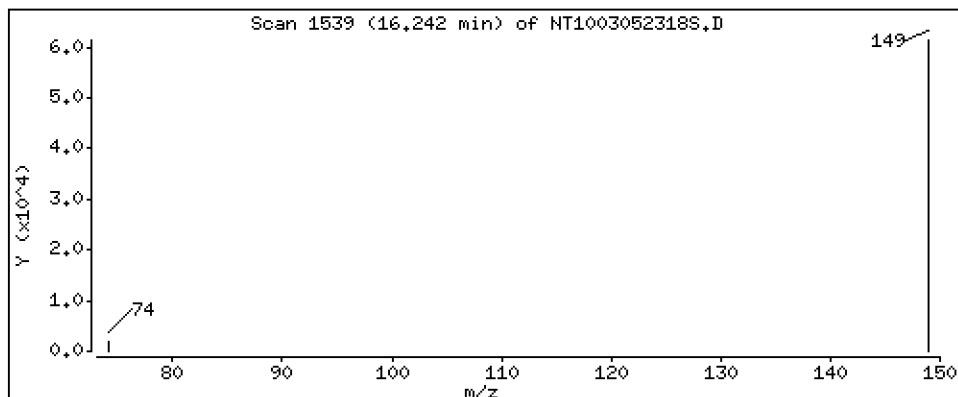
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,5552 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

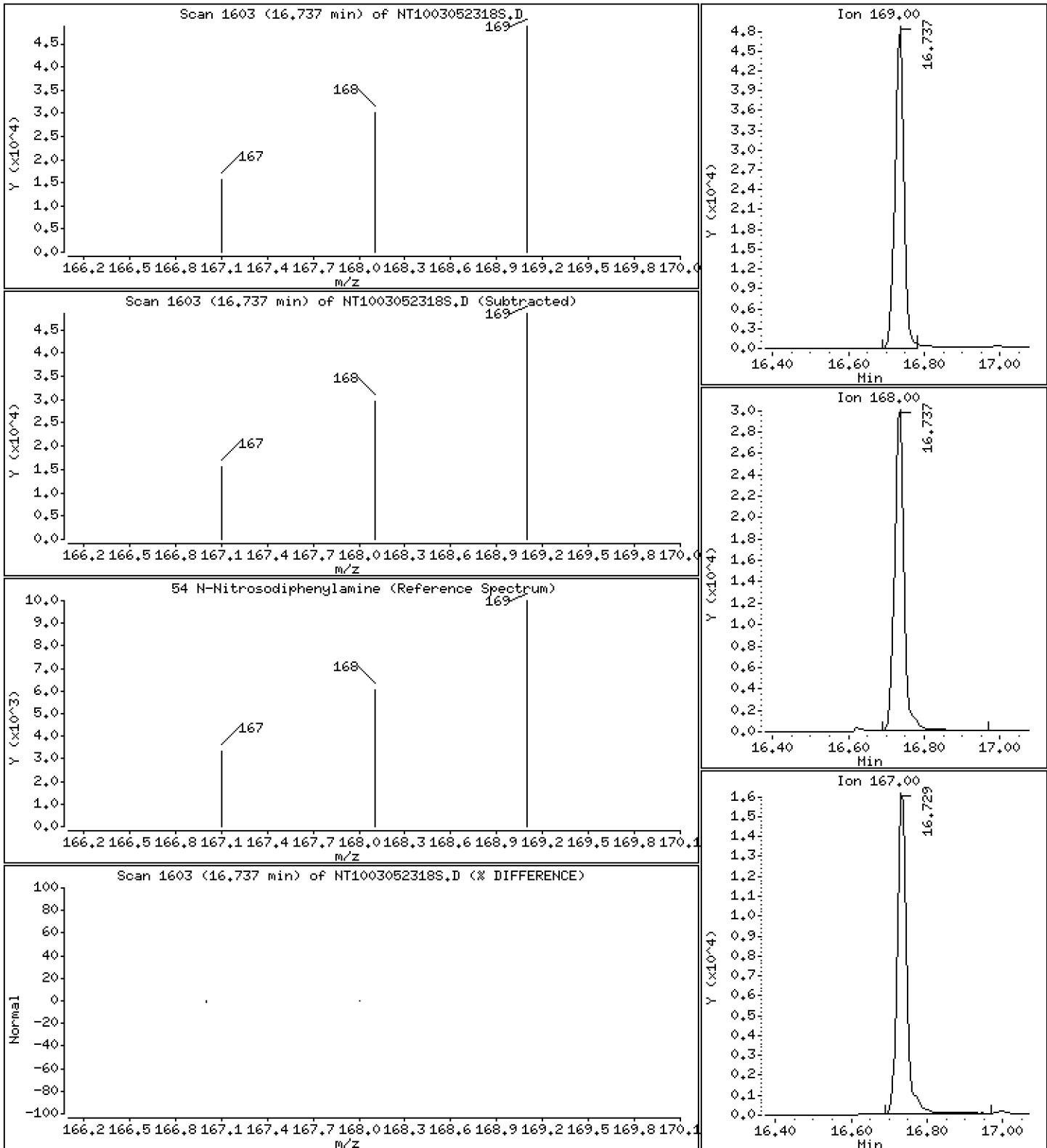
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,4559 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

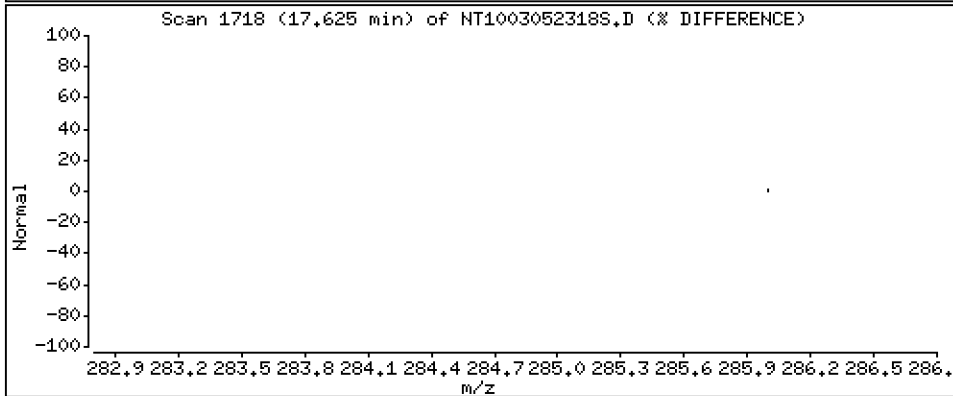
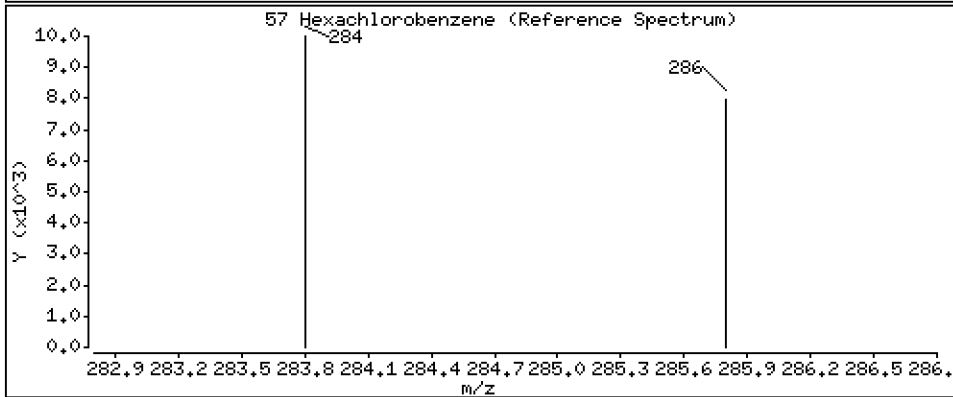
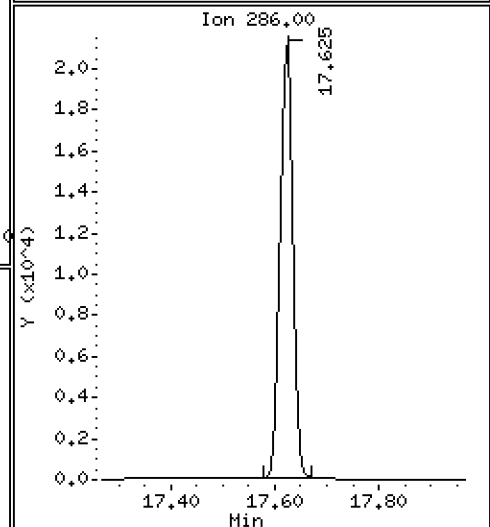
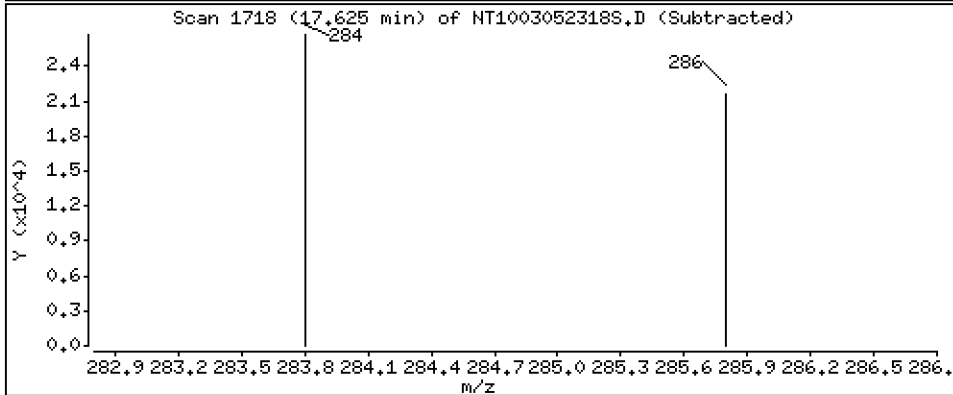
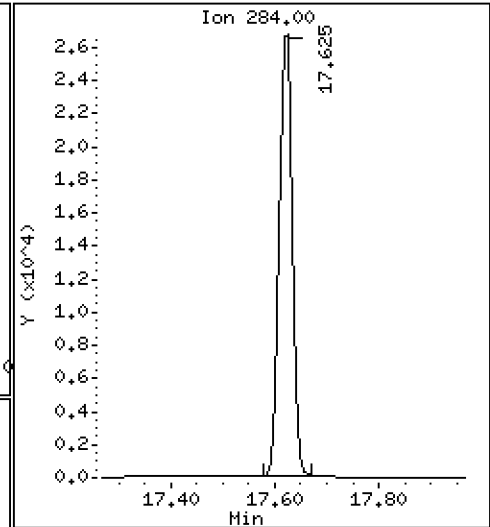
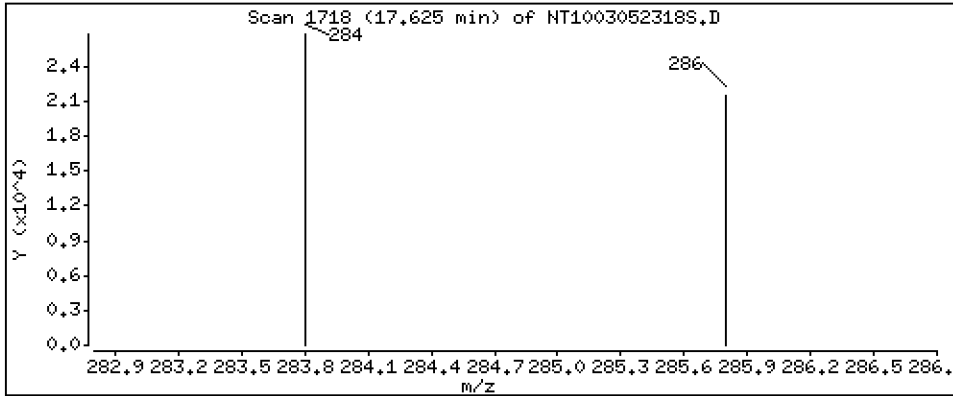
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,5511 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

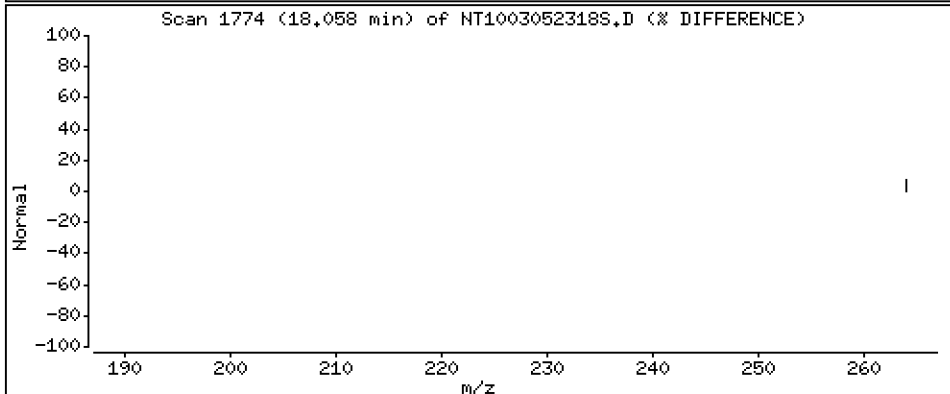
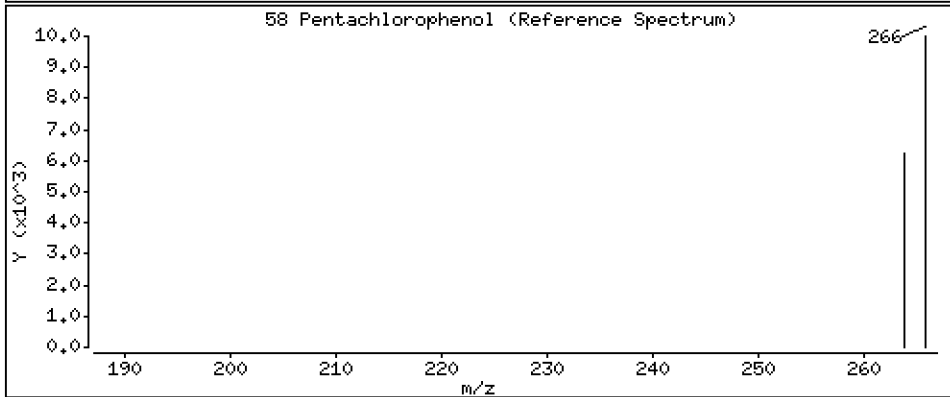
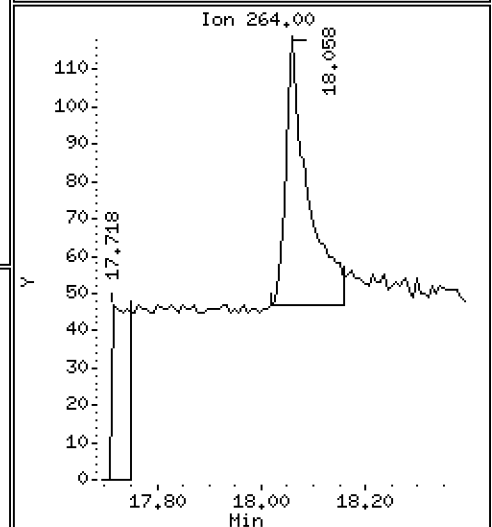
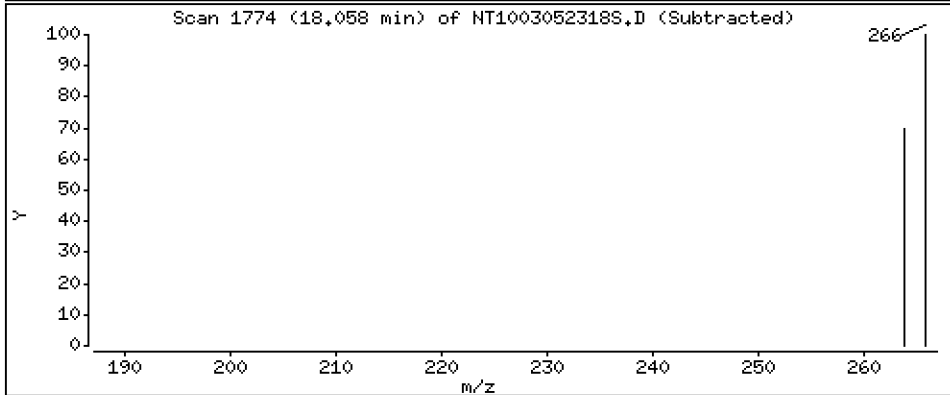
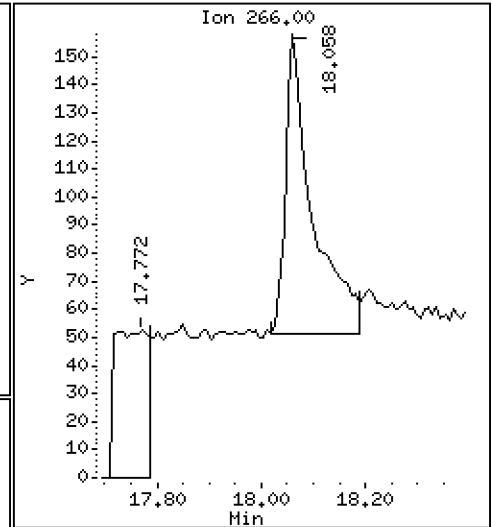
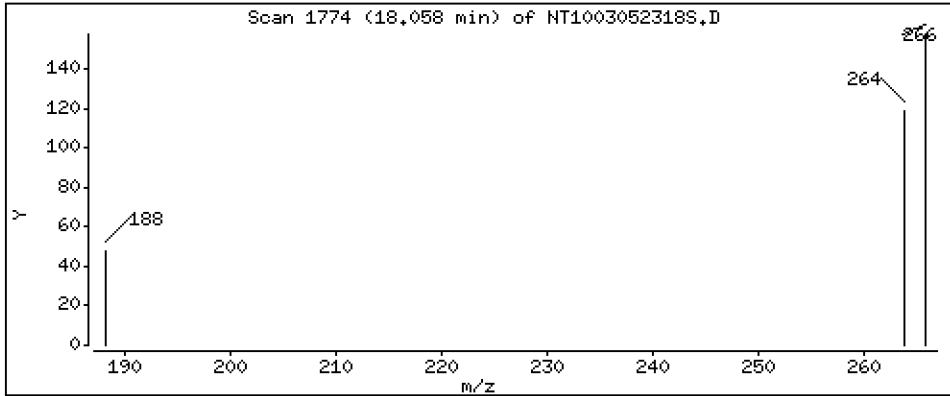
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,01097 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

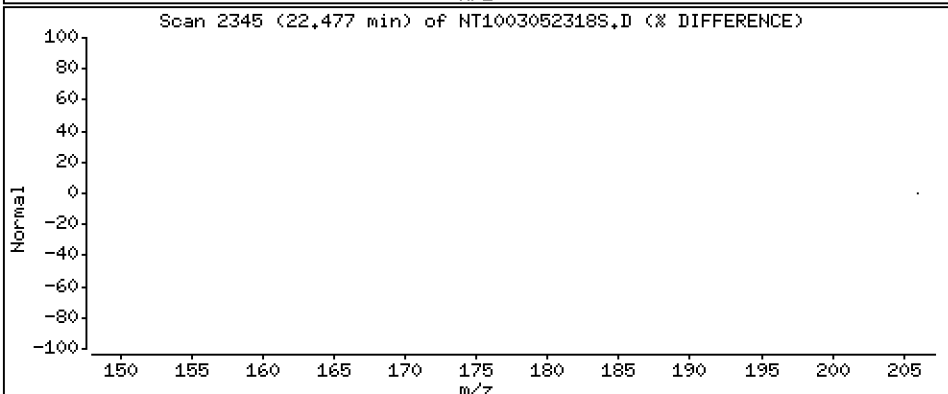
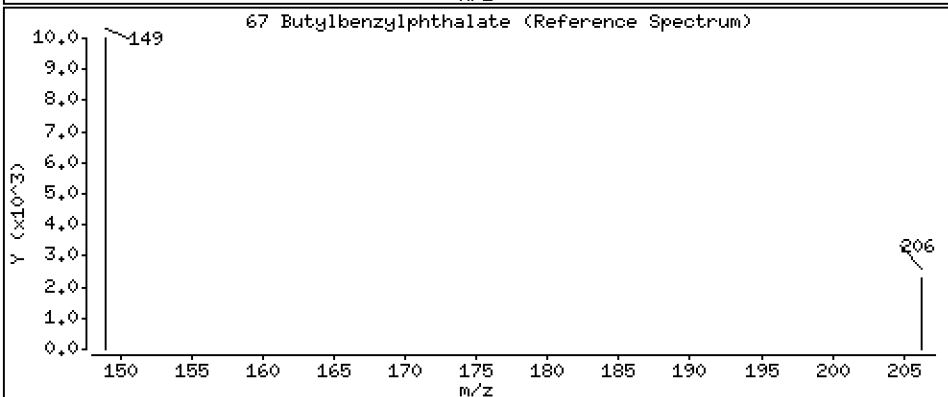
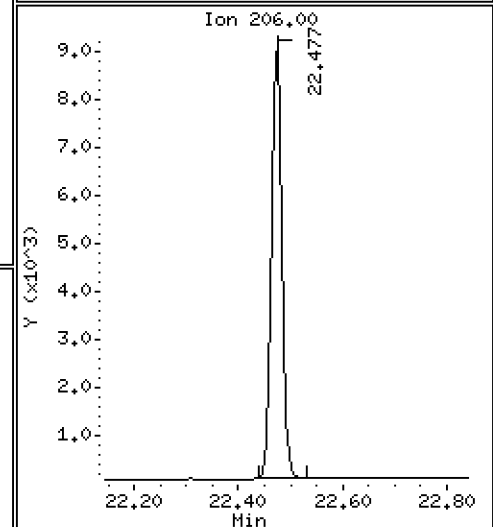
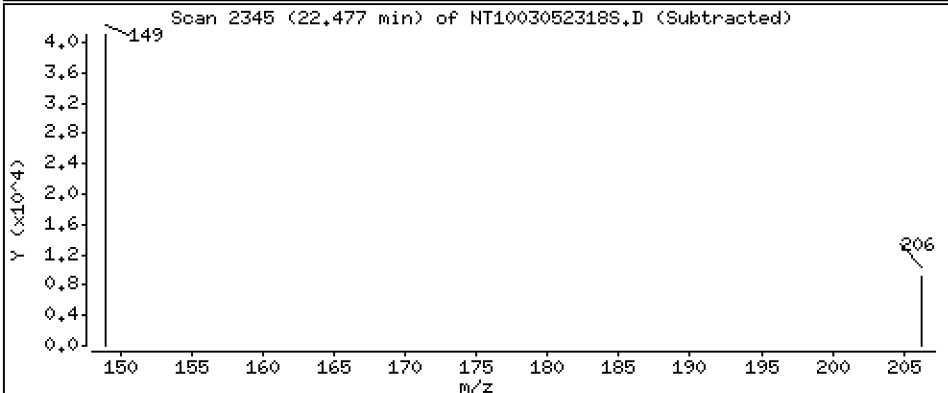
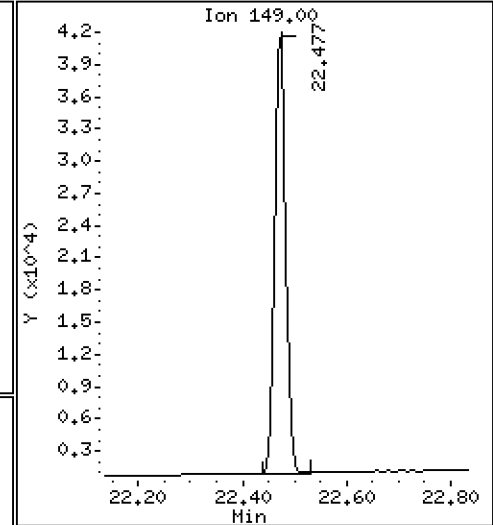
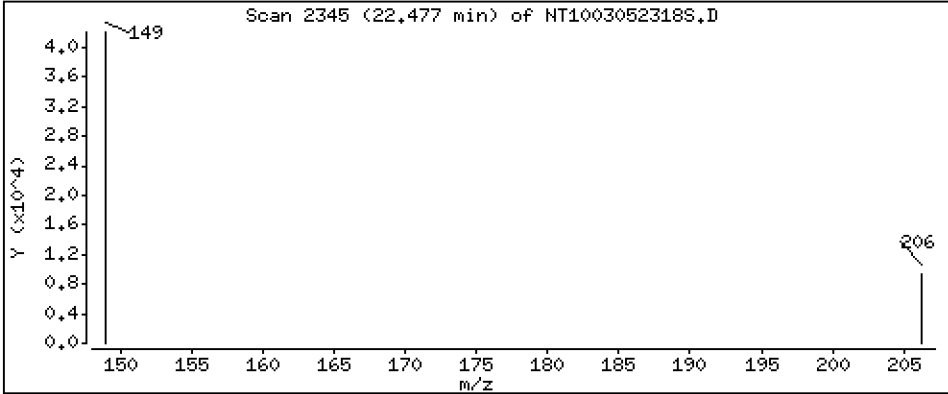
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,3512 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

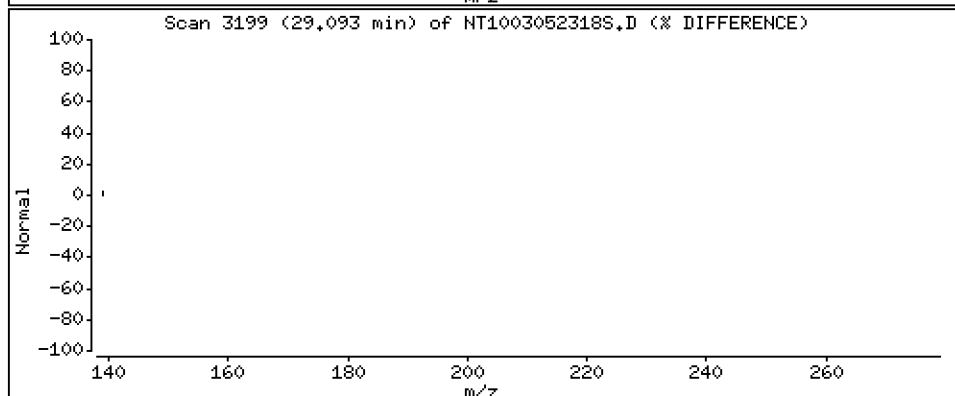
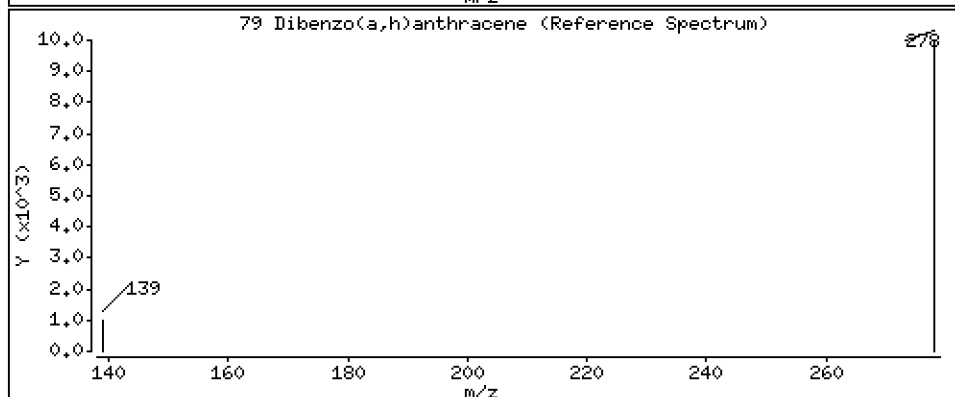
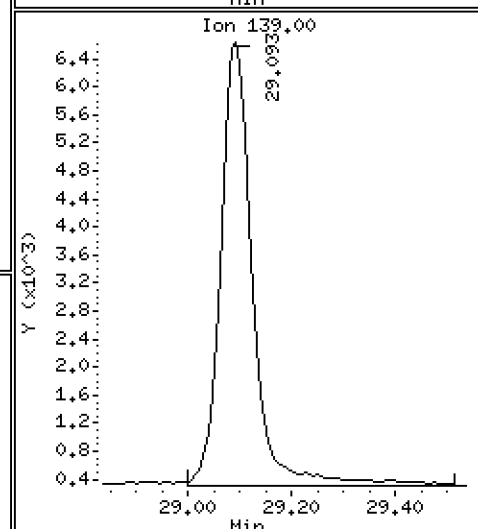
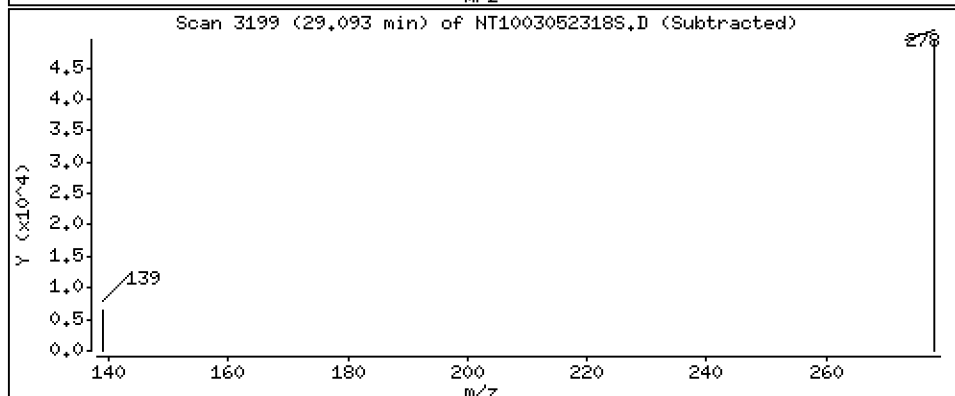
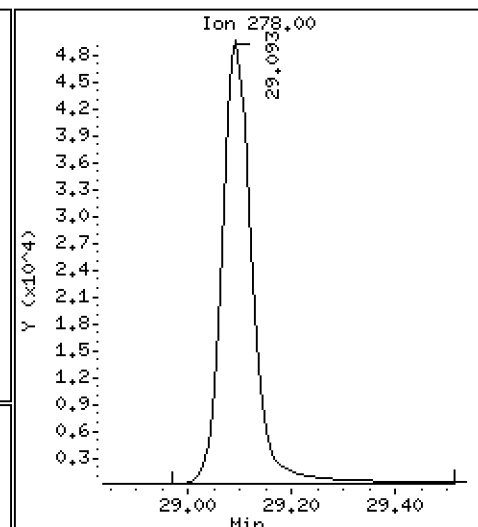
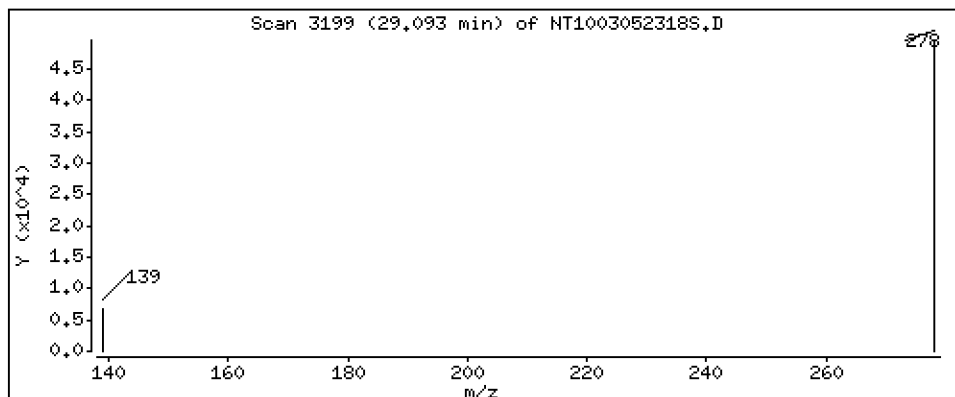
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,6585 ug/mL



Date : 06-MAR-2023 00:09

Client ID:

Instrument: nt10.i

Sample Info: SLC0440-LCV3

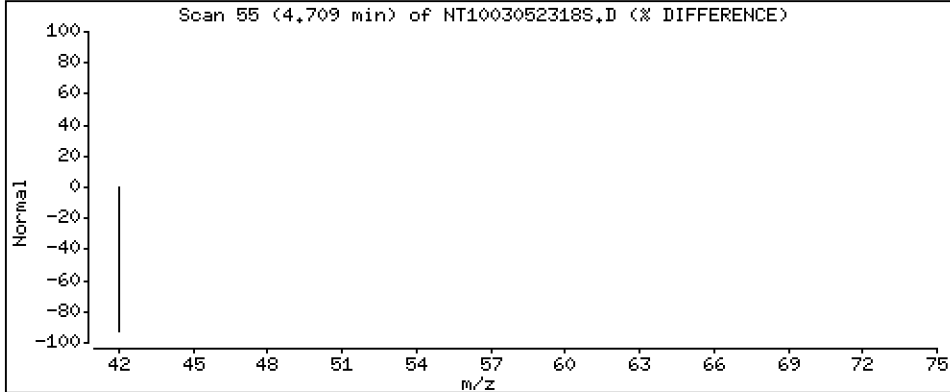
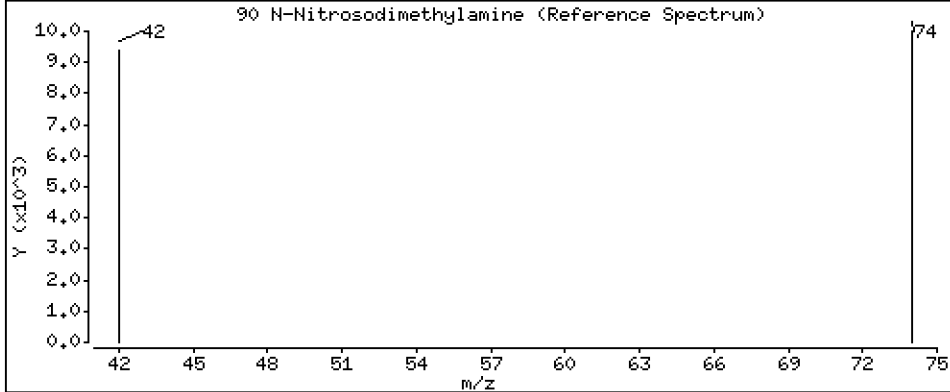
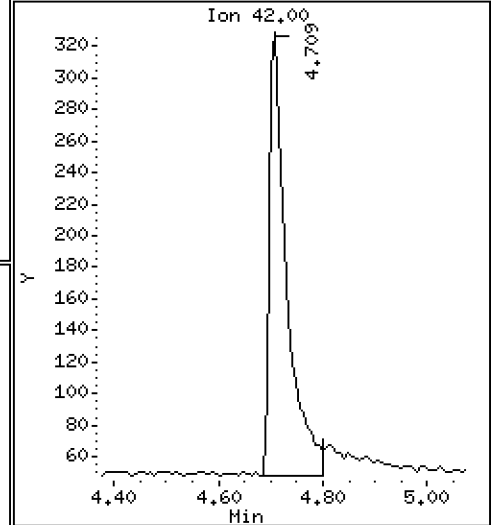
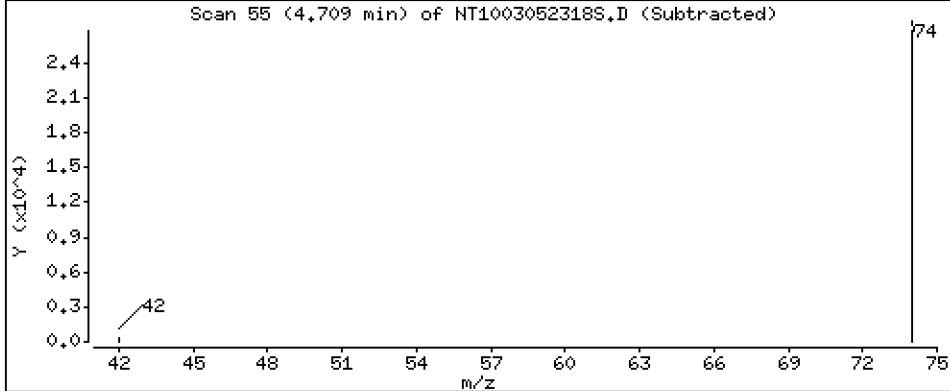
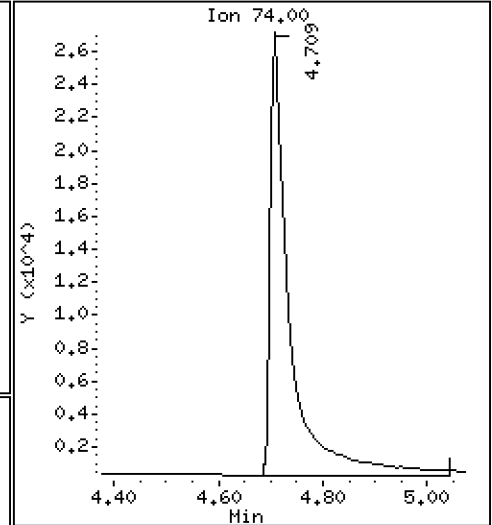
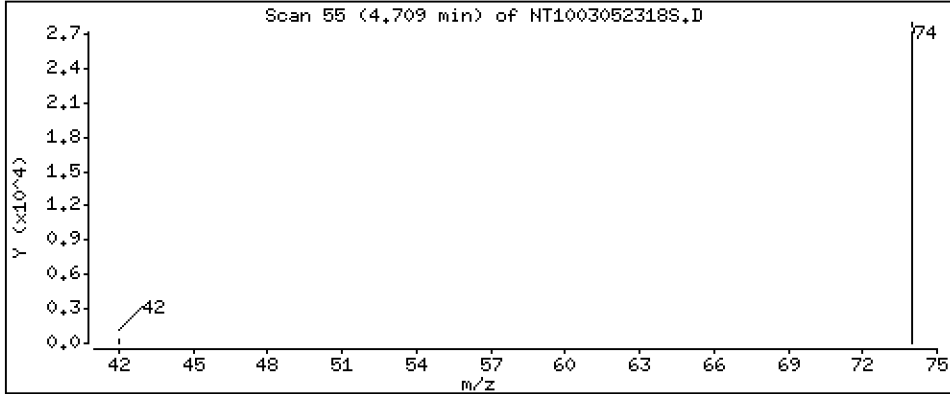
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 1,302 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\NT1003052318S.D
 Lab Smp Id: SLC0440-LCV3
 Inj Date : 06-MAR-2023 00:09
 Operator : YZ
 Smp Info : SLC0440-LCV3
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Meth Date : 29-Mar-2023 11:59 van
 Cal Date : 01-MAR-2023 21:09
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: VANS-201906

Inst ID: nt10.i

Quant Type: ISTD
 Cal File: NT1003012310S.D

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.745)	71552	0.80379	0.8038 (R)
3 Phenol	94		8.548	8.532	(0.923)	54678	0.41566	0.4157
7 1,3-Dichlorobenzene	146		9.151	9.143	(0.988)	61281	0.53031	0.5303
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.252	(1.000)	311802	4.00000	
9 1,4-Dichlorobenzene	146		9.290	9.283	(1.003)	58255	0.51851	0.5185
11 Benzyl alcohol	79		9.507	9.484	(1.027)	30147	0.41218	0.4122
12 1,2-Dichlorobenzene	146		9.577	9.570	(1.034)	57327	0.53086	0.5309
13 2-Methylphenol	108		9.694	9.671	(1.047)	42802	0.54000	0.5400
15 4-Methylphenol	108		9.981	9.966	(1.078)	42426	0.51415	0.5142
16 N-Nitroso-di-n-propylamine	70		10.004	9.981	(1.080)	33183	0.56646	0.5665
22 2,4-Dimethylphenol	107		11.040	11.014	(0.939)	94310	1.00133	1.001
24 Benzoic acid	105		11.269	11.133	(0.959)	587	0.01140	0.01140 (H)
26 1,2,4-Trichlorobenzene	180		11.631	11.608	(0.989)	49327	0.61903	0.6190
* 27 Naphthalene-d8	136		11.754	11.731	(1.000)	1107108	4.00000	
30 Hexachlorobutadiene	225		12.017	12.001	(1.022)	32414	0.57322	0.5732
39 Dimethylphthalate	163		14.772	14.764	(0.963)	89580	0.51007	0.5101
* 42 Acenaphthene-d10	162		15.344	15.337	(1.000)	553105	4.00000	
50 Diethylphthalate	149		16.241	16.234	(1.058)	91953	0.55521	0.5552
54 N-Nitrosodiphenylamine	169		16.736	16.729	(0.907)	79176	0.45590	0.4559
57 Hexachlorobenzene	284		17.624	17.617	(0.955)	44790	0.55109	0.5511
58 Pentachlorophenol	266		18.058	18.042	(0.979)	390	0.01097	0.01097
* 59 Phenanthrene-d10	188		18.452	18.453	(1.000)	1073112	4.00000	
\$ 66 Terphenyl-d14	244		21.586	21.594	(0.919)	66761	0.81259	0.8126 (R)
67 Butylbenzylphthalate	149		22.476	22.484	(0.957)	60183	0.35124	0.3512
* 69 Chrysene-d12	240		23.491	23.514	(1.000)	1015975	4.00000	
* 77 Perylene-d12	264		26.224	26.270	(1.000)	1303152	4.00000	
79 Dibenzo(a,h)anthracene	278		29.092	29.186	(1.109)	200557	0.65847	0.6585
90 N-Nitrosodimethylamine	74		4.709	4.724	(0.509)	68624	1.30210	1.302

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052318S.D
 Lab Smp Id: SLC0440-LCV3
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305A.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 05-MAR-2023
 Calibration Time: 22:16
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	293840	146920	587680	311802	6.11
27 Naphthalene-d8	1032639	516320	2065278	1107108	7.21
42 Acenaphthene-d10	502349	251175	1004698	553105	10.10
59 Phenanthrene-d10	975997	487999	1951994	1073112	9.95
69 Chrysene-d12	978544	489272	1957088	1015975	3.83
77 Perylene-d12	1201606	600803	2403212	1303152	8.45

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.08
27 Naphthalene-d8	11.73	11.23	12.23	11.75	0.20
42 Acenaphthene-d10	15.34	14.84	15.84	15.34	0.05
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.49	-0.10
77 Perylene-d12	26.27	25.77	26.77	26.22	-0.18

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

REVIEW SUMMARY FOR FILE - NT1003052318S.D

Lab ID: SLC0440-LCV3

nt10.i, 20230305A.b\SIM.b\SIMABN2.m,

06-MAR-2023 00:09

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.949	0.0097	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003052315SA.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052336S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0447</u>	Injection Date:	<u>03/06/23</u>
Lab Sample ID:	<u>SLC0447-CCV1</u>	Injection Time:	<u>11:27</u>
Sequence Name:	<u>Calibration Check</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	1.0	1.4413080	1.4000710		-2.9	+/-50
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3790660		-0.5	+/-50
Benzyl Alcohol	A	1.0000	0.8	0.7492523	0.7916670		-16.1	+/-50
Benzoic acid	A	4.0000	0.4	0.1431163	0.0202012		-89.2	+/-50 *
2,4-Dimethylphenol	A	2.0000	2.2	0.2957717	0.3684601		7.9	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3483385		21.0	+/-50
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5786501		-10.6	+/-50
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0113478		-91.5	+/-50 *
2-Fluorophenol	A	1.5000	1.71	1.1419780	1.3026230		14.1	+/-50
p-Terphenyl-d14	A	1.0000	1.67	0.3234672	0.5410383		67.3	+/-50 *

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052336S.D

Date: 06-MAR-2023 11:27

Client ID:

Sample Info: SLC0447-CCW1

Page 1

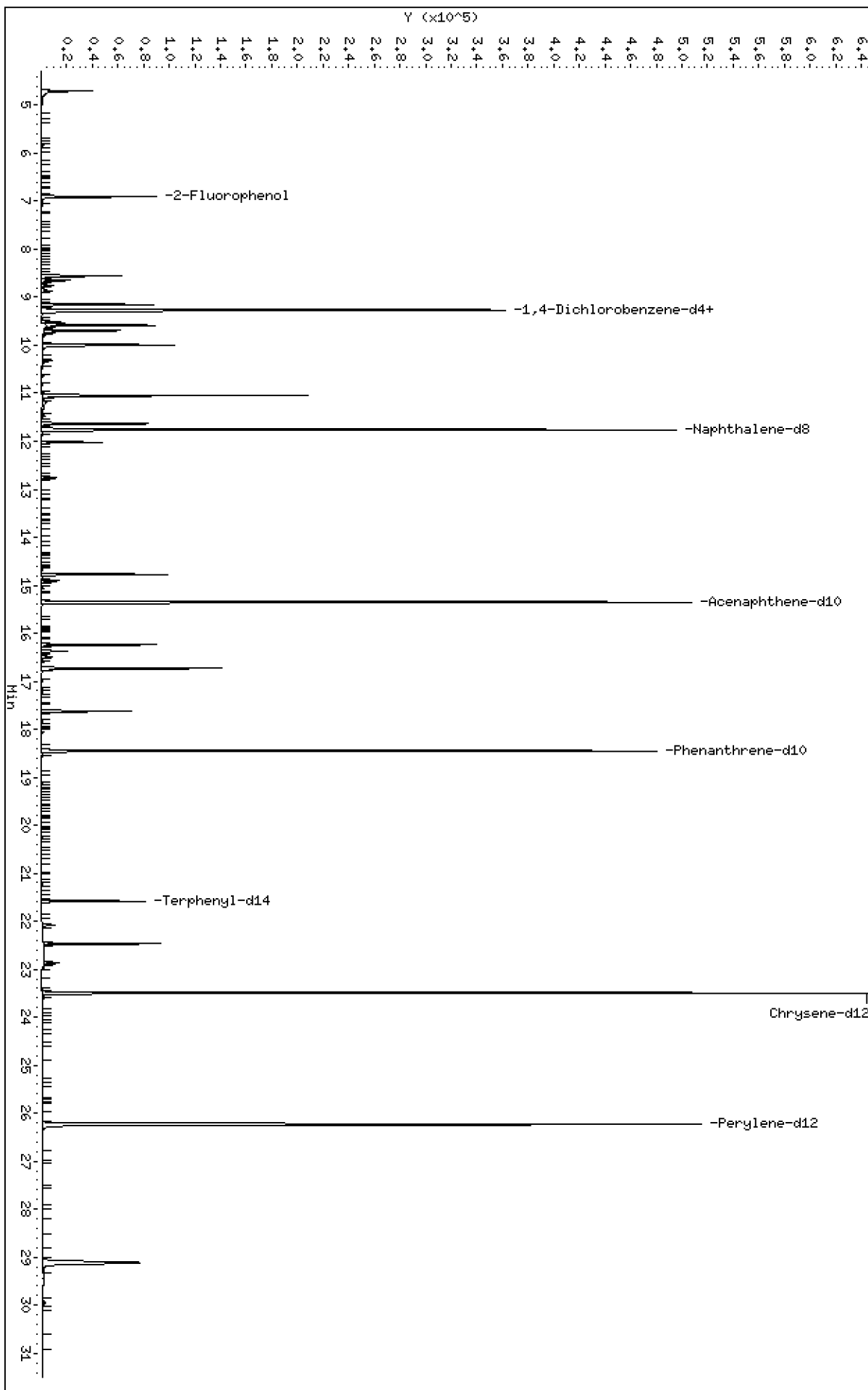
Instrument: nt10.1

Operator: YZ

Column diameter: 0.25

Column phase: ZB-Smsi

\\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT1003052336S.D



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

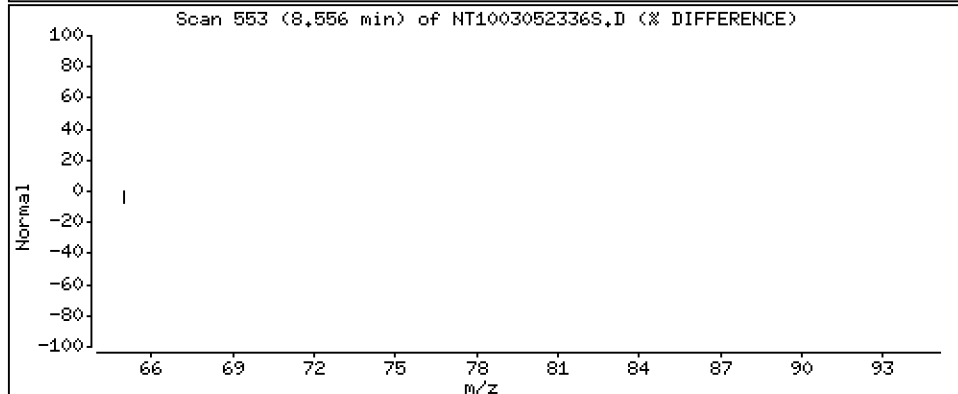
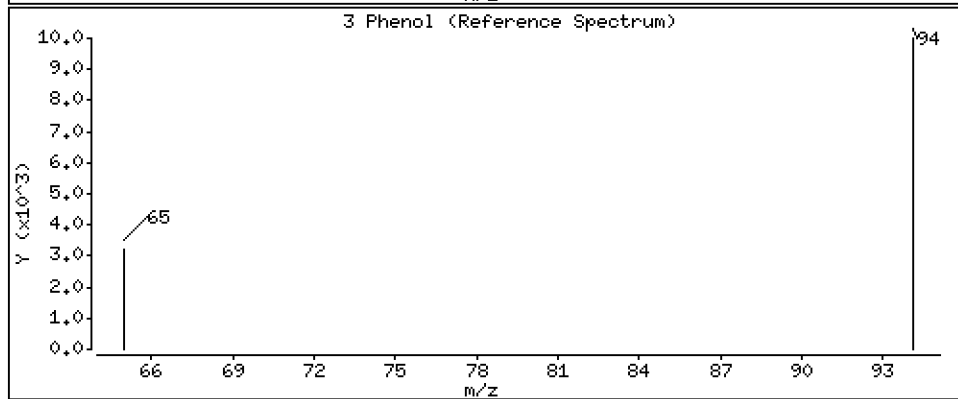
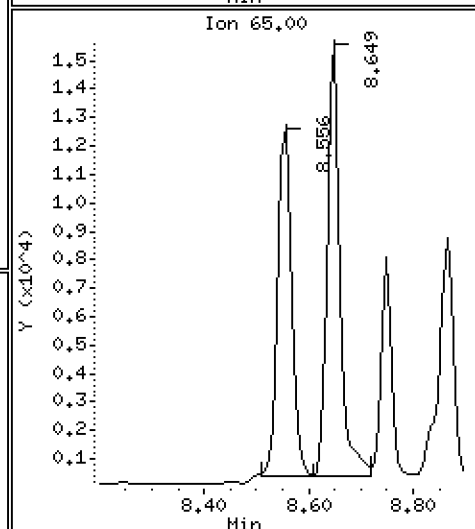
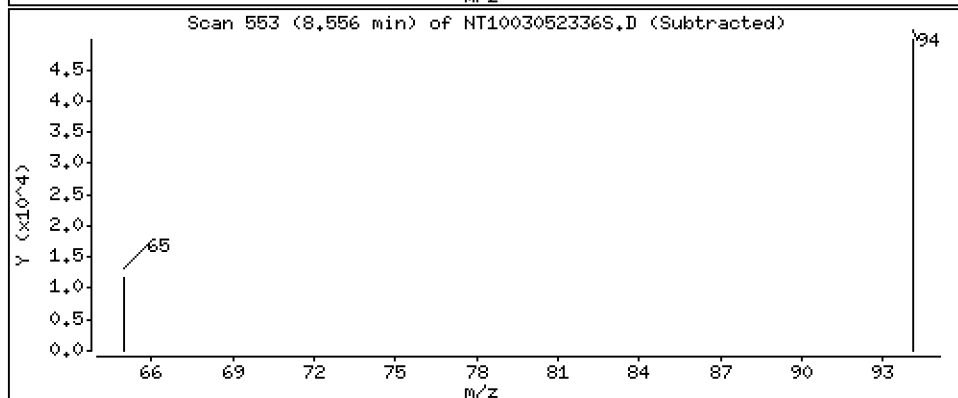
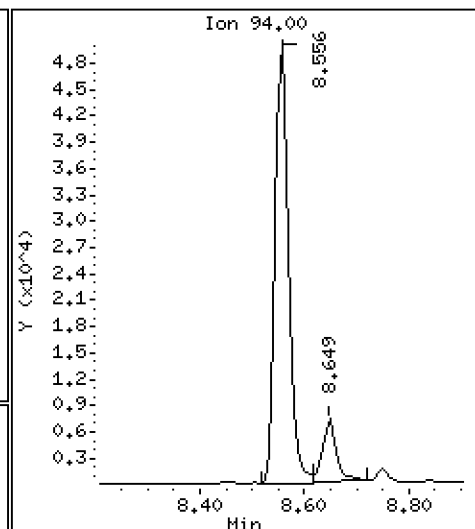
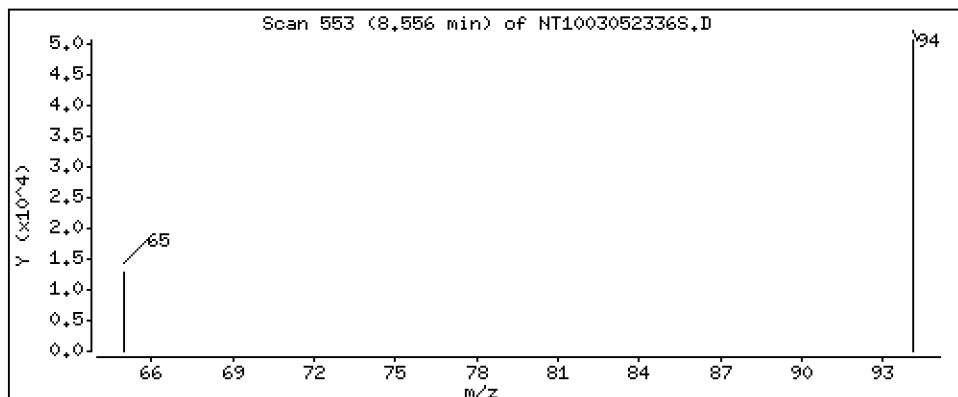
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,9178 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

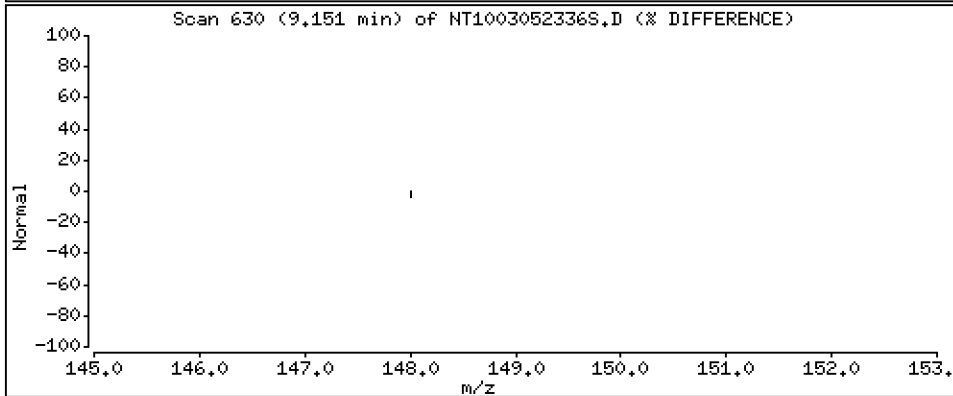
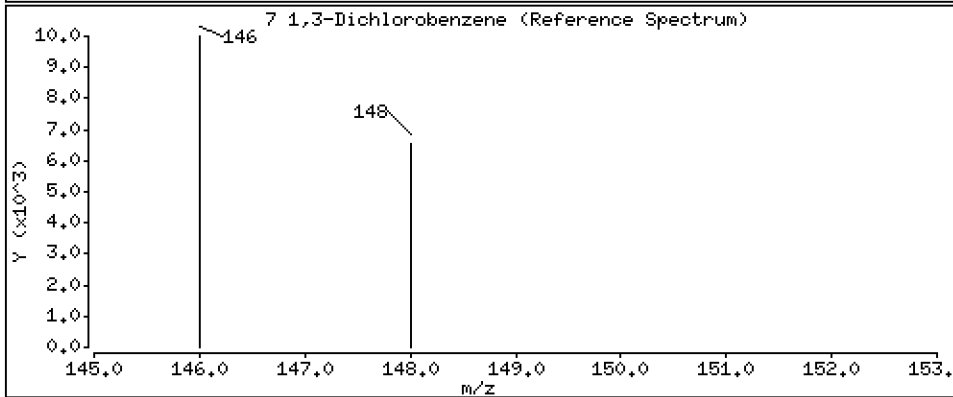
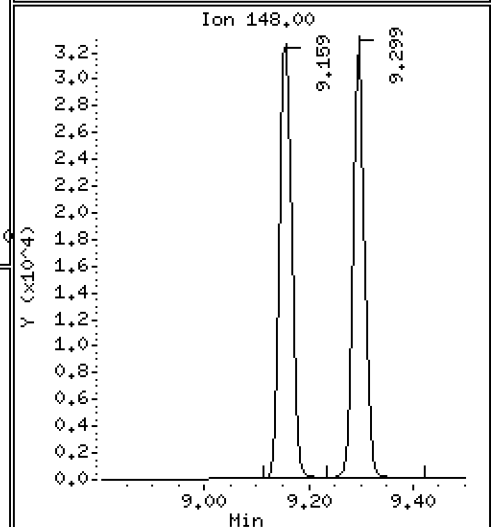
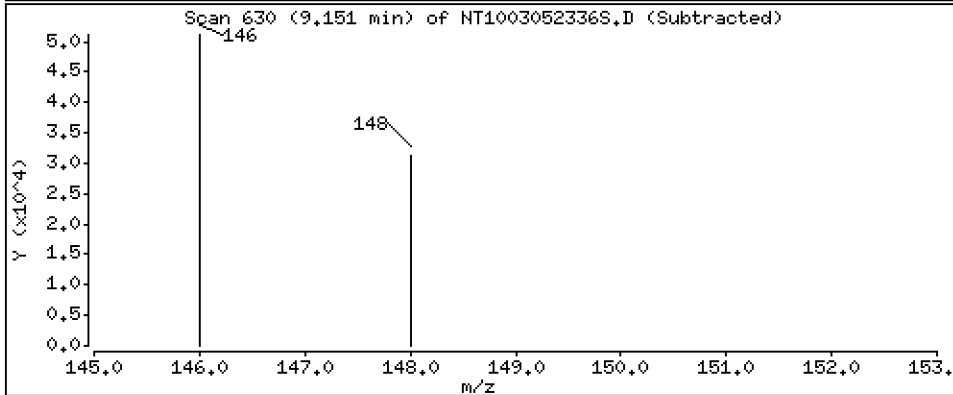
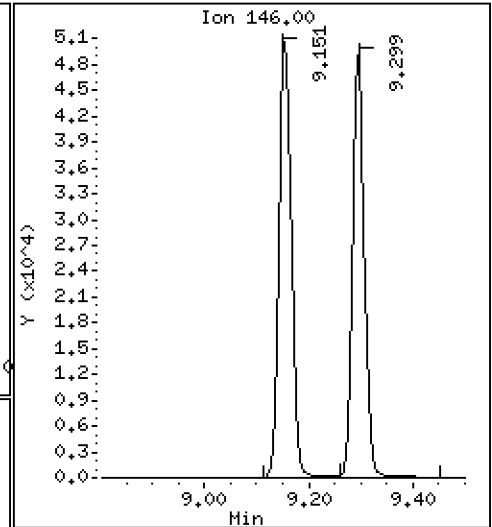
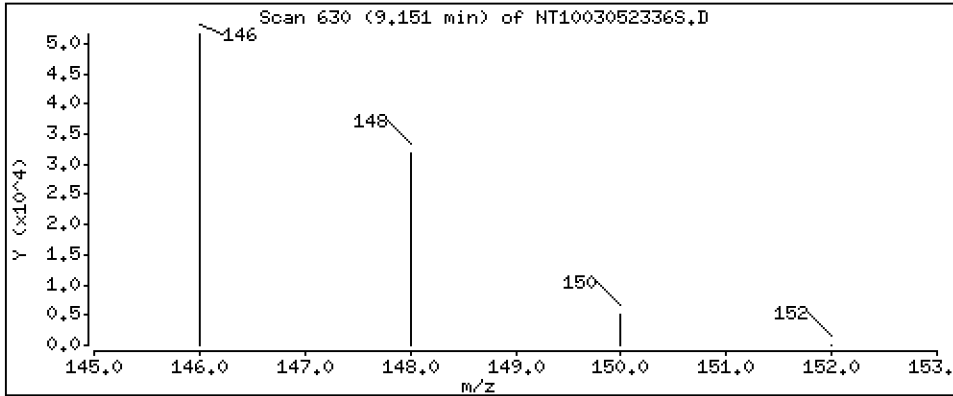
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

7 1,3-Dichlorobenzene

Concentration: 0,9831 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

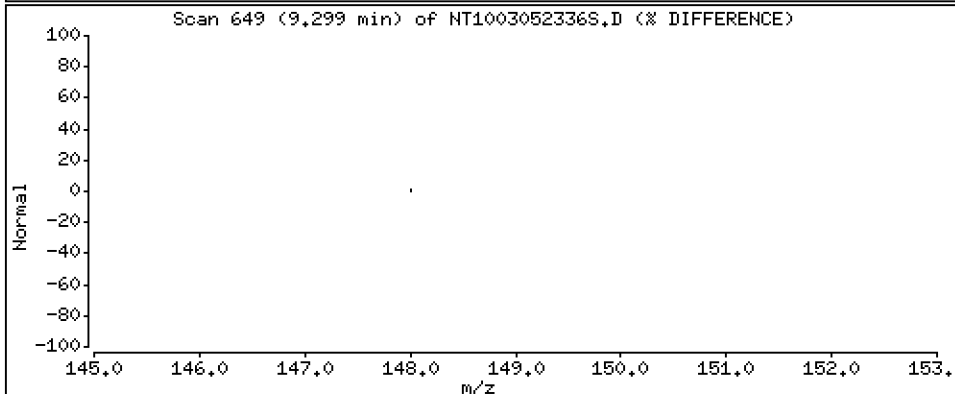
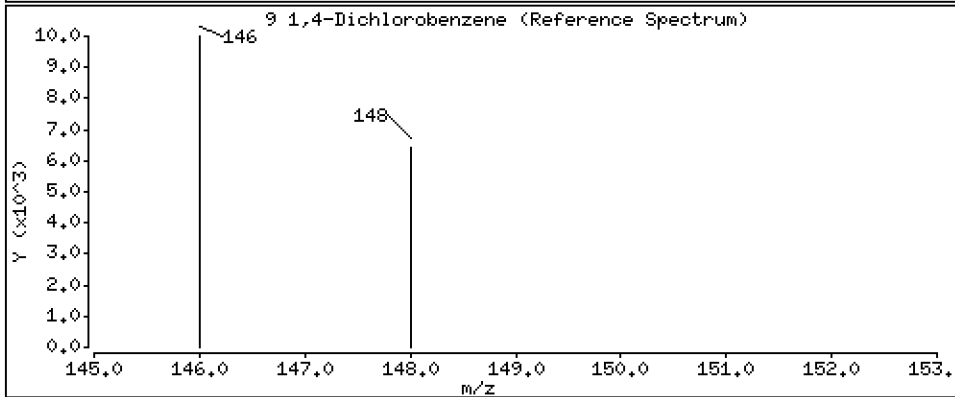
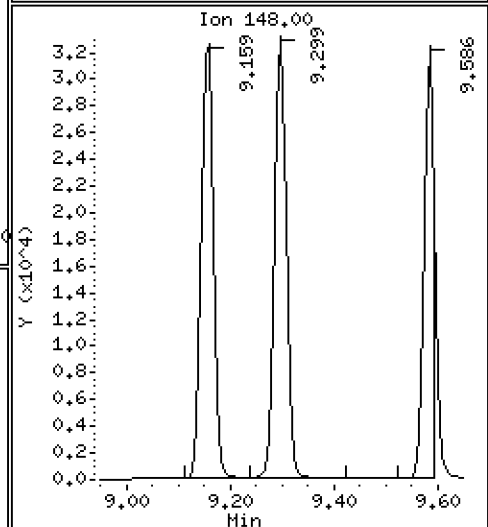
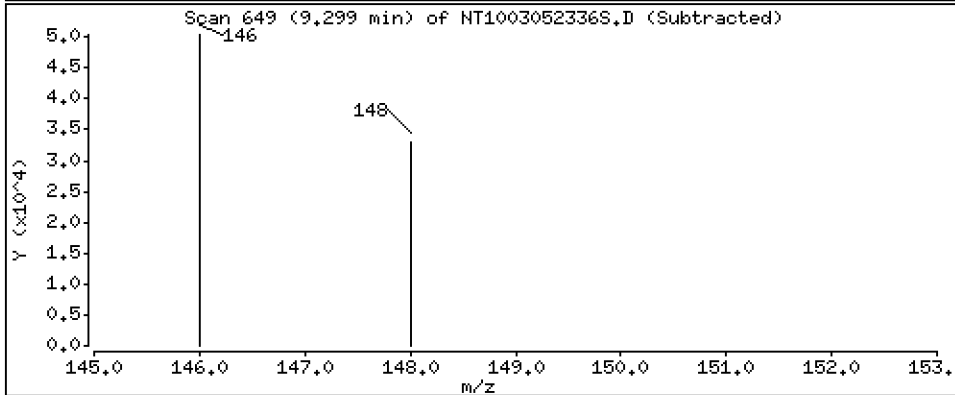
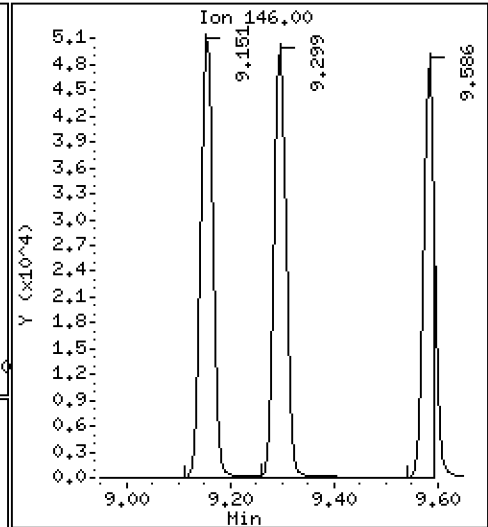
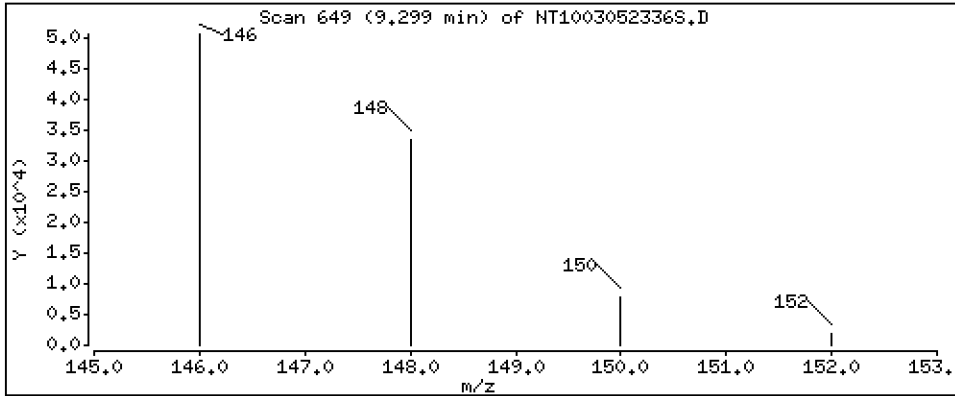
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.9714 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

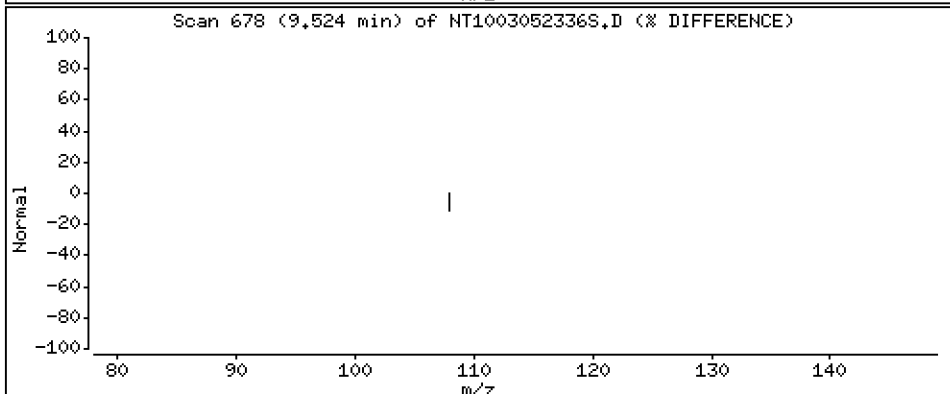
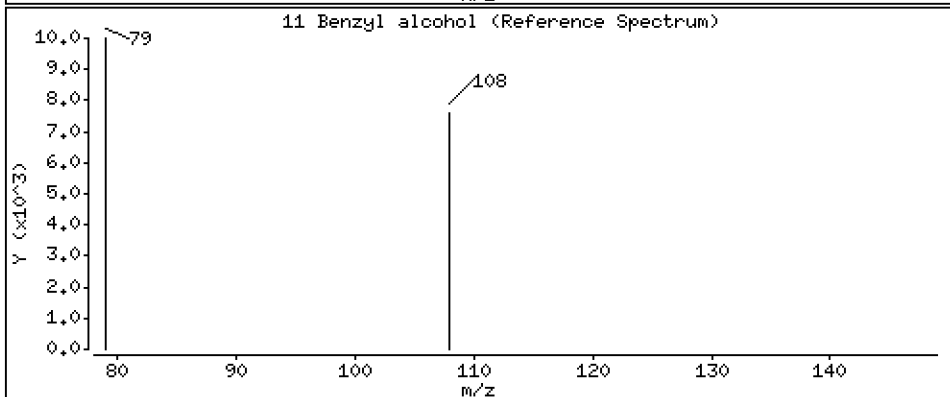
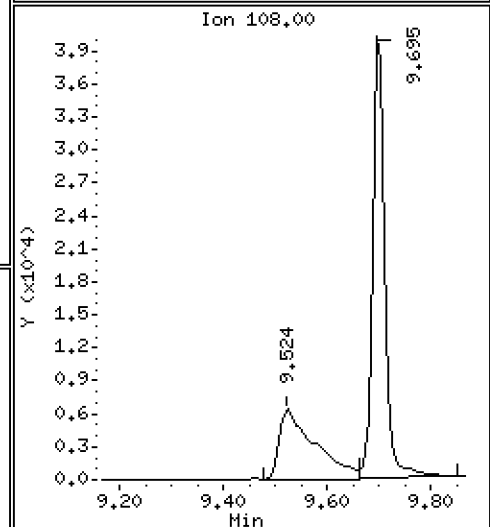
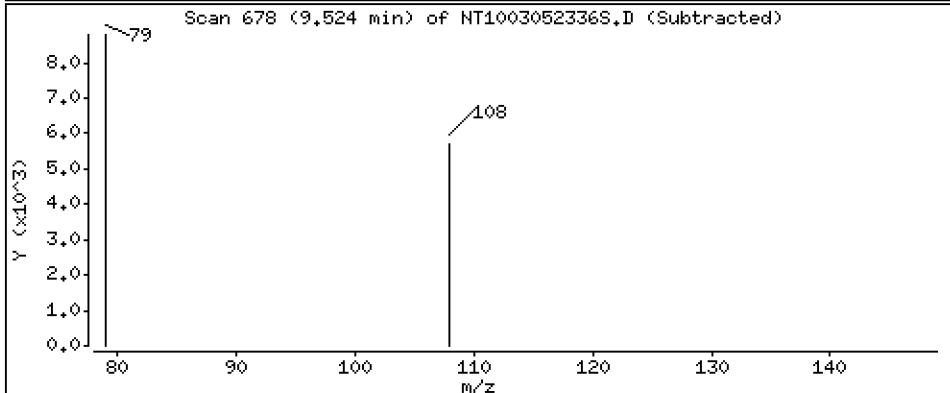
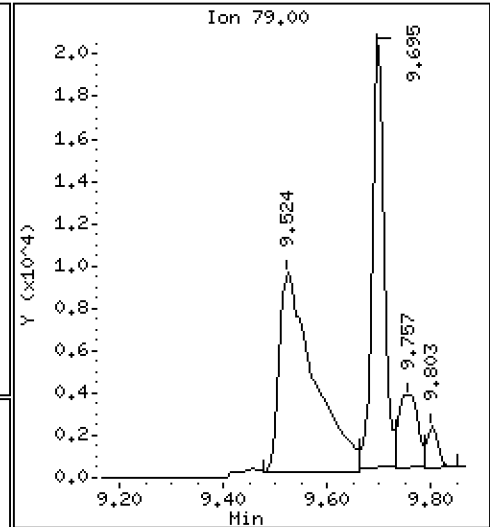
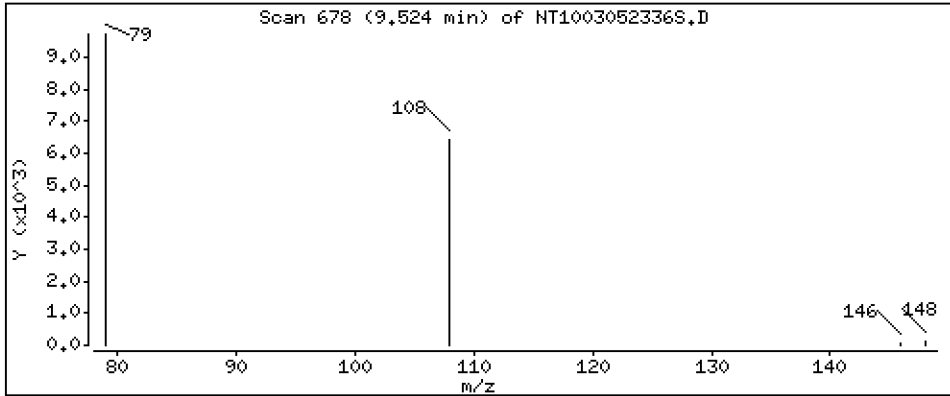
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,8391 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

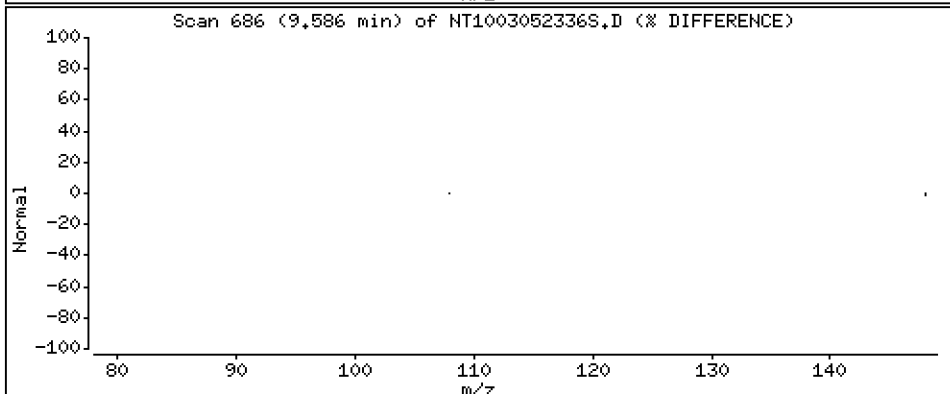
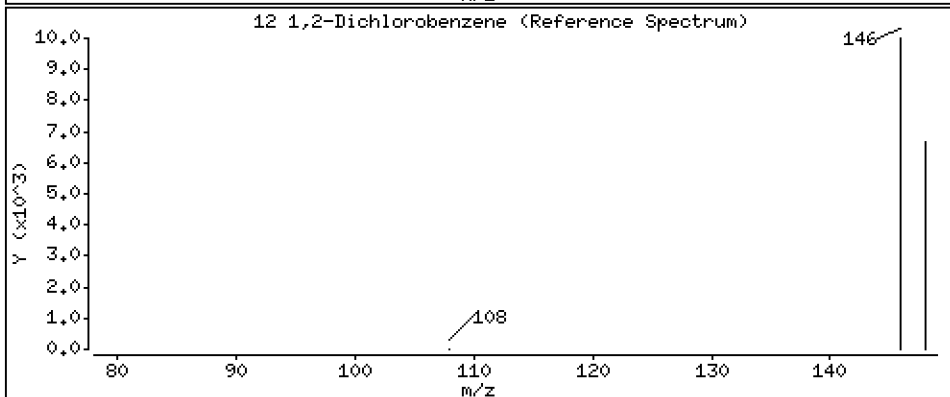
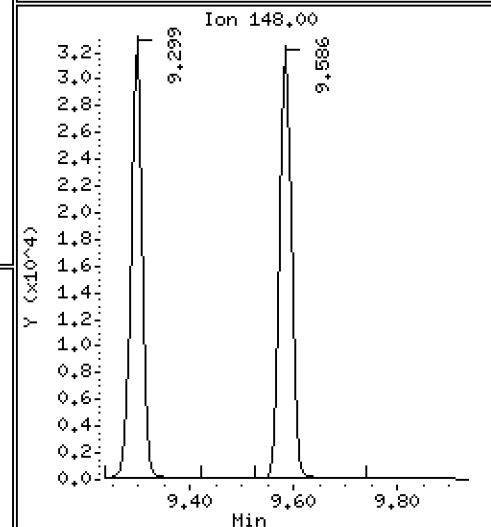
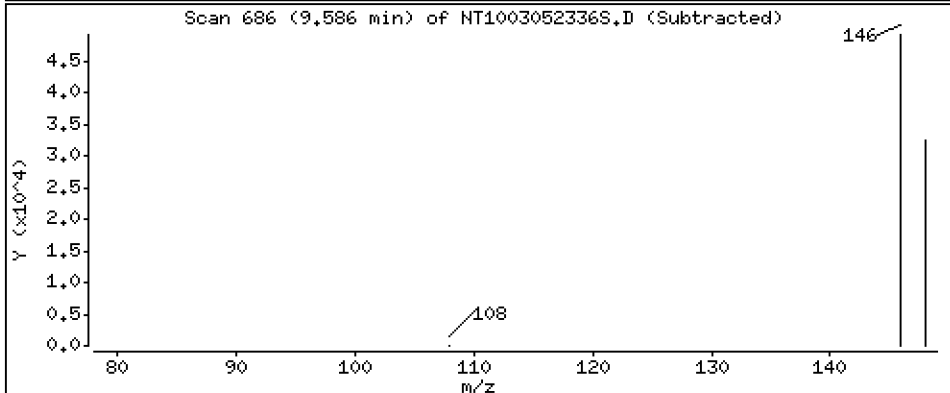
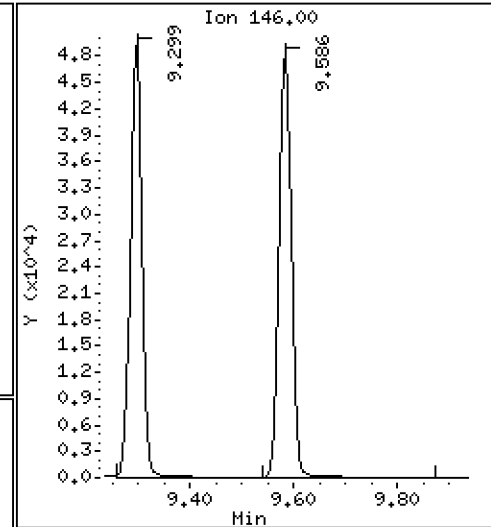
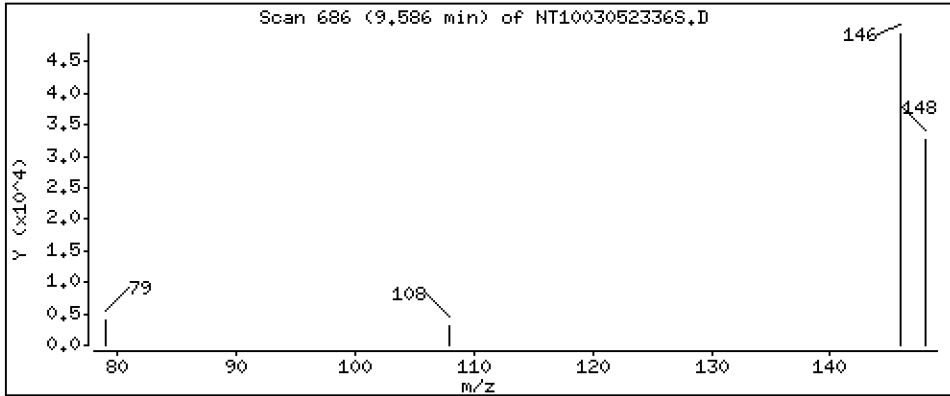
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,9955 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

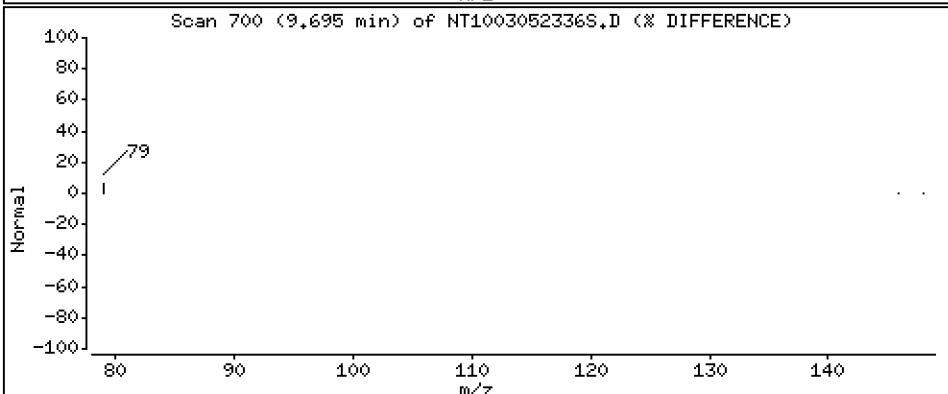
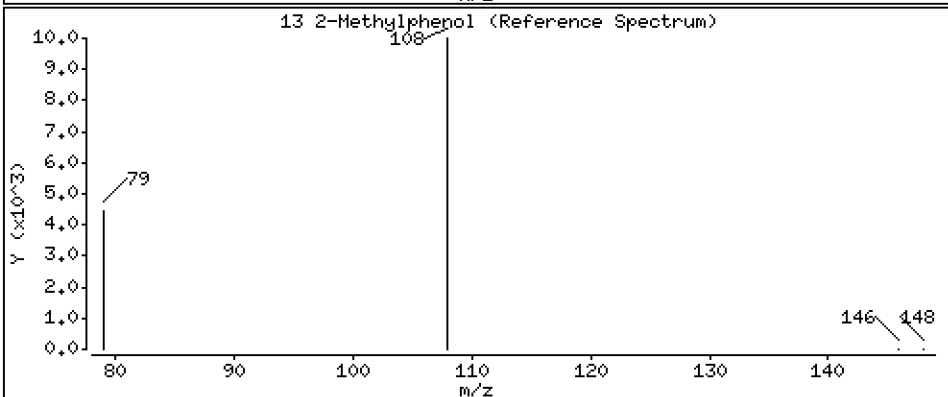
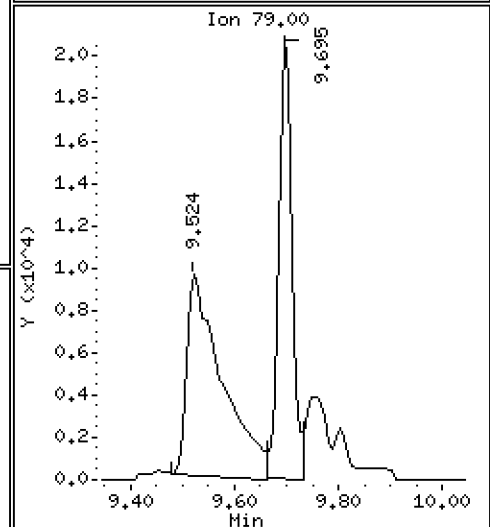
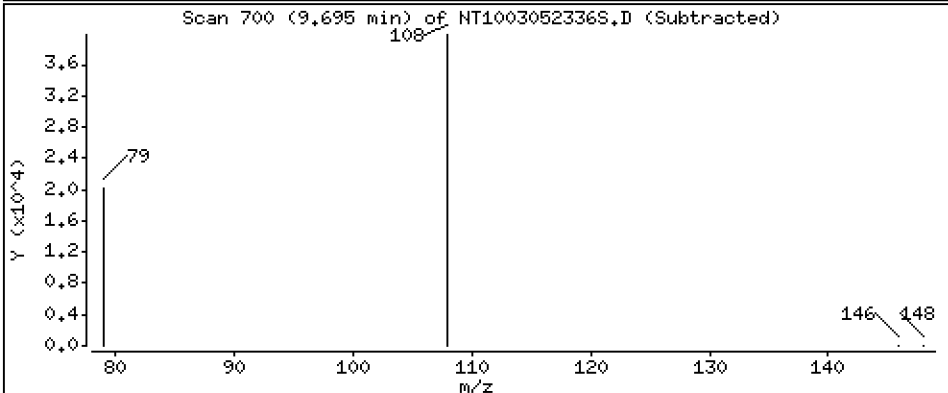
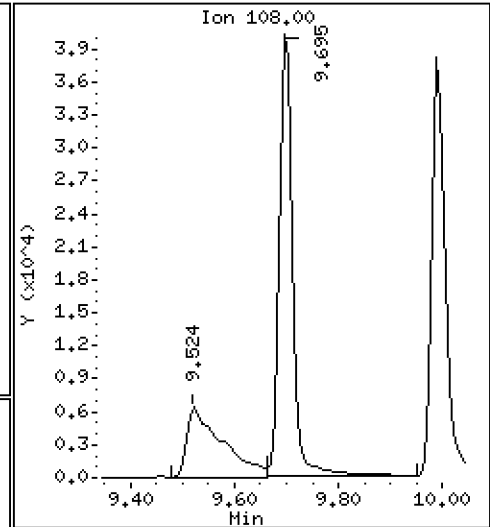
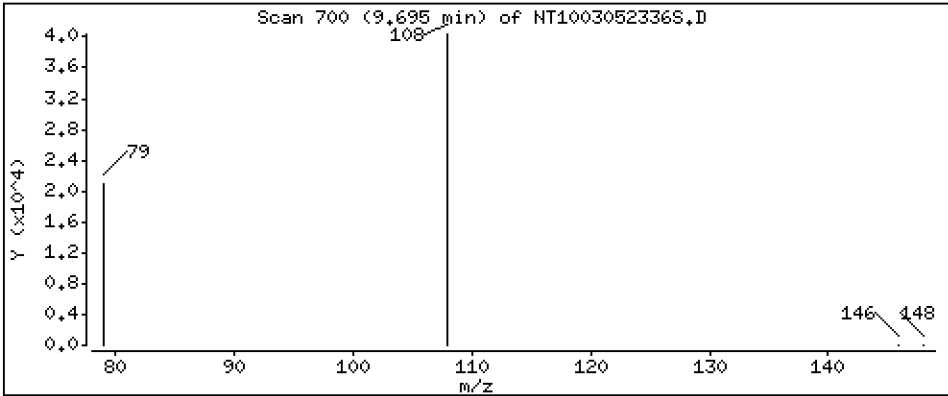
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 1.214 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

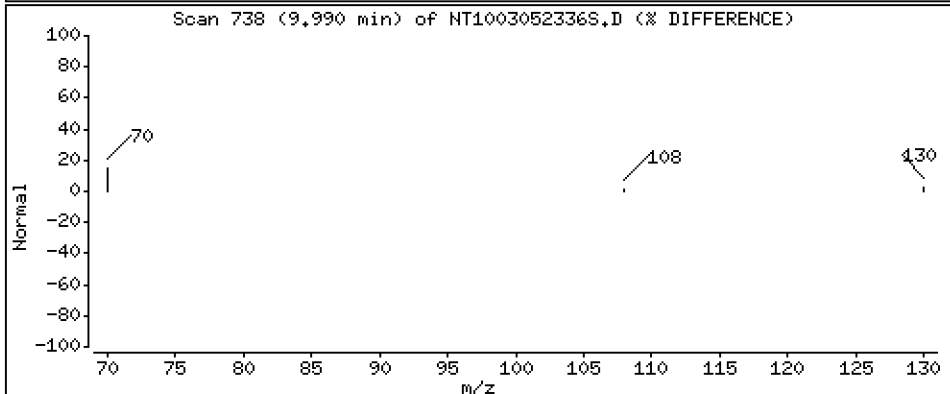
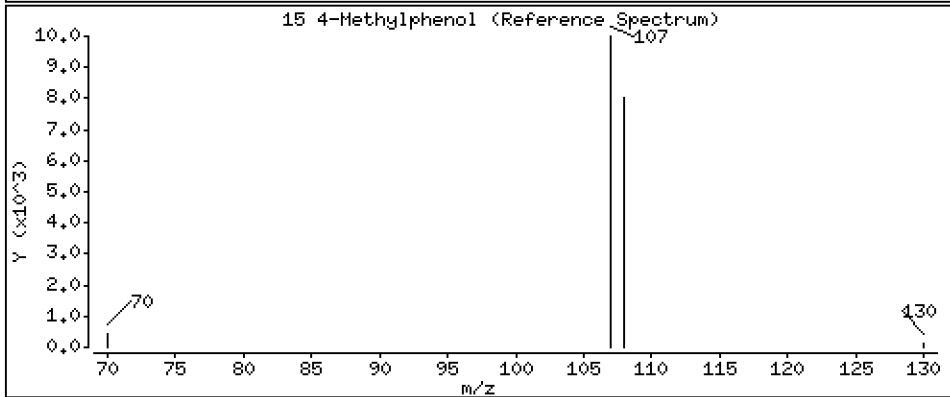
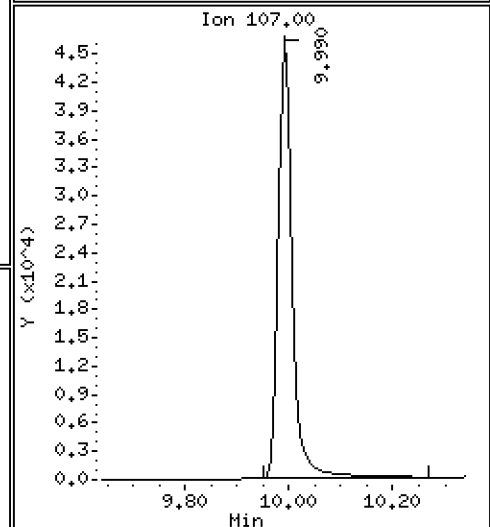
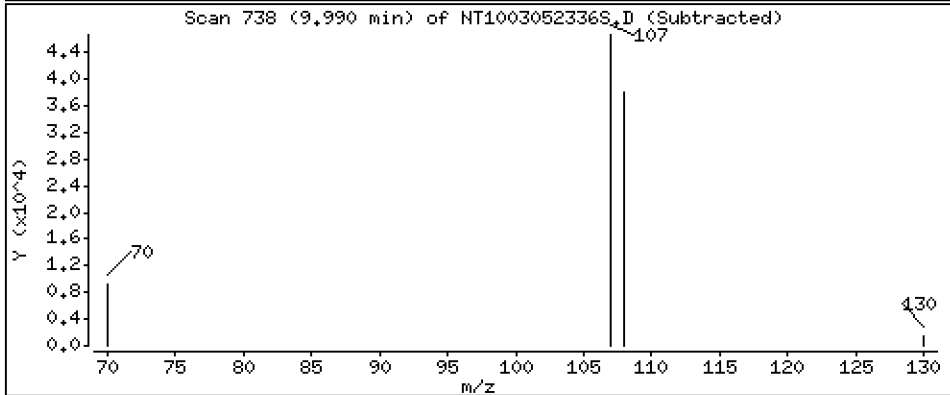
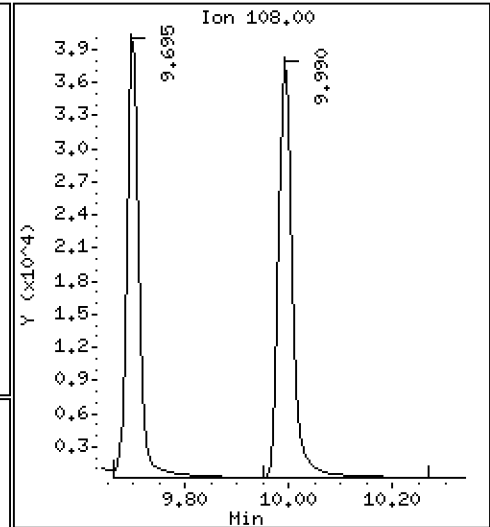
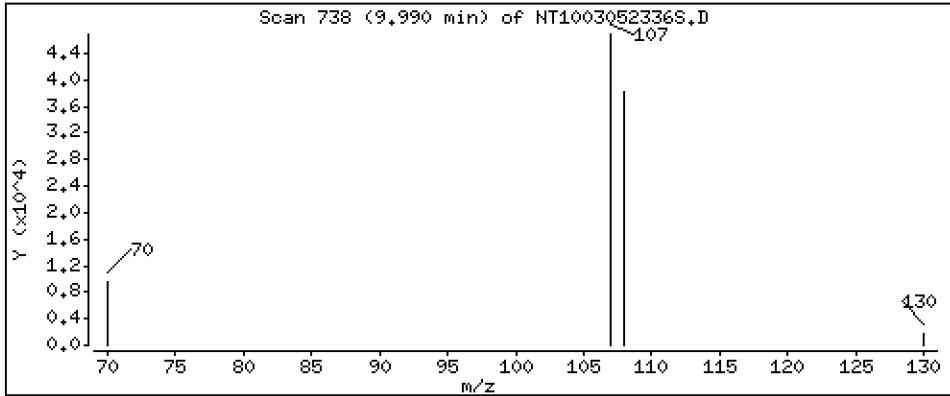
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 1,156 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

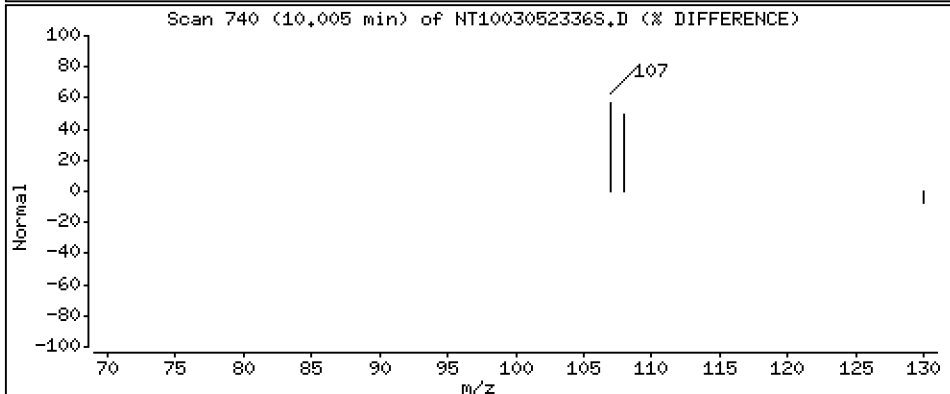
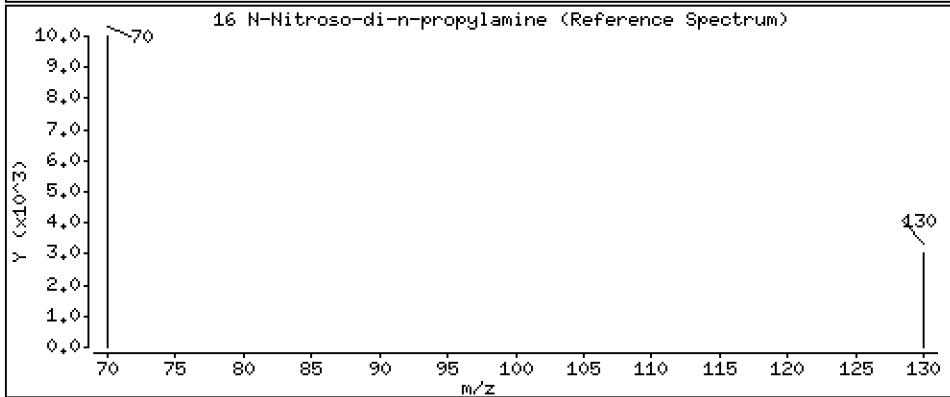
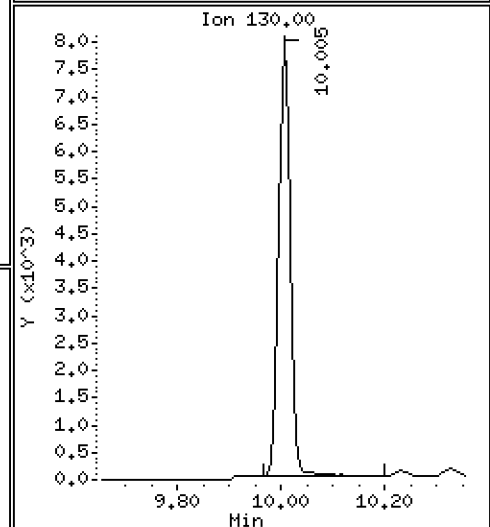
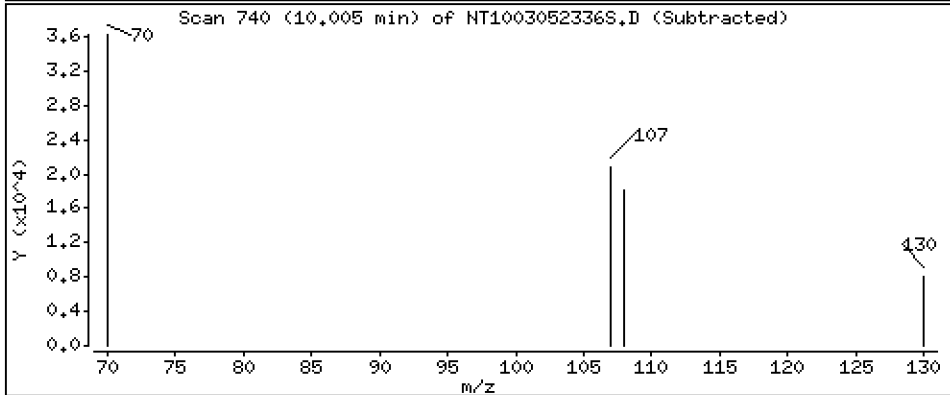
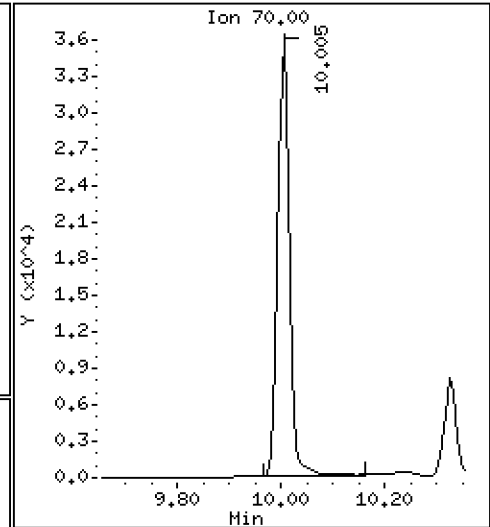
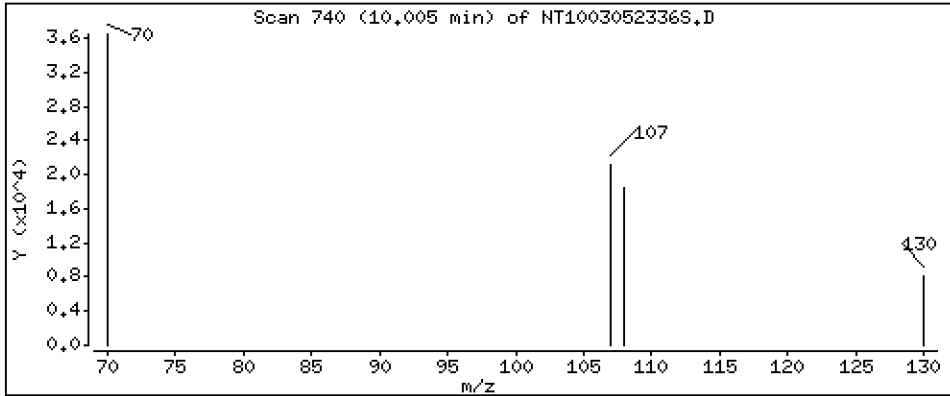
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

16 N-Nitroso-di-n-propylamine

Concentration: 1,258 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

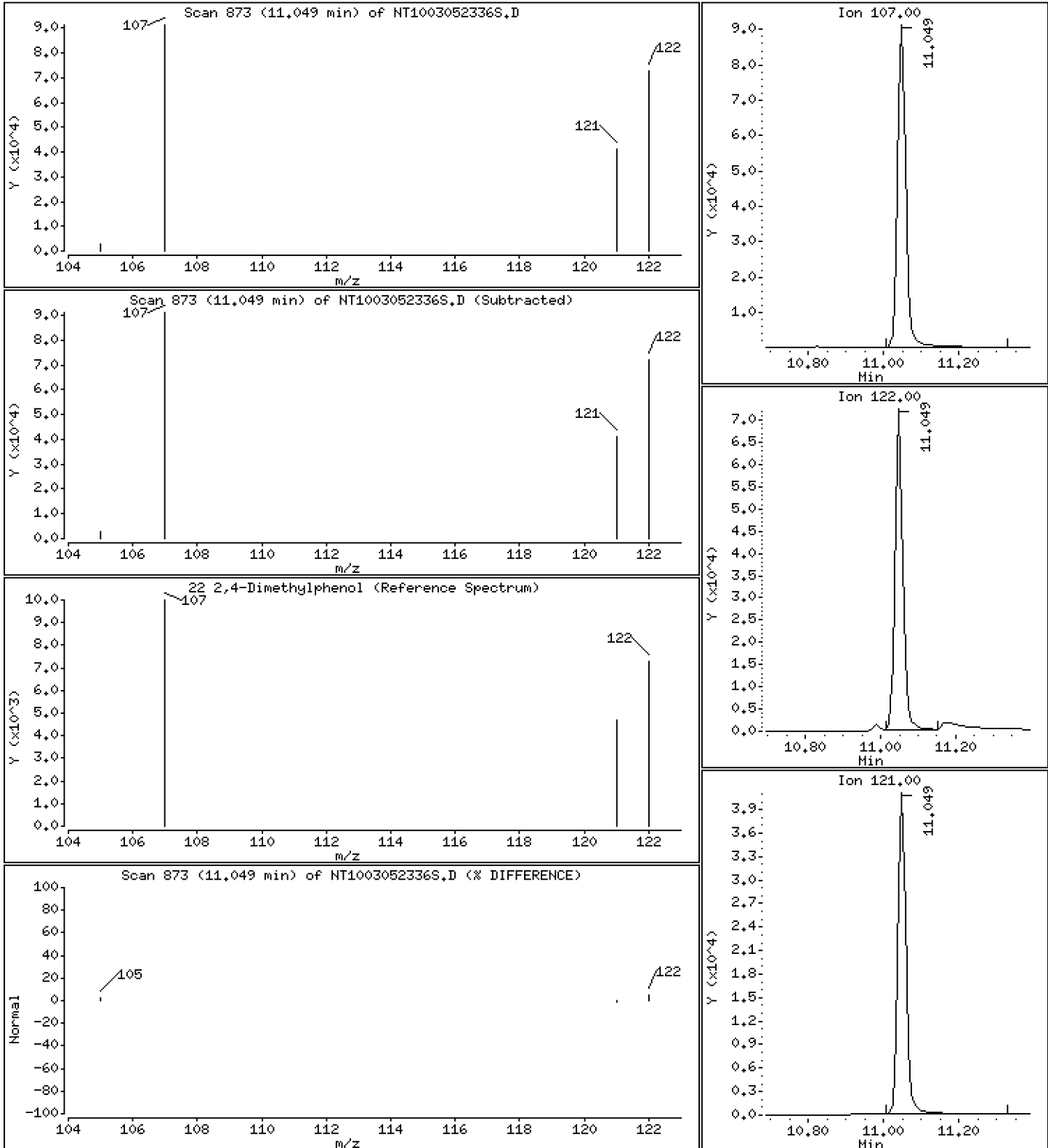
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

22 2,4-Dimethylphenol

Concentration: 2,158 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

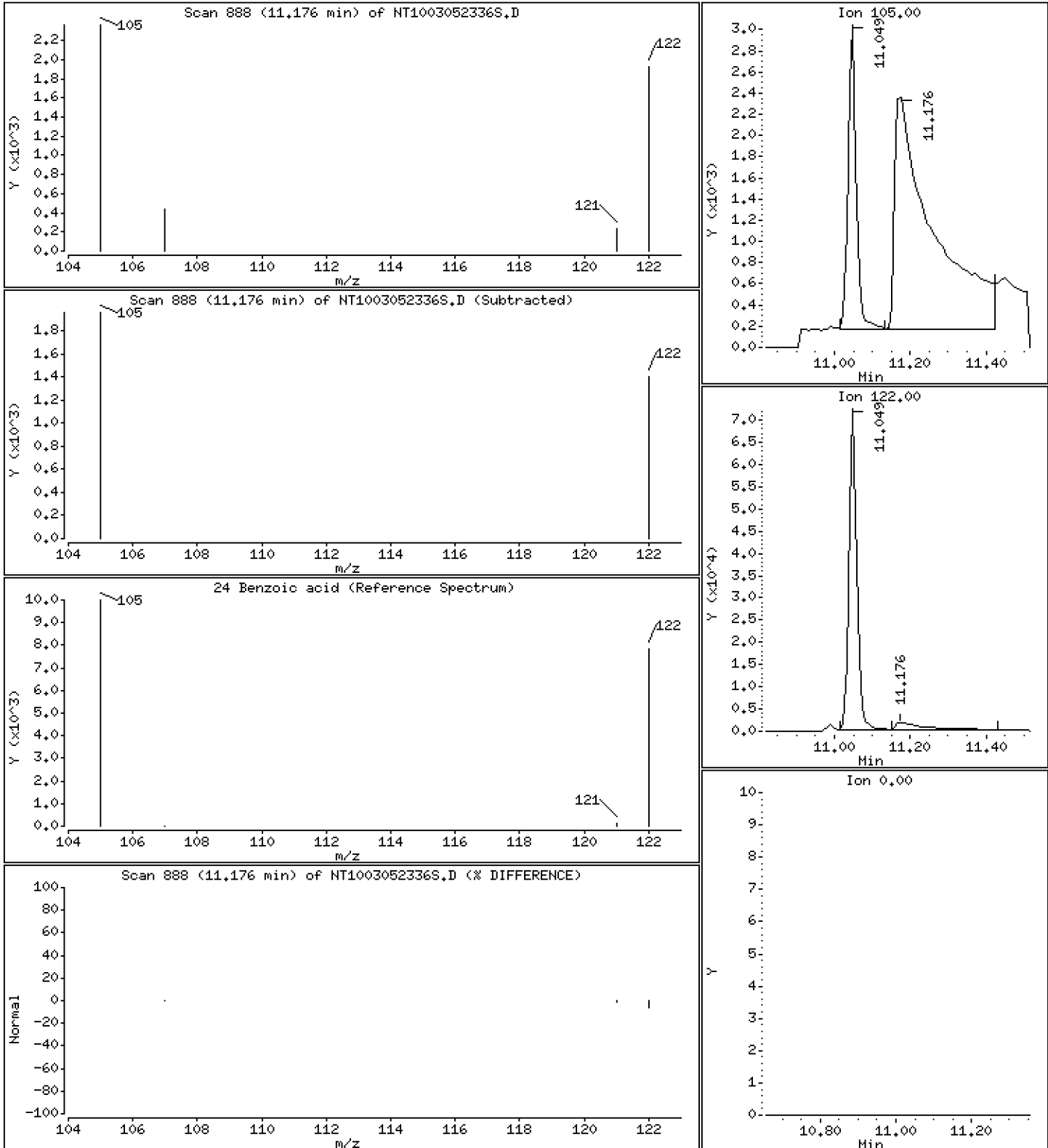
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

24 Benzoic acid

Concentration: 0,4334 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

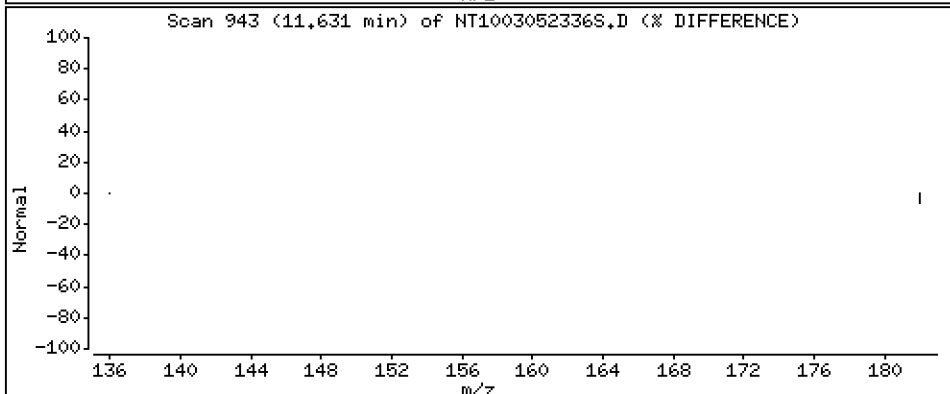
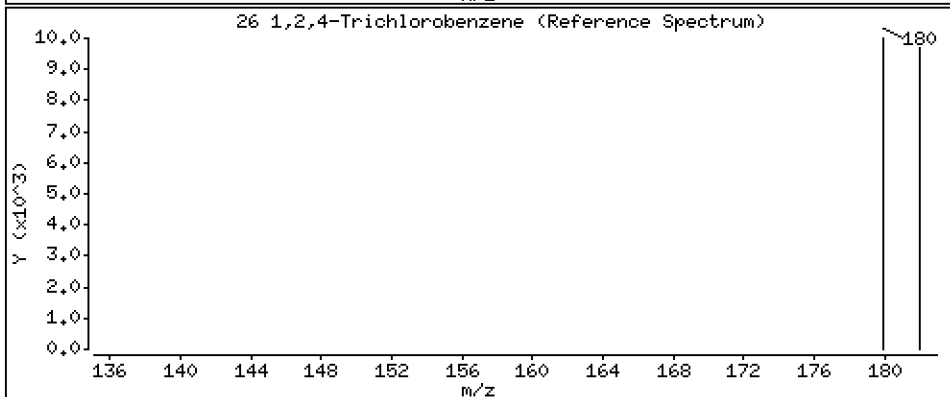
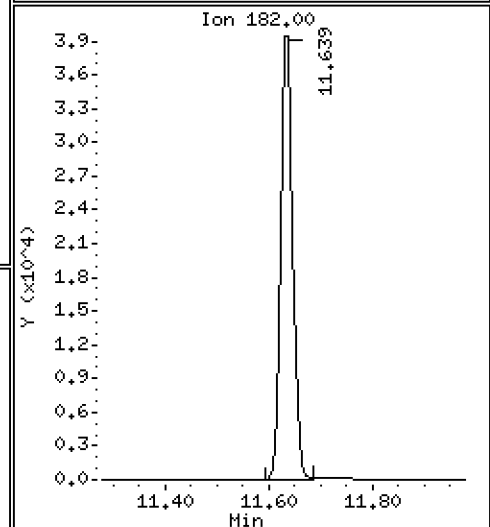
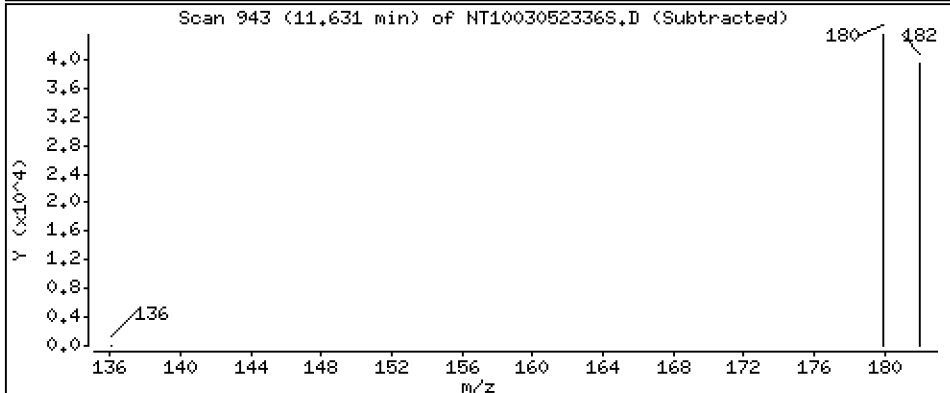
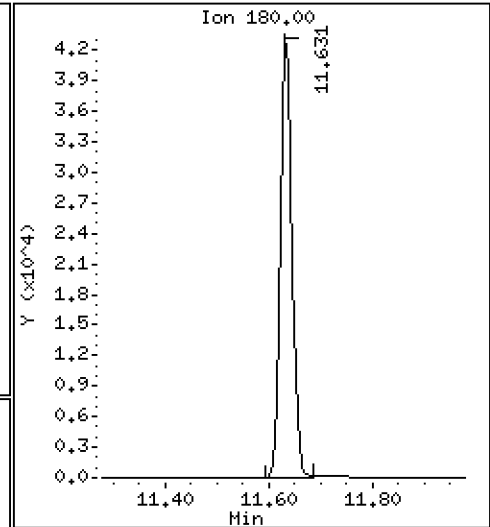
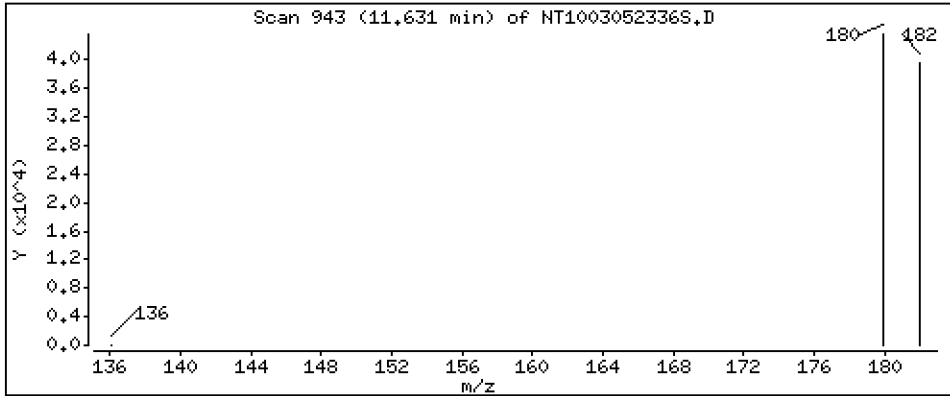
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 1,210 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

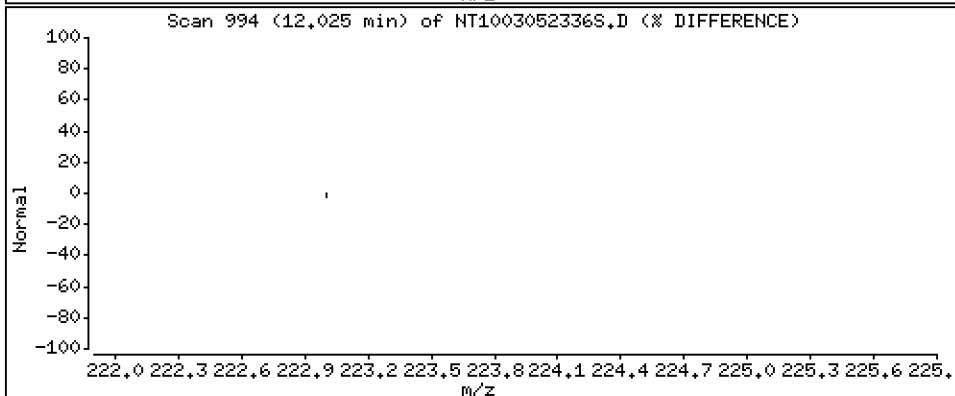
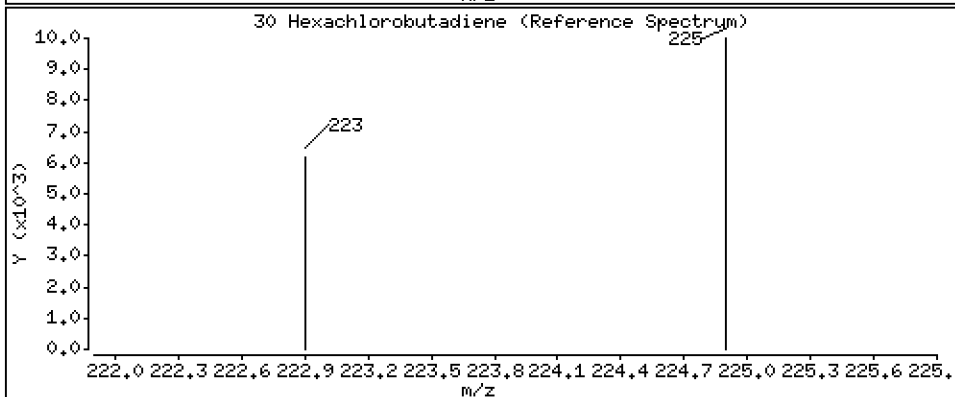
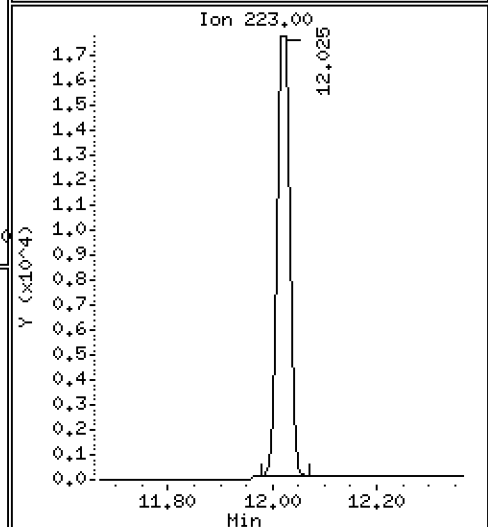
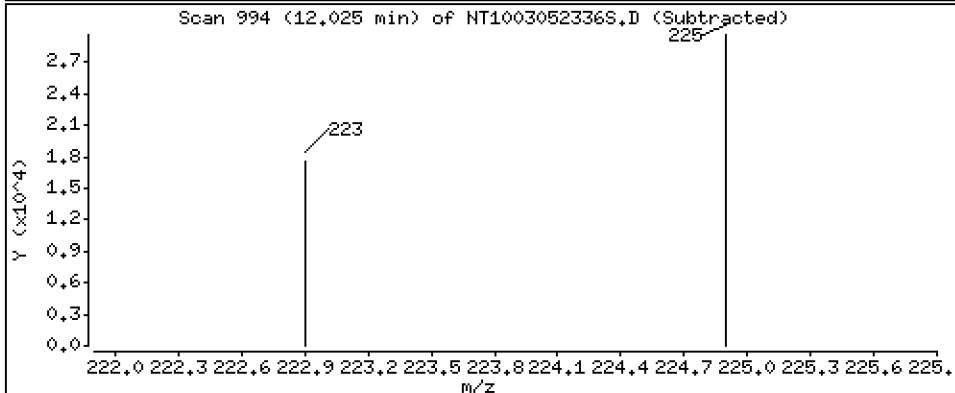
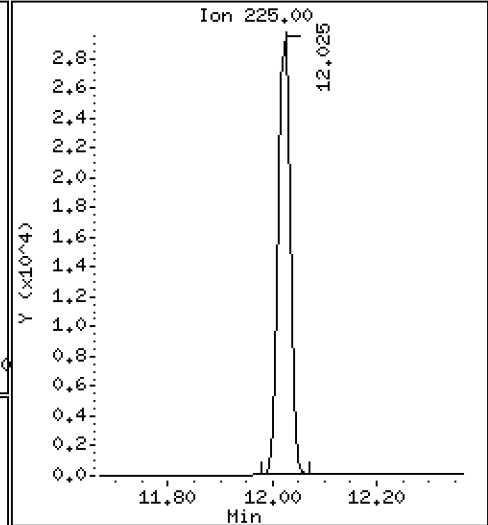
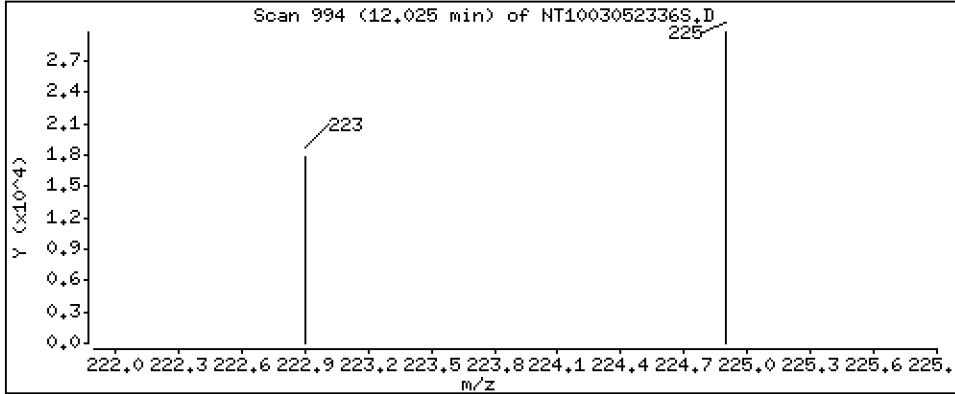
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 1,134 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

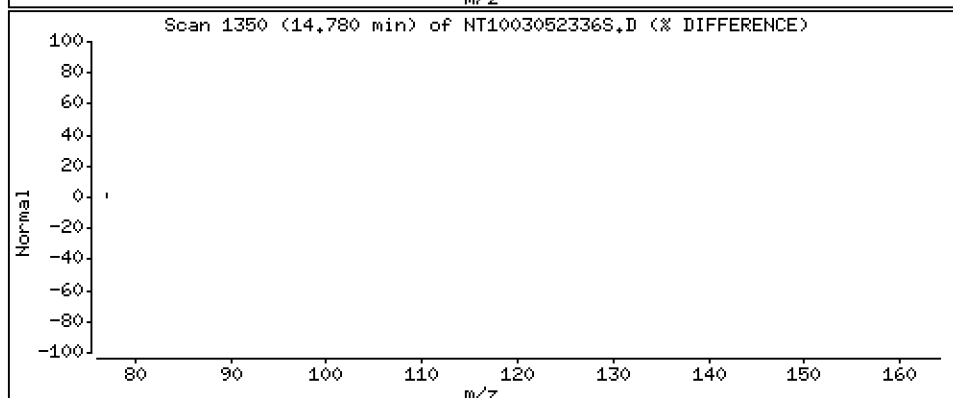
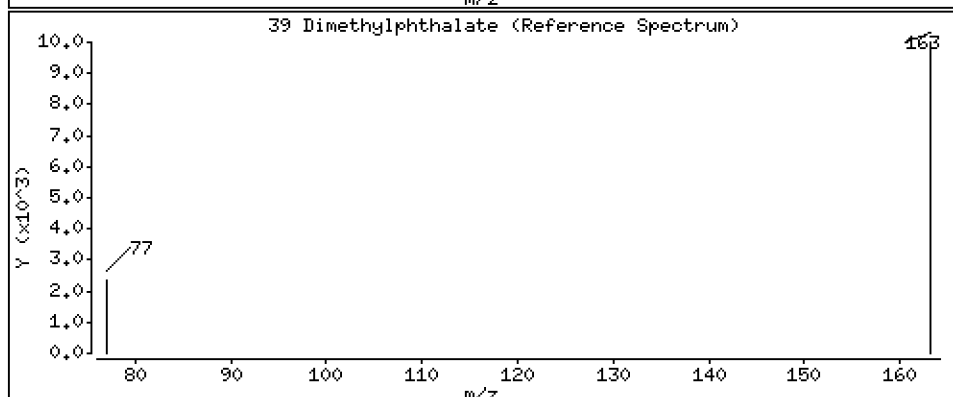
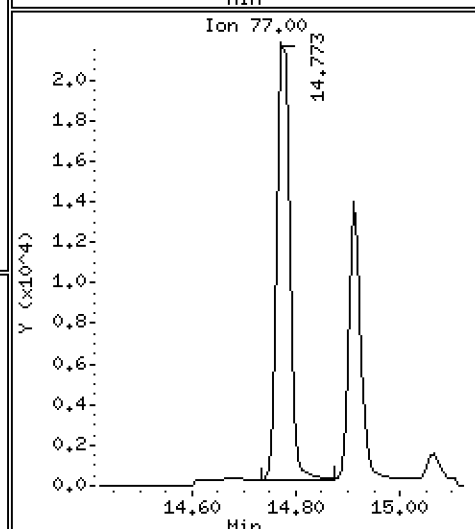
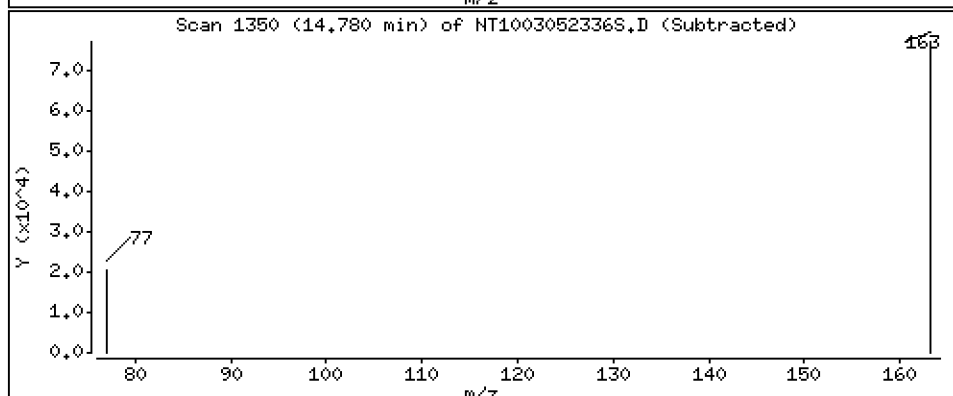
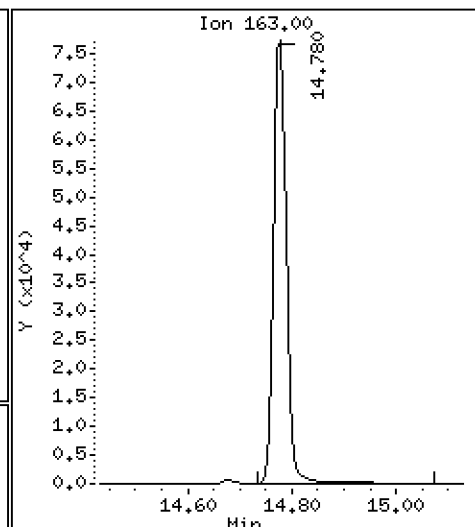
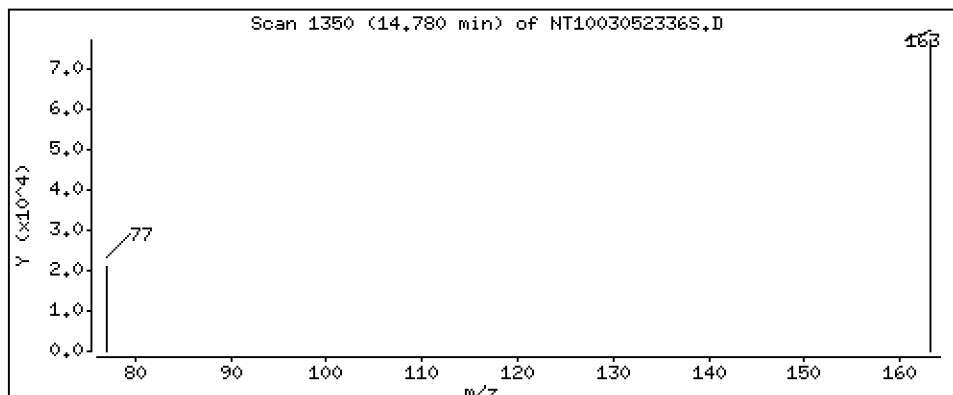
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

39 Dimethylphthalate

Concentration: 1,039 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

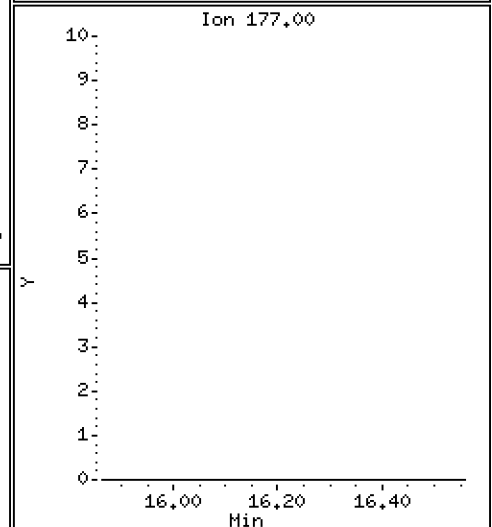
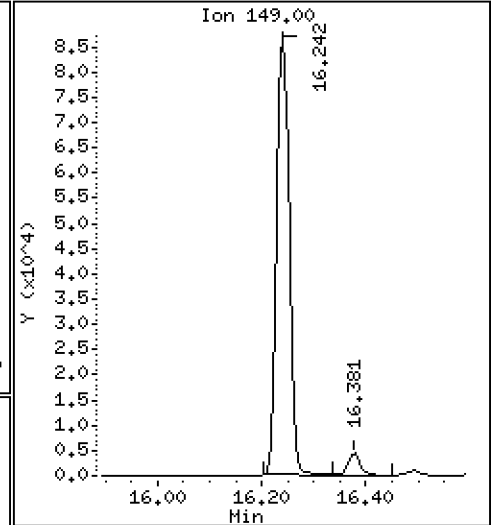
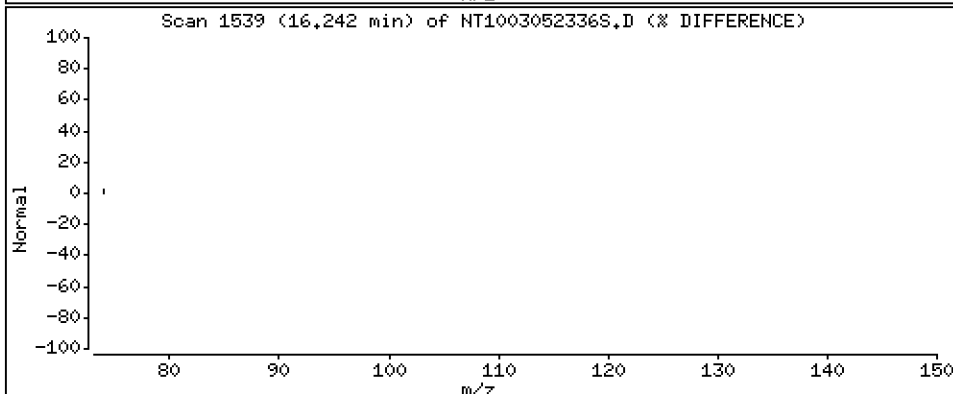
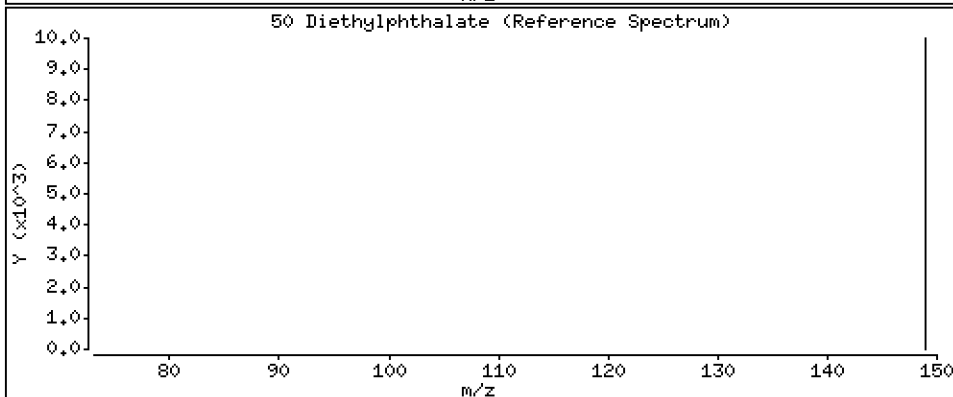
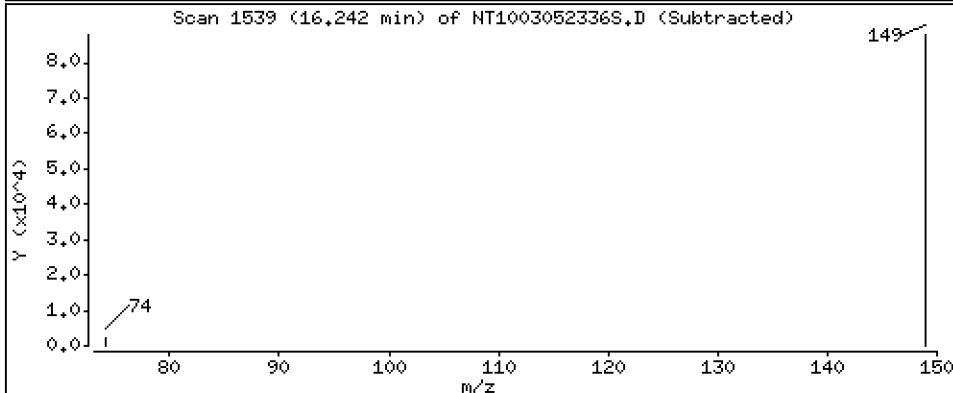
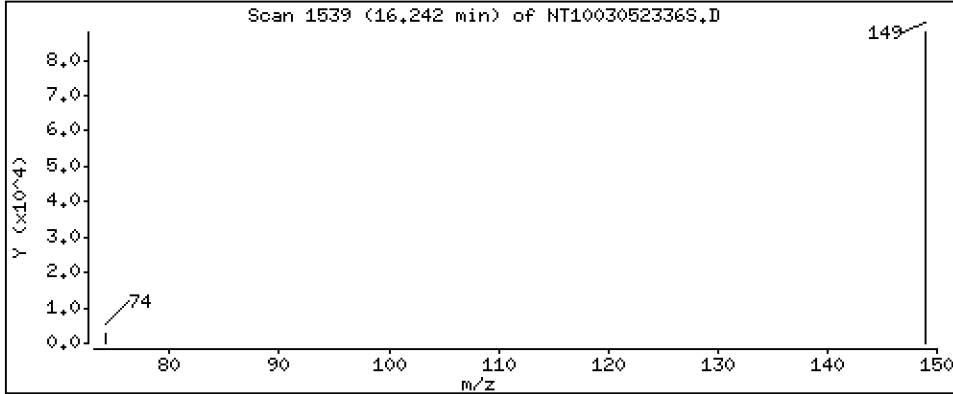
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 1,207 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

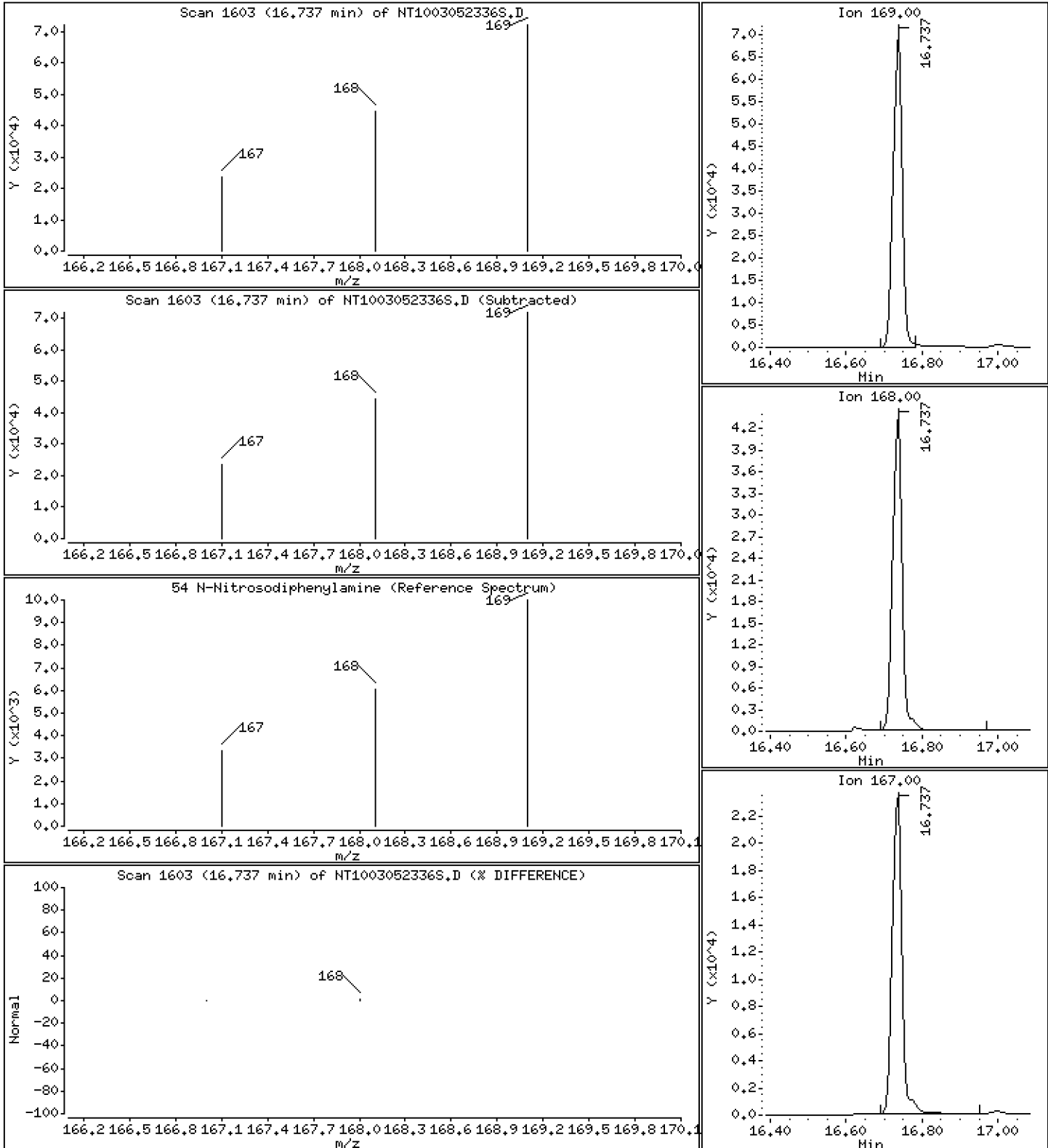
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,8939 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

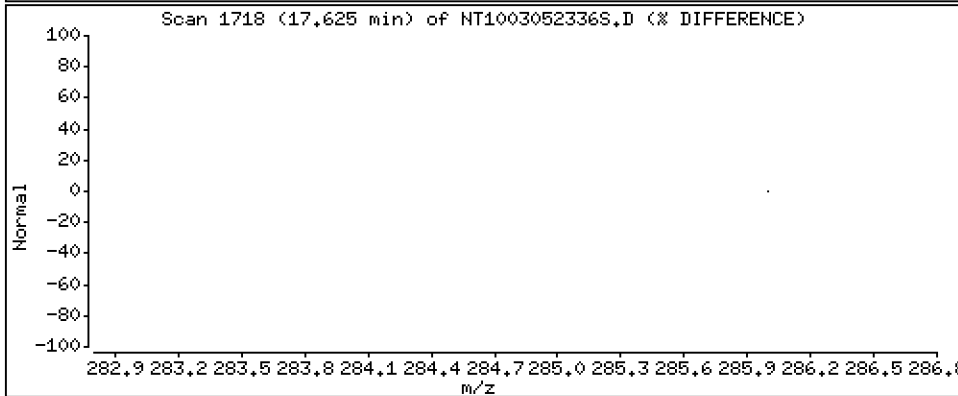
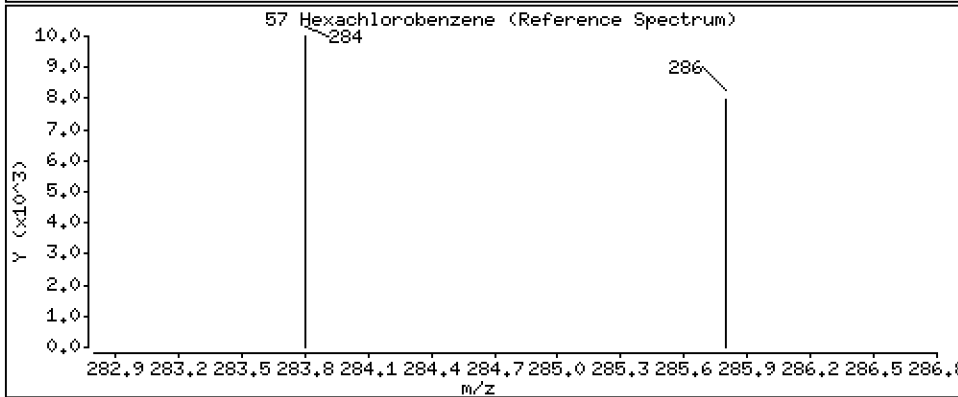
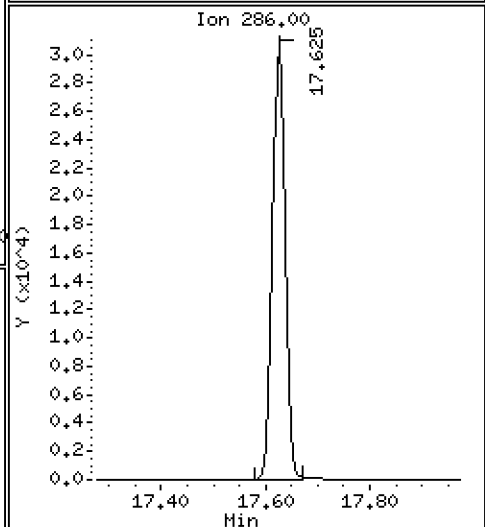
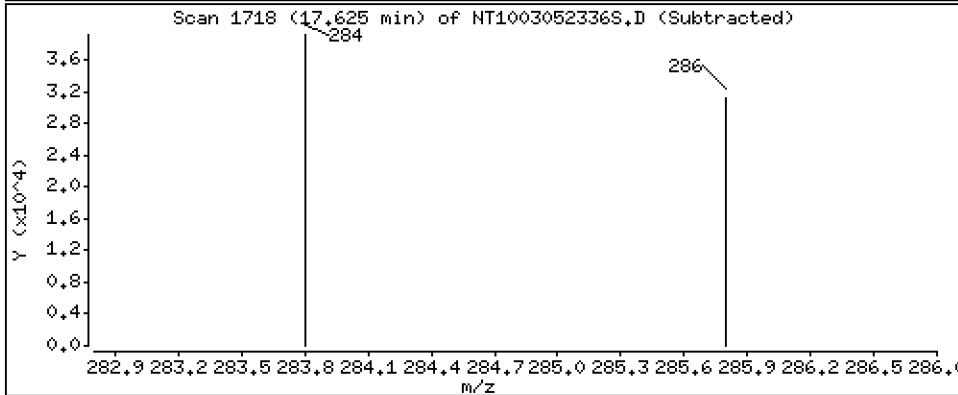
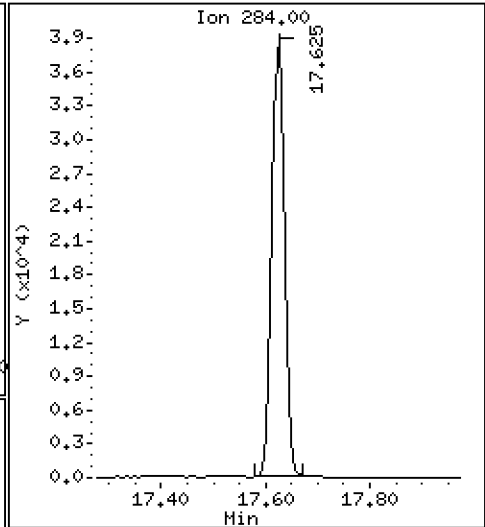
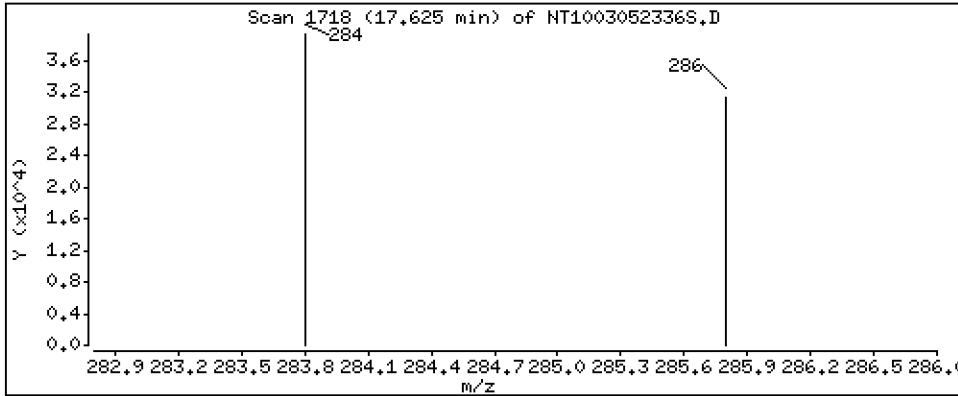
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 1,079 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

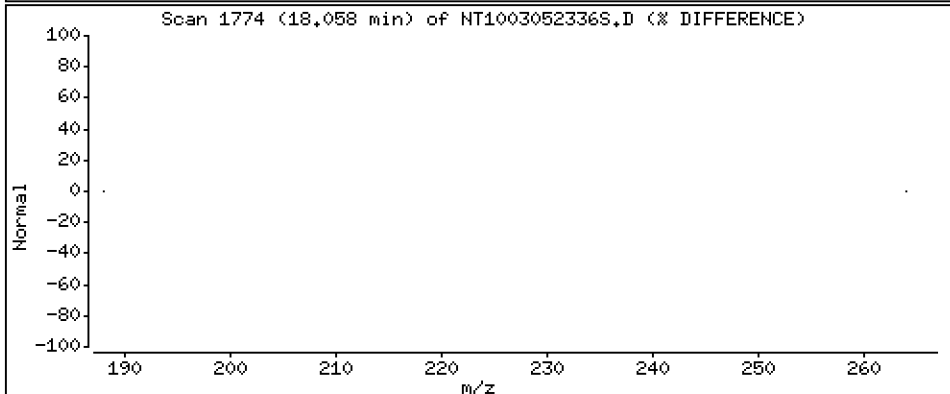
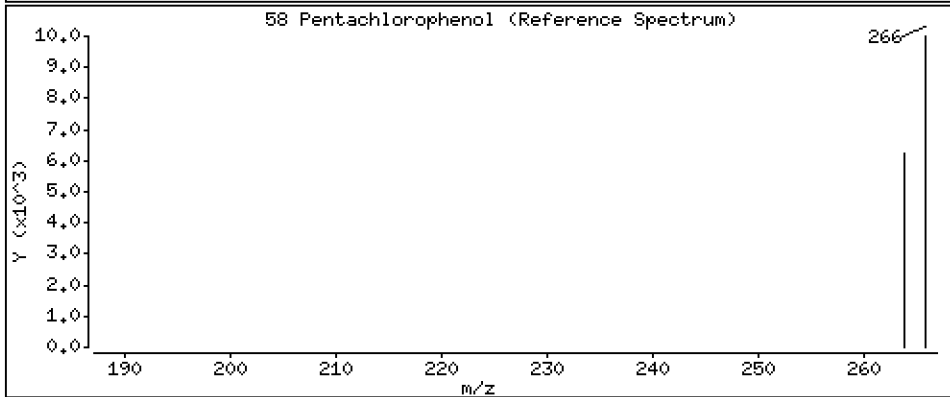
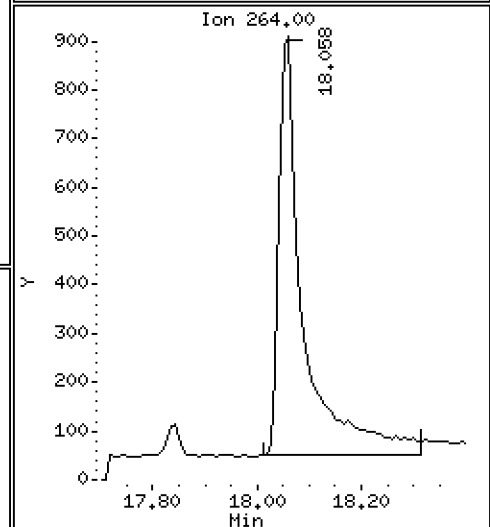
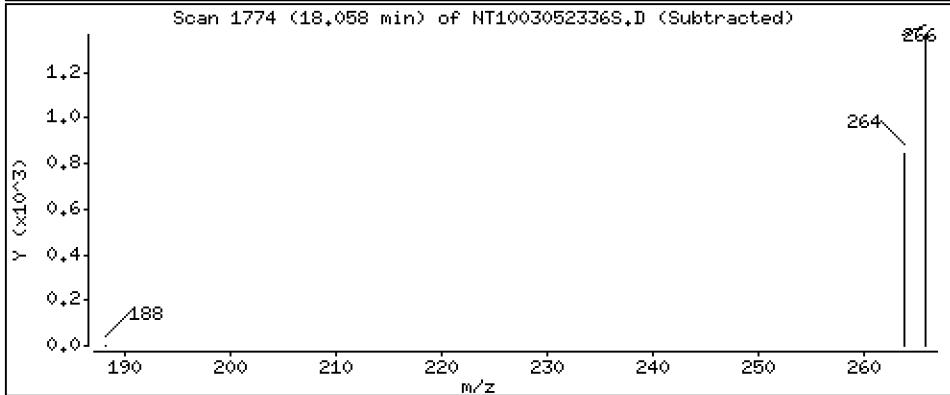
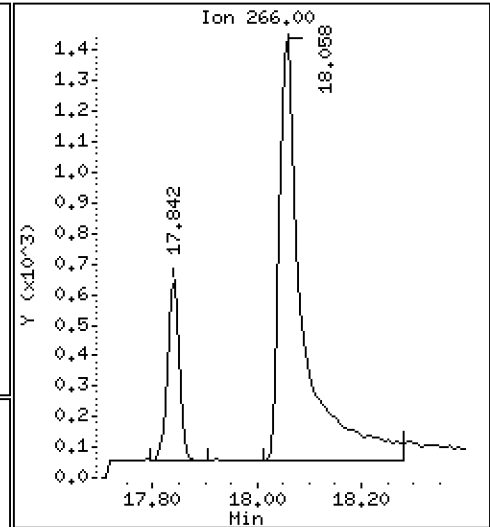
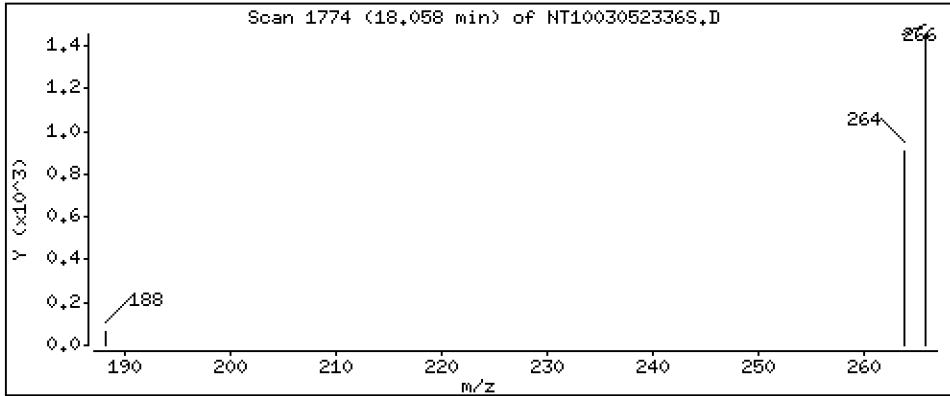
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

58 Pentachlorophenol

Concentration: 0,1710 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

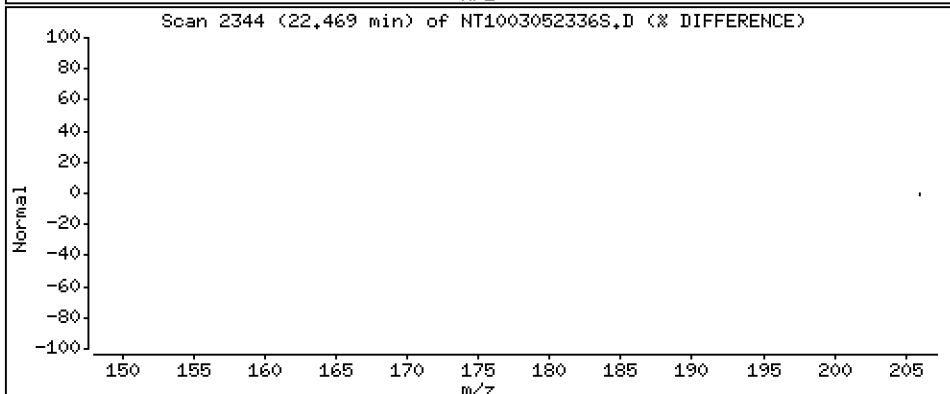
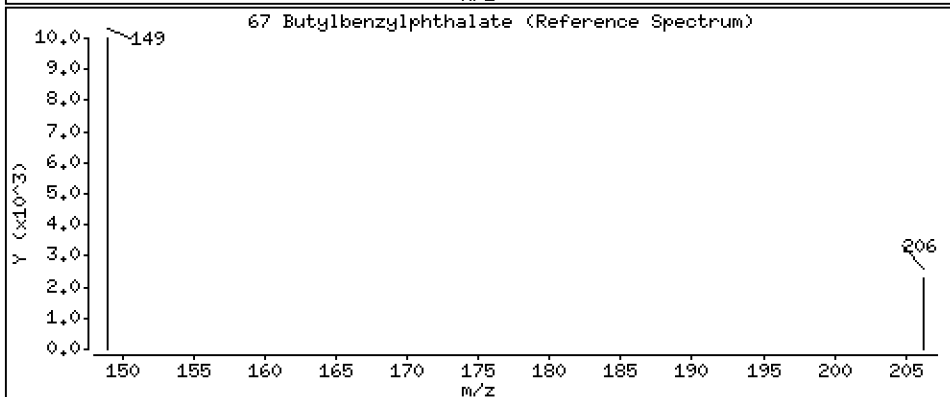
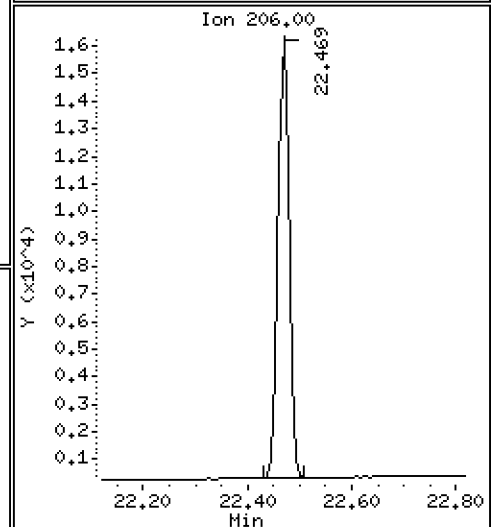
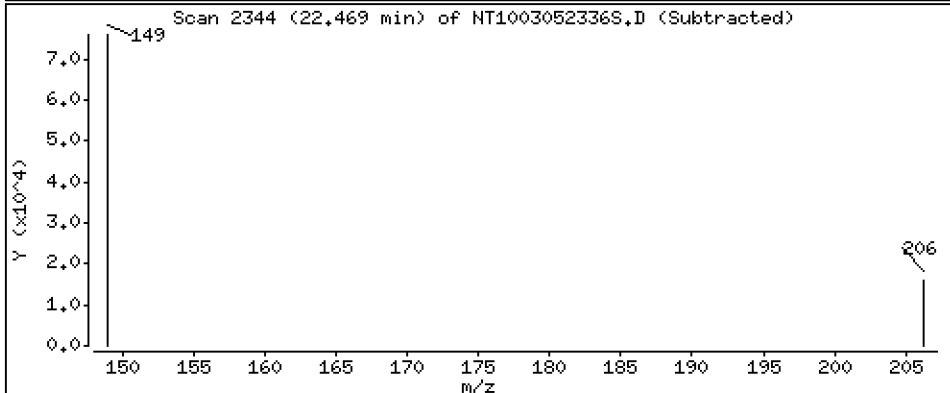
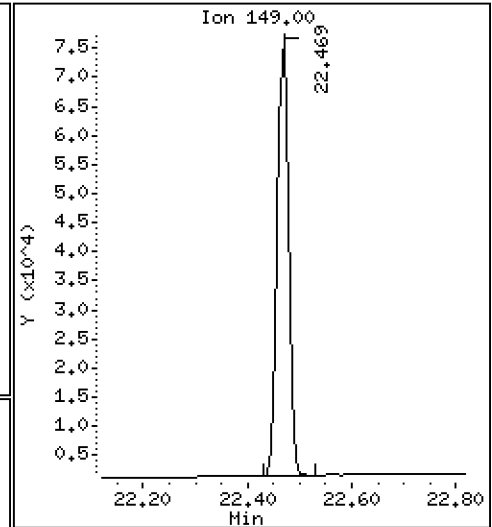
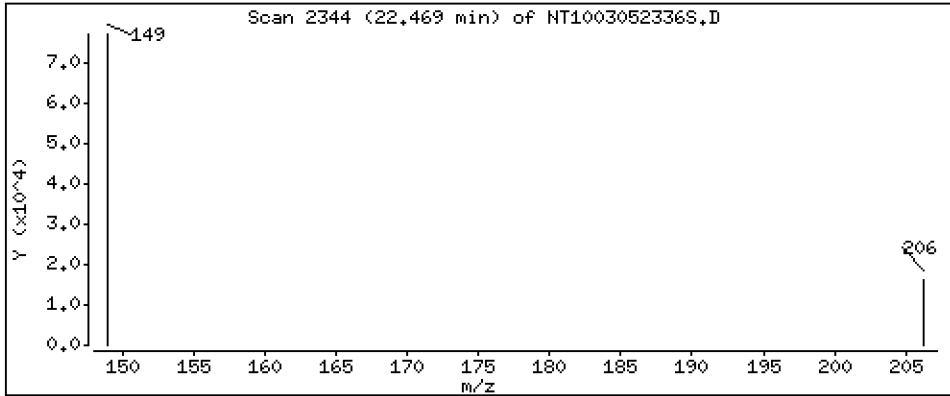
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,8184 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

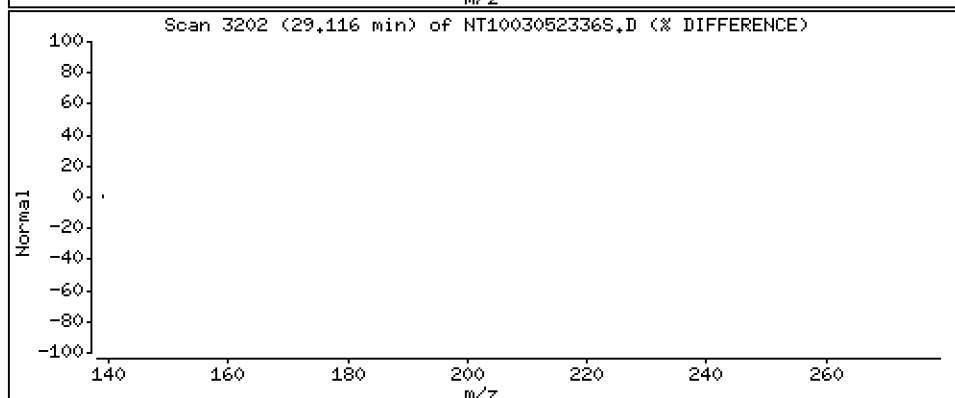
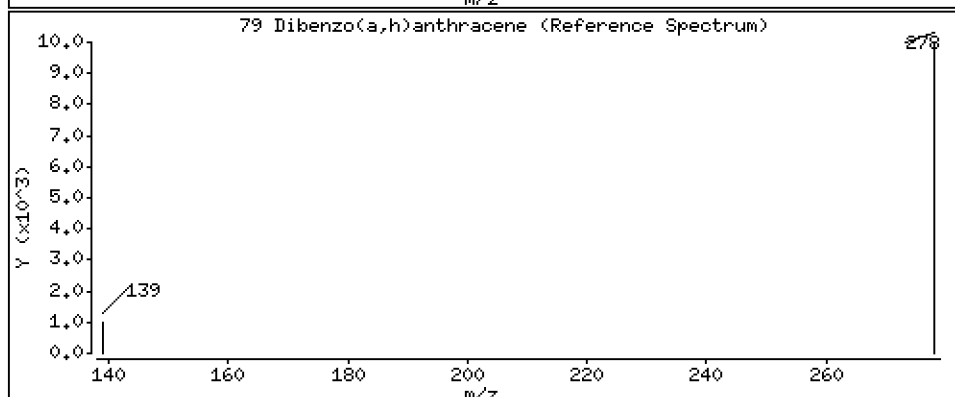
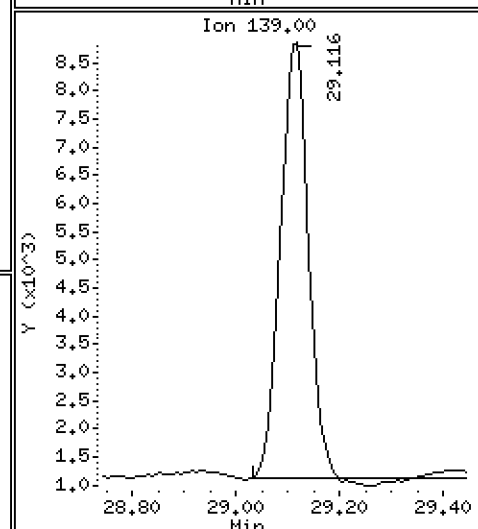
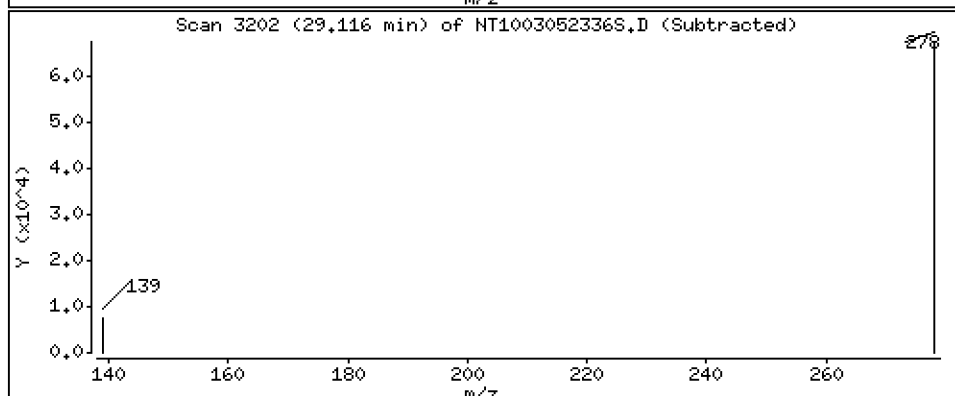
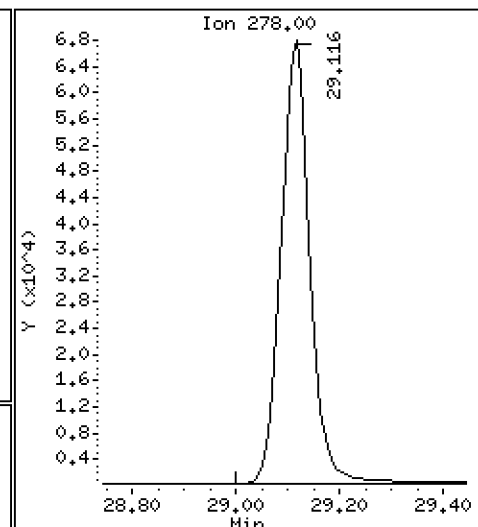
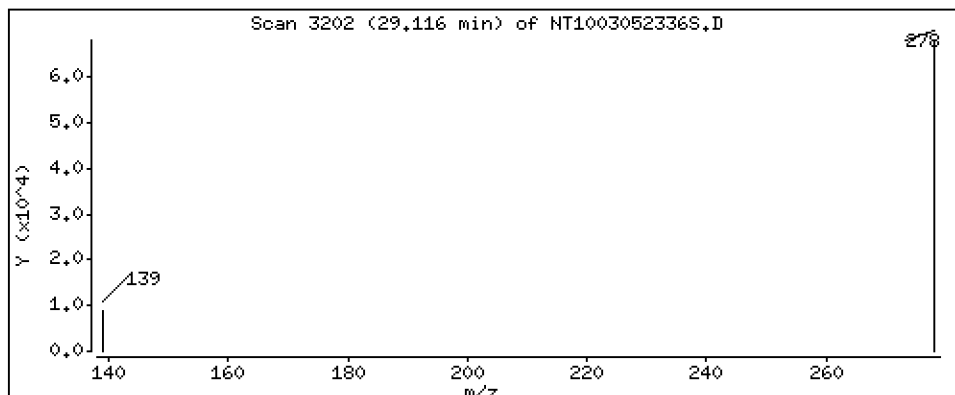
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 1,226 ug/mL



Date : 06-MAR-2023 11:27

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-CCV1

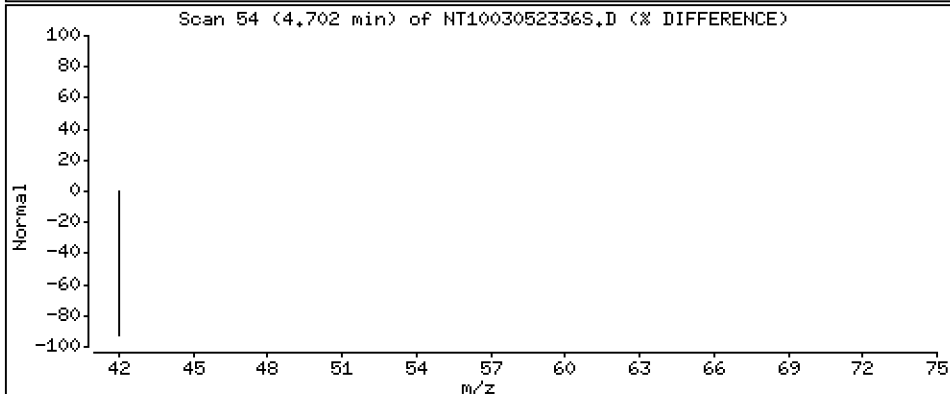
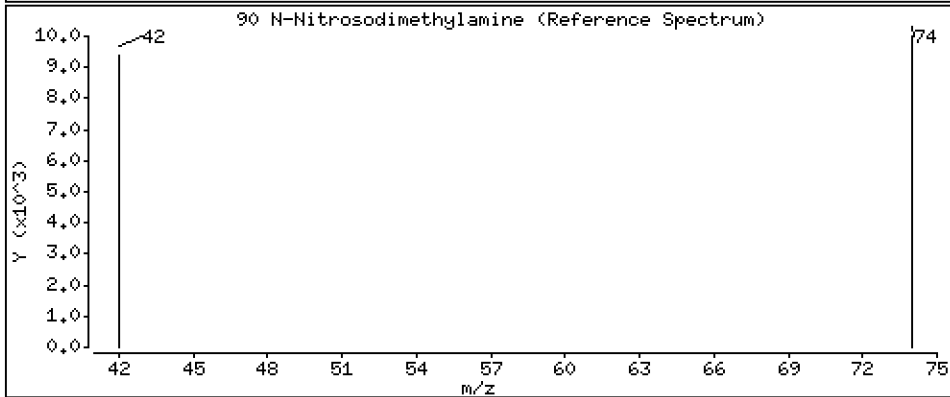
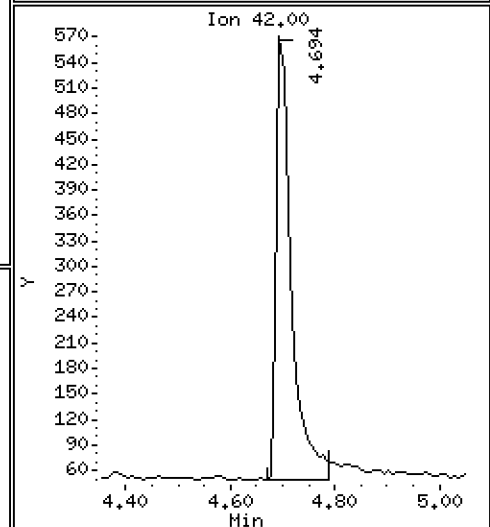
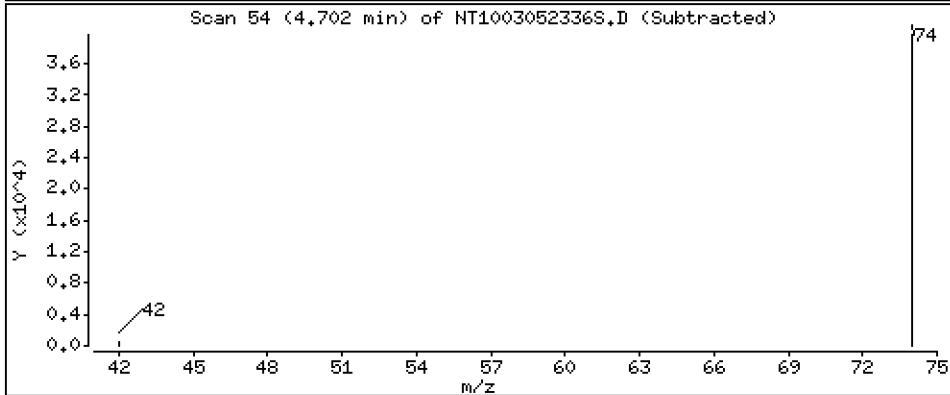
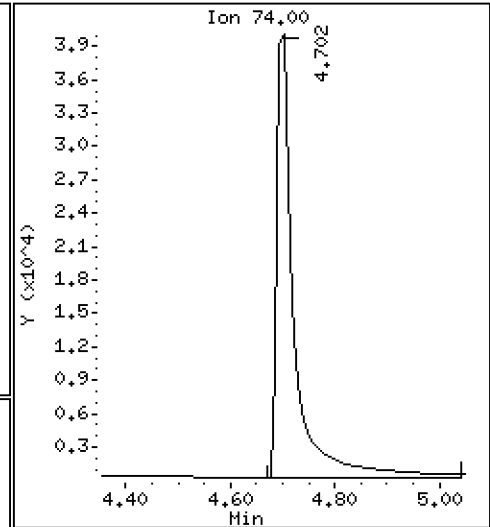
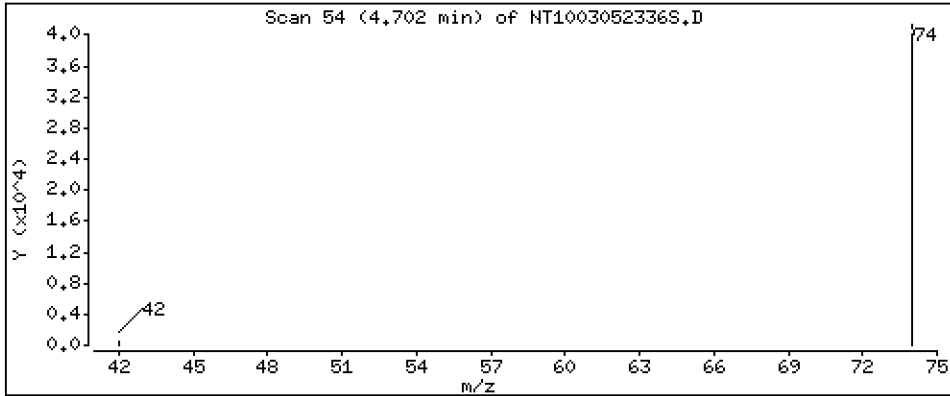
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 2,408 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052336S.D
 Lab Smp Id: SLC0447-CCV1
 Inj Date : 06-MAR-2023 11:27
 Operator : YZ
 Smp Info : SLC0447-CCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSDDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.902	6.902	(0.745)	107440	1.71101	1.711 (R)
3 Phenol	94		8.556	8.556	(0.923)	85386	0.91782	0.9178
7 1,3-Dichlorobenzene	146		9.151	9.151	(0.987)	80136	0.98309	0.9831
* 8 1,4-Dichlorobenzene-d4	152		9.267	9.259	(1.000)	219946	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.003)	76985	0.97139	0.9714
11 Benzyl alcohol	79		9.523	9.515	(1.028)	43531	0.83909	0.8391
12 1,2-Dichlorobenzene	146		9.585	9.585	(1.034)	75830	0.99547	0.9955
13 2-Methylphenol	108		9.694	9.694	(1.046)	68273	1.21423	1.214
15 4-Methylphenol	108		9.989	9.989	(1.078)	67752	1.15585	1.156
16 N-Nitroso-di-n-propylamine	70		10.005	10.005	(1.080)	52114	1.25789	1.258
22 2,4-Dimethylphenol	107		11.048	11.040	(0.940)	141256	2.15849	2.158
24 Benzoic acid	105		11.176	11.167	(0.951)	15489	0.43343	0.4334
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	66771	1.20992	1.210
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	766737	4.00000	
30 Hexachlorobutadiene	225		12.025	12.017	(1.023)	44393	1.13356	1.134
39 Dimethylphthalate	163		14.780	14.780	(0.963)	125743	1.03902	1.039
* 42 Acenaphthene-d10	162		15.352	15.352	(1.000)	381140	4.00000	
50 Diethylphthalate	149		16.241	16.241	(1.058)	137735	1.20685	1.207 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.736	(0.907)	110806	0.89388	0.8939
57 Hexachlorobenzene	284		17.625	17.625	(0.955)	62580	1.07874	1.079
58 Pentachlorophenol	266		18.058	18.050	(0.979)	4346	0.17097	0.1710
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	765962	4.00000	
\$ 66 Terphenyl-d14	244		21.578	21.586	(0.919)	104758	1.67262	1.673 (R)
67 Butylbenzylphthalate	149		22.469	22.469	(0.956)	106717	0.81844	0.8184
* 69 Chrysene-d12	240		23.491	23.491	(1.000)	774496	4.00000	
* 77 Perylene-d12	264		26.232	26.224	(1.000)	914722	4.00000	
79 Dibenzo(a,h)anthracene	278		29.116	29.093	(1.110)	264400	1.22645	1.226
90 N-Nitrosodimethylamine	74		4.701	4.701	(0.507)	89521	2.40800	2.408

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052336S.D
 Lab Smp Id: SLC0447-CCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	219946	-8.14
27 Naphthalene-d8	849492	424746	1698984	766737	-9.74
42 Acenaphthene-d10	421435	210718	842870	381140	-9.56
59 Phenanthrene-d10	835585	417793	1671170	765962	-8.33
69 Chrysene-d12	874614	437307	1749228	774496	-11.45
77 Perylene-d12	1035818	517909	2071636	914722	-11.69

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.27	0.08
27 Naphthalene-d8	11.75	11.25	12.25	11.75	-0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	-0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	-0.00
69 Chrysene-d12	23.49	22.99	23.99	23.49	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.23	0.03

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

REVIEW SUMMARY FOR FILE - NT1003052336S.D

Lab ID: SLC0447-CCV1

nt10.i, 20230305B.b\SIM.b\SIMABN2.m,

06-MAR-2023 11:27

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



**LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>NT10</u>	Calibration:	<u>GC00032</u>
Lab File ID:	<u>NT1003052328S.D</u>	Calibration Date:	<u>03/01/2023</u>
Sequence:	<u>SLC0447</u>	Injection Date:	<u>03/06/23</u>
Lab Sample ID:	<u>SLC0447-LCV1</u>	Injection Time:	<u>06:25</u>
Sequence Name:	<u>ABN 0.2</u>		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.10000	0.1	1.4413080	1.4237320		-1.2	
1,2-Dichlorobenzene	A	0.10000	0.1	1.3853460	1.4027200		1.3	
Benzyl Alcohol	A	0.10000	0.06	0.7492523	0.6042557		-35.3	
Benzoic acid	A	0.40000	0.0	0.1431163				
2,4-Dimethylphenol	A	0.20000	0.2	0.2957717	0.3343850		-1.5	
1,2,4-Trichlorobenzene	A	0.10000	0.1	0.2879030	0.3536098		22.8	
N-Nitrosodiphenylamine	A	0.10000	0.08	0.6473471	0.5249536		-18.9	
Pentachlorophenol	A	0.20000	0.0	0.0950913				
2-Fluorophenol	A	0.15000	0.155	1.1419780	1.1834820		3.6	
p-Terphenyl-d14	A	0.10000	0.172	0.3234672	0.5575088		72.4	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.1\20230305B.b\SIH.b\NT10030523289.D

Date : 06-MAR-2023 06:25

Client ID:

Sample Info: SLC0447-LCW1

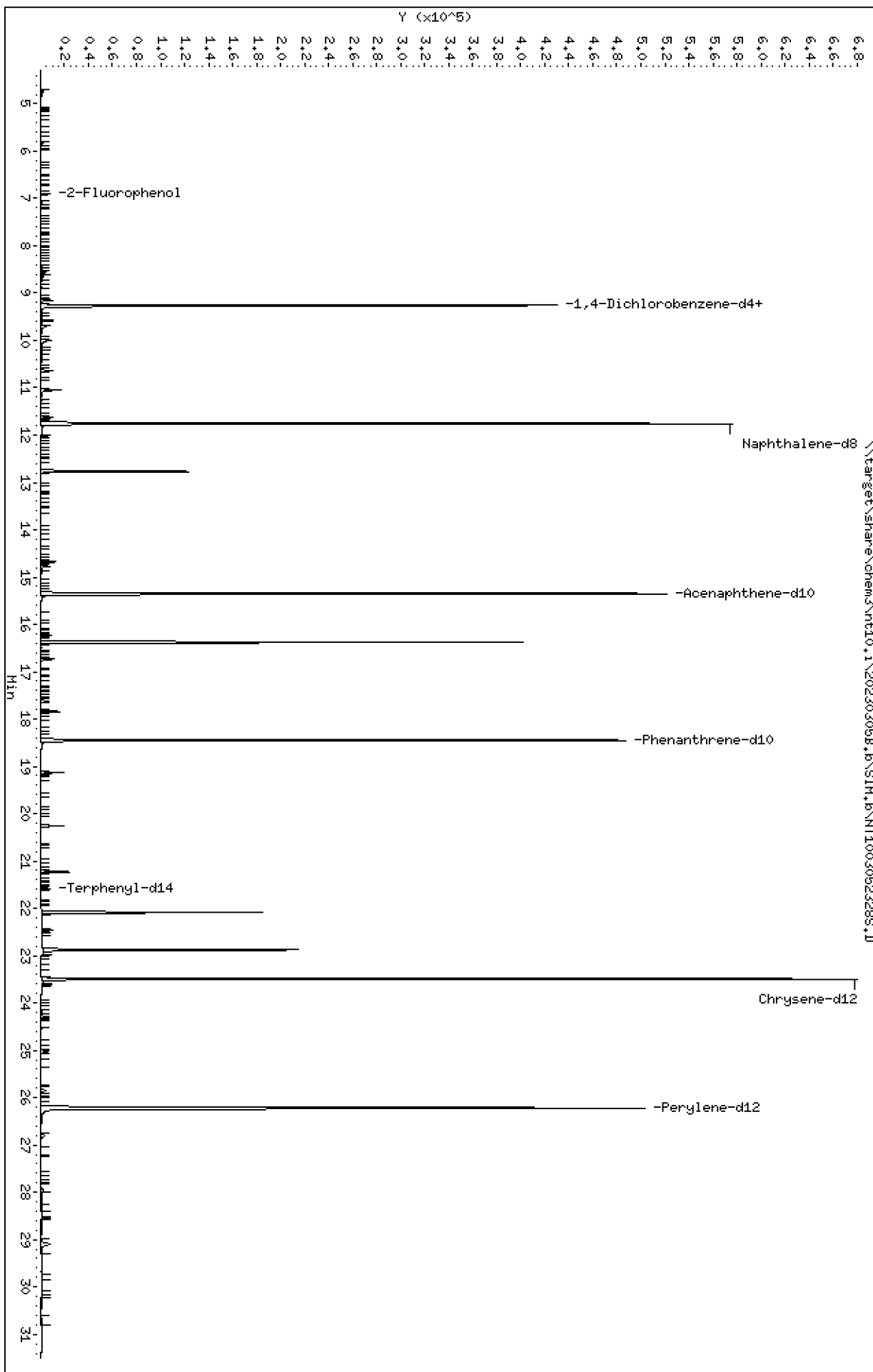
Instrument: nt10.1

Column phase: ZB-5msi

Operator: YZ

Column diameter: 0.25

Page 1



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

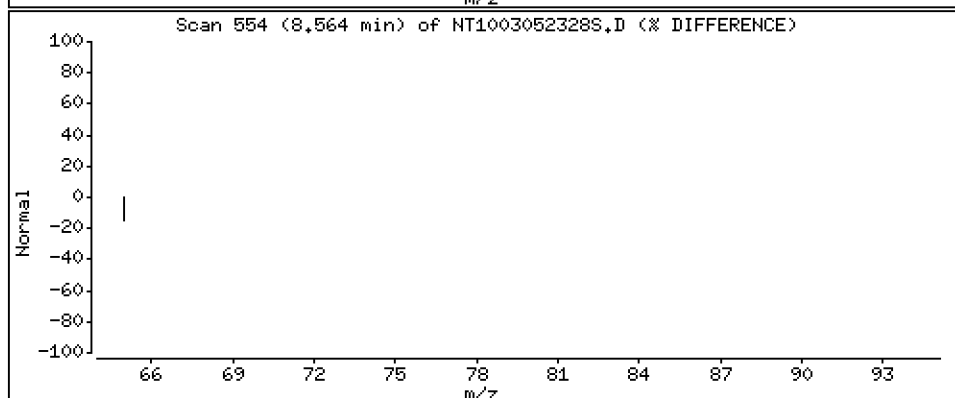
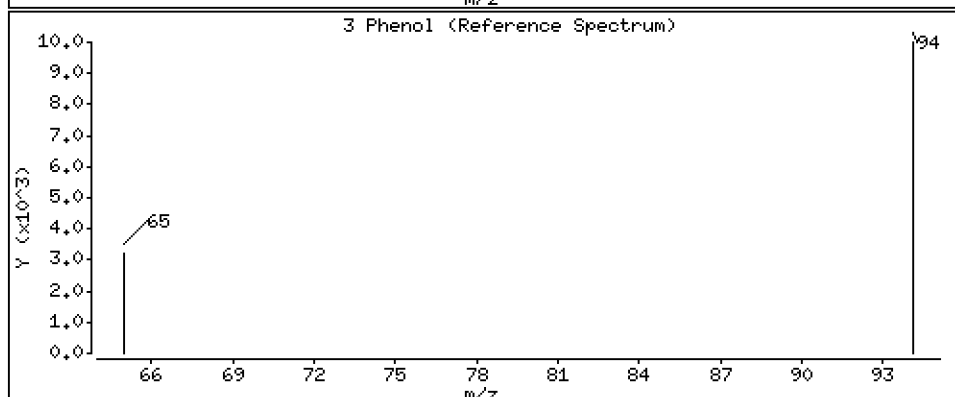
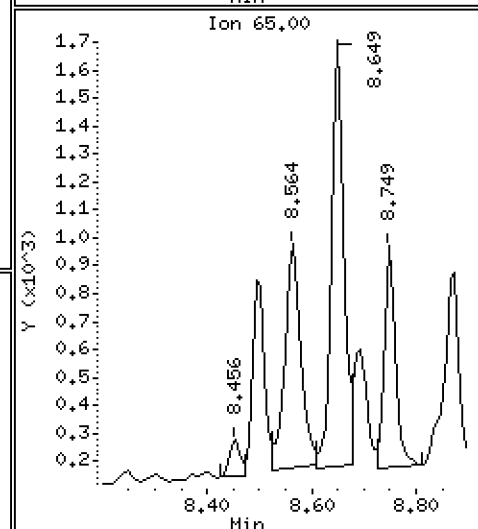
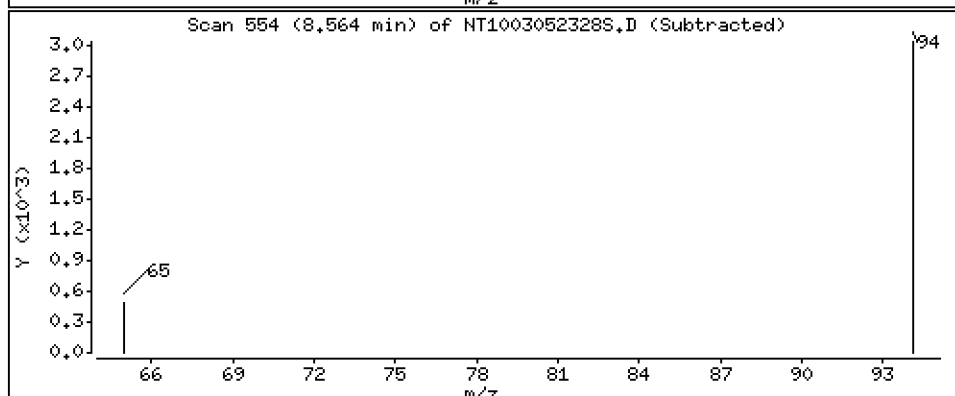
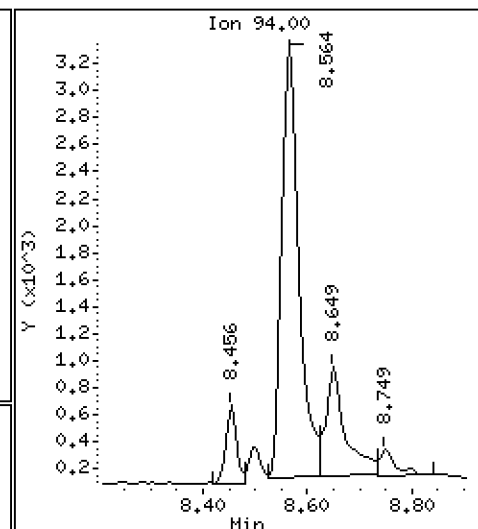
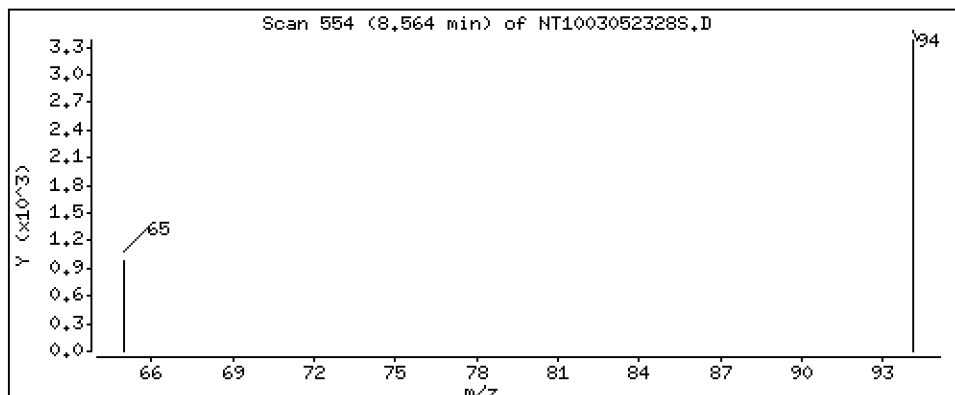
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

3 Phenol

Concentration: 0,06752 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

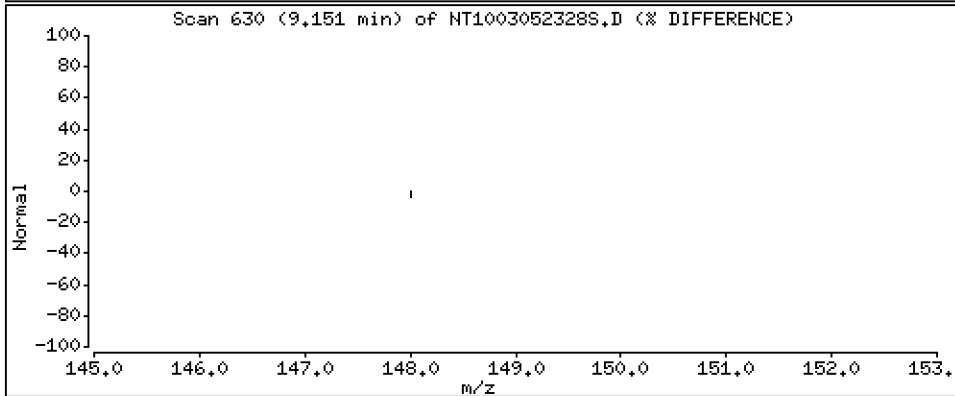
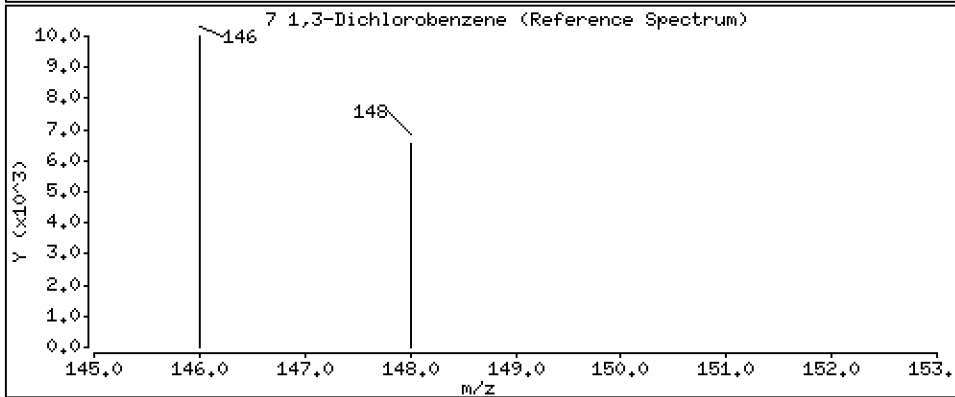
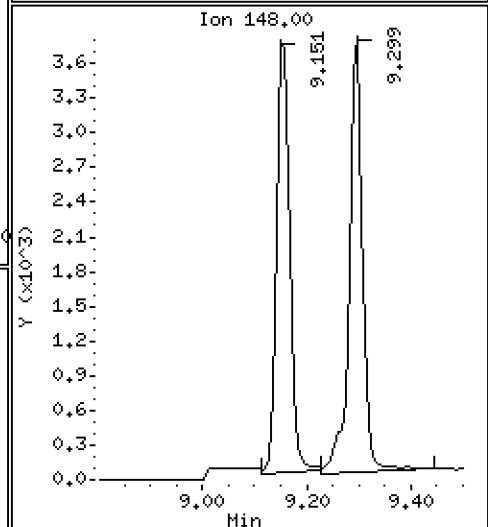
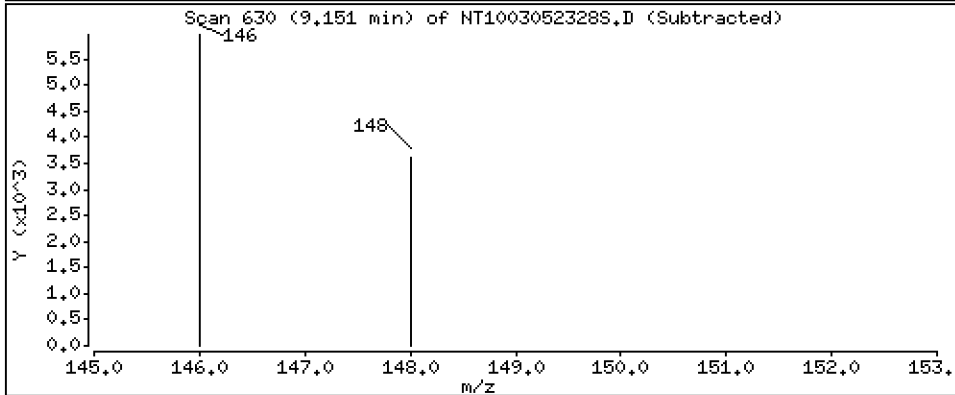
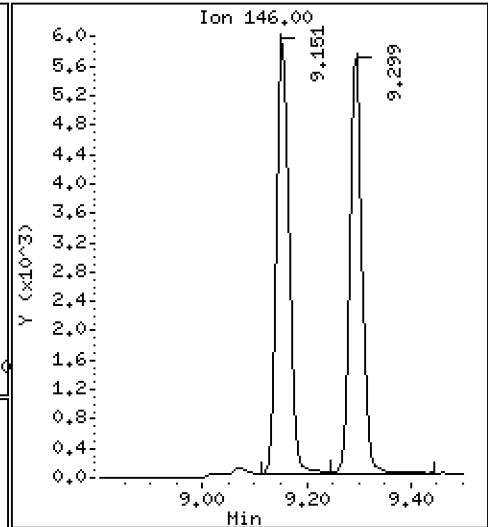
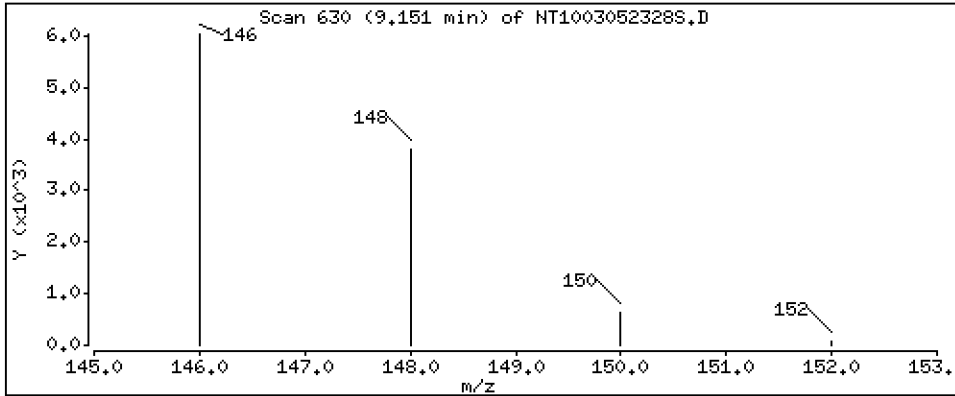
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

7 1,3-Dichlorobenzene

Concentration: 0.09965 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

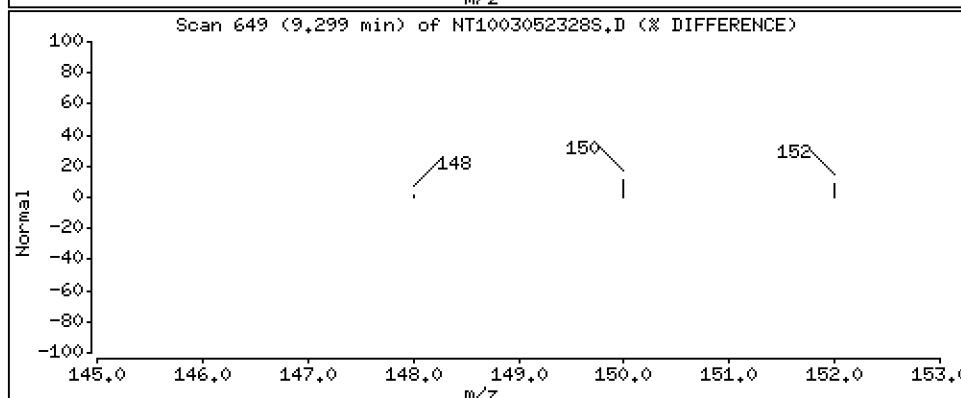
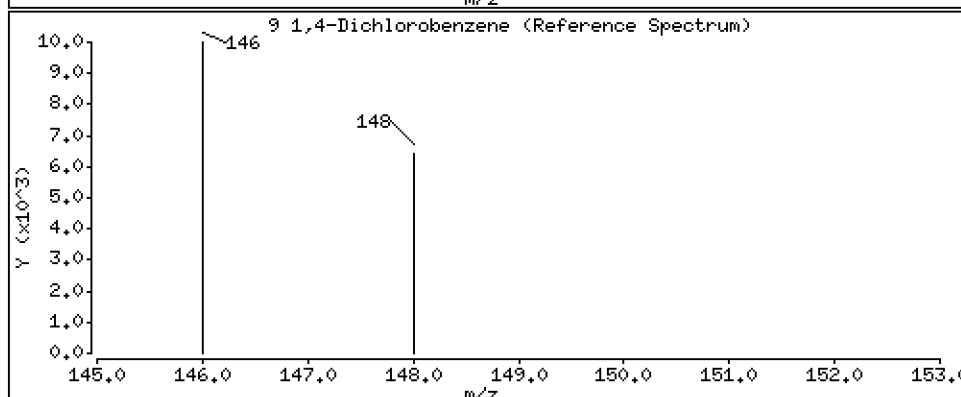
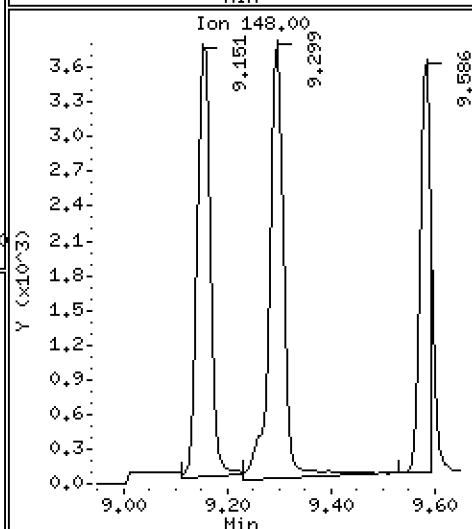
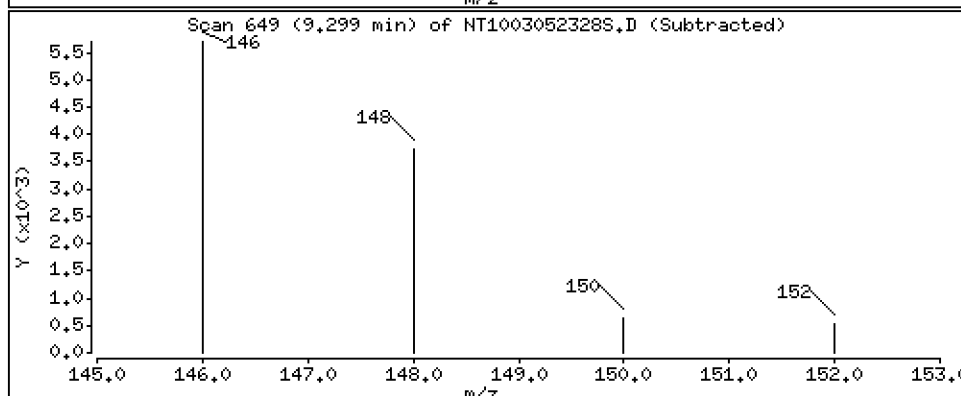
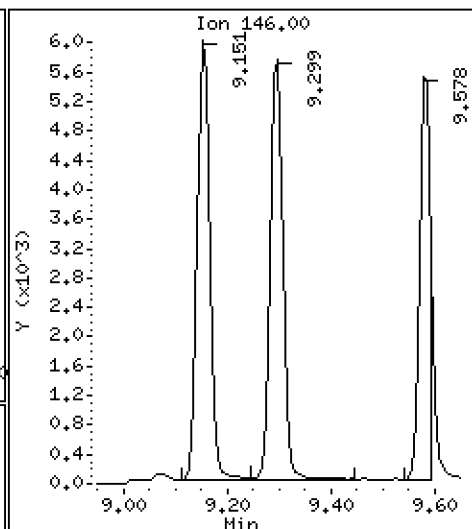
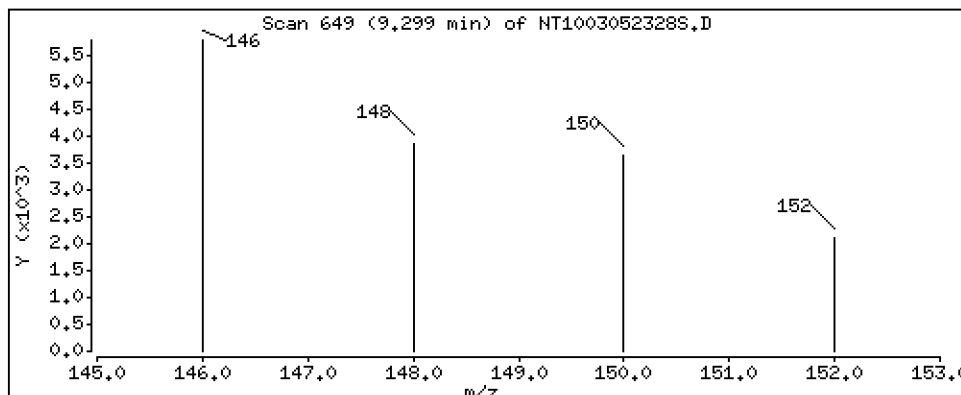
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

9 1,4-Dichlorobenzene

Concentration: 0.09878 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

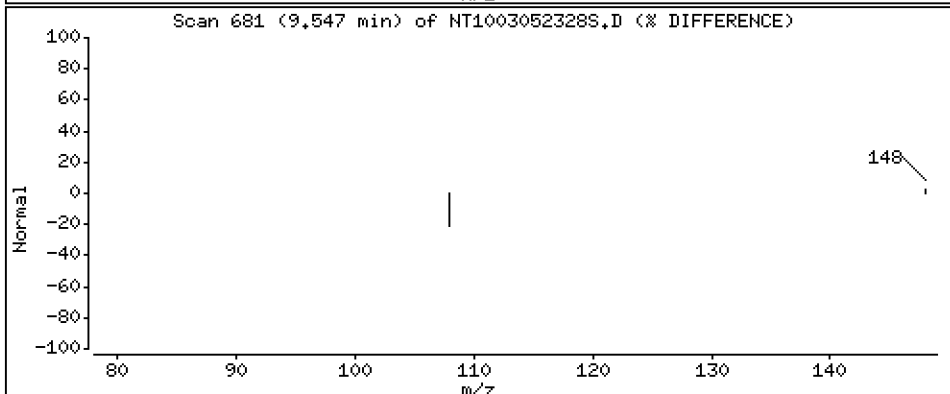
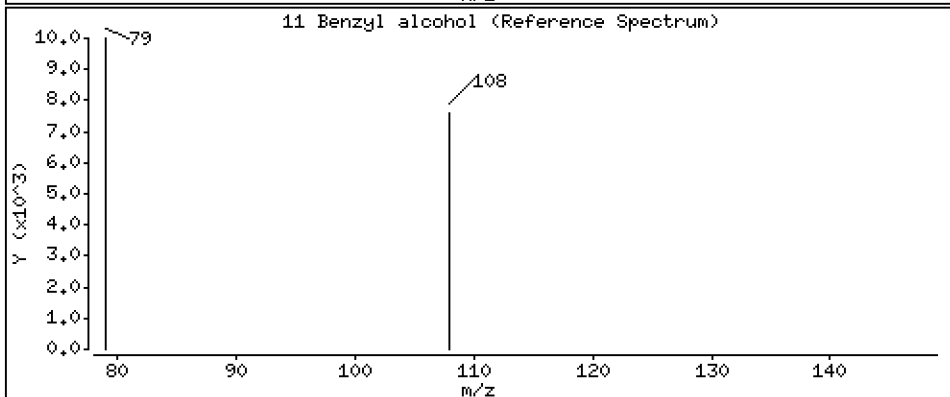
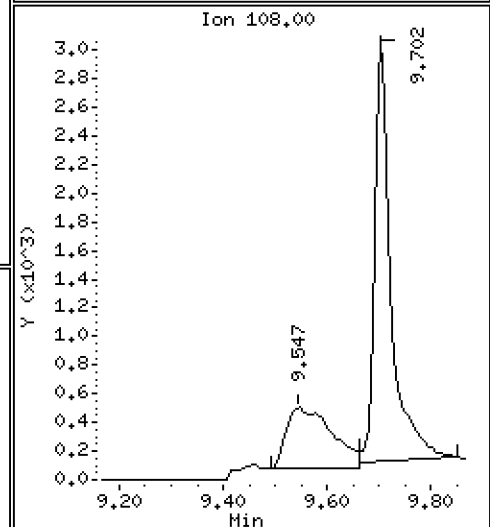
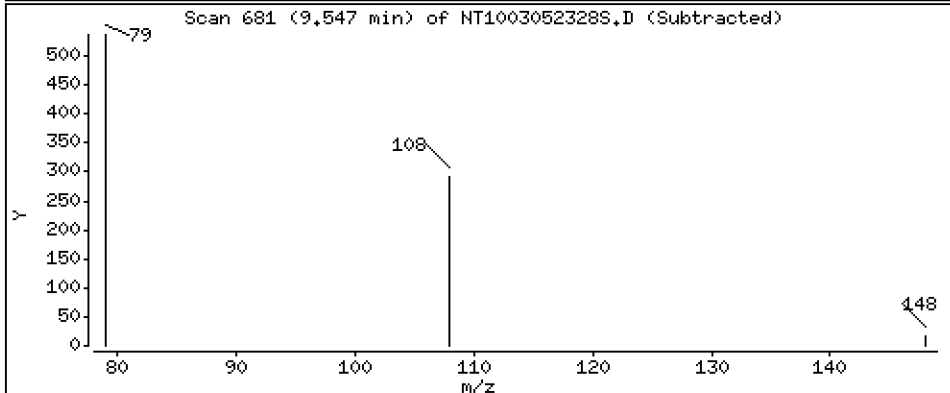
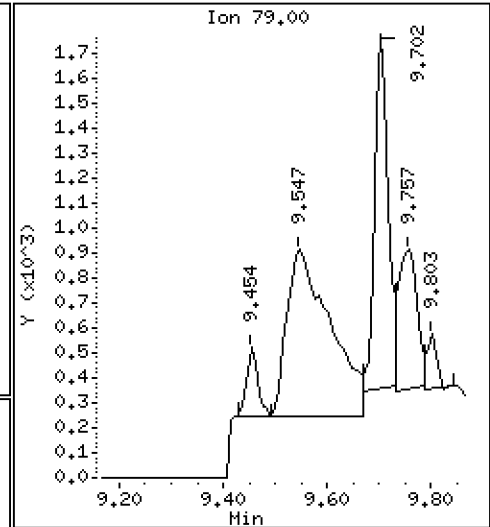
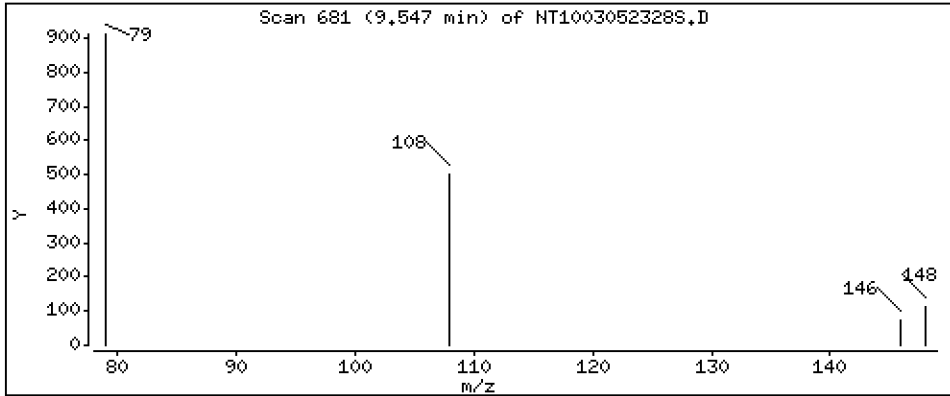
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

11 Benzyl alcohol

Concentration: 0,06468 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

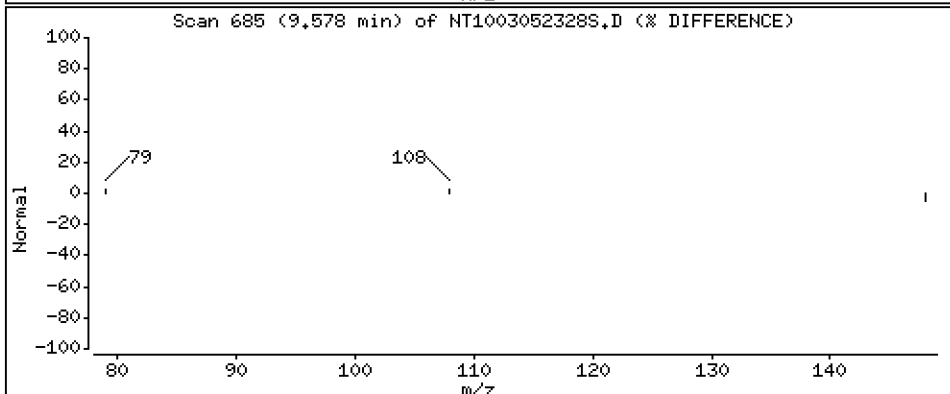
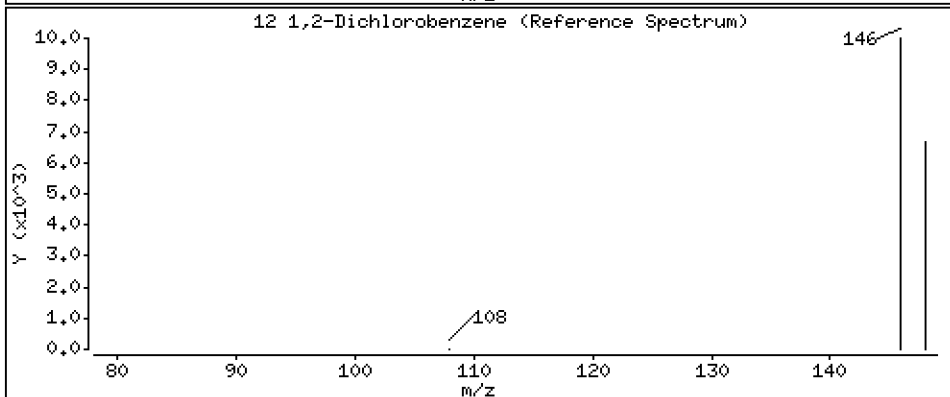
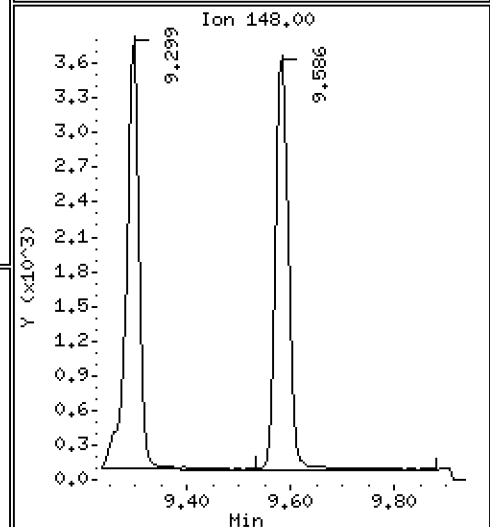
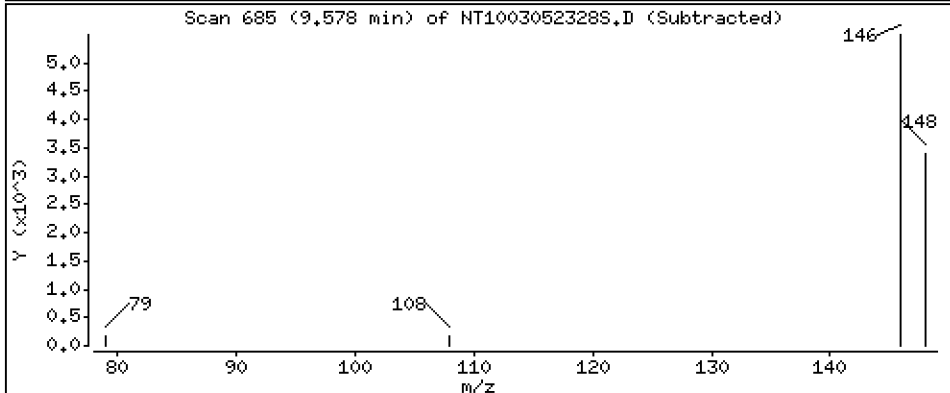
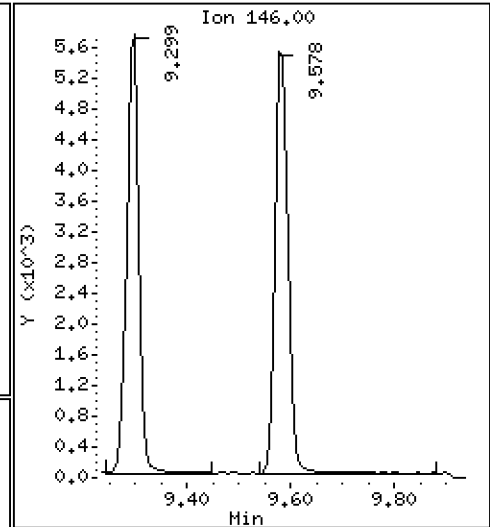
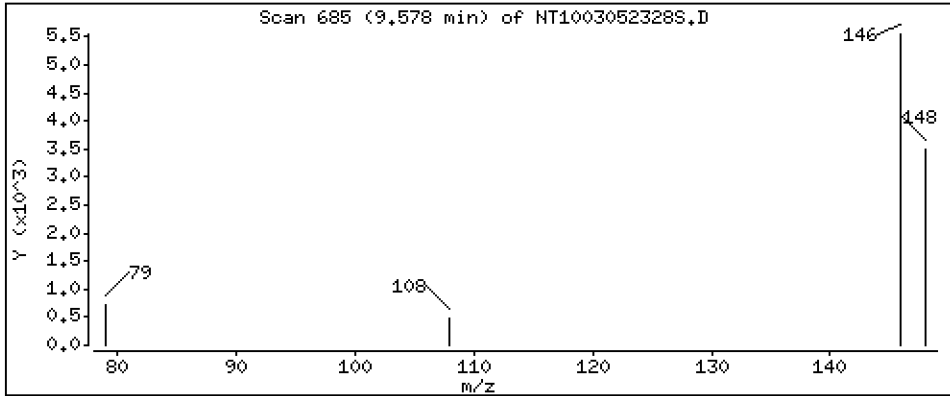
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

12 1,2-Dichlorobenzene

Concentration: 0,1013 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

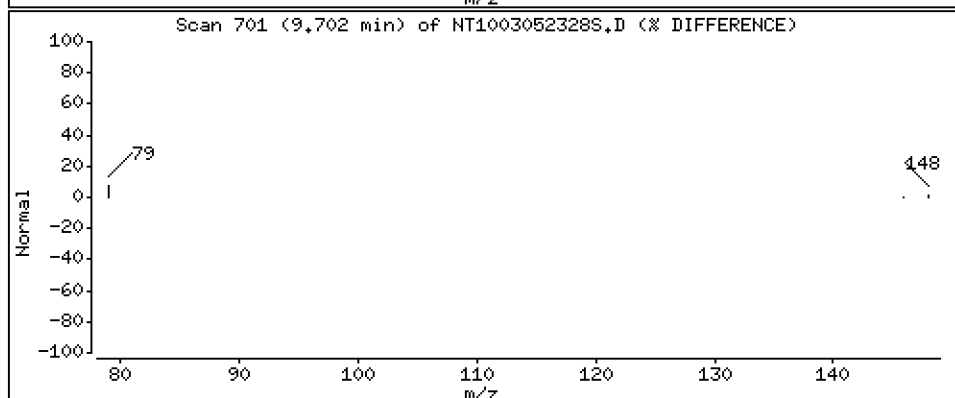
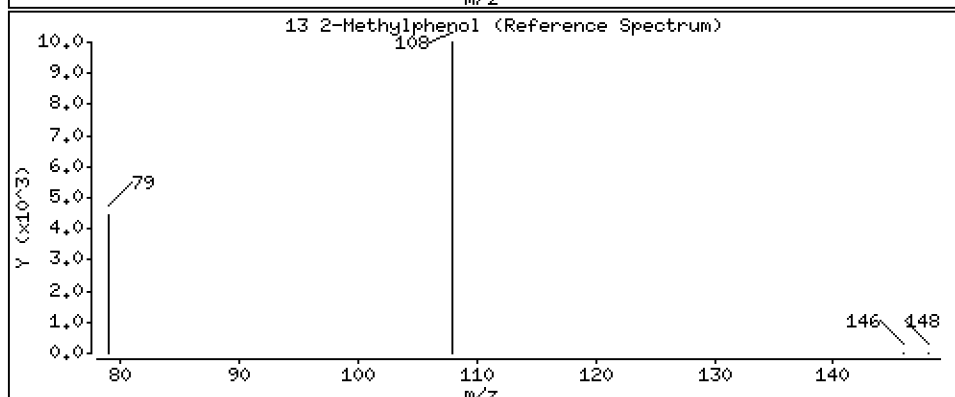
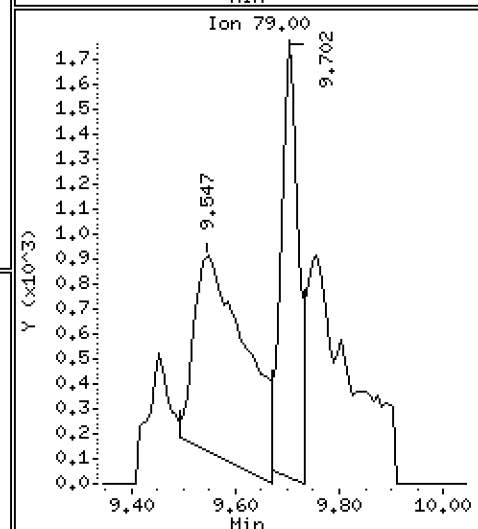
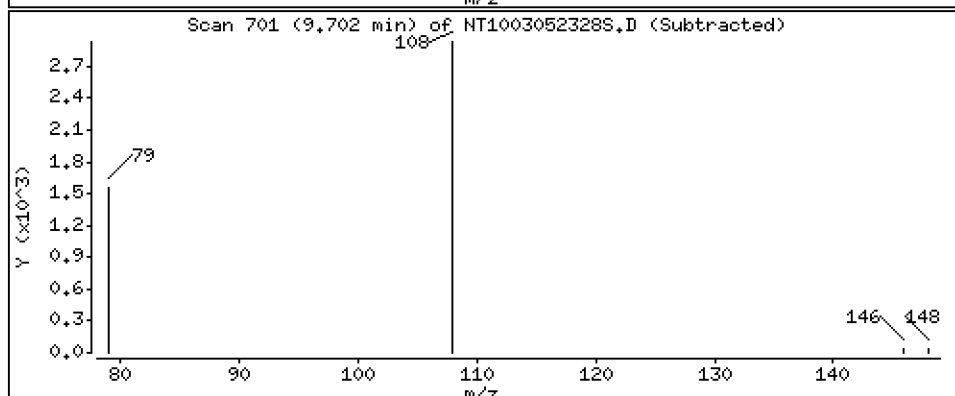
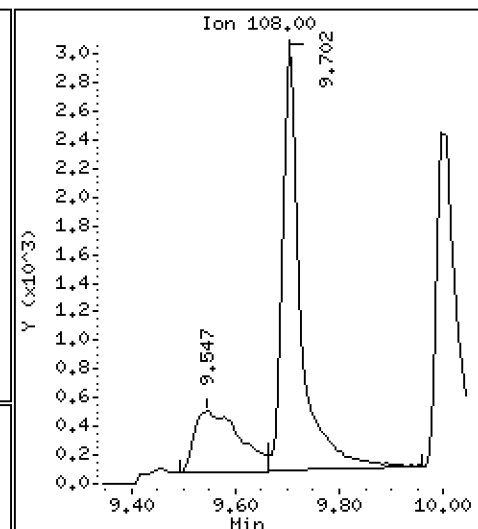
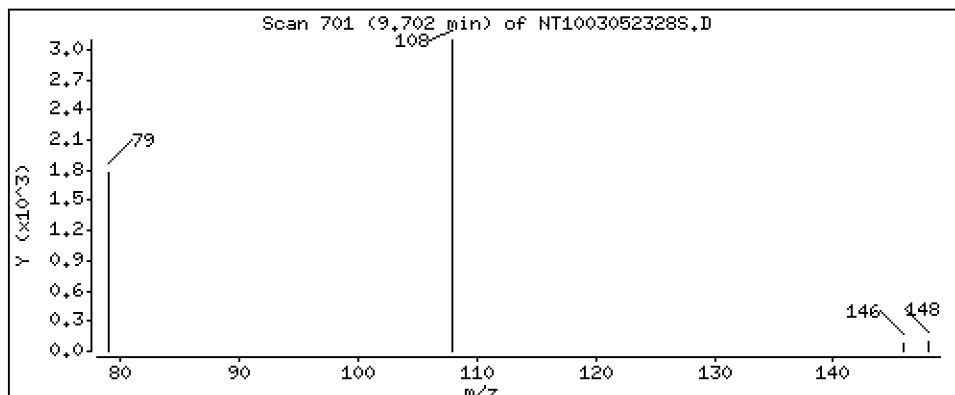
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

13 2-Methylphenol

Concentration: 0.1098 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

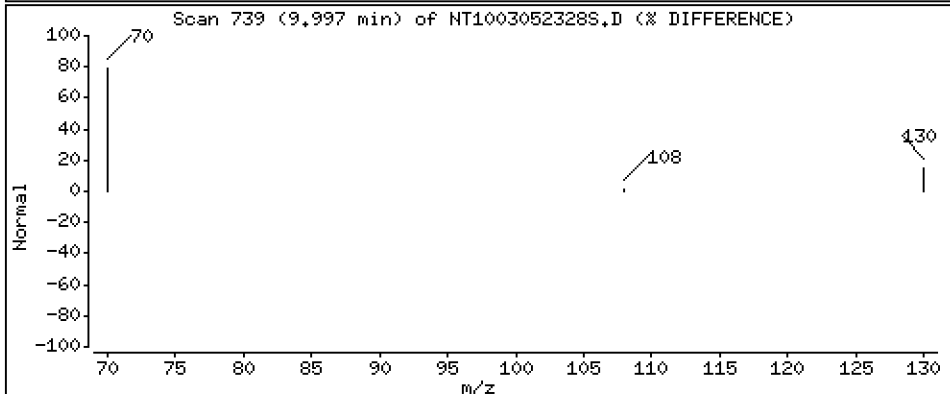
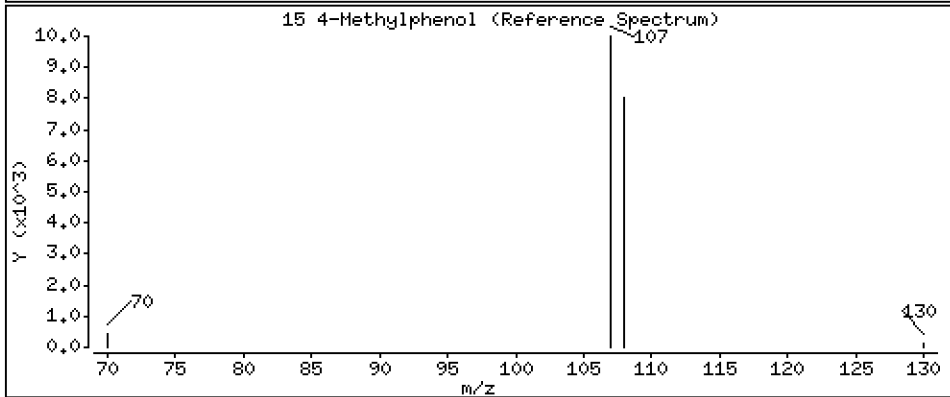
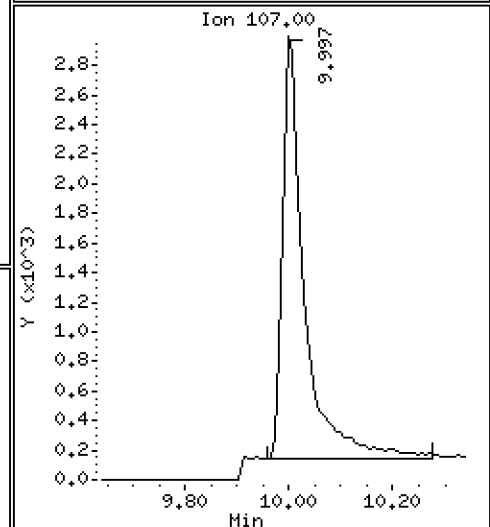
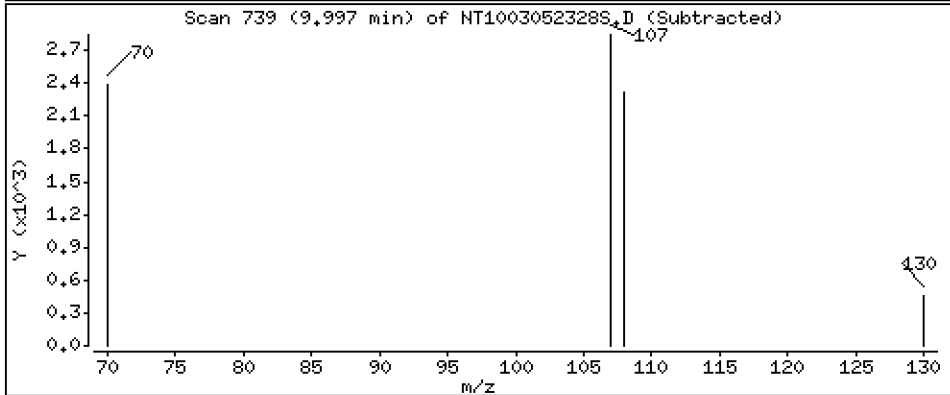
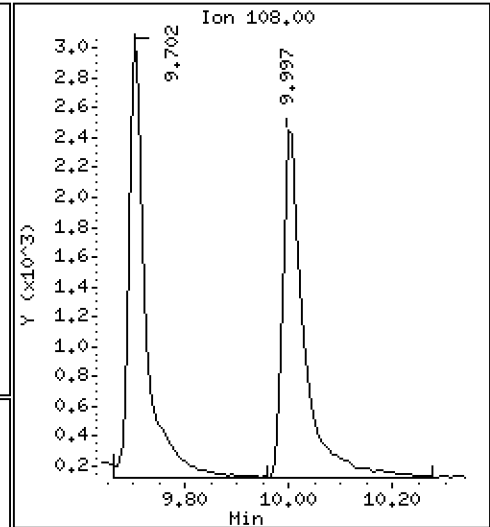
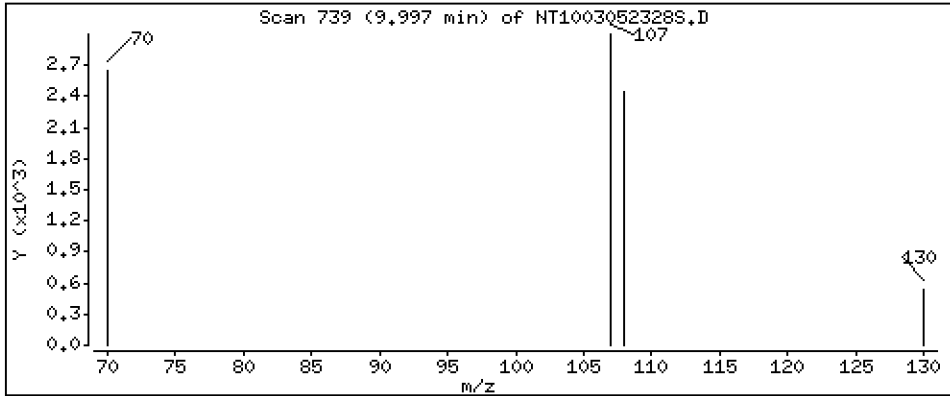
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

15 4-Methylphenol

Concentration: 0,09826 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

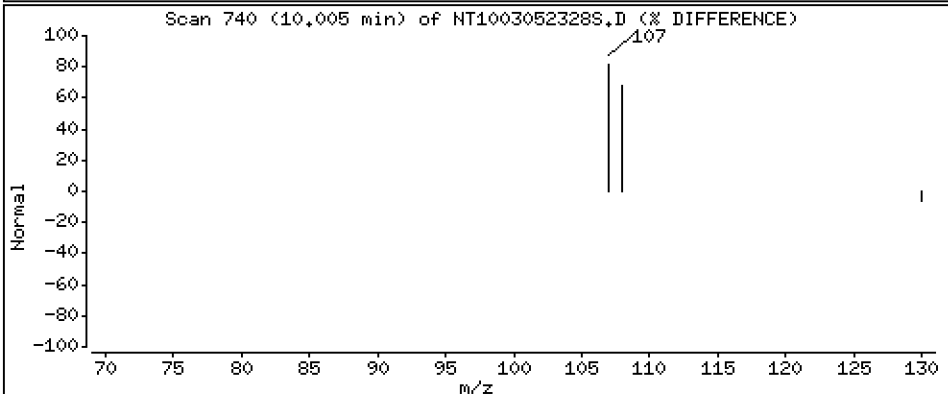
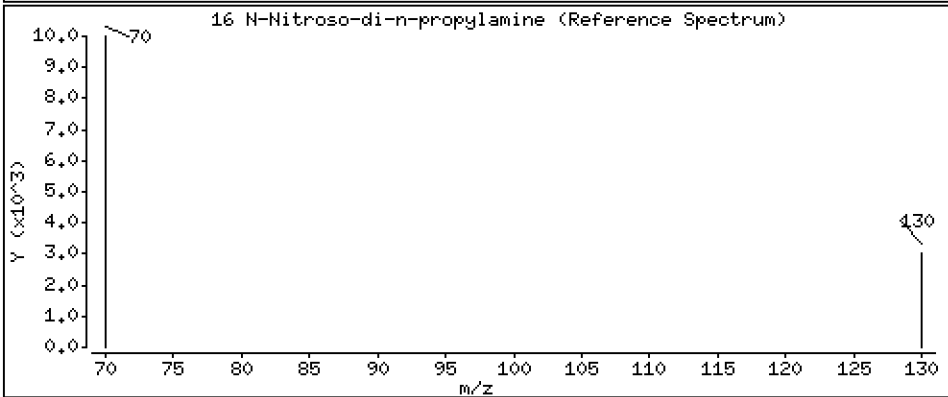
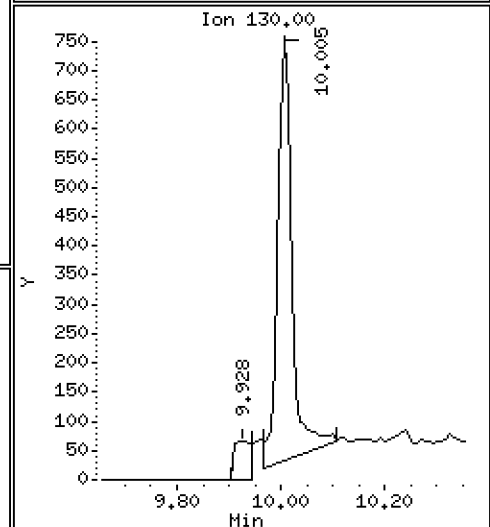
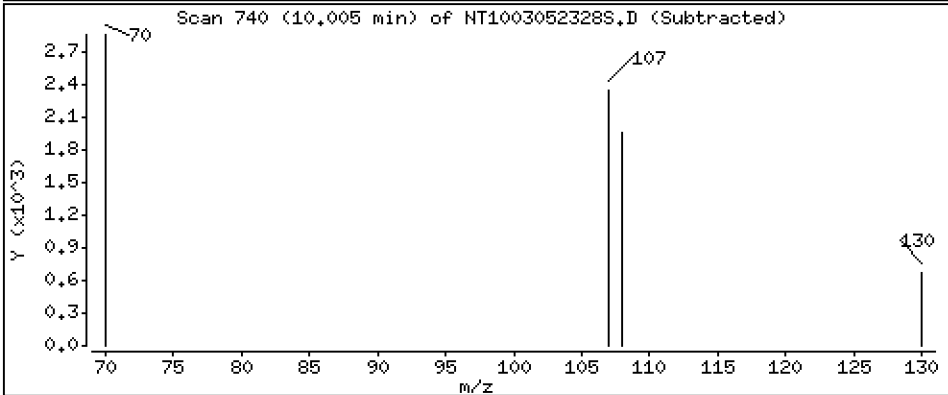
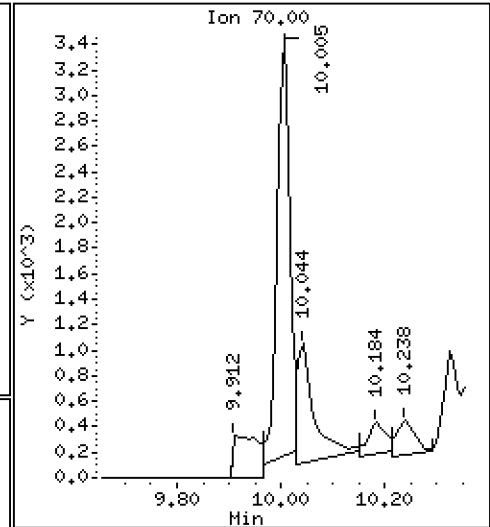
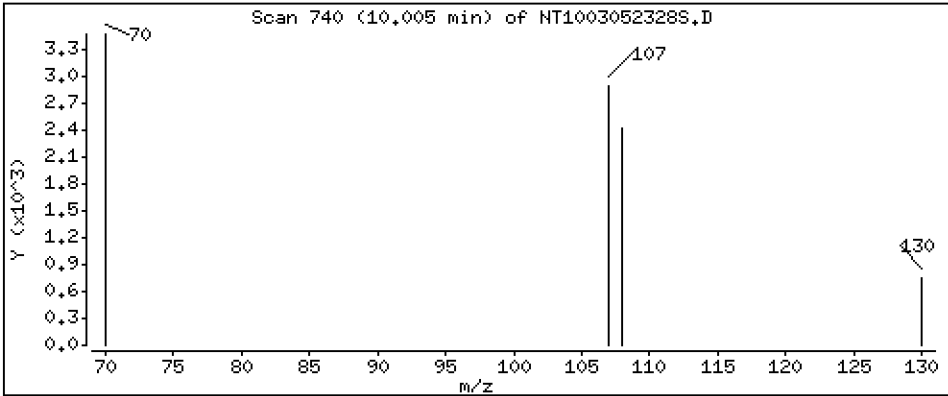
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

16 N-Nitroso-di-n-propylamine

Concentration: 0.1095 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

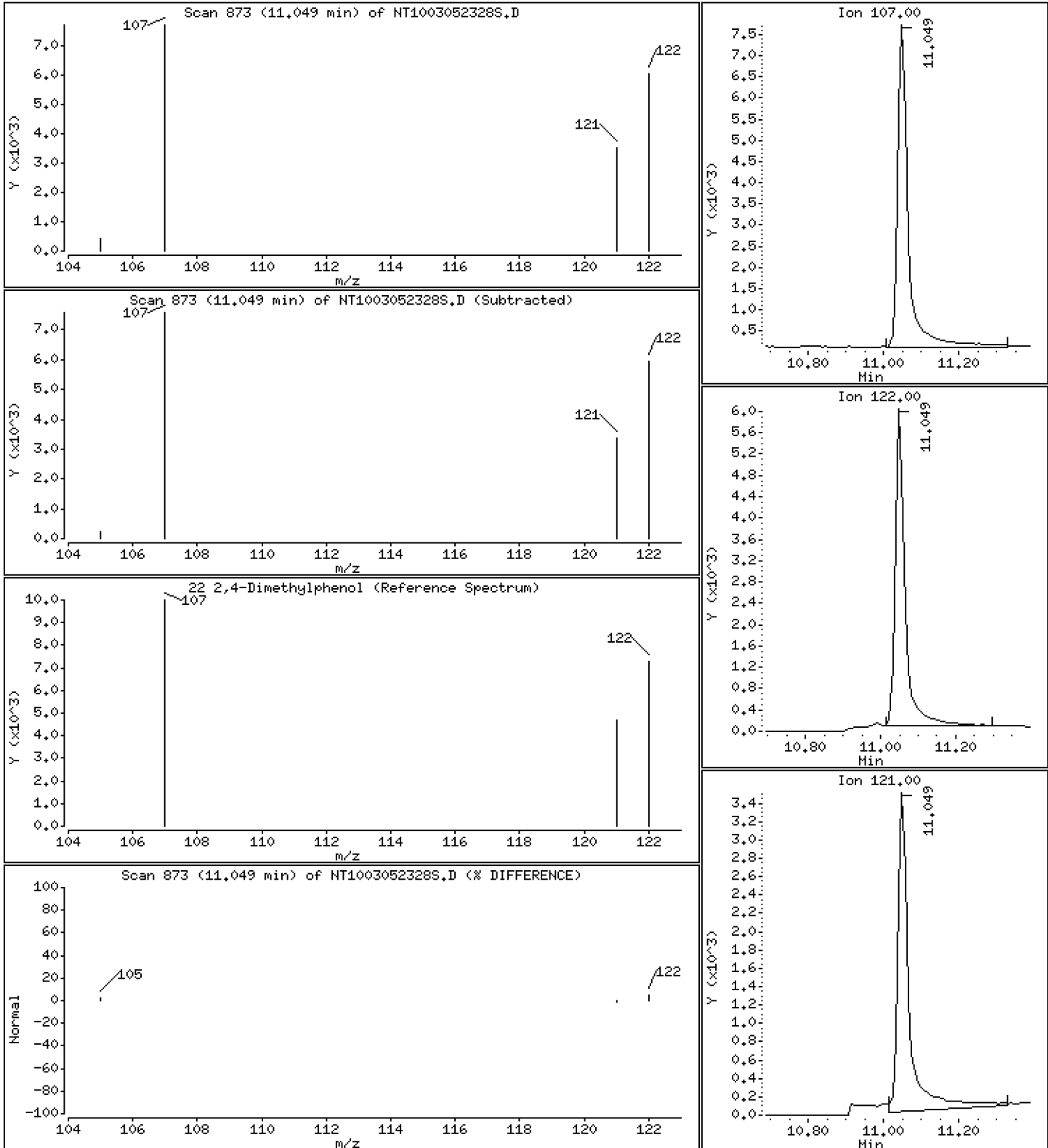
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

22 2,4-Dimethylphenol

Concentration: 0.1970 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

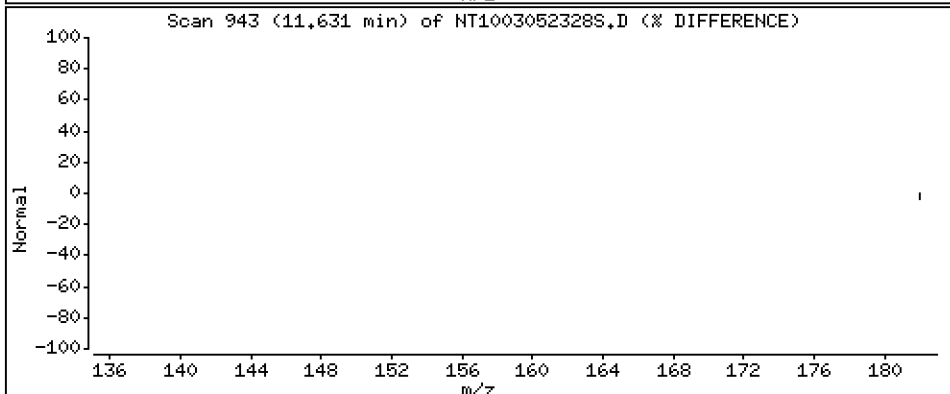
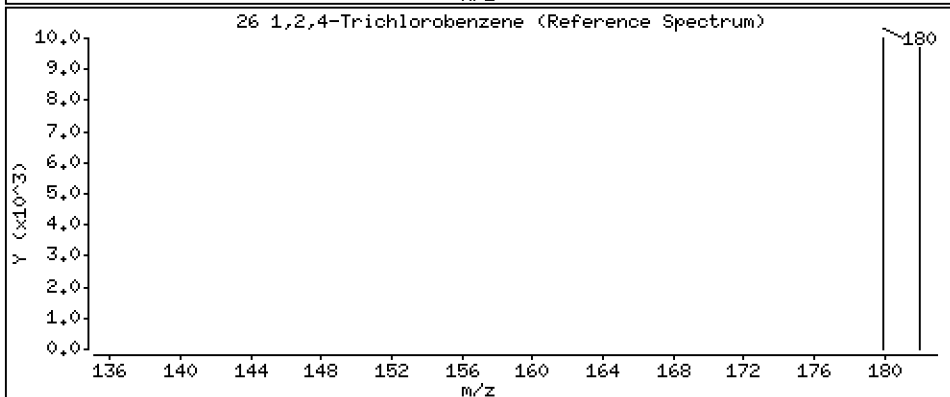
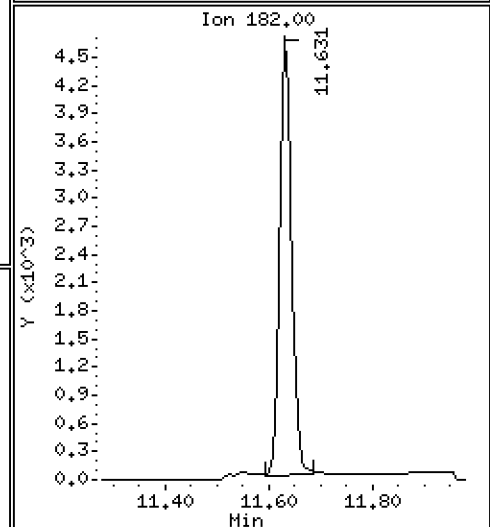
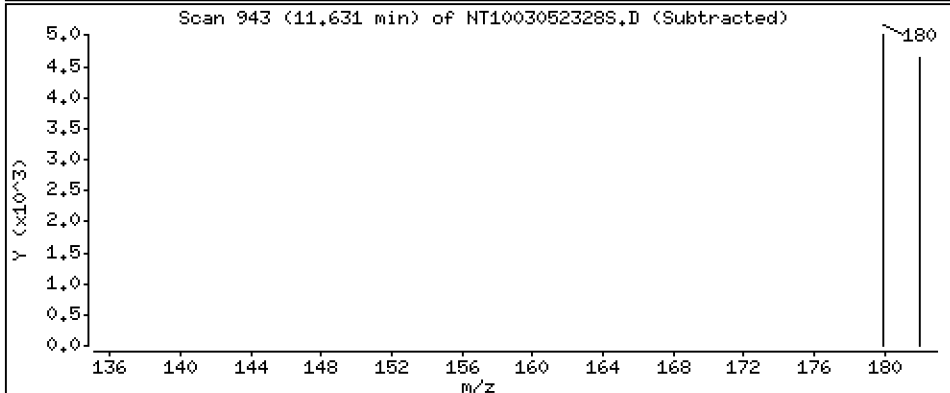
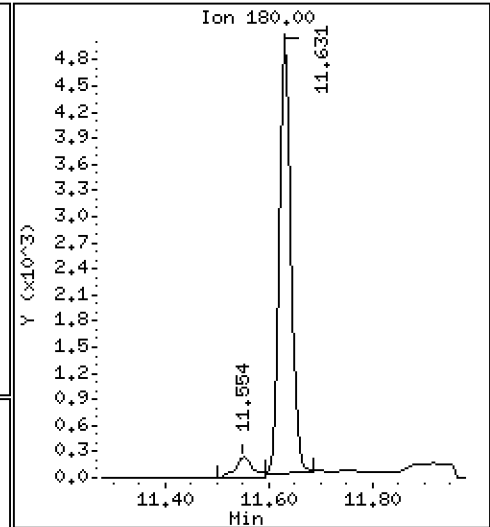
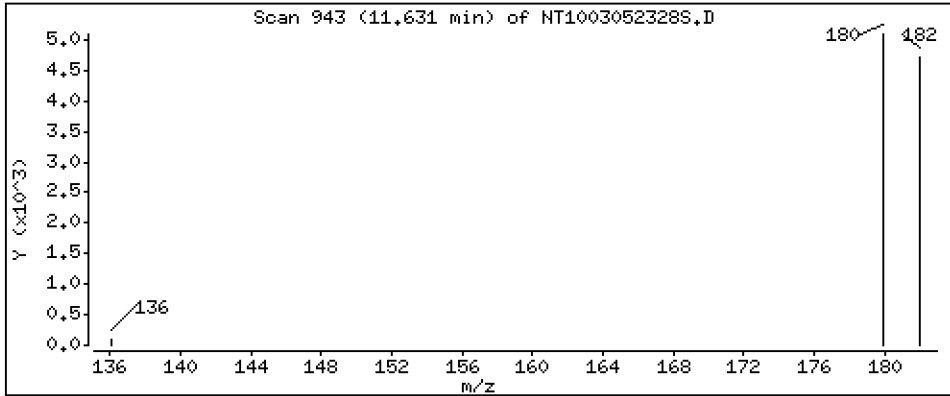
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

26 1,2,4-Trichlorobenzene

Concentration: 0,1228 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

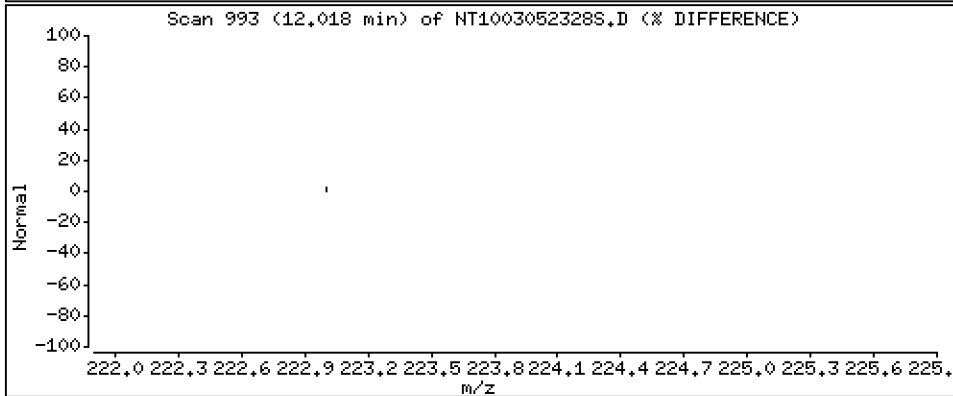
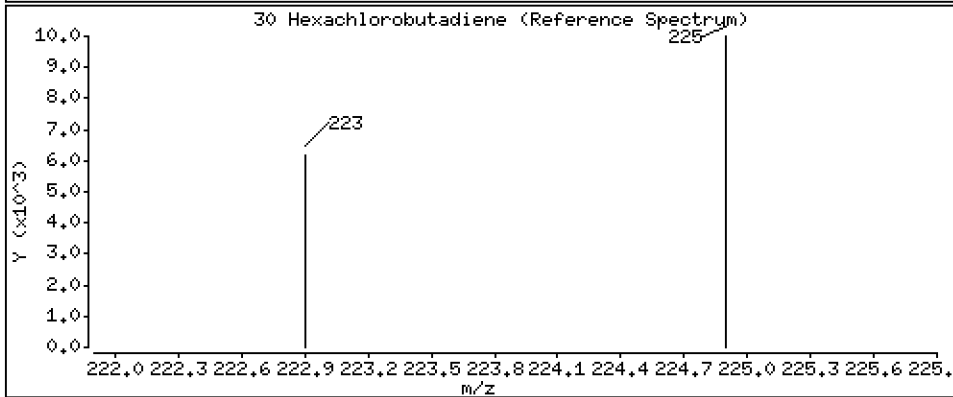
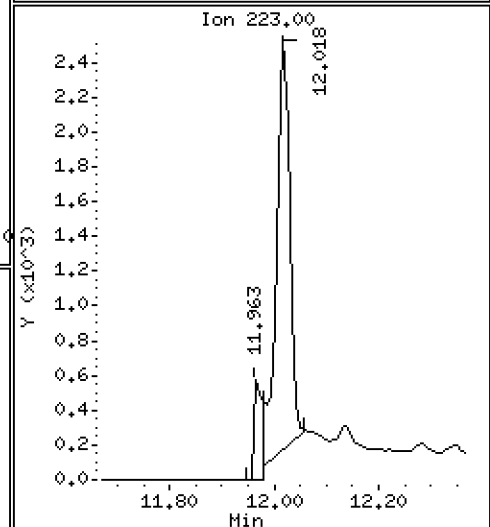
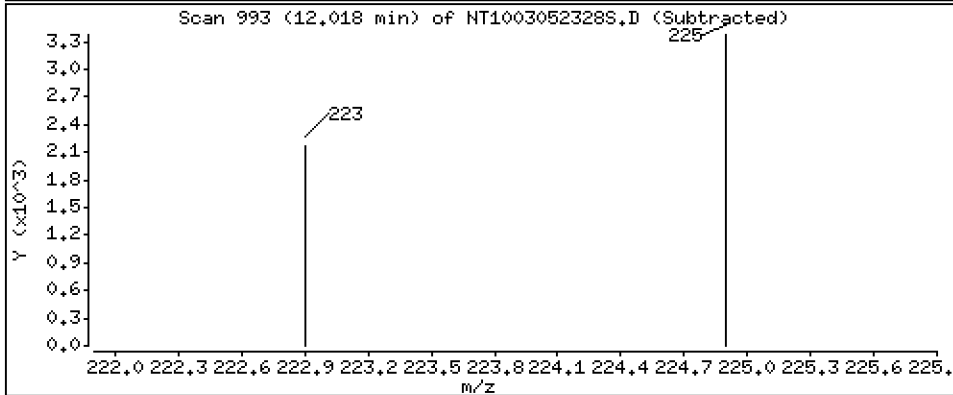
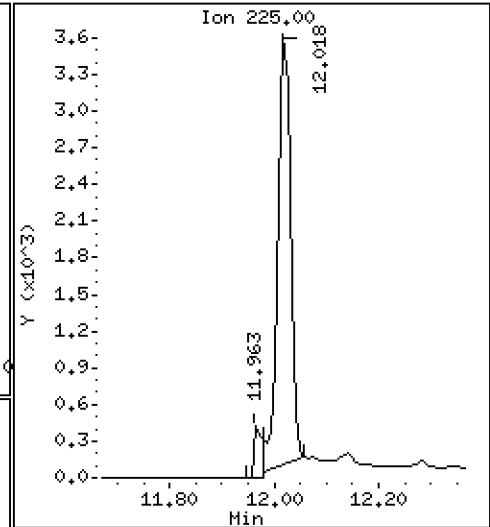
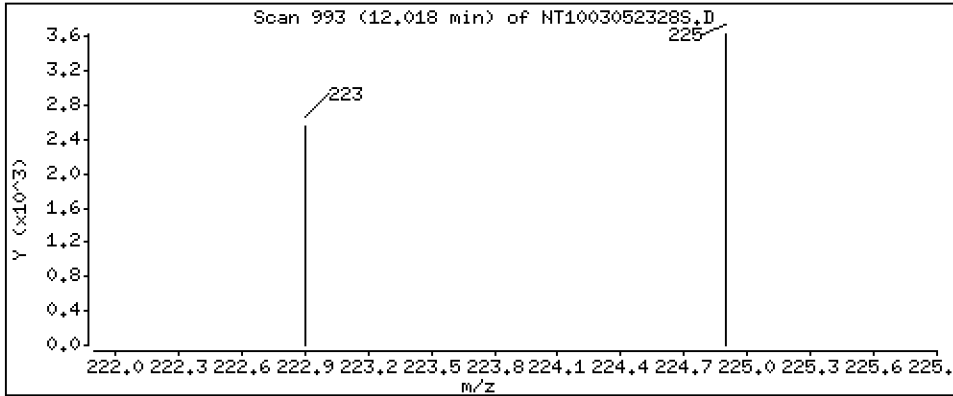
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

30 Hexachlorobutadiene

Concentration: 0,1250 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

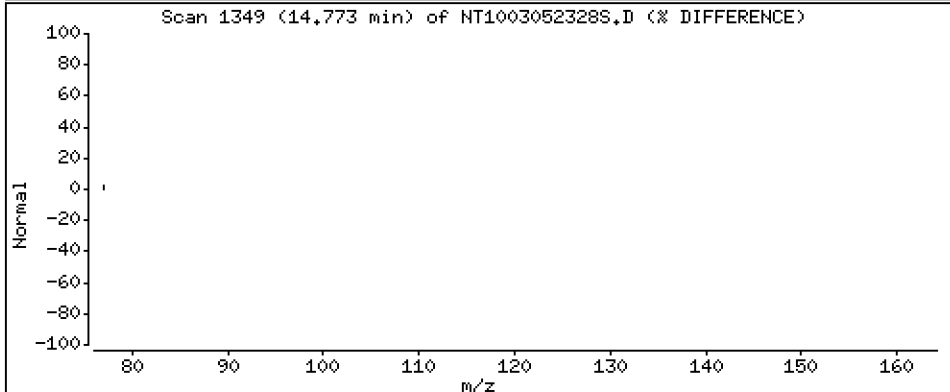
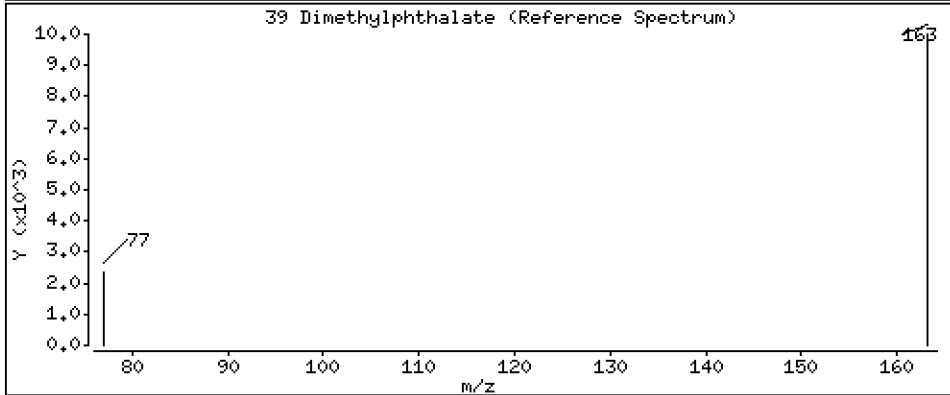
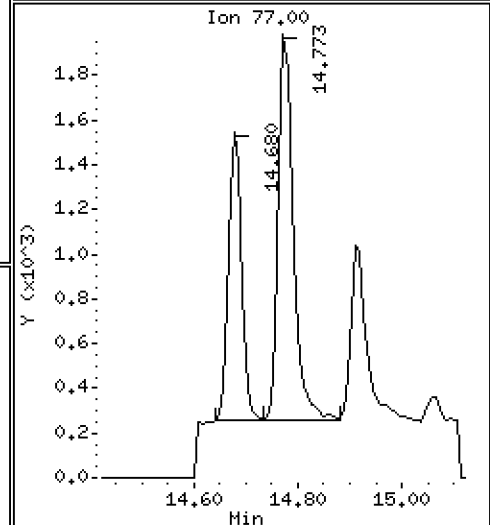
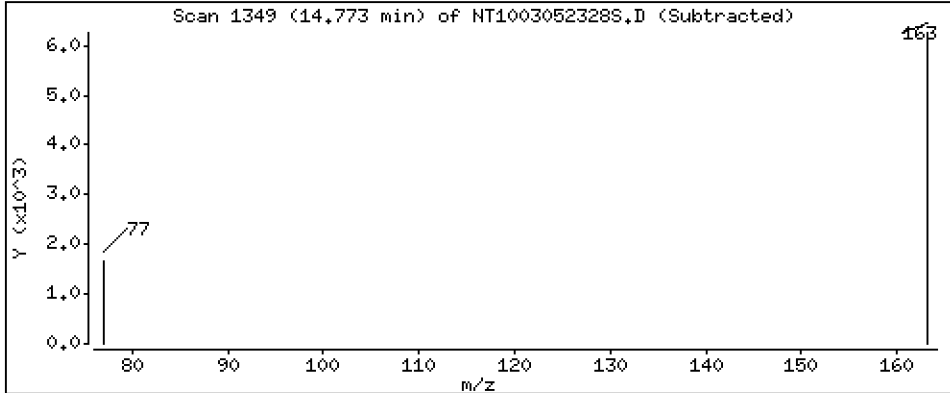
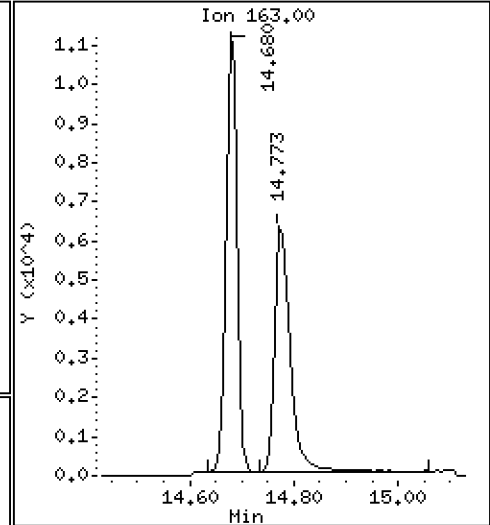
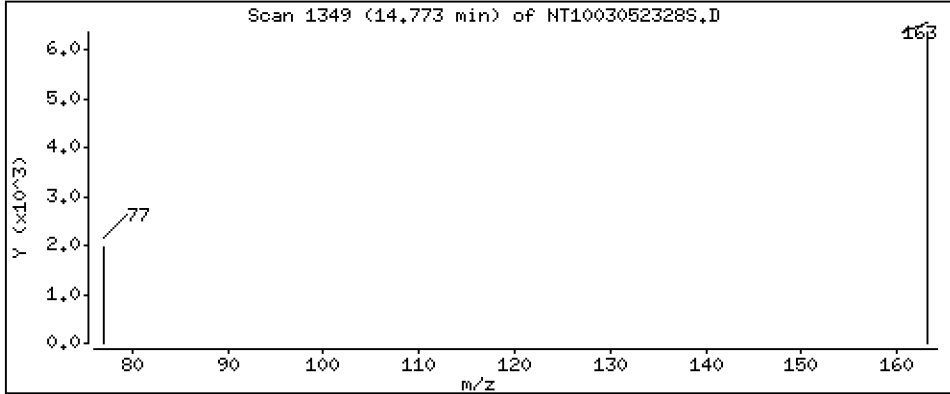
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0.25

39 Dimethylphthalate

Concentration: 0.09292 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

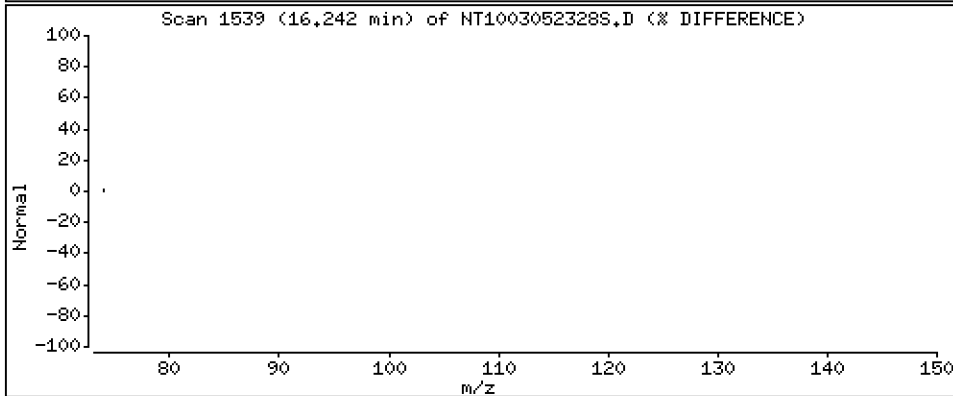
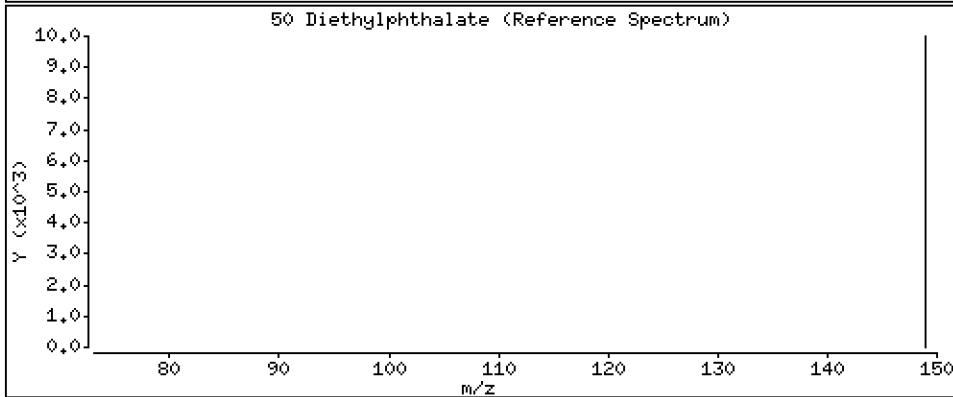
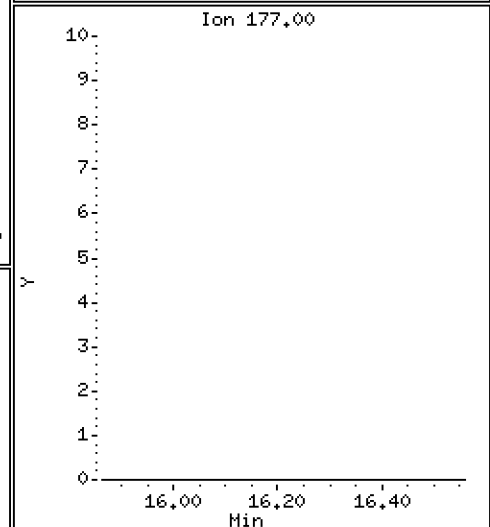
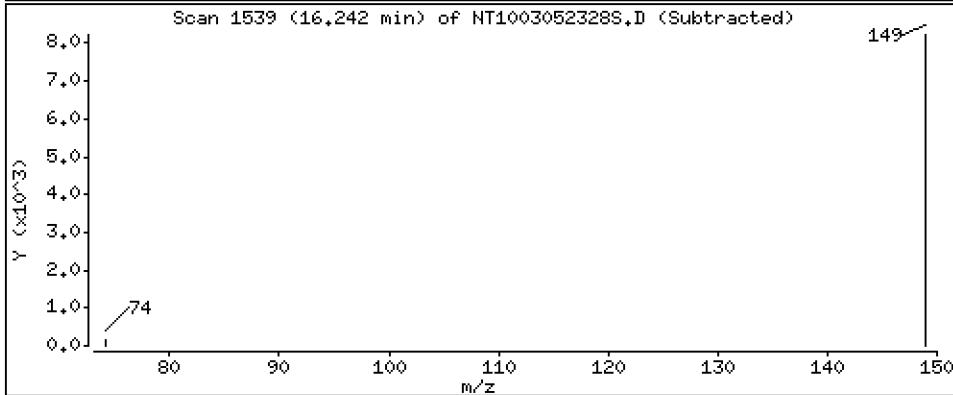
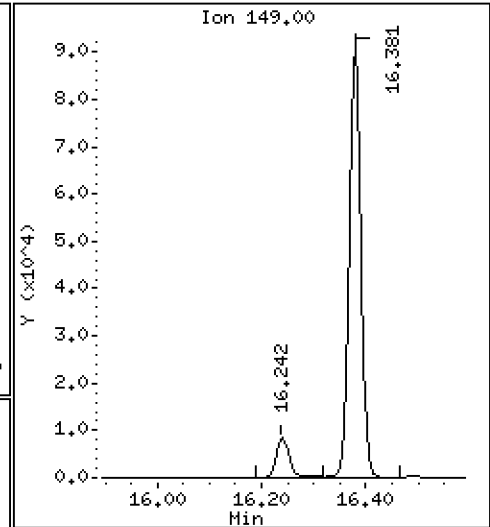
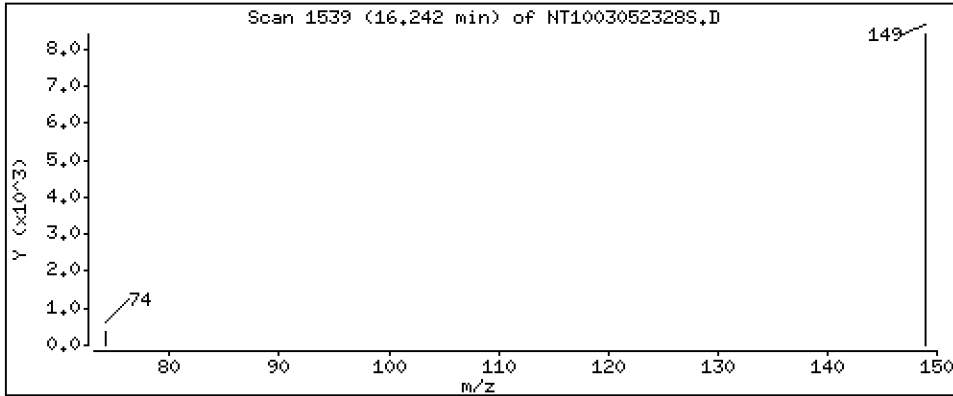
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

50 Diethylphthalate

Concentration: 0,1041 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

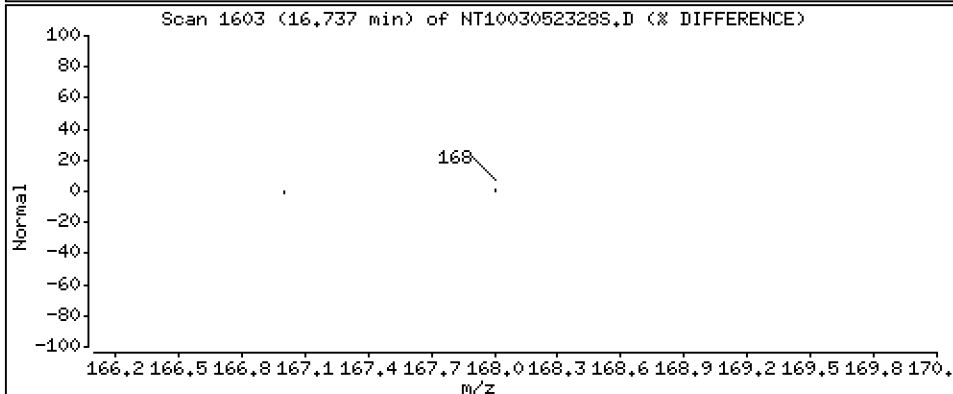
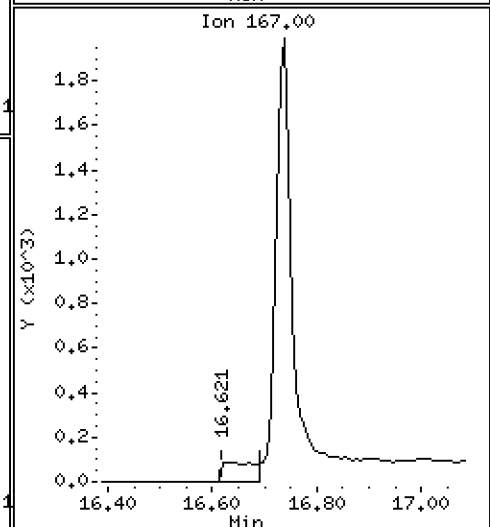
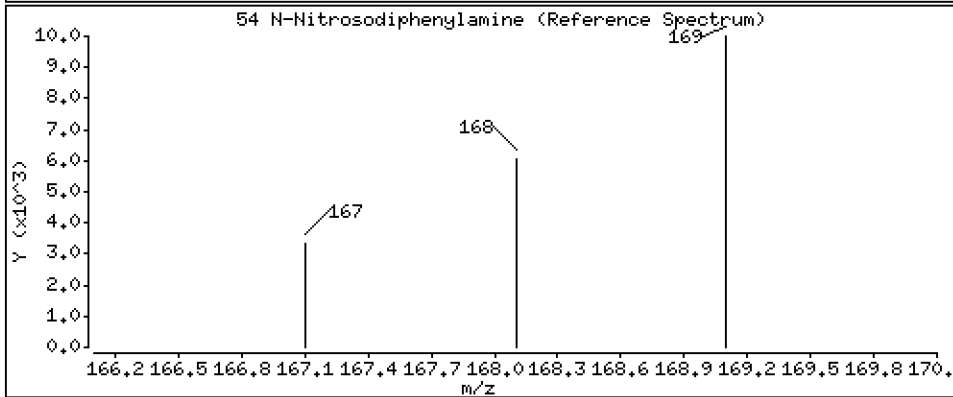
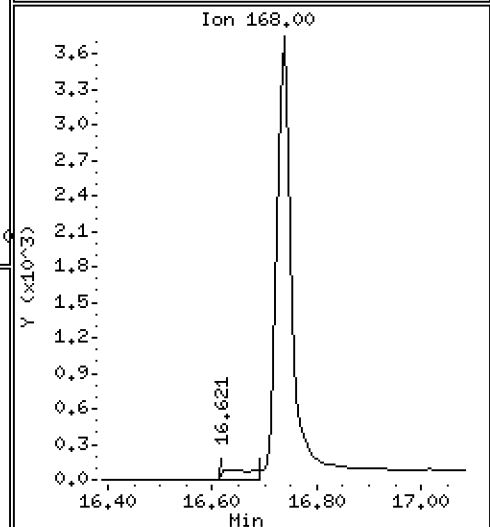
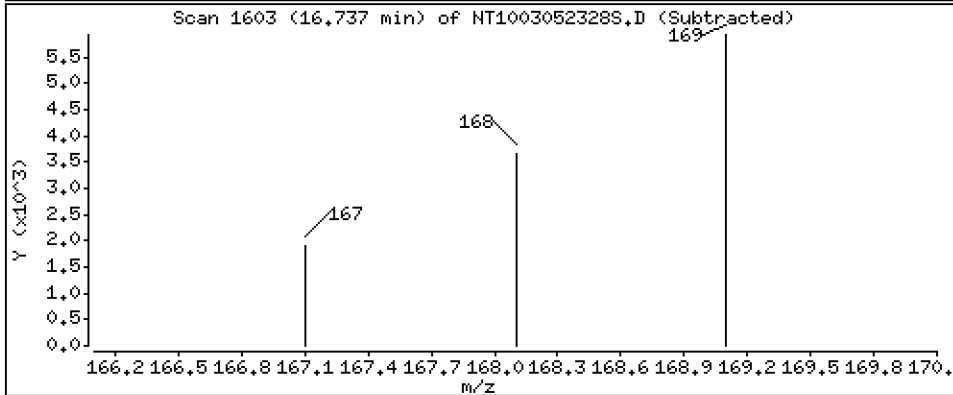
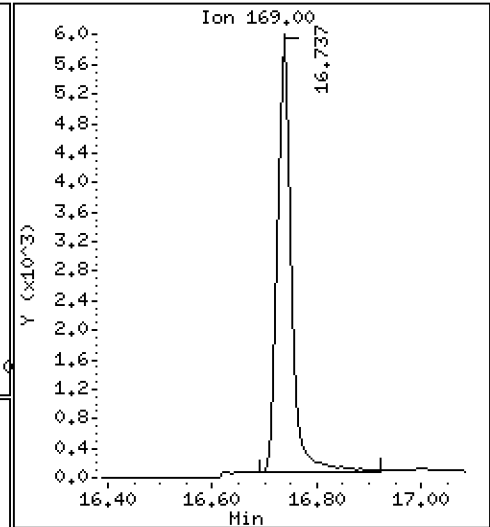
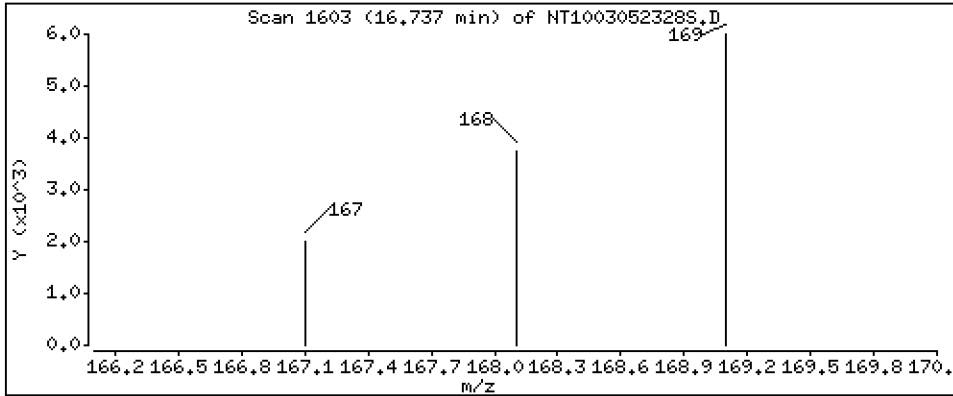
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

54 N-Nitrosodiphenylamine

Concentration: 0,08109 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

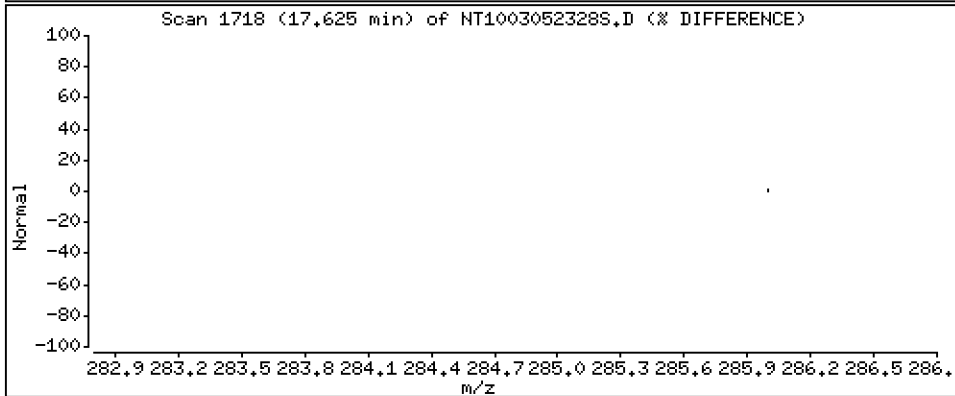
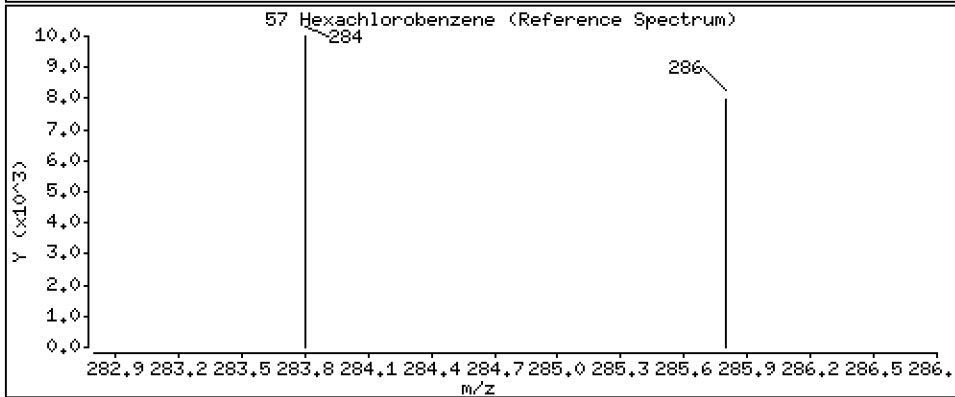
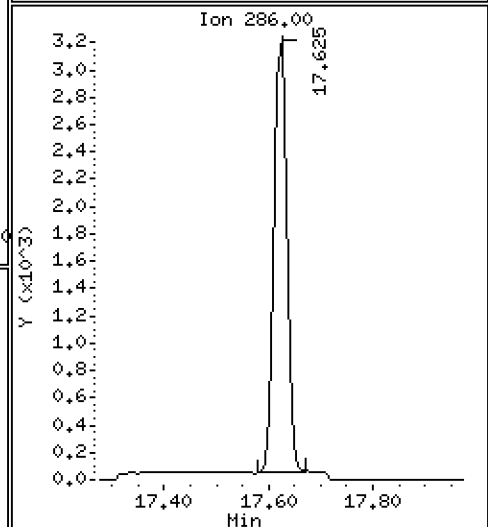
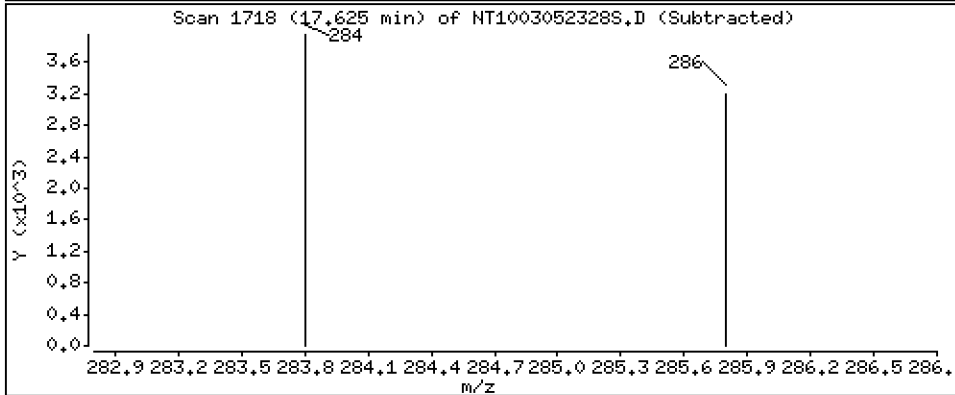
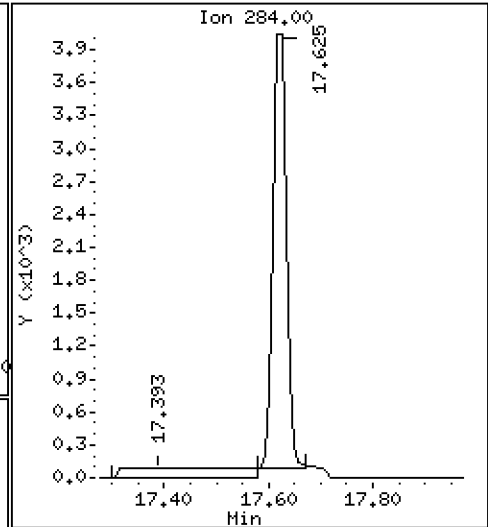
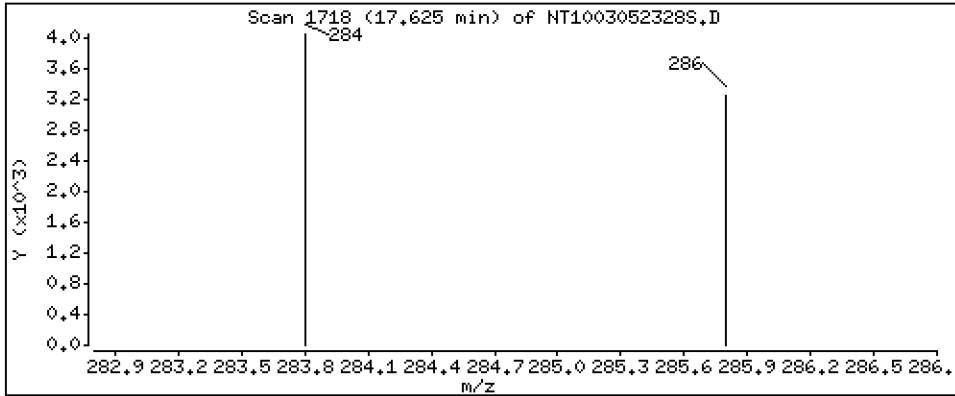
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

57 Hexachlorobenzene

Concentration: 0,1061 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

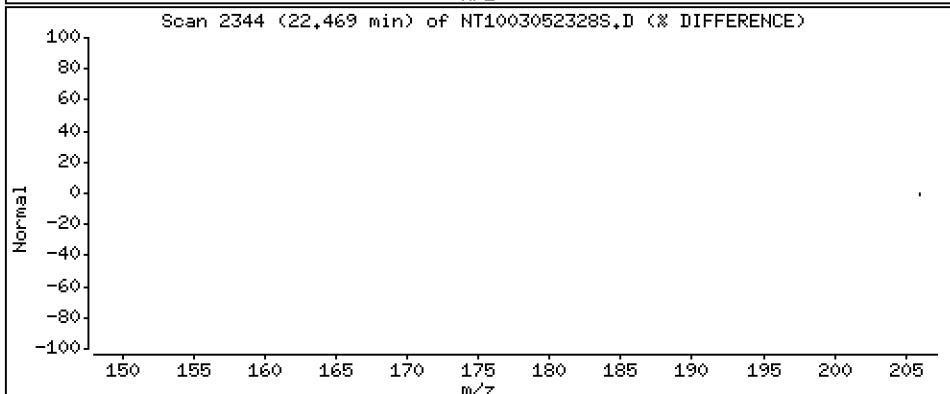
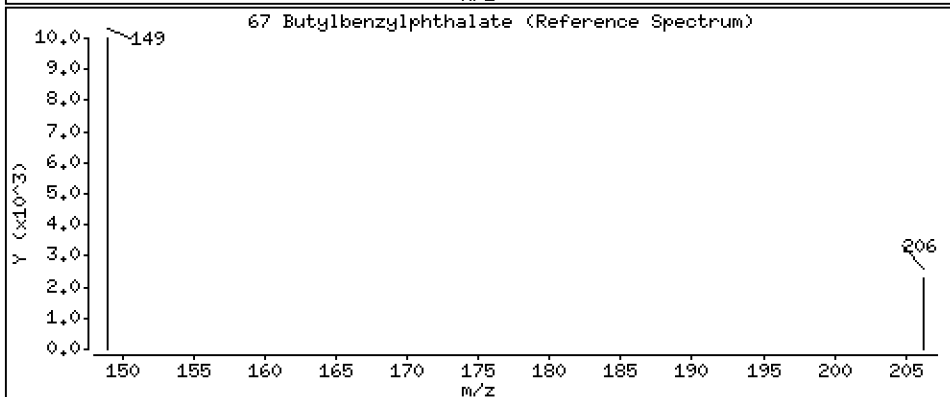
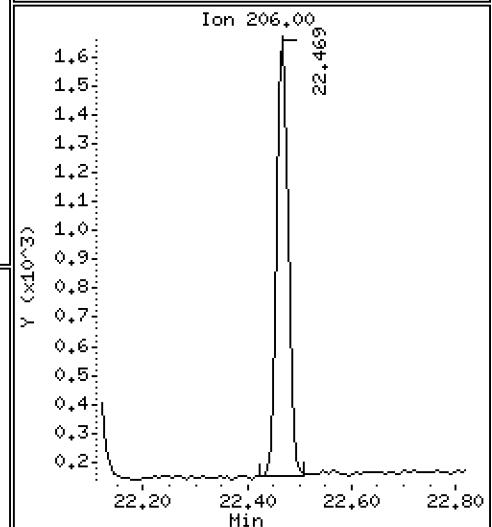
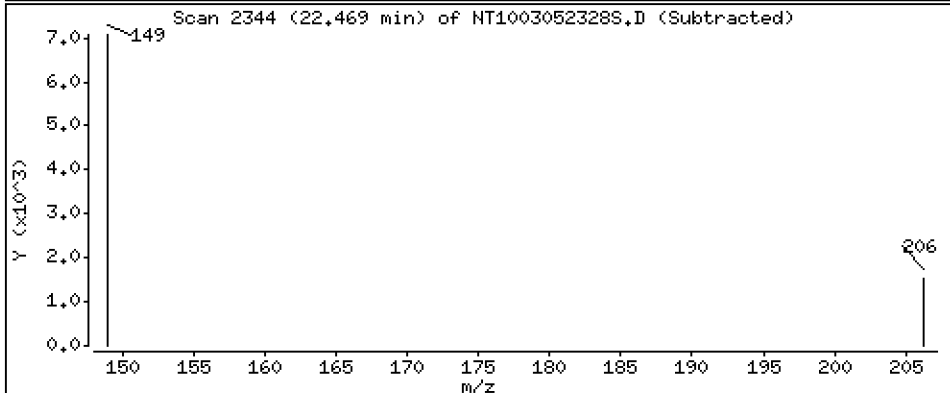
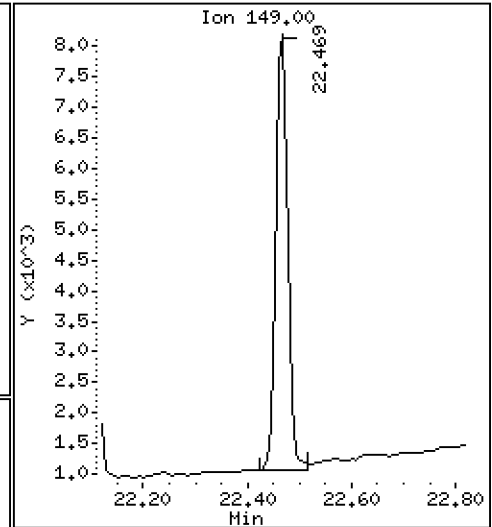
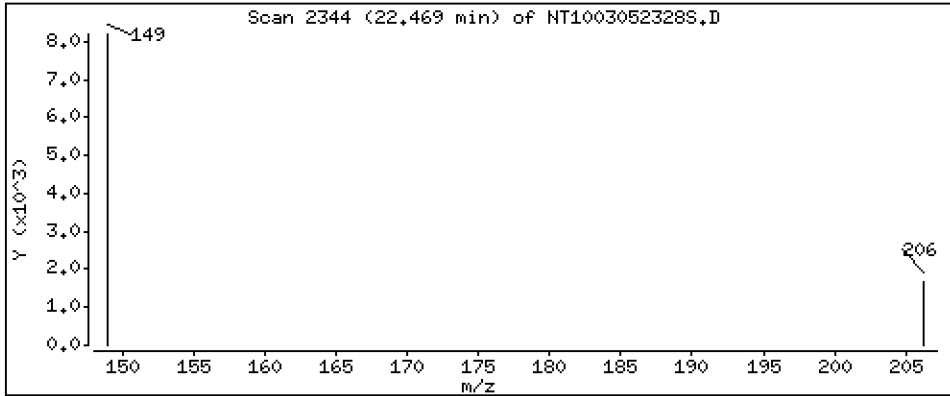
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

67 Butylbenzylphthalate

Concentration: 0,07706 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

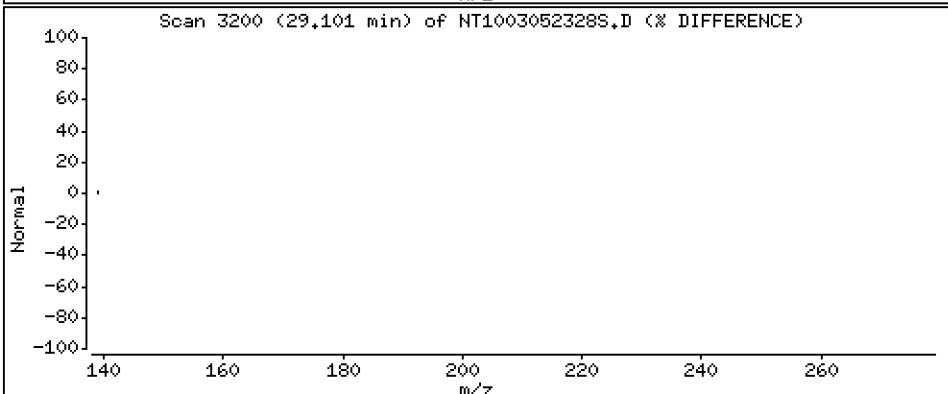
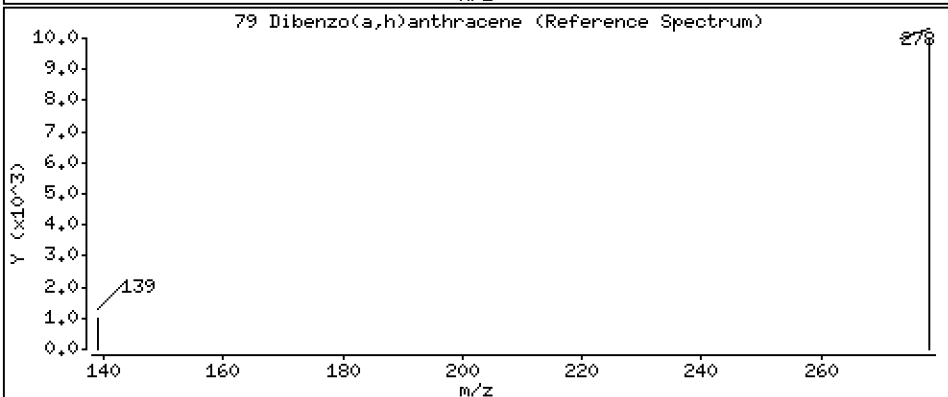
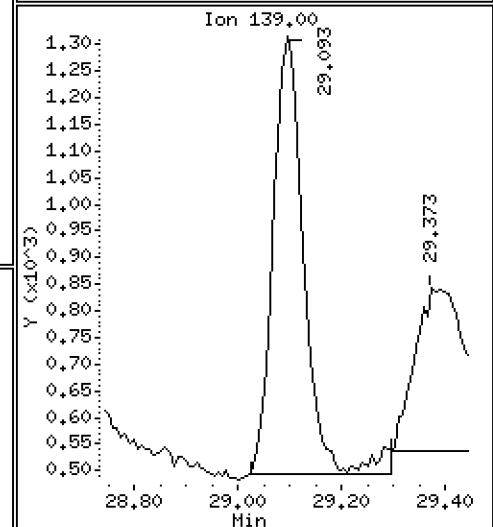
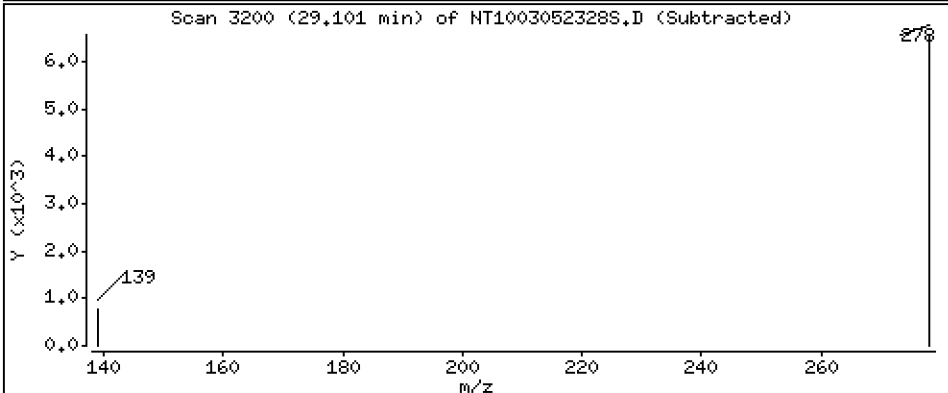
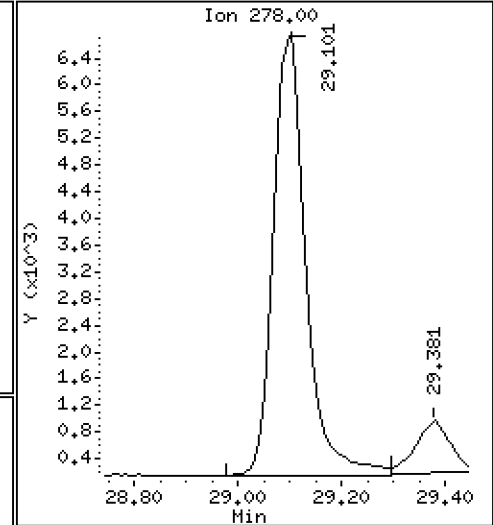
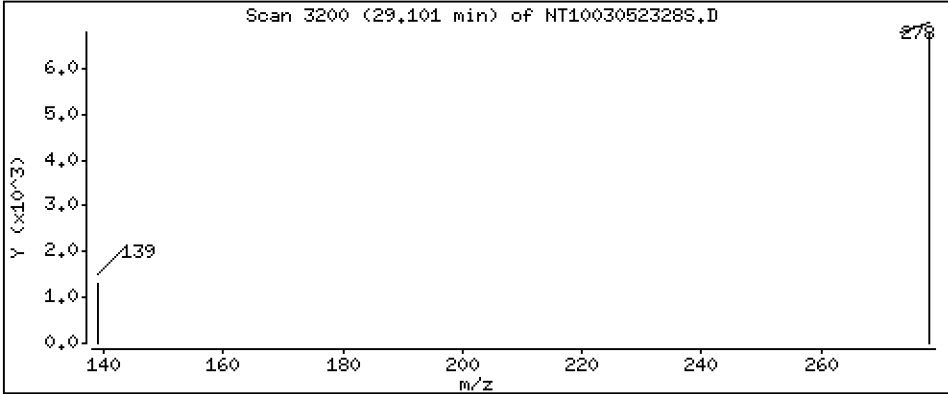
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

79 Dibenzo(a,h)anthracene

Concentration: 0,1252 ug/mL



Date : 06-MAR-2023 06:25

Client ID:

Instrument: nt10.i

Sample Info: SLC0447-LCV1

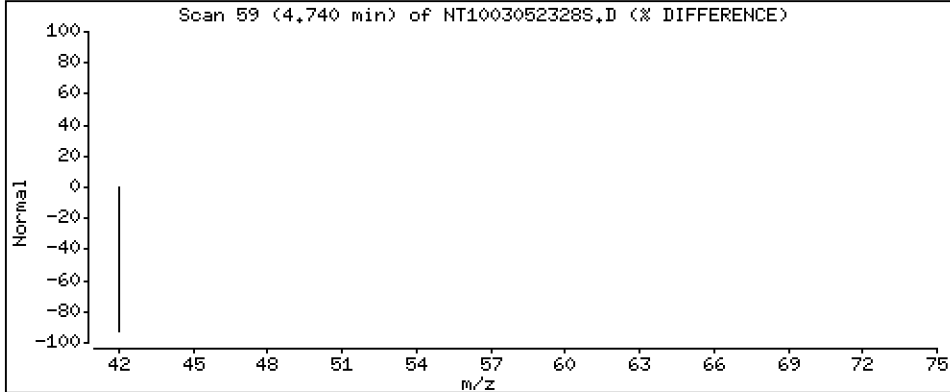
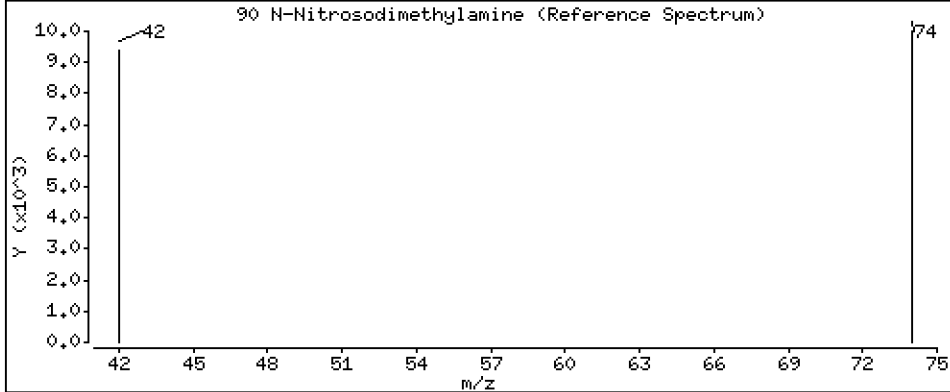
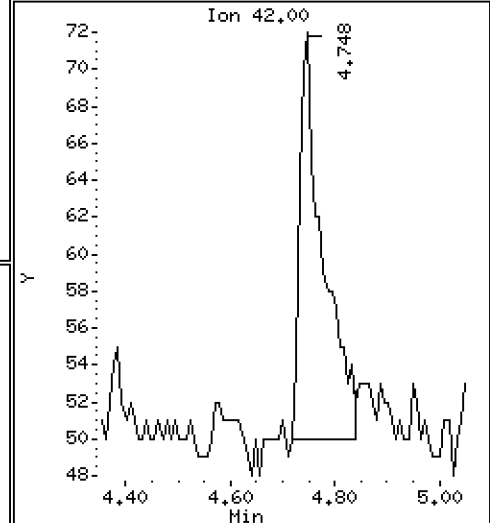
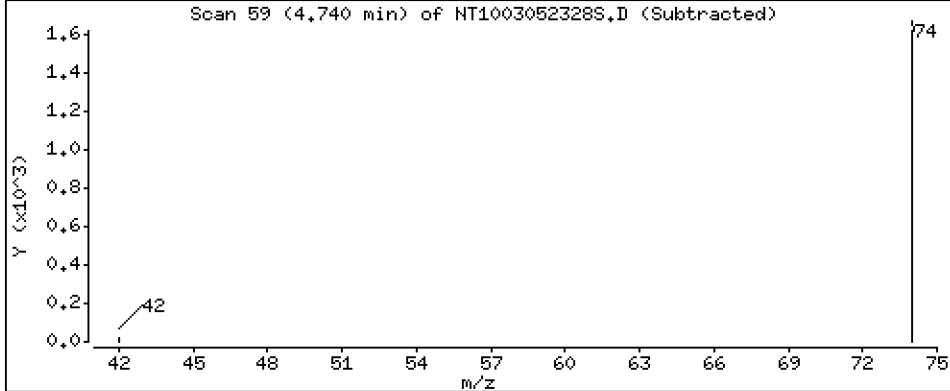
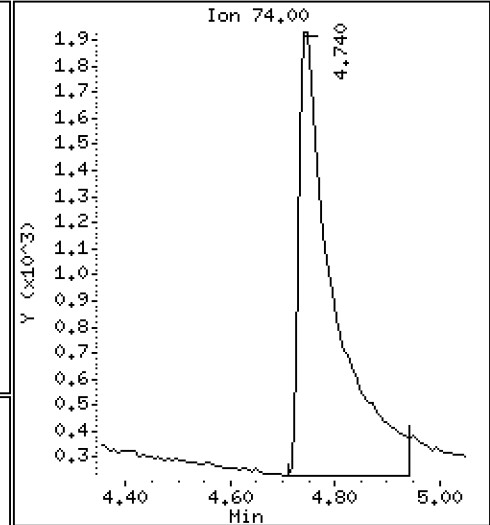
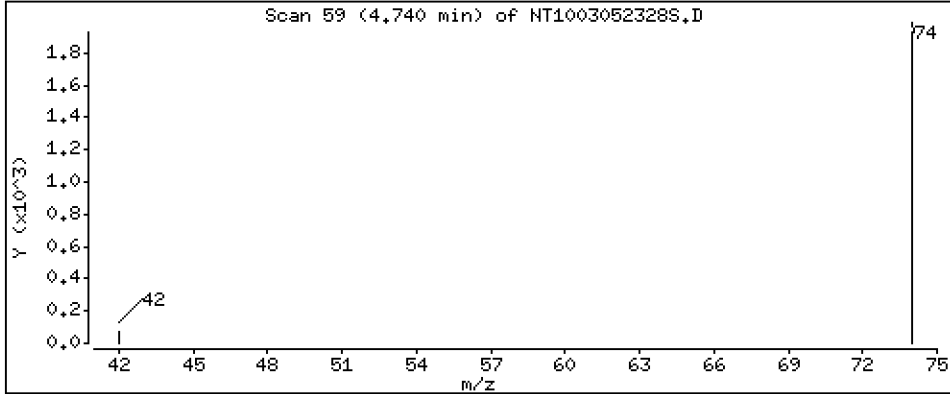
Operator: YZ

Column phase: ZB-5msi

Column diameter: 0,25

90 N-Nitrosodimethylamine

Concentration: 0,1824 ug/mL



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\NT1003052328S.D
 Lab Smp Id: SLC0447-LCV1
 Inj Date : 06-MAR-2023 06:25
 Operator : YZ
 Smp Info : SLC0447-LCV1
 Misc Info :
 Comment :
 Method : \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Meth Date : 31-Mar-2023 08:56 deenayd Quant Type: ISTD
 Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.14
 Processing Host: DEENAY-201905

Inst ID: nt10.i

Compound Sublist: PSSDA.sub

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
	MASS						(ug/mL)	(ug/mL)
\$ 1 2-Fluorophenol	112		6.910	6.902	(0.746)	11490	0.15545	0.1555 (R)
3 Phenol	94		8.563	8.556	(0.925)	7362	0.06752	0.06752
7 1,3-Dichlorobenzene	146		9.151	9.151	(0.988)	9561	0.09965	0.09965
* 8 1,4-Dichlorobenzene-d4	152		9.259	9.259	(1.000)	258897	4.00000	
9 1,4-Dichlorobenzene	146		9.298	9.298	(1.004)	9215	0.09878	0.09878
11 Benzyl alcohol	79		9.547	9.515	(1.031)	3911	0.06468	0.06468
12 1,2-Dichlorobenzene	146		9.578	9.585	(1.034)	9079	0.10125	0.1013
13 2-Methylphenol	108		9.702	9.694	(1.048)	7201	0.10980	0.1098
15 4-Methylphenol	108		9.997	9.989	(1.080)	6702	0.09826	0.09826
16 N-Nitroso-di-n-propylamine	70		10.005	10.005	(1.080)	5315	0.10946	0.1095
22 2,4-Dimethylphenol	107		11.048	11.040	(0.940)	14854	0.19697	0.1970
24 Benzoic acid	105		Compound Not Detected.					
26 1,2,4-Trichlorobenzene	180		11.631	11.631	(0.989)	7854	0.12282	0.1228
* 27 Naphthalene-d8	136		11.754	11.754	(1.000)	888437	4.00000	
30 Hexachlorobutadiene	225		12.017	12.017	(1.022)	5671	0.12497	0.1250
39 Dimethylphthalate	163		14.772	14.780	(0.962)	12488	0.09292	0.09292
* 42 Acenaphthene-d10	162		15.352	15.352	(1.000)	423269	4.00000	
50 Diethylphthalate	149		16.241	16.241	(1.058)	13197	0.10412	0.1041 (H)
54 N-Nitrosodiphenylamine	169		16.736	16.736	(0.907)	10846	0.08109	0.08109
57 Hexachlorobenzene	284		17.625	17.625	(0.955)	6644	0.10615	0.1061
58 Pentachlorophenol	266		Compound Not Detected.					
* 59 Phenanthrene-d10	188		18.453	18.453	(1.000)	826435	4.00000	
\$ 66 Terphenyl-d14	244		21.578	21.586	(0.919)	11453	0.17235	0.1724 (R)
67 Butylbenzylphthalate	149		22.469	22.469	(0.956)	10690	0.07706	0.07706
* 69 Chrysene-d12	240		23.491	23.491	(1.000)	821727	4.00000	
* 77 Perylene-d12	264		26.224	26.224	(1.000)	985206	4.00000	
79 Dibenzo(a,h)anthracene	278		29.101	29.093	(1.110)	28603	0.12517	0.1252
90 N-Nitrosodimethylamine	74		4.740	4.701	(0.512)	7981	0.18238	0.1824

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
 H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: nt10.i
 Lab File ID: NT1003052328S.D
 Lab Smp Id: SLC0447-LCV1
 Analysis Type: SV
 Quant Type: ISTD
 Operator: YZ
 Method File: \\target\share\chem3\nt10.i\20230305B.b\SIM.b\SIMABN2.m
 Misc Info:

Calibration Date: 06-MAR-2023
 Calibration Time: 05:10
 Level:
 Sample Type:

Test Mode:
 Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	239436	119718	478872	258897	8.13
27 Naphthalene-d8	849492	424746	1698984	888437	4.58
42 Acenaphthene-d10	421435	210718	842870	423269	0.44
59 Phenanthrene-d10	835585	417793	1671170	826435	-1.10
69 Chrysene-d12	874614	437307	1749228	821727	-6.05
77 Perylene-d12	1035818	517909	2071636	985206	-4.89

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.75	11.25	12.25	11.75	0.00
42 Acenaphthene-d10	15.35	14.85	15.85	15.35	0.00
59 Phenanthrene-d10	18.45	17.95	18.95	18.45	0.00
69 Chrysene-d12	23.49	22.99	23.99	23.49	0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	0.00

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

REVIEW SUMMARY FOR FILE - NT1003052328S.D

Lab ID: SLC0447-LCV1

nt10.i, 20230305B.b\SIM.b\SIMABN2.m,

06-MAR-2023 06:25

RT CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV	RRT	DELTA	COMPOUND
-----	-----	-----	-------	----------

NONE

RRT check based on Ccal File: SIM.b/NT1003052326SB.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLA0213

Instrument: NT8

Calibration: GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLA0213-TUN1	N823011901.D	NA	01/19/23 10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	NA	01/19/23 10:59
8270 SIM PNA 0.1	SLA0213-CAL1	N823011903.D	NA	01/19/23 11:26
8270 SIM PNA 0.5	SLA0213-CAL2	N823011904.D	NA	01/19/23 11:58
8270 SIM PNA 1.0	SLA0213-CAL3	N823011905.D	NA	01/19/23 12:25
8270 SIM PNA 2.5	SLA0213-CAL4	N823011906.D	NA	01/19/23 12:52
8270 SIM PNA 5	SLA0213-CAL5	N823011907.D	NA	01/19/23 13:19
8270 SIM PNA 10	SLA0213-CAL6	N823011908.D	NA	01/19/23 13:46
8270 SIM PNA SCV	SLA0213-SCV1	N823011909.D	NA	01/19/23 14:58



ANALYSIS SEQUENCE

SLA0213

Instrument: NT8
Calibration ID: GA00050

Element Column ID: J006458

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

Time	Filename	LabID	ClientId	DF											
1	1028	N823011901.D	SLA0213-TUN1	1	|	NO ISTDS FOUND|									
2	1059	N823011902.D	SLA0213-ICB1	1	|	4.92	52082|	7.20	30936|	9.24	59030|	14.22	50944|	18.12	47418|
3	1126	N823011903.D	SLA0213-CAL1	1	|	4.91	46132|	7.20	27261|	9.24	52158|	14.20	44953|	18.11	41635|
4	1158	N823011904.D	SLA0213-CAL2	1	|	4.91	45056|	7.20	26746|	9.24	50759|	14.21	44658|	18.11	42567|
5	1225	N823011905.D	SLA0213-CAL3	1	|	4.91	47180|	7.20	28206|	9.24	53233|	14.20	46493|	18.11	44587|
6	1252	N823011906.D	SLA0213-CAL4	1	|	4.91	44704|	7.20	26411|	9.24	49210|	14.20	42994|	18.11	40520|
7	1319	N823011907.D	SLA0213-CAL5	1	|	4.91	46542|	7.20	27638|	9.23	51351|	14.20	44781|	18.11	42187|
8	1346	N823011908.D	SLA0213-CAL6	1	|	4.91	46070|	7.20	26689|	9.24	50683|	14.21	43880|	18.11	40659|
9	1458	N823011909.D	SLA0213-SCV1	1	|	4.91	46346|	7.20	27709|	9.24	51685|	14.21	46582|	18.12	41743|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0075

Instrument: NT8

Calibration: GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0075-TUN1	N823020606.D	NA	02/06/23 14:46
Initial Cal Check	SLB0075-ICV1	N823020607A.D	NA	02/06/23 15:15
Blank	BLA0683-BLK1	N823020608.D	Solid	02/06/23 15:57
LCS	BLA0683-BS1	N823020609.D	Solid	02/06/23 16:24
LCS Dup	BLA0683-BSD1	N823020610.D	Solid	02/06/23 16:51
Reference	BLA0683-SRM1	N823020611.D	Solid	02/06/23 17:18
ZZZZZ	23A0207-01	N823020612.D	Solid	02/06/23 17:45
ZZZZZ	23A0207-02	N823020613.D	Solid	02/06/23 18:12
ZZZZZ	23A0207-03	N823020614.D	Solid	02/06/23 18:39
ZZZZZ	23A0207-05	N823020618.D	Solid	02/06/23 20:26
ZZZZZ	23A0207-06	N823020619.D	Solid	02/06/23 20:53
ZZZZZ	23A0207-07	N823020620.D	Solid	02/06/23 21:20
ZZZZZ	23A0207-08	N823020621.D	Solid	02/06/23 21:47
ZZZZZ	23A0207-09	N823020622.D	Solid	02/06/23 22:14
ZZZZZ	23A0207-15	N823020623.D	Solid	02/06/23 22:41
ZZZZZ	23A0207-17	N823020625.D	Solid	02/06/23 23:34
ZZZZZ	23A0249-07	N823020626.D	Solid	02/07/23 00:01
ZZZZZ	23A0295-08	N823020627.D	Solid	02/07/23 00:28
ZZZZZ	23A0313-03	N823020628.D	Solid	02/07/23 00:55
ZZZZZ	23A0313-04	N823020629.D	Solid	02/07/23 01:22
ZZZZZ	23A0313-12	N823020630.D	Solid	02/07/23 01:49
LDW23-IT1181	23A0326-08	N823020631.D	Solid	02/07/23 02:16
LDW23-IT1127	23A0326-09	N823020632.D	Solid	02/07/23 02:42
Calibration Check	SLB0075-CCV1	N823020633.D	NA	02/07/23 03:09



ANALYSIS SEQUENCE

SLB0075

Instrument: NT8
Calibration ID: GA00050

Printed: 2/8/2023 4:31:14PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0075-TUN1	QC		1		K004775			
SLB0075-ICV1	QC		2		L000606	K008540		
BLA0683-BLK1	QC		3			K008540		
BLA0683-BS1	QC		4			K008540		
BLA0683-BSD1	QC		5			K008540		
BLA0683-SRM1	QC		6			K008540		
23A0207-01	DE-SIM PAH (0.1ug/L or 5ug	A 02	7			K008540	Anchor QEA, LLC	
23A0207-02	DE-SIM PAH (0.1ug/L or 5ug	A 02	8			K008540	Anchor QEA, LLC	
23A0207-03	DE-SIM PAH (0.1ug/L or 5ug	A 02	9			K008540	Anchor QEA, LLC	
BLA0683-MS1	QC		10			K008540		
BLA0683-MSD1	QC		11			K008540		
23A0207-05	DE-SIM PAH (0.1ug/L or 5ug	A 02	12			K008540	Anchor QEA, LLC	
23A0207-06	DE-SIM PAH (0.1ug/L or 5ug	A 02	13			K008540	Anchor QEA, LLC	
23A0207-07	DE-SIM PAH (0.1ug/L or 5ug	A 02	14			K008540	Anchor QEA, LLC	
23A0207-08	DE-SIM PAH (0.1ug/L or 5ug	A 02	15			K008540	Anchor QEA, LLC	
23A0207-09	DE-SIM PAH (0.1ug/L or 5ug	A 02	16			K008540	Anchor QEA, LLC	
23A0207-15	DE-SIM PAH (0.1ug/L or 5ug	A 02	17			K008540	Anchor QEA, LLC	
23A0207-17	DE-SIM PAH (0.1ug/L or 5ug	A 02	18			K008540	Anchor QEA, LLC	
23A0249-07	DE-SIM PAH (0.1ug/L or 5ug	A 01	19			K008540	Anchor QEA, LLC	
23A0295-08	DE-SIM PAH (0.1ug/L or 5ug	A 01	20			K008540	Anchor QEA, LLC	
23A0313-03	DE-SIM PAH (0.1ug/L or 5ug	A 01	21			K008540	Anchor QEA, LLC	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____



ANALYSIS SEQUENCE

SLB0075

Instrument: NT8
Calibration ID: GA00050

Printed: 2/8/2023 4:31:14PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0313-04	DE-SIM PAH (0.1ug/L or 5ug	A 01	22			K008540	Anchor QEA, LLC	
23A0313-12	DE-SIM PAH (0.1ug/L or 5ug	A 01	23			K008540	Anchor QEA, LLC	
23A0326-08	DE-SIM PAH (0.1ug/L or 5ug	A 01	24			K008540	Anchor QEA, LLC	
23A0326-09	DE-SIM PAH (0.1ug/L or 5ug	A 01	25			K008540	Anchor QEA, LLC	
SLB0075-CCV1	QC		26		L000606	K008540		

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

Time	Filename	LabID	ClientId	DF									
1	1446	N823020606.D	SLB0075-TUN1		1	|	NO ISTDS FOUND|						
2	1515	N823020607A.D	SLB0075-ICV1		1	|	4.90 44336|	7.19	26127|	9.23	47424|	14.20 36794|	18.11 36636|
3	1557	N823020608.D	BLA0683-BLK1		1	|	4.89 48985|	7.19	28561|	9.23	52393|	14.20 40654|	18.10 24723|
4	1624	N823020609.D	BLA0683-BS1		1	|	4.88 50596|	7.18	29850|	9.22	54061|	14.19 41046|	18.10 27103|
5	1651	N823020610.D	BLA0683-BSD1		1	|	4.89 52018|	7.18	29996|	9.22	54697|	14.19 41650|	18.10 27575|
6	1718	N823020611.D	BLA0683-SRM1		1	|	4.88 47898|	7.18	26592|	9.22	44776|	14.19 36552|	18.09 22526|
7	1745	N823020612.D	23A0207-01		1	|	4.88 49668|	7.18	29744|	9.22	50330|	14.19 35079|	18.09 30080|
8	1812	N823020613.D	23A0207-02		1	|	4.89 52443|	7.18	30994|	9.22	49132|	14.19 23550|	18.10 21895|
9	1839	N823020614.D	23A0207-03		1	|	4.88 52165|	7.18	30594|	9.23	46304|	14.19 23098|	18.10 21017|
10	1906	N823020615.D	BLA0683-MS1		1	|	4.88 54388|	7.18	30727|	9.23	46335|	14.19 24118|	18.11 21563|
11	1933	N823020616.D	BLA0683-MSD1		1	|	4.88 52636|	7.18	30563|	9.23	45924|	14.19 23485|	18.10 21615|
12	1959	N823020617.D	23A0207-04	IS out, NR	1	|	4.88 51275|	7.18	28123|	9.23	43249|	14.20 19710|	18.11 17658|
13	2026	N823020618.D	23A0207-05		1	|	4.89 50448|	7.18	28375|	9.23	45673|	14.20 20022|	18.11 18460|
14	2053	N823020619.D	23A0207-06		3	|	4.89 50637|	7.18	30605|	9.23	52103|	14.20 24084|	18.10 20229|
15	2120	N823020620.D	23A0207-07		1	|	4.89 51867|	7.18	31021|	9.23	53247|	14.20 26745|	18.11 24765|
16	2147	N823020621.D	23A0207-08		1	|	4.88 54142|	7.18	32326|	9.23	57668|	14.19 37315|	18.11 31960|
17	2214	N823020622.D	23A0207-09		1	|	4.88 51253|	7.18	30524|	9.23	47253|	14.19 26321|	18.11 26206|
18	2241	N823020623.D	23A0207-15		3	|	4.89 54069|	7.19	27937|	9.23	43496|	14.20 23177|	18.12 20718|
19	2308	N823020624.D	23A0207-16	IS out, NR	3	|	4.89 52940|	7.19	28892|	9.23	42684|	14.22 19654|	18.13 17901|
20	2334	N823020625.D	23A0207-17		3	|	4.89 53176|	7.19	28398|	9.23	43410|	14.22 20694|	18.14 18612|

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

Time	Filename	LabID	ClientId	DF							
21	0001	N823020626.D	23A0249-07		1	| 4.88	57390|| 7.19	33309|| 9.24	50089||14.24	22976||18.17	20857|
22	0028	N823020627.D	23A0295-08		1	| 4.88	53834|| 7.19	32628|| 9.24	54268||14.23	24018||18.16	19340|
23	0055	N823020628.D	23A0313-03		3	| 4.89	56887|| 7.19	30456|| 9.24	48664||14.25	22993||18.17	19769|
24	0122	N823020629.D	23A0313-04		1	| 4.89	53062|| 7.19	28241|| 9.24	46666||14.28	29789||18.19	22259|
25	0149	N823020630.D	23A0313-12		1	| 4.88	58298|| 7.19	35361|| 9.24	61613||14.23	23944||18.16	19888|
26	0216	N823020631.D	23A0326-08		1	| 4.88	56917|| 7.19	31966|| 9.24	50110||14.25	22679||18.17	20298|
27	0242	N823020632.D	23A0326-09		1	| 4.88	55762|| 7.19	33500|| 9.24	54143||14.23	22621||18.16	20226|
28	0309	N823020633.D	SLB0075-CCV1		1	| 4.89	52897|| 7.19	31659|| 9.24	57767||14.23	48067||18.16	37211|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

ARI Job No.: SLB0 Method: tune.b\DFTPP.m Instrument: nt8.i Date: 06-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1446	N823020606.D	SLB0075-TUN1		1	NO MANUAL INTEGRATION
1557	N823020608.D	BLA0683-BLK1		1	Acenaphthene, Phenanthrene,
1624	N823020609.D	BLA0683-BS1		1	Total Benzofluoranthenes,
1651	N823020610.D	BLA0683-BSD1		1	Total Benzofluoranthenes,
1718	N823020611.D	BLA0683-SRM1		1	2-Methylnaphthalene, Dibenzofuran, Perylene, Total Benzofluoranthenes,
1745	N823020612.D	23A0207-01		1	Total Benzofluoranthenes,
1812	N823020613.D	23A0207-02		1	2-Methylnaphthalene, Anthracene, Total Benzofluoranthenes,
1839	N823020614.D	23A0207-03		1	Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, 1-methylnaphthalene, Acenaphthylene, Total Benzofluoranthenes, Chrysene,
1906	N823020615.D	BLA0683-MS1		1	Total Benzofluoranthenes,
1933	N823020616.D	BLA0683-MSD1		1	Total Benzofluoranthenes,
2026	N823020618.D	23A0207-05		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 1-methylnaphthalene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Perylene, Total Benzofluoranthenes, Chrysene, Carbazole,
2053	N823020619.D	23A0207-06		3	Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Perylene, Benzo(a)pyrene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
2120	N823020620.D	23A0207-07		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Fluorene, Perylene, Benzo(a)pyrene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
2147	N823020621.D	23A0207-08		1	Benzo(g,h,i)perylene, 2-Methylnaphthalene, Phenanthrene, Benzo(k)fluoranthene, Total Benzofluoranthenes, Carbazole,
2214	N823020622.D	23A0207-09		1	Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Anthracene, Benzo(a)anthracene, Total Benzofluoranthenes, Chrysene,
2241	N823020623.D	23A0207-15		3	Benzo(g,h,i)perylene, Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Benzo(a)pyrene, Total Benzofluoranthenes,

2334 N823020625.D 23A0207-17

3 1-methylnaphthalene, Total Benzofluoranthenes, Carbazole,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0001	N823020626.D	23A0249-07		1	Dibenzo(a,h)anthracene, Fluorene, Benzo(a)pyrene, Benzo(a)anthracene, Total Benzofluoranthenes, Chrysene,
0028	N823020627.D	23A0295-08		1	Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthylene, Indeno(1,2,3-cd)pyrene, Perylene, Total Benzofluoranthenes, Chrysene, Carbazole,
0055	N823020628.D	23A0313-03		3	Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Acenaphthylene, Acenaphthene, Anthracene, Total Benzofluoranthenes, Carbazole,
0122	N823020629.D	23A0313-04		1	Dibenzo(a,h)anthracene, Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
0149	N823020630.D	23A0313-12		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthylene, Indeno(1,2,3-cd)pyrene, Fluorene, Perylene, Total Benzofluoranthenes, Chrysene, Benzo(j)fluoranthene, Dibenzo(a,h)anthracene-d14,
0216	N823020631.D	23A0326-08		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, 1-methylnaphthalene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Fluorene, Perylene, Total Benzofluoranthenes, Benzo(j)fluoranthene, Perylene-d12, Carbazole, Fluoranthene-d10, Dibenzo(a,h)anthracene-d14,
0242	N823020632.D	23A0326-09		1	Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Total Benzofluoranthenes, Carbazole,
0309	N823020633.D	SLB0075-CCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 10-Feb-2023 13:10

N823020606.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020607A.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020608.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020609.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020610.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020611.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020612.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020613.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020614.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020615.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020616.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020618.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020619.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020620.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020621.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020622.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020623.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020625.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020626.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020627.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020628.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020629.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020630.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020631.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020632.D	Data Locked	jianqing,	10-Feb-2023	13:10
N823020633.D	Data Locked	jianqing,	10-Feb-2023	13:10



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Extract Dilution Bench Sheet

Sequence: SLB0078

Analyst: JZ

Date: 2/6/23

Sample ID	Primary Dilution				Secondary Dilution			
	Extract Volume (uL)	Diluent ID	Diluent Volume (uL)	Dilution Factor	Extract Volume (uL)	Diluent ID	Diluent Volume (uL)	Dilution Factor
23A0207-06	100	K005942	200	3				
23A0207-15	100		200	3				
23A0207-17	100		200	3				
23A0313-03	100		200	3				



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0143

Instrument: NT10

Calibration: GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0143-TUN1	NT1003012301S.D	NA	03/01/23 15:49
CAL 10.0	SLC0143-CAL8	NT1003012303S.D	NA	03/01/23 16:42
CAL 5.0	SLC0143-CAL7	NT1003012304S.D	NA	03/01/23 17:21
CAL 2.5	SLC0143-CAL6	NT1003012305S.D	NA	03/01/23 17:59
CAL 1.0	SLC0143-CAL5	NT1003012306S.D	NA	03/01/23 18:37
CAL 0.50	SLC0143-CAL4	NT1003012307S.D	NA	03/01/23 19:15
CAL 0.20	SLC0143-CAL3	NT1003012308S.D	NA	03/01/23 19:53
CAL 0.10	SLC0143-CAL2	NT1003012309S.D	NA	03/01/23 20:30
CAL 0.05	SLC0143-CAL1	NT1003012310S.D	NA	03/01/23 21:09
SCV 5.0	SLC0143-SCV1	NT1003012311S.D	NA	03/01/23 21:46
Initial Cal Blank	SLC0143-ICB1	NT1003012312S.D	NA	03/01/23 22:24



ANALYSIS SEQUENCE

SLC0143

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/10/2023 10:34:45AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0143-CAL1	QC		1		K011453	K010831		
SLC0143-CAL2	QC		2		K011452	K010831		
SLC0143-CAL3	QC		3		K011105	K010831		
SLC0143-CAL4	QC		4		K011106	K010831		
SLC0143-CAL5	QC		5		K011107	K010831		
SLC0143-CAL6	QC		6		K011108	K010831		
SLC0143-CAL7	QC		7		K011109	K010831		
SLC0143-CAL8	QC		8		K011110	K010831		
SLC0143-ICB1	QC		9		K005156	K010831		
SLC0143-SCV1	QC		10		K010066	K010831		

Samples Loaded By

Date

Data Processed By

Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b\SIM.b

Time	Filename	LabID	ClientId	DF																			
1	1642	NT1003012303S.D	SEQ-CAL8		1	|	9.25	358478	||	11.72	1302515	||	15.31	720687	||	18.40	1243145	||	23.42	1161833	||	26.11	1054384
2	1721	NT1003012304S.D	SEQ-CAL7		1	|	9.25	354441	||	11.72	1288295	||	15.31	739997	||	18.40	1248235	||	23.41	1079945	||	26.11	1086769
3	1759	NT1003012305S.D	SEQ-CAL6		1	|	9.24	334269	||	11.72	1202042	||	15.31	670352	||	18.40	1124281	||	23.41	948691	||	26.11	1004445
4	1837	NT1003012306S.D	SEQ-CAL5		1	|	9.24	320125	||	11.72	1136019	||	15.31	636993	||	18.40	1093620	||	23.41	1000300	||	26.10	1058448
5	1915	NT1003012307S.D	SEQ-CAL4		1	|	9.24	333617	||	11.72	1170292	||	15.31	639612	||	18.40	1094919	||	23.42	1048196	||	26.11	1117593
6	1953	NT1003012308S.D	SEQ-CAL3		1	|	9.25	314467	||	11.72	1088698	||	15.31	568154	||	18.40	979213	||	23.42	963807	||	26.11	1037909
7	2030	NT1003012309S.D	SEQ-CAL2		1	|	9.24	305434	||	11.72	1048978	||	15.31	536796	||	18.40	924275	||	23.42	947041	||	26.11	1060218
8	2109	NT1003012310S.D	SEQ-CAL1		1	|	9.25	370360	||	11.72	1262304	||	15.31	638059	||	18.40	1124768	||	23.42	1114478	||	26.11	1276260
9	2146	NT1003012311S.D	SEQ-SCV1		1	|	9.25	303734	||	11.72	1147551	||	15.31	645730	||	18.40	1151000	||	23.42	1297466	||	26.11	1394899
10	2224	NT1003012312S.D	SEQ-IBL1		1	|	9.25	515340	||	11.72	1787704	||	15.31	879316	||	18.40	1572306	||	23.42	1486349	||	26.11	1674195

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230301.b\SIM.b

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1642	NT1003012303S.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1721	NT1003012304S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1759	NT1003012305S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1837	NT1003012306S.D	SEQ-CAL5		1	Pentachlorophenol,
1915	NT1003012307S.D	SEQ-CAL4		1	Pentachlorophenol,
1953	NT1003012308S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2030	NT1003012309S.D	SEQ-CAL2		1	Benzyl alcohol, Berzoic acid,
2109	NT1003012310S.D	SEQ-CAL1		1	Benzyl alcohol, 2-Methylphenol, 4-Methylphenol, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Hexachlorobenzene,
2146	NT1003012311S.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2224	NT1003012312S.D	SEQ-IBL1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 10-Mar-2023 11:02

NT1003012303S.D	Data Locked	yev, 10-
NT1003012304S.D	Data Locked	yev, 10-
NT1003012305S.D	Data Locked	yev, 10-
NT1003012306S.D	Data Locked	yev, 10-
NT1003012307S.D	Data Locked	yev, 10-
NT1003012308S.D	Data Locked	yev, 10-
NT1003012309S.D	Data Locked	yev, 10-
NT1003012310S.D	Data Locked	yev, 10-
NT1003012311S.D	Data Locked	yev, 10-
NT1003012312S.D	Data Locked	yev, 10-



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0435

Instrument: NT10

Calibration: GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0435-TUN1	NT1003052301S.D	NA	03/05/23 13:48
Initial Cal Check	SLC0435-ICV1	NT1003052303S.D	NA	03/05/23 14:40
ABN 0.2	SLC0435-LCV2	NT1003052304S.D	NA	03/05/23 15:18
Low Cal Check	SLC0435-LCV1	NT1003052305S.D	NA	03/05/23 15:56
Blank	BLA0685-BLK2	NT1003052307S.D	Solid	03/05/23 17:12
LCS	BLA0685-BS2	NT1003052308S.D	Solid	03/05/23 17:50
LCS Dup	BLA0685-BSD2	NT1003052309S.D	Solid	03/05/23 18:28
Reference	BLA0685-SRM2	NT1003052312S.D	Solid	03/05/23 20:22
<i>ZZZZZ</i>	23A0313-08	NT1003052313S.D	Solid	03/05/23 21:00
Calibration Check	SLC0435-CCV1	NT1003052315S.D	NA	03/05/23 22:16



ANALYSIS SEQUENCE

SLC0435

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00032 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0435-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301S.D	VTS	
SLC0435-ICV1	Initial Cal Check	QC		2	K011107	K010831	03/05/2023 14:40	NT1003052303S.D	YZ	
SLC0435-LCV1	Low Cal Check	QC		3	K011452	K010831	03/05/2023 15:56	NT1003052305S.D	YZ	
BLA0685-BLK2	Blank	QC		4		K010831	03/05/2023 17:12	NT1003052307S.D	YZ	
BLA0685-BS2	LCS	QC		5		K010831	03/05/2023 17:50	NT1003052308S.D	YZ	
BLA0685-BSD2	LCS Dup	QC		6		K010831	03/05/2023 18:28	NT1003052309S.D	YZ	
BLA0685-SRM2	Reference	QC		7		K010831	03/05/2023 20:22	NT1003052312S.D	YZ	
BLA0685-MS2	Matrix Spike	QC		8		K010831	03/05/2023 19:06	NT1003052310S.D	YZ	
BLA0685-MSD2	Matrix Spike Dup	QC		9		K010831	03/05/2023 19:44	NT1003052311S.D	YZ	
23A0313-08	LDW23-SC1016A	270E-SIM Dual Scan SVO	A 04	10		K010831	03/05/2023 21:00	NT1003052313S.D	YZ	
SLC0435-CCV1	Calibration Check	QC		11	K011107	K010831	03/05/2023 22:16	NT1003052315S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305.b\SIM.b

Time	Filename	LabID	ClientId	DF																		
1	1348	NT1003052301S.D	SLC0435-TUN1	1	|	NO	ISTDS	FOUND	|	|												
2	1440	NT1003052303S.D	SLC0435-ICV1	1	|	9.24	321376	|	11.73	1132931	|	15.34	561597	|	18.45	1068222	|	23.51	997572	|	26.29	1245490
3	1556	NT1003052305S.D	SLC0435-LCV1	1	|	9.24	302311	|	11.73	1102062	|	15.34	539935	|	18.45	1024492	|	23.52	911208	|	26.29	1065211
4	1712	NT1003052307S.D	BLA0685-BLK1	1	|	9.24	308288	|	11.73	1085923	|	15.34	528064	|	18.45	1014390	|	23.52	923539	|	26.29	1001440
5	1750	NT1003052308S.D	BLA0685-BS1	1	|	9.25	335662	|	11.74	1201009	|	15.35	587178	|	18.46	1118430	|	23.53	1055166	|	26.30	1125544
6	1828	NT1003052309S.D	BLA0685-BSD1	1	|	9.25	373655	|	11.74	1328154	|	15.35	660605	|	18.45	1250960	|	23.51	1159338	|	26.28	1176555
7	1906	NT1003052310S.D	BLA0685-MS1	1	|	9.26	338041	|	11.74	1209805	|	15.35	593872	|	18.46	1170327	|	23.52	1225934	|	26.29	1335320
8	1944	NT1003052311S.D	BLA0685-MSD1	1	|	9.25	324331	|	11.74	1148792	|	15.35	566447	|	18.46	1132534	|	23.52	1164880	|	26.29	1261918
9	2022	NT1003052312S.D	BLA0685-SRMI	1	|	9.25	291216	|	11.74	1022375	|	15.35	512455	|	18.46	1021943	|	23.52	1019134	|	26.29	1141471
10	2100	NT1003052313S.D	23A0313-08	1	|	9.25	350409	|	11.74	1235679	|	15.35	603959	|	18.46	1203779	|	23.54	1124621	|	26.32	1296389
11	2216	NT1003052315S.D	SLC0435-CCV1	1	|	9.25	293840	|	11.73	1032639	|	15.34	502349	|	18.45	975997	|	23.51	978544	|	26.27	1201606

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305.b\SIM.b

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1403	NT1003052302S.D	SEQ-ICVFULL		1	NO MANUAL INTEGRATION
1440	NT1003052303S.D	SLC0435-ICV1		1	Benzyl alcohol, Dibenzo(a,h)anthracene,
1518	NT1003052304S.D	SEQ-SIM200		1	NO MANUAL INTEGRATION
1556	NT1003052305S.D	SLC0435-LCV1		1	Benzyl alcohol,
1634	NT1003052306S.D	SEQ-SIM500		1	NO MANUAL INTEGRATION
1712	NT1003052307S.D	BLA0685-BLK1		1	NO MANUAL INTEGRATION
1750	NT1003052308S.D	BLA0685-BS1		1	Benzyl alcohol,
1828	NT1003052309S.D	BLA0685-BSD1		1	Benzyl alcohol,
1906	NT1003052310S.D	BLA0685-MS1		1	Benzyl alcohol,
1944	NT1003052311S.D	BLA0685-MSD1		1	Benzyl alcohol,
2022	NT1003052312S.D	BLA0685-SRM1		1	Hexachlorobenzene,
2100	NT1003052313S.D	23A0313-08		1	NO MANUAL INTEGRATION
2138	NT1003052314S.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
2216	NT1003052315S.D	SLC0435-CCV1		1	Diethylphthalate,

Security Status Report

Date: 28-Mar-2023 11:50

NT1003052301S.D	Data Locked	deenayd, 28-
NT1003052302S.D	Data Locked	deenayd, 28-
NT1003052303S.D	Data Locked	deenayd, 28-
NT1003052304S.D	Data Locked	deenayd, 28-
NT1003052305S.D	Data Locked	deenayd, 28-
NT1003052306S.D	Data Locked	deenayd, 28-
NT1003052307S.D	Data Locked	deenayd, 28-
NT1003052308S.D	Data Locked	deenayd, 28-
NT1003052309S.D	Data Locked	deenayd, 28-
NT1003052310S.D	Data Locked	deenayd, 28-
NT1003052311S.D	Data Locked	deenayd, 28-
NT1003052312S.D	Data Locked	deenayd, 28-
NT1003052313S.D	Data Locked	deenayd, 28-
NT1003052314S.D	Data Locked	deenayd, 28-
NT1003052315S.D	Data Locked	deenayd, 28-



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0440

Instrument: NT10

Calibration: GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0440-TUN1	NT1003052301SA.D	NA	03/05/23 13:48
Initial Cal Check	SLC0440-ICV1	NT1003052315SA.D	NA	03/05/23 22:16
ABN 0.2	SLC0440-LCV2	NT1003052316S.D	NA	03/05/23 22:54
ABN 0.1	SLC0440-LCV1	NT1003052317S.D	NA	03/05/23 23:32
ABN 0.5	SLC0440-LCV3	NT1003052318S.D	NA	03/06/23 00:09
ZZZZZ	23A0313-09	NT1003052319S.D	Solid	03/06/23 00:47
ZZZZZ	23A0313-10	NT1003052320S.D	Solid	03/06/23 01:25
ZZZZZ	23A0313-11	NT1003052321S.D	Solid	03/06/23 02:02
ZZZZZ	23A0313-13	NT1003052322S.D	Solid	03/06/23 02:40
LDW23-SC1028	23A0326-01	NT1003052323S.D	Solid	03/06/23 03:17
LDW23-SC1032	23A0326-02	NT1003052324S.D	Solid	03/06/23 03:55
Calibration Check	SLC0440-CCV1	NT1003052326S.D	NA	03/06/23 05:10



ANALYSIS SEQUENCE

SLC0440

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00032 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0440-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301SA.D	VTS	
SLC0440-ICV1	Initial Cal Check	QC		2	K011107	K010831	03/05/2023 22:16	NT1003052315SA.D	YZ	
SLC0440-LCV1	ABN 0.2	QC		3	K011452	K010831	03/05/2023 23:32	NT1003052317S.D	YZ	
23A0313-10	LDW23-SC1006A	270E-SIM Dual Scan SVO	A 04	4		K010831	03/06/2023 01:25	NT1003052320S.D	YZ	
23A0313-11	LDW23-SC1012B	270E-SIM Dual Scan SVO	A 04	5		K010831	03/06/2023 02:02	NT1003052321S.D	YZ	
23A0313-13	LDW23-SC1159	270E-SIM Dual Scan SVO	A 04	6		K010831	03/06/2023 02:40	NT1003052322S.D	YZ	
23A0326-01	LDW23-SC1028	270E-SIM Dual Scan SVO	A 04	7		K010831	03/06/2023 03:17	NT1003052323S.D	YZ	
23A0326-02	LDW23-SC1032	270E-SIM Dual Scan SVO	A 04	8		K010831	03/06/2023 03:55	NT1003052324S.D	YZ	
23A0313-09	LDW23-SC1011A	270E-SIM Dual Scan SVO	A 04	9		K010831	03/06/2023 00:47	NT1003052319S.D	YZ	
SLC0440-CCV1	Calibration Check	QC		10	K011107	K010831	03/06/2023 05:10	NT1003052326S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b\SIM.b

Time	Filename	LabID	ClientId	DF																
1	1348	NT1003052301SA.D	SLC0440-TUN1	1	|	NO ISTDS FOUND|														
2	2216	NT1003052315SA.D	SLC0440-ICV1	1	|	9.25	293840|	11.73	1032639|	15.34	502349|	18.45	975997|	23.51	978544|	26.27	1201606|			
3	2332	NT1003052317S.D	SLC0440-LCV1	1	|	9.26	273861|	11.75	953301|	15.33	454624|	18.42	860369|	23.44	801660|	26.14	976489|			
4	0047	NT1003052319S.D	23A0313-09	1	|	9.26	312461|	11.75	1106271|	15.34	540606|	18.45	1031434|	23.50	1116268|	26.24	1332726|			
5	0125	NT1003052320S.D	23A0313-10	1	|	9.26	318026|	11.76	1112734|	15.35	544391|	18.45	1064250|	23.51	1058301|	26.24	1201257|			
6	0202	NT1003052321S.D	23A0313-11	1	|	9.26	321868|	11.75	1135908|	15.35	569381|	18.46	1110246|	23.51	1072933|	26.25	1245013|			
7	0240	NT1003052322S.D	23A0313-13	1	|	9.26	252500|	11.75	898205|	15.35	443491|	18.46	905195|	23.51	911194|	26.25	1029784|			
8	0317	NT1003052323S.D	23A0326-01	1	|	9.26	239857|	11.75	850863|	15.35	416153|	18.46	849063|	23.51	827784|	26.25	975174|			
9	0355	NT1003052324S.D	23A0326-02	1	|	9.26	287793|	11.76	1014116|	15.35	497309|	18.46	999293|	23.51	986742|	26.25	1120343|			
10	0510	NT1003052326S.D	SLC0440-CCV1	1	|	9.26	239436|	11.75	849492|	15.35	421435|	18.45	835585|	23.49	874614|	26.22	1035818|			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305A.b\SIM.b

ARI Job No.: SLC0 Method: SIM.b\DFTPP8270E.m Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1348	NT1003052301SA.D	SLC0440-TUN1		1	NO MANUAL INTEGRATION
2138	NT1003052314SA.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
2216	NT1003052315S.D	SLC0440-ICV1		1	Diethylphthalate,
2254	NT1003052316S.D	SEQ-SIM200		1	NO MANUAL INTEGRATION
2332	NT1003052317S.D	SLC0440-LCV1		1	NO MANUAL INTEGRATION
0009	NT1003052318S.D	SEQ-SIM500		1	NO MANUAL INTEGRATION
0047	NT1003052319S.D	23A0313-09		1	1,4-Dichlorobenzene,
0125	NT1003052320S.D	23A0313-10		1	NO MANUAL INTEGRATION
0202	NT1003052321S.D	23A0313-11		1	NO MANUAL INTEGRATION
0240	NT1003052322S.D	23A0313-13		1	NO MANUAL INTEGRATION
0317	NT1003052323S.D	23A0326-01		1	Diethylphthalate,
0355	NT1003052324S.D	23A0326-02		1	Diethylphthalate,
0432	NT1003052325S.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
0510	NT1003052326S.D	SLC0440-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 28-Mar-2023 11:37

NT1003052301SA.D	Data Locked	deenayd, 28-
NT1003052314SA.D	Data Locked	deenayd, 28-
NT1003052315SA.D	Data Locked	deenayd, 28-
NT1003052316S.D	Data Locked	deenayd, 28-
NT1003052317S.D	Data Locked	deenayd, 28-
NT1003052318S.D	Data Locked	deenayd, 28-
NT1003052319S.D	Data Locked	deenayd, 28-
NT1003052320S.D	Data Locked	deenayd, 28-
NT1003052321S.D	Data Locked	deenayd, 28-
NT1003052322S.D	Data Locked	deenayd, 28-
NT1003052323S.D	Data Locked	deenayd, 28-
NT1003052324S.D	Data Locked	deenayd, 28-
NT1003052325S.D	Data Locked	deenayd, 28-
NT1003052326S.D	Data Locked	deenayd, 28-



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0447

Instrument: NT10

Calibration: GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0447-TUN1	NT1003052301SB.D	NA	03/05/23 13:48
Initial Cal Check	SLC0447-ICV1	NT1003052326SB.D	NA	03/06/23 05:10
ABN 0.2	SLC0447-LCV1	NT1003052328S.D	NA	03/06/23 06:25
LDW23-SC1170A	23A0326-04	NT1003052330S.D	Solid	03/06/23 07:41
LDW23-SC1169C	23A0326-05	NT1003052331S.D	Solid	03/06/23 08:18
LDW23-SC1161	23A0326-10	NT1003052332S.D	Solid	03/06/23 08:56
LDW23-SC1155	23A0326-11	NT1003052333S.D	Solid	03/06/23 09:34
LDW23-SC1162B	23A0326-12	NT1003052334S.D	Solid	03/06/23 10:11
Calibration Check	SLC0447-CCV1	NT1003052336S.D	NA	03/06/23 11:27



ANALYSIS SEQUENCE

SLC0447

Instrument ID: NT10 GCMS Description: Agilent 5975/MS http://bi
Calibration ID: GC00032 GCMS Column ID: 1001330
MS EM Level: 1317.6 EV

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0447-TUN1	MS Tune	QC		1	L002618		03/05/2023 13:48	NT1003052301SB.D	JGR	
SLC0447-ICV1	Initial Cal Check	QC		2	K011107	K010831	03/06/2023 05:10	NT1003052326SB.D	YZ	
SLC0447-LCV1	ABN 0.2	QC		3	K011452	K010831	03/06/2023 06:25	NT1003052328S.D	YZ	
23A0326-04	LDW23-SC1170A	270E-SIM Dual Scan SVO	A 04	4		K010831	03/06/2023 07:41	NT1003052330S.D	YZ	
23A0326-05	LDW23-SC1169C	270E-SIM Dual Scan SVO	A 04	5		K010831	03/06/2023 08:18	NT1003052331S.D	YZ	
23A0326-10	LDW23-SC1161	270E-SIM Dual Scan SVO	A 04	6		K010831	03/06/2023 08:56	NT1003052332S.D	YZ	
23A0326-11	LDW23-SC1155	270E-SIM Dual Scan SVO	A 04	7		K010831	03/06/2023 09:34	NT1003052333S.D	YZ	
23A0326-12	LDW23-SC1162B	270E-SIM Dual Scan SVO	A 04	8		K010831	03/06/2023 10:11	NT1003052334S.D	YZ	
SLC0447-CCV1	Calibration Check	QC		9	K011107	K010831	03/06/2023 11:27	NT1003052336S.D	YZ	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305B.b\SIM.b

Time	Filename	LabID	ClientId	DF										
1 1348	NT1003052301SB.D	SLC0447-TUN1		1	|NO ISTDs FOUND|									
2 0510	NT1003052326SB.D	SLC0447-ICV1		1	| 9.26	239436||11.75	849492||15.35	421435||18.45	835585||23.49	874614||26.22	1035818|			
3 0625	NT1003052328S.D	SLC0447-LCV1		1	| 9.26	258897||11.75	888437||15.35	423269||18.45	826435||23.49	821727||26.22	985206|			
4 0741	NT1003052330S.D	23A0326-04		1	| 9.27	246883||11.75	879699||15.35	440303||18.45	858013||23.50	828700||26.24	1038678|			
5 0818	NT1003052331S.D	23A0326-05		1	| 9.27	253406||11.75	884415||15.35	448606||18.45	879449||23.51	886830||26.26	972028|			
6 0856	NT1003052332S.D	23A0326-10		1	| 9.27	220135||11.76	781530||15.35	384624||18.45	777427||23.51	764063||26.24	865273|			
7 0934	NT1003052333S.D	23A0326-11		1	| 9.27	230177||11.75	824331||15.35	409943||18.45	832581||23.51	797791||26.25	888447|			
8 1011	NT1003052334S.D	23A0326-12		1	| 9.27	205720||11.75	733196||15.35	363700||18.45	731713||23.51	685514||26.25	788109|			
9 1127	NT1003052336S.D	SLC0447-CCV1		1	| 9.27	219946||11.75	766737||15.35	381140||18.45	765962||23.49	774496||26.23	914722|			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230305B.b\SIM.b

ARI Job No.: SLC0 Method: SIM.b\DFTPP8270E.m Instrument: nt10.i Date: 05-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1348	NT1003052301SB.D	SLC0447-TUN1		1	NO MANUAL INTEGRATION
0432	NT1003052325SB.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
0510	NT1003052326SB.D	SLC0447-ICV1		1	NO MANUAL INTEGRATION
0548	NT1003052327S.D	SEQ-SIM200		1	NO MANUAL INTEGRATION
0625	NT1003052328S.D	SLC0447-LCV1		1	NO MANUAL INTEGRATION
0703	NT1003052329S.D	SEQ-SIM500		1	NO MANUAL INTEGRATION
0741	NT1003052330S.D	23A0326-04		1	Benzyl alcohol, Diethylphthalate,
0818	NT1003052331S.D	23A0326-05		1	NO MANUAL INTEGRATION
0856	NT1003052332S.D	23A0326-10		1	Benzyl alcohol,
0934	NT1003052333S.D	23A0326-11		1	Benzyl alcohol,
1011	NT1003052334S.D	23A0326-12		1	Diethylphthalate,
1049	NT1003052335S.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
1127	NT1003052336S.D	SLC0447-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 31-Mar-2023 09:07

NT1003052301SB.D	Data Locked	deenayd, 31-
NT1003052325SB.D	Data Locked	deenayd, 31-
NT1003052326SB.D	Data Locked	deenayd, 31-
NT1003052327S.D	Data Locked	deenayd, 31-
NT1003052328S.D	Data Locked	deenayd, 31-
NT1003052329S.D	Data Locked	deenayd, 31-
NT1003052330S.D	Data Locked	deenayd, 31-
NT1003052331S.D	Data Locked	deenayd, 31-
NT1003052332S.D	Data Locked	deenayd, 31-
NT1003052333S.D	Data Locked	deenayd, 31-
NT1003052334S.D	Data Locked	deenayd, 31-
NT1003052335S.D	Data Locked	deenayd, 31-
NT1003052336S.D	Data Locked	deenayd, 31-



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLA0213</u>	Instrument:	<u>NT8</u>
Calibration:	<u>GA00050</u>	Calibration Date:	<u>01/19/2023</u>

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0213-ICB1 (Water)		Lab File ID: N823011902.D			Analyzed: 01/19/23 10:59			
2-Methylnaphthalene-d10			31 - 120		5.6415	-5.6415	N/A	
Dibenzo[a,h]anthracene-d14			10 - 125		20.5525	-20.5525	N/A	
Fluoranthene-d10			46 - 121		11.016	-11.0160	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG/WO: 23A0326
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Sequence: SLB0075 Instrument: NT8
 Calibration: GA00050 Calibration Date: 01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0075-ICV1 (Solid) Lab File ID: N823020607A.D Analyzed: 02/06/23 15:15								
2-Methylnaphthalene-d10	2.5000	105	80 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	96.8	80 - 120	20.549	20.5525	-0.0035	N/A	
Fluoranthene-d10	2.5000	103	80 - 120	11.009	11.016	-0.0070	N/A	
BLA0683-BLK1 (Solid) Lab File ID: N823020608.D Analyzed: 02/06/23 15:57								
2-Methylnaphthalene-d10	150.00	83.2	32 - 120	5.627	5.6415	-0.0145	N/A	
Dibenzo[a,h]anthracene-d14	150.00	154	21 - 133	20.545	20.5525	-0.0075	N/A	*
Fluoranthene-d10	150.00	99.4	36 - 134	11.009	11.016	-0.0070	N/A	
BLA0683-BS1 (Solid) Lab File ID: N823020609.D Analyzed: 02/06/23 16:24								
2-Methylnaphthalene-d10	150.00	63.3	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	150.00	114	21 - 133	20.536	20.5525	-0.0165	N/A	
Fluoranthene-d10	150.00	73.4	36 - 134	11	11.016	-0.0160	N/A	
BLA0683-BSD1 (Solid) Lab File ID: N823020610.D Analyzed: 02/06/23 16:51								
2-Methylnaphthalene-d10	150.00	71.8	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	150.00	119	21 - 133	20.533	20.5525	-0.0195	N/A	
Fluoranthene-d10	150.00	80.0	36 - 134	11.003	11.016	-0.0130	N/A	
BLA0683-SRM1 (Solid) Lab File ID: N823020611.D Analyzed: 02/06/23 17:18								
2-Methylnaphthalene-d10	300.00	95.8	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	300.00	173	21 - 133	20.53	20.5525	-0.0225	N/A	*
Fluoranthene-d10	300.00	110	36 - 134	11.003	11.016	-0.0130	N/A	
23A0326-08 (Solid) Lab File ID: N823020631.D Analyzed: 02/07/23 02:16								
2-Methylnaphthalene-d10	149.66	71.1	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	149.66	97.5	21 - 133	20.634	20.5525	0.0815	N/A	
Fluoranthene-d10	149.66	106	36 - 134	11.044	11.016	0.0280	N/A	
23A0326-09 (Solid) Lab File ID: N823020632.D Analyzed: 02/07/23 02:42								
2-Methylnaphthalene-d10	149.95	92.3	32 - 120	5.621	5.6415	-0.0205	N/A	
Dibenzo[a,h]anthracene-d14	149.95	126	21 - 133	20.621	20.5525	0.0685	N/A	
Fluoranthene-d10	149.95	107	36 - 134	11.028	11.016	0.0120	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG/WO: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Sequence: SLB0075 Instrument: NT8
Calibration: GA00050 Calibration Date: 01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0075-CCV1 (Solid)			Lab File ID: N823020633.D		Analyzed: 02/07/23 03:09			
2-Methylnaphthalene-d10	2.5000	108	50 - 150	5.627	5.6415	-0.0145	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	88.0	50 - 150	20.609	20.5525	0.0565	N/A	
Fluoranthene-d10	2.5000	109	50 - 150	11.025	11.016	0.0090	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0143</u>	Instrument:	<u>NT10</u>
Calibration:	<u>GC00032</u>	Calibration Date:	<u>03/01/2023</u>

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0143-SCV1 (Solid)		Lab File ID: NT1003012311S.D			Analyzed: 03/01/23 21:46			
2-Fluorophenol	7.5000	0.502	0 - 200	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	5.0000	0.542	0 - 200	21.524	21.525	-0.0010	N/A	
SLC0143-ICB1 (Solid)		Lab File ID: NT1003012312S.D			Analyzed: 03/01/23 22:24			
2-Fluorophenol	7.5000	105	27 - 120	6.894	6.899	-0.0050	N/A	
p-Terphenyl-d14	5.0000	98.0	37 - 120	21.524	21.525	-0.0010	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG/WO: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0435

Instrument: NT10

Calibration: GC00032

Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0435-ICV1 (Solid)		Lab File ID: NT1003052303S.D			Analyzed: 03/05/23 14:40			
2-Fluorophenol	1.5000	102	80 - 120	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	1.0000	149	80 - 120	21.602	21.525	0.0770	N/A	*
SLC0435-LCV2 (Solid)		Lab File ID: NT1003052304S.D			Analyzed: 03/05/23 15:18			
2-Fluorophenol	0.30000	81.8	0 - 200	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	0.20000	144	0 - 200	21.602	21.525	0.0770	N/A	
SLC0435-LCV1 (Solid)		Lab File ID: NT1003052305S.D			Analyzed: 03/05/23 15:56			
2-Fluorophenol	0.15000	74.3	0 - 200	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	0.10000	161	0 - 200	21.602	21.525	0.0770	N/A	
BLA0685-BLK2 (Solid)		Lab File ID: NT1003052307S.D			Analyzed: 03/05/23 17:12			
2-Fluorophenol	750.00	62.5	27 - 120	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	500.00	141	37 - 120	21.609	21.525	0.0840	N/A	*
BLA0685-BS2 (Solid)		Lab File ID: NT1003052308S.D			Analyzed: 03/05/23 17:50			
2-Fluorophenol	750.00	83.8	27 - 120	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	500.00	143	37 - 120	21.609	21.525	0.0840	N/A	*
BLA0685-BSD2 (Solid)		Lab File ID: NT1003052309S.D			Analyzed: 03/05/23 18:28			
2-Fluorophenol	750.00	83.7	27 - 120	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	500.00	135	37 - 120	21.602	21.525	0.0770	N/A	*
BLA0685-SRM2 (Solid)		Lab File ID: NT1003052312S.D			Analyzed: 03/05/23 20:22			
2-Fluorophenol	7500.0	87.7	27 - 120	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	5000.0	137	37 - 120	21.602	21.525	0.0770	N/A	*
SLC0435-CCV1 (Solid)		Lab File ID: NT1003052315S.D			Analyzed: 03/05/23 22:16			
2-Fluorophenol	1.5000	110	50 - 150	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	1.0000	157	50 - 150	21.594	21.525	0.0690	N/A	*



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0440</u>	Instrument:	<u>NT10</u>
Calibration:	<u>GC00032</u>	Calibration Date:	<u>03/01/2023</u>

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0440-ICV1 (Solid) Lab File ID: NT1003052315SA.D Analyzed: 03/05/23 22:16								
2-Fluorophenol	1.5000	110	80 - 120	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	1.0000	157	80 - 120	21.594	21.525	0.0690	N/A	*
SLC0440-LCV2 (Solid) Lab File ID: NT1003052316S.D Analyzed: 03/05/23 22:54								
2-Fluorophenol	0.30000	98.1	0 - 200	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	0.20000	156	0 - 200	21.578	21.525	0.0530	N/A	
SLC0440-LCV1 (Solid) Lab File ID: NT1003052317S.D Analyzed: 03/05/23 23:32								
2-Fluorophenol	0.15000	97.5	0 - 200	6.909	6.899	0.0100	N/A	
p-Terphenyl-d14	0.10000	161	0 - 200	21.539	21.525	0.0140	N/A	
SLC0440-LCV3 (Solid) Lab File ID: NT1003052318S.D Analyzed: 03/06/23 00:09								
2-Fluorophenol	0.75000	107	0 - 200	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	0.50000	163	0 - 200	21.586	21.525	0.0610	N/A	
23A0326-01 (Solid) Lab File ID: NT1003052323S.D Analyzed: 03/06/23 03:17								
2-Fluorophenol	719.89	7.15	27 - 120	6.902	6.899	0.0030	N/A	*
p-Terphenyl-d14	479.93	159	37 - 120	21.601	21.525	0.0760	N/A	*
23A0326-02 (Solid) Lab File ID: NT1003052324S.D Analyzed: 03/06/23 03:55								
2-Fluorophenol	745.65	40.1	27 - 120	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	497.10	144	37 - 120	21.602	21.525	0.0770	N/A	*
SLC0440-CCV1 (Solid) Lab File ID: NT1003052326S.D Analyzed: 03/06/23 05:10								
2-Fluorophenol	1.5000	116	50 - 150	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	1.0000	159	50 - 150	21.586	21.525	0.0610	N/A	*



SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0447</u>	Instrument:	<u>NT10</u>
Calibration:	<u>GC00032</u>	Calibration Date:	<u>03/01/2023</u>

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0447-ICV1 (Solid) Lab File ID: NT1003052326SB.D Analyzed: 03/06/23 05:10								
2-Fluorophenol	1.5000	116	80 - 120	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	1.0000	159	80 - 120	21.586	21.525	0.0610	N/A	*
SLC0447-LCV1 (Solid) Lab File ID: NT1003052328S.D Analyzed: 03/06/23 06:25								
2-Fluorophenol	0.15000	104	0 - 200	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	0.10000	172	0 - 200	21.578	21.525	0.0530	N/A	
23A0326-04 (Solid) Lab File ID: NT1003052330S.D Analyzed: 03/06/23 07:41								
2-Fluorophenol	749.03	77.6	27 - 120	6.917	6.899	0.0180	N/A	
p-Terphenyl-d14	499.35	146	37 - 120	21.594	21.525	0.0690	N/A	*
23A0326-05 (Solid) Lab File ID: NT1003052331S.D Analyzed: 03/06/23 08:18								
2-Fluorophenol	735.20	79.4	27 - 120	6.918	6.899	0.0190	N/A	
p-Terphenyl-d14	490.13	138	37 - 120	21.602	21.525	0.0770	N/A	*
23A0326-10 (Solid) Lab File ID: NT1003052332S.D Analyzed: 03/06/23 08:56								
2-Fluorophenol	727.16	71.3	27 - 120	6.918	6.899	0.0190	N/A	
p-Terphenyl-d14	484.77	135	37 - 120	21.594	21.525	0.0690	N/A	*
23A0326-11 (Solid) Lab File ID: NT1003052333S.D Analyzed: 03/06/23 09:34								
2-Fluorophenol	720.54	78.0	27 - 120	6.918	6.899	0.0190	N/A	
p-Terphenyl-d14	480.36	151	37 - 120	21.594	21.525	0.0690	N/A	*
23A0326-12 (Solid) Lab File ID: NT1003052334S.D Analyzed: 03/06/23 10:11								
2-Fluorophenol	724.22	76.5	27 - 120	6.91	6.899	0.0110	N/A	
p-Terphenyl-d14	482.81	141	37 - 120	21.594	21.525	0.0690	N/A	*
SLC0447-CCV1 (Solid) Lab File ID: NT1003052336S.D Analyzed: 03/06/23 11:27								
2-Fluorophenol	1.5000	114	50 - 150	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	1.0000	167	50 - 150	21.578	21.525	0.0530	N/A	*



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLA0213

Instrument: NT8

Calibration: GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Blank (SLA0213-ICB1)		(Water)	Lab File ID: N823011902.D			Analyzed: 01/19/23 10:59			
Naphthalene-d8	52082	4.916	44704	4.906	117	50 - 200	0.010	+/-0.50	
Acenaphthene-d10	30936	7.202	26411	7.196	117	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	59030	9.241	49210	9.235	120	50 - 200	0.006	+/-0.50	
Chrysene-d12	50944	14.215	42994	14.202	118	50 - 200	0.013	+/-0.50	
Perylene-d12	47418	18.12	40520	18.111	117	50 - 200	0.009	+/-0.50	
Secondary Cal Check (SLA0213-SCV1)		(Water)	Lab File ID: N823011909.D			Analyzed: 01/19/23 14:58			
Naphthalene-d8	46346	4.913	44704	4.906	104	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	27709	7.202	26411	7.196	105	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	51685	9.238	49210	9.235	105	50 - 200	0.003	+/-0.50	
Chrysene-d12	46582	14.212	42994	14.202	108	50 - 200	0.010	+/-0.50	
Perylene-d12	41743	18.117	40520	18.111	103	50 - 200	0.006	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0075

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT8
Calibration: GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0075-ICV1)		(Solid)	Lab File ID: N823020607A.D			Analyzed: 02/06/23 15:15			
Naphthalene-d8	44336	4.9	44336	4.9	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	26127	7.189	26127	7.189	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	47424	9.232	47424	9.232	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	36794	14.202	36794	14.202	100	50 - 200	0.000	+/-0.50	
Perylene-d12	36636	18.107	36636	18.107	100	50 - 200	0.000	+/-0.50	
Blank (BLA0683-BLK1)		(Solid)	Lab File ID: N823020608.D			Analyzed: 02/06/23 15:57			
Naphthalene-d8	48985	4.89	44336	4.9	110	50 - 200	-0.010	+/-0.50	
Acenaphthene-d10	28561	7.189	26127	7.189	109	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	52393	9.229	47424	9.232	110	50 - 200	-0.003	+/-0.50	
Chrysene-d12	40654	14.196	36794	14.202	110	50 - 200	-0.006	+/-0.50	
Perylene-d12	24723	18.104	36636	18.107	67	50 - 200	-0.003	+/-0.50	
LCS (BLA0683-BS1)		(Solid)	Lab File ID: N823020609.D			Analyzed: 02/06/23 16:24			
Naphthalene-d8	50596	4.884	44336	4.9	114	50 - 200	-0.016	+/-0.50	
Acenaphthene-d10	29850	7.183	26127	7.189	114	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	54061	9.222	47424	9.232	114	50 - 200	-0.010	+/-0.50	
Chrysene-d12	41046	14.19	36794	14.202	112	50 - 200	-0.012	+/-0.50	
Perylene-d12	27103	18.098	36636	18.107	74	50 - 200	-0.009	+/-0.50	
LCS Dup (BLA0683-BSD1)		(Solid)	Lab File ID: N823020610.D			Analyzed: 02/06/23 16:51			
Naphthalene-d8	52018	4.887	44336	4.9	117	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	29996	7.183	26127	7.189	115	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	54697	9.223	47424	9.232	115	50 - 200	-0.009	+/-0.50	
Chrysene-d12	41650	14.187	36794	14.202	113	50 - 200	-0.015	+/-0.50	
Perylene-d12	27575	18.098	36636	18.107	75	50 - 200	-0.009	+/-0.50	
Reference (BLA0683-SRM1)		(Solid)	Lab File ID: N823020611.D			Analyzed: 02/06/23 17:18			
Naphthalene-d8	47898	4.884	44336	4.9	108	50 - 200	-0.016	+/-0.50	
Acenaphthene-d10	26592	7.183	26127	7.189	102	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	44776	9.223	47424	9.232	94	50 - 200	-0.009	+/-0.50	
Chrysene-d12	36552	14.19	36794	14.202	99	50 - 200	-0.012	+/-0.50	
Perylene-d12	22526	18.092	36636	18.107	61	50 - 200	-0.015	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0075

Instrument: NT8

Calibration: GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-IT1181 (23A0326-08)		(Solid)	Lab File ID: N823020631.D			Analyzed: 02/07/23 02:16			
Naphthalene-d8	56917	4.884	44336	4.9	128	50 - 200	-0.016	+/-0.50	
Acenaphthene-d10	31966	7.189	26127	7.189	122	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	50110	9.238	47424	9.232	106	50 - 200	0.006	+/-0.50	
Chrysene-d12	22679	14.247	36794	14.202	62	50 - 200	0.045	+/-0.50	
Perylene-d12	20298	18.174	36636	18.107	55	50 - 200	0.067	+/-0.50	
LDW23-IT1127 (23A0326-09)		(Solid)	Lab File ID: N823020632.D			Analyzed: 02/07/23 02:42			
Naphthalene-d8	55762	4.881	44336	4.9	126	50 - 200	-0.019	+/-0.50	
Acenaphthene-d10	33500	7.186	26127	7.189	128	50 - 200	-0.003	+/-0.50	
Phenanthrene-d10	54143	9.235	47424	9.232	114	50 - 200	0.003	+/-0.50	
Chrysene-d12	22621	14.234	36794	14.202	61	50 - 200	0.032	+/-0.50	
Perylene-d12	20226	18.164	36636	18.107	55	50 - 200	0.057	+/-0.50	
Calibration Check (SLB0075-CCV1)		(Water)	Lab File ID: N823020633.D			Analyzed: 02/07/23 03:09			
Naphthalene-d8	52897	4.891	44336	4.9	119	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	31659	7.186	26127	7.189	121	50 - 200	-0.003	+/-0.50	
Phenanthrene-d10	57767	9.235	47424	9.232	122	50 - 200	0.003	+/-0.50	
Chrysene-d12	48067	14.228	36794	14.202	131	50 - 200	0.026	+/-0.50	
Perylene-d12	37211	18.155	36636	18.107	102	50 - 200	0.048	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0143

Instrument: NT10

Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0143-SCV1)		(Solid)	Lab File ID: NT1003012311S.D			Analyzed: 03/01/23 21:46			
1,4-Dichlorobenzene-d4	303734	9.252	320125	9.244	95	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1147551	11.724	1136019	11.724	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	645730	15.314	636993	15.314	101	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1151000	18.399	1093620	18.399	105	50 - 200	0.000	+/-0.50	
Chrysene-d12	1297466	23.421	1000300	23.414	130	50 - 200	0.007	+/-0.50	
Perylene-d12	1394899	26.108	1058448	26.1	132	50 - 200	0.008	+/-0.50	
Initial Cal Blank (SLC0143-ICB1)		(Solid)	Lab File ID: NT1003012312S.D			Analyzed: 03/01/23 22:24			
1,4-Dichlorobenzene-d4	515340	9.251	320125	9.244	161	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1787704	11.723	1136019	11.724	157	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	879316	15.314	636993	15.314	138	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1572306	18.398	1093620	18.399	144	50 - 200	-0.001	+/-0.50	
Chrysene-d12	1486349	23.421	1000300	23.414	149	50 - 200	0.007	+/-0.50	
Perylene-d12	1674195	26.108	1058448	26.1	158	50 - 200	0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0435

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0435-ICV1)		(Solid)	Lab File ID: NT1003052303S.D			Analyzed: 03/05/23 14:40			
1,4-Dichlorobenzene-d4	321376	9.244	321376	9.244	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1132931	11.731	1132931	11.731	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	561597	15.337	561597	15.337	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1068222	18.453	1068222	18.453	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	997572	23.514	997572	23.514	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1245490	26.286	1245490	26.286	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0435-LCV2)		(Solid)	Lab File ID: NT1003052304S.D			Analyzed: 03/05/23 15:18			
1,4-Dichlorobenzene-d4	335082	9.244	321376	9.244	104	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1186054	11.731	1132931	11.731	105	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	567675	15.337	561597	15.337	101	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1059550	18.452	1068222	18.453	99	50 - 200	-0.001	+/-0.50	
Chrysene-d12	958983	23.514	997572	23.514	96	50 - 200	0.000	+/-0.50	
Perylene-d12	1190912	26.278	1245490	26.286	96	50 - 200	-0.008	+/-0.50	
Low Cal Check (SLC0435-LCV1)		(Solid)	Lab File ID: NT1003052305S.D			Analyzed: 03/05/23 15:56			
1,4-Dichlorobenzene-d4	302311	9.244	321376	9.244	94	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1102062	11.731	1132931	11.731	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	539935	15.337	561597	15.337	96	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1024492	18.453	1068222	18.453	96	50 - 200	0.000	+/-0.50	
Chrysene-d12	911208	23.522	997572	23.514	91	50 - 200	0.008	+/-0.50	
Perylene-d12	1065211	26.286	1245490	26.286	86	50 - 200	0.000	+/-0.50	
Blank (BLA0685-BLK2)		(Solid)	Lab File ID: NT1003052307S.D			Analyzed: 03/05/23 17:12			
1,4-Dichlorobenzene-d4	308288	9.244	321376	9.244	96	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1085923	11.731	1132931	11.731	96	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	528064	15.337	561597	15.337	94	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1014390	18.453	1068222	18.453	95	50 - 200	0.000	+/-0.50	
Chrysene-d12	923539	23.522	997572	23.514	93	50 - 200	0.008	+/-0.50	
Perylene-d12	1001440	26.294	1245490	26.286	80	50 - 200	0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0435

Instrument: NT10

Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (BLA0685-BS2)		(Solid)	Lab File ID: NT1003052308S.D			Analyzed: 03/05/23 17:50			
1,4-Dichlorobenzene-d4	335662	9.252	321376	9.244	104	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1201009	11.739	1132931	11.731	106	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	587178	15.345	561597	15.337	105	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1118430	18.46	1068222	18.453	105	50 - 200	0.007	+/-0.50	
Chrysene-d12	1055166	23.53	997572	23.514	106	50 - 200	0.016	+/-0.50	
Perylene-d12	1125544	26.301	1245490	26.286	90	50 - 200	0.015	+/-0.50	
LCS Dup (BLA0685-BSD2)		(Solid)	Lab File ID: NT1003052309S.D			Analyzed: 03/05/23 18:28			
1,4-Dichlorobenzene-d4	373655	9.252	321376	9.244	116	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1328154	11.739	1132931	11.731	117	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	660605	15.345	561597	15.337	118	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1250960	18.453	1068222	18.453	117	50 - 200	0.000	+/-0.50	
Chrysene-d12	1159338	23.514	997572	23.514	116	50 - 200	0.000	+/-0.50	
Perylene-d12	1176555	26.278	1245490	26.286	94	50 - 200	-0.008	+/-0.50	
Reference (BLA0685-SRM2)		(Solid)	Lab File ID: NT1003052312S.D			Analyzed: 03/05/23 20:22			
1,4-Dichlorobenzene-d4	291216	9.252	321376	9.244	91	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1022375	11.739	1132931	11.731	90	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	512455	15.345	561597	15.337	91	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1021943	18.46	1068222	18.453	96	50 - 200	0.007	+/-0.50	
Chrysene-d12	1019134	23.522	997572	23.514	102	50 - 200	0.008	+/-0.50	
Perylene-d12	1141471	26.286	1245490	26.286	92	50 - 200	0.000	+/-0.50	
Calibration Check (SLC0435-CCV1)		(Solid)	Lab File ID: NT1003052315S.D			Analyzed: 03/05/23 22:16			
1,4-Dichlorobenzene-d4	293840	9.252	321376	9.244	91	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1032639	11.731	1132931	11.731	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	502349	15.337	561597	15.337	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	975997	18.453	1068222	18.453	91	50 - 200	0.000	+/-0.50	
Chrysene-d12	978544	23.514	997572	23.514	98	50 - 200	0.000	+/-0.50	
Perylene-d12	1201606	26.27	1245490	26.286	96	50 - 200	-0.016	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0440

Instrument: NT10

Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0440-ICV1)		(Solid)	Lab File ID: NT1003052315SA.D			Analyzed: 03/05/23 22:16			
1,4-Dichlorobenzene-d4	293840	9.252	293840	9.252	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1032639	11.731	1032639	11.731	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	502349	15.337	502349	15.337	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	975997	18.453	975997	18.453	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	978544	23.514	978544	23.514	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1201606	26.27	1201606	26.27	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0440-LCV2)		(Solid)	Lab File ID: NT1003052316S.D			Analyzed: 03/05/23 22:54			
1,4-Dichlorobenzene-d4	343403	9.244	293840	9.252	117	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	1183783	11.731	1032639	11.731	115	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	573890	15.329	502349	15.337	114	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	1096301	18.437	975997	18.453	112	50 - 200	-0.016	+/-0.50	
Chrysene-d12	1039816	23.491	978544	23.514	106	50 - 200	-0.023	+/-0.50	
Perylene-d12	1308865	26.247	1201606	26.27	109	50 - 200	-0.023	+/-0.50	
Low Cal Check (SLC0440-LCV1)		(Solid)	Lab File ID: NT1003052317S.D			Analyzed: 03/05/23 23:32			
1,4-Dichlorobenzene-d4	273861	9.259	293840	9.252	93	50 - 200	0.007	+/-0.50	
Naphthalene-d8	953301	11.746	1032639	11.731	92	50 - 200	0.015	+/-0.50	
Acenaphthene-d10	454624	15.329	502349	15.337	90	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	860369	18.421	975997	18.453	88	50 - 200	-0.032	+/-0.50	
Chrysene-d12	801660	23.436	978544	23.514	82	50 - 200	-0.078	+/-0.50	
Perylene-d12	976489	26.138	1201606	26.27	81	50 - 200	-0.132	+/-0.50	
Low Cal Check (SLC0440-LCV3)		(Solid)	Lab File ID: NT1003052318S.D			Analyzed: 03/06/23 00:09			
1,4-Dichlorobenzene-d4	311802	9.259	293840	9.252	106	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1107108	11.754	1032639	11.731	107	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	553105	15.344	502349	15.337	110	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1073112	18.452	975997	18.453	110	50 - 200	-0.001	+/-0.50	
Chrysene-d12	1015975	23.491	978544	23.514	104	50 - 200	-0.023	+/-0.50	
Perylene-d12	1303152	26.224	1201606	26.27	108	50 - 200	-0.046	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0440

Instrument: NT10

Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1028 (23A0326-01)		(Solid)	Lab File ID: NT1003052323S.D			Analyzed: 03/06/23 03:17			
1,4-Dichlorobenzene-d4	239857	9.259	293840	9.252	82	50 - 200	0.007	+/-0.50	
Naphthalene-d8	850863	11.754	1032639	11.731	82	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	416153	15.352	502349	15.337	83	50 - 200	0.015	+/-0.50	
Phenanthrene-d10	849063	18.46	975997	18.453	87	50 - 200	0.007	+/-0.50	
Chrysene-d12	827784	23.506	978544	23.514	85	50 - 200	-0.008	+/-0.50	
Perylene-d12	975174	26.247	1201606	26.27	81	50 - 200	-0.023	+/-0.50	
LDW23-SC1032 (23A0326-02)		(Solid)	Lab File ID: NT1003052324S.D			Analyzed: 03/06/23 03:55			
1,4-Dichlorobenzene-d4	287793	9.26	293840	9.252	98	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1014116	11.755	1032639	11.731	98	50 - 200	0.024	+/-0.50	
Acenaphthene-d10	497309	15.353	502349	15.337	99	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	999293	18.46	975997	18.453	102	50 - 200	0.007	+/-0.50	
Chrysene-d12	986742	23.507	978544	23.514	101	50 - 200	-0.007	+/-0.50	
Perylene-d12	1120343	26.247	1201606	26.27	93	50 - 200	-0.023	+/-0.50	
Calibration Check (SLC0440-CCV1)		(Solid)	Lab File ID: NT1003052326S.D			Analyzed: 03/06/23 05:10			
1,4-Dichlorobenzene-d4	239436	9.259	293840	9.252	81	50 - 200	0.007	+/-0.50	
Naphthalene-d8	849492	11.754	1032639	11.731	82	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	421435	15.352	502349	15.337	84	50 - 200	0.015	+/-0.50	
Phenanthrene-d10	835585	18.453	975997	18.453	86	50 - 200	0.000	+/-0.50	
Chrysene-d12	874614	23.491	978544	23.514	89	50 - 200	-0.023	+/-0.50	
Perylene-d12	1035818	26.224	1201606	26.27	86	50 - 200	-0.046	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0447

Instrument: NT10

Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0447-ICV1)		(Solid)	Lab File ID: NT1003052326SB.D			Analyzed: 03/06/23 05:10			
1,4-Dichlorobenzene-d4	239436	9.259	239436	9.259	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	849492	11.754	849492	11.754	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	421435	15.352	421435	15.352	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	835585	18.453	835585	18.453	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	874614	23.491	874614	23.491	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1035818	26.224	1035818	26.224	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0447-LCV1)		(Solid)	Lab File ID: NT1003052328S.D			Analyzed: 03/06/23 06:25			
1,4-Dichlorobenzene-d4	258897	9.259	239436	9.259	108	50 - 200	0.000	+/-0.50	
Naphthalene-d8	888437	11.754	849492	11.754	105	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	423269	15.352	421435	15.352	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	826435	18.453	835585	18.453	99	50 - 200	0.000	+/-0.50	
Chrysene-d12	821727	23.491	874614	23.491	94	50 - 200	0.000	+/-0.50	
Perylene-d12	985206	26.224	1035818	26.224	95	50 - 200	0.000	+/-0.50	
LDW23-SC1170A (23A0326-04)		(Solid)	Lab File ID: NT1003052330S.D			Analyzed: 03/06/23 07:41			
1,4-Dichlorobenzene-d4	246883	9.267	239436	9.259	103	50 - 200	0.008	+/-0.50	
Naphthalene-d8	879699	11.754	849492	11.754	104	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	440303	15.352	421435	15.352	104	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	858013	18.453	835585	18.453	103	50 - 200	0.000	+/-0.50	
Chrysene-d12	828700	23.499	874614	23.491	95	50 - 200	0.008	+/-0.50	
Perylene-d12	1038678	26.239	1035818	26.224	100	50 - 200	0.015	+/-0.50	
LDW23-SC1169C (23A0326-05)		(Solid)	Lab File ID: NT1003052331S.D			Analyzed: 03/06/23 08:18			
1,4-Dichlorobenzene-d4	253406	9.267	239436	9.259	106	50 - 200	0.008	+/-0.50	
Naphthalene-d8	884415	11.754	849492	11.754	104	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	448606	15.353	421435	15.352	106	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	879449	18.453	835585	18.453	105	50 - 200	0.000	+/-0.50	
Chrysene-d12	886830	23.506	874614	23.491	101	50 - 200	0.015	+/-0.50	
Perylene-d12	972028	26.255	1035818	26.224	94	50 - 200	0.031	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
Client: Anchor OEA, LLC
Sequence: SLC0447

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: NT10
Calibration: GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1161 (23A0326-10)		(Solid)	Lab File ID: NT1003052332S.D			Analyzed: 03/06/23 08:56			
1,4-Dichlorobenzene-d4	220135	9.267	239436	9.259	92	50 - 200	0.008	+/-0.50	
Naphthalene-d8	781530	11.755	849492	11.754	92	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	384624	15.353	421435	15.352	91	50 - 200	0.001	+/-0.50	
Phenanthrene-d10	777427	18.453	835585	18.453	93	50 - 200	0.000	+/-0.50	
Chrysene-d12	764063	23.507	874614	23.491	87	50 - 200	0.016	+/-0.50	
Perylene-d12	865273	26.24	1035818	26.224	84	50 - 200	0.016	+/-0.50	
LDW23-SC1155 (23A0326-11)		(Solid)	Lab File ID: NT1003052333S.D			Analyzed: 03/06/23 09:34			
1,4-Dichlorobenzene-d4	230177	9.267	239436	9.259	96	50 - 200	0.008	+/-0.50	
Naphthalene-d8	824331	11.754	849492	11.754	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	409943	15.352	421435	15.352	97	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	832581	18.453	835585	18.453	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	797791	23.506	874614	23.491	91	50 - 200	0.015	+/-0.50	
Perylene-d12	888447	26.247	1035818	26.224	86	50 - 200	0.023	+/-0.50	
LDW23-SC1162B (23A0326-12)		(Solid)	Lab File ID: NT1003052334S.D			Analyzed: 03/06/23 10:11			
1,4-Dichlorobenzene-d4	205720	9.267	239436	9.259	86	50 - 200	0.008	+/-0.50	
Naphthalene-d8	733196	11.754	849492	11.754	86	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	363700	15.352	421435	15.352	86	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	731713	18.453	835585	18.453	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	685514	23.506	874614	23.491	78	50 - 200	0.015	+/-0.50	
Perylene-d12	788109	26.247	1035818	26.224	76	50 - 200	0.023	+/-0.50	
Calibration Check (SLC0447-CCV1)		(Solid)	Lab File ID: NT1003052336S.D			Analyzed: 03/06/23 11:27			
1,4-Dichlorobenzene-d4	219946	9.267	239436	9.259	92	50 - 200	0.008	+/-0.50	
Naphthalene-d8	766737	11.754	849492	11.754	90	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	381140	15.352	421435	15.352	90	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	765962	18.453	835585	18.453	92	50 - 200	0.000	+/-0.50	
Chrysene-d12	774496	23.491	874614	23.491	89	50 - 200	0.000	+/-0.50	
Perylene-d12	914722	26.232	1035818	26.224	88	50 - 200	0.008	+/-0.50	



HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 03:17	32	40	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 03:55	32	40	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 07:41	32	40	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	02/02/23 13:06	16	365	03/06/23 08:18	32	40	
LDW23-IT1181 23A0326-08	01/17/23 12:31	01/17/23 16:46	02/01/23 11:29	14	365	02/07/23 02:16	6	40	
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	02/01/23 11:29	14	365	02/07/23 02:42	6	40	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	02/02/23 13:06	15	365	03/06/23 08:56	32	40	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	02/02/23 13:06	15	365	03/06/23 09:34	32	40	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	02/02/23 13:06	15	365	03/06/23 10:11	32	40	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: NT10

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg



**METHOD DETECTION
AND REPORTING LIMITS**

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: NT8

Analyte	MDL	RL	Units
Benzo(a)anthracene	0.82	5.00	ug/kg
Chrysene	1.05	5.00	ug/kg
Benzo(b)fluoranthene	1.37	5.00	ug/kg
Benzo(k)fluoranthene	0.76	5.00	ug/kg
Benzo(a)pyrene	0.61	5.00	ug/kg
Indeno(1,2,3-cd)pyrene	1.05	5.00	ug/kg
Dibenzo(a,h)anthracene	0.89	5.00	ug/kg

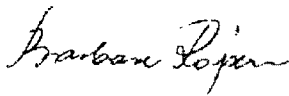
Certificate of Analysis

I 8227

SIGMA-ALDRICH

Product Name Pentachlorophenol,
97%
Product Number P2604
Product Brand ALDRICH
CAS Number 87-86-5
Molecular Formula C₆Cl₅OH
Molecular Weight 266.34

TEST	SPECIFICATION	LOT 07119HO RESULTS
APPEARANCE	WHITE TO OFF-WHITE OR LIGHT BLUE POWDER	OFF-WHITE POWDER
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD
TITRATION	97.5% - 102.5% (WITH AGNO ₃ AFTER OXYGEN	100.5 % (WITH AGNO ₃ AFTER OXYGEN COMBUSTION)
GAS LIQUID CHROMATOGRAPHY	97.5% (MINIMUM)	99.9 %
SOLUBILITY		100 MG/ML, 95% ETOH: VERY HAZY, FAINT YELLOW SOLUTION
QUALITY CONTROL		JUNE 2001
ACCEPTANCE DATE		



Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: 0-916

Lot #: 59-57A

Purity: 99%

Analyst: VFB

Element: B000954



Description: SVOC 4,4 DDT Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 23-Sep-13
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 11:46 by JZ
Vendor: Chem Service Lot #: 198-128A
Vendor Catalog #:

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AS



Description: SVOC alpha-Terpineol Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 12:13 by JZ
Vendor: ACROS Organics Lot #: AD16481201
Vendor Catalog #:

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: AD6481201

Purity: 98%

Analyst: 12



Description: SVOA Dibutyl Phenyl phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 15:45 by JZ
Vendor: Monsanto Lot #: N/A
Vendor Catalog #:

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98.9%

Analyst: AD



Description: SVOC Triphenyl Phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 15:59 by JZ
Vendor: Aldrich Lot #: 04902CM
Vendor Catalog #:

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Triphenyl phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04902CM

Purity: 99%

Analyst: [Signature]



Description: SVOC Butylated Hydroxytoluene Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 16:18 by JZ
Vendor: SIGMA Lot #: 39F-0197
Vendor Catalog #:

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Bulkyated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AB



Description: SVOC Butyl Diphenyl Phosphate Expires: 31-Dec-29
Standard Type: Calibration Stan Prepared: 31-Dec-12
Solvent: NA Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 23-Sep-13 17:02 by JZ
Vendor: Monsanto Lot #: N/A
Vendor Catalog #:

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 99%

Analyst: [Signature]



Description: SVOC 2,4-Dinitrophenol
 Standard Type: Calibration Stan
 Solvent: NA
 Final Volume (mls): 1
 Vials: 1
 Vendor: SIGMA
 Vendor Catalog #:

Expires: 31-Dec-29
 Prepared: 25-Sep-13
 Prepared By: Jianqing Zhou
 Department: Organics
 Last Edit: 25-Sep-13 13:45 by JZ
 Lot #: 65H5021

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941

SVOA 2,4-Dinitrophenol
 Expires 12/31/2029
 Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: 644 5021

Purity: 90.29%

Analyst: AB



Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945

SVOC Benzoic Acid

Expires 12/31/2029

Prepared By Jianqing Zhou 12/31/2012

Reviewed By

Date



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0224339

Purity: 98%

Analyst: AB



Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948

SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: RB



Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL



B002054

SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 62-53

Purity: 99%

Analyst: AB



Description: SVOA Benzidine Expires: 31-Dec-29
Standard Type: Analyte Spike Prepared: 15-Oct-13
Solvent: N/A Prepared By: Jianqing Zhou
Final Volume (mls): 1 Department: Organics
Vials: 1 Last Edit: 15-Oct-13 12:07 by JZ
Vendor: SIGMA Lot #: 18C0024
Vendor Catalog #:

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL



Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 95%

Analyst: B.



CERTIFICATE OF ANALYSIS

Product Name: DIBENZ[A,H]ANTHRACENE
(Isotopic Label & Enrichment Specification) (D14, 97%)

Lot Number: PR-14764/09163DA2

Catalog Number: DLM-677-0

I2955

Product Information

Chemical Purity Specification: $\geq 98\%$
Labeled CAS Number: NA
Unlabeled CAS Number: 53-70-3
Molecular Weight: 292.5
Chemical Formula: C22D14
Storage: Store at room temperature away from light and moisture.
Stability: Stable if stored under recommended conditions.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible.

Approved by: Deborah E. Costa

Deborah E. Costa, Quality Assurance

Quality Control Tests and Results

GC/MS for Chemical Purity	99.3%
GC/MS for Isotopic Enrichment	97.4%
Melting Point Range Determination	263-265°C
¹ H NMR for Chemical Purity	Pass

E006466

SVOA-d14-Dibenz(a,h)anthracene-NEAT

Solvent / Lot: NA

Prep: 11/9/2016 by VS

Exp: 5/8/2030

Location:



Certificate of Analysis

Product Name: 1,2,4,5-Tetrachlorobenzene
Product Description: 98%
Product Brand: Sigma-Aldrich
Product Number: 131857
Molecular Weight: 215.89
CAS Number: 95-94-3

TEST

APPEARANCE
INFRARED SPECTRUM

GAS LIQUID

QUALITY CONTROL

SPECIFICATION

WHITE POWDER, CHIPS OR CRYSTALS
CONFORMS TO STRUCTURE.

97.5% (MINIMUM)

LOT 19309JR RESULTS

WHITE CHIPS
CONFORMS TO STRUCTURE AND
STANDARD AS
ILLUSTRATED ON PAGE 1011C OF EDITION
I,
VOLUME 1 OF "THE ALDRICH LIBRARY OF
FT-IR
SPECTRA".
99.9 %
JULY 1997



Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

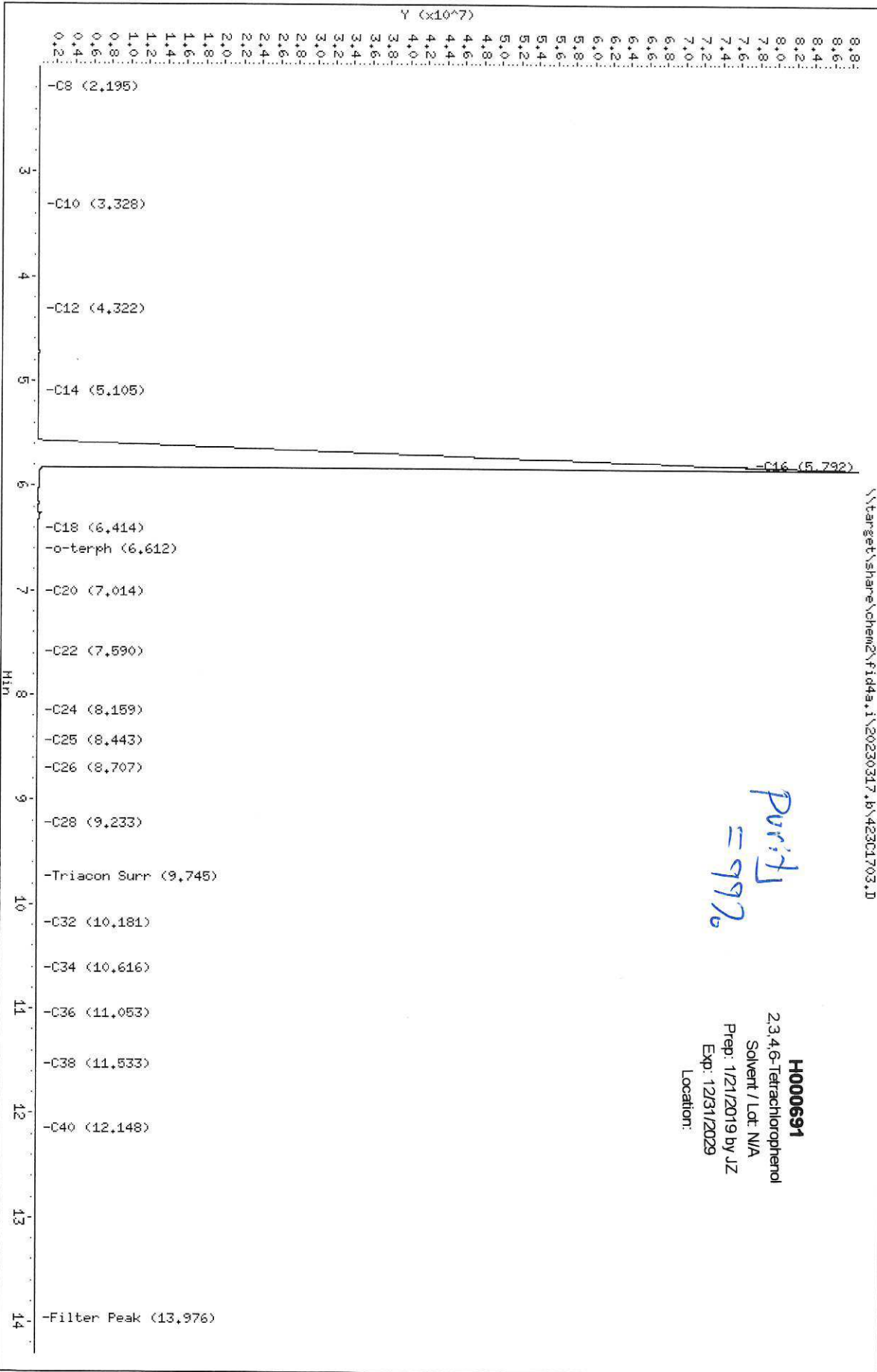
F009172

SVOC 1,2,4,5-Tetrachlorobenzene
Expires 12/31/2079
Prepared By Joshua Rains 10/6/2017

Data File: \\target\share\chem2\fid4a,1\20230317,1\42301703.D
Date: 17-MAR-2023 10:46
Client ID:
Sample Info: K007226

Column phase: RTX-1

Instrument: fid4a.i
Operator: AA
Column diameter: 0.25



Purity
= 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

H000691

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
 Lab Smp Id: K007226
 Inj Date : 17-MAR-2023 10:46
 Operator : AA Inst ID: fid4a.i
 Smp Info : K007226
 Misc Info :
 Comment :
 Method : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
 Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
 Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: Falcon+ Compound Sublist: tph.sub
 Target Version: 4.14
 Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
 Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	\$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	\$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
===== 677340272	===== 268782821	===== 100.000			

Total unknown % area = 25.478

CERTIFICATE OF ANALYSIS

2-Chloronaphthalene

CATALOG NUMBER N-10323-100MG
LOT NUMBER 10816400
DATE CERTIFIED 05/22/18
EXPIRATION DATE 05/31/24
CAS NUMBER 91-58-7
MOLECULAR FORMULA C₁₀H₇Cl
MOLECULAR WEIGHT 162.62
STORAGE Store at room temperature (20 - 25 °C).
HANDLING See Safety Data Sheet
INTENDED USE For laboratory use only.

I010152

2-Chloronaphthalene NEAT
Expires 12/31/2079
Prepared By Joshua Rains 10/29/2020

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

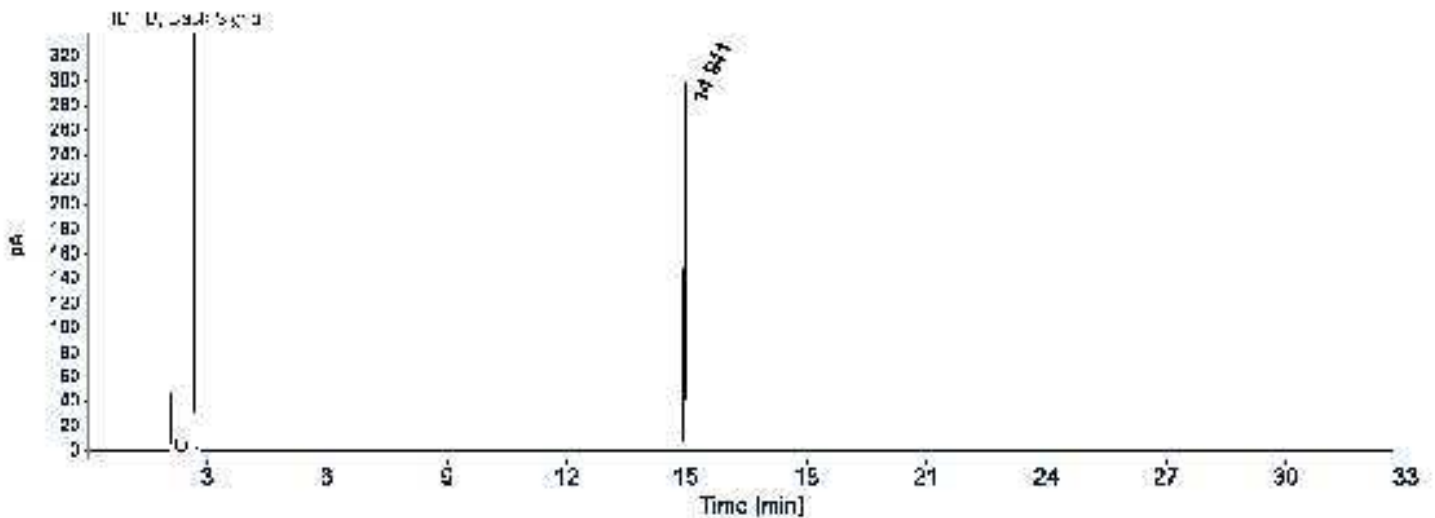
Mary Beth O'Donnell
CSM/TC

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\Chem32\11\Data\2018 Data\0518\2-Chloronaphthalene.D
Sample name: 2-Chloronaphthalene

Instrument: GC3 Location: 209
Injection date: 5/22/2018 1:12:52 PM Injection volume: 1.0uL
Acq. method: REAR_SCREEN.M
Col Type: pn# 7HG-G008-17-C Diameter 250.000 Length 30.000



Signal: FID1 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
14.941	BB	0.0410	808.8124	308.5675	100.0000
Sum			808.8124		

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005199

SVOA-ABN BASE STOCK-200-800ug/ml
 Expires 5/31/2023
 Prepared By Jiangqing Zhou 5/18/2021

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

12-May-2021



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

J005200
 SVOA-ABN ACID STOCK-200-800ug/ml
 Solvent / Lot: DCM
 Prep: 5/18/2021 by JZ
 Exp: 5/31/2023
 Location:

 5/18/21

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.





CERTIFIED WEIGHT REPORT

Part Number: 70476
Lot Number: 092220
Description: Benzo(j)fluoranthene

Solvent(s): Methylene chloride
Lot# 104929

Expiration Date: 092225
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

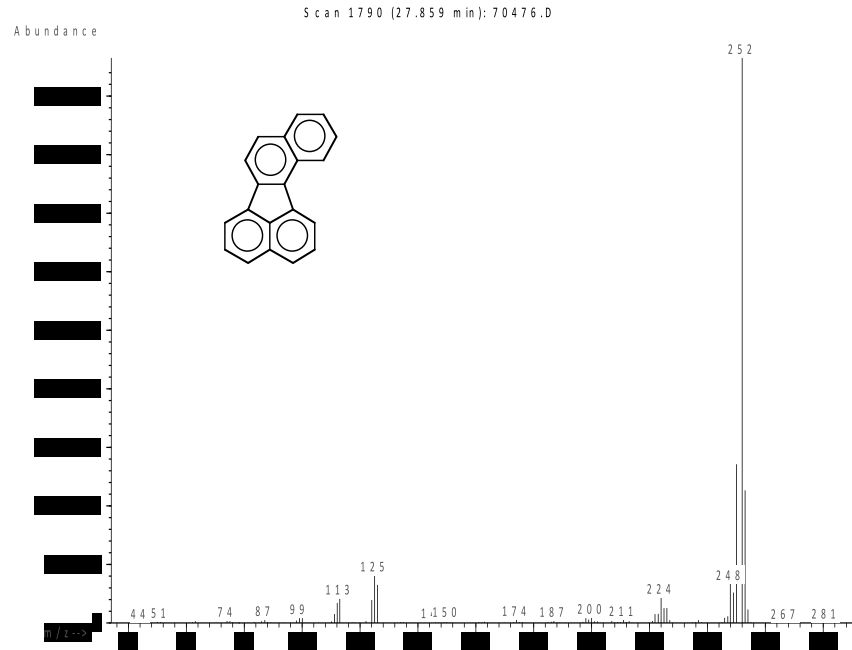
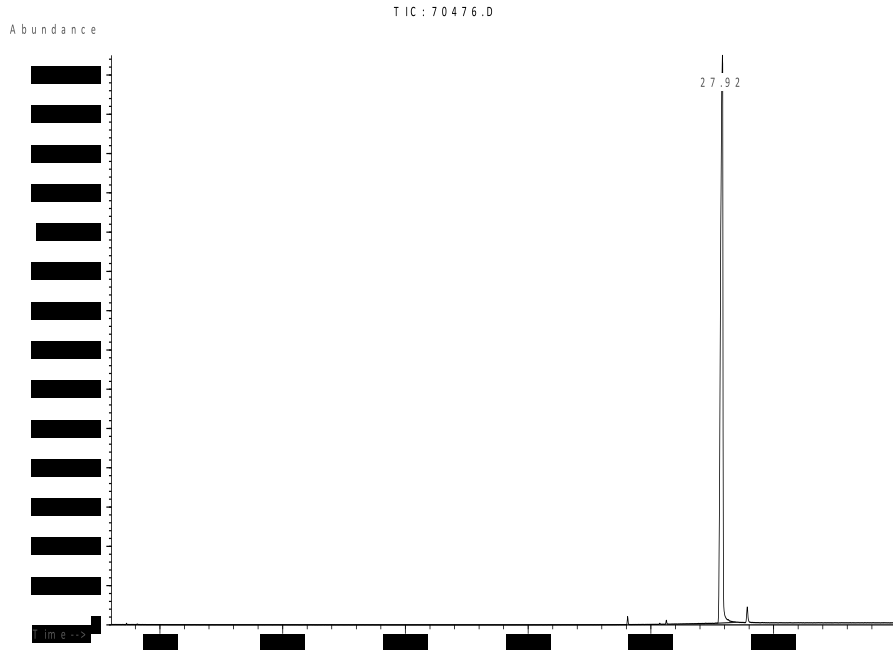
Weight(s) shown below were combined and diluted to (mL): 25.0
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

		092220
Formulated By:	Benson Chan	DATE
		092220
Reviewed By:	Pedro L. Rentas	DATE

SDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Benzo(j)fluoranthene	476	3-CSZ-153-20	1000	98.1	0.2	0.02547	0.02552	1001.8	5.7	205-82-3	0.2mg/m3	N/A

Method GC8MSD1M: Column:SBB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 290°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Run 31, "P70476 L092220 [1000µg/mL in MeCl2]"

Run Length: 40.00 min, 23999 points at 10 points/second.

Created: Thu, Sep 24, 2020 at 2:33:43 AM.

Sampled: Sequence "092120-GC9M2", Method "GC9-M2".

Analyzed using Method "GC9-M2".

Comments

GC9-M2 Analysis by Melissa Stonier

Column ID SPB-5 30 meter x 0.53mm x 1.5µm Film Thickness.

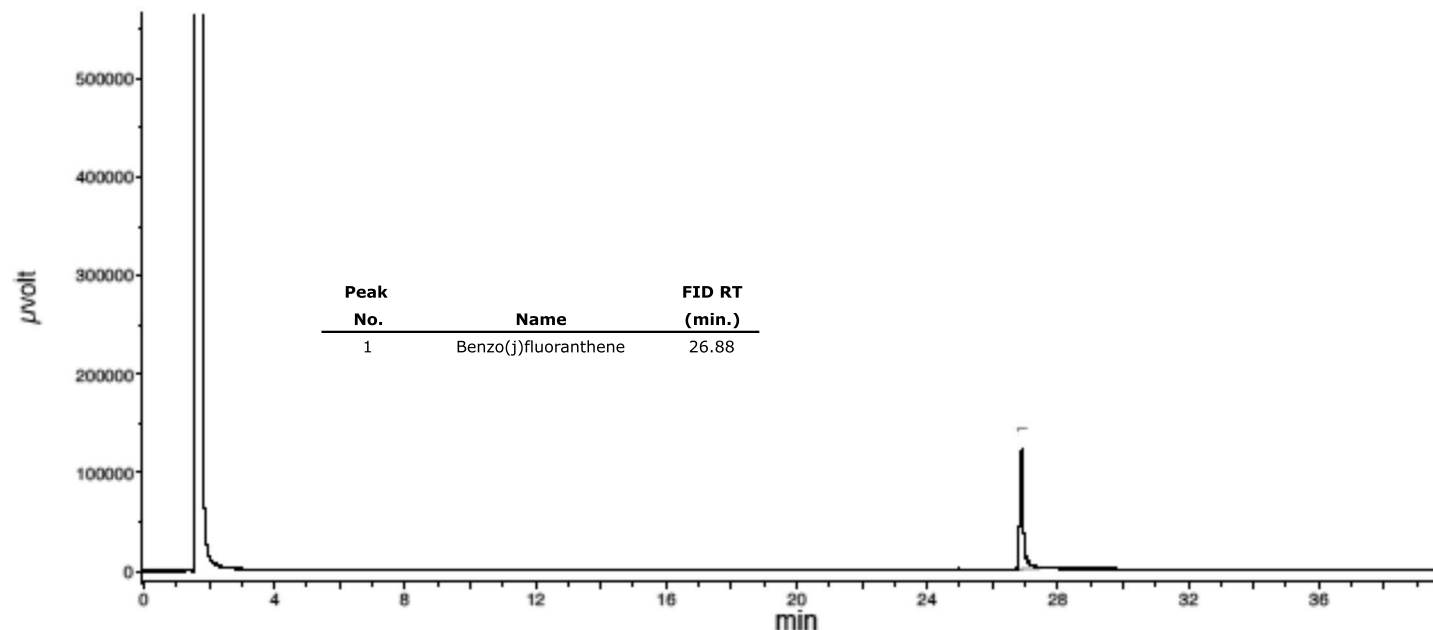
Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.

Hydrogen (detector) = 30 mL, Air (detector) = 360 mL Oven Temp 1 = 50°C (1 min).

Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.

FID Temp = 300°C, FID Signal = eDaq Channel 1.

Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 3



Certificate of Analysis

J008074

 SVOA PAH STD 2000ug/ml
 Expires 6/30/2023
 Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Issue Date: 11-Jun-2020

Lot Number: 0006540449

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

 ISO 17034 Cert No.
 AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/

 ISO 17025 Cert
 No. AT-1937

Certificate of Analysis

Product Number: US-106N-1

Lot Number: 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:



Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 2 of 2

www.agilent.com/quality/



ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL16062

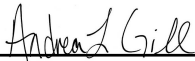
Description: Benzidines Standard

Certification Date: November 19, 2020

Storage: 4 °C

Expiration Date: November 30, 2030

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310

Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Type in Product Names, Product Numbers, or CAS Numbers to see suggestions.



Certificate of Analysis

► Sigma-Aldrich

Product Name: 2,4,6-Tribromophenol
 Product Description: 99%
 Product Brand: Sigma-Aldrich
 Product Number: 137715
 Molecular Weight: 330.80
 Molecular Formula: $\text{Br}_3\text{C}_6\text{H}_2\text{OH}$
 CAS Number: 118-79-6

TEST	SPECIFICATION	LOT 05110PD RESULTS
APPEARANCE:	WHITE TO OFF-WHITE TO PINK FLAKES, CHUNKS,	PINK BEADS
INFRARED SPECTRUM:		CONFORMS TO STRUCTURE.
GAS LIQUID:	98.5% (MINIMUM)	99.9%
QUALITY CONTROL:		NOVEMBER 2005



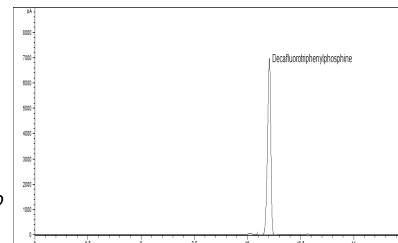
Barbara Rajzer, Supervisor
 Quality Control
 Milwaukee, Wisconsin USA

J010541
 SVOA-Tribromophenol-NEAT
 Solvent / Lot: 05110PD
 Prep: 10/1/2021 by VS
 Exp: 3/30/2040
 Location: voa freezer

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness

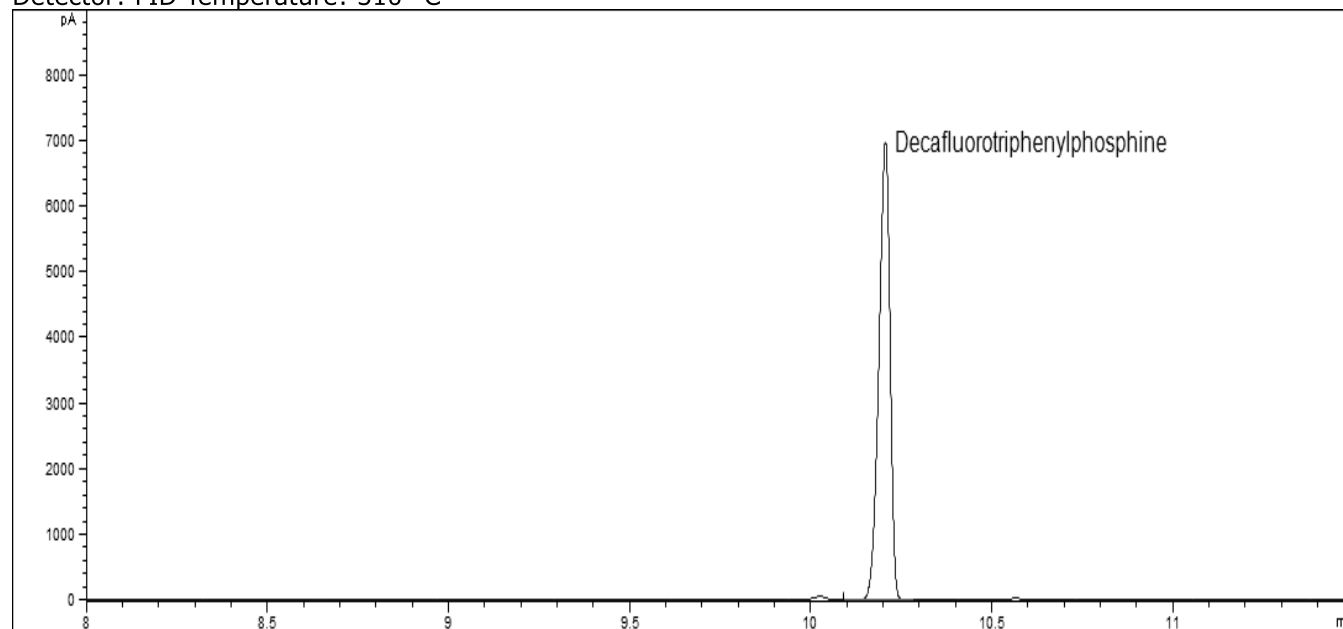
Carrier Gas: H₂ Flow Rate: 4.3 mL/min

Inlet Temperature: 250 °C Injection Volume: 1 µL

Injection Mode: 25:1

Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)

Detector: FID Temperature: 310 °C



Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL16693

Description: Benzoic Acid

Certification Date: May 6, 2021

Storage: 4 °C

Expiration Date: April 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



A Phenomenex
Company

Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenex
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443

Lot Number: CL17696

Description: Aniline

Certification Date: December 14, 2021

Storage: 4 °C

Expiration Date: December 31, 2029

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty In Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	Units	Certified ^{1,4} Value
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values



Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	Units	Suggested Acceptance Windows	Standard Deviation
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4°C.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4°C. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4°C.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

*Certified
Reference
Material*

Description

Product ID CRM143-50G
Lot LRAC8918
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.



SIGMA-ALDRICH®

2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

1 Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH ISO/IEC 17025:2017 (ANAB Cert AT-1467) and ISO 17034:2016 (ANAB Cert AR-1470).



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certification Date January 05, 2021
Version 0-152021





CERTIFIED WEIGHT REPORT

Part Number: 93462
Lot Number: 081021
Description: PAH Standard
30 components
Expiration Date: 081026
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s): Methylene chloride
Lot# 105345

Volume(s) shown below were combined and diluted to (mL): 20.0
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.001

K-3587

Formulated By:	<i>Prashant Chauhan</i>	081021
Reviewed By:	<i>Pedro L. Remias</i>	081021
Prashant Chauhan		DATE
Pedro L. Remias		DATE

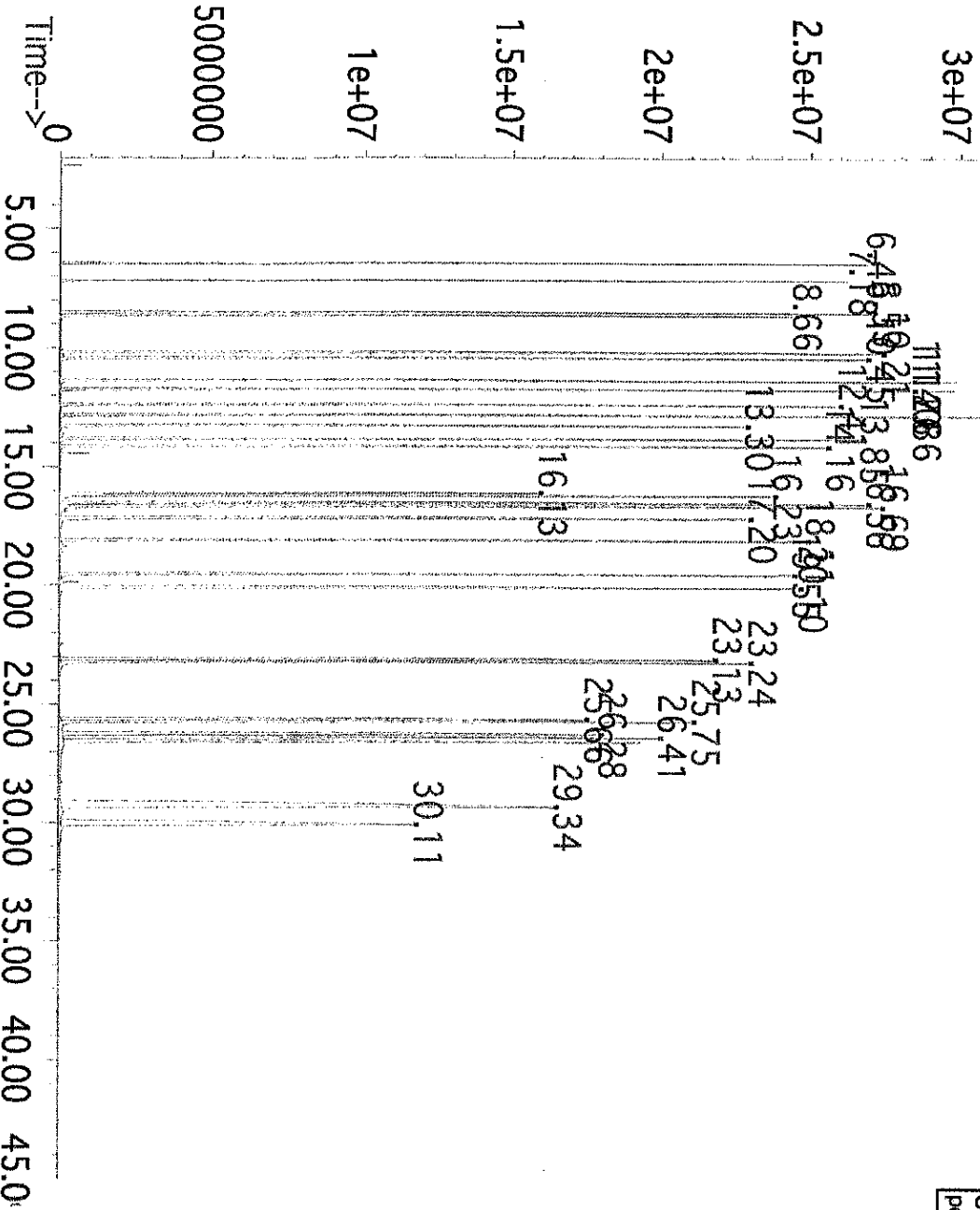
Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. Acenaphthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	83-32-9	N/A	ip-rat 600mg/kg
2. Acenaphthylene	10007	042420	0.50	10.00	0.042	2000.2	999.9	9.4	208-96-8	N/A	N/A
3. Anthracene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.3	120-12-7	0.2mg/m3 (8H)	ip-rms 430mg/kg
4. Benzo(a)anthracene	10007	042420	0.50	10.00	0.042	2001.3	1000.4	9.4	56-55-3	N/A	N/A
5. Benzo(a)pyrene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6. Benzo(b)fluoranthene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	205-99-2	N/A	N/A
7. Benzo(k)fluoranthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	207-08-9	N/A	N/A
8. Benzo(g,h,i)perylene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	191-24-2	N/A	N/A
9. Carbazole	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	86-74-8	N/A	ip-rms 200mg/kg
10. Chrysene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	218-01-9	0.2mg/m3	N/A
11. Dibenzo(a,h)anthracene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	53-70-3	0.2mg/m3	N/A
12. Fluoranthene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	206-44-0	N/A	ip-rat 2000mg/kg
13. Fluorene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	86-73-7	N/A	ip-rms 2 g/kg
14. Indeno(1,2,3-cd)pyrene	10007	042420	0.50	10.00	0.042	2000.1	999.8	9.3	193-39-5	N/A	N/A
15. Naphthalene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	91-20-3	10 ppm (50mg/m3/8H)	or-rat 480mg/kg
16. Phenanthrene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	85-01-8	0.2mg/m3/8H	or-rms 700mg/kg
17. Pyrene	10007	042420	0.50	10.00	0.042	2001.0	1000.3	9.4	129-00-0	0.2mg/m3/8H	or-rat 2700mg/kg
18. Benzo(e)pyrene	94851	081021	0.50	10.00	0.042	2002.1	1000.8	9.4	192-97-2	N/A	N/A
19. Biphenyl	94851	081021	0.50	10.00	0.042	2001.5	1000.5	9.4	92-52-4	0.2 ppm(1mg/m3/8H)	or-rat 2400mg/kg
20. Decalin (49% cis, 51% trans)	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	91-17-8	N/A	N/A
21. Dibenzofuran	94851	081021	0.50	10.00	0.042	2002.3	1000.9	9.4	132-64-9	N/A	N/A
22. Dibenzothiophene	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	132-65-0	N/A	or-rms 470 mg/kg
23. 2,6-Dimethylnaphthalene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	581-42-0	N/A	N/A
24. 1-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2002.2	1000.9	9.4	90-12-0	N/A	N/A
25. 2-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2000.6	1000.1	9.4	91-57-6	N/A	or-rat 1840mg/kg
26. 1-Methylphenanthrene	94851	081021	0.50	10.00	0.042	2002.3	1000.9	9.4	832-69-9	N/A	or-rat 1630mg/kg
27. Pentachlorophenol	94851	081021	0.50	10.00	0.042	3961.5	1980.3	18.6	87-86-5	0.5mg/m3/8H (skin)	or-rat 27mg/kg
28. Perylene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	198-55-0	N/A	N/A
29. Thianaphthene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.4	95-15-8	N/A	N/A
30. 2,3,5-Trimethylnaphthalene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.5	2245-38-7	N/A	N/A

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
 * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
 * All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
 * Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Abundance

TIC: 93462.D



Method GCxMSD-2L0ng: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1 min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.

Retention Time (min.)	Compound Name
6.46	Decahydronaphthalene (Decalin) (isomer)
7.18	Decahydronaphthalene (Decalin) (isomer)
8.53	Naphthalene
8.66	Thianaphthene
10.21	2-Methylnaphthalene
10.45	1-Methylnaphthalene
11.4	Biphenyl
11.76	2,6-Dimethylnaphthalene
12.41	Acenaphthylene
12.86	Acenaphthene
13.3	Dibenzofuran
13.85	2,3,5-Trimethylnaphthalene
14.16	Fluorene
16.13	Pentachlorophenol
16.23	Dibenzothiophene
16.56	Phenanthrene
16.69	Anthracene
17.2	Carbazole
18.11	1-Methylphenanthrene
19.55	Fluoranthene
20.1	Pyrene
23.13	Benzo(a)anthracene
23.24	Chrysene
25.66	Benzo(b)fluoranthene
25.75	Benzo(k)fluoranthene
26.28	Perylene
26.41	Benzo(a)pyrene
26.61	Benzo(e)pyrene
29.34	Indeno(1,2,3-cd)pyrene
29.34	Dibenzo(a,h)anthracene
30.11	Benzof(g,h,i)perylene

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291

Lot Number: CL11000

Description: GC/MS Tuning Mix

Certification Date: May 9, 2014

Storage: 4 °C

Expiration Date: December 31, 2023

Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Revision Date: August 5, 2015

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891

GC/MS Tune solution-1000ug/ml

Solvent / Lot: CL11000

Prep: 4/22/2022 by VS

Exp: 12/31/2023

Location:



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL11110612_us



Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1

Lot Issue Date: 25-May-2021

Lot Number: 0006609664

Expiration Date: 30-Jun-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

[Handwritten signature]
5/11/22

K004539

toxic sub mix#1

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 6/30/2024

Location:



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

ISO 17034



Agilent

Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard

Lot Number: 0006648297

Product Number: US-107N-1

Lot Issue Date: 17-Nov-2021

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
4-chloro-3-methylphenol	2006	± 10 µg/mL		000059-50-7	RM01885
2-chlorophenol	2007	± 10 µg/mL		000095-57-8	RM01871
2,4-dichlorophenol	2005	± 10 µg/mL		000120-83-2	RM13878
2,4-dimethylphenol	2006	± 10 µg/mL		000105-67-9	RM13009
2,4-dinitrophenol	2006	± 10 µg/mL		000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005	± 10 µg/mL		000534-52-1	RM02292
2-nitrophenol	2007	± 10 µg/mL		000088-75-5	RM13445
4-nitrophenol	2006	± 10 µg/mL		000100-02-7	RM03752
pentachlorophenol	2006	± 10 µg/mL		000087-86-5	RM02474
phenol	2006	± 10 µg/mL		000108-95-2	RM11471
2,4,6-trichlorophenol	2006	± 10 µg/mL		000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Page: 1 of 2

CSD-QA-015.1

K004540

phenols mix

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 12/31/2024

Location:



Reference Material Certificate

Product Name: PAH Standard

Lot Number: 0006627349

Product Number: US-106N-1

Lot Issue Date: 17-Sep-2021

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
acenaphthene	2007	± 10 µg/mL		000083-32-9	RM10879
acenaphthylene	2004	± 10 µg/mL		000208-96-8	RM10891
anthracene	2006	± 10 µg/mL		000120-12-7	RM14212
benz[a]anthracene	2006	± 10 µg/mL		000056-55-3	RM16072
benzo[b]fluoranthene	2006	± 10 µg/mL		000205-99-2	RM14571
benzo[k]fluoranthene	2006	± 10 µg/mL		000207-08-9	RM18376
benzo[ghi]perylene	2006	± 10 µg/mL		000191-24-2	RM15761
benzo[a]pyrene	2006	± 10 µg/mL		000050-32-8	RM17573
chrysene	2007	± 10 µg/mL		000218-01-9	RM13771
dibenz[a,h]anthracene	2006	± 10 µg/mL		000053-70-3	RM06786
fluoranthene	2006	± 10 µg/mL		000206-44-0	RM12277
fluorene	2006	± 10 µg/mL		000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006	± 10 µg/mL		000193-39-5	RM14192
naphthalene	2007	± 10 µg/mL		000091-20-3	RM10445
phenanthrene	2005	± 10 µg/mL		000085-01-8	RM10495
pyrene	2005	± 10 µg/mL		000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE

Prep: 5/11/2022 by JZ

Exp: 10/31/2024

Location: Fridge 19

Page: 1 of 2

CSD-QA-015.1



Reference Materials Producer
Cert #2495.01



Certificate of Analysis



Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number:	ECS-A-030	Lot No.	AA210126005
Description:	Base/Neutrals Mix 1	Manufactured Date:	1-26-2021
Matrix:	Methylene Chloride	Expiration Date:	1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Mave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25 µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$ where k=2 is the coverage factor at the 95% confidence level
- $u_c =$ combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributed By SPEX CertiPrep

SPEX CertiPrep 

Your Science is Our Passion.®

203 Norcross Ave. Metuchen, NJ 08840

www.spexcertiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647





Certificate of Analysis

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This SPEXOrganics® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

<u>Compound</u>	<u>CAS #</u>	<u>Labeled</u>	<u>Purity</u>	<u>Certified†</u>	<u>Uncertainty</u>
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Lot No. AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Moore

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005
Description: Base/Neutrals Mix 1
Matrix: Methylene Chloride **Manufactured Date:** 1-26-2021
Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25 µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i , where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

Distributed By SPEX CertiPrep

SPEX CertiPrep 

Your Science is Our Passion.®

203 Norcross Ave. Metuchen NJ 08840

www.spexcertiprep.com • E-mail: crmsales@spexcsp.com

Phone: 1-732-549-7144 • Fax 1-732-603-9647





Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1

Lot Issue Date: 19-Jul-2021

Lot Number: 0006624769

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543

1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

[Handwritten signature]
5/11/22

Sample lot approver:

[Handwritten signature]
Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1

Lot Issue Date: 02-Jul-2021

Lot Number: 0006620643

Expiration Date: 31-Jul-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544

toxic sub mix#2

Solvent / Lot: methylene chloride

Prep: 5/11/2022 by JZ

Exp: 7/31/2023

Location:

JZ 05/11/22



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243
Description : CLP 04.1 BNA Surrogate Mix
CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2025 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

Handwritten signature and date: 05/11/22

K004545
 CLP 04.1 BNA SURR MIX
 Solvent / Lot: AO175316
 Prep: 5/11/2022 by JZ
 Exp: 10/20/2025
 Location:

Elution Order	Compound	Gr (weight)					
1	2-Fluorophenol CAS # 367-12-4 (Lot STBJ2508) Purity 99%	1,50					
			+/-	53.3632	µg/mL		Stressed
2	Phenol-d6 CAS # 13127-88-3 (Lot PR-31262) Purity 99%	1,506.0	µg/mL				
			+/-	8.9452	µg/mL		Gravimetric
			+/-	43.9882	µg/mL		Unstressed
			+/-	53.3632	µg/mL		Stressed
3	2-Chlorophenol-d4 CAS # 93951-73-6 (Lot PR-30568) Purity 99%	1,510.0	µg/mL				
			+/-	8.9689	µg/mL		Gravimetric
			+/-	44.1050	µg/mL		Unstressed
			+/-	53.5049	µg/mL		Stressed
4	1,2-Dichlorobenzene-d4 CAS # 2199-69-1 (Lot PR-32542/022621DB1) Purity 99%	1,004.0	µg/mL				
			+/-	5.9635	µg/mL		Gravimetric
			+/-	29.3255	µg/mL		Unstressed
			+/-	35.5754	µg/mL		Stressed
5	Nitrobenzene-d5 CAS # 4165-60-0 (Lot PR-29940A) Purity 99%	1,008.0	µg/mL				
			+/-	5.9872	µg/mL		Gravimetric
			+/-	29.4423	µg/mL		Unstressed
			+/-	35.7172	µg/mL		Stressed
6	2-Fluorobiphenyl CAS # 321-60-8 (Lot 19169) Purity 99%	1,006.0	µg/mL				
			+/-	5.9753	µg/mL		Gravimetric
			+/-	29.3839	µg/mL		Unstressed
			+/-	35.6463	µg/mL		Stressed
7	2,4,6-Tribromophenol CAS # 118-79-6 (Lot MKCJ7664) Purity 99%	1,506.0	µg/mL				
			+/-	8.9452	µg/mL		Gravimetric
			+/-	43.9882	µg/mL		Unstressed
			+/-	53.3632	µg/mL		Stressed

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246

Lot Number: CL17953

Description: Benzoic Acid

Certification Date: January 31, 2022

Storage: 4 °C

Expiration Date: January 31, 2032

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603

Benzoic Acid @2000ug/ml

Solvent / Lot: N/A

Prep: 5/13/2022 by JZ

Exp: 1/31/2032

Location: GC

JZ 5/13/22



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244

Lot Number: CL17662

Description: Benzidines Standard

Certification Date: December 2, 2021

Storage: 4 °C

Expiration Date: November 30, 2031

Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604

Benzidines std @2000ug/ml
Solvent / Lot: Mecl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

JZ 5/13/22



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0183500

Description : SOM01.0 SIM Analysis Standard
SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Methylnaphthalene-d10	2,003.5 µg/mL	+/-	11.7578	µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot EF-135)		+/-	90.2539	µg/mL	Unstressed
	Purity 96%		+/-	100.1449	µg/mL	Stressed
2	Fluoranthene-d10	2,006.0 µg/mL	+/-	11.7723	µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/-	90.3656	µg/mL	Unstressed
	Purity 99%		+/-	100.2689	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

K004605
 SOMO 1.0 SIM DMC
 Solvent / Lot: A0183500
 Prep: 5/14/2022 by VS
 Exp: 2/29/2028
 Location:

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

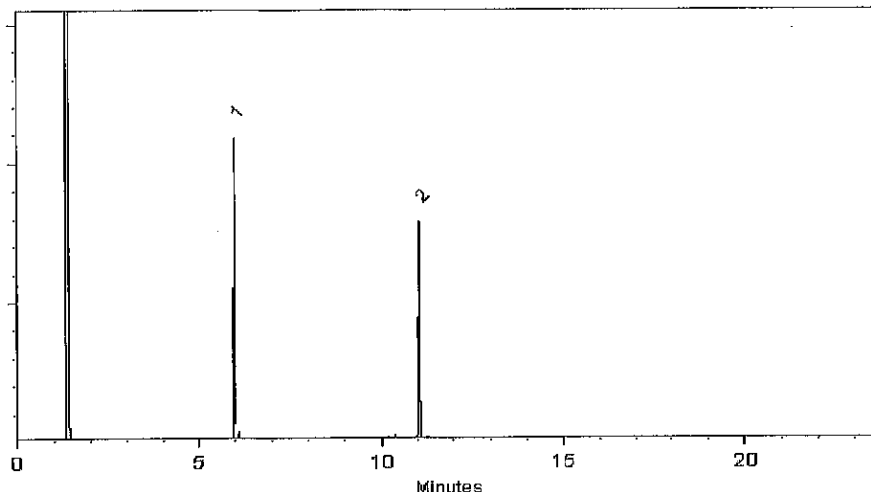
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis
Cathleen Soltis - Mix Technician

Date Mixed: 29-Mar-2022 Balance: B345965662

Clara Windle
Clara Windle - Operations Technician I

Date Passed: 01-Apr-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

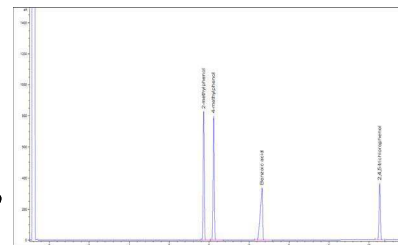
Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

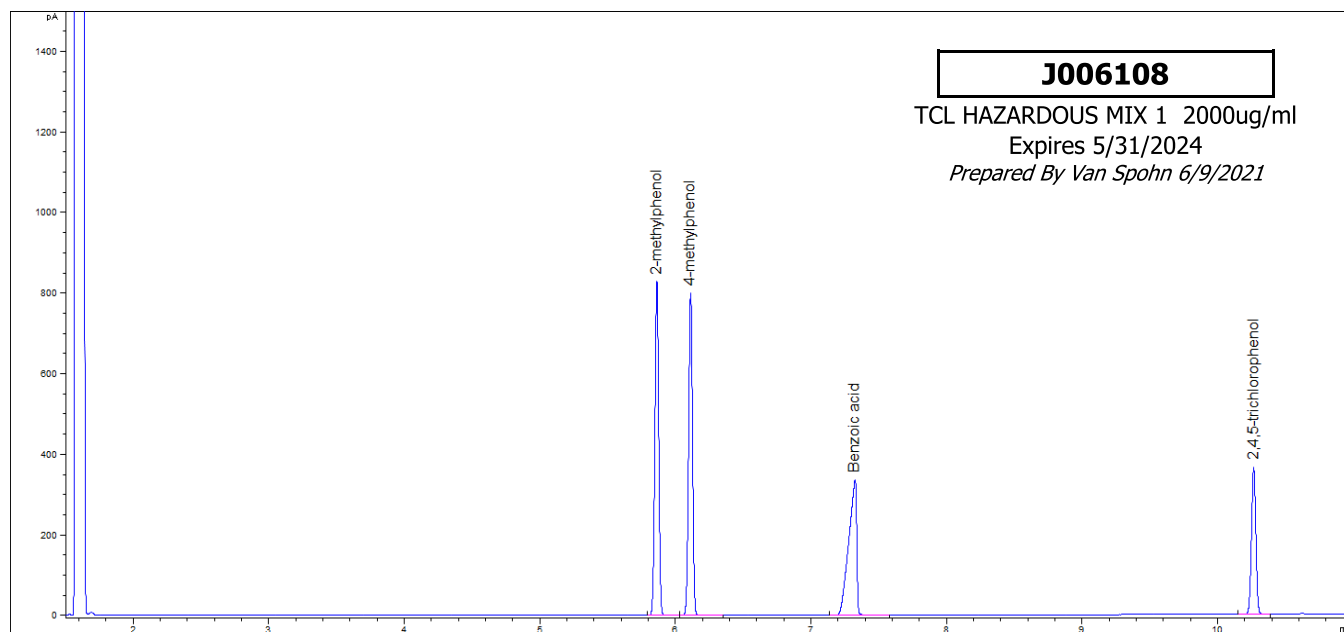
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

Analyte	Certified Value	Units	Raw Material Purity, %	Elution order	Raw Material Lot
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:

Analytical Method Parameters:
 Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
 Carrier Gas: H₂, Flow: 4.5 mL/min
 Inlet Temperature: 170 °C, Injection Volume: 1 µL
 Injection Mode: Split, Split Ratio: 20:1



Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021



Handwritten signature of Andy Ommen in black ink.

Andy Ommen - QC Manager

Handwritten signature of Mark Pooler in black ink.

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

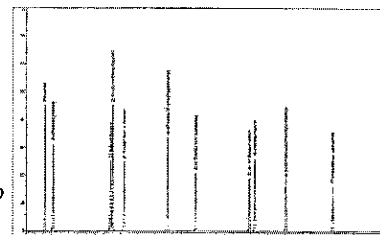
The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.



Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)



Certified Values:

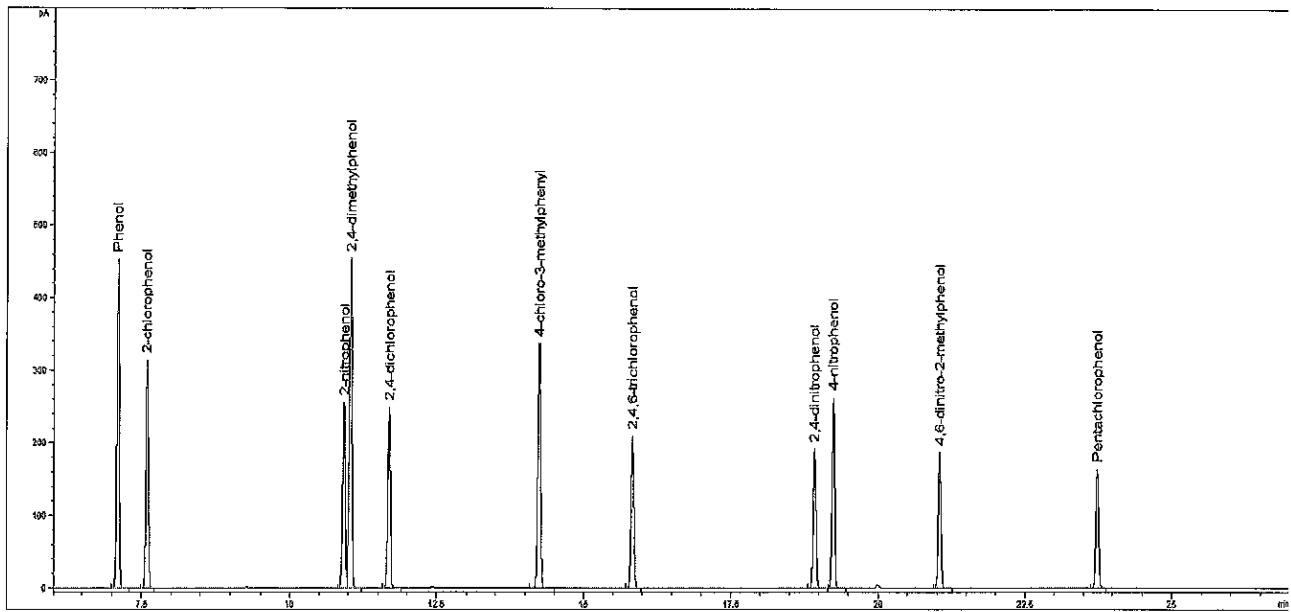
Analyte	Certified Value	Units	Raw Material Purity, %	Raw Material Lot
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597

TCL Phenols Mix 2000ug/ml
 Solvent / Lot: LRAD0139
 Prep: 12/30/2021 by VS
 Exp: 7/31/2024
 Location:





METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m x 0.53 mm I.D., 1.5 µm film thickness

Carrier Gas: H₂ Flow Rate: 4.5 mL/min

Inlet Temperature: 200 °C Injection Volume: 1.0 µL

Injection Mode: 25:1

Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)

Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorophenol
6	14.242	4-chloro-3-methylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021



Andy Ommen

Mark Pooler

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability:

This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty:

Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment:

Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment:

Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.





110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

K007194
 CLP 04.1 BNA SURR MIX
 Solvent / Lot: A0187400
 Prep: 8/5/2022 by VS
 Exp: 4/30/2026
 Location:

IAL



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400
Description : CLP 04.1 BNA Surrogate Mix
CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2026 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	2-Fluorophenol	1,508.0 µg/mL	+/-	8.9571	µg/mL	Gravimetric
	CAS # 367-12-4 (Lot STBJ3299)		+/-	44.0466	µg/mL	Unstressed
	Purity 99%		+/-	53.4340	µg/mL	Stressed
2	Phenol-d6	1,510.0 µg/mL	+/-	8.9689	µg/mL	Gravimetric
	CAS # 13127-88-3 (Lot SL210831)		+/-	44.1050	µg/mL	Unstressed
	Purity 99%		+/-	53.5049	µg/mL	Stressed
3	2-Chlorophenol-d4	1,512.0 µg/mL	+/-	8.9808	µg/mL	Gravimetric
	CAS # 93951-73-6 (Lot PR-30568)		+/-	44.1635	µg/mL	Unstressed
	Purity 99%		+/-	53.5758	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4	1,004.0 µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 2199-69-1 (Lot PR-32597)		+/-	29.3255	µg/mL	Unstressed
	Purity 99%		+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5	1,004.0 µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 4165-60-0 (Lot PR-29940A)		+/-	29.3255	µg/mL	Unstressed
	Purity 99%		+/-	35.5754	µg/mL	Stressed
6	2-Fluorobiphenyl	1,004.0 µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 321-60-8 (Lot 00021384)		+/-	29.3255	µg/mL	Unstressed
	Purity 99%		+/-	35.5754	µg/mL	Stressed
7	2,4,6-Tribromophenol	1,502.0 µg/mL	+/-	8.9214	µg/mL	Gravimetric
	CAS # 118-79-6 (Lot MKCJ7664)		+/-	43.8714	µg/mL	Unstressed
	Purity 99%		+/-	53.2214	µg/mL	Stressed

8	p-Terphenyl-d14		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)		+/- 29.2671	µg/mL	Unstressed
	Purity 99%			+/- 35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

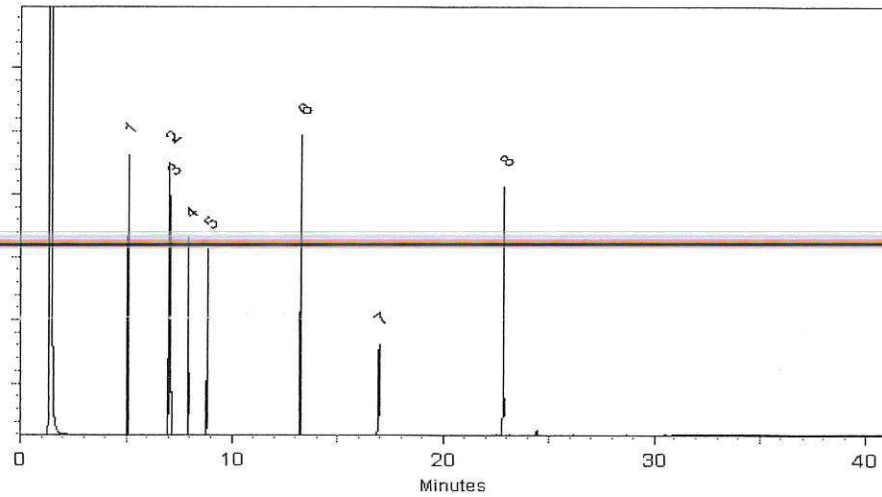
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder
Bryan Snyder - Operations Tech I

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Mixed: 17-Jul-2022 **Balance:** 1128353505

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

K007995

SVOA-8270 LCS MIX 1000ug/ml

Solvent / Lot: N/A

Prep: 8/29/2022 by JZ

Exp: 8/31/2023

Location: FREEZER 44



Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444

Lot Number: CL18355

Description: 8270 Calibration Standard

Certification Date: July 25, 2022

Storage: -18 °C

Expiration Date: August 31, 2023

Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444 **Lot Number:** CL18355
Description: 8270 Calibration Standard **Certification Date:** July 25, 2022
Storage: -18 °C **Expiration Date:** August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl₂/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroisopropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	Assigned Value	Units	Raw Material Purity, %	Raw Material Lot
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user's location. Open slowly and carefully to avoid dispersion of the material.



Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

03 JUN 2022



Andy Ommen - QC Manager



Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.



Certificate of Analysis - Analytical Standard

PAHs in Soil

Product no.: SQC017-40G
Lot no.: LRAD3953
Expiry Date: October 2025
Manufacturing Date: October 2022
Storage: REFRIGERATE
Solvent/Matrix: SOIL
Certificate version: LRAD3953.01 (Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)

Analyte	Units	Certified Value
Naphthalene	µg/Kg	418 ± 39
Acenaphthene	µg/Kg	478 ± 51
Acenaphthylene	µg/Kg	557 ± 63
Anthracene	µg/Kg	393 ± 23
Benzo(a)anthracene	µg/Kg	110 ± 11
Benzo(a)pyrene	µg/Kg	159 ± 23
Benzo(b)fluoranthene	µg/Kg	318 ± 49
Benzo(g,h,i)perylene	µg/Kg	103 ± 18
Benzo(k)fluoranthene	µg/Kg	95.1 ± 16.0
Chrysene	µg/Kg	231 ± 24
Dibenz(a,h) anthracene	µg/Kg	220 ± 16
Fluoranthene	µg/Kg	303 ± 24
Fluorene	µg/Kg	340 ± 27
Indeno(1,2,3-cd) pyrene	µg/Kg	119 ± 14
Phenanthrene	µg/Kg	510 ± 30
Pyrene	µg/Kg	350 ± 25



Informational Values:

Analyte	Units	Suggested Acceptance Windows	Standard Deviation
Acenaphthene	µg/Kg	192 to 1041	141
Acenaphthylene	µg/Kg	13.1 to 1101	181
Anthracene	µg/Kg	166 to 619	75.4
Benzo(a)anthracene	µg/Kg	28.4 to 191	27.2
Benzo(a)pyrene	µg/Kg	0.00 to 327	56.2
Benzo(b)fluoranthene	µg/Kg	0.00 to 672	118
Benzo(g,h,i)perylene	µg/Kg	35.9 to 170	36.0
Benzo(k)fluoranthene	µg/Kg	0.00 to 215	39.9
Chrysene	µg/Kg	100.00 to 361	43.5
Dibenz(a,h) anthracene	µg/Kg	98.0 to 341	40.5
Fluoranthene	µg/Kg	176 to 518	57.0
Fluorene	µg/Kg	128 to 644	85.9
Indeno(1,2,3-cd) pyrene	µg/Kg	52.6 to 185	22.0
Naphthalene	µg/Kg	31.3 to 910	146
Phenanthrene	µg/Kg	255 to 953	116
Pyrene	µg/Kg	184 to 654	78.2

Additional Information:**DESCRIPTION**

This product consist of a 4 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested show homogeneity.

Four samples have been provided for your convenience (multiple methods, multiple analysts, etc.)

The soil has been chemically stabilized with 1 mL of acetone to minimize degradation of the sample.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Note: Sample extracts and calibration solutions should be in the same solvent.

All values are based on a wet weight basis, do not correct for moisture.

Assume a 10g sample size for all calculations.

Measurement method:

Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use:

Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging:

Package of 4 units of 10 g in amber jar

Instructions for handling and correct use:

Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information:

All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date:

24 OCT 2022



Andy Ommen - QC Manager



Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD3953.01	24 OCT 2022	Original release date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The vibrant M, Supelco, TraceCERT and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.





ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	
Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-01 A</u>
	File ID: <u>23021337.D</u>
Sampled: <u>01/16/23 15:17</u>	Prepared: <u>02/01/23 13:23</u>
	Analyzed: <u>02/14/23 00:03</u>
% Solids: <u>58.96</u>	Preparation: <u>EPA 3546 (Microwave)</u>
	Initial/Final: <u>21.33 g Wet / 2.5 mL</u>
Batch: <u>BLA0684</u>	Sequence: <u>SLB0237</u>
	Calibration: <u>FL00041</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>
	Column 2: <u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9515	6.98	87.7	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9515	7.03	88.5	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9515	5.83	73.3	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9515	5.68	71.5	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021337.D
Data file 2: /20230213.b/B20230213.b/23021337.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-01
Client ID:
Injection Date: 14-FEB-2023 00:03
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.292	-0.007	64613	4.833	0.018	24364	3.70	0.87	123.7*	alpha-BHC
4.672	-0.009	24102	5.314	0.024	16254	3.58	1.53	80.3*	beta-BHC
4.869	0.006	92057	----	----	----	6.44	0.00	---	delta-BHC
4.601	0.003	47494	5.211	0.002	10202	3.13	0.43	151.7*	gamma-BHC (Lindane)
5.066	-0.012	34756	5.745	0.012	43318	2.58	2.01	24.5	Heptachlor
5.418	0.018	47961	6.138	0.003	29553	3.17	1.20	90.0*	Aldrin
6.117	0.045	198973	6.772	-0.020	202914	15.18	10.00	41.2*	Heptachlor epoxide b
----	----	----	7.225	-0.011	15030	0.00	0.84	---	Endosulfan I
6.805	0.030	16945	7.513	-0.017	89299	1.31	4.52	110.0*	Dieldrin
6.431	-0.009	123420	7.319	-0.004	69714	10.29	3.85	91.1*	4,4'-DDE
7.051	0.026	370796	----	----	----	39.55	0.00	---	Endrin
7.291	0.027	21863	8.078	0.011	132025	2.59	10.45	120.5*	Endosulfan II
----	----	----	7.926	-0.003	65484	0.00	5.46	---	4,4'-DDD
8.158	0.032	14866	----	----	----	1.85	0.00	---	Endosulfan sulfate
----	----	----	8.255	0.007	602464	0.00	52.04	---	4,4'-DDT
7.895	0.029	48690	----	----	----	12.87	0.00	---	Methoxychlor
----	----	----	9.209	0.020	471921	0.00	39.37	---	Endrin ketone
7.716	0.024	160506	8.394	-0.004	148881	23.84	16.70	35.2	Endrin aldehyde
----	----	----	----	----	----	0.00	0.00	---	trans-Chlordane
6.380	0.020	72316	7.162	-0.002	23676	5.42	1.20	127.7*	cis-Chlordane
2.280	-0.016	13916	2.444	-0.029	31017	0.76	1.17	42.4*	Hexachlorobutadiene
4.143	0.001	47707	----	----	----	2.94	0.00	---	Hexachlorobenzene
3.789	-0.002	362084	4.180	-0.002	561730	29.31	28.60	2.5	Tetrachloro-m-xylene
9.309	0.003	254273	10.405	0.002	339140	35.09	35.38	0.8	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	908257	35.1
Hexabromobiphenyl	609723	715154	17.3

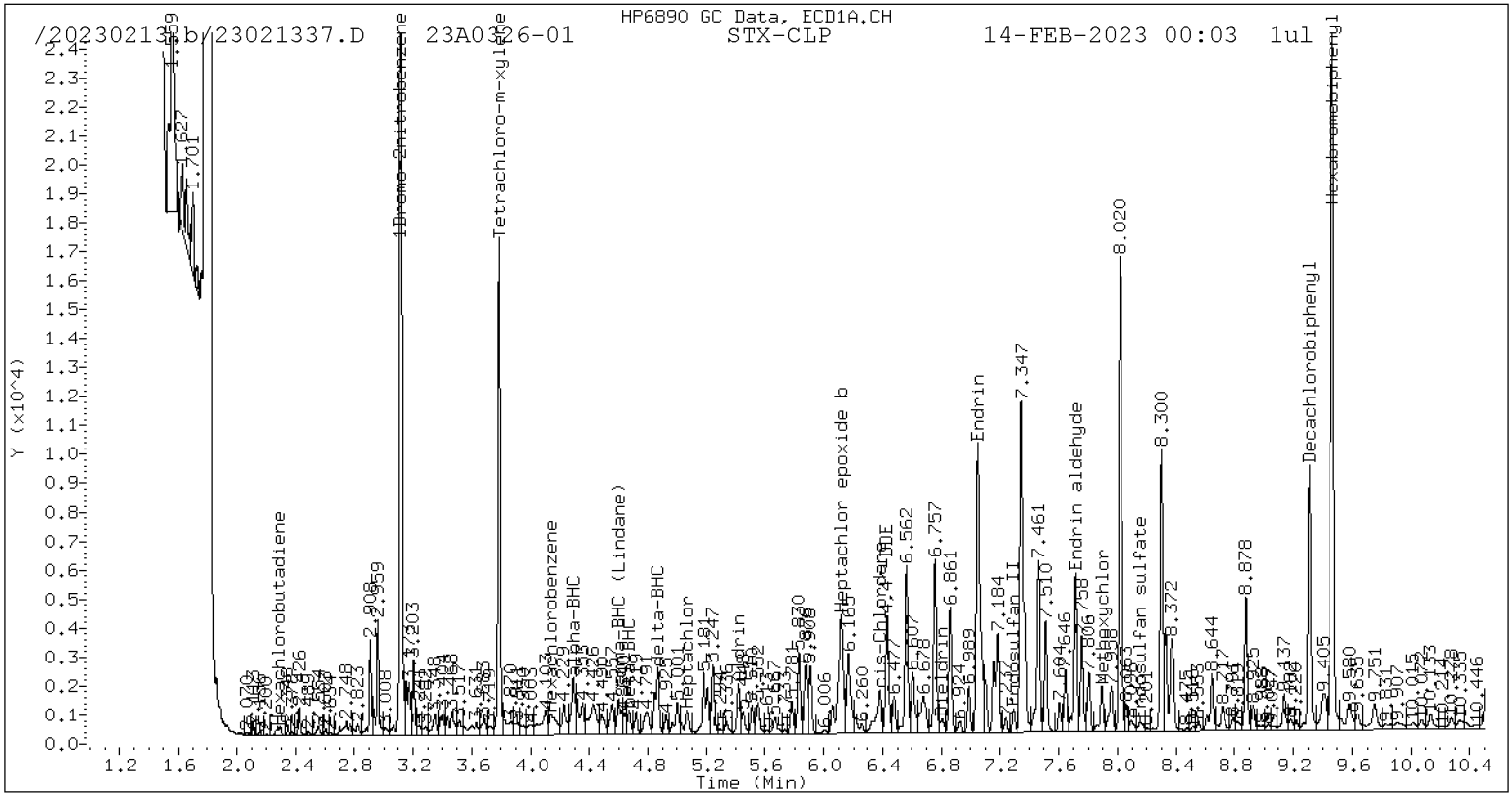
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1395556	38.7
Hexabromobiphenyl	769764	867200	12.7

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

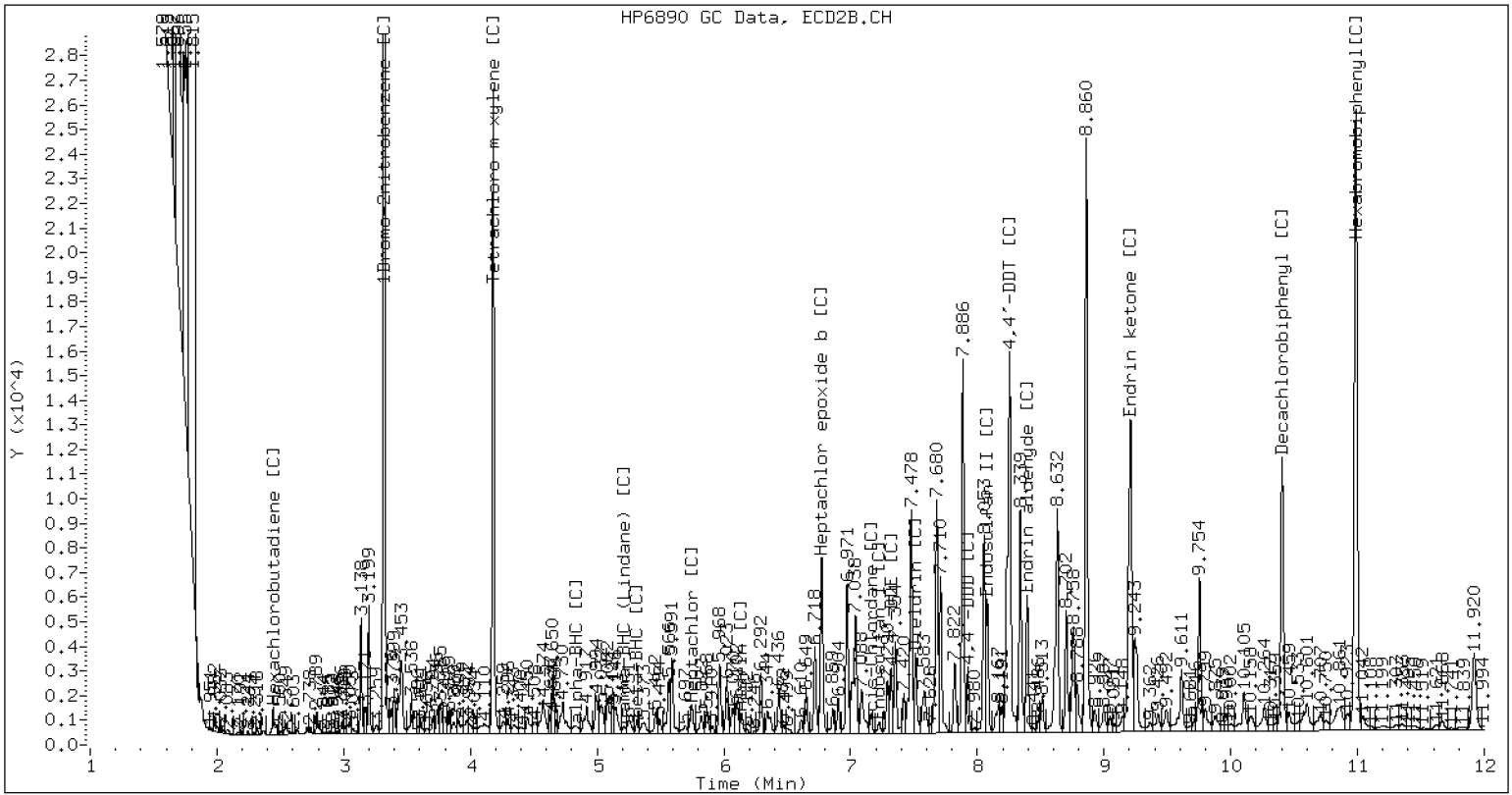
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021337.D 23A0326-01 CLP2



CLP-2 Manual Integration: NO



ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>		
Project:	<u>AOC5 MR Phase 1</u>		
Matrix:	<u>Solid</u>	Laboratory ID:	<u>23A0326-02 A</u>
		File ID:	<u>23021338.D</u>
Sampled:	<u>01/16/23 15:32</u>	Prepared:	<u>02/01/23 13:23</u>
		Analyzed:	<u>02/14/23 00:21</u>
% Solids:	<u>57.28</u>	Preparation:	<u>EPA 3546 (Microwave)</u>
		Initial/Final:	<u>22.37 g Wet / 2.5 mL</u>
Batch:	<u>BLA0684</u>	Sequence:	<u>SLB0237</u>
		Calibration:	<u>FL00041</u>
Instrument:	<u>ECD6</u>	Column 1:	<u>STX-CLP</u>
		Column 2:	<u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.8042	6.41	82.2	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.8042	6.80	87.1	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.8042	5.04	64.6	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.8042	4.88	62.6	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021338.D
Data file 2: /20230213.b/B20230213.b/23021338.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-02
Client ID:
Injection Date: 14-FEB-2023 00:21
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
4.293	-0.006	53056	4.833	0.018	19572	3.12	0.74	123.7*	alpha-BHC
4.672	-0.009	49775	5.315	0.024	18925	7.60	1.87	121.0*	beta-BHC
4.870	0.006	117936	5.666	0.024	5404	8.48	0.25	188.7*	delta-BHC
4.602	0.003	34797	5.211	0.002	10561	2.36	0.47	133.8*	gamma-BHC (Lindane)
5.066	-0.013	40195	5.745	0.012	56359	3.06	2.76	10.6	Heptachlor
5.418	0.019	61235	6.139	0.003	26071	4.16	1.12	115.4*	Aldrin
6.118	0.046	240708	6.773	-0.019	245607	18.87	12.72	39.0	Heptachlor epoxide b
----			7.225	-0.011	19209	0.00	1.13	---	Endosulfan I
6.807	0.032	18597	7.513	-0.017	78088	1.48	4.15	94.9*	Dieldrin
6.431	-0.009	138344	7.319	-0.003	73745	11.85	4.28	93.9*	4,4'-DDE
7.052	0.027	294509	----			31.79	0.00	---	Endrin
7.293	0.029	25865	8.076	0.010	133370	3.10	10.58	109.3*	Endosulfan II
----			7.927	-0.003	71548	0.00	5.98	---	4,4'-DDD
8.156	0.030	15885	----			2.01	0.00	---	Endosulfan sulfate
7.402	0.024	184491	8.255	0.008	465900	21.88	40.36	59.4*	4,4'-DDT
7.895	0.029	38524	----			10.31	0.00	---	Methoxychlor
8.428	0.029	3903	9.208	0.019	259801	0.43	21.73	192.2*	Endrin ketone
7.716	0.024	88553	8.385	-0.013	312528	13.31	35.15	90.1*	Endrin aldehyde
----			----			0.00	0.00	---	trans-Chlordane
6.381	0.020	82046	7.162	-0.002	25140	6.32	1.33	130.2*	cis-Chlordane
2.279	-0.017	14224	2.499	0.026	2435	0.80	0.10	156.9*	Hexachlorobutadiene
4.141	-0.001	19320	----			1.22	0.00	---	Hexachlorobenzene
3.789	-0.002	310681	4.180	-0.002	467903	25.85	25.04	3.2	Tetrachloro-m-xylene
9.309	0.004	235360	10.405	0.002	333128	32.87	34.85	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	883707	31.4
Hexabromobiphenyl	609723	706633	15.9

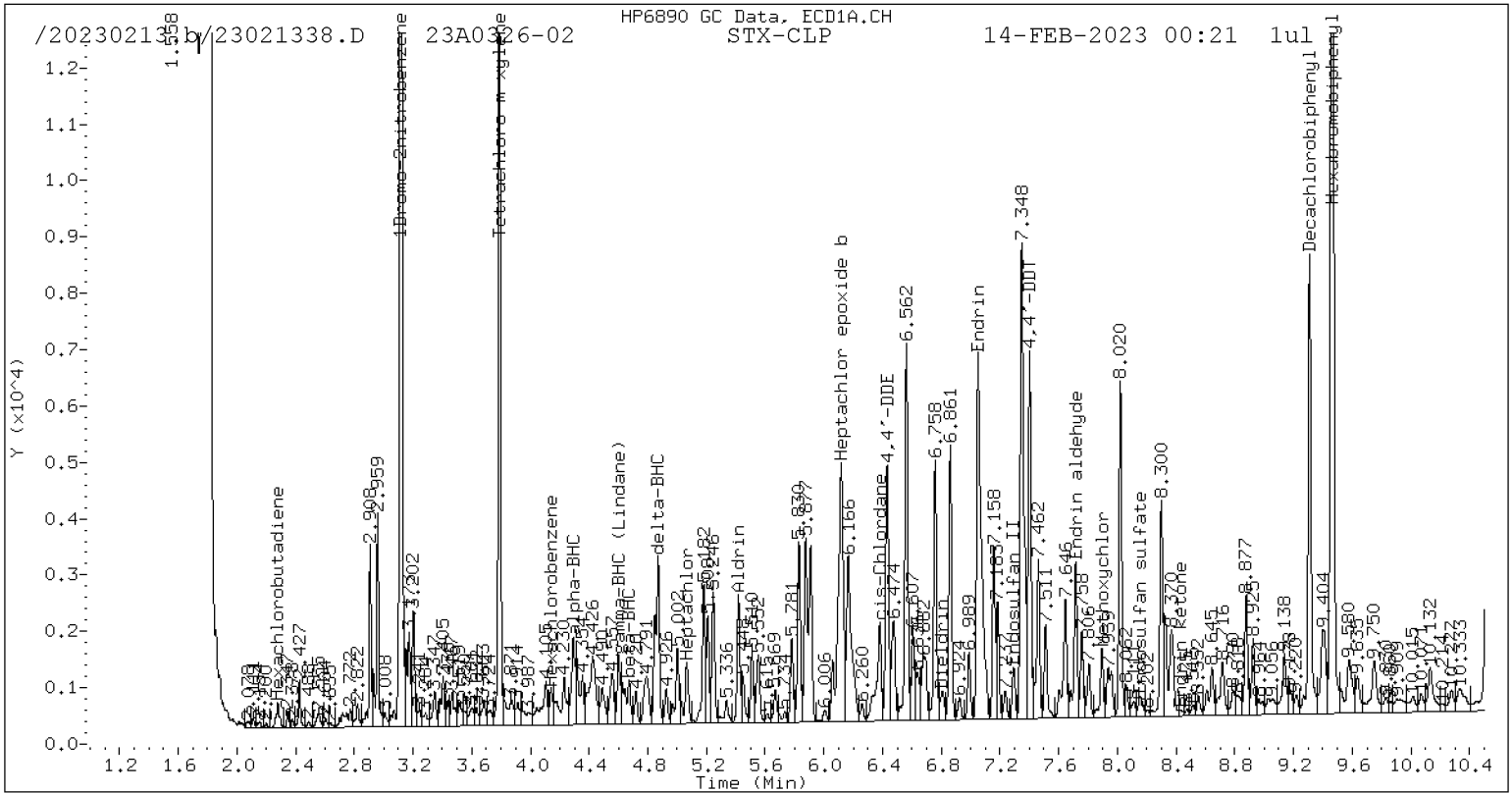
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1327668	31.9
Hexabromobiphenyl	769764	864760	12.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

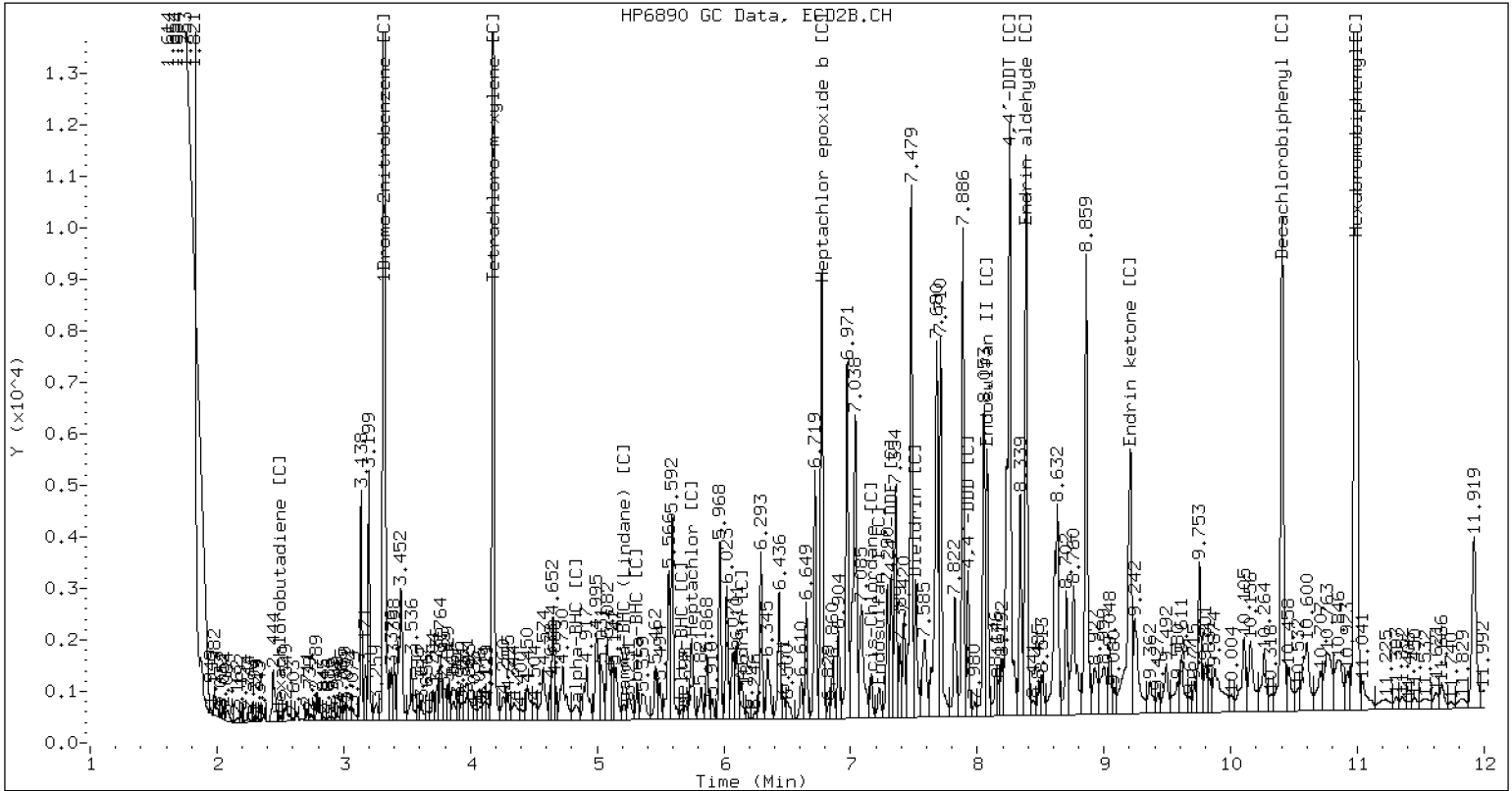
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021338.D 23A0326-02 CLP2



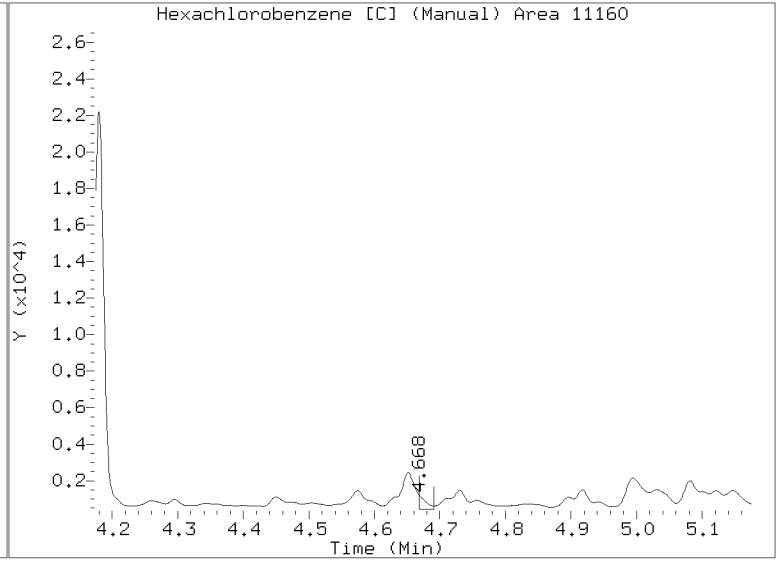
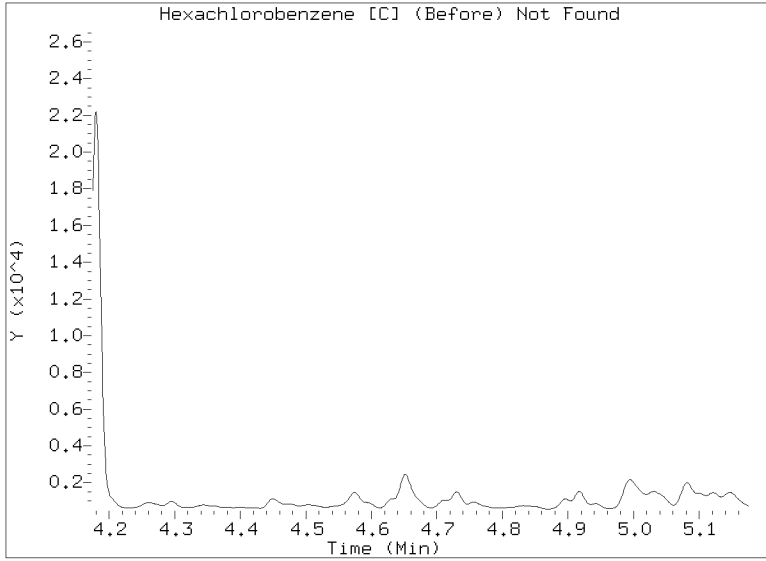
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021338.D

Injection Date: 14-FEB-2023 00:21

Lab ID:23A0326-02 Client ID:





ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23A0326-04 A File ID: 23021339.D
 Sampled: 01/17/23 10:33 Prepared: 02/01/23 13:23 Analyzed: 02/14/23 00:39
 % Solids: 51.64 Preparation: EPA 3546 (Microwave) Initial/Final: 24.34 g Wet / 2.5 mL
 Batch: BLA0684 Sequence: SLB0237 Calibration: FL00041
 Instrument: ECD6 Column 1: STX-CLP Column 2: STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9560	6.98	87.7	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9560	7.51	94.4	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9560	5.49	69.0	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9560	5.36	67.4	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021339.D
Data file 2: /20230213.b/B20230213.b/23021339.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-04
Client ID:
Injection Date: 14-FEB-2023 00:39
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.291	-0.008	104654	4.829	0.014	34700	5.91	1.29	128.3*	alpha-BHC
4.671	-0.010	73872	5.314	0.024	16395	10.83	1.60	148.4*	beta-BHC
4.868	0.005	78579	5.626	-0.016	10687	5.43	0.48	167.3*	delta-BHC
4.603	0.004	71862	5.215	0.006	15976	4.68	0.70	147.9*	gamma-BHC (Lindane)
5.069	-0.010	36572	5.744	0.010	35858	2.68	1.74	42.7*	Heptachlor
5.417	0.018	41656	6.139	0.004	33309	2.72	1.41	63.3*	Aldrin
6.059	-0.012	22779	6.772	-0.020	161075	1.72	8.26	131.2*	Heptachlor epoxide b
----			7.225	-0.011	17854	0.00	1.04	---	Endosulfan I
6.804	0.029	13191	7.513	-0.018	61441	1.01	3.23	105.0*	Dieldrin
6.431	-0.009	107605	7.319	-0.003	76469	8.85	4.39	67.4*	4,4'-DDE
7.051	0.026	141868	----			15.67	0.00	---	Endrin
7.290	0.026	12300	8.076	0.009	80873	1.51	6.53	124.9*	Endosulfan II
----			7.926	-0.003	87576	0.00	7.45	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
----			8.254	0.007	290665	0.00	25.61	---	4,4'-DDT
7.892	0.027	30981	----			8.48	0.00	---	Methoxychlor
8.428	0.029	3936	9.208	0.019	129047	0.44	10.98	184.5*	Endrin ketone
7.717	0.025	58704	8.392	-0.006	56581	9.03	6.47	33.0	Endrin aldehyde
6.212	-0.003	17532	----			1.30	0.00	---	trans-Chlordane
6.378	0.018	83070	7.162	-0.002	25438	6.14	1.34	128.5*	cis-Chlordane
2.277	-0.019	11971	2.500	0.026	2205	0.65	0.09	152.8*	Hexachlorobutadiene
4.143	0.001	43352	----			2.64	0.00	---	Hexachlorobenzene
3.789	-0.002	345305	4.179	-0.002	509232	27.60	26.97	2.3	Tetrachloro-m-xylene
9.309	0.003	245339	10.404	0.001	354953	35.07	37.78	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	920097	36.8
Hexabromobiphenyl	609723	690417	13.2

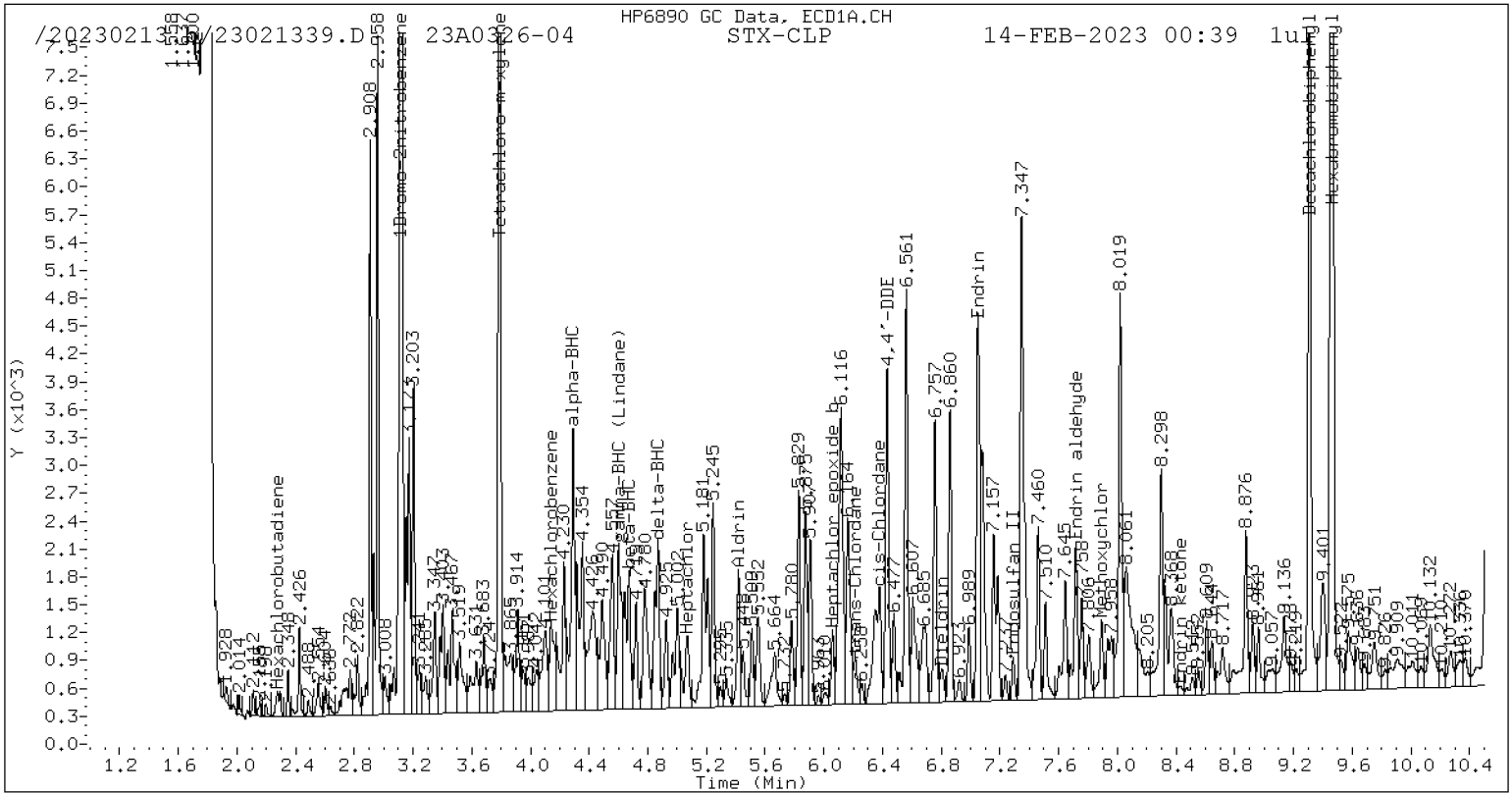
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1341211	33.3
Hexabromobiphenyl	769764	850182	10.4

* Standard Areas taken from Initial Cal Level 5

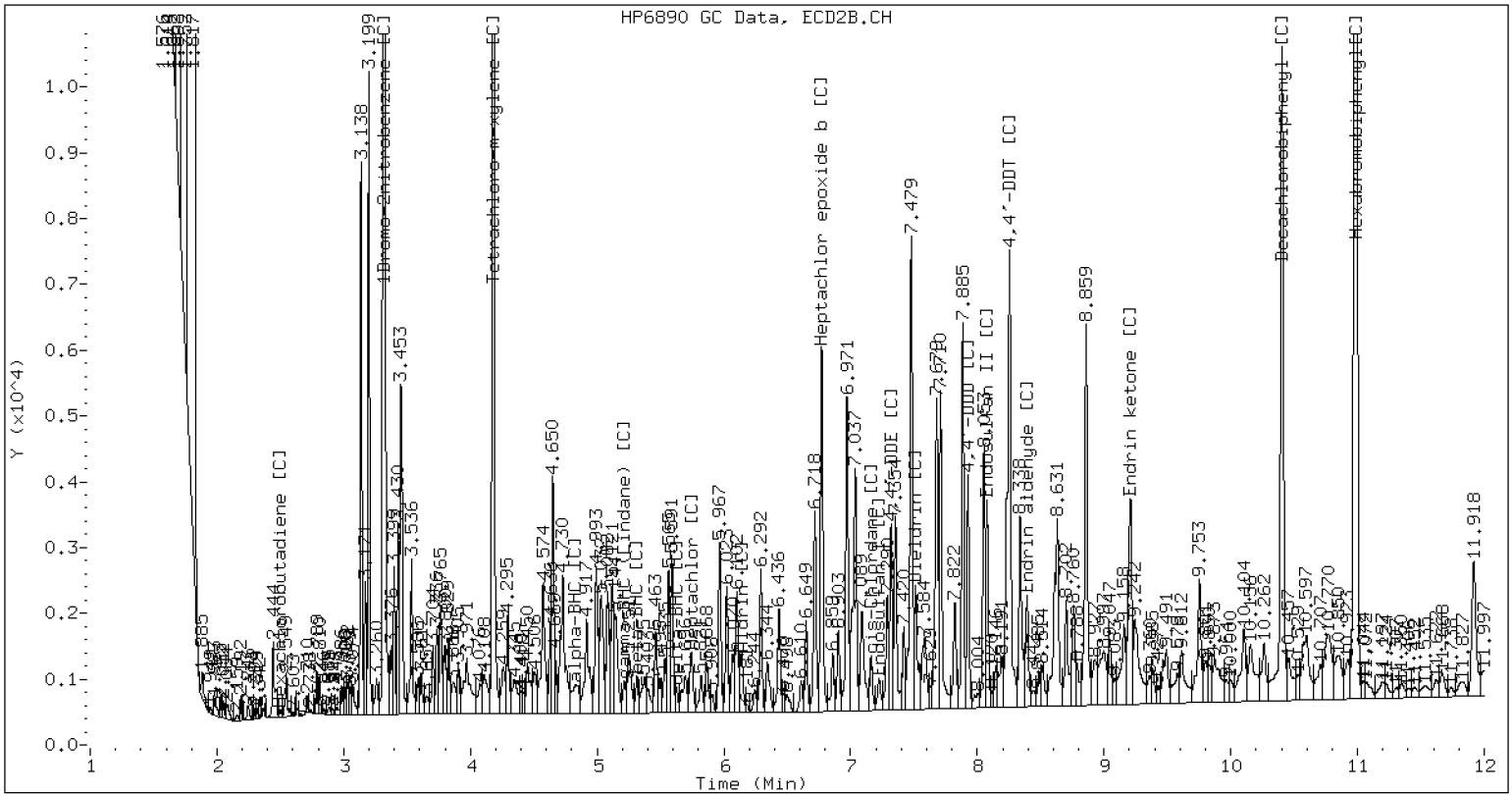
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



/20230213.b/B20230213.b/23021339.D 23A0326-04 CLP2





ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid Laboratory ID: 23A0326-05 A File ID: 23021340.D
Sampled: 01/17/23 11:08 Prepared: 02/01/23 13:23 Analyzed: 02/14/23 00:57
% Solids: 54.64 Preparation: EPA 3546 (Microwave) Initial/Final: 23.31 g Wet / 2.5 mL
Batch: BLA0684 Sequence: SLB0237 Calibration: FL00041
Instrument: ECD6 Column 1: STX-CLP Column 2: STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.8514	7.45	94.9	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.8514	8.53	109	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.8514	5.53	70.5	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.8514	5.39	68.7	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021340.D
Data file 2: /20230213.b/B20230213.b/23021340.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-05
Client ID:
Injection Date: 14-FEB-2023 00:57
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.316	0.017	134752	4.836	0.021	27747	7.93	1.03 153.9* alpha-BHC
4.672	-0.009	56007	5.315	0.025	25551	8.56	2.50 109.5* beta-BHC
4.870	0.007	146761	----	----	----	10.57	0.00 --- delta-BHC
4.602	0.003	68688	5.210	0.001	11865	4.66	0.52 159.8* gamma-BHC (Lindane)
5.066	-0.012	51653	5.745	0.012	97246	3.94	4.71 17.9 Heptachlor
5.418	0.019	90749	----	----	----	6.18	0.00 --- Aldrin
6.061	-0.011	65717	6.773	-0.019	392678	5.16	20.16 118.5* Heptachlor epoxide b
----	----	----	----	----	----	0.00	0.00 --- Endosulfan I
6.808	0.033	34122	----	----	----	2.72	0.00 --- Dieldrin
6.433	-0.007	250068	----	----	----	21.44	0.00 --- 4,4'-DDE
7.054	0.029	589285	----	----	----	64.42	0.00 --- Endrin
7.293	0.029	34786	8.055	-0.012	530672	4.22	40.69 162.4* Endosulfan II
----	----	----	7.928	-0.001	183238	0.00	14.81 --- 4,4'-DDD
8.156	0.030	61445	----	----	----	7.86	0.00 --- Endosulfan sulfite
----	----	----	8.256	0.009	775771	0.00	64.94 --- 4,4'-DDT
7.897	0.032	69743	8.861	-0.028	499730	18.90	94.54 133.4* Methoxychlor
----	----	----	9.208	0.019	658627	0.00	53.24 --- Endrin ketone
7.718	0.026	151145	8.395	-0.003	155861	23.01	16.94 30.4 Endrin aldehyde
----	----	----	----	----	----	0.00	0.00 --- trans-Chlordane
6.382	0.021	150337	7.163	-0.001	66011	11.58	3.47 107.7* cis-Chlordane
2.278	-0.018	15409	2.448	-0.025	31457	0.87	1.23 35.1 Hexachlorobutadiene
4.144	0.001	48418	----	----	----	3.07	0.00 --- Hexachlorobenzene
3.789	-0.002	338376	4.180	-0.002	517803	28.19	27.47 2.6 Tetrachloro-m-xylene
9.315	0.009	268467	10.407	0.005	429844	37.98	43.46 13.5 Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	882757	31.3
Hexabromobiphenyl	609723	697702	14.4

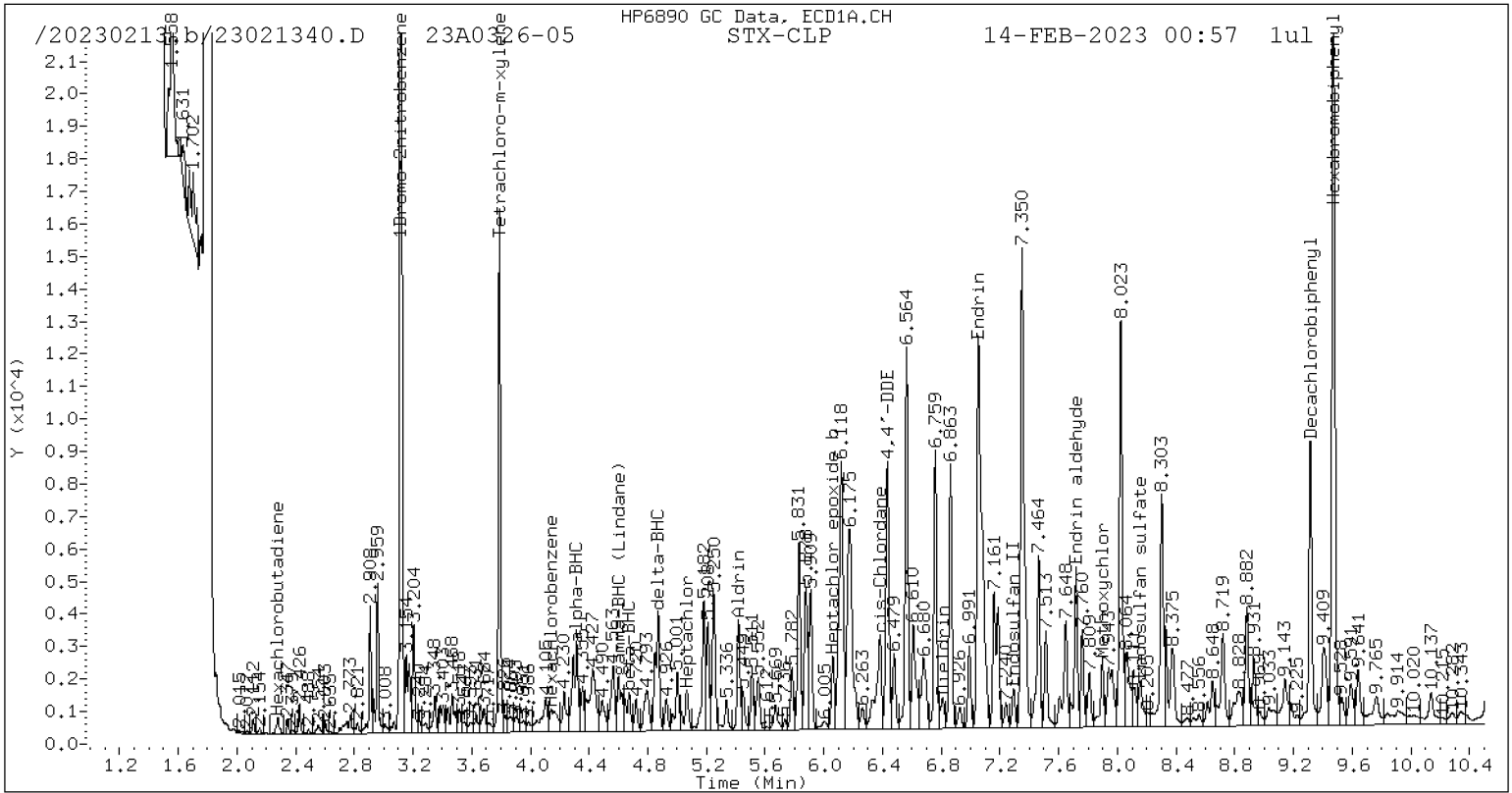
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1339157	33.1
Hexabromobiphenyl	769764	894859	16.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

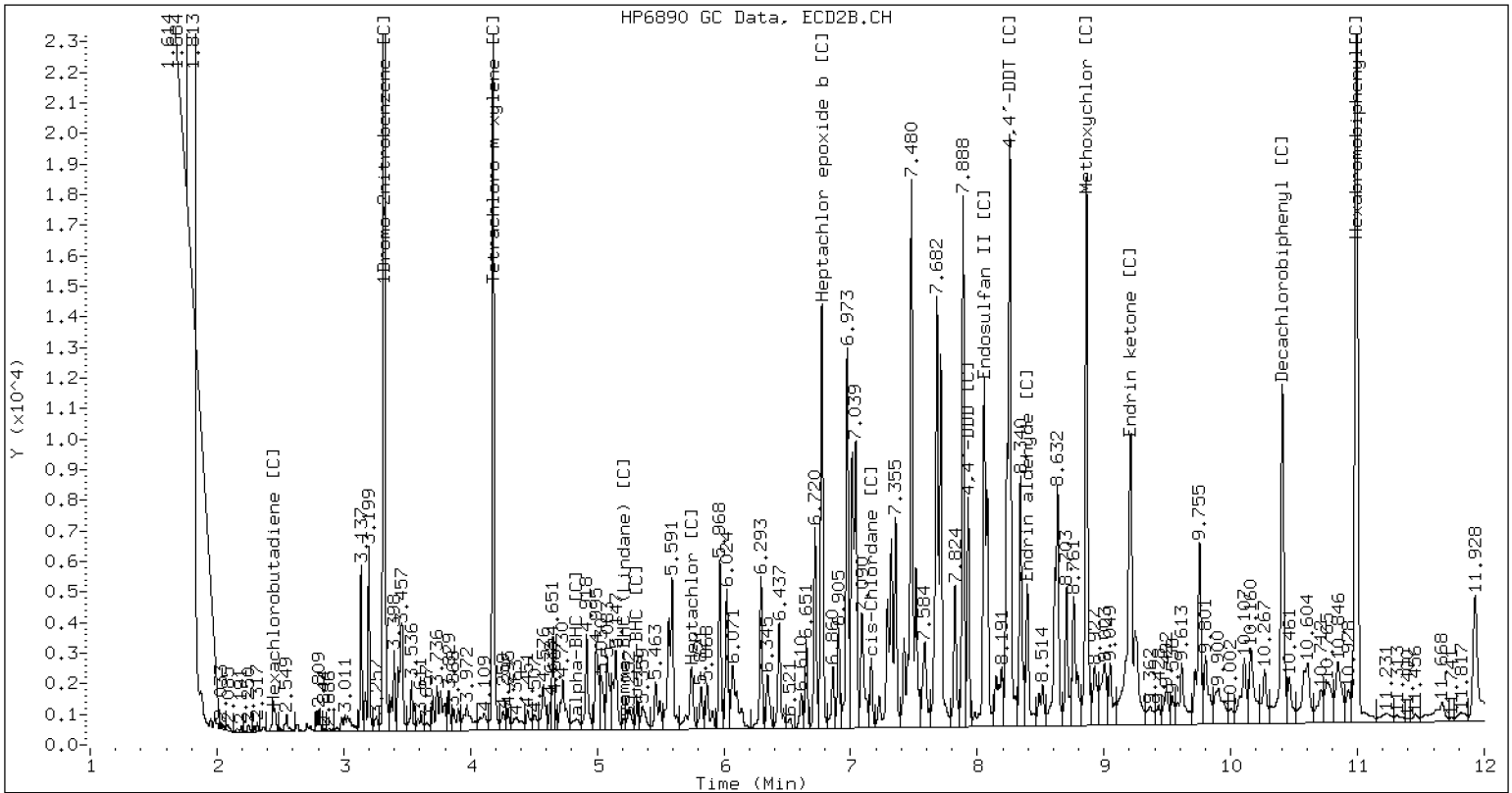
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021340.D 23A0326-05 CLP2



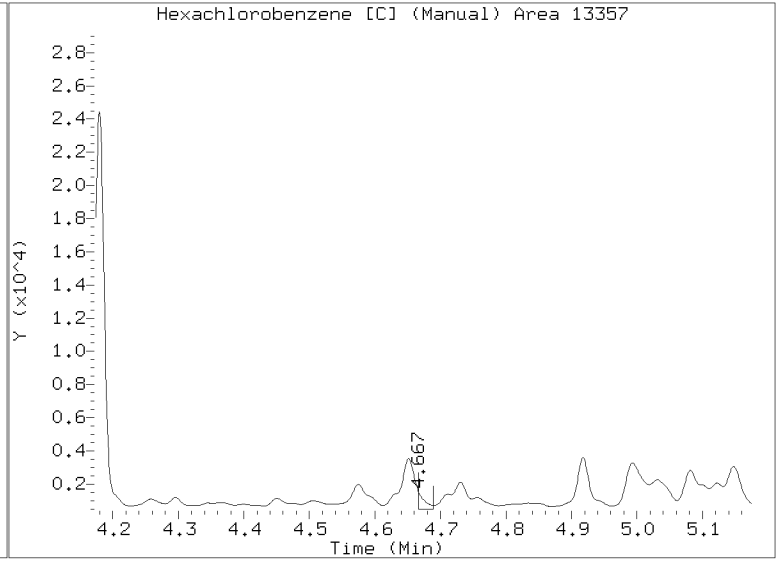
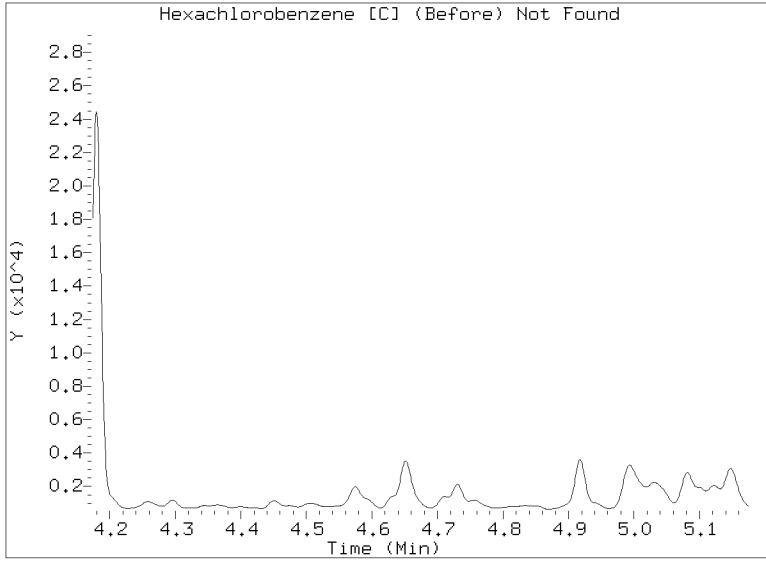
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021340.D

Injection Date: 14-FEB-2023 00:57

Lab ID:23A0326-05 Client ID:





ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	
Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-10 A</u>
Sampled: <u>01/17/23 14:18</u>	Prepared: <u>02/01/23 13:23</u>
% Solids: <u>54.63</u>	Preparation: <u>EPA 3546 (Microwave)</u>
Batch: <u>BLA0684</u>	Sequence: <u>SLB0237</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>
	File ID: <u>23021341.D</u>
	Analyzed: <u>02/14/23 01:15</u>
	Initial/Final: <u>22.88 g Wet / 2.5 mL</u>
	Calibration: <u>FL00041</u>
	Column 2: <u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.15	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	8.0004	7.06	88.3	30 - 160	
<i>Decachlorobiphenyl</i>	2	8.0004	7.45	93.1	30 - 160	
<i>Tetrachlorometaxylene</i>	1	8.0004	5.64	70.5	30 - 160	
<i>Tetrachlorometaxylene</i>	2	8.0004	5.47	68.3	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021341.D
Data file 2: /20230213.b/B20230213.b/23021341.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-10
Client ID:
Injection Date: 14-FEB-2023 01:15
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.292	-0.007	56838	4.836	0.021	18516	3.39	0.71	130.5*	alpha-BHC
4.672	-0.010	37124	5.315	0.025	17799	5.75	1.80	104.5*	beta-BHC
4.869	0.005	101048	----	----	----	7.37	0.00	---	delta-BHC
4.600	0.002	49796	5.210	0.001	11101	3.42	0.50	148.7*	gamma-BHC (Lindane)
5.066	-0.013	34226	5.745	0.011	60625	2.65	3.04	13.8	Heptachlor
5.417	0.018	53242	6.138	0.003	27938	3.67	1.23	99.9*	Aldrin
6.060	-0.012	34239	6.773	-0.019	220203	2.72	11.68	124.4*	Heptachlor epoxide b
----	----	----	7.226	-0.010	20450	0.00	1.23	---	Endosulfan I
6.806	0.030	17584	----	----	----	1.42	0.00	---	Dieldrin
6.431	-0.009	140050	7.319	-0.004	152243	12.17	9.05	29.4	4,4'-DDE
7.052	0.027	327005	----	----	----	35.32	0.00	---	Endrin
7.290	0.026	19334	8.054	-0.013	295436	2.32	22.20	162.2*	Endosulfan II
----	----	----	----	----	----	0.00	0.00	---	4,4'-DDD
8.152	0.026	36223	----	----	----	4.58	0.00	---	Endosulfan sulfate
----	----	----	8.255	0.007	521584	0.00	42.79	---	4,4'-DDT
7.895	0.029	43296	----	----	----	11.59	0.00	---	Methoxychlor
----	----	----	9.206	0.017	424510	0.00	33.63	---	Endrin ketone
7.716	0.024	99196	8.393	-0.004	103827	14.92	11.06	29.7	Endrin aldehyde
6.210	-0.005	16088	----	----	----	1.26	0.00	---	trans-Chlordane
6.379	0.019	84628	7.162	-0.002	31758	6.61	1.73	117.1*	cis-Chlordane
2.279	-0.017	11228	2.446	-0.028	27936	0.64	1.13	55.7*	Hexachlorobutadiene
4.142	-0.000	29675	----	----	----	1.91	0.00	---	Hexachlorobenzene
3.789	-0.002	334030	4.180	-0.002	498409	28.20	27.33	3.1	Tetrachloro-m-xylene
9.310	0.004	252619	10.405	0.002	376005	35.31	37.26	5.4	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	871068	29.5
Hexabromobiphenyl	609723	706093	15.8

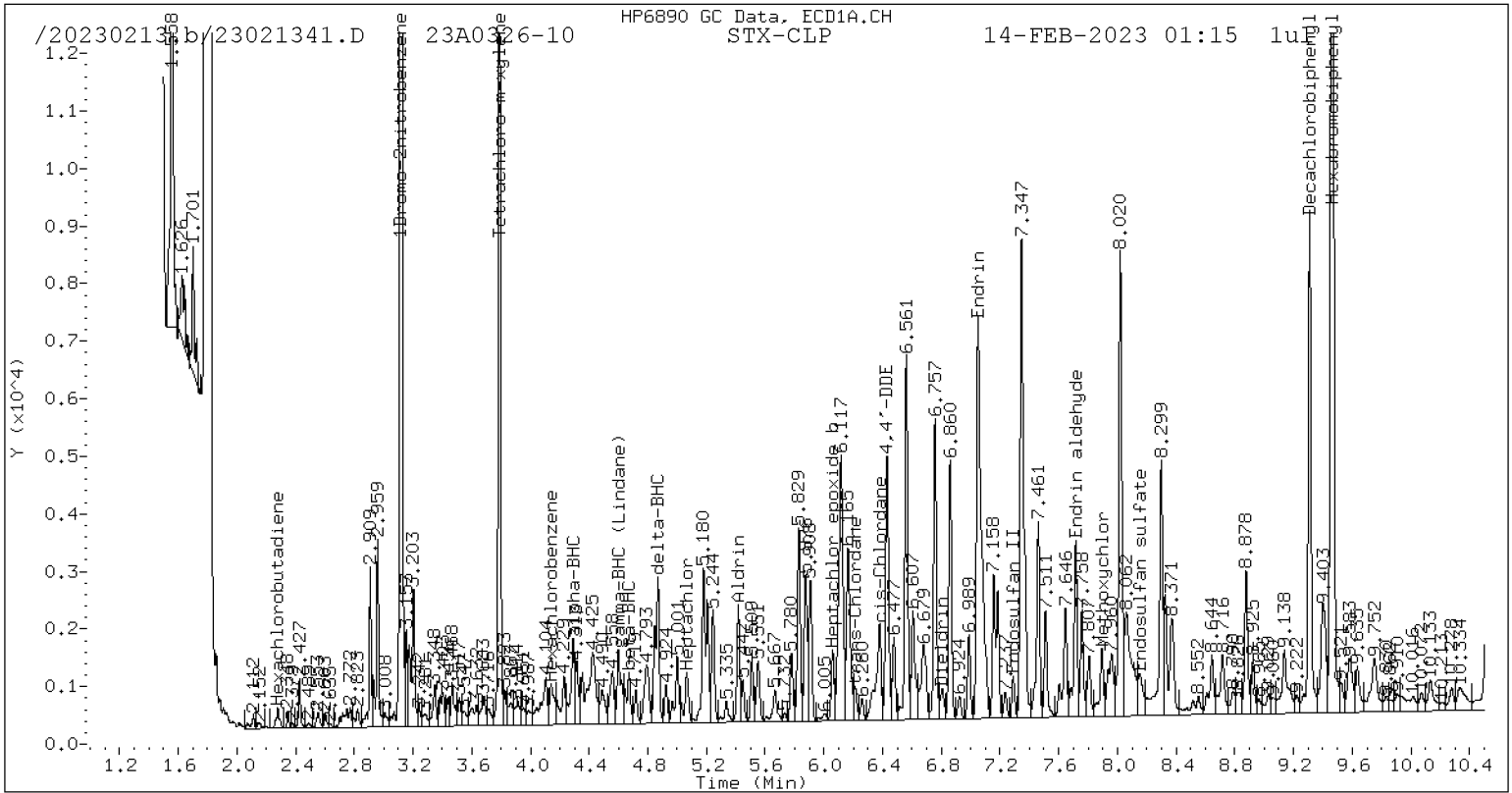
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1295584	28.7
Hexabromobiphenyl	769764	913077	18.6

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

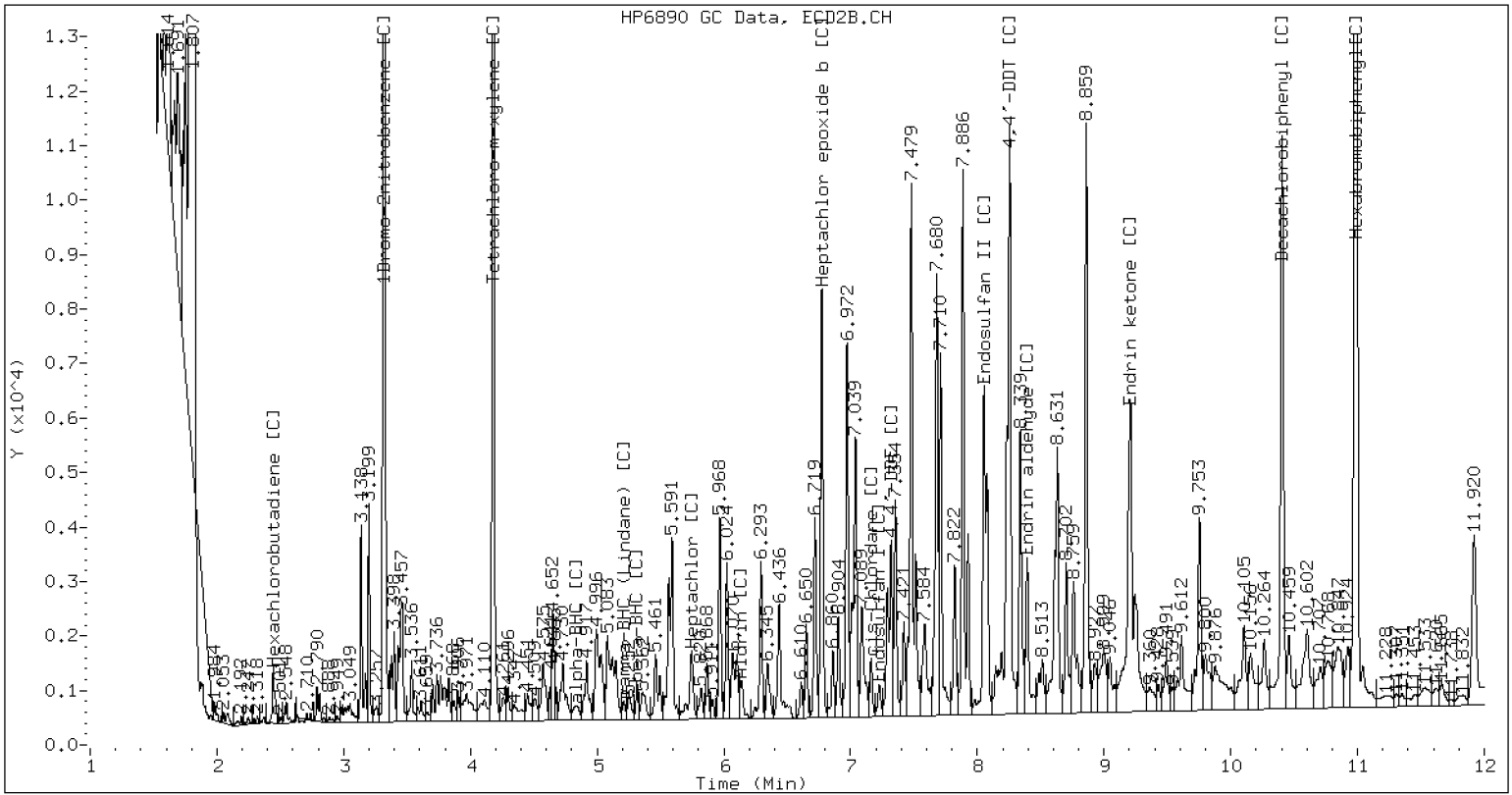
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021341.D 23A0326-10 CLP2



CLP-2 Manual Integration: NO



ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	
Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-11 A</u>
Sampled: <u>01/17/23 14:06</u>	Prepared: <u>02/01/23 13:23</u>
% Solids: <u>52.57</u>	Preparation: <u>EPA 3546 (Microwave)</u>
Batch: <u>BLA0684</u>	Sequence: <u>SLB0237</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>
	File ID: <u>23021342.D</u>
	Analyzed: <u>02/14/23 01:32</u>
	Initial/Final: <u>23.91 g Wet / 2.5 mL</u>
	Calibration: <u>FL00041</u>
	Column 2: <u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9558	7.66	96.2	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.9558	8.02	101	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.9558	5.90	74.1	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.9558	5.75	72.3	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021342.D
Data file 2: /20230213.b/B20230213.b/23021342.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-11
Client ID:
Injection Date: 14-FEB-2023 01:32
Report Date: 02/17/2023 12:18
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.291	-0.008	102187	4.810	-0.005	24150	5.95	0.90	147.4*	alpha-BHC
4.672	-0.009	40168	5.314	0.024	15956	6.07	1.57	118.0*	beta-BHC
4.868	0.005	83243	----	----	----	5.93	0.00	---	delta-BHC
4.601	0.002	45290	5.211	0.002	9848	3.04	0.43	150.1*	gamma-BHC (Lindane)
5.066	-0.013	30898	5.744	0.011	37249	2.33	1.81	25.3	Heptachlor
5.417	0.018	44995	6.139	0.004	23416	3.03	1.00	101.1*	Aldrin
6.060	-0.011	30832	6.772	-0.020	210398	2.39	10.82	127.5*	Heptachlor epoxide b
----	----	----	7.225	-0.011	19722	0.00	1.15	---	Endosulfan I
6.807	0.031	17159	7.515	-0.015	66577	1.35	3.52	88.9*	Dieldrin
6.432	-0.008	124790	7.319	-0.003	77936	10.59	4.49	80.9*	4,4'-DDE
7.052	0.027	256458	----	----	----	27.20	0.00	---	Endrin
7.291	0.027	15709	8.077	0.010	96651	1.85	7.85	123.7*	Endosulfan II
----	----	----	7.927	-0.002	81313	0.00	6.96	---	4,4'-DDD
8.155	0.030	23269	----	----	----	2.89	0.00	---	Endosulfan sulfate
----	----	----	8.255	0.008	358032	0.00	31.76	---	4,4'-DDT
7.897	0.032	33033	8.861	-0.029	242188	8.68	48.55	139.3*	Methoxychlor
8.430	0.030	3787	9.209	0.021	227785	0.41	19.51	191.8*	Endrin ketone
7.723	0.031	68192	8.395	-0.003	64014	10.07	7.37	30.9	Endrin aldehyde
6.211	-0.004	15717	----	----	----	1.20	0.00	---	trans-Chlordane
6.380	0.019	85119	7.162	-0.002	29212	6.49	1.54	123.3*	cis-Chlordane
2.277	-0.019	8448	2.499	0.025	1640	0.47	0.06	151.7*	Hexachlorobutadiene
4.141	-0.001	33008	----	----	----	2.07	0.00	---	Hexachlorobenzene
3.788	-0.002	359639	4.179	-0.002	544401	29.64	28.93	2.4	Tetrachloro-m-xylene
9.312	0.006	280492	10.406	0.003	376355	38.49	40.33	4.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	892170	32.7
Hexabromobiphenyl	609723	719189	18.0

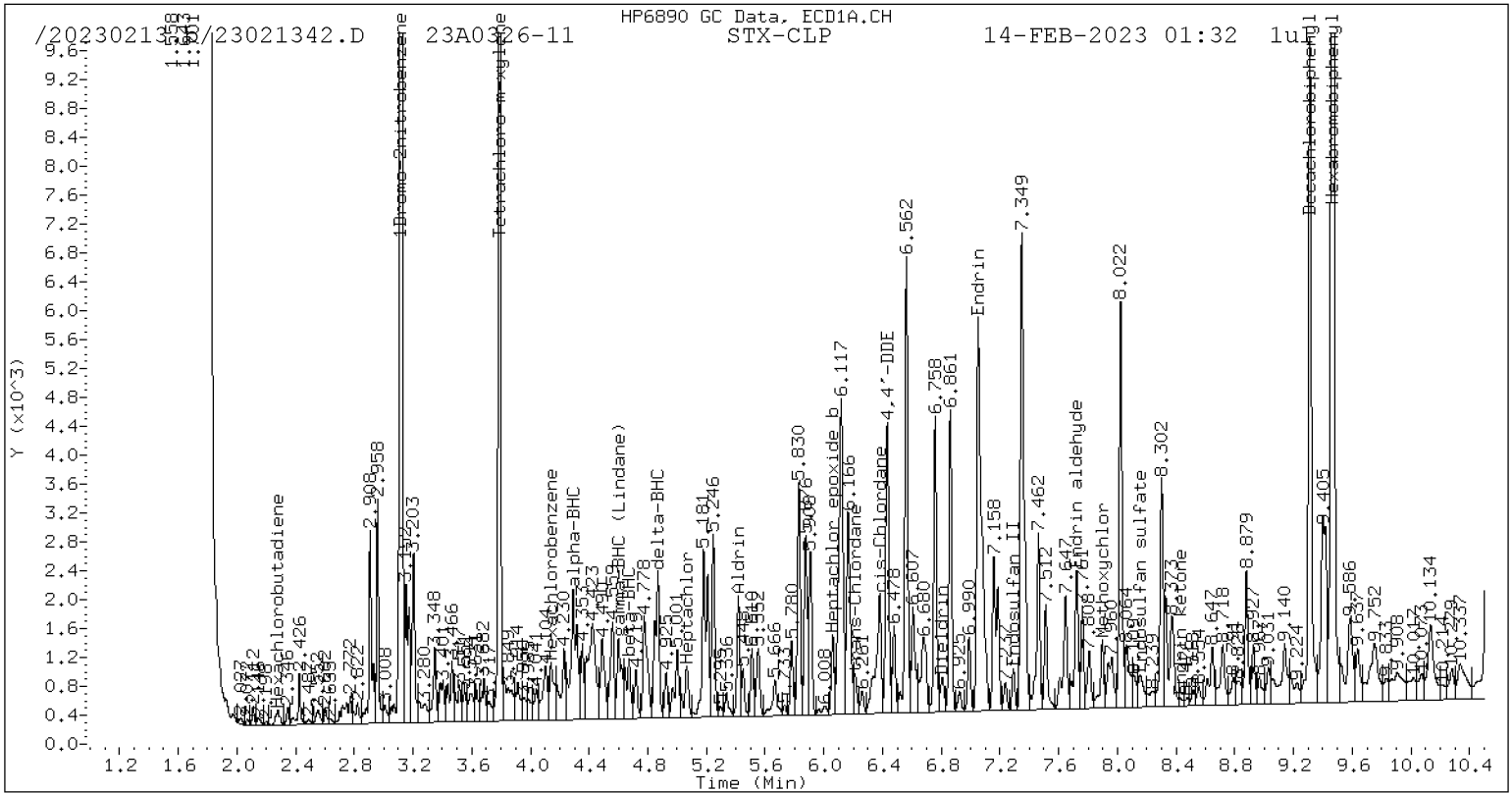
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1336839	32.8
Hexabromobiphenyl	769764	844428	9.7

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

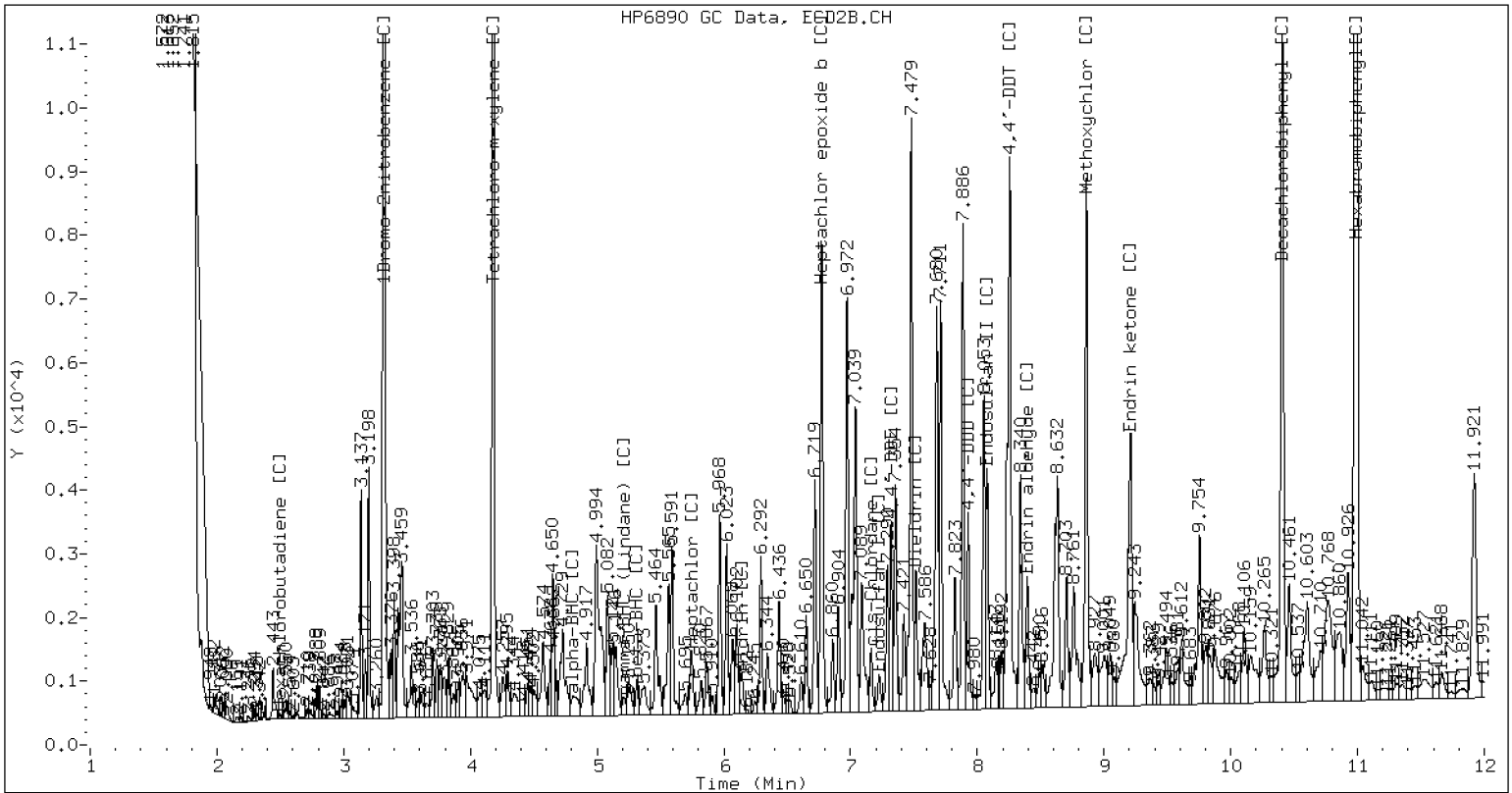
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021342.D 23A0326-11 CLP2



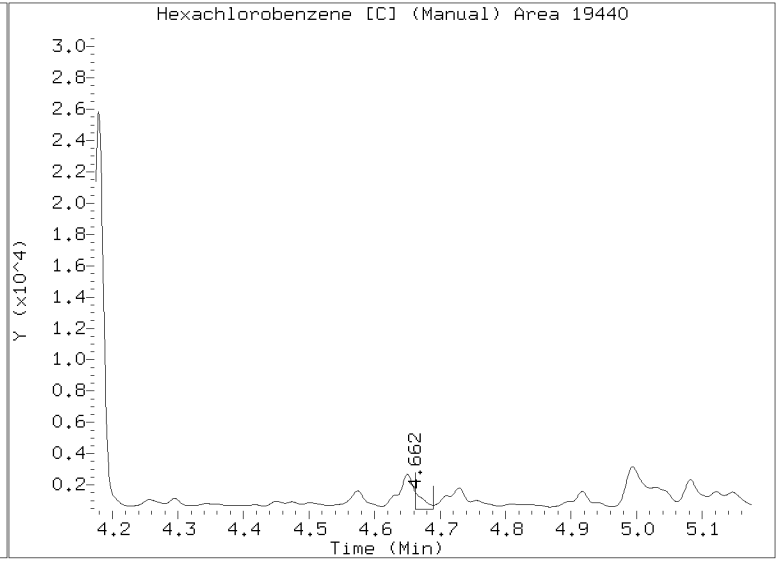
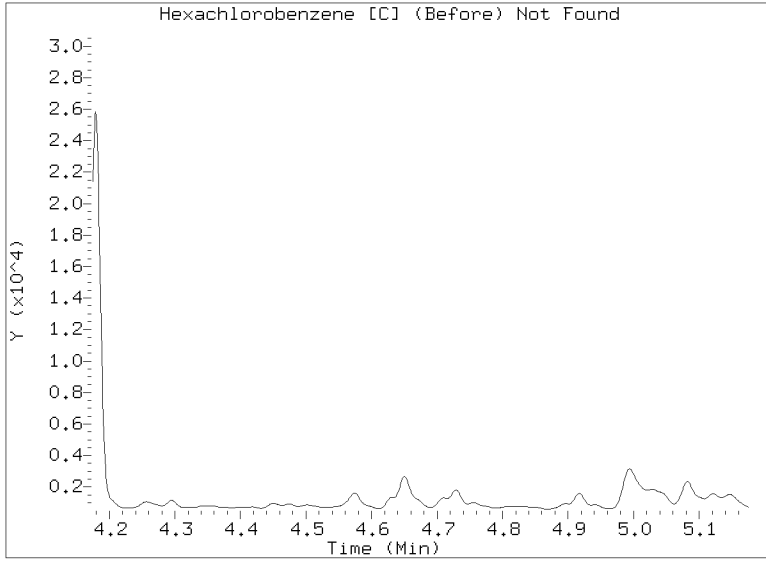
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021342.D

Injection Date: 14-FEB-2023 01:32

Lab ID:23A0326-11 Client ID:





LDW23-SC1162B

Dual Column

**ORGANIC ANALYSIS DATA SHEET
EPA 8081B**

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	
Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-12 A</u>
	File ID: <u>23021343.D</u>
Sampled: <u>01/17/23 14:37</u>	Prepared: <u>02/01/23 13:23</u>
	Analyzed: <u>02/14/23 01:50</u>
% Solids: <u>51.42</u>	Preparation: <u>EPA 3546 (Microwave)</u>
	Initial/Final: <u>24.65 g Wet / 2.5 mL</u>
Batch: <u>BLA0684</u>	Sequence: <u>SLB0237</u>
	Calibration: <u>FL00041</u>
Instrument: <u>ECD6</u>	Column 1: <u>STX-CLP</u>
	Column 2: <u>STX-CLPII</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.8895	12.3	156	30 - 160	
<i>Decachlorobiphenyl</i>	2	7.8895	7.71	97.7	30 - 160	
<i>Tetrachlorometaxylene</i>	1	7.8895	7.23	91.6	30 - 160	
<i>Tetrachlorometaxylene</i>	2	7.8895	5.39	68.4	30 - 160	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021343.D
Data file 2: /20230213.b/B20230213.b/23021343.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: 23A0326-12
Client ID:
Injection Date: 14-FEB-2023 01:50
Report Date: 02/17/2023 12:18
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.292	-0.007	104507	4.834	0.019	16130	9.67	1.14	158.0*	alpha-BHC
4.720	0.039	49111	5.315	0.025	13377	11.80	2.48	130.6*	beta-BHC
4.870	0.007	125605	----	----	----	14.22	0.00	---	delta-BHC
4.602	0.003	148247	5.212	0.003	8742	15.82	0.73	182.5*	gamma-BHC (Lindane)
5.067	-0.011	85829	5.745	0.011	30516	10.29	2.79	114.6*	Heptachlor
5.418	0.019	150129	6.140	0.005	19287	16.07	1.55	164.9*	Aldrin
6.060	-0.012	74153	6.773	-0.019	153506	9.15	14.89	47.7*	Heptachlor epoxide b
----	----	----	7.226	-0.010	14516	0.00	1.60	---	Endosulfan I
6.805	0.030	68767	7.514	-0.016	58764	8.61	5.85	38.1	Dieldrin
6.430	-0.010	155613	7.319	-0.003	55780	20.98	6.06	110.4*	4,4'-DDE
7.051	0.026	379849	----	----	----	46.16	0.00	---	Endrin
7.290	0.026	77775	8.077	0.010	72290	10.50	10.88	3.6	Endosulfan II
----	----	----	7.927	-0.003	69840	0.00	11.08	---	4,4'-DDD
----	----	----	----	----	----	0.00	0.00	---	Endosulfan sulfate
----	----	----	8.255	0.008	282368	0.00	46.42	---	4,4'-DDT
7.894	0.028	161329	----	----	----	48.59	0.00	---	Methoxychlor
----	----	----	9.208	0.019	187695	0.00	29.80	---	Endrin ketone
7.716	0.024	125733	8.393	-0.005	52251	21.28	11.15	62.4*	Endrin aldehyde
----	----	----	----	----	----	0.00	0.00	---	trans-Chlordane
6.379	0.019	190180	7.162	-0.002	20325	23.05	2.02	167.8*	cis-Chlordane
2.297	0.000	91301	2.474	0.001	126651	8.06	9.39	15.2	Hexachlorobutadiene
4.181	0.039	36206	----	----	----	3.61	0.00	---	Hexachlorobenzene
3.791	0.000	279693	4.181	-0.000	272852	36.64	27.35	29.0	Tetrachloro-m-xylene
9.308	0.002	397671	10.404	0.001	196853	62.52	39.09	46.1*	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	561375	-16.5
Hexabromobiphenyl	609723	627734	3.0

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	708801	-29.6
Hexabromobiphenyl	769764	455690	-40.8

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

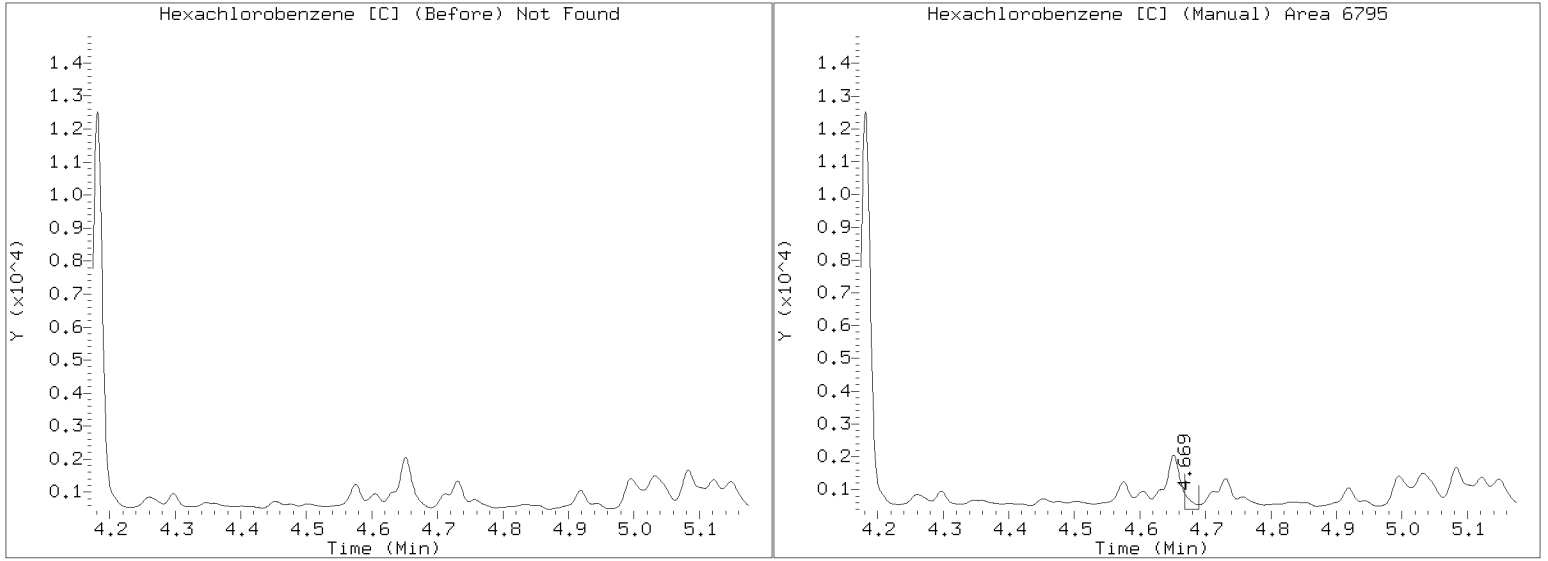
<- Indicates standard response outside Limits (-50 to +100%)

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021343.D

Injection Date: 14-FEB-2023 01:50

Lab ID:23A0326-12 Client ID:





PREPARATION BATCH SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0684 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	23021337.D	02/01/23 13:23	
LDW23-SC1032	23A0326-02	23021338.D	02/01/23 13:23	
LDW23-SC1170A	23A0326-04	23021339.D	02/01/23 13:23	
LDW23-SC1169C	23A0326-05	23021340.D	02/01/23 13:23	
LDW23-SC1161	23A0326-10	23021341.D	02/01/23 13:23	
LDW23-SC1155	23A0326-11	23021342.D	02/01/23 13:23	
LDW23-SC1162B	23A0326-12	23021343.D	02/01/23 13:23	
Blank	BLA0684-BLK1	23021325.D	02/01/23 13:23	
LCS	BLA0684-BS1	23021326.D	02/01/23 13:23	
LCS Dup	BLA0684-BSD1	23021327.D	02/01/23 13:23	



Batch: BLA0684

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version: HCB Only)

Matrix: Solid

Date Prepared: 2/1/23

Balance ID: B139298002

Set Up By: CFO 1/28/23

WO Comments

23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
62	Toxaphene
44	WND
QLS 10	QLS Spike

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g)		(REQ) GPC (1:1)	Yes / No Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Ethyl Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 12.5 (Wet)	Actual							
23A0313-08 A	56.1	(22.30)	22.34	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0313-09 A	52.3	(23.89)	23.97	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0313-10 A	54.1	(23.10)	23.58	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0313-11 A	58.7	(21.31)	21.40	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0313-13 A	84.7	(14.75)	14.75	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-01 A	59.0	(21.20)	21.33	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-02 A	57.3	(21.82)	22.37	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-04 A	51.6	(24.21)	24.34	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-05 A	54.6	(22.88)	23.31	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-10 A	54.6	(22.88)	22.88	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-11 A	52.6	(23.78)	23.91	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0326-12 A	51.4	(24.31)	24.65	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g)		(REQ) GPC (1:1)	Yes / No Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL Ethyl Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 12.5 (Wet)	Actual							
BLA0684-BLK1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0684-BS1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0684-BSD1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0684-MS1	84.7	(14.75)	14.75	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0313-13
BLA0684-MSD1	84.7	(14.75)	14.75	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0313-13

AR

2/1/23

NR 2/9/23

R 2/1/23 13:23

Client ID verified By

Date

Preparation Reviewed By

Date

Extraction Date and Time



Batch: BLA0684

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version: HCB Only)

WO Comments

23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Reagents Used

Surrogates & Spike Standards Used

Microwave	Station/Reagent	Standard ID
① 2 3 CR 2/11/23 Analyst/Date	Microwave Analyst: CR Date: 2/11/23	
Pre GPC KD 100°C (No Exchange) ④ 3 ④ ⑤ 6 TWC 2/16/23 Analyst/Date	Hexane K011373	
	80:20 Hexane/Acetone L0000257	
	1:1 Hexane/Acetone L000879	
	Neutral Glass Wool L000350	
	Anhydrous Sodium Sulfate L000759	
	Pre GPC KD Analyst: TWC Date: 2/16/23	
TurboVap Pre GPC 1 2 3 ④ 5 CRO 2/17/23 Analyst/Date	Hexane K011373	
	Anhydrous Sodium Sulfate N/A	
	Neutral Glass Wool N/A	
	GPC Filter Prep Analyst: CRO Date: 2/17/23	
Post GPC KD 80 - 85°C Hexane Exchange (2 X 20 mL) 100°C ① ② ③ ④ ⑤ 6 WJ/V 2/10/23 Analyst/Date	Methylene Chloride L000808	
	GPC Analyst: CRO Date: 2/17/23	
	Methylene Chloride L000808	
	GPC Calibration File CHAD66	
	Post GPC KD Analyst: WJ/V Date: 2/10/23	
TurboVap Pre-Cleanups 1 2 3 ④ 5 MRS 2/9/23 Analyst/Date	Methylene Chloride L000900	
	Hexane K011373	
	Vialing Analyst: MRS Date: 2/9/23	
TurboVap Post-Cleanups 1 2 ③ 4 5 MRS 2/9/23 Analyst/Date	Hexane K011373	
	Sulfuric Acid L001033	
	Ethyl Acetate	
	Tetrabutylammonium hydrogensulfate (TBAS) L000840	
1 Vialing MRS 2/9/23	Sodium Sulfite K010263	
	Silica Gel (SPE) Darts K011573	

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	N L000773	50µL	CR	DP
2µg/mL	Exp Date: 7/21/23			
Spike (Freezer)	3 K011471	100µL	CR	DP
0.5/1/5µg/mL	Exp Date: 6/10/23			

MANUALLY ENTER EXPIRATION DATES!

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

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



Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0684

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version: HCB Only)

WO Comments

23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43,
7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43,
7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Analyst/Date



Extraction Parameter: PEST Extraction Batch BLA684

Total Solids Batch: BA 0326 Work Order(s): 23A0326

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= $\phi 7, \phi 8$.	$\checkmark \phi 1/27/23$
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= $\phi 1-12$	$\checkmark \phi 1/27/23$
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	ϕ
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel (sulfur odors)= $\phi 1-\phi 6, \phi 9-12$.	$\checkmark \phi 1/27/23$
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/N	$\checkmark \phi 1/27/23$
<input checked="" type="checkbox"/> Multiple Jars Y/N	$\checkmark \phi 1/27/23$
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	ϕ
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



Batch: BLA0684

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version: HCB Only)

WO Comments
23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
<p>SPECIAL INSTRUCTIONS:</p> <ol style="list-style-type: none"> 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessels. 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool. 8. Rinse with Hexane. 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE). 12. TurboVap 13. GPC 14. After GPC: KD at 80 - 85°C 15. Exchange to Hexane at 100°C 2 x 20 mL). 16. TurboVap. 17. Cleanups, If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid liable compounds are requested. 18. Vial in Hexane. <p>A. Need Total Solids Y <input type="checkbox"/> N</p> <p>B. Archive/Freeze <input checked="" type="checkbox"/> N</p>	



Extraction Parameter: PEST Extraction Batch BLA0684

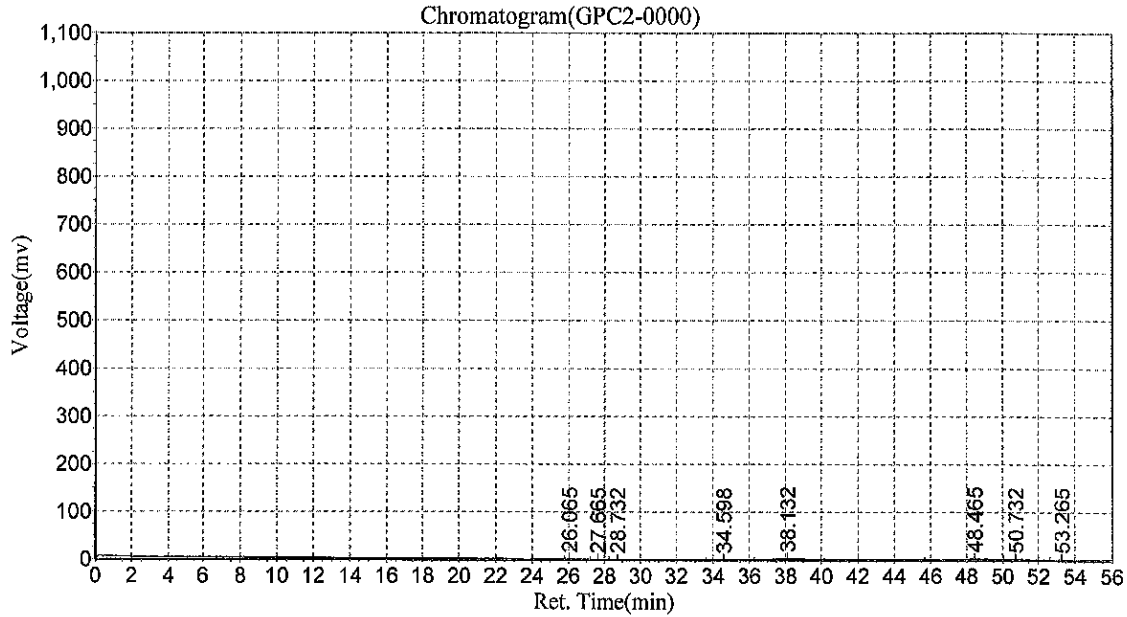
Total Solids Batch: BLA0619 Work Order(s): 13A0313

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>12, 11</u>	<u>Y</u> <u>01/27/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>01, 02, 05-11, 13</u>	<u>N</u> <u>01/27/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)= <u>12/23</u>	<u>Y</u>
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors= <u>sulfur odor = 01, 02, 05-11, 13</u> ^{Included} <u>03, 04</u>	<u>Y</u> <u>01/27/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized In Pyrex dish=	<u>Y</u>
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y / N	<u>Y</u> <u>01/27/23</u>
<input checked="" type="checkbox"/> Multiple Jars Y / N	<u>N</u> <u>01/27/23</u>
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	<u>Y</u>
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	

BLA0684 23a0313/23a0326

Date:2023-02-07,3:40:01 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0000
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,3:40:01 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		26.065	2045.637	175390.813	11.5630
2		27.665	2287.374	116313.930	7.6682
3		28.732	2577.198	141872.141	9.3532
4		34.598	1745.552	110368.398	7.2762
5		38.132	2482.952	308108.313	20.3126
6		48.465	2452.892	343415.844	22.6403
7		50.732	2297.757	214301.344	14.1282
8		53.265	1828.135	107062.008	7.0583
Total			17717.497	1516832.789	100.000

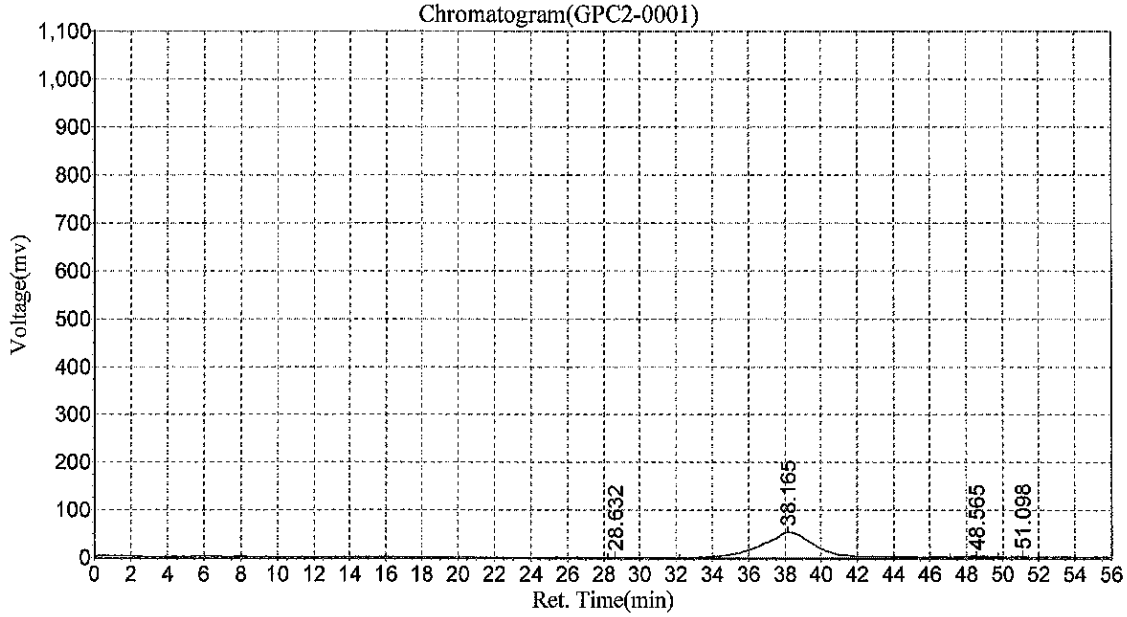
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,4:37:48 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0001
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,4:37:49 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.632	1872.667	105375.859	0.9108
2		38.165	53448.621	11129589.000	96.1967
3		48.565	1865.577	169535.688	1.4654
4		51.098	1766.712	165115.516	1.4271
Total			58953.576	11569616.063	100.000

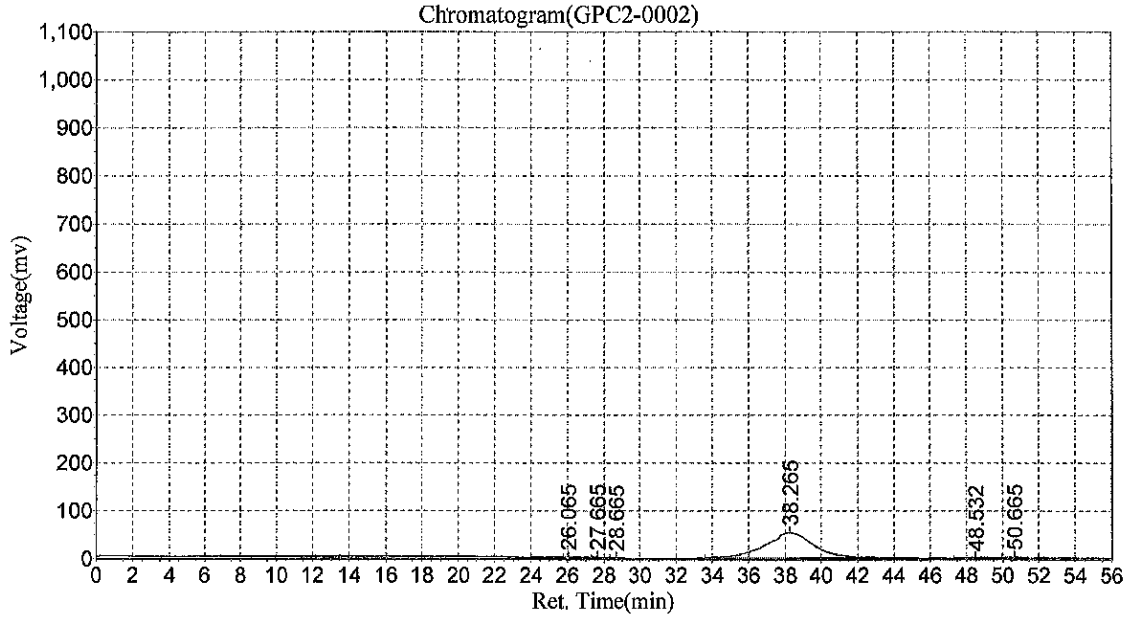
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,5:35:30 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0002
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,5:35:31 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		26.065	2044.281	125258.219	1.1201
2		27.665	2677.741	123849.922	1.1075
3		28.665	2769.405	154366.172	1.3804
4		38.265	54103.621	10478551.000	93.7047
5		48.532	1507.548	151866.969	1.3581
6		50.665	1982.918	148629.219	1.3291
Total			65085.514	11182521.500	100.000

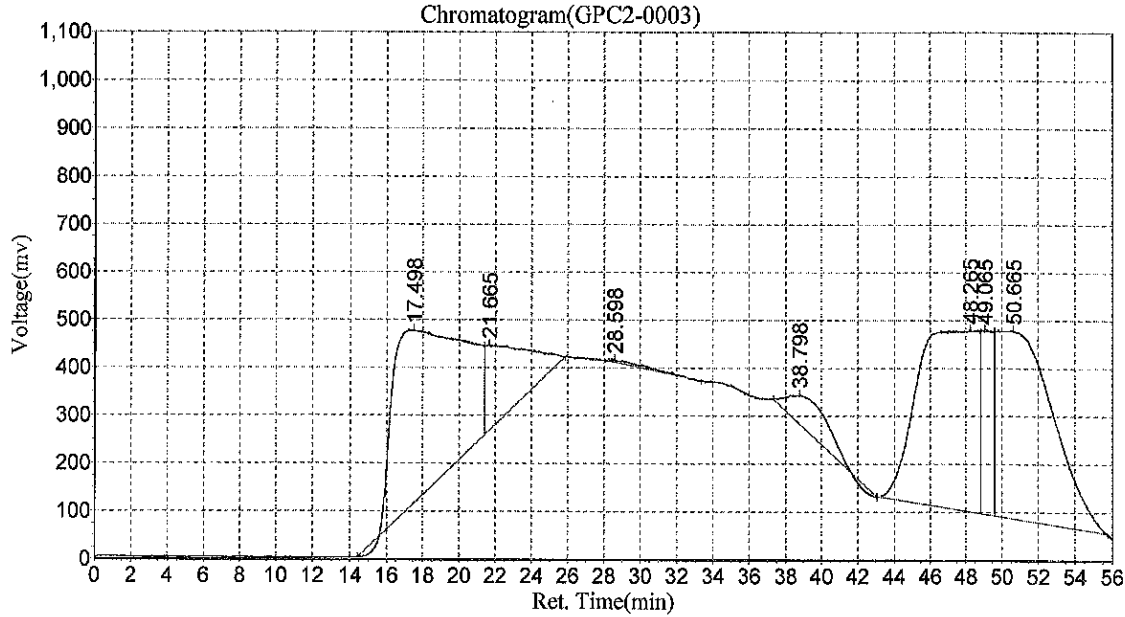
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,6:33:14 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0003
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,6:33:15 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	361567.875	93923208.000	29.4580
2		21.665	177956.109	25590148.000	8.0261
3		28.598	7453.872	1298927.000	0.4074
4		38.798	59552.023	10055738.000	3.1539
5		48.265	377205.375	86255184.000	27.0530
6		49.065	381770.594	18316824.000	5.7449
7		50.665	390079.000	83397704.000	26.1568
Total			1755584.849	318837733.000	100.000

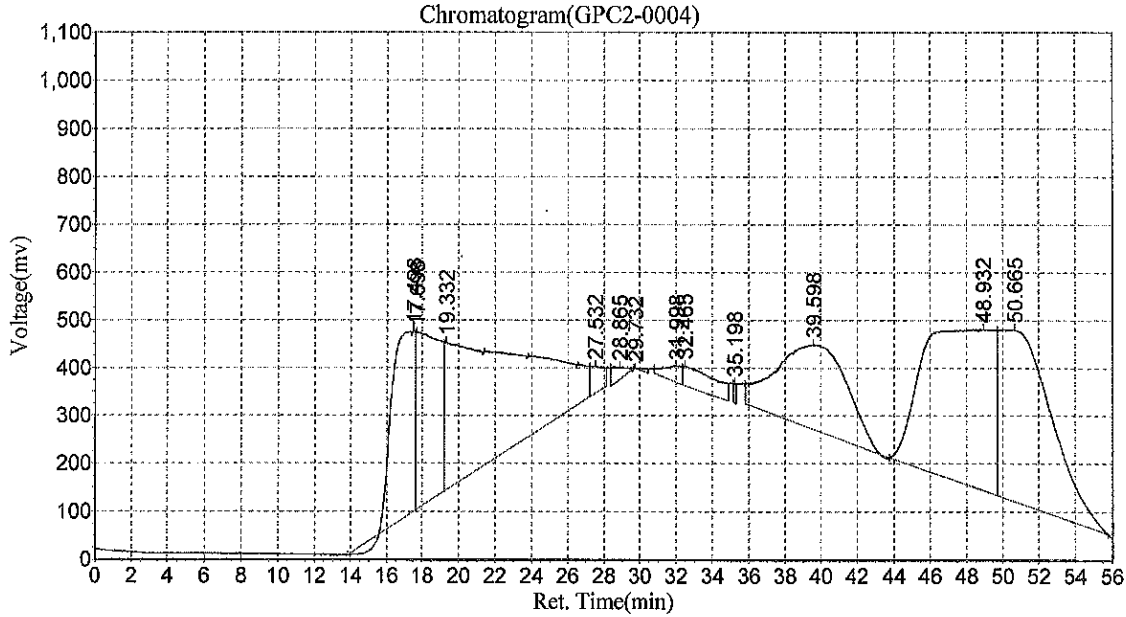
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,7:30:55 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0004
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,7:30:56 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	378171.344	33221718.000	8.8020
2		17.698	371236.000	32839988.000	8.7009
3		19.332	311264.031	89675272.000	23.7593
4		27.532	57203.898	2701164.500	0.7157
5		28.865	22632.936	1340354.250	0.3551
6		29.732	2258.431	270377.313	0.0716
7		31.998	35564.094	2537687.000	0.6724
8		32.465	41963.113	5950597.500	1.5766
9		35.198	42958.793	336711.188	0.0892
10		39.598	182113.250	50367236.000	13.3447
11		48.932	335034.031	88271688.000	23.3874
12		50.665	357095.719	69919280.000	18.5250
Total			2137495.640	377432073.750	100.000

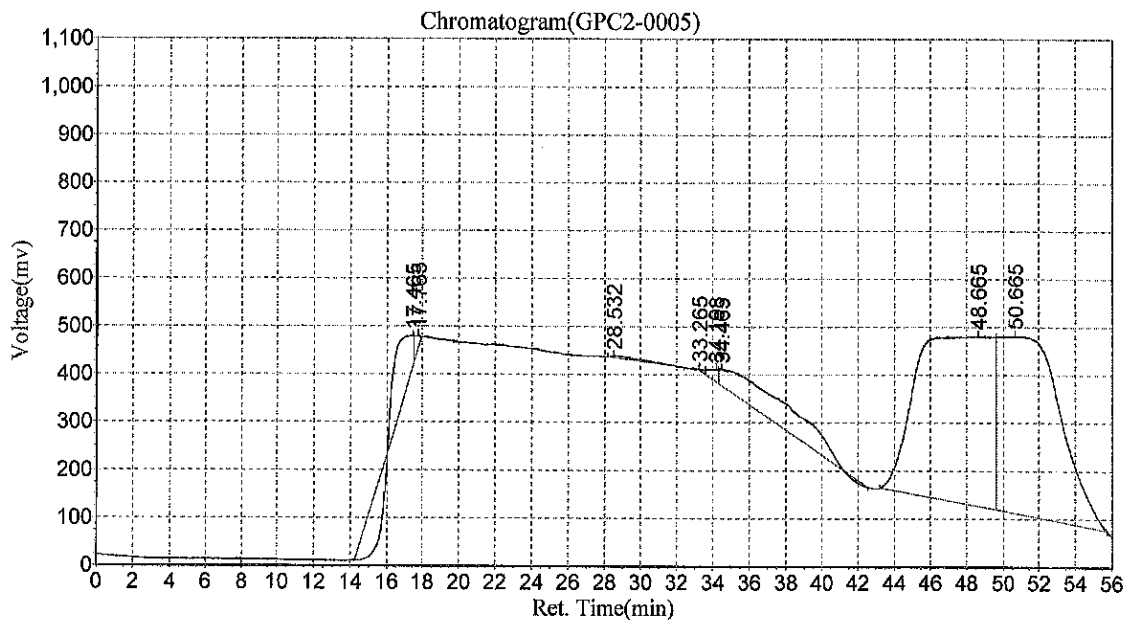
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,8:28:43 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0005
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,8:28:43 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.465	65355.211	1987989.375	0.9500
2		17.765	28363.482	753694.625	0.3602
3		28.532	6062.290	935352.000	0.4470
4		33.265	2726.936	119844.297	0.0573
5		34.198	25858.035	849874.500	0.4061
6		34.465	32817.777	17338680.000	8.2858
7		48.665	352897.531	100165776.000	47.8673
8		50.665	367063.469	87106088.000	41.6263
Total			881144.731	209257298.797	100.000

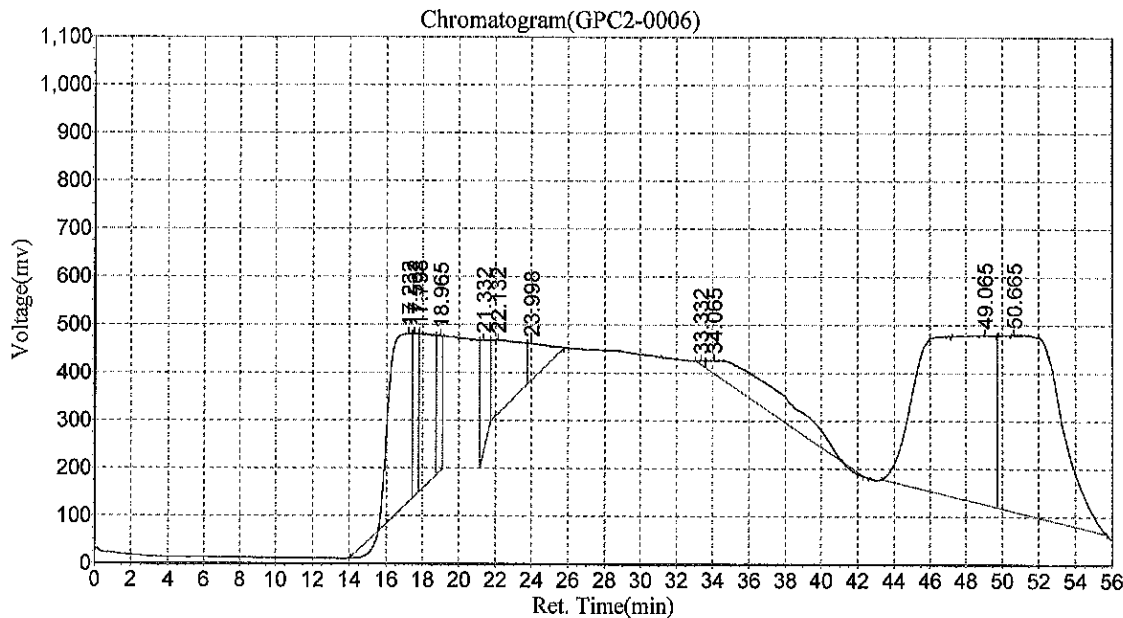
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,9:26:24 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0006
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,9:26:25 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.232	351395.969	29399818.000	10.1379
2		17.532	340227.781	6744449.000	2.3257
3		17.798	330202.313	17447950.000	6.0165
4		18.965	283422.344	6262672.000	2.1595
5		21.332	184204.750	6483515.000	2.2357
6		22.132	154606.313	15827304.000	5.4577
7	Collect BAN	23.998	77211.969	5197848.000	1.7924
8		33.332	7197.638	223502.094	0.0771
9		34.065	27158.893	18320312.000	6.3174
10		49.065	352242.844	99002440.000	34.1389
11		50.665	367601.063	85089480.000	29.3413
Total			2475471.874	289999290.094	100.000

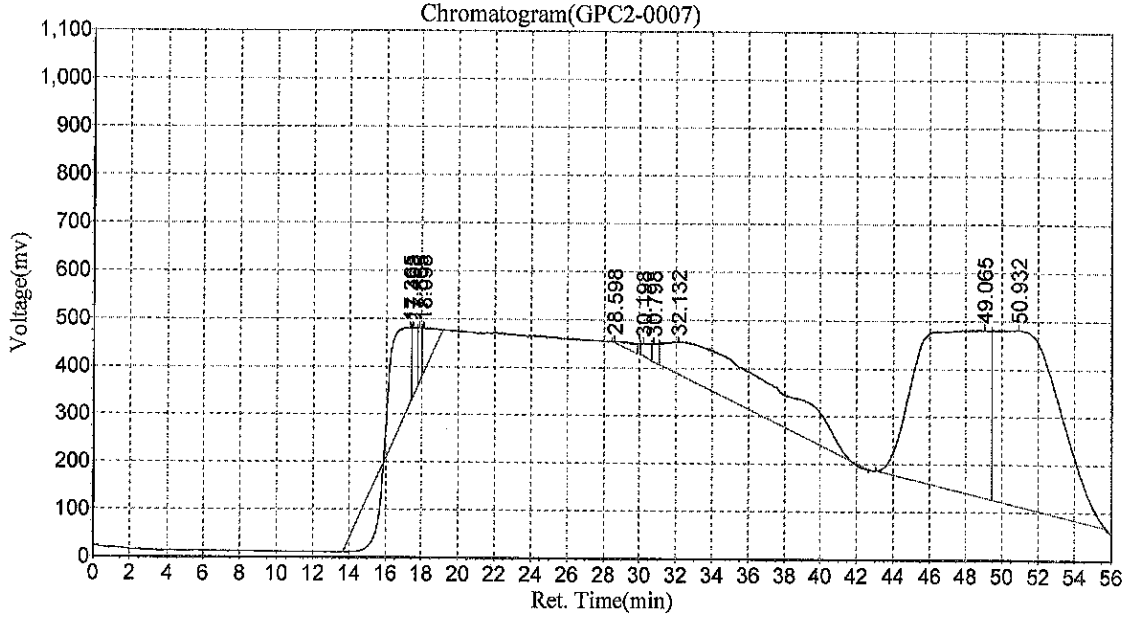
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,10:24:12 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0007
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,10:24:13 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	157158.484	6460461.000	2.6419
2		17.498	145667.031	2735405.750	1.1186
3		17.865	114760.570	1784165.875	0.7296
4		18.098	94770.547	3414838.000	1.3964
5		28.598	2947.897	952096.063	0.3893
6		30.198	28665.658	1128058.750	0.4613
7		30.798	39588.195	972821.375	0.3978
8		32.132	68118.164	43446736.000	17.7667
9		49.065	349350.156	94006864.000	38.4423
10		50.932	366789.875	89638792.000	36.6561
Total			1367816.578	244540238.813	100.000

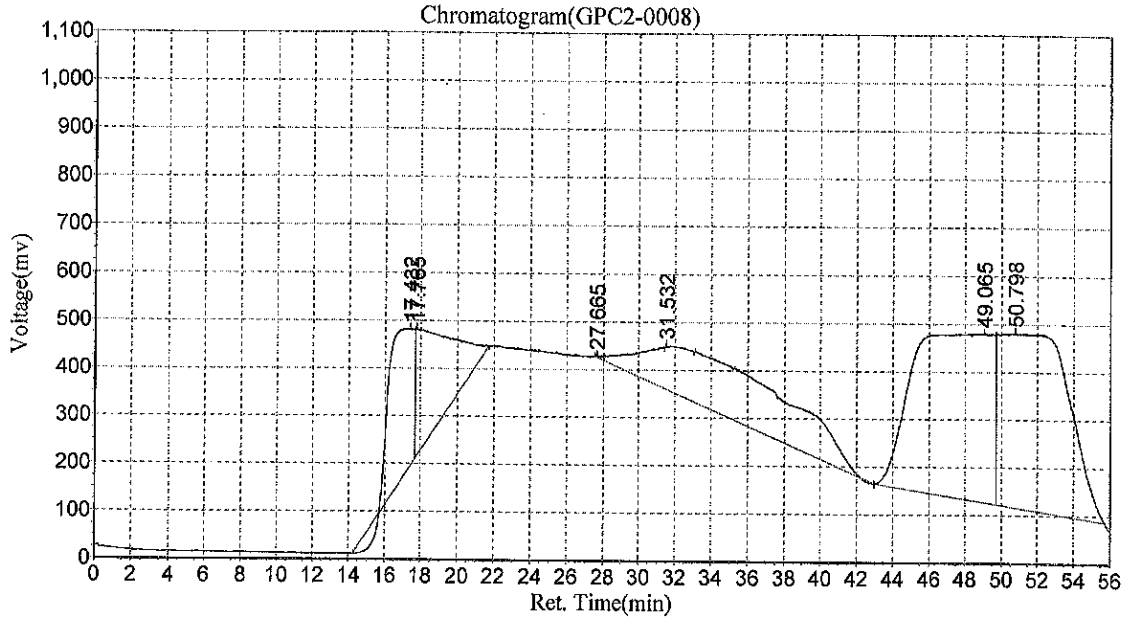
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-07,11:22:06 PM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0008
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-07,11:22:06 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.432	285774.406	28112124.000	8.5782
2		17.765	266163.875	32129906.000	9.8042
3		27.665	3194.303	151873.906	0.0463
4		31.532	91231.094	65394472.000	19.9546
5		49.065	350504.125	105313952.000	32.1357
6		50.798	361467.313	96613680.000	29.4809
Total			1358335.115	327716007.906	100.000

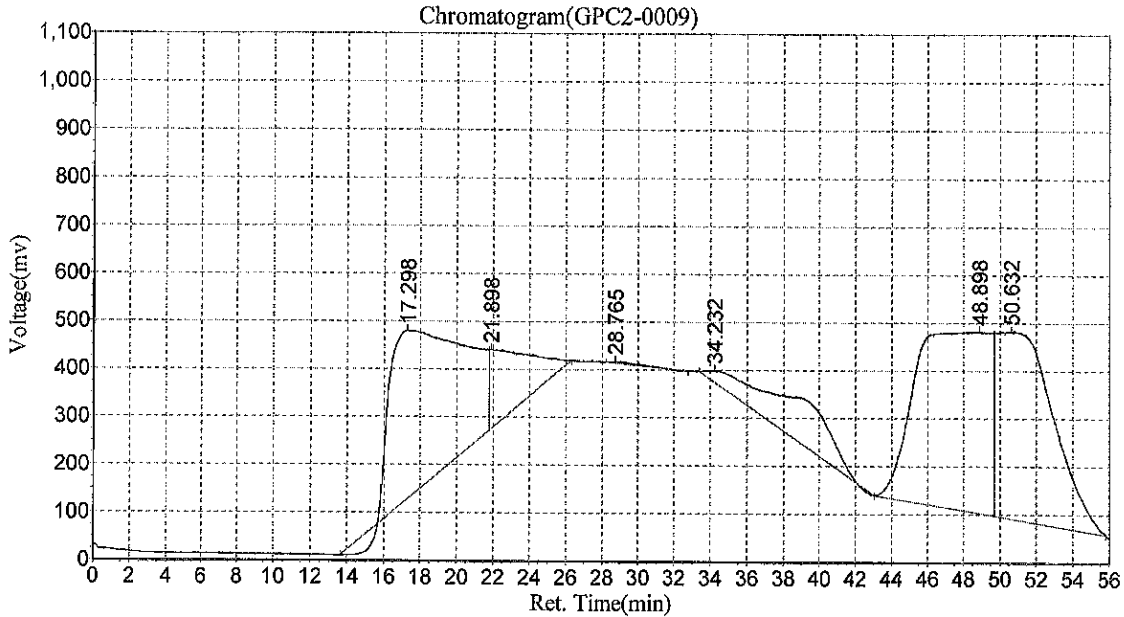
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,12:19:49 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0009
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-08,12:19:49 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.298	351414.750	91876480.000	27.6058
2		21.898	164695.313	22989242.000	6.9075
3		28.765	4745.500	590200.688	0.1773
4		34.232	23918.063	26827426.000	8.0608
5		48.898	376970.781	106771744.000	32.0814
6		50.632	388368.344	83760312.000	25.1672
Total			1310112.750	332815404.688	100.000

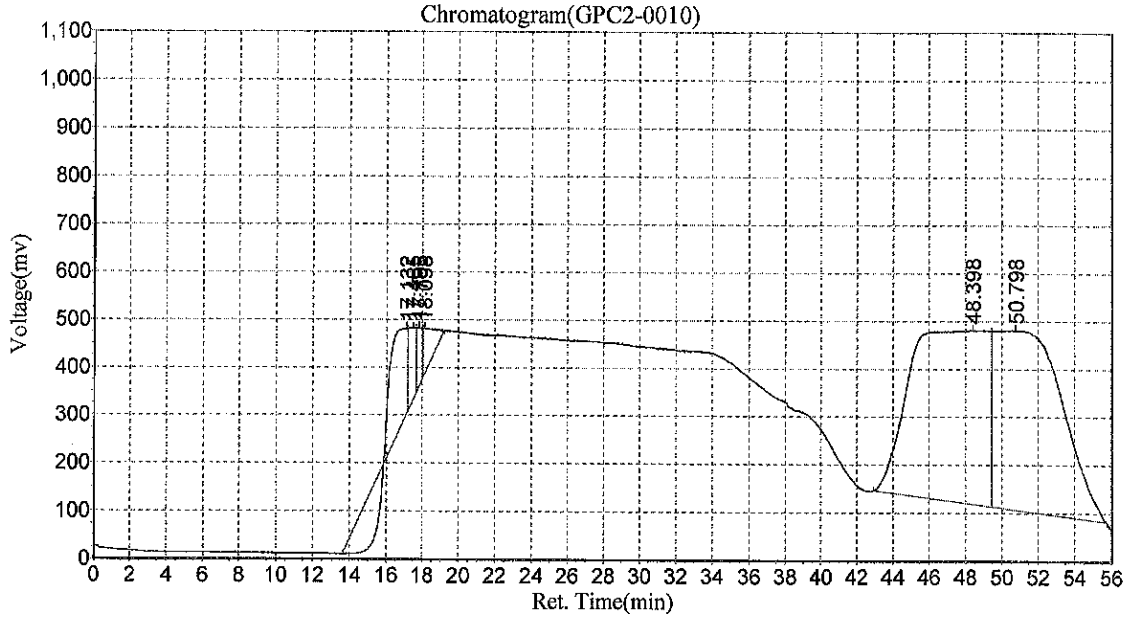
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,1:17:30 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0010
 Method File:E:\GPC2_InHouse.mtd

Analyst:£°CTO
 Date/Time:2023-02-08,1:17:31 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.132	179613.234	4741030.000	2.1898
2		17.465	153128.844	4351076.500	2.0097
3		17.798	125574.430	2654679.750	1.2261
4		18.098	99311.969	3783231.250	1.7474
5		48.398	360984.281	106371040.000	49.1302
6		50.798	372913.844	94607344.000	43.6968
Total			1291526.602	216508401.500	100.000

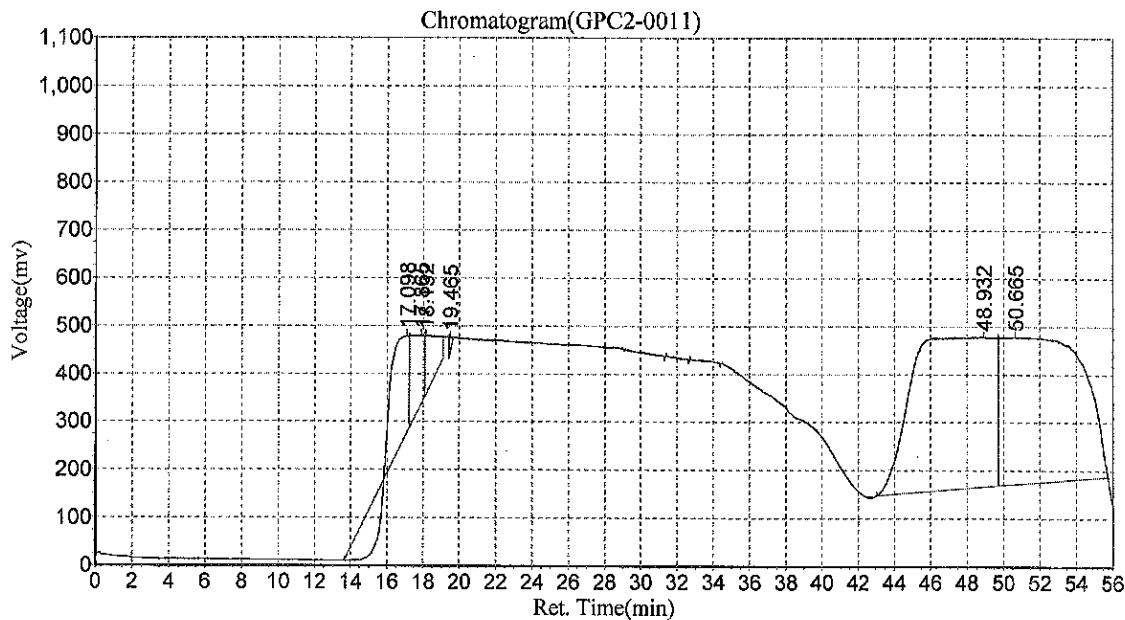
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,2:15:18 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0011
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-08,2:15:18 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.098	203656.750	7214126.500	3.4824
2		17.865	144546.391	8045000.500	3.8834
3		18.132	123420.703	5395251.000	2.6044
4		19.465	16746.254	173290.297	0.0836
5		48.932	305085.031	97305856.000	46.9710
6		50.665	297291.188	89028008.000	42.9752
Total			1090746.316	207161532.297	100.000

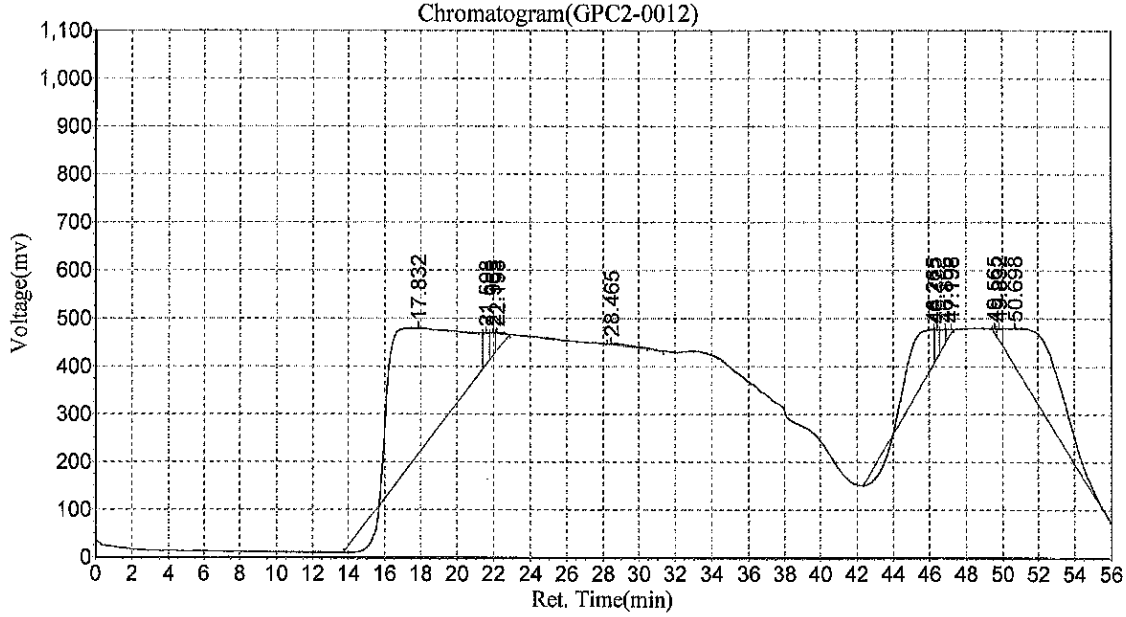
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,3:12:59 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0012
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-08,3:13:00 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	265792.375	65047660.000	60.3012
2		21.598	66632.078	1322080.750	1.2256
3		21.965	48148.926	989856.063	0.9176
4		22.198	36461.465	973650.625	0.9026
5		28.465	1960.151	342867.188	0.3178
6		46.265	71621.078	9622771.000	8.9206
7		46.432	60904.398	971701.688	0.9008
8		46.865	32965.039	882455.813	0.8181
9		47.198	11032.682	367878.688	0.3410
10		49.565	6409.438	101121.805	0.0937
11		49.832	22746.273	491085.406	0.4553
12		50.698	77339.734	26758042.000	24.8056
Total			702013.637	107871171.023	100.000

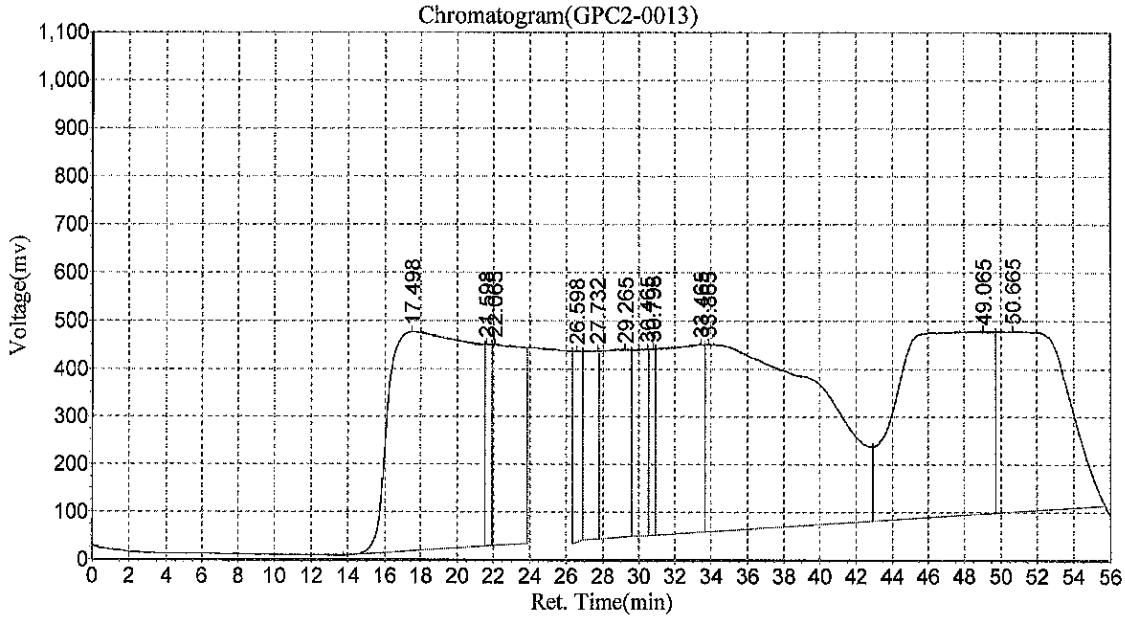
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,4:10:42 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0013
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-08,4:10:42 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	457003.969	146407408.000	18.8770
2		21.598	421701.313	10087459.000	1.3006
3		22.065	419339.063	47994832.000	6.1882
4		26.598	394113.000	14168122.000	1.8268
5		27.732	391543.250	20375022.000	2.6270
6		29.265	390593.000	42187828.000	5.4395
7		30.465	388140.469	21743510.000	2.8035
8		30.798	387896.719	9306643.000	1.1999
9		33.465	390068.688	63656888.000	8.2076
10		33.865	388962.188	168079104.000	21.6712
11		49.065	375465.063	135636336.000	17.4882
12		50.665	371734.031	95944232.000	12.3705
Total			4776560.750	775587384.000	100.000

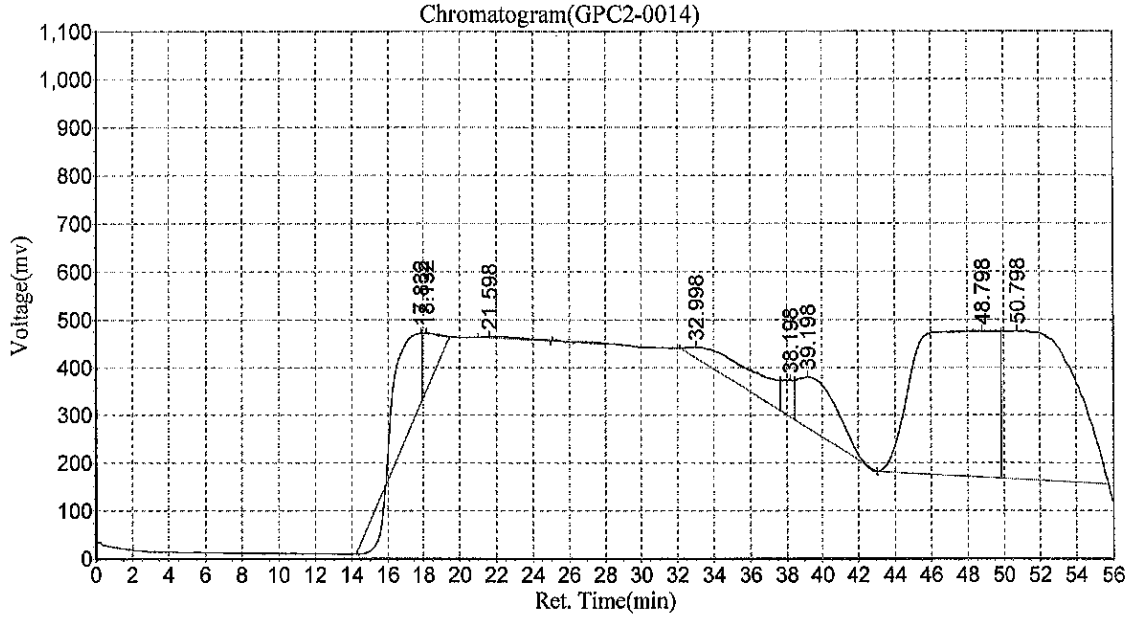
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,5:08:23 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0014
 Method File:E:\GPC2_InHouse.mtd

Analyst:f°CTO
 Date/Time2023-02-08,5:08:24 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	147901.891	15465743.000	6.6273
2		18.132	121640.031	6614780.500	2.8345
3		21.598	4183.657	935222.125	0.4008
4		32.998	26553.137	13890007.000	5.9521
5		38.198	79204.938	3605424.750	1.5450
6		39.198	108816.125	17155622.000	7.3514
7		48.798	300711.344	94479296.000	40.4858
8		50.798	303635.563	81217704.000	34.8030
Total			1092646.684	233363799.375	100.000

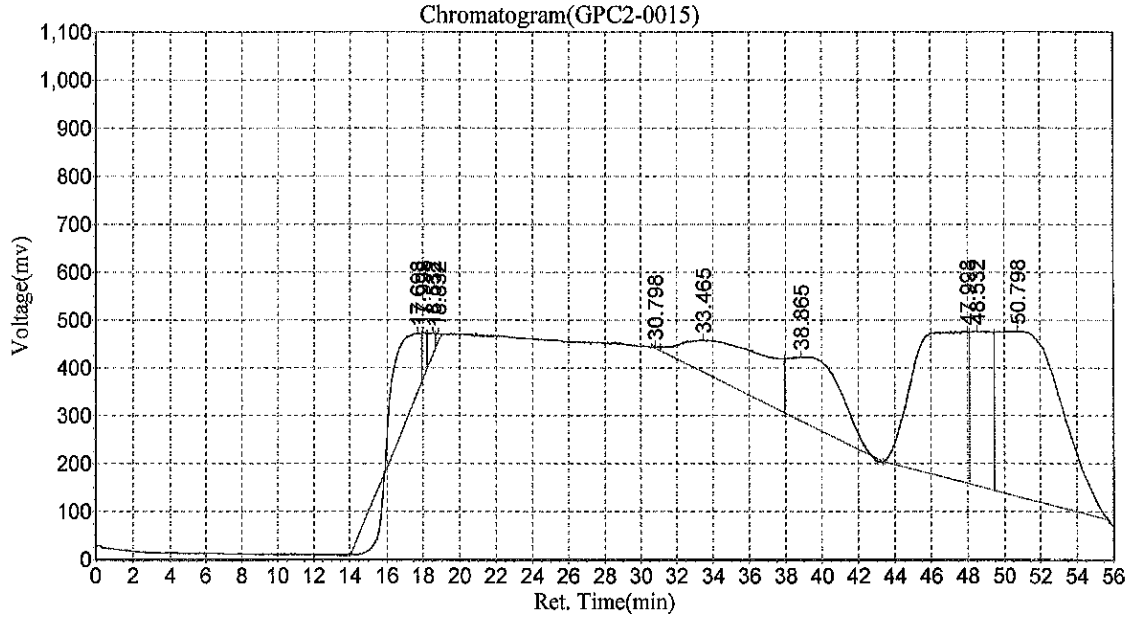
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,6:06:11 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0015
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-08,6:06:11 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.698	122716.875	11321036.000	4.5950
2		17.998	95965.523	1627600.375	0.6606
3		18.532	45138.438	1510906.500	0.6132
4		18.832	16534.080	322007.156	0.1307
5		30.798	4695.848	134228.359	0.0545
6		33.465	67765.156	30011826.000	12.1812
7		38.865	134736.063	29046574.000	11.7894
8	Dump BAN	47.998	315676.906	62679528.000	25.4403
9		48.532	321795.438	25859998.000	10.4960
10		50.798	343290.844	83865344.000	34.0392
Total			1468315.170	246379048.391	100.000

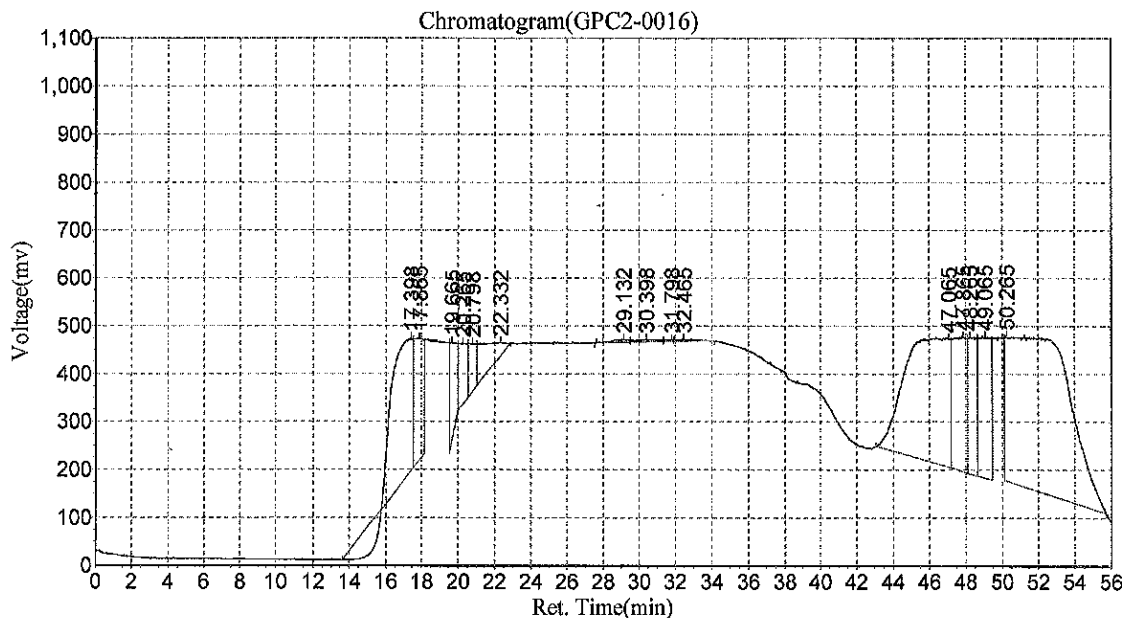
Ingredient Table

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

BLA0684 23a0313/23a0326

Date:2023-02-08,7:03:52 AM
 Data File:c:\n2000\data\gpc2\020723\GPC2-0016
 Method File:E:\GPC2_InHouse.mtd

Analyst:CTO
 Date/Time:2023-02-08,7:03:53 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	276680.313	19002084.000	9.2619
2		17.865	254762.344	9184247.000	4.4765
3		19.665	157862.156	4261930.000	2.0773
4		20.265	127179.750	4054936.000	1.9764
5		20.798	100407.063	3202546.000	1.5610
6		22.332	27212.707	4763639.000	2.3219
7		29.132	5593.894	396476.938	0.1932
8		30.398	4639.841	446572.969	0.2177
9		31.798	4079.150	132808.547	0.0647
10		32.465	3729.965	335989.406	0.1638
11		47.065	268158.844	44148660.000	21.5187
12		47.865	278318.406	15390726.000	7.5017
13		48.265	282099.688	9059252.000	4.4156
14		49.065	291385.250	13941107.000	6.7951
15		50.265	304767.125	76843184.000	37.4545
Total			2386876.494	205164158.859	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000

GPC #2

2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0078

Cleanup Type: Sulfuric Acid

Cleanup Method: EPA 3665 Sulfuric Acid Cleanup - uL

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1155	23A0326-11	23021342.D	02/09/2023	
LDW23-SC1028	23A0326-01	23021337.D	02/09/2023	
LDW23-SC1032	23A0326-02	23021338.D	02/09/2023	
LDW23-SC1170A	23A0326-04	23021339.D	02/09/2023	
LDW23-SC1169C	23A0326-05	23021340.D	02/09/2023	
LDW23-SC1161	23A0326-10	23021341.D	02/09/2023	
Blank	BLA0684-BLK1	23021325.D	02/09/2023	
LCS	BLA0684-BS1	23021326.D	02/09/2023	
LCS Dup	BLA0684-BSD1	23021327.D	02/09/2023	
LDW23-SC1162B	23A0326-12	23021343.D	02/09/2023	



CLEANUP BENCH SHEET

CLB0078

Matrix: Solid

Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL

Printed: 2/9/2023 4:54:04PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0313-08	A	LDW23-SC1016A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-09	A	LDW23-SC1011A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-10	A	LDW23-SC1006A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-11	A	LDW23-SC1012B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-13	A	LDW23-SC1159	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-01	A	LDW23-SC1028	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
BLA0684-BLK1	-	Blank	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BS1	-	LCS	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BSD1	-	LCS Dup	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MS1	-	Matrix Spike	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/9/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0079

Cleanup Type: Sulfur

Cleanup Method: EPA 3660B Sulfur Cleanup - uL

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1155	23A0326-11	23021342.D	02/09/2023	
LDW23-SC1169C	23A0326-05	23021340.D	02/09/2023	
LDW23-SC1032	23A0326-02	23021338.D	02/09/2023	
LDW23-SC1028	23A0326-01	23021337.D	02/09/2023	
LCS	BLA0684-BS1	23021326.D	02/09/2023	
Blank	BLA0684-BLK1	23021325.D	02/09/2023	
LDW23-SC1161	23A0326-10	23021341.D	02/09/2023	
LCS Dup	BLA0684-BSD1	23021327.D	02/09/2023	
LDW23-SC1170A	23A0326-04	23021339.D	02/09/2023	
LDW23-SC1162B	23A0326-12	23021343.D	02/09/2023	



CLEANUP BENCH SHEET

CLB0079

Matrix: Solid

Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL

Printed: 2/9/2023 4:54:38PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0313-08	A	LDW23-SC1016A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-09	A	LDW23-SC1011A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-10	A	LDW23-SC1006A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-11	A	LDW23-SC1012B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-13	A	LDW23-SC1159	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-01	A	LDW23-SC1028	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
BLA0684-BLK1	-	Blank	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BS1	-	LCS	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BSD1	-	LCS Dup	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MS1	-	Matrix Spike	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/9/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0080

Cleanup Type: Silica Gel

Cleanup Method: EPA 3630C Silica Gel Cleanup - uL

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS	BLA0684-BS1	23021326.D	02/09/2023	
LDW23-SC1170A	23A0326-04	23021339.D	02/09/2023	
LCS Dup	BLA0684-BSD1	23021327.D	02/09/2023	
Blank	BLA0684-BLK1	23021325.D	02/09/2023	
LDW23-SC1162B	23A0326-12	23021343.D	02/09/2023	
LDW23-SC1161	23A0326-10	23021341.D	02/09/2023	
LDW23-SC1155	23A0326-11	23021342.D	02/09/2023	
LDW23-SC1032	23A0326-02	23021338.D	02/09/2023	
LDW23-SC1028	23A0326-01	23021337.D	02/09/2023	
LDW23-SC1169C	23A0326-05	23021340.D	02/09/2023	



CLEANUP BENCH SHEET

CLB0080

Matrix: Solid

Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/9/2023 4:55:12PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0313-08	A	LDW23-SC1016A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-09	A	LDW23-SC1011A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-10	A	LDW23-SC1006A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-11	A	LDW23-SC1012B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-13	A	LDW23-SC1159	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-01	A	LDW23-SC1028	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
BLA0684-BLK1	-	Blank	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BS1	-	LCS	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BSD1	-	LCS Dup	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MS1	-	Matrix Spike	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/9/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0081

Cleanup Type: GPC

Cleanup Method: EPA 3640A GPC Cleanup 1:1

Analysis: EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLA0684-BLK1	23021325.D	02/09/2023	
LCS	BLA0684-BS1	23021326.D	02/09/2023	
LCS Dup	BLA0684-BSD1	23021327.D	02/09/2023	
LDW23-SC1169C	23A0326-05	23021340.D	02/09/2023	
LDW23-SC1170A	23A0326-04	23021339.D	02/09/2023	
LDW23-SC1162B	23A0326-12	23021343.D	02/09/2023	
LDW23-SC1155	23A0326-11	23021342.D	02/09/2023	
LDW23-SC1032	23A0326-02	23021338.D	02/09/2023	
LDW23-SC1028	23A0326-01	23021337.D	02/09/2023	
LDW23-SC1161	23A0326-10	23021341.D	02/09/2023	



CLEANUP BENCH SHEET

CLB0081

Matrix: Solid Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1 Check Standard: CLA0166-GPC1 Printed: 2/9/2023 4:55:51PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0313-08	A	LDW23-SC1016A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-09	A	LDW23-SC1011A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-10	A	LDW23-SC1006A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-11	A	LDW23-SC1012B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0313-13	A	LDW23-SC1159	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-01	A	LDW23-SC1028	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/9/2023	NRB	
BLA0684-BLK1	-	Blank	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BS1	-	LCS	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-BSD1	-	LCS Dup	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MS1	-	Matrix Spike	-	2.5	2.5	-	2/9/2023	NRB	
BLA0684-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/9/2023	NRB	



Form I
METHOD BLANK DATA SHEET
EPA 8081B

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLA0684-BLK1</u>
Sampled:	<u>N/A</u>	Prepared:	<u>02/01/23 13:23</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLA0684</u>	Sequence:	<u>SLB0237</u>
Instrument:	<u>ECD6</u>	Column:	<u>STX-CLP</u>
		File ID:	<u>23021325.D</u>
		Analyzed:	<u>02/13/23 20:28</u>
		Initial/Final:	<u>12.5 g / 2.5 mL</u>
		Calibration:	<u>FL00041</u>
		Cleanups:	<u>GPC, Silica Gel, Sulfur, Sulfuric Acid</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.50	U	0.15	0.50
SURROGATES		ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl		8.0000	9.05	113	30 - 160	
Decachlorobiphenyl [2C]		8.0000	9.36	117	30 - 160	
Tetrachlorometaxylene		8.0000	5.72	71.5	30 - 160	
Tetrachlorometaxylene [2C]		8.0000	5.70	71.3	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021325.D
Data file 2: /20230213.b/B20230213.b/23021325.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: BIA0684-BLK1
Client ID:
Injection Date: 13-FEB-2023 20:28
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----			4.813	-0.002	2388	0.00	0.16	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
4.606	0.007	32333	----			4.21	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			----			0.00	0.00	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
7.026	0.001	66019	----			10.35	0.00	---	Endrin
----			----			0.00	0.00	---	Endosulfan II
----			----			0.00	0.00	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
7.378	-0.001	94740	----			16.32	0.00	---	4,4'-DDT
7.866	0.001	109327	----			42.50	0.00	---	Methoxychlor
8.430	0.030	81915	----			13.12	0.00	---	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			----			0.00	0.00	---	trans-Chlordane
----			----			0.00	0.00	---	cis-Chlordane
----			2.447	-0.026	25173	0.00	1.73	---	Hexachlorobutadiene
4.144	0.002	3278	4.673	-0.002	5011	0.40	0.36	10.1	Hexachlorobenzene
3.792	0.002	179072	4.183	0.001	306263	28.60	28.51	0.3	Tetrachloro-m-xylene
9.305	-0.001	223058	10.401	-0.001	278631	45.27	46.82	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	460404	-31.5
Hexabromobiphenyl	609723	486330	-20.2

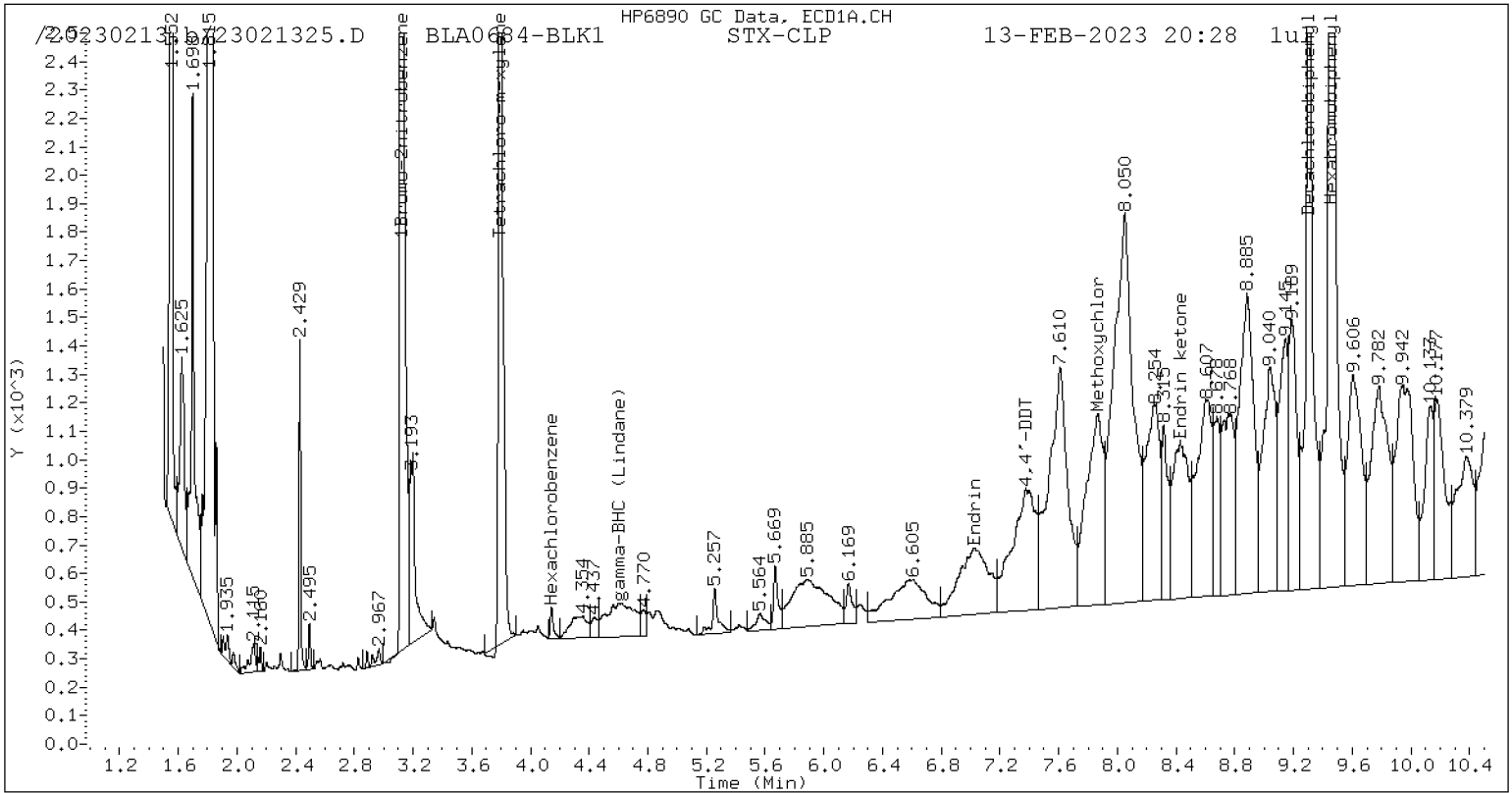
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	763127	-24.2
Hexabromobiphenyl	769764	538454	-30.0

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

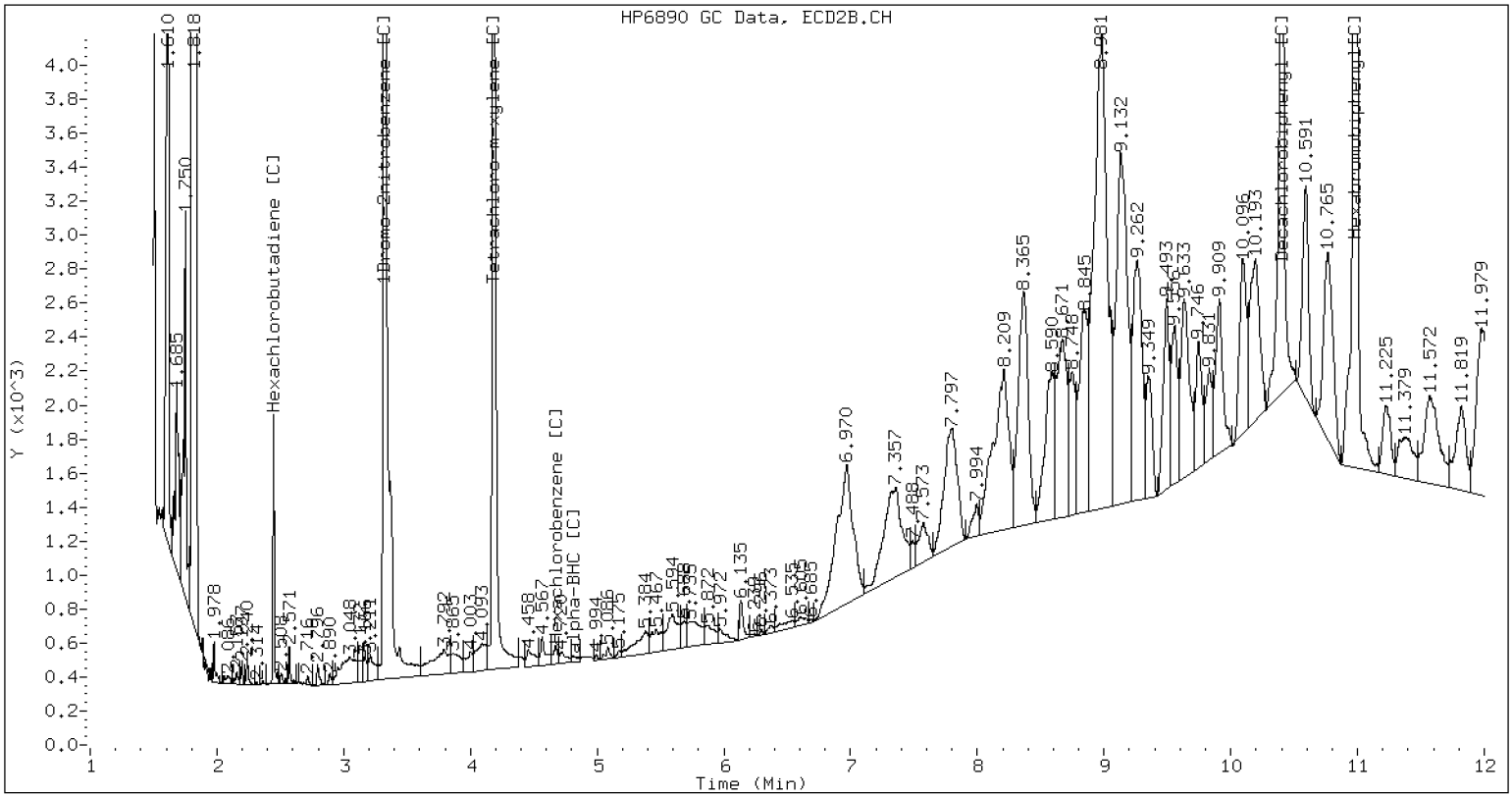
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021325.D BLA0684-BLK1 CLP2



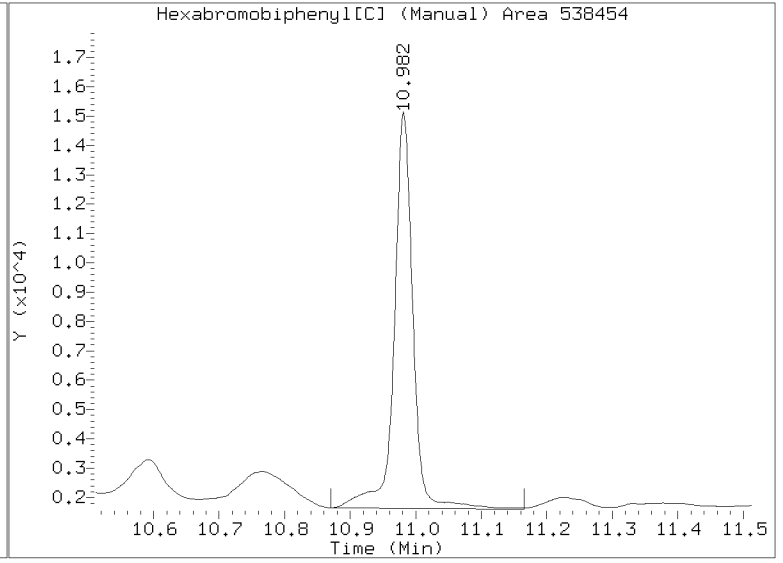
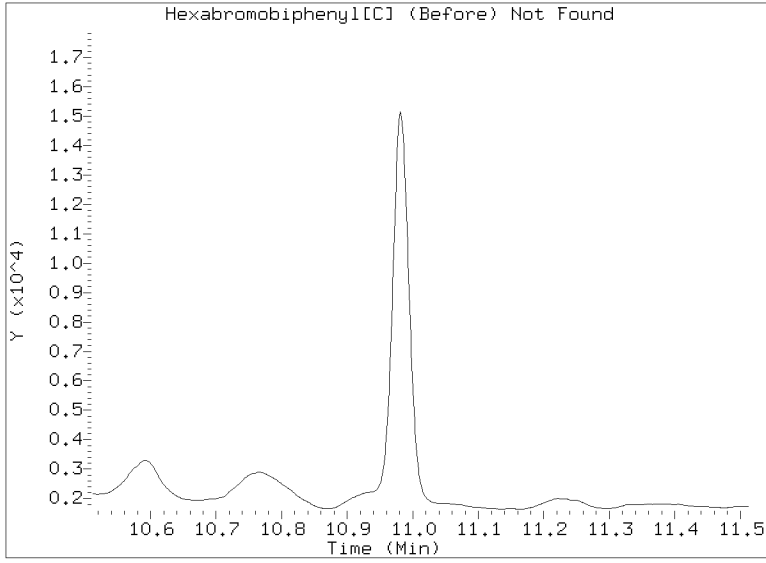
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021325.D

Injection Date: 13-FEB-2023 20:28

Lab ID:BLA0684-BLK1 Client ID:





LCS / LCS DUPLICATE RECOVERY
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>02/13/23 20:46</u>
Batch:	<u>BLA0684</u>	Laboratory ID:	<u>BLA0684-BS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>12.5 g / 2.5 mL</u>		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	3.23		80.7	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Hexachlorobenzene	4.00	3.17		79.3	1.64	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021326.D
Data file 2: /20230213.b/B20230213.b/23021326.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: BIA0684-BS1
Client ID:
Injection Date: 13-FEB-2023 20:46
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.299	0.001	157078	4.815	0.000	239734	17.01	15.40	9.9	alpha-BHC
4.682	0.001	64049	5.290	0.000	94189	18.01	15.92	12.4	beta-BHC
4.864	0.001	147491	5.641	-0.001	211961	19.54	16.53	16.7	delta-BHC
4.600	0.001	144117	5.209	0.000	218831	18.00	16.57	8.3	gamma-BHC (Lindane)
5.079	0.001	132041	5.733	-0.000	196760	18.53	16.44	12.0	Heptachlor
5.399	0.000	134661	6.135	-0.001	183946	16.87	13.46	22.4	Aldrin
6.072	0.000	121961	6.792	0.000	177871	17.62	15.74	11.2	Heptachlor epoxide b
6.516	0.001	185140	7.235	-0.001	256806	29.14	25.79	12.2	Endosulfan I
----			7.548	0.018	7532	0.00	0.68	---	Dieldrin
6.437	-0.002	236396	7.321	-0.002	344427	37.30	34.14	8.9	4,4'-DDE
----			7.862	0.007	24842	0.00	2.88	---	Endrin
7.264	-0.000	44010	8.066	-0.000	79769	8.59	9.01	4.7	Endosulfan II
7.086	-0.001	203451	7.929	-0.001	287837	39.68	34.25	14.7	4,4'-DDD
8.126	0.000	197924	8.665	-0.000	312410	40.69	40.18	1.3	Endosulfan sulfate
7.378	0.000	216460	8.246	-0.001	283048	41.78	34.90	17.9	4,4'-DDT
7.867	0.001	30481	8.889	-0.001	110872	13.28	30.89	79.8*	Methoxychlor
8.400	0.000	168551	9.189	-0.000	235778	30.25	28.07	7.5	Endrin ketone
7.692	0.001	25885	8.398	-0.000	74015	6.33	11.85	60.7*	Endrin aldehyde
6.214	-0.001	132745	7.003	-0.001	185763	18.88	16.49	13.5	trans-Chlordane
6.361	0.000	125654	7.163	-0.001	181732	17.82	16.49	7.8	cis-Chlordane
2.297	0.001	138535	2.475	0.001	196925	14.32	13.32	7.2	Hexachlorobutadiene
4.144	0.001	138316	4.676	0.000	201547	16.13	14.23	12.5	Hexachlorobenzene
3.792	0.002	201768	4.182	0.000	311123	30.93	28.46	8.3	Tetrachloro-m-xylene
9.306	-0.000	150844	10.402	-0.001	258213	34.29	38.45	11.4	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	479700	-28.7
Hexabromobiphenyl	609723	434102	-28.8

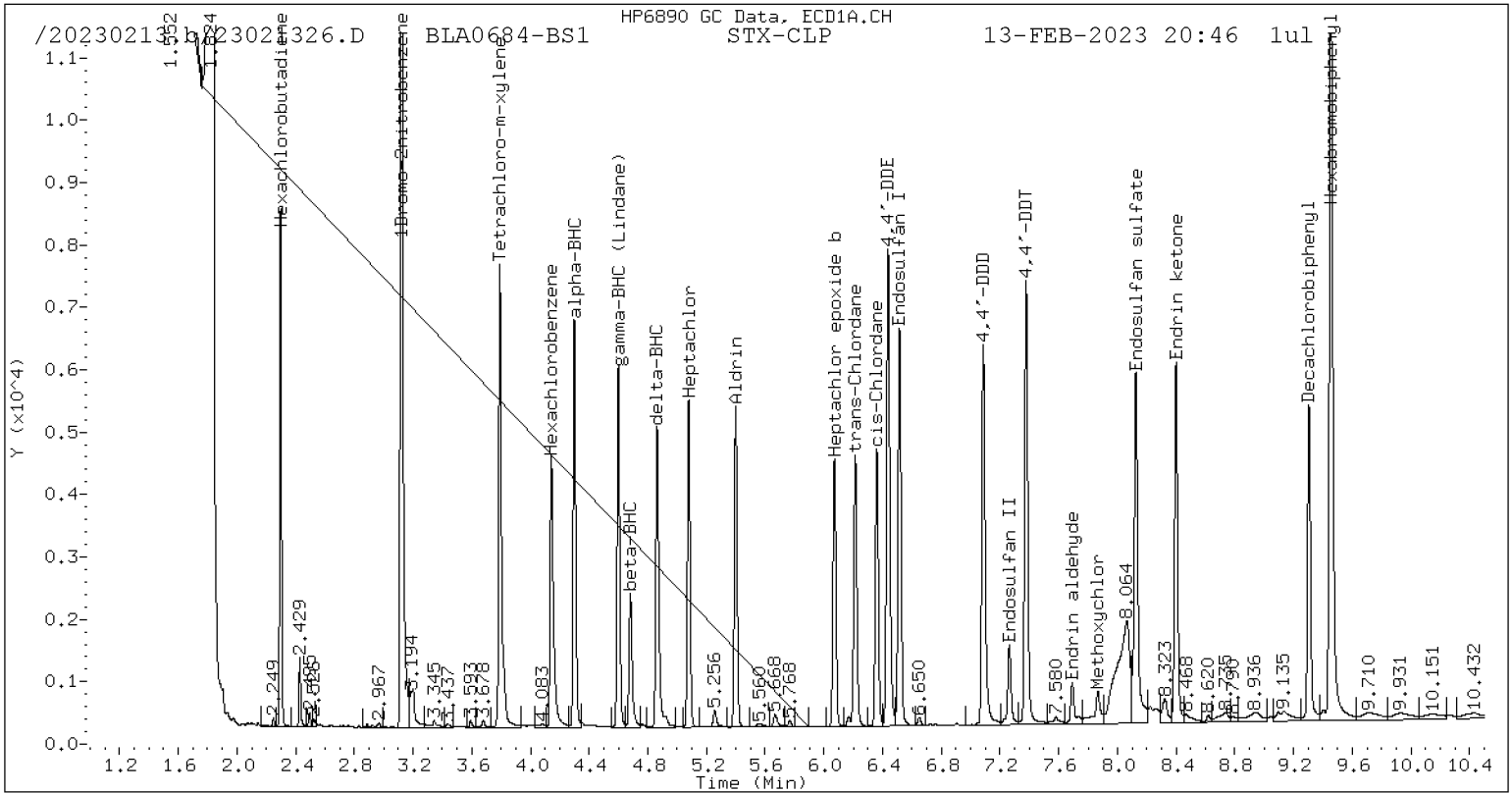
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	776692	-22.8
Hexabromobiphenyl	769764	607596	-21.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

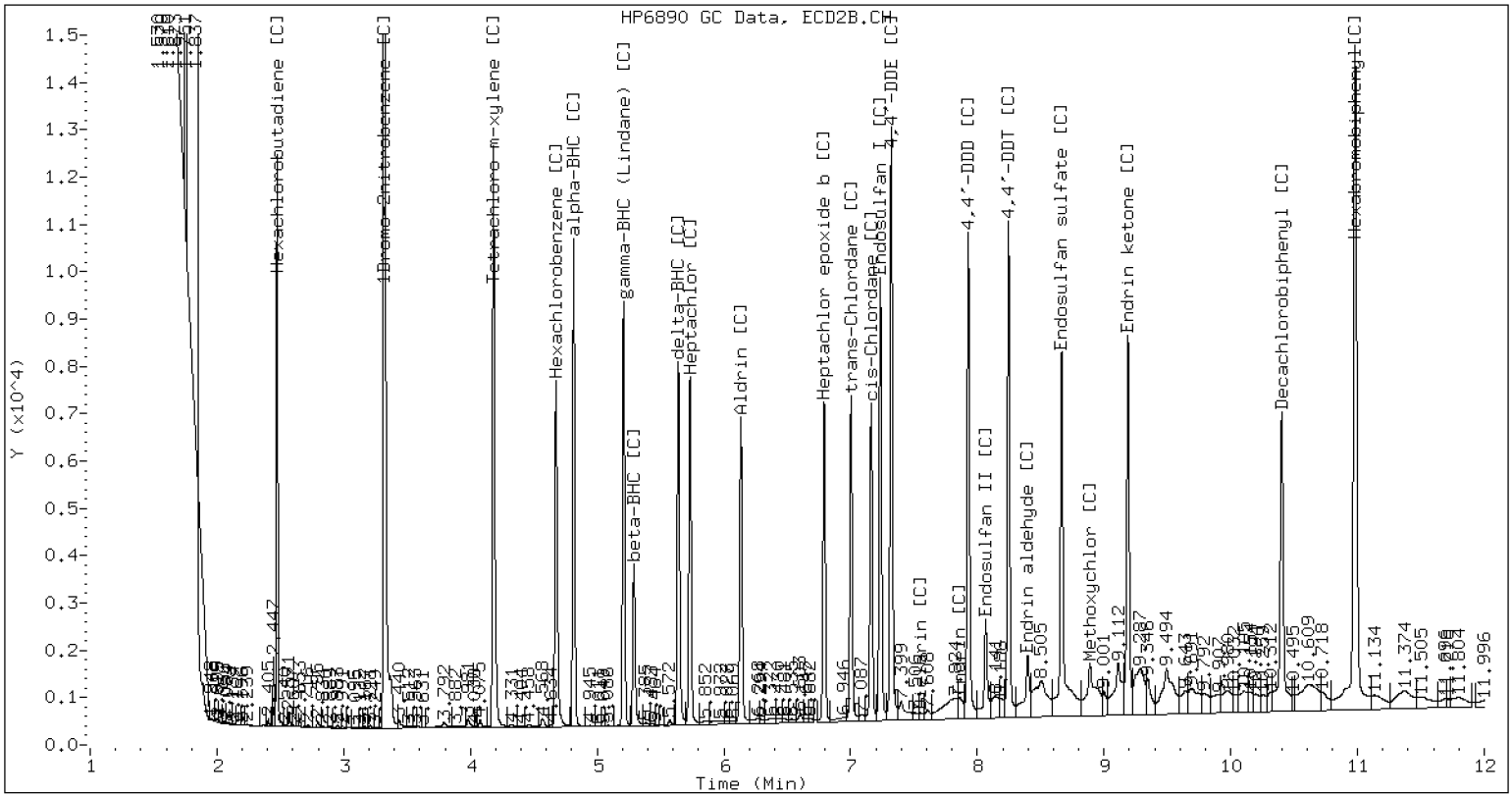
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021326.D BLA0684-BS1 CLP2



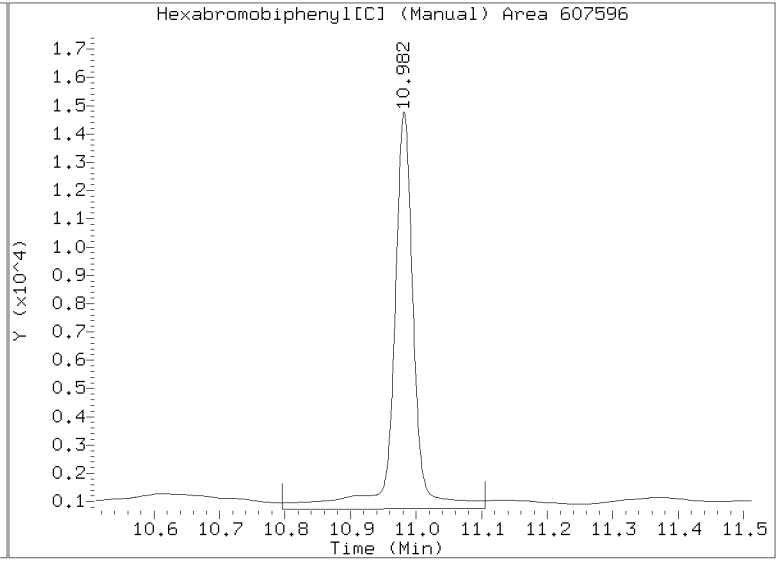
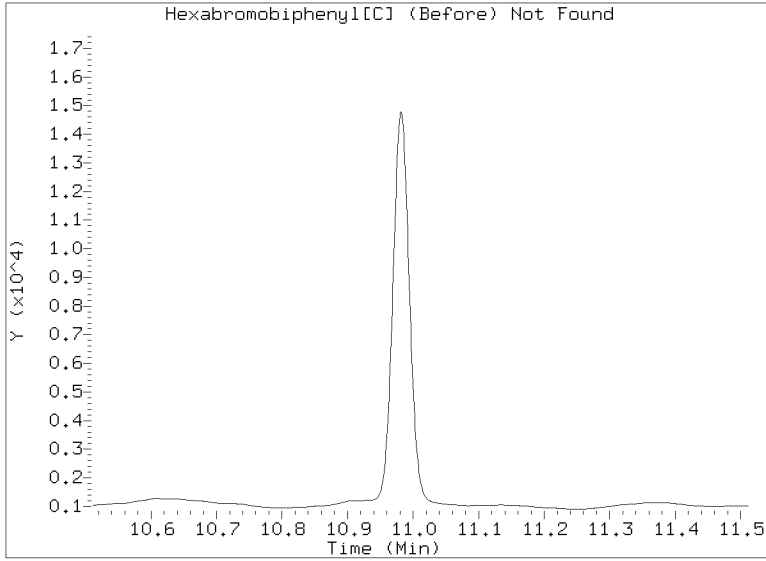
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021326.D

Injection Date: 13-FEB-2023 20:46

Lab ID:BLA0684-BS1 Client ID:



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021327.D
Data file 2: /20230213.b/B20230213.b/23021327.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: BIA0684-BSD1
Client ID:
Injection Date: 13-FEB-2023 21:04
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.297	-0.002	304563	4.813	-0.002	478529	17.52	16.43	6.4	alpha-BHC
4.680	-0.002	121740	5.288	-0.002	185163	18.19	16.73	8.4	beta-BHC
4.861	-0.002	281246	5.639	-0.003	437460	19.79	18.24	8.2	delta-BHC
4.598	-0.001	279899	5.207	-0.002	438285	18.57	17.74	4.6	gamma-BHC (Lindane)
5.077	-0.001	255366	5.731	-0.002	387836	19.04	17.33	9.4	Heptachlor
5.398	-0.001	264996	6.133	-0.002	340601	17.63	13.33	27.8	Aldrin
6.070	-0.002	237369	6.790	-0.002	355122	18.21	16.80	8.1	Heptachlor epoxide b
6.514	-0.001	337242	7.234	-0.002	473552	28.20	25.42	10.3	Endosulfan I
----			7.542	0.012	4012	0.00	0.19	---	Dieldrin
6.435	-0.005	461188	7.320	-0.003	659416	38.66	34.94	10.1	4,4'-DDE
----			7.862	0.008	8627	0.00	0.63	---	Endrin
7.262	-0.002	119565	8.065	-0.002	153153	13.21	10.89	19.2	Endosulfan II
7.084	-0.003	392902	7.927	-0.002	551859	43.37	41.36	4.7	4,4'-DDD
8.125	-0.000	299547	8.665	-0.001	428506	34.85	34.71	0.4	Endosulfan sulfate
7.377	-0.001	411022	8.246	-0.002	531387	44.90	41.27	8.4	4,4'-DDT
7.865	-0.001	40875	8.888	-0.002	106946	10.08	18.77	60.3*	Methoxychlor
8.399	-0.001	346844	9.188	-0.001	429778	35.22	32.23	8.9	Endrin ketone
7.691	-0.001	43178	8.396	-0.001	76925	5.98	7.76	25.9	Endrin aldehyde
6.213	-0.002	259150	7.002	-0.002	368818	19.58	17.50	11.2	trans-Chlordane
6.359	-0.001	246918	7.162	-0.002	353099	18.60	17.13	8.3	cis-Chlordane
2.295	-0.001	256870	2.472	-0.001	365299	14.10	13.21	6.5	Hexachlorobutadiene
4.141	-0.001	256141	4.674	-0.001	386776	15.87	14.60	8.4	Hexachlorobenzene
3.790	-0.001	370805	4.180	-0.001	586565	30.19	28.68	5.1	Tetrachloro-m-xylene
9.305	-0.001	263874	10.402	-0.001	380204	33.95	35.66	4.9	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	903043	34.3
Hexabromobiphenyl	609723	767072	25.8

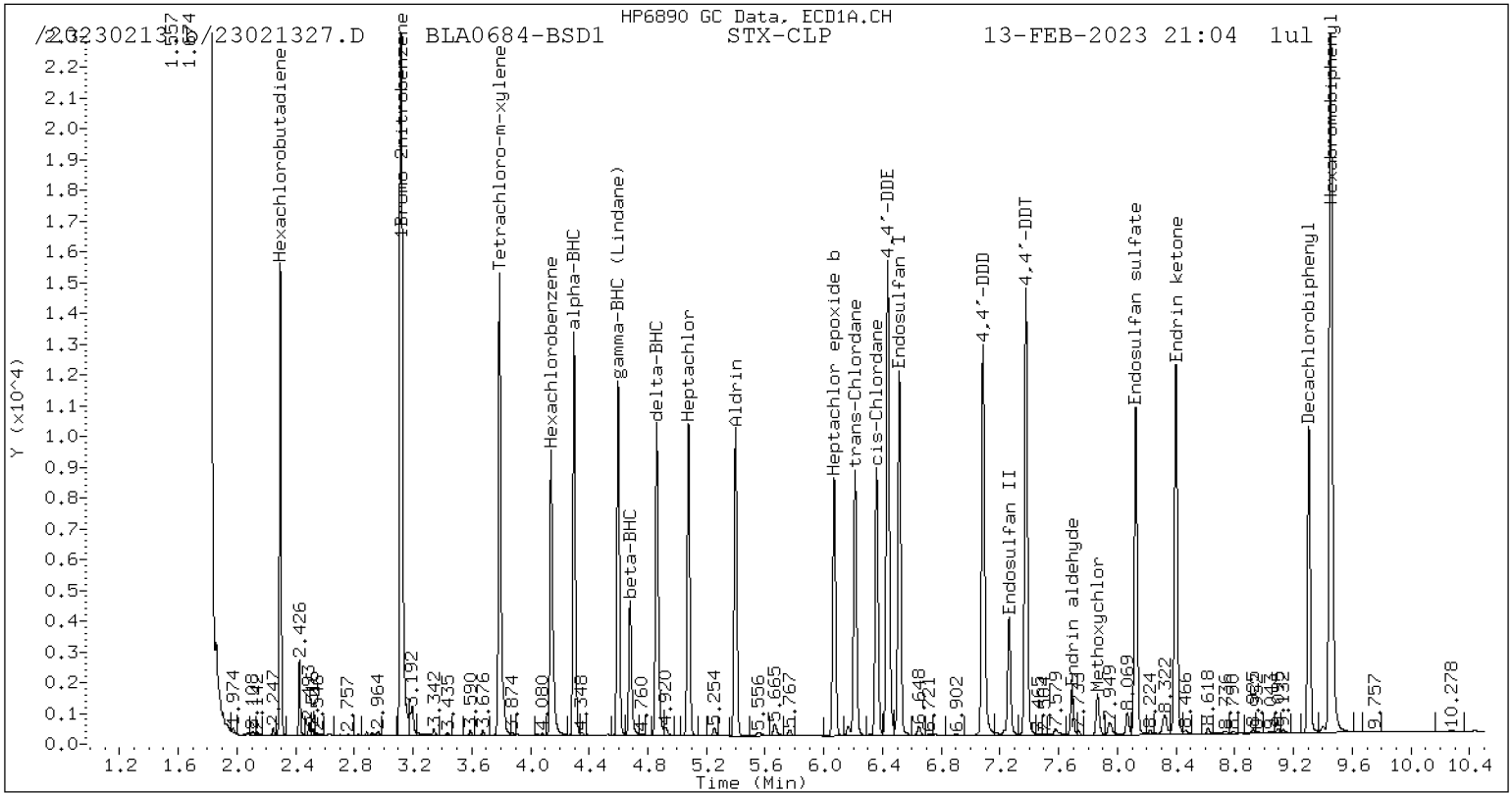
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1452954	44.4
Hexabromobiphenyl	769764	964689	25.3

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

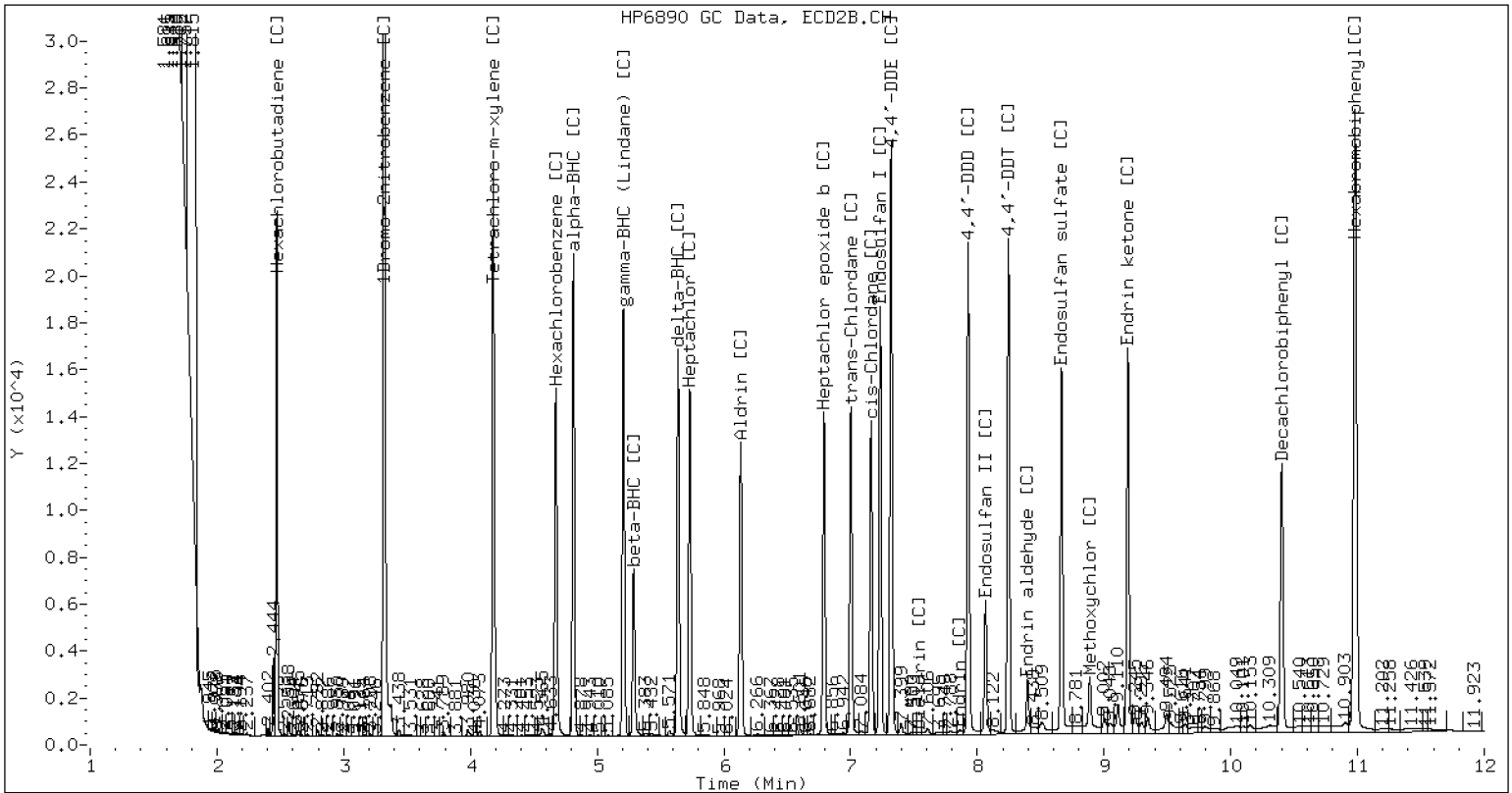
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021327.D BLA0684-BSD1 CLP2



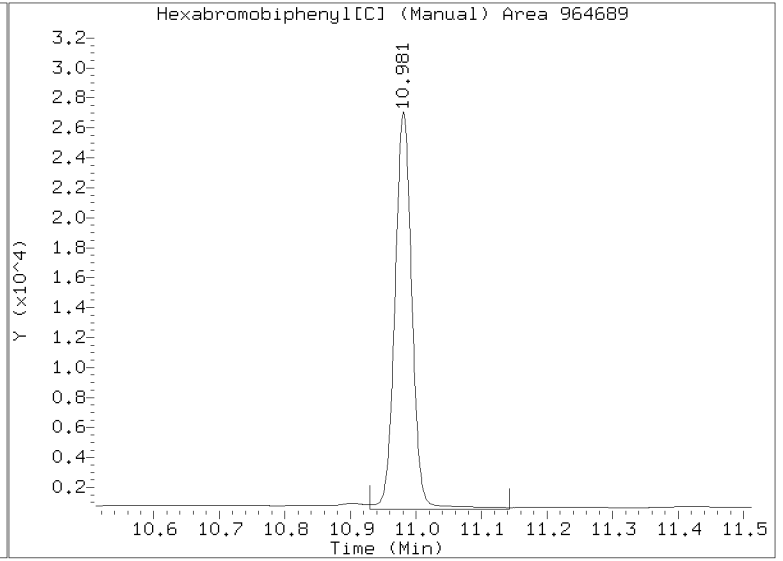
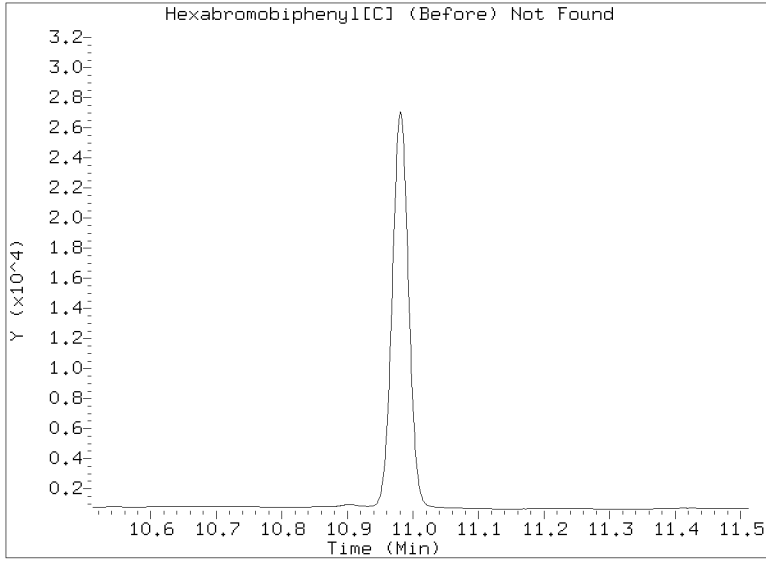
CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021327.D

Injection Date: 13-FEB-2023 21:04

Lab ID:BLA0684-BSD1 Client ID:





INITIAL CALIBRATION DATA
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FL00041

Instrument: ECD6

Calibration Date: 12/14/2022

Column (1): STX-CLP

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC			2.5	1.564682	5	1.558115	10	1.57359	20	1.566596	40	1.528219
beta-BHC			2.5	0.6501672	5	0.6116678	10	0.6049898	20	0.5910241	40	0.567415
gamma-BHC (Lindane)			2.5	1.364013	5	1.359107	10	1.367627	20	1.357913	40	1.317203
delta-BHC			2.5	1.267737	5	1.264366	10	1.278672	20	1.286232	40	1.255792
Heptachlor			2.5	1.26903	5	1.222902	10	1.218715	20	1.207966	40	1.145438
Aldrin			2.5	1.349967	5	1.349283	10	1.40535	20	1.372547	40	1.307197
Heptachlor Epoxide			2.5	1.231126	5	1.189593	10	1.20792	20	1.178021	40	1.104377
trans-Chlordane (beta-Chlordane)			2.5	1.262297	5	1.202181	10	1.202336	20	1.19062	40	1.128117
cis-Chlordane (alpha-chlordane)			2.5	1.308183	5	1.222582	10	1.200602	20	1.177182	40	1.111332
Endosulfan I			2.5	1.143813	5	1.097776	10	1.093658	20	1.076133	40	1.011287
4,4'-DDE			5	1.141182	10	1.108491	20	1.098369	40	1.077225	80	0.9961189
Dieldrin			5	1.225418	10	1.190449	20	1.185191	40	1.155764	80	1.077517
Endrin			5	1.158191	10	1.117563	20	1.079508	40	1.061387	80	0.9725989
Endosulfan II			5	0.9400399	10	0.9913797	20	1.005265	40	0.925043	80	0.9337917
4,4'-DDD			5	1.004568	10	0.9927897	20	0.9803235	40	0.9586353	80	0.8937077
Endrin Aldehyde			5	0.8167784	10	0.7834798	20	0.7706241	40	0.7573308	80	0.7147756
4,4'-DDT			5	1.007054	10	0.9936998	20	0.9768522	40	0.9722874	80	0.9123228
Endosulfan Sulfate			5	0.9534179	10	0.9413755	20	0.9158457	40	0.9056998	80	0.8542021
Endrin Ketone			5	1.134866	10	1.083274	20	1.043162	40	1.021136	80	0.9645492
Methoxychlor			25	0.4887243	50	0.4567517	100	0.4291758	200	0.4123964	400	0.380531
Hexachlorobutadiene			2.5	1.967135	5	1.727858	10	1.608612	20	1.550898	40	1.457962
Hexachlorobenzene			2.5	1.583946	5	1.509865	10	1.463674	20	1.414258	40	1.348389
Decachlorobiphenyl			5	0.9567749	10	0.8690419	20	0.8114883	40	0.7853665	80	0.7399881
Tetrachlorometaxylene			5	1.223478	10	1.154628	20	1.122612	40	1.064313	80	1.018952



INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC	80	1.449687										
beta-BHC	80	0.5324503										
gamma-BHC (Lindane)	80	1.246178										
delta-BHC	80	1.199667										
Heptachlor	80	1.064858										
Aldrin	80	1.204866										
Heptachlor Epoxide	80	1.016142										
trans-Chlordane (beta-Chlordane)	80	1.050129										
cis-Chlordane (alpha-chlordane)	80	1.036345										
Endosulfan I	80	0.9344351										
4,4'-DDE	160	0.9196699										
Dieldrin	160	0.9953457										
Endrin	160	0.903669										
Endosulfan II	160	0.8694106										
4,4'-DDD	160	0.8394108										
Endrin Aldehyde	160	0.6754471										
4,4'-DDT	160	0.8666848										
Endosulfan Sulfate	160	0.808554										
Endrin Ketone	160	0.9150773										
Methoxychlor	800	0.3710888										
Hexachlorobutadiene	80	1.368623										
Hexachlorobenzene	80	1.259233										
2,4'-DDE					5	0.8703192	10	0.8471901	20	0.8231684	40	0.7887622
2,4'-DDD					5	0.761682	10	0.7418629	20	0.7301989	40	0.7053717
2,4'-DDT					5	0.8194572	10	0.8004965	20	0.7842725	40	0.7616258
Oxychlordane					5	1.016746	10	1.011016	20	0.9890796	40	0.9530961
cis-Nonachlor					5	1.323191	10	1.277938	20	1.243982	40	1.217703



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC	1.540148	3.1			RSD (20)	
beta-BHC	0.5929524	6.8			RSD (20)	
gamma-BHC (Lindane)	1.33534	3.5			RSD (20)	
delta-BHC	1.258744	2.5			RSD (20)	
Heptachlor	1.188151	6.1			RSD (20)	
Aldrin	1.331535	5.2			RSD (20)	
Heptachlor Epoxide	1.15453	6.9			RSD (20)	
trans-Chlordane (beta-Chlordane)	1.172613	6.3			RSD (20)	
cis-Chlordane (alpha-chlordane)	1.176038	8.0			RSD (20)	
Endosulfan I	1.059517	7.1			RSD (20)	
4,4'-DDE	1.056843	7.9			RSD (20)	
Dieldrin	1.138281	7.6			RSD (20)	
Endrin	1.048819	9.0			RSD (20)	
Endosulfan II	0.944155	5.2			RSD (20)	
4,4'-DDD	0.9449058	6.9			RSD (20)	
Endrin Aldehyde	0.7530726	6.7			RSD (20)	
4,4'-DDT	0.9548168	5.7			RSD (20)	
Endosulfan Sulfate	0.8965158	6.2			RSD (20)	
Endrin Ketone	1.027011	7.7			RSD (20)	
Methoxychlor	0.4231113	10.6			RSD (20)	
Hexachlorobutadiene	1.613515	13.2			RSD (20)	
Hexachlorobenzene	1.429894	8.1			RSD (20)	
2,4'-DDE	0.7852778	10.3			RSD (20)	
2,4'-DDD	0.698595	8.8			RSD (20)	
2,4'-DDT	0.7548286	8.4			RSD (20)	
Oxychlordane	0.951144	7.5			RSD (20)	
cis-Nonachlor	1.211391	7.8			RSD (20)	
trans-Nonachlor	1.244025	8.1			RSD (20)	
Mirex	0.7535613	8.1			RSD (20)	
Decachlorobiphenyl	0.8105886	11.4			RSD (20)	
Tetrachlorometaxylene	1.087951	9.2			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FL00041

Instrument: ECD6

Calibration Date: 12/14/2022

Column (2): STX-CLPII

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]			2.5	1.582358	5	1.586238	10	1.633164	20	1.640486	40	1.615441
beta-BHC [2C]			2.5	0.652782	5	0.6172948	10	0.6184608	20	0.6125812	40	0.5918008
gamma-BHC (Lindane) [2C]			2.5	1.355071	5	1.348783	10	1.381456	20	1.392772	40	1.366606
delta-BHC [2C]			2.5	1.323764	5	1.307234	10	1.339425	20	1.328433	40	1.331977
Heptachlor [2C]			2.5	1.270249	5	1.234236	10	1.258409	20	1.272245	40	1.215755
Aldrin [2C]			2.5	1.511397	5	1.416724	10	1.432636	20	1.430376	40	1.370917
Heptachlor Epoxide [2C]			2.5	1.2977	5	1.174596	10	1.174288	20	1.174706	40	1.114434
trans-Chlordane (beta-Chlordane) [2C]			2.5	1.25449	5	1.176102	10	1.164843	20	1.168848	40	1.125534
cis-Chlordane (alpha-chlordane) [2C]			2.5	1.258498	5	1.153199	10	1.135052	20	1.136251	40	1.089792
Endosulfan I [2C]			2.5	1.118263	5	1.044155	10	1.035412	20	1.034697	40	0.9885012
4,4'-DDE [2C]			5	1.120237	10	1.069625	20	1.064387	40	1.055415	80	0.9897135
Dieldrin [2C]			5	1.270008	10	1.162844	20	1.139359	40	1.136098	80	1.071389
Endrin [2C]			5	1.256912	10	1.17909	20	1.159477	40	1.149599	80	1.066056
Endosulfan II [2C]			5	1.296819	10	1.202961	20	1.188491	40	1.160501	80	1.099056
4,4'-DDD [2C]			5	1.234482	10	1.121556	20	1.117792	40	1.112003	80	1.04628
Endrin Aldehyde [2C]			5	0.9430111	10	0.8430348	20	0.8249196	40	0.8129946	80	0.7727701
4,4'-DDT [2C]			5	1.175911	10	1.077825	20	1.067612	40	1.073272	80	1.019364
Endosulfan Sulfate [2C]			5	1.137768	10	1.042553	20	1.030373	40	1.023023	80	0.9721732
Endrin Ketone [2C]			5	1.235631	10	1.119988	20	1.114405	40	1.100852	80	1.047659
Methoxychlor [2C]			25	0.5184064	50	0.4866753	100	0.4751666	200	0.4681736	400	0.4433957
Hexachlorobutadiene [2C]			2.5	1.975612	5	1.648845	10	1.492482	20	1.376096	40	1.341211
Hexachlorobenzene [2C]			2.5	1.602215	5	1.520618	10	1.491402	20	1.450251	40	1.385947
Decachlorobiphenyl [2C]			5	1.087142	10	0.9391597	20	0.8562421	40	0.8499592	80	0.8013928
Tetrachlorometaxylene [2C]			5	1.220863	10	1.179368	20	1.164832	40	1.127982	80	1.06878



INITIAL CALIBRATION DATA
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC [2C]	1.603265	1.9			RSD (20)	
beta-BHC [2C]	0.6095359	4.9			RSD (20)	
gamma-BHC (Lindane) [2C]	1.3606	1.9			RSD (20)	
delta-BHC [2C]	1.320624	1.3			RSD (20)	
Heptachlor [2C]	1.232502	3.9			RSD (20)	
Aldrin [2C]	1.407219	5.4			RSD (20)	
Heptachlor Epoxide [2C]	1.163645	7.1			RSD (20)	
trans-Chlordane (beta-Chlordane) [2C]	1.160417	5.2			RSD (20)	
cis-Chlordane (alpha-chlordane) [2C]	1.13523	6.5			RSD (20)	
Endosulfan I [2C]	1.025602	6.0			RSD (20)	
4,4'-DDE [2C]	1.039168	6.3			RSD (20)	
Dieldrin [2C]	1.133177	7.5			RSD (20)	
Endrin [2C]	1.137486	7.6			RSD (20)	
Endosulfan II [2C]	1.165938	7.4			RSD (20)	
4,4'-DDD [2C]	1.106416	7.0			RSD (20)	
Endrin Aldehyde [2C]	0.8224595	8.5			RSD (20)	
4,4'-DDT [2C]	1.067896	5.9			RSD (20)	
Endosulfan Sulfate [2C]	1.023857	6.7			RSD (20)	
Endrin Ketone [2C]	1.10585	6.8			RSD (20)	
Methoxychlor [2C]	0.4725766	6.0			RSD (20)	
Hexachlorobutadiene [2C]	1.52251	16.8			RSD (20)	
Hexachlorobenzene [2C]	1.459109	7.2			RSD (20)	
2,4'-DDE [2C]	0.7295523	11.8			RSD (20)	
2,4'-DDD [2C]	0.8188656	8.8			RSD (20)	
2,4'-DDT [2C]	0.8432439	8.1			RSD (20)	
Oxychlordane [2C]	0.8909094	7.3			RSD (20)	
cis-Nonachlor [2C]	1.361061	5.2			RSD (20)	
trans-Nonachlor [2C]	1.43157	5.4			RSD (20)	
Mirex [2C]	0.7915793	9.9			RSD (20)	
Decachlorobiphenyl [2C]	0.8841805	13.0			RSD (20)	
Tetrachlorometaxylene [2C]	1.126107	7.3			RSD (20)	



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WPDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022	19:27	22121401.D	1	RINSE	
2	14-DEC-2022	19:44	22121402.D	1	RINSE	
3	14-DEC-2022	20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022	20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022	20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022	20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022	21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022	21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022	21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022	22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022	22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022	22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022	23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022	23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022	23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022	23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022	00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022	00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022	00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022	01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022	01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022	01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022	01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022	02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022	02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022	02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022	03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022	03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022	03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022	04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022	04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022	04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022	04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022	05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022	05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022	05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022	06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022	06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022	06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022	07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022	07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022	07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022	07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022	08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022	08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022	08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022	09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022	09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022	09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022	10:02	22121450.D	1	BKK0142-MSD1	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01	1		Heptachlor epoxide b,
1131	22121455.D	22K0429-02	1		Heptachlor epoxide b,
1149	22121456.D	22K0429-03	1		Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3	1		NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1	1		NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2	1		NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3	1		NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4	1		NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1	1		NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1	1		NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1	1		NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01	1		NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01	1		NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01	1		NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1	1		NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1	1		NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2	1		NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1	1		NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1	1		NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1	1		NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2	1		NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3	1		NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4	1		NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5	1		NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6	1		NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7	1		NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8	1		NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9	1		NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA	1		NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB	1		NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC	1		NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD	1		NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane [C],
1113	22121454.D	22K0429-01	1		NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02	1		Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03	1		Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D SEQ-PEM3		1		NO MANUAL INTEGRATION
1225	22121458.D SEQ-CCV1		1		NO MANUAL INTEGRATION
1243	22121459.D SEQ-CCV2		1		NO MANUAL INTEGRATION
1301	22121460.D SEQ-CCV3		1		NO MANUAL INTEGRATION
1319	22121461.D SEQ-CCV4		1		NO MANUAL INTEGRATION
1336	22121462.D BKK0380-BLK1		1		NO MANUAL INTEGRATION
1354	22121463.D BKK0380-BS1		1		NO MANUAL INTEGRATION
1412	22121464.D BKK0380-BSD1		1		NO MANUAL INTEGRATION
1430	22121465.D 22K0157-01		1		NO MANUAL INTEGRATION
1448	22121466.D 22K0230-01		1		NO MANUAL INTEGRATION
1506	22121467.D 22K0231-01		1		NO MANUAL INTEGRATION
1524	22121468.D BKK0382-BLK1		1		NO MANUAL INTEGRATION
1542	22121469.D BKK0382-BS1		1		NO MANUAL INTEGRATION
1600	22121470.D BKK0382-BS2		1		NO MANUAL INTEGRATION
1618	22121471.D BKK0382-BSD1		1		NO MANUAL INTEGRATION
1635	22121472.D 22K0075-01		1		NO MANUAL INTEGRATION
1653	22121473.D SEQ-PEM4		1		NO MANUAL INTEGRATION
1711	22121474.D SEQ-CCV5		1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains,	17-Dec-2022	10:57
22121402.D	Data Locked	jrains,	17-Dec-2022	10:57
22121403.D	Data Locked	jrains,	17-Dec-2022	10:57
22121404.D	Data Locked	jrains,	17-Dec-2022	10:57
22121405.D	Data Locked	jrains,	17-Dec-2022	10:57
22121406.D	Data Locked	jrains,	17-Dec-2022	10:57
22121407.D	Data Locked	jrains,	17-Dec-2022	10:57
22121408.D	Data Locked	jrains,	17-Dec-2022	10:57
22121409.D	Data Locked	jrains,	17-Dec-2022	10:57
22121410.D	Data Locked	jrains,	17-Dec-2022	10:57
22121411.D	Data Locked	jrains,	17-Dec-2022	10:57
22121412.D	Data Locked	jrains,	17-Dec-2022	10:57
22121413.D	Data Locked	jrains,	17-Dec-2022	10:57
22121414.D	Data Locked	jrains,	17-Dec-2022	10:57
22121415.D	Data Locked	jrains,	17-Dec-2022	10:57
22121416.D	Data Locked	jrains,	17-Dec-2022	10:57
22121417.D	Data Locked	jrains,	17-Dec-2022	10:57
22121418.D	Data Locked	jrains,	17-Dec-2022	10:57
22121419.D	Data Locked	jrains,	17-Dec-2022	10:57
22121420.D	Data Locked	jrains,	17-Dec-2022	10:57
22121421.D	Data Locked	jrains,	17-Dec-2022	10:57
22121422.D	Data Locked	jrains,	17-Dec-2022	10:57
22121423.D	Data Locked	jrains,	17-Dec-2022	10:57
22121424.D	Data Locked	jrains,	17-Dec-2022	10:57
22121425.D	Data Locked	jrains,	17-Dec-2022	10:57
22121426.D	Data Locked	jrains,	17-Dec-2022	10:57
22121427.D	Data Locked	jrains,	17-Dec-2022	10:57
22121428.D	Data Locked	jrains,	17-Dec-2022	10:57
22121429.D	Data Locked	jrains,	17-Dec-2022	10:57
22121430.D	Data Locked	jrains,	17-Dec-2022	10:57
22121431.D	Data Locked	jrains,	17-Dec-2022	10:57
22121432.D	Data Locked	jrains,	17-Dec-2022	10:57
22121433.D	Data Locked	jrains,	17-Dec-2022	10:57
22121434.D	Data Locked	jrains,	17-Dec-2022	10:57

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121428.D
 Level 2: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121429.D
 Level 3: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121430.D
 Level 4: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121431.D
 Level 5: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121432.D
 Level 6: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121433.D
 Level 7: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121434.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
1 Hexachlorobutadiene [C]	+++++ 1.30081	1.97561	1.64885	1.49248	1.37610	1.34121	1.52251	16.761
5 Hexachlorobenzene [C]	+++++ 1.30422	1.60221	1.52062	1.49140	1.45025	1.38595	1.45911	7.170
6 alpha-BHC [C]	+++++ 1.56190	1.58236	1.58624	1.63316	1.64049	1.61544	1.60327	1.946
7 gamma-BHC (Lindane) [C]	+++++ 1.31891	1.35507	1.34878	1.38146	1.39277	1.36661	1.36060	1.921
8 beta-BHC [C]	+++++ 0.56430	0.65278	0.61729	0.61846	0.61258	0.59180	0.60954	4.856
9 delta-BHC [C]	+++++ 1.29291	1.32376	1.30723	1.33943	1.32843	1.33198	1.32062	1.312
10 Heptachlor [C]	+++++ 1.14412	1.27025	1.23424	1.25841	1.27225	1.21576	1.23250	3.937
11 Chlorthalonil	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 j rains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
12 Aldrin [C]	++++ 1.28126	1.51140	1.41672	1.43264	1.43038	1.37092	1.40722	5.441
13 Heptachlor Epoxide a	++++ ++++	++++	++++	++++	++++	++++	++++	++++
14 Heptachlor epoxide b [C]	++++ 1.04614	1.29770	1.17460	1.17429	1.17471	1.11443	1.16364	7.144
15 cis-Chlordane [C]	++++ 1.03859	1.25850	1.15320	1.13505	1.13625	1.08979	1.13523	6.464
16 trans-Chlordane [C]	++++ 1.07269	1.25449	1.17610	1.16484	1.16885	1.12553	1.16042	5.185
17 Endosulfan I [C]	++++ 0.93258	1.11826	1.04415	1.03541	1.03470	0.98850	1.02560	6.032
18 4,4'-DDE [C]	++++ 0.93563	1.12024	1.06963	1.06439	1.05541	0.98971	1.03917	6.320
19 Dieldrin [C]	++++ 1.01937	1.27001	1.16284	1.13936	1.13610	1.07139	1.13318	7.532
20 Endrin [C]	++++ 1.01378	1.25691	1.17909	1.15948	1.14960	1.06606	1.13749	7.566
21 4,4'-DDD [C]	++++ 1.00638	1.23448	1.12156	1.11779	1.11200	1.04628	1.10642	7.049
22 Endosulfan II [C]	++++ 1.04780	1.29682	1.20296	1.18849	1.16050	1.09906	1.16594	7.425

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 j rains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
23 4,4'-DDT [C]	80.000 Level 7	++++ 1.17591	1.07782	1.06761	1.07327	1.01936	1.06790	5.878
24 Endrin aldehyde [C]	0.99339	++++ 0.94301	0.84303	0.82492	0.81299	0.77277	0.82246	8.537
25 Endosulfan sulfate [C]	0.73803	++++ 1.13777	1.04255	1.03037	1.02302	0.97217	1.02386	6.702
26 Methoxychlor [C]	0.93725	++++ 0.51841	0.48668	0.47517	0.46817	0.44340	0.47258	5.996
27 Endrin ketone [C]	0.44364	++++ 1.23563	1.11999	1.11440	1.10085	1.04766	1.10585	6.827
29 Aroclor-1016(1)	1.01657	++++	++++	++++	++++	++++	++++	++++
(2)	++++	++++	++++	++++	++++	++++	++++	++++
(3)	++++	++++	++++	++++	++++	++++	++++	++++
(4)	++++	++++	++++	++++	++++	++++	++++	++++
(5)	++++	++++	++++	++++	++++	++++	++++	++++
30 Aroclor-1221(1)	++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
31 Aroclor-1232 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
32 Aroclor-1242 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
33 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
34 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
35 Aroclor-1260(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
36 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
37 Aroclor-1268 (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Toxaphene [C] (1)	0.01492 0.01387	0.01529	0.01573	0.01558	0.01527	0.01455	0.01503	4.285
(2)	0.03524 0.03010	0.03538	0.03581	0.03480	0.03351	0.03170	0.03379	6.368
(3)	0.02615 0.02387	0.02659	0.02671	0.02640	0.02571	0.02464	0.02572	4.197
(4)	0.08868 0.07782	0.08690	0.08740	0.08502	0.08225	0.07926	0.08390	5.022
(5)	0.04138 0.04062	0.04124	0.04193	0.04145	0.04102	0.04046	0.04116	1.227
39 2,4-DDE [C]	+++++ 0.60202	0.83433	0.80524	0.74313	0.72589	0.66671	0.72955	11.810

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
40 2,4-DDD [C]	++++ 0.71370	0.90975	0.87971	0.82738	0.81642	0.76623	0.81887	8.785
41 2,4-DDT [C]	++++ 0.74249	0.94001	0.88046	0.85026	0.84852	0.79773	0.84324	8.052
42 Hexachloroethane [C]	++++ ++++	++++	++++	++++	++++	++++	++++	++++
43 Oxychlordan [C]	++++ 0.79092	0.96447	0.94678	0.90333	0.89663	0.84333	0.89091	7.271
44 trans-Nonachlor [C]	++++ 1.30668	1.48885	1.51762	1.45179	1.44766	1.37681	1.43157	5.406
45 cis-Nonachlor [C]	++++ 1.24817	1.44924	1.40707	1.37647	1.37212	1.31329	1.36106	5.224
46 Mirex [C]	++++ 0.70751	0.93314	0.81155	0.79462	0.76268	0.73998	0.79158	9.949
47 bis-(2-ethylhexyl) Phthalate	++++ ++++	++++	++++	++++	++++	++++	++++	++++
48 Chlordane (NOS) [C] (1)	0.03877 0.03764	0.03690	0.03764	0.03840	0.03761	0.03805	0.03786	1.615
(2)	0.04647 0.03825	0.04439	0.04416	0.04357	0.04103	0.03978	0.04252	6.844
(3)	0.14135 0.13812	0.14252	0.14927	0.15059	0.14418	0.14081	0.14383	3.173

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
 End Cal Date : 15-DEC-2022 05:16
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Last Edit : 15-Dec-2022 08:33 jrains
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
49 Trifluralin	++++	++++	++++	++++	++++	++++		++++	++++
50 Dacthal	++++	++++	++++	++++	++++	++++		++++	++++
51 Oxadiazon	++++	++++	++++	++++	++++	++++		++++	++++
52 Kelthane	++++	++++	++++	++++	++++	++++		++++	++++
53 Chlorpyrifos	++++	++++	++++	++++	++++	++++		++++	++++
54 Methyl Parathion	++++	++++	++++	++++	++++	++++		++++	++++
55 Ethyl Parathion	++++	++++	++++	++++	++++	++++		++++	++++
56 Kepone [C]	++++	++++	++++	++++	++++	++++		++++	++++
57 1-Chloropyrene	++++	++++	++++	++++	++++	++++		++++	++++
\$ 4 Tetrachloro-m-xylene [C]	++++	1.22086	1.17937	1.16483	1.12798	1.06878		1.12611	7.306
\$ 28 Decachlorobiphenyl [C]	++++	1.08714	0.93916	0.85624	0.84996	0.80139		0.88418	12.973

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd6.i\20220809.b\22080909.D
 Level 2: \\target\share\chem4\ecd6.i\20220809.b\22080910.D
 Level 3: \\target\share\chem4\ecd6.i\20220809.b\22080911.D
 Level 4: \\target\share\chem4\ecd6.i\20220809.b\22080912.D
 Level 5: \\target\share\chem4\ecd6.i\20220809.b\22080913.D
 Level 6: \\target\share\chem4\ecd6.i\20220809.b\22080914.D
 Level 7: \\target\share\chem4\ecd6.i\20220809.b\22080915.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
1 Hexachlorobutadiene	+++++ 1.30292	1.64215	1.55667	1.51049	1.47308	1.40536	1.48178	7.988
5 Hexachlorobenzene	+++++ 1.15582	1.48647	1.40778	1.36481	1.31957	1.25458	1.33150	8.750
6 alpha-BHC	+++++ 1.29587	1.41183	1.40802	1.42270	1.42790	1.37811	1.39074	3.567
7 gamma-BHC (Lindane)	+++++ 1.11861	1.20108	1.18733	1.20704	1.21598	1.18532	1.18589	2.948
8 beta-BHC	+++++ 0.50588	0.65244	0.60612	0.58927	0.57533	0.54649	0.57925	8.684
9 delta-BHC	+++++ 1.16159	1.15252	1.13315	1.18185	1.21952	1.21492	1.17726	2.950
10 Heptachlor	+++++ 0.94214	1.18674	1.12881	1.11527	1.09009	1.03076	1.08230	7.897
11 Aldrin	+++++ 0.96536	1.14505	1.10493	1.10576	1.09698	1.04621	1.07738	5.877

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
80.000 Level 7								
12 Chlorthalonil	++++	++++	++++	++++	++++	++++	++++	++++
13 Heptachlor Epoxide a	++++	++++	++++	++++	++++	++++	++++	++++
14 Heptachlor epoxide b	++++ 0.81733	1.05278	0.99602	0.98316	0.95413	0.89408	0.94959	8.751
15 cis-Chlordane	++++ 0.82943	1.00217	0.95563	0.94931	0.93343	0.89233	0.92705	6.424
16 trans-Chlordane	++++ 0.84267	1.02223	0.96054	0.95840	0.94631	0.90606	0.93937	6.420
17 Endosulfan I	++++ 0.77363	1.10444	1.01004	0.97510	0.92642	0.86761	0.94287	12.207
18 4,4'-DDE	++++ 0.73346	0.85783	0.84618	0.86175	0.85068	0.80349	0.82557	6.027
19 Dieldrin	++++ 0.79720	1.02112	0.97469	0.96064	0.93395	0.87876	0.92773	8.553
20 Endrin	++++ 0.92125	1.03359	0.99258	1.01493	1.03951	0.95184	0.99228	4.755
21 4,4'-DDD	++++ 1.02286	1.26749	1.21690	1.21140	1.19455	1.09258	1.16763	7.815
22 Endosulfan II	++++ 1.05695	1.32213	1.30831	1.28817	1.25191	1.14300	1.22841	8.614

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
23 4,4'-DDT	++++ 1.06544	1.20278	1.19912	1.21231	1.21971	1.13284	1.17203	5.186
24 Endrin aldehyde	++++ 0.84575	1.05042	1.01673	1.00197	0.99460	0.91340	0.97048	7.836
25 Methoxychlor	++++ 0.43428	0.56408	0.54010	0.51985	0.50693	0.45626	0.50358	9.854
26 Endosulfan sulfate	++++ 0.94888	1.14290	1.11216	1.09802	1.09968	1.00734	1.06816	6.922
27 Endrin ketone	++++ 1.12695	1.47959	1.40243	1.34455	1.31335	1.19489	1.31029	9.966
29 Aroclor-1016(1)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(2)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(3)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(4)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
(5)	++++ ++++	++++	++++	++++	++++	++++	++++	++++
30 Aroclor-1221(1)	++++ ++++	++++	++++	++++	++++	++++	++++	++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
31 Aroclor-1232 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
32 Aroclor-1242 (1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
35 Aroclor-1260(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
36 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
37 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
38 Toxaphene(1)	0.02824|	0.03896|	0.03693|	0.03480|	0.03418|	0.02891|		0.03285|	13.645|
(2)	0.08343|	0.10636|	0.10204|	0.09499|	0.09608|	0.08394|		0.09278|	10.362|
(3)	0.04776|	0.06283|	0.06069|	0.06020|	0.06090|	0.05141|		0.05643|	10.755|
(4)	0.05098|	0.07225|	0.07089|	0.06844|	0.06847|	0.06296|		0.06541|	11.021|
(5)	0.04955|	0.06896|	0.06748|	0.06372|	0.06603|	0.05846|		0.06194|	10.880|

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
39 2,4-DDE	0.89319	1.14103	1.08072	1.09005	1.06169	0.88466	1.02522	10.614
40 2,4-DDD	0.85318	1.08881	1.01841	0.99599	0.98400	0.85150	0.96531	9.816
41 2,4-DDT	0.88215	0.97799	0.97179	0.97332	0.98841	0.88743	0.94685	5.117
42 Hexachloroethane	++++	++++	++++	++++	++++	++++	++++	++++
43 Oxychlordane	1.05015	1.32927	1.24890	1.22496	1.20236	1.04785	1.18392	9.540
44 trans-Nonachlor	1.36253	1.68629	1.57989	1.58456	1.55669	1.34437	1.51906	8.949
45 cis-Nonachlor	1.35527	1.62941	1.55213	1.53413	1.52347	1.34758	1.49033	7.639
46 Mirex	0.85786	1.20478	1.11168	1.05006	1.00932	0.85381	1.01459	13.749
47 bis-(2-ethylhexyl) Phthalate	++++	++++	++++	++++	++++	++++	++++	++++
48 Chlordane (NOS) (1)	0.04531	0.06029	0.05735	0.05369	0.05005	0.04581	0.04808	11.230
(2)	0.12030	0.15038	0.14213	0.13501	0.13074	0.12020	0.12674	8.482

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
(3)	0.17221	0.15459	0.13623	0.13893	0.12753	0.13518		0.14232	11.024
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++		+++++	+++++
4 Tetrachloro-m-xylene	+++++	1.10401	1.05839	1.02629	0.99588	0.93352		0.99475	9.166

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
 End Cal Date : 13-DEC-2022 22:43
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
 Last Edit : 14-Dec-2022 10:32
 Curve Type : Average

Compound	1.250	2.500	5.000	10.000	20.000	40.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	80.000							
	Level 7							
\$ 28 Decachlorobiphenyl	+++++	0.99444	0.96249	0.90111	0.87014	0.79161	0.87939	10.607
	0.75653							

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Table with 7 columns: ID, RT01, RT02, RT03, RT04, RT05, RT06, RT07. Rows include FILENAME, INJ. DATE, and INJ. TIME for each RT column.

Main data table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Lists 17 compounds with their respective retention times and standard deviations.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	6.489	6.489	6.490	6.490	6.489	6.489	6.490	6.489	6.459-6.519	6.489	0.000
19 Dieldrin	6.831	6.832	6.832	6.832	6.831	6.832	6.832	6.831	6.801-6.861	6.832	0.000
20 Endrin	7.081	7.081	7.082	7.082	7.081	7.082	7.082	7.081	7.051-7.111	7.082	0.000
21 4,4'-DDD	7.135	7.136	7.136	7.136	7.135	7.136	7.135	7.135	7.105-7.165	7.136	0.000
22 Endosulfan II	7.318	7.317	7.318	7.318	7.317	7.317	7.317	7.317	7.287-7.347	7.317	0.000
23 4,4'-DDT	7.427	7.427	7.428	7.428	7.427	7.427	7.428	7.427	7.397-7.457	7.428	0.000
24 Endrin aldehyde	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.716-7.776	7.746	0.000
25 Methoxychlor	7.912	7.912	7.913	7.912	7.912	7.912	7.912	7.912	7.882-7.942	7.912	0.000
26 Endosulfan sulfate	8.180	8.179	8.180	8.180	8.180	8.179	8.180	8.180	8.150-8.210	8.180	0.000
27 Endrin ketone	8.453	8.452	8.454	8.453	8.453	8.453	8.454	8.453	8.423-8.483	8.453	0.001
28 Decachlorobiphenyl	9.355	9.354	9.355	9.355	9.355	9.355	9.356	9.355	9.325-9.385	9.355	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121405 22121406 22121407 22121408 22121409 22121410 22121411
INJ. DATE: 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022
INJ. TIME: 20:38 20:56 21:14 21:31 21:49 22:07 22:25

Table with 12 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows list various chemical compounds like Hexachlorobutadiene, Bromobenzene, Hexabromobiphenyl, etc., with their respective retention times and standard deviations.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	7.370	7.370	7.371	7.371	7.370	7.371	7.371	7.371	7.341-7.401	7.371	0.000
19 Dieldrin [C]	7.582	7.582	7.583	7.583	7.582	7.582	7.583	7.583	7.553-7.613	7.582	0.000
20 Endrin [C]	7.906	7.906	7.906	7.907	7.907	7.907	7.907	7.907	7.877-7.937	7.907	0.000
21 4,4'-DDD [C]	7.976	7.976	7.976	7.977	7.976	7.976	7.976	7.976	7.946-8.006	7.976	0.000
22 Endosulfan II [C]	8.117	8.116	8.117	8.117	8.117	8.117	8.117	8.117	8.087-8.147	8.117	0.000
23 4,4'-DDT [C]	8.294	8.294	8.294	8.295	8.295	8.295	8.295	8.295	8.265-8.325	8.295	0.000
24 Endrin aldehyde [C]	8.448	8.447	8.448	8.448	8.448	8.448	8.448	8.448	8.418-8.478	8.448	0.000
25 Endosulfan sulfate [C]	8.715	8.714	8.715	8.715	8.715	8.715	8.715	8.715	8.685-8.745	8.715	0.000
26 Methoxychlor [C]	8.935	8.934	8.935	8.936	8.935	8.935	8.936	8.936	8.906-8.966	8.935	0.001
27 Endrin ketone [C]	9.239	9.239	9.239	9.240	9.239	9.239	9.240	9.240	9.210-9.270	9.239	0.000
28 Decachlorobiphenyl [C]	10.466	10.465	10.466	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.001
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Table with 7 columns: ID, RT01, RT02, RT03, RT04, RT05, RT06, RT07. Rows include FILENAME, INJ. DATE, and INJ. TIME for various samples.

Main data table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Lists 17 compounds with their retention times and standard deviations.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.355	9.325-9.385	+++++	+++++
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
39 2,4-DDE	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.076-6.136	6.106	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.681	6.681	6.681	6.681	6.681	6.681	6.680	6.681	6.651-6.711	6.681	0.000
41 2,4-DDT	6.956	6.957	6.956	6.956	6.957	6.956	6.956	6.957	6.927-6.987	6.956	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	6.014	6.015	6.014	6.015	6.014	6.014	6.014	6.014	5.984-6.044	6.015	0.000
44 trans-Nonachlor	6.397	6.398	6.398	6.398	6.397	6.397	6.397	6.397	6.367-6.427	6.398	0.000
45 cis-Nonachlor	7.112	7.112	7.111	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.052-8.112	8.082	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121412 22121413 22121414 22121415 22121416 22121417 22121418
INJ. DATE: 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 14-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 22:43 23:01 23:19 23:36 23:54 00:12 00:30

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Hexachlorobenzene, alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Chlorthalonil, Aldrin, Heptachlor Epoxide a, Heptachlor epoxide b, cis-Chlordane, trans-Chlordane, and Endosulfan I.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	10.471	10.467	10.437-10.497	10.471	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	7.036	7.036	7.035	7.036	7.036	7.036	7.036	7.036	7.006-7.066	7.036	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.591	7.590	7.590	7.591	7.590	7.591	7.591	7.591	7.561-7.621	7.591	0.000
41 2,4-DDT [C]	7.913	7.914	7.913	7.913	7.913	7.914	7.913	7.913	7.883-7.943	7.913	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.711-6.771	6.741	0.000
44 trans-Nonachlor [C]	7.154	7.154	7.154	7.155	7.154	7.155	7.155	7.155	7.125-7.185	7.154	0.000
45 cis-Nonachlor [C]	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.945-8.005	7.975	0.000
46 Mirex [C]	9.223	9.223	9.222	9.223	9.222	9.223	9.223	9.223	9.193-9.253	9.223	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121421 22121422 22121423 22121424 22121425 22121426 22121427
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 01:24 01:42 01:59 02:17 02:35 02:53 03:11

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	9.380	9.355	9.325-9.385	9.380	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	5.593	5.593	5.593	5.593	5.593	5.592	5.593	5.593	5.563-5.623	5.593	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121421 22121422 22121423 22121424 22121425 22121426 22121427
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 01:24 01:42 01:59 02:17 02:35 02:53 03:11

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Hexachlorobenzene, alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Chlorthalonil, Aldrin, Heptachlor Epoxide a, Heptachlor epoxide b, cis-Chlordane, trans-Chlordane, and Endosulfan I.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.467	10.437-10.497	+++++	+++++
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	5.612	5.612	5.612	5.611	5.612	5.612	5.612	5.612	5.582-5.642	5.612	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121428 22121429 22121430 22121431 22121432 22121433 22121434
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 03:29 03:46 04:04 04:22 04:40 04:58 05:16

Table with 12 columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows list various compounds like Hexachlorobutadiene, Bromo-2nitrobenzene, Hexabromobiphenyl, etc., with their respective retention times and standard deviations.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
28 Decachlorobiphenyl	9.355	9.355	9.355	9.355	9.356	9.356	9.355	9.355	9.325-9.385	9.356	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38 Toxaphene	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.901-6.961	6.931	0.000
39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlorane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID: RT01 RT02 RT03 RT04 RT05 RT06 RT07
FILENAME: 22121428 22121429 22121430 22121431 22121432 22121433 22121434
INJ. DATE: 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022 15-DEC-2022
INJ. TIME: 03:29 03:46 04:04 04:22 04:40 04:58 05:16

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, RT07, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include compounds like Hexachlorobutadiene, 1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Hexachlorobenzene, alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Chlorthalonil, Aldrin, Heptachlor Epoxide a, Heptachlor epoxide b, cis-Chlordane, trans-Chlordane, and Endosulfan I.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
\$ 28 Decachlorobiphenyl [C]	10.467	10.467	10.467	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.000
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	7.125	7.125	7.125	7.125	7.126	7.126	7.126	7.126	7.096-7.156	7.125	0.000
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
 Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
 Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlorane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			6.824	-0.021	2291	0.00	0.14	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.597	0.015	1696	0.00	0.11	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.135	0.018	285	0.00	0.02	---	Endosulfan II
----			7.975	-0.002	1369	0.00	0.12	---	4,4'-DDD
----			8.720	0.005	243	0.00	0.02	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			8.924	-0.013	546	0.00	0.11	---	Methoxychlor
8.444	-0.009	1962	9.226	-0.013	2888	0.23	0.25	10.1	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			7.070	0.014	4708	0.00	0.30	---	trans-Chlordane
----			7.219	0.003	810	0.00	0.05	---	cis-Chlordane
2.351	0.028	6378	2.512	0.012	33421	0.42	1.60	116.6*	Hexachlorobutadiene
4.183	0.001	4869	4.721	0.003	421	0.36	0.02	178.1*	Hexachlorobenzene
3.828	0.000	375293	4.220	-0.000	579767	36.70	37.46	2.1	Tetrachloro-m-xylene
9.356	0.001	243291	10.467	0.000	323668	35.86	35.40	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	751998	5.8
Hexabromobiphenyl	641833	669495	4.3

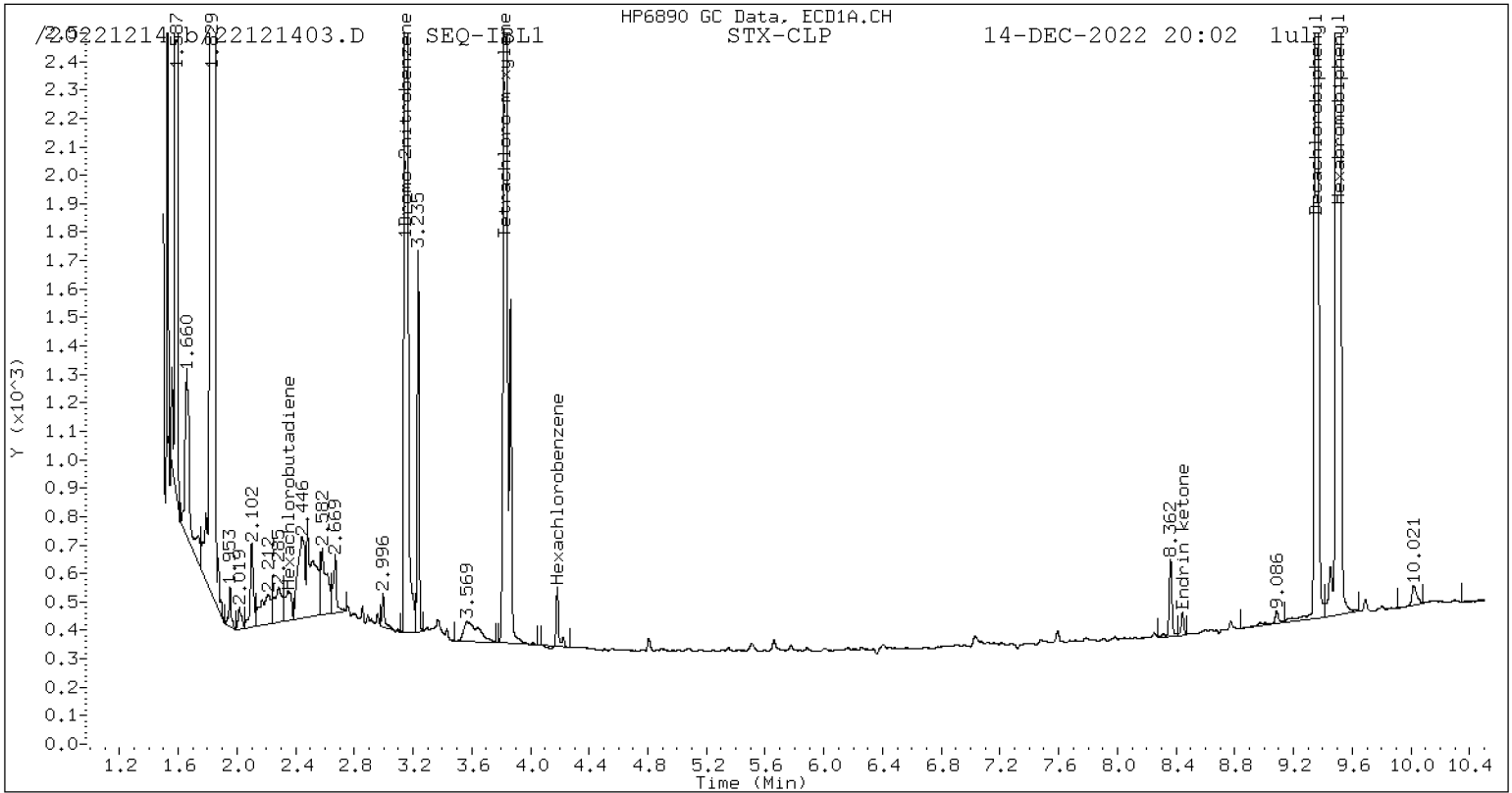
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1099555	3.8
Hexabromobiphenyl	797125	827325	3.8

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

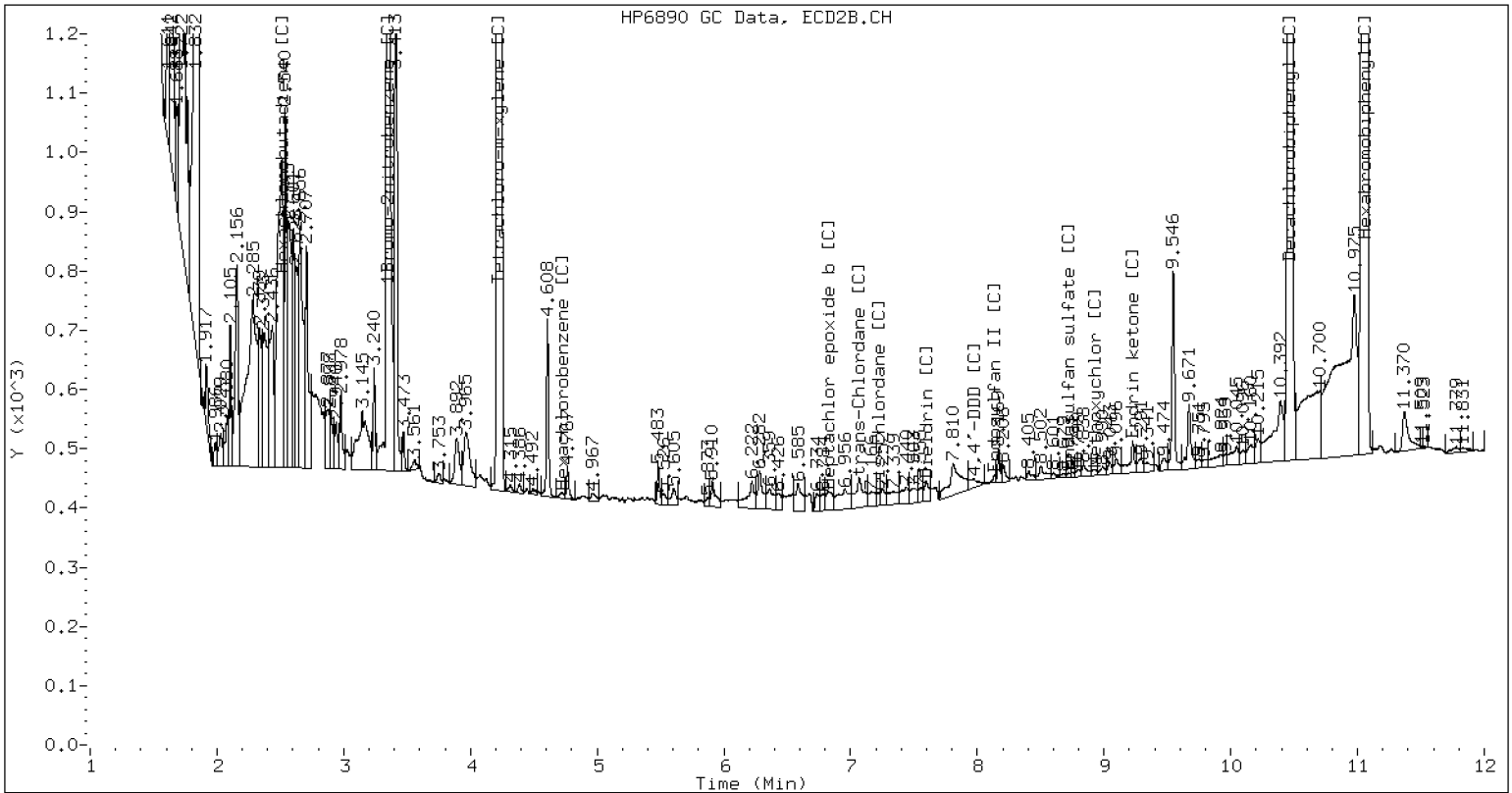
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121403.D SEQ-IBL1 CLP2



CLP-2 Manual Integration: NO

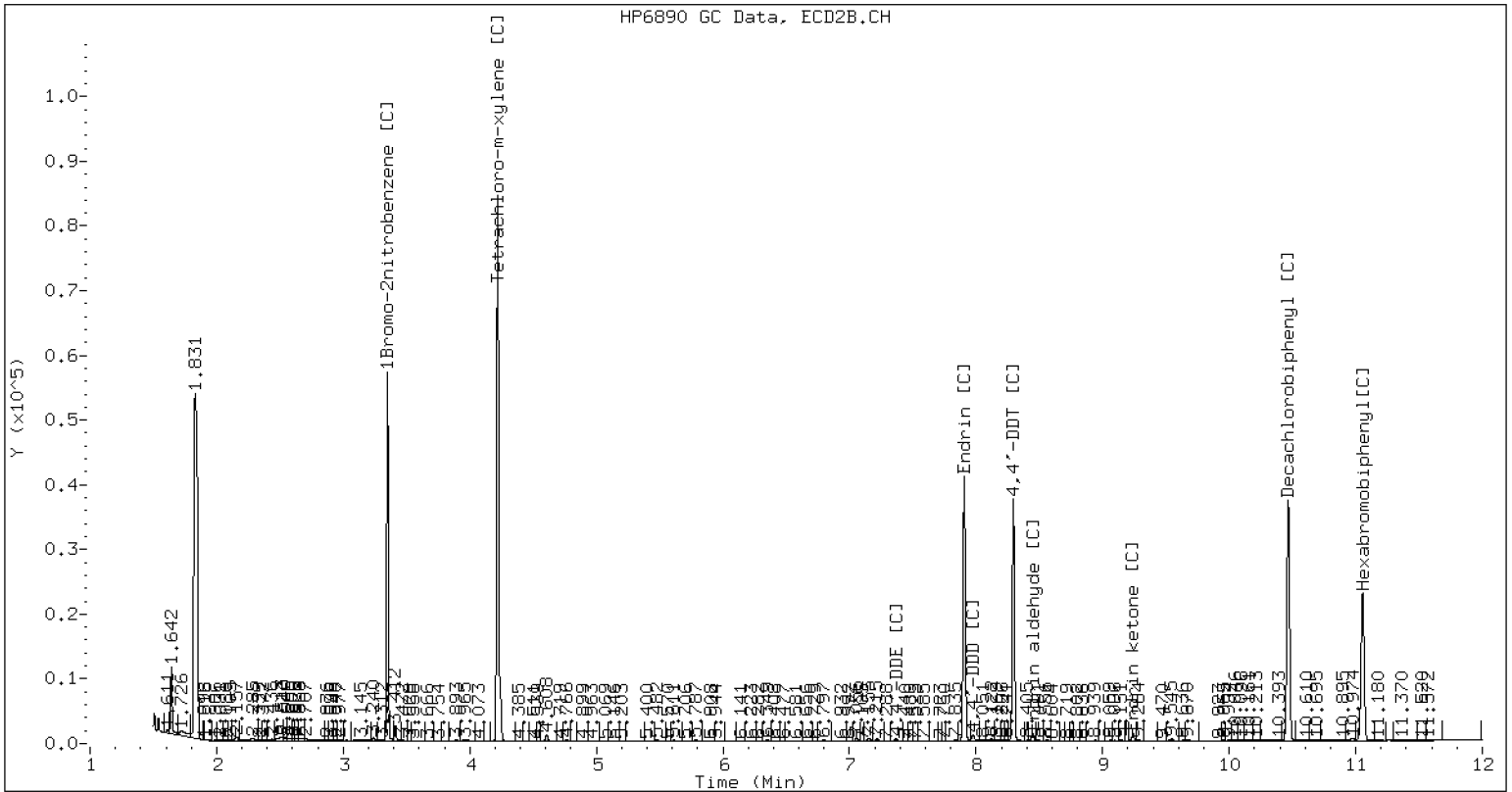
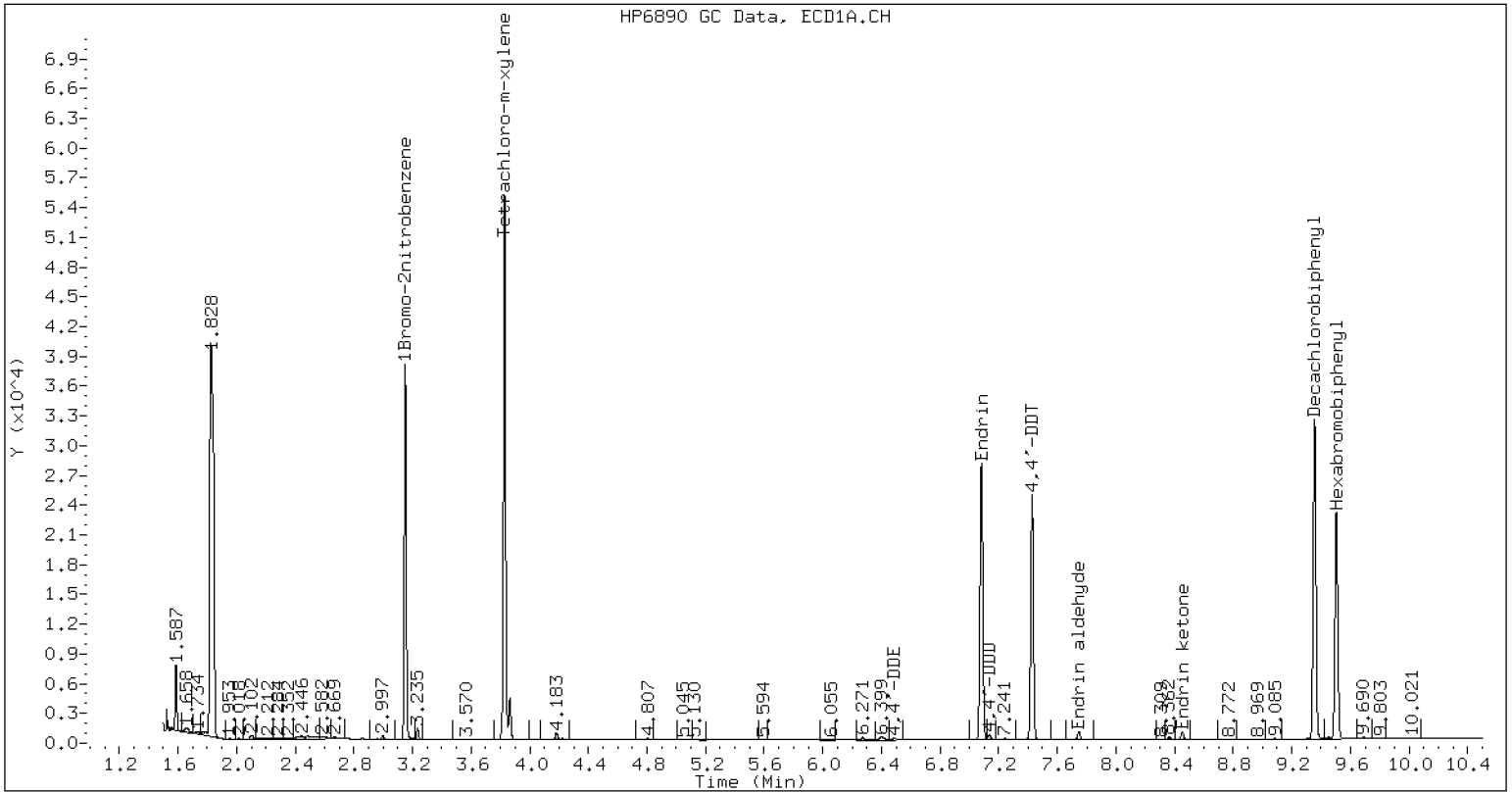
Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col		

=====



7E
8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D
Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
 $((6258+15566) * 100)/(6258+15566+629664)$

Endrin Percent Breakdown = 5.2 %
 $((21328+19276) * 100)/(21328+19276+745471)$

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	-0.000	17720	4.860	-0.001	25579	1.30	1.22	6.4	alpha-BHC
4.726	-0.000	7513	5.337	-0.000	10927	1.43	1.37	4.4	beta-BHC
4.909	-0.000	14050	5.690	-0.000	21188	1.26	1.23	2.8	delta-BHC
4.645	-0.000	15329	5.257	-0.001	21981	1.30	1.24	4.9	gamma-BHC (Lindane)
5.130	-0.000	14540	5.786	-0.000	20395	1.38	1.27	8.9	Heptachlor
5.453	-0.001	15026	6.190	-0.001	24413	1.28	1.33	3.9	Aldrin
6.130	0.000	13937	6.845	-0.000	21959	1.37	1.44	5.6	Heptachlor epoxide b
6.572	-0.000	13220	7.288	-0.000	19257	1.41	1.44	1.8	Endosulfan I
6.831	0.000	27285	7.582	-0.001	43580	2.71	2.94	8.2	Dieldrin
6.489	0.000	25951	7.370	-0.001	37722	2.78	2.78	0.0	4,4'-DDE
7.081	0.000	24429	7.906	-0.001	31381	2.94	2.78	5.3	Endrin
7.318	0.001	19827	8.117	-0.000	30675	2.65	2.66	0.3	Endosulfan II
7.135	0.000	20434	7.976	-0.000	28995	2.73	2.65	3.0	4,4'-DDD
8.180	-0.000	19661	8.715	-0.000	26689	2.76	2.63	4.9	Endosulfan sulfate
7.427	0.000	20071	8.294	-0.001	26950	2.65	2.55	3.9	4,4'-DDT
7.912	-0.000	52385	8.935	-0.001	65896	15.60	14.07	10.3	Methoxychlor
8.453	-0.001	24276	9.239	-0.000	30129	2.98	2.75	8.0	Endrin ketone
7.746	-0.000	17209	8.448	-0.000	21218	2.88	2.60	10.1	Endrin aldehyde
6.270	-0.001	14829	7.056	-0.000	22517	1.43	1.48	3.7	trans-Chlordane
6.417	0.000	15767	7.215	-0.000	22150	1.52	1.49	1.6	cis-Chlordane
2.323	-0.001	27320	2.500	-0.001	42655	1.92	2.14	11.3	Hexachlorobutadiene
4.182	0.000	18555	4.718	-0.000	27377	1.47	1.44	2.2	Hexachlorobenzene
3.828	-0.000	28792	4.220	-0.001	41270	2.99	2.80	6.5	Tetrachloro-m-xylene
9.355	-0.000	21954	10.466	-0.000	30646	3.41	3.50	2.5	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	707324	-0.5
Hexabromobiphenyl	641833	634819	-1.1

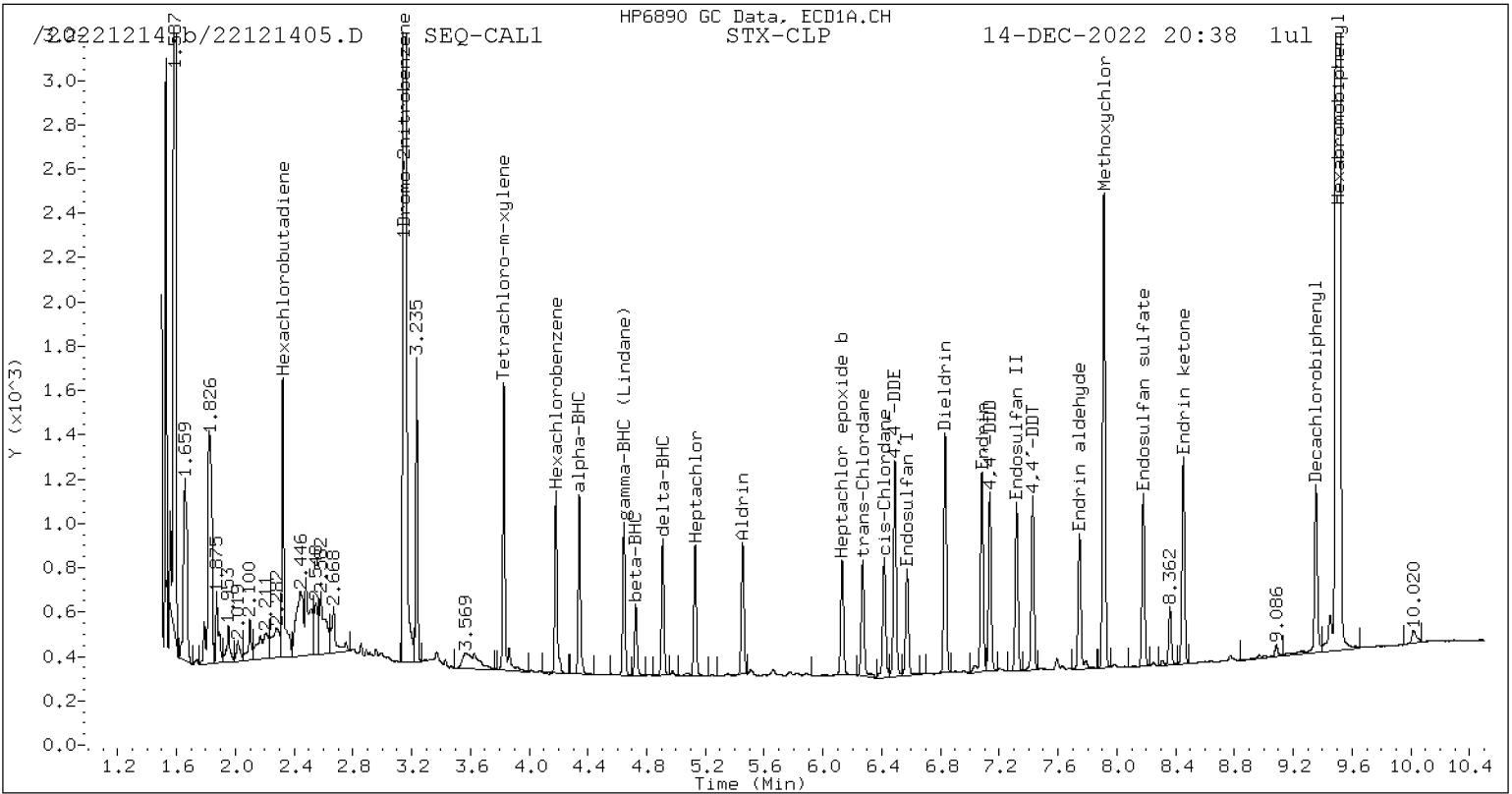
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1045524	-1.3
Hexabromobiphenyl	797125	792558	-0.6

* Standard Areas taken from Initial Cal Level 5

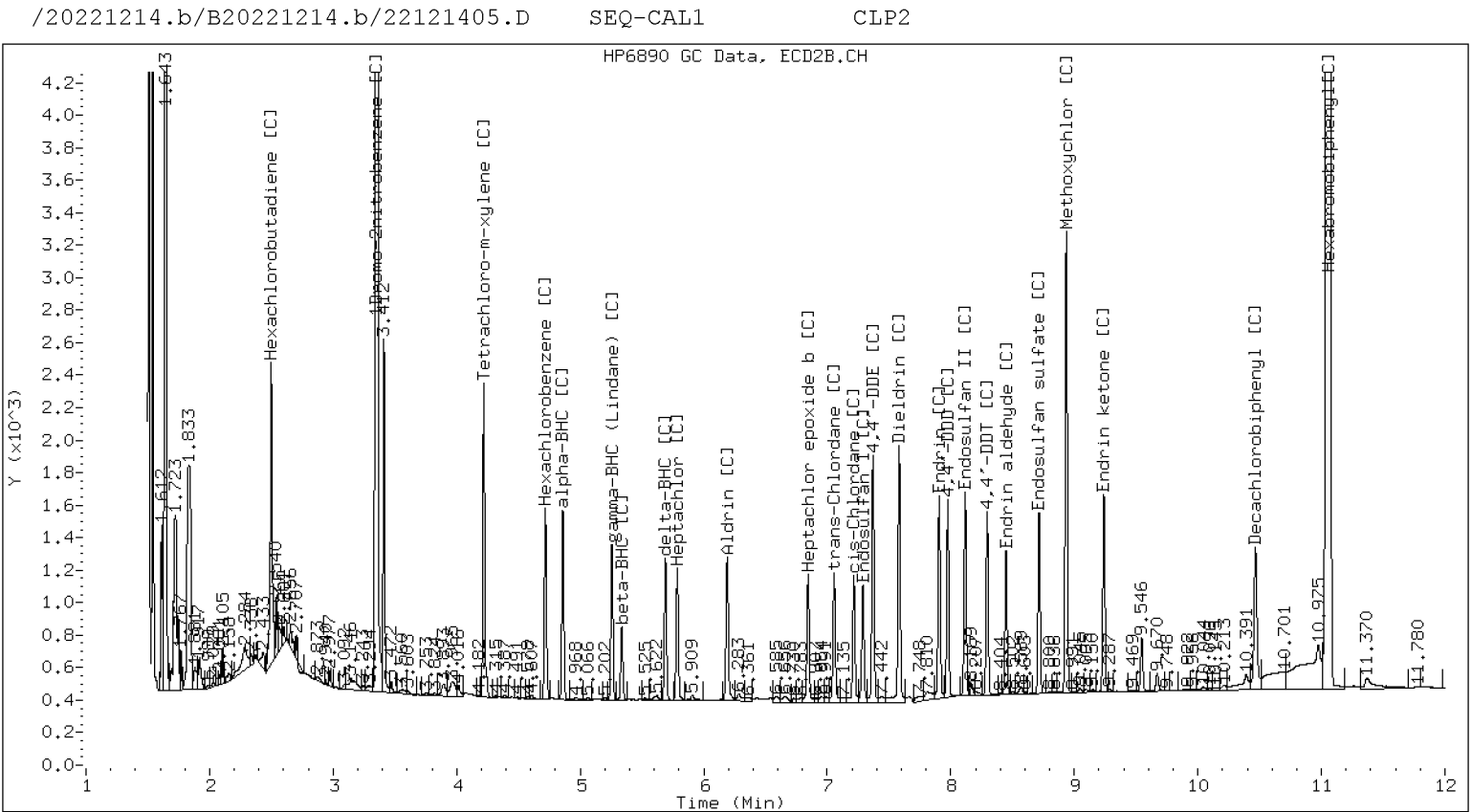
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	-0.000	35088	4.859	-0.001	52514	2.54	2.47	2.9	alpha-BHC
4.726	-0.000	14580	5.337	-0.000	21664	2.74	2.68	2.4	beta-BHC
4.909	-0.000	28429	5.691	-0.000	43932	2.52	2.51	0.5	delta-BHC
4.645	0.000	30588	5.257	-0.001	44971	2.55	2.49	2.5	gamma-BHC (Lindane)
5.129	-0.001	28458	5.787	-0.000	42156	2.67	2.58	3.6	Heptachlor
5.453	-0.001	30273	6.190	-0.001	50159	2.53	2.69	5.8	Aldrin
6.130	-0.001	27608	6.845	-0.001	43067	2.67	2.79	4.5	Heptachlor epoxide b
6.572	-0.000	25650	7.288	-0.001	37112	2.70	2.73	1.0	Endosulfan I
6.832	0.000	54960	7.582	-0.001	84296	5.38	5.60	4.0	Dieldrin
6.489	-0.000	51182	7.370	-0.001	74355	5.40	5.39	0.2	4,4'-DDE
7.081	0.000	46577	7.906	-0.001	63434	5.52	5.52	0.1	Endrin
7.317	0.001	37804	8.116	-0.001	65448	4.98	5.56	11.1	Endosulfan II
7.136	0.001	40399	7.976	-0.001	62302	5.32	5.58	4.8	4,4'-DDD
8.179	-0.001	38342	8.714	-0.001	57421	5.32	5.56	4.4	Endosulfan sulfate
7.427	-0.000	40499	8.294	-0.001	59346	5.27	5.51	4.3	4,4'-DDT
7.912	-0.000	98271	8.934	-0.002	130815	28.88	27.42	5.2	Methoxychlor
8.452	-0.001	45639	9.239	-0.001	62360	5.53	5.59	1.1	Endrin ketone
7.746	0.000	32847	8.447	-0.001	47592	5.42	5.73	5.6	Endrin aldehyde
6.271	0.000	28307	7.055	-0.001	41633	2.69	2.70	0.4	trans-Chlordane
6.417	0.000	29336	7.215	-0.000	41766	2.78	2.77	0.3	cis-Chlordane
2.323	-0.001	44113	2.500	-0.001	65565	3.05	3.24	6.2	Hexachlorobutadiene
4.182	-0.000	35520	4.718	-0.000	53173	2.77	2.75	0.9	Hexachlorobenzene
3.828	-0.000	54873	4.220	-0.001	81034	5.62	5.42	3.7	Tetrachloro-m-xylene
9.354	-0.001	38477	10.465	-0.001	54866	5.90	6.15	4.1	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	717600	1.0
Hexabromobiphenyl	641833	643445	0.3

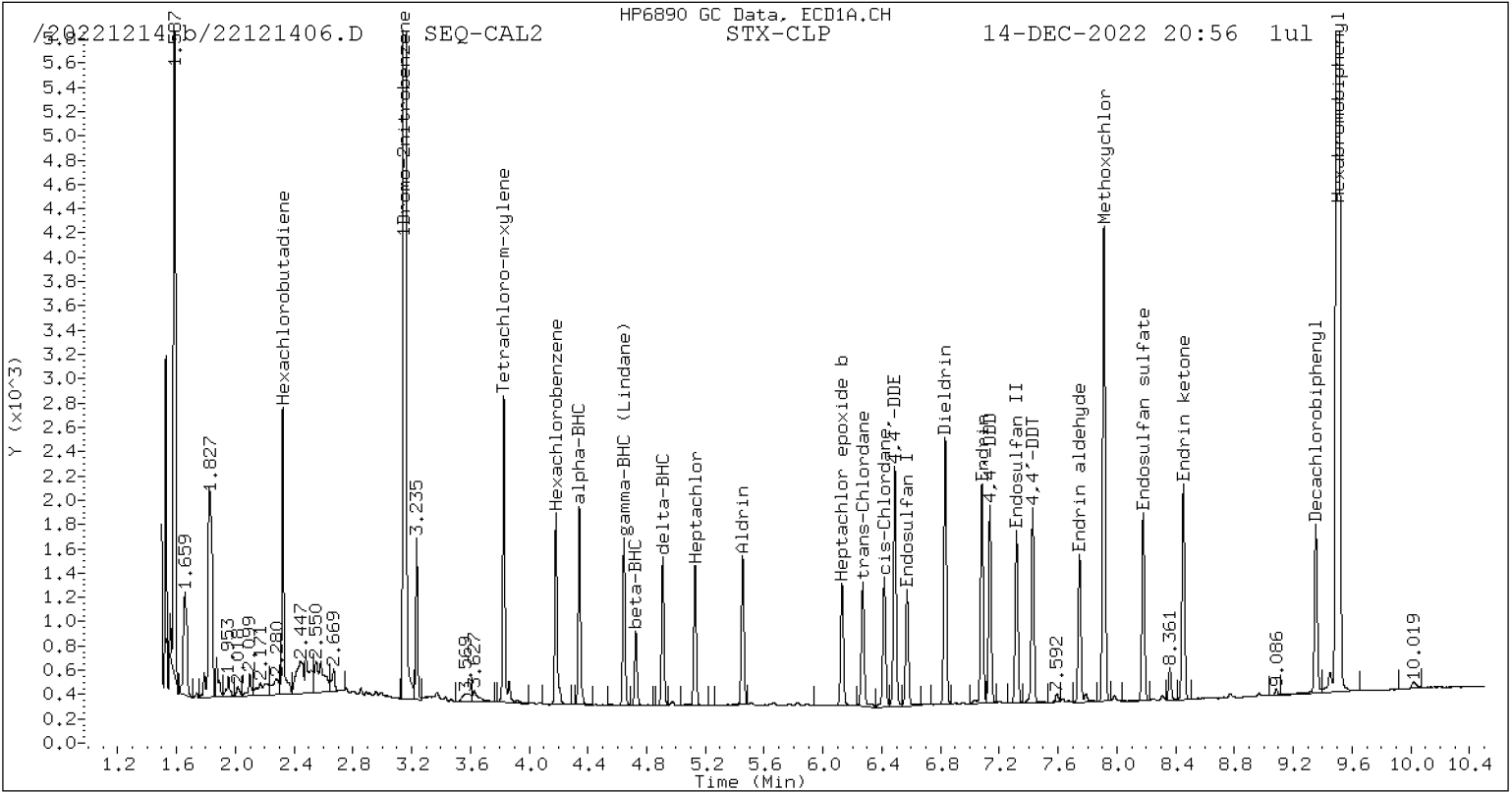
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1061990	0.3
Hexabromobiphenyl	797125	807490	1.3

* Standard Areas taken from Initial Cal Level 5

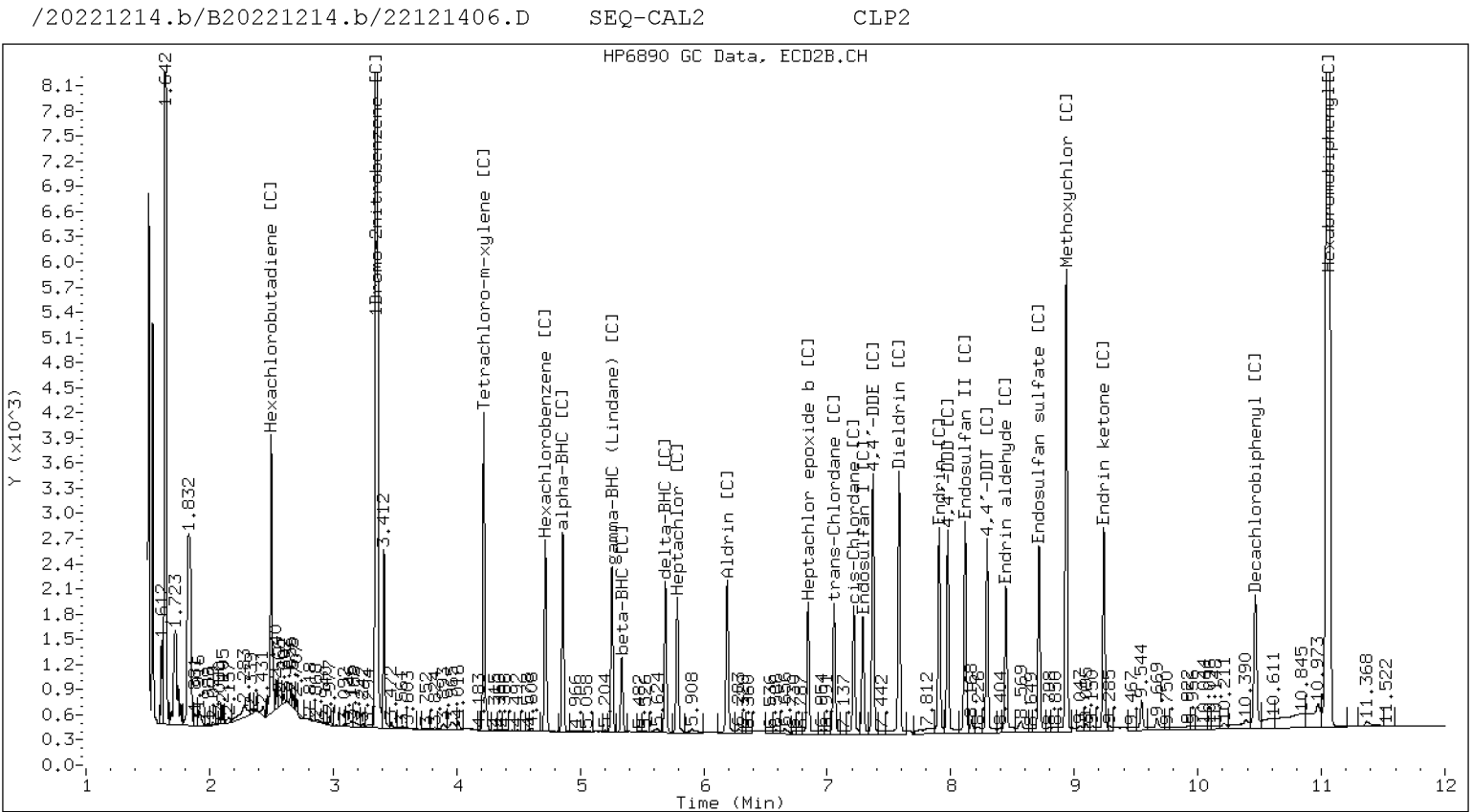
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
4.343	0.001	68202	4.860	-0.000	103195	5.06	4.95	2.2	alpha-BHC
4.727	0.000	26774	5.338	0.000	40159	5.16	5.06	1.8	beta-BHC
4.910	0.001	55344	5.691	0.000	85044	5.02	4.95	1.5	delta-BHC
4.646	0.001	59491	5.258	0.000	87747	5.09	4.96	2.6	gamma-BHC (Lindane)
5.130	0.000	53529	5.787	0.000	80295	5.15	5.01	2.7	Heptachlor
5.455	0.001	59061	6.191	0.000	92167	5.07	5.03	0.7	Aldrin
6.132	0.001	52071	6.845	-0.000	76415	5.15	5.05	2.1	Heptachlor epoxide b
6.573	0.001	48052	7.289	-0.000	67929	5.18	5.09	1.8	Endosulfan I
6.832	0.001	104217	7.583	-0.000	151301	10.46	10.26	1.9	Dieldrin
6.490	0.001	97042	7.371	0.000	139172	10.49	10.29	1.9	4,4'-DDE
7.082	0.001	87185	7.906	-0.001	115830	10.66	10.37	2.8	Endrin
7.318	0.001	77341	8.117	0.000	118175	10.50	10.32	1.8	Endosulfan II
7.136	0.001	77451	7.976	0.000	110178	10.51	10.14	3.6	4,4'-DDD
8.180	0.001	73440	8.715	0.000	102417	10.50	10.18	3.1	Endosulfan sulfate
7.428	0.001	77522	8.294	-0.001	105882	10.41	10.09	3.1	4,4'-DDT
7.913	0.001	178164	8.935	-0.001	239047	53.98	51.49	4.7	Methoxychlor
8.454	0.000	84510	9.239	-0.000	110024	10.55	10.13	4.1	Endrin ketone
7.746	0.001	61122	8.448	-0.000	82817	10.40	10.25	1.5	Endrin aldehyde
6.271	0.001	52622	7.056	-0.000	76513	5.13	5.07	1.1	trans-Chlordane
6.417	0.001	53515	7.216	0.000	75023	5.20	5.08	2.3	cis-Chlordane
2.324	-0.000	75632	2.500	-0.000	107268	5.35	5.41	1.1	Hexachlorobutadiene
4.183	0.001	66090	4.718	-0.000	98926	5.28	5.21	1.3	Hexachlorobenzene
3.828	0.000	101081	4.220	-0.000	153451	10.61	10.47	1.3	Tetrachloro-m-xylene
9.355	-0.000	67797	10.466	-0.000	92260	10.72	10.62	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	700354	-1.4
Hexabromobiphenyl	641833	624108	-2.8

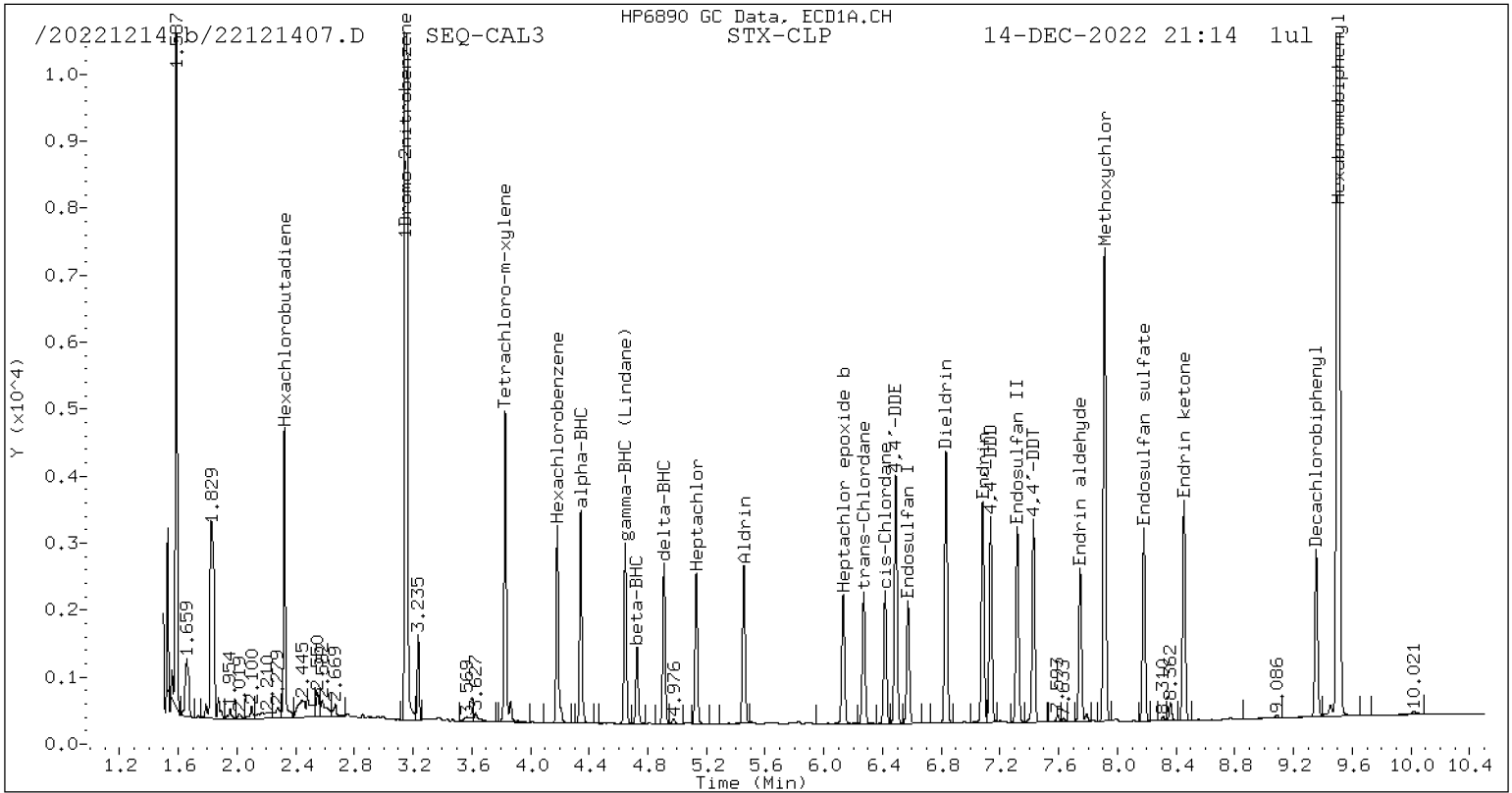
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1040903	-1.7
Hexabromobiphenyl	797125	785894	-1.4

* Standard Areas taken from Initial Cal Level 5

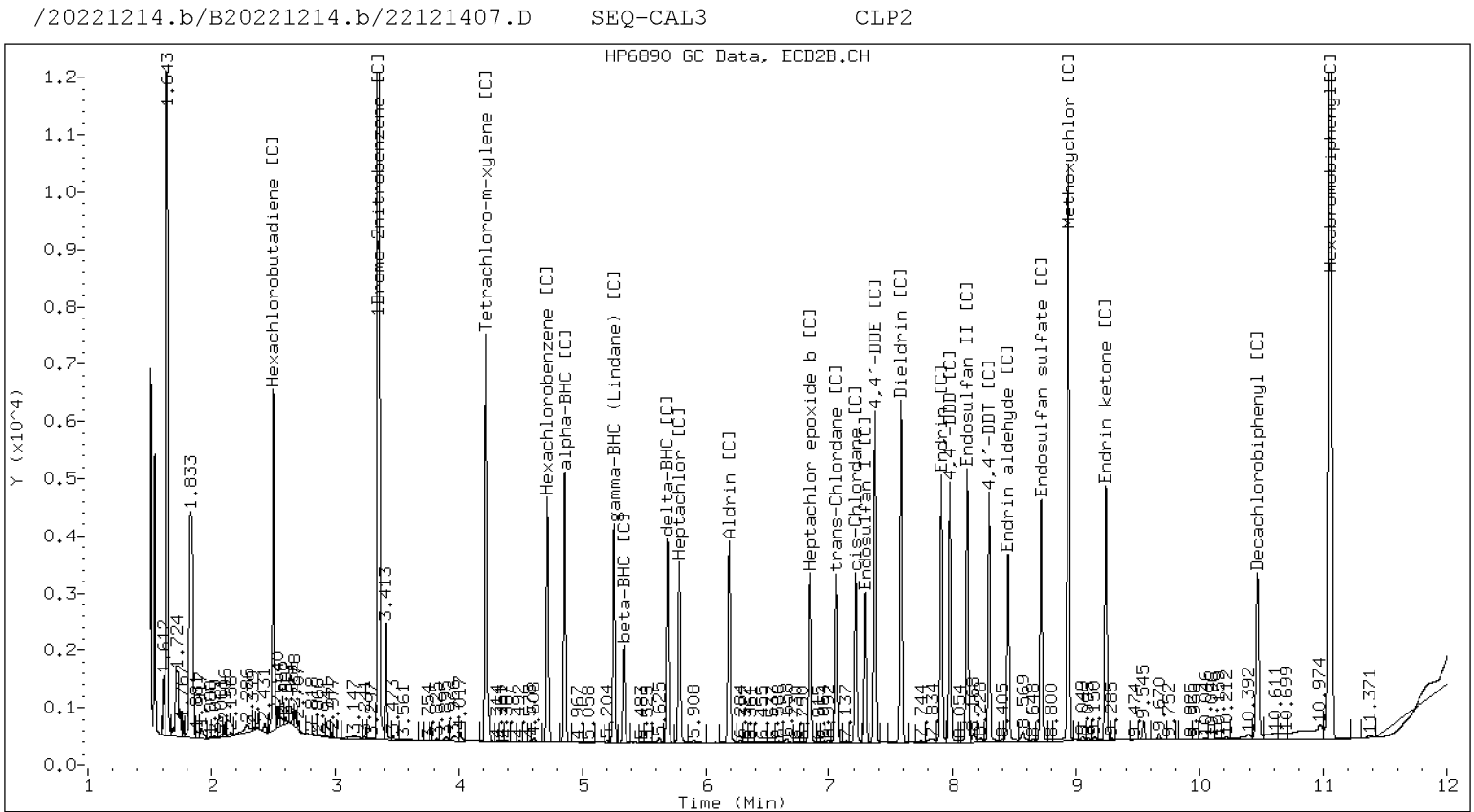
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
 Data file 2: /20221214.b/B20221214.b/22121408.D
 Method: \20221214.b\PEST.m
 Compound Sublist: INDA.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CAL4
 Client ID:
 Injection Date: 14-DEC-2022 21:31
 Report Date: 12/16/2022 15:19
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.343	0.000	139784	4.860	-0.000	216159	10.22	10.19	0.3	alpha-BHC
4.726	0.000	53742	5.337	0.000	81857	10.20	10.15	0.6	beta-BHC
4.910	0.001	113586	5.691	0.000	177281	10.16	10.14	0.2	delta-BHC
4.646	0.000	121488	5.258	0.000	182844	10.24	10.15	0.9	gamma-BHC (Lindane)
5.130	0.000	108260	5.787	-0.000	166558	10.26	10.21	0.5	Heptachlor
5.454	0.000	124839	6.191	0.000	189618	10.55	10.18	3.6	Aldrin
6.131	0.001	107301	6.846	0.001	155424	10.46	10.09	3.6	Heptachlor epoxide b
6.573	0.000	97151	7.289	0.000	137043	10.32	10.10	2.2	Endosulfan I
6.832	0.001	210564	7.583	0.000	301602	20.82	20.11	3.5	Dieldrin
6.490	0.001	195139	7.371	0.000	281756	20.79	20.49	1.5	4,4'-DDE
7.082	0.001	173216	7.907	-0.000	231062	20.59	20.39	1.0	Endrin
7.318	0.001	161303	8.117	0.001	236844	21.29	20.39	4.4	Endosulfan II
7.136	0.001	157301	7.977	0.001	222755	20.75	20.21	2.7	4,4'-DDD
8.180	0.000	146955	8.715	0.000	205334	20.43	20.13	1.5	Endosulfan sulfate
7.428	0.001	156744	8.295	-0.000	212755	20.46	19.99	2.3	4,4'-DDT
7.912	0.001	344324	8.936	-0.001	473459	101.43	100.55	0.9	Methoxychlor
8.453	-0.000	167384	9.240	0.000	222080	20.31	20.15	0.8	Endrin ketone
7.746	0.000	123653	8.448	0.000	164391	20.47	20.06	2.0	Endrin aldehyde
6.271	0.001	106805	7.056	0.000	154174	10.25	10.04	2.1	trans-Chlordane
6.418	0.001	106651	7.216	0.001	150231	10.21	10.00	2.1	cis-Chlordane
2.323	-0.000	142895	2.500	-0.001	197539	9.97	9.80	1.7	Hexachlorobutadiene
4.183	0.000	130020	4.718	0.000	197396	10.24	10.22	0.1	Hexachlorobenzene
3.828	0.000	199446	4.220	-0.000	308345	20.64	20.69	0.2	Tetrachloro-m-xylene
9.355	0.000	130210	10.466	-0.000	170633	20.02	19.37	3.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	710650	0.0
Hexabromobiphenyl	641833	641833	0.0

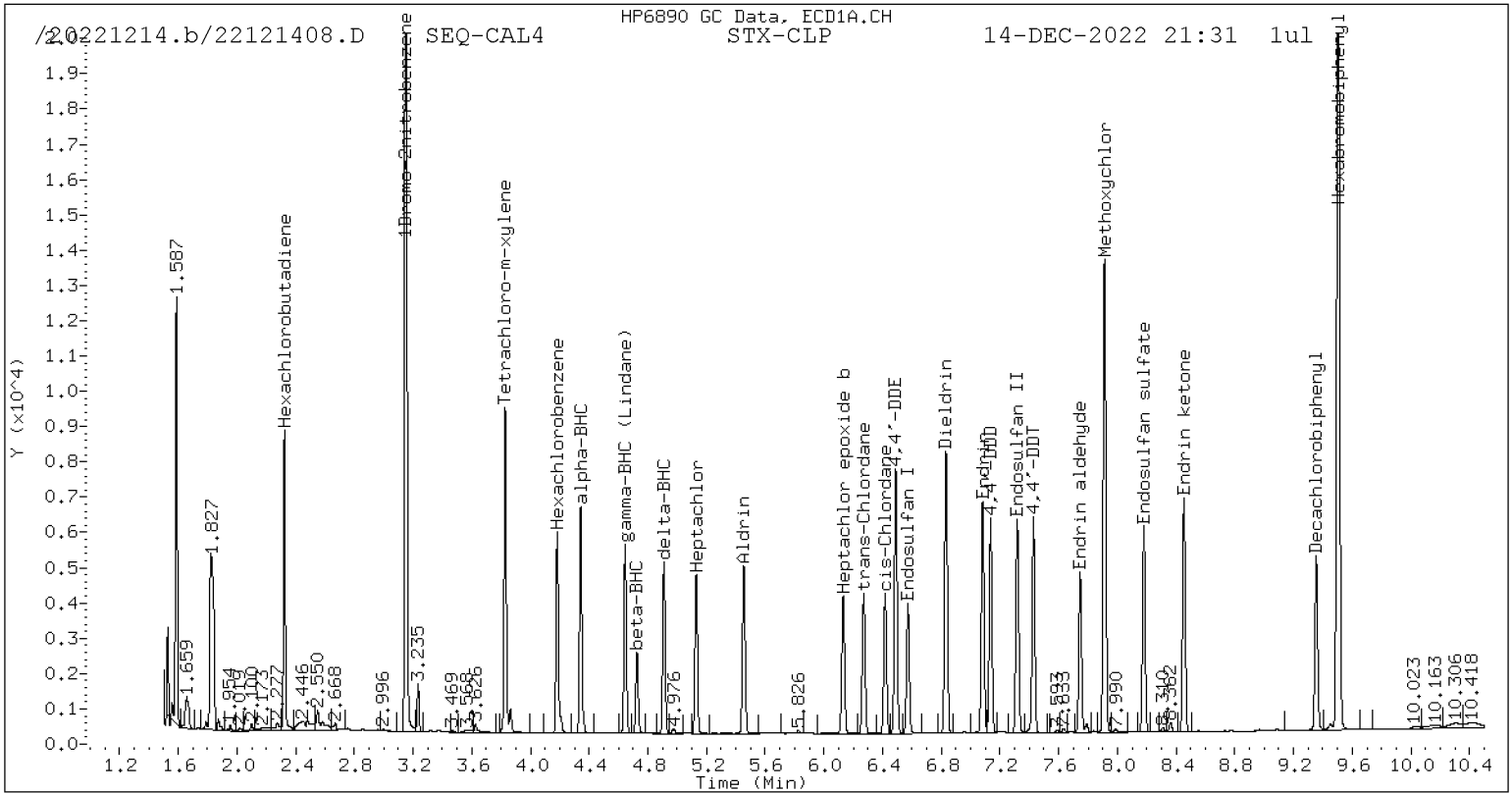
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1058848	0.0
Hexabromobiphenyl	797125	797125	0.0

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

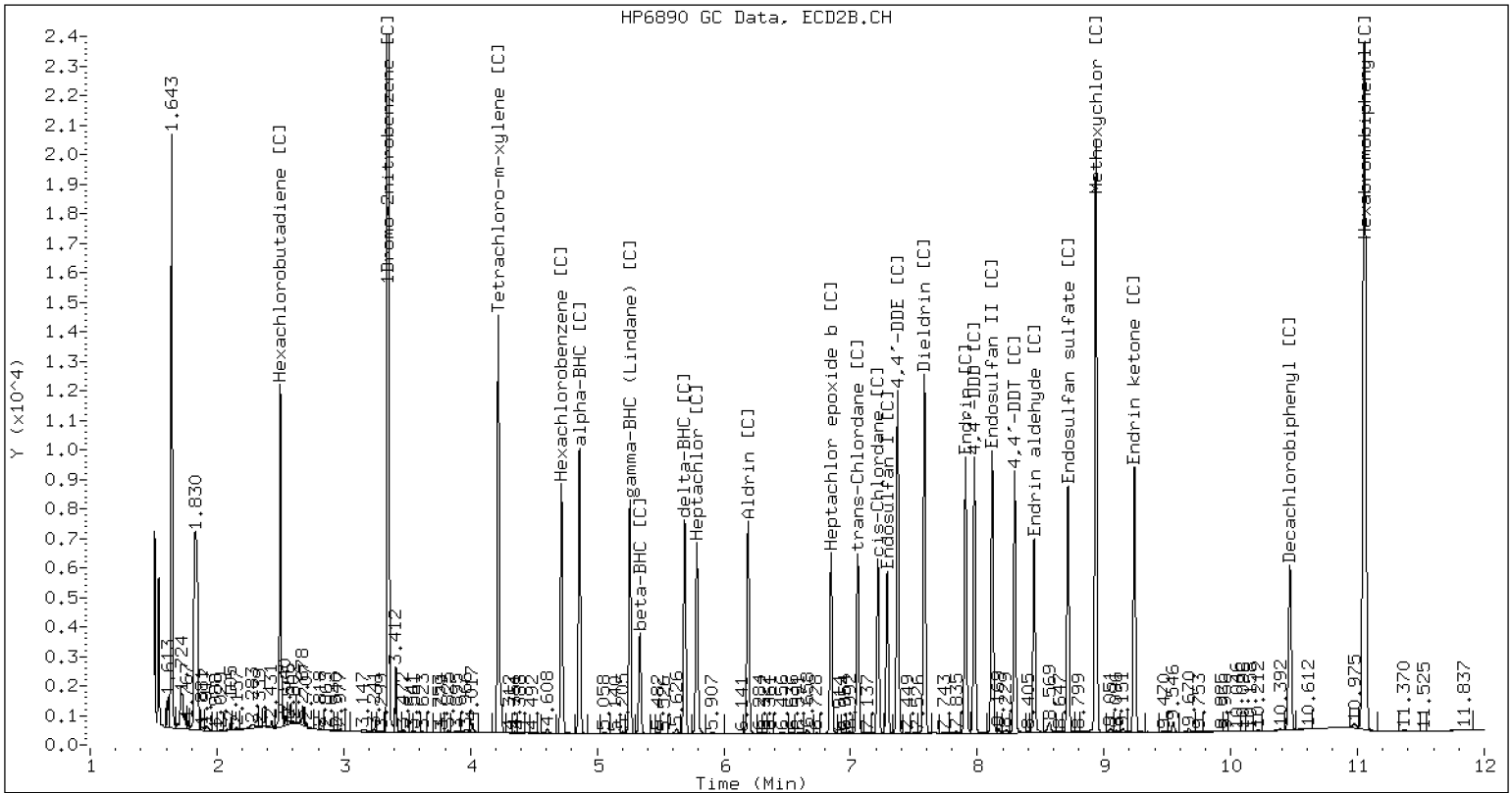
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121408.D SEQ-CAL4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/16/2022 15:30
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	0.000	263355	4.860	-0.001	412780	20.34	20.46	0.6	alpha-BHC
4.726	0.000	99355	5.337	-0.000	154138	19.93	20.10	0.8	beta-BHC
4.909	0.000	216224	5.690	-0.000	334261	20.44	20.12	1.6	delta-BHC
4.645	0.000	228274	5.258	-0.000	350450	20.34	20.47	0.7	gamma-BHC (Lindane)
5.130	0.000	203067	5.787	-0.000	320123	20.33	20.64	1.5	Heptachlor
5.454	0.000	230734	6.191	-0.000	359912	20.62	20.33	1.4	Aldrin
6.130	0.000	198033	6.845	-0.000	295580	20.41	20.19	1.1	Heptachlor epoxide b
6.572	0.000	180905	7.289	-0.000	260351	20.31	20.18	0.7	Endosulfan I
6.831	0.000	388583	7.582	-0.000	571731	40.61	40.10	1.3	Dieldrin
6.489	0.000	362177	7.370	-0.000	531128	40.77	40.63	0.4	4,4'-DDE
7.081	0.000	323576	7.907	-0.000	442460	40.48	40.43	0.1	Endrin
7.317	0.000	282010	8.117	-0.000	446656	39.19	39.81	1.6	Endosulfan II
7.135	0.000	292251	7.976	-0.000	427990	40.58	40.20	0.9	4,4'-DDD
8.180	0.000	276113	8.715	0.000	393743	40.41	39.97	1.1	Endosulfan sulfate
7.427	0.000	296413	8.295	-0.000	413083	40.73	40.20	1.3	4,4'-DDT
7.912	0.000	628619	8.935	-0.001	900958	194.94	198.14	1.6	Methoxychlor
8.453	0.000	311305	9.239	-0.000	423698	39.77	39.82	0.1	Endrin ketone
7.746	0.000	230881	8.448	0.000	312907	40.23	39.54	1.7	Endrin aldehyde
6.271	0.000	200151	7.056	-0.000	294106	20.31	20.15	0.8	trans-Chlordane
6.417	0.000	197892	7.216	-0.000	285904	20.02	20.02	0.0	cis-Chlordane
2.324	0.000	260716	2.500	-0.000	346254	19.22	18.08	6.2	Hexachlorobutadiene
4.182	0.000	237746	4.718	-0.000	364913	19.78	19.88	0.5	Hexachlorobenzene
3.828	0.000	357836	4.220	-0.000	567647	39.13	40.07	2.4	Tetrachloro-m-xylene
9.355	0.000	239428	10.466	-0.001	327134	38.76	38.45	0.8	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	672426	0.0
Hexabromobiphenyl	609723	609723	0.0

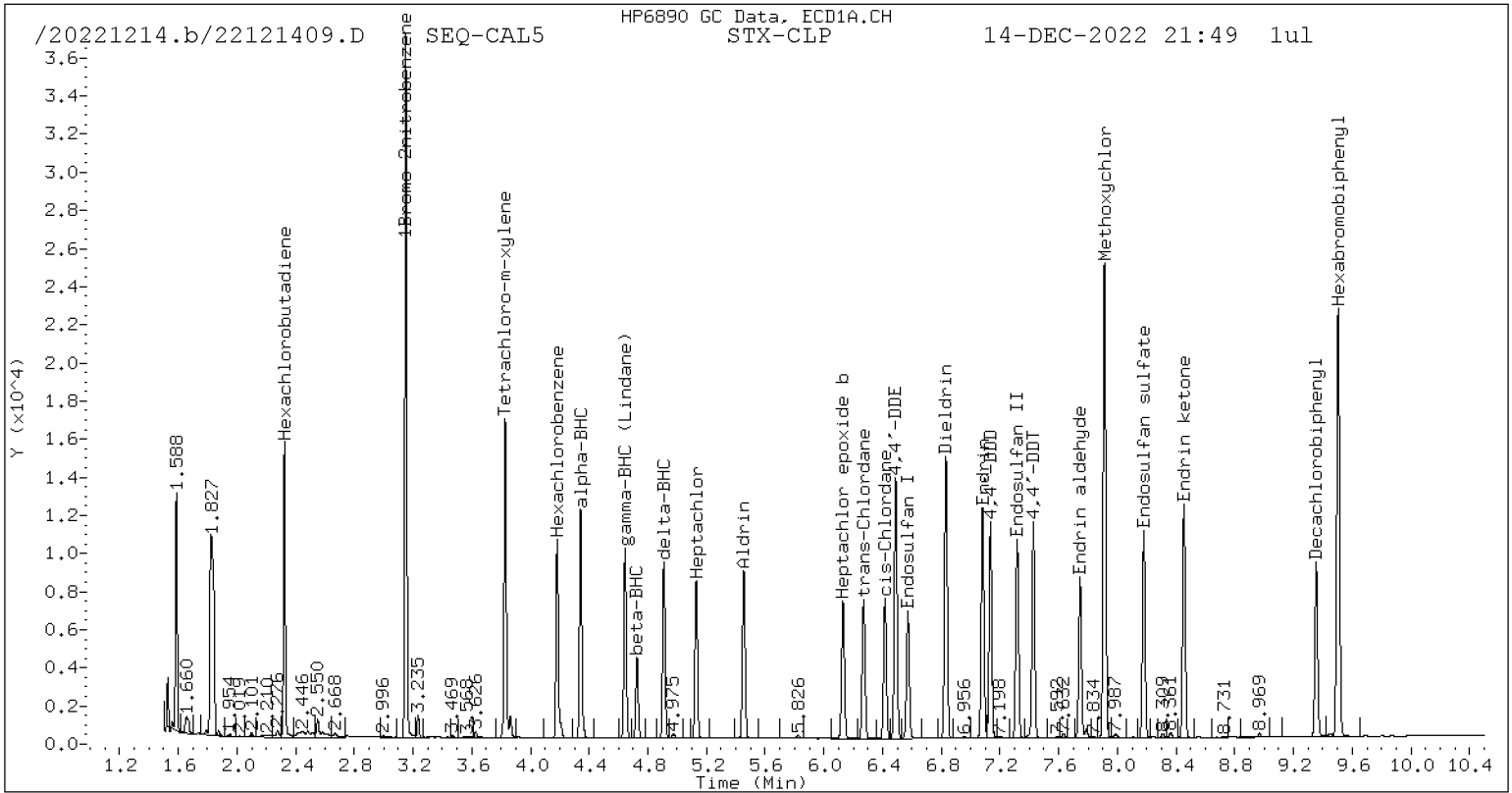
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1006482	0.0
Hexabromobiphenyl	769764	769764	0.0

* Standard Areas taken from Initial Cal Level 5

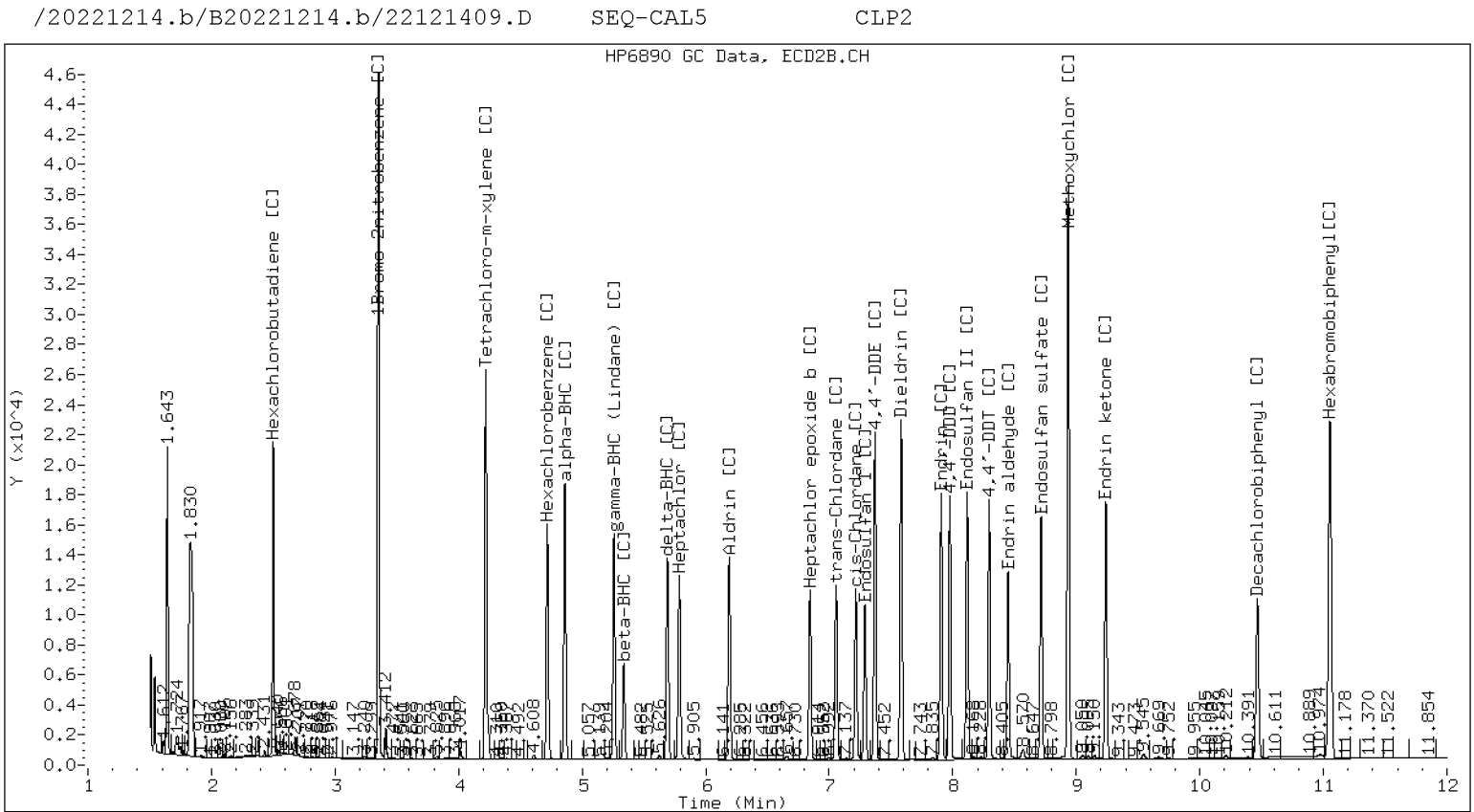
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	0.000	535902	4.860	-0.000	849533	39.69	40.30	1.5	alpha-BHC
4.726	0.000	198976	5.337	-0.000	311218	38.28	38.84	1.4	beta-BHC
4.910	0.000	440370	5.691	0.000	700464	39.91	40.34	1.1	delta-BHC
4.646	0.000	461905	5.258	0.000	718675	39.46	40.18	1.8	gamma-BHC (Lindane)
5.130	0.000	401672	5.787	0.000	639345	38.56	39.46	2.3	Heptachlor
5.454	0.000	458396	6.190	-0.000	720942	39.27	38.97	0.8	Aldrin
6.130	0.000	387273	6.846	0.000	586062	38.26	38.31	0.1	Heptachlor epoxide b
6.572	-0.000	354629	7.288	-0.001	519836	38.18	38.55	1.0	Endosulfan I
6.832	0.000	755708	7.582	-0.000	1126850	75.73	75.64	0.1	Dieldrin
6.489	0.000	698620	7.371	-0.000	1040947	75.40	76.19	1.0	4,4'-DDE
7.082	0.000	615481	7.907	-0.000	858461	74.19	74.98	1.1	Endrin
7.317	0.000	590923	8.117	-0.000	885035	79.12	75.41	4.8	Endosulfan II
7.136	0.000	565557	7.976	-0.000	842536	75.67	75.65	0.0	4,4'-DDD
8.179	-0.001	540557	8.715	0.000	782860	76.22	75.96	0.3	Endosulfan sulfate
7.427	0.000	577337	8.295	-0.000	820861	76.44	76.36	0.1	4,4'-DDT
7.912	-0.000	1204040	8.935	-0.001	1785262	359.75	375.30	4.2	Methoxychlor
8.453	-0.001	610387	9.239	-0.000	843646	75.13	75.79	0.9	Endrin ketone
7.746	-0.000	452325	8.448	0.000	622287	75.93	75.17	1.0	Endrin aldehyde
6.271	0.000	395598	7.056	-0.000	591899	38.48	38.80	0.8	trans-Chlordane
6.417	0.001	389712	7.215	-0.000	573103	37.80	38.40	1.6	cis-Chlordane
2.324	0.000	511265	2.500	-0.000	705320	36.14	35.24	2.5	Hexachlorobutadiene
4.183	0.001	472841	4.718	0.000	728846	37.72	37.99	0.7	Hexachlorobenzene
3.828	-0.000	714634	4.221	0.000	1124106	74.93	75.93	1.3	Tetrachloro-m-xylene
9.355	-0.000	468280	10.466	-0.001	645336	73.03	72.51	0.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	701342	-1.3
Hexabromobiphenyl	641833	632821	-1.4

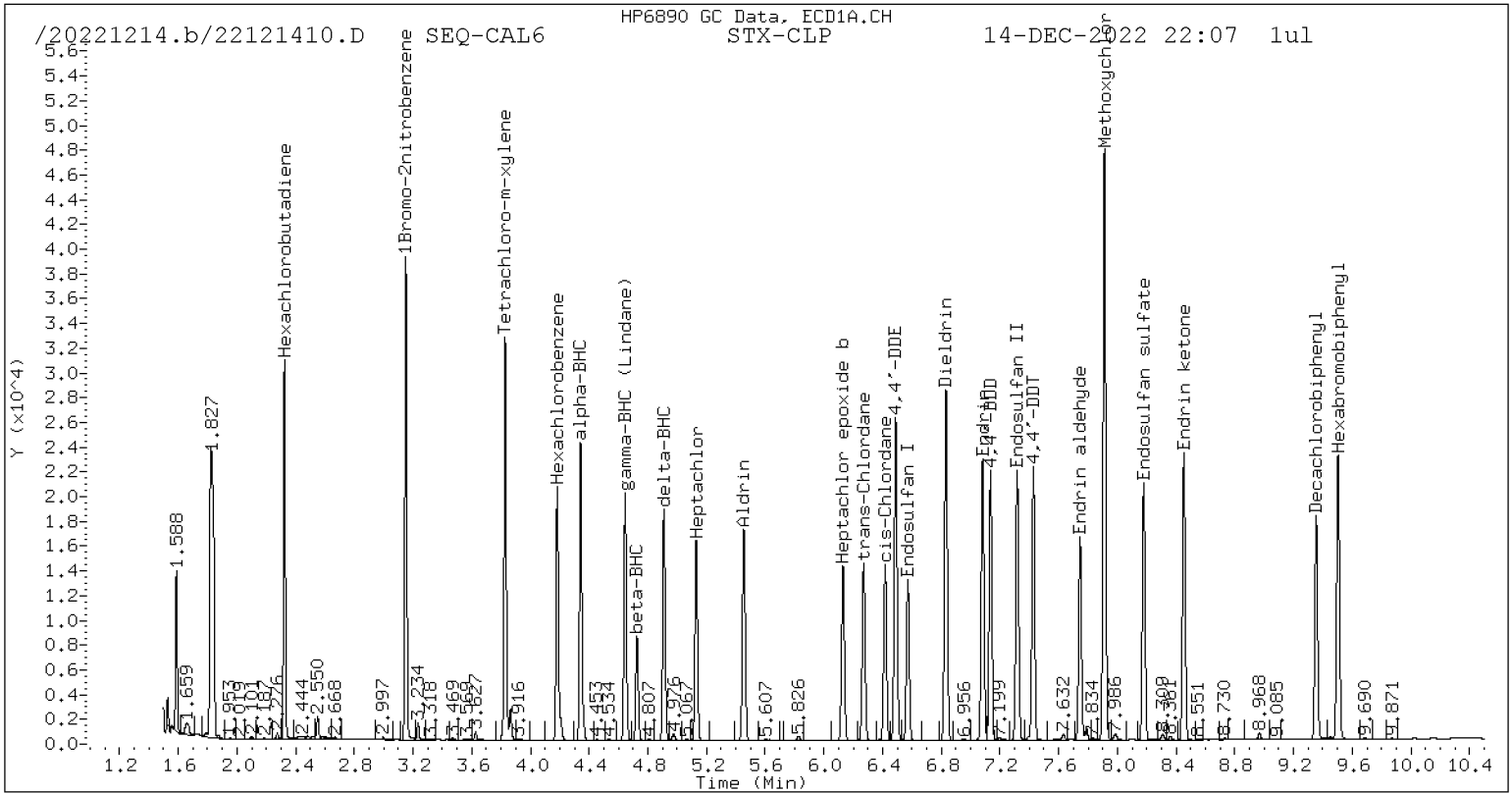
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1051766	-0.7
Hexabromobiphenyl	797125	805268	1.0

* Standard Areas taken from Initial Cal Level 5

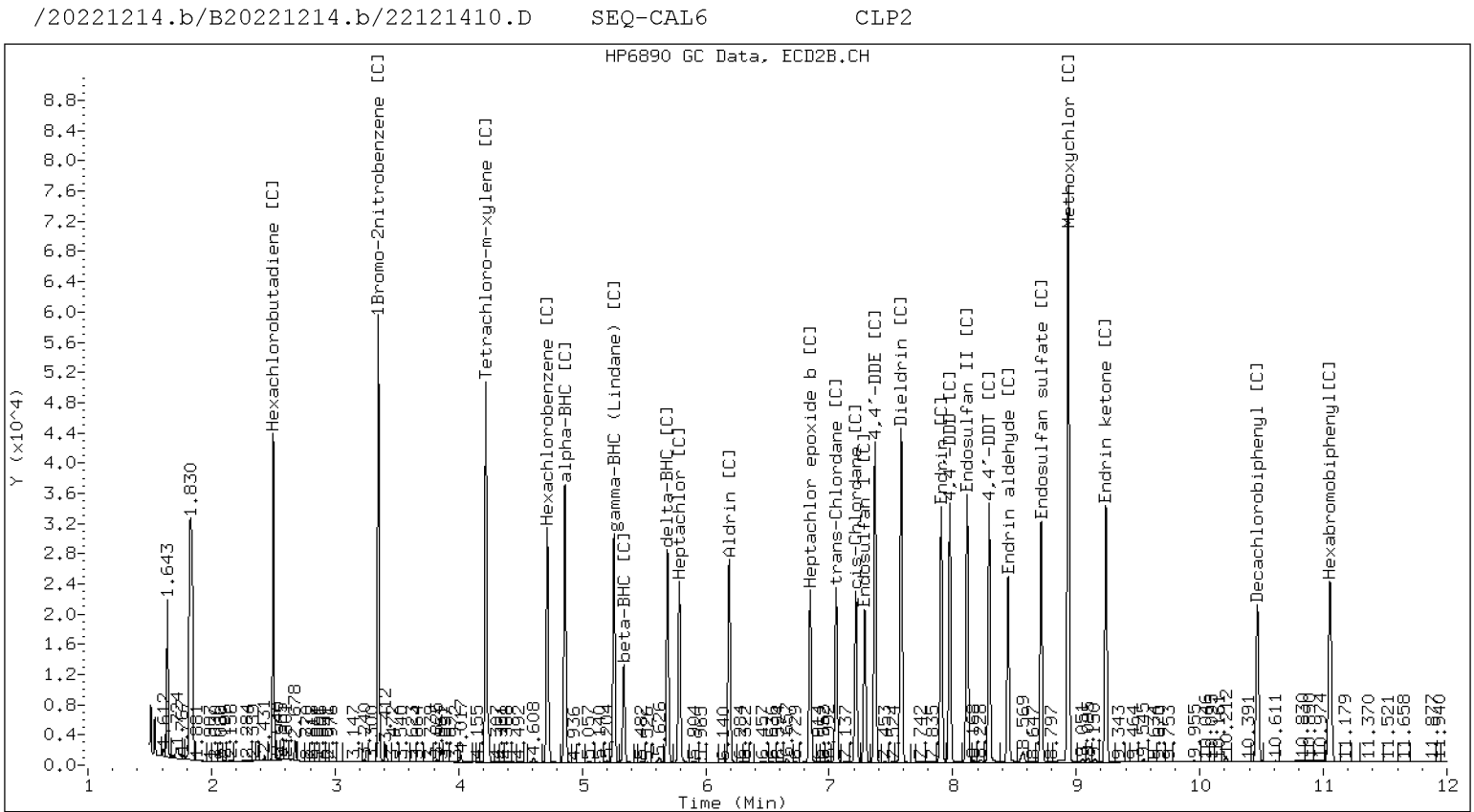
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
4.342	0.000	1012605	4.861	0.000	1623058	75.30	77.94	3.4	alpha-BHC
4.726	0.000	371916	5.337	0.000	586390	71.84	74.06	3.1	beta-BHC
4.910	0.000	837966	5.691	0.000	1343533	76.25	78.32	2.7	delta-BHC
4.645	-0.000	870454	5.258	0.000	1370551	74.66	77.55	3.8	gamma-BHC (Lindane)
5.130	0.000	743802	5.787	0.000	1188915	71.70	74.26	3.5	Heptachlor
5.454	0.000	841598	6.191	0.000	1331430	72.39	72.84	0.6	Aldrin
6.130	-0.000	709774	6.845	0.000	1087105	70.41	71.92	2.1	Heptachlor epoxide b
6.573	0.000	652702	7.289	0.000	969098	70.56	72.74	3.1	Endosulfan I
6.832	0.000	1390496	7.583	0.000	2118555	139.91	143.93	2.8	Dieldrin
6.490	0.001	1284777	7.371	0.000	1944530	139.23	144.06	3.4	4,4'-DDE
7.082	0.001	1132487	7.907	0.000	1618631	137.86	142.60	3.4	Endrin
7.317	0.000	1089554	8.117	0.000	1672946	147.33	143.79	2.4	Endosulfan II
7.135	0.000	1051958	7.976	0.000	1606815	142.14	145.53	2.4	4,4'-DDD
8.180	0.000	1013288	8.715	0.000	1496440	144.30	146.47	1.5	Endosulfan sulfate
7.428	0.001	1086138	8.295	0.000	1586078	145.23	148.84	2.5	4,4'-DDT
7.912	0.001	2325261	8.936	0.000	3541650	701.64	751.02	6.8	Methoxychlor
8.454	0.000	1146784	9.240	0.000	1623077	142.56	147.08	3.1	Endrin ketone
7.746	-0.000	846477	8.448	0.000	1178353	143.51	143.57	0.0	Endrin aldehyde
6.271	0.000	733514	7.056	0.000	1114685	71.64	73.95	3.2	trans-Chlordane
6.417	0.001	723886	7.216	0.000	1079255	70.50	73.19	3.7	cis-Chlordane
2.324	0.000	955982	2.501	0.000	1351745	67.86	68.35	0.7	Hexachlorobutadiene
4.182	0.000	879573	4.718	0.000	1355289	70.45	71.51	1.5	Hexachlorobenzene
3.828	0.000	1318381	4.220	0.000	2067539	138.79	141.35	1.8	Tetrachloro-m-xylene
9.356	0.000	878340	10.467	0.000	1231298	138.34	139.55	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	698499	-1.7
Hexabromobiphenyl	641833	626605	-2.4

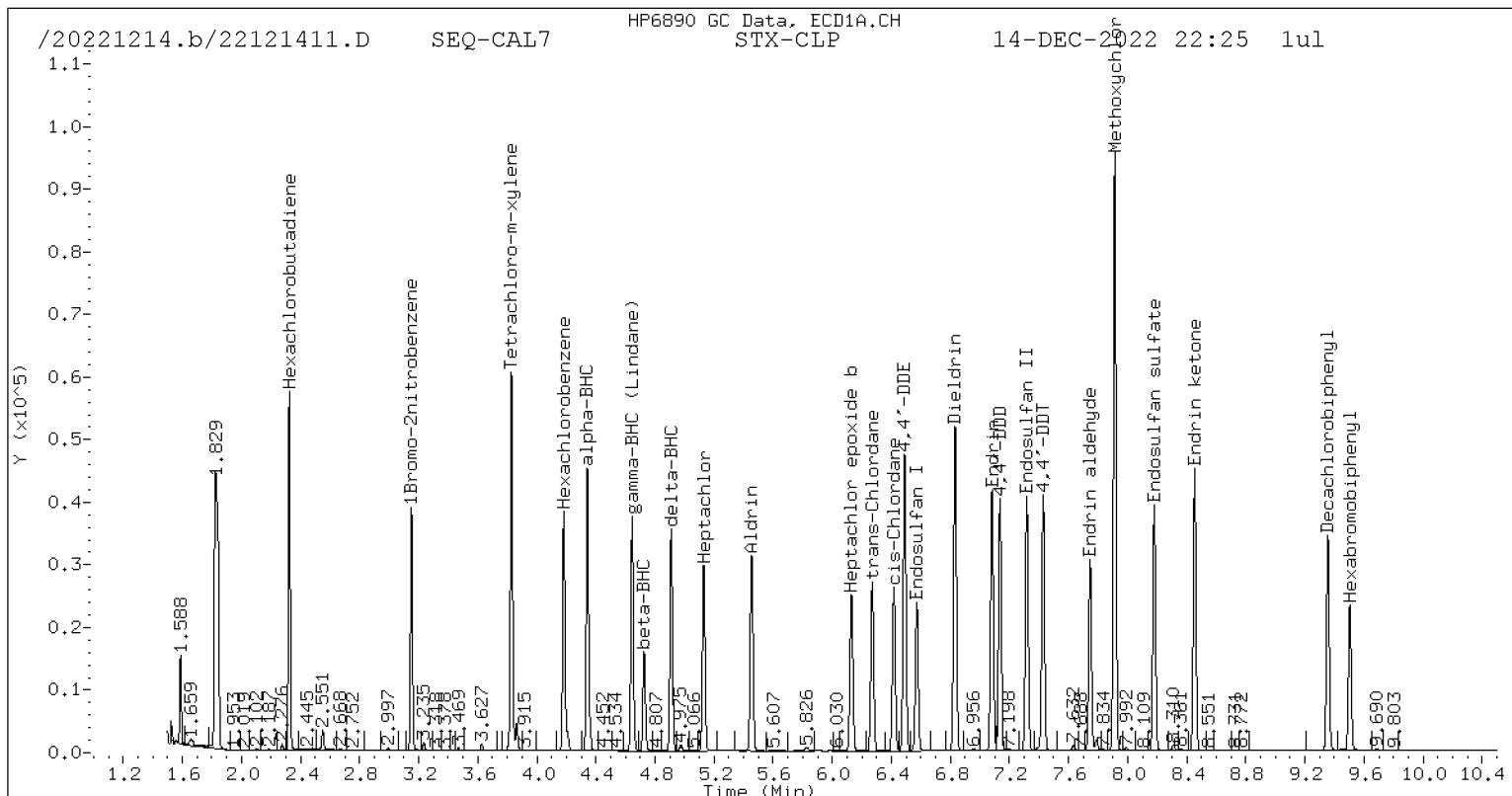
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1039154	-1.9
Hexabromobiphenyl	797125	798313	0.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

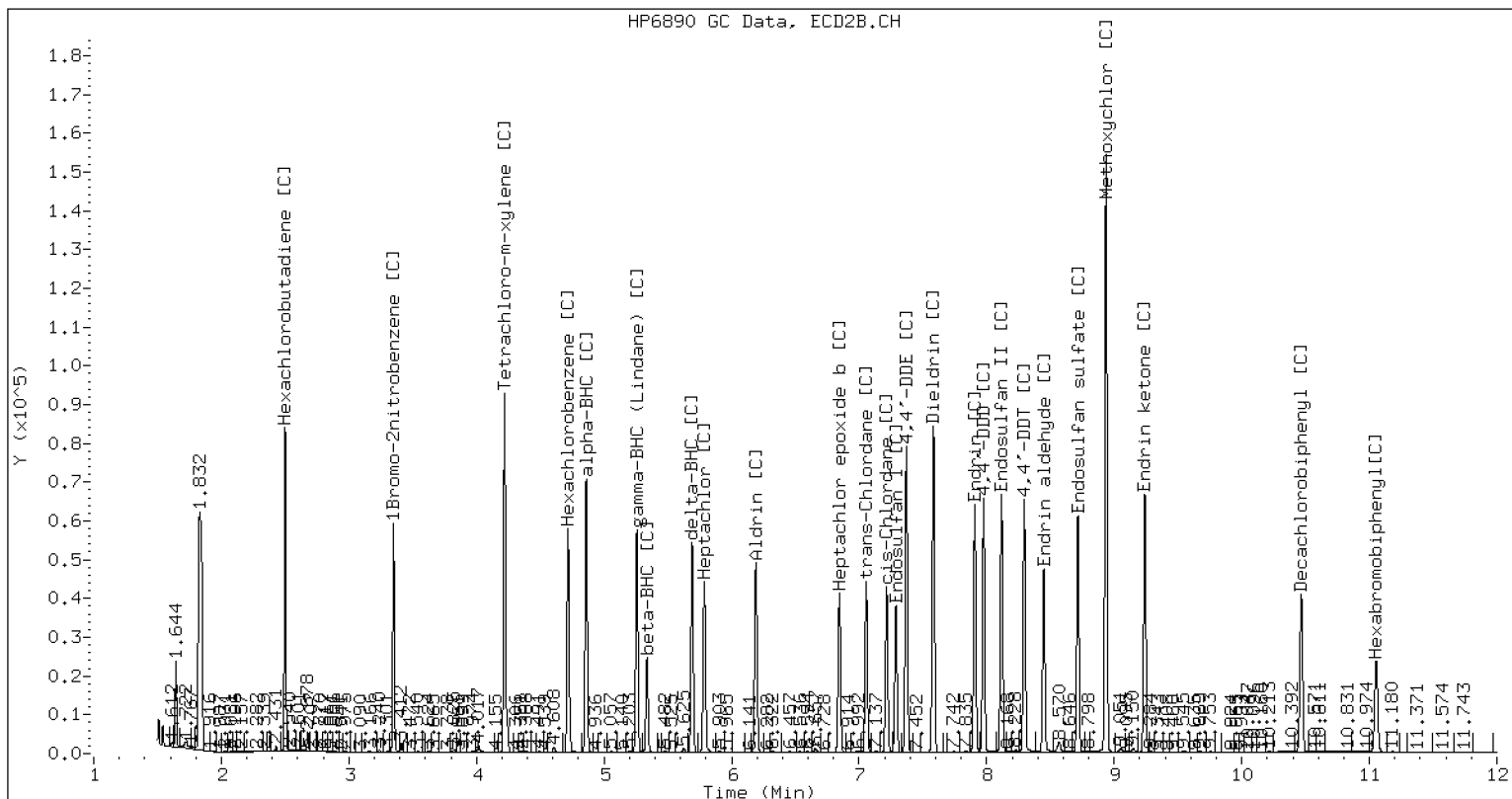
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121411.D SEQ-CAL7 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
6.014	-0.000	22184	6.741	-0.000	34211	2.89	2.85	1.2	Oxychlorthane
6.106	-0.000	18661	7.036	-0.000	30817	2.94	3.14	6.5	2,4-DDE
6.397	-0.000	30616	7.154	-0.001	41466	3.05	2.82	7.5	trans-Nonachlor
6.681	0.000	16263	7.591	0.000	26177	2.88	3.12	7.9	2,4-DDD
6.956	-0.001	17569	7.913	-0.000	24398	2.88	2.82	2.1	2,4-DDT
7.112	-0.000	29417	7.975	-0.000	37972	3.01	2.72	9.9	cis-Nonachlor
8.082	-0.000	18819	9.223	-0.000	24312	3.09	3.00	3.1	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	713898	0.5
Hexabromobiphenyl	641833	646441	0.7

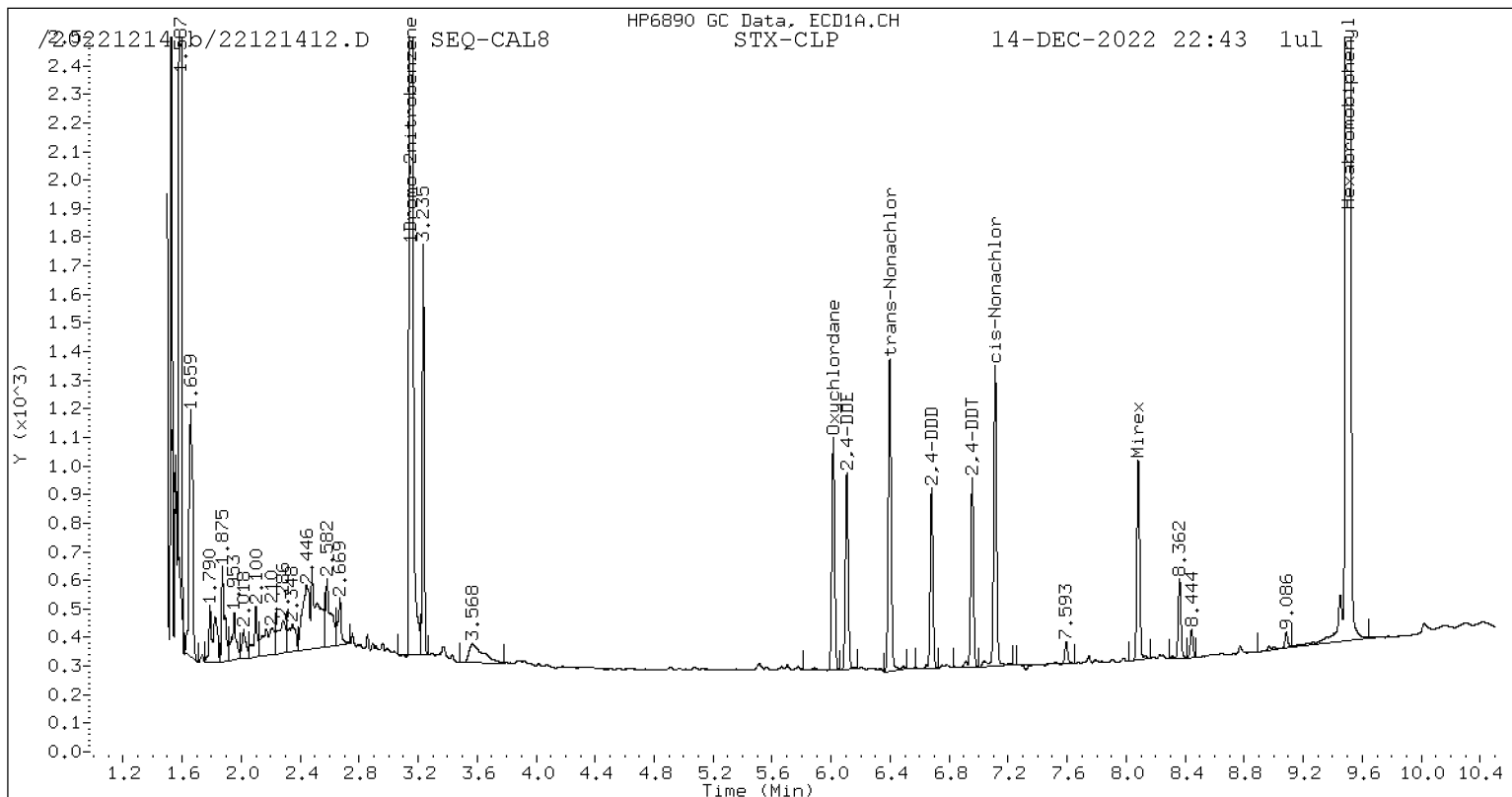
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1076864	1.7
Hexabromobiphenyl	797125	820275	2.9

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

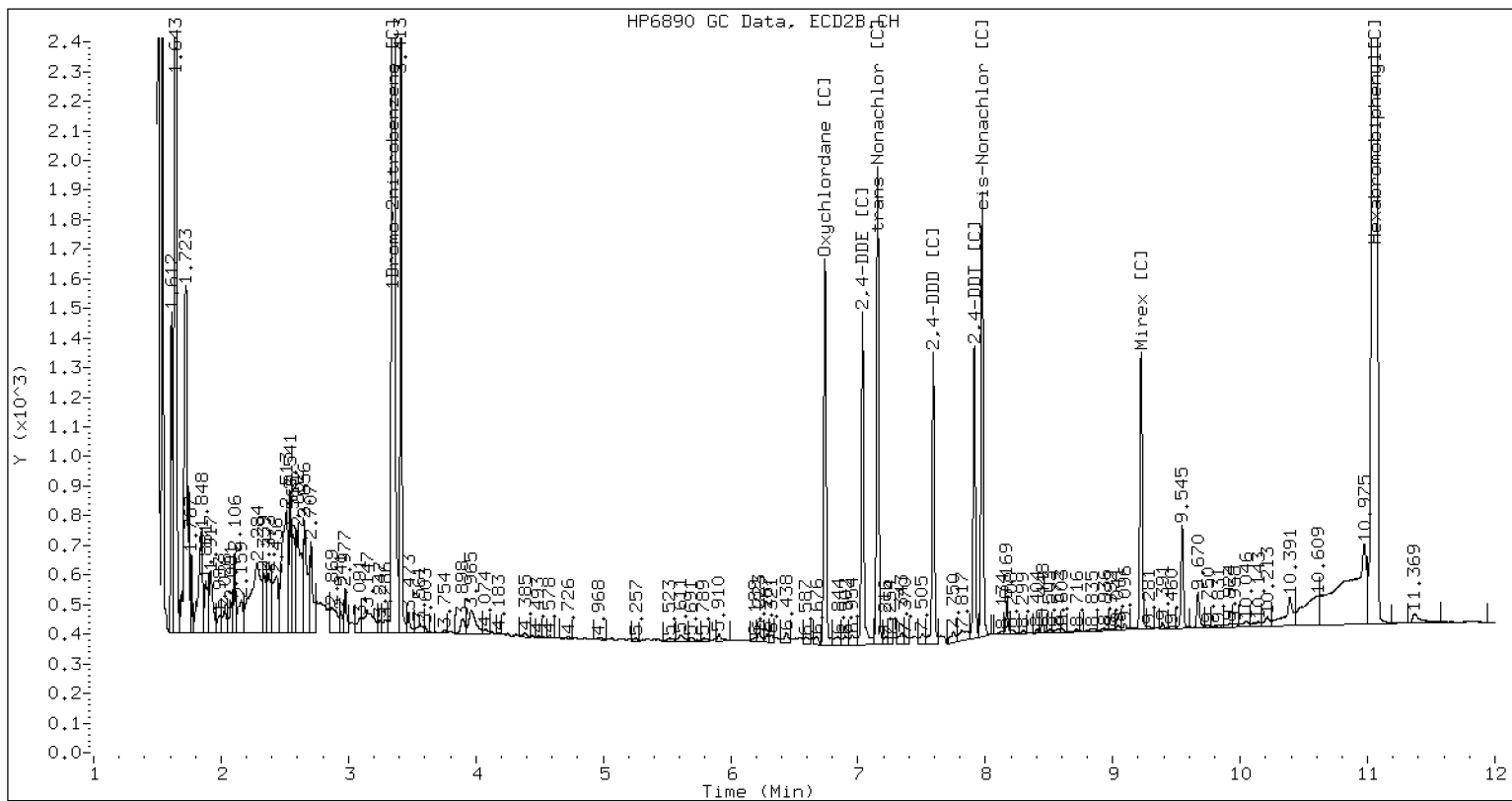
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121412.D SEQ-CAL8 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift Response	RT	Shift Response	on col on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag		
6.015	0.000	39121	6.741	-0.000	61505	5.34	5.41	1.3	Oxychlorthane
6.106	0.000	33487	7.036	-0.000	53206	5.54	5.72	3.1	2,4-DDE
6.398	0.000	51858	7.154	-0.001	72836	5.42	5.20	4.1	trans-Nonachlor
6.681	0.000	29307	7.590	-0.000	44506	5.45	5.55	1.9	2,4-DDD
6.957	-0.000	31530	7.914	0.000	45986	5.43	5.57	2.6	2,4-DDT
7.112	-0.000	50912	7.975	0.000	70898	5.46	5.32	2.6	cis-Nonachlor
8.082	-0.000	32004	9.223	-0.000	45650	5.52	5.89	6.6	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	672507	-5.4
Hexabromobiphenyl	641833	615627	-4.1

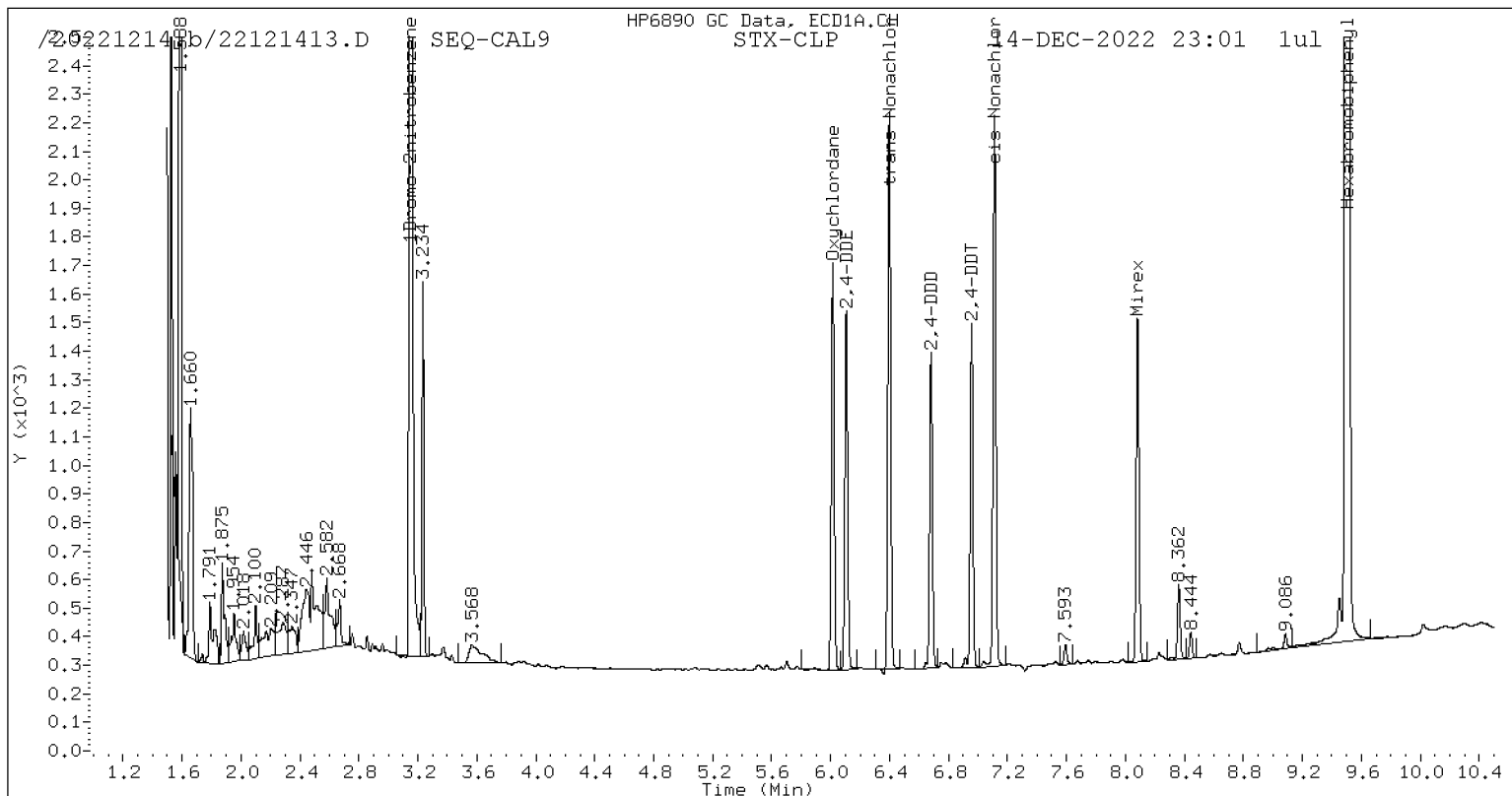
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1020334	-3.6
Hexabromobiphenyl	797125	782734	-1.8

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

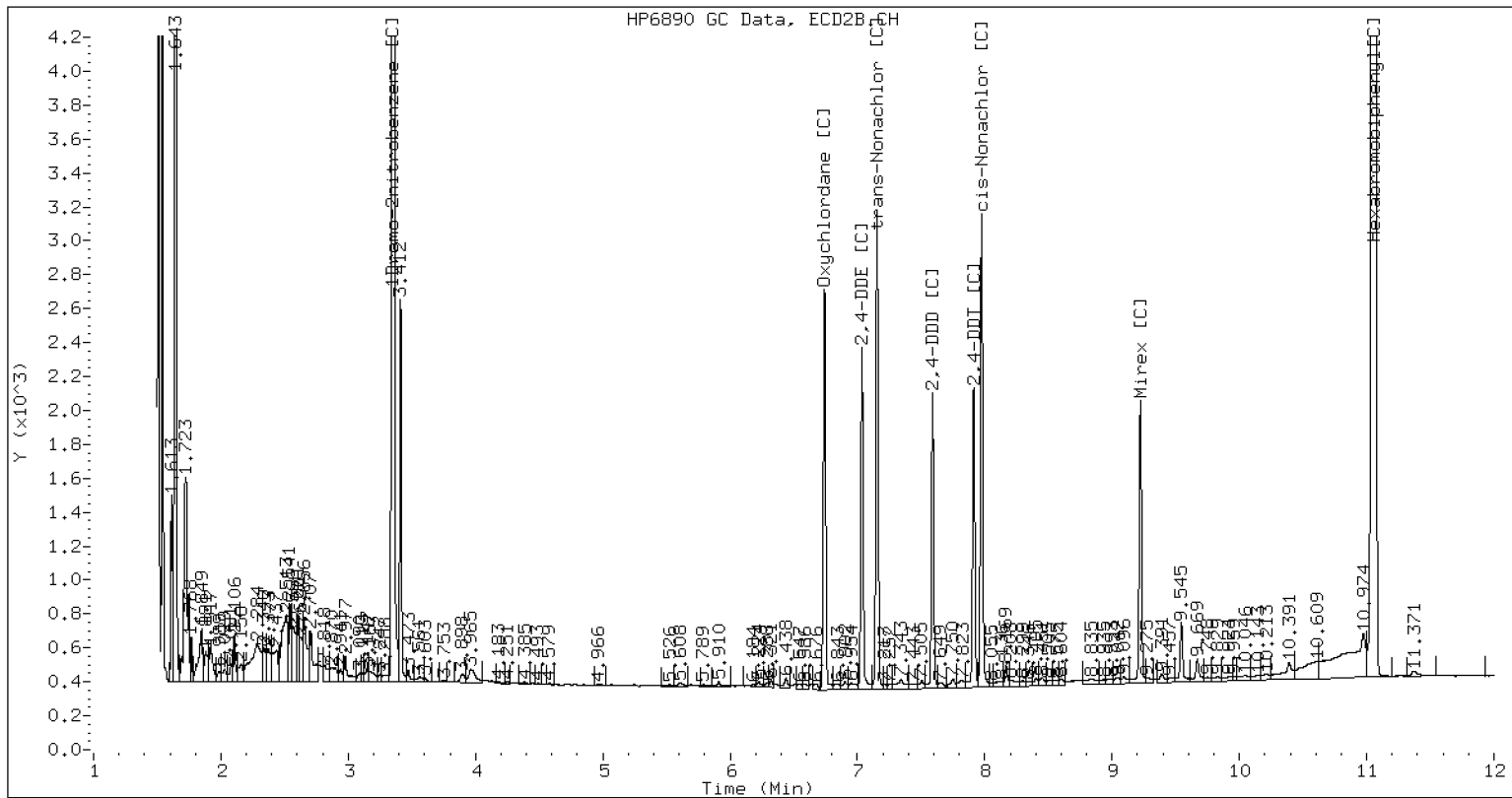
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121413.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
6.014	-0.000	82473	6.741	-0.001	127500	10.63	10.63	0.0	Oxychlorane
6.106	-0.000	69109	7.035	-0.001	108440	10.79	11.04	2.3	2,4-DDE
6.398	0.000	108386	7.154	-0.001	157712	10.68	10.60	0.7	trans-Nonachlor
6.681	0.000	60517	7.590	-0.000	91420	10.62	10.74	1.2	2,4-DDD
6.956	-0.001	65300	7.913	0.000	91498	10.61	10.44	1.6	2,4-DDT
7.111	-0.001	104247	7.975	-0.000	146224	10.55	10.34	2.0	cis-Nonachlor
8.082	-0.000	65614	9.222	-0.000	84337	10.67	10.25	4.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	712122	0.2
Hexabromobiphenyl	641833	652595	1.7

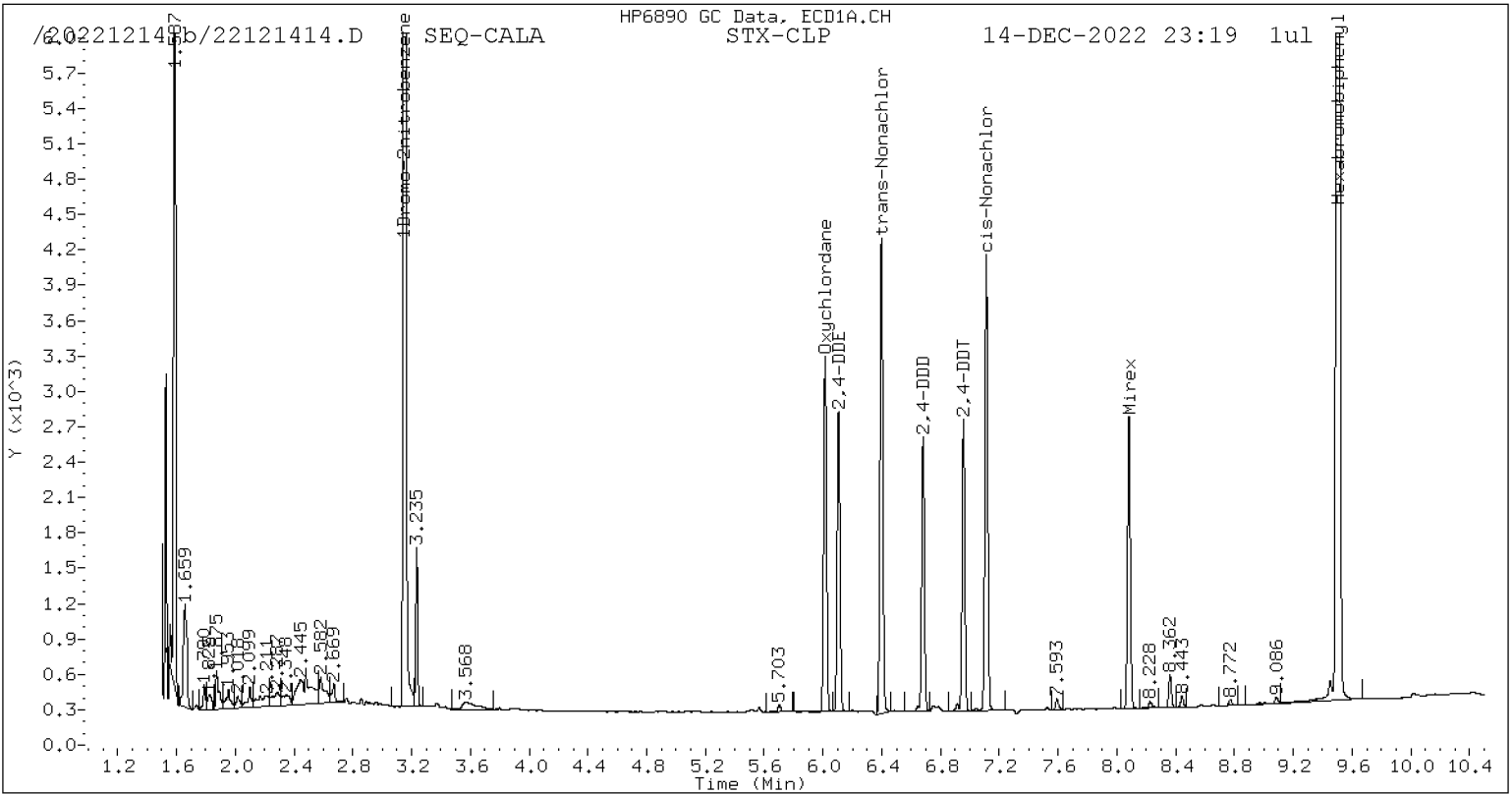
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1077341	1.7
Hexabromobiphenyl	797125	831365	4.3

* Standard Areas taken from Initial Cal Level 5

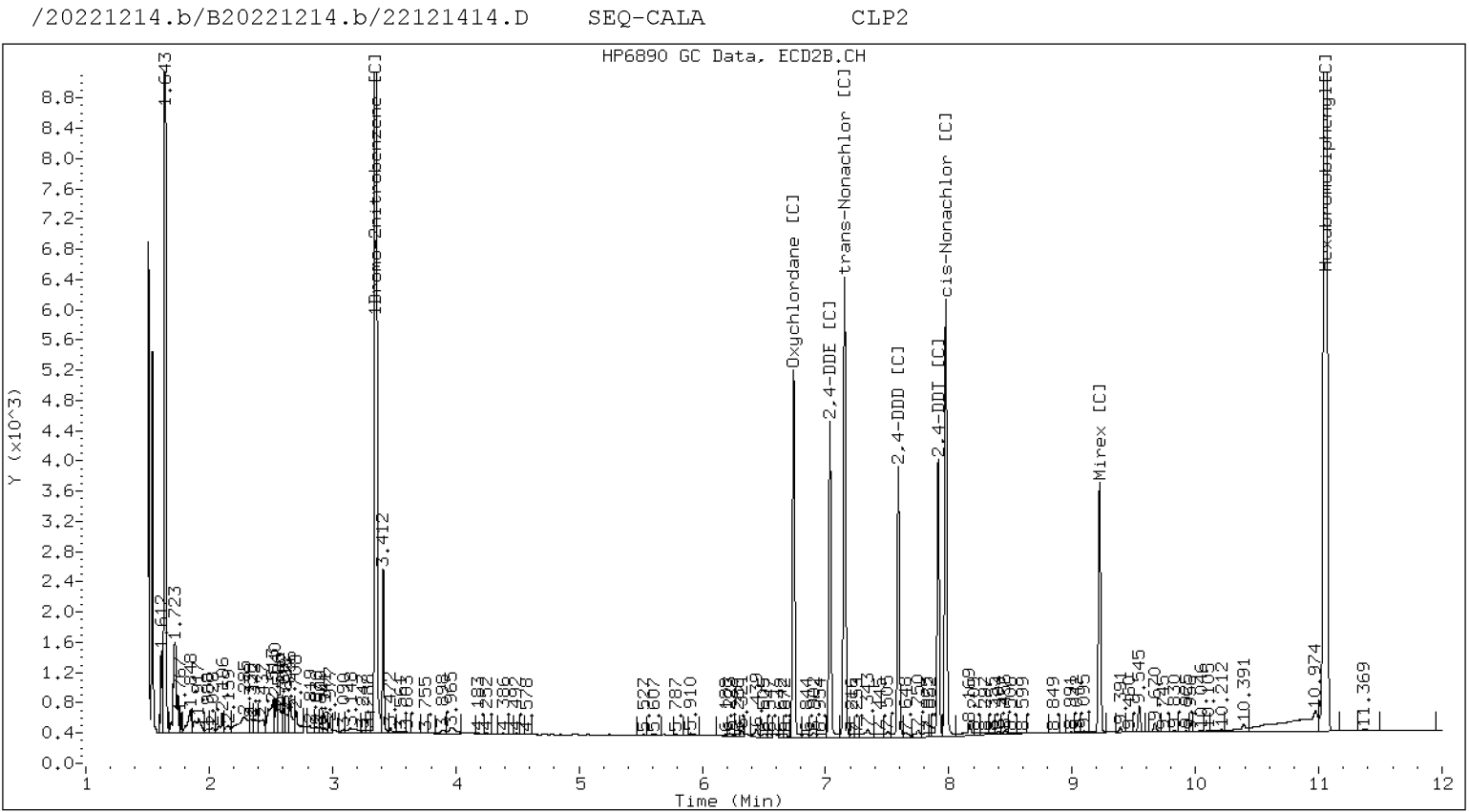
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
 Data file 2: /20221214.b/B20221214.b/22121415.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALB
 Client ID:
 Injection Date: 14-DEC-2022 23:36
 Report Date: 12/16/2022 15:19
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
6.015	0.001	154379	6.741	-0.000	238017	20.80	20.28	2.5	Oxychlorthane
6.106	-0.000	128483	7.036	-0.000	195807	20.97	20.37	2.9	2,4-DDE
6.398	0.000	200622	7.155	-0.000	289952	20.66	20.28	1.9	trans-Nonachlor
6.681	0.000	113972	7.591	0.000	165245	20.90	20.21	3.4	2,4-DDD
6.956	-0.001	122412	7.913	0.000	169814	20.78	20.17	3.0	2,4-DDT
7.112	-0.000	194165	7.975	-0.000	274910	20.54	20.23	1.5	cis-Nonachlor
8.082	-0.000	119271	9.223	0.000	158702	20.28	20.08	1.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	693450	-2.4
Hexabromobiphenyl	641833	624334	-2.7

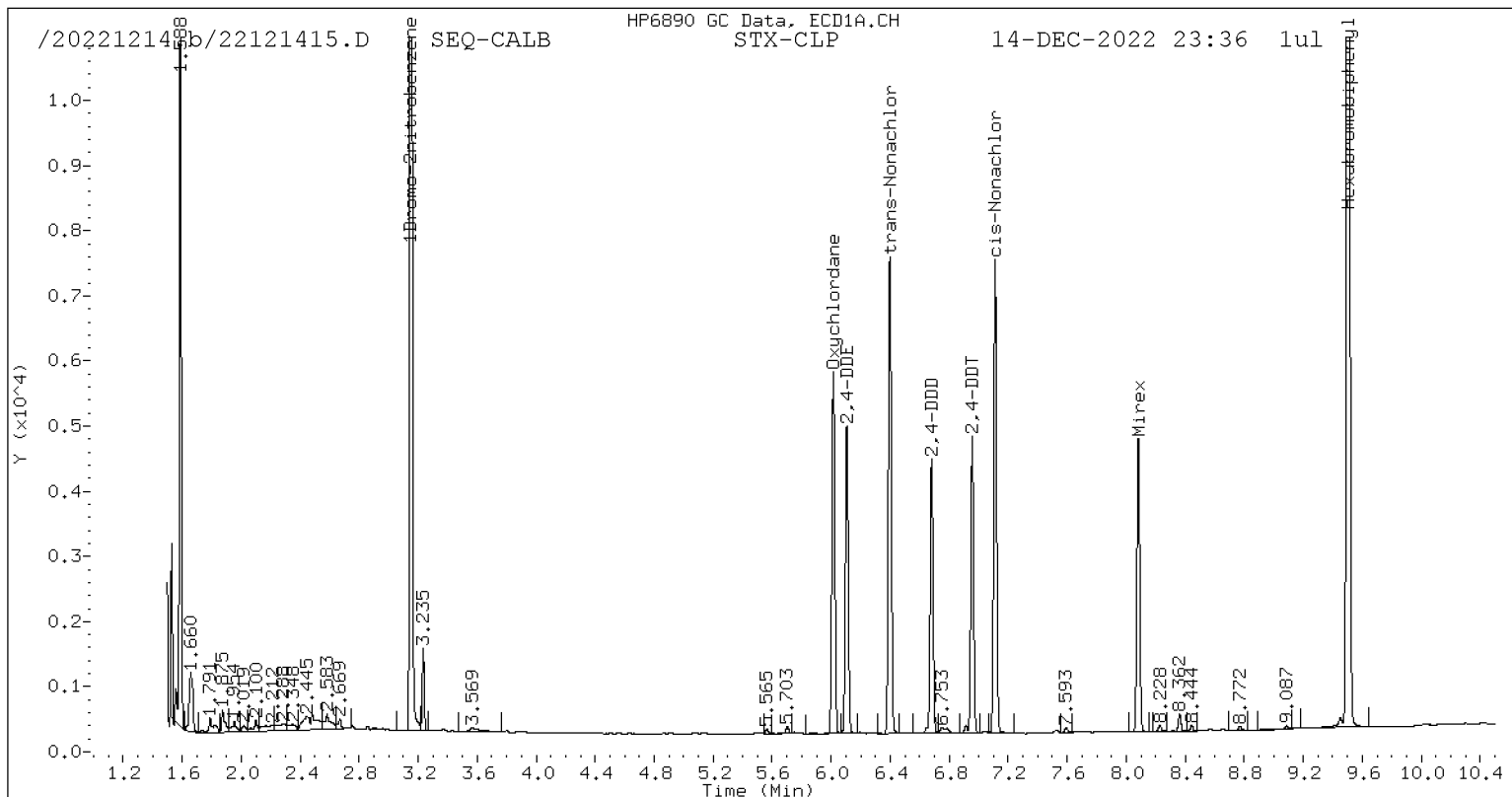
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1053959	-0.5
Hexabromobiphenyl	797125	798882	0.2

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

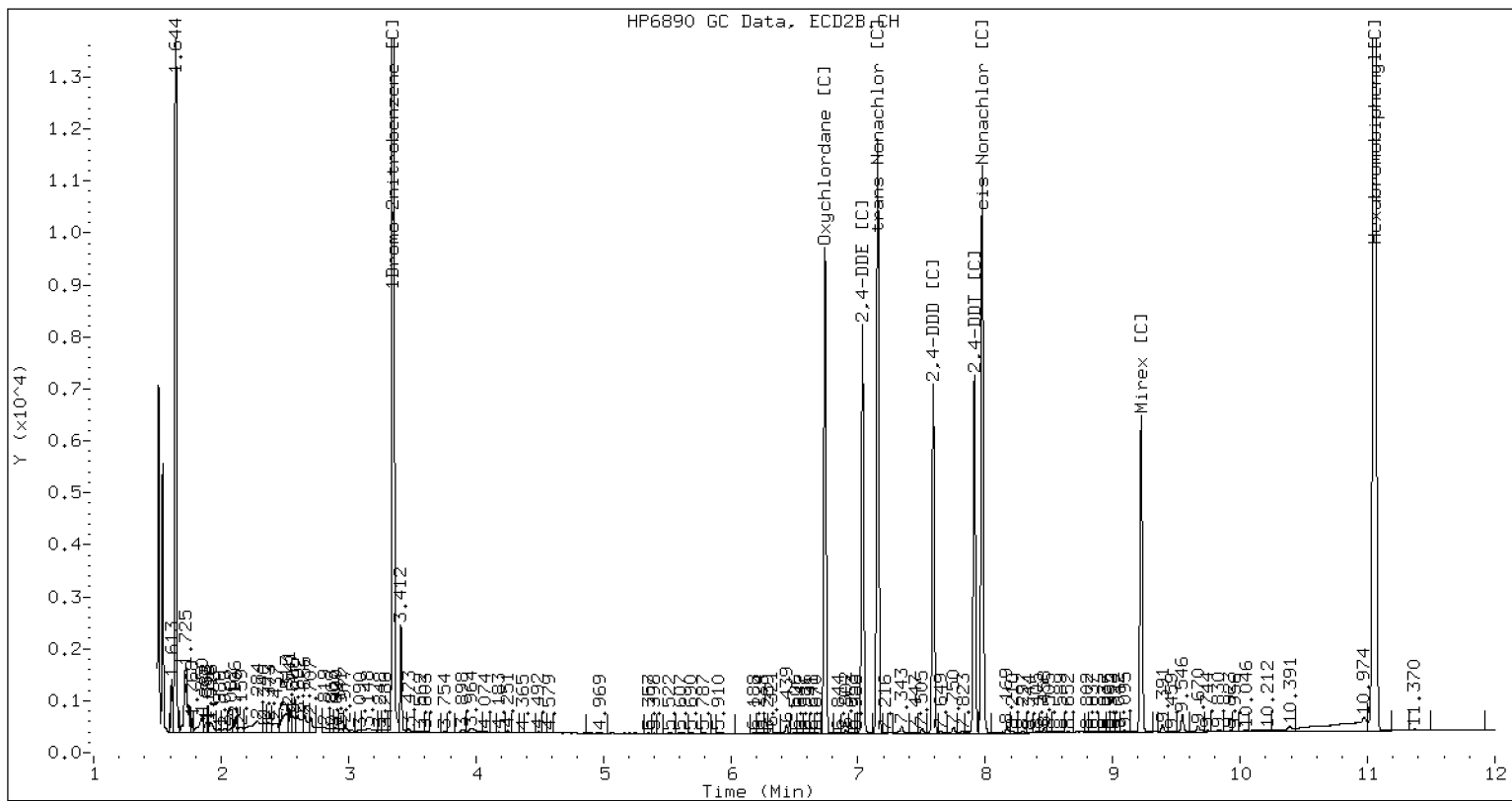
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121415.D SEQ-CALB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
6.014	0.000	292499	6.741	-0.000	460731	40.08	40.26	0.4	Oxychlorthane
6.106	0.000	242066	7.036	-0.000	372996	40.18	39.80	0.9	2,4-DDE
6.397	0.000	383329	7.154	-0.001	567971	40.16	40.45	0.7	trans-Nonachlor
6.681	0.000	216474	7.590	-0.000	320311	40.39	39.88	1.3	2,4-DDD
6.957	0.000	233738	7.913	-0.000	332906	40.36	40.25	0.3	2,4-DDT
7.112	0.000	373705	7.975	-0.000	538334	40.21	40.33	0.3	cis-Nonachlor
8.082	0.000	229604	9.222	-0.000	299228	39.71	38.54	3.0	Mirex
3.800	-0.028	1151	----			0.13	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	674573	-5.1
Hexabromobiphenyl	641833	613787	-4.4

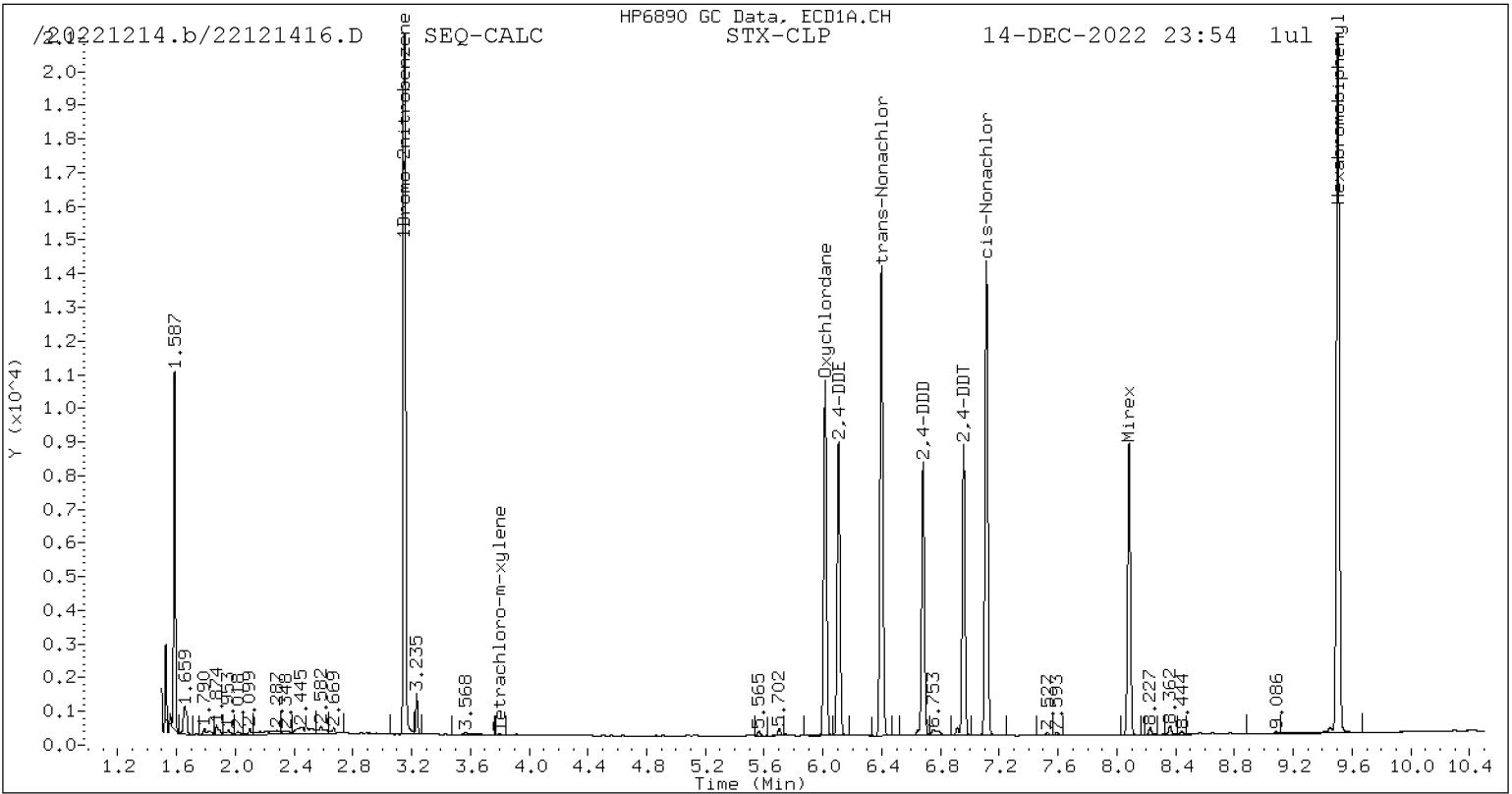
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1027697	-2.9
Hexabromobiphenyl	797125	784673	-1.6

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

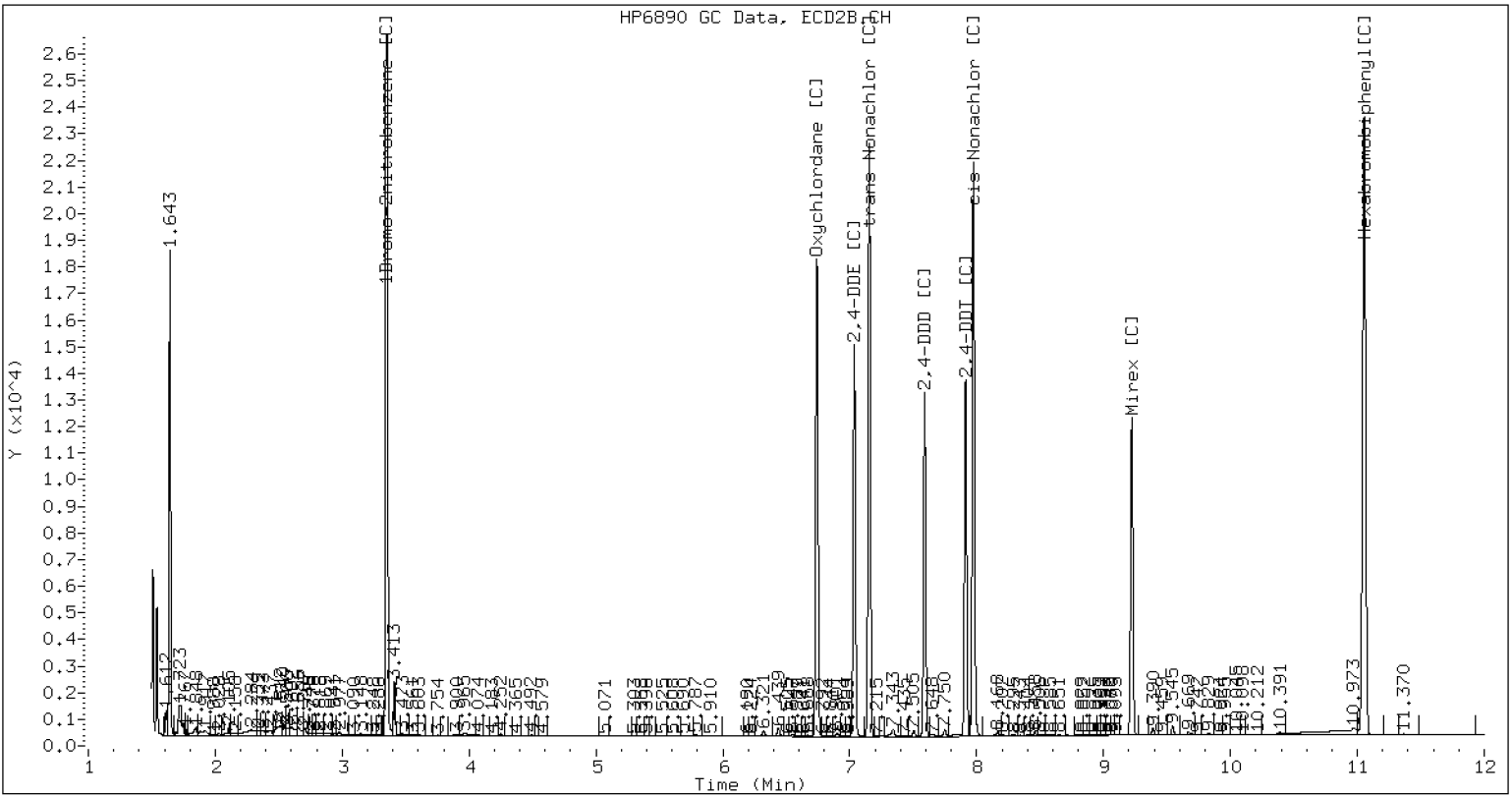
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121416.D SEQ-CALC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
 Data file 2: /20221214.b/B20221214.b/22121417.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALD
 Client ID:
 Injection Date: 15-DEC-2022 00:12
 Report Date: 12/16/2022 15:19
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
6.014	-0.000	544254	6.741	-0.000	856443	75.85	75.73	0.2	Oxychlorane
6.106	-0.000	438313	7.036	-0.000	677072	73.99	73.11	1.2	2,4-DDE
6.397	-0.000	704675	7.155	0.000	1067899	75.09	76.94	2.4	trans-Nonachlor
6.681	0.000	393654	7.591	0.000	594311	74.70	74.86	0.2	2,4-DDD
6.956	-0.001	430636	7.914	0.000	618740	75.63	75.68	0.1	2,4-DDT
7.112	-0.000	688257	7.975	0.000	1018624	75.31	77.19	2.5	cis-Nonachlor
8.082	-0.001	426177	9.223	0.000	573947	74.97	74.78	0.2	Mirex
3.800	-0.028	2109	----			0.23	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	664375	-6.5
Hexabromobiphenyl	641833	603504	-6.0

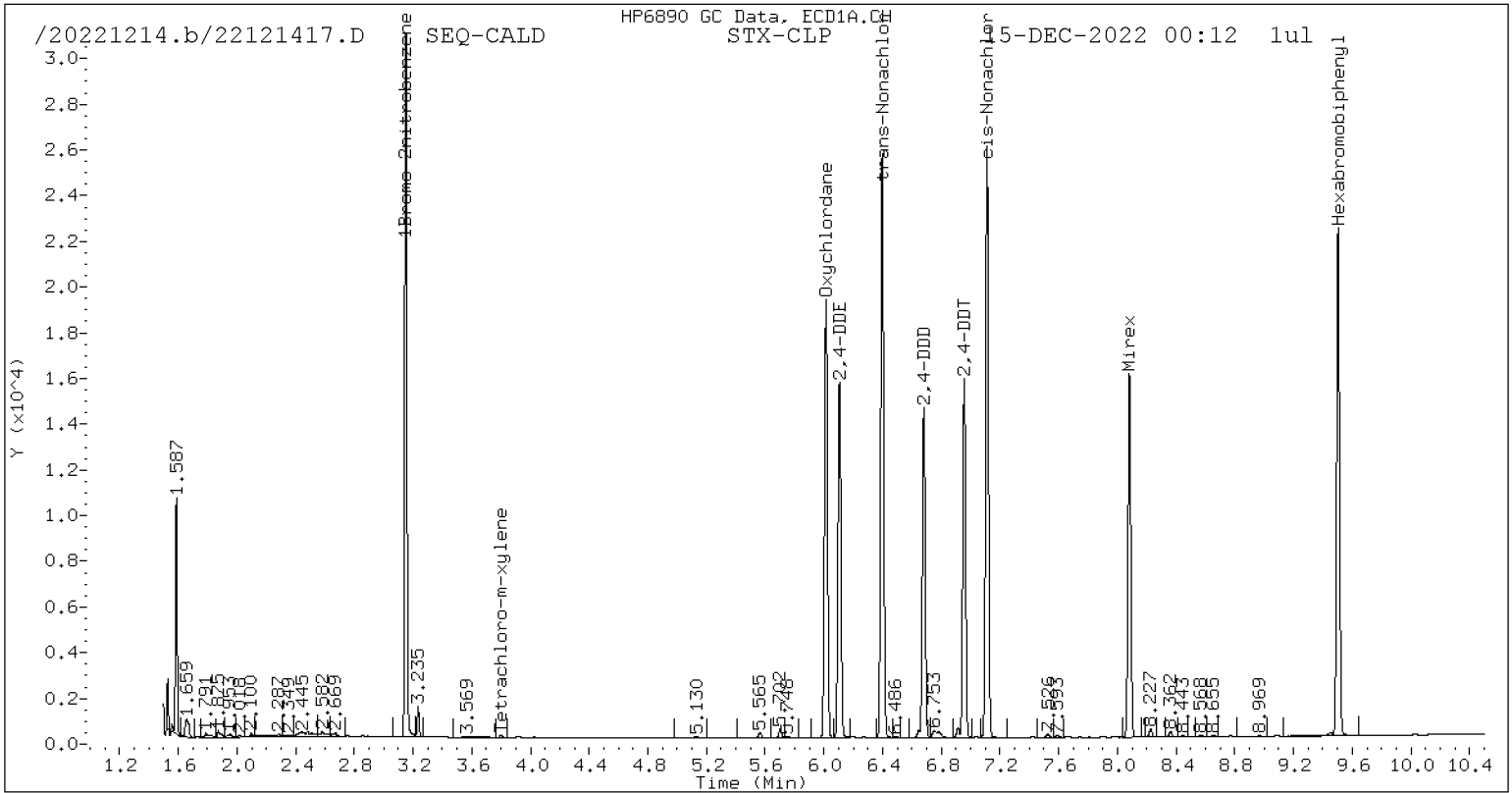
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1015544	-4.1
Hexabromobiphenyl	797125	775630	-2.7

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

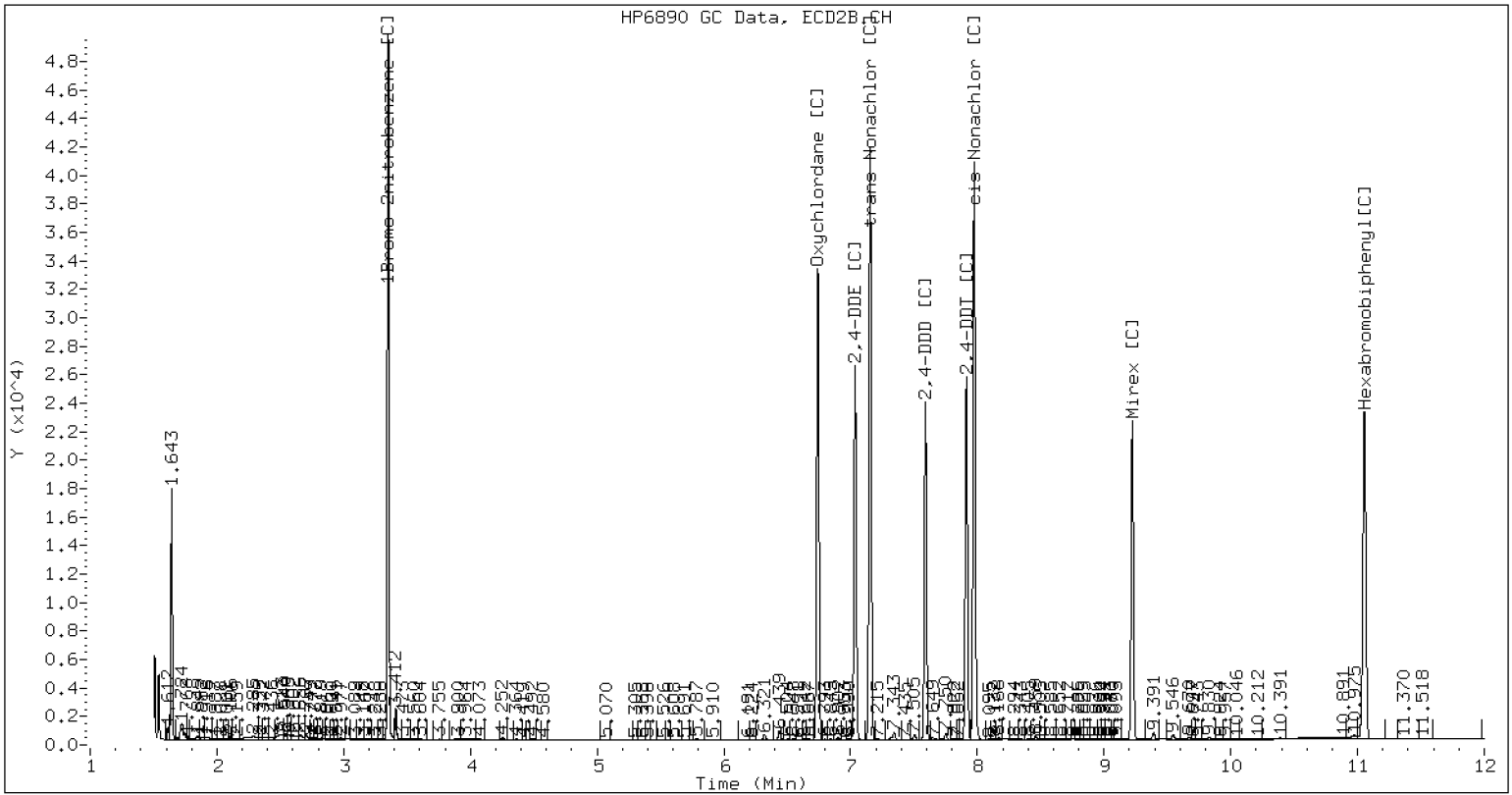
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121417.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
 Data file 2: /20221214.b/B20221214.b/22121418.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALE
 Client ID:
 Injection Date: 15-DEC-2022 00:30
 Report Date: 12/16/2022 15:19
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
6.014	0.000 1020828	6.741 0.000 1630330	6.741	0.000 1630330	140.48	142.04	1.1	Oxychlorane
6.106	-0.000 801828	7.036 0.000 1240933	7.036	0.000 1240933	133.65	132.03	1.2	2,4-DDE
6.397	0.000 1327091	7.155 0.000 2047915	7.155	0.000 2047915	139.63	146.04	4.5	trans-Nonachlor
6.680	-0.000 733651	7.591 0.000 1118552	7.591	0.000 1118552	137.46	139.45	1.4	2,4-DDD
6.956	-0.001 794021	7.913 0.000 1163676	7.913	0.000 1163676	137.69	140.88	2.3	2,4-DDT
7.112	-0.000 1301975	7.975 0.000 1956215	7.975	0.000 1956215	140.68	146.73	4.2	cis-Nonachlor
8.082	-0.001 815059	9.223 0.000 1108848	9.223	0.000 1108848	141.57	143.01	1.0	Mirex
3.800	-0.028 3997	----	----	----	0.43	0.00	---	Tetrachloro-m-xylene
----		10.471 0.004 3393	10.471	0.004 3393	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	675789	-4.9
Hexabromobiphenyl	641833	611199	-4.8

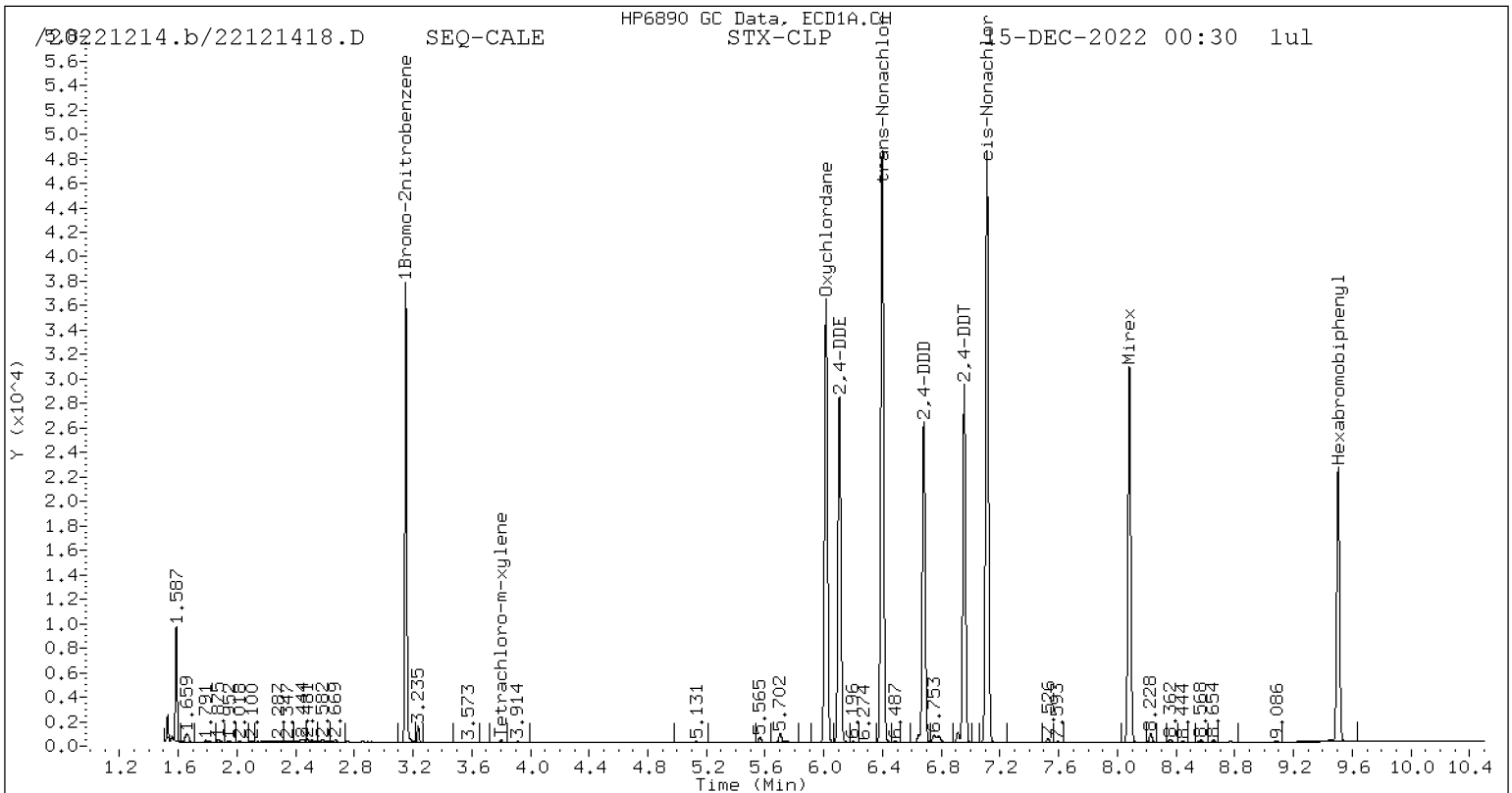
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1030648	-2.7
Hexabromobiphenyl	797125	783631	-1.7

* Standard Areas taken from Initial Cal Level 5

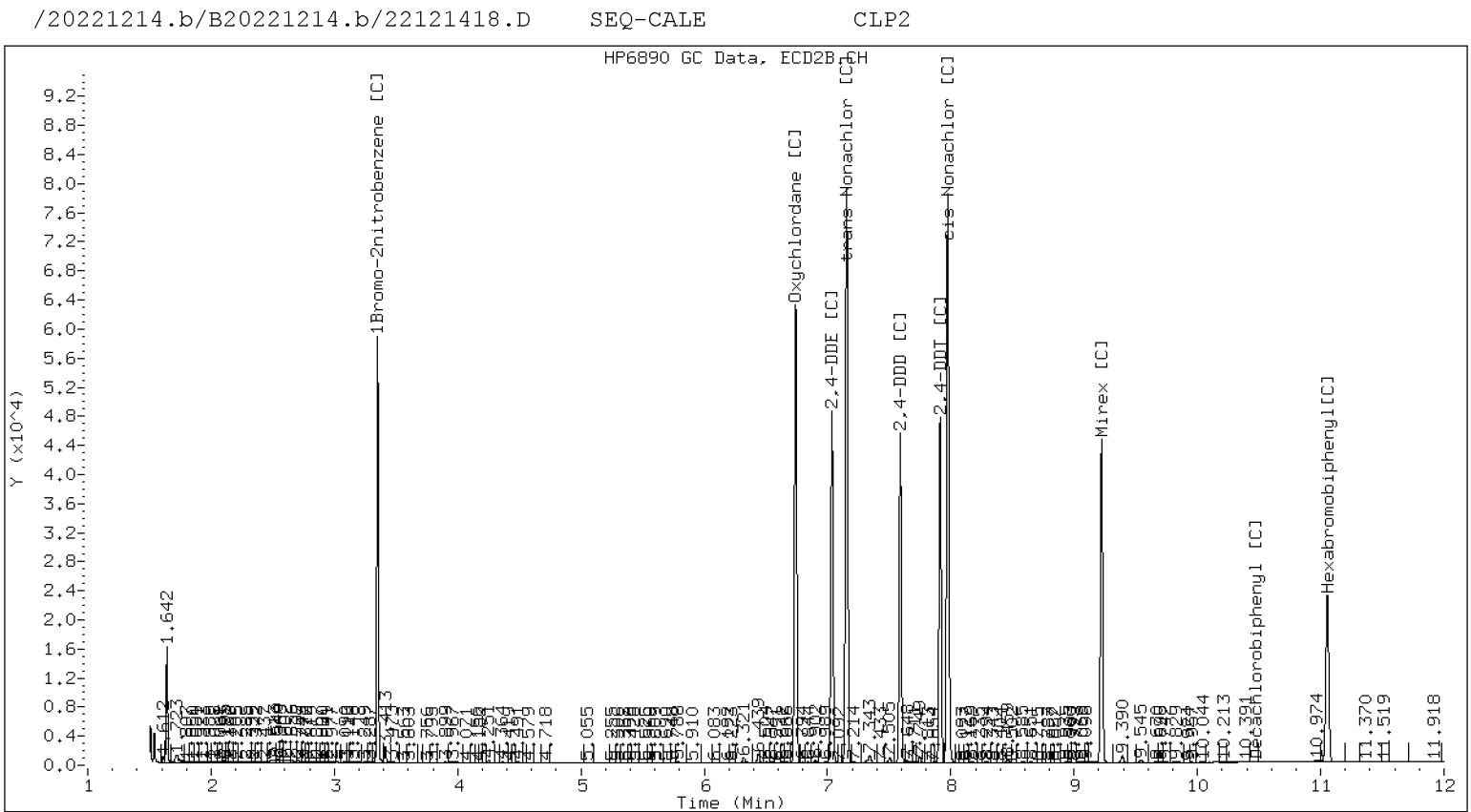
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.342	0.000	643235	4.860	-0.000	1047709	49.66	51.22	3.1	alpha-BHC
4.726	-0.000	242617	5.337	0.000	386388	48.66	49.69	2.1	beta-BHC
4.909	0.000	554797	5.692	0.001	897343	52.41	53.26	1.6	delta-BHC
4.646	0.001	573983	5.258	0.000	915596	51.11	52.75	3.1	gamma-BHC (Lindane)
5.130	0.000	495138	5.788	0.001	804002	49.55	51.13	3.1	Heptachlor
5.454	0.000	526615	6.191	0.000	842909	47.03	46.95	0.2	Aldrin
6.130	0.000	469481	6.846	0.000	724932	48.36	48.83	1.0	Heptachlor epoxide b
6.573	0.000	423102	7.289	-0.000	632890	47.49	48.37	1.8	Endosulfan I
6.832	0.000	478299	7.583	0.000	724854	49.97	50.14	0.3	Dieldrin
6.489	0.000	448741	7.371	0.000	670346	50.49	50.56	0.1	4,4'-DDE
7.082	0.001	396143	7.907	0.000	551004	50.36	50.73	0.7	Endrin
7.318	0.001	350431	8.118	0.001	537104	49.49	48.24	2.6	Endosulfan II
7.136	0.001	355688	7.977	0.001	525927	50.19	49.78	0.8	4,4'-DDD
8.180	0.000	347949	8.716	0.001	502438	51.75	51.39	0.7	Endosulfan sulfate
7.428	0.001	368644	8.295	-0.000	524685	51.48	51.45	0.1	4,4'-DDT
7.913	0.001	174306	8.935	-0.001	238791	54.93	52.91	3.7	Methoxychlor
8.454	0.000	394474	9.240	-0.000	540431	51.21	51.18	0.1	Endrin ketone
7.746	0.001	316262	8.448	0.000	449269	56.00	57.20	2.1	Endrin aldehyde
6.271	0.000	490842	7.056	0.000	748350	49.78	50.55	1.5	trans-Chlordane
6.417	0.001	469513	7.216	0.000	700871	47.47	48.39	1.9	cis-Chlordane
----			2.512	0.011	11364	0.00	0.59	---	Hexachlorobutadiene
----			4.719	0.001	634	0.00	0.03	---	Hexachlorobenzene
----			4.220	-0.000	1724	0.00	0.12	---	Tetrachloro-m-xylene
----			10.468	0.001	643	0.00	0.08	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	672755	-5.3
Hexabromobiphenyl	641833	599983	-6.5

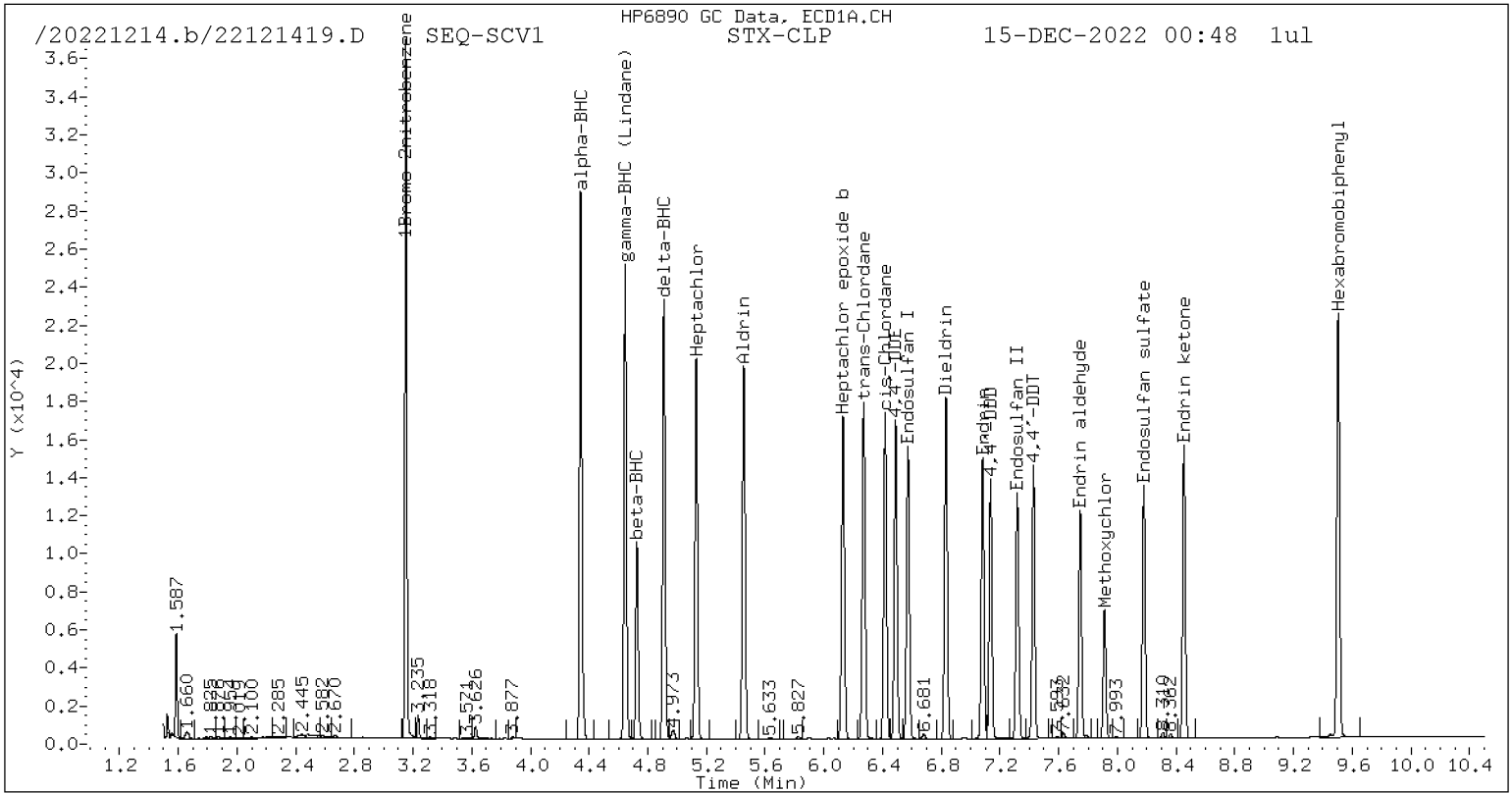
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1020655	-3.6
Hexabromobiphenyl	797125	763949	-4.2

* Standard Areas taken from Initial Cal Level 5

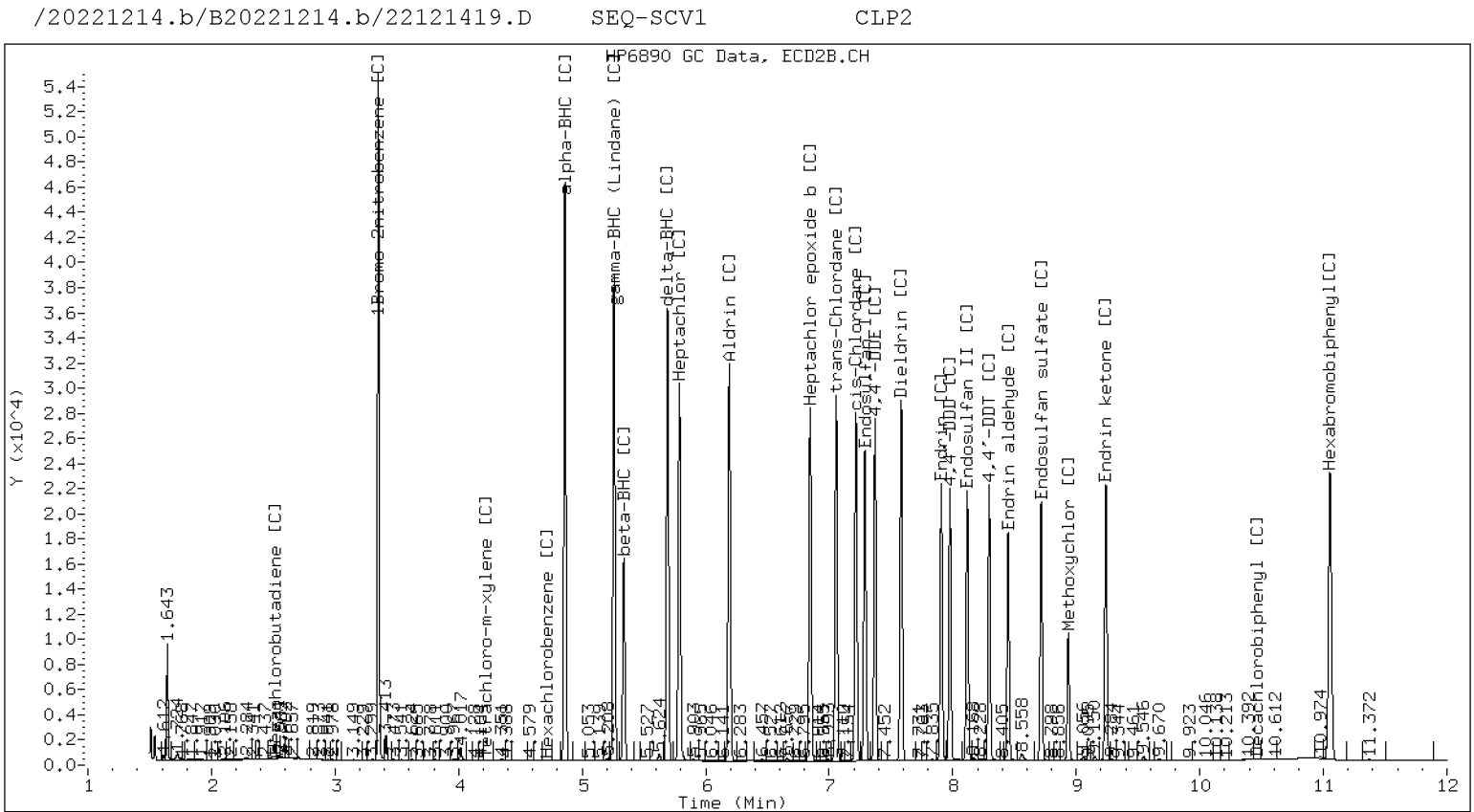
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
 Data file 2: /20221214.b/B20221214.b/22121420.D
 Method: \20221214.b\PEST.m
 Compound Sublist: WND.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-SCV2
 Client ID:
 Injection Date: 15-DEC-2022 01:06
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
6.014	-0.000 374516	6.741 0.000 591348	51.08	50.07	2.0	Oxychlorthane
6.106	-0.000 261097	7.036 -0.000 403824	43.13	41.76	3.2	2,4-DDE
6.397	-0.000 444133	7.155 -0.000 657777	46.31	45.91	0.9	trans-Nonachlor
6.681	0.000 222534	7.591 0.000 334706	41.32	40.84	1.2	2,4-DDD
6.956	-0.001 262722	7.914 0.000 382016	45.15	45.26	0.2	2,4-DDT
7.111	-0.001 455894	7.975 0.000 655718	48.82	48.13	1.4	cis-Nonachlor
8.081	-0.001 256593	9.223 0.000 343173	44.17	43.31	2.0	Mirex
----		----	0.00	0.00	---	Tetrachloro-m-xylene
----		----	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	687052	-3.3
Hexabromobiphenyl	641833	616730	-3.9

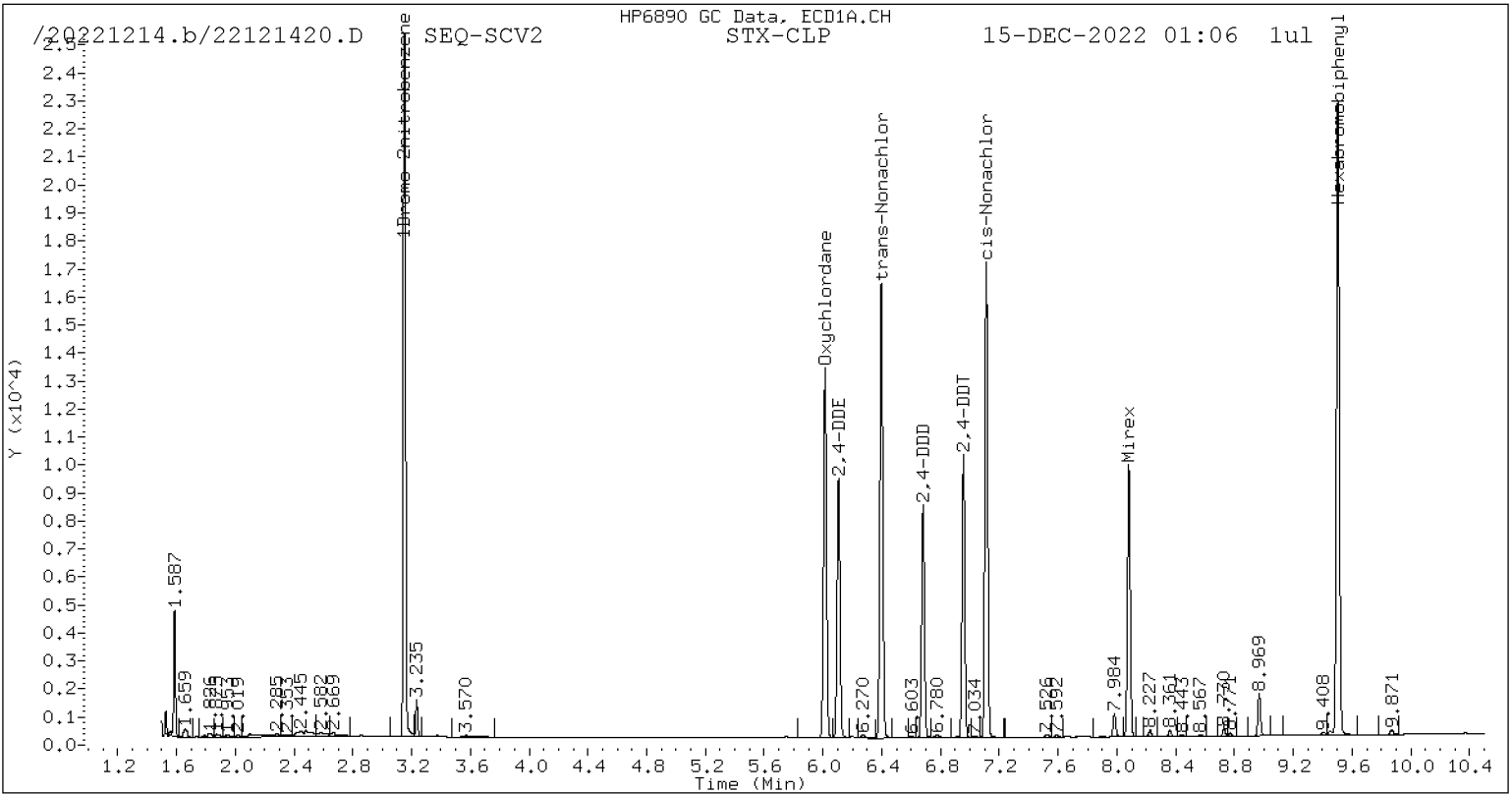
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1060438	0.2
Hexabromobiphenyl	797125	800740	0.5

* Standard Areas taken from Initial Cal Level 5

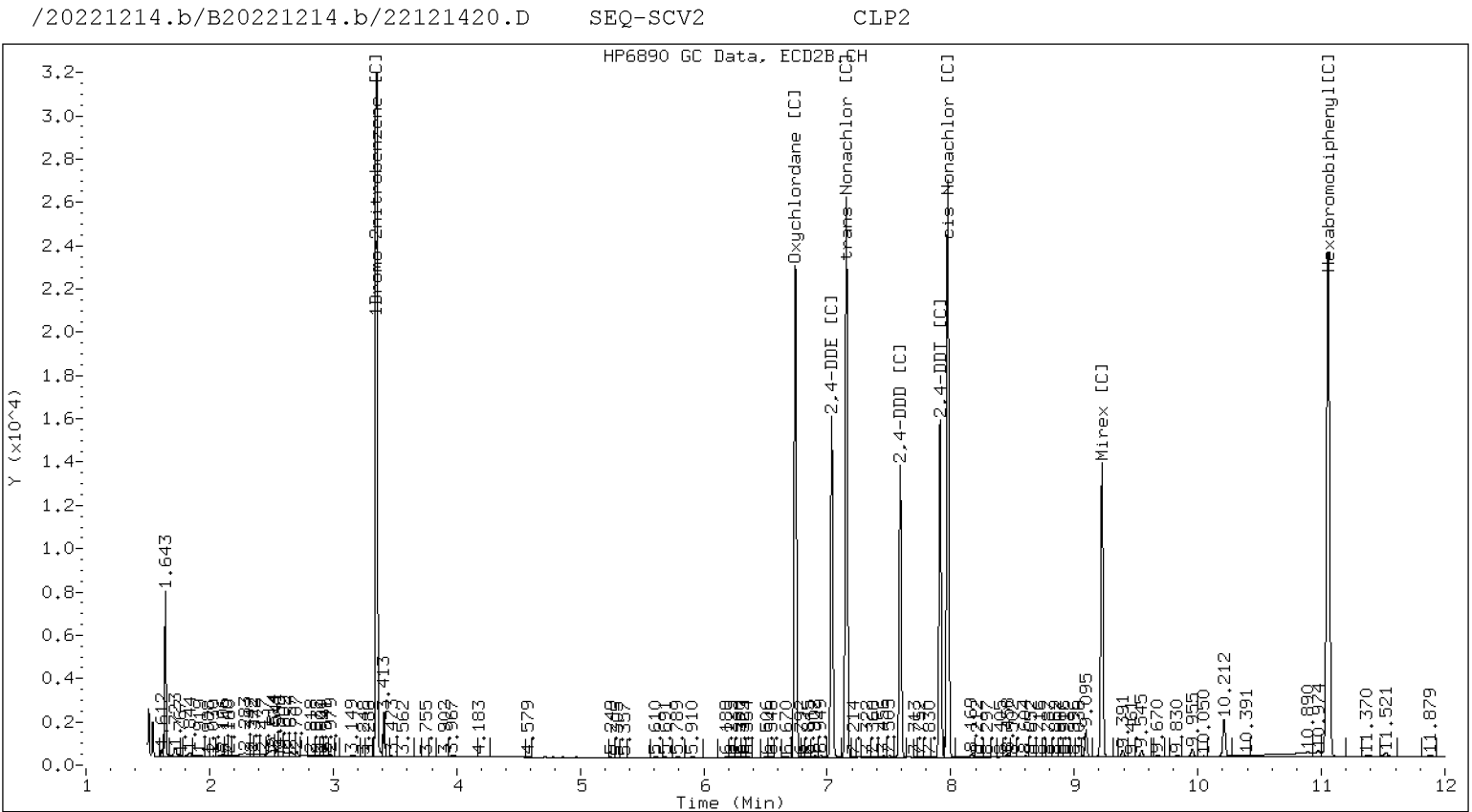
Initial Calibration Date: 14-DEC-2022

<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	361	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
----	| 4.215	-0.006	361	| 0.00	0.02	---	Tetrachloro-m-xylene
----	| ----			| 0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

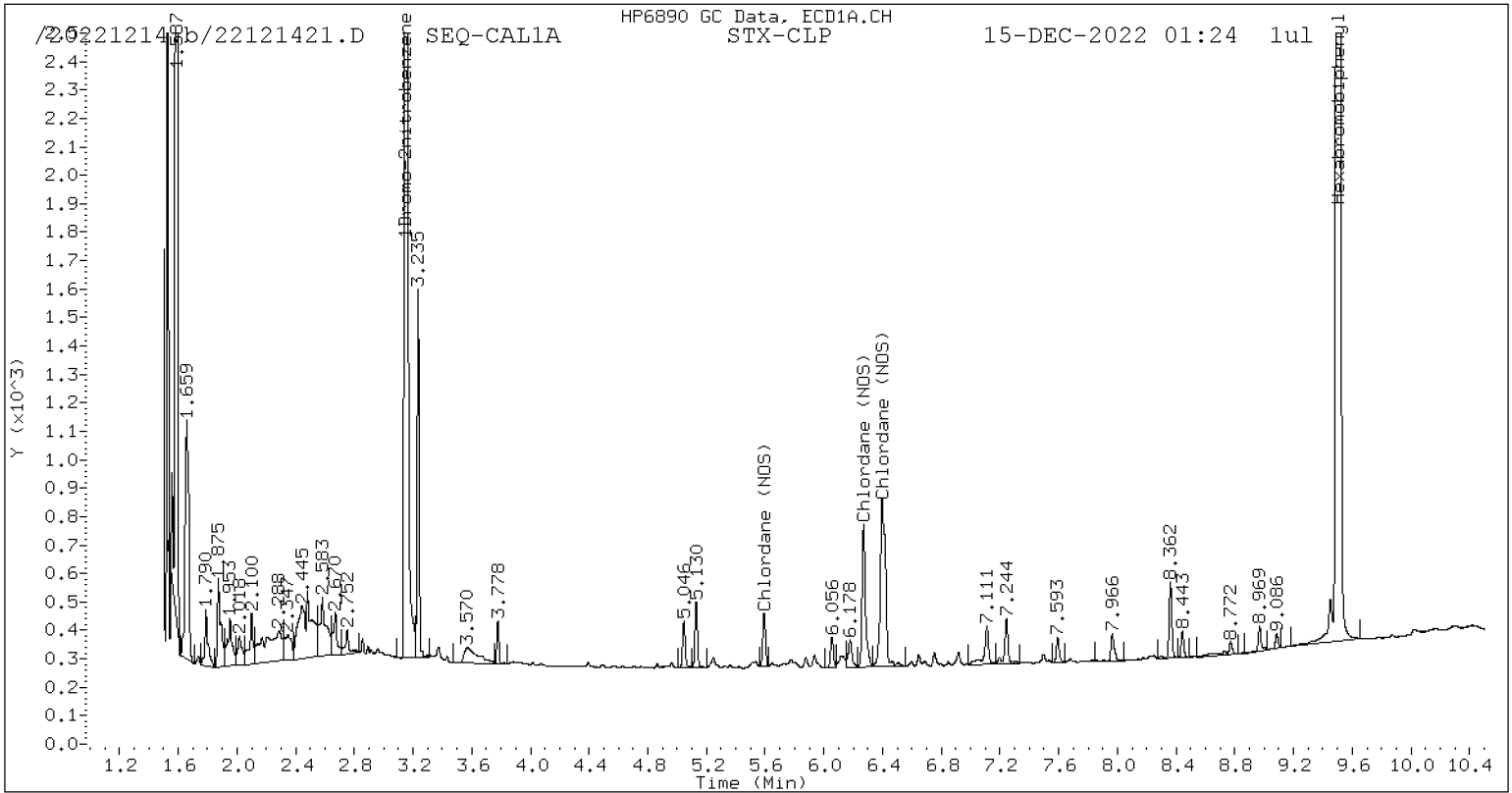
Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	601512	-15.4
Hexabromobiphenyl	641833	690103	7.5

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	776759	-26.6
Hexabromobiphenyl	797125	1058847	32.8

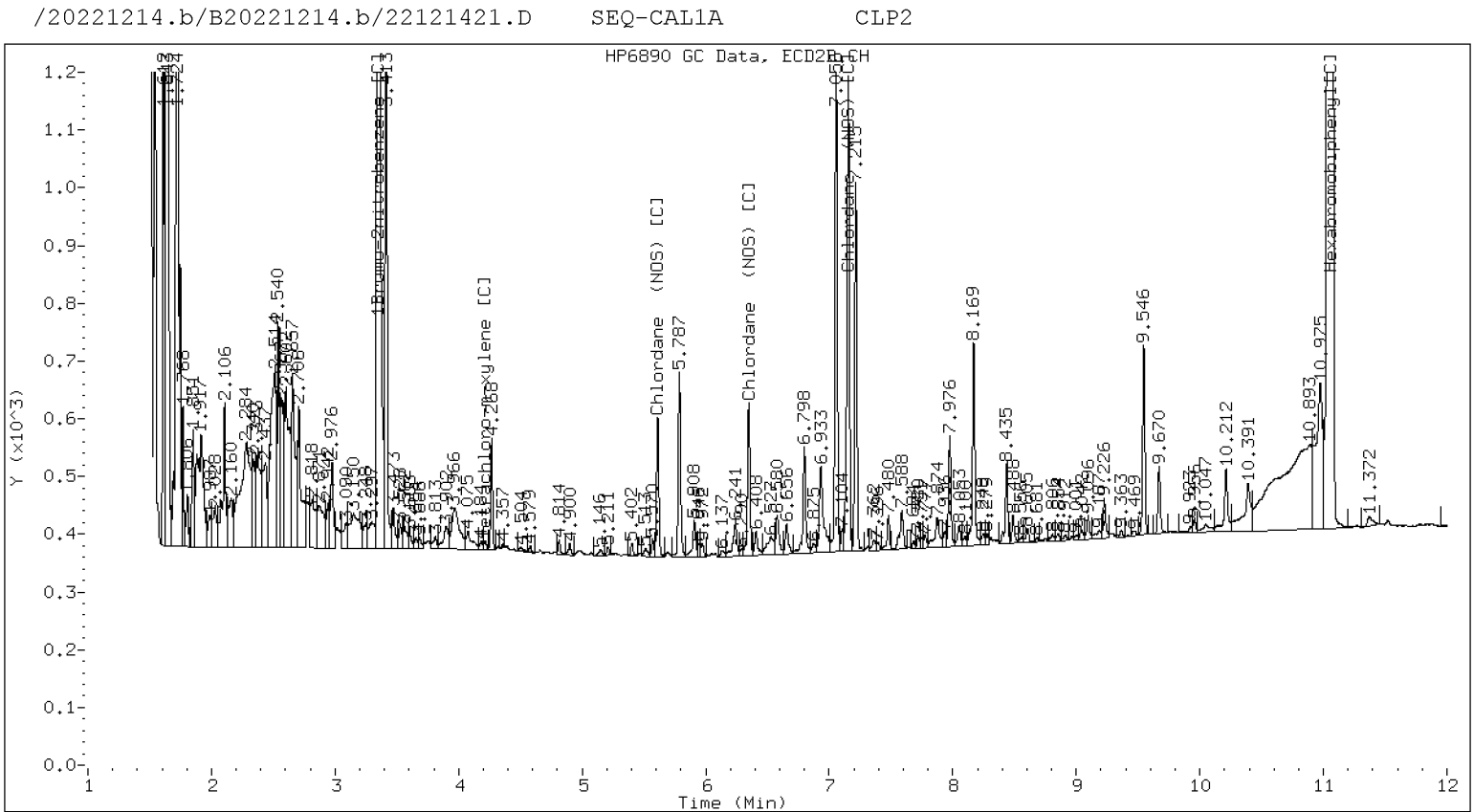
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	5054	13.1	1	5.612	-0.000	6415	12.8
Chlordane (NOS)	2	6.271	-0.000	15913	12.4	2	6.349	-0.000	7689	13.7
Chlordane (NOS)	3	6.399	0.000	29332	13.1	3	7.155	-0.001	23386	12.3
Total STX-CLPAve (3 peaks): 12.882					Total CLP2Ave (3 peaks): 12.916					RPD = 0
Corrected Ave (3 peaks): 12.882					Corrected Ave (3 peaks): 12.916					RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

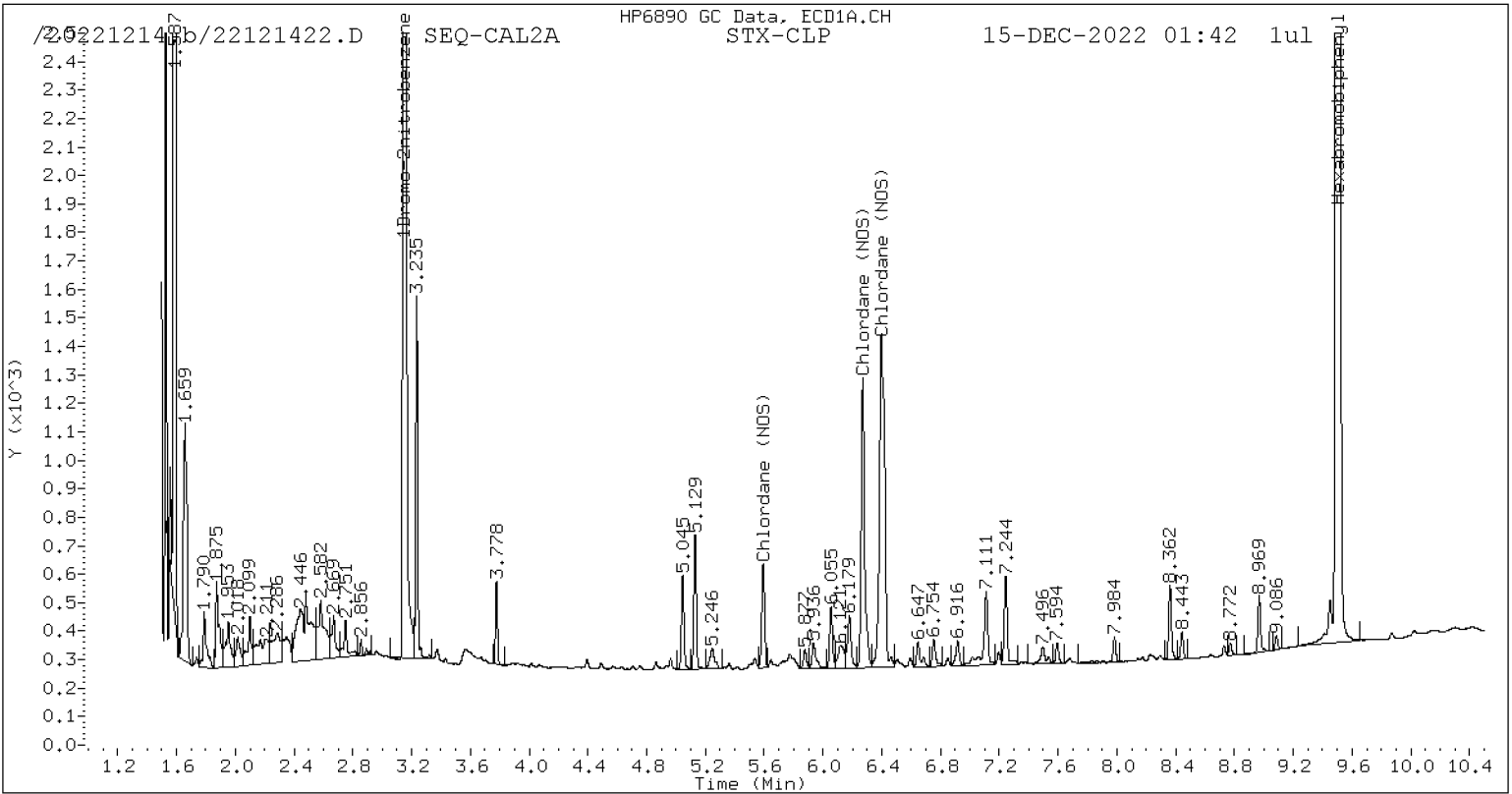
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	611280	-14.0
Hexabromobiphenyl	641833	704720	9.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	793365	-25.1
Hexabromobiphenyl	797125	1083049	35.9

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

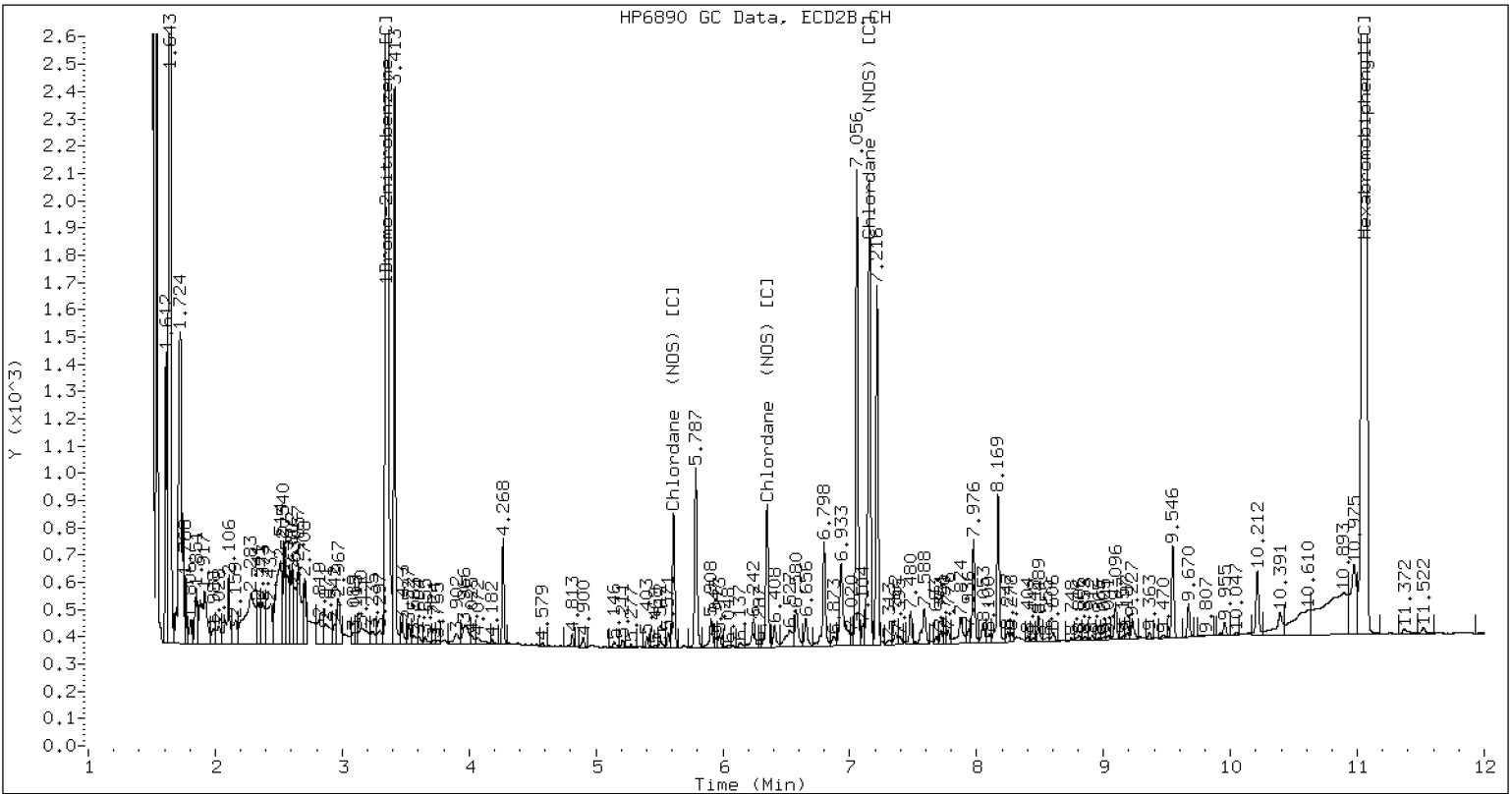
Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	10046	25.5	1	5.612	-0.000	12488	24.4
Chlordane (NOS)	2	6.271	-0.000	32715	25.0	2	6.348	-0.001	15023	26.1
Chlordane (NOS)	3	6.399	0.000	58016	25.4	3	7.155	-0.000	48236	24.8
Total STX-CLPAve (3 peaks): 25.309					Total CLP2Ave (3 peaks): 25.077					RPD = 1
Corrected Ave (3 peaks): 25.309					Corrected Ave (3 peaks): 25.077					RPD = 1

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121422.D SEQ-CAL2A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

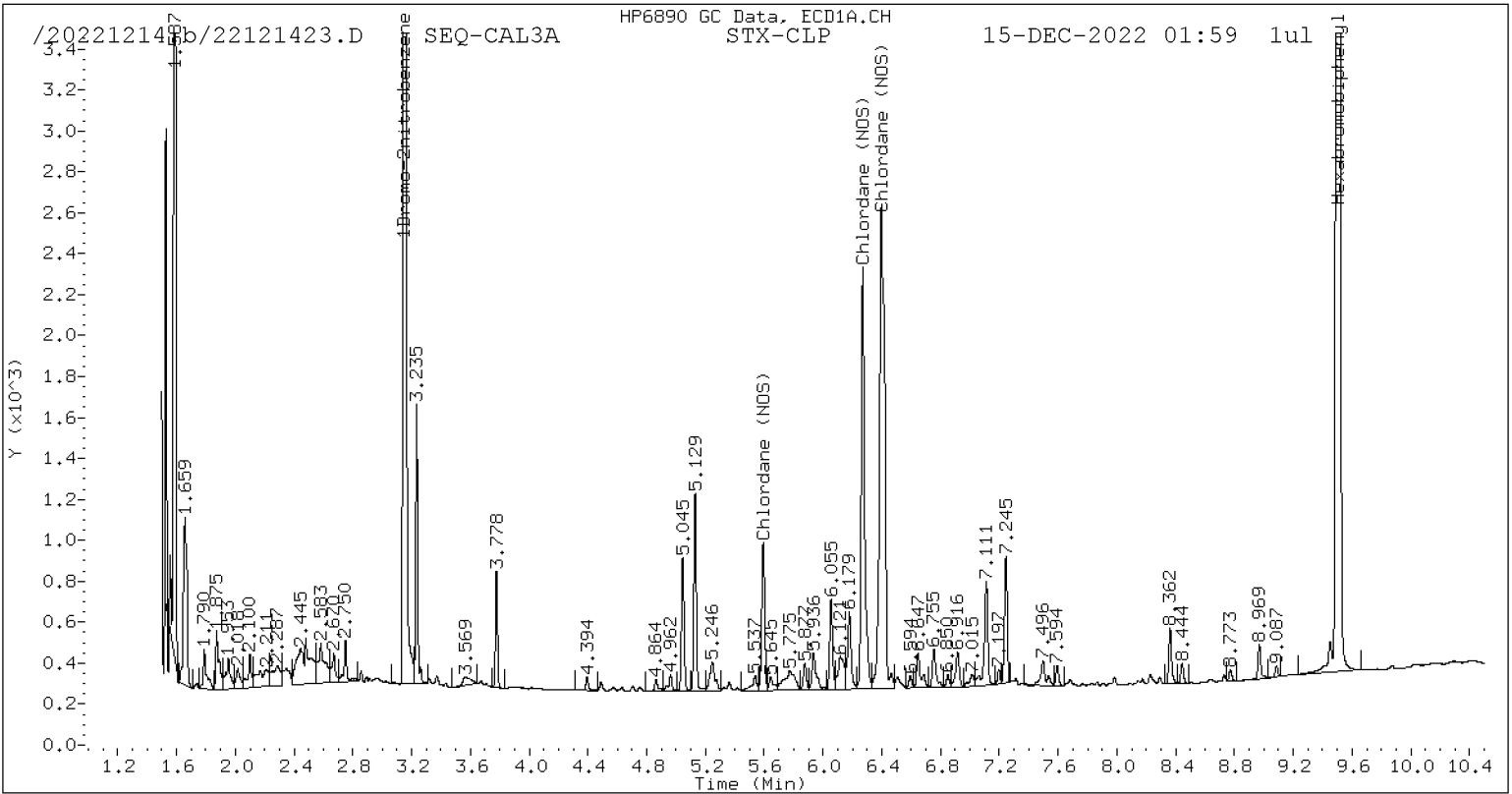
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	592438	-16.6
Hexabromobiphenyl	641833	685225	6.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	769029	-27.4
Hexabromobiphenyl	797125	1054742	32.3

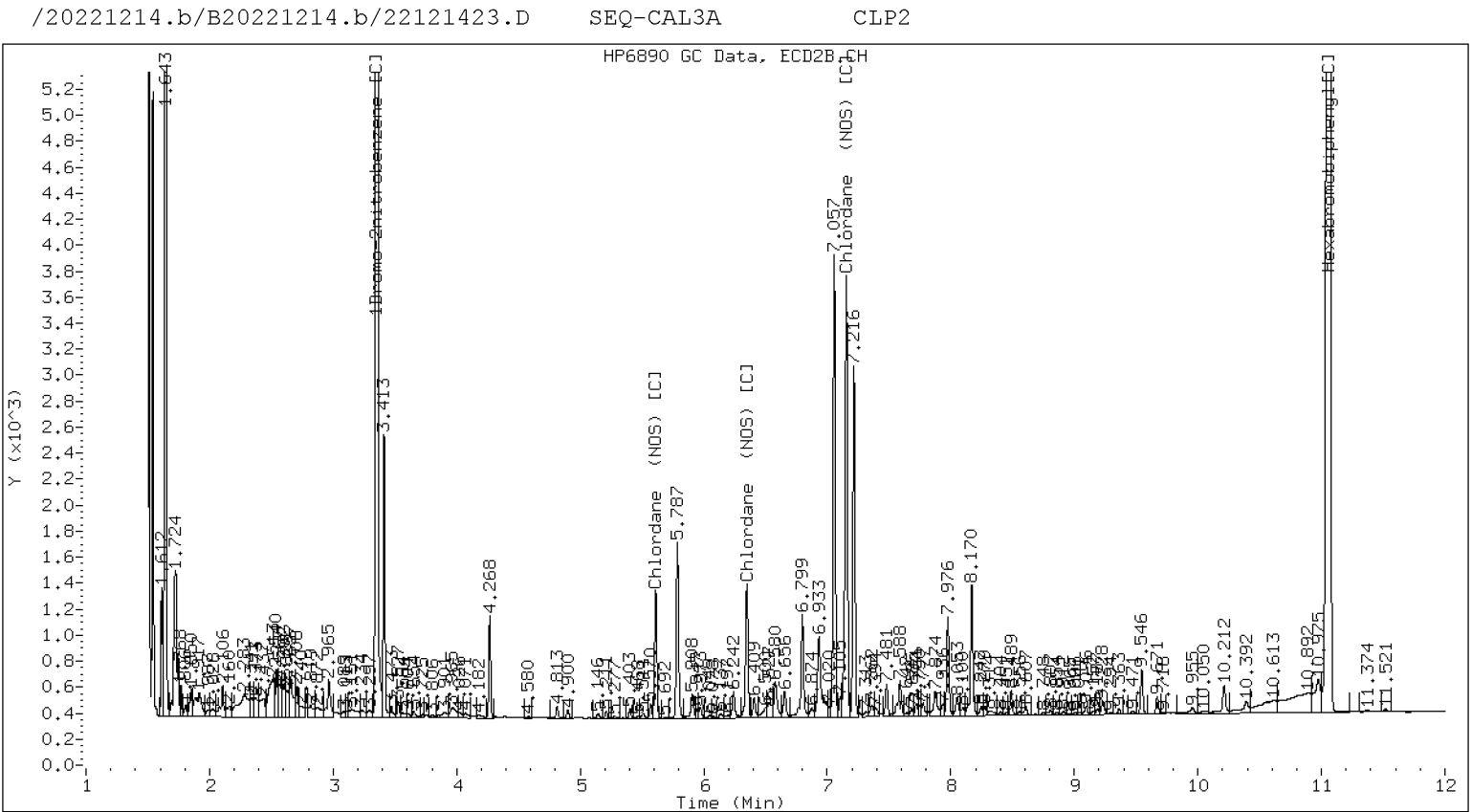
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.001	20502	53.5	1	5.612	-0.000	24816	49.7
Chlordane (NOS)	2	6.271	-0.000	66320	52.2	2	6.349	0.000	29114	51.9
Chlordane (NOS)	3	6.399	0.000	116820	52.6	3	7.155	-0.000	98401	51.9
Total STX-CLPAve (3 peaks): 52.767					Total CLP2Ave (3 peaks): 51.179					RPD = 3
Corrected Ave (3 peaks): 52.767					Corrected Ave (3 peaks): 51.179					RPD = 3

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
 Data file 2: /20221214.b/B20221214.b/22121424.D
 Method: \20221214.b\PEST.m
 Compound Sublist: TECHCHLOR.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CAL4A
 Client ID:
 Injection Date: 15-DEC-2022 02:17
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

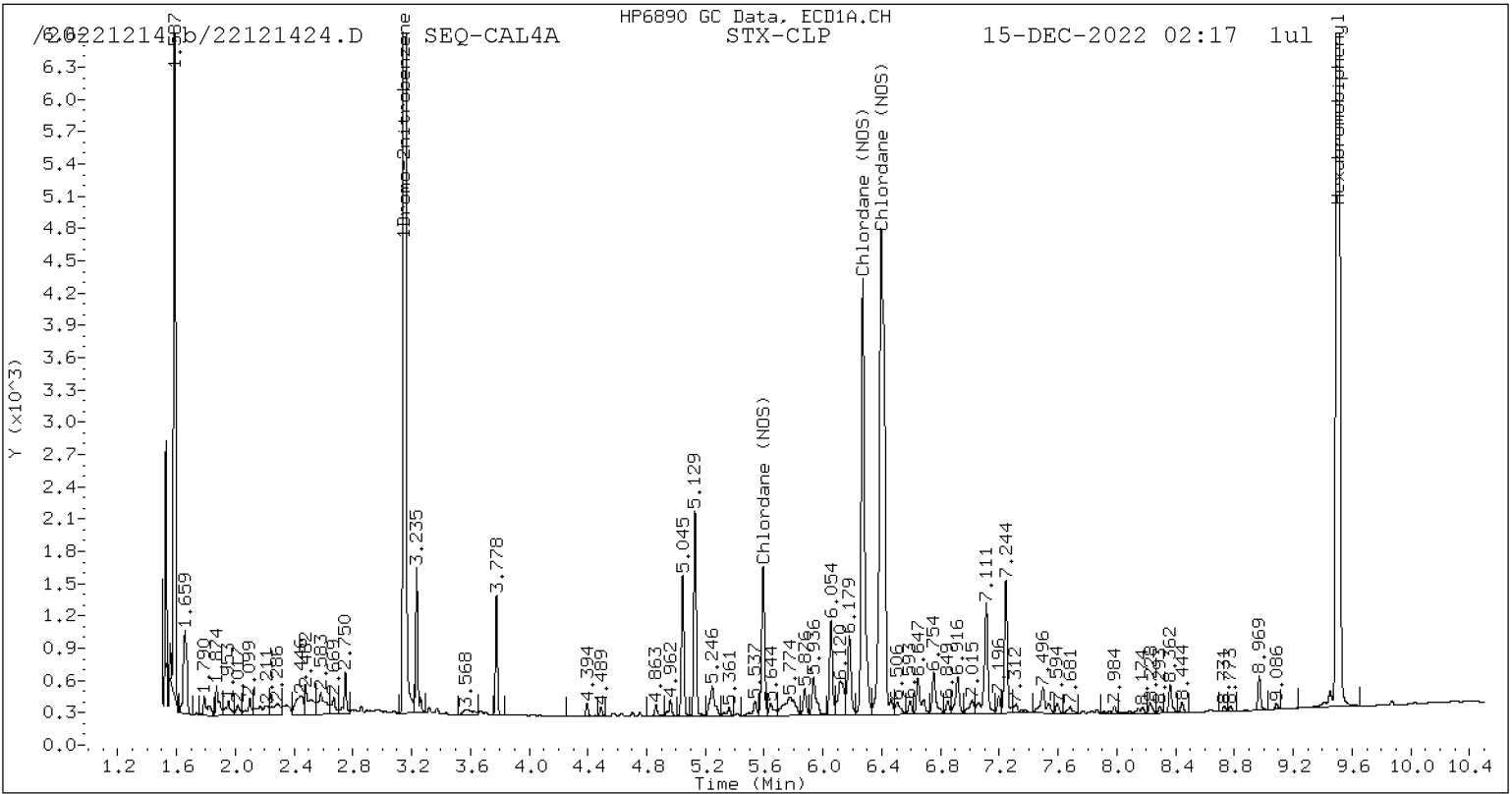
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	584808	-17.7
Hexabromobiphenyl	641833	675665	5.3

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	758204	-28.4
Hexabromobiphenyl	797125	1039488	30.4

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

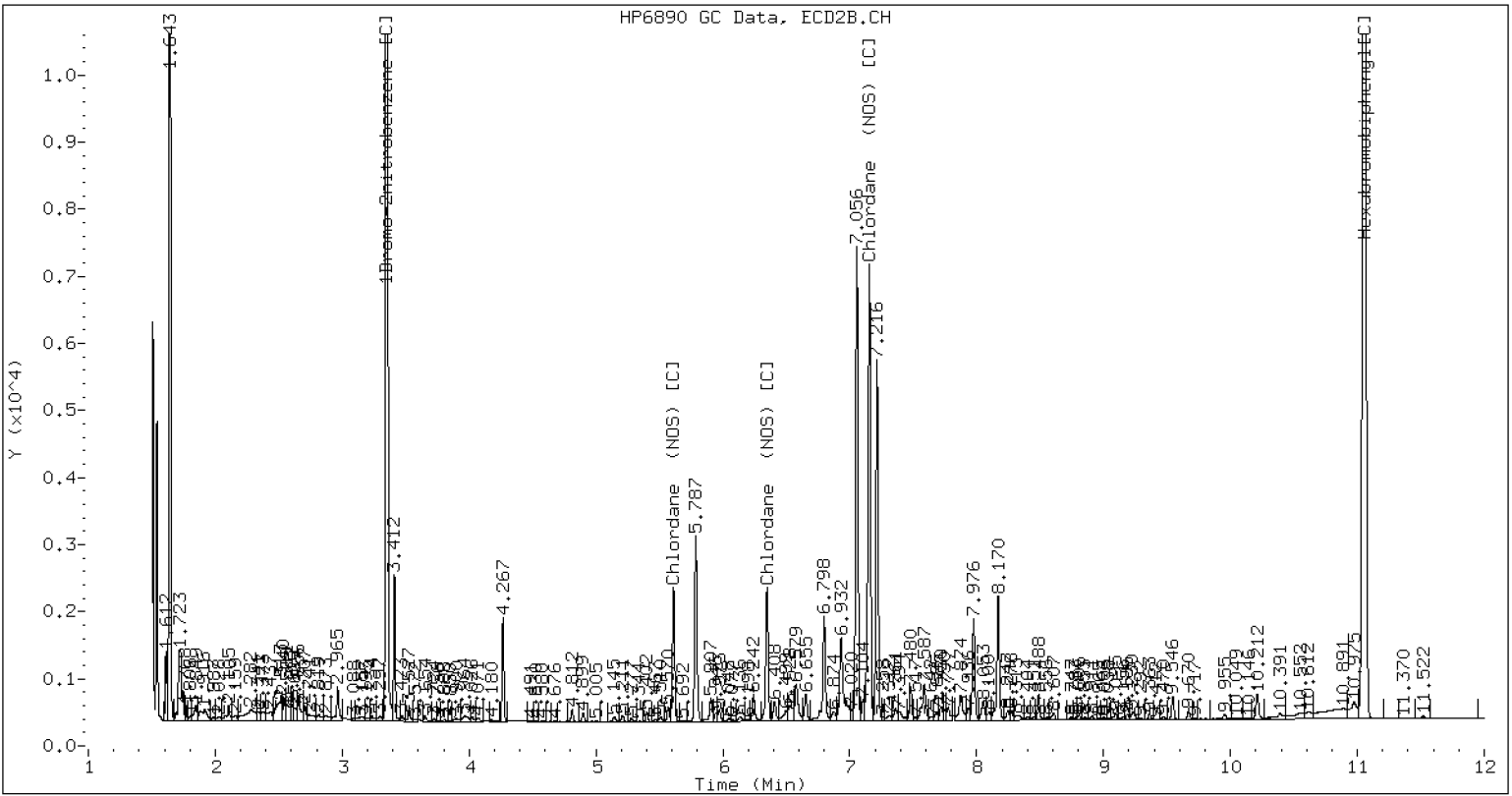
Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	-0.000	39696	105.0	1	5.611	-0.001	49889	101.4
Chlordane (NOS)	2	6.271	-0.000	131726	105.2	2	6.348	-0.001	56608	102.5
Chlordane (NOS)	3	6.398	-0.001	229050	104.6	3	7.155	-0.000	195665	104.7
Total STX-CLPAve (3 peaks): 104.931					Total CLP2Ave (3 peaks): 102.854					RPD = 2
Corrected Ave (3 peaks): 104.931					Corrected Ave (3 peaks): 102.854					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121424.D SEQ-CAL4A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	612592	-13.8
Hexabromobiphenyl	641833	705251	9.9

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	792856	-25.1
Hexabromobiphenyl	797125	1079718	35.5

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.000	77307	196.0	1	5.612	-0.000	101527	198.7
Chlordane (NOS)	2	6.271	0.000	261078	199.7	2	6.349	-0.001	110757	193.0
Chlordane (NOS)	3	6.399	0.000	449301	196.5	3	7.155	-0.000	389197	200.5
Total STX-CLPAve (3 peaks): 197.408					Total CLP2Ave (3 peaks): 197.390					RPD = 0
Corrected Ave (3 peaks): 197.408					Corrected Ave (3 peaks): 197.390					RPD = 0

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
----	|	----	|	0.00	0.00	---	Tetrachloro-m-xylene
----	|	----	|	0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

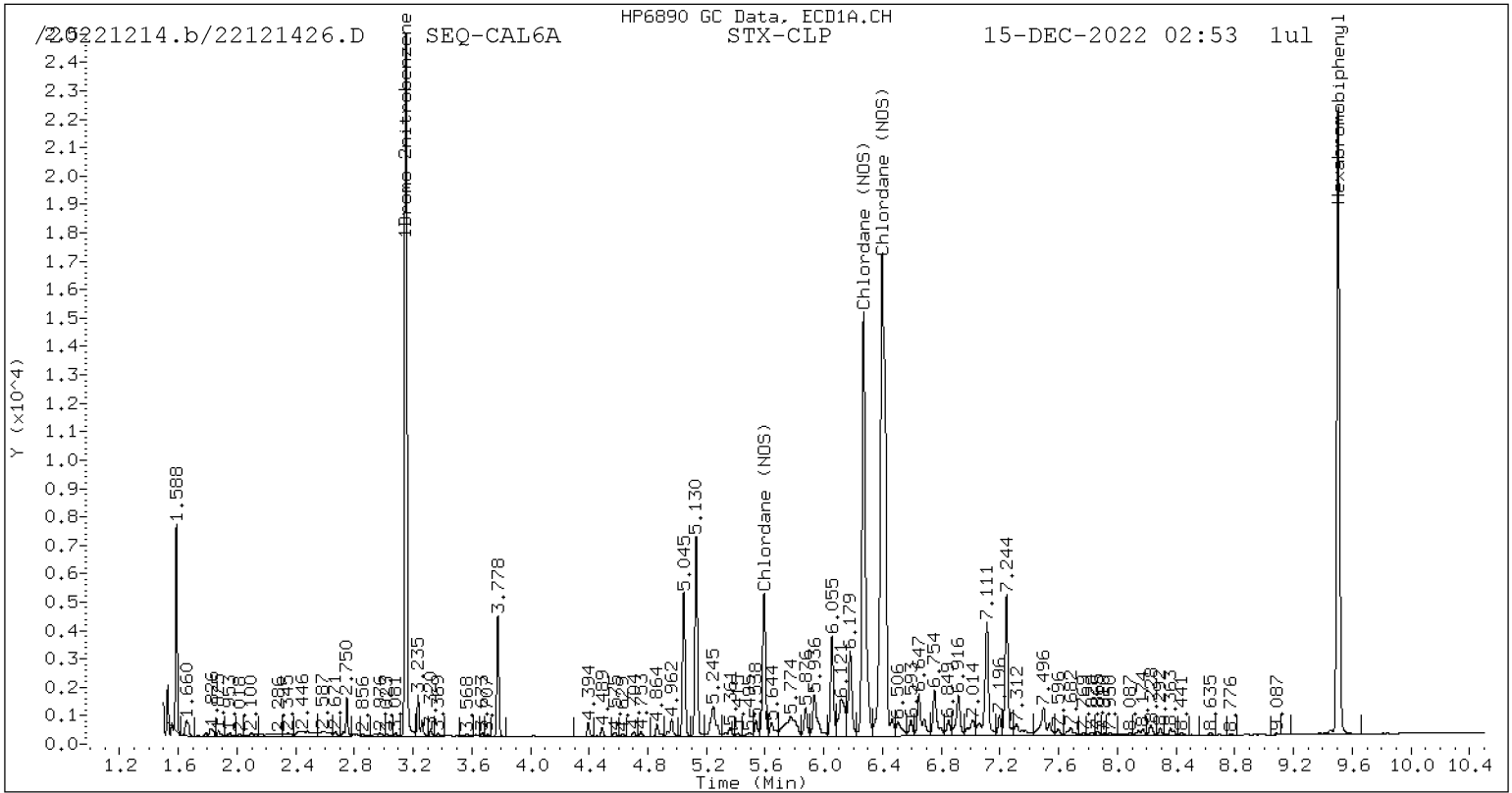
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	603526	-15.1
Hexabromobiphenyl	641833	699031	8.9

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	779405	-26.4
Hexabromobiphenyl	797125	1068976	34.1

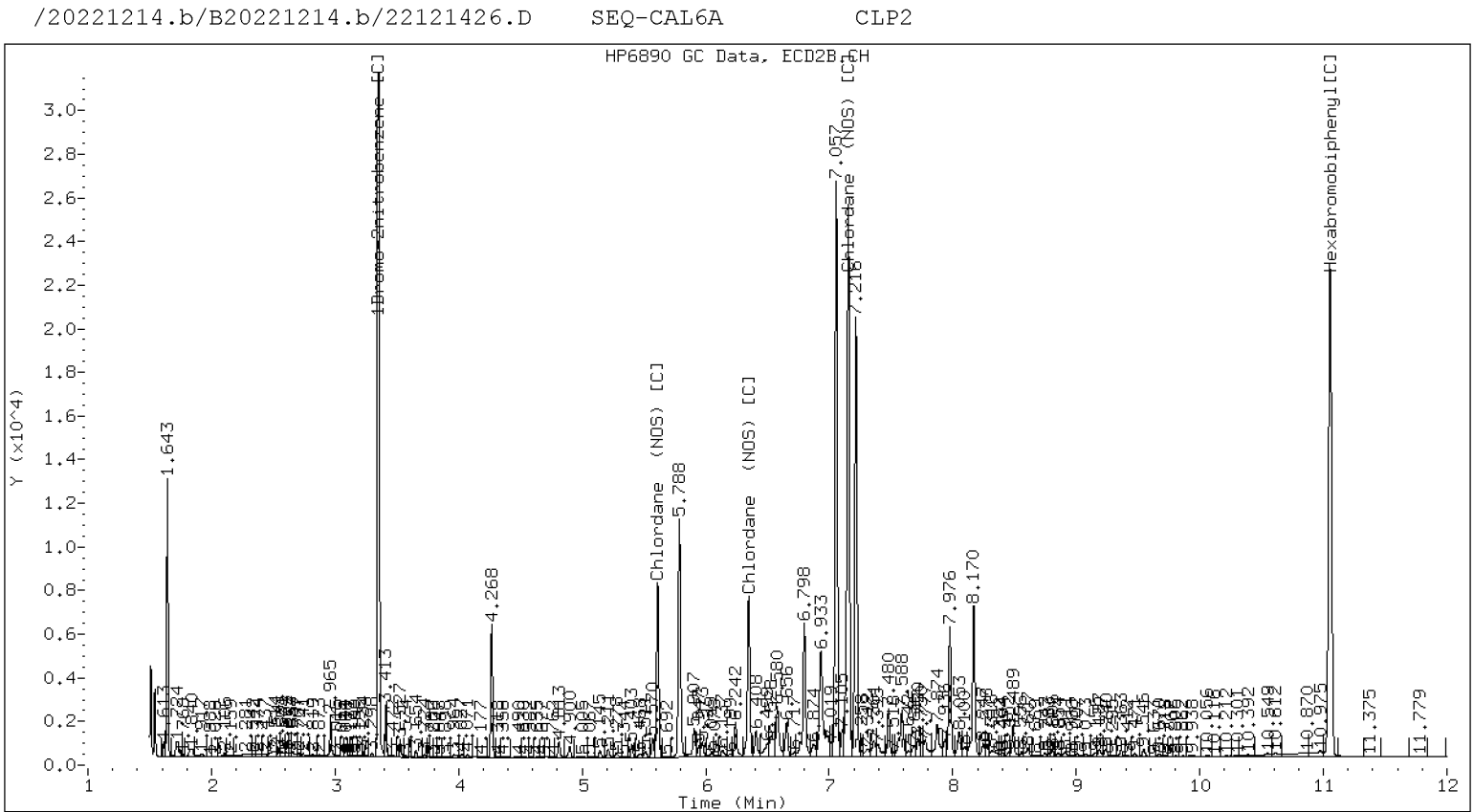
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.592	-0.000	146950	375.8	1	5.612	-0.000	203386	402.0
Chlordane (NOS)	2	6.271	-0.000	503310	388.5	2	6.349	-0.000	212637	374.2
Chlordane (NOS)	3	6.399	0.000	857451	378.4	3	7.155	-0.000	752631	391.6
Total STX-CLPAve (3 peaks): 380.894					Total CLP2Ave (3 peaks): 389.290					RPD = 2
Corrected Ave (3 peaks): 380.894					Corrected Ave (3 peaks): 389.290					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
----			----			0.00	0.00	---	Tetrachloro-m-xylene
9.380	0.025	1930	----			0.31	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

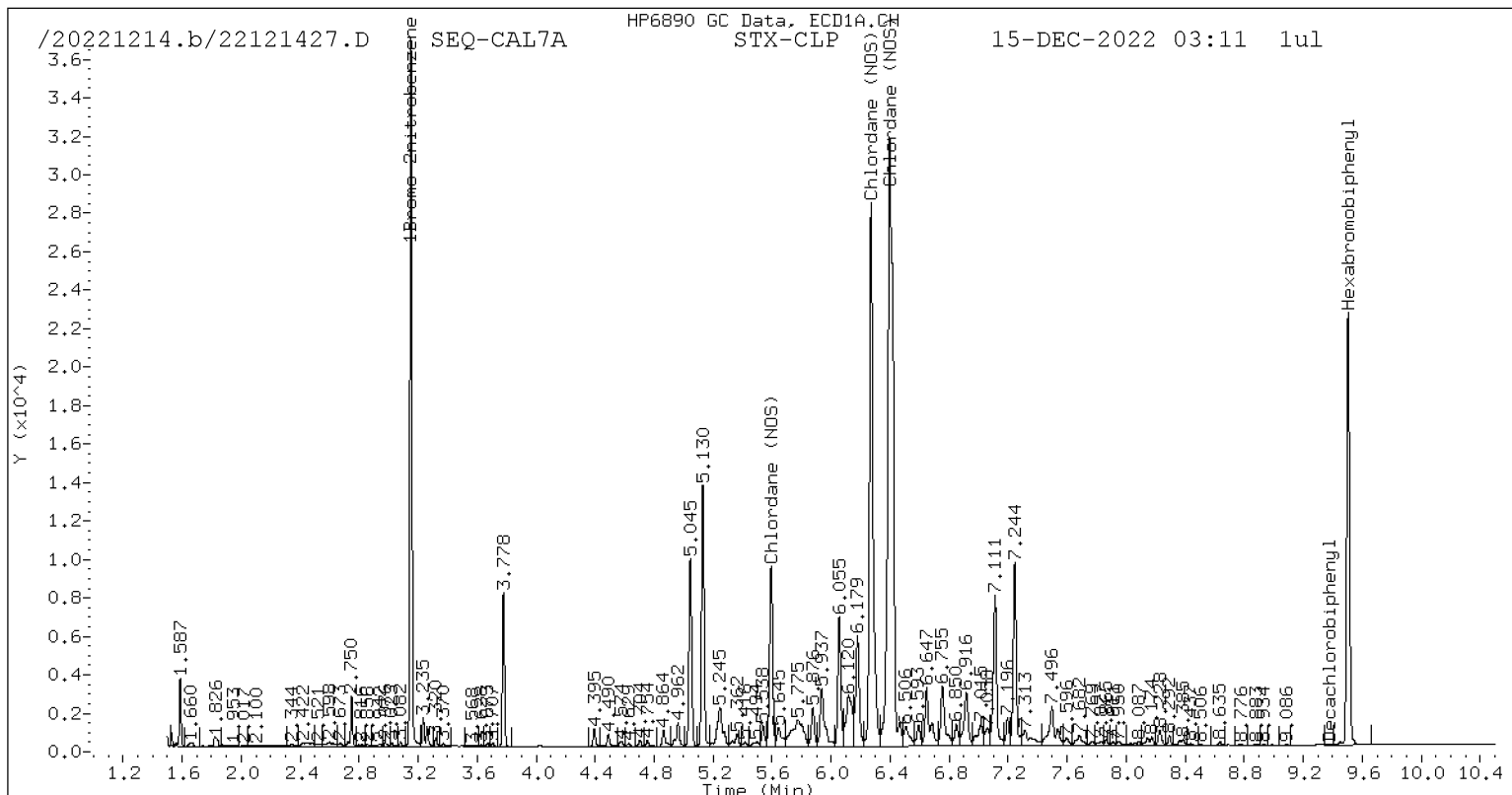
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	610159	-14.1
Hexabromobiphenyl	641833	692215	7.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	790388	-25.4
Hexabromobiphenyl	797125	1059143	32.9

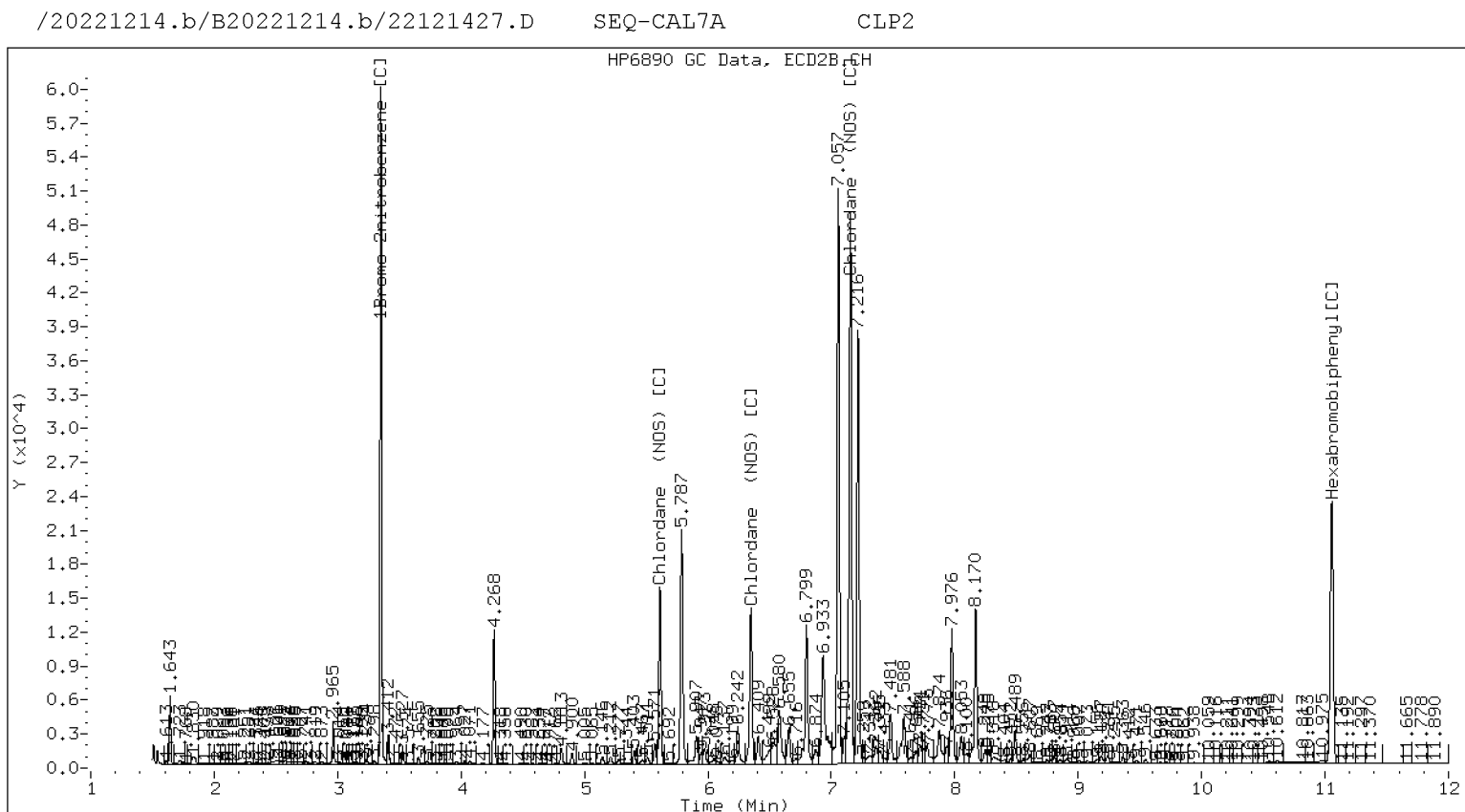
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col		
			Shift	Height	Amount			Shift	Height	Amount
Chlordane (NOS)	1	5.593	0.001	276980	715.3	1	5.612	0.000	398620	795.3
Chlordane (NOS)	2	6.271	-0.000	961368	749.3	2	6.349	0.000	405170	719.7
Chlordane (NOS)	3	6.399	-0.000	1631241	727.0	3	7.155	0.000	1462876	768.2
Total STX-CLPAve (3 peaks): 730.539					Total CLP2Ave (3 peaks): 761.064					RPD = 4
Corrected Ave (3 peaks): 730.539					Corrected Ave (3 peaks): 761.064					RPD = 4

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
 Data file 2: /20221214.b/B20221214.b/22121428.D
 Method: \20221214.b\PEST.m
 Compound Sublist: TOXAPH.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CAL8A
 Client ID:
 Injection Date: 15-DEC-2022 03:29
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	0.000	8893	4.221	0.000	14795	0.95	0.98	4.0	Tetrachloro-m-xylene
9.355	0.000	15511	10.467	0.000	24896	2.54	2.86	11.7	Decachlorobiphenyl

- * Indicates RPD > 40%
- A Indicates Peak Height was used for Column 1 quantitation instead of Area
- B Indicates Peak Height was used for Column 2 quantitation instead of Area
- M Indicates Column 1 peak was manually integrated
- N Indicates Column 2 peak was manually integrated

- ~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

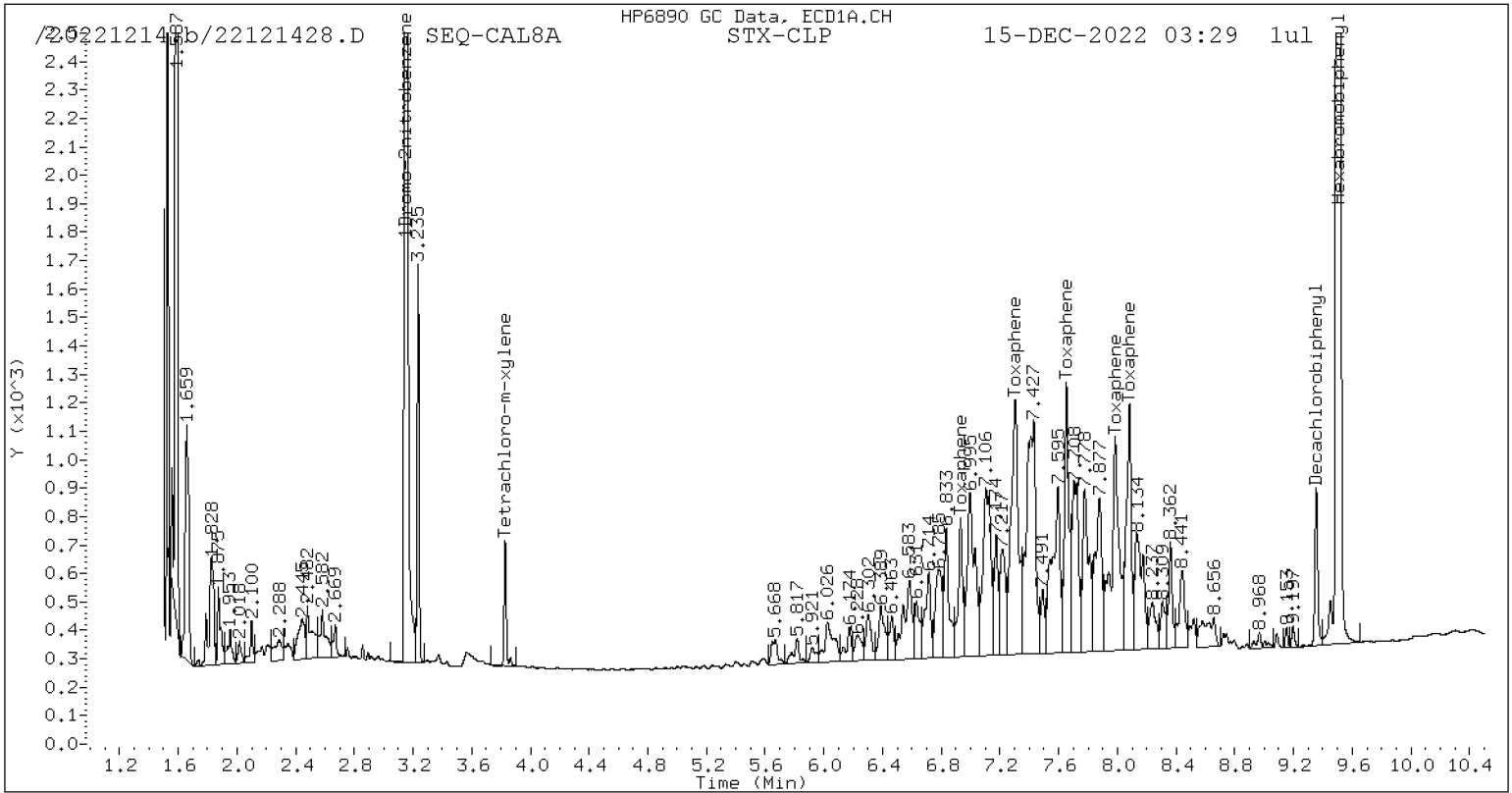
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	691781	-2.7
Hexabromobiphenyl	641833	602865	-6.1

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1068328	0.9
Hexabromobiphenyl	797125	788806	-1.0

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col			Amount	
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	20939	118.9	1	7.125	-0.000	18390	124.1		
Toxaphene	2	7.304	0.000	62921	127.5	2	7.553	-0.000	43437	130.4		
Toxaphene	3	7.653	-0.000	40147	126.2	3	8.059	-0.001	32235	127.1		
Toxaphene	4	7.985	-0.001	56816	133.6	4	8.201	-0.001	109296	132.1		
Toxaphene	5	8.082	-0.000	39643	123.4	5	8.958	-0.001	50997	125.7		
Total STX-CLPAve (5 peaks):					125.907	Total CLP2Ave (5 peaks):					127.865	RPD = 2
Corrected Ave (5 peaks):					125.907	Corrected Ave (5 peaks):					127.865	RPD = 2

Pesticide Dual Column Chromatograms

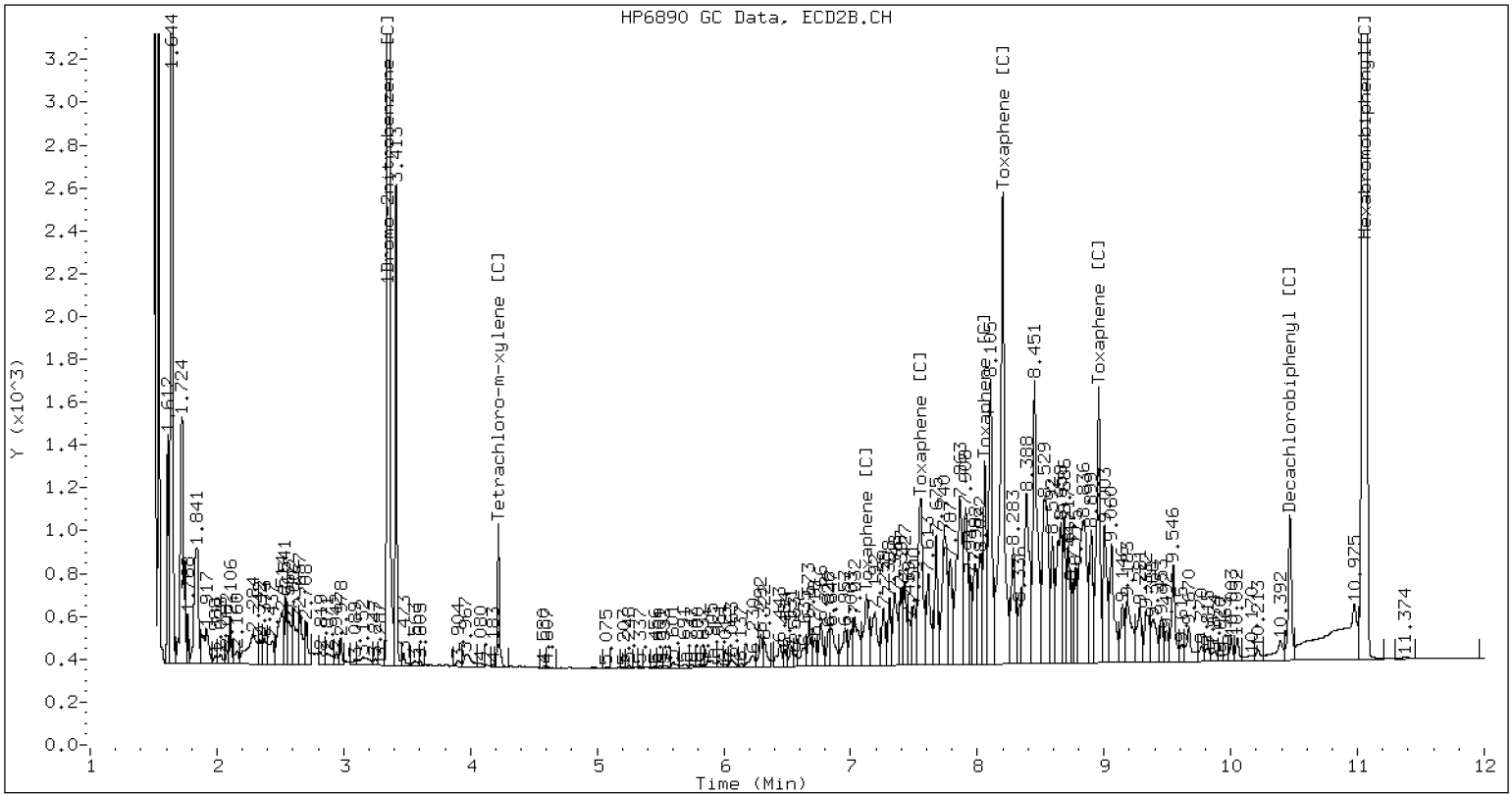


STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121428.D

SEQ-CAL8A

CLP2



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.828	-0.000	18632	4.220	1.92	1.92	0.1	Tetrachloro-m-xylene
9.355	0.000	29179	10.467	4.64	4.98	7.1	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

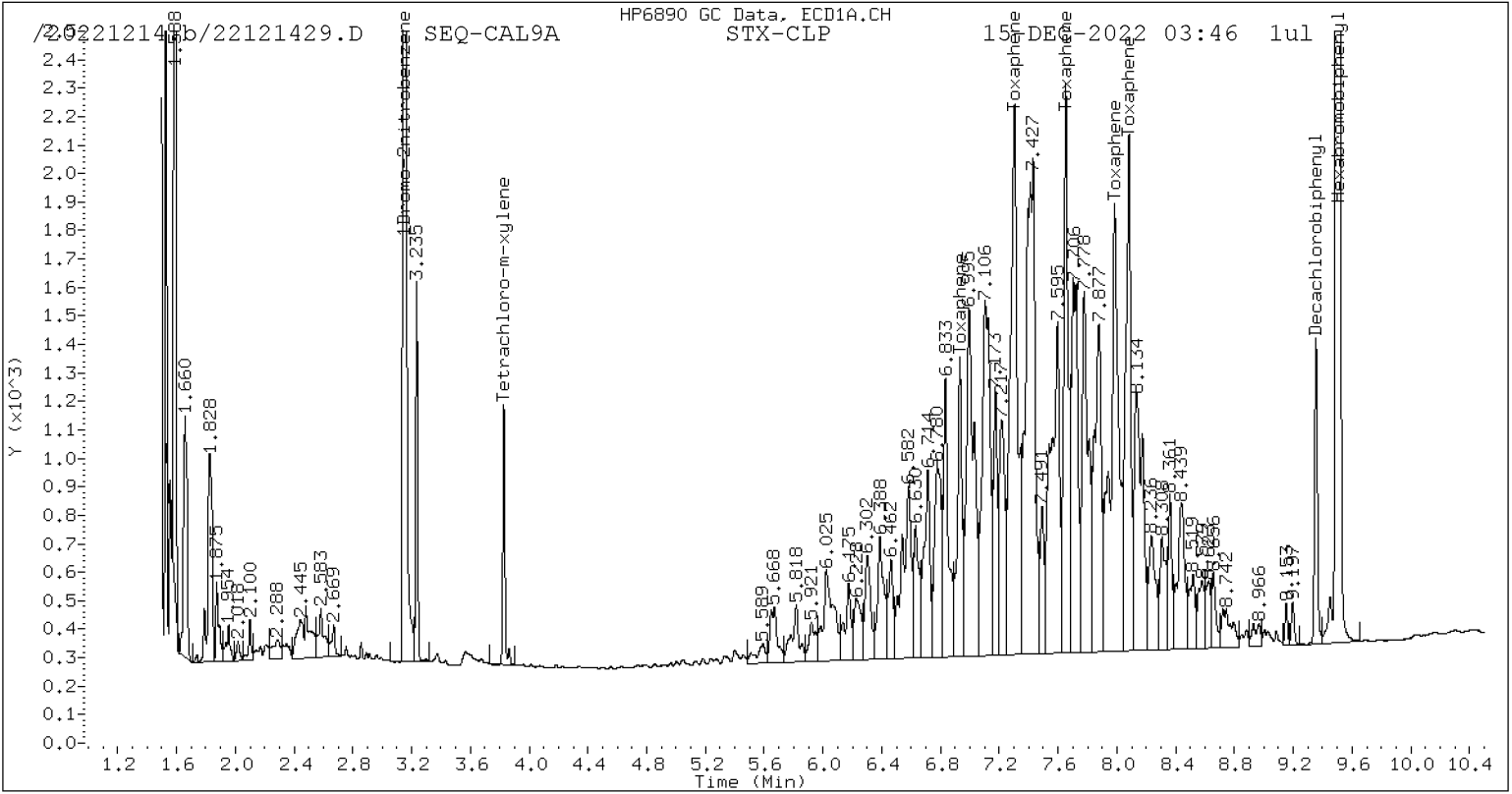
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	713620	0.4
Hexabromobiphenyl	641833	620026	-3.4

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1104488	4.3
Hexabromobiphenyl	797125	811719	1.8

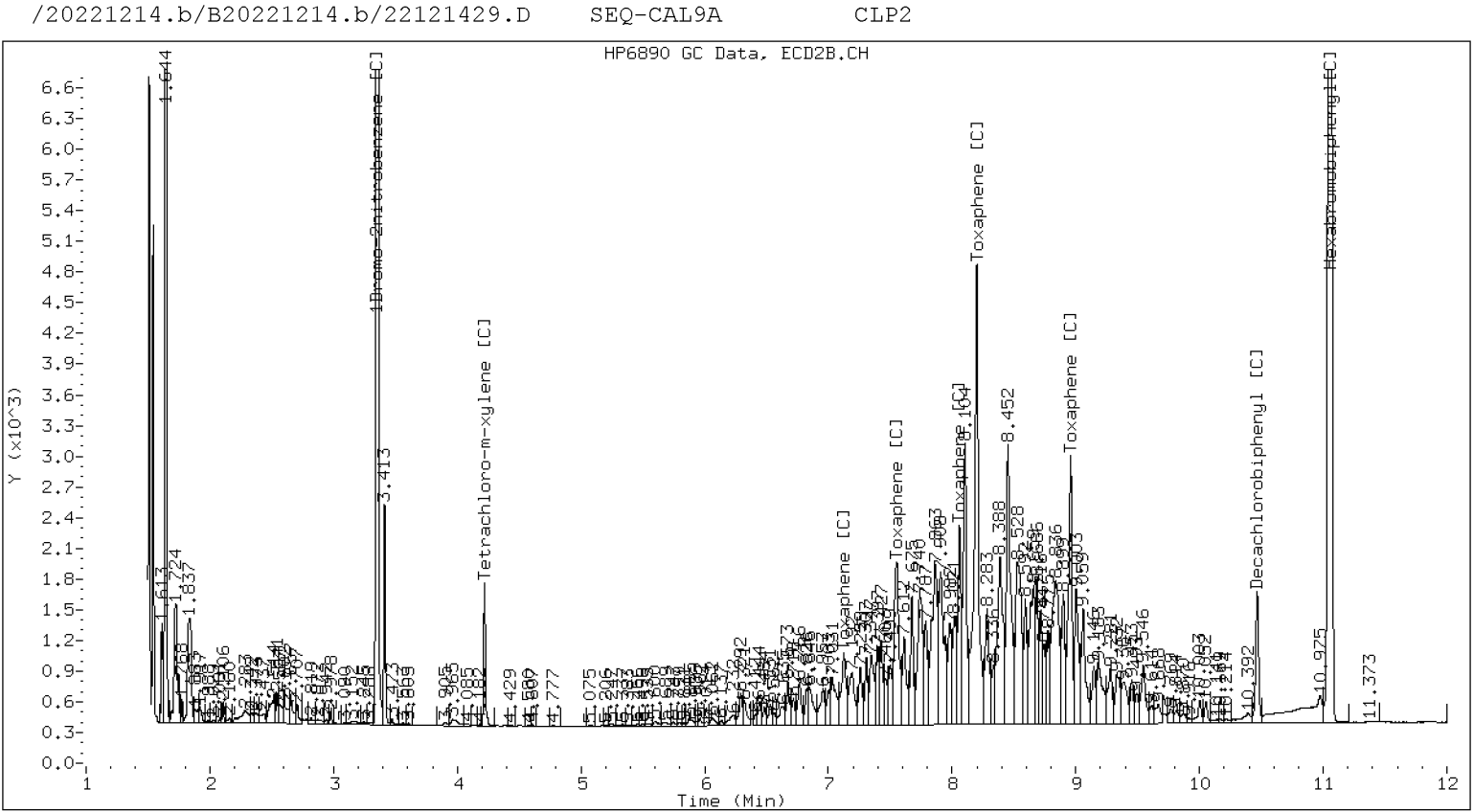
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col			Amount
			Shift	Height	Amount			Shift	Height	Amount	
Toxaphene	1	6.931	0.000	47415	261.8	1	7.125	-0.001	38790	254.4	
Toxaphene	2	7.302	-0.001	134642	265.2	2	7.552	-0.001	89754	261.8	
Toxaphene	3	7.652	-0.001	86679	264.9	3	8.059	-0.001	67442	258.4	
Toxaphene	4	7.985	-0.001	125891	287.7	4	8.200	-0.001	220426	258.9	
Toxaphene	5	8.081	-0.000	85903	260.0	5	8.958	-0.001	104601	250.5	
Total STX-CLPAve (5 peaks): 267.939					Total CLP2Ave (5 peaks): 256.784					RPD = 4	
Corrected Ave (5 peaks): 267.939					Corrected Ave (5 peaks): 256.784					RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag	
RT	Shift Response	RT	Shift Response	on col	on col	

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
 Data file 2: /20221214.b/B20221214.b/22121430.D
 Method: \20221214.b\PEST.m
 Compound Sublist: TOXAPH.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALAA
 Client ID:
 Injection Date: 15-DEC-2022 04:04
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	-0.000	37717	4.220	0.000	60469	3.98	3.98	0.0	Tetrachloro-m-xylene
9.355	0.000	57106	10.467	0.000	82418	9.20	9.32	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	696179	-2.0
Hexabromobiphenyl	641833	612804	-4.5

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1078803	1.9
Hexabromobiphenyl	797125	800071	0.4

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	-0.000	96535	539.4	1	7.125	-0.001	78635	523.1		
Toxaphene	2	7.304	0.000	273576	545.2	2	7.553	-0.001	179081	529.9		
Toxaphene	3	7.652	-0.001	177095	547.7	3	8.059	-0.001	133547	519.1		
Toxaphene	4	7.985	-0.001	190443	440.4	4	8.200	-0.001	437035	520.8		
Toxaphene	5	8.082	-0.000	175009	535.8	5	8.958	-0.001	209659	509.4		
Total STX-CLPAve (5 peaks):					521.711	Total CLP2Ave (5 peaks):					520.468	RPD = 0
Corrected Ave (5 peaks):					521.711	Corrected Ave (5 peaks):					520.468	RPD = 0

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
 Data file 2: /20221214.b/B20221214.b/22121431.D
 Method: \20221214.b\PEST.m
 Compound Sublist: TOXAPH.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALAB
 Client ID:
 Injection Date: 15-DEC-2022 04:22
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	0.000	74347	4.221	0.000	119694	7.73	7.77	0.5	Tetrachloro-m-xylene
9.355	-0.000	107024	10.466	-0.000	151970	17.00	17.11	0.7	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

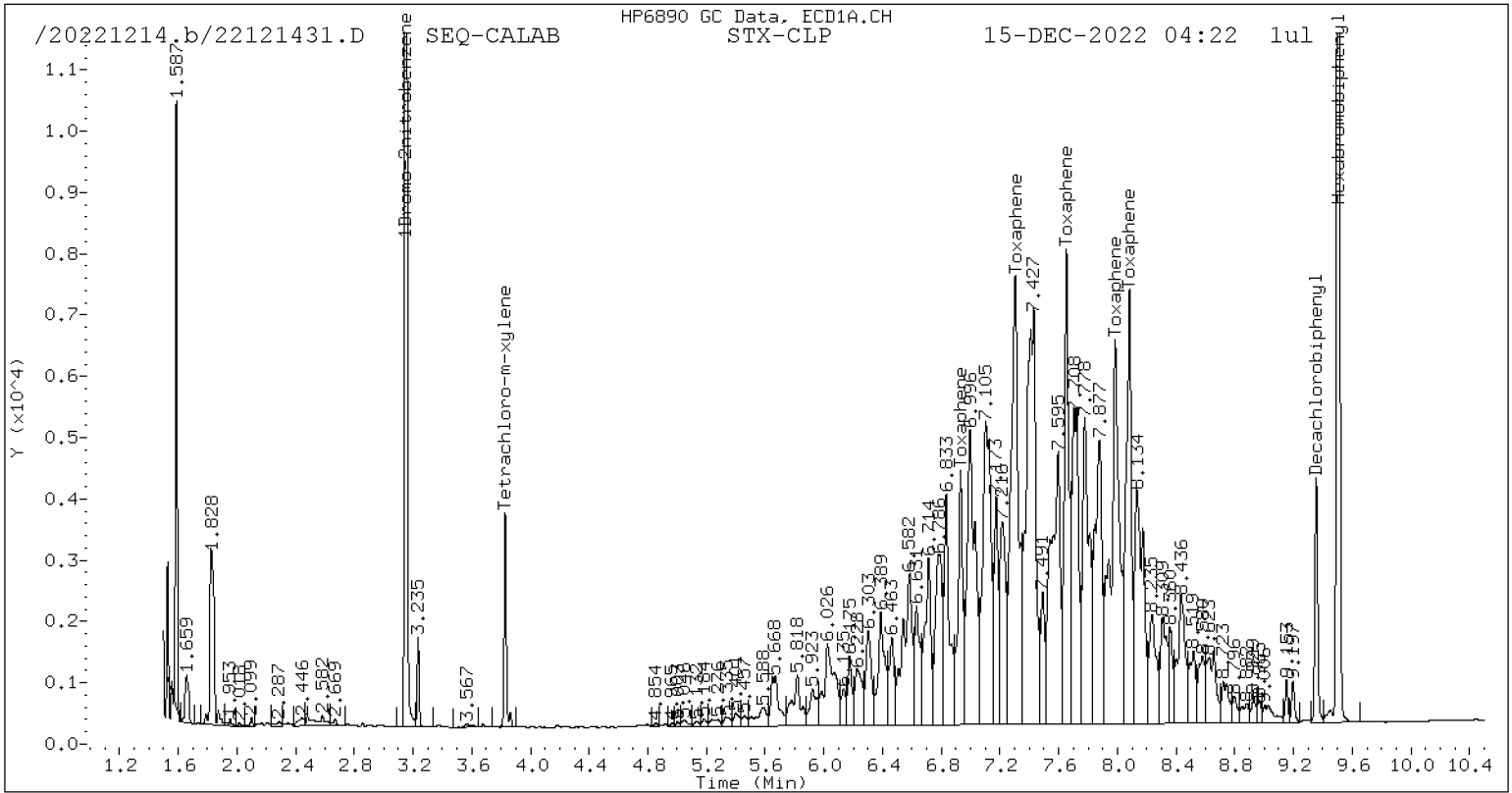
Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	706924	-0.5
Hexabromobiphenyl	641833	621486	-3.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1093936	3.3
Hexabromobiphenyl	797125	803782	0.8

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	192757	1062.0	1	7.125	-0.000	156515	1036.5		
Toxaphene	2	7.303	-0.000	530863	1043.2	2	7.553	-0.001	349637	1029.8		
Toxaphene	3	7.653	-0.000	344194	1049.6	3	8.059	-0.000	265296	1026.5		
Toxaphene	4	7.986	-0.000	522105	1190.6	4	8.201	-0.001	854255	1013.3		
Toxaphene	5	8.082	-0.000	345477	1043.0	5	8.958	-0.001	416452	1007.1		
Total STX-CLPAve (5 peaks):					1077.665	Total CLP2Ave (5 peaks):					1022.630	RPD = 5
Corrected Ave (5 peaks):					1077.665	Corrected Ave (5 peaks):					1022.630	RPD = 5

Pesticide Dual Column Chromatograms



Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
 Data file 2: /20221214.b/B20221214.b/22121432.D
 Method: \20221214.b\PEST.m
 Compound Sublist: TOXAPH.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: JGR

ARI ID: SEQ-CALAC
 Client ID:
 Injection Date: 15-DEC-2022 04:40
 Report Date: 12/16/2022 15:20
 Units: ng/mL
 Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	0.000	169388	4.221	0.000	273030	18.51	18.69	1.0	Tetrachloro-m-xylene
9.356	0.001	234532	10.466	-0.000	332716	40.53	40.11	1.0	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672958	-5.3
Hexabromobiphenyl	641833	571112	-11.0

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1037593	-2.0
Hexabromobiphenyl	797125	750492	-5.9

* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	432250	2591.5	1	7.126	-0.000	358061	2539.5		
Toxaphene	2	7.303	0.000	1180375	2524.1	2	7.553	0.000	785942	2479.1		
Toxaphene	3	7.653	0.000	762221	2529.4	3	8.059	-0.000	602985	2498.7		
Toxaphene	4	7.986	0.000	863552	2142.9	4	8.201	-0.001	1929083	2450.8		
Toxaphene	5	8.082	0.000	777497	2554.3	5	8.958	-0.001	962132	2492.0		
Total STX-CLPAve (5 peaks):					2468.427	Total CLP2Ave (5 peaks):					2492.024	RPD = 1
Corrected Ave (5 peaks):					2468.427	Corrected Ave (5 peaks):					2492.024	RPD = 1

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	-0.000	329284	4.221	0.000	536251	34.78	35.63	2.4	Tetrachloro-m-xylene
9.356	0.000	464116	10.466	-0.000	660536	76.95	77.19	0.3	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

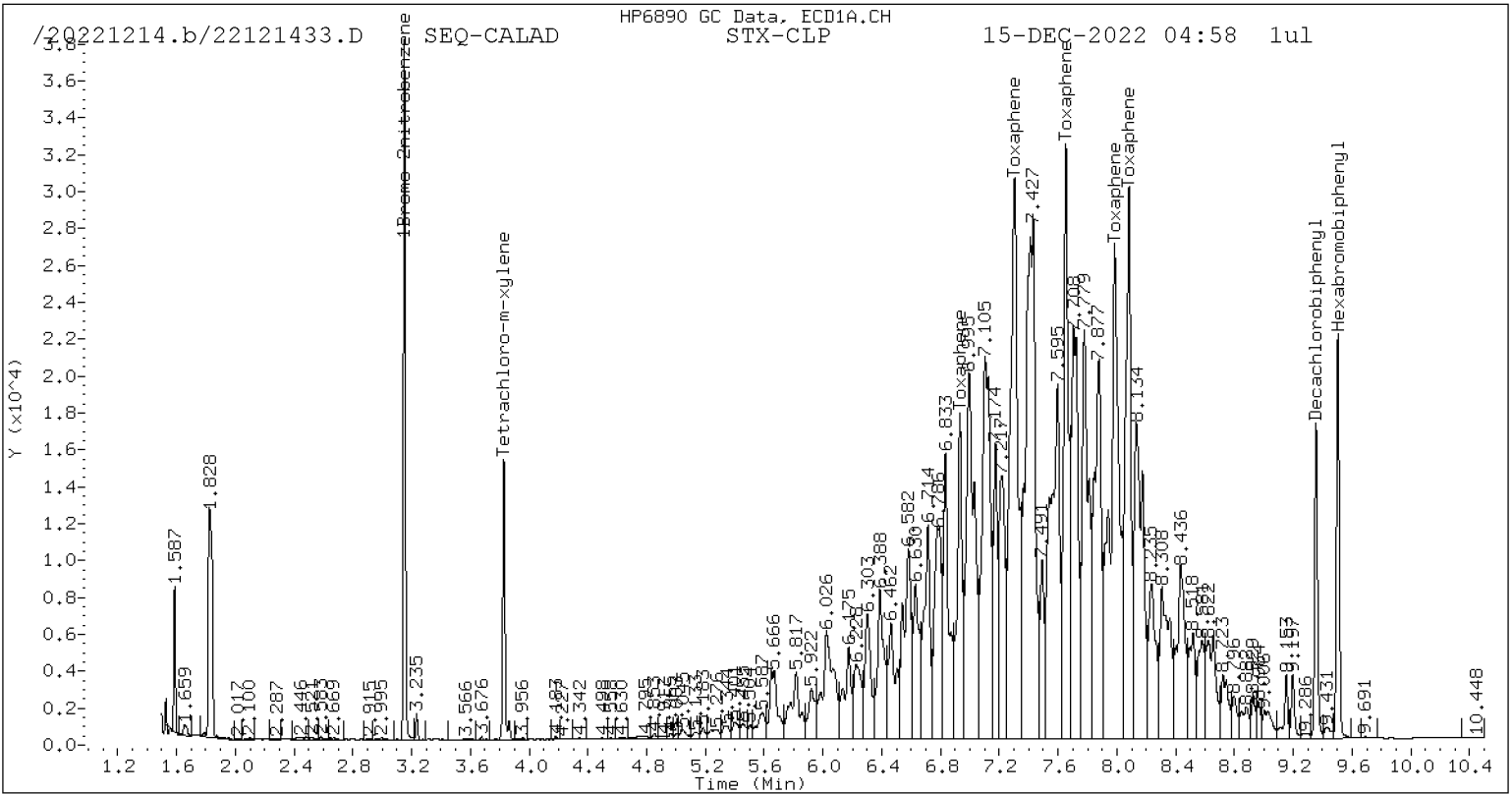
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	696178	-2.0
Hexabromobiphenyl	641833	595287	-7.3

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1069205	1.0
Hexabromobiphenyl	797125	774218	-2.9

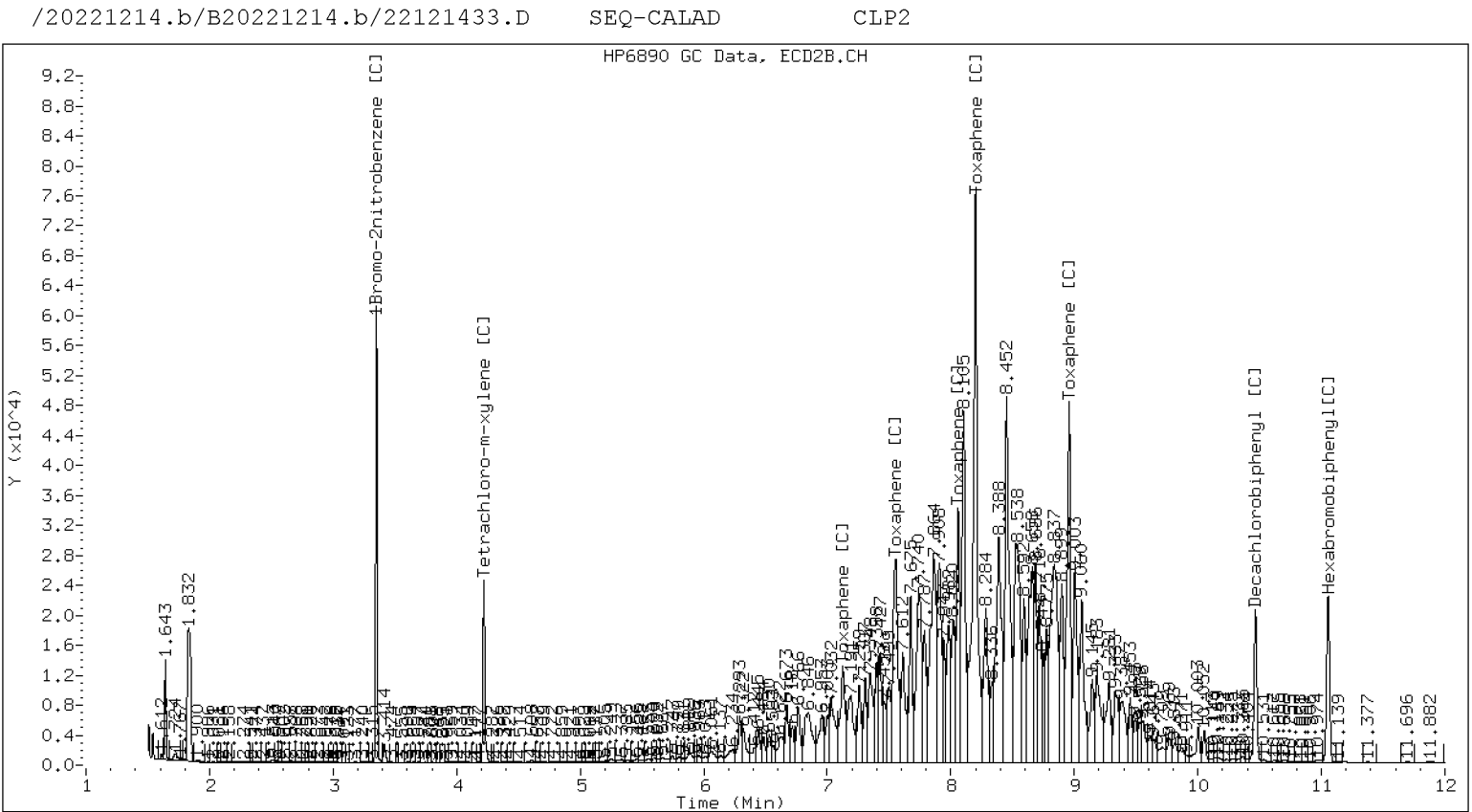
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	828531	4765.6	1	7.126	-0.000	704213	4841.5		
Toxaphene	2	7.303	-0.000	2275106	4667.4	2	7.554	0.000	1533921	4690.3		
Toxaphene	3	7.653	-0.000	1493693	4755.4	3	8.059	-0.001	1192086	4788.5		
Toxaphene	4	7.986	0.000	2318449	5519.5	4	8.201	-0.001	3835448	4723.4		
Toxaphene	5	8.081	-0.000	1509568	4758.0	5	8.958	-0.000	1957568	4914.8		
Total STX-CLPAve (5 peaks):					4893.192	Total CLP2Ave (5 peaks):					4791.694	RPD = 2
Corrected Ave (5 peaks):					4893.192	Corrected Ave (5 peaks):					4791.694	RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col		CLP2 Col		STX-CLP	CLP2		
RT	Shift Response	RT	Shift Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2	RPD	Compound/Flag
RT	Shift	Response	RT	Shift	Response	on col	on col		
3.828	-0.000	626937	4.221	0.000	1016753	65.66	67.54	2.8	Tetrachloro-m-xylene
9.355	0.000	899917	10.467	0.000	1293767	145.37	151.89	4.4	Decachlorobiphenyl

- * Indicates RPD > 40%
- A Indicates Peak Height was used for Column 1 quantitation instead of Area
- B Indicates Peak Height was used for Column 2 quantitation instead of Area
- M Indicates Column 1 peak was manually integrated
- N Indicates Column 2 peak was manually integrated
- ~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

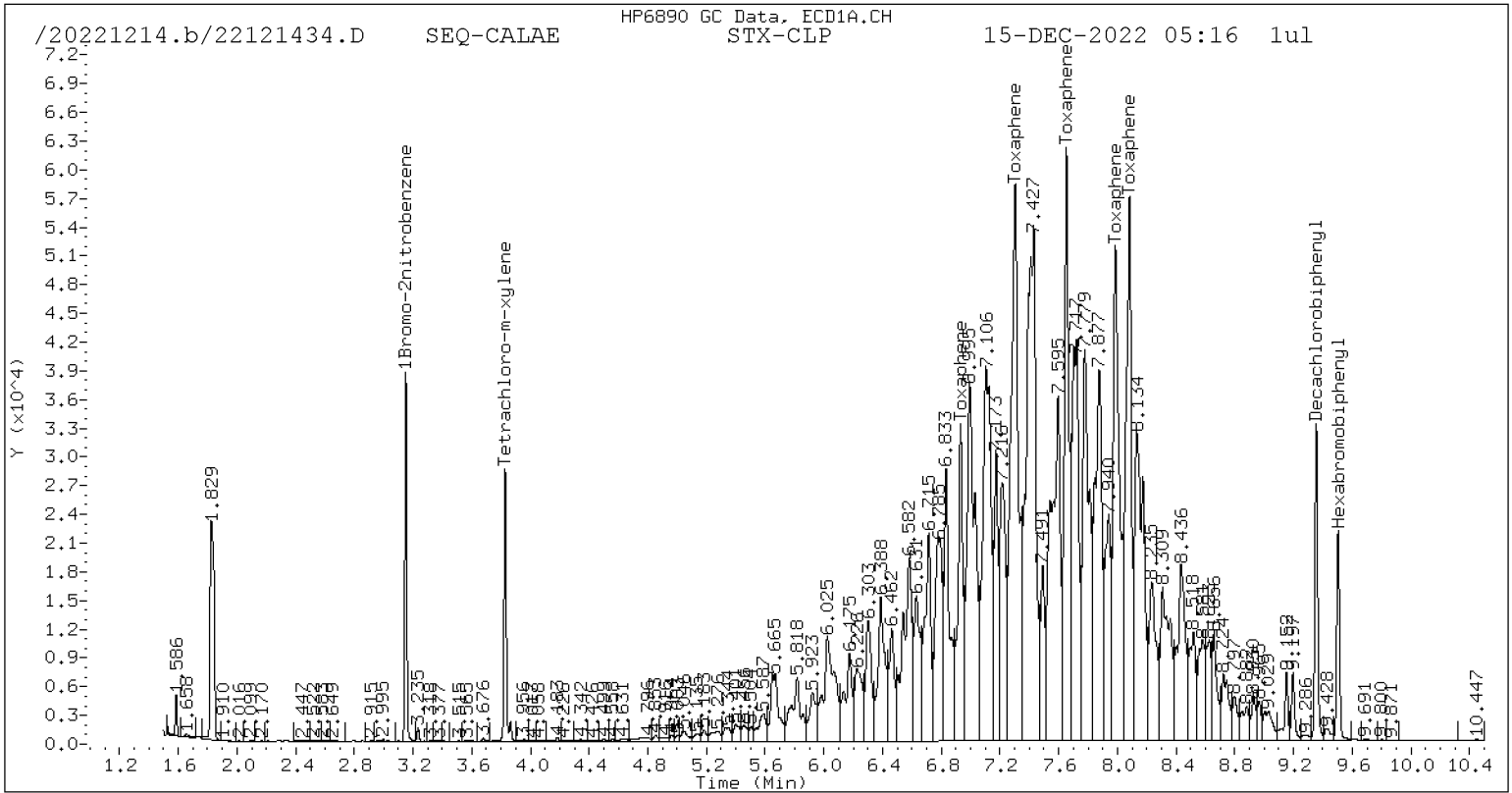
Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	710650	702143	-1.2
Hexabromobiphenyl	641833	610983	-4.8

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1058848	1069521	1.0
Hexabromobiphenyl	797125	770702	-3.3

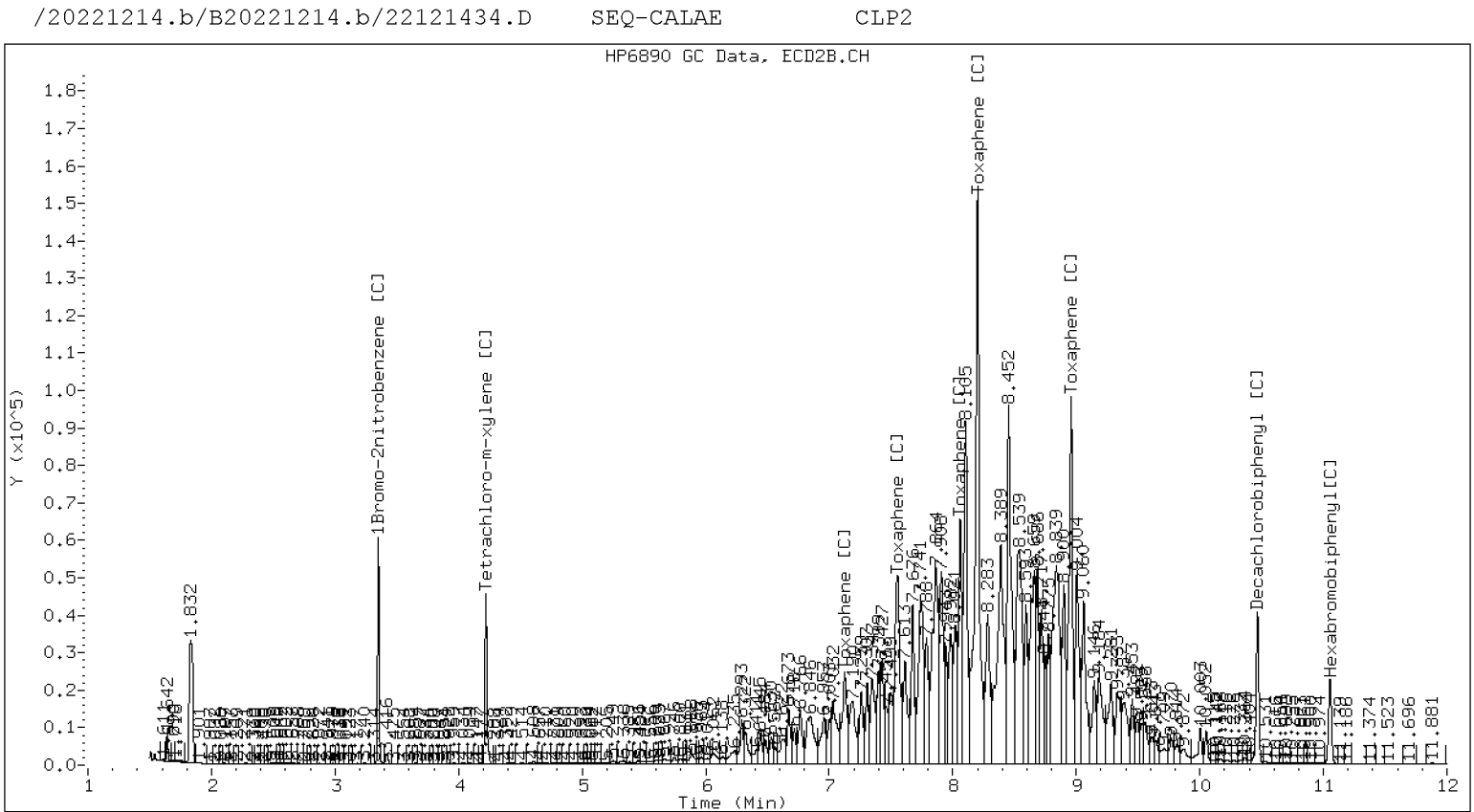
* Standard Areas taken from Initial Cal Level 5
 Initial Calibration Date: 14-DEC-2022
 <- Indicates standard response outside Limits (-50 to +100%)

Cpnd	Peak#	RT	STX-CLP Col			Peak#	RT	CLP2 Col				
			Shift	Height	Amount			Shift	Height	Amount		
Toxaphene	1	6.931	0.000	1553785	8707.6	1	7.126	0.000	1336419	9229.8		
Toxaphene	2	7.303	-0.000	4216546	8428.1	2	7.553	0.000	2900195	8908.4		
Toxaphene	3	7.653	-0.000	2652265	8227.0	3	8.060	0.000	2299294	9278.2		
Toxaphene	4	7.987	0.001	3225164	7480.8	4	8.201	0.000	7496819	9274.6		
Toxaphene	5	8.082	-0.000	2882252	8851.2	5	8.959	0.000	3913616	9870.7		
Total STX-CLPAve (5 peaks):					8338.950	Total CLP2Ave (5 peaks):					9312.318	RPD = 11
Corrected Ave (5 peaks):					8338.950	Corrected Ave (5 peaks):					9312.318	RPD = 11

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col	CLP2 Col	STX-CLP	CLP2	RPD	Compound/Flag				
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

=====

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021303.D
Data file 2: /20230213.b/B20230213.b/23021303.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SIB0237-ICV1
Client ID:
Injection Date: 13-FEB-2023 13:53
Report Date: 02/17/2023 12:16
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.299	0.000	385166	4.815	0.000	591161	22.93	22.31 2.8 alpha-BHC
4.681	0.000	150867	5.290	0.000	221903	23.33	22.03 5.8 beta-BHC
4.863	0.000	331352	5.642	0.000	479832	24.14	21.98 9.3 delta-BHC
4.599	0.000	319554	5.209	0.000	499695	21.94	22.22 1.3 gamma-BHC (Lindane)
5.078	0.000	302682	5.733	0.000	440264	23.36	21.61 7.8 Heptachlor
5.399	0.000	317692	6.135	0.000	489547	21.88	21.05 3.9 Aldrin
6.072	0.000	271636	6.792	0.000	398191	21.57	20.70 4.1 Heptachlor epoxide b
6.515	0.000	286877	7.236	0.000	357255	24.83	21.07 16.4 Endosulfan I
6.775	0.000	532996	7.530	0.000	761256	42.93	40.64 5.5 Dieldrin
6.440	0.000	492409	7.323	0.000	740969	42.72	43.14 1.0 4,4'-DDE
7.025	0.000	364580	7.854	0.000	496172	33.58	35.94 6.8 Endrin
7.264	0.000	455043	8.067	0.000	606712	46.56	42.88 8.2 Endosulfan II
7.087	0.000	441342	7.930	0.000	593025	45.12	44.16 2.1 4,4'-DDD
8.126	0.000	404235	8.666	0.000	565565	43.56	45.52 4.4 Endosulfan sulfate
7.378	0.000	457513	8.247	0.000	577599	46.29	44.57 3.8 4,4'-DDT
7.866	0.000	907770	8.890	0.000	1081159	207.27	188.51 9.5 Methoxychlor
8.400	0.000	470936	9.189	0.000	602288	44.30	44.88 1.3 Endrin ketone
7.692	0.000	360981	8.398	0.000	465305	46.31	46.62 0.7 Endrin aldehyde
6.215	0.000	280851	7.004	0.000	405296	21.96	21.13 3.9 trans-Chlordane
6.361	0.000	277028	7.164	0.000	394538	21.60	21.03 2.7 cis-Chlordane
2.296	0.000	356877	2.473	0.000	509414	20.28	20.24 0.2 Hexachlorobutadiene
4.142	0.000	318003	4.675	0.000	483385	20.39	20.04 1.7 Hexachlorobenzene
3.791	0.000	475425	4.181	0.000	730409	40.07	39.24 2.1 Tetrachloro-m-xylene
9.306	0.000	302673	10.403	0.000	386396	36.07	36.01 0.2 Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	872478	29.8
Hexabromobiphenyl	609723	828072	35.8

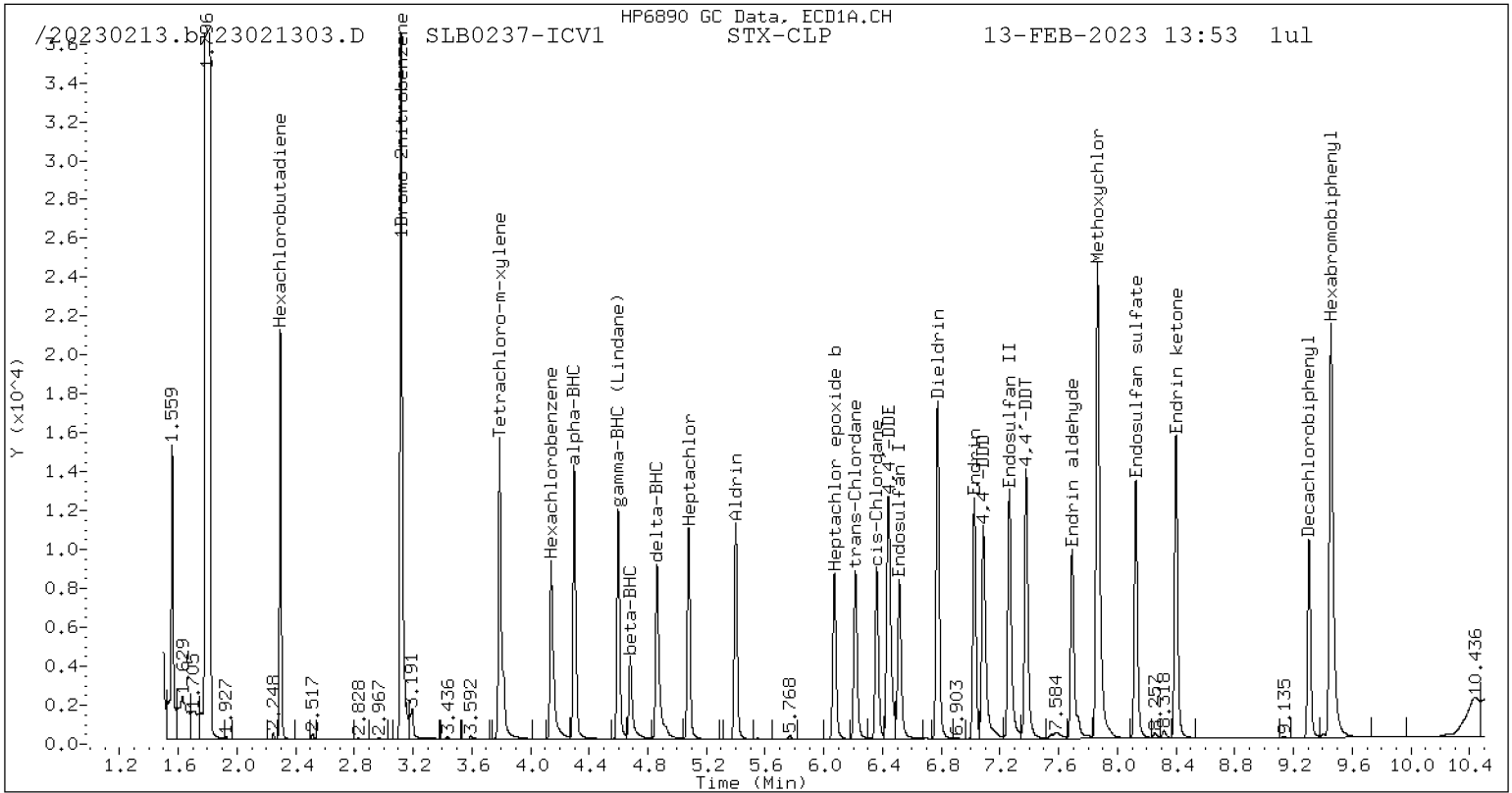
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1322323	31.4
Hexabromobiphenyl	769764	970888	26.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

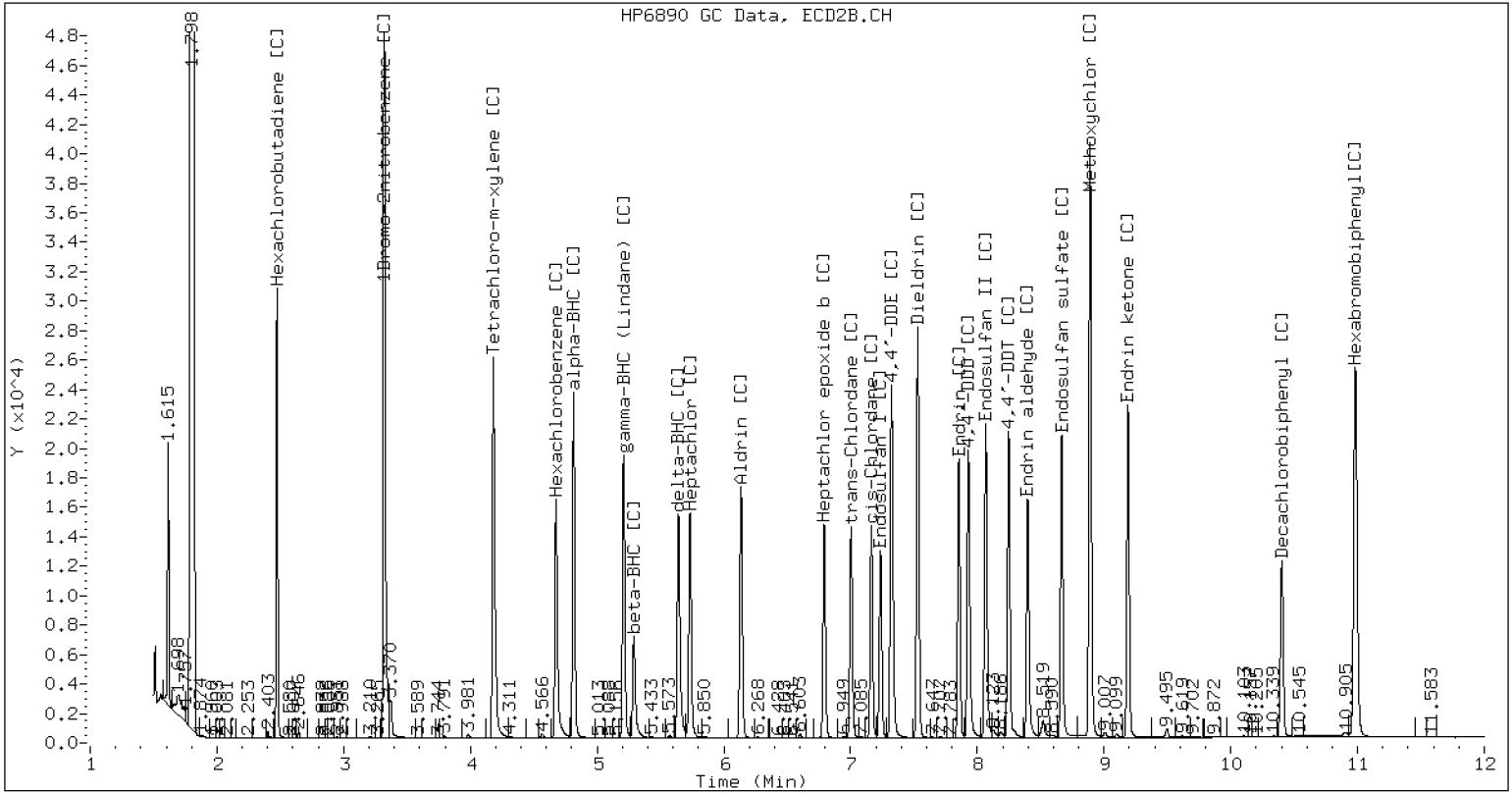
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021303.D SLB0237-ICV1 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>23021318.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLB0237</u>	Injection Date:	<u>02/13/23</u>
Lab Sample ID:	<u>SLB0237-CCV1</u>	Injection Time:	<u>18:23</u>
Sequence Name:	<u>INDAE</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.2	1.4298940	1.4412880		0.8	+/-20
Hexachlorobenzene [2C]	A	20.000	17.7	1.4591090	1.2885810		-11.7	+/-20
Decachlorobiphenyl	A	40.000	35.9	0.8105886	0.7278352		-10.2	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.0	0.8841805	0.7955198		-10.0	+/-20
Tetrachlorometaxylene	A	40.000	40.0	1.0879510	1.0884600		0.05	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.7	1.1261070	1.0046290		-10.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021318.D
Data file 2: /20230213.b/B20230213.b/23021318.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SIB0237-CCV1
Client ID:
Injection Date: 13-FEB-2023 18:23
Report Date: 02/17/2023 12:17
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.301	0.002	194160	4.816	0.001	294989	22.33	19.24	14.9	alpha-BHC
4.683	0.002	77768	5.291	0.001	112550	23.23	19.31	18.4	beta-BHC
4.866	0.003	160725	5.643	0.001	226060	22.62	17.90	23.3	delta-BHC
4.601	0.002	158602	5.210	0.000	247692	21.04	19.04	10.0	gamma-BHC (Lindane)
5.080	0.001	155598	5.733	0.000	236809	23.20	20.09	14.3	Heptachlor
5.400	0.001	161345	6.136	0.000	244794	21.47	18.19	16.5	Aldrin
6.073	0.002	140571	6.792	0.000	201681	21.57	18.13	17.3	Heptachlor epoxide b
6.517	0.003	156569	7.236	-0.000	176685	26.18	18.02	36.9	Endosulfan I
6.777	0.002	278472	7.530	-0.000	386242	43.34	35.65	19.5	Dieldrin
6.443	0.003	244136	7.323	0.000	371027	40.92	37.34	9.2	4,4'-DDE
7.026	0.001	152996	7.855	0.000	207941	27.06	27.83	2.8	Endrin
7.266	0.002	241934	8.067	0.000	308364	47.54	40.26	16.6	Endosulfan II
7.090	0.003	225828	7.931	0.001	299466	44.34	41.20	7.3	4,4'-DDD
8.127	0.001	242834	8.666	0.000	290419	50.25	43.18	15.1	Endosulfan sulfate
7.381	0.002	237235	8.247	0.000	308753	46.10	44.01	4.6	4,4'-DDT
7.868	0.003	465508	8.891	0.001	589006	204.12	189.74	7.3	Methoxychlor
8.401	0.001	253677	9.190	0.001	335185	45.83	46.14	0.7	Endrin ketone
7.694	0.002	211925	8.398	0.000	254221	52.21	47.06	10.4	Endrin aldehyde
6.216	0.001	142529	7.004	0.000	199319	21.53	17.96	18.1	trans-Chlordane
6.362	0.002	138238	7.163	-0.001	192710	20.82	17.75	15.9	cis-Chlordane
2.297	0.001	184101	2.475	0.001	256275	20.21	17.60	13.8	Hexachlorobutadiene
4.145	0.003	162716	4.677	0.001	246415	20.16	17.66	13.2	Hexachlorobenzene
3.793	0.002	245766	4.183	0.001	384230	40.02	35.69	11.4	Tetrachloro-m-xylene
9.308	0.002	156922	10.403	0.001	209026	35.92	35.99	0.2	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	451585	-32.8
Hexabromobiphenyl	609723	431202	-29.3

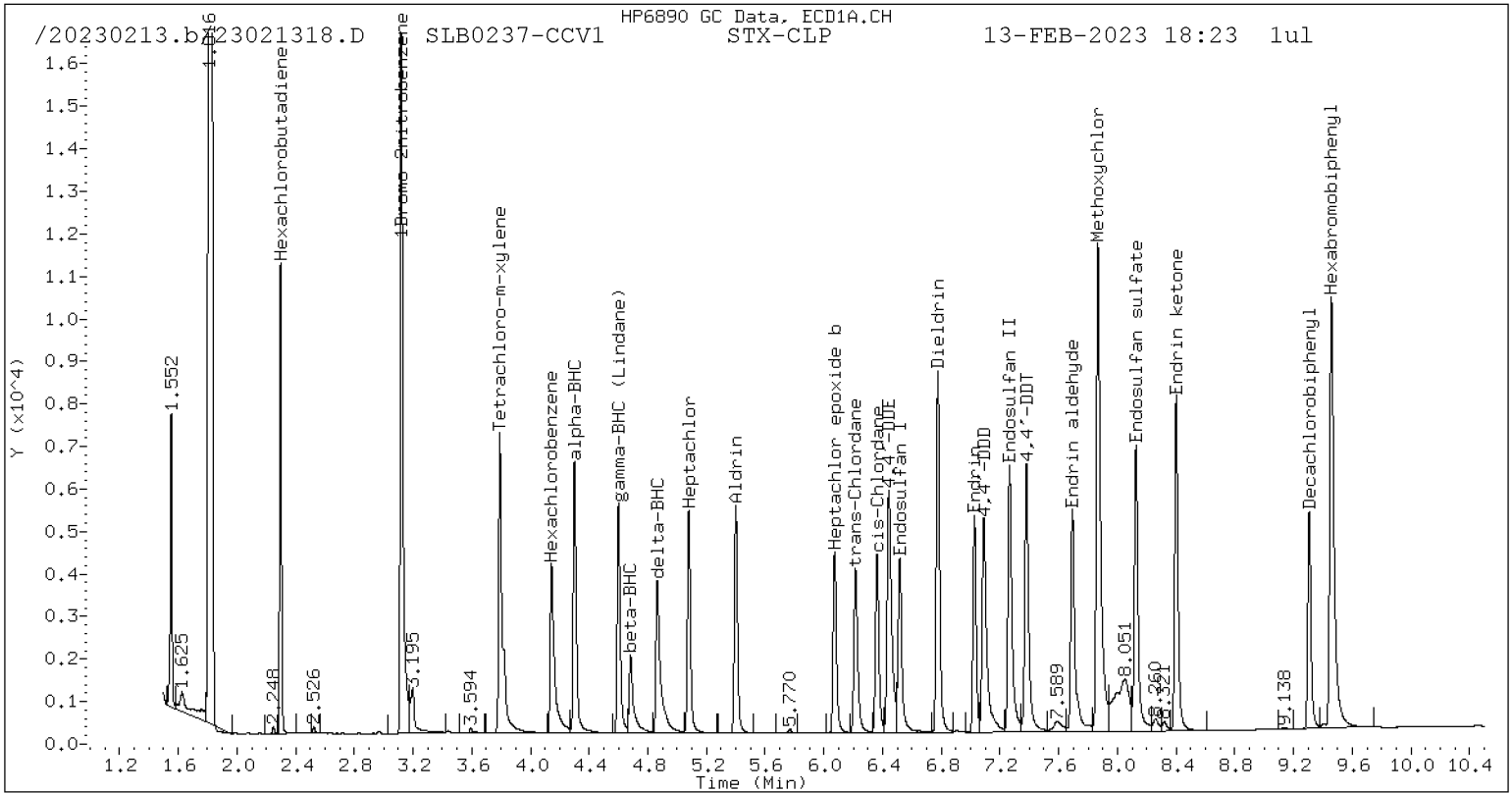
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	764919	-24.0
Hexabromobiphenyl	769764	525508	-31.7

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

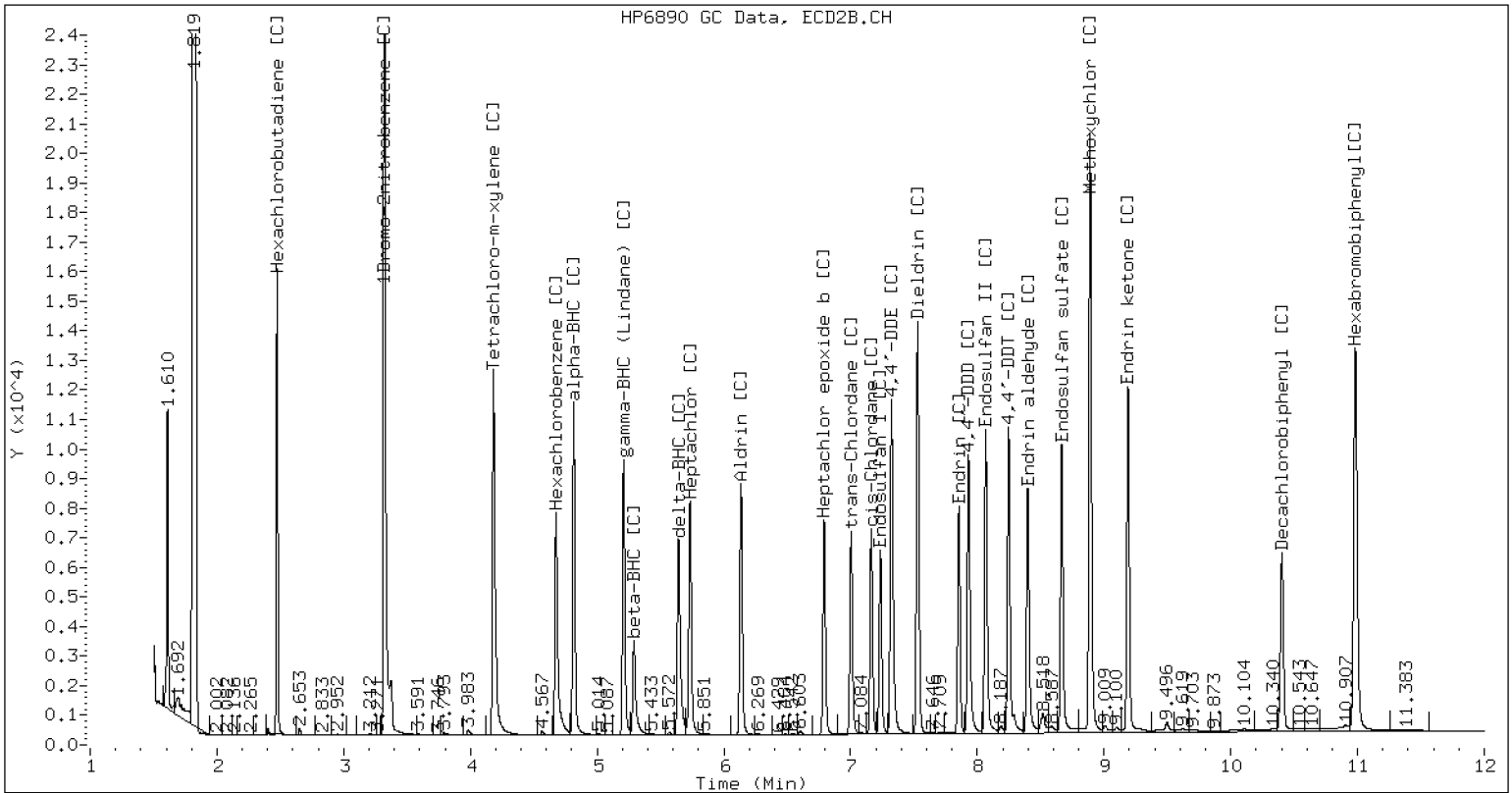
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021318.D SLB0237-CCV1 CLP2



CLP-2 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>23021336.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLB0237</u>	Injection Date:	<u>02/13/23</u>
Lab Sample ID:	<u>SLB0237-CCV2</u>	Injection Time:	<u>23:45</u>
Sequence Name:	<u>INDAE</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.9	1.4298940	1.4234100		-0.5	+/-20
Hexachlorobenzene [2C]	A	20.000	19.0	1.4591090	1.3855120		-5.0	+/-20
Decachlorobiphenyl	A	40.000	35.2	0.8105886	0.7132044		-12.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	35.2	0.8841805	0.7791637		-11.9	+/-20
Tetrachlorometaxylene	A	40.000	39.1	1.0879510	1.0644710		-2.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.6	1.1261070	1.0576030		-6.1	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021336.D
 Data file 2: /20230213.b/B20230213.b/23021336.D
 Method: \20230213.b\PEST.m
 Compound Sublist: INDA.sub
 Instrument, Inj. Vol.: ecd6.i, 1ul
 Operator: AA/JR

ARI ID: SIB0237-CCV2
 Client ID:
 Injection Date: 13-FEB-2023 23:45
 Report Date: 02/17/2023 12:17
 Units: ng/mL
 Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Response	RT	CLP2 Col Shift Response	CLP2 Col Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
4.299	0.000	361457	4.814	-0.000	561582	21.94	21.02	4.3	alpha-BHC
4.681	0.000	142563	5.290	-0.001	207695	22.47	20.45	9.4	beta-BHC
4.864	0.000	317618	5.641	-0.001	452056	23.59	20.54	13.8	delta-BHC
4.599	0.001	306353	5.208	-0.001	475058	21.44	20.96	2.3	gamma-BHC (Lindane)
5.079	0.001	289449	5.732	-0.001	428063	22.77	20.84	8.8	Heptachlor
5.400	0.001	301007	6.134	-0.001	444319	21.13	18.95	10.9	Aldrin
6.072	0.001	255233	6.791	-0.000	350955	20.66	18.10	13.2	Heptachlor epoxide b
6.516	0.001	255207	7.235	-0.001	294126	22.52	17.21	26.7	Endosulfan I
6.776	0.000	494995	7.529	-0.001	634223	40.65	33.59	19.0	Dieldrin
6.440	-0.000	463564	7.322	-0.001	615164	41.00	35.53	14.3	4,4'-DDE
7.026	0.001	261427	7.854	-0.001	329027	27.98	27.74	0.9	Endrin
7.264	0.000	418251	8.066	-0.001	496023	49.73	40.79	19.7	Endosulfan II
7.087	-0.000	399778	7.929	-0.000	487429	47.50	42.24	11.7	4,4'-DDD
8.126	0.001	410284	8.665	-0.001	457142	51.38	42.81	18.2	Endosulfan sulfate
7.379	0.000	400918	8.247	-0.001	495036	47.14	44.45	5.9	4,4'-DDT
7.866	0.000	813487	8.890	-0.000	1003472	215.84	203.61	5.8	Methoxychlor
8.400	0.000	437877	9.189	-0.000	534700	47.87	46.36	3.2	Endrin ketone
7.693	0.001	348779	8.397	-0.001	403975	51.99	47.10	9.9	Endrin aldehyde
6.215	-0.000	260314	7.003	-0.000	340843	20.75	17.63	16.3	trans-Chlordane
6.361	0.000	253946	7.162	-0.002	323072	20.18	17.08	16.7	cis-Chlordane
2.296	0.000	346462	2.473	-0.000	491295	20.07	19.37	3.6	Hexachlorobutadiene
4.143	0.000	304557	4.675	0.000	461702	19.91	18.99	4.7	Hexachlorobenzene
3.791	0.000	455515	4.181	-0.000	704862	39.14	37.57	4.1	Tetrachloro-m-xylene
9.307	0.001	254114	10.402	-0.000	325034	35.19	35.25	0.2	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	855852	27.3
Hexabromobiphenyl	609723	712598	16.9

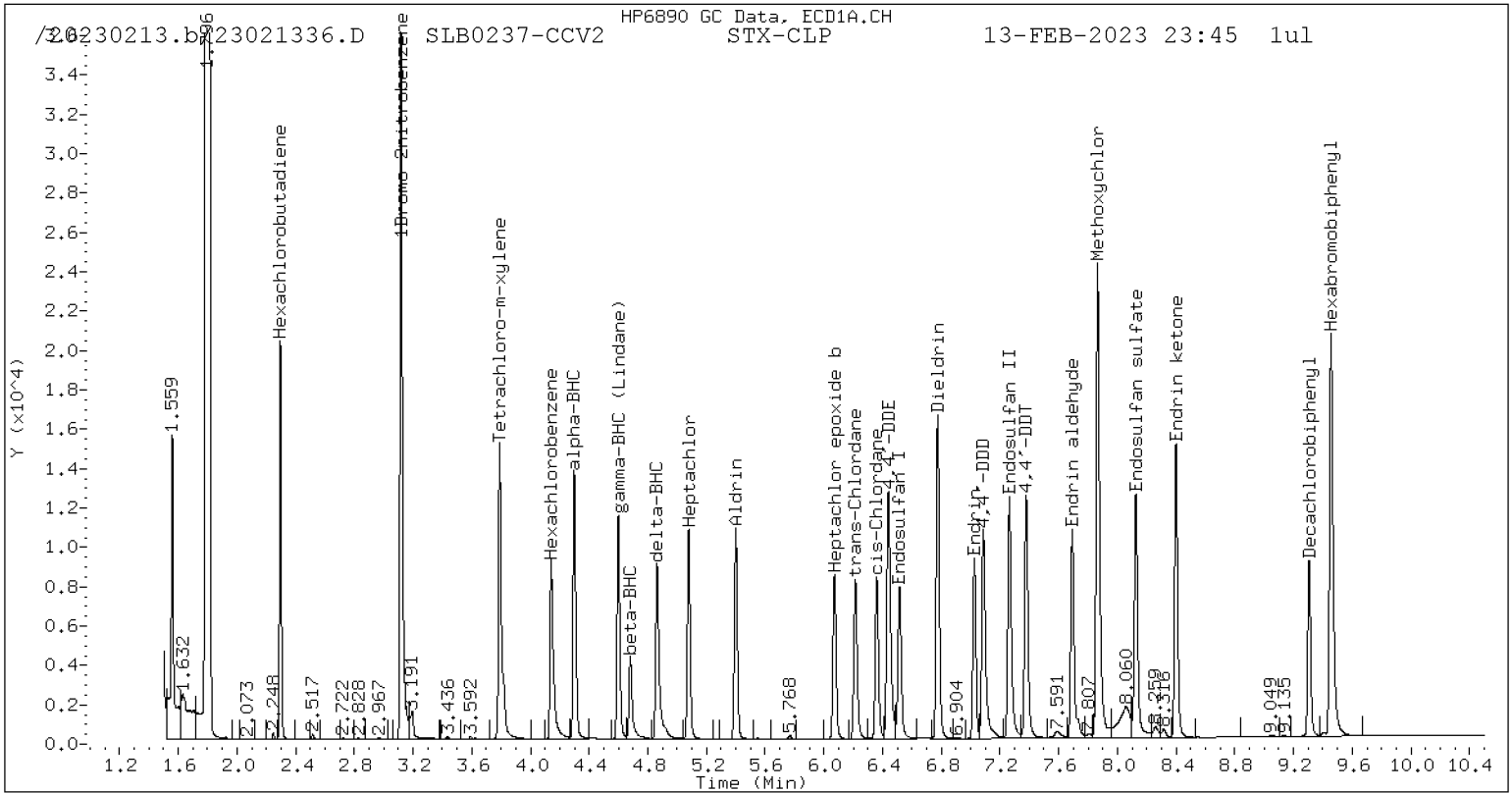
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	1332943	32.4
Hexabromobiphenyl	769764	834315	8.4

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

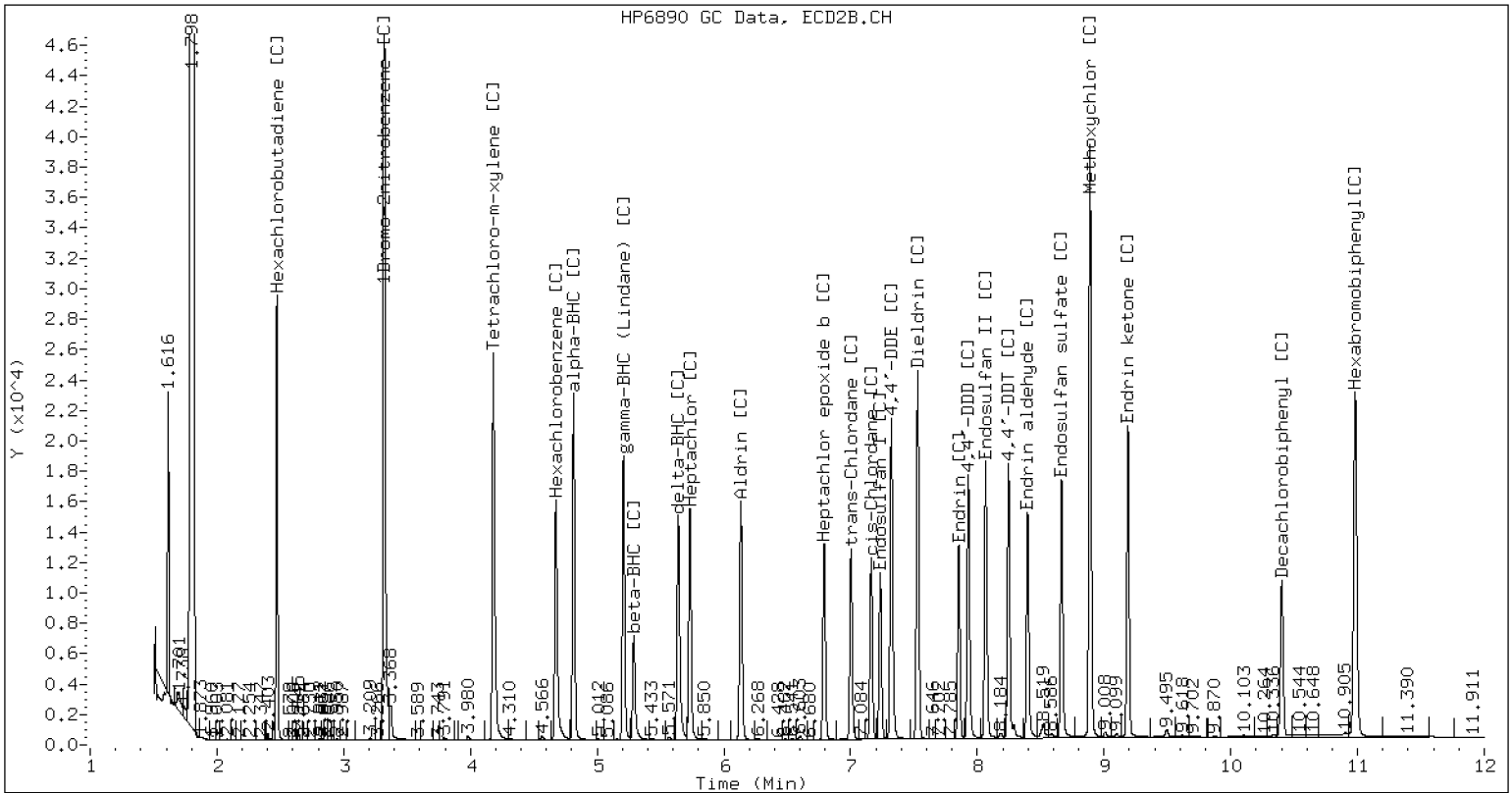
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

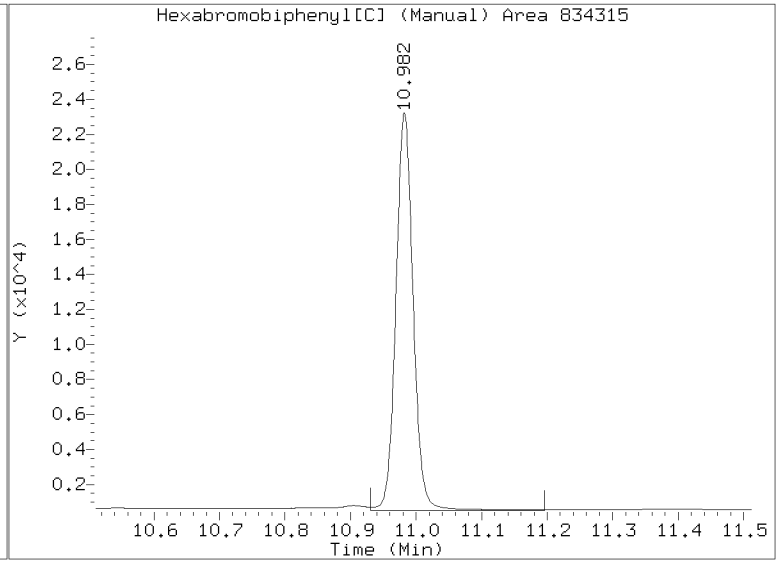
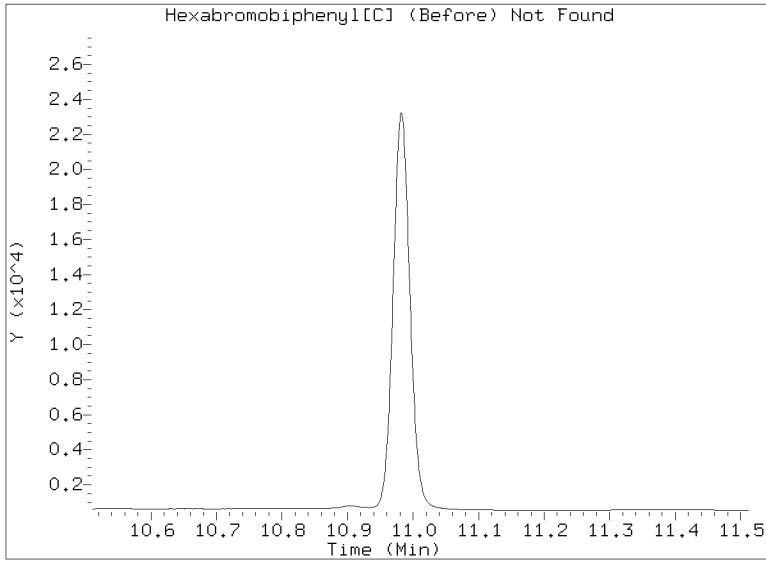
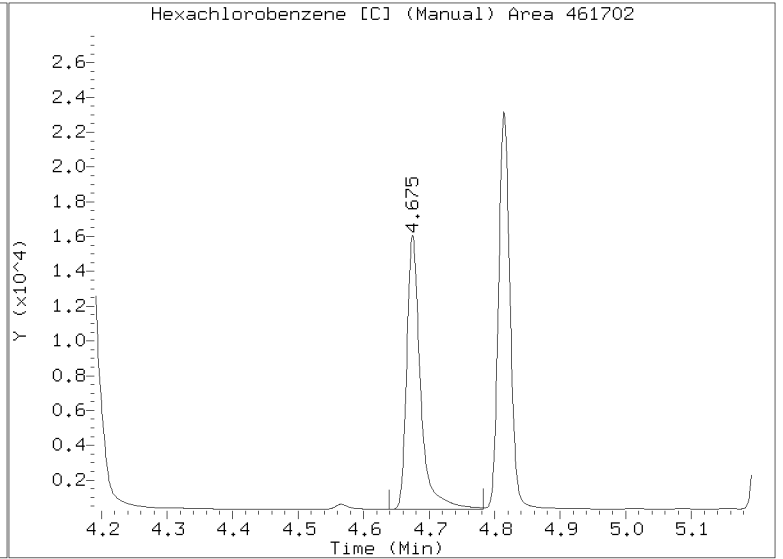
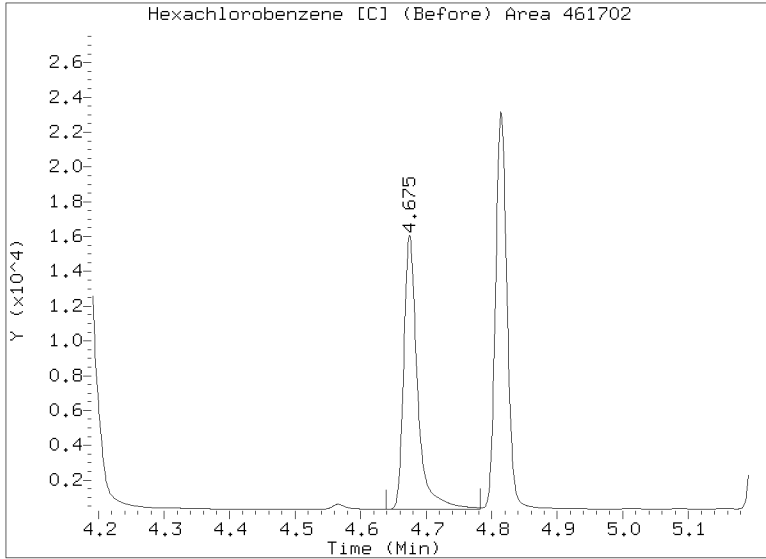
/20230213.b/B20230213.b/23021336.D SLB0237-CCV2 CLP2



CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230213.b/B20230213.b/23021336.D
Injection Date: 13-FEB-2023 23:45
Lab ID:SEQ-CCV2 Client ID:





CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD6</u>	Calibration:	<u>FL00041</u>
Lab File ID:	<u>23021345.D</u>	Calibration Date:	<u>12/14/2022</u>
Sequence:	<u>SLB0237</u>	Injection Date:	<u>02/14/23</u>
Lab Sample ID:	<u>SLB0237-CCV3</u>	Injection Time:	<u>02:26</u>
Sequence Name:	<u>INDAE</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	20.2	1.4298940	1.4436410		1.0	+/-20
Hexachlorobenzene [2C]	A	20.000	19.1	1.4591090	1.3914940		-4.6	+/-20
Decachlorobiphenyl	A	40.000	35.8	0.8105886	0.7261920		-10.4	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.6	0.8841805	0.8094974		-8.4	+/-20
Tetrachlorometaxylene	A	40.000	40.1	1.0879510	1.0896450		0.2	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.2	1.1261070	1.0754550		-4.5	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230213.b/23021345.D
Data file 2: /20230213.b/B20230213.b/23021345.D
Method: \20230213.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA/JR

ARI ID: SIB0237-CCV3
Client ID:
Injection Date: 14-FEB-2023 02:26
Report Date: 02/17/2023 12:18
Units: ng/mL
Dilution Factor: 1.000

RT	STX-CLP Col Shift Response	CLP2 Col Shift Response	RT	CLP2 Col Shift Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag	
4.301	0.002	188179	4.816	0.001	290256	21.84	20.61	5.8	alpha-BHC
4.683	0.002	74818	5.291	0.001	108840	22.55	20.33	10.4	beta-BHC
4.866	0.003	158990	5.642	-0.000	225657	22.57	19.45	14.9	delta-BHC
4.601	0.002	156260	5.210	0.000	243980	20.91	20.41	2.4	gamma-BHC (Lindane)
5.080	0.002	151735	5.733	-0.000	224276	22.82	20.71	9.7	Heptachlor
5.401	0.002	157825	6.135	-0.000	231176	21.18	18.70	12.5	Aldrin
6.073	0.002	135112	6.792	-0.000	183074	20.92	17.91	15.5	Heptachlor epoxide b
6.517	0.002	139246	7.236	-0.000	153178	23.49	17.00	32.0	Endosulfan I
6.777	0.002	262196	7.529	-0.001	332610	41.17	33.41	20.8	Dieldrin
6.442	0.002	238516	7.323	-0.000	320500	40.34	35.11	13.9	4,4'-DDE
7.027	0.002	131361	7.854	-0.000	159476	25.04	23.91	4.6	Endrin
7.265	0.001	220942	8.066	-0.000	263585	46.79	38.55	19.3	Endosulfan II
7.089	0.002	210480	7.929	-0.000	254875	44.54	39.29	12.5	4,4'-DDD
8.127	0.001	213399	8.665	-0.000	252070	47.60	41.99	12.5	Endosulfan sulfate
7.380	0.001	208384	8.247	-0.001	235096	43.64	37.54	15.0	4,4'-DDT
7.867	0.001	444931	8.889	-0.001	533735	210.27	192.61	8.8	Methoxychlor
8.401	0.001	235199	9.189	-0.000	291229	45.79	44.91	1.9	Endrin ketone
7.693	0.001	189288	8.397	-0.001	222039	50.26	46.04	8.8	Endrin aldehyde
6.217	0.002	135624	7.004	0.000	175272	20.67	17.19	18.4	trans-Chlordane
6.362	0.001	133329	7.163	-0.001	167755	20.26	16.82	18.6	cis-Chlordane
2.297	0.001	181738	2.475	0.002	267244	20.13	19.98	0.7	Hexachlorobutadiene
4.145	0.003	161551	4.676	0.001	244490	20.19	19.07	5.7	Hexachlorobenzene
3.793	0.002	243874	4.182	0.001	377922	40.06	38.20	4.8	Tetrachloro-m-xylene
9.307	0.001	145266	10.402	-0.001	189866	35.84	36.62	2.2	Decachlorobiphenyl

* Indicates RPD > 40%

A Indicates Peak Height was used for Column 1 quantitation instead of Area

B Indicates Peak Height was used for Column 2 quantitation instead of Area

M Indicates Column 1 peak was manually integrated

N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	672426	447621	-33.4
Hexabromobiphenyl	609723	400076	-34.4

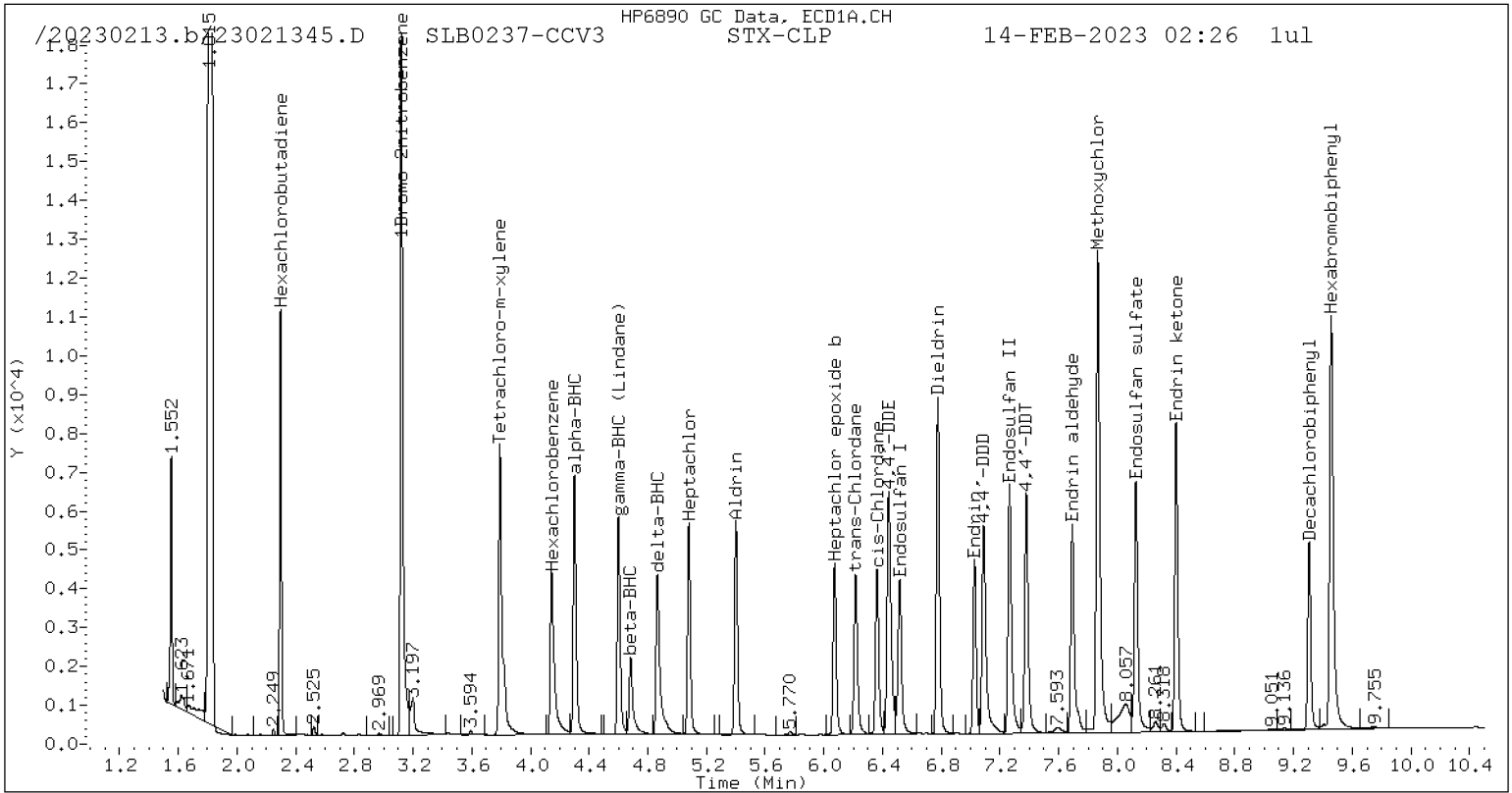
Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	1006482	702813	-30.2
Hexabromobiphenyl	769764	469096	-39.1

* Standard Areas taken from Initial Cal Level 5

Initial Calibration Date: 14-DEC-2022

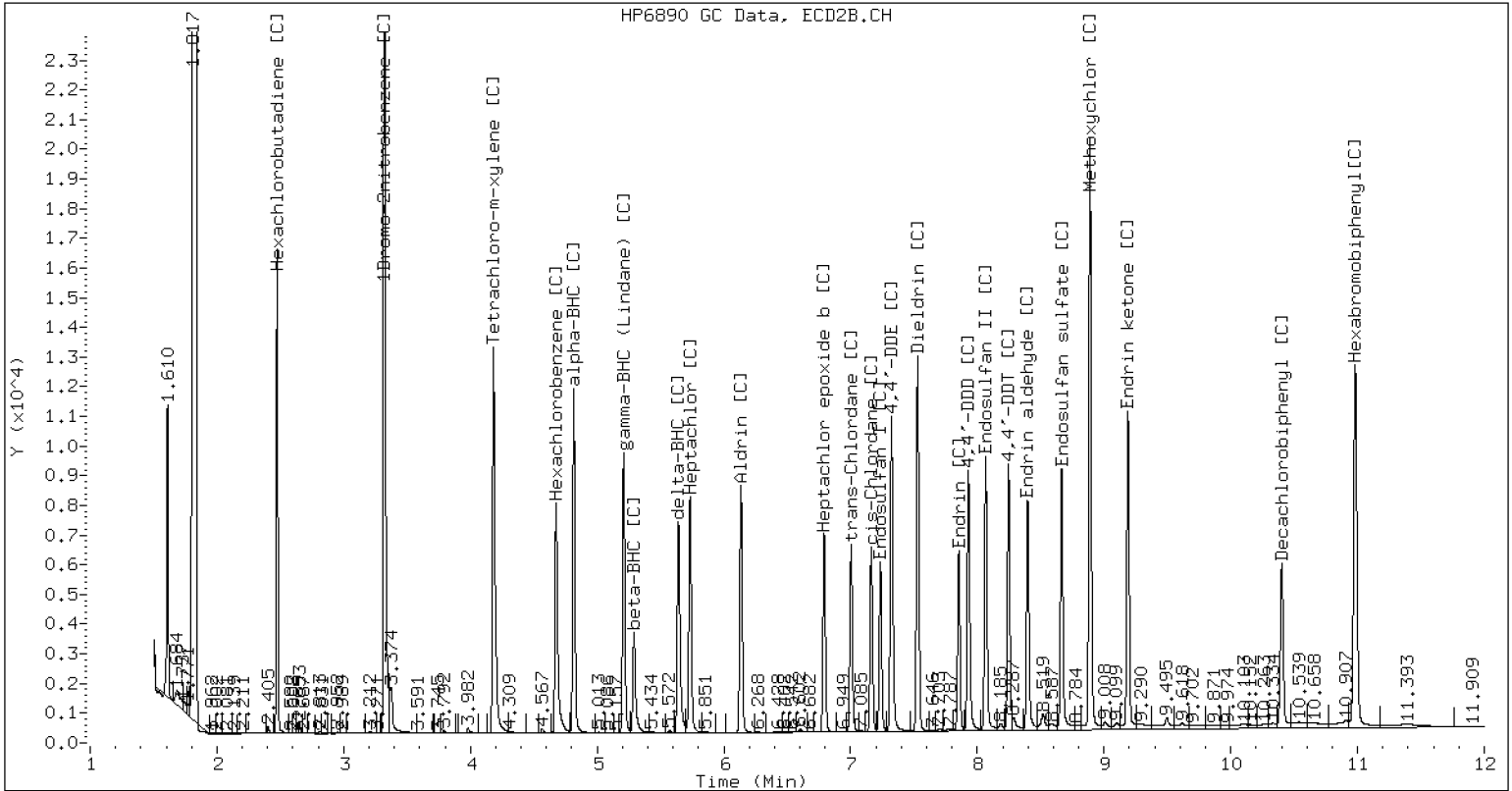
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230213.b/B20230213.b/23021345.D SLB0237-CCV3 CLP2



CLP-2 Manual Integration: NO



PERFORMANCE EVALUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC

Laboratory ID: SKL0233-PEM1

File ID: 22121404.D

Client: Anchor QEA, LLC

Matrix: Water

Instrument: ECD6

Project: AOC5 MR Phase 1

Analyzed: 12/14/2022

Sequence: SKL0233

SDG: 23A0326

Calibration: FL00041

Column: 1

PEM COMPOUND	RT	Response
4,4'-DDE	6.49	6258
Endrin	7.08	745471
4,4'-DDD	7.14	15566
Endrin Aldehyde	7.75	21328
4,4'-DDT	7.43	629664
Endrin Ketone	8.45	19276

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 5.2



PERFORMANCE EVALUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC

Laboratory ID: SKL0233-PEM1

File ID: 22121404.D

Client: Anchor QEA, LLC

Matrix: Water

Instrument: ECD6

Project: AOC5 MR Phase 1

Analyzed: 12/14/2022

Sequence: SKL0233

SDG: 23A0326

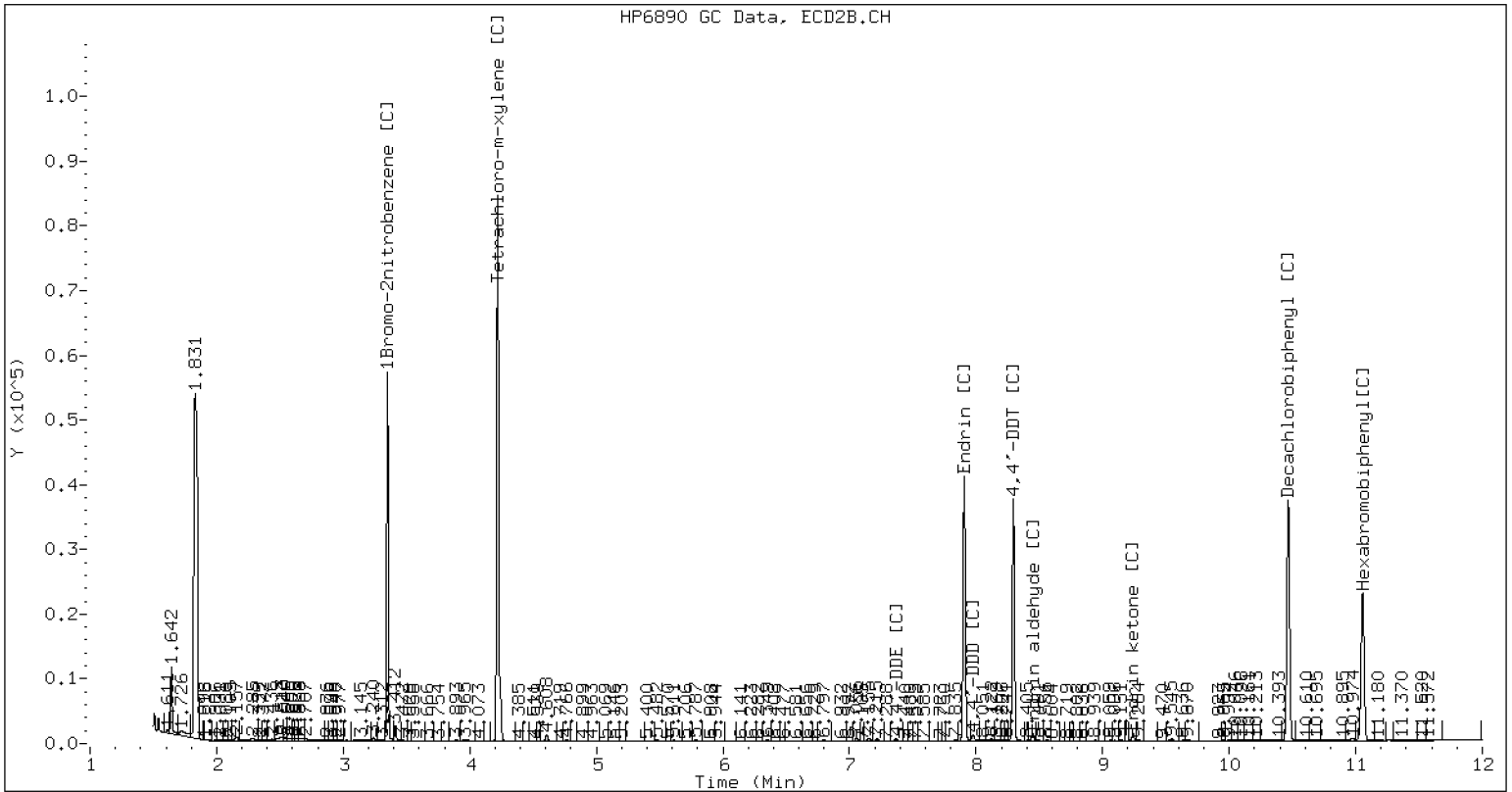
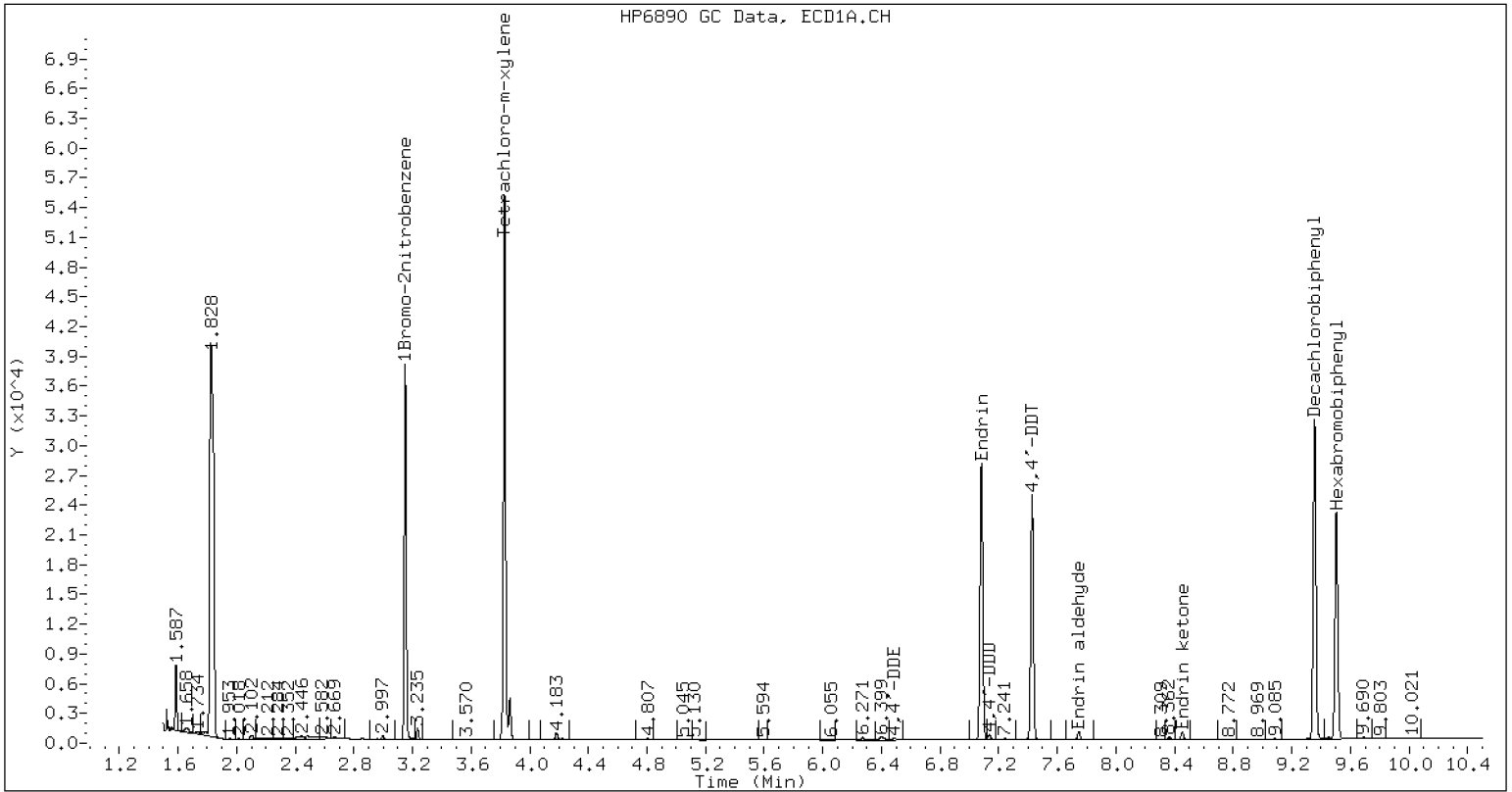
Calibration: FL00041

Column: 2

PEM COMPOUND	RT	Response
4,4'-DDE	7.37	11906
Endrin	7.91	1029194
4,4'-DDD	7.98	32697
Endrin Aldehyde	8.45	31426
4,4'-DDT	8.30	890195
Endrin Ketone	9.24	28268

4,4'-DDT %Breakdown (1): 4.8

Endrin %Breakdown (1): 5.5



7E
8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D
Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
 $((6258+15566) * 100)/(6258+15566+629664)$

Endrin Percent Breakdown = 5.2 %
 $((21328+19276) * 100)/(21328+19276+745471)$

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312



Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SKL0233

Instrument: ECD6

Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SKL0233-PEM1	22121404.D	22121404.D	NA	12/14/22 20:20
Cal Standard	SKL0233-CAL1	22121405.D	22121405.D	NA	12/14/22 20:38
Cal Standard	SKL0233-CAL2	22121406.D	22121406.D	NA	12/14/22 20:56
Cal Standard	SKL0233-CAL3	22121407.D	22121407.D	NA	12/14/22 21:14
Cal Standard	SKL0233-CAL4	22121408.D	22121408.D	NA	12/14/22 21:31
Cal Standard	SKL0233-CAL5	22121409.D	22121409.D	NA	12/14/22 21:49
Cal Standard	SKL0233-CAL6	22121410.D	22121410.D	NA	12/14/22 22:07
Cal Standard	SKL0233-CAL7	22121411.D	22121411.D	NA	12/14/22 22:25
Cal Standard	SKL0233-CAL8	22121412.D	22121412.D	NA	12/14/22 22:43
Cal Standard	SKL0233-CAL9	22121413.D	22121413.D	NA	12/14/22 23:01
Cal Standard	SKL0233-CALA	22121414.D	22121414.D	NA	12/14/22 23:19
Cal Standard	SKL0233-CALB	22121415.D	22121415.D	NA	12/14/22 23:36
Cal Standard	SKL0233-CALC	22121416.D	22121416.D	NA	12/14/22 23:54
Cal Standard	SKL0233-CALD	22121417.D	22121417.D	NA	12/15/22 00:12
Cal Standard	SKL0233-CALE	22121418.D	22121418.D	NA	12/15/22 00:30



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		



ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6
Calibration ID: FL00041

Element Column ID:

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022	19:27	22121401.D	1	RINSE	
2	14-DEC-2022	19:44	22121402.D	1	RINSE	
3	14-DEC-2022	20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022	20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022	20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022	20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022	21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022	21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022	21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022	22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022	22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022	22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022	23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022	23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022	23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022	23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022	00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022	00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022	00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022	01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022	01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022	01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022	01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022	02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022	02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022	02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022	03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022	03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022	03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022	04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022	04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022	04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022	04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022	05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022	05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022	05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022	06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022	06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022	06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022	07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022	07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022	07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022	07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022	08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022	08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022	08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022	09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022	09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022	09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022	10:02	22121450.D	1	BKK0142-MSD1	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A	1		NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1		NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1		NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1		NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1		NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1		NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1		NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1		NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1		NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1		NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1		NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1		NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1		NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1		NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1	1		NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1		NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1		NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01	1		Heptachlor epoxide b,
1131	22121455.D	22K0429-02	1		Heptachlor epoxide b,
1149	22121456.D	22K0429-03	1		Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3	1		NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1	1		NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2	1		NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3	1		NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4	1		NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1	1		NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1	1		NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1	1		NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01	1		NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01	1		NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01	1		NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1	1		NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1	1		NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2	1		NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1	1		NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1	1		NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1	1		NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2	1		NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3	1		NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4	1		NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5	1		NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6	1		NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7	1		NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8	1		NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9	1		NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA	1		NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB	1		NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC	1		NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD	1		NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE	1		NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1	1		NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A	1	NO	MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A	1	NO	MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A	1	NO	MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A	1	NO	MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A	1	NO	MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A	1	NO	MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A	1	NO	MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A	1	NO	MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A	1	NO	MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA	1	NO	MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB	1	NO	MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC	1	NO	MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD	1	NO	MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE	1	NO	MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2	1	NO	MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1	1	NO	MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2	1	NO	MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3	1	NO	MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4	1		NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1	1		NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1	1		NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2	1		NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3	1		NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1	1		NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1	1		NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1	1		NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2	1		NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1	1		NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1	1		NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1	1		NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01	1		NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04	1		NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01	1		trans-Chlordane [C],
1113	22121454.D	22K0429-01	1		NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02	1		Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03	1		Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D SEQ-PEM3		1		NO MANUAL INTEGRATION
1225	22121458.D SEQ-CCV1		1		NO MANUAL INTEGRATION
1243	22121459.D SEQ-CCV2		1		NO MANUAL INTEGRATION
1301	22121460.D SEQ-CCV3		1		NO MANUAL INTEGRATION
1319	22121461.D SEQ-CCV4		1		NO MANUAL INTEGRATION
1336	22121462.D BKK0380-BLK1		1		NO MANUAL INTEGRATION
1354	22121463.D BKK0380-BS1		1		NO MANUAL INTEGRATION
1412	22121464.D BKK0380-BSD1		1		NO MANUAL INTEGRATION
1430	22121465.D 22K0157-01		1		NO MANUAL INTEGRATION
1448	22121466.D 22K0230-01		1		NO MANUAL INTEGRATION
1506	22121467.D 22K0231-01		1		NO MANUAL INTEGRATION
1524	22121468.D BKK0382-BLK1		1		NO MANUAL INTEGRATION
1542	22121469.D BKK0382-BS1		1		NO MANUAL INTEGRATION
1600	22121470.D BKK0382-BS2		1		NO MANUAL INTEGRATION
1618	22121471.D BKK0382-BSD1		1		NO MANUAL INTEGRATION
1635	22121472.D 22K0075-01		1		NO MANUAL INTEGRATION
1653	22121473.D SEQ-PEM4		1		NO MANUAL INTEGRATION
1711	22121474.D SEQ-CCV5		1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1 10		1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains,	17-Dec-2022	10:57
22121402.D	Data Locked	jrains,	17-Dec-2022	10:57
22121403.D	Data Locked	jrains,	17-Dec-2022	10:57
22121404.D	Data Locked	jrains,	17-Dec-2022	10:57
22121405.D	Data Locked	jrains,	17-Dec-2022	10:57
22121406.D	Data Locked	jrains,	17-Dec-2022	10:57
22121407.D	Data Locked	jrains,	17-Dec-2022	10:57
22121408.D	Data Locked	jrains,	17-Dec-2022	10:57
22121409.D	Data Locked	jrains,	17-Dec-2022	10:57
22121410.D	Data Locked	jrains,	17-Dec-2022	10:57
22121411.D	Data Locked	jrains,	17-Dec-2022	10:57
22121412.D	Data Locked	jrains,	17-Dec-2022	10:57
22121413.D	Data Locked	jrains,	17-Dec-2022	10:57
22121414.D	Data Locked	jrains,	17-Dec-2022	10:57
22121415.D	Data Locked	jrains,	17-Dec-2022	10:57
22121416.D	Data Locked	jrains,	17-Dec-2022	10:57
22121417.D	Data Locked	jrains,	17-Dec-2022	10:57
22121418.D	Data Locked	jrains,	17-Dec-2022	10:57
22121419.D	Data Locked	jrains,	17-Dec-2022	10:57
22121420.D	Data Locked	jrains,	17-Dec-2022	10:57
22121421.D	Data Locked	jrains,	17-Dec-2022	10:57
22121422.D	Data Locked	jrains,	17-Dec-2022	10:57
22121423.D	Data Locked	jrains,	17-Dec-2022	10:57
22121424.D	Data Locked	jrains,	17-Dec-2022	10:57
22121425.D	Data Locked	jrains,	17-Dec-2022	10:57
22121426.D	Data Locked	jrains,	17-Dec-2022	10:57
22121427.D	Data Locked	jrains,	17-Dec-2022	10:57
22121428.D	Data Locked	jrains,	17-Dec-2022	10:57
22121429.D	Data Locked	jrains,	17-Dec-2022	10:57
22121430.D	Data Locked	jrains,	17-Dec-2022	10:57
22121431.D	Data Locked	jrains,	17-Dec-2022	10:57
22121432.D	Data Locked	jrains,	17-Dec-2022	10:57
22121433.D	Data Locked	jrains,	17-Dec-2022	10:57
22121434.D	Data Locked	jrains,	17-Dec-2022	10:57



Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0237

Instrument: ECD6

Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0237-ICV1	23021303.D	23021303.D	NA	02/13/23 13:53
Calibration Check	SLB0237-CCV1	23021318.D	23021318.D	NA	02/13/23 18:23
Blank	BLA0684-BLK1	23021325.D	23021325.D	Solid	02/13/23 20:28
LCS	BLA0684-BS1	23021326.D	23021326.D	Solid	02/13/23 20:46
LCS Dup	BLA0684-BSD1	23021327.D	23021327.D	Solid	02/13/23 21:04
Calibration Check	SLB0237-CCV2	23021336.D	23021336.D	NA	02/13/23 23:45
LDW23-SC1028	23A0326-01	23021337.D	23021337.D	Solid	02/14/23 00:03
LDW23-SC1032	23A0326-02	23021338.D	23021338.D	Solid	02/14/23 00:21
LDW23-SC1170A	23A0326-04	23021339.D	23021339.D	Solid	02/14/23 00:39
LDW23-SC1169C	23A0326-05	23021340.D	23021340.D	Solid	02/14/23 00:57
LDW23-SC1161	23A0326-10	23021341.D	23021341.D	Solid	02/14/23 01:15
LDW23-SC1155	23A0326-11	23021342.D	23021342.D	Solid	02/14/23 01:32
LDW23-SC1162B	23A0326-12	23021343.D	23021343.D	Solid	02/14/23 01:50
Calibration Check	SLB0237-CCV3	23021345.D	23021345.D	NA	02/14/23 02:26



ANALYSIS SEQUENCE

SLB0237

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/17/2023 12:00:09PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0237-PEM1	QC		1		K007286	L000844		
SLB0237-ICV1	QC		2		L000845	L000844		
BLA0622-BLK1	QC		3			L000844		
BLA0622-BS1	QC		4			L000844		
BLA0622-BSD1	QC		5			L000844		
BLA0622-MS1	QC		6			L000844		
BLA0622-MSD1	QC		7			L000844		
23A0206-01	8081B Pest (PSDDA)	B 01	8			L000844	Anchor QEA, LLC	
23A0206-02	8081B Pest (PSDDA)	B 01	9			L000844	Anchor QEA, LLC	
23A0206-03	8081B Pest (PSDDA)	B 01	10			L000844	Anchor QEA, LLC	
23A0206-04	8081B Pest (PSDDA)	B 01	11			L000844	Anchor QEA, LLC	
23A0206-05	8081B Pest (PSDDA)	B 01	12			L000844	Anchor QEA, LLC	
23A0206-06	8081B Pest (PSDDA)	B 01	13			L000844	Anchor QEA, LLC	
23A0206-07	8081B Pest (PSDDA)	B 01	14			L000844	Anchor QEA, LLC	
23A0206-08	8081B Pest (PSDDA)	B 01	15			L000844	Anchor QEA, LLC	
23A0206-09	8081B Pest (PSDDA)	B 01	16			L000844	Anchor QEA, LLC	
23A0206-10	8081B Pest (PSDDA)	B 01	17			L000844	Anchor QEA, LLC	
SLB0237-PEM2	QC		18		K007286	L000844		
SLB0237-CCV1	QC		19		L000845	L000844		
23A0206-11	8081B Pest (PSDDA)	B 01	20			L000844	Anchor QEA, LLC	
23A0206-12	8081B Pest (PSDDA)	B 01	21			L000844	Anchor QEA, LLC	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____



ANALYSIS SEQUENCE

SLB0237

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/17/2023 12:00:09PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0206-13	8081B Pest (PSDDA)	B 01	22			L000844	Anchor QEA, LLC	
23A0206-14	8081B Pest (PSDDA)	B 01	23			L000844	Anchor QEA, LLC	
BLA0684-BLK1	QC		24			L000844		
BLA0684-BS1	QC		25			L000844		
BLA0684-BSD1	QC		26			L000844		
BLA0684-MS1	QC		27			L000844		
BLA0684-MSD1	QC		28			L000844		
23A0313-08	8081B Pest (PSDDA)	A 01	29			L000844	Anchor QEA, LLC	
23A0313-09	8081B Pest (PSDDA)	A 01	30			L000844	Anchor QEA, LLC	
23A0313-10	8081B Pest (PSDDA)	A 01	31			L000844	Anchor QEA, LLC	
23A0313-11	8081B Pest (PSDDA)	A 01	32			L000844	Anchor QEA, LLC	
23A0313-13	8081B Pest (PSDDA)	A 01	33			L000844	Anchor QEA, LLC	
23A0326-01	8081B Pest (PSDDA)	A 01	34			L000844	Anchor QEA, LLC	
23A0326-02	8081B Pest (PSDDA)	A 01	35			L000844	Anchor QEA, LLC	
23A0326-04	8081B Pest (PSDDA)	A 01	36			L000844	Anchor QEA, LLC	
SLB0237-PEM3	QC		37		K007286	L000844		
SLB0237-CCV2	QC		38		L000845	L000844		
23A0326-05	8081B Pest (PSDDA)	A 01	39			L000844	Anchor QEA, LLC	
23A0326-10	8081B Pest (PSDDA)	A 01	40			L000844	Anchor QEA, LLC	
23A0326-11	8081B Pest (PSDDA)	A 01	41			L000844	Anchor QEA, LLC	
23A0326-12	8081B Pest (PSDDA)	A 01	42			L000844	Anchor QEA, LLC	

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____



ANALYSIS SEQUENCE

SLB0237

Instrument: ECD6
Calibration ID: FL00041

Printed: 2/17/2023 12:00:09PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0237-PEM4	QC		43		K007286	L000844		
SLB0237-CCV3	QC		44		L000845	L000844		

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230213.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	13-FEB-2023	13:18	23021301.D	1	RINSE	
2	13-FEB-2023	13:36	23021302.D	1	SEQ-PEM1	
3	13-FEB-2023	13:53	23021303.D	1	SEQ-ICV1	
4	13-FEB-2023	14:11	23021304.D	1	BLA0622-BLK1	
5	13-FEB-2023	14:29	23021305.D	1	BLA0622-BS1	
6	13-FEB-2023	14:47	23021306.D	1	BLA0622-BSD1	
7	13-FEB-2023	15:05	23021307.D	1	23A0206-01	
8	13-FEB-2023	15:23	23021308.D	1	23A0206-02	
9	13-FEB-2023	15:41	23021309.D	1	23A0206-03	
10	13-FEB-2023	15:59	23021310.D	1	23A0206-04	
11	13-FEB-2023	16:17	23021311.D	1	23A0206-05	
12	13-FEB-2023	16:35	23021312.D	1	23A0206-06	
13	13-FEB-2023	16:53	23021313.D	1	23A0206-07	
14	13-FEB-2023	17:11	23021314.D	1	23A0206-08	
15	13-FEB-2023	17:29	23021315.D	1	23A0206-09	
16	13-FEB-2023	17:47	23021316.D	1	23A0206-10	
17	13-FEB-2023	18:05	23021317.D	1	SEQ-PEM2	
18	13-FEB-2023	18:23	23021318.D	1	SEQ-CCV1	
19	13-FEB-2023	18:41	23021319.D	1	23A0206-11	
20	13-FEB-2023	18:58	23021320.D	1	23A0206-12	
21	13-FEB-2023	19:16	23021321.D	1	23A0206-13	
22	13-FEB-2023	19:34	23021322.D	1	23A0206-14	
23	13-FEB-2023	19:52	23021323.D	1	BLA0622-MS1	
24	13-FEB-2023	20:10	23021324.D	1	BLA0622-MSD1	
25	13-FEB-2023	20:28	23021325.D	1	BLA0684-BLK1	
26	13-FEB-2023	20:46	23021326.D	1	BLA0684-BS1	
27	13-FEB-2023	21:04	23021327.D	1	BLA0684-BSD1	
28	13-FEB-2023	21:22	23021328.D	1	BLA0684-MS1	
29	13-FEB-2023	21:40	23021329.D	1	BLA0684-MSD1	
30	13-FEB-2023	21:58	23021330.D	1	23A0313-08	
31	13-FEB-2023	22:15	23021331.D	1	23A0313-09	
32	13-FEB-2023	22:33	23021332.D	1	23A0313-10	
33	13-FEB-2023	22:51	23021333.D	1	23A0313-11	
34	13-FEB-2023	23:09	23021334.D	1	23A0313-13	
35	13-FEB-2023	23:27	23021335.D	1	SEQ-PEM3	
36	13-FEB-2023	23:45	23021336.D	1	SEQ-CCV2	
37	14-FEB-2023	00:03	23021337.D	1	23A0326-01	
38	14-FEB-2023	00:21	23021338.D	1	23A0326-02	
39	14-FEB-2023	00:39	23021339.D	1	23A0326-04	
40	14-FEB-2023	00:57	23021340.D	1	23A0326-05	
41	14-FEB-2023	01:15	23021341.D	1	23A0326-10	
42	14-FEB-2023	01:32	23021342.D	1	23A0326-11	
43	14-FEB-2023	01:50	23021343.D	1	23A0326-12	
44	14-FEB-2023	02:08	23021344.D	1	SEQ-PEM4	
45	14-FEB-2023	02:26	23021345.D	1	SEQ-CCV3	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230213.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 13-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1336	23021302.D	SEQ-PEM1		1	Endrin, 4,4'-DDD,
1353	23021303.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
1411	23021304.D	BLA0622-BLK1		1	NO MANUAL INTEGRATION
1429	23021305.D	BLA0622-BS1		1	NO MANUAL INTEGRATION
1447	23021306.D	BLA0622-BSD1		1	NO MANUAL INTEGRATION
1505	23021307.D	23A0206-01		1	NO MANUAL INTEGRATION
1523	23021308.D	23A0206-02		1	NO MANUAL INTEGRATION
1541	23021309.D	23A0206-03		1	NO MANUAL INTEGRATION
1559	23021310.D	23A0206-04		1	NO MANUAL INTEGRATION
1617	23021311.D	23A0206-05		1	NO MANUAL INTEGRATION
1635	23021312.D	23A0206-06		1	NO MANUAL INTEGRATION
1653	23021313.D	23A0206-07		1	NO MANUAL INTEGRATION
1711	23021314.D	23A0206-08		1	NO MANUAL INTEGRATION
1729	23021315.D	23A0206-09		1	NO MANUAL INTEGRATION
1747	23021316.D	23A0206-10		1	NO MANUAL INTEGRATION
1805	23021317.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
1823	23021318.D	SEQ-CCV1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1841	23021319.D	23A0206-11	1		NO MANUAL INTEGRATION
1858	23021320.D	23A0206-12	1		NO MANUAL INTEGRATION
1916	23021321.D	23A0206-13	1		NO MANUAL INTEGRATION
1934	23021322.D	23A0206-14	1		NO MANUAL INTEGRATION
1952	23021323.D	BLA0622-MS1	1		NO MANUAL INTEGRATION
2010	23021324.D	BLA0622-MSD1	1		NO MANUAL INTEGRATION
2028	23021325.D	BLA0684-BLK1	1		NO MANUAL INTEGRATION
2046	23021326.D	BLA0684-BS1	1		NO MANUAL INTEGRATION
2104	23021327.D	BLA0684-BSD1	1		NO MANUAL INTEGRATION
2122	23021328.D	BLA0684-MS1	1		NO MANUAL INTEGRATION
2140	23021329.D	BLA0684-MSD1	1		NO MANUAL INTEGRATION
2158	23021330.D	23A0313-08	1		NO MANUAL INTEGRATION
2215	23021331.D	23A0313-09	1		NO MANUAL INTEGRATION
2233	23021332.D	23A0313-10	1		NO MANUAL INTEGRATION
2251	23021333.D	23A0313-11	1		NO MANUAL INTEGRATION
2309	23021334.D	23A0313-13	1		NO MANUAL INTEGRATION
2327	23021335.D	SEQ-PEM3	1		NO MANUAL INTEGRATION
2345	23021336.D	SEQ-CCV2	1		NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0003	23021337.D	23A0326-01	1	NO	MANUAL INTEGRATION
0021	23021338.D	23A0326-02	1	NO	MANUAL INTEGRATION
0039	23021339.D	23A0326-04	1	NO	MANUAL INTEGRATION
0057	23021340.D	23A0326-05	1	NO	MANUAL INTEGRATION
0115	23021341.D	23A0326-10	1	NO	MANUAL INTEGRATION
0132	23021342.D	23A0326-11	1	NO	MANUAL INTEGRATION
0150	23021343.D	23A0326-12	1	NO	MANUAL INTEGRATION
0208	23021344.D	SEQ-PEM4	1	NO	MANUAL INTEGRATION
0226	23021345.D	SEQ-CCV3	1	NO	MANUAL INTEGRATION

Security Status Report

Date: 17-Feb-2023 11:49

23021302.D	Data Locked	yev, 17-
23021303.D	Data Locked	yev, 17-
23021304.D	Data Locked	yev, 17-
23021305.D	Data Locked	yev, 17-
23021306.D	Data Locked	yev, 17-
23021307.D	Data Locked	yev, 17-
23021308.D	Data Locked	yev, 17-
23021309.D	Data Locked	yev, 17-
23021310.D	Data Locked	yev, 17-
23021311.D	Data Locked	yev, 17-
23021312.D	Data Locked	yev, 17-
23021313.D	Data Locked	yev, 17-
23021314.D	Data Locked	yev, 17-
23021315.D	Data Locked	yev, 17-
23021316.D	Data Locked	yev, 17-
23021317.D	Data Locked	yev, 17-
23021318.D	Data Locked	yev, 17-
23021319.D	Data Locked	yev, 17-
23021320.D	Data Locked	yev, 17-
23021321.D	Data Locked	yev, 17-
23021322.D	Data Locked	yev, 17-
23021323.D	Data Locked	yev, 17-
23021324.D	Data Locked	yev, 17-
23021325.D	Data Locked	yev, 17-
23021326.D	Data Locked	yev, 17-
23021327.D	Data Locked	yev, 17-
23021328.D	Data Locked	yev, 17-
23021329.D	Data Locked	yev, 17-
23021330.D	Data Locked	yev, 17-
23021331.D	Data Locked	yev, 17-
23021332.D	Data Locked	yev, 17-
23021333.D	Data Locked	yev, 17-
23021334.D	Data Locked	yev, 17-
23021335.D	Data Locked	yev, 17-
23021336.D	Data Locked	yev, 17-
23021337.D	Data Locked	yev, 17-
23021338.D	Data Locked	yev, 17-
23021339.D	Data Locked	yev, 17-
23021340.D	Data Locked	yev, 17-
23021341.D	Data Locked	yev, 17-
23021342.D	Data Locked	yev, 17-
23021343.D	Data Locked	yev, 17-
23021344.D	Data Locked	yev, 17-
23021345.D	Data Locked	yev, 17-



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG/WO:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SKL0233</u>	Instrument:	<u>ECD6</u>
Calibration:	<u>FL00041</u>	Calibration Date:	<u>12/15/2022</u>

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SKL0233-PEM1 (Water)		Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20			
Decachlorobiphenyl	160.00	83.0	0 - 200	9.355	9.354666	0.0003	+/-0.1	
Decachlorobiphenyl [2C]	160.00	83.5	0 - 200	10.466	10.4655	0.0005	+/-0.1	
Tetrachlorometaxylene	160.00	78.1	0 - 200	3.828	3.827833	0.0002	+/-0.1	
Tetrachlorometaxylene [2C]	160.00	83.5	0 - 200	4.22	4.219666	0.0003	+/-0.1	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor OEA, LLC
Sequence: SLB0237
Calibration: FL00041

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0237-ICV1 (Solid) Lab File ID: 23021303.D Analyzed: 02/13/23 13:53								
Decachlorobiphenyl	40.000	90.3	80 - 120	9.305	9.354666	-0.0497	+/-0.1	
Decachlorobiphenyl [2C]	40.000	90.0	80 - 120	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylyene	40.000	100	80 - 120	3.79	3.827833	-0.0378	+/-0.1	
Tetrachlorometaxylyene [2C]	40.000	98.0	80 - 120	4.181	4.219666	-0.0387	+/-0.1	
SLB0237-CCV1 (Solid) Lab File ID: 23021318.D Analyzed: 02/13/23 18:23								
Decachlorobiphenyl	40.000	89.8	80 - 120	9.307	9.354666	-0.0477	+/-0.1	
Decachlorobiphenyl [2C]	40.000	90.0	80 - 120	10.403	10.4655	-0.0625	+/-0.1	
Tetrachlorometaxylyene	40.000	100	80 - 120	3.792	3.827833	-0.0358	+/-0.1	
Tetrachlorometaxylyene [2C]	40.000	89.2	80 - 120	4.182	4.219666	-0.0377	+/-0.1	
BLA0684-BLK1 (Solid) Lab File ID: 23021325.D Analyzed: 02/13/23 20:28								
Decachlorobiphenyl	8.0000	113	30 - 160	9.305	9.354666	-0.0497	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	117	30 - 160	10.401	10.4655	-0.0645	+/-0.1	
Tetrachlorometaxylyene	8.0000	71.5	30 - 160	3.792	3.827833	-0.0358	+/-0.1	
Tetrachlorometaxylyene [2C]	8.0000	71.3	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
BLA0684-BS1 (Solid) Lab File ID: 23021326.D Analyzed: 02/13/23 20:46								
Decachlorobiphenyl	8.0000	85.7	30 - 160	9.305	9.354666	-0.0497	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	96.1	30 - 160	10.401	10.4655	-0.0645	+/-0.1	
Tetrachlorometaxylyene	8.0000	77.3	30 - 160	3.792	3.827833	-0.0358	+/-0.1	
Tetrachlorometaxylyene [2C]	8.0000	71.1	30 - 160	4.181	4.219666	-0.0387	+/-0.1	
BLA0684-BSD1 (Solid) Lab File ID: 23021327.D Analyzed: 02/13/23 21:04								
Decachlorobiphenyl	8.0000	84.9	30 - 160	9.305	9.354666	-0.0497	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	89.1	30 - 160	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylyene	8.0000	75.5	30 - 160	3.789	3.827833	-0.0388	+/-0.1	
Tetrachlorometaxylyene [2C]	8.0000	71.7	30 - 160	4.18	4.219666	-0.0397	+/-0.1	
SLB0237-CCV2 (Solid) Lab File ID: 23021336.D Analyzed: 02/13/23 23:45								
Decachlorobiphenyl	40.000	88.0	80 - 120	9.306	9.354666	-0.0487	+/-0.1	
Decachlorobiphenyl [2C]	40.000	88.1	80 - 120	10.402	10.4655	-0.0635	+/-0.1	
Tetrachlorometaxylyene	40.000	97.8	80 - 120	3.791	3.827833	-0.0368	+/-0.1	
Tetrachlorometaxylyene [2C]	40.000	93.9	80 - 120	4.18	4.219666	-0.0397	+/-0.1	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0237
Calibration: FL00041

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0326-01 (Solid) Lab File ID: 23021337.D Analyzed: 02/14/23 00:03								
Decachlorobiphenyl	7.9515	87.7	30 - 160	9.309	9.354666	-0.0457	+/-0.1	
Decachlorobiphenyl [2C]	7.9515	88.5	30 - 160	10.404	10.4655	-0.0615	+/-0.1	
Tetrachlorometaxylene	7.9515	73.3	30 - 160	3.788	3.827833	-0.0398	+/-0.1	
Tetrachlorometaxylene [2C]	7.9515	71.5	30 - 160	4.179	4.219666	-0.0407	+/-0.1	
23A0326-02 (Solid) Lab File ID: 23021338.D Analyzed: 02/14/23 00:21								
Decachlorobiphenyl	7.8042	82.2	30 - 160	9.309	9.354666	-0.0457	+/-0.1	
Decachlorobiphenyl [2C]	7.8042	87.1	30 - 160	10.405	10.4655	-0.0605	+/-0.1	
Tetrachlorometaxylene	7.8042	64.6	30 - 160	3.788	3.827833	-0.0398	+/-0.1	
Tetrachlorometaxylene [2C]	7.8042	62.6	30 - 160	4.179	4.219666	-0.0407	+/-0.1	
23A0326-04 (Solid) Lab File ID: 23021339.D Analyzed: 02/14/23 00:39								
Decachlorobiphenyl	7.9560	87.7	30 - 160	9.308	9.354666	-0.0467	+/-0.1	
Decachlorobiphenyl [2C]	7.9560	94.4	30 - 160	10.403	10.4655	-0.0625	+/-0.1	
Tetrachlorometaxylene	7.9560	69.0	30 - 160	3.788	3.827833	-0.0398	+/-0.1	
Tetrachlorometaxylene [2C]	7.9560	67.4	30 - 160	4.179	4.219666	-0.0407	+/-0.1	
23A0326-05 (Solid) Lab File ID: 23021340.D Analyzed: 02/14/23 00:57								
Decachlorobiphenyl	7.8514	94.9	30 - 160	9.315	9.354666	-0.0397	+/-0.1	
Decachlorobiphenyl [2C]	7.8514	109	30 - 160	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	7.8514	70.5	30 - 160	3.789	3.827833	-0.0388	+/-0.1	
Tetrachlorometaxylene [2C]	7.8514	68.7	30 - 160	4.179	4.219666	-0.0407	+/-0.1	
23A0326-10 (Solid) Lab File ID: 23021341.D Analyzed: 02/14/23 01:15								
Decachlorobiphenyl	8.0004	88.3	30 - 160	9.31	9.354666	-0.0447	+/-0.1	
Decachlorobiphenyl [2C]	8.0004	93.1	30 - 160	10.404	10.4655	-0.0615	+/-0.1	
Tetrachlorometaxylene	8.0004	70.5	30 - 160	3.788	3.827833	-0.0398	+/-0.1	
Tetrachlorometaxylene [2C]	8.0004	68.3	30 - 160	4.179	4.219666	-0.0407	+/-0.1	
23A0326-11 (Solid) Lab File ID: 23021342.D Analyzed: 02/14/23 01:32								
Decachlorobiphenyl	7.9558	96.2	30 - 160	9.311	9.354666	-0.0437	+/-0.1	
Decachlorobiphenyl [2C]	7.9558	101	30 - 160	10.405	10.4655	-0.0605	+/-0.1	
Tetrachlorometaxylene	7.9558	74.1	30 - 160	3.788	3.827833	-0.0398	+/-0.1	
Tetrachlorometaxylene [2C]	7.9558	72.3	30 - 160	4.179	4.219666	-0.0407	+/-0.1	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SKL0233

Instrument: ECD6

Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SKL0233-PEM1)		(Water)	Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20			
1-Bromo-2-Nitrobenzene	683485	3.15	672426	3.15	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	619012	9.503	609723	9.504	102	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1005375	3.35	1006482	3.35	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	772586	11.054	769764	11.053	100	50 - 200	0.001	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0237

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0237-ICV1)		(Solid)	Lab File ID: 23021303.D			Analyzed: 02/13/23 13:53			
1-Bromo-2-Nitrobenzene	872478	3.118	872478	3.118	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	828072	9.455	828072	9.455	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1322323	3.319	1322323	3.319	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	970888	10.983	970888	10.983	100	50 - 200	0.000	+/-0.50	
Blank (BLA0684-BLK1)		(Solid)	Lab File ID: 23021325.D			Analyzed: 02/13/23 20:28			
1-Bromo-2-Nitrobenzene	460404	3.12	872478	3.118	53	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	486330	9.455	828072	9.455	59	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	763127	3.32	1322323	3.319	58	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	538454	10.981	970888	10.983	55	50 - 200	-0.002	+/-0.50	
LCS (BLA0684-BS1)		(Solid)	Lab File ID: 23021326.D			Analyzed: 02/13/23 20:46			
1-Bromo-2-Nitrobenzene	479700	3.12	872478	3.118	55	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	434102	9.455	828072	9.455	52	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	776692	3.32	1322323	3.319	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	607596	10.981	970888	10.983	63	50 - 200	-0.002	+/-0.50	
LCS Dup (BLA0684-BSD1)		(Solid)	Lab File ID: 23021327.D			Analyzed: 02/13/23 21:04			
1-Bromo-2-Nitrobenzene	903043	3.118	872478	3.118	104	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	767072	9.453	828072	9.455	93	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1452954	3.318	1322323	3.319	110	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	964689	10.98	970888	10.983	99	50 - 200	-0.003	+/-0.50	
LDW23-SC1028 (23A0326-01)		(Solid)	Lab File ID: 23021337.D			Analyzed: 02/14/23 00:03			
1-Bromo-2-Nitrobenzene	908257	3.117	872478	3.118	104	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	715154	9.463	828072	9.455	86	50 - 200	0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1395556	3.317	1322323	3.319	106	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	867200	10.986	970888	10.983	89	50 - 200	0.003	+/-0.50	
LDW23-SC1032 (23A0326-02)		(Solid)	Lab File ID: 23021338.D			Analyzed: 02/14/23 00:21			
1-Bromo-2-Nitrobenzene	883707	3.116	872478	3.118	101	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	706633	9.463	828072	9.455	85	50 - 200	0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1327668	3.317	1322323	3.319	100	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	864760	10.986	970888	10.983	89	50 - 200	0.003	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor OEA, LLC
Sequence: SLB0237

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1170A (23A0326-04)		(Solid)	Lab File ID: 23021339.D		Analyzed: 02/14/23 00:39				
1-Bromo-2-Nitrobenzene	920097	3.116	872478	3.118	105	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	690417	9.46	828072	9.455	83	50 - 200	0.005	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1341211	3.317	1322323	3.319	101	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	850182	10.984	970888	10.983	88	50 - 200	0.001	+/-0.50	
LDW23-SC1169C (23A0326-05)		(Solid)	Lab File ID: 23021340.D		Analyzed: 02/14/23 00:57				
1-Bromo-2-Nitrobenzene	882757	3.117	872478	3.118	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	697702	9.472	828072	9.455	84	50 - 200	0.017	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1339157	3.317	1322323	3.319	101	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	894859	10.99	970888	10.983	92	50 - 200	0.007	+/-0.50	
LDW23-SC1161 (23A0326-10)		(Solid)	Lab File ID: 23021341.D		Analyzed: 02/14/23 01:15				
1-Bromo-2-Nitrobenzene	871068	3.117	872478	3.118	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	706093	9.463	828072	9.455	85	50 - 200	0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1295584	3.317	1322323	3.319	98	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	913077	10.985	970888	10.983	94	50 - 200	0.002	+/-0.50	
LDW23-SC1155 (23A0326-11)		(Solid)	Lab File ID: 23021342.D		Analyzed: 02/14/23 01:32				
1-Bromo-2-Nitrobenzene	892170	3.116	872478	3.118	102	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	719189	9.466	828072	9.455	87	50 - 200	0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1336839	3.316	1322323	3.319	101	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	844428	10.987	970888	10.983	87	50 - 200	0.004	+/-0.50	
LDW23-SC1162B (23A0326-12)		(Solid)	Lab File ID: 23021343.D		Analyzed: 02/14/23 01:50				
1-Bromo-2-Nitrobenzene	561375	3.119	872478	3.118	64	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	627734	9.458	828072	9.455	76	50 - 200	0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	708801	3.319	1322323	3.319	54	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	455690	10.983	970888	10.983	47	50 - 200	0.000	+/-0.50	*



HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	02/01/23 13:23	15	365	02/14/23 00:03	12	40	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	02/01/23 13:23	15	365	02/14/23 00:21	12	40	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	02/01/23 13:23	15	365	02/14/23 00:39	12	40	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	02/01/23 13:23	15	365	02/14/23 00:57	12	40	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	02/01/23 13:23	14	365	02/14/23 01:15	12	40	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	02/01/23 13:23	14	365	02/14/23 01:32	13	40	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	02/01/23 13:23	14	365	02/14/23 01:50	13	40	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**

EPA 8081B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Warning

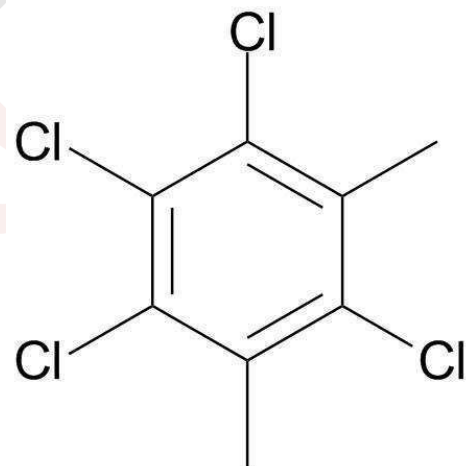
Certified Reference Material



Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration ¹
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C₈H₆Cl₄
Molecular weight: 243.94



C000147

tetrachlorometaxylene

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ The Uncertainty calculated for this product is $\pm 2.4\%$. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



AccuStandard

125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N

EXPIRATION: Jul 28, 2015

DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

LOT #: 990521LB-AC

SOLVENT: N/A

This product is guaranteed accurate to $\pm 0.5\%$ of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹	Certified Analyte Concentration ²
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2;

C000148

decachlorobiphenyl

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

** I 1768 A*

Certified by:

R. Cooper

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
 2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is $\pm 0.5\%$ which is the Combined Uncertainty $U_c(y)$. It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is $U_c(y) * K$ where K is the coverage factor at the 95% confidence level ($K=2$).
 3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

** Recertified ~ 4-6-09 (S)*



Analytical Standard Record
Standard ID: C000148

Printed: 4/23/2015 11:54:44AM

Description:	decachlorobiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	9905211b-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By

Date

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4



1007970

Mirex 2d source
Solvent / Lot: MeOH
Prep: 9/7/2020 by JR
Exp: 6/5/2024
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.


² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-026S
Description: o,p'-DDE
Lot: 218021093-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Feb 10, 2020
Expiration: Feb 10, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity %	Prepared Concentration ²	Certified Analyte Concentration ¹
		(GC/MS)	(µg/mL)	(µg/mL)
o,p'-DDE	3424-82-6	99.9	100.4	100.3

I7971

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 218011470
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jan 30, 2018
Expiration: Jan 30, 2028
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

I 7974

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.


² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: May 27, 2020
Expiration: Jun 27, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2



I010773

o,p-²DDD
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.


² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations Certificate Number 3774

2 Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this

4 Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 218101131
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Oct 8, 2018
Expiration: Nov 8, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	97.7	102.4*	100.0



I010795

Oxychlordane isomer
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/20/2022
Location:

* Weight compensated to 100% purity.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.


² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4 Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 217121240
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Dec 13, 2017
Expiration: Dec 13, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹ (µg/mL)	Certified Analyte Concentration ² (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.4	99.0



I010796

cis-Nonochlor-Accustd-100ug/ml

Solvent / Lot: methanol

Prep: 11/20/2020 by VS

Exp: 11/27/2022

Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.


¹ All weights are traceable through NIST, Test No. 822-275872-11

² Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11.
3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.
4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.
7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: Refer to SDS for complete safety information

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982



J006504

Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this

4 Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 21, 2021
Expiration: Aug 21, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.


The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations

- 2. Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.
- 3. Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.
- 4. Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
- 5. Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
- 6. Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level.
- 7. Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 6, 2021
Expiration: Aug 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

K 0448

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: May 28, 2021
Expiration: Jun 28, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



AR-1463

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

K000449

Oxychlordane isomer
Solvent / Lot: methanol
Prep: 1/13/2022 by YZ
Exp: 6/28/2023
Location:

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations

2. Intended Use: The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. Manufacturing: All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. Homogeneity: This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. Stability: The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. Uncertainty: The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level.

7. Legal Notice and Limit of Liability: This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 221041461
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Apr 22, 2021
Expiration: Apr 22, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
cis-Nonachlor	5103-73-1	98.6	101.1	99.7

K 000450

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:



Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 220091107
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Sep 11, 2020
Expiration: Sep 11, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

K-00451

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

K 000952

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 221121451
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Dec 27, 2021
Expiration: Dec 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 

Larry Decker, Organic QC Manager

CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 221031488-04
Solvent: Hexane
Hazards: Refer to SDS for complete safety information

Date Certified: Apr 8, 2022
Expiration: May 8, 2023
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
4,4'-DDT	50-29-3	100.0	200.9	200.9
Endrin	72-20-8	99.8	200.0	199.6

K7002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:



Larry Decker, Organic QC Manager



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2
Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	alpha-BHC	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/-	0.3672	µg/mL	Unstressed
	Purity 99%		+/-	0.5281	µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/-	0.3672	µg/mL	Unstressed
	Purity 99%		+/-	0.5281	µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/-	0.3702	µg/mL	Unstressed
	Purity 96%		+/-	0.5323	µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/-	0.0660	µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/-	0.3703	µg/mL	Unstressed
	Purity 99%		+/-	0.5325	µg/mL	Stressed

8	trans-Chlordane CAS # 5103-74-2 Purity 98%	(Lot 32943)	8.0 µg/mL	+/- 0.0657 +/- 0.3689 +/- 0.5305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	cis-Chlordane CAS # 5103-71-9 Purity 98%	(Lot 31766)	8.0 µg/mL	+/- 0.0657 +/- 0.3689 +/- 0.5305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Endosulfan I CAS # 959-98-8 Purity 99%	(Lot BCCF4060)	8.0 µg/mL	+/- 0.0654 +/- 0.3672 +/- 0.5281	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	4,4'-DDE CAS # 72-55-9 Purity 99%	(Lot GHYQG)	16.1 µg/mL	+/- 0.1314 +/- 0.7375 +/- 1.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Dieldrin CAS # 60-57-1 Purity 98%	(Lot 11129900)	16.1 µg/mL	+/- 0.1320 +/- 0.7408 +/- 1.0653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Endrin CAS # 72-20-8 Purity 99%	(Lot 13157400)	16.1 µg/mL	+/- 0.1320 +/- 0.7406 +/- 1.0650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	4,4'-DDD CAS # 72-54-8 Purity 99%	(Lot HAN02)	16.1 µg/mL	+/- 0.1320 +/- 0.7406 +/- 1.0650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Endosulfan II CAS # 33213-65-9 Purity 99%	(Lot 12448900)	16.0 µg/mL	+/- 0.1309 +/- 0.7345 +/- 1.0562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	4,4'-DDT CAS # 50-29-3 Purity 98%	(Lot 220428JLM)	16.1 µg/mL	+/- 0.1315 +/- 0.7378 +/- 1.0610	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Endrin aldehyde CAS # 7421-93-4 Purity 99%	(Lot 30720)	16.1 µg/mL	+/- 0.1314 +/- 0.7375 +/- 1.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Endosulfan sulfate CAS # 1031-07-8 Purity 99%	(Lot BCCB0424)	16.1 µg/mL	+/- 0.1320 +/- 0.7406 +/- 1.0650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Methoxychlor CAS # 72-43-5 Purity 98%	(Lot 13027000)	80.2 µg/mL	+/- 0.5781 +/- 3.6697 +/- 5.2871	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Endrin ketone CAS # 53494-70-5 Purity 99%	(Lot 13026800)	16.1 µg/mL	+/- 0.1314 +/- 0.7375 +/- 1.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

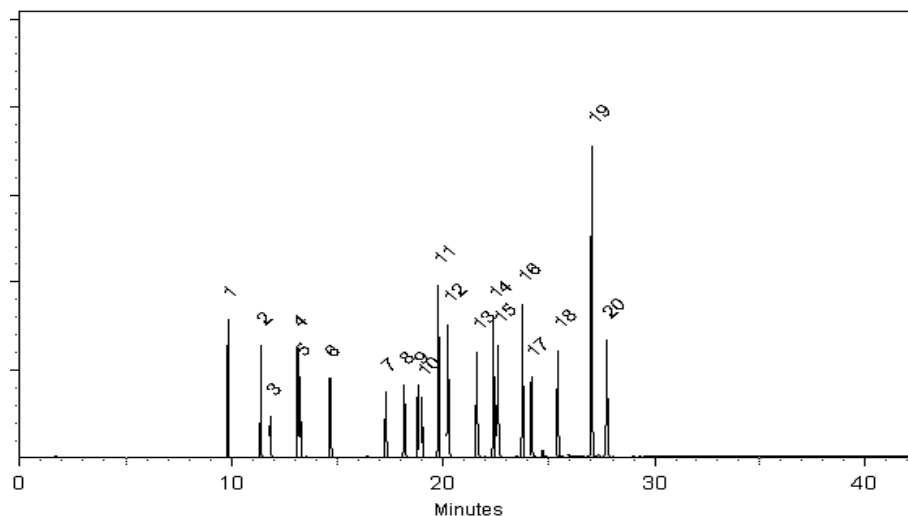
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311


Fang-Yun Lo - GC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)



Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.


The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 
Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations

- 2. Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.
- 3. Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.
- 4. Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
- 5. Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
- 6. Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of $k=2$ is chosen using approximately a 95% confidence level.
- 7. Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X

Description: Hexachlorobutadiene

Lot: 222031188

Solvent: Methanol

Hazards: Refer to SDS for complete safety information

Date Certified: Mar 11, 2022

Expiration: Apr 11, 2024

Sample Size: 1 mL

Components: 1

Storage Condition: Ambient (>5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>	
Client: <u>Anchor QEA, LLC</u>		
Project: <u>AOC5 MR Phase 1</u>		
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-01 A</u>	File ID: <u>02132351ECD7.D</u>
Sampled: <u>01/16/23 15:17</u>	Prepared: <u>01/31/23 15:03</u>	Analyzed: <u>02/14/23 03:26</u>
% Solids: <u>58.96</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>21.21 g Wet / 2.5 mL</u>
Batch: <u>BLA0687</u>	Sequence: <u>SLB0168</u>	Calibration: <u>GA00061</u>
Instrument: <u>ECD7</u>	Column 1: <u>ZB5</u>	Column 2: <u>ZB35</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	26.4	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	47.1	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	38.5	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9965	6.68	83.5	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9965	5.46	68.3	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9965	6.52	81.5	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9965	6.18	77.3	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132351ECD7.D
Data file 2: /230213.b/230213.b/02132351ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-01
Client ID:
Injection Date: 14-FEB-2023 03:26
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.803	-0.004	161328	5.680	-0.004	137634	27.3	30.9	12.4	Tetrachloro-m-xylene
13.884	-0.004	135409	14.112	-0.005	171439	33.4	32.6	2.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	503318	417935	-17.0
Hexabromobiphenyl	647433	379063	-41.5

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	336911	329129	-2.3
Hexabromobiphenyl	382032	331371	-13.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.392	-0.013	30288	144.9	1	8.296	-0.007	20468	137.6	
Aroclor-1248	2	8.562	-0.018	20277	76.0	2	8.702	-0.007	20626	128.8	
Aroclor-1248	3	8.980	-0.019	63020	123.5	3	9.135	-0.017	29315	149.8	
Aroclor-1248	4	9.284	-0.010	63561	251.7	4	9.530	-0.047	27024	111.7	
Total CollAve (4 peaks):				149.0	Total Col2Ave (4 peaks):				132.0	RPD = 12	
Corrected Ave (3 peaks):				114.8	Corrected Ave (3 peaks):				126.0	RPD = 9	
Aroclor-1254	1	9.284	-0.009	63561	149.2	1	9.434	-0.009	50066	209.7	
Aroclor-1254	2	9.359	-0.012	27016	148.5	2	9.953	-0.010	27524	142.6	
Aroclor-1254	3	9.654	-0.006	51377	188.3	3	10.102	-0.013	90208	214.3	
Aroclor-1254	4	9.784	-0.016	91796	171.7	4	10.350	-0.016	112957	268.3	
Aroclor-1254	5	10.115	-0.049	63568	182.8	5	10.551	-0.012	80577	343.6	
Total CollAve (5 peaks):				168.1	Total Col2Ave (5 peaks):				235.7	RPD = 33	
Corrected Ave (4 peaks):				163.1	Corrected Ave (4 peaks):				208.7	RPD = 25	
Aroclor-1260	1	11.031	-0.008	38476	180.9	1	11.641	-0.008	46230	193.4	
Aroclor-1260	2	11.347	-0.009	32199	147.3	2	11.901	-0.011	86066	142.3	
Aroclor-1260	3	11.717	-0.011	90614	157.4	3	12.420	-0.012	39441	261.6	
Aroclor-1260	4	12.117	-0.016	49159	165.3	4	12.485	-0.010	67808	173.2	
Aroclor-1260	5	12.232	-0.008	25574	197.3	NS	---			---	
Total CollAve (5 peaks):				169.6	Total Col2Ave (4 peaks):				192.6	RPD = 13	
Corrected Ave (4 peaks):				162.7	Corrected Ave (3 peaks):				169.6	RPD = 4	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 1807584 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1639782 Col2 Total PCB = 0.5 ppm*

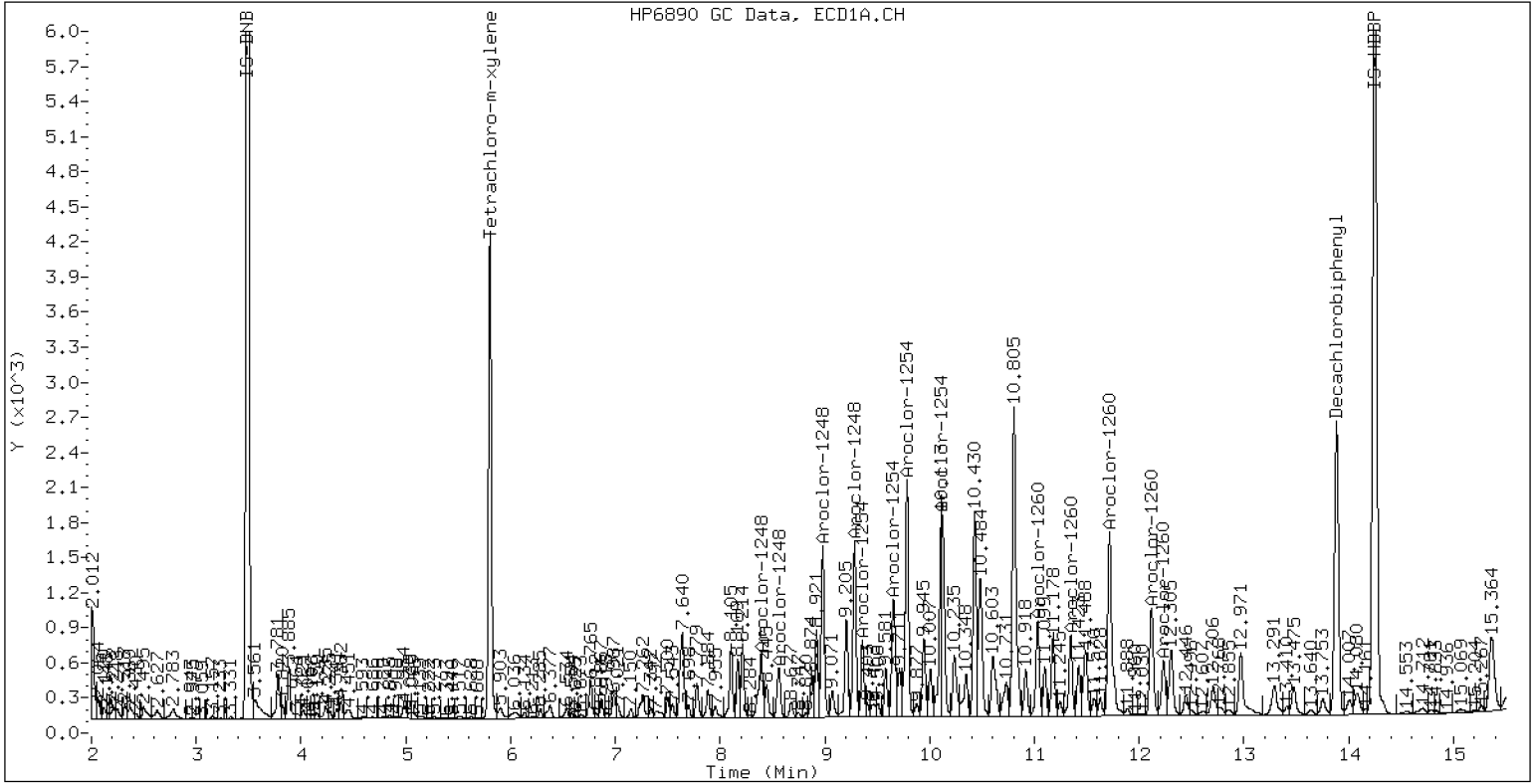
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-01

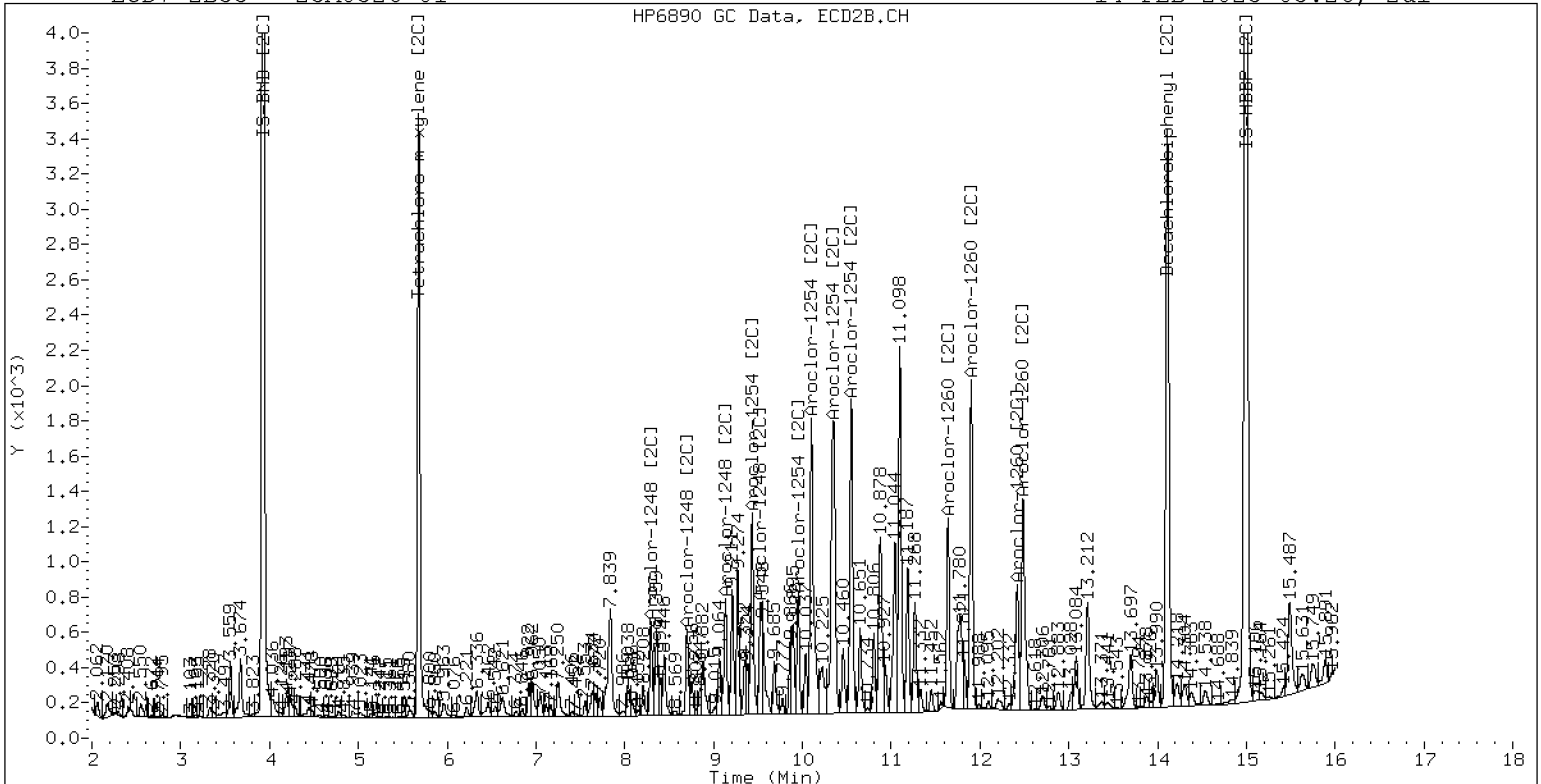
14-FEB-2023 03:26, 2u1



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0326-01

14-FEB-2023 03:26, 2u1



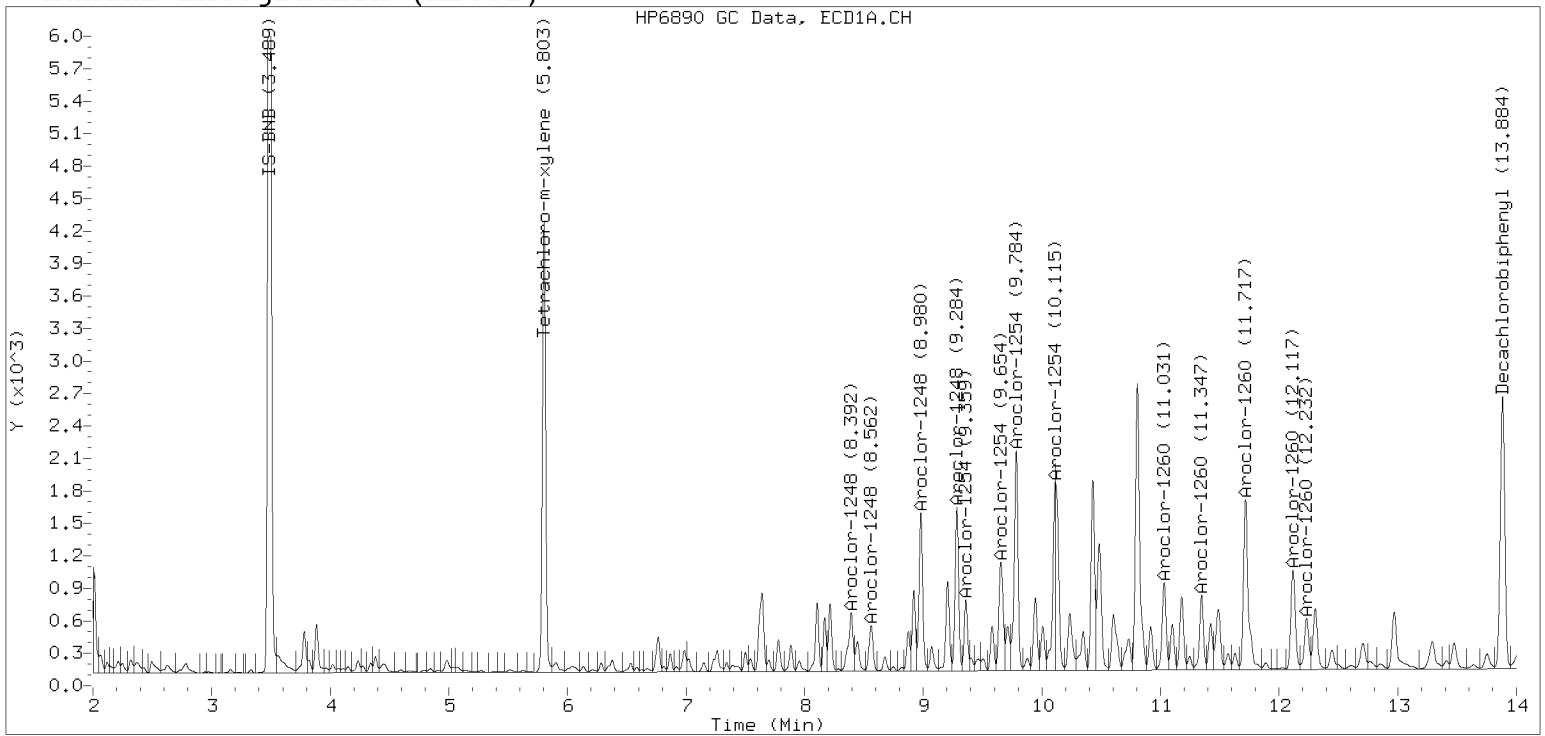
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

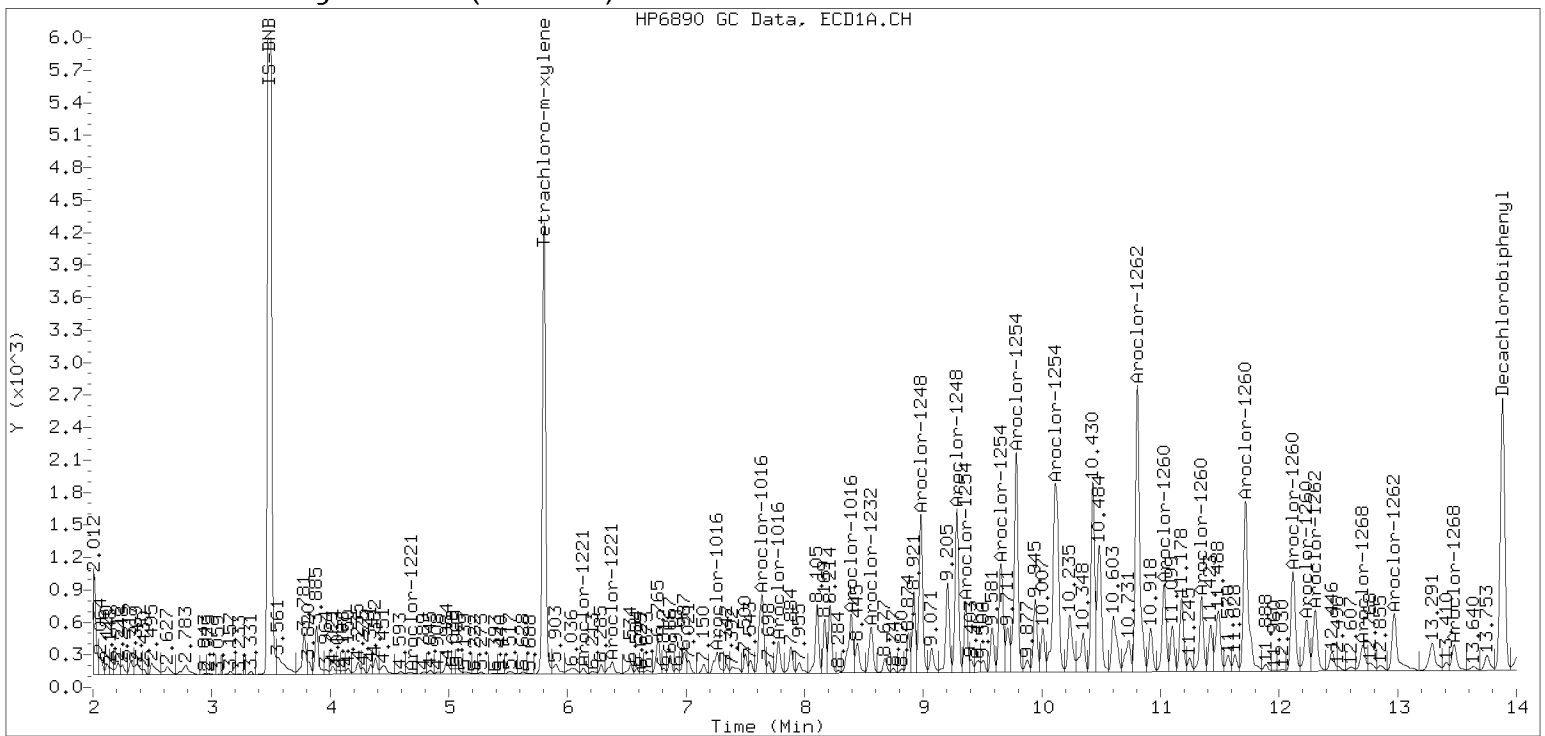
Datafile: ecd7.i/230213.b/02132351ECD7.D

Injection Date: 14-FEB-2023 03:26

Manual Integration (After)



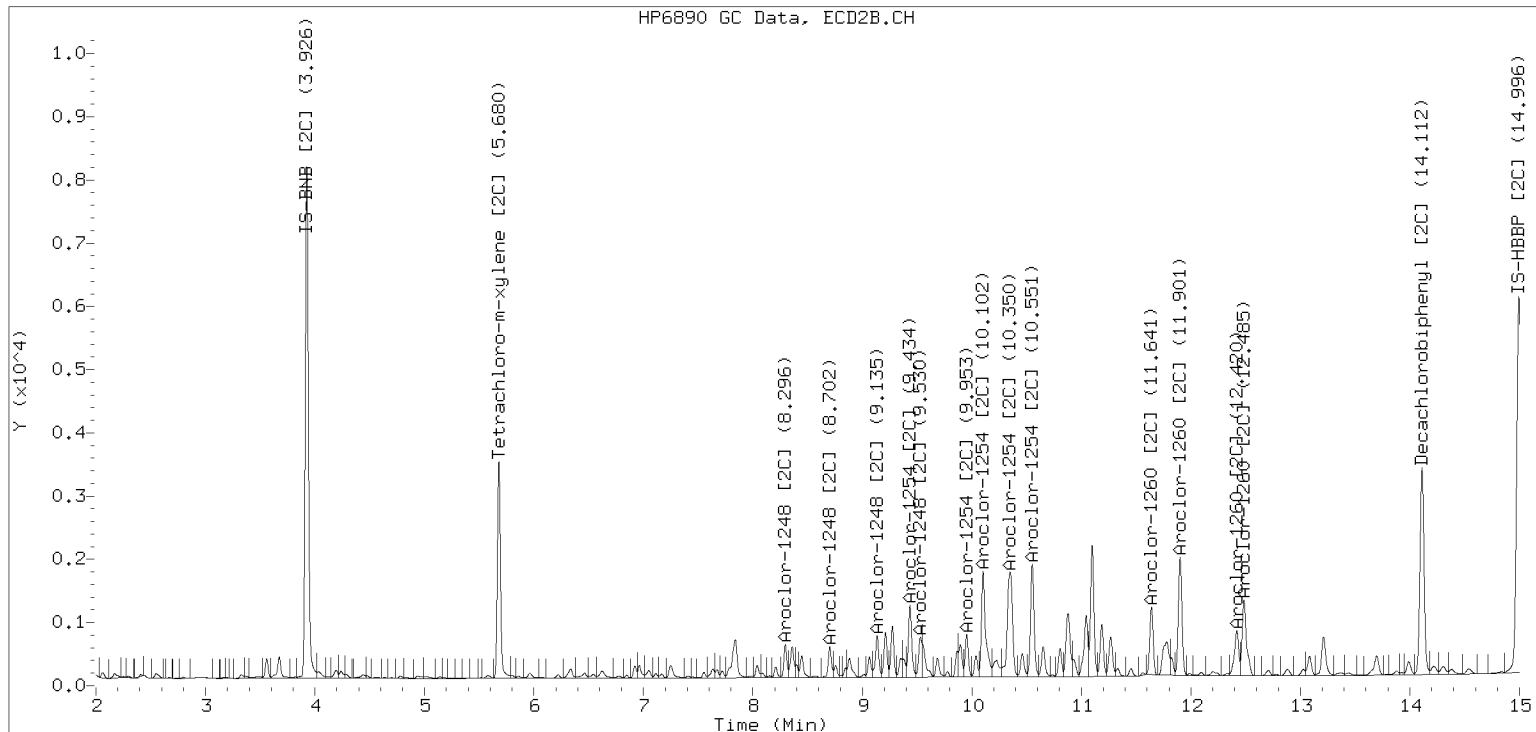
Processed Integration (Before)



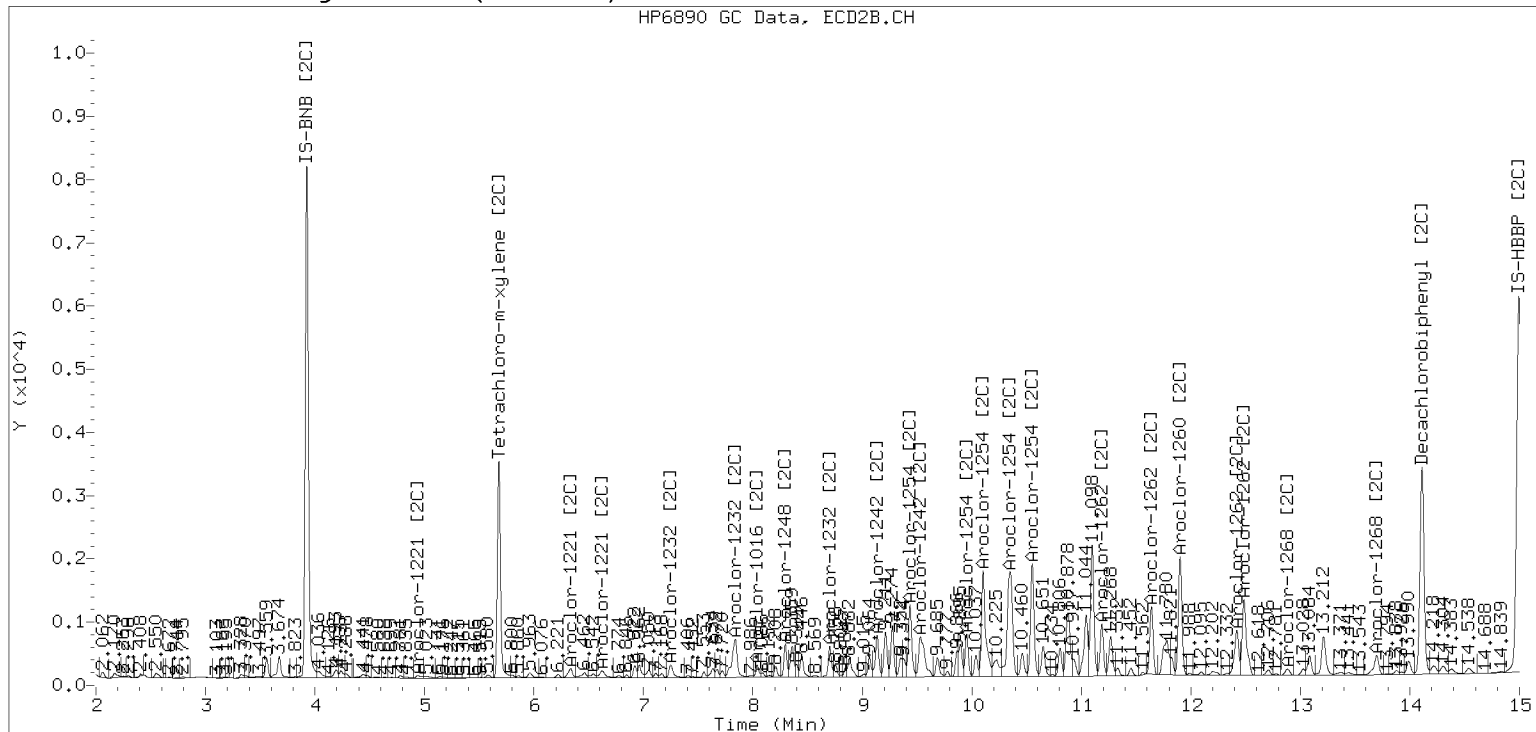
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132351ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23A0326-02 A File ID: 02132352ECD7.D
 Sampled: 01/16/23 15:32 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 03:47
 % Solids: 57.28 Preparation: EPA 3546 (Microwave) Initial/Final: 21.83 g Wet / 2.5 mL
 Batch: BLA0687 Sequence: SLB0168 Calibration: GA00061
 Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	27.1	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	48.6	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	40.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9973	6.58	82.3	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9973	5.44	68.0	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9973	6.53	81.7	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9973	6.31	78.9	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132352ECD7.D
Data file 2: /230213.b/230213.b/02132352ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-02
Client ID:
Injection Date: 14-FEB-2023 03:47
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.803	-0.005	158928	5.679	-0.005	138996	27.2	31.6	14.8	Tetrachloro-m-xylene
13.884	-0.004	126631	14.111	-0.006	163478	32.9	32.7	0.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	503318	413285	-17.9
Hexabromobiphenyl	647433	359825	-44.4

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	336911	325815	-3.3
Hexabromobiphenyl	382032	315342	-17.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.393	-0.013	24666	119.3	1	8.296	-0.007	21153	143.6
Aroclor-1248	2	8.562	-0.018	20328	77.1	2	8.702	-0.007	21189	133.7
Aroclor-1248	3	8.980	-0.019	62735	124.4	3	9.136	-0.017	30826	159.1
Aroclor-1248	4	9.284	-0.010	63706	255.1	4	9.529	-0.048	25357	105.8
Total CollAve (4 peaks):				144.0	Total Col2Ave (4 peaks):				135.6	RPD = 6
Corrected Ave (3 peaks):				106.9	Corrected Ave (3 peaks):				127.7	RPD = 18
Aroclor-1254	1	9.284	-0.009	63706	151.2	1	9.434	-0.010	51186	216.5
Aroclor-1254	2	9.358	-0.012	26156	145.4	2	9.953	-0.010	28352	148.4
Aroclor-1254	3	9.655	-0.006	51612	191.2	3	10.101	-0.014	91311	219.1
Aroclor-1254	4	9.783	-0.016	91187	172.4	4	10.349	-0.016	115565	277.3
Aroclor-1254	5	10.116	-0.048	116349	338.3	5	10.551	-0.012	81963	353.1
Total CollAve (5 peaks):				199.7	Total Col2Ave (5 peaks):				242.9	RPD = 19
Corrected Ave (4 peaks):				165.1	Corrected Ave (4 peaks):				215.3	RPD = 26
Aroclor-1260	1	11.031	-0.009	37093	183.7	1	11.640	-0.009	47975	210.9
Aroclor-1260	2	11.346	-0.009	31475	151.7	2	11.901	-0.011	90797	157.8
Aroclor-1260	3	11.716	-0.012	86884	159.0	3	12.421	-0.011	37551	261.8
Aroclor-1260	4	12.117	-0.015	48607	172.2	4	12.485	-0.011	69468	186.5
Aroclor-1260	5	12.232	-0.008	24453	198.7	NS	---			----
Total CollAve (5 peaks):				173.1	Total Col2Ave (4 peaks):				204.2	RPD = 17
Corrected Ave (4 peaks):				166.7	Corrected Ave (3 peaks):				185.0	RPD = 10
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.908 - 13.788) = 1797662 Col1 Total PCB = 0.4 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 1706229 Col2 Total PCB = 0.5 ppm*

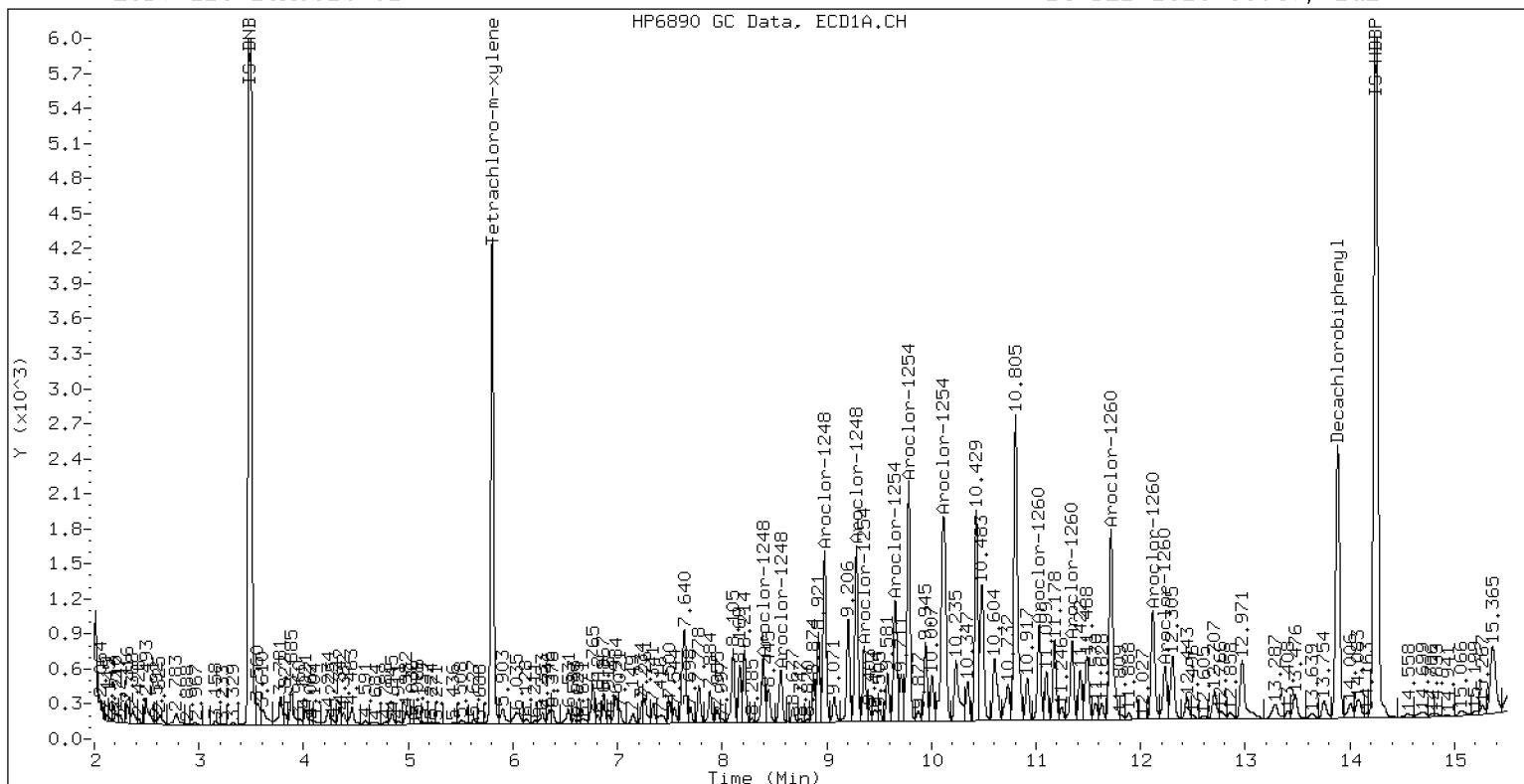
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-02

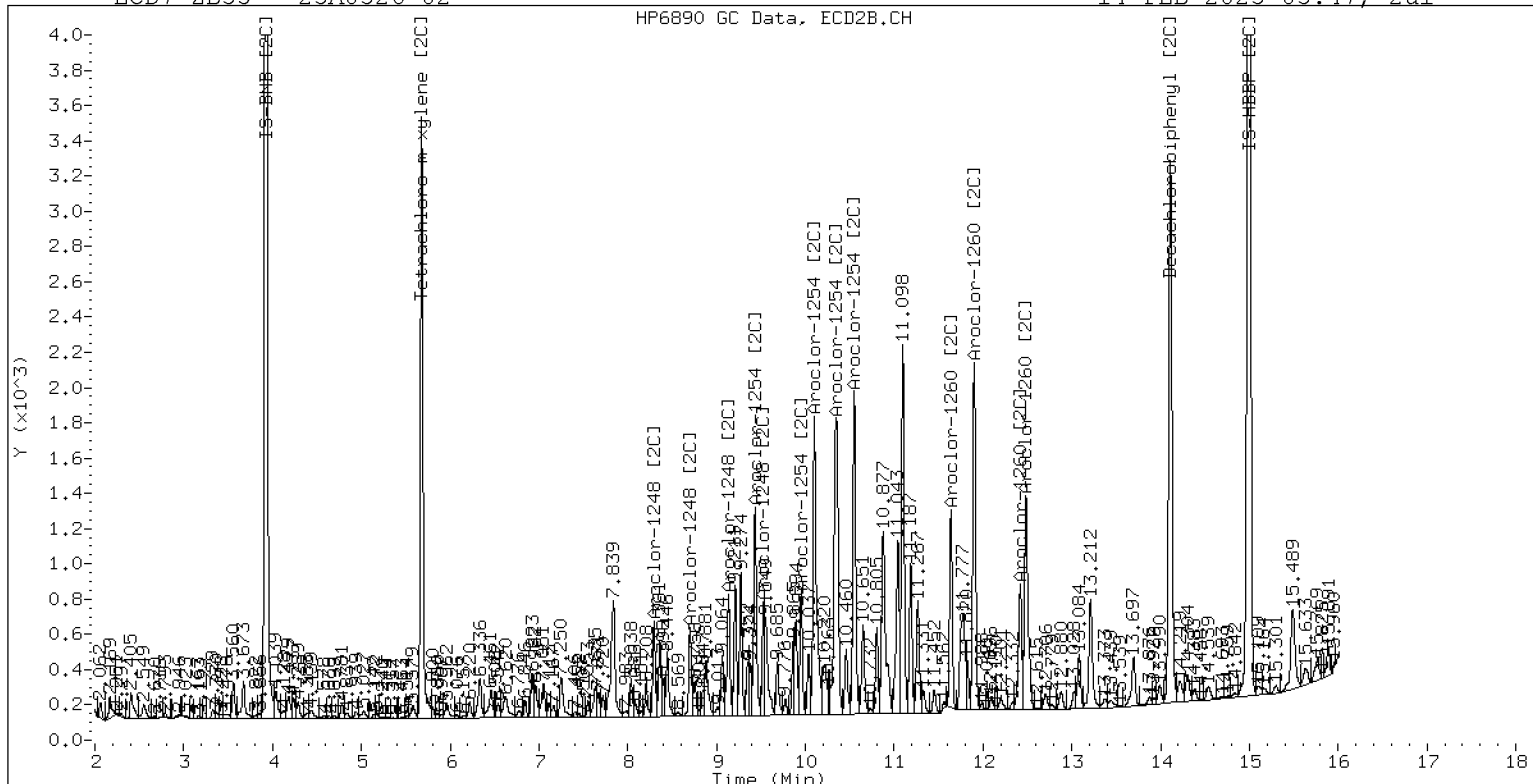
14-FEB-2023 03:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-02

14-FEB-2023 03:47, 2ul

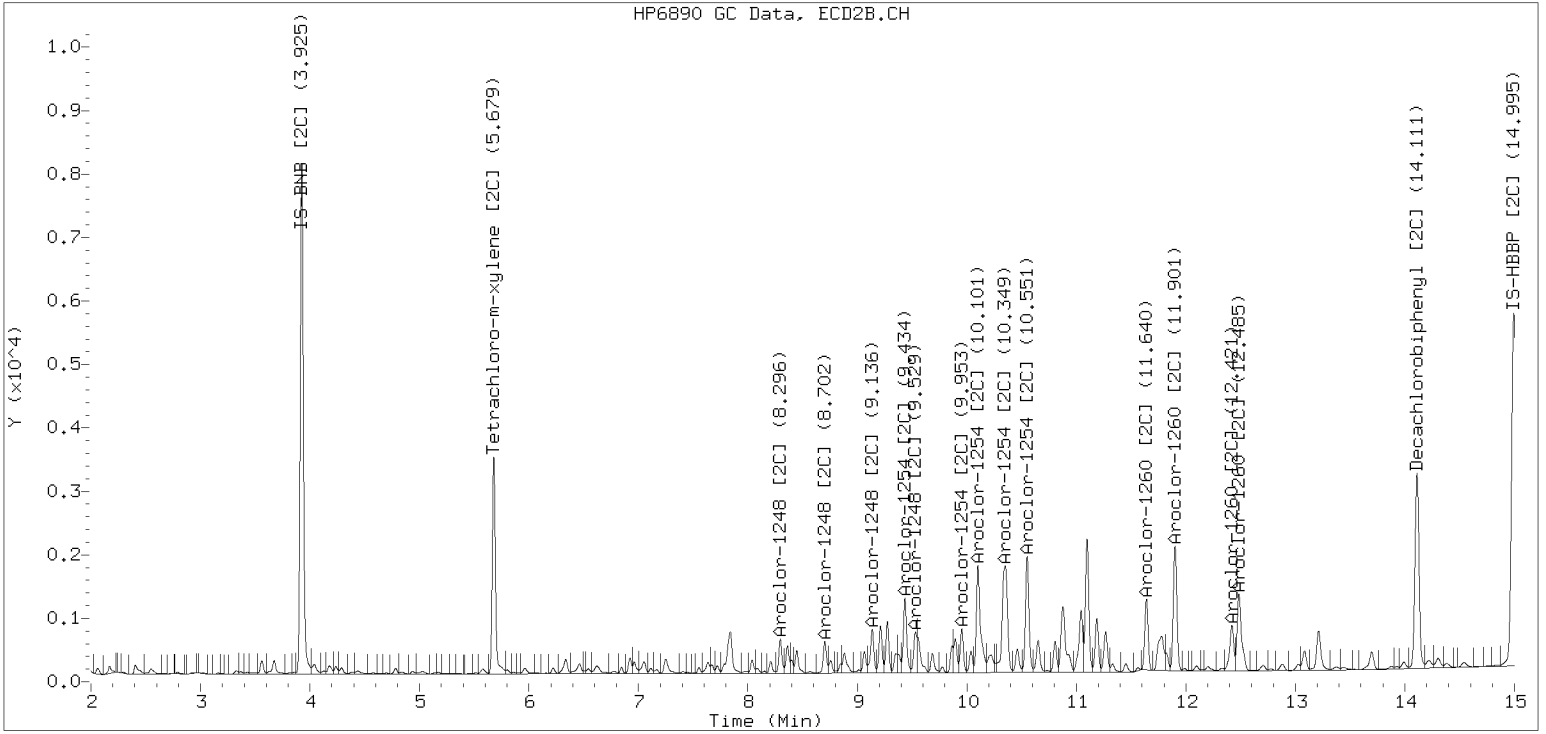


ZB-35 Manual Integration: YES

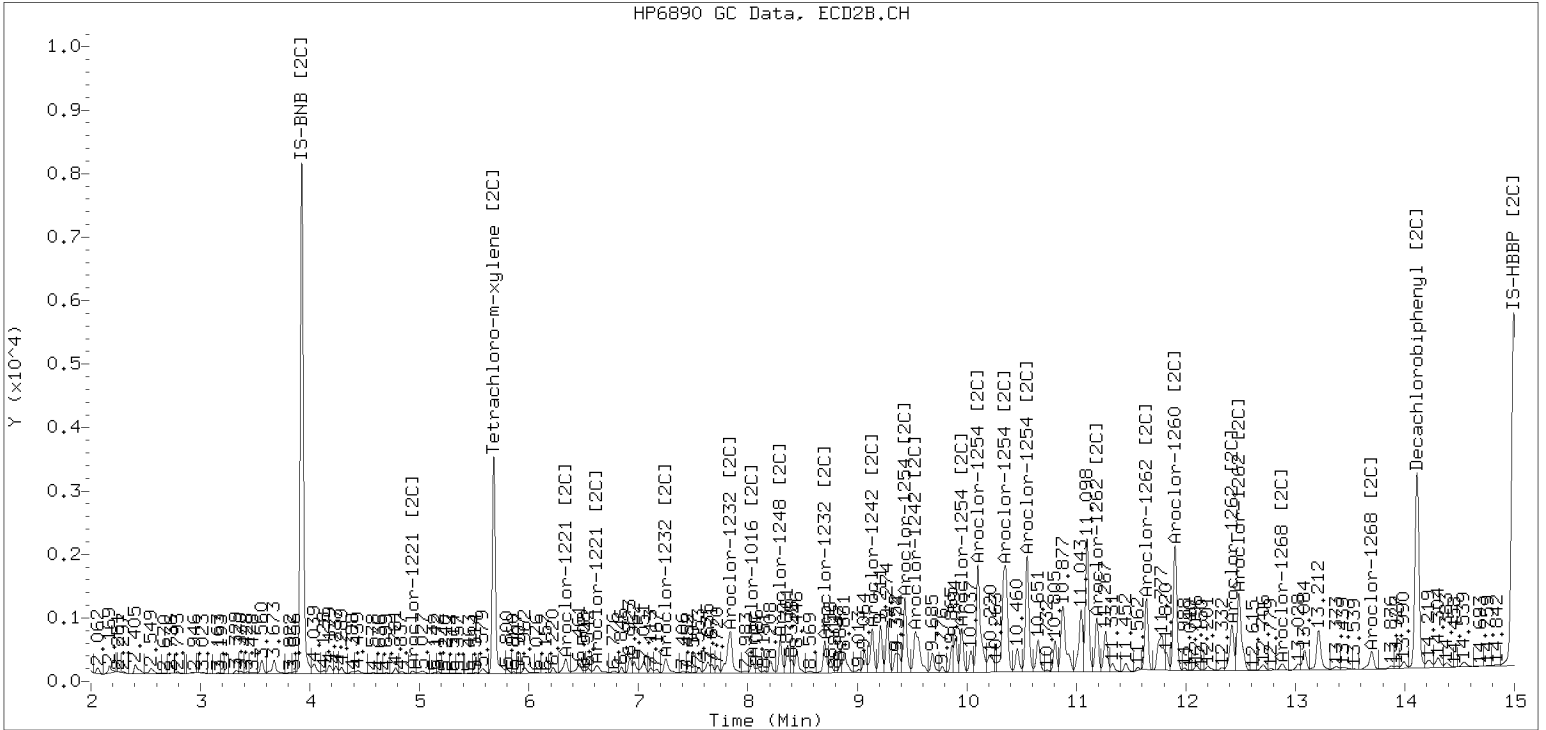
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132352ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





Dual Column

LDW23-SC1128

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>	
Client: <u>Anchor QEA, LLC</u>		
Project: <u>AOC5 MR Phase 1</u>		
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-03 A</u>	File ID: <u>02132353ECD7.D</u>
Sampled: <u>01/17/23 08:36</u>	Prepared: <u>01/31/23 15:03</u>	Analyzed: <u>02/14/23 04:08</u>
% Solids: <u>53.20</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>23.59 g Wet / 2.5 mL</u>
Batch: <u>BLA0687</u>	Sequence: <u>SLB0168</u>	Calibration: <u>GA00061</u>
Instrument: <u>ECD7</u>	Column 1: <u>ZB5</u>	Column 2: <u>ZB35</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	46.2	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	75.8	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	79.5	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9682	6.64	83.3	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9682	5.42	68.0	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9682	6.58	82.5	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9682	6.56	82.4	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132353ECD7.D
Data file 2: /230213.b/230213.b/02132353ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-03
Client ID:
Injection Date: 14-FEB-2023 04:08
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag
RT	Shift Response	RT	Shift Response	on col	on col		
5.802	-0.005	161427	142728	27.2	32.9	19.1	Tetrachloro-m-xylene
13.884	-0.004	126393	162729	33.3	33.0	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	419677	-16.6
Hexabromobiphenyl	647433	354652	-45.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	320487	-4.9
Hexabromobiphenyl	382032	310533	-18.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.393	-0.012	39447	187.9	1	8.296	-0.007	38087	262.9
Aroclor-1248	2	8.562	-0.018	35208	131.5	2	8.702	-0.007	33911	217.5
Aroclor-1248	3	8.980	-0.019	105861	206.6	3	9.135	-0.017	49716	260.9
Aroclor-1248	4	9.283	-0.010	117361	462.9	4	9.530	-0.047	43800	185.9
Total CollAve (4 peaks):				247.2	Total Col2Ave (4 peaks):				231.8	RPD = 6
Corrected Ave (3 peaks):				175.3	Corrected Ave (3 peaks):				221.4	RPD = 23
Aroclor-1254	1	9.283	-0.009	117361	274.4	1	9.435	-0.009	92336	397.1
Aroclor-1254	2	9.359	-0.012	42395	232.1	2	9.953	-0.010	43810	233.1
Aroclor-1254	3	9.662	0.001	132692	484.2	3	10.102	-0.014	159336	388.7
Aroclor-1254	4	9.784	-0.016	158243	294.7	4	10.354	-0.011	206122	502.8
Aroclor-1254	5	10.112	-0.052	211553	605.8	5	10.552	-0.011	160808	704.3
Total CollAve (5 peaks):				370.2	Total Col2Ave (5 peaks):				445.2	RPD = 16
Corrected Ave (4 peaks):				321.3	Corrected Ave (4 peaks):				380.4	RPD = 17
Aroclor-1260	1	11.031	-0.009	78325	393.6	1	11.641	-0.007	88784	396.3
Aroclor-1260	2	11.346	-0.010	67978	332.3	2	11.902	-0.011	205949	363.4
Aroclor-1260	3	11.717	-0.011	196780	365.4	3	12.422	-0.009	65359	462.7
Aroclor-1260	4	12.117	-0.016	106507	382.8	4	12.485	-0.010	137470	374.8
Aroclor-1260	5	12.232	-0.009	41809	344.7	NS	---			---
Total CollAve (5 peaks):				363.8	Total Col2Ave (4 peaks):				399.3	RPD = 9
Corrected Ave (4 peaks):				356.3	Corrected Ave (3 peaks):				378.2	RPD = 6
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.908 - 13.788) = 3230491 Col1 Total PCB = 0.7 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 2953659 Col2 Total PCB = 0.9 ppm*

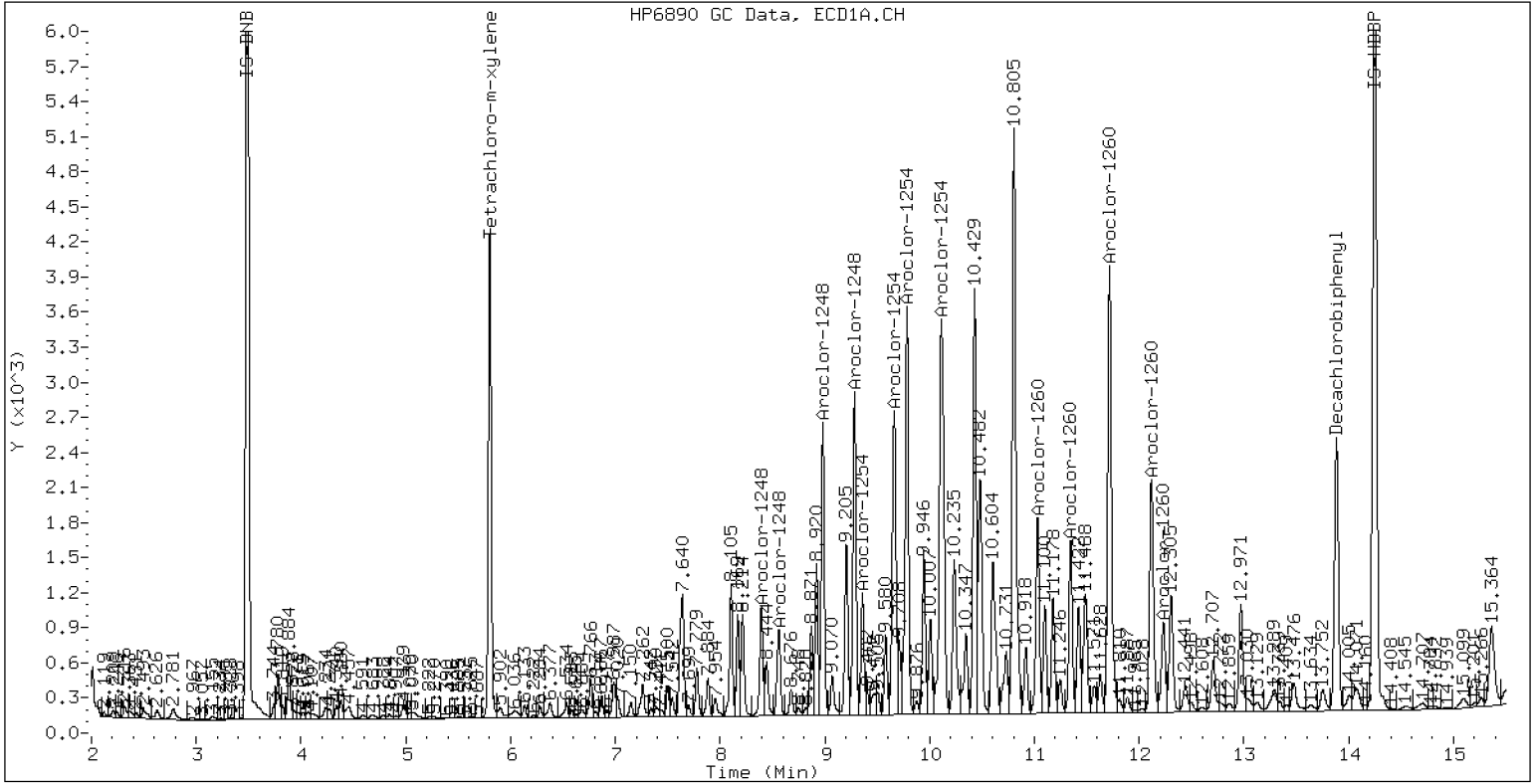
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-03

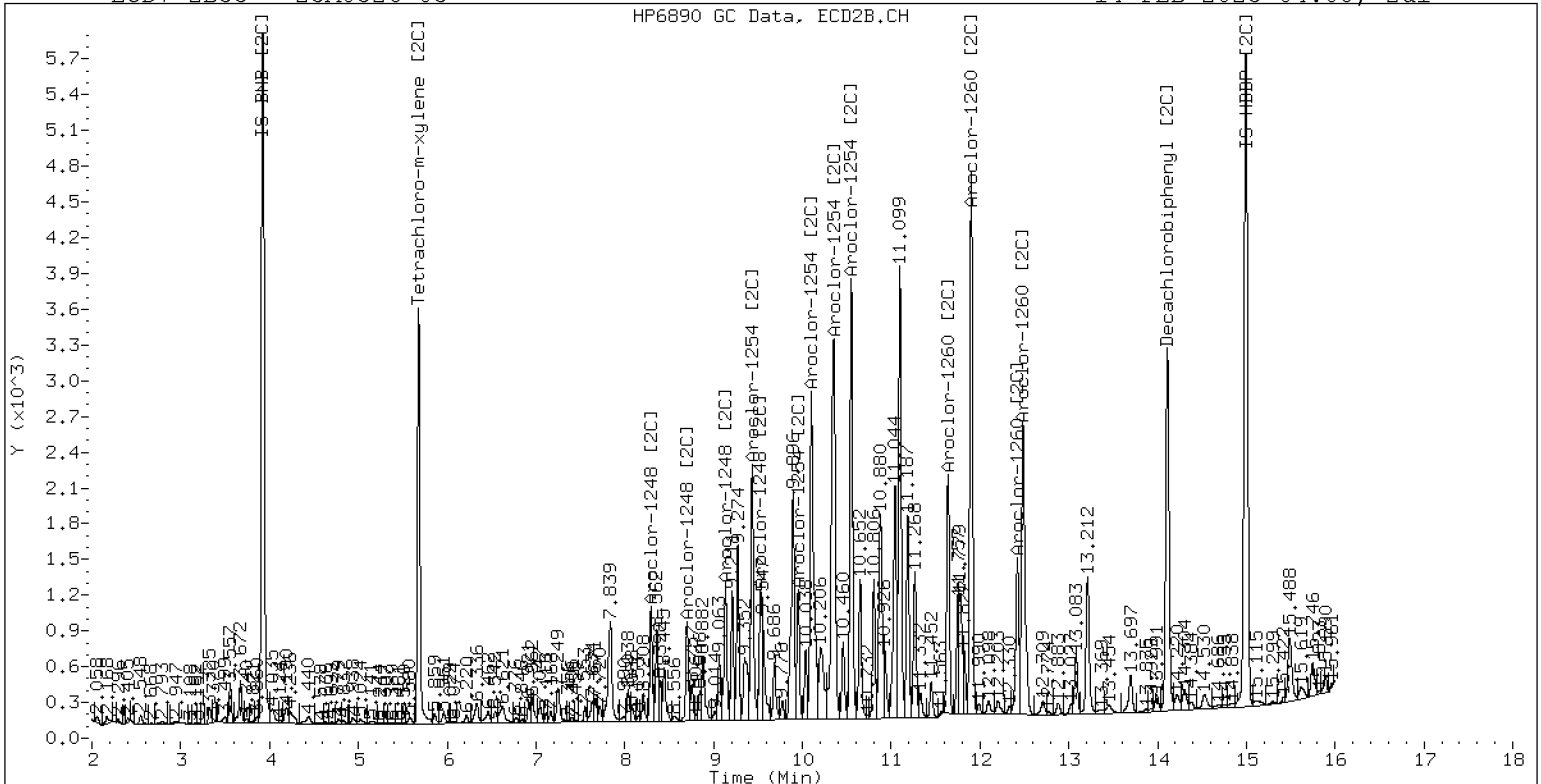
14-FEB-2023 04:08, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-03

14-FEB-2023 04:08, 2ul

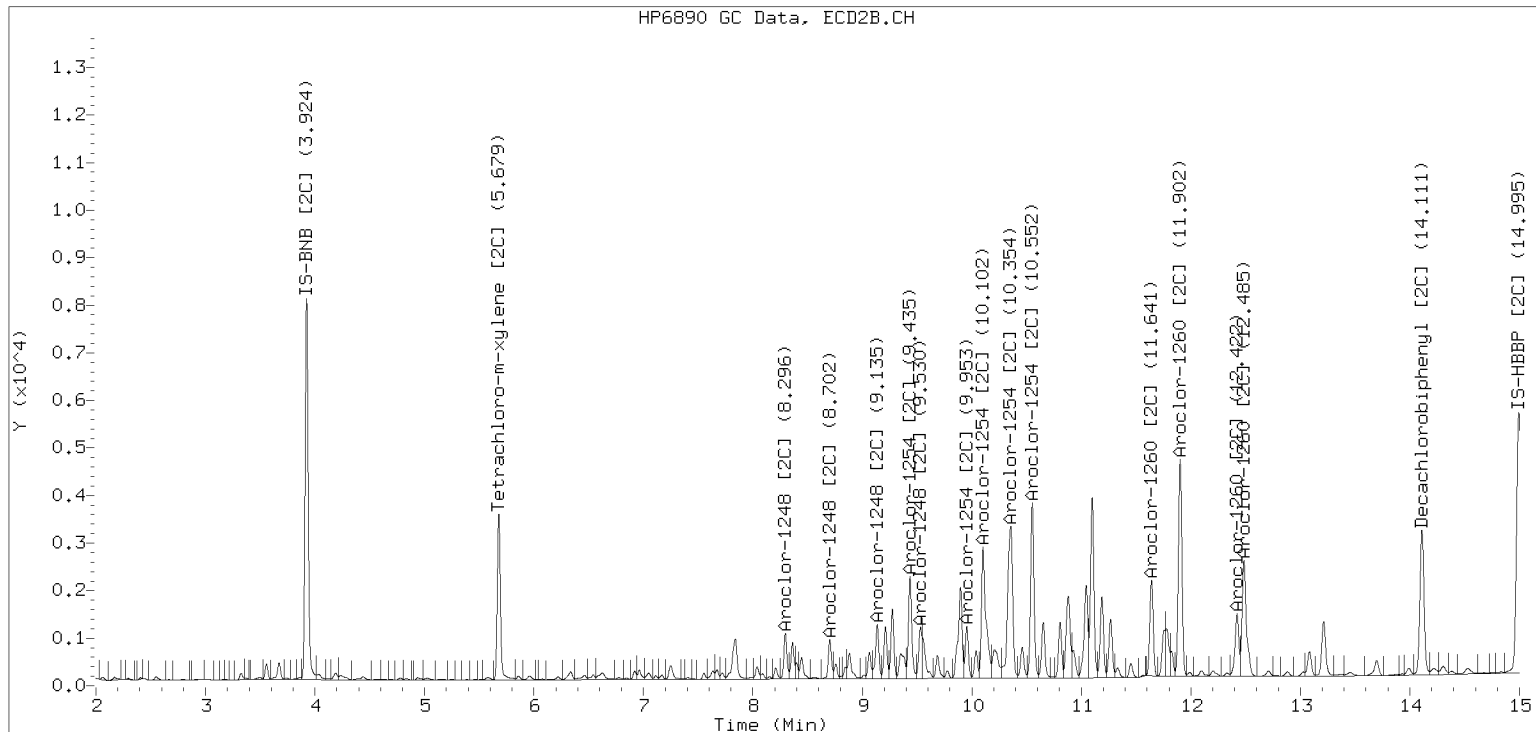


ZB-35 Manual Integration: YES

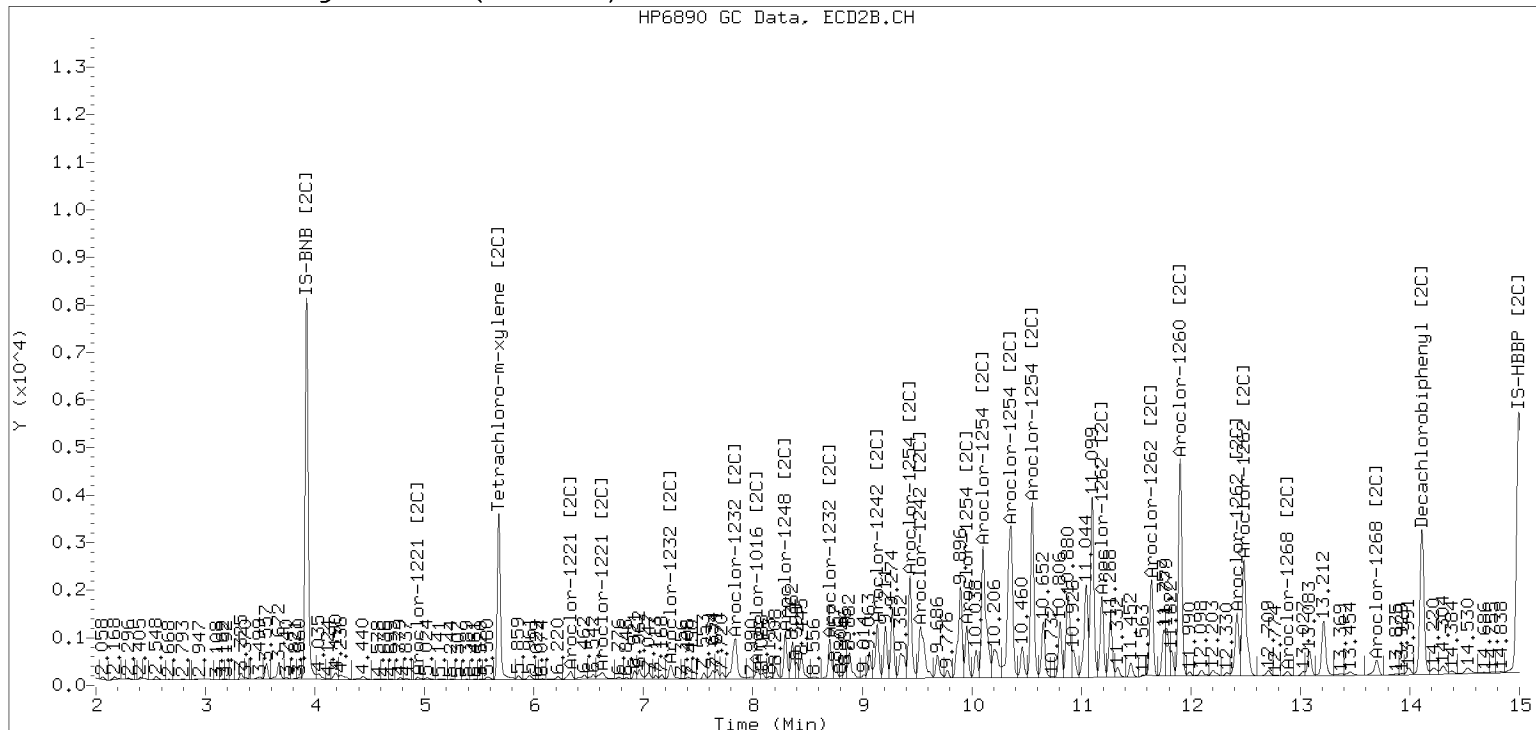
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132353ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23A0326-04 A

File ID: 02132354ECD7.D

Sampled: 01/17/23 10:33

Prepared: 01/31/23 15:03

Analyzed: 02/14/23 04:29

% Solids: 51.64

Preparation: EPA 3546 (Microwave)

Initial/Final: 24.3 g Wet / 2.5 mL

Batch: BLA0687

Sequence: SLB0168

Calibration: GA00061

Instrument: ECD7

Column 1: ZB5

Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	21.6	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	33.9	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	26.0	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9691	6.28	78.8	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9691	5.47	68.6	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9691	6.22	78.0	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9691	6.45	80.9	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132354ECD7.D
Data file 2: /230213.b/230213.b/02132354ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-04
Client ID:
Injection Date: 14-FEB-2023 04:29
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.803	-0.005	158243	5.679	-0.006	143149	27.5	32.4	16.4	Tetrachloro-m-xylene
13.884	-0.005	121506	14.112	-0.005	156637	31.5	31.2	1.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	407767	-19.0
Hexabromobiphenyl	647433	360348	-44.3
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	327071	-2.9
Hexabromobiphenyl	382032	316301	-17.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.394	-0.012	17580	86.2	1	8.297	-0.006	19127	129.4	
Aroclor-1248	2	8.563	-0.018	14557	55.9	2	8.703	-0.006	15467	97.2	
Aroclor-1248	3	8.981	-0.018	42420	85.2	3	9.136	-0.017	22749	117.0	
Aroclor-1248	4	9.283	-0.010	45720	185.6	4	9.531	-0.047	21488	89.4	
Total CollAve (4 peaks):				103.2	Total Col2Ave (4 peaks):				108.2	RPD = 5	
Corrected Ave (3 peaks):				75.8	Corrected Ave (3 peaks):				101.2	RPD = 29	
Aroclor-1254	1	9.283	-0.009	45720	110.0	1	9.435	-0.009	39934	168.3	
Aroclor-1254	2	9.359	-0.012	18685	105.3	2	9.954	-0.010	19741	102.9	
Aroclor-1254	3	9.661	0.000	43914	164.9	3	10.102	-0.014	64124	153.3	
Aroclor-1254	4	9.784	-0.015	66872	128.2	4	10.349	-0.017	77678	185.7	
Aroclor-1254	5	10.117	-0.046	80539	237.4	5	10.552	-0.011	55992	240.3	
Total CollAve (5 peaks):				149.2	Total Col2Ave (5 peaks):				170.1	RPD = 13	
Corrected Ave (4 peaks):				127.1	Corrected Ave (4 peaks):				152.5	RPD = 18	
Aroclor-1260	1	11.032	-0.008	24018	118.8	1	11.641	-0.007	27453	120.3	
Aroclor-1260	2	11.345	-0.010	18273	87.9	2	11.902	-0.011	54560	94.5	
Aroclor-1260	3	11.717	-0.012	59917	109.5	3	12.422	-0.009	27073	188.1	
Aroclor-1260	4	12.118	-0.015	29365	103.9	4	12.485	-0.011	44338	118.7	
Aroclor-1260	5	12.233	-0.007	15388	124.9	NS	---			----	
Total CollAve (5 peaks):				109.0	Total Col2Ave (4 peaks):				130.4	RPD = 18	
Corrected Ave (4 peaks):				105.0	Corrected Ave (3 peaks):				111.2	RPD = 6	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 1646275 Col1 Total PCB = 0.3 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 1434689 Col2 Total PCB = 0.4 ppm*

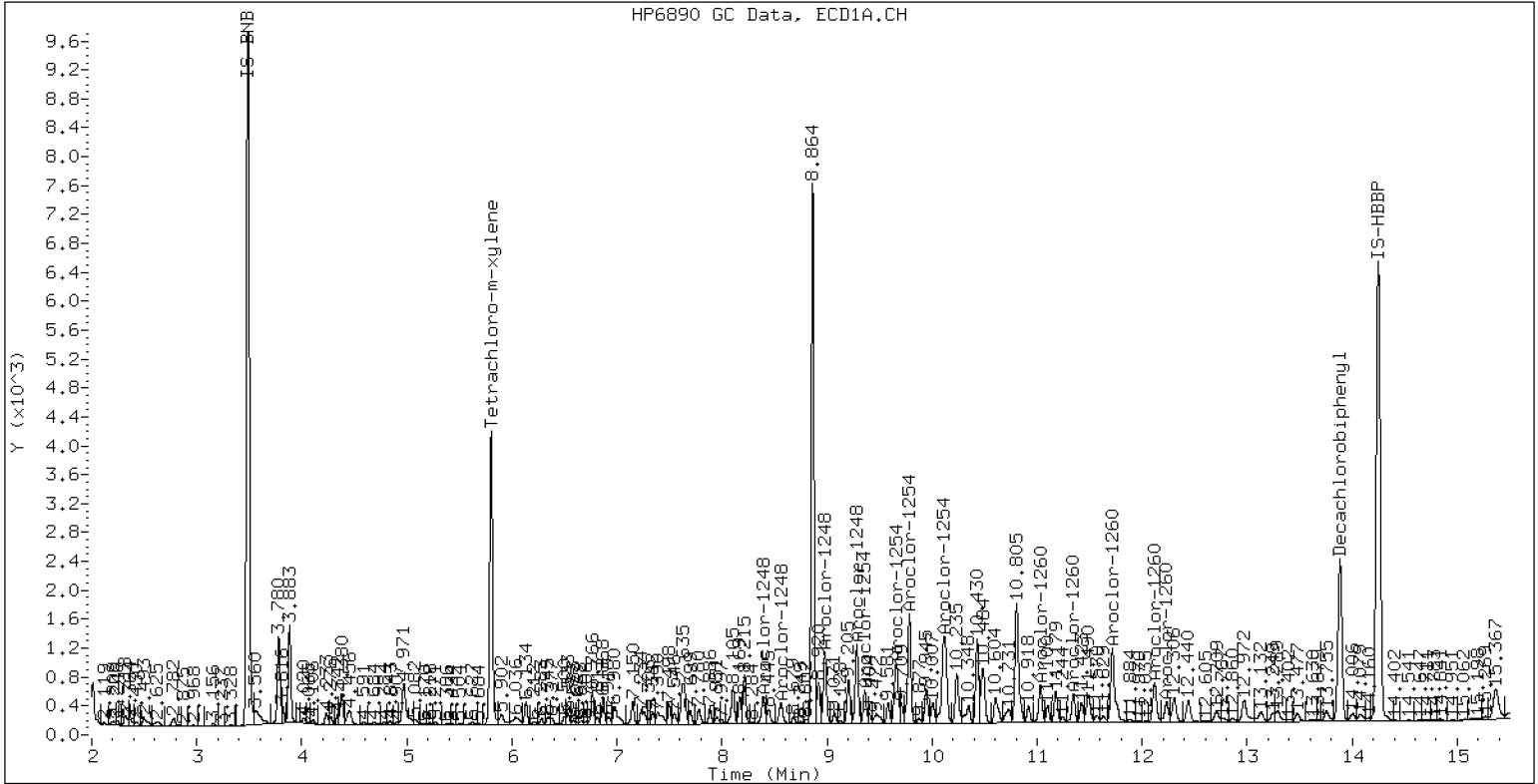
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-04

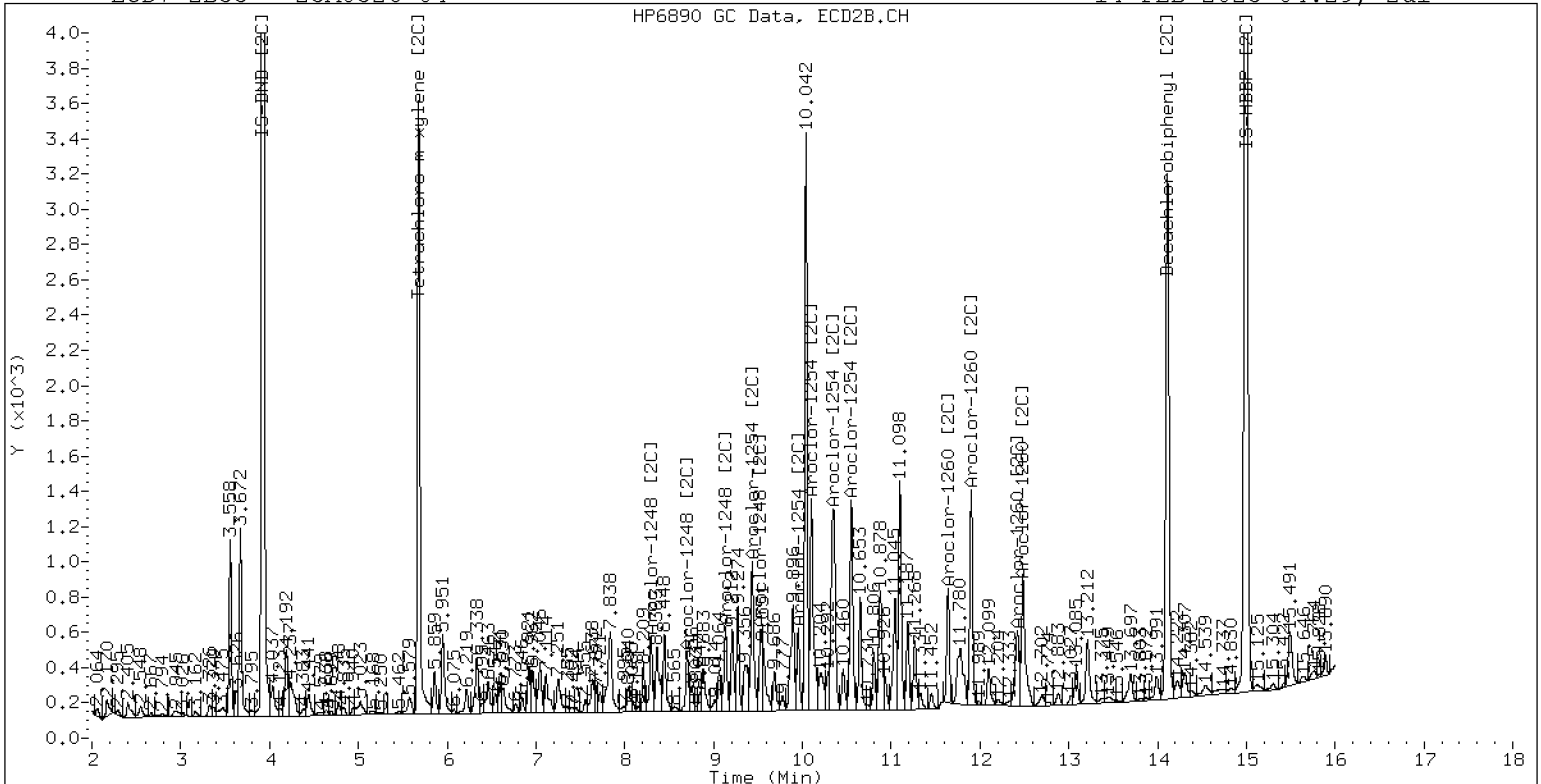
14-FEB-2023 04:29, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-04

14-FEB-2023 04:29, 2ul

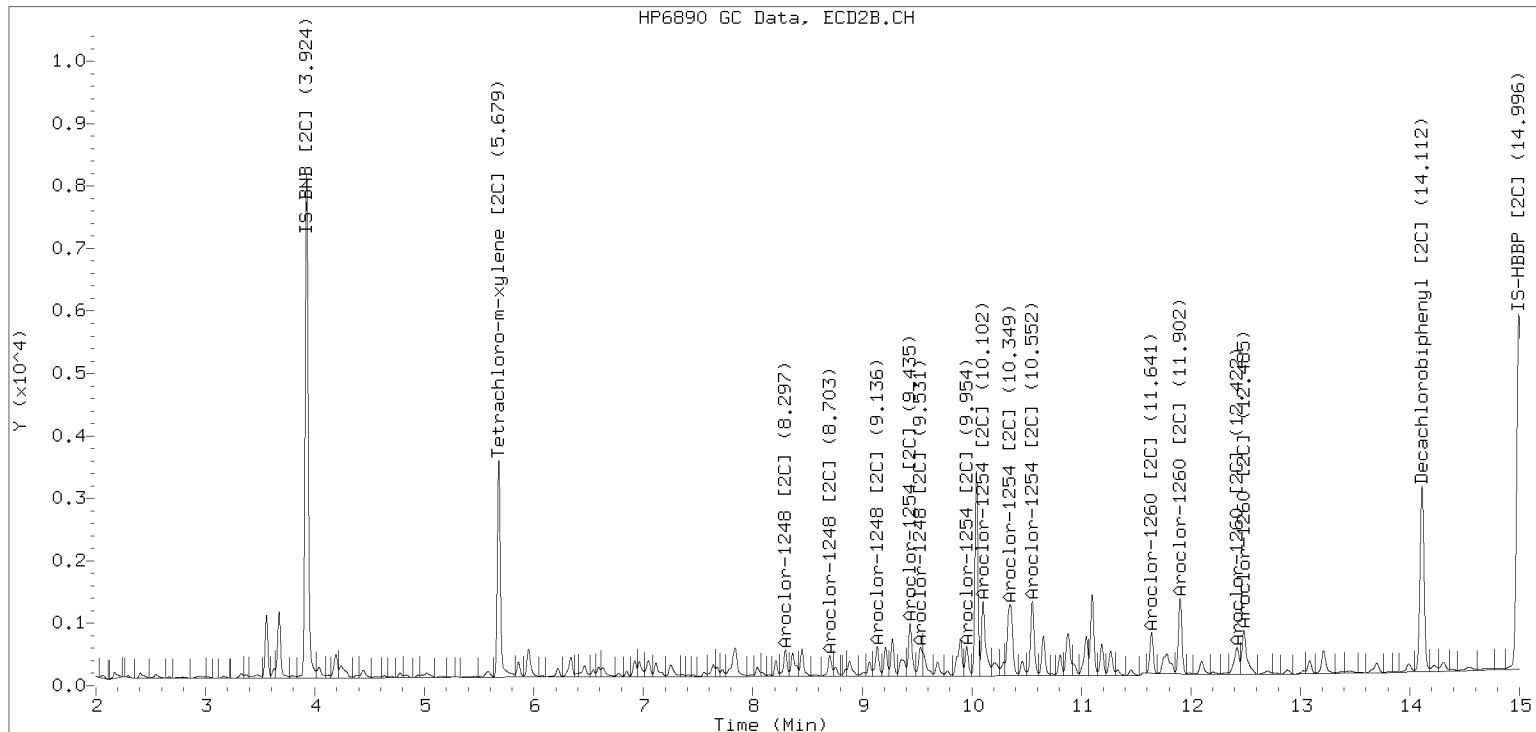


ZB-35 Manual Integration: YES

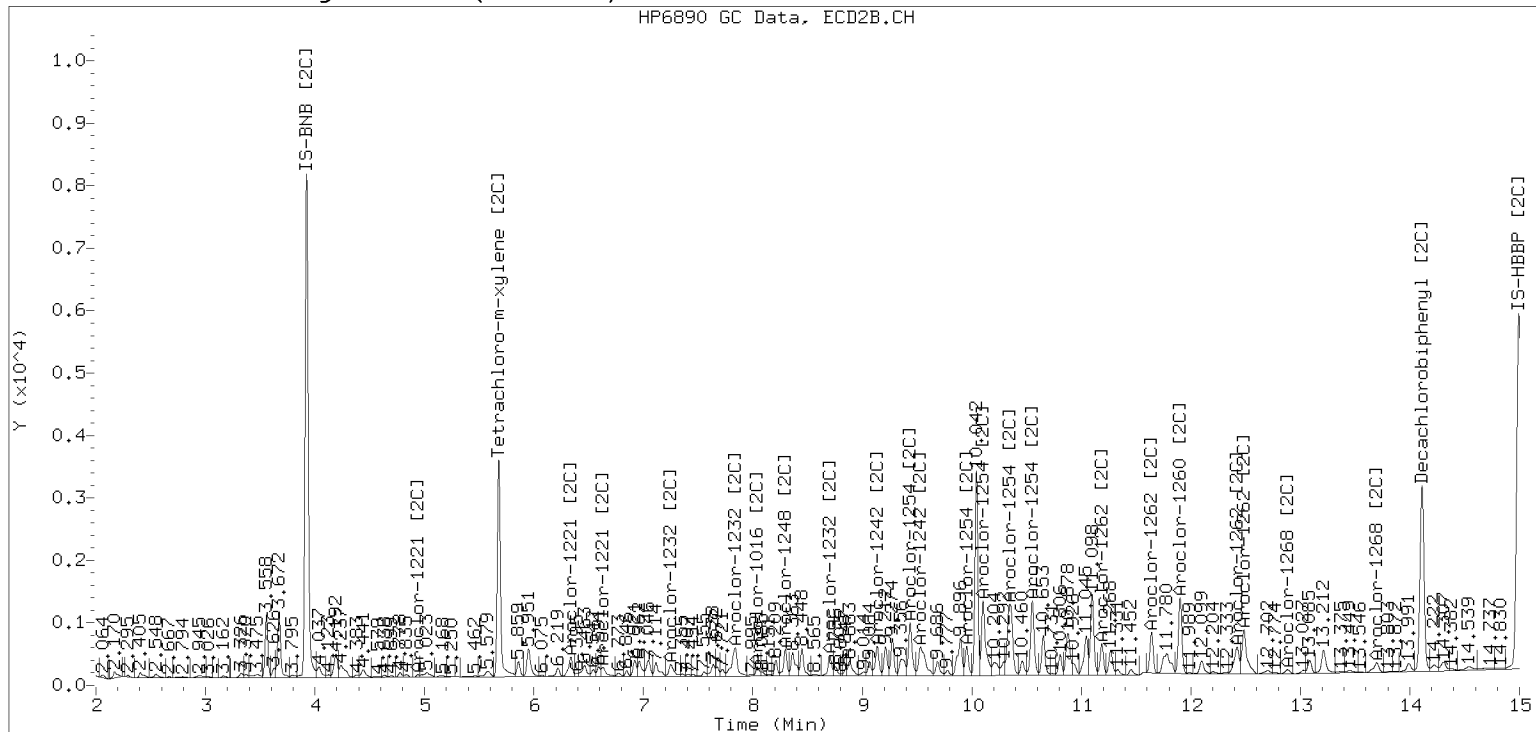
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132354ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23A0326-05 A File ID: 02132355ECD7.D
 Sampled: 01/17/23 11:08 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 04:50
 % Solids: 54.64 Preparation: EPA 3546 (Microwave) Initial/Final: 22.94 g Wet / 2.5 mL
 Batch: BLA0687 Sequence: SLB0168 Calibration: GA00061
 Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	53.7	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	84.8	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	74.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9780	6.05	75.9	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9780	4.72	59.2	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9780	5.92	74.2	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9780	5.55	69.5	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132355ECD7.D
Data file 2: /230213.b/230213.b/02132355ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-05
Client ID:
Injection Date: 14-FEB-2023 04:50
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.802	-0.005	138240	5.679	-0.005	121121	23.7	27.8	16.1	Tetrachloro-m-xylene
13.883	-0.005	109930	14.110	-0.007	145690	30.3	29.7	2.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	413268	-17.9
Hexabromobiphenyl	647433	338749	-47.7
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	322140	-4.4
Hexabromobiphenyl	382032	309225	-19.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.392	-0.013	45952	222.3	1	8.296	-0.007	37547	257.9
Aroclor-1248	2	8.562	-0.019	32044	121.5	2	8.702	-0.007	35094	223.9
Aroclor-1248	3	8.979	-0.019	108899	215.9	3	9.135	-0.018	49591	258.9
Aroclor-1248	4	9.283	-0.010	117988	472.5	4	9.528	-0.049	79782	336.8
Total CollAve (4 peaks):				258.0	Total Col2Ave (4 peaks):				269.4	RPD = 4
Corrected Ave (3 peaks):				186.6	Corrected Ave (3 peaks):				246.9	RPD = 28
Aroclor-1254	1	9.283	-0.009	117988	280.1	1	9.435	-0.009	96807	414.2
Aroclor-1254	2	9.358	-0.013	49299	274.1	2	9.953	-0.010	42271	223.8
Aroclor-1254	3	9.658	-0.003	95736	354.8	3	10.101	-0.014	162487	394.3
Aroclor-1254	4	9.783	-0.017	162818	307.9	4	10.350	-0.015	193491	469.6
Aroclor-1254	5	10.116	-0.048	208021	604.9	5	10.551	-0.012	143196	623.9
Total CollAve (5 peaks):				364.4	Total Col2Ave (5 peaks):				425.2	RPD = 15
Corrected Ave (4 peaks):				304.2	Corrected Ave (4 peaks):				375.5	RPD = 21
Aroclor-1260	1	11.031	-0.009	67423	354.7	1	11.640	-0.009	84356	378.1
Aroclor-1260	2	11.346	-0.010	57996	296.8	2	11.901	-0.012	175794	311.5
Aroclor-1260	3	11.716	-0.012	161797	314.6	3	12.422	-0.010	63140	448.8
Aroclor-1260	4	12.117	-0.016	90161	339.3	4	12.485	-0.011	129503	354.5
Aroclor-1260	5	12.232	-0.009	40685	351.2	NS	---			---
Total CollAve (5 peaks):				331.3	Total Col2Ave (4 peaks):				373.2	RPD = 12
Corrected Ave (4 peaks):				325.5	Corrected Ave (3 peaks):				348.1	RPD = 7
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.908 - 13.788) = 3096253 Col1 Total PCB = 0.6 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 2880446 Col2 Total PCB = 0.8 ppm*

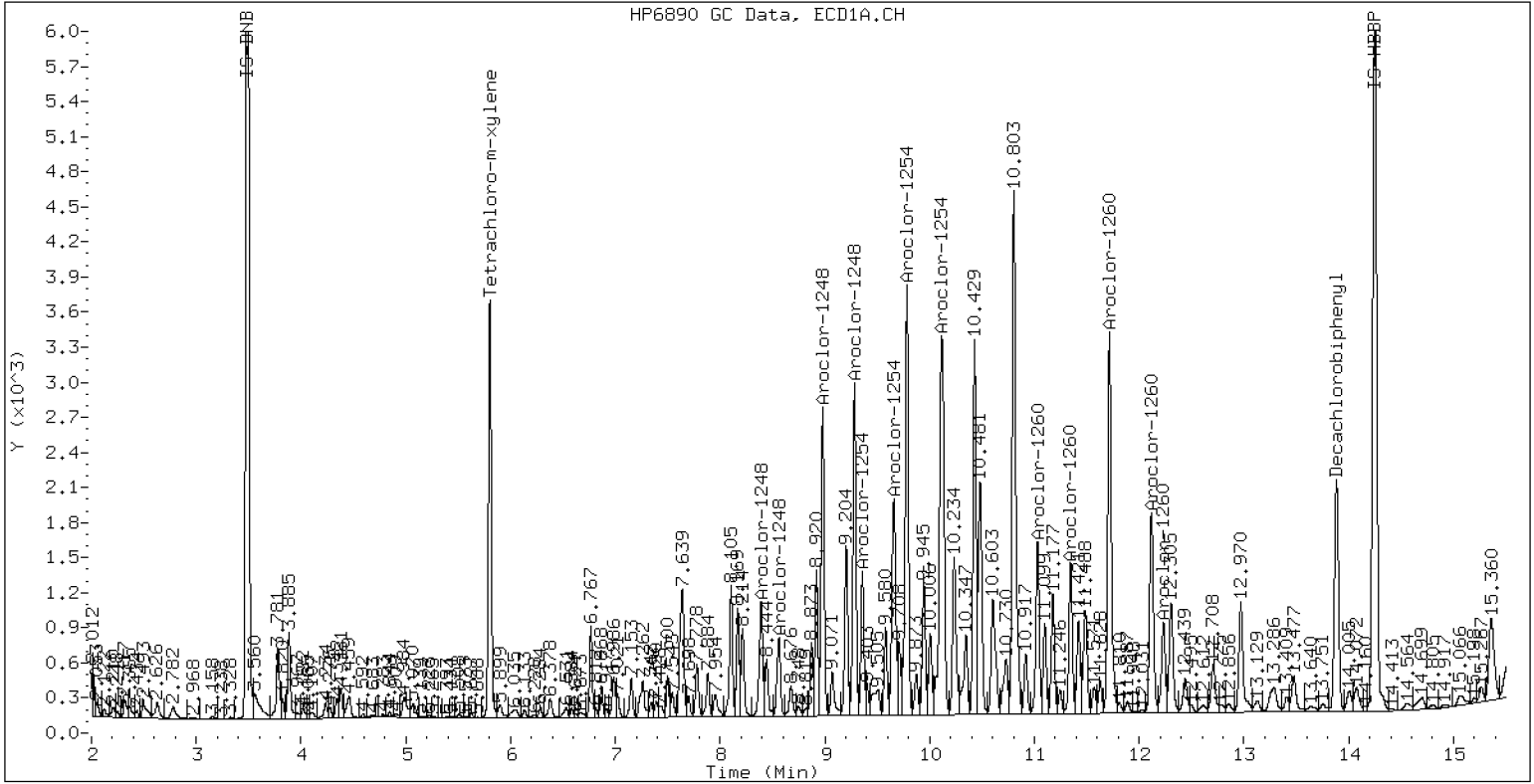
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-05

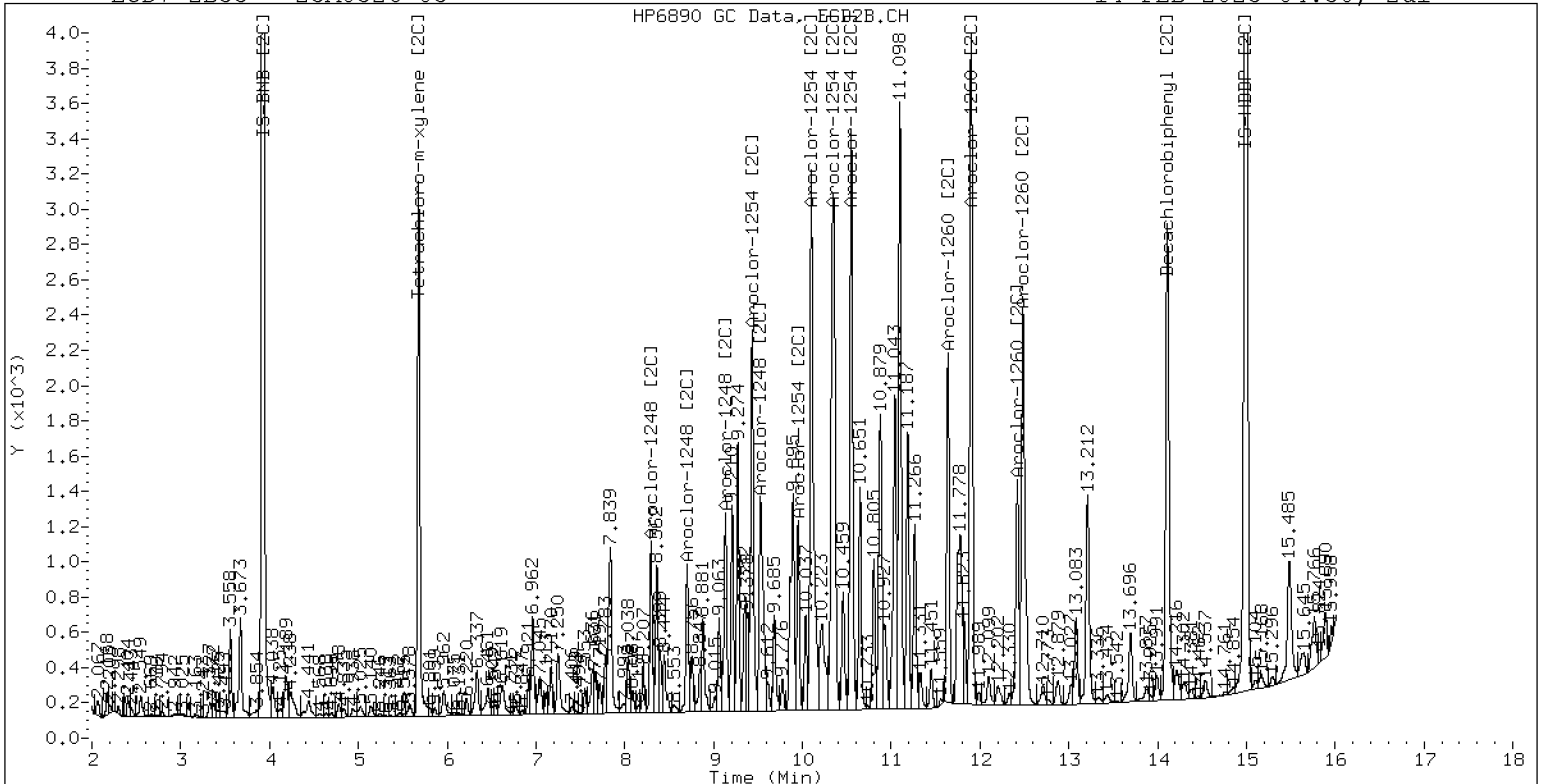
14-FEB-2023 04:50, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-05

14-FEB-2023 04:50, 2ul



ZB-35 Manual Integration: YES



ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23A0326-06 A File ID: 02132356ECD7.D
 Sampled: 01/17/23 11:51 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 05:11
 % Solids: 56.51 Preparation: EPA 3546 (Microwave) Initial/Final: 22.18 g Wet / 2.5 mL
 Batch: BLA0687 Sequence: SLB0168 Calibration: GA00061
 Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	30.4	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	51.9	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	40.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9784	6.57	82.3	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9784	5.39	67.6	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9784	6.94	86.9	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9784	6.36	79.7	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132356ECD7.D
Data file 2: /230213.b/230213.b/02132356ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-06
Client ID:
Injection Date: 14-FEB-2023 05:11
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.803	-0.004	162985	5.680	-0.004	144099	27.0	31.9	16.5	Tetrachloro-m-xylene
13.884	-0.004	124745	14.111	-0.006	178212	32.9	34.8	5.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	503318	426733	-15.2
Hexabromobiphenyl	647433	354182	-45.3

Standard Cpnd	Column 2		%D
	Standard Area*	Sample Area	
Bromo-Nitrobenzene	336911	334514	-0.7
Hexabromobiphenyl	382032	322885	-15.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.394	-0.012	26506	124.2	1	8.296	-0.006	28067	185.6	
Aroclor-1248	2	8.561	-0.019	21187	77.8	2	8.703	-0.006	23930	147.0	
Aroclor-1248	3	8.980	-0.019	64015	122.9	3	9.135	-0.018	31444	158.1	
Aroclor-1248	4	9.283	-0.010	70350	272.9	4	9.529	-0.049	29100	118.3	
Total CollAve (4 peaks):				149.4	Total Col2Ave (4 peaks):				152.3	RPD = 2	
Corrected Ave (3 peaks):				108.3	Corrected Ave (3 peaks):				141.2	RPD = 26	
Aroclor-1254	1	9.283	-0.009	70350	161.8	1	9.435	-0.009	56557	233.0	
Aroclor-1254	2	9.359	-0.011	28362	152.7	2	9.953	-0.011	28406	144.8	
Aroclor-1254	3	9.657	-0.004	58061	208.4	3	10.102	-0.014	101190	236.5	
Aroclor-1254	4	9.783	-0.016	97973	179.4	4	10.350	-0.016	129973	303.7	
Aroclor-1254	5	10.115	-0.049	120686	339.9	5	10.551	-0.012	91321	383.2	
Total CollAve (5 peaks):				208.4	Total Col2Ave (5 peaks):				260.3	RPD = 22	
Corrected Ave (4 peaks):				175.6	Corrected Ave (4 peaks):				229.5	RPD = 27	
Aroclor-1260	1	11.031	-0.009	40816	205.4	1	11.640	-0.009	46624	200.2	
Aroclor-1260	2	11.346	-0.009	34904	170.9	2	11.901	-0.012	97367	165.2	
Aroclor-1260	3	11.716	-0.013	105670	196.5	3	12.421	-0.010	38369	261.2	
Aroclor-1260	4	12.116	-0.017	55722	200.5	4	12.485	-0.011	69769	182.9	
Aroclor-1260	5	12.232	-0.009	28478	235.1	NS	---			----	
Total CollAve (5 peaks):				201.7	Total Col2Ave (4 peaks):				202.4	RPD = 0	
Corrected Ave (4 peaks):				193.3	Corrected Ave (3 peaks):				182.8	RPD = 6	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 2021115 Col1 Total PCB = 0.4 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 1821533 Col2 Total PCB = 0.5 ppm*

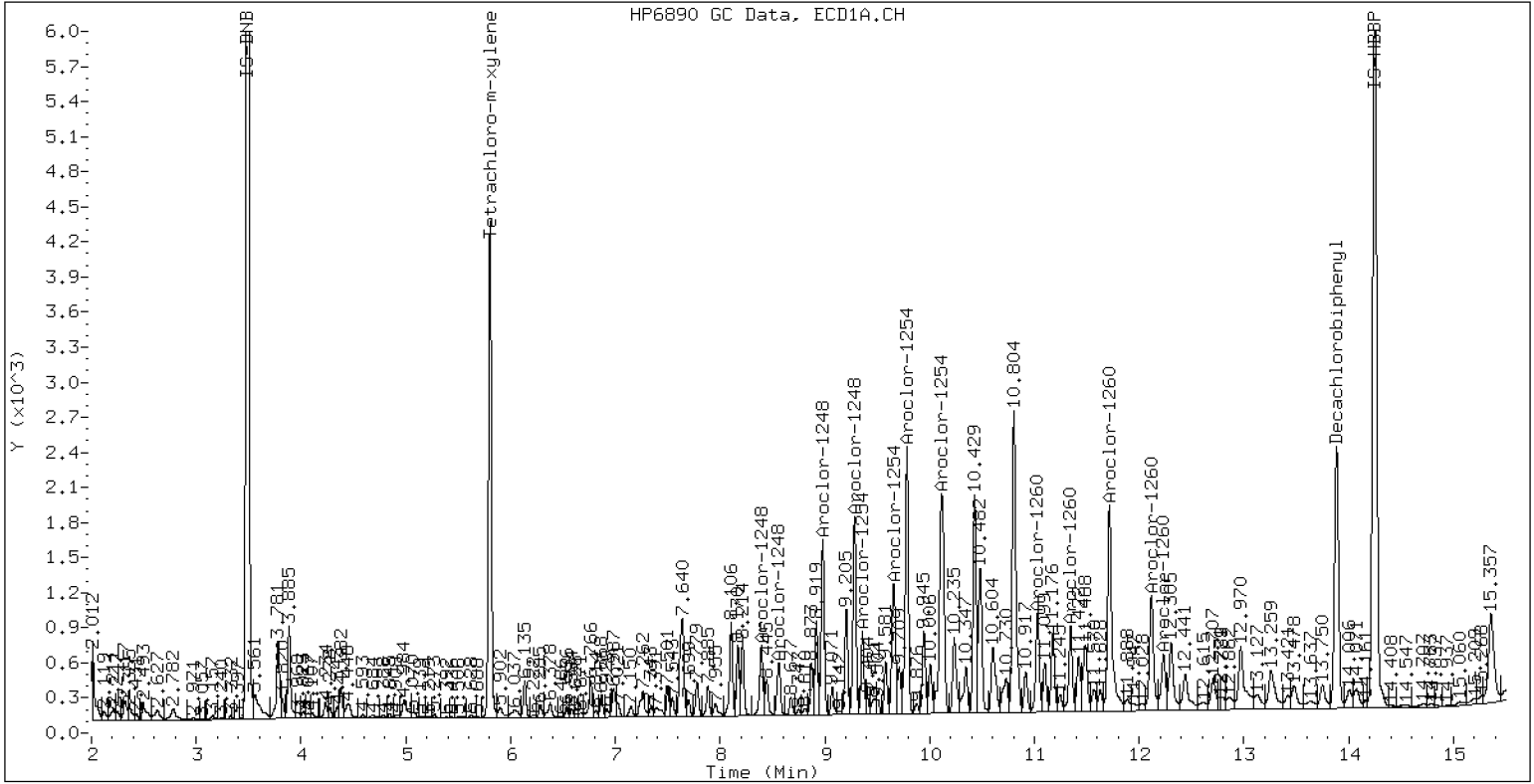
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-06

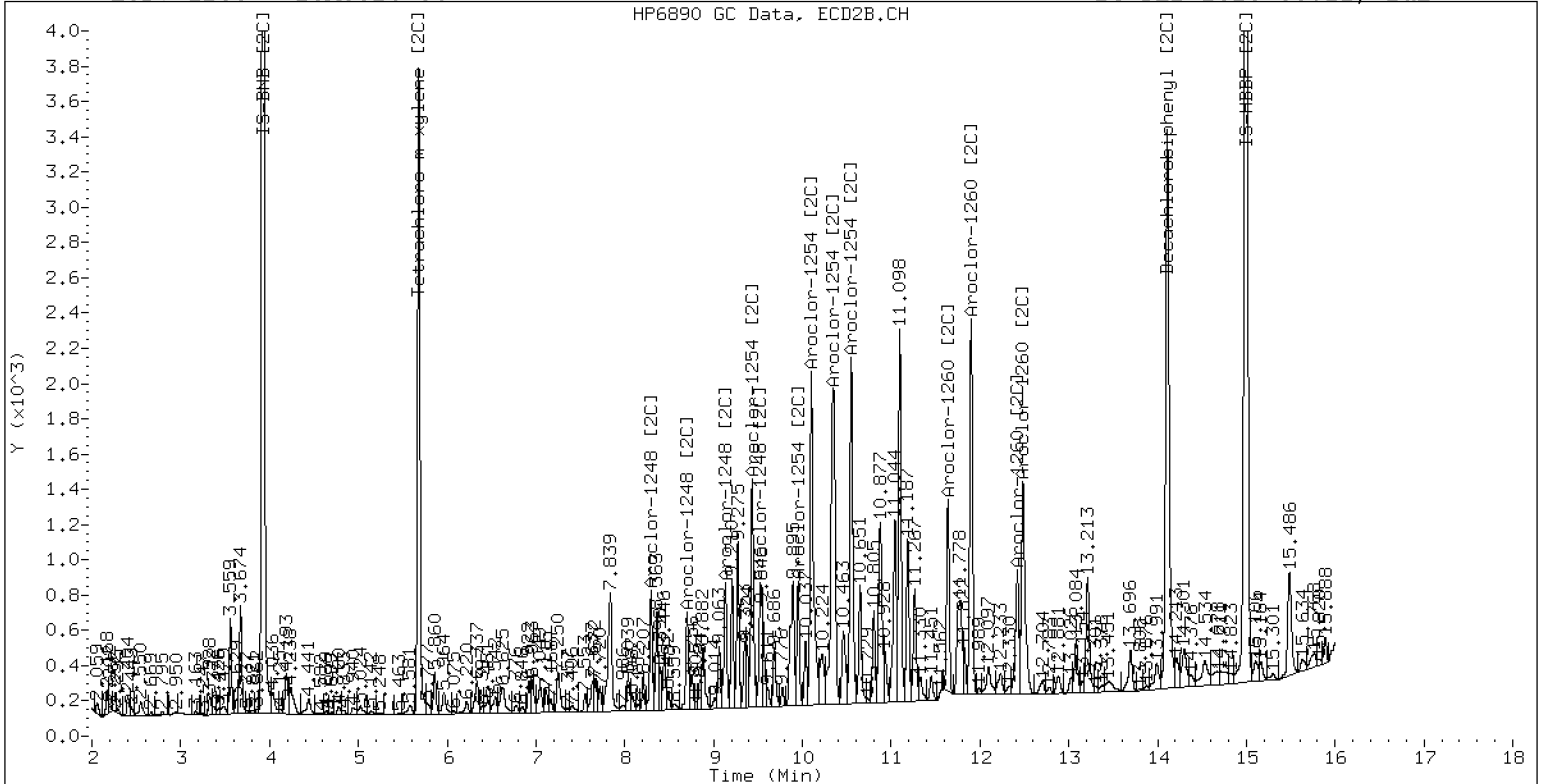
14-FEB-2023 05:11, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-06

14-FEB-2023 05:11, 2ul

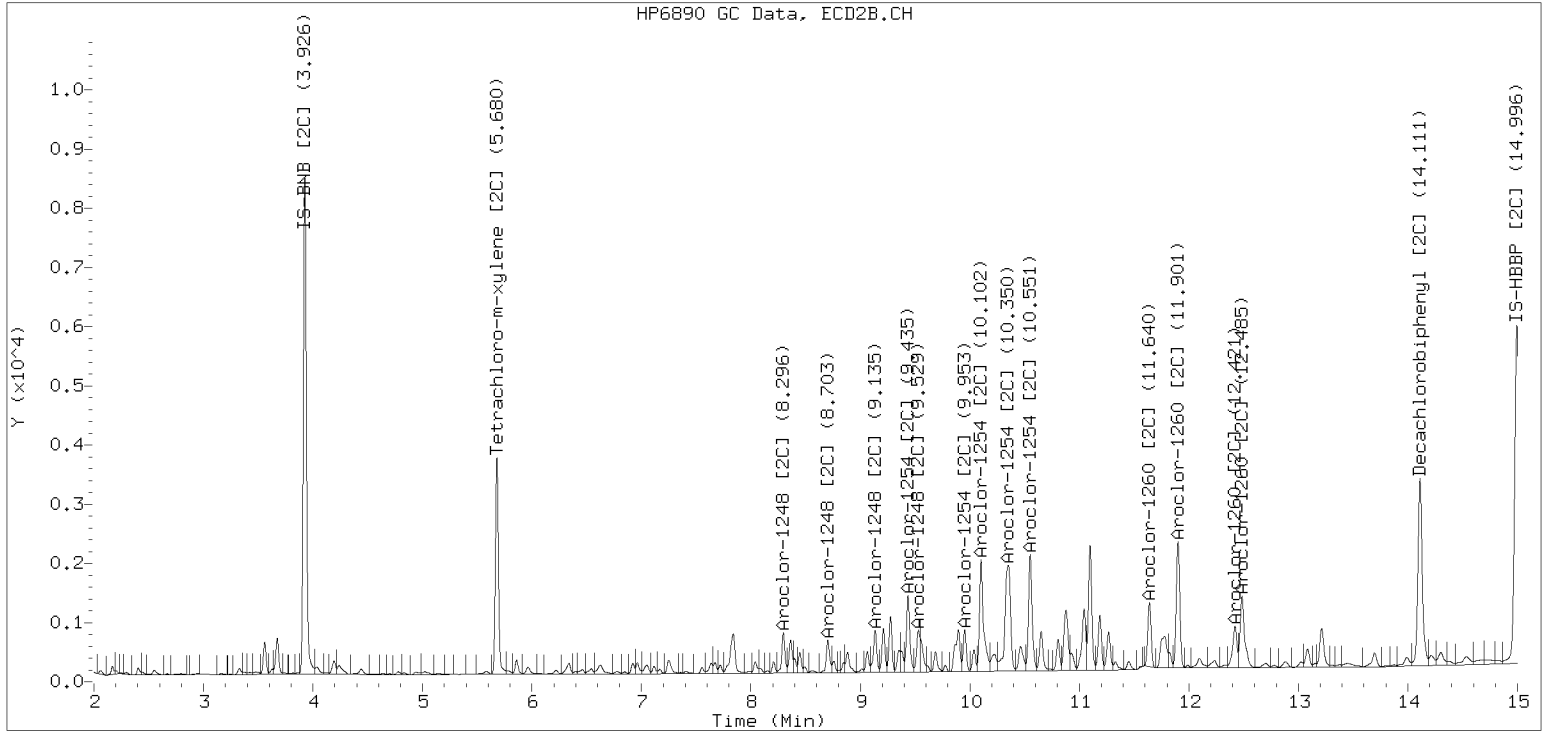


ZB-35 Manual Integration: YES

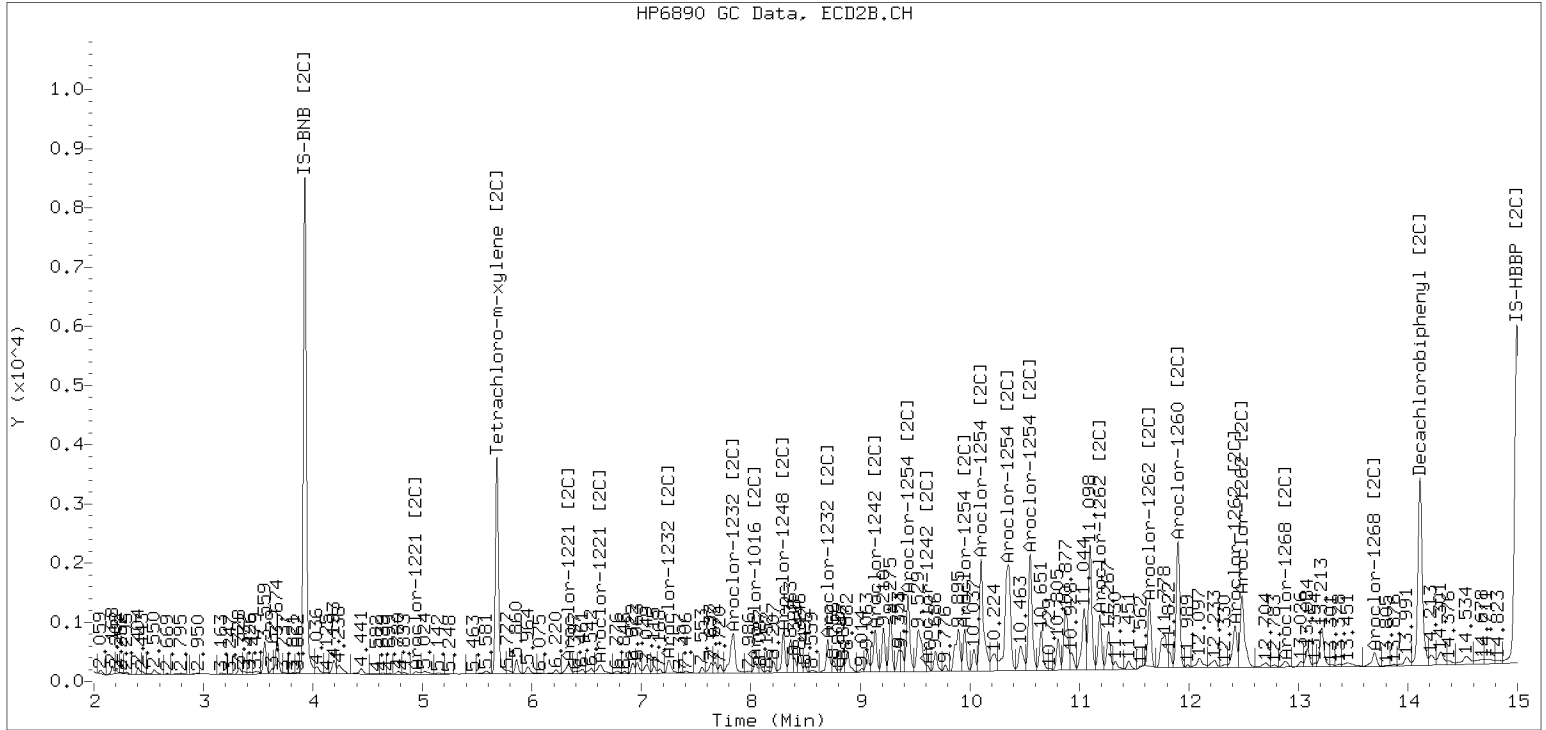
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132356ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23A0326-07 A File ID: 02132357ECD7.D
 Sampled: 01/17/23 12:11 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 05:32
 % Solids: 80.95 Preparation: EPA 3546 (Microwave) Initial/Final: 15.48 g Wet / 2.5 mL
 Batch: BLA0687 Sequence: SLB0168 Calibration: GA00061
 Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	20.9	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	13.8	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	13.6	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9802	7.23	90.6	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9802	6.26	78.5	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9802	5.86	73.5	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9802	6.55	82.1	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132357ECD7.D
Data file 2: /230213.b/230213.b/02132357ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-07
Client ID:
Injection Date: 14-FEB-2023 05:32
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.805	-0.003	191498	5.682	-0.002	161771	31.4	32.8	4.5	Tetrachloro-m-xylene
13.887	-0.002	158383	14.113	-0.004	182107	36.2	29.4	20.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	431723	-14.2
Hexabromobiphenyl	647433	408817	-36.9

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	364377	8.2
Hexabromobiphenyl	382032	390527	2.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.397	-0.008	20168	93.4	1	8.299	-0.003	16858	102.4	
Aroclor-1248	2	8.566	-0.014	25466	92.4	2	8.705	-0.004	17809	100.5	
Aroclor-1248	3	8.984	-0.015	39934	75.8	3	9.142	-0.011	23367	107.9	
Aroclor-1248	4	9.286	-0.008	25715	98.6	4	9.563	-0.015	29029	108.4	
Total CollAve (4 peaks):				90.0	Total Col2Ave (4 peaks):				104.8	RPD = 15	
Corrected Ave (3 peaks):				87.2	Corrected Ave (3 peaks):				103.6	RPD = 17	
Aroclor-1254	1	9.286	-0.007	25715	58.4	1	9.439	-0.005	17557	66.4	
Aroclor-1254	2	9.363	-0.008	11827	63.0	2	9.957	-0.007	9438	44.2	
Aroclor-1254	3	9.659	-0.001	16770	59.5	3	10.108	-0.008	31419	67.4	
Aroclor-1254	4	9.789	-0.011	31513	57.0	4	10.357	-0.008	34296	73.6	
Aroclor-1254	5	10.125	-0.039	16264	45.3	5	10.555	-0.008	24470	94.3	
Total CollAve (5 peaks):				56.6	Total Col2Ave (5 peaks):				69.2	RPD = 20	
Corrected Ave (4 peaks):				55.1	Corrected Ave (4 peaks):				62.9	RPD = 13	
Aroclor-1260	1	11.033	-0.006	16467	71.8	1	11.643	-0.006	17300	61.4	
Aroclor-1260	2	11.350	-0.006	13134	55.7	2	11.905	-0.008	37911	53.2	
Aroclor-1260	3	11.720	-0.009	41625	67.1	3	12.424	-0.007	16315	91.8	
Aroclor-1260	4	12.122	-0.010	18721	58.4	4	12.488	-0.008	30809	66.8	
Aroclor-1260	5	12.234	-0.007	13749	98.3	NS	---			----	
Total CollAve (5 peaks):				70.3	Total Col2Ave (4 peaks):				68.3	RPD = 3	
Corrected Ave (4 peaks):				63.2	Corrected Ave (3 peaks):				60.5	RPD = 4	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 897929 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 799588 Col2 Total PCB = 0.2 ppm*

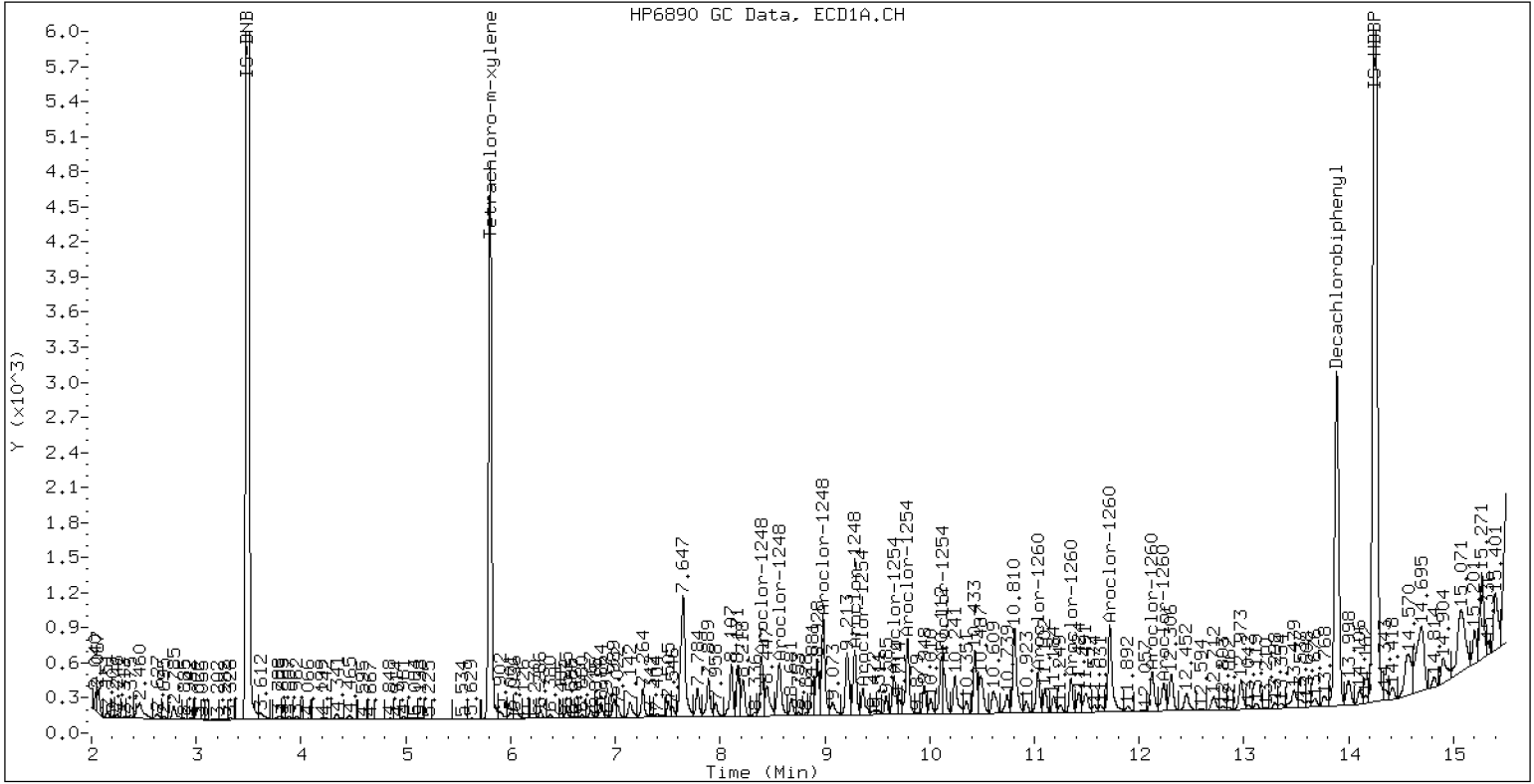
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-07

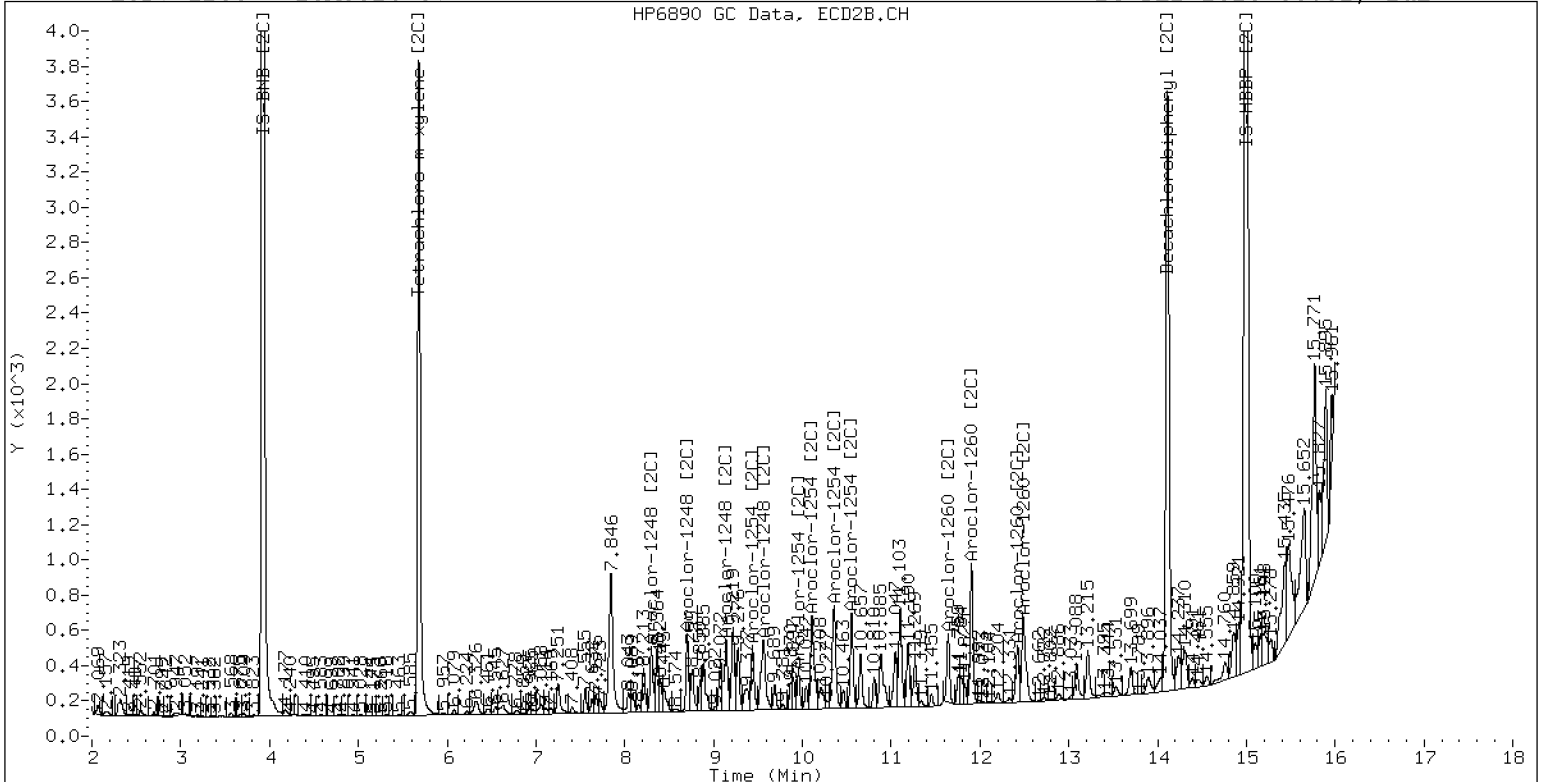
14-FEB-2023 05:32, 2u1



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0326-07

14-FEB-2023 05:32, 2u1

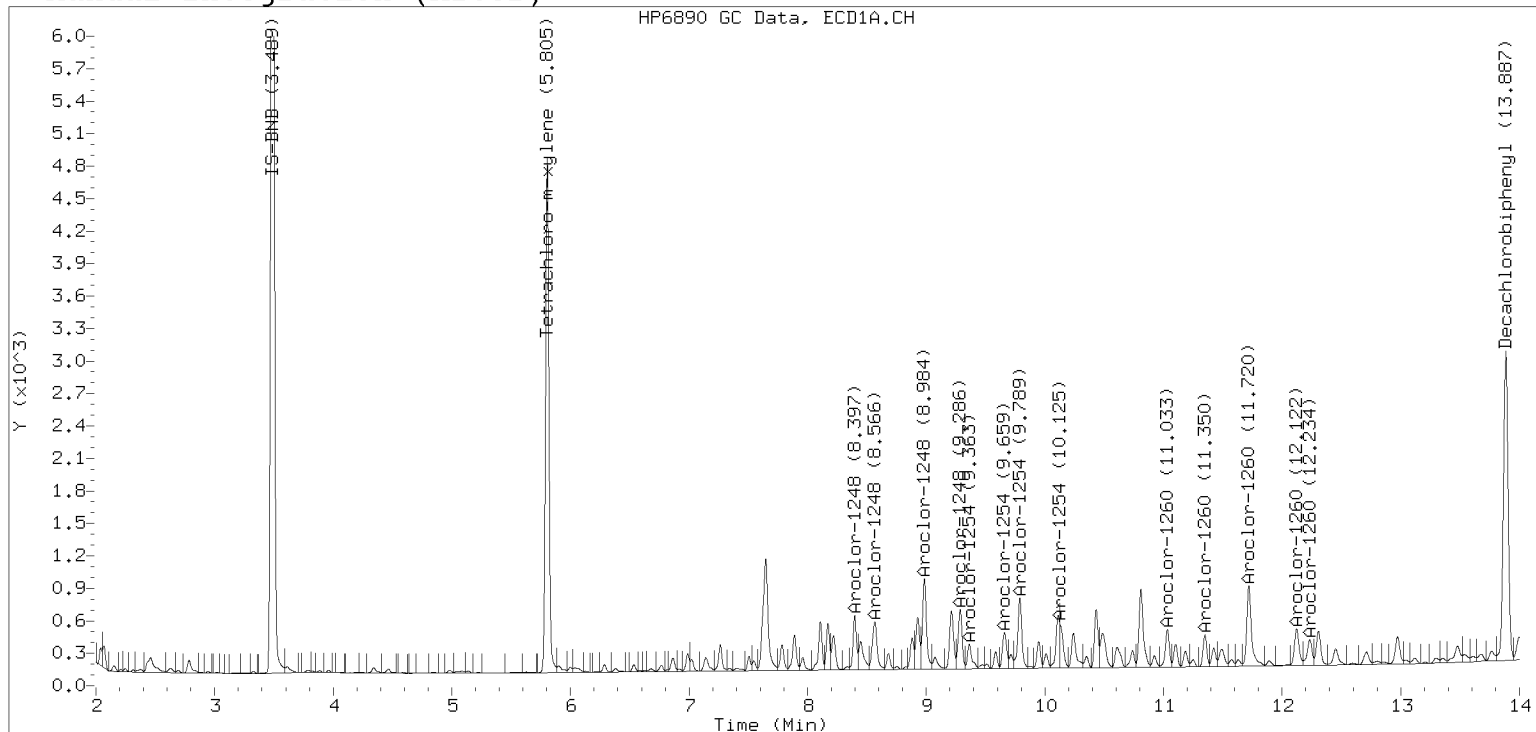


ZB-35 Manual Integration: NO

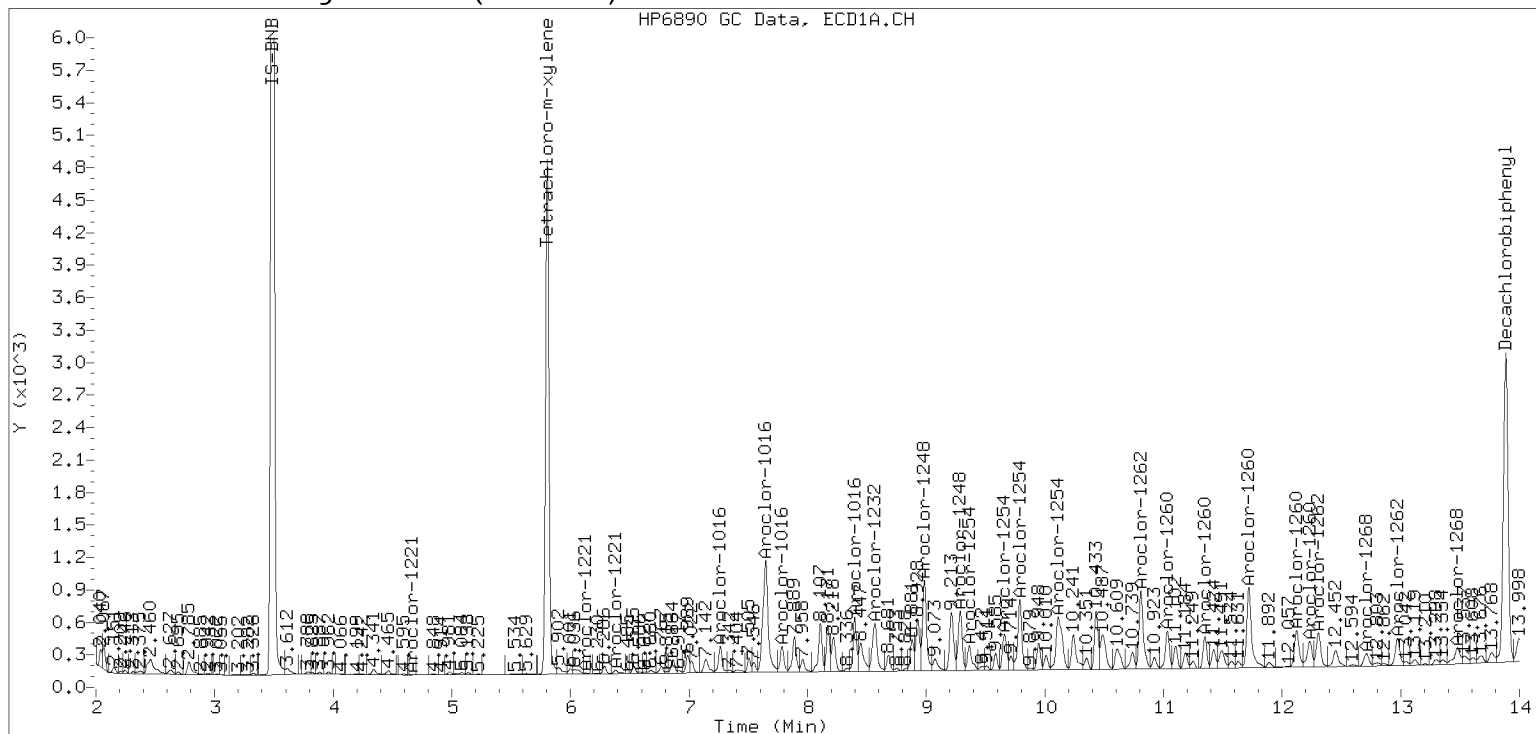
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230213.b/02132357ECD7.D Injection Date: 14-FEB-2023 05:32

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: 23A0326-08 A

File ID: 02132362ECD7.D

Sampled: 01/17/23 12:31

Prepared: 01/31/23 15:03

Analyzed: 02/14/23 07:17

% Solids: 75.53

Preparation: EPA 3546 (Microwave)

Initial/Final: 16.6 g Wet / 2.5 mL

Batch: BLA0687

Sequence: SLB0168

Calibration: GA00061

Instrument: ECD7

Column 1: ZB5

Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	15.7	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	38.8	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	27.6	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9758	6.56	82.3	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9758	6.03	75.6	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9758	6.31	79.1	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9758	6.54	82.0	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132362ECD7.D
Data file 2: /230213.b/230213.b/02132362ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-08
Client ID:
Injection Date: 14-FEB-2023 07:17
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.004	179056	5.681	-0.003	153778	30.2	32.8	8.1	Tetrachloro-m-xylene
13.885	-0.003	148232	14.112	-0.005	182626	32.9	31.6	3.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	419047	-16.7
Hexabromobiphenyl	647433	421264	-34.9
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	346864	3.0
Hexabromobiphenyl	382032	363711	-4.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.394	-0.011	15497	73.9	1	8.297	-0.005	12721	81.1	
Aroclor-1248	2	8.561	-0.019	10645	39.8	2	8.704	-0.005	11104	65.8	
Aroclor-1248	3	8.984	-0.015	46781	91.5	3	9.137	-0.016	16251	78.8	
Aroclor-1248	4	9.284	-0.009	57281	226.2	4	9.530	-0.047	22779	89.3	
Total CollAve (4 peaks):				107.9	Total Col2Ave (4 peaks):				78.8	RPD = 31	
Corrected Ave (3 peaks):				68.4	Corrected Ave (3 peaks):				75.2	RPD = 10	
Aroclor-1254	1	9.284	-0.008	57281	134.1	1	9.436	-0.008	43793	174.0	
Aroclor-1254	2	9.361	-0.010	22790	125.0	2	9.954	-0.009	22561	110.9	
Aroclor-1254	3	9.655	-0.005	44365	162.1	3	10.104	-0.012	81809	184.4	
Aroclor-1254	4	9.785	-0.014	79347	148.0	4	10.352	-0.013	97623	220.0	
Aroclor-1254	5	10.116	-0.047	58930	169.0	5	10.553	-0.010	70100	283.7	
Total CollAve (5 peaks):				147.6	Total Col2Ave (5 peaks):				194.6	RPD = 27	
Corrected Ave (4 peaks):				142.3	Corrected Ave (4 peaks):				172.3	RPD = 19	
Aroclor-1260	1	11.032	-0.008	30314	128.3	1	11.642	-0.007	40317	153.7	
Aroclor-1260	2	11.349	-0.007	26630	109.6	2	11.903	-0.010	73410	110.6	
Aroclor-1260	3	11.718	-0.011	77941	121.9	3	12.420	-0.011	29584	178.8	
Aroclor-1260	4	12.118	-0.015	35029	106.0	4	12.487	-0.009	47220	109.9	
Aroclor-1260	5	12.233	-0.007	17252	119.8	NS	---			---	
Total CollAve (5 peaks):				117.1	Total Col2Ave (4 peaks):				138.2	RPD = 17	
Corrected Ave (4 peaks):				114.3	Corrected Ave (3 peaks):				124.7	RPD = 9	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 1420048 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1303869 Col2 Total PCB = 0.4 ppm*

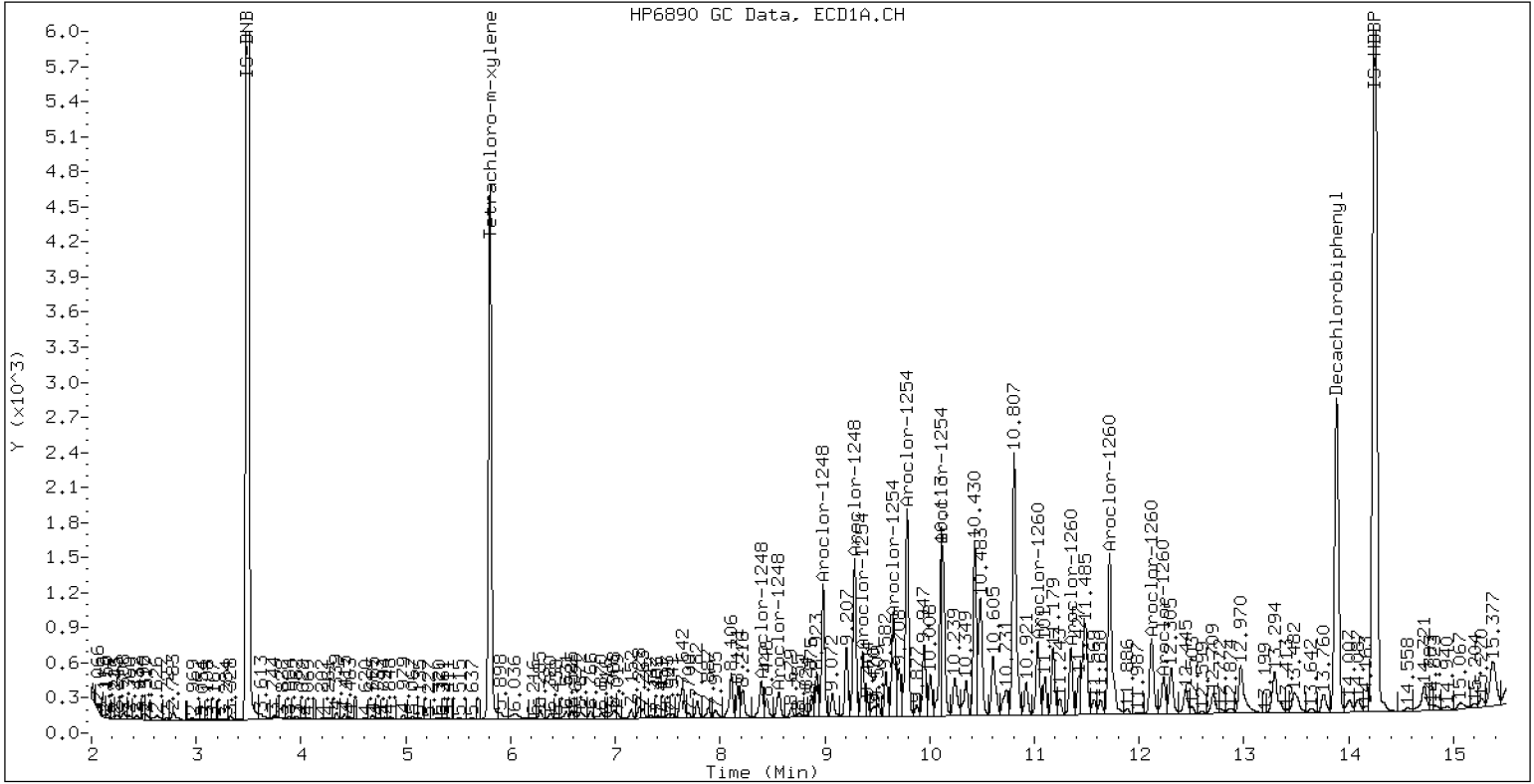
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-08

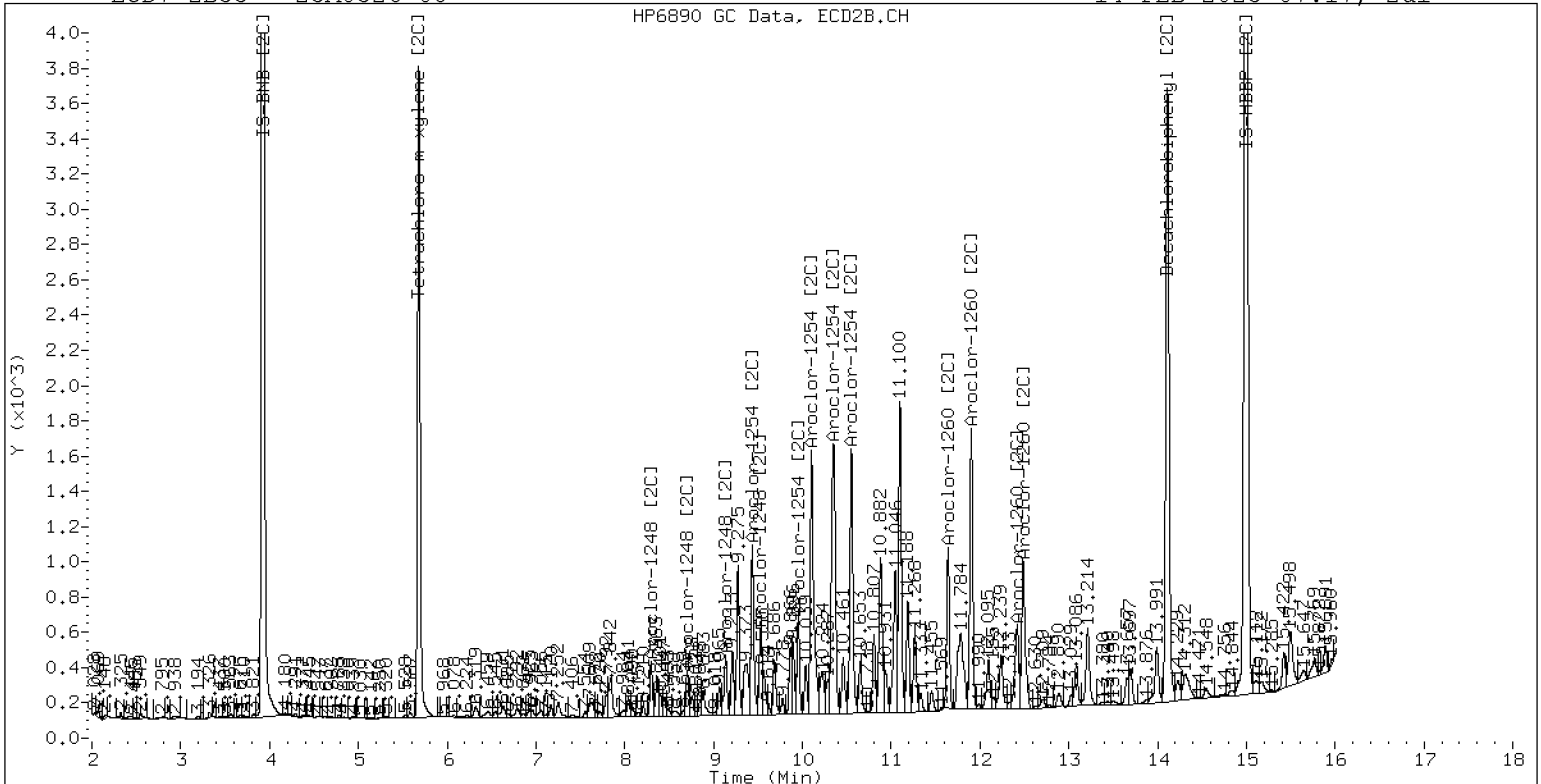
14-FEB-2023 07:17, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0326-08

14-FEB-2023 07:17, 2ul



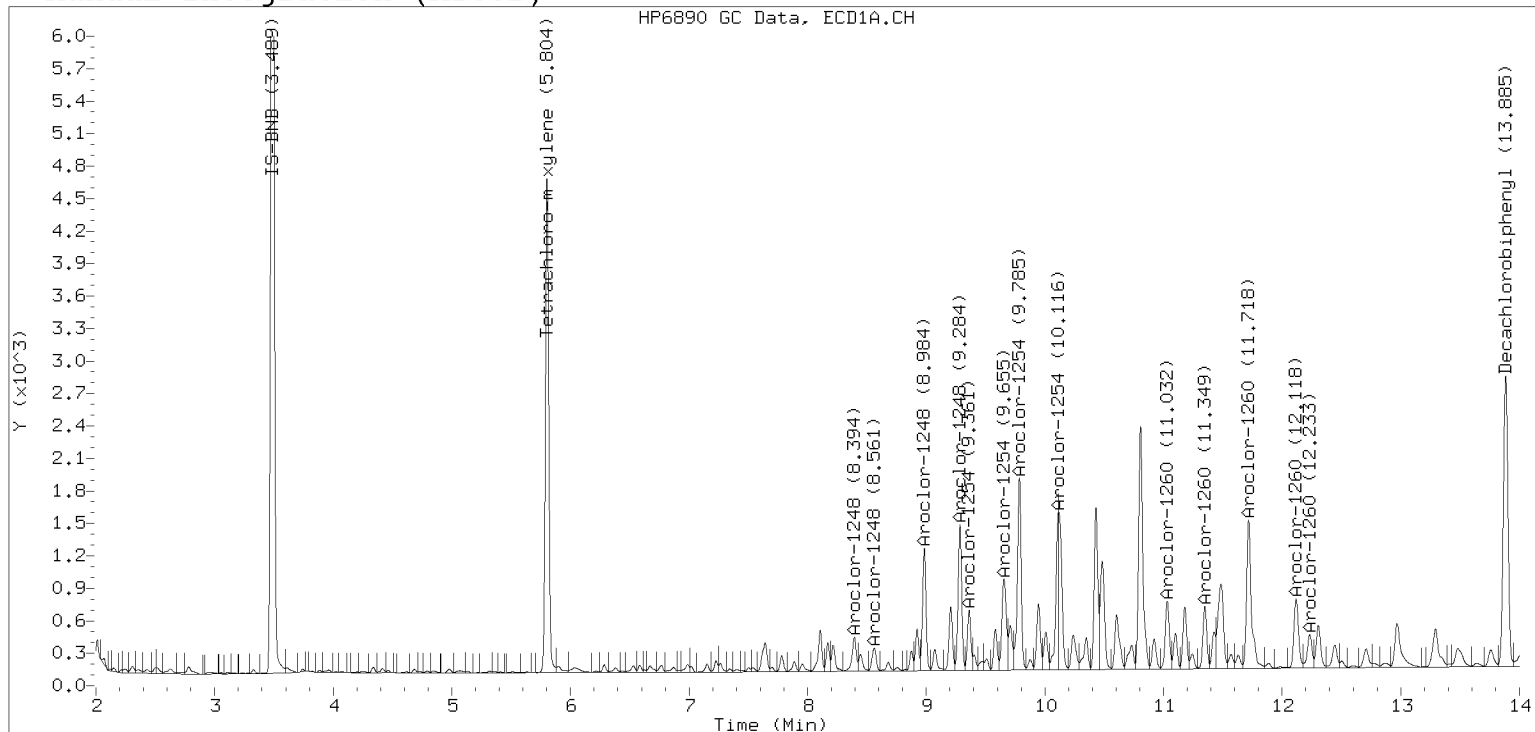
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

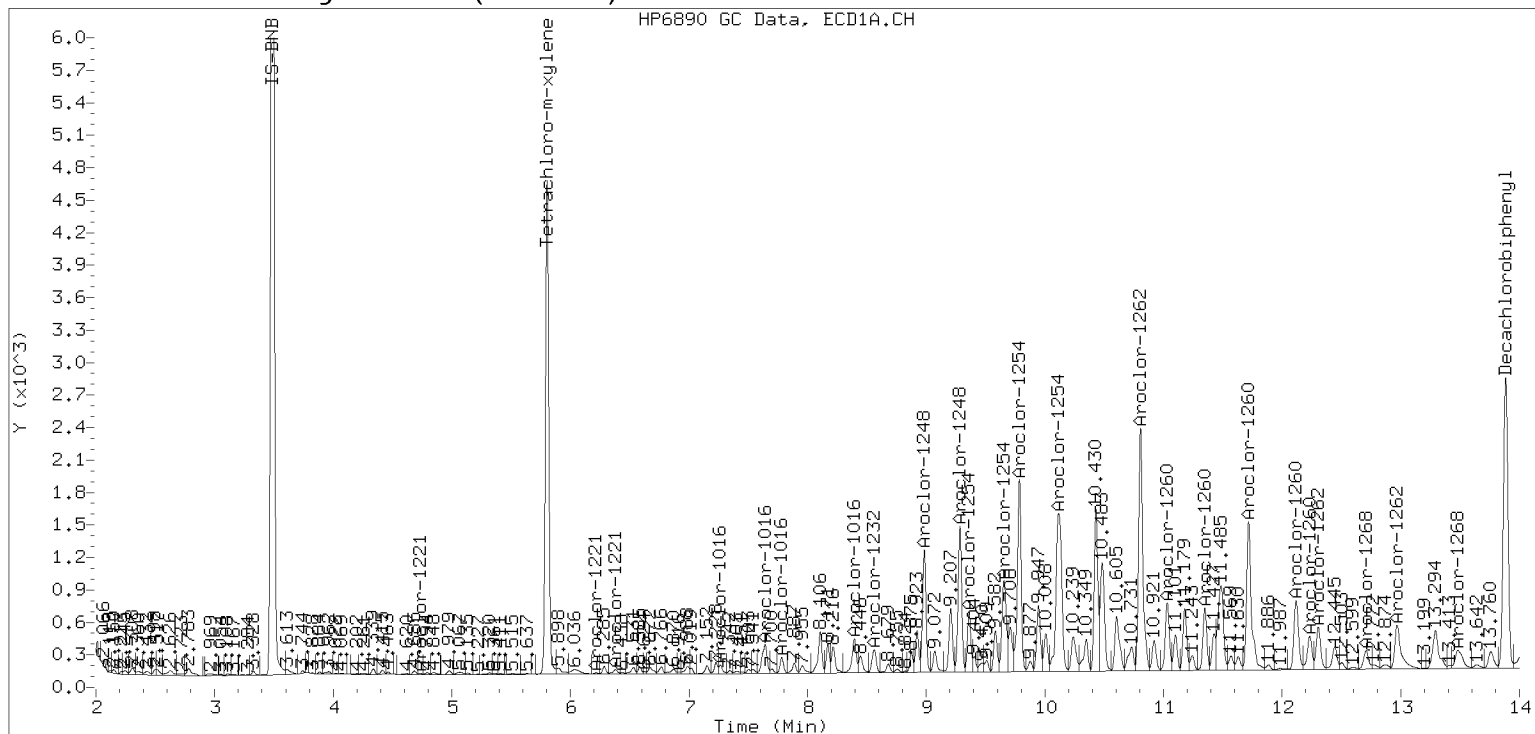
Datafile: ecd7.i/230213.b/02132362ECD7.D

Injection Date: 14-FEB-2023 07:17

Manual Integration (After)



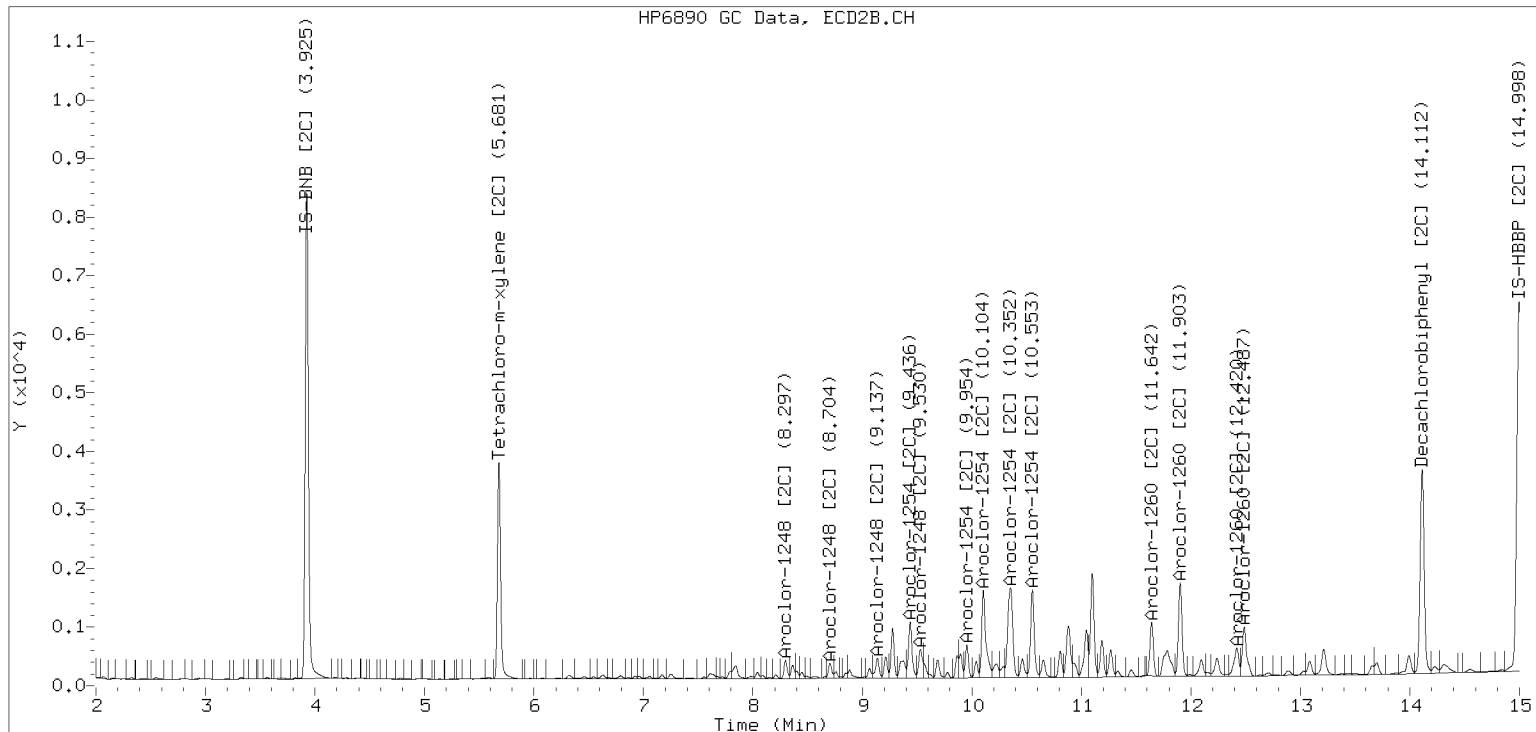
Processed Integration (Before)



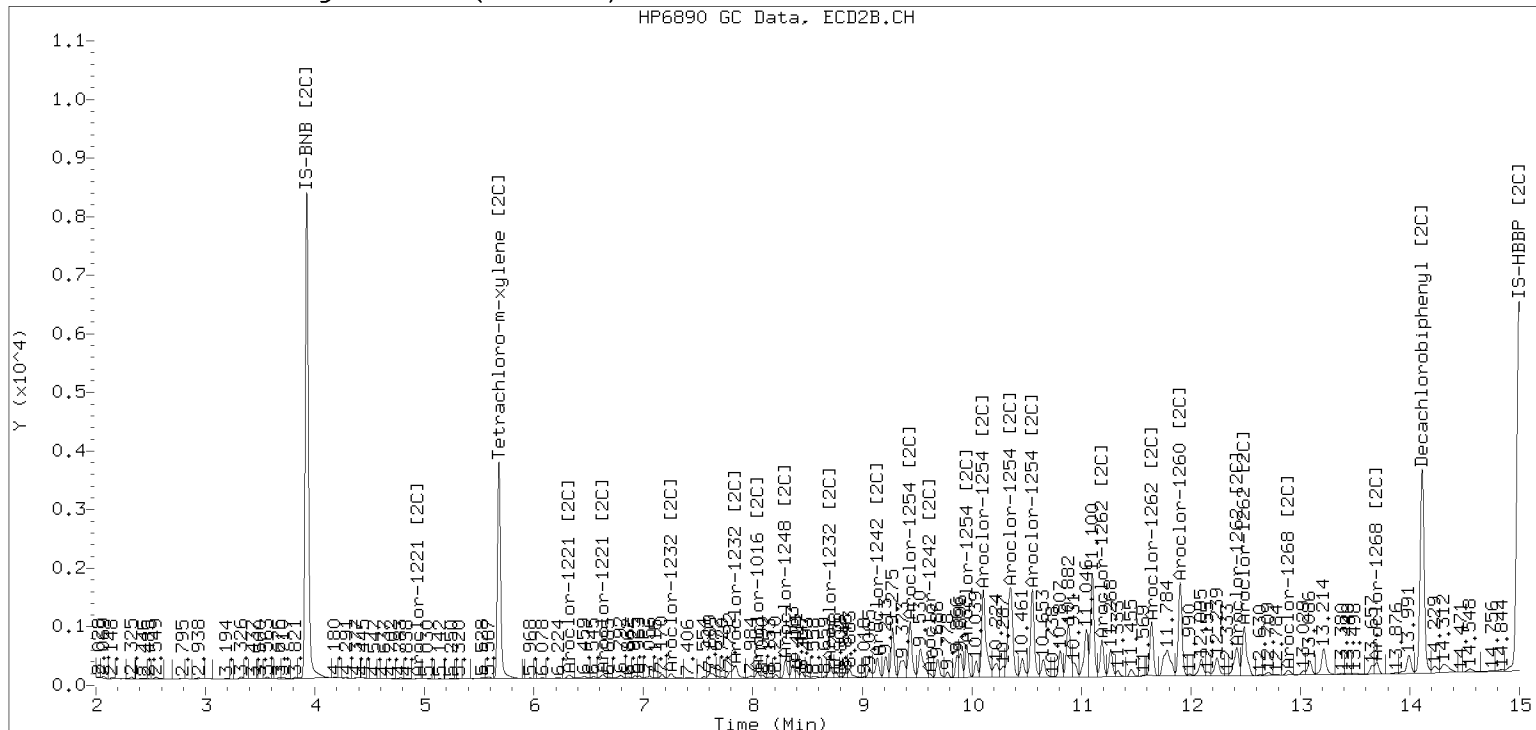
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132362ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Solid Laboratory ID: 23A0326-09 A File ID: 02132363ECD7.D
 Sampled: 01/17/23 13:32 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 07:38
 % Solids: 61.94 Preparation: EPA 3546 (Microwave) Initial/Final: 20.22 g Wet / 2.5 mL
 Batch: BLA0687 Sequence: SLB0168 Calibration: GA00061
 Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	31.9	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	68.2	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	88.1	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9845	7.46	93.5	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9845	4.84	60.6	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9845	7.64	95.7	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9845	5.81	72.8	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132363ECD7.D
Data file 2: /230213.b/230213.b/02132363ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-09
Client ID:
Injection Date: 14-FEB-2023 07:38
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.802	-0.005	130982	5.678	-0.006	115551	24.3	29.1	18.2	Tetrachloro-m-xylene
13.884	-0.004	125290	14.112	-0.005	171300	37.4	38.3	2.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	382058	-24.1
Hexabromobiphenyl	647433	313310	-51.6 <-

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	293571	-12.9
Hexabromobiphenyl	382032	281986	-26.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.394	-0.012	22020	115.2	1	8.296	-0.007	23365	176.1	
Aroclor-1248	2	8.561	-0.019	19163	78.6	2	8.702	-0.008	20767	145.4	
Aroclor-1248	3	8.980	-0.019	70176	150.5	3	9.134	-0.019	27625	158.3	
Aroclor-1248	4	9.283	-0.010	83398	361.3	4	9.527	-0.050	53527	248.0	
Total CollAve (4 peaks):				176.4	Total Col2Ave (4 peaks):				181.9	RPD = 3	
Corrected Ave (3 peaks):				114.8	Corrected Ave (3 peaks):				159.9	RPD = 33	
Aroclor-1254	1	9.283	-0.009	83398	214.2	1	9.434	-0.010	66777	313.5	
Aroclor-1254	2	9.359	-0.012	33978	204.4	2	9.952	-0.011	29645	172.2	
Aroclor-1254	3	9.664	0.004	114577	459.3	3	10.101	-0.014	115511	307.6	
Aroclor-1254	4	9.783	-0.017	112147	229.4	4	10.354	-0.011	137102	365.1	
Aroclor-1254	5	10.112	-0.052	78939	248.3	5	10.551	-0.012	115214	550.9	
Total CollAve (5 peaks):				271.1	Total Col2Ave (5 peaks):				341.9	RPD = 23	
Corrected Ave (4 peaks):				224.1	Corrected Ave (4 peaks):				289.6	RPD = 26	
				276.825							
Aroclor-1260	1	11.030	-0.009	73071	415.7	1	11.640	-0.009	79702	391.8	
Aroclor-1260	2	11.347	-0.009	60314	333.8	2	11.902	-0.011	206473	401.2	
Aroclor-1260	3	11.717	-0.012	182531	383.7	3	12.422	-0.009	71684	558.8	
Aroclor-1260	4	12.118	-0.015	88229	359.0	4	12.486	-0.010	138030	414.4	
Aroclor-1260	5	12.231	-0.009	49078	458.1	NS	---			----	
Total CollAve (5 peaks):				390.0	Total Col2Ave (4 peaks):				441.5	RPD = 12	
Corrected Ave (4 peaks):				373.0	Corrected Ave (3 peaks):				402.5	RPD = 8	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 2540431 Col1 Total PCB = 0.6 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 2440980 Col2 Total PCB = 0.8 ppm*

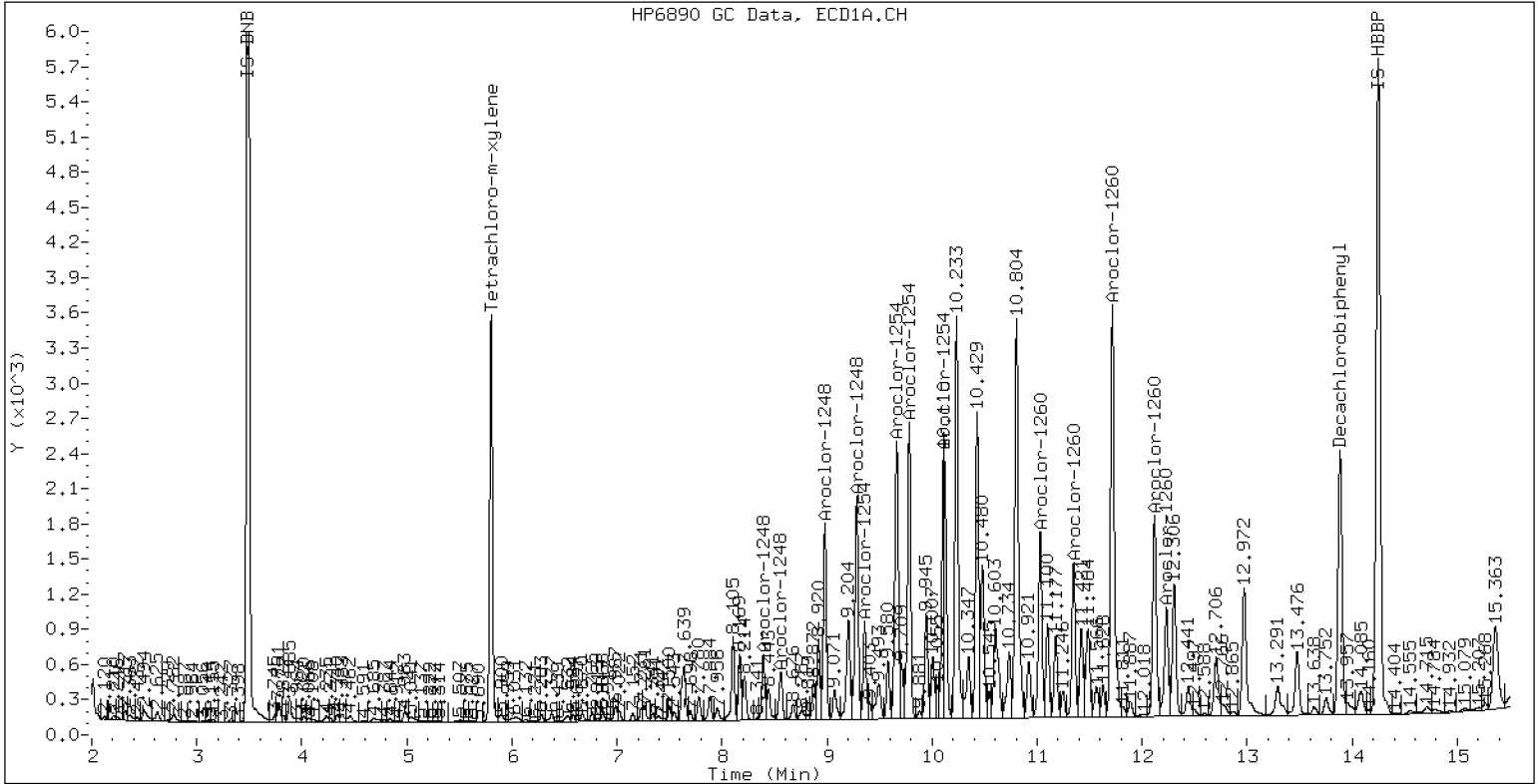
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-09

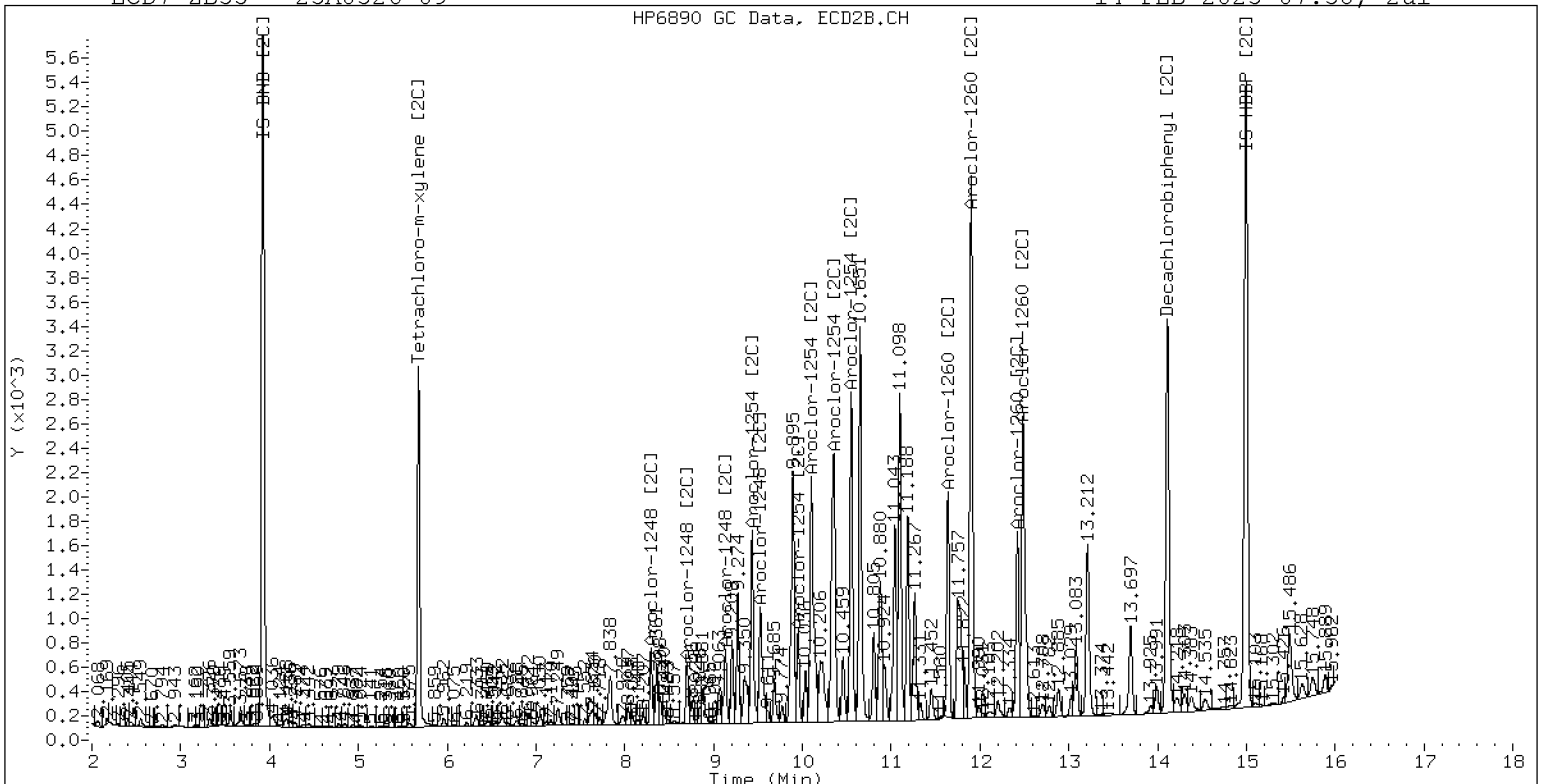
14-FEB-2023 07:38, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0326-09

14-FEB-2023 07:38, 2ul



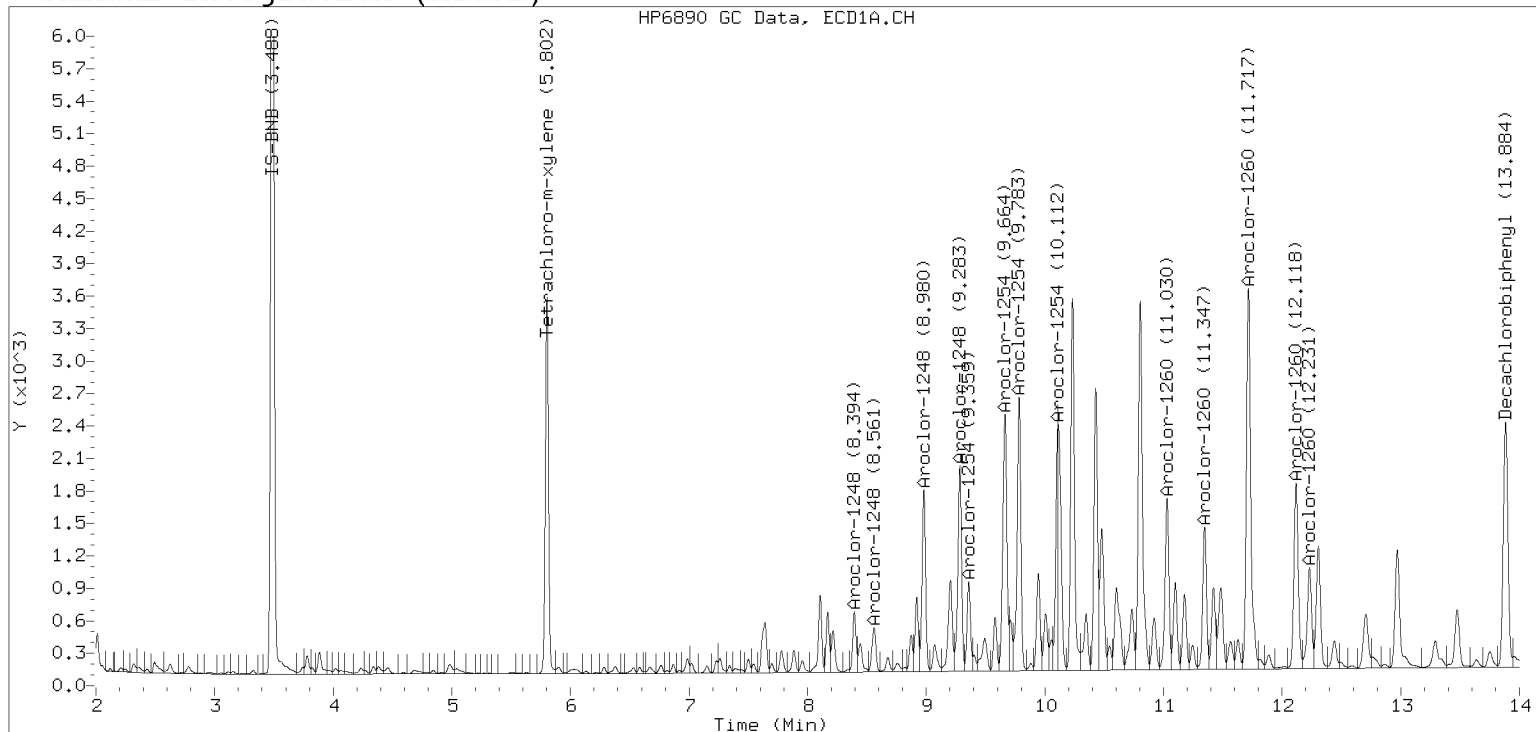
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

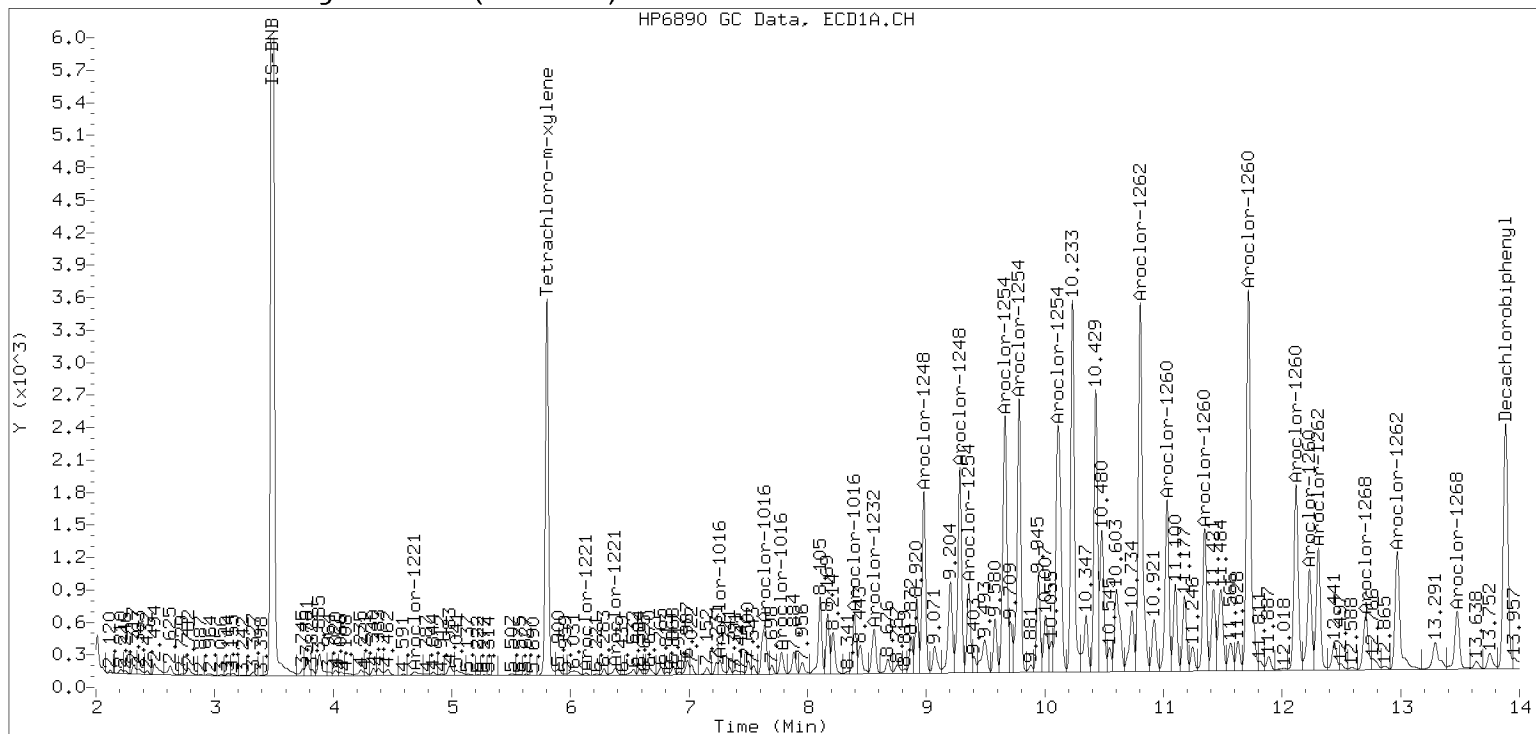
Datafile: ecd7.i/230213.b/02132363ECD7.D

Injection Date: 14-FEB-2023 07:38

Manual Integration (After)



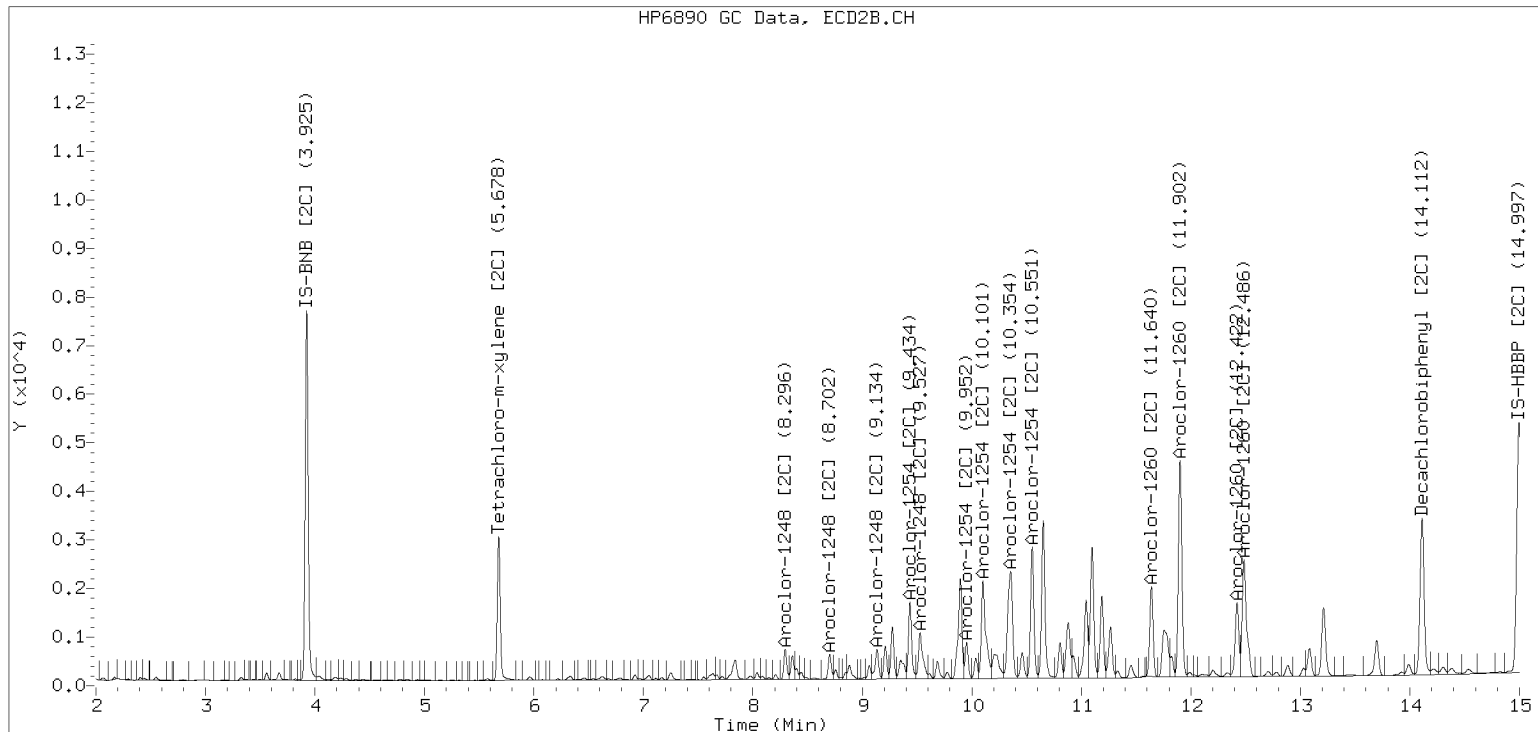
Processed Integration (Before)



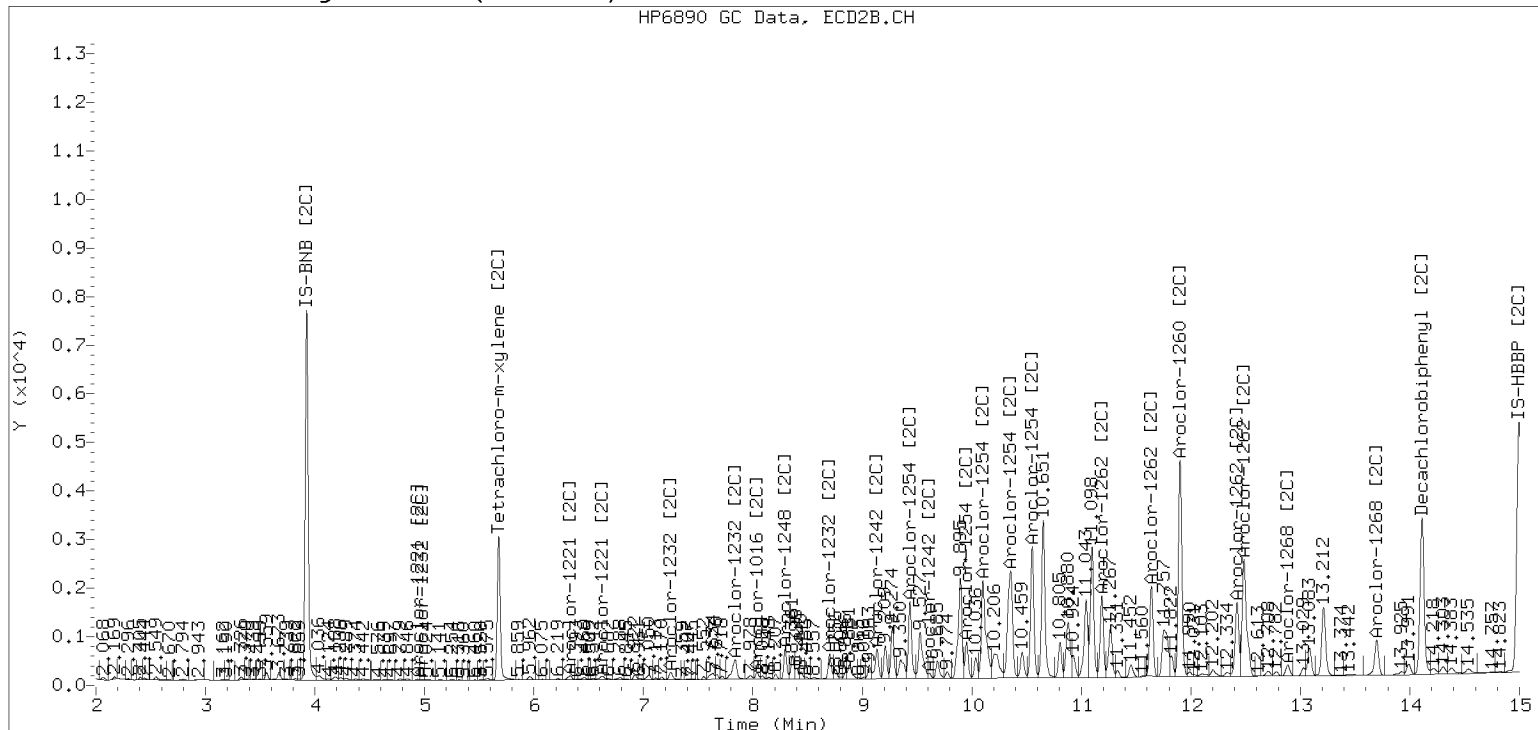
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132363ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





LDW23-SC1161

Dual Column

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>	
Client: <u>Anchor QEA, LLC</u>		
Project: <u>AOC5 MR Phase 1</u>		
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-10 A</u>	File ID: <u>02132364ECD7.D</u>
Sampled: <u>01/17/23 14:18</u>	Prepared: <u>01/31/23 15:03</u>	Analyzed: <u>02/14/23 07:59</u>
% Solids: <u>.54.63</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>22.92 g Wet / 2.5 mL</u>
Batch: <u>BLA0687</u>	Sequence: <u>SLB0168</u>	Calibration: <u>GA00061</u>
Instrument: <u>ECD7</u>	Column 1: <u>ZB5</u>	Column 2: <u>ZB35</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	30.8	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	53.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	44.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9865	6.01	75.2	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9865	5.27	66.0	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9865	6.15	77.0	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9865	6.14	76.9	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132364ECD7.D
Data file 2: /230213.b/230213.b/02132364ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-10
Client ID:
Injection Date: 14-FEB-2023 07:59
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.804	-0.004	150693	5.681	-0.004	134822	26.4	30.8	15.2	Tetrachloro-m-xylene
13.883	-0.005	113872	14.112	-0.005	153016	30.1	30.8	2.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	403570	-19.8
Hexabromobiphenyl	647433	353885	-45.3
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	324144	-3.8
Hexabromobiphenyl	382032	313086	-18.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.394	-0.012	27410	135.8	1	8.297	-0.006	26627	181.7
Aroclor-1248	2	8.562	-0.018	20017	77.7	2	8.703	-0.006	22638	143.5
Aroclor-1248	3	8.981	-0.018	64276	130.5	3	9.136	-0.017	30304	157.3
Aroclor-1248	4	9.284	-0.010	71118	291.7	4	9.530	-0.047	31910	133.9
Total CollAve (4 peaks):				158.9	Total Col2Ave (4 peaks):				154.1	RPD = 3
Corrected Ave (3 peaks):				114.7	Corrected Ave (3 peaks):				144.9	RPD = 23
Aroclor-1254	1	9.284	-0.008	71118	172.9	1	9.435	-0.008	58234	247.6
Aroclor-1254	2	9.360	-0.011	28710	163.5	2	9.954	-0.010	27344	143.9
Aroclor-1254	3	9.657	-0.004	57233	217.2	3	10.102	-0.013	99073	238.9
Aroclor-1254	4	9.784	-0.016	97558	188.9	4	10.353	-0.013	129279	311.8
Aroclor-1254	5	10.114	-0.050	122988	366.3	5	10.552	-0.011	90822	393.3
Total CollAve (5 peaks):				221.7	Total Col2Ave (5 peaks):				267.1	RPD = 19
Corrected Ave (4 peaks):				185.6	Corrected Ave (4 peaks):				235.6	RPD = 24
Aroclor-1260	1	11.032	-0.008	42762	215.4	1	11.642	-0.007	48812	216.1
Aroclor-1260	2	11.347	-0.009	34473	168.9	2	11.903	-0.010	106600	186.6
Aroclor-1260	3	11.717	-0.012	100373	186.8	3	12.422	-0.010	40322	283.1
Aroclor-1260	4	12.118	-0.014	52003	187.3	4	12.486	-0.010	75664	204.6
Aroclor-1260	5	12.233	-0.007	26384	218.0	NS	---			---
Total CollAve (5 peaks):				195.3	Total Col2Ave (4 peaks):				222.6	RPD = 13
Corrected Ave (4 peaks):				189.6	Corrected Ave (3 peaks):				202.4	RPD = 7
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.908 - 13.788) = 1882646 Col1 Total PCB = 0.4 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 1797488 Col2 Total PCB = 0.5 ppm*

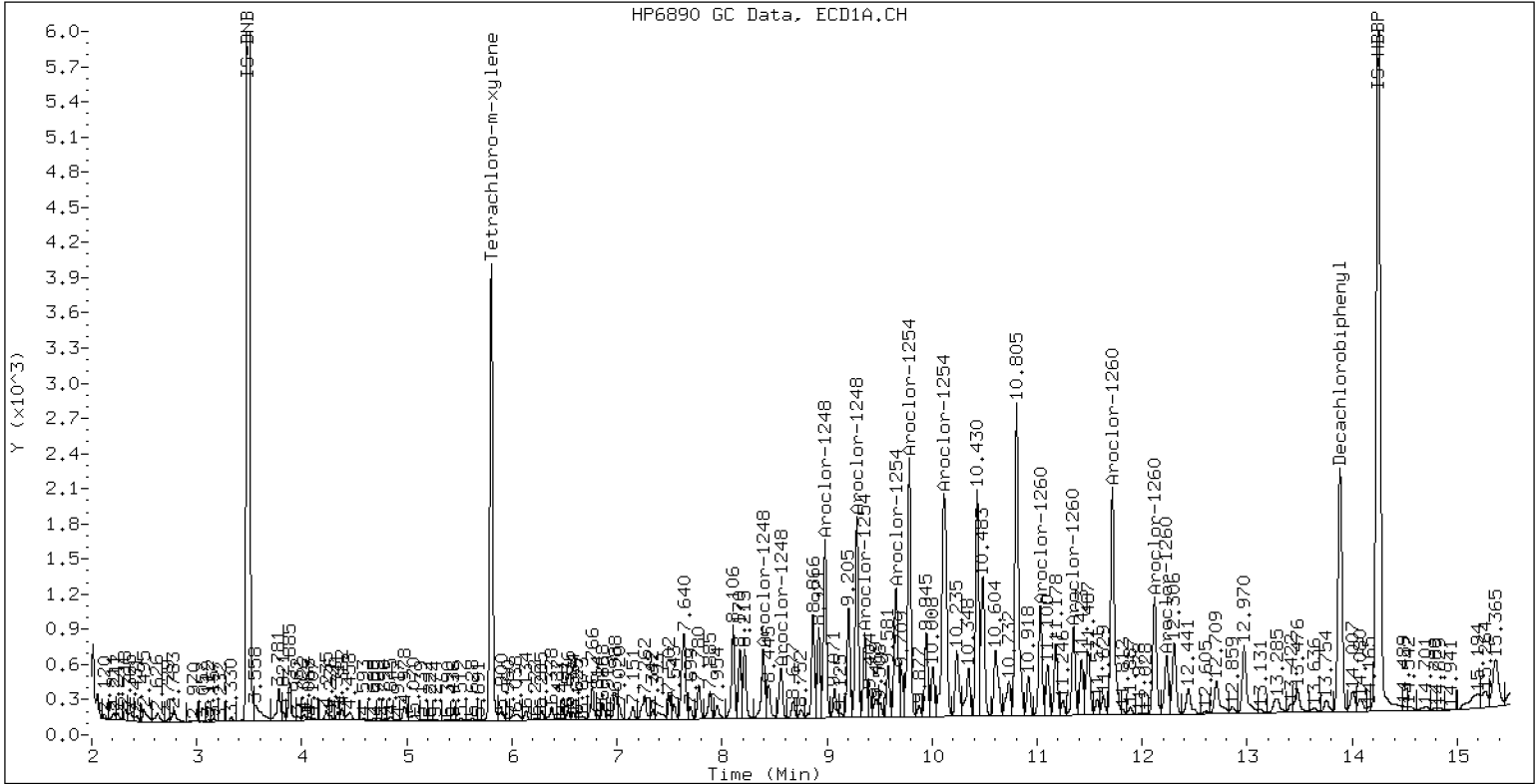
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-10

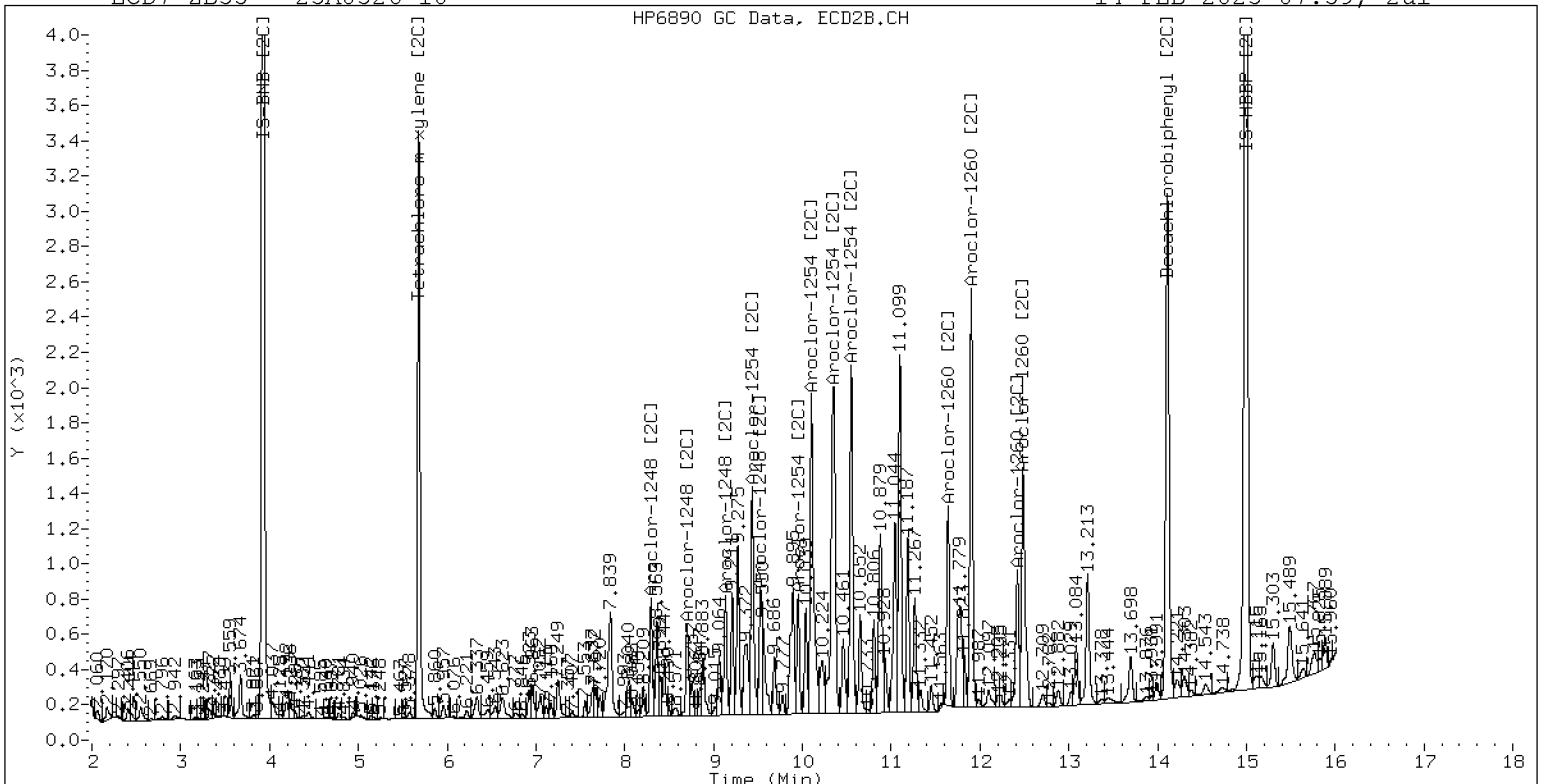
14-FEB-2023 07:59, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-10

14-FEB-2023 07:59, 2ul

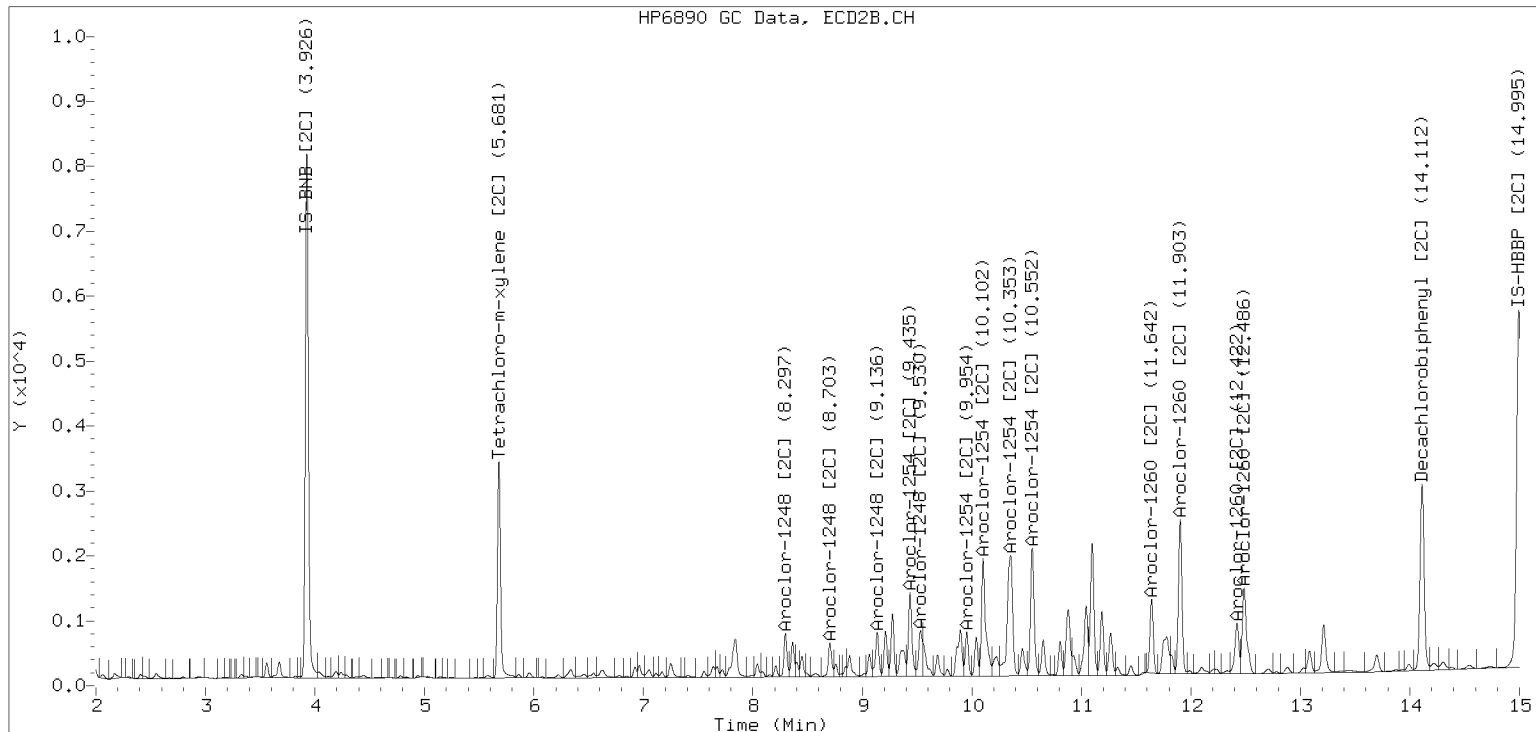


ZB-35 Manual Integration: YES

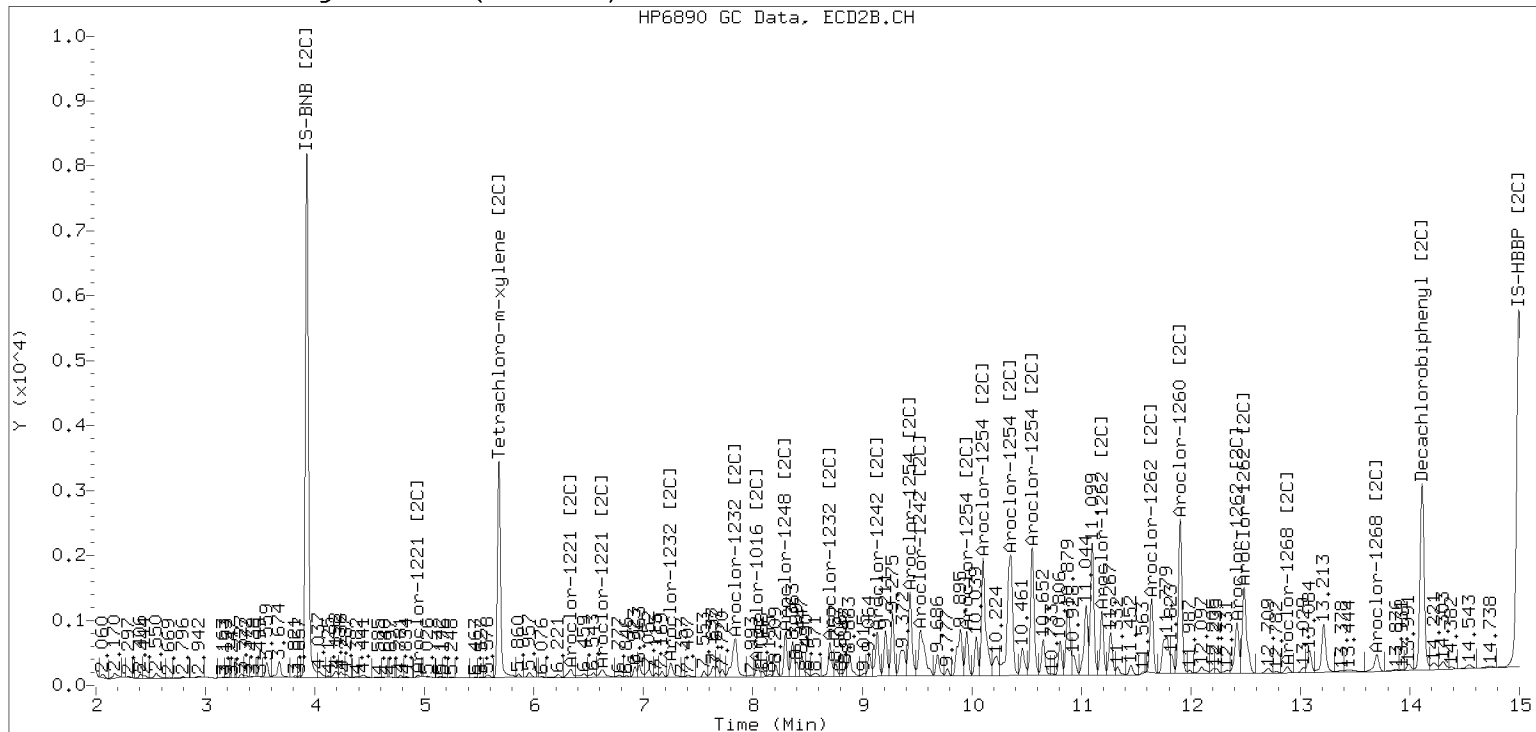
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132364ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





Dual Column

LDW23-SC1155

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid Laboratory ID: 23A0326-11 A File ID: 02132365ECD7.D
Sampled: 01/17/23 14:06 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 08:20
% Solids: 52.57 Preparation: EPA 3546 (Microwave) Initial/Final: 23.78 g Wet / 2.5 mL
Batch: BLA0687 Sequence: SLB0168 Calibration: GA00061
Instrument: ECD7 Column 1: ZB5 Column 2: ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	29.2	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	44.3	1.6	4.0	
11096-82-5	Aroclor 1260	1	1	54.7	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	7.9993	7.38	92.2	40 - 126	
<i>Tetrachlorometaxylene</i>	1	7.9993	4.15	51.8	44 - 120	
<i>Decachlorobiphenyl</i>	2	7.9993	7.75	96.9	40 - 126	
<i>Tetrachlorometaxylene</i>	2	7.9993	6.40	80.0	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132365ECD7.D
Data file 2: /230213.b/230213.b/02132365ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-11
Client ID:
Injection Date: 14-FEB-2023 08:20
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.802	-0.006	117690	5.678	-0.006	121672	20.7	32.0	42.7*	Tetrachloro-m-xylene
13.883	-0.005	131396	14.111	-0.006	216592	36.9	38.8	5.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	401462	-20.2
Hexabromobiphenyl	647433	332969	-48.6
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	281310	-16.5
Hexabromobiphenyl	382032	351991	-7.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	---			0.0	1	---			0.0	
Aroclor-1016	2	---			0.0	2	---			0.0	
Aroclor-1016	3	---			0.0	3	---			0.0	
Aroclor-1016	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	---			0.0	
Aroclor-1221	3	---			0.0	3	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	---			0.0	
Aroclor-1232	3	---			0.0	3	---			0.0	
Aroclor-1232	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	---			0.0	1	---			0.0	
Aroclor-1242	2	---			0.0	2	---			0.0	
Aroclor-1242	3	---			0.0	3	---			0.0	
Aroclor-1242	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1248	1	8.392	-0.013	21484	107.0	1	8.296	-0.007	20732	163.0	
Aroclor-1248	2	8.560	-0.020	14797	57.8	2	8.703	-0.007	18226	133.2	
Aroclor-1248	3	8.976	-0.022	54864	112.0	3	9.134	-0.019	23797	142.3	
Aroclor-1248	4	9.282	-0.012	56129	231.4	4	9.525	-0.053	51025	246.7	
Total CollAve (4 peaks):				127.0	Total Col2Ave (4 peaks):				171.3	RPD = 30	
Corrected Ave (3 peaks):				92.2	Corrected Ave (3 peaks):				146.2	RPD = 45*	
Aroclor-1254	1	9.282	-0.010	56129	137.2	1	9.435	-0.009	45152	221.2	
Aroclor-1254	2	9.358	-0.013	21367	122.3	2	9.953	-0.011	23114	140.1	
Aroclor-1254	3	9.655	-0.005	44898	171.3	3	10.101	-0.015	79450	220.8	
Aroclor-1254	4	9.783	-0.017	75667	147.3	4	10.350	-0.015	109081	303.1	
Aroclor-1254	5	10.115	-0.049	92534	277.0	5	10.552	-0.011	89948	448.8	
Total CollAve (5 peaks):				171.0	Total Col2Ave (5 peaks):				266.8	RPD = 44*	
Corrected Ave (4 peaks):				144.5	Corrected Ave (4 peaks):				221.3	RPD = 42*	
Aroclor-1260	1	11.031	-0.008	44179	236.5	1	11.641	-0.008	47891	188.6	
Aroclor-1260	2	11.347	-0.008	45618	237.5	2	11.902	-0.011	128776	200.5	
Aroclor-1260	3	11.716	-0.012	124118	245.5	3	12.421	-0.010	53788	335.9	
Aroclor-1260	4	12.117	-0.015	69003	264.2	4	12.486	-0.010	96893	233.0	
Aroclor-1260	5	12.232	-0.009	43840	385.0	NS	---			----	
Total CollAve (5 peaks):				273.7	Total Col2Ave (4 peaks):				239.5	RPD = 13	
Corrected Ave (4 peaks):				245.9	Corrected Ave (3 peaks):				207.4	RPD = 17	
Aroclor-1262	1	---			0.0	1	---			0.0	
Aroclor-1262	2	---			0.0	2	---			0.0	
Aroclor-1262	3	---			0.0	3	---			0.0	
Aroclor-1262	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1268	1	---			0.0	1	---			0.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	---			0.0	3	---			0.0	
Aroclor-1268	4	---			0.0	4	---			0.0	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						

Total PCB Area Col1 (5.908 - 13.788) = 2075925 Col1 Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1852431 Col2 Total PCB = 0.6 ppm*

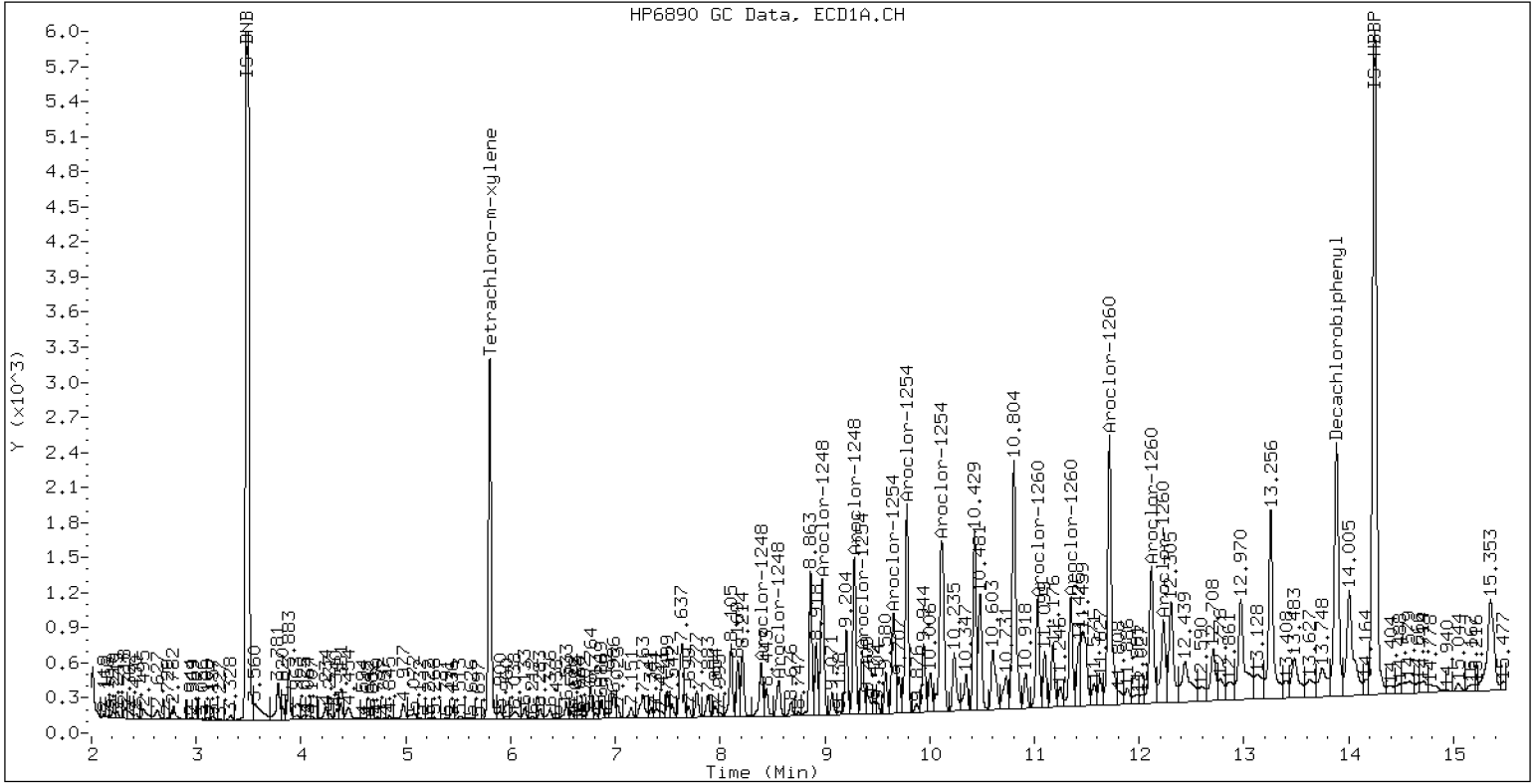
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-11

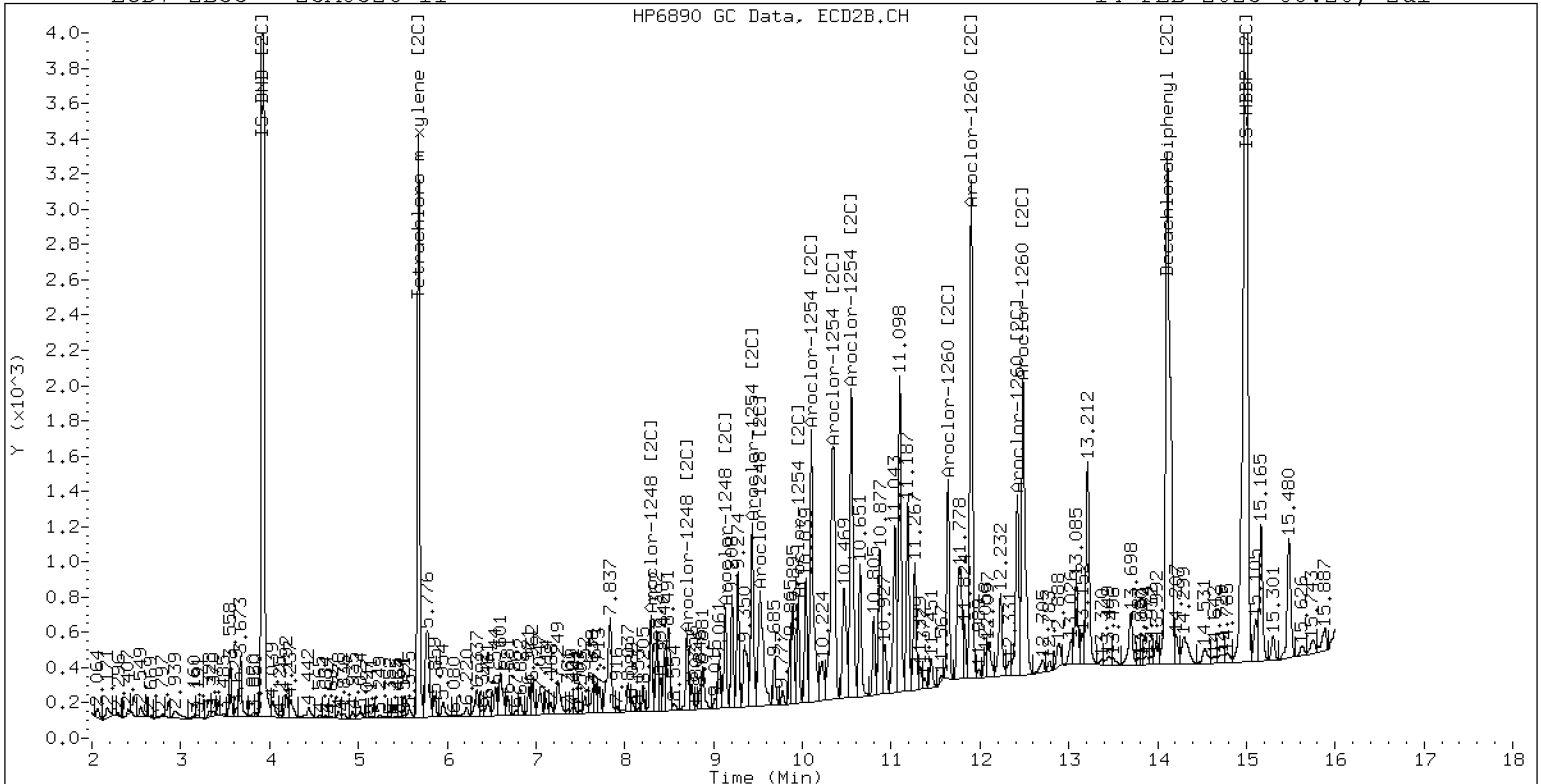
14-FEB-2023 08:20, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0326-11

14-FEB-2023 08:20, 2ul



ZB-35 Manual Integration: NO



ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>	
Client: <u>Anchor QEA, LLC</u>		
Project: <u>AOC5 MR Phase 1</u>		
Matrix: <u>Solid</u>	Laboratory ID: <u>23A0326-12 A</u>	File ID: <u>02132366ECD7.D</u>
Sampled: <u>01/17/23 14:37</u>	Prepared: <u>01/31/23 15:03</u>	Analyzed: <u>02/14/23 08:41</u>
% Solids: <u>51.42</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Initial/Final: <u>21.31 g Wet / 2.5 mL</u>
Batch: <u>BLA0687</u>	Sequence: <u>SLB0168</u>	Calibration: <u>GA00061</u>
Instrument: <u>ECD7</u>	Column 1: <u>ZB5</u>	Column 2: <u>ZB35</u>

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.6	1.8	4.6	U
11104-28-2	Aroclor 1221	1	1	4.6	1.8	4.6	U
11141-16-5	Aroclor 1232	1	1	4.6	1.8	4.6	U
53469-21-9	Aroclor 1242	1	1	4.6	1.8	4.6	U
12672-29-6	Aroclor 1248	2	1	45.5	1.8	4.6	
11097-69-1	Aroclor 1254	2	1	60.5	1.8	4.6	
11096-82-5	Aroclor 1260	2	1	65.5	0.7	4.6	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
<i>Decachlorobiphenyl</i>	1	9.1261	6.98	76.5	40 - 126	
<i>Tetrachlorometaxylene</i>	1	9.1261	5.82	63.8	44 - 120	
<i>Decachlorobiphenyl</i>	2	9.1261	6.96	76.2	40 - 126	
<i>Tetrachlorometaxylene</i>	2	9.1261	6.89	75.6	44 - 120	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132366ECD7.D
Data file 2: /230213.b/230213.b/02132366ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0326-12
Client ID:
Injection Date: 14-FEB-2023 08:41
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.803	-0.004	143164	5.680	-0.004	130456	25.5	30.2	16.9	Tetrachloro-m-xylene
13.884	-0.005	110181	14.111	-0.005	147096	30.6	30.5	0.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	397168	-21.1
Hexabromobiphenyl	647433	336550	-48.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	319315	-5.2
Hexabromobiphenyl	382032	303892	-20.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1248	1	8.394	-0.012	31187	157.0	1	8.297	-0.006	29731	206.0
Aroclor-1248	2	8.562	-0.018	23050	90.9	2	8.703	-0.006	25918	166.8
Aroclor-1248	3	8.981	-0.018	75231	155.2	3	9.135	-0.017	35400	186.5
Aroclor-1248	4	9.284	-0.009	81440	339.4	4	9.529	-0.048	56011	238.6
Total CollAve (4 peaks):				185.6	Total Col2Ave (4 peaks):				199.5	RPD = 7
Corrected Ave (3 peaks):				134.4	Corrected Ave (3 peaks):				186.4	RPD = 32
Aroclor-1254	1	9.284	-0.008	81440	201.2	1	9.435	-0.009	66827	288.5
Aroclor-1254	2	9.360	-0.011	35678	206.4	2	9.954	-0.010	27874	148.9
Aroclor-1254	3	9.657	-0.004	59415	229.1	3	10.101	-0.014	114953	281.4
Aroclor-1254	4	9.784	-0.016	112273	220.9	4	10.352	-0.014	139353	341.2
Aroclor-1254	5	10.114	-0.050	85597	259.0	5	10.551	-0.012	108731	477.9
Total CollAve (5 peaks):				223.3	Total Col2Ave (5 peaks):				307.6	RPD = 32
Corrected Ave (4 peaks):				214.4	Corrected Ave (4 peaks):				265.0	RPD = 21
Aroclor-1260	1	11.031	-0.009	56684	300.2	1	11.641	-0.008	60156	274.4
Aroclor-1260	2	11.346	-0.010	41916	215.9	2	11.902	-0.011	135487	244.3
Aroclor-1260	3	11.716	-0.013	127413	249.3	3	12.422	-0.009	49862	360.7
Aroclor-1260	4	12.117	-0.016	64765	245.3	4	12.486	-0.010	96634	269.2
Aroclor-1260	5	12.232	-0.008	31728	275.7	NS	---			----
Total CollAve (5 peaks):				257.3	Total Col2Ave (4 peaks):				287.1	RPD = 11
Corrected Ave (4 peaks):				246.6	Corrected Ave (3 peaks):				262.6	RPD = 6
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks					

Total PCB Area Col1 (5.908 - 13.788) = 2266206 Col1 Total PCB = 0.5 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 2154047 Col2 Total PCB = 0.6 ppm*

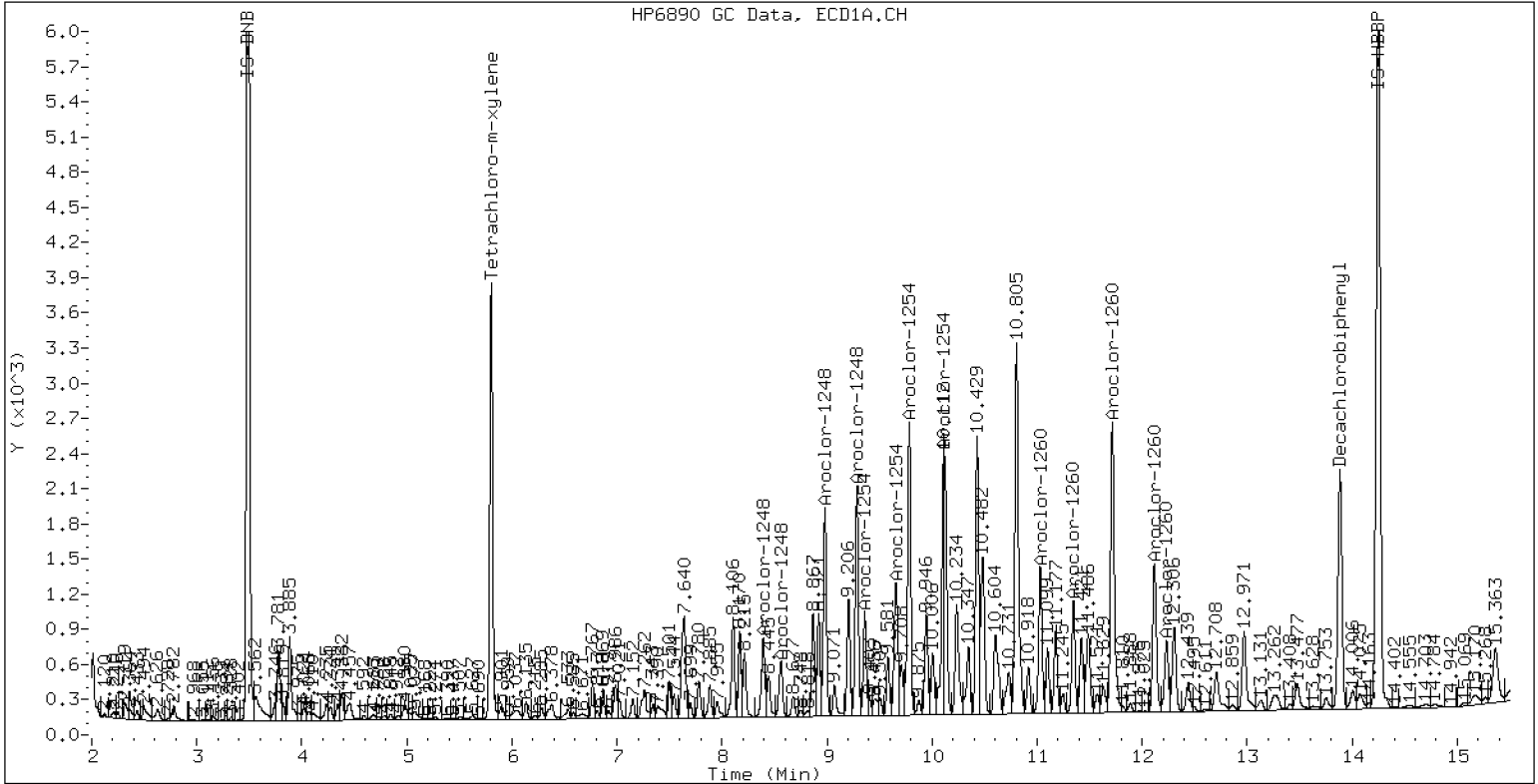
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 23A0326-12

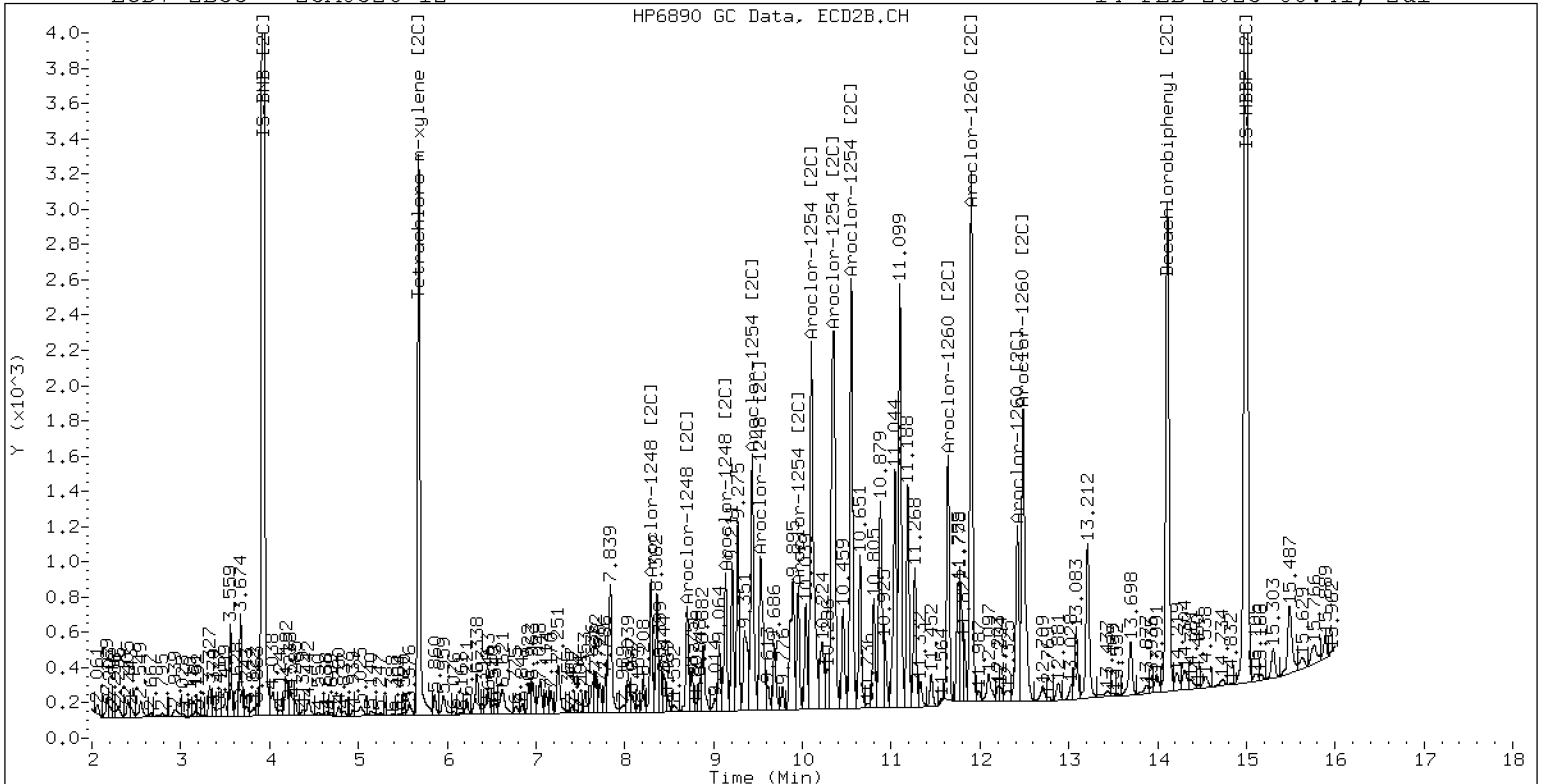
14-FEB-2023 08:41, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0326-12

14-FEB-2023 08:41, 2ul



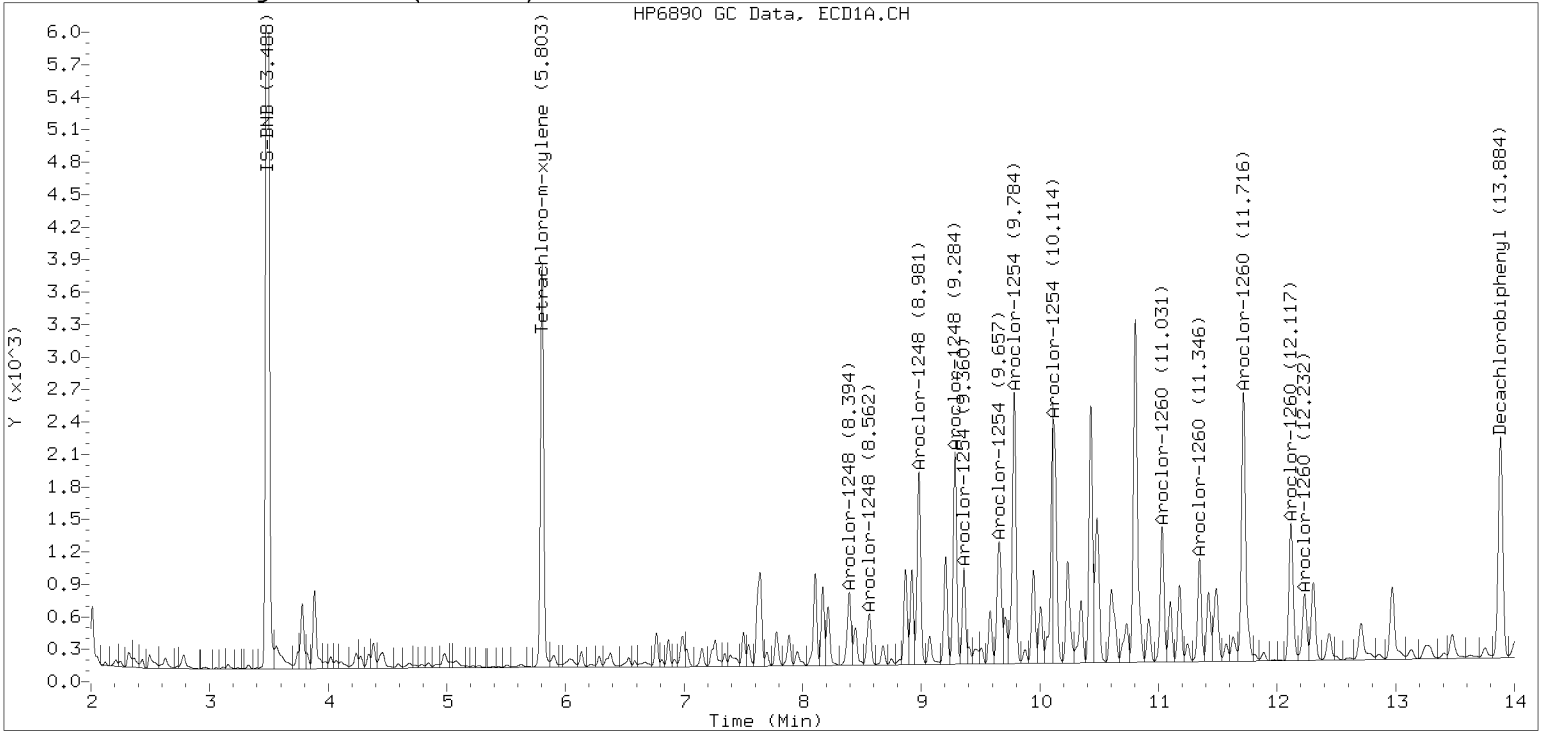
ZB-35 Manual Integration: YES

Manual Peak Adjustment, ZB-5

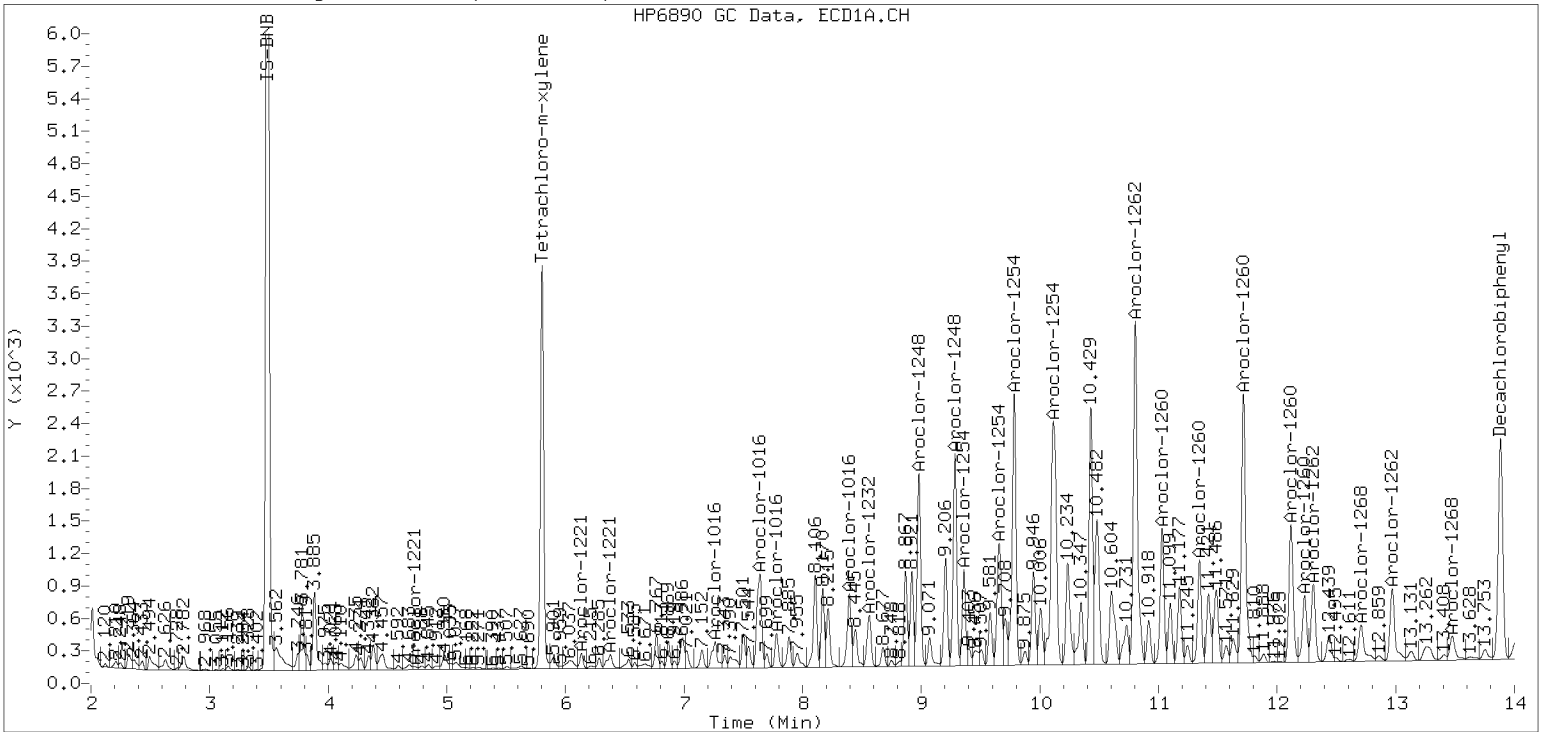
Datafile: ecd7.i/230213.b/02132366ECD7.D

Injection Date: 14-FEB-2023 08:41

Manual Integration (After)



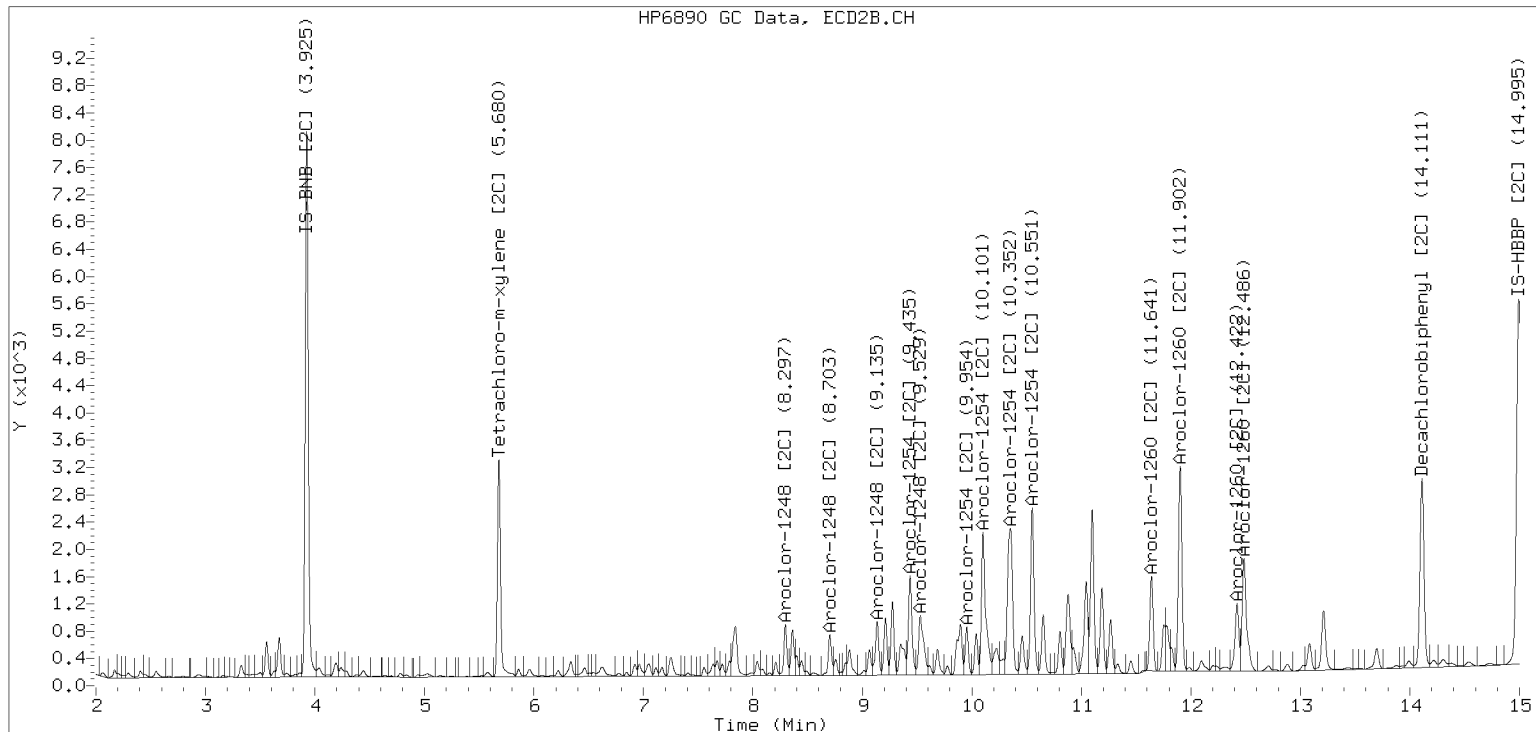
Processed Integration (Before)



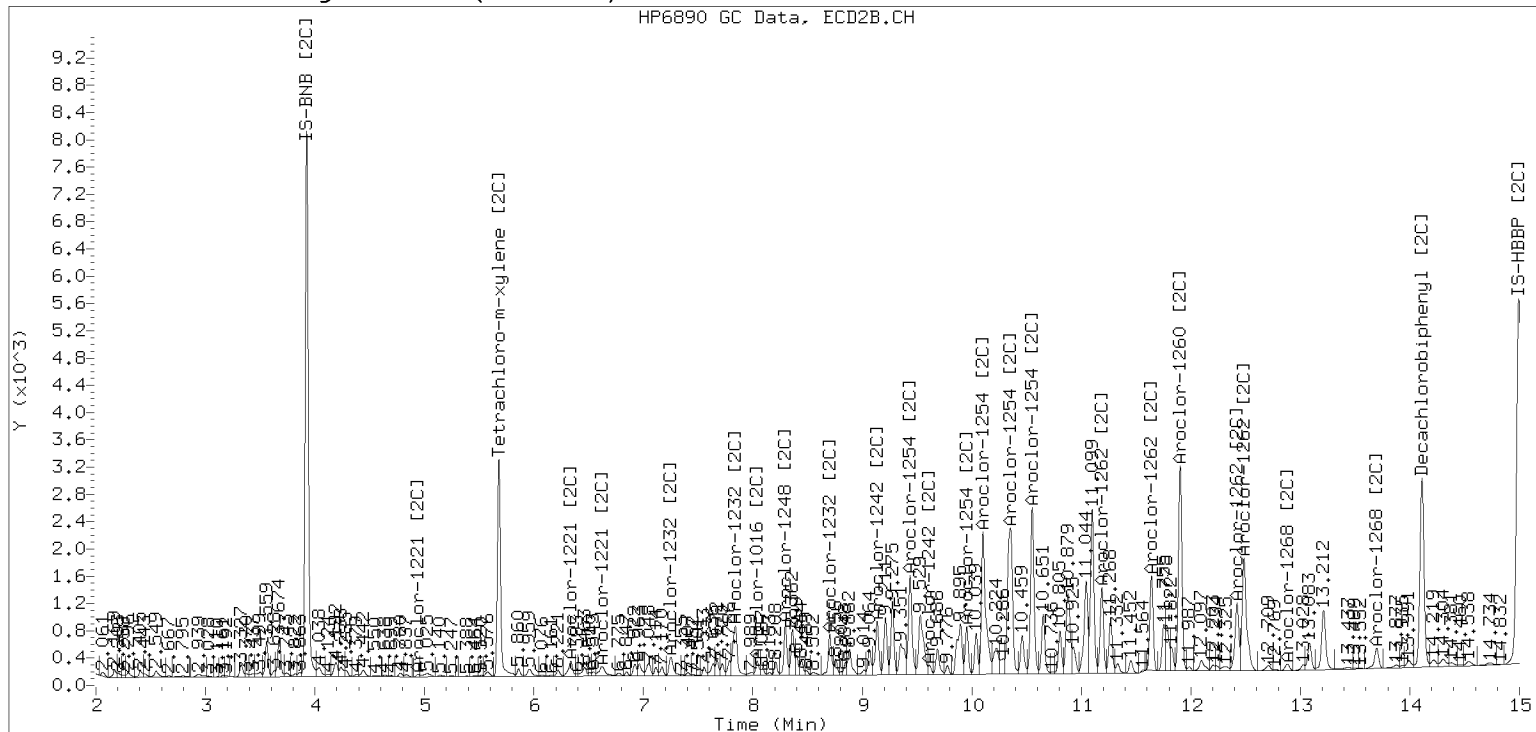
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230213.b/230213.b/02132366ECD7.D Injection Date: 14-FEB-2023

Manual Integration (After)



Processed Integration (Before)





PREPARATION BATCH SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0687 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	02132351ECD7.D	01/31/23 15:03	
LDW23-SC1032	23A0326-02	02132352ECD7.D	01/31/23 15:03	
LDW23-SC1128	23A0326-03	02132353ECD7.D	01/31/23 15:03	
LDW23-SC1170A	23A0326-04	02132354ECD7.D	01/31/23 15:03	
LDW23-SC1169C	23A0326-05	02132355ECD7.D	01/31/23 15:03	
LDW23-SC1168	23A0326-06	02132356ECD7.D	01/31/23 15:03	
LDW23-SC1176	23A0326-07	02132357ECD7.D	01/31/23 15:03	
LDW23-IT1181	23A0326-08	02132362ECD7.D	01/31/23 15:03	
LDW23-IT1127	23A0326-09	02132363ECD7.D	01/31/23 15:03	
LDW23-SC1161	23A0326-10	02132364ECD7.D	01/31/23 15:03	
LDW23-SC1155	23A0326-11	02132365ECD7.D	01/31/23 15:03	
LDW23-SC1162B	23A0326-12	02132366ECD7.D	01/31/23 15:03	
Blank	BLA0687-BLK1	02132347ECD7.D	01/31/23 15:03	
LCS	BLA0687-BS1	02132348ECD7.D	01/31/23 15:03	
LCS Dup	BLA0687-BSD1	02132349ECD7.D	01/31/23 15:03	
LDW23-SC1176	BLA0687-MS1	02132360ECD7.D	01/31/23 15:03	
LDW23-SC1176	BLA0687-MSD1	02132361ECD7.D	01/31/23 15:03	
Reference	BLA0687-SRM1	02132350ECD7.D	01/31/23 15:03	



Batch: BLA0687

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

Matrix: Solid

Date Prepared: 01/31/23

Balance ID: B146462614

Set Up By: CTO 1/17/23

WO Comments

23A0326: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD <E> <H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 5	QLS Spike

Analysis: 8082A PCB Solid 4

Lab Number & Container	% Solids	Initial (g)		(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL)	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 12.5 (Wet)	Actual						
23A0326-01 A	59.0	(21.20)	21.21	5mL	5mL	2mL	2.5	1.0	
23A0326-02 A	57.3	(21.82)	21.83	5mL	5mL	2mL	2.5	1.0	
23A0326-03 A	53.2	(23.50)	23.59	5mL	5mL	2mL	2.5	1.0	
23A0326-04 A	51.6	(24.21)	24.34	5mL	5mL	2mL	2.5	1.0	
23A0326-05 A	54.6	(22.88)	22.94	5mL	5mL	2mL	2.5	1.0	
23A0326-06 A	56.5	(22.12)	22.18	5mL	5mL	2mL	2.5	1.0	
23A0326-07 A	81.0	(15.44)	15.48	5mL	5mL	2mL	2.5	1.0	
23A0326-08 A	75.5	(16.55)	16.64	5mL	5mL	2mL	2.5	1.0	
23A0326-09 A	61.9	(20.18)	20.22	5mL	5mL	2mL	2.5	1.0	
23A0326-10 A	54.6	(22.88)	22.92	5mL	5mL	2mL	2.5	1.0	
23A0326-11 A	52.6	(23.78)	23.78	5mL	5mL	2mL	2.5	1.0	
23A0326-12 A	51.4	(24.31)	24.31	5mL	5mL	2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g)		(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL)	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
		Target Dry: 12.5 (Wet)	Actual						
BLA0687-BLK1	100.0	(12.50)	12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLA0687-BS1	100.0	(12.50)	12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLA0687-BSD1	100.0	(12.50)	12.54	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLA0687-MS1	81.0	(15.44)	15.45	5mL	5mL	2mL	2.5	1.0	Use 23A0326-07
BLA0687-MSD1	81.0	(15.44)	15.45	5mL	5mL	2mL	2.5	1.0	Use 23A0326-07
BLA0687-SRM1	100.0	(12.50) (2.50)	2.54	5mL	5mL	2mL	2.5	1.0	Use K011477 K011478 10 1/31/23

+1g DI WATER

Client ID: 01/31/23

Date

Preparation Reviewed By: MRS

Date: 2/10/23

Extraction Date and Time: 01/31/23 15:43



Batch: BLA0687

Prepared using: EPA 3546 (Microwave)
8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments
23A0326: <C>BPR SRM, MS, DUP <C> <M>BPR PS, MS/MSD <M> <E>BPR 8270E RM K000591, SIM PAH RM 1009127 PCB RM J006840-43,
7935-36, K011477-79, MS/MSD <E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup <H> Store in freezer (except GS)

Prep Steps

Reagents Used

Surrogates & Spike Standards Used

Station/Reagent	Standard ID
Microwave	
Analyst: <i>CTM</i> Date: <i>1/31/23</i>	
Neutral Glass Wool	<i>L000350</i>
1:1 Hexane/Acetone	<i>L000879</i>
Hexane	<i>L0008310</i>
Anhydrous Sodium Sulfate	<i>L000759</i>
KD	
Analyst: <i>LOIAL</i> Date: <i>2/7/23</i>	
Anhydrous Sodium Sulfate	
Hexane	<i>K011373</i>
Vialing	
Analyst: <i>ZH NRS</i> Date: <i>2/10/23</i>	
Hexane	<i>K011373</i>
Concentrated Sulfuric Acid	<i>L001033</i>
Silica Gel (SPE) Darts	<i>K011573</i>
Sodium Sulfite	<i>L0010363</i>
Tetrabutylammonium hydrogensulfate (TBAS)	<i>L000840</i>

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	N <i>L000773</i>	50µL		
2µg/mL	Exp Date: <i>7/21/2023</i>		<i>CT</i>	<i>[Signature]</i>
Spike	1 <i>K008150</i>	63µL		
20µg/mL	Exp Date: <i>3/5/2023</i>		<i>G</i>	<i>[Signature]</i>

MANUALLY ENTER EXPIRATION DATES!

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

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



Batch: BLA0687

Prepared using: EPA 3546 (Microwave)
8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments
23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270B RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36, K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
<p>SPECIAL INSTRUCTIONS:</p> <ol style="list-style-type: none"> 1. Weigh soil/sed into beakers-lightly dry with sodium sulfate. 2. Transfer to microwave vessel(s). Note: (do not fill vessels more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hexane/Acetone until the solvent layer is 3 inches above the soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then cool vessels in R-05 15 minutes. Re-homogenize while cool. 7. Decant 1:1 Hex/Ace into Erlenmeyer flask with sodium sulfate in bottom and funnel with neutral glasswool plug. 8. Re-homogenize and rinse with 1:1 Hexane/Acetone. 9. Let cool and decant solvent then empty the soil into the funnel and rinse with Hexane. 10. KD on 100° bath. 11. Exchange (2 X with 20mL) Hexane. 12. TurboVap. 13. Clean-ups. 14. TurboVap. 15. Vial with Hexane. <p>A. Need Total Solids Y <input checked="" type="checkbox"/> N</p> <p>B. Archive/Freeze Y <input checked="" type="checkbox"/> N</p>	



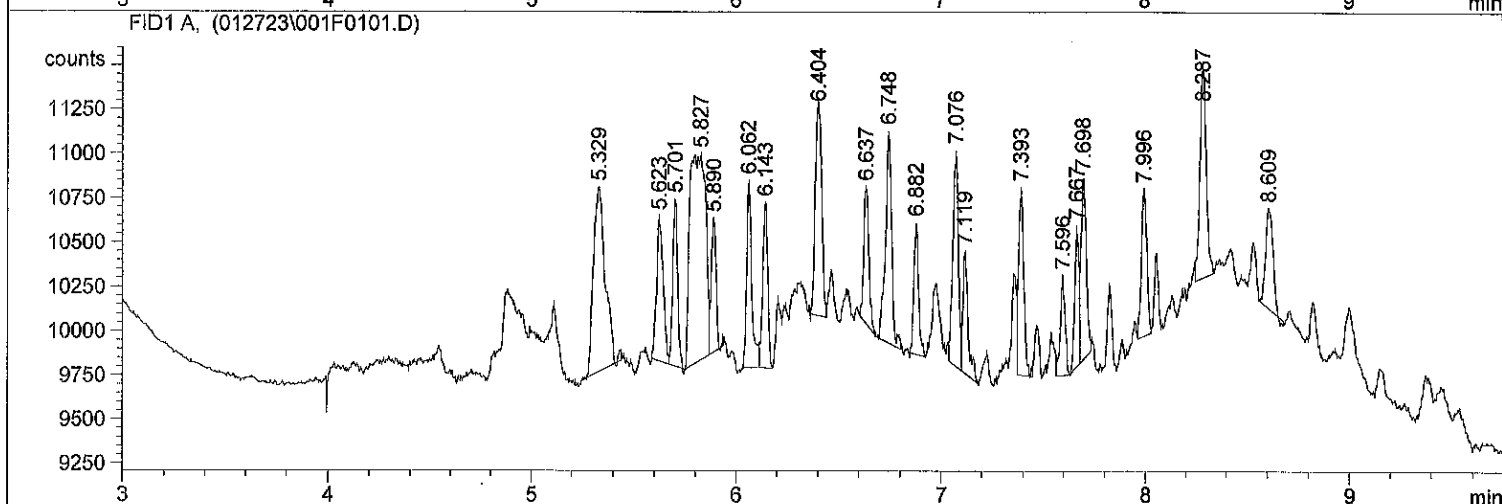
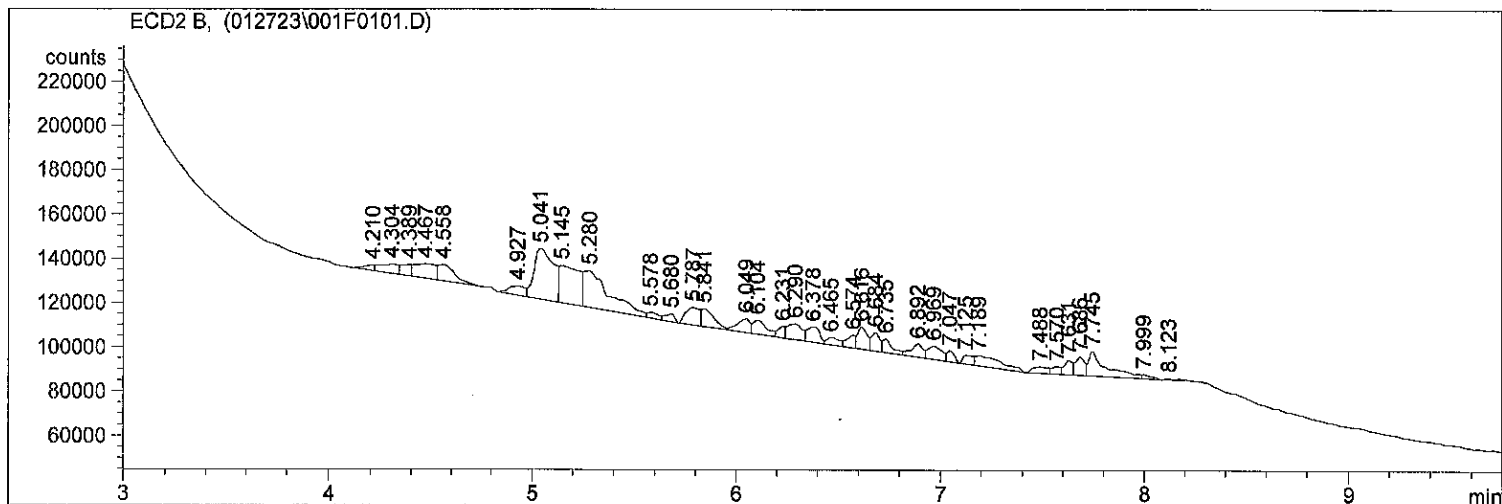
BLA0687

Extraction Parameter: PUB Extraction Batch: ~~BLA0687~~
50 1/28/23

Total Solids Batch: BLA0320 Work Order(s): 23A0320

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= $\phi 7, \phi 8$.	\checkmark $\phi 1/27/23$
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= $\phi 1-12$	\checkmark $\phi 1/27/23$
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	\checkmark
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input type="checkbox"/> Rocks (%+size)?	
<input type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel (sulfur odors)= $\phi 1-\phi 6, \phi 9-12$.	\checkmark $\phi 1/27/23$
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input checked="" type="checkbox"/> Share Samples Y/N	\checkmark $\phi 1/27/23$
<input checked="" type="checkbox"/> Multiple Jars Y/N	\checkmark $\phi 1/27/23$
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	\checkmark
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	

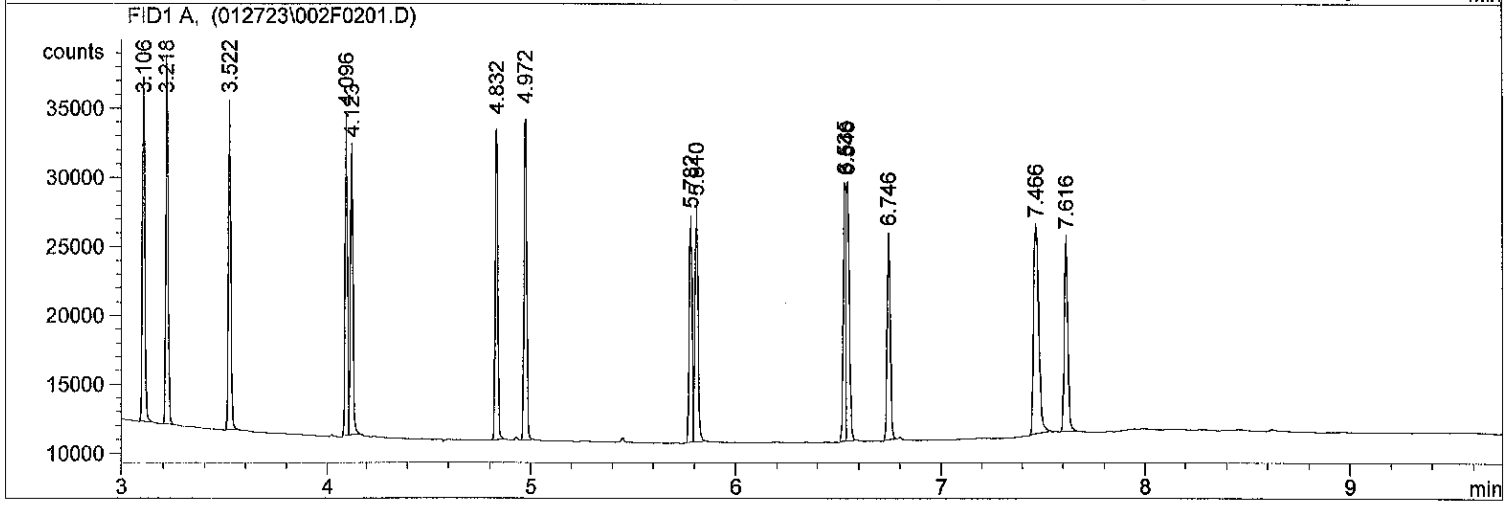
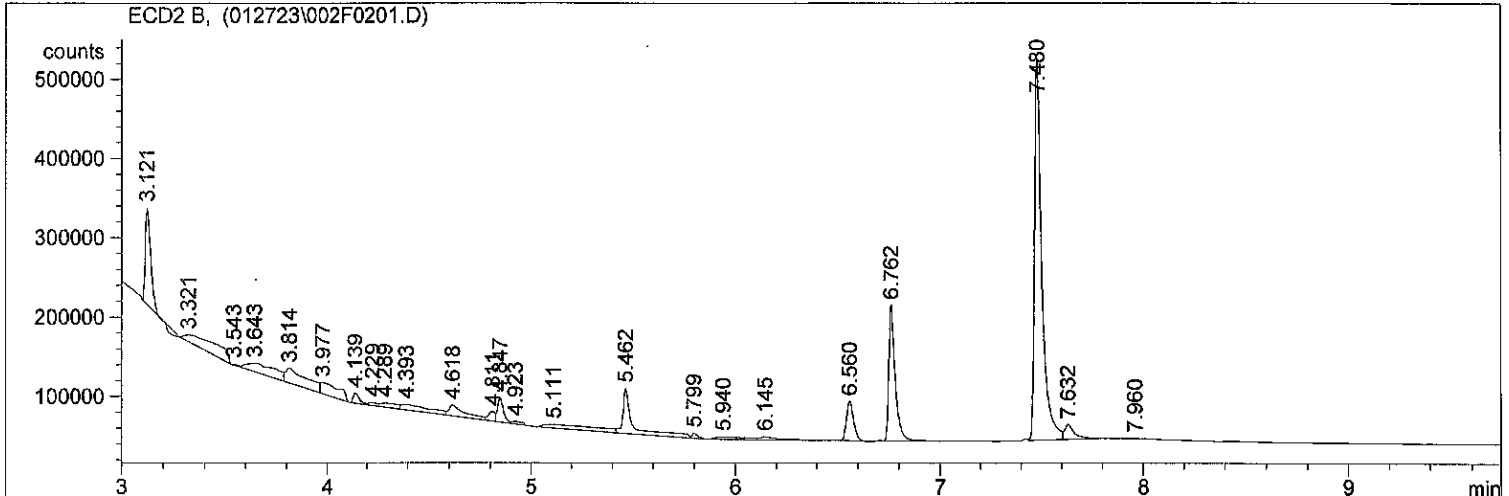
Injection Date : 1/27/2023 4:42:19 PM Seq. Line : 1
Sample Name : DCM RINSE Location : Vial 1
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

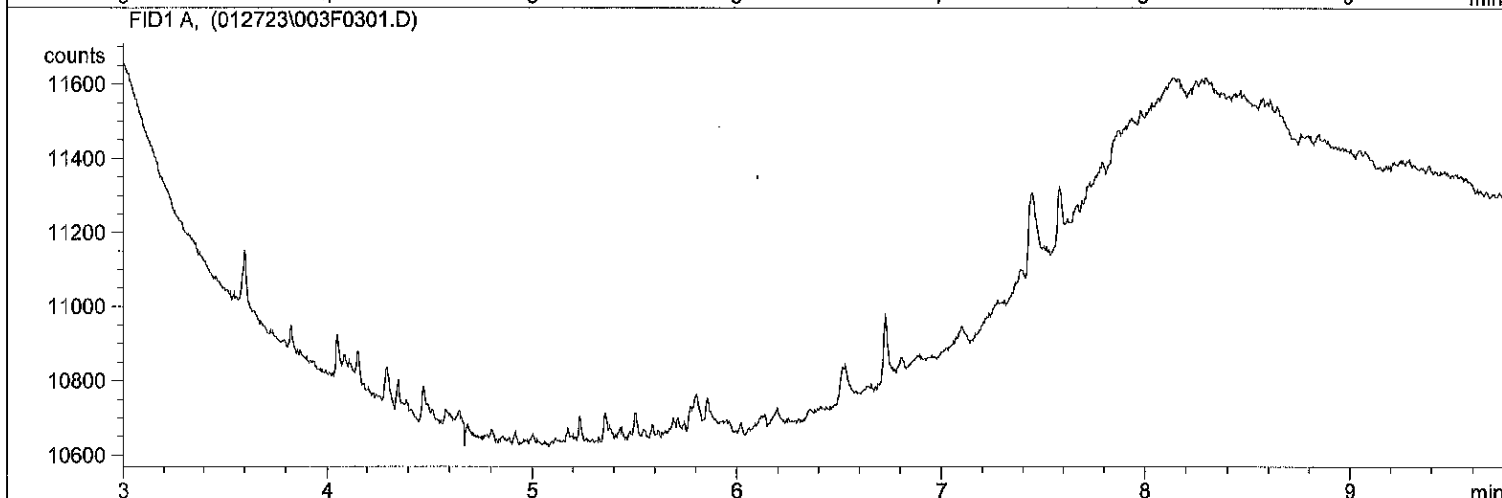
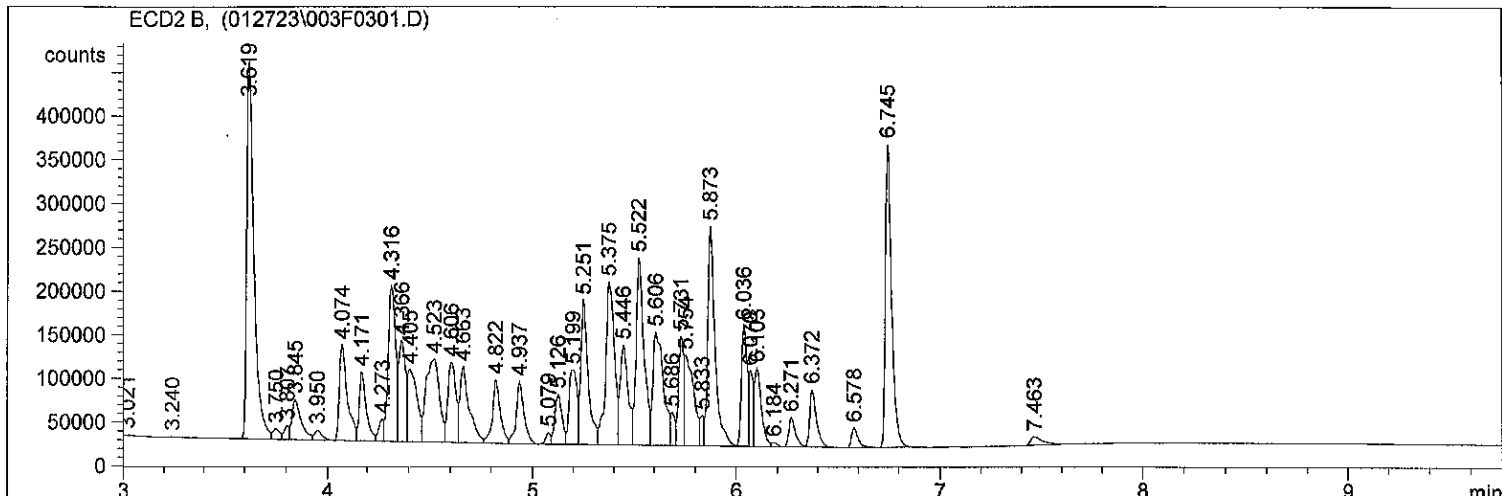
Injection Date : 1/27/2023 4:56:11 PM Seq. Line : 2
Sample Name : PNA STD 10PPM Location : Vial 2
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

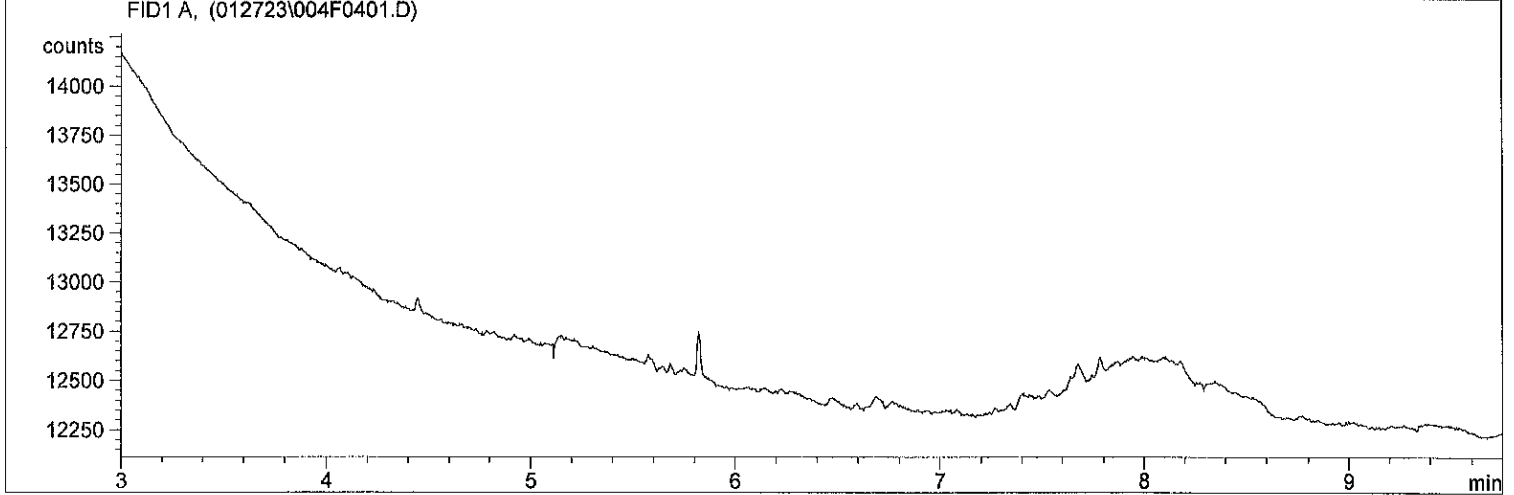
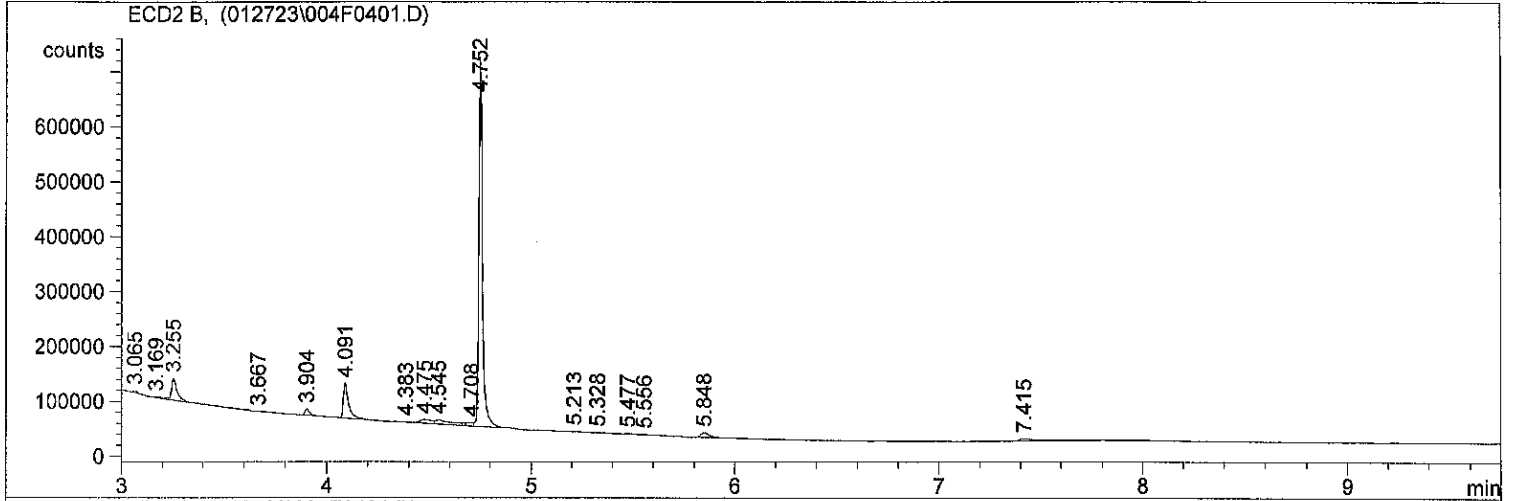
Injection Date : 1/27/2023 5:10:34 PM Seq. Line : 3
Sample Name : AR1660 1PPM Location : Vial 3
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

=====
Injection Date : 1/27/2023 5:24:35 PM Seq. Line : 4
Sample Name : 23A0326 01 Location : Vial 4
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



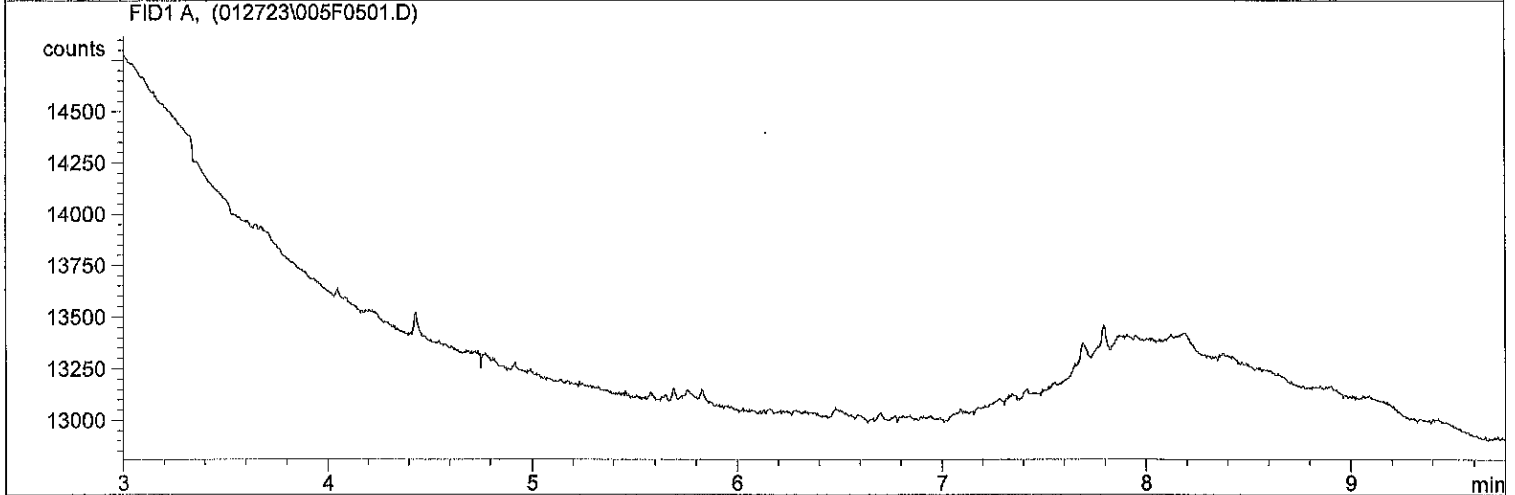
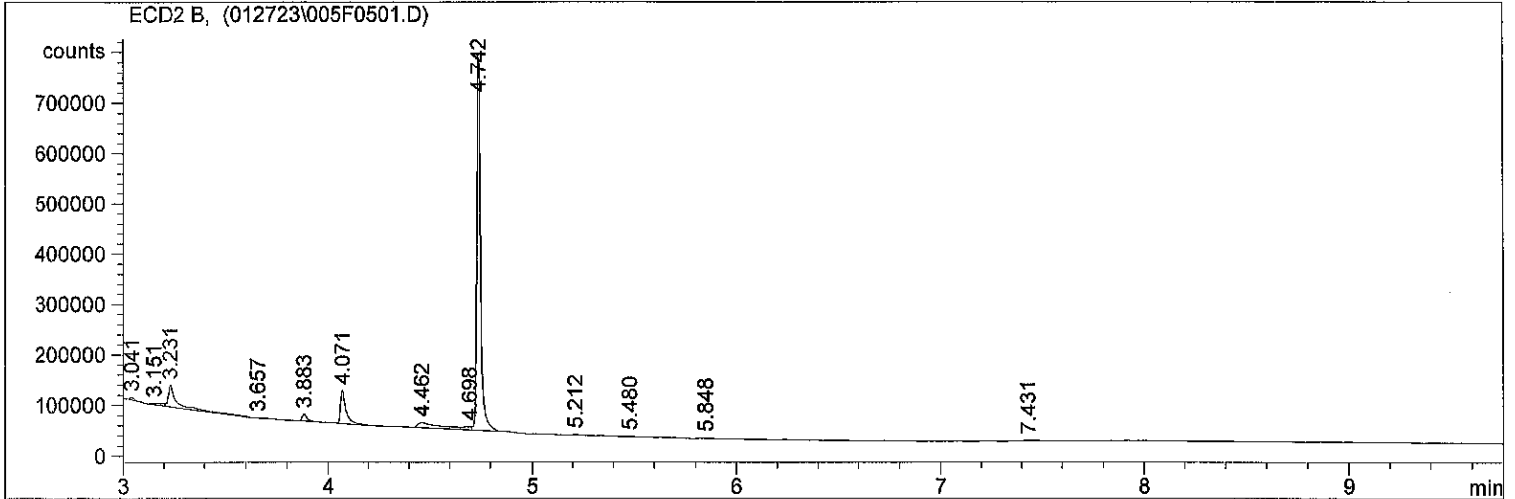
*** End of Report ***

```

=====
Injection Date   : 1/27/2023 5:39:07 PM      Seq. Line   :    5
Sample Name     : 23A0326 02                Location    : Vial 5
Acq. Operator  : YL                          Inj         :    1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012723.S
Method          : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed    : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====

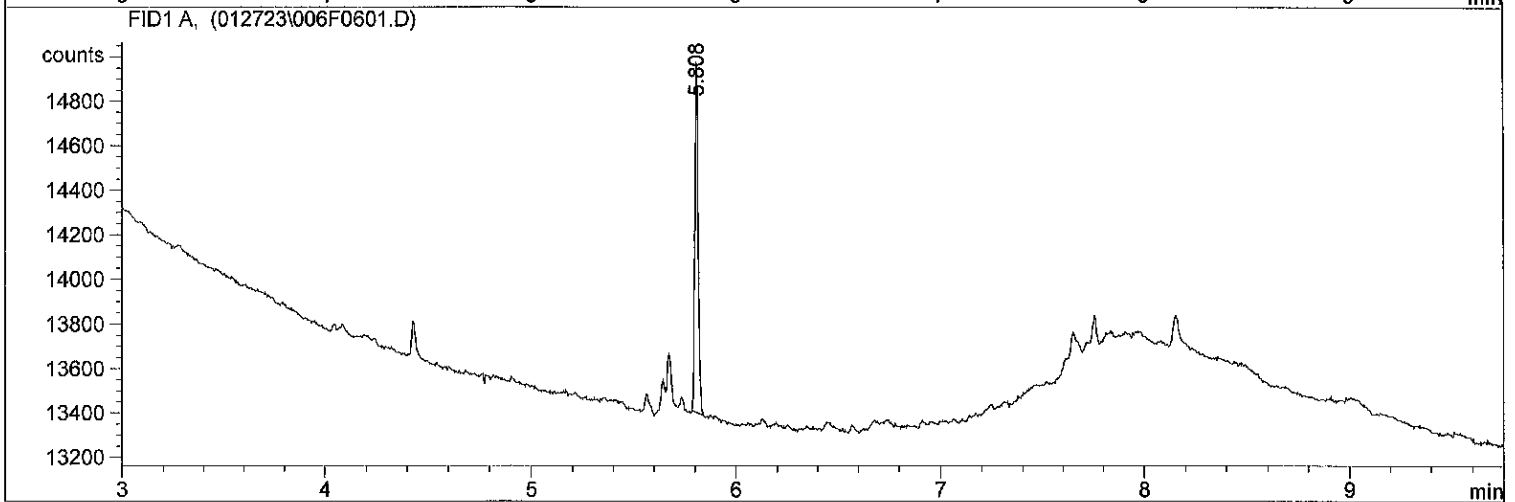
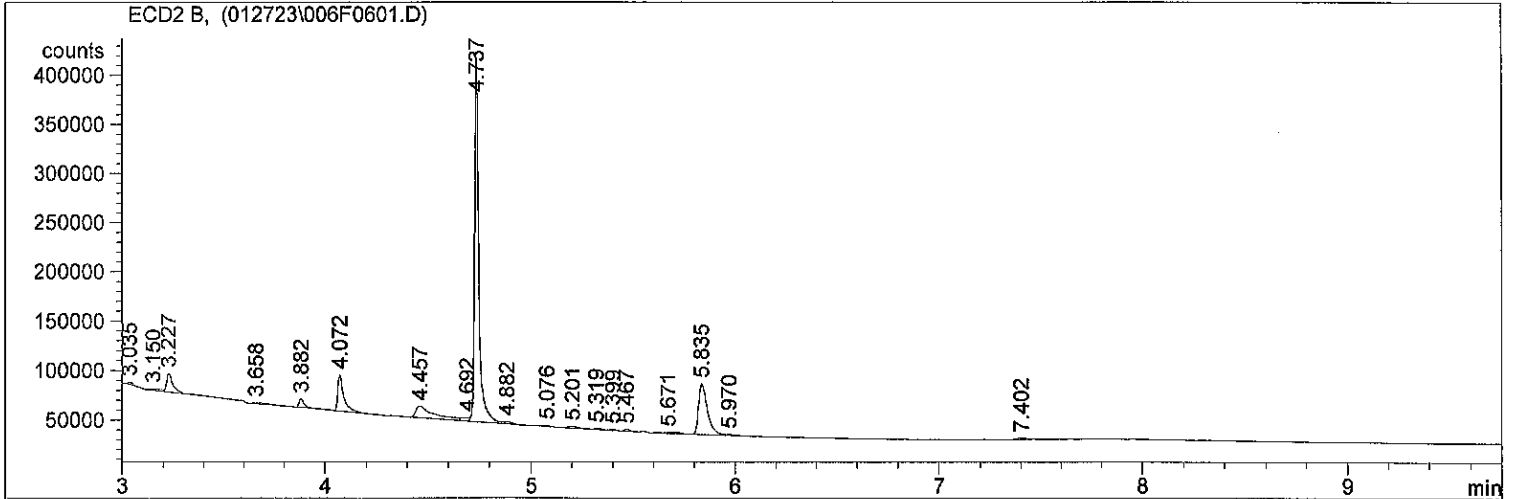
```



*** End of Report ***

=====
Injection Date : 1/27/2023 5:53:06 PM Seq. Line : 6
Sample Name : 23A0326 03 Location : Vial 6
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



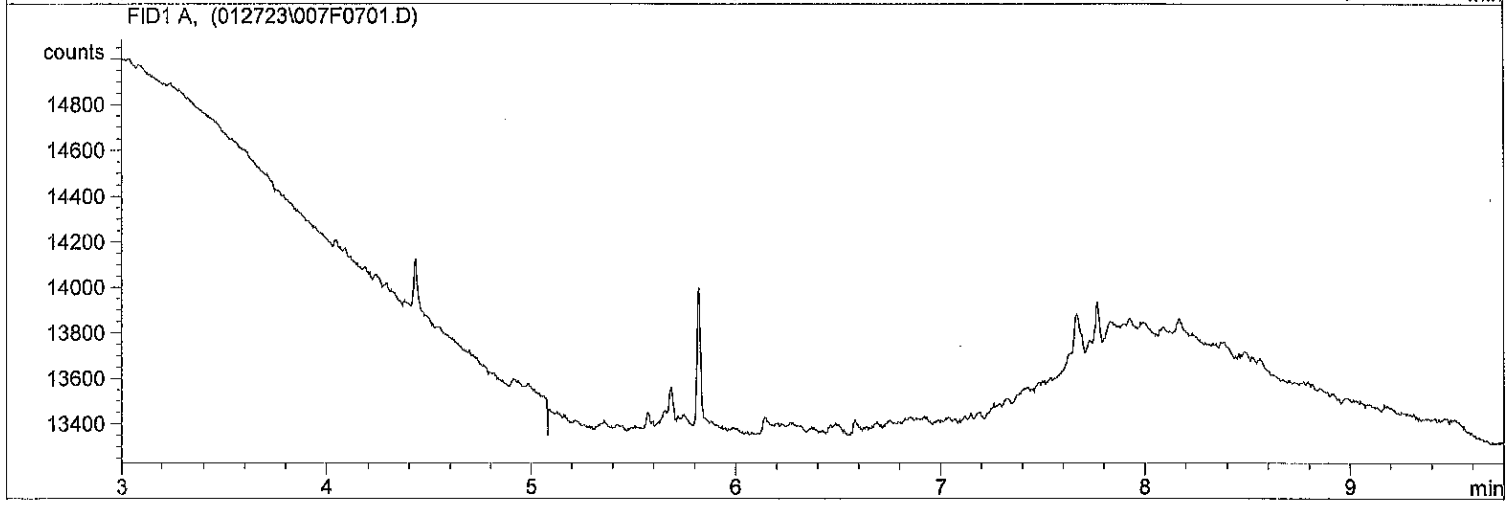
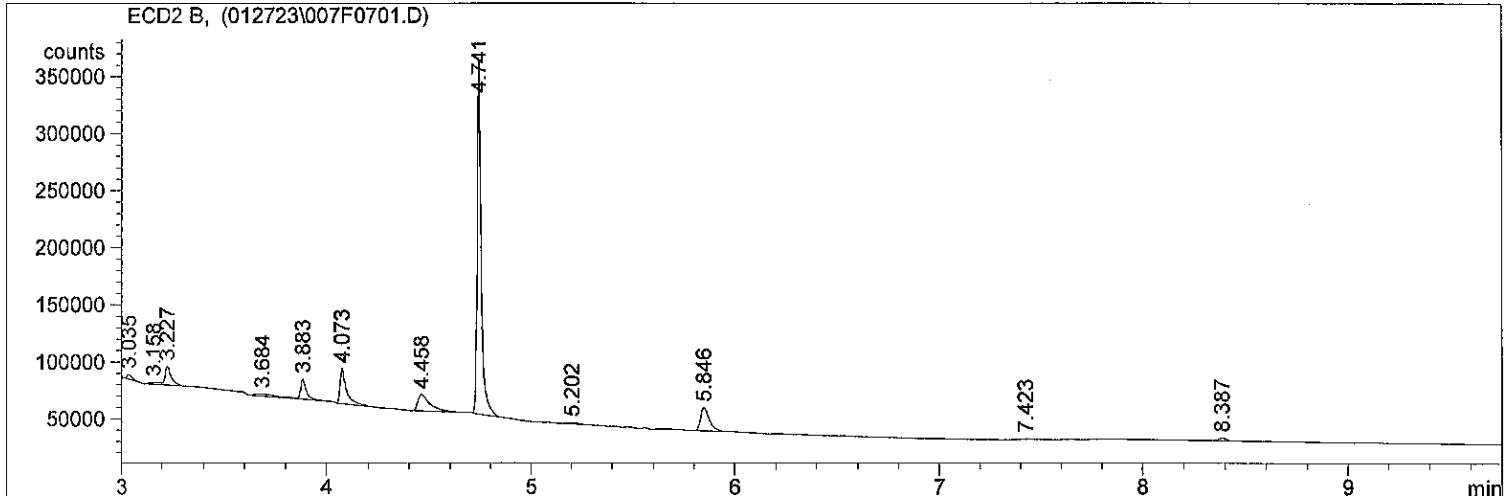
*** End of Report ***

```

=====
Injection Date   : 1/27/2023 6:07:42 PM      Seq. Line   :    7
Sample Name     : 23A0326 04                 Location    : Vial 7
Acq. Operator  : YL                          Inj         :    1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012723.S
Method          : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed    : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====

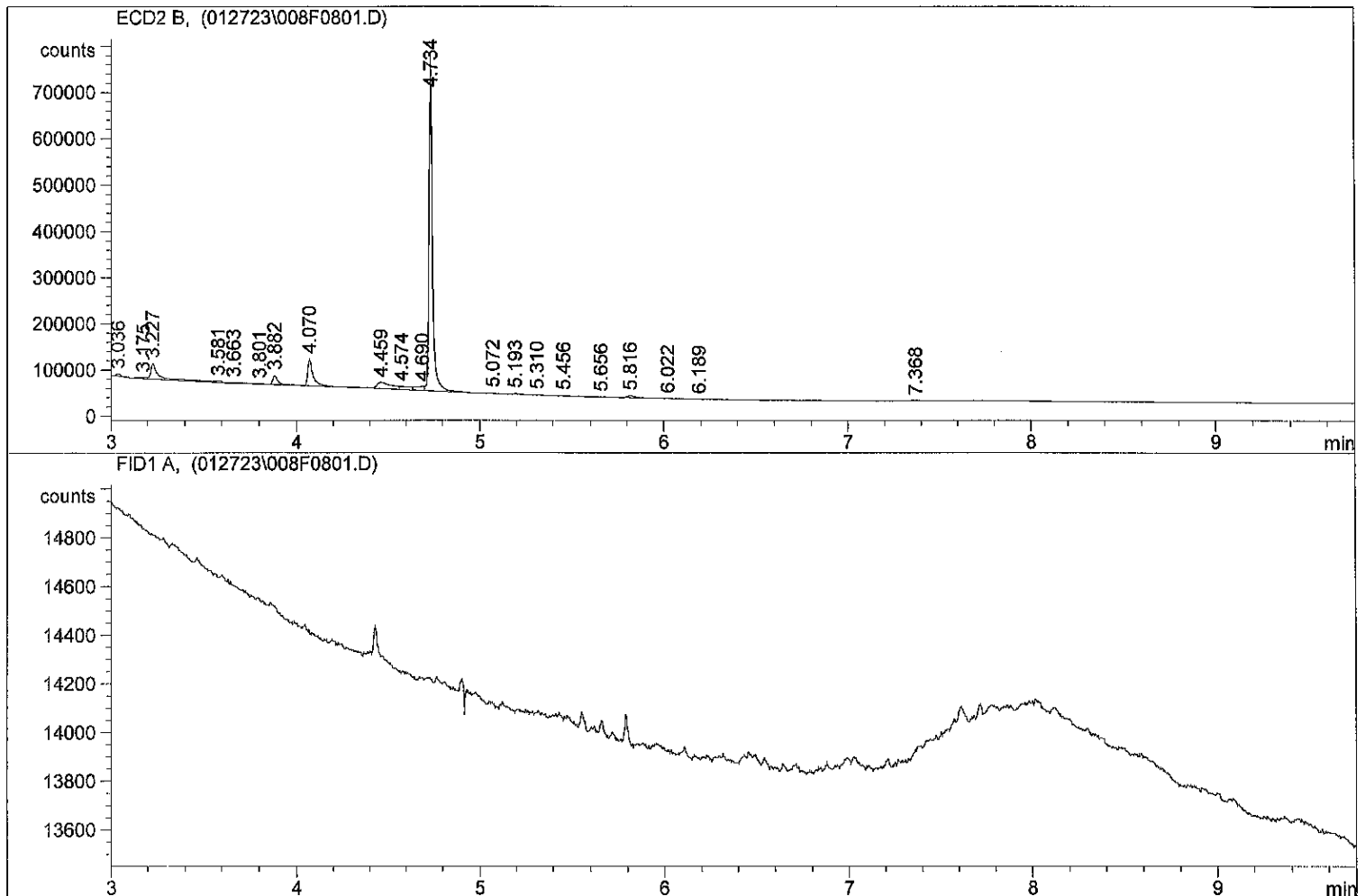
```



*** End of Report ***

=====
Injection Date : 1/27/2023 6:21:37 PM Seq. Line : 8
Sample Name : 23A0326 05 Location : Vial 8
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

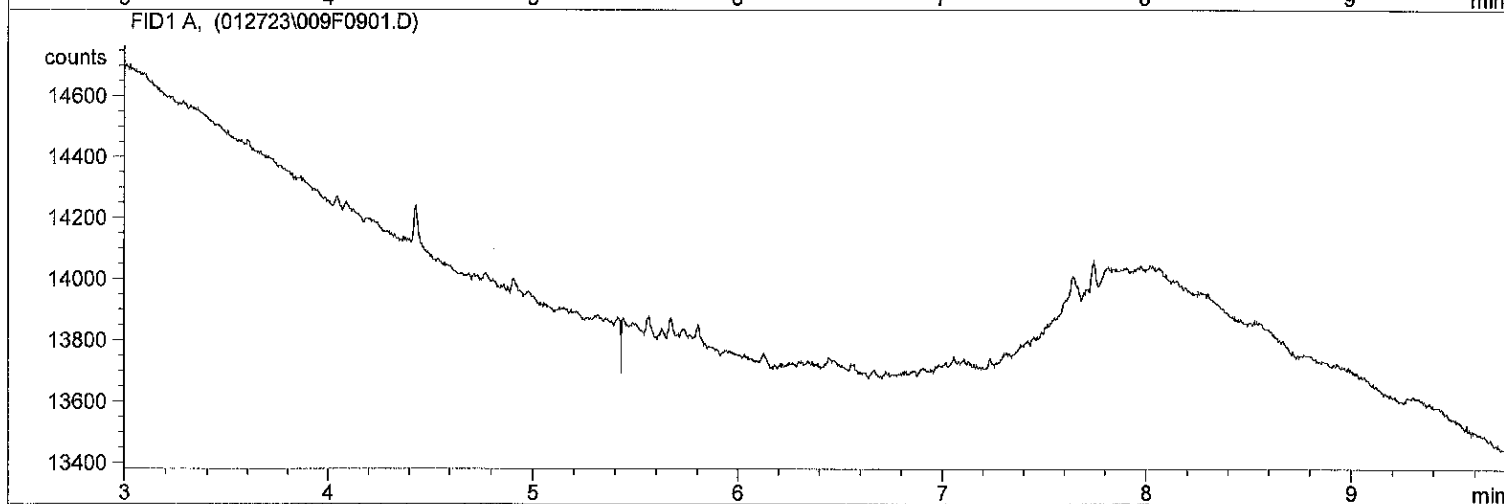
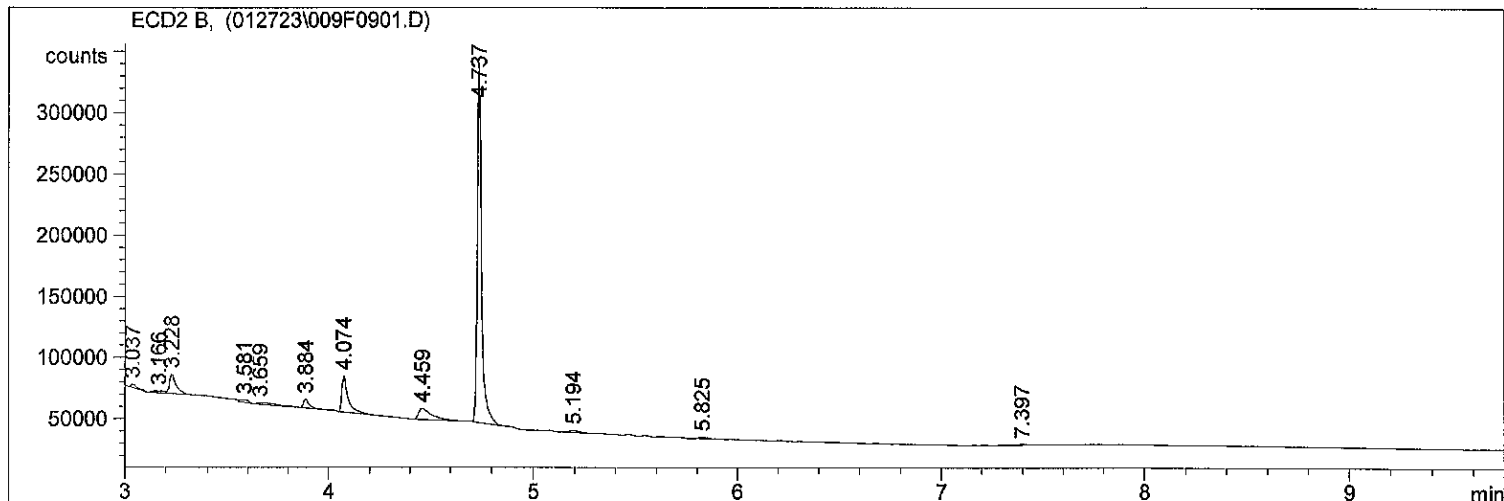
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

=====
Injection Date : 1/27/2023 6:36:16 PM Seq. Line : 9
Sample Name : 23A0326 06 Location : Vial 9
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

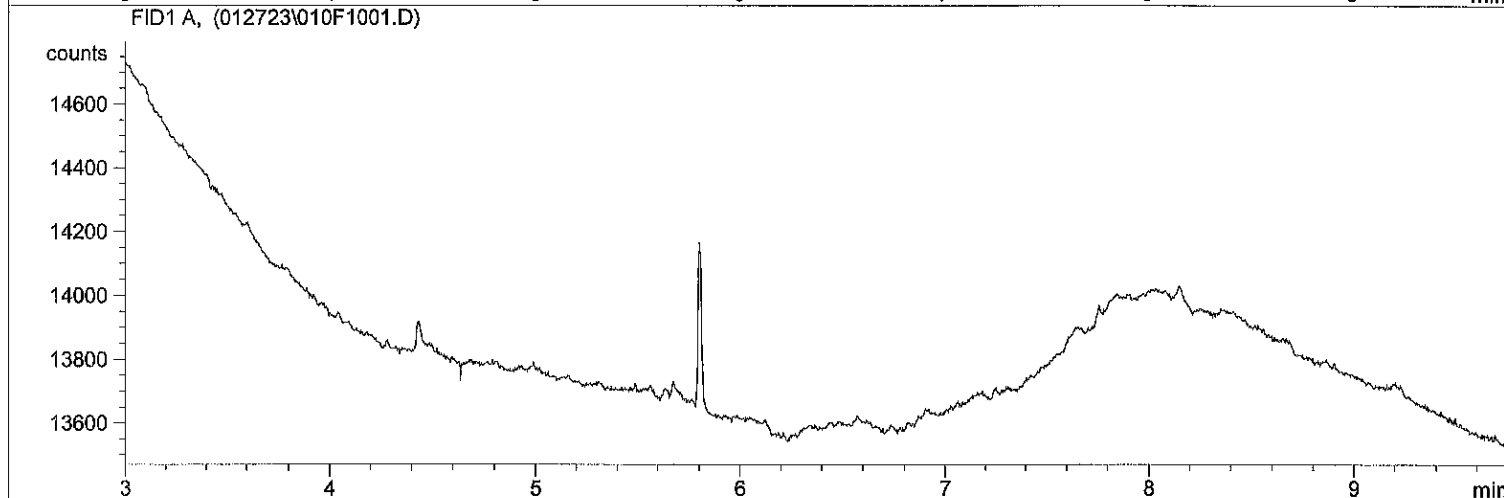
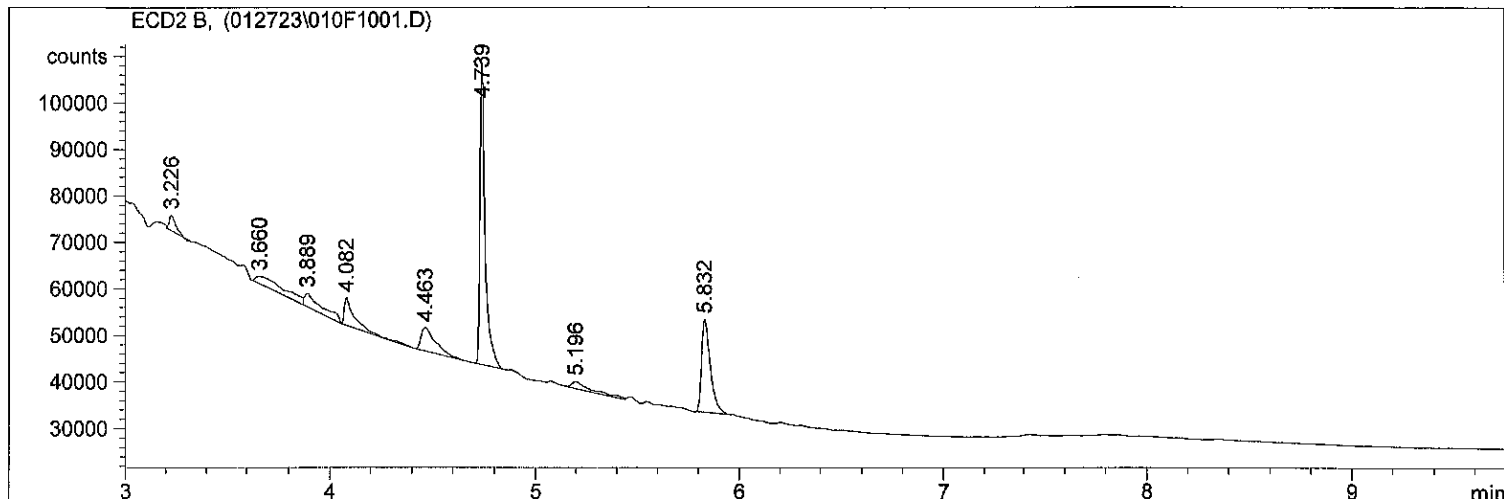
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

=====
Injection Date : 1/27/2023 6:50:13 PM Seq. Line : 10
Sample Name : 23A0326 07 Location : Vial 10
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

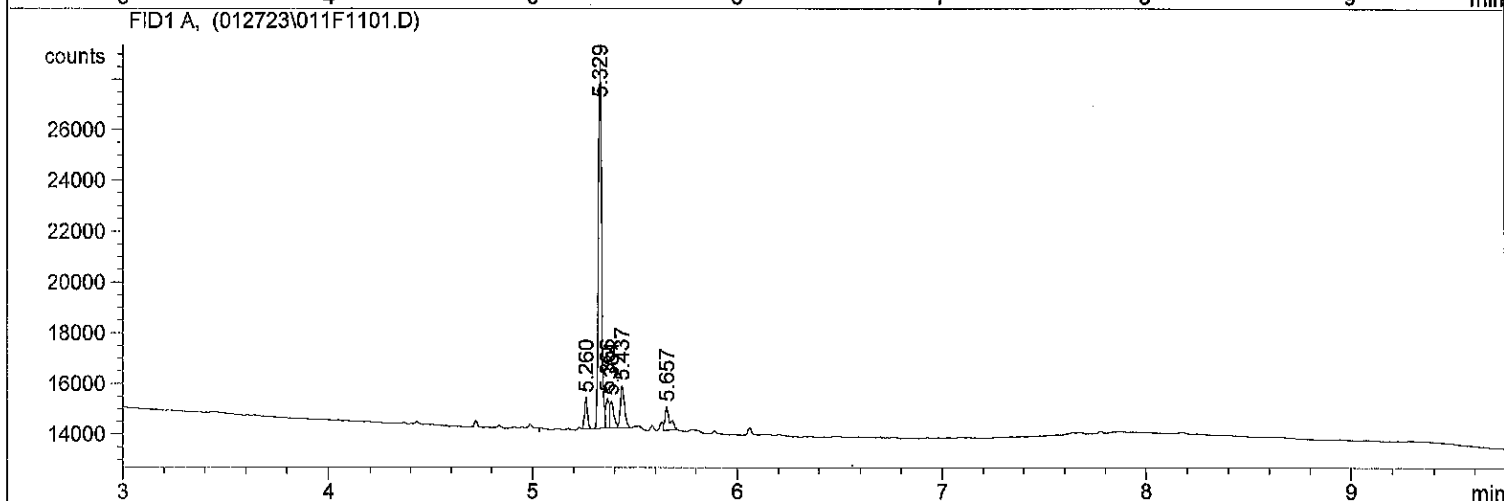
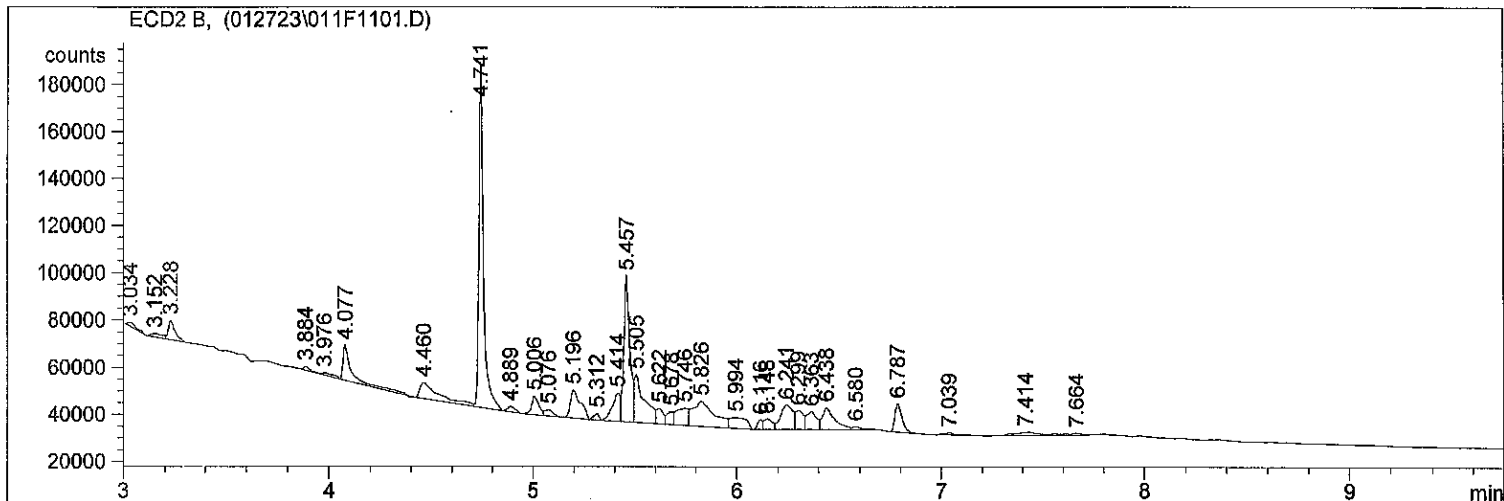
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

=====
Injection Date : 1/27/2023 7:04:49 PM Seq. Line : 11
Sample Name : 23A0326 08 Location : Vial 11
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

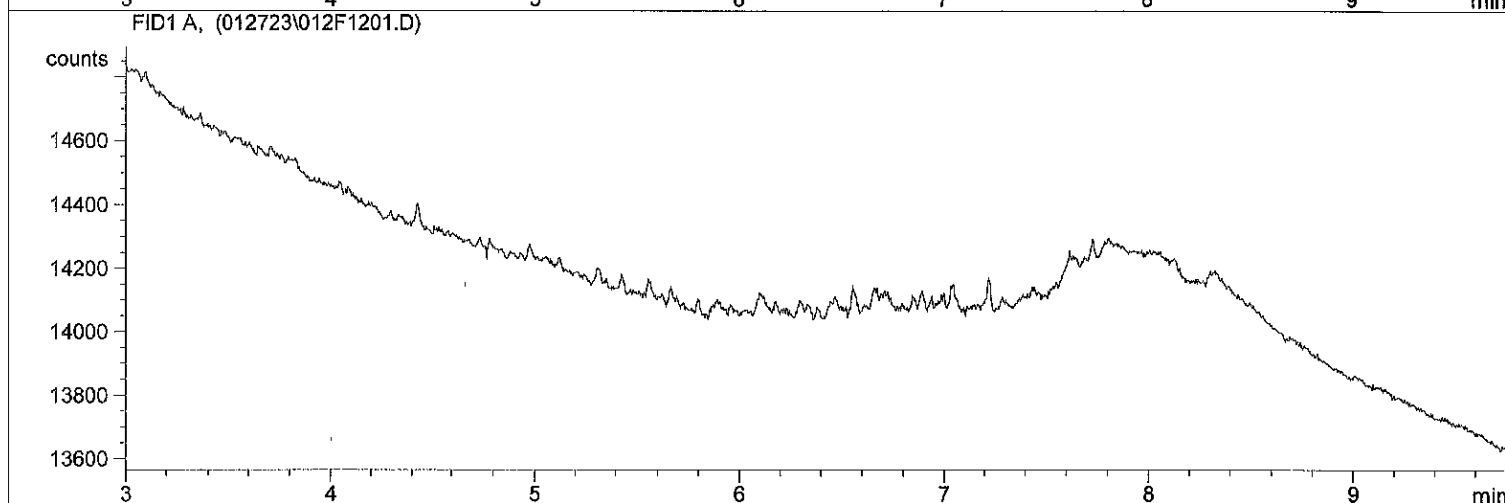
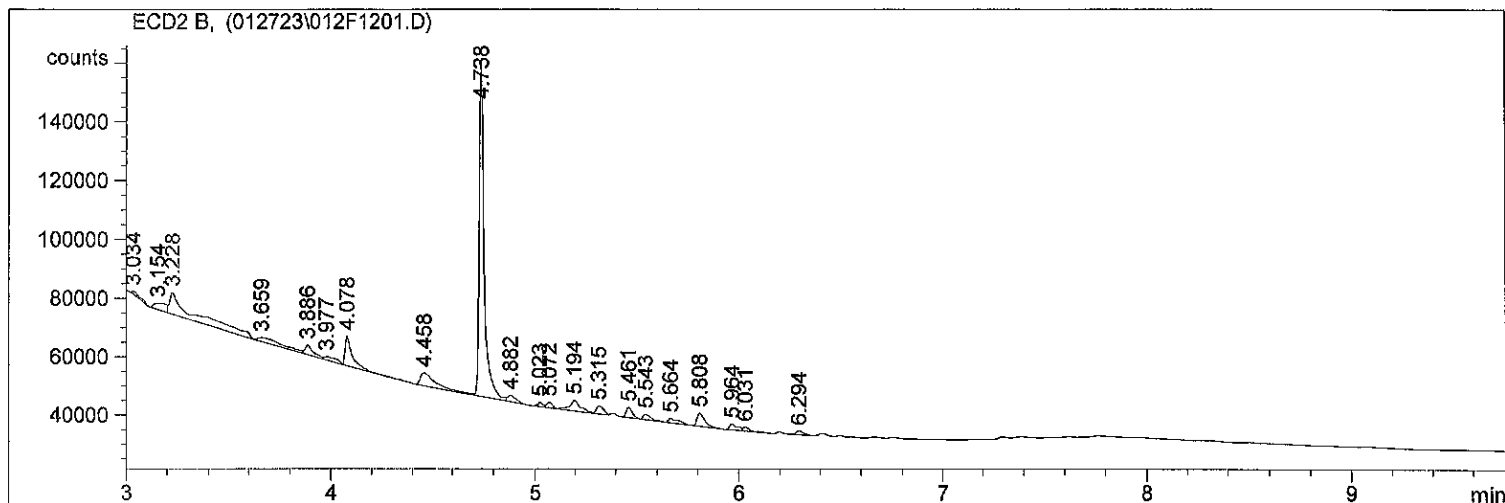
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

=====
Injection Date : 1/27/2023 7:18:47 PM Seq. Line : 12
Sample Name : 23A0326 09 Location : Vial 12
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

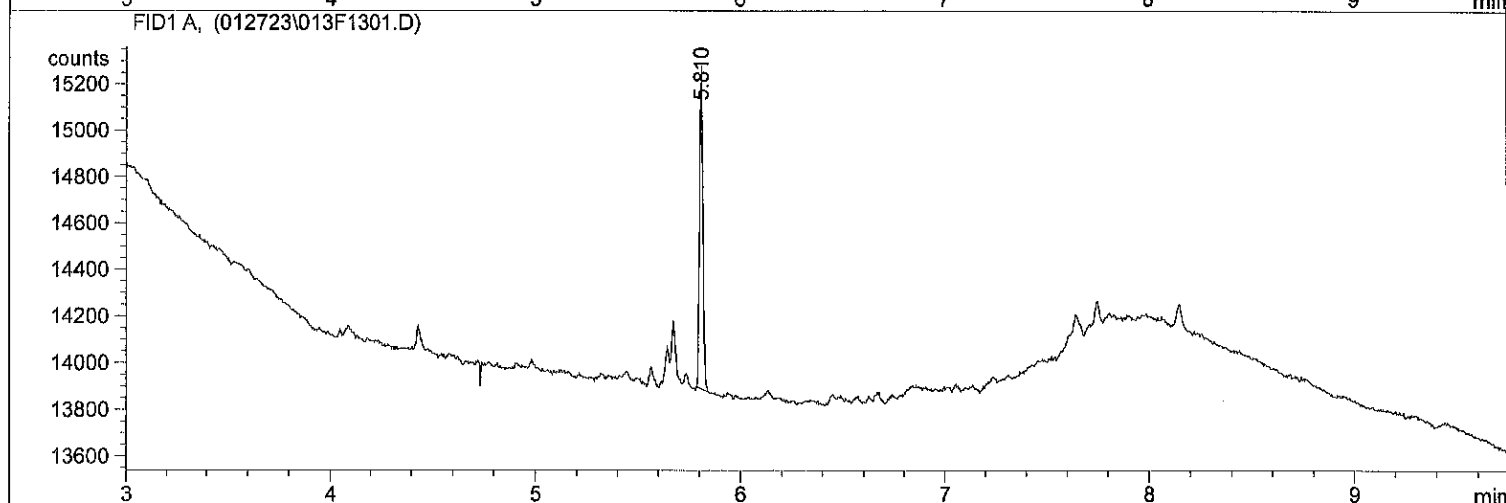
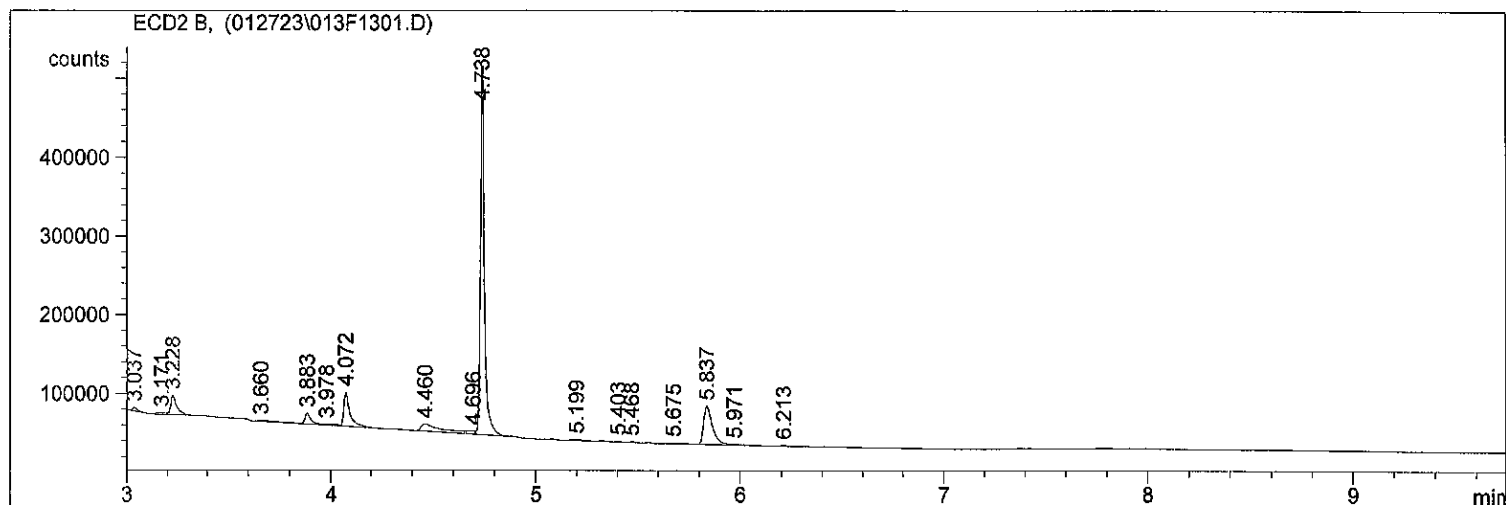
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

=====
Injection Date : 1/27/2023 7:33:22 PM Seq. Line : 13
Sample Name : 23A0326 10 Location : Vial 13
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

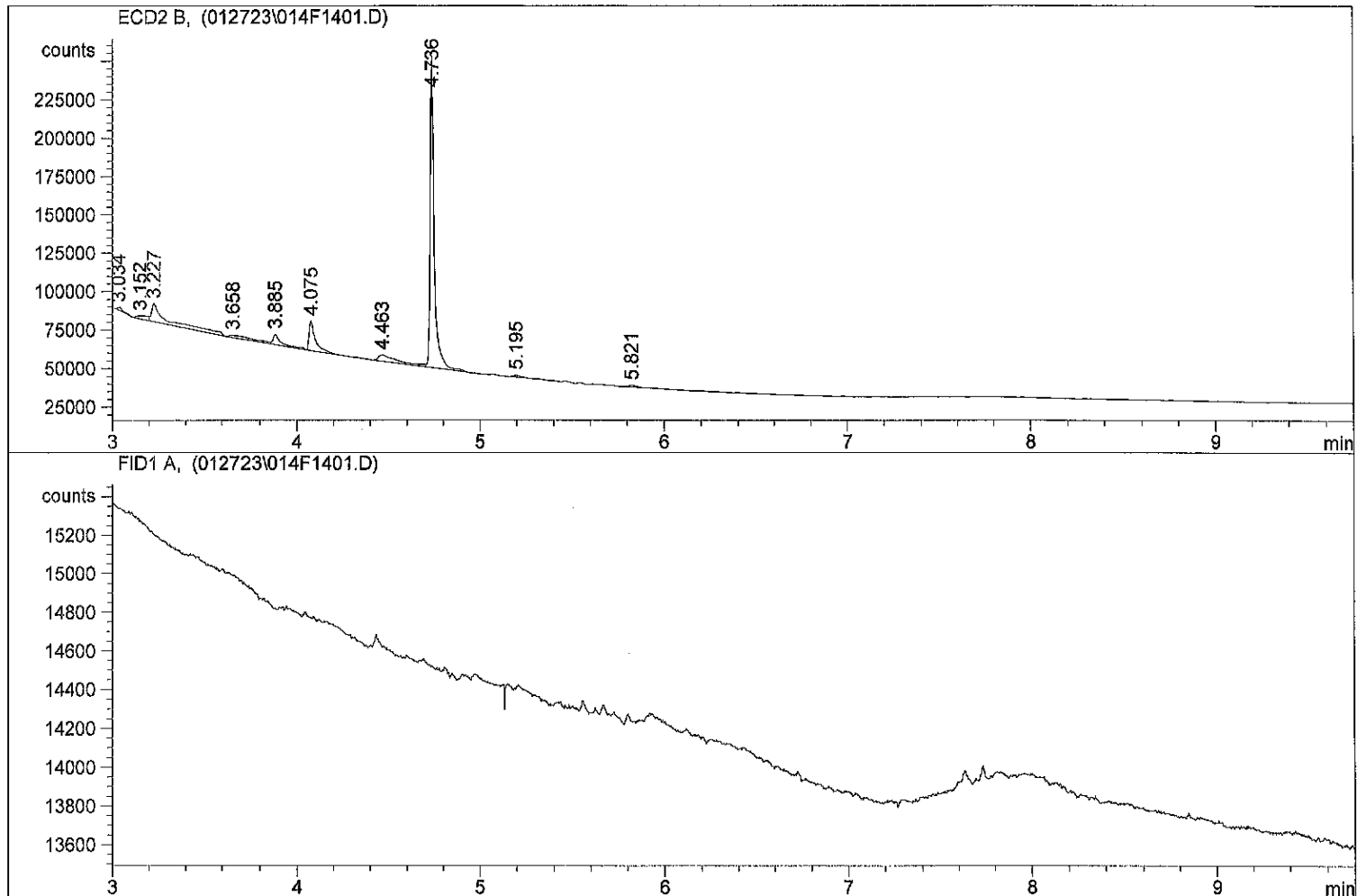
Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***

```
=====
Injection Date   : 1/27/2023 7:47:20 PM      Seq. Line : 14
Sample Name     : 23A0326 11                 Location  : Vial 14
Acq. Operator  : YL                          Inj      : 1
                                           Inj Volume: 1 µl

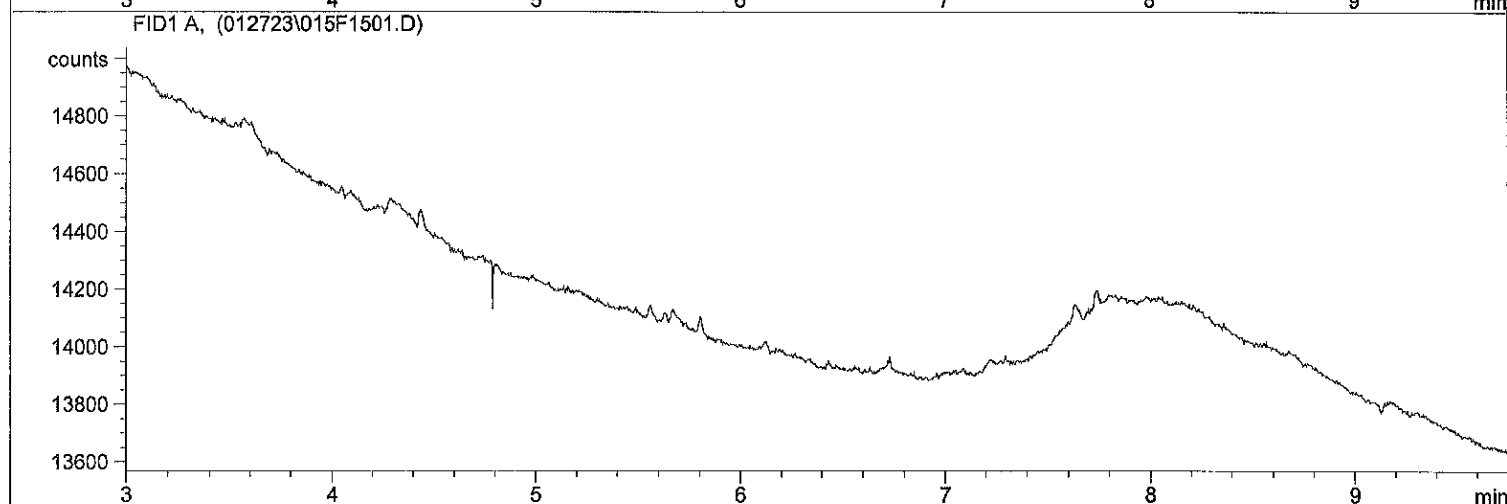
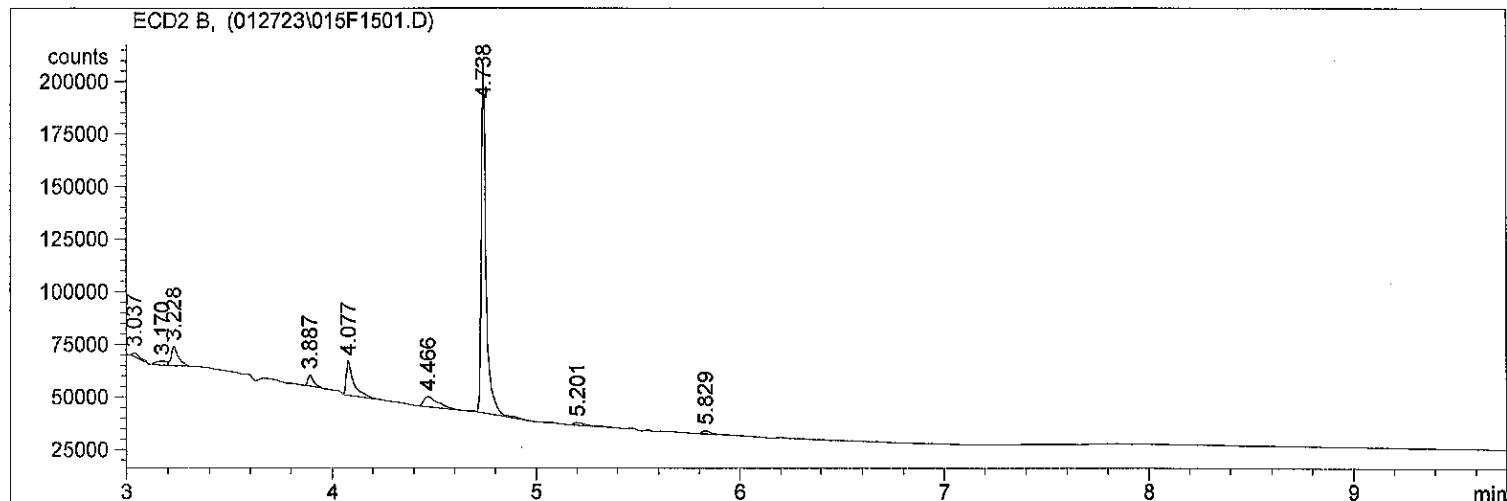
Sequence File   : C:\HPCHEM\1\SEQUENCE\012723.S
Method          : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed   : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====
```



*** End of Report ***

=====
Injection Date : 1/27/2023 8:01:58 PM Seq. Line : 15
Sample Name : 23A0326 12 Location : Vial 15
Acq. Operator : YL Inj : 1
 Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012723.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD
=====



*** End of Report ***



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0082

Cleanup Type: Sulfuric Acid

Cleanup Method: EPA 3665 Sulfuric Acid Cleanup - uL

Analysis: EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	02132351ECD7.D	02/10/2023	
LDW23-SC1176	23A0326-07	02132357ECD7.D	02/10/2023	
Reference	BLA0687-SRM1	02132350ECD7.D	02/10/2023	
LDW23-IT1127	23A0326-09	02132363ECD7.D	02/10/2023	
Matrix Spike Dup	BLA0687-MSD1	02132361ECD7.D	02/10/2023	
Matrix Spike	BLA0687-MS1	02132360ECD7.D	02/10/2023	
LCS Dup	BLA0687-BSD1	02132349ECD7.D	02/10/2023	
Blank	BLA0687-BLK1	02132347ECD7.D	02/10/2023	
LDW23-SC1155	23A0326-11	02132365ECD7.D	02/10/2023	
LDW23-SC1032	23A0326-02	02132352ECD7.D	02/10/2023	
LDW23-SC1128	23A0326-03	02132353ECD7.D	02/10/2023	
LDW23-SC1161	23A0326-10	02132364ECD7.D	02/10/2023	
LDW23-SC1162B	23A0326-12	02132366ECD7.D	02/10/2023	
LDW23-SC1168	23A0326-06	02132356ECD7.D	02/10/2023	
LDW23-SC1169C	23A0326-05	02132355ECD7.D	02/10/2023	
LDW23-IT1181	23A0326-08	02132362ECD7.D	02/10/2023	
LDW23-SC1170A	23A0326-04	02132354ECD7.D	02/10/2023	
LCS	BLA0687-BS1	02132348ECD7.D	02/10/2023	



CLEANUP BENCH SHEET

CLB0082

Matrix: Solid

Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL

Printed: 2/10/2023 12:00:44PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0326-01	A	LDW23-SC1028	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-03	A	LDW23-SC1128	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-06	A	LDW23-SC1168	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-07	A	LDW23-SC1176	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-08	A	LDW23-IT1181	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-09	A	LDW23-IT1127	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
BLA0687-BLK1	-	Blank	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-BS1	-	LCS	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-BSD1	-	LCS Dup	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-MS1	-	Matrix Spike	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-SRM1	-	Reference	-	2.5	2.5	-	2/10/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0083

Cleanup Type: Sulfur

Cleanup Method: EPA 3660B Sulfur Cleanup - uL

Analysis: EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	02132351ECD7.D	02/10/2023	
LDW23-SC1170A	23A0326-04	02132354ECD7.D	02/10/2023	
LDW23-SC1169C	23A0326-05	02132355ECD7.D	02/10/2023	
LDW23-SC1168	23A0326-06	02132356ECD7.D	02/10/2023	
LDW23-SC1162B	23A0326-12	02132366ECD7.D	02/10/2023	
LDW23-SC1161	23A0326-10	02132364ECD7.D	02/10/2023	
LDW23-SC1155	23A0326-11	02132365ECD7.D	02/10/2023	
LDW23-IT1181	23A0326-08	02132362ECD7.D	02/10/2023	
LDW23-SC1128	23A0326-03	02132353ECD7.D	02/10/2023	
LDW23-SC1032	23A0326-02	02132352ECD7.D	02/10/2023	
LDW23-IT1127	23A0326-09	02132363ECD7.D	02/10/2023	
Blank	BLA0687-BLK1	02132347ECD7.D	02/10/2023	
LCS Dup	BLA0687-BSD1	02132349ECD7.D	02/10/2023	
Matrix Spike Dup	BLA0687-MSD1	02132361ECD7.D	02/10/2023	
LCS	BLA0687-BS1	02132348ECD7.D	02/10/2023	
Reference	BLA0687-SRM1	02132350ECD7.D	02/10/2023	
LDW23-SC1176	23A0326-07	02132357ECD7.D	02/10/2023	
Matrix Spike	BLA0687-MS1	02132360ECD7.D	02/10/2023	



CLEANUP BENCH SHEET

CLB0083

Matrix: Solid

Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL

Printed: 2/10/2023 12:01:27PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0326-01	A	LDW23-SC1028	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-03	A	LDW23-SC1128	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-06	A	LDW23-SC1168	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-07	A	LDW23-SC1176	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-08	A	LDW23-IT1181	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-09	A	LDW23-IT1127	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
BLA0687-BLK1	-	Blank	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-BS1	-	LCS	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-BSD1	-	LCS Dup	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-MS1	-	Matrix Spike	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-SRM1	-	Reference	-	2.5	2.5	-	2/10/2023	NRB	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0084

Cleanup Type: Silica Gel

Cleanup Method: EPA 3630C Silica Gel Cleanup - uL

Analysis: EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLA0687-BSD1	02132349ECD7.D	02/10/2023	
LDW23-SC1169C	23A0326-05	02132355ECD7.D	02/10/2023	
Reference	BLA0687-SRM1	02132350ECD7.D	02/10/2023	
Matrix Spike Dup	BLA0687-MSD1	02132361ECD7.D	02/10/2023	
LCS	BLA0687-BS1	02132348ECD7.D	02/10/2023	
Blank	BLA0687-BLK1	02132347ECD7.D	02/10/2023	
LDW23-SC1168	23A0326-06	02132356ECD7.D	02/10/2023	
LDW23-SC1170A	23A0326-04	02132354ECD7.D	02/10/2023	
LDW23-IT1127	23A0326-09	02132363ECD7.D	02/10/2023	
LDW23-SC1176	23A0326-07	02132357ECD7.D	02/10/2023	
LDW23-SC1162B	23A0326-12	02132366ECD7.D	02/10/2023	
LDW23-SC1161	23A0326-10	02132364ECD7.D	02/10/2023	
LDW23-SC1155	23A0326-11	02132365ECD7.D	02/10/2023	
LDW23-SC1128	23A0326-03	02132353ECD7.D	02/10/2023	
LDW23-SC1032	23A0326-02	02132352ECD7.D	02/10/2023	
LDW23-SC1028	23A0326-01	02132351ECD7.D	02/10/2023	
LDW23-IT1181	23A0326-08	02132362ECD7.D	02/10/2023	
Matrix Spike	BLA0687-MS1	02132360ECD7.D	02/10/2023	



CLEANUP BENCH SHEET

CLB0084

Matrix: Solid

Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/10/2023 12:01:58PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0326-01	A	LDW23-SC1028	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-02	A	LDW23-SC1032	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-03	A	LDW23-SC1128	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-04	A	LDW23-SC1170A	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-05	A	LDW23-SC1169C	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-06	A	LDW23-SC1168	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-07	A	LDW23-SC1176	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-08	A	LDW23-IT1181	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-09	A	LDW23-IT1127	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-10	A	LDW23-SC1161	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-11	A	LDW23-SC1155	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
23A0326-12	A	LDW23-SC1162B	A 03	2.5	2.5	8082A PCB Solid 4	2/10/2023	NRB	
BLA0687-BLK1	-	Blank	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-BS1	-	LCS	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-BSD1	-	LCS Dup	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-MS1	-	Matrix Spike	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/10/2023	NRB	
BLA0687-SRM1	-	Reference	-	2.5	2.5	-	2/10/2023	NRB	



Form I
METHOD BLANK DATA SHEET
EPA 8082A

Blank

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Laboratory ID:	<u>BLA0687-BLK1</u>
Sampled:	<u>N/A</u>	Prepared:	<u>01/31/23 15:03</u>
Solids:		Preparation:	<u>EPA 3546 (Microwave)</u>
Batch:	<u>BLA0687</u>	Sequence:	<u>SLB0168</u>
Instrument:	<u>ECD7</u>	Column:	<u>ZB5</u>
		File ID:	<u>02132347ECD7.D</u>
		Analyzed:	<u>02/14/23 02:02</u>
		Initial/Final:	<u>12.5 g / 2.5 mL</u>
		Calibration:	<u>GA00061</u>
		Cleanups:	<u>Silica Gel, Sulfur, Sulfuric Acid</u>

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
12674-11-2	Aroclor 1016	1	4.0	U	1.6	4.0
11104-28-2	Aroclor 1221	1	4.0	U	1.6	4.0
11141-16-5	Aroclor 1232	1	4.0	U	1.6	4.0
53469-21-9	Aroclor 1242	1	4.0	U	1.6	4.0
12672-29-6	Aroclor 1248	1	4.0	U	1.6	4.0
11097-69-1	Aroclor 1254	1	4.0	U	1.6	4.0
11096-82-5	Aroclor 1260	1	4.0	U	0.6	4.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	7.07	88.4	40 - 126	
Tetrachlorometaxylene	8.0000	6.95	86.8	44 - 120	
Decachlorobiphenyl [2C]	8.0000	7.51	93.9	40 - 126	
Tetrachlorometaxylene [2C]	8.0000	6.87	85.9	44 - 120	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132347ECD7.D
Data file 2: /230213.b/230213.b/02132347ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0687-BLK1
Client ID:
Injection Date: 14-FEB-2023 02:02
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.003	217101	5.682	-0.002	174241	34.7	34.4	1.1	Tetrachloro-m-xylene
13.889	0.000	195767	14.115	-0.002	236806	35.4	37.6	6.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	442127	-12.2
Hexabromobiphenyl	647433	517735	-20.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	375160	11.4
Hexabromobiphenyl	382032	397272	4.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
=====										
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				

Total PCB Area Coll (5.908 - 13.788) = 113971

Coll Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 78152 Col2 Total PCB = 0.0 ppm*

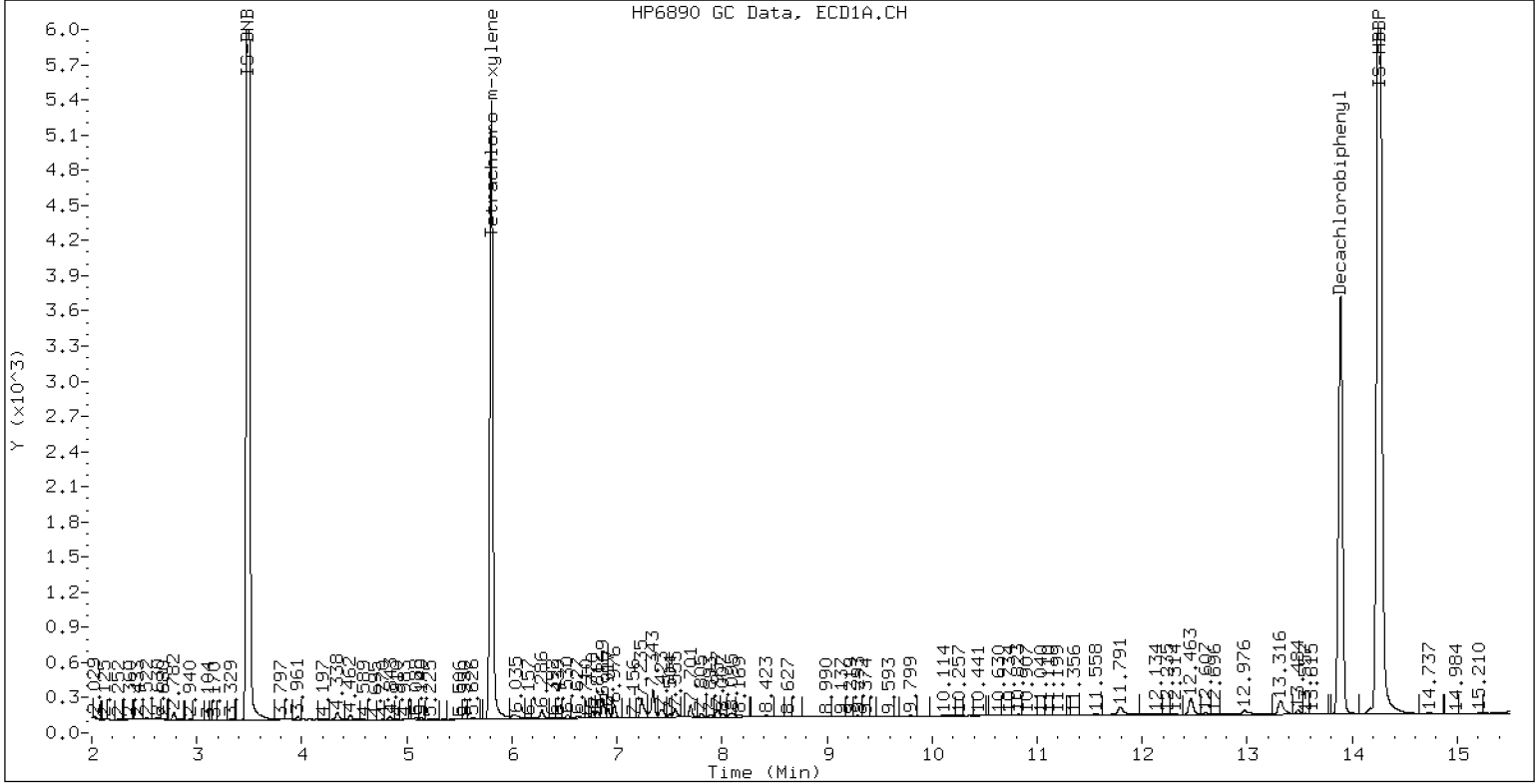
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLA0687-BLK1

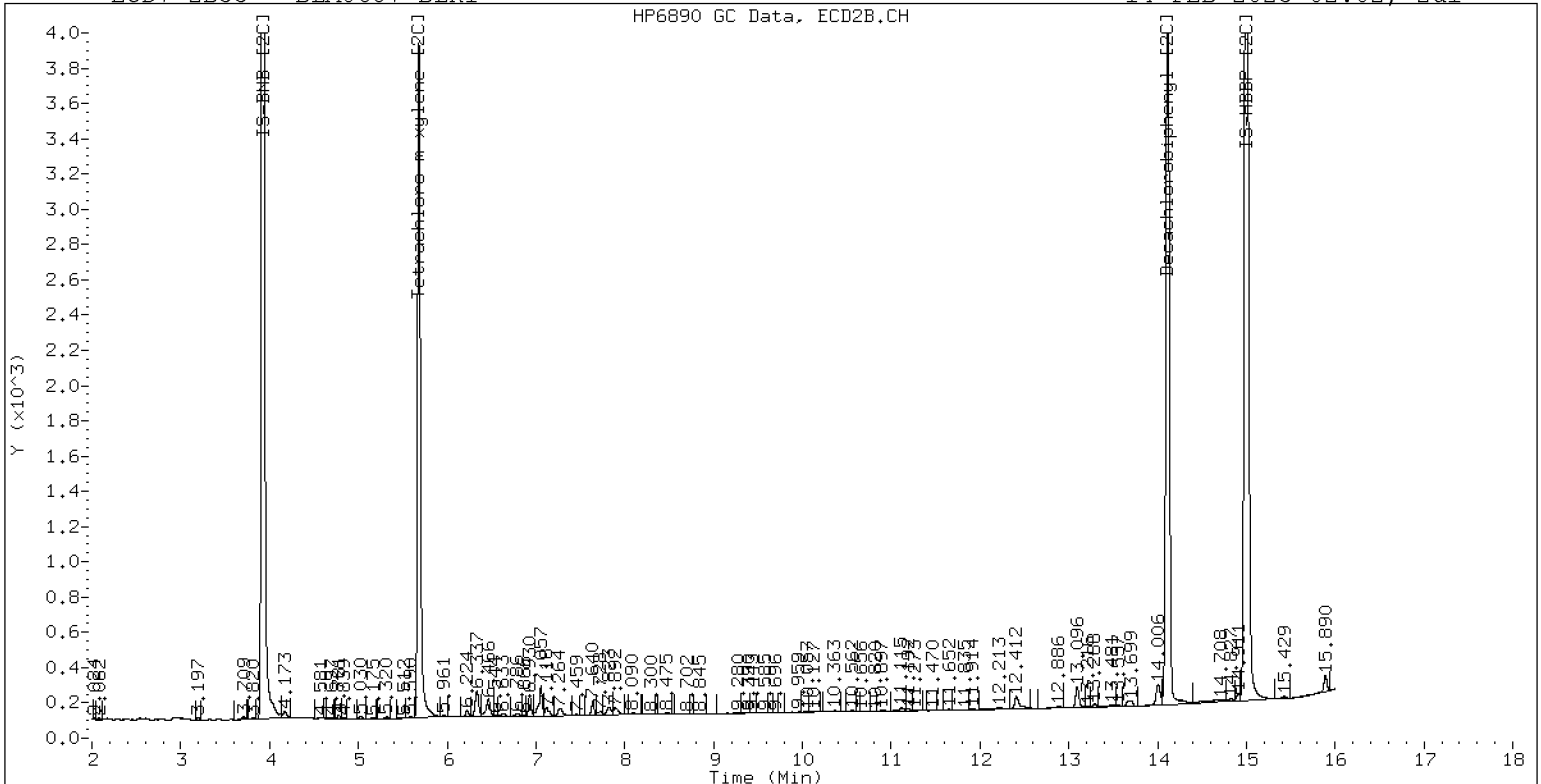
14-FEB-2023 02:02, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0687-BLK1

14-FEB-2023 02:02, 2ul



ZB-35 Manual Integration: NO



LCS / LCS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>02/14/23 02:23</u>
Batch:	<u>BLA0687</u>	Laboratory ID:	<u>BLA0687-BS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>12.5 g / 2.5 mL</u>		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Aroclor 1016 [2C]	101	104		103	56 - 120
Aroclor 1260 [2C]	101	100		99.5	58 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016 [2C]	101	98.0		97.3	5.53	30	56 - 120
Aroclor 1260 [2C]	101	98.2		97.4	2.11	30	58 - 120

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132348ECD7.D
Data file 2: /230213.b/230213.b/02132348ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0687-BS1
Client ID:
Injection Date: 14-FEB-2023 02:23
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.004	207195	5.682	-0.003	160149	33.0	31.7	4.0	Tetrachloro-m-xylene
13.888	-0.000	217995	14.116	-0.001	243871	34.3	35.0	2.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	444513	-11.7
Hexabromobiphenyl	647433	595081	-8.1

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	373917	11.0
Hexabromobiphenyl	382032	439354	15.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.265	-0.003	82239	497.9	1	7.250	-0.003	101689	501.4
Aroclor-1016	2	7.644	-0.005	290295	530.4	2	7.844	-0.005	243940	548.9
Aroclor-1016	3	7.783	-0.005	111589	443.1	3	8.044	-0.005	93710	516.7
Aroclor-1016	4	8.398	-0.004	88496	546.3	4	8.299	-0.004	71865	505.5
Total CollAve (4 peaks):				504.4		Total Col2Ave (4 peaks):				518.1 RPD = 3
Corrected Ave (3 peaks):				490.5		Corrected Ave (3 peaks):				507.9 RPD = 3
Aroclor-1221	1	4.729	-0.004	528	16.1	1	4.955	-0.004	328	12.0
Aroclor-1221	2	6.127	-0.006	8808	131.1	2	6.294	-0.005	9036	150.4
Aroclor-1221	3	6.378	-0.006	50079	321.1	3	6.617	-0.006	38117	376.0
Total CollAve (3 peaks):				156.1		Total Col2Ave (3 peaks):				179.5 RPD = 14
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.729	-0.005	528	25.7	1	4.955	-0.005	328	19.7
Aroclor-1232	2	6.127	-0.006	8808	190.5	2	7.250	-0.007	101689	1092.9
Aroclor-1232	3	7.644	-0.014	290295	1255.7	3	7.844	-0.011	243940	1287.3
Aroclor-1232	4	8.569	-0.015	110775	1119.5	4	8.707	-0.007	75205	1428.4
Total CollAve (4 peaks):				647.9		Total Col2Ave (4 peaks):				957.1 RPD = 39
Corrected Ave (3 peaks):				445.3		Corrected Ave (3 peaks):				800.0 RPD = 57*
Aroclor-1242	1	7.265	-0.006	82239	604.2	1	7.250	-0.002	101689	621.8
Aroclor-1242	2	7.644	-0.011	290295	651.7	2	7.844	-0.006	243940	671.6
Aroclor-1242	3	8.398	-0.008	88496	668.7	3	9.146	-0.008	16375	144.0
Aroclor-1242	4	8.569	-0.012	110775	554.1	4	9.568	-0.011	13259	87.9
Total CollAve (4 peaks):				619.7		Total Col2Ave (4 peaks):				381.3 RPD = 48*
Corrected Ave (3 peaks):				603.3		Corrected Ave (3 peaks):				284.6 RPD = 72*
Aroclor-1248	1	8.398	-0.007	88496	398.0	1	8.299	-0.003	71865	425.2
Aroclor-1248	2	8.569	-0.011	110775	390.5	2	8.707	-0.002	75205	413.4
Aroclor-1248	3	8.988	-0.011	88635	163.4	3	9.146	-0.006	16375	73.7
Aroclor-1248	4	9.291	-0.003	82468	307.1	4	9.568	-0.009	13259	48.2
Total CollAve (4 peaks):				314.7		Total Col2Ave (4 peaks):				240.1 RPD = 27
Corrected Ave (3 peaks):				287.0		Corrected Ave (3 peaks):				178.4 RPD = 47*
Aroclor-1254	1	9.291	-0.001	82468	182.0	1	9.442	-0.002	59506	219.4
Aroclor-1254	2	9.365	-0.005	8773	45.4	2	9.961	-0.002	14168	64.6
Aroclor-1254	3	9.659	-0.002	18190	62.7	3	10.139	0.023	134298	280.8
Aroclor-1254	4	9.794	-0.005	55929	98.3	4	10.364	-0.002	168215	351.7
Aroclor-1254	5	10.113	-0.050	213988	578.6	5	10.559	-0.004	214263	804.3
Total CollAve (5 peaks):				193.4		Total Col2Ave (5 peaks):				344.2 RPD = 56*
Corrected Ave (4 peaks):				97.1		Corrected Ave (4 peaks):				229.1 RPD = 81*
Aroclor-1260	1	11.038	-0.002	160635	481.1	1	11.647	-0.002	157887	498.1
Aroclor-1260	2	11.355	-0.001	162063	472.2	2	11.911	-0.002	377363	470.6
Aroclor-1260	3	11.725	-0.003	402502	445.5	3	12.429	-0.002	108264	541.7
Aroclor-1260	4	12.129	-0.004	207140	443.7	4	12.494	-0.002	256986	495.2
Aroclor-1260	5	12.238	-0.002	83335	409.5	NS	---			----
Total CollAve (5 peaks):				450.4		Total Col2Ave (4 peaks):				501.4 RPD = 11
Corrected Ave (4 peaks):				442.7		Corrected Ave (3 peaks):				488.0 RPD = 10
Aroclor-1262	1	10.816	-0.016	322321	1339.3	1	11.193	-0.007	149604	347.9
Aroclor-1262	2	12.238	-0.007	83335	219.4	2	11.647	-0.006	157887	431.8
Aroclor-1262	3	12.312	-0.008	99403	241.0	3	12.429	-0.005	108264	278.0
Aroclor-1262	4	12.980	-0.009	89914	239.3	4	12.494	-0.010	256986	412.1
Total CollAve (4 peaks):				509.8		Total Col2Ave (4 peaks):				367.5 RPD = 32
Corrected Ave (3 peaks):				233.2		Corrected Ave (3 peaks):				346.0 RPD = 39
Aroclor-1268	1	12.238	-0.006	83335	84.8	1	12.429	-0.004	108264	105.5
Aroclor-1268	2	12.312	-0.006	99403	101.4	2	12.494	-0.008	256986	235.4
Aroclor-1268	3	12.716	0.017	42810	52.7	3	12.887	-0.006	6385	7.0
Aroclor-1268	4	13.482	-0.007	29608	12.3	4	13.703	-0.005	29466	10.5
Total CollAve (4 peaks):				62.8		Total Col2Ave (4 peaks):				89.6 RPD = 35

Corrected Ave (3 peaks): 49.9 Corrected Ave (3 peaks): 41.0 RPD = 20

Total PCB Area Col1 (5.908 - 13.788) = 4728601 Col1 Total PCB = 0.9 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 3992607 Col2 Total PCB = 1.0 ppm*

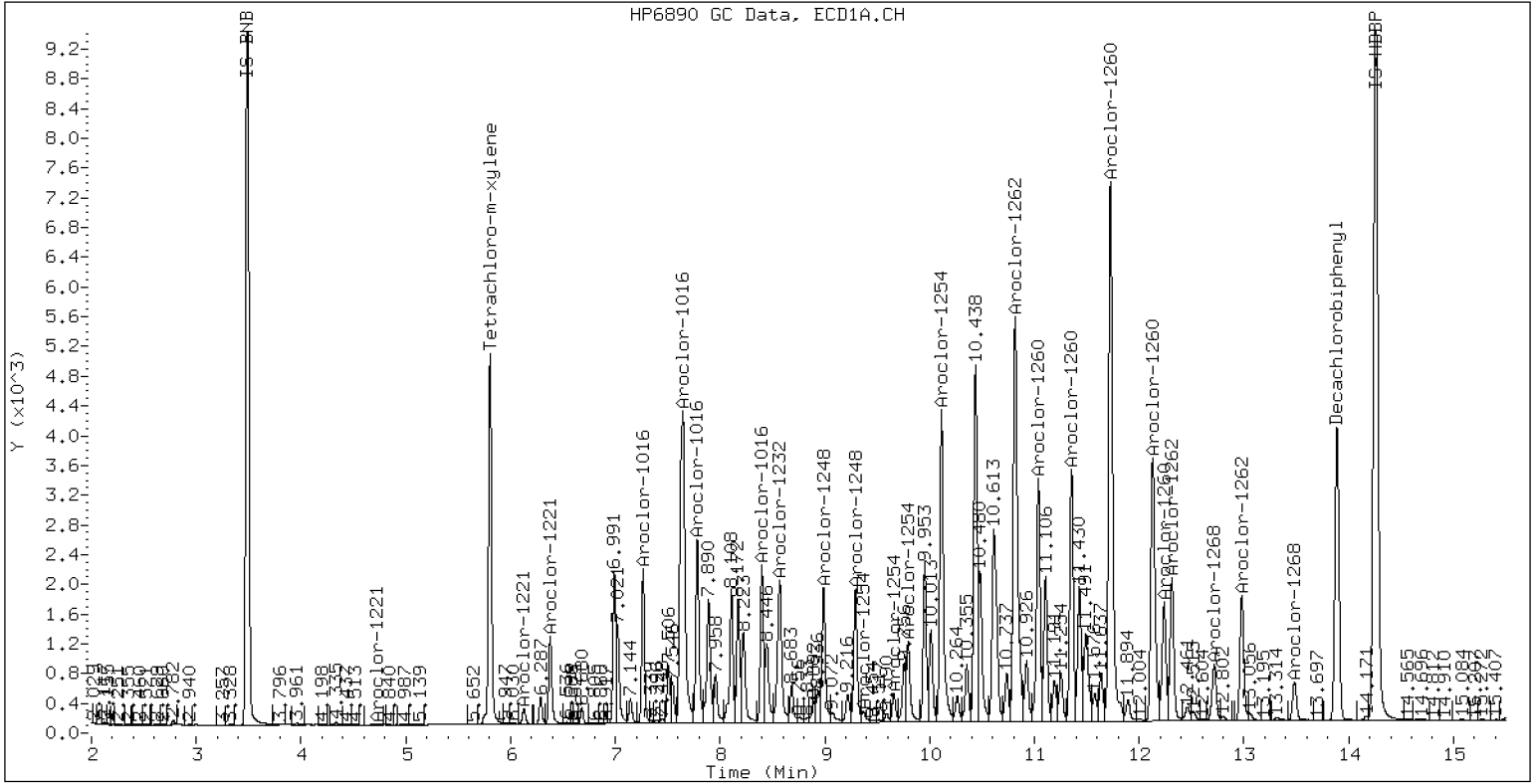
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLA0687-BS1

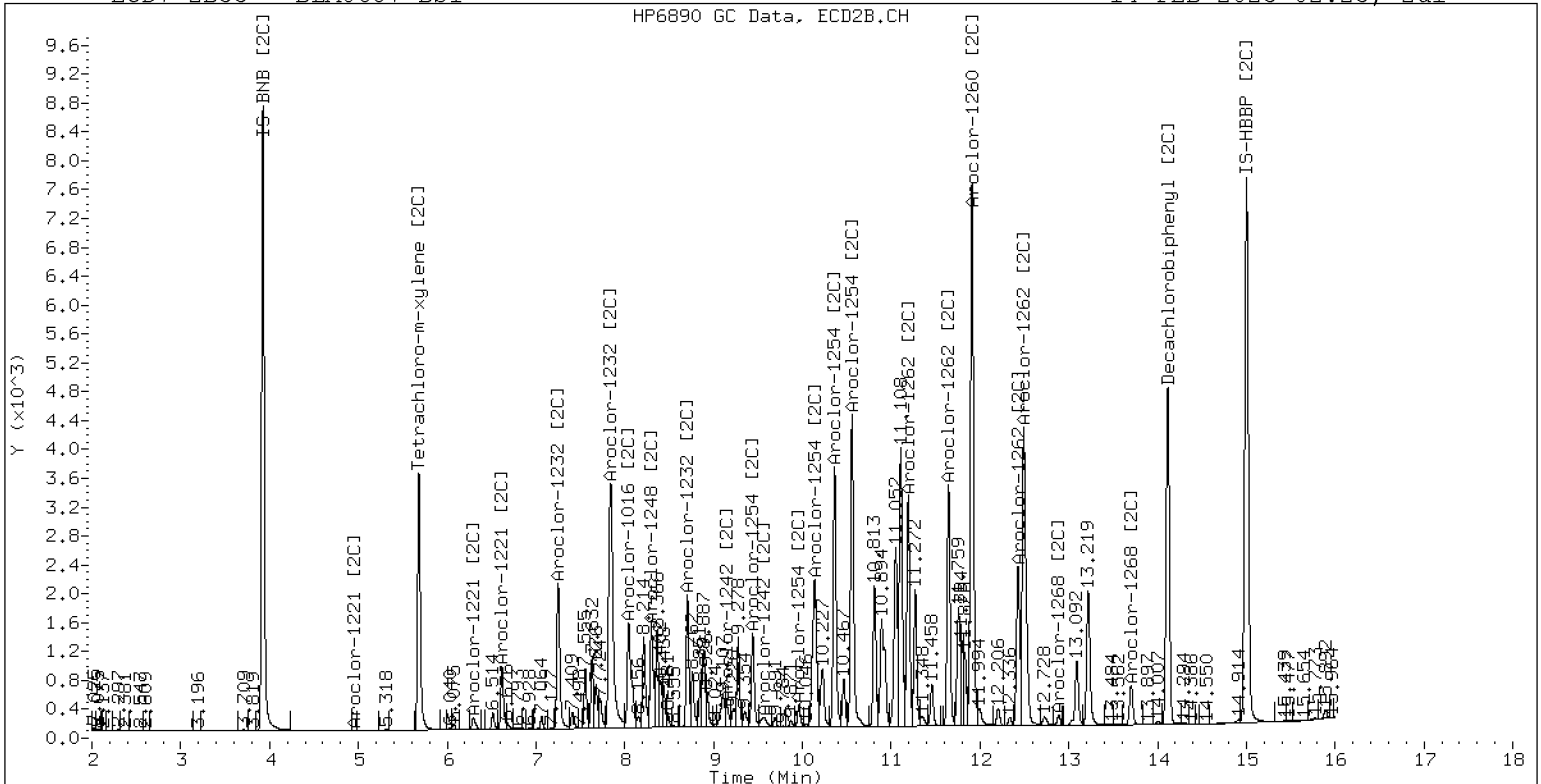
14-FEB-2023 02:23, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0687-BS1

14-FEB-2023 02:23, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132349ECD7.D
Data file 2: /230213.b/230213.b/02132349ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0687-BSD1
Client ID:
Injection Date: 14-FEB-2023 02:44
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.003	227300	5.682	-0.002	175375	36.3	34.7	4.2	Tetrachloro-m-xylene
13.888	-0.000	257054	14.116	-0.001	272488	36.5	37.2	1.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	443569	-11.9
Hexabromobiphenyl	647433	658490	1.7

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	373346	10.8
Hexabromobiphenyl	382032	461753	20.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.266	-0.002	77965	473.0	1	7.250	-0.002	95421	471.2
Aroclor-1016	2	7.645	-0.004	266759	488.4	2	7.844	-0.005	225507	508.2
Aroclor-1016	3	7.783	-0.004	108068	430.1	3	8.044	-0.005	91749	506.7
Aroclor-1016	4	8.398	-0.003	80951	500.8	4	8.300	-0.003	67414	474.9
Total CollAve (4 peaks):				473.1		Total Col2Ave (4 peaks):				490.2 RPD = 4
Corrected Ave (3 peaks):				463.8		Corrected Ave (3 peaks):				484.3 RPD = 4
Aroclor-1221	1	4.730	-0.003	605	18.5	1	4.943	-0.016	1077	39.4
Aroclor-1221	2	6.128	-0.006	8693	129.7	2	6.294	-0.004	10001	166.8
Aroclor-1221	3	6.379	-0.005	48684	312.8	3	6.617	-0.005	40840	403.5
Total CollAve (3 peaks):				153.6		Total Col2Ave (3 peaks):				203.2 RPD = 28
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.730	-0.003	605	29.6	1	4.943	-0.016	1077	64.9
Aroclor-1232	2	6.128	-0.006	8693	188.5	2	7.250	-0.006	95421	1027.1
Aroclor-1232	3	7.645	-0.013	266759	1156.4	3	7.844	-0.011	225507	1191.8
Aroclor-1232	4	8.570	-0.014	100449	1017.3	4	8.707	-0.007	70984	1350.3
Total CollAve (4 peaks):				597.9		Total Col2Ave (4 peaks):				908.5 RPD = 41*
Corrected Ave (3 peaks):				411.8		Corrected Ave (3 peaks):				761.3 RPD = 60*
Aroclor-1242	1	7.266	-0.005	77965	574.0	1	7.250	-0.002	95421	584.4
Aroclor-1242	2	7.645	-0.010	266759	600.1	2	7.844	-0.006	225507	621.8
Aroclor-1242	3	8.398	-0.008	80951	613.0	3	9.147	-0.008	12194	107.4
Aroclor-1242	4	8.570	-0.011	100449	503.5	4	9.570	-0.009	6904	45.9
Total CollAve (4 peaks):				572.6		Total Col2Ave (4 peaks):				339.9 RPD = 51*
Corrected Ave (3 peaks):				559.2		Corrected Ave (3 peaks):				245.9 RPD = 78*
Aroclor-1248	1	8.398	-0.007	80951	364.8	1	8.300	-0.002	67414	399.5
Aroclor-1248	2	8.570	-0.010	100449	354.9	2	8.707	-0.003	70984	390.8
Aroclor-1248	3	8.988	-0.011	77239	142.7	3	9.147	-0.006	12194	54.9
Aroclor-1248	4	9.292	-0.002	80947	302.0	4	9.570	-0.007	6904	25.2
Total CollAve (4 peaks):				291.1		Total Col2Ave (4 peaks):				217.6 RPD = 29
Corrected Ave (3 peaks):				266.5		Corrected Ave (3 peaks):				157.0 RPD = 52*
Aroclor-1254	1	9.292	-0.001	80947	179.1	1	9.441	-0.003	58380	215.5
Aroclor-1254	2	---			0.0	2	9.962	-0.002	12816	58.5
Aroclor-1254	3	9.658	-0.003	14267	49.3	3	10.139	0.023	131166	274.7
Aroclor-1254	4	9.794	-0.005	46357	81.7	4	10.364	-0.001	168154	352.1
Aroclor-1254	5	10.112	-0.051	213496	578.5	5	10.560	-0.003	219262	824.3
Total CollAve (4 peaks):				222.1		Total Col2Ave (5 peaks):				345.0 RPD = 43*
Corrected Ave (3 peaks):				103.3		Corrected Ave (4 peaks):				225.2 RPD = 74*
Aroclor-1260	1	11.037	-0.003	167087	452.2	1	11.648	-0.001	162931	489.1
Aroclor-1260	2	11.353	-0.002	170156	448.0	2	11.910	-0.003	391112	464.1
Aroclor-1260	3	11.727	-0.002	408542	408.6	3	12.430	-0.002	110229	524.7
Aroclor-1260	4	12.130	-0.003	218901	423.8	4	12.494	-0.002	265002	485.9
Aroclor-1260	5	12.238	-0.002	87370	388.0	NS	---			----
Total CollAve (5 peaks):				424.1		Total Col2Ave (4 peaks):				490.9 RPD = 15
Corrected Ave (4 peaks):				417.1		Corrected Ave (3 peaks):				479.7 RPD = 14
Aroclor-1262	1	10.815	-0.017	334934	1257.7	1	11.193	-0.007	152462	337.4
Aroclor-1262	2	12.238	-0.007	87370	207.9	2	11.648	-0.005	162931	424.0
Aroclor-1262	3	12.312	-0.009	104520	229.0	3	12.430	-0.005	110229	269.3
Aroclor-1262	4	12.981	-0.009	95811	230.4	4	12.494	-0.010	265002	404.3
Total CollAve (4 peaks):				481.3		Total Col2Ave (4 peaks):				358.8 RPD = 29
Corrected Ave (3 peaks):				222.4		Corrected Ave (3 peaks):				337.0 RPD = 41*
Aroclor-1268	1	12.238	-0.007	87370	80.3	1	12.430	-0.004	110229	102.2
Aroclor-1268	2	12.312	-0.006	104520	96.3	2	12.494	-0.008	265002	230.9
Aroclor-1268	3	12.717	0.017	45695	50.8	3	12.887	-0.006	6588	6.9
Aroclor-1268	4	13.482	-0.007	31855	12.0	4	13.703	-0.006	29671	10.1
Total CollAve (4 peaks):				59.9		Total Col2Ave (4 peaks):				87.5 RPD = 38

Corrected Ave (3 peaks): 47.7 Corrected Ave (3 peaks): 39.7 RPD = 18

Total PCB Area Col1 (5.908 - 13.788) = 4656260 Col1 Total PCB = 0.9 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 3951079 Col2 Total PCB = 1.0 ppm*

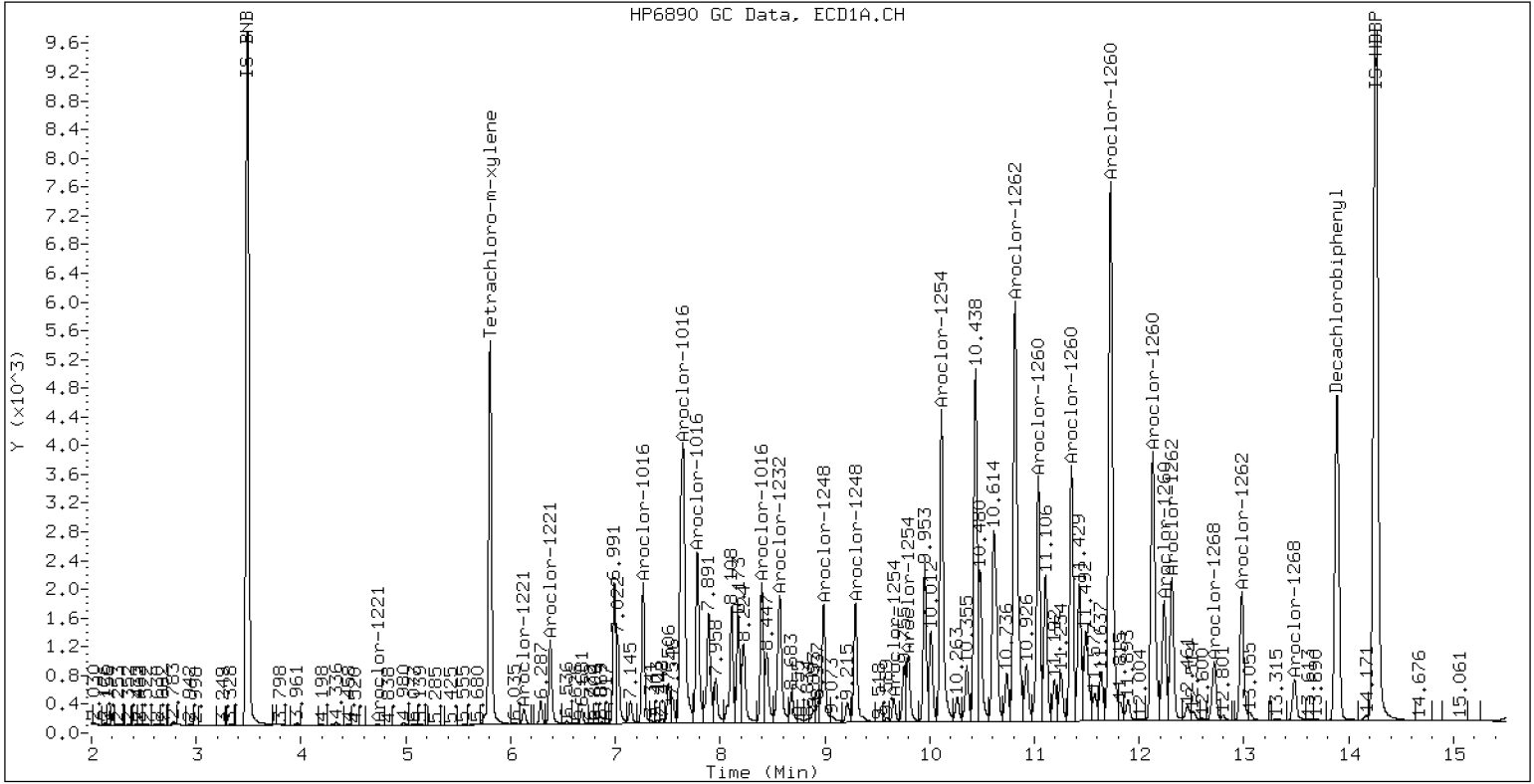
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLA0687-BSD1

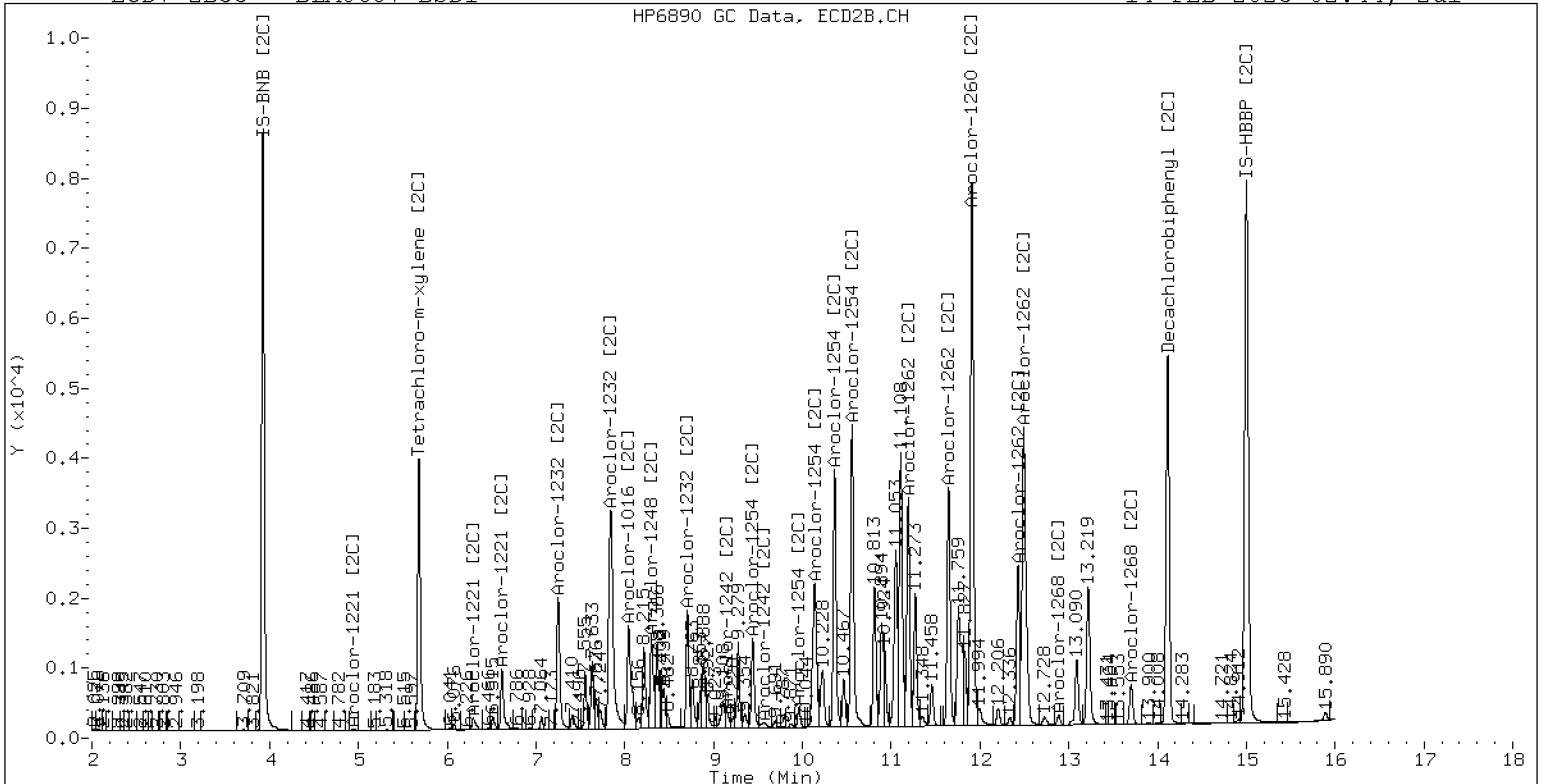
14-FEB-2023 02:44, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0687-BSD1

14-FEB-2023 02:44, 2ul



ZB-35 Manual Integration: NO



MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>02/14/23 06:35</u>
Batch:	<u>BLA0687</u>	Laboratory ID:	<u>BLA0687-MS1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>15.45 g / 2.5 mL</u>	Source Sample:	<u>LDW23-SC1176</u>

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Aroclor 1016	101	ND	U	88.4		87.7	56 - 120
Aroclor 1260 [2C]	101	14.0		90.5		76.1	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.



MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>02/14/23 06:56</u>
Batch:	<u>BLA0687</u>	Laboratory ID:	<u>BLA0687-MSD1</u>
Preparation:	<u>EPA 3546 (Microwave)</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>15.45 g / 2.5 mL</u>	Source Sample:	<u>LDW23-SC1176</u>

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016	101	87.9		87.3	0.543	30	56 - 120
Aroclor 1260 [2C]	101	90.5		76.1	0.0891	30	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132360ECD7.D
Data file 2: /230213.b/230213.b/02132360ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0687-MS1
Client ID:
Injection Date: 14-FEB-2023 06:35
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.803	-0.004	197121	5.681	-0.004	167977	32.6	35.5	8.5	Tetrachloro-m-xylene
13.885	-0.003	163909	14.113	-0.004	193757	33.4	32.6	2.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	427576	-15.0
Hexabromobiphenyl	647433	458283	-29.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	350012	3.9
Hexabromobiphenyl	382032	374416	-2.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.265	-0.004	74045	466.0	1	7.249	-0.004	89860	473.3
Aroclor-1016	2	7.642	-0.007	241505	458.7	2	7.841	-0.008	202461	486.7
Aroclor-1016	3	7.780	-0.007	91210	376.6	3	8.041	-0.008	78553	462.7
Aroclor-1016	4	8.397	-0.005	72808	467.3	4	8.299	-0.005	60540	454.9
Total CollAve (4 peaks):				442.1		Total Col2Ave (4 peaks):				469.4 RPD = 6
Corrected Ave (3 peaks):				433.8		Corrected Ave (3 peaks):				463.6 RPD = 7
Aroclor-1221	1	4.730	-0.003	754	23.9	1	4.945	-0.014	784	30.6
Aroclor-1221	2	6.126	-0.008	9487	146.8	2	6.293	-0.006	8199	145.8
Aroclor-1221	3	6.377	-0.007	46440	309.6	3	6.616	-0.007	37560	395.8
Total CollAve (3 peaks):				160.1		Total Col2Ave (3 peaks):				190.7 RPD = 17
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.730	-0.004	754	38.2	1	4.945	-0.014	784	50.4
Aroclor-1232	2	6.126	-0.007	9487	213.4	2	7.249	-0.008	89860	1031.8
Aroclor-1232	3	7.642	-0.016	241505	1086.1	3	7.841	-0.013	202461	1141.4
Aroclor-1232	4	8.566	-0.018	81581	857.1	4	8.704	-0.009	66295	1345.1
Total CollAve (4 peaks):				548.7		Total Col2Ave (4 peaks):				892.2 RPD = 48*
Corrected Ave (3 peaks):				369.6		Corrected Ave (3 peaks):				741.2 RPD = 67*
Aroclor-1242	1	7.265	-0.006	74045	565.5	1	7.249	-0.004	89860	587.0
Aroclor-1242	2	7.642	-0.013	241505	563.6	2	7.841	-0.008	202461	595.5
Aroclor-1242	3	8.397	-0.010	72808	571.9	3	9.139	-0.016	19122	179.6
Aroclor-1242	4	8.566	-0.015	81581	424.2	4	9.559	-0.021	19141	135.6
Total CollAve (4 peaks):				531.3		Total Col2Ave (4 peaks):				374.4 RPD = 35
Corrected Ave (3 peaks):				517.8		Corrected Ave (3 peaks):				300.7 RPD = 53*
Aroclor-1248	1	8.397	-0.009	72808	340.4	1	8.299	-0.004	60540	382.6
Aroclor-1248	2	8.566	-0.014	81581	299.0	2	8.704	-0.005	66295	389.3
Aroclor-1248	3	8.986	-0.013	60803	116.5	3	9.139	-0.014	19122	91.9
Aroclor-1248	4	9.287	-0.007	71840	278.1	4	9.559	-0.019	19141	74.4
Total CollAve (4 peaks):				258.5		Total Col2Ave (4 peaks):				234.6 RPD = 10
Corrected Ave (3 peaks):				231.2		Corrected Ave (3 peaks):				183.0 RPD = 23
Aroclor-1254	1	9.287	-0.006	71840	164.9	1	9.437	-0.006	57202	225.3
Aroclor-1254	2	9.362	-0.009	11587	62.3	2	9.956	-0.008	15812	77.0
Aroclor-1254	3	9.655	-0.005	26770	95.9	3	10.135	0.020	118283	264.2
Aroclor-1254	4	9.787	-0.012	84489	154.4	4	10.360	-0.005	152787	341.3
Aroclor-1254	5	10.110	-0.054	170647	479.7	5	10.555	-0.008	168309	674.9
Total CollAve (5 peaks):				191.4		Total Col2Ave (5 peaks):				316.5 RPD = 49*
Corrected Ave (4 peaks):				119.4		Corrected Ave (4 peaks):				226.9 RPD = 62*
Aroclor-1260	1	11.033	-0.007	113202	440.2	1	11.643	-0.006	119551	442.6
Aroclor-1260	2	11.350	-0.006	117952	446.2	2	11.904	-0.009	295076	431.8
Aroclor-1260	3	11.719	-0.010	294127	422.7	3	12.424	-0.008	86296	506.6
Aroclor-1260	4	12.120	-0.012	156590	435.6	4	12.488	-0.008	190511	430.8
Aroclor-1260	5	12.233	-0.007	59605	380.3	NS	---			----
Total CollAve (5 peaks):				425.0		Total Col2Ave (4 peaks):				452.9 RPD = 6
Corrected Ave (4 peaks):				419.7		Corrected Ave (3 peaks):				435.1 RPD = 4
Aroclor-1262	1	10.809	-0.023	249368	1345.5	1	11.190	-0.010	109793	299.6
Aroclor-1262	2	12.233	-0.012	59605	203.8	2	11.643	-0.010	119551	383.6
Aroclor-1262	3	12.307	-0.013	71628	225.5	3	12.424	-0.011	86296	260.1
Aroclor-1262	4	12.973	-0.016	66533	229.9	4	12.488	-0.016	190511	358.5
Total CollAve (4 peaks):				501.2		Total Col2Ave (4 peaks):				325.4 RPD = 43*
Corrected Ave (3 peaks):				219.7		Corrected Ave (3 peaks):				306.1 RPD = 33
Aroclor-1268	1	12.233	-0.012	59605	78.7	1	12.424	-0.010	86296	98.7
Aroclor-1268	2	12.307	-0.011	71628	94.9	2	12.488	-0.014	190511	204.8
Aroclor-1268	3	12.710	0.011	33237	53.1	3	12.885	-0.009	5537	7.1
Aroclor-1268	4	13.478	-0.011	24951	13.5	4	13.698	-0.010	24456	10.2
Total CollAve (4 peaks):				60.0		Total Col2Ave (4 peaks):				80.2 RPD = 29

Corrected Ave (3 peaks): 48.4 Corrected Ave (3 peaks): 38.7 RPD = 22

Total PCB Area Col1 (5.908 - 13.788) = 3753334 Col1 Total PCB = 0.8 ppm*
Total PCB Area Col2 (5.784 - 14.017) = 3348650 Col2 Total PCB = 0.9 ppm*

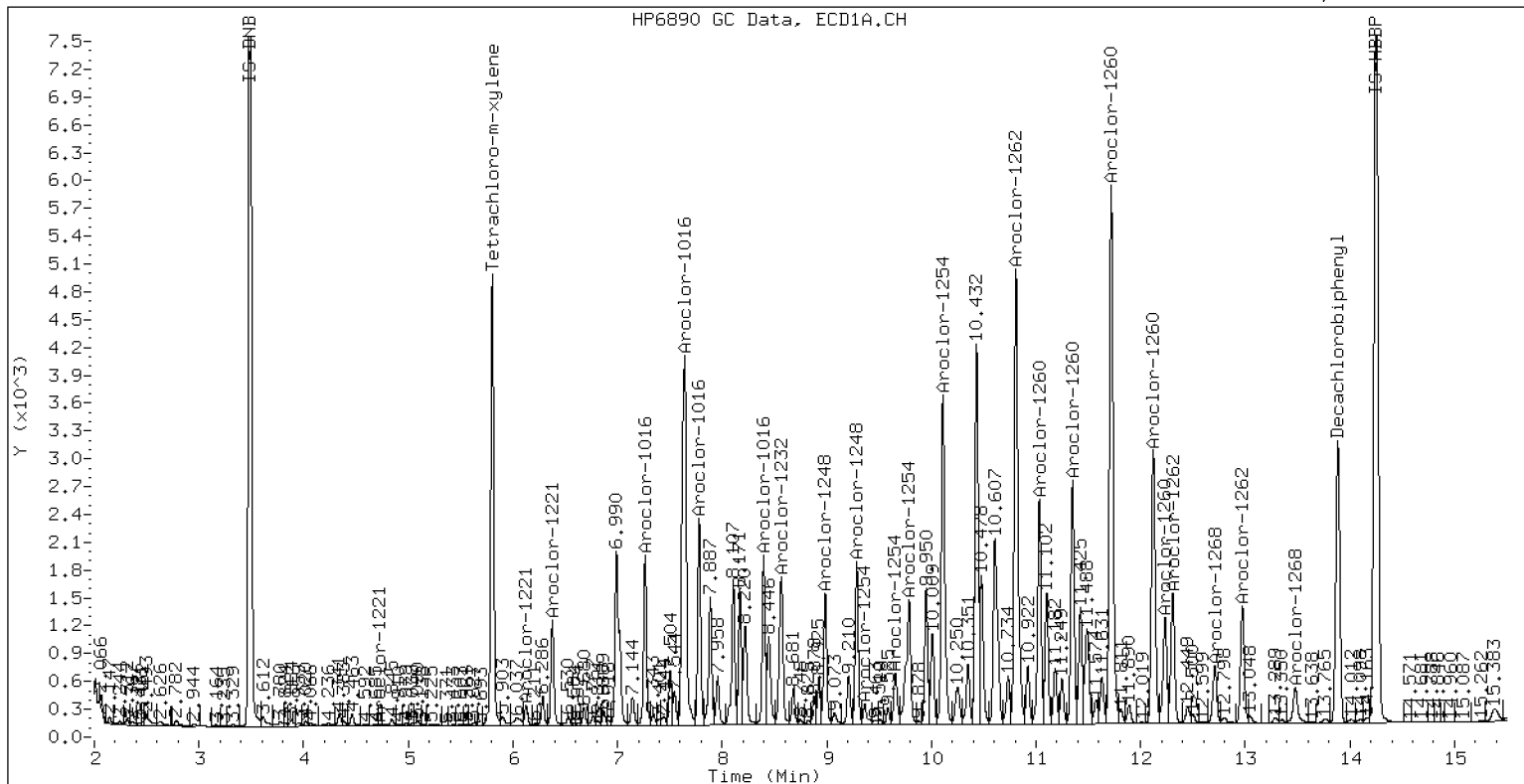
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLA0687-MS1

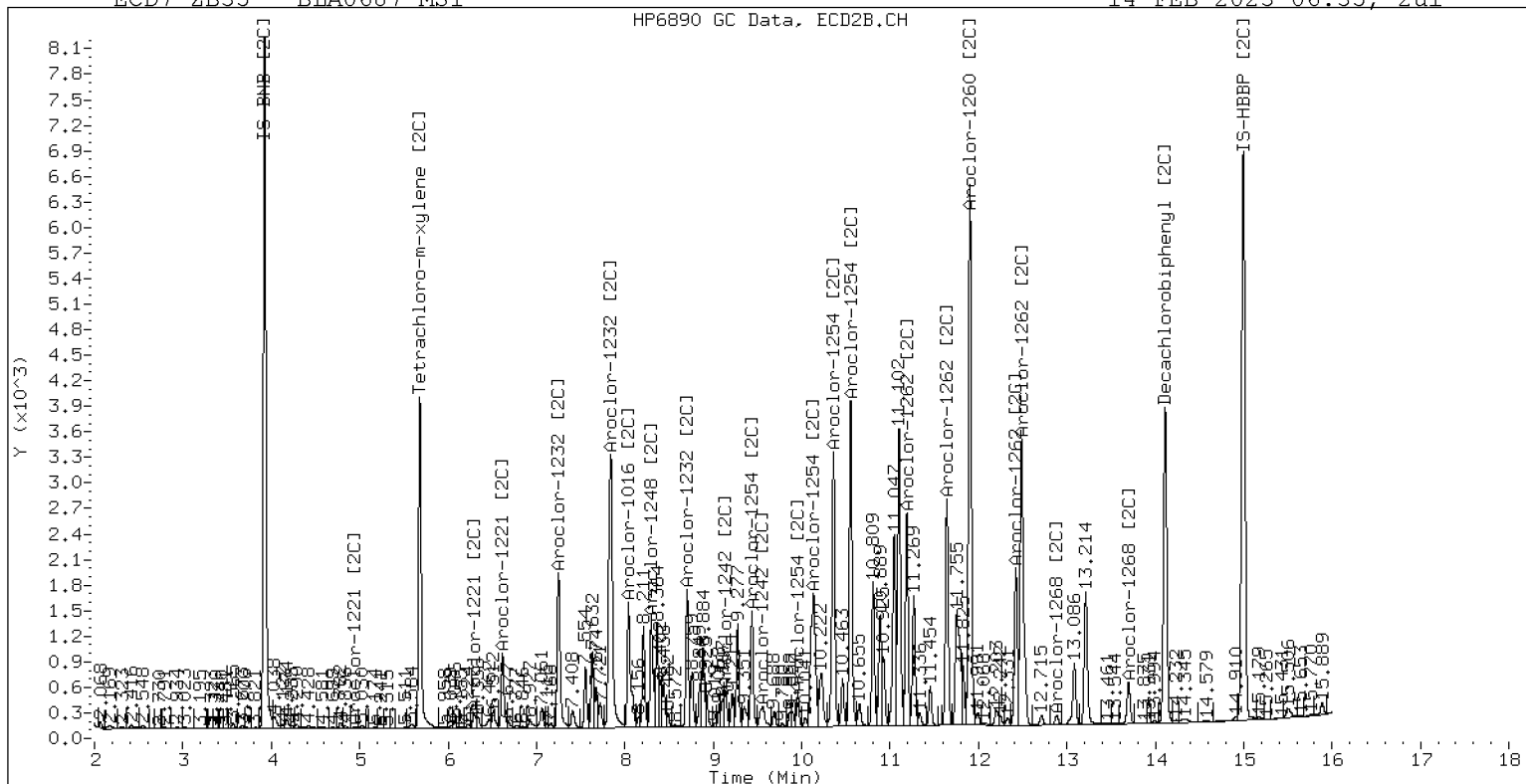
14-FEB-2023 06:35, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0687-MS1

14-FEB-2023 06:35, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132361ECD7.D
Data file 2: /230213.b/230213.b/02132361ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0687-MSD1
Client ID:
Injection Date: 14-FEB-2023 06:56
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.004	206752	5.681	-0.003	168464	34.0	35.0	2.9	Tetrachloro-m-xylene
13.885	-0.003	166999	14.112	-0.005	199629	33.3	32.7	2.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	430730	-14.4
Hexabromobiphenyl	647433	468256	-27.7

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	356542	5.8
Hexabromobiphenyl	382032	384880	0.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.265	-0.003	72442	452.6	1	7.249	-0.004	89631	463.5
Aroclor-1016	2	7.643	-0.006	242935	458.1	2	7.841	-0.007	204295	482.1
Aroclor-1016	3	7.781	-0.006	92421	378.8	3	8.041	-0.008	79363	458.9
Aroclor-1016	4	8.397	-0.005	73706	469.6	4	8.298	-0.005	62312	459.6
Total CollAve (4 peaks):				439.8		Total Col2Ave (4 peaks):				466.0 RPD = 6
Corrected Ave (3 peaks):				429.8		Corrected Ave (3 peaks):				460.7 RPD = 7
Aroclor-1221	1	4.730	-0.003	642	20.2	1	4.945	-0.014	1094	41.9
Aroclor-1221	2	6.127	-0.007	8907	136.8	2	6.293	-0.005	12505	218.3
Aroclor-1221	3	6.378	-0.007	46632	308.6	3	6.615	-0.007	37866	391.7
Total CollAve (3 peaks):				155.2		Total Col2Ave (3 peaks):				217.3 RPD = 33
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.730	-0.003	642	32.3	1	4.945	-0.015	1094	69.0
Aroclor-1232	2	6.127	-0.006	8907	198.9	2	7.249	-0.008	89631	1010.3
Aroclor-1232	3	7.643	-0.015	242935	1084.5	3	7.841	-0.013	204295	1130.6
Aroclor-1232	4	8.567	-0.017	83473	870.6	4	8.704	-0.009	65882	1312.3
Total CollAve (4 peaks):				546.6		Total Col2Ave (4 peaks):				880.6 RPD = 47*
Corrected Ave (3 peaks):				367.2		Corrected Ave (3 peaks):				736.6 RPD = 67*
Aroclor-1242	1	7.265	-0.006	72442	549.2	1	7.249	-0.004	89631	574.8
Aroclor-1242	2	7.643	-0.012	242935	562.8	2	7.841	-0.008	204295	589.9
Aroclor-1242	3	8.397	-0.010	73706	574.7	3	9.140	-0.015	19375	178.6
Aroclor-1242	4	8.567	-0.014	83473	430.9	4	9.560	-0.020	21177	147.3
Total CollAve (4 peaks):				529.4		Total Col2Ave (4 peaks):				372.6 RPD = 35
Corrected Ave (3 peaks):				514.3		Corrected Ave (3 peaks):				300.2 RPD = 53*
Aroclor-1248	1	8.397	-0.009	73706	342.1	1	8.298	-0.004	62312	386.6
Aroclor-1248	2	8.567	-0.013	83473	303.7	2	8.704	-0.005	65882	379.8
Aroclor-1248	3	8.986	-0.013	69314	131.8	3	9.140	-0.013	19375	91.4
Aroclor-1248	4	9.288	-0.006	75507	290.1	4	9.560	-0.018	21177	80.8
Total CollAve (4 peaks):				266.9		Total Col2Ave (4 peaks):				234.6 RPD = 13
Corrected Ave (3 peaks):				241.9		Corrected Ave (3 peaks):				184.0 RPD = 27
Aroclor-1254	1	9.288	-0.005	75507	172.0	1	9.438	-0.006	59564	230.3
Aroclor-1254	2	9.363	-0.008	13375	71.4	2	9.956	-0.008	17293	82.7
Aroclor-1254	3	9.656	-0.005	27657	98.3	3	10.133	0.018	122034	267.6
Aroclor-1254	4	9.787	-0.012	89147	161.7	4	10.360	-0.006	155998	342.0
Aroclor-1254	5	10.110	-0.054	177056	494.0	5	10.554	-0.009	174198	685.8
Total CollAve (5 peaks):				199.5		Total Col2Ave (5 peaks):				321.7 RPD = 47*
Corrected Ave (4 peaks):				125.9		Corrected Ave (4 peaks):				230.7 RPD = 59*
Aroclor-1260	1	11.034	-0.006	116681	444.1	1	11.643	-0.005	122368	440.7
Aroclor-1260	2	11.350	-0.006	117861	436.4	2	11.905	-0.008	301641	429.4
Aroclor-1260	3	11.720	-0.009	299086	420.7	3	12.424	-0.007	89047	508.6
Aroclor-1260	4	12.121	-0.011	158540	431.6	4	12.488	-0.008	196168	431.5
Aroclor-1260	5	12.234	-0.006	61861	386.3	NS	---			----
Total CollAve (5 peaks):				423.8		Total Col2Ave (4 peaks):				452.5 RPD = 7
Corrected Ave (4 peaks):				418.7		Corrected Ave (3 peaks):				433.9 RPD = 4
Aroclor-1262	1	10.809	-0.023	255506	1349.3	1	11.189	-0.011	113093	300.2
Aroclor-1262	2	12.234	-0.011	61861	207.0	2	11.643	-0.010	122368	382.0
Aroclor-1262	3	12.308	-0.013	73518	226.6	3	12.424	-0.010	89047	261.0
Aroclor-1262	4	12.973	-0.016	68501	231.7	4	12.488	-0.016	196168	359.1
Total CollAve (4 peaks):				503.6		Total Col2Ave (4 peaks):				325.6 RPD = 43*
Corrected Ave (3 peaks):				221.7		Corrected Ave (3 peaks):				306.8 RPD = 32
Aroclor-1268	1	12.234	-0.011	61861	80.0	1	12.424	-0.010	89047	99.1
Aroclor-1268	2	12.308	-0.011	73518	95.3	2	12.488	-0.014	196168	205.1
Aroclor-1268	3	12.710	0.011	34304	53.7	3	12.885	-0.008	5835	7.3
Aroclor-1268	4	13.477	-0.012	24770	13.1	4	13.699	-0.010	25636	10.4
Total CollAve (4 peaks):				60.5		Total Col2Ave (4 peaks):				80.5 RPD = 28

Corrected Ave (3 peaks): 48.9 Corrected Ave (3 peaks): 38.9 RPD = 23

Total PCB Area Col1 (5.908 - 13.788) = 3829122 Col1 Total PCB = 0.8 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 3411146 Col2 Total PCB = 0.9 ppm*

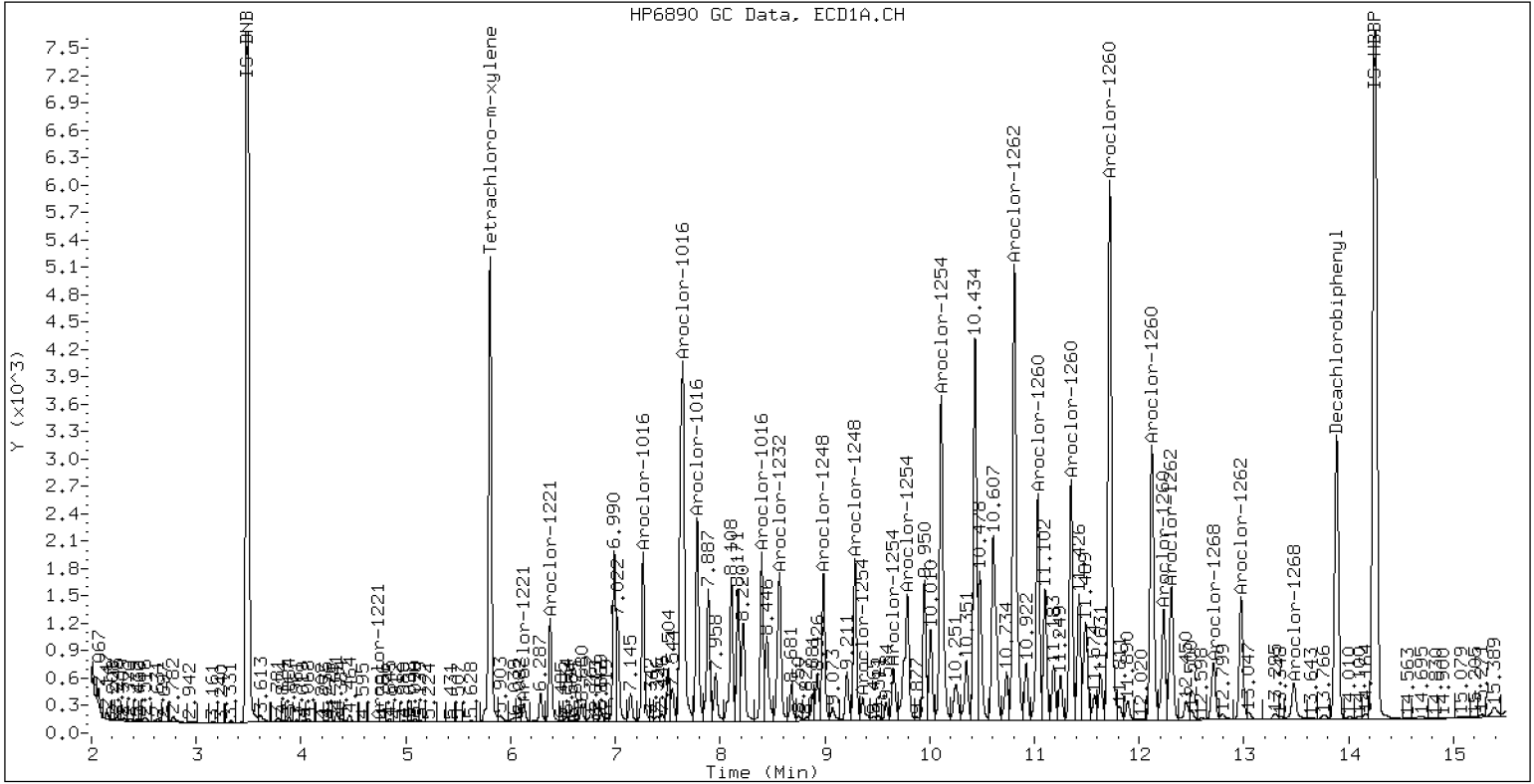
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLA0687-MSD1

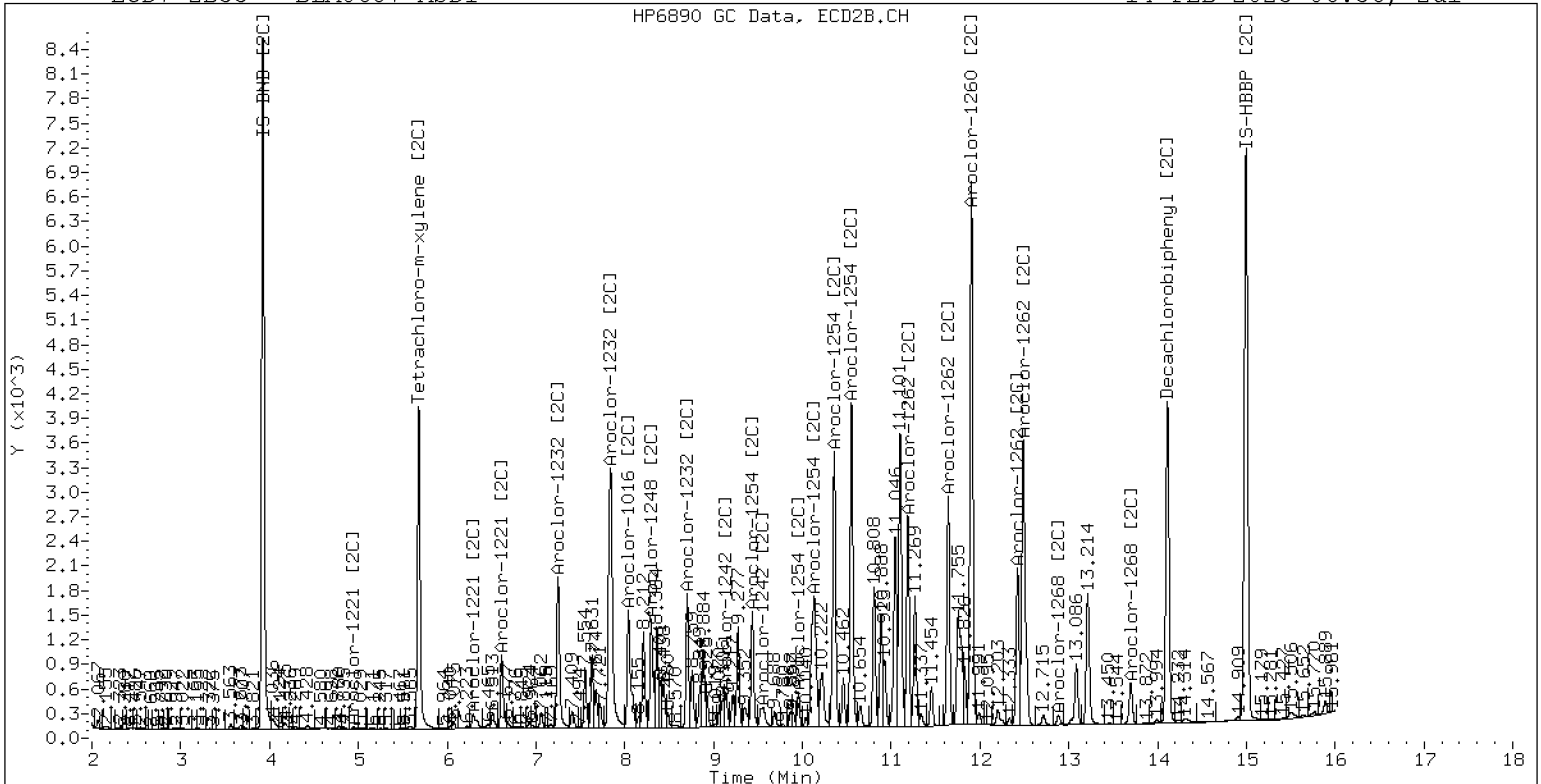
14-FEB-2023 06:56, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0687-MSD1

14-FEB-2023 06:56, 2u1



ZB-35 Manual Integration: NO



STANDARD REFERENCE MATERIAL RECOVERY

EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0687-SRM1

Batch: BLA0687

Initial/Final: 2.5 g / 2.5 mL

Preparation: EPA 3546 (Microwave)

Analyzed: 02/14/2023 3:05

Standard ID: K011477

Expires: 06/11/2023

Standard Lot#: PSRM0168

Description: Puget Sound reference-SRM

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Aroclor 1260	108.00	87.8	2.9	20.0		81.3	38 - 167
Aroclor 1260 [2C]	108.00	102	2.9	20.0		94.2	38 - 167

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132350ECD7.D
Data file 2: /230213.b/230213.b/02132350ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0687-SRM1
Client ID:
Injection Date: 14-FEB-2023 03:05
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.004	183364	5.682	-0.003	152643	28.8	31.6	9.1	Tetrachloro-m-xylene
13.885	-0.004	191234	14.113	-0.004	209766	31.9	30.8	3.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	449774	-10.6
Hexabromobiphenyl	647433	560270	-13.5

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	357560	6.1
Hexabromobiphenyl	382032	429149	12.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.300	0.031	1766	10.6	1	7.255	0.003	8401	43.3	
Aroclor-1016	2	7.643	-0.006	9238	16.7	2	7.840	-0.009	15789	37.2	
Aroclor-1016	3	7.786	-0.001	3835	15.1	3	8.044	-0.005	2220	12.8	
Aroclor-1016	4	8.398	-0.004	6544	39.9	4	8.299	-0.005	7707	56.7	
Total CollAve (4 peaks):				20.6	Total Col2Ave (4 peaks):				37.5	RPD = 58*	
Corrected Ave (3 peaks):				14.1	Corrected Ave (3 peaks):				31.1	RPD = 75*	
Aroclor-1221	1	4.783	0.050	812	24.4	1	4.940	-0.019	456	17.4	
Aroclor-1221	2	6.114	-0.019	1306	19.2	2	6.338	0.040	9082	158.1	
Aroclor-1221	3	6.391	0.007	3048	19.3	3	6.633	0.010	4083	42.1	
Total CollAve (3 peaks):				21.0	Total Col2Ave (3 peaks):				72.5	RPD = 110*	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.783	0.049	812	39.1	1	4.940	-0.019	456	28.7	
Aroclor-1232	2	6.114	-0.019	1306	27.9	2	7.255	-0.001	8401	94.4	
Aroclor-1232	3	7.643	-0.015	9238	39.5	3	7.840	-0.014	15789	87.1	
Aroclor-1232	4	8.566	-0.018	4456	44.5	4	8.705	-0.009	6061	120.4	
Total CollAve (4 peaks):				37.8	Total Col2Ave (4 peaks):				82.7	RPD = 75*	
Corrected Ave (3 peaks):				35.5	Corrected Ave (3 peaks):				70.1	RPD = 65*	
Aroclor-1242	1	7.300	0.029	1766	12.8	1	7.255	0.003	8401	53.7	
Aroclor-1242	2	7.643	-0.012	9238	20.5	2	7.840	-0.009	15789	45.5	
Aroclor-1242	3	8.398	-0.009	6544	48.9	3	9.142	-0.013	8031	73.8	
Aroclor-1242	4	8.566	-0.015	4456	22.0	4	9.533	-0.046	12343	85.6	
Total CollAve (4 peaks):				26.1	Total Col2Ave (4 peaks):				64.7	RPD = 85*	
Corrected Ave (3 peaks):				18.4	Corrected Ave (3 peaks):				57.7	RPD = 103*	
Aroclor-1248	1	8.398	-0.007	6544	29.1	1	8.299	-0.003	7707	47.7	
Aroclor-1248	2	8.566	-0.014	4456	15.5	2	8.705	-0.004	6061	34.8	
Aroclor-1248	3	8.986	-0.013	17921	32.6	3	9.142	-0.011	8031	37.8	
Aroclor-1248	4	9.287	-0.007	24379	89.7	4	9.533	-0.044	12343	46.9	
Total CollAve (4 peaks):				41.7	Total Col2Ave (4 peaks):				41.8	RPD = 0	
Corrected Ave (3 peaks):				25.8	Corrected Ave (3 peaks):				39.9	RPD = 43*	
Aroclor-1254	1	9.287	-0.006	24379	53.2	1	9.438	-0.006	19721	76.0	
Aroclor-1254	2	9.363	-0.008	8891	45.4	2	9.957	-0.006	9499	45.3	
Aroclor-1254	3	9.657	-0.003	14535	49.5	3	10.109	-0.006	37859	82.8	
Aroclor-1254	4	9.788	-0.011	32678	56.8	4	10.360	-0.006	47841	104.6	
Aroclor-1254	5	10.111	-0.053	53410	142.7	5	10.555	-0.008	48129	188.9	
Total CollAve (5 peaks):				69.5	Total Col2Ave (5 peaks):				99.5	RPD = 36	
Corrected Ave (4 peaks):				51.2	Corrected Ave (4 peaks):				77.2	RPD = 40*	
Aroclor-1260	1	11.034	-0.005	30238	96.2	1	11.643	-0.005	30479	98.4	
Aroclor-1260	2	11.347	-0.008	24451	75.7	2	11.906	-0.007	71662	91.5	
Aroclor-1260	3	11.720	-0.008	78985	92.8	3	12.423	-0.008	24133	123.6	
Aroclor-1260	4	12.121	-0.011	39358	89.5	4	12.489	-0.007	47357	93.4	
Aroclor-1260	5	12.234	-0.006	16193	84.5	NS	---			----	
Total CollAve (5 peaks):				87.8	Total Col2Ave (4 peaks):				101.7	RPD = 15	
Corrected Ave (4 peaks):				85.6	Corrected Ave (3 peaks):				94.5	RPD = 10	
Aroclor-1262	1	10.809	-0.023	69510	306.8	1	11.190	-0.010	29193	69.5	
Aroclor-1262	2	12.234	-0.011	16193	45.3	2	11.643	-0.009	30479	85.3	
Aroclor-1262	3	12.308	-0.013	19603	50.5	3	12.423	-0.011	24133	63.4	
Aroclor-1262	4	12.974	-0.015	18186	51.4	4	12.489	-0.015	47357	77.7	
Total CollAve (4 peaks):				113.5	Total Col2Ave (4 peaks):				74.0	RPD = 42*	
Corrected Ave (3 peaks):				49.1	Corrected Ave (3 peaks):				70.2	RPD = 36	
Aroclor-1268	1	12.234	-0.011	16193	17.5	1	12.423	-0.010	24133	24.1	
Aroclor-1268	2	12.308	-0.011	19603	21.2	2	12.489	-0.013	47357	44.4	
Aroclor-1268	3	12.711	0.012	9358	12.2	3	12.886	-0.007	1396	1.6	
Aroclor-1268	4	13.479	-0.010	4984	2.2	4	13.699	-0.010	7404	2.7	
Total CollAve (4 peaks):				13.3	Total Col2Ave (4 peaks):				18.2	RPD = 31	

Corrected Ave (3 peaks): 10.6 Corrected Ave (3 peaks): 9.5 RPD = 12

Total PCB Area Col1 (5.908 - 13.788) = 914707 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 852633 Col2 Total PCB = 0.2 ppm*

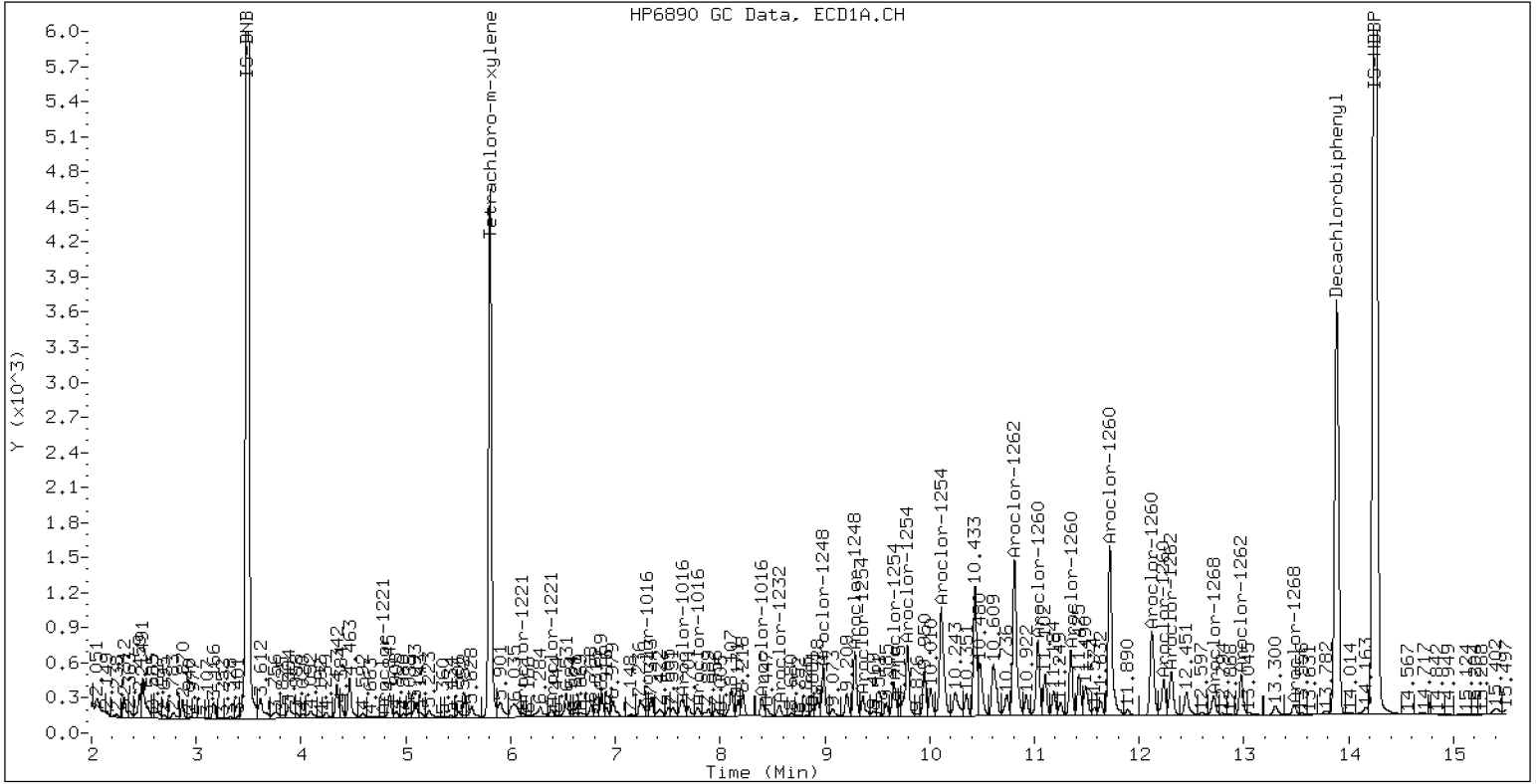
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 BLA0687-SRM1

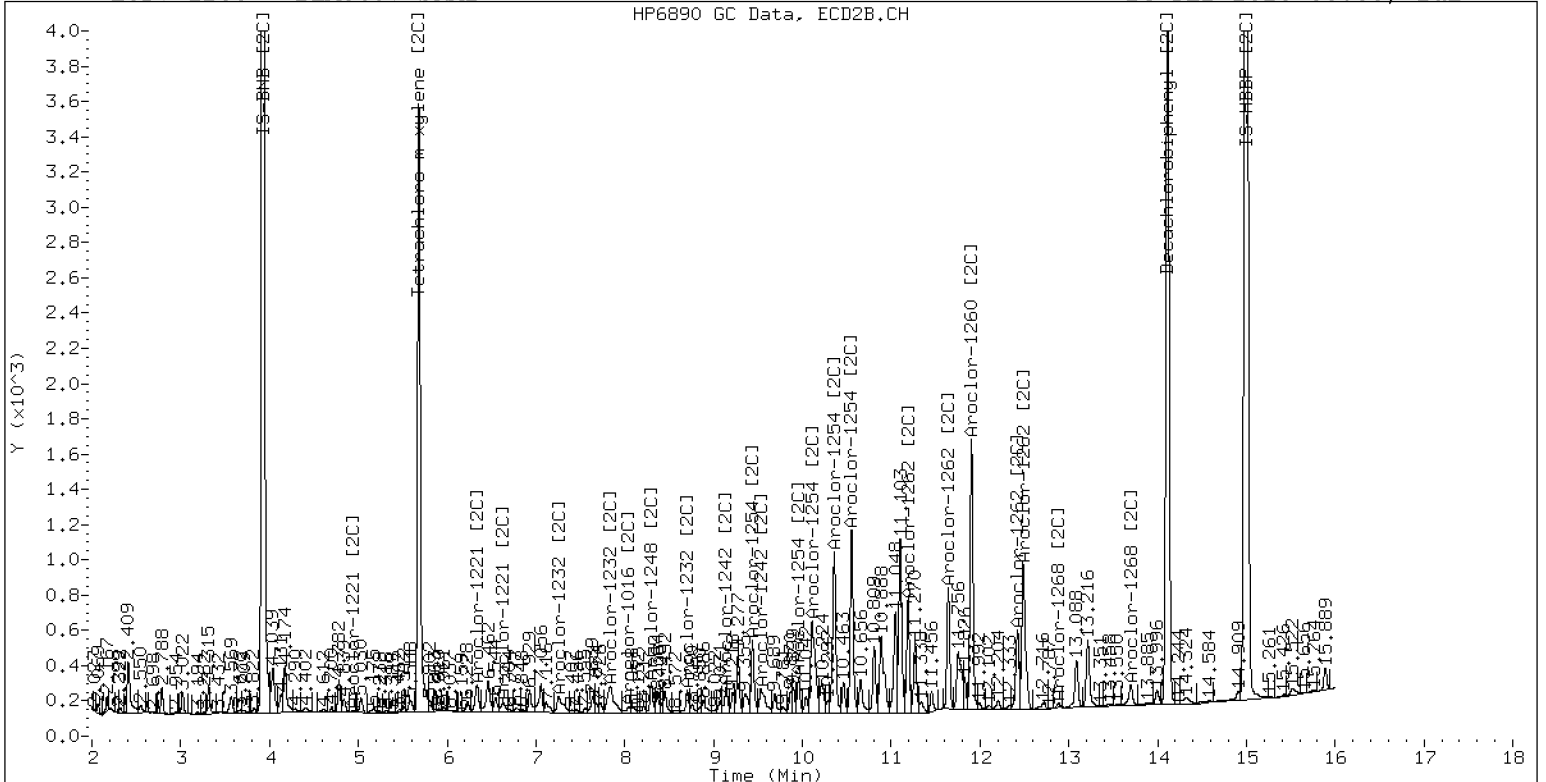
14-FEB-2023 03:05, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0687-SRM1

14-FEB-2023 03:05, 2u1



ZB-35 Manual Integration: NO



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016	250	5.167707E-02	20	4.942809E-02	50	5.153925E-02	1000	4.662732E-02	100	5.549196E-02	500	4.928929E-02
Aroclor-1016 (1)	250	3.017861E-02	20	2.947465E-02	50	3.102226E-02	1000	2.635254E-02	100	3.309682E-02	500	2.824148E-02
Aroclor-1016 (2)	250	0.1020346	20	9.270426E-02	50	9.811961E-02	1000	9.356138E-02	100	0.1059789	500	0.0986114
Aroclor-1016 (3)	250	4.399859E-02	20	4.877736E-02	50	4.899883E-02	1000	3.795541E-02	100	0.0512744	500	4.091133E-02
Aroclor-1016 (4)	250	3.049651E-02	20	2.675607E-02	50	2.801628E-02	1000	2.863996E-02	100	3.161774E-02	500	2.939295E-02
Aroclor 1260	250	6.608884E-02	20	6.779653E-02	50	6.325495E-02	1000	5.469674E-02	100	5.850835E-02	500	5.278897E-02
Aroclor-1260 (1)	250	5.181373E-02	20	4.727423E-02	50	4.542797E-02	1000	0.0403981	100	0.0442757	500	0.0401323
Aroclor-1260 (2)	250	5.350015E-02	20	4.939797E-02	50	4.636355E-02	1000	4.208491E-02	100	4.449674E-02	500	4.100371E-02
Aroclor-1260 (3)	250	0.1331674	20	0.1373712	50	0.1282887	1000	0.1078965	100	0.1173998	500	0.1046798
Aroclor-1260 (4)	250	6.473121E-02	20	7.197922E-02	50	0.0663805	1000	5.863707E-02	100	5.997377E-02	500	5.485394E-02
Aroclor-1260 (5)	250	2.723173E-02	20	3.295998E-02	50	2.981405E-02	1000	2.446709E-02	100	2.639578E-02	500	2.327509E-02
Decachlorobiphenyl	40	0.8481341	3.2	0.8644195	8	0.9030151	160	0.7914512	16	0.9308139	80	0.7957625
Tetrachlorometaxylene	40	1.149655	3.2	1.100393	8	1.102173	160	1.094607	16	1.219974	80	1.117921



INITIAL CALIBRATION DATA EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221							250	0.0153579				
Aroclor-1221 (1)							250	5.913051E-03				
Aroclor-1221 (2)							250	1.209121E-02				
Aroclor-1221 (3)							250	2.806945E-02				
Aroclor 1232									250	1.785602E-02		
Aroclor-1232 (1)									250	3.691407E-03		
Aroclor-1232 (2)									250	8.319285E-03		
Aroclor-1232 (3)									250	4.160486E-02		
Aroclor-1232 (4)									250	1.780851E-02		
Aroclor 1242	250	0.0411165										
Aroclor-1242 (1)	250	2.449677E-02										
Aroclor-1242 (2)	250	8.016926E-02										
Aroclor-1242 (3)	250	2.381903E-02										
Aroclor-1242 (4)	250	3.598092E-02										
Aroclor 1248			250	0.0592639								
Aroclor-1248 (1)			250	4.001993E-02								
Aroclor-1248 (2)			250	5.105008E-02								
Aroclor-1248 (3)			250	9.765126E-02								
Aroclor-1248 (4)			250	4.833435E-02								
Aroclor 1254					250	6.750332E-02						
Aroclor-1254 (1)					250	8.153293E-02						
Aroclor-1254 (2)					250	0.0348121						
Aroclor-1254 (3)					250	5.224052E-02						
Aroclor-1254 (4)					250	0.1023658						
Aroclor-1254 (5)					250	6.656523E-02						
Aroclor-1262 (1)							250	3.235265E-02				
Aroclor-1262 (2)							250	5.106336E-02				
Aroclor-1262 (3)							250	5.543866E-02				



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Instrument: ECD7

Calibration Date: 01/24/2023

Column (1): ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (4)							250	5.051654E-02				
Aroclor-1268 (1)									250	0.132157		
Aroclor-1268 (2)									250	0.1317955		
Aroclor-1268 (3)									250	0.1091938		
Aroclor-1268 (4)									250	0.3237404		



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016	0.0506755	5.9			RSD (20)	
Aroclor-1016 (1)	2.972773E-02	7.8			RSD (20)	
Aroclor-1016 (2)	9.850169E-02	5.1			RSD (20)	
Aroclor-1016 (3)	4.531932E-02	11.5			RSD (20)	
Aroclor-1016 (4)	2.915325E-02	6.0			RSD (20)	
Aroclor 1221		0.0			RSD (20)	
Aroclor-1221 (1)		0.0			RSD (20)	
Aroclor-1221 (2)		0.0			RSD (20)	
Aroclor-1221 (3)		0.0			RSD (20)	
Aroclor 1232		0.0			RSD (20)	
Aroclor-1232 (1)		0.0			RSD (20)	
Aroclor-1232 (2)		0.0			RSD (20)	
Aroclor-1232 (3)		0.0			RSD (20)	
Aroclor-1232 (4)		0.0			RSD (20)	
Aroclor 1242		0.0			RSD (20)	
Aroclor-1242 (1)		0.0			RSD (20)	
Aroclor-1242 (2)		0.0			RSD (20)	
Aroclor-1242 (3)		0.0			RSD (20)	
Aroclor-1242 (4)		0.0			RSD (20)	
Aroclor 1248		0.0			RSD (20)	
Aroclor-1248 (1)		0.0			RSD (20)	
Aroclor-1248 (2)		0.0			RSD (20)	
Aroclor-1248 (3)		0.0			RSD (20)	
Aroclor-1248 (4)		0.0			RSD (20)	
Aroclor 1254		0.0			RSD (20)	
Aroclor-1254 (1)		0.0			RSD (20)	
Aroclor-1254 (2)		0.0			RSD (20)	
Aroclor-1254 (3)		0.0			RSD (20)	
Aroclor-1254 (4)		0.0			RSD (20)	
Aroclor-1254 (5)		0.0			RSD (20)	
Aroclor 1260	0.0605224	10.2			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1)	0.044887	9.8			RSD (20)	
Aroclor-1260 (2)	4.614117E-02	10.2			RSD (20)	
Aroclor-1260 (3)	0.1214672	11.2			RSD (20)	
Aroclor-1260 (4)	6.275928E-02	9.8			RSD (20)	
Aroclor-1260 (5)	2.735729E-02	13.0			RSD (20)	
Aroclor-1262 (1)		0.0			RSD (20)	
Aroclor-1262 (2)		0.0			RSD (20)	
Aroclor-1262 (3)		0.0			RSD (20)	
Aroclor-1262 (4)		0.0			RSD (20)	
Aroclor-1268 (1)		0.0			RSD (20)	
Aroclor-1268 (2)		0.0			RSD (20)	
Aroclor-1268 (3)		0.0			RSD (20)	
Aroclor-1268 (4)		0.0			RSD (20)	
Decachlorobiphenyl	0.8555994	6.6			RSD (20)	
Tetrachlorometaxylene	1.130787	4.2			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016 [2C]	250	5.292579E-02	20	4.676037E-02	50	5.470557E-02	1000	4.853417E-02	100	5.747899E-02	500	5.114174E-02
Aroclor-1016 (1) [2C]	250	4.314113E-02	20	4.423802E-02	50	4.724251E-02	1000	3.795138E-02	100	4.677646E-02	500	4.099489E-02
Aroclor-1016 (2) [2C]	250	9.823746E-02	20	8.511696E-02	50	9.615173E-02	1000	9.129912E-02	100	0.1041709	500	9.554107E-02
Aroclor-1016 (3) [2C]	250	4.028886E-02	20	2.918885E-02	50	0.0416533	1000	3.764267E-02	100	4.478001E-02	500	3.925449E-02
Aroclor-1016 (4) [2C]	250	3.003571E-02	20	2.849763E-02	50	3.377476E-02	1000	2.724351E-02	100	3.418865E-02	500	0.0287764
Aroclor 1260 [2C]	250	0.0868269	20	8.456297E-02	50	8.682148E-02	1000	7.954321E-02	100	8.639013E-02	500	7.778218E-02
Aroclor-1260 (1) [2C]	250	6.129497E-02	20	6.075052E-02	50	5.973709E-02	1000	5.307059E-02	100	5.911734E-02	500	5.231082E-02
Aroclor-1260 (2) [2C]	250	0.1536701	20	0.147481	50	0.1510614	1000	0.1380864	100	0.1518107	500	0.1339581
Aroclor-1260 (3) [2C]	250	3.647192E-02	20	3.683006E-02	50	3.729426E-02	1000	3.693906E-02	100	3.582131E-02	500	3.500995E-02
Aroclor-1260 (4) [2C]	250	0.0958705	20	9.319031E-02	50	9.919317E-02	1000	9.007677E-02	100	9.881117E-02	500	8.984983E-02
Decachlorobiphenyl [2C]	40	1.292085	3.2	1.209146	8	1.271224	160	1.30389	16	1.311901	80	1.229614
Tetrachlorometaxylene [2C]	40	1.096753	3.2	1.043423	8	1.105211	160	1.038509	16	1.153217	80	1.051873



INITIAL CALIBRATION DATA EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221 [2C]							250	1.346872E-02				
Aroclor-1221 (1) [2C]							250	5.864614E-03				
Aroclor-1221 (2) [2C]							250	1.285084E-02				
Aroclor-1221 (3) [2C]							250	2.169068E-02				
Aroclor 1232 [2C]									250	0.0188178		
Aroclor-1232 (1) [2C]									250	3.556924E-03		
Aroclor-1232 (2) [2C]									250	1.990636E-02		
Aroclor-1232 (3) [2C]									250	4.054321E-02		
Aroclor-1232 (4) [2C]									250	1.126471E-02		
Aroclor 1242 [2C]	250	4.232355E-02										
Aroclor-1242 (1) [2C]	250	3.498756E-02										
Aroclor-1242 (2) [2C]	250	7.771274E-02										
Aroclor-1242 (3) [2C]	250	2.433789E-02										
Aroclor-1242 (4) [2C]	250	3.225599E-02										
Aroclor 1248 [2C]			250	4.536727E-02								
Aroclor-1248 (1) [2C]			250	0.036162								
Aroclor-1248 (2) [2C]			250	3.892353E-02								
Aroclor-1248 (3) [2C]			250	4.756205E-02								
Aroclor-1248 (4) [2C]			250	5.882148E-02								
Aroclor 1254 [2C]					250	7.332193E-02						
Aroclor-1254 (1) [2C]					250	5.803883E-02						
Aroclor-1254 (2) [2C]					250	4.691175E-02						
Aroclor-1254 (3) [2C]					250	0.1023304						
Aroclor-1254 (4) [2C]					250	0.1023323						
Aroclor-1254 (5) [2C]					250	5.699633E-02						
Aroclor-1262 (1) [2C]							250	7.829705E-02				
Aroclor-1262 (2) [2C]							250	6.658267E-02				
Aroclor-1262 (3) [2C]							250	7.090313E-02				



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (4) [2C]							250	0.1135497				
Aroclor-1268 (1) [2C]									250	0.1868176		
Aroclor-1268 (2) [2C]									250	0.1988025		
Aroclor-1268 (3) [2C]									250	0.1654822		
Aroclor-1268 (4) [2C]									250	0.5111759		



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016 [2C]	5.192444E-02	7.6			RSD (20)	
Aroclor-1016 (1) [2C]	4.339073E-02	8.1			RSD (20)	
Aroclor-1016 (2) [2C]	9.508621E-02	6.8			RSD (20)	
Aroclor-1016 (3) [2C]	3.880136E-02	13.6			RSD (20)	
Aroclor-1016 (4) [2C]	3.041944E-02	9.5			RSD (20)	
Aroclor 1221 [2C]		0.0			RSD (20)	
Aroclor-1221 (1) [2C]		0.0			RSD (20)	
Aroclor-1221 (2) [2C]		0.0			RSD (20)	
Aroclor-1221 (3) [2C]		0.0			RSD (20)	
Aroclor 1232 [2C]		0.0			RSD (20)	
Aroclor-1232 (1) [2C]		0.0			RSD (20)	
Aroclor-1232 (2) [2C]		0.0			RSD (20)	
Aroclor-1232 (3) [2C]		0.0			RSD (20)	
Aroclor-1232 (4) [2C]		0.0			RSD (20)	
Aroclor 1242 [2C]		0.0			RSD (20)	
Aroclor-1242 (1) [2C]		0.0			RSD (20)	
Aroclor-1242 (2) [2C]		0.0			RSD (20)	
Aroclor-1242 (3) [2C]		0.0			RSD (20)	
Aroclor-1242 (4) [2C]		0.0			RSD (20)	
Aroclor 1248 [2C]		0.0			RSD (20)	
Aroclor-1248 (1) [2C]		0.0			RSD (20)	
Aroclor-1248 (2) [2C]		0.0			RSD (20)	
Aroclor-1248 (3) [2C]		0.0			RSD (20)	
Aroclor-1248 (4) [2C]		0.0			RSD (20)	
Aroclor 1254 [2C]		0.0			RSD (20)	
Aroclor-1254 (1) [2C]		0.0			RSD (20)	
Aroclor-1254 (2) [2C]		0.0			RSD (20)	
Aroclor-1254 (3) [2C]		0.0			RSD (20)	
Aroclor-1254 (4) [2C]		0.0			RSD (20)	
Aroclor-1254 (5) [2C]		0.0			RSD (20)	
Aroclor 1260 [2C]	8.365448E-02	4.8			RSD (20)	



INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1) [2C]	5.771356E-02	6.9			RSD (20)	
Aroclor-1260 (2) [2C]	0.1460113	5.5			RSD (20)	
Aroclor-1260 (3) [2C]	3.639443E-02	2.3			RSD (20)	
Aroclor-1260 (4) [2C]	9.449863E-02	4.4			RSD (20)	
Aroclor-1262 (1) [2C]		0.0			RSD (20)	
Aroclor-1262 (2) [2C]		0.0			RSD (20)	
Aroclor-1262 (3) [2C]		0.0			RSD (20)	
Aroclor-1262 (4) [2C]		0.0			RSD (20)	
Aroclor-1268 (1) [2C]		0.0			RSD (20)	
Aroclor-1268 (2) [2C]		0.0			RSD (20)	
Aroclor-1268 (3) [2C]		0.0			RSD (20)	
Aroclor-1268 (4) [2C]		0.0			RSD (20)	
Decachlorobiphenyl [2C]	1.269643	3.3			RSD (20)	
Tetrachlorometaxylene [2C]	1.081498	4.2			RSD (20)	



ANALYSIS SEQUENCE

SLA0281

Instrument: ECD7
Calibration ID: GA00061

Printed: 1/26/2023 11:51:52AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLA0281-CAL1	QC		1		L000856	K006953		
SLA0281-CAL2	QC		2		L000859	K006953		
SLA0281-CAL3	QC		3		L000858	K006953		
SLA0281-CAL4	QC		4		L000731	K006953		
SLA0281-CAL5	QC		5		L000857	K006953		
SLA0281-CAL6	QC		6		L000855	K006953		
SLA0281-CAL7	QC		7		L000860	K006953		
SLA0281-CAL8	QC		8		L000861	K006953		
SLA0281-CAL9	QC		9		L000862	K006953		
SLA0281-CALA	QC		10		L000863	K006953		
SLA0281-CALB	QC		11		L000864	K006953		
SLA0281-SCV1	QC		12		K007655	K006953		
SLA0281-SCV2	QC		13		K007656	K006953		
SLA0281-SCV3	QC		14		K007657	K006953		
SLA0281-SCV4	QC		15		K007658	K006953		
SLA0281-SCV5	QC		16		K007659	K006953		
SLA0281-SCV6	QC		17		K007660	K006953		

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	24-JAN-2023	15:39	01242312ECD7.D	1	IB	
2	24-JAN-2023	16:00	01242313ECD7.D	1	0.25PPM	AR1660
3	24-JAN-2023	16:21	01242314ECD7.D	1	0.02PPM	AR1660
4	24-JAN-2023	16:42	01242315ECD7.D	1	0.05PPM	AR1660
5	24-JAN-2023	17:03	01242316ECD7.D	1	1.0PPM	AR1660
6	24-JAN-2023	17:24	01242317ECD7.D	1	0.1PPM	AR1660
7	24-JAN-2023	17:45	01242318ECD7.D	1	0.5PPM	AR1660
8	24-JAN-2023	18:06	01242319ECD7.D	1	0.25PPM	1242
9	24-JAN-2023	18:27	01242320ECD7.D	1	0.25PPM	1248
10	24-JAN-2023	18:48	01242321ECD7.D	1	0.25PPM	1254
11	24-JAN-2023	19:09	01242322ECD7.D	1	0.25PPM	2162
12	24-JAN-2023	19:30	01242323ECD7.D	1	0.25PPM	3268
13	24-JAN-2023	19:51	01242324ECD7.D	1	AR1660	SCV
14	24-JAN-2023	20:12	01242325ECD7.D	1	AR1242	SCV
15	24-JAN-2023	20:33	01242326ECD7.D	1	AR1248	SCV
16	24-JAN-2023	20:54	01242327ECD7.D	1	AR1254	SCV
17	24-JAN-2023	21:15	01242328ECD7.D	1	AR2162	SCV
18	24-JAN-2023	21:36	01242329ECD7.D	1	AR3268	SCV
19	24-JAN-2023	21:57	01242330ECD7.D	1	DDTS	
20	24-JAN-2023	22:18	01242331ECD7.D	1	DDT	BD

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1539	01242312ECD7.D	IB		1	NO MANUAL INTEGRATION
1600	01242313ECD7.D	0.25PPM	AR1660	1	NO MANUAL INTEGRATION
1621	01242314ECD7.D	0.02PPM	AR1660	1	NO MANUAL INTEGRATION
1642	01242315ECD7.D	0.05PPM	AR1660	1	NO MANUAL INTEGRATION
1703	01242316ECD7.D	1.0PPM	AR1660	1	NO MANUAL INTEGRATION
1724	01242317ECD7.D	0.1PPM	AR1660	1	NO MANUAL INTEGRATION
1745	01242318ECD7.D	0.5PPM	AR1660	1	NO MANUAL INTEGRATION
1806	01242319ECD7.D	0.25PPM	1242	1	NO MANUAL INTEGRATION
1827	01242320ECD7.D	0.25PPM	1248	1	NO MANUAL INTEGRATION
1848	01242321ECD7.D	0.25PPM	1254	1	NO MANUAL INTEGRATION
1909	01242322ECD7.D	0.25PPM	2162	1	NO MANUAL INTEGRATION
1930	01242323ECD7.D	0.25PPM	3268	1	NO MANUAL INTEGRATION
1951	01242324ECD7.D	AR1660	SCV	1	NO MANUAL INTEGRATION
2012	01242325ECD7.D	AR1242	SCV	1	NO MANUAL INTEGRATION
2033	01242326ECD7.D	AR1248	SCV	1	NO MANUAL INTEGRATION
2054	01242327ECD7.D	AR1254	SCV	1	NO MANUAL INTEGRATION
2115	01242328ECD7.D	AR2162	SCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2136	01242329ECD7.D	AR3268	SCV	1	NO MANUAL INTEGRATION
2157	01242330ECD7.D	DDTS		1	NO MANUAL INTEGRATION
2218	01242331ECD7.D	DDT	BD	1	NO MANUAL INTEGRATION

Security Status Report

Date: 26-Jan-2023 11:55

01242301ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242302ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242303ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242304ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242305ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242306ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242307ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242308ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242309ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242310ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242311ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242312ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242313ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242314ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242315ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242316ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242317ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242318ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242319ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242320ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242321ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242322ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242323ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242324ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242325ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242326ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242327ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242328ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242329ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242330ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242331ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Last Edit : 25-Jan-2023 10:02 JoshuaR
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd7.i\230124.b\01242314ECD7.D
 Level 2: \\target\share\chem4\ecd7.i\230124.b\01242315ECD7.D
 Level 3: \\target\share\chem4\ecd7.i\230124.b\01242317ECD7.D
 Level 4: \\target\share\chem4\ecd7.i\230124.b\01242313ECD7.D
 Level 5: \\target\share\chem4\ecd7.i\230124.b\01242318ECD7.D
 Level 6: \\target\share\chem4\ecd7.i\230124.b\01242316ECD7.D
 Level 7: \\target\share\chem4\ecd7.i\230124.b\01242323ECD7.D
 Level 8: \\target\share\chem4\ecd7.i\230124.b\01242330ECD7.D

Compound	20.000	50.000	100.000	250.000	500.000	1000.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	250.000	0.000e+00						
	Level 7	Level 8						
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00591	0.000
	0.00591	+++++						
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01209	0.000
	0.01209	+++++						
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02807	0.000
	0.02807	+++++						
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02450	0.000
	0.02450	+++++						

(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.08017	+++++						0.08017	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02382	+++++						0.02382	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03598	+++++						0.03598	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.00369	+++++						0.00369	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Last Edit : 25-Jan-2023 10:02 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.00832	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04160	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01781	0.000
7 Aroclor-1016(1)	0.02947	0.03102	0.03310	0.03018	0.02824	0.02635	0.02973	7.802
(2)	0.09270	0.09812	0.10598	0.10203	0.09861	0.09356	0.09850	5.108
(3)	0.04878	0.04900	0.05127	0.04400	0.04091	0.03796	0.04532	11.523
(4)	0.02676	0.02802	0.03162	0.03050	0.02939	0.02864	0.02915	5.988
6 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++		

	0.04002	+++++					0.04002	0.000
(2)	0.05105	+++++					0.05105	0.000
(3)	0.09765	+++++					0.09765	0.000
(4)	0.04833	+++++					0.04833	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Last Edit : 25-Jan-2023 10:02 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
8 Aroclor-1254(1)	0.08153	0.000e+00					0.08153	0.000
(2)	0.03481						0.03481	0.000
(3)	0.05224						0.05224	0.000
(4)	0.10237						0.10237	0.000
(5)	0.06657						0.06657	0.000
9 Aroclor-1260(1)	0.04727	0.04543	0.04428	0.05181	0.04013	0.04040	0.04489	9.818
(2)	0.04940	0.04636	0.04450	0.05350	0.04100	0.04208	0.04614	10.182
(3)	0.13737	0.12829	0.11740	0.13317	0.10468	0.10790		

	+++++	+++++					0.12147	11.161
(4)	0.07198	0.06638	0.05997	0.06473	0.05485	0.05864		
	+++++	+++++					0.06276	9.803
(5)	0.03296	0.02981	0.02640	0.02723	0.02328	0.02447		
	+++++	+++++					0.02736	13.015
10 Aroclor-1262 (1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03235	+++++					0.03235	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Last Edit : 25-Jan-2023 10:02 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.05106	0.000
	0.05106	+++++						
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.05544	0.000
	0.05544	+++++						
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.05052	0.000
	0.05052	+++++						
11 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.13216	0.000
	0.13216	+++++						
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.13180	0.000
	0.13180	+++++						
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.10919	0.000
	0.10919	+++++						
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.32374	0.000
	0.32374	+++++						
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++		

	+++++	904					904	0.000

43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1034					1034	0.000

44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	2557					2557	0.000

46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1539					1539	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Last Edit : 25-Jan-2023 10:02 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 4,4-DDT	+++++	1484	+++++	+++++	+++++	+++++	1484	0.000
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 1 Tetrachloro-m-xylene	1.10039	1.10217	1.21997	1.14965	1.11792	1.09461	1.13079	4.246
\$ 13 Decachlorobiphenyl	0.86442	0.90302	0.93081	0.84813	0.79576	0.79145	0.85560	6.556

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
 Last Edit : 25-Jan-2023 09:58 JoshuaR
 Curve Type : Average

Calibration File Names:

Level 1: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242314ECD7.D
 Level 2: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242315ECD7.D
 Level 3: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242317ECD7.D
 Level 4: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242313ECD7.D
 Level 5: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242318ECD7.D
 Level 6: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242316ECD7.D
 Level 7: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242323ECD7.D
 Level 8: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242330ECD7.D

Compound	20.000	50.000	100.000	250.000	500.000	1000.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	250.000	0.000e+00						
	Level 7	Level 8						
1 Aroclor-1221 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00586	0.000
	0.00586	+++++						
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01285	0.000
	0.01285	+++++						
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02169	0.000
	0.02169	+++++						
4 Aroclor-1232 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00356	0.000
	0.00356	+++++						

(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.01991	+++++						0.01991	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04054	+++++						0.04054	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.01126	+++++						0.01126	0.000
3 Aroclor-1242 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03499	+++++						0.03499	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
 Last Edit : 25-Jan-2023 09:58 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07771	0.000
(3)	0.02434	+++++					0.02434	0.000
(4)	0.03226	+++++					0.03226	0.000
6 Aroclor-1248 [2C] (1)	0.03616	+++++					0.03616	0.000
(2)	0.03892	+++++					0.03892	0.000
(3)	0.04756	+++++					0.04756	0.000
(4)	0.05882	+++++					0.05882	0.000
7 Aroclor-1016 [2C] (1)	0.04424	0.04724	0.04678	0.04314	0.04099	0.03795		

	+++++	+++++					0.04339	8.142
(2)	0.08512	0.09615	0.10417	0.09824	0.09554	0.09130		
	+++++	+++++					0.09509	6.775
(3)	0.02919	0.04165	0.04478	0.04029	0.03925	0.03764		
	+++++	+++++					0.03880	13.639
(4)	0.02850	0.03377	0.03419	0.03004	0.02878	0.02724		
	+++++	+++++					0.03042	9.538

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
 Last Edit : 25-Jan-2023 09:58 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
8 Aroclor-1254 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.05804	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.04691	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.10233	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.10233	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++	0.05700	0.000
10 Aroclor-1262 [2C] (1)	+++++	+++++	+++++	+++++	+++++	+++++	0.07830	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.06658	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		

	0.07090	+++++					0.07090	0.000

(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.11355	+++++					0.11355	0.000

9 Aroclor-1260 [2C] (1)	0.06075	0.05974	0.05912	0.06129	0.05231	0.05307		
	+++++	+++++					0.05771	6.881

(2)	0.14748	0.15106	0.15181	0.15367	0.13396	0.13809		
	+++++	+++++					0.14601	5.547

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
 Last Edit : 25-Jan-2023 09:58 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
(3)	0.03683 +++++	0.03729 +++++	0.03582	0.03647	0.03501	0.03694	0.03639	2.314
(4)	0.09319 +++++	0.09919 +++++	0.09881	0.09587	0.08985	0.09008	0.09450	4.373
11 Aroclor-1268 [2C] (1)	+++++ 0.18682	+++++	+++++	+++++	+++++	+++++	0.18682	0.000
(2)	+++++ 0.19880	+++++	+++++	+++++	+++++	+++++	0.19880	0.000
(3)	+++++ 0.16548	+++++	+++++	+++++	+++++	+++++	0.16548	0.000
(4)	+++++ 0.51118	+++++	+++++	+++++	+++++	+++++	0.51118	0.000
41 2,4-DDE [2C]	+++++ +++++	+++++ 1528	+++++	+++++	+++++	+++++	1528	0.000
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++		

	+++++	866					866	0.000

44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	863					863	0.000

45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1162					1162	0.000

46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1277					1277	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
 End Cal Date : 24-JAN-2023 21:57
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 4.14
 Integrator : HP Genie
 Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
 Last Edit : 25-Jan-2023 09:58 JoshuaR
 Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000	0.000e+00						
	Level 7	Level 8						
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 2 Tetrachloro-m-xylene [2C]	1.04342	1.10521	1.15322	1.09675	1.05187	1.03851	1.08150	4.159
\$ 13 Decachlorobiphenyl [2C]	1.20915	1.27122	1.31190	1.29209	1.22961	1.30389	1.26964	3.291

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230124.b
Inst ID: ecd7.i

ID: RT01 RT02 RT03 RT04 RT05 RT06
FILENAME: 01242313ECD7 01242314ECD7 01242315ECD7 01242316ECD7 01242317ECD7 01242318ECD7
INJ. DATE: 24-JAN-2023 24-JAN-2023 24-JAN-2023 24-JAN-2023 24-JAN-2023 24-JAN-2023
INJ. TIME: 16:00 16:21 16:42 17:03 17:24 17:45

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like IS-BNB, Aroclor-1221, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Batch File: \\target\share\chem4\ecd7.i\230124.b
 Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.281	10.181-10.381	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.758	10.658-10.858	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230124.b\230124.b
Inst ID: ecd7.i

ID: RT01 RT02 RT03 RT04 RT05 RT06
FILENAME: 01242313ECD7 01242314ECD7 01242315ECD7 01242316ECD7 01242317ECD7 01242318ECD7
INJ. DATE: 24-JAN-2023 24-JAN-2023 24-JAN-2023 24-JAN-2023 24-JAN-2023 24-JAN-2023
INJ. TIME: 16:00 16:21 16:42 17:03 17:24 17:45

Table with columns: Compound, RT01, RT02, RT03, RT04, RT05, RT06, EXPEC RT, RT WINDOW, AVG RT, STD DEV. Rows include various chemical compounds like Aroclor-1221, Aroclor-1232, etc.

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
 Batch File: \\target\share\chem4\ecd7.i\230124.b\230124.b
 Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.095	10.995-11.195	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242312ECD7.D
Data file 2: /230124.b/230124.b/01242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-JAN-2023 15:39
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.822	0.013	272340	5.680	-0.007	171573	36.5	36.4	0.1	Tetrachloro-m-xylene
13.900	0.008	252989	14.120	-0.000	223176	37.3	38.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	528068	4.9
Hexabromobiphenyl	647433	634177	-2.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	348301	3.4
Hexabromobiphenyl	382032	364259	-4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	7.852	0.064	162	0.5	3	---			0.0
Aroclor-1016	4	8.431	0.027	495	2.6	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.317	0.019	1908	34.1
Aroclor-1221	3	---			0.0	3	6.630	0.007	299	3.2
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.208	-0.049	26	0.3
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	8.730	0.017	33	0.7
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	7.208	-0.048	26	0.2
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	8.431	0.024	495	3.1	3	9.151	-0.008	93	0.9
Aroclor-1242	4	8.630	0.049	1101	4.6	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.431	0.025	495	1.9	1	---			0.0
Aroclor-1248	2	8.630	0.050	1101	3.3	2	8.730	0.018	33	0.2
Aroclor-1248	3	---			0.0	3	9.151	-0.005	93	0.4
Aroclor-1248	4	---			0.0	4	---			0.0
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	9.474	0.026	9010	35.7
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.571	-0.099	114	0.3	3	---			0.0
Aroclor-1254	4	9.770	-0.038	104	0.2	4	---			0.0
Aroclor-1254	5	---			0.0	5	10.525	-0.044	482	1.9
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.066	0.023	262	0.7	1	11.703	0.050	189	0.7
Aroclor-1260	2	---			0.0	2	11.832	-0.086	97	0.1
Aroclor-1260	3	11.803	0.069	4470	4.6	3	12.414	-0.022	2209	13.3
Aroclor-1260	4	12.089	-0.051	661	1.3	4	---			0.0
Aroclor-1260	5	12.282	0.038	5183	23.9	NS	---			----
Total CollAve (4 peaks):				7.7		Total Col2Ave (3 peaks):				4.7 RPD = 47*
Corrected Ave (3 peaks):				2.2		Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.789	-0.043	941	3.7	1	---			0.0
Aroclor-1262	2	12.282	0.036	5183	12.8	2	11.703	0.051	189	0.6
Aroclor-1262	3	---			0.0	3	12.414	-0.020	2209	6.8
Aroclor-1262	4	12.982	-0.007	2811	7.0	4	---			0.0
Total CollAve (3 peaks):					7.8	Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	12.282	0.037	5183	4.9	1	12.414	-0.020	2209	2.6
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.705	0.006	3092	3.6	3	12.894	0.001	724	1.0
Aroclor-1268	4	13.500	0.011	13310	5.2	4	13.708	-0.000	2974	1.3
Total CollAve (3 peaks):				4.6		Total Col2Ave (3 peaks):				1.6 RPD = 96*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

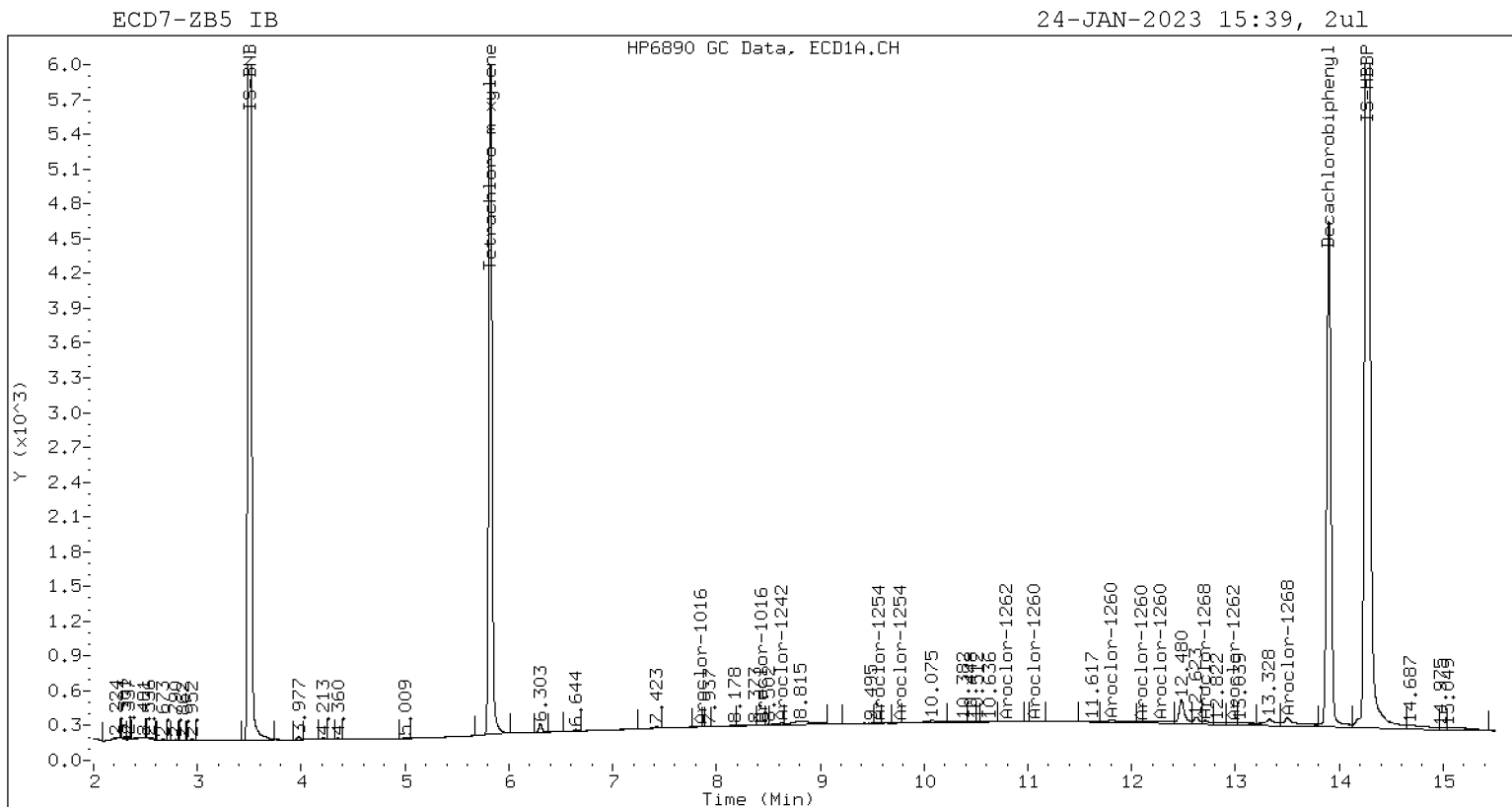
Total PCB Area Col1 (5.909 - 13.792) = 89790 Col1 Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 40020 Col2 Total PCB = 0.0 ppm*

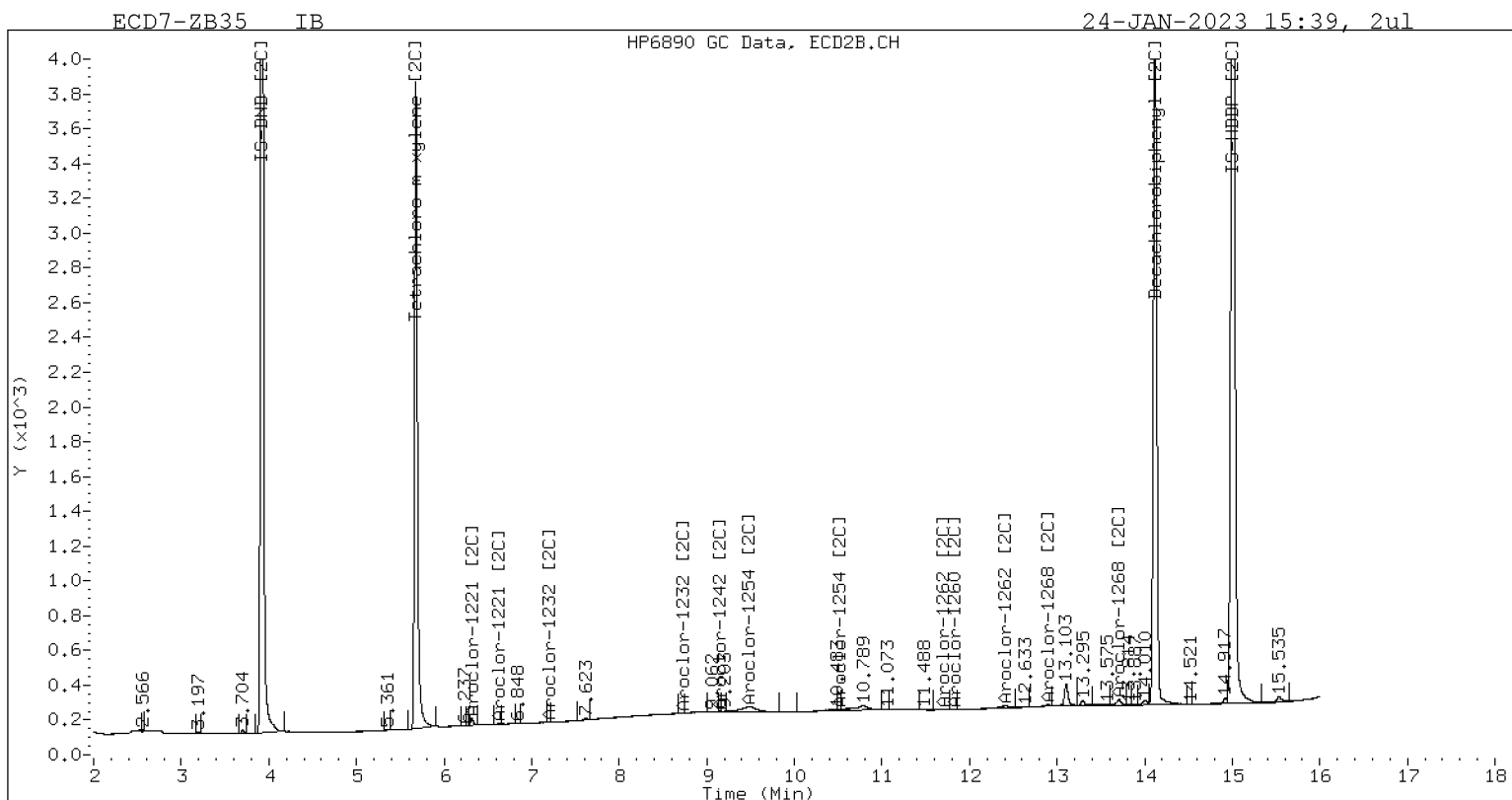
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms



ZB-5 Manual Integration: NO



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242313ECD7.D
Data file 2: /230124.b/230124.b/01242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:00
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.810	0.001	289321	5.685	-0.002	184754	40.7	40.6	0.3	Tetrachloro-m-xylene
13.894	0.002	274555	14.120	0.000	246809	39.7	40.7	2.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503318	0.0
Hexabromobiphenyl	647433	647433	0.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	336911	0.0
Hexabromobiphenyl	382032	382032	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	47467	253.8	1	7.255	0.000	45421	248.6
Aroclor-1016	2	7.654	0.004	160487	259.0	2	7.851	0.000	103429	258.3
Aroclor-1016	3	7.791	0.003	69204	242.7	3	8.050	0.000	42418	259.6
Aroclor-1016	4	8.406	0.003	47967	261.5	4	8.305	0.000	31623	246.8
Total CollAve (4 peaks):				254.2		Total Col2Ave (4 peaks):				253.3 RPD = 0
Corrected Ave (3 peaks):				251.8		Corrected Ave (3 peaks):				251.2 RPD = 0

CalAmt %D: 1.7

CalAmt %D: 1.3

Aroclor-1260	1	11.047	0.003	104831	288.6	1	11.653	0.000	73177	265.5
Aroclor-1260	2	11.362	0.002	108243	289.9	2	11.918	0.000	183459	263.1
Aroclor-1260	3	11.738	0.004	269428	274.1	3	12.436	0.000	43542	250.5
Aroclor-1260	4	12.142	0.002	130966	257.9	4	12.502	0.000	114455	253.6
Aroclor-1260	5	12.246	0.002	55096	248.9	NS	---			----
Total CollAve (5 peaks):				271.8		Total Col2Ave (4 peaks):				258.2 RPD = 5
Corrected Ave (4 peaks):				267.3		Corrected Ave (3 peaks):				255.8 RPD = 4

CalAmt %D: 8.7

CalAmt %D: 3.3

Total PCB Area Coll (5.909 - 13.792) = 2930230 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1777050 Col2 Total PCB = 0.5 ppm*

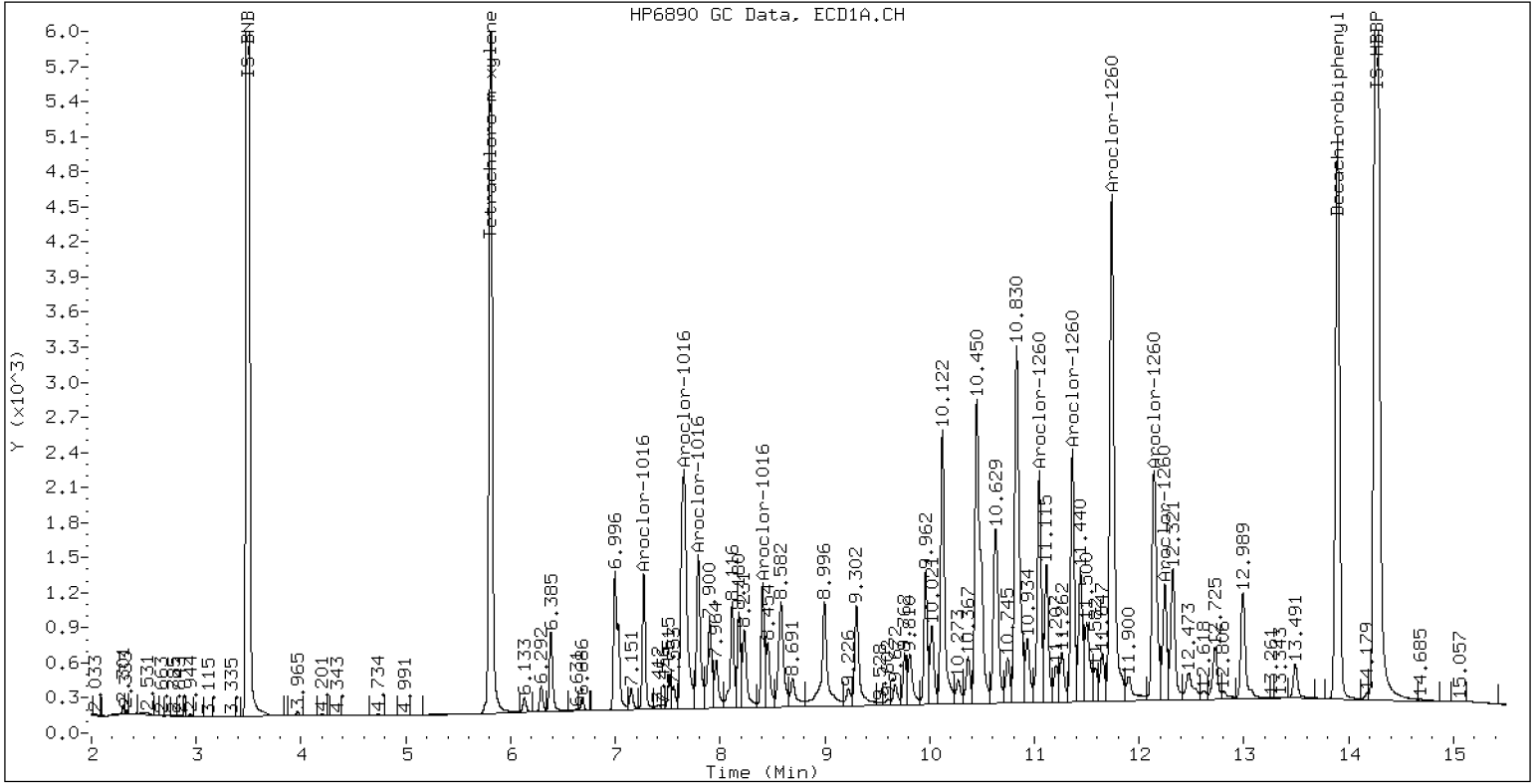
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM AR1660

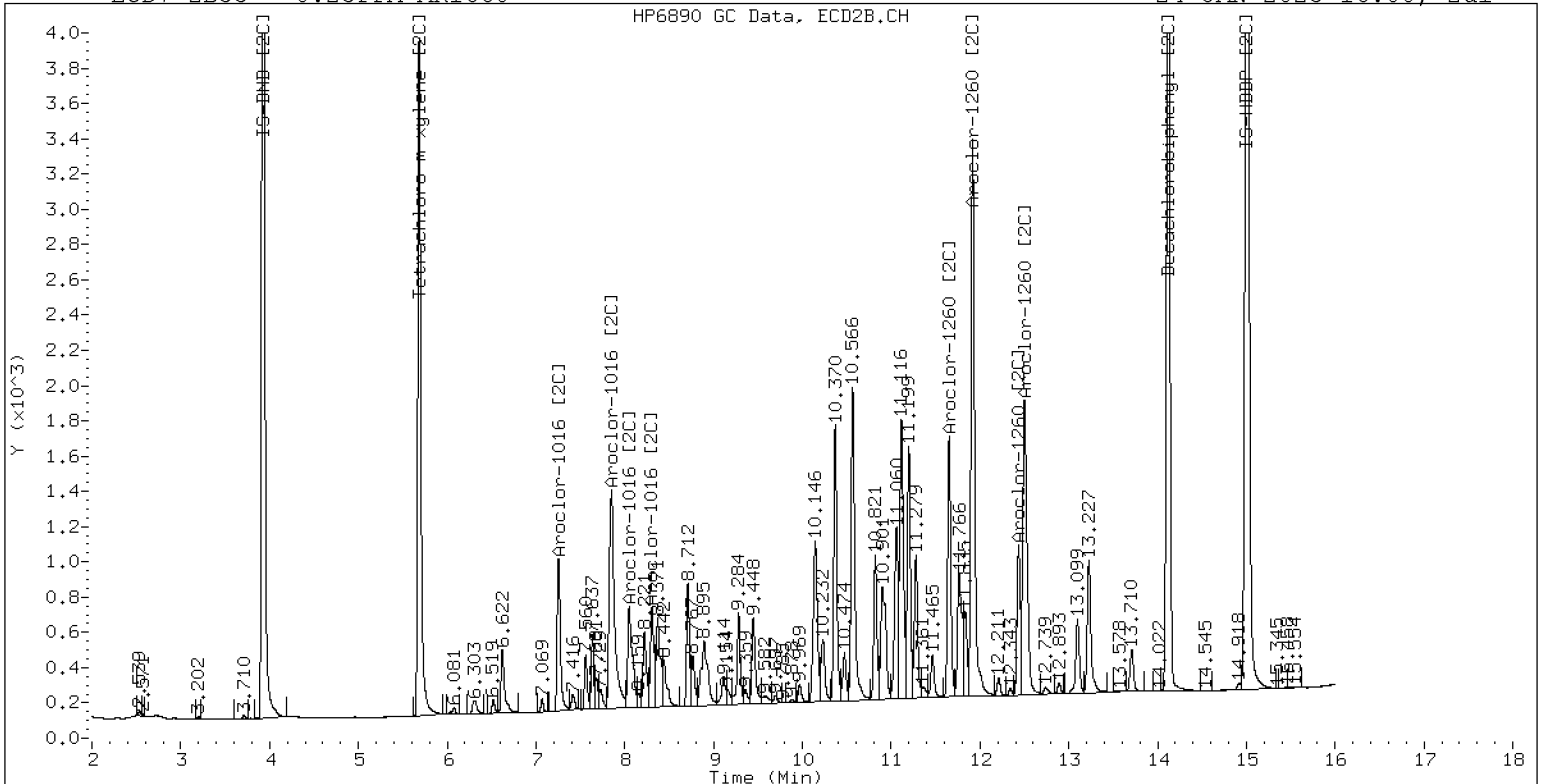
24-JAN-2023 16:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM AR1660

24-JAN-2023 16:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242314ECD7.D
 Data file 2: /230124.b/230124.b/01242314ECD7.D
 Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Compound Sublist: AR1660.sub
 Instrument, Inj. Vol.: ecd7.i, 2ul
 Quant Method: Internal Std

ARI ID: 0.02PPM AR1660
 Client ID:
 Injection Date: 24-JAN-2023 16:21
 Report Date: 01/25/2023 10:53
 Matrix: NONE
 Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	21307	5.686	-0.000	13767	3.1	3.1	0.9	Tetrachloro-m-xylene
13.892	0.000	23054	14.121	0.001	19257	3.2	3.0	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	484077	-3.8
Hexabromobiphenyl	647433	666748	3.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	329852	-2.1
Hexabromobiphenyl	382032	398153	4.2

* Standard Areas taken from Initial Cal Level 3
 Initial Calibration Date: 24-JAN-2023
 <- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.002	3567	19.8	1	7.257	0.002	3648	20.4	
Aroclor-1016	2	7.663	0.012	11219	18.8	2	7.858	0.007	7019	17.9	
Aroclor-1016	3	7.796	0.008	5903	21.5	3	8.058	0.007	2407	15.0	
Aroclor-1016	4	8.410	0.006	3238	18.4	4	8.308	0.003	2350	18.7	
Total CollAve (4 peaks):				19.6	Total Col2Ave (4 peaks):				18.0	RPD = 9	
Corrected Ave (3 peaks):				19.0	Corrected Ave (3 peaks):				17.2	RPD = 10	

CalAmt %D: -1.8 CalAmt %D: -9.9

Aroclor-1260	1	11.049	0.005	7880	21.1	1	11.655	0.002	6047	21.1	
Aroclor-1260	2	11.365	0.005	8234	21.4	2	11.923	0.005	14680	20.2	
Aroclor-1260	3	11.742	0.008	22898	22.6	3	12.438	0.002	3666	20.2	
Aroclor-1260	4	12.149	0.009	11998	22.9	4	12.506	0.004	9276	19.7	
Aroclor-1260	5	12.247	0.003	5494	24.1	NS	---			----	
Total CollAve (5 peaks):				22.4	Total Col2Ave (4 peaks):				20.3	RPD = 10	
Corrected Ave (4 peaks):				22.0	Corrected Ave (3 peaks):				20.1	RPD = 9	

CalAmt %D: 12.1 CalAmt %D: 1.5

Total PCB Area Coll (5.909 - 13.792) = 256211 Coll Total PCB = 0.0 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 146434 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242315ECD7.D
Data file 2: /230124.b/230124.b/01242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:42
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col				
5.809	-0.000	53503	5.687	-0.000	36922	7.8	8.2	4.7	Tetrachloro-m-xylene
13.893	0.001	62544	14.120	-0.000	52782	8.4	8.0	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	485432	-3.6
Hexabromobiphenyl	647433	692613	7.0
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334072	-0.8
Hexabromobiphenyl	382032	415206	8.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.271	0.002	9412	52.2	1	7.256	0.001	9864	54.4	
Aroclor-1016	2	7.657	0.007	29769	49.8	2	7.855	0.004	20076	50.6	
Aroclor-1016	3	7.795	0.006	14866	54.1	3	8.055	0.004	8697	53.7	
Aroclor-1016	4	8.409	0.005	8500	48.1	4	8.308	0.003	7052	55.5	
Total CollAve (4 peaks):				51.0	Total Col2Ave (4 peaks):				53.5	RPD = 5	
Corrected Ave (3 peaks):				50.0	Corrected Ave (3 peaks):				52.9	RPD = 6	
CalAmt %D:				2.0	CalAmt %D:				7.1		
Aroclor-1260	1	11.048	0.005	19665	50.6	1	11.655	0.002	15502	51.8	
Aroclor-1260	2	11.364	0.003	20070	50.2	2	11.921	0.003	39201	51.7	
Aroclor-1260	3	11.740	0.006	55534	52.8	3	12.439	0.003	9678	51.2	
Aroclor-1260	4	12.145	0.006	28735	52.9	4	12.506	0.004	25741	52.5	
Aroclor-1260	5	12.246	0.002	12906	54.5	NS	---			----	
Total CollAve (5 peaks):				52.2	Total Col2Ave (4 peaks):				51.8	RPD = 1	
Corrected Ave (4 peaks):				51.6	Corrected Ave (3 peaks):				51.6	RPD = 0	
CalAmt %D:				4.4	CalAmt %D:				3.6		

Total PCB Area Coll (5.909 - 13.792) = 600311 Coll Total PCB = 0.1 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 383666 Col2 Total PCB = 0.1 ppm*

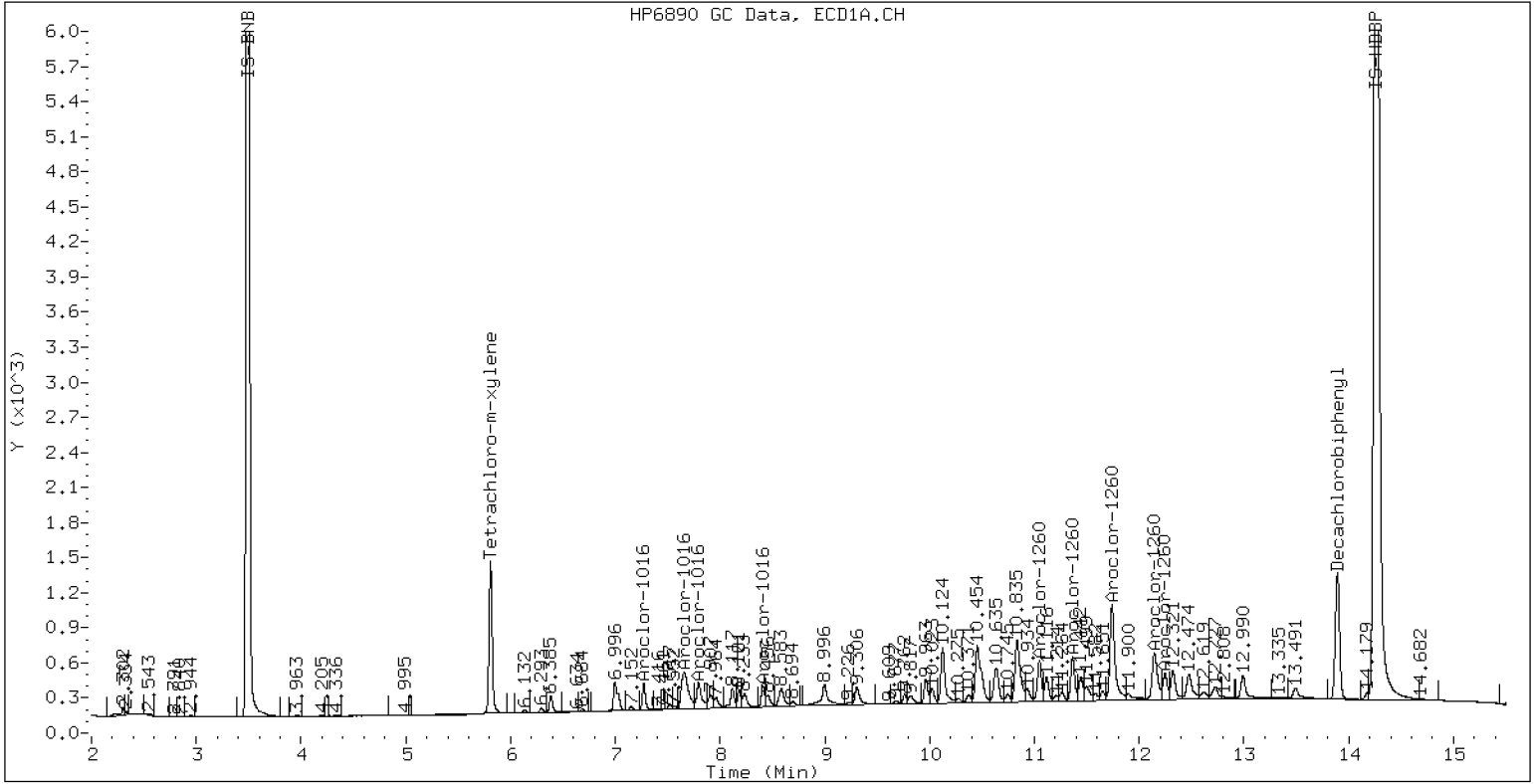
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPM AR1660

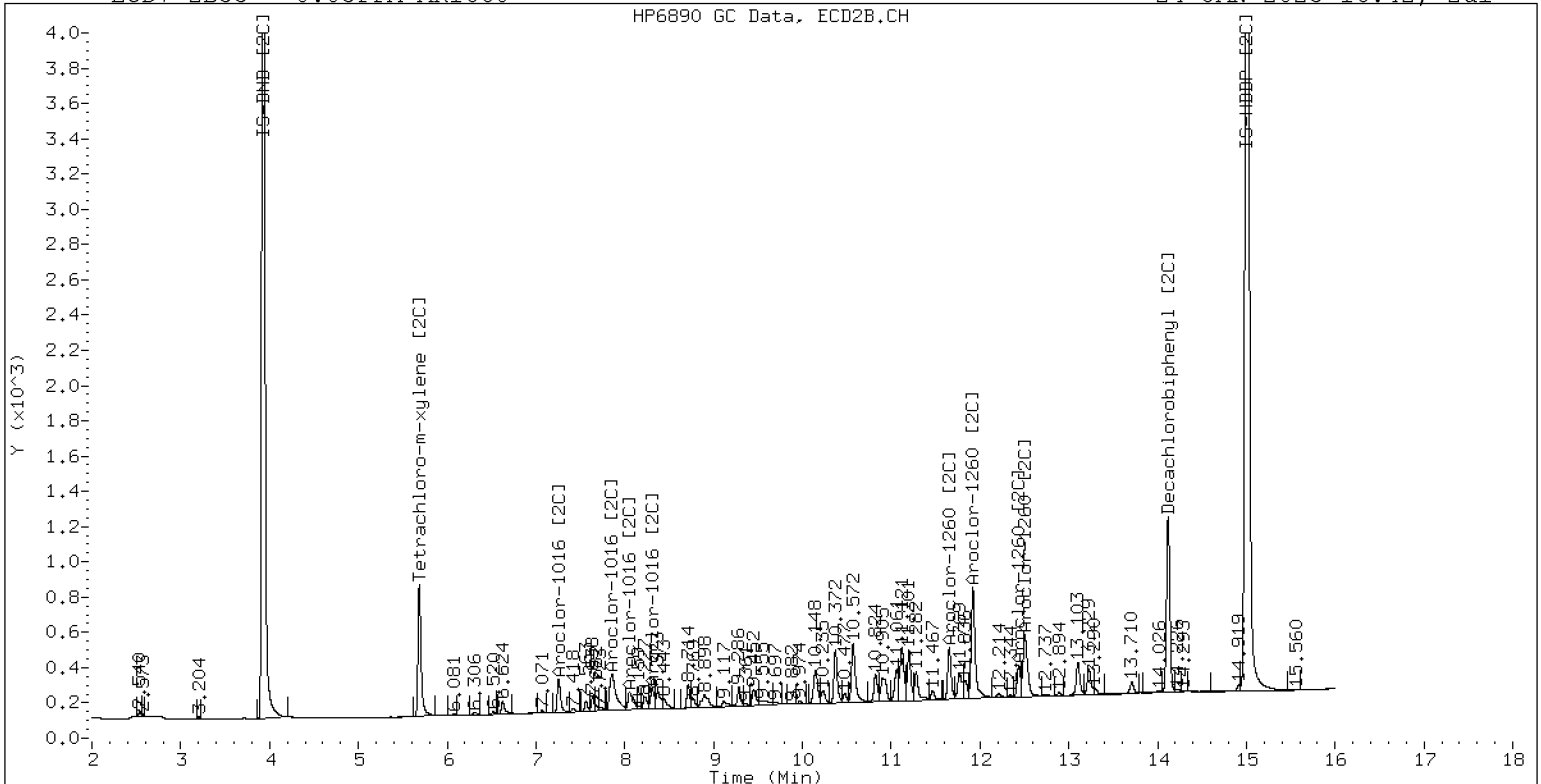
24-JAN-2023 16:42, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPM AR1660

24-JAN-2023 16:42, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242316ECD7.D
Data file 2: /230124.b/230124.b/01242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:03
Report Date: 01/25/2023 11:34
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	1033475	5.685	-0.002	672800	154.9	153.6	0.8	Tetrachloro-m-xylene
13.892	0.000	1125556	14.122	0.002	1078539	148.0	164.3	10.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	472076	-6.2
Hexabromobiphenyl	647433	711071	9.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	323926	-3.9
Hexabromobiphenyl	382032	413585	8.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	155505	886.5	1	7.254	-0.001	153668	874.6
Aroclor-1016	2	7.649	-0.001	552101	949.8	2	7.849	-0.002	369677	960.2
Aroclor-1016	3	7.786	-0.002	223973	837.5	3	8.048	-0.003	152418	970.1
Aroclor-1016	4	8.402	-0.001	169003	982.4	4	8.304	-0.001	110311	895.6
Total CollAve (4 peaks):				914.1		Total Col2Ave (4 peaks):				925.1 RPD = 1
Corrected Ave (3 peaks):				891.3		Corrected Ave (3 peaks):				910.1 RPD = 2

CalAmt %D: -8.6

CalAmt %D: -7.5

Aroclor-1260	1	11.043	-0.001	359074	900.0	1	11.653	-0.001	274365	919.6
Aroclor-1260	2	11.360	-0.000	374067	912.1	2	11.917	-0.000	713881	945.7
Aroclor-1260	3	11.733	-0.001	959026	888.3	3	12.436	-0.000	190968	1015.0
Aroclor-1260	4	12.137	-0.002	521189	934.3	4	12.502	-0.000	465680	953.2
Aroclor-1260	5	12.242	-0.002	217473	894.4	NS	---			----
Total CollAve (5 peaks):				905.8		Total Col2Ave (4 peaks):				958.4 RPD = 6
Corrected Ave (4 peaks):				898.7		Corrected Ave (3 peaks):				939.5 RPD = 4

CalAmt %D: -9.4

CalAmt %D: -4.2

Total PCB Area Coll (5.909 - 13.792) = 10234908 Coll Total PCB = 1.9 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 6685547 Col2 Total PCB = 2.0 ppm*

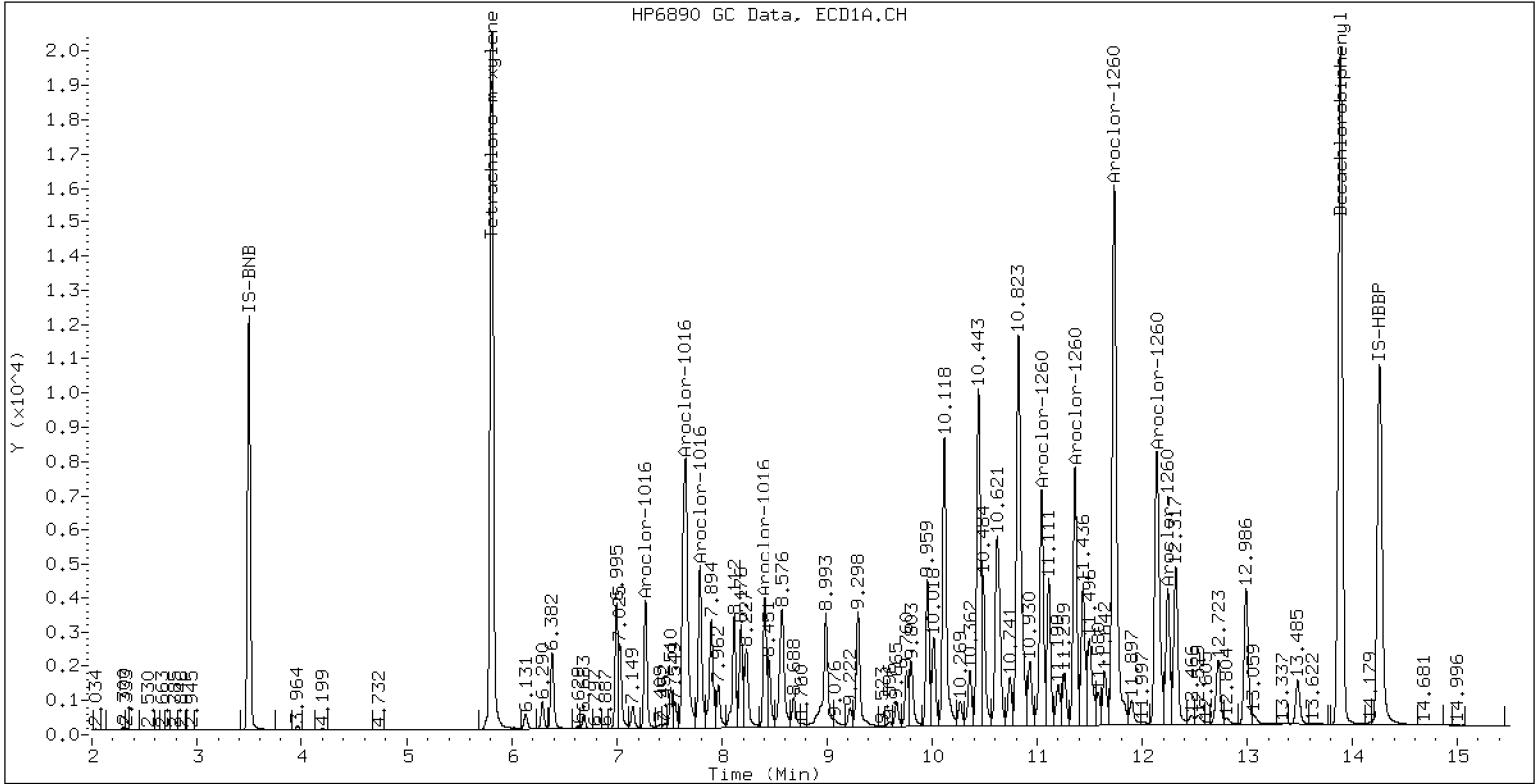
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPM AR1660

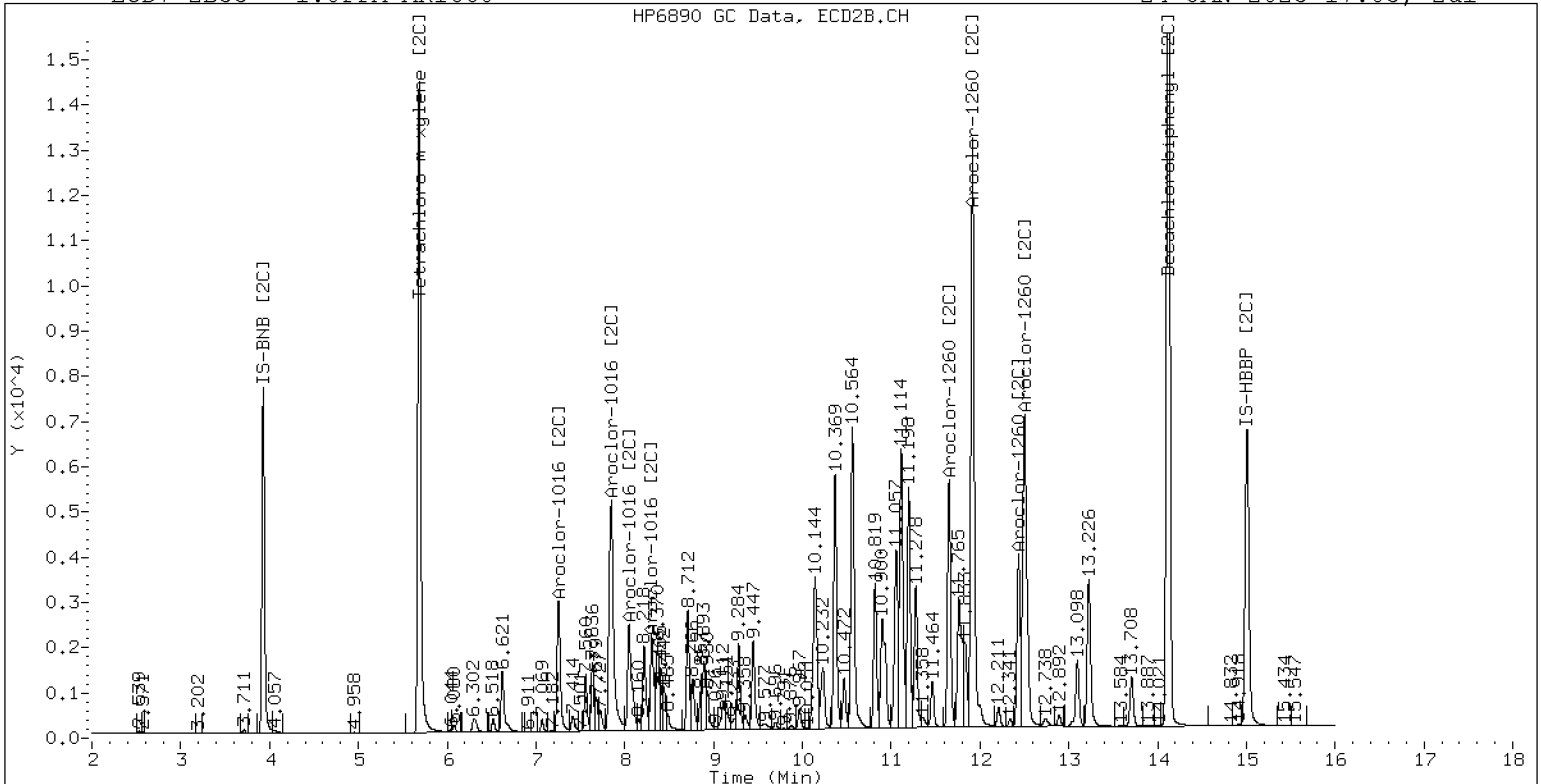
24-JAN-2023 17:03, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPM AR1660

24-JAN-2023 17:03, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242317ECD7.D
Data file 2: /230124.b/230124.b/01242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:24
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.808	-0.001	117058	5.686	-0.001	76340	17.3	17.1	1.2	Tetrachloro-m-xylene
13.892	0.000	140818	14.119	-0.001	113773	17.4	16.5	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	479756	-4.7
Hexabromobiphenyl	647433	756424	16.8

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	330987	-1.8
Hexabromobiphenyl	382032	433619	13.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	19848	111.3	1	7.255	0.000	19353	107.8
Aroclor-1016	2	7.656	0.005	63555	107.6	2	7.853	0.002	43099	109.6
Aroclor-1016	3	7.793	0.004	30749	113.1	3	8.053	0.003	18527	115.4
Aroclor-1016	4	8.406	0.003	18961	108.5	4	8.307	0.002	14145	112.4
Total CollAve (4 peaks):				110.1		Total Col2Ave (4 peaks):				111.3 RPD = 1
Corrected Ave (3 peaks):				109.1		Corrected Ave (3 peaks):				109.9 RPD = 1

CalAmt %D: 10.1 CalAmt %D: 11.3

Aroclor-1260	1	11.046	0.002	41864	98.6	1	11.655	0.001	32043	102.4
Aroclor-1260	2	11.362	0.001	42073	96.4	2	11.920	0.002	82285	104.0
Aroclor-1260	3	11.739	0.004	111005	96.7	3	12.437	0.001	19416	98.4
Aroclor-1260	4	12.144	0.004	56707	95.6	4	12.504	0.002	53558	104.6
Aroclor-1260	5	12.245	0.001	24958	96.5	NS	---			----
Total CollAve (5 peaks):				96.8		Total Col2Ave (4 peaks):				102.3 RPD = 6
Corrected Ave (4 peaks):				96.3		Corrected Ave (3 peaks):				101.6 RPD = 5

CalAmt %D: -3.2 CalAmt %D: 2.3

Total PCB Area Coll (5.909 - 13.792) = 1238855 Coll Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 777713 Col2 Total PCB = 0.2 ppm*

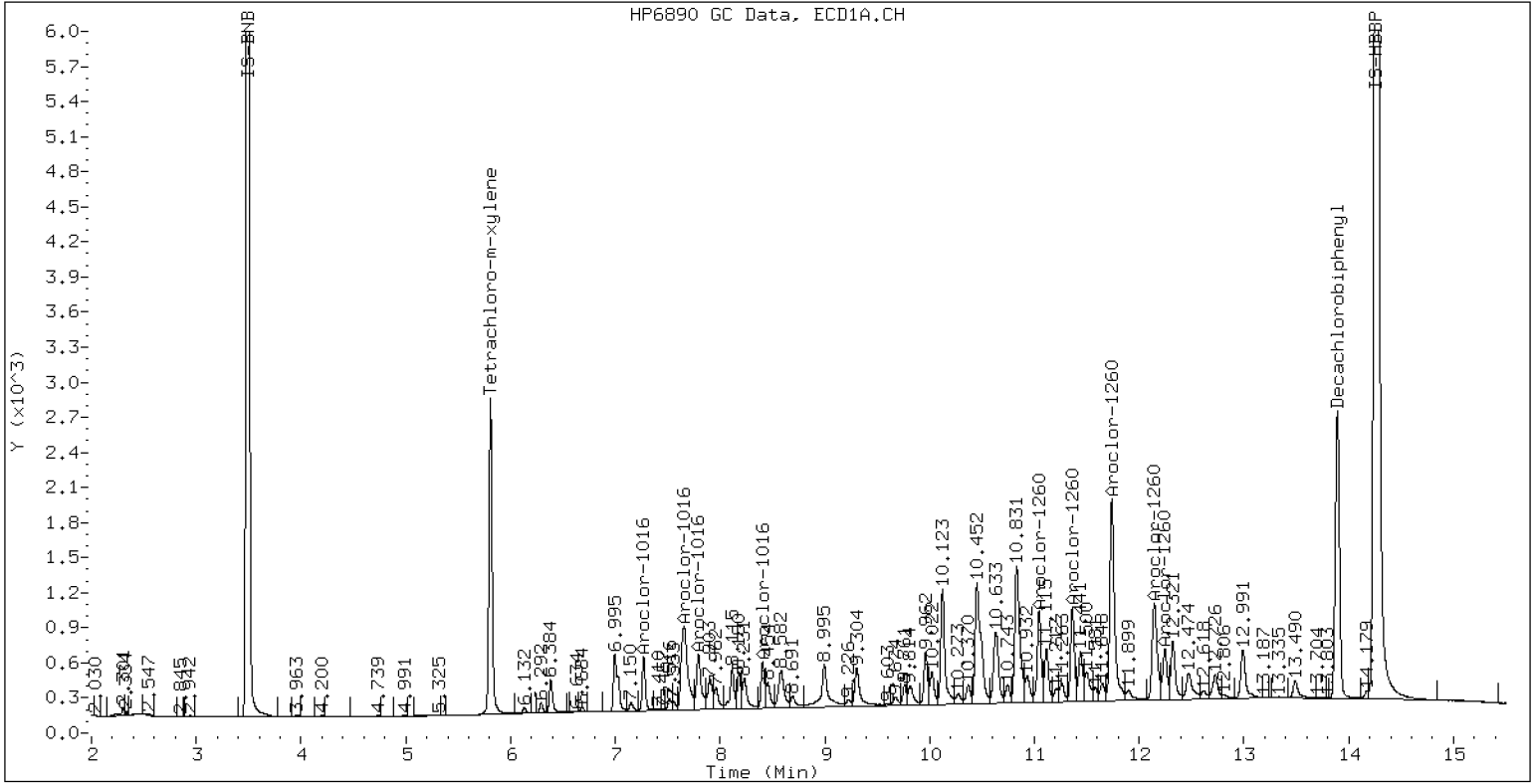
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPM AR1660

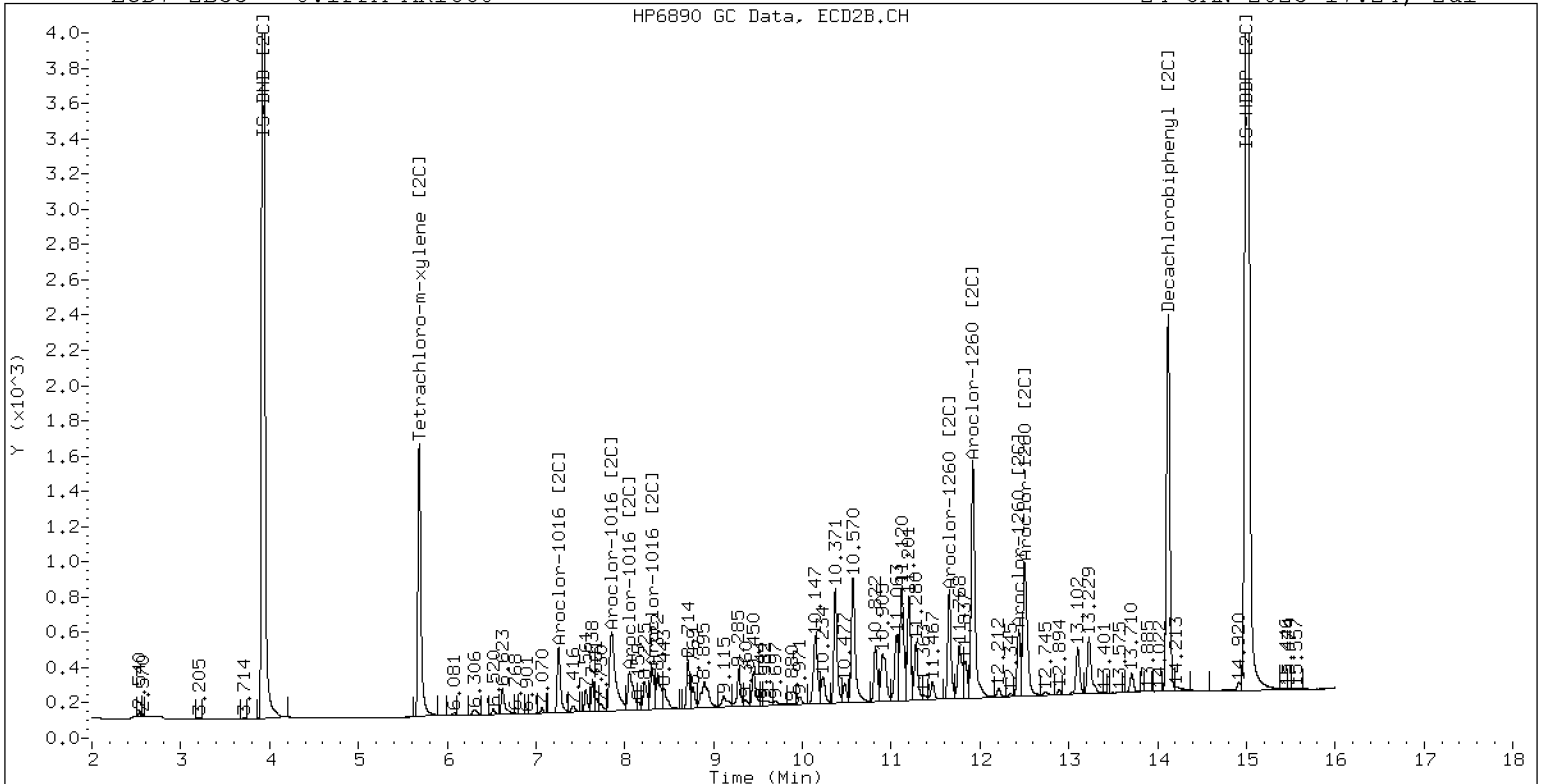
24-JAN-2023 17:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPM AR1660

24-JAN-2023 17:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242318ECD7.D
Data file 2: /230124.b/230124.b/01242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:45
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	534053	5.686	-0.000	348900	79.1	77.8	1.6	Tetrachloro-m-xylene
13.891	-0.001	614978	14.120	0.000	552784	74.4	77.5	4.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	477720	-5.1
Hexabromobiphenyl	647433	772816	19.4

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331694	-1.5
Hexabromobiphenyl	382032	449559	17.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.270	0.000	84322	475.0	1	7.254	-0.000	84986	472.4	
Aroclor-1016	2	7.650	0.000	294429	500.6	2	7.850	-0.001	198065	502.4	
Aroclor-1016	3	7.789	0.000	122151	451.4	3	8.050	-0.000	81378	505.8	
Aroclor-1016	4	8.404	0.000	87760	504.1	4	8.305	-0.000	59656	473.0	
Total CollAve (4 peaks):				482.8		Total Col2Ave (4 peaks):				488.4	RPD = 1
Corrected Ave (3 peaks):				475.6		Corrected Ave (3 peaks):				482.6	RPD = 1

CalAmt %D: -3.4

CalAmt %D: -2.3

Aroclor-1260	1	11.044	0.000	193843	447.0	1	11.653	-0.000	146980	453.2	
Aroclor-1260	2	11.361	0.000	198052	444.3	2	11.917	-0.001	376388	458.7	
Aroclor-1260	3	11.734	0.000	505614	430.9	3	12.436	-0.000	98369	481.0	
Aroclor-1260	4	12.139	0.000	264950	437.0	4	12.501	-0.001	252455	475.4	
Aroclor-1260	5	12.244	0.000	112421	425.4	NS	---			----	
Total CollAve (5 peaks):				436.9		Total Col2Ave (4 peaks):				467.1	RPD = 7
Corrected Ave (4 peaks):				434.4		Corrected Ave (3 peaks):				462.4	RPD = 6

CalAmt %D: -12.6

CalAmt %D: -6.6

Total PCB Area Coll (5.909 - 13.792) = 5412241 Coll Total PCB = 1.0 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 3551064 Col2 Total PCB = 1.0 ppm*

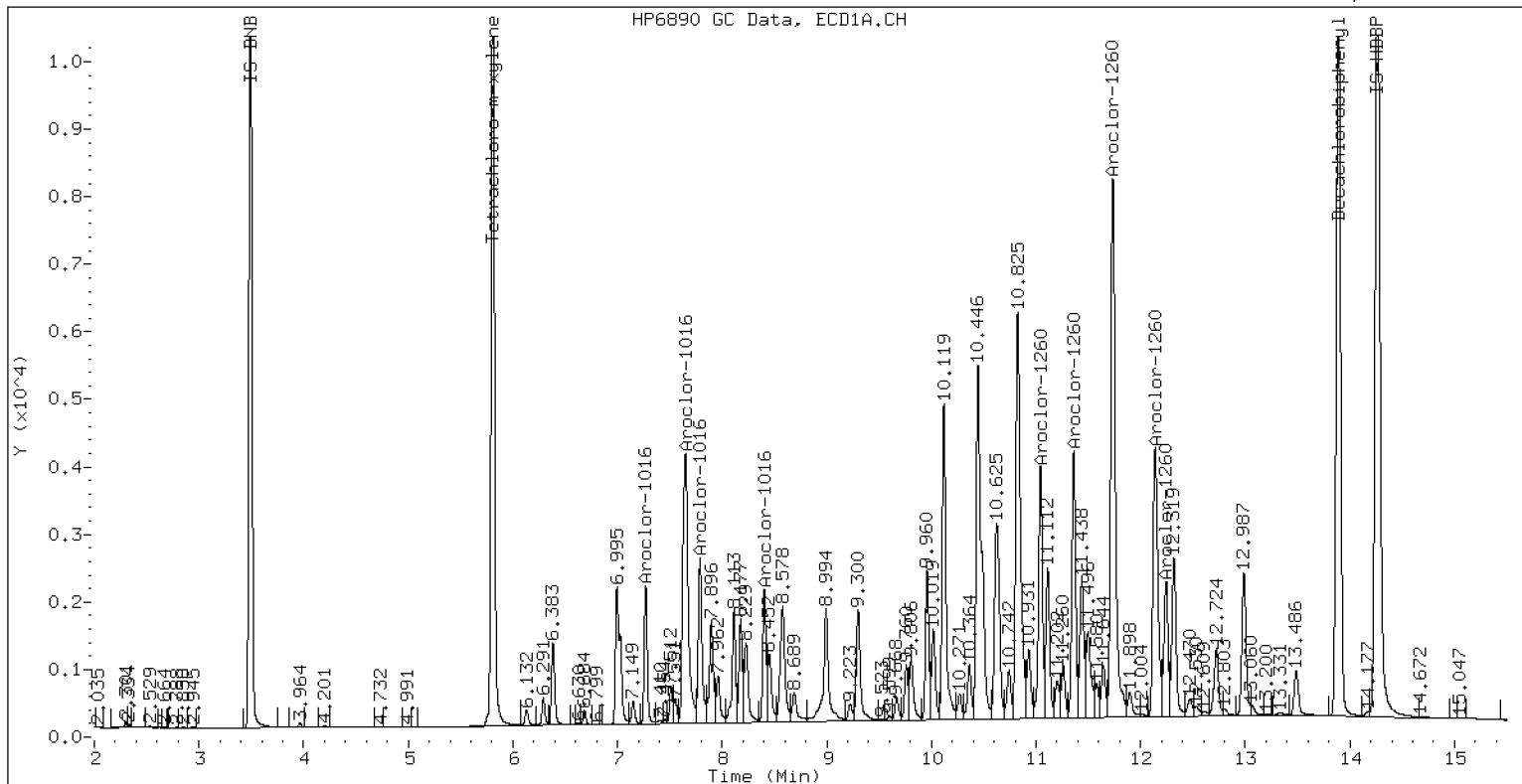
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPM AR1660

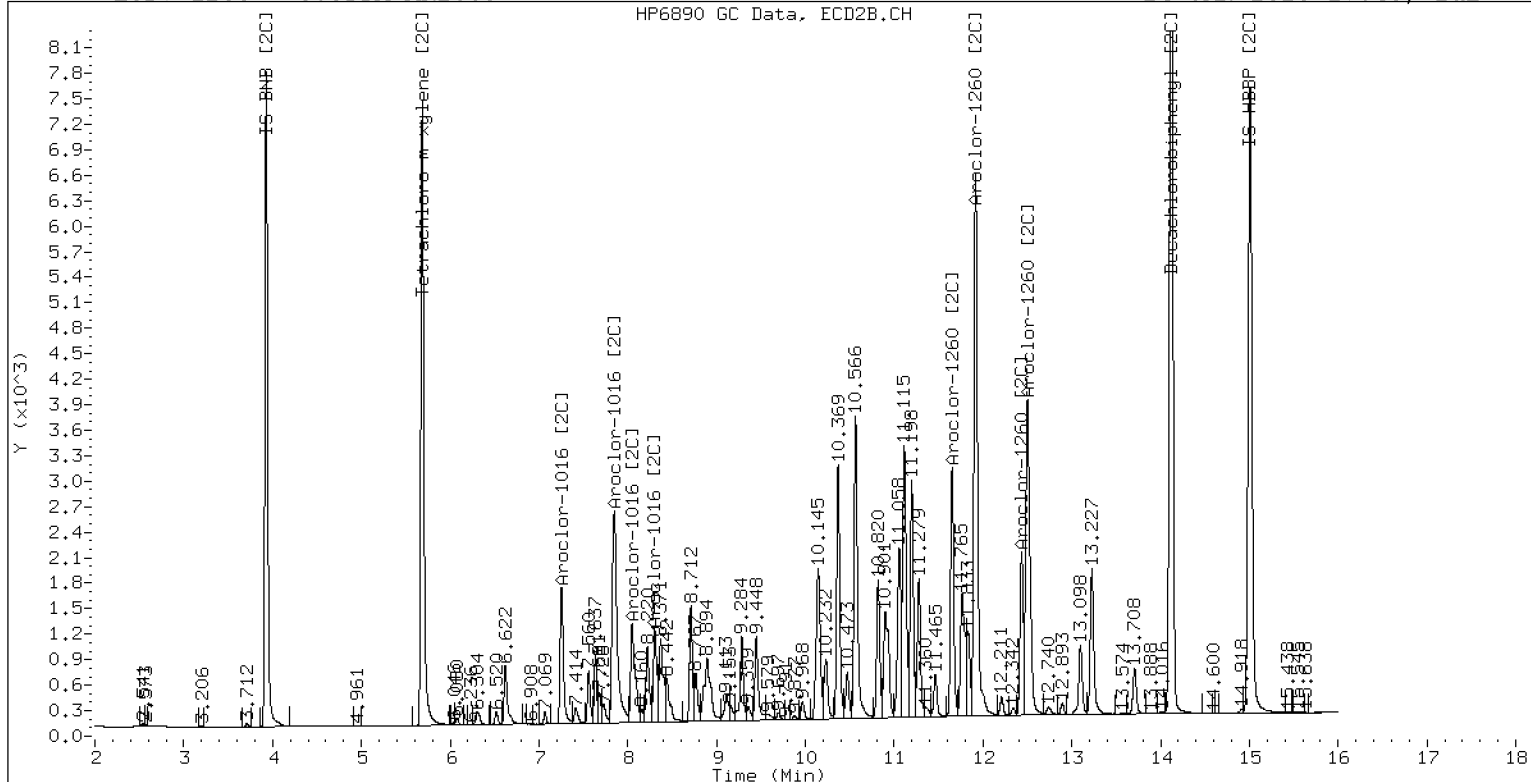
24-JAN-2023 17:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPM AR1660

24-JAN-2023 17:45, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242319ECD7.D
Data file 2: /230124.b/230124.b/01242319ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1242
Client ID:
Injection Date: 24-JAN-2023 18:06
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	-0.000	317773	5.686	-0.000	205627	47.7	46.6	2.2	Tetrachloro-m-xylene
13.892	-0.000	322814	14.121	0.001	269935	36.0	36.5	1.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	471690	-6.3
Hexabromobiphenyl	647433	839322	29.6

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	326260	-3.2
Hexabromobiphenyl	382032	466396	22.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col ZB35 Col

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1242	1	7.271	0.000	36109	250.0	1	7.256	0.000	35672	250.0	
Aroclor-1242	2	7.655	0.000	118172	250.0	2	7.853	0.000	79233	250.0	
Aroclor-1242	3	8.407	0.000	35110	250.0	3	9.160	0.000	24814	250.0	
Aroclor-1242	4	8.581	0.000	53037	250.0	4	9.587	0.000	32887	250.0	
Total Col1Ave (4 peaks):				250.0	Total Col2Ave (4 peaks):				250.0	RPD = 0	
Corrected Ave (3 peaks):				250.0	Corrected Ave (3 peaks):				250.0	RPD = 0	

Total PCB Area Col1 (5.909 - 13.792) = 930958 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 567613 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242320ECD7.D
Data file 2: /230124.b/230124.b/01242320ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1248
Client ID:
Injection Date: 24-JAN-2023 18:27
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	266561	5.686	-0.001	171841	38.5	38.0	1.3	Tetrachloro-m-xylene
13.892	0.001	334524	14.120	0.000	281569	36.6	37.7	3.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	489828	-2.7
Hexabromobiphenyl	647433	855612	32.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334539	-0.7
Hexabromobiphenyl	382032	470415	23.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.406	0.000	61259	250.0	1	8.305	0.000	37805	250.0
Aroclor-1248	2	8.580	0.000	78143	250.0	2	8.712	0.000	40692	250.0
Aroclor-1248	3	8.999	0.000	149476	250.0	3	9.156	0.000	49723	250.0
Aroclor-1248	4	9.294	0.000	73986	250.0	4	9.582	0.000	61494	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Coll (5.909 - 13.792) = 1237662 Coll Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 773955 Col2 Total PCB = 0.2 ppm*

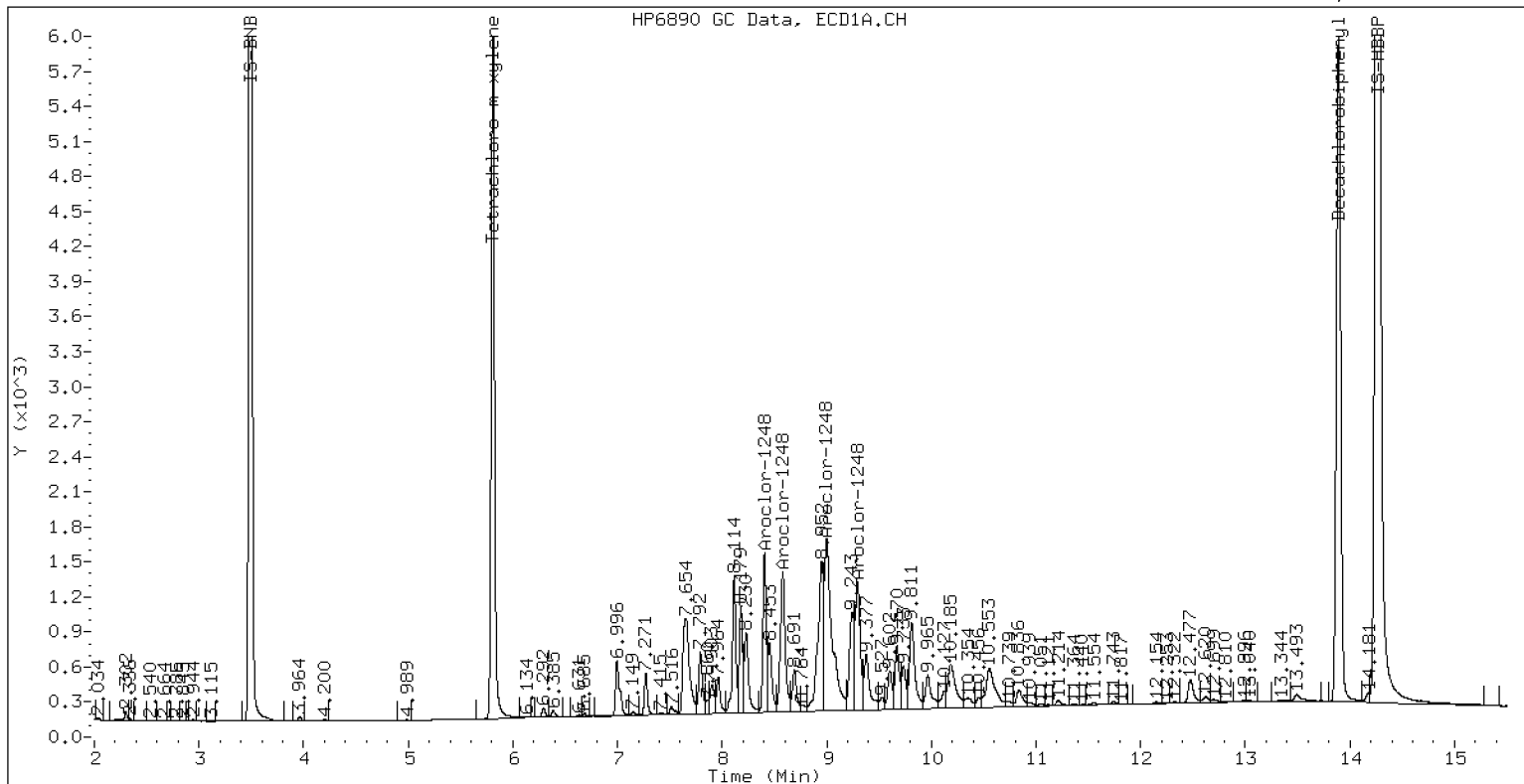
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1248

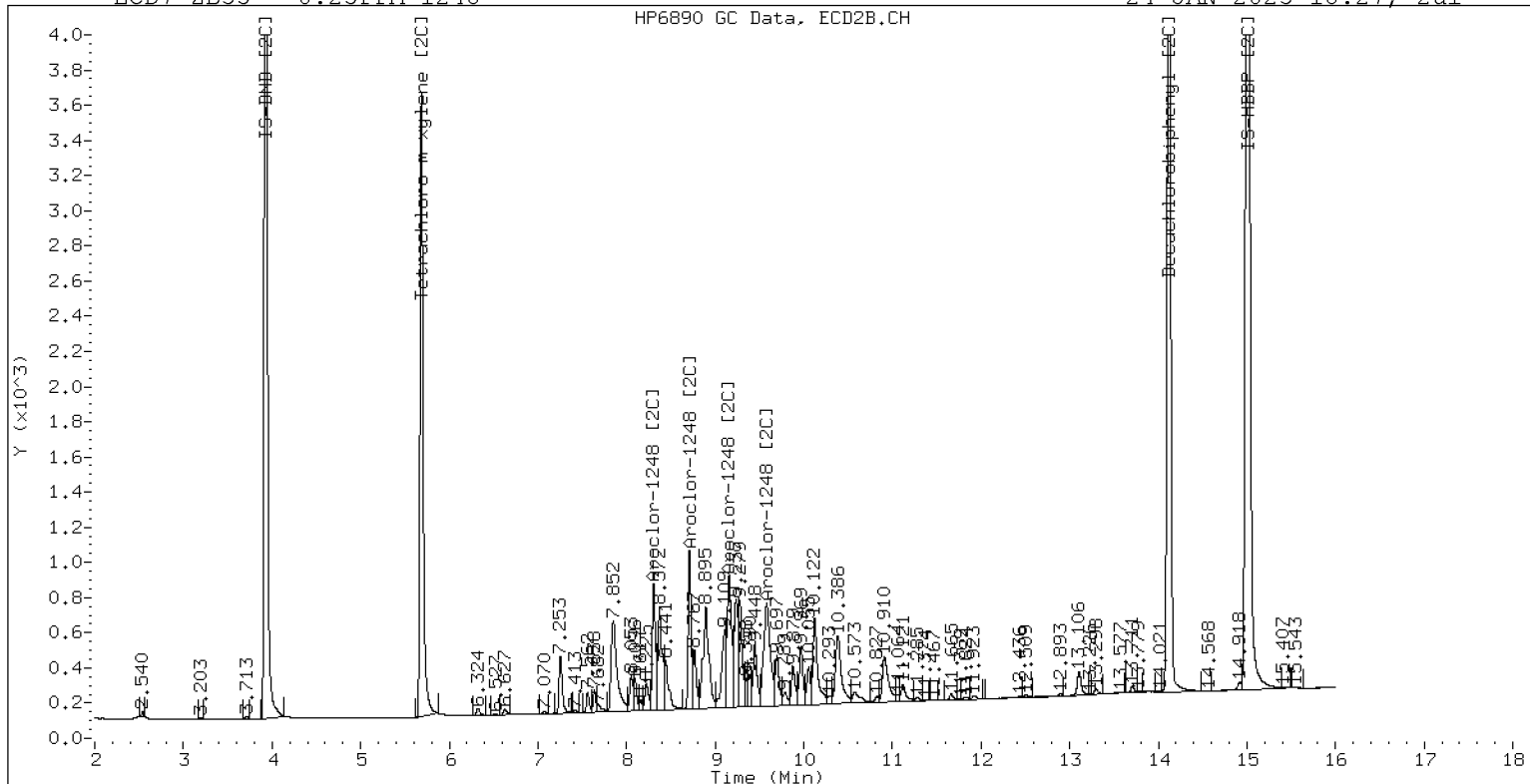
24-JAN-2023 18:27, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1248

24-JAN-2023 18:27, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242321ECD7.D
 Data file 2: /230124.b/230124.b/01242321ECD7.D
 Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
 Compound Sublist: AR1254.sub
 Instrument, Inj. Vol.: ecd7.i, 2ul
 Quant Method: Internal Std

ARI ID: 0.25PPM 1254
 Client ID:
 Injection Date: 24-JAN-2023 18:48
 Report Date: 01/25/2023 10:53
 Matrix: NONE
 Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col		ZB5	ZB35	RPD	Compound/Flag		
RT	Shift Response	RT	Shift Response	on col	on col				
5.808	-0.001	258819	5.684	-0.002	171764	37.7	38.1	1.1	Tetrachloro-m-xylene
13.893	0.001	343162	14.119	-0.001	283996	36.8	37.9	2.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	486231	-3.4
Hexabromobiphenyl	647433	871523	34.6

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	333658	-1.0
Hexabromobiphenyl	382032	471925	23.5

* Standard Areas taken from Initial Cal Level 3
 Initial Calibration Date: 24-JAN-2023
 <- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1254	1	9.299	0.000	123887	250.0	1	9.448	0.000	60516	250.0	
Aroclor-1254	2	9.378	0.000	52896	250.0	2	9.969	0.000	48914	250.0	
Aroclor-1254	3	9.669	0.000	79378	250.0	3	10.121	0.000	106698	250.0	
Aroclor-1254	4	9.808	0.000	155542	250.0	4	10.372	0.000	106700	250.0	
Aroclor-1254	5	10.177	0.000	101144	250.0	5	10.569	0.000	59429	250.0	
Total CollAve (5 peaks):				250.0		Total Col2Ave (5 peaks):				250.0	RPD = 0
Corrected Ave (4 peaks):				250.0		Corrected Ave (4 peaks):				250.0	RPD = 0

Total PCB Area Coll (5.909 - 13.792) = 1659821 Coll Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1016659 Col2 Total PCB = 0.3 ppm*

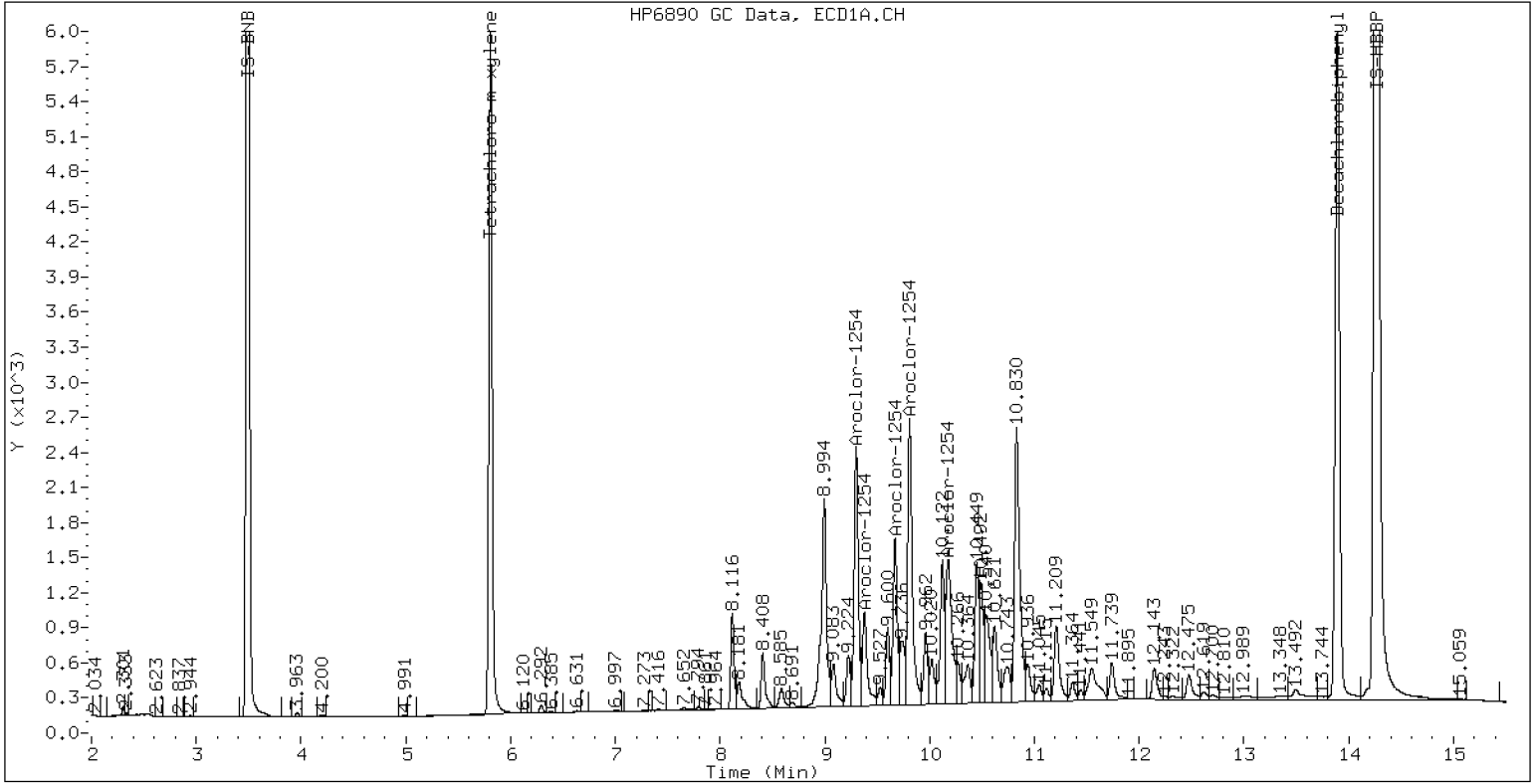
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1254

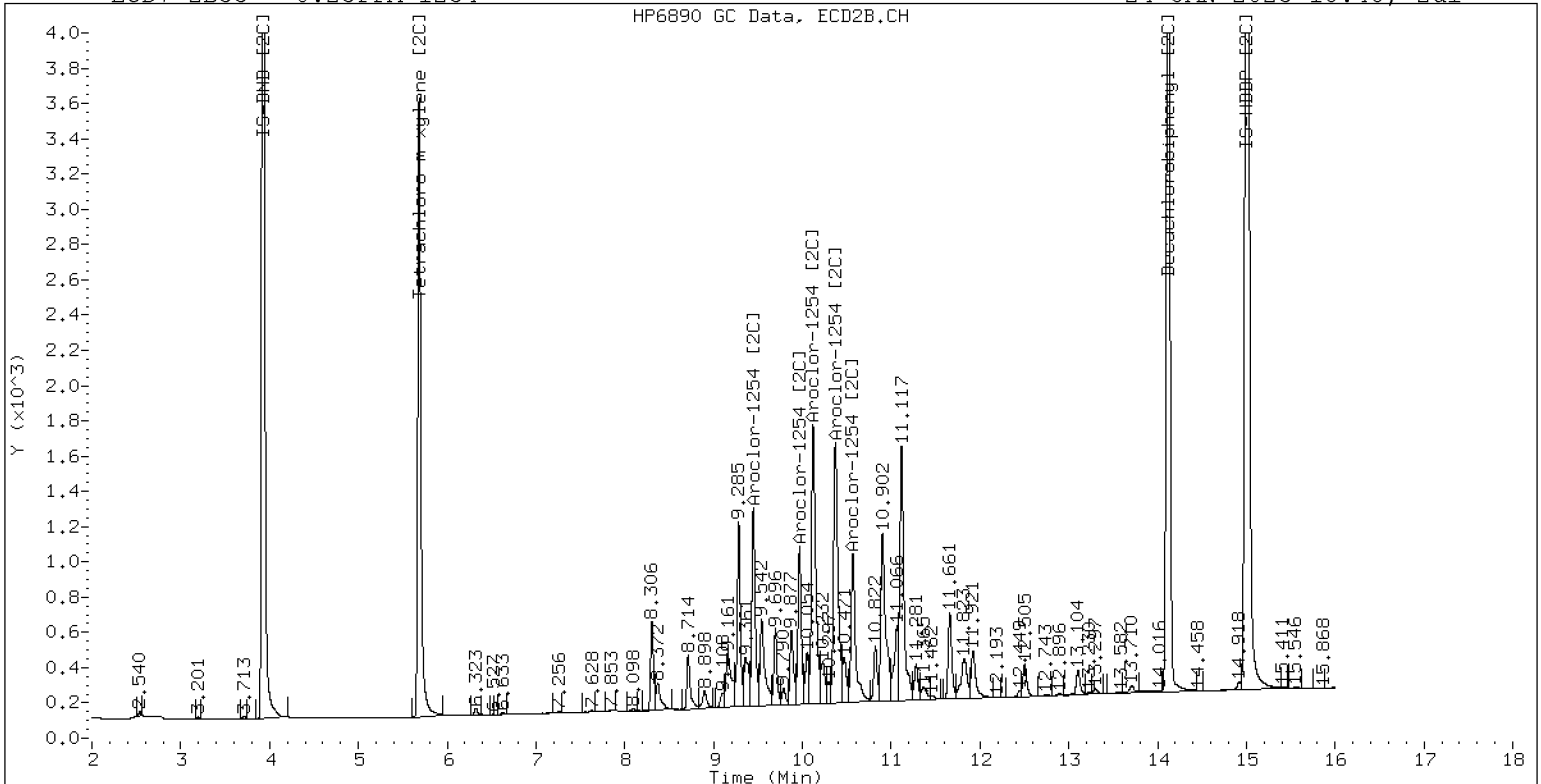
24-JAN-2023 18:48, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1254

24-JAN-2023 18:48, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242322ECD7.D
Data file 2: /230124.b/230124.b/01242322ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 2162
Client ID:
Injection Date: 24-JAN-2023 19:09
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	272296	5.686	-0.001	173237	39.1	38.6	1.3	Tetrachloro-m-xylene
13.893	0.001	347331	14.120	-0.000	282892	36.8	37.2	1.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	492470	-2.2
Hexabromobiphenyl	647433	883652	36.5

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331807	-1.5
Hexabromobiphenyl	382032	479356	25.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1221	1	4.733	0.000	9100	250.0	1	4.959	0.000	6081	250.0	
Aroclor-1221	2	6.134	0.000	18608	250.0	2	6.298	0.000	13325	250.0	
Aroclor-1221	3	6.384	0.000	43198	250.0	3	6.623	0.000	22491	250.0	
Total CollAve (3 peaks):				250.0	Total Col2Ave (3 peaks):				250.0	RPD = 0	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						

Aroclor-1262	1	10.832	0.000	89339	250.0	1	11.200	0.000	117288	250.0	
Aroclor-1262	2	12.246	0.000	141007	250.0	2	11.653	0.000	99740	250.0	
Aroclor-1262	3	12.321	0.000	153089	250.0	3	12.434	0.000	106212	250.0	
Aroclor-1262	4	12.989	0.000	139497	250.0	4	12.504	0.000	170096	250.0	
Total CollAve (4 peaks):				250.0	Total Col2Ave (4 peaks):				250.0	RPD = 0	
Corrected Ave (3 peaks):				250.0	Corrected Ave (3 peaks):				250.0	RPD = 0	

Total PCB Area Coll (5.909 - 13.792) = 2446612 Coll Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1558387 Col2 Total PCB = 0.4 ppm*

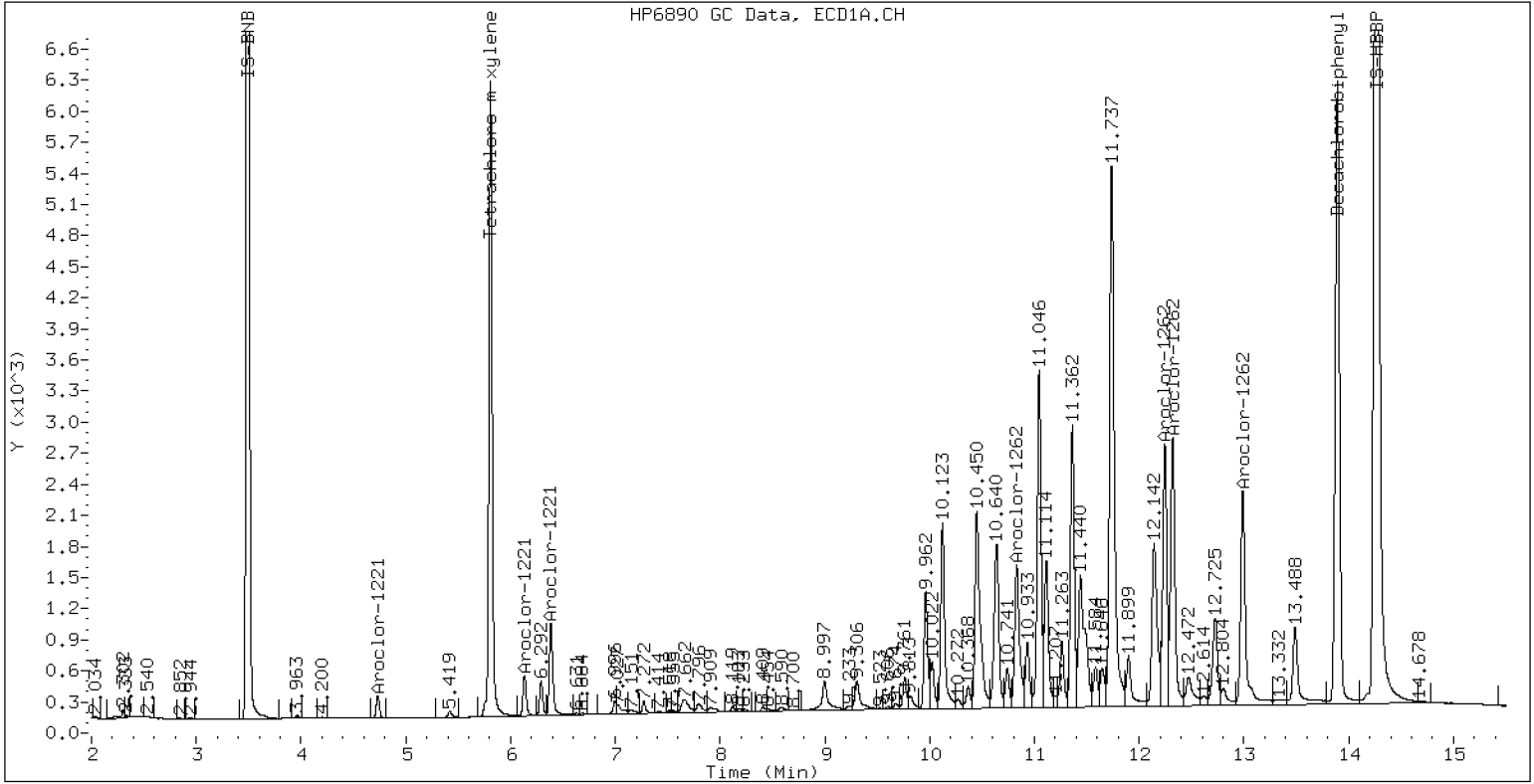
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 2162

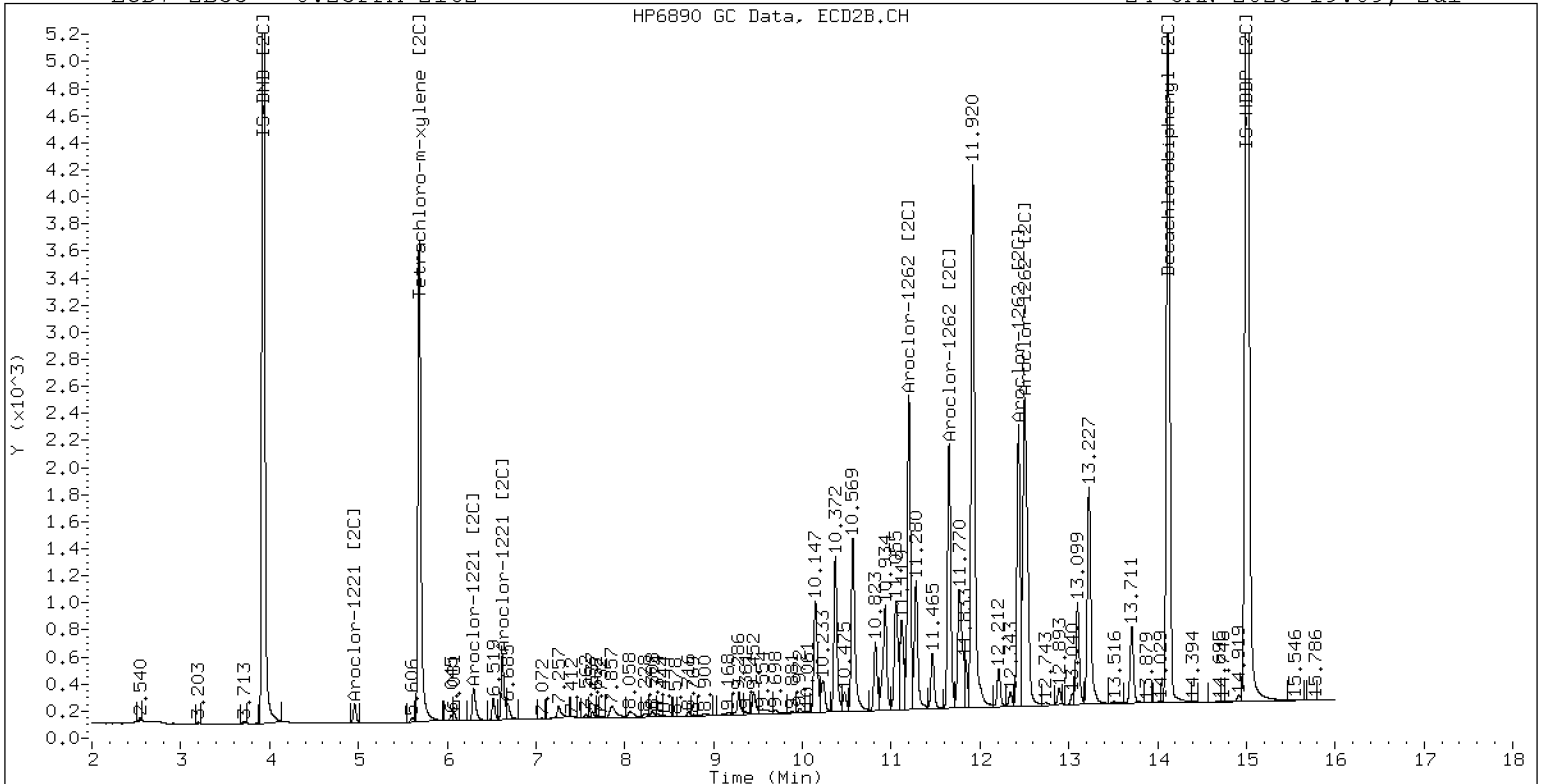
24-JAN-2023 19:09, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 2162

24-JAN-2023 19:09, 2u1



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242323ECD7.D
Data file 2: /230124.b/230124.b/01242323ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 3268
Client ID:
Injection Date: 24-JAN-2023 19:30
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	277108	5.687	0.000	177359	39.7	39.1	1.5	Tetrachloro-m-xylene
13.892	0.000	525503	14.120	0.000	438987	53.8	57.7	7.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	493427	-2.0
Hexabromobiphenyl	647433	913614	41.1

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	335121	-0.5
Hexabromobiphenyl	382032	479458	25.5

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-JAN-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.733	0.000	5692	250.0	1	4.960	0.000	3725	250.0
Aroclor-1232	2	6.133	0.000	12828	250.0	2	7.257	0.000	20847	250.0
Aroclor-1232	3	7.658	0.000	64153	250.0	3	7.854	0.000	42459	250.0
Aroclor-1232	4	8.584	0.000	27460	250.0	4	8.714	0.000	11797	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.245	0.000	377314	250.0	1	12.434	0.000	279910	250.0
Aroclor-1268	2	12.318	0.000	376282	250.0	2	12.501	0.000	297867	250.0
Aroclor-1268	3	12.699	0.000	311753	250.0	3	12.893	0.000	247943	250.0
Aroclor-1268	4	13.489	0.000	924293	250.0	4	13.709	0.000	765898	250.0
Total CollAve (4 peaks):				250.0		Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):				250.0		Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 3136879 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2269104 Col2 Total PCB = 0.6 ppm*

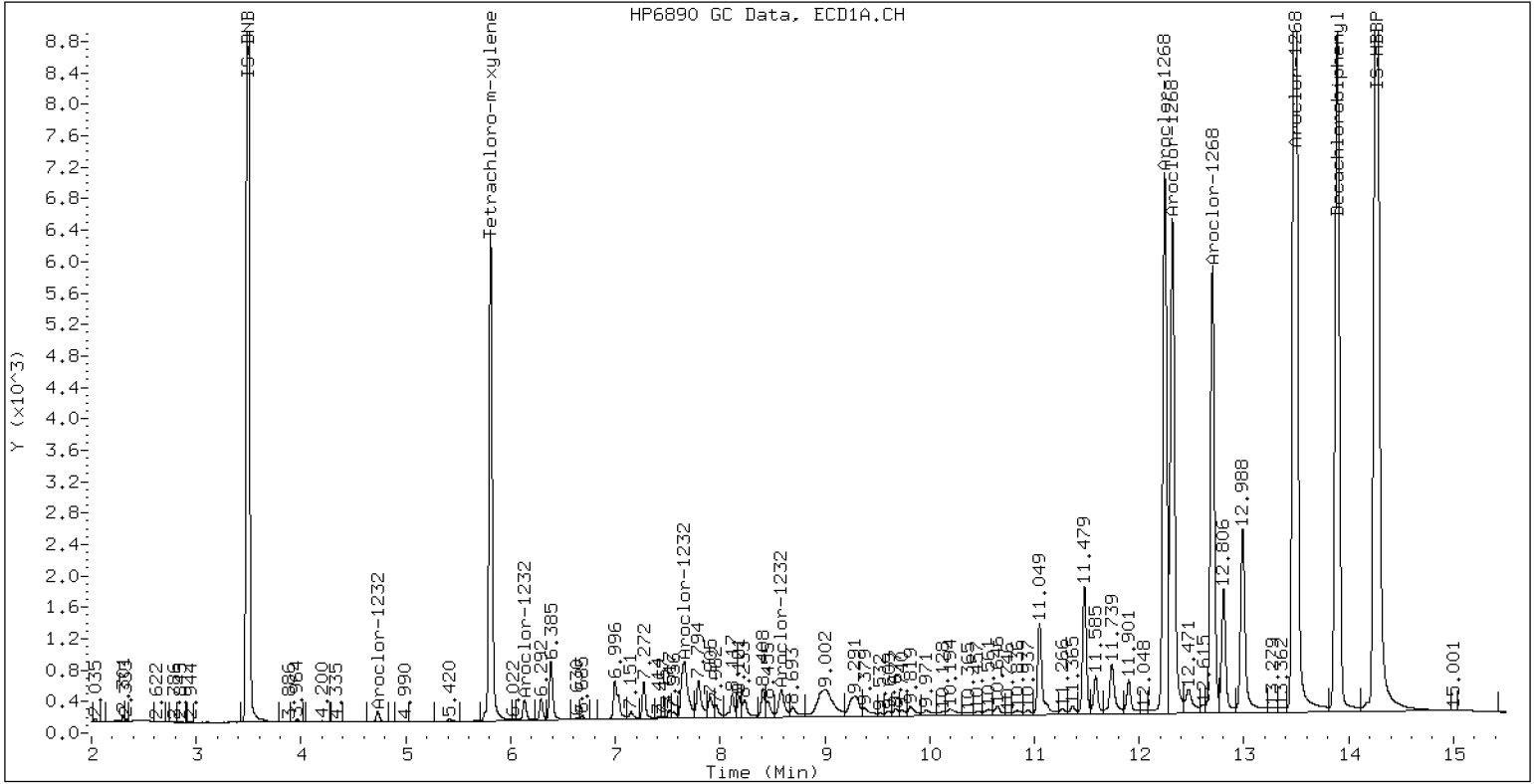
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 3268

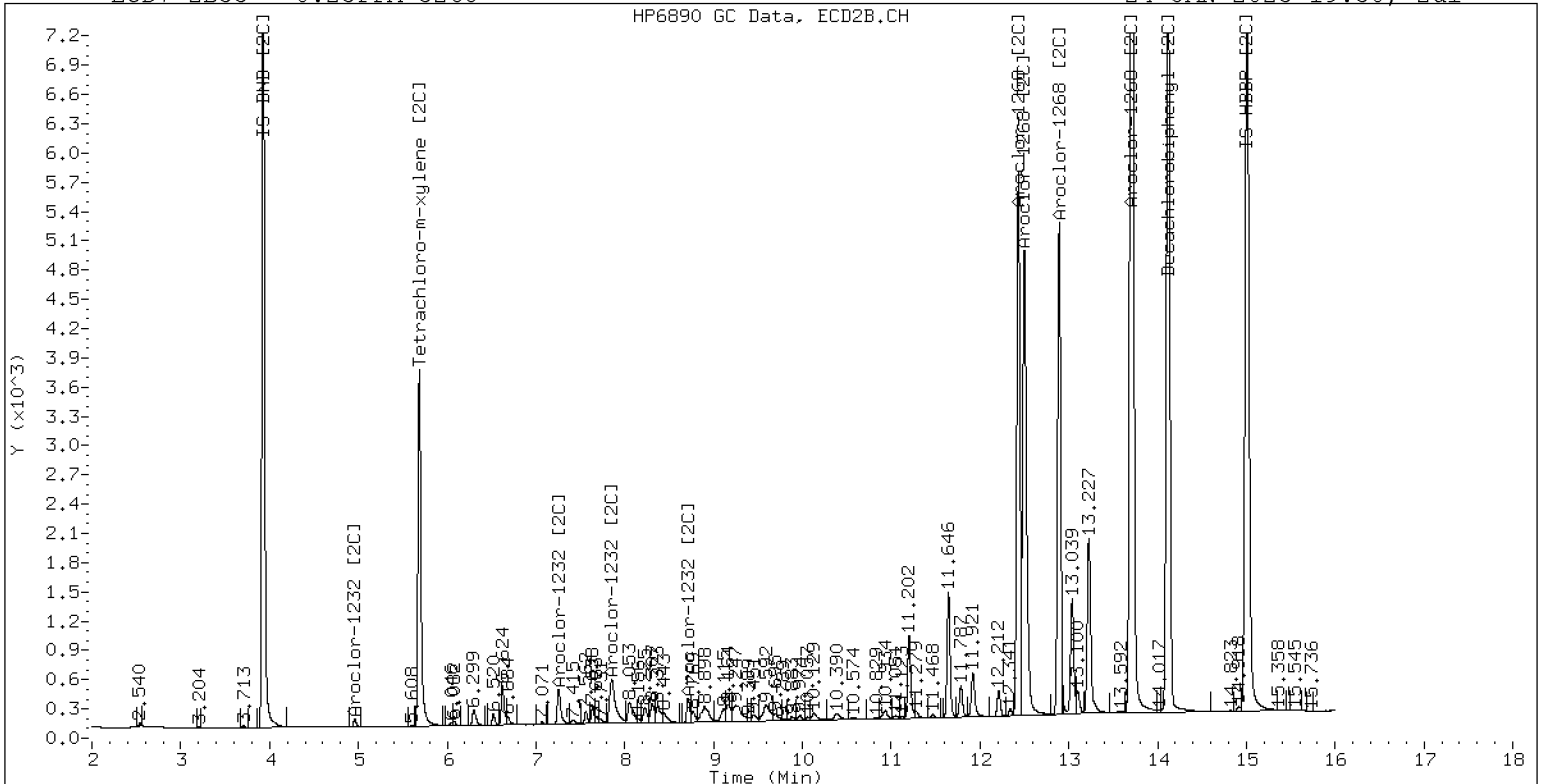
24-JAN-2023 19:30, 2u1



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 3268

24-JAN-2023 19:30, 2u1

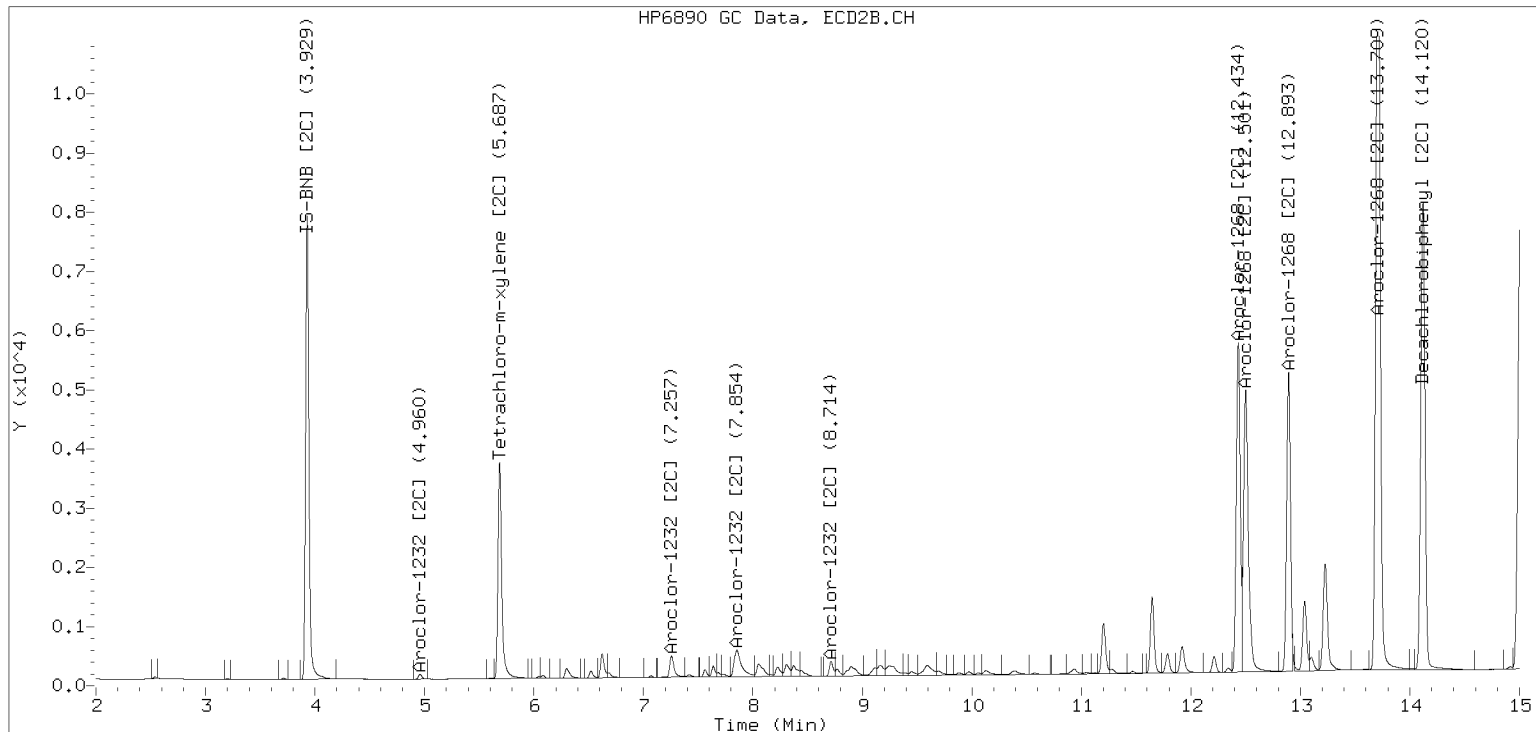


ZB-35 Manual Integration: YES

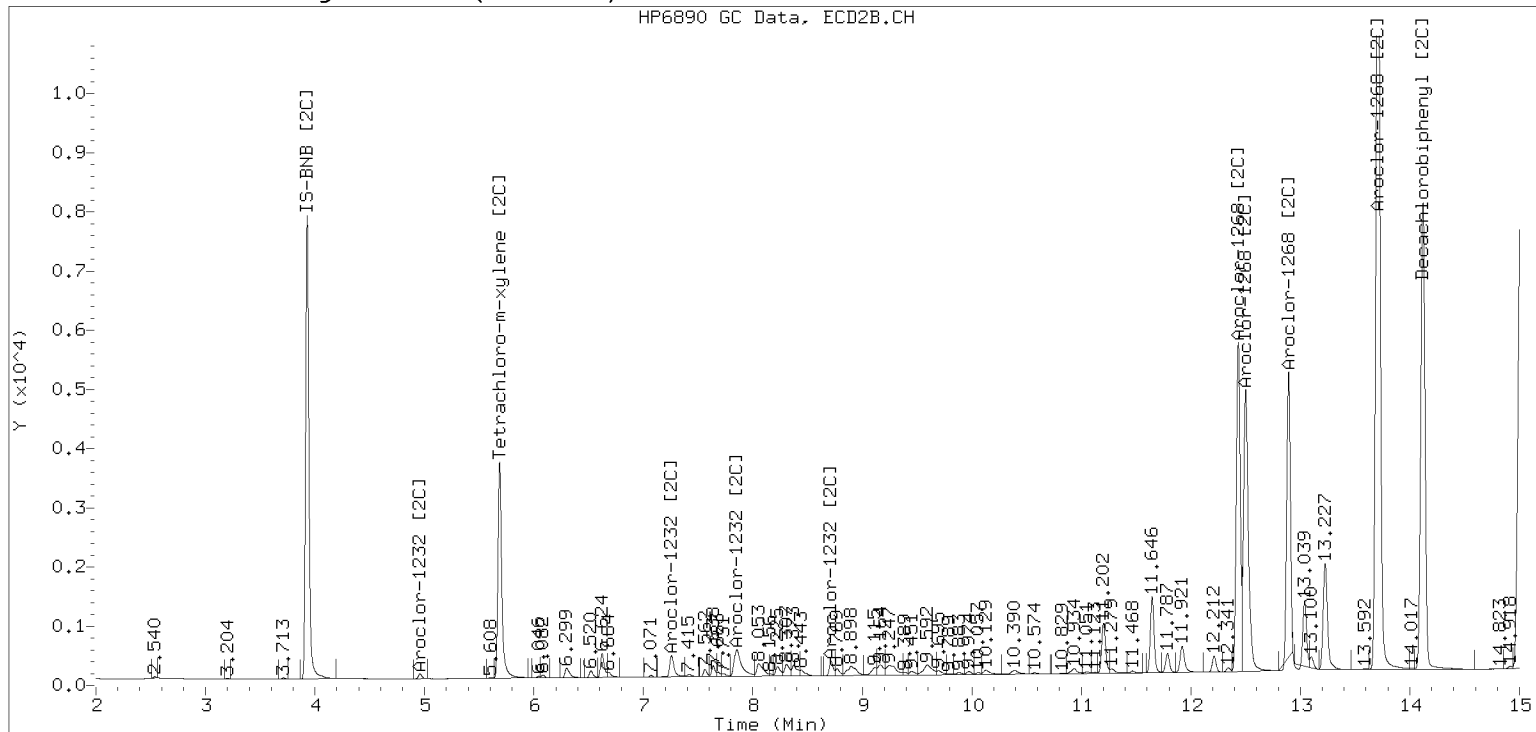
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230124.b/230124.b/01242323ECD7.D Injection Date: 24-JAN-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total CollAve (4 peaks):				216.9		Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):				216.3		Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total CollAve (3 peaks):				74.4		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total CollAve (4 peaks):				279.8		Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):				202.0		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total CollAve (4 peaks):				262.0		Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):				260.1		Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total CollAve (4 peaks):				137.3		Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):				124.4		Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total CollAve (4 peaks):				97.4		Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):				35.3		Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total CollAve (5 peaks):				210.7		Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):				208.2		Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total CollAve (4 peaks):				205.3		Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):				124.9		Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total CollAve (4 peaks):				32.1		Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):				24.7		Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

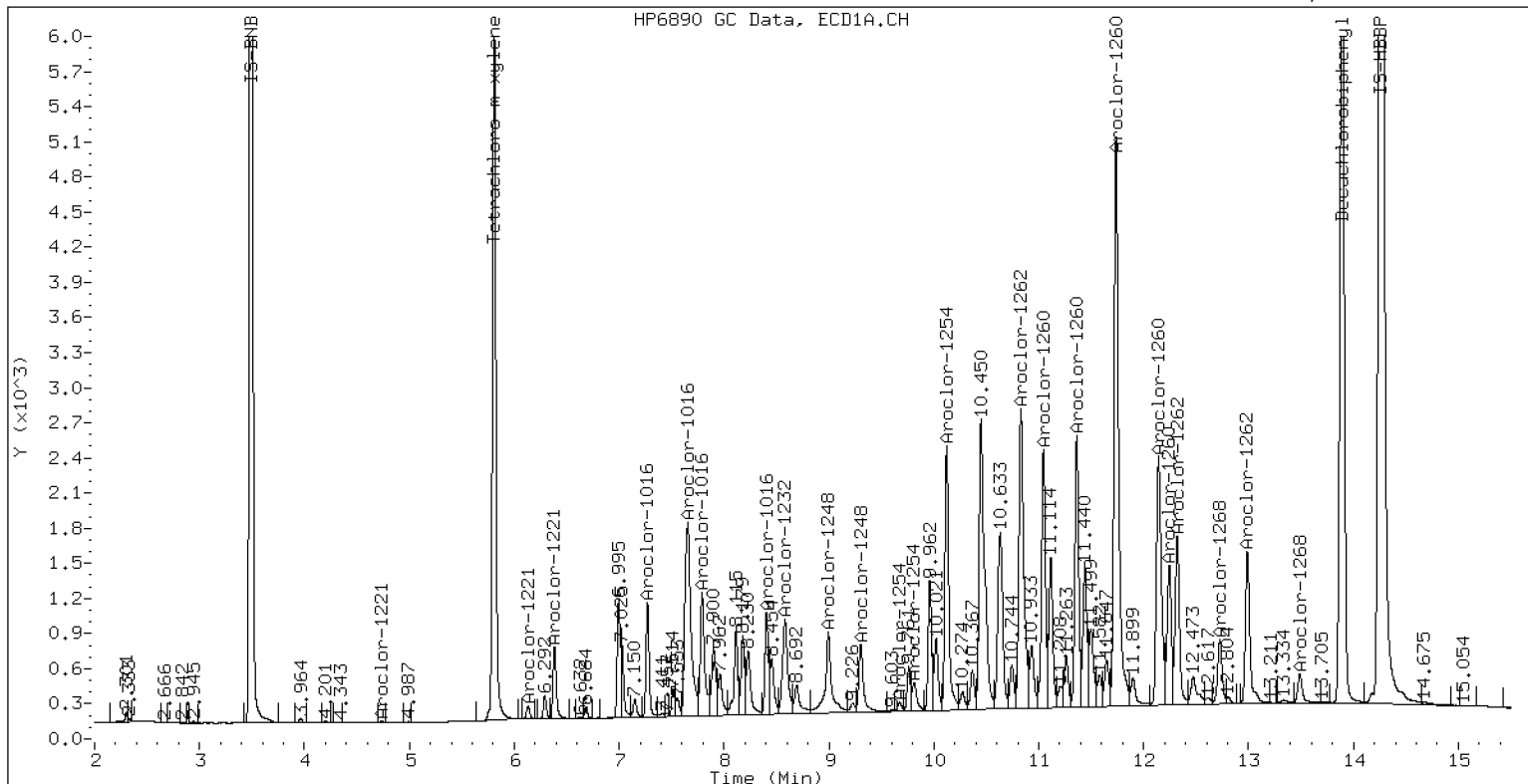
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV

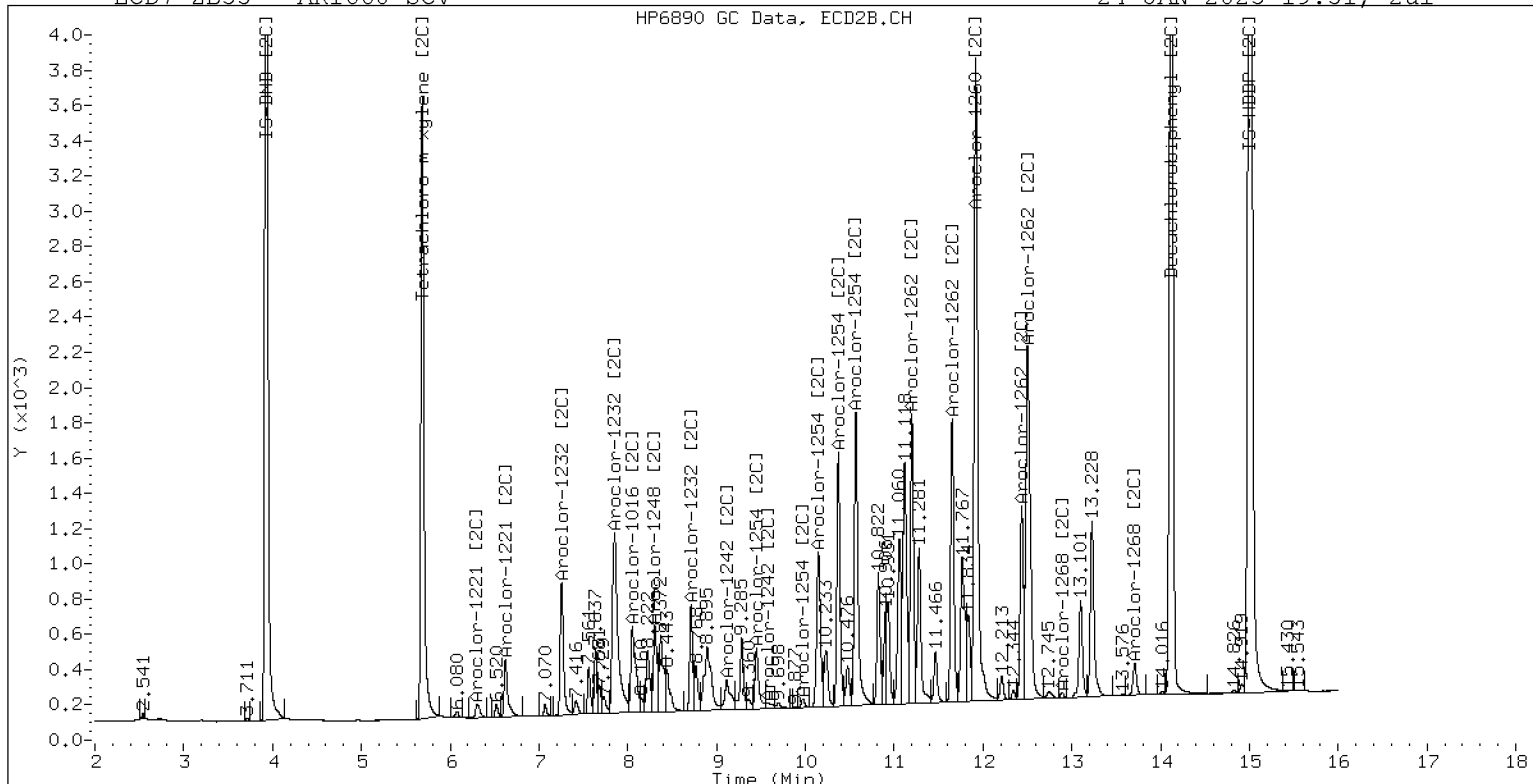
24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV

24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total CollAve (4 peaks):				167.7		Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):				163.7		Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total CollAve (3 peaks):				57.3		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total CollAve (4 peaks):				254.6		Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):				162.0		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total CollAve (4 peaks):				222.6		Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):				209.0		Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total CollAve (4 peaks):				131.8		Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):				113.9		Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total CollAve (5 peaks):				42.7		Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):				39.6		Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total CollAve (4 peaks):				1.2		Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):				0.9		Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total CollAve (3 peaks):				11.0		Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total CollAve (3 peaks):				1.9		Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

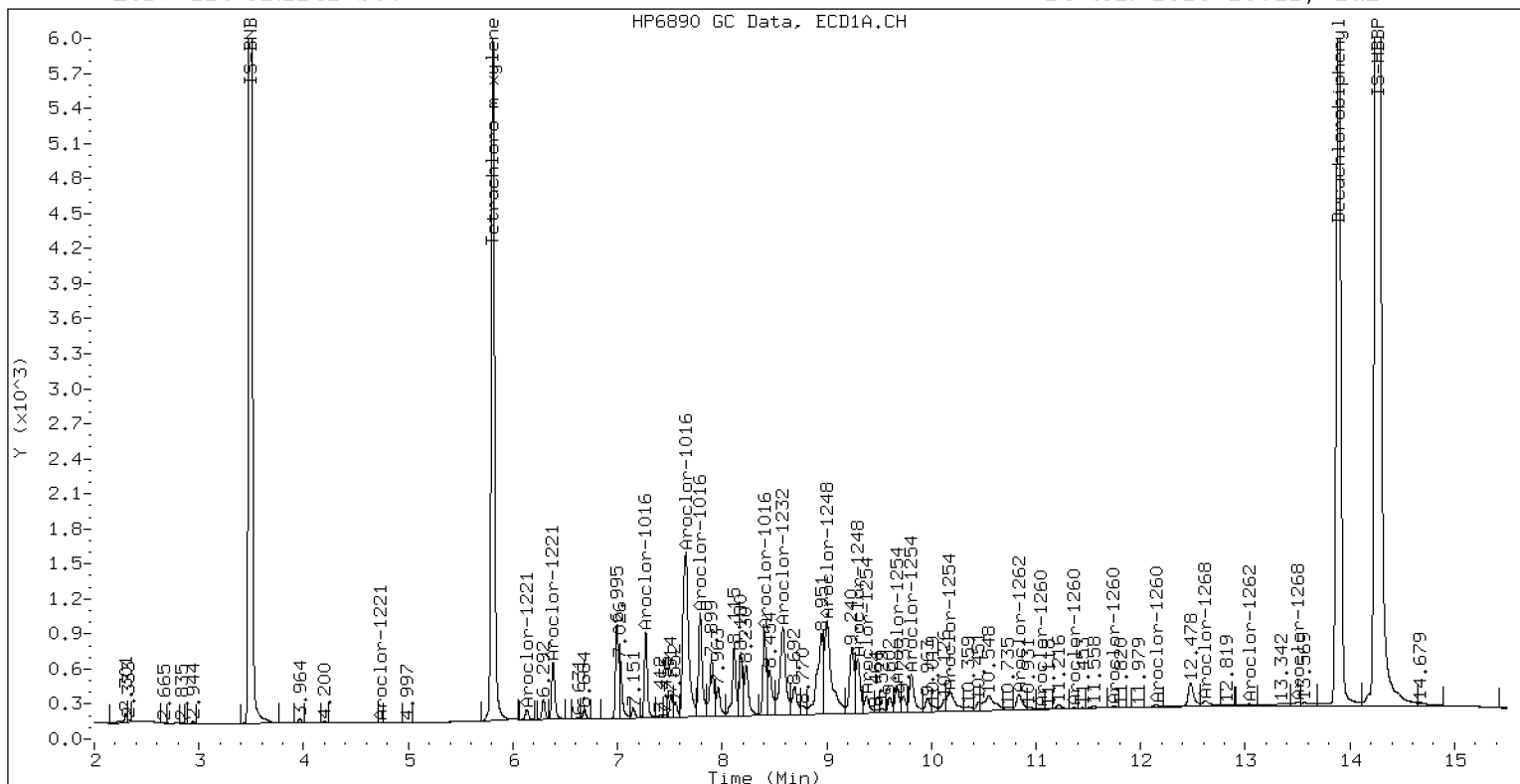
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV

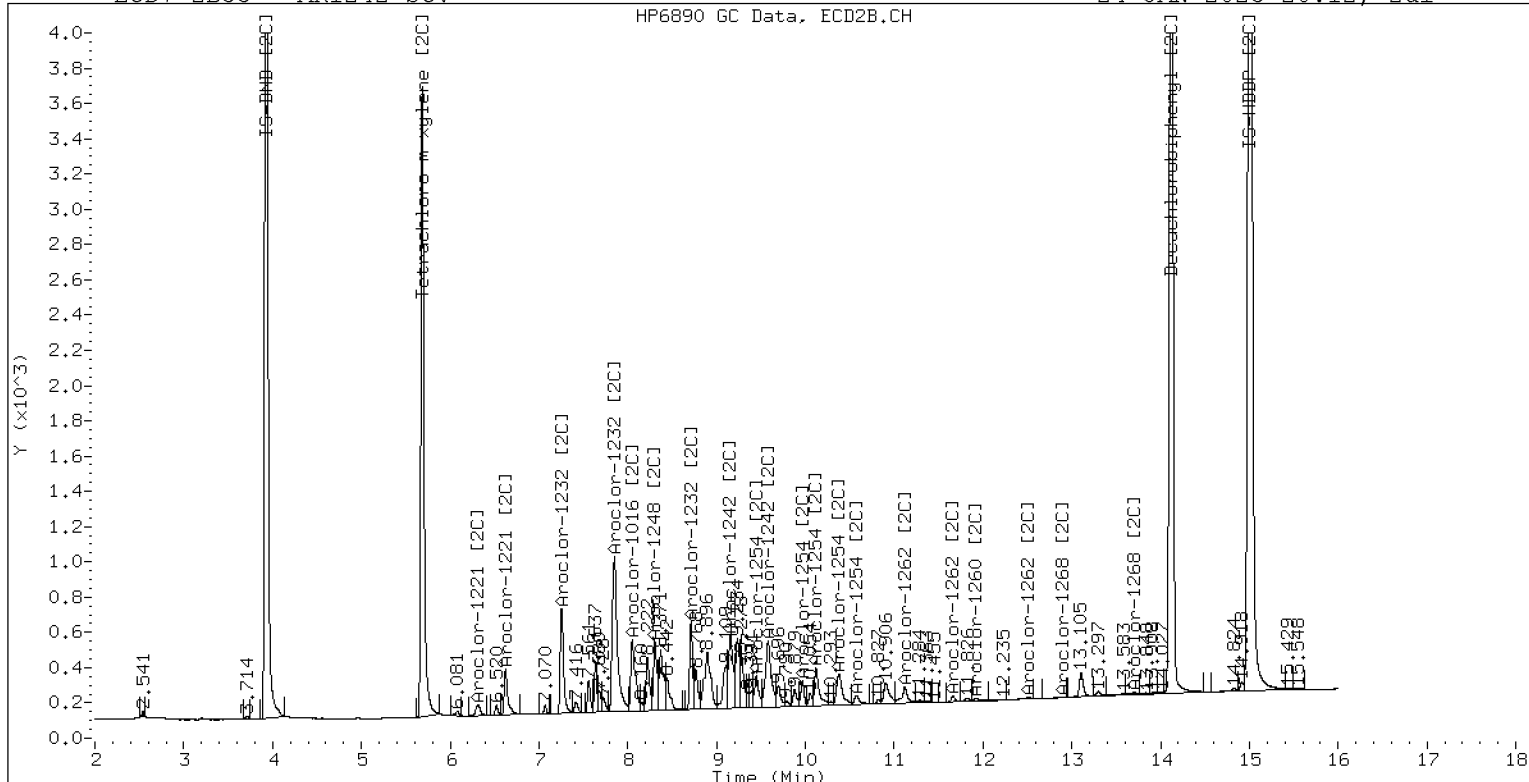
24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV

24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total CollAve (4 peaks):				152.0		Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):				94.9		Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total CollAve (3 peaks):				316.9		Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total CollAve (4 peaks):				240.5		Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):				188.8		Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total CollAve (4 peaks):				237.2		Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):				236.3		Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total CollAve (5 peaks):				115.3		Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):				102.7		Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total CollAve (5 peaks):				2.2		Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):				1.9		Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total CollAve (4 peaks):				8.9		Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):				1.2		Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total CollAve (4 peaks):				0.6		Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):				0.5		Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

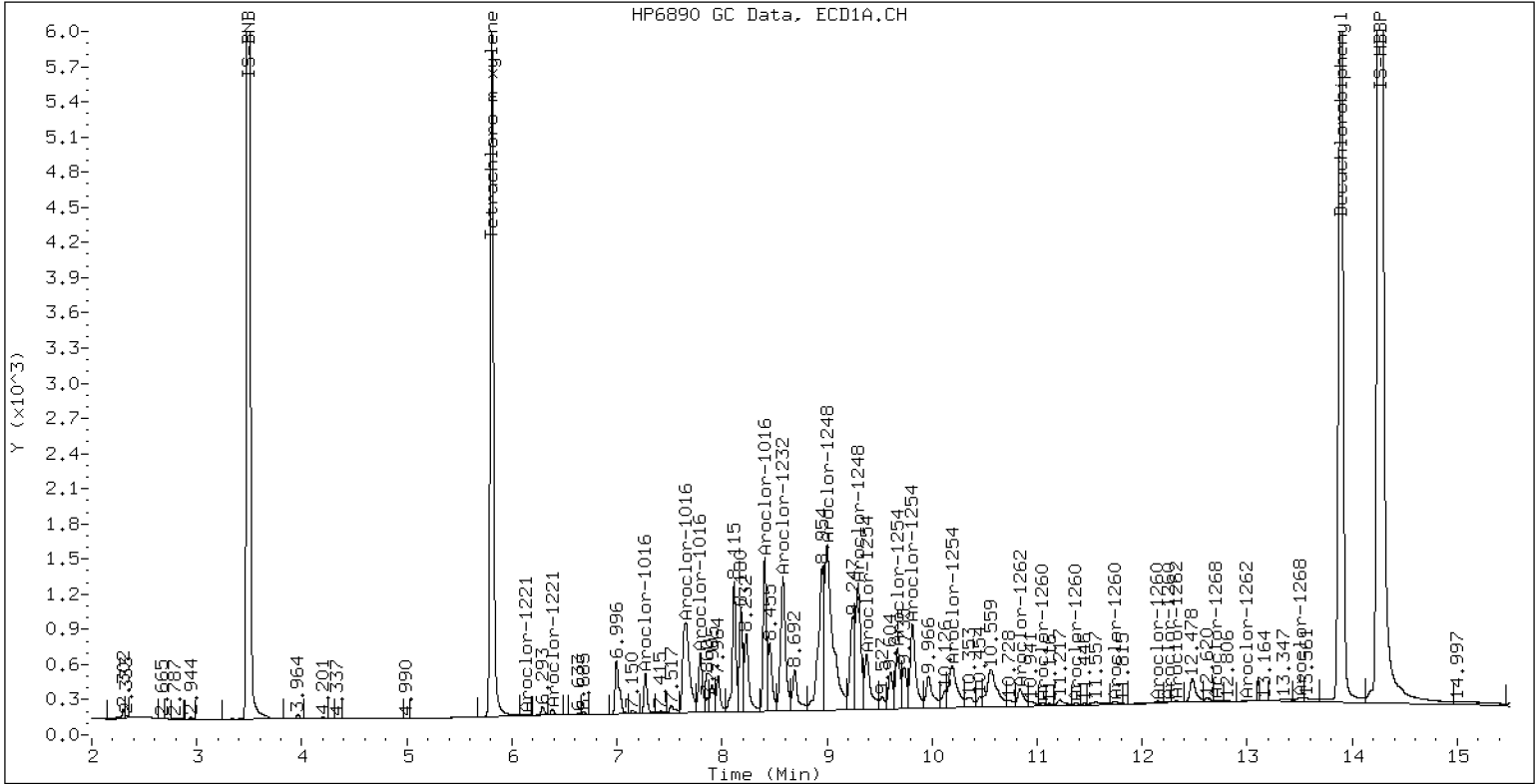
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV

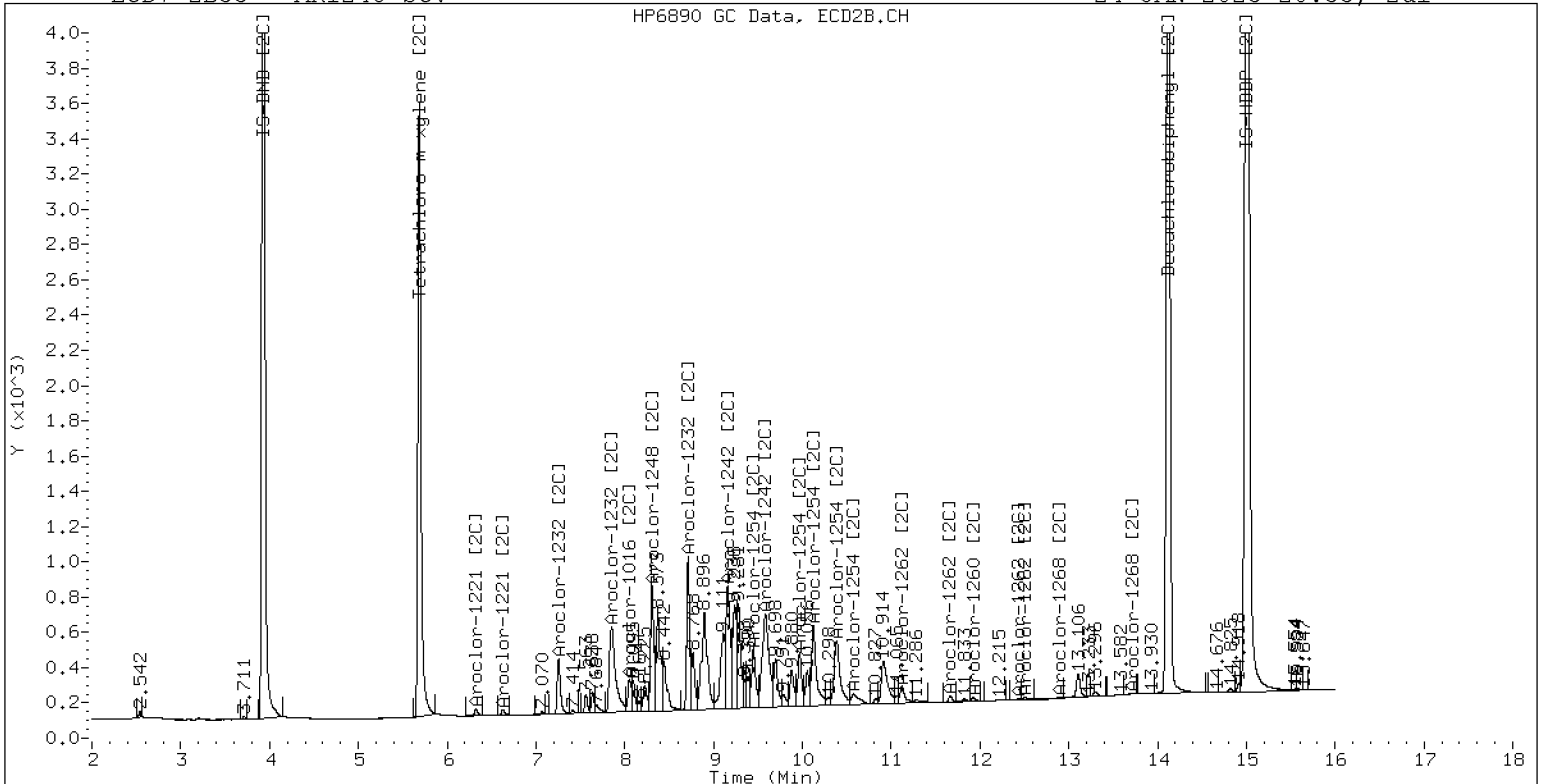
24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV

24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
Total CollAve (4 peaks):				30.5		Total Col2Ave (3 peaks):				53.9 RPD = 55*
Corrected Ave (3 peaks):				1.9		Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
Total CollAve (4 peaks):				46.4		Total Col2Ave (3 peaks):				168.6 RPD = 114*
Corrected Ave (3 peaks):				14.4		Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
Total CollAve (4 peaks):				165.7		Total Col2Ave (4 peaks):				120.7 RPD = 31
Corrected Ave (3 peaks):				97.2		Corrected Ave (3 peaks):				115.5 RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
Total CollAve (5 peaks):				220.8		Total Col2Ave (5 peaks):				226.5 RPD = 3
Corrected Ave (4 peaks):				219.7		Corrected Ave (4 peaks):				224.7 RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			---
Total CollAve (5 peaks):				15.6		Total Col2Ave (3 peaks):				50.0 RPD = 105*
Corrected Ave (4 peaks):				13.3		Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
Total CollAve (3 peaks):				135.6		Total Col2Ave (3 peaks):				91.7 RPD = 39
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
Total CollAve (3 peaks):				0.8		Total Col2Ave (3 peaks):				3.8 RPD = 130*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

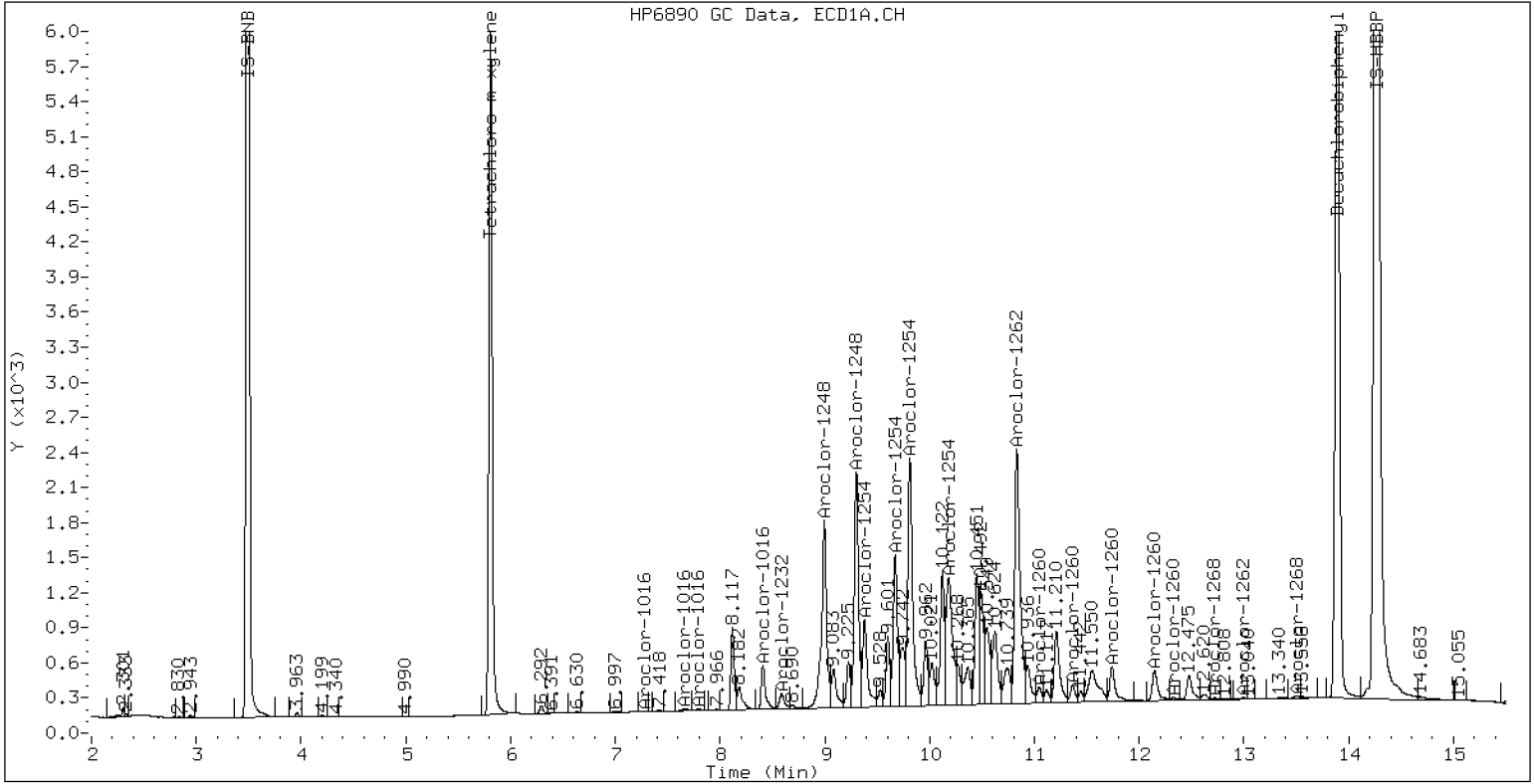
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV

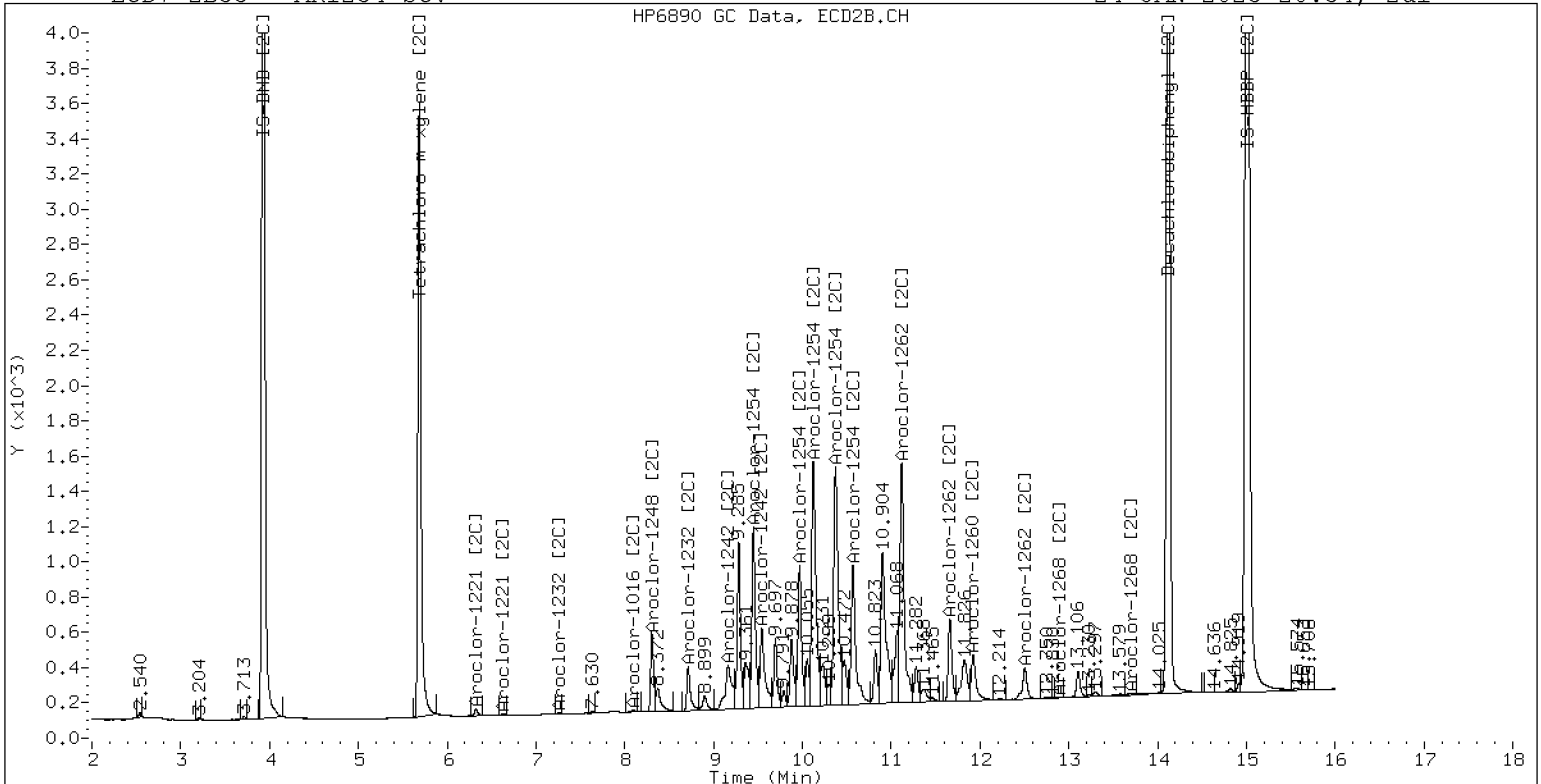
24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV

24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3	
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9	
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2	
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0	
Total CollAve (4 peaks):				22.4	Total Col2Ave (4 peaks):				22.1	RPD = 1	
Corrected Ave (3 peaks):				20.3	Corrected Ave (3 peaks):				17.3	RPD = 16	
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8	
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2	
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2	
Total CollAve (3 peaks):				228.1	Total Col2Ave (3 peaks):				238.7	RPD = 5	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9	
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2	
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9	
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0	
Total CollAve (4 peaks):				192.6	Total Col2Ave (4 peaks):				141.7	RPD = 30	
Corrected Ave (3 peaks):				126.3	Corrected Ave (3 peaks):				53.4	RPD = 81*	
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1	
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9	
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9	
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6	
Total CollAve (4 peaks):				24.0	Total Col2Ave (4 peaks):				32.3	RPD = 30	
Corrected Ave (3 peaks):				20.5	Corrected Ave (3 peaks):				28.1	RPD = 31	
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4	
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3	
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7	
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9	
Total CollAve (4 peaks):				46.0	Total Col2Ave (4 peaks):				14.6	RPD = 104*	
Corrected Ave (3 peaks):				27.5	Corrected Ave (3 peaks):				11.5	RPD = 82*	
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3	
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3	
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5	
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9	
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5	
Total CollAve (5 peaks):				110.8	Total Col2Ave (5 peaks):				223.7	RPD = 68*	
Corrected Ave (4 peaks):				31.0	Corrected Ave (4 peaks):				133.5	RPD = 125*	
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4	
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0	
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7	
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5	
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----	
Total CollAve (5 peaks):				499.5	Total Col2Ave (4 peaks):				592.1	RPD = 17	
Corrected Ave (4 peaks):				426.6	Corrected Ave (3 peaks):				500.3	RPD = 16	
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1	
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0	
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4	
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6	
Total CollAve (4 peaks):				421.5	Total Col2Ave (4 peaks):				437.0	RPD = 4	
Corrected Ave (3 peaks):				419.8	Corrected Ave (3 peaks):				434.3	RPD = 3	
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0	
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7	
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3	
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8	
Total CollAve (4 peaks):				111.6	Total Col2Ave (4 peaks):				112.0	RPD = 0	

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total CollAve (4 peaks):				101.3		Total Col2Ave (4 peaks):				103.7 RPD = 2
Corrected Ave (3 peaks):				99.4		Corrected Ave (3 peaks):				101.6 RPD = 2
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total CollAve (3 peaks):				144.5		Total Col2Ave (3 peaks):				154.8 RPD = 7
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total CollAve (4 peaks):				215.7		Total Col2Ave (4 peaks):				238.8 RPD = 10
Corrected Ave (3 peaks):				210.5		Corrected Ave (3 peaks):				236.6 RPD = 12
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total CollAve (4 peaks):				121.0		Total Col2Ave (4 peaks):				125.4 RPD = 4
Corrected Ave (3 peaks):				118.0		Corrected Ave (3 peaks):				121.8 RPD = 3
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total CollAve (4 peaks):				92.7		Total Col2Ave (4 peaks):				69.7 RPD = 28
Corrected Ave (3 peaks):				85.7		Corrected Ave (3 peaks):				66.3 RPD = 26
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total CollAve (5 peaks):				31.1		Total Col2Ave (5 peaks):				11.2 RPD = 94*
Corrected Ave (4 peaks):				23.3		Corrected Ave (4 peaks):				10.1 RPD = 79*
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total CollAve (5 peaks):				250.2		Total Col2Ave (4 peaks):				449.7 RPD = 57*
Corrected Ave (4 peaks):				42.5		Corrected Ave (3 peaks):				217.5 RPD = 135*
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total CollAve (4 peaks):				340.7		Total Col2Ave (4 peaks):				299.1 RPD = 13
Corrected Ave (3 peaks):				261.2		Corrected Ave (3 peaks):				202.6 RPD = 25
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total CollAve (4 peaks):				223.7		Total Col2Ave (4 peaks):				218.1 RPD = 3

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230124.b/01242330ECD7.D

ARI ID: DDTS

RT	ZB5 Col Shift Response	ZB35 Col Shift Response	RT	ZB5 on col	ZB35 on col	RPD	Compound/Flag		
9.263	0.000	519078	9.912	0.000	601473	0.100	0.100	0.0	2,4-DDE
10.296	0.000	1468204	10.666	0.000	915087	0.100	0.200#	66.7*	2,4-DDT
9.687	0.000	883988	10.211	0.000	339715	0.100	0.100	0.0	4,4-DDE
0.000	-10.281	0	10.666	0.000	915087	0.000	0.200#	----	4,4-DDD

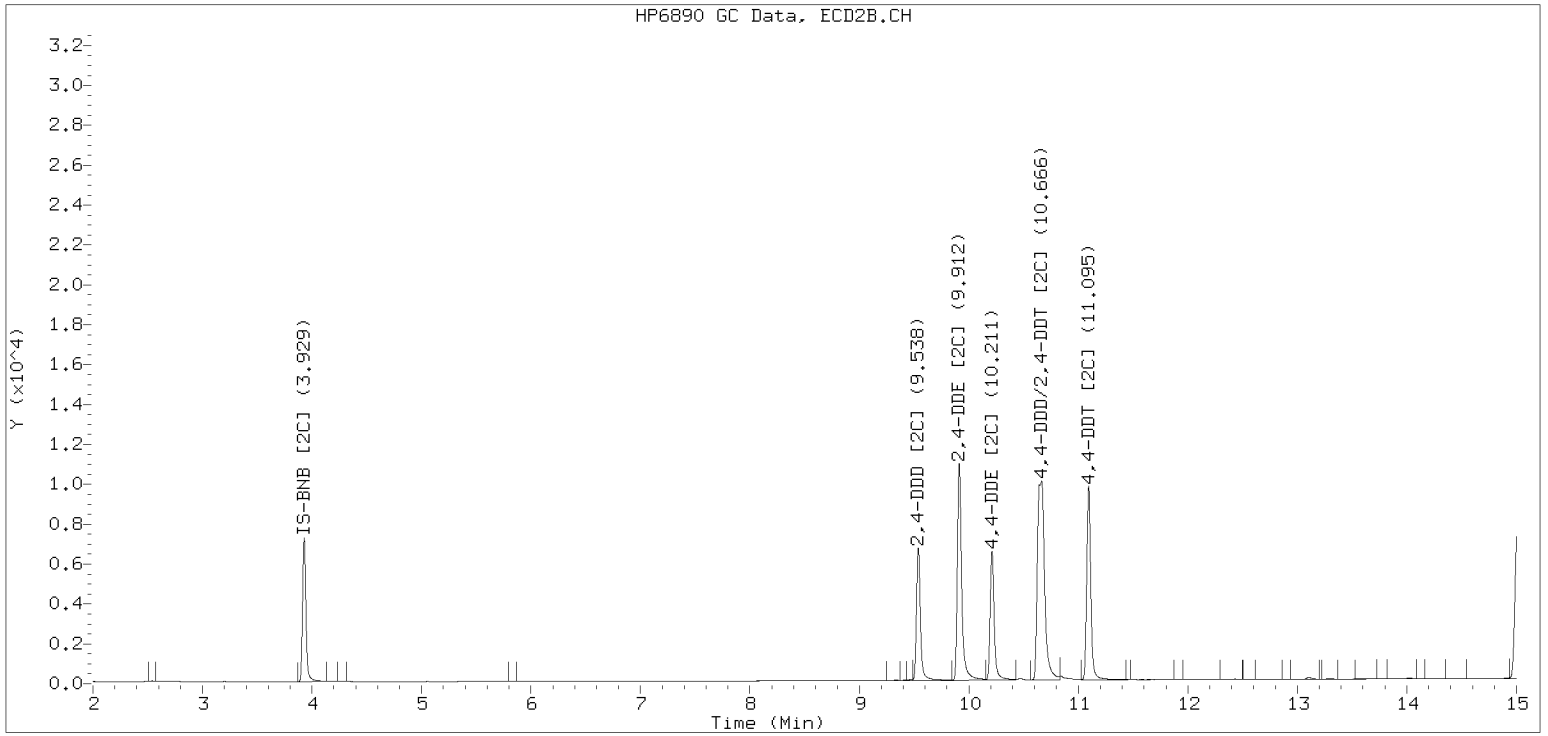
Indicates value is from co-eluting peaks

* Indicates RPD > 40%

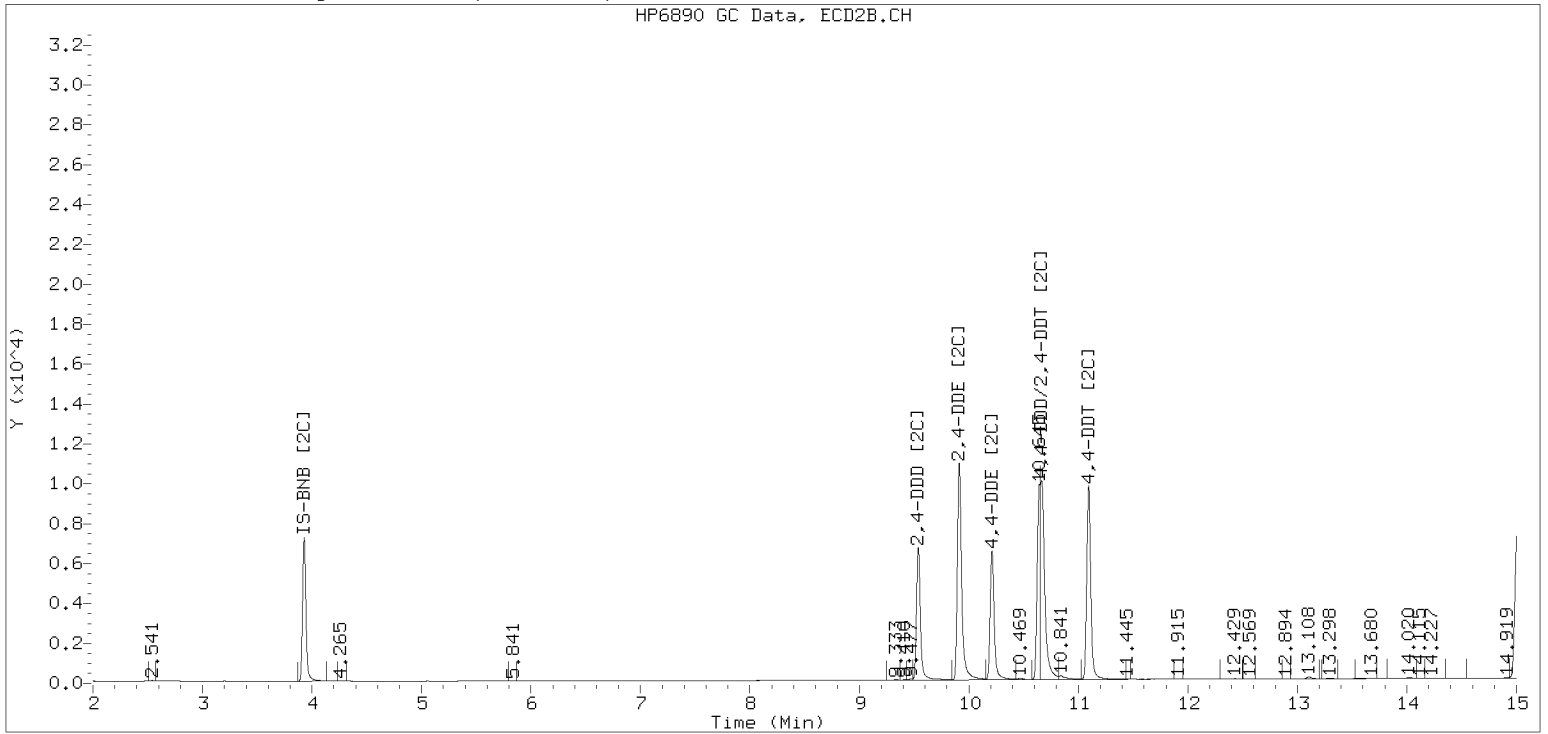
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230124.b/230124.b/01242330ECD7.D Injection Date: 24-JAN-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242331ECD7.D
Data file 2: /230124.b/230124.b/01242331ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: DDT BD
Client ID:
Injection Date: 24-JAN-2023 22:18
Report Date: 01/25/2023 10:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	-0.000	249607	0.000	0.000	0	36.2	0.1	198.6*	Tetrachloro-m-xylene
13.893	0.001	342925	0.000	0.000	0	33.3	0.1	198.4*	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	488086	-3.0
Hexabromobiphenyl	647433	963404	48.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334787	-0.6
Hexabromobiphenyl	382032	334787	-12.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	3.929	-0.000	334787	80.0
Aroclor-1016	2	---			0.0	NS	---			----
Aroclor-1016	3	---			0.0	NS	---			----
Aroclor-1016	4	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	9.924	0.012	8335	0.0
Aroclor-1221	2	---			0.0	NS	---			----
Aroclor-1221	3	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	NS	---			----
Aroclor-1232	3	---			0.0	NS	---			----
Aroclor-1232	4	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	NS	---			----
Aroclor-1242	3	---			0.0	NS	---			----
Aroclor-1242	4	---			0.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	10.681	0.016	29738	0.0
Aroclor-1248	2	---			0.0	NS	---			----
Aroclor-1248	3	8.973	-0.026	2304	3.9	NS	---			----
Aroclor-1248	4	9.235	-0.059	1484	5.0	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	9.235	-0.064	1484	3.0	1	11.098	0.003	696435	0.1
Aroclor-1254	2	9.378	-0.000	295	1.4	NS	---			----
Aroclor-1254	3	9.703	0.034	11396	35.8	NS	---			----
Aroclor-1254	4	---			0.0	NS	---			----
Aroclor-1254	5	10.272	0.095	32481	80.0	NS	---			----
Total CollAve (4 peaks):				30.0		Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.115	0.071	9308	17.2	1	---			0.0
Aroclor-1260	2	11.344	-0.016	232461	418.4	NS	---			----
Aroclor-1260	3	11.698	-0.036	294	0.2	NS	---			----
Aroclor-1260	4	---			0.0	NS	---			----
Aroclor-1260	5	---			0.0	NS	---			----
Total CollAve (3 peaks):				145.3		Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.763	-0.070	892438	2290.6	1	---			0.0
Aroclor-1262	2	---			0.0	NS	---			----
Aroclor-1262	3	---			0.0	NS	---			----
Aroclor-1262	4	12.990	0.001	748	1.2	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	NS	---			----
Aroclor-1268	3	12.620	-0.079	4678	3.6	NS	---			----
Aroclor-1268	4	13.510	0.021	3115	0.8	NS	---			----
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				

Total PCB Area Coll1 (5.909 - 13.792) = 1961348

Coll1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.909 - 13.792) = 1177441 Col2 Total PCB = 0.3 ppm*

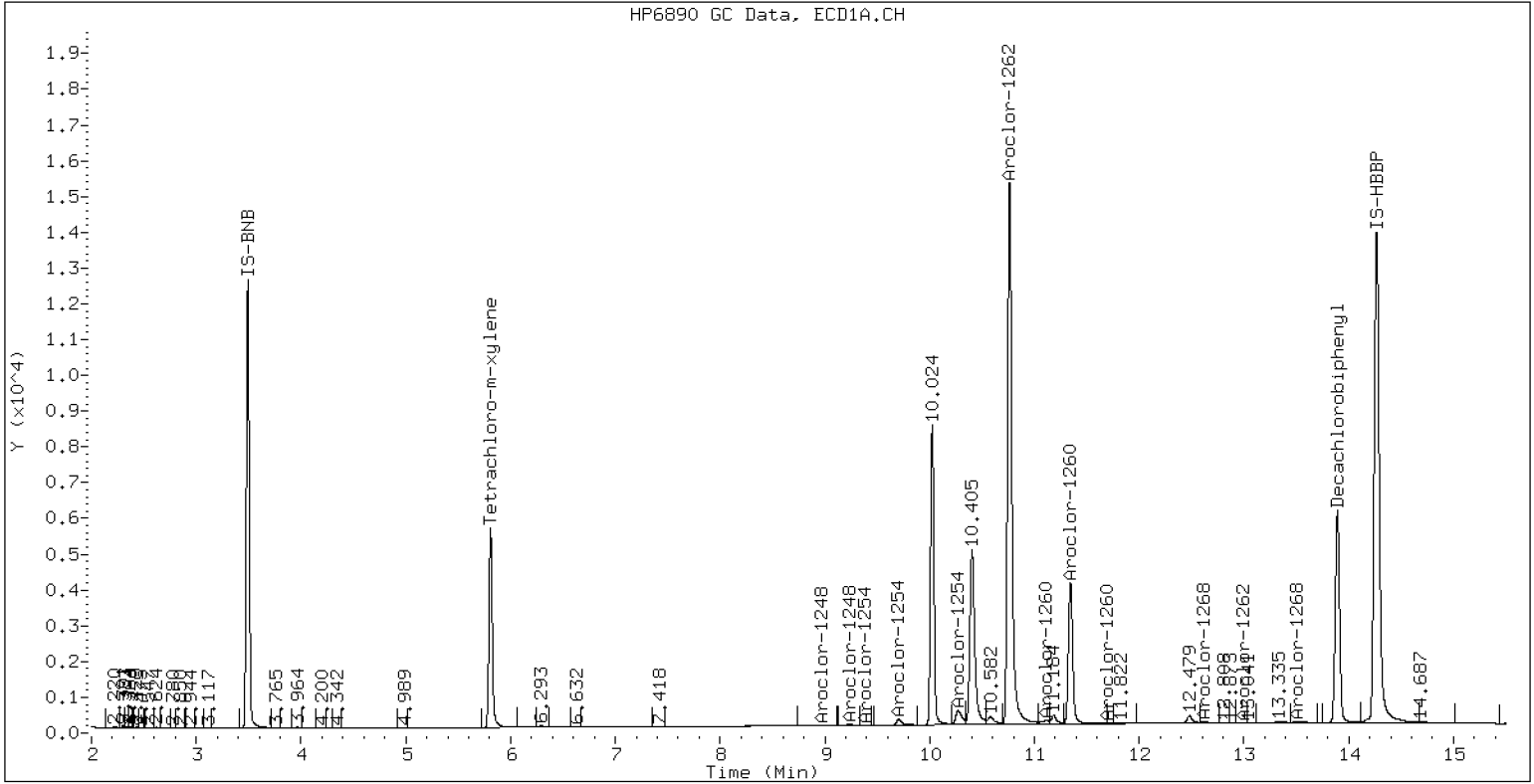
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 DDT BD

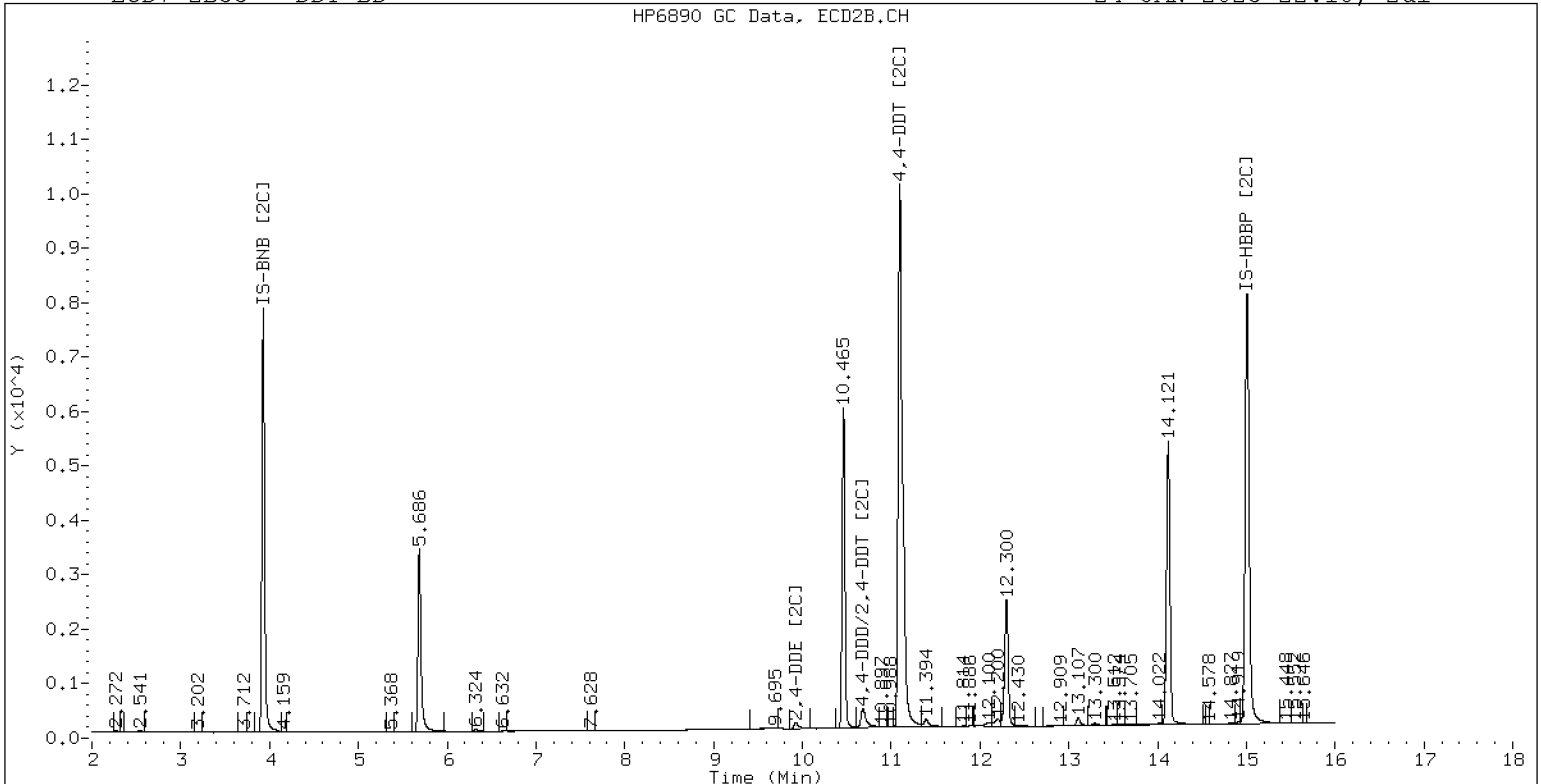
24-JAN-2023 22:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 DDT BD

24-JAN-2023 22:18, 2ul



ZB-35 Manual Integration: NO



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Laboratory ID: SLA0281-SCV1

Sequence: SLA0281

Sequence Name: AR1660SCV1

Standard ID: K007655

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1016	250.00	217	-13.2	20.00
Aroclor 1016 [2C]	250.00	220	-11.9	20.00
Aroclor 1260	250.00	211	-15.7	20.00
Aroclor 1260 [2C]	250.00	238	-4.9	20.00
Decachlorobiphenyl	40.000	37.9	-5.1	20.00
Tetrachlorometaxylene	40.000	37.5	-6.2	20.00
Decachlorobiphenyl [2C]	40.000	40.2	0.6	20.00
Tetrachlorometaxylene [2C]	40.000	37.3	-6.8	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total CollAve (4 peaks):				216.9		Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):				216.3		Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total CollAve (3 peaks):				74.4		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total CollAve (4 peaks):				279.8		Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):				202.0		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total CollAve (4 peaks):				262.0		Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):				260.1		Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total CollAve (4 peaks):				137.3		Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):				124.4		Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total CollAve (4 peaks):				97.4		Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):				35.3		Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total CollAve (5 peaks):				210.7		Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):				208.2		Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total CollAve (4 peaks):				205.3		Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):				124.9		Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total CollAve (4 peaks):				32.1		Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):				24.7		Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

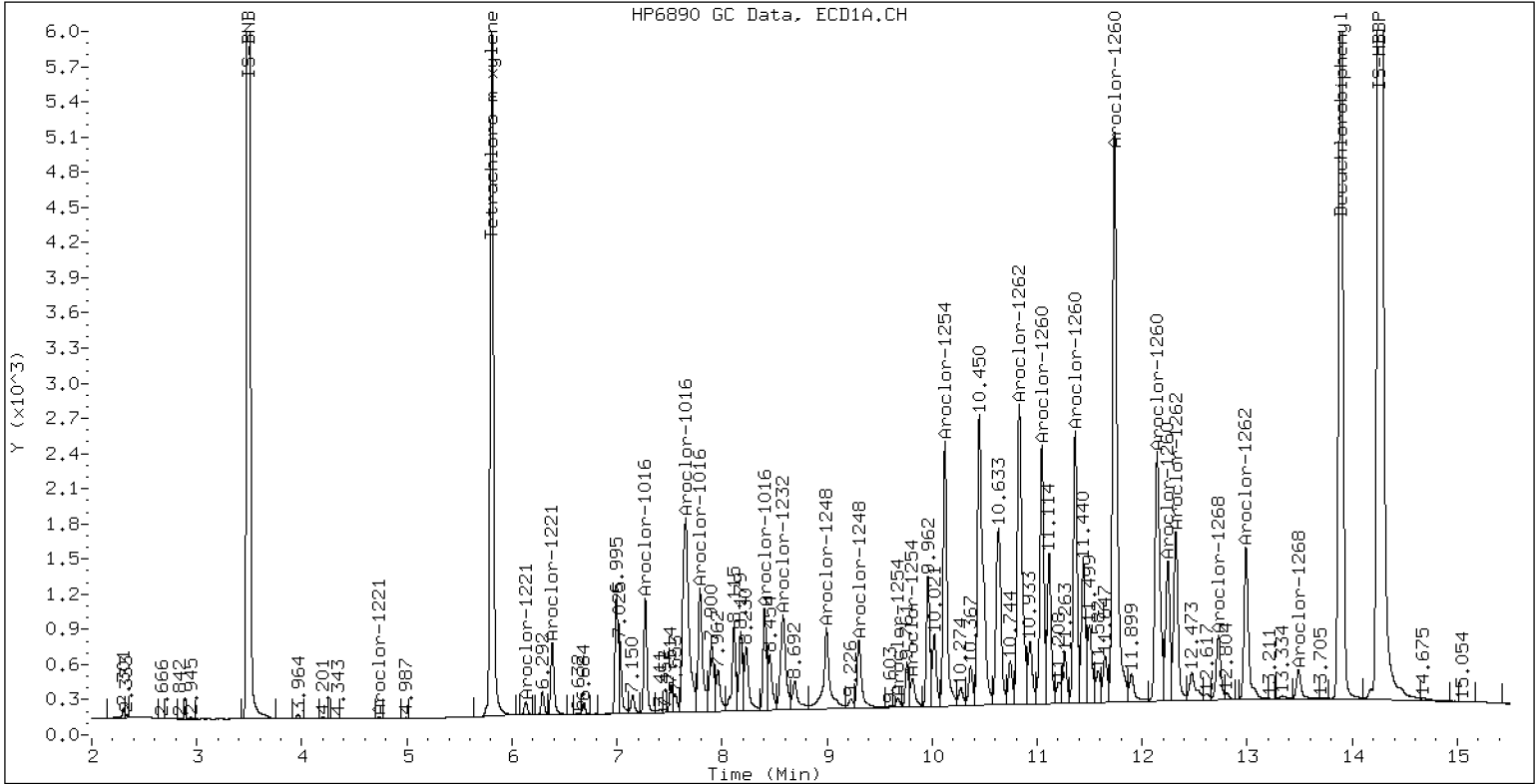
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV

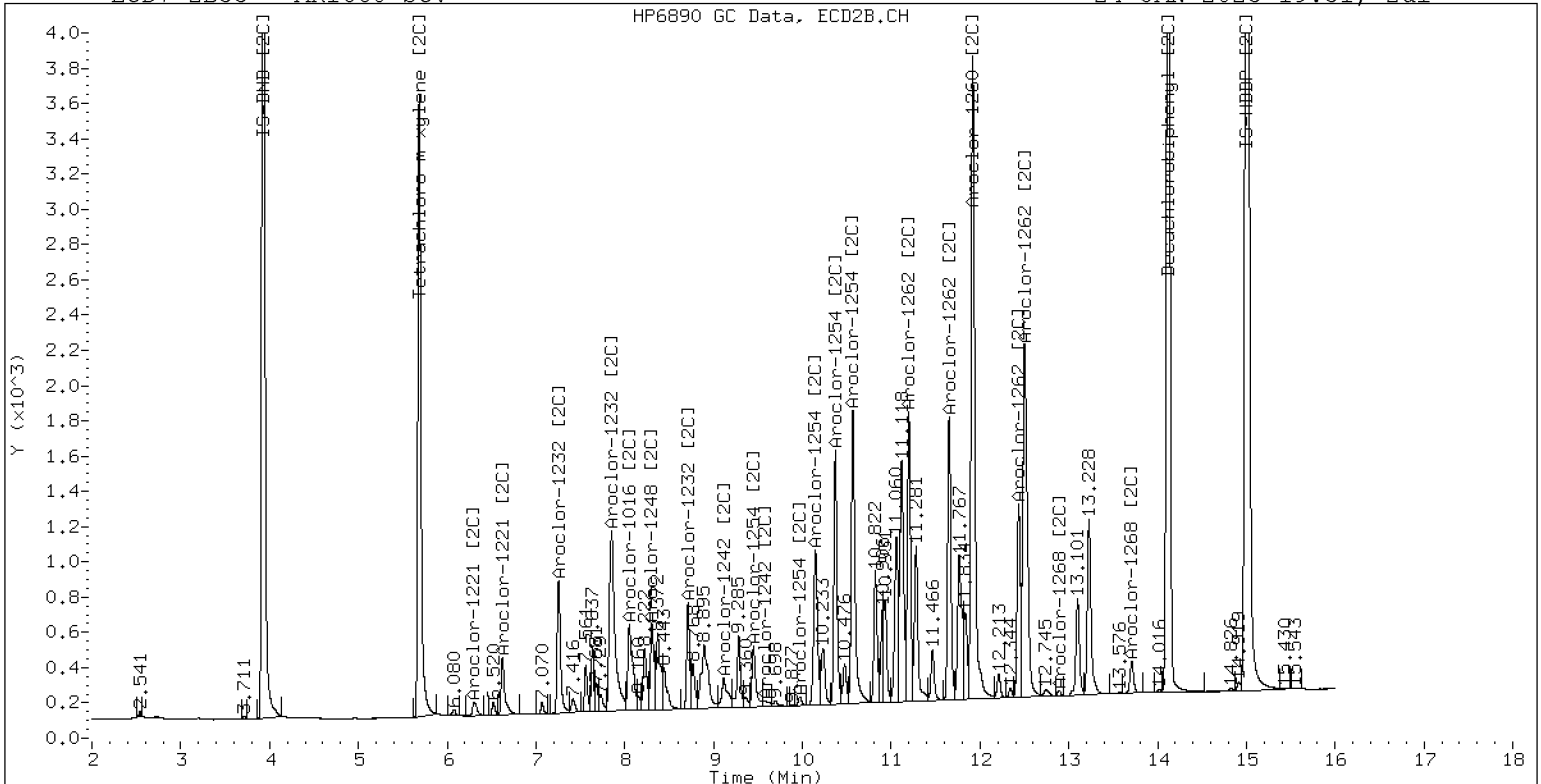
24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV

24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Laboratory ID: SLA0281-SCV2

Sequence: SLA0281

Sequence Name: AR1242SCV2

Standard ID: K007656

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1242	250.00	223	-10.9	20.00
Aroclor 1242 [2C]	250.00	235	-5.9	20.00
Decachlorobiphenyl	40.000	38.5	-3.6	20.00
Tetrachlorometaxylene	40.000	37.8	-5.6	20.00
Decachlorobiphenyl [2C]	40.000	40.3	0.9	20.00
Tetrachlorometaxylene [2C]	40.000	37.4	-6.6	20.00

* Indicates values outside of QC limits

[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-JAN-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total CollAve (4 peaks):				167.7		Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):				163.7		Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total CollAve (3 peaks):				57.3		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total CollAve (4 peaks):				254.6		Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):				162.0		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total CollAve (4 peaks):				222.6		Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):				209.0		Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total CollAve (4 peaks):				131.8		Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):				113.9		Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total CollAve (5 peaks):				42.7		Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):				39.6		Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total CollAve (4 peaks):				1.2		Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):				0.9		Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total CollAve (3 peaks):				11.0		Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total CollAve (3 peaks):				1.9		Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

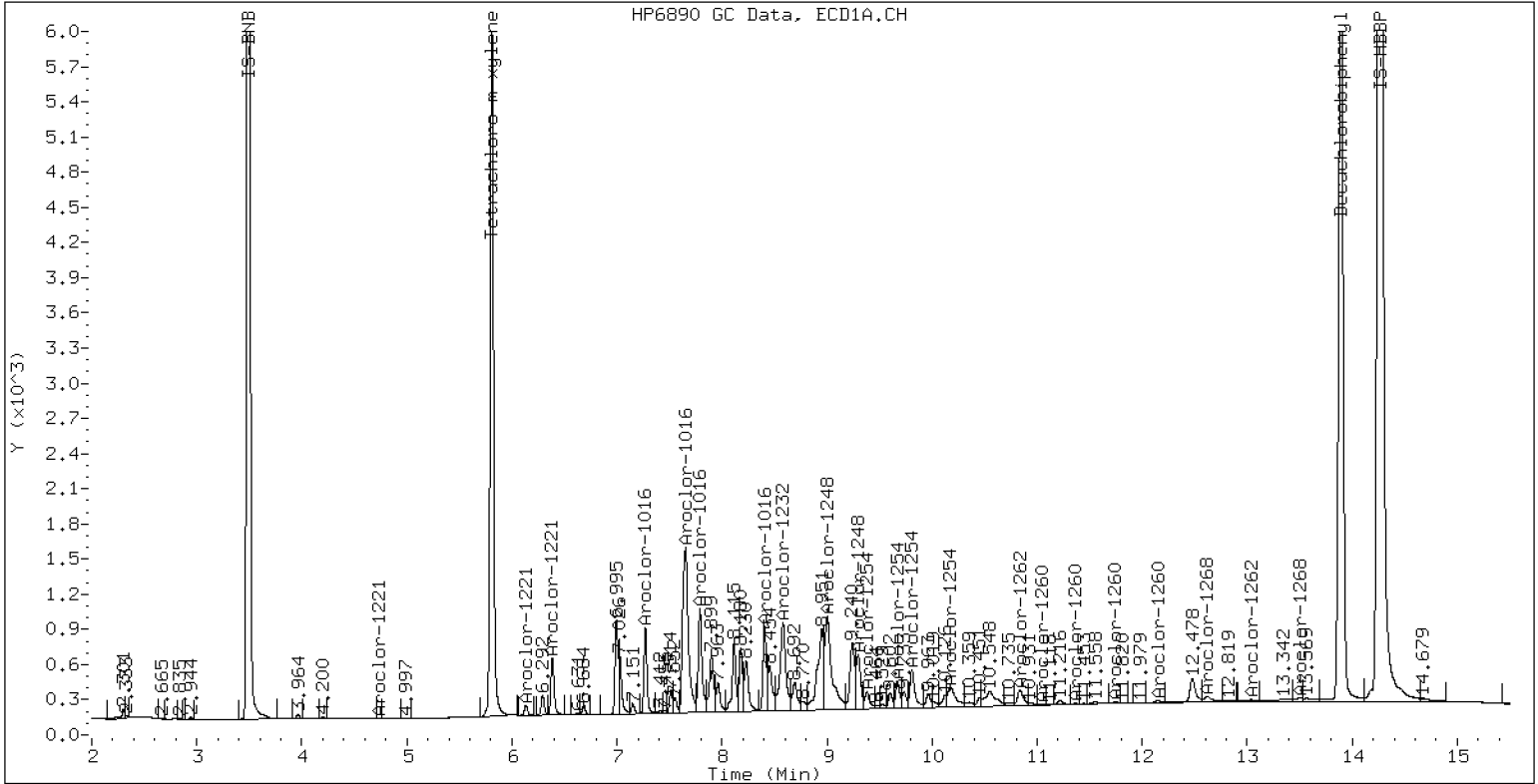
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV

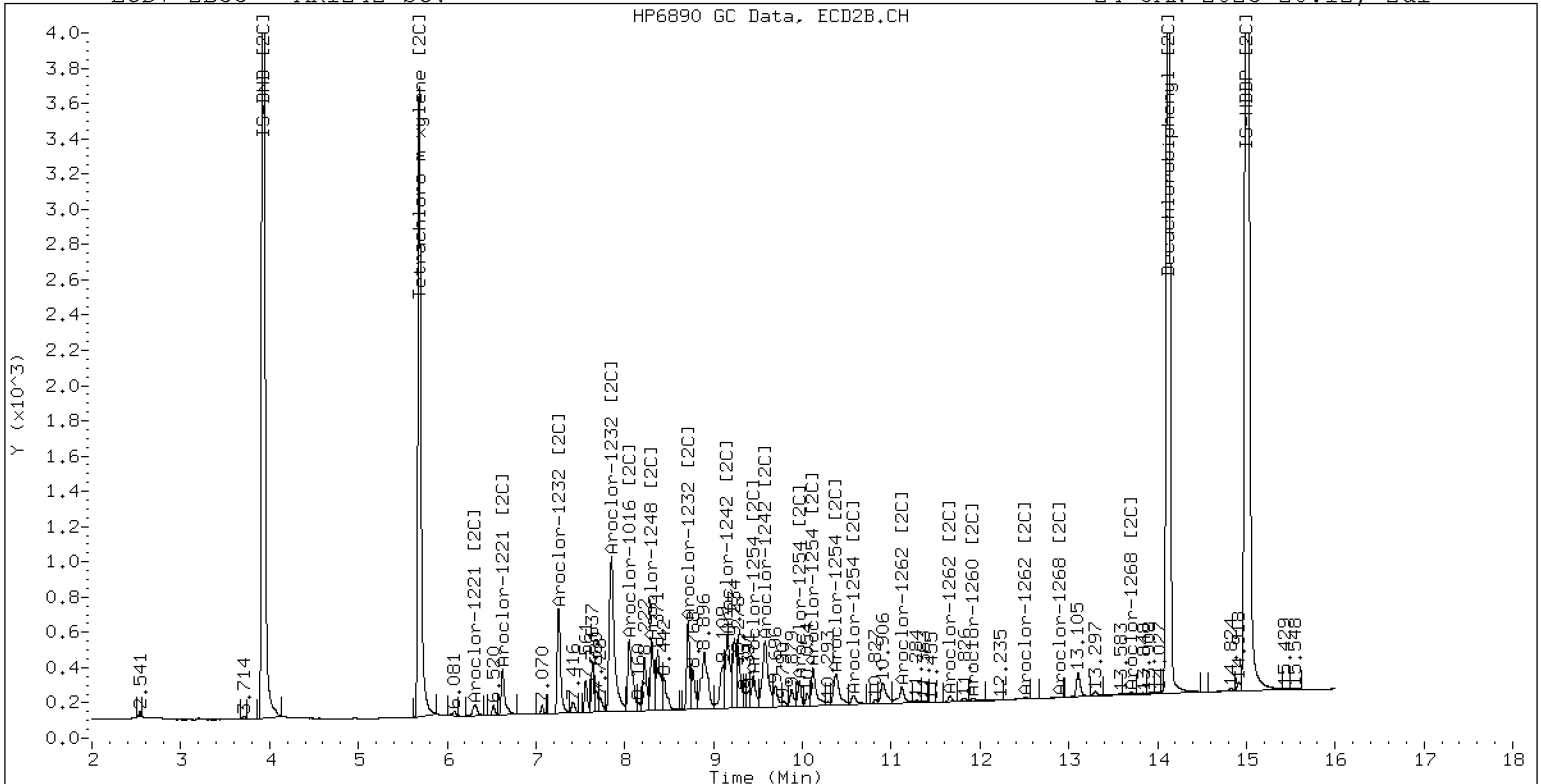
24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV

24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Laboratory ID: SLA0281-SCV3

Sequence: SLA0281

Sequence Name: AR1248SCV3

Standard ID: K007657

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1248	250.00	237	-5.1	20.00
Aroclor 1248 [2C]	250.00	231	-7.6	20.00
Decachlorobiphenyl	40.000	38.3	-4.3	20.00
Tetrachlorometaxylene	40.000	36.8	-8.1	20.00
Decachlorobiphenyl [2C]	40.000	39.6	-1.1	20.00
Tetrachlorometaxylene [2C]	40.000	36.5	-8.6	20.00

* Indicates values outside of QC limits

[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total CollAve (4 peaks):				152.0		Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):				94.9		Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total CollAve (3 peaks):				316.9		Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total CollAve (4 peaks):				240.5		Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):				188.8		Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total CollAve (4 peaks):				237.2		Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):				236.3		Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total CollAve (5 peaks):				115.3		Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):				102.7		Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total CollAve (5 peaks):				2.2		Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):				1.9		Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total CollAve (4 peaks):				8.9		Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):				1.2		Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total CollAve (4 peaks):				0.6		Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):				0.5		Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

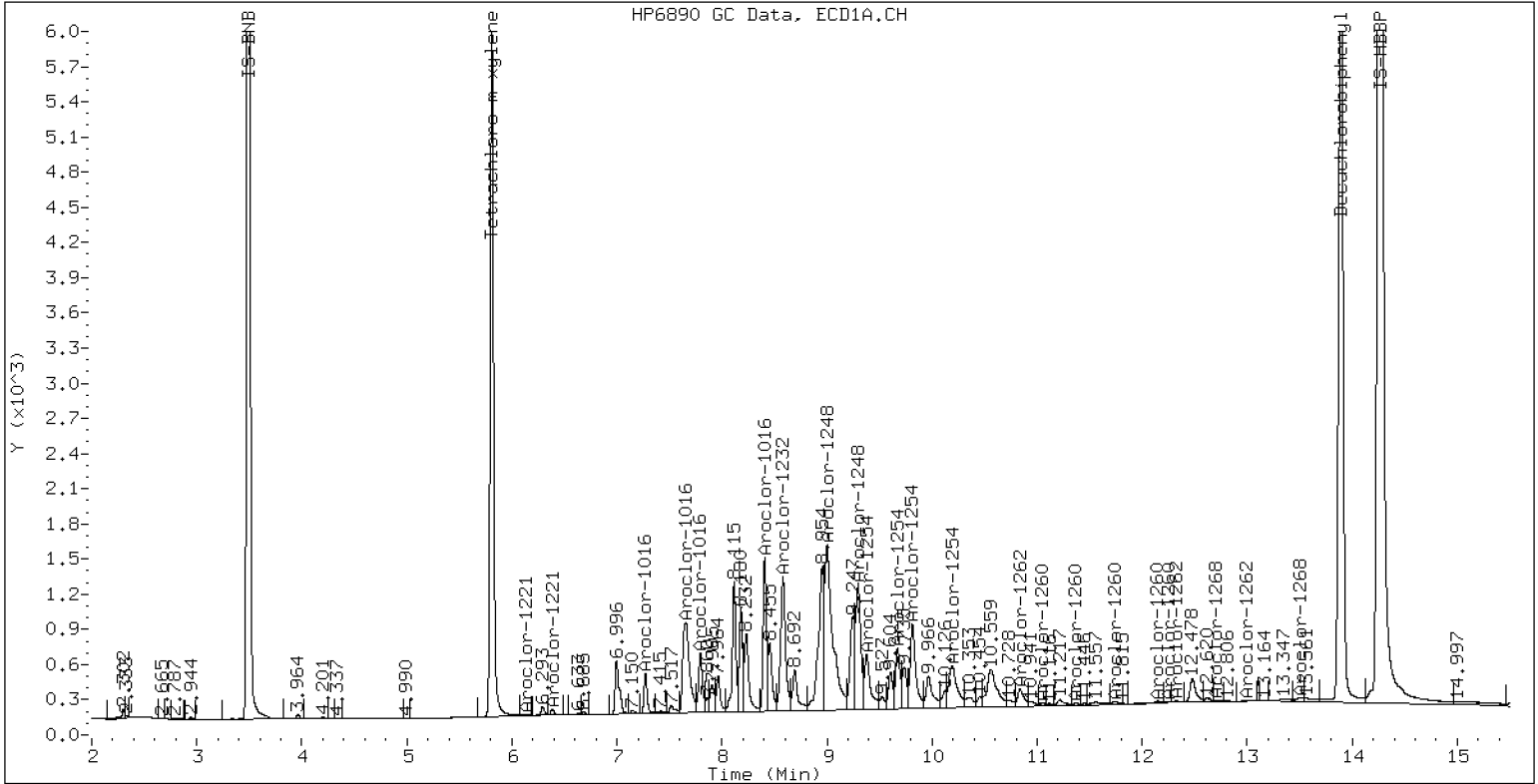
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV

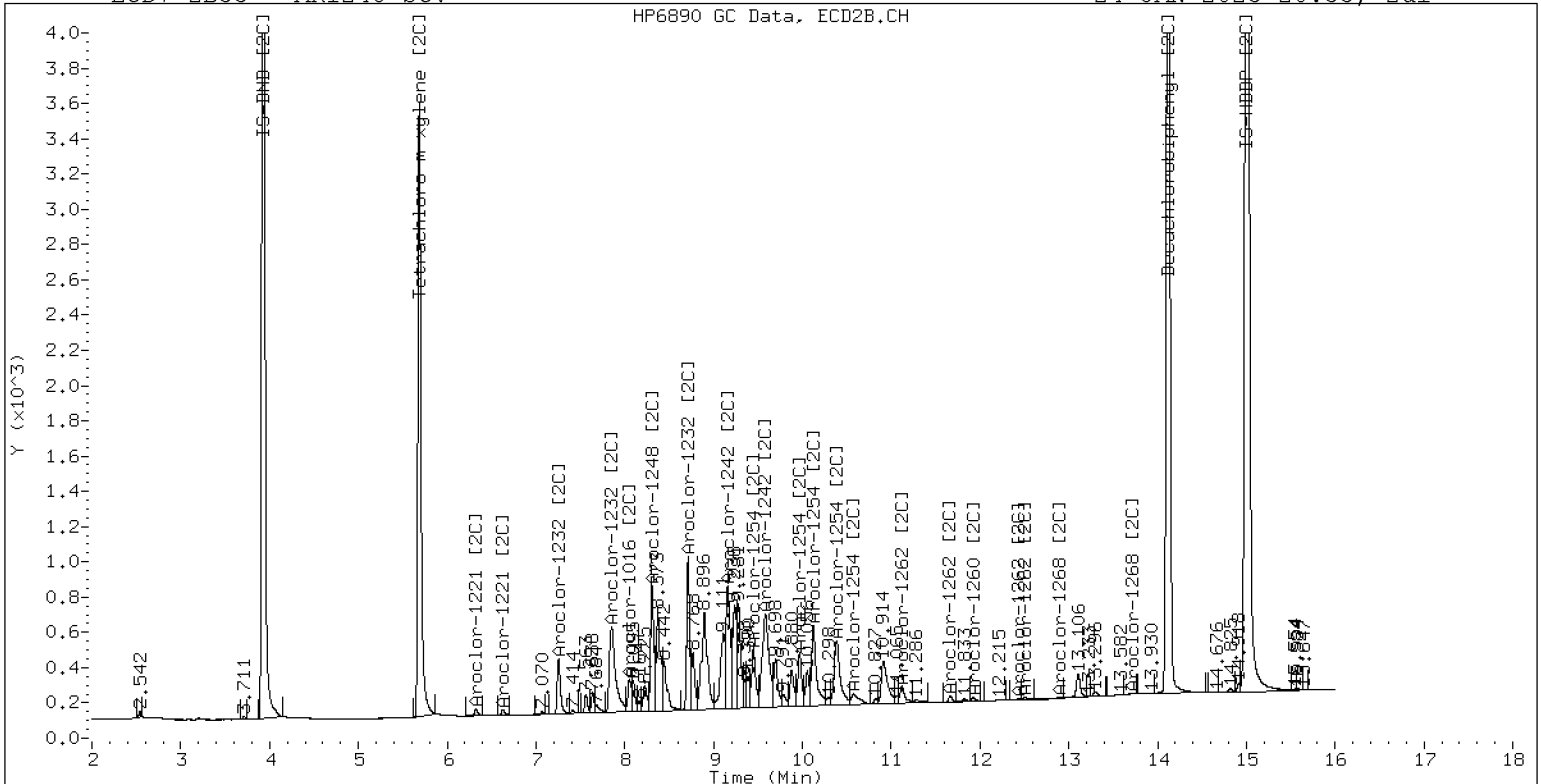
24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV

24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Laboratory ID: SLA0281-SCV4

Sequence: SLA0281

Sequence Name: AR1254SCV4

Standard ID: K007658

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1254	250.00	221	-11.7	20.00
Aroclor 1254 [2C]	250.00	227	-9.4	20.00
Decachlorobiphenyl	40.000	37.1	-7.3	20.00
Tetrachlorometaxylene	40.000	36.7	-8.3	20.00
Decachlorobiphenyl [2C]	40.000	39.5	-1.1	20.00
Tetrachlorometaxylene [2C]	40.000	36.6	-8.4	20.00

* Indicates values outside of QC limits

[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8	
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0	
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1	
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8	
Total CollAve (4 peaks):				30.5	Total Col2Ave (3 peaks):				53.9	RPD = 55*	
Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7	
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9	
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0	
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2	
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0	
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9	
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7	
Total CollAve (4 peaks):				46.4	Total Col2Ave (3 peaks):				168.6	RPD = 114*	
Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks						
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9	
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1	
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4	
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4	
Total CollAve (4 peaks):				165.7	Total Col2Ave (4 peaks):				120.7	RPD = 31	
Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks): 115.5 RPD = 17						
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9	
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4	
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2	
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2	
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0	
Total CollAve (5 peaks):				220.8	Total Col2Ave (5 peaks):				226.5	RPD = 3	
Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks): 224.7 RPD = 2						
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6	
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2	
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3	
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0	
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			---	
Total CollAve (5 peaks):				15.6	Total Col2Ave (3 peaks):				50.0	RPD = 105*	
Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks						
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3	
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0	
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9	
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0	
Total CollAve (3 peaks):				135.6	Total Col2Ave (3 peaks):				91.7	RPD = 39	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2	
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3	
Total CollAve (3 peaks):				0.8	Total Col2Ave (3 peaks):				3.8	RPD = 130*	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

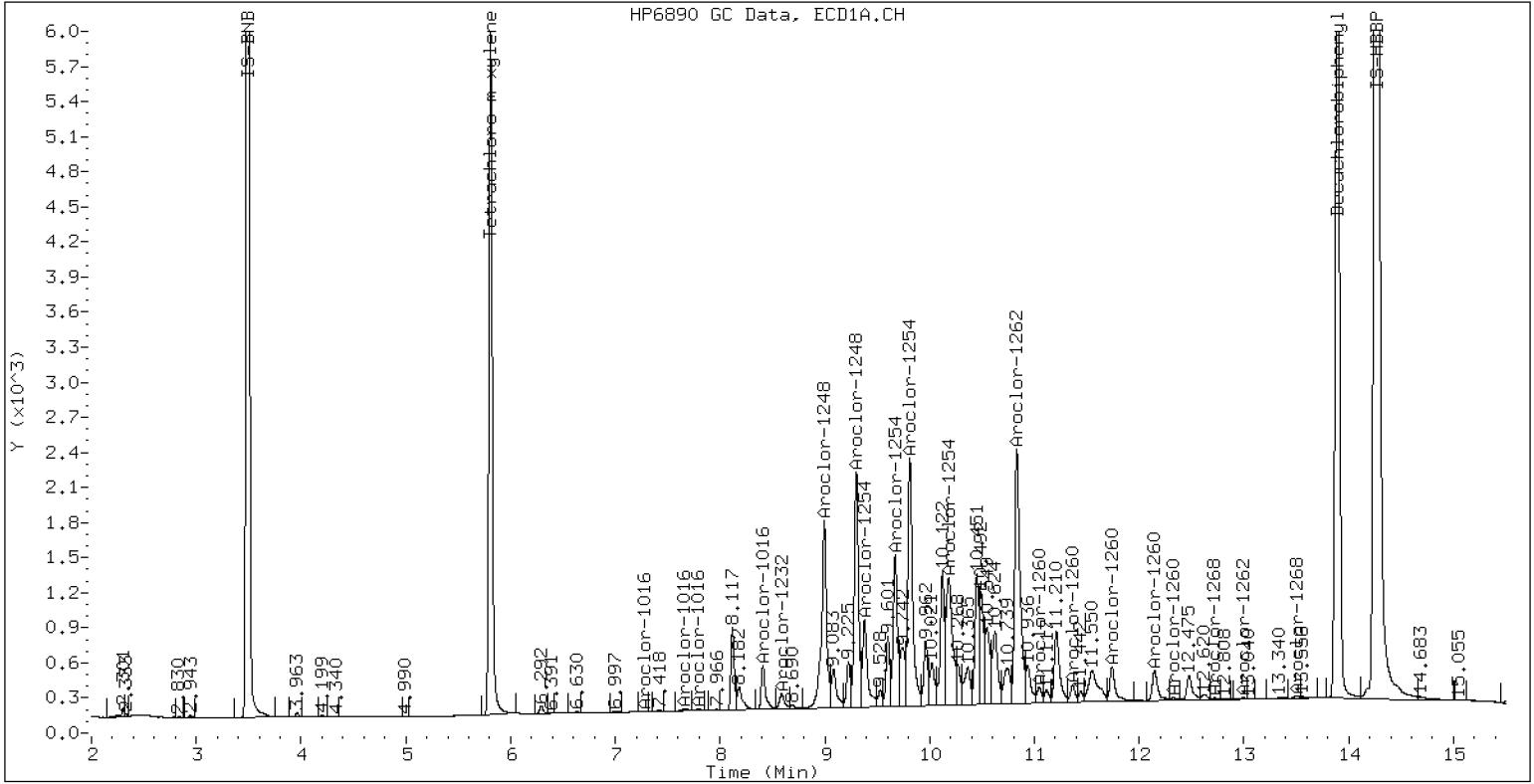
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV

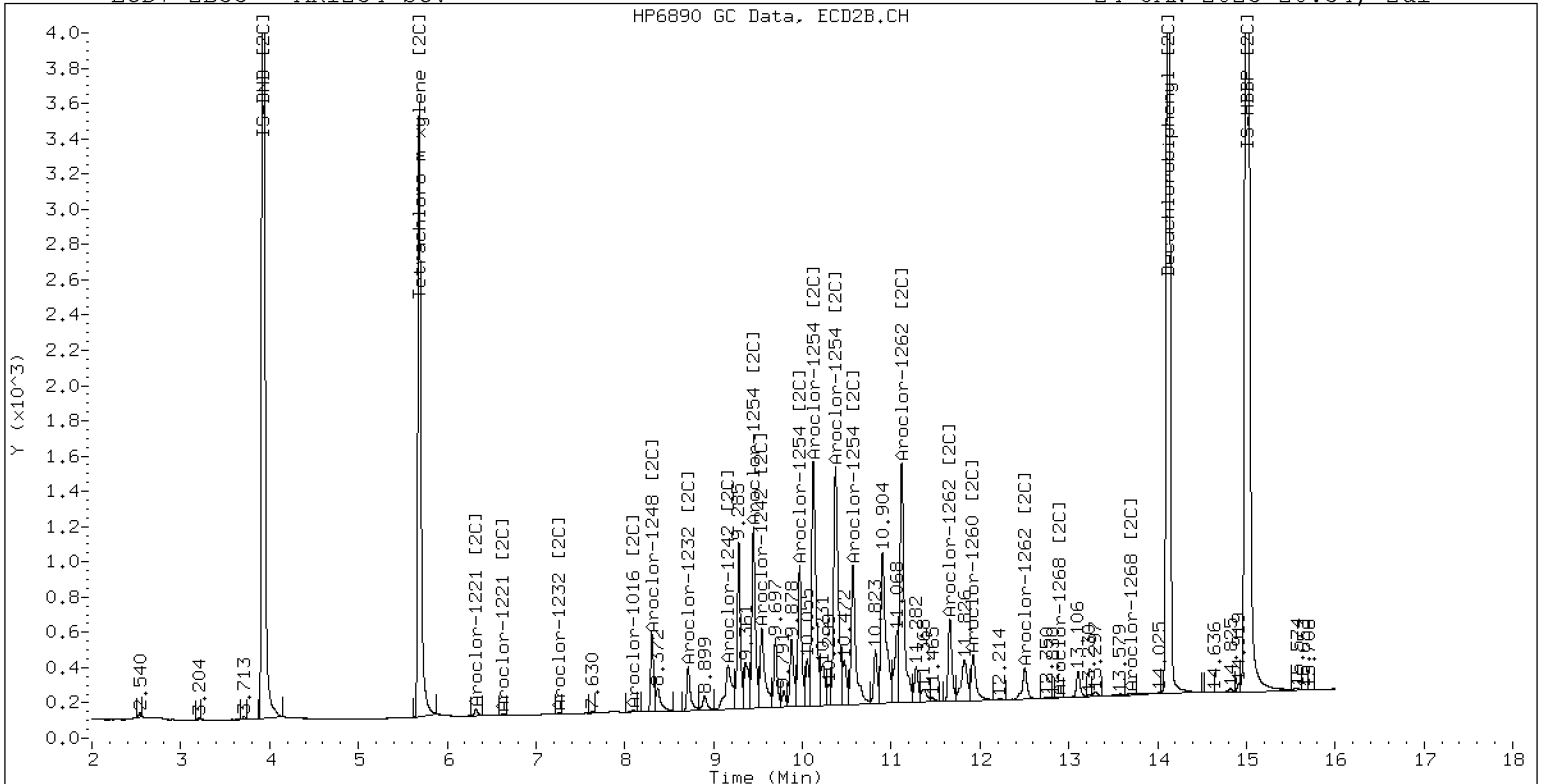
24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV

24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Laboratory ID: SLA0281-SCV5

Sequence: SLA0281

Sequence Name: AR2162SCV5

Standard ID: K007659

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1221	250.00	228	-8.8	20.00
Aroclor 1221 [2C]	250.00	239	-4.5	20.00
Decachlorobiphenyl	40.000	37.5	-6.4	20.00
Tetrachlorometaxylene	40.000	37.3	-6.8	20.00
Decachlorobiphenyl [2C]	40.000	39.5	-1.3	20.00
Tetrachlorometaxylene [2C]	40.000	37.2	-7.1	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3	
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9	
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2	
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0	
Total CollAve (4 peaks):				22.4	Total Col2Ave (4 peaks):				22.1	RPD = 1	
Corrected Ave (3 peaks):				20.3	Corrected Ave (3 peaks):				17.3	RPD = 16	
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8	
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2	
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2	
Total CollAve (3 peaks):				228.1	Total Col2Ave (3 peaks):				238.7	RPD = 5	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9	
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2	
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9	
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0	
Total CollAve (4 peaks):				192.6	Total Col2Ave (4 peaks):				141.7	RPD = 30	
Corrected Ave (3 peaks):				126.3	Corrected Ave (3 peaks):				53.4	RPD = 81*	
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1	
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9	
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9	
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6	
Total CollAve (4 peaks):				24.0	Total Col2Ave (4 peaks):				32.3	RPD = 30	
Corrected Ave (3 peaks):				20.5	Corrected Ave (3 peaks):				28.1	RPD = 31	
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4	
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3	
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7	
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9	
Total CollAve (4 peaks):				46.0	Total Col2Ave (4 peaks):				14.6	RPD = 104*	
Corrected Ave (3 peaks):				27.5	Corrected Ave (3 peaks):				11.5	RPD = 82*	
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3	
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3	
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5	
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9	
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5	
Total CollAve (5 peaks):				110.8	Total Col2Ave (5 peaks):				223.7	RPD = 68*	
Corrected Ave (4 peaks):				31.0	Corrected Ave (4 peaks):				133.5	RPD = 125*	
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4	
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0	
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7	
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5	
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----	
Total CollAve (5 peaks):				499.5	Total Col2Ave (4 peaks):				592.1	RPD = 17	
Corrected Ave (4 peaks):				426.6	Corrected Ave (3 peaks):				500.3	RPD = 16	
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1	
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0	
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4	
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6	
Total CollAve (4 peaks):				421.5	Total Col2Ave (4 peaks):				437.0	RPD = 4	
Corrected Ave (3 peaks):				419.8	Corrected Ave (3 peaks):				434.3	RPD = 3	
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0	
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7	
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3	
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8	
Total CollAve (4 peaks):				111.6	Total Col2Ave (4 peaks):				112.0	RPD = 0	

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GA00061

Laboratory ID: SLA0281-SCV6

Sequence: SLA0281

Sequence Name: AR3268SCV6

Standard ID: K007660

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1232	250.00	216	-13.7	20.00
Aroclor 1232 [2C]	250.00	239	-4.5	20.00
Decachlorobiphenyl	40.000	54.6	36.5	20.00
Tetrachlorometaxylene	40.000	36.4	-9.1	20.00
Decachlorobiphenyl [2C]	40.000	57.9	44.8	20.00
Tetrachlorometaxylene [2C]	40.000	36.3	-9.2	20.00

* Indicates values outside of QC limits

[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total CollAve (4 peaks):				101.3		Total Col2Ave (4 peaks):				103.7 RPD = 2
Corrected Ave (3 peaks):				99.4		Corrected Ave (3 peaks):				101.6 RPD = 2
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total CollAve (3 peaks):				144.5		Total Col2Ave (3 peaks):				154.8 RPD = 7
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total CollAve (4 peaks):				215.7		Total Col2Ave (4 peaks):				238.8 RPD = 10
Corrected Ave (3 peaks):				210.5		Corrected Ave (3 peaks):				236.6 RPD = 12
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total CollAve (4 peaks):				121.0		Total Col2Ave (4 peaks):				125.4 RPD = 4
Corrected Ave (3 peaks):				118.0		Corrected Ave (3 peaks):				121.8 RPD = 3
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total CollAve (4 peaks):				92.7		Total Col2Ave (4 peaks):				69.7 RPD = 28
Corrected Ave (3 peaks):				85.7		Corrected Ave (3 peaks):				66.3 RPD = 26
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total CollAve (5 peaks):				31.1		Total Col2Ave (5 peaks):				11.2 RPD = 94*
Corrected Ave (4 peaks):				23.3		Corrected Ave (4 peaks):				10.1 RPD = 79*
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total CollAve (5 peaks):				250.2		Total Col2Ave (4 peaks):				449.7 RPD = 57*
Corrected Ave (4 peaks):				42.5		Corrected Ave (3 peaks):				217.5 RPD = 135*
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total CollAve (4 peaks):				340.7		Total Col2Ave (4 peaks):				299.1 RPD = 13
Corrected Ave (3 peaks):				261.2		Corrected Ave (3 peaks):				202.6 RPD = 25
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total CollAve (4 peaks):				223.7		Total Col2Ave (4 peaks):				218.1 RPD = 3

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

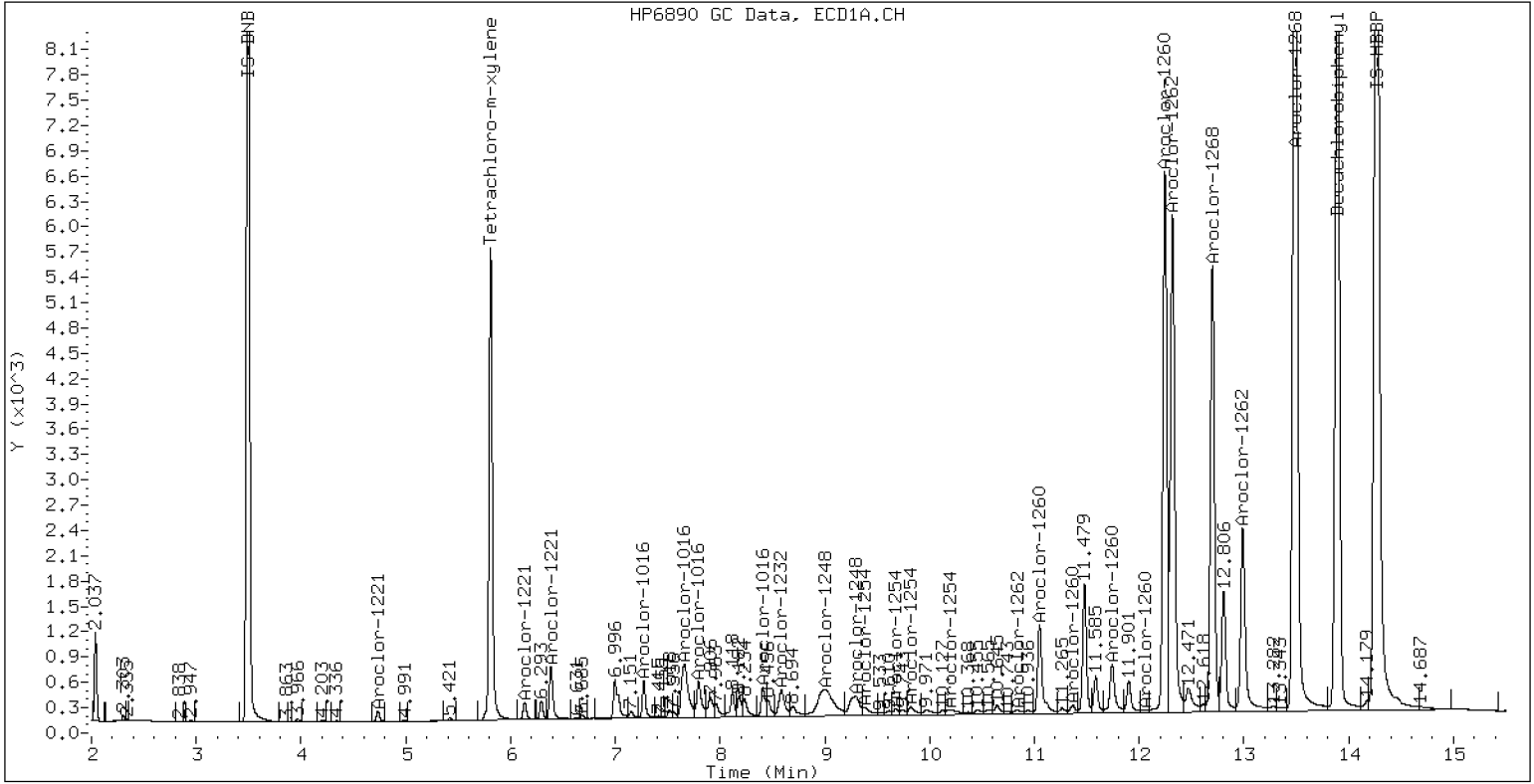
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV

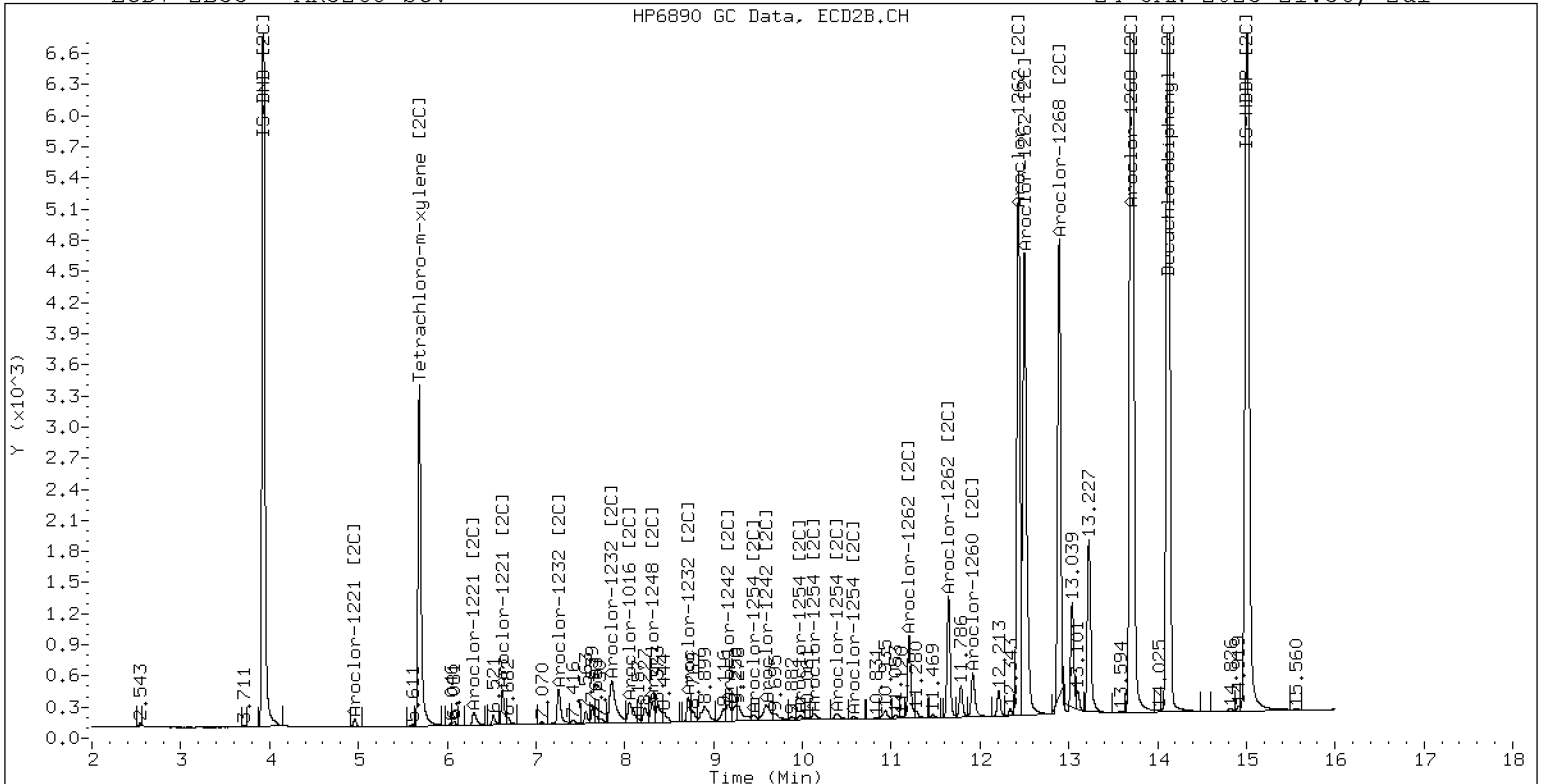
24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV

24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>01242324ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLA0281</u>	Injection Date:	<u>01/24/23</u>
Lab Sample ID:	<u>SLA0281-SCV1</u>	Injection Time:	<u>19:51</u>
Sequence Name:	<u>AR1660SCV1</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	217	0.0506755	0.0439293		-13.2	+/-20
Aroclor 1016 [2C]	A	250.00	220	0.0519244	0.0458194		-11.9	+/-20
Aroclor 1260	A	250.00	211	0.0605224	0.0508252		-15.7	+/-20
Aroclor 1260 [2C]	A	250.00	238	0.0836545	0.0795027		-4.9	+/-20
Decachlorobiphenyl	A	40.000	37.9	0.8555994	0.8115673		-5.1	+/-20
Tetrachlorometaxylene	A	40.000	37.5	1.1307870	1.0610020		-6.2	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.2	1.2696430	1.2773160		0.6	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.3	1.0814980	1.0082190		-6.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total CollAve (4 peaks):				216.9		Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):				216.3		Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total CollAve (3 peaks):				74.4		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total CollAve (4 peaks):				279.8		Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):				202.0		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total CollAve (4 peaks):				262.0		Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):				260.1		Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total CollAve (4 peaks):				137.3		Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):				124.4		Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total CollAve (4 peaks):				97.4		Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):				35.3		Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total CollAve (5 peaks):				210.7		Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):				208.2		Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total CollAve (4 peaks):				205.3		Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):				124.9		Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total CollAve (4 peaks):				32.1		Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):				24.7		Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

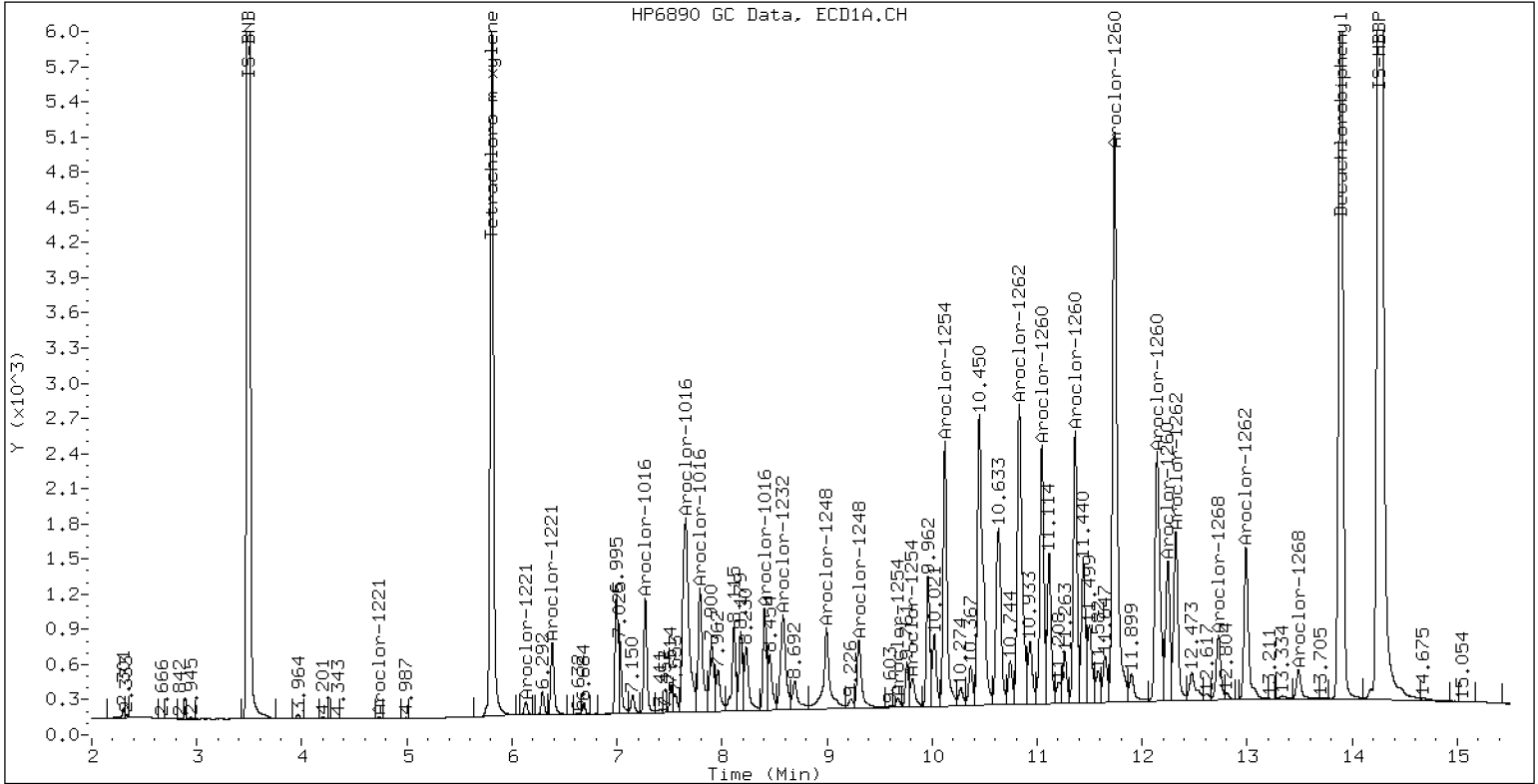
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV

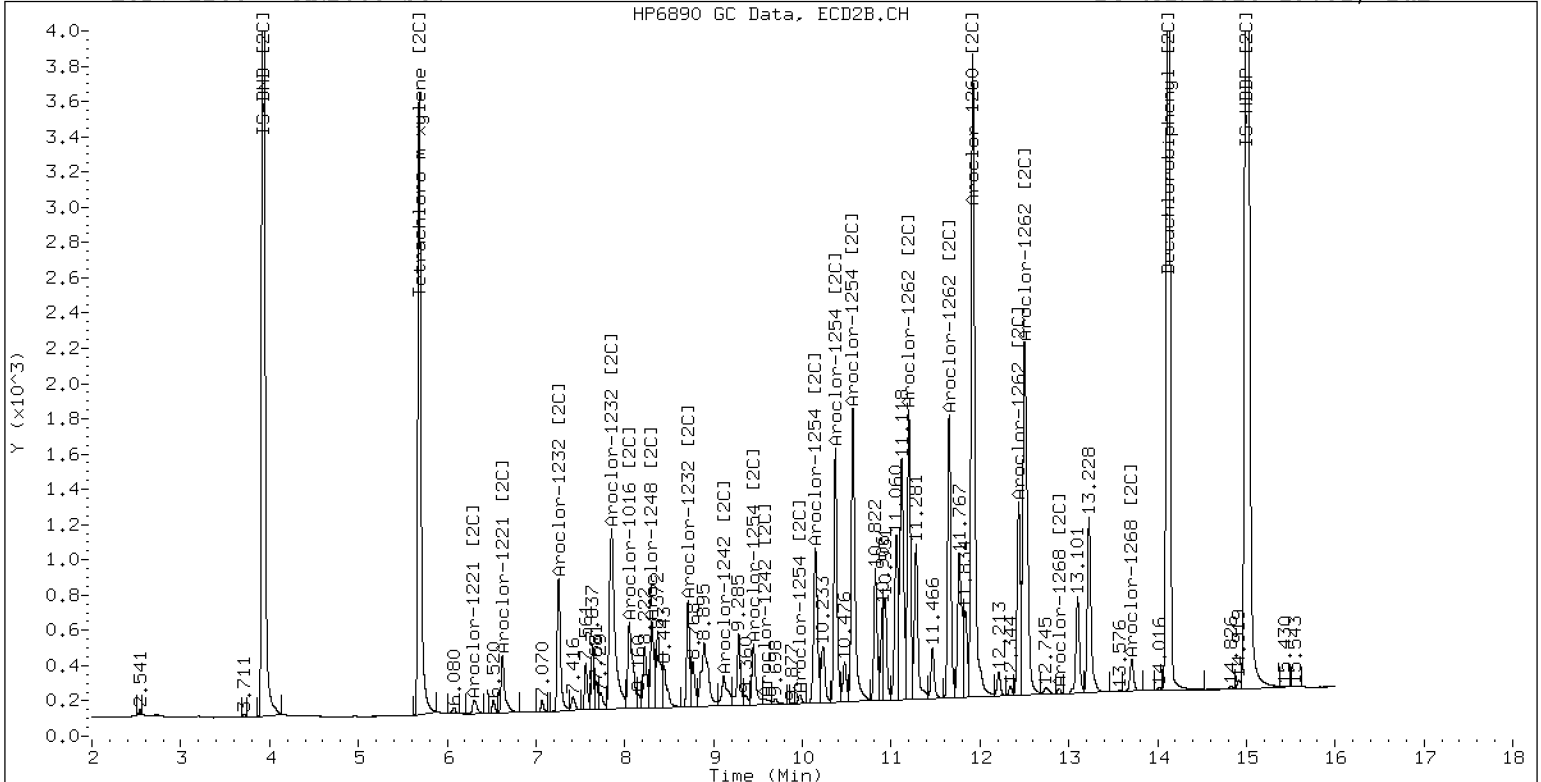
24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV

24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>01242325ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLA0281</u>	Injection Date:	<u>01/24/23</u>
Lab Sample ID:	<u>SLA0281-SCV2</u>	Injection Time:	<u>20:12</u>
Sequence Name:	<u>AR1242SCV2</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	223	0.0411165	0.0365437		-10.9	+/-20
Aroclor 1242 [2C]	A	250.00	235	0.0423236	0.0386405		-5.9	+/-20
Decachlorobiphenyl	A	40.000	38.5	0.8555994	0.8244733		-3.6	+/-20
Tetrachlorometaxylene	A	40.000	37.8	1.1307870	1.0677240		-5.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.3	1.2696430	1.2804690		0.9	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.4	1.0814980	1.0101840		-6.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-JAN-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total CollAve (4 peaks):				167.7		Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):				163.7		Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total CollAve (3 peaks):				57.3		Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total CollAve (4 peaks):				254.6		Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):				162.0		Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total CollAve (4 peaks):				222.6		Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):				209.0		Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total CollAve (4 peaks):				131.8		Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):				113.9		Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total CollAve (5 peaks):				42.7		Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):				39.6		Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total CollAve (4 peaks):				1.2		Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):				0.9		Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total CollAve (3 peaks):				11.0		Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total CollAve (3 peaks):				1.9		Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>01242326ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLA0281</u>	Injection Date:	<u>01/24/23</u>
Lab Sample ID:	<u>SLA0281-SCV3</u>	Injection Time:	<u>20:33</u>
Sequence Name:	<u>AR1248SCV3</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	237	0.0592639	0.0563710		-5.1	+/-20
Aroclor 1248 [2C]	A	250.00	231	0.0453673	0.0417577		-7.6	+/-20
Decachlorobiphenyl	A	40.000	38.3	0.8555994	0.8184425		-4.3	+/-20
Tetrachlorometaxylene	A	40.000	36.8	1.1307870	1.0389130		-8.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.6	1.2696430	1.2561970		-1.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.5	1.0814980	0.9880182		-8.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-JAN-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total CollAve (4 peaks):				152.0		Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):				94.9		Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
CollAve: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total CollAve (3 peaks):				316.9		Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total CollAve (4 peaks):				240.5		Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):				188.8		Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total CollAve (4 peaks):				237.2		Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):				236.3		Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total CollAve (5 peaks):				115.3		Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):				102.7		Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total CollAve (5 peaks):				2.2		Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):				1.9		Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total CollAve (4 peaks):				8.9		Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):				1.2		Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total CollAve (4 peaks):				0.6		Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):				0.5		Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

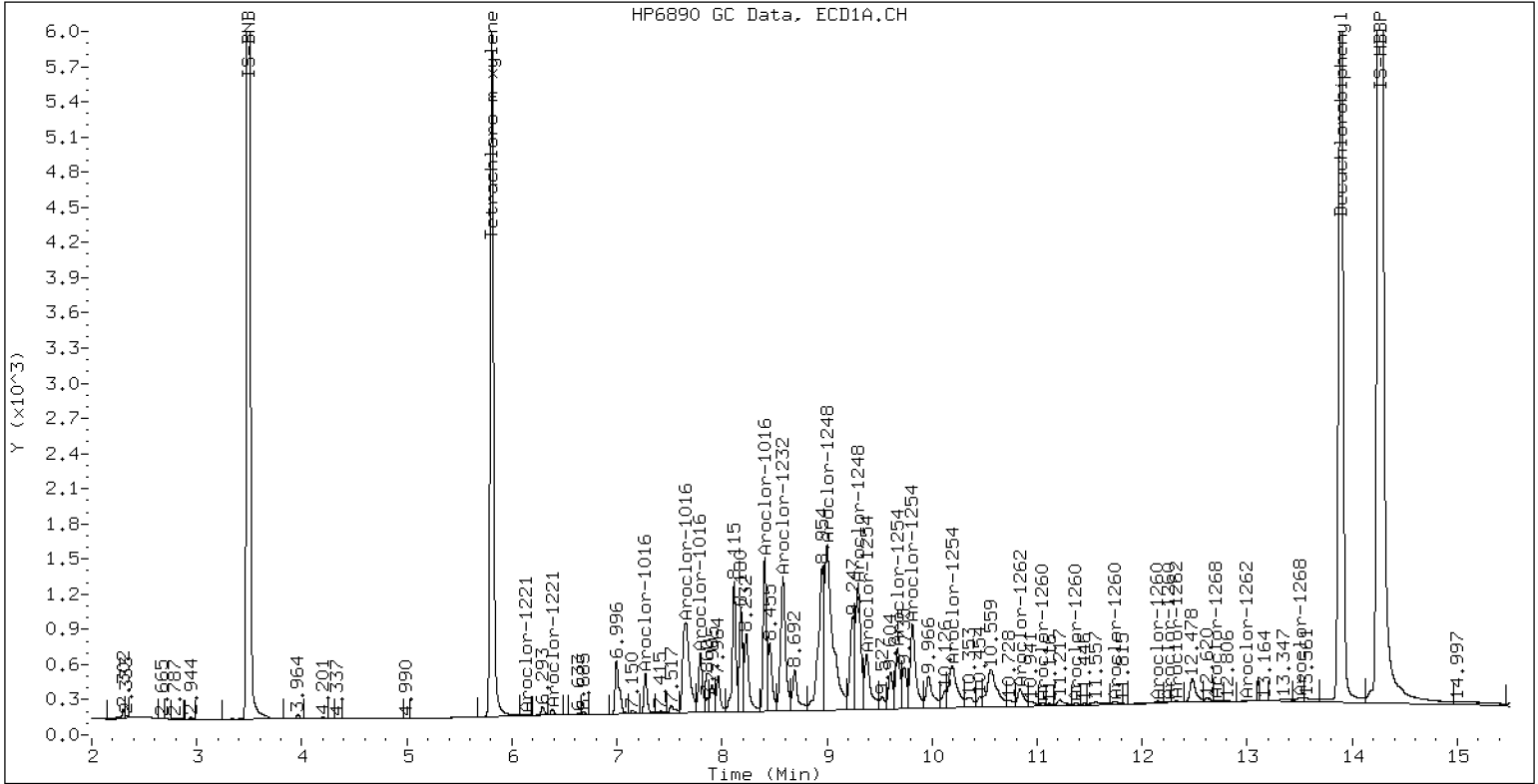
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV

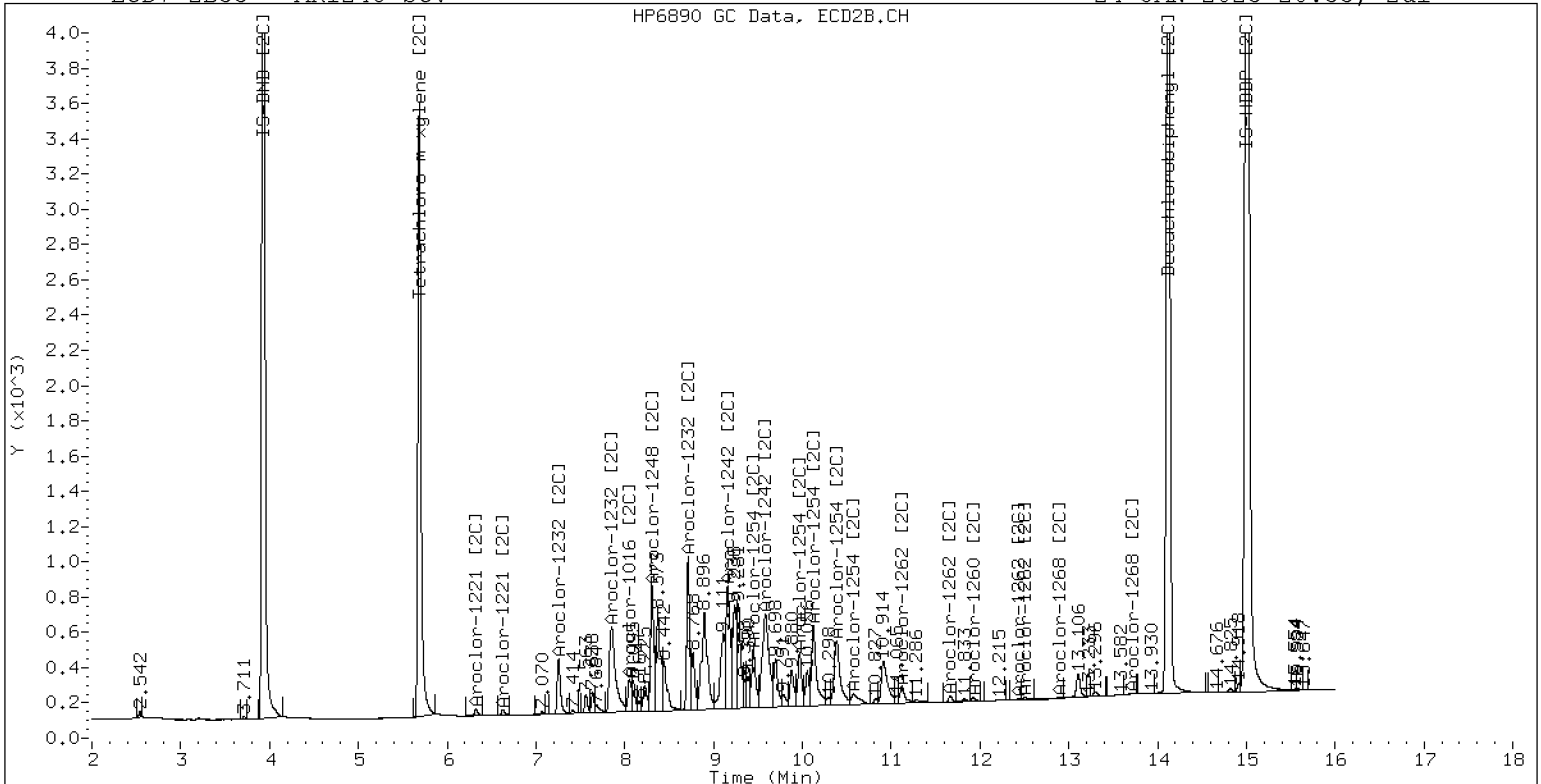
24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV

24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>01242327ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLA0281</u>	Injection Date:	<u>01/24/23</u>
Lab Sample ID:	<u>SLA0281-SCV4</u>	Injection Time:	<u>20:54</u>
Sequence Name:	<u>AR1254SCV4</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	221	0.0675033	0.0594048		-11.7	+/-20
Aroclor 1254 [2C]	A	250.00	227	0.0733219	0.0662023		-9.4	+/-20
Decachlorobiphenyl	A	40.000	37.1	0.8555994	0.7930764		-7.3	+/-20
Tetrachlorometaxylene	A	40.000	36.7	1.1307870	1.0364220		-8.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.5	1.2696430	1.2551640		-1.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.0814980	0.9904044		-8.4	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8	
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0	
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1	
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8	
Total CollAve (4 peaks):				30.5	Total Col2Ave (3 peaks):				53.9	RPD = 55*	
Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks						
Aroclor-1221	1	---			0.0	1	---			0.0	
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7	
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1232	1	---			0.0	1	---			0.0	
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9	
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0	
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5	
CollAve: <3 Quant Peaks					Col2Ave: <3 Quant Peaks						
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2	
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0	
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9	
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7	
Total CollAve (4 peaks):				46.4	Total Col2Ave (3 peaks):				168.6	RPD = 114*	
Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks						
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9	
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1	
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4	
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4	
Total CollAve (4 peaks):				165.7	Total Col2Ave (4 peaks):				120.7	RPD = 31	
Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks): 115.5 RPD = 17						
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9	
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4	
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2	
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2	
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0	
Total CollAve (5 peaks):				220.8	Total Col2Ave (5 peaks):				226.5	RPD = 3	
Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks): 224.7 RPD = 2						
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6	
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2	
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3	
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0	
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			---	
Total CollAve (5 peaks):				15.6	Total Col2Ave (3 peaks):				50.0	RPD = 105*	
Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks						
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3	
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0	
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9	
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0	
Total CollAve (3 peaks):				135.6	Total Col2Ave (3 peaks):				91.7	RPD = 39	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0	
Aroclor-1268	2	---			0.0	2	---			0.0	
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2	
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3	
Total CollAve (3 peaks):				0.8	Total Col2Ave (3 peaks):				3.8	RPD = 130*	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

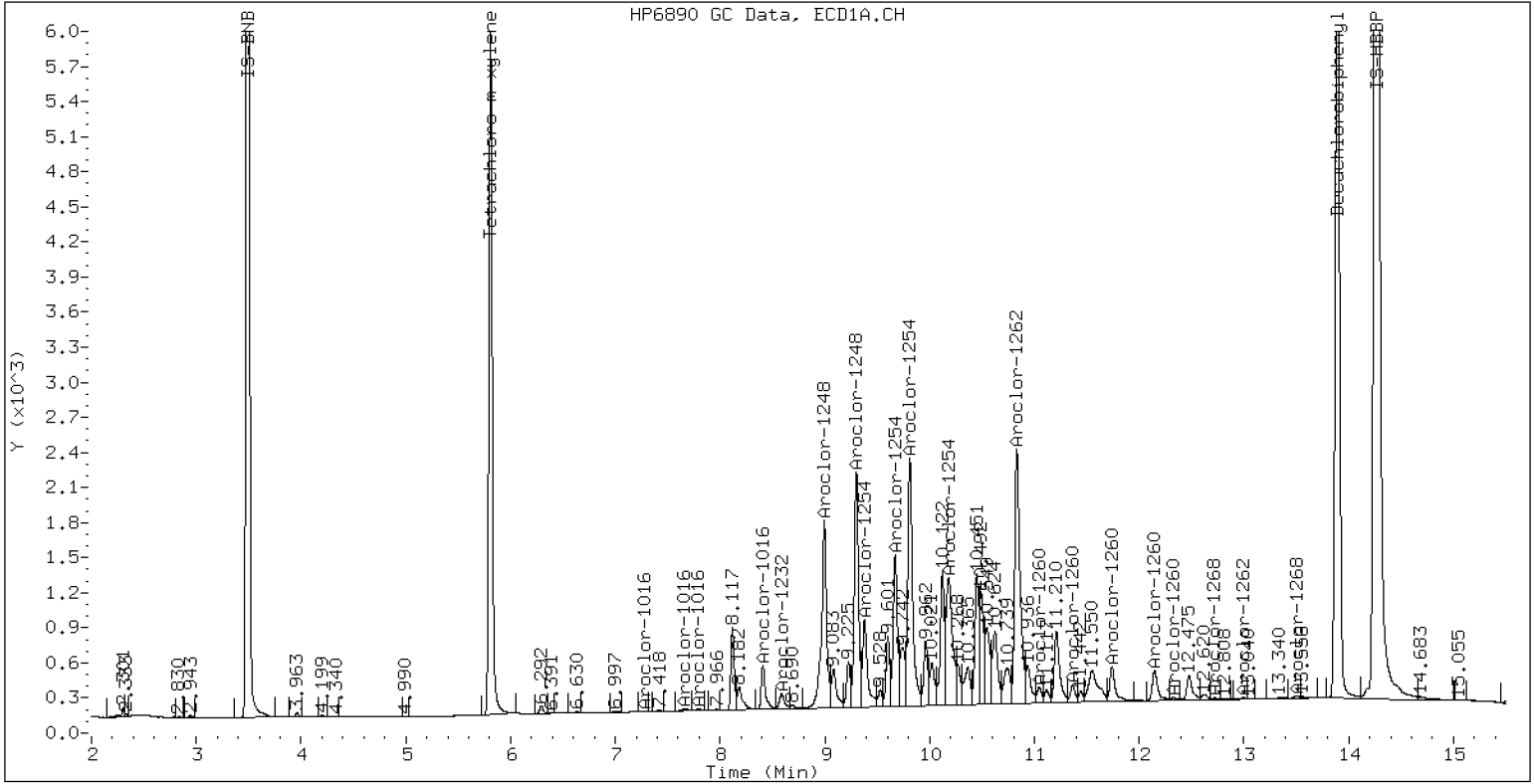
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV

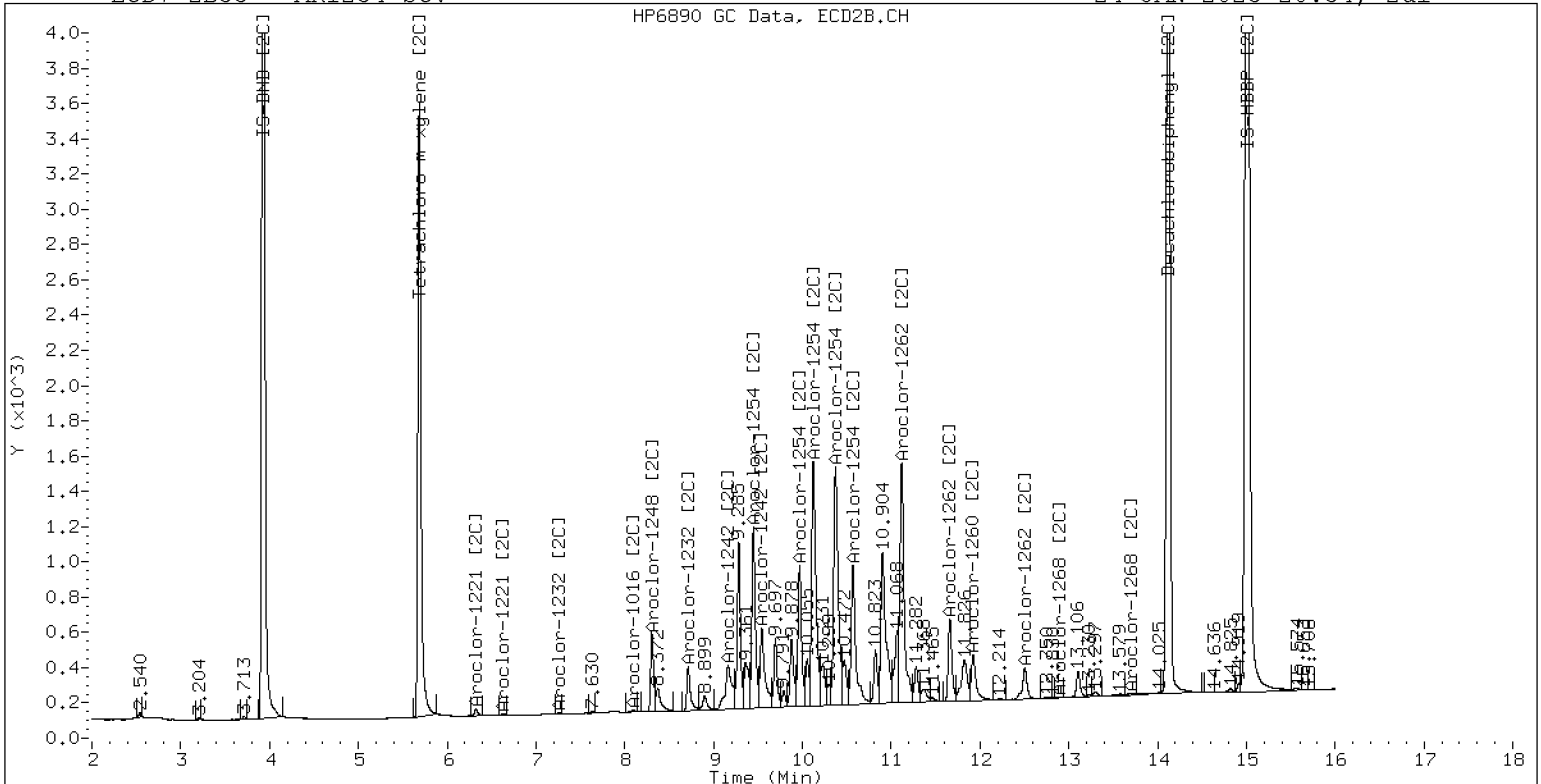
24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV

24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>01242328ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLA0281</u>	Injection Date:	<u>01/24/23</u>
Lab Sample ID:	<u>SLA0281-SCV5</u>	Injection Time:	<u>21:15</u>
Sequence Name:	<u>AR2162SCV5</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1221	A	250.00	228	0.0153579	0.0138791		-8.8	+/-20
Aroclor 1221 [2C]	A	250.00	239	0.0134687	0.0127460		-4.5	+/-20
Decachlorobiphenyl	A	40.000	37.5	0.8555994	0.8010750		-6.4	+/-20
Tetrachlorometaxylene	A	40.000	37.3	1.1307870	1.0541060		-6.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.5	1.2696430	1.2528610		-1.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.2	1.0814980	1.0047210		-7.1	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3	
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9	
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2	
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0	
Total CollAve (4 peaks):				22.4	Total Col2Ave (4 peaks):				22.1	RPD = 1	
Corrected Ave (3 peaks):				20.3	Corrected Ave (3 peaks):				17.3	RPD = 16	
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8	
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2	
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2	
Total CollAve (3 peaks):				228.1	Total Col2Ave (3 peaks):				238.7	RPD = 5	
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks						
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9	
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2	
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9	
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0	
Total CollAve (4 peaks):				192.6	Total Col2Ave (4 peaks):				141.7	RPD = 30	
Corrected Ave (3 peaks):				126.3	Corrected Ave (3 peaks):				53.4	RPD = 81*	
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1	
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9	
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9	
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6	
Total CollAve (4 peaks):				24.0	Total Col2Ave (4 peaks):				32.3	RPD = 30	
Corrected Ave (3 peaks):				20.5	Corrected Ave (3 peaks):				28.1	RPD = 31	
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4	
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3	
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7	
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9	
Total CollAve (4 peaks):				46.0	Total Col2Ave (4 peaks):				14.6	RPD = 104*	
Corrected Ave (3 peaks):				27.5	Corrected Ave (3 peaks):				11.5	RPD = 82*	
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3	
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3	
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5	
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9	
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5	
Total CollAve (5 peaks):				110.8	Total Col2Ave (5 peaks):				223.7	RPD = 68*	
Corrected Ave (4 peaks):				31.0	Corrected Ave (4 peaks):				133.5	RPD = 125*	
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4	
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0	
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7	
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5	
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----	
Total CollAve (5 peaks):				499.5	Total Col2Ave (4 peaks):				592.1	RPD = 17	
Corrected Ave (4 peaks):				426.6	Corrected Ave (3 peaks):				500.3	RPD = 16	
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1	
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0	
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4	
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6	
Total CollAve (4 peaks):				421.5	Total Col2Ave (4 peaks):				437.0	RPD = 4	
Corrected Ave (3 peaks):				419.8	Corrected Ave (3 peaks):				434.3	RPD = 3	
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0	
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7	
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3	
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8	
Total CollAve (4 peaks):				111.6	Total Col2Ave (4 peaks):				112.0	RPD = 0	

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

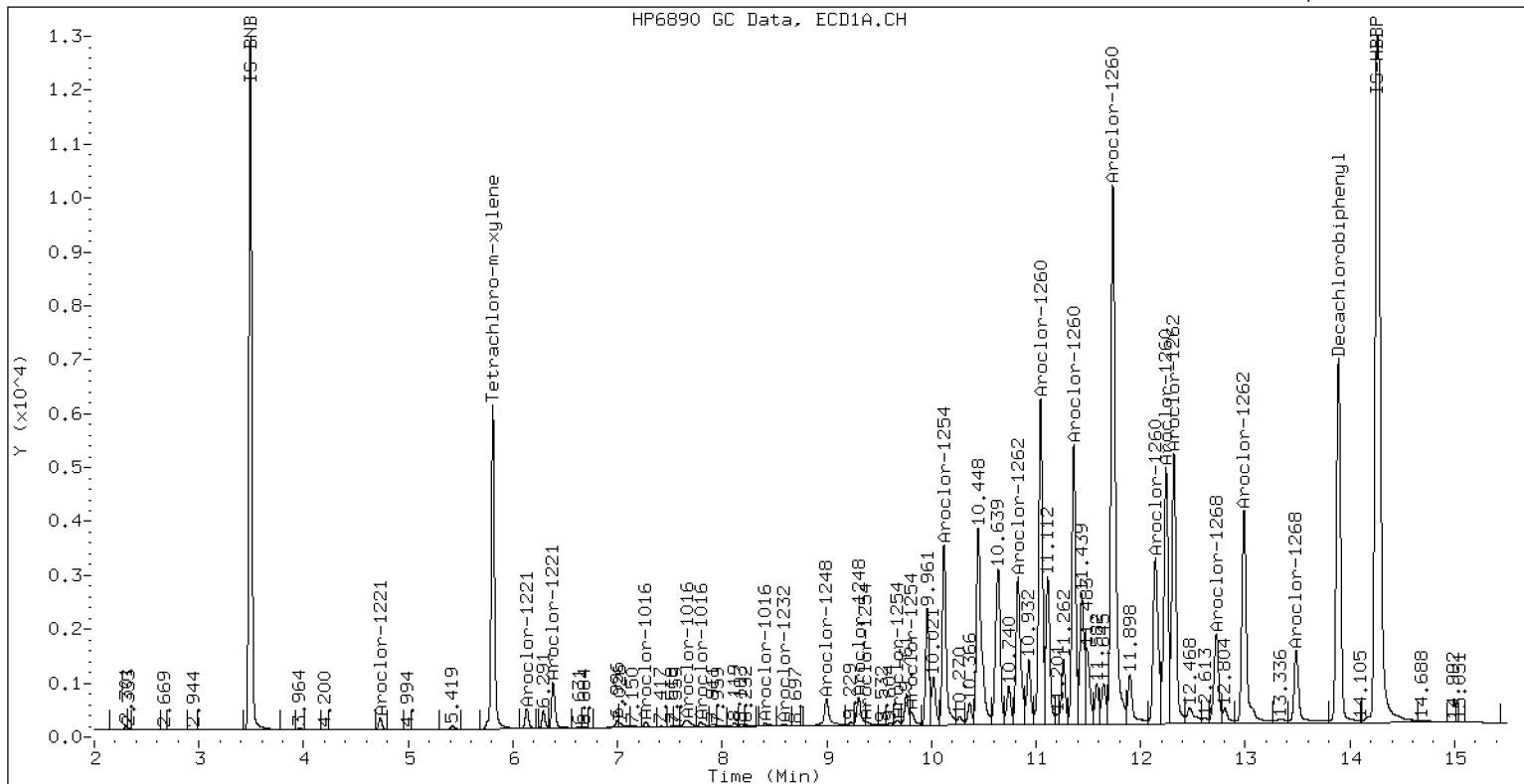
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV

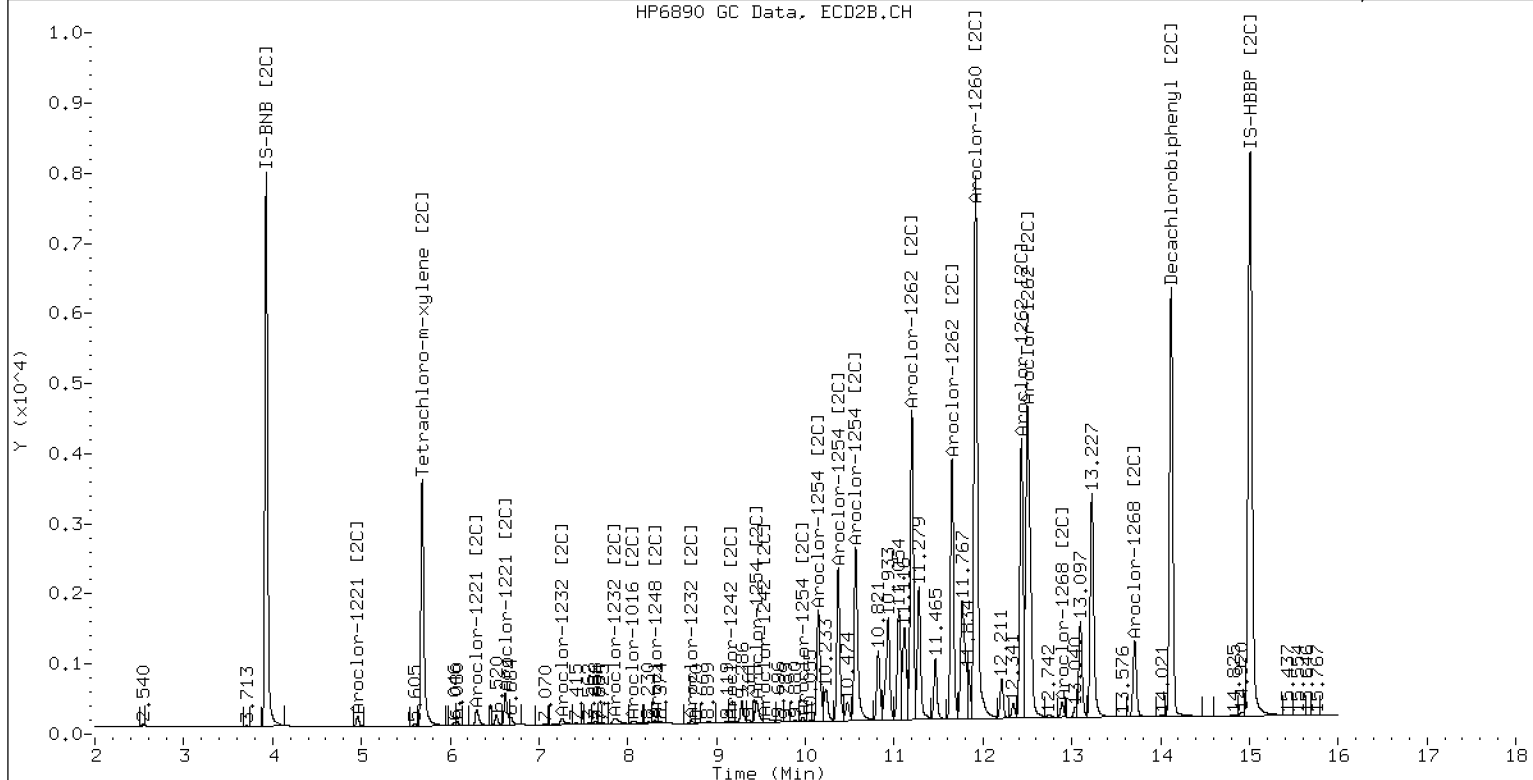
24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV

24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A**

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>01242329ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLA0281</u>	Injection Date:	<u>01/24/23</u>
Lab Sample ID:	<u>SLA0281-SCV6</u>	Injection Time:	<u>21:36</u>
Sequence Name:	<u>AR3268SCV6</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1232	A	250.00	216	0.0178560	0.0160358		-13.7	+/-20
Aroclor 1232 [2C]	A	250.00	239	0.0188178	0.0180429		-4.5	+/-20
Decachlorobiphenyl	A	40.000	54.6	0.8555994	1.1682210		36.5	+/-20
Tetrachlorometaxylene	A	40.000	36.4	1.1307870	1.0284340		-9.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	57.9	1.2696430	1.8387740		44.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.3	1.0814980	0.9815176		-9.2	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total CollAve (4 peaks):				101.3		Total Col2Ave (4 peaks):				103.7 RPD = 2
Corrected Ave (3 peaks):				99.4		Corrected Ave (3 peaks):				101.6 RPD = 2
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total CollAve (3 peaks):				144.5		Total Col2Ave (3 peaks):				154.8 RPD = 7
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total CollAve (4 peaks):				215.7		Total Col2Ave (4 peaks):				238.8 RPD = 10
Corrected Ave (3 peaks):				210.5		Corrected Ave (3 peaks):				236.6 RPD = 12
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total CollAve (4 peaks):				121.0		Total Col2Ave (4 peaks):				125.4 RPD = 4
Corrected Ave (3 peaks):				118.0		Corrected Ave (3 peaks):				121.8 RPD = 3
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total CollAve (4 peaks):				92.7		Total Col2Ave (4 peaks):				69.7 RPD = 28
Corrected Ave (3 peaks):				85.7		Corrected Ave (3 peaks):				66.3 RPD = 26
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total CollAve (5 peaks):				31.1		Total Col2Ave (5 peaks):				11.2 RPD = 94*
Corrected Ave (4 peaks):				23.3		Corrected Ave (4 peaks):				10.1 RPD = 79*
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total CollAve (5 peaks):				250.2		Total Col2Ave (4 peaks):				449.7 RPD = 57*
Corrected Ave (4 peaks):				42.5		Corrected Ave (3 peaks):				217.5 RPD = 135*
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total CollAve (4 peaks):				340.7		Total Col2Ave (4 peaks):				299.1 RPD = 13
Corrected Ave (3 peaks):				261.2		Corrected Ave (3 peaks):				202.6 RPD = 25
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total CollAve (4 peaks):				223.7		Total Col2Ave (4 peaks):				218.1 RPD = 3

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>02132324ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLB0168</u>	Injection Date:	<u>02/13/23</u>
Lab Sample ID:	<u>SLB0168-CCV3</u>	Injection Time:	<u>17:58</u>
Sequence Name:	<u>AR1242CCV3</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	234	0.0411165	0.0384356		-6.4	
Aroclor-1242 (1)	A	250.00	237		0.0232694			
Aroclor-1242 (2)	A	250.00	233		0.0747668			
Aroclor-1242 (3)	A	250.00	236		0.0225328			
Aroclor-1242 (4)	A	250.00	230		0.0331735			
Aroclor 1242 [2C]	A	250.00	236	0.0423236	0.0399911		-5.6	
Aroclor-1242 (1) [2C]	A	250.00	245		0.0342834			
Aroclor-1242 (2) [2C]	A	250.00	236		0.0734751			
Aroclor-1242 (3) [2C]	A	250.00	240		0.0233706			
Aroclor-1242 (4) [2C]	A	250.00	223		0.0288352			
Decachlorobiphenyl	A	40.000	30.6	0.8555994	0.6552115		-23.5	
Tetrachlorometaxylene	A	40.000	46.3	1.1307870	1.3094560		15.8	
Decachlorobiphenyl [2C]	A	40.000	32.7	1.2696430	1.0393810		-18.3	
Tetrachlorometaxylene [2C]	A	40.000	45.6	1.0814980	1.2319680		14.0	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132324ECD7.D
Data file 2: /230213.b/230213.b/02132324ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV3
Client ID:
Injection Date: 13-FEB-2023 17:58
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.807	-0.001	289814	5.683	-0.001	226740	46.3	45.6	1.6	Tetrachloro-m-xylene
13.890	0.002	312930	14.117	0.000	315900	30.6	32.7	6.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	442648	-12.1
Hexabromobiphenyl	647433	955203	47.5

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	368094	9.3
Hexabromobiphenyl	382032	607862	59.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1242	1	7.268	-0.002	32188	237.5	1	7.251	-0.001	39436	245.0	
Aroclor-1242	2	7.651	-0.004	103423	233.2	2	7.849	-0.000	84518	236.4	
Aroclor-1242	3	8.402	-0.004	31169	236.5	3	9.155	0.001	26883	240.1	
Aroclor-1242	4	8.576	-0.006	45888	230.5	4	9.582	0.003	33169	223.5	
Total Col1Ave (4 peaks):				234.4	Total Col2Ave (4 peaks):				236.2	RPD = 1	
Corrected Ave (3 peaks):				233.4	Corrected Ave (3 peaks):				233.3	RPD = 0	
CalAmt %D:				-6.2	CalAmt %D:				-5.5		

Total PCB Area Col1 (5.908 - 13.788) = 784162 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 626247 Col2 Total PCB = 0.2 ppm*

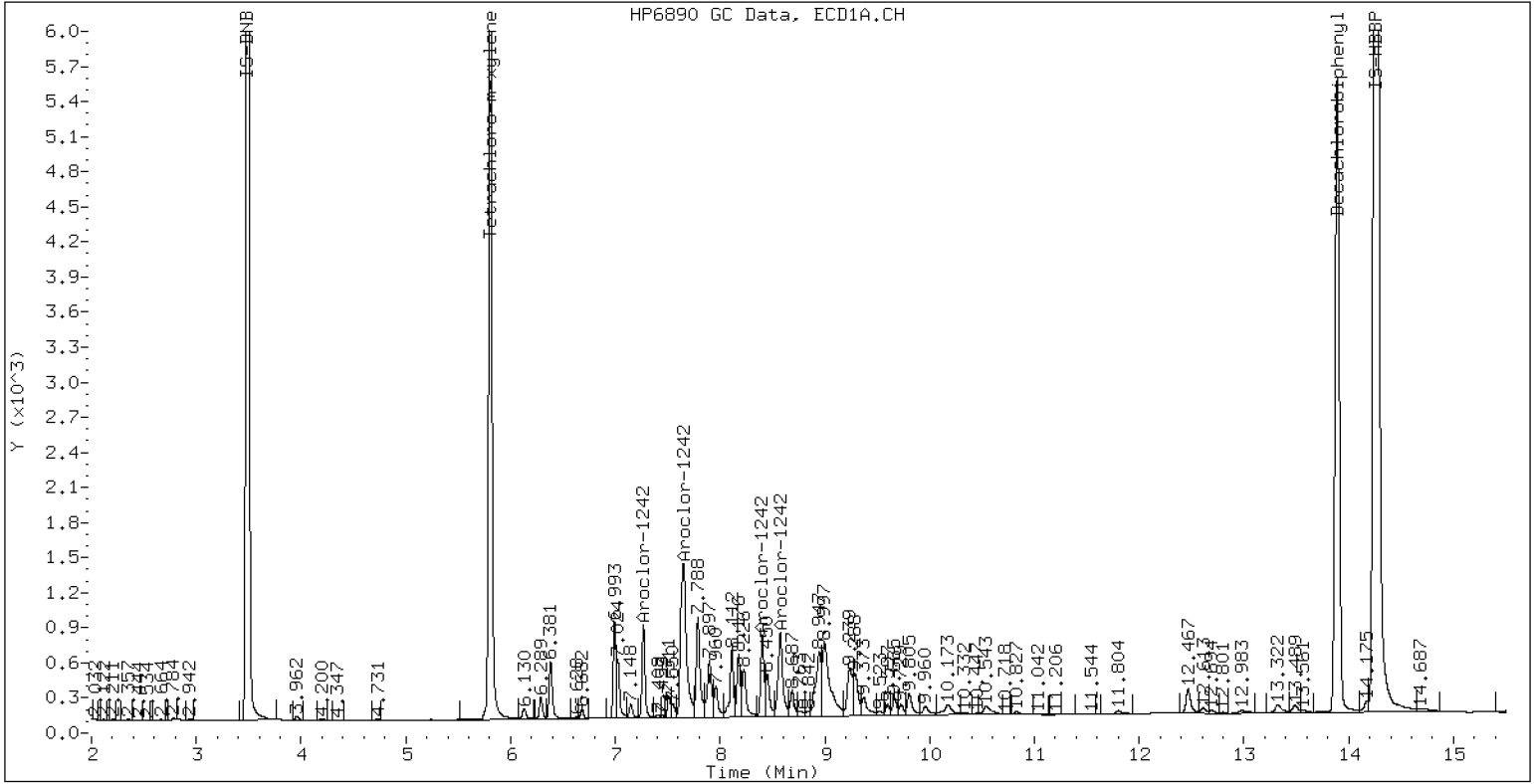
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3

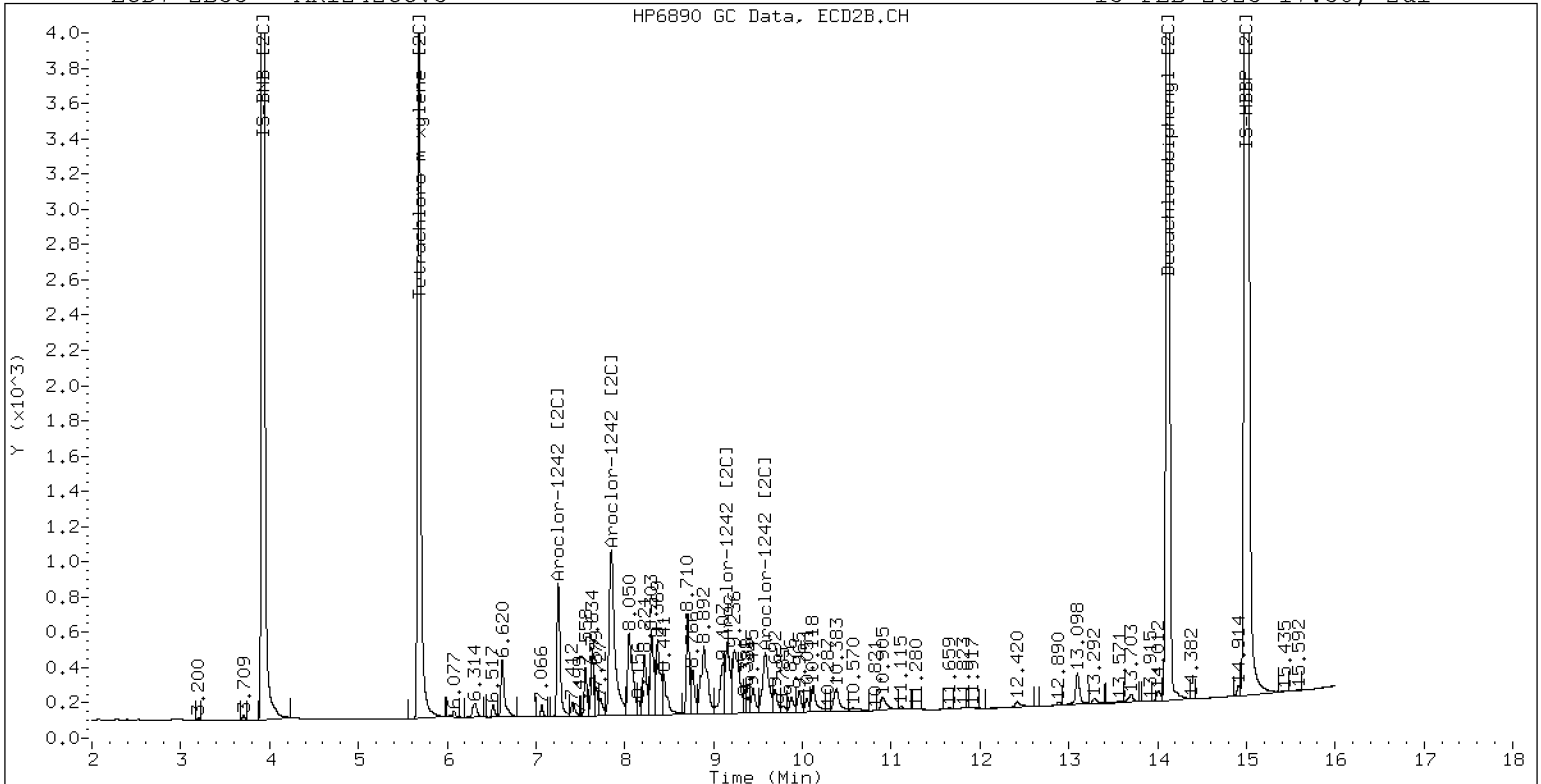
13-FEB-2023 17:58, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3

13-FEB-2023 17:58, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132325ECD7.D
Data file 2: /230213.b/230213.b/02132325ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 13-FEB-2023 18:19
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.806	-0.002	251414	5.683	-0.002	193280	40.0	39.0	2.4	Tetrachloro-m-xylene
13.890	0.001	338002	14.116	-0.001	340877	33.5	35.2	4.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	444740	-11.6
Hexabromobiphenyl	647433	943358	45.7

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	366222	8.7
Hexabromobiphenyl	382032	610696	59.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.268	-0.000	40286	243.8	1	7.251	-0.001	47819	240.7	
Aroclor-1016	2	7.650	0.001	131597	240.3	2	7.848	-0.000	105057	241.4	
Aroclor-1016	3	7.787	-0.000	56630	224.8	3	8.049	-0.000	44364	249.8	
Aroclor-1016	4	8.401	-0.000	39579	244.2	4	8.302	-0.001	33964	243.9	
Total CollAve (4 peaks):				238.3		Total Col2Ave (4 peaks):				243.9	RPD = 2
Corrected Ave (3 peaks):				236.3		Corrected Ave (3 peaks):				242.0	RPD = 2
CalAmt %D:				-4.7		CalAmt %D:				-2.4	
Aroclor-1260	1	11.041	0.001	86104	162.7	1	11.649	0.000	79381	180.2	
Aroclor-1260	2	11.357	0.002	90052	165.5	2	11.913	0.000	206547	185.3	
Aroclor-1260	3	11.731	0.003	237135	165.6	3	12.431	-0.000	54460	196.0	
Aroclor-1260	4	12.135	0.002	121896	164.7	4	12.498	0.002	136434	189.1	
Aroclor-1260	5	12.241	0.000	50247	155.8	NS	---			----	
Total CollAve (5 peaks):				162.8		Total Col2Ave (4 peaks):				187.7	RPD = 14
Corrected Ave (4 peaks):				162.2		Corrected Ave (3 peaks):				184.9	RPD = 13
CalAmt %D:				-34.9		CalAmt %D:				-24.9	

Total PCB Area Coll (5.908 - 13.788) = 2467607 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1911086 Col2 Total PCB = 0.5 ppm*

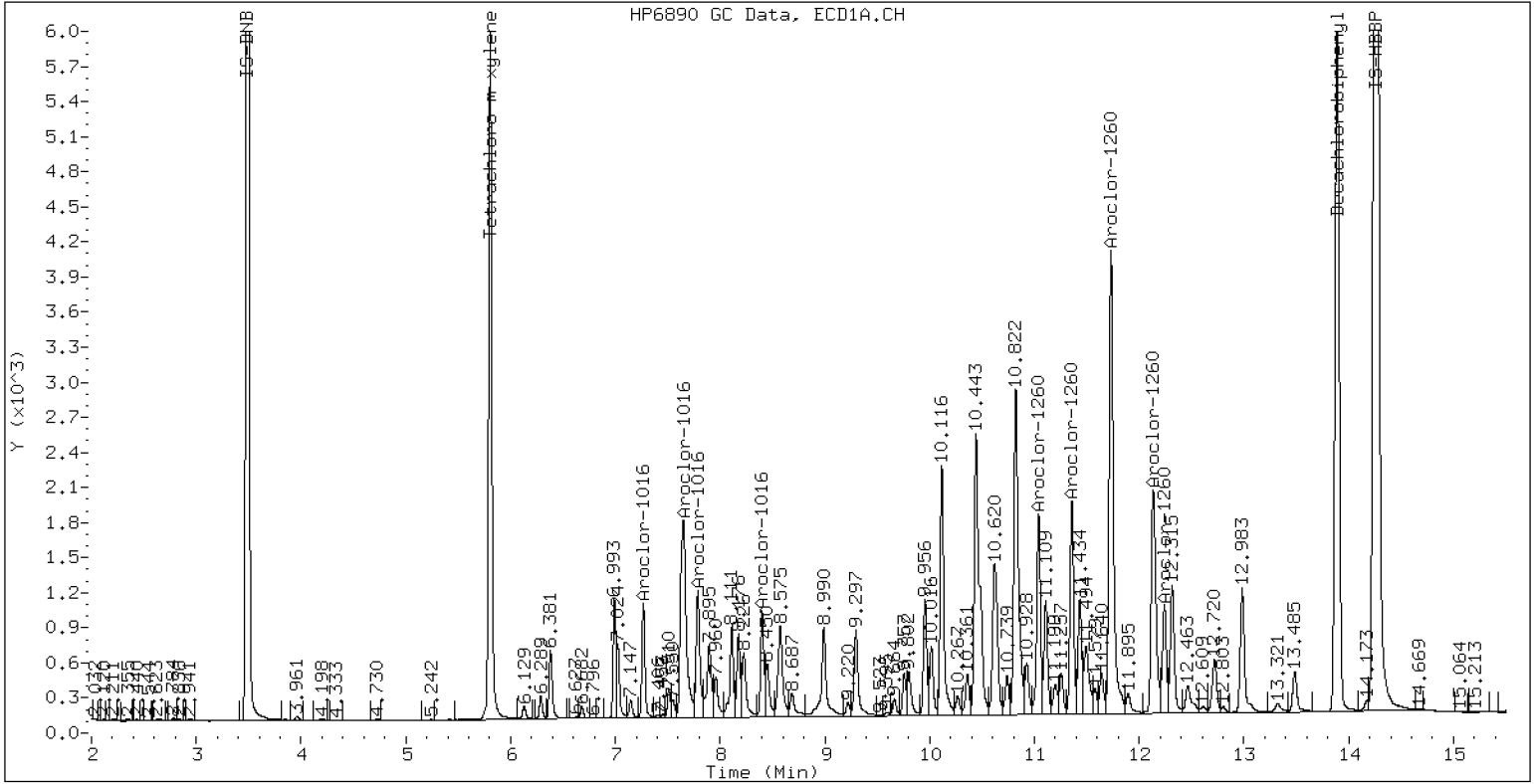
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4

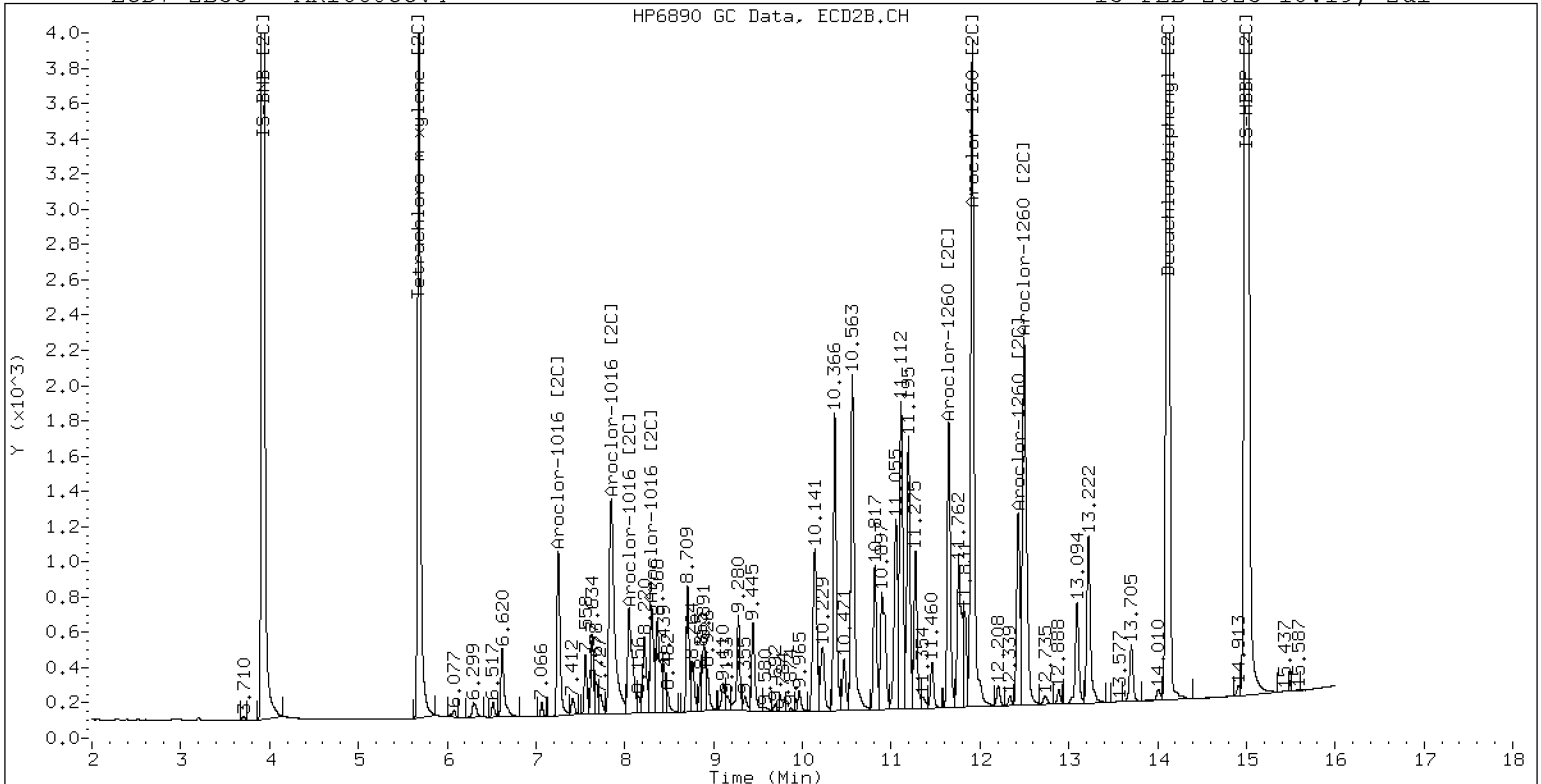
13-FEB-2023 18:19, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4

13-FEB-2023 18:19, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>02132342ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLB0168</u>	Injection Date:	<u>02/14/23</u>
Lab Sample ID:	<u>SLB0168-CCV5</u>	Injection Time:	<u>00:16</u>
Sequence Name:	<u>AR1254CCV5</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	193	0.0675033	0.0521140		-22.7	
Aroclor-1254 (1)	A	250.00	201		0.0656569			
Aroclor-1254 (2)	A	250.00	205		0.0285112			
Aroclor-1254 (3)	A	250.00	182		0.0381009			
Aroclor-1254 (4)	A	250.00	194		0.0793688			
Aroclor-1254 (5)	A	250.00	184		0.0489321			
Aroclor 1254 [2C]	A	250.00	200	0.0733219	0.0587725		-19.8	
Aroclor-1254 (1) [2C]	A	250.00	210		0.0488633			
Aroclor-1254 (2) [2C]	A	250.00	212		0.0397805			
Aroclor-1254 (3) [2C]	A	250.00	196		0.0801244			
Aroclor-1254 (4) [2C]	A	250.00	207		0.0847329			
Aroclor-1254 (5) [2C]	A	250.00	177		0.0403615			
Decachlorobiphenyl	A	40.000	32.4	0.8555994	0.6937590		-19.0	
Tetrachlorometaxylene	A	40.000	37.6	1.1307870	1.0626820		-6.0	
Decachlorobiphenyl [2C]	A	40.000	34.5	1.2696430	1.0948540		-13.8	
Tetrachlorometaxylene [2C]	A	40.000	38.1	1.0814980	1.0294000		-4.8	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132342ECD7.D
Data file 2: /230213.b/230213.b/02132342ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCV5
Client ID:
Injection Date: 14-FEB-2023 00:16
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.806	-0.002	227481	5.682	-0.002	187954	37.6	38.1	1.3	Tetrachloro-m-xylene
13.889	0.001	157604	14.116	-0.001	199576	32.4	34.5	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	428126	-14.9
Hexabromobiphenyl	647433	454348	-29.8

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	365172	8.4
Hexabromobiphenyl	382032	364571	-4.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1254	1	9.293	0.000	87842	201.3	1	9.444	0.000	55761	210.5	
Aroclor-1254	2	9.371	-0.000	38145	204.8	2	9.964	0.000	45396	212.0	
Aroclor-1254	3	9.661	0.000	50975	182.3	3	10.116	0.000	91435	195.7	
Aroclor-1254	4	9.799	-0.001	106187	193.8	4	10.365	0.000	96694	207.0	
Aroclor-1254	5	10.160	-0.004	65466	183.8	5	10.563	0.000	46059	177.0	
Total CollAve (5 peaks):				193.2		Total Col2Ave (5 peaks):				200.5	RPD = 4
Corrected Ave (4 peaks):				190.3		Corrected Ave (4 peaks):				197.6	RPD = 4
CalAmt %D:				-22.7		CalAmt %D:				-19.8	

Total PCB Area Col1 (5.908 - 13.788) = 1165653 Col1 Total PCB = 0.2 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 928439 Col2 Total PCB = 0.2 ppm*

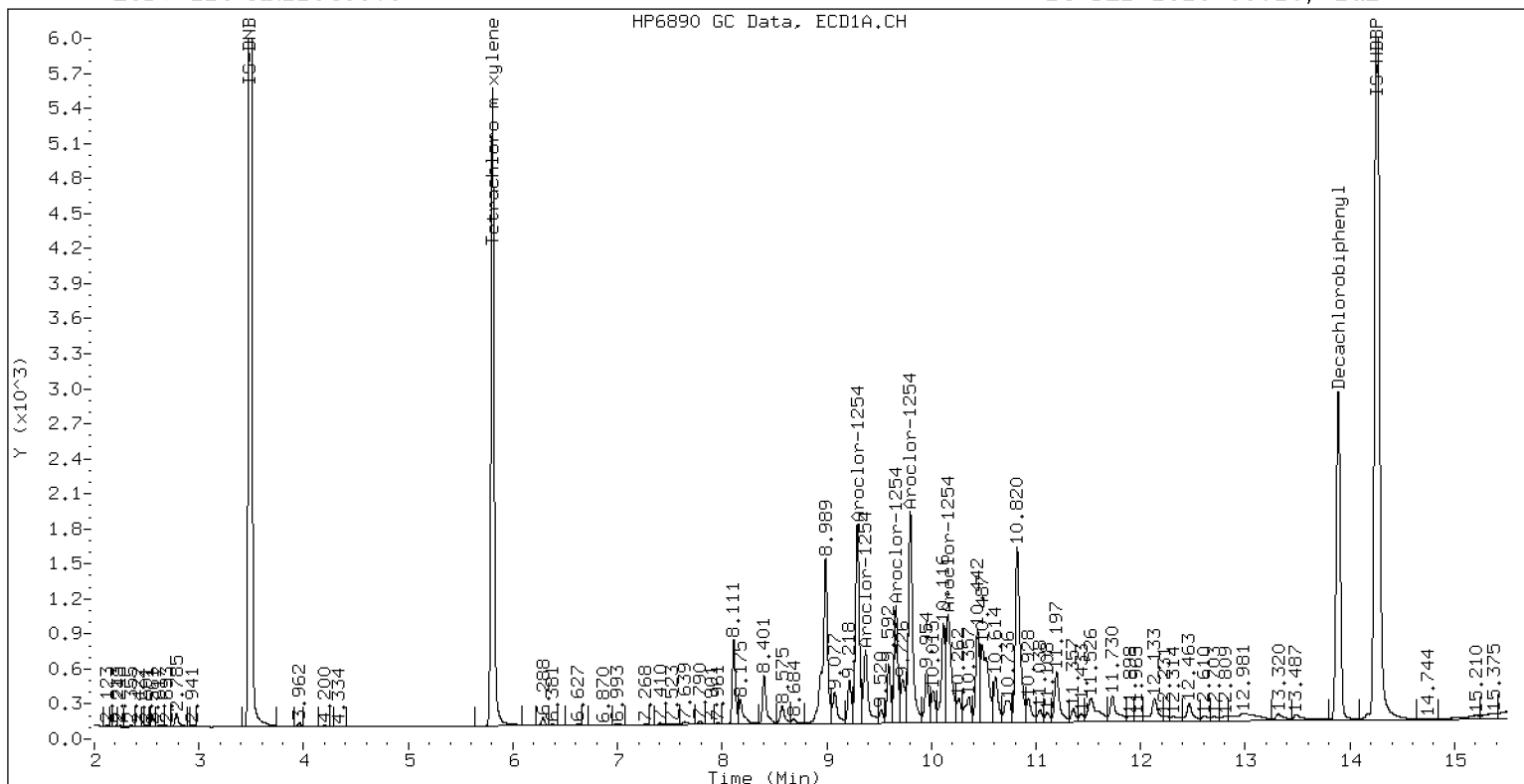
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCV5

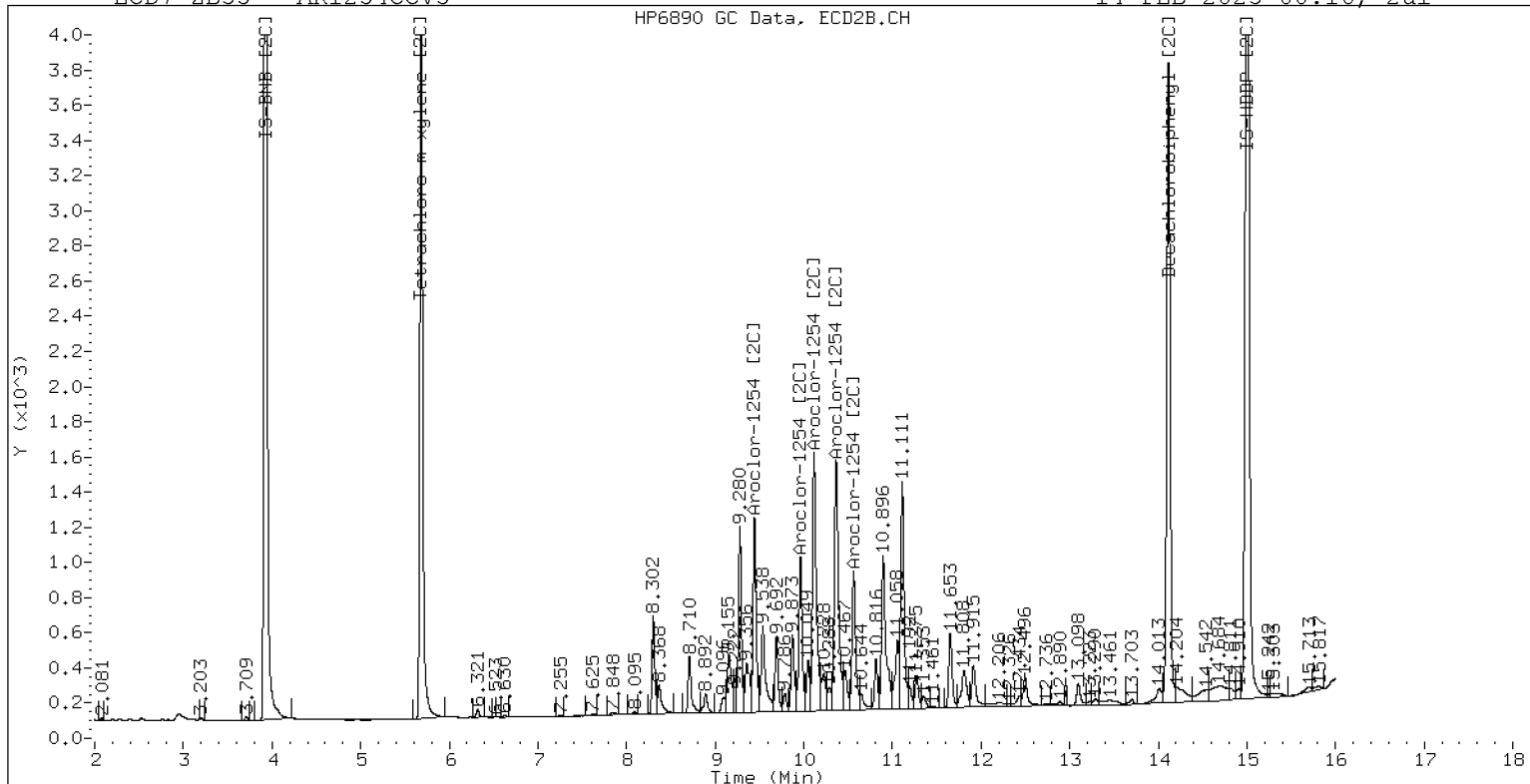
14-FEB-2023 00:16, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCV5

14-FEB-2023 00:16, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132343ECD7.D
Data file 2: /230213.b/230213.b/02132343ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV6
Client ID:
Injection Date: 14-FEB-2023 00:37
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.806	-0.002	241551	5.683	-0.001	191883	39.5	38.9	1.6	Tetrachloro-m-xylene
13.889	0.001	201710	14.117	-0.000	232342	34.7	35.5	2.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	432527	-14.1
Hexabromobiphenyl	647433	543918	-16.0

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	365140	8.4
Hexabromobiphenyl	382032	412190	7.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.267	-0.001	38822	241.5	1	7.251	-0.002	47704	240.9
Aroclor-1016	2	7.647	-0.002	126949	238.4	2	7.848	-0.000	104827	241.5
Aroclor-1016	3	7.786	-0.002	53734	219.3	3	8.047	-0.002	43936	248.1
Aroclor-1016	4	8.400	-0.002	37511	238.0	4	8.302	-0.002	33129	238.6
Total CollAve (4 peaks):				234.3		Total Col2Ave (4 peaks):				242.3 RPD = 3
Corrected Ave (3 peaks):				231.9		Corrected Ave (3 peaks):				240.3 RPD = 4

CalAmt %D: -6.3

CalAmt %D: -3.1

Aroclor-1260	1	11.039	-0.000	68585	224.7	1	11.648	-0.000	67079	225.6
Aroclor-1260	2	11.356	0.000	68143	217.2	2	11.914	0.001	170346	226.4
Aroclor-1260	3	11.729	0.000	172465	208.8	3	12.432	0.000	44884	239.4
Aroclor-1260	4	12.133	0.000	86653	203.1	4	12.496	-0.000	108804	223.5
Aroclor-1260	5	12.239	-0.001	35715	192.0	NS	---			----
Total CollAve (5 peaks):				209.2		Total Col2Ave (4 peaks):				228.7 RPD = 9
Corrected Ave (4 peaks):				205.3		Corrected Ave (3 peaks):				225.2 RPD = 9

CalAmt %D: -16.3

CalAmt %D: -8.5

Total PCB Area Coll (5.908 - 13.788) = 2056304 Coll Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1715393 Col2 Total PCB = 0.4 ppm*

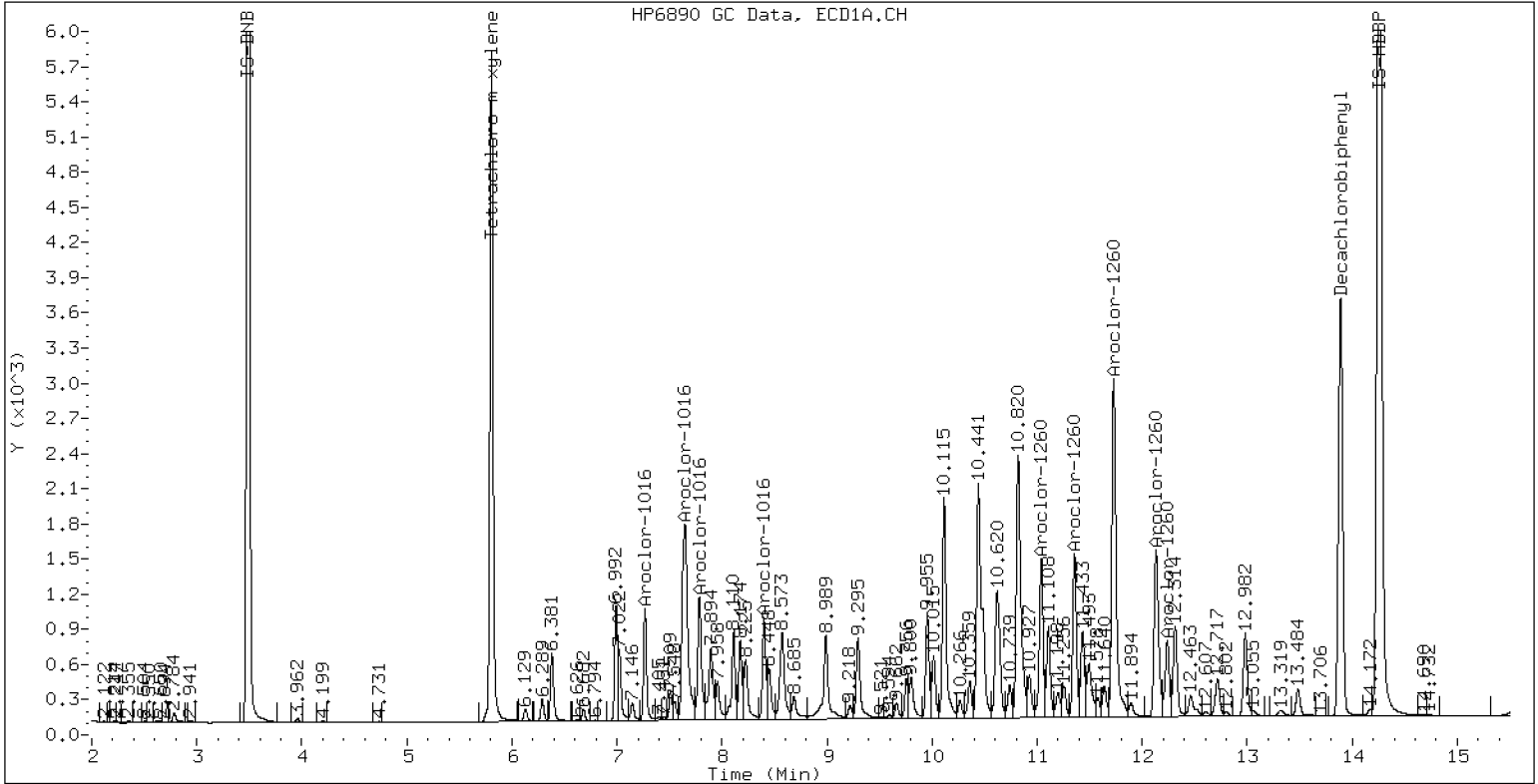
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV6

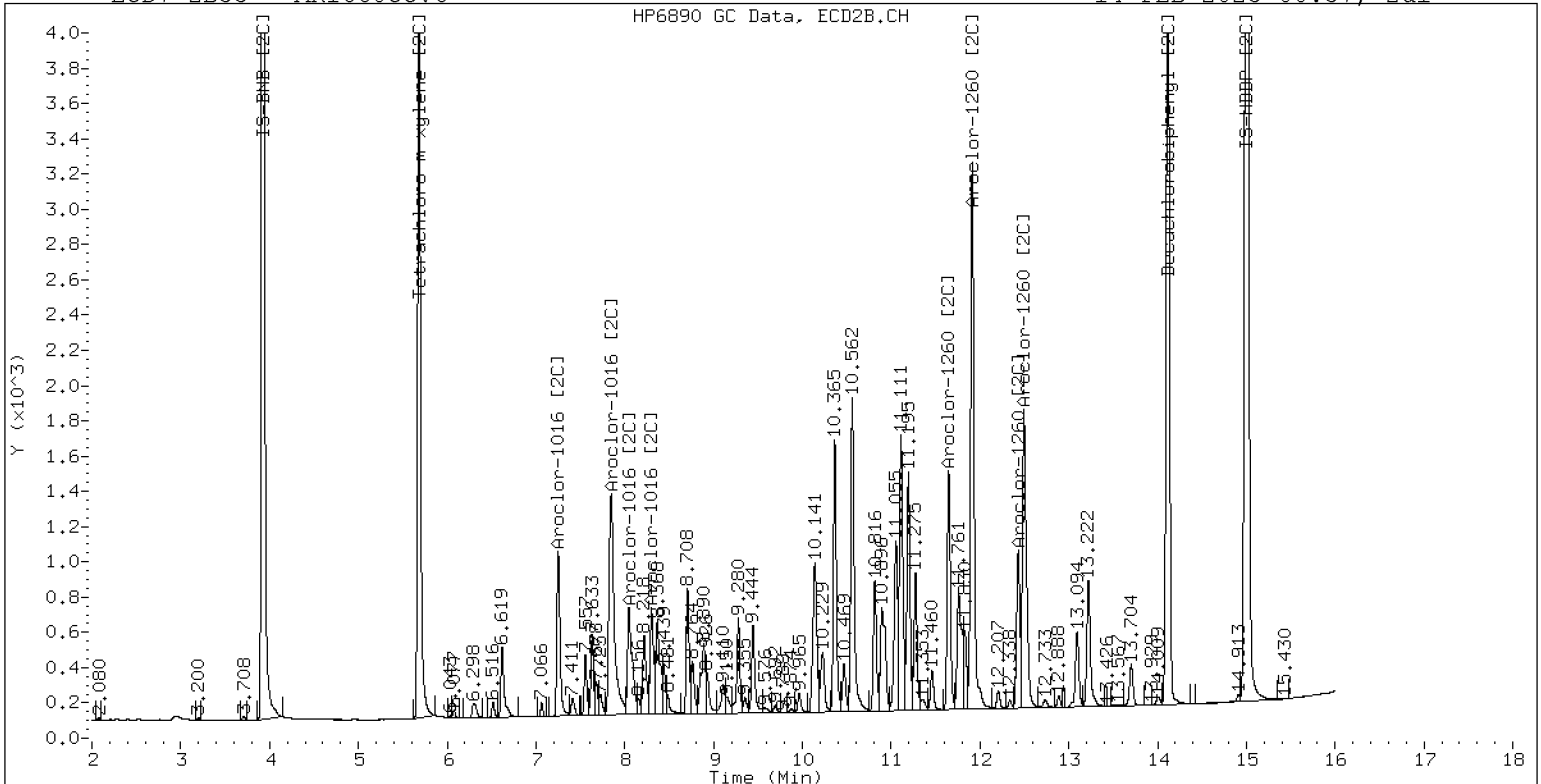
14-FEB-2023 00:37, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV6

14-FEB-2023 00:37, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>02132358ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLB0168</u>	Injection Date:	<u>02/14/23</u>
Lab Sample ID:	<u>SLB0168-CCV7</u>	Injection Time:	<u>05:53</u>
Sequence Name:	<u>AR1248CCV7</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	198	0.0592639	0.0450846		-20.7	
Aroclor-1248 (1)	A	250.00	236		0.0378284			
Aroclor-1248 (2)	A	250.00	234		0.0476868			
Aroclor-1248 (3)	A	250.00	165		0.0643512			
Aroclor-1248 (4)	A	250.00	158		0.0304719			
Aroclor 1248 [2C]	A	250.00	217	0.0453673	0.0390266		-13.1	
Aroclor-1248 (1) [2C]	A	250.00	242		0.0350518			
Aroclor-1248 (2) [2C]	A	250.00	205		0.0319724			
Aroclor-1248 (3) [2C]	A	250.00	224		0.0425494			
Aroclor-1248 (4) [2C]	A	250.00	198		0.0465329			
Decachlorobiphenyl	A	40.000	34.0	0.8555994	0.7277638		-15.0	
Tetrachlorometaxylene	A	40.000	37.3	1.1307870	1.0533470		-6.8	
Decachlorobiphenyl [2C]	A	40.000	43.8	1.2696430	1.3890610		9.5	
Tetrachlorometaxylene [2C]	A	40.000	37.7	1.0814980	1.0204730		-5.8	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132358ECD7.D
Data file 2: /230213.b/230213.b/02132358ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV7
Client ID:
Injection Date: 14-FEB-2023 05:53
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.804	-0.003	234209	5.682	-0.002	193424	37.3	37.7	1.3	Tetrachloro-m-xylene
13.889	0.000	209783	14.116	-0.000	306297	34.0	43.8	25.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	444695	-11.6
Hexabromobiphenyl	647433	576514	-11.0

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	379087	12.5
Hexabromobiphenyl	382032	441013	15.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1248	1	8.400	-0.005	52569	236.3	1	8.303	0.000	41524	242.3	
Aroclor-1248	2	8.572	-0.008	66269	233.5	2	8.709	0.000	37876	205.4	
Aroclor-1248	3	8.992	-0.007	89427	164.7	3	9.153	0.000	50406	223.7	
Aroclor-1248	4	9.292	-0.001	42346	157.6	4	9.577	0.000	55125	197.8	
Total CollAve (4 peaks):				198.0		Total Col2Ave (4 peaks):				217.3	RPD = 9
Corrected Ave (3 peaks):				185.3		Corrected Ave (3 peaks):				208.9	RPD = 12
CalAmt %D:				-20.8		CalAmt %D:				-13.1	

Total PCB Area Col1 (5.908 - 13.788) = 1619514 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 923512 Col2 Total PCB = 0.2 ppm*

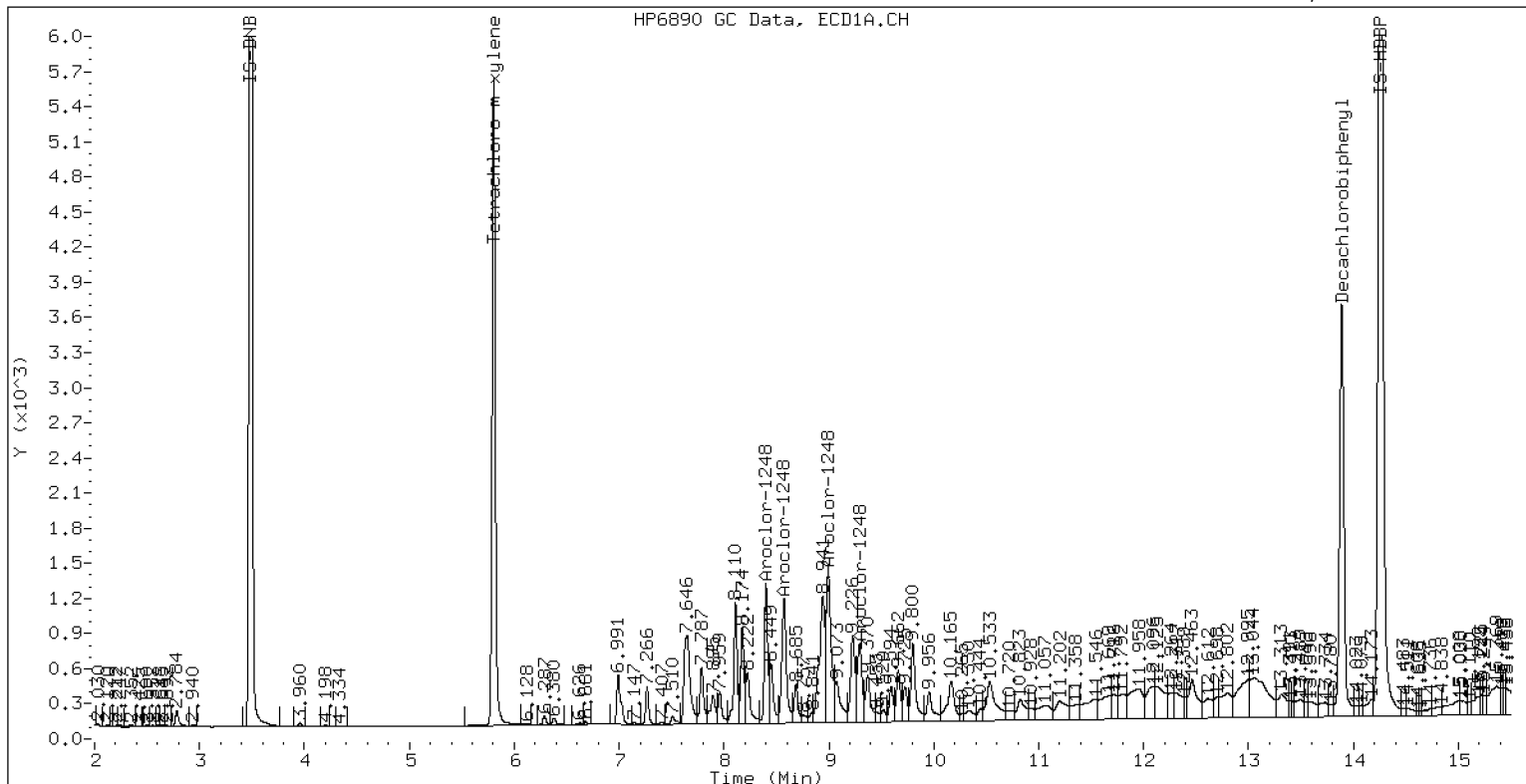
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV7

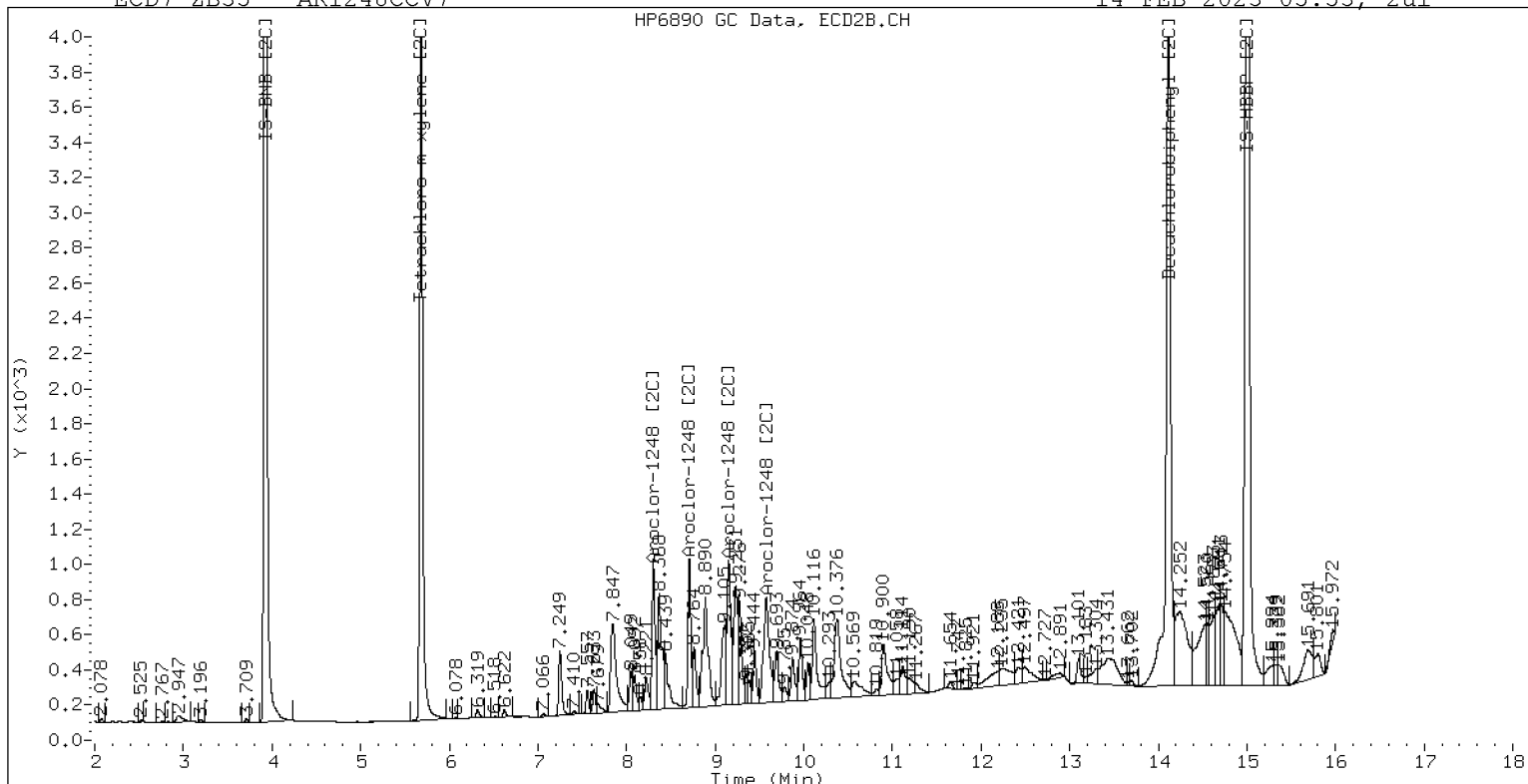
14-FEB-2023 05:53, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV7

14-FEB-2023 05:53, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132359ECD7.D
Data file 2: /230213.b/230213.b/02132359ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV8
Client ID:
Injection Date: 14-FEB-2023 06:14
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col		ZB35 Col			ZB5	ZB35	RPD	Compound/Flag	
RT	Shift	Response	RT	Shift	Response	on col			on col
5.804	-0.003	245692	5.682	-0.002	197881	39.5	39.3	0.5	Tetrachloro-m-xylene
13.890	0.001	219792	14.117	0.001	261000	33.6	36.8	9.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	440286	-12.5
Hexabromobiphenyl	647433	612225	-5.4

Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	372657	10.6
Hexabromobiphenyl	382032	447005	17.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.267	-0.001	39378	240.7	1	7.251	-0.002	48374	239.3
Aroclor-1016	2	7.648	-0.002	128659	237.3	2	7.848	-0.001	107022	241.6
Aroclor-1016	3	7.786	-0.001	55304	221.7	3	8.048	-0.001	44549	246.5
Aroclor-1016	4	8.401	-0.001	38808	241.9	4	8.303	-0.001	33796	238.5
Total CollAve (4 peaks):				235.4		Total Col2Ave (4 peaks):				241.5 RPD = 3
Corrected Ave (3 peaks):				233.2		Corrected Ave (3 peaks):				239.8 RPD = 3

CalAmt %D: -5.8

CalAmt %D: -3.4

Aroclor-1260	1	11.039	-0.000	75535	219.9	1	11.649	-0.000	71737	222.5
Aroclor-1260	2	11.356	0.001	76897	217.8	2	11.913	0.000	182674	223.9
Aroclor-1260	3	11.730	0.001	195592	210.4	3	12.431	-0.000	47571	233.9
Aroclor-1260	4	12.134	0.001	96565	201.1	4	12.497	0.001	115652	219.0
Aroclor-1260	5	12.240	-0.000	39434	188.4	NS	---			----
Total CollAve (5 peaks):				207.5		Total Col2Ave (4 peaks):				224.8 RPD = 8
Corrected Ave (4 peaks):				204.4		Corrected Ave (3 peaks):				221.8 RPD = 8

CalAmt %D: -17.0

CalAmt %D: -10.1

Total PCB Area Coll (5.908 - 13.788) = 2193376 Coll Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1805340 Col2 Total PCB = 0.5 ppm*

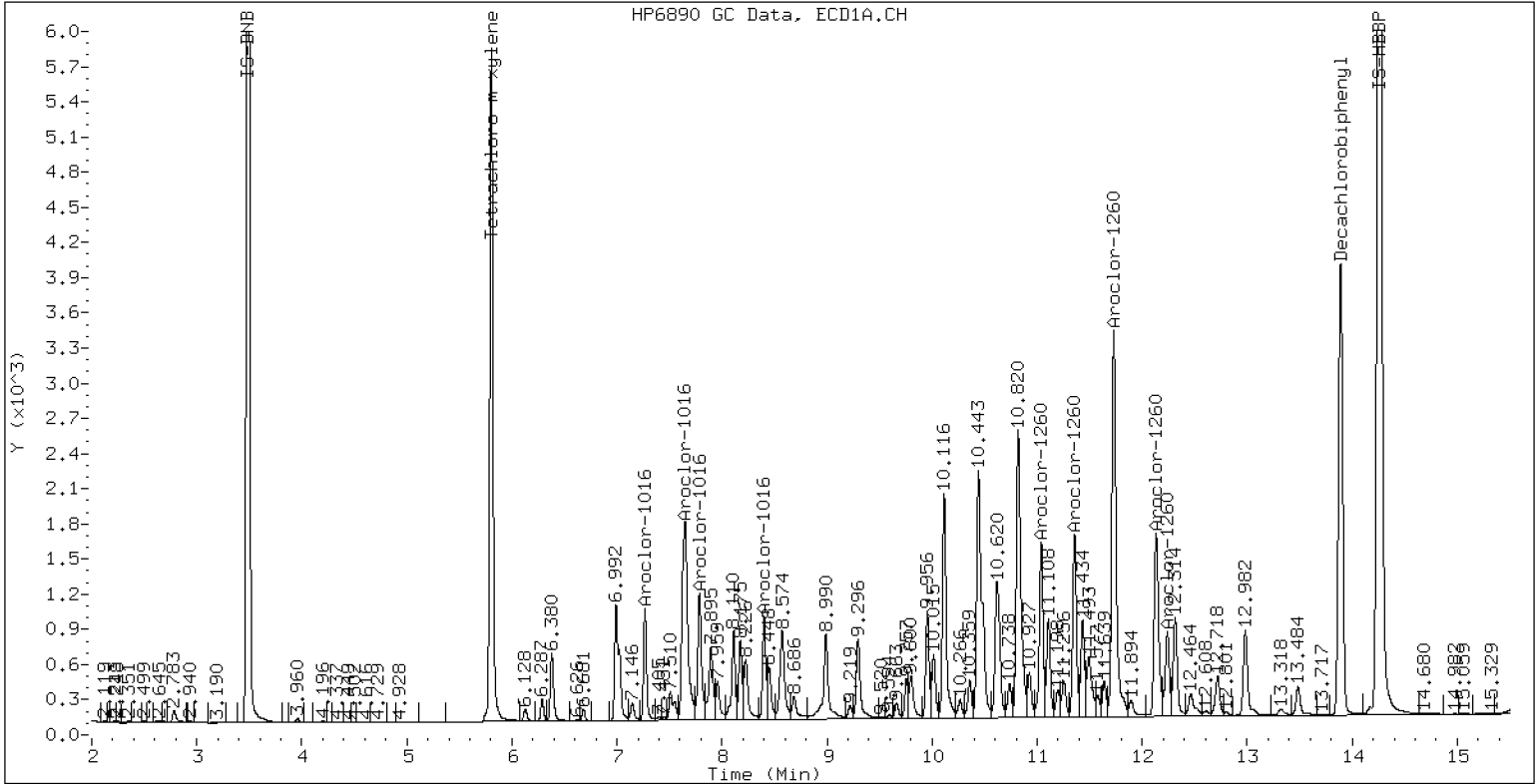
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV8

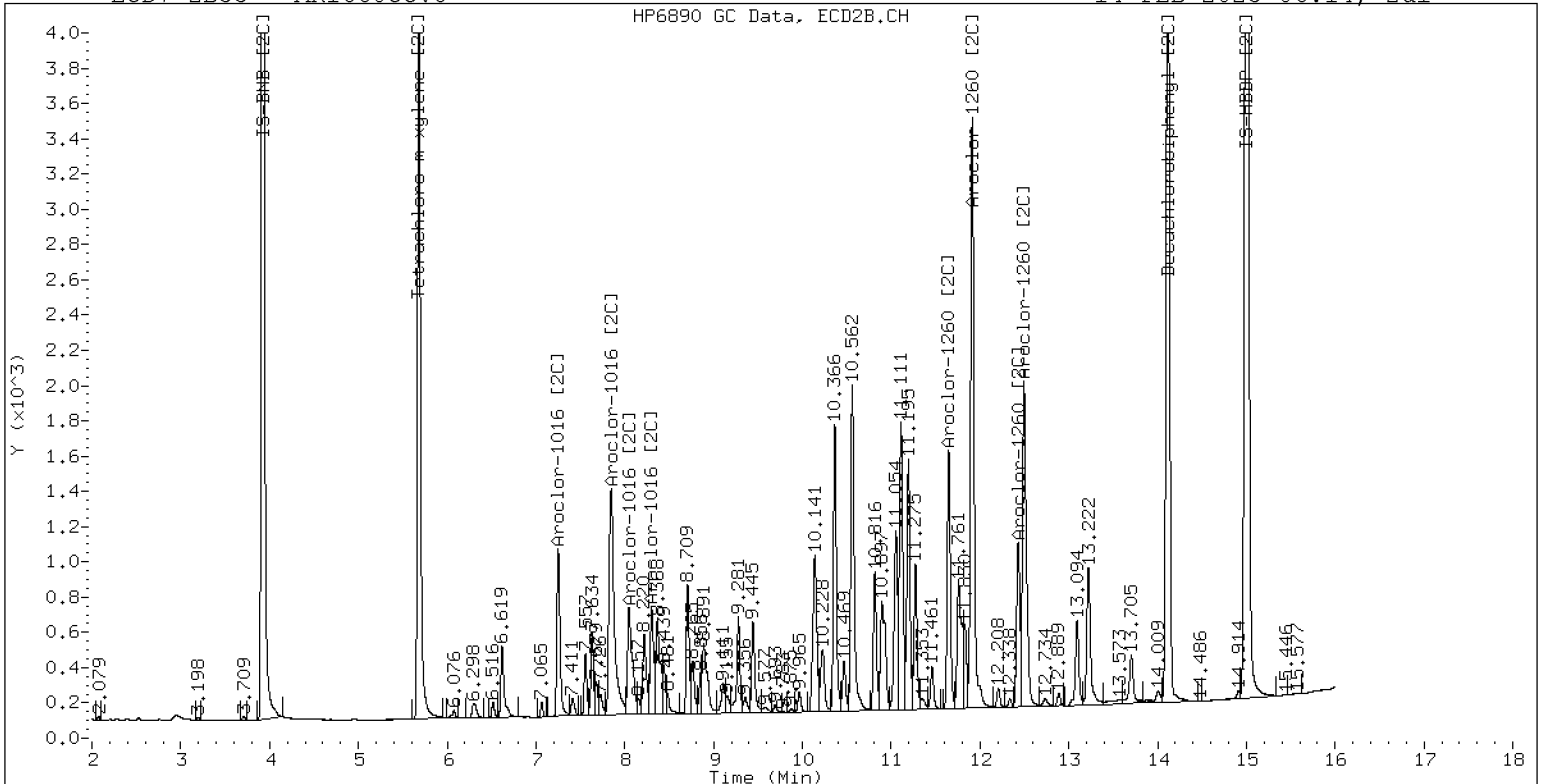
14-FEB-2023 06:14, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV8

14-FEB-2023 06:14, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>02132367ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLB0168</u>	Injection Date:	<u>02/14/23</u>
Lab Sample ID:	<u>SLB0168-CCV9</u>	Injection Time:	<u>09:02</u>
Sequence Name:	<u>AR1242CCV9</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	217	0.0411165	0.0359362		-13.2	
Aroclor-1242 (1)	A	250.00	227		0.0222618			
Aroclor-1242 (2)	A	250.00	223		0.0715100			
Aroclor-1242 (3)	A	250.00	212		0.0202550			
Aroclor-1242 (4)	A	250.00	206		0.0297181			
Aroclor 1242 [2C]	A	250.00	216	0.0423236	0.0368425		-13.7	
Aroclor-1242 (1) [2C]	A	250.00	232		0.0325026			
Aroclor-1242 (2) [2C]	A	250.00	221		0.0687566			
Aroclor-1242 (3) [2C]	A	250.00	214		0.0208860			
Aroclor-1242 (4) [2C]	A	250.00	196		0.0252251			
Decachlorobiphenyl	A	40.000	29.9	0.8555994	0.6402943		-25.3	
Tetrachlorometaxylene	A	40.000	44.6	1.1307870	1.2619250		11.5	
Decachlorobiphenyl [2C]	A	40.000	32.6	1.2696430	1.0359600		-18.5	
Tetrachlorometaxylene [2C]	A	40.000	44.9	1.0814980	1.2148700		12.3	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132367ECD7.D
Data file 2: /230213.b/230213.b/02132367ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV9
Client ID:
Injection Date: 14-FEB-2023 09:02
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.000	270440	5.685	0.001	224254	44.6	44.9	0.7	Tetrachloro-m-xylene
13.889	0.001	143529	14.116	-0.001	187302	29.9	32.6	8.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	428615	-14.8
Hexabromobiphenyl	647433	448322	-30.8
Column 2			
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	369182	9.6
Hexabromobiphenyl	382032	361601	-5.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1242	1	7.269	-0.002	29818	227.2	1	7.252	0.000	37498	232.2	
Aroclor-1242	2	7.649	-0.006	95782	223.0	2	7.849	0.000	79324	221.2	
Aroclor-1242	3	8.402	-0.004	27130	212.6	3	9.154	0.000	24096	214.5	
Aroclor-1242	4	8.575	-0.006	39805	206.5	4	9.579	0.000	29102	195.5	
Total CollAve (4 peaks):				217.3	Total Col2Ave (4 peaks):				215.9	RPD = 1	
Corrected Ave (3 peaks):				214.0	Corrected Ave (3 peaks):				210.4	RPD = 2	
CalAmt %D:				-13.1	CalAmt %D:				-13.7		

Total PCB Area Col1 (5.908 - 13.788) = 683419 Col1 Total PCB = 0.1 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 548384 Col2 Total PCB = 0.1 ppm*

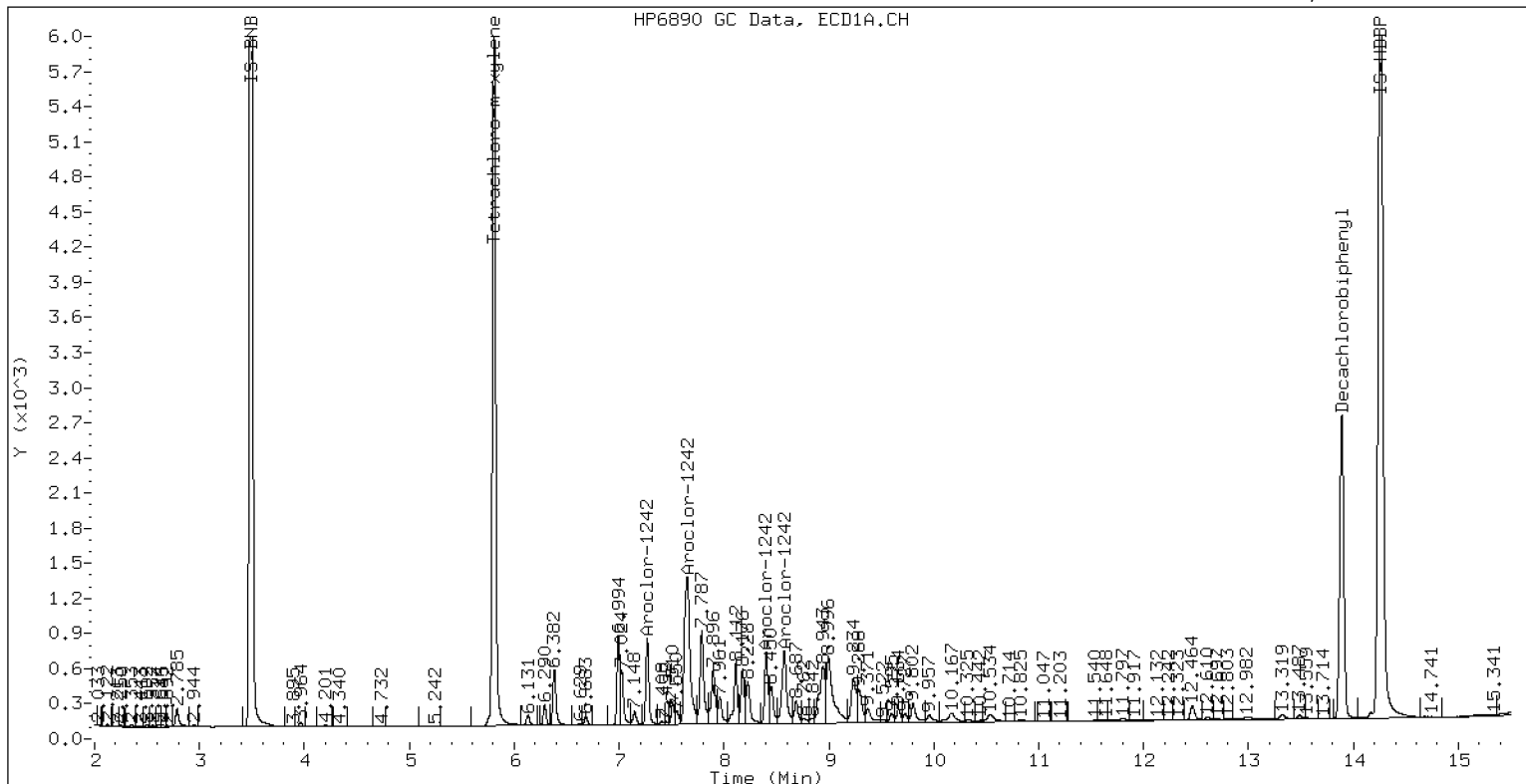
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV9

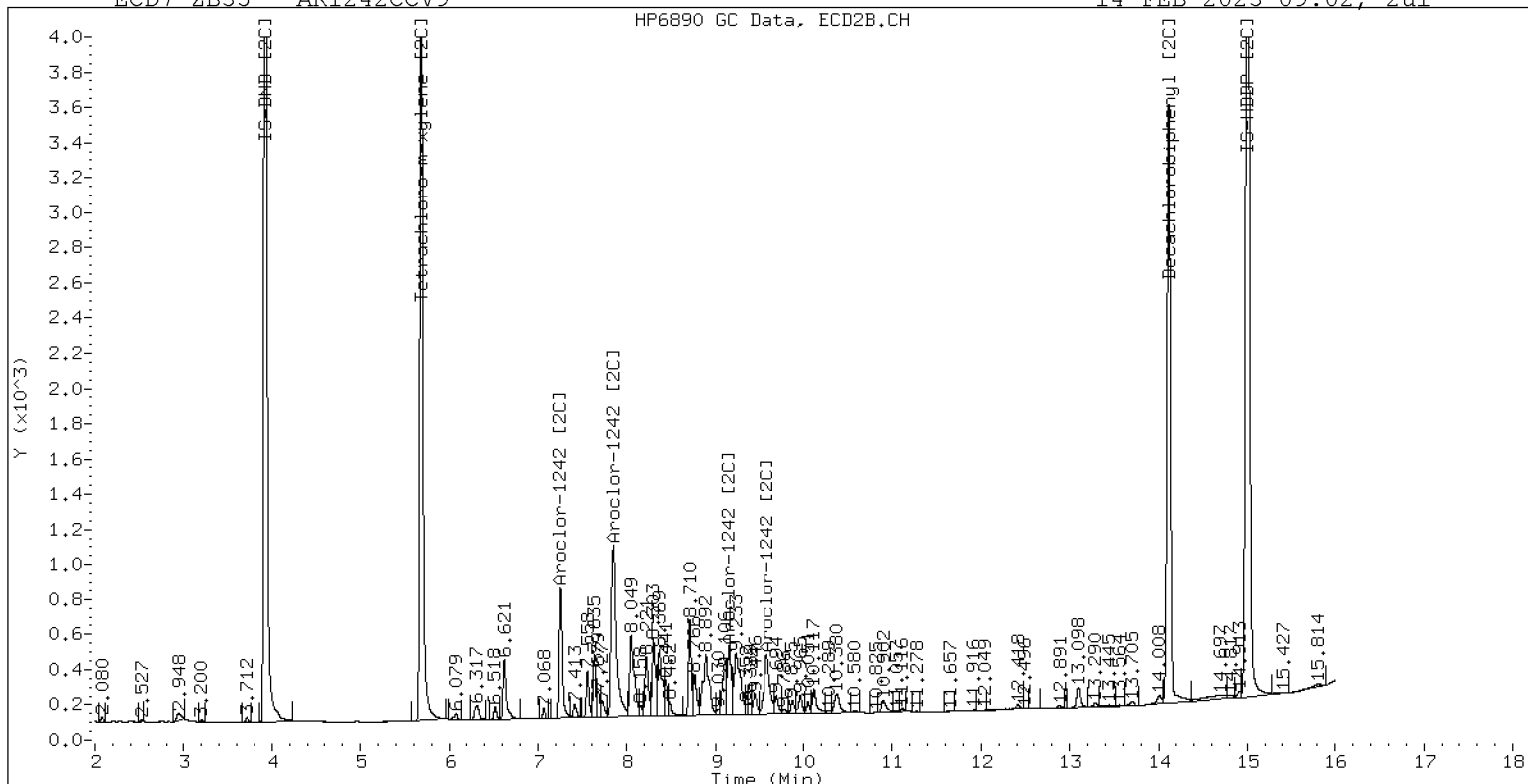
14-FEB-2023 09:02, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV9

14-FEB-2023 09:02, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ECD7

Calibration: GA00061

Lab File ID: 02132368ECD7.D

Calibration Date: 01/24/2023

Sequence: SLB0168

Injection Date: 02/14/23

Lab Sample ID: SLB0168-CCVA

Injection Time: 09:23

Sequence Name: AR1660CCVA

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	232	0.0506755	0.0470378		-7.4	
Aroclor-1016 (1)	A	250.00	239	0.0297277	0.0283884		-4.4	
Aroclor-1016 (2)	A	250.00	237	0.0985017	0.0933482		-5.2	
Aroclor-1016 (3)	A	250.00	216	0.0453193	0.0390996		-13.6	
Aroclor-1016 (4)	A	250.00	234	0.0291533	0.0273150		-6.4	
Aroclor 1016 [2C]	A	250.00	241	0.0519244	0.0499861		-3.8	
Aroclor-1016 (1) [2C]	A	250.00	239	0.0433907	0.0415442		-4.4	
Aroclor-1016 (2) [2C]	A	250.00	241	0.0950862	0.0915296		-3.6	
Aroclor-1016 (3) [2C]	A	250.00	246	0.0388014	0.0381399		-1.6	
Aroclor-1016 (4) [2C]	A	250.00	236	0.0304194	0.0287305		-5.6	
Aroclor 1260	A	250.00	213	0.0605224	0.0519094		-14.6	
Aroclor-1260 (1)	A	250.00	234	0.0448870	0.0419567		-6.4	
Aroclor-1260 (2)	A	250.00	228	0.0461412	0.0420390		-8.8	
Aroclor-1260 (3)	A	250.00	215	0.1214672	0.1043884		-14.0	
Aroclor-1260 (4)	A	250.00	202	0.0627593	0.0506320		-19.2	
Aroclor-1260 (5)	A	250.00	188	0.0273573	0.0205307		-24.8	
Aroclor 1260 [2C]	A	250.00	230	0.0836545	0.0763834		-7.9	
Aroclor-1260 (1) [2C]	A	250.00	228	0.0577136	0.0527047		-8.8	
Aroclor-1260 (2) [2C]	A	250.00	228	0.1460113	0.1329849		-8.8	
Aroclor-1260 (3) [2C]	A	250.00	241	0.0363944	0.0351465		-3.6	
Aroclor-1260 (4) [2C]	A	250.00	224	0.0944986	0.0846974		-10.4	
Decachlorobiphenyl	A	40.000	34.6	0.8555994	0.7409184		-13.5	
Tetrachlorometaxylene	A	40.000	39.6	1.1307870	1.1207190		-1.0	
Decachlorobiphenyl [2C]	A	40.000	35.8	1.2696430	1.1347610		-10.5	
Tetrachlorometaxylene [2C]	A	40.000	39.4	1.0814980	1.0643830		-1.5	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132368ECD7.D
Data file 2: /230213.b/230213.b/02132368ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCVA
Client ID:
Injection Date: 14-FEB-2023 09:23
Report Date: 02/14/2023 10:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.807	-0.001	244050	5.684	0.000	198401	39.6	39.4	0.7	Tetrachloro-m-xylene
13.889	0.001	200178	14.117	0.000	236550	34.6	35.8	3.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	435524	-13.5
Hexabromobiphenyl	647433	540351	-16.5

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	372800	10.7
Hexabromobiphenyl	382032	416916	9.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.269	0.000	38637	238.7	1	7.252	0.000	48399	239.4	
Aroclor-1016	2	7.650	0.000	127048	236.9	2	7.849	0.000	106632	240.6	
Aroclor-1016	3	7.787	-0.000	53215	215.7	3	8.049	0.000	44433	245.7	
Aroclor-1016	4	8.402	-0.000	37176	234.2	4	8.304	0.000	33471	236.1	
Total CollAve (4 peaks):				231.4		Total Col2Ave (4 peaks):				240.5	RPD = 4
Corrected Ave (3 peaks):				228.9		Corrected Ave (3 peaks):				238.7	RPD = 4

CalAmt %D: -7.4

CalAmt %D: -3.8

Aroclor-1260	1	11.041	0.001	70848	233.7	1	11.649	0.000	68667	228.3	
Aroclor-1260	2	11.356	0.000	70987	227.8	2	11.913	0.000	173261	227.7	
Aroclor-1260	3	11.730	0.001	176270	214.8	3	12.431	0.000	45791	241.4	
Aroclor-1260	4	12.133	0.000	85497	201.7	4	12.496	0.000	110349	224.1	
Aroclor-1260	5	12.239	-0.001	34668	187.6	NS	---			----	
Total CollAve (5 peaks):				213.1		Total Col2Ave (4 peaks):				230.4	RPD = 8
Corrected Ave (4 peaks):				208.0		Corrected Ave (3 peaks):				226.7	RPD = 9

CalAmt %D: -14.8

CalAmt %D: -7.9

Total PCB Area Coll (5.908 - 13.788) = 2049302 Coll Total PCB = 0.4 ppm*

Total PCB Area Col2 (5.784 - 14.017) = 1742433 Col2 Total PCB = 0.4 ppm*

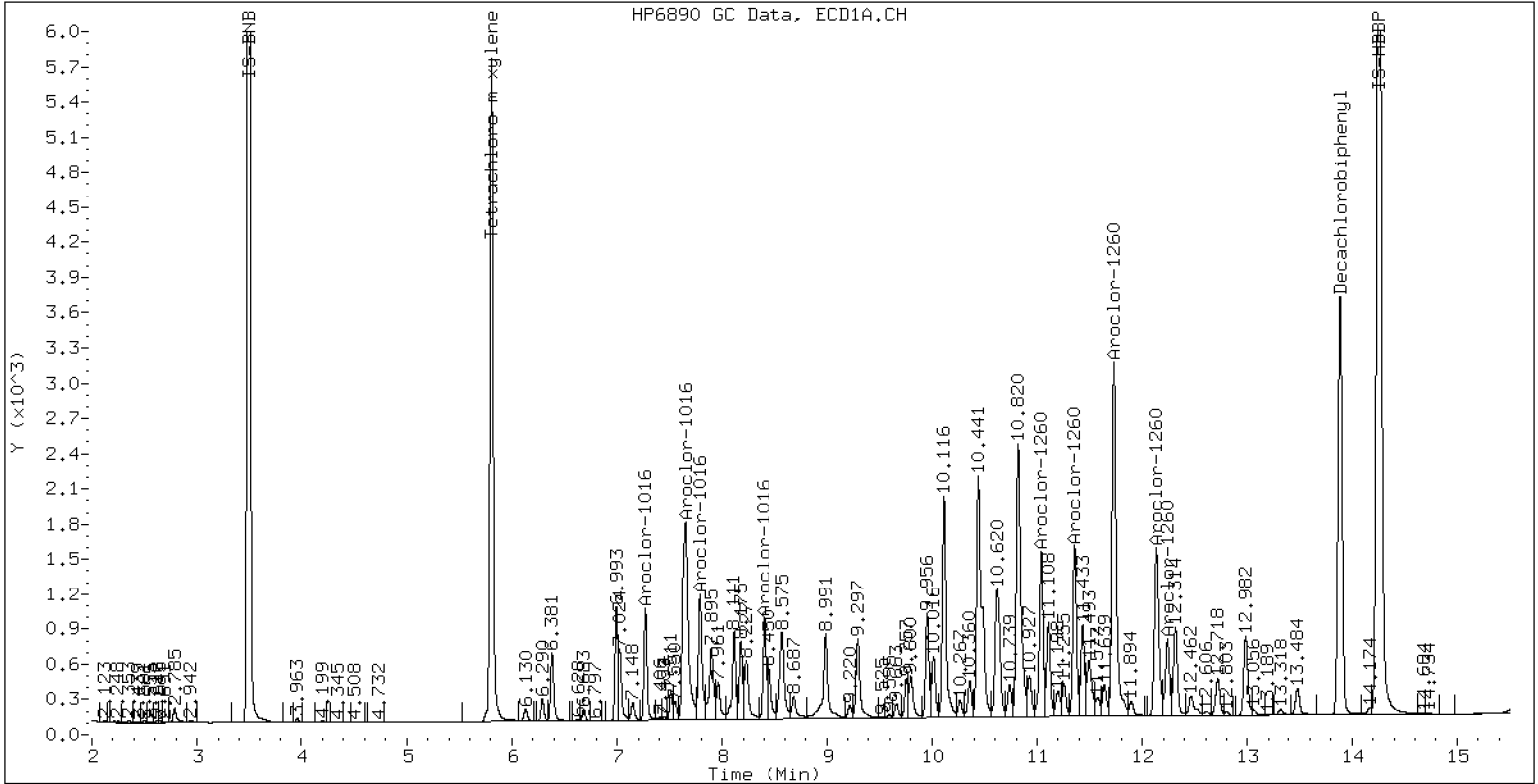
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCVA

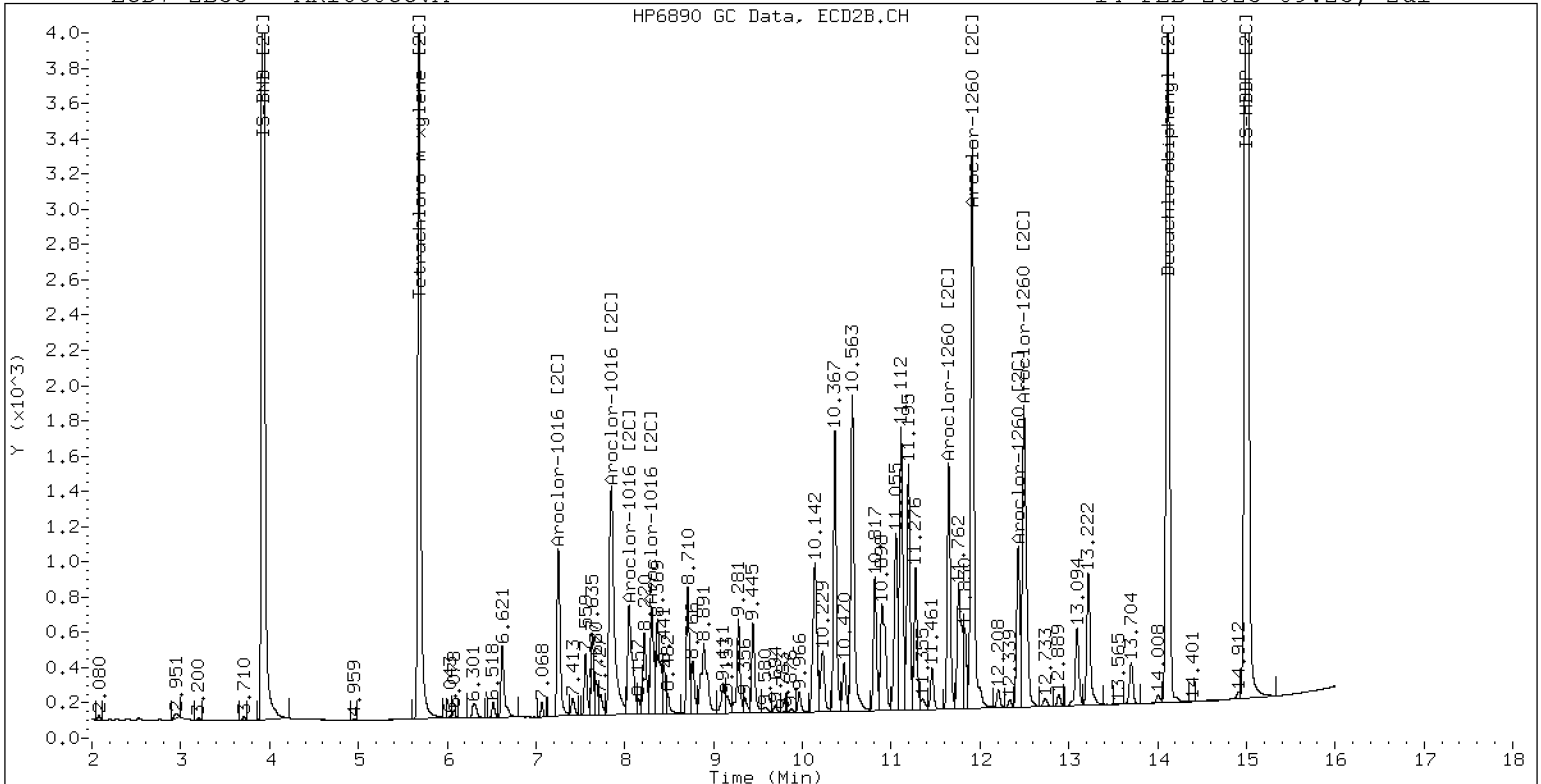
14-FEB-2023 09:23, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCVA

14-FEB-2023 09:23, 2ul



ZB-35 Manual Integration: NO



CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>ECD7</u>	Calibration:	<u>GA00061</u>
Lab File ID:	<u>02132378ECD7.D</u>	Calibration Date:	<u>01/24/2023</u>
Sequence:	<u>SLB0168</u>	Injection Date:	<u>02/14/23</u>
Lab Sample ID:	<u>SLB0168-CCVB</u>	Injection Time:	<u>12:53</u>
Sequence Name:	<u>AR1254CCVB</u>		

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	226	0.0675033	0.0615862		-9.7	
Aroclor-1254 (1)	A	250.00	230		0.0750121			
Aroclor-1254 (2)	A	250.00	216		0.0301389			
Aroclor-1254 (3)	A	250.00	216		0.0450668			
Aroclor-1254 (4)	A	250.00	234		0.0956935			
Aroclor-1254 (5)	A	250.00	233		0.0620198			
Aroclor 1254 [2C]	A	250.00	231	0.0733219	0.0676867		-7.7	
Aroclor-1254 (1) [2C]	A	250.00	232		0.0539326			
Aroclor-1254 (2) [2C]	A	250.00	243		0.0455774			
Aroclor-1254 (3) [2C]	A	250.00	222		0.0906835			
Aroclor-1254 (4) [2C]	A	250.00	243		0.0993518			
Aroclor-1254 (5) [2C]	A	250.00	214		0.0488880			
Decachlorobiphenyl	A	40.000	32.1	0.8555994	0.6865345		-19.8	
Tetrachlorometaxylene	A	40.000	38.0	1.1307870	1.0738500		-5.0	
Decachlorobiphenyl [2C]	A	40.000	34.4	1.2696430	1.0908100		-14.0	
Tetrachlorometaxylene [2C]	A	40.000	37.9	1.0814980	1.0242750		-5.3	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132378ECD7.D
Data file 2: /230213.b/230213.b/02132378ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCVB
Client ID:
Injection Date: 14-FEB-2023 12:53
Report Date: 02/14/2023 13:18
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.000	239679	5.685	0.000	192616	38.0	37.9	0.3	Tetrachloro-m-xylene
13.890	0.000	276774	14.116	0.000	301483	32.1	34.4	6.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	446392	-11.3
Hexabromobiphenyl	647433	806293	24.5

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	376102	11.6
Hexabromobiphenyl	382032	552769	44.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col						ZB35 Col					
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1254	1	9.294	0.000	104640	230.0	1	9.445	0.000	63388	232.3	
Aroclor-1254	2	9.371	0.000	42043	216.4	2	9.965	0.000	53568	242.9	
Aroclor-1254	3	9.662	0.000	62867	215.7	3	10.117	0.000	106582	221.5	
Aroclor-1254	4	9.800	0.000	133490	233.7	4	10.367	0.000	116770	242.7	
Aroclor-1254	5	10.162	0.000	86516	232.9	5	10.564	0.000	57459	214.4	
Total CollAve (5 peaks):				225.7		Total Col2Ave (5 peaks):				230.8	RPD = 2
Corrected Ave (4 peaks):				223.8		Corrected Ave (4 peaks):				227.8	RPD = 2
CalAmt %D:				-9.7		CalAmt %D:				-7.7	

Total PCB Area Col1 (5.908 - 13.790) = 1422974 Col1 Total PCB = 0.3 ppm*

Total PCB Area Col2 (5.785 - 14.016) = 1099209 Col2 Total PCB = 0.3 ppm*

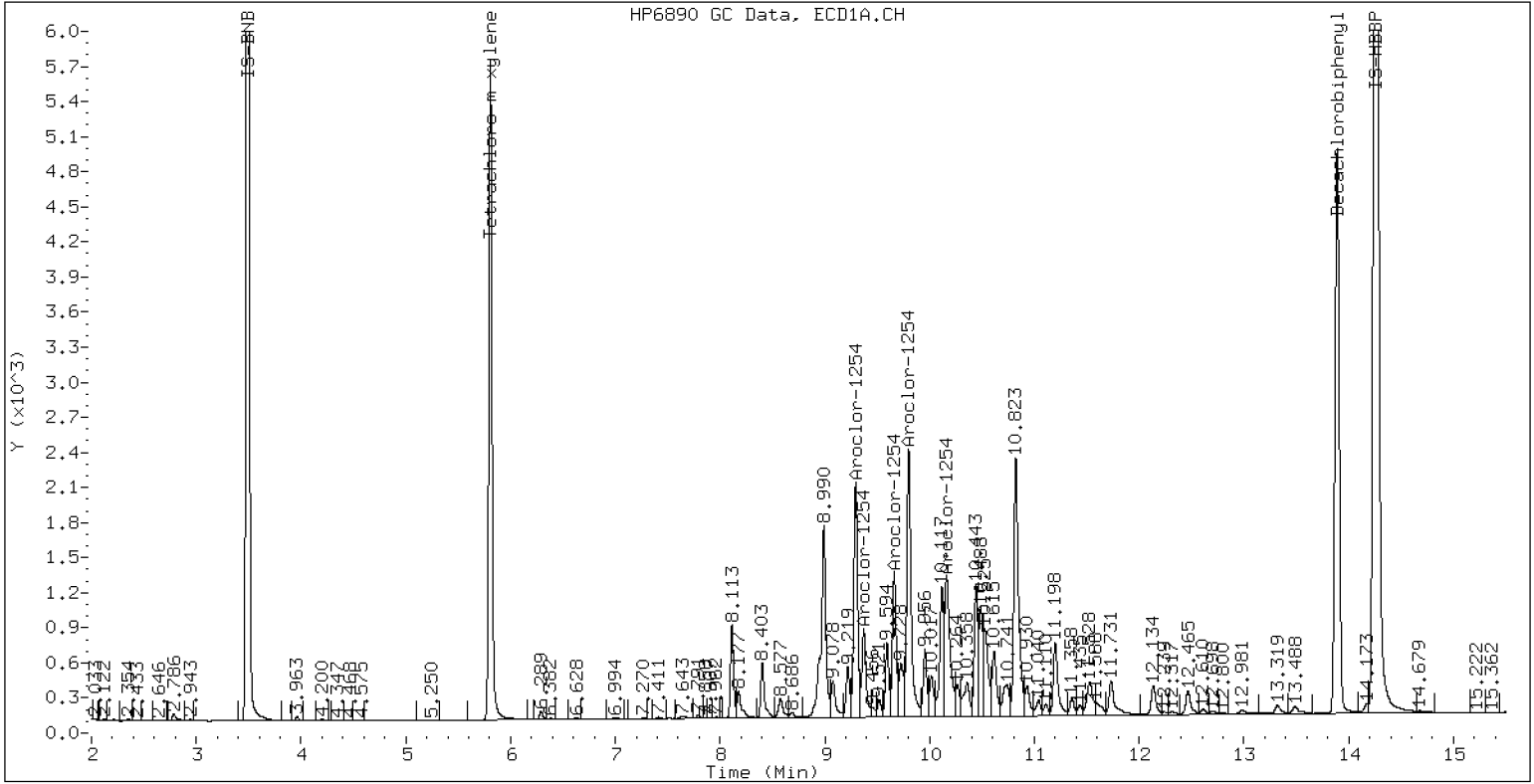
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCVB

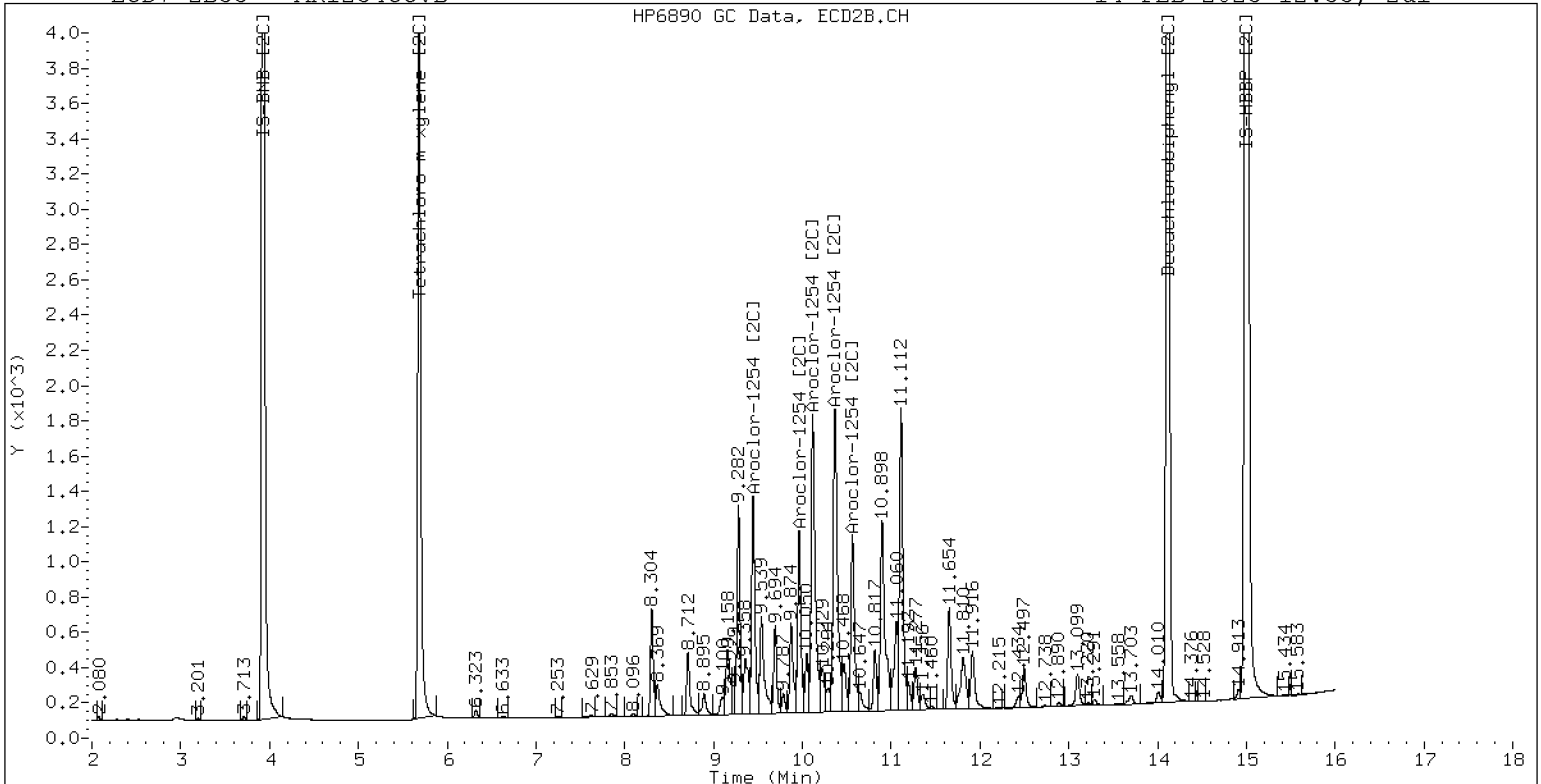
14-FEB-2023 12:53, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCVB

14-FEB-2023 12:53, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230213.b/02132379ECD7.D
Data file 2: /230213.b/230213.b/02132379ECD7.D
Method: \\target\share\chem4\ecd7.i\230213.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCVC
Client ID:
Injection Date: 14-FEB-2023 13:14
Report Date: 02/14/2023 13:32
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

RT	ZB5 Col Shift	Response	RT	ZB35 Col Shift	Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
5.808	0.000	248615	5.685	-0.000	199305	39.6	39.2	1.0	Tetrachloro-m-xylene
13.890	-0.000	293565	14.117	0.001	309987	33.6	35.2	4.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	443819	-11.8
Hexabromobiphenyl	647433	817133	26.2

Standard Cpnd	Column 2		
	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	375676	11.5
Hexabromobiphenyl	382032	554911	45.3

* Standard Areas taken from Initial Cal Level 3

Initial Calibration Date: 24-JAN-2023

<- Indicates standard response outside Limits (-50 to +100%)

ZB5 Col					ZB35 Col						
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1016	1	7.269	0.001	39834	241.5	1	7.253	0.001	48785	239.4	
Aroclor-1016	2	7.650	0.000	130689	239.2	2	7.850	0.002	107854	241.5	
Aroclor-1016	3	7.788	0.001	55757	221.8	3	8.050	0.001	45128	247.7	
Aroclor-1016	4	8.402	0.000	39126	241.9	4	8.304	-0.000	34398	240.8	
Total CollAve (4 peaks):				236.1		Total Col2Ave (4 peaks):				242.4	RPD = 3
Corrected Ave (3 peaks):				234.2		Corrected Ave (3 peaks):				240.6	RPD = 3

CalAmt %D: -5.6

CalAmt %D: -3.1

Aroclor-1260	1	11.041	0.001	84288	183.8	1	11.650	0.001	79471	198.5	
Aroclor-1260	2	11.357	0.002	86575	183.7	2	11.913	0.001	205258	202.7	
Aroclor-1260	3	11.731	0.002	222852	179.6	3	12.432	0.001	54229	214.8	
Aroclor-1260	4	12.134	0.001	112888	176.1	4	12.497	0.001	133416	203.5	
Aroclor-1260	5	12.241	0.001	46638	166.9	NS	---			----	
Total CollAve (5 peaks):				178.0		Total Col2Ave (4 peaks):				204.9	RPD = 14
Corrected Ave (4 peaks):				176.6		Corrected Ave (3 peaks):				201.6	RPD = 13

CalAmt %D: -28.8

CalAmt %D: -18.0

Total PCB Area Coll (5.908 - 13.790) = 2422965 Coll Total PCB = 0.5 ppm*

Total PCB Area Col2 (5.785 - 14.016) = 1933444 Col2 Total PCB = 0.5 ppm*

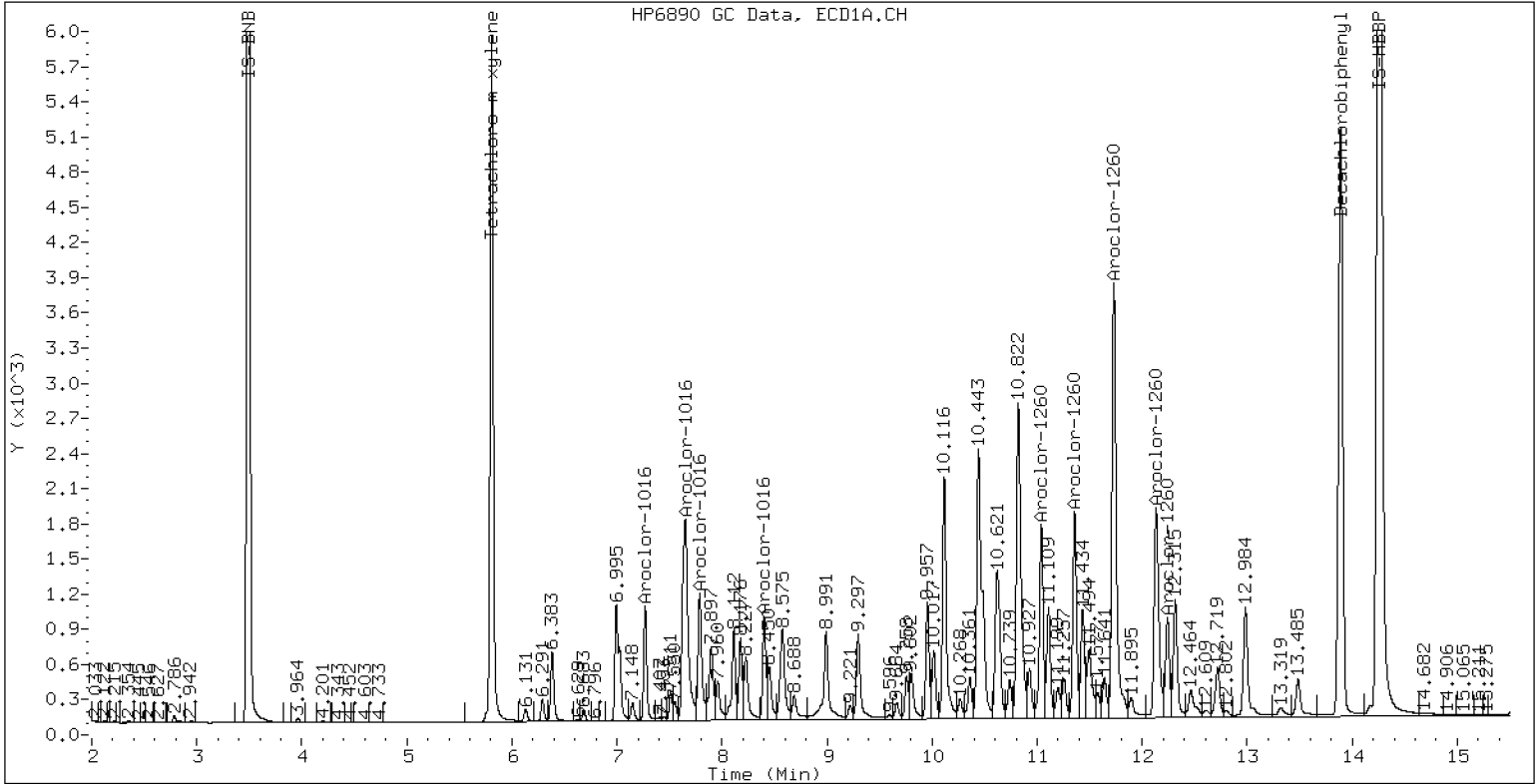
* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCVC

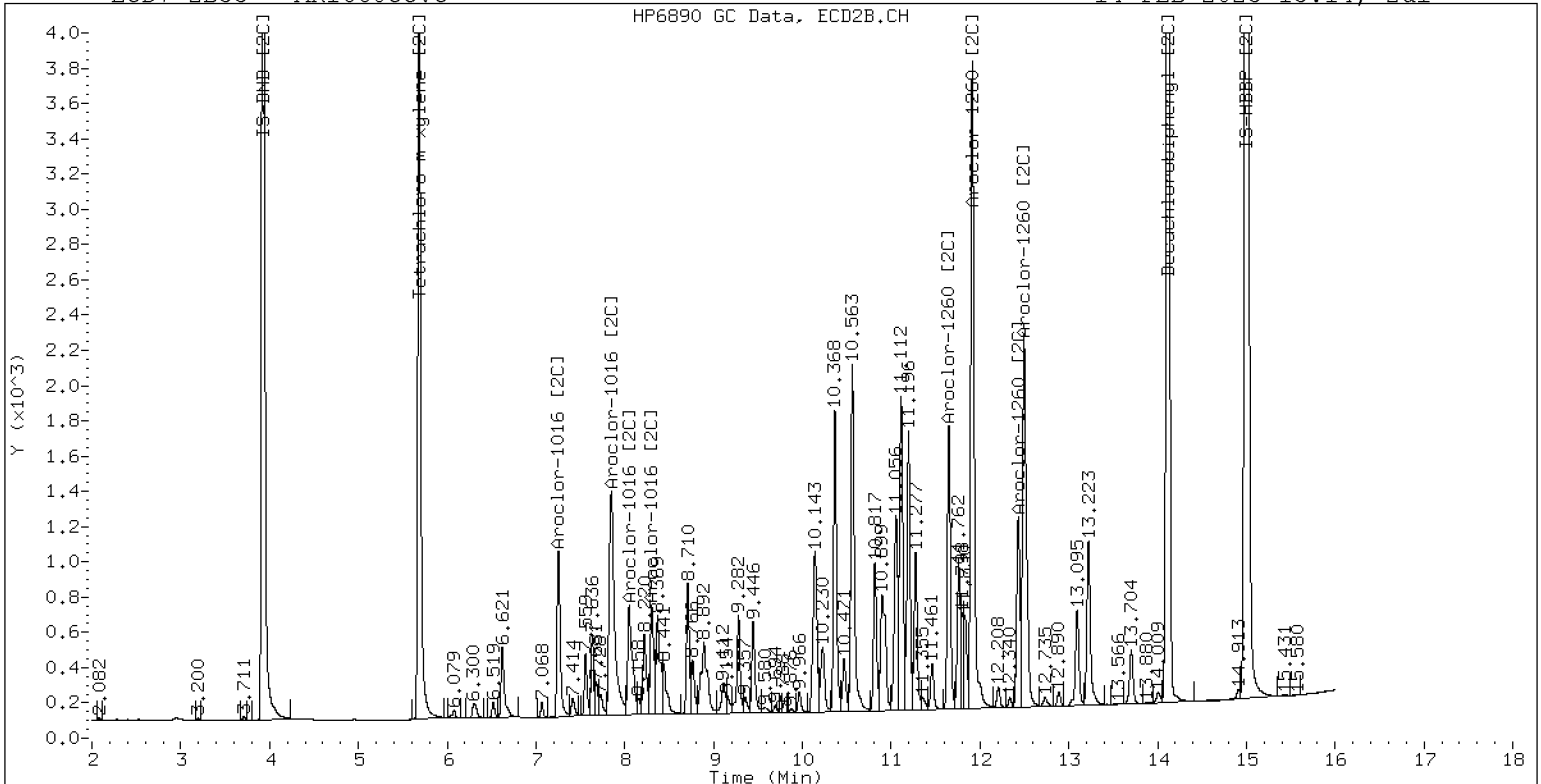
14-FEB-2023 13:14, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCVC

14-FEB-2023 13:14, 2ul



ZB-35 Manual Integration: NO



Dual Column
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLA0281

Instrument: ECD7

Calibration: GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLA0281-CAL1	01242313ECD7.D	01242313ECD7.D	NA	01/24/23 16:00
Cal Standard	SLA0281-CAL2	01242314ECD7.D	01242314ECD7.D	NA	01/24/23 16:21
Cal Standard	SLA0281-CAL3	01242315ECD7.D	01242315ECD7.D	NA	01/24/23 16:42
Cal Standard	SLA0281-CAL4	01242316ECD7.D	01242316ECD7.D	NA	01/24/23 17:03
Cal Standard	SLA0281-CAL5	01242317ECD7.D	01242317ECD7.D	NA	01/24/23 17:24
Cal Standard	SLA0281-CAL6	01242318ECD7.D	01242318ECD7.D	NA	01/24/23 17:45
Cal Standard	SLA0281-CAL7	01242319ECD7.D	01242319ECD7.D	NA	01/24/23 18:06
Cal Standard	SLA0281-CAL8	01242320ECD7.D	01242320ECD7.D	NA	01/24/23 18:27
Cal Standard	SLA0281-CAL9	01242321ECD7.D	01242321ECD7.D	NA	01/24/23 18:48
Cal Standard	SLA0281-CALA	01242322ECD7.D	01242322ECD7.D	NA	01/24/23 19:09
Cal Standard	SLA0281-CALB	01242323ECD7.D	01242323ECD7.D	NA	01/24/23 19:30
Secondary Cal Check	SLA0281-SCV1	01242324ECD7.D	01242324ECD7.D	NA	01/24/23 19:51
Secondary Cal Check	SLA0281-SCV2	01242325ECD7.D	01242325ECD7.D	NA	01/24/23 20:12
Secondary Cal Check	SLA0281-SCV3	01242326ECD7.D	01242326ECD7.D	NA	01/24/23 20:33
Secondary Cal Check	SLA0281-SCV4	01242327ECD7.D	01242327ECD7.D	NA	01/24/23 20:54
Secondary Cal Check	SLA0281-SCV5	01242328ECD7.D	01242328ECD7.D	NA	01/24/23 21:15
Secondary Cal Check	SLA0281-SCV6	01242329ECD7.D	01242329ECD7.D	NA	01/24/23 21:36

Security Status Report

Date: 26-Jan-2023 15:41

01242330ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242331ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242332ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242333ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242334ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242335ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242336ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242337ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242338ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242339ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242340ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242341ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242342ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242343ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242344ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242345ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242346ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242347ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242348ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242349ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242350ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242351ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242352ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242353ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242354ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242355ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242356ECD7.D	Data Locked	richardl, 26-Jan-2023 15:41
01242357ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242358ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242359ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242360ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242361ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242362ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242363ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242364ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242365ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242366ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242367ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242368ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242369ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242370ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242371ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242372ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242373ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19

01242374ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242375ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242376ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242377ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242378ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242379ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242380ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242381ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242382ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242383ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242384ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242385ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242386ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242387ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242388ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242389ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242390ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242391ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

	Inject	Date/Time	Filename	DF	LabID	ClientID
1	13-FEB-2023	09:53	02132301ECD7.D	1	AR1254TEST	
2	13-FEB-2023	10:14	02132302ECD7.D	1	AR1248TEST	
3	13-FEB-2023	10:35	02132303ECD7.D	1	AR1242TEST	
4	13-FEB-2023	10:56	02132304ECD7.D	1	AR1660TEST	
5	13-FEB-2023	11:17	02132305ECD7.D	1	DDTS	
6	13-FEB-2023	11:39	02132306ECD7.D	1	AR1254ICV1	
7	13-FEB-2023	12:00	02132307ECD7.D	1	AR1660ICV2	
8	13-FEB-2023	12:21	02132308ECD7.D	1	BLB0174-BLK1	
9	13-FEB-2023	12:42	02132309ECD7.D	1	BLB0174-BS1	
10	13-FEB-2023	13:03	02132310ECD7.D	1	BLB0174-BSD1	
11	13-FEB-2023	13:24	02132311ECD7.D	1	23B0122-01	
12	13-FEB-2023	13:45	02132312ECD7.D	1	23B0125-01	
13	13-FEB-2023	14:06	02132313ECD7.D	1	23B0128-01	
14	13-FEB-2023	14:27	02132314ECD7.D	1	AR1248CCV1	
15	13-FEB-2023	14:48	02132315ECD7.D	1	AR1660CCV2	
16	13-FEB-2023	15:09	02132316ECD7.D	1	BLB0129-BLK1	
17	13-FEB-2023	15:30	02132317ECD7.D	1	BLB0129-BS1	
18	13-FEB-2023	15:51	02132318ECD7.D	1	BLB0129-BSD1	
19	13-FEB-2023	16:12	02132319ECD7.D	1	23B0089-01	
20	13-FEB-2023	16:33	02132320ECD7.D	1	PCB20	
21	13-FEB-2023	16:55	02132321ECD7.D	1	PCB2	
22	13-FEB-2023	17:16	02132322ECD7.D	1	PCB0.2	
23	13-FEB-2023	17:37	02132323ECD7.D	1	23B0089-02	
24	13-FEB-2023	17:58	02132324ECD7.D	1	AR1242CCV3	
25	13-FEB-2023	18:19	02132325ECD7.D	1	AR1660CCV4	
26	13-FEB-2023	18:40	02132326ECD7.D	1	BLA0686-BLK1	
27	13-FEB-2023	19:01	02132327ECD7.D	1	BLA0686-BS1	
28	13-FEB-2023	19:22	02132328ECD7.D	1	BLA0686-BSD1	
29	13-FEB-2023	19:43	02132329ECD7.D	1	BLA0686-SRM1	
30	13-FEB-2023	20:04	02132330ECD7.D	1	23A0313-01	
31	13-FEB-2023	20:25	02132331ECD7.D	1	23A0313-02	
32	13-FEB-2023	20:46	02132332ECD7.D	1	23A0313-03	
33	13-FEB-2023	21:07	02132333ECD7.D	1	23A0313-04	
34	13-FEB-2023	21:28	02132334ECD7.D	1	23A0313-05	
35	13-FEB-2023	21:49	02132335ECD7.D	1	23A0313-06	
36	13-FEB-2023	22:10	02132336ECD7.D	1	23A0313-07	
37	13-FEB-2023	22:31	02132337ECD7.D	1	BLA0686-MS1	
38	13-FEB-2023	22:52	02132338ECD7.D	1	BLA0686-MSD1	
39	13-FEB-2023	23:13	02132339ECD7.D	1	23A0313-08	
40	13-FEB-2023	23:34	02132340ECD7.D	1	23A0313-09	
41	13-FEB-2023	23:55	02132341ECD7.D	1	23A0313-10	
42	14-FEB-2023	00:16	02132342ECD7.D	1	AR1254CCV5	
43	14-FEB-2023	00:37	02132343ECD7.D	1	AR1660CCV6	
44	14-FEB-2023	00:58	02132344ECD7.D	1	23A0313-11	
45	14-FEB-2023	01:20	02132345ECD7.D	1	23A0313-12	
46	14-FEB-2023	01:41	02132346ECD7.D	1	23A0313-13	
47	14-FEB-2023	02:02	02132347ECD7.D	1	BLA0687-BLK1	
48	14-FEB-2023	02:23	02132348ECD7.D	1	BLA0687-BS1	
49	14-FEB-2023	02:44	02132349ECD7.D	1	BLA0687-BSD1	
50	14-FEB-2023	03:05	02132350ECD7.D	1	BLA0687-SRM1	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	14-FEB-2023 03:26	02132351ECD7.D	1	23A0326-01	
52	14-FEB-2023 03:47	02132352ECD7.D	1	23A0326-02	
53	14-FEB-2023 04:08	02132353ECD7.D	1	23A0326-03	
54	14-FEB-2023 04:29	02132354ECD7.D	1	23A0326-04	
55	14-FEB-2023 04:50	02132355ECD7.D	1	23A0326-05	
56	14-FEB-2023 05:11	02132356ECD7.D	1	23A0326-06	
57	14-FEB-2023 05:32	02132357ECD7.D	1	23A0326-07	
58	14-FEB-2023 05:53	02132358ECD7.D	1	AR1248CCV7	
59	14-FEB-2023 06:14	02132359ECD7.D	1	AR1660CCV8	
60	14-FEB-2023 06:35	02132360ECD7.D	1	BLA0687-MS1	
61	14-FEB-2023 06:56	02132361ECD7.D	1	BLA0687-MSD1	
62	14-FEB-2023 07:17	02132362ECD7.D	1	23A0326-08	
63	14-FEB-2023 07:38	02132363ECD7.D	1	23A0326-09	
64	14-FEB-2023 07:59	02132364ECD7.D	1	23A0326-10	
65	14-FEB-2023 08:20	02132365ECD7.D	1	23A0326-11	
66	14-FEB-2023 08:41	02132366ECD7.D	1	23A0326-12	
67	14-FEB-2023 09:02	02132367ECD7.D	1	AR1242CCV9	
68	14-FEB-2023 09:23	02132368ECD7.D	1	AR1660CCVA	
69	14-FEB-2023 09:44	02132369ECD7.D	1	BLB0206-BLK1	
70	14-FEB-2023 10:05	02132370ECD7.D	50	L1587	
71	14-FEB-2023 10:26	02132371ECD7.D	5	L1588	
72	14-FEB-2023 10:47	02132372ECD7.D	5	L1589	
73	14-FEB-2023 11:08	02132373ECD7.D	1	BLB0129-BLK1	
74	14-FEB-2023 11:29	02132374ECD7.D	1	BLB0129-BS1	
75	14-FEB-2023 11:50	02132375ECD7.D	1	BLB0129-BSD1	
76	14-FEB-2023 12:11	02132376ECD7.D	1	23B0089-01	
77	14-FEB-2023 12:32	02132377ECD7.D	1	23B0089-02	
78	14-FEB-2023 12:53	02132378ECD7.D	1	AR1254CCVB	
79	14-FEB-2023 13:14	02132379ECD7.D	1	AR1660CCVC	
80	14-FEB-2023 13:36	02132380ECD7.D	1	BLB0206-BS1	
81	14-FEB-2023 13:57	02132381ECD7.D	1	BLB0206-BSD1	
82	14-FEB-2023 14:18	02132382ECD7.D	1	BLB0206-SRM1	
83	14-FEB-2023 14:39	02132383ECD7.D	1	23A0626-01	
84	14-FEB-2023 15:00	02132384ECD7.D	1	BLB0206-MS1	
85	14-FEB-2023 15:21	02132385ECD7.D	1	BLB0206-MSD1	
86	14-FEB-2023 15:42	02132386ECD7.D	1	23A0626-03	
87	14-FEB-2023 16:03	02132387ECD7.D	1	23A0626-05	
88	14-FEB-2023 16:24	02132388ECD7.D	1	23A0626-07	
89	14-FEB-2023 16:45	02132389ECD7.D	1	23A0626-10	
90	14-FEB-2023 17:06	02132390ECD7.D	1	23A0626-29	
91	14-FEB-2023 17:27	02132391ECD7.D	1	AR1248CCVD	
92	14-FEB-2023 17:48	02132392ECD7.D	1	AR1660CCVE	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

ARI Job No.: AR12 Method: PCB.m Instrument: ecd7.i Date: 13-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0953	02132301ECD7.D	AR1254	TEST	1	NO MANUAL INTEGRATION
1014	02132302ECD7.D	AR1248	TEST	1	NO MANUAL INTEGRATION
1035	02132303ECD7.D	AR1242	TEST	1	NO MANUAL INTEGRATION
1056	02132304ECD7.D	AR1660	TEST	1	NO MANUAL INTEGRATION
1117	02132305ECD7.D		DDTS	1	NO MANUAL INTEGRATION
1139	02132306ECD7.D	AR1254	ICV1	1	NO MANUAL INTEGRATION
1200	02132307ECD7.D	AR1660	ICV2	1	NO MANUAL INTEGRATION
1221	02132308ECD7.D	BLB0174	-BLK1	1	NO MANUAL INTEGRATION
1242	02132309ECD7.D	BLB0174	-BS1	1	NO MANUAL INTEGRATION
1303	02132310ECD7.D	BLB0174	-BSD1	1	NO MANUAL INTEGRATION
1324	02132311ECD7.D	23B0122	-01	1	NO MANUAL INTEGRATION
1345	02132312ECD7.D	23B0125	-01	1	NO MANUAL INTEGRATION
1406	02132313ECD7.D	23B0128	-01	1	NO MANUAL INTEGRATION
1427	02132314ECD7.D	AR1248	CCV1	1	NO MANUAL INTEGRATION
1448	02132315ECD7.D	AR1660	CCV2	1	NO MANUAL INTEGRATION
1509	02132316ECD7.D	BLB0129	-BLK1	1	NO MANUAL INTEGRATION
1530	02132317ECD7.D	BLB0129	-BS1	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1551	02132318ECD7.D	BLB0129-BSD1		1	NO MANUAL INTEGRATION
1612	02132319ECD7.D	23B0089-01		1	NO MANUAL INTEGRATION
1633	02132320ECD7.D	PCB20		1	NO MANUAL INTEGRATION
1655	02132321ECD7.D	PCB2		1	NO MANUAL INTEGRATION
1716	02132322ECD7.D	PCB0.2		1	NO MANUAL INTEGRATION
1737	02132323ECD7.D	23B0089-02		1	NO MANUAL INTEGRATION
1758	02132324ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1819	02132325ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1840	02132326ECD7.D	BLA0686-BLK1		1	NO MANUAL INTEGRATION
1901	02132327ECD7.D	BLA0686-BS1		1	NO MANUAL INTEGRATION
1922	02132328ECD7.D	BLA0686-BSD1		1	NO MANUAL INTEGRATION
1943	02132329ECD7.D	BLA0686-SRM1		1	NO MANUAL INTEGRATION
2004	02132330ECD7.D	23A0313-01		1	NO MANUAL INTEGRATION
2025	02132331ECD7.D	23A0313-02		1	NO MANUAL INTEGRATION
2046	02132332ECD7.D	23A0313-03		1	NO MANUAL INTEGRATION
2107	02132333ECD7.D	23A0313-04		1	NO MANUAL INTEGRATION
2128	02132334ECD7.D	23A0313-05		1	NO MANUAL INTEGRATION
2149	02132335ECD7.D	23A0313-06		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2210	02132336ECD7.D	23A0313-07		1	NO MANUAL INTEGRATION
2231	02132337ECD7.D	BLA0686-MS1		1	NO MANUAL INTEGRATION
2252	02132338ECD7.D	BLA0686-MSD1		1	NO MANUAL INTEGRATION
2313	02132339ECD7.D	23A0313-08		1	NO MANUAL INTEGRATION
2334	02132340ECD7.D	23A0313-09		1	NO MANUAL INTEGRATION
2355	02132341ECD7.D	23A0313-10		1	NO MANUAL INTEGRATION
0016	02132342ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0037	02132343ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
0058	02132344ECD7.D	23A0313-11		1	Aroclor-1254,
0120	02132345ECD7.D	23A0313-12		1	Aroclor-1254,
0141	02132346ECD7.D	23A0313-13		1	Aroclor-1254,
0202	02132347ECD7.D	BLA0687-BLK1		1	NO MANUAL INTEGRATION
0223	02132348ECD7.D	BLA0687-BS1		1	NO MANUAL INTEGRATION
0244	02132349ECD7.D	BLA0687-BSD1		1	NO MANUAL INTEGRATION
0305	02132350ECD7.D	BLA0687-SRM1		1	NO MANUAL INTEGRATION
0326	02132351ECD7.D	23A0326-01		1	Aroclor-1254,
0347	02132352ECD7.D	23A0326-02		1	NO MANUAL INTEGRATION
0408	02132353ECD7.D	23A0326-03		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0429	02132354ECD7.D	23A0326-04		1	NO MANUAL INTEGRATION
0450	02132355ECD7.D	23A0326-05		1	NO MANUAL INTEGRATION
0511	02132356ECD7.D	23A0326-06		1	NO MANUAL INTEGRATION
0532	02132357ECD7.D	23A0326-07		1	Aroclor-1254,
0553	02132358ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
0614	02132359ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION
0635	02132360ECD7.D	BLA0687-MS1		1	NO MANUAL INTEGRATION
0656	02132361ECD7.D	BLA0687-MSD1		1	NO MANUAL INTEGRATION
0717	02132362ECD7.D	23A0326-08		1	Aroclor-1254,
0738	02132363ECD7.D	23A0326-09		1	Aroclor-1254,
0759	02132364ECD7.D	23A0326-10		1	NO MANUAL INTEGRATION
0820	02132365ECD7.D	23A0326-11		1	NO MANUAL INTEGRATION
0841	02132366ECD7.D	23A0326-12		1	Aroclor-1254,
0902	02132367ECD7.D	AR1242CCV9		1	NO MANUAL INTEGRATION
0923	02132368ECD7.D	AR1660CCVA		1	NO MANUAL INTEGRATION
0944	02132369ECD7.D	BLB0206-BLK1		1	NO MANUAL INTEGRATION
1005	02132370ECD7.D	L1587		50	NO MANUAL INTEGRATION
1026	02132371ECD7.D	L1588		5	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1047	02132372ECD7.D	L1589		5	NO MANUAL INTEGRATION
1108	02132373ECD7.D	BLB0129-BLK1		1	NO MANUAL INTEGRATION
1129	02132374ECD7.D	BLB0129-BS1		1	NO MANUAL INTEGRATION
1150	02132375ECD7.D	BLB0129-BSD1		1	NO MANUAL INTEGRATION
1211	02132376ECD7.D	23B0089-01		1	Aroclor-1254,
1232	02132377ECD7.D	23B0089-02		1	NO MANUAL INTEGRATION
1253	02132378ECD7.D	AR1254CCVB		1	NO MANUAL INTEGRATION
1314	02132379ECD7.D	AR1660CCVC		1	NO MANUAL INTEGRATION
1336	02132380ECD7.D	BLB0206-BS1		1	NO MANUAL INTEGRATION
1357	02132381ECD7.D	BLB0206-BSD1		1	NO MANUAL INTEGRATION
1418	02132382ECD7.D	BLB0206-SRM1		1	NO MANUAL INTEGRATION
1439	02132383ECD7.D	23A0626-01		1	NO MANUAL INTEGRATION
1500	02132384ECD7.D	BLB0206-MS1		1	NO MANUAL INTEGRATION
1521	02132385ECD7.D	BLB0206-MSD1		1	NO MANUAL INTEGRATION
1542	02132386ECD7.D	23A0626-03		1	Aroclor-1254, Aroclor-1260, Aroclor-1262, Aroclor-1268, IS-HBBP, Decachlorobiphenyl,
1603	02132387ECD7.D	23A0626-05		1	NO MANUAL INTEGRATION
1624	02132388ECD7.D	23A0626-07		1	NO MANUAL INTEGRATION
1645	02132389ECD7.D	23A0626-10		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1706	02132390ECD7.D	23A0626-29		1	NO MANUAL INTEGRATION
1727	02132391ECD7.D	AR1248CCVD		1	NO MANUAL INTEGRATION
1748	02132392ECD7.D	AR1660CCVE		1	NO MANUAL INTEGRATION
0953	02132301ECD7.D	AR1254TEST		1	NO MANUAL INTEGRATION
1014	02132302ECD7.D	AR1248TEST		1	NO MANUAL INTEGRATION
1035	02132303ECD7.D	AR1242TEST		1	NO MANUAL INTEGRATION
1056	02132304ECD7.D	AR1660TEST		1	NO MANUAL INTEGRATION
1117	02132305ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1139	02132306ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1200	02132307ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1221	02132308ECD7.D	BLB0174-BLK1		1	NO MANUAL INTEGRATION
1242	02132309ECD7.D	BLB0174-BS1		1	NO MANUAL INTEGRATION
1303	02132310ECD7.D	BLB0174-BSD1		1	NO MANUAL INTEGRATION
1324	02132311ECD7.D	23B0122-01		1	NO MANUAL INTEGRATION
1345	02132312ECD7.D	23B0125-01		1	NO MANUAL INTEGRATION
1406	02132313ECD7.D	23B0128-01		1	NO MANUAL INTEGRATION
1427	02132314ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1448	02132315ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1509	02132316ECD7.D	BLB0129-BLK1		1	NO MANUAL INTEGRATION
1530	02132317ECD7.D	BLB0129-BS1		1	NO MANUAL INTEGRATION
1551	02132318ECD7.D	BLB0129-BSD1		1	NO MANUAL INTEGRATION
1612	02132319ECD7.D	23B0089-01		1	NO MANUAL INTEGRATION
1633	02132320ECD7.D	PCB20		1	NO MANUAL INTEGRATION
1655	02132321ECD7.D	PCB2		1	NO MANUAL INTEGRATION
1716	02132322ECD7.D	PCB0.2		1	NO MANUAL INTEGRATION
1737	02132323ECD7.D	23B0089-02		1	NO MANUAL INTEGRATION
1758	02132324ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1819	02132325ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1840	02132326ECD7.D	BLA0686-BLK1		1	NO MANUAL INTEGRATION
1901	02132327ECD7.D	BLA0686-BS1		1	NO MANUAL INTEGRATION
1922	02132328ECD7.D	BLA0686-BSD1		1	NO MANUAL INTEGRATION
1943	02132329ECD7.D	BLA0686-SRM1		1	NO MANUAL INTEGRATION
2004	02132330ECD7.D	23A0313-01		1	NO MANUAL INTEGRATION
2025	02132331ECD7.D	23A0313-02		1	NO MANUAL INTEGRATION
2046	02132332ECD7.D	23A0313-03		1	NO MANUAL INTEGRATION
2107	02132333ECD7.D	23A0313-04		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2128	02132334ECD7.D	23A0313-05		1	NO MANUAL INTEGRATION
2149	02132335ECD7.D	23A0313-06		1	NO MANUAL INTEGRATION
2210	02132336ECD7.D	23A0313-07		1	NO MANUAL INTEGRATION
2231	02132337ECD7.D	BLA0686-MS1		1	NO MANUAL INTEGRATION
2252	02132338ECD7.D	BLA0686-MSD1		1	NO MANUAL INTEGRATION
2313	02132339ECD7.D	23A0313-08		1	NO MANUAL INTEGRATION
2334	02132340ECD7.D	23A0313-09		1	NO MANUAL INTEGRATION
2355	02132341ECD7.D	23A0313-10		1	NO MANUAL INTEGRATION
0016	02132342ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0037	02132343ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
0058	02132344ECD7.D	23A0313-11		1	Aroclor-1248 [2C],
0120	02132345ECD7.D	23A0313-12		1	Aroclor-1248 [2C],
0141	02132346ECD7.D	23A0313-13		1	Aroclor-1248 [2C],
0202	02132347ECD7.D	BLA0687-BLK1		1	NO MANUAL INTEGRATION
0223	02132348ECD7.D	BLA0687-BS1		1	NO MANUAL INTEGRATION
0244	02132349ECD7.D	BLA0687-BSD1		1	NO MANUAL INTEGRATION
0305	02132350ECD7.D	BLA0687-SRM1		1	NO MANUAL INTEGRATION
0326	02132351ECD7.D	23A0326-01		1	Aroclor-1248 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0347	02132352ECD7.D	23A0326-02		1	Aroclor-1248 [2C],
0408	02132353ECD7.D	23A0326-03		1	Aroclor-1248 [2C],
0429	02132354ECD7.D	23A0326-04		1	Aroclor-1248 [2C],
0450	02132355ECD7.D	23A0326-05		1	Aroclor-1248 [2C],
0511	02132356ECD7.D	23A0326-06		1	Aroclor-1248 [2C],
0532	02132357ECD7.D	23A0326-07		1	NO MANUAL INTEGRATION
0553	02132358ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
0614	02132359ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION
0635	02132360ECD7.D	BLA0687-MS1		1	NO MANUAL INTEGRATION
0656	02132361ECD7.D	BLA0687-MSD1		1	NO MANUAL INTEGRATION
0717	02132362ECD7.D	23A0326-08		1	Aroclor-1248 [2C],
0738	02132363ECD7.D	23A0326-09		1	Aroclor-1248 [2C],
0759	02132364ECD7.D	23A0326-10		1	Aroclor-1248 [2C],
0820	02132365ECD7.D	23A0326-11		1	NO MANUAL INTEGRATION
0841	02132366ECD7.D	23A0326-12		1	Aroclor-1248 [2C],
0902	02132367ECD7.D	AR1242CCV9		1	NO MANUAL INTEGRATION
0923	02132368ECD7.D	AR1660CCVA		1	NO MANUAL INTEGRATION
0944	02132369ECD7.D	BLB0206-BLK1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1005	02132370ECD7.D	L1587		50	NO MANUAL INTEGRATION
1026	02132371ECD7.D	L1588		5	NO MANUAL INTEGRATION
1047	02132372ECD7.D	L1589		5	NO MANUAL INTEGRATION
1108	02132373ECD7.D	BLB0129-BLK1		1	NO MANUAL INTEGRATION
1129	02132374ECD7.D	BLB0129-BS1		1	NO MANUAL INTEGRATION
1150	02132375ECD7.D	BLB0129-BSD1		1	NO MANUAL INTEGRATION
1211	02132376ECD7.D	23B0089-01		1	NO MANUAL INTEGRATION
1232	02132377ECD7.D	23B0089-02		1	NO MANUAL INTEGRATION
1253	02132378ECD7.D	AR1254CCVB		1	NO MANUAL INTEGRATION
1314	02132379ECD7.D	AR1660CCVC		1	NO MANUAL INTEGRATION
1336	02132380ECD7.D	BLB0206-BS1		1	NO MANUAL INTEGRATION
1357	02132381ECD7.D	BLB0206-BSD1		1	NO MANUAL INTEGRATION
1418	02132382ECD7.D	BLB0206-SRMI		1	NO MANUAL INTEGRATION
1439	02132383ECD7.D	23A0626-01		1	NO MANUAL INTEGRATION
1500	02132384ECD7.D	BLB0206-MS1		1	NO MANUAL INTEGRATION
1521	02132385ECD7.D	BLB0206-MSD1		1	NO MANUAL INTEGRATION
1542	02132386ECD7.D	23A0626-03		1	NO MANUAL INTEGRATION
1603	02132387ECD7.D	23A0626-05		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230213.b\230213.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1624	02132388ECD7.D	23A0626-07		1	NO MANUAL INTEGRATION
1645	02132389ECD7.D	23A0626-10		1	NO MANUAL INTEGRATION
1706	02132390ECD7.D	23A0626-29		1	NO MANUAL INTEGRATION
1727	02132391ECD7.D	AR1248CCVD		1	NO MANUAL INTEGRATION
1748	02132392ECD7.D	AR1660CCVE		1	NO MANUAL INTEGRATION

Security Status Report

Date: 15-Feb-2023 14:22

02132301ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132302ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132303ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132304ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132305ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132306ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132307ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132308ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132309ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132310ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132311ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132312ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132313ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132314ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132315ECD7.D	Data Locked	richardl, 14-Feb-2023 09:02
02132316ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132317ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132318ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132319ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132320ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132321ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132322ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132323ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132324ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132325ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132326ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132327ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132328ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132329ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132330ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132331ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132332ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132333ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132334ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132335ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132336ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132337ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132338ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132339ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132340ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132341ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132342ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132343ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22
02132344ECD7.D	Data Locked	richardl, 15-Feb-2023 14:22



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor OEA, LLC
Sequence: SLA0281
Calibration: GA00061

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0281-SCV1 (Solid) Lab File ID: 01242324ECD7.D Analyzed: 01/24/23 19:51								
Decachlorobiphenyl	40.000	94.9	80 - 120	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	40.000	93.8	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	93.2	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV2 (Solid) Lab File ID: 01242325ECD7.D Analyzed: 01/24/23 20:12								
Decachlorobiphenyl	40.000	96.4	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	94.4	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.121	14.12017	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	93.4	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV3 (Solid) Lab File ID: 01242326ECD7.D Analyzed: 01/24/23 20:33								
Decachlorobiphenyl	40.000	95.7	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	91.9	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	91.4	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV4 (Solid) Lab File ID: 01242327ECD7.D Analyzed: 01/24/23 20:54								
Decachlorobiphenyl	40.000	92.7	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	91.7	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	14.121	14.12017	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	91.6	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV5 (Solid) Lab File ID: 01242328ECD7.D Analyzed: 01/24/23 21:15								
Decachlorobiphenyl	40.000	93.6	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	93.2	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	98.7	80 - 120	14.119	14.12017	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	92.9	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV6 (Solid) Lab File ID: 01242329ECD7.D Analyzed: 01/24/23 21:36								
Decachlorobiphenyl	40.000	137	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	90.9	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	145	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	90.8	80 - 120	5.686	5.685333	0.0007	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0168
Calibration: GA00061

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0168-CCV3 (Water) Lab File ID: 02132324ECD7.D Analyzed: 02/13/23 17:58								
Decachlorobiphenyl	40.000	76.5	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	116	0 - 200	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	81.8	0 - 200	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	114	0 - 200	5.683	5.685333	-0.0023	N/A	
SLB0168-CCV4 (Water) Lab File ID: 02132325ECD7.D Analyzed: 02/13/23 18:19								
Decachlorobiphenyl	40.000	83.8	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	100	0 - 200	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	40.000	88.0	0 - 200	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	97.5	0 - 200	5.682	5.685333	-0.0033	N/A	
SLB0168-CCV5 (Water) Lab File ID: 02132342ECD7.D Analyzed: 02/14/23 00:16								
Decachlorobiphenyl	40.000	81.0	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	94.0	0 - 200	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	40.000	86.3	0 - 200	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	95.3	0 - 200	5.682	5.685333	-0.0033	N/A	
SLB0168-CCV6 (Water) Lab File ID: 02132343ECD7.D Analyzed: 02/14/23 00:37								
Decachlorobiphenyl	40.000	86.8	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	98.8	0 - 200	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	88.8	0 - 200	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	97.3	0 - 200	5.683	5.685333	-0.0023	N/A	
BLA0687-BLK1 (Solid) Lab File ID: 02132347ECD7.D Analyzed: 02/14/23 02:02								
Decachlorobiphenyl	8.0000	88.4	40 - 126	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	8.0000	86.8	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	8.0000	93.9	40 - 126	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	8.0000	85.9	44 - 120	5.681	5.685333	-0.0043	N/A	
BLA0687-BS1 (Solid) Lab File ID: 02132348ECD7.D Analyzed: 02/14/23 02:23								
Decachlorobiphenyl	8.0000	85.6	40 - 126	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	8.0000	82.4	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	8.0000	87.4	40 - 126	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	8.0000	79.2	44 - 120	5.681	5.685333	-0.0043	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0168
Calibration: GA00061

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0687-BSD1 (Solid) Lab File ID: 02132349ECD7.D Analyzed: 02/14/23 02:44								
Decachlorobiphenyl	8.0000	91.3	40 - 126	13.887	13.892	-0.0050	N/A	
Tetrachlorometaxylene	8.0000	90.6	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	8.0000	93.0	40 - 126	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	8.0000	86.9	44 - 120	5.682	5.685333	-0.0033	N/A	
BLA0687-SRM1 (Solid) Lab File ID: 02132350ECD7.D Analyzed: 02/14/23 03:05								
Decachlorobiphenyl	40.000	79.8	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	40.000	72.1	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	40.000	77.0	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	40.000	78.9	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0326-01 (Solid) Lab File ID: 02132351ECD7.D Analyzed: 02/14/23 03:26								
Decachlorobiphenyl	7.9965	83.5	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9965	68.3	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9965	81.5	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9965	77.3	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0326-02 (Solid) Lab File ID: 02132352ECD7.D Analyzed: 02/14/23 03:47								
Decachlorobiphenyl	7.9973	82.3	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9973	68.0	44 - 120	5.802	5.808667	-0.0067	N/A	
Decachlorobiphenyl [2C]	7.9973	81.7	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9973	78.9	44 - 120	5.679	5.685333	-0.0063	N/A	
23A0326-03 (Solid) Lab File ID: 02132353ECD7.D Analyzed: 02/14/23 04:08								
Decachlorobiphenyl	7.9682	83.3	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9682	68.0	44 - 120	5.802	5.808667	-0.0067	N/A	
Decachlorobiphenyl [2C]	7.9682	82.5	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9682	82.4	44 - 120	5.679	5.685333	-0.0063	N/A	
23A0326-04 (Solid) Lab File ID: 02132354ECD7.D Analyzed: 02/14/23 04:29								
Decachlorobiphenyl	7.9691	78.8	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9691	68.6	44 - 120	5.802	5.808667	-0.0067	N/A	
Decachlorobiphenyl [2C]	7.9691	78.0	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9691	80.9	44 - 120	5.678	5.685333	-0.0073	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0168
Calibration: GA00061

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0326-05 (Solid) Lab File ID: 02132355ECD7.D Analyzed: 02/14/23 04:50								
Decachlorobiphenyl	7.9780	75.9	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9780	59.2	44 - 120	5.802	5.808667	-0.0067	N/A	
Decachlorobiphenyl [2C]	7.9780	74.2	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9780	69.5	44 - 120	5.679	5.685333	-0.0063	N/A	
23A0326-06 (Solid) Lab File ID: 02132356ECD7.D Analyzed: 02/14/23 05:11								
Decachlorobiphenyl	7.9784	82.3	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9784	67.6	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9784	86.9	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9784	79.7	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0326-07 (Solid) Lab File ID: 02132357ECD7.D Analyzed: 02/14/23 05:32								
Decachlorobiphenyl	7.9802	90.6	40 - 126	13.886	13.892	-0.0060	N/A	
Tetrachlorometaxylene	7.9802	78.5	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9802	73.5	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9802	82.1	44 - 120	5.682	5.685333	-0.0033	N/A	
SLB0168-CCV7 (Water) Lab File ID: 02132358ECD7.D Analyzed: 02/14/23 05:53								
Decachlorobiphenyl	40.000	85.0	0 - 200	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	93.3	0 - 200	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	40.000	110	0 - 200	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	94.3	0 - 200	5.682	5.685333	-0.0033	N/A	
SLB0168-CCV8 (Water) Lab File ID: 02132359ECD7.D Analyzed: 02/14/23 06:14								
Decachlorobiphenyl	40.000	84.0	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	98.8	0 - 200	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	40.000	92.0	0 - 200	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	98.3	0 - 200	5.682	5.685333	-0.0033	N/A	
BLA0687-MS1 (Solid) Lab File ID: 02132360ECD7.D Analyzed: 02/14/23 06:35								
Decachlorobiphenyl	7.9957	83.6	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	7.9957	81.5	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9957	81.5	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9957	88.8	44 - 120	5.68	5.685333	-0.0053	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0168
Calibration: GA00061

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0687-MSD1 (Solid) Lab File ID: 02132361ECD7.D Analyzed: 02/14/23 06:56								
Decachlorobiphenyl	7.9957	83.4	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	7.9957	84.9	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9957	81.7	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9957	87.4	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0326-08 (Solid) Lab File ID: 02132362ECD7.D Analyzed: 02/14/23 07:17								
Decachlorobiphenyl	7.9758	82.3	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9758	75.6	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9758	79.1	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9758	82.0	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0326-09 (Solid) Lab File ID: 02132363ECD7.D Analyzed: 02/14/23 07:38								
Decachlorobiphenyl	7.9845	93.5	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9845	60.6	44 - 120	5.802	5.808667	-0.0067	N/A	
Decachlorobiphenyl [2C]	7.9845	95.7	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9845	72.8	44 - 120	5.678	5.685333	-0.0073	N/A	
23A0326-10 (Solid) Lab File ID: 02132364ECD7.D Analyzed: 02/14/23 07:59								
Decachlorobiphenyl	7.9865	75.2	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9865	66.0	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9865	77.0	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9865	76.9	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0326-11 (Solid) Lab File ID: 02132365ECD7.D Analyzed: 02/14/23 08:20								
Decachlorobiphenyl	7.9993	92.2	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9993	51.8	44 - 120	5.801	5.808667	-0.0077	N/A	
Decachlorobiphenyl [2C]	7.9993	96.9	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9993	80.0	44 - 120	5.678	5.685333	-0.0073	N/A	
23A0326-12 (Solid) Lab File ID: 02132366ECD7.D Analyzed: 02/14/23 08:41								
Decachlorobiphenyl	9.1261	76.5	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	9.1261	63.8	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	9.1261	76.2	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	9.1261	75.6	44 - 120	5.68	5.685333	-0.0053	N/A	



SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLB0168
Calibration: GA00061

SDG/WO: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0168-CCV9 (Water)		Lab File ID: 02132367ECD7.D			Analyzed: 02/14/23 09:02			
Decachlorobiphenyl	40.000	74.8	0 - 200	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	112	0 - 200	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	81.5	0 - 200	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	112	0 - 200	5.685	5.685333	-0.0003	N/A	
SLB0168-CCVA (Water)		Lab File ID: 02132368ECD7.D			Analyzed: 02/14/23 09:23			
Decachlorobiphenyl	40.000	86.5	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	99.0	0 - 200	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	40.000	89.5	0 - 200	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	98.5	0 - 200	5.684	5.685333	-0.0013	N/A	
SLB0168-CCVB (Water)		Lab File ID: 02132378ECD7.D			Analyzed: 02/14/23 12:53			
Decachlorobiphenyl	40.000	80.3	0 - 200	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	95.0	0 - 200	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	86.0	0 - 200	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	94.8	0 - 200	5.684	5.685333	-0.0013	N/A	
SLB0168-CCVC (Water)		Lab File ID: 02132379ECD7.D			Analyzed: 02/14/23 13:14			
Decachlorobiphenyl	40.000	84.0	0 - 200	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	99.0	0 - 200	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	88.0	0 - 200	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	98.0	0 - 200	5.684	5.685333	-0.0013	N/A	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLA0281

SDG: 23A0326
Project: AOC5 MR Phase 1
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLA0281-SCV1)		(Solid)	Lab File ID: 01242324ECD7.D			Analyzed: 01/24/23 19:51			
1-Bromo-2-Nitrobenzene	506576	3.491	503318	3.492	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	940129	14.264	647433	14.266	145	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	343102	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	501702	15.008	382032	15.008	131	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLA0281-SCV2)		(Solid)	Lab File ID: 01242325ECD7.D			Analyzed: 01/24/23 20:12			
1-Bromo-2-Nitrobenzene	503089	3.492	503318	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	953137	14.265	647433	14.266	147	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341704	3.929	336911	3.928	101	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	505860	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLA0281-SCV3)		(Solid)	Lab File ID: 01242326ECD7.D			Analyzed: 01/24/23 20:33			
1-Bromo-2-Nitrobenzene	508189	3.491	503318	3.492	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	979067	14.265	647433	14.266	151	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	344105	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	503378	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLA0281-SCV4)		(Solid)	Lab File ID: 01242327ECD7.D			Analyzed: 01/24/23 20:54			
1-Bromo-2-Nitrobenzene	504424	3.491	503318	3.492	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	968338	14.265	647433	14.266	150	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	342969	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	515045	15.01	382032	15.008	135	50 - 200	0.002	+/-0.50	
Secondary Cal Check (SLA0281-SCV5)		(Solid)	Lab File ID: 01242328ECD7.D			Analyzed: 01/24/23 21:15			
1-Bromo-2-Nitrobenzene	503473	3.491	503318	3.492	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	991997	14.264	647433	14.266	153	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	340361	3.928	336911	3.928	101	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	521975	15.008	382032	15.008	137	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLA0281-SCV6)		(Solid)	Lab File ID: 01242329ECD7.D			Analyzed: 01/24/23 21:36			
1-Bromo-2-Nitrobenzene	487061	3.494	503318	3.492	97	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	944934	14.266	647433	14.266	146	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	331721	3.93	336911	3.928	98	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	502401	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0168

Instrument: ECD7

Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (BLA0687-BLK1)		(Solid)	Lab File ID: 02132347ECD7.D			Analyzed: 02/14/23 02:02			
1-Bromo-2-Nitrobenzene	442127	3.487	444695	3.488	99	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	517735	14.257	454348	14.259	114	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	375160	3.924	369182	3.928	102	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl [2C]	397272	15.001	610696	15.003	65	50 - 200	-0.002	+/-0.50	
LCS (BLA0687-BS1)		(Solid)	Lab File ID: 02132348ECD7.D			Analyzed: 02/14/23 02:23			
1-Bromo-2-Nitrobenzene	444513	3.487	444695	3.488	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	595081	14.258	454348	14.259	131	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	373917	3.924	369182	3.928	101	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl [2C]	439354	15.003	610696	15.003	72	50 - 200	0.000	+/-0.50	
LCS Dup (BLA0687-BSD1)		(Solid)	Lab File ID: 02132349ECD7.D			Analyzed: 02/14/23 02:44			
1-Bromo-2-Nitrobenzene	443569	3.488	444695	3.488	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	658490	14.257	454348	14.259	145	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	373346	3.925	369182	3.928	101	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	461753	15.001	610696	15.003	76	50 - 200	-0.002	+/-0.50	
Reference (BLA0687-SRM1)		(Solid)	Lab File ID: 02132350ECD7.D			Analyzed: 02/14/23 03:05			
1-Bromo-2-Nitrobenzene	449774	3.487	444695	3.488	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	560270	14.252	454348	14.259	123	50 - 200	-0.007	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	357560	3.924	369182	3.928	97	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl [2C]	429149	14.999	610696	15.003	70	50 - 200	-0.004	+/-0.50	
LDW23-SC1028 (23A0326-01)		(Solid)	Lab File ID: 02132351ECD7.D			Analyzed: 02/14/23 03:26			
1-Bromo-2-Nitrobenzene	417935	3.489	428126	3.489	98	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	379063	14.248	448322	14.258	85	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	329129	3.925	366222	3.925	90	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	331371	14.995	610696	15.003	54	50 - 200	-0.008	+/-0.50	
LDW23-SC1032 (23A0326-02)		(Solid)	Lab File ID: 02132352ECD7.D			Analyzed: 02/14/23 03:47			
1-Bromo-2-Nitrobenzene	413285	3.488	432527	3.488	96	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	359825	14.248	448322	14.258	80	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	325815	3.925	369182	3.928	88	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	315342	14.995	361601	15.003	87	50 - 200	-0.008	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0168

Instrument: ECD7

Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1128 (23A0326-03)		(Solid)	Lab File ID: 02132353ECD7.D			Analyzed: 02/14/23 04:08			
1-Bromo-2-Nitrobenzene	419677	3.487	446392	3.49	94	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl	354652	14.248	454348	14.259	78	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	320487	3.923	372800	3.927	86	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl [2C]	310533	14.995	416916	15.002	74	50 - 200	-0.007	+/-0.50	
LDW23-SC1170A (23A0326-04)		(Solid)	Lab File ID: 02132354ECD7.D			Analyzed: 02/14/23 04:29			
1-Bromo-2-Nitrobenzene	407767	3.487	444695	3.488	92	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	360348	14.248	955203	14.261	38	50 - 200	-0.013	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	327071	3.924	365172	3.926	90	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	316301	14.995	364571	15.003	87	50 - 200	-0.008	+/-0.50	
LDW23-SC1169C (23A0326-05)		(Solid)	Lab File ID: 02132355ECD7.D			Analyzed: 02/14/23 04:50			
1-Bromo-2-Nitrobenzene	413268	3.488	428126	3.489	97	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	338749	14.248	543918	14.259	62	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	322140	3.924	372800	3.927	86	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	309225	14.994	364571	15.003	85	50 - 200	-0.009	+/-0.50	
LDW23-SC1168 (23A0326-06)		(Solid)	Lab File ID: 02132356ECD7.D			Analyzed: 02/14/23 05:11			
1-Bromo-2-Nitrobenzene	426733	3.488	435524	3.49	98	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	354182	14.248	454348	14.259	78	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	334514	3.925	369182	3.928	91	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	322885	14.995	610696	15.003	53	50 - 200	-0.008	+/-0.50	
LDW23-SC1176 (23A0326-07)		(Solid)	Lab File ID: 02132357ECD7.D			Analyzed: 02/14/23 05:32			
1-Bromo-2-Nitrobenzene	431723	3.489	444695	3.488	97	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	408817	14.251	454348	14.259	90	50 - 200	-0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	364377	3.925	365140	3.925	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	390527	14.997	607862	15.004	64	50 - 200	-0.007	+/-0.50	
Matrix Spike (BLA0687-MS1)		(Solid)	Lab File ID: 02132360ECD7.D			Analyzed: 02/14/23 06:35			
1-Bromo-2-Nitrobenzene	427576	3.487	444695	3.488	96	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	458283	14.25	454348	14.259	101	50 - 200	-0.009	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	350012	3.924	369182	3.928	95	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl [2C]	374416	14.996	610696	15.003	61	50 - 200	-0.007	+/-0.50	



INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor OEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLB0168

Instrument: ECD7

Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (BLA0687-MSD1)		(Solid)	Lab File ID: 02132361ECD7.D			Analyzed: 02/14/23 06:56			
1-Bromo-2-Nitrobenzene	430730	3.488	444695	3.488	97	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	468256	14.249	454348	14.259	103	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	356542	3.924	369182	3.928	97	50 - 200	-0.004	+/-0.50	
Hexabromobiphenyl [2C]	384880	14.996	610696	15.003	63	50 - 200	-0.007	+/-0.50	
LDW23-IT1181 (23A0326-08)		(Solid)	Lab File ID: 02132362ECD7.D			Analyzed: 02/14/23 07:17			
1-Bromo-2-Nitrobenzene	419047	3.488	432527	3.488	97	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	421264	14.249	454348	14.259	93	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	346864	3.925	369182	3.928	94	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	363711	14.997	441013	15.003	82	50 - 200	-0.006	+/-0.50	
LDW23-IT1127 (23A0326-09)		(Solid)	Lab File ID: 02132363ECD7.D			Analyzed: 02/14/23 07:38			
1-Bromo-2-Nitrobenzene	382058	3.488	444740	3.488	86	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	313310	14.248	943358	14.261	33	50 - 200	-0.013	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	293571	3.924	365140	3.925	80	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	281986	14.996	412190	15.002	68	50 - 200	-0.006	+/-0.50	
LDW23-SC1161 (23A0326-10)		(Solid)	Lab File ID: 02132364ECD7.D			Analyzed: 02/14/23 07:59			
1-Bromo-2-Nitrobenzene	403570	3.488	432527	3.488	93	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	353885	14.248	955203	14.261	37	50 - 200	-0.013	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	324144	3.925	372800	3.927	87	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	313086	14.995	552769	15.004	57	50 - 200	-0.009	+/-0.50	
LDW23-SC1155 (23A0326-11)		(Solid)	Lab File ID: 02132365ECD7.D			Analyzed: 02/14/23 08:20			
1-Bromo-2-Nitrobenzene	401462	3.487	432527	3.488	93	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	332969	14.247	540351	14.258	62	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	281310	3.923	365172	3.926	77	50 - 200	-0.003	+/-0.50	
Hexabromobiphenyl [2C]	351991	14.995	412190	15.002	85	50 - 200	-0.007	+/-0.50	
LDW23-SC1162B (23A0326-12)		(Solid)	Lab File ID: 02132366ECD7.D			Analyzed: 02/14/23 08:41			
1-Bromo-2-Nitrobenzene	397168	3.488	446392	3.49	89	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	336550	14.248	576514	14.259	58	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	319315	3.924	372657	3.924	86	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	303892	14.994	364571	15.003	83	50 - 200	-0.009	+/-0.50	



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-06 File ID: 02132356ECD7.D
 Sampled: 01/17/23 11:51 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 05:11
 Solids: 56.51 Preparation: EPA 3546 (Microwave) Instrument: ECD7
 Batch: BLA0687 Sequence: SLB0168
 GC Column(1): ZB5 GC Column(2): ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.393	8.405	0.012	45514.5	29.8	2.
	* 2	8.296	8.305	0.009	28135.25	30.4	
Aroclor 1254	1	9.283	9.298	0.015	75086.4	41.6	22.
	* 2	9.435	9.447	0.012	81489.4	51.9	
Aroclor 1260	1	11.03	11.04533	0.0153	53118	40.2	.5
	* 2	11.639	11.65333	0.0143	63032.25	40.4	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>		
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>		
Matrix:	<u>Sediment</u>	Laboratory ID:	<u>23A0326-07</u>	File ID:	<u>02132357ECD7.D</u>
Sampled:	<u>01/17/23 12:11</u>	Prepared:	<u>01/31/23 15:03</u>	Analyzed:	<u>02/14/23 05:32</u>
Solids:	<u>80.95</u>	Preparation:	<u>EPA 3546 (Microwave)</u>	Instrument:	<u>ECD7</u>
Batch:	<u>BLA0687</u>	Sequence:	<u>SLB0168</u>		
GC Column(1):	<u>ZB5</u>	GC Column(2):	<u>ZB35</u>		

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.397	8.405	0.008	27820.75	18.0	14.9
	* 2	8.299	8.305	0.006	21765.75	20.9	
Aroclor 1254	1	9.285	9.298	0.013	20417.8	11.3	19.9
	* 2	9.438	9.447	0.009	23436	13.8	
Aroclor 1260	1	11.033	11.04533	0.0123	20739.2	14.0	2.9
	* 2	11.642	11.65333	0.0113	25583.75	13.6	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>	
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Sediment</u>	Laboratory ID: <u>23A0326-08</u>	File ID: <u>02132362ECD7.D</u>
Sampled: <u>01/17/23 12:31</u>	Prepared: <u>01/31/23 15:03</u>	Analyzed: <u>02/14/23 07:17</u>
Solids: <u>75.53</u>	Preparation: <u>EPA 3546 (Microwave)</u>	Instrument: <u>ECD7</u>
Batch: <u>BLA0687</u>	Sequence: <u>SLB0168</u>	
GC Column(1): <u>ZB5</u>	GC Column(2): <u>ZB35</u>	

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	32551	13.6	14.3
	* 2	8.297	8.305	0.008	15713.75	15.7	
Aroclor 1254	1	9.284	9.298	0.014	52542.6	29.4	27.6
	* 2	9.436	9.447	0.011	63177.2	38.8	
Aroclor 1260	1	11.031	11.04533	0.0143	37433.2	23.3	16.9
	* 2	11.641	11.65333	0.0123	47632.75	27.6	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-09 File ID: 02132363ECD7.D
 Sampled: 01/17/23 13:32 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 07:38
 Solids: 61.94 Preparation: EPA 3546 (Microwave) Instrument: ECD7
 Batch: BLA0687 Sequence: SLB0168
 GC Column(1): ZB5 GC Column(2): ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.393	8.405	0.012	48689.25	35.2	9.8
	* 2	8.295	8.305	0.01	31321	31.9	
Aroclor 1254	1	9.283	9.298	0.015	84607.8	55.3	20.9
	* 2	9.434	9.447	0.013	92849.8	68.2	
Aroclor 1260	1	11.03	11.04533	0.0153	90644.6	77.9	12.3
	* 2	11.64	11.65333	0.0133	123972.3	88.1	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>		
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>		
Matrix:	<u>Sediment</u>	Laboratory ID:	<u>23A0326-10</u>	File ID:	<u>02132364ECD7.D</u>
Sampled:	<u>01/17/23 14:18</u>	Prepared:	<u>01/31/23 15:03</u>	Analyzed:	<u>02/14/23 07:59</u>
Solids:	<u>54.63</u>	Preparation:	<u>EPA 3546 (Microwave)</u>	Instrument:	<u>ECD7</u>
Batch:	<u>BLA0687</u>	Sequence:	<u>SLB0168</u>		
GC Column(1):	<u>ZB5</u>	GC Column(2):	<u>ZB35</u>		

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.393	8.405	0.012	45705.25	31.7	2.9
	* 2	8.296	8.305	0.009	27869.75	30.8	
Aroclor 1254	1	9.284	9.298	0.014	75521.4	37.1	35.8
	* 2	9.435	9.447	0.012	80950.4	53.3	
Aroclor 1260	1	11.031	11.04533	0.0143	51199	39.0	12.9
	* 2	11.641	11.65333	0.0123	67849.5	44.4	

* Column used for quantitation



DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Matrix: Sediment Laboratory ID: 23A0326-11 File ID: 02132365ECD7.D
Sampled: 01/17/23 14:06 Prepared: 01/31/23 15:03 Analyzed: 02/14/23 08:20
Solids: 52.57 Preparation: EPA 3546 (Microwave) Instrument: ECD7
Batch: BLA0687 Sequence: SLB0168
GC Column(1): ZB5 GC Column(2): ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.392	8.405	0.013	36818.5	25.4	13.9
	* 2	8.295	8.305	0.01	28445	29.2	
Aroclor 1254	1	9.282	9.298	0.016	58119	34.2	25.7
	* 2	9.435	9.447	0.012	69349	44.3	
Aroclor 1260	* 1	11.031	11.04533	0.0143	65351.6	54.7	13.3
	2	11.64	11.65333	0.0133	81837	47.9	

* Column used for quantitation



HOLDING TIME SUMMARY

Analysis: EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 03:26	14	40	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 03:47	14	40	
LDW23-SC1128 23A0326-03	01/17/23 08:36	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 04:08	14	40	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 04:29	14	40	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 04:50	14	40	
LDW23-SC1168 23A0326-06	01/17/23 11:51	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 05:11	14	40	
LDW23-SC1176 23A0326-07	01/17/23 12:11	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 05:32	14	40	
LDW23-IT1181 23A0326-08	01/17/23 12:31	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 07:17	14	40	
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 07:38	14	40	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 07:59	14	40	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 08:20	14	40	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 08:41	14	40	
Matrix Spike BLA0687-MS1	01/17/23 12:11	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 06:35	14	40	
Matrix Spike Dup BLA0687-MSD1	01/17/23 12:11	01/17/23 16:46	01/31/23 15:03	14	365	02/14/23 06:56	14	40	

* Indicates hold time exceedance.



METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ECD7

Analyte	MDL	RL	Units
Aroclor 1016	1.6	4.0	ug/kg
Aroclor 1016 [2C]	1.6	4.0	ug/kg
Aroclor 1221	1.6	4.0	ug/kg
Aroclor 1221 [2C]	1.6	4.0	ug/kg
Aroclor 1232	1.6	4.0	ug/kg
Aroclor 1232 [2C]	1.6	4.0	ug/kg
Aroclor 1242	1.6	4.0	ug/kg
Aroclor 1242 [2C]	1.6	4.0	ug/kg
Aroclor 1248	1.6	4.0	ug/kg
Aroclor 1248 [2C]	1.6	4.0	ug/kg
Aroclor 1254	1.6	4.0	ug/kg
Aroclor 1254 [2C]	1.6	4.0	ug/kg
Aroclor 1260	0.6	4.0	ug/kg
Aroclor 1260 [2C]	0.6	4.0	ug/kg

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: Refer to SDS for complete safety information

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)



Signal Word: Warning

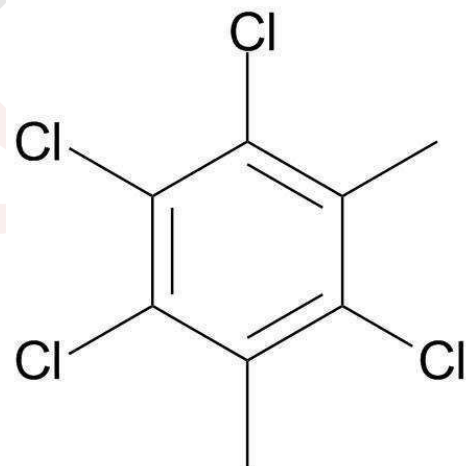
Certified Reference Material



Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration ¹
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C₈H₆Cl₄
Molecular weight: 243.94



C000147

tetrachlorometaxylene

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager



AccuStandard

125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N

EXPIRATION: Jul 28, 2015

DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

LOT #: 990521LB-AC

SOLVENT: N/A

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹	Certified Analyte Concentration ²
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2;

C000148

decachlorobiphenyl

Expires 1/15/2020

Prepared By Joshua Rains 1/15/2014

** I 1768 A*

Certified by:

R. Cooper

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
 2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±0.5% which is the Combined Uncertainty $U_c(y)$. It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is $U_c(y) * K$ where K is the coverage factor at the 95% confidence level ($K=2$).
 3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

** Recertified ~ 4-6-09 (S)*



Analytical Standard Record
Standard ID: C000148

Printed: 4/23/2015 11:54:44AM

Description:	decachlorobiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	9905211b-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By

Date

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101461

Lot Number: CL13053

Description: Aroclor 1254

Certification Date: November 29, 2018

Storage: 4 °C

Expiration Date: November 30, 2026

Provided As: 1 mL in 2 mL Ampoule in Hexane

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1254	11097-69-1	1000	± 0.246%

I 09808
Recd.
02/24/20



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_US

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462

Lot Number: CL16516

Description: Aroclor 1260

Certification Date: March 4, 2021

Storage: 4 °C

Expiration Date: February 28, 2029

Provided As: 1 mL in 2 mL Ampoule in Hexane

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

J006465



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101468

Lot Number: CL14017

Description: Aroclor 1221

Certification Date: August 20, 2019

Storage: 4 °C

Expiration Date: August 31, 2027

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1221	11104-28-2	1000	± 0.553%

J006466
Recd of
06/18/21



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA * Tel: 303-940-0033 * Fax: 303-940-0043 * info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenex
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101469

Lot Number: CL14914

Description: Aroclor 1232

Certification Date: January 31, 2020

Storage: 4 °C

Expiration Date: January 31, 2028

Provided As: 1 mL in 2 mL Ampoule in Isooctane



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1232	11141-16-5	1000	± 0.738%

J 006467
reed
06/18/21



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



A Phenomenix
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101470

Lot Number: CL14018

Description: Aroclor 1242

Certification Date: August 20, 2019

Storage: 4 °C

Expiration Date: August 31, 2027

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1242	53469-21-9	1000	± 0.553%

J006468
feed JR
06/18/21



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA * Tel: 303-940-0033 * Fax: 303-940-0043 * info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k\sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.

³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenex
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101471

Lot Number: CL15384

Description: Aroclor 1248

Certification Date: June 19, 2020

Storage: 4 °C

Expiration Date: June 30, 2028

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1248	12672-29-6	1000	± 0.520%

*# J006469
Reed, JR
06/18/21*



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

- 1. Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
- 2. Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
- 3. Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
- 4. Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
- 5. Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
- 6. Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
- 7. Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
- 8. Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
- 9. Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$u_{CRM} = k\sqrt{u_M^2 + u_H^2 + u_{LTS}^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
- 10. Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
- 11. Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
- 12. Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



phenova[®]
Certified Reference Materials

A Phenomenon
Company

Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101474

Lot Number: CL11330

Description: Aroclor 1262

Certification Date: May 15, 2015

Storage: 4 °C

Expiration Date: April 30, 2023

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Revision Date: April 2, 2018



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1262	37324-23-5	1000	± 0.516%

J 00647H
Reed JK
06/18/21



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
 2. **Quality Standards:** Phenova is accredited by A2LA to ISO Guide 34³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
 3. **Intended Use:** The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.
 4. **Instruction:** Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.
 5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.
 6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
 7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
 8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
 9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$
- Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
 11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.
 12. **Period of Validity:** The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
- ³ ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the IAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101475

Lot Number: CL11331

Description: Aroclor 1268

Certification Date: May 15, 2015

Storage: 4 °C

Expiration Date: April 30, 2023

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Revision Date: April 2, 2018

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1268	11100-14-4	1000	± 0.516%

J006472
Rec'd. JK
06/18/21



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL1110613_US

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO Guide 34³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.
4. **Instruction:** Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).
$$uCRM = k \cdot \sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.
10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.
12. **Period of Validity:** The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
- ³ ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101467

Lot Number: CL16555

Description: Aroclor 1016

Certification Date: June 22, 2021

Storage: 4 °C

Expiration Date: February 28, 2029

Provided As: 1 mL in 2 mL Ampoule in Isooctane

J012591

AROCLOR 1016

Expires 2/28/2029

Prepared By Joshua Rains 11/26/2021



Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.310%

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com

Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. Quality Standards: Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03



Certificate of Analysis

Aroclor 1016 Solution

Product Number: PP-282

Page: 1 of 1

Lot Number: CR-0761

Lot Issue Date: 28-Feb-2017

Expiration Date: 31-Mar-2025

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

*K1254
Rec'd JP
02/05/17*

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.

John Russo
President

Monica Bourgeois
Director of QA/RA



Certificate of Analysis

Product Name: Aroclor 1260 Standard

Product Number: PP-362-1

Lot Issue Date: 20-Jan-2021

Lot Number: 0006582048

Expiration Date: 28-Feb-2025

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1260	011096-82-5	NT01023	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

K 1255

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis ISO Guide 34

Aroclor 1242 Solution

Product Number: PP-312

Page: 1 of 1

Lot Number: CS-6293

Lot Issue Date: 04-Jan-2019

Expiration Date: 31-Jan-2023

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1242	053469-21-9	NT01020	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1256

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.


Monica Bourgeois
QMS Representative



ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO17025 Cert No.
AT-1937

ISO 17034



Agilent

Trusted Answers

Reference Material Certificate

Product Name: Aroclor 1248 Standard **Lot Number:** 0006626997
Product Number: PP-342-1 **Lot Issue Date:** 17-Aug-2021
Storage Conditions: Store at Room Temperature (15° to 30°C). **Expiration Date:** 30-Sep-2025

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
Aroclor 1248	100.3	± 0.5 µg/mL		012672-29-6	NT01582

Matrix: isooctane (2,2,4-trimethylpentane)

K1257

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.



Certificate of Analysis

Aroclor 1254 Solution

Product Number: PP-352

Page: 1 of 1

Lot Number: CS-2321

Lot Issue Date: 04-May-2018

Expiration Date: 31-May-2026

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

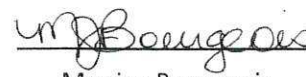
K-1250

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA



Certificate of Analysis

Product Name: Aroclor 1221 Standard
Product Number: PP-292-1
Lot Issue Date: 28-Apr-2020
Lot Number: 0006535333
Expiration Date: 31-May-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1221	011104-28-2	RM04278	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1259

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:


Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



Certificate of Analysis ISO 17034

Aroclor 1262 Standard

Product Number: PP-372-1

Page: 1 of 1

Lot Number: 0006499800

Lot Issue Date: 04-Nov-2019

Expiration Date: 30-Nov-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1262	037324-23-5	RM14263	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1260

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO 17025 Cert No.
AT-1937



Certificate of Analysis ISO 17034

Aroclor 1232 Standard

Product Number: PP-302-1

Page: 1 of 1

Lot Number: CF-2197A

Lot Issue Date: 05-Jul-2016

Expiration Date: 31-Aug-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01717	100.4 ± 0.5 µg/mL

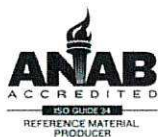
Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1261

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.


Monica Bourgeois
QMS Representative



ISO 17034 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System



ISO17025 Cert No.
AT-1937



Certificate of Analysis

Product Name: Aroclor 1268 Standard

Product Number: PP-382-1

Lot Issue Date: 09-Feb-2021

Lot Number: 0006587800

Expiration Date: 31-Mar-2029

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1268	011100-14-4	RM00937	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1262

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:


Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 1

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101467

Lot Number: CL12975

Description: Aroclor 1016

Certification Date: November 19, 2018

Storage: 4 °C

Expiration Date: October 31, 2026

Provided As: 1 mL in 2 mL Ampoule in Isooctane

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.553%

125829



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC-MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03



Certificate of Analysis



Phenova Certified Reference Materials are sold by Phenomenex.

411 Madrid Ave., Torrance, CA 90501 USA ■ Tel: 310-212-0555 ■ Fax: 310-328-7768 ■ info@phenomenex.com

Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO Guide 34³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.
4. **Instruction:** Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k \sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.
12. **Period of Validity:** The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

¹ ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.

² ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.

³ ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.

⁴ ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.

⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

IL111063_US

Certificate of Analysis

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462

Lot Number: CL18021

Description: Aroclor 1260

Certification Date: February 14, 2022

Storage: 4 °C

Expiration Date: February 28, 2030

Provided As: 1 mL in 2 mL Ampoule in Hexane

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

K005830



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis



Page 2 of 2

Produced by Phenova

6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. **Quality Document:** This Certificate of Analysis has been created in accordance with ISO Guide 31¹ and ISO Guide 35.²
2. **Quality Standards:** Phenova is accredited by A2LA to ISO 17034³ and ISO/IEC 17025⁴ as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.
3. **Intended Use:** The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.
4. **Handling and Usage Notes:** Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.
5. **Hazardous Situation:** The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.
6. **Level of Homogeneity:** The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.
7. **Certified Value:** Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.
8. **Raw Materials and Purity:** Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.
9. **Expanded Uncertainty:** The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98⁵ and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$u_{CRM} = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. **Metrological Traceability:** The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.
11. **Values Obtained During Product Testing:** This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.
12. **Period of Validity:** The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

- ¹ ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
- ² ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
- ³ ISO 17034 – General Requirements for the Competence of Reference Material Producers.
- ⁴ ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ⁵ ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)



Reference Material Producer
Certificate No. 2427.02



Phenova is an accredited ISO/IEC 17034 Reference Material
Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.



Chemical Testing Laboratory
Certificate No. 2427.03

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15570

Order Number: CB014985

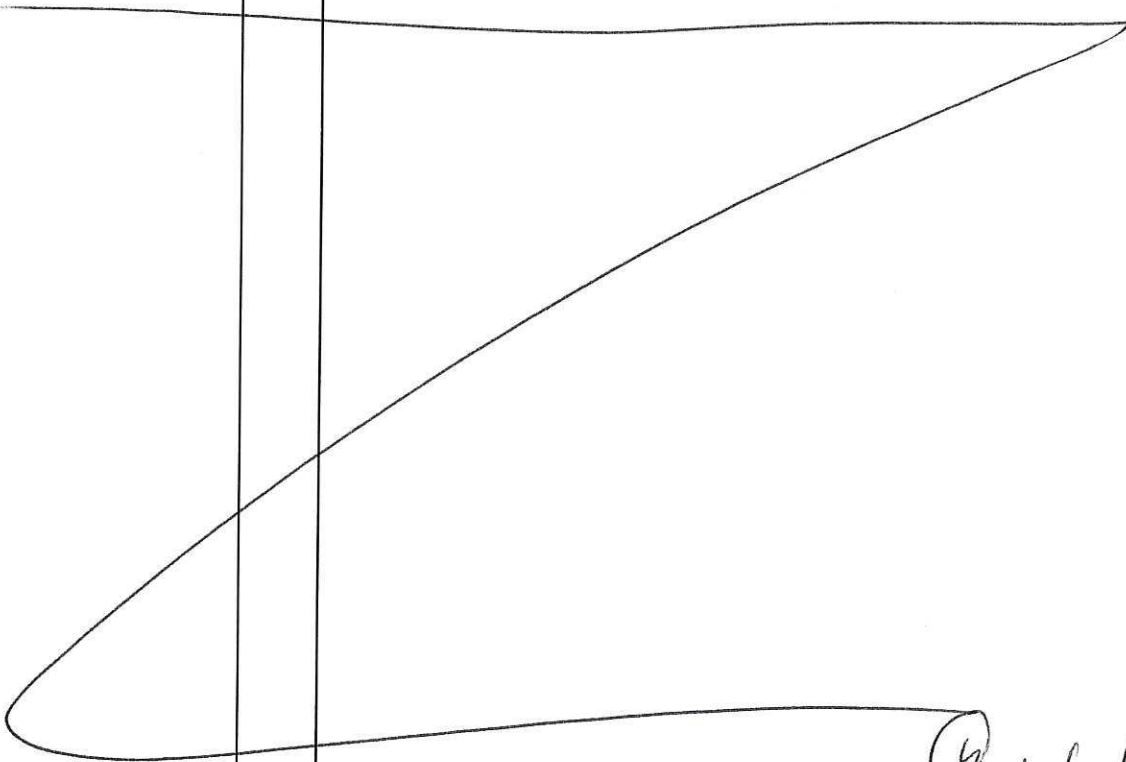
Date Shipped: 12/12/2022

AirBill No(s):

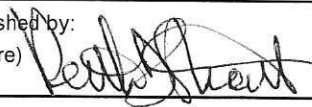

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

519204142631

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
K011477 PSRM0168	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
K011478 PSRM0169	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
K011479 PSRM0171	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
				
@ 12/12/2022 PUGET SOUND SRM FOR DUWAMISH AOC4 PROJECT.				

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature) 	Date/Time (1400) 12/12/2022	Received by: (Signature) 	Date/Time 12/12/2022 11:15
Custody Seal(s): <u>Present</u> /Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time



Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-01 C File ID: 23030627
 Sampled: 01/16/23 15:17 Prepared: 01/24/23 07:31 Analyzed: 03/07/23 07:39
 % Solids: 59.94 Preparation: EPA 1613 Initial/Final: 16.74 g Wet / 20 uL
 Result Basis: Dry Sequence: SLC0081 Calibration: GC00015
 Batch: BLA0398 Instrument: AUTOSPEC01 Column: RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.727	0.655-0.886	0.112	0.997	0.791	ng/kg	X, J
1746-01-6	2,3,7,8-TCDD	1	0.415	0.655-0.886	0.080	0.997	0.250	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.614	1.318-1.783	0.152	0.997	0.761	ng/kg	J
57117-31-4	2,3,4,7,8-PeCDF	1	1.508	1.318-1.783	0.135	0.997	1.28	ng/kg	
40321-76-4	1,2,3,7,8-PeCDD	1	1.542	1.318-1.783	0.214	0.997	1.15	ng/kg	B
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.225	1.054-1.426	0.084	0.997	4.33	ng/kg	B
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.292	1.054-1.426	0.085	0.997	1.58	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.712	1.054-1.426	0.087	0.997	1.17	ng/kg	EMPC
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.007	1.054-1.426	0.086	0.997	0.978	ng/kg	EMPC, J
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.185	1.054-1.426	0.195	0.997	1.42	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.201	1.054-1.426	0.186	0.997	6.15	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.128	1.054-1.426	0.210	0.997	3.77	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.978	0.893-1.208	0.186	0.997	34.9	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.992	0.893-1.208	0.251	0.997	3.34	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.027	0.893-1.208	0.403	2.49	165	ng/kg	B
39001-02-0	OCDF	1	0.864	0.757-1.024	0.251	2.49	94.8	ng/kg	B
3268-87-9	OCDD	1	0.858	0.757-1.024	0.418	9.97	1820	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.997	6.52	ng/kg
41903-57-5	Total TCDD	1	0.000			0.997	2.64	ng/kg
30402-15-4	Total PeCDF	1	0.000			0.997	19.1	ng/kg
36088-22-9	Total PeCDD	1	0.000			0.997	2.20	ng/kg
55684-94-1	Total HxCDF	1	0.000			0.997	48.1	ng/kg
34465-46-8	Total HxCDD	1	0.000			0.997	50.1	ng/kg
38998-75-3	Total HpCDF	1	0.000			0.997	124	ng/kg
37871-00-4	Total HpCDD	1	0.000			0.997	403	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 6.43
 Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 6.43



Form 2
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Sediment</u>	Laboratory ID:	<u>23A0326-01</u>
Sampled:	<u>01/16/23 15:17</u>	Prepared:	<u>01/24/23 07:31</u>
Solids Wt%:	<u>59.94</u>	Preparation:	<u>EPA 1613</u>
Result Basis:	<u>Dry</u>	Sequence:	<u>SLC0081</u>
Batch:	<u>BLA0398</u>	Instrument:	<u>AUTOSPEC01</u>
		File ID:	<u>23030627</u>
		Analyzed:	<u>03/07/23 07:39</u>
		Initial/Final:	<u>16.74 g / 20 uL</u>
		Calibration:	<u>GC00015</u>
		Column:	<u>RTX-Dioxin2</u>

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.757	0.655-0.886	0.089	92.9	24 - 169 %	
13C12-2,3,7,8-TCDD		0.793	0.655-0.886	0.111	103	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.481	1.318-1.783	0.153	98.0	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.472	1.318-1.783	0.170	104	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.604	1.318-1.783	0.108	104	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.508	0.434-0.587	0.153	88.9	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.513	0.434-0.587	0.129	77.8	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.515	0.434-0.587	0.159	90.3	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.511	0.434-0.587	0.192	103	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.291	1.054-1.426	0.115	95.4	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.263	1.054-1.426	0.099	81.7	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.439	0.374-0.506	0.205	103	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.441	0.374-0.506	0.238	105	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.085	0.893-1.208	0.203	108	23 - 140 %	
13C12-OCDD		0.907	0.757-1.024	0.185	108	17 - 157 %	
37C14-2,3,7,8-TCDD		328.000		0.038	86.2	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.001	1.264e3	1.738e3	0.702	0.727	0.770	1312	873	1.99e4	2.53e4	15.2	29.0	NO	bd	bd	0.397
12378-PeCDF	29.934	1.001	1.393e3	8.632e2	0.679	1.614	1.550	1113	1173	2.08e4	1.19e4	18.7	10.2	NO	bd	bb	0.382
23478-PeCDF	31.260	1.000	2.524e3	1.674e3	0.786	1.508	1.550	1113	1173	4.06e4	2.27e4	36.5	19.4	NO	db	db	0.643
123478-HxCDF	34.891	1.001	8.342e3	6.807e3	1.166	1.225	1.240	780	746	1.32e5	1.11e5	169.6	148.4	NO	dd	bd	2.170
234678-HxCDF	35.894	1.000	2.478e3	1.448e3	1.140	1.712	1.240	780	746	4.23e4	2.82e4	54.1	37.8	YES	MM	MM	0.586
123678-HxCDF	35.025	1.000	3.026e3	2.343e3	1.091	1.292	1.240	780	746	4.65e4	3.47e4	59.5	46.5	NO	db	db	0.792
123789-HxCDF	36.897	1.000	1.554e3	1.543e3	1.137	1.007	1.240	780	746	2.70e4	2.41e4	34.5	32.3	YES	bb	bb	0.490
1234678-HpCDF	38.769	1.000	4.615e4	4.719e4	1.003	0.978	1.050	1218	1551	7.68e5	7.84e5	631.0	505.1	NO	bd	bb	17.531
1234789-HpCDF	40.997	1.000	3.688e3	3.718e3	0.953	0.992	1.050	1218	1551	5.14e4	4.97e4	42.2	32.1	NO	bb	bb	1.676
OCDF	45.246	1.006	8.195e4	9.485e4	0.778	0.864	0.890	1058	844	9.79e5	1.14e6	924.8	1346.9	NO	bb	bb	47.550
2378-TCDD	26.410	1.001	3.580e2	8.620e2	1.149	0.415	0.770	877	1130	6.92e3	1.72e4	7.9	15.2	YES	bb	bb	0.125
12378-PeCDD	31.504	1.000	2.202e3	1.428e3	1.022	1.542	1.550	1910	1583	2.87e4	2.09e4	15.0	13.2	NO	bb	bb	0.576
123478-HxCDD	36.028	1.001	2.100e3	1.772e3	0.996	1.185	1.240	1200	1654	3.67e4	2.69e4	30.6	16.3	NO	bd	bd	0.711
123678-HxCDD	36.139	1.000	9.171e3	7.637e3	1.001	1.201	1.240	1200	1654	1.51e5	1.27e5	125.8	77.1	NO	dd	dd	3.085
123789-HxCDD	36.518	1.011	4.960e3	4.398e3	0.907	1.128	1.240	1200	1654	8.24e4	6.75e4	68.7	40.8	NO	bb	bb	1.891
1234678-HpCDD	40.262	1.000	2.293e5	2.232e5	1.039	1.027	1.050	2910	2729	3.58e6	3.46e6	1231.0	1266.6	NO	bb	bb	82.982
OCDD	45.008	1.000	1.859e6	2.166e6	0.920	0.858	0.890	1780	1977	2.32e7	2.73e7	13029.0	13801.9	NO	bb	bb	915.345
13C-2378-TCDF	25.746	1.007	4.645e5	6.132e5	1.620	0.757	0.770	1693	1109	7.15e6	9.48e6	4221.7	8548.1	NO	bb	bb	92.934
13C-12378-PeCDF	29.912	1.169	5.196e5	3.508e5	1.240	1.481	1.550	1742	1926	7.90e6	5.29e6	4535.9	2746.7	NO	bb	bb	98.045
13C-23478-PeCDF	31.248	1.222	4.948e5	3.360e5	1.118	1.472	1.550	1742	1926	7.69e6	5.19e6	4415.0	2697.3	NO	bb	bb	103.854
13C-123478-HxCDF	34.869	0.955	2.017e5	3.969e5	1.168	0.508	0.510	1523	1388	3.16e6	6.15e6	2072.2	4429.5	NO	bd	bd	88.950
13C-123678-HxCDF	35.014	0.959	2.105e5	4.107e5	1.386	0.513	0.510	1523	1388	3.33e6	6.43e6	2186.2	4633.8	NO	db	db	77.781
13C-234678-HxCDF	35.894	0.983	1.997e5	3.878e5	1.129	0.515	0.510	1523	1388	3.14e6	6.06e6	2063.0	4362.4	NO	bb	bb	90.307
13C-123789-HxCDF	36.908	1.011	1.878e5	3.676e5	0.932	0.511	0.510	1523	1388	3.14e6	6.08e6	2063.6	4382.7	NO	bb	bb	103.483
13C-1234678-HpCDF	38.757	1.062	1.619e5	3.689e5	0.895	0.439	0.440	1291	1689	2.71e6	6.11e6	2096.5	3617.1	NO	bb	bb	102.945
13C-1234789-HpCDF	40.986	1.123	1.420e5	3.217e5	0.770	0.441	0.440	1291	1689	2.12e6	4.84e6	1638.9	2865.5	NO	bb	bb	104.572
13C-1234-TCDD	25.577	0.000	3.173e5	3.984e5	1.000	0.796	0.770	1564	922	5.13e6	6.43e6	3280.6	6973.6	NO	bb	bb	100.000
13C-2378-TCDD	26.382	1.031	3.752e5	4.733e5	1.152	0.793	0.770	1564	922	5.76e6	7.34e6	3683.7	7963.1	NO	bb	bb	102.871
13C-12378-PeCDD	31.504	1.232	3.800e5	2.369e5	0.829	1.604	1.550	709	1021	5.88e6	3.67e6	8290.6	3591.7	NO	bb	bb	104.004
13C-123478-HxCDD	36.006	0.986	3.081e5	2.386e5	0.995	1.291	1.240	999	868	4.95e6	3.86e6	4953.6	4450.2	NO	bd	bd	95.378
13C-123678-HxCDD	36.128	0.990	3.037e5	2.405e5	1.157	1.263	1.240	999	868	5.11e6	4.01e6	5109.2	4616.6	NO	db	db	81.679
13C-1234678-HpCDD	40.250	1.103	2.730e5	2.517e5	0.840	1.085	1.050	1311	1456	4.19e6	3.93e6	3199.4	2697.2	NO	bb	bb	108.429
13C-OCDD	44.990	1.232	4.547e5	5.014e5	0.767	0.907	0.890	1021	1282	5.55e6	6.20e6	5437.8	4832.8	NO	bb	bb	216.260
13C-123789-HxCDD	36.507	0.000	3.238e5	2.523e5	1.000	1.284	1.240	999	868	5.46e6	4.21e6	5468.5	4854.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.410	1.033	3.177e5		1.288			936		4.96e6		5299.2			bb		34.472

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.243	0.864	3.882e2	5.513e2	0.802	0.704	0.770	1312	873	5.53e3	8.51e3	4.2	9.8	NO	bb	bb	0.109
1289-TCDF					0.678		0.770	1312	873								
13468-PECDF					1.246		1.550	570	617								
12389-PECDF					0.496		1.550	1113	1173								
123468-HXCDF	33.220	0.953	8.358e3	6.559e3	1.169	1.274	1.240	780	746	1.31e5	9.77e4	168.1	131.0	NO	db	bb	2.131
1368-TCDD	23.528	0.892	1.682e3	2.119e3	1.015	0.794	0.770	877	1130	2.54e4	3.32e4	29.0	29.4	NO	bb	bb	0.441
1289-TCDD					0.909		0.770	877	1130								
12479-PECDD	28.820	0.915	4.583e3	3.850e3	2.301	1.191	1.550	1910	1583	4.87e4	3.53e4	25.5	22.3	YES	MM	MM	0.594
12389-PECDD					1.184		1.550	1910	1583								
124679-HXCDD	34.000	0.944	2.482e4	1.984e4	1.115	1.251	1.240	1200	1654	3.91e5	3.11e5	325.9	188.1	NO	bb	bb	7.324
1234679-HPCDD	39.214	0.974	3.590e5	3.533e5	1.137	1.016	1.050	2910	2729	5.94e6	5.89e6	2041.6	2158.0	NO	bb	bb	119.401
Total-tetrafurans			1.067e4		0.727			1312		1.52e5							3.272
Total-penta1			2.146e4					570		3.23e5							4.523
Total-pentafurans			1.716e4		0.654			1113		2.54e5							5.056
Total-hexafurans			9.092e4		1.141			780		1.41e6							24.132
Total-heptafurans			1.548e5		0.978			1218		2.55e6							62.437
Total-Furans			3.770e5		0.922			1312		5.67e6							146.970
Total-tetradoxins			4.909e3		1.024			877		7.15e4							1.327
Total-pentadoxins			5.086e3		1.502			1910		7.69e4							1.105
Total-hexadoxins			7.744e4		1.005			1200		1.09e6							25.133
Total-heptadoxins			5.883e5		1.088			2910		9.52e6							202.383
Total-Dioxins			2.535e6		1.130			877		3.39e7							1145.292
Total-TEQ			2.912e6					877		3.96e7							1292.262
FUNCTION1 PFK			3.582e6					287185		1.12e7							
FUNCTION2 PFK			1.554e5					118730		7.69e5							0.000
FUNCTION3 PFK			1.228e6					176815		4.05e6							0.000
FUNCTION4 PFK			2.676e5					166528		6.76e6							
FUNCTION5 PFK			5.666e4					118665		2.34e6							
FUNCTION1 HXCD...			2.421e3					615		3.49e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.021e2					986		1.28e4							0.000
FUNCTION3 OCDPE			1.531e2					500		2.87e3							0.000
FUNCTION4 NCDPE			8.325e3					496		1.42e5							0.000
FUNCTION5 DCDPE			0.000e0					523		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.86	8.588e2	1.238e3	0.727	0.69	0.77	12.2	YES	NO	bb	bb	0.268
2	Total-tetrafurans	24.50	7.756e2	1.184e3	0.727	0.65	0.77	8.5	YES	NO	dd	dd	0.250
3	Total-tetrafurans	24.43	1.499e3	1.962e3	0.727	0.76	0.77	15.4	YES	NO	bd	dd	0.442
4	Total-tetrafurans	23.75	1.431e3	2.003e3	0.727	0.71	0.77	16.8	YES	NO	bd	dd	0.438
5	1368-TCDF	22.24	3.882e2	5.513e2	0.802	0.70	0.77	4.2	YES	NO	bb	bb	0.109
6	Total-tetrafurans	27.38	6.055e2	8.957e2	0.727	0.68	0.77	7.1	YES	NO	bb	db	0.192
7	2378-TCDF	25.77	1.264e3	1.738e3	0.702	0.73	0.77	15.2	YES	NO	bd	bd	0.397
8	Total-tetrafurans	25.53	2.949e3	4.320e3	0.727	0.68	0.77	28.4	YES	NO	bb	bb	0.928
9	Total-tetrafurans	25.07	8.993e2	1.050e3	0.727	0.86	0.77	8.3	YES	NO	bd	bd	0.249

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.20	2.146e4	1.465e4		1.46	1.55	566.6	YES	NO	bb	bb	4.523

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.26	2.524e3	1.674e3	0.786	1.51	1.55	36.5	YES	NO	db	db	0.643
2	Total-pentafurans	31.11	1.969e3	1.248e3	0.654	1.58	1.55	28.0	YES	NO	dd	dd	0.578
3	Total-pentafurans	30.13	1.631e3	9.932e2	0.654	1.64	1.55	23.1	YES	NO	dd	bd	0.472
4	12378-PeCDF	29.93	1.393e3	8.632e2	0.679	1.61	1.55	18.7	YES	NO	bd	bb	0.382
5	Total-pentafurans	28.98	6.058e2	4.388e2	0.654	1.38	1.55	10.3	YES	NO	dd	db	0.188
6	Total-pentafurans	28.85	9.038e3	6.501e3	0.654	1.39	1.55	111.2	YES	NO	dd	MM	2.793

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk**HF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	35.37	3.172e2	2.667e2	1.141	1.19	1.24	6.7	YES	NO	bb	bb	0.087
2	123678-HxCDF	35.03	3.026e3	2.343e3	1.091	1.29	1.24	59.5	YES	NO	db	db	0.792
3	123478-HxCDF	34.89	8.342e3	6.807e3	1.166	1.23	1.24	169.6	YES	NO	dd	bd	2.170
4	Total-hexafurans	34.72	1.265e3	1.040e3	1.141	1.22	1.24	29.4	YES	NO	bd	bb	0.342
5	Total-hexafurans	34.27	4.177e4	3.359e4	1.141	1.24	1.24	851.7	YES	NO	bb	bb	11.186
6	Total-hexafurans	33.97	9.958e2	7.961e2	1.141	1.25	1.24	19.9	YES	NO	bb	bb	0.266
7	Total-hexafurans	33.44	2.685e4	2.137e4	1.141	1.26	1.24	506.9	YES	NO	bb	bb	7.157
8	123468-HXCDF	33.22	8.358e3	6.559e3	1.169	1.27	1.24	168.1	YES	NO	db	bb	2.131

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.00	3.688e3	3.718e3	0.953	0.99	1.05	42.2	YES	NO	bb	bb	1.676
2	Total-heptafurans	39.43	1.050e5	1.053e5	0.978	1.00	1.05	1419.4	YES	NO	bb	bb	43.231
3	1234678-HpCDF	38.77	4.615e4	4.719e4	1.003	0.98	1.05	631.0	YES	NO	bd	bb	17.531

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.86	8.588e2	1.238e3	0.727	0.69	0.77	12.2	YES	NO	bb	bb	0.268
2	Total-tetrafurans	24.50	7.756e2	1.184e3	0.727	0.65	0.77	8.5	YES	NO	dd	dd	0.250
3	Total-tetrafurans	24.43	1.499e3	1.962e3	0.727	0.76	0.77	15.4	YES	NO	bd	dd	0.442
4	Total-tetrafurans	23.75	1.431e3	2.003e3	0.727	0.71	0.77	16.8	YES	NO	bd	dd	0.438
5	1368-TCDF	22.24	3.882e2	5.513e2	0.802	0.70	0.77	4.2	YES	NO	bb	bb	0.109
6	Total-tetrafurans	27.38	6.055e2	8.957e2	0.727	0.68	0.77	7.1	YES	NO	bb	db	0.192
7	2378-TCDF	25.77	1.264e3	1.738e3	0.702	0.73	0.77	15.2	YES	NO	bd	bd	0.397
8	Total-tetrafurans	25.53	2.949e3	4.320e3	0.727	0.68	0.77	28.4	YES	NO	bb	bb	0.928
9	Total-tetrafurans	25.07	8.993e2	1.050e3	0.727	0.86	0.77	8.3	YES	NO	bd	bd	0.249
10	23478-PeCDF	31.26	2.524e3	1.674e3	0.786	1.51	1.55	36.5	YES	NO	db	db	0.643
11	Total-pentafurans	31.11	1.969e3	1.248e3	0.654	1.58	1.55	28.0	YES	NO	dd	dd	0.578
12	Total-pentafurans	30.13	1.631e3	9.932e2	0.654	1.64	1.55	23.1	YES	NO	dd	bd	0.472
13	12378-PeCDF	29.93	1.393e3	8.632e2	0.679	1.61	1.55	18.7	YES	NO	bd	bb	0.382
14	Total-pentafurans	28.98	6.058e2	4.388e2	0.654	1.38	1.55	10.3	YES	NO	dd	db	0.188
15	Total-pentafurans	28.85	9.038e3	6.501e3	0.654	1.39	1.55	111.2	YES	NO	dd	MM	2.793
16	Total-hexafurans	35.37	3.172e2	2.667e2	1.141	1.19	1.24	6.7	YES	NO	bb	bb	0.087
17	123678-HxCDF	35.03	3.026e3	2.343e3	1.091	1.29	1.24	59.5	YES	NO	db	db	0.792
18	123478-HxCDF	34.89	8.342e3	6.807e3	1.166	1.23	1.24	169.6	YES	NO	dd	bd	2.170
19	Total-hexafurans	34.72	1.265e3	1.040e3	1.141	1.22	1.24	29.4	YES	NO	bd	bb	0.342
20	Total-hexafurans	34.27	4.177e4	3.359e4	1.141	1.24	1.24	851.7	YES	NO	bb	bb	11.186
21	Total-hexafurans	33.97	9.958e2	7.961e2	1.141	1.25	1.24	19.9	YES	NO	bb	bb	0.266
22	Total-hexafurans	33.44	2.685e4	2.137e4	1.141	1.26	1.24	506.9	YES	NO	bb	bb	7.157
23	123468-HXCDF	33.22	8.358e3	6.559e3	1.169	1.27	1.24	168.1	YES	NO	db	bb	2.131
24	1234789-HpCDF	41.00	3.688e3	3.718e3	0.953	0.99	1.05	42.2	YES	NO	bb	bb	1.676
25	Total-heptafurans	39.43	1.050e5	1.053e5	0.978	1.00	1.05	1419.4	YES	NO	bb	bb	43.231
26	1234678-HpCDF	38.77	4.615e4	4.719e4	1.003	0.98	1.05	631.0	YES	NO	bd	bb	17.531
27	OCDF	45.25	8.195e4	9.485e4	0.778	0.86	0.89	924.8	YES	NO	bb	bb	47.550
28	Total-penta1	27.20	2.146e4	1.465e4		1.46	1.55	566.6	YES	NO	bb	bb	4.523

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	23.81	1.035e3	1.413e3	1.024	0.73	0.77	18.0	YES	NO	bb	bb	0.282
2	1368-TCDD	23.53	1.682e3	2.119e3	1.015	0.79	0.77	29.0	YES	NO	bb	bb	0.441
3	Total-tetradioxins	26.03	7.927e2	1.190e3	1.024	0.67	0.77	10.7	YES	NO	bb	bb	0.228
4	Total-tetradioxins	25.03	7.381e2	1.093e3	1.024	0.68	0.77	14.9	YES	NO	bb	bb	0.211
5	Total-tetradioxins	24.73	6.612e2	7.727e2	1.024	0.86	0.77	9.0	YES	NO	db	db	0.165

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk**PD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.50	2.202e3	1.428e3	1.022	1.54	1.55	15.0	YES	NO	bb	bb	0.576
2	Total-pentadioxins	30.27	1.555e3	1.162e3	1.502	1.34	1.55	14.4	YES	NO	db	bd	0.293
3	Total-pentadioxins	29.30	1.329e3	8.567e2	1.502	1.55	1.55	10.8	YES	NO	bb	bb	0.236

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.52	4.960e3	4.398e3	0.907	1.13	1.24	68.7	YES	NO	bb	bb	1.891
2	Total-hexadioxins	36.30	1.400e3	1.313e3	1.005	1.07	1.24	19.4	YES	NO	db	db	0.495
3	123678-HxCDD	36.14	9.171e3	7.637e3	1.001	1.20	1.24	125.8	YES	NO	dd	dd	3.085
4	123478-HxCDD	36.03	2.100e3	1.772e3	0.996	1.19	1.24	30.6	YES	NO	bd	bd	0.711
5	Total-hexadioxins	35.24	2.650e3	2.199e3	1.005	1.20	1.24	38.1	YES	NO	db	db	0.885
6	Total-hexadioxins	35.14	2.738e4	2.236e4	1.005	1.22	1.24	232.5	YES	NO	bd	bd	9.076
7	Total-hexadioxins	34.77	4.954e3	4.178e3	1.005	1.19	1.24	66.4	YES	NO	bb	bb	1.666
8	124679-HXCDD	34.00	2.482e4	1.984e4	1.115	1.25	1.24	325.9	YES	NO	bb	bb	7.324

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.26	2.293e5	2.232e5	1.039	1.03	1.05	1231.0	YES	NO	bb	bb	82.982
2	1234679-HPCDD	39.21	3.590e5	3.533e5	1.137	1.02	1.05	2041.6	YES	NO	bb	bb	119.401

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	23.81	1.035e3	1.413e3	1.024	0.73	0.77	18.0	YES	NO	bb	bb	0.282
2	1368-TCDD	23.53	1.682e3	2.119e3	1.015	0.79	0.77	29.0	YES	NO	bb	bb	0.441
3	Total-tetradoxins	26.03	7.927e2	1.190e3	1.024	0.67	0.77	10.7	YES	NO	bb	bb	0.228
4	Total-tetradoxins	25.03	7.381e2	1.093e3	1.024	0.68	0.77	14.9	YES	NO	bb	bb	0.211
5	Total-tetradoxins	24.73	6.612e2	7.727e2	1.024	0.86	0.77	9.0	YES	NO	db	db	0.165
6	12378-PeCDD	31.50	2.202e3	1.428e3	1.022	1.54	1.55	15.0	YES	NO	bb	bb	0.576
7	Total-pentadoxins	30.27	1.555e3	1.162e3	1.502	1.34	1.55	14.4	YES	NO	db	bd	0.293
8	Total-pentadoxins	29.30	1.329e3	8.567e2	1.502	1.55	1.55	10.8	YES	NO	bb	bb	0.236
9	123789-HxCDD	36.52	4.960e3	4.398e3	0.907	1.13	1.24	68.7	YES	NO	bb	bb	1.891
10	Total-hexadoxins	36.30	1.400e3	1.313e3	1.005	1.07	1.24	19.4	YES	NO	db	db	0.495
11	123678-HxCDD	36.14	9.171e3	7.637e3	1.001	1.20	1.24	125.8	YES	NO	dd	dd	3.085
12	123478-HxCDD	36.03	2.100e3	1.772e3	0.996	1.19	1.24	30.6	YES	NO	bd	bd	0.711
13	Total-hexadoxins	35.24	2.650e3	2.199e3	1.005	1.20	1.24	38.1	YES	NO	db	db	0.885
14	Total-hexadoxins	35.14	2.738e4	2.236e4	1.005	1.22	1.24	232.5	YES	NO	bd	bd	9.076
15	Total-hexadoxins	34.77	4.954e3	4.178e3	1.005	1.19	1.24	66.4	YES	NO	bb	bb	1.666
16	124679-HxCDD	34.00	2.482e4	1.984e4	1.115	1.25	1.24	325.9	YES	NO	bb	bb	7.324
17	1234678-HpCDD	40.26	2.293e5	2.232e5	1.039	1.03	1.05	1231.0	YES	NO	bb	bb	82.982
18	1234679-HPCDD	39.21	3.590e5	3.533e5	1.137	1.02	1.05	2041.6	YES	NO	bb	bb	119.401
19	OCDD	45.01	1.859e6	2.166e6	0.920	0.86	0.89	13029.0	YES	NO	bb	bb	915.345

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.86	8.588e2	1.238e3	0.727	0.69	0.77	12.2	YES	NO	bb	bb	0.268
2	Total-tetrafurans	24.50	7.756e2	1.184e3	0.727	0.65	0.77	8.5	YES	NO	dd	dd	0.250
3	Total-tetrafurans	24.43	1.499e3	1.962e3	0.727	0.76	0.77	15.4	YES	NO	bd	dd	0.442
4	Total-tetrafurans	23.75	1.431e3	2.003e3	0.727	0.71	0.77	16.8	YES	NO	bd	dd	0.438
5	1368-TCDF	22.24	3.882e2	5.513e2	0.802	0.70	0.77	4.2	YES	NO	bb	bb	0.109
6	Total-tetrafurans	27.38	6.055e2	8.957e2	0.727	0.68	0.77	7.1	YES	NO	bb	db	0.192
7	2378-TCDF	25.77	1.264e3	1.738e3	0.702	0.73	0.77	15.2	YES	NO	bd	bd	0.397
8	Total-tetrafurans	25.53	2.949e3	4.320e3	0.727	0.68	0.77	28.4	YES	NO	bb	bb	0.928
9	Total-tetrafurans	25.07	8.993e2	1.050e3	0.727	0.86	0.77	8.3	YES	NO	bd	bd	0.249
10	23478-PeCDF	31.26	2.524e3	1.674e3	0.786	1.51	1.55	36.5	YES	NO	db	db	0.643
11	Total-pentafurans	31.11	1.969e3	1.248e3	0.654	1.58	1.55	28.0	YES	NO	dd	dd	0.578
12	Total-pentafurans	30.13	1.631e3	9.932e2	0.654	1.64	1.55	23.1	YES	NO	dd	bd	0.472
13	12378-PeCDF	29.93	1.393e3	8.632e2	0.679	1.61	1.55	18.7	YES	NO	bd	bb	0.382
14	Total-pentafurans	28.98	6.058e2	4.388e2	0.654	1.38	1.55	10.3	YES	NO	dd	db	0.188
15	Total-pentafurans	28.85	9.038e3	6.501e3	0.654	1.39	1.55	111.2	YES	NO	dd	MM	2.793
16	Total-hexafurans	35.37	3.172e2	2.667e2	1.141	1.19	1.24	6.7	YES	NO	bb	bb	0.087
17	123678-HxCDF	35.03	3.026e3	2.343e3	1.091	1.29	1.24	59.5	YES	NO	db	db	0.792
18	123478-HxCDF	34.89	8.342e3	6.807e3	1.166	1.23	1.24	169.6	YES	NO	dd	bd	2.170
19	Total-hexafurans	34.72	1.265e3	1.040e3	1.141	1.22	1.24	29.4	YES	NO	bd	bb	0.342
20	Total-hexafurans	34.27	4.177e4	3.359e4	1.141	1.24	1.24	851.7	YES	NO	bb	bb	11.186
21	Total-hexafurans	33.97	9.958e2	7.961e2	1.141	1.25	1.24	19.9	YES	NO	bb	bb	0.266
22	Total-hexafurans	33.44	2.685e4	2.137e4	1.141	1.26	1.24	506.9	YES	NO	bb	bb	7.157
23	123468-HXCDF	33.22	8.358e3	6.559e3	1.169	1.27	1.24	168.1	YES	NO	db	bb	2.131
24	1234789-HpCDF	41.00	3.688e3	3.718e3	0.953	0.99	1.05	42.2	YES	NO	bb	bb	1.676
25	Total-heptafurans	39.43	1.050e5	1.053e5	0.978	1.00	1.05	1419.4	YES	NO	bb	bb	43.231
26	1234678-HpCDF	38.77	4.615e4	4.719e4	1.003	0.98	1.05	631.0	YES	NO	bd	bb	17.531
27	OCDF	45.25	8.195e4	9.485e4	0.778	0.86	0.89	924.8	YES	NO	bb	bb	47.550
28	Total-penta1	27.20	2.146e4	1.465e4		1.46	1.55	566.6	YES	NO	bb	bb	4.523
29	Total-tetradioxins	23.81	1.035e3	1.413e3	1.024	0.73	0.77	18.0	YES	NO	bb	bb	0.282
30	1368-TCDD	23.53	1.682e3	2.119e3	1.015	0.79	0.77	29.0	YES	NO	bb	bb	0.441
31	Total-tetradioxins	26.03	7.927e2	1.190e3	1.024	0.67	0.77	10.7	YES	NO	bb	bb	0.228
32	Total-tetradioxins	25.03	7.381e2	1.093e3	1.024	0.68	0.77	14.9	YES	NO	bb	bb	0.211
33	Total-tetradioxins	24.73	6.612e2	7.727e2	1.024	0.86	0.77	9.0	YES	NO	db	db	0.165
34	12378-PeCDD	31.50	2.202e3	1.428e3	1.022	1.54	1.55	15.0	YES	NO	bb	bb	0.576
35	Total-pentadioxins	30.27	1.555e3	1.162e3	1.502	1.34	1.55	14.4	YES	NO	db	bd	0.293
36	Total-pentadioxins	29.30	1.329e3	8.567e2	1.502	1.55	1.55	10.8	YES	NO	bb	bb	0.236
37	123789-HxCDD	36.52	4.960e3	4.398e3	0.907	1.13	1.24	68.7	YES	NO	bb	bb	1.891

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk**TotalTEQ,Furans,Dioxins**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-hexadioxins	36.30	1.400e3	1.313e3	1.005	1.07	1.24	19.4	YES	NO	db	db	0.495
39	123678-HxCDD	36.14	9.171e3	7.637e3	1.001	1.20	1.24	125.8	YES	NO	dd	dd	3.085
40	123478-HxCDD	36.03	2.100e3	1.772e3	0.996	1.19	1.24	30.6	YES	NO	bd	bd	0.711
41	Total-hexadioxins	35.24	2.650e3	2.199e3	1.005	1.20	1.24	38.1	YES	NO	db	db	0.885
42	Total-hexadioxins	35.14	2.738e4	2.236e4	1.005	1.22	1.24	232.5	YES	NO	bd	bd	9.076
43	Total-hexadioxins	34.77	4.954e3	4.178e3	1.005	1.19	1.24	66.4	YES	NO	bb	bb	1.666
44	124679-HXCDD	34.00	2.482e4	1.984e4	1.115	1.25	1.24	325.9	YES	NO	bb	bb	7.324
45	1234678-HpCDD	40.26	2.293e5	2.232e5	1.039	1.03	1.05	1231.0	YES	NO	bb	bb	82.982
46	1234679-HPCDD	39.21	3.590e5	3.533e5	1.137	1.02	1.05	2041.6	YES	NO	bb	bb	119.401
47	OCDD	45.01	1.859e6	2.166e6	0.920	0.86	0.89	13029.0	YES	NO	bb	bb	915.345

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.58	8.044e4					3.1	YES		bb		
2	FUNCTION1 PFK	25.24	4.726e5					5.1	YES		bb		
3	FUNCTION1 PFK	21.95	2.195e5					7.1	YES		db		
4	FUNCTION1 PFK	21.82	1.885e6					9.7	YES		bd		
5	FUNCTION1 PFK	21.17	9.240e5					14.0	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.18	1.554e5					6.5	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.13	4.145e5					5.2	YES		bb		0.000
2	FUNCTION3 PFK	36.77	8.137e5					17.7	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk**PFK4**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	37.90	1.194e4					1.7	NO		bb		
2	FUNCTION4 PFK	39.98	9.396e2					0.5	NO		bb		
3	FUNCTION4 PFK	39.64	2.416e3					0.8	NO		bb		
4	FUNCTION4 PFK	39.59	1.102e4					1.5	NO		bb		
5	FUNCTION4 PFK	39.50	1.001e4					1.8	NO		db		
6	FUNCTION4 PFK	39.44	1.571e4					1.9	NO		bd		
7	FUNCTION4 PFK	39.16	5.506e3					1.3	NO		bb		
8	FUNCTION4 PFK	39.06	1.124e4					2.2	NO		db		
9	FUNCTION4 PFK	39.01	1.708e4					1.7	NO		bd		
10	FUNCTION4 PFK	38.85	2.242e3					0.7	NO		bb		
11	FUNCTION4 PFK	38.71	3.118e3					0.8	NO		bb		
12	FUNCTION4 PFK	38.57	1.524e3					0.7	NO		db		
13	FUNCTION4 PFK	38.53	6.122e3					1.1	NO		bd		
14	FUNCTION4 PFK	38.27	1.079e4					1.8	NO		db		
15	FUNCTION4 PFK	38.24	4.519e4					1.3	NO		dd		
16	FUNCTION4 PFK	38.03	2.430e4					2.7	NO		bd		
17	FUNCTION4 PFK	37.98	4.060e3					1.3	NO		bb		
18	FUNCTION4 PFK	42.37	6.819e3					1.4	NO		bb		
19	FUNCTION4 PFK	42.14	3.847e3					0.9	NO		db		
20	FUNCTION4 PFK	42.10	6.236e3					1.4	NO		bd		
21	FUNCTION4 PFK	41.91	3.642e3					1.1	NO		bb		
22	FUNCTION4 PFK	41.73	2.111e3					0.7	NO		bb		
23	FUNCTION4 PFK	41.64	2.400e3					0.7	NO		bb		
24	FUNCTION4 PFK	41.54	3.638e3					1.1	NO		bb		
25	FUNCTION4 PFK	41.31	6.114e3					1.7	NO		db		
26	FUNCTION4 PFK	41.28	1.591e4					1.8	NO		dd		
27	FUNCTION4 PFK	41.21	9.822e3					1.4	NO		bd		
28	FUNCTION4 PFK	40.75	9.695e2					0.5	NO		bb		
29	FUNCTION4 PFK	40.62	9.529e3					1.3	NO		bb		
30	FUNCTION4 PFK	40.34	7.034e3					1.2	NO		bb		
31	FUNCTION4 PFK	40.11	6.339e3					1.6	NO		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.57	9.354e2					0.9	NO		bb		
2	FUNCTION5 PFK	45.62	3.003e3					1.5	NO		bb		
3	FUNCTION5 PFK	45.38	2.911e3					1.0	NO		bb		
4	FUNCTION5 PFK	45.02	8.002e3					1.3	NO		bb		
5	FUNCTION5 PFK	44.60	6.122e2					0.6	NO		bb		
6	FUNCTION5 PFK	44.57	7.356e2					0.7	NO		bb		
7	FUNCTION5 PFK	44.40	1.664e3					0.8	NO		bb		
8	FUNCTION5 PFK	43.91	3.126e3					1.3	NO		db		
9	FUNCTION5 PFK	43.86	4.328e3					1.3	NO		bd		
10	FUNCTION5 PFK	43.75	2.839e3					1.3	NO		bb		
11	FUNCTION5 PFK	43.57	3.669e3					1.3	NO		bb		
12	FUNCTION5 PFK	43.46	1.551e3					0.9	NO		bb		
13	FUNCTION5 PFK	43.32	6.995e3					1.2	NO		bb		
14	FUNCTION5 PFK	43.18	5.892e2					0.5	NO		bb		
15	FUNCTION5 PFK	42.99	4.929e3					1.7	NO		bb		
16	FUNCTION5 PFK	42.88	1.257e3					0.7	NO		bb		
17	FUNCTION5 PFK	42.66	4.946e2					0.5	NO		bb		
18	FUNCTION5 PFK	45.92	4.826e3					1.3	NO		db		
19	FUNCTION5 PFK	45.86	4.196e3					1.1	NO		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.78	1.570e2					4.0	YES		bb		0.000
2	FUNCTION1 HXCD...	26.14	3.921e2					9.7	YES		db		0.000
3	FUNCTION1 HXCD...	25.93	5.664e2					14.5	YES		dd		0.000
4	FUNCTION1 HXCD...	25.79	3.237e2					7.2	YES		bd		0.000
5	FUNCTION1 HXCD...	25.11	1.506e2					3.3	YES		bb		0.000
6	FUNCTION1 HXCD...	23.78	3.099e2					8.5	YES		bb		0.000
7	FUNCTION1 HXCD...	22.30	2.704e2					5.3	YES		db		0.000
8	FUNCTION1 HXCD...	22.16	2.511e2					4.3	YES		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:18:56 Pacific Standard Time

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk**ETHERS3**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.22	7.088e1					1.8	NO		bb		0.000
2	FUNCTION2 HPCD...	29.91	2.521e2					3.4	YES		bb		0.000
3	FUNCTION2 HPCD...	28.96	3.792e2					7.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	33.12	1.531e2					5.7	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.41	8.325e3					286.9	YES		bb		0.000

ETHERS6

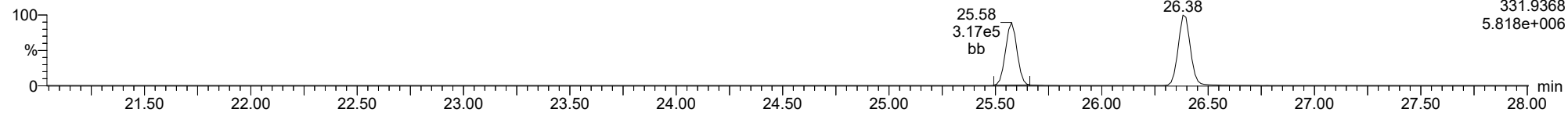
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-01, **Name:** 23030627, **Date:** 07-Mar-2023, **Time:** 07:39:23, **Conditions:** AUTOSPEC01, **User:** pk

13C-1234-TCDD

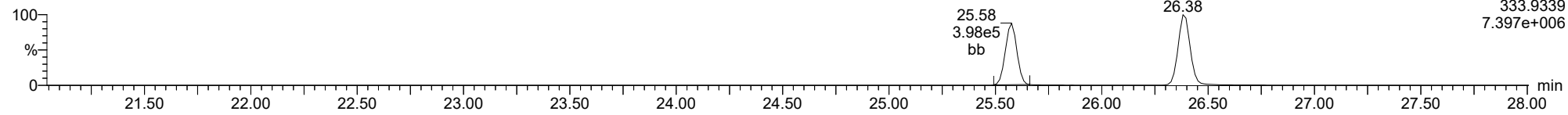
23030627



F1:Voltage SIR,El+
331.9368
5.818e+006

13C-1234-TCDD

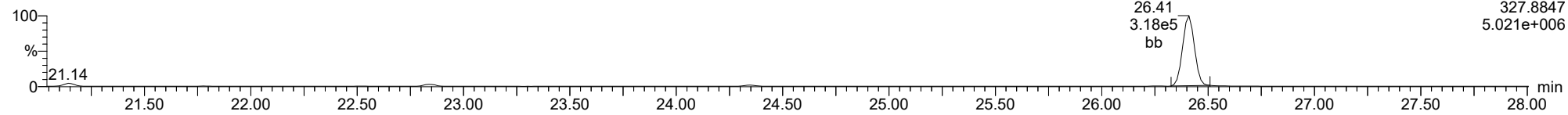
23030627



F1:Voltage SIR,El+
333.9339
7.397e+006

37CL-2378-TCDD

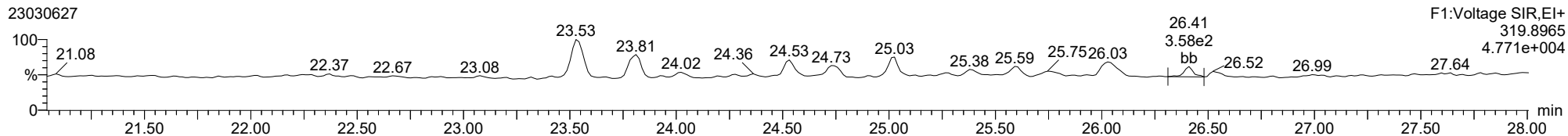
23030627



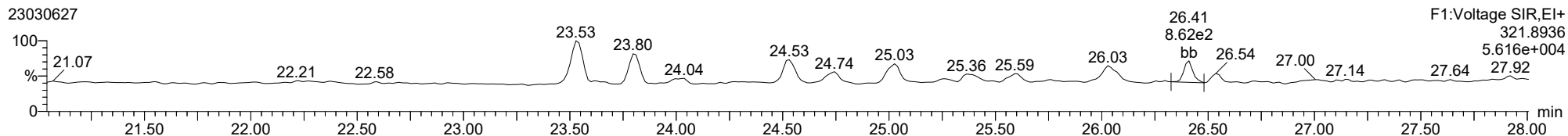
F1:Voltage SIR,El+
327.8847
5.021e+006

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

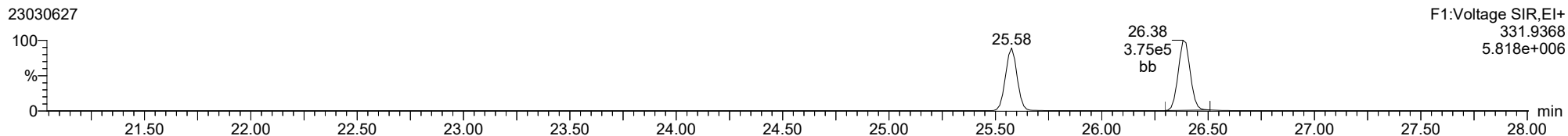
2378-TCDD



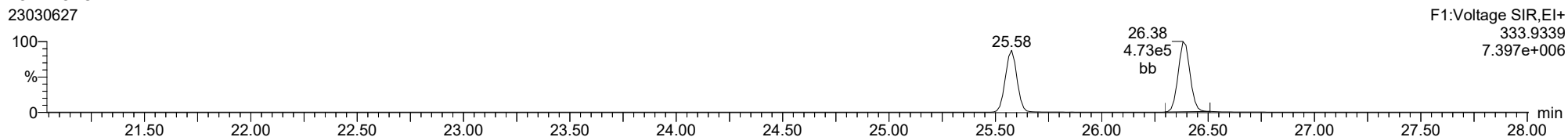
2378-TCDD



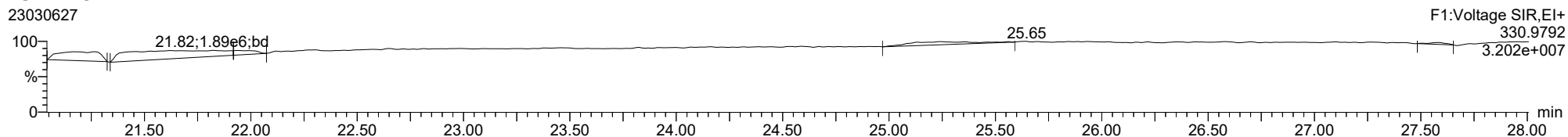
13C-2378-TCDD



13C-2378-TCDD

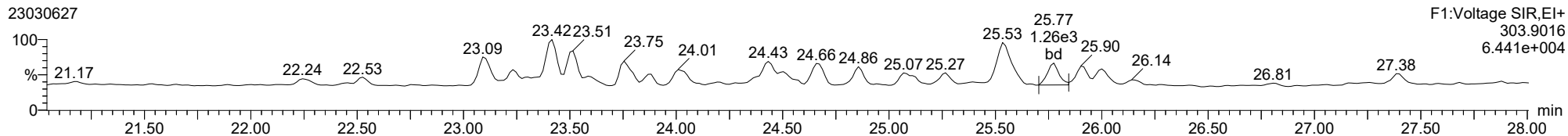


FUNCTION1 PFK

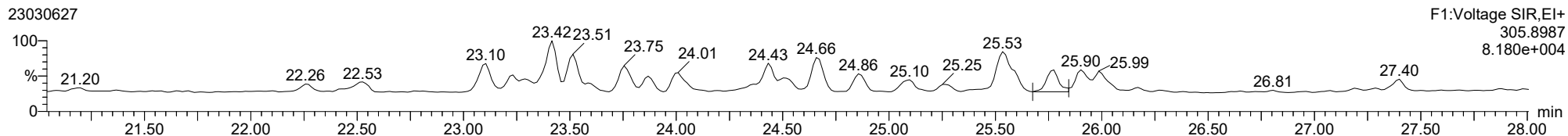


ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

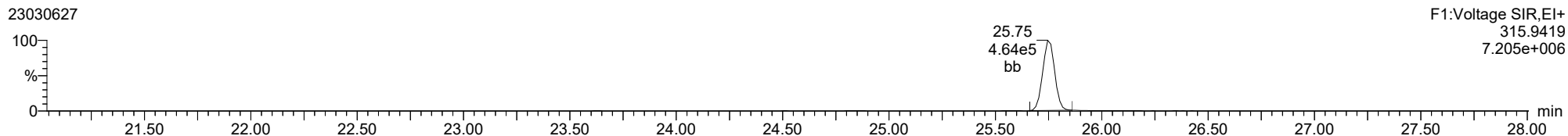
2378-TCDF



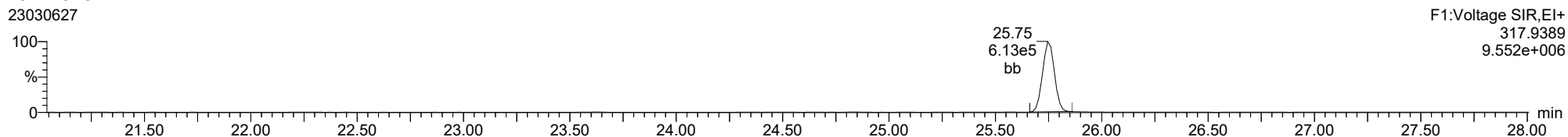
2378-TCDF



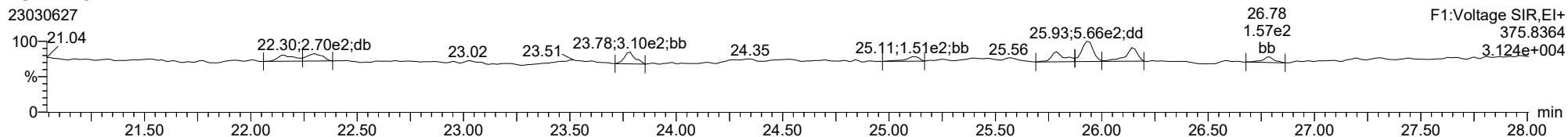
13C-2378-TCDF



13C-2378-TCDF

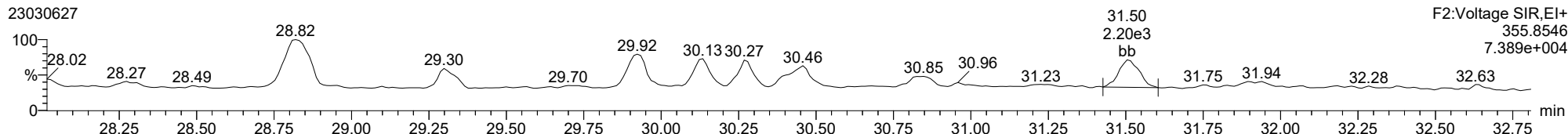


FUNCTION1 HXCDPE

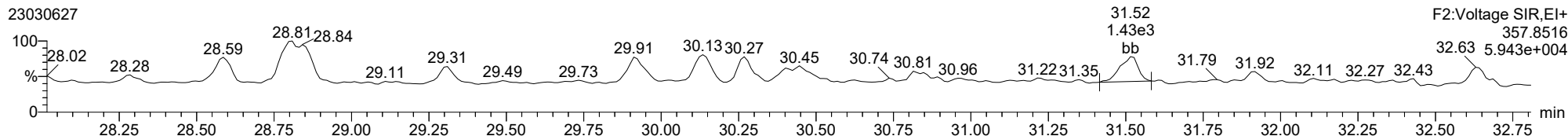


ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

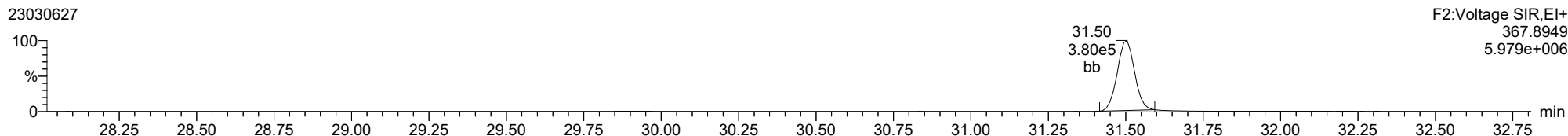
12378-PeCDD



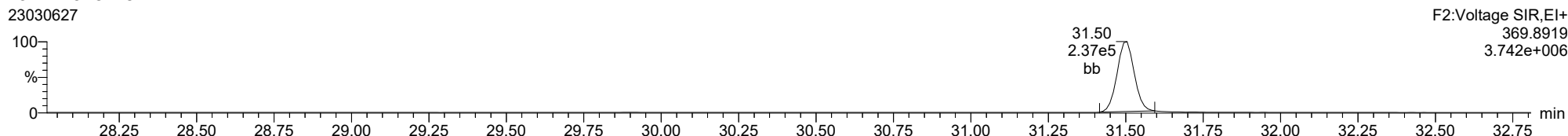
12378-PeCDD



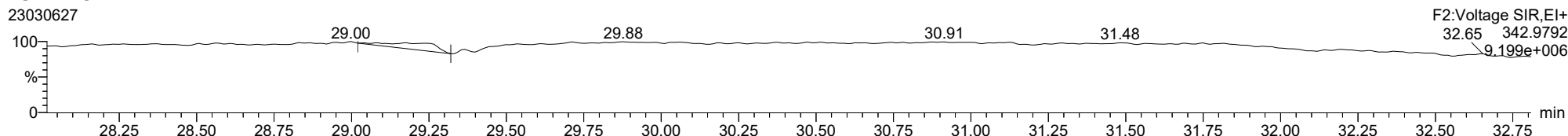
13C-12378-PeCDD



13C-12378-PeCDD



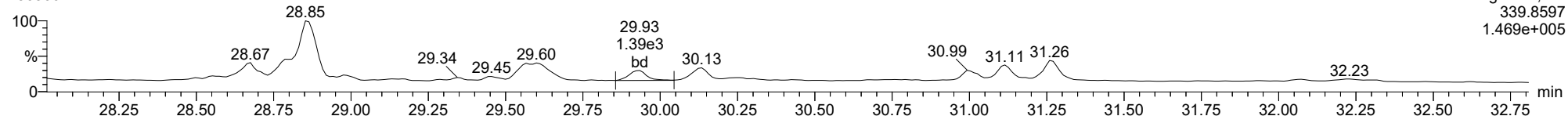
FUNCTION2 PFK



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

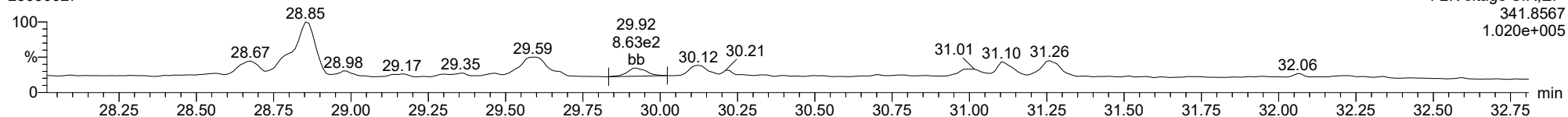
12378-PeCDF

23030627



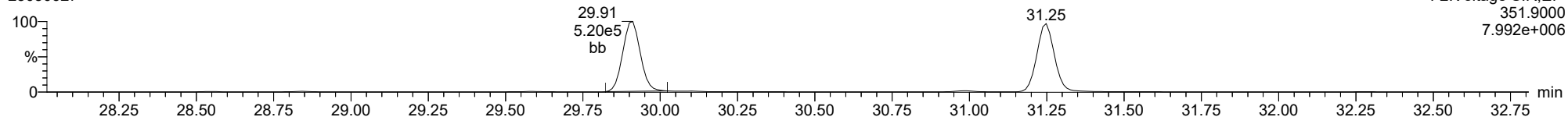
12378-PeCDF

23030627



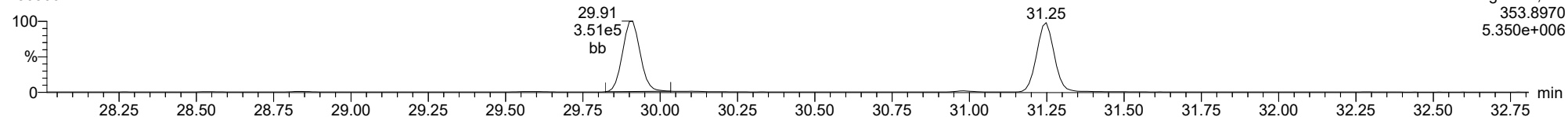
13C-12378-PeCDF

23030627



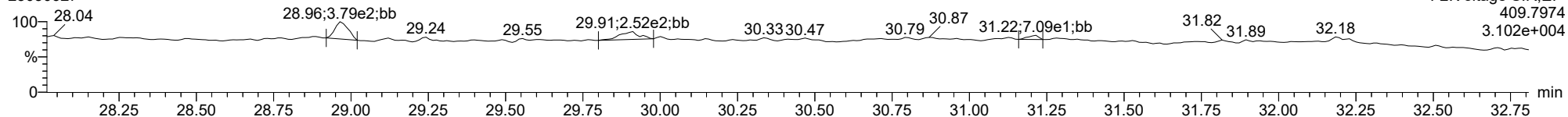
13C-12378-PeCDF

23030627



FUNCTION2 HPCDPE

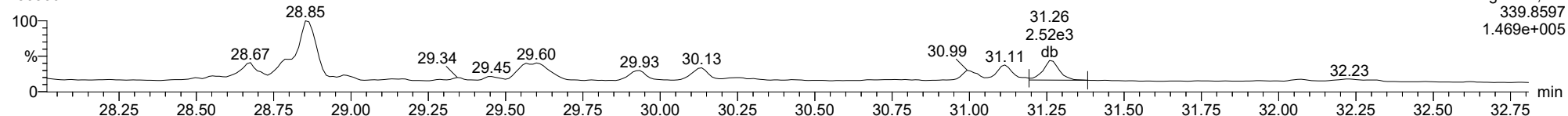
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

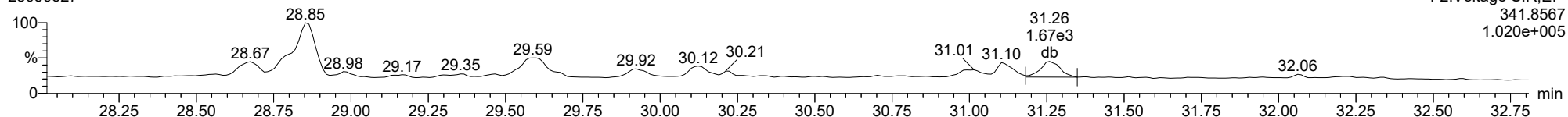
23478-PeCDF

23030627



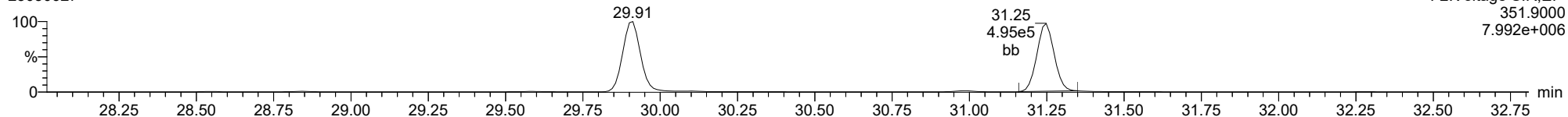
23478-PeCDF

23030627



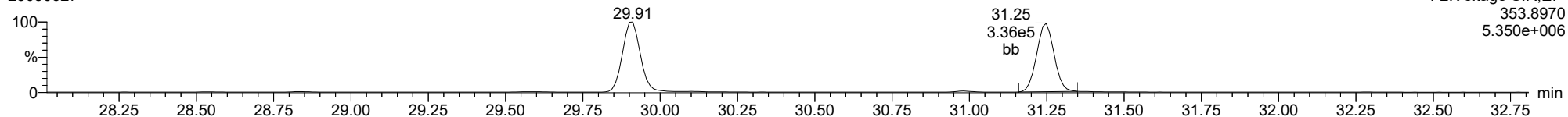
13C-23478-PeCDF

23030627



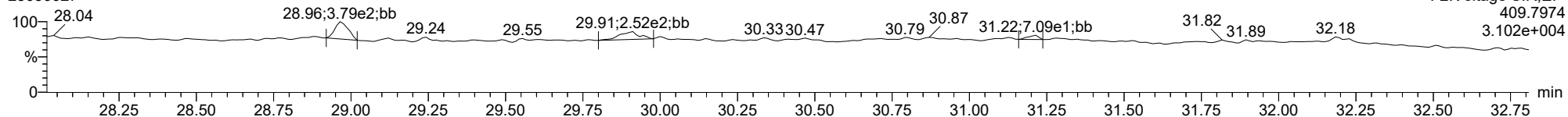
13C-23478-PeCDF

23030627



FUNCTION2 HPCDPE

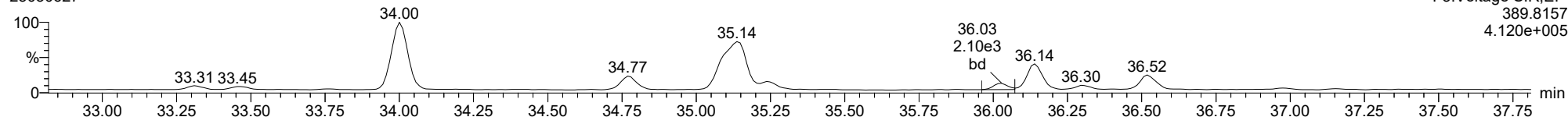
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

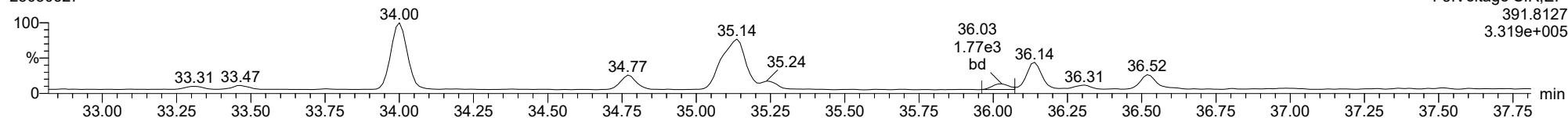
123478-HxCDD

23030627



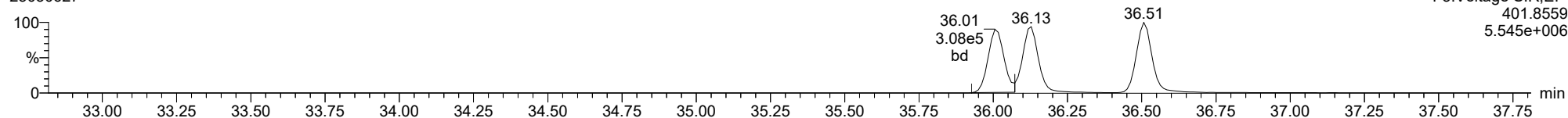
123478-HxCDD

23030627



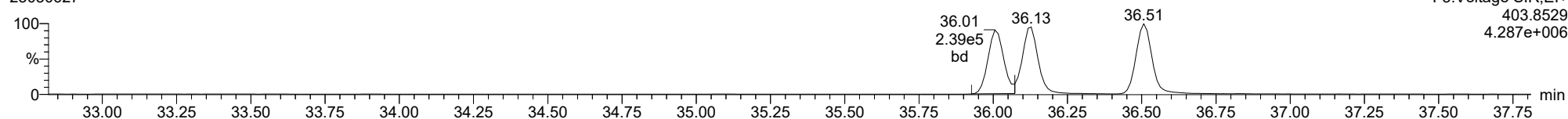
13C-123478-HxCDD

23030627



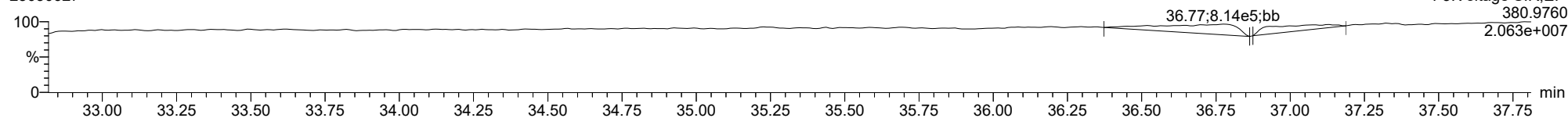
13C-123478-HxCDD

23030627



FUNCTION3 PFK

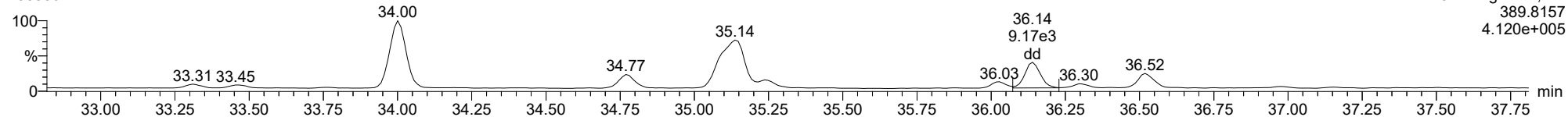
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

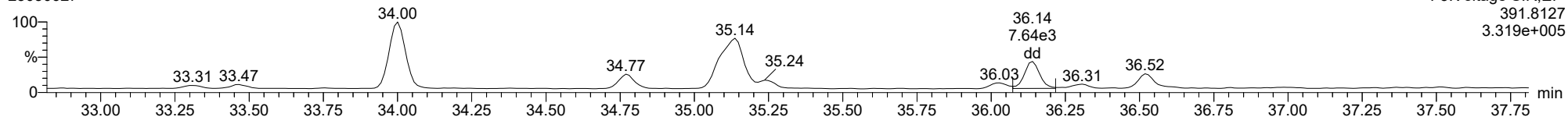
123678-HxCDD

23030627



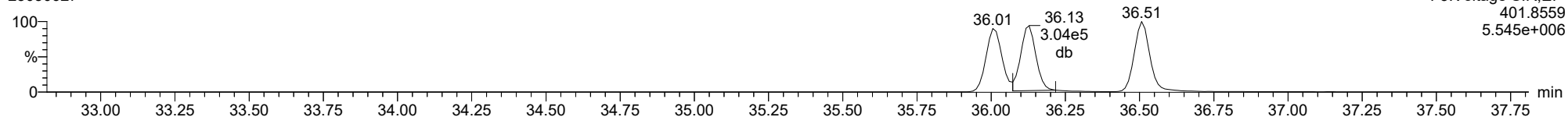
123678-HxCDD

23030627



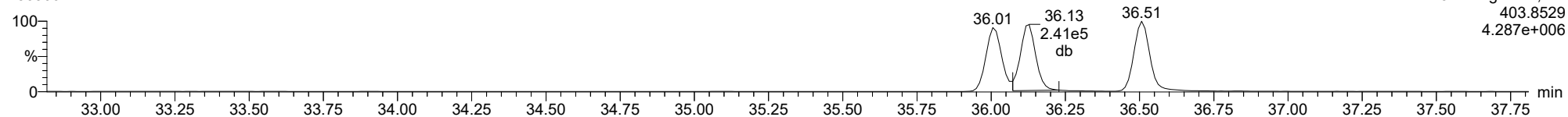
13C-123678-HxCDD

23030627



13C-123678-HxCDD

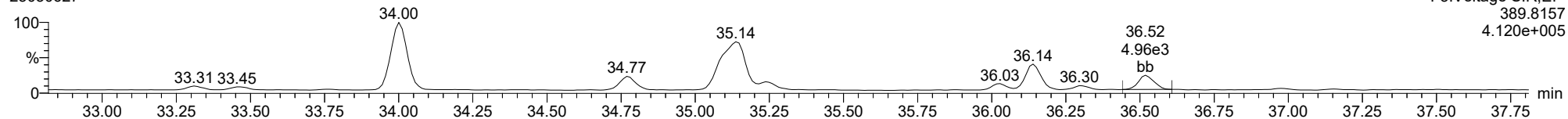
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

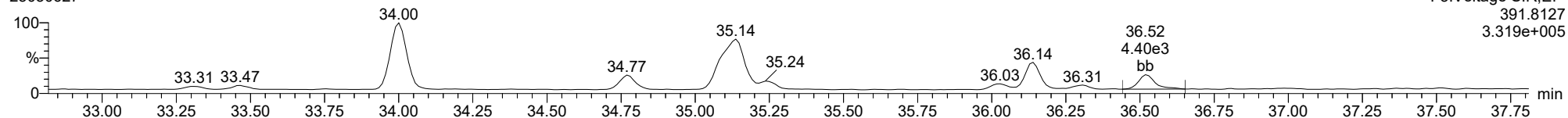
123789-HxCDD

23030627



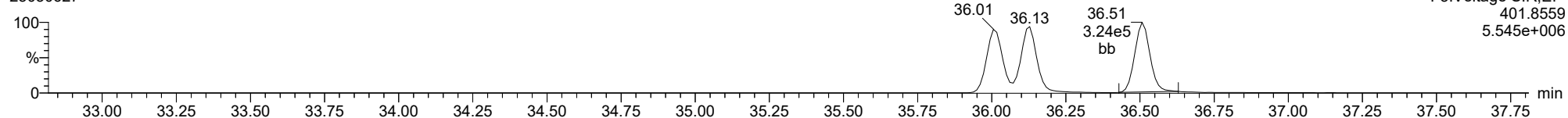
123789-HxCDD

23030627



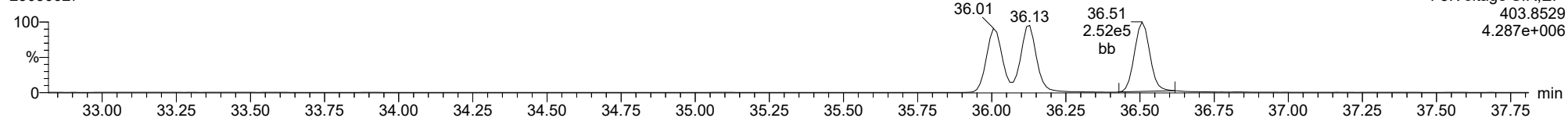
13C-123789-HxCDD

23030627



13C-123789-HxCDD

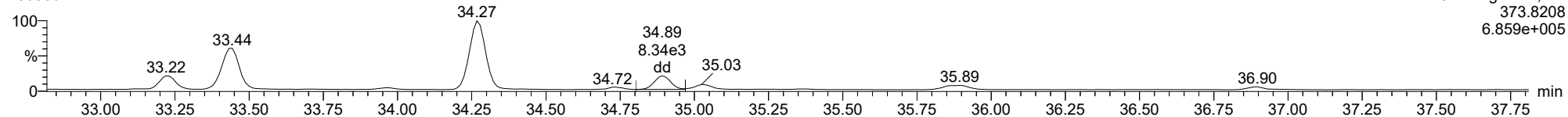
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

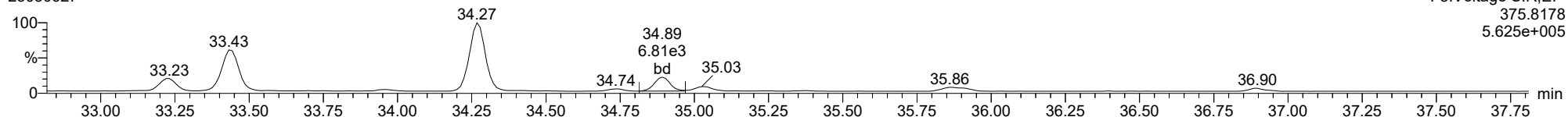
123478-HxCDF

23030627



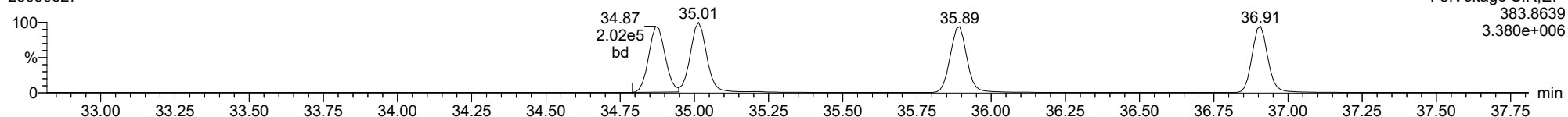
123478-HxCDF

23030627



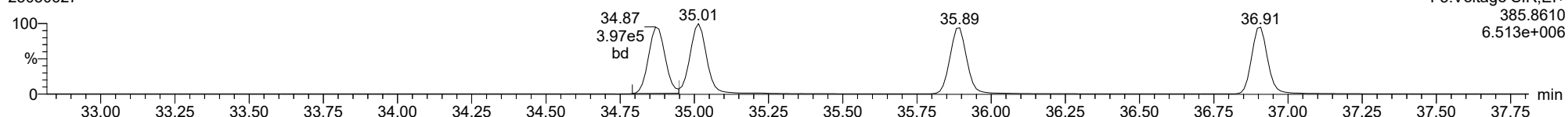
13C-123478-HxCDF

23030627



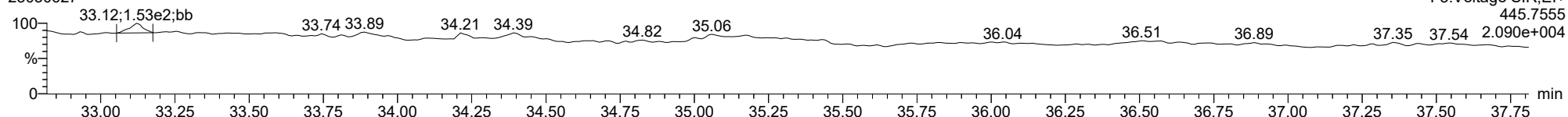
13C-123478-HxCDF

23030627



FUNCTION3 OCDPE

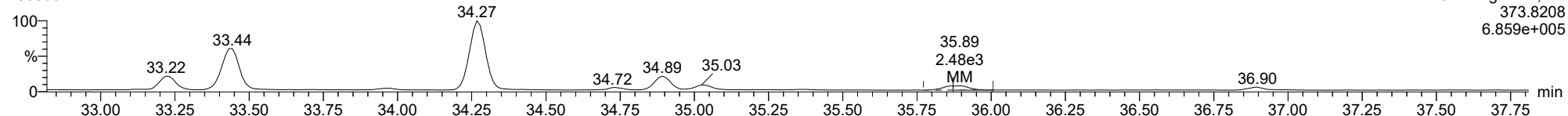
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

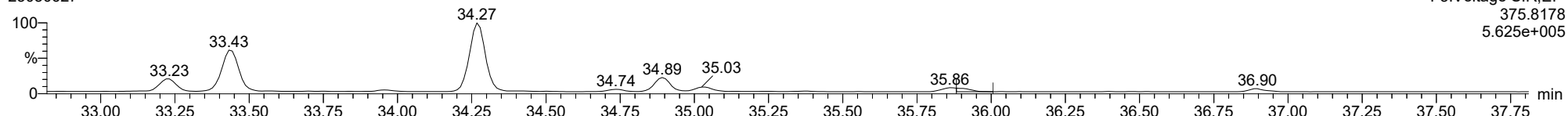
234678-HxCDF

23030627



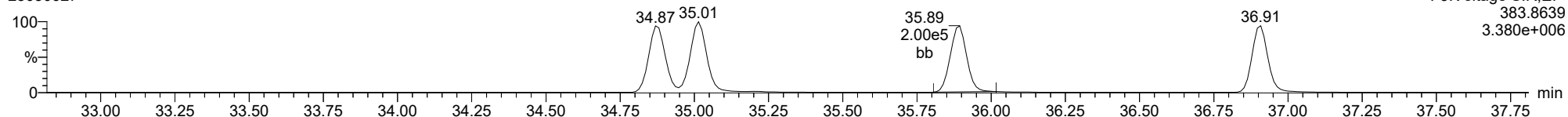
234678-HxCDF

23030627



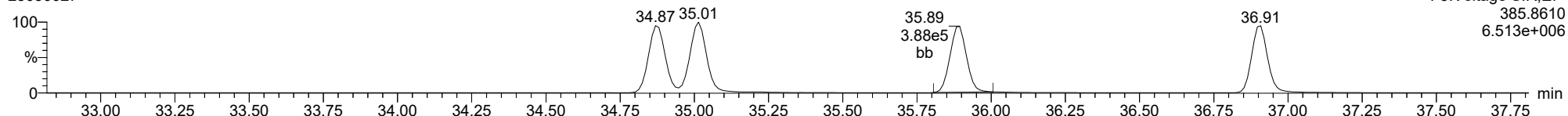
13C-234678-HxCDF

23030627



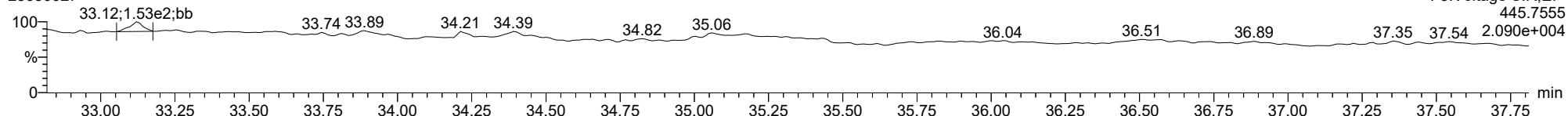
13C-234678-HxCDF

23030627



FUNCTION3 OCDPE

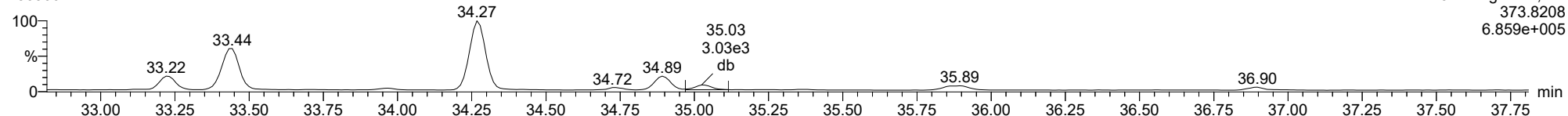
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

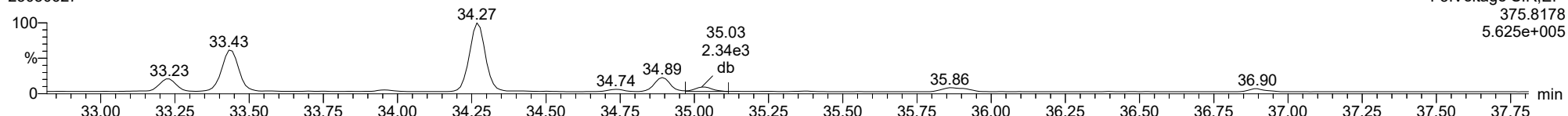
123678-HxCDF

23030627



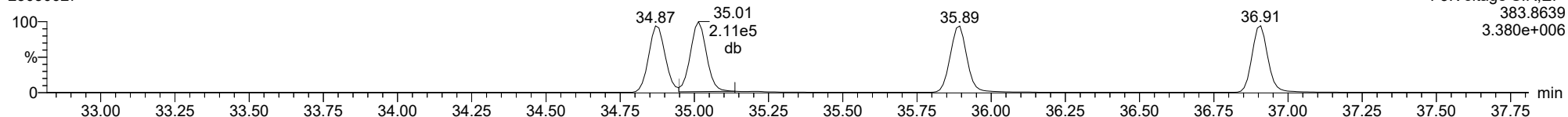
123678-HxCDF

23030627



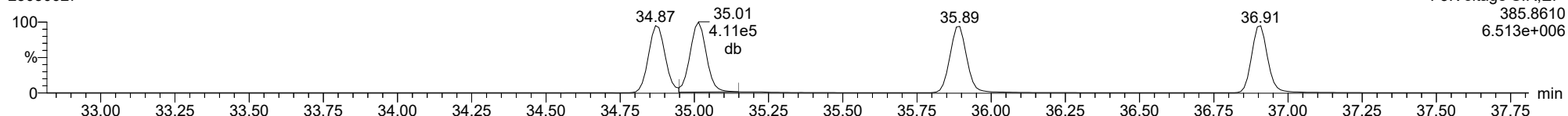
13C-123678-HxCDF

23030627



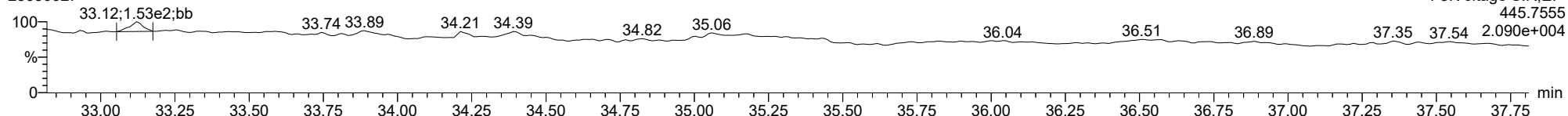
13C-123678-HxCDF

23030627



FUNCTION3 OCDPE

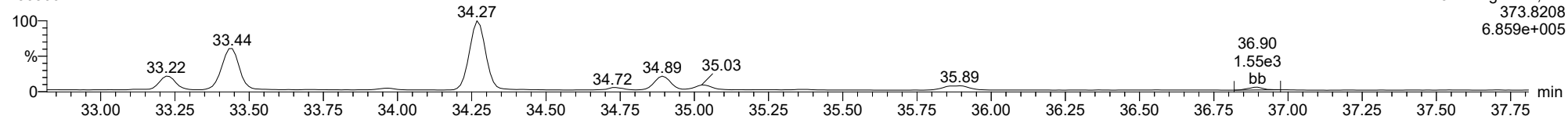
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

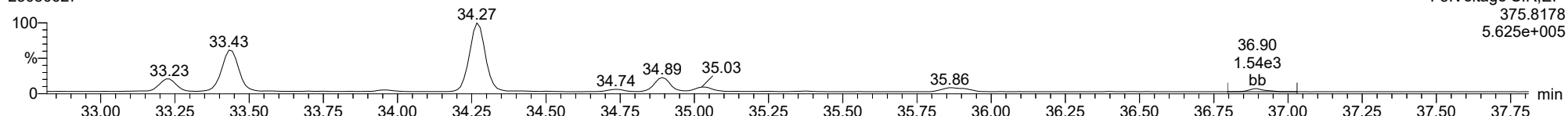
123789-HxCDF

23030627



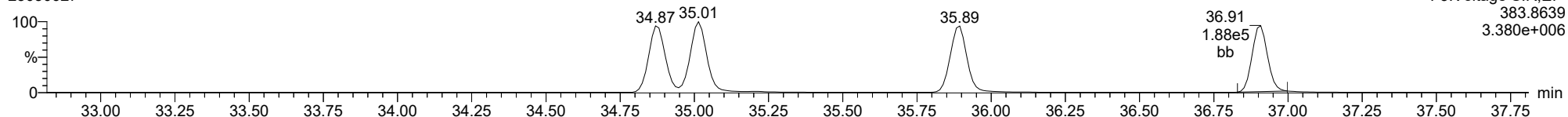
123789-HxCDF

23030627



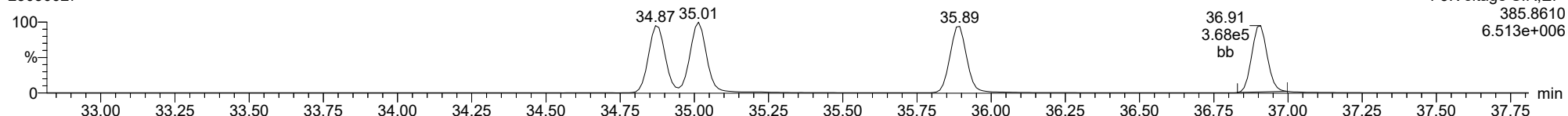
13C-123789-HxCDF

23030627



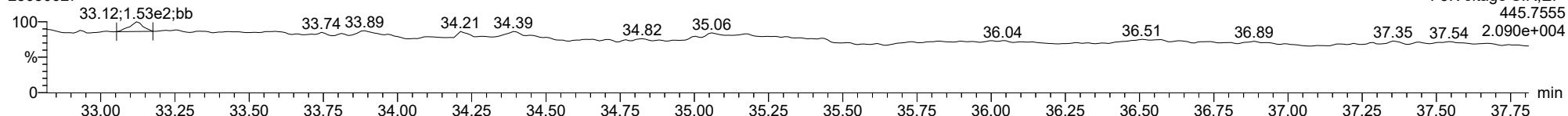
13C-123789-HxCDF

23030627



FUNCTION3 OCDPE

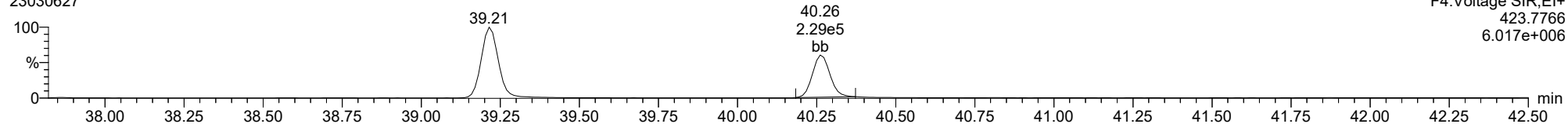
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

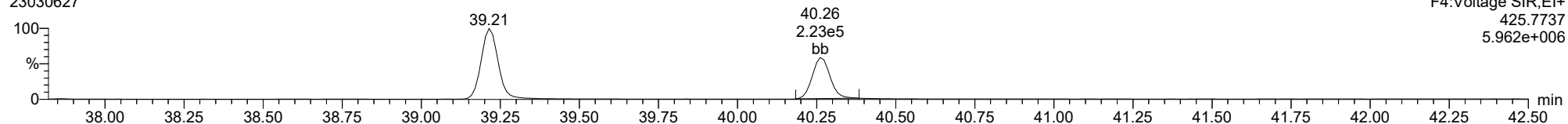
23030627



F4:Voltage SIR,EI+
423.7766
6.017e+006

1234678-HpCDD

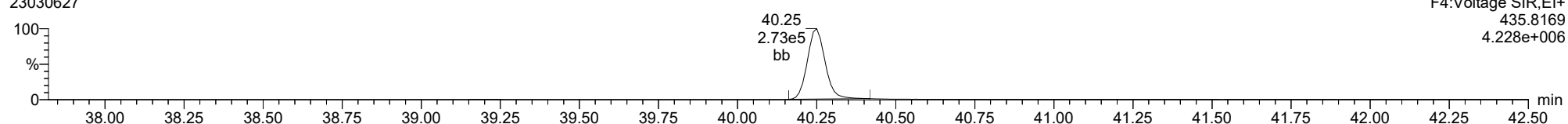
23030627



F4:Voltage SIR,EI+
425.7737
5.962e+006

13C-1234678-HpCDD

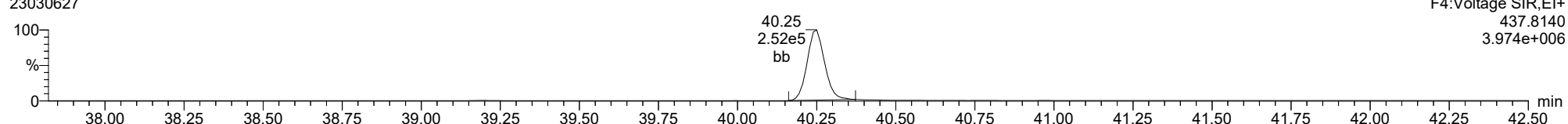
23030627



F4:Voltage SIR,EI+
435.8169
4.228e+006

13C-1234678-HpCDD

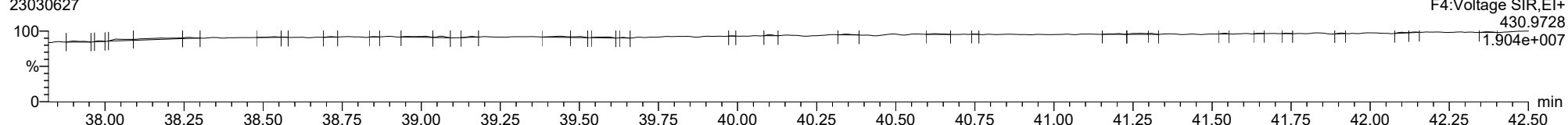
23030627



F4:Voltage SIR,EI+
437.8140
3.974e+006

FUNCTION4 PFK

23030627

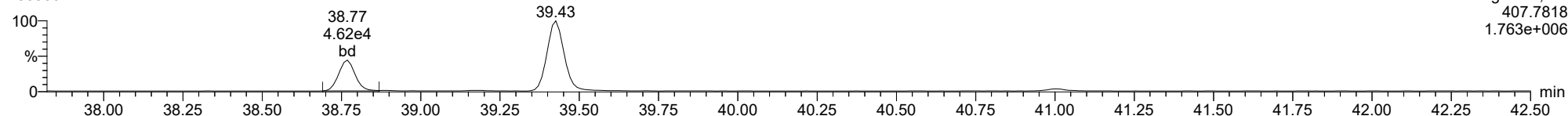


F4:Voltage SIR,EI+
430.9728
1.904e+007

ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

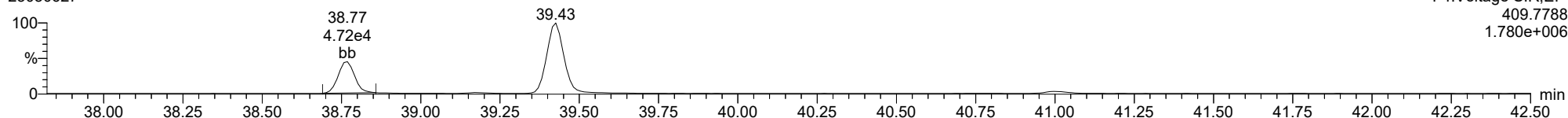
1234678-HpCDF

23030627



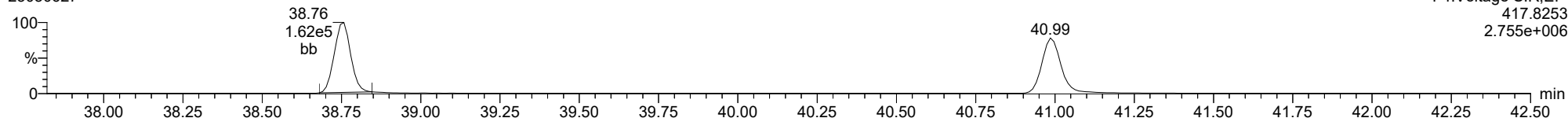
1234678-HpCDF

23030627



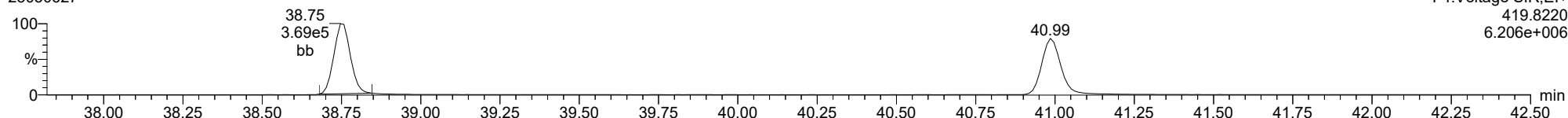
13C-1234678-HpCDF

23030627



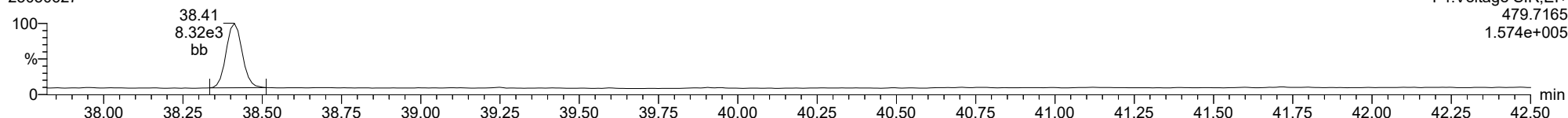
13C-1234678-HpCDF

23030627



FUNCTION4 NCDPE

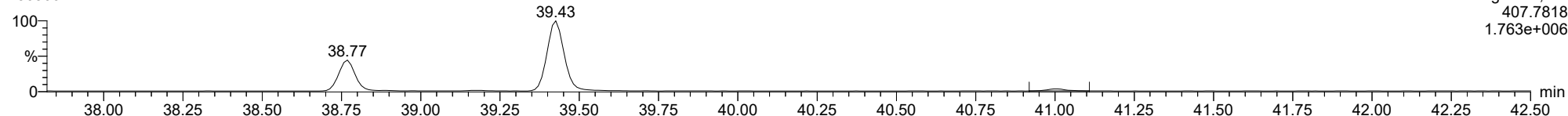
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

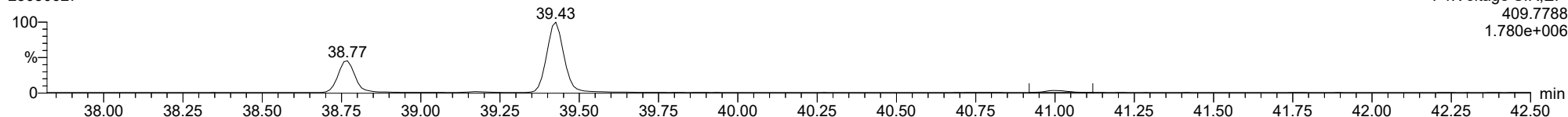
1234789-HpCDF

23030627



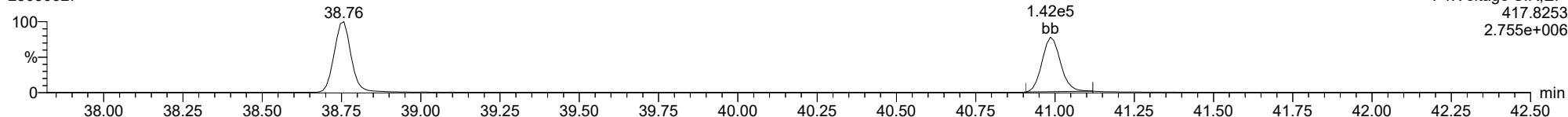
1234789-HpCDF

23030627



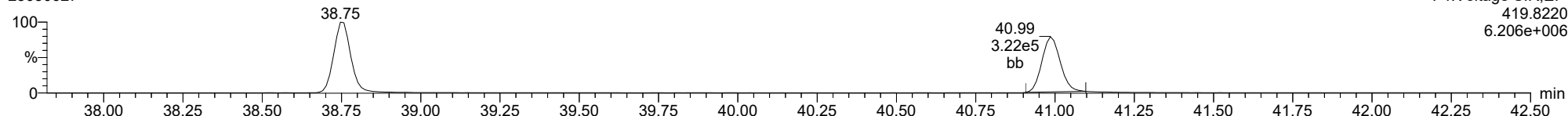
13C-1234789-HpCDF

23030627



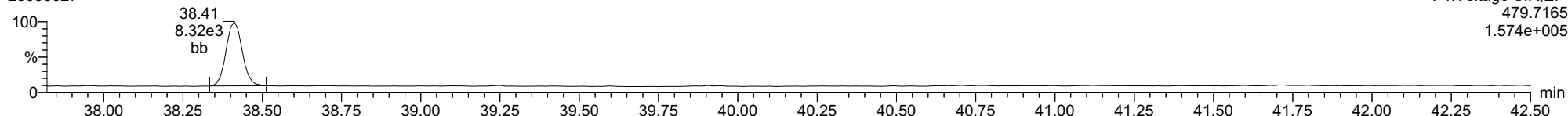
13C-1234789-HpCDF

23030627

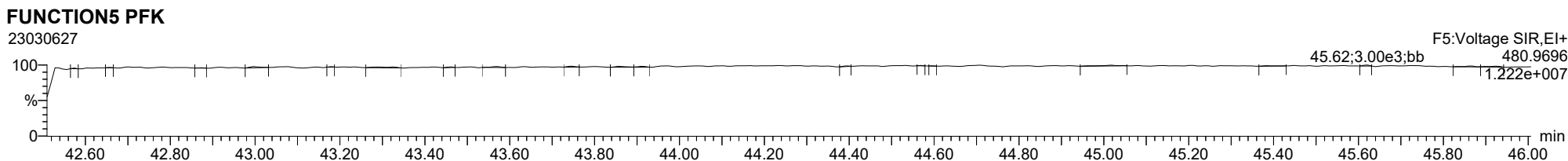
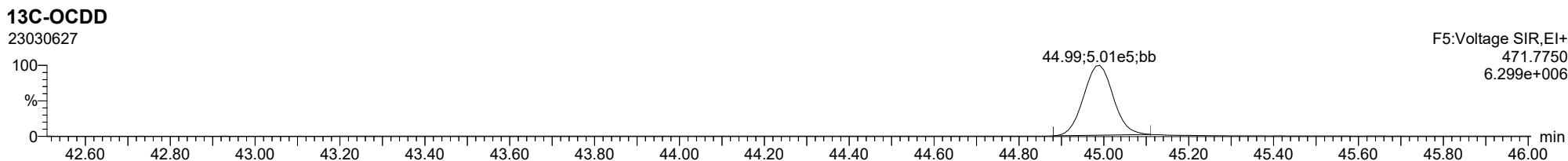
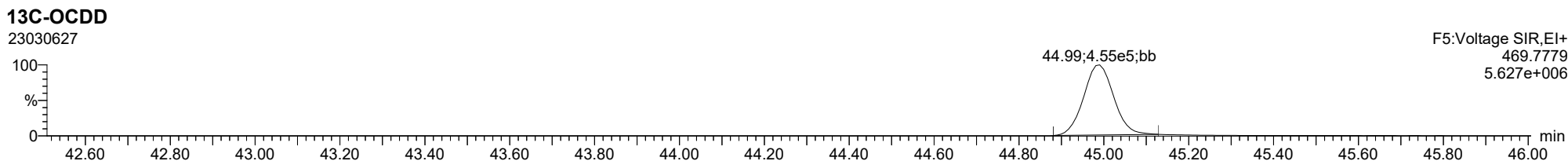
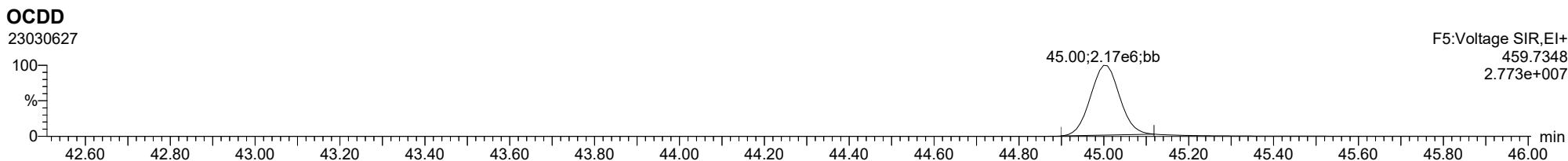
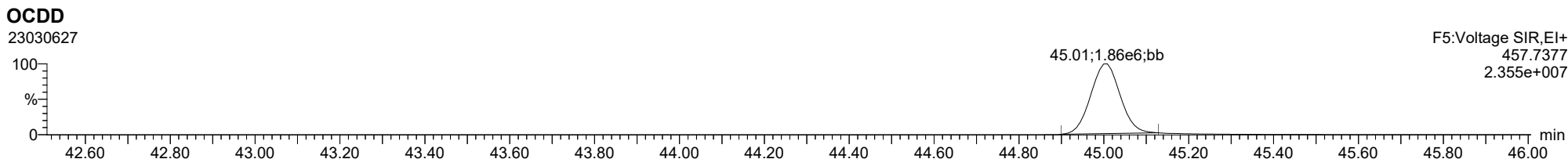


FUNCTION4 NCDPE

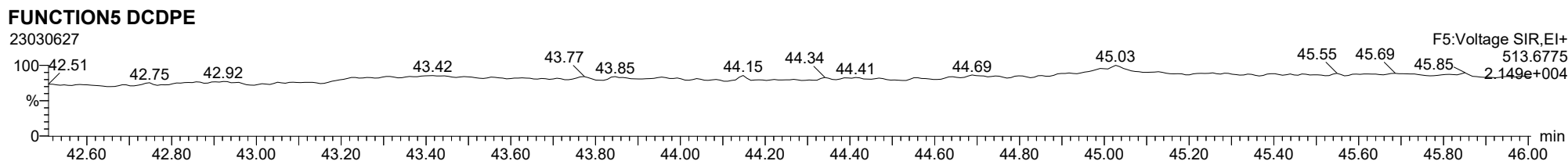
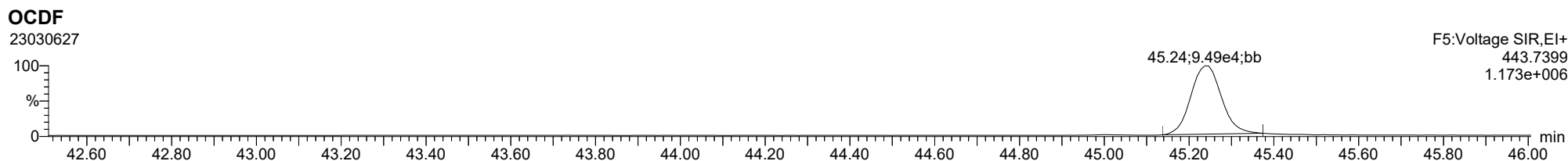
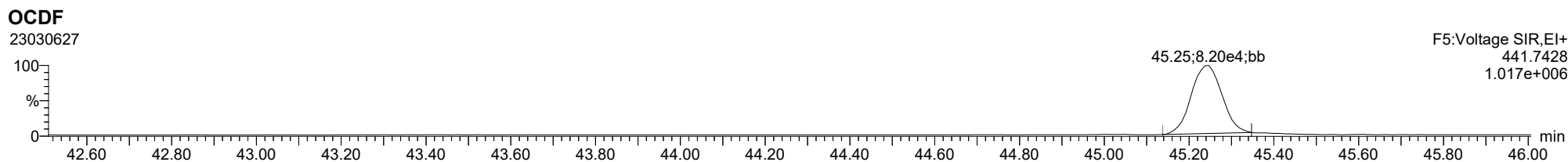
23030627



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

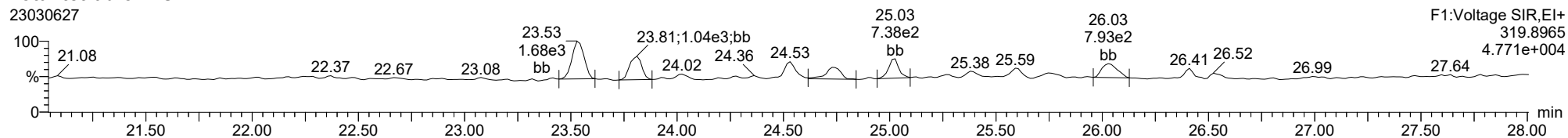


ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

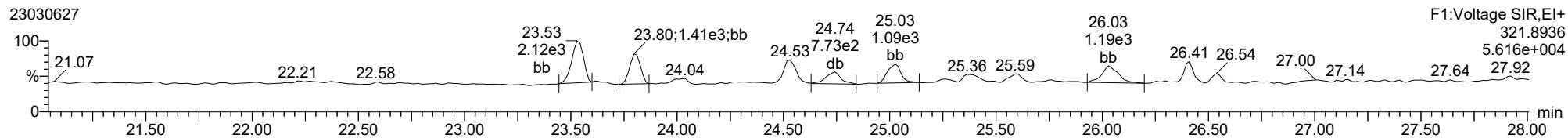


ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

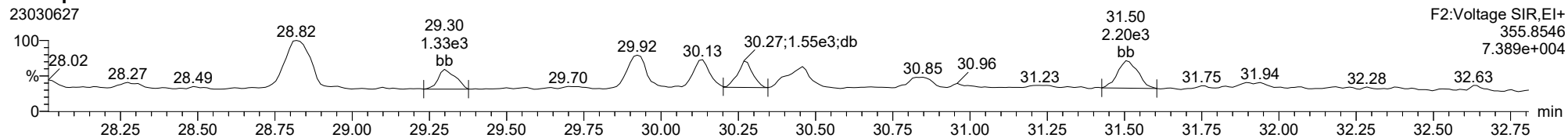
Total-tetradioxins



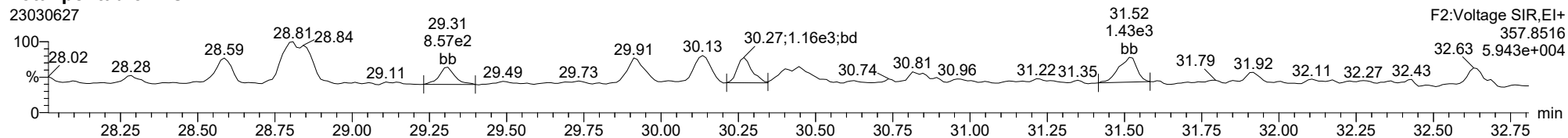
Total-tetradioxins



Total-pentadioxins



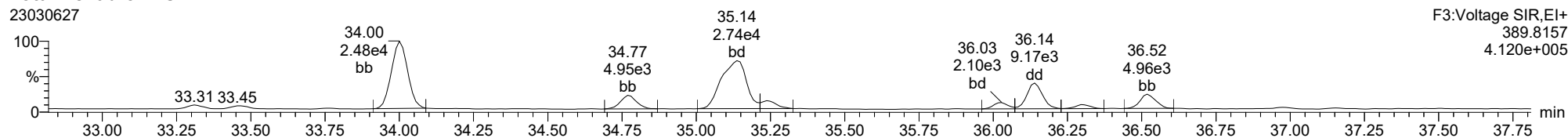
Total-pentadioxins



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

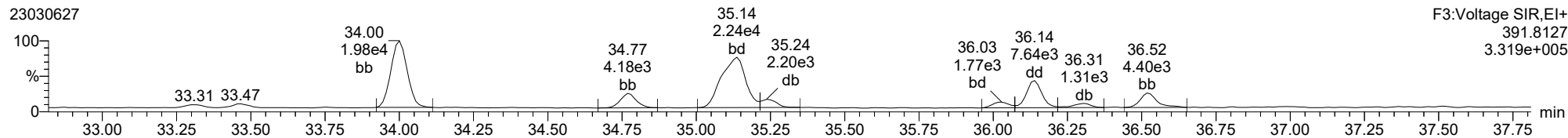
Total-hexadioxins

23030627



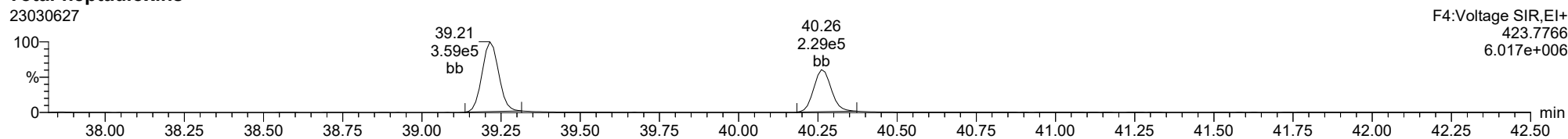
Total-hexadioxins

23030627



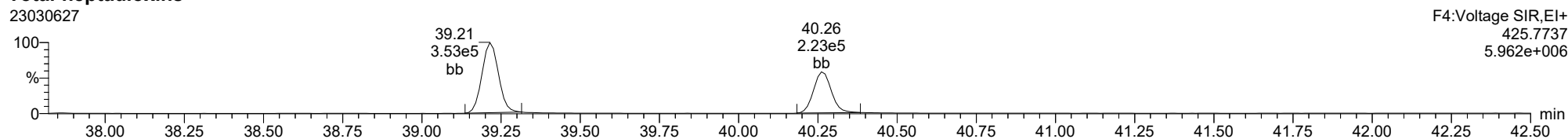
Total-heptadioxins

23030627



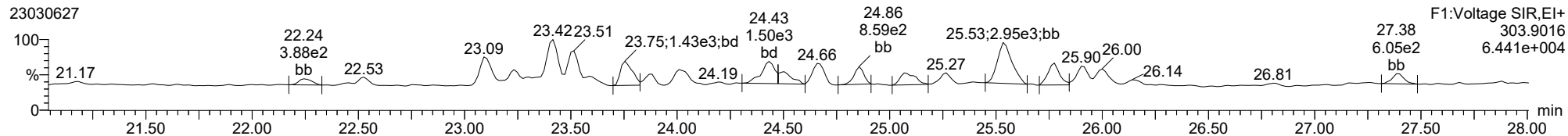
Total-heptadioxins

23030627

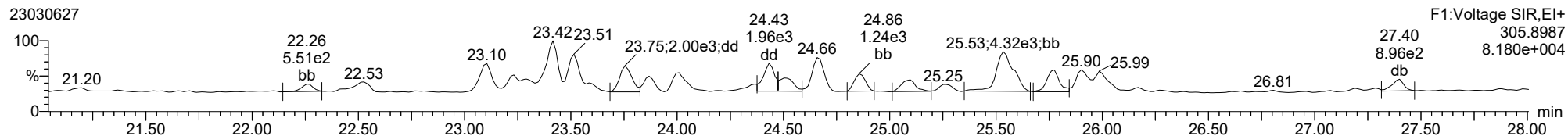


ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

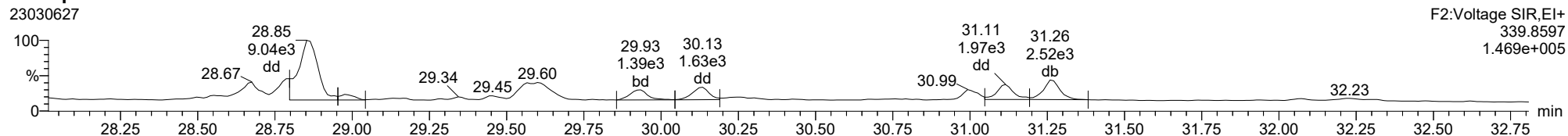
Total-tetrafurans



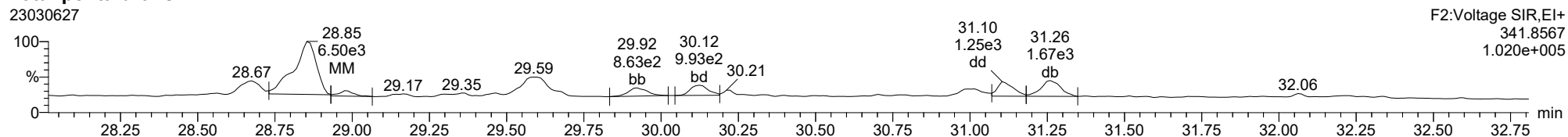
Total-tetrafurans



Total-pentafurans



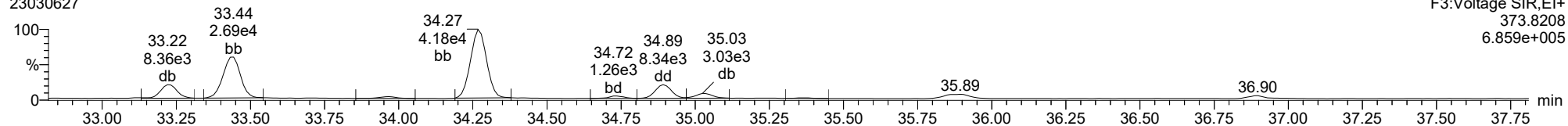
Total-pentafurans



ID: 23A0326-01, Name: 23030627, Date: 07-Mar-2023, Time: 07:39:23, Conditions: AUTOSPEC01, User: pk

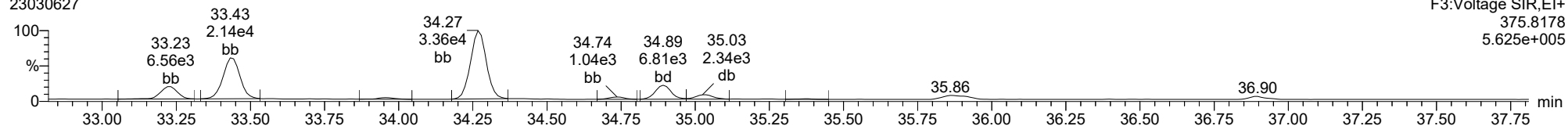
Total-hexafurans

23030627



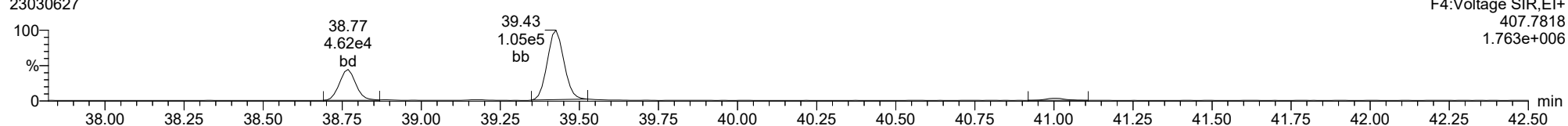
Total-hexafurans

23030627



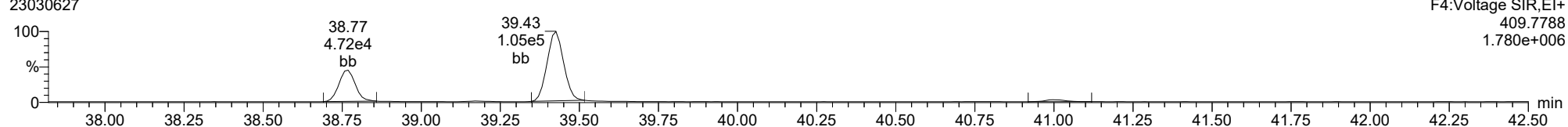
Total-heptafurans

23030627



Total-heptafurans

23030627





Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-09 C File ID: 23030628
 Sampled: 01/17/23 13:32 Prepared: 01/24/23 07:31 Analyzed: 03/07/23 08:28
 % Solids: 61.27 Preparation: EPA 1613 Initial/Final: 16.4 g Wet / 20 uL
 Result Basis: Dry Sequence: SLC0081 Calibration: GC00015
 Batch: BLA0398 Instrument: AUTOSPEC01 Column: RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.770	0.655-0.886	0.145	0.995	2.44	ng/kg	X
1746-01-6	2,3,7,8-TCDD	1	0.493	0.655-0.886	0.084	0.995	0.695	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.457	1.318-1.783	0.177	0.995	1.35	ng/kg	
57117-31-4	2,3,4,7,8-PeCDF	1	1.326	1.318-1.783	0.161	0.995	2.25	ng/kg	
40321-76-4	1,2,3,7,8-PeCDD	1	1.566	1.318-1.783	0.225	0.995	2.43	ng/kg	B
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.270	1.054-1.426	0.148	0.995	7.80	ng/kg	B
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.252	1.054-1.426	0.154	0.995	5.19	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.262	1.054-1.426	0.152	0.995	8.23	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.265	1.054-1.426	0.157	0.995	2.15	ng/kg	
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.198	1.054-1.426	0.221	0.995	2.26	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.196	1.054-1.426	0.215	0.995	13.0	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.134	1.054-1.426	0.240	0.995	8.99	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.998	0.893-1.208	0.299	0.995	448	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.960	0.893-1.208	0.421	0.995	8.10	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.023	0.893-1.208	0.391	2.49	363	ng/kg	B
39001-02-0	OCDF	1	0.877	0.757-1.024	0.254	2.49	520	ng/kg	B
3268-87-9	OCDD	1	0.856	0.757-1.024	0.355	9.95	3550	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.995	38.3	ng/kg
41903-57-5	Total TCDD	1	0.000			0.995	7.67	ng/kg
30402-15-4	Total PeCDF	1	0.000			0.995	88.7	ng/kg
36088-22-9	Total PeCDD	1	0.000			0.995	9.75	ng/kg
55684-94-1	Total HxCDF	1	0.000			0.995	246	ng/kg
34465-46-8	Total HxCDD	1	0.000			0.995	90.6	ng/kg
38998-75-3	Total HpCDF	1	0.000			0.995	1020	ng/kg
37871-00-4	Total HpCDD	1	0.000			0.995	694	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 18.26
 Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 18.26



LDW23-IT1127

Form 2
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>
Matrix: <u>Sediment</u>	Laboratory ID: <u>23A0326-09</u>
Sampled: <u>01/17/23 13:32</u>	File ID: <u>23030628</u>
Solids Wt%: <u>61.27</u>	Prepared: <u>01/24/23 07:31</u>
Result Basis: <u>Dry</u>	Preparation: <u>EPA 1613</u>
Batch: <u>BLA0398</u>	Sequence: <u>SLC0081</u>
	Instrument: <u>AUTOSPEC01</u>
	Column: <u>RTX-Dioxin2</u>
	Analyzed: <u>03/07/23 08:28</u>
	Initial/Final: <u>16.4 g / 20 uL</u>
	Calibration: <u>GC00015</u>

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.762	0.655-0.886	0.128	89.8	24 - 169 %	
13C12-2,3,7,8-TCDD		0.792	0.655-0.886	0.125	101	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.474	1.318-1.783	0.257	78.6	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.498	1.318-1.783	0.285	83.9	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.617	1.318-1.783	0.114	87.6	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.509	0.434-0.587	0.189	88.6	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.517	0.434-0.587	0.159	76.9	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.519	0.434-0.587	0.195	89.1	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.509	0.434-0.587	0.236	100	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.300	1.054-1.426	0.141	94.3	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.254	1.054-1.426	0.121	80.7	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.433	0.374-0.506	0.210	95.4	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.452	0.374-0.506	0.244	98.1	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.063	0.893-1.208	0.136	103	23 - 140 %	
13C12-OCDD		0.918	0.757-1.024	0.204	86.7	17 - 157 %	
37C14-2,3,7,8-TCDD		328.000		0.038	86.5	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.199e3	5.455e3	0.702	0.770	0.770	1314	1696	5.90e4	8.06e4	44.9	47.6	NO	bd	bd	1.223
12378-PeCDF	29.933	1.000	2.054e3	1.410e3	0.679	1.457	1.550	1302	1087	3.17e4	2.07e4	24.3	19.1	NO	bb	bb	0.677
23478-PeCDF	31.281	1.001	3.680e3	2.776e3	0.786	1.326	1.550	1302	1087	5.60e4	4.42e4	43.0	40.7	NO	db	dd	1.133
123478-HxCDF	34.902	1.000	1.745e4	1.374e4	1.166	1.270	1.240	1655	1432	2.73e5	2.12e5	164.7	148.2	NO	bd	bd	3.916
234678-HxCDF	35.905	1.000	1.745e4	1.383e4	1.140	1.262	1.240	1655	1432	1.77e5	1.39e5	107.2	97.2	NO	bb	bb	4.133
123678-HxCDF	35.047	1.001	1.113e4	8.885e3	1.091	1.252	1.240	1655	1432	1.79e5	1.45e5	108.0	101.6	NO	db	db	2.607
123789-HxCDF	36.908	1.000	4.230e3	3.342e3	1.137	1.265	1.240	1655	1432	5.55e4	4.02e4	33.5	28.0	NO	bb	bb	1.083
1234678-HpCDF	38.779	1.000	6.360e5	6.372e5	1.003	0.998	1.050	2664	2190	1.08e7	1.10e7	4068.0	5004.7	NO	bb	bb	225.302
1234789-HpCDF	41.030	1.001	9.459e3	9.855e3	0.953	0.960	1.050	2664	2190	1.32e5	1.54e5	49.4	70.2	NO	bd	bb	4.067
OCDF	45.264	1.006	4.167e5	4.750e5	0.778	0.877	0.890	917	898	5.06e6	5.79e6	5518.7	6441.9	NO	bb	bb	261.256
2378-TCDD	26.424	1.001	1.186e3	2.408e3	1.149	0.493	0.770	1066	1171	1.87e4	3.65e4	17.5	31.2	YES	bd	bd	0.349
12378-PeCDD	31.538	1.001	4.274e3	2.730e3	1.022	1.566	1.550	1367	2009	6.05e4	4.04e4	44.3	20.1	NO	bb	bb	1.222
123478-HxCDD	36.039	1.001	3.821e3	3.189e3	0.996	1.198	1.240	1499	2176	6.33e4	5.47e4	42.2	25.1	NO	bd	bd	1.138
123678-HxCDD	36.150	1.000	2.194e4	1.833e4	1.001	1.196	1.240	1499	2176	3.55e5	3.05e5	237.0	140.4	NO	dd	dd	6.534
123789-HxCDD	36.529	1.011	1.344e4	1.185e4	0.907	1.134	1.240	1499	2176	2.18e5	1.90e5	145.4	87.5	NO	bb	bb	4.516
1234678-HpCDD	40.283	1.001	5.490e5	5.364e5	1.039	1.023	1.050	2505	3486	8.57e6	8.36e6	3422.3	2396.6	NO	bb	bb	182.358
OCDD	45.026	1.000	3.317e6	3.877e6	0.920	0.856	0.890	1336	1670	4.30e7	5.04e7	32195.3	30175.4	NO	bb	bb	1781.727
13C-2378-TCDF	25.760	1.007	4.865e5	6.383e5	1.620	0.762	0.770	2510	1719	7.66e6	1.02e7	3053.3	5923.8	NO	bb	bb	89.841
13C-12378-PeCDF	29.922	1.169	4.490e5	3.045e5	1.240	1.474	1.550	2286	4217	7.08e6	4.76e6	3095.2	1128.6	NO	bb	bb	78.608
13C-23478-PeCDF	31.259	1.221	4.349e5	2.902e5	1.118	1.498	1.550	2286	4217	6.74e6	4.57e6	2950.4	1083.6	NO	bb	bb	83.948
13C-123478-HxCDF	34.891	0.955	2.304e5	4.525e5	1.168	0.509	0.510	1563	2591	3.60e6	7.00e6	2306.9	2702.6	NO	bd	bd	88.596
13C-123678-HxCDF	35.025	0.959	2.399e5	4.639e5	1.386	0.517	0.510	1563	2591	3.73e6	7.24e6	2386.7	2795.1	NO	db	db	76.937
13C-234678-HxCDF	35.905	0.983	2.268e5	4.373e5	1.129	0.519	0.510	1563	2591	3.63e6	7.06e6	2325.9	2724.2	NO	bb	bb	89.135
13C-123789-HxCDF	36.919	1.011	2.075e5	4.076e5	0.932	0.509	0.510	1563	2591	3.47e6	6.85e6	2222.4	2643.2	NO	bb	bb	100.054
13C-1234678-HpCDF	38.768	1.062	1.703e5	3.931e5	0.895	0.433	0.440	1834	1708	2.92e6	6.79e6	1595.0	3977.9	NO	bb	bb	95.386
13C-1234789-HpCDF	41.008	1.123	1.551e5	3.431e5	0.770	0.452	0.440	1834	1708	2.25e6	5.10e6	1225.6	2984.7	NO	bd	bb	98.103
13C-1234-TCDD	25.591	0.000	3.433e5	4.295e5	1.000	0.799	0.770	1716	1224	5.42e6	6.76e6	3156.6	5528.5	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	3.961e5	5.001e5	1.152	0.792	0.770	1716	1224	6.15e6	7.85e6	3584.3	6412.6	NO	bb	bb	100.634
13C-12378-PeCDD	31.515	1.232	3.466e5	2.143e5	0.829	1.617	1.550	912	1021	5.42e6	3.32e6	5939.6	3246.5	NO	bb	bb	87.584
13C-123478-HxCDD	36.016	0.986	3.498e5	2.691e5	0.995	1.300	1.240	1738	903	5.63e6	4.34e6	3238.1	4805.1	NO	bd	bd	94.269
13C-123678-HxCDD	36.139	0.990	3.425e5	2.731e5	1.157	1.254	1.240	1738	903	5.68e6	4.49e6	3266.8	4972.6	NO	db	db	80.673
13C-1234678-HpCDD	40.261	1.103	2.951e5	2.777e5	0.840	1.063	1.050	1152	1010	4.53e6	4.35e6	3936.0	4308.9	NO	bb	bb	103.344
13C-OCDD	45.008	1.232	4.200e5	4.577e5	0.767	0.918	0.890	1377	1575	5.26e6	5.73e6	3818.3	3636.8	NO	bb	bb	173.334
13C-123789-HxCDD	36.518	0.000	3.691e5	2.907e5	1.000	1.270	1.240	1738	903	6.30e6	4.91e6	3625.5	5440.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	3.443e5		1.288			1005		5.28e6		5255.2			bb		34.604

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	1.478e3	1.917e3	0.802	0.771	0.770	1314	1696	2.30e4	2.65e4	17.5	15.6	NO	bd	bb	0.377
1289-TCDF	27.215	1.056	2.310e2	1.131e3	0.678	0.204	0.770	1314	1696	4.99e3	1.02e4	3.8	6.0	YES	bd	bd	0.179
13468-PECDF					1.246		1.550	661	897								
12389-PECDF	32.239	1.077	1.042e3	8.111e2	0.496	1.284	1.550	1302	1087	1.66e4	1.32e4	12.8	12.1	YES	bd	bd	0.495
123468-HXCDF	33.242	0.953	5.065e4	4.018e4	1.169	1.261	1.240	1655	1432	8.15e5	6.52e5	492.7	455.6	NO	bb	bb	11.376
1368-TCDD	23.542	0.892	4.935e3	6.248e3	1.015	0.790	0.770	1066	1171	7.98e4	1.01e5	74.8	85.9	NO	bb	bb	1.229
1289-TCDD	27.017	1.024	2.838e2	3.890e2	0.909	0.730	0.770	1066	1171	4.51e3	5.61e3	4.2	4.8	NO	bb	bd	0.083
12479-PECDD	28.853	0.916	9.199e3	6.673e3	2.301	1.379	1.550	1367	2009	9.93e4	6.89e4	72.7	34.3	NO	MM	MM	1.230
12389-PECDD					1.184		1.550	1367	2009								
124679-HXCDD	34.011	0.944	4.601e4	3.703e4	1.115	1.243	1.240	1499	2176	7.06e5	5.79e5	471.0	266.3	NO	bb	bb	12.029
1234679-HPCDD	39.236	0.975	5.461e5	5.375e5	1.137	1.016	1.050	2505	3486	9.26e6	9.09e6	3697.4	2606.7	NO	bb	bb	166.392
Total-tetrafurans			6.717e4		0.727			1314		9.76e5							19.236
Total-penta1			1.078e5					661		1.65e6							25.677
Total-pentafurans			5.477e4		0.654			1302		7.04e5							18.895
Total-hexafurans			5.259e5		1.141			1655		8.20e6							123.556
Total-heptafurans			1.376e6		0.978			2664		2.30e7							513.062
Total-Furans			2.549e6		0.922			1314		3.96e7							961.818
Total-tetradoxins			1.548e4		1.024			1066		2.36e5							3.855
Total-pentadoxins			2.574e4		1.502			1367		3.50e5							4.897
Total-hexadoxins			1.571e5		1.005			1499		2.19e6							45.540
Total-heptadoxins			1.095e6		1.088			2505		1.78e7							348.750
Total-Dioxins			4.610e6		1.130			1066		6.36e7							2184.852
Total-TEQ			7.160e6					1066		1.03e8							3146.671
FUNCTION1 PFK			9.909e6					402177		2.97e7							
FUNCTION2 PFK			1.856e6					254989		7.99e6							0.000
FUNCTION3 PFK			2.982e6					328451		9.45e6							0.000
FUNCTION4 PFK			8.161e5					231193		3.91e6							
FUNCTION5 PFK			1.623e6					145054		4.34e6							
FUNCTION1 HXCD...			8.231e3					556		1.34e5							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.599e3					640		4.44e4							0.000
FUNCTION3 OCDPE			7.098e1					493		1.55e3							0.000
FUNCTION4 NCDPE			1.438e4					715		2.50e5							0.000
FUNCTION5 DCDPE			4.333e2					573		4.87e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.04	2.700e3	3.161e3	0.727	0.85	0.77	23.9	YES	NO	db	dd	0.717
2	Total-tetrafurans	23.88	1.143e3	1.558e3	0.727	0.73	0.77	14.6	YES	NO	dd	dd	0.330
3	Total-tetrafurans	23.77	9.978e3	1.398e4	0.727	0.71	0.77	110.7	YES	NO	bd	bd	2.930
4	Total-tetrafurans	23.53	4.937e3	6.935e3	0.727	0.71	0.77	57.9	YES	NO	dd	dd	1.452
5	Total-tetrafurans	23.42	2.700e3	3.971e3	0.727	0.68	0.77	26.4	YES	NO	dd	dd	0.816
6	Total-tetrafurans	23.10	1.379e4	1.789e4	0.727	0.77	0.77	162.0	YES	NO	bd	bd	3.875
7	Total-tetrafurans	22.53	3.797e3	5.210e3	0.727	0.73	0.77	42.6	YES	NO	db	bb	1.101
8	1368-TCDF	22.27	1.478e3	1.917e3	0.802	0.77	0.77	17.5	YES	NO	bd	bb	0.377
9	Total-tetrafurans	26.01	2.535e3	3.649e3	0.727	0.69	0.77	24.1	YES	NO	dd	dd	0.756
10	Total-tetrafurans	25.92	1.307e3	1.950e3	0.727	0.67	0.77	15.5	YES	NO	dd	dd	0.398
11	2378-TCDF	25.79	4.199e3	5.455e3	0.702	0.77	0.77	44.9	YES	NO	bd	bd	1.223
12	Total-tetrafurans	25.55	3.805e3	5.226e3	0.727	0.73	0.77	29.4	YES	NO	bb	bb	1.104
13	Total-tetrafurans	25.28	1.013e3	1.222e3	0.727	0.83	0.77	10.5	YES	NO	db	db	0.273
14	Total-tetrafurans	25.10	2.230e3	2.919e3	0.727	0.76	0.77	22.0	YES	NO	bd	bd	0.630
15	Total-tetrafurans	24.87	2.743e3	3.724e3	0.727	0.74	0.77	33.6	YES	NO	bb	bb	0.791
16	Total-tetrafurans	24.69	8.813e3	1.132e4	0.727	0.78	0.77	107.6	YES	NO	db	db	2.462

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.95	6.097e2	3.982e2		1.53	1.55	15.0	YES	NO	bb	bb	0.146
2	Total-penta1	27.22	1.072e5	6.919e4		1.55	1.55	2476.8	YES	NO	bb	bb	25.531

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	31.01	1.760e3	9.901e2	0.654	1.78	1.55	22.2	YES	NO	bd	bd	0.569
2	12378-PeCDF	29.93	2.054e3	1.410e3	0.679	1.46	1.55	24.3	YES	NO	bb	bb	0.677
3	Total-pentafurans	29.58	7.884e3	5.745e3	0.654	1.37	1.55	88.1	YES	NO	dd	db	2.819
4	Total-pentafurans	28.99	1.712e3	1.107e3	0.654	1.55	1.55	21.4	YES	NO	db	db	0.583
5	Total-pentafurans	28.88	2.816e4	1.895e4	0.654	1.49	1.55	232.4	YES	NO	MM	MM	9.747
6	Total-pentafurans	28.70	2.846e3	1.966e3	0.654	1.45	1.55	32.5	YES	NO	bd	dd	0.995
7	23478-PeCDF	31.28	3.680e3	2.776e3	0.786	1.33	1.55	43.0	YES	NO	db	dd	1.133
8	Total-pentafurans	31.14	6.670e3	4.800e3	0.654	1.39	1.55	77.3	YES	NO	dd	dd	2.373

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk**HF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.05	1.113e4	8.885e3	1.091	1.25	1.24	108.0	YES	NO	db	db	2.607
2	123478-HxCDF	34.90	1.745e4	1.374e4	1.166	1.27	1.24	164.7	YES	NO	bd	bd	3.916
3	Total-hexafurans	34.75	2.366e3	1.812e3	1.141	1.31	1.24	24.1	YES	NO	bb	bb	0.550
4	Total-hexafurans	34.29	2.763e5	2.198e5	1.141	1.26	1.24	2622.4	YES	NO	bb	bb	65.260
5	Total-hexafurans	33.98	3.272e3	2.599e3	1.141	1.26	1.24	30.2	YES	NO	bb	bb	0.772
6	Total-hexafurans	33.45	1.423e5	1.136e5	1.141	1.25	1.24	1364.0	YES	NO	bb	bb	33.666
7	123468-HxCDF	33.24	5.065e4	4.018e4	1.169	1.26	1.24	492.7	YES	NO	bb	bb	11.376
8	123789-HxCDF	36.91	4.230e3	3.342e3	1.137	1.27	1.24	33.5	YES	NO	bb	bb	1.083
9	234678-HxCDF	35.90	1.745e4	1.383e4	1.140	1.26	1.24	107.2	YES	NO	bb	bb	4.133
10	Total-hexafurans	35.38	7.691e2	6.950e2	1.141	1.11	1.24	7.4	YES	NO	bb	bb	0.193

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	39.44	7.310e5	7.419e5	0.978	0.99	1.05	4522.6	YES	NO	bb	bb	283.692
2	1234678-HpCDF	38.78	6.360e5	6.372e5	1.003	1.00	1.05	4068.0	YES	NO	bb	bb	225.302
3	1234789-HpCDF	41.03	9.459e3	9.855e3	0.953	0.96	1.05	49.4	YES	NO	bd	bb	4.067

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.04	2.700e3	3.161e3	0.727	0.85	0.77	23.9	YES	NO	db	dd	0.717
2	Total-tetrafurans	23.88	1.143e3	1.558e3	0.727	0.73	0.77	14.6	YES	NO	dd	dd	0.330
3	Total-tetrafurans	23.77	9.978e3	1.398e4	0.727	0.71	0.77	110.7	YES	NO	bd	bd	2.930
4	Total-tetrafurans	23.53	4.937e3	6.935e3	0.727	0.71	0.77	57.9	YES	NO	dd	dd	1.452
5	Total-tetrafurans	23.42	2.700e3	3.971e3	0.727	0.68	0.77	26.4	YES	NO	dd	dd	0.816
6	Total-tetrafurans	23.10	1.379e4	1.789e4	0.727	0.77	0.77	162.0	YES	NO	bd	bd	3.875
7	Total-tetrafurans	22.53	3.797e3	5.210e3	0.727	0.73	0.77	42.6	YES	NO	db	bb	1.101
8	1368-TCDF	22.27	1.478e3	1.917e3	0.802	0.77	0.77	17.5	YES	NO	bd	bb	0.377
9	Total-Furans	21.20	5.998e2	8.248e2	0.922	0.73	0.77	5.9	YES	NO	bb	bb	0.137
10	Total-tetrafurans	26.01	2.535e3	3.649e3	0.727	0.69	0.77	24.1	YES	NO	dd	dd	0.756
11	Total-tetrafurans	25.92	1.307e3	1.950e3	0.727	0.67	0.77	15.5	YES	NO	dd	dd	0.398
12	2378-TCDF	25.79	4.199e3	5.455e3	0.702	0.77	0.77	44.9	YES	NO	bd	bd	1.223
13	Total-tetrafurans	25.55	3.805e3	5.226e3	0.727	0.73	0.77	29.4	YES	NO	bb	bb	1.104
14	Total-tetrafurans	25.28	1.013e3	1.222e3	0.727	0.83	0.77	10.5	YES	NO	db	db	0.273
15	Total-tetrafurans	25.10	2.230e3	2.919e3	0.727	0.76	0.77	22.0	YES	NO	bd	bd	0.630
16	Total-tetrafurans	24.87	2.743e3	3.724e3	0.727	0.74	0.77	33.6	YES	NO	bb	bb	0.791
17	Total-tetrafurans	24.69	8.813e3	1.132e4	0.727	0.78	0.77	107.6	YES	NO	db	db	2.462
18	Total-pentafurans	31.01	1.760e3	9.901e2	0.654	1.78	1.55	22.2	YES	NO	bd	bd	0.569
19	12378-PeCDF	29.93	2.054e3	1.410e3	0.679	1.46	1.55	24.3	YES	NO	bb	bb	0.677
20	Total-pentafurans	29.58	7.884e3	5.745e3	0.654	1.37	1.55	88.1	YES	NO	dd	db	2.819
21	Total-pentafurans	28.99	1.712e3	1.107e3	0.654	1.55	1.55	21.4	YES	NO	db	db	0.583
22	Total-pentafurans	28.88	2.816e4	1.895e4	0.654	1.49	1.55	232.4	YES	NO	MM	MM	9.747
23	Total-pentafurans	28.70	2.846e3	1.966e3	0.654	1.45	1.55	32.5	YES	NO	bd	dd	0.995
24	23478-PeCDF	31.28	3.680e3	2.776e3	0.786	1.33	1.55	43.0	YES	NO	db	dd	1.133
25	Total-pentafurans	31.14	6.670e3	4.800e3	0.654	1.39	1.55	77.3	YES	NO	dd	dd	2.373
26	123678-HxCDF	35.05	1.113e4	8.885e3	1.091	1.25	1.24	108.0	YES	NO	db	db	2.607
27	123478-HxCDF	34.90	1.745e4	1.374e4	1.166	1.27	1.24	164.7	YES	NO	bd	bd	3.916
28	Total-hexafurans	34.75	2.366e3	1.812e3	1.141	1.31	1.24	24.1	YES	NO	bb	bb	0.550
29	Total-hexafurans	34.29	2.763e5	2.198e5	1.141	1.26	1.24	2622.4	YES	NO	bb	bb	65.260
30	Total-hexafurans	33.98	3.272e3	2.599e3	1.141	1.26	1.24	30.2	YES	NO	bb	bb	0.772
31	Total-hexafurans	33.45	1.423e5	1.136e5	1.141	1.25	1.24	1364.0	YES	NO	bb	bb	33.666
32	123468-HXCDF	33.24	5.065e4	4.018e4	1.169	1.26	1.24	492.7	YES	NO	bb	bb	11.376
33	123789-HxCDF	36.91	4.230e3	3.342e3	1.137	1.27	1.24	33.5	YES	NO	bb	bb	1.083
34	234678-HxCDF	35.90	1.745e4	1.383e4	1.140	1.26	1.24	107.2	YES	NO	bb	bb	4.133
35	Total-hexafurans	35.38	7.691e2	6.950e2	1.141	1.11	1.24	7.4	YES	NO	bb	bb	0.193
36	Total-heptafurans	39.44	7.310e5	7.419e5	0.978	0.99	1.05	4522.6	YES	NO	bb	bb	283.692
37	1234678-HpCDF	38.78	6.360e5	6.372e5	1.003	1.00	1.05	4068.0	YES	NO	bb	bb	225.302

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	OCDF	45.26	4.167e5	4.750e5	0.778	0.88	0.89	5518.7	YES	NO	bb	bb	261.256
39	1234789-HpCDF	41.03	9.459e3	9.855e3	0.953	0.96	1.05	49.4	YES	NO	bd	bb	4.067
40	Total-penta1	27.95	6.097e2	3.982e2		1.53	1.55	15.0	YES	NO	bb	bb	0.146
41	Total-penta1	27.22	1.072e5	6.919e4		1.55	1.55	2476.8	YES	NO	bb	bb	25.531

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	24.55	9.978e2	1.208e3	1.024	0.83	0.77	14.5	YES	NO	bd	bb	0.240
2	Total-tetradoxins	24.04	1.038e3	1.255e3	1.024	0.83	0.77	11.2	YES	NO	db	db	0.250
3	Total-tetradoxins	23.83	3.237e3	3.964e3	1.024	0.82	0.77	46.4	YES	NO	bd	bd	0.784
4	1368-TCDD	23.54	4.935e3	6.248e3	1.015	0.79	0.77	74.8	YES	NO	bb	bb	1.229
5	1289-TCDD	27.02	2.838e2	3.890e2	0.909	0.73	0.77	4.2	YES	NO	bb	bd	0.083
6	Total-tetradoxins	25.39	7.510e2	9.390e2	1.024	0.80	0.77	11.2	YES	NO	bb	db	0.184
7	Total-tetradoxins	25.03	2.579e3	3.758e3	1.024	0.69	0.77	37.0	YES	NO	bb	bb	0.690
8	Total-tetradoxins	24.76	1.663e3	1.958e3	1.024	0.85	0.77	21.6	YES	NO	db	bb	0.395

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadoxins	30.15	3.277e3	2.464e3	1.502	1.33	1.55	37.6	YES	NO	bd	bd	0.681
2	Total-pentadoxins	29.93	4.583e3	3.159e3	1.502	1.45	1.55	49.6	YES	NO	bb	bb	0.919
3	Total-pentadoxins	29.32	1.007e3	7.254e2	1.502	1.39	1.55	12.8	YES	NO	bb	bb	0.206
4	12378-PeCDD	31.54	4.274e3	2.730e3	1.022	1.57	1.55	44.3	YES	NO	bb	bb	1.222
5	Total-pentadoxins	30.29	3.397e3	1.996e3	1.502	1.70	1.55	38.9	YES	NO	dd	dd	0.640
6	12479-PECDD	28.85	9.199e3	6.673e3	2.301	1.38	1.55	72.7	YES	NO	MM	MM	1.230

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDD	36.15	2.194e4	1.833e4	1.001	1.20	1.24	237.0	YES	NO	dd	dd	6.534
2	123478-HxCDD	36.04	3.821e3	3.189e3	0.996	1.20	1.24	42.2	YES	NO	bd	bd	1.138
3	Total-hexadoxins	35.15	6.119e4	5.165e4	1.005	1.18	1.24	449.4	YES	NO	bd	bb	18.193
4	Total-hexadoxins	34.79	8.989e3	7.416e3	1.005	1.21	1.24	99.4	YES	NO	bb	bb	2.645
5	124679-HXCDD	34.01	4.601e4	3.703e4	1.115	1.24	1.24	471.0	YES	NO	bb	bb	12.029
6	123789-HxCDD	36.53	1.344e4	1.185e4	0.907	1.13	1.24	145.4	YES	NO	bb	bb	4.516
7	Total-hexadoxins	36.31	1.748e3	1.259e3	1.005	1.39	1.24	15.4	YES	NO	db	db	0.485

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk**HPD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.28	5.490e5	5.364e5	1.039	1.02	1.05	3422.3	YES	NO	bb	bb	182.358
2	1234679-HPCDD	39.24	5.461e5	5.375e5	1.137	1.02	1.05	3697.4	YES	NO	bb	bb	166.392

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	24.55	9.978e2	1.208e3	1.024	0.83	0.77	14.5	YES	NO	bd	bb	0.240
2	Total-tetradoxins	24.04	1.038e3	1.255e3	1.024	0.83	0.77	11.2	YES	NO	db	db	0.250
3	Total-tetradoxins	23.83	3.237e3	3.964e3	1.024	0.82	0.77	46.4	YES	NO	bd	bd	0.784
4	1368-TCDD	23.54	4.935e3	6.248e3	1.015	0.79	0.77	74.8	YES	NO	bb	bb	1.229
5	Total-Dioxins	22.68	3.707e2	4.704e2	1.130	0.79	0.77	5.0	YES	NO	bb	bb	0.083
6	1289-TCDD	27.02	2.838e2	3.890e2	0.909	0.73	0.77	4.2	YES	NO	bb	bd	0.083
7	Total-tetradoxins	25.39	7.510e2	9.390e2	1.024	0.80	0.77	11.2	YES	NO	bb	db	0.184
8	Total-tetradoxins	25.03	2.579e3	3.758e3	1.024	0.69	0.77	37.0	YES	NO	bb	bb	0.690
9	Total-tetradoxins	24.76	1.663e3	1.958e3	1.024	0.85	0.77	21.6	YES	NO	db	bb	0.395
10	Total-pentadoxins	30.15	3.277e3	2.464e3	1.502	1.33	1.55	37.6	YES	NO	bd	bd	0.681
11	Total-pentadoxins	29.93	4.583e3	3.159e3	1.502	1.45	1.55	49.6	YES	NO	bb	bb	0.919
12	Total-pentadoxins	29.32	1.007e3	7.254e2	1.502	1.39	1.55	12.8	YES	NO	bb	bb	0.206
13	12378-PeCDD	31.54	4.274e3	2.730e3	1.022	1.57	1.55	44.3	YES	NO	bb	bb	1.222
14	Total-pentadoxins	30.29	3.397e3	1.996e3	1.502	1.70	1.55	38.9	YES	NO	dd	dd	0.640
15	123678-HxCDD	36.15	2.194e4	1.833e4	1.001	1.20	1.24	237.0	YES	NO	dd	dd	6.534
16	123478-HxCDD	36.04	3.821e3	3.189e3	0.996	1.20	1.24	42.2	YES	NO	bd	bd	1.138
17	Total-hexadoxins	35.15	6.119e4	5.165e4	1.005	1.18	1.24	449.4	YES	NO	bd	bb	18.193
18	Total-hexadoxins	34.79	8.989e3	7.416e3	1.005	1.21	1.24	99.4	YES	NO	bb	bb	2.645
19	124679-HXCDD	34.01	4.601e4	3.703e4	1.115	1.24	1.24	471.0	YES	NO	bb	bb	12.029
20	123789-HxCDD	36.53	1.344e4	1.185e4	0.907	1.13	1.24	145.4	YES	NO	bb	bb	4.516
21	Total-hexadoxins	36.31	1.748e3	1.259e3	1.005	1.39	1.24	15.4	YES	NO	db	db	0.485
22	1234678-HpCDD	40.28	5.490e5	5.364e5	1.039	1.02	1.05	3422.3	YES	NO	bb	bb	182.358
23	1234679-HPCDD	39.24	5.461e5	5.375e5	1.137	1.02	1.05	3697.4	YES	NO	bb	bb	166.392
24	OCDD	45.03	3.317e6	3.877e6	0.920	0.86	0.89	32195.3	YES	NO	bb	bb	1781.7...
25	12479-PECDD	28.85	9.199e3	6.673e3	2.301	1.38	1.55	72.7	YES	NO	MM	MM	1.230

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.04	2.700e3	3.161e3	0.727	0.85	0.77	23.9	YES	NO	db	dd	0.717
2	Total-tetrafurans	23.88	1.143e3	1.558e3	0.727	0.73	0.77	14.6	YES	NO	dd	dd	0.330
3	Total-tetrafurans	23.77	9.978e3	1.398e4	0.727	0.71	0.77	110.7	YES	NO	bd	bd	2.930
4	Total-tetrafurans	23.53	4.937e3	6.935e3	0.727	0.71	0.77	57.9	YES	NO	dd	dd	1.452
5	Total-tetrafurans	23.42	2.700e3	3.971e3	0.727	0.68	0.77	26.4	YES	NO	dd	dd	0.816
6	Total-tetrafurans	23.10	1.379e4	1.789e4	0.727	0.77	0.77	162.0	YES	NO	bd	bd	3.875
7	Total-tetrafurans	22.53	3.797e3	5.210e3	0.727	0.73	0.77	42.6	YES	NO	db	bb	1.101
8	1368-TCDF	22.27	1.478e3	1.917e3	0.802	0.77	0.77	17.5	YES	NO	bd	bb	0.377
9	Total-Furans	21.20	5.998e2	8.248e2	0.922	0.73	0.77	5.9	YES	NO	bb	bb	0.137
10	Total-tetrafurans	26.01	2.535e3	3.649e3	0.727	0.69	0.77	24.1	YES	NO	dd	dd	0.756
11	Total-tetrafurans	25.92	1.307e3	1.950e3	0.727	0.67	0.77	15.5	YES	NO	dd	dd	0.398
12	2378-TCDF	25.79	4.199e3	5.455e3	0.702	0.77	0.77	44.9	YES	NO	bd	bd	1.223
13	Total-tetrafurans	25.55	3.805e3	5.226e3	0.727	0.73	0.77	29.4	YES	NO	bb	bb	1.104
14	Total-tetrafurans	25.28	1.013e3	1.222e3	0.727	0.83	0.77	10.5	YES	NO	db	db	0.273
15	Total-tetrafurans	25.10	2.230e3	2.919e3	0.727	0.76	0.77	22.0	YES	NO	bd	bd	0.630
16	Total-tetrafurans	24.87	2.743e3	3.724e3	0.727	0.74	0.77	33.6	YES	NO	bb	bb	0.791
17	Total-tetrafurans	24.69	8.813e3	1.132e4	0.727	0.78	0.77	107.6	YES	NO	db	db	2.462
18	Total-pentafurans	31.01	1.760e3	9.901e2	0.654	1.78	1.55	22.2	YES	NO	bd	bd	0.569
19	12378-PeCDF	29.93	2.054e3	1.410e3	0.679	1.46	1.55	24.3	YES	NO	bb	bb	0.677
20	Total-pentafurans	29.58	7.884e3	5.745e3	0.654	1.37	1.55	88.1	YES	NO	dd	db	2.819
21	Total-pentafurans	28.99	1.712e3	1.107e3	0.654	1.55	1.55	21.4	YES	NO	db	db	0.583
22	Total-pentafurans	28.88	2.816e4	1.895e4	0.654	1.49	1.55	232.4	YES	NO	MM	MM	9.747
23	Total-pentafurans	28.70	2.846e3	1.966e3	0.654	1.45	1.55	32.5	YES	NO	bd	dd	0.995
24	23478-PeCDF	31.28	3.680e3	2.776e3	0.786	1.33	1.55	43.0	YES	NO	db	dd	1.133
25	Total-pentafurans	31.14	6.670e3	4.800e3	0.654	1.39	1.55	77.3	YES	NO	dd	dd	2.373
26	123678-HxCDF	35.05	1.113e4	8.885e3	1.091	1.25	1.24	108.0	YES	NO	db	db	2.607
27	123478-HxCDF	34.90	1.745e4	1.374e4	1.166	1.27	1.24	164.7	YES	NO	bd	bd	3.916
28	Total-hexafurans	34.75	2.366e3	1.812e3	1.141	1.31	1.24	24.1	YES	NO	bb	bb	0.550
29	Total-hexafurans	34.29	2.763e5	2.198e5	1.141	1.26	1.24	2622.4	YES	NO	bb	bb	65.260
30	Total-hexafurans	33.98	3.272e3	2.599e3	1.141	1.26	1.24	30.2	YES	NO	bb	bb	0.772
31	Total-hexafurans	33.45	1.423e5	1.136e5	1.141	1.25	1.24	1364.0	YES	NO	bb	bb	33.666
32	123468-HXCDF	33.24	5.065e4	4.018e4	1.169	1.26	1.24	492.7	YES	NO	bb	bb	11.376
33	123789-HxCDF	36.91	4.230e3	3.342e3	1.137	1.27	1.24	33.5	YES	NO	bb	bb	1.083
34	234678-HxCDF	35.90	1.745e4	1.383e4	1.140	1.26	1.24	107.2	YES	NO	bb	bb	4.133
35	Total-hexafurans	35.38	7.691e2	6.950e2	1.141	1.11	1.24	7.4	YES	NO	bb	bb	0.193
36	Total-heptafurans	39.44	7.310e5	7.419e5	0.978	0.99	1.05	4522.6	YES	NO	bb	bb	283.692
37	1234678-HpCDF	38.78	6.360e5	6.372e5	1.003	1.00	1.05	4068.0	YES	NO	bb	bb	225.302

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	OCDF	45.26	4.167e5	4.750e5	0.778	0.88	0.89	5518.7	YES	NO	bb	bb	261.256
39	1234789-HpCDF	41.03	9.459e3	9.855e3	0.953	0.96	1.05	49.4	YES	NO	bd	bb	4.067
40	Total-penta1	27.95	6.097e2	3.982e2		1.53	1.55	15.0	YES	NO	bb	bb	0.146
41	Total-penta1	27.22	1.072e5	6.919e4		1.55	1.55	2476.8	YES	NO	bb	bb	25.531
42	Total-tetradoxins	24.55	9.978e2	1.208e3	1.024	0.83	0.77	14.5	YES	NO	bd	bb	0.240
43	Total-tetradoxins	24.04	1.038e3	1.255e3	1.024	0.83	0.77	11.2	YES	NO	db	db	0.250
44	Total-tetradoxins	23.83	3.237e3	3.964e3	1.024	0.82	0.77	46.4	YES	NO	bd	bd	0.784
45	1368-TCDD	23.54	4.935e3	6.248e3	1.015	0.79	0.77	74.8	YES	NO	bb	bb	1.229
46	Total-Dioxins	22.68	3.707e2	4.704e2	1.130	0.79	0.77	5.0	YES	NO	bb	bb	0.083
47	1289-TCDD	27.02	2.838e2	3.890e2	0.909	0.73	0.77	4.2	YES	NO	bb	bd	0.083
48	Total-tetradoxins	25.39	7.510e2	9.390e2	1.024	0.80	0.77	11.2	YES	NO	bb	db	0.184
49	Total-tetradoxins	25.03	2.579e3	3.758e3	1.024	0.69	0.77	37.0	YES	NO	bb	bb	0.690
50	Total-tetradoxins	24.76	1.663e3	1.958e3	1.024	0.85	0.77	21.6	YES	NO	db	bb	0.395
51	Total-pentadoxins	30.15	3.277e3	2.464e3	1.502	1.33	1.55	37.6	YES	NO	bd	bd	0.681
52	Total-pentadoxins	29.93	4.583e3	3.159e3	1.502	1.45	1.55	49.6	YES	NO	bb	bb	0.919
53	Total-pentadoxins	29.32	1.007e3	7.254e2	1.502	1.39	1.55	12.8	YES	NO	bb	bb	0.206
54	12378-PeCDD	31.54	4.274e3	2.730e3	1.022	1.57	1.55	44.3	YES	NO	bb	bb	1.222
55	Total-pentadoxins	30.29	3.397e3	1.996e3	1.502	1.70	1.55	38.9	YES	NO	dd	dd	0.640
56	123678-HxCDD	36.15	2.194e4	1.833e4	1.001	1.20	1.24	237.0	YES	NO	dd	dd	6.534
57	123478-HxCDD	36.04	3.821e3	3.189e3	0.996	1.20	1.24	42.2	YES	NO	bd	bd	1.138
58	Total-hexadoxins	35.15	6.119e4	5.165e4	1.005	1.18	1.24	449.4	YES	NO	bd	bb	18.193
59	Total-hexadoxins	34.79	8.989e3	7.416e3	1.005	1.21	1.24	99.4	YES	NO	bb	bb	2.645
60	124679-HXCDD	34.01	4.601e4	3.703e4	1.115	1.24	1.24	471.0	YES	NO	bb	bb	12.029
61	123789-HxCDD	36.53	1.344e4	1.185e4	0.907	1.13	1.24	145.4	YES	NO	bb	bb	4.516
62	Total-hexadoxins	36.31	1.748e3	1.259e3	1.005	1.39	1.24	15.4	YES	NO	db	db	0.485
63	1234678-HpCDD	40.28	5.490e5	5.364e5	1.039	1.02	1.05	3422.3	YES	NO	bb	bb	182.358
64	1234679-HPCDD	39.24	5.461e5	5.375e5	1.137	1.02	1.05	3697.4	YES	NO	bb	bb	166.392
65	OCDD	45.03	3.317e6	3.877e6	0.920	0.86	0.89	32195.3	YES	NO	bb	bb	1781.7...
66	12479-PECDD	28.85	9.199e3	6.673e3	2.301	1.38	1.55	72.7	YES	NO	MM	MM	1.230

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk**PFK1**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.30	2.599e5					5.4	YES		bb		
2	FUNCTION1 PFK	23.58	8.026e4					4.1	YES		bb		
3	FUNCTION1 PFK	22.68	2.294e5					6.0	YES		db		
4	FUNCTION1 PFK	22.48	3.583e6					14.3	YES		bd		
5	FUNCTION1 PFK	21.97	5.243e6					30.6	YES		db		
6	FUNCTION1 PFK	21.45	5.127e5					13.3	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	29.38	4.334e4					4.8	YES		bb		0.000
2	FUNCTION2 PFK	29.22	3.439e5					9.5	YES		bb		0.000
3	FUNCTION2 PFK	32.25	1.231e6					10.6	YES		bb		0.000
4	FUNCTION2 PFK	29.53	2.370e5					6.5	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.97	8.862e5					15.3	YES		bb		0.000
2	FUNCTION3 PFK	36.58	2.095e6					13.5	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.85	6.028e5					9.1	YES		bb		
2	FUNCTION4 PFK	39.54	2.133e5					7.8	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.72	1.623e6					29.9	YES		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:10 Pacific Standard Time

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk**ETHERS1**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.14	3.879e2					11.5	YES		bb		0.000
2	FUNCTION1 HXCD...	23.78	2.299e3					66.2	YES		bb		0.000
3	FUNCTION1 HXCD...	22.77	3.047e2					7.9	YES		bb		0.000
4	FUNCTION1 HXCD...	22.34	4.235e2					11.3	YES		db		0.000
5	FUNCTION1 HXCD...	22.19	1.283e2					3.4	YES		bd		0.000
6	FUNCTION1 HXCD...	26.81	8.717e2					25.7	YES		bb		0.000
7	FUNCTION1 HXCD...	26.16	1.991e3					58.3	YES		bb		0.000
8	FUNCTION1 HXCD...	25.79	1.579e3					51.0	YES		bb		0.000
9	FUNCTION1 HXCD...	25.56	2.456e2					5.7	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.25	7.067e2					15.7	YES		bb		0.000
2	FUNCTION2 HPCD...	31.16	2.483e2					9.4	YES		bb		0.000
3	FUNCTION2 HPCD...	28.99	1.644e3					44.4	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	33.72	7.098e1					3.1	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.95	1.259e2					3.0	NO		bb		0.000
2	FUNCTION4 NCDPE	38.42	1.426e4					346.3	YES		bb		0.000

ETHERS6

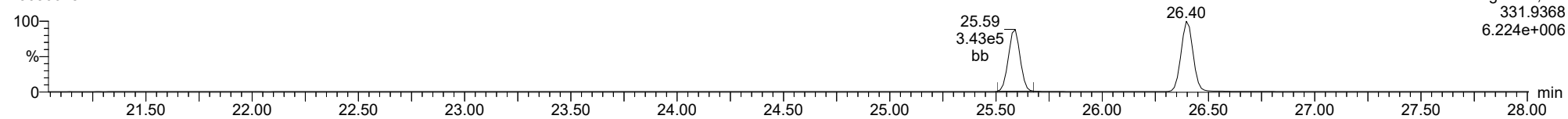
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.05	4.333e2					8.5	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD

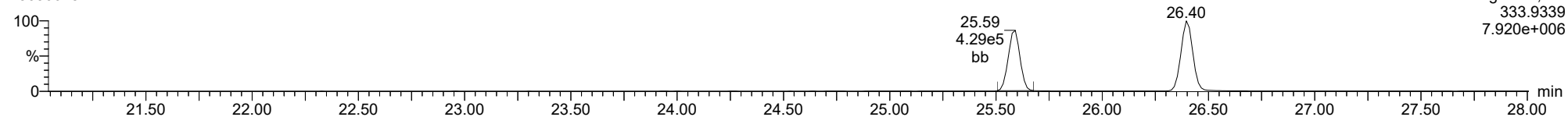
23030628



F1:Voltage SIR,El+
331.9368
6.224e+006

13C-1234-TCDD

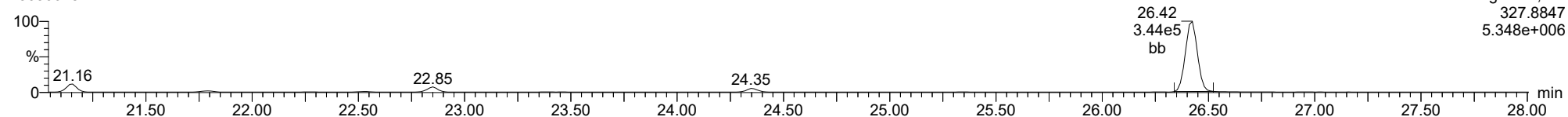
23030628



F1:Voltage SIR,El+
333.9339
7.920e+006

37CL-2378-TCDD

23030628

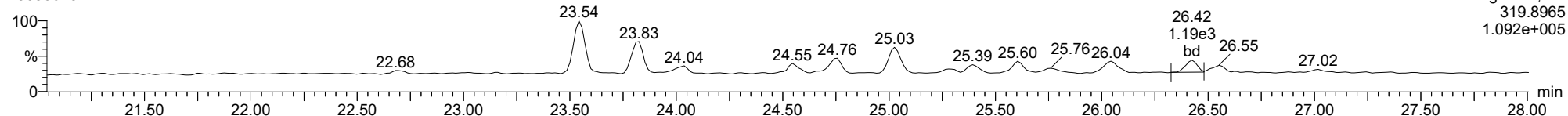


F1:Voltage SIR,El+
327.8847
5.348e+006

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

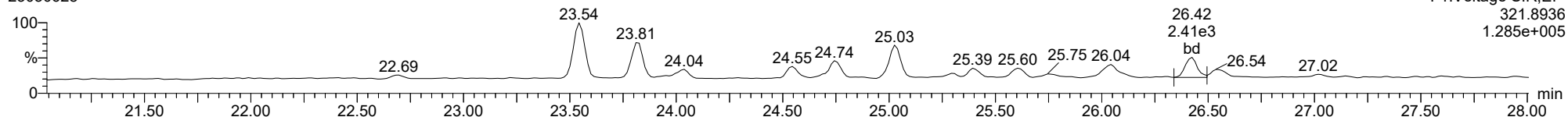
2378-TCDD

23030628



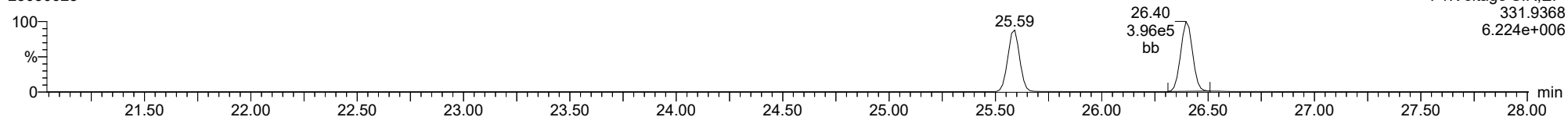
2378-TCDD

23030628



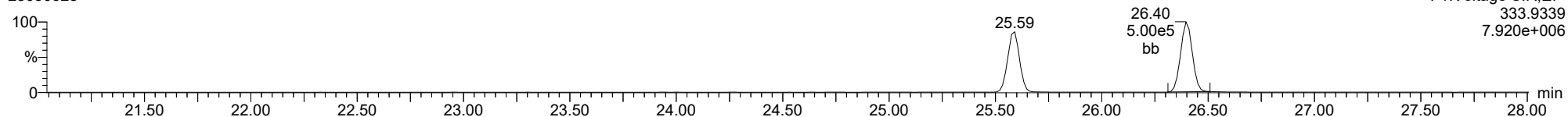
13C-2378-TCDD

23030628



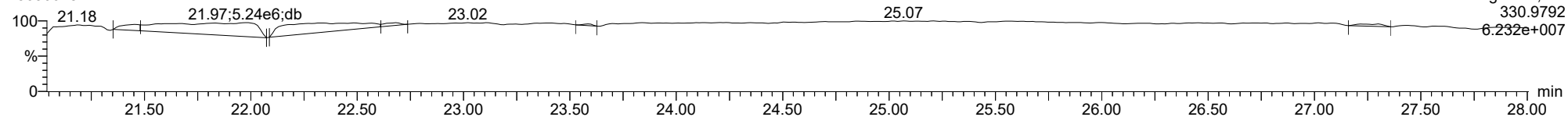
13C-2378-TCDD

23030628



FUNCTION1 PFK

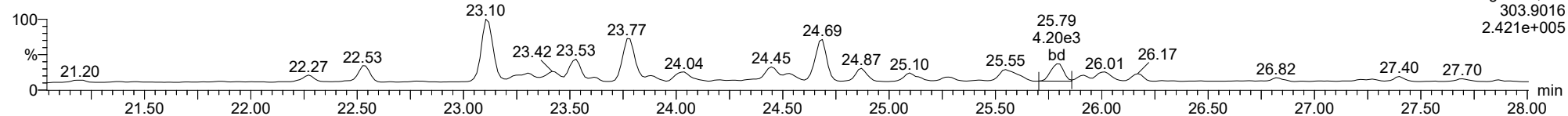
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

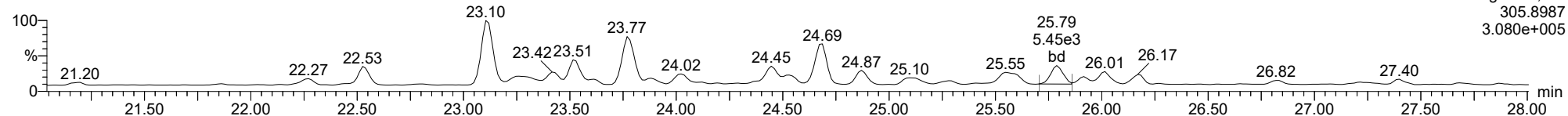
2378-TCDF

23030628



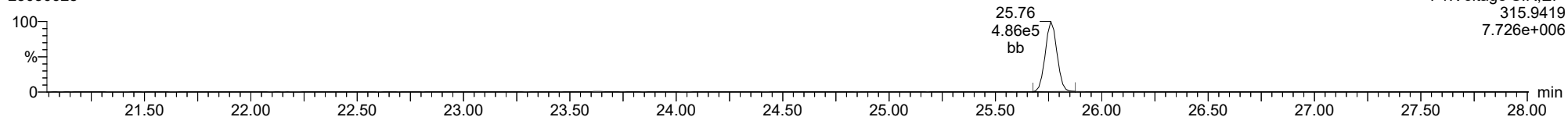
2378-TCDF

23030628



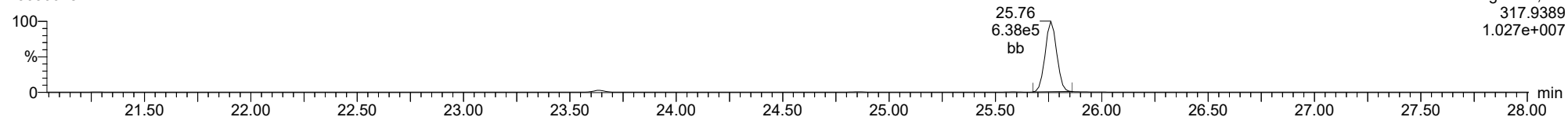
13C-2378-TCDF

23030628



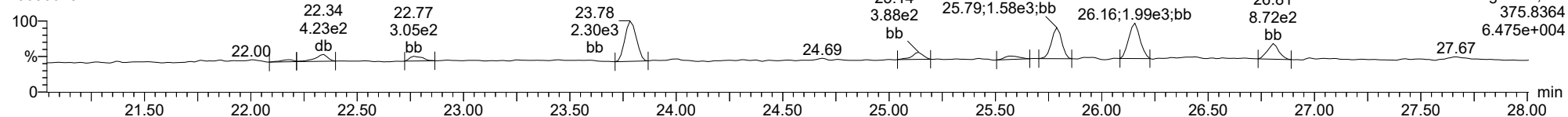
13C-2378-TCDF

23030628



FUNCTION1 HXCDPE

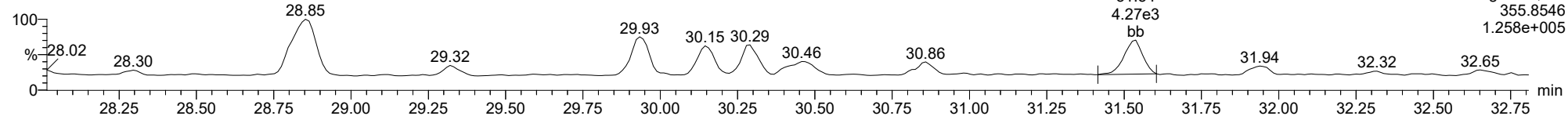
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

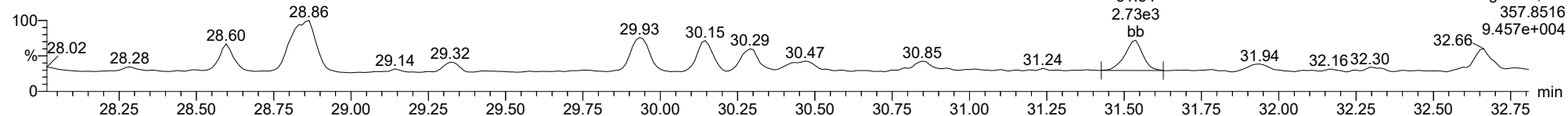
12378-PeCDD

23030628



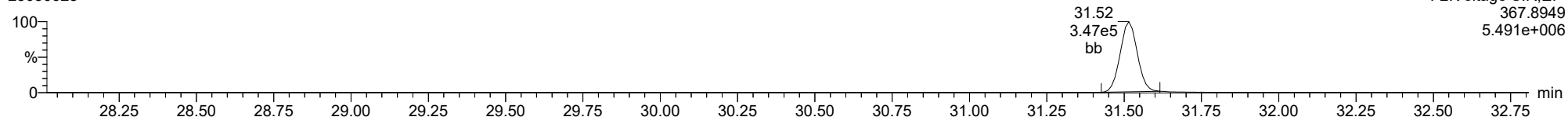
12378-PeCDD

23030628



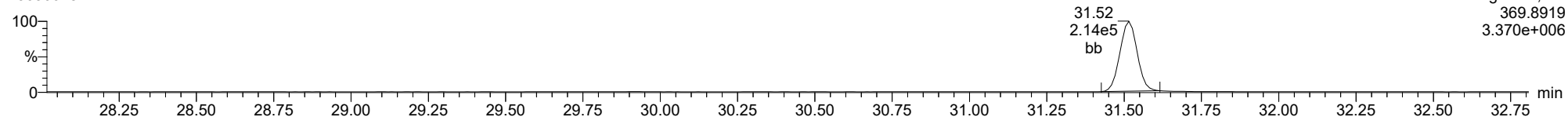
13C-12378-PeCDD

23030628



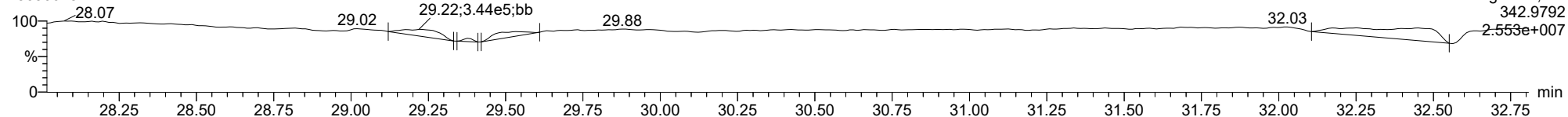
13C-12378-PeCDD

23030628



FUNCTION2 PFK

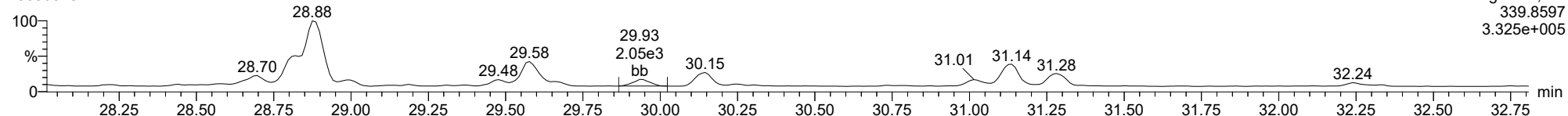
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

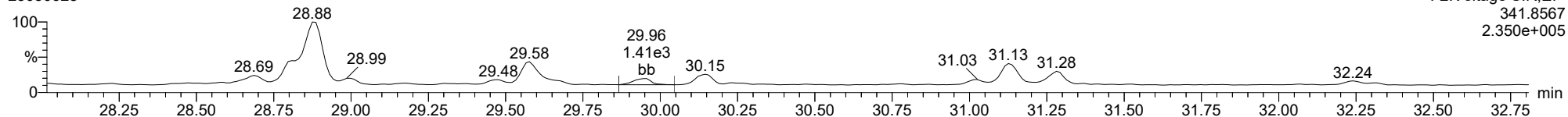
12378-PeCDF

23030628



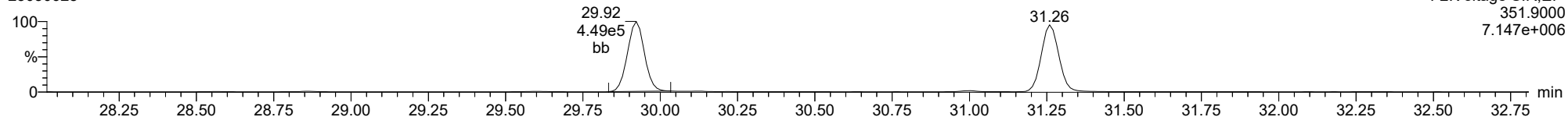
12378-PeCDF

23030628



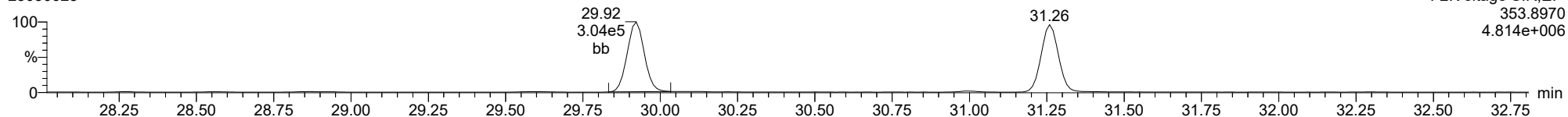
13C-12378-PeCDF

23030628



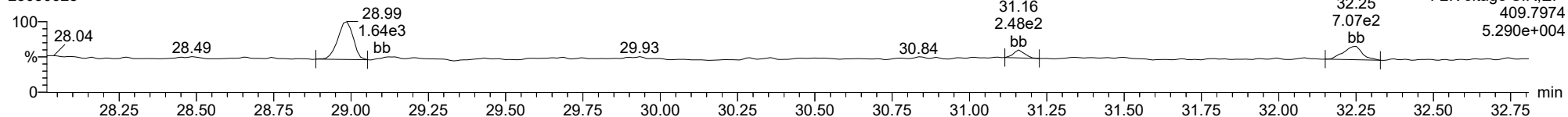
13C-12378-PeCDF

23030628



FUNCTION2 HPCDPE

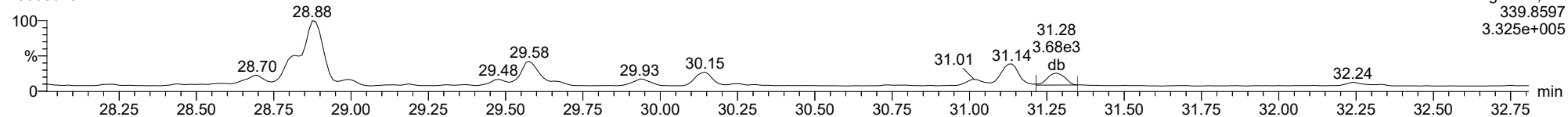
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

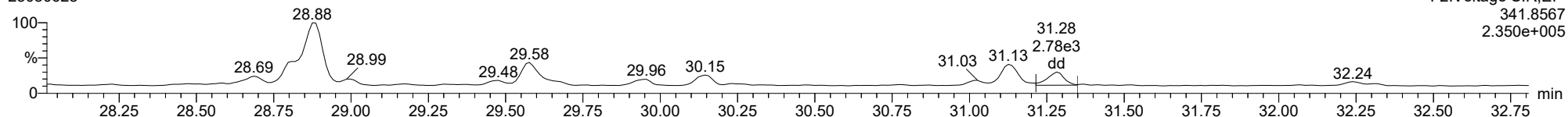
23478-PeCDF

23030628



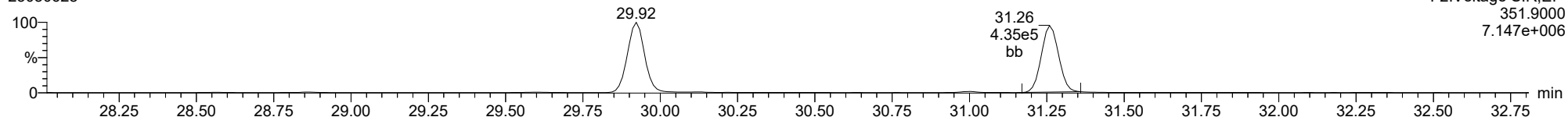
23478-PeCDF

23030628



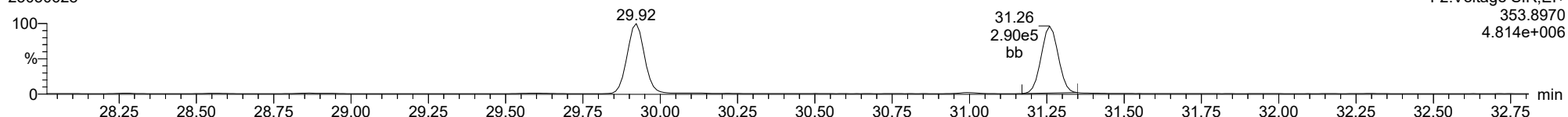
13C-23478-PeCDF

23030628



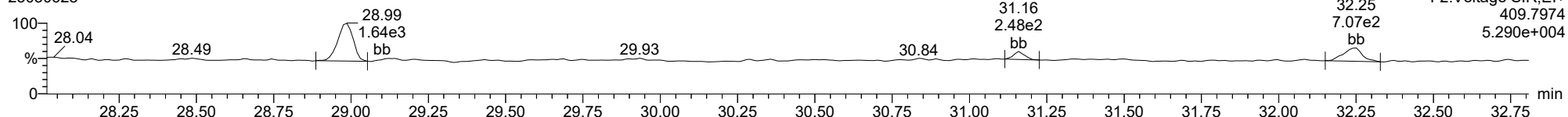
13C-23478-PeCDF

23030628



FUNCTION2 HPCDPE

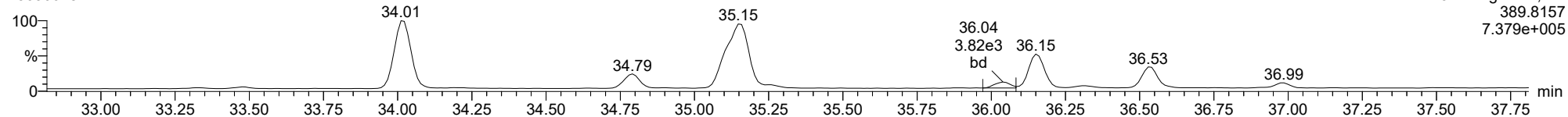
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

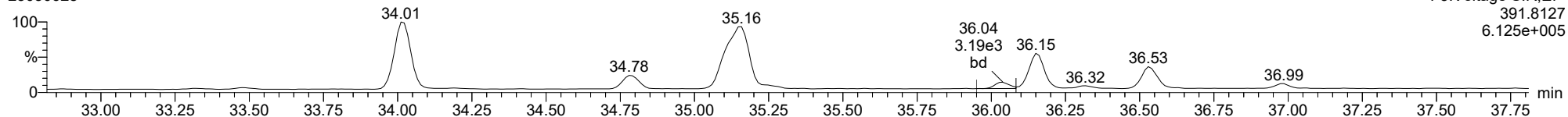
123478-HxCDD

23030628



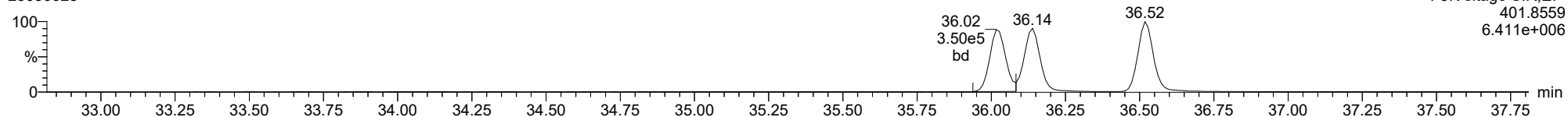
123478-HxCDD

23030628



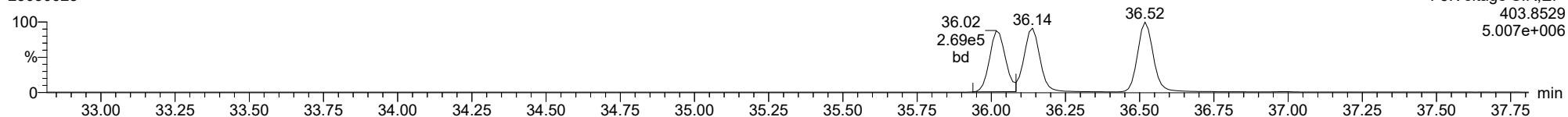
13C-123478-HxCDD

23030628



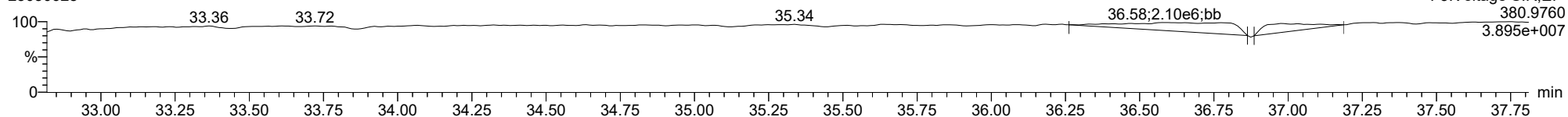
13C-123478-HxCDD

23030628



FUNCTION3 PFK

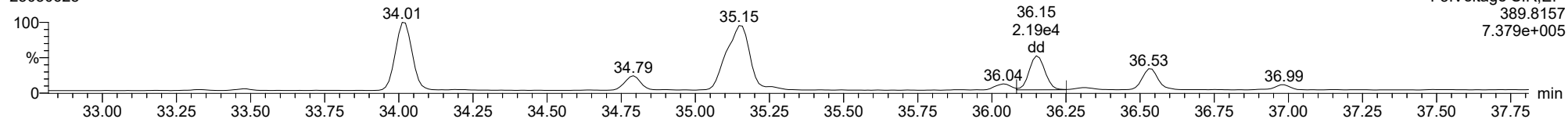
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

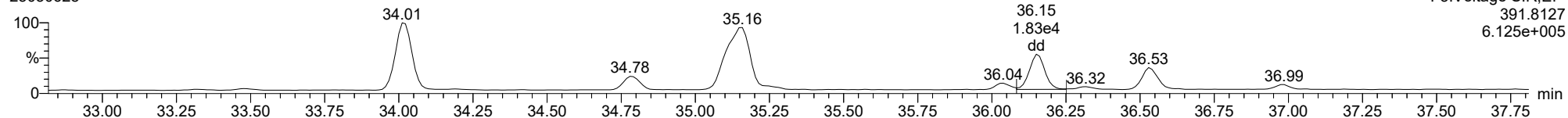
123678-HxCDD

23030628



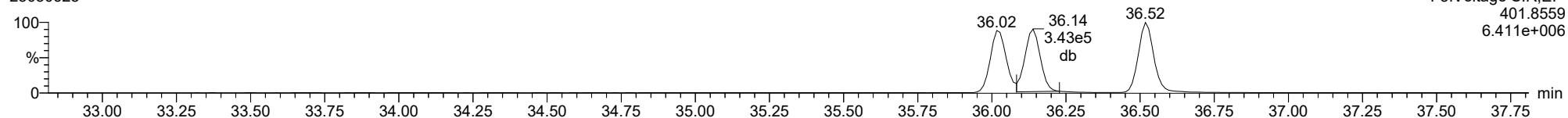
123678-HxCDD

23030628



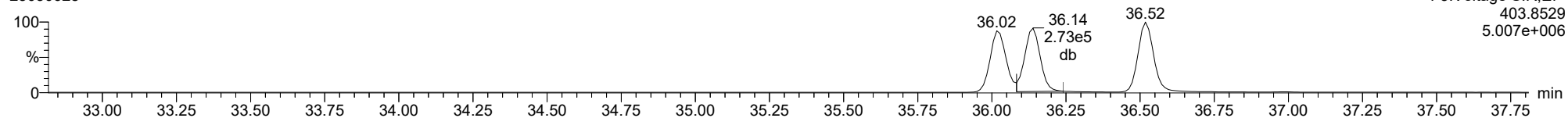
13C-123678-HxCDD

23030628



13C-123678-HxCDD

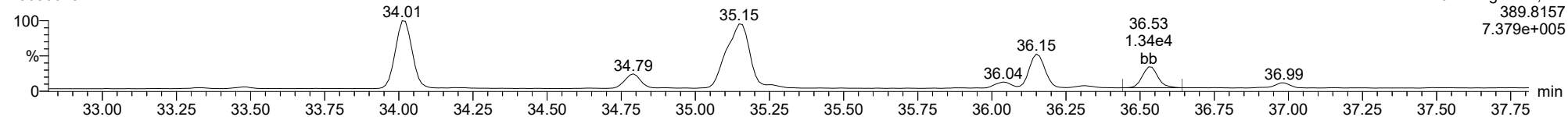
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

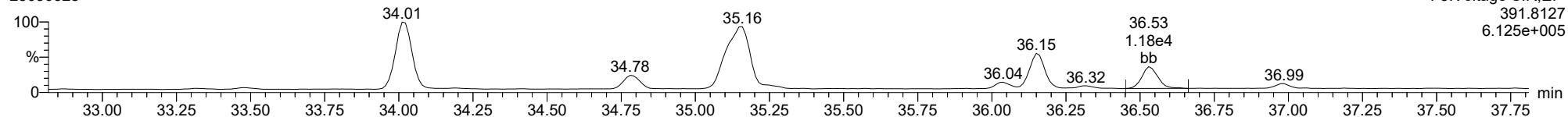
123789-HxCDD

23030628



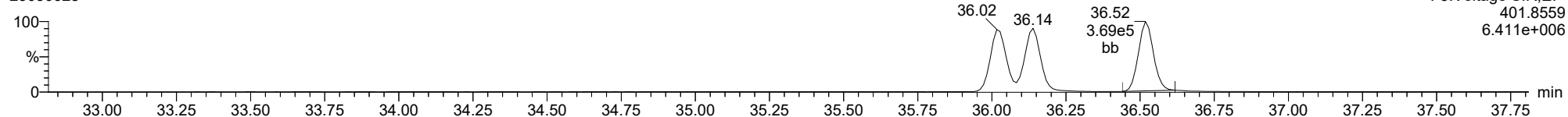
123789-HxCDD

23030628



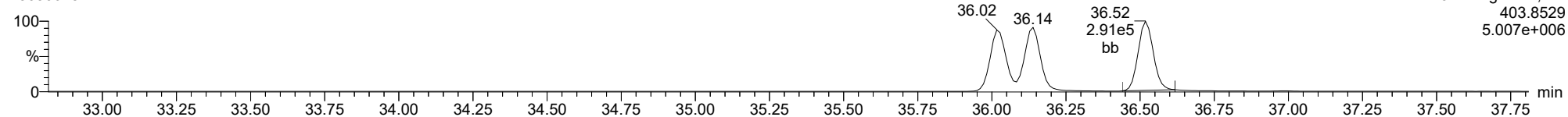
13C-123789-HxCDD

23030628



13C-123789-HxCDD

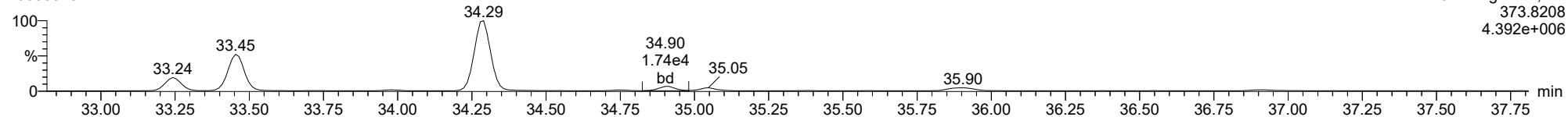
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

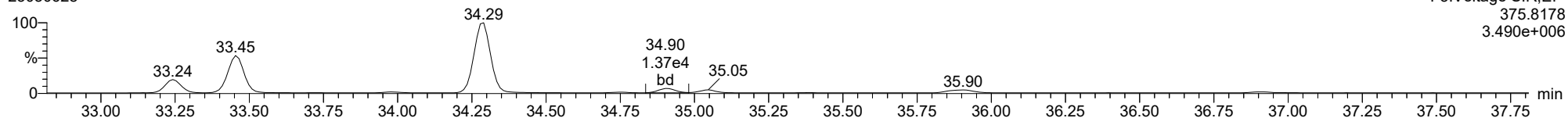
123478-HxCDF

23030628



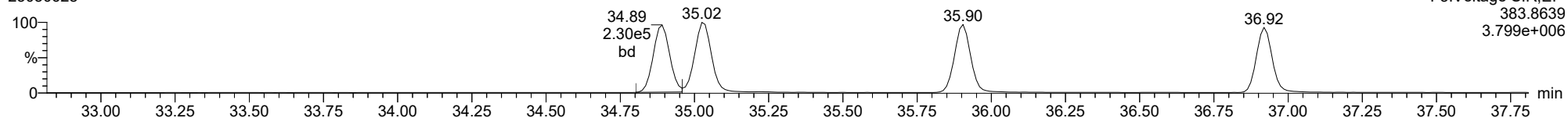
123478-HxCDF

23030628



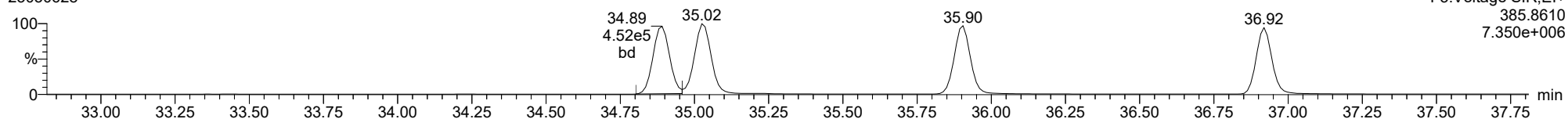
13C-123478-HxCDF

23030628



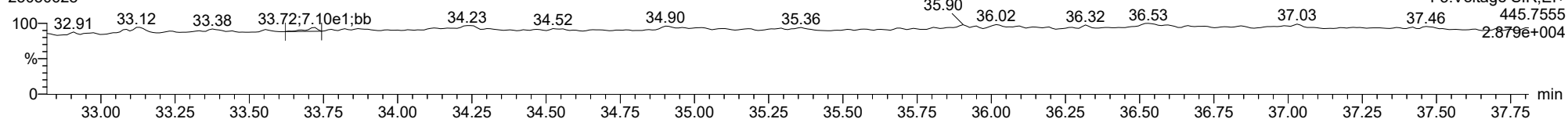
13C-123478-HxCDF

23030628



FUNCTION3 OCDPE

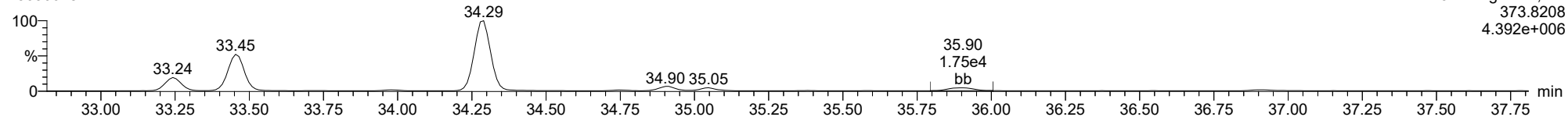
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

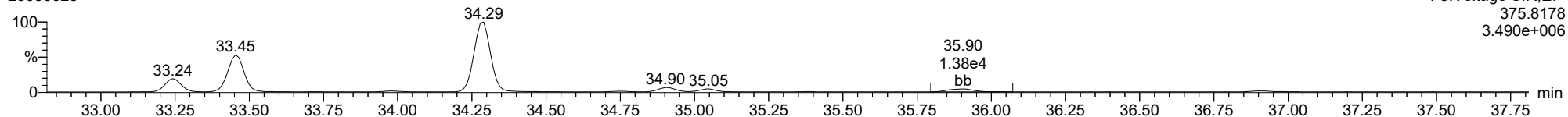
234678-HxCDF

23030628



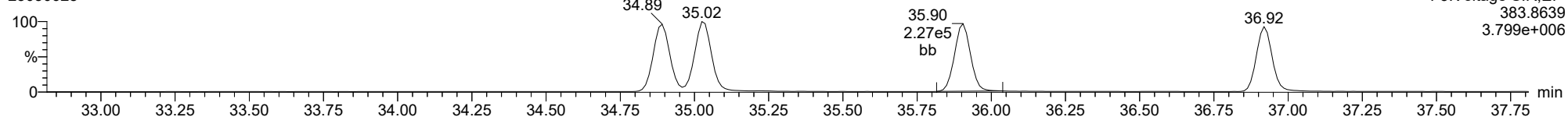
234678-HxCDF

23030628



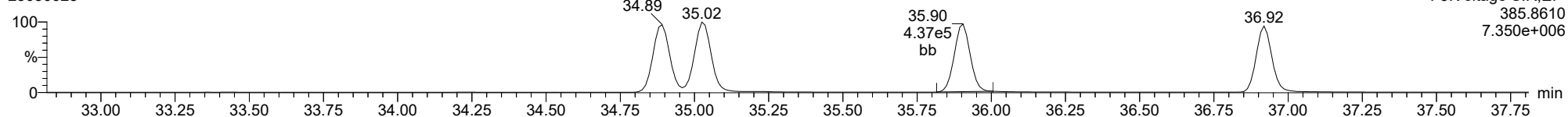
13C-234678-HxCDF

23030628



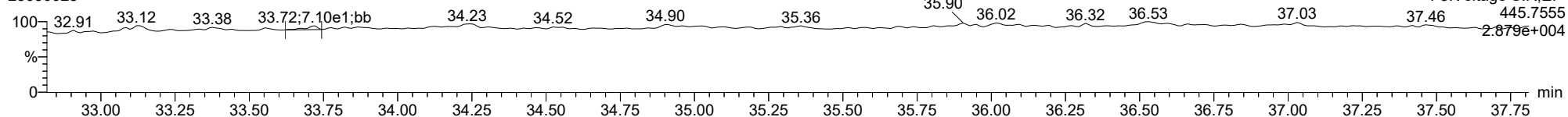
13C-234678-HxCDF

23030628



FUNCTION3 OCDPE

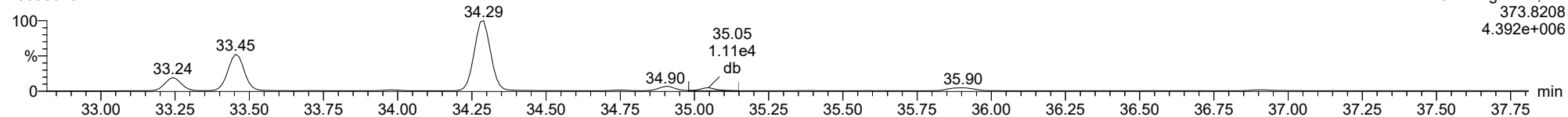
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

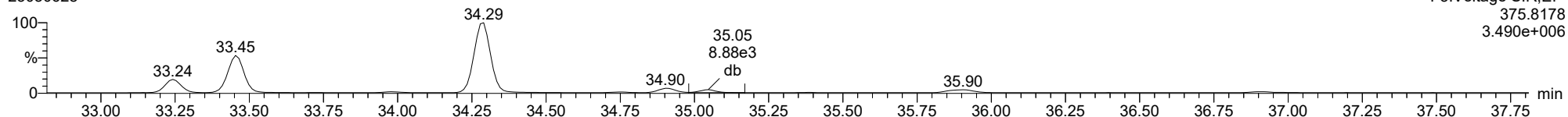
123678-HxCDF

23030628



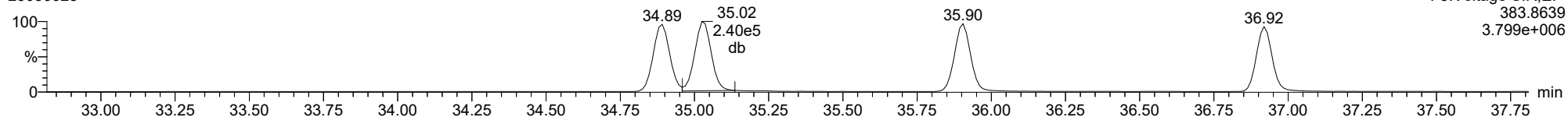
123678-HxCDF

23030628



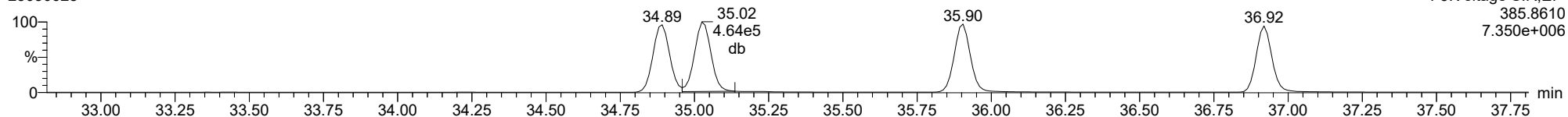
13C-123678-HxCDF

23030628



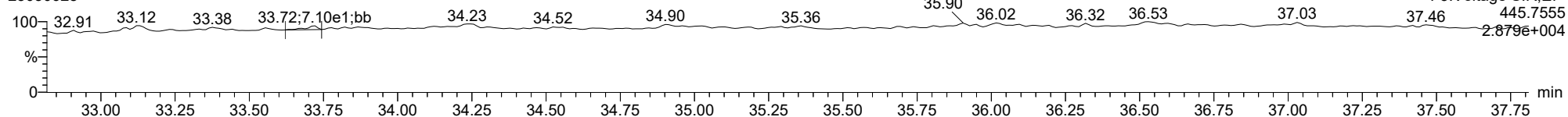
13C-123678-HxCDF

23030628



FUNCTION3 OCDPE

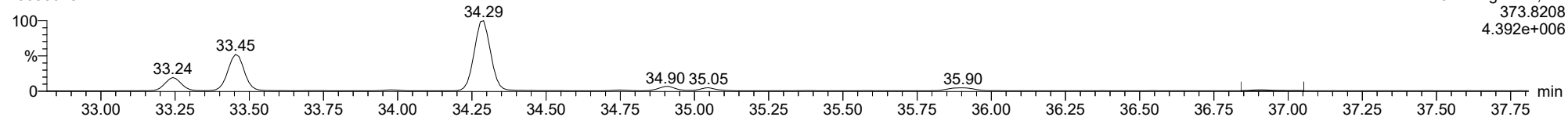
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

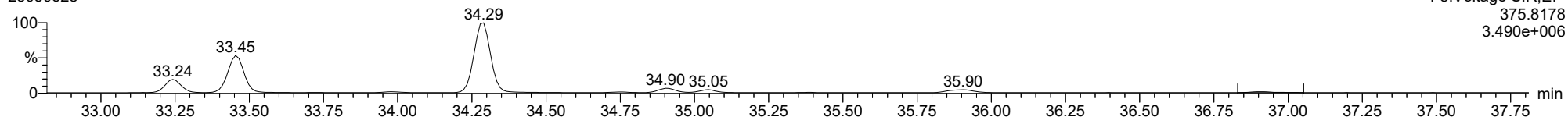
123789-HxCDF

23030628



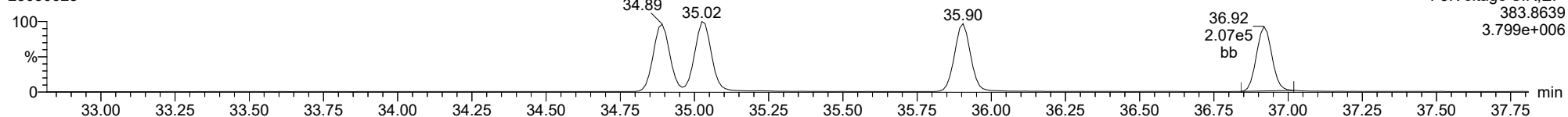
123789-HxCDF

23030628



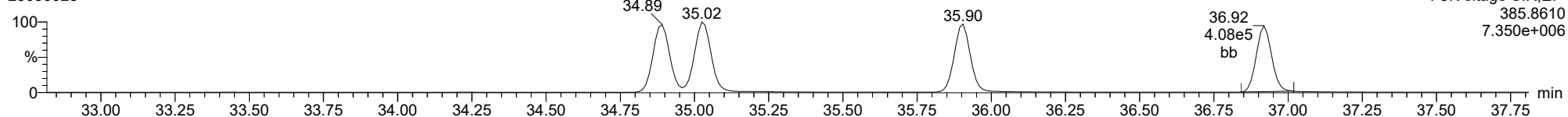
13C-123789-HxCDF

23030628



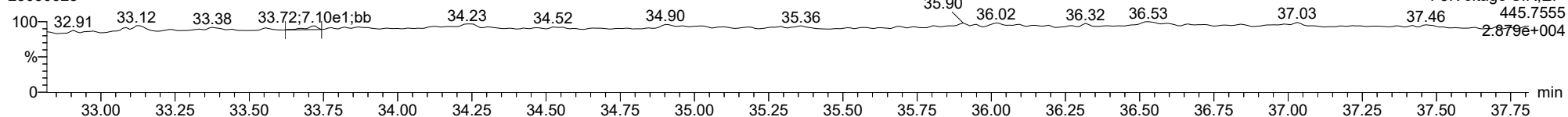
13C-123789-HxCDF

23030628



FUNCTION3 OCDPE

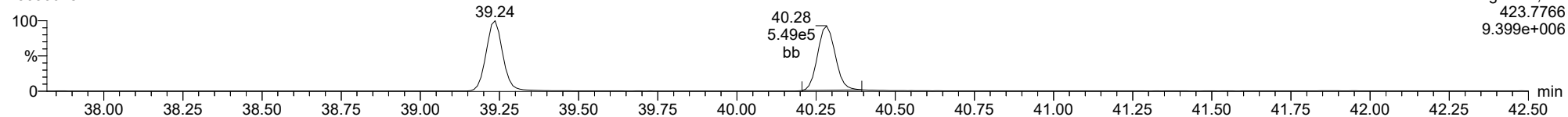
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

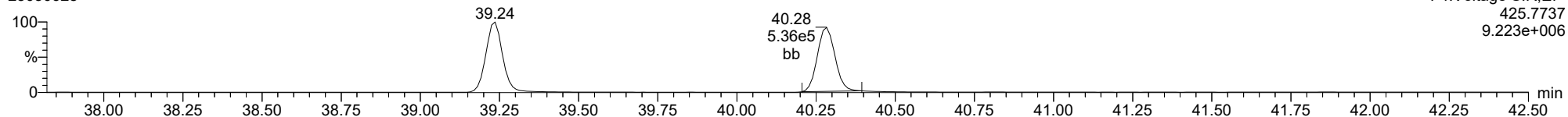
23030628



F4:Voltage SIR,EI+
423.7766
9.399e+006

1234678-HpCDD

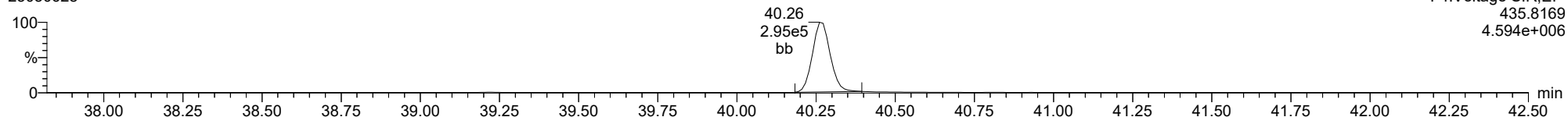
23030628



F4:Voltage SIR,EI+
425.7737
9.223e+006

13C-1234678-HpCDD

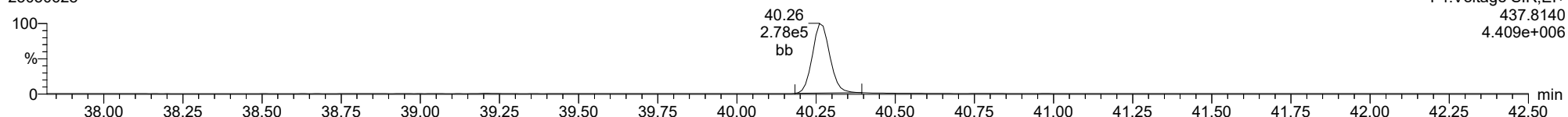
23030628



F4:Voltage SIR,EI+
435.8169
4.594e+006

13C-1234678-HpCDD

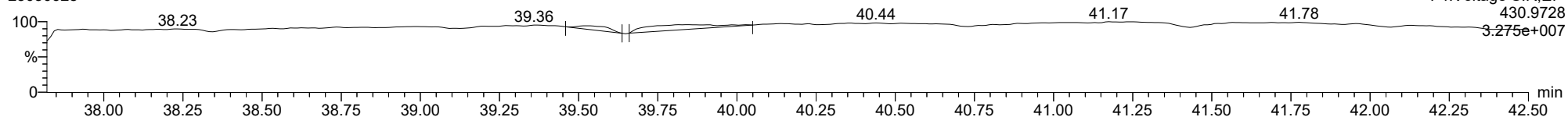
23030628



F4:Voltage SIR,EI+
437.8140
4.409e+006

FUNCTION4 PFK

23030628

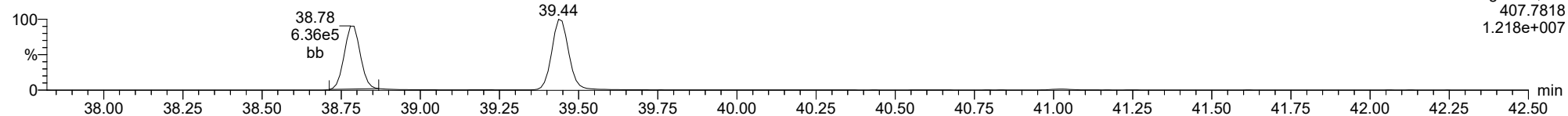


F4:Voltage SIR,EI+
430.9728
3.275e+007

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

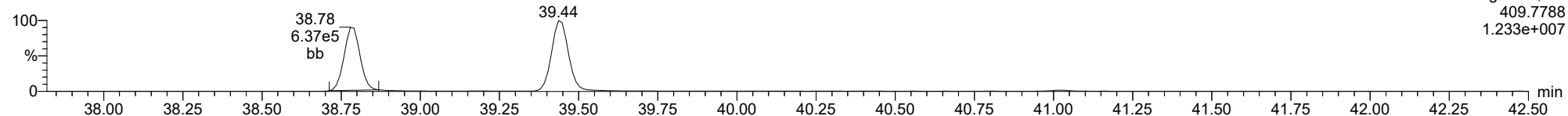
23030628



F4:Voltage SIR,El+
407.7818
1.218e+007

1234678-HpCDF

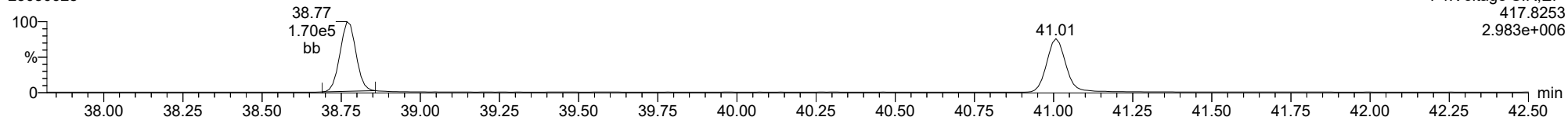
23030628



F4:Voltage SIR,El+
409.7788
1.233e+007

13C-1234678-HpCDF

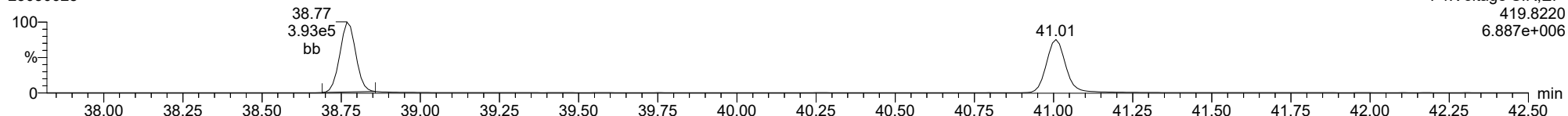
23030628



F4:Voltage SIR,El+
417.8253
2.983e+006

13C-1234678-HpCDF

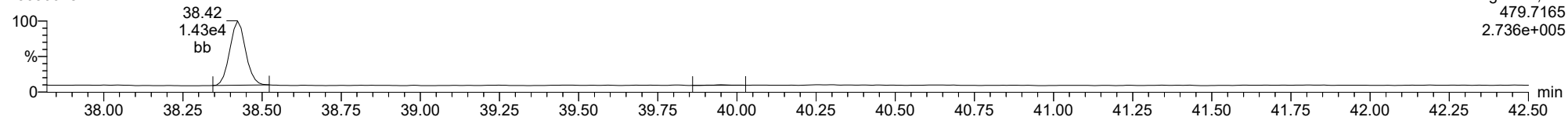
23030628



F4:Voltage SIR,El+
419.8220
6.887e+006

FUNCTION4 NCDPE

23030628

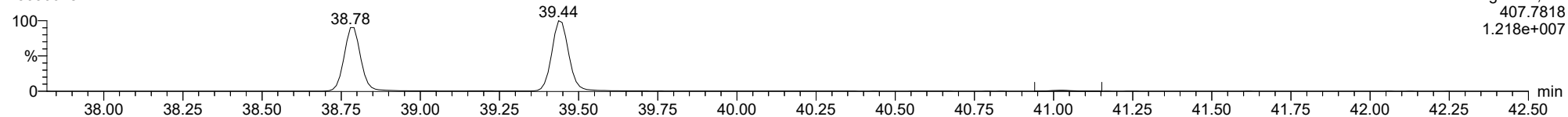


F4:Voltage SIR,El+
479.7165
2.736e+005

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

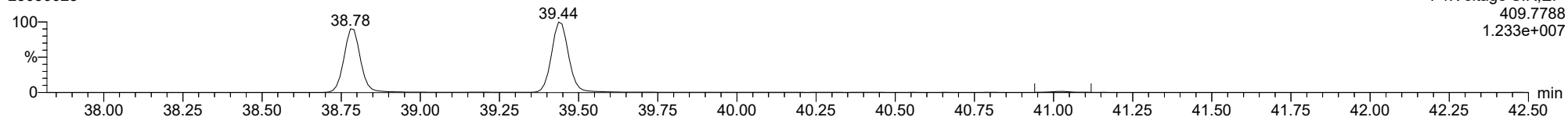
23030628



F4:Voltage SIR,El+
407.7818
1.218e+007

1234789-HpCDF

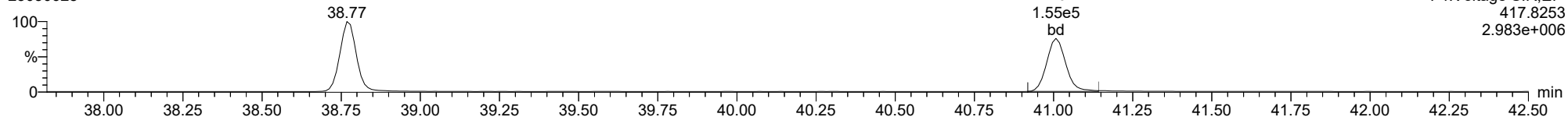
23030628



F4:Voltage SIR,El+
409.7788
1.233e+007

13C-1234789-HpCDF

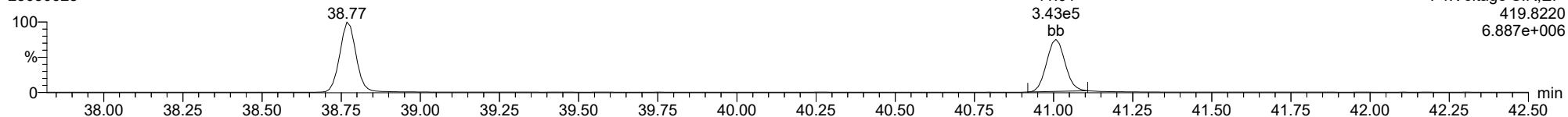
23030628



F4:Voltage SIR,El+
417.8253
2.983e+006

13C-1234789-HpCDF

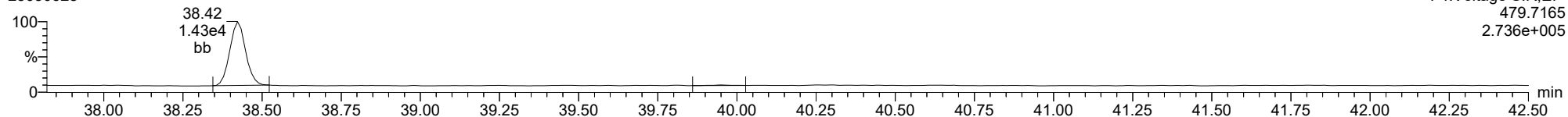
23030628



F4:Voltage SIR,El+
419.8220
6.887e+006

FUNCTION4 NCDPE

23030628

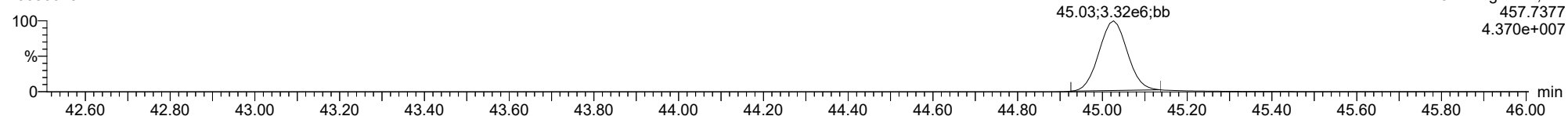


F4:Voltage SIR,El+
479.7165
2.736e+005

ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

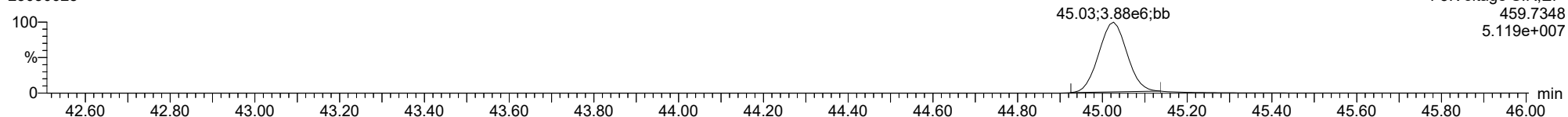
OCDD

23030628



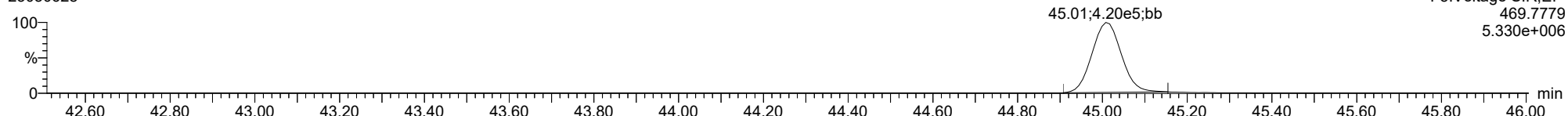
OCDD

23030628



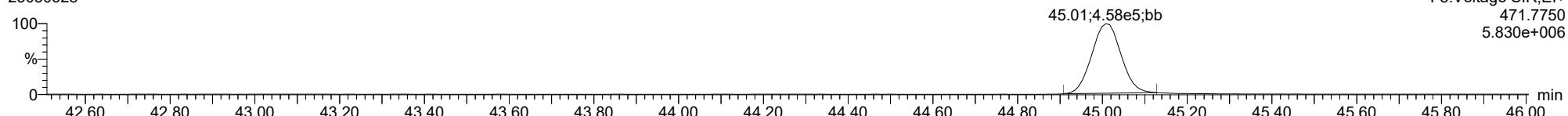
13C-OCDD

23030628



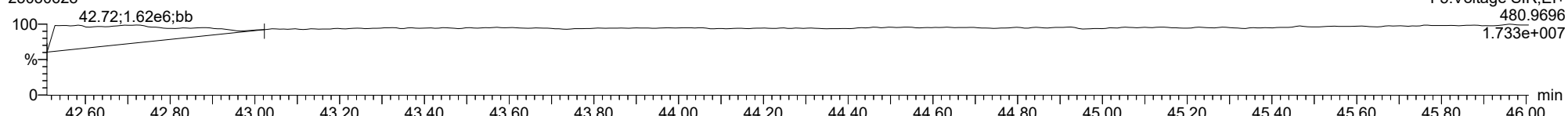
13C-OCDD

23030628



FUNCTION5 PFK

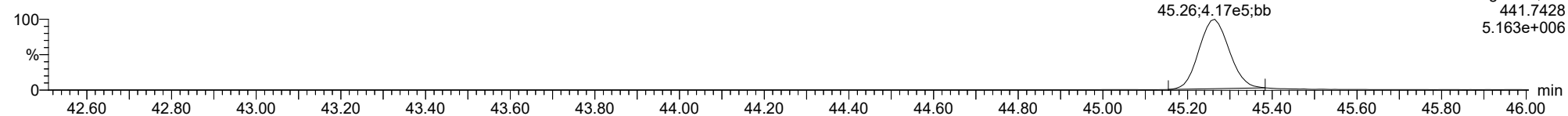
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

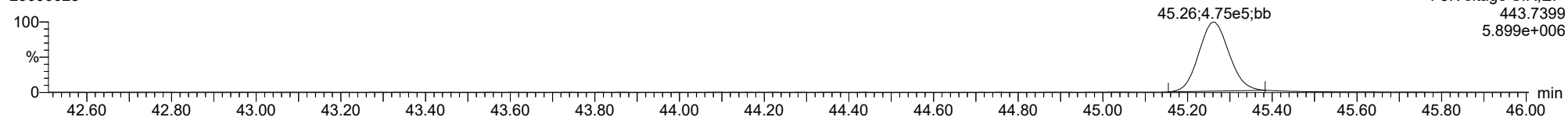
OCDF

23030628



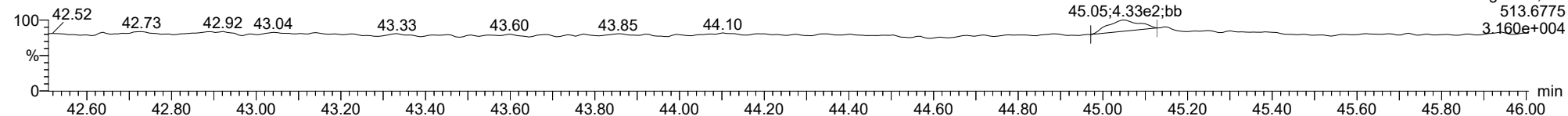
OCDF

23030628



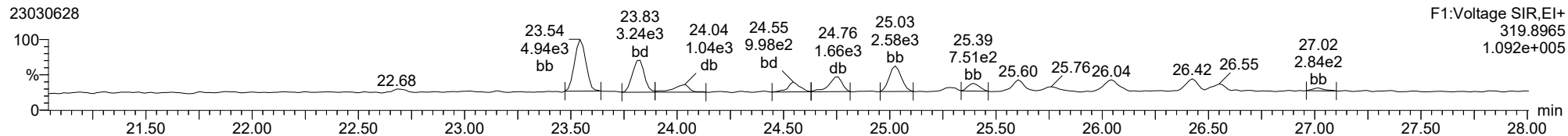
FUNCTION5 DCDPE

23030628

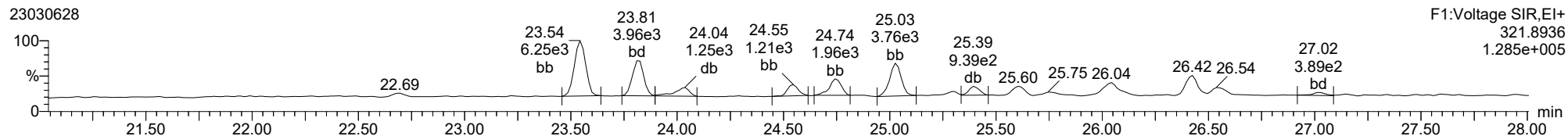


ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

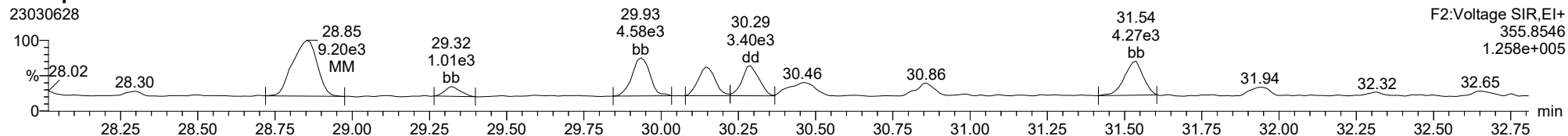
Total-tetradioxins



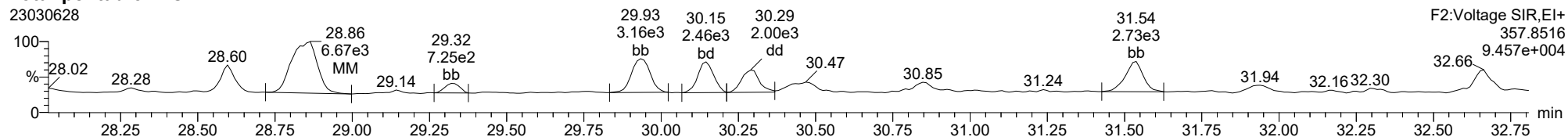
Total-tetradioxins



Total-pentadioxins



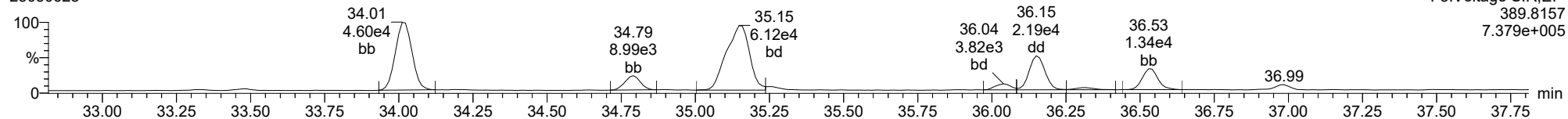
Total-pentadioxins



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

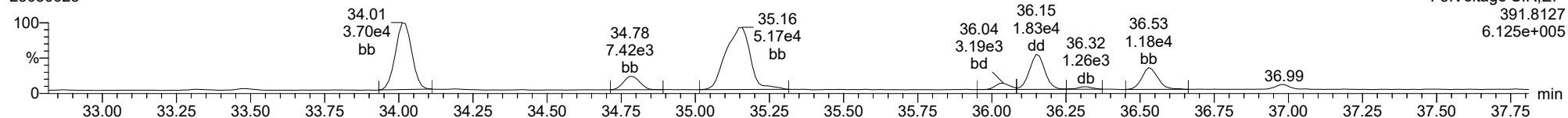
Total-hexadioxins

23030628



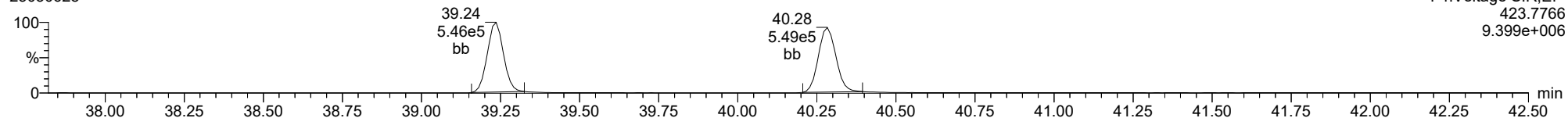
Total-hexadioxins

23030628



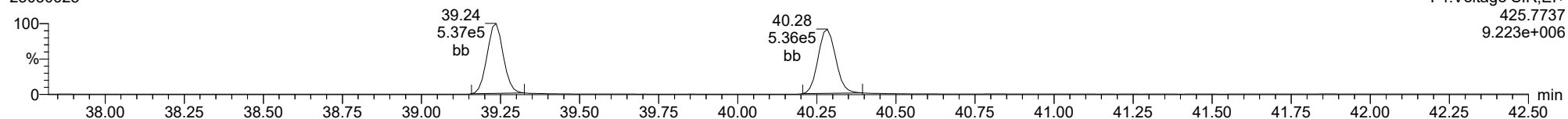
Total-heptadioxins

23030628



Total-heptadioxins

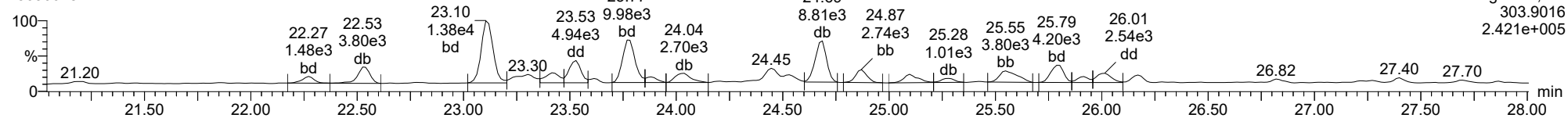
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

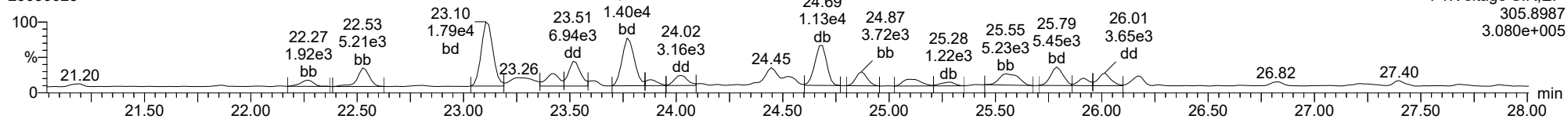
Total-tetrafurans

23030628



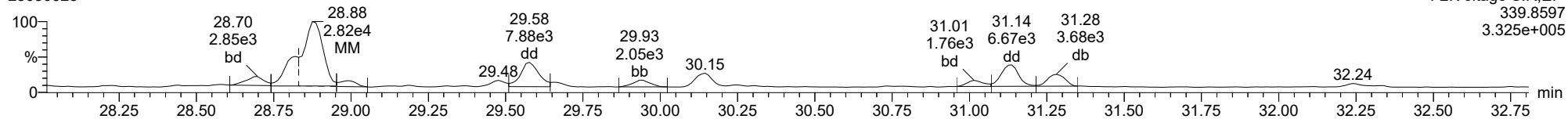
Total-tetrafurans

23030628



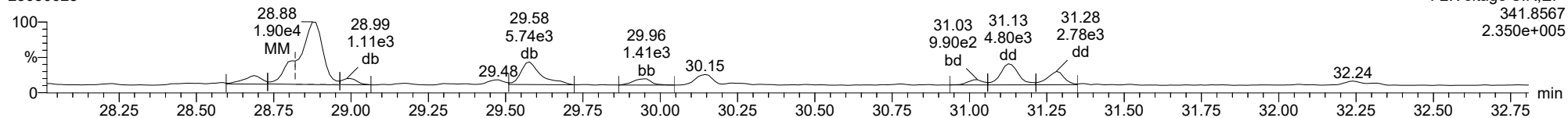
Total-pentafurans

23030628



Total-pentafurans

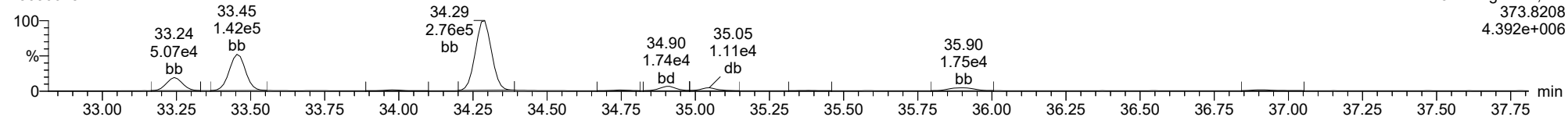
23030628



ID: 23A0326-09, Name: 23030628, Date: 07-Mar-2023, Time: 08:28:30, Conditions: AUTOSPEC01, User: pk

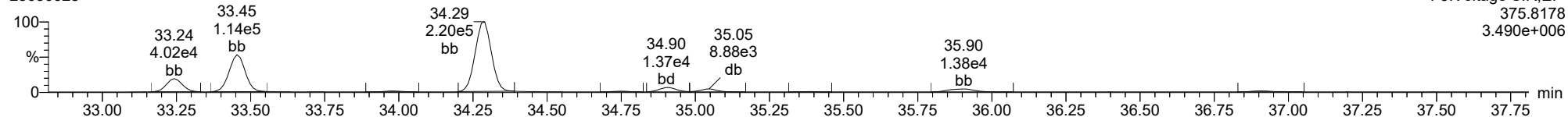
Total-hexafurans

23030628



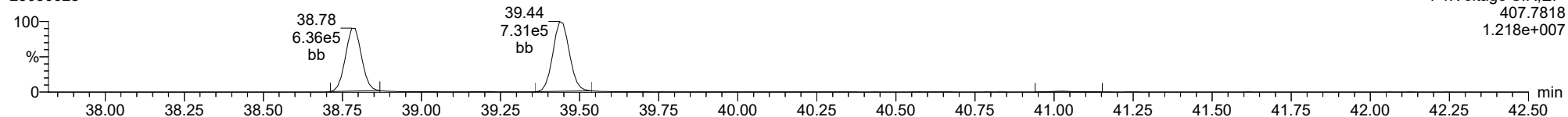
Total-hexafurans

23030628



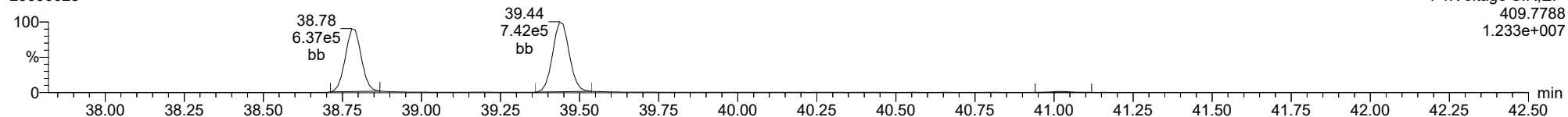
Total-heptafurans

23030628



Total-heptafurans

23030628





Form 1
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-12 C File ID: 23030629
 Sampled: 01/17/23 14:37 Prepared: 01/24/23 07:31 Analyzed: 03/07/23 09:17
 % Solids: 52.84 Preparation: EPA 1613 Initial/Final: 18.98 g Wet / 20 uL
 Result Basis: Dry Sequence: SLC0081 Calibration: GC00015
 Batch: BLA0398 Instrument: AUTOSPEC01 Column: RTX-Dioxin2

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.775	0.655-0.886	0.130	0.997	1.21	ng/kg	X
1746-01-6	2,3,7,8-TCDD	1	0.533	0.655-0.886	0.107	0.997	0.497	ng/kg	EMPC, J
57117-41-6	1,2,3,7,8-PeCDF	1	1.393	1.318-1.783	0.199	0.997	0.812	ng/kg	J
57117-31-4	2,3,4,7,8-PeCDF	1	1.571	1.318-1.783	0.168	0.997	1.32	ng/kg	
40321-76-4	1,2,3,7,8-PeCDD	1	1.696	1.318-1.783	0.212	0.997	1.46	ng/kg	B
70648-26-9	1,2,3,4,7,8-HxCDF	1	1.228	1.054-1.426	0.099	0.997	4.72	ng/kg	B
57117-44-9	1,2,3,6,7,8-HxCDF	1	1.226	1.054-1.426	0.104	0.997	1.94	ng/kg	
60851-34-5	2,3,4,6,7,8-HxCDF	1	1.098	1.054-1.426	0.110	0.997	2.70	ng/kg	
72918-21-9	1,2,3,7,8,9-HxCDF	1	1.300	1.054-1.426	0.112	0.997	1.14	ng/kg	
39227-28-6	1,2,3,4,7,8-HxCDD	1	1.180	1.054-1.426	0.215	0.997	1.86	ng/kg	
57653-85-7	1,2,3,6,7,8-HxCDD	1	1.206	1.054-1.426	0.207	0.997	7.66	ng/kg	
19408-74-3	1,2,3,7,8,9-HxCDD	1	1.278	1.054-1.426	0.232	0.997	5.16	ng/kg	
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.995	0.893-1.208	0.163	0.997	39.2	ng/kg	
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	1.011	0.893-1.208	0.284	0.997	3.13	ng/kg	
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.028	0.893-1.208	0.415	2.49	205	ng/kg	B
39001-02-0	OCDF	1	0.875	0.757-1.024	0.260	2.49	103	ng/kg	B
3268-87-9	OCDD	1	0.851	0.757-1.024	0.394	9.97	1590	ng/kg	B

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.997	16.5	ng/kg
41903-57-5	Total TCDD	1	0.000			0.997	3.98	ng/kg
30402-15-4	Total PeCDF	1	0.000			0.997	24.0	ng/kg
36088-22-9	Total PeCDD	1	0.000			0.997	4.22	ng/kg
55684-94-1	Total HxCDF	1	0.000			0.997	58.9	ng/kg
34465-46-8	Total HxCDD	1	0.000			0.997	64.1	ng/kg
38998-75-3	Total HpCDF	1	0.000			0.997	141	ng/kg
37871-00-4	Total HpCDD	1	0.000			0.997	530	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC): 8.00
 Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC): 8.00



Form 2
ORGANIC ANALYSIS DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-12 File ID: 23030629
 Sampled: 01/17/23 14:37 Prepared: 01/24/23 07:31 Analyzed: 03/07/23 09:17
 Solids Wt%: 52.84 Preparation: EPA 1613 Initial/Final: 18.98 g / 20 uL
 Result Basis: Dry Sequence: SLC0081 Calibration: GC00015
 Batch: BLA0398 Instrument: AUTOSPEC01 Column: RTX-Dioxin2

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF		0.759	0.655-0.886	0.158	79.8	24 - 169 %	
13C12-2,3,7,8-TCDD		0.795	0.655-0.886	0.192	89.6	25 - 164 %	
13C12-1,2,3,7,8-PeCDF		1.492	1.318-1.783	0.169	92.9	24 - 185 %	
13C12-2,3,4,7,8-PeCDF		1.465	1.318-1.783	0.187	102	21 - 178 %	
13C12-1,2,3,7,8-PeCDD		1.603	1.318-1.783	0.137	109	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF		0.517	0.434-0.587	0.121	78.1	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF		0.515	0.434-0.587	0.102	67.6	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF		0.513	0.434-0.587	0.126	77.0	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF		0.507	0.434-0.587	0.152	85.0	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD		1.299	1.054-1.426	0.200	81.4	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD		1.263	1.054-1.426	0.172	70.2	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF		0.430	0.374-0.506	0.149	76.0	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF		0.447	0.374-0.506	0.174	62.1	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD		1.068	0.893-1.208	0.137	64.2	23 - 140 %	
13C12-OCDD		0.896	0.757-1.024	0.149	70.8	17 - 157 %	
37Cl4-2,3,7,8-TCDD		328.000		0.046	72.6	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
 Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.803	1.001	1.581e3	2.039e3	0.702	0.775	0.770	841	1249	2.29e4	2.92e4	27.2	23.4	NO	bd	dd	0.608
12378-PeCDF	29.956	1.001	1.217e3	8.733e2	0.679	1.393	1.550	1387	1269	1.73e4	1.39e4	12.4	10.9	NO	bb	bb	0.407
23478-PeCDF	31.304	1.001	2.381e3	1.516e3	0.786	1.571	1.550	1387	1269	3.60e4	2.66e4	25.9	20.9	NO	db	bb	0.660
123478-HxCDF	34.914	1.000	1.070e4	8.716e3	1.166	1.228	1.240	1056	1139	1.81e5	1.39e5	171.4	122.5	NO	bd	dd	2.366
234678-HxCDF	35.905	1.000	5.430e3	4.946e3	1.140	1.098	1.240	1056	1139	5.68e4	4.96e4	53.8	43.6	NO	bd	bb	1.356
123678-HxCDF	35.058	1.001	4.219e3	3.442e3	1.091	1.226	1.240	1056	1139	6.91e4	5.37e4	65.4	47.2	NO	db	db	0.971
123789-HxCDF	36.919	1.000	2.250e3	1.731e3	1.137	1.300	1.240	1056	1139	3.37e4	2.79e4	31.9	24.5	NO	bb	bb	0.573
1234678-HpCDF	38.791	1.000	5.162e4	5.186e4	1.003	0.995	1.050	1237	1175	8.87e5	8.68e5	717.1	738.6	NO	bb	bb	19.649
1234789-HpCDF	41.030	1.000	2.773e3	2.742e3	0.953	1.011	1.050	1237	1175	4.24e4	4.13e4	34.3	35.2	NO	bb	bb	1.568
OCDF	45.264	1.006	7.849e4	8.973e4	0.778	0.875	0.890	1013	719	9.38e5	1.09e6	926.5	1521.6	NO	bb	bb	51.577
2378-TCDD	26.424	1.001	6.747e2	1.267e3	1.149	0.533	0.770	1244	956	1.10e4	2.18e4	8.9	22.8	YES	bb	bd	0.249
12378-PeCDD	31.549	1.001	2.786e3	1.643e3	1.022	1.696	1.550	1721	1602	4.02e4	2.90e4	23.4	18.1	NO	bb	bb	0.730
123478-HxCDD	36.050	1.000	3.150e3	2.671e3	0.996	1.180	1.240	1684	1915	5.71e4	4.70e4	33.9	24.6	NO	dd	bd	0.935
123678-HxCDD	36.161	1.000	1.317e4	1.092e4	1.001	1.206	1.240	1684	1915	2.16e5	1.79e5	128.0	93.2	NO	dd	dd	3.843
123789-HxCDD	36.540	1.011	8.241e3	6.450e3	0.907	1.278	1.240	1684	1915	1.35e5	1.12e5	80.3	58.2	NO	bb	bb	2.588
1234678-HpCDD	40.294	1.001	2.249e5	2.188e5	1.039	1.028	1.050	1948	2767	3.42e6	3.37e6	1756.7	1219.6	NO	bb	bb	102.568
OCDD	45.026	1.000	1.415e6	1.662e6	0.920	0.851	0.890	1034	2067	1.72e7	2.02e7	16603.5	9752.9	NO	bb	bb	797.504
13C-2378-TCDF	25.774	1.007	3.660e5	4.820e5	1.620	0.759	0.770	2552	1882	5.91e6	7.74e6	2315.1	4111.8	NO	bb	bb	79.778
13C-12378-PeCDF	29.934	1.169	4.525e5	3.034e5	1.240	1.492	1.550	2051	1565	7.03e6	4.72e6	3427.8	3016.8	NO	bb	bb	92.884
13C-23478-PeCDF	31.270	1.221	4.465e5	3.048e5	1.118	1.465	1.550	2051	1565	7.14e6	4.82e6	3483.0	3077.7	NO	bb	bb	102.454
13C-123478-HxCDF	34.902	0.955	2.400e5	4.640e5	1.168	0.517	0.510	1326	1768	3.89e6	7.41e6	2936.2	4193.4	NO	bd	bd	78.082
13C-123678-HxCDF	35.036	0.959	2.460e5	4.773e5	1.386	0.515	0.510	1326	1768	3.93e6	7.54e6	2967.6	4264.7	NO	db	db	67.595
13C-234678-HxCDF	35.916	0.983	2.275e5	4.437e5	1.129	0.513	0.510	1326	1768	3.54e6	6.94e6	2672.2	3927.1	NO	bb	bb	77.017
13C-123789-HxCDF	36.930	1.011	2.057e5	4.055e5	0.932	0.507	0.510	1326	1768	3.46e6	6.81e6	2608.2	3853.2	NO	bb	bb	84.997
13C-1234678-HpCDF	38.779	1.062	1.578e5	3.672e5	0.895	0.430	0.440	1366	1547	2.65e6	6.16e6	1940.6	3984.0	NO	bb	bb	76.004
13C-1234789-HpCDF	41.019	1.123	1.141e5	2.550e5	0.770	0.447	0.440	1366	1547	1.65e6	3.72e6	1207.8	2402.4	NO	bb	bb	62.140
13C-1234-TCDD	25.605	0.000	2.892e5	3.668e5	1.000	0.789	0.770	1906	1908	4.56e6	5.76e6	2390.2	3018.2	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	3.002e5	3.774e5	1.152	0.795	0.770	1906	1908	4.73e6	5.95e6	2481.2	3120.9	NO	bb	bb	89.623
13C-12378-PeCDD	31.527	1.231	3.658e5	2.282e5	0.829	1.603	1.550	1179	782	5.64e6	3.52e6	4784.8	4505.7	NO	bb	bb	109.253
13C-123478-HxCDD	36.039	0.987	3.533e5	2.721e5	0.995	1.299	1.240	2650	1683	5.70e6	4.37e6	2149.0	2596.8	NO	bd	bd	81.439
13C-123678-HxCDD	36.150	0.990	3.496e5	2.768e5	1.157	1.263	1.240	2650	1683	5.81e6	4.57e6	2191.6	2715.8	NO	db	db	70.169
13C-1234678-HpCDD	40.272	1.102	2.150e5	2.013e5	0.840	1.068	1.050	1340	1162	3.38e6	3.16e6	2523.4	2719.1	NO	bb	bb	64.217
13C-OCDD	45.008	1.232	3.963e5	4.423e5	0.767	0.896	0.890	1176	1311	4.83e6	5.39e6	4112.0	4112.1	NO	bb	bb	141.598
13C-123789-HxCDD	36.529	0.000	4.308e5	3.409e5	1.000	1.264	1.240	2650	1683	7.28e6	5.81e6	2747.0	3449.9	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	2.453e5		1.288			1033		3.80e6		3677.4			bb		29.036

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	5.884e2	5.836e2	0.802	1.008	0.770	841	1249	8.88e3	9.23e3	10.6	7.4	YES	bb	bb	0.172
1289-TCDF					0.678		0.770	841	1249								
13468-PECDF					1.246		1.550	913	1023								
12389-PECDF	32.239	1.077	6.719e2	1.900e2	0.496	3.536	1.550	1387	1269	1.02e4	5.75e3	7.4	4.5	YES	bb	bd	0.230
123468-HXCDF	33.254	0.953	1.105e4	8.679e3	1.169	1.273	1.240	1056	1139	1.71e5	1.38e5	161.8	121.0	NO	db	db	2.397
1368-TCDD	23.557	0.892	1.987e3	2.669e3	1.015	0.744	0.770	1244	956	3.28e4	4.58e4	26.4	47.9	NO	bb	bb	0.677
1289-TCDD					0.909		0.770	1244	956								
12479-PECDD	28.864	0.916	6.025e3	4.782e3	2.301	1.260	1.550	1721	1602	6.24e4	5.47e4	36.3	34.1	YES	MM	MM	0.791
12389-PECDD					1.184		1.550	1721	1602								
124679-HXCDD	34.022	0.944	3.624e4	2.955e4	1.115	1.226	1.240	1684	1915	5.58e5	4.75e5	331.3	248.2	NO	bb	bb	9.432
1234679-HPCDD	39.236	0.974	3.907e5	3.820e5	1.137	1.023	1.050	1948	2767	6.46e6	6.31e6	3315.7	2279.1	NO	bb	bb	163.245
Total-tetrafurans			2.139e4		0.727			841		3.09e5							8.260
Total-penta1			2.086e4					913		3.30e5							5.008
Total-pentafurans			2.133e4		0.654			1387		3.13e5							7.027
Total-hexafurans			1.278e5		1.141			1056		1.98e6							29.511
Total-heptafurans			1.625e5		0.978			1237		2.72e6							70.892
Total-Furans			4.324e5		0.922			841		6.60e6							172.275
Total-tetradoxins			5.883e3		1.024			1244		9.68e4							1.996
Total-pentadoxins			1.028e4		1.502			1721		1.60e5							2.117
Total-hexadoxins			1.132e5		1.005			1684		1.59e6							32.121
Total-heptadoxins			6.156e5		1.088			1948		9.88e6							265.814
Total-Dioxins			2.160e6		1.130			1244		2.89e7							1099.552
Total-TEQ			2.592e6					1244		3.55e7							1271.827
FUNCTION1 PFK			6.868e6					401200		2.31e7							
FUNCTION2 PFK			2.070e6					236177		4.03e6							0.000
FUNCTION3 PFK			4.195e6					271439		1.41e7							0.000
FUNCTION4 PFK			4.108e6					192255		3.28e6							
FUNCTION5 PFK			2.657e6					158707		1.43e6							
FUNCTION1 HXCD...			3.021e3					613		4.48e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.585e3					642		3.15e4							0.000
FUNCTION3 OCDPE			4.311e2					777		7.77e3							0.000
FUNCTION4 NCDPE			6.643e3					804		1.19e5							0.000
FUNCTION5 DCDPE			1.571e2					594		3.45e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.04	1.740e3	2.313e3	0.727	0.75	0.77	27.6	YES	NO	dd	db	0.657
2	Total-tetrafurans	23.88	8.849e2	1.119e3	0.727	0.79	0.77	15.2	YES	NO	dd	dd	0.325
3	Total-tetrafurans	23.80	2.024e3	2.987e3	0.727	0.68	0.77	34.8	YES	NO	bd	bd	0.813
4	Total-tetrafurans	23.54	1.833e3	2.714e3	0.727	0.68	0.77	36.0	YES	NO	dd	dd	0.737
5	Total-tetrafurans	23.44	2.841e3	4.169e3	0.727	0.68	0.77	46.6	YES	NO	dd	dd	1.137
6	Total-tetrafurans	23.12	2.821e3	3.386e3	0.727	0.83	0.77	49.0	YES	NO	bd	bd	1.007
7	Total-tetrafurans	22.55	8.071e2	1.024e3	0.727	0.79	0.77	16.4	YES	NO	db	bb	0.297
8	Total-tetrafurans	27.43	3.658e2	5.389e2	0.727	0.68	0.77	7.0	YES	NO	bb	bb	0.147
9	Total-tetrafurans	26.03	1.242e3	1.814e3	0.727	0.68	0.77	18.3	YES	NO	dd	dd	0.496
10	2378-TCDF	25.80	1.581e3	2.039e3	0.702	0.78	0.77	27.2	YES	NO	bd	dd	0.608
11	Total-tetrafurans	25.29	4.478e2	5.656e2	0.727	0.79	0.77	7.5	YES	NO	db	db	0.164
12	Total-tetrafurans	24.88	1.126e3	1.524e3	0.727	0.74	0.77	21.3	YES	NO	db	db	0.430
13	Total-tetrafurans	24.69	1.904e3	2.614e3	0.727	0.73	0.77	32.4	YES	NO	dd	dd	0.733
14	Total-tetrafurans	24.46	1.768e3	2.598e3	0.727	0.68	0.77	28.7	YES	NO	bd	bd	0.708

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.22	2.086e4	1.385e4		1.51	1.55	361.5	YES	NO	bb	bb	5.008

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	28.90	6.944e3	4.522e3	0.654	1.54	1.55	73.2	YES	NO	dd	dd	2.327
2	Total-pentafurans	28.82	2.917e3	1.953e3	0.654	1.49	1.55	34.7	YES	NO	dd	dd	0.988
3	Total-pentafurans	28.69	2.242e3	1.341e3	0.654	1.67	1.55	21.3	YES	NO	dd	bd	0.727
4	23478-PeCDF	31.30	2.381e3	1.516e3	0.786	1.57	1.55	25.9	YES	NO	db	bb	0.660
5	Total-pentafurans	31.14	1.871e3	1.133e3	0.654	1.65	1.55	19.7	YES	NO	dd	db	0.610
6	Total-pentafurans	30.15	1.426e3	1.020e3	0.654	1.40	1.55	17.9	YES	NO	bb	bb	0.496
7	12378-PeCDF	29.96	1.217e3	8.733e2	0.679	1.39	1.55	12.4	YES	NO	bb	bb	0.407
8	Total-pentafurans	29.62	2.334e3	1.669e3	0.654	1.40	1.55	20.4	YES	NO	dd	bd	0.812

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk**HF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.92	2.250e3	1.731e3	1.137	1.30	1.24	31.9	YES	NO	bb	bb	0.573
2	234678-HxCDF	35.90	5.430e3	4.946e3	1.140	1.10	1.24	53.8	YES	NO	bd	bb	1.356
3	Total-hexafurans	35.38	5.176e2	4.123e2	1.141	1.26	1.24	7.8	YES	NO	db	db	0.120
4	123678-HxCDF	35.06	4.219e3	3.442e3	1.091	1.23	1.24	65.4	YES	NO	db	db	0.971
5	123478-HxCDF	34.91	1.070e4	8.716e3	1.166	1.23	1.24	171.4	YES	NO	bd	dd	2.366
6	Total-hexafurans	34.77	1.562e3	1.372e3	1.141	1.14	1.24	22.0	YES	NO	bb	bd	0.380
7	Total-hexafurans	34.30	5.588e4	4.373e4	1.141	1.28	1.24	824.1	YES	NO	bb	bb	12.892
8	Total-hexafurans	33.99	1.145e3	9.292e2	1.141	1.23	1.24	17.1	YES	NO	bb	bb	0.268
9	Total-hexafurans	33.75	4.303e2	3.318e2	1.141	1.30	1.24	5.2	YES	NO	bb	bb	0.099
10	Total-hexafurans	33.47	3.466e4	2.783e4	1.141	1.25	1.24	518.8	YES	NO	bb	bb	8.089
11	123468-HXCDF	33.25	1.105e4	8.679e3	1.169	1.27	1.24	161.8	YES	NO	db	db	2.397

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.03	2.773e3	2.742e3	0.953	1.01	1.05	34.3	YES	NO	bb	bb	1.568
2	Total-heptafurans	39.45	1.082e5	1.091e5	0.978	0.99	1.05	1448.2	YES	NO	bb	bb	49.675
3	1234678-HpCDF	38.79	5.162e4	5.186e4	1.003	1.00	1.05	717.1	YES	NO	bb	bb	19.649

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.04	1.740e3	2.313e3	0.727	0.75	0.77	27.6	YES	NO	dd	db	0.657
2	Total-tetrafurans	23.88	8.849e2	1.119e3	0.727	0.79	0.77	15.2	YES	NO	dd	dd	0.325
3	Total-tetrafurans	23.80	2.024e3	2.987e3	0.727	0.68	0.77	34.8	YES	NO	bd	bd	0.813
4	Total-tetrafurans	23.54	1.833e3	2.714e3	0.727	0.68	0.77	36.0	YES	NO	dd	dd	0.737
5	Total-tetrafurans	23.44	2.841e3	4.169e3	0.727	0.68	0.77	46.6	YES	NO	dd	dd	1.137
6	Total-tetrafurans	23.12	2.821e3	3.386e3	0.727	0.83	0.77	49.0	YES	NO	bd	bd	1.007
7	Total-tetrafurans	22.55	8.071e2	1.024e3	0.727	0.79	0.77	16.4	YES	NO	db	bb	0.297
8	Total-tetrafurans	27.43	3.658e2	5.389e2	0.727	0.68	0.77	7.0	YES	NO	bb	bb	0.147
9	Total-tetrafurans	26.03	1.242e3	1.814e3	0.727	0.68	0.77	18.3	YES	NO	dd	dd	0.496
10	2378-TCDF	25.80	1.581e3	2.039e3	0.702	0.78	0.77	27.2	YES	NO	bd	dd	0.608
11	Total-tetrafurans	25.29	4.478e2	5.656e2	0.727	0.79	0.77	7.5	YES	NO	db	db	0.164
12	Total-tetrafurans	24.88	1.126e3	1.524e3	0.727	0.74	0.77	21.3	YES	NO	db	db	0.430
13	Total-tetrafurans	24.69	1.904e3	2.614e3	0.727	0.73	0.77	32.4	YES	NO	dd	dd	0.733
14	Total-tetrafurans	24.46	1.768e3	2.598e3	0.727	0.68	0.77	28.7	YES	NO	bd	bd	0.708
15	Total-pentafurans	28.90	6.944e3	4.522e3	0.654	1.54	1.55	73.2	YES	NO	dd	dd	2.327
16	Total-pentafurans	28.82	2.917e3	1.953e3	0.654	1.49	1.55	34.7	YES	NO	dd	dd	0.988
17	Total-pentafurans	28.69	2.242e3	1.341e3	0.654	1.67	1.55	21.3	YES	NO	dd	bd	0.727
18	23478-PeCDF	31.30	2.381e3	1.516e3	0.786	1.57	1.55	25.9	YES	NO	db	bb	0.660
19	Total-pentafurans	31.14	1.871e3	1.133e3	0.654	1.65	1.55	19.7	YES	NO	dd	db	0.610
20	Total-pentafurans	30.15	1.426e3	1.020e3	0.654	1.40	1.55	17.9	YES	NO	bb	bb	0.496
21	12378-PeCDF	29.96	1.217e3	8.733e2	0.679	1.39	1.55	12.4	YES	NO	bb	bb	0.407
22	Total-pentafurans	29.62	2.334e3	1.669e3	0.654	1.40	1.55	20.4	YES	NO	dd	bd	0.812
23	123789-HxCDF	36.92	2.250e3	1.731e3	1.137	1.30	1.24	31.9	YES	NO	bb	bb	0.573
24	234678-HxCDF	35.90	5.430e3	4.946e3	1.140	1.10	1.24	53.8	YES	NO	bd	bb	1.356
25	Total-hexafurans	35.38	5.176e2	4.123e2	1.141	1.26	1.24	7.8	YES	NO	db	db	0.120
26	123678-HxCDF	35.06	4.219e3	3.442e3	1.091	1.23	1.24	65.4	YES	NO	db	db	0.971
27	123478-HxCDF	34.91	1.070e4	8.716e3	1.166	1.23	1.24	171.4	YES	NO	bd	dd	2.366
28	Total-hexafurans	34.77	1.562e3	1.372e3	1.141	1.14	1.24	22.0	YES	NO	bb	bd	0.380
29	Total-hexafurans	34.30	5.588e4	4.373e4	1.141	1.28	1.24	824.1	YES	NO	bb	bb	12.892
30	Total-hexafurans	33.99	1.145e3	9.292e2	1.141	1.23	1.24	17.1	YES	NO	bb	bb	0.268
31	Total-hexafurans	33.75	4.303e2	3.318e2	1.141	1.30	1.24	5.2	YES	NO	bb	bb	0.099
32	Total-hexafurans	33.47	3.466e4	2.783e4	1.141	1.25	1.24	518.8	YES	NO	bb	bb	8.089
33	123468-HXCDF	33.25	1.105e4	8.679e3	1.169	1.27	1.24	161.8	YES	NO	db	db	2.397
34	1234789-HpCDF	41.03	2.773e3	2.742e3	0.953	1.01	1.05	34.3	YES	NO	bb	bb	1.568
35	Total-heptafurans	39.45	1.082e5	1.091e5	0.978	0.99	1.05	1448.2	YES	NO	bb	bb	49.675
36	1234678-HpCDF	38.79	5.162e4	5.186e4	1.003	1.00	1.05	717.1	YES	NO	bb	bb	19.649
37	OCDF	45.26	7.849e4	8.973e4	0.778	0.87	0.89	926.5	YES	NO	bb	bb	51.577

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-penta1	27.22	2.086e4	1.385e4		1.51	1.55	361.5	YES	NO	bb	bb	5.008

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	23.83	1.332e3	1.857e3	1.024	0.72	0.77	17.9	YES	NO	bb	bb	0.460
2	1368-TCDD	23.56	1.987e3	2.669e3	1.015	0.74	0.77	26.4	YES	NO	bb	bb	0.677
3	Total-tetradoxins	26.06	8.702e2	1.118e3	1.024	0.78	0.77	8.8	YES	NO	bb	db	0.286
4	Total-tetradoxins	25.77	2.101e2	2.448e2	1.024	0.86	0.77	3.1	YES	NO	bb	db	0.066
5	Total-tetradoxins	24.77	6.281e2	9.095e2	1.024	0.69	0.77	8.5	YES	NO	bb	db	0.222
6	Total-tetradoxins	24.56	8.556e2	1.134e3	1.024	0.75	0.77	13.2	YES	NO	bb	bd	0.287

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.55	2.786e3	1.643e3	1.022	1.70	1.55	23.4	YES	NO	bb	bb	0.730
2	Total-pentadioxins	30.31	1.757e3	1.057e3	1.502	1.66	1.55	15.6	YES	NO	dd	bd	0.315
3	Total-pentadioxins	30.16	2.475e3	1.601e3	1.502	1.55	1.55	22.4	YES	NO	bd	bb	0.457
4	Total-pentadioxins	29.94	2.031e3	1.359e3	1.502	1.50	1.55	19.0	YES	NO	bb	bb	0.380
5	Total-pentadioxins	29.33	1.232e3	8.680e2	1.502	1.42	1.55	12.7	YES	NO	bb	bb	0.235

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HxCDD	34.02	3.624e4	2.955e4	1.115	1.23	1.24	331.3	YES	NO	bb	bb	9.432
2	123789-HxCDD	36.54	8.241e3	6.450e3	0.907	1.28	1.24	80.3	YES	NO	bb	bb	2.588
3	Total-hexadioxins	36.32	1.924e3	1.547e3	1.005	1.24	1.24	16.9	YES	NO	db	db	0.552
4	123678-HxCDD	36.16	1.317e4	1.092e4	1.001	1.21	1.24	128.0	YES	NO	dd	dd	3.843
5	123478-HxCDD	36.05	3.150e3	2.671e3	0.996	1.18	1.24	33.9	YES	NO	dd	bd	0.935
6	Total-hexadioxins	35.27	3.500e3	2.976e3	1.005	1.18	1.24	34.1	YES	NO	db	db	1.030
7	Total-hexadioxins	35.16	4.037e4	3.396e4	1.005	1.19	1.24	253.2	YES	NO	bd	bd	11.821
8	Total-hexadioxins	34.80	6.575e3	5.501e3	1.005	1.20	1.24	64.0	YES	NO	bb	bb	1.920

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.29	2.249e5	2.188e5	1.039	1.03	1.05	1756.7	YES	NO	bb	bb	102.568
2	1234679-HPCDD	39.24	3.907e5	3.820e5	1.137	1.02	1.05	3315.7	YES	NO	bb	bb	163.245

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	23.83	1.332e3	1.857e3	1.024	0.72	0.77	17.9	YES	NO	bb	bb	0.460
2	1368-TCDD	23.56	1.987e3	2.669e3	1.015	0.74	0.77	26.4	YES	NO	bb	bb	0.677
3	Total-tetradoxins	26.06	8.702e2	1.118e3	1.024	0.78	0.77	8.8	YES	NO	bb	db	0.286
4	Total-tetradoxins	25.77	2.101e2	2.448e2	1.024	0.86	0.77	3.1	YES	NO	bb	db	0.066
5	Total-tetradoxins	24.77	6.281e2	9.095e2	1.024	0.69	0.77	8.5	YES	NO	bb	db	0.222
6	Total-tetradoxins	24.56	8.556e2	1.134e3	1.024	0.75	0.77	13.2	YES	NO	bb	bd	0.287
7	12378-PeCDD	31.55	2.786e3	1.643e3	1.022	1.70	1.55	23.4	YES	NO	bb	bb	0.730
8	Total-pentadoxins	30.31	1.757e3	1.057e3	1.502	1.66	1.55	15.6	YES	NO	dd	bd	0.315
9	Total-pentadoxins	30.16	2.475e3	1.601e3	1.502	1.55	1.55	22.4	YES	NO	bd	bb	0.457
10	Total-pentadoxins	29.94	2.031e3	1.359e3	1.502	1.50	1.55	19.0	YES	NO	bb	bb	0.380
11	Total-pentadoxins	29.33	1.232e3	8.680e2	1.502	1.42	1.55	12.7	YES	NO	bb	bb	0.235
12	124679-HxCDD	34.02	3.624e4	2.955e4	1.115	1.23	1.24	331.3	YES	NO	bb	bb	9.432
13	123789-HxCDD	36.54	8.241e3	6.450e3	0.907	1.28	1.24	80.3	YES	NO	bb	bb	2.588
14	Total-hexadoxins	36.32	1.924e3	1.547e3	1.005	1.24	1.24	16.9	YES	NO	db	db	0.552
15	123678-HxCDD	36.16	1.317e4	1.092e4	1.001	1.21	1.24	128.0	YES	NO	dd	dd	3.843
16	123478-HxCDD	36.05	3.150e3	2.671e3	0.996	1.18	1.24	33.9	YES	NO	dd	bd	0.935
17	Total-hexadoxins	35.27	3.500e3	2.976e3	1.005	1.18	1.24	34.1	YES	NO	db	db	1.030
18	Total-hexadoxins	35.16	4.037e4	3.396e4	1.005	1.19	1.24	253.2	YES	NO	bd	bd	11.821
19	Total-hexadoxins	34.80	6.575e3	5.501e3	1.005	1.20	1.24	64.0	YES	NO	bb	bb	1.920
20	1234678-HpCDD	40.29	2.249e5	2.188e5	1.039	1.03	1.05	1756.7	YES	NO	bb	bb	102.568
21	1234679-HPCDD	39.24	3.907e5	3.820e5	1.137	1.02	1.05	3315.7	YES	NO	bb	bb	163.245
22	OCDD	45.03	1.415e6	1.662e6	0.920	0.85	0.89	16603.5	YES	NO	bb	bb	797.504

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	24.04	1.740e3	2.313e3	0.727	0.75	0.77	27.6	YES	NO	dd	db	0.657
2	Total-tetrafurans	23.88	8.849e2	1.119e3	0.727	0.79	0.77	15.2	YES	NO	dd	dd	0.325
3	Total-tetrafurans	23.80	2.024e3	2.987e3	0.727	0.68	0.77	34.8	YES	NO	bd	bd	0.813
4	Total-tetrafurans	23.54	1.833e3	2.714e3	0.727	0.68	0.77	36.0	YES	NO	dd	dd	0.737
5	Total-tetrafurans	23.44	2.841e3	4.169e3	0.727	0.68	0.77	46.6	YES	NO	dd	dd	1.137
6	Total-tetrafurans	23.12	2.821e3	3.386e3	0.727	0.83	0.77	49.0	YES	NO	bd	bd	1.007
7	Total-tetrafurans	22.55	8.071e2	1.024e3	0.727	0.79	0.77	16.4	YES	NO	db	bb	0.297
8	Total-tetrafurans	27.43	3.658e2	5.389e2	0.727	0.68	0.77	7.0	YES	NO	bb	bb	0.147
9	Total-tetrafurans	26.03	1.242e3	1.814e3	0.727	0.68	0.77	18.3	YES	NO	dd	dd	0.496
10	2378-TCDF	25.80	1.581e3	2.039e3	0.702	0.78	0.77	27.2	YES	NO	bd	dd	0.608
11	Total-tetrafurans	25.29	4.478e2	5.656e2	0.727	0.79	0.77	7.5	YES	NO	db	db	0.164
12	Total-tetrafurans	24.88	1.126e3	1.524e3	0.727	0.74	0.77	21.3	YES	NO	db	db	0.430
13	Total-tetrafurans	24.69	1.904e3	2.614e3	0.727	0.73	0.77	32.4	YES	NO	dd	dd	0.733
14	Total-tetrafurans	24.46	1.768e3	2.598e3	0.727	0.68	0.77	28.7	YES	NO	bd	bd	0.708
15	Total-pentafurans	28.90	6.944e3	4.522e3	0.654	1.54	1.55	73.2	YES	NO	dd	dd	2.327
16	Total-pentafurans	28.82	2.917e3	1.953e3	0.654	1.49	1.55	34.7	YES	NO	dd	dd	0.988
17	Total-pentafurans	28.69	2.242e3	1.341e3	0.654	1.67	1.55	21.3	YES	NO	dd	bd	0.727
18	23478-PeCDF	31.30	2.381e3	1.516e3	0.786	1.57	1.55	25.9	YES	NO	db	bb	0.660
19	Total-pentafurans	31.14	1.871e3	1.133e3	0.654	1.65	1.55	19.7	YES	NO	dd	db	0.610
20	Total-pentafurans	30.15	1.426e3	1.020e3	0.654	1.40	1.55	17.9	YES	NO	bb	bb	0.496
21	12378-PeCDF	29.96	1.217e3	8.733e2	0.679	1.39	1.55	12.4	YES	NO	bb	bb	0.407
22	Total-pentafurans	29.62	2.334e3	1.669e3	0.654	1.40	1.55	20.4	YES	NO	dd	bd	0.812
23	123789-HxCDF	36.92	2.250e3	1.731e3	1.137	1.30	1.24	31.9	YES	NO	bb	bb	0.573
24	234678-HxCDF	35.90	5.430e3	4.946e3	1.140	1.10	1.24	53.8	YES	NO	bd	bb	1.356
25	Total-hexa furans	35.38	5.176e2	4.123e2	1.141	1.26	1.24	7.8	YES	NO	db	db	0.120
26	123678-HxCDF	35.06	4.219e3	3.442e3	1.091	1.23	1.24	65.4	YES	NO	db	db	0.971
27	123478-HxCDF	34.91	1.070e4	8.716e3	1.166	1.23	1.24	171.4	YES	NO	bd	dd	2.366
28	Total-hexa furans	34.77	1.562e3	1.372e3	1.141	1.14	1.24	22.0	YES	NO	bb	bd	0.380
29	Total-hexa furans	34.30	5.588e4	4.373e4	1.141	1.28	1.24	824.1	YES	NO	bb	bb	12.892
30	Total-hexa furans	33.99	1.145e3	9.292e2	1.141	1.23	1.24	17.1	YES	NO	bb	bb	0.268
31	Total-hexa furans	33.75	4.303e2	3.318e2	1.141	1.30	1.24	5.2	YES	NO	bb	bb	0.099
32	Total-hexa furans	33.47	3.466e4	2.783e4	1.141	1.25	1.24	518.8	YES	NO	bb	bb	8.089
33	123468-HXCDF	33.25	1.105e4	8.679e3	1.169	1.27	1.24	161.8	YES	NO	db	db	2.397
34	1234789-HpCDF	41.03	2.773e3	2.742e3	0.953	1.01	1.05	34.3	YES	NO	bb	bb	1.568
35	Total-hepta furans	39.45	1.082e5	1.091e5	0.978	0.99	1.05	1448.2	YES	NO	bb	bb	49.675
36	1234678-HpCDF	38.79	5.162e4	5.186e4	1.003	1.00	1.05	717.1	YES	NO	bb	bb	19.649
37	OCDF	45.26	7.849e4	8.973e4	0.778	0.87	0.89	926.5	YES	NO	bb	bb	51.577

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-penta1	27.22	2.086e4	1.385e4		1.51	1.55	361.5	YES	NO	bb	bb	5.008
39	Total-tetradoxins	23.83	1.332e3	1.857e3	1.024	0.72	0.77	17.9	YES	NO	bb	bb	0.460
40	1368-TCDD	23.56	1.987e3	2.669e3	1.015	0.74	0.77	26.4	YES	NO	bb	bb	0.677
41	Total-tetradoxins	26.06	8.702e2	1.118e3	1.024	0.78	0.77	8.8	YES	NO	bb	db	0.286
42	Total-tetradoxins	25.77	2.101e2	2.448e2	1.024	0.86	0.77	3.1	YES	NO	bb	db	0.066
43	Total-tetradoxins	24.77	6.281e2	9.095e2	1.024	0.69	0.77	8.5	YES	NO	bb	db	0.222
44	Total-tetradoxins	24.56	8.556e2	1.134e3	1.024	0.75	0.77	13.2	YES	NO	bb	bd	0.287
45	12378-PeCDD	31.55	2.786e3	1.643e3	1.022	1.70	1.55	23.4	YES	NO	bb	bb	0.730
46	Total-pentadoxins	30.31	1.757e3	1.057e3	1.502	1.66	1.55	15.6	YES	NO	dd	bd	0.315
47	Total-pentadoxins	30.16	2.475e3	1.601e3	1.502	1.55	1.55	22.4	YES	NO	bd	bb	0.457
48	Total-pentadoxins	29.94	2.031e3	1.359e3	1.502	1.50	1.55	19.0	YES	NO	bb	bb	0.380
49	Total-pentadoxins	29.33	1.232e3	8.680e2	1.502	1.42	1.55	12.7	YES	NO	bb	bb	0.235
50	124679-HxCDD	34.02	3.624e4	2.955e4	1.115	1.23	1.24	331.3	YES	NO	bb	bb	9.432
51	123789-HxCDD	36.54	8.241e3	6.450e3	0.907	1.28	1.24	80.3	YES	NO	bb	bb	2.588
52	Total-hexadoxins	36.32	1.924e3	1.547e3	1.005	1.24	1.24	16.9	YES	NO	db	db	0.552
53	123678-HxCDD	36.16	1.317e4	1.092e4	1.001	1.21	1.24	128.0	YES	NO	dd	dd	3.843
54	123478-HxCDD	36.05	3.150e3	2.671e3	0.996	1.18	1.24	33.9	YES	NO	dd	bd	0.935
55	Total-hexadoxins	35.27	3.500e3	2.976e3	1.005	1.18	1.24	34.1	YES	NO	db	db	1.030
56	Total-hexadoxins	35.16	4.037e4	3.396e4	1.005	1.19	1.24	253.2	YES	NO	bd	bd	11.821
57	Total-hexadoxins	34.80	6.575e3	5.501e3	1.005	1.20	1.24	64.0	YES	NO	bb	bb	1.920
58	1234678-HpCDD	40.29	2.249e5	2.188e5	1.039	1.03	1.05	1756.7	YES	NO	bb	bb	102.568
59	1234679-HPCDD	39.24	3.907e5	3.820e5	1.137	1.02	1.05	3315.7	YES	NO	bb	bb	163.245
60	OCDD	45.03	1.415e6	1.662e6	0.920	0.85	0.89	16603.5	YES	NO	bb	bb	797.504

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.02	7.905e5					13.2	YES		db		
2	FUNCTION1 PFK	21.65	4.538e6					23.3	YES		bd		
3	FUNCTION1 PFK	21.27	1.539e6					21.1	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.00	4.329e5					7.2	YES		bb		0.000
2	FUNCTION2 PFK	29.94	7.346e5					3.8	YES		bb		0.000
3	FUNCTION2 PFK	28.96	9.025e5					6.1	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk**PFK3**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.05	1.138e6					17.6	YES		bb		0.000
2	FUNCTION3 PFK	36.63	2.624e6					21.2	YES		bb		0.000
3	FUNCTION3 PFK	35.69	3.703e5					9.1	YES		bb		0.000
4	FUNCTION3 PFK	32.97	6.234e4					4.2	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.72	1.419e5					4.4	YES		bb		
2	FUNCTION4 PFK	38.78	3.966e6					12.7	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.42	2.657e6					9.0	YES		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.83	3.140e2					6.7	YES		bb		0.000
2	FUNCTION1 HXCD...	26.17	4.707e2					12.2	YES		bb		0.000
3	FUNCTION1 HXCD...	25.94	5.679e2					16.4	YES		db		0.000
4	FUNCTION1 HXCD...	25.80	5.128e2					11.7	YES		bd		0.000
5	FUNCTION1 HXCD...	23.81	6.310e2					15.0	YES		bb		0.000
6	FUNCTION1 HXCD...	22.34	2.247e2					5.9	YES		db		0.000
7	FUNCTION1 HXCD...	22.17	2.998e2					5.3	YES		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld

Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time

Printed: Tuesday, March 07, 2023 13:19:24 Pacific Standard Time

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk**ETHERS3**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	29.13	1.345e2					4.9	YES		dd		0.000
2	FUNCTION2 HPCD...	29.00	8.033e2					18.3	YES		bd		0.000
3	FUNCTION2 HPCD...	32.26	2.247e2					7.1	YES		db		0.000
4	FUNCTION2 HPCD...	32.23	1.524e2					6.7	YES		bd		0.000
5	FUNCTION2 HPCD...	31.16	1.572e2					6.6	YES		bb		0.000
6	FUNCTION2 HPCD...	29.15	1.126e2					5.5	YES		db		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.43	7.013e1					2.7	NO		bb		0.000
2	FUNCTION3 OCDPE	34.23	3.610e2					7.3	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.43	6.571e3					144.6	YES		db		0.000
2	FUNCTION4 NCDPE	38.33	7.179e1					2.9	NO		bd		0.000

ETHERS6

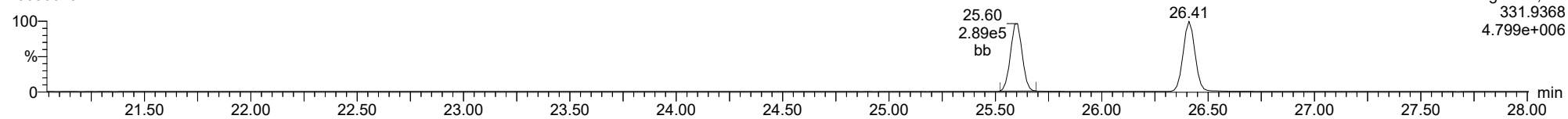
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.08	8.354e1					2.7	NO		db		0.000
2	FUNCTION5 DCDPE	45.01	7.355e1					3.1	YES		bd		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

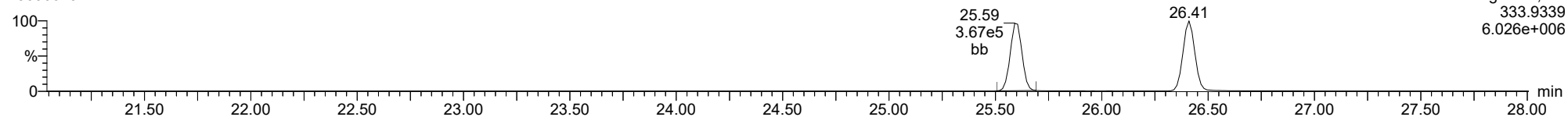
13C-1234-TCDD

23030629



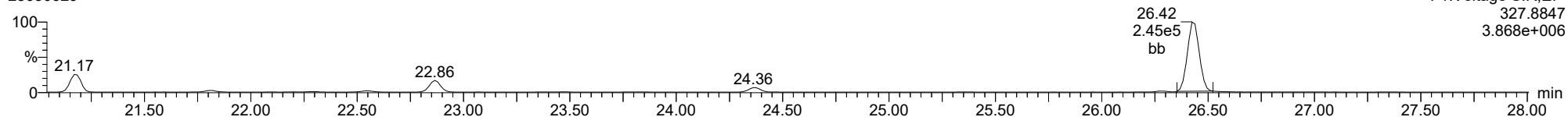
13C-1234-TCDD

23030629



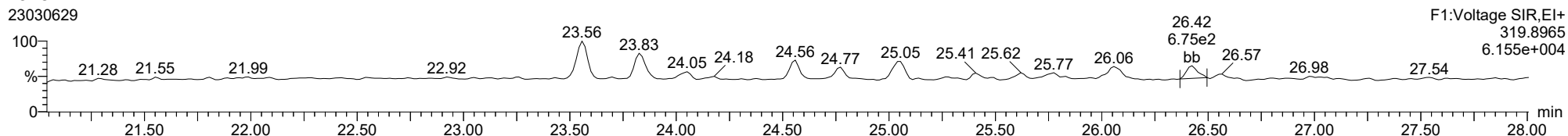
37CL-2378-TCDD

23030629

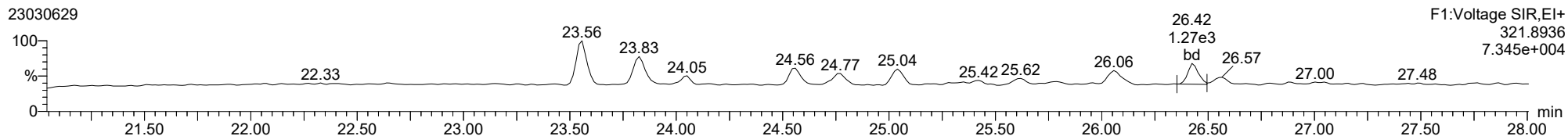


ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

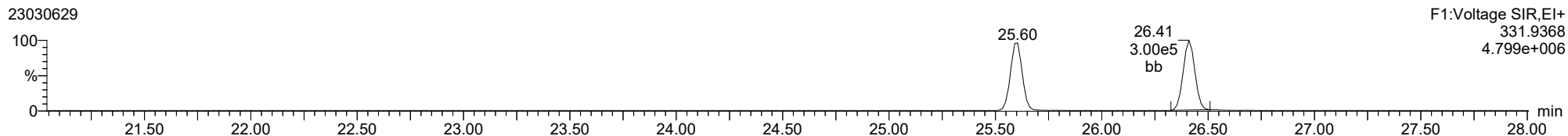
2378-TCDD



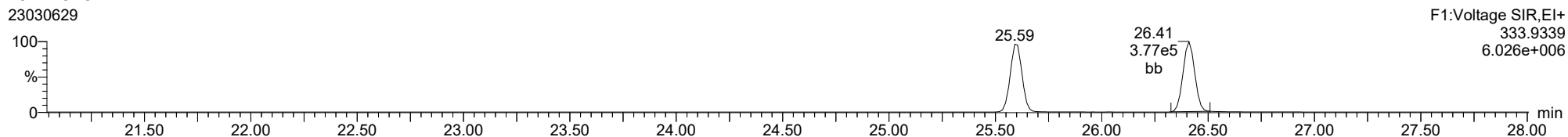
2378-TCDD



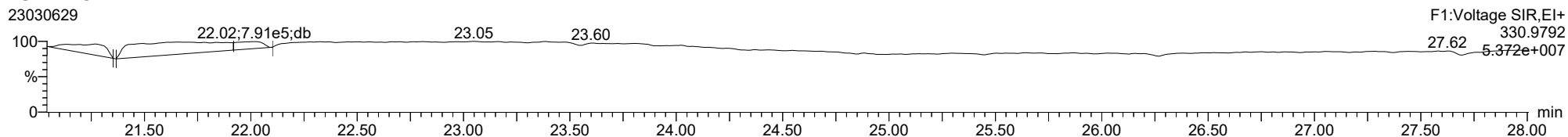
13C-2378-TCDD



13C-2378-TCDD



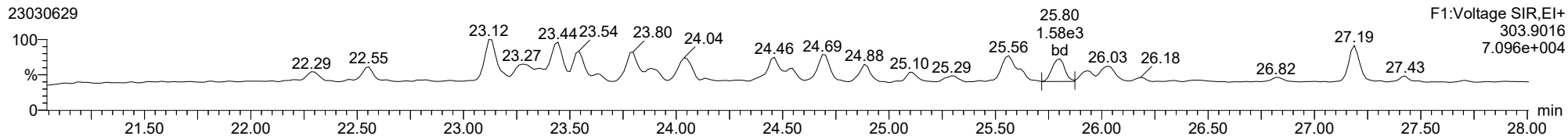
FUNCTION1 PFK



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

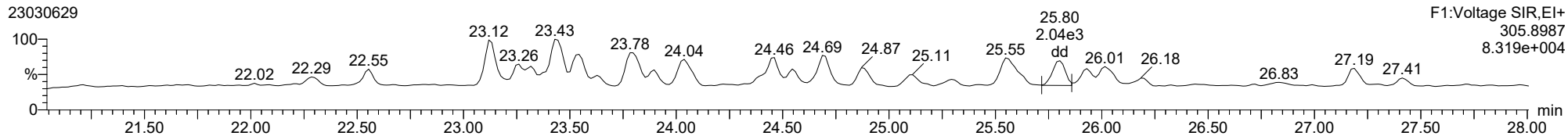
2378-TCDF

23030629



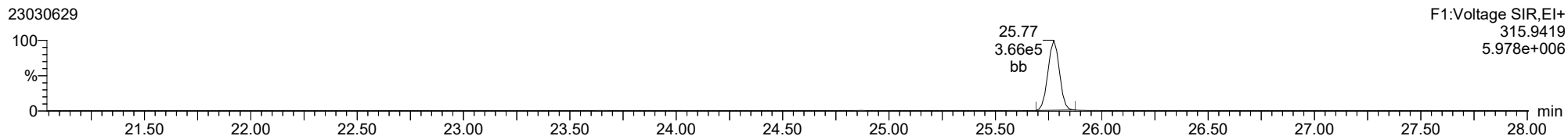
2378-TCDF

23030629



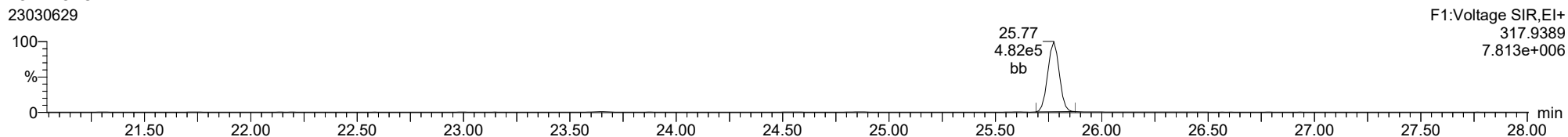
13C-2378-TCDF

23030629



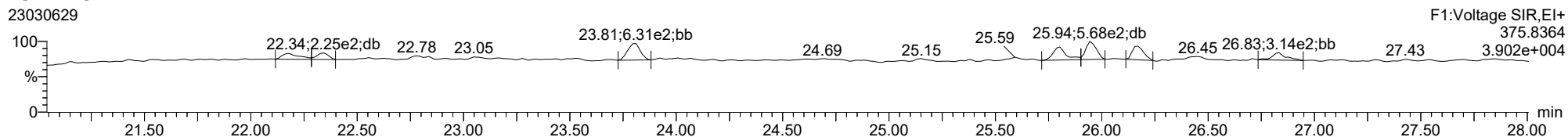
13C-2378-TCDF

23030629



FUNCTION1 HXCDPE

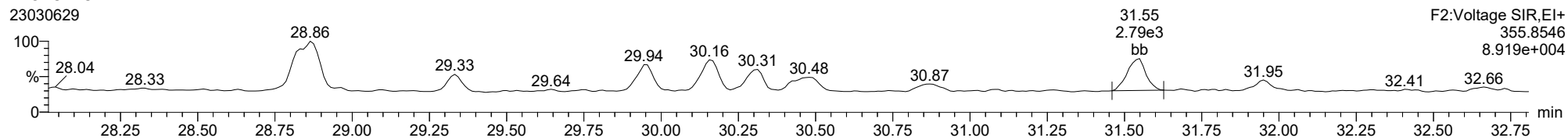
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

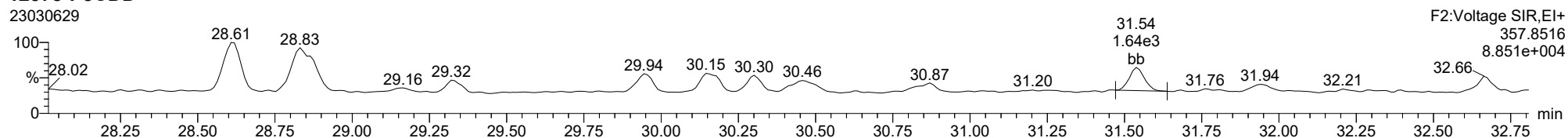
12378-PeCDD

23030629



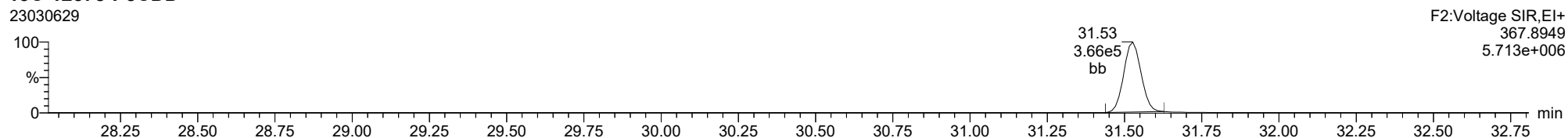
12378-PeCDD

23030629



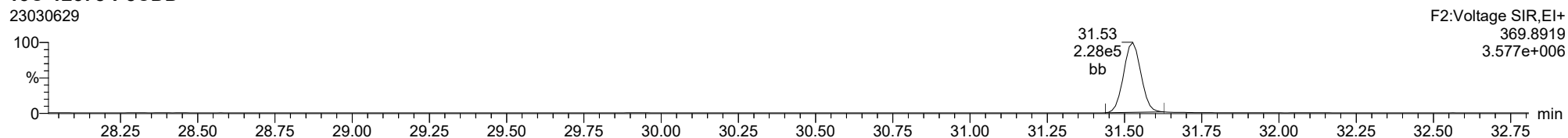
13C-12378-PeCDD

23030629



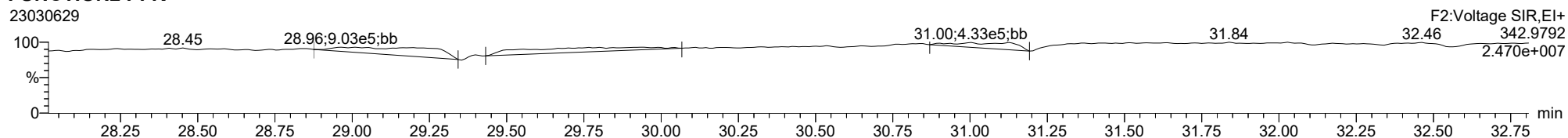
13C-12378-PeCDD

23030629



FUNCTION2 PFK

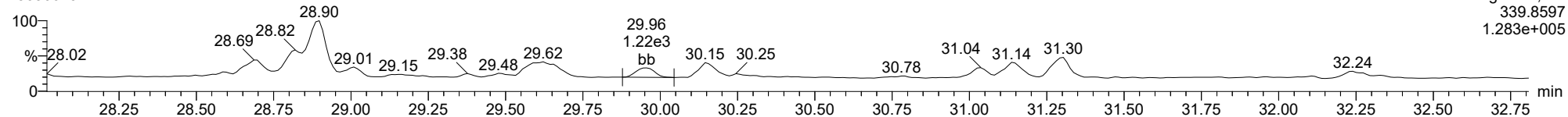
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

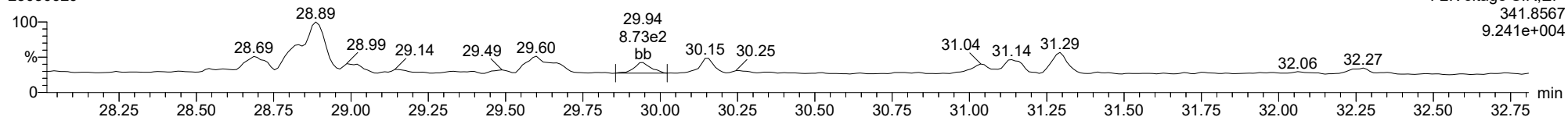
12378-PeCDF

23030629



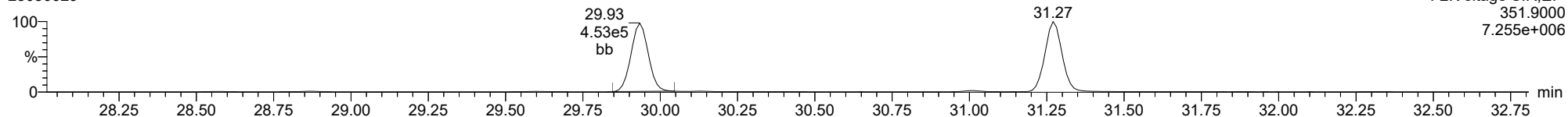
12378-PeCDF

23030629



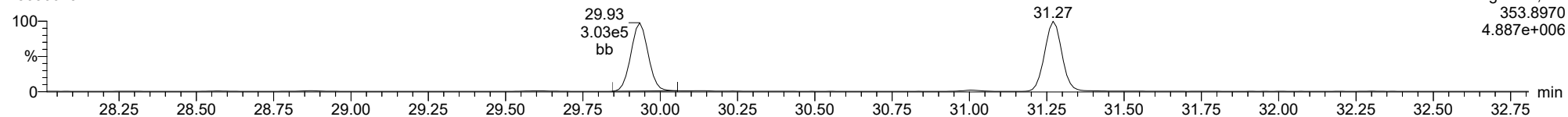
13C-12378-PeCDF

23030629



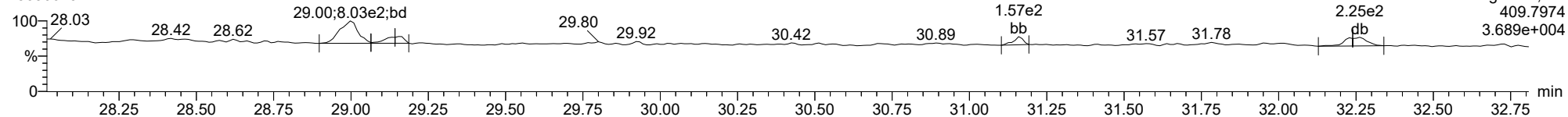
13C-12378-PeCDF

23030629



FUNCTION2 HPCDPE

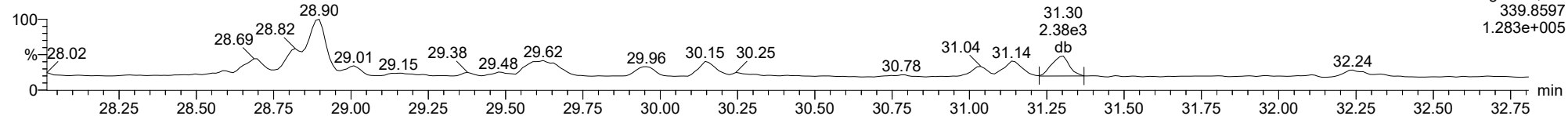
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

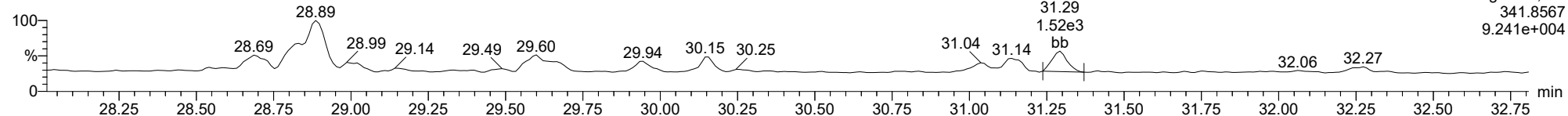
23478-PeCDF

23030629



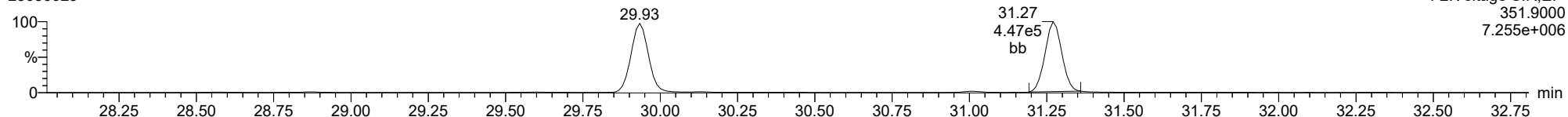
23478-PeCDF

23030629



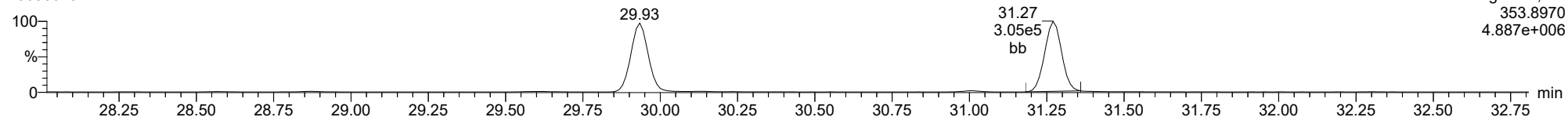
13C-23478-PeCDF

23030629



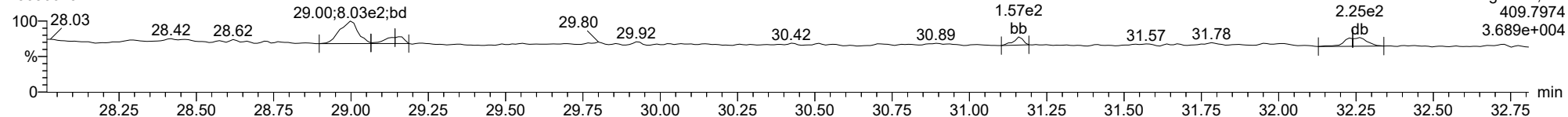
13C-23478-PeCDF

23030629



FUNCTION2 HPCDPE

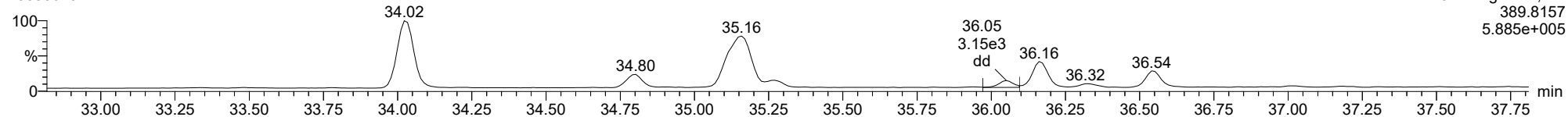
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

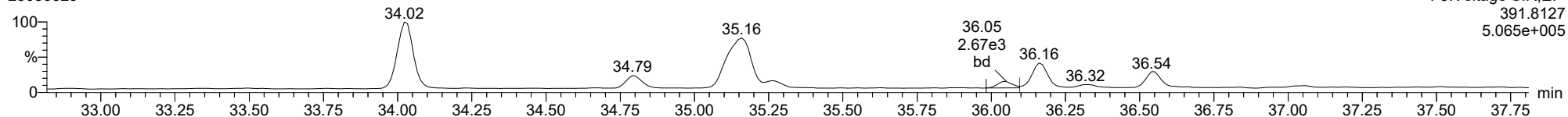
123478-HxCDD

23030629



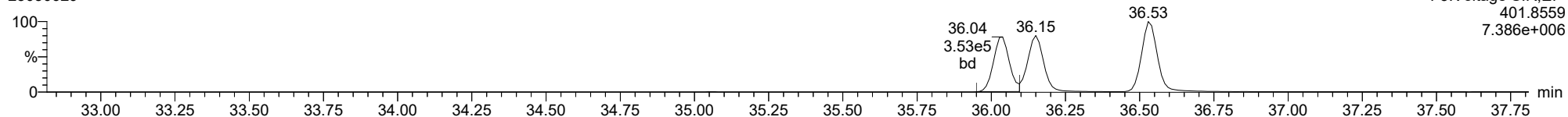
123478-HxCDD

23030629



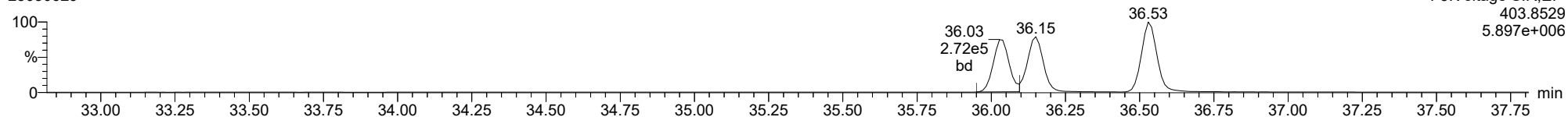
13C-123478-HxCDD

23030629



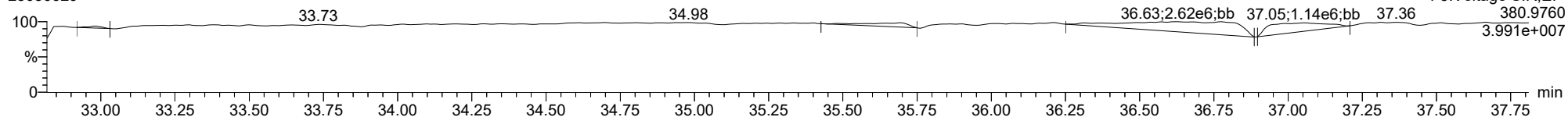
13C-123478-HxCDD

23030629



FUNCTION3 PFK

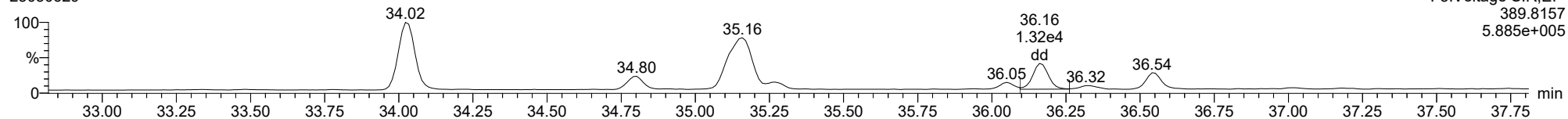
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

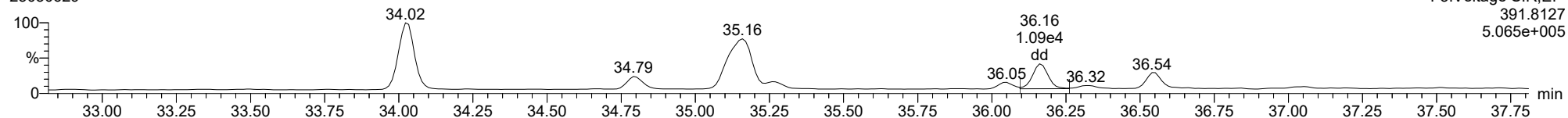
123678-HxCDD

23030629



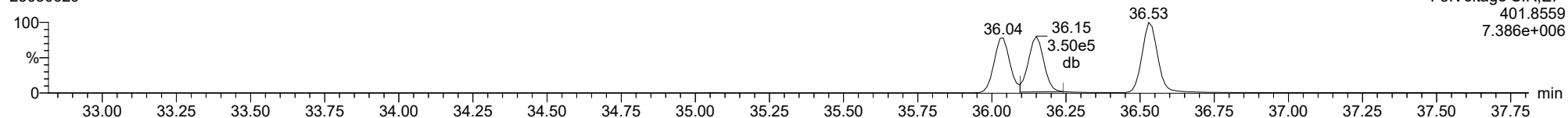
123678-HxCDD

23030629



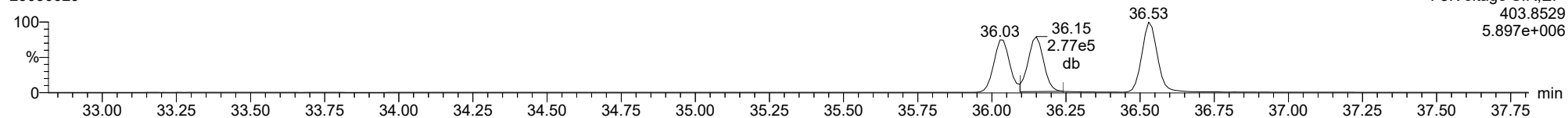
13C-123678-HxCDD

23030629



13C-123678-HxCDD

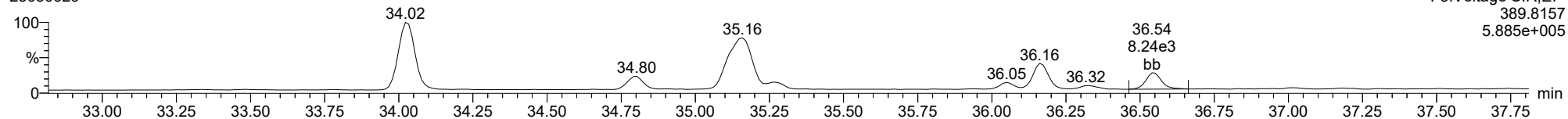
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

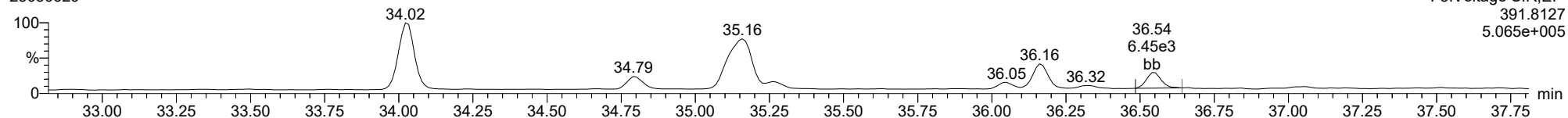
123789-HxCDD

23030629



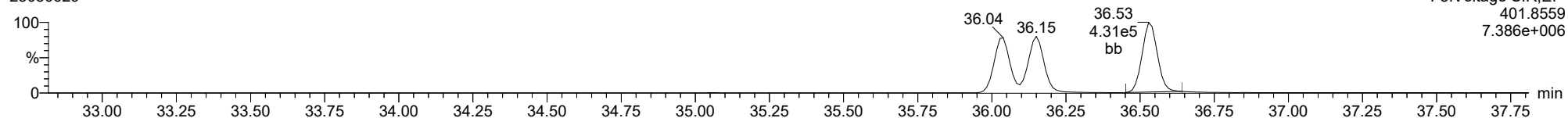
123789-HxCDD

23030629



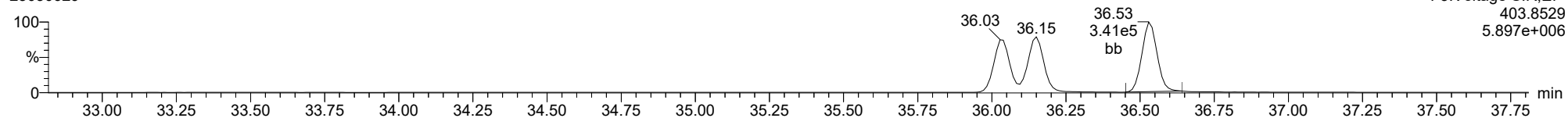
13C-123789-HxCDD

23030629



13C-123789-HxCDD

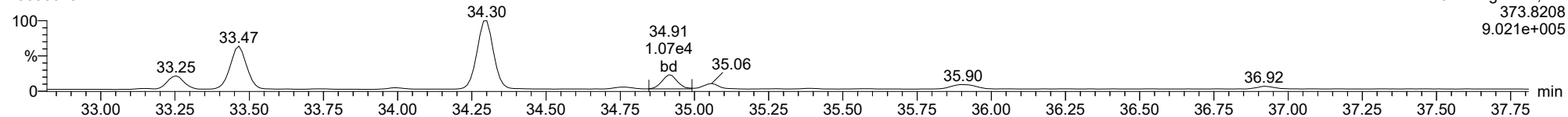
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

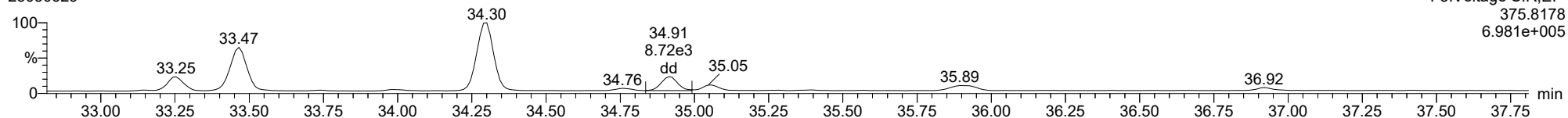
123478-HxCDF

23030629



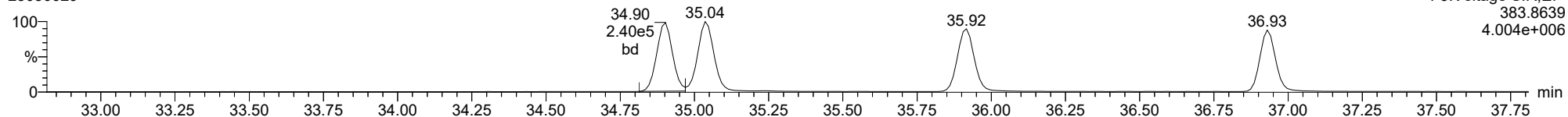
123478-HxCDF

23030629



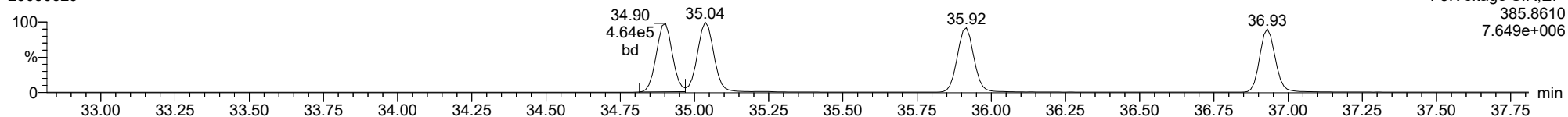
13C-123478-HxCDF

23030629



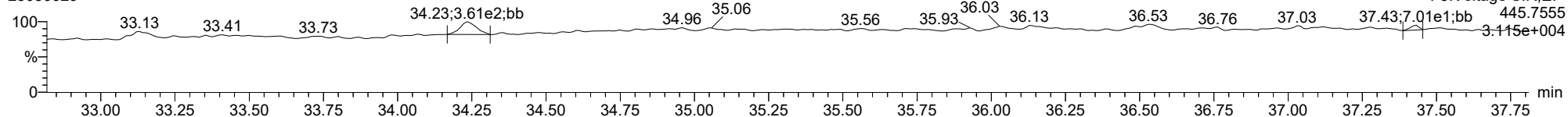
13C-123478-HxCDF

23030629



FUNCTION3 OCDPE

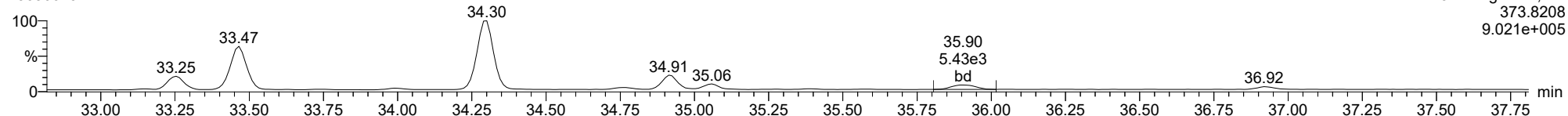
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

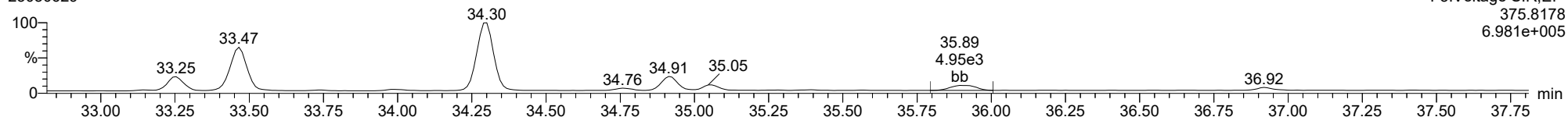
234678-HxCDF

23030629



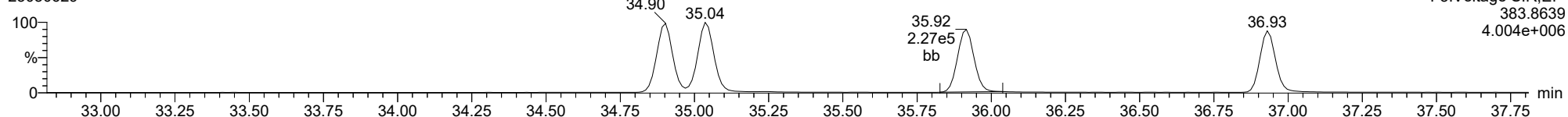
234678-HxCDF

23030629



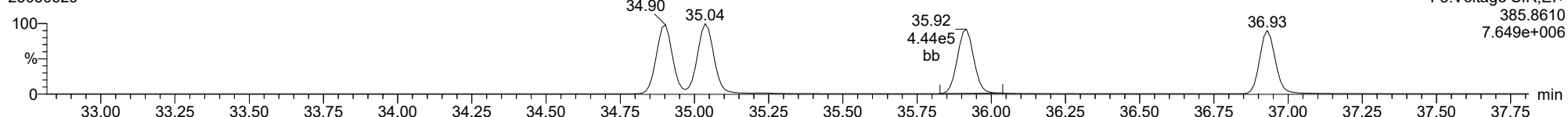
13C-234678-HxCDF

23030629



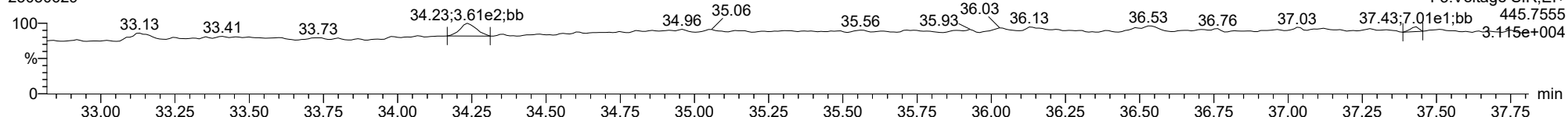
13C-234678-HxCDF

23030629



FUNCTION3 OCDPE

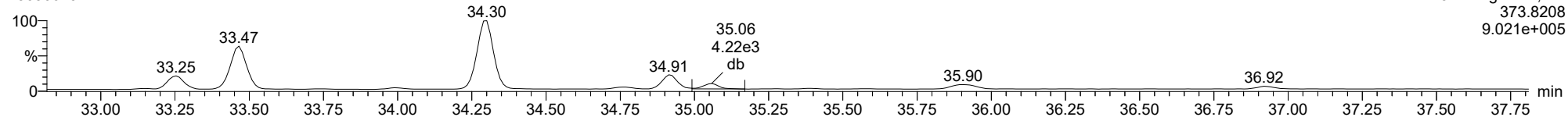
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

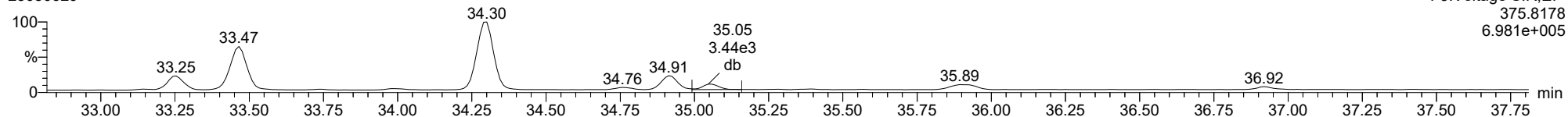
123678-HxCDF

23030629



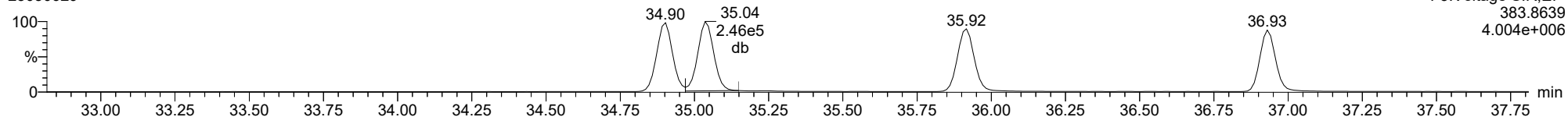
123678-HxCDF

23030629



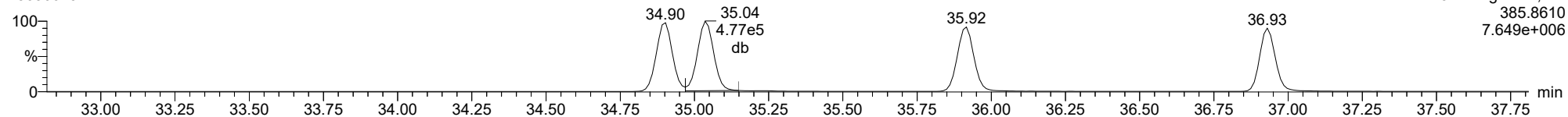
13C-123678-HxCDF

23030629



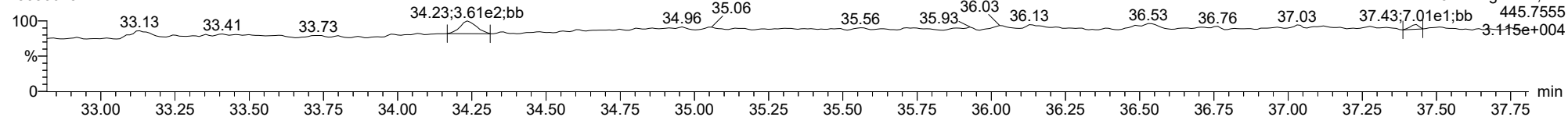
13C-123678-HxCDF

23030629



FUNCTION3 OCDPE

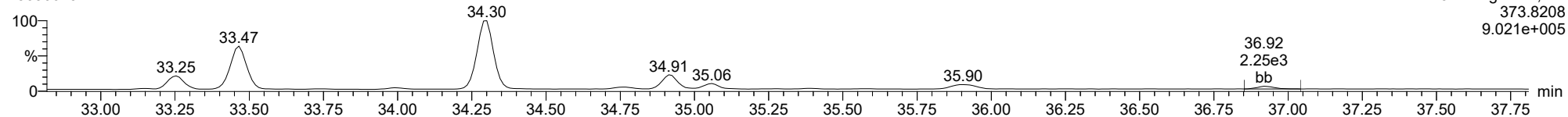
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

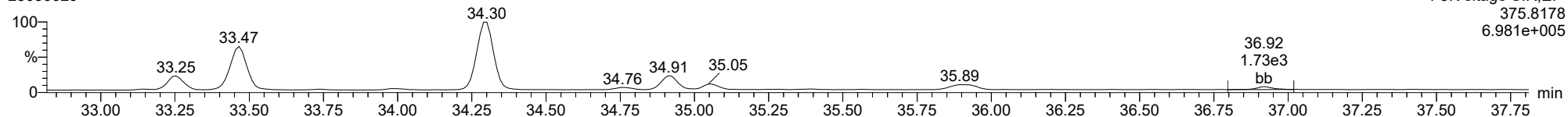
123789-HxCDF

23030629



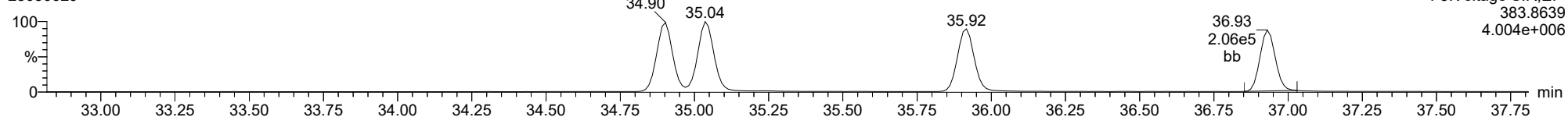
123789-HxCDF

23030629



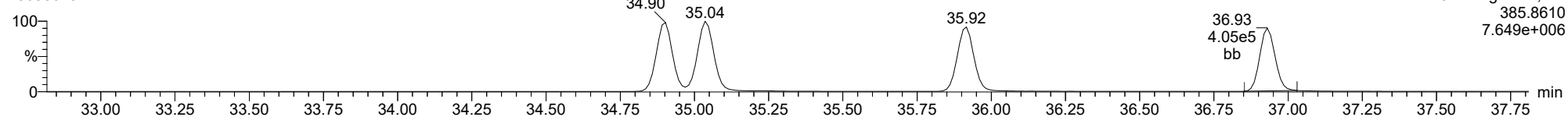
13C-123789-HxCDF

23030629



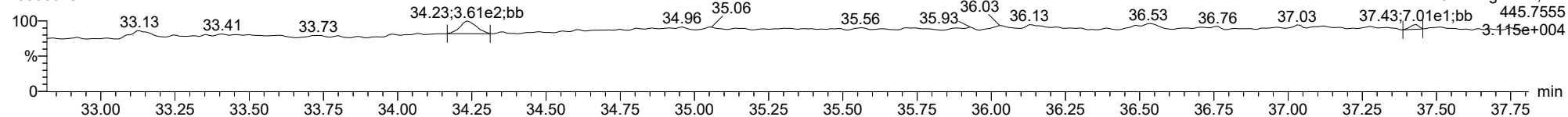
13C-123789-HxCDF

23030629



FUNCTION3 OCDPE

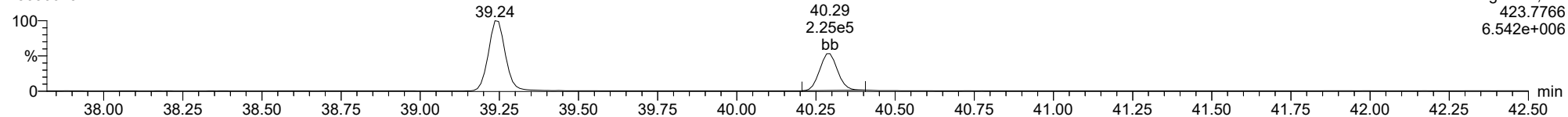
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

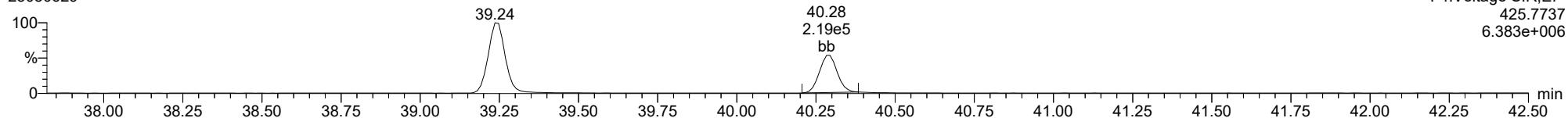
23030629



F4:Voltage SIR,EI+
423.7766
6.542e+006

1234678-HpCDD

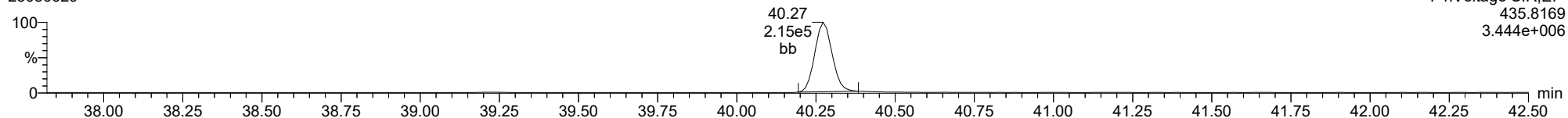
23030629



F4:Voltage SIR,EI+
425.7737
6.383e+006

13C-1234678-HpCDD

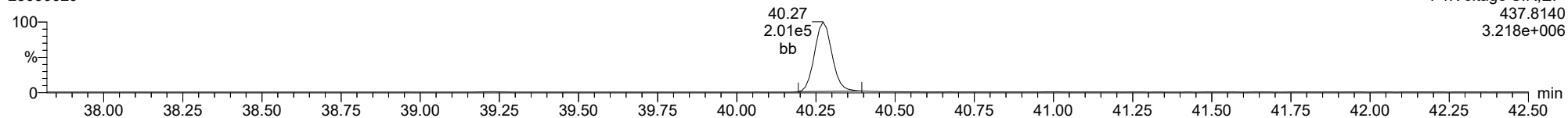
23030629



F4:Voltage SIR,EI+
435.8169
3.444e+006

13C-1234678-HpCDD

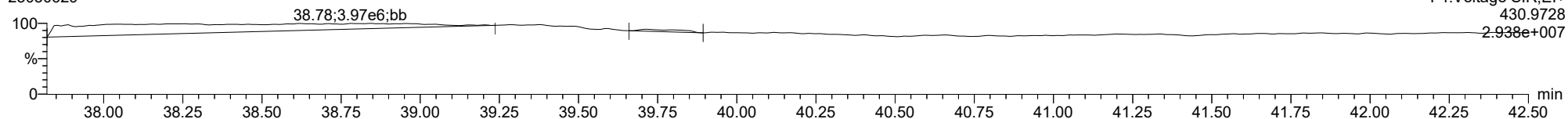
23030629



F4:Voltage SIR,EI+
437.8140
3.218e+006

FUNCTION4 PFK

23030629

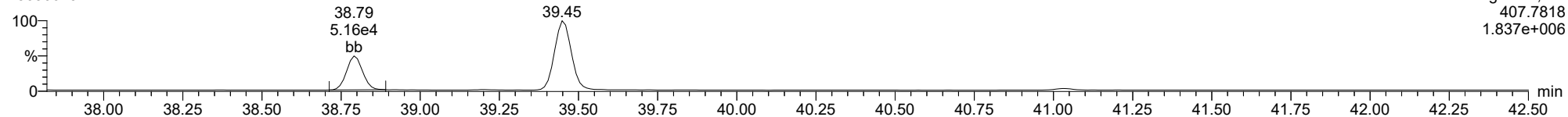


F4:Voltage SIR,EI+
430.9728
2.938e+007

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

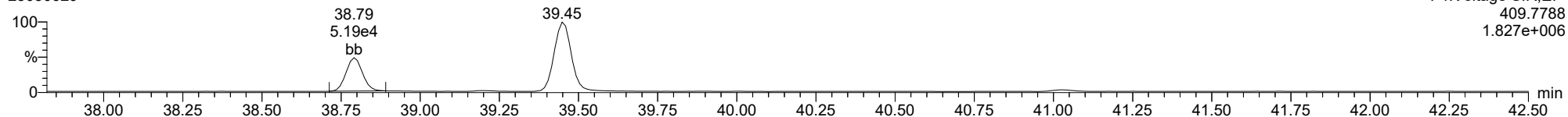
1234678-HpCDF

23030629



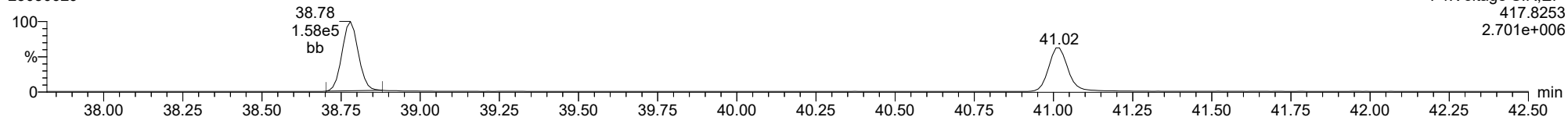
1234678-HpCDF

23030629



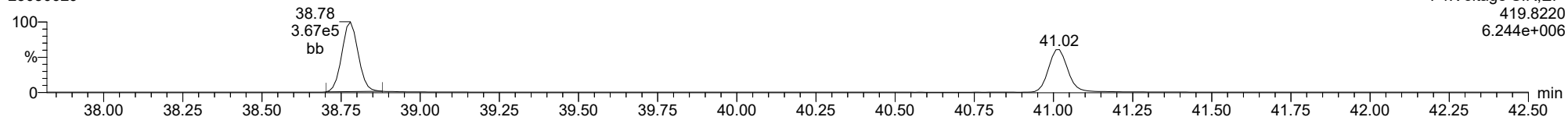
13C-1234678-HpCDF

23030629



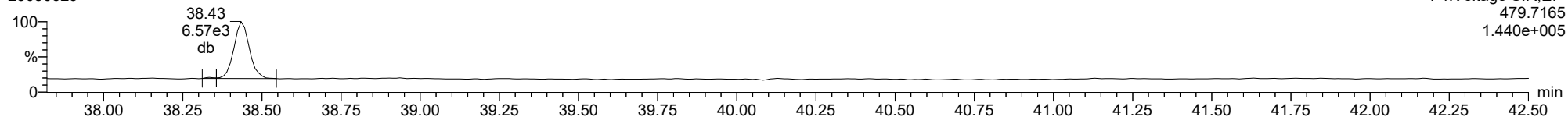
13C-1234678-HpCDF

23030629



FUNCTION4 NCDPE

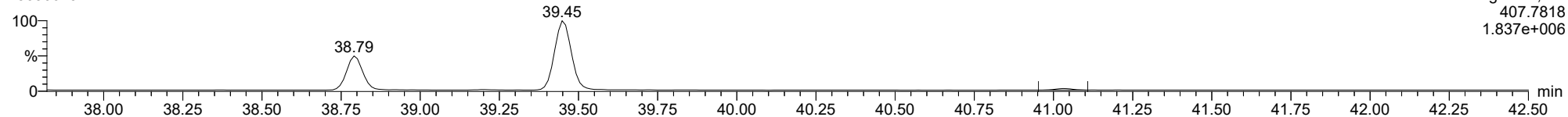
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

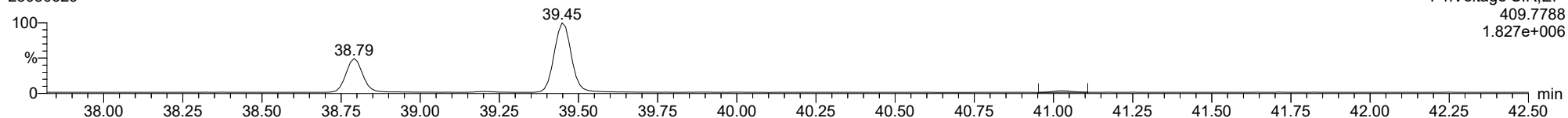
23030629



F4:Voltage SIR,El+
407.7818
1.837e+006

1234789-HpCDF

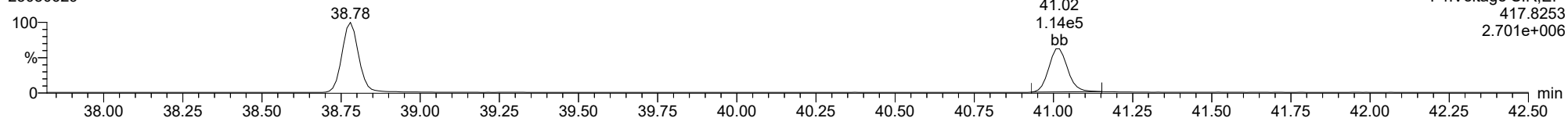
23030629



F4:Voltage SIR,El+
409.7788
1.827e+006

13C-1234789-HpCDF

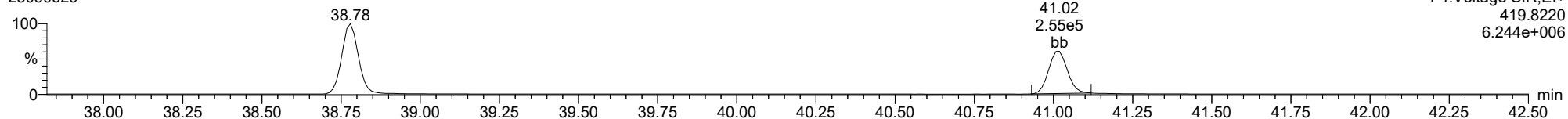
23030629



F4:Voltage SIR,El+
417.8253
2.701e+006

13C-1234789-HpCDF

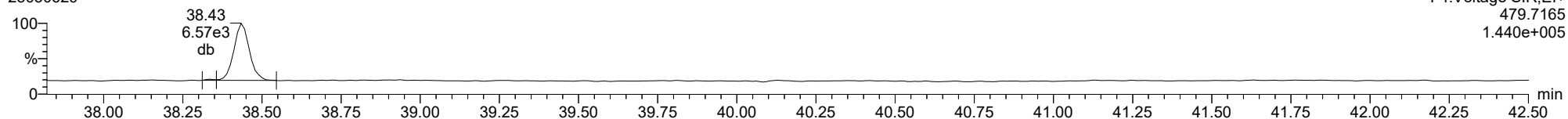
23030629



F4:Voltage SIR,El+
419.8220
6.244e+006

FUNCTION4 NCDPE

23030629

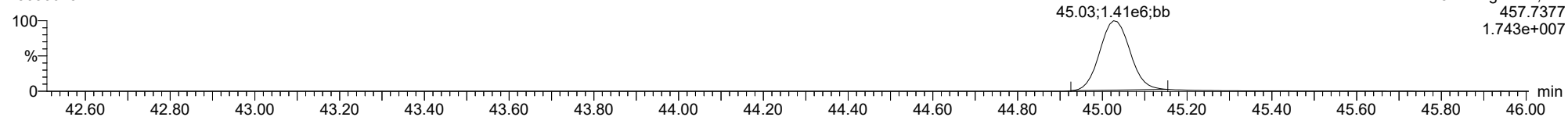


F4:Voltage SIR,El+
479.7165
1.440e+005

ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

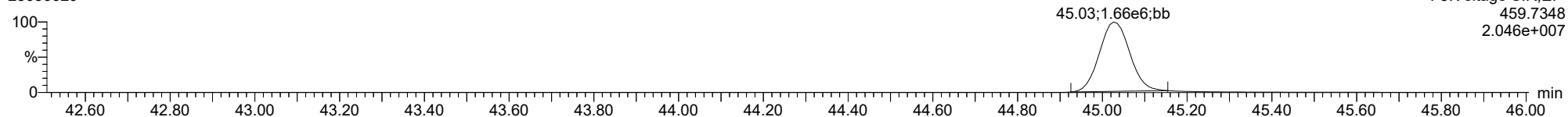
OCDD

23030629



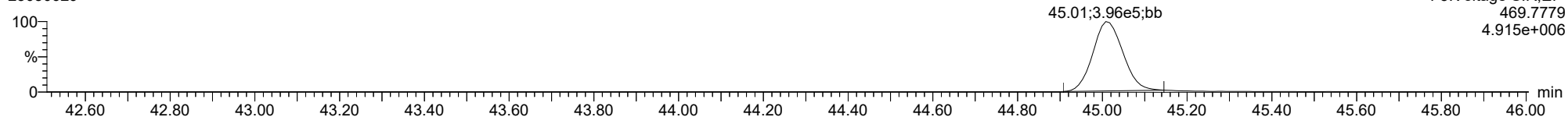
OCDD

23030629



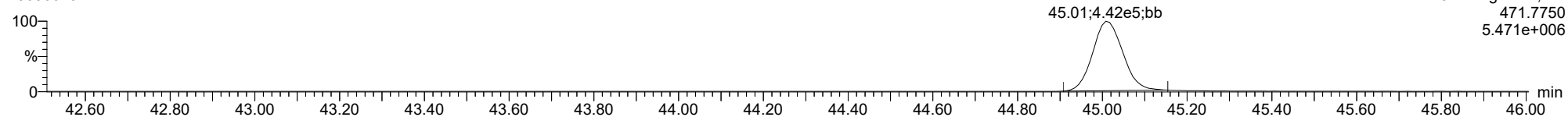
13C-OCDD

23030629



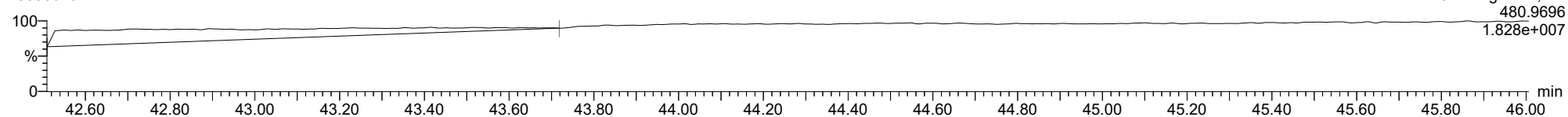
13C-OCDD

23030629



FUNCTION5 PFK

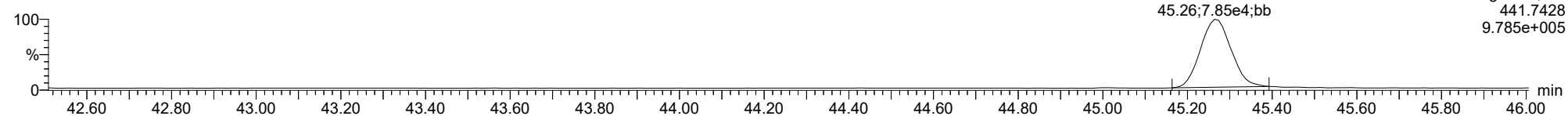
23030629



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

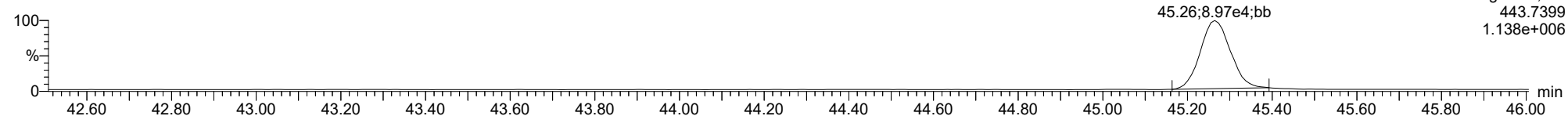
OCDF

23030629



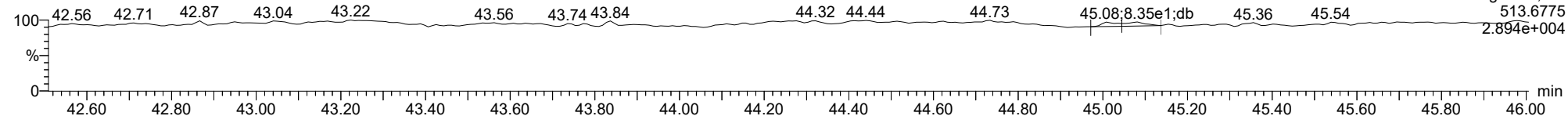
OCDF

23030629



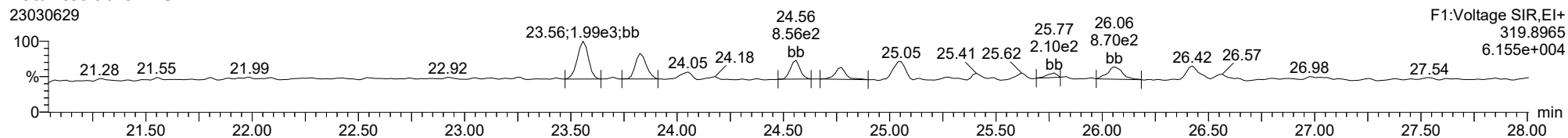
FUNCTION5 DCDPE

23030629

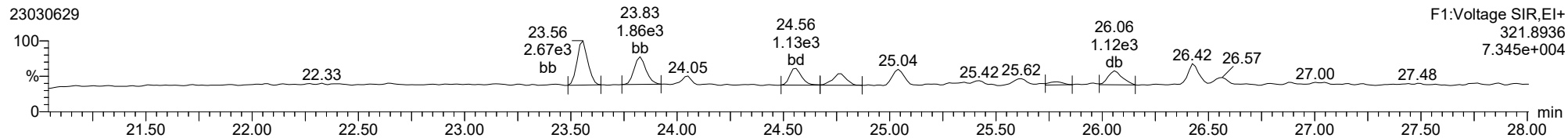


ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

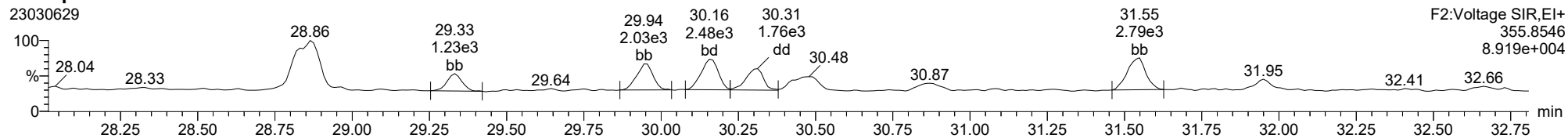
Total-tetradioxins



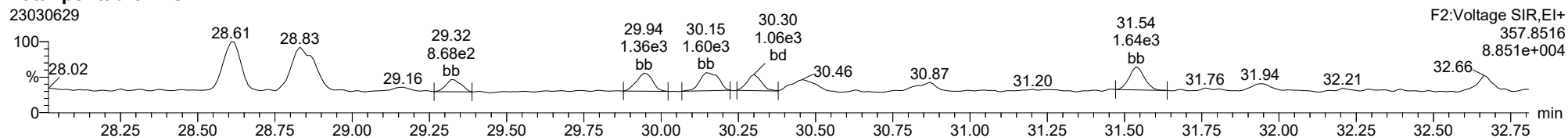
Total-tetradioxins



Total-pentadioxins



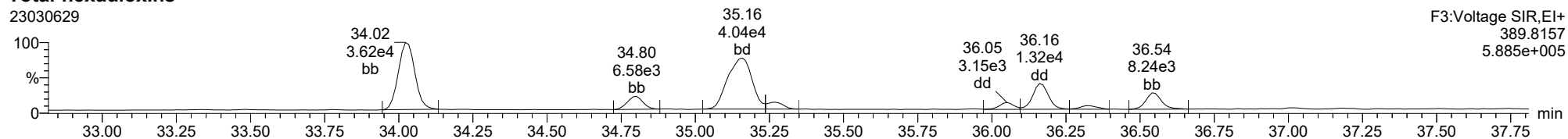
Total-pentadioxins



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

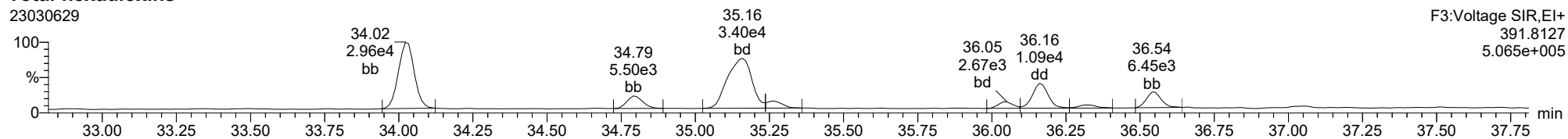
Total-hexadioxins

23030629



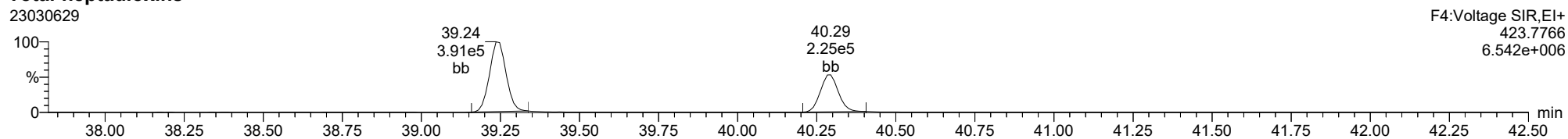
Total-hexadioxins

23030629



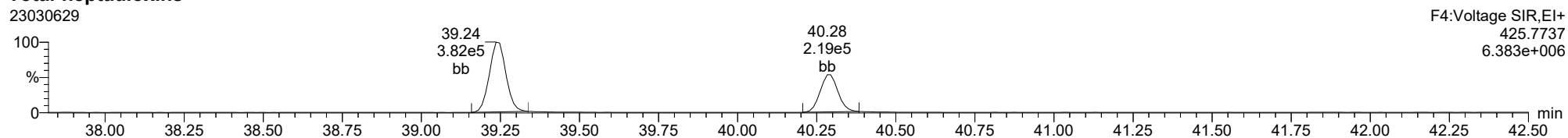
Total-heptadioxins

23030629



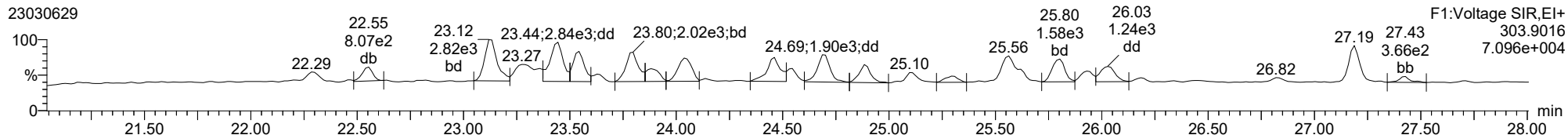
Total-heptadioxins

23030629

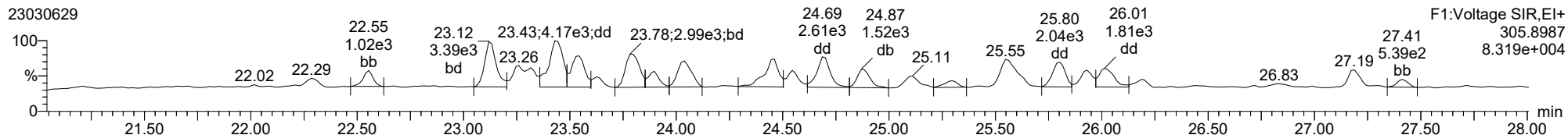


ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

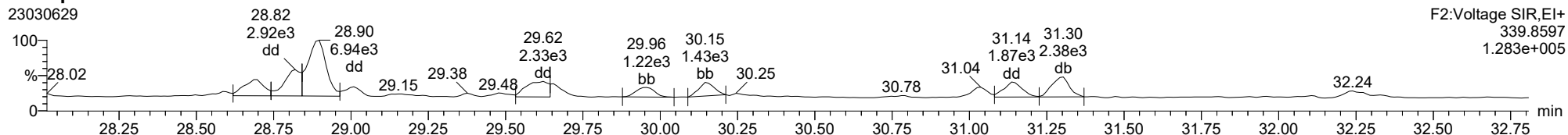
Total-tetrafurans



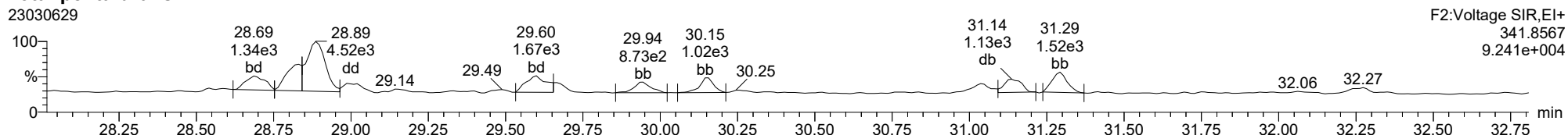
Total-tetrafurans



Total-pentafurans



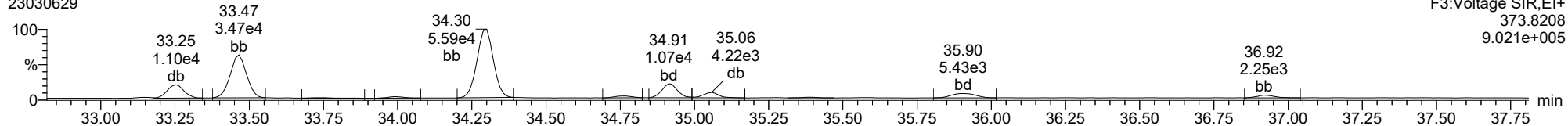
Total-pentafurans



ID: 23A0326-12, Name: 23030629, Date: 07-Mar-2023, Time: 09:17:30, Conditions: AUTOSPEC01, User: pk

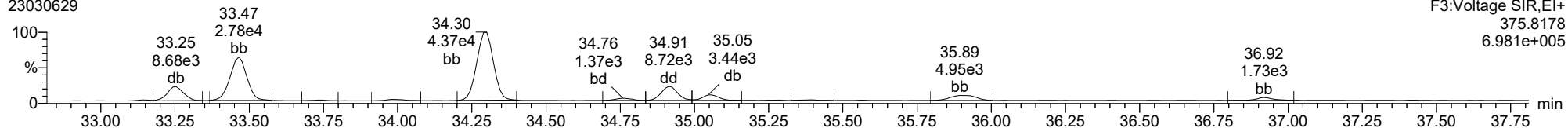
Total-hexafurans

23030629



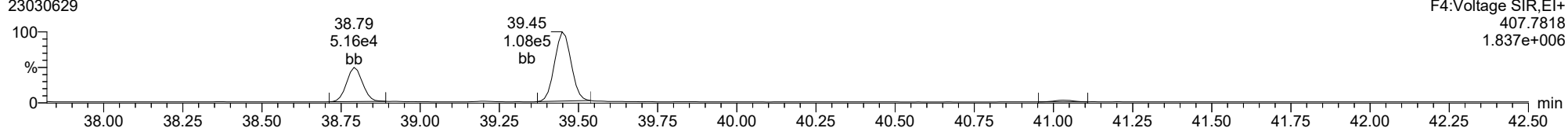
Total-hexafurans

23030629



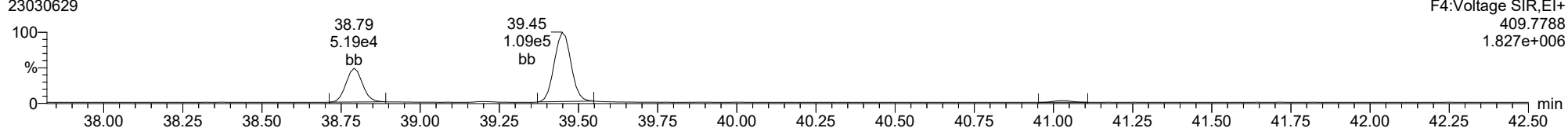
Total-heptafurans

23030629



Total-heptafurans

23030629





PREPARATION BATCH SUMMARY
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Batch:	<u>BLA0398</u>	Batch Matrix:	<u>Solid</u>
		Preparation:	<u>EPA 1613</u>

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	23030627	01/24/23 07:31	
LDW23-IT1127	23A0326-09	23030628	01/24/23 07:31	
LDW23-SC1162B	23A0326-12	23030629	01/24/23 07:31	
Blank	BLA0398-BLK1	23030614	01/24/23 07:31	
LCS	BLA0398-BS1	23030615	01/24/23 07:31	
Reference	BLA0398-SRM1	23030616	01/24/23 07:31	



Analytical Resources, LLC
Analytical Chemists and Consultants

HRGCMS Dioxin/Furan Preparation Bench Sheet EPA Methods 8290A or 1613B

Batch: BLA0398

Solid Samples

ARI Work Orders: 23A0099, 23A0295, 23A0313, 23A0326, 23A0328

Matrix (circle one)	<input checked="" type="radio"/> Soil	Sediment	Oil	Tissue
Extraction Method	Start Date/Time:	End Date/Time:		
<input checked="" type="checkbox"/> Soxhlet <input type="checkbox"/> SepF Shake out	2/2/23 16:00	2/3/23 07:00		

Reagents/Equipment Used	NA	ID / Lot Number	Initials	Date
Glasswool		5012850	DP	2/8/23
Basic Silica		K0100710	DP	2/8/23
Acid Silica		K011012	DP	2/8/23
Activated Florisil		K0005956	DP	2/8/23
Balance		24650344	DP	2/2/23
Toluene		K011233	DP	2/2/23
Hexane		K011373	DP	2/6/23
CH2Cl2		L0000808	DP	2/8/23
H2SO4		L001033	DP	2/7/23
Na2SO4		L00059/4000980	DP	2/2/23
Other (RM)		K010912	DP	2/2/23
0% Silica		K011054	DP	2/8/23
Nonane		H0006038	DP	2/10/23

Lab Number & Container	Sample Name	% Solids	Sample Weight Equal to dry (g)		RotoVap	Water Trap	Final Vol. (uL)
			(Target Dry)	Actual			
23A0099-01 C	LDW23-IT1154	45.09	(22.18)	22.22	45 °C	9.2	20
23A0099-04 C	LDW23-SC1186	54.6	(18.32)	18.37	45 °C	7.0	20
23A0099-05 C	LDW23-SC1186-FD	53.73	(18.61)	18.69	45 °C	7.6	20
23A0099-10 C	LDW23-IT1160	46.91	(21.32)	21.40	45 °C	10.8	20
23A0099-11 C	LDW23-IT1160-FD	46.63	(21.45)	21.49	45 °C	8.0	20
23A0295-02 B	LDW23-SC1075	52.57	(19.02)	19.10	45 °C	7.2	20
23A0313-12 C	LDW23-IT1148	81.29	(12.30)	12.39	45 °C	1.9	20
23A0326-01 C	LDW23-SC1028	59.94	(16.68)	16.74	45 °C	6.4	20
23A0326-09 C	LDW23-IT1127	61.27	(16.32)	16.40	45 °C	6.1	20
23A0326-12 C	LDW23-SC1162B	52.84	(18.93)	18.98	45 °C	7.8	20
23A0328-06 C	LDW23-SS1168	45.73	(21.87)	21.97	45 °C	11.0	20
23A0328-07 C	LDW23-SS1176	59.31	(16.86)	16.89	45 °C	6.8	20
23A0328-12 C	LDW23-SS1162	43.23	(23.13)	23.18	45 °C	12.0	20
BLA0398-BLK1	Blank	100	0	10.01	45 °C	0.0	20
BLA0398-BS1	LCS	100	0	10.01	45 °C	0.0	20
BLA0398-DUP1	23A0099-01C Duplicate	45.09	(22.18)	22.22	45 °C	9.8	20
BLA0398-SRM1	Reference	100	0	10.00	45 °C	0.0	20

Prep Analyst / Date: DP 2/2/23 DP 2/2/23 DP 2/3/23

Standards Used	Vol	ID / Lot Number	Concentration	Expiration Date	Analyst	Witness	Date
Recovery Standard	1.0 mL	K011158	2/4 ng/mL	12/2/23	DP	M	2/2/23
OPR	1.0 mL	K006003	0.2/1.0/2.0 ng/mL	6/30/23	DP	M	2/2/23
QES Standard	1.0 mL		0.1/0.05/0.1 ng/mL ng/n				
Clean-up Standard	1.0 mL	K011159	0.8 ng/mL	12/2/23	DP	M	2/8/23

Verify Client ID
Analyst / Date: DP 2/2/23

Acid Clean
Analyst / Date: DP N 2/7/23

Silica-Florisil Clean
Analyst / Date: DP N 2/8/23

Supervisor Review By: DP Date: 2/6/23

TOTAL SOLIDS BENCHSHEET				Batch:	BLA0144
Method HRSM01.2				Date:	1/24/2023 5:23
(dry at 110 C)				Analyst:	DXP
Instrumentation				Drying Oven:	18
				Analytical Balance:	24650344
Batch drying time			Oven Temp, C	TS (%) calculated as:	
Record times as mm/dd/yy hh:mm			111	Final dry wt (g) = (Dry Wt - Tare Wt)	
Date/time in oven:	1/23/2023 12:55		110	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)	
Date/time out:	1/24/2023 5:23				
Elapsed hrs:	16.5				
				Oven Temps, °C	
				Start Temp:	111
				End Temp:	110

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0099-01	0.7900	11.5900	5.6600	4.87	45.09%	No
23A0099-04	0.8100	11.3600	6.5700	5.76	54.60%	Yes
23A0099-05	0.8000	11.5200	6.5600	5.76	53.73%	Yes
23A0099-10	0.8200	11.8400	5.9900	5.17	46.91%	No
23A0099-11	0.8000	11.1800	5.6400	4.84	46.63%	Yes
23A0295-02	0.8100	11.3300	6.3400	5.53	52.57%	Yes
23A0313-12	0.8000	11.1700	9.2300	8.43	81.29%	No
23A0326-01	0.8000	11.2600	7.0700	6.27	59.94%	No
23A0326-09	0.8000	11.3600	7.2700	6.47	61.27%	Yes
23A0326-12	0.8000	11.5300	6.4700	5.67	52.84%	No
23A0328-06	0.8000	11.8000	5.8300	5.03	45.73%	Yes
23A0328-07	0.8000	11.5400	7.1700	6.37	59.31%	Yes
23A0328-12	0.8000	11.6500	5.4900	4.69	43.23%	Yes

TOTAL SOLIDS BENCHSHEET		Batch:	BLA0144
Method HRSM01.2		Date:	
(dry at 110 C)		Analyst:	DP
Instrumentation		Drying Oven:	018
		Analytical Balance:	24650344

Batch drying time		Oven Temp, C	TS (%) calculated as: Final dry wt (g) = (Dry Wt - Tare Wt) TS = (Final Dry Wt X 100)/(sample & dish -dish tare)	Oven Temps, °C	
Record times as mm/dd/yy hh:mm				Start Temp:	111	End Temp:	110
Date/time in oven:	01/23/23 12:55	111			
Date/time out:	01/24/23 05:25	110			
Elapsed hrs:	0.0				

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0099-01	0.79	11.59	5.66			No
23A0099-04	0.81	11.36	6.57			No yes
23A0099-05	0.80	11.52	6.56			No yes
23A0099-10	0.82	11.84	5.99			No
23A0099-11	0.80	11.18	5.64			No yes
23A0295-02	0.81	11.33	6.34			No yes
23A0313-12	0.80	11.17	9.23			No
23A0326-01	0.80	11.26	7.47			No
23A0326-09	0.80	11.36	7.27			No yes
23A0326-12	0.80	11.93	6.47			No
23A0328-06	0.80	11.80	5.83			No yes
23A0328-07	0.80	11.54	7.17			No yes
23A0328-12	0.80	11.65	5.49			No yes



Extraction Parameter: Dioxin Extraction Batch _____

Total Solids Batch: BLA0144 Work Order(s): 23A0099, 295, 313, 326, 328

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
<input checked="" type="checkbox"/> No Anomalies (standard soil/wet sediment/sand/gravel)= <u>313-12, 326-12</u>	<u>DP 1/23/23</u>
<input checked="" type="checkbox"/> Standing Water Decanted (Not shared)= <u>099-4, 5, 11, 295-2, 326-9, 328-6, 7, 12</u>	<u>DP 1/23/23</u>
<input type="checkbox"/> Standing Water Homogenized (Shared samples)=	
<input type="checkbox"/> Clay/Clumps (Difficult to homogenize)=	
<input checked="" type="checkbox"/> Rocks (%+size)? <u>20% 1/4" = 099-1</u> <u>10% 1/3" = 326-1</u>	<u>DP 1/23/23</u>
<input checked="" type="checkbox"/> Organics (Leaves/sticks/grass)=	
<input checked="" type="checkbox"/> Oily, obvious fuel/sulfur odors= <u>099-10, 11</u>	<u>DP 1/23/23</u>
<input type="checkbox"/> Received in 32oz jar(s)=Homogenized in Pyrex dish=	
<input type="checkbox"/> Previously Frozen =	
<input type="checkbox"/> Other (Details)=	
Aqueous:	
<input checked="" type="checkbox"/> No Anomalies	
<input type="checkbox"/> Turbid/Color=	
<input type="checkbox"/> Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
<input type="checkbox"/> Emulsions (%)=	
<input type="checkbox"/> Oily, obvious fuel/sulfur odors=	
<input type="checkbox"/> Other (Details)=	
<input type="checkbox"/> Received in 1.0L Bottle(s)=No Bottle Rinse=	
<input type="checkbox"/> Other Notes/Comments= (Note problems, concerns, corrective actions).	
<input type="checkbox"/> Share Samples Y / N	
<input type="checkbox"/> Multiple Jars Y / N	
<input type="checkbox"/> Sample Pre-Screens indicate analyte activity=	
<input type="checkbox"/> Sample weights/volumes reduced based on Pre-Screen=	



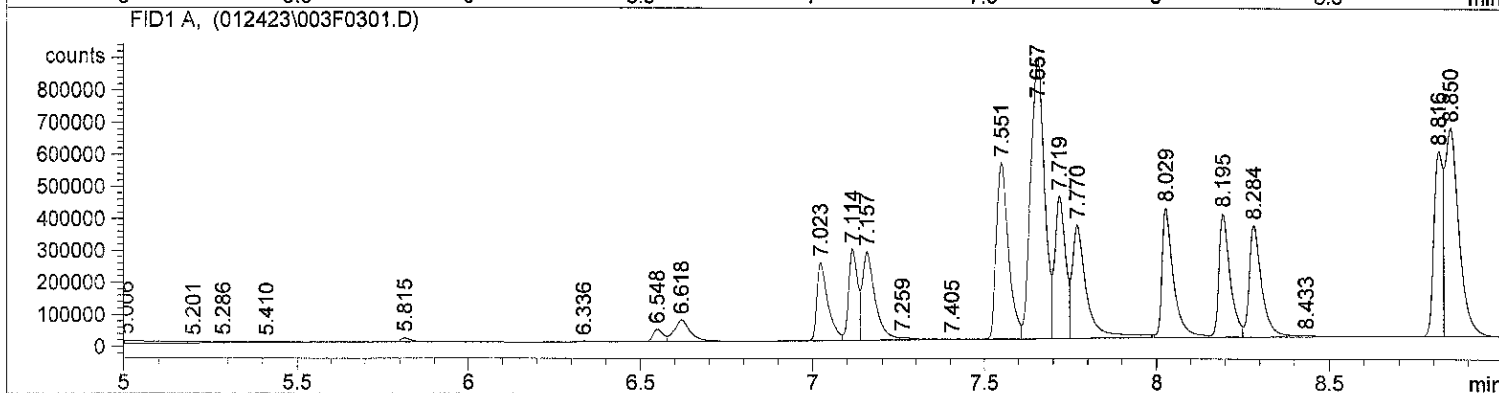
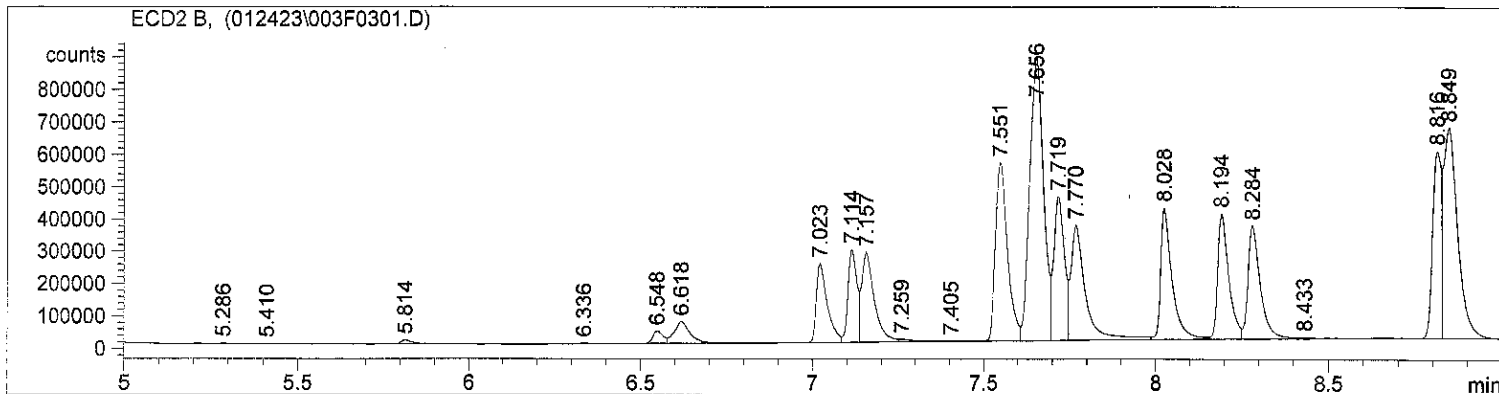
Batch ID: BLA0398 Work Order: 23A0099, 295, 313, 326, 328 Extraction Parameter: Dioxin ARI Analyst

ARI Sample ID	300 mL Flat Bottom	Small Soxhlet	Large Soxhlet	250 mL Beaker	Funnel	Column	Florisil Column	Turbo Tube	Sep Funnel	Erlenmeyer Flask	Centrifuge Bottle	Turbo-Vap	Vortex Mixer	Heating Mantle
BLA0398 - BIKI	31	23	/	43	70	225	49	20				4	4	
BSI	30	"	/	31	03	37	7	85				4	4	
Dupl	6	/	71	3	35	19	103	3				4	4	
SRM	39	15	/	1	4	47	71	23				4	4	
23A0099 - 01C	38	/	67	138	34	224	54	26				4	4	
04C	40	/	31	12	96	70	70	35				4	4	
05C	70	/	25	13	26	48	57	24				4	4	
10C	79	/	3	25	56	17	123	52				4	4	
11C	32	/	23	49	55	9	139	82				4	4	
23A0295 - 02B	49	/	28	177	64	18	168	31				4	4	
23A0313 - 12C	18	5	/	12	43	24	79	9				4	4	
23A0326 - 01C	43	64	/	239	96	51	60	56				4	4	
09C	60	25	/	41	41	145	16	10				4	4	
12C	67	/	35	19	32	13	115	101				4	4	
23A0328 - 06C	4	/	59	517	52	29	167	1				4	4	
07C	17	70	/	48	69	11	36	47				4	4	
12C	53	/	1	23	43	36	19	60				4	4	
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	
												4	4	

```

=====
Injection Date : 1/24/2023 6:04:34 AM      Seq. Line : 3
Sample Name    : CS4 STANDARD                Location  : Vial 3
Acq. Operator  : NL                          Inj      : 1
                                           Inj Volume : 1 ul

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method         : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed   : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier    : 1.0000
Dilution      : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.286	VP	0.0319	4059.78784	1898.46875	0.03014
2	5.410	VB	0.0665	4313.74951	891.31641	0.03203
3	5.814	PB	0.0332	2.88391e4	1.23662e4	0.21410
4	6.336	PP	0.0280	5969.90625	3167.71777	0.04432
5	6.548	VV	0.0317	8.15397e4	3.85392e4	0.60536
6	6.618	VB	0.0455	2.17624e5	6.77624e4	1.61567
7	7.023	VV	0.0328	5.39860e5	2.44294e5	4.00798
8	7.114	VV	0.0278	5.09726e5	2.86446e5	3.78426
9	7.157	VV	0.0360	7.11815e5	2.77063e5	5.28459
10	7.259	VV	0.0475	3.00911e4	8459.78223	0.22340
11	7.405	VV	0.0530	7732.26172	2050.95898	0.05741
12	7.551	VV	0.0390	1.37177e6	5.51711e5	10.18414
13	7.656	VV	0.0454	2.42581e6	8.74311e5	18.00951
14	7.719	VV	0.0320	9.54359e5	4.46165e5	7.08527
15	7.770	VV	0.0410	1.03618e6	3.55964e5	7.69274
16	8.028	VV	0.0328	9.32557e5	4.06599e5	6.92341

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	8.194	VV	0.0331	8.69020e5	3.88659e5	6.45170
18	8.284	VV	0.0358	8.63413e5	3.49626e5	6.41007
19	8.433	VV	0.0672	2.46572e4	4775.69287	0.18306
20	8.816	PV	0.0266	1.02207e6	5.78584e5	7.58799
21	8.849	VBA	0.0408	1.82821e6	6.50757e5	13.57286

Totals : 1.34696e7 5.55009e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.006	BV	0.1252	7.71025e4	1.02652e4	0.56650
2	5.201	VV	0.0493	1.92479e4	5071.13721	0.14142
3	5.286	VV	0.0637	2.54531e4	5238.68896	0.18701
4	5.410	VB	0.0933	2.03024e4	2845.01587	0.14917
5	5.815	PB	0.0331	2.86754e4	1.23503e4	0.21069
6	6.336	PP	0.0278	5902.39209	3164.09741	0.04337
7	6.548	VV	0.0327	8.15213e4	3.85395e4	0.59897
8	6.618	VB	0.0444	2.17470e5	6.77549e4	1.59784
9	7.023	PV	0.0329	5.43793e5	2.44577e5	3.99546
10	7.114	VV	0.0268	5.10308e5	2.86696e5	3.74944
11	7.157	VV	0.0360	7.13106e5	2.77278e5	5.23947
12	7.259	VV	0.0483	3.12913e4	8632.20410	0.22991
13	7.405	VV	0.0533	8356.83008	2202.36230	0.06140
14	7.551	VV	0.0390	1.37316e6	5.51820e5	10.08914
15	7.657	VV	0.0454	2.42626e6	8.74402e5	17.82667
16	7.719	VV	0.0320	9.54703e5	4.46320e5	7.01458
17	7.770	VB	0.0410	1.03660e6	3.56093e5	7.61634
18	8.029	BV	0.0327	9.30315e5	4.06699e5	6.83539
19	8.195	VV	0.0331	8.69041e5	3.88705e5	6.38519
20	8.284	VV	0.0358	8.63457e5	3.49684e5	6.34416
21	8.433	VV	0.0677	2.43453e4	4755.13916	0.17887
22	8.816	PV	0.0266	1.02176e6	5.78637e5	7.50729
23	8.850	VBA	0.0398	1.82809e6	6.50719e5	13.43170

Totals : 1.36103e7 5.57245e6

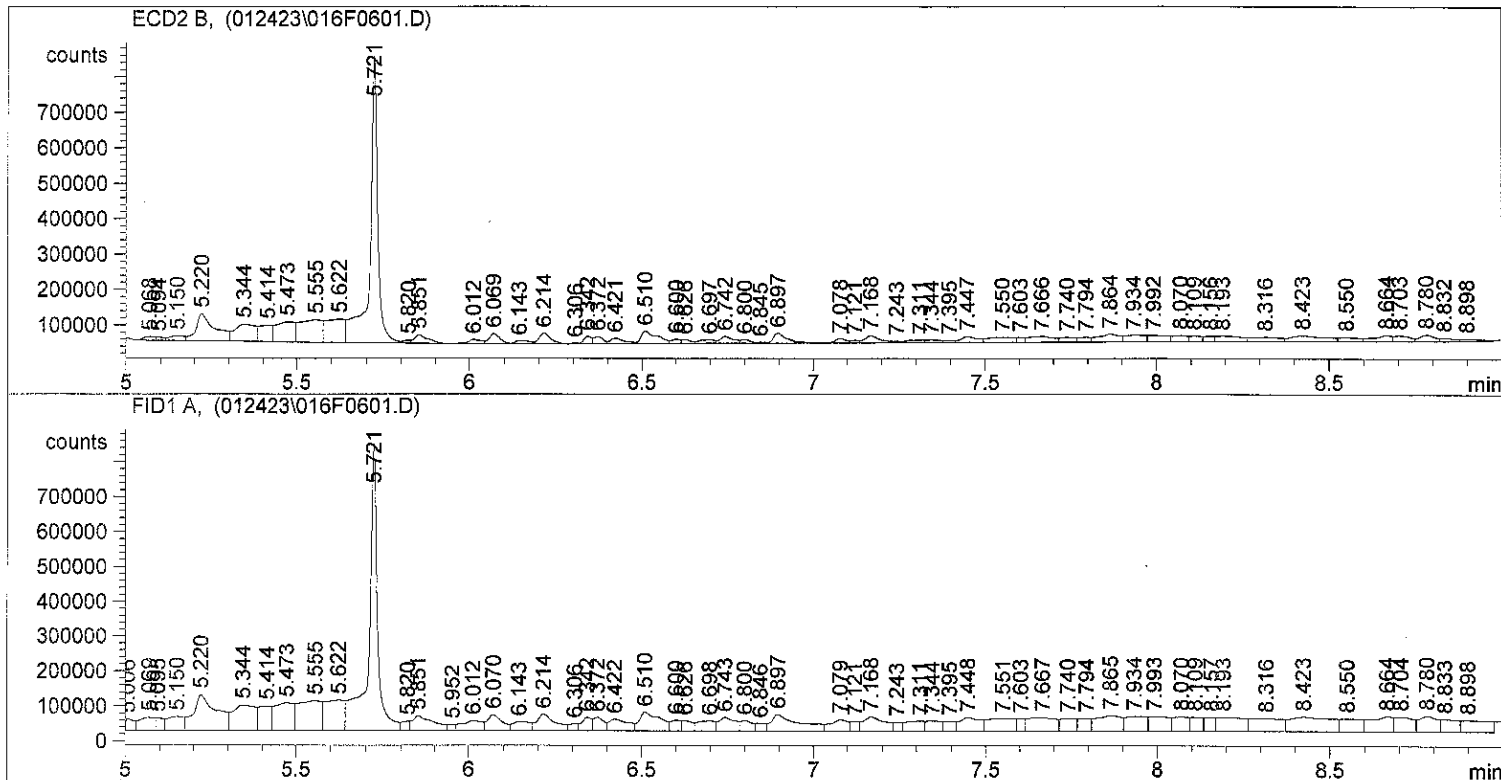
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 1/24/2023 6:46:22 AM      Seq. Line   :    6
Sample Name     : 23A0099 01                Location    : Vial 16
Acq. Operator  : NL                        Inj         :    1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed    : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.068	BV	0.0360	2.38958e4	1.07232e4	0.48714
2	5.094	VV	0.0245	1.34137e4	9121.74316	0.27345
3	5.150	VV	0.0450	4.17186e4	1.39101e4	0.85047
4	5.220	VV	0.0504	2.94377e5	7.73733e4	6.00115
5	5.344	VV	0.0630	2.10268e5	4.90607e4	4.28651
6	5.414	VV	0.0359	1.20568e5	4.70046e4	2.45789
7	5.473	VV	0.0510	2.18625e5	5.66220e4	4.45688
8	5.555	VV	0.0588	2.83587e5	6.38881e4	5.78118
9	5.622	VV	0.0483	2.47281e5	6.66070e4	5.04105
10	5.721	VV	0.0224	1.28591e6	8.16140e5	26.21454
11	5.820	VV	0.0217	1.22795e4	8486.57910	0.25033
12	5.851	VP	0.0393	6.97064e4	2.44338e4	1.42103
13	6.012	VV	0.0359	3.27741e4	1.23661e4	0.66813
14	6.069	VV	0.0314	6.08931e4	2.90737e4	1.24136
15	6.143	VV	0.0370	2.39306e4	8463.77832	0.48785
16	6.214	VP	0.0356	7.19031e4	3.04361e4	1.46581

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.306	VV	0.0185	3178.70923	2753.87549	0.06480
18	6.342	VV	0.0232	3.40362e4	2.17798e4	0.69386
19	6.372	VV	0.0277	3.86220e4	2.07209e4	0.78735
20	6.421	VV	0.0424	4.55007e4	1.58835e4	0.92758
21	6.510	VV	0.0454	1.18602e5	3.60481e4	2.41781
22	6.600	VV	0.0253	2.23887e4	1.28851e4	0.45641
23	6.626	VV	0.0256	1.97429e4	1.11862e4	0.40248
24	6.697	VV	0.0414	3.39543e4	1.12008e4	0.69219
25	6.742	VV	0.0378	5.48605e4	2.01003e4	1.11838
26	6.800	VV	0.0288	2.20740e4	1.13085e4	0.45000
27	6.845	VV	0.0273	6109.99756	3348.11694	0.12456
28	6.897	VV	0.0410	8.37438e4	2.87242e4	1.70720
29	7.078	VV	0.0324	2.82842e4	1.30142e4	0.57660
30	7.121	VV	0.0237	1.20241e4	7515.79883	0.24512
31	7.168	VV	0.0436	6.26189e4	2.04950e4	1.27655
32	7.243	VV	0.0236	6925.47852	4353.95752	0.14118
33	7.311	VV	0.0421	2.56941e4	8075.87549	0.52380
34	7.344	VV	0.0418	2.28643e4	8120.63428	0.46611
35	7.395	VV	0.0315	1.50054e4	6853.22949	0.30590
36	7.447	VV	0.0461	5.92140e4	1.76509e4	1.20713
37	7.550	VV	0.0672	7.76144e4	1.43256e4	1.58224
38	7.603	VV	0.0219	2.08167e4	1.35966e4	0.42437
39	7.666	VV	0.0659	8.58212e4	1.70022e4	1.74954
40	7.740	VV	0.0400	4.04860e4	1.39038e4	0.82534
41	7.794	VV	0.0352	3.31049e4	1.37178e4	0.67488
42	7.864	VV	0.0590	9.71907e4	2.22394e4	1.98132
43	7.934	VV	0.0547	7.85624e4	1.88158e4	1.60157
44	7.992	VV	0.0515	6.76455e4	1.77487e4	1.37902
45	8.070	VV	0.0408	5.10354e4	1.75958e4	1.04040
46	8.109	VV	0.0342	3.92541e4	1.62441e4	0.80023
47	8.156	VV	0.0296	3.32764e4	1.57696e4	0.67837
48	8.193	VV	0.0664	8.20101e4	1.58366e4	1.67185
49	8.316	VV	0.0766	7.38571e4	1.25537e4	1.50565
50	8.423	VV	0.0981	1.18750e5	1.64782e4	2.42082
51	8.550	VV	0.0530	4.40173e4	1.11712e4	0.89733
52	8.664	VV	0.0508	6.53112e4	1.74099e4	1.33143
53	8.703	VV	0.0495	5.31824e4	1.60978e4	1.08417
54	8.780	VV	0.0446	5.81820e4	1.90536e4	1.18610
55	8.832	VV	0.0409	2.75944e4	9508.62402	0.56254
56	8.898	VV	0.0629	3.10535e4	6256.11523	0.63305

Totals : 4.90534e6 1.91106e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.006	BV	0.0273	5.53195e4	3.37865e4	0.54265
2	5.069	VV	0.0457	1.16627e5	3.80854e4	1.14404
3	5.095	VV	0.0262	5.68230e4	3.61866e4	0.55740
4	5.150	VV	0.0493	1.36024e5	4.03433e4	1.33431
5	5.220	VV	0.0627	4.91936e5	1.03019e5	4.82558
6	5.344	VV	0.0656	3.30264e5	7.32760e4	3.23968
7	5.414	VV	0.0363	1.82662e5	7.04209e4	1.79180
8	5.473	VV	0.0520	3.12570e5	7.93594e4	3.06612
9	5.555	VV	0.0597	3.86727e5	8.56887e4	3.79354
10	5.622	VV	0.0487	3.28489e5	8.76407e4	3.22227
11	5.721	VV	0.0246	1.47350e6	8.35227e5	14.45415
12	5.820	VV	0.0240	4.47047e4	2.72602e4	0.43852
13	5.851	VV	0.0577	1.89985e5	4.28485e4	1.86364
14	5.952	VV	0.0210	2.63670e4	1.81284e4	0.25864
15	6.012	VV	0.0515	1.18676e5	2.98002e4	1.16414

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
16	6.070	VV	0.0418	1.38761e5	4.65078e4	1.36116
17	6.143	VV	0.0456	9.23816e4	2.58938e4	0.90621
18	6.214	VV	0.0514	1.78155e5	4.78632e4	1.74759
19	6.306	VV	0.0251	3.49028e4	2.02530e4	0.34238
20	6.342	VV	0.0280	7.74873e4	3.93461e4	0.76010
21	6.372	VV	0.0314	8.38518e4	3.84736e4	0.82253
22	6.422	VV	0.0553	1.34268e5	3.37999e4	1.31709
23	6.510	VV	0.0561	2.28743e5	5.43367e4	2.24383
24	6.600	VV	0.0274	6.05400e4	3.15146e4	0.59386
25	6.626	VV	0.0294	6.26348e4	2.99137e4	0.61441
26	6.698	VV	0.0459	1.05869e5	3.02002e4	1.03851
27	6.743	VV	0.0456	1.33185e5	3.92757e4	1.30646
28	6.800	VV	0.0351	7.64856e4	3.07012e4	0.75028
29	6.846	VV	0.0284	4.40968e4	2.29161e4	0.43256
30	6.897	VV	0.0753	2.83939e5	4.84937e4	2.78526
31	7.079	VV	0.0499	1.20277e5	3.34751e4	1.17985
32	7.121	VV	0.0252	4.87439e4	2.81386e4	0.47815
33	7.168	VV	0.0610	1.83922e5	4.12848e4	1.80416
34	7.243	VV	0.0246	4.27170e4	2.54443e4	0.41903
35	7.311	VV	0.0475	1.07212e5	2.94311e4	1.05168
36	7.344	VV	0.0440	8.87849e4	2.95992e4	0.87092
37	7.395	VV	0.0326	6.50870e4	2.85296e4	0.63846
38	7.448	VV	0.0558	1.65306e5	3.95276e4	1.62154
39	7.551	VV	0.0697	2.06175e5	3.65950e4	2.02245
40	7.603	VV	0.0219	5.52375e4	3.60681e4	0.54185
41	7.667	VV	0.0714	2.19373e5	3.97165e4	2.15191
42	7.740	VV	0.0417	1.12769e5	3.68997e4	1.10619
43	7.794	VV	0.0348	9.10992e4	3.69231e4	0.89363
44	7.865	VV	0.0660	2.27133e5	4.57127e4	2.22803
45	7.934	VV	0.0562	1.83082e5	4.25552e4	1.79592
46	7.993	VV	0.0528	1.63585e5	4.17140e4	1.60467
47	8.070	VV	0.0421	1.25935e5	4.18570e4	1.23534
48	8.109	VV	0.0338	1.00322e5	4.06546e4	0.98409
49	8.157	VV	0.0300	8.63911e4	4.03643e4	0.84744
50	8.193	VV	0.0701	2.22730e5	4.05686e4	2.18484
51	8.316	VV	0.0819	2.36035e5	3.77580e4	2.31536
52	8.423	VV	0.1139	3.56824e5	4.20924e4	3.50022
53	8.550	VV	0.0555	1.54883e5	3.72751e4	1.51931
54	8.664	VV	0.0609	2.03194e5	4.39496e4	1.99321
55	8.704	VV	0.0545	1.55904e5	4.27874e4	1.52932
56	8.780	VV	0.0528	1.72969e5	4.60359e4	1.69672
57	8.833	VV	0.0458	1.22135e5	3.66929e4	1.19807
58	8.898	VV	0.0710	1.90529e5	3.36935e4	1.86897

Totals : 1.01943e7 3.19590e6

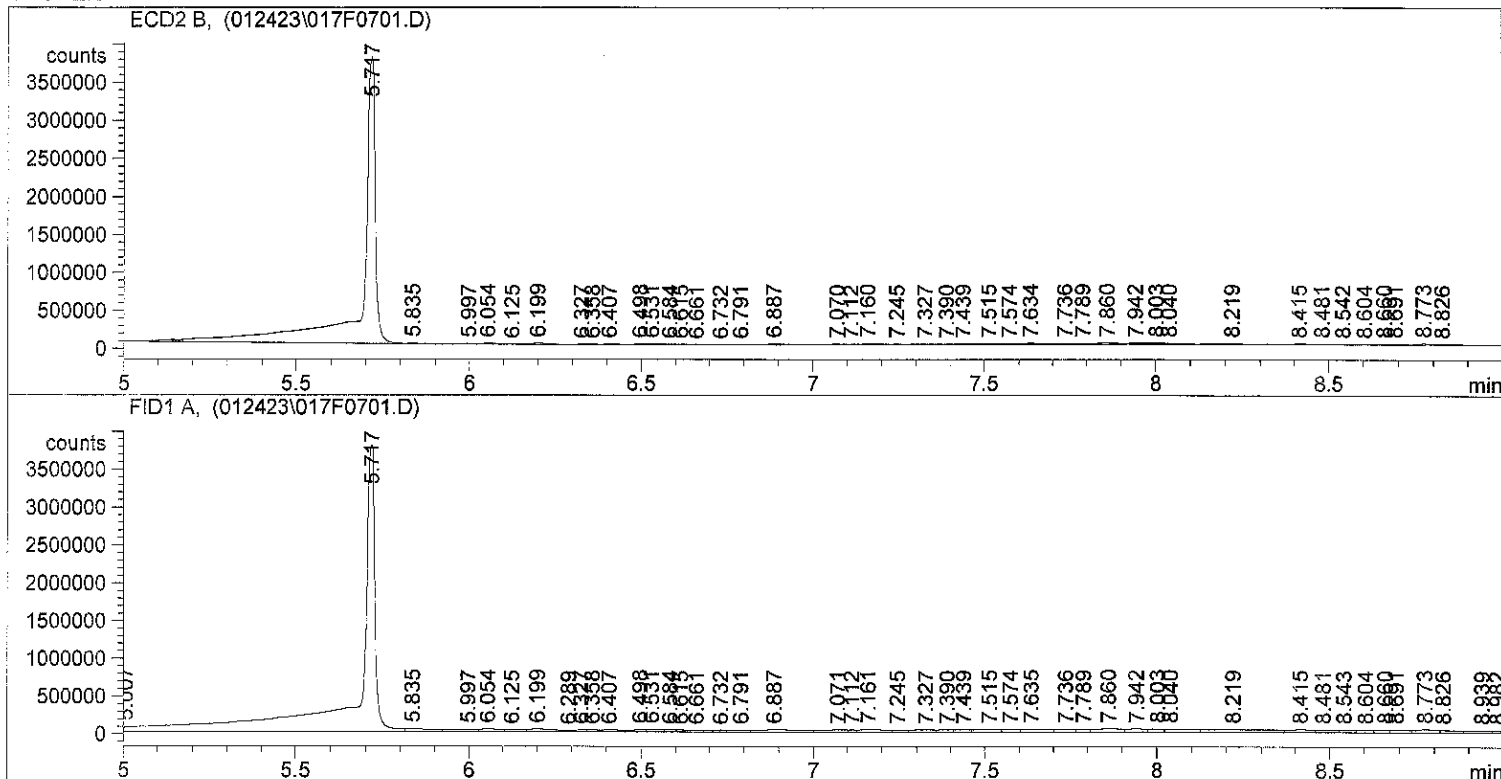
Results obtained with enhanced integrator!

*** End of Report ***


```

=====
Injection Date   : 1/24/2023 7:00:32 AM      Seq. Line   :    7
Sample Name     : 23A0099 04                 Location    : Vial 17
Acq. Operator  : NL                          Inj         :    1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed    : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.717	BV	0.0382	1.03786e7	3.75718e6	87.64991
2	5.835	VP	0.0355	3.42858e4	1.35805e4	0.28955
3	5.997	VV	0.0429	3.05006e4	9634.42773	0.25758
4	6.054	VV	0.0371	4.79063e4	1.91832e4	0.40458
5	6.125	VV	0.0418	2.29990e4	7299.66504	0.19423
6	6.199	VP	0.0402	5.70054e4	2.13361e4	0.48142
7	6.327	VV	0.0233	1.48342e4	9983.30762	0.12528
8	6.358	VV	0.0262	1.54971e4	8935.62109	0.13088
9	6.407	VV	0.0374	2.87742e4	1.18347e4	0.24301
10	6.498	VV	0.0268	2.97390e4	1.67072e4	0.25115
11	6.531	VV	0.0345	3.74957e4	1.59193e4	0.31666
12	6.584	VV	0.0270	1.43495e4	7617.63818	0.12118
13	6.615	VV	0.0264	1.13359e4	6177.46826	0.09573
14	6.661	VV	0.0383	1.27241e4	4455.15674	0.10746
15	6.732	VV	0.0257	7478.82129	4425.36475	0.06316
16	6.791	VV	0.0388	1.75379e4	6233.41650	0.14811

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.887	VV	0.0547	7.10229e4	1.73553e4	0.59981
18	7.070	VV	0.0437	3.41144e4	1.08304e4	0.28810
19	7.112	VV	0.0238	1.12032e4	6933.94043	0.09461
20	7.160	VV	0.0462	5.70988e4	1.74326e4	0.48221
21	7.245	VV	0.0401	1.37596e4	5168.04785	0.11620
22	7.327	VV	0.0559	3.02049e4	7055.25830	0.25509
23	7.390	VV	0.0376	1.85940e4	6854.66406	0.15703
24	7.439	VV	0.0382	2.91010e4	1.08921e4	0.24576
25	7.515	VV	0.0587	5.67158e4	1.25491e4	0.47898
26	7.574	VV	0.0429	3.87180e4	1.25822e4	0.32698
27	7.634	VV	0.0626	7.94192e4	1.69703e4	0.67071
28	7.736	VV	0.0474	4.95245e4	1.43176e4	0.41825
29	7.789	VV	0.0353	3.43663e4	1.36684e4	0.29023
30	7.860	VV	0.0649	9.44679e4	1.97109e4	0.79780
31	7.942	VV	0.0555	6.15367e4	1.61421e4	0.51969
32	8.003	VV	0.0401	4.33422e4	1.48495e4	0.36603
33	8.040	VV	0.0655	7.58743e4	1.44036e4	0.64078
34	8.219	VV	0.1315	1.23545e5	1.15778e4	1.04337
35	8.415	VV	0.0598	4.07118e4	1.01526e4	0.34382
36	8.481	VV	0.0488	2.11548e4	6044.23877	0.17866
37	8.542	VV	0.0390	1.08537e4	3958.57031	0.09166
38	8.604	VV	0.0415	9127.81250	3183.37817	0.07709
39	8.660	VV	0.0320	1.27302e4	5936.81689	0.10751
40	8.691	VV	0.0423	1.68275e4	6076.89600	0.14211
41	8.773	VV	0.0383	3.97774e4	1.58239e4	0.33593
42	8.826	VP	0.0289	6118.21191	3121.23193	0.05167

Totals : 1.18410e7 4.20410e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.007	BV	0.0180	7.35712e4	6.80296e4	0.38093
2	5.717	VV	0.0451	1.27074e7	3.79280e6	65.79473
3	5.835	VV	0.0645	2.22260e5	4.43384e4	1.15079
4	5.997	VV	0.0714	1.97723e5	3.52592e4	1.02375
5	6.054	VV	0.0501	1.57823e5	4.37559e4	0.81716
6	6.125	VV	0.0477	1.11791e5	3.05459e4	0.57882
7	6.199	VV	0.0612	1.93187e5	4.32104e4	1.00026
8	6.289	VV	0.0245	3.57055e4	2.13507e4	0.18487
9	6.327	VV	0.0309	6.55917e4	3.07191e4	0.33961
10	6.358	VV	0.0316	6.53200e4	2.98140e4	0.33821
11	6.407	VV	0.0577	1.37450e5	3.29443e4	0.71167
12	6.498	VV	0.0334	8.96739e4	3.82391e4	0.46430
13	6.531	VV	0.0400	1.06296e5	3.76036e4	0.55036
14	6.584	VV	0.0289	6.06239e4	2.95503e4	0.31389
15	6.615	VV	0.0313	6.37676e4	2.82523e4	0.33017
16	6.661	VV	0.0497	1.02395e5	2.67477e4	0.53017
17	6.732	VV	0.0335	6.37463e4	2.70487e4	0.33006
18	6.791	VV	0.0507	1.11647e5	2.91302e4	0.57807
19	6.887	VV	0.1007	3.26839e5	4.07017e4	1.69227
20	7.071	VV	0.0663	1.78039e5	3.50307e4	0.92183
21	7.112	VV	0.0245	5.24902e4	3.13285e4	0.27178
22	7.161	VV	0.0653	2.06624e5	4.20514e4	1.06983
23	7.245	VV	0.0416	8.42804e4	3.01758e4	0.43638
24	7.327	VV	0.0624	1.54177e5	3.24479e4	0.79828
25	7.390	VV	0.0402	9.53670e4	3.25411e4	0.49378
26	7.439	VV	0.0430	1.13510e5	3.68057e4	0.58772
27	7.515	VV	0.0639	1.92636e5	3.88161e4	0.99740
28	7.574	VV	0.0432	1.24658e5	3.91257e4	0.64544
29	7.635	VV	0.0713	2.37703e5	4.37951e4	1.23075

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
30	7.736	VV	0.0507	1.55937e5	4.16182e4	0.80739
31	7.789	VV	0.0357	1.04831e5	4.12120e4	0.54278
32	7.860	VV	0.0725	2.59119e5	4.75883e4	1.34163
33	7.942	VV	0.0564	1.76404e5	4.44022e4	0.91337
34	8.003	VV	0.0394	1.27796e5	4.33921e4	0.66169
35	8.040	VV	0.0725	2.53169e5	4.31188e4	1.31083
36	8.219	VV	0.1641	5.53714e5	4.11295e4	2.86695
37	8.415	VV	0.0722	2.06021e5	4.06113e4	1.06671
38	8.481	VV	0.0547	1.47432e5	3.68128e4	0.76335
39	8.543	VV	0.0422	1.05660e5	3.50131e4	0.54708
40	8.604	VV	0.0435	1.05088e5	3.45254e4	0.54411
41	8.660	VV	0.0375	9.80724e4	3.75420e4	0.50779
42	8.691	VV	0.0521	1.36465e5	3.78245e4	0.70657
43	8.773	VV	0.0565	1.95368e5	4.79522e4	1.01155
44	8.826	VV	0.0520	1.39854e5	3.54958e4	0.72412
45	8.939	VV	0.0604	1.63091e5	3.37323e4	0.84443
46	8.982	VBA	0.0265	5.33829e4	3.36256e4	0.27640

Totals : 1.93137e7 5.46776e6

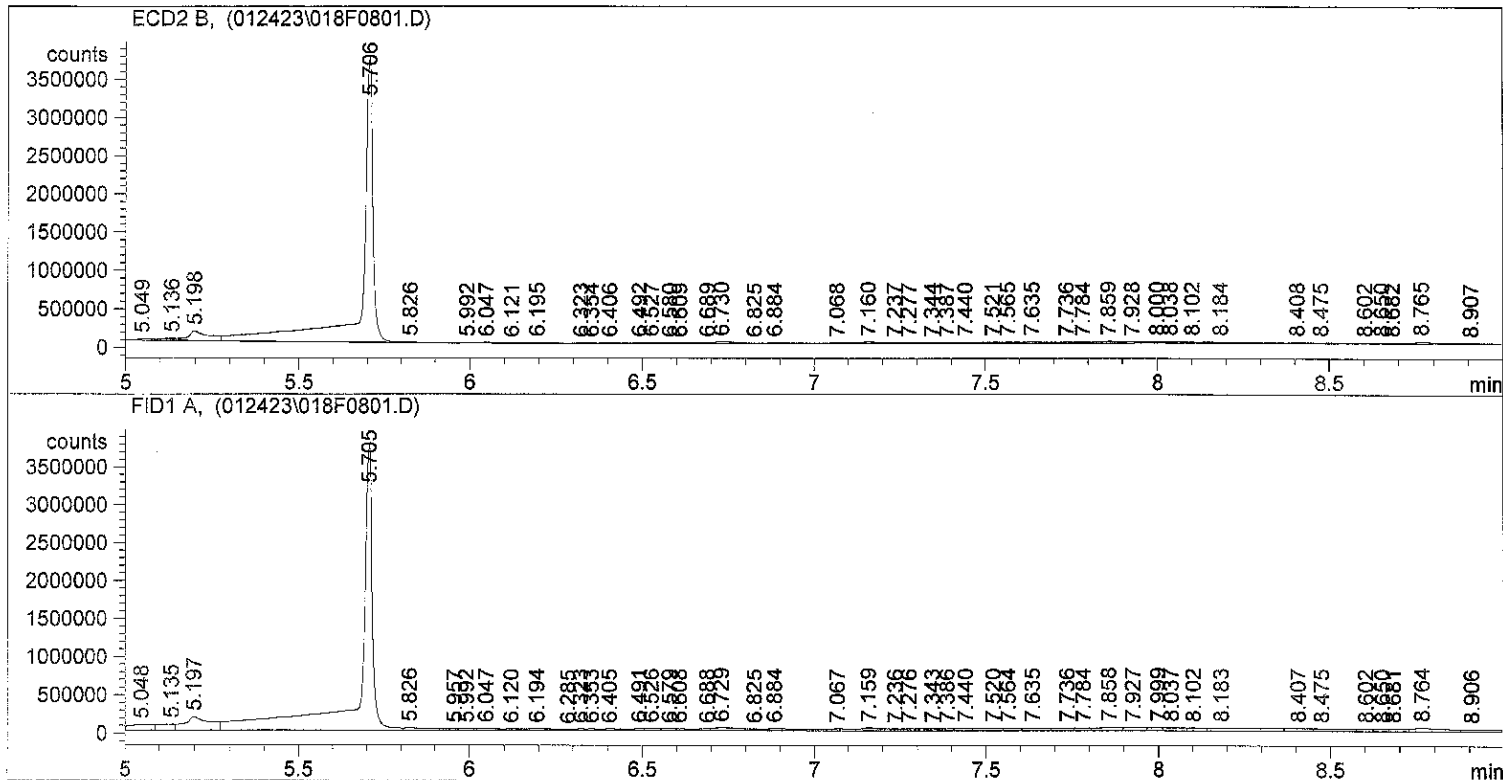
Results obtained with enhanced integrator!

=====
*** End of Report ***

```

=====
Injection Date   : 1/24/2023 7:14:22 AM      Seq. Line   :    8
Sample Name     : 23A0099 05                Location    : Vial 18
Acq. Operator  : NL                          Inj         :    1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed    : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.049	BV	0.0548	6.52302e4	1.73793e4	0.57805
2	5.136	VV	0.0440	8.29324e4	2.84453e4	0.73492
3	5.198	VV	0.0548	5.31689e5	1.27035e5	4.71164
4	5.706	VV	0.0321	8.68892e6	3.74547e6	76.99823
5	5.826	VP	0.0352	2.62709e4	1.05064e4	0.23280
6	5.992	VV	0.0323	1.09720e4	4693.00439	0.09723
7	6.047	VV	0.0304	2.49677e4	1.19373e4	0.22125
8	6.121	VV	0.0389	1.03451e4	3555.36938	0.09167
9	6.195	VP	0.0392	3.30105e4	1.27541e4	0.29253
10	6.323	VV	0.0245	1.41375e4	8899.31738	0.12528
11	6.354	VV	0.0287	1.52422e4	8201.52832	0.13507
12	6.406	VV	0.0443	2.46488e4	8135.55664	0.21843
13	6.492	VV	0.0261	2.33503e4	1.35795e4	0.20692
14	6.527	VV	0.0353	3.58857e4	1.53577e4	0.31801
15	6.580	VV	0.0319	2.23954e4	1.00962e4	0.19846
16	6.609	VV	0.0269	1.56390e4	8328.06250	0.13859

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.689	VV	0.0309	2.65972e4	1.19621e4	0.23570
18	6.730	VV	0.0579	1.13060e5	2.64306e4	1.00190
19	6.825	VV	0.0262	9994.19629	5504.57813	0.08857
20	6.884	VV	0.0552	6.98325e4	1.69109e4	0.61883
21	7.068	VV	0.0564	4.14526e4	9983.45410	0.36734
22	7.160	VV	0.0453	7.90478e4	2.40675e4	0.70049
23	7.237	VV	0.0238	1.34629e4	7951.68848	0.11930
24	7.277	VV	0.0470	3.74984e4	1.04093e4	0.33230
25	7.344	VV	0.0340	2.40311e4	9346.04297	0.21295
26	7.387	VV	0.0342	2.22573e4	9220.25781	0.19724
27	7.440	VV	0.0391	3.60713e4	1.30917e4	0.31965
28	7.521	VV	0.0629	7.69625e4	1.60695e4	0.68202
29	7.565	VV	0.0398	4.73504e4	1.54197e4	0.41960
30	7.635	VV	0.0578	7.87238e4	1.84298e4	0.69762
31	7.736	VV	0.0519	6.18580e4	1.60573e4	0.54816
32	7.784	VV	0.0427	4.88113e4	1.64312e4	0.43255
33	7.859	VV	0.0597	1.08118e5	2.48645e4	0.95811
34	7.928	VV	0.0518	7.70499e4	1.96389e4	0.68279
35	8.000	VV	0.0379	5.04197e4	1.90636e4	0.44680
36	8.038	VV	0.0526	7.91988e4	1.98290e4	0.70183
37	8.102	VV	0.0449	5.72676e4	1.76107e4	0.50749
38	8.184	VV	0.1392	1.80781e5	1.61963e4	1.60202
39	8.408	VV	0.0655	6.62311e4	1.47151e4	0.58692
40	8.475	VV	0.0820	7.08330e4	1.13169e4	0.62770
41	8.602	VV	0.0442	2.23747e4	7860.63574	0.19828
42	8.650	VV	0.0349	2.34047e4	9460.11621	0.20740
43	8.682	VV	0.0459	2.63687e4	8802.85840	0.23367
44	8.765	VV	0.0498	9.69555e4	2.70829e4	0.85919
45	8.907	VBA	0.0620	1.29199e4	3140.50195	0.11449

Totals : 1.12846e7 4.46124e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.048	BV	0.0685	3.65241e5	7.41479e4	2.12002
2	5.135	VV	0.0485	2.69364e5	8.15620e4	1.56350
3	5.197	VV	0.0668	9.10191e5	1.77491e5	5.28314
4	5.705	VV	0.0352	9.84403e6	3.80681e6	57.13900
5	5.826	VV	0.0759	2.08277e5	3.47392e4	1.20893
6	5.957	VV	0.0207	3.03064e4	1.99714e4	0.17591
7	5.992	VV	0.0417	7.14638e4	2.33722e4	0.41481
8	6.047	VV	0.0480	1.04741e5	2.98279e4	0.60796
9	6.120	VV	0.0494	7.75979e4	2.04091e4	0.45041
10	6.194	VV	0.0621	1.29998e5	2.85828e4	0.75456
11	6.285	VV	0.0229	2.52907e4	1.56320e4	0.14680
12	6.323	VV	0.0304	5.20827e4	2.39075e4	0.30231
13	6.353	VV	0.0323	5.26345e4	2.33546e4	0.30551
14	6.405	VV	0.0596	1.02094e5	2.35179e4	0.59260
15	6.491	VV	0.0316	6.44920e4	2.93753e4	0.37434
16	6.526	VV	0.0380	8.32191e4	3.12758e4	0.48304
17	6.579	VV	0.0340	6.31131e4	2.62528e4	0.36634
18	6.608	VV	0.0319	5.45728e4	2.46031e4	0.31676
19	6.688	VV	0.0396	8.48121e4	2.86228e4	0.49229
20	6.729	VV	0.0708	2.32809e5	4.32500e4	1.35132
21	6.825	VV	0.0262	4.33005e4	2.27499e4	0.25133
22	6.884	VV	0.0873	2.36934e5	3.44168e4	1.37526
23	7.067	VV	0.0785	1.71172e5	2.83063e4	0.99355
24	7.159	VV	0.0607	1.93416e5	4.27917e4	1.12267
25	7.236	VV	0.0251	4.65810e4	2.70300e4	0.27038
26	7.276	VV	0.0508	1.16420e5	2.96628e4	0.67575

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
27	7.343	VV	0.0344	7.54109e4	2.89027e4	0.43772
28	7.386	VV	0.0351	7.23001e4	2.89634e4	0.41966
29	7.440	VV	0.0423	1.00044e5	3.30721e4	0.58070
30	7.520	VV	0.0670	1.87132e5	3.64114e4	1.08620
31	7.564	VV	0.0410	1.13931e5	3.59576e4	0.66130
32	7.635	VV	0.0632	1.82457e5	3.92891e4	1.05906
33	7.736	VV	0.0540	1.50470e5	3.73543e4	0.87339
34	7.784	VV	0.0433	1.14854e5	3.79462e4	0.66666
35	7.858	VV	0.0658	2.27525e5	4.67184e4	1.32065
36	7.927	VV	0.0530	1.68410e5	4.17871e4	0.97752
37	7.999	VV	0.0372	1.11230e5	4.15365e4	0.64563
38	8.037	VV	0.0541	1.75042e5	4.24650e4	1.01602
39	8.102	VV	0.0466	1.37488e5	4.05380e4	0.79804
40	8.183	VV	0.1563	4.98643e5	3.94858e4	2.89434
41	8.407	VV	0.0705	1.92143e5	3.90003e4	1.11528
42	8.475	VV	0.0899	2.52095e5	3.59016e4	1.46327
43	8.602	VV	0.0437	9.54609e4	3.30119e4	0.55410
44	8.650	VV	0.0368	9.20311e4	3.48223e4	0.53419
45	8.681	VV	0.0504	1.15775e5	3.43064e4	0.67201
46	8.764	VV	0.0815	3.29067e5	5.29779e4	1.91005
47	8.906	VBA	0.0927	2.02559e5	2.96436e4	1.17574

Totals : 1.72282e7 5.54175e6

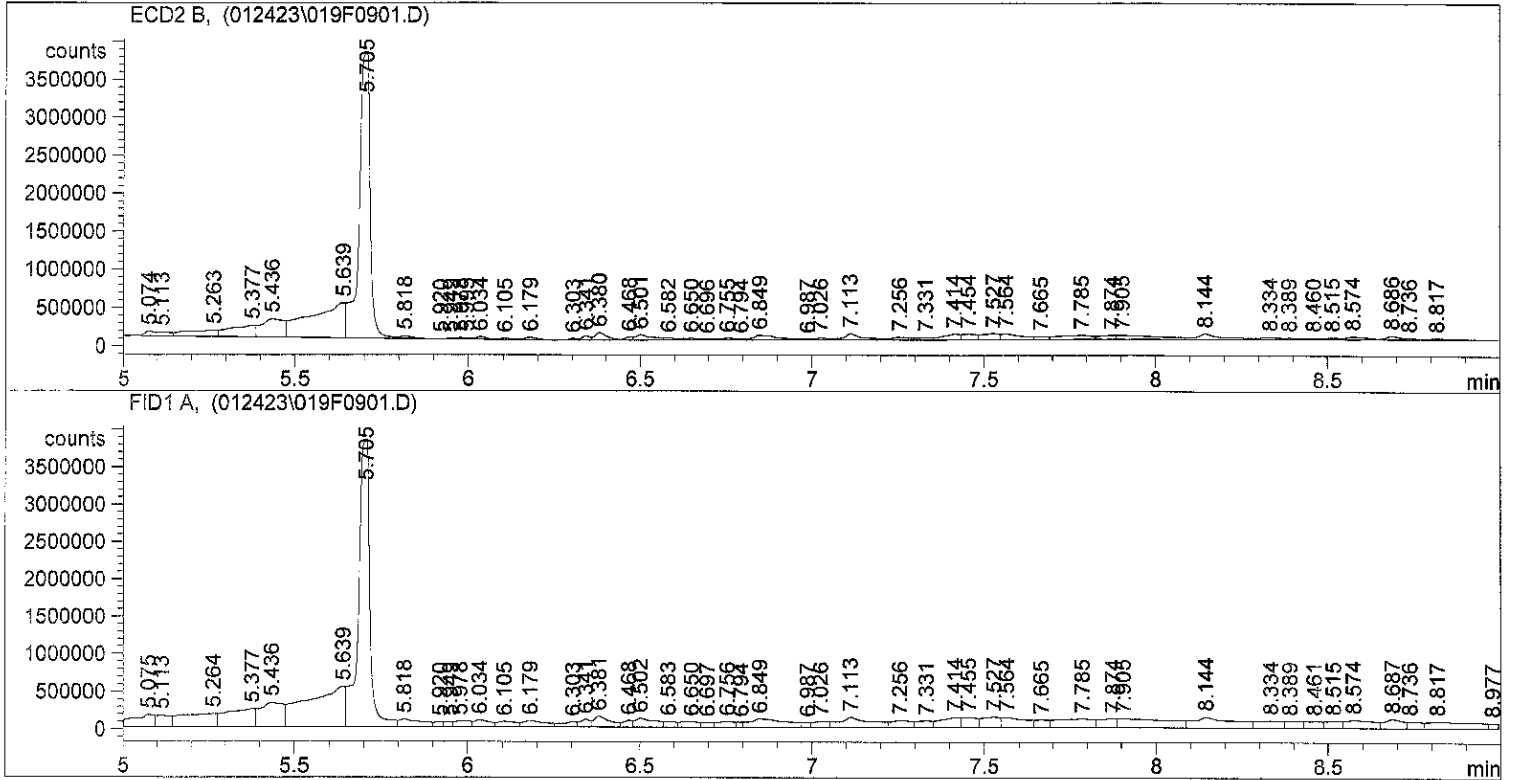
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date : 1/24/2023 7:28:39 AM      Seq. Line : 9
Sample Name    : 23A0099 10                Location  : Vial 19
Acq. Operator  : NL                        Inj      : 1
                                           Inj Volume: 1 µl

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method         : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed   : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.074	BV	0.0303	1.37626e5	6.34175e4	0.68609
2	5.113	VV	0.0400	1.53291e5	5.41708e4	0.76418
3	5.263	VV	0.0816	5.42998e5	8.48833e4	2.70695
4	5.377	VV	0.0680	8.14431e5	1.53317e5	4.06010
5	5.436	VV	0.0601	1.07301e6	2.40352e5	5.34918
6	5.639	VV	0.0892	3.24502e6	4.60452e5	16.17707
7	5.705	VV	0.0339	8.33247e6	3.74962e6	41.53899
8	5.818	VP	0.0369	1.03446e5	3.91139e4	0.51570
9	5.920	VV	0.0185	6409.24707	5545.05371	0.03195
10	5.949	VV	0.0191	1.36409e4	1.05624e4	0.06800
11	5.978	VV	0.0248	3.69801e4	2.17820e4	0.18435
12	5.995	VV	0.0175	2.31313e4	1.99321e4	0.11531
13	6.034	VV	0.0319	8.10797e4	3.79420e4	0.40420
14	6.105	VV	0.0348	5.29297e4	2.07430e4	0.26386
15	6.179	VP	0.0362	8.91472e4	3.68912e4	0.44442
16	6.303	VV	0.0232	3.54423e4	2.27160e4	0.17669

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.341	VV	0.0253	9.67080e4	5.56622e4	0.48211
18	6.380	VV	0.0360	2.42673e5	9.76313e4	1.20977
19	6.468	VV	0.0241	6.34190e4	4.08937e4	0.31616
20	6.501	VV	0.0449	2.37453e5	7.12639e4	1.18375
21	6.582	VV	0.0296	6.03111e4	2.86153e4	0.30066
22	6.650	VV	0.0423	7.32661e4	2.35632e4	0.36525
23	6.696	VV	0.0289	3.03243e4	1.54271e4	0.15117
24	6.755	VV	0.0378	7.12016e4	2.70114e4	0.35495
25	6.794	VV	0.0160	1.86144e4	1.67244e4	0.09280
26	6.849	VV	0.0657	3.21924e5	6.28669e4	1.60486
27	6.987	VV	0.0238	2.12664e4	1.25468e4	0.10602
28	7.026	VV	0.0385	7.19232e4	2.66748e4	0.35855
29	7.113	VV	0.0550	3.37325e5	8.19876e4	1.68163
30	7.256	VV	0.0491	1.30854e5	3.71592e4	0.65233
31	7.331	VV	0.0426	9.53249e4	3.21433e4	0.47521
32	7.414	VV	0.0472	2.67730e5	7.58866e4	1.33469
33	7.454	VV	0.0420	2.28367e5	7.60939e4	1.13845
34	7.527	VV	0.0453	2.80822e5	8.32879e4	1.39995
35	7.564	VV	0.0559	3.17508e5	7.57723e4	1.58284
36	7.665	VV	0.0397	1.15829e5	4.12717e4	0.57743
37	7.785	VV	0.0851	3.84126e5	5.81406e4	1.91494
38	7.874	VV	0.0429	1.80512e5	5.41030e4	0.89989
39	7.905	VV	0.1084	4.80439e5	5.47434e4	2.39508
40	8.144	VV	0.0717	4.19221e5	7.67923e4	2.08990
41	8.334	VV	0.0651	1.33743e5	2.88577e4	0.66673
42	8.389	VV	0.0422	6.47712e4	2.14754e4	0.32290
43	8.460	VV	0.0453	6.18672e4	1.98926e4	0.30842
44	8.515	VV	0.0457	7.22872e4	2.36358e4	0.36037
45	8.574	VV	0.0567	1.64879e5	3.86989e4	0.82195
46	8.686	VV	0.0410	1.39852e5	5.09945e4	0.69719
47	8.736	VV	0.0343	4.49780e4	1.92526e4	0.22422
48	8.817	VV	0.0798	8.88231e4	1.46346e4	0.44280

Totals : 2.00594e7 6.46514e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.075	BV	0.0554	7.15558e5	1.65711e5	1.98141
2	5.113	VV	0.0416	4.58575e5	1.54530e5	1.26981
3	5.264	VV	0.0919	1.29325e6	1.77704e5	3.58107
4	5.377	VV	0.0745	1.41228e6	2.40429e5	3.91065
5	5.436	VV	0.0624	1.51221e6	3.24544e5	4.18737
6	5.639	VV	0.0953	4.04545e6	5.34443e5	11.20201
7	5.705	VV	0.0354	8.96705e6	3.81820e6	24.83012
8	5.818	VV	0.0613	4.93461e5	1.04138e5	1.36641
9	5.920	VV	0.0252	1.13865e5	6.57752e4	0.31530
10	5.949	VV	0.0222	1.09095e5	6.98123e4	0.30209
11	5.978	VV	0.0422	2.55467e5	8.00545e4	0.70740
12	6.034	VV	0.0444	3.02431e5	9.43016e4	0.83744
13	6.105	VV	0.0503	2.83880e5	7.46912e4	0.78608
14	6.179	VV	0.0593	3.95566e5	8.83179e4	1.09534
15	6.303	VV	0.0432	2.30343e5	7.22603e4	0.63783
16	6.341	VV	0.0294	2.20791e5	1.05590e5	0.61138
17	6.381	VV	0.0472	4.97416e5	1.47984e5	1.37736
18	6.468	VV	0.0284	1.77272e5	9.21434e4	0.49087
19	6.502	VV	0.0548	5.13701e5	1.22855e5	1.42246
20	6.583	VV	0.0343	1.96937e5	8.10470e4	0.54533
21	6.650	VV	0.0496	2.86771e5	7.66966e4	0.79408
22	6.697	VV	0.0311	1.54328e5	6.90404e4	0.42734
23	6.756	VV	0.0467	2.76155e5	8.12357e4	0.76468

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
24	6.794	VV	0.0169	8.07586e4	7.13517e4	0.22362
25	6.849	VV	0.0931	8.81342e5	1.18059e5	2.44047
26	6.987	VV	0.0241	1.19325e5	6.91720e4	0.33042
27	7.026	VV	0.0447	2.70689e5	8.37056e4	0.74955
28	7.113	VV	0.0837	9.20070e5	1.39928e5	2.54771
29	7.256	VV	0.0566	4.02690e5	9.65726e4	1.11507
30	7.331	VV	0.0450	2.92578e5	9.23338e4	0.81016
31	7.414	VV	0.0539	5.62203e5	1.36942e5	1.55676
32	7.455	VV	0.0439	4.23191e5	1.37560e5	1.17183
33	7.527	VV	0.0472	5.14399e5	1.45508e5	1.42439
34	7.564	VV	0.0643	6.79536e5	1.38369e5	1.88166
35	7.665	VV	0.0404	3.00319e5	1.04919e5	0.83160
36	7.785	VV	0.0936	9.02864e5	1.23036e5	2.50006
37	7.874	VV	0.0447	4.18123e5	1.19921e5	1.15780
38	7.905	VV	0.1302	1.28699e6	1.20875e5	3.56371
39	8.144	VV	0.1063	1.22570e6	1.45411e5	3.39401
40	8.334	VV	0.0724	5.23035e5	9.94396e4	1.44830
41	8.389	VV	0.0450	3.01517e5	9.26308e4	0.83491
42	8.461	VV	0.0479	3.05857e5	9.17871e4	0.84693
43	8.515	VV	0.0494	3.24662e5	9.60957e4	0.89900
44	8.574	VV	0.0735	6.36841e5	1.11770e5	1.76344
45	8.687	VV	0.0537	4.79507e5	1.25237e5	1.32777
46	8.736	VV	0.0405	2.69639e5	9.40030e4	0.74664
47	8.817	VV	0.1312	9.44986e5	9.02215e4	2.61670
48	8.977	VBA	0.0287	1.34932e5	7.84675e4	0.37363

Totals : 3.61136e7 9.56482e6

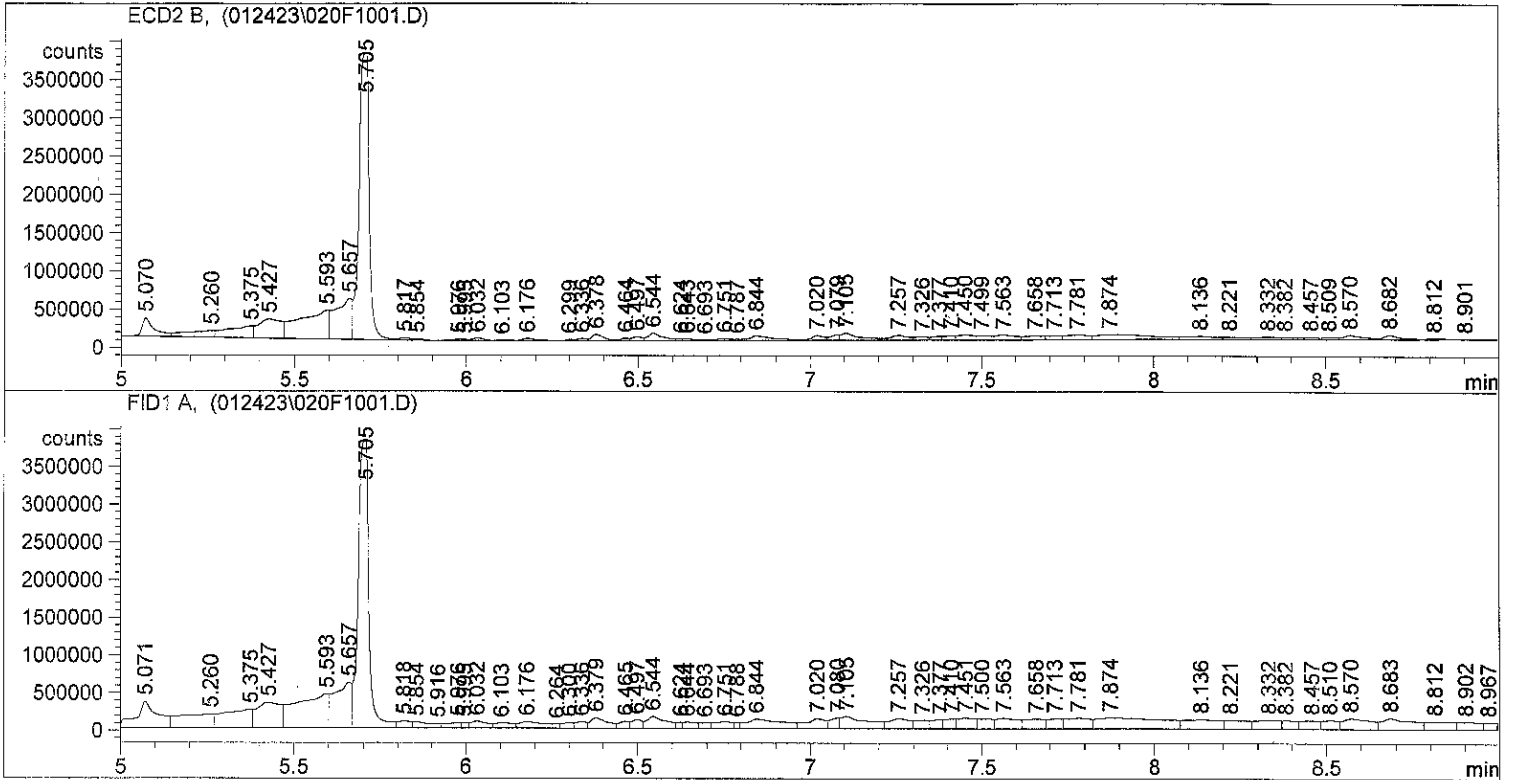
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 1/24/2023 7:42:30 AM      Seq. Line   : 10
Sample Name     : 23A0099 11                Location    : Vial 20
Acq. Operator  : NL                          Inj        : 1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed   : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier    : 1.0000
Dilution      : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.070	BV	0.0352	6.31121e5	2.43640e5	2.96754
2	5.260	VV	0.0724	5.06306e5	8.89980e4	2.38066
3	5.375	VV	0.0680	8.24538e5	1.57741e5	3.87698
4	5.427	VV	0.0638	1.16928e6	2.53726e5	5.49794
5	5.593	VV	0.0739	2.21645e6	3.75383e5	10.42176
6	5.657	VV	0.0428	1.73285e6	5.34934e5	8.14789
7	5.705	VV	0.0323	7.78315e6	3.74241e6	36.59642
8	5.817	VV	0.0310	7.05831e4	3.28784e4	0.33188
9	5.854	VP	0.0241	3.52405e4	2.15070e4	0.16570
10	5.976	VV	0.0262	3.15074e4	1.73603e4	0.14815
11	5.995	VV	0.0166	1.90590e4	1.63433e4	0.08962
12	6.032	VV	0.0323	8.09756e4	3.74128e4	0.38075
13	6.103	VV	0.0321	2.91158e4	1.25360e4	0.13690
14	6.176	VP	0.0369	8.28846e4	3.34633e4	0.38972
15	6.299	VV	0.0219	2.86709e4	1.97414e4	0.13481
16	6.336	VV	0.0264	5.95826e4	3.40993e4	0.28016

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.378	VV	0.0371	2.08621e5	8.36276e4	0.98094
18	6.464	VV	0.0240	5.54047e4	3.58572e4	0.26051
19	6.497	VV	0.0287	1.10462e5	5.67825e4	0.51939
20	6.544	VV	0.0418	3.07205e5	1.03082e5	1.44448
21	6.624	VV	0.0176	2.79877e4	2.36870e4	0.13160
22	6.643	VV	0.0314	5.46429e4	2.51057e4	0.25693
23	6.693	VV	0.0289	3.07649e4	1.57000e4	0.14466
24	6.751	VV	0.0399	8.71489e4	3.09057e4	0.40977
25	6.787	VV	0.0155	2.01078e4	1.88398e4	0.09455
26	6.844	VV	0.0633	3.13300e5	6.37684e4	1.47314
27	7.020	VV	0.0400	1.88622e5	6.66697e4	0.88690
28	7.079	VV	0.0248	1.25203e5	7.49041e4	0.58871
29	7.105	VV	0.0552	3.97046e5	9.61519e4	1.86691
30	7.257	VV	0.0494	2.31494e5	6.67810e4	1.08849
31	7.326	VV	0.0400	1.21974e5	4.30761e4	0.57352
32	7.377	VV	0.0297	1.00806e5	4.99555e4	0.47399
33	7.410	VV	0.0307	1.30848e5	5.93060e4	0.61525
34	7.450	VV	0.0466	2.36651e5	7.15734e4	1.11273
35	7.499	VV	0.0394	1.79346e5	5.91876e4	0.84329
36	7.563	VV	0.0542	2.67732e5	6.76092e4	1.25888
37	7.658	VV	0.0547	2.16482e5	5.53117e4	1.01790
38	7.713	VV	0.0413	1.55506e5	5.45050e4	0.73119
39	7.781	VV	0.0618	2.95215e5	6.52732e4	1.38810
40	7.874	VV	0.1424	7.68534e5	6.57493e4	3.61365
41	8.136	VV	0.0802	2.67566e5	4.26723e4	1.25810
42	8.221	VV	0.0600	1.27278e5	2.96743e4	0.59846
43	8.332	VV	0.0655	1.53905e5	3.42022e4	0.72366
44	8.382	VV	0.0425	7.20093e4	2.58769e4	0.33859
45	8.457	VV	0.0489	9.02552e4	2.70430e4	0.42438
46	8.509	VV	0.0427	8.69990e4	2.92687e4	0.40907
47	8.570	VV	0.0540	2.28375e5	5.67107e4	1.07382
48	8.682	VV	0.0535	2.23453e5	5.85923e4	1.05068
49	8.812	VV	0.0631	6.24106e4	1.39768e4	0.29345
50	8.901	VV	0.0514	2.28522e4	6763.36084	0.10745

Totals : 2.12675e7 7.30037e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.071	BV	0.0575	1.59998e6	3.55818e5	4.00792
2	5.260	VV	0.0844	1.27183e6	1.89198e5	3.18591
3	5.375	VV	0.0746	1.47344e6	2.50647e5	3.69095
4	5.427	VV	0.0660	1.64732e6	3.43466e5	4.12651
5	5.593	VV	0.0784	2.85931e6	4.54707e5	7.16252
6	5.657	VV	0.0428	2.03150e6	6.10201e5	5.08886
7	5.705	VV	0.0332	8.33824e6	3.86708e6	20.88713
8	5.818	VV	0.0366	2.56951e5	9.80886e4	0.64366
9	5.854	VV	0.0401	2.53890e5	8.44291e4	0.63599
10	5.916	VV	0.0204	8.55009e4	6.09370e4	0.21418
11	5.976	VV	0.0432	2.50804e5	7.66548e4	0.62826
12	5.995	VV	0.0170	9.06471e4	7.54784e4	0.22707
13	6.032	VV	0.0485	3.33668e5	9.62006e4	0.83583
14	6.103	VV	0.0483	2.62845e5	7.08055e4	0.65842
15	6.176	VV	0.0651	4.45882e5	9.11455e4	1.11692
16	6.264	VV	0.0172	7.04788e4	5.79161e4	0.17655
17	6.300	VV	0.0322	1.74079e5	7.75144e4	0.43606
18	6.336	VV	0.0309	1.97545e5	9.24064e4	0.49485
19	6.379	VV	0.0499	5.11610e5	1.42376e5	1.28157
20	6.465	VV	0.0291	1.90493e5	9.60227e4	0.47718
21	6.497	VV	0.0317	2.58523e5	1.17427e5	0.64760

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
22	6.544	VV	0.0520	6.48861e5	1.64405e5	1.62538
23	6.624	VV	0.0179	1.03651e5	8.61693e4	0.25964
24	6.644	VV	0.0359	2.25209e5	8.78649e4	0.56414
25	6.693	VV	0.0313	1.71433e5	7.91814e4	0.42944
26	6.751	VV	0.0494	3.45691e5	9.52283e4	0.86595
27	6.788	VV	0.0154	8.91579e4	8.36900e4	0.22334
28	6.844	VV	0.0941	9.66428e5	1.29445e5	2.42088
29	7.020	VV	0.0547	5.51596e5	1.34904e5	1.38174
30	7.080	VV	0.0272	2.68853e5	1.44004e5	0.67347
31	7.105	VV	0.0739	9.49079e5	1.65605e5	2.37743
32	7.257	VV	0.0573	5.84983e5	1.38449e5	1.46537
33	7.326	VV	0.0409	3.35937e5	1.15747e5	0.84151
34	7.377	VV	0.0310	2.62091e5	1.23369e5	0.65653
35	7.410	VV	0.0317	3.04786e5	1.33190e5	0.76348
36	7.451	VV	0.0490	5.12947e5	1.46046e5	1.28492
37	7.500	VV	0.0400	4.14527e5	1.34373e5	1.03838
38	7.563	VV	0.0594	6.33663e5	1.43717e5	1.58731
39	7.658	VV	0.0571	5.48076e5	1.32799e5	1.37292
40	7.713	VV	0.0419	3.85639e5	1.32789e5	0.96602
41	7.781	VV	0.0657	7.02397e5	1.44540e5	1.75949
42	7.874	VV	0.1660	2.00691e6	1.46367e5	5.02728
43	8.136	VV	0.0905	9.09572e5	1.27101e5	2.27846
44	8.221	VV	0.0645	5.38469e5	1.15325e5	1.34885
45	8.332	VV	0.0724	6.18941e5	1.21466e5	1.55043
46	8.382	VV	0.0445	3.36415e5	1.13868e5	0.84271
47	8.457	VV	0.0520	4.18382e5	1.16120e5	1.04804
48	8.510	VV	0.0456	3.83732e5	1.19111e5	0.96124
49	8.570	VV	0.0722	8.23857e5	1.47438e5	2.06375
50	8.683	VV	0.0831	9.58663e5	1.50951e5	2.40143
51	8.812	VV	0.0767	6.09737e5	1.08212e5	1.52738
52	8.902	VV	0.0658	4.72168e5	1.02302e5	1.18277
53	8.967	VBA	0.0300	2.34069e5	9.75486e4	0.58634

Totals : 3.99205e7 1.12898e7

Results obtained with enhanced integrator!

*** End of Report ***

```

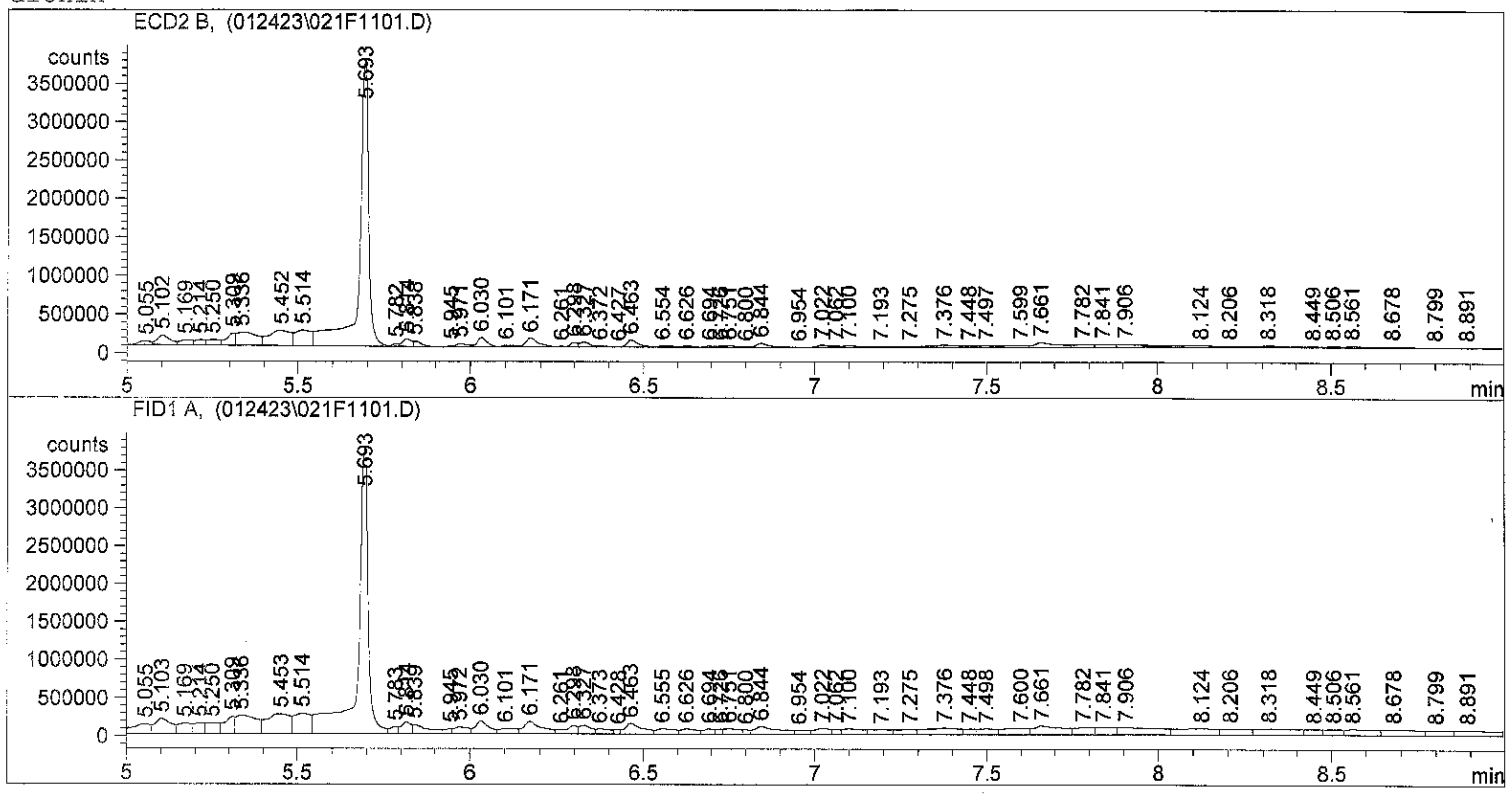
=====
Injection Date : 1/24/2023 7:56:36 AM      Seq. Line : 11
Sample Name    : 23A0295 02                Location  : Vial 21
Acq. Operator  : NL                        Inj      : 1
                                           Inj Volume : 1 µl

```

```

Sequence File : C:\HPCHEM\1\SEQUENCE\012423.S
Method        : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed  : 3/2/2018 11:45:27 AM by RM
dioxin

```



=====
Area Percent Report
=====

```

Sorted By      : Signal
Multiplier    : 1.0000
Dilution      : 1.0000

```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.055	BV	0.0371	1.14550e5	4.92317e4	0.77520
2	5.102	VV	0.0381	3.29656e5	1.23729e5	2.23090
3	5.169	VV	0.0378	1.59093e5	6.23252e4	1.07664
4	5.214	VV	0.0288	1.39177e5	6.82659e4	0.94186
5	5.250	VV	0.0368	1.83681e5	7.19164e4	1.24303
6	5.309	VV	0.0265	2.82767e5	1.53599e5	1.91358
7	5.336	VV	0.0598	7.05576e5	1.72253e5	4.77488
8	5.452	VV	0.0589	8.86688e5	1.95710e5	6.00052
9	5.514	VV	0.0445	6.40311e5	2.04672e5	4.33320
10	5.693	VV	0.0274	7.15350e6	3.72722e6	48.41019
11	5.782	VV	0.0209	5.29002e4	3.87186e4	0.35799
12	5.814	VV	0.0266	1.87551e5	1.01163e5	1.26922
13	5.838	VP	0.0258	1.16108e5	6.82675e4	0.78575
14	5.945	VV	0.0149	1.61295e4	1.70208e4	0.10915
15	5.971	VV	0.0310	9.43361e4	4.23806e4	0.63841
16	6.030	VV	0.0296	2.35348e5	1.21584e5	1.59268

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.101	VV	0.0363	5.69349e4	2.12195e4	0.38530
18	6.171	VV	0.0352	2.77905e5	1.15016e5	1.88068
19	6.261	VV	0.0192	1.28998e4	1.05759e4	0.08730
20	6.298	VV	0.0218	8.63231e4	5.98836e4	0.58418
21	6.327	VV	0.0298	1.25182e5	6.41316e4	0.84715
22	6.372	VV	0.0349	3.36708e4	1.51815e4	0.22786
23	6.427	VV	0.0167	6571.13330	6080.36816	0.04447
24	6.463	VV	0.0342	2.13965e5	9.16295e4	1.44798
25	6.554	VV	0.0346	5.58479e4	2.20224e4	0.37794
26	6.626	VP	0.0306	4.11013e4	2.02774e4	0.27815
27	6.694	VV	0.0237	2.85218e4	1.88152e4	0.19302
28	6.726	VV	0.0176	2.14321e4	1.70908e4	0.14504
29	6.751	VV	0.0333	5.48739e4	2.34638e4	0.37135
30	6.800	VV	0.0201	1.17113e4	8471.57812	0.07925
31	6.844	VV	0.0375	1.40732e5	5.37757e4	0.95238
32	6.954	VV	0.0338	6072.89893	2461.56641	0.04110
33	7.022	VV	0.0312	6.21665e4	3.00194e4	0.42070
34	7.062	VV	0.0224	2.73801e4	1.73781e4	0.18529
35	7.100	VV	0.0441	7.12918e4	2.30701e4	0.48246
36	7.193	VV	0.0579	4.51347e4	1.09945e4	0.30544
37	7.275	VV	0.0452	4.87106e4	1.48907e4	0.32964
38	7.376	VV	0.0730	1.80843e5	3.19838e4	1.22383
39	7.448	VV	0.0301	4.50597e4	2.09122e4	0.30493
40	7.497	VV	0.0538	8.50806e4	2.21381e4	0.57577
41	7.599	VV	0.0612	1.32341e5	2.79596e4	0.89560
42	7.661	VV	0.0641	2.94552e5	6.12471e4	1.99333
43	7.782	VV	0.0509	1.38568e5	3.68082e4	0.93774
44	7.841	VV	0.0503	1.35179e5	3.56000e4	0.91480
45	7.906	VV	0.0960	2.65053e5	3.55294e4	1.79371
46	8.124	VV	0.0965	1.86602e5	2.46001e4	1.26280
47	8.206	VV	0.0694	1.14083e5	2.20269e4	0.77204
48	8.318	VV	0.0954	1.65187e5	2.36781e4	1.11788
49	8.449	VV	0.0463	4.66484e4	1.45763e4	0.31569
50	8.506	VV	0.0496	5.08160e4	1.49693e4	0.34389
51	8.561	VV	0.0612	8.65967e4	1.86516e4	0.58603
52	8.678	VV	0.0693	7.31377e4	1.41621e4	0.49495
53	8.799	VV	0.0633	2.68333e4	6225.38672	0.18159
54	8.891	VBA	0.0590	2.44626e4	5947.02002	0.16555

Totals : 1.47768e7 6.28152e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.055	BV	0.0518	4.55052e5	1.27075e5	1.58455
2	5.103	VV	0.0453	6.57354e5	2.00124e5	2.28900
3	5.169	VV	0.0397	3.71011e5	1.36667e5	1.29191
4	5.214	VV	0.0296	2.98076e5	1.41210e5	1.03794
5	5.250	VV	0.0375	3.76090e5	1.43748e5	1.30960
6	5.309	VV	0.0292	4.63195e5	2.23624e5	1.61291
7	5.336	VV	0.0619	1.03242e6	2.41441e5	3.59504
8	5.453	VV	0.0614	1.24062e6	2.61274e5	4.32002
9	5.514	VV	0.0452	8.55019e5	2.68363e5	2.97730
10	5.693	VV	0.0295	7.93247e6	3.78131e6	27.62199
11	5.783	VV	0.0244	1.56723e5	9.41109e4	0.54573
12	5.814	VV	0.0295	3.26500e5	1.55574e5	1.13692
13	5.839	VV	0.0435	3.92083e5	1.21910e5	1.36529
14	5.945	VV	0.0210	1.00066e5	6.81170e4	0.34845
15	5.972	VV	0.0376	2.61608e5	9.35075e4	0.91096
16	6.030	VV	0.0383	4.64103e5	1.72824e5	1.61607
17	6.101	VV	0.0445	2.45604e5	7.25253e4	0.85523

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
18	6.171	VV	0.0480	5.98631e5	1.66407e5	2.08452
19	6.261	VV	0.0249	1.06031e5	6.20849e4	0.36922
20	6.298	VV	0.0261	2.01706e5	1.11446e5	0.70237
21	6.327	VV	0.0350	2.77352e5	1.15722e5	0.96578
22	6.373	VV	0.0429	1.94327e5	6.68387e4	0.67667
23	6.428	VV	0.0181	7.39338e4	5.78066e4	0.25745
24	6.463	VV	0.0490	5.15920e5	1.43427e5	1.79651
25	6.555	VV	0.0493	2.80979e5	7.39171e4	0.97841
26	6.626	VV	0.0468	2.46781e5	7.22685e4	0.85933
27	6.694	VV	0.0315	1.55322e5	7.09804e4	0.54085
28	6.726	VV	0.0185	9.21096e4	6.94073e4	0.32074
29	6.751	VV	0.0423	2.36140e5	7.58948e4	0.82227
30	6.800	VV	0.0208	8.80761e4	6.11344e4	0.30669
31	6.844	VV	0.0667	5.45928e5	1.06656e5	1.90100
32	6.954	VV	0.0378	1.57148e5	5.58553e4	0.54721
33	7.022	VV	0.0437	2.56391e5	8.37380e4	0.89279
34	7.062	VV	0.0244	1.18698e5	7.12845e4	0.41332
35	7.100	VV	0.0560	3.17707e5	7.71556e4	1.10630
36	7.193	VV	0.0618	2.91070e5	6.55233e4	1.01355
37	7.275	VV	0.0523	2.71175e5	6.98062e4	0.94427
38	7.376	VV	0.0909	6.28244e5	8.73809e4	2.18764
39	7.448	VV	0.0304	1.67004e5	7.66464e4	0.58153
40	7.498	VV	0.0566	3.12075e5	7.81078e4	1.08669
41	7.600	VV	0.0670	4.41444e5	8.44152e4	1.53717
42	7.661	VV	0.0785	7.13528e5	1.17996e5	2.48461
43	7.782	VV	0.0530	3.70728e5	9.41118e4	1.29093
44	7.841	VV	0.0511	3.60105e5	9.31994e4	1.25394
45	7.906	VV	0.1096	8.05817e5	9.34383e4	2.80597
46	8.124	VV	0.1021	6.73818e5	8.35409e4	2.34633
47	8.206	VV	0.0731	4.53972e5	8.13560e4	1.58080
48	8.318	VV	0.1124	7.04742e5	8.35352e4	2.45401
49	8.449	VV	0.0474	2.47103e5	7.50575e4	0.86045
50	8.506	VV	0.0509	2.65499e5	7.57183e4	0.92451
51	8.561	VV	0.0778	4.83535e5	7.96642e4	1.68374
52	8.678	VV	0.0919	5.37992e5	7.57283e4	1.87336
53	8.799	VV	0.0721	3.46349e5	6.83670e4	1.20604
54	8.891	VBA	0.1041	5.52572e5	6.85251e4	1.92413

Totals : 2.87180e7 9.39755e6

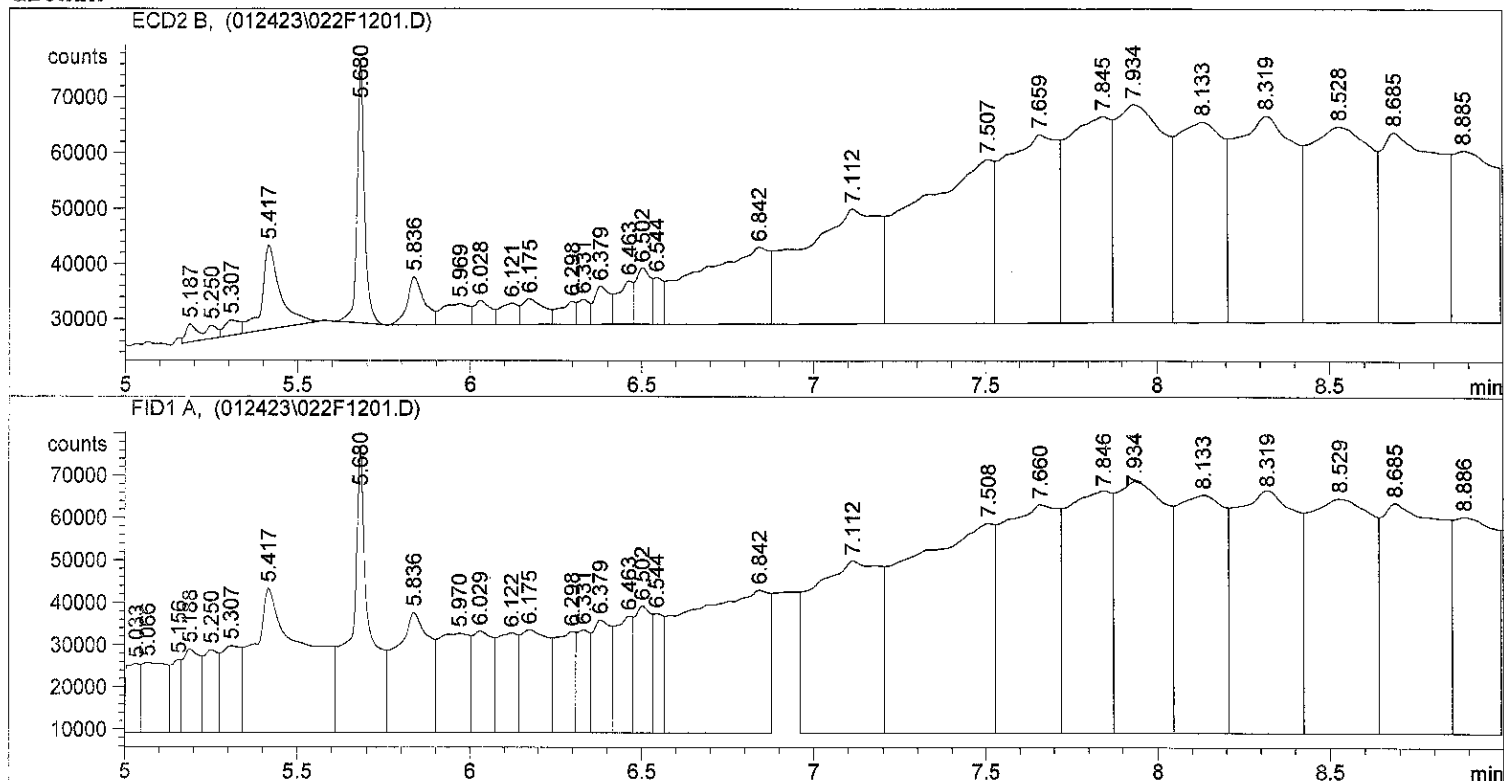
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date : 1/24/2023 8:10:21 AM      Seq. Line : 12
Sample Name    : 23A0313 12                Location  : Vial 22
Acq. Operator  : NL                        Inj      : 1
                                           Inj Volume: 1 µl

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method         : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed   : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.187	VV	0.0341	7598.50586	3265.85669	0.17628
2	5.250	VV	0.0320	5460.01709	2447.44287	0.12667
3	5.307	VV	0.0443	9009.95410	2819.22388	0.20903
4	5.417	VB	0.0526	5.70142e4	1.52639e4	1.32272
5	5.680	BP	0.0221	6.98814e4	4.76889e4	1.62124
6	5.836	BV	0.0498	2.98123e4	8737.83496	0.69164
7	5.969	VV	0.0698	2.12574e4	3828.41162	0.49317
8	6.028	VV	0.0484	1.48217e4	4392.78369	0.34386
9	6.121	VV	0.0508	1.48818e4	3876.67822	0.34526
10	6.175	VV	0.0634	2.13317e4	4662.06787	0.49489
11	6.298	VV	0.0431	1.36209e4	4167.64844	0.31600
12	6.331	VV	0.0347	1.08006e4	4551.33594	0.25057
13	6.379	VV	0.0448	2.18899e4	6935.61621	0.50784
14	6.463	VV	0.0420	2.42145e4	7852.47656	0.56177
15	6.502	VV	0.0429	3.06600e4	1.02517e4	0.71131
16	6.544	VV	0.0286	1.71638e4	8468.56641	0.39820

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.842	VV	0.1751	2.00832e5	1.39389e4	4.65928
18	7.112	VV	0.1906	3.27190e5	2.07947e4	7.59077
19	7.507	VV	0.1919	4.68010e5	2.95296e4	10.85779
20	7.659	VV	0.1347	3.69109e5	3.39812e4	8.56330
21	7.845	VV	0.1110	3.25110e5	3.71705e4	7.54253
22	7.934	VV	0.1212	3.81642e5	3.93262e4	8.85406
23	8.133	VV	0.1251	3.34771e5	3.61371e4	7.76665
24	8.319	VV	0.1558	4.49095e5	3.72043e4	10.41896
25	8.528	VV	0.1527	4.31271e5	3.52536e4	10.00544
26	8.685	VV	0.1488	4.00936e5	3.41830e4	9.30168
27	8.885	VBA	0.1145	2.52978e5	3.09165e4	5.86906

Totals : 4.31036e6 4.87646e5

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.033	BV	0.0369	4.30749e4	1.62479e4	0.48556
2	5.066	VV	0.0623	8.17975e4	1.66456e4	0.92206
3	5.156	VV	0.0273	3.30520e4	1.72915e4	0.37258
4	5.188	VV	0.0475	6.87118e4	1.98033e4	0.77455
5	5.250	VV	0.0398	5.67758e4	1.96090e4	0.64000
6	5.307	VV	0.0518	7.89474e4	2.05502e4	0.88993
7	5.417	VV	0.1361	3.71570e5	3.41039e4	4.18852
8	5.680	VV	0.0477	2.48013e5	6.77201e4	2.79572
9	5.836	VV	0.0903	1.95725e5	2.84232e4	2.20631
10	5.970	VV	0.0769	1.45043e5	2.35461e4	1.63500
11	6.029	VV	0.0539	9.69629e4	2.41208e4	1.09301
12	6.122	VV	0.0555	1.00176e5	2.36287e4	1.12923
13	6.175	VV	0.0749	1.35908e5	2.44293e4	1.53202
14	6.298	VV	0.0519	9.41970e4	2.39624e4	1.06183
15	6.331	VV	0.0363	6.11029e4	2.43547e4	0.68878
16	6.379	VV	0.0501	9.64162e4	2.67504e4	1.08685
17	6.463	VV	0.0469	9.70509e4	2.76882e4	1.09400
18	6.502	VV	0.0460	9.81037e4	3.00977e4	1.10587
19	6.544	VV	0.0292	5.86466e4	2.83231e4	0.66109
20	6.842	VV	0.2040	5.71736e5	3.38642e4	6.44489
21	7.112	BV	0.1658	5.55031e5	4.07877e4	6.25657
22	7.508	VV	0.2094	8.56459e5	4.96177e4	9.65442
23	7.660	VV	0.1368	6.01959e5	5.41059e4	6.78557
24	7.846	VV	0.1128	5.10162e5	5.73389e4	5.75079
25	7.934	VV	0.1238	5.90651e5	5.95168e4	6.65810
26	8.133	VV	0.1280	5.31446e5	5.63762e4	5.99071
27	8.319	VV	0.1595	7.12025e5	5.74865e4	8.02628
28	8.529	VV	0.1558	6.94737e5	5.55871e4	7.83141
29	8.685	VV	0.1531	6.59709e5	5.45536e4	7.43655
30	8.886	VBA	0.1038	4.25973e5	5.13354e4	4.80178

Totals : 8.87116e6 1.06787e6

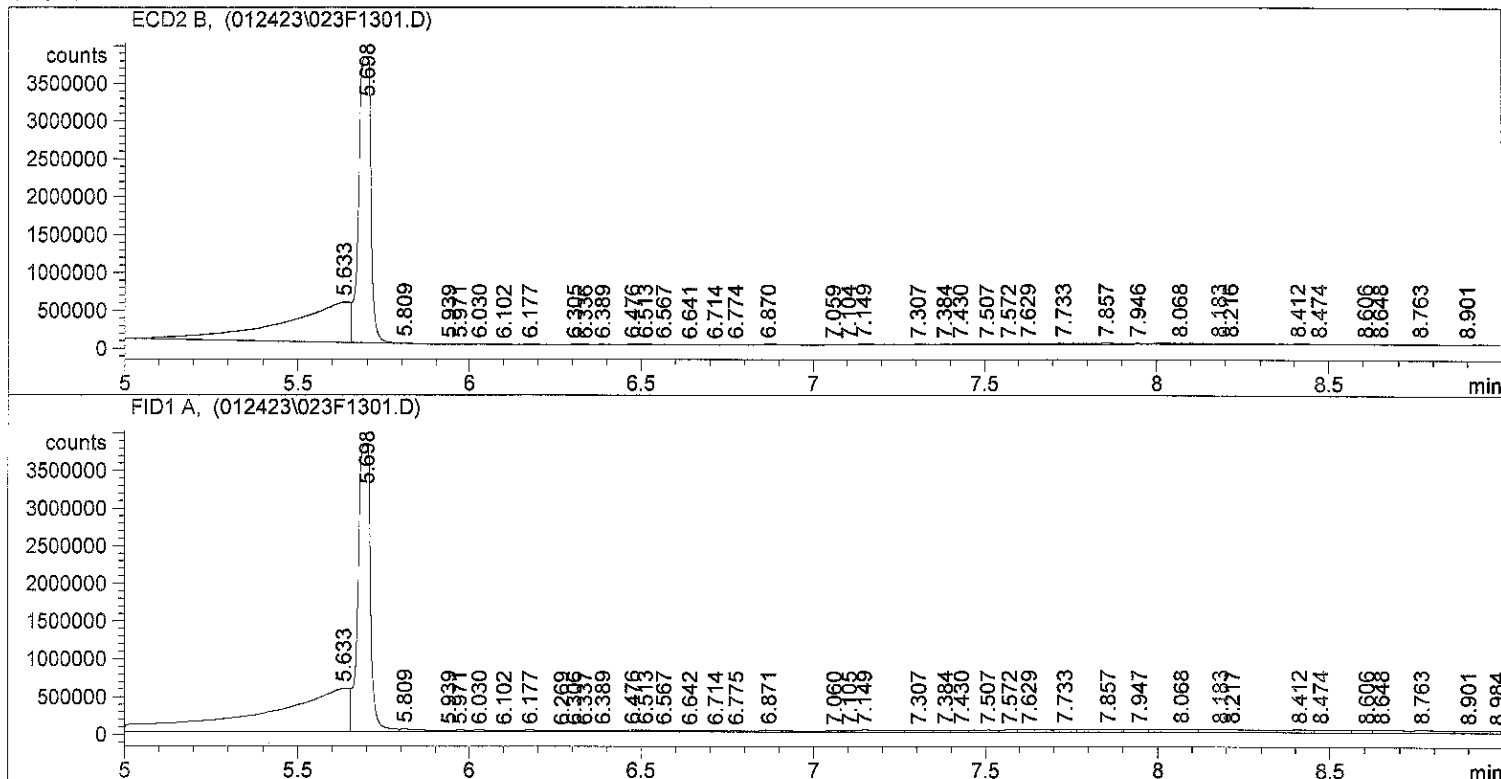
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date : 1/24/2023 8:22:44 AM      Seq. Line : 13
Sample Name    : 23A0326 01                Location  : Vial 23
Acq. Operator  : NL                        Inj      : 1
                                           Inj Volume: 1 µl

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method         : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed   : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.633	BV	0.1602	7.09607e6	5.33433e5	40.18767
2	5.698	VV	0.0384	9.18685e6	3.77802e6	52.02849
3	5.809	VP	0.0310	2.08036e4	9694.14258	0.11782
4	5.939	VV	0.0270	5238.96826	2658.04175	0.02967
5	5.971	VV	0.0322	1.23645e4	5497.81396	0.07002
6	6.030	VP	0.0309	2.11495e4	1.07641e4	0.11978
7	6.102	VV	0.0370	9048.11816	3293.76147	0.05124
8	6.177	VP	0.0372	3.03974e4	1.21541e4	0.17215
9	6.305	VV	0.0230	1.15515e4	7486.68701	0.06542
10	6.336	VV	0.0278	1.23452e4	6927.02686	0.06992
11	6.389	VV	0.0405	2.32237e4	8871.81348	0.13152
12	6.476	VV	0.0280	2.19771e4	1.21823e4	0.12446
13	6.513	VV	0.0372	3.07487e4	1.22984e4	0.17414
14	6.567	VV	0.0430	2.22942e4	6841.81348	0.12626
15	6.641	VP	0.0349	7445.49365	2905.04980	0.04217
16	6.714	VV	0.0241	4242.60742	2730.50342	0.02403

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.774	VV	0.0379	1.17543e4	4438.08057	0.06657
18	6.870	VP	0.0466	5.17450e4	1.52551e4	0.29305
19	7.059	VV	0.0329	1.40305e4	6323.74219	0.07946
20	7.104	VV	0.0257	8968.96680	5165.53516	0.05079
21	7.149	VV	0.0613	6.42700e4	1.49155e4	0.36398
22	7.307	VV	0.0589	2.96999e4	7383.25537	0.16820
23	7.384	VV	0.0383	1.78899e4	6464.30518	0.10132
24	7.430	VV	0.0372	2.48462e4	9294.42773	0.14071
25	7.507	VV	0.0623	4.94988e4	1.04514e4	0.28033
26	7.572	VV	0.0466	3.24019e4	1.03331e4	0.18350
27	7.629	VV	0.0687	7.38452e4	1.41917e4	0.41821
28	7.733	VV	0.0455	5.38628e4	1.63098e4	0.30505
29	7.857	VV	0.0847	1.16847e5	1.77721e4	0.66175
30	7.946	VV	0.0570	5.99016e4	1.48632e4	0.33924
31	8.068	VV	0.1008	1.25943e5	1.56709e4	0.71326
32	8.183	VV	0.0620	6.66596e4	1.38846e4	0.37752
33	8.216	VV	0.0835	9.15383e4	1.37821e4	0.51841
34	8.412	VV	0.0691	7.16389e4	1.43901e4	0.40572
35	8.474	VV	0.0681	5.30853e4	1.06621e4	0.30064
36	8.606	VV	0.0495	2.70559e4	8190.35107	0.15323
37	8.648	VV	0.0640	4.66490e4	9386.23633	0.26419
38	8.763	VV	0.0464	3.97720e4	1.24022e4	0.22524
39	8.901	VV	0.0524	9684.39063	2604.00903	0.05485

Totals : 1.76573e7 4.66989e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.633	BV	0.2016	9.70040e6	5.75543e5	39.30898
2	5.698	VV	0.0390	9.48457e6	3.81311e6	38.43437
3	5.809	VV	0.0607	1.76345e5	3.75847e4	0.71460
4	5.939	VV	0.0410	7.07037e4	2.23076e4	0.28651
5	5.971	VV	0.0409	7.26043e4	2.42796e4	0.29421
6	6.030	VV	0.0473	9.42382e4	2.79572e4	0.38188
7	6.102	VV	0.0500	7.20385e4	1.86937e4	0.29192
8	6.177	VV	0.0590	1.13871e5	2.60254e4	0.46144
9	6.269	VV	0.0247	2.24093e4	1.32564e4	0.09081
10	6.306	VV	0.0298	4.27388e4	2.01385e4	0.17319
11	6.337	VV	0.0332	4.44139e4	1.97515e4	0.17998
12	6.389	VV	0.0588	9.00697e4	2.19924e4	0.36499
13	6.476	VV	0.0329	5.95313e4	2.57952e4	0.24124
14	6.513	VV	0.0420	7.61306e4	2.61171e4	0.30850
15	6.567	VV	0.0533	8.67993e4	2.09652e4	0.35174
16	6.642	VV	0.0490	6.58730e4	1.74471e4	0.26694
17	6.714	VV	0.0354	4.30104e4	1.76930e4	0.17429
18	6.775	VV	0.0522	7.66097e4	1.97634e4	0.31045
19	6.871	VV	0.0960	2.37835e5	3.11660e4	0.96378
20	7.060	VV	0.0592	1.03078e5	2.35070e4	0.41770
21	7.105	VV	0.0264	4.17328e4	2.27142e4	0.16911
22	7.149	VV	0.0917	2.27004e5	3.28257e4	0.91989
23	7.307	VV	0.0678	1.27043e5	2.65767e4	0.51482
24	7.384	VV	0.0406	7.78906e4	2.62808e4	0.31564
25	7.430	VV	0.0407	8.76968e4	2.94905e4	0.35537
26	7.507	VV	0.0666	1.59867e5	3.12715e4	0.64783
27	7.572	VV	0.0478	1.02554e5	3.16789e4	0.41558
28	7.629	VV	0.0768	2.12308e5	3.60005e4	0.86034
29	7.733	VV	0.0503	1.44443e5	3.89632e4	0.58533
30	7.857	VV	0.0945	3.07180e5	4.14324e4	1.24479
31	7.947	VV	0.0590	1.64689e5	3.92498e4	0.66737
32	8.068	VV	0.1046	3.43470e5	4.10521e4	1.39184

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
33	8.183	VV	0.0621	1.93214e5	4.01963e4	0.78296
34	8.217	VV	0.1018	3.31346e5	4.03643e4	1.34272
35	8.412	VV	0.0808	2.54677e5	4.25633e4	1.03203
36	8.474	VV	0.0810	2.39498e5	3.93330e4	0.97052
37	8.606	VV	0.0522	1.34009e5	3.79370e4	0.54304
38	8.648	VV	0.0780	2.43482e5	3.94747e4	0.98666
39	8.763	VV	0.0846	2.81478e5	4.34271e4	1.14063
40	8.901	VV	0.0791	2.08786e5	3.47469e4	0.84607
41	8.984	VBA	0.0311	6.16774e4	3.31030e4	0.24994

Totals : 2.46773e7 5.55178e6

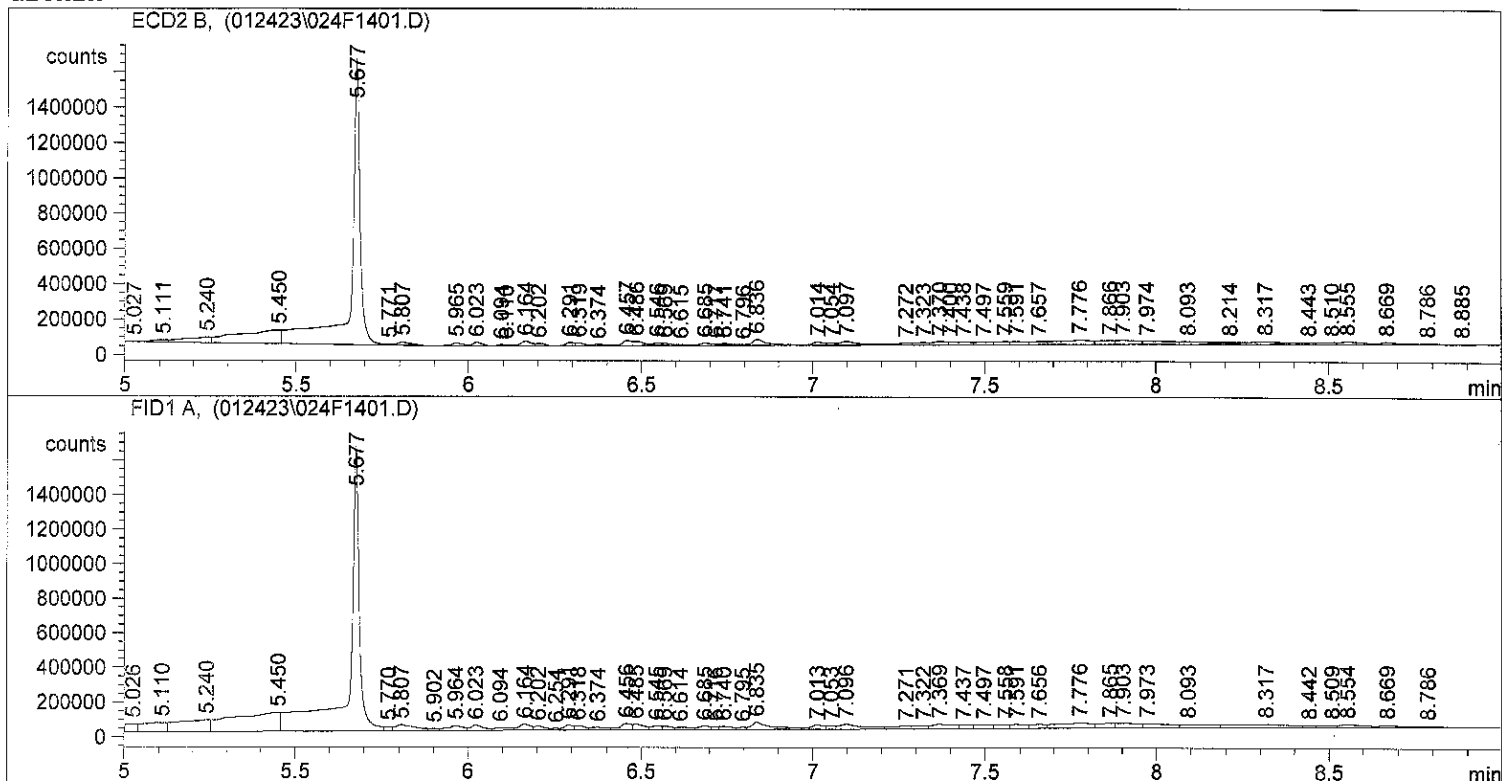
Results obtained with enhanced integrator!

=====
*** End of Report ***

```

=====
Injection Date : 1/24/2023 8:38:27 AM      Seq. Line : 14
Sample Name    : 23A0326 09                Location  : Vial 24
Acq. Operator  : NL                        Inj      : 1
                                           Inj Volume: 1 µl

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method        : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed  : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.027	BV	0.0244	4697.54785	2974.23657	0.07441
2	5.111	VV	0.0491	4.28159e4	1.27809e4	0.67826
3	5.240	VV	0.0700	1.75388e5	3.19668e4	2.77836
4	5.450	VV	0.1079	6.81909e5	7.67931e4	10.80228
5	5.677	VV	0.0251	3.07070e6	1.62141e6	48.64360
6	5.771	VV	0.0206	1.02841e4	7248.03662	0.16291
7	5.807	VP	0.0367	5.30332e4	2.01688e4	0.84011
8	5.965	VV	0.0310	3.75971e4	1.75396e4	0.59558
9	6.023	VP	0.0295	4.08420e4	2.11621e4	0.64699
10	6.094	VV	0.0202	1.01529e4	7792.86328	0.16083
11	6.110	VV	0.0261	1.15656e4	7396.68945	0.18321
12	6.164	VV	0.0306	5.39529e4	2.66709e4	0.85468
13	6.202	VV	0.0262	2.48839e4	1.43516e4	0.39419
14	6.291	VV	0.0235	3.26879e4	2.06190e4	0.51782
15	6.319	VV	0.0265	2.86402e4	1.62667e4	0.45370
16	6.374	VV	0.0399	2.04394e4	7980.30029	0.32379

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.457	VV	0.0288	5.82062e4	2.97213e4	0.92206
18	6.486	VV	0.0319	5.21877e4	2.44545e4	0.82672
19	6.546	VV	0.0263	2.94597e4	1.61522e4	0.46668
20	6.569	VV	0.0263	2.33984e4	1.34494e4	0.37066
21	6.615	VV	0.0377	2.02745e4	7025.81982	0.32117
22	6.685	VV	0.0285	2.98608e4	1.54599e4	0.47303
23	6.717	VV	0.0169	1.33976e4	1.12763e4	0.21223
24	6.741	VV	0.0339	2.99320e4	1.25129e4	0.47416
25	6.796	VV	0.0245	1.11265e4	6641.55225	0.17626
26	6.836	VV	0.0471	1.21603e5	3.53845e4	1.92634
27	7.014	VV	0.0354	4.85490e4	1.99389e4	0.76908
28	7.054	VV	0.0242	2.30335e4	1.40308e4	0.36488
29	7.097	VV	0.0605	1.05821e5	2.35160e4	1.67633
30	7.272	VV	0.0509	4.80048e4	1.27656e4	0.76046
31	7.323	VV	0.0378	4.07652e4	1.49680e4	0.64577
32	7.370	VV	0.0386	6.07947e4	2.17265e4	0.96306
33	7.400	VV	0.0293	3.15084e4	1.79117e4	0.49913
34	7.438	VV	0.0351	4.18722e4	1.67784e4	0.66331
35	7.497	VV	0.0464	5.58145e4	1.65459e4	0.88417
36	7.559	VV	0.0364	4.93642e4	1.89229e4	0.78199
37	7.591	VV	0.0424	5.86845e4	1.93313e4	0.92963
38	7.657	VV	0.0413	5.55795e4	1.89146e4	0.88045
39	7.776	VV	0.0858	1.84272e5	2.76388e4	2.91910
40	7.866	VV	0.0443	7.86381e4	2.33501e4	1.24572
41	7.903	VV	0.0670	1.08343e5	2.34001e4	1.71629
42	7.974	VV	0.0742	1.13137e5	1.96283e4	1.79222
43	8.093	VV	0.0815	1.04037e5	1.62897e4	1.64807
44	8.214	VV	0.0395	4.01893e4	1.28540e4	0.63665
45	8.317	VV	0.1160	1.45281e5	1.67830e4	2.30143
46	8.443	VV	0.0313	2.07061e4	9175.26270	0.32801
47	8.510	VV	0.0488	3.78999e4	1.14050e4	0.60038
48	8.555	VV	0.0627	7.68302e4	1.60860e4	1.21709
49	8.669	VV	0.0591	5.40062e4	1.23221e4	0.85552
50	8.786	VV	0.0739	3.09044e4	5827.02197	0.48956
51	8.885	VBA	0.0525	9573.31836	2213.41528	0.15165

Totals : 6.31264e6 2.49753e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.026	BV	0.0326	1.10482e5	4.83689e4	1.23952
2	5.110	VV	0.0663	2.65640e5	5.50674e4	2.98027
3	5.240	VV	0.0847	4.73973e5	6.94205e4	5.31761
4	5.450	VV	0.1224	1.08946e6	1.06416e5	12.22290
5	5.677	VV	0.0278	3.49878e6	1.64394e6	39.25352
6	5.770	VV	0.0212	3.67525e4	2.49318e4	0.41233
7	5.807	VV	0.0526	1.45729e5	3.64843e4	1.63497
8	5.902	VV	0.0276	2.64114e4	1.36434e4	0.29632
9	5.964	VV	0.0444	9.69181e4	2.94758e4	1.08735
10	6.023	VV	0.0381	8.54134e4	3.20523e4	0.95827
11	6.094	VV	0.0454	6.16082e4	1.77875e4	0.69120
12	6.164	VV	0.0345	8.57820e4	3.64296e4	0.96241
13	6.202	VV	0.0319	5.32802e4	2.39806e4	0.59776
14	6.254	VV	0.0226	1.71639e4	1.13947e4	0.19257
15	6.291	VV	0.0280	5.64431e4	2.99384e4	0.63325
16	6.318	VV	0.0306	5.15344e4	2.54974e4	0.57818
17	6.374	VV	0.0468	5.36181e4	1.70203e4	0.60155
18	6.456	VV	0.0339	9.21150e4	3.84567e4	1.03346
19	6.485	VV	0.0332	7.73250e4	3.31125e4	0.86753
20	6.545	VV	0.0281	4.86359e4	2.45944e4	0.54566

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
21	6.569	VV	0.0276	4.23159e4	2.18193e4	0.47475
22	6.614	VV	0.0424	4.88505e4	1.52356e4	0.54806
23	6.685	VV	0.0321	5.24612e4	2.34557e4	0.58857
24	6.716	VV	0.0181	2.26809e4	1.91338e4	0.25446
25	6.740	VV	0.0360	5.39494e4	2.02912e4	0.60527
26	6.795	VV	0.0251	2.45490e4	1.42278e4	0.27542
27	6.835	VV	0.0595	1.92642e5	4.28169e4	2.16129
28	7.013	VV	0.0408	7.75778e4	2.67653e4	0.87036
29	7.053	VV	0.0245	3.47258e4	2.07299e4	0.38960
30	7.096	VV	0.0702	1.60201e5	3.00626e4	1.79733
31	7.271	VV	0.0549	7.68169e4	1.87158e4	0.86183
32	7.322	VV	0.0385	5.77922e4	2.07359e4	0.64838
33	7.369	VV	0.0576	1.20868e5	2.73268e4	1.35604
34	7.437	VV	0.0354	5.58439e4	2.21496e4	0.62653
35	7.497	VV	0.0468	7.39951e4	2.17156e4	0.83017
36	7.558	VV	0.0371	6.35897e4	2.38802e4	0.71343
37	7.591	VV	0.0429	7.44836e4	2.41770e4	0.83565
38	7.656	VV	0.0417	7.00781e4	2.35300e4	0.78622
39	7.776	VV	0.0888	2.20396e5	3.18405e4	2.47267
40	7.865	VV	0.0445	9.22267e4	2.72567e4	1.03471
41	7.903	VV	0.0675	1.26801e5	2.71683e4	1.42260
42	7.973	VV	0.0739	1.34685e5	2.31539e4	1.51106
43	8.093	VV	0.0823	1.25282e5	1.94034e4	1.40556
44	8.317	VV	0.1490	2.19640e5	1.91225e4	2.46419
45	8.442	VV	0.0315	2.51973e4	1.10828e4	0.28269
46	8.509	VV	0.0493	4.40808e4	1.30811e4	0.49455
47	8.554	VV	0.0644	8.65733e4	1.76053e4	0.97128
48	8.669	VV	0.0611	6.12206e4	1.34486e4	0.68685
49	8.786	VBA	0.0952	4.66950e4	6549.91602	0.52388

Totals : 8.91328e6 2.94449e6

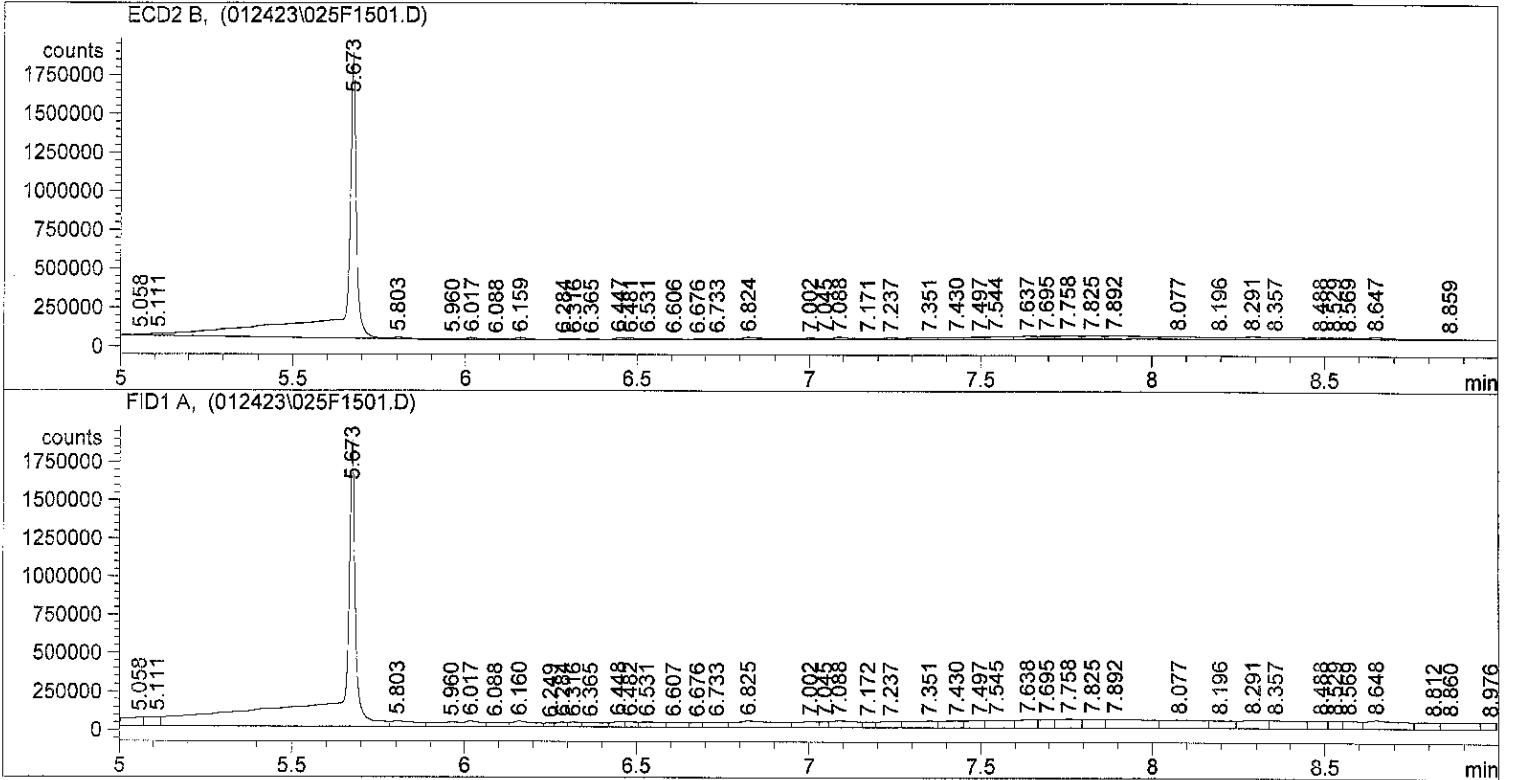
Results obtained with enhanced integrator!

=====
 *** End of Report ***

```

=====
Injection Date   : 1/24/2023 8:52:40 AM      Seq. Line   : 15
Sample Name     : 23A0326 12                Location    : Vial 25
Acq. Operator  : NL                        Inj        : 1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed    : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By      : Signal
Multiplier    : 1.0000
Dilution      : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.058	BV	0.0301	1.57707e4	7330.74268	0.25696
2	5.111	VV	0.0401	3.37583e4	1.26498e4	0.55005
3	5.673	VV	0.0299	4.23687e6	1.83741e6	69.03422
4	5.803	VP	0.0353	2.84886e4	1.13328e4	0.46418
5	5.960	VV	0.0359	1.40471e4	5480.85596	0.22888
6	6.017	VV	0.0303	2.47377e4	1.23699e4	0.40307
7	6.088	VV	0.0395	1.06905e4	3612.32227	0.17419
8	6.159	VP	0.0358	3.22359e4	1.30412e4	0.52524
9	6.284	VV	0.0234	1.08860e4	7301.98926	0.17737
10	6.316	VV	0.0286	1.50562e4	8139.51855	0.24532
11	6.365	VV	0.0429	1.70453e4	6044.89551	0.27773
12	6.447	VV	0.0282	2.37224e4	1.24835e4	0.38653
13	6.481	VV	0.0309	2.04321e4	9966.85938	0.33291
14	6.531	VV	0.0499	3.12508e4	8489.57812	0.50919
15	6.606	VV	0.0398	1.63050e4	5307.90332	0.26567
16	6.676	VV	0.0276	8112.89746	4379.82617	0.13219

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.733	VV	0.0461	2.31811e4	6912.91650	0.37771
18	6.824	VV	0.0716	8.57432e4	1.54733e4	1.39707
19	7.002	VV	0.0471	3.60373e4	1.07533e4	0.58718
20	7.045	VV	0.0234	1.43636e4	9095.08398	0.23404
21	7.088	VV	0.0563	6.51487e4	1.57401e4	1.06151
22	7.171	VV	0.0337	1.92471e4	8116.56055	0.31361
23	7.237	VV	0.0593	4.32614e4	1.06726e4	0.70489
24	7.351	VV	0.0724	7.42445e4	1.34451e4	1.20972
25	7.430	VV	0.0551	6.01496e4	1.45743e4	0.98006
26	7.497	VV	0.0467	5.26543e4	1.47186e4	0.85793
27	7.544	VV	0.0621	8.53542e4	1.80872e4	1.39074
28	7.637	VV	0.0518	8.41739e4	2.24403e4	1.37150
29	7.695	VV	0.0391	5.84278e4	2.05653e4	0.95200
30	7.758	VV	0.0588	1.03186e5	2.41517e4	1.68129
31	7.825	VV	0.0519	8.20727e4	2.18229e4	1.33727
32	7.892	VV	0.1041	1.72278e5	2.09157e4	2.80704
33	8.077	VV	0.0981	1.29606e5	1.69740e4	2.11176
34	8.196	VV	0.0609	5.88198e4	1.32142e4	0.95839
35	8.291	VV	0.0687	8.31797e4	1.71223e4	1.35530
36	8.357	VV	0.0780	7.44576e4	1.27683e4	1.21319
37	8.488	VV	0.0518	3.77946e4	1.07990e4	0.61581
38	8.529	VV	0.0348	2.69349e4	1.09179e4	0.43887
39	8.569	VV	0.0470	3.12966e4	9863.52832	0.50994
40	8.647	VV	0.0625	6.98614e4	1.52311e4	1.13830
41	8.859	VP	0.1037	2.64633e4	3404.69702	0.43118

Totals : 6.13735e6 2.32312e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.058	BV	0.0507	2.22999e5	5.69251e4	1.56781
2	5.111	VV	0.0447	1.85702e5	6.06733e4	1.30559
3	5.673	VV	0.0388	5.73575e6	1.86947e6	40.32549
4	5.803	VV	0.0649	1.95877e5	3.88135e4	1.37712
5	5.960	VV	0.0713	1.68686e5	3.01554e4	1.18595
6	6.017	VV	0.0481	1.29644e5	3.68227e4	0.91147
7	6.088	VV	0.0500	1.07129e5	2.77821e4	0.75318
8	6.160	VV	0.0625	1.75641e5	3.69289e4	1.23485
9	6.249	VV	0.0249	4.19658e4	2.46645e4	0.29504
10	6.284	VV	0.0309	6.68626e4	3.12993e4	0.47008
11	6.316	VV	0.0341	7.79824e4	3.23644e4	0.54826
12	6.365	VV	0.0603	1.32097e5	3.06259e4	0.92872
13	6.448	VV	0.0369	9.64897e4	3.76581e4	0.67838
14	6.482	VV	0.0336	8.07654e4	3.53807e4	0.56783
15	6.531	VV	0.0602	1.56169e5	3.42613e4	1.09795
16	6.607	VV	0.0487	1.21031e5	3.16212e4	0.85091
17	6.676	VV	0.0320	6.95515e4	3.11910e4	0.48899
18	6.733	VV	0.0567	1.45452e5	3.41369e4	1.02261
19	6.825	VV	0.1131	3.94126e5	4.33531e4	2.77092
20	7.002	VV	0.0592	1.75298e5	3.99100e4	1.23244
21	7.045	VV	0.0238	6.19934e4	3.85609e4	0.43585
22	7.088	VV	0.0701	2.42428e5	4.55123e4	1.70440
23	7.172	VV	0.0341	9.27734e4	3.84897e4	0.65225
24	7.237	VV	0.0635	1.83374e5	4.15172e4	1.28922
25	7.351	VV	0.0784	2.72207e5	4.51083e4	1.91376
26	7.430	VV	0.0576	2.03123e5	4.68024e4	1.42807
27	7.497	VV	0.0471	1.71168e5	4.74269e4	1.20341
28	7.545	VV	0.0644	2.56182e5	5.11377e4	1.80110
29	7.638	VV	0.0549	2.30495e5	5.61593e4	1.62051
30	7.695	VV	0.0397	1.57986e5	5.46949e4	1.11073

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
31	7.758	VV	0.0623	2.68279e5	5.87318e4	1.88615
32	7.825	VV	0.0534	2.21338e5	5.68900e4	1.55613
33	7.892	VV	0.1137	5.11574e5	5.64550e4	3.59665
34	8.077	VV	0.1057	4.46461e5	5.38527e4	3.13887
35	8.196	VV	0.0630	2.35902e5	5.09446e4	1.65852
36	8.291	VV	0.0761	3.05277e5	5.55336e4	2.14626
37	8.357	VV	0.0852	3.33034e5	5.16544e4	2.34142
38	8.488	VV	0.0513	1.83500e5	5.06315e4	1.29011
39	8.529	VV	0.0357	1.30069e5	5.10407e4	0.91446
40	8.569	VV	0.0504	1.74240e5	5.02684e4	1.22500
41	8.648	VV	0.0981	4.29260e5	5.62044e4	3.01793
42	8.812	VV	0.0561	1.98137e5	4.52145e4	1.39302
43	8.860	VV	0.0913	3.11857e5	4.58971e4	2.19253
44	8.976	VBA	0.0387	1.23755e5	4.40901e4	0.87007

Totals : 1.42236e7 3.75686e6

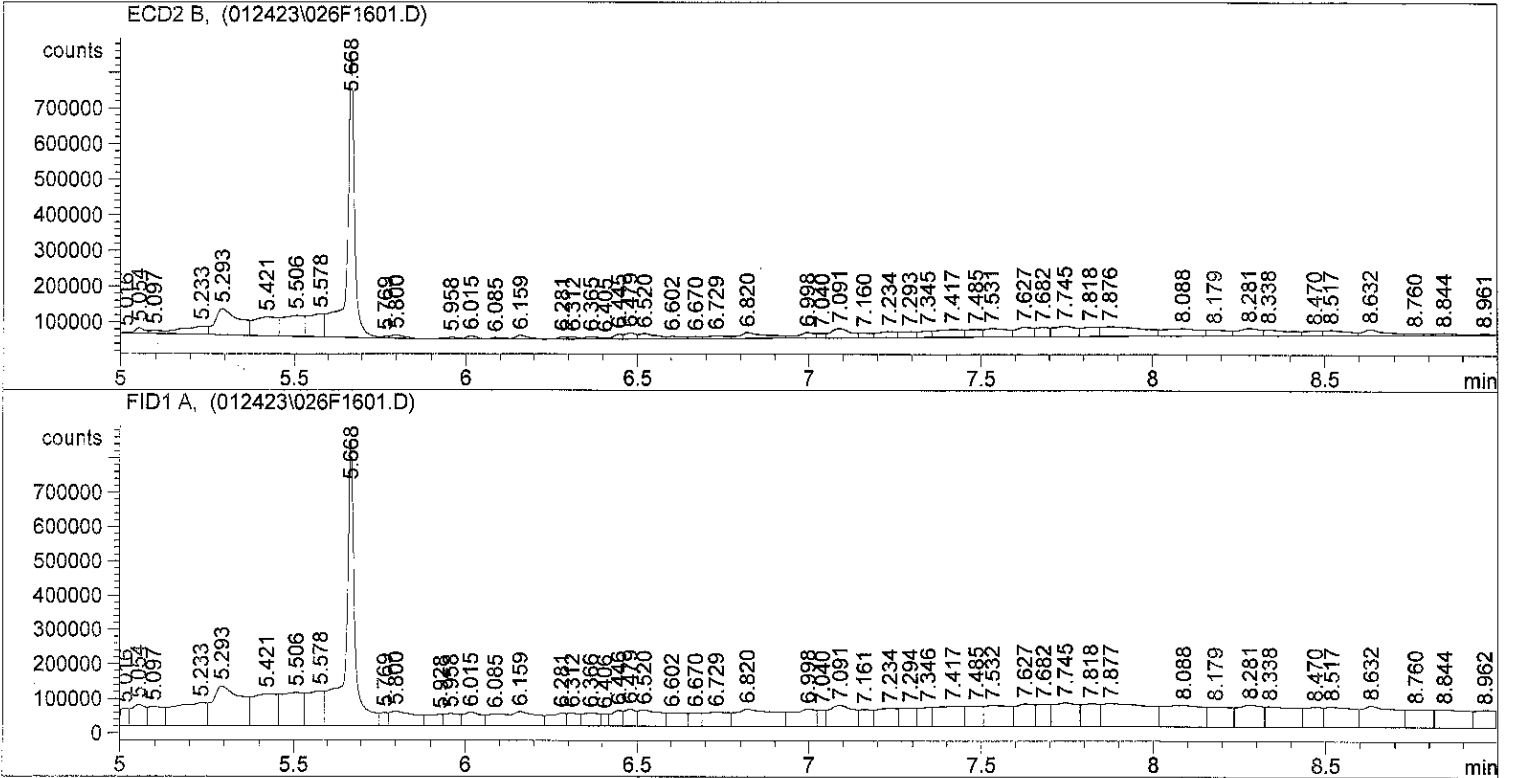
Results obtained with enhanced integrator!

=====
*** End of Report ***

```

=====
Injection Date : 1/24/2023 9:06:31 AM      Seq. Line : 16
Sample Name    : 23A0328 06                Location  : Vial 26
Acq. Operator  : NL                        Inj      : 1
                                           Inj Volume: 1 µl

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method        : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed  : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



=====
 Area Percent Report
 =====

```

Sorted By      : Signal
Multiplier     : 1.0000
Dilution       : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.016	BV	0.0197	3007.14526	2381.54639	0.06083
2	5.054	VV	0.0259	2.86589e4	1.59895e4	0.57977
3	5.097	VV	0.0395	2.49004e4	8926.48730	0.50374
4	5.233	VV	0.0663	1.20684e5	2.33637e4	2.44145
5	5.293	VV	0.0676	3.61485e5	7.32164e4	7.31285
6	5.421	VV	0.0617	2.48129e5	5.29139e4	5.01965
7	5.506	VV	0.0566	2.50491e5	5.88710e4	5.06744
8	5.578	VV	0.0463	2.18646e5	6.48753e4	4.42321
9	5.668	VV	0.0219	1.24105e6	8.07358e5	25.10641
10	5.769	VV	0.0211	7722.85400	5269.99951	0.15623
11	5.800	VP	0.0356	2.72293e4	1.07353e4	0.55085
12	5.958	VV	0.0388	1.49618e4	5323.37842	0.30268
13	6.015	VV	0.0306	1.90693e4	9437.19434	0.38577
14	6.085	VV	0.0391	1.30596e4	4608.09326	0.26420
15	6.159	VP	0.0386	2.97801e4	1.13395e4	0.60245
16	6.281	VV	0.0257	1.16136e4	6883.72705	0.23494

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.312	VV	0.0282	1.30244e4	6842.77637	0.26348
18	6.365	VV	0.0422	1.84043e4	6660.85596	0.37232
19	6.405	VV	0.0168	4843.75146	4098.62695	0.09799
20	6.445	VV	0.0266	2.45571e4	1.39134e4	0.49679
21	6.479	VV	0.0322	3.82363e4	1.77161e4	0.77352
22	6.520	VV	0.0495	5.36978e4	1.50843e4	1.08631
23	6.602	VV	0.0441	2.40288e4	7176.03174	0.48610
24	6.670	VV	0.0309	1.41566e4	6637.10547	0.28639
25	6.729	VV	0.0531	3.48120e4	8620.78809	0.70425
26	6.820	VV	0.0748	9.58435e4	1.67449e4	1.93892
27	6.998	VV	0.0504	5.67008e4	1.55849e4	1.14706
28	7.040	VV	0.0222	2.05835e4	1.31851e4	0.41640
29	7.091	VV	0.0588	1.05016e5	2.61659e4	2.12449
30	7.160	VV	0.0373	3.47243e4	1.33793e4	0.70247
31	7.234	VV	0.0583	6.53865e4	1.68319e4	1.32277
32	7.293	VV	0.0466	5.21827e4	1.66519e4	1.05566
33	7.345	VV	0.0357	4.59486e4	1.86535e4	0.92954
34	7.417	VV	0.0678	1.19616e5	2.25987e4	2.41984
35	7.485	VV	0.0456	6.96977e4	2.21997e4	1.40999
36	7.531	VV	0.0640	1.18810e5	2.43072e4	2.40353
37	7.627	VV	0.0464	9.45263e4	2.79599e4	1.91227
38	7.682	VV	0.0387	7.10626e4	2.61632e4	1.43760
39	7.745	VV	0.0605	1.33967e5	2.97815e4	2.71015
40	7.818	VV	0.0500	9.06764e4	2.64497e4	1.83439
41	7.876	VV	0.1122	2.33730e5	2.66862e4	4.72836
42	8.088	VV	0.0937	1.53211e5	2.06103e4	3.09945
43	8.179	VV	0.0622	7.61144e4	1.70051e4	1.53980
44	8.281	VV	0.0651	9.71935e4	2.13710e4	1.96623
45	8.338	VV	0.0734	9.32186e4	1.68970e4	1.88581
46	8.470	VV	0.0502	4.76097e4	1.38248e4	0.96315
47	8.517	VV	0.0652	7.30820e4	1.46544e4	1.47845
48	8.632	VV	0.0653	7.92903e4	1.67287e4	1.60405
49	8.760	VV	0.0607	2.83798e4	6160.44971	0.57412
50	8.844	VV	0.0668	2.80923e4	5773.78662	0.56831
51	8.961	VBA	0.0447	1.22376e4	4111.51270	0.24757

Totals : 4.94315e6 1.72872e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.016	BV	0.0273	8.07879e4	4.93674e4	0.57511
2	5.054	VV	0.0365	1.67968e5	6.22553e4	1.19572
3	5.097	VV	0.0415	1.60843e5	5.43911e4	1.14500
4	5.233	VV	0.0839	4.42336e5	6.62623e4	3.14887
5	5.293	VV	0.0772	6.62006e5	1.14990e5	4.71264
6	5.421	VV	0.0633	4.44915e5	9.22688e4	3.16724
7	5.506	VV	0.0597	4.20274e5	9.66254e4	2.99182
8	5.578	VV	0.0472	3.49248e5	1.01270e5	2.48621
9	5.668	VV	0.0259	1.57640e6	8.41409e5	11.22195
10	5.769	VV	0.0229	6.18300e4	3.80716e4	0.44015
11	5.800	VV	0.0658	2.20166e5	4.29522e4	1.56730
12	5.928	VV	0.0409	1.05364e5	3.24548e4	0.75006
13	5.958	VV	0.0419	1.10444e5	3.58853e4	0.78622
14	6.015	VV	0.0484	1.41408e5	3.98729e4	1.00665
15	6.085	VV	0.0539	1.43565e5	3.49359e4	1.02200
16	6.159	VV	0.0678	2.12726e5	4.15328e4	1.51434
17	6.281	VV	0.0473	1.31862e5	3.72686e4	0.93869
18	6.312	VV	0.0337	8.89968e4	3.74200e4	0.63354
19	6.366	VV	0.0498	1.28317e5	3.75706e4	0.91345
20	6.406	VV	0.0172	4.27849e4	3.52587e4	0.30457

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
21	6.446	VV	0.0325	1.02810e5	4.53240e4	0.73188
22	6.479	VV	0.0351	1.18966e5	4.93325e4	0.84688
23	6.520	VV	0.0612	2.14015e5	4.69588e4	1.52352
24	6.602	VV	0.0486	1.47797e5	3.95600e4	1.05213
25	6.670	VV	0.0342	9.54586e4	3.94467e4	0.67954
26	6.729	VV	0.0619	2.00341e5	4.17957e4	1.42617
27	6.820	VV	0.1059	4.23871e5	5.04874e4	3.01742
28	6.998	VV	0.0647	2.44970e5	5.04354e4	1.74387
29	7.040	VV	0.0225	7.65688e4	4.82997e4	0.54507
30	7.091	VV	0.0695	3.03797e5	6.15949e4	2.16265
31	7.161	VV	0.0380	1.30785e5	4.92435e4	0.93102
32	7.234	VV	0.0612	2.19609e5	5.31550e4	1.56334
33	7.294	VV	0.0472	1.69983e5	5.33447e4	1.21007
34	7.346	VV	0.0369	1.42637e5	5.56708e4	1.01540
35	7.417	VV	0.0707	3.33314e5	6.00609e4	2.37278
36	7.485	VV	0.0460	1.90351e5	6.00850e4	1.35506
37	7.532	VV	0.0674	3.23309e5	6.24758e4	2.30155
38	7.627	VV	0.0493	2.41919e5	6.67345e4	1.72215
39	7.682	VV	0.0391	1.79670e5	6.52774e4	1.27902
40	7.745	VV	0.0641	3.33281e5	6.92835e4	2.37254
41	7.818	VV	0.0510	2.33321e5	6.64101e4	1.66095
42	7.877	VV	0.1214	6.51474e5	6.70112e4	4.63767
43	8.088	VV	0.0996	4.94276e5	6.22563e4	3.51862
44	8.179	VV	0.0668	2.78233e5	5.92158e4	1.98067
45	8.281	VV	0.0710	3.24934e5	6.42158e4	2.31312
46	8.338	VV	0.0820	3.80945e5	6.00985e4	2.71185
47	8.470	VV	0.0517	2.06940e5	5.78495e4	1.47315
48	8.517	VV	0.0758	3.47560e5	5.89690e4	2.47419
49	8.632	VV	0.0921	4.39979e5	6.17529e4	3.13209
50	8.760	VV	0.0653	2.59831e5	5.19912e4	1.84966
51	8.844	VV	0.0882	3.45075e5	5.21278e4	2.45650
52	8.962	VBA	0.0554	1.99182e5	5.11953e4	1.41792

Totals : 1.40474e7 3.67372e6

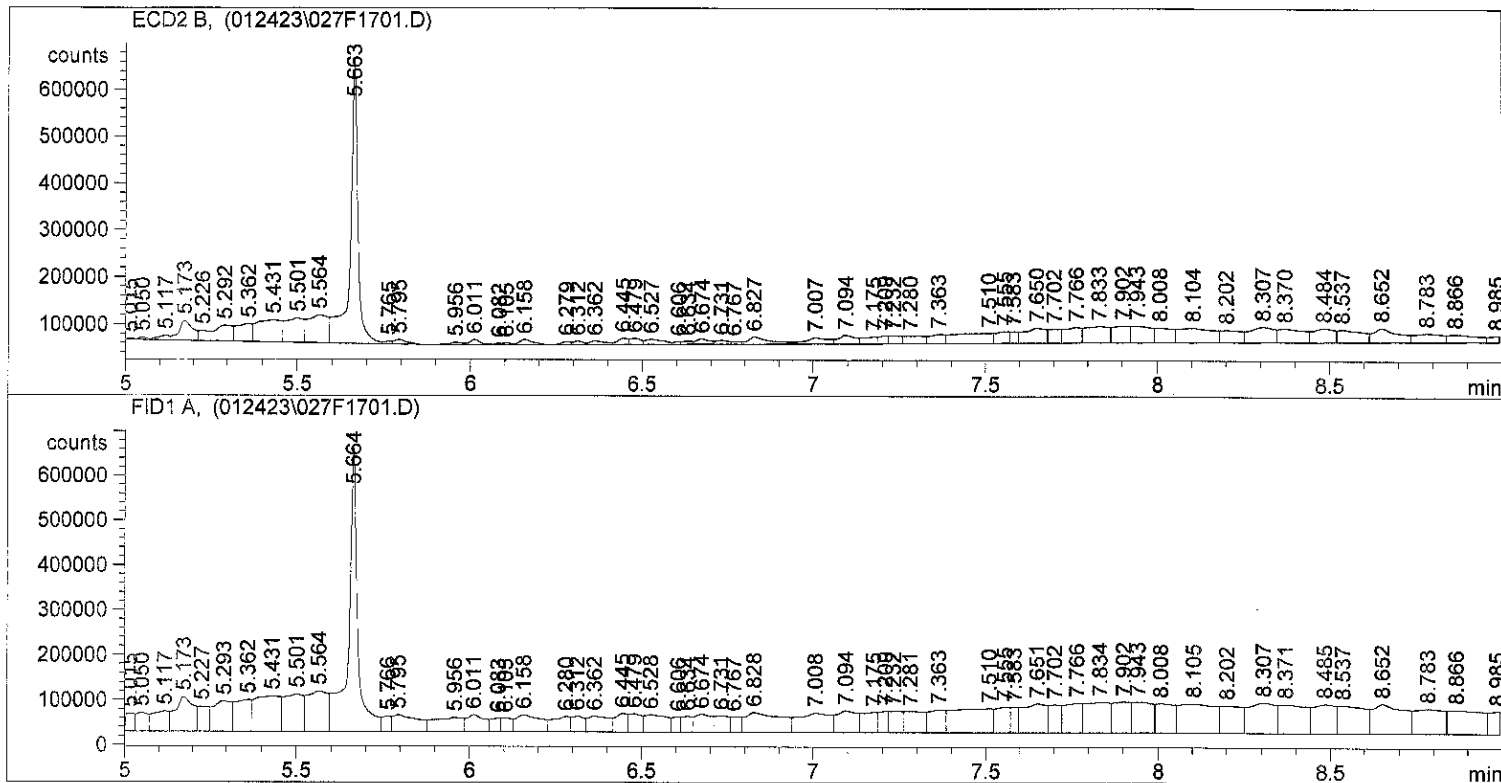
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 1/24/2023 9:20:39 AM      Seq. Line   : 17
Sample Name     : 23A0328 07                 Location    : Vial 27
Acq. Operator  : NL                          Inj         : 1
                                           Inj Volume  : 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed    : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



Area Percent Report

```

Sorted By       : Signal
Multiplier      : 1.0000
Dilution        : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.015	BV	0.0236	4381.12988	3087.93188	0.08276
2	5.050	VV	0.0231	9025.83008	5806.15723	0.17050
3	5.117	VV	0.0331	2.39716e4	9949.20020	0.45282
4	5.173	VV	0.0407	1.22288e5	4.22895e4	2.31001
5	5.226	VV	0.0314	4.75115e4	2.18291e4	0.89749
6	5.292	VV	0.0492	1.17108e5	3.39837e4	2.21216
7	5.362	VV	0.0417	1.16890e5	3.82252e4	2.20805
8	5.431	VV	0.0635	2.29345e5	4.73812e4	4.33232
9	5.501	VV	0.0460	1.84709e5	5.26102e4	3.48915
10	5.564	VV	0.0556	2.38306e5	5.96284e4	4.50159
11	5.663	VV	0.0212	9.50290e5	6.09744e5	17.95092
12	5.765	VV	0.0232	1.00217e4	6430.13281	0.18931
13	5.795	VP	0.0367	2.60424e4	1.02396e4	0.49194
14	5.956	BV	0.0381	1.43678e4	5217.71875	0.27141
15	6.011	VV	0.0292	2.25078e4	1.12985e4	0.42517
16	6.082	VV	0.0198	4358.42041	3223.96484	0.08233

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.105	VV	0.0279	6973.09863	3721.13867	0.13172
18	6.158	VP	0.0402	3.08135e4	1.11807e4	0.58207
19	6.279	VV	0.0259	1.27331e4	7118.76758	0.24053
20	6.312	VV	0.0297	1.53151e4	7855.08838	0.28930
21	6.362	VV	0.0498	2.67222e4	7835.64404	0.50478
22	6.445	VV	0.0298	2.86422e4	1.40253e4	0.54105
23	6.479	VV	0.0330	2.99006e4	1.34311e4	0.56482
24	6.527	VV	0.0504	4.17304e4	1.12163e4	0.78828
25	6.606	VV	0.0193	7874.38916	5649.53564	0.14875
26	6.634	VV	0.0273	1.39298e4	7273.06445	0.26313
27	6.674	VV	0.0388	3.26423e4	1.19759e4	0.61661
28	6.731	VV	0.0349	2.11158e4	8518.10938	0.39888
29	6.767	VV	0.0277	1.17352e4	6038.28076	0.22168
30	6.827	VV	0.0611	7.20190e4	1.55418e4	1.36043
31	7.007	VV	0.0658	6.57614e4	1.35002e4	1.24223
32	7.094	VV	0.0491	6.39415e4	1.85812e4	1.20785
33	7.175	VV	0.0377	4.10564e4	1.46605e4	0.77555
34	7.209	VV	0.0267	3.18652e4	1.71358e4	0.60193
35	7.232	VV	0.0340	4.10928e4	1.71135e4	0.77624
36	7.280	VV	0.0513	6.58015e4	1.65817e4	1.24299
37	7.363	VV	0.0437	6.20209e4	1.97004e4	1.17157
38	7.510	VV	0.0967	1.73857e5	2.18866e4	3.28415
39	7.555	VV	0.0373	6.72004e4	2.50423e4	1.26941
40	7.583	VV	0.0231	3.81543e4	2.46588e4	0.72073
41	7.650	VV	0.0607	1.45576e5	3.22343e4	2.74992
42	7.702	VV	0.0334	7.22982e4	2.97324e4	1.36571
43	7.766	VV	0.0459	1.13603e5	3.32232e4	2.14595
44	7.833	VV	0.0630	1.67851e5	3.49949e4	3.17069
45	7.902	VV	0.0450	1.18775e5	3.55096e4	2.24365
46	7.943	VV	0.0498	1.35125e5	3.52154e4	2.55249
47	8.008	VV	0.0499	1.10914e5	3.09115e4	2.09515
48	8.104	VV	0.0903	2.17750e5	3.08608e4	4.11329
49	8.202	VV	0.0589	1.10994e5	2.64962e4	2.09667
50	8.307	VV	0.0727	1.69146e5	3.30814e4	3.19515
51	8.370	VV	0.0702	1.53304e5	2.92017e4	2.89591
52	8.484	VV	0.0623	1.28008e5	2.96770e4	2.41805
53	8.537	VV	0.0661	1.35752e5	2.67924e4	2.56436
54	8.652	VV	0.0695	1.58668e5	3.00805e4	2.99723
55	8.783	VV	0.0737	1.05056e5	1.86684e4	1.98451
56	8.866	VV	0.0804	9.96226e4	1.60582e4	1.88186
57	8.985	VBA	0.0354	2.73591e4	1.28987e4	0.51681

Totals : 5.29382e6 1.76682e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.015	BV	0.0293	7.08241e4	4.02791e4	0.54962
2	5.050	VV	0.0318	9.77696e4	4.25697e4	0.75873
3	5.117	VV	0.0428	1.52742e5	4.58912e4	1.18534
4	5.173	VV	0.0518	2.97804e5	7.75521e4	2.31107
5	5.227	VV	0.0320	1.25750e5	5.64298e4	0.97587
6	5.293	VV	0.0524	2.52354e5	6.77791e4	1.95836
7	5.362	VV	0.0429	2.25354e5	7.11658e4	1.74883
8	5.431	VV	0.0651	3.95669e5	7.94803e4	3.07054
9	5.501	VV	0.0472	3.03189e5	8.38526e4	2.35286
10	5.564	VV	0.0570	3.70445e5	9.00962e4	2.87479
11	5.664	VV	0.0252	1.21639e6	6.39100e5	9.43965
12	5.766	VV	0.0251	5.94476e4	3.44343e4	0.46134
13	5.795	VV	0.0656	1.90205e5	3.78750e4	1.47606
14	5.956	VV	0.0759	1.91645e5	3.19927e4	1.48724

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
15	6.011	VV	0.0477	1.36206e5	3.81321e4	1.05701
16	6.083	VV	0.0266	5.84621e4	3.01375e4	0.45369
17	6.105	VV	0.0315	6.70715e4	3.06583e4	0.52050
18	6.158	VV	0.0672	1.93828e5	3.81783e4	1.50418
19	6.280	VV	0.0471	1.21160e5	3.43834e4	0.94024
20	6.312	VV	0.0342	8.52278e4	3.52399e4	0.66140
21	6.362	VV	0.0613	1.55838e5	3.54075e4	1.20936
22	6.445	VV	0.0358	1.07200e5	4.19059e4	0.83191
23	6.479	VV	0.0357	1.01836e5	4.14374e4	0.79029
24	6.528	VV	0.0609	1.82046e5	3.94032e4	1.41275
25	6.606	VV	0.0204	5.08507e4	3.41330e4	0.39462
26	6.634	VV	0.0294	7.51407e4	3.58564e4	0.58312
27	6.674	VV	0.0466	1.38171e5	4.07084e4	1.07226
28	6.731	VV	0.0388	1.05348e5	3.74637e4	0.81754
29	6.767	VV	0.0285	7.06876e4	3.51182e4	0.54856
30	6.828	VV	0.0922	3.27511e5	4.48460e4	2.54160
31	7.008	VV	0.0863	2.88079e5	4.34752e4	2.23560
32	7.094	VV	0.0564	1.98685e5	4.88795e4	1.54187
33	7.175	VV	0.0397	1.34808e5	4.52613e4	1.04616
34	7.209	VV	0.0276	9.28256e4	4.78625e4	0.72036
35	7.232	VV	0.0343	1.16275e5	4.79251e4	0.90234
36	7.281	VV	0.0532	1.92467e5	4.75736e4	1.49362
37	7.363	VV	0.0457	1.69268e5	5.10009e4	1.31358
38	7.510	VV	0.0992	4.38670e5	5.37312e4	3.40424
39	7.555	VV	0.0383	1.57739e5	5.70565e4	1.22411
40	7.583	VV	0.0231	8.79764e4	5.67775e4	0.68273
41	7.651	VV	0.0643	3.11991e5	6.46043e4	2.42116
42	7.702	VV	0.0345	1.52142e5	6.22923e4	1.18068
43	7.766	VV	0.0471	2.32652e5	6.60238e4	1.80546
44	7.834	VV	0.0641	3.33190e5	6.80467e4	2.58567
45	7.902	VV	0.0465	2.32879e5	6.88175e4	1.80723
46	7.943	VV	0.0507	2.69187e5	6.86742e4	2.08899
47	8.008	VV	0.0507	2.36403e5	6.46168e4	1.83458
48	8.105	VV	0.0958	4.77212e5	6.49221e4	3.70334
49	8.202	VV	0.0590	2.60820e5	6.09164e4	2.02406
50	8.307	VV	0.0765	3.69439e5	6.78951e4	2.86698
51	8.371	VV	0.0751	3.53140e5	6.42529e4	2.74049
52	8.485	VV	0.0636	2.93802e5	6.51505e4	2.28001
53	8.537	VV	0.0705	3.40066e5	6.24609e4	2.63903
54	8.652	VV	0.0821	4.20473e5	6.61799e4	3.26302
55	8.783	VV	0.0776	3.29840e5	5.52552e4	2.55968
56	8.866	VV	0.0874	3.60352e5	5.29543e4	2.79647
57	8.985	VBA	0.0363	1.09433e5	5.02352e4	0.84924

Totals : 1.28860e7 3.56435e6

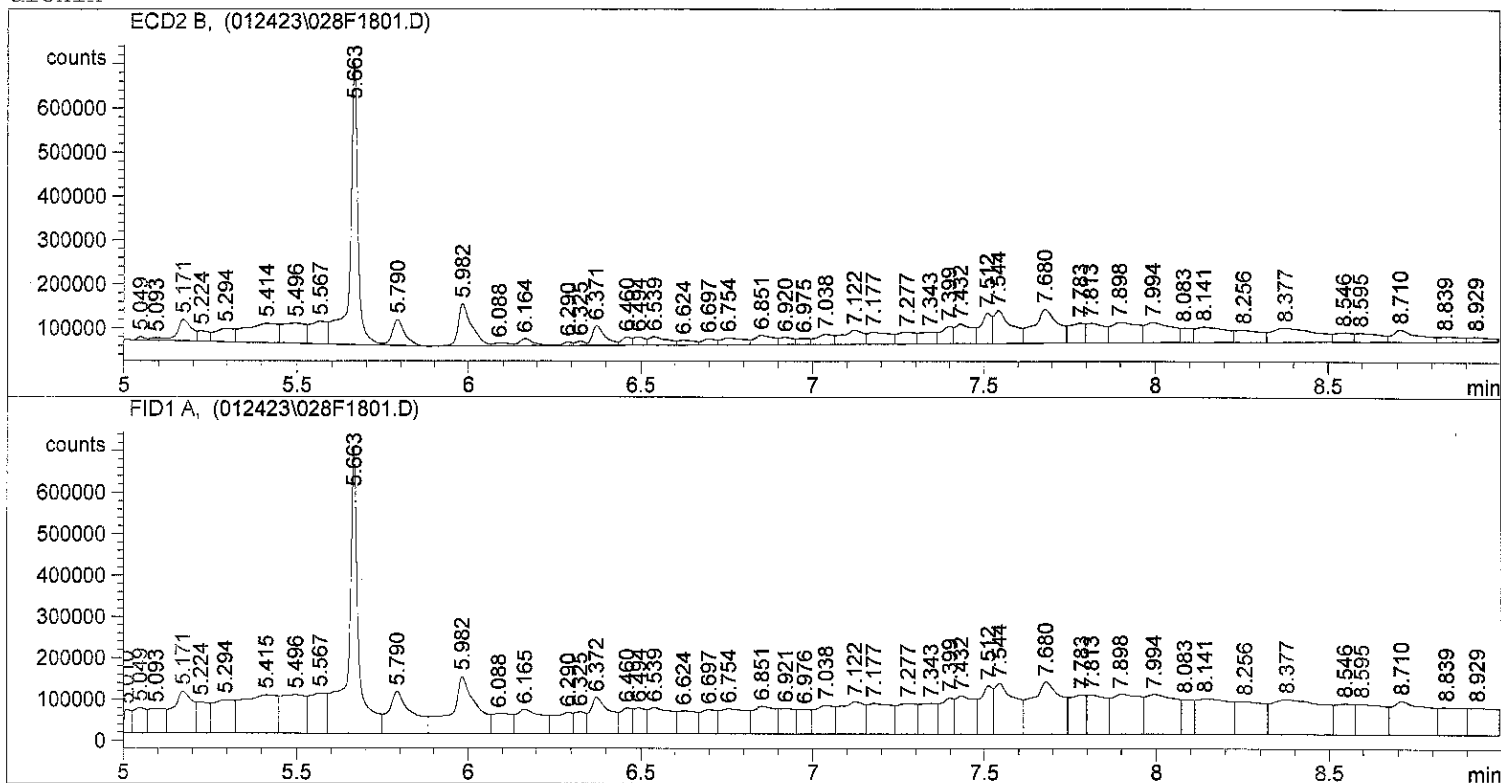
Results obtained with enhanced integrator!

*** End of Report ***


```

=====
Injection Date   : 1/24/2023 9:34:31 AM      Seq. Line : 18
Sample Name     : 23A0328 12                Location  : Vial 28
Acq. Operator  : NL                          Inj      : 1
                                           Inj Volume: 1 µl

Sequence File   : C:\HPCHEM\1\SEQUENCE\012423.S
Method          : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed    : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



=====
 Area Percent Report
 =====

```

Sorted By      : Signal
Multiplier    : 1.0000
Dilution      : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.049	VV	0.0231	1.20301e4	8194.13574	0.17831
2	5.093	VV	0.0410	1.65991e4	6045.60889	0.24603
3	5.171	VV	0.0396	1.37749e5	4.92232e4	2.04168
4	5.224	VV	0.0321	5.39437e4	2.41055e4	0.79954
5	5.294	VV	0.0529	1.17806e5	3.06413e4	1.74609
6	5.414	VV	0.0823	2.90046e5	4.43324e4	4.29897
7	5.496	VV	0.0605	2.08781e5	4.63864e4	3.09449
8	5.567	VV	0.0464	1.75375e5	5.18851e4	2.59937
9	5.663	VV	0.0212	1.01020e6	6.47627e5	14.97283
10	5.790	VP	0.0383	1.53441e5	5.90159e4	2.27425
11	5.982	VV	0.0377	2.61963e5	9.63144e4	3.88275
12	6.088	VV	0.0431	2.22638e4	6642.44043	0.32999
13	6.164	VV	0.0403	4.46018e4	1.61343e4	0.66108
14	6.290	VV	0.0285	1.62908e4	8465.45410	0.24146
15	6.325	VV	0.0280	1.88729e4	1.00027e4	0.27973
16	6.371	VV	0.0381	1.16339e5	4.50881e4	1.72434

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	6.460	VV	0.0291	3.73363e4	1.88791e4	0.55339
18	6.494	VV	0.0328	4.20166e4	1.89842e4	0.62276
19	6.539	VV	0.0514	7.41119e4	1.94672e4	1.09847
20	6.624	VV	0.0439	3.88227e4	1.13472e4	0.57542
21	6.697	VV	0.0393	3.90408e4	1.45507e4	0.57865
22	6.754	VV	0.0618	7.68854e4	1.63545e4	1.13957
23	6.851	VV	0.0525	8.48522e4	2.17539e4	1.25766
24	6.920	VV	0.0412	4.79075e4	1.68486e4	0.71007
25	6.975	VV	0.0372	3.58252e4	1.38281e4	0.53099
26	7.038	VV	0.0501	8.08679e4	2.35245e4	1.19860
27	7.122	VV	0.0610	1.39795e5	3.19932e4	2.07201
28	7.177	VV	0.0581	1.24045e5	2.78028e4	1.83856
29	7.277	VV	0.0539	9.93948e4	2.70344e4	1.47320
30	7.343	VV	0.0479	9.19149e4	2.68623e4	1.36234
31	7.399	VV	0.0347	9.72318e4	3.94885e4	1.44114
32	7.432	VV	0.0476	1.59400e5	4.46754e4	2.36259
33	7.512	VV	0.0319	1.52157e5	6.86636e4	2.25524
34	7.544	VV	0.0484	2.72664e5	7.50051e4	4.04135
35	7.680	VV	0.0672	3.87374e5	7.76998e4	5.74154
36	7.783	VV	0.0427	1.42090e5	4.51801e4	2.10602
37	7.813	VV	0.0482	1.65899e5	4.48392e4	2.45891
38	7.898	VV	0.0762	2.52103e5	4.58263e4	3.73659
39	7.994	VV	0.0770	2.59390e5	4.58207e4	3.84461
40	8.083	VV	0.0323	7.48649e4	3.32121e4	1.10963
41	8.141	VV	0.0795	2.19597e5	3.53204e4	3.25480
42	8.256	VV	0.0703	1.46245e5	2.78505e4	2.16760
43	8.377	VV	0.1213	2.96639e5	3.22621e4	4.39669
44	8.546	VV	0.0537	7.90720e4	2.16293e4	1.17198
45	8.595	VV	0.0665	1.07122e5	2.06698e4	1.58773
46	8.710	VV	0.0716	1.51207e5	2.82001e4	2.24114
47	8.839	VV	0.0626	6.03271e4	1.26498e4	0.89415
48	8.929	VBA	0.0671	5.43601e4	1.13032e4	0.80571

Totals : 6.74686e6 2.14963e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.010	BV	0.0249	8.47172e4	5.66496e4	0.46419
2	5.049	VV	0.0345	1.53240e5	6.27254e4	0.83964
3	5.093	VV	0.0459	1.89028e5	5.98399e4	1.03573
4	5.171	VV	0.0547	4.16231e5	1.01733e5	2.28064
5	5.224	VV	0.0331	1.75679e5	7.57400e4	0.96259
6	5.294	VV	0.0564	3.36238e5	8.11157e4	1.84234
7	5.415	VV	0.0895	6.64340e5	9.28146e4	3.64010
8	5.496	VV	0.0615	4.28844e5	9.35202e4	2.34976
9	5.567	VV	0.0477	3.41249e5	9.78487e4	1.86980
10	5.663	VV	0.0271	1.42814e6	6.92145e5	7.82517
11	5.790	VV	0.0655	4.99043e5	1.01294e5	2.73439
12	5.982	VV	0.0663	7.11362e5	1.37519e5	3.89775
13	6.088	VV	0.0520	1.94714e5	4.83324e4	1.06689
14	6.165	VV	0.0696	3.07170e5	5.81851e4	1.68307
15	6.290	VV	0.0491	1.88999e5	5.11079e4	1.03558
16	6.325	VV	0.0323	1.18907e5	5.28055e4	0.65152
17	6.372	VV	0.0541	3.47863e5	8.81095e4	1.90604
18	6.460	VV	0.0335	1.46829e5	6.23184e4	0.80452
19	6.494	VV	0.0349	1.49776e5	6.25808e4	0.82066
20	6.539	VV	0.0627	3.01873e5	6.32779e4	1.65405
21	6.624	VV	0.0484	2.11409e5	5.55546e4	1.15837
22	6.697	VV	0.0445	1.84958e5	5.91006e4	1.01344
23	6.754	VV	0.0702	3.31189e5	6.11747e4	1.81468

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
24	6.851	VV	0.0605	3.07282e5	6.70278e4	1.68368
25	6.921	VV	0.0426	1.90516e5	6.24486e4	1.04389
26	6.976	VV	0.0376	1.56770e5	5.96864e4	0.85899
27	7.038	VV	0.0558	2.73553e5	6.96742e4	1.49887
28	7.122	VV	0.0686	3.94393e5	7.85420e4	2.16099
29	7.177	VV	0.0619	3.57229e5	7.46087e4	1.95735
30	7.277	VV	0.0557	2.84845e5	7.43066e4	1.56074
31	7.343	VV	0.0487	2.59753e5	7.44466e4	1.42326
32	7.399	VV	0.0376	2.36326e5	8.73397e4	1.29490
33	7.432	VV	0.0504	3.52997e5	9.26801e4	1.93417
34	7.512	VV	0.0337	2.88336e5	1.17047e5	1.57987
35	7.544	VV	0.0560	5.29048e5	1.23533e5	2.89880
36	7.680	VV	0.0795	7.66454e5	1.26870e5	4.19961
37	7.783	VV	0.0439	3.08034e5	9.48289e4	1.68780
38	7.813	VV	0.0501	3.65884e5	9.46281e4	2.00478
39	7.898	VV	0.0790	5.51526e5	9.60184e4	3.02196
40	7.994	VV	0.0825	5.91035e5	9.64614e4	3.23845
41	8.083	VV	0.0327	1.92610e5	8.42706e4	1.05537
42	8.141	VV	0.0846	5.76005e5	8.66507e4	3.15609
43	8.256	VV	0.0736	4.41680e5	7.97224e4	2.42008
44	8.377	VV	0.1376	8.97279e5	8.47003e4	4.91644
45	8.546	VV	0.0552	2.83925e5	7.48630e4	1.55570
46	8.595	VV	0.0725	4.22282e5	7.41307e4	2.31380
47	8.710	VV	0.0951	6.06523e5	8.22059e4	3.32331
48	8.839	VV	0.0656	3.43433e5	6.72595e4	1.88177
49	8.929	VBA	0.0745	3.61070e5	6.63346e4	1.97840

Totals : 1.82506e7 4.50578e6

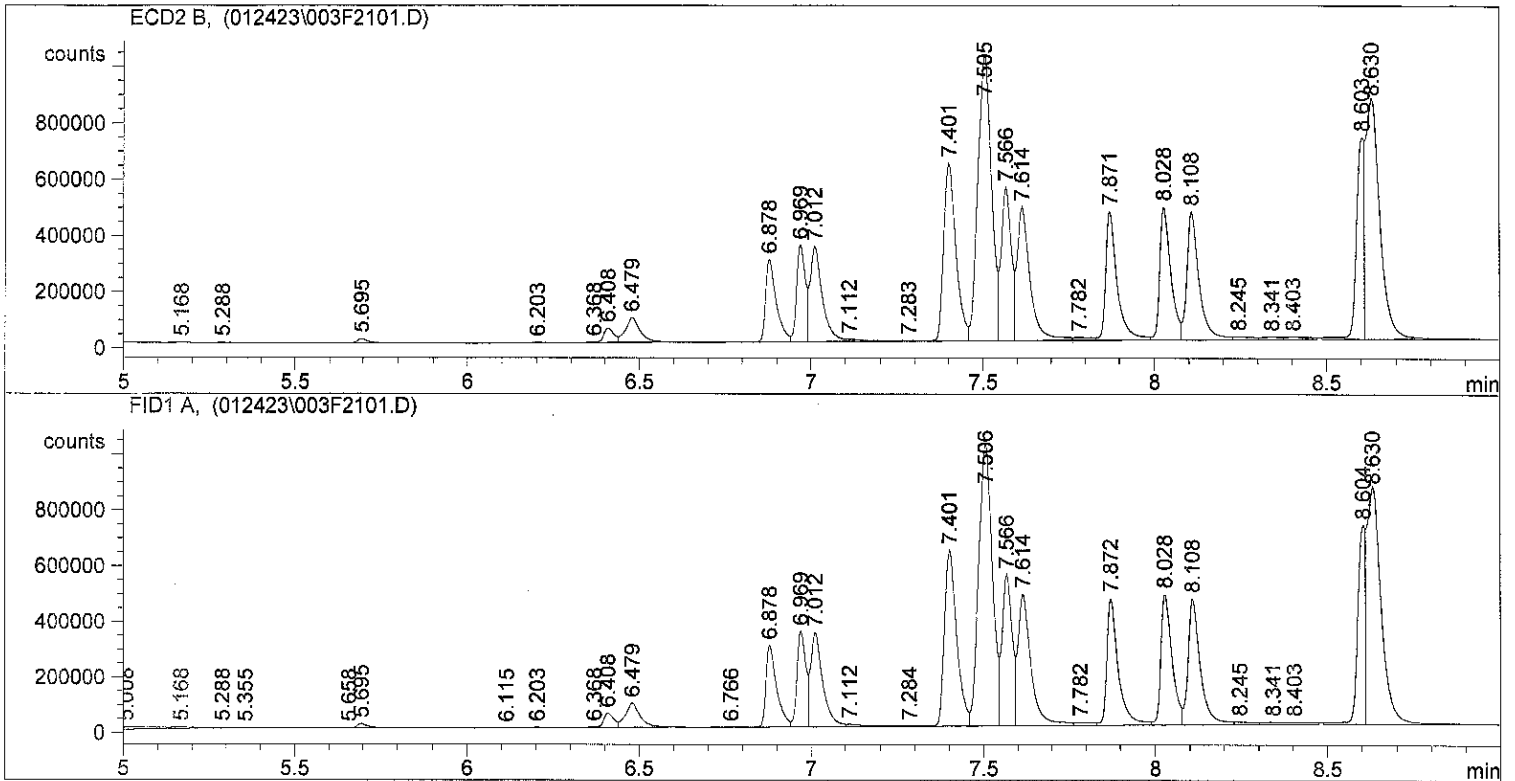
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date : 1/24/2023 10:16:47 AM      Seq. Line : 21
Sample Name    : CS4 STANDARD                 Location  : Vial 3
Acq. Operator  : NL                          Inj      : 1
                                           Inj Volume: 1 µl

Sequence File  : C:\HPCHEM\1\SEQUENCE\012423.S
Method         : C:\HPCHEM\1\METHODS\DIOXIN.M
Last changed   : 3/2/2018 11:45:27 AM by RM
dioxin
    
```



=====
Area Percent Report
=====

```

Sorted By      : Signal
Multiplier    : 1.0000
Dilution      : 1.0000
    
```

Signal 1: ECD2 B,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.168	PP	0.0341	4478.49902	1930.49158	0.02762
2	5.288	VV	0.0440	4315.11182	1439.97754	0.02661
3	5.695	VB	0.0291	2.95176e4	1.49070e4	0.18202
4	6.203	VP	0.0257	4715.11768	2792.34961	0.02908
5	6.368	PV	0.0240	6279.03613	3849.51221	0.03872
6	6.408	VV	0.0312	1.08087e5	5.20908e4	0.66654
7	6.479	VB	0.0423	2.66820e5	8.81339e4	1.64539
8	6.878	VV	0.0325	6.42458e5	2.94509e5	3.96183
9	6.969	VV	0.0267	6.11732e5	3.45127e5	3.77235
10	7.012	VV	0.0361	8.47476e5	3.40233e5	5.22610
11	7.112	VV	0.0558	3.91475e4	9357.16309	0.24141
12	7.283	VV	0.0541	1.16621e4	2769.90112	0.07192
13	7.401	VV	0.0389	1.56976e6	6.33634e5	9.68018
14	7.505	VV	0.0441	2.78597e6	1.01358e6	17.18012
15	7.566	VV	0.0312	1.13450e6	5.45916e5	6.99611
16	7.614	VV	0.0378	1.25820e6	4.76198e5	7.75888

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
17	7.782	VV	0.0507	4.22147e4	1.12650e4	0.26032
18	7.871	VV	0.0328	1.05600e6	4.59301e5	6.51202
19	8.028	VV	0.0310	1.01595e6	4.73264e5	6.26505
20	8.108	VV	0.0360	1.13300e6	4.55817e5	6.98683
21	8.245	VV	0.0529	4.24287e4	1.07809e4	0.26164
22	8.341	VV	0.0557	3.88303e4	9503.67383	0.23945
23	8.403	VB	0.0718	5.06846e4	8981.02930	0.31256
24	8.603	BV	0.0229	1.09549e6	7.15910e5	6.75555
25	8.630	VB	0.0400	2.41649e6	8.53214e5	14.90171

Totals : 1.62162e7 6.82450e6

Results obtained with enhanced integrator!

Signal 2: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area counts*s	Height [counts]	Area %
1	5.008	BV	0.1022	5.63122e4	9180.94531	0.34500
2	5.168	VV	0.0685	3.36264e4	6383.06299	0.20602
3	5.288	VV	0.0565	1.49564e4	3674.02661	0.09163
4	5.355	VB	0.0455	6425.50391	1946.76807	0.03937
5	5.658	PV	0.0227	1413.43945	882.57587	0.00866
6	5.695	VB	0.0290	2.94136e4	1.48901e4	0.18021
7	6.115	PP	0.0375	1459.99292	596.86633	0.00894
8	6.203	VP	0.0267	4730.86670	2794.75879	0.02898
9	6.368	PV	0.0239	6207.80859	3835.17920	0.03803
10	6.408	VV	0.0312	1.08068e5	5.20839e4	0.66209
11	6.479	VB	0.0423	2.66590e5	8.81254e4	1.63330
12	6.766	PV	0.0384	2315.62354	834.64386	0.01419
13	6.878	VV	0.0314	6.42432e5	2.94543e5	3.93595
14	6.969	VV	0.0267	6.11808e5	3.45210e5	3.74833
15	7.012	VV	0.0361	8.47361e5	3.39882e5	5.19147
16	7.112	VV	0.0558	3.91466e4	9353.72852	0.23984
17	7.284	VV	0.0542	1.16688e4	2765.52197	0.07149
18	7.401	VV	0.0389	1.56969e6	6.33618e5	9.61694
19	7.506	VV	0.0441	2.78590e6	1.01360e6	17.06817
20	7.566	VV	0.0312	1.13445e6	5.45991e5	6.95034
21	7.614	VV	0.0378	1.25813e6	4.76197e5	7.70812
22	7.782	VV	0.0508	4.22415e4	1.12553e4	0.25880
23	7.872	VV	0.0328	1.05582e6	4.59304e5	6.46864
24	8.028	VV	0.0311	1.01597e6	4.72007e5	6.22447
25	8.108	VV	0.0370	1.13284e6	4.55836e5	6.94053
26	8.245	VV	0.0519	4.23189e4	1.07678e4	0.25927
27	8.341	VV	0.0558	3.89141e4	9490.42187	0.23841
28	8.403	VB	0.0726	5.04138e4	8967.63574	0.30887
29	8.604	BV	0.0228	1.09489e6	7.16063e5	6.70798
30	8.630	VB	0.0410	2.41665e6	8.53140e5	14.80595

Totals : 1.63222e7 6.84322e6

Results obtained with enhanced integrator!

*** End of Report ***



Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0087

Cleanup Type: Sulfuric Acid

Cleanup Method: EPA 3665 Sulfuric Acid Cleanup - uL

Analysis: EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1162B	23A0326-12	23030629	02/07/2023	
LDW23-SC1028	23A0326-01	23030627	02/07/2023	
Reference	BLA0398-SRM1	23030616	02/07/2023	
LCS	BLA0398-BS1	23030615	02/07/2023	
Blank	BLA0398-BLK1	23030614	02/07/2023	
LDW23-IT1127	23A0326-09	23030628	02/07/2023	



CLEANUP BENCH SHEET

CLB0087

Matrix: Solid Cleanup using: HRGCMS - EPA 3665 Sulfuric Acid Cleanup - uL

Printed: 2/10/2023 2:53:43PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0099-01	C	LDW23-IT1154	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0099-04	C	LDW23-SC1186	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0099-05	C	LDW23-SC1186-FD	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0099-10	C	LDW23-IT1160	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0099-11	C	LDW23-IT1160-FD	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0295-02	B	LDW23-SC1075	B 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0313-12	C	LDW23-IT1148	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0326-01	C	LDW23-SC1028	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0326-09	C	LDW23-IT1127	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0326-12	C	LDW23-SC1162B	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0328-06	C	LDW23-SS1168	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0328-07	C	LDW23-SS1176	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
23A0328-12	C	LDW23-SS1162	C 01	20	20	1613B Dioxin	2/7/2023	DxP	
BLA0398-BLK1	-	Blank	-	20	20	-	2/7/2023	DxP	
BLA0398-BS1	-	LCS	-	20	20	-	2/7/2023	DxP	
BLA0398-DUP1	-	Duplicate	-	20	20	-	2/7/2023	DxP	
BLA0398-SRM1	-	Reference	-	20	20	-	2/7/2023	DxP	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0088

Cleanup Type: Silica Gel

Cleanup Method: EPA 3630C Silica Gel Cleanup - uL

Analysis: EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLA0398-SRM1	23030616	02/08/2023	
LDW23-SC1028	23A0326-01	23030627	02/08/2023	
LDW23-IT1127	23A0326-09	23030628	02/08/2023	
Blank	BLA0398-BLK1	23030614	02/08/2023	
LCS	BLA0398-BS1	23030615	02/08/2023	
LDW23-SC1162B	23A0326-12	23030629	02/08/2023	



CLEANUP BENCH SHEET

CLB0088

Matrix: Solid

Cleanup using: HRGCMS - EPA 3630C Silica Gel Cleanup - uL

Printed: 2/10/2023 2:54:21PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0099-01	C	LDW23-IT1154	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-04	C	LDW23-SC1186	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-05	C	LDW23-SC1186-FD	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-10	C	LDW23-IT1160	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-11	C	LDW23-IT1160-FD	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0295-02	B	LDW23-SC1075	B 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0313-12	C	LDW23-IT1148	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0326-01	C	LDW23-SC1028	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0326-09	C	LDW23-IT1127	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0326-12	C	LDW23-SC1162B	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0328-06	C	LDW23-SS1168	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0328-07	C	LDW23-SS1176	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0328-12	C	LDW23-SS1162	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
BLA0398-BLK1	-	Blank	-	20	20	-	2/8/2023	DxP	
BLA0398-BS1	-	LCS	-	20	20	-	2/8/2023	DxP	
BLA0398-DUP1	-	Duplicate	-	20	20	-	2/8/2023	DxP	
BLA0398-SRM1	-	Reference	-	20	20	-	2/8/2023	DxP	



CLEANUP BATCH SUMMARY

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Cleanup Batch: CLB0089

Cleanup Type: Florisil

Cleanup Method: EPA 3620B Florisil Cleanup (uL)

Analysis: EPA 1613B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLA0398-BLK1	23030614	02/08/2023	
LDW23-SC1162B	23A0326-12	23030629	02/08/2023	
LDW23-SC1028	23A0326-01	23030627	02/08/2023	
LDW23-IT1127	23A0326-09	23030628	02/08/2023	
Reference	BLA0398-SRM1	23030616	02/08/2023	
LCS	BLA0398-BS1	23030615	02/08/2023	



CLEANUP BENCH SHEET

CLB0089

Matrix: Solid

Cleanup using: HRGCMS - EPA 3620B Florisil Cleanup (uL)

Check Standard: CKK0015-FLO1

Printed: 2/10/2023 2:54:38PM

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0099-01	C	LDW23-IT1154	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-04	C	LDW23-SC1186	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-05	C	LDW23-SC1186-FD	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-10	C	LDW23-IT1160	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0099-11	C	LDW23-IT1160-FD	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0295-02	B	LDW23-SC1075	B 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0313-12	C	LDW23-IT1148	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0326-01	C	LDW23-SC1028	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0326-09	C	LDW23-IT1127	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0326-12	C	LDW23-SC1162B	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0328-06	C	LDW23-SS1168	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0328-07	C	LDW23-SS1176	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
23A0328-12	C	LDW23-SS1162	C 01	20	20	1613B Dioxin	2/8/2023	DxP	
BLA0398-BLK1	-	Blank	-	20	20	-	2/8/2023	DxP	
BLA0398-BS1	-	LCS	-	20	20	-	2/8/2023	DxP	
BLA0398-DUP1	-	Duplicate	-	20	20	-	2/8/2023	DxP	
BLA0398-SRM1	-	Reference	-	20	20	-	2/8/2023	DxP	



Blank

Form 1
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>	
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>	
Matrix: <u>Solid</u>	Laboratory ID: <u>BLA0398-BLK1</u>	File ID: <u>23030614</u>
Sampled: <u>N/A</u>	Prepared: <u>01/24/23 07:31</u>	Analyzed: <u>03/06/23 20:55</u>
Solids Wt%: <u></u>	Preparation: <u>EPA 1613</u>	Initial/Final: <u>10.01 g / 20 uL</u>
Result Basis: <u>Dry</u>	Sequence: <u>SLC0081</u>	Calibration: <u>GC00015</u>
Batch: <u>BLA0398</u>	Instrument: <u>AUTOSPEC01</u>	Column: <u>RTX-Dioxin2</u>

CAS NO.	COMPOUND	DF/Split	Ion Ratio	Ratio Limits	EDL	RL	Result	Units	Q
51207-31-9	2,3,7,8-TCDF	1	0.000	0.655-0.886	0.128	0.999	ND	ng/kg	U
1746-01-6	2,3,7,8-TCDD	1	0.000	0.655-0.886	0.092	0.999	ND	ng/kg	U
57117-41-6	1,2,3,7,8-PeCDF	1	0.000	1.318-1.783	0.156	0.999	ND	ng/kg	U
57117-31-4	2,3,4,7,8-PeCDF	1	0.000	1.318-1.783	0.148	0.999	ND	ng/kg	U
40321-76-4	1,2,3,7,8-PeCDD	1	1.205	1.318-1.783	0.111	0.999	0.0939	ng/kg	EMPC, J
70648-26-9	1,2,3,4,7,8-HxCDF	1	0.820	1.054-1.426	0.078	0.999	0.111	ng/kg	EMPC, J
57117-44-9	1,2,3,6,7,8-HxCDF	1	0.000	1.054-1.426	0.076	0.999	ND	ng/kg	U
60851-34-5	2,3,4,6,7,8-HxCDF	1	0.000	1.054-1.426	0.086	0.999	ND	ng/kg	U
72918-21-9	1,2,3,7,8,9-HxCDF	1	0.000	1.054-1.426	0.105	0.999	ND	ng/kg	U
39227-28-6	1,2,3,4,7,8-HxCDD	1	0.000	1.054-1.426	0.113	0.999	ND	ng/kg	U
57653-85-7	1,2,3,6,7,8-HxCDD	1	0.000	1.054-1.426	0.111	0.999	ND	ng/kg	U
19408-74-3	1,2,3,7,8,9-HxCDD	1	0.000	1.054-1.426	0.123	0.999	ND	ng/kg	U
67562-39-4	1,2,3,4,6,7,8-HpCDF	1	0.000	0.893-1.208	0.104	0.999	ND	ng/kg	U
55673-89-7	1,2,3,4,7,8,9-HpCDF	1	0.000	0.893-1.208	0.174	0.999	ND	ng/kg	U
35822-46-9	1,2,3,4,6,7,8-HpCDD	1	1.285	0.893-1.208	0.175	2.50	0.460	ng/kg	EMPC, J
39001-02-0	OCDF	1	0.480	0.757-1.024	0.415	2.50	0.415	ng/kg	EMPC, J
3268-87-9	OCDD	1	0.889	0.757-1.024	0.284	9.99	3.71	ng/kg	J

Homologue Groups

55722-27-5	Total TCDF	1	0.000			0.999	ND	ng/kg
41903-57-5	Total TCDD	1	0.000			0.999	ND	ng/kg
30402-15-4	Total PeCDF	1	0.000			0.999	ND	ng/kg
36088-22-9	Total PeCDD	1	0.000			0.999	ND	ng/kg
55684-94-1	Total HxCDF	1	0.000			0.999	ND	ng/kg
34465-46-8	Total HxCDD	1	0.000			0.999	ND	ng/kg
38998-75-3	Total HpCDF	1	0.000			0.999	ND	ng/kg
37871-00-4	Total HpCDD	1	0.000			0.999	0.575	ng/kg

Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=0, Including EMPC):	0.111
Total 2,3,7,8-TCDD Equivalence (WHO2005, ND=1/2 EDL, Including EMPC):	0.220



Blank

Form 2
METHOD BLANK DATA SHEET
EPA 1613B
Dioxins/Furans by HRGC/HRMS

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>
Matrix: <u>Solid</u>	Laboratory ID: <u>BLA0398-BLK1</u>
Sampled: <u>N/A</u>	File ID: <u>23030614</u>
Solids Wt%: <u>0.00</u>	Prepared: <u>01/24/23 07:31</u>
Result Basis: <u>Dry</u>	Analyzed: <u>03/06/23 20:55</u>
Batch: <u>BLA0398</u>	Preparation: <u>EPA 1613</u>
	Initial/Final: <u>10.01 g / 20 uL</u>
	Sequence: <u>SLC0081</u>
	Calibration: <u>GC00015</u>
	Instrument: <u>AUTOSPEC01</u>
	Column: <u>RTX-Dioxin2</u>

Labels	DF/Split	Ion Ratio	Ratio Limits	EDL	% REC	QC LIMITS	Q
13C12-2,3,7,8-TCDF	1	0.757	0.655-0.886	0.14	79.8	24 - 169 %	
13C12-2,3,7,8-TCDD	1	0.802	0.655-0.886	0.19	90.5	25 - 164 %	
13C12-1,2,3,7,8-PeCDF	1	1.545	1.318-1.783	0.23	82.7	24 - 185 %	
13C12-2,3,4,7,8-PeCDF	1	1.531	1.318-1.783	0.26	81.5	21 - 178 %	
13C12-1,2,3,7,8-PeCDD	1	1.552	1.318-1.783	0.18	82.6	25 - 181 %	
13C12-1,2,3,4,7,8-HxCDF	1	0.525	0.434-0.587	0.44	119	26 - 152 %	
13C12-1,2,3,6,7,8-HxCDF	1	0.474	0.434-0.587	0.37	119	26 - 123 %	
13C12-2,3,4,6,7,8-HxCDF	1	0.507	0.434-0.587	0.46	116	28 - 136 %	
13C12-1,2,3,7,8,9-HxCDF	1	0.515	0.434-0.587	0.55	118	29 - 147 %	
13C12-1,2,3,4,7,8-HxCDD	1	1.319	1.054-1.426	0.35	118	32 - 141 %	
13C12-1,2,3,6,7,8-HxCDD	1	1.322	1.054-1.426	0.30	113	28 - 130 %	
13C12-1,2,3,4,6,7,8-HpCDF	1	0.413	0.374-0.506	0.58	125	28 - 143 %	
13C12-1,2,3,4,7,8,9-HpCDF	1	0.432	0.374-0.506	0.68	106	26 - 138 %	
13C12-1,2,3,4,6,7,8-HpCDD	1	1.084	0.893-1.208	0.41	117	23 - 140 %	
13C12-OCDD	1	0.896	0.757-1.024	0.54	84.5	17 - 157 %	
37Cl4-2,3,7,8-TCDD	1	328.000		0.11	71.2	35 - 197 %	

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: BLA0398-BLK1, **Name:** 23030614, **Date:** 06-Mar-2023, **Time:** 20:55:12, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.702		0.770	617	1017								
12378-PeCDF					0.679		1.550	594	906								
23478-PeCDF					0.786		1.550	594	906								
123478-HxCDF	34.847	1.000	1.371e2	1.673e2	1.166	0.820	1.240	558	523	3.20e3	2.72e3	5.7	5.2	YES	bd	bb	0.056
234678-HxCDF					1.140		1.240	558	523								
123678-HxCDF					1.091		1.240	558	523								
123789-HxCDF					1.137		1.240	558	523								
1234678-HpCDF					1.003		1.050	634	391								
1234789-HpCDF					0.953		1.050	634	391								
OCDF	45.210	1.006	1.147e2	2.389e2	0.778	0.480	0.890	591	687	2.79e3	3.59e3	4.7	5.2	YES	db	bb	0.208
2378-TCDD					1.149		0.770	1024	577								
12378-PeCDD	31.504	1.001	1.044e2	8.665e1	1.022	1.205	1.550	647	450	2.01e3	1.74e3	3.1	3.9	YES	bb	bb	0.047
123478-HxCDD					0.996		1.240	587	599								
123678-HxCDD					1.001		1.240	587	599								
123789-HxCDD					0.907		1.240	587	599								
1234678-HpCDD	40.228	1.000	4.465e2	3.475e2	1.039	1.285	1.050	717	582	7.92e3	5.71e3	11.0	9.8	YES	bb	bb	0.230
OCDD	44.963	1.000	1.759e3	1.979e3	0.920	0.889	0.890	557	476	1.90e4	2.58e4	34.1	54.2	NO	bb	bb	1.855
13C-2378-TCDF	25.732	1.007	3.240e5	4.281e5	1.620	0.757	0.770	1887	1511	4.71e6	6.20e6	2498.0	4103.5	NO	bb	bb	79.808
13C-12378-PeCDF	29.889	1.169	3.624e5	2.346e5	1.240	1.545	1.550	2358	1847	5.15e6	3.34e6	2184.5	1806.2	NO	bd	bd	82.744
13C-23478-PeCDF	31.226	1.222	3.205e5	2.094e5	1.118	1.531	1.550	2358	1847	4.66e6	3.07e6	1976.2	1660.5	NO	bb	bb	81.502
13C-123478-HxCDF	34.847	0.955	1.619e5	3.082e5	1.168	0.525	0.510	1683	2688	2.47e6	4.80e6	1466.4	1784.7	NO	bd	bd	119.106
13C-123678-HxCDF	34.992	0.959	1.794e5	3.785e5	1.386	0.474	0.510	1683	2688	2.53e6	4.99e6	1502.0	1856.0	NO	db	db	119.106
13C-234678-HxCDF	35.849	0.983	1.489e5	2.937e5	1.129	0.507	0.510	1683	2688	2.22e6	4.34e6	1316.0	1612.8	NO	bb	bb	116.019
13C-123789-HxCDF	36.886	1.011	1.257e5	2.443e5	0.932	0.515	0.510	1683	2688	1.84e6	3.59e6	1095.7	1336.6	NO	bb	bb	117.559
13C-1234678-HpCDF	38.724	1.062	1.108e5	2.687e5	0.895	0.413	0.440	1702	2705	1.71e6	3.95e6	1006.1	1461.0	NO	bb	bd	125.493
13C-1234789-HpCDF	40.963	1.123	8.344e4	1.932e5	0.770	0.432	0.440	1702	2705	1.12e6	2.56e6	656.1	947.2	NO	bb	bb	106.378
13C-1234-TCDD	25.562	0.000	2.610e5	3.207e5	1.000	0.814	0.770	1550	1677	3.94e6	4.92e6	2541.2	2934.5	NO	bb	bb	100.000
13C-2378-TCDD	26.368	1.031	2.700e5	3.365e5	1.152	0.802	0.770	1550	1677	4.05e6	5.06e6	2610.0	3020.5	NO	bb	bb	90.477
13C-12378-PeCDD	31.482	1.232	2.420e5	1.560e5	0.829	1.552	1.550	1148	1027	3.53e6	2.20e6	3071.5	2143.5	NO	bb	bd	82.558
13C-123478-HxCDD	35.972	0.986	2.253e5	1.709e5	0.995	1.319	1.240	1475	1441	3.59e6	2.73e6	2430.5	1895.0	NO	bd	bd	117.870
13C-123678-HxCDD	36.083	0.989	2.513e5	1.901e5	1.157	1.322	1.240	1475	1441	3.66e6	2.79e6	2478.9	1934.8	NO	db	db	112.956
13C-1234678-HpCDD	40.217	1.103	1.726e5	1.592e5	0.840	1.084	1.050	1000	1943	2.23e6	2.10e6	2225.1	1080.7	NO	bd	bd	116.906
13C-OCDD	44.944	1.232	2.071e5	2.311e5	0.767	0.896	0.890	1386	2131	2.24e6	2.48e6	1619.4	1163.9	NO	bb	bb	168.984
13C-123789-HxCDD	36.473	0.000	1.898e5	1.480e5	1.000	1.282	1.240	1475	1441	2.85e6	2.24e6	1934.0	1555.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.396	1.033	2.133e5		1.288			2140		3.20e6		1493.7			bb		28.469

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	617	1017								
1289-TCDF					0.678		0.770	617	1017								
13468-PECDF					1.246		1.550	711	773								
12389-PECDF					0.496		1.550	594	906								
123468-HXCDF					1.169		1.240	558	523								
1368-TCDD					1.015		0.770	1024	577								
1289-TCDD					0.909		0.770	1024	577								
12479-PECDD					2.301		1.550	647	450								
12389-PECDD					1.184		1.550	647	450								
124679-HXCDD					1.115		1.240	587	599								
1234679-HPCDD	39.192	0.975	5.353e2	5.506e2	1.137	0.972	1.050	717	582	9.09e3	1.02e4	12.7	17.5	NO	bd	bb	0.288
Total-tetrafurans			0.000e0		0.727			617		0.00e0							
Total-penta1			0.000e0					711		0.00e0							
Total-pentafurans			0.000e0		0.654			594		0.00e0							
Total-hexafurans			0.000e0		1.141			558		0.00e0							
Total-heptafurans			0.000e0		0.978			634		0.00e0							
Total-Furans			0.000e0		0.922			617		0.00e0							
Total-tetradoxins			0.000e0		1.024			1024		0.00e0							
Total-pentadoxins			0.000e0		1.502			647		0.00e0							
Total-hexadoxins			0.000e0		1.005			587		0.00e0							
Total-heptadoxins			5.353e2		1.088			717		9.09e3							0.288
Total-Dioxins			2.294e3		1.130			1024		2.81e4							2.143
Total-TEQ			2.294e3					1024		2.81e4							2.143
FUNCTION1 PFK			2.986e7					477199		1.09e8							
FUNCTION2 PFK			5.160e6					203463		7.29e6							0.000
FUNCTION3 PFK			3.452e5					350748		9.93e6							0.000
FUNCTION4 PFK			1.501e5					252353		6.18e6							
FUNCTION5 PFK			1.003e7					173857		7.38e6							
FUNCTION1 HXCD...			1.340e3					621		2.22e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.882e1					485		1.06e3							0.000
FUNCTION3 OCDPE			9.014e1					403		1.23e3							0.000
FUNCTION4 NCDPE			3.509e2					529		5.24e3							0.000
FUNCTION5 DCDPE			0.000e0					430		0.00e0							

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.19	5.353e2	5.506e2	1.137	0.97	1.05	12.7	YES	NO	bd	bb	0.288

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	OCDD	44.96	1.759e3	1.979e3	0.920	0.89	0.89	34.1	YES	NO	bb	bb	1.855
2	1234679-HPCDD	39.19	5.353e2	5.506e2	1.137	0.97	1.05	12.7	YES	NO	bd	bb	0.288

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.31	9.817e5					14.4	YES		db		
2	FUNCTION1 PFK	24.14	9.304e6					16.4	YES		bd		
3	FUNCTION1 PFK	22.98	4.596e6					29.1	YES		db		
4	FUNCTION1 PFK	22.79	1.930e6					26.7	YES		dd		
5	FUNCTION1 PFK	22.53	1.763e6					23.1	YES		bd		
6	FUNCTION1 PFK	22.24	2.885e6					25.8	YES		db		
7	FUNCTION1 PFK	22.10	1.456e6					22.8	YES		bd		
8	FUNCTION1 PFK	21.88	8.212e5					17.4	YES		db		
9	FUNCTION1 PFK	21.71	2.869e6					16.7	YES		bd		
10	FUNCTION1 PFK	26.18	1.100e6					4.1	YES		bb		
11	FUNCTION1 PFK	25.66	6.541e5					9.1	YES		db		
12	FUNCTION1 PFK	25.55	2.557e5					8.6	YES		bd		
13	FUNCTION1 PFK	25.36	5.557e5					7.6	YES		bb		
14	FUNCTION1 PFK	24.60	6.901e5					6.3	YES		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.10	5.160e6					35.8	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.40	2.157e4					1.2	NO		bb		0.000
2	FUNCTION3 PFK	34.11	4.746e4					1.9	NO		bb		0.000
3	FUNCTION3 PFK	33.97	5.264e3					0.7	NO		bb		0.000
4	FUNCTION3 PFK	33.82	1.946e3					0.5	NO		bb		0.000
5	FUNCTION3 PFK	33.55	2.780e3					0.7	NO		bb		0.000
6	FUNCTION3 PFK	33.51	7.003e3					0.8	NO		bb		0.000
7	FUNCTION3 PFK	33.42	1.037e4					0.9	NO		bb		0.000
8	FUNCTION3 PFK	33.32	7.154e3					1.1	NO		bb		0.000
9	FUNCTION3 PFK	37.41	6.736e3					1.0	NO		bb		0.000
10	FUNCTION3 PFK	37.32	3.712e3					0.6	NO		bb		0.000
11	FUNCTION3 PFK	37.14	1.600e4					1.3	NO		db		0.000
12	FUNCTION3 PFK	37.10	1.233e4					1.4	NO		bd		0.000
13	FUNCTION3 PFK	36.96	8.421e3					1.2	NO		bb		0.000
14	FUNCTION3 PFK	36.92	2.050e3					0.5	NO		bb		0.000
15	FUNCTION3 PFK	36.61	1.235e4					1.0	NO		bb		0.000
16	FUNCTION3 PFK	36.29	3.197e4					2.2	NO		bb		0.000
17	FUNCTION3 PFK	36.08	1.649e3					0.4	NO		bb		0.000
18	FUNCTION3 PFK	36.04	9.230e3					0.9	NO		bb		0.000
19	FUNCTION3 PFK	35.89	4.441e4					1.9	NO		bb		0.000
20	FUNCTION3 PFK	35.48	4.123e4					2.1	NO		bb		0.000
21	FUNCTION3 PFK	35.33	5.259e3					0.6	NO		bb		0.000
22	FUNCTION3 PFK	35.25	9.534e3					1.2	NO		bb		0.000
23	FUNCTION3 PFK	35.11	7.824e3					1.1	NO		bb		0.000
24	FUNCTION3 PFK	34.69	8.350e3					1.1	NO		bb		0.000
25	FUNCTION3 PFK	37.75	1.526e4					1.2	NO		bb		0.000
26	FUNCTION3 PFK	37.54	5.316e3					0.7	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk**PFK4**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.53	6.276e3					0.9	NO		bb		
2	FUNCTION4 PFK	39.49	1.741e3					0.5	NO		bb		
3	FUNCTION4 PFK	39.34	1.135e3					0.4	NO		bb		
4	FUNCTION4 PFK	38.82	2.478e3					0.6	NO		bb		
5	FUNCTION4 PFK	38.78	4.630e3					0.8	NO		bb		
6	FUNCTION4 PFK	38.68	1.101e3					0.4	NO		bb		
7	FUNCTION4 PFK	38.58	6.363e3					0.8	NO		bb		
8	FUNCTION4 PFK	38.48	4.305e3					0.6	NO		bb		
9	FUNCTION4 PFK	38.36	9.372e3					1.4	NO		bb		
10	FUNCTION4 PFK	38.27	5.849e3					0.9	NO		bb		
11	FUNCTION4 PFK	38.02	1.372e3					0.5	NO		bb		
12	FUNCTION4 PFK	37.98	3.013e3					0.7	NO		bb		
13	FUNCTION4 PFK	37.90	1.461e4					1.4	NO		bb		
14	FUNCTION4 PFK	42.20	4.014e3					0.8	NO		bb		
15	FUNCTION4 PFK	41.78	1.656e3					0.6	NO		bb		
16	FUNCTION4 PFK	41.53	9.079e3					1.4	NO		bb		
17	FUNCTION4 PFK	41.44	1.203e4					1.7	NO		bb		
18	FUNCTION4 PFK	40.93	3.119e3					0.6	NO		bb		
19	FUNCTION4 PFK	40.83	8.161e3					1.3	NO		bb		
20	FUNCTION4 PFK	40.74	3.593e3					0.7	NO		bb		
21	FUNCTION4 PFK	40.64	4.094e3					0.9	NO		bb		
22	FUNCTION4 PFK	40.21	5.070e3					0.7	NO		bb		
23	FUNCTION4 PFK	40.13	5.842e3					1.1	NO		bb		
24	FUNCTION4 PFK	40.06	1.401e4					2.3	NO		db		
25	FUNCTION4 PFK	40.02	5.262e3					0.8	NO		bd		
26	FUNCTION4 PFK	39.90	3.859e3					0.8	NO		db		
27	FUNCTION4 PFK	39.87	8.093e3					1.0	NO		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.99	1.003e7					42.5	YES		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:26 Pacific Standard Time

ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk**ETHERS1**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.26	1.388e2					2.2	NO		bb		0.000
2	FUNCTION1 HXCD...	26.76	8.549e1					1.8	NO		bb		0.000
3	FUNCTION1 HXCD...	25.90	4.921e2					19.2	YES		bb		0.000
4	FUNCTION1 HXCD...	25.55	9.027e1					2.0	NO		bb		0.000
5	FUNCTION1 HXCD...	25.17	9.028e1					1.8	NO		bb		0.000
6	FUNCTION1 HXCD...	23.34	1.371e2					3.1	YES		bb		0.000
7	FUNCTION1 HXCD...	22.30	1.259e2					2.0	NO		db		0.000
8	FUNCTION1 HXCD...	22.14	8.372e1					1.8	NO		dd		0.000
9	FUNCTION1 HXCD...	22.07	9.643e1					1.8	NO		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	29.22	8.882e1					2.2	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	37.01	9.014e1					3.1	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.88	7.586e1					2.3	NO		bb		0.000
2	FUNCTION4 NCDPE	42.30	7.540e1					2.2	NO		db		0.000
3	FUNCTION4 NCDPE	42.22	1.126e2					3.3	YES		bd		0.000
4	FUNCTION4 NCDPE	40.99	8.706e1					2.1	NO		bb		0.000

ETHERS6

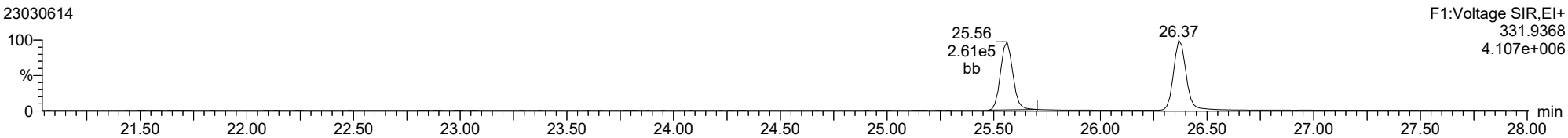
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

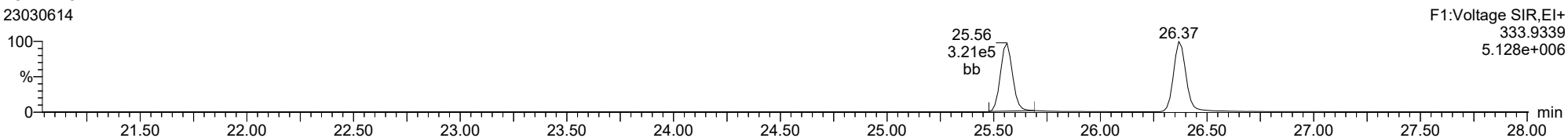
13C-1234-TCDD

23030614



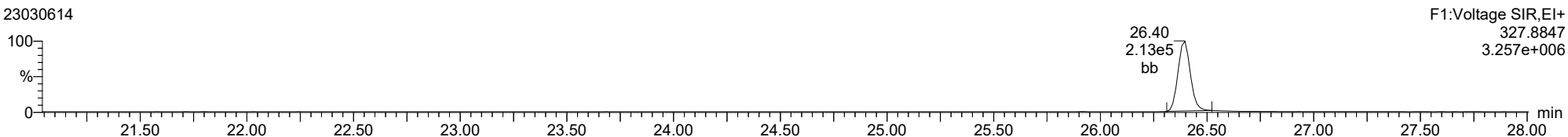
13C-1234-TCDD

23030614



37CL-2378-TCDD

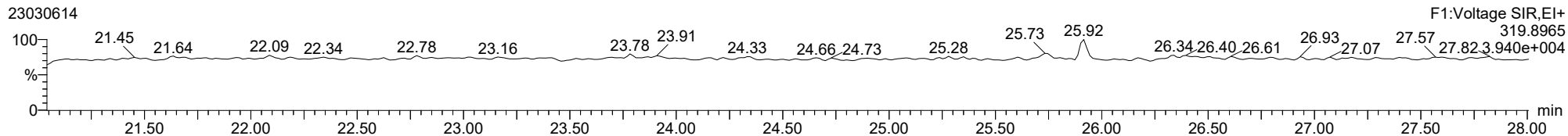
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

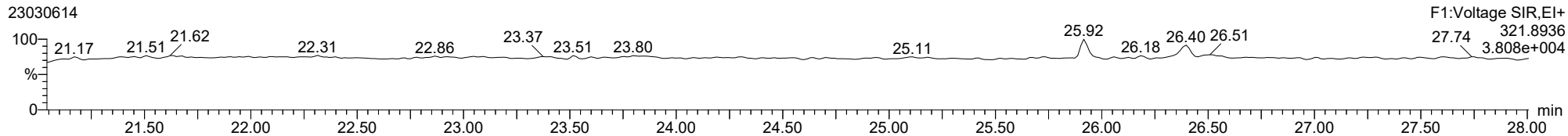
2378-TCDD

23030614



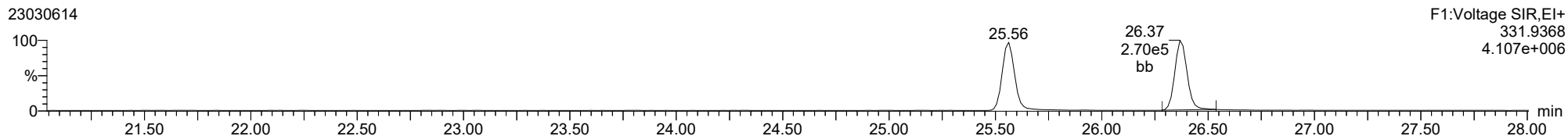
2378-TCDD

23030614



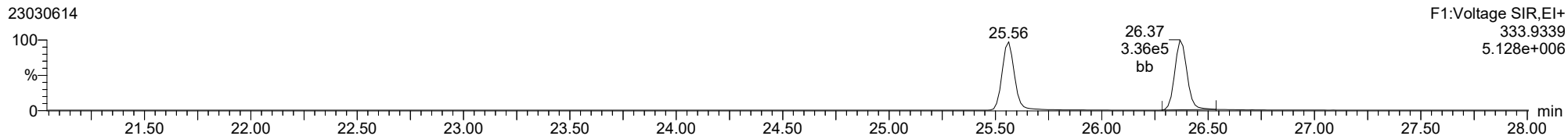
13C-2378-TCDD

23030614



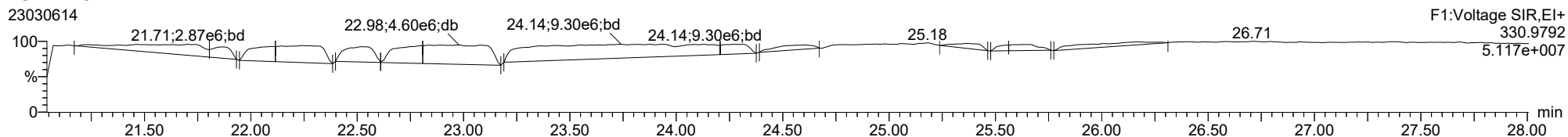
13C-2378-TCDD

23030614



FUNCTION1 PFK

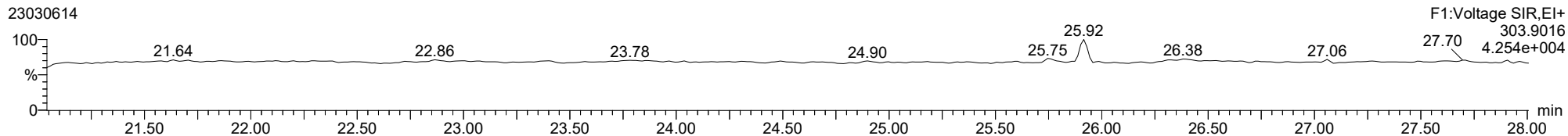
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

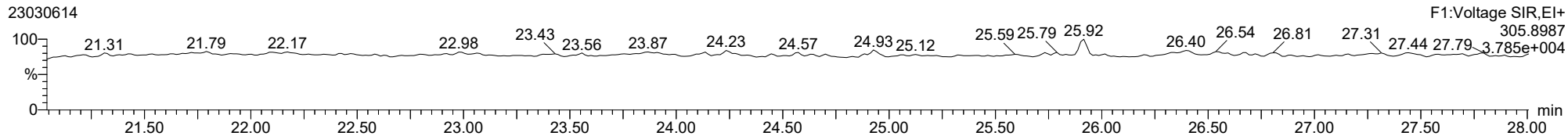
2378-TCDF

23030614



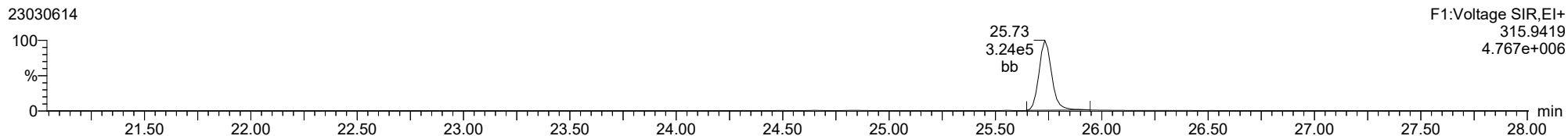
2378-TCDF

23030614



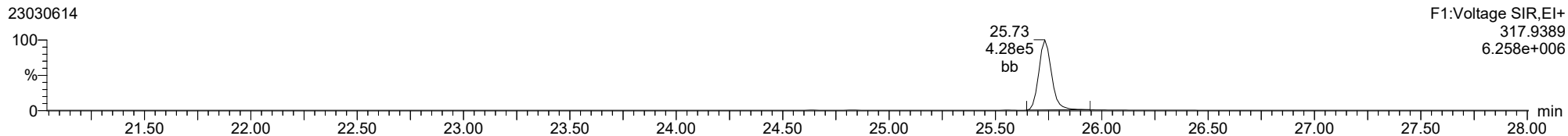
13C-2378-TCDF

23030614



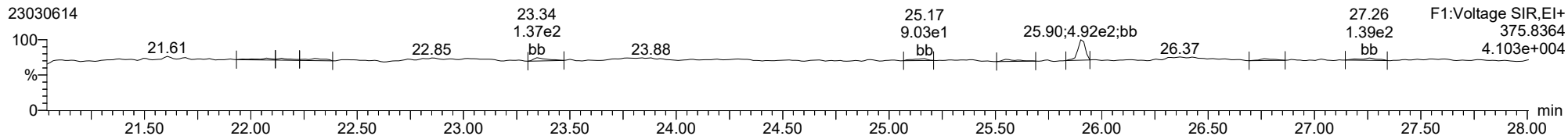
13C-2378-TCDF

23030614



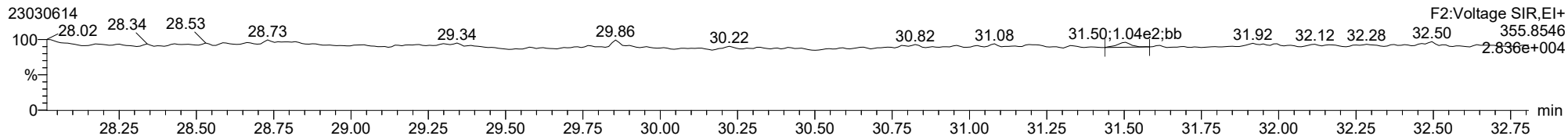
FUNCTION1 HXCDPE

23030614

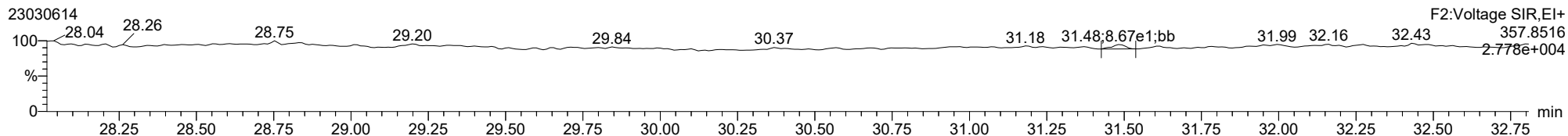


ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

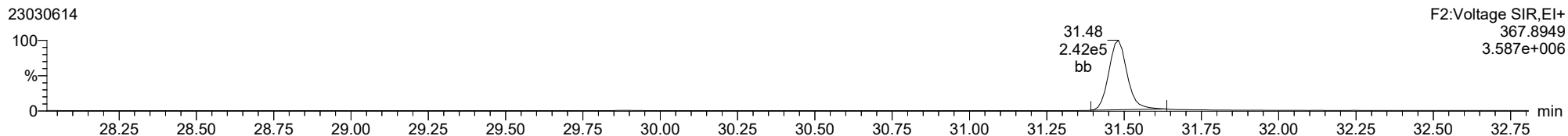
12378-PeCDD



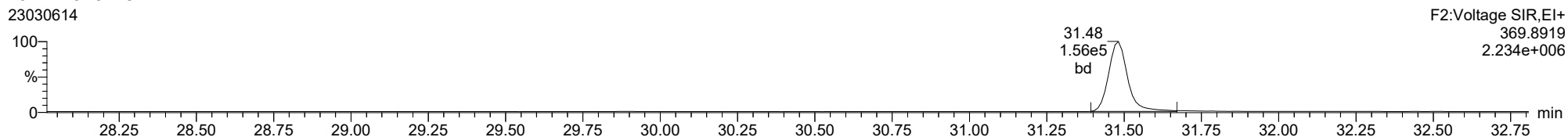
12378-PeCDD



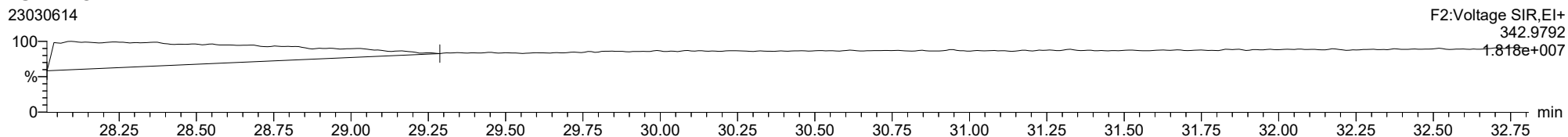
13C-12378-PeCDD



13C-12378-PeCDD



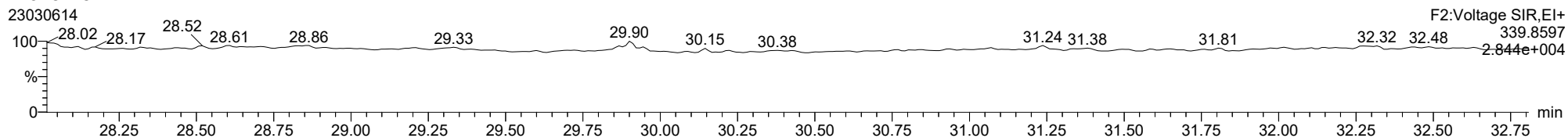
FUNCTION2 PFK



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

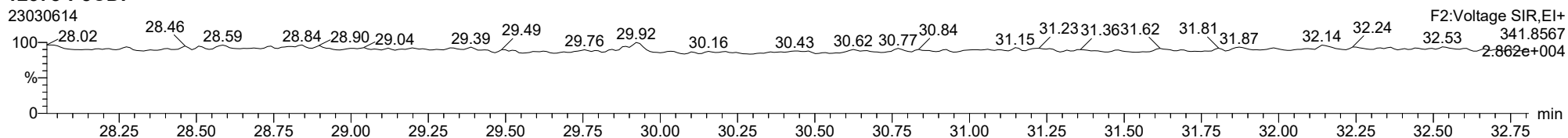
12378-PeCDF

23030614



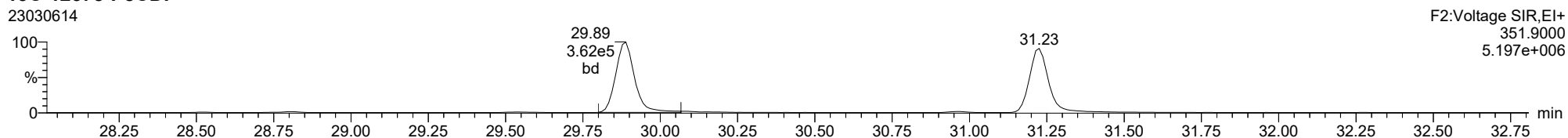
12378-PeCDF

23030614



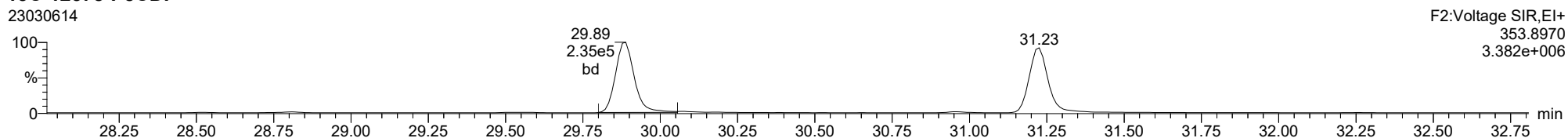
13C-12378-PeCDF

23030614



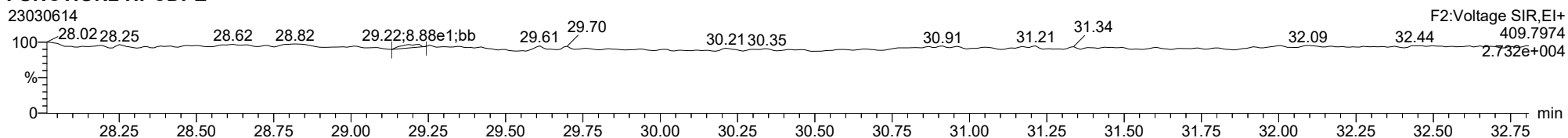
13C-12378-PeCDF

23030614



FUNCTION2 HPCDPE

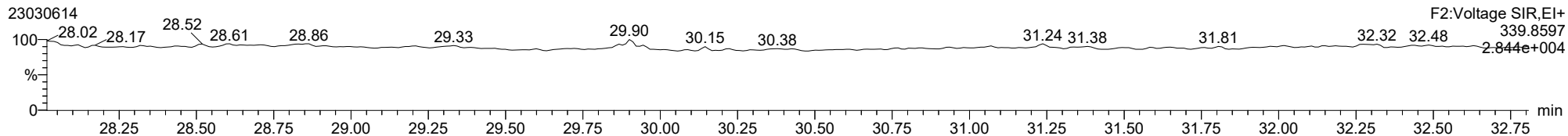
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

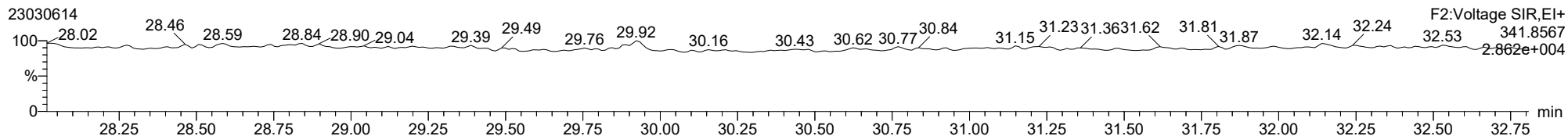
23478-PeCDF

23030614



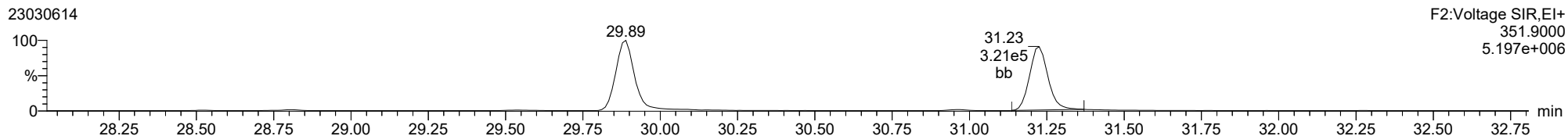
23478-PeCDF

23030614



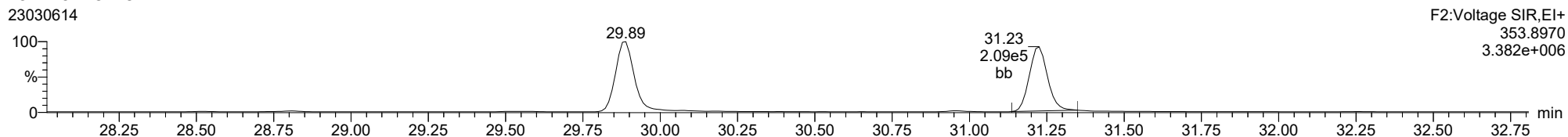
13C-23478-PeCDF

23030614



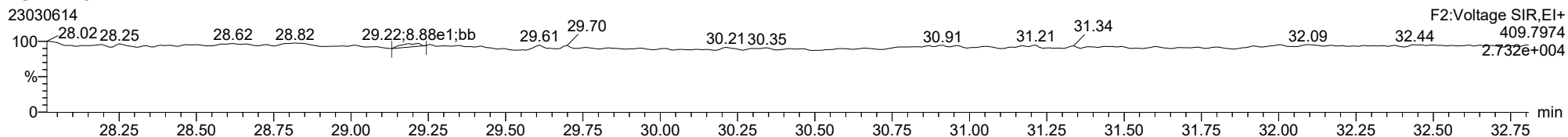
13C-23478-PeCDF

23030614



FUNCTION2 HPCDPE

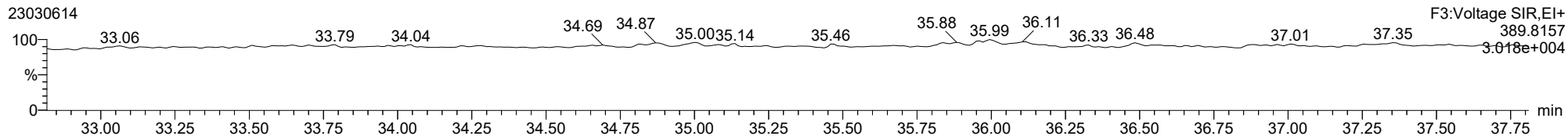
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

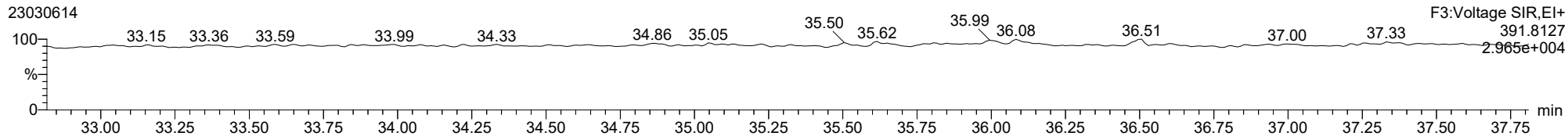
123478-HxCDD

23030614



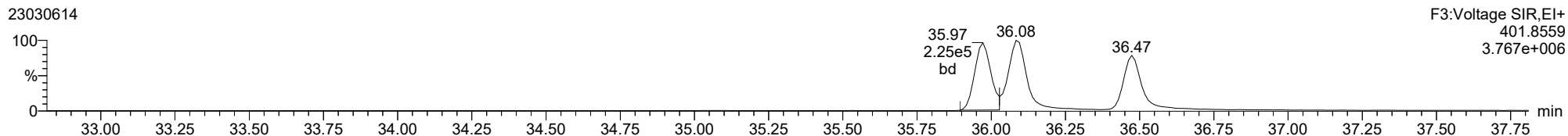
123478-HxCDD

23030614



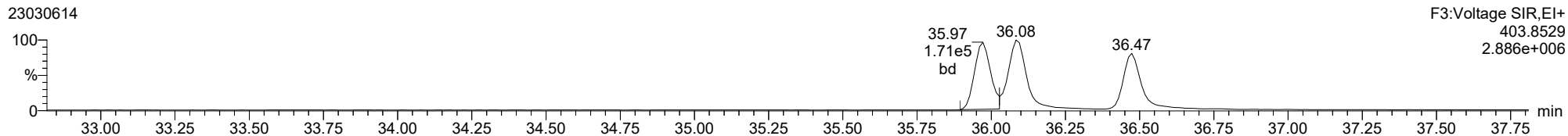
13C-123478-HxCDD

23030614



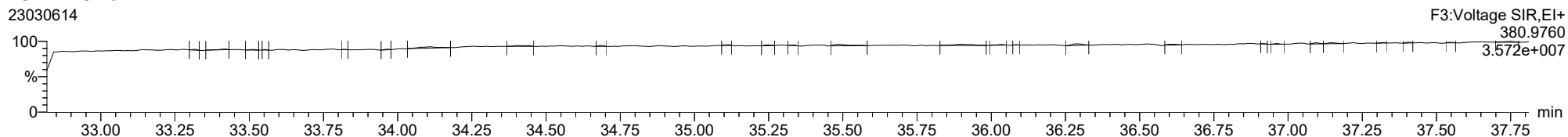
13C-123478-HxCDD

23030614



FUNCTION3 PFK

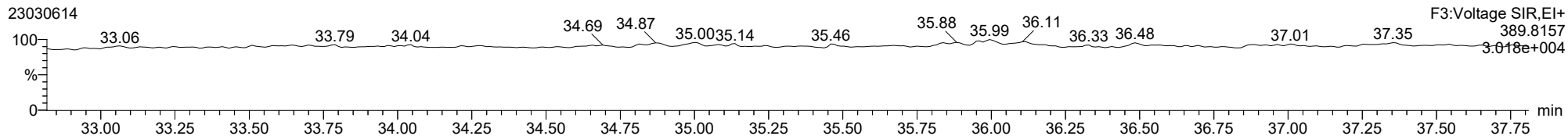
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

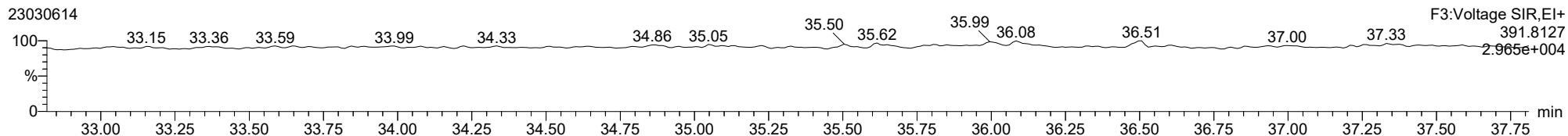
123678-HxCDD

23030614



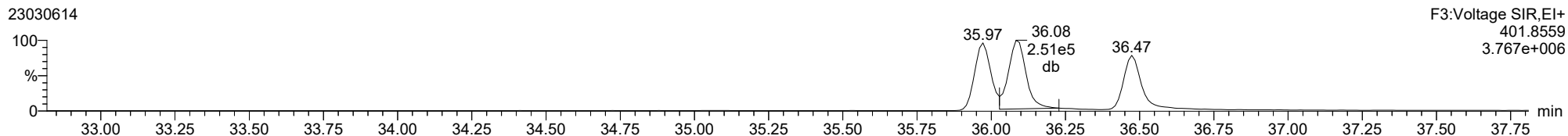
123678-HxCDD

23030614



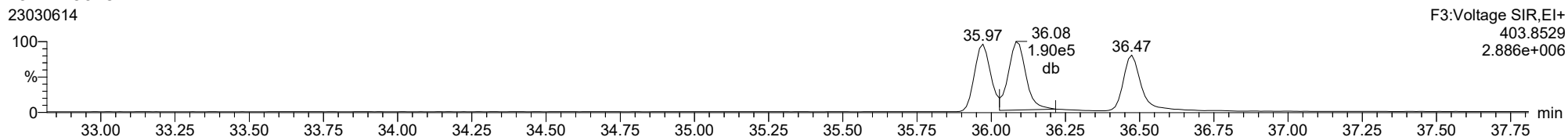
13C-123678-HxCDD

23030614



13C-123678-HxCDD

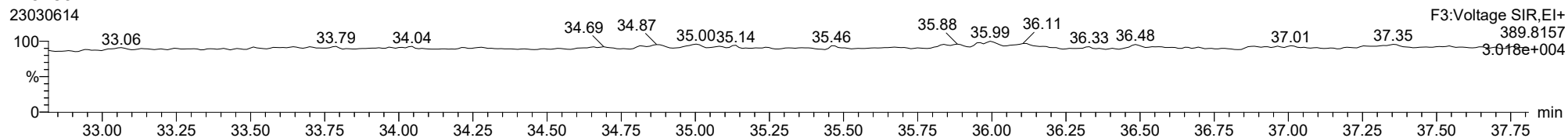
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

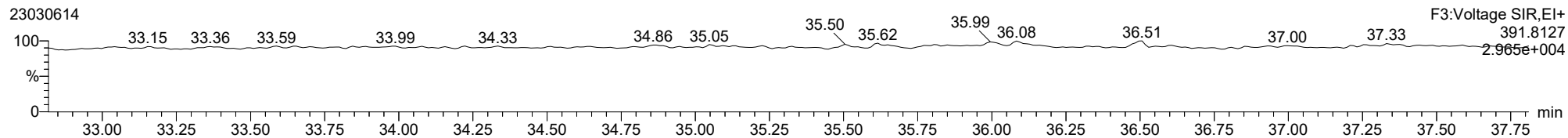
123789-HxCDD

23030614



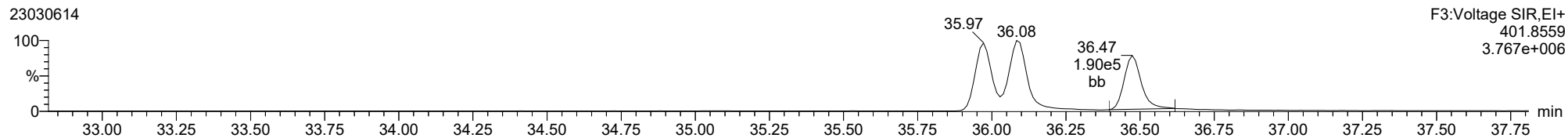
123789-HxCDD

23030614



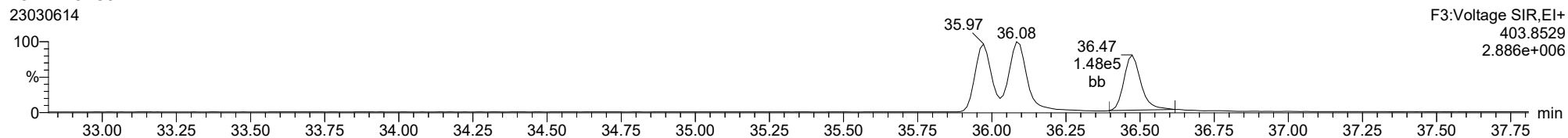
13C-123789-HxCDD

23030614



13C-123789-HxCDD

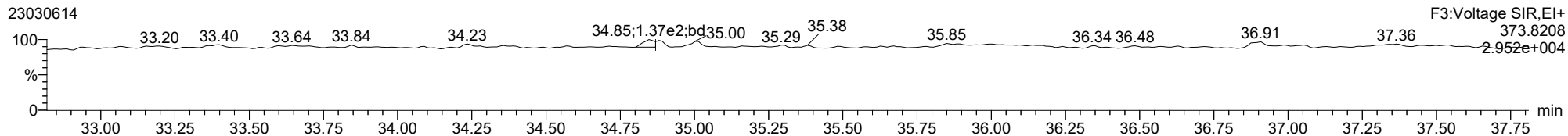
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

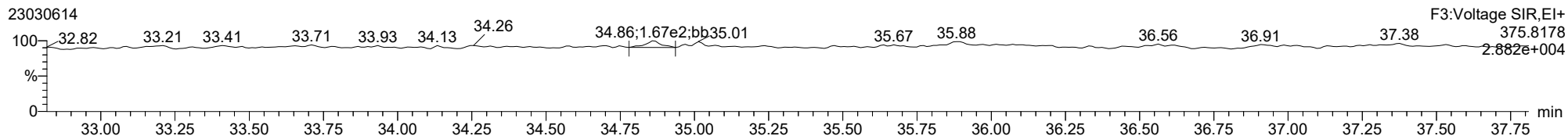
123478-HxCDF

23030614



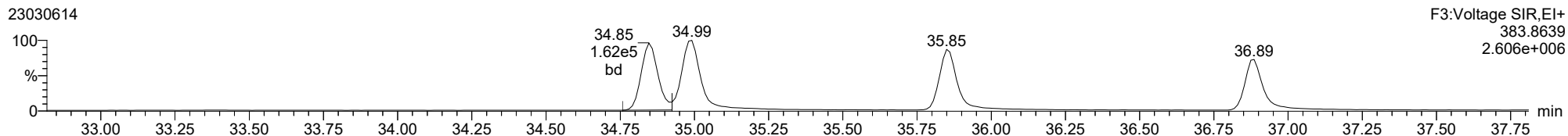
123478-HxCDF

23030614



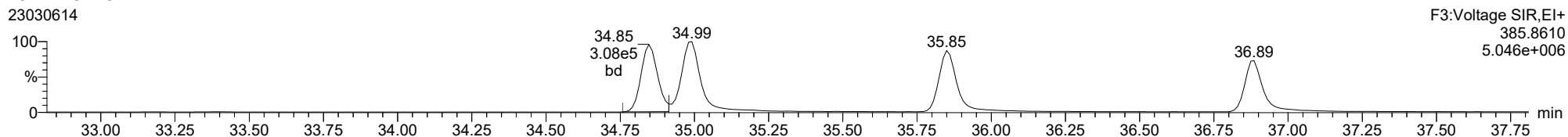
13C-123478-HxCDF

23030614



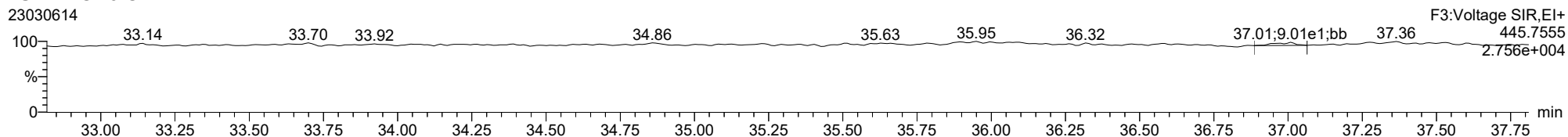
13C-123478-HxCDF

23030614



FUNCTION3 OCDPE

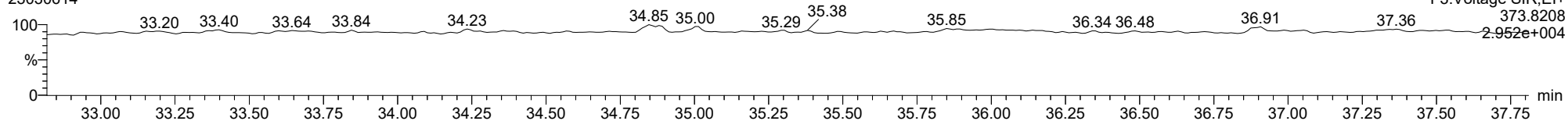
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

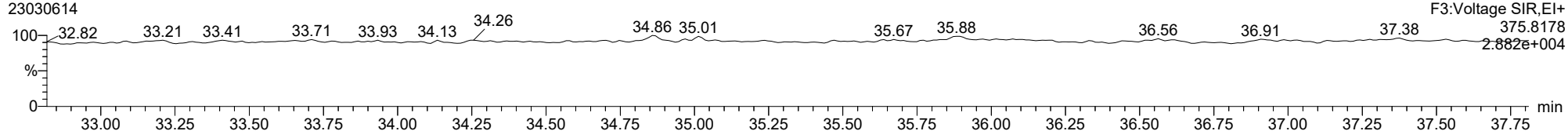
234678-HxCDF

23030614



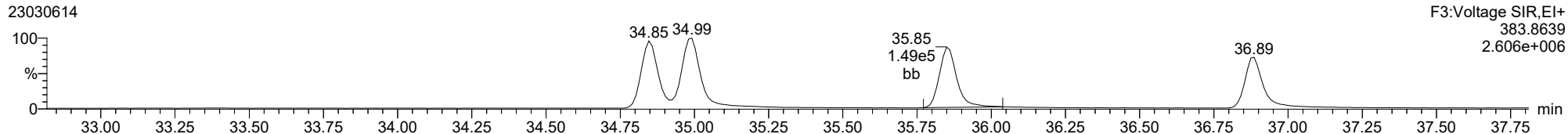
234678-HxCDF

23030614



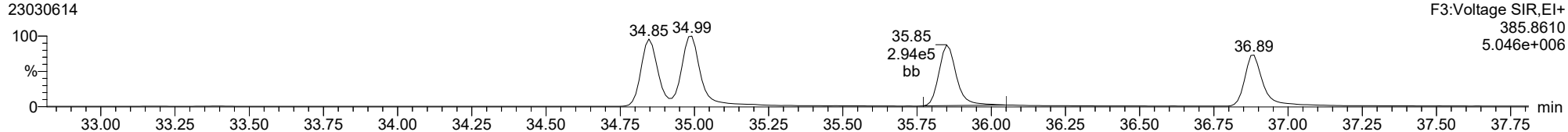
13C-234678-HxCDF

23030614



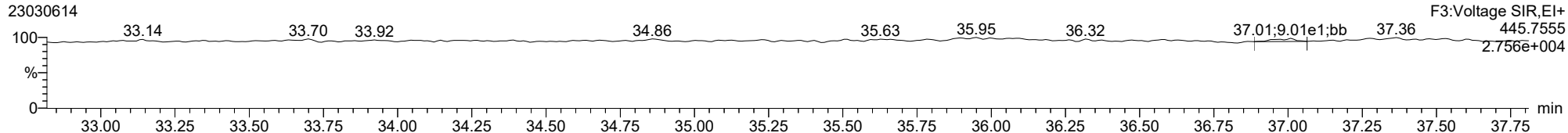
13C-234678-HxCDF

23030614



FUNCTION3 OCDPE

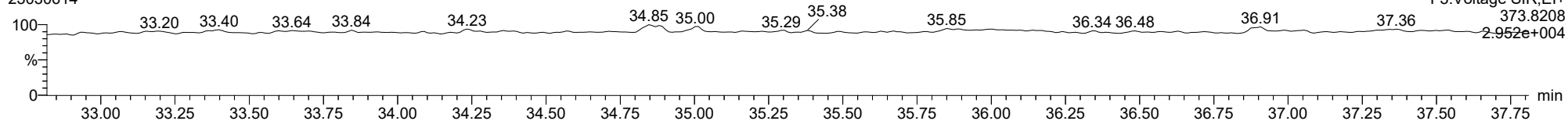
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

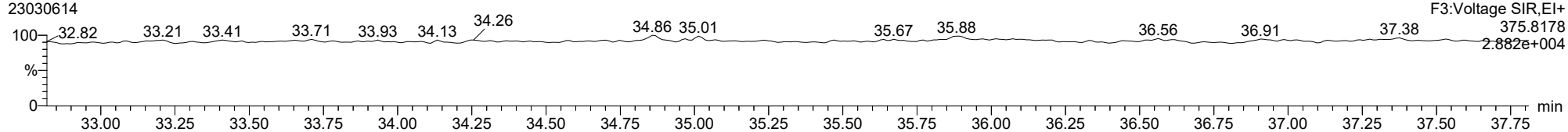
123678-HxCDF

23030614



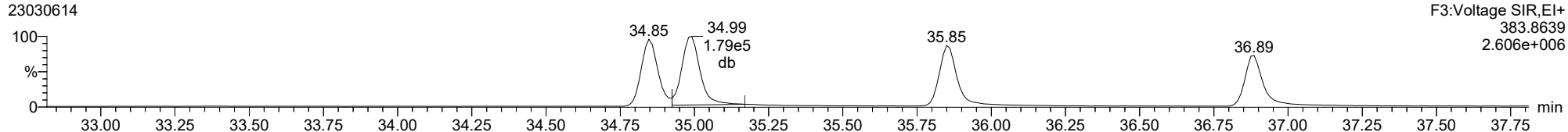
123678-HxCDF

23030614



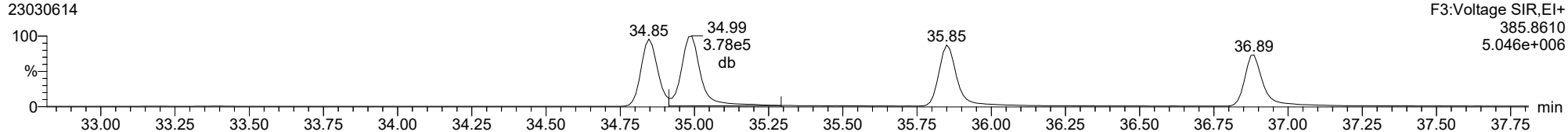
13C-123678-HxCDF

23030614



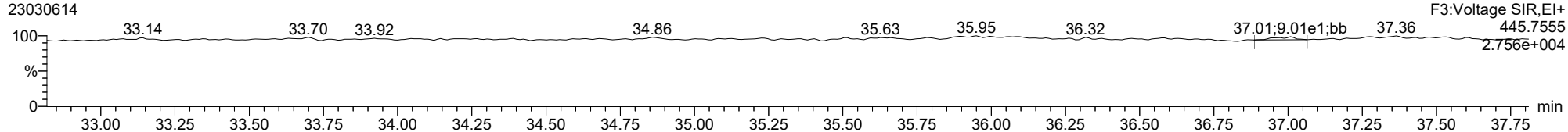
13C-123678-HxCDF

23030614



FUNCTION3 OCDPE

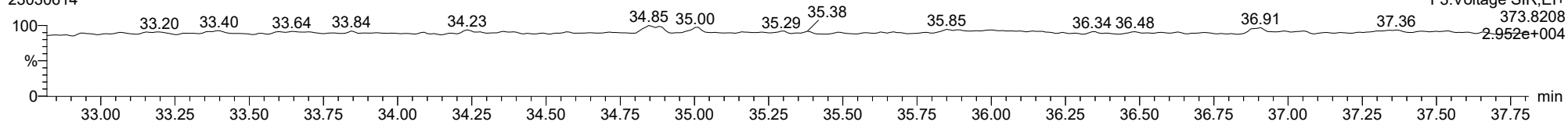
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

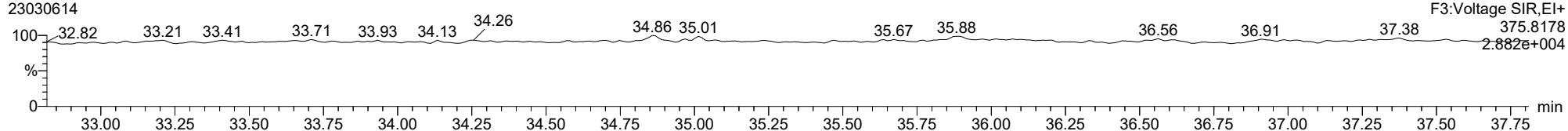
123789-HxCDF

23030614



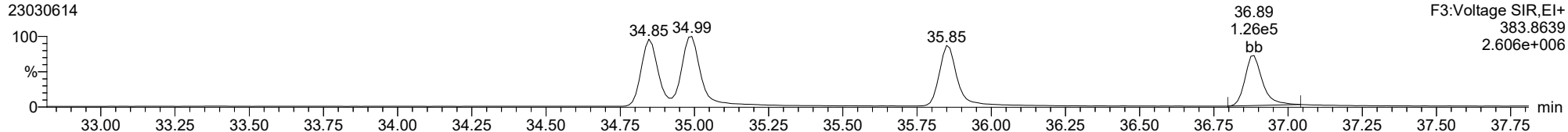
123789-HxCDF

23030614



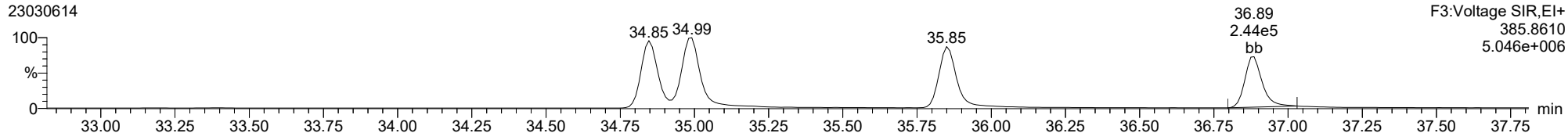
13C-123789-HxCDF

23030614



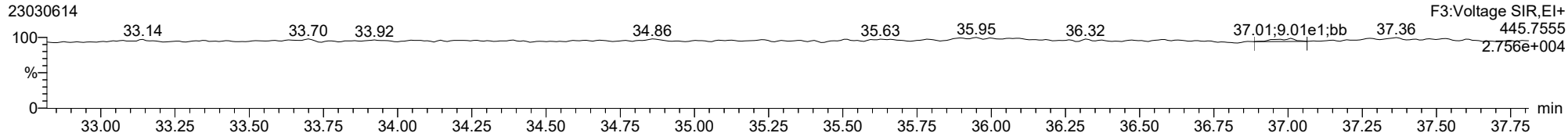
13C-123789-HxCDF

23030614



FUNCTION3 OCDPE

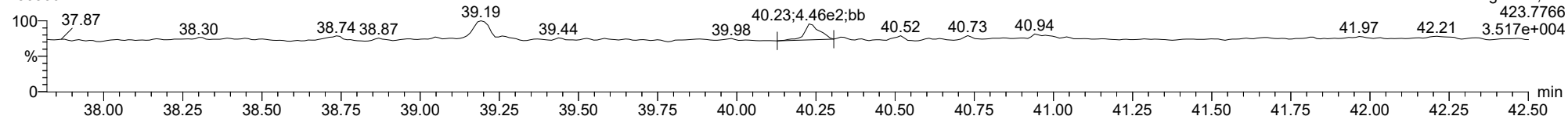
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

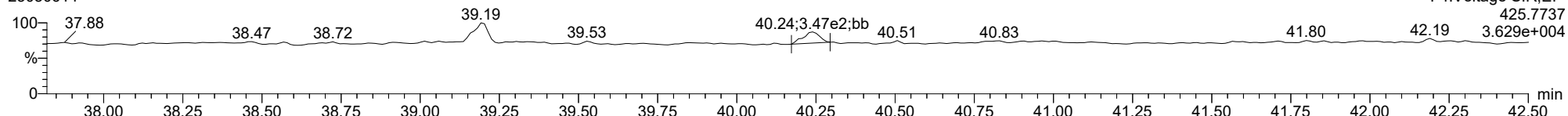
1234678-HpCDD

23030614



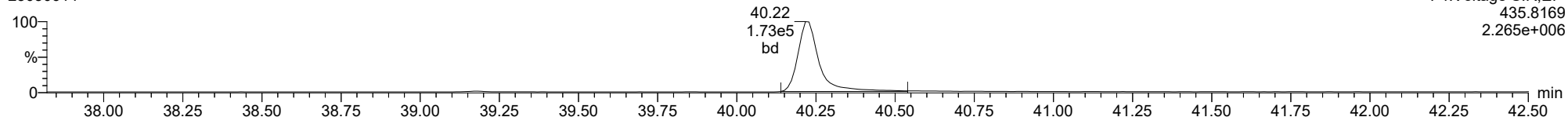
1234678-HpCDD

23030614



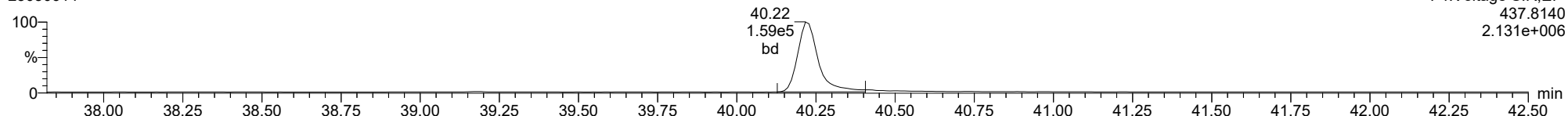
13C-1234678-HpCDD

23030614



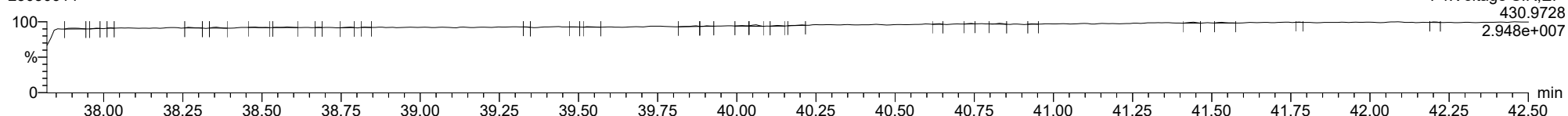
13C-1234678-HpCDD

23030614



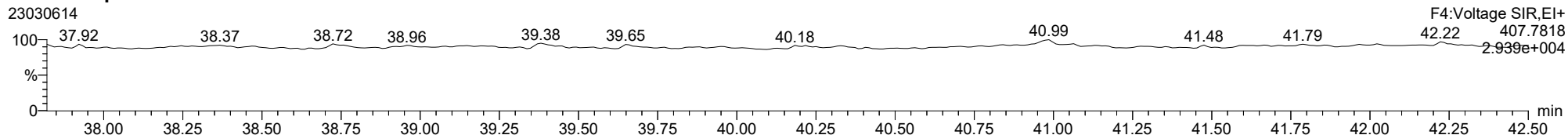
FUNCTION4 PFK

23030614

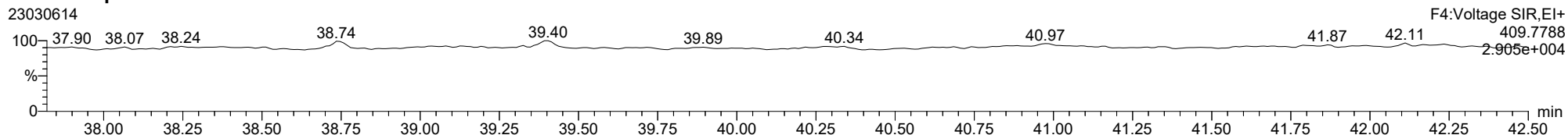


ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

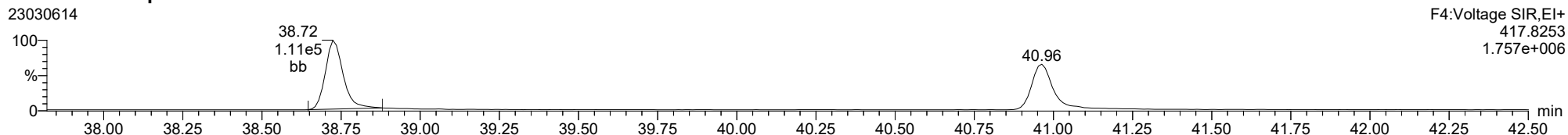
1234678-HpCDF



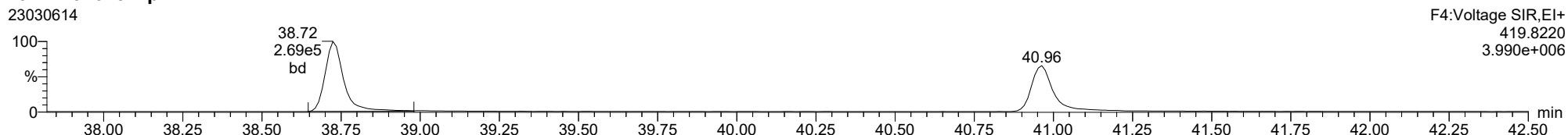
1234678-HpCDF



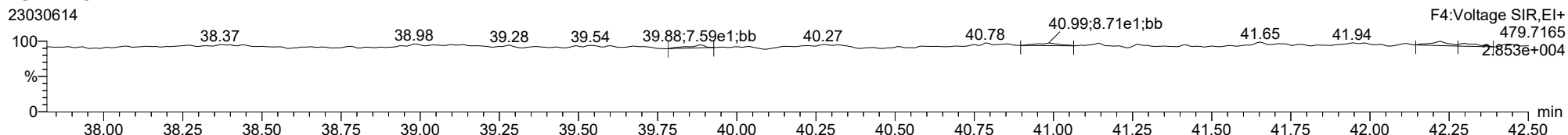
13C-1234678-HpCDF



13C-1234678-HpCDF



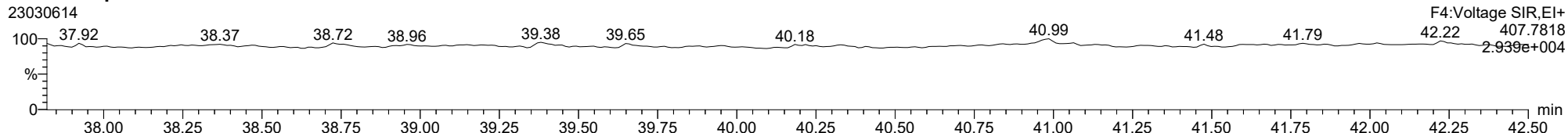
FUNCTION4 NCDPE



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

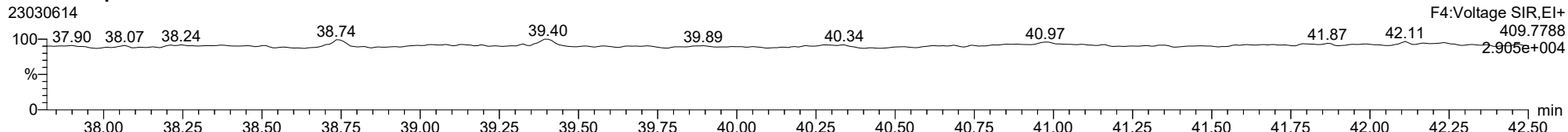
1234789-HpCDF

23030614



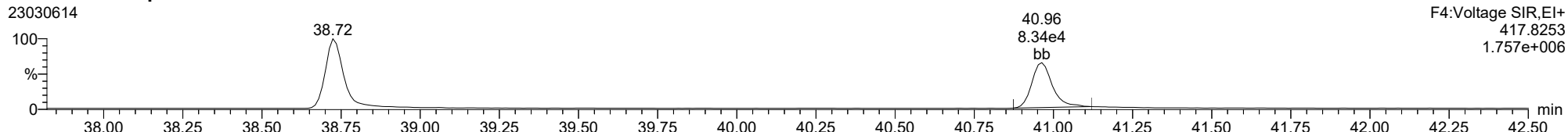
1234789-HpCDF

23030614



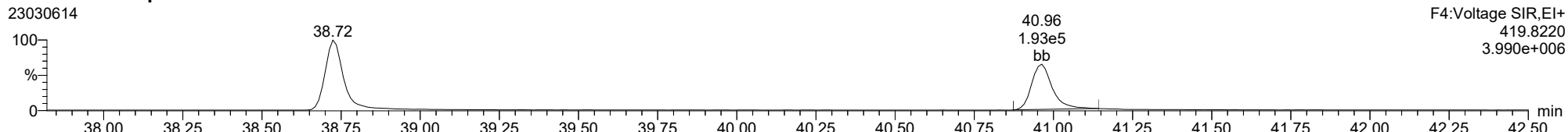
13C-1234789-HpCDF

23030614



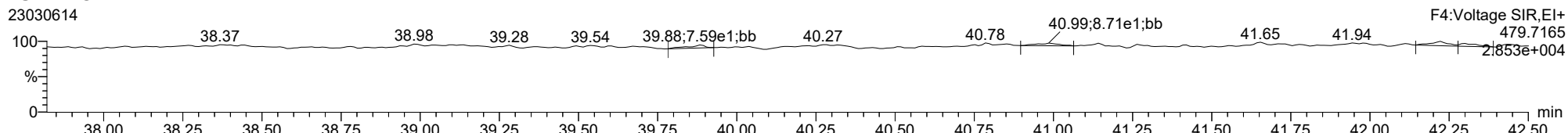
13C-1234789-HpCDF

23030614



FUNCTION4 NCDPE

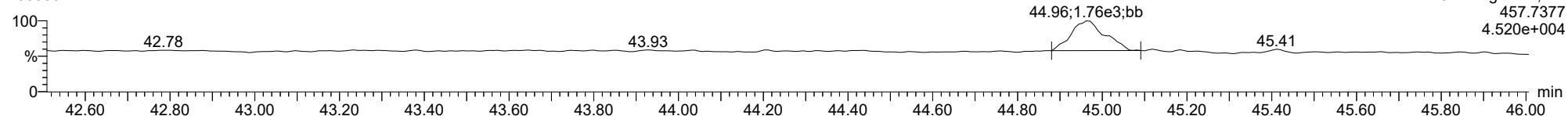
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

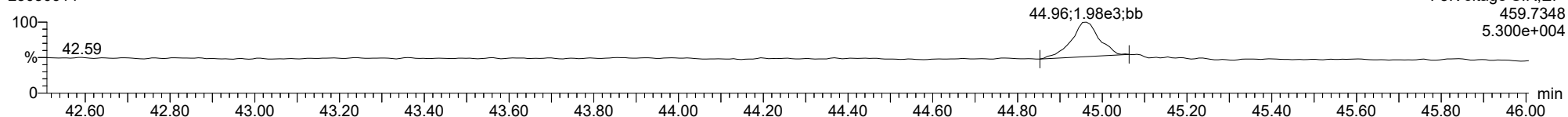
OCDD

23030614



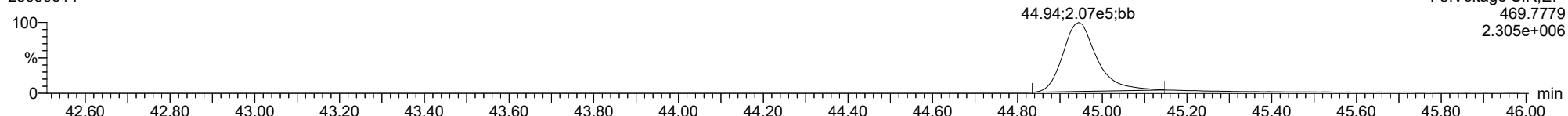
OCDD

23030614



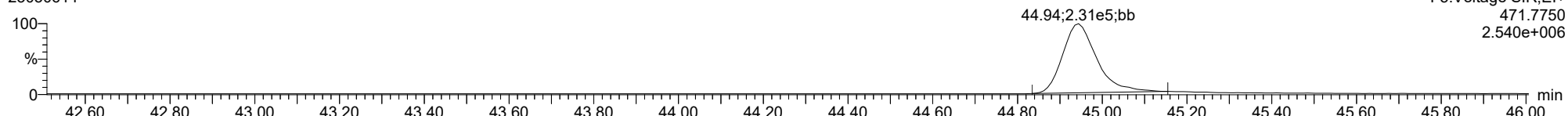
13C-OCDD

23030614



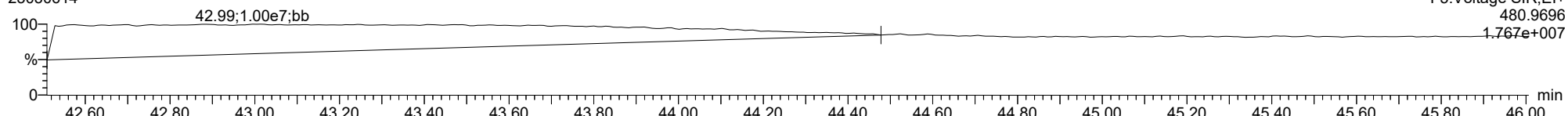
13C-OCDD

23030614



FUNCTION5 PFK

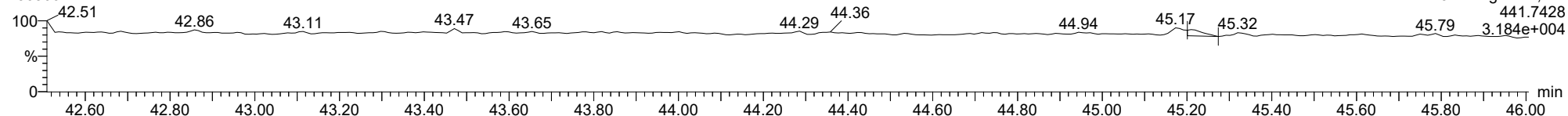
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

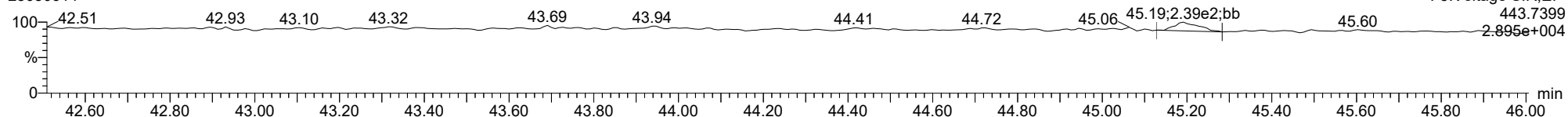
OCDF

23030614



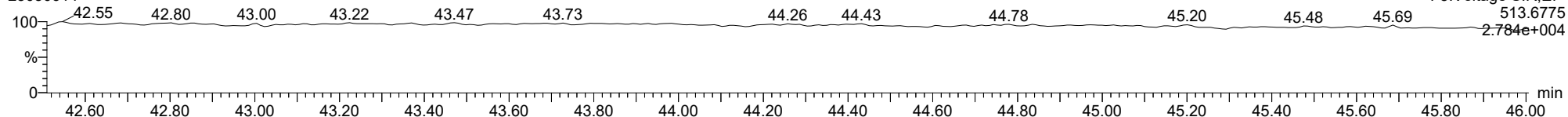
OCDF

23030614



FUNCTION5 DCDPE

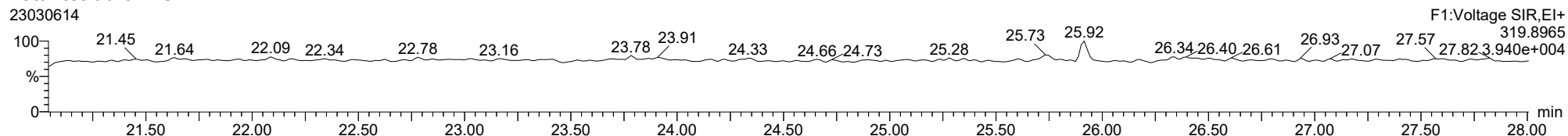
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

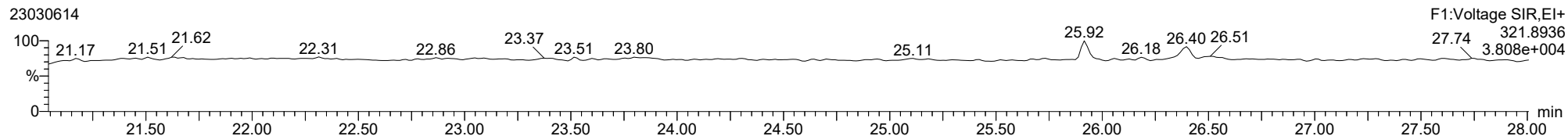
Total-tetradioxins

23030614



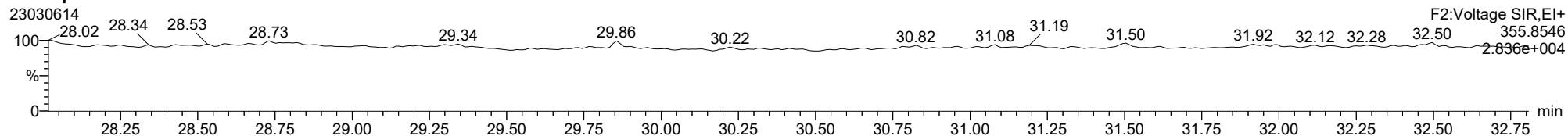
Total-tetradioxins

23030614



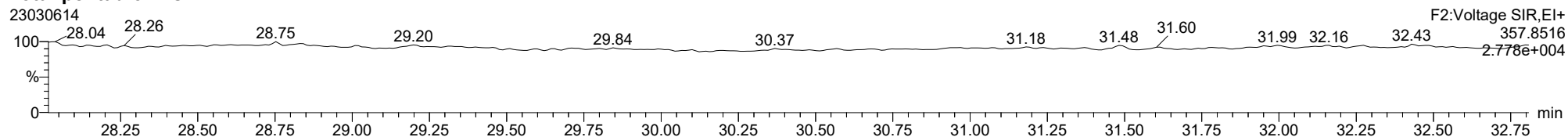
Total-pentadioxins

23030614



Total-pentadioxins

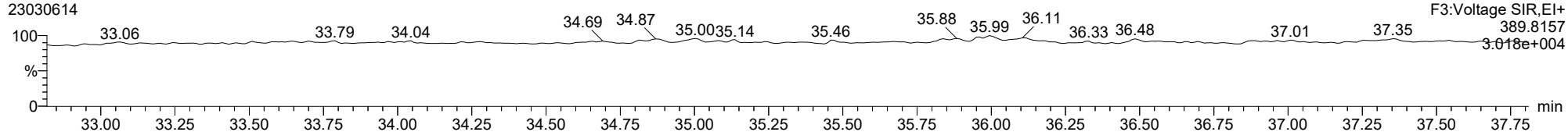
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

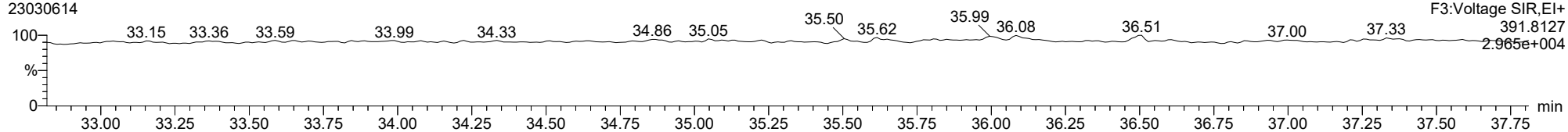
Total-hexadioxins

23030614



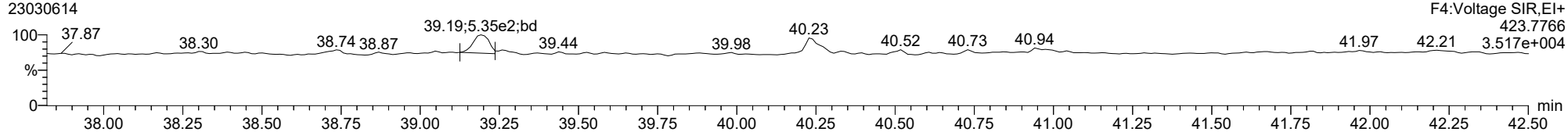
Total-hexadioxins

23030614



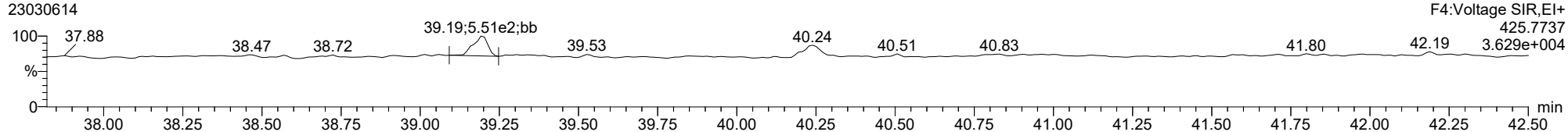
Total-heptadioxins

23030614



Total-heptadioxins

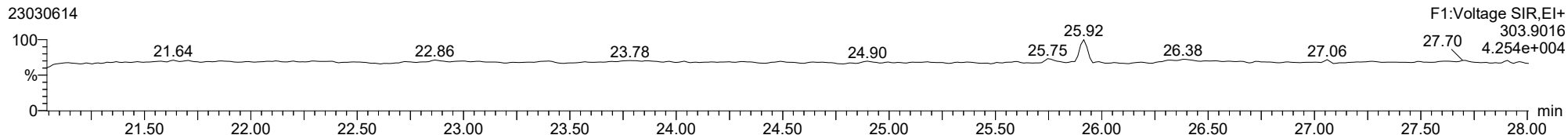
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

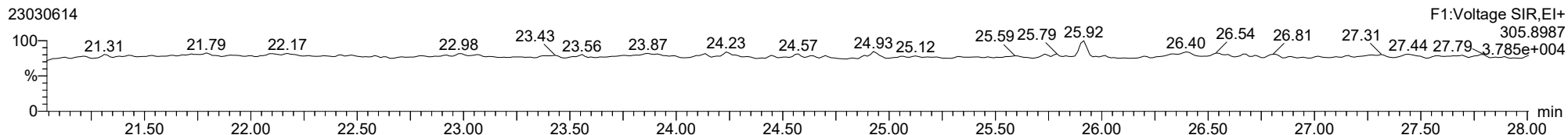
Total-tetrafurans

23030614



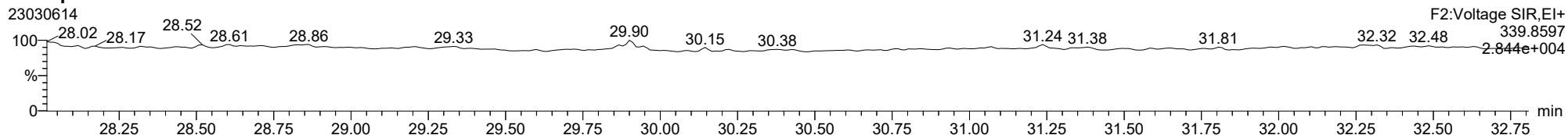
Total-tetrafurans

23030614



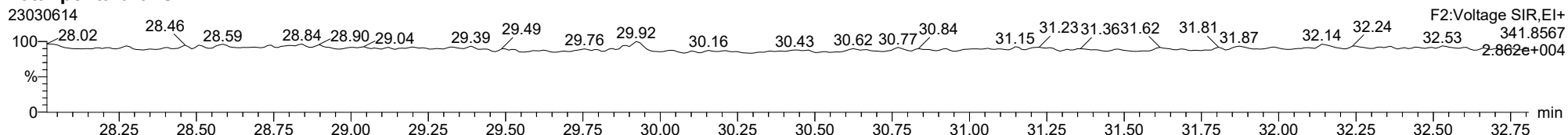
Total-pentafurans

23030614



Total-pentafurans

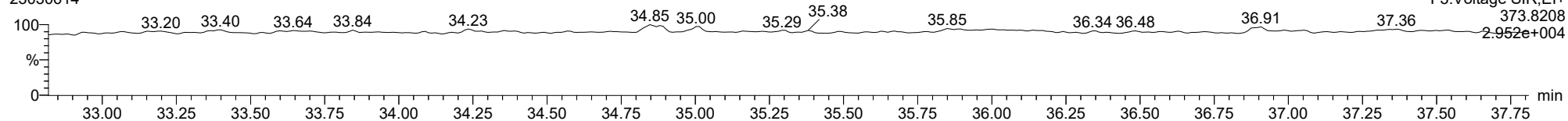
23030614



ID: BLA0398-BLK1, Name: 23030614, Date: 06-Mar-2023, Time: 20:55:12, Conditions: AUTOSPEC01, User: pk

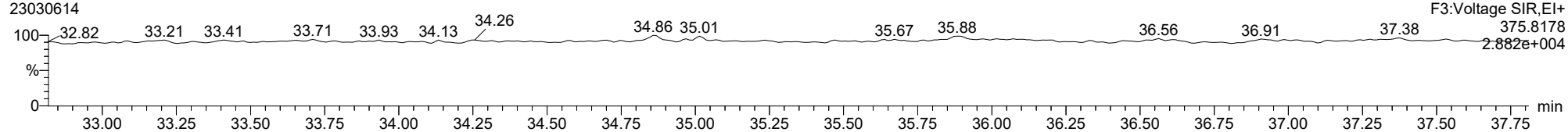
Total-hexafurans

23030614



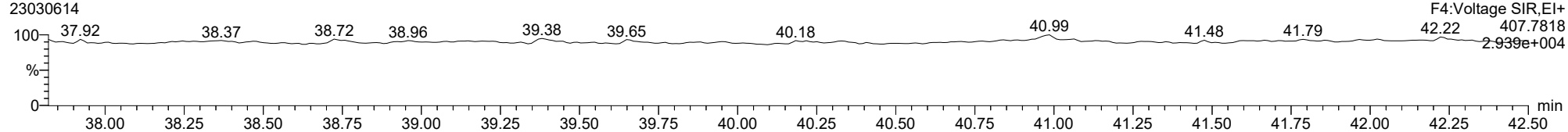
Total-hexafurans

23030614



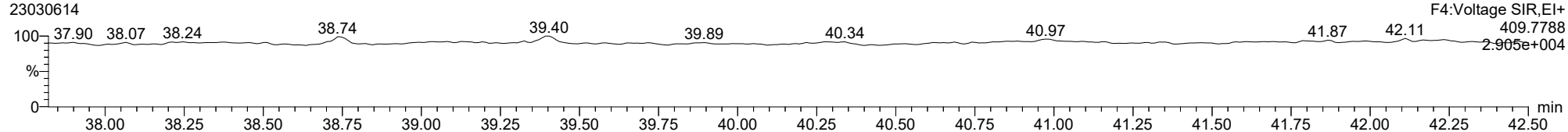
Total-heptafurans

23030614



Total-heptafurans

23030614





LCS RECOVERY
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 03/06/23 21:44

Batch: BLA0398

Laboratory ID: BLA0398-BS1

Preparation: EPA 1613

Sequence Name: LCS

Initial/Final: 10.01 g / 20 uL

COMPOUND	SPIKE ADDED (ng/kg wet)	LCS CONCENTRATION (ng/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
2,3,7,8-TCDF	20.0	18.5		92.5	75 - 158
2,3,7,8-TCDD	20.0	18.3		91.5	67 - 158
1,2,3,7,8-PeCDF	99.9	99.2		99.3	80 - 134
2,3,4,7,8-PeCDF	99.9	97.0		97.1	68 - 160
1,2,3,7,8-PeCDD	99.9	98.5	B	98.6	70 - 142
1,2,3,4,7,8-HxCDF	99.9	95.4	B	95.5	72 - 134
1,2,3,6,7,8-HxCDF	99.9	105		106	84 - 130
2,3,4,6,7,8-HxCDF	99.9	101		101	70 - 156
1,2,3,7,8,9-HxCDF	99.9	93.9		94.0	78 - 130
1,2,3,4,7,8-HxCDD	99.9	97.3		97.4	70 - 164
1,2,3,6,7,8-HxCDD	99.9	104		104	76 - 134
1,2,3,7,8,9-HxCDD	99.9	104		104	64 - 162
1,2,3,4,6,7,8-HpCDF	99.9	101		101	82 - 122
1,2,3,4,7,8,9-HpCDF	99.9	103		103	78 - 138
1,2,3,4,6,7,8-HpCDD	99.9	99.5	B	99.6	70 - 140
OCDF	200	175	B	87.6	63 - 170
OCDD	200	185	B	92.8	78 - 144

* Indicates values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: BLA0398-BS1, **Name:** 23030615, **Date:** 06-Mar-2023, **Time:** 21:44:12, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.760	1.001	1.719e4	2.454e4	0.702	0.701	0.770	1033	977	2.57e5	3.64e5	249.0	372.9	NO	bb	bb	9.248
12378-PeCDF	29.911	1.001	1.339e5	8.741e4	0.679	1.532	1.550	2089	1260	2.00e6	1.31e6	955.1	1041.2	NO	bb	bb	49.637
23478-PeCDF	31.248	1.001	1.373e5	9.088e4	0.786	1.511	1.550	2089	1260	2.03e6	1.36e6	972.0	1076.5	NO	bb	bb	48.569
123478-HxCDF	34.869	1.000	1.666e5	1.312e5	1.166	1.270	1.240	1821	1363	2.56e6	2.02e6	1403.4	1481.5	NO	bd	bd	47.757
234678-HxCDF	35.871	1.000	1.614e5	1.273e5	1.140	1.268	1.240	1821	1363	2.43e6	1.92e6	1332.9	1406.5	NO	bd	bd	50.428
123678-HxCDF	35.014	1.001	1.926e5	1.492e5	1.091	1.291	1.240	1821	1363	2.65e6	2.10e6	1454.6	1542.7	NO	dd	db	52.757
123789-HxCDF	36.908	1.001	1.276e5	9.818e4	1.137	1.300	1.240	1821	1363	1.90e6	1.50e6	1043.4	1103.2	NO	bb	bb	47.015
1234678-HpCDF	38.746	1.000	9.948e4	1.015e5	1.003	0.980	1.050	1165	1545	1.62e6	1.57e6	1389.3	1014.6	NO	bb	bd	50.656
1234789-HpCDF	40.985	1.001	6.117e4	5.840e4	0.953	1.048	1.050	1165	1545	8.03e5	8.08e5	688.8	522.8	NO	bd	bb	51.352
OCDF	45.200	1.005	8.240e4	8.697e4	0.778	0.947	0.890	615	846	9.07e5	1.02e6	1476.3	1210.0	NO	bd	bb	87.574
2378-TCDD	26.396	1.001	2.383e4	2.853e4	1.149	0.835	0.770	772	552	3.73e5	4.55e5	483.4	823.0	NO	bb	bb	9.153
12378-PeCDD	31.504	1.001	1.378e5	9.080e4	1.022	1.518	1.550	1354	751	2.09e6	1.33e6	1540.4	1772.5	NO	bb	bb	49.307
123478-HxCDD	35.994	1.001	1.237e5	1.023e5	0.996	1.210	1.240	1118	812	2.02e6	1.64e6	1804.0	2017.8	NO	bd	bd	48.685
123678-HxCDD	36.105	1.000	1.399e5	1.193e5	1.001	1.173	1.240	1118	812	2.07e6	1.69e6	1850.0	2079.1	NO	db	dd	51.838
123789-HxCDD	36.495	1.011	1.231e5	1.056e5	0.907	1.166	1.240	1118	812	1.80e6	1.48e6	1614.0	1822.8	NO	bd	dd	52.209
1234678-HpCDD	40.239	1.000	7.514e4	7.779e4	1.039	0.966	1.050	1083	1191	1.08e6	1.06e6	1000.4	893.3	NO	bb	bb	49.789
OCDD	44.972	1.000	1.025e5	1.098e5	0.920	0.934	0.890	1198	868	1.12e6	1.29e6	930.8	1488.3	NO	bd	bb	92.841
13C-2378-TCDF	25.732	1.007	2.782e5	3.650e5	1.620	0.762	0.770	1887	1388	4.01e6	5.30e6	2122.7	3817.7	NO	bb	bb	73.458
13C-12378-PeCDF	29.889	1.169	3.992e5	2.572e5	1.240	1.552	1.550	2522	1751	5.83e6	3.88e6	2312.5	2214.5	NO	bd	bb	97.925
13C-23478-PeCDF	31.226	1.222	3.561e5	2.415e5	1.118	1.474	1.550	2522	1751	5.39e6	3.63e6	2135.5	2075.8	NO	bb	bb	98.924
13C-123478-HxCDF	34.858	0.956	1.808e5	3.539e5	1.168	0.511	0.510	1855	2054	2.80e6	5.40e6	1508.7	2631.5	NO	bd	bd	106.727
13C-123678-HxCDF	34.991	0.959	2.036e5	3.903e5	1.386	0.522	0.510	1855	2054	3.04e6	5.78e6	1639.9	2816.0	NO	db	db	99.901
13C-234678-HxCDF	35.860	0.983	1.702e5	3.320e5	1.129	0.513	0.510	1855	2054	2.61e6	5.05e6	1408.1	2459.9	NO	bb	bb	103.721
13C-123789-HxCDF	36.885	1.011	1.419e5	2.805e5	0.932	0.506	0.510	1855	2054	2.16e6	4.20e6	1162.7	2046.2	NO	bb	bb	105.711
13C-1234678-HpCDF	38.735	1.062	1.179e5	2.777e5	0.895	0.425	0.440	1585	1878	1.88e6	4.40e6	1188.6	2342.1	NO	bb	bb	103.044
13C-1234789-HpCDF	40.963	1.123	7.749e4	1.668e5	0.770	0.465	0.440	1585	1878	9.96e5	2.26e6	628.6	1202.6	NO	bb	bb	74.013
13C-1234-TCDD	25.563	0.000	2.381e5	3.023e5	1.000	0.788	0.770	1753	1274	3.59e6	4.44e6	2045.4	3486.4	NO	bb	bd	100.000
13C-2378-TCDD	26.382	1.032	2.194e5	2.786e5	1.152	0.788	0.770	1753	1274	3.32e6	4.14e6	1893.1	3247.9	NO	bb	bb	79.957
13C-12378-PeCDD	31.482	1.232	2.805e5	1.733e5	0.829	1.619	1.550	923	1047	4.23e6	2.59e6	4579.8	2474.0	NO	bb	bb	101.296
13C-123478-HxCDD	35.972	0.986	2.642e5	2.021e5	0.995	1.307	1.240	2069	2221	4.08e6	3.13e6	1972.6	1410.9	NO	bd	bd	109.290
13C-123678-HxCDD	36.094	0.990	2.848e5	2.149e5	1.157	1.325	1.240	2069	2221	4.35e6	3.32e6	2102.0	1495.1	NO	db	db	100.734
13C-1234678-HpCDD	40.228	1.103	1.540e5	1.417e5	0.840	1.087	1.050	1244	816	2.14e6	1.95e6	1719.9	2395.9	NO	bb	bb	82.057
13C-OCDD	44.953	1.233	2.382e5	2.591e5	0.767	0.920	0.890	2246	1254	2.68e6	2.93e6	1192.0	2336.8	NO	bb	bb	151.106
13C-123789-HxCDD	36.473	0.000	2.398e5	1.890e5	1.000	1.268	1.240	2069	2221	3.58e6	2.83e6	1731.8	1274.7	NO	bb	bb	100.000
37CL-2378-TCDD	26.396	1.033	1.816e5		1.288			961		2.76e6		2870.9			bb		26.088

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1033	977								
1289-TCDF					0.678		0.770	1033	977								
13468-PECDF					1.246		1.550	464	848								
12389-PECDF	32.284	1.080	1.215e3	7.269e2	0.496	1.672	1.550	2089	1260	1.60e4	7.64e3	7.7	6.1	NO	bb	bb	0.596
123468-HXCDF					1.169		1.240	1821	1363								
1368-TCDD					1.015		0.770	772	552								
1289-TCDD					0.909		0.770	772	552								
12479-PECDD					2.301		1.550	1354	751								
12389-PECDD	31.805	1.010	1.000e2	1.440e2	1.184	0.695	1.550	1354	751	3.69e3	3.25e3	2.7	4.3	YES	db	bb	0.045
124679-HXCDD					1.115		1.240	1118	812								
1234679-HPCDD	39.192	0.974	1.091e3	8.930e2	1.137	1.221	1.050	1083	1191	1.66e4	1.53e4	15.3	12.9	YES	bb	bb	0.590
Total-tetrafurans			1.743e4		0.727			1033		2.62e5							9.360
Total-penta1			0.000e0					464		0.00e0							
Total-pentafurans			2.724e5		0.654			2089		4.04e6							98.801
Total-hexafurans			6.482e5		1.141			1821		9.53e6							197.956
Total-heptafurans			1.606e5		0.978			1165		2.42e6							102.009
Total-Furans			1.181e6		0.922			1033		1.72e7							495.700
Total-tetradoxins			2.383e4		1.024			772		3.73e5							9.153
Total-pentadoxins			1.378e5		1.502			1354		2.09e6							49.307
Total-hexadoxins			3.868e5		1.005			1118		5.89e6							152.732
Total-heptadoxins			7.514e4		1.088			1083		1.08e6							49.789
Total-Dioxins			7.262e5		1.130			772		1.05e7							353.822
Total-TEQ			1.907e6					772		2.77e7							849.522
FUNCTION1 PFK			2.682e7					349405		1.25e8							
FUNCTION2 PFK			2.396e6					152736		2.16e7							0.000
FUNCTION3 PFK			4.584e5					287868		9.96e6							0.000
FUNCTION4 PFK			4.641e6					263515		3.20e6							
FUNCTION5 PFK			8.648e3					170900		3.51e5							
FUNCTION1 HXCD...			5.542e2					492		7.07e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.037e2					437		1.62e3							0.000
FUNCTION3 OCDPE			0.000e0					372		0.00e0							
FUNCTION4 NCDPE			1.635e2					591		4.41e3							0.000
FUNCTION5 DCDPE			9.362e1					474		1.12e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.76	1.719e4	2.454e4	0.702	0.70	0.77	249.0	YES	NO	bb	bb	9.248
2	Total-tetrafurans	24.50	2.392e2	2.821e2	0.727	0.85	0.77	4.2	YES	NO	bd	bb	0.111

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.28	1.215e3	7.269e2	0.496	1.67	1.55	7.7	YES	NO	bb	bb	0.596
2	23478-PeCDF	31.25	1.373e5	9.088e4	0.786	1.51	1.55	972.0	YES	NO	bb	bb	48.569
3	12378-PeCDF	29.91	1.339e5	8.741e4	0.679	1.53	1.55	955.1	YES	NO	bb	bb	49.637

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.01	1.926e5	1.492e5	1.091	1.29	1.24	1454.6	YES	NO	dd	db	52.757
2	123478-HxCDF	34.87	1.666e5	1.312e5	1.166	1.27	1.24	1403.4	YES	NO	bd	bd	47.757
3	123789-HxCDF	36.91	1.276e5	9.818e4	1.137	1.30	1.24	1043.4	YES	NO	bb	bb	47.015
4	234678-HxCDF	35.87	1.614e5	1.273e5	1.140	1.27	1.24	1332.9	YES	NO	bd	bd	50.428

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.99	6.117e4	5.840e4	0.953	1.05	1.05	688.8	YES	NO	bd	bb	51.352
2	1234678-HpCDF	38.75	9.948e4	1.015e5	1.003	0.98	1.05	1389.3	YES	NO	bb	bd	50.656

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk**Furans,TF,PP,PF,HF,HPF,OF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.76	1.719e4	2.454e4	0.702	0.70	0.77	249.0	YES	NO	bb	bb	9.248
2	Total-tetrafurans	24.50	2.392e2	2.821e2	0.727	0.85	0.77	4.2	YES	NO	bd	bb	0.111
3	12389-PECDF	32.28	1.215e3	7.269e2	0.496	1.67	1.55	7.7	YES	NO	bb	bb	0.596
4	23478-PeCDF	31.25	1.373e5	9.088e4	0.786	1.51	1.55	972.0	YES	NO	bb	bb	48.569
5	12378-PeCDF	29.91	1.339e5	8.741e4	0.679	1.53	1.55	955.1	YES	NO	bb	bb	49.637
6	123678-HxCDF	35.01	1.926e5	1.492e5	1.091	1.29	1.24	1454.6	YES	NO	dd	db	52.757
7	123478-HxCDF	34.87	1.666e5	1.312e5	1.166	1.27	1.24	1403.4	YES	NO	bd	bd	47.757
8	123789-HxCDF	36.91	1.276e5	9.818e4	1.137	1.30	1.24	1043.4	YES	NO	bb	bb	47.015
9	234678-HxCDF	35.87	1.614e5	1.273e5	1.140	1.27	1.24	1332.9	YES	NO	bd	bd	50.428
10	1234789-HpCDF	40.99	6.117e4	5.840e4	0.953	1.05	1.05	688.8	YES	NO	bd	bb	51.352
11	1234678-HpCDF	38.75	9.948e4	1.015e5	1.003	0.98	1.05	1389.3	YES	NO	bb	bd	50.656
12	OCDF	45.20	8.240e4	8.697e4	0.778	0.95	0.89	1476.3	YES	NO	bd	bb	87.574

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.40	2.383e4	2.853e4	1.149	0.83	0.77	483.4	YES	NO	bb	bb	9.153

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.50	1.378e5	9.080e4	1.022	1.52	1.55	1540.4	YES	NO	bb	bb	49.307

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.50	1.231e5	1.056e5	0.907	1.17	1.24	1614.0	YES	NO	bd	dd	52.209
2	123678-HxCDD	36.11	1.399e5	1.193e5	1.001	1.17	1.24	1850.0	YES	NO	db	dd	51.838
3	123478-HxCDD	35.99	1.237e5	1.023e5	0.996	1.21	1.24	1804.0	YES	NO	bd	bd	48.685

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.24	7.514e4	7.779e4	1.039	0.97	1.05	1000.4	YES	NO	bb	bb	49.789

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.40	2.383e4	2.853e4	1.149	0.83	0.77	483.4	YES	NO	bb	bb	9.153
2	123789-HxCDD	36.50	1.231e5	1.056e5	0.907	1.17	1.24	1614.0	YES	NO	bd	dd	52.209
3	123678-HxCDD	36.11	1.399e5	1.193e5	1.001	1.17	1.24	1850.0	YES	NO	db	dd	51.838
4	123478-HxCDD	35.99	1.237e5	1.023e5	0.996	1.21	1.24	1804.0	YES	NO	bd	bd	48.685
5	12378-PeCDD	31.50	1.378e5	9.080e4	1.022	1.52	1.55	1540.4	YES	NO	bb	bb	49.307
6	1234678-HpCDD	40.24	7.514e4	7.779e4	1.039	0.97	1.05	1000.4	YES	NO	bb	bb	49.789
7	OCDD	44.97	1.025e5	1.098e5	0.920	0.93	0.89	930.8	YES	NO	bd	bb	92.841

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.76	1.719e4	2.454e4	0.702	0.70	0.77	249.0	YES	NO	bb	bb	9.248
2	Total-tetrafurans	24.50	2.392e2	2.821e2	0.727	0.85	0.77	4.2	YES	NO	bd	bb	0.111
3	12389-PECDF	32.28	1.215e3	7.269e2	0.496	1.67	1.55	7.7	YES	NO	bb	bb	0.596
4	23478-PeCDF	31.25	1.373e5	9.088e4	0.786	1.51	1.55	972.0	YES	NO	bb	bb	48.569
5	12378-PeCDF	29.91	1.339e5	8.741e4	0.679	1.53	1.55	955.1	YES	NO	bb	bb	49.637
6	123678-HxCDF	35.01	1.926e5	1.492e5	1.091	1.29	1.24	1454.6	YES	NO	dd	db	52.757
7	123478-HxCDF	34.87	1.666e5	1.312e5	1.166	1.27	1.24	1403.4	YES	NO	bd	bd	47.757
8	123789-HxCDF	36.91	1.276e5	9.818e4	1.137	1.30	1.24	1043.4	YES	NO	bb	bb	47.015
9	234678-HxCDF	35.87	1.614e5	1.273e5	1.140	1.27	1.24	1332.9	YES	NO	bd	bd	50.428
10	1234789-HpCDF	40.99	6.117e4	5.840e4	0.953	1.05	1.05	688.8	YES	NO	bd	bb	51.352
11	1234678-HpCDF	38.75	9.948e4	1.015e5	1.003	0.98	1.05	1389.3	YES	NO	bb	bd	50.656
12	OCDF	45.20	8.240e4	8.697e4	0.778	0.95	0.89	1476.3	YES	NO	bd	bb	87.574
13	2378-TCDD	26.40	2.383e4	2.853e4	1.149	0.83	0.77	483.4	YES	NO	bb	bb	9.153
14	123789-HxCDD	36.50	1.231e5	1.056e5	0.907	1.17	1.24	1614.0	YES	NO	bd	dd	52.209
15	123678-HxCDD	36.11	1.399e5	1.193e5	1.001	1.17	1.24	1850.0	YES	NO	db	dd	51.838
16	123478-HxCDD	35.99	1.237e5	1.023e5	0.996	1.21	1.24	1804.0	YES	NO	bd	bd	48.685
17	12378-PeCDD	31.50	1.378e5	9.080e4	1.022	1.52	1.55	1540.4	YES	NO	bb	bb	49.307
18	1234678-HpCDD	40.24	7.514e4	7.779e4	1.039	0.97	1.05	1000.4	YES	NO	bb	bb	49.789
19	OCDD	44.97	1.025e5	1.098e5	0.920	0.93	0.89	930.8	YES	NO	bd	bb	92.841

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk**PFK1**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.92	4.108e6					35.0	YES		db		
2	FUNCTION1 PFK	22.79	1.639e6					31.4	YES		dd		
3	FUNCTION1 PFK	22.55	1.598e6					28.0	YES		bd		
4	FUNCTION1 PFK	22.31	2.555e6					31.9	YES		db		
5	FUNCTION1 PFK	22.10	1.168e6					26.7	YES		bd		
6	FUNCTION1 PFK	21.88	5.424e5					16.5	YES		db		
7	FUNCTION1 PFK	21.68	9.464e5					11.5	YES		bd		
8	FUNCTION1 PFK	26.20	6.539e4					3.4	YES		db		
9	FUNCTION1 PFK	26.16	5.350e5					2.8	NO		bd		
10	FUNCTION1 PFK	25.59	4.471e5					8.9	YES		db		
11	FUNCTION1 PFK	25.55	1.512e5					7.1	YES		bd		
12	FUNCTION1 PFK	25.31	3.521e5					3.7	YES		bb		
13	FUNCTION1 PFK	24.90	4.418e5					5.7	YES		db		
14	FUNCTION1 PFK	24.62	2.500e5					11.5	YES		dd		
15	FUNCTION1 PFK	24.56	7.152e5					13.8	YES		dd		
16	FUNCTION1 PFK	24.42	1.483e5					9.3	YES		dd		
17	FUNCTION1 PFK	24.28	1.009e6					22.0	YES		dd		
18	FUNCTION1 PFK	24.14	1.674e6					24.6	YES		dd		
19	FUNCTION1 PFK	23.81	3.238e6					32.0	YES		dd		
20	FUNCTION1 PFK	23.63	5.239e6					31.4	YES		bd		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk**PFK2**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.24	7.241e5					26.1	YES		dd		0.000
2	FUNCTION2 PFK	28.07	4.331e5					33.6	YES		bd		0.000
3	FUNCTION2 PFK	31.42	3.218e3					1.1	NO		bb		0.000
4	FUNCTION2 PFK	31.16	2.189e3					0.8	NO		bb		0.000
5	FUNCTION2 PFK	30.67	1.203e4					2.2	NO		db		0.000
6	FUNCTION2 PFK	30.58	2.206e4					2.6	NO		dd		0.000
7	FUNCTION2 PFK	30.48	9.025e3					1.2	NO		dd		0.000
8	FUNCTION2 PFK	30.43	1.028e4					2.0	NO		dd		0.000
9	FUNCTION2 PFK	30.39	6.572e3					1.4	NO		bd		0.000
10	FUNCTION2 PFK	30.25	3.018e3					1.0	NO		bb		0.000
11	FUNCTION2 PFK	29.67	1.827e3					0.7	NO		bb		0.000
12	FUNCTION2 PFK	29.42	9.446e3					1.3	NO		bb		0.000
13	FUNCTION2 PFK	29.31	7.975e3					1.8	NO		bb		0.000
14	FUNCTION2 PFK	29.16	6.048e3					1.8	NO		bb		0.000
15	FUNCTION2 PFK	28.94	4.785e3					1.2	NO		bb		0.000
16	FUNCTION2 PFK	28.65	2.499e5					11.0	YES		db		0.000
17	FUNCTION2 PFK	28.54	5.949e5					14.3	YES		dd		0.000
18	FUNCTION2 PFK	28.32	2.266e5					23.8	YES		dd		0.000
19	FUNCTION2 PFK	32.56	2.066e4					1.8	NO		db		0.000
20	FUNCTION2 PFK	32.50	4.424e3					0.9	NO		bd		0.000
21	FUNCTION2 PFK	32.32	4.257e3					1.1	NO		db		0.000
22	FUNCTION2 PFK	32.27	1.122e4					2.2	NO		bd		0.000
23	FUNCTION2 PFK	32.21	8.443e2					0.5	NO		bb		0.000
24	FUNCTION2 PFK	31.93	5.696e3					1.6	NO		bb		0.000
25	FUNCTION2 PFK	31.78	5.399e3					1.5	NO		db		0.000
26	FUNCTION2 PFK	31.74	1.081e4					2.4	NO		bd		0.000
27	FUNCTION2 PFK	31.54	5.878e3					1.6	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk**PFK3**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.94	2.535e4					1.7	NO		bd		0.000
2	FUNCTION3 PFK	33.61	1.633e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	33.52	3.313e3					0.6	NO		bb		0.000
4	FUNCTION3 PFK	33.33	9.026e3					1.3	NO		bb		0.000
5	FUNCTION3 PFK	33.25	5.390e3					0.9	NO		bb		0.000
6	FUNCTION3 PFK	32.95	2.262e4					1.2	NO		bb		0.000
7	FUNCTION3 PFK	37.31	1.762e4					1.4	NO		bd		0.000
8	FUNCTION3 PFK	37.21	2.034e4					1.5	NO		db		0.000
9	FUNCTION3 PFK	37.12	6.437e4					2.7	NO		dd		0.000
10	FUNCTION3 PFK	36.95	7.176e4					2.5	NO		dd		0.000
11	FUNCTION3 PFK	36.83	1.923e4					1.6	NO		bd		0.000
12	FUNCTION3 PFK	36.68	6.733e3					1.0	NO		bb		0.000
13	FUNCTION3 PFK	36.38	6.698e3					1.1	NO		bb		0.000
14	FUNCTION3 PFK	35.38	1.346e4					1.6	NO		bb		0.000
15	FUNCTION3 PFK	35.23	6.815e3					1.0	NO		db		0.000
16	FUNCTION3 PFK	35.18	1.993e4					1.8	NO		bd		0.000
17	FUNCTION3 PFK	35.10	1.793e4					1.0	NO		db		0.000
18	FUNCTION3 PFK	35.02	1.345e4					1.5	NO		dd		0.000
19	FUNCTION3 PFK	34.97	1.295e4					1.0	NO		bd		0.000
20	FUNCTION3 PFK	34.47	4.650e3					0.6	NO		bb		0.000
21	FUNCTION3 PFK	34.29	1.870e4					1.4	NO		bb		0.000
22	FUNCTION3 PFK	34.04	3.008e3					0.6	NO		db		0.000
23	FUNCTION3 PFK	37.72	2.620e4					1.4	NO		db		0.000
24	FUNCTION3 PFK	37.65	1.493e4					1.5	NO		bd		0.000
25	FUNCTION3 PFK	37.45	1.757e3					0.5	NO		bb		0.000
26	FUNCTION3 PFK	37.41	1.589e4					1.9	NO		db		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.69	4.641e6					12.1	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.53	8.648e3					2.1	NO		bb		

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:38 Pacific Standard Time

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.25	1.547e2					2.8	NO		db		0.000
2	FUNCTION1 HXCD...	25.17	1.364e2					3.5	YES		dd		0.000
3	FUNCTION1 HXCD...	25.08	8.306e1					3.6	YES		bd		0.000
4	FUNCTION1 HXCD...	24.28	9.755e1					2.5	NO		db		0.000
5	FUNCTION1 HXCD...	24.15	8.245e1					2.0	NO		bd		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.46	1.037e2					3.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.16	7.500e1					5.0	YES		bb		0.000
2	FUNCTION4 NCDPE	38.71	8.852e1					2.4	NO		bb		0.000

ETHERS6

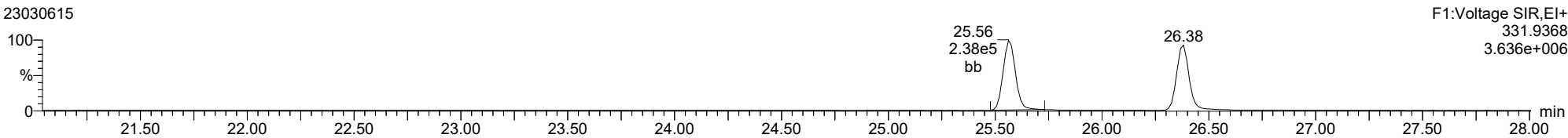
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.57	9.362e1					2.4	NO		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

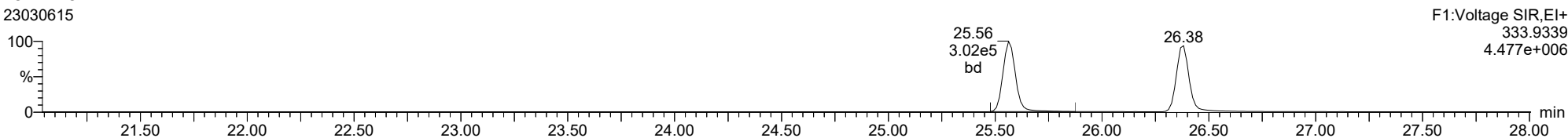
13C-1234-TCDD

23030615



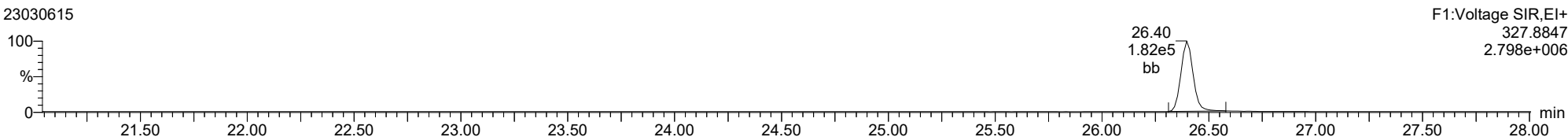
13C-1234-TCDD

23030615



37CL-2378-TCDD

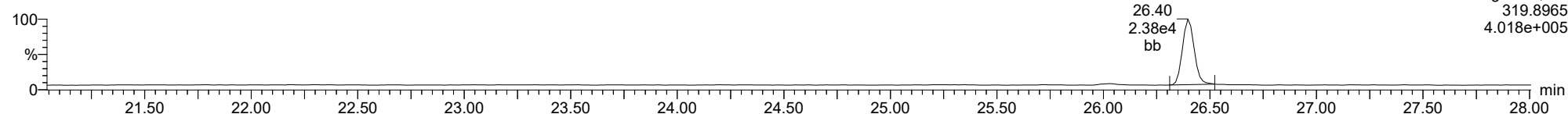
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

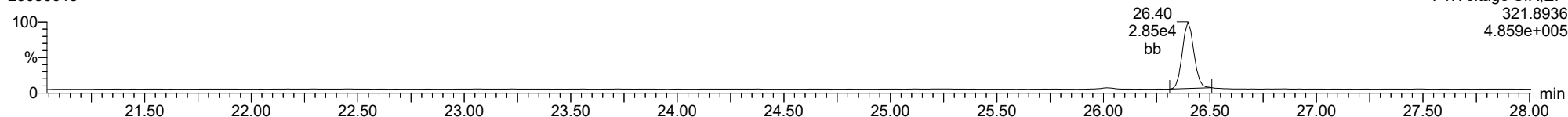
2378-TCDD

23030615



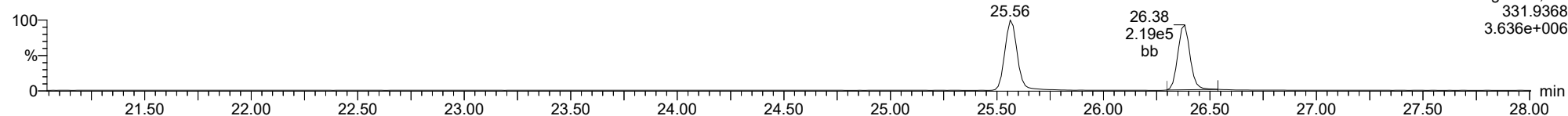
2378-TCDD

23030615



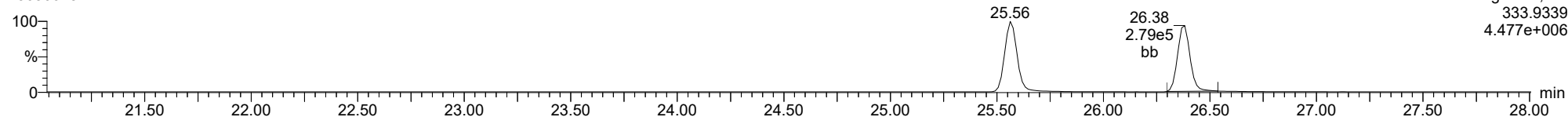
13C-2378-TCDD

23030615



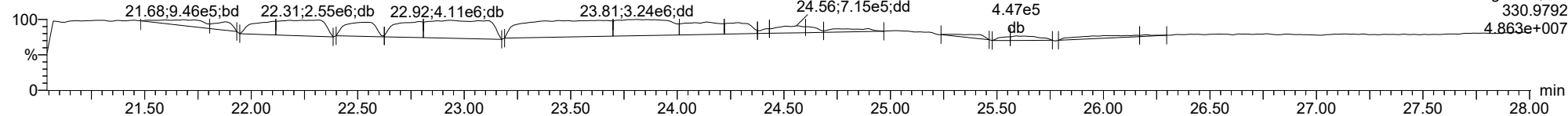
13C-2378-TCDD

23030615



FUNCTION1 PFK

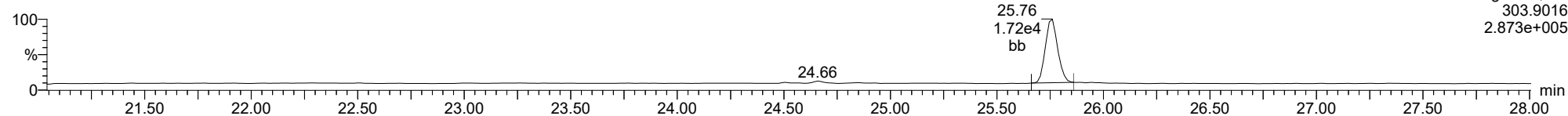
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

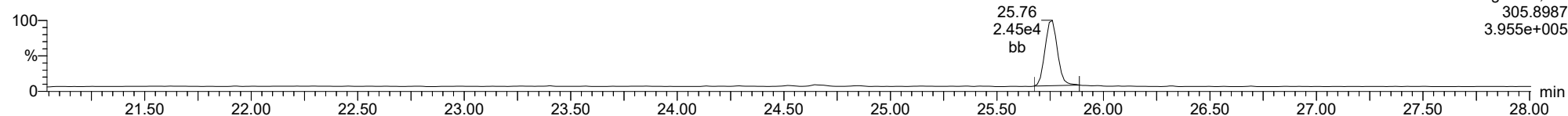
2378-TCDF

23030615



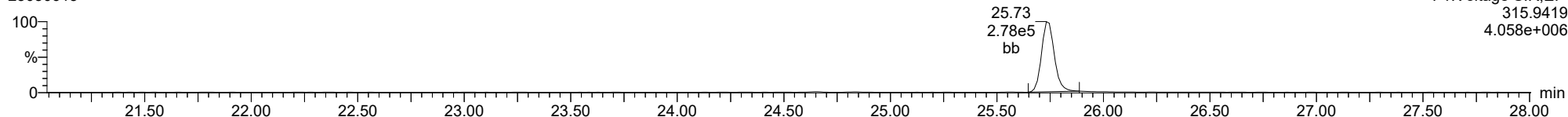
2378-TCDF

23030615



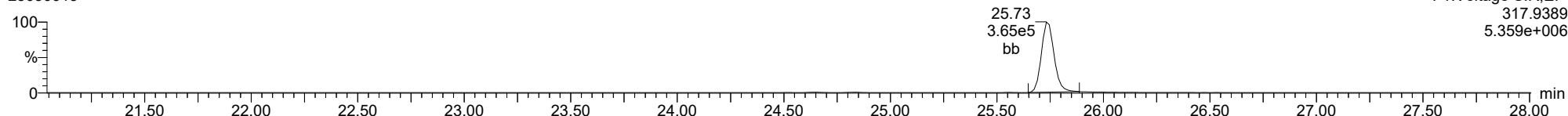
13C-2378-TCDF

23030615



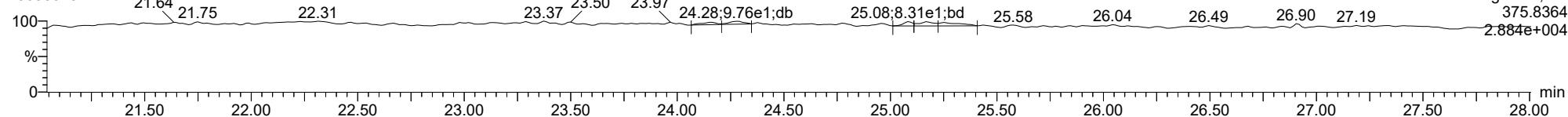
13C-2378-TCDF

23030615



FUNCTION1 HXCDPE

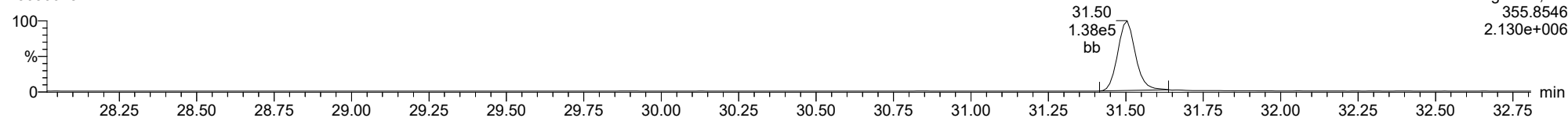
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

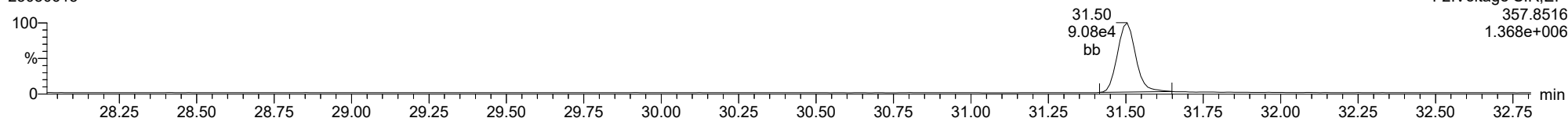
12378-PeCDD

23030615



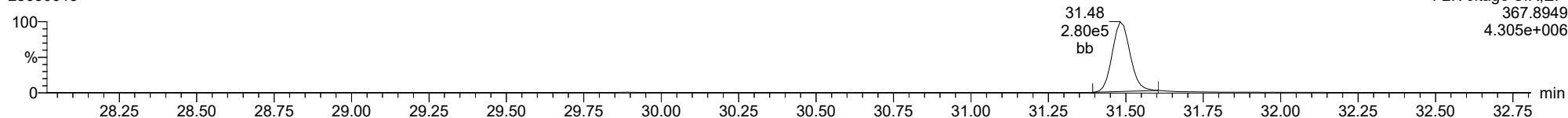
12378-PeCDD

23030615



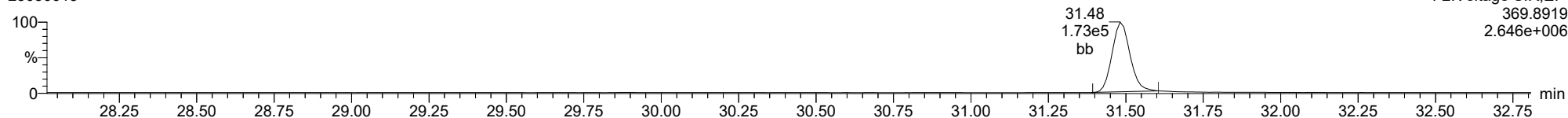
13C-12378-PeCDD

23030615



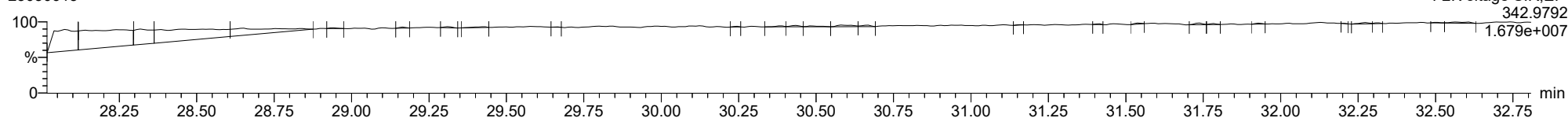
13C-12378-PeCDD

23030615



FUNCTION2 PFK

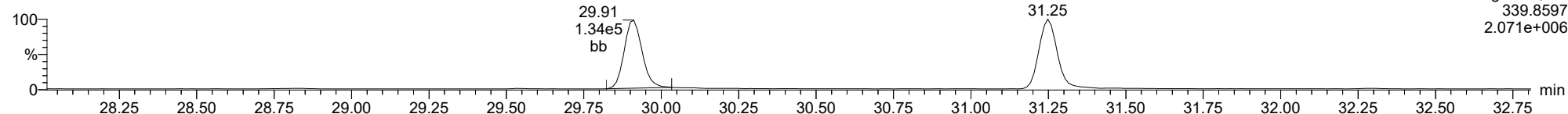
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

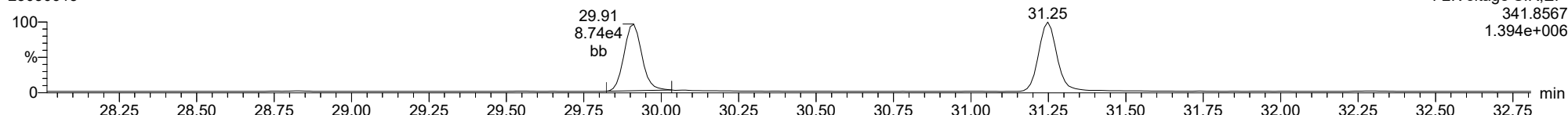
12378-PeCDF

23030615



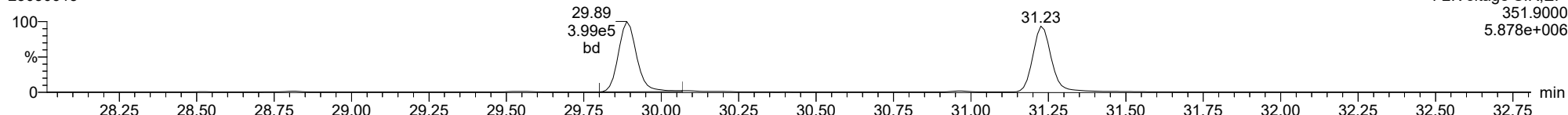
12378-PeCDF

23030615



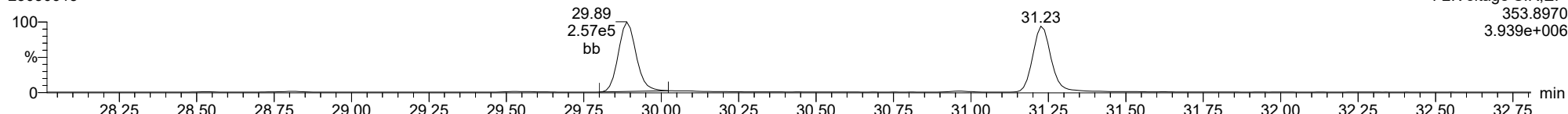
13C-12378-PeCDF

23030615



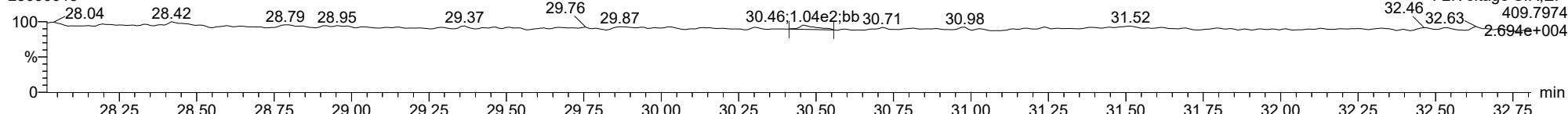
13C-12378-PeCDF

23030615



FUNCTION2 HPCDPE

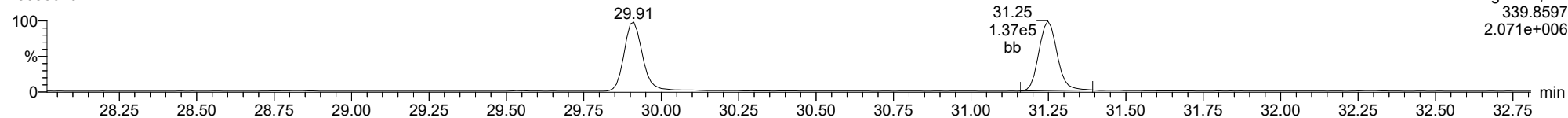
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

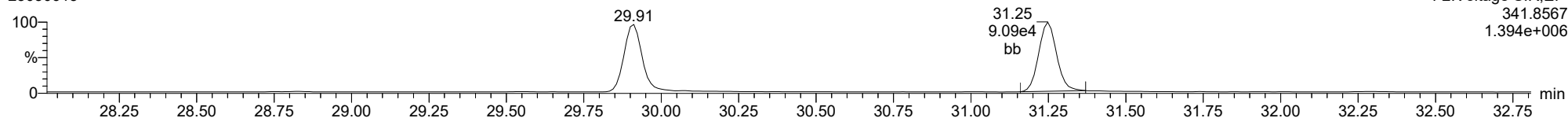
23478-PeCDF

23030615



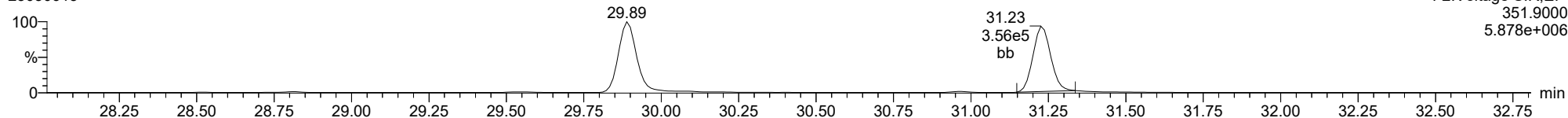
23478-PeCDF

23030615



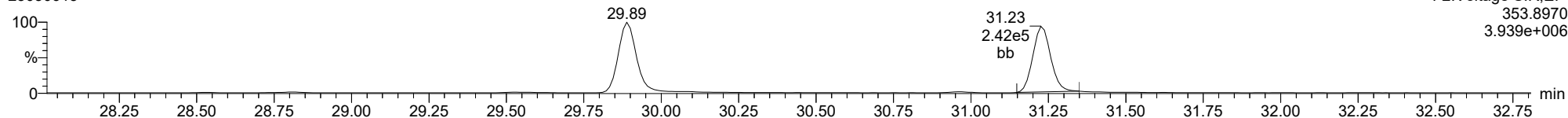
13C-23478-PeCDF

23030615



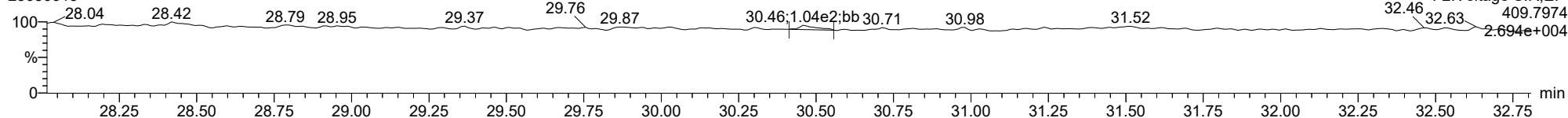
13C-23478-PeCDF

23030615



FUNCTION2 HPCDPE

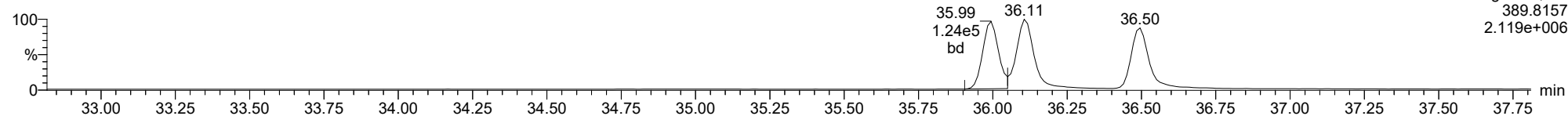
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

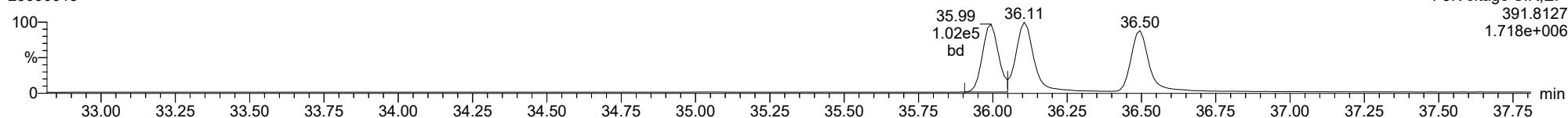
123478-HxCDD

23030615



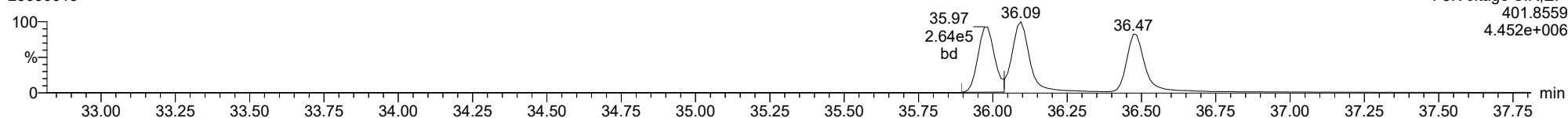
123478-HxCDD

23030615



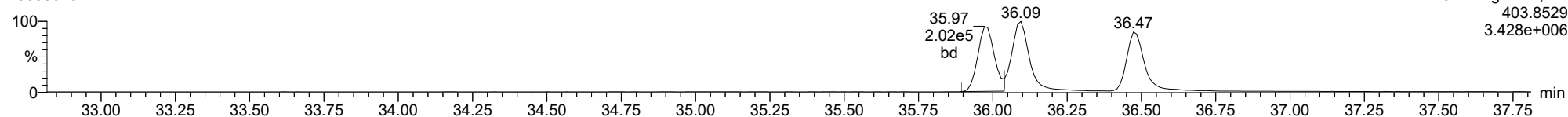
13C-123478-HxCDD

23030615



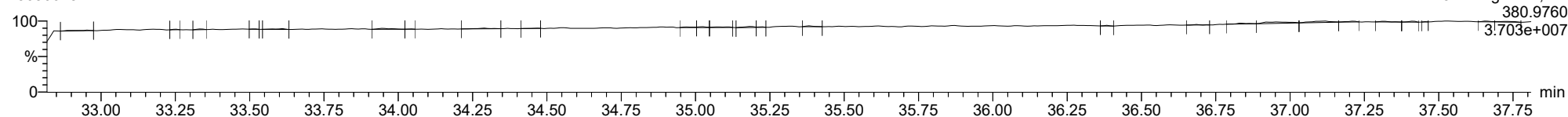
13C-123478-HxCDD

23030615



FUNCTION3 PFK

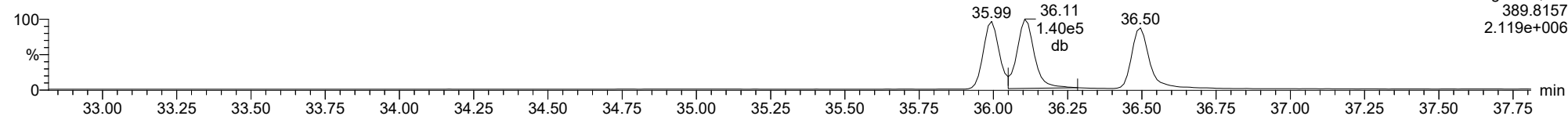
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

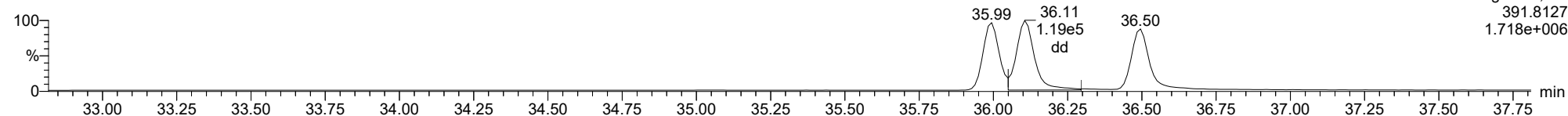
123678-HxCDD

23030615



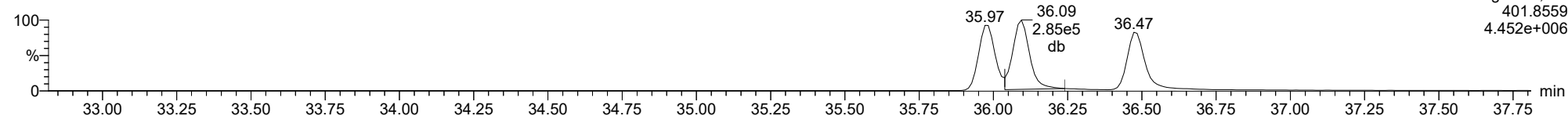
123678-HxCDD

23030615



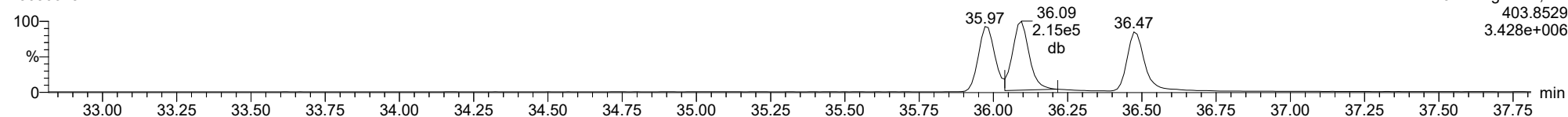
13C-123678-HxCDD

23030615



13C-123678-HxCDD

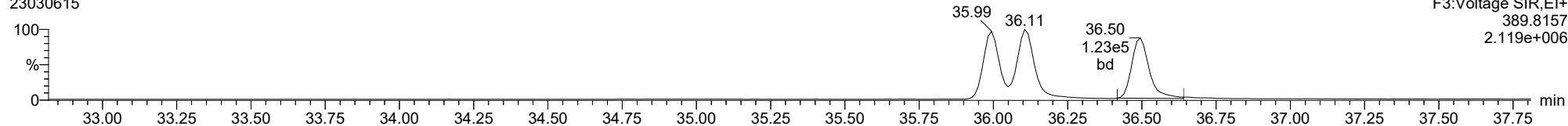
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

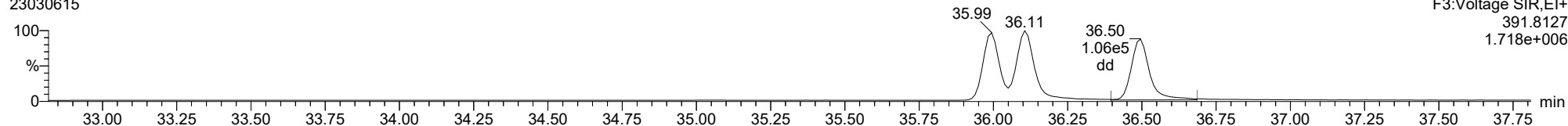
123789-HxCDD

23030615



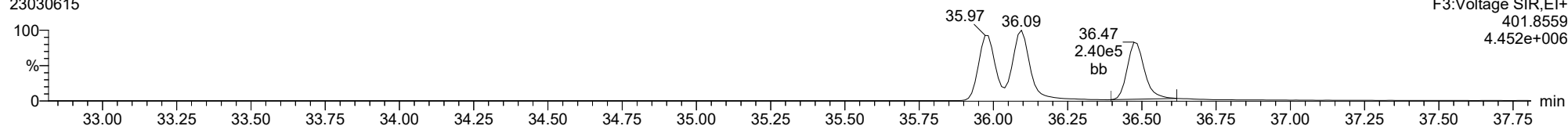
123789-HxCDD

23030615



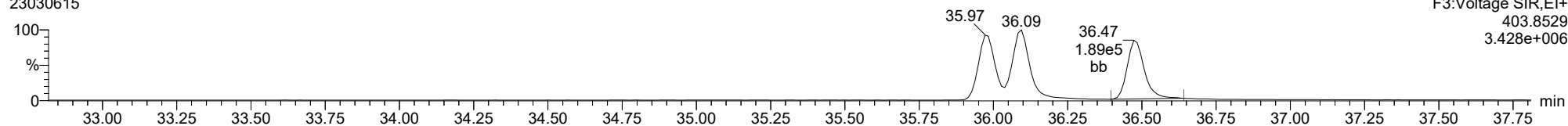
13C-123789-HxCDD

23030615



13C-123789-HxCDD

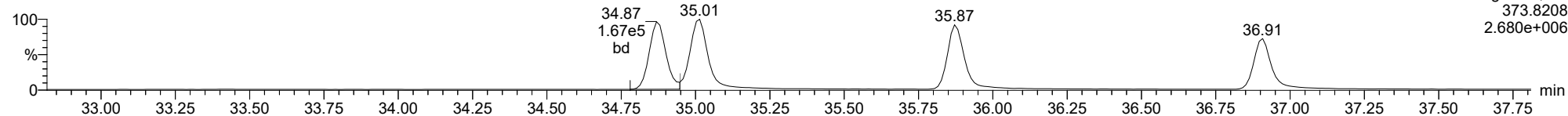
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

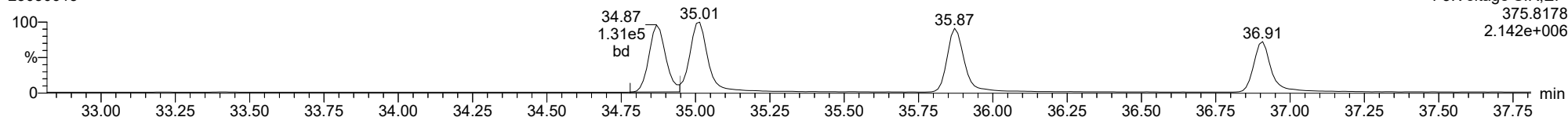
123478-HxCDF

23030615



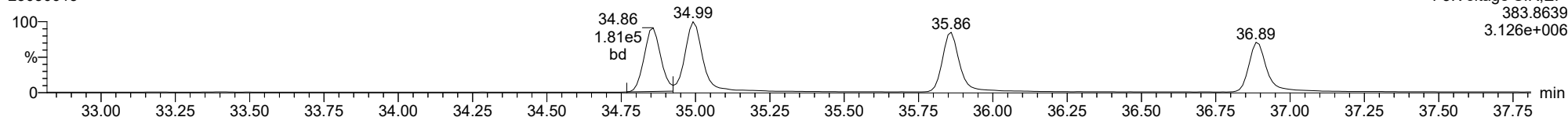
123478-HxCDF

23030615



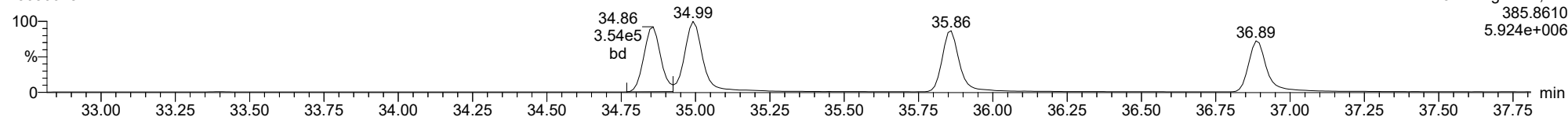
13C-123478-HxCDF

23030615



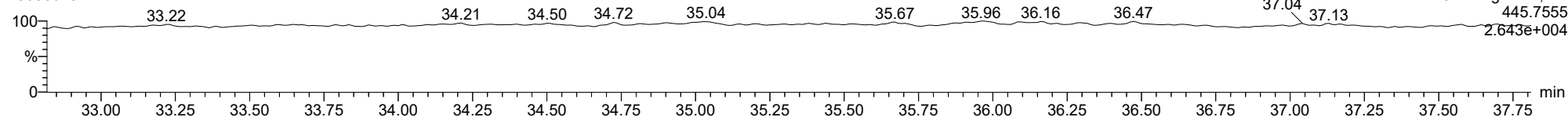
13C-123478-HxCDF

23030615



FUNCTION3 OCDPE

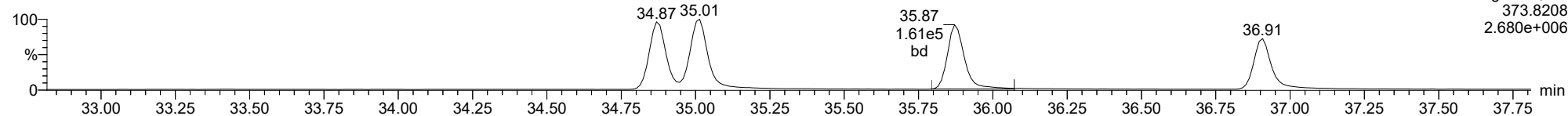
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

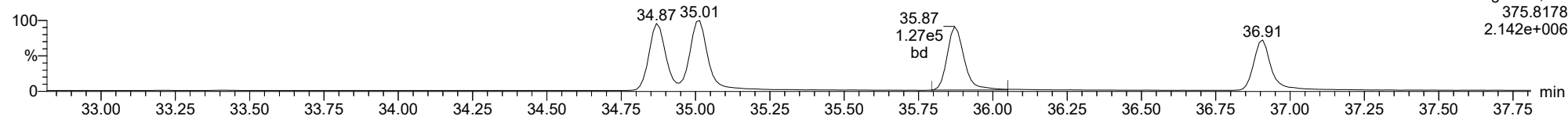
234678-HxCDF

23030615



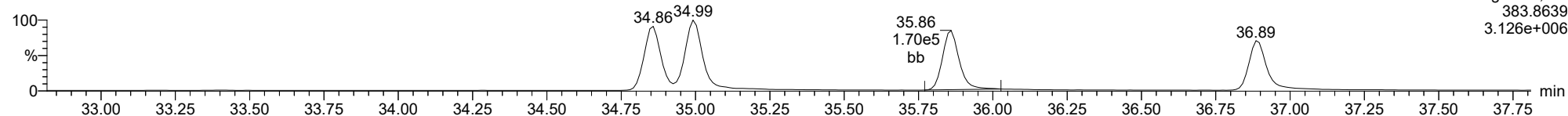
234678-HxCDF

23030615



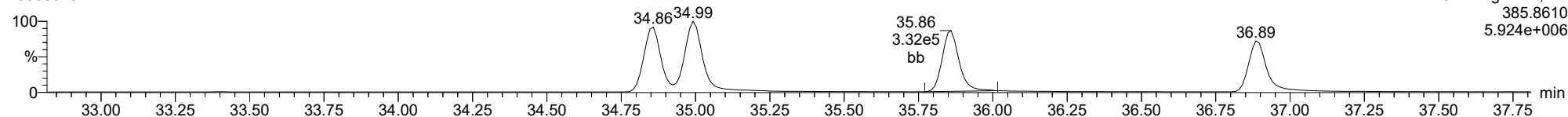
13C-234678-HxCDF

23030615



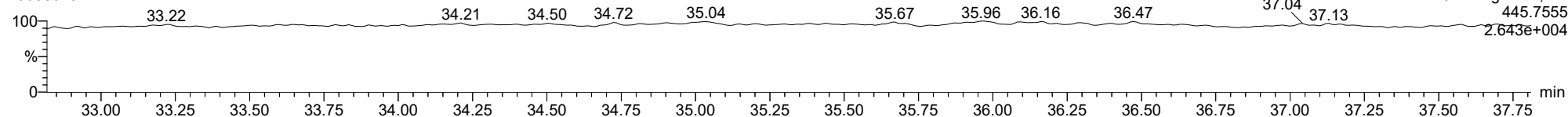
13C-234678-HxCDF

23030615



FUNCTION3 OCDPE

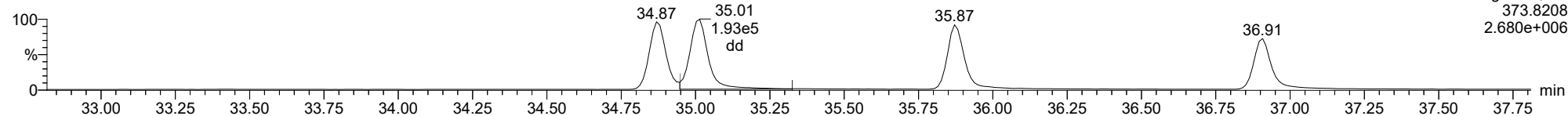
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

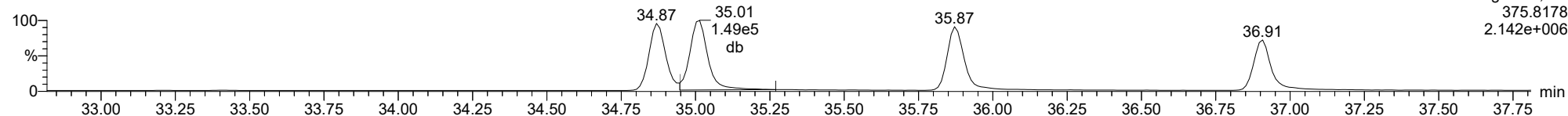
123678-HxCDF

23030615



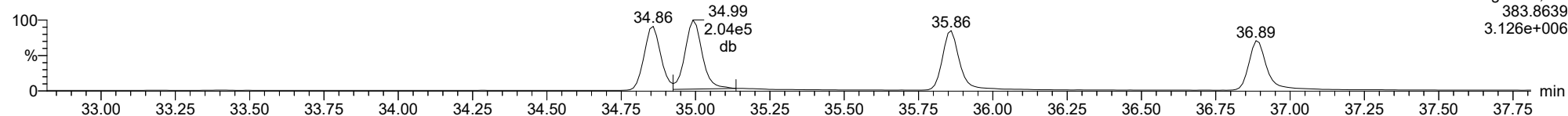
123678-HxCDF

23030615



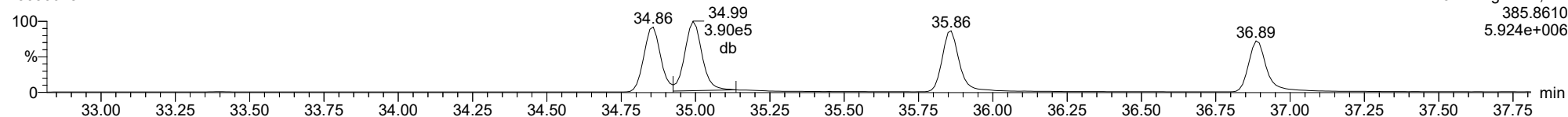
13C-123678-HxCDF

23030615



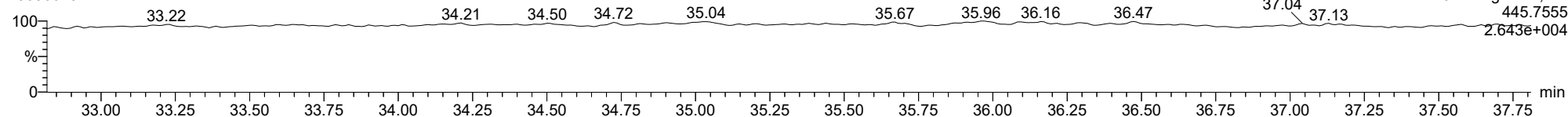
13C-123678-HxCDF

23030615



FUNCTION3 OCDPE

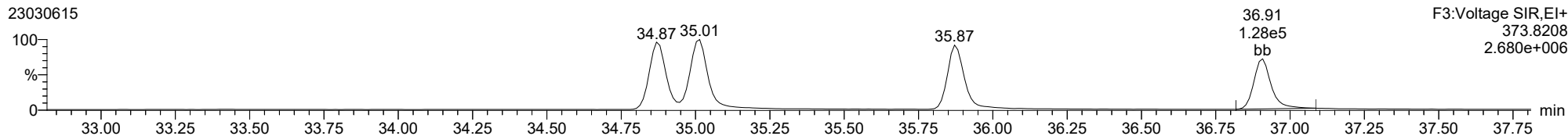
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

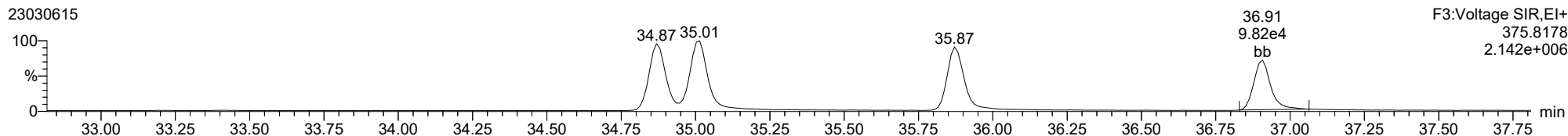
123789-HxCDF

23030615



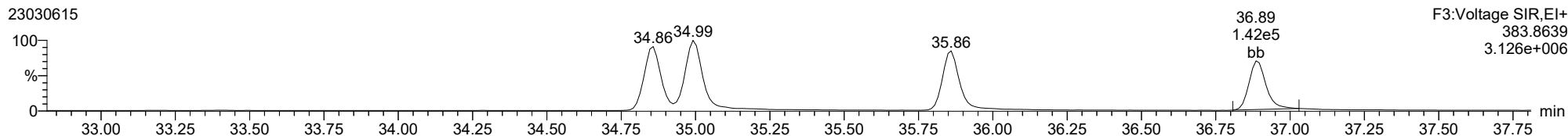
123789-HxCDF

23030615



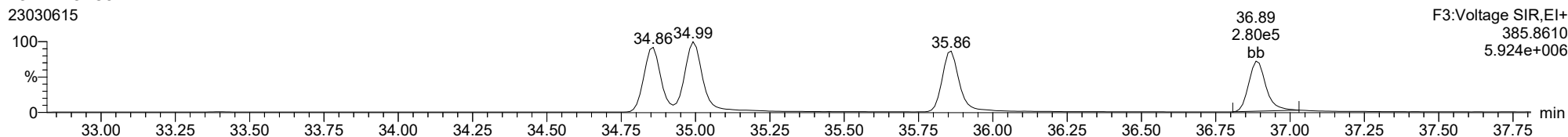
13C-123789-HxCDF

23030615



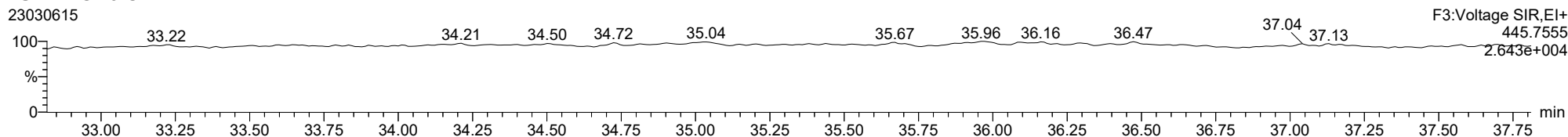
13C-123789-HxCDF

23030615



FUNCTION3 OCDPE

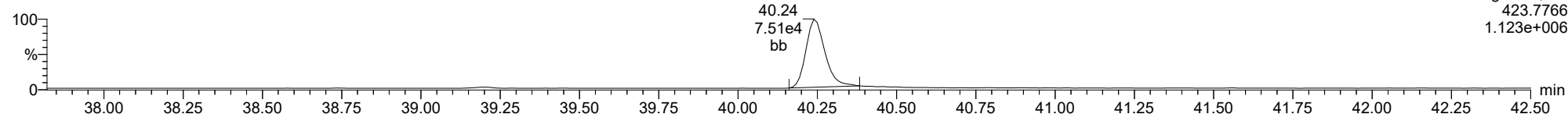
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

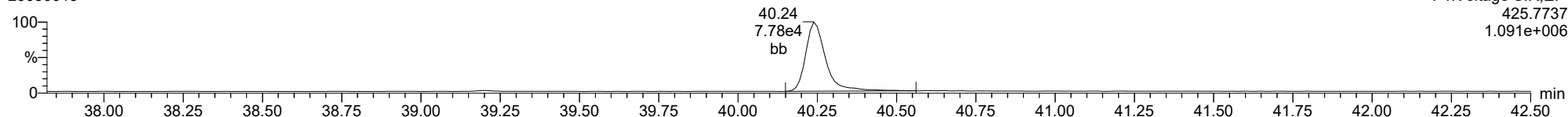
1234678-HpCDD

23030615



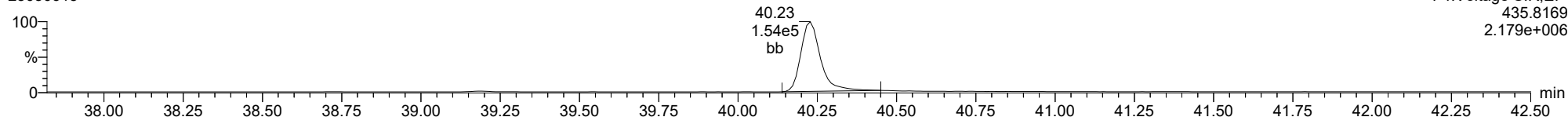
1234678-HpCDD

23030615



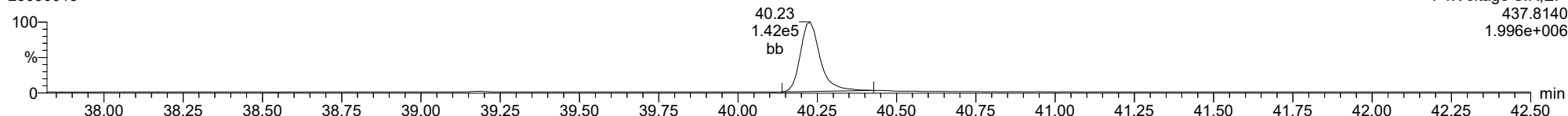
13C-1234678-HpCDD

23030615



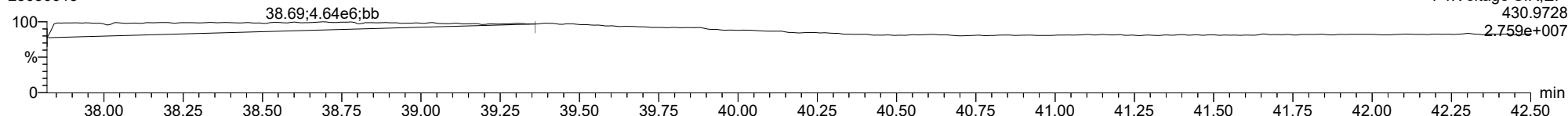
13C-1234678-HpCDD

23030615



FUNCTION4 PFK

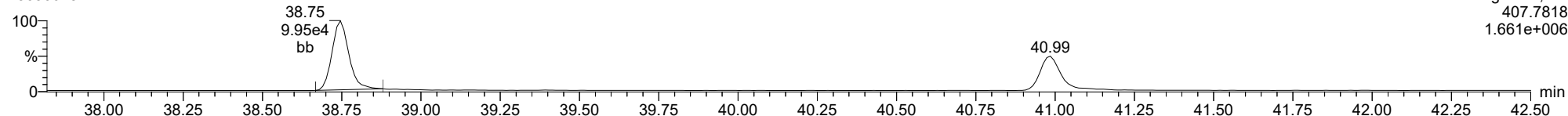
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

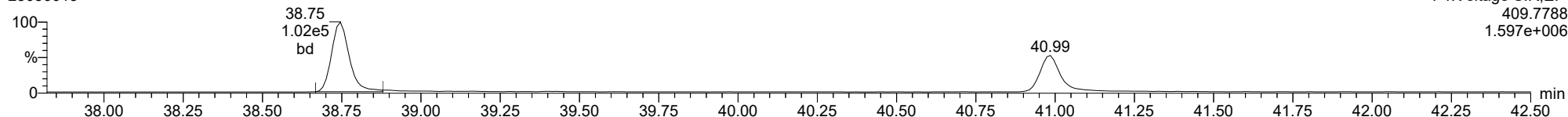
23030615



F4:Voltage SIR,EI+
407.7818
1.661e+006

1234678-HpCDF

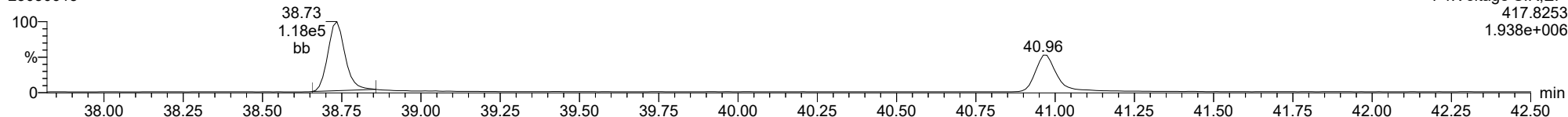
23030615



F4:Voltage SIR,EI+
409.7788
1.597e+006

13C-1234678-HpCDF

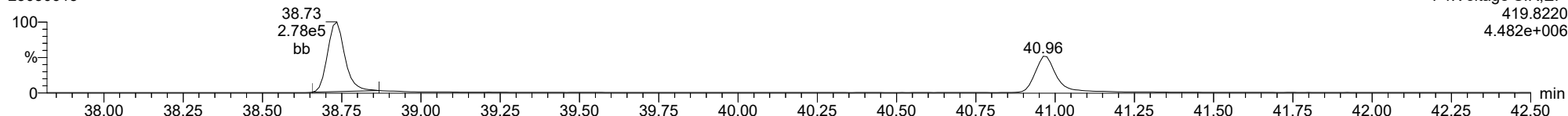
23030615



F4:Voltage SIR,EI+
417.8253
1.938e+006

13C-1234678-HpCDF

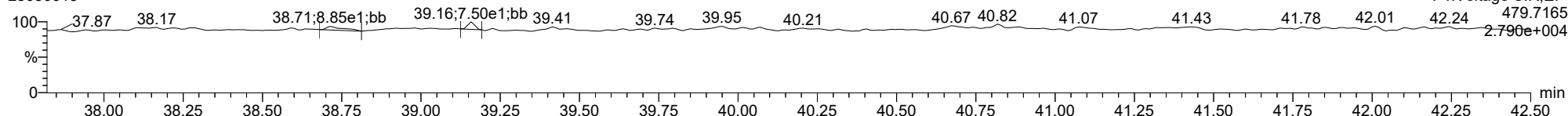
23030615



F4:Voltage SIR,EI+
419.8220
4.482e+006

FUNCTION4 NCDPE

23030615

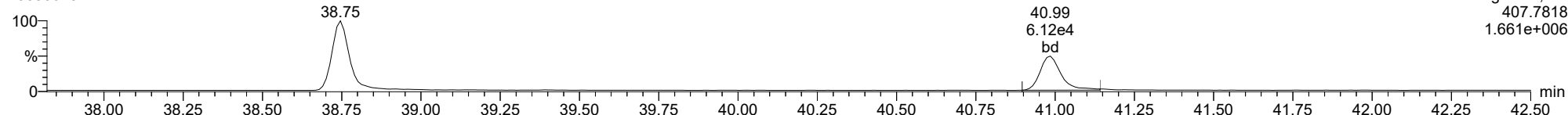


F4:Voltage SIR,EI+
479.7165
2.790e+004

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

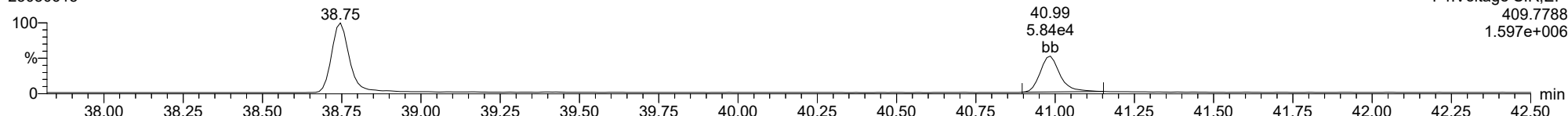
1234789-HpCDF

23030615



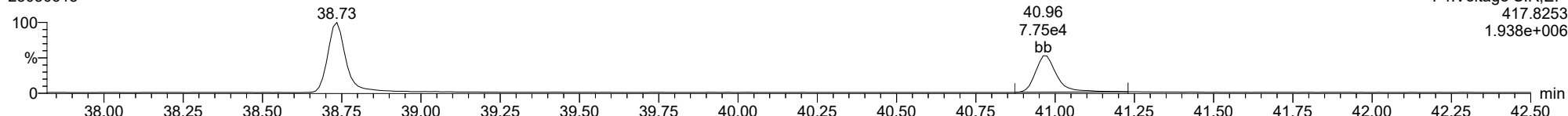
1234789-HpCDF

23030615



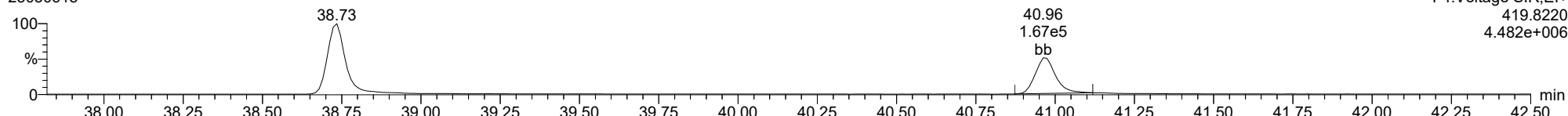
13C-1234789-HpCDF

23030615



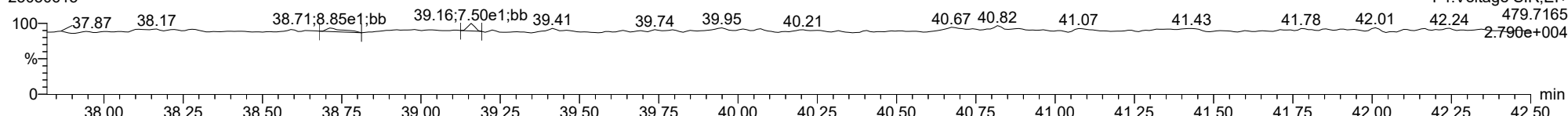
13C-1234789-HpCDF

23030615



FUNCTION4 NCDPE

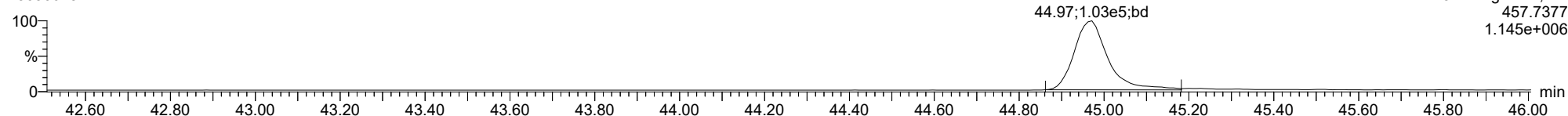
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

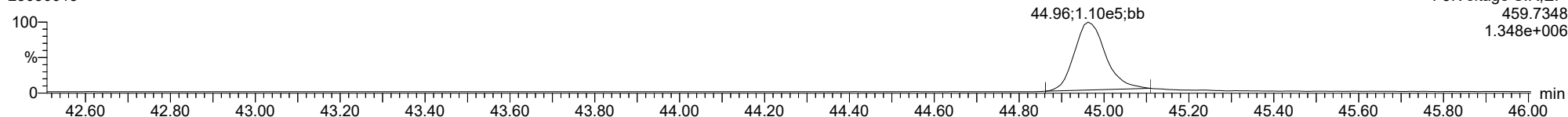
OCDD

23030615



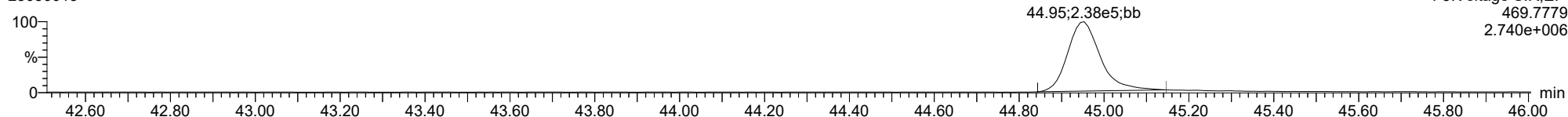
OCDD

23030615



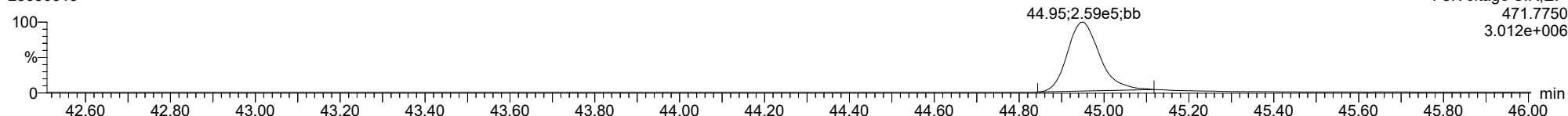
13C-OCDD

23030615



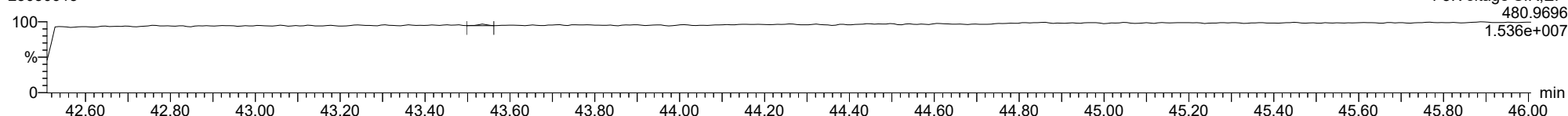
13C-OCDD

23030615

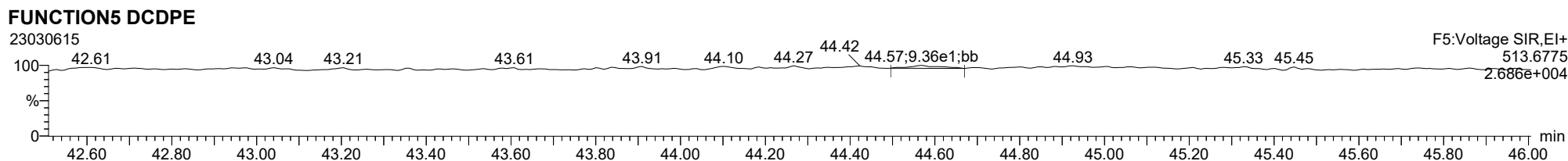
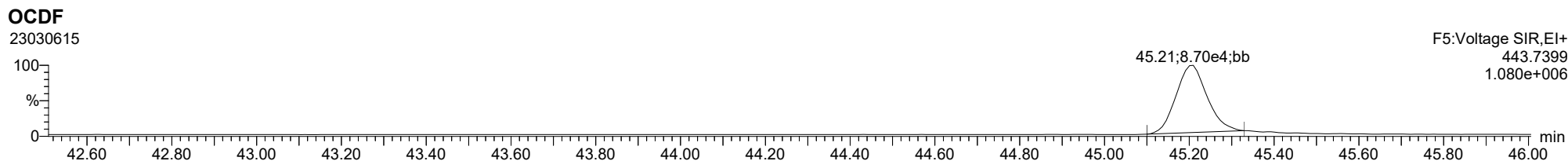
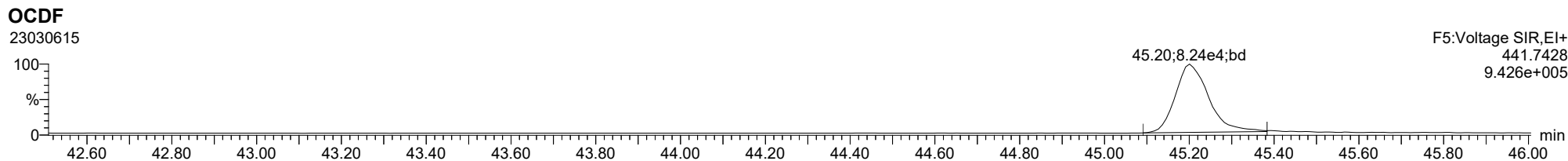


FUNCTION5 PFK

23030615



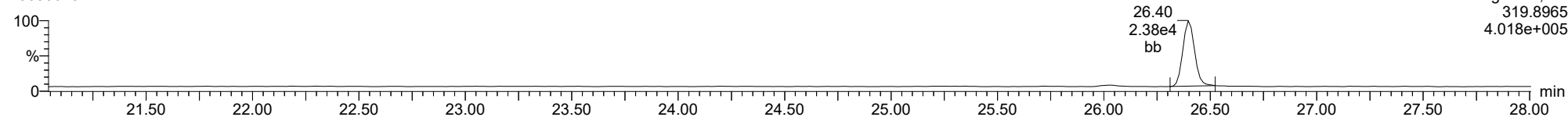
ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

Total-tetradioxins

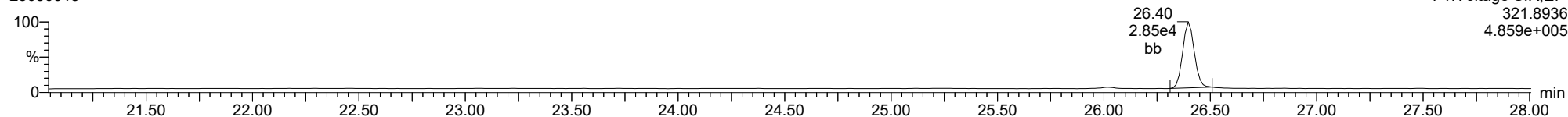
23030615



F1:Voltage SIR,EI+
319.8936
4.018e+005

Total-tetradioxins

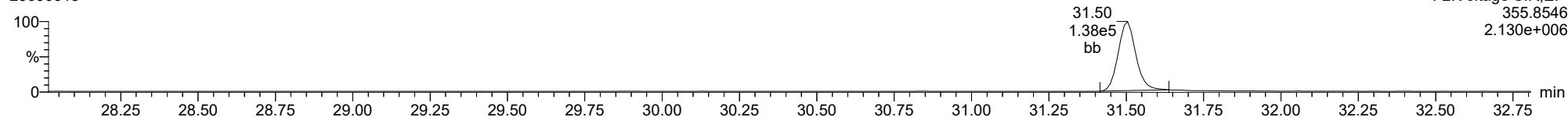
23030615



F1:Voltage SIR,EI+
321.8936
4.859e+005

Total-pentadioxins

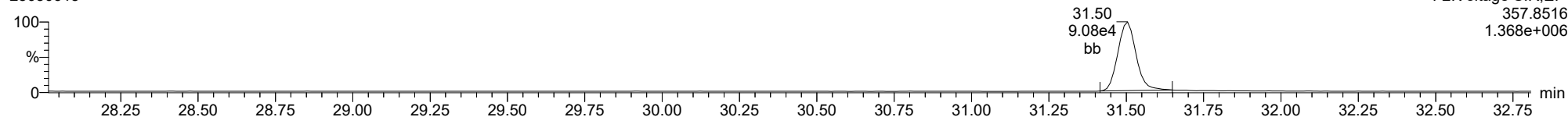
23030615



F2:Voltage SIR,EI+
355.8546
2.130e+006

Total-pentadioxins

23030615

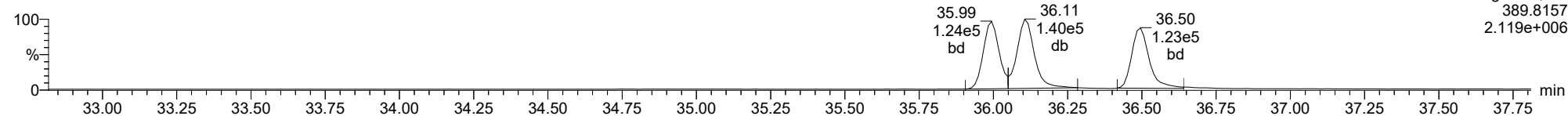


F2:Voltage SIR,EI+
357.8516
1.368e+006

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

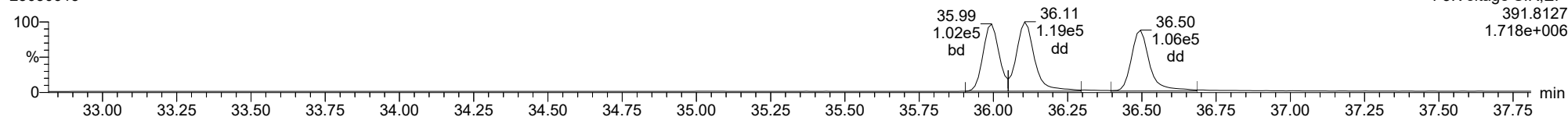
Total-hexadioxins

23030615



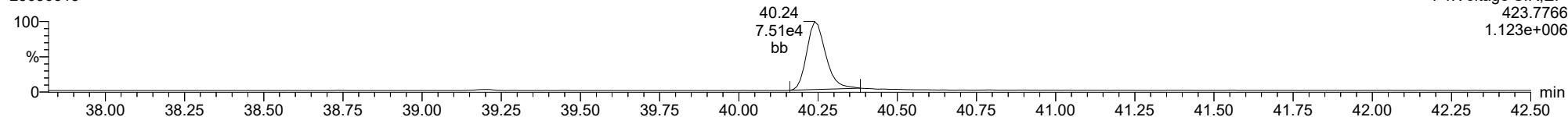
Total-hexadioxins

23030615



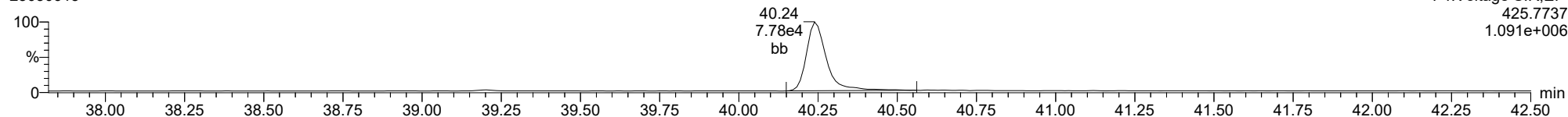
Total-heptadioxins

23030615



Total-heptadioxins

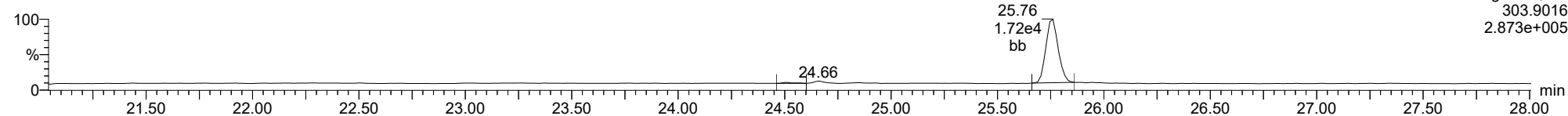
23030615



ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans

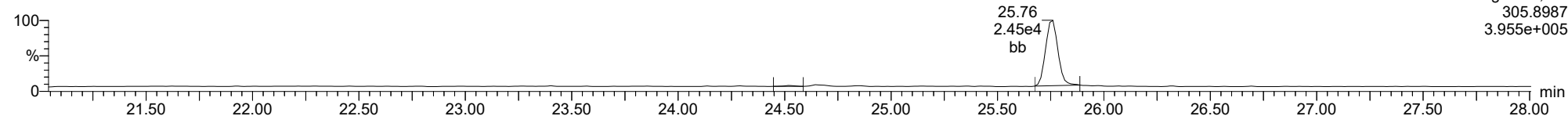
23030615



F1:Voltage SIR,EI+
303.9016
2.873e+005

Total-tetrafurans

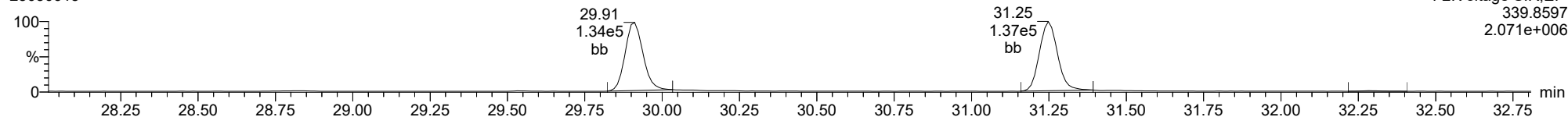
23030615



F1:Voltage SIR,EI+
305.8987
3.955e+005

Total-pentafurans

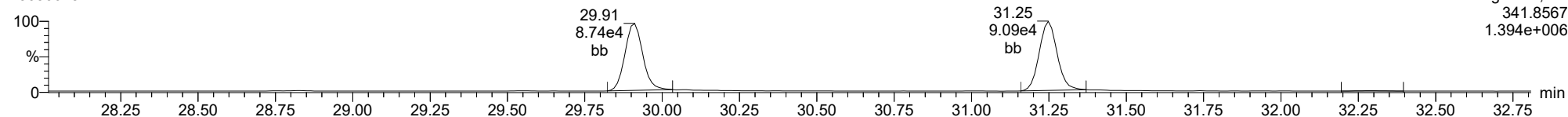
23030615



F2:Voltage SIR,EI+
339.8597
2.071e+006

Total-pentafurans

23030615

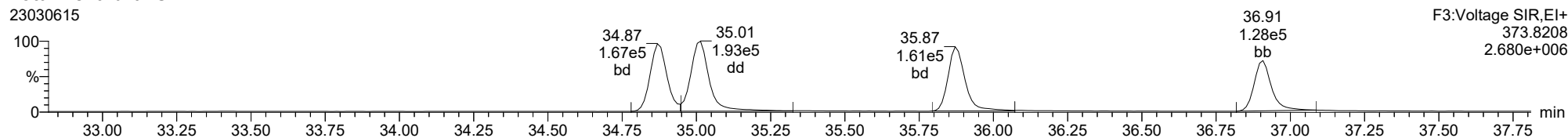


F2:Voltage SIR,EI+
341.8567
1.394e+006

ID: BLA0398-BS1, Name: 23030615, Date: 06-Mar-2023, Time: 21:44:12, Conditions: AUTOSPEC01, User: pk

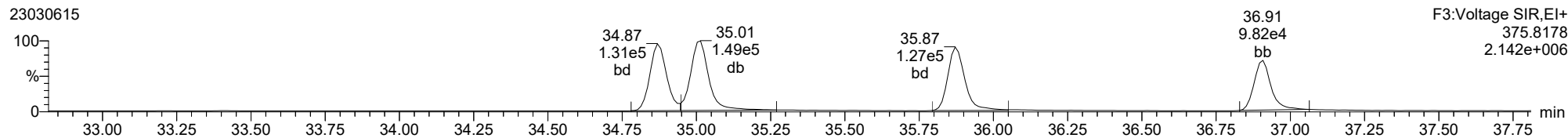
Total-hexa-furans

23030615



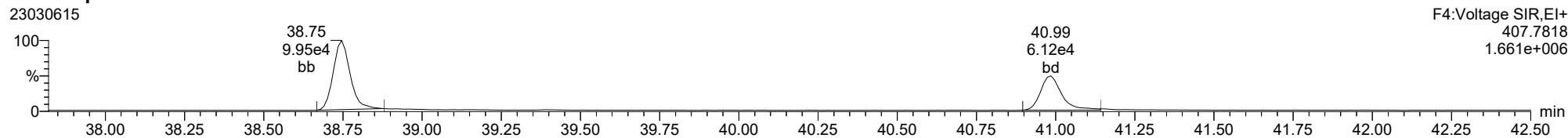
Total-hexa-furans

23030615



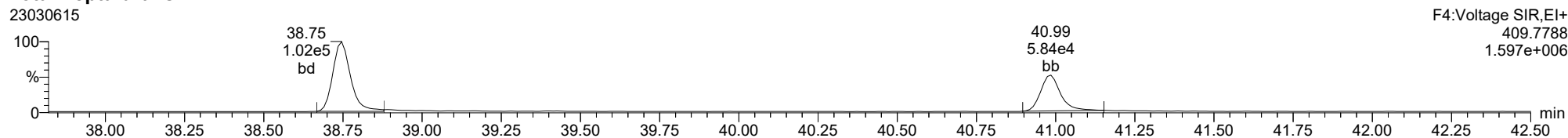
Total-hepta-furans

23030615



Total-hepta-furans

23030615





STANDARD REFERENCE MATERIAL RECOVERY
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0398-SRM1

Batch: BLA0398

Initial/Final: 10 g / 20 uL

Preparation: EPA 1613

Analyzed: 03/06/2023 22:33

Standard ID: K011479

Expires: 06/11/2023

Standard Lot#: PSRM0171

Description: Puget Sound reference-SRM

ANALYTE	TRUE (ng/kg wet)	FOUND (ng/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,3,7,8-TCDF	1.1100	0.856	0.144	1.00	J	77.1	50 - 150
2,3,7,8-TCDD	1.0500	0.796	0.150	1.00	J	75.8	50 - 150
1,2,3,7,8-PeCDF	1.2300	1.26	0.240	1.00		102	50 - 150
2,3,4,7,8-PeCDF	1.0700	0.821	0.220	1.00	J	76.7	50 - 150
1,2,3,7,8-PeCDD	1.0800	1.13	0.170	1.00	B	105	50 - 150
1,2,3,4,7,8-HxCDF	3.0200	2.29	0.280	1.00	B	76.0	50 - 150
1,2,3,6,7,8-HxCDF	1.0900	0.918	0.200	1.00	J	84.2	50 - 150
2,3,4,6,7,8-HxCDF	1.8300	1.61	0.170	1.00		88.2	50 - 150
1,2,3,7,8,9-HxCDF	0.51100	0.721	0.190	1.00	J	141	50 - 150
1,2,3,4,7,8-HxCDD	1.5900	1.48	0.170	1.00		93.1	50 - 150
1,2,3,6,7,8-HxCDD	3.8800	3.43	0.180	1.00		88.4	50 - 150
1,2,3,7,8,9-HxCDD	3.0400	2.55	0.220	1.00		84.0	50 - 150
1,2,3,4,6,7,8-HpCDF	18.700	16.7	0.210	1.00		89.5	50 - 150
1,2,3,4,7,8,9-HpCDF	1.6300	1.44	0.240	1.00		88.1	50 - 150
1,2,3,4,6,7,8-HpCDD	90.600	85.7	0.560	2.50	B	94.6	50 - 150
OCDF	58.400	49.2	1.10	2.50	B	84.3	50 - 150
OCDD	811.00	660	4.60	10.0	B	81.3	50 - 150

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: BLA0398-SRM1, **Name:** 23030616, **Date:** 06-Mar-2023, **Time:** 22:33:18, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.760	1.001	1.466e3	1.879e3	0.702	0.780	0.770	1848	951	1.92e4	2.68e4	10.4	28.2	NO	dd	dd	0.428
12378-PeCDF	29.911	1.001	2.540e3	1.698e3	0.679	1.495	1.550	1856	1921	3.14e4	2.43e4	16.9	12.6	NO	bd	bb	0.630
23478-PeCDF	31.259	1.001	1.779e3	1.287e3	0.786	1.382	1.550	1856	1921	2.64e4	1.86e4	14.2	9.7	NO	db	db	0.410
123478-HxCDF	34.880	1.001	5.502e3	4.491e3	1.166	1.225	1.240	1050	843	8.89e4	6.87e4	84.6	81.5	NO	bd	dd	1.147
234678-HxCDF	35.872	1.000	3.662e3	2.634e3	1.140	1.390	1.240	1050	843	4.27e4	3.25e4	40.7	38.5	NO	bb	bb	0.807
123678-HxCDF	35.014	1.000	2.321e3	1.785e3	1.091	1.301	1.240	1050	843	3.30e4	2.61e4	31.4	30.9	NO	db	db	0.459
123789-HxCDF	36.886	1.000	1.443e3	1.199e3	1.137	1.204	1.240	1050	843	1.74e4	1.49e4	16.6	17.6	NO	bb	bb	0.361
1234678-HpCDF	38.746	1.000	2.301e4	2.269e4	1.003	1.014	1.050	1261	1028	3.67e5	3.77e5	291.3	366.6	NO	bb	bb	8.369
1234789-HpCDF	40.986	1.000	1.891e3	1.636e3	0.953	1.156	1.050	1261	1028	3.26e4	2.60e4	25.8	25.3	NO	bb	bb	0.718
OCDF	45.209	1.005	4.428e4	5.214e4	0.778	0.849	0.890	550	1053	5.06e5	5.72e5	921.0	543.2	NO	bd	bd	24.606
2378-TCDD	26.396	1.001	1.763e3	2.373e3	1.149	0.743	0.770	1278	600	2.81e4	3.78e4	22.0	63.0	NO	bd	bd	0.398
12378-PeCDD	31.504	1.000	2.529e3	1.464e3	1.022	1.727	1.550	1030	1438	3.33e4	2.57e4	32.3	17.9	NO	bb	bb	0.566
123478-HxCDD	36.005	1.000	2.441e3	1.874e3	0.996	1.303	1.240	1225	1021	4.21e4	3.14e4	34.4	30.7	NO	bd	bd	0.740
123678-HxCDD	36.128	1.001	5.933e3	4.667e3	1.001	1.271	1.240	1225	1021	9.19e4	6.77e4	75.0	66.3	NO	dd	dd	1.715
123789-HxCDD	36.507	1.011	3.753e3	3.215e3	0.907	1.167	1.240	1225	1021	6.26e4	4.83e4	51.1	47.4	NO	bb	bb	1.277
1234678-HpCDD	40.250	1.001	1.275e5	1.170e5	1.039	1.090	1.050	1763	2356	1.86e6	1.77e6	1054.4	752.6	NO	bd	bb	42.870
OCDD	44.972	1.000	7.021e5	8.265e5	0.920	0.849	0.890	1491	1599	8.79e6	1.04e7	5894.3	6508.8	NO	bb	bb	329.822
13C-2378-TCDF	25.732	1.007	4.788e5	6.352e5	1.620	0.754	0.770	2022	1258	7.12e6	9.47e6	3523.0	7527.8	NO	bb	bb	91.987
13C-12378-PeCDF	29.889	1.169	5.954e5	3.951e5	1.240	1.507	1.550	2444	1753	8.57e6	5.74e6	3506.5	3273.4	NO	bd	bd	106.829
13C-23478-PeCDF	31.237	1.222	5.686e5	3.822e5	1.118	1.487	1.550	2444	1753	8.31e6	5.63e6	3398.6	3210.4	NO	bb	bb	113.798
13C-123478-HxCDF	34.858	0.955	2.494e5	4.978e5	1.168	0.501	0.510	1517	1876	3.92e6	7.75e6	2582.1	4131.3	NO	bd	bd	109.382
13C-123678-HxCDF	35.003	0.959	2.642e5	5.560e5	1.386	0.475	0.510	1517	1876	3.92e6	7.68e6	2586.1	4093.1	NO	db	db	101.177
13C-234678-HxCDF	35.872	0.983	2.300e5	4.546e5	1.129	0.506	0.510	1517	1876	3.50e6	6.82e6	2307.8	3637.1	NO	bb	bb	103.688
13C-123789-HxCDF	36.886	1.011	2.161e5	4.280e5	0.932	0.505	0.510	1517	1876	3.48e6	6.98e6	2291.7	3718.7	NO	bb	bb	118.226
13C-1234678-HpCDF	38.735	1.061	1.679e5	3.766e5	0.895	0.446	0.440	1571	1928	2.76e6	6.28e6	1756.6	3257.7	NO	bb	bb	104.024
13C-1234789-HpCDF	40.974	1.123	1.472e5	3.681e5	0.770	0.400	0.440	1571	1928	2.11e6	4.91e6	1344.5	2548.5	NO	bb	bd	114.498
13C-1234-TCDD	25.562	0.000	3.309e5	4.166e5	1.000	0.794	0.770	1489	1033	5.14e6	6.45e6	3454.3	6239.4	NO	bb	bb	100.000
13C-2378-TCDD	26.382	1.032	4.004e5	5.040e5	1.152	0.794	0.770	1489	1033	5.92e6	7.43e6	3975.7	7188.0	NO	bb	bb	104.996
13C-12378-PeCDD	31.493	1.232	4.260e5	2.641e5	0.829	1.613	1.550	1273	1025	6.27e6	3.89e6	4925.7	3794.3	NO	bb	bb	111.405
13C-123478-HxCDD	35.994	0.986	3.322e5	2.532e5	0.995	1.312	1.240	1431	1057	5.32e6	4.05e6	3718.1	3834.8	NO	bd	bd	100.624
13C-123678-HxCDD	36.106	0.989	3.459e5	2.715e5	1.157	1.274	1.240	1431	1057	5.31e6	4.19e6	3709.8	3960.0	NO	db	db	91.294
13C-1234678-HpCDD	40.228	1.102	2.860e5	2.629e5	0.840	1.088	1.050	1597	1139	4.22e6	3.91e6	2640.4	3432.1	NO	bb	bb	111.746
13C-OCDD	44.963	1.232	4.770e5	5.306e5	0.767	0.899	0.890	1534	1434	5.88e6	6.54e6	3837.0	4561.2	NO	bb	bb	224.535
13C-123789-HxCDD	36.496	0.000	3.299e5	2.548e5	1.000	1.295	1.240	1431	1057	5.34e6	4.14e6	3729.7	3912.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.396	1.033	3.247e5		1.288			1136		4.97e6		4371.0			bb		33.733

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1848	951								
1289-TCDF					0.678		0.770	1848	951								
13468-PECDF					1.246		1.550	679	882								
12389-PECDF					0.496		1.550	1856	1921								
123468-HXCDF	33.209	0.953	5.696e3	4.488e3	1.169	1.269	1.240	1050	843	9.13e4	7.10e4	87.0	84.2	NO	bb	bb	1.166
1368-TCDD	23.528	0.892	1.468e3	1.660e3	1.015	0.885	0.770	1278	600	1.96e4	2.51e4	15.4	41.9	NO	bb	bb	0.341
1289-TCDD					0.909		0.770	1278	600								
12479-PECDD	28.830	0.915	3.165e3	2.634e3	2.301	1.202	1.550	1030	1438	3.05e4	2.80e4	29.6	19.4	YES	bb	bb	0.365
12389-PECDD	31.894	1.013	5.451e2	1.743e2	1.184	3.127	1.550	1030	1438	9.41e3	3.80e3	9.1	2.6	YES	bb	bb	0.088
124679-HXCDD	33.989	0.944	1.775e4	1.464e4	1.115	1.212	1.240	1225	1021	2.72e5	2.24e5	222.2	219.7	NO	bb	bb	4.961
1234679-HPCDD	39.203	0.975	1.743e5	1.680e5	1.137	1.038	1.050	1763	2356	2.86e6	2.77e6	1622.4	1176.4	NO	bb	bb	54.859
Total-tetrafurans			1.226e4		0.727			1848		1.78e5							3.638
Total-penta1			1.501e4					679		1.92e5							2.751
Total-pentafurans			6.927e3		0.654			1856		9.20e4							1.749
Total-hexafurans			6.253e4		1.141			1050		9.42e5							13.518
Total-heptafurans			7.390e4		0.978			1261		1.15e6							27.666
Total-Furans			2.160e5		0.922			1848		3.07e6							74.169
Total-tetradioxins			6.107e3		1.024			1278		9.32e4							1.462
Total-pentadioxins			5.554e3		1.502			1030		8.21e4							1.049
Total-hexadioxins			5.338e4		1.005			1225		7.49e5							15.676
Total-heptadioxins			3.019e5		1.088			1763		4.72e6							97.729
Total-Dioxins			1.069e6		1.130			1278		1.44e7							445.739
Total-TEQ			1.285e6					1278		1.75e7							519.907
FUNCTION1 PFK			1.132e6					375345		6.97e6							
FUNCTION2 PFK			2.669e6					176024		4.67e6							0.000
FUNCTION3 PFK			1.484e7					284655		9.38e6							0.000
FUNCTION4 PFK			0.000e0					215931		0.00e0							
FUNCTION5 PFK			5.409e4					156813		2.13e6							
FUNCTION1 HXCD...			1.932e3					558		2.70e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			6.892e2					592		1.32e4							0.000
FUNCTION3 OCDPE			8.510e1					418		1.18e3							0.000
FUNCTION4 NCDPE			8.994e3					408		1.50e5							0.000
FUNCTION5 DCDPE			1.518e2					532		3.53e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.87	7.117e2	1.016e3	0.727	0.70	0.77	5.4	YES	NO	dd	dd	0.213
2	Total-tetrafurans	23.75	8.170e2	1.200e3	0.727	0.68	0.77	6.4	YES	NO	bd	dd	0.249
3	Total-tetrafurans	23.09	1.517e3	2.030e3	0.727	0.75	0.77	12.1	YES	NO	bb	bd	0.438
4	Total-tetrafurans	27.38	6.071e2	7.905e2	0.727	0.77	0.77	5.0	YES	NO	bb	bb	0.173
5	Total-tetrafurans	25.99	1.053e3	1.503e3	0.727	0.70	0.77	8.6	YES	NO	dd	dd	0.316
6	2378-TCDF	25.76	1.466e3	1.879e3	0.702	0.78	0.77	10.4	YES	NO	dd	dd	0.428
7	Total-tetrafurans	24.84	1.606e3	2.335e3	0.727	0.69	0.77	12.5	YES	NO	bb	bb	0.487
8	Total-tetrafurans	24.67	1.209e3	1.626e3	0.727	0.74	0.77	7.6	YES	NO	db	db	0.350
9	Total-tetrafurans	24.50	2.349e3	3.447e3	0.727	0.68	0.77	19.7	YES	NO	dd	dd	0.716
10	Total-tetrafurans	24.43	9.277e2	1.248e3	0.727	0.74	0.77	8.4	YES	NO	dd	dd	0.269

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-penta1	27.19	1.501e4	9.979e3		1.50	1.55	282.5	YES	NO	bb	bd	2.751

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	29.91	2.540e3	1.698e3	0.679	1.50	1.55	16.9	YES	NO	bd	bb	0.630
2	Total-pentafurans	28.49	1.593e3	1.200e3	0.654	1.33	1.55	11.8	YES	NO	dd	dd	0.440
3	23478-PeCDF	31.26	1.779e3	1.287e3	0.786	1.38	1.55	14.2	YES	NO	db	db	0.410
4	Total-pentafurans	31.10	1.015e3	6.923e2	0.654	1.47	1.55	6.6	YES	NO	dd	dd	0.269

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk**HF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.89	1.443e3	1.199e3	1.137	1.20	1.24	16.6	YES	NO	bb	bb	0.361
2	234678-HxCDF	35.87	3.662e3	2.634e3	1.140	1.39	1.24	40.7	YES	NO	bb	bb	0.807
3	123678-HxCDF	35.01	2.321e3	1.785e3	1.091	1.30	1.24	31.4	YES	NO	db	db	0.459
4	123478-HxCDF	34.88	5.502e3	4.491e3	1.166	1.23	1.24	84.6	YES	NO	bd	dd	1.147
5	Total-hexafurans	34.72	8.857e2	6.423e2	1.141	1.38	1.24	15.2	YES	NO	bb	bd	0.185
6	Total-hexafurans	34.26	2.333e4	1.888e4	1.141	1.24	1.24	345.1	YES	NO	bb	bb	5.112
7	Total-hexafurans	33.94	6.662e2	5.036e2	1.141	1.32	1.24	9.0	YES	NO	bb	bb	0.142
8	Total-hexafurans	33.42	1.902e4	1.517e4	1.141	1.25	1.24	267.2	YES	NO	bb	bb	4.140
9	123468-HXCDF	33.21	5.696e3	4.488e3	1.169	1.27	1.24	87.0	YES	NO	bb	bb	1.166

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.75	2.301e4	2.269e4	1.003	1.01	1.05	291.3	YES	NO	bb	bb	8.369
2	1234789-HpCDF	40.99	1.891e3	1.636e3	0.953	1.16	1.05	25.8	YES	NO	bb	bb	0.718
3	Total-heptafurans	39.41	4.900e4	4.729e4	0.978	1.04	1.05	590.5	YES	NO	bd	bb	18.579

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.87	7.117e2	1.016e3	0.727	0.70	0.77	5.4	YES	NO	dd	dd	0.213
2	Total-tetrafurans	23.75	8.170e2	1.200e3	0.727	0.68	0.77	6.4	YES	NO	bd	dd	0.249
3	Total-tetrafurans	23.09	1.517e3	2.030e3	0.727	0.75	0.77	12.1	YES	NO	bb	bd	0.438
4	Total-Furans	21.35	2.282e2	2.957e2	0.922	0.77	0.77	3.0	NO	NO	bb	db	0.051
5	Total-Furans	21.18	6.526e2	9.218e2	0.922	0.71	0.77	6.0	YES	NO	bb	dd	0.153
6	Total-Furans	27.85	1.674e2	2.046e2	0.922	0.82	0.77	1.9	NO	NO	bb	bb	0.036
7	Total-tetrafurans	27.38	6.071e2	7.905e2	0.727	0.77	0.77	5.0	YES	NO	bb	bb	0.173
8	Total-tetrafurans	25.99	1.053e3	1.503e3	0.727	0.70	0.77	8.6	YES	NO	dd	dd	0.316
9	2378-TCDF	25.76	1.466e3	1.879e3	0.702	0.78	0.77	10.4	YES	NO	dd	dd	0.428
10	Total-tetrafurans	24.84	1.606e3	2.335e3	0.727	0.69	0.77	12.5	YES	NO	bb	bb	0.487
11	Total-tetrafurans	24.67	1.209e3	1.626e3	0.727	0.74	0.77	7.6	YES	NO	db	db	0.350
12	Total-tetrafurans	24.50	2.349e3	3.447e3	0.727	0.68	0.77	19.7	YES	NO	dd	dd	0.716
13	Total-tetrafurans	24.43	9.277e2	1.248e3	0.727	0.74	0.77	8.4	YES	NO	dd	dd	0.269
14	12378-PeCDF	29.91	2.540e3	1.698e3	0.679	1.50	1.55	16.9	YES	NO	bd	bb	0.630
15	Total-pentafurans	28.49	1.593e3	1.200e3	0.654	1.33	1.55	11.8	YES	NO	dd	dd	0.440
16	23478-PeCDF	31.26	1.779e3	1.287e3	0.786	1.38	1.55	14.2	YES	NO	db	db	0.410
17	Total-pentafurans	31.10	1.015e3	6.923e2	0.654	1.47	1.55	6.6	YES	NO	dd	dd	0.269
18	123789-HxCDF	36.89	1.443e3	1.199e3	1.137	1.20	1.24	16.6	YES	NO	bb	bb	0.361
19	234678-HxCDF	35.87	3.662e3	2.634e3	1.140	1.39	1.24	40.7	YES	NO	bb	bb	0.807
20	123678-HxCDF	35.01	2.321e3	1.785e3	1.091	1.30	1.24	31.4	YES	NO	db	db	0.459
21	123478-HxCDF	34.88	5.502e3	4.491e3	1.166	1.23	1.24	84.6	YES	NO	bd	dd	1.147
22	Total-hexafurans	34.72	8.857e2	6.423e2	1.141	1.38	1.24	15.2	YES	NO	bb	bd	0.185
23	Total-hexafurans	34.26	2.333e4	1.888e4	1.141	1.24	1.24	345.1	YES	NO	bb	bb	5.112
24	Total-hexafurans	33.94	6.662e2	5.036e2	1.141	1.32	1.24	9.0	YES	NO	bb	bb	0.142
25	Total-hexafurans	33.42	1.902e4	1.517e4	1.141	1.25	1.24	267.2	YES	NO	bb	bb	4.140
26	123468-HXCDF	33.21	5.696e3	4.488e3	1.169	1.27	1.24	87.0	YES	NO	bb	bb	1.166
27	1234678-HpCDF	38.75	2.301e4	2.269e4	1.003	1.01	1.05	291.3	YES	NO	bb	bb	8.369
28	OCDF	45.21	4.428e4	5.214e4	0.778	0.85	0.89	921.0	YES	NO	bd	bd	24.606
29	1234789-HpCDF	40.99	1.891e3	1.636e3	0.953	1.16	1.05	25.8	YES	NO	bb	bb	0.718
30	Total-heptafurans	39.41	4.900e4	4.729e4	0.978	1.04	1.05	590.5	YES	NO	bd	bb	18.579
31	Total-penta1	27.19	1.501e4	9.979e3		1.50	1.55	282.5	YES	NO	bb	bd	2.751

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradiioxins	23.80	8.457e2	1.189e3	1.024	0.71	0.77	11.3	YES	NO	bb	bb	0.220
2	1368-TCDD	23.53	1.468e3	1.660e3	1.015	0.88	0.77	15.4	YES	NO	bb	bb	0.341
3	Total-tetradiioxins	26.51	3.628e2	4.380e2	1.024	0.83	0.77	4.5	YES	NO	db	db	0.086
4	2378-TCDD	26.40	1.763e3	2.373e3	1.149	0.74	0.77	22.0	YES	NO	bd	bd	0.398
5	Total-tetradiioxins	25.59	1.246e3	1.720e3	1.024	0.72	0.77	15.6	YES	NO	dd	bd	0.320
6	Total-tetradiioxins	24.74	4.210e2	4.797e2	1.024	0.88	0.77	4.2	YES	NO	bb	db	0.097

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.50	2.529e3	1.464e3	1.022	1.73	1.55	32.3	YES	NO	bb	bb	0.566
2	Total-pentadiioxins	30.12	1.408e3	9.744e2	1.502	1.44	1.55	24.0	YES	NO	bb	bd	0.230
3	Total-pentadiioxins	29.90	1.618e3	1.005e3	1.502	1.61	1.55	23.3	YES	NO	bb	bb	0.253

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.51	3.753e3	3.215e3	0.907	1.17	1.24	51.1	YES	NO	bb	bb	1.277
2	123678-HxCDD	36.13	5.933e3	4.667e3	1.001	1.27	1.24	75.0	YES	NO	dd	dd	1.715
3	123478-HxCDD	36.01	2.441e3	1.874e3	0.996	1.30	1.24	34.4	YES	NO	bd	bd	0.740
4	Total-hexadiioxins	35.23	2.157e3	1.728e3	1.005	1.25	1.24	30.5	YES	NO	db	db	0.643
5	Total-hexadiioxins	35.13	1.819e4	1.436e4	1.005	1.27	1.24	156.8	YES	NO	bd	bd	5.386
6	Total-hexadiioxins	34.76	3.159e3	2.605e3	1.005	1.21	1.24	41.4	YES	NO	bb	bb	0.954
7	124679-HXCDD	33.99	1.775e4	1.464e4	1.115	1.21	1.24	222.2	YES	NO	bb	bb	4.961

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.20	1.743e5	1.680e5	1.137	1.04	1.05	1622.4	YES	NO	bb	bb	54.859
2	1234678-HpCDD	40.25	1.275e5	1.170e5	1.039	1.09	1.05	1054.4	YES	NO	bd	bb	42.870

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk**Dioxins,TD,PD,HD,HPD,OD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradiioxins	23.80	8.457e2	1.189e3	1.024	0.71	0.77	11.3	YES	NO	bb	bb	0.220
2	1368-TCDD	23.53	1.468e3	1.660e3	1.015	0.88	0.77	15.4	YES	NO	bb	bb	0.341
3	Total-tetradiioxins	26.51	3.628e2	4.380e2	1.024	0.83	0.77	4.5	YES	NO	db	db	0.086
4	2378-TCDD	26.40	1.763e3	2.373e3	1.149	0.74	0.77	22.0	YES	NO	bd	bd	0.398
5	Total-tetradiioxins	25.59	1.246e3	1.720e3	1.024	0.72	0.77	15.6	YES	NO	dd	bd	0.320
6	Total-tetradiioxins	24.74	4.210e2	4.797e2	1.024	0.88	0.77	4.2	YES	NO	bb	db	0.097
7	12378-PeCDD	31.50	2.529e3	1.464e3	1.022	1.73	1.55	32.3	YES	NO	bb	bb	0.566
8	Total-pentadiioxins	30.12	1.408e3	9.744e2	1.502	1.44	1.55	24.0	YES	NO	bb	bd	0.230
9	Total-pentadiioxins	29.90	1.618e3	1.005e3	1.502	1.61	1.55	23.3	YES	NO	bb	bb	0.253
10	123789-HxCDD	36.51	3.753e3	3.215e3	0.907	1.17	1.24	51.1	YES	NO	bb	bb	1.277
11	123678-HxCDD	36.13	5.933e3	4.667e3	1.001	1.27	1.24	75.0	YES	NO	dd	dd	1.715
12	123478-HxCDD	36.01	2.441e3	1.874e3	0.996	1.30	1.24	34.4	YES	NO	bd	bd	0.740
13	Total-hexadiioxins	35.23	2.157e3	1.728e3	1.005	1.25	1.24	30.5	YES	NO	db	db	0.643
14	Total-hexadiioxins	35.13	1.819e4	1.436e4	1.005	1.27	1.24	156.8	YES	NO	bd	bd	5.386
15	Total-hexadiioxins	34.76	3.159e3	2.605e3	1.005	1.21	1.24	41.4	YES	NO	bb	bb	0.954
16	124679-HxCDD	33.99	1.775e4	1.464e4	1.115	1.21	1.24	222.2	YES	NO	bb	bb	4.961
17	1234679-HPCDD	39.20	1.743e5	1.680e5	1.137	1.04	1.05	1622.4	YES	NO	bb	bb	54.859
18	1234678-HpCDD	40.25	1.275e5	1.170e5	1.039	1.09	1.05	1054.4	YES	NO	bd	bb	42.870
19	OCDD	44.97	7.021e5	8.265e5	0.920	0.85	0.89	5894.3	YES	NO	bb	bb	329.822

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetrafurans	23.87	7.117e2	1.016e3	0.727	0.70	0.77	5.4	YES	NO	dd	dd	0.213
2	Total-tetrafurans	23.75	8.170e2	1.200e3	0.727	0.68	0.77	6.4	YES	NO	bd	dd	0.249
3	Total-tetrafurans	23.09	1.517e3	2.030e3	0.727	0.75	0.77	12.1	YES	NO	bb	bd	0.438
4	Total-Furans	21.35	2.282e2	2.957e2	0.922	0.77	0.77	3.0	NO	NO	bb	db	0.051
5	Total-Furans	21.18	6.526e2	9.218e2	0.922	0.71	0.77	6.0	YES	NO	bb	dd	0.153
6	Total-Furans	27.85	1.674e2	2.046e2	0.922	0.82	0.77	1.9	NO	NO	bb	bb	0.036
7	Total-tetrafurans	27.38	6.071e2	7.905e2	0.727	0.77	0.77	5.0	YES	NO	bb	bb	0.173
8	Total-tetrafurans	25.99	1.053e3	1.503e3	0.727	0.70	0.77	8.6	YES	NO	dd	dd	0.316
9	2378-TCDF	25.76	1.466e3	1.879e3	0.702	0.78	0.77	10.4	YES	NO	dd	dd	0.428
10	Total-tetrafurans	24.84	1.606e3	2.335e3	0.727	0.69	0.77	12.5	YES	NO	bb	bb	0.487
11	Total-tetrafurans	24.67	1.209e3	1.626e3	0.727	0.74	0.77	7.6	YES	NO	db	db	0.350
12	Total-tetrafurans	24.50	2.349e3	3.447e3	0.727	0.68	0.77	19.7	YES	NO	dd	dd	0.716
13	Total-tetrafurans	24.43	9.277e2	1.248e3	0.727	0.74	0.77	8.4	YES	NO	dd	dd	0.269
14	12378-PeCDF	29.91	2.540e3	1.698e3	0.679	1.50	1.55	16.9	YES	NO	bd	bb	0.630
15	Total-pentafurans	28.49	1.593e3	1.200e3	0.654	1.33	1.55	11.8	YES	NO	dd	dd	0.440
16	23478-PeCDF	31.26	1.779e3	1.287e3	0.786	1.38	1.55	14.2	YES	NO	db	db	0.410
17	Total-pentafurans	31.10	1.015e3	6.923e2	0.654	1.47	1.55	6.6	YES	NO	dd	dd	0.269
18	123789-HxCDF	36.89	1.443e3	1.199e3	1.137	1.20	1.24	16.6	YES	NO	bb	bb	0.361
19	234678-HxCDF	35.87	3.662e3	2.634e3	1.140	1.39	1.24	40.7	YES	NO	bb	bb	0.807
20	123678-HxCDF	35.01	2.321e3	1.785e3	1.091	1.30	1.24	31.4	YES	NO	db	db	0.459
21	123478-HxCDF	34.88	5.502e3	4.491e3	1.166	1.23	1.24	84.6	YES	NO	bd	dd	1.147
22	Total-hexafurans	34.72	8.857e2	6.423e2	1.141	1.38	1.24	15.2	YES	NO	bb	bd	0.185
23	Total-hexafurans	34.26	2.333e4	1.888e4	1.141	1.24	1.24	345.1	YES	NO	bb	bb	5.112
24	Total-hexafurans	33.94	6.662e2	5.036e2	1.141	1.32	1.24	9.0	YES	NO	bb	bb	0.142
25	Total-hexafurans	33.42	1.902e4	1.517e4	1.141	1.25	1.24	267.2	YES	NO	bb	bb	4.140
26	123468-HXCDF	33.21	5.696e3	4.488e3	1.169	1.27	1.24	87.0	YES	NO	bb	bb	1.166
27	1234678-HpCDF	38.75	2.301e4	2.269e4	1.003	1.01	1.05	291.3	YES	NO	bb	bb	8.369
28	OCDF	45.21	4.428e4	5.214e4	0.778	0.85	0.89	921.0	YES	NO	bd	bd	24.606
29	1234789-HpCDF	40.99	1.891e3	1.636e3	0.953	1.16	1.05	25.8	YES	NO	bb	bb	0.718
30	Total-heptafurans	39.41	4.900e4	4.729e4	0.978	1.04	1.05	590.5	YES	NO	bd	bb	18.579
31	Total-penta1	27.19	1.501e4	9.979e3		1.50	1.55	282.5	YES	NO	bb	bd	2.751
32	Total-tetradioxins	23.80	8.457e2	1.189e3	1.024	0.71	0.77	11.3	YES	NO	bb	bb	0.220
33	1368-TCDD	23.53	1.468e3	1.660e3	1.015	0.88	0.77	15.4	YES	NO	bb	bb	0.341
34	Total-tetradioxins	26.51	3.628e2	4.380e2	1.024	0.83	0.77	4.5	YES	NO	db	db	0.086
35	2378-TCDD	26.40	1.763e3	2.373e3	1.149	0.74	0.77	22.0	YES	NO	bd	bd	0.398
36	Total-tetradioxins	25.59	1.246e3	1.720e3	1.024	0.72	0.77	15.6	YES	NO	dd	bd	0.320
37	Total-tetradioxins	24.74	4.210e2	4.797e2	1.024	0.88	0.77	4.2	YES	NO	bb	db	0.097

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk**TotalTEQ,Furans,Dioxins**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	12378-PeCDD	31.50	2.529e3	1.464e3	1.022	1.73	1.55	32.3	YES	NO	bb	bb	0.566
39	Total-pentadioxins	30.12	1.408e3	9.744e2	1.502	1.44	1.55	24.0	YES	NO	bb	bd	0.230
40	Total-pentadioxins	29.90	1.618e3	1.005e3	1.502	1.61	1.55	23.3	YES	NO	bb	bb	0.253
41	123789-HxCDD	36.51	3.753e3	3.215e3	0.907	1.17	1.24	51.1	YES	NO	bb	bb	1.277
42	123678-HxCDD	36.13	5.933e3	4.667e3	1.001	1.27	1.24	75.0	YES	NO	dd	dd	1.715
43	123478-HxCDD	36.01	2.441e3	1.874e3	0.996	1.30	1.24	34.4	YES	NO	bd	bd	0.740
44	Total-hexadioxins	35.23	2.157e3	1.728e3	1.005	1.25	1.24	30.5	YES	NO	db	db	0.643
45	Total-hexadioxins	35.13	1.819e4	1.436e4	1.005	1.27	1.24	156.8	YES	NO	bd	bd	5.386
46	Total-hexadioxins	34.76	3.159e3	2.605e3	1.005	1.21	1.24	41.4	YES	NO	bb	bb	0.954
47	124679-HxCDD	33.99	1.775e4	1.464e4	1.115	1.21	1.24	222.2	YES	NO	bb	bb	4.961
48	1234679-HPCDD	39.20	1.743e5	1.680e5	1.137	1.04	1.05	1622.4	YES	NO	bb	bb	54.859
49	1234678-HpCDD	40.25	1.275e5	1.170e5	1.039	1.09	1.05	1054.4	YES	NO	bd	bb	42.870
50	OCDD	44.97	7.021e5	8.265e5	0.920	0.85	0.89	5894.3	YES	NO	bb	bb	329.822

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.54	2.811e5					4.8	YES		bb		
2	FUNCTION1 PFK	23.46	6.719e5					8.2	YES		bb		
3	FUNCTION1 PFK	22.02	1.787e5					5.5	YES		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.44	9.825e4					4.4	YES		bb		0.000
2	FUNCTION2 PFK	29.14	4.660e5					9.1	YES		bb		0.000
3	FUNCTION2 PFK	28.53	2.105e6					13.0	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.10	3.254e5					4.5	YES		bb		0.000
2	FUNCTION3 PFK	33.35	1.452e7					28.4	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk**PFK4**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.66	5.764e3					1.7	NO		bb		
2	FUNCTION5 PFK	45.49	4.742e3					1.1	NO		bb		
3	FUNCTION5 PFK	45.37	4.286e3					1.4	NO		bb		
4	FUNCTION5 PFK	45.31	6.613e3					1.5	NO		bb		
5	FUNCTION5 PFK	43.99	7.212e3					1.5	NO		bb		
6	FUNCTION5 PFK	43.64	2.505e3					0.9	NO		db		
7	FUNCTION5 PFK	43.59	7.371e3					1.7	NO		bd		
8	FUNCTION5 PFK	43.42	4.569e3					1.2	NO		bb		
9	FUNCTION5 PFK	42.71	7.860e3					1.5	NO		db		
10	FUNCTION5 PFK	42.65	3.165e3					1.1	NO		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.79	1.501e2					5.8	YES		bb		0.000
2	FUNCTION1 HXCD...	26.14	2.769e2					6.3	YES		bb		0.000
3	FUNCTION1 HXCD...	25.92	5.832e2					14.3	YES		db		0.000
4	FUNCTION1 HXCD...	25.75	3.358e2					6.2	YES		bd		0.000
5	FUNCTION1 HXCD...	25.36	8.062e1					2.9	NO		bb		0.000
6	FUNCTION1 HXCD...	24.83	1.025e2					3.4	YES		bb		0.000
7	FUNCTION1 HXCD...	23.78	2.475e2					5.1	YES		bb		0.000
8	FUNCTION1 HXCD...	22.33	1.551e2					4.4	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:05:52 Pacific Standard Time

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.32	7.807e1					2.7	NO		bb		0.000
2	FUNCTION2 HPCD...	32.23	8.949e1					3.4	YES		bb		0.000
3	FUNCTION2 HPCD...	30.82	9.862e1					2.7	NO		bb		0.000
4	FUNCTION2 HPCD...	29.89	8.875e1					3.5	YES		bb		0.000
5	FUNCTION2 HPCD...	28.96	3.343e2					10.1	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	34.23	8.510e1					2.8	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	38.40	8.994e3					367.0	YES		bb		0.000

ETHERS6

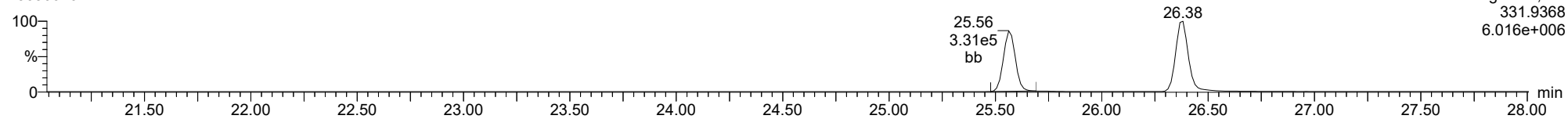
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.99	7.738e1					3.2	YES		db		0.000
2	FUNCTION5 DCDPE	44.95	7.439e1					3.4	YES		bd		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD

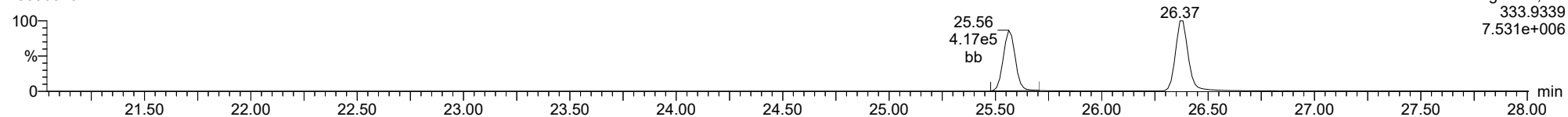
23030616



F1:Voltage SIR,El+
331.9368
6.016e+006

13C-1234-TCDD

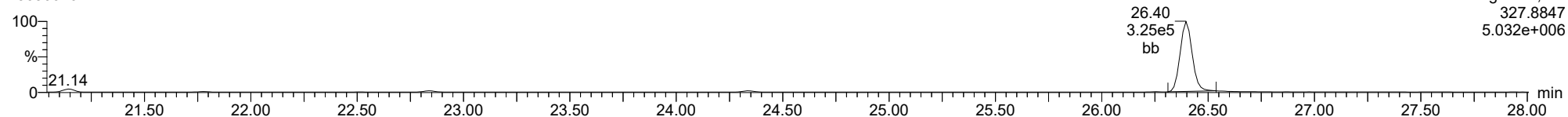
23030616



F1:Voltage SIR,El+
333.9339
7.531e+006

37CL-2378-TCDD

23030616

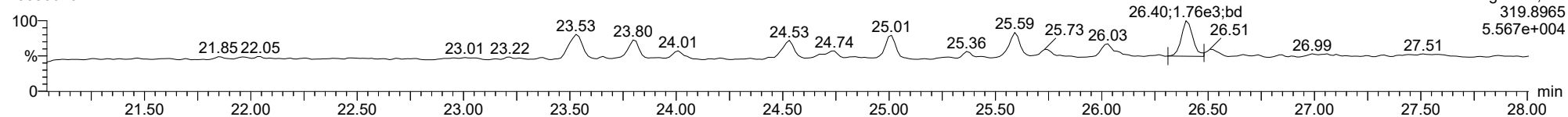


F1:Voltage SIR,El+
327.8847
5.032e+006

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

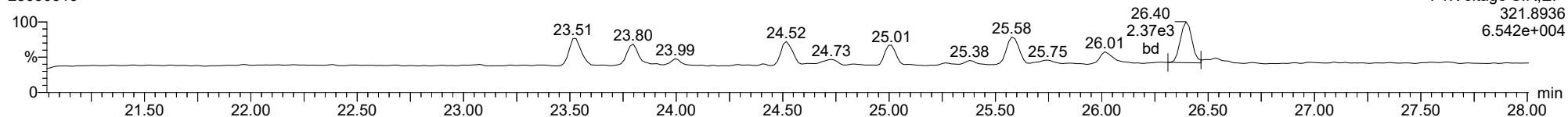
2378-TCDD

23030616



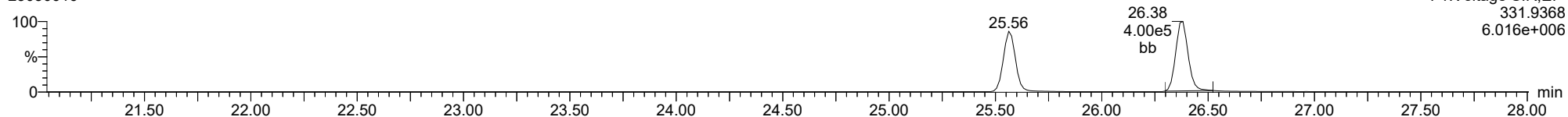
2378-TCDD

23030616



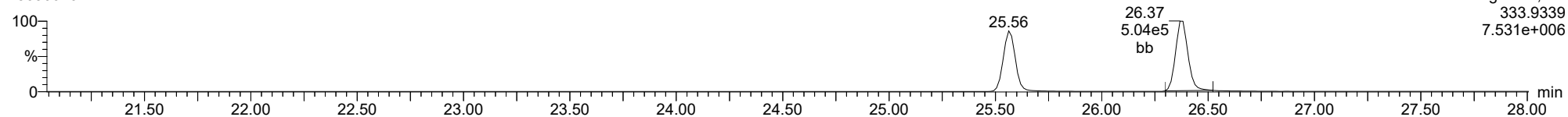
13C-2378-TCDD

23030616



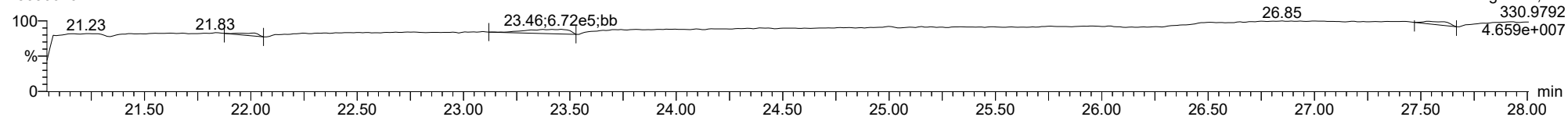
13C-2378-TCDD

23030616



FUNCTION1 PFK

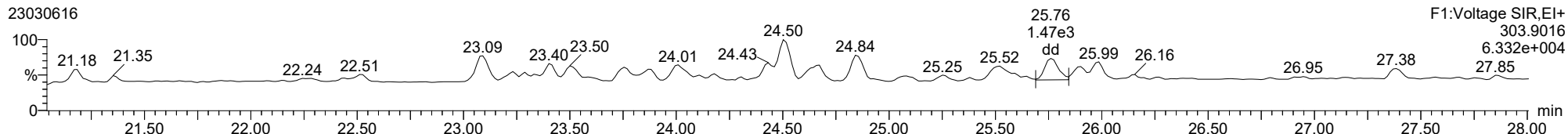
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

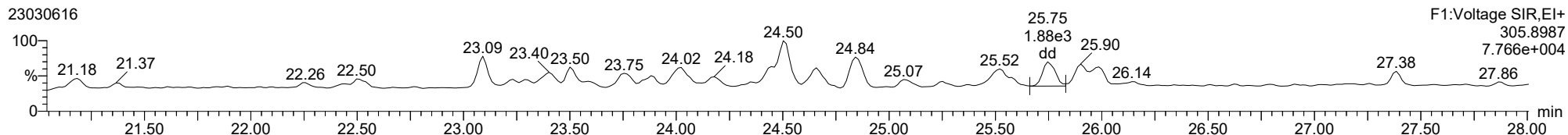
2378-TCDF

23030616



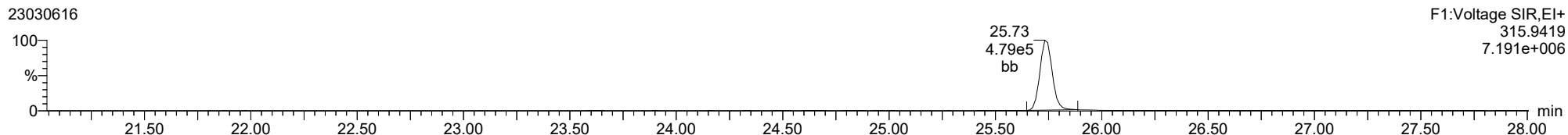
2378-TCDF

23030616



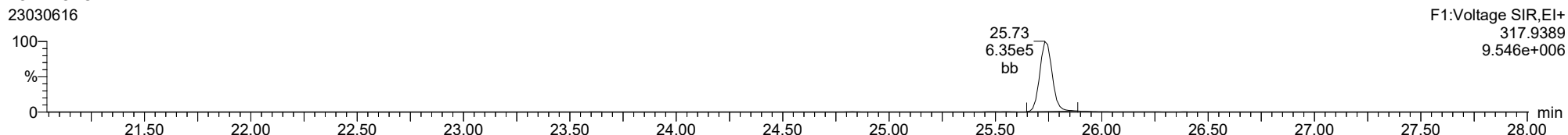
13C-2378-TCDF

23030616



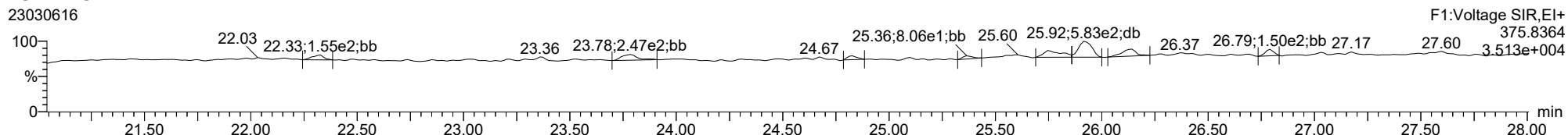
13C-2378-TCDF

23030616



FUNCTION1 HXCDPE

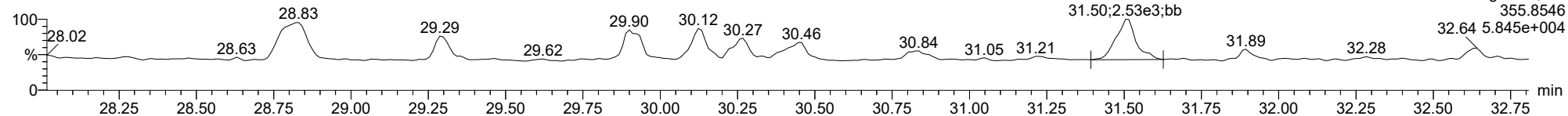
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

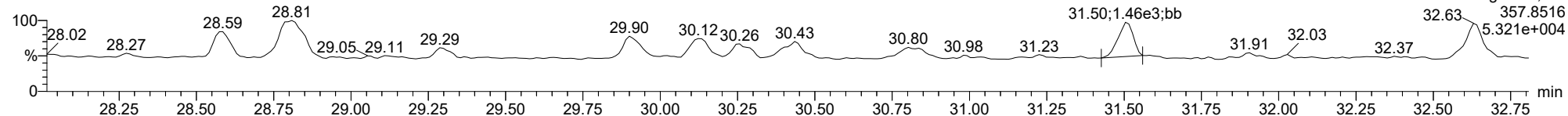
12378-PeCDD

23030616



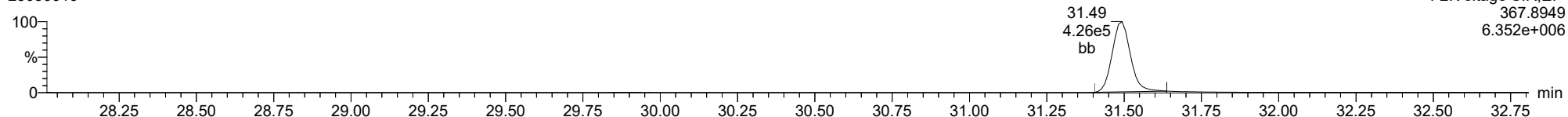
12378-PeCDD

23030616



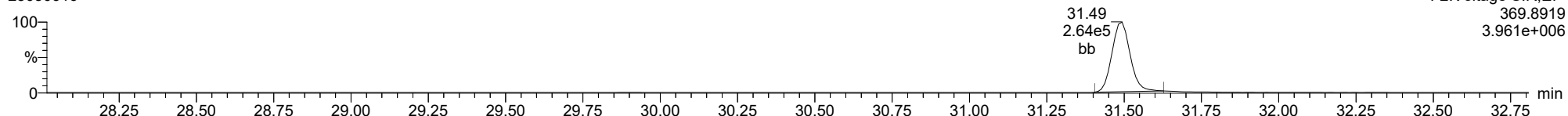
13C-12378-PeCDD

23030616



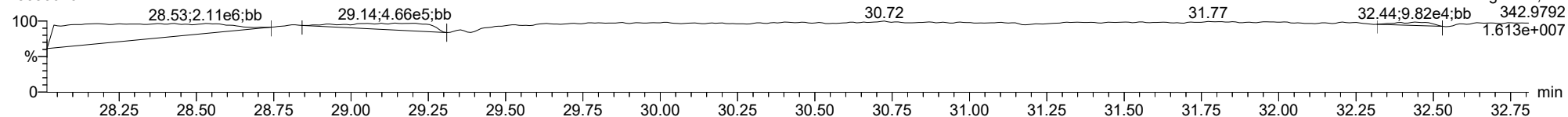
13C-12378-PeCDD

23030616



FUNCTION2 PFK

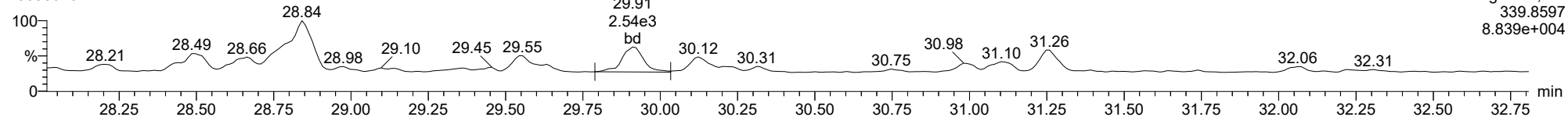
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

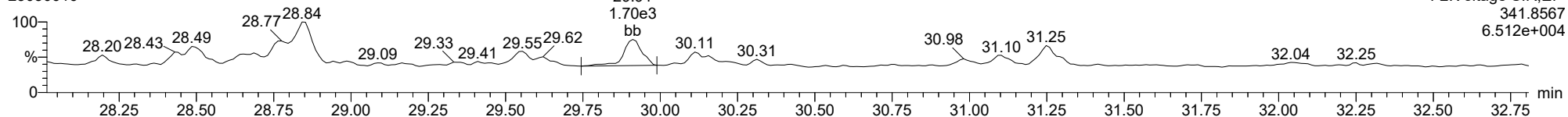
12378-PeCDF

23030616



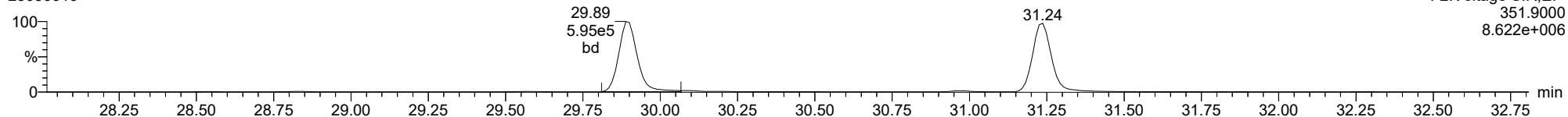
12378-PeCDF

23030616



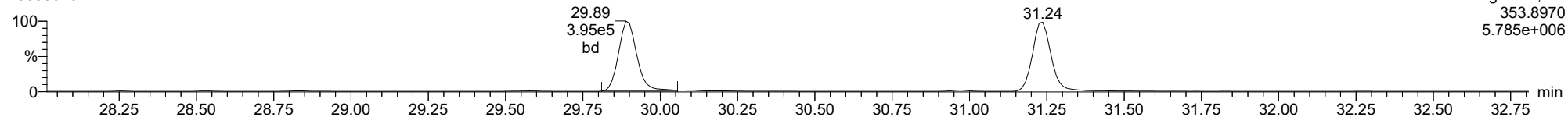
13C-12378-PeCDF

23030616



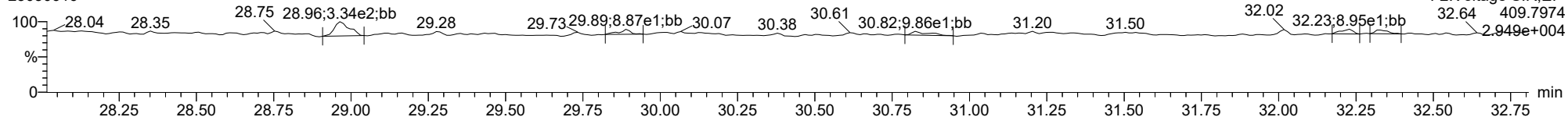
13C-12378-PeCDF

23030616



FUNCTION2 HPCDPE

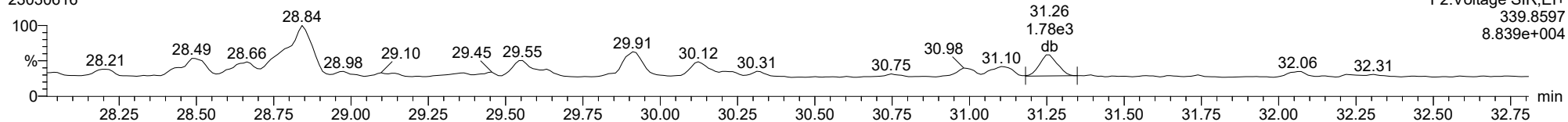
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

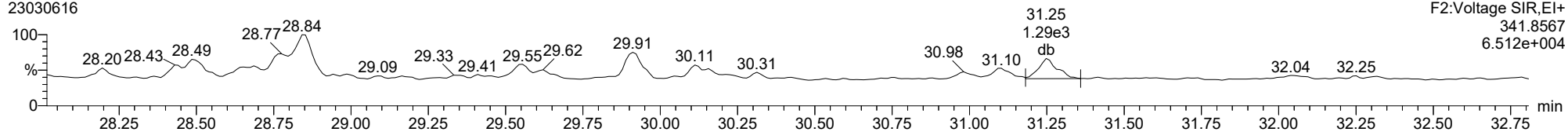
23478-PeCDF

23030616



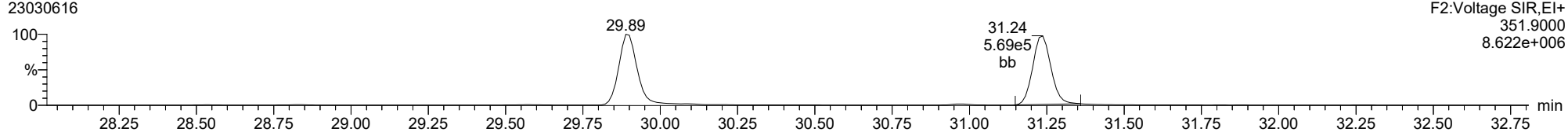
23478-PeCDF

23030616



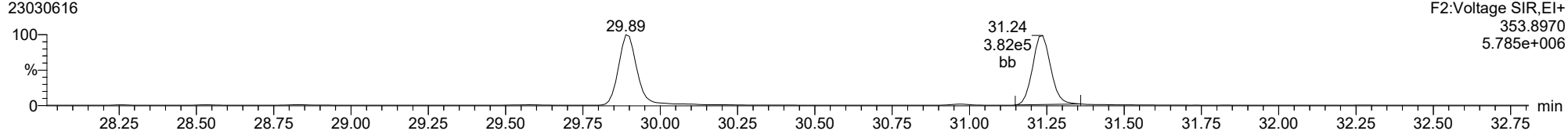
13C-23478-PeCDF

23030616



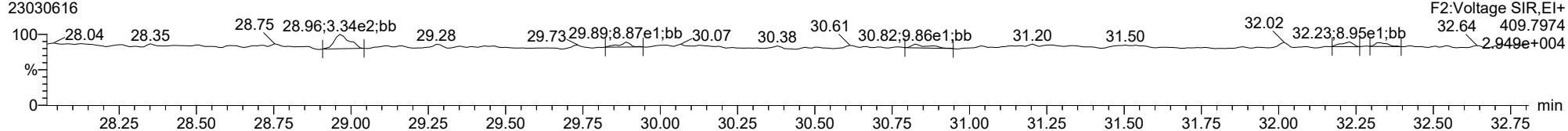
13C-23478-PeCDF

23030616



FUNCTION2 HPCDPE

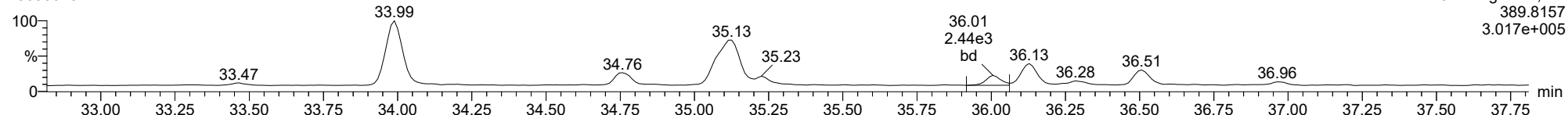
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

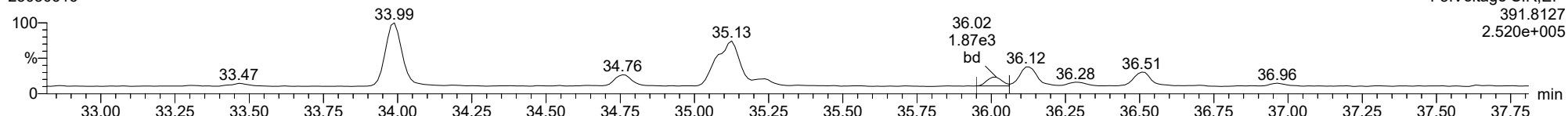
123478-HxCDD

23030616



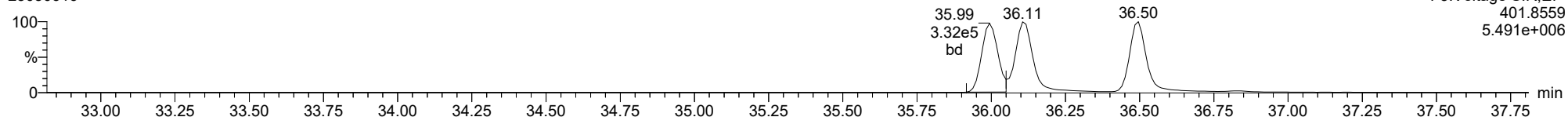
123478-HxCDD

23030616



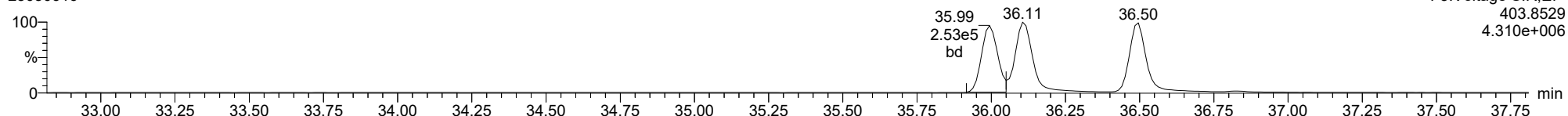
13C-123478-HxCDD

23030616



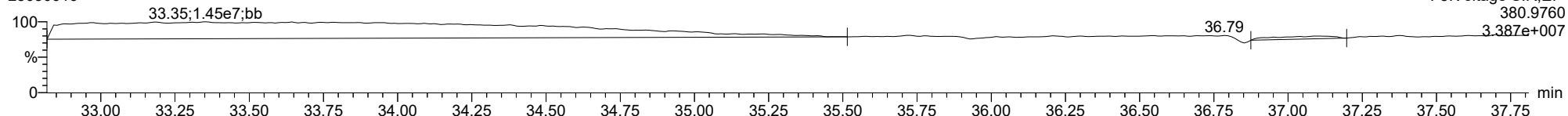
13C-123478-HxCDD

23030616



FUNCTION3 PFK

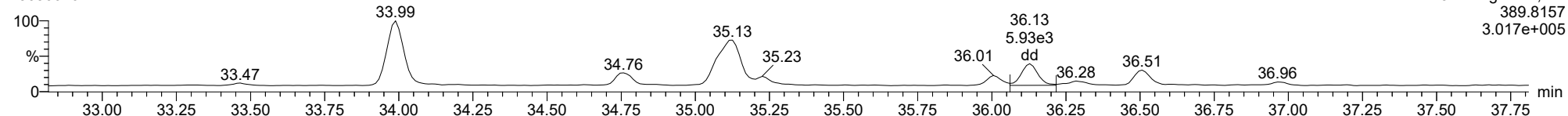
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

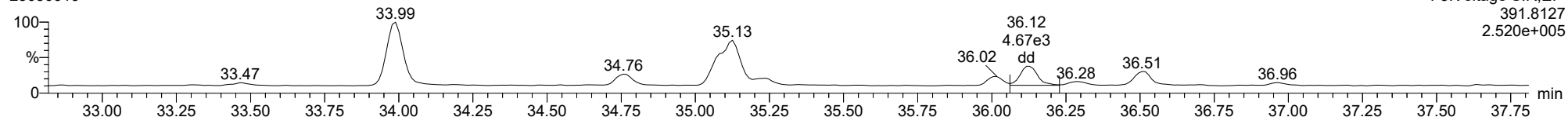
123678-HxCDD

23030616



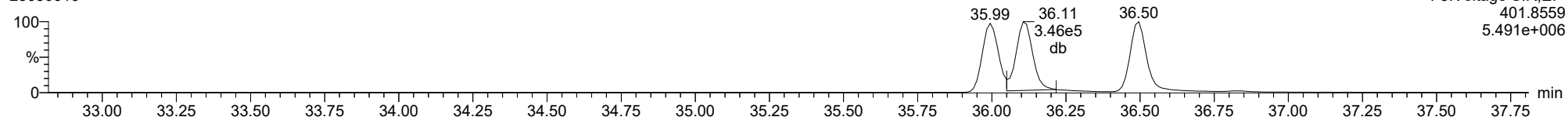
123678-HxCDD

23030616



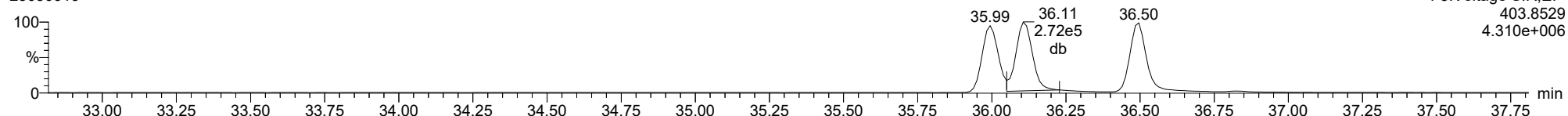
13C-123678-HxCDD

23030616



13C-123678-HxCDD

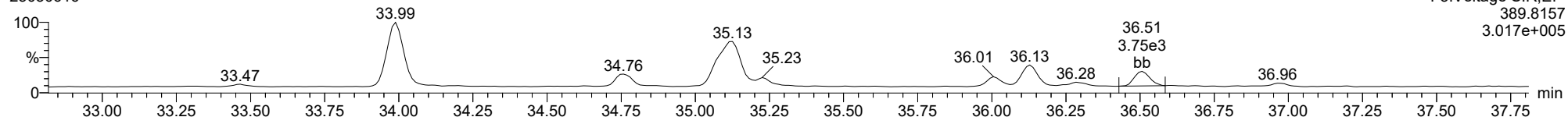
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

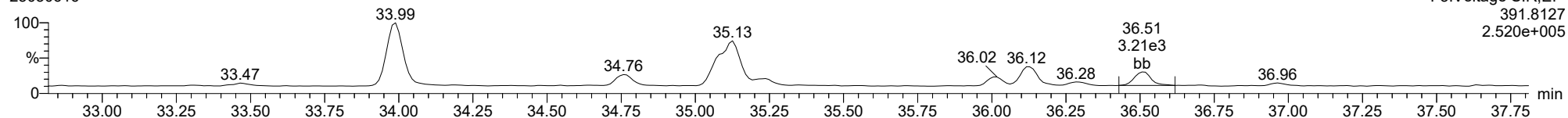
123789-HxCDD

23030616



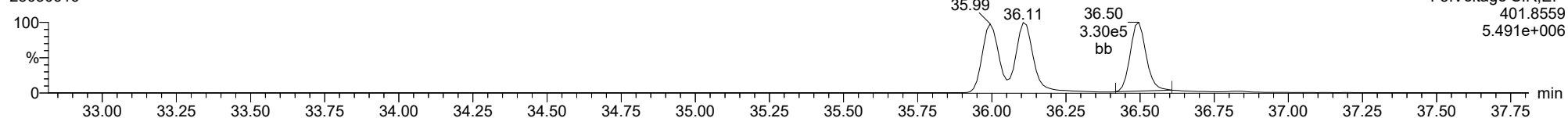
123789-HxCDD

23030616



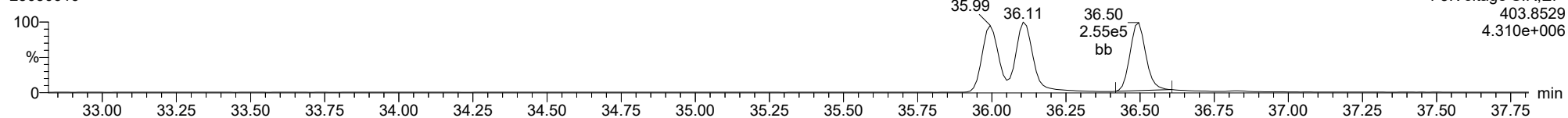
13C-123789-HxCDD

23030616



13C-123789-HxCDD

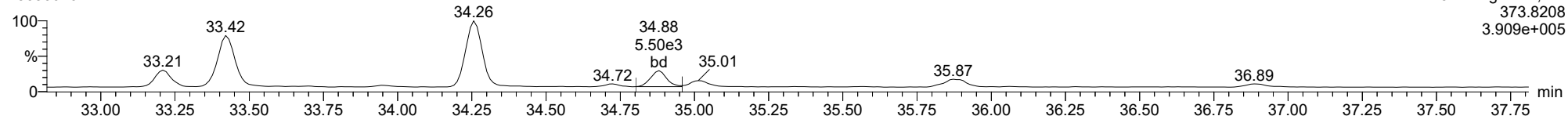
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

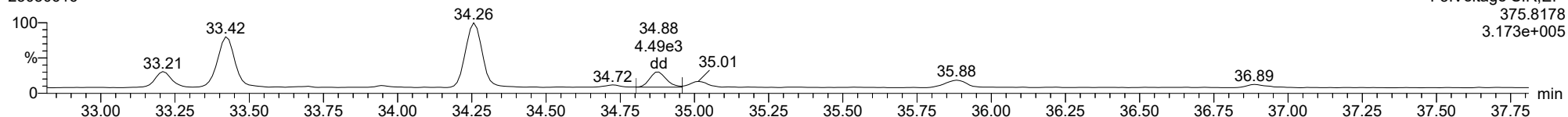
123478-HxCDF

23030616



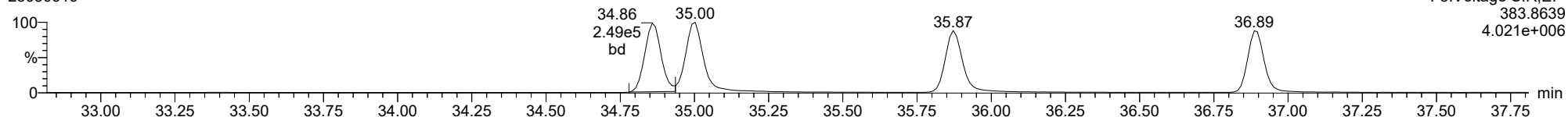
123478-HxCDF

23030616



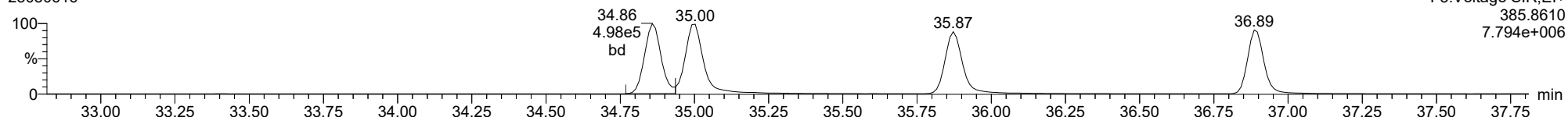
13C-123478-HxCDF

23030616



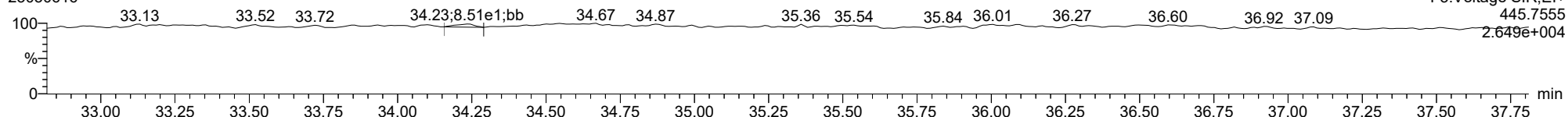
13C-123478-HxCDF

23030616



FUNCTION3 OCDPE

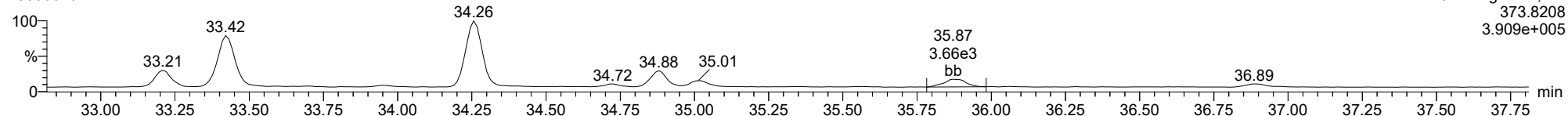
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

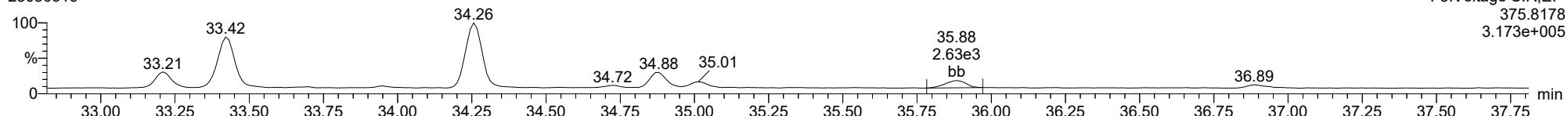
234678-HxCDF

23030616



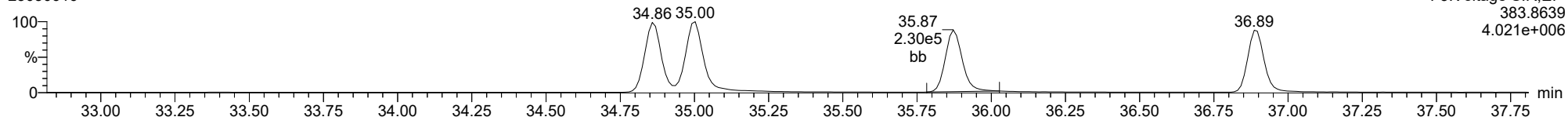
234678-HxCDF

23030616



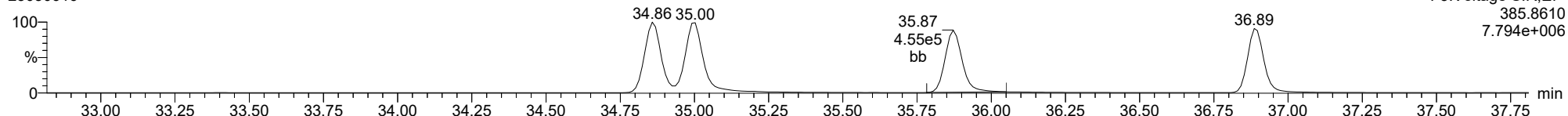
13C-234678-HxCDF

23030616



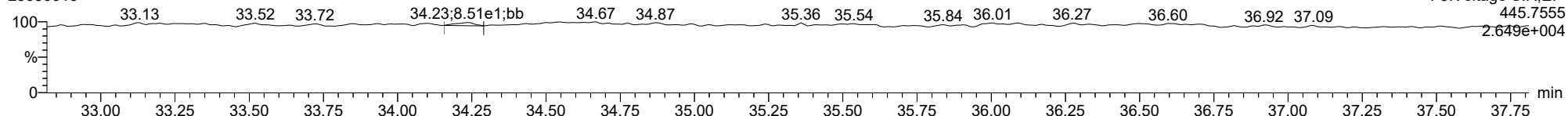
13C-234678-HxCDF

23030616



FUNCTION3 OCDPE

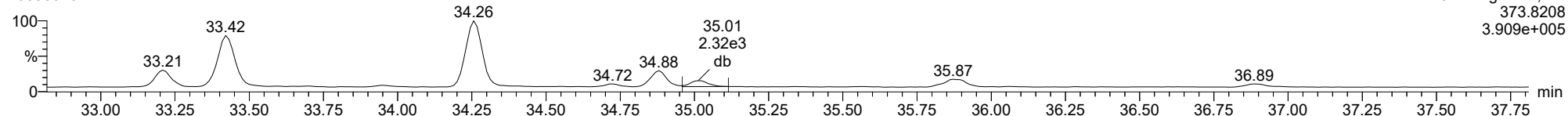
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

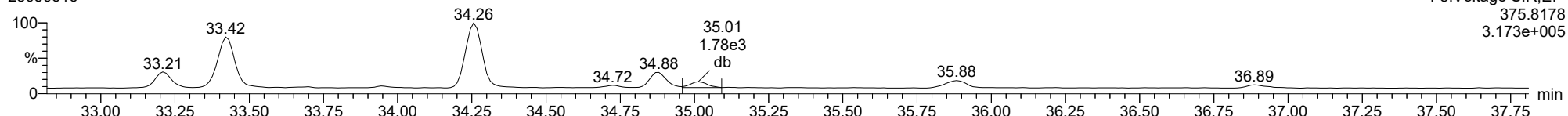
123678-HxCDF

23030616



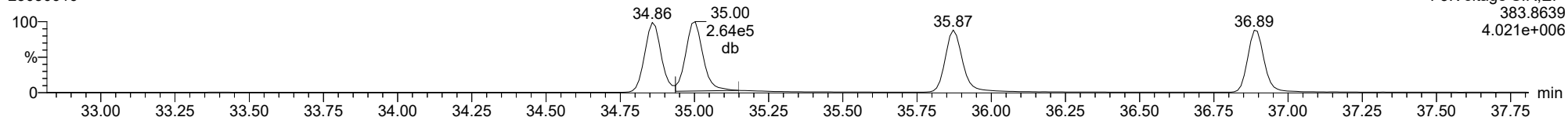
123678-HxCDF

23030616



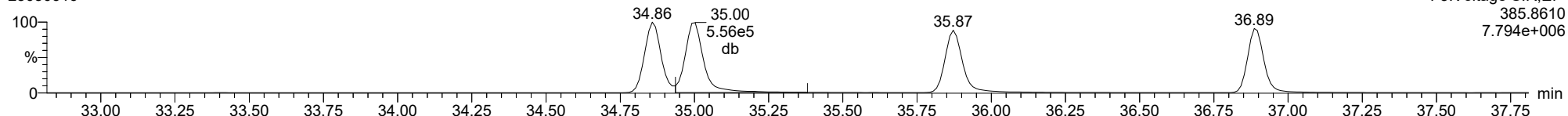
13C-123678-HxCDF

23030616



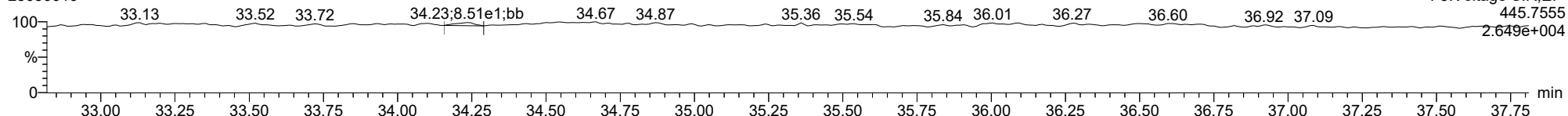
13C-123678-HxCDF

23030616



FUNCTION3 OCDPE

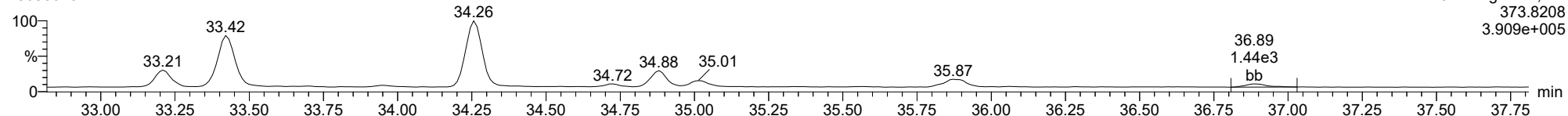
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

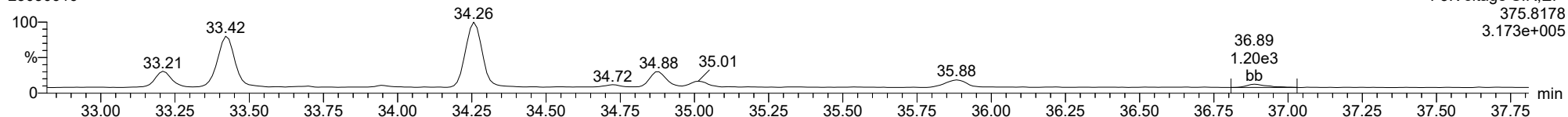
123789-HxCDF

23030616



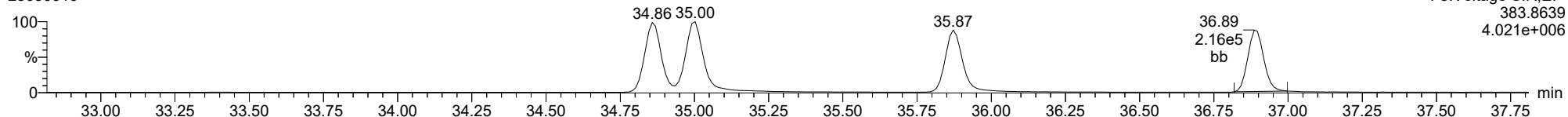
123789-HxCDF

23030616



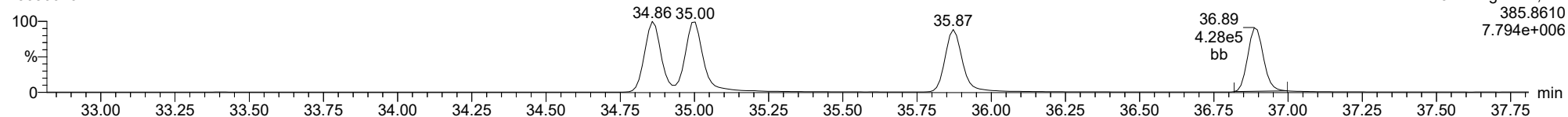
13C-123789-HxCDF

23030616



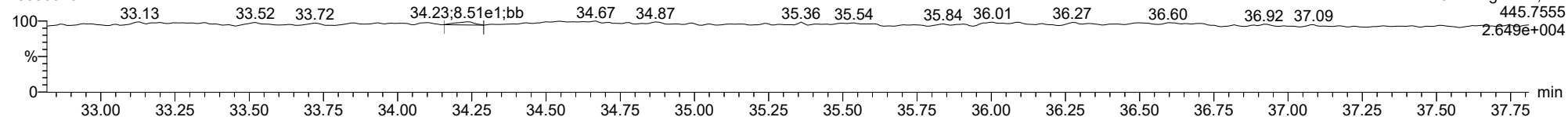
13C-123789-HxCDF

23030616



FUNCTION3 OCDPE

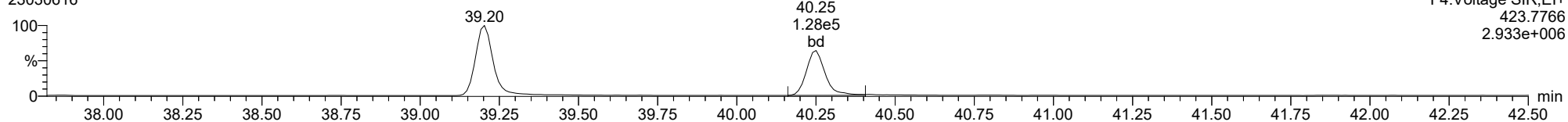
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

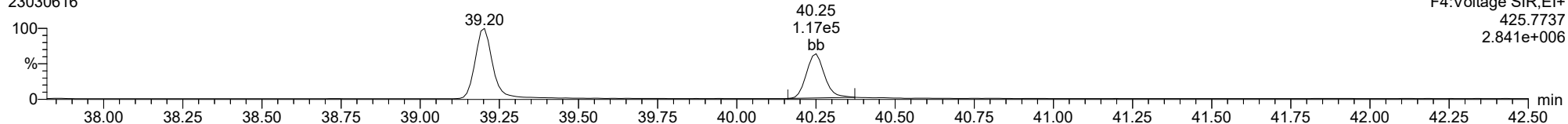
23030616



F4:Voltage SIR,EI+
423.7766
2.933e+006

1234678-HpCDD

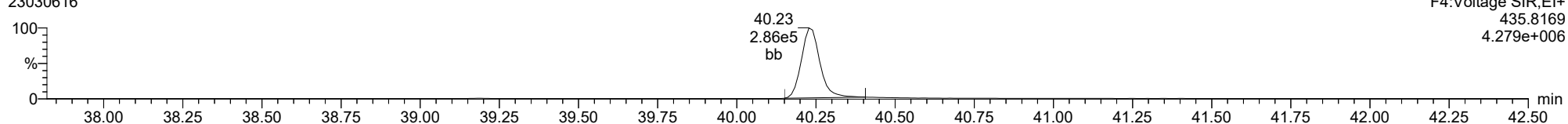
23030616



F4:Voltage SIR,EI+
425.7737
2.841e+006

13C-1234678-HpCDD

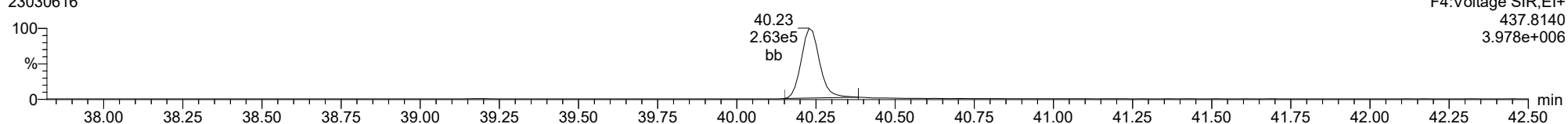
23030616



F4:Voltage SIR,EI+
435.8169
4.279e+006

13C-1234678-HpCDD

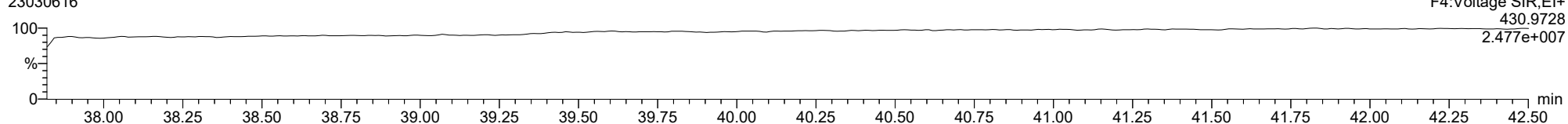
23030616



F4:Voltage SIR,EI+
437.8140
3.978e+006

FUNCTION4 PFK

23030616

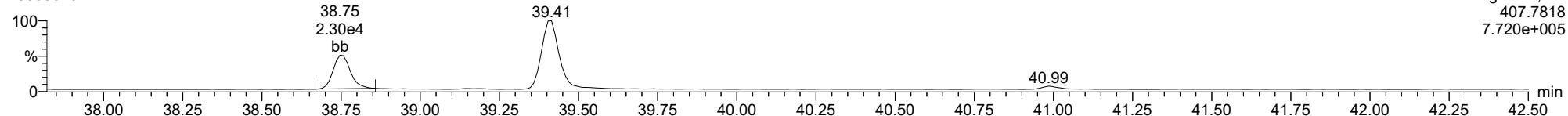


F4:Voltage SIR,EI+
430.9728
2.477e+007

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

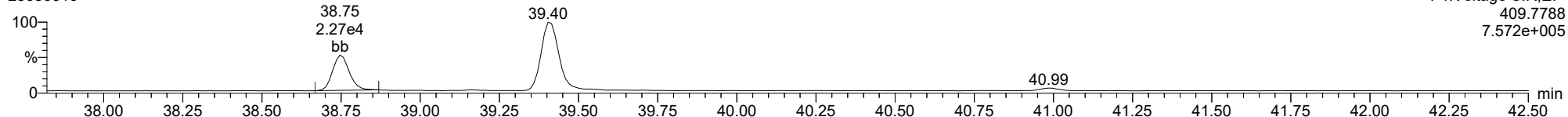
23030616



F4:Voltage SIR,El+
407.7818
7.720e+005

1234678-HpCDF

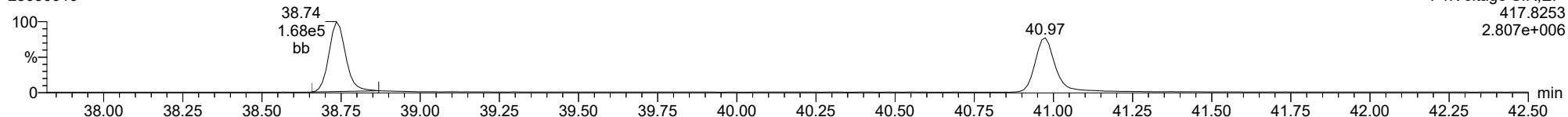
23030616



F4:Voltage SIR,El+
409.7788
7.572e+005

13C-1234678-HpCDF

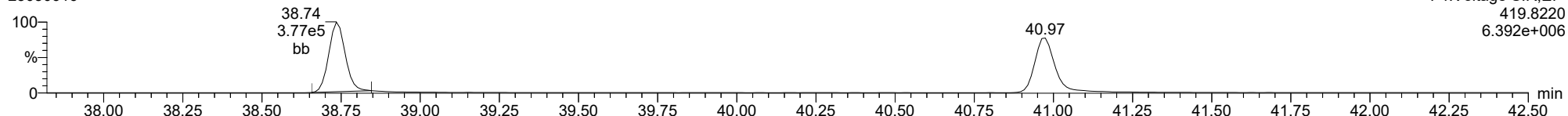
23030616



F4:Voltage SIR,El+
417.8253
2.807e+006

13C-1234678-HpCDF

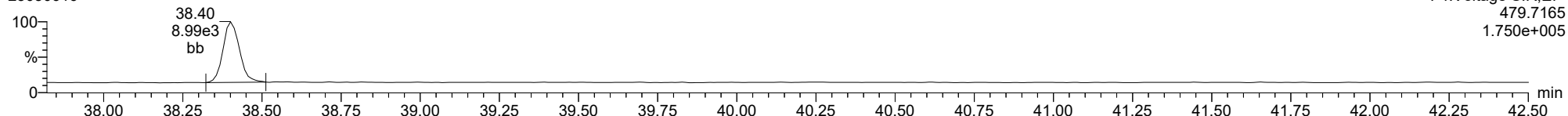
23030616



F4:Voltage SIR,El+
419.8220
6.392e+006

FUNCTION4 NCDPE

23030616

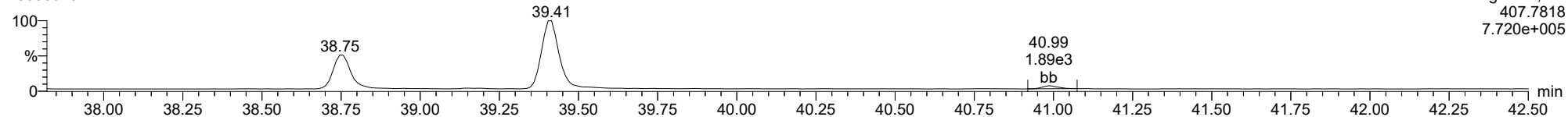


F4:Voltage SIR,El+
479.7165
1.750e+005

ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

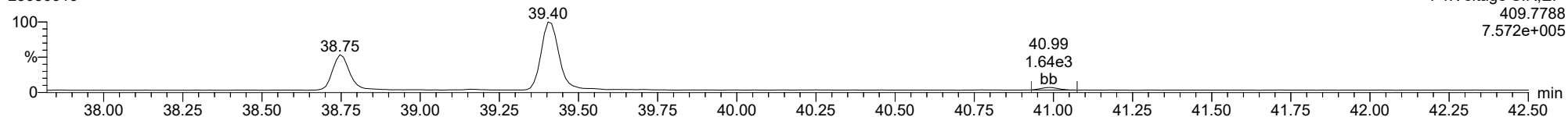
1234789-HpCDF

23030616



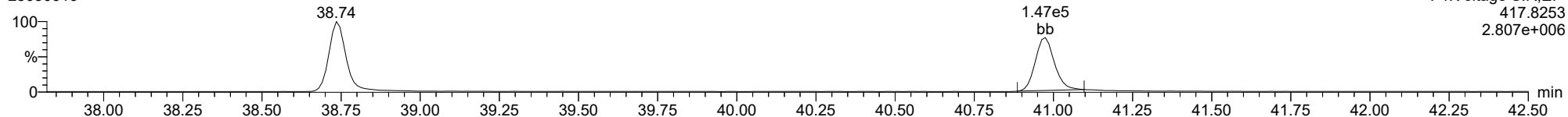
1234789-HpCDF

23030616



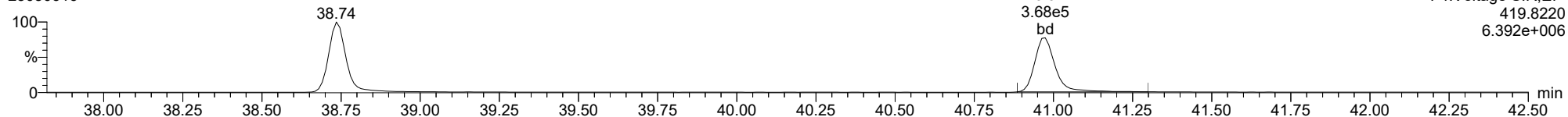
13C-1234789-HpCDF

23030616



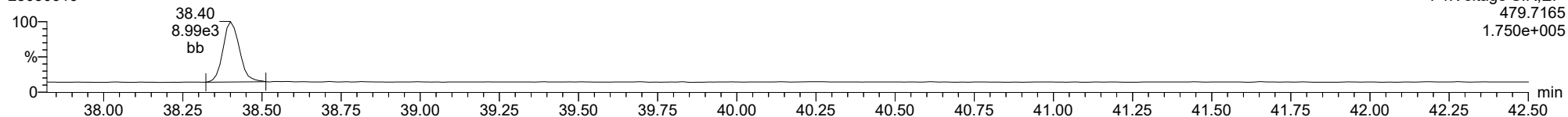
13C-1234789-HpCDF

23030616



FUNCTION4 NCDPE

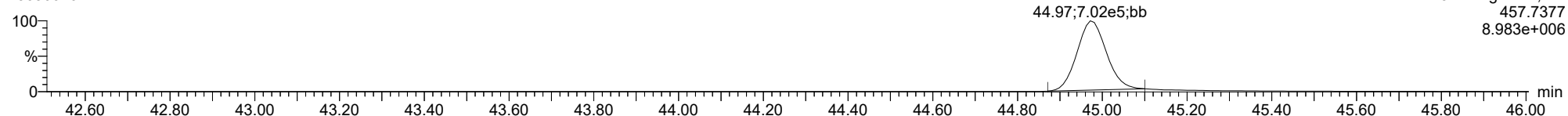
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

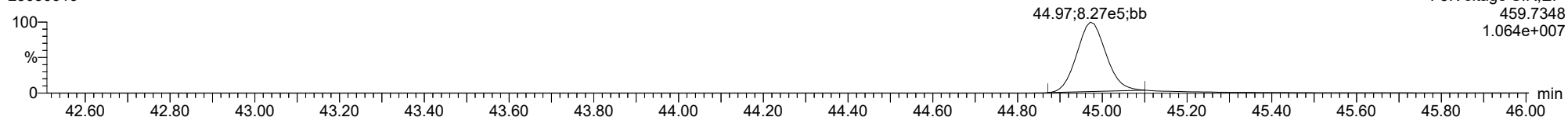
OCDD

23030616



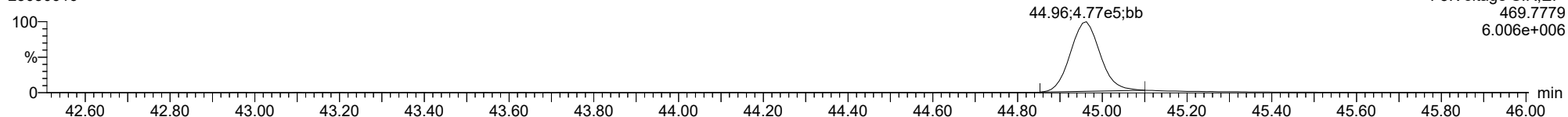
OCDD

23030616



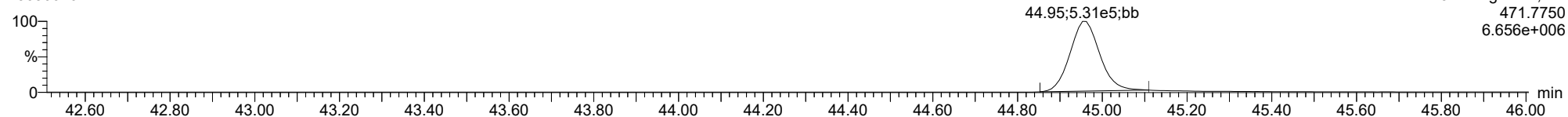
13C-OCDD

23030616



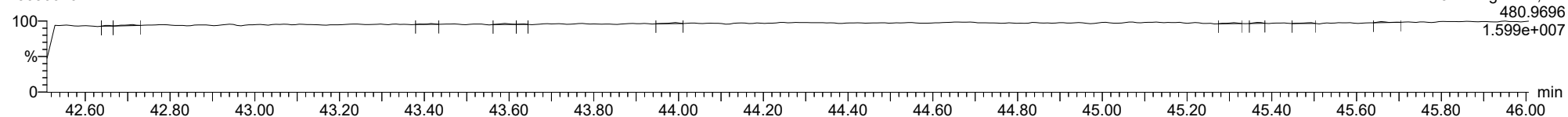
13C-OCDD

23030616



FUNCTION5 PFK

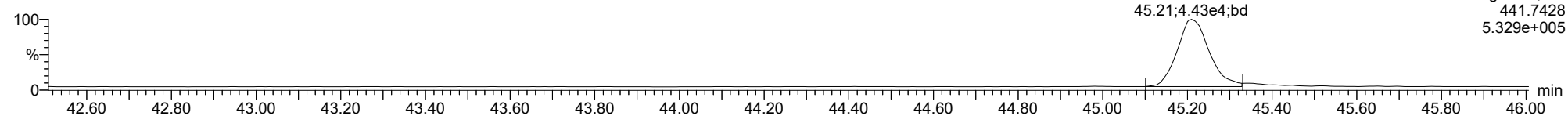
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

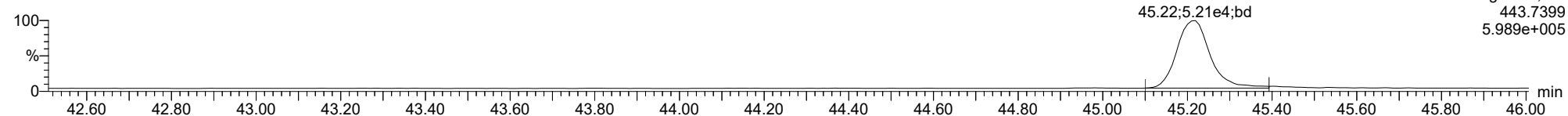
OCDF

23030616



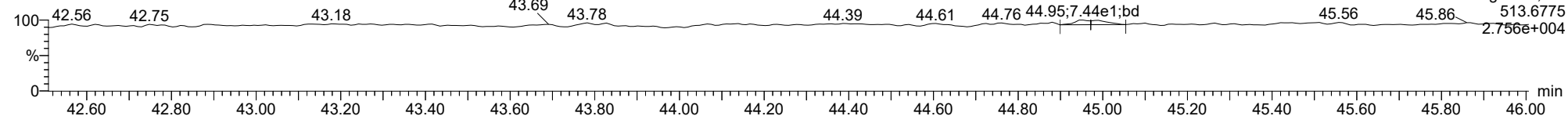
OCDF

23030616



FUNCTION5 DCDPE

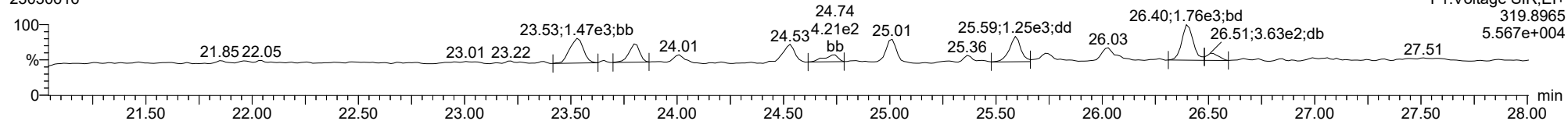
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

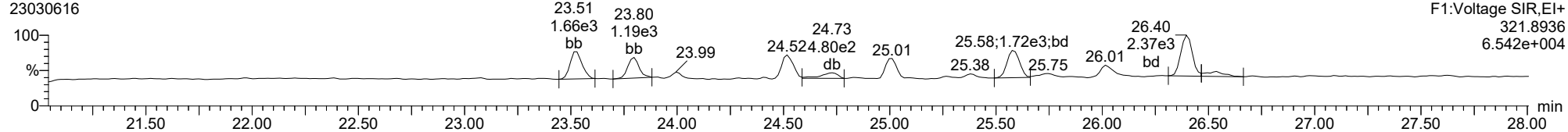
Total-tetradioxins

23030616



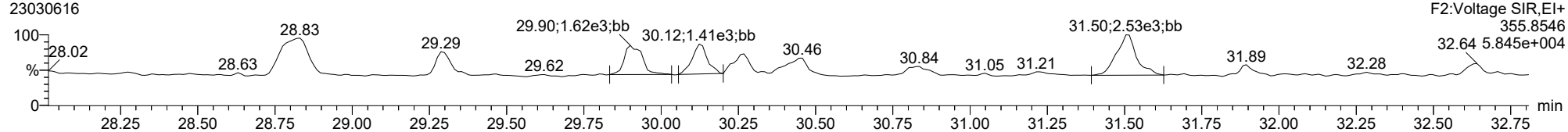
Total-tetradioxins

23030616



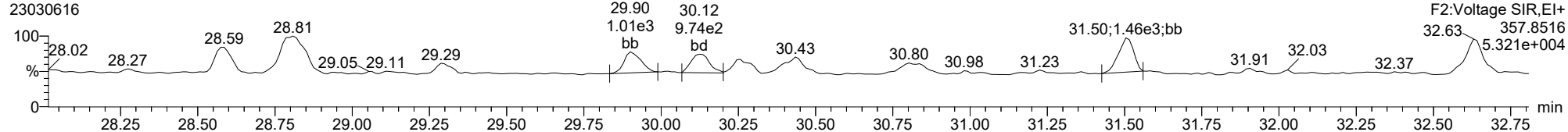
Total-pentadioxins

23030616



Total-pentadioxins

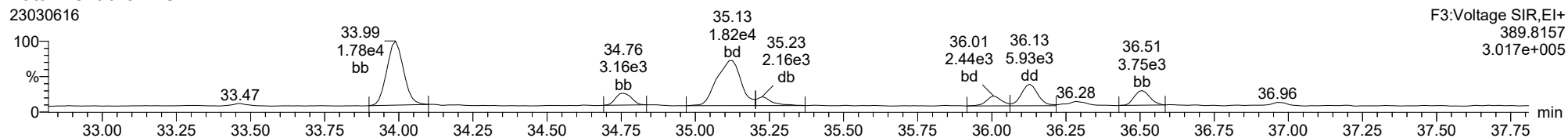
23030616



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

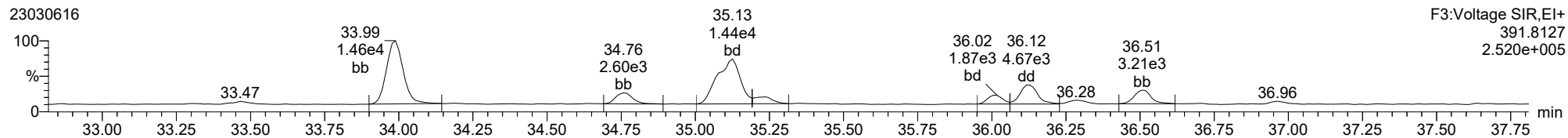
Total-hexadioxins

23030616



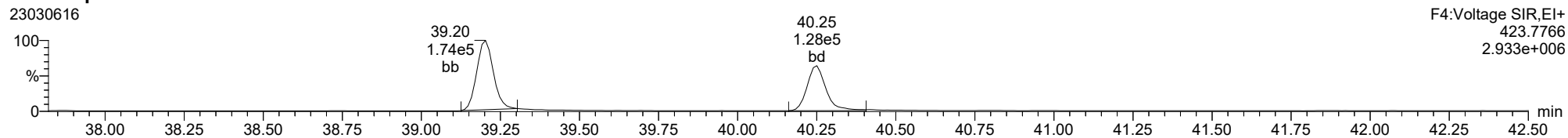
Total-hexadioxins

23030616



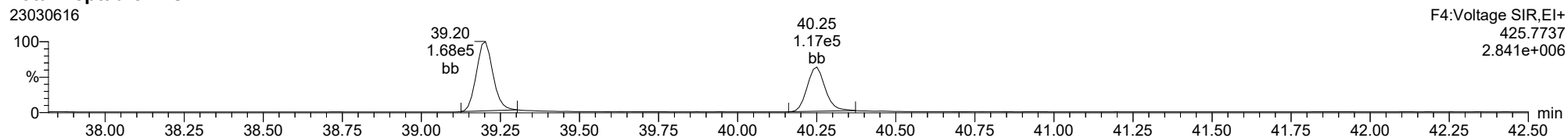
Total-heptadioxins

23030616



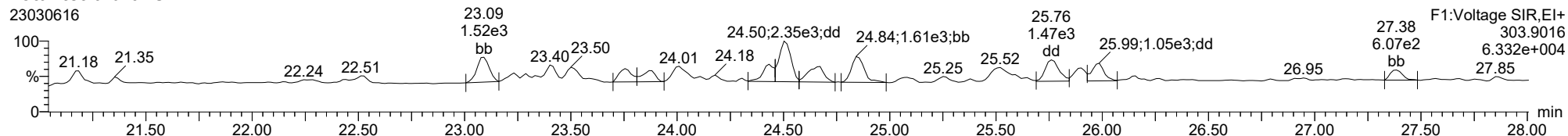
Total-heptadioxins

23030616

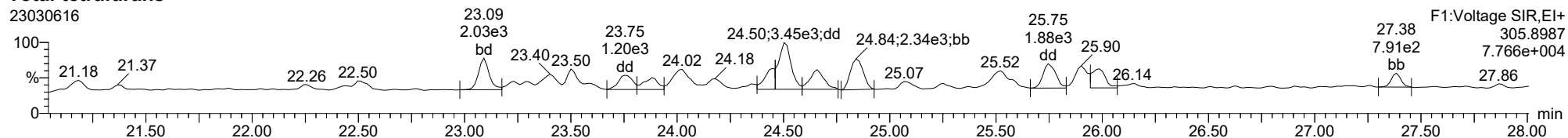


ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

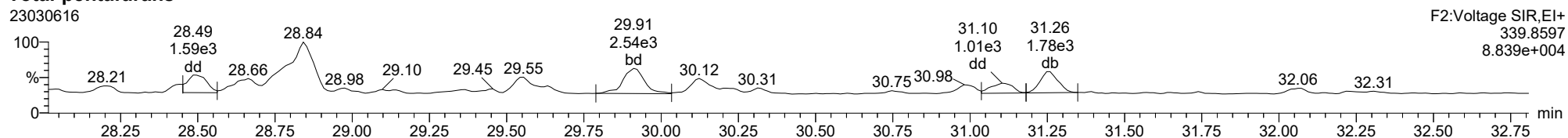
Total-tetrafurans



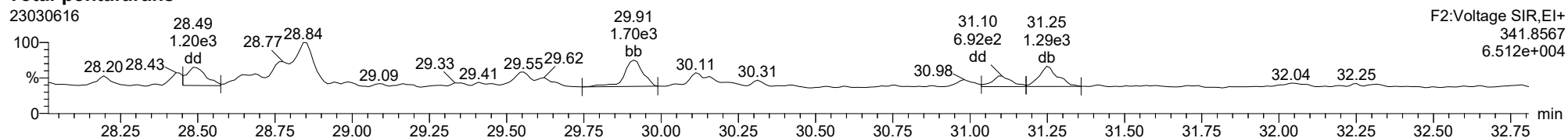
Total-tetrafurans



Total-pentafurans



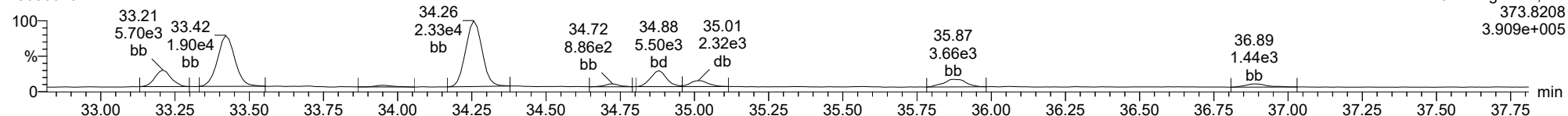
Total-pentafurans



ID: BLA0398-SRM1, Name: 23030616, Date: 06-Mar-2023, Time: 22:33:18, Conditions: AUTOSPEC01, User: pk

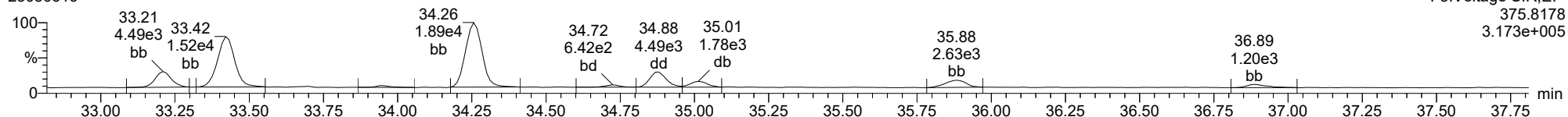
Total-hexafurans

23030616



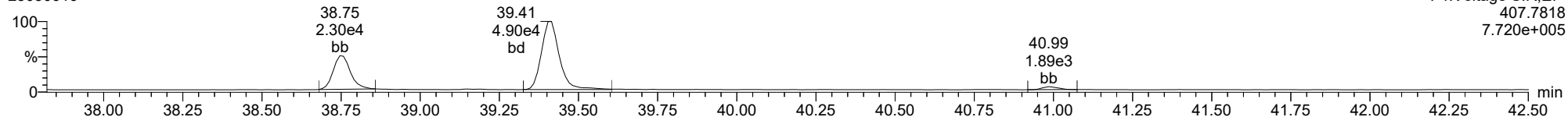
Total-hexafurans

23030616



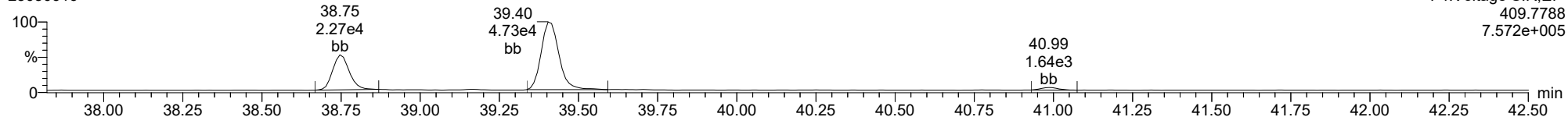
Total-heptafurans

23030616



Total-heptafurans

23030616





INITIAL CALIBRATION DATA
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00015

Instrument: AUTOSPEC01

Calibration Date: 03/03/2023

Column (1): RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,3,7,8-TCDF			0.5	0.6926363	2	0.6813225	10	0.7107923	40	0.719723	200	0.703162
2,3,7,8-TCDD			0.5	1.116738	2	1.187915	10	1.134128	40	1.147736	200	1.156792
1,2,3,7,8-PeCDF	0.5	0.7064839	2.5	0.5889757	10	0.710829	50	0.6668491	200	0.6891968	1000	0.7130453
2,3,4,7,8-PeCDF	0.5	0.7979673	2.5	0.750268	10	0.8092124	50	0.7777683	200	0.7907891	1000	0.7910175
1,2,3,7,8-PeCDD	0.5	1.103364	2.5	0.959607	10	1.01992	50	1.019473	200	1.01999	1000	1.008719
1,2,3,4,7,8-HxCDF	0.5	1.217557	2.5	1.181192	10	1.149885	50	1.142227	200	1.15269	1000	1.152678
1,2,3,6,7,8-HxCDF	0.5	1.080855	2.5	1.053928	10	1.175308	50	1.102076	200	1.035098	1000	1.097184
2,3,4,6,7,8-HxCDF	0.5	1.045907	2.5	1.140857	10	1.199347	50	1.11691	200	1.197861	1000	1.13731
1,2,3,7,8,9-HxCDF	0.5	1.190403	2.5	1.119796	10	1.130872	50	1.147742	200	1.139146	1000	1.094601
1,2,3,4,7,8-HxCDD	0.5	1.079554	2.5	0.961704	10	0.973768	50	0.967789	200	0.9862736	1000	1.004325
1,2,3,6,7,8-HxCDD	0.5	0.9586431	2.5	0.9983677	10	0.9838912	50	1.030566	200	1.022077	1000	1.012084
1,2,3,7,8,9-HxCDD	0.5	0.930997	2.5	0.8854269	10	0.8092562	50	0.9267543	200	0.9251392	1000	0.9651099
1,2,3,4,6,7,8-HpCDF	0.5	0.934103	2.5	1.075239	10	1.011687	50	0.9661089	200	1.026311	1000	1.004508
1,2,3,4,7,8,9-HpCDF	0.5	0.8861422	2.5	0.8930411	10	1.006144	50	0.9387033	200	0.9934576	1000	1.001203
1,2,3,4,6,7,8-HpCDD	0.5	1.103772	2.5	0.971421	10	1.040117	50	1.038088	200	1.030577	1000	1.050103
OCDF	1	0.8118871	5	0.7091624	20	0.7657645	100	0.7266152	400	0.8162858	2000	0.8371317
OCDD			5	1.012935	20	0.8906655	100	0.878436	400	0.9061913	2000	0.9115405
13C12-2,3,7,8-TCDF	100	1.631571	100	1.588495	100	1.670669	100	1.492829	100	1.645068	100	1.692541
13C12-2,3,7,8-TCDD	100	1.103543	100	1.165686	100	1.103763	100	1.147762	100	1.181831	100	1.211872
13C12-1,2,3,7,8-PeCDF	100	1.373516	100	0.8861478	100	1.254697	100	1.157546	100	1.425701	100	1.345107
13C12-2,3,4,7,8-PeCDF	100	1.219579	100	0.8983995	100	1.113808	100	0.8611233	100	1.32733	100	1.286474
13C12-1,2,3,7,8-PeCDD	100	0.9177021	100	0.7002528	100	0.8365419	100	0.5962156	100	0.9821822	100	0.939983
13C12-1,2,3,4,7,8-HxCDF	100	1.152029	100	1.095885	100	1.513935	100	1.121285	100	1.094572	100	1.032122
13C12-1,2,3,6,7,8-HxCDF	100	1.353853	100	1.348693	100	1.689158	100	1.367383	100	1.37092	100	1.188788
13C12-2,3,4,6,7,8-HxCDF	100	1.092029	100	1.127896	100	1.240354	100	1.126074	100	1.087409	100	1.101774
13C12-1,2,3,7,8,9-HxCDF	100	0.8958406	100	0.9493947	100	0.9152119	100	0.9630403	100	0.8996667	100	0.9673701
13C12-1,2,3,4,7,8-HxCDD	100	0.9718531	100	0.9656819	100	1.113686	100	0.9864835	100	0.9766715	100	0.95586
13C12-1,2,3,6,7,8-HxCDD	100	1.184228	100	1.157253	100	1.278683	100	1.163318	100	1.111106	100	1.045546



INITIAL CALIBRATION DATA
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
13C12-1,2,3,4,6,7,8-HpCDF	100	0.7396157	100	0.9023055	100	1.063192	100	0.9589237	100	0.7622694	100	0.9449039
13C12-1,2,3,4,7,8,9-HpCDF	100	0.6488087	100	0.8119515	100	0.8176949	100	0.8667001	100	0.665459	100	0.8078955
13C12-1,2,3,4,6,7,8-HpCDD	100	0.724191	100	0.8737196	100	0.9555336	100	0.9094052	100	0.7229358	100	0.8549505
13C12-OCDD	200	0.701507	200	0.6312376	200	0.823691	200	0.8980531	200	0.7066522	200	0.8436876
37C14-2,3,7,8-TCDD	0.1	1.576039	0.5	1.320077	2	1.177166	10	1.132717	40	1.2366	200	1.284223
13C12-1,2,3,4-TCDD	100	1	100	1	100	1	100	1	100	1	100	1
13C12-1,2,3,7,8,9-HxCDD	100	1	100	1	100	1	100	1	100	1	100	1



INITIAL CALIBRATION DATA
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
2,3,7,8-TCDF	0.7015272	2.1			RSD ()	
2,3,7,8-TCDD	1.148662	2.3			RSD ()	
1,2,3,7,8-PeCDF	0.67923	7.0			RSD ()	
2,3,4,7,8-PeCDF	0.7861704	2.6			RSD ()	
1,2,3,7,8-PeCDD	1.021845	4.5			RSD ()	
1,2,3,4,7,8-HxCDF	1.166038	2.4			RSD ()	
1,2,3,6,7,8-HxCDF	1.090741	4.5			RSD ()	
2,3,4,6,7,8-HxCDF	1.139699	5.0			RSD ()	
1,2,3,7,8,9-HxCDF	1.137093	2.8			RSD ()	
1,2,3,4,7,8-HxCDD	0.9955689	4.4			RSD ()	
1,2,3,6,7,8-HxCDD	1.000938	2.7			RSD ()	
1,2,3,7,8,9-HxCDD	0.9071139	6.0			RSD ()	
1,2,3,4,6,7,8-HpCDF	1.002993	4.9			RSD ()	
1,2,3,4,7,8,9-HpCDF	0.9531152	5.8			RSD ()	
1,2,3,4,6,7,8-HpCDD	1.039013	4.1			RSD ()	
OCDF	0.7778078	6.7			RSD ()	
OCDD	0.9199537	5.8			RSD ()	
13C12-2,3,7,8-TCDF	1.620196	4.4			RSD ()	
13C12-2,3,7,8-TCDD	1.152409	3.8			RSD ()	
13C12-1,2,3,7,8-PeCDF	1.240452	15.9			RSD ()	
13C12-2,3,4,7,8-PeCDF	1.117786	17.7			RSD ()	
13C12-1,2,3,7,8-PeCDD	0.8288129	18.3			RSD ()	
13C12-1,2,3,4,7,8-HxCDF	1.168305	14.9			RSD ()	
13C12-1,2,3,6,7,8-HxCDF	1.386466	11.8			RSD ()	
13C12-2,3,4,6,7,8-HxCDF	1.129256	5.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDF	0.9317541	3.4			RSD ()	
13C12-1,2,3,4,7,8-HxCDD	0.9950393	5.9			RSD ()	
13C12-1,2,3,6,7,8-HxCDD	1.156689	6.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDF	0.8952017	13.8			RSD ()	
13C12-1,2,3,4,7,8,9-HpCDF	0.7697516	11.7			RSD ()	
13C12-1,2,3,4,6,7,8-HpCDD	0.8401226	11.5			RSD ()	



INITIAL CALIBRATION DATA
EPA 1613B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00015	Instrument:	AUTOSPEC01
Calibration Date:	03/03/2023	Column (1):	RTX-Dioxin2

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
13C12-OCDD	0.7674714	13.4			RSD ()	
37C14-2,3,7,8-TCDD	1.287804	12.2			RSD ()	
13C12-1,2,3,4-TCDD	1	0.0			RSD ()	
13C12-1,2,3,7,8,9-HxCDD	1	0.0			RSD ()	



ANALYSIS SEQUENCE

SLC0045

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 9:51, 18:18

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0045-ICV1	CS3W1	QC		1	K009821		03/03/2023 09:51	23030302	PK	
SLC0045-RES1	ISCW1	QC		2	L002084		03/03/2023 10:39	23030303	PK	
SLC0045-CAL1	CSLCW	QC		3	I005460		03/03/2023 11:28	23030304	PK	
SLC0045-CAL2	CS1CW	QC		4	I005456		03/03/2023 12:23	23030305	PK	
SLC0045-CAL3	CS2CW	QC		5	I005457		03/03/2023 13:16	23030306	PK	
SLC0045-CAL4	CS3CW	QC		6	K009821		03/03/2023 14:06	23030307	PK	
SLC0045-CAL5	CS4CW	QC		7	I005458		03/03/2023 14:59	23030308	PK	
SLC0045-CAL6	CS5CW	QC		8	I005459		03/03/2023 15:47	23030309	PK	
SLC0045-SCV1	ICVCW	QC		9	H008219		03/03/2023 16:36	23030310	PK	
SLC0045-CCV1	CS3V4	QC		10	K009821		03/03/2023 17:25	23030311	PK	
SLC0045-RES2	ISCV4	QC		11	L002084		03/03/2023 18:18	23030312	PK	

Dataset: T:\Autospec\Processed Data Batch\2303031CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 10:58:44 Pacific Standard Time

3/6/23 PK

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030304, Compound:TD, RT:26.410	1
Peak deleted	Sample:23030304, Compound:OD, RT:44.990	1
Peak deleted	Sample:23030304, Compound:TF, RT:25.774	1
Pre modification peak	Sample:23030305, Compound:TF, RT:25.774	2
Peak modified	Sample:23030305, Compound:TF, RT:25.774	2
Pre modification peak	Sample:23030304, Compound:HPD, RT:40.261	1
Peak modified	Sample:23030304, Compound:HPD, RT:40.261	1
Peak deleted	Sample:23030308, Compound:PF, RT:32.328	5
Peak deleted	Sample:23030309, Compound:PF, RT:32.307	6
Peak deleted	Sample:23030309, Compound:HF, RT:33.220	6
Peak deleted	Sample:23030309, Compound:TD, RT:27.017	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.995	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.917	6
Peak deleted	Sample:23030308, Compound:HD, RT:34.000	5
Peak deleted	Sample:23030308, Compound:HPD, RT:39.225	5
Peak deleted	Sample:23030309, Compound:HPD, RT:39.214	6
Pre modification peak	Sample:23030305, Compound:OF, RT:45.237	2
Peak modified	Sample:23030305, Compound:OF, RT:45.237	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\2303031CIH.qld'	

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
 Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.469e4	5.839e4	0.702	0.765	0.770	894	1638	6.87e5	9.09e5	769.3	554.8	NO	bb	bb	9.550
12378-PeCDF	29.956	1.001	2.355e5	1.540e5	0.679	1.529	1.550	2187	1572	3.61e6	2.40e6	1652.4	1526.9	NO	bb	bb	49.641
23478-PeCDF	31.293	1.001	2.214e5	1.482e5	0.786	1.494	1.550	2187	1572	3.41e6	2.30e6	1560.8	1464.8	NO	bb	bb	47.528
123478-HxCDF	34.914	1.001	2.600e5	2.102e5	1.166	1.237	1.240	1592	1910	4.13e6	3.31e6	2594.2	1730.9	NO	bd	bd	47.118
234678-HxCDF	35.917	1.001	2.733e5	2.175e5	1.140	1.257	1.240	1592	1910	4.33e6	3.47e6	2719.2	1818.9	NO	bb	bb	49.341
123678-HxCDF	35.048	1.000	2.727e5	2.151e5	1.091	1.268	1.240	1592	1910	4.23e6	3.33e6	2659.9	1743.3	NO	db	db	49.569
123789-HxCDF	36.941	1.000	2.420e5	1.912e5	1.137	1.266	1.240	1592	1910	3.95e6	3.13e6	2482.2	1637.3	NO	bb	bb	46.959
1234678-HpCDF	38.780	1.000	1.767e5	1.776e5	1.003	0.995	1.050	1849	2300	2.99e6	3.02e6	1618.0	1311.0	NO	bb	bb	47.490
1234789-HpCDF	41.019	1.000	1.595e5	1.575e5	0.953	1.013	1.050	1849	2300	2.36e6	2.33e6	1274.2	1012.6	NO	bb	bb	50.221
OCDF	45.246	1.005	2.326e5	2.612e5	0.778	0.891	0.890	910	1225	2.82e6	3.14e6	3100.2	2559.9	NO	bb	bb	88.591
2378-TCDD	26.438	1.001	5.709e4	7.150e4	1.149	0.798	0.770	1506	757	9.09e5	1.12e6	603.1	1485.0	NO	bb	bb	9.450
12378-PeCDD	31.549	1.001	2.156e5	1.424e5	1.022	1.514	1.550	2044	1419	3.32e6	2.17e6	1626.0	1530.4	NO	bb	bb	49.654
123478-HxCDD	36.028	1.000	2.225e5	1.815e5	0.996	1.226	1.240	1845	1377	3.65e6	2.93e6	1979.4	2130.4	NO	bd	bd	50.053
123678-HxCDD	36.150	1.000	2.361e5	1.995e5	1.001	1.184	1.240	1845	1377	3.83e6	3.15e6	2076.5	2285.7	NO	db	db	49.648
123789-HxCDD	36.529	1.011	2.267e5	1.883e5	0.907	1.204	1.240	1845	1377	3.65e6	3.02e6	1979.8	2191.3	NO	bb	bb	54.229
1234678-HpCDD	40.284	1.001	1.918e5	1.891e5	1.039	1.015	1.050	2026	1655	2.99e6	2.92e6	1477.4	1764.9	NO	bb	bb	47.619
OCDD	45.008	1.000	3.015e5	3.475e5	0.920	0.868	0.890	1418	1100	3.70e6	4.29e6	2606.9	3904.9	NO	bb	bb	98.432
13C-2378-TCDF	25.774	1.007	6.611e5	8.775e5	1.620	0.753	0.770	2458	1918	1.00e7	1.34e7	4080.0	6997.2	NO	bb	bb	94.015
13C-12378-PeCDF	29.934	1.169	6.937e5	4.618e5	1.240	1.502	1.550	2176	1857	1.07e7	7.10e6	4925.2	3826.5	NO	bb	bb	92.213
13C-23478-PeCDF	31.271	1.221	5.928e5	3.963e5	1.118	1.496	1.550	2176	1857	9.20e6	6.25e6	4229.1	3368.5	NO	bb	bb	87.601
13C-123478-HxCDF	34.891	0.955	2.871e5	5.687e5	1.168	0.505	0.510	1657	1593	4.56e6	9.04e6	2750.7	5674.1	NO	bd	bd	84.013
13C-123678-HxCDF	35.036	0.959	3.069e5	5.954e5	1.386	0.515	0.510	1657	1593	4.75e6	9.14e6	2868.0	5738.5	NO	db	db	74.642
13C-234678-HxCDF	35.894	0.983	2.954e5	5.775e5	1.129	0.512	0.510	1657	1593	4.85e6	9.48e6	2926.1	5951.0	NO	bb	bb	88.651
13C-123789-HxCDF	36.930	1.011	2.724e5	5.390e5	0.932	0.505	0.510	1657	1593	4.39e6	8.57e6	2648.2	5379.8	NO	bb	bb	99.871
13C-1234678-HpCDF	38.769	1.062	2.262e5	5.177e5	0.895	0.437	0.440	2036	2545	3.83e6	8.70e6	1881.8	3416.5	NO	bb	bb	95.295
13C-1234789-HpCDF	41.008	1.123	1.995e5	4.627e5	0.770	0.431	0.440	2036	2545	2.95e6	6.70e6	1450.8	2632.3	NO	bb	bb	98.667
13C-1234-TCDD	25.605	0.000	4.500e5	5.601e5	1.000	0.803	0.770	1910	1117	7.08e6	8.81e6	3705.2	7891.1	NO	bb	bb	100.000
13C-2378-TCDD	26.424	1.032	5.241e5	6.605e5	1.152	0.794	0.770	1910	1117	7.92e6	9.96e6	4144.8	8917.7	NO	bb	bb	101.762
13C-12378-PeCDD	31.527	1.231	4.348e5	2.708e5	0.829	1.606	1.550	951	872	6.72e6	4.16e6	7062.4	4771.1	NO	bb	bb	84.283
13C-123478-HxCDD	36.017	0.986	4.575e5	3.533e5	0.995	1.295	1.240	1714	1036	7.67e6	5.90e6	4475.1	5696.2	NO	bd	bd	93.458
13C-123678-HxCDD	36.139	0.990	4.929e5	3.835e5	1.157	1.285	1.240	1714	1036	7.72e6	6.07e6	4504.9	5859.4	NO	db	db	86.905
13C-1234678-HpCDD	40.262	1.103	3.870e5	3.828e5	0.840	1.011	1.050	1736	1260	5.92e6	5.62e6	3411.3	4462.2	NO	bb	bb	105.085
13C-OCDD	44.999	1.232	6.781e5	7.554e5	0.767	0.898	0.890	1440	1232	8.22e6	9.13e6	5710.3	7413.0	NO	bb	bb	214.218
13C-123789-HxCDD	36.518	0.000	4.889e5	3.830e5	1.000	1.277	1.240	1714	1036	7.91e6	6.13e6	4618.2	5918.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.438	1.033	1.177e5		1.288			2053		1.80e6		877.6			bb		9.046

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	4.825e4	6.619e4	0.802	0.729	0.770	894	1638	7.69e5	1.08e6	860.8	657.5	NO	bb	bb	9.280
1289-TCDF	27.286	1.059	4.233e4	5.922e4	0.678	0.715	0.770	894	1638	6.48e5	8.96e5	725.0	547.0	NO	db	db	9.735
13468-PECDF	27.145	0.907	4.529e5	2.964e5	1.246	1.528	1.550	639	866	7.07e6	4.64e6	11052.6	5356.5	NO	bb	bb	52.031
12389-PECDF	32.329	1.080	1.727e5	1.137e5	0.496	1.519	1.550	2187	1572	2.66e6	1.70e6	1217.2	1080.5	NO	bb	bb	49.938
123468-HXCDF	33.243	0.953	2.450e5	1.964e5	1.169	1.248	1.240	1592	1910	3.71e6	2.99e6	2333.1	1567.3	NO	bb	bb	44.113
1368-TCDD	23.571	0.892	5.082e4	6.674e4	1.015	0.761	0.770	1506	757	8.30e5	1.09e6	551.2	1438.0	NO	bb	bb	9.774
1289-TCDD	27.031	1.023	4.817e4	6.482e4	0.909	0.743	0.770	1506	757	7.39e5	9.76e5	490.7	1289.2	NO	bb	bb	10.496
12479-PECDD	28.831	0.914	4.117e5	2.743e5	2.301	1.501	1.550	2044	1419	3.99e6	2.64e6	1950.7	1862.6	NO	bb	bb	42.238
12389-PECDD	31.939	1.013	2.280e5	1.502e5	1.184	1.518	1.550	2044	1419	3.50e6	2.32e6	1711.4	1633.6	NO	bb	bb	45.288
124679-HXCDD	34.022	0.945	2.111e5	1.738e5	1.115	1.214	1.240	1845	1377	3.36e6	2.72e6	1819.4	1971.8	NO	bb	bb	42.563
1234679-HPCDD	39.236	0.975	2.063e5	2.043e5	1.137	1.010	1.050	2026	1655	3.38e6	3.38e6	1668.0	2041.4	NO	bb	bb	46.924
Total-tetrafurans			1.368e5		0.727			894		2.13e6							28.888
Total-penta1			4.529e5					639		7.07e6							52.031
Total-pentafurans			6.685e5		0.654			2187		1.03e7							156.333
Total-hexafurans			1.293e6		1.141			1592		2.04e7							237.100
Total-heptafurans			3.381e5		0.978			1849		5.38e6							98.217
Total-Furans			3.122e6		0.922			894		4.80e7							661.160
Total-tetradoxins			2.626e5		1.024			1506		3.74e6							49.711
Total-pentadoxins			8.563e5		1.502			2044		1.08e7							137.339
Total-hexadoxins			8.975e5		1.005			1845		1.45e7							196.701
Total-heptadoxins			3.982e5		1.088			2026		6.38e6							94.566
Total-Dioxins			2.716e6		1.130			1506		3.92e7							576.750
Total-TEQ			5.838e6					1506		8.72e7							1237.909
FUNCTION1 PFK			0.000e0					705807		0.00e0							
FUNCTION2 PFK			1.098e6					272509		2.65e6							0.000
FUNCTION3 PFK			8.030e5					419872		3.44e6							0.000
FUNCTION4 PFK			2.346e5					346452		6.90e6							
FUNCTION5 PFK			5.429e4					176842		2.44e6							
FUNCTION1 HXCD...			8.708e2					511		1.38e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.374e3					1181		2.70e4							0.000
FUNCTION3 OCDPE			4.232e2					570		6.10e3							0.000
FUNCTION4 NCDPE			7.938e2					683		4.57e3							0.000
FUNCTION5 DCDPE			0.000e0					526		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDFF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
2	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
3	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
4	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
2	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
3	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
4	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
5	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
2	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
3	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
4	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
5	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280
7	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
8	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
9	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
10	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528
11	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
12	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
13	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
14	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
15	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113
16	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
17	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
18	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
19	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
20	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490
21	OCDF	45.25	2.326e5	2.612e5	0.778	0.89	0.89	3100.2	YES	NO	bb	bb	88.591
22	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
2	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
3	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
4	Total-tetradoxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
5	Total-tetradoxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
2	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
3	Total-pentadoxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
4	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
2	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
3	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
4	Total-hexadoxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
5	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924
2	Total-heptadoxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
3	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
2	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
3	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
4	Total-tetradoxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
5	Total-tetradoxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660
6	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
7	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
8	Total-pentadoxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
9	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238
10	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
11	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
12	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
13	Total-hexadoxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
14	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563
15	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924
16	Total-heptadoxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
17	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619
18	OCDD	45.01	3.015e5	3.475e5	0.920	0.87	0.89	2606.9	YES	NO	bb	bb	98.432

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\HOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.233e4	5.922e4	0.678	0.71	0.77	725.0	YES	NO	db	db	9.735
2	Total-tetrafurans	27.16	6.976e2	1.059e3	0.727	0.66	0.77	14.1	YES	NO	bd	bd	0.157
3	2378-TCDF	25.79	4.469e4	5.839e4	0.702	0.77	0.77	769.3	YES	NO	bb	bb	9.550
4	Total-tetrafurans	24.88	4.805e2	5.664e2	0.727	0.85	0.77	7.5	YES	NO	bb	bb	0.094
5	Total-tetrafurans	24.57	3.491e2	4.664e2	0.727	0.75	0.77	6.2	YES	NO	bd	bd	0.073
6	1368-TCDF	22.29	4.825e4	6.619e4	0.802	0.73	0.77	860.8	YES	NO	bb	bb	9.280
7	12378-PeCDF	29.96	2.355e5	1.540e5	0.679	1.53	1.55	1652.4	YES	NO	bb	bb	49.641
8	Total-pentafurans	28.81	3.891e4	2.579e4	0.654	1.51	1.55	273.1	YES	NO	bb	bb	9.226
9	12389-PECDF	32.33	1.727e5	1.137e5	0.496	1.52	1.55	1217.2	YES	NO	bb	bb	49.938
10	23478-PeCDF	31.29	2.214e5	1.482e5	0.786	1.49	1.55	1560.8	YES	NO	bb	bb	47.528
11	123789-HxCDF	36.94	2.420e5	1.912e5	1.137	1.27	1.24	2482.2	YES	NO	bb	bb	46.959
12	234678-HxCDF	35.92	2.733e5	2.175e5	1.140	1.26	1.24	2719.2	YES	NO	bb	bb	49.341
13	123678-HxCDF	35.05	2.727e5	2.151e5	1.091	1.27	1.24	2659.9	YES	NO	db	db	49.569
14	123478-HxCDF	34.91	2.600e5	2.102e5	1.166	1.24	1.24	2594.2	YES	NO	bd	bd	47.118
15	123468-HXCDF	33.24	2.450e5	1.964e5	1.169	1.25	1.24	2333.1	YES	NO	bb	bb	44.113
16	Total-heptafurans	41.38	1.097e2	1.037e2	0.978	1.06	1.05	1.8	NO	NO	bb	bb	0.031
17	1234789-HpCDF	41.02	1.595e5	1.575e5	0.953	1.01	1.05	1274.2	YES	NO	bb	bb	50.221
18	Total-heptafurans	39.45	1.654e3	1.420e3	0.978	1.17	1.05	14.3	YES	NO	bb	bb	0.447
19	Total-heptafurans	39.28	9.725e1	9.433e1	0.978	1.03	1.05	1.5	NO	NO	bb	bb	0.028
20	1234678-HpCDF	38.78	1.767e5	1.776e5	1.003	1.00	1.05	1618.0	YES	NO	bb	bb	47.490
21	OCDF	45.25	2.326e5	2.612e5	0.778	0.89	0.89	3100.2	YES	NO	bb	bb	88.591
22	13468-PECDF	27.14	4.529e5	2.964e5	1.246	1.53	1.55	11052.6	YES	NO	bb	bb	52.031
23	1368-TCDD	23.57	5.082e4	6.674e4	1.015	0.76	0.77	551.2	YES	NO	bb	bb	9.774
24	1289-TCDD	27.03	4.817e4	6.482e4	0.909	0.74	0.77	490.7	YES	NO	bb	bb	10.496
25	2378-TCDD	26.44	5.709e4	7.150e4	1.149	0.80	0.77	603.1	YES	NO	bb	bb	9.450
26	Total-tetradioxins	26.11	8.149e4	1.045e5	1.024	0.78	0.77	583.1	YES	NO	bb	bb	15.330
27	Total-tetradioxins	25.62	2.499e4	3.156e4	1.024	0.79	0.77	257.1	YES	NO	bb	bb	4.660
28	12389-PECDD	31.94	2.280e5	1.502e5	1.184	1.52	1.55	1711.4	YES	NO	bb	bb	45.288
29	12378-PeCDD	31.55	2.156e5	1.424e5	1.022	1.51	1.55	1626.0	YES	NO	bb	bb	49.654
30	Total-pentadioxins	30.87	1.016e3	6.817e2	1.502	1.49	1.55	7.9	YES	NO	bb	bb	0.160
31	12479-PECDD	28.83	4.117e5	2.743e5	2.301	1.50	1.55	1950.7	YES	NO	bb	bb	42.238
32	123789-HxCDD	36.53	2.267e5	1.883e5	0.907	1.20	1.24	1979.8	YES	NO	bb	bb	54.229
33	123678-HxCDD	36.15	2.361e5	1.995e5	1.001	1.18	1.24	2076.5	YES	NO	db	db	49.648
34	123478-HxCDD	36.03	2.225e5	1.815e5	0.996	1.23	1.24	1979.4	YES	NO	bd	bd	50.053
35	Total-hexadioxins	35.14	9.946e2	7.755e2	1.005	1.28	1.24	9.3	YES	NO	db	bd	0.209
36	124679-HXCDD	34.02	2.111e5	1.738e5	1.115	1.21	1.24	1819.4	YES	NO	bb	bb	42.563
37	1234679-HPCDD	39.24	2.063e5	2.043e5	1.137	1.01	1.05	1668.0	YES	NO	bb	bb	46.924

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	Total-heptadioxins	40.58	1.040e2	8.729e1	1.088	1.19	1.05	2.1	NO	NO	bb	bb	0.023
39	1234678-HpCDD	40.28	1.918e5	1.891e5	1.039	1.01	1.05	1477.4	YES	NO	bb	bb	47.619
40	OCDD	45.01	3.015e5	3.475e5	0.920	0.87	0.89	2606.9	YES	NO	bb	bb	98.432

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.96	1.058e5					1.1	NO		bb		0.000
2	FUNCTION2 PFK	30.15	5.471e5					3.7	YES		bb		0.000
3	FUNCTION2 PFK	28.28	4.455e5					4.9	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.89	2.667e5					4.7	YES		bb		0.000
2	FUNCTION3 PFK	33.03	5.362e5					3.5	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
 Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.07	4.905e4					2.0	NO		db		
2	FUNCTION4 PFK	37.96	1.071e4					1.3	NO		bd		
3	FUNCTION4 PFK	37.89	4.848e3					0.7	NO		bb		
4	FUNCTION4 PFK	42.18	1.359e4					1.2	NO		bb		
5	FUNCTION4 PFK	41.91	8.056e3					0.9	NO		db		
6	FUNCTION4 PFK	41.83	2.292e4					1.6	NO		bd		
7	FUNCTION4 PFK	41.77	1.673e4					1.5	NO		bb		
8	FUNCTION4 PFK	41.48	1.418e4					1.4	NO		bb		
9	FUNCTION4 PFK	41.32	2.104e3					0.5	NO		bb		
10	FUNCTION4 PFK	41.13	8.695e3					1.0	NO		bb		
11	FUNCTION4 PFK	40.63	8.163e3					0.8	NO		bb		
12	FUNCTION4 PFK	40.08	1.008e4					1.1	NO		db		
13	FUNCTION4 PFK	40.04	1.572e4					1.4	NO		bd		
14	FUNCTION4 PFK	39.51	7.181e3					1.0	NO		bb		
15	FUNCTION4 PFK	39.44	5.021e3					0.7	NO		bb		
16	FUNCTION4 PFK	38.96	9.511e3					1.3	NO		db		
17	FUNCTION4 PFK	38.92	2.806e4					1.5	NO		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.57	1.411e3					0.9	NO		bb		
2	FUNCTION5 PFK	45.95	2.307e4					3.9	YES		bb		
3	FUNCTION5 PFK	45.69	1.018e3					0.6	NO		bb		
4	FUNCTION5 PFK	45.54	1.146e3					0.7	NO		bb		
5	FUNCTION5 PFK	45.12	9.805e3					2.3	NO		bb		
6	FUNCTION5 PFK	44.83	5.276e3					1.3	NO		bb		
7	FUNCTION5 PFK	44.58	5.554e3					1.4	NO		bb		
8	FUNCTION5 PFK	44.38	2.760e3					0.9	NO		db		
9	FUNCTION5 PFK	44.35	3.252e3					1.1	NO		bd		
10	FUNCTION5 PFK	42.99	9.959e2					0.6	NO		bb		

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.01	7.970e1					3.2	YES		bb		0.000
2	FUNCTION1 HXCD...	23.47	8.919e1					3.0	YES		db		0.000
3	FUNCTION1 HXCD...	23.40	8.065e1					2.9	NO		dd		0.000
4	FUNCTION1 HXCD...	23.32	1.305e2					3.4	YES		dd		0.000
5	FUNCTION1 HXCD...	23.22	1.146e2					2.8	NO		bd		0.000
6	FUNCTION1 HXCD...	22.41	7.936e1					4.3	YES		bb		0.000
7	FUNCTION1 HXCD...	27.40	7.698e1					2.2	NO		bb		0.000
8	FUNCTION1 HXCD...	27.14	1.376e2					3.3	YES		bb		0.000
9	FUNCTION1 HXCD...	25.79	8.222e1					1.9	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.53	2.999e2					2.9	NO		bb		0.000
2	FUNCTION2 HPCD...	31.17	3.219e2					4.5	YES		bb		0.000
3	FUNCTION2 HPCD...	29.58	8.369e1					1.2	NO		db		0.000
4	FUNCTION2 HPCD...	29.50	8.185e1					1.4	NO		bd		0.000
5	FUNCTION2 HPCD...	29.43	9.066e1					2.2	NO		bb		0.000
6	FUNCTION2 HPCD...	28.26	1.049e2					2.5	NO		db		0.000
7	FUNCTION2 HPCD...	28.22	1.658e2					2.8	NO		bd		0.000
8	FUNCTION2 HPCD...	28.15	1.360e2					3.3	YES		db		0.000
9	FUNCTION2 HPCD...	28.11	8.921e1					2.1	NO		bd		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.53	2.562e2					6.2	YES		bb		0.000
2	FUNCTION3 OCDPE	36.14	1.671e2					4.5	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHOP.qld
Last Altered: Monday, March 06, 2023 11:36:30 Pacific Standard Time
Printed: Monday, March 06, 2023 11:37:17 Pacific Standard Time

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	8.282e1					2.4	NO		bb		0.000
2	FUNCTION4 NCDPE	38.07	5.777e2					4.3	YES		bb		0.000
3	FUNCTION4 NCDPE	37.82	1.333e2					0.0	NO		bb		0.000

ETHERS6

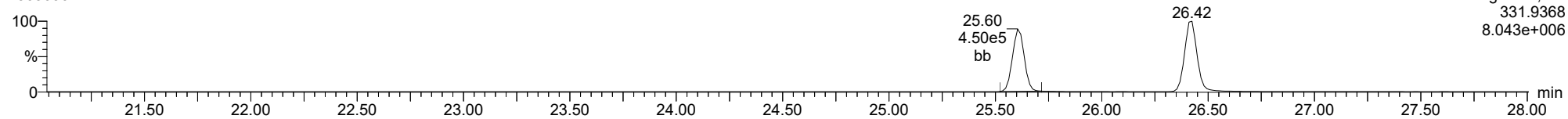
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

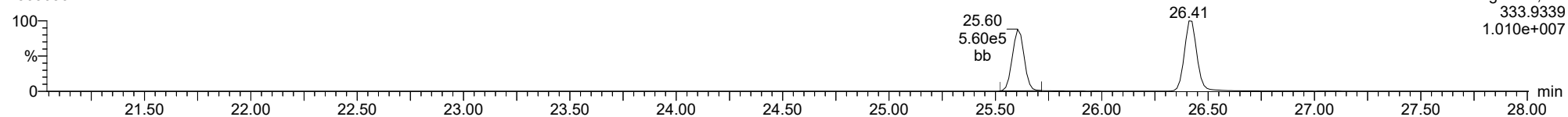
13C-1234-TCDD

23030302



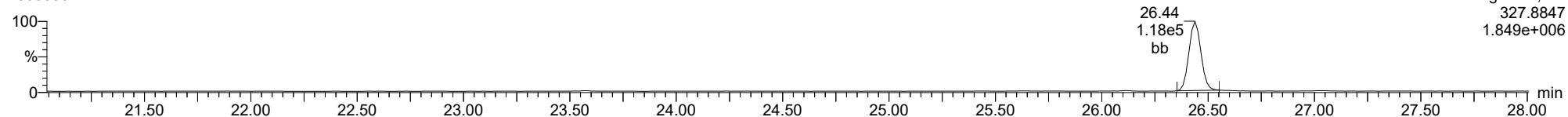
13C-1234-TCDD

23030302



37CL-2378-TCDD

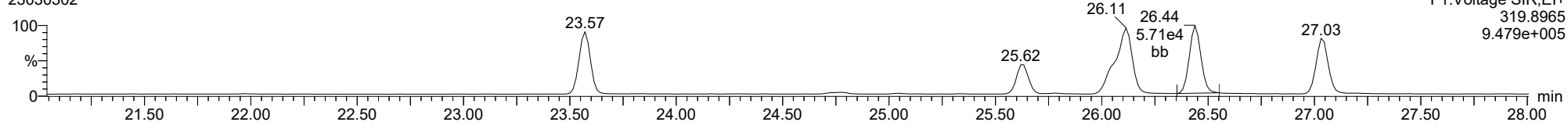
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

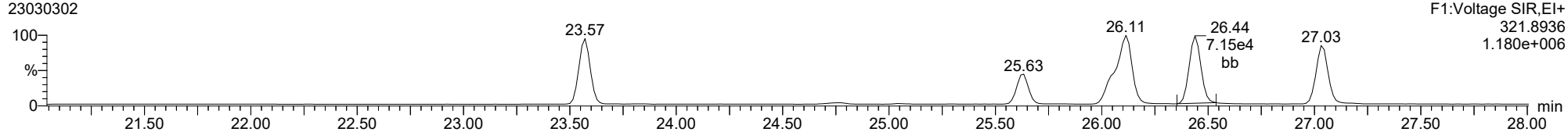
2378-TCDD

23030302



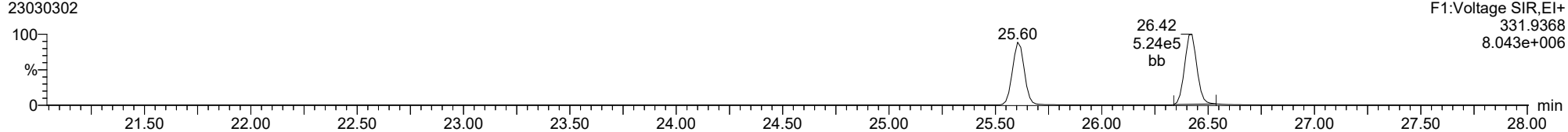
2378-TCDD

23030302



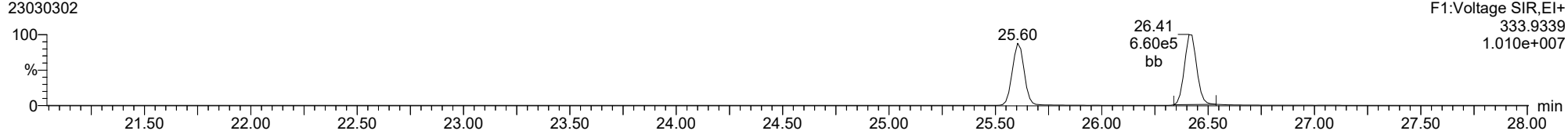
13C-2378-TCDD

23030302



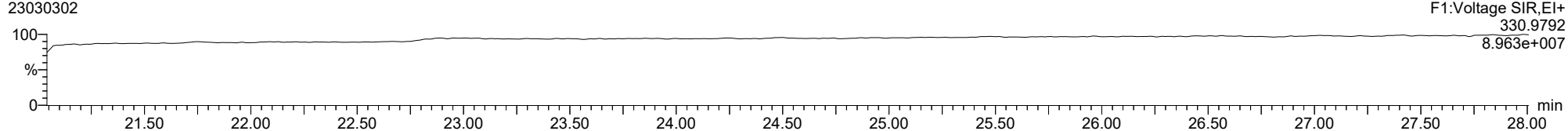
13C-2378-TCDD

23030302



FUNCTION1 PFK

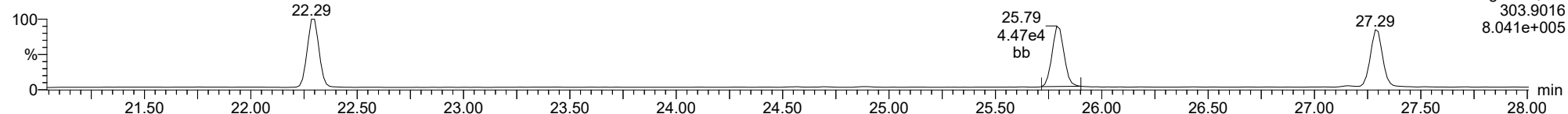
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

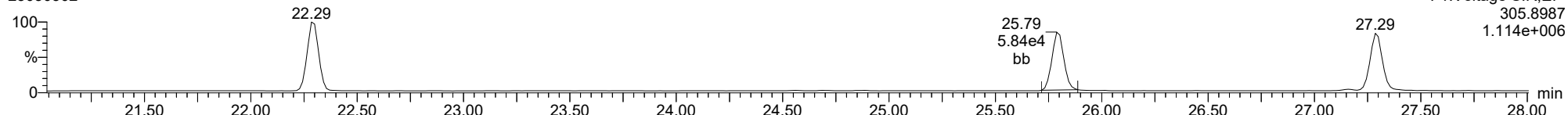
2378-TCDF

23030302



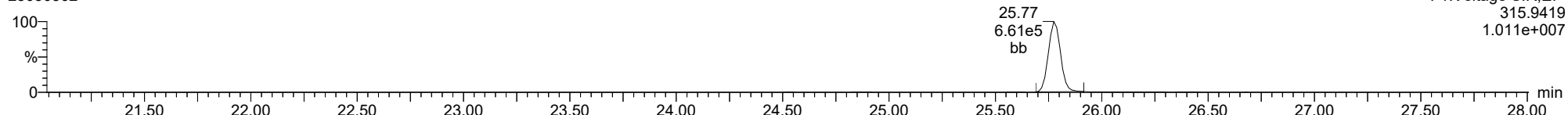
2378-TCDF

23030302



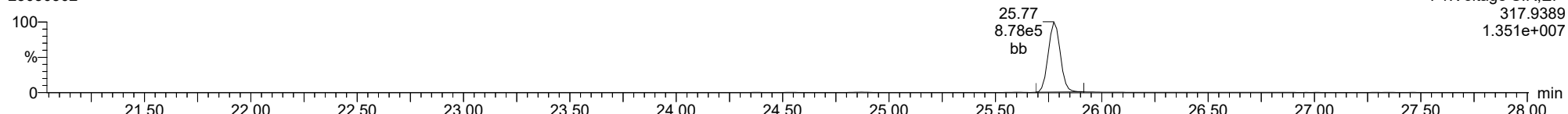
13C-2378-TCDF

23030302



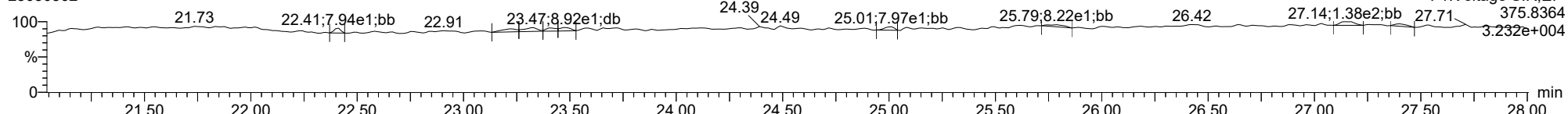
13C-2378-TCDF

23030302



FUNCTION1 HXCDPE

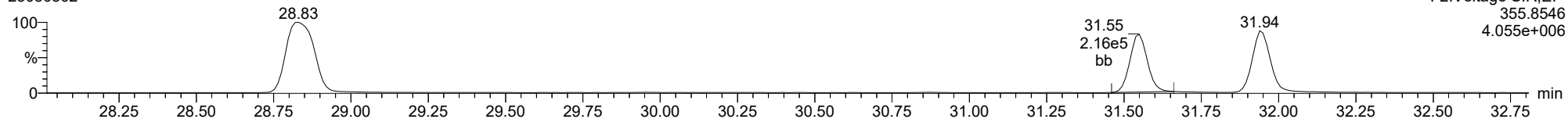
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

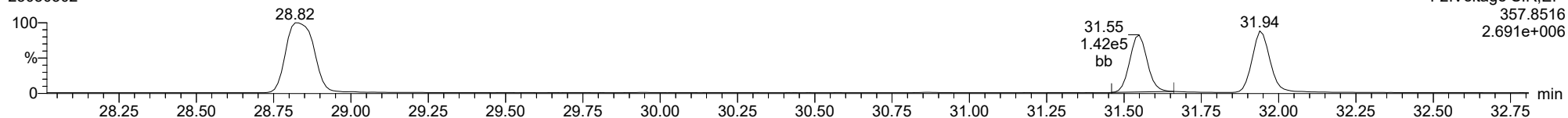
12378-PeCDD

23030302



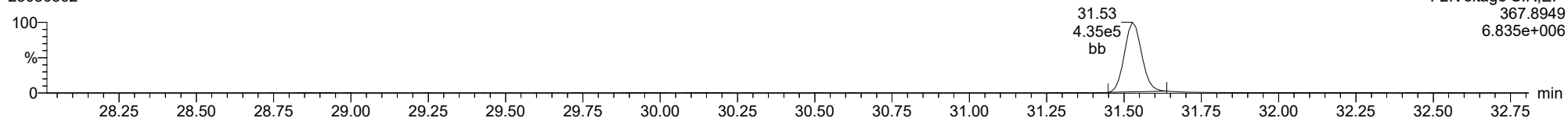
12378-PeCDD

23030302



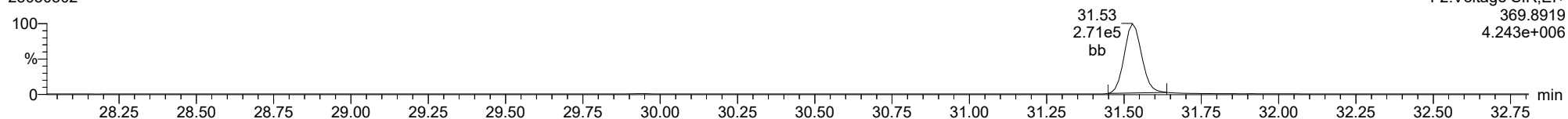
13C-12378-PeCDD

23030302



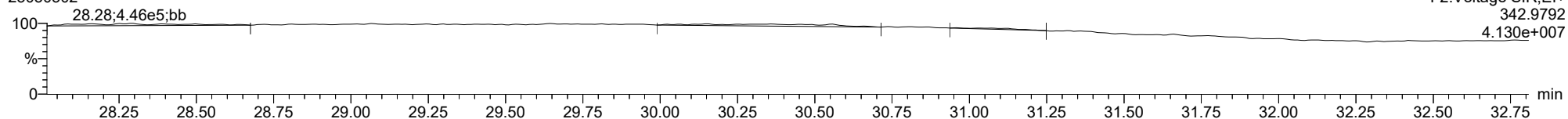
13C-12378-PeCDD

23030302



FUNCTION2 PFK

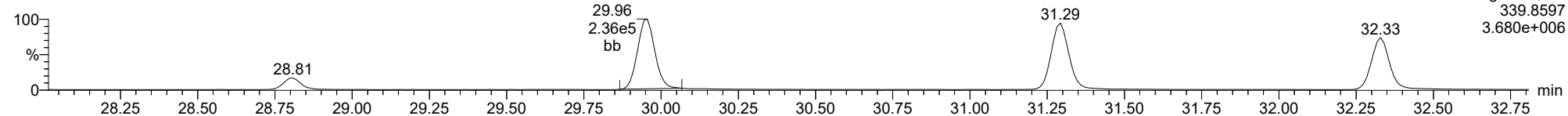
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

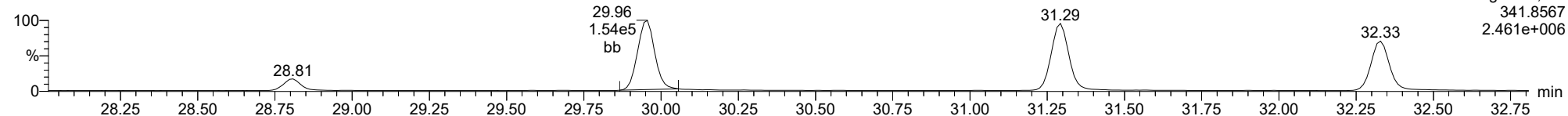
12378-PeCDF

23030302



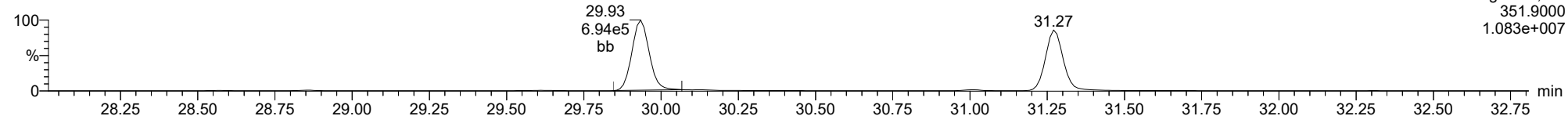
12378-PeCDF

23030302



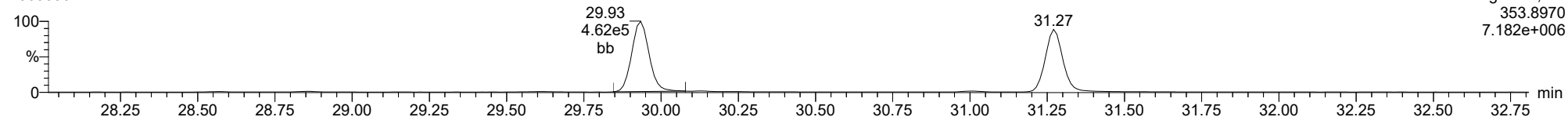
13C-12378-PeCDF

23030302



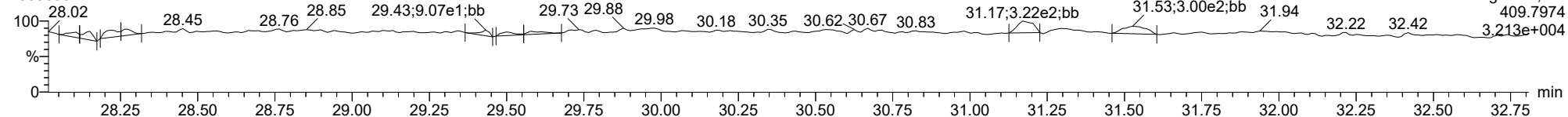
13C-12378-PeCDF

23030302



FUNCTION2 HPCDPE

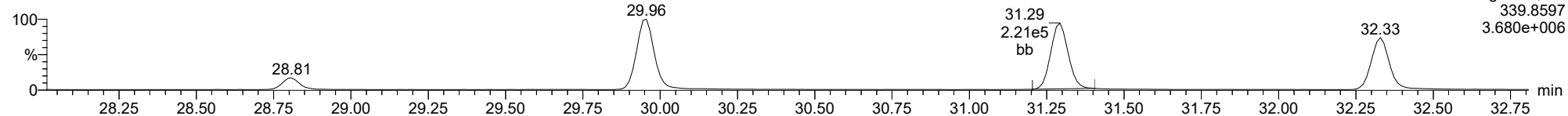
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

23478-PeCDF

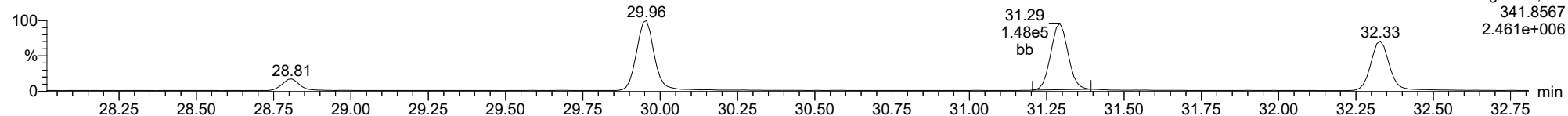
23030302



F2:Voltage SIR,EI+
339.8597
3.680e+006

23478-PeCDF

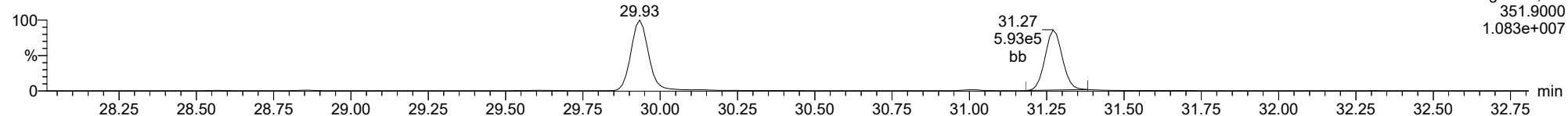
23030302



F2:Voltage SIR,EI+
341.8567
2.461e+006

13C-23478-PeCDF

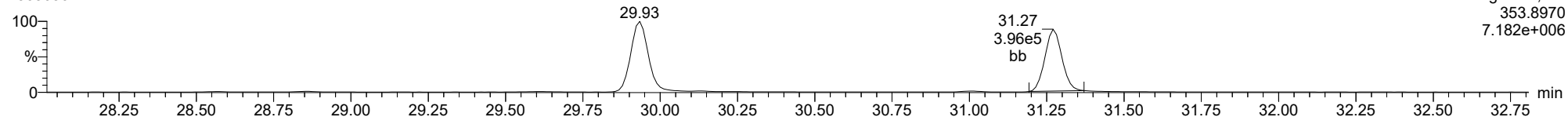
23030302



F2:Voltage SIR,EI+
351.9000
1.083e+007

13C-23478-PeCDF

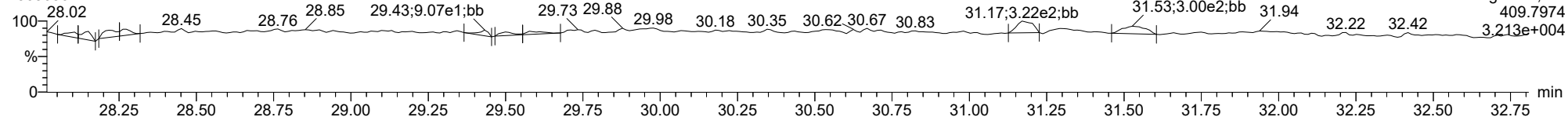
23030302



F2:Voltage SIR,EI+
353.8970
7.182e+006

FUNCTION2 HPCDPE

23030302

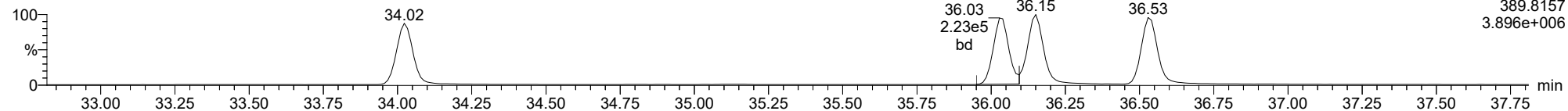


F2:Voltage SIR,EI+
409.7974
3.213e+004

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

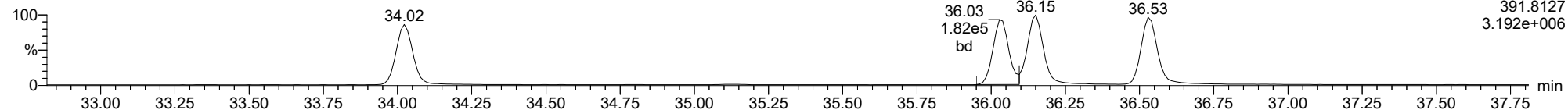
123478-HxCDD

23030302



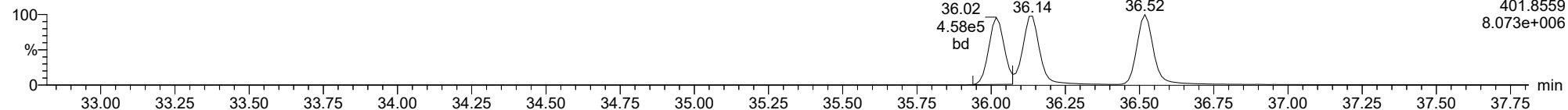
123478-HxCDD

23030302



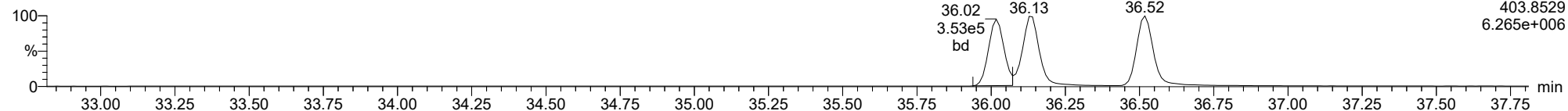
13C-123478-HxCDD

23030302



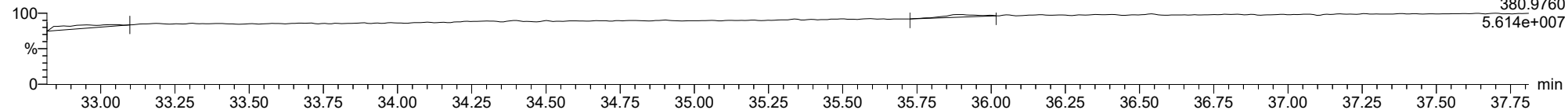
13C-123478-HxCDD

23030302



FUNCTION3 PFK

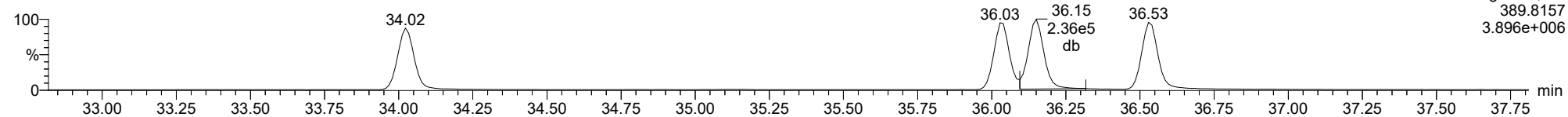
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

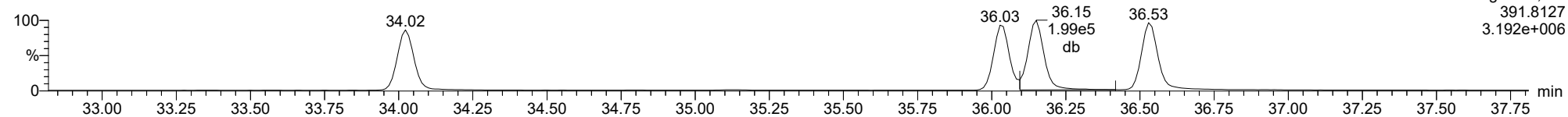
123678-HxCDD

23030302



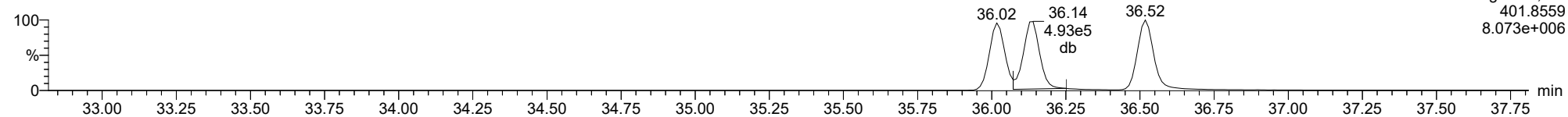
123678-HxCDD

23030302



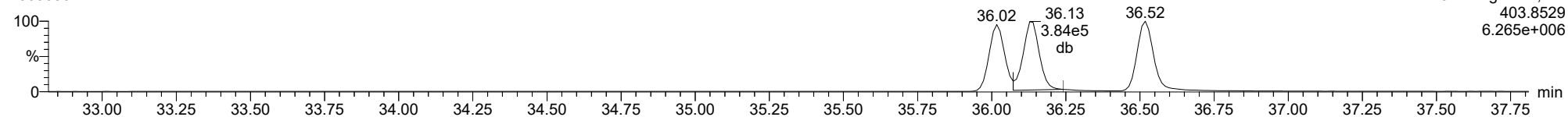
13C-123678-HxCDD

23030302



13C-123678-HxCDD

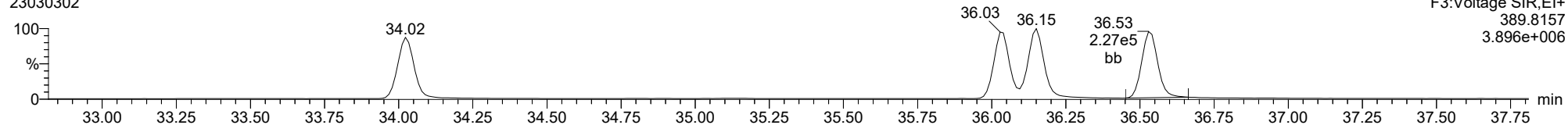
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

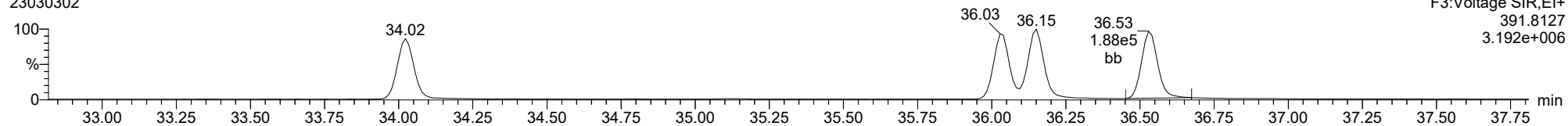
123789-HxCDD

23030302



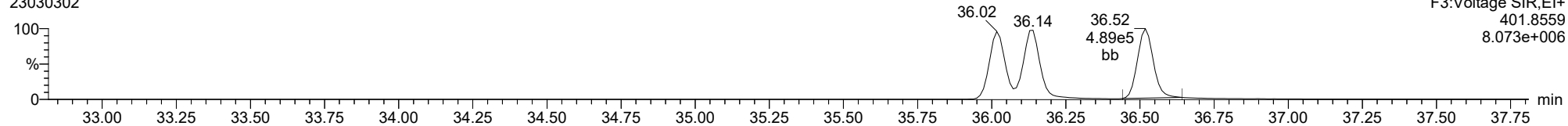
123789-HxCDD

23030302



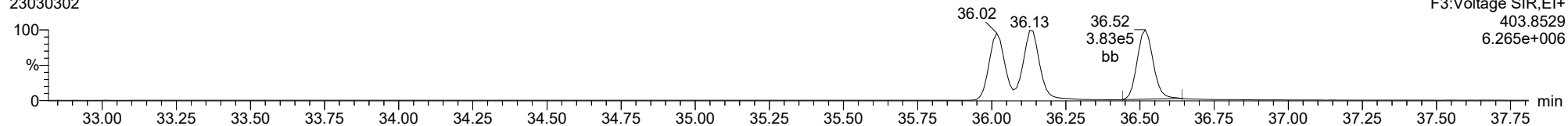
13C-123789-HxCDD

23030302



13C-123789-HxCDD

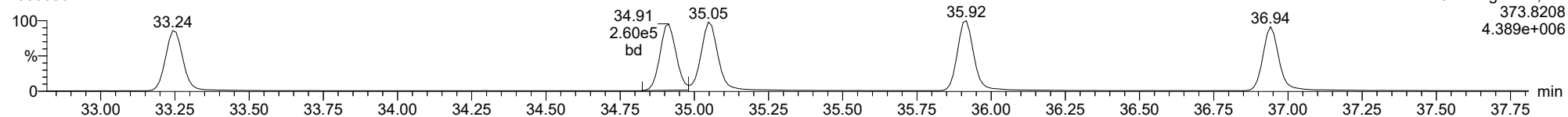
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

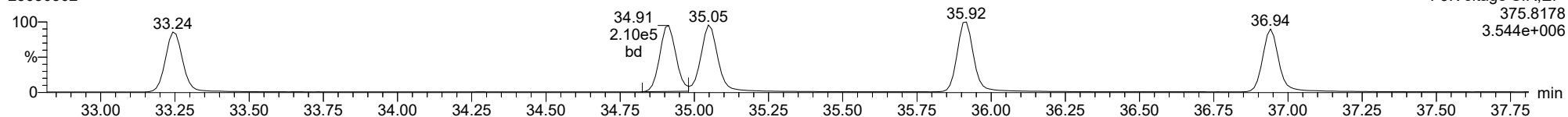
123478-HxCDF

23030302



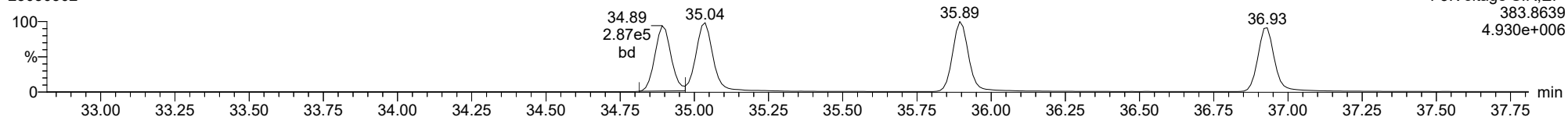
123478-HxCDF

23030302



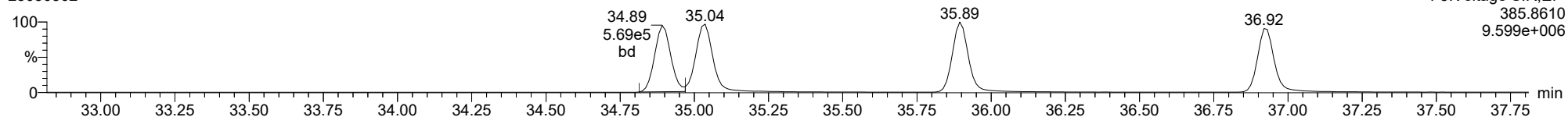
13C-123478-HxCDF

23030302



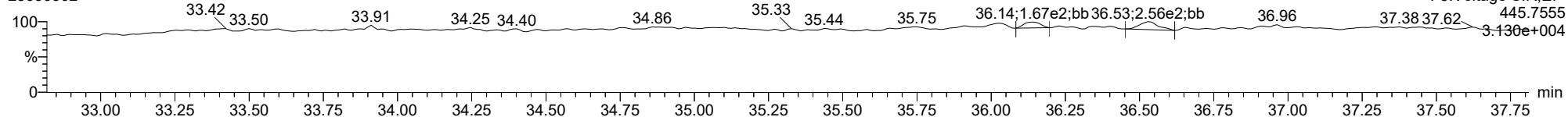
13C-123478-HxCDF

23030302



FUNCTION3 OCDPE

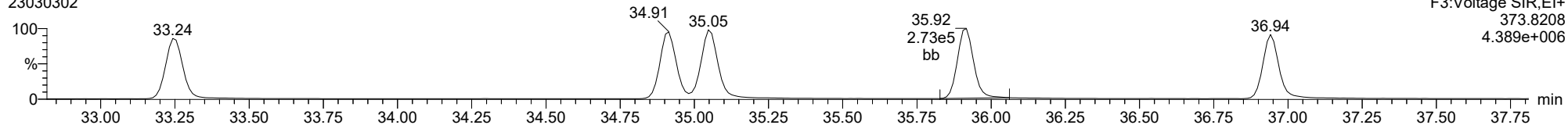
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

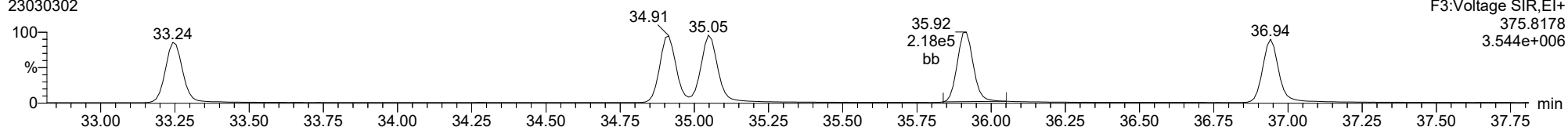
234678-HxCDF

23030302



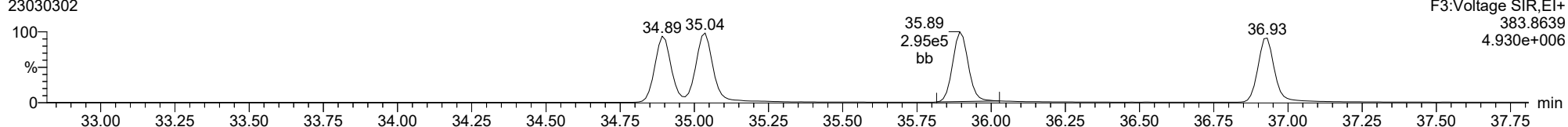
234678-HxCDF

23030302



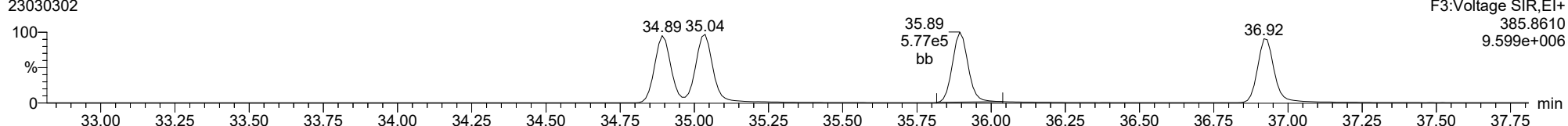
13C-234678-HxCDF

23030302



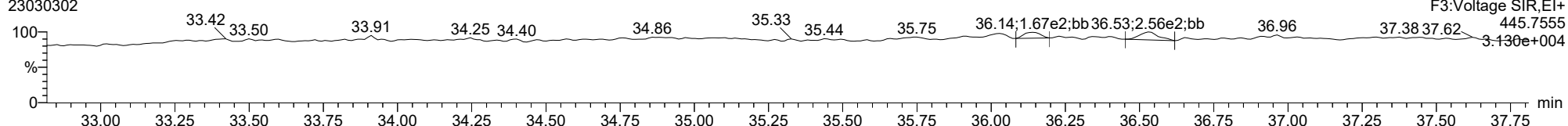
13C-234678-HxCDF

23030302



FUNCTION3 OCDPE

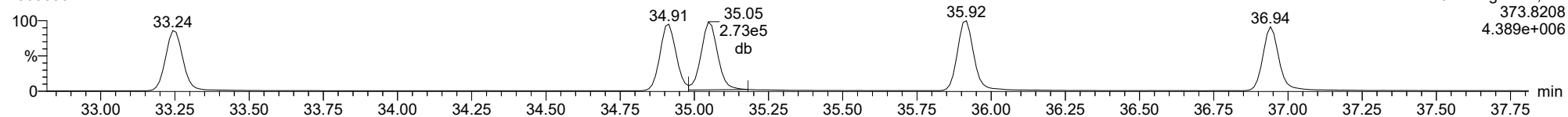
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

123678-HxCDF

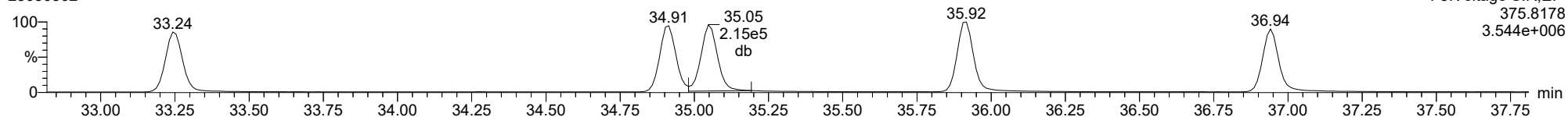
23030302



F3:Voltage SIR,EI+
373.8208
4.389e+006

123678-HxCDF

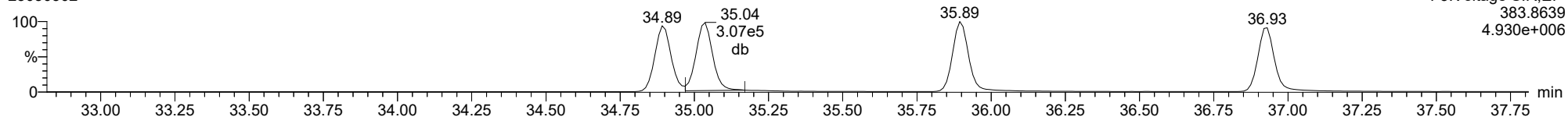
23030302



F3:Voltage SIR,EI+
375.8178
3.544e+006

13C-123678-HxCDF

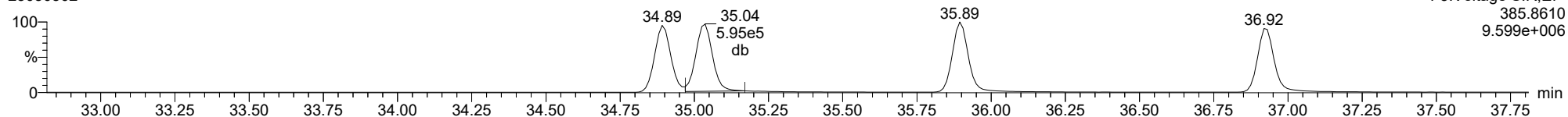
23030302



F3:Voltage SIR,EI+
383.8639
4.930e+006

13C-123678-HxCDF

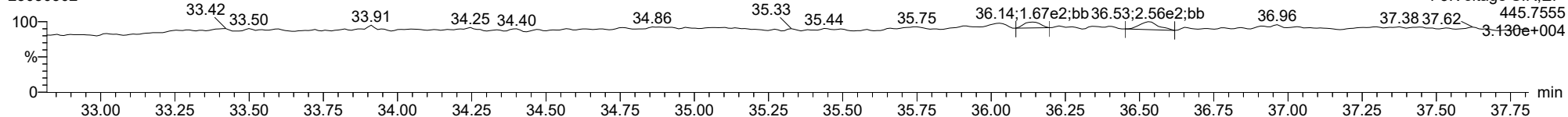
23030302



F3:Voltage SIR,EI+
385.8610
9.599e+006

FUNCTION3 OCDPE

23030302

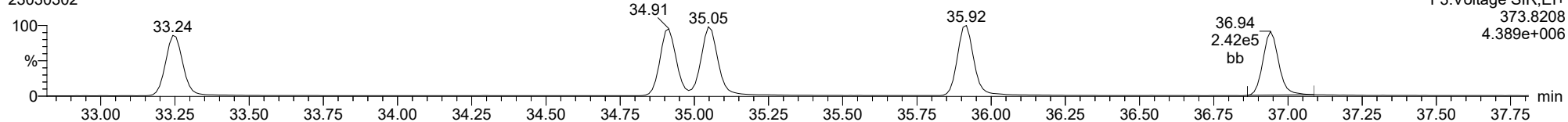


F3:Voltage SIR,EI+
445.7555
3.130e+004

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

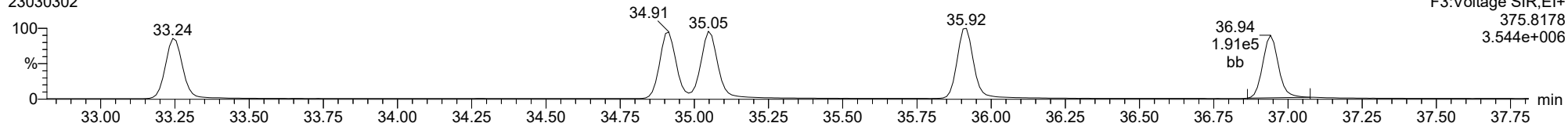
123789-HxCDF

23030302



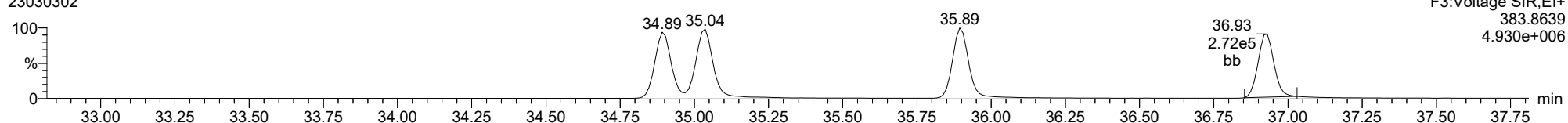
123789-HxCDF

23030302



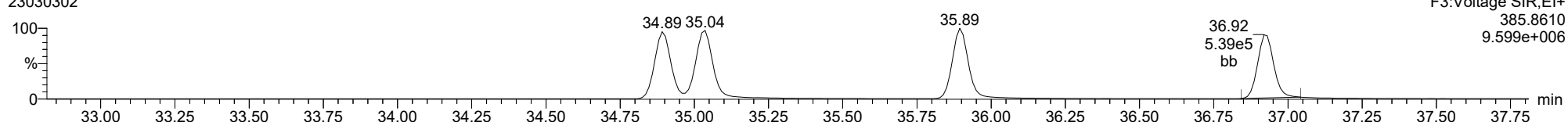
13C-123789-HxCDF

23030302



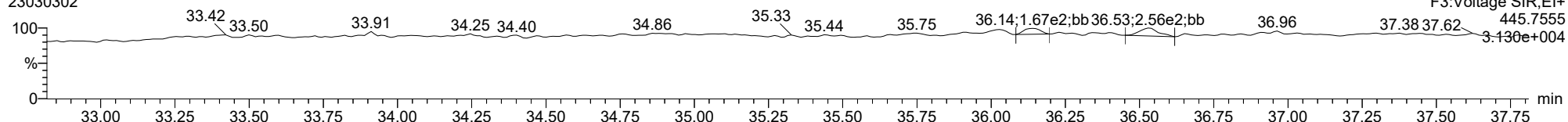
13C-123789-HxCDF

23030302



FUNCTION3 OCDPE

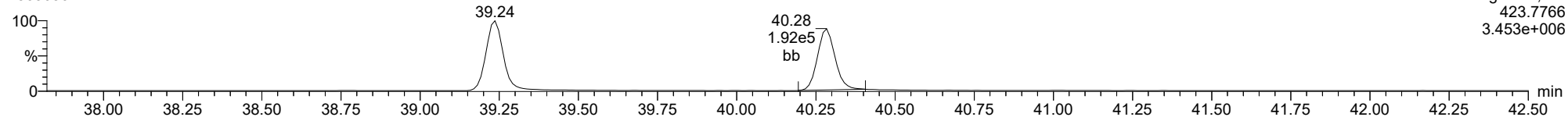
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

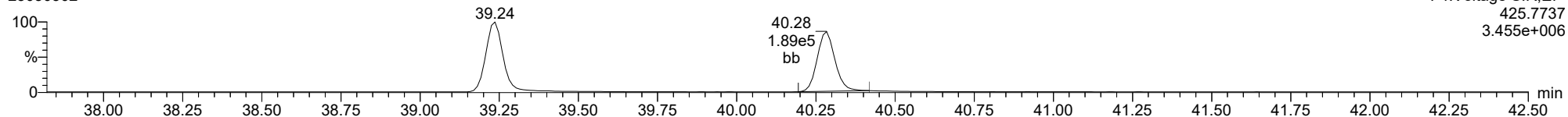
23030302



F4:Voltage SIR,EI+
423.7766
3.453e+006

1234678-HpCDD

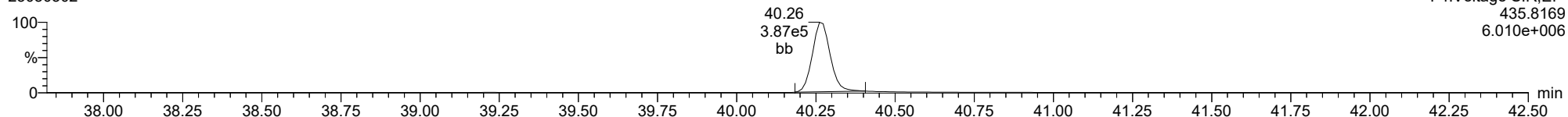
23030302



F4:Voltage SIR,EI+
425.7737
3.455e+006

13C-1234678-HpCDD

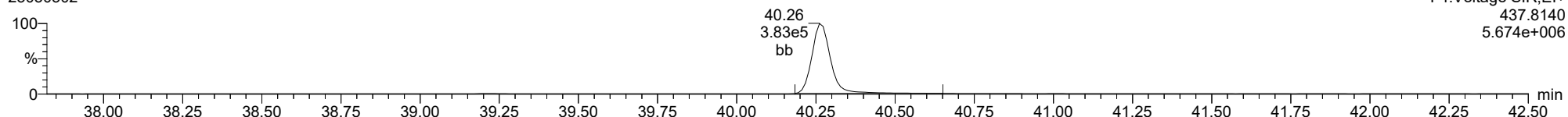
23030302



F4:Voltage SIR,EI+
435.8169
6.010e+006

13C-1234678-HpCDD

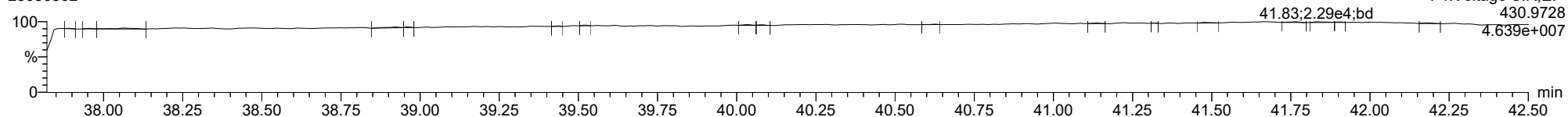
23030302



F4:Voltage SIR,EI+
437.8140
5.674e+006

FUNCTION4 PFK

23030302

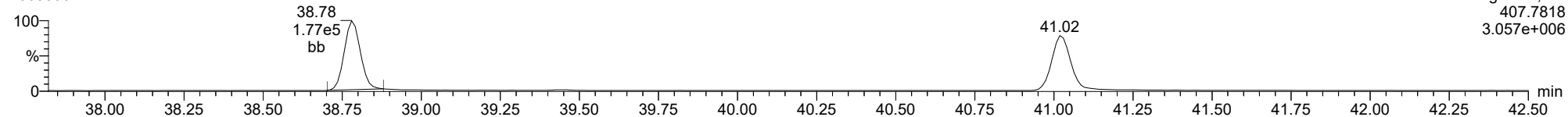


F4:Voltage SIR,EI+
430.9728
4.639e+007

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

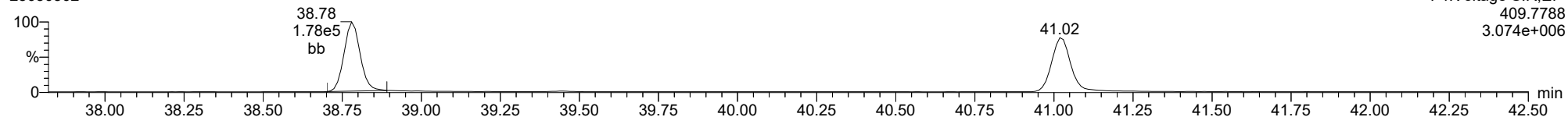
23030302



F4:Voltage SIR,EI+
407.7818
3.057e+006

1234678-HpCDF

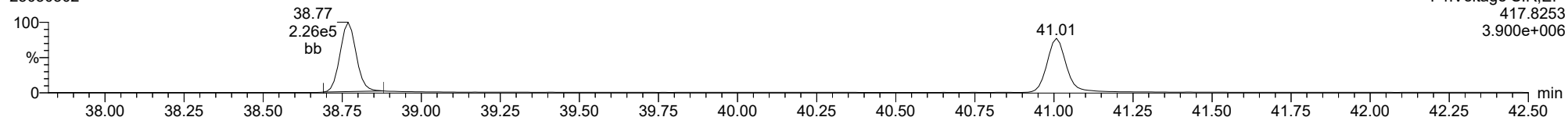
23030302



F4:Voltage SIR,EI+
409.7788
3.074e+006

13C-1234678-HpCDF

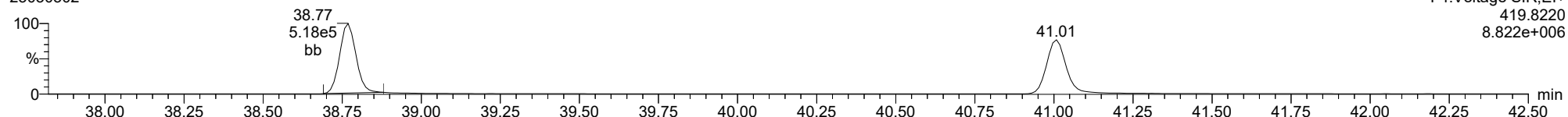
23030302



F4:Voltage SIR,EI+
417.8253
3.900e+006

13C-1234678-HpCDF

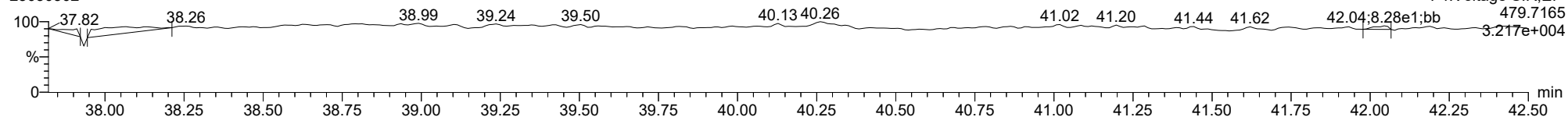
23030302



F4:Voltage SIR,EI+
419.8220
8.822e+006

FUNCTION4 NCDPE

23030302

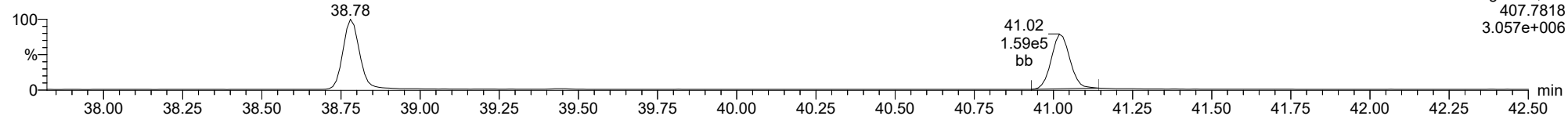


F4:Voltage SIR,EI+
479.7165
3.217e+004

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

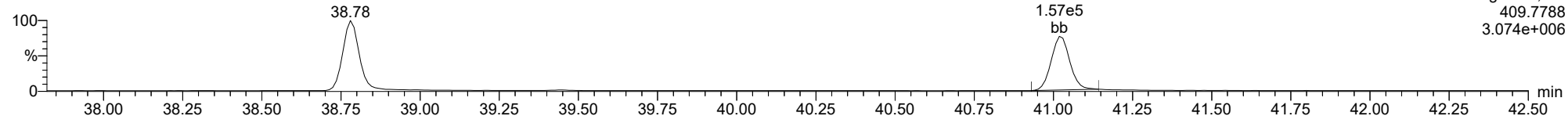
23030302



F4:Voltage SIR,EI+
407.7818
3.057e+006

1234789-HpCDF

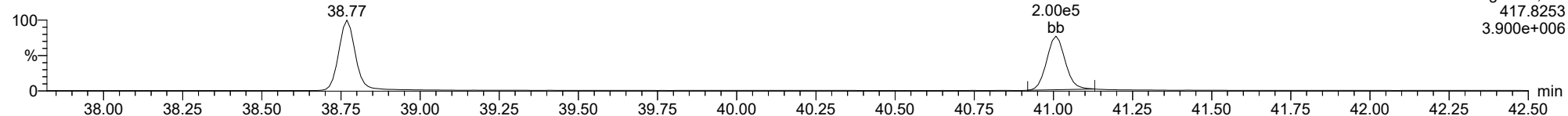
23030302



F4:Voltage SIR,EI+
409.7788
3.074e+006

13C-1234789-HpCDF

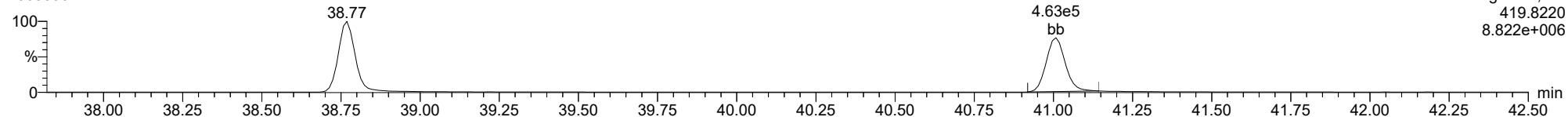
23030302



F4:Voltage SIR,EI+
417.8253
3.900e+006

13C-1234789-HpCDF

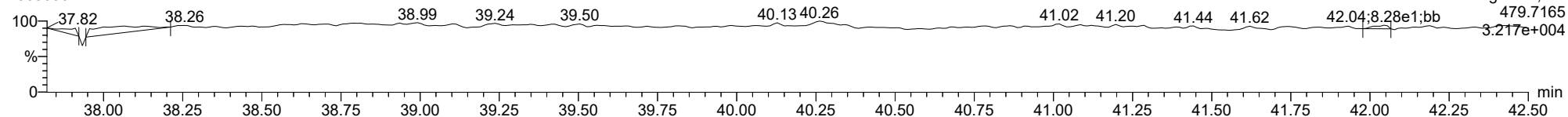
23030302



F4:Voltage SIR,EI+
419.8220
8.822e+006

FUNCTION4 NCDPE

23030302

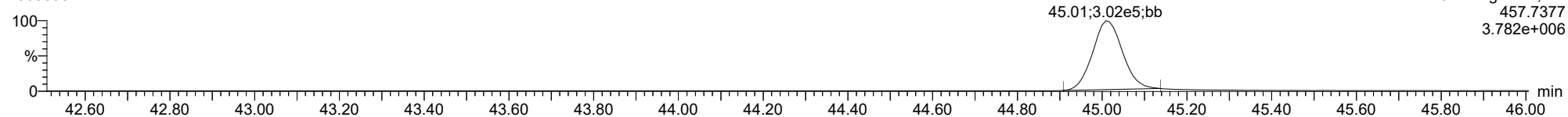


F4:Voltage SIR,EI+
479.7165
3.217e+004

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

OCDD

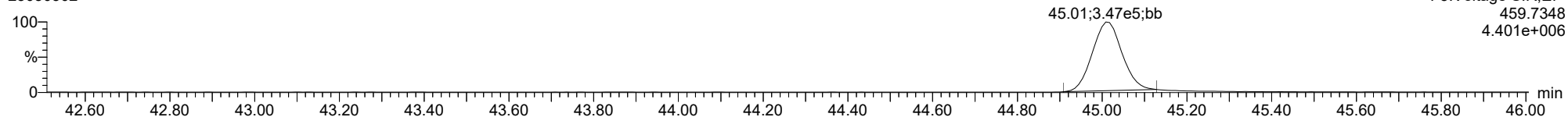
23030302



F5:Voltage SIR,EI+
457.7377
3.782e+006

OCDD

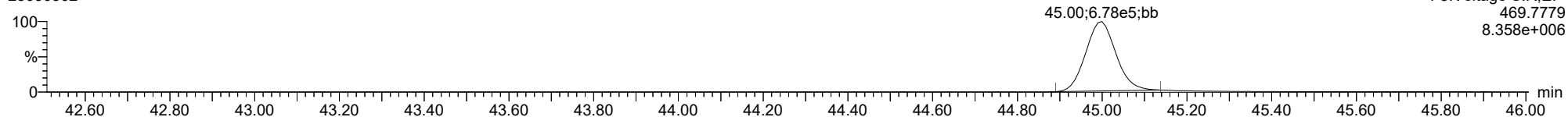
23030302



F5:Voltage SIR,EI+
459.7348
4.401e+006

13C-OCDD

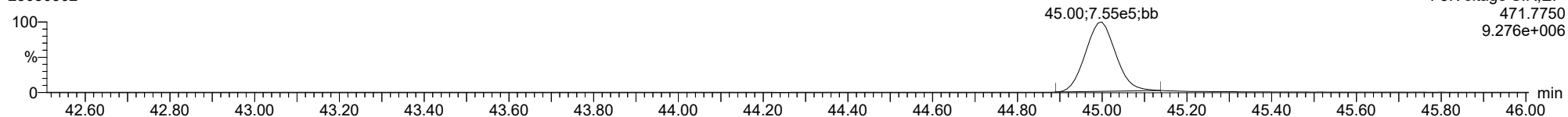
23030302



F5:Voltage SIR,EI+
469.7779
8.358e+006

13C-OCDD

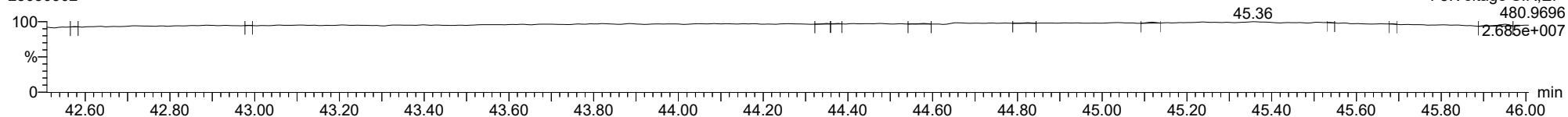
23030302



F5:Voltage SIR,EI+
471.7750
9.276e+006

FUNCTION5 PFK

23030302

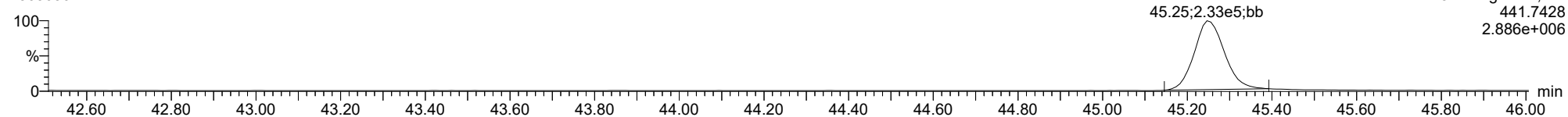


F5:Voltage SIR,EI+
480.9696
2.685e+007

ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

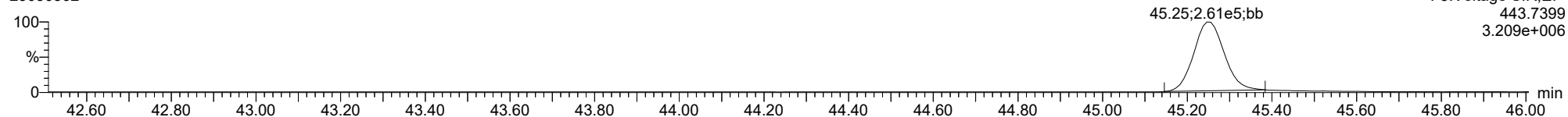
OCDF

23030302



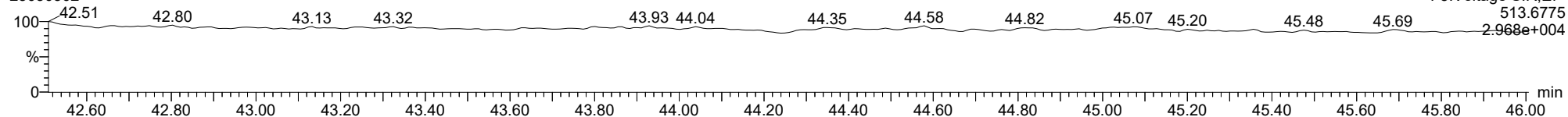
OCDF

23030302



FUNCTION5 DCDPE

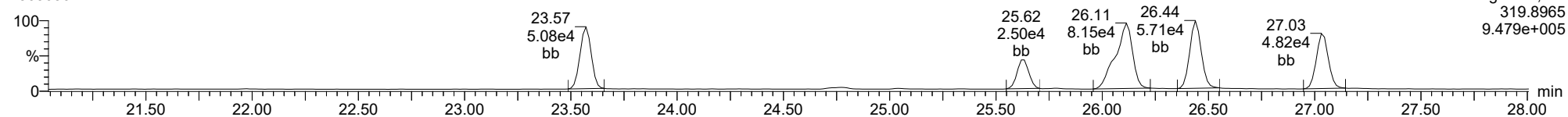
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

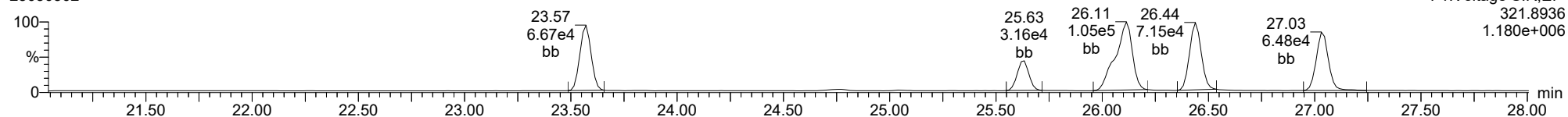
Total-tetradioxins

23030302



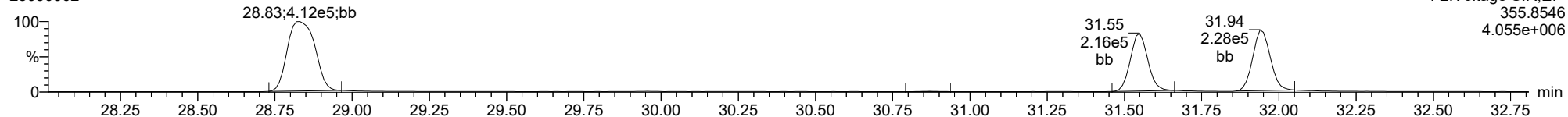
Total-tetradioxins

23030302



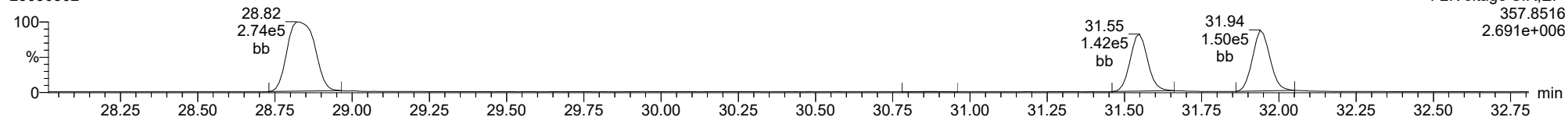
Total-pentadioxins

23030302



Total-pentadioxins

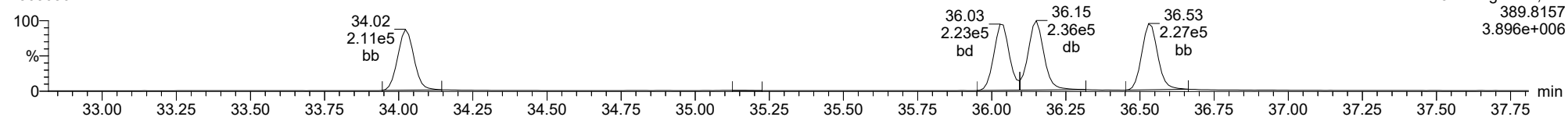
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

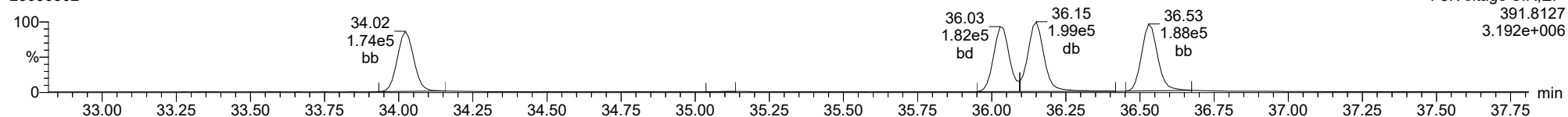
Total-hexadioxins

23030302



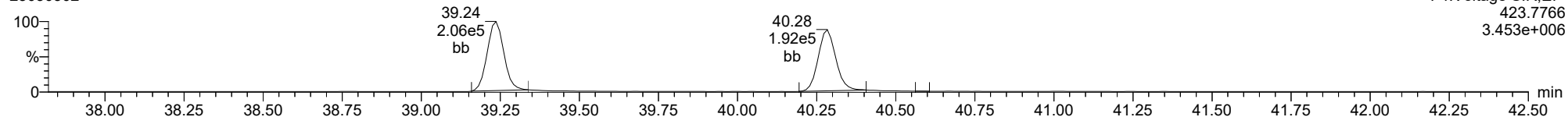
Total-hexadioxins

23030302



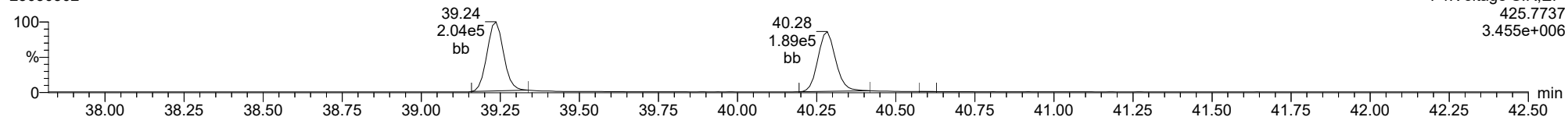
Total-heptadioxins

23030302



Total-heptadioxins

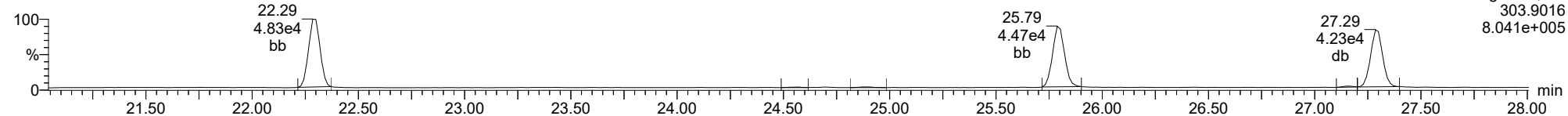
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

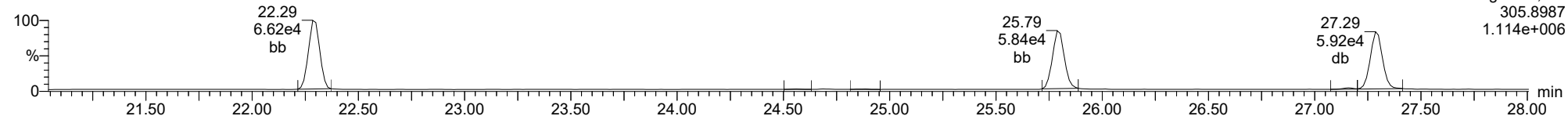
Total-tetrafurans

23030302



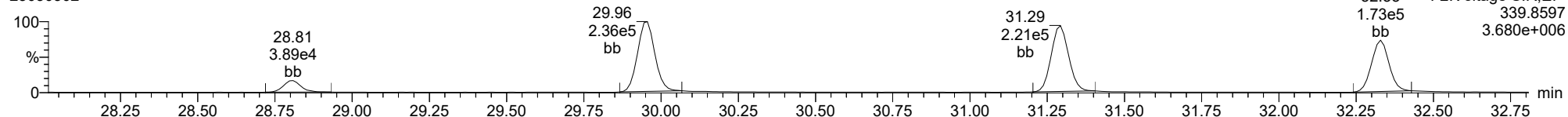
Total-tetrafurans

23030302



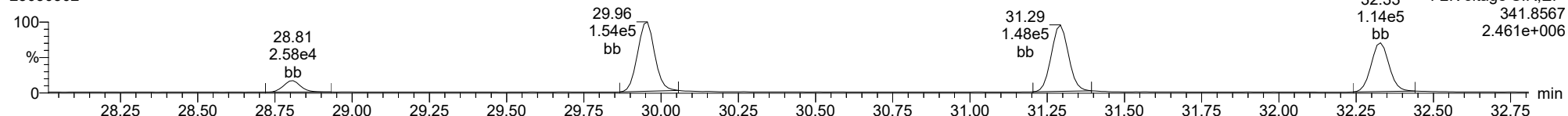
Total-pentafurans

23030302



Total-pentafurans

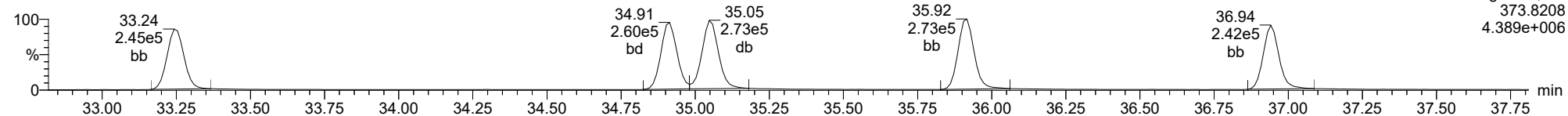
23030302



ID: CS3W1, Name: 23030302, Date: 03-Mar-2023, Time: 09:51:40, Conditions: AUTOSPEC01, User: pk

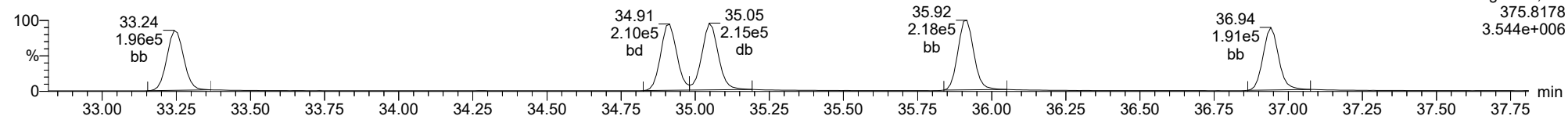
Total-hexafurans

23030302



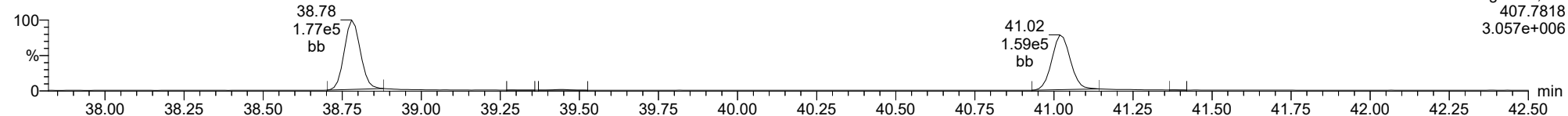
Total-hexafurans

23030302



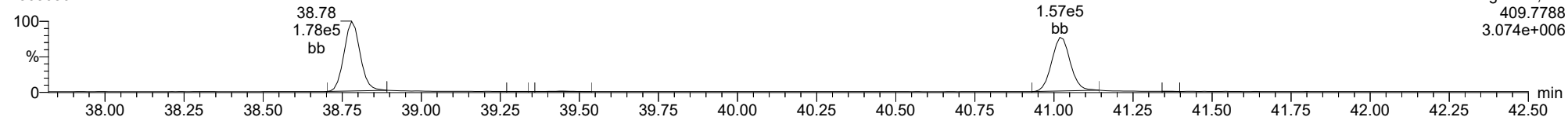
Total-heptafurans

23030302



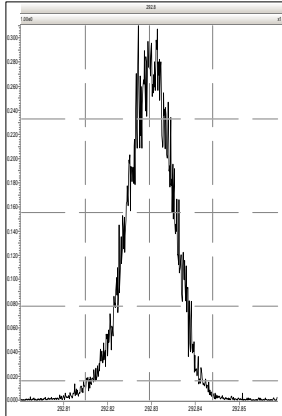
Total-heptafurans

23030302

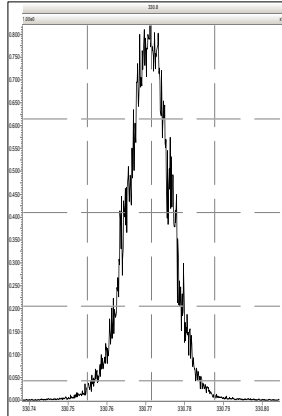


Printed: Friday, March 03, 2023 09:51:10 Pacific Standard Time

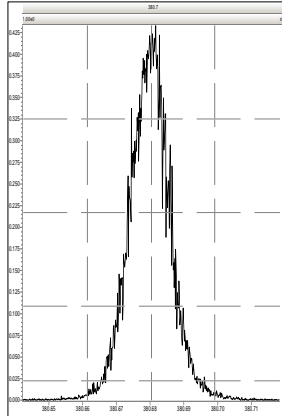
M 292.9824 R 11554



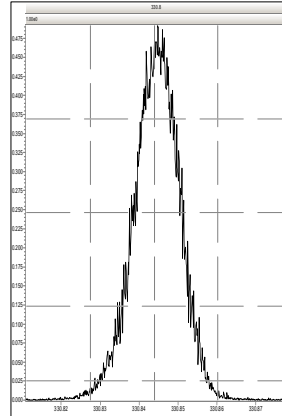
M 330.9792 R 12378



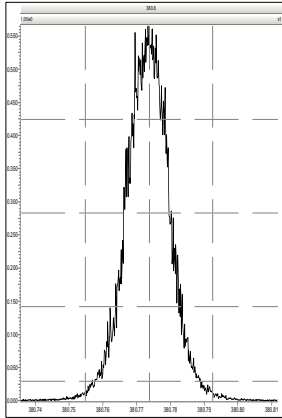
M 380.9760 R 13750



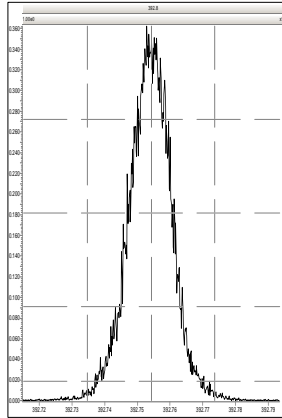
M 330.9792 R 11876



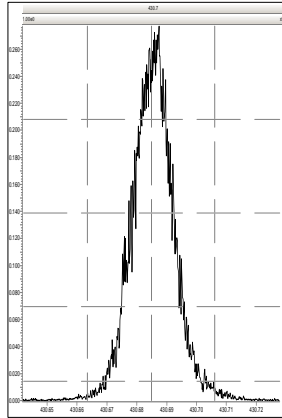
M 380.9760 R 12255



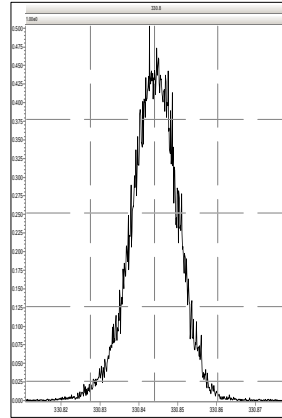
M 392.9760 R 12762



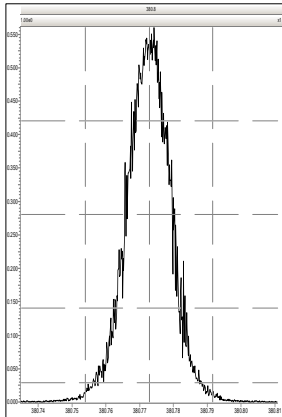
M 430.9728 R 13440



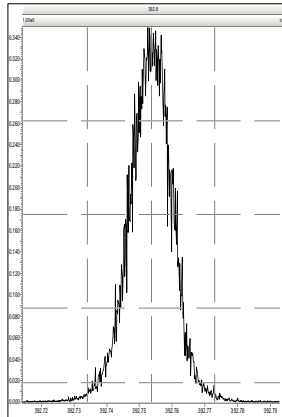
M 330.9792 R 11574



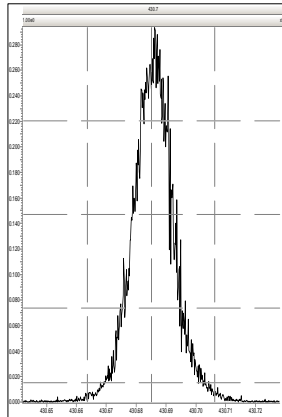
M 380.9760 R 12376



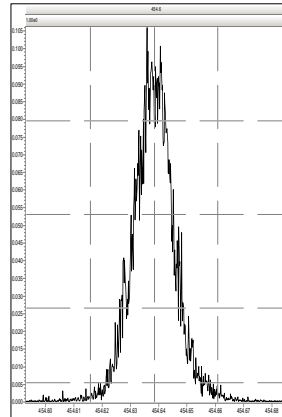
M 392.9760 R 13122



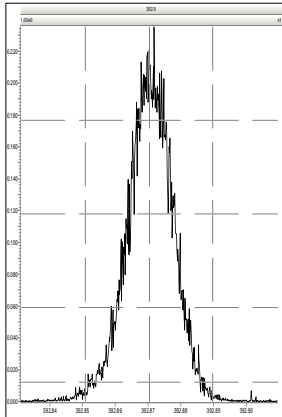
M 430.9728 R 12938



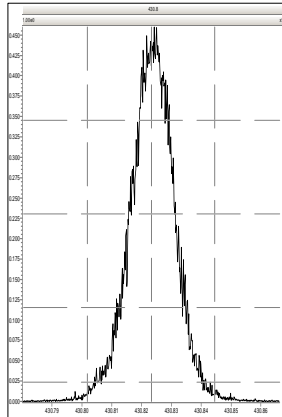
M 454.9728 R 14513



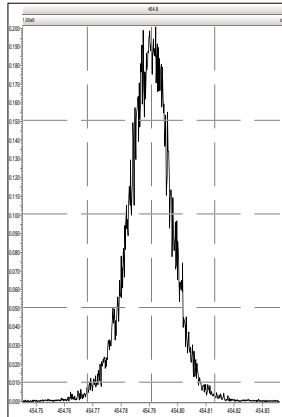
M 392.9760 R 12109



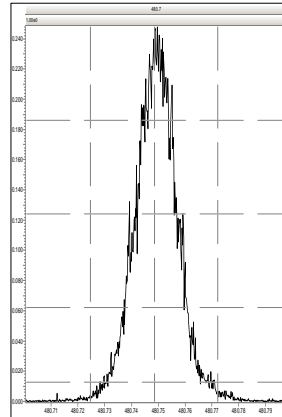
M 430.9728 R 12594



M 454.9728 R 12801

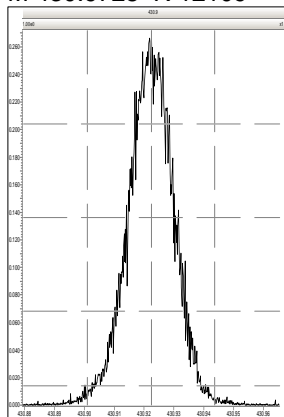


M 480.9696 R 12854

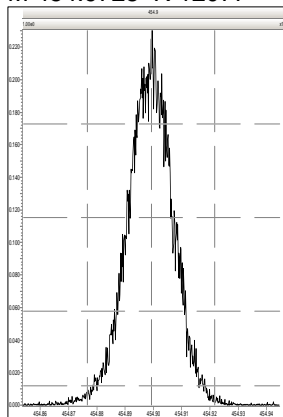


Printed: Friday, March 03, 2023 09:51:10 Pacific Standard Time

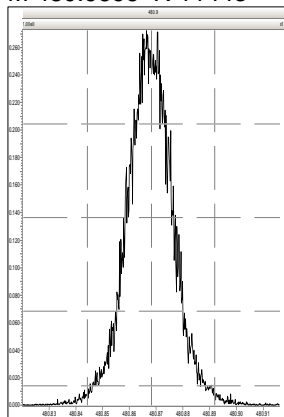
M 430.9728 R 12109



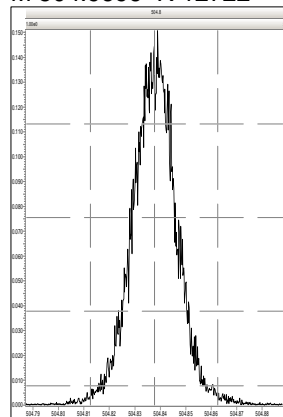
M 454.9728 R 12077



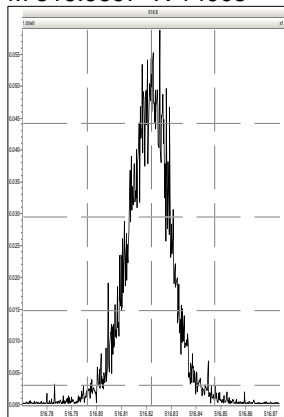
M 480.9696 R 11443



M 504.9696 R 12722



M 516.9697 R 14005

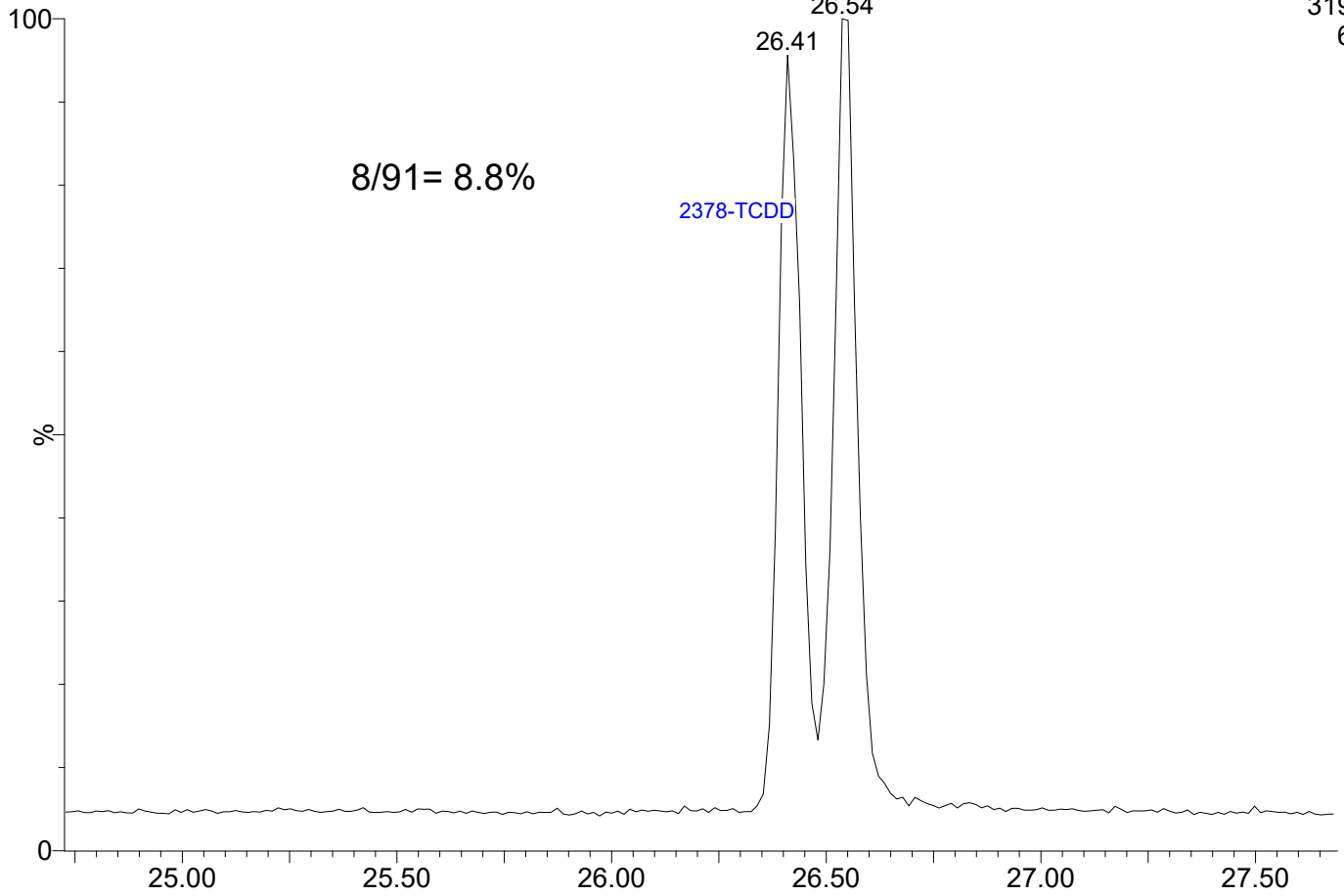


23030303

1: Voltage SIR 14 Channels EI+

319.8965

6.27e5

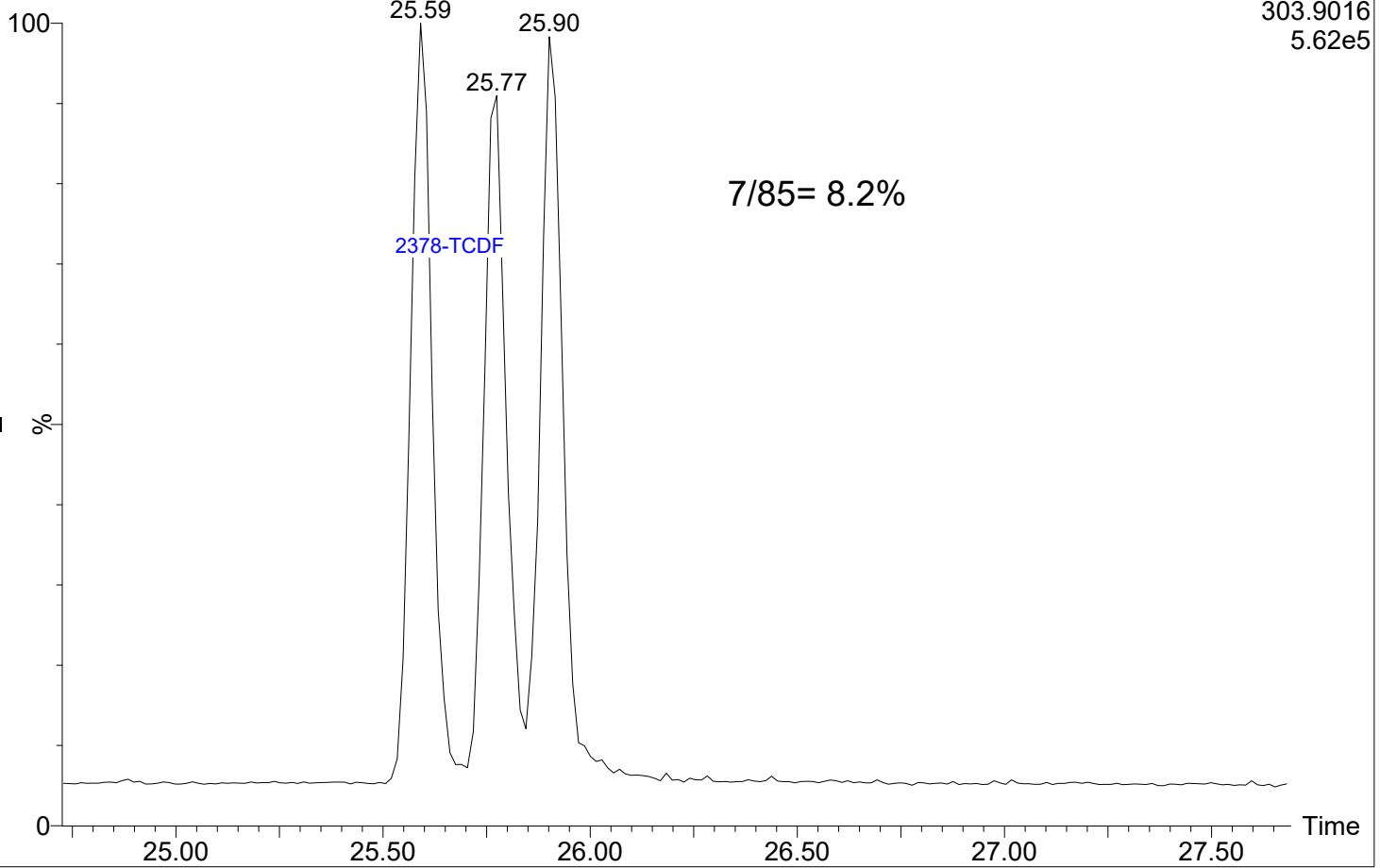


23030303

1: Voltage SIR 14 Channels EI+

303.9016

5.62e5



Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
 Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF					0.702		0.770	1141	1568								
12378-PeCDF	29.922	1.000	2.331e3	1.631e3	0.679	1.429	1.550	717	1165	3.89e4	2.49e4	54.3	21.4	NO	bb	bd	0.520
23478-PeCDF	31.270	1.001	2.446e3	1.527e3	0.786	1.602	1.550	717	1165	3.60e4	2.25e4	50.1	19.4	NO	bb	bb	0.508
123478-HxCDF	34.891	1.001	2.740e3	2.578e3	1.166	1.063	1.240	675	706	4.36e4	3.63e4	64.6	51.5	NO	bd	bd	0.522
234678-HxCDF	35.894	1.001	2.363e3	1.967e3	1.140	1.201	1.240	675	706	3.52e4	3.17e4	52.2	44.9	NO	bb	bb	0.459
123678-HxCDF	35.025	1.000	2.955e3	2.593e3	1.091	1.140	1.240	675	706	3.97e4	3.71e4	58.8	52.6	NO	db	dd	0.495
123789-HxCDF	36.919	1.000	2.292e3	1.751e3	1.137	1.309	1.240	675	706	3.51e4	2.45e4	52.0	34.7	NO	bd	bb	0.523
1234678-HpCDF	38.769	1.001	1.264e3	1.356e3	1.003	0.932	1.050	1176	1150	2.17e4	2.11e4	18.4	18.3	NO	bd	bb	0.466
1234789-HpCDF	40.997	1.000	1.144e3	1.036e3	0.953	1.105	1.050	1176	1150	1.78e4	1.51e4	15.1	13.1	NO	bb	bd	0.465
OCDF	45.228	1.006	2.105e3	2.214e3	0.778	0.951	0.890	762	984	2.31e4	2.16e4	30.2	22.0	NO	bb	bb	1.044
2378-TCDD					1.149		0.770	1186	741								
12378-PeCDD	31.527	1.001	2.628e3	1.506e3	1.022	1.745	1.550	935	615	3.66e4	1.58e4	39.1	25.7	NO	bb	bb	0.540
123478-HxCDD	36.016	1.001	2.113e3	1.865e3	0.996	1.133	1.240	725	812	3.30e4	2.93e4	45.6	36.1	NO	dd	bd	0.542
123678-HxCDD	36.128	1.001	2.428e3	1.876e3	1.001	1.294	1.240	725	812	3.70e4	2.39e4	51.1	29.5	NO	db	db	0.479
123789-HxCDD	36.507	1.011	2.154e3	1.651e3	0.907	1.304	1.240	725	812	3.30e4	2.34e4	45.5	28.9	NO	bd	bb	0.513
1234678-HpCDD	40.261	1.000	1.634e3	1.397e3	1.039	1.170	1.050	985	1205	2.31e4	2.24e4	23.5	18.6	NO	MM	bb	0.531
OCDD					0.920		0.890	1090	941								
13C-2378-TCDF	25.746	1.007	5.730e5	7.592e5	1.620	0.755	0.770	2498	2006	8.42e6	1.11e7	3371.3	5556.4	NO	bb	bb	100.702
13C-12378-PeCDF	29.911	1.169	6.805e5	4.409e5	1.240	1.543	1.550	2678	2220	9.20e6	6.10e6	3433.8	2749.3	NO	bb	bd	110.727
13C-23478-PeCDF	31.248	1.222	6.001e5	3.956e5	1.118	1.517	1.550	2678	2220	8.66e6	5.74e6	3235.2	2585.6	NO	bb	bb	109.107
13C-123478-HxCDF	34.869	0.955	2.965e5	5.770e5	1.168	0.514	0.510	1558	3112	4.38e6	8.54e6	2813.2	2745.5	NO	bd	bd	98.607
13C-123678-HxCDF	35.014	0.959	3.446e5	6.820e5	1.386	0.505	0.510	1558	3112	4.56e6	9.02e6	2927.1	2898.6	NO	db	dd	97.648
13C-234678-HxCDF	35.872	0.983	2.821e5	5.460e5	1.129	0.517	0.510	1558	3112	4.13e6	8.00e6	2652.6	2572.0	NO	bb	bb	96.703
13C-123789-HxCDF	36.908	1.011	2.282e5	4.511e5	0.932	0.506	0.510	1558	3112	3.31e6	6.47e6	2122.2	2079.8	NO	bb	bb	96.146
13C-1234678-HpCDF	38.746	1.062	1.794e5	3.814e5	0.895	0.470	0.440	2435	3572	2.60e6	5.93e6	1069.0	1659.1	NO	bd	bb	82.620
13C-1234789-HpCDF	40.986	1.123	1.404e5	3.516e5	0.770	0.399	0.440	2435	3572	1.98e6	4.51e6	813.8	1262.1	NO	bb	bb	84.288
13C-1234-TCDD	25.576	0.000	3.640e5	4.524e5	1.000	0.805	0.770	1931	1352	5.55e6	6.91e6	2875.2	5114.0	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.032	4.012e5	4.998e5	1.152	0.803	0.770	1931	1352	5.75e6	7.10e6	2979.4	5249.9	NO	bb	bb	95.760
13C-12378-PeCDD	31.504	1.232	4.613e5	2.880e5	0.829	1.602	1.550	1401	1533	6.70e6	4.14e6	4781.1	2700.1	NO	bb	bb	110.725
13C-123478-HxCDD	35.994	0.986	4.133e5	3.236e5	0.995	1.277	1.240	1744	1461	6.55e6	5.10e6	3756.0	3493.2	NO	bd	bd	97.670
13C-123678-HxCDD	36.106	0.989	5.195e5	3.785e5	1.157	1.372	1.240	1744	1461	6.84e6	5.29e6	3920.0	3622.3	NO	db	db	102.381
13C-1234678-HpCDD	40.250	1.103	2.785e5	2.707e5	0.840	1.029	1.050	1497	2275	3.82e6	3.65e6	2553.8	1605.5	NO	bb	bd	86.201
13C-OCDD	44.972	1.232	5.210e5	5.429e5	0.767	0.960	0.890	2989	1436	5.87e6	6.48e6	1964.2	4513.5	NO	bd	bb	182.810
13C-123789-HxCDD	36.496	0.000	4.181e5	3.402e5	1.000	1.229	1.240	1744	1461	6.11e6	4.85e6	3503.9	3317.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.410	1.033	1.287e3		1.288			1959		1.53e4		7.8			db		0.122

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1141	1568								
1289-TCDF					0.678		0.770	1141	1568								
13468-PECDF					1.246		1.550	669	893								
12389-PECDF					0.496		1.550	717	1165								
123468-HXCDF					1.169		1.240	675	706								
1368-TCDD					1.015		0.770	1186	741								
1289-TCDD					0.909		0.770	1186	741								
12479-PECDD					2.301		1.550	935	615								
12389-PECDD					1.184		1.550	935	615								
124679-HXCDD					1.115		1.240	725	812								
1234679-HPCDD					1.137		1.050	985	1205								
Total-tetrafurans			0.000e0		0.727			1141		0.00e0							
Total-penta1			0.000e0					669		0.00e0							
Total-pentafurans			4.777e3		0.654			717		7.49e4							1.028
Total-hexafurans			1.035e4		1.141			675		1.54e5							2.000
Total-heptafurans			2.408e3		0.978			1176		3.94e4							0.931
Total-Furans			1.971e4		0.922			1141		2.93e5							5.016
Total-tetradoxins			0.000e0		1.024			1186		0.00e0							
Total-pentadoxins			2.628e3		1.502			935		3.66e4							0.540
Total-hexadoxins			6.694e3		1.005			725		1.03e5							1.534
Total-heptadoxins			1.634e3		1.088			985		2.31e4							0.531
Total-Dioxins			1.096e4		1.130			1186		1.63e5							2.605
Total-TEQ			3.067e4					1186		4.55e5							7.621
FUNCTION1 PFK			3.116e6					620464		1.62e6							
FUNCTION2 PFK			1.698e6					301200		2.24e6							0.000
FUNCTION3 PFK			5.380e7					450736		2.93e7							0.000
FUNCTION4 PFK			1.391e7					291095		1.60e7							
FUNCTION5 PFK			7.208e4					238350		2.59e6							
FUNCTION1 HXCD...			4.809e2					559		5.84e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.084e2					933		1.50e4							0.000
FUNCTION3 OCDPE			0.000e0					494		0.00e0							
FUNCTION4 NCDPE			6.931e2					845		1.26e4							0.000
FUNCTION5 DCDPE			7.511e2					821		1.86e4							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303\CIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
2	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
2	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
3	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
4	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
2	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.68	7.033e1	1.021e2	0.922	0.69	0.77	1.5	NO	NO	bb	bb	0.014
2	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
3	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
4	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
5	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522
6	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
7	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520
8	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
9	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465
10	OCDF	45.23	2.105e3	2.214e3	0.778	0.95	0.89	30.2	YES	NO	bb	bb	1.044

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
2	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
3	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540
2	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
3	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
4	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542
5	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-Furans	21.68	7.033e1	1.021e2	0.922	0.69	0.77	1.5	NO	NO	bb	bb	0.014
2	123789-HxCDF	36.92	2.292e3	1.751e3	1.137	1.31	1.24	52.0	YES	NO	bd	bb	0.523
3	234678-HxCDF	35.89	2.363e3	1.967e3	1.140	1.20	1.24	52.2	YES	NO	bb	bb	0.459
4	123678-HxCDF	35.03	2.955e3	2.593e3	1.091	1.14	1.24	58.8	YES	NO	db	dd	0.495
5	123478-HxCDF	34.89	2.740e3	2.578e3	1.166	1.06	1.24	64.6	YES	NO	bd	bd	0.522
6	23478-PeCDF	31.27	2.446e3	1.527e3	0.786	1.60	1.55	50.1	YES	NO	bb	bb	0.508
7	12378-PeCDF	29.92	2.331e3	1.631e3	0.679	1.43	1.55	54.3	YES	NO	bb	bd	0.520
8	1234678-HpCDF	38.77	1.264e3	1.356e3	1.003	0.93	1.05	18.4	YES	NO	bd	bb	0.466
9	1234789-HpCDF	41.00	1.144e3	1.036e3	0.953	1.10	1.05	15.1	YES	NO	bb	bd	0.465
10	OCDF	45.23	2.105e3	2.214e3	0.778	0.95	0.89	30.2	YES	NO	bb	bb	1.044
11	12378-PeCDD	31.53	2.628e3	1.506e3	1.022	1.75	1.55	39.1	YES	NO	bb	bb	0.540
12	123789-HxCDD	36.51	2.154e3	1.651e3	0.907	1.30	1.24	45.5	YES	NO	bd	bb	0.513
13	123678-HxCDD	36.13	2.428e3	1.876e3	1.001	1.29	1.24	51.1	YES	NO	db	db	0.479
14	123478-HxCDD	36.02	2.113e3	1.865e3	0.996	1.13	1.24	45.6	YES	NO	dd	bd	0.542
15	1234678-HpCDD	40.26	1.634e3	1.397e3	1.039	1.17	1.05	23.5	YES	NO	MM	bb	0.531

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.18	3.116e6					2.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.19	1.560e6					3.1	YES		bb		0.000
2	FUNCTION2 PFK	28.13	1.376e5					4.3	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.12	2.560e6					15.7	YES		db		0.000
2	FUNCTION3 PFK	36.37	7.058e6					24.4	YES		dd		0.000
3	FUNCTION3 PFK	36.11	4.418e7					24.8	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	42.43	1.404e5					1.6	NO		bb		
2	FUNCTION4 PFK	37.89	1.377e7					53.2	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.15	7.152e3					1.1	NO		bb		
2	FUNCTION5 PFK	45.07	1.178e3					0.5	NO		bb		
3	FUNCTION5 PFK	44.98	1.177e3					0.5	NO		bb		
4	FUNCTION5 PFK	44.19	7.772e3					0.8	NO		bb		
5	FUNCTION5 PFK	43.72	7.921e3					1.3	NO		bb		
6	FUNCTION5 PFK	43.60	4.474e3					0.7	NO		bb		
7	FUNCTION5 PFK	43.17	6.636e3					1.2	NO		bb		
8	FUNCTION5 PFK	43.01	5.001e3					0.7	NO		bb		
9	FUNCTION5 PFK	42.76	1.253e4					1.4	NO		bb		
10	FUNCTION5 PFK	45.91	8.220e3					0.4	NO		bb		
11	FUNCTION5 PFK	45.75	6.523e3					1.4	NO		bb		
12	FUNCTION5 PFK	45.25	3.501e3					0.7	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.60	9.542e1					2.4	NO		bb		0.000
2	FUNCTION1 HXCD...	26.42	7.837e1					1.9	NO		bb		0.000
3	FUNCTION1 HXCD...	25.58	1.709e2					3.5	YES		bb		0.000
4	FUNCTION1 HXCD...	23.40	1.362e2					2.7	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:33:58 Pacific Standard Time

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.36	1.308e2					1.8	NO		bb		0.000
2	FUNCTION2 HPCD...	31.75	8.377e1					1.7	NO		bb		0.000
3	FUNCTION2 HPCD...	31.30	1.170e2					2.2	NO		db		0.000
4	FUNCTION2 HPCD...	31.24	1.138e2					2.6	NO		bd		0.000
5	FUNCTION2 HPCD...	30.92	1.786e2					3.2	YES		bb		0.000
6	FUNCTION2 HPCD...	30.04	8.034e1					1.7	NO		bb		0.000
7	FUNCTION2 HPCD...	29.47	1.041e2					2.9	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	42.04	9.826e1					2.2	NO		bb		0.000
2	FUNCTION4 NCDPE	41.83	1.085e2					2.1	NO		bb		0.000
3	FUNCTION4 NCDPE	41.67	8.318e1					2.8	NO		db		0.000
4	FUNCTION4 NCDPE	41.58	1.047e2					2.5	NO		bd		0.000
5	FUNCTION4 NCDPE	41.32	1.741e2					2.4	NO		bb		0.000
6	FUNCTION4 NCDPE	41.15	1.244e2					2.8	NO		bb		0.000

ETHERS6

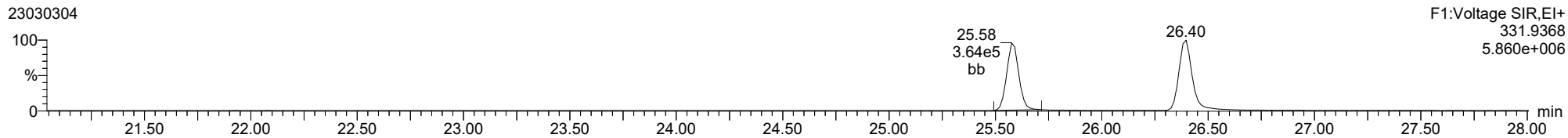
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	43.53	7.557e1					1.5	NO		bb		0.000
2	FUNCTION5 DCDPE	43.39	1.767e2					2.9	NO		bb		0.000
3	FUNCTION5 DCDPE	43.31	8.303e1					2.9	NO		db		0.000
4	FUNCTION5 DCDPE	43.27	1.217e2					4.5	YES		bd		0.000
5	FUNCTION5 DCDPE	43.04	1.550e2					3.9	YES		bb		0.000
6	FUNCTION5 DCDPE	42.73	1.390e2					7.0	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303\CIH.cdb 06 Mar 2023 10:57:27

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

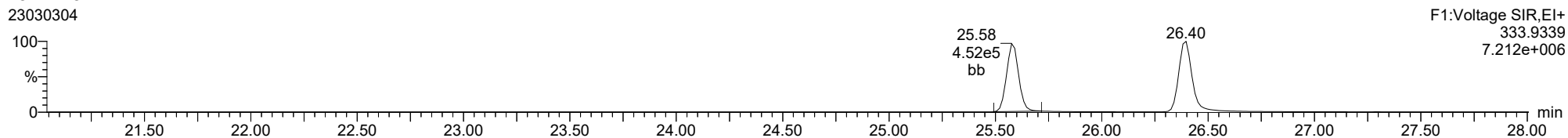
13C-1234-TCDD

23030304



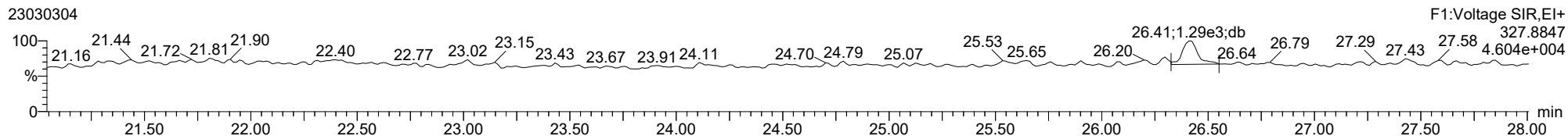
13C-1234-TCDD

23030304



37CL-2378-TCDD

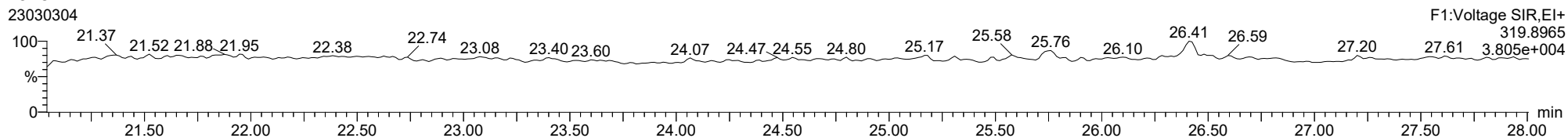
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

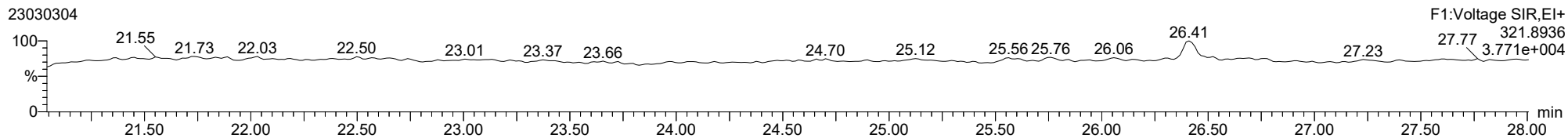
2378-TCDD

23030304



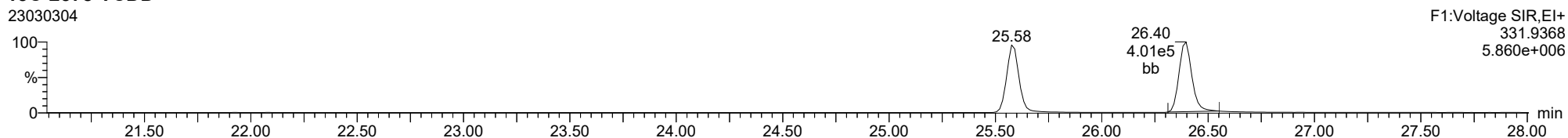
2378-TCDD

23030304



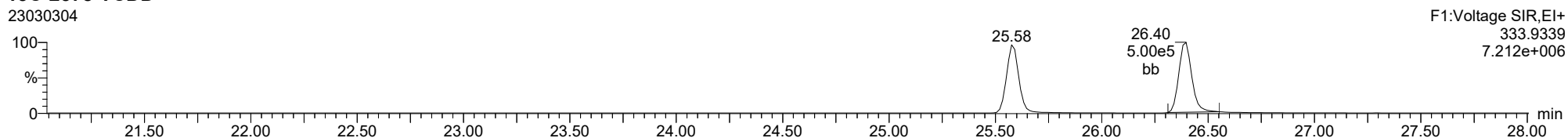
13C-2378-TCDD

23030304



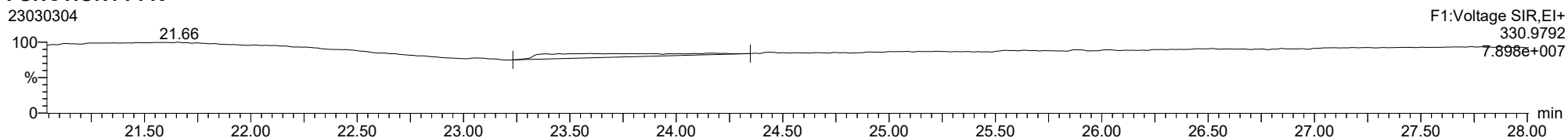
13C-2378-TCDD

23030304



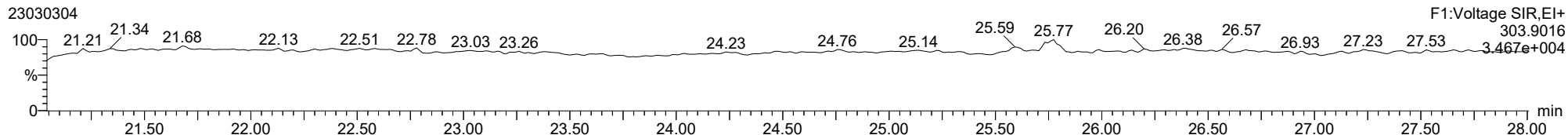
FUNCTION1 PFK

23030304

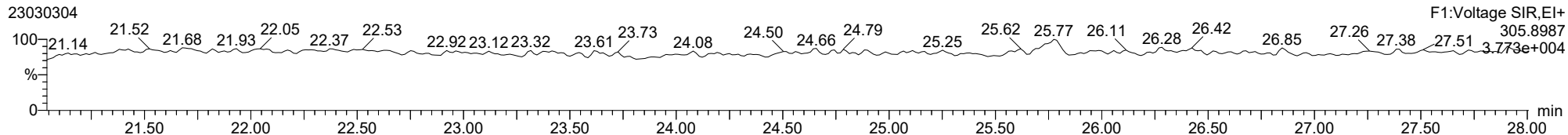


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

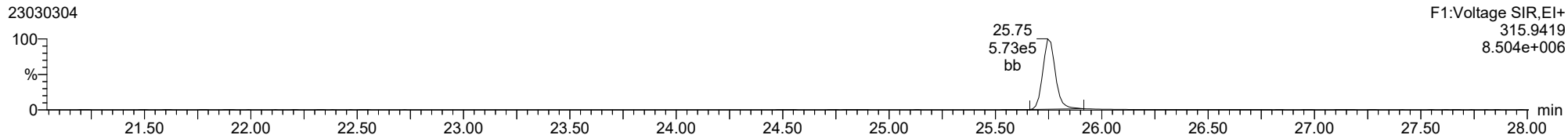
2378-TCDF



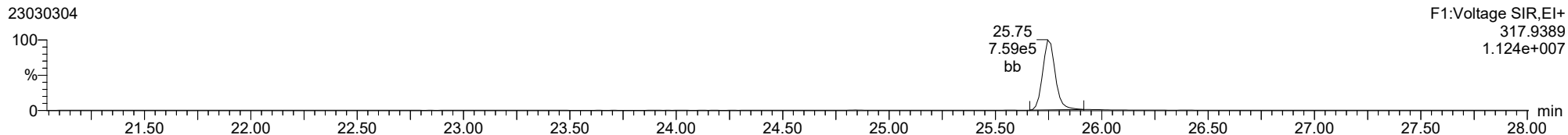
2378-TCDF



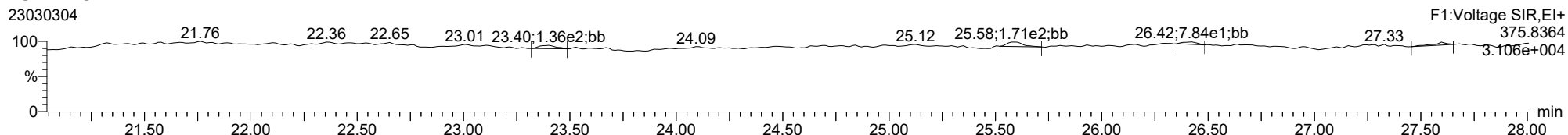
13C-2378-TCDF



13C-2378-TCDF



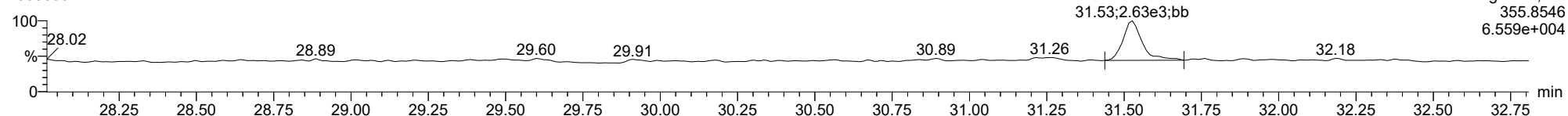
FUNCTION1 HXCDPE



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

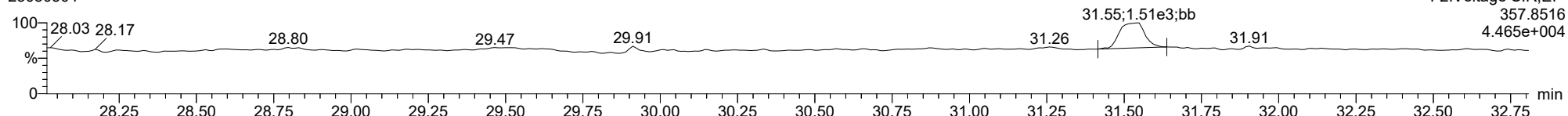
12378-PeCDD

23030304



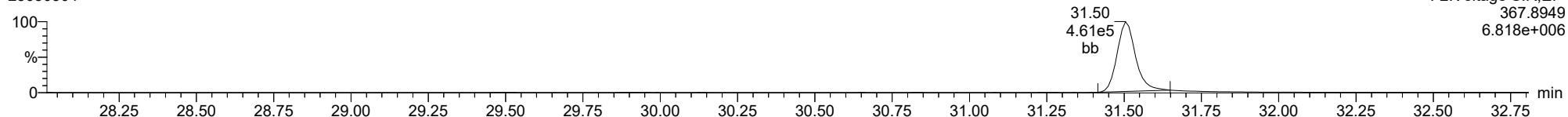
12378-PeCDD

23030304



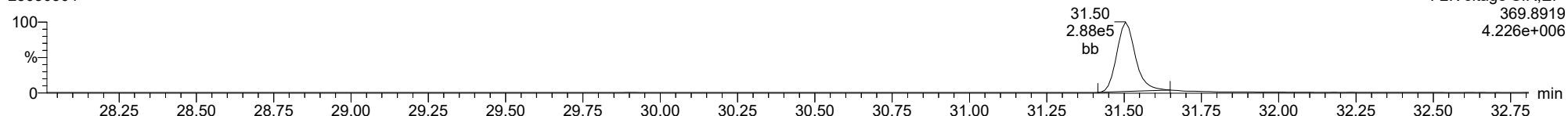
13C-12378-PeCDD

23030304



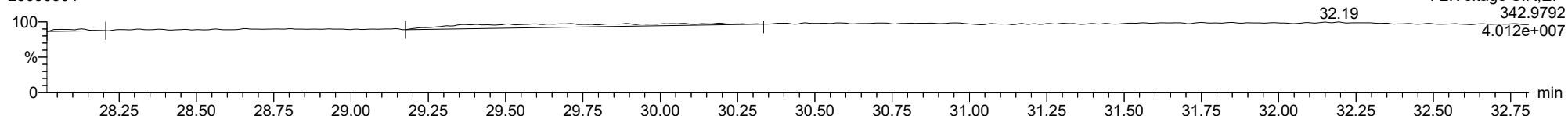
13C-12378-PeCDD

23030304



FUNCTION2 PFK

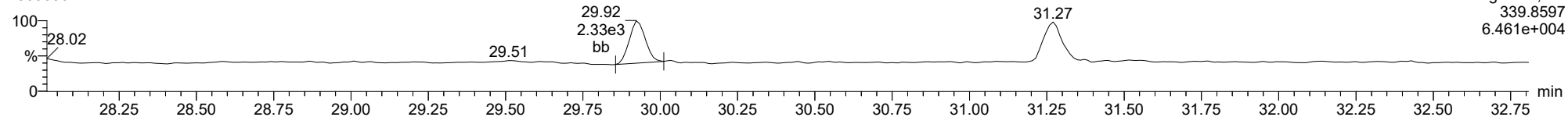
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

12378-PeCDF

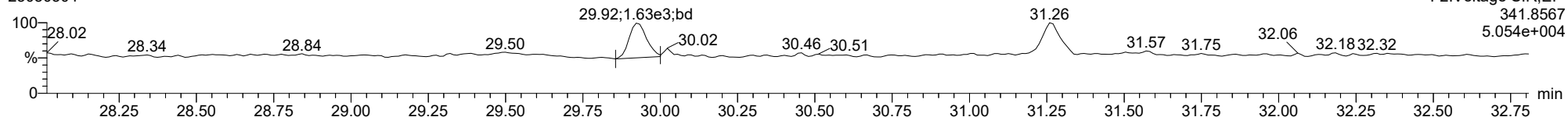
23030304



F2:Voltage SIR,EI+
339.8597
6.461e+004

12378-PeCDF

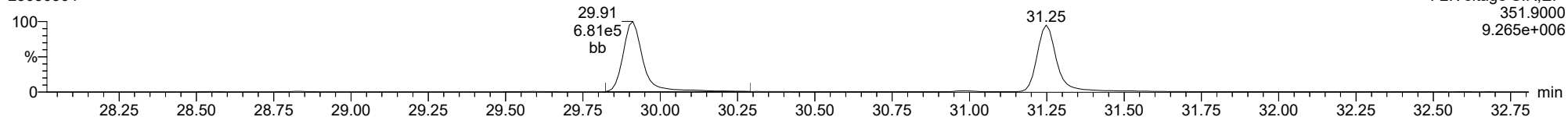
23030304



F2:Voltage SIR,EI+
341.8567
5.054e+004

13C-12378-PeCDF

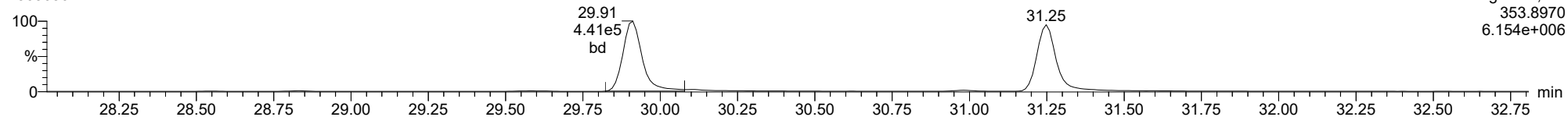
23030304



F2:Voltage SIR,EI+
351.9000
9.265e+006

13C-12378-PeCDF

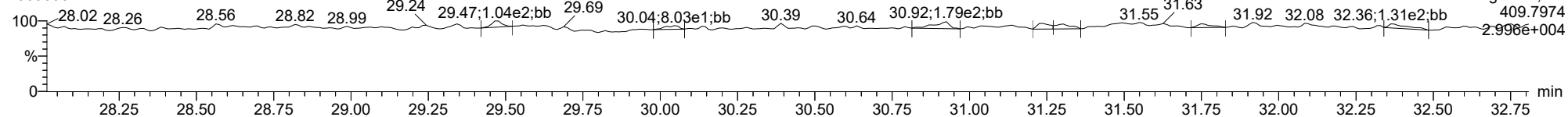
23030304



F2:Voltage SIR,EI+
353.8970
6.154e+006

FUNCTION2 HPCDPE

23030304

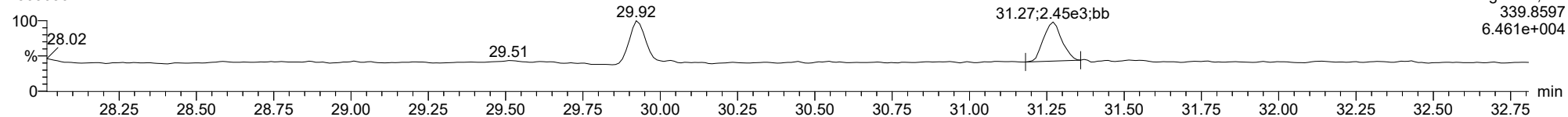


F2:Voltage SIR,EI+
409.7974
2.990e+004

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

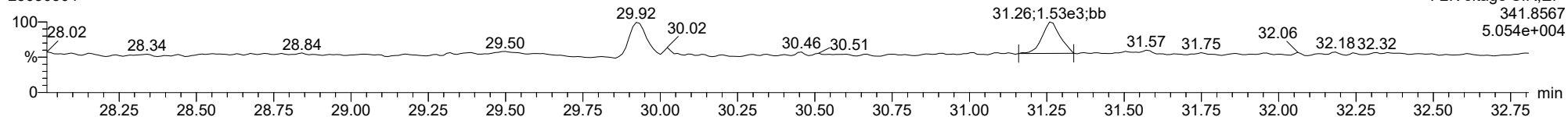
23478-PeCDF

23030304



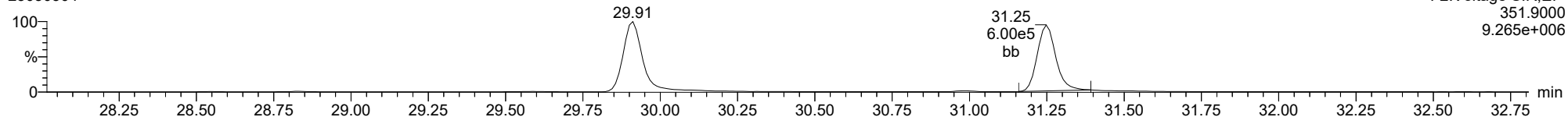
23478-PeCDF

23030304



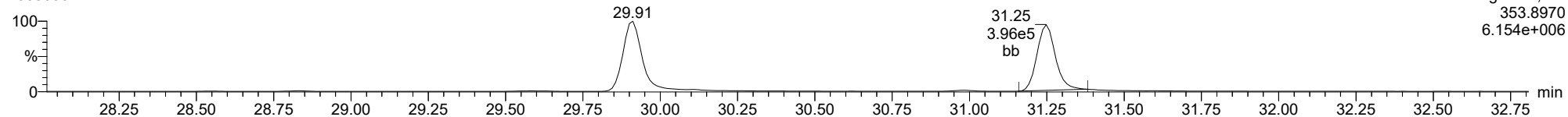
13C-23478-PeCDF

23030304



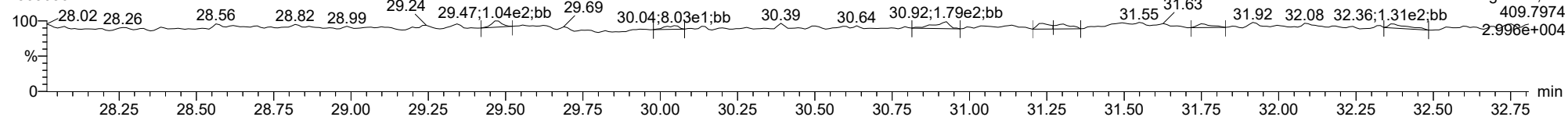
13C-23478-PeCDF

23030304



FUNCTION2 HPCDPE

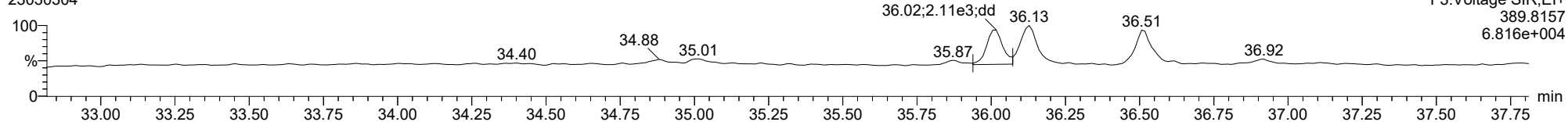
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

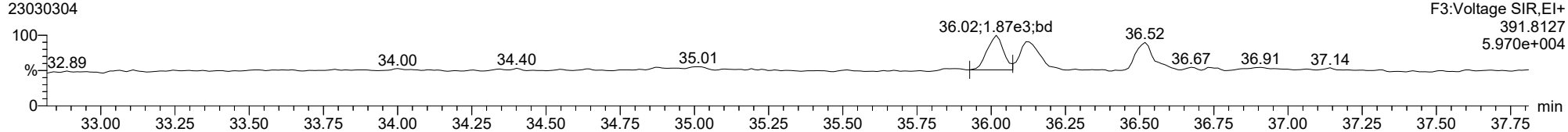
123478-HxCDD

23030304



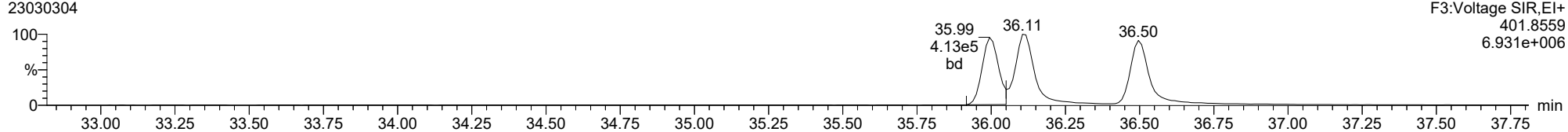
123478-HxCDD

23030304



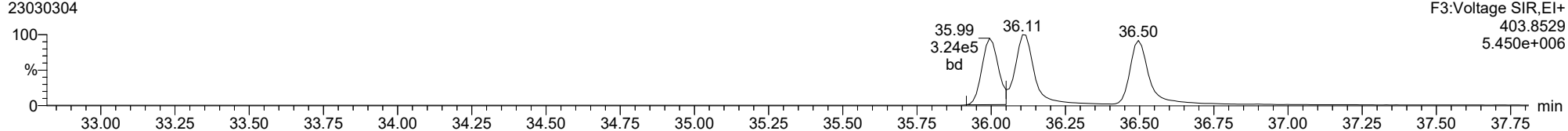
13C-123478-HxCDD

23030304



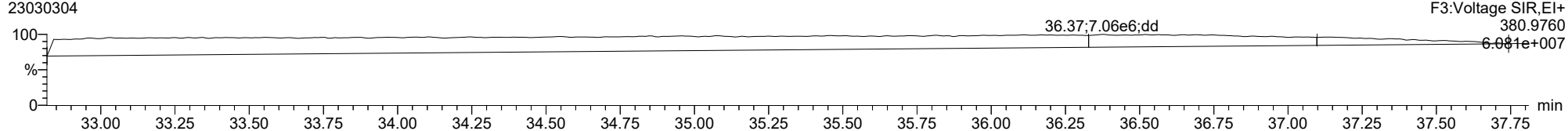
13C-123478-HxCDD

23030304



FUNCTION3 PFK

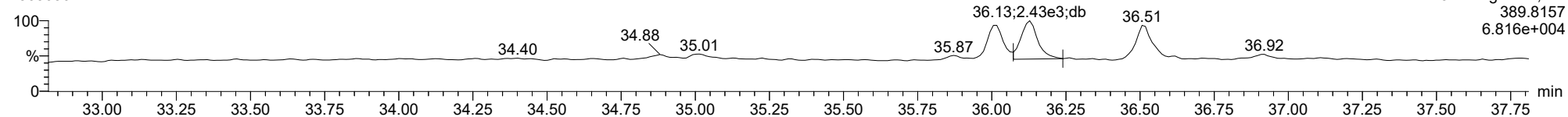
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

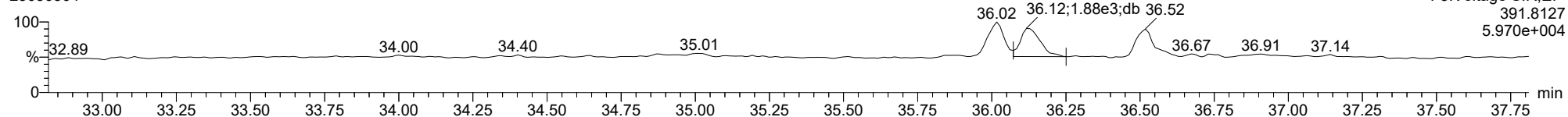
123678-HxCDD

23030304



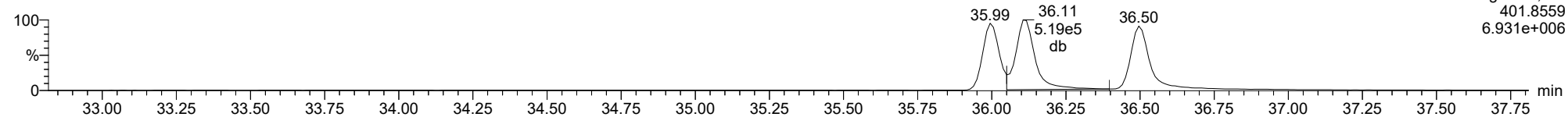
123678-HxCDD

23030304



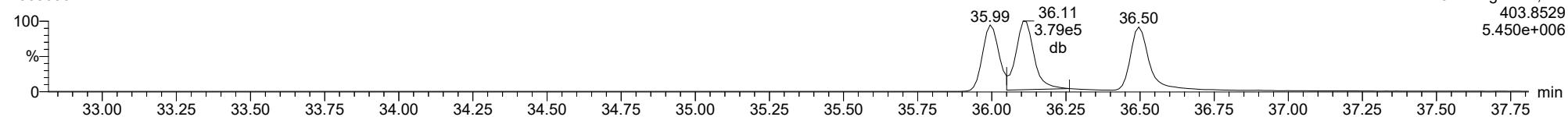
13C-123678-HxCDD

23030304



13C-123678-HxCDD

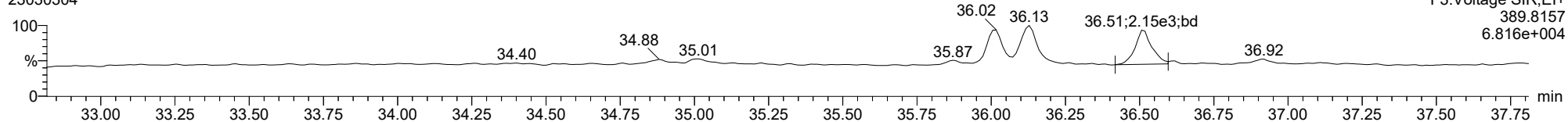
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

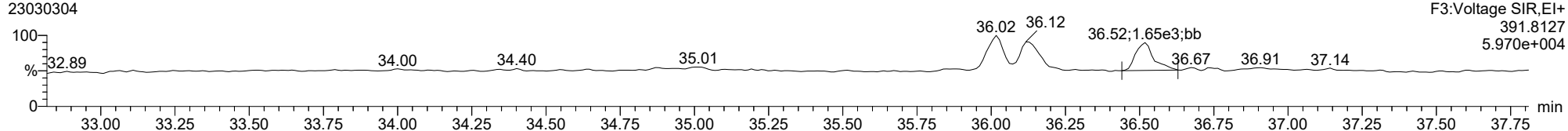
123789-HxCDD

23030304



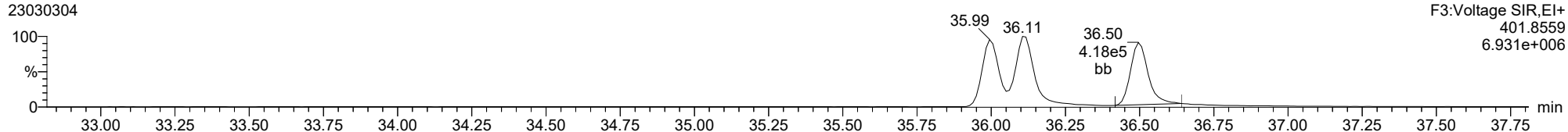
123789-HxCDD

23030304



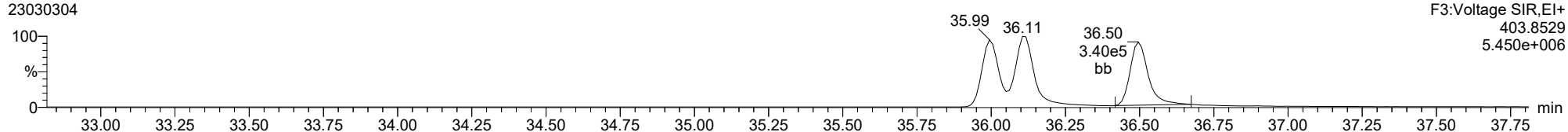
13C-123789-HxCDD

23030304



13C-123789-HxCDD

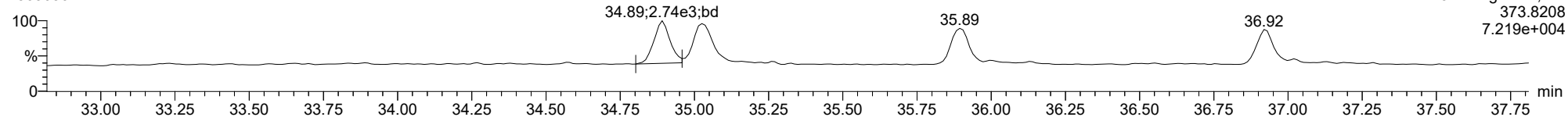
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

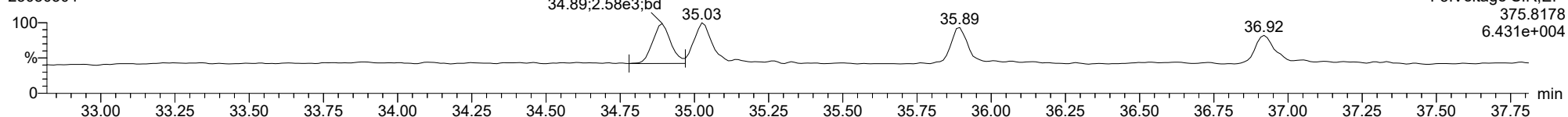
123478-HxCDF

23030304



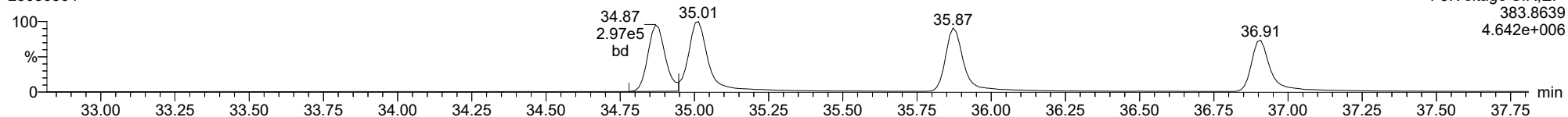
123478-HxCDF

23030304



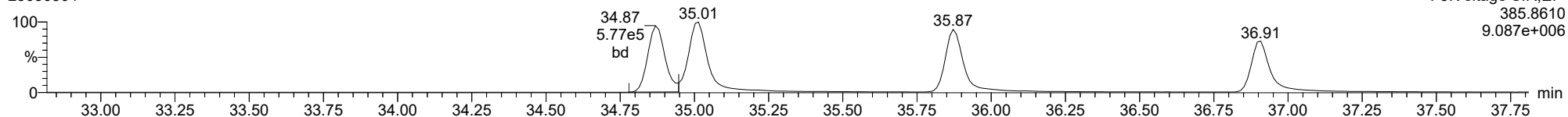
13C-123478-HxCDF

23030304



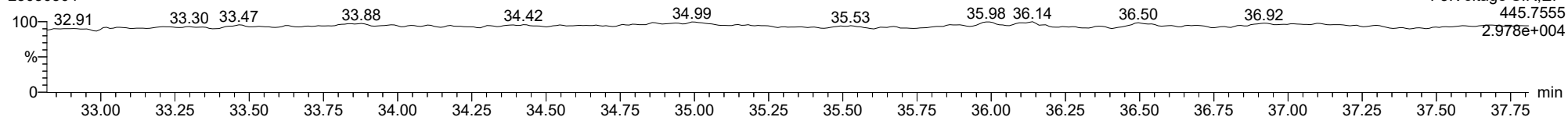
13C-123478-HxCDF

23030304



FUNCTION3 OCDPE

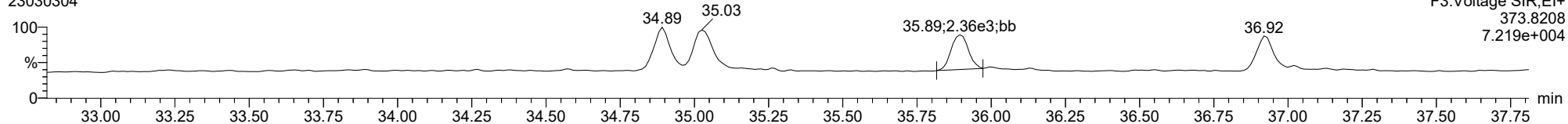
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

234678-HxCDF

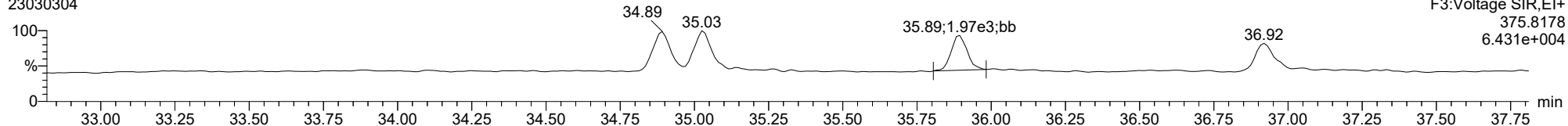
23030304



F3:Voltage SIR,EI+
373.8208
7.219e+004

234678-HxCDF

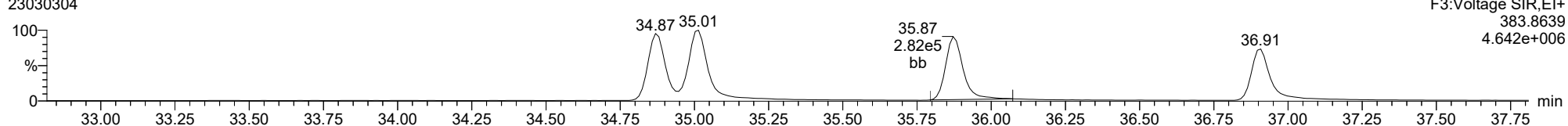
23030304



F3:Voltage SIR,EI+
375.8178
6.431e+004

13C-234678-HxCDF

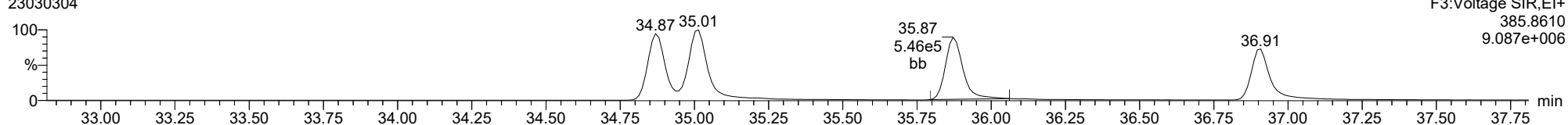
23030304



F3:Voltage SIR,EI+
383.8639
4.642e+006

13C-234678-HxCDF

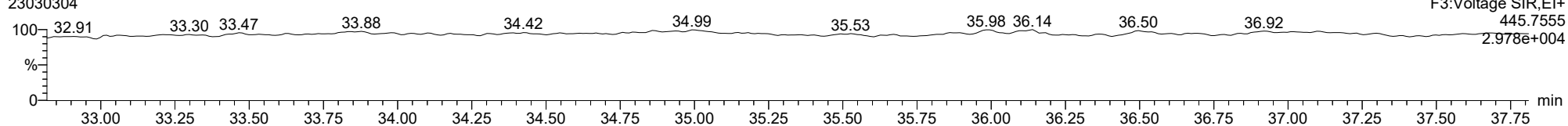
23030304



F3:Voltage SIR,EI+
385.8610
9.087e+006

FUNCTION3 OCDPE

23030304

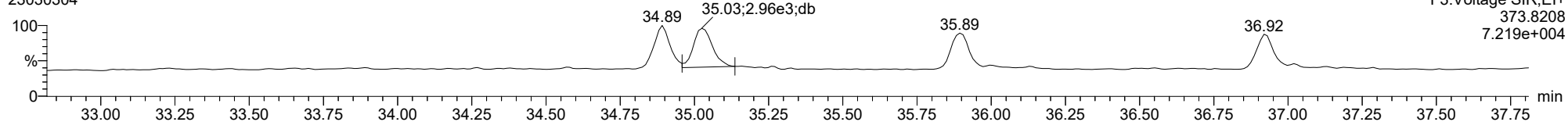


F3:Voltage SIR,EI+
445.7555
2.978e+004

ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

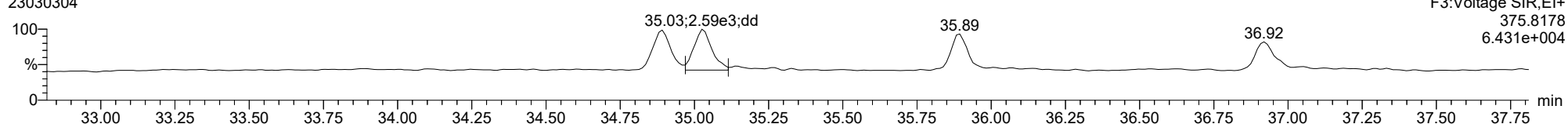
123678-HxCDF

23030304



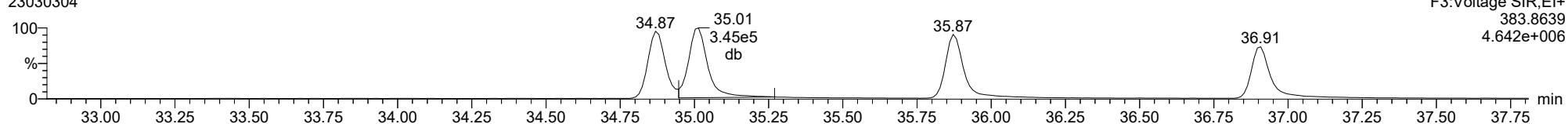
123678-HxCDF

23030304



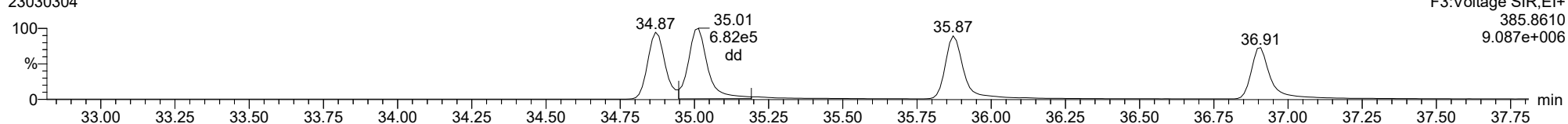
13C-123678-HxCDF

23030304



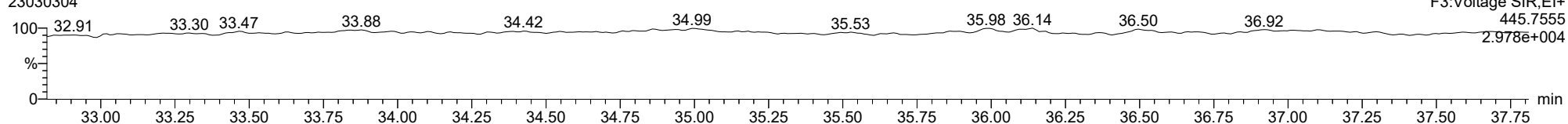
13C-123678-HxCDF

23030304



FUNCTION3 OCDPE

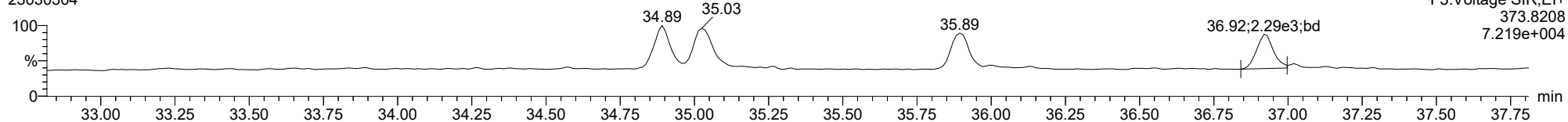
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

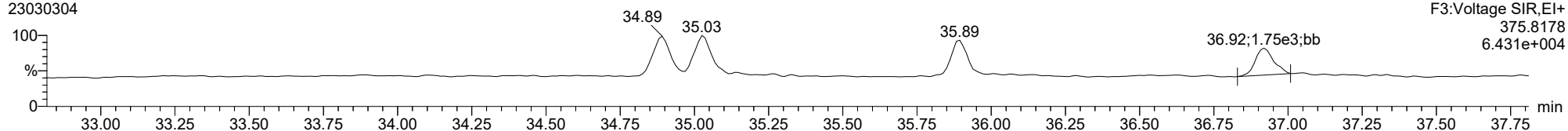
123789-HxCDF

23030304



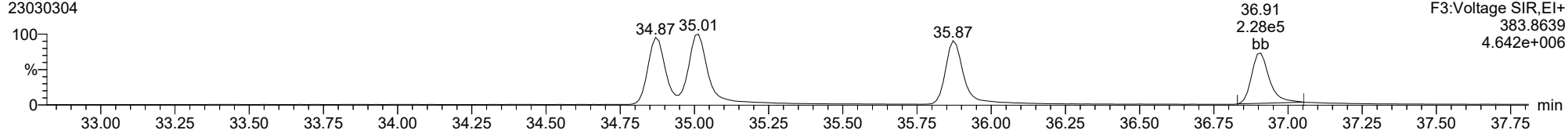
123789-HxCDF

23030304



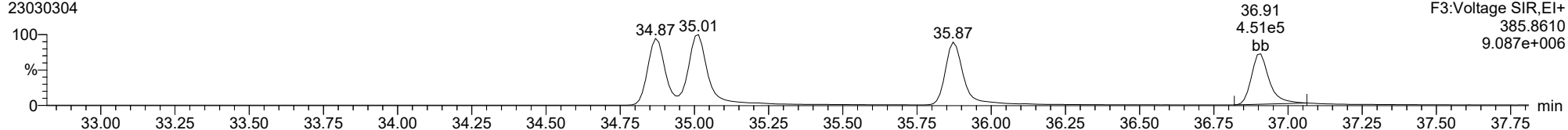
13C-123789-HxCDF

23030304



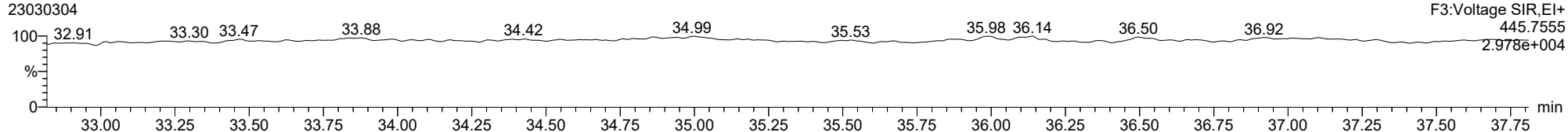
13C-123789-HxCDF

23030304



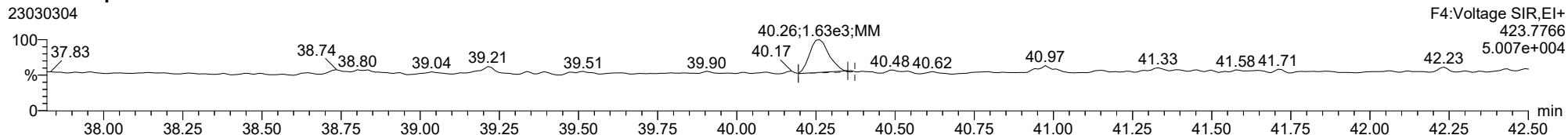
FUNCTION3 OCDPE

23030304

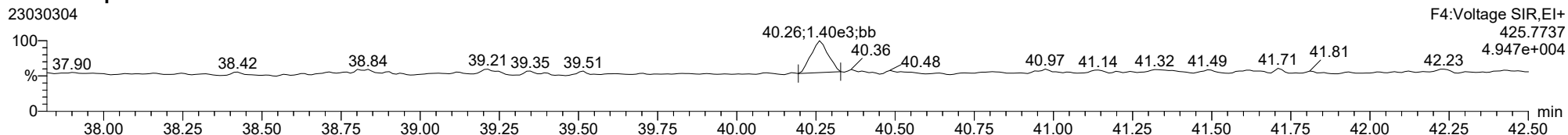


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

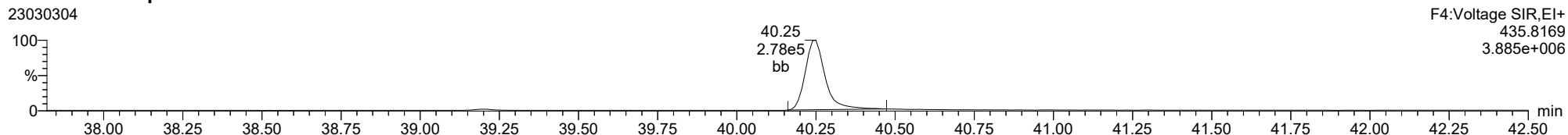
1234678-HpCDD



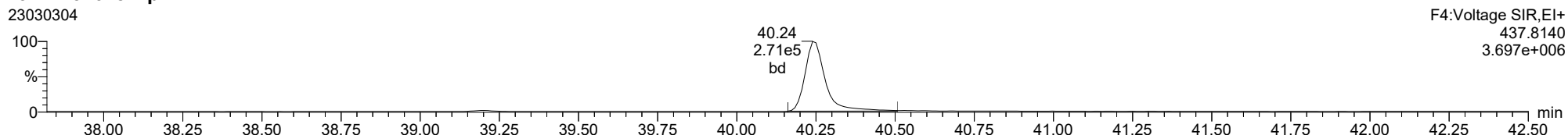
1234678-HpCDD



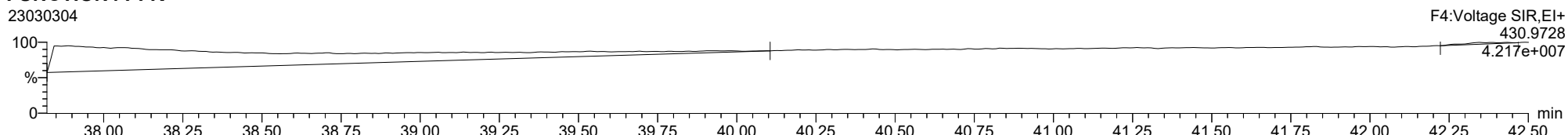
13C-1234678-HpCDD



13C-1234678-HpCDD



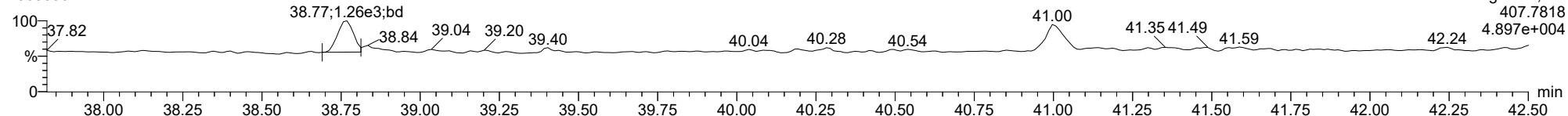
FUNCTION4 PFK



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

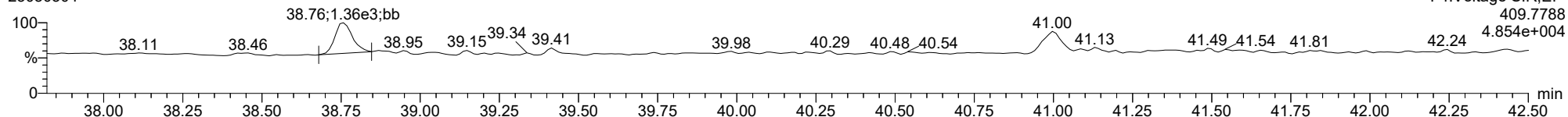
1234678-HpCDF

23030304



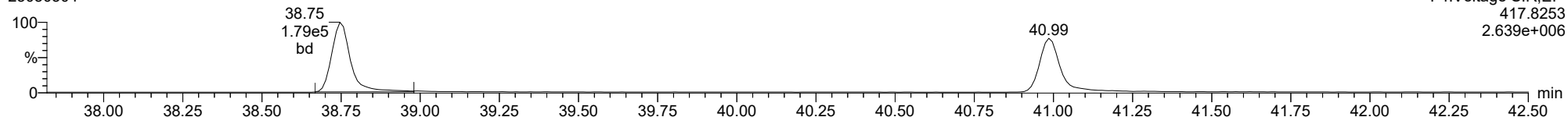
1234678-HpCDF

23030304



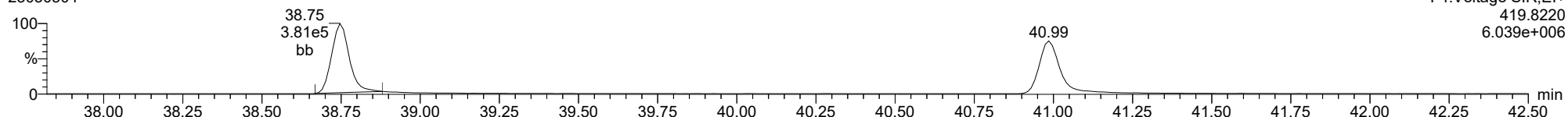
13C-1234678-HpCDF

23030304



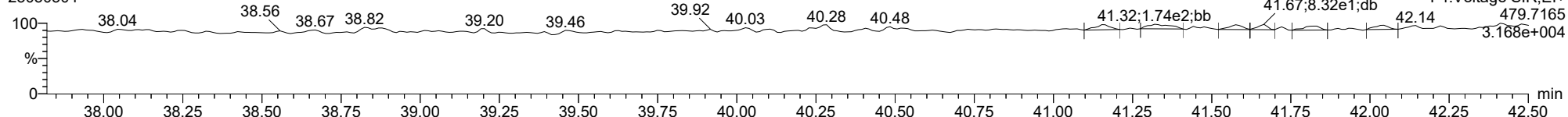
13C-1234678-HpCDF

23030304



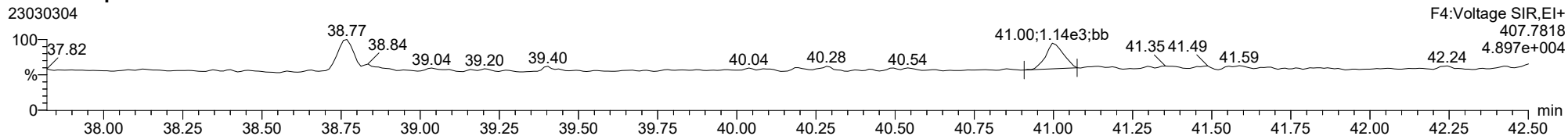
FUNCTION4 NCDPE

23030304

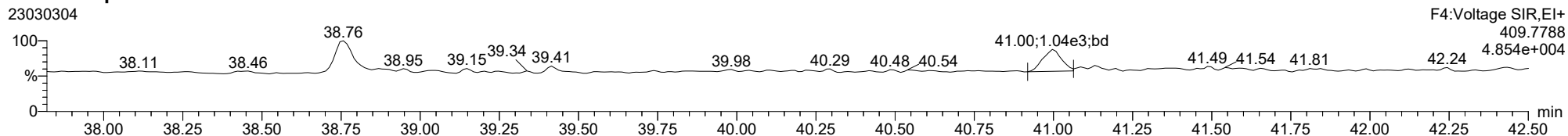


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

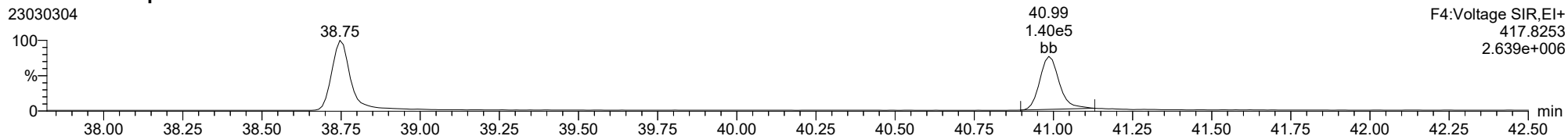
1234789-HpCDF



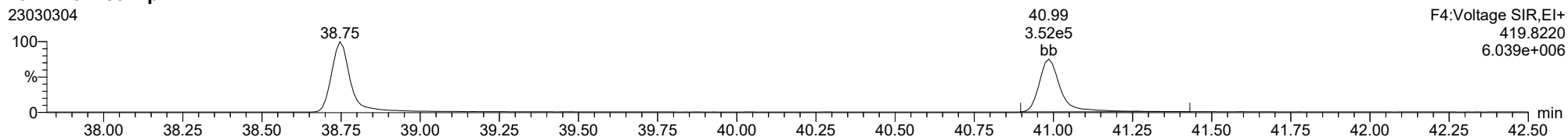
1234789-HpCDF



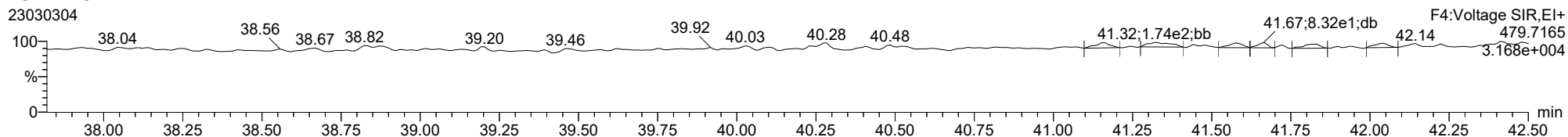
13C-1234789-HpCDF



13C-1234789-HpCDF



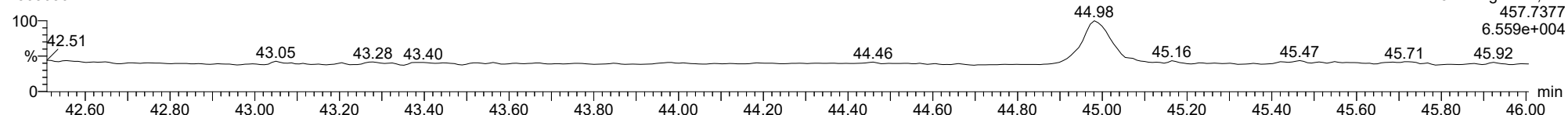
FUNCTION4 NCDPE



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

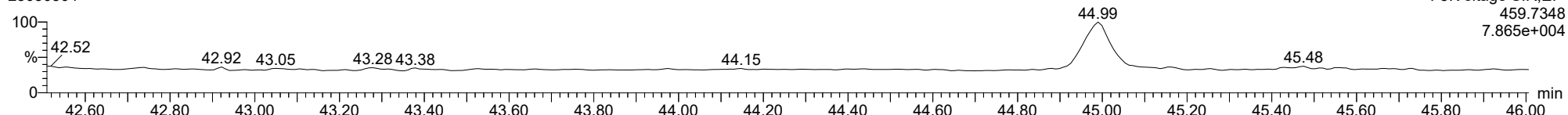
OCDD

23030304



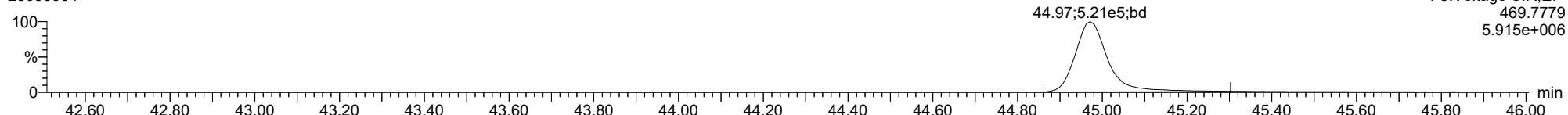
OCDD

23030304



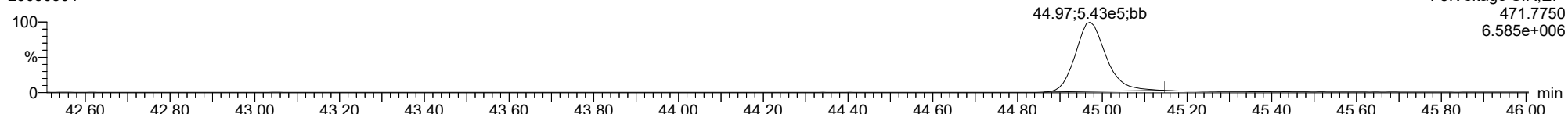
13C-OCDD

23030304



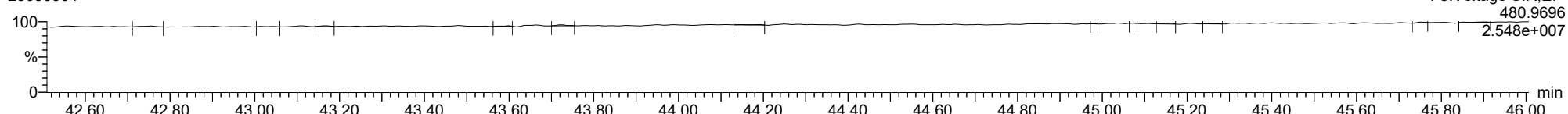
13C-OCDD

23030304



FUNCTION5 PFK

23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

OCDF

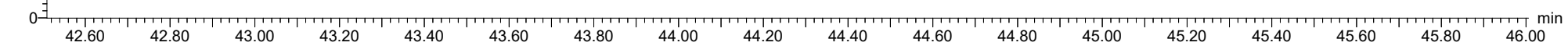
23030304

100
42.51
%
0

43.05 43.27 43.40 43.64 43.75 44.02 44.40

45.23;2.10e3;bb

F5:Voltage SIR,EI+
441.7428
4.982e+004
45.48 45.58 45.66 45.83



OCDF

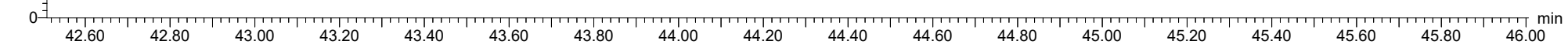
23030304

100
42.51
%
0

43.05 43.32 43.42 43.73 44.25

45.25;2.21e3;bb

F5:Voltage SIR,EI+
443.7399
4.786e+004
45.45 45.73



FUNCTION5 DCDPE

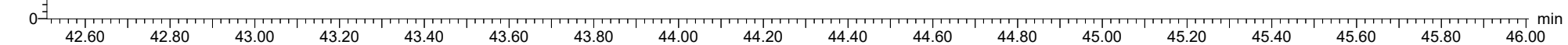
23030304

100
42.73;1.39e2;bb
%
0

43.27;1.22e2;bd 43.65 43.95 44.18 44.40 44.61

45.01 45.15 45.22

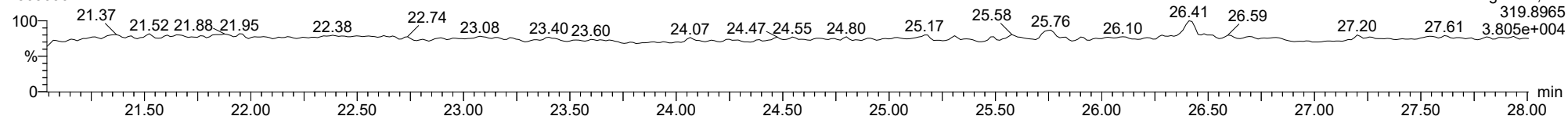
F5:Voltage SIR,EI+
513.6775
3.310e+004
45.44 45.52 45.73



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

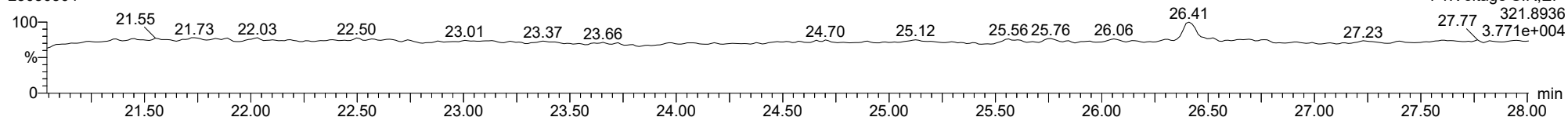
Total-tetradioxins

23030304



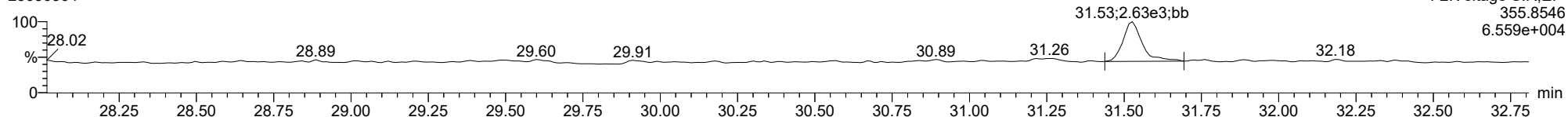
Total-tetradioxins

23030304



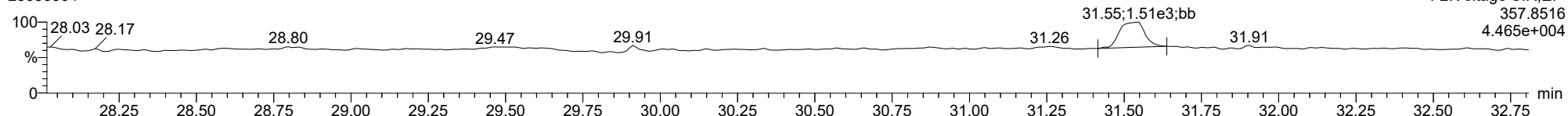
Total-pentadioxins

23030304



Total-pentadioxins

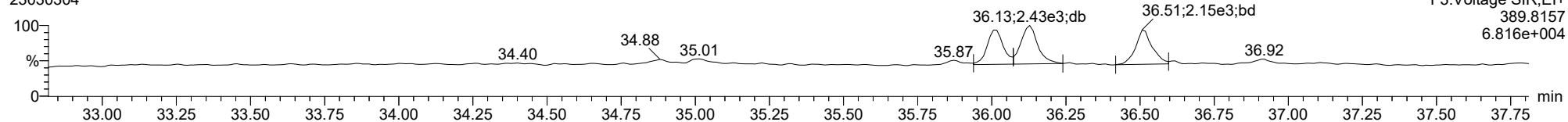
23030304



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

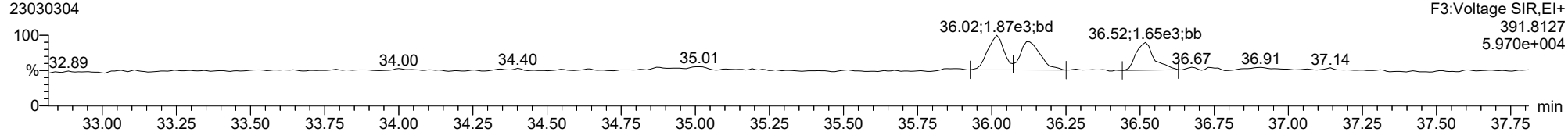
Total-hexadioxins

23030304



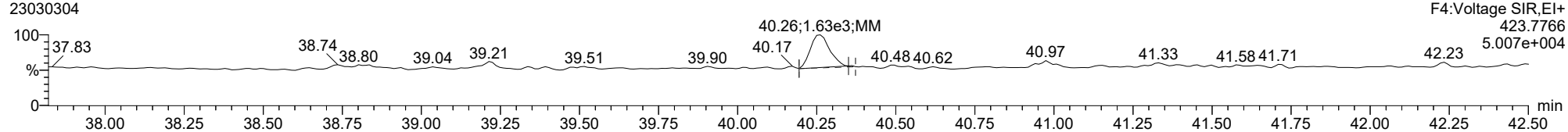
Total-hexadioxins

23030304



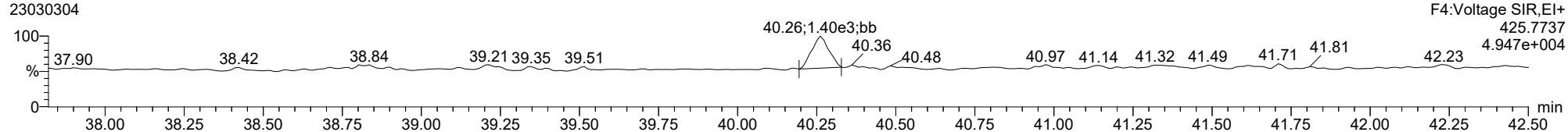
Total-heptadioxins

23030304



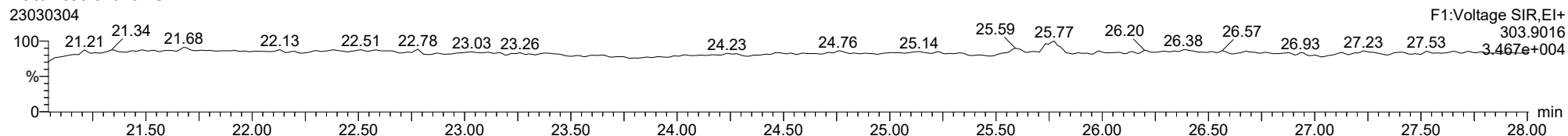
Total-heptadioxins

23030304

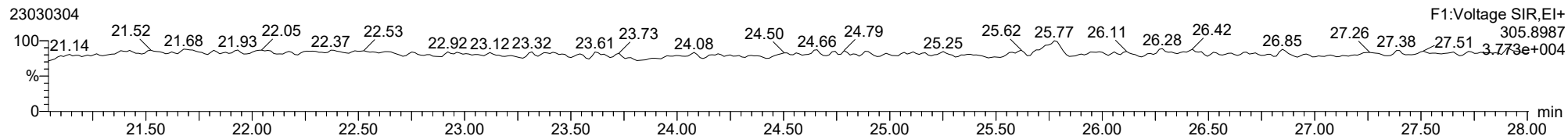


ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

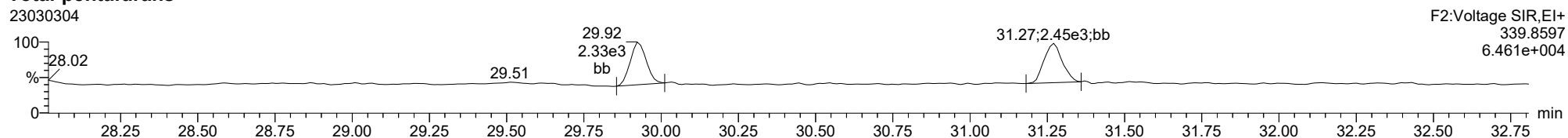
Total-tetrafurans



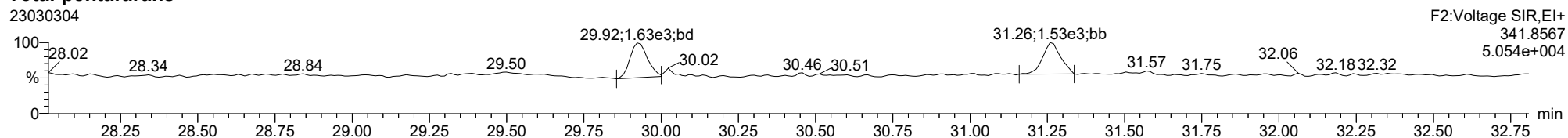
Total-tetrafurans



Total-pentafurans



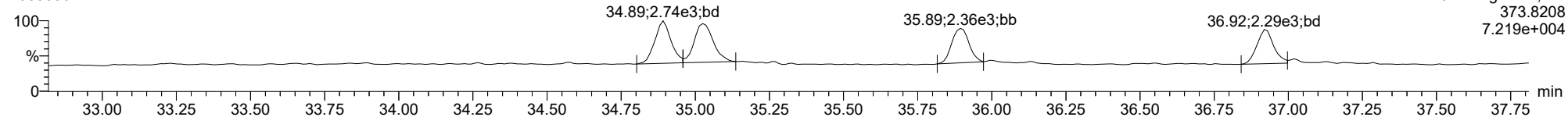
Total-pentafurans



ID: CSLCW, Name: 23030304, Date: 03-Mar-2023, Time: 11:28:13, Conditions: AUTOSPEC01, User: pk

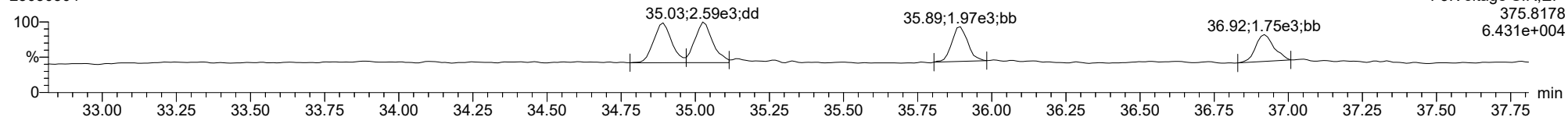
Total-hexafurans

23030304



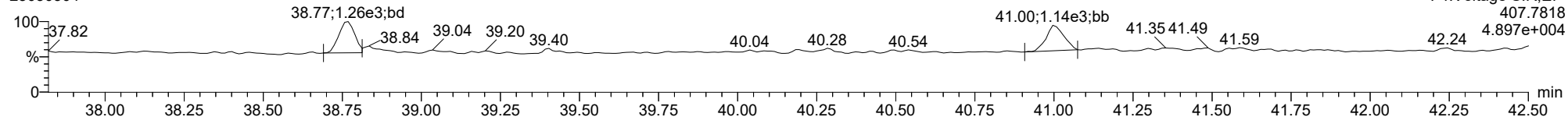
Total-hexafurans

23030304



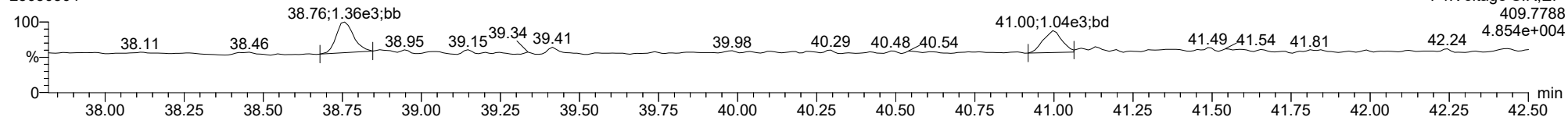
Total-heptafurans

23030304



Total-heptafurans

23030304



Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, **Name:** 23030305, **Date:** 03-Mar-2023, **Time:** 12:23:58, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	1.705e3	2.516e3	0.702	0.678	0.770	886	1799	2.34e4	3.87e4	26.4	21.5	NO	bb	MM	0.494
12378-PeCDF	29.933	1.000	5.914e3	4.099e3	0.679	1.442	1.550	1151	1276	9.10e4	6.48e4	79.1	50.8	NO	bb	bb	2.168
23478-PeCDF	31.270	1.000	7.974e3	4.958e3	0.786	1.608	1.550	1151	1276	1.22e5	6.97e4	106.1	54.6	NO	bb	bb	2.386
123478-HxCDF	34.891	1.000	1.063e4	7.851e3	1.166	1.354	1.240	1046	1170	1.58e5	1.17e5	151.4	100.1	NO	bd	bd	2.532
234678-HxCDF	35.894	1.000	1.057e4	7.802e3	1.140	1.354	1.240	1046	1170	1.51e5	1.18e5	143.9	100.6	NO	bb	bb	2.503
123678-HxCDF	35.036	1.001	1.161e4	8.676e3	1.091	1.339	1.240	1046	1170	1.53e5	1.27e5	146.1	108.8	NO	dd	dd	2.416
123789-HxCDF	36.930	1.001	8.482e3	6.693e3	1.137	1.267	1.240	1046	1170	1.18e5	8.92e4	112.7	76.2	NO	bd	bb	2.462
1234678-HpCDF	38.768	1.000	7.253e3	6.596e3	1.003	1.100	1.050	811	627	1.05e5	9.73e4	128.9	155.1	NO	bb	bb	2.680
1234789-HpCDF	41.008	1.000	5.116e3	5.234e3	0.953	0.978	1.050	811	627	7.22e4	7.17e4	89.0	114.3	NO	bb	bb	2.342
OCDF	45.237	1.006	5.981e3	6.798e3	0.778	0.880	0.890	709	890	6.92e4	8.13e4	97.6	91.3	NO	MM	bd	4.559
2378-TCDD	26.424	1.001	2.272e3	2.723e3	1.149	0.834	0.770	1286	820	3.35e4	3.73e4	26.0	45.5	NO	bb	bb	0.486
12378-PeCDD	31.538	1.001	7.831e3	5.061e3	1.022	1.548	1.550	902	618	1.00e5	7.05e4	111.4	114.0	NO	bb	bd	2.348
123478-HxCDD	36.016	1.000	7.381e3	5.875e3	0.996	1.256	1.240	655	843	1.17e5	9.68e4	178.2	114.9	NO	bd	bd	2.415
123678-HxCDD	36.139	1.001	9.152e3	7.340e3	1.001	1.247	1.240	655	843	1.26e5	9.90e4	192.8	117.4	NO	db	dd	2.494
123789-HxCDD	36.518	1.011	7.480e3	5.936e3	0.907	1.260	1.240	655	843	1.06e5	8.62e4	162.4	102.3	NO	bd	bd	2.440
1234678-HpCDD	40.272	1.001	6.283e3	5.832e3	1.039	1.077	1.050	694	917	8.98e4	8.16e4	129.4	89.0	NO	bb	bd	2.337
OCDD	44.999	1.000	8.578e3	9.676e3	0.920	0.887	0.890	635	634	9.84e4	1.12e5	154.9	175.9	NO	bd	bb	5.505
13C-2378-TCDF	25.760	1.007	5.230e5	6.960e5	1.620	0.752	0.770	2566	1723	7.68e6	1.02e7	2994.2	5911.4	NO	bb	bb	98.043
13C-12378-PeCDF	29.922	1.169	4.082e5	2.718e5	1.240	1.502	1.550	3092	2294	5.44e6	3.64e6	1758.1	1584.9	NO	bd	bb	71.437
13C-23478-PeCDF	31.259	1.222	4.106e5	2.788e5	1.118	1.473	1.550	3092	2294	5.91e6	4.02e6	1912.5	1751.3	NO	bb	bb	80.373
13C-123478-HxCDF	34.880	0.955	2.117e5	4.140e5	1.168	0.511	0.510	1778	2186	3.18e6	6.21e6	1786.5	2841.3	NO	bd	bd	93.801
13C-123678-HxCDF	35.014	0.959	2.754e5	4.947e5	1.386	0.557	0.510	1778	2186	3.40e6	6.43e6	1911.3	2941.0	NO	db	db	97.276
13C-234678-HxCDF	35.882	0.983	2.122e5	4.318e5	1.129	0.491	0.510	1778	2186	3.04e6	5.98e6	1709.4	2734.1	NO	bb	bd	99.880
13C-123789-HxCDF	36.908	1.011	1.853e5	3.568e5	0.932	0.519	0.510	1778	2186	2.62e6	5.01e6	1471.0	2293.6	NO	bb	bb	101.893
13C-1234678-HpCDF	38.757	1.062	1.579e5	3.573e5	0.895	0.442	0.440	2049	3174	2.36e6	5.45e6	1151.3	1718.3	NO	bb	bb	100.794
13C-1234789-HpCDF	40.997	1.123	1.372e5	3.264e5	0.770	0.420	0.440	2049	3174	1.74e6	3.92e6	851.0	1236.7	NO	bd	bd	105.482
13C-1234-TCDD	25.591	0.000	3.429e5	4.245e5	1.000	0.808	0.770	2519	1748	5.22e6	6.49e6	2072.6	3712.2	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	3.982e5	4.964e5	1.152	0.802	0.770	2519	1748	5.51e6	6.93e6	2188.2	3962.8	NO	bb	bb	101.152
13C-12378-PeCDD	31.515	1.232	3.242e5	2.131e5	0.829	1.521	1.550	1586	877	4.46e6	2.78e6	2809.5	3168.1	NO	bb	bd	84.489
13C-123478-HxCDD	36.005	0.986	3.100e5	2.413e5	0.995	1.285	1.240	2517	1649	4.83e6	3.77e6	1920.9	2283.3	NO	bd	bd	97.050
13C-123678-HxCDD	36.117	0.989	3.700e5	2.908e5	1.157	1.273	1.240	2517	1649	5.06e6	4.03e6	2012.2	2442.3	NO	db	db	100.049
13C-1234678-HpCDD	40.250	1.102	2.556e5	2.433e5	0.840	1.051	1.050	2183	1602	3.48e6	3.29e6	1594.9	2052.3	NO	bb	bb	103.999
13C-OCDD	44.980	1.232	3.386e5	3.823e5	0.767	0.886	0.890	3187	1733	3.80e6	4.27e6	1193.7	2462.5	NO	bb	bb	164.498
13C-123789-HxCDD	36.507	0.000	3.194e5	2.515e5	1.000	1.270	1.240	2517	1649	4.46e6	3.59e6	1770.5	2177.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	5.065e3		1.288			2040		7.28e4		35.7			bb		0.513

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	886	1799								
1289-TCDF					0.678		0.770	886	1799								
13468-PECDF					1.246		1.550	811	1221								
12389-PECDF					0.496		1.550	1151	1276								
123468-HXCDF					1.169		1.240	1046	1170								
1368-TCDD					1.015		0.770	1286	820								
1289-TCDD					0.909		0.770	1286	820								
12479-PECDD					2.301		1.550	902	618								
12389-PECDD					1.184		1.550	902	618								
124679-HXCDD					1.115		1.240	655	843								
1234679-HPCDD					1.137		1.050	694	917								
Total-tetrafurans			1.705e3		0.727			886		2.34e4							0.494
Total-penta1			0.000e0					811		0.00e0							
Total-pentafurans			1.389e4		0.654			1151		2.13e5							4.554
Total-hexafurans			4.139e4		1.141			1046		5.82e5							9.938
Total-heptafurans			1.237e4		0.978			811		1.77e5							5.023
Total-Furans			7.533e4		0.922			886		1.06e6							24.566
Total-tetradoxins			2.272e3		1.024			1286		3.35e4							0.486
Total-pentadoxins			7.831e3		1.502			902		1.00e5							2.348
Total-hexadoxins			2.401e4		1.005			655		3.49e5							7.349
Total-heptadoxins			6.283e3		1.088			694		8.98e4							2.337
Total-Dioxins			4.898e4		1.130			1286		6.72e5							18.025
Total-TEQ			1.243e5					1286		1.74e6							42.592
FUNCTION1 PFK			0.000e0					501375		0.00e0							
FUNCTION2 PFK			7.687e6					300953		7.99e6							0.000
FUNCTION3 PFK			1.081e7					473463		1.95e7							0.000
FUNCTION4 PFK			1.035e7					332160		2.87e6							
FUNCTION5 PFK			6.101e5					195111		8.38e5							
FUNCTION1 HXCD...			6.739e2					611		6.36e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.361e2					923		1.83e4							0.000
FUNCTION3 OCDPE			2.008e2					596		2.61e3							0.000
FUNCTION4 NCDPE			9.397e1					539		1.40e3							0.000
FUNCTION5 DCDPE			1.677e2					561		3.39e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303\CIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
2	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
3	Total-hexafurans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
4	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
5	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
2	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168
3	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494
4	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
5	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
6	Total-hexa-furans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
7	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
8	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532
9	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
10	OCDF	45.24	5.981e3	6.798e3	0.778	0.88	0.89	97.6	YES	NO	MM	bd	4.559
11	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
2	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
3	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486
2	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
3	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
4	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415
5	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348
6	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337
7	OCDD	45.00	8.578e3	9.676e3	0.920	0.89	0.89	154.9	YES	NO	bd	bb	5.505

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	7.974e3	4.958e3	0.786	1.61	1.55	106.1	YES	NO	bb	bb	2.386
2	12378-PeCDF	29.93	5.914e3	4.099e3	0.679	1.44	1.55	79.1	YES	NO	bb	bb	2.168
3	2378-TCDF	25.79	1.705e3	2.516e3	0.702	0.68	0.77	26.4	YES	NO	bb	MM	0.494
4	123789-HxCDF	36.93	8.482e3	6.693e3	1.137	1.27	1.24	112.7	YES	NO	bd	bb	2.462
5	234678-HxCDF	35.89	1.057e4	7.802e3	1.140	1.35	1.24	143.9	YES	NO	bb	bb	2.503
6	Total-hexa-furans	35.23	1.011e2	8.523e1	1.141	1.19	1.24	2.2	NO	NO	db	db	0.025
7	123678-HxCDF	35.04	1.161e4	8.676e3	1.091	1.34	1.24	146.1	YES	NO	dd	dd	2.416
8	123478-HxCDF	34.89	1.063e4	7.851e3	1.166	1.35	1.24	151.4	YES	NO	bd	bd	2.532
9	1234678-HpCDF	38.77	7.253e3	6.596e3	1.003	1.10	1.05	128.9	YES	NO	bb	bb	2.680
10	OCDF	45.24	5.981e3	6.798e3	0.778	0.88	0.89	97.6	YES	NO	MM	bd	4.559
11	1234789-HpCDF	41.01	5.116e3	5.234e3	0.953	0.98	1.05	89.0	YES	NO	bb	bb	2.342
12	2378-TCDD	26.42	2.272e3	2.723e3	1.149	0.83	0.77	26.0	YES	NO	bb	bb	0.486
13	123789-HxCDD	36.52	7.480e3	5.936e3	0.907	1.26	1.24	162.4	YES	NO	bd	bd	2.440
14	123678-HxCDD	36.14	9.152e3	7.340e3	1.001	1.25	1.24	192.8	YES	NO	db	dd	2.494
15	123478-HxCDD	36.02	7.381e3	5.875e3	0.996	1.26	1.24	178.2	YES	NO	bd	bd	2.415
16	12378-PeCDD	31.54	7.831e3	5.061e3	1.022	1.55	1.55	111.4	YES	NO	bb	bd	2.348
17	1234678-HpCDD	40.27	6.283e3	5.832e3	1.039	1.08	1.05	129.4	YES	NO	bb	bd	2.337
18	OCDD	45.00	8.578e3	9.676e3	0.920	0.89	0.89	154.9	YES	NO	bd	bb	5.505

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.41	6.929e5					4.3	YES		bb		0.000
2	FUNCTION2 PFK	28.05	6.994e6					22.3	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.60	1.788e4					1.3	NO		bb		0.000
2	FUNCTION3 PFK	36.61	1.585e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	36.53	6.942e3					0.8	NO		bb		0.000
4	FUNCTION3 PFK	33.99	9.502e3					0.9	NO		bb		0.000
5	FUNCTION3 PFK	33.78	4.298e6					7.0	YES		db		0.000
6	FUNCTION3 PFK	33.15	6.467e6					29.8	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	38.85	1.035e7					8.6	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.97	6.101e5					4.3	YES		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.27	8.033e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	24.98	2.706e2					3.4	YES		bb		0.000
3	FUNCTION1 HXCD...	22.17	1.286e2					2.0	NO		bb		0.000
4	FUNCTION1 HXCD...	21.47	8.089e1					1.9	NO		bb		0.000
5	FUNCTION1 HXCD...	21.17	1.135e2					1.3	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:10 Pacific Standard Time

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.66	1.045e2					4.3	YES		db		0.000
2	FUNCTION2 HPCD...	32.58	1.134e2					3.0	NO		bd		0.000
3	FUNCTION2 HPCD...	31.88	7.272e1					1.9	NO		bb		0.000
4	FUNCTION2 HPCD...	30.71	7.070e1					1.8	NO		bb		0.000
5	FUNCTION2 HPCD...	30.13	1.134e2					2.5	NO		bb		0.000
6	FUNCTION2 HPCD...	28.92	7.142e1					2.0	NO		bb		0.000
7	FUNCTION2 HPCD...	28.66	9.983e1					2.2	NO		bb		0.000
8	FUNCTION2 HPCD...	28.24	9.016e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.50	2.008e2					4.4	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.59	9.397e1					2.6	NO		bb		0.000

ETHERS6

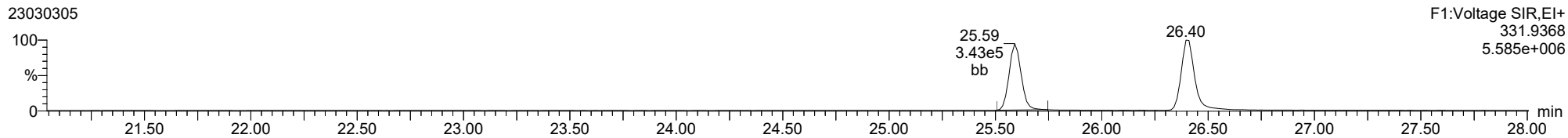
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.72	7.355e1					2.5	NO		bb		0.000
2	FUNCTION5 DCDPE	44.30	9.416e1					3.6	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

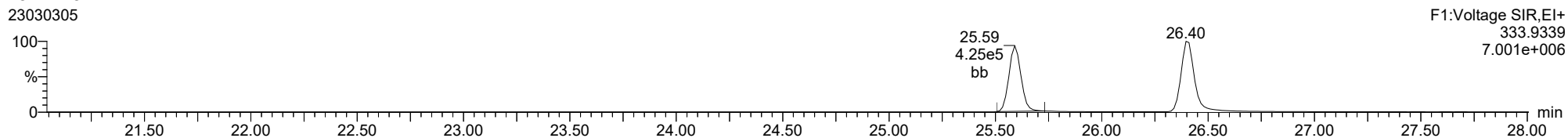
13C-1234-TCDD

23030305



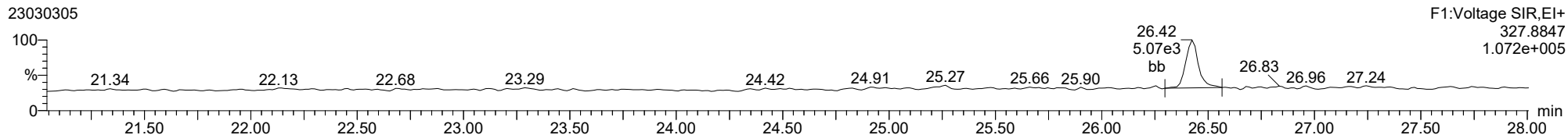
13C-1234-TCDD

23030305



37CL-2378-TCDD

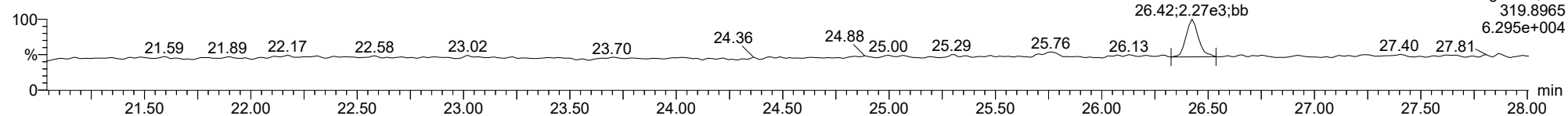
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

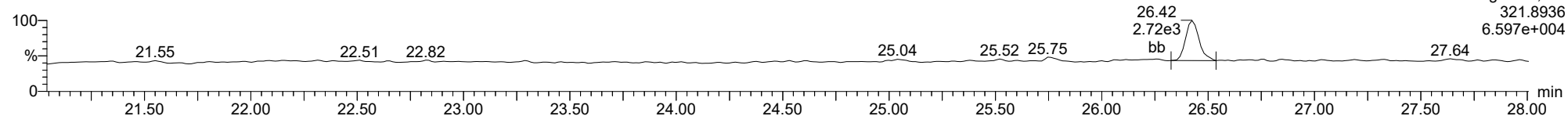
2378-TCDD

23030305



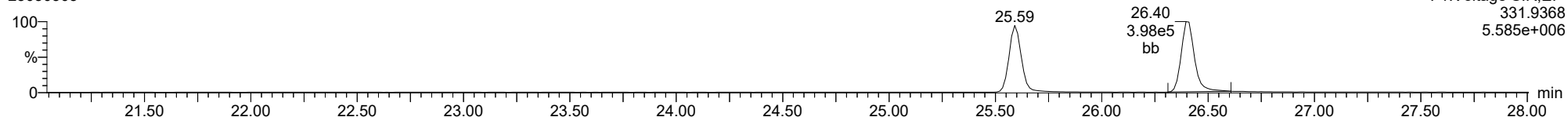
2378-TCDD

23030305



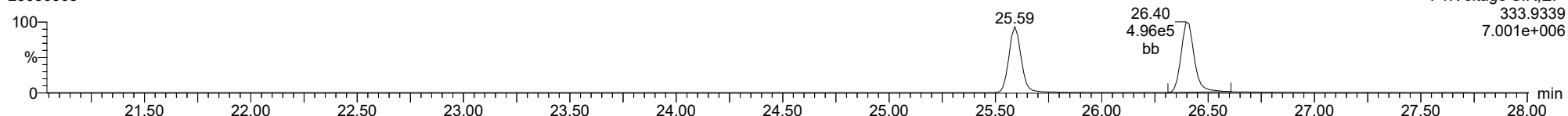
13C-2378-TCDD

23030305



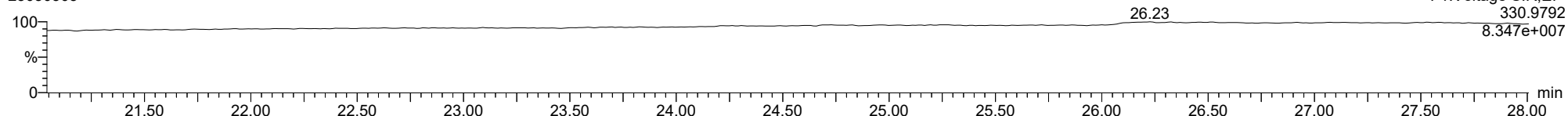
13C-2378-TCDD

23030305



FUNCTION1 PFK

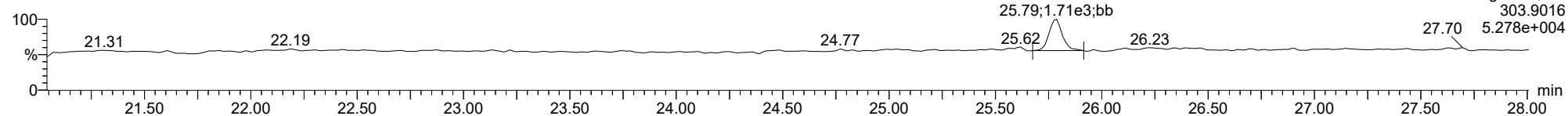
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

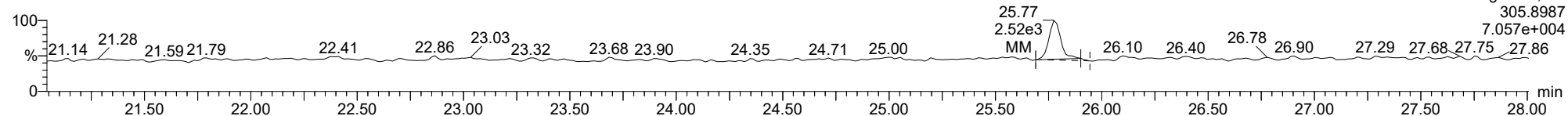
2378-TCDF

23030305



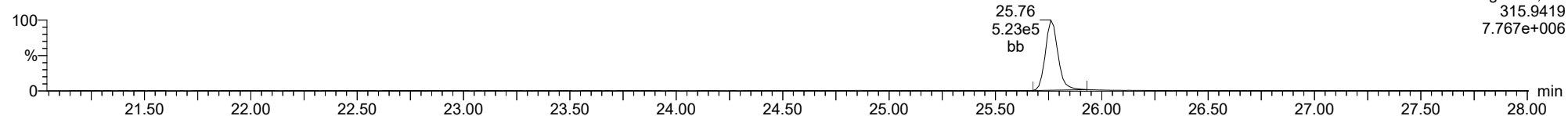
2378-TCDF

23030305



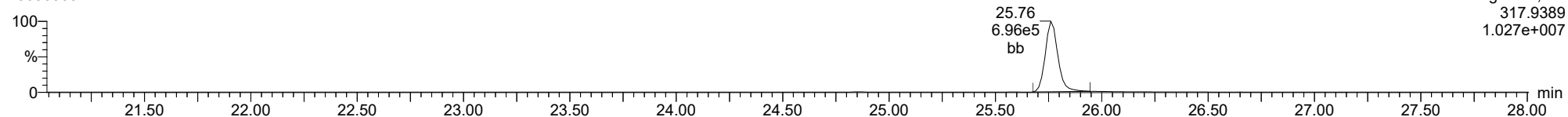
13C-2378-TCDF

23030305



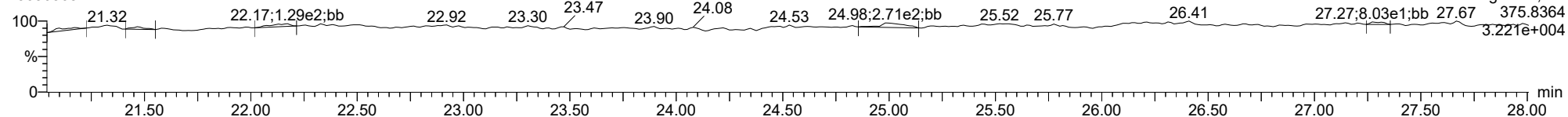
13C-2378-TCDF

23030305



FUNCTION1 HXCDPE

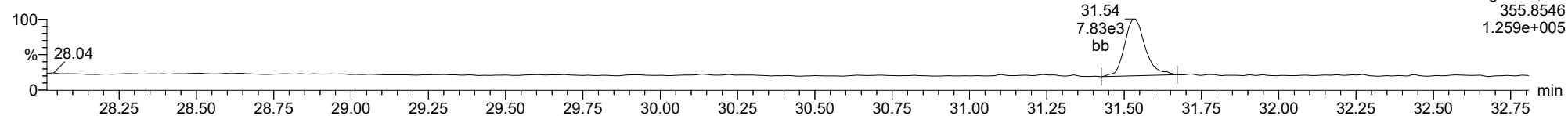
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

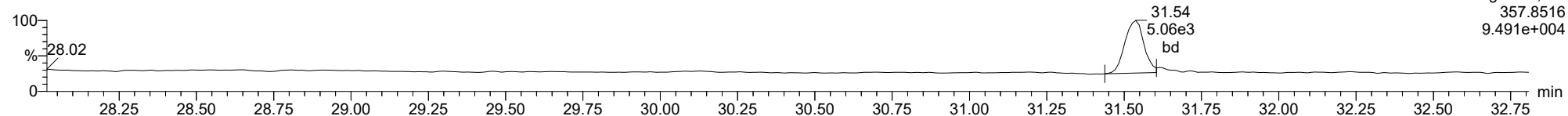
12378-PeCDD

23030305



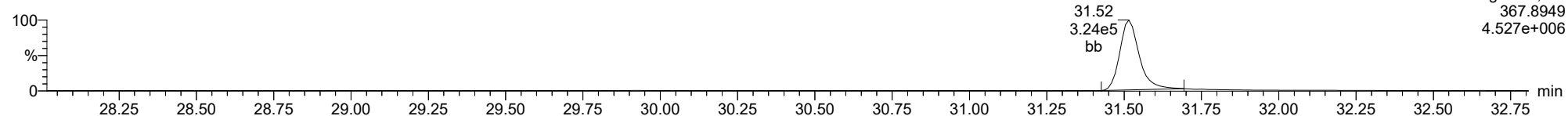
12378-PeCDD

23030305



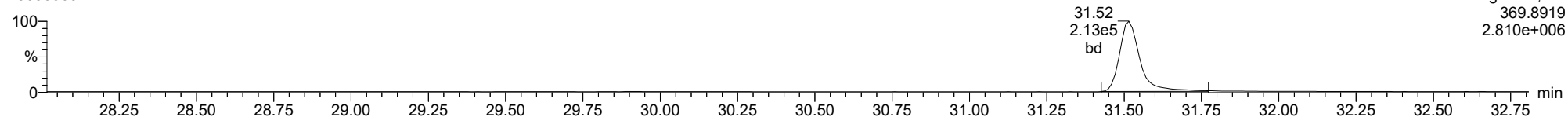
13C-12378-PeCDD

23030305



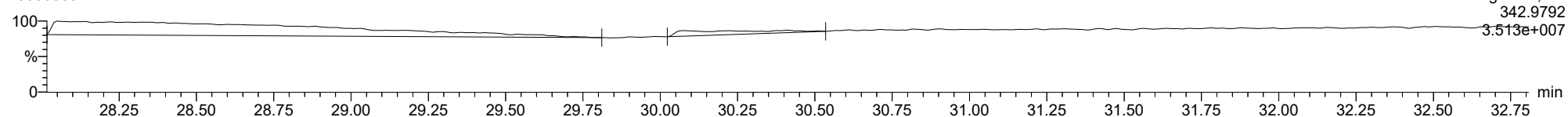
13C-12378-PeCDD

23030305



FUNCTION2 PFK

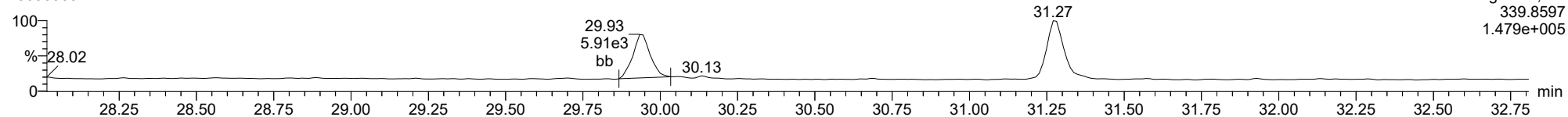
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

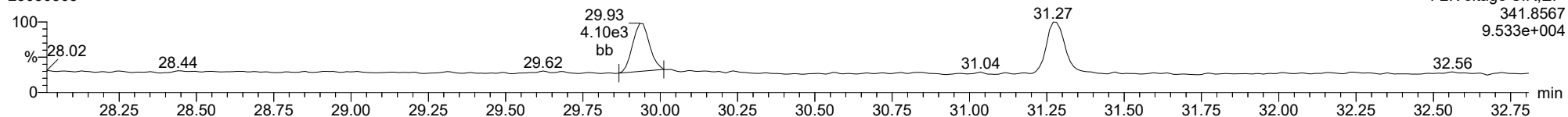
12378-PeCDF

23030305



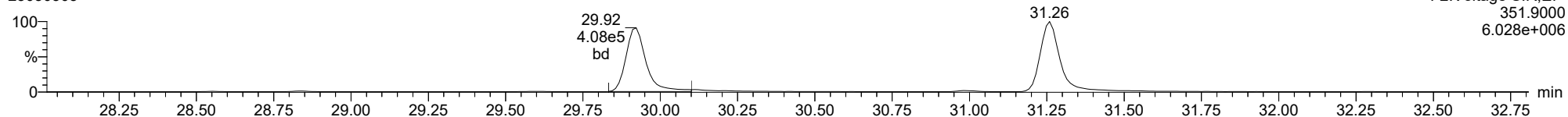
12378-PeCDF

23030305



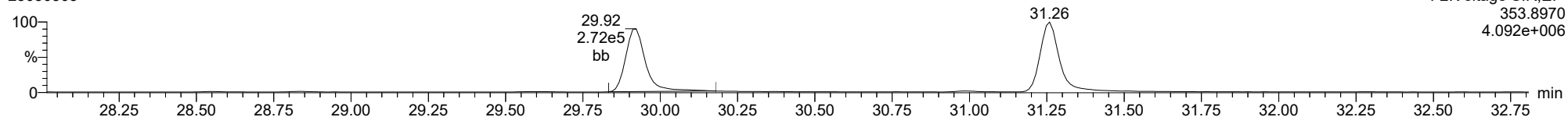
13C-12378-PeCDF

23030305



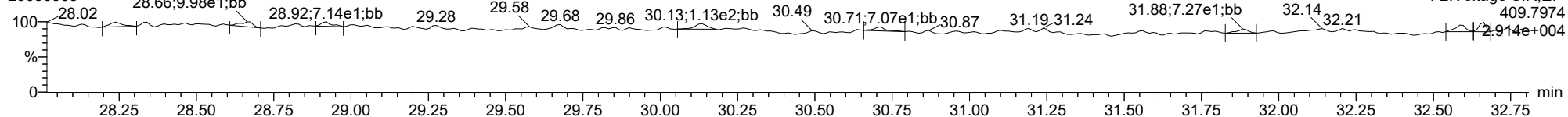
13C-12378-PeCDF

23030305



FUNCTION2 HPCDPE

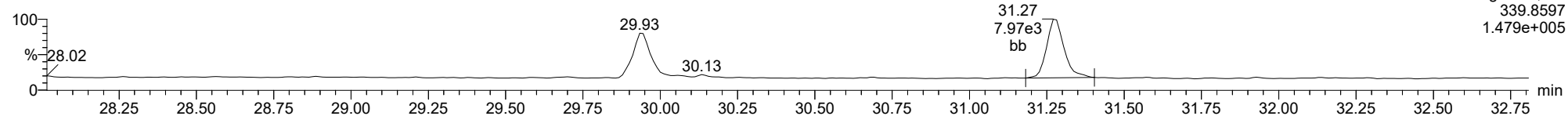
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

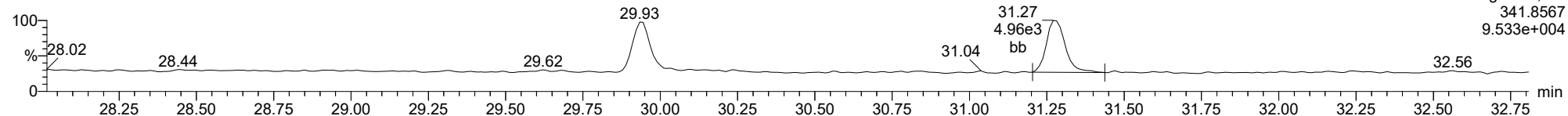
23478-PeCDF

23030305



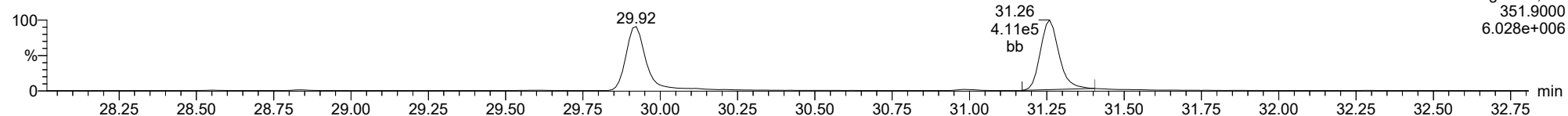
23478-PeCDF

23030305



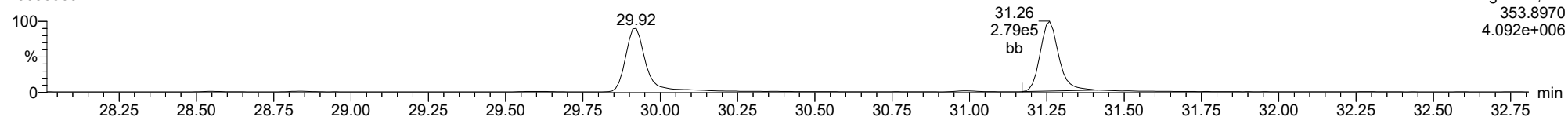
13C-23478-PeCDF

23030305



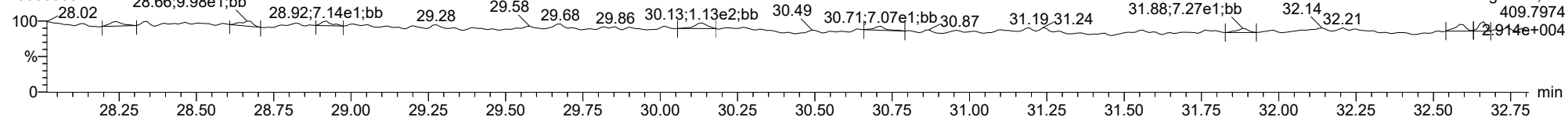
13C-23478-PeCDF

23030305



FUNCTION2 HPCDPE

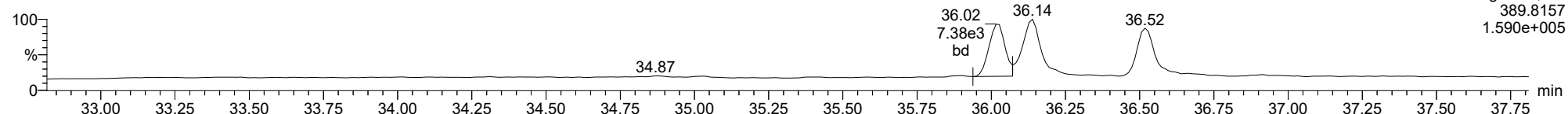
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

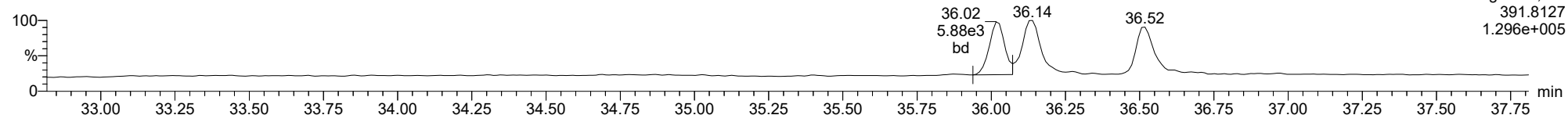
123478-HxCDD

23030305



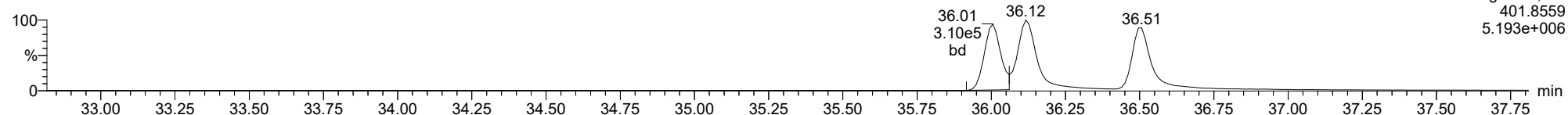
123478-HxCDD

23030305



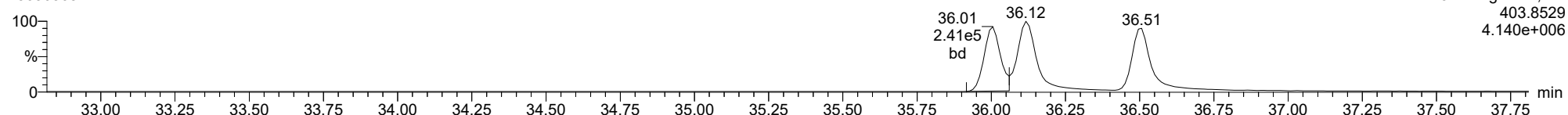
13C-123478-HxCDD

23030305



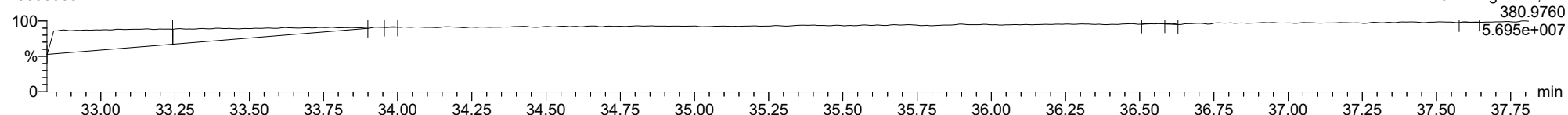
13C-123478-HxCDD

23030305



FUNCTION3 PFK

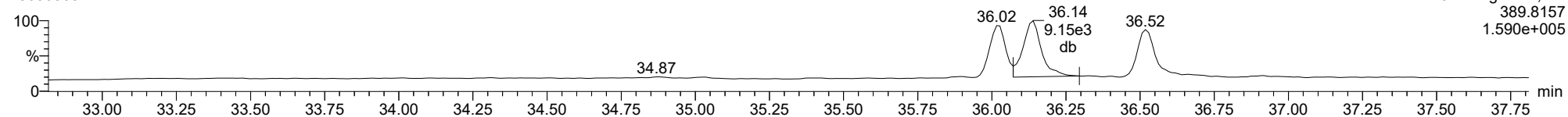
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

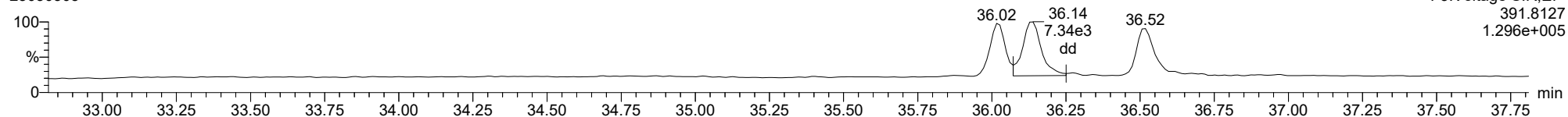
123678-HxCDD

23030305



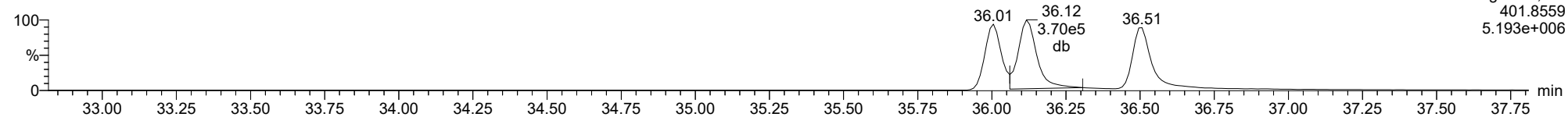
123678-HxCDD

23030305



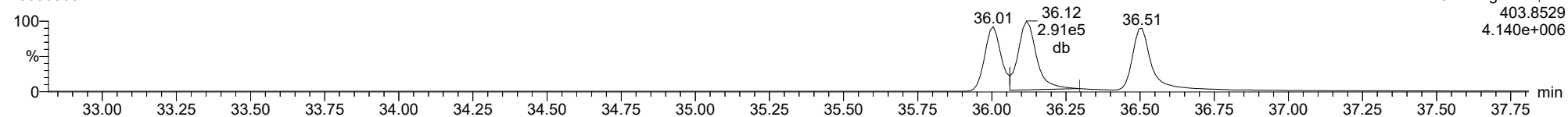
13C-123678-HxCDD

23030305



13C-123678-HxCDD

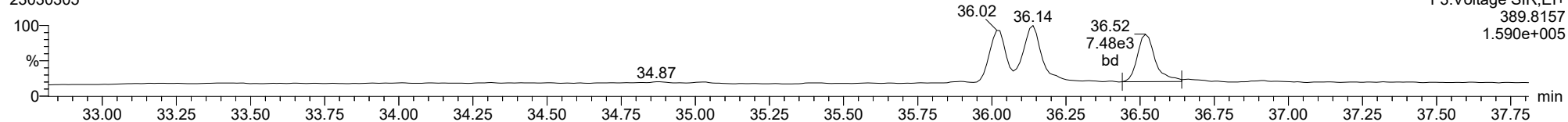
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

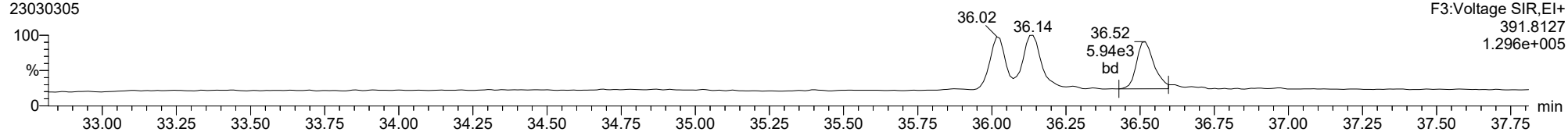
123789-HxCDD

23030305



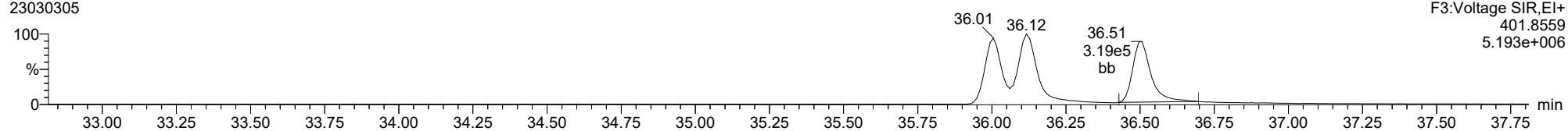
123789-HxCDD

23030305



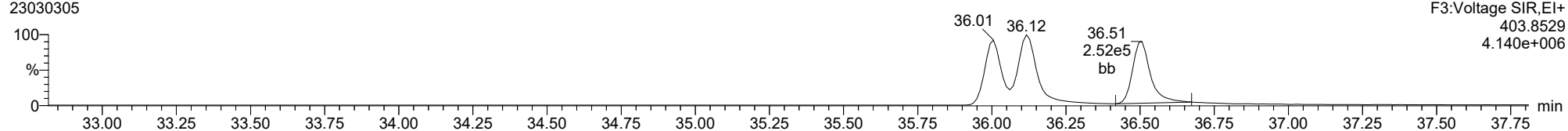
13C-123789-HxCDD

23030305



13C-123789-HxCDD

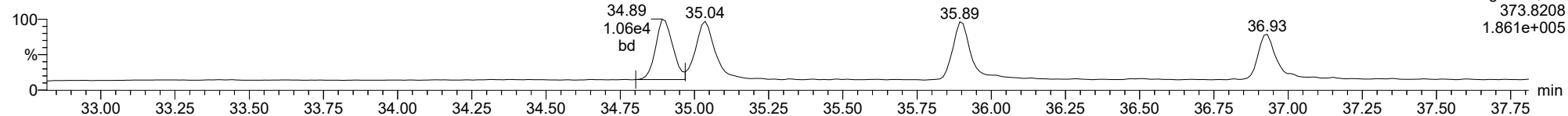
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

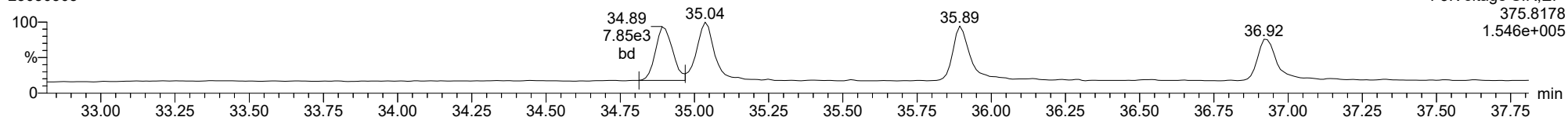
123478-HxCDF

23030305



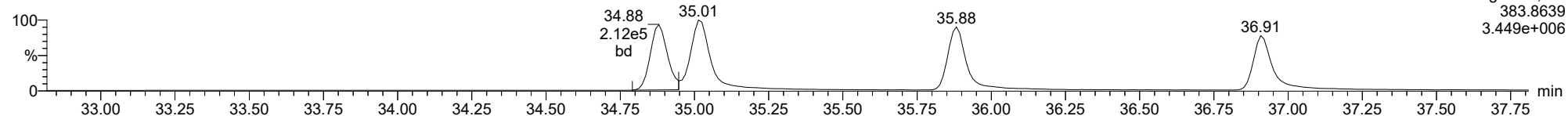
123478-HxCDF

23030305



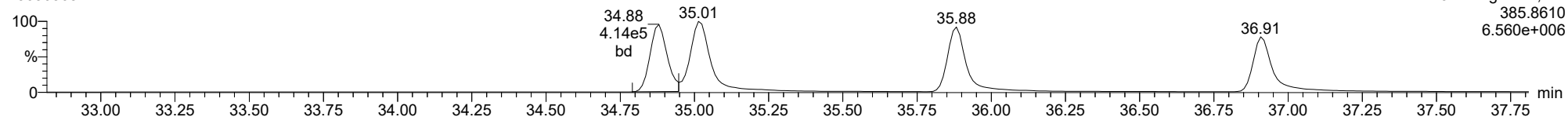
13C-123478-HxCDF

23030305



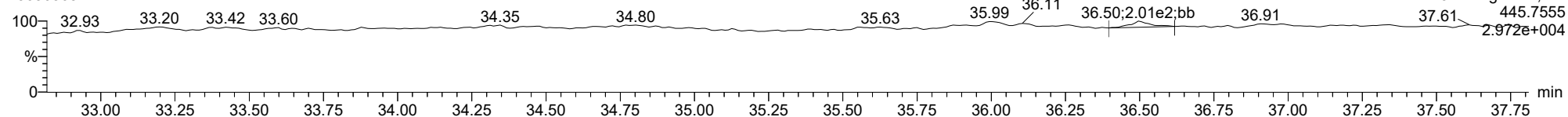
13C-123478-HxCDF

23030305



FUNCTION3 OCDPE

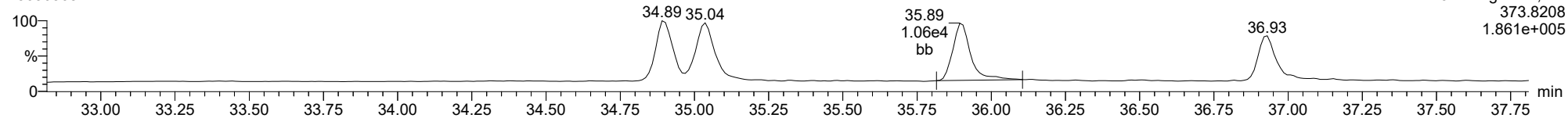
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

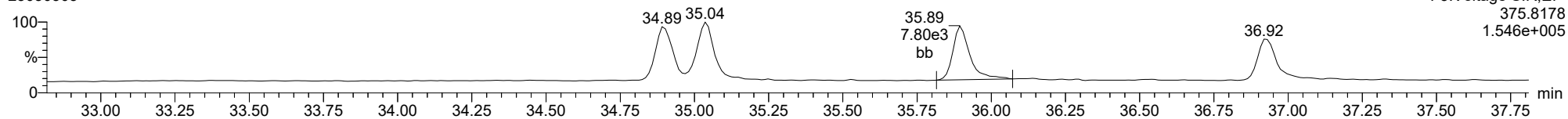
234678-HxCDF

23030305



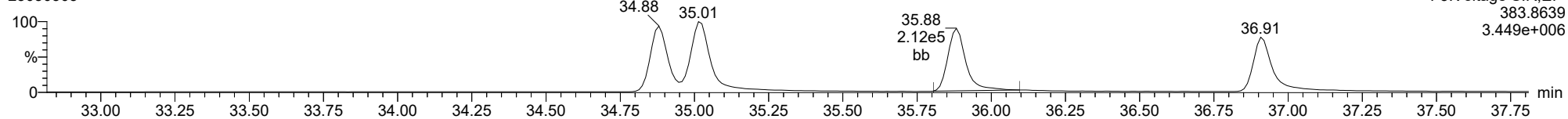
234678-HxCDF

23030305



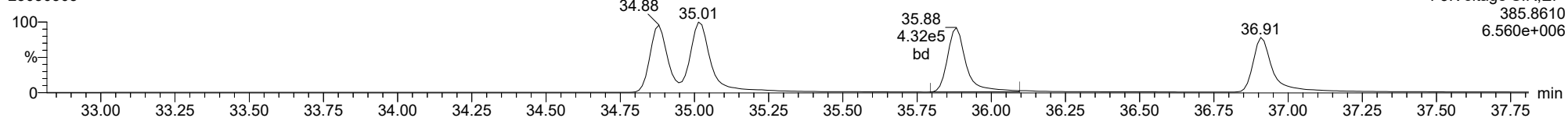
13C-234678-HxCDF

23030305



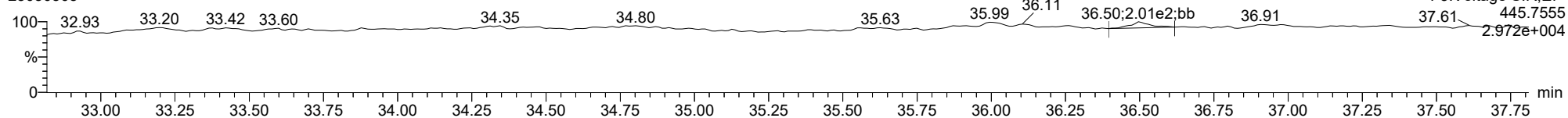
13C-234678-HxCDF

23030305



FUNCTION3 OCDPE

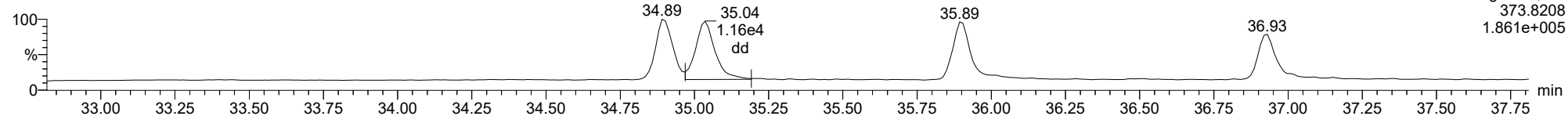
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

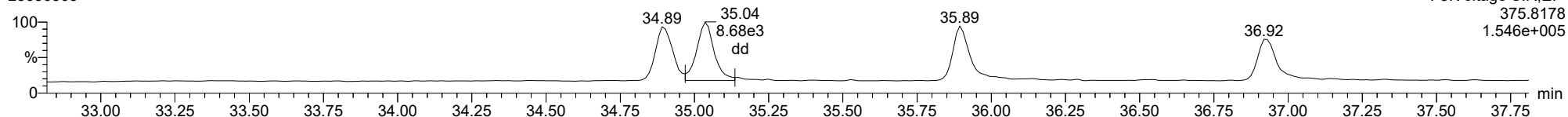
123678-HxCDF

23030305



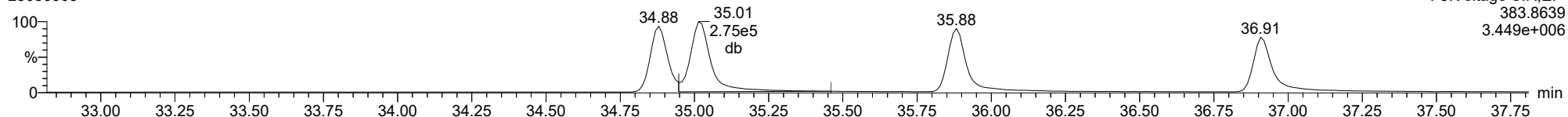
123678-HxCDF

23030305



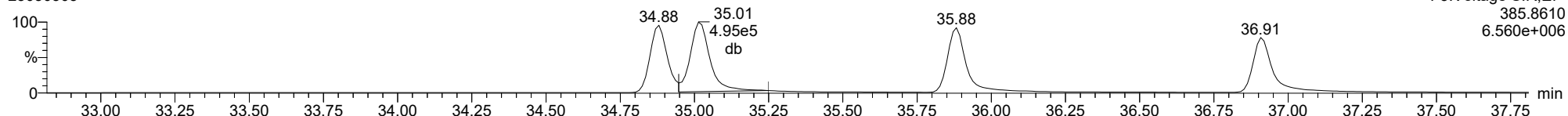
13C-123678-HxCDF

23030305



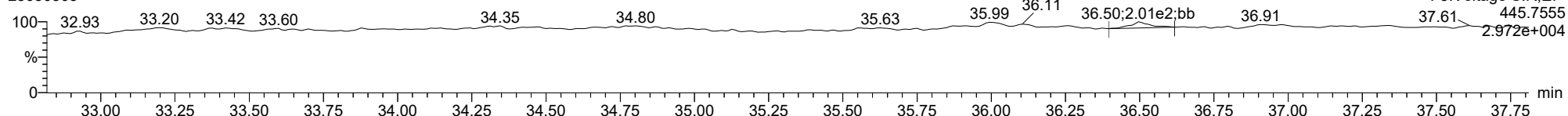
13C-123678-HxCDF

23030305



FUNCTION3 OCDPE

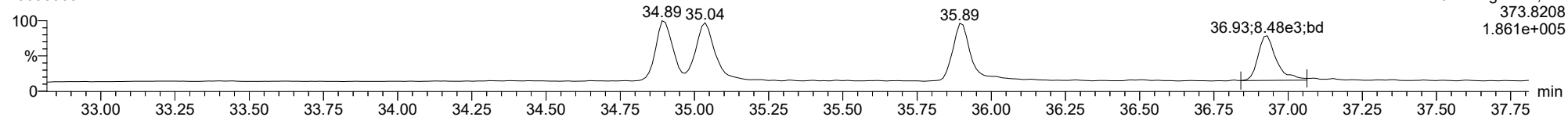
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

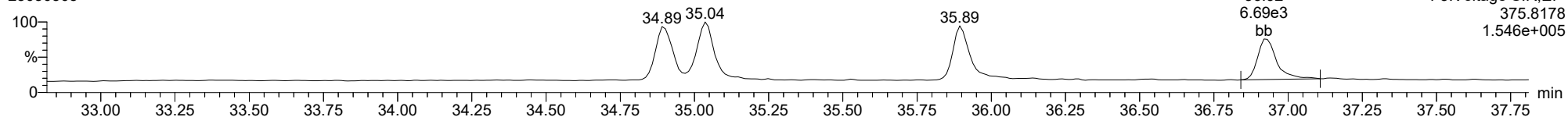
123789-HxCDF

23030305



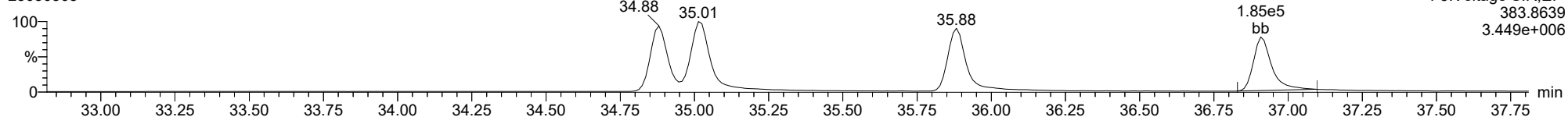
123789-HxCDF

23030305



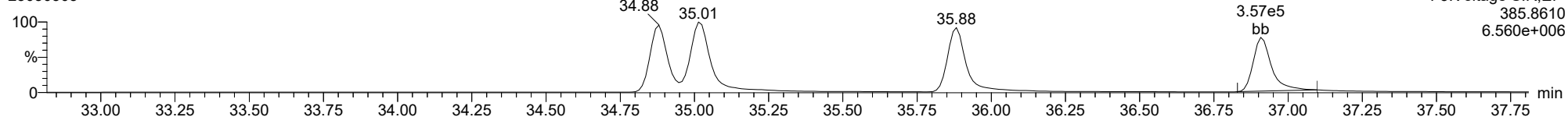
13C-123789-HxCDF

23030305



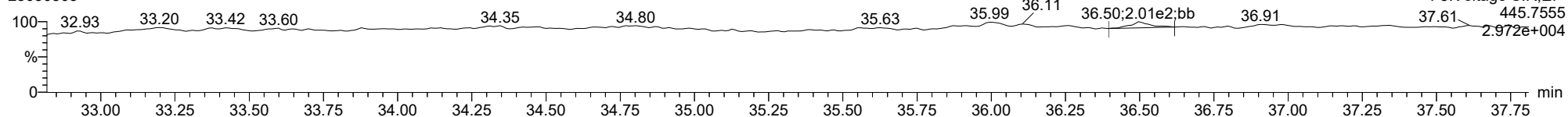
13C-123789-HxCDF

23030305



FUNCTION3 OCDPE

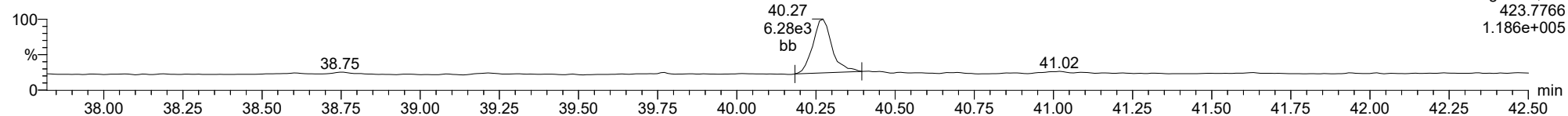
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

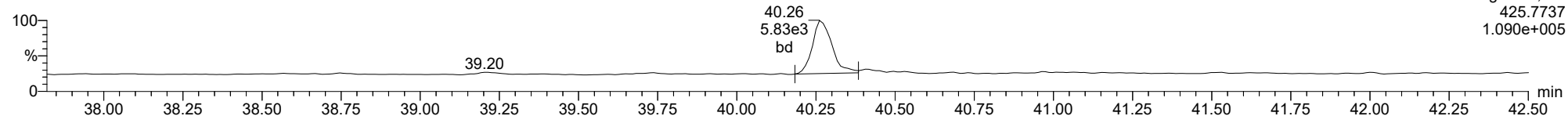
1234678-HpCDD

23030305



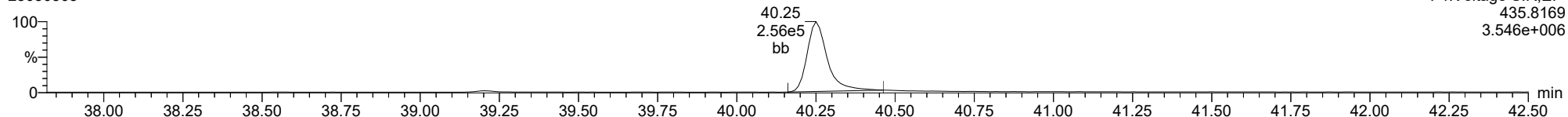
1234678-HpCDD

23030305



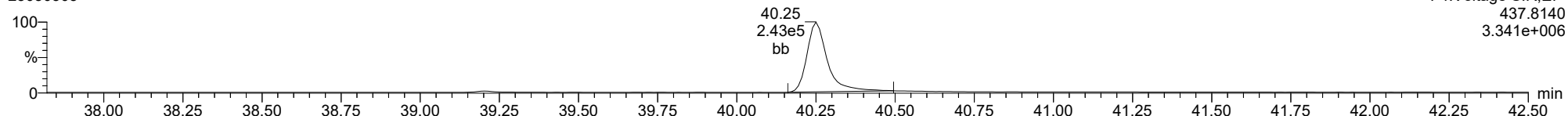
13C-1234678-HpCDD

23030305



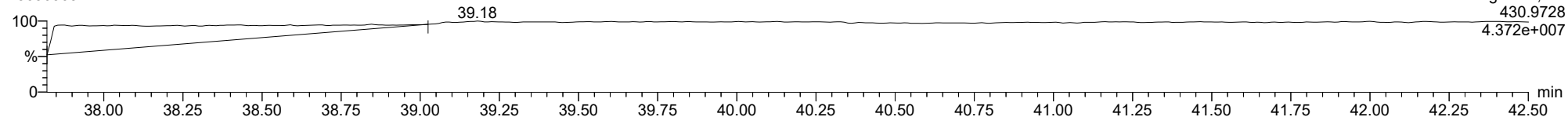
13C-1234678-HpCDD

23030305



FUNCTION4 PFK

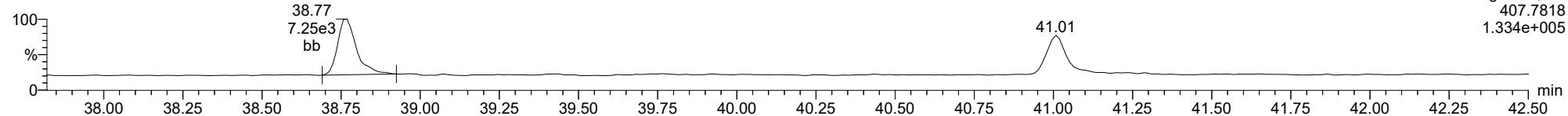
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

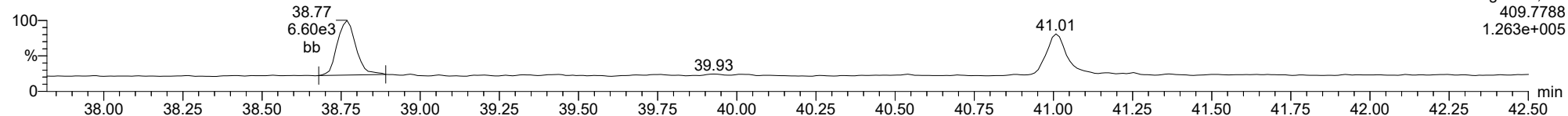
1234678-HpCDF

23030305



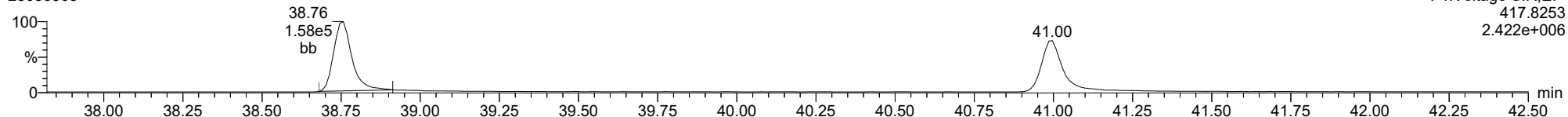
1234678-HpCDF

23030305



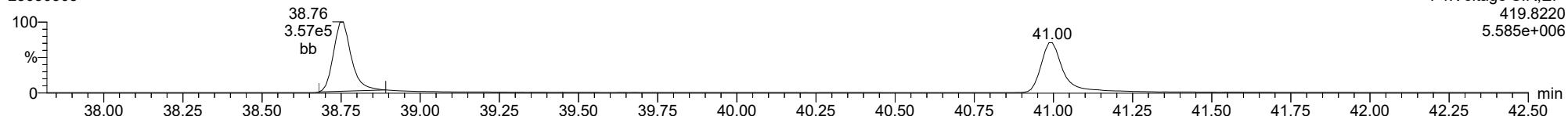
13C-1234678-HpCDF

23030305



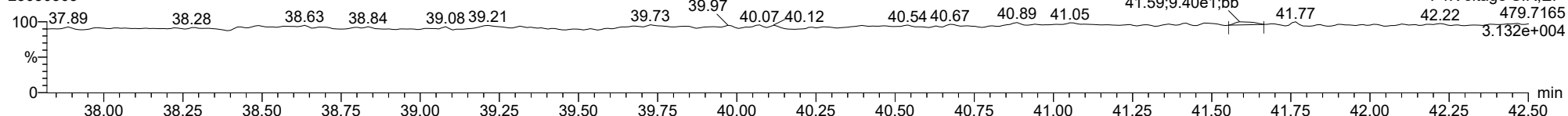
13C-1234678-HpCDF

23030305



FUNCTION4 NCDPE

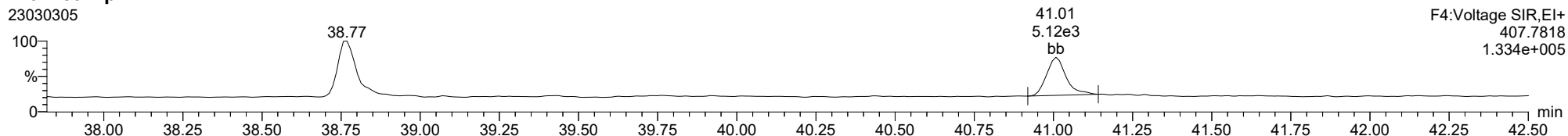
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

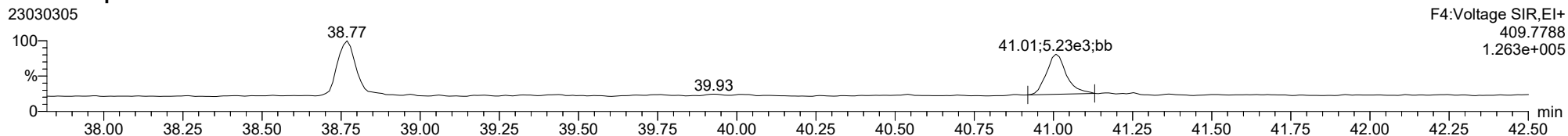
23030305



F4:Voltage SIR,EI+
409.7818
1.334e+005

1234789-HpCDF

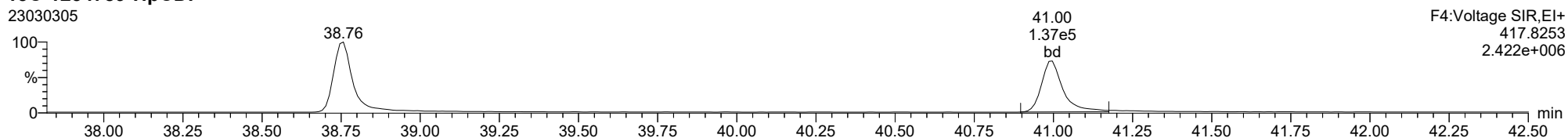
23030305



F4:Voltage SIR,EI+
409.7788
1.263e+005

13C-1234789-HpCDF

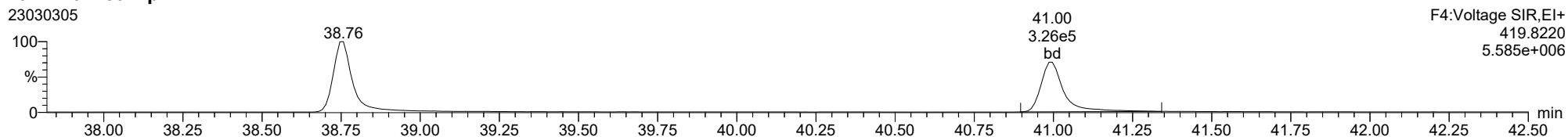
23030305



F4:Voltage SIR,EI+
417.8253
2.422e+006

13C-1234789-HpCDF

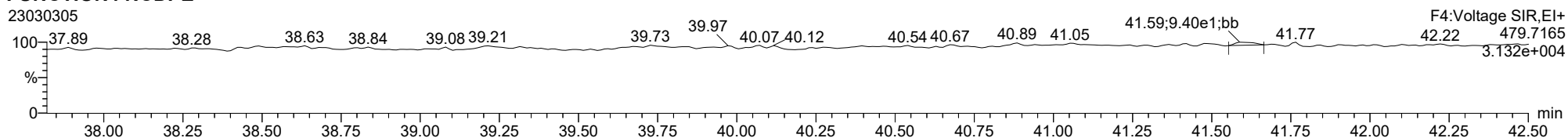
23030305



F4:Voltage SIR,EI+
419.8220
5.585e+006

FUNCTION4 NCDPE

23030305



F4:Voltage SIR,EI+
479.7165
3.132e+004

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

OCDD

23030305

100
%
0

45.00;8.58e3;bd

F5:Voltage SIR,EI+
457.7377
1.243e+005

42.51
42.60 42.80 43.00 43.20 43.40 43.60 43.80 44.00 44.20 44.40 44.60 44.80 45.00 45.20 45.40 45.60 45.80 46.00 min

OCDD

23030305

100
%
0

45.00;9.68e3;bb

F5:Voltage SIR,EI+
459.7348
1.384e+005

42.51
42.60 42.80 43.00 43.20 43.40 43.60 43.80 44.00 44.20 44.40 44.60 44.80 45.00 45.20 45.40 45.60 45.80 46.00 min

13C-OCDD

23030305

100
%
0

44.98;3.39e5;bb

F5:Voltage SIR,EI+
469.7779
3.894e+006

42.60 42.80 43.00 43.20 43.40 43.60 43.80 44.00 44.20 44.40 44.60 44.80 45.00 45.20 45.40 45.60 45.80 46.00 min

13C-OCDD

23030305

100
%
0

44.98;3.82e5;bb

F5:Voltage SIR,EI+
471.7750
4.349e+006

42.60 42.80 43.00 43.20 43.40 43.60 43.80 44.00 44.20 44.40 44.60 44.80 45.00 45.20 45.40 45.60 45.80 46.00 min

FUNCTIONS PFK

23030305

100
%
0

43.52

F5:Voltage SIR,EI+
480.9696
2.456e+007

42.60 42.80 43.00 43.20 43.40 43.60 43.80 44.00 44.20 44.40 44.60 44.80 45.00 45.20 45.40 45.60 45.80 46.00 min

ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

OCDF

23030305

42.51

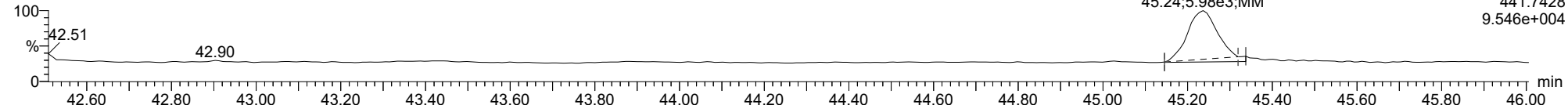
42.90

45.24;5.98e3;MM

F5:Voltage SIR,EI+

441.7428

9.546e+004



OCDF

23030305

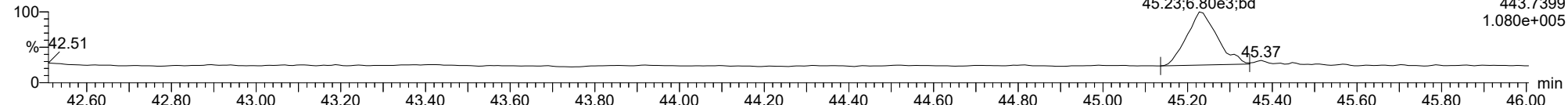
42.51

45.23;6.80e3;bd

F5:Voltage SIR,EI+

443.7399

1.080e+005



FUNCTION5 DCDPE

23030305

42.51

42.84

43.10

43.38

44.11

44.30;9.42e1;bb

44.53

44.72;7.35e1;bb

45.03

45.36

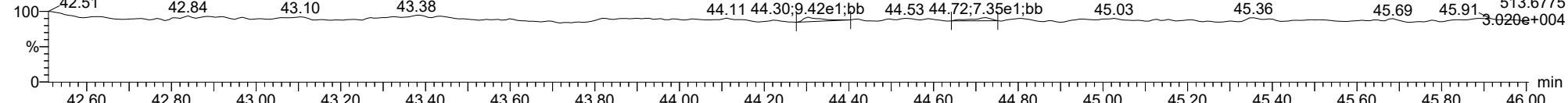
45.69

45.91

F5:Voltage SIR,EI+

513.6775

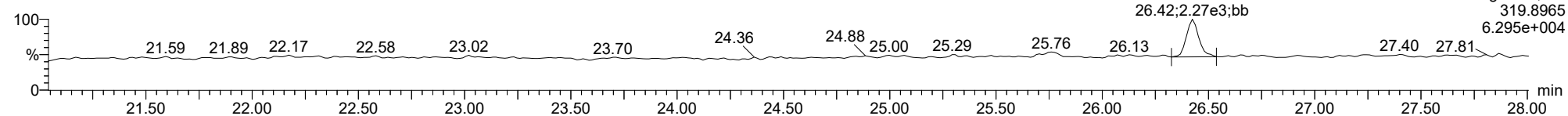
3.020e+004



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

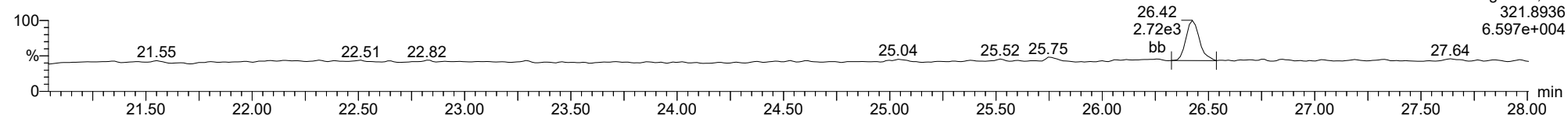
Total-tetradioxins

23030305



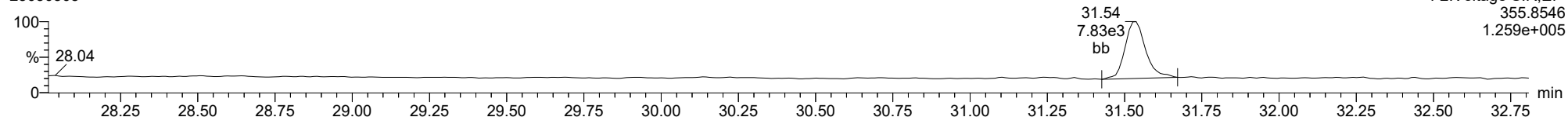
Total-tetradioxins

23030305



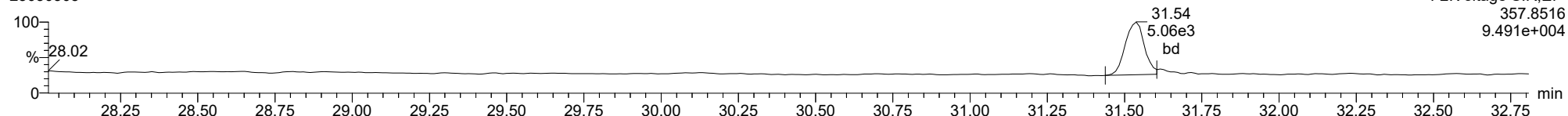
Total-pentadioxins

23030305



Total-pentadioxins

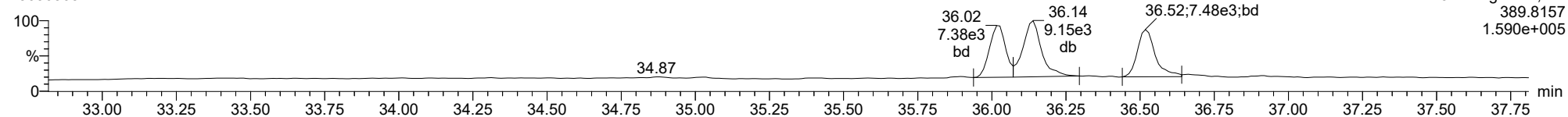
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

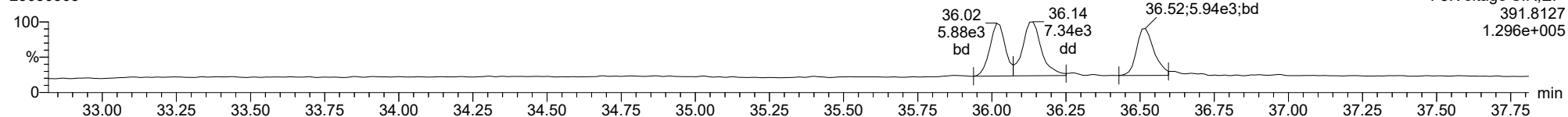
Total-hexadioxins

23030305



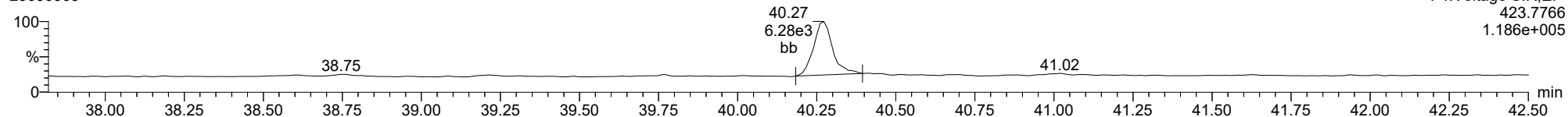
Total-hexadioxins

23030305



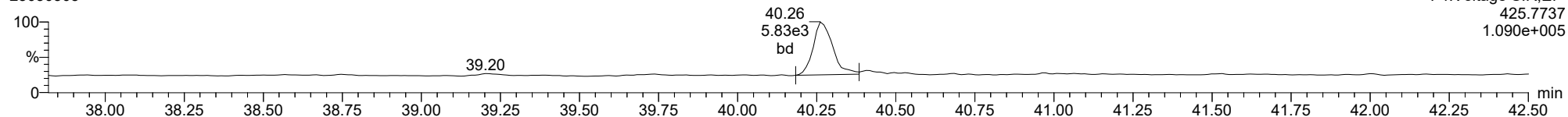
Total-heptadioxins

23030305



Total-heptadioxins

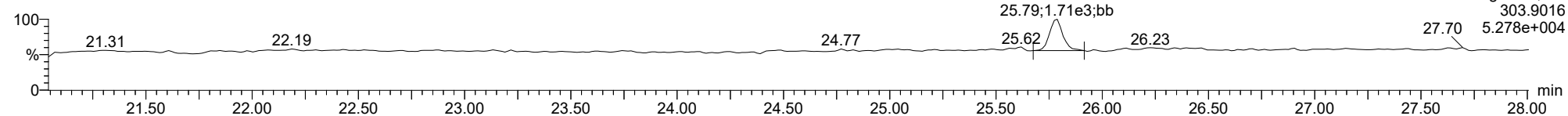
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

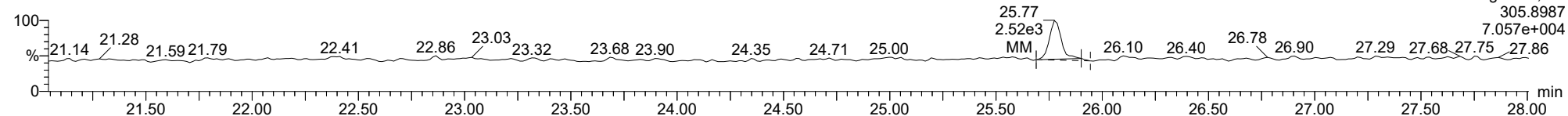
Total-tetrafurans

23030305



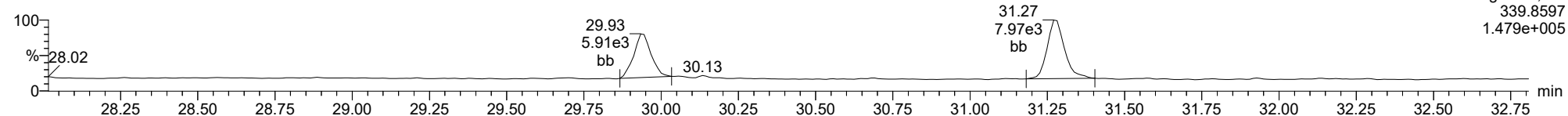
Total-tetrafurans

23030305



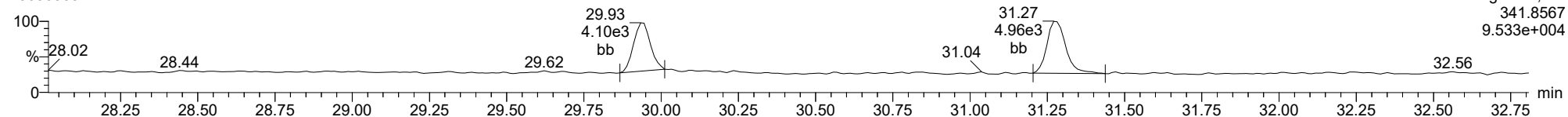
Total-pentafurans

23030305



Total-pentafurans

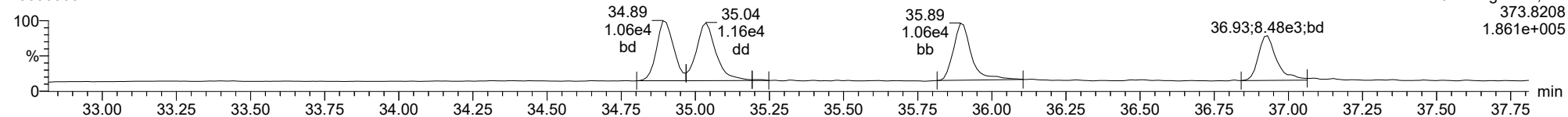
23030305



ID: CS1CW, Name: 23030305, Date: 03-Mar-2023, Time: 12:23:58, Conditions: AUTOSPEC01, User: pk

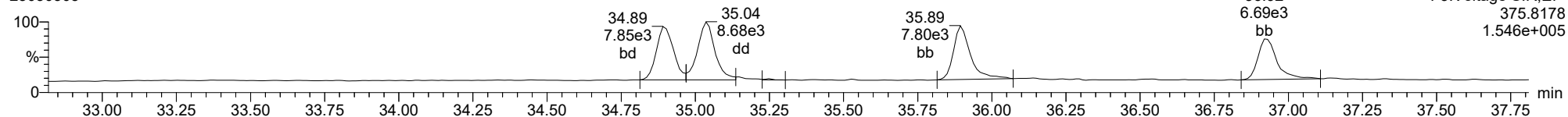
Total-hexafurans

23030305



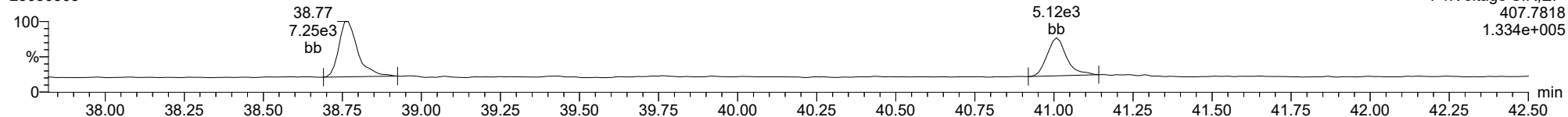
Total-hexafurans

23030305



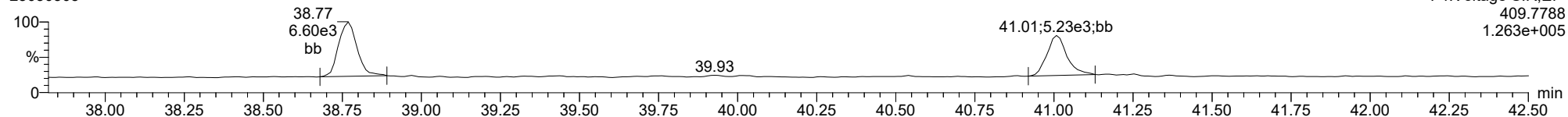
Total-heptafurans

23030305



Total-heptafurans

23030305



Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS2CW, **Name:** 23030306, **Date:** 03-Mar-2023, **Time:** 13:16:24, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.789	1.001	8.311e3	1.080e4	0.702	0.769	0.770	1017	2375	1.17e5	1.59e5	114.9	67.2	NO	bd	bb	1.942
12378-PeCDF	29.945	1.001	4.669e4	2.820e4	0.679	1.656	1.550	1114	1452	6.51e5	4.26e5	583.9	293.2	NO	bd	bb	10.465
23478-PeCDF	31.282	1.000	4.676e4	2.892e4	0.786	1.617	1.550	1114	1452	6.63e5	4.21e5	595.0	289.8	NO	bb	bb	10.293
123478-HxCDF	34.903	1.000	5.097e4	3.855e4	1.166	1.322	1.240	1081	974	7.67e5	5.88e5	709.2	604.2	NO	bd	bd	9.861
234678-HxCDF	35.906	1.000	4.287e4	3.364e4	1.140	1.274	1.240	1081	974	6.16e5	4.95e5	570.0	508.0	NO	bd	bb	10.523
123678-HxCDF	35.048	1.001	5.830e4	4.380e4	1.091	1.331	1.240	1081	974	7.78e5	6.16e5	719.4	632.0	NO	dd	db	10.775
123789-HxCDF	36.942	1.001	3.050e4	2.273e4	1.137	1.342	1.240	1081	974	4.14e5	3.24e5	383.3	332.2	NO	bb	bb	9.945
1234678-HpCDF	38.780	1.001	2.871e4	2.660e4	1.003	1.079	1.050	1234	1299	4.33e5	4.29e5	350.5	330.3	NO	bd	bb	10.087
1234789-HpCDF	41.020	1.000	2.198e4	2.032e4	0.953	1.082	1.050	1234	1299	3.09e5	2.76e5	250.5	212.3	NO	bb	bb	10.556
OCDF	45.247	1.006	3.160e4	3.327e4	0.778	0.950	0.890	832	1108	3.53e5	3.88e5	424.8	350.5	NO	bd	bb	19.690
2378-TCDD	26.438	1.001	9.033e3	1.299e4	1.149	0.696	0.770	1078	937	1.34e5	1.84e5	124.1	196.6	NO	bb	bb	2.068
12378-PeCDD	31.538	1.000	4.287e4	2.877e4	1.022	1.490	1.550	1012	882	6.26e5	3.88e5	618.4	440.6	NO	bb	bb	9.981
123478-HxCDD	36.028	1.001	3.011e4	2.566e4	0.996	1.173	1.240	1087	1355	4.81e5	4.17e5	442.1	307.5	NO	bd	bd	9.781
123678-HxCDD	36.140	1.000	3.660e4	2.810e4	1.001	1.303	1.240	1087	1355	5.13e5	3.98e5	471.9	293.4	NO	dd	db	9.830
123789-HxCDD	36.530	1.011	2.694e4	2.285e4	0.907	1.179	1.240	1087	1355	3.87e5	3.22e5	355.7	237.4	NO	bb	bb	8.921
1234678-HpCDD	40.273	1.000	2.448e4	2.664e4	1.039	0.919	1.050	853	881	3.43e5	3.58e5	402.1	405.9	NO	bb	bd	10.011
OCDD	45.009	1.000	3.531e4	4.015e4	0.920	0.879	0.890	1050	1012	4.08e5	4.99e5	388.3	492.6	NO	bb	bb	19.363
13C-2378-TCDF	25.774	1.007	6.035e5	7.993e5	1.620	0.755	0.770	2457	1835	8.64e6	1.14e7	3516.1	6186.3	NO	bb	bb	103.115
13C-12378-PeCDF	29.923	1.169	6.526e5	4.010e5	1.240	1.628	1.550	3002	2090	8.73e6	5.82e6	2907.1	2783.7	NO	bb	bb	101.148
13C-23478-PeCDF	31.271	1.221	5.554e5	3.799e5	1.118	1.462	1.550	3002	2090	8.01e6	5.41e6	2667.8	2586.4	NO	bb	bb	99.644
13C-123478-HxCDF	34.892	0.956	2.641e5	5.144e5	1.168	0.513	0.510	1857	2488	3.90e6	7.62e6	2100.8	3063.0	NO	bd	bd	129.584
13C-123678-HxCDF	35.026	0.959	2.932e5	5.755e5	1.386	0.510	0.510	1857	2488	4.18e6	8.13e6	2249.4	3269.5	NO	db	db	121.832
13C-234678-HxCDF	35.895	0.983	2.180e5	4.199e5	1.129	0.519	0.510	1857	2488	3.14e6	6.08e6	1689.2	2442.9	NO	bb	bb	109.838
13C-123789-HxCDF	36.920	1.011	1.570e5	3.137e5	0.932	0.501	0.510	1857	2488	2.29e6	4.45e6	1232.1	1790.1	NO	bb	bb	98.225
13C-1234678-HpCDF	38.758	1.062	1.644e5	3.823e5	0.895	0.430	0.440	2012	3375	2.57e6	5.95e6	1277.0	1763.6	NO	bb	bb	118.766
13C-1234789-HpCDF	40.998	1.123	1.271e5	2.934e5	0.770	0.433	0.440	2012	3375	1.71e6	4.02e6	850.7	1191.4	NO	bb	bb	106.228
13C-1234-TCDD	25.605	0.000	3.763e5	4.634e5	1.000	0.812	0.770	2552	2183	5.75e6	7.05e6	2254.8	3231.1	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	4.085e5	5.183e5	1.152	0.788	0.770	2552	2183	5.98e6	7.56e6	2342.4	3461.2	NO	bb	bb	95.779
13C-12378-PeCDD	31.527	1.231	4.337e5	2.688e5	0.829	1.614	1.550	1077	1542	6.15e6	3.74e6	5715.6	2425.2	NO	bb	bb	100.933
13C-123478-HxCDD	36.006	0.986	3.223e5	2.505e5	0.995	1.287	1.240	2237	1883	4.87e6	3.76e6	2175.2	1999.6	NO	bd	bd	111.924
13C-123678-HxCDD	36.129	0.990	3.608e5	2.967e5	1.157	1.216	1.240	2237	1883	5.10e6	4.02e6	2277.5	2137.4	NO	db	db	110.547
13C-1234678-HpCDD	40.262	1.103	2.573e5	2.341e5	0.840	1.099	1.050	2349	1481	3.41e6	3.22e6	1450.8	2172.3	NO	bd	bb	113.737
13C-OCDD	44.991	1.232	4.017e5	4.455e5	0.767	0.902	0.890	2278	1800	4.53e6	5.05e6	1990.6	2807.7	NO	bb	bb	214.651
13C-123789-HxCDD	36.507	0.000	2.902e5	2.240e5	1.000	1.296	1.240	2237	1883	4.20e6	3.27e6	1878.6	1737.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	1.977e4		1.288			2484		2.93e5		117.9			bb		1.828

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1017	2375								
1289-TCDF					0.678		0.770	1017	2375								
13468-PECDF					1.246		1.550	633	1159								
12389-PECDF					0.496		1.550	1114	1452								
123468-HXCDF					1.169		1.240	1081	974								
1368-TCDD					1.015		0.770	1078	937								
1289-TCDD					0.909		0.770	1078	937								
12479-PECDD					2.301		1.550	1012	882								
12389-PECDD					1.184		1.550	1012	882								
124679-HXCDD					1.115		1.240	1087	1355								
1234679-HPCDD					1.137		1.050	853	881								
Total-tetrafurans			8.311e3		0.727			1017		1.17e5							1.942
Total-penta1			0.000e0					633		0.00e0							
Total-pentafurans			9.345e4		0.654			1114		1.31e6							20.758
Total-hexafurans			1.826e5		1.141			1081		2.58e6							41.105
Total-heptafurans			5.070e4		0.978			1234		7.42e5							20.643
Total-Furans			3.667e5		0.922			1017		5.10e6							104.140
Total-tetradoxins			9.033e3		1.024			1078		1.34e5							2.068
Total-pentadoxins			4.287e4		1.502			1012		6.26e5							9.981
Total-hexadoxins			9.364e4		1.005			1087		1.38e6							28.532
Total-heptadoxins			2.448e4		1.088			853		3.43e5							10.011
Total-Dioxins			2.053e5		1.130			1078		2.89e6							69.955
Total-TEQ			5.720e5					1078		7.99e6							174.095
FUNCTION1 PFK			1.995e6					567717		7.69e6							
FUNCTION2 PFK			1.258e5					282093		4.74e6							0.000
FUNCTION3 PFK			4.711e7					382868		3.34e7							0.000
FUNCTION4 PFK			2.092e7					278389		1.32e7							
FUNCTION5 PFK			6.777e4					239180		2.68e6							
FUNCTION1 HXCD...			0.000e0					613		0.00e0							
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.408e2					965		2.85e3							0.000
FUNCTION3 OCDPE			0.000e0					571		0.00e0							
FUNCTION4 NCDPE			3.810e2					638		4.39e3							0.000
FUNCTION5 DCDPE			0.000e0					603		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303\CIH.cdb 06 Mar 2023 10:57:27

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
2	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
3	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
4	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
2	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465
3	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942
4	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
5	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
6	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
7	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861
8	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
9	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087
10	OCDF	45.25	3.160e4	3.327e4	0.778	0.95	0.89	424.8	YES	NO	bd	bb	19.690

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
2	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
3	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981
2	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068
3	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
4	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
5	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781
6	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011
7	OCDD	45.01	3.531e4	4.015e4	0.920	0.88	0.89	388.3	YES	NO	bb	bb	19.363

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.28	4.676e4	2.892e4	0.786	1.62	1.55	595.0	YES	NO	bb	bb	10.293
2	12378-PeCDF	29.94	4.669e4	2.820e4	0.679	1.66	1.55	583.9	YES	NO	bd	bb	10.465
3	2378-TCDF	25.79	8.311e3	1.080e4	0.702	0.77	0.77	114.9	YES	NO	bd	bb	1.942
4	123789-HxCDF	36.94	3.050e4	2.273e4	1.137	1.34	1.24	383.3	YES	NO	bb	bb	9.945
5	234678-HxCDF	35.91	4.287e4	3.364e4	1.140	1.27	1.24	570.0	YES	NO	bd	bb	10.523
6	123678-HxCDF	35.05	5.830e4	4.380e4	1.091	1.33	1.24	719.4	YES	NO	dd	db	10.775
7	123478-HxCDF	34.90	5.097e4	3.855e4	1.166	1.32	1.24	709.2	YES	NO	bd	bd	9.861
8	1234789-HpCDF	41.02	2.198e4	2.032e4	0.953	1.08	1.05	250.5	YES	NO	bb	bb	10.556
9	1234678-HpCDF	38.78	2.871e4	2.660e4	1.003	1.08	1.05	350.5	YES	NO	bd	bb	10.087
10	OCDF	45.25	3.160e4	3.327e4	0.778	0.95	0.89	424.8	YES	NO	bd	bb	19.690
11	12378-PeCDD	31.54	4.287e4	2.877e4	1.022	1.49	1.55	618.4	YES	NO	bb	bb	9.981
12	2378-TCDD	26.44	9.033e3	1.299e4	1.149	0.70	0.77	124.1	YES	NO	bb	bb	2.068
13	123789-HxCDD	36.53	2.694e4	2.285e4	0.907	1.18	1.24	355.7	YES	NO	bb	bb	8.921
14	123678-HxCDD	36.14	3.660e4	2.810e4	1.001	1.30	1.24	471.9	YES	NO	dd	db	9.830
15	123478-HxCDD	36.03	3.011e4	2.566e4	0.996	1.17	1.24	442.1	YES	NO	bd	bd	9.781
16	1234678-HpCDD	40.27	2.448e4	2.664e4	1.039	0.92	1.05	402.1	YES	NO	bb	bd	10.011
17	OCDD	45.01	3.531e4	4.015e4	0.920	0.88	0.89	388.3	YES	NO	bb	bb	19.363

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	25.73	8.333e5					6.7	YES		bb		
2	FUNCTION1 PFK	21.10	1.162e6					6.9	YES		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:24 Pacific Standard Time

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.61	1.110e4					1.3	NO		bb		0.000
2	FUNCTION2 PFK	28.31	1.183e4					1.5	NO		bb		0.000
3	FUNCTION2 PFK	31.85	7.066e3					1.3	NO		bb		0.000
4	FUNCTION2 PFK	31.75	1.168e4					1.4	NO		bb		0.000
5	FUNCTION2 PFK	30.95	1.613e4					2.1	NO		bb		0.000
6	FUNCTION2 PFK	30.06	7.806e3					1.3	NO		bb		0.000
7	FUNCTION2 PFK	29.77	1.198e4					1.4	NO		bb		0.000
8	FUNCTION2 PFK	29.47	1.476e4					2.1	NO		bb		0.000
9	FUNCTION2 PFK	29.28	1.360e4					2.0	NO		db		0.000
10	FUNCTION2 PFK	29.22	1.980e4					2.4	NO		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.30	3.856e7					44.6	YES		db		0.000
2	FUNCTION3 PFK	33.18	8.558e6					42.7	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.24	1.285e7					8.2	YES		db		
2	FUNCTION4 PFK	38.41	8.070e6					39.3	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.68	1.647e4					1.8	NO		bb		
2	FUNCTION5 PFK	45.75	3.282e3					1.0	NO		bb		
3	FUNCTION5 PFK	45.28	6.957e3					1.1	NO		bb		
4	FUNCTION5 PFK	44.90	6.364e3					1.0	NO		bb		
5	FUNCTION5 PFK	44.84	1.531e3					0.5	NO		bb		
6	FUNCTION5 PFK	44.40	6.282e3					1.0	NO		bb		
7	FUNCTION5 PFK	44.21	4.626e3					1.1	NO		bb		
8	FUNCTION5 PFK	44.03	7.842e3					1.2	NO		bb		
9	FUNCTION5 PFK	43.96	6.415e3					1.4	NO		bb		
10	FUNCTION5 PFK	43.84	7.992e3					1.2	NO		bb		

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.54	1.408e2					3.0	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.65	1.069e2					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	40.25	1.358e2					2.2	NO		bb		0.000
3	FUNCTION4 NCDPE	41.02	1.383e2					2.8	NO		bb		0.000

ETHERS6

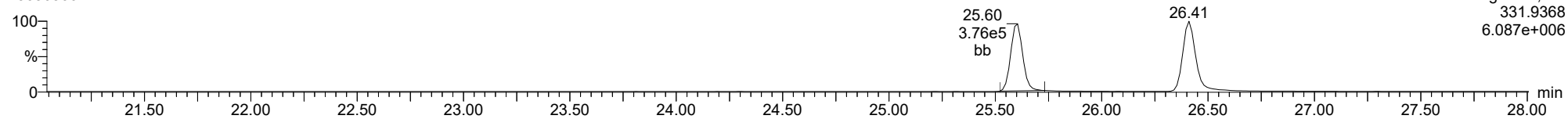
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

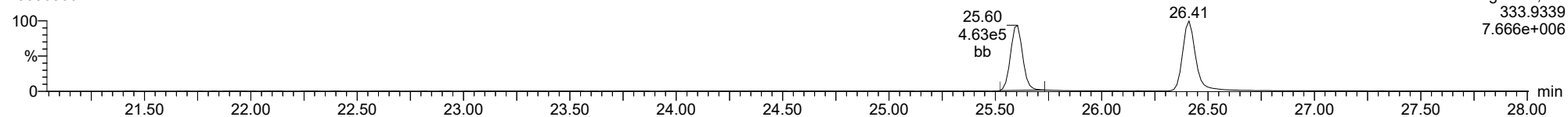
13C-1234-TCDD

23030306



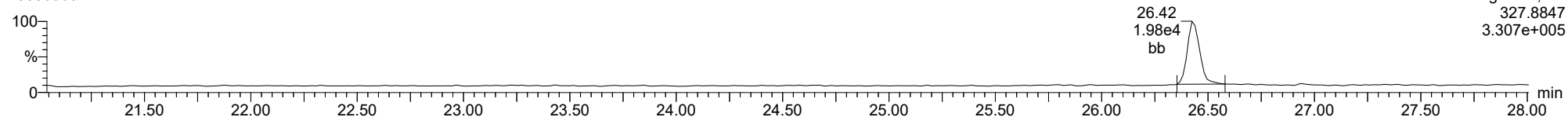
13C-1234-TCDD

23030306



37CL-2378-TCDD

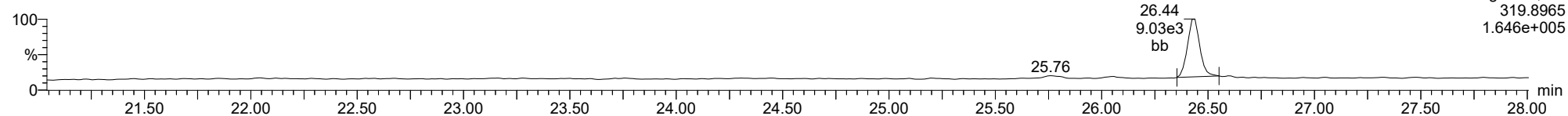
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

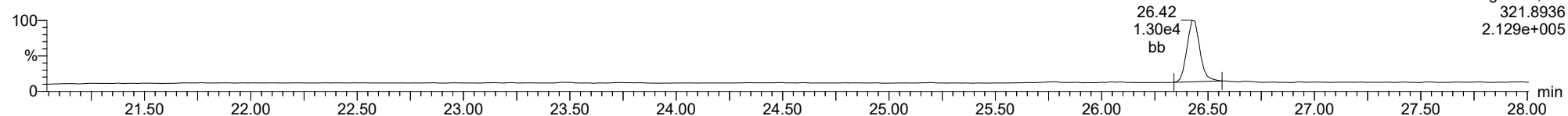
2378-TCDD

23030306



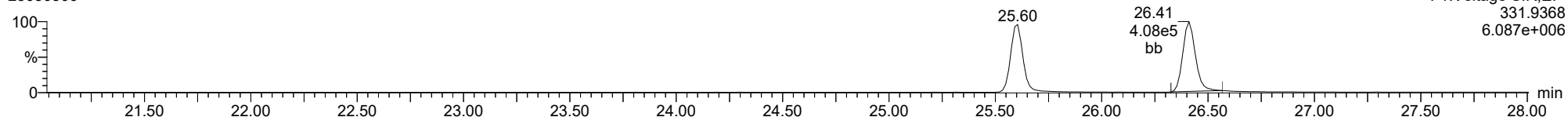
2378-TCDD

23030306



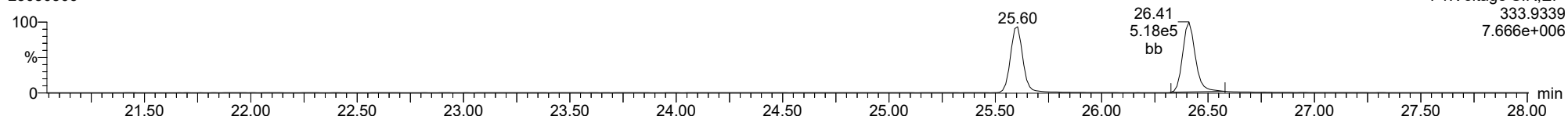
13C-2378-TCDD

23030306



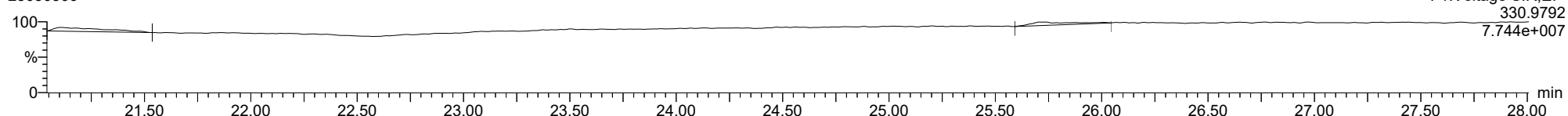
13C-2378-TCDD

23030306



FUNCTION1 PFK

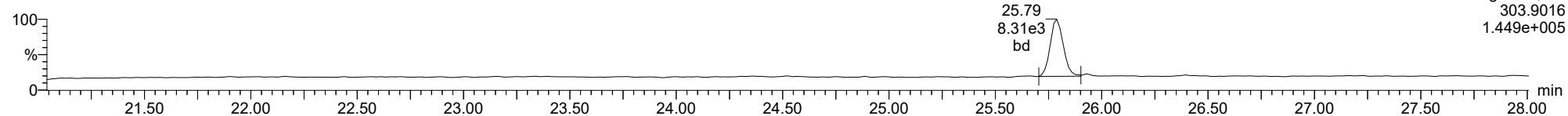
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

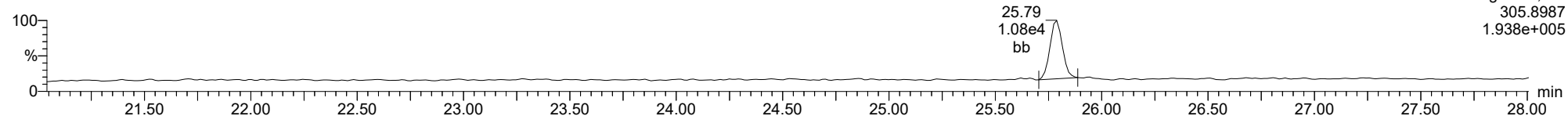
2378-TCDF

23030306



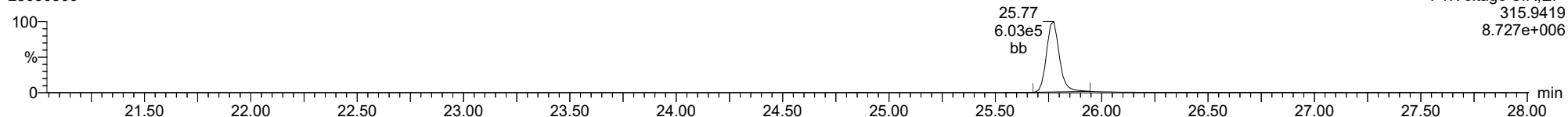
2378-TCDF

23030306



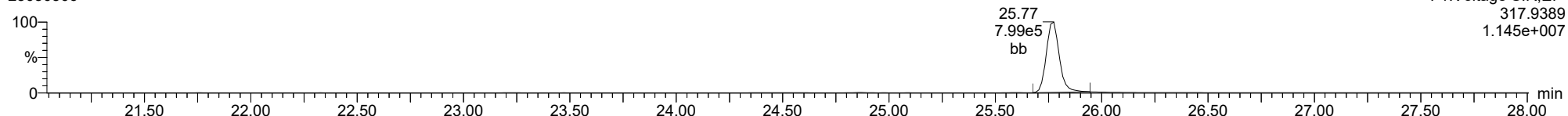
13C-2378-TCDF

23030306



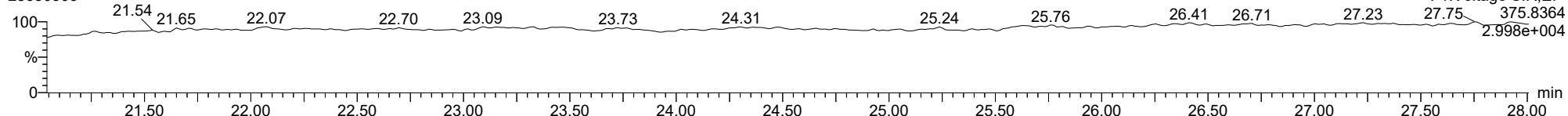
13C-2378-TCDF

23030306



FUNCTION1 HXCDFE

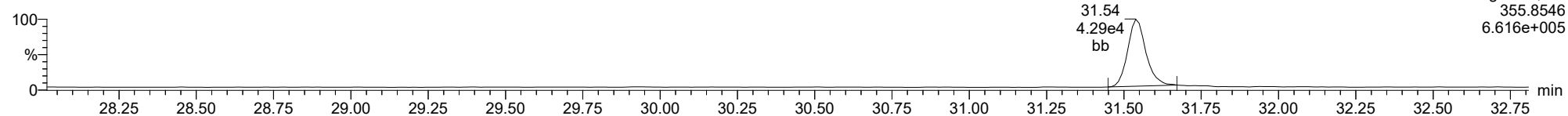
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

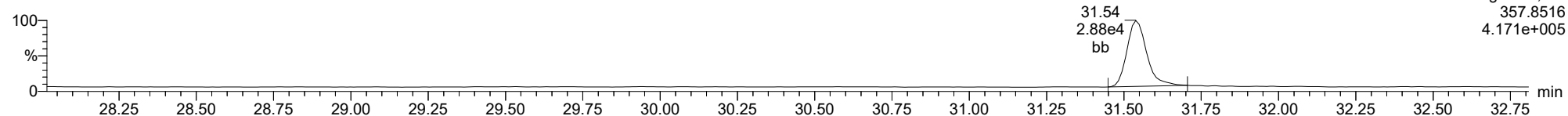
23030306



F2:Voltage SIR,EI+
355.8546
6.616e+005

12378-PeCDD

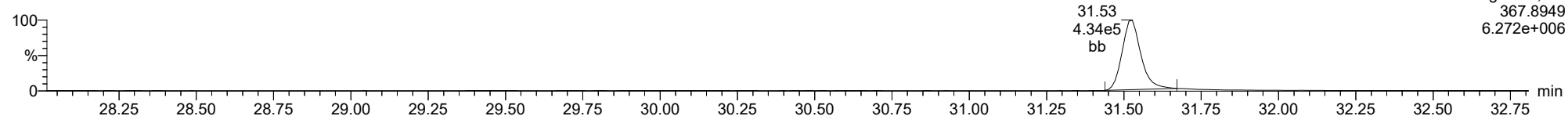
23030306



F2:Voltage SIR,EI+
357.8516
4.171e+005

13C-12378-PeCDD

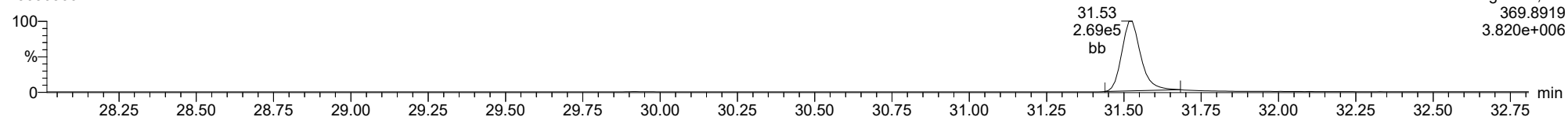
23030306



F2:Voltage SIR,EI+
367.8949
6.272e+006

13C-12378-PeCDD

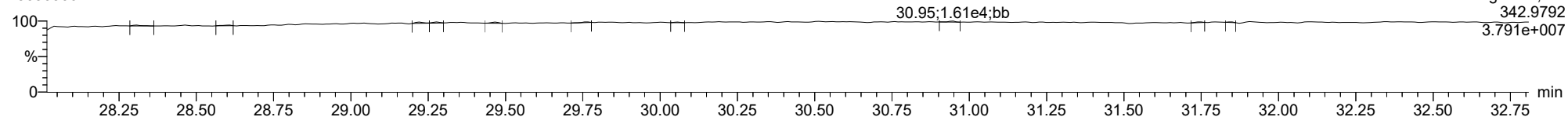
23030306



F2:Voltage SIR,EI+
369.8919
3.820e+006

FUNCTION2 PFK

23030306

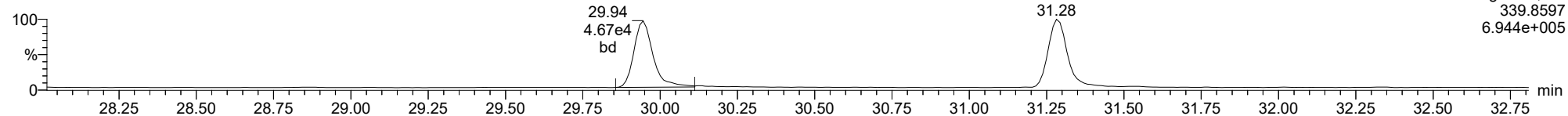


F2:Voltage SIR,EI+
342.9792
3.791e+007

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

12378-PeCDF

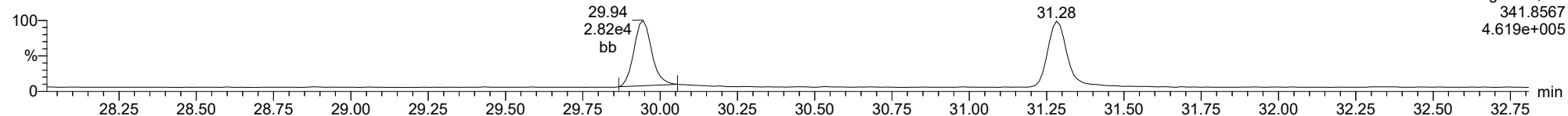
23030306



F2:Voltage SIR,EI+
339.8597
6.944e+005

12378-PeCDF

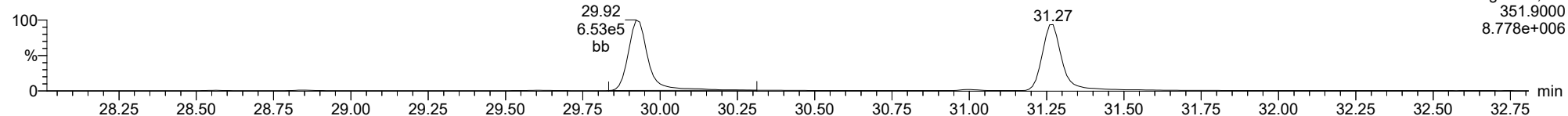
23030306



F2:Voltage SIR,EI+
341.8567
4.619e+005

13C-12378-PeCDF

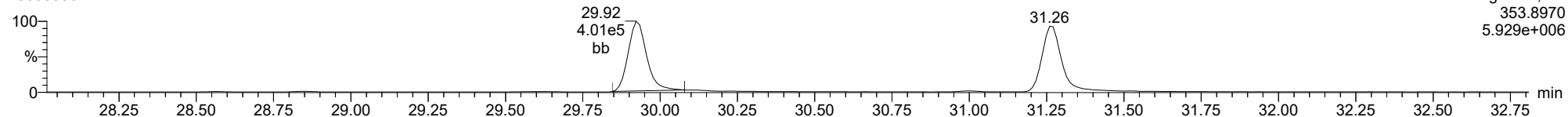
23030306



F2:Voltage SIR,EI+
351.9000
8.778e+006

13C-12378-PeCDF

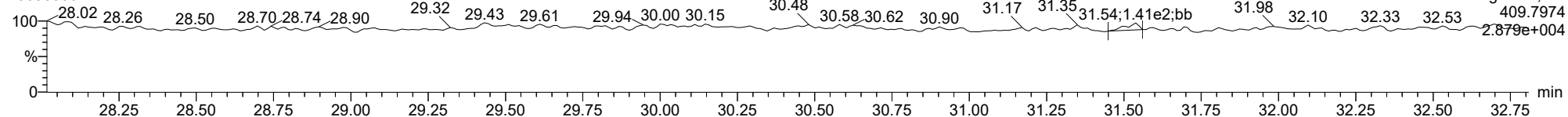
23030306



F2:Voltage SIR,EI+
353.8970
5.929e+006

FUNCTION2 HPCDPE

23030306

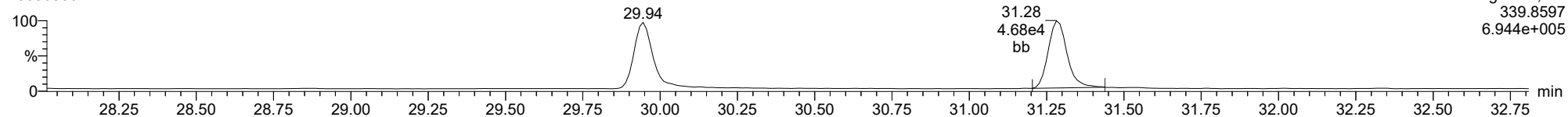


F2:Voltage SIR,EI+
409.7974
2.879e+004

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

23478-PeCDF

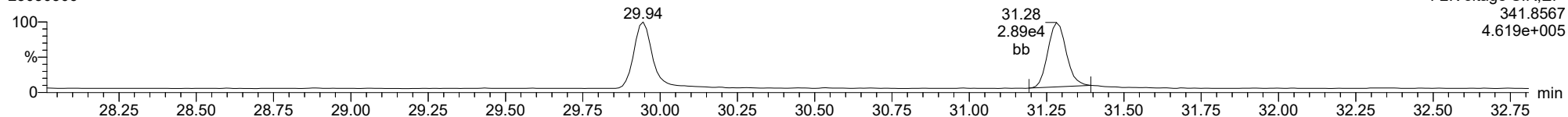
23030306



F2:Voltage SIR,EI+
339.8597
6.944e+005

23478-PeCDF

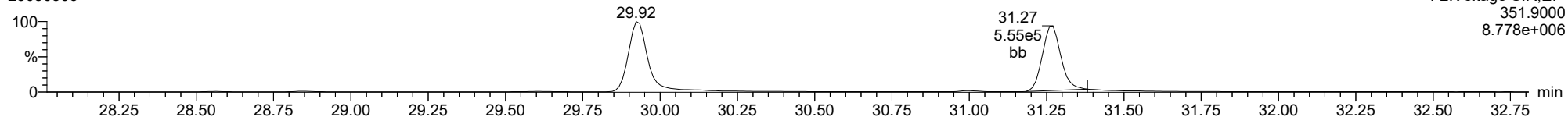
23030306



F2:Voltage SIR,EI+
341.8567
4.619e+005

13C-23478-PeCDF

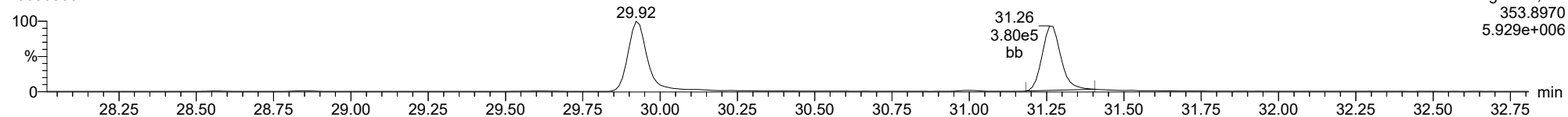
23030306



F2:Voltage SIR,EI+
351.9000
8.778e+006

13C-23478-PeCDF

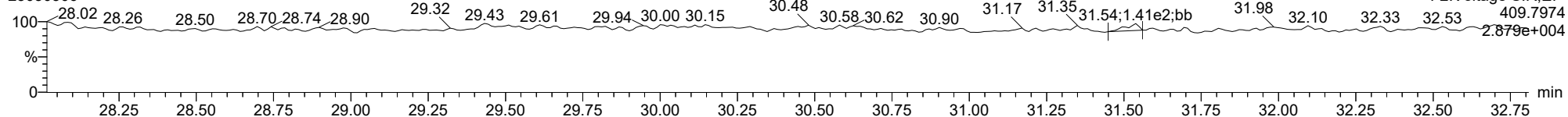
23030306



F2:Voltage SIR,EI+
353.8970
5.929e+006

FUNCTION2 HPCDPE

23030306

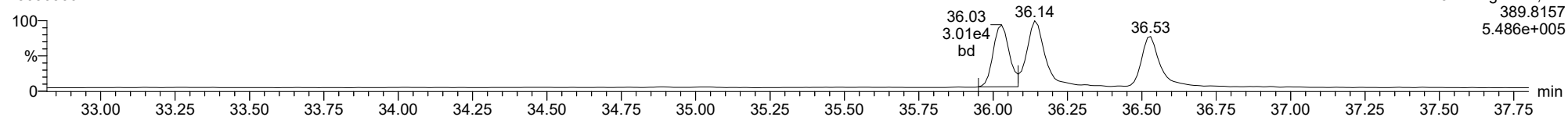


F2:Voltage SIR,EI+
409.7974
2.879e+004

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

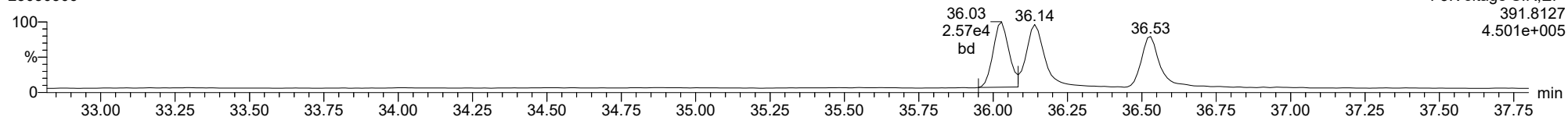
123478-HxCDD

23030306



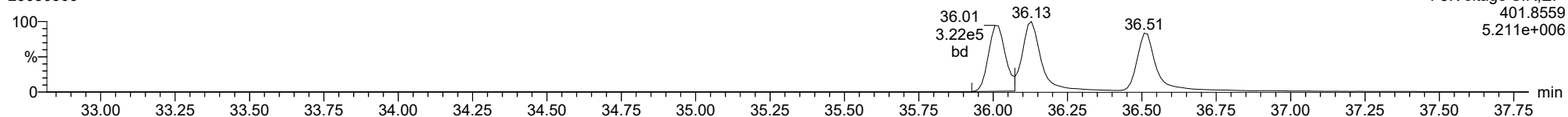
123478-HxCDD

23030306



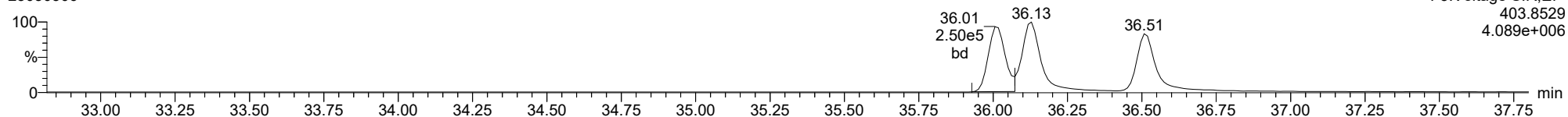
13C-123478-HxCDD

23030306



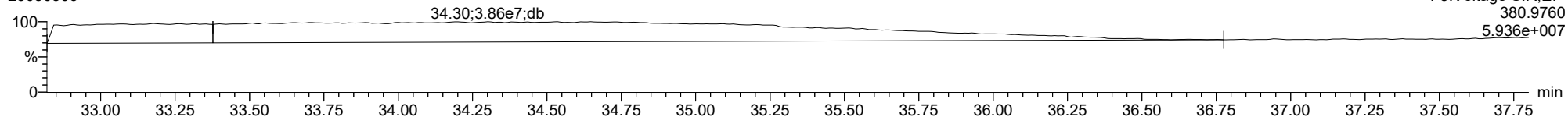
13C-123478-HxCDD

23030306



FUNCTION3 PFK

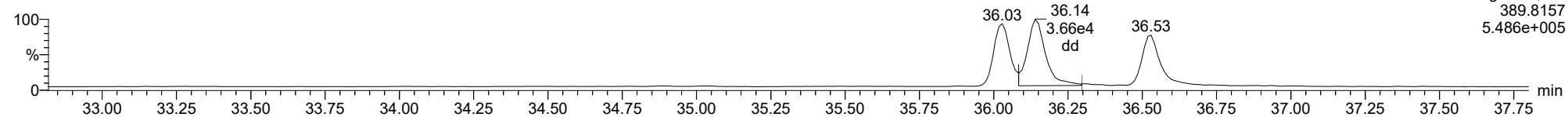
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

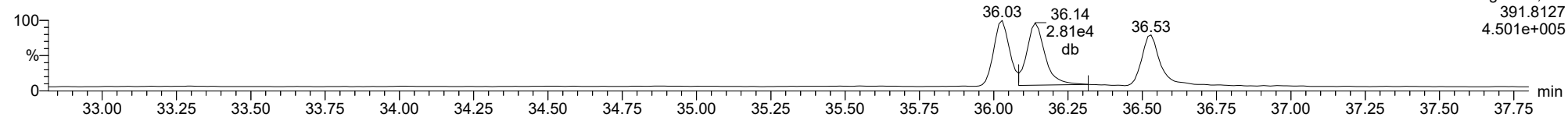
123678-HxCDD

23030306



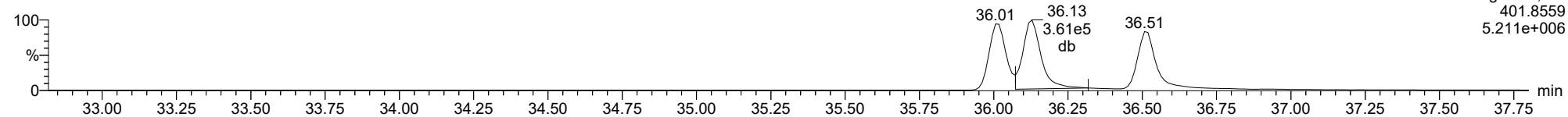
123678-HxCDD

23030306



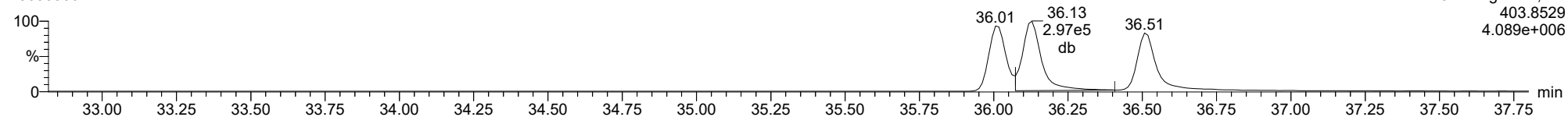
13C-123678-HxCDD

23030306



13C-123678-HxCDD

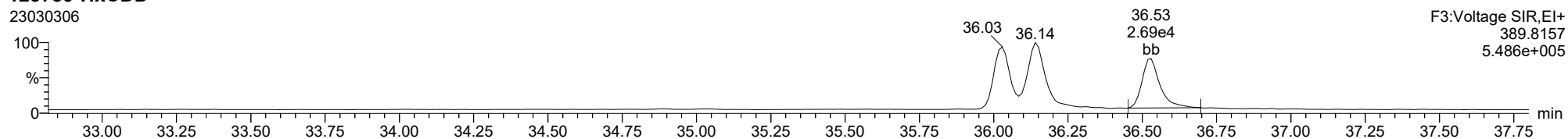
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

123789-HxCDD

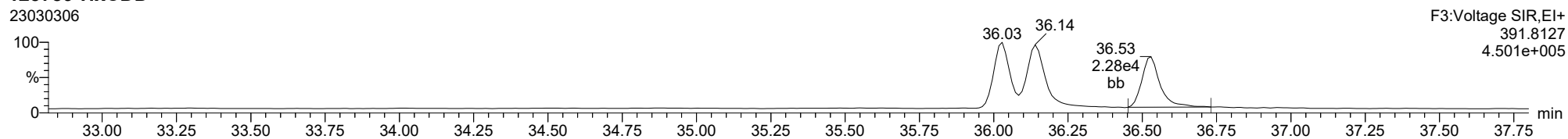
23030306



F3:Voltage SIR,EI+
389.8157
5.486e+005

123789-HxCDD

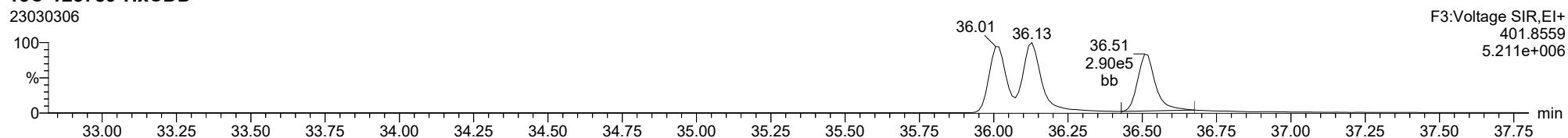
23030306



F3:Voltage SIR,EI+
391.8127
4.501e+005

13C-123789-HxCDD

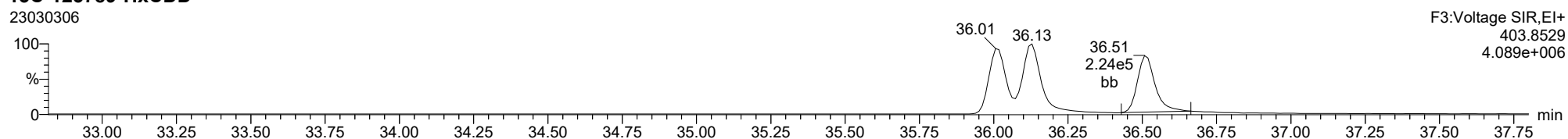
23030306



F3:Voltage SIR,EI+
401.8559
5.211e+006

13C-123789-HxCDD

23030306

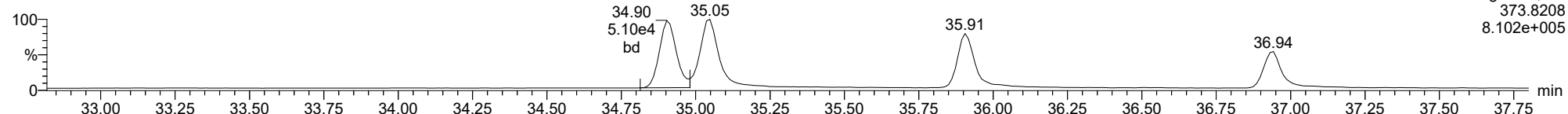


F3:Voltage SIR,EI+
403.8529
4.089e+006

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

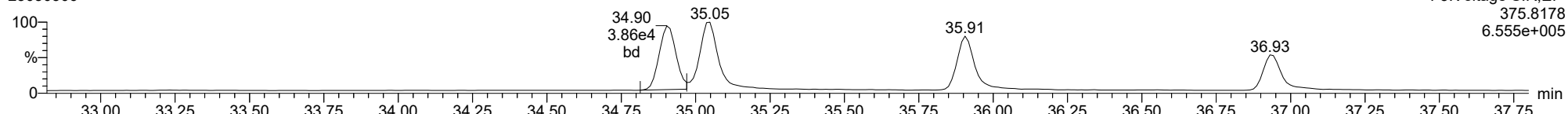
123478-HxCDF

23030306



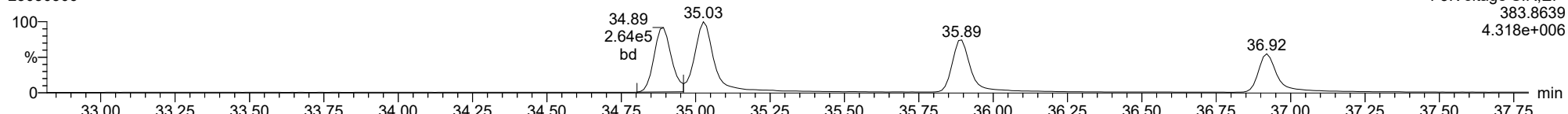
123478-HxCDF

23030306



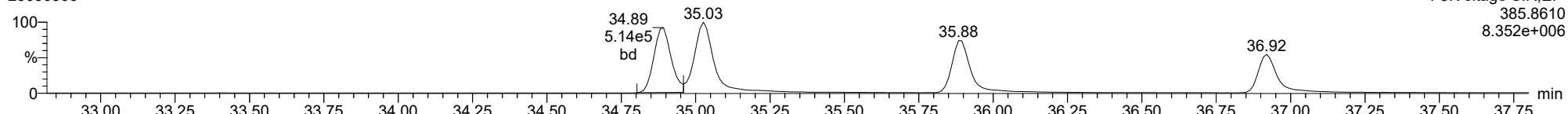
13C-123478-HxCDF

23030306



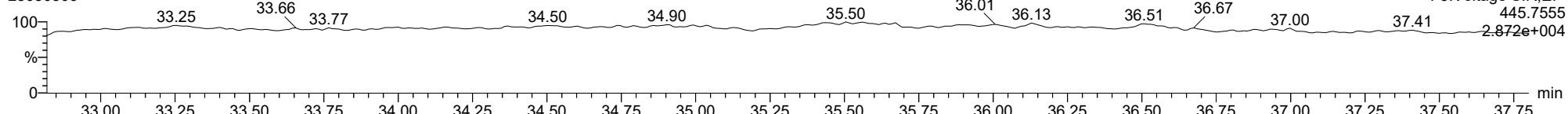
13C-123478-HxCDF

23030306



FUNCTION3 OCDPE

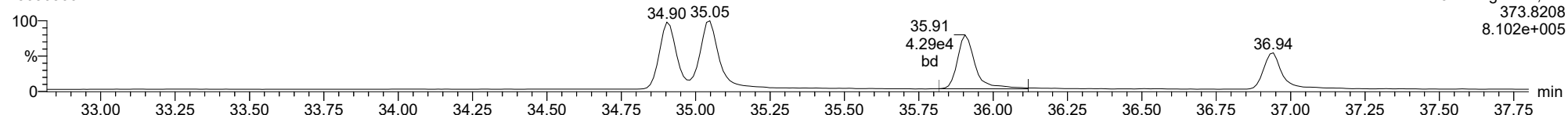
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

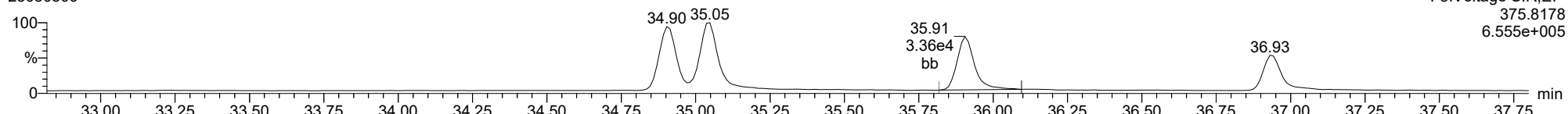
234678-HxCDF

23030306



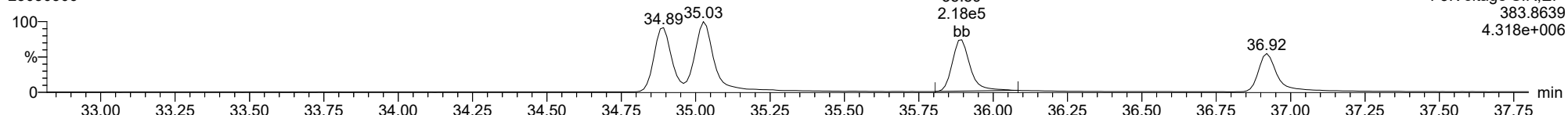
234678-HxCDF

23030306



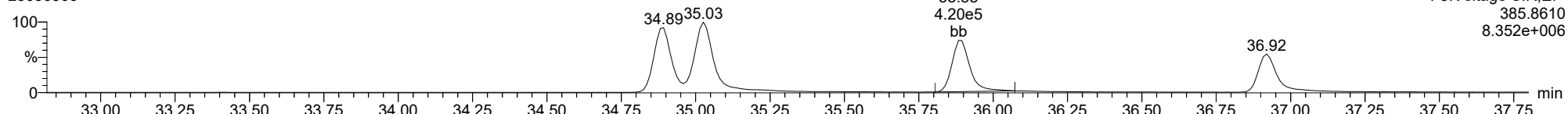
13C-234678-HxCDF

23030306



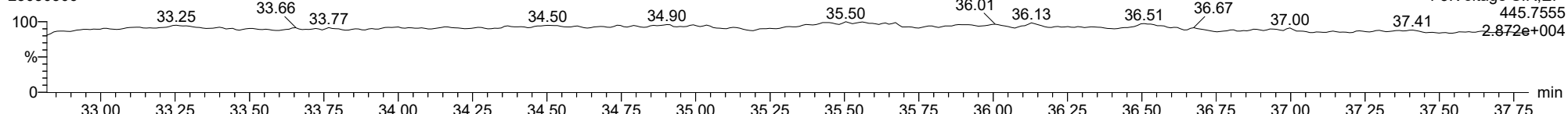
13C-234678-HxCDF

23030306



FUNCTION3 OCDPE

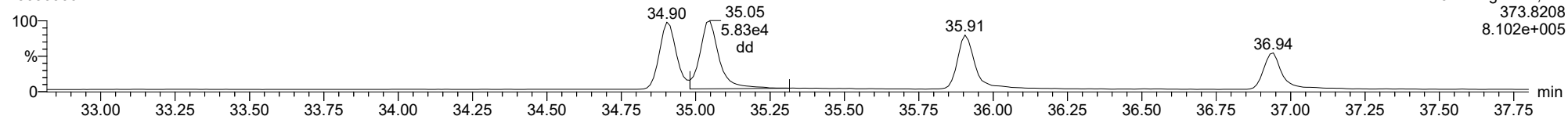
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

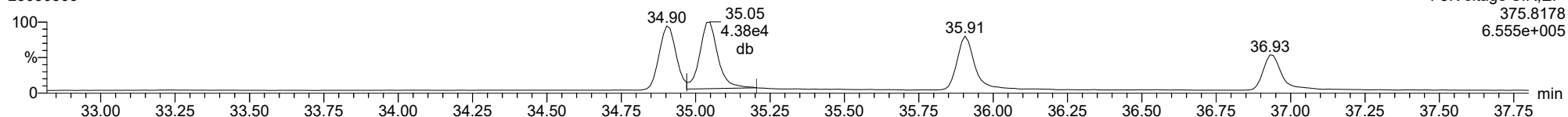
123678-HxCDF

23030306



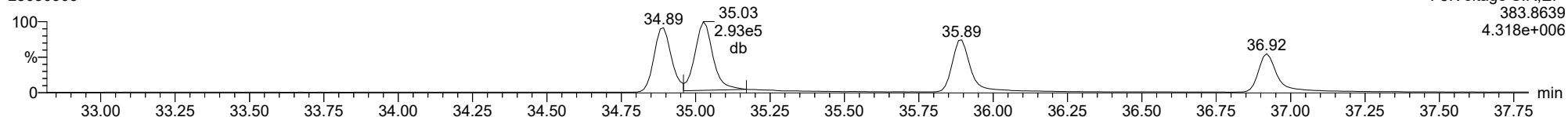
123678-HxCDF

23030306



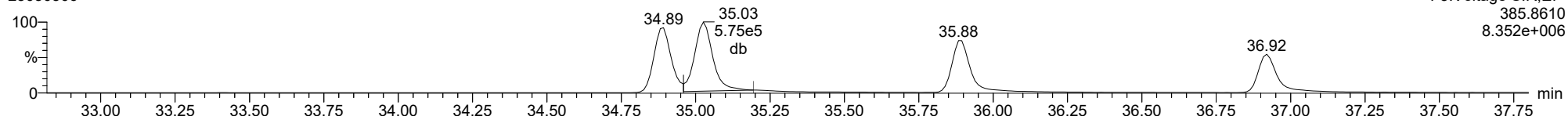
13C-123678-HxCDF

23030306



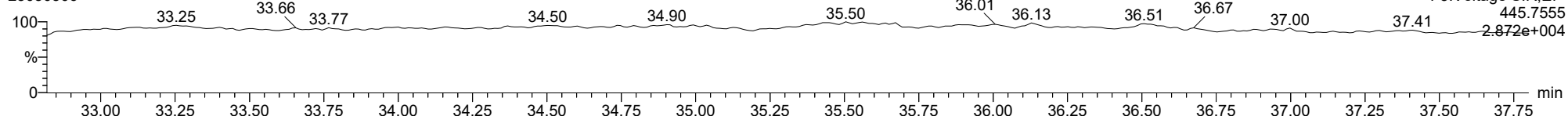
13C-123678-HxCDF

23030306



FUNCTION3 OCDPE

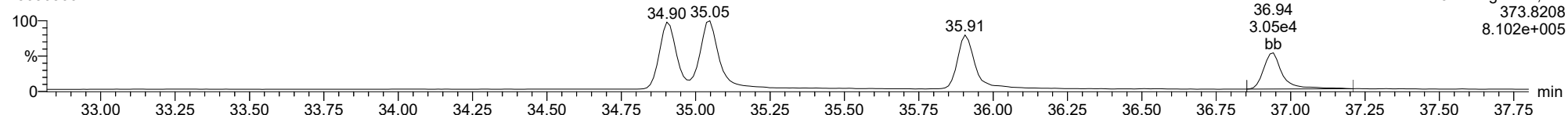
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

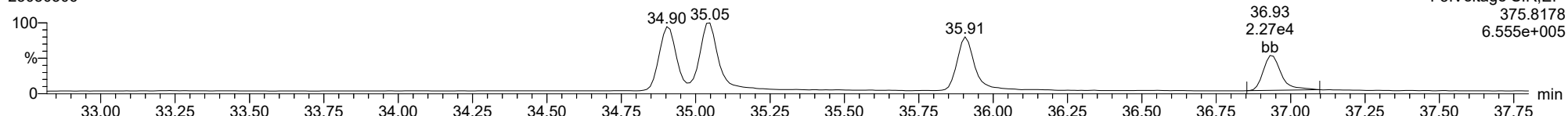
123789-HxCDF

23030306



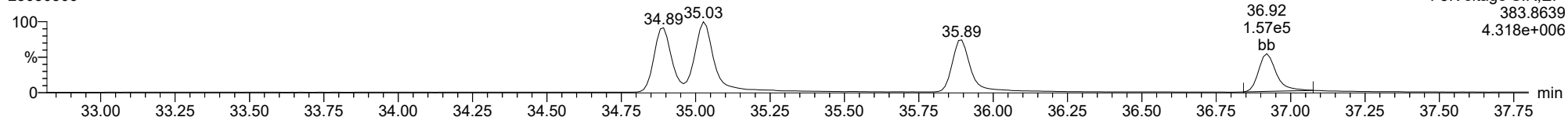
123789-HxCDF

23030306



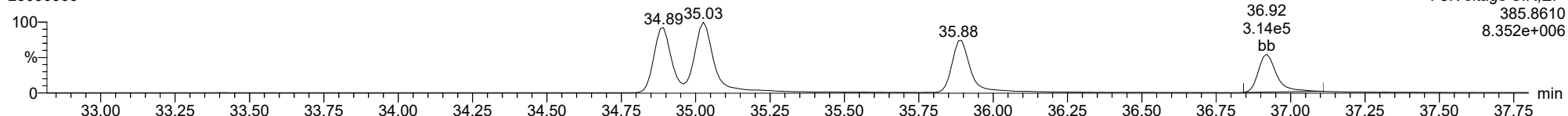
13C-123789-HxCDF

23030306



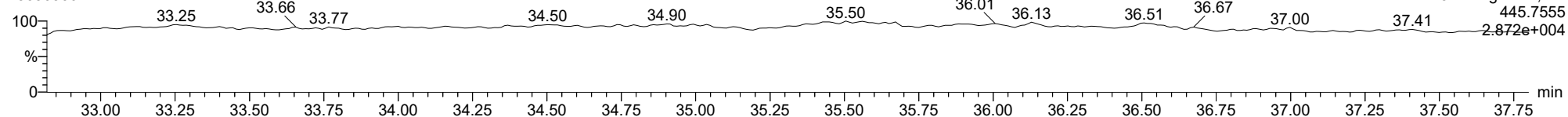
13C-123789-HxCDF

23030306



FUNCTION3 OCDPE

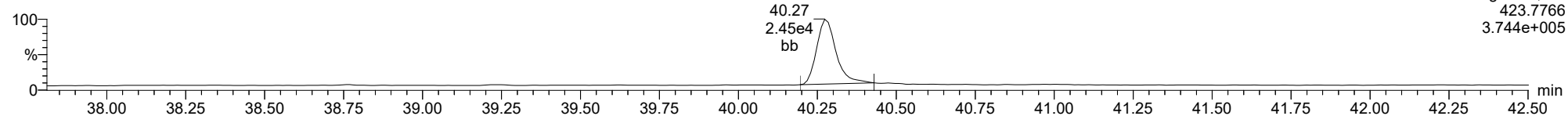
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

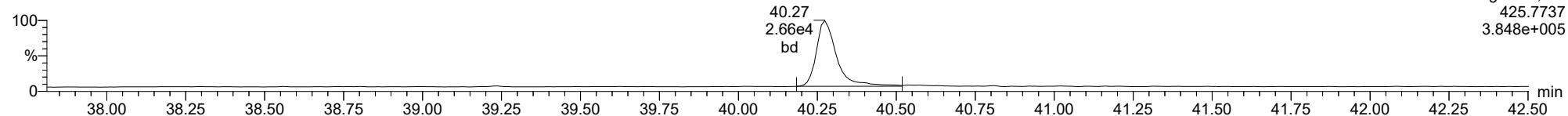
23030306



F4:Voltage SIR,El+
423.7766
3.744e+005

1234678-HpCDD

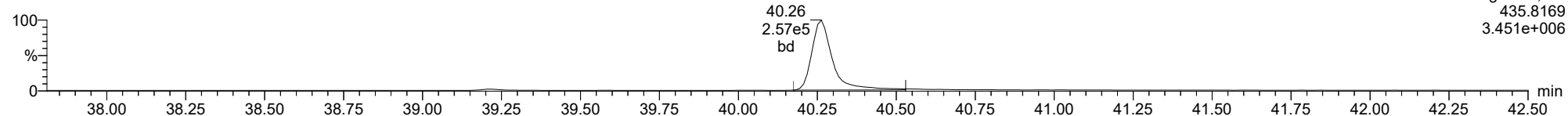
23030306



F4:Voltage SIR,El+
425.7737
3.848e+005

13C-1234678-HpCDD

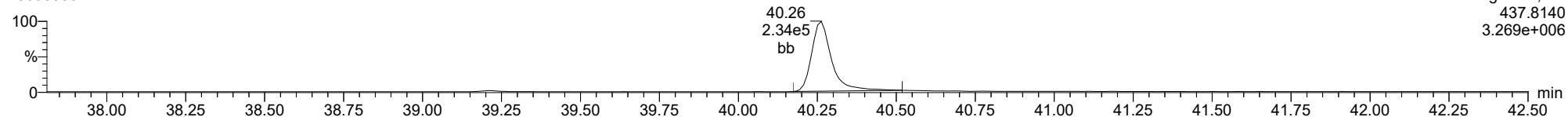
23030306



F4:Voltage SIR,El+
435.8169
3.451e+006

13C-1234678-HpCDD

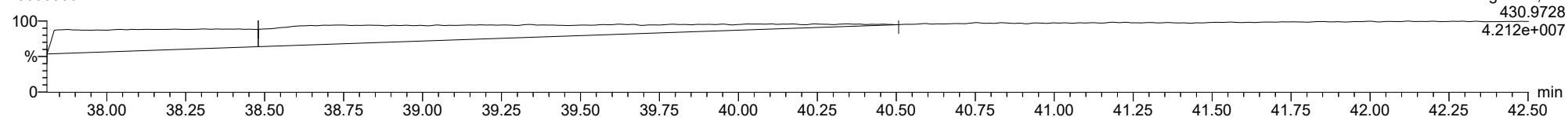
23030306



F4:Voltage SIR,El+
437.8140
3.269e+006

FUNCTION4 PFK

23030306

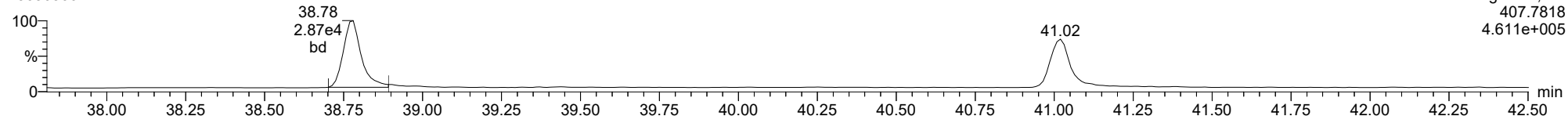


F4:Voltage SIR,El+
430.9728
4.212e+007

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

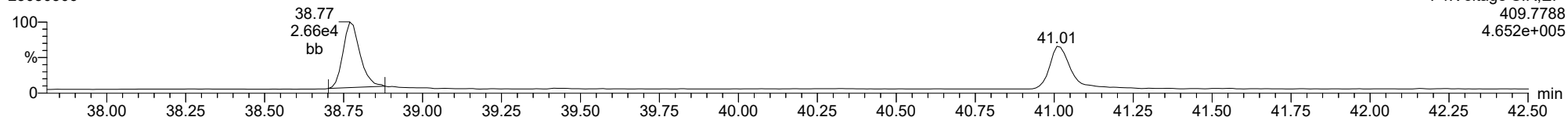
1234678-HpCDF

23030306



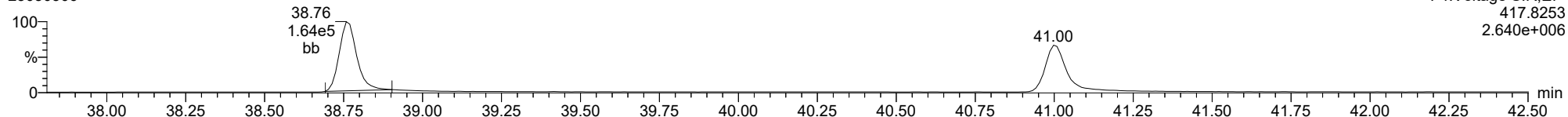
1234678-HpCDF

23030306



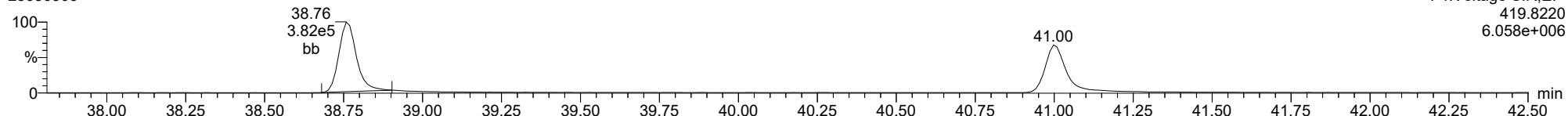
13C-1234678-HpCDF

23030306



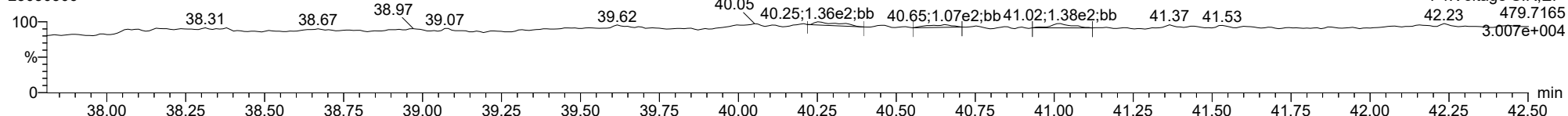
13C-1234678-HpCDF

23030306



FUNCTION4 NCDPE

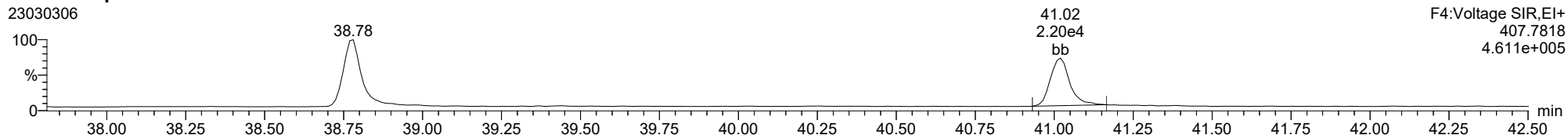
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

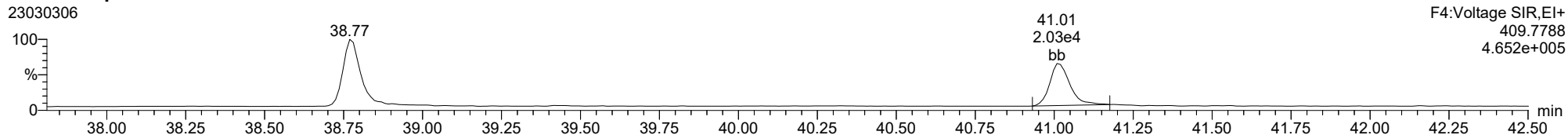
23030306



F4:Voltage SIR,EI+
407.7818
4.611e+005

1234789-HpCDF

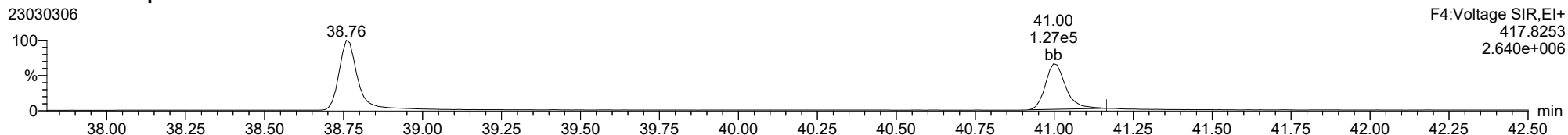
23030306



F4:Voltage SIR,EI+
409.7788
4.652e+005

13C-1234789-HpCDF

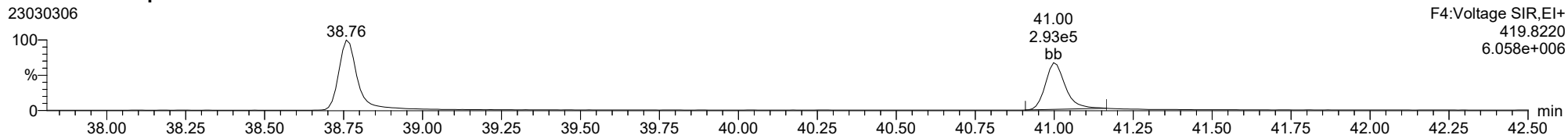
23030306



F4:Voltage SIR,EI+
417.8253
2.640e+006

13C-1234789-HpCDF

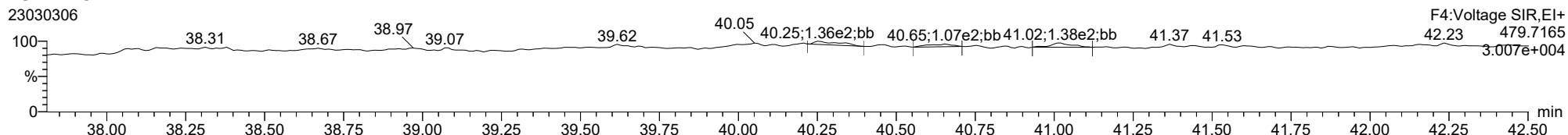
23030306



F4:Voltage SIR,EI+
419.8220
6.058e+006

FUNCTION4 NCDPE

23030306

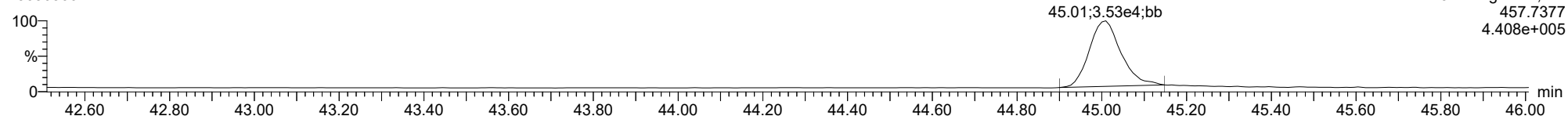


F4:Voltage SIR,EI+
479.7165
3.007e+004

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

OCDD

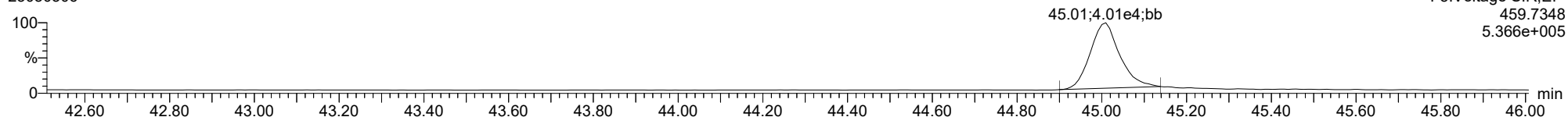
23030306



F5:Voltage SIR,EI+
457.7377
4.408e+005

OCDD

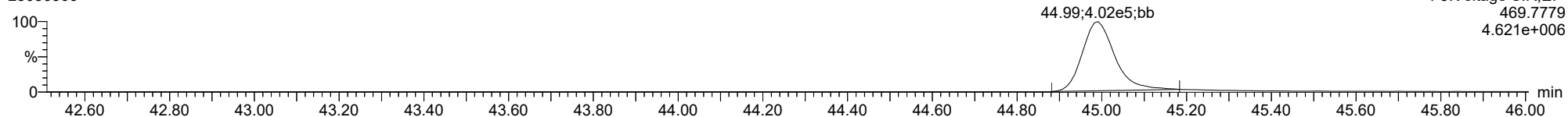
23030306



F5:Voltage SIR,EI+
459.7348
5.366e+005

13C-OCDD

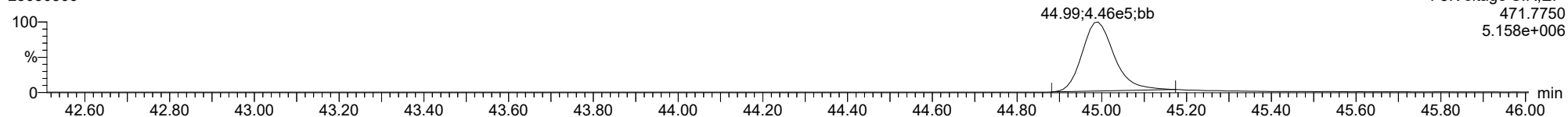
23030306



F5:Voltage SIR,EI+
469.7779
4.621e+006

13C-OCDD

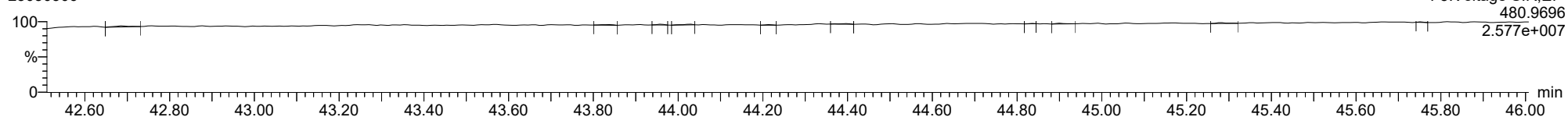
23030306



F5:Voltage SIR,EI+
471.7750
5.158e+006

FUNCTION5 PFK

23030306

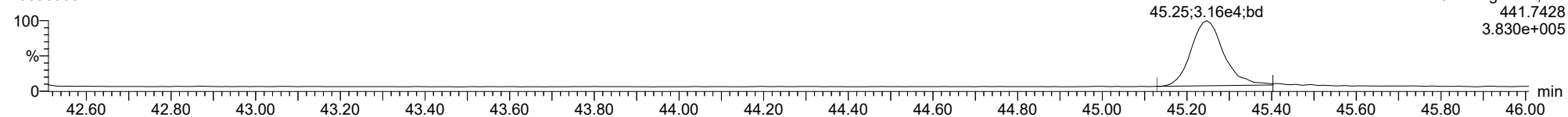


F5:Voltage SIR,EI+
480.9696
2.577e+007

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

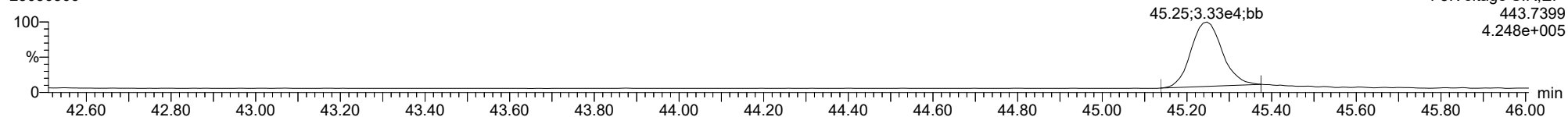
OCDF

23030306



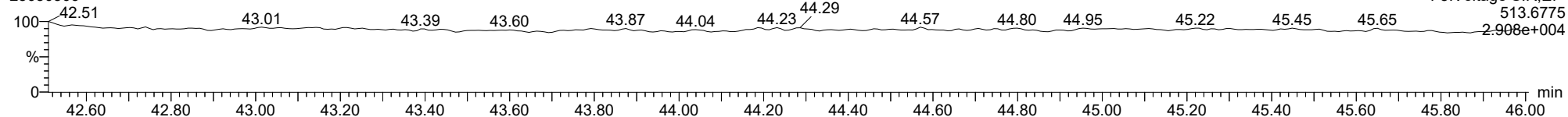
OCDF

23030306



FUNCTION5 DCDPE

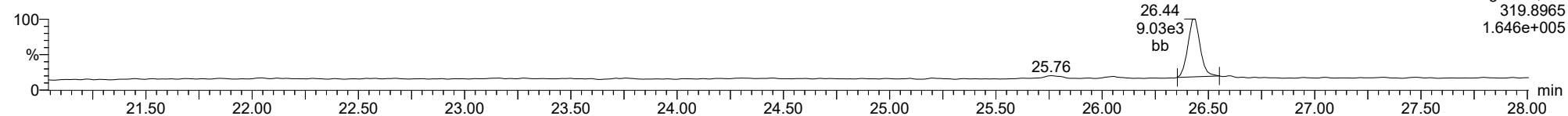
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

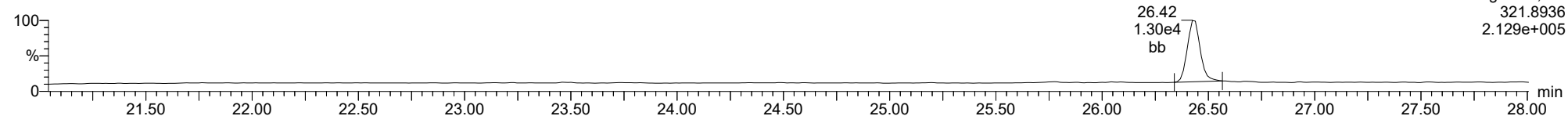
Total-tetradioxins

23030306



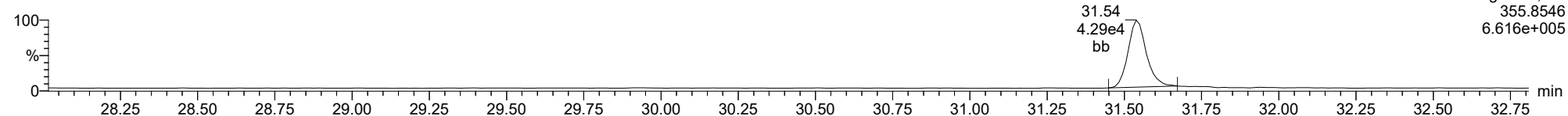
Total-tetradioxins

23030306



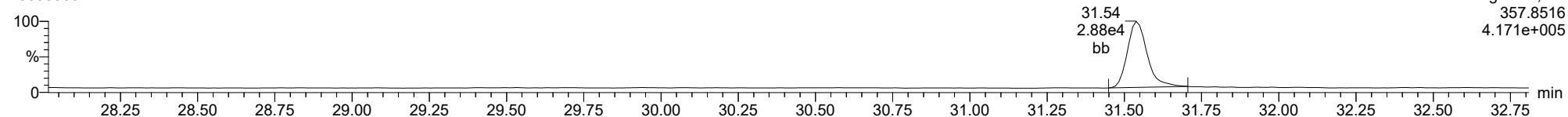
Total-pentadioxins

23030306



Total-pentadioxins

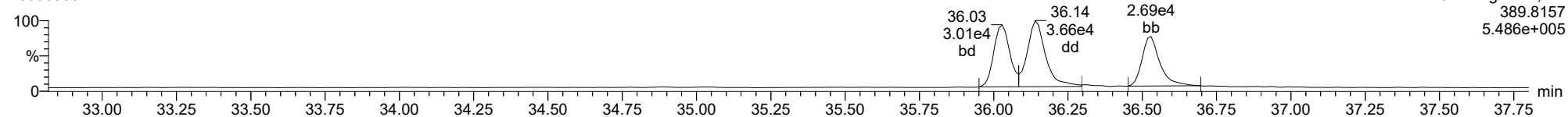
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

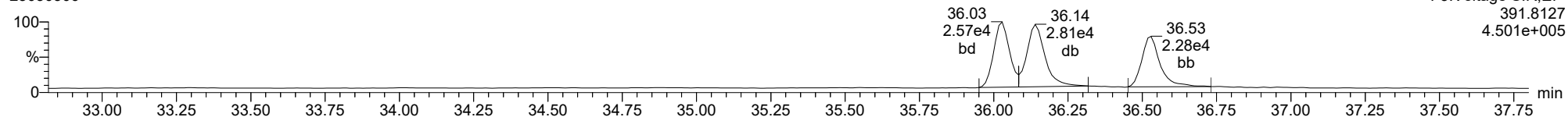
Total-hexadioxins

23030306



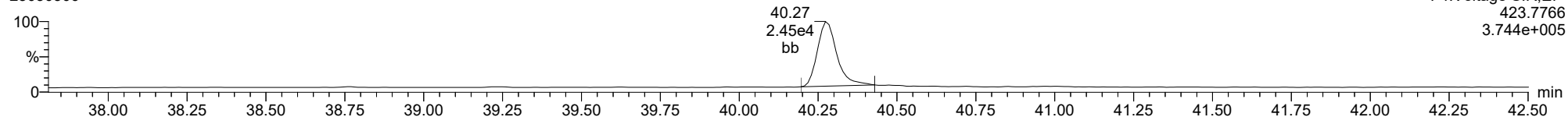
Total-hexadioxins

23030306



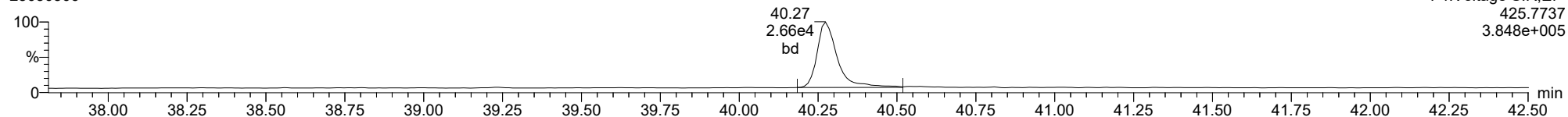
Total-heptadioxins

23030306



Total-heptadioxins

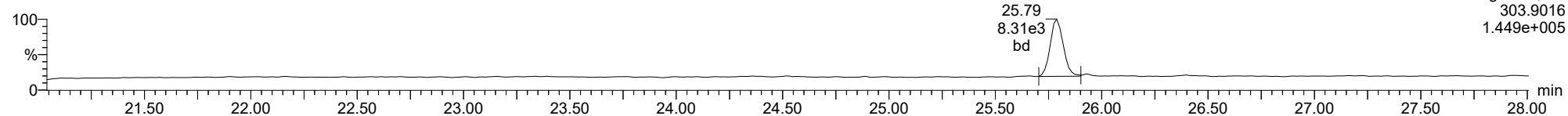
23030306



ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

Total-tetrafurans

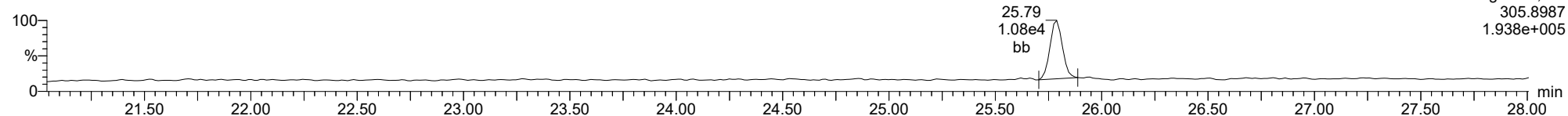
23030306



F1:Voltage SIR,EI+
303.9016
1.449e+005

Total-tetrafurans

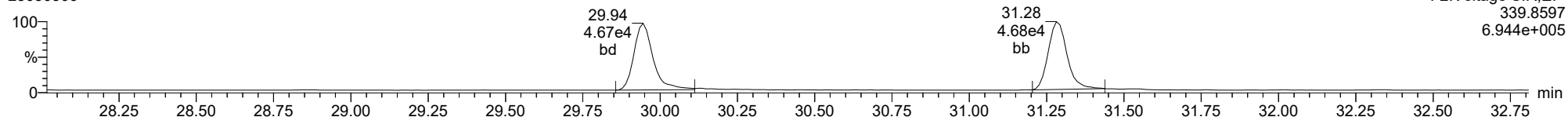
23030306



F1:Voltage SIR,EI+
305.8987
1.938e+005

Total-pentafurans

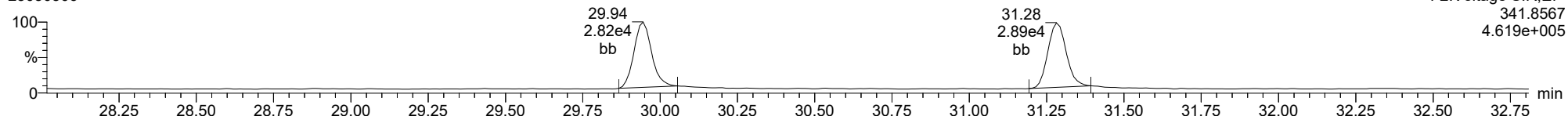
23030306



F2:Voltage SIR,EI+
339.8597
6.944e+005

Total-pentafurans

23030306

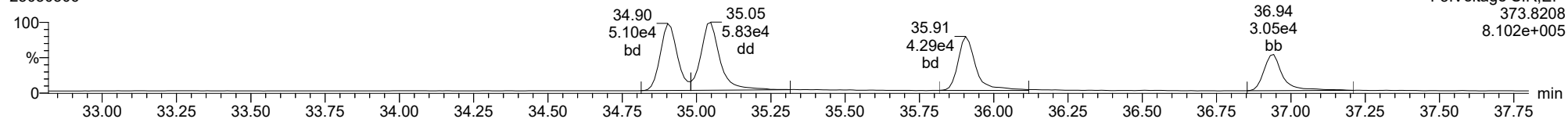


F2:Voltage SIR,EI+
341.8567
4.619e+005

ID: CS2CW, Name: 23030306, Date: 03-Mar-2023, Time: 13:16:24, Conditions: AUTOSPEC01, User: pk

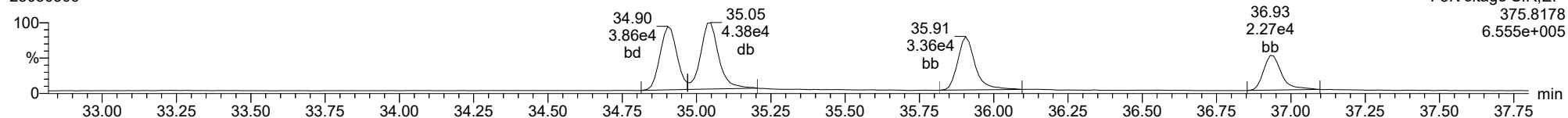
Total-hexa-furans

23030306



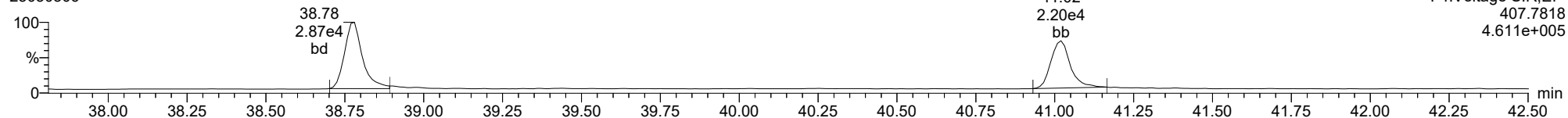
Total-hexa-furans

23030306



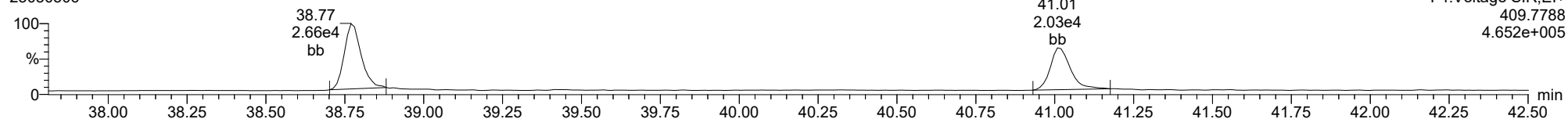
Total-hepta-furans

23030306



Total-hepta-furans

23030306



Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3CW, **Name:** 23030307, **Date:** 03-Mar-2023, **Time:** 14:06:39, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	4.563e4	6.298e4	0.702	0.724	0.770	1455	2151	7.03e5	9.46e5	483.4	440.0	NO	bb	bb	10.132
12378-PeCDF	29.945	1.001	2.374e5	1.577e5	0.679	1.505	1.550	2714	2519	3.51e6	2.28e6	1294.3	903.8	NO	bb	bb	49.089
23478-PeCDF	31.282	1.001	2.063e5	1.364e5	0.786	1.512	1.550	2714	2519	3.03e6	1.99e6	1118.0	788.5	NO	bb	bb	49.466
123478-HxCDF	34.903	1.000	2.473e5	1.941e5	1.166	1.275	1.240	3008	2708	3.76e6	2.98e6	1248.4	1099.9	NO	bd	bd	48.979
234678-HxCDF	35.905	1.000	2.404e5	1.930e5	1.140	1.246	1.240	3008	2708	3.53e6	2.85e6	1172.2	1053.8	NO	bb	bb	49.000
123678-HxCDF	35.048	1.001	2.970e5	2.223e5	1.091	1.336	1.240	3008	2708	3.95e6	3.09e6	1312.5	1142.3	NO	db	db	50.520
123789-HxCDF	36.942	1.001	2.103e5	1.706e5	1.137	1.233	1.240	3008	2708	2.89e6	2.30e6	959.2	849.3	NO	bd	bd	50.468
1234678-HpCDF	38.780	1.000	1.592e5	1.601e5	1.003	0.994	1.050	2672	2189	2.51e6	2.53e6	939.2	1157.5	NO	bb	bb	48.161
1234789-HpCDF	41.019	1.000	1.361e5	1.443e5	0.953	0.943	1.050	2672	2189	1.84e6	1.86e6	689.1	851.7	NO	bb	bd	49.244
OCDF	45.247	1.006	2.019e5	2.478e5	0.778	0.815	0.890	1393	1380	2.32e6	2.62e6	1663.0	1900.3	NO	bb	bd	93.418
2378-TCDD	26.424	1.000	5.877e4	7.446e4	1.149	0.789	0.770	1483	1021	8.00e5	1.03e6	539.5	1013.7	NO	bd	bb	9.873
12378-PeCDD	31.538	1.000	1.890e5	1.221e5	1.022	1.548	1.550	1651	2172	2.74e6	1.77e6	1662.3	815.6	NO	bb	bb	49.884
123478-HxCDD	36.028	1.000	1.812e5	1.479e5	0.996	1.225	1.240	1690	2600	2.90e6	2.38e6	1717.5	913.7	NO	bd	bd	48.605
123678-HxCDD	36.139	1.000	2.270e5	1.862e5	1.001	1.219	1.240	1690	2600	3.05e6	2.54e6	1803.3	977.3	NO	db	db	51.480
123789-HxCDD	36.529	1.011	1.887e5	1.546e5	0.907	1.221	1.240	1690	2600	2.71e6	2.20e6	1606.4	846.3	NO	bb	bb	51.083
1234678-HpCDD	40.273	1.000	1.573e5	1.681e5	1.039	0.936	1.050	2523	2313	2.21e6	2.22e6	874.4	957.9	NO	bb	bd	49.956
OCDD	45.009	1.000	2.508e5	2.930e5	0.920	0.856	0.890	1279	1652	2.91e6	3.41e6	2272.5	2065.6	NO	bb	bb	95.487
13C-2378-TCDF	25.774	1.007	6.575e5	8.705e5	1.620	0.755	0.770	2127	1667	9.70e6	1.27e7	4562.2	7600.8	NO	bb	bb	92.139
13C-12378-PeCDF	29.922	1.169	7.106e5	4.742e5	1.240	1.498	1.550	3150	3257	9.76e6	6.54e6	3098.5	2009.5	NO	bd	bd	93.316
13C-23478-PeCDF	31.259	1.221	5.241e5	3.573e5	1.118	1.467	1.550	3150	3257	7.68e6	5.27e6	2437.6	1617.5	NO	bb	bb	77.038
13C-123478-HxCDF	34.891	0.956	2.605e5	5.124e5	1.168	0.508	0.510	2130	2302	3.94e6	7.71e6	1851.1	3349.5	NO	bd	bd	95.975
13C-123678-HxCDF	35.025	0.959	3.029e5	6.396e5	1.386	0.474	0.510	2130	2302	4.25e6	8.39e6	1994.1	3646.7	NO	db	db	98.624
13C-234678-HxCDF	35.894	0.983	2.705e5	5.057e5	1.129	0.535	0.510	2130	2302	3.77e6	7.17e6	1772.4	3115.7	NO	bd	bb	99.718
13C-123789-HxCDF	36.919	1.011	2.253e5	4.385e5	0.932	0.514	0.510	2130	2302	3.30e6	6.48e6	1548.0	2814.2	NO	bb	bb	103.358
13C-1234678-HpCDF	38.769	1.062	2.032e5	4.578e5	0.895	0.444	0.440	2209	3025	3.15e6	7.13e6	1428.1	2357.0	NO	bb	bb	107.118
13C-1234789-HpCDF	41.008	1.123	1.757e5	4.217e5	0.770	0.417	0.440	2209	3025	2.29e6	5.20e6	1036.4	1717.4	NO	bb	bb	112.595
13C-1234-TCDD	25.605	0.000	4.555e5	5.681e5	1.000	0.802	0.770	2485	1606	6.85e6	8.57e6	2757.9	5335.2	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	5.228e5	6.520e5	1.152	0.802	0.770	2485	1606	7.70e6	9.63e6	3097.5	5999.3	NO	bb	bb	99.597
13C-12378-PeCDD	31.527	1.231	3.747e5	2.356e5	0.829	1.590	1.550	1413	1348	5.28e6	3.29e6	3736.6	2437.5	NO	bb	bb	71.936
13C-123478-HxCDD	36.017	0.986	3.837e5	2.963e5	0.995	1.295	1.240	1796	1719	5.91e6	4.54e6	3293.9	2638.3	NO	bd	bd	99.140
13C-123678-HxCDD	36.128	0.989	4.675e5	3.344e5	1.157	1.398	1.240	1796	1719	6.38e6	4.87e6	3554.2	2831.4	NO	db	db	100.573
13C-1234678-HpCDD	40.262	1.102	3.210e5	3.059e5	0.840	1.049	1.050	2165	1959	4.38e6	4.15e6	2024.2	2117.7	NO	bb	bb	108.247
13C-OCDD	44.990	1.232	6.075e5	6.305e5	0.767	0.963	0.890	2629	1930	6.50e6	7.26e6	2473.3	3761.0	NO	bd	bb	234.029
13C-123789-HxCDD	36.518	0.000	3.849e5	3.043e5	1.000	1.265	1.240	1796	1719	5.52e6	4.36e6	3076.5	2537.0	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.032	1.159e5		1.288			2383		1.68e6		703.2			bb		8.796

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.285	0.865	5.143e4	7.104e4	0.802	0.724	0.770	1455	2151	8.64e5	1.17e6	593.7	544.2	NO	bb	bb	10.000
1289-TCDF	27.286	1.059	4.449e4	5.910e4	0.678	0.753	0.770	1455	2151	6.41e5	8.65e5	440.8	402.3	NO	bb	db	10.000
13468-PECDF	27.144	0.907	4.471e5	2.913e5	1.246	1.535	1.550	765	1431	6.85e6	4.42e6	8952.4	3092.4	NO	bb	bb	50.000
12389-PECDF	32.318	1.080	1.756e5	1.185e5	0.496	1.482	1.550	2714	2519	2.46e6	1.67e6	905.1	663.5	NO	bb	bb	50.000
123468-HXCDF	33.243	0.953	2.474e5	2.044e5	1.169	1.210	1.240	3008	2708	3.57e6	2.89e6	1187.3	1066.9	NO	bb	bd	50.000
1368-TCDD	23.557	0.892	5.333e4	6.596e4	1.015	0.808	0.770	1483	1021	8.25e5	1.09e6	556.5	1064.4	NO	bb	bb	10.000
1289-TCDD	27.031	1.023	4.649e4	6.027e4	0.909	0.771	0.770	1483	1021	6.71e5	8.87e5	452.4	868.9	NO	bb	bb	10.000
12479-PECDD	28.830	0.914	4.152e5	2.870e5	2.301	1.447	1.550	1651	2172	3.89e6	2.64e6	2354.1	1214.5	NO	bb	bd	50.000
12389-PECDD	31.939	1.013	2.202e5	1.409e5	1.184	1.563	1.550	1651	2172	2.97e6	1.93e6	1798.8	887.7	NO	bd	bd	50.000
124679-HXCDD	34.011	0.944	2.133e5	1.659e5	1.115	1.286	1.240	1690	2600	2.98e6	2.42e6	1762.3	930.8	NO	bd	bb	50.000
1234679-HPCDD	39.225	0.974	1.868e5	1.696e5	1.137	1.101	1.050	2523	2313	2.68e6	2.60e6	1062.7	1125.2	NO	bd	bb	50.000
Total-tetrafurans			1.415e5		0.727			1455		2.21e6							30.132
Total-penta1			4.471e5					765		6.85e6							50.000
Total-pentafurans			6.595e5		0.654			2714		9.58e6							158.378
Total-hexafurans			1.243e6		1.141			3008		1.77e7							249.074
Total-heptafurans			2.965e5		0.978			2672		4.37e6							97.824
Total-Furans			2.990e6		0.922			1455		4.30e7							678.826
Total-tetradoxins			2.666e5		1.024			1483		3.52e6							50.252
Total-pentadoxins			8.253e5		1.502			1651		9.61e6							150.025
Total-hexadoxins			8.102e5		1.005			1690		1.16e7							201.167
Total-heptadoxins			3.440e5		1.088			2523		4.89e6							99.956
Total-Dioxins			2.497e6		1.130			1483		3.26e7							596.887
Total-TEQ			5.487e6					1483		7.56e7							1275.713
FUNCTION1 PFK			2.078e5					640846		4.44e6							
FUNCTION2 PFK			1.544e7					302960		1.17e7							0.000
FUNCTION3 PFK			6.335e6					441696		3.43e7							0.000
FUNCTION4 PFK			1.606e7					302692		2.36e6							
FUNCTION5 PFK			3.357e4					240421		1.60e6							
FUNCTION1 HXCD...			1.444e3					587		1.68e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.034e2					1003		1.66e4							0.000
FUNCTION3 OCDPE			5.560e2					494		8.57e3							0.000
FUNCTION4 NCDPE			9.205e2					776		1.78e4							0.000
FUNCTION5 DCDPE			9.291e1					548		1.29e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
2	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
3	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
4	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
5	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
2	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
3	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
4	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
5	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
6	123468-HxCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
2	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
3	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000
4	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
5	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
6	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
7	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
8	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712
9	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
10	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
11	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
12	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
13	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
14	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000
15	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
16	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
17	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161
18	OCDF	45.25	2.019e5	2.478e5	0.778	0.81	0.89	1663.0	YES	NO	bb	bd	93.418
19	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
2	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
3	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
4	Total-tetradoxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
5	Total-tetradoxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
6	Total-tetradoxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
2	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
3	Total-pentadoxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
4	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
2	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
3	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
4	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
2	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
2	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
3	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
4	Total-tetradoxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
5	Total-tetradoxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
6	Total-tetradoxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108
7	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
8	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
9	Total-pentadoxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
10	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000
11	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
12	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
13	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
14	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000
15	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
16	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000
17	OCDD	45.01	2.508e5	2.930e5	0.920	0.86	0.89	2272.5	YES	NO	bb	bb	95.487

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.29	4.449e4	5.910e4	0.678	0.75	0.77	440.8	YES	NO	bb	db	10.000
2	2378-TCDF	25.79	4.563e4	6.298e4	0.702	0.72	0.77	483.4	YES	NO	bb	bb	10.132
3	1368-TCDF	22.29	5.143e4	7.104e4	0.802	0.72	0.77	593.7	YES	NO	bb	bb	10.000
4	12389-PECDF	32.32	1.756e5	1.185e5	0.496	1.48	1.55	905.1	YES	NO	bb	bb	50.000
5	23478-PeCDF	31.28	2.063e5	1.364e5	0.786	1.51	1.55	1118.0	YES	NO	bb	bb	49.466
6	Total-pentafurans	30.13	4.319e2	3.264e2	0.654	1.32	1.55	1.8	NO	NO	bb	bb	0.112
7	12378-PeCDF	29.94	2.374e5	1.577e5	0.679	1.51	1.55	1294.3	YES	NO	bb	bb	49.089
8	Total-pentafurans	28.80	3.978e4	2.583e4	0.654	1.54	1.55	212.5	YES	NO	bb	bb	9.712
9	Total-hexafurans	37.33	5.073e2	4.522e2	1.141	1.12	1.24	4.2	YES	NO	db	dd	0.107
10	123789-HxCDF	36.94	2.103e5	1.706e5	1.137	1.23	1.24	959.2	YES	NO	bd	bd	50.468
11	234678-HxCDF	35.91	2.404e5	1.930e5	1.140	1.25	1.24	1172.2	YES	NO	bb	bb	49.000
12	123678-HxCDF	35.05	2.970e5	2.223e5	1.091	1.34	1.24	1312.5	YES	NO	db	db	50.520
13	123478-HxCDF	34.90	2.473e5	1.941e5	1.166	1.27	1.24	1248.4	YES	NO	bd	bd	48.979
14	123468-HXCDF	33.24	2.474e5	2.044e5	1.169	1.21	1.24	1187.3	YES	NO	bb	bd	50.000
15	1234789-HpCDF	41.02	1.361e5	1.443e5	0.953	0.94	1.05	689.1	YES	NO	bb	bd	49.244
16	Total-heptafurans	39.44	1.302e3	1.273e3	0.978	1.02	1.05	8.5	YES	NO	bb	bb	0.418
17	1234678-HpCDF	38.78	1.592e5	1.601e5	1.003	0.99	1.05	939.2	YES	NO	bb	bb	48.161
18	OCDF	45.25	2.019e5	2.478e5	0.778	0.81	0.89	1663.0	YES	NO	bb	bd	93.418
19	13468-PECDF	27.14	4.471e5	2.913e5	1.246	1.53	1.55	8952.4	YES	NO	bb	bb	50.000
20	1368-TCDD	23.56	5.333e4	6.596e4	1.015	0.81	0.77	556.5	YES	NO	bb	bb	10.000
21	1289-TCDD	27.03	4.649e4	6.027e4	0.909	0.77	0.77	452.4	YES	NO	bb	bb	10.000
22	2378-TCDD	26.42	5.877e4	7.446e4	1.149	0.79	0.77	539.5	YES	NO	bd	bb	9.873
23	Total-tetradiioxins	26.10	8.105e4	1.035e5	1.024	0.78	0.77	553.1	YES	NO	bb	bb	15.333
24	Total-tetradiioxins	25.62	2.642e4	3.299e4	1.024	0.80	0.77	267.0	YES	NO	bd	bb	4.937
25	Total-tetradiioxins	25.04	5.856e2	7.161e2	1.024	0.82	0.77	7.0	YES	NO	bb	bb	0.108
26	12389-PECDD	31.94	2.202e5	1.409e5	1.184	1.56	1.55	1798.8	YES	NO	bd	bd	50.000
27	12378-PeCDD	31.54	1.890e5	1.221e5	1.022	1.55	1.55	1662.3	YES	NO	bb	bb	49.884
28	Total-pentadiioxins	30.88	8.263e2	4.657e2	1.502	1.77	1.55	8.6	YES	NO	bb	bb	0.141
29	12479-PECDD	28.83	4.152e5	2.870e5	2.301	1.45	1.55	2354.1	YES	NO	bb	bd	50.000
30	123789-HxCDD	36.53	1.887e5	1.546e5	0.907	1.22	1.24	1606.4	YES	NO	bb	bb	51.083
31	123678-HxCDD	36.14	2.270e5	1.862e5	1.001	1.22	1.24	1803.3	YES	NO	db	db	51.480
32	123478-HxCDD	36.03	1.812e5	1.479e5	0.996	1.23	1.24	1717.5	YES	NO	bd	bd	48.605
33	124679-HXCDD	34.01	2.133e5	1.659e5	1.115	1.29	1.24	1762.3	YES	NO	bd	bb	50.000
34	1234678-HpCDD	40.27	1.573e5	1.681e5	1.039	0.94	1.05	874.4	YES	NO	bb	bd	49.956
35	1234679-HPCDD	39.23	1.868e5	1.696e5	1.137	1.10	1.05	1062.7	YES	NO	bd	bb	50.000
36	OCDD	45.01	2.508e5	2.930e5	0.920	0.86	0.89	2272.5	YES	NO	bb	bb	95.487

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld

Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time

Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk**PFK1**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.24	1.621e5					3.0	YES		bb		
2	FUNCTION1 PFK	26.04	7.004e3					0.8	NO		bb		
3	FUNCTION1 PFK	25.20	1.505e4					1.0	NO		bb		
4	FUNCTION1 PFK	24.33	1.235e4					0.8	NO		bb		
5	FUNCTION1 PFK	23.94	5.589e3					0.6	NO		bb		
6	FUNCTION1 PFK	23.61	5.711e3					0.6	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.40	1.216e5					2.2	NO		bb		0.000
2	FUNCTION2 PFK	29.43	1.324e7					19.8	YES		db		0.000
3	FUNCTION2 PFK	28.41	2.080e6					16.6	YES		bd		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.64	4.177e4					1.9	NO		bb		0.000
2	FUNCTION3 PFK	33.49	1.199e5					5.0	YES		db		0.000
3	FUNCTION3 PFK	33.44	2.654e6					7.0	YES		dd		0.000
4	FUNCTION3 PFK	33.06	2.958e6					23.7	YES		bd		0.000
5	FUNCTION3 PFK	35.38	2.169e4					1.0	NO		bb		0.000
6	FUNCTION3 PFK	35.25	5.928e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	35.11	7.037e3					0.7	NO		bb		0.000
8	FUNCTION3 PFK	34.99	1.627e4					1.0	NO		bb		0.000
9	FUNCTION3 PFK	34.92	1.103e4					1.1	NO		db		0.000
10	FUNCTION3 PFK	34.86	1.305e4					1.0	NO		bd		0.000
11	FUNCTION3 PFK	34.80	9.642e3					0.9	NO		bb		0.000
12	FUNCTION3 PFK	34.66	1.233e4					0.9	NO		db		0.000
13	FUNCTION3 PFK	34.64	7.688e3					0.8	NO		bd		0.000
14	FUNCTION3 PFK	34.57	9.132e3					0.8	NO		bb		0.000
15	FUNCTION3 PFK	34.47	7.208e3					0.8	NO		bb		0.000
16	FUNCTION3 PFK	34.31	1.503e4					1.0	NO		bb		0.000
17	FUNCTION3 PFK	34.22	2.675e4					1.4	NO		bb		0.000
18	FUNCTION3 PFK	34.01	3.007e4					2.1	NO		db		0.000
19	FUNCTION3 PFK	33.97	1.328e4					1.1	NO		bd		0.000
20	FUNCTION3 PFK	33.91	6.249e3					0.6	NO		bb		0.000
21	FUNCTION3 PFK	36.99	2.219e4					1.1	NO		bd		0.000
22	FUNCTION3 PFK	36.87	2.133e3					0.4	NO		bb		0.000
23	FUNCTION3 PFK	36.83	5.225e3					0.6	NO		bb		0.000
24	FUNCTION3 PFK	36.70	4.929e4					1.7	NO		bb		0.000
25	FUNCTION3 PFK	36.43	1.980e4					1.2	NO		bb		0.000
26	FUNCTION3 PFK	36.38	7.184e3					0.9	NO		bb		0.000
27	FUNCTION3 PFK	36.27	4.220e3					0.5	NO		bb		0.000
28	FUNCTION3 PFK	36.24	2.102e3					0.4	NO		bb		0.000
29	FUNCTION3 PFK	36.19	3.748e3					0.5	NO		bb		0.000
30	FUNCTION3 PFK	35.87	3.133e4					1.6	NO		db		0.000
31	FUNCTION3 PFK	35.83	1.912e4					1.5	NO		bd		0.000
32	FUNCTION3 PFK	35.78	2.675e3					0.4	NO		db		0.000
33	FUNCTION3 PFK	35.74	3.023e4					1.5	NO		dd		0.000
34	FUNCTION3 PFK	35.67	1.673e4					1.4	NO		bd		0.000
35	FUNCTION3 PFK	35.58	2.145e4					1.4	NO		db		0.000
36	FUNCTION3 PFK	35.53	1.268e4					1.1	NO		bd		0.000
37	FUNCTION3 PFK	37.67	2.243e4					1.6	NO		bb		0.000

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	37.45	8.583e3					0.7	NO		db		0.000
39	FUNCTION3 PFK	37.43	4.891e3					0.7	NO		bd		0.000
40	FUNCTION3 PFK	37.30	6.956e3					0.6	NO		bb		0.000
41	FUNCTION3 PFK	37.23	5.682e3					0.7	NO		db		0.000
42	FUNCTION3 PFK	37.20	9.815e3					0.9	NO		dd		0.000
43	FUNCTION3 PFK	37.15	5.475e3					0.6	NO		dd		0.000
44	FUNCTION3 PFK	37.11	7.631e3					0.8	NO		bd		0.000
45	FUNCTION3 PFK	37.06	2.709e4					1.4	NO		db		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.40	1.889e5					2.4	NO		bb		
2	FUNCTION4 PFK	39.68	1.587e7					5.4	YES		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.63	9.422e3					1.5	NO		bb		
2	FUNCTION5 PFK	43.24	1.576e3					0.7	NO		bb		
3	FUNCTION5 PFK	43.00	1.263e4					1.7	NO		bb		
4	FUNCTION5 PFK	45.90	6.371e3					1.4	NO		bb		
5	FUNCTION5 PFK	45.34	1.310e3					0.6	NO		bb		
6	FUNCTION5 PFK	43.79	2.270e3					0.7	NO		bb		

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.16	2.360e2					3.4	YES		bb		0.000
2	FUNCTION1 HXCD...	26.52	1.410e2					3.2	YES		db		0.000
3	FUNCTION1 HXCD...	26.41	1.480e2					3.3	YES		bd		0.000
4	FUNCTION1 HXCD...	26.16	8.707e1					1.9	NO		db		0.000
5	FUNCTION1 HXCD...	26.10	7.515e1					2.1	NO		bd		0.000
6	FUNCTION1 HXCD...	25.79	8.971e1					2.2	NO		bb		0.000
7	FUNCTION1 HXCD...	25.63	1.156e2					2.5	NO		bb		0.000
8	FUNCTION1 HXCD...	24.52	1.119e2					2.7	NO		db		0.000
9	FUNCTION1 HXCD...	24.43	1.844e2					3.5	YES		bd		0.000
10	FUNCTION1 HXCD...	23.75	1.728e2					2.1	NO		bb		0.000
11	FUNCTION1 HXCD...	21.31	8.251e1					1.7	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.95	1.010e2					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	31.18	4.333e2					5.6	YES		bb		0.000
3	FUNCTION2 HPCD...	30.70	7.244e1					2.1	NO		bb		0.000
4	FUNCTION2 HPCD...	30.31	7.131e1					1.6	NO		bb		0.000
5	FUNCTION2 HPCD...	29.76	7.422e1					1.6	NO		bb		0.000
6	FUNCTION2 HPCD...	29.04	7.307e1					1.9	NO		bb		0.000
7	FUNCTION2 HPCD...	28.55	7.813e1					2.1	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	1.400e2					5.4	YES		bb		0.000
2	FUNCTION3 OCDPE	35.04	1.909e2					5.6	YES		db		0.000
3	FUNCTION3 OCDPE	34.94	2.251e2					6.4	YES		bd		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:37 Pacific Standard Time

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.60	9.374e1					3.5	YES		bb		0.000
2	FUNCTION4 NCDPE	40.25	1.903e2					3.2	YES		bb		0.000
3	FUNCTION4 NCDPE	39.09	7.390e1					1.9	NO		bb		0.000
4	FUNCTION4 NCDPE	38.97	7.768e1					2.4	NO		bb		0.000
5	FUNCTION4 NCDPE	41.21	8.604e1					3.3	YES		bb		0.000
6	FUNCTION4 NCDPE	41.01	1.089e2					3.1	YES		bb		0.000
7	FUNCTION4 NCDPE	40.86	1.930e2					2.9	NO		db		0.000
8	FUNCTION4 NCDPE	40.74	9.692e1					2.6	NO		bd		0.000

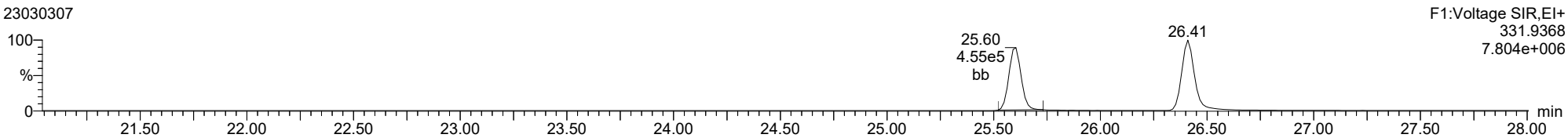
ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	44.90	9.291e1					2.4	NO		bb		0.000

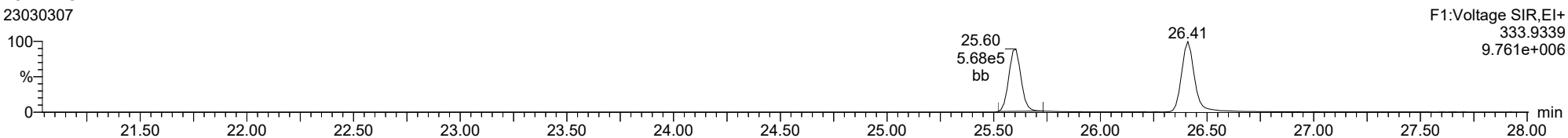
Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3CW, **Name:** 23030307, **Date:** 03-Mar-2023, **Time:** 14:06:39, **Conditions:** AUTOSPEC01, **User:** pk

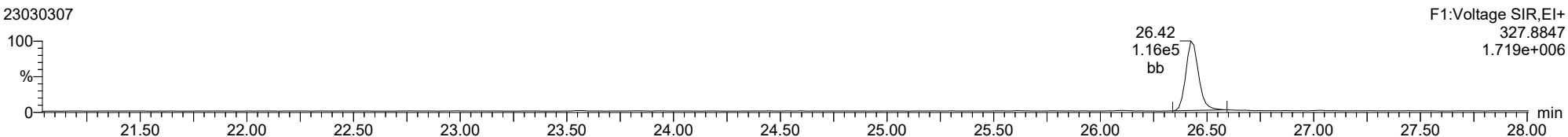
13C-1234-TCDD
23030307



13C-1234-TCDD
23030307



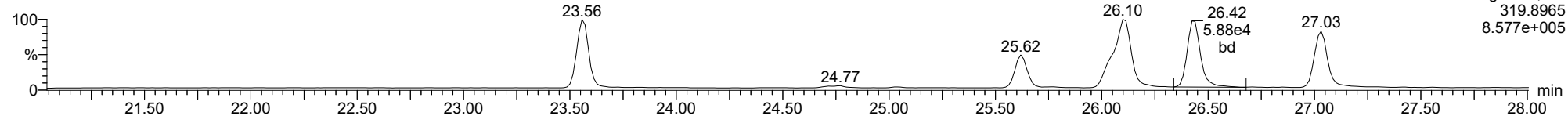
37CL-2378-TCDD
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

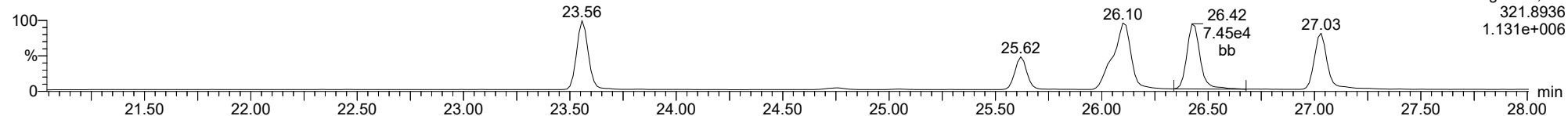
2378-TCDD

23030307



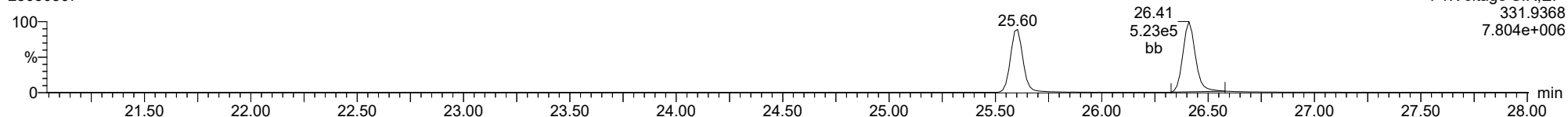
2378-TCDD

23030307



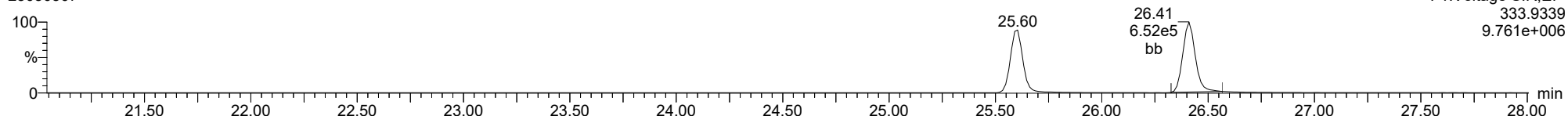
13C-2378-TCDD

23030307



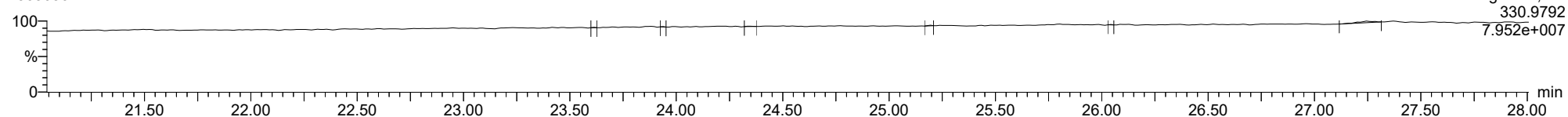
13C-2378-TCDD

23030307



FUNCTION1 PFK

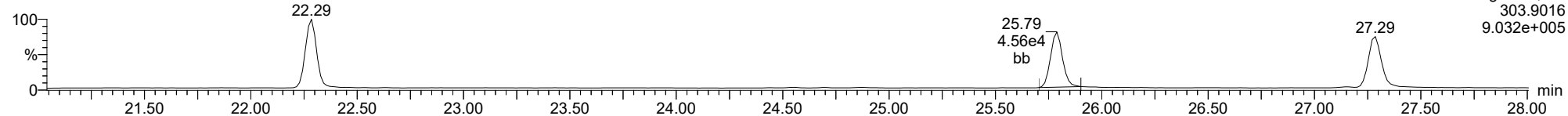
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

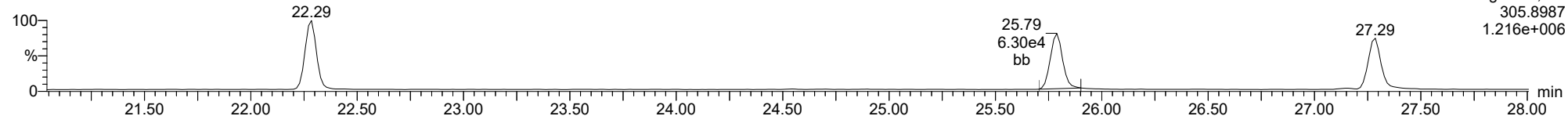
2378-TCDF

23030307



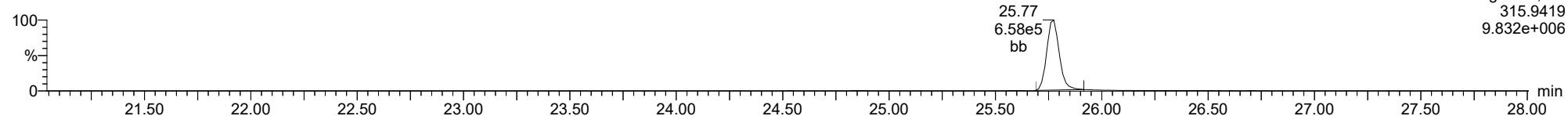
2378-TCDF

23030307



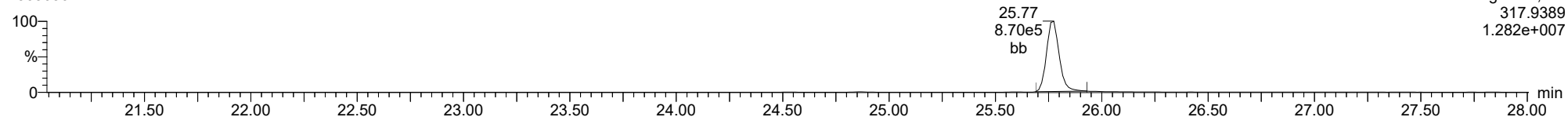
13C-2378-TCDF

23030307



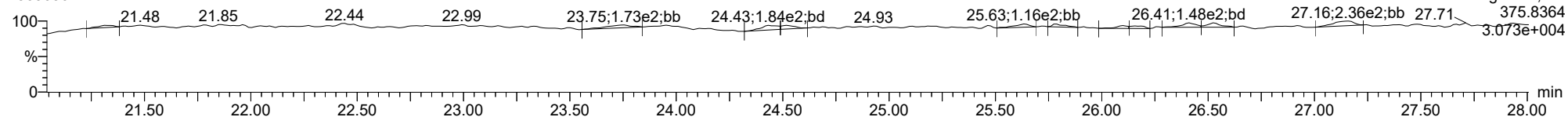
13C-2378-TCDF

23030307



FUNCTION1 HXCDPE

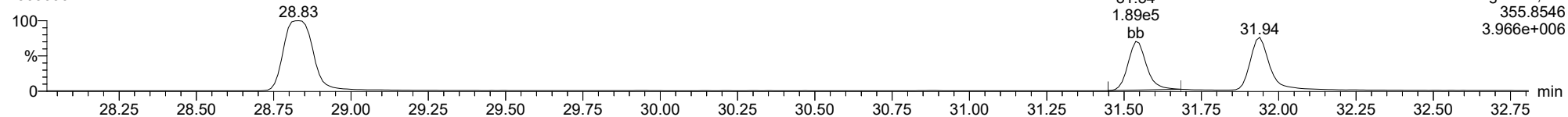
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

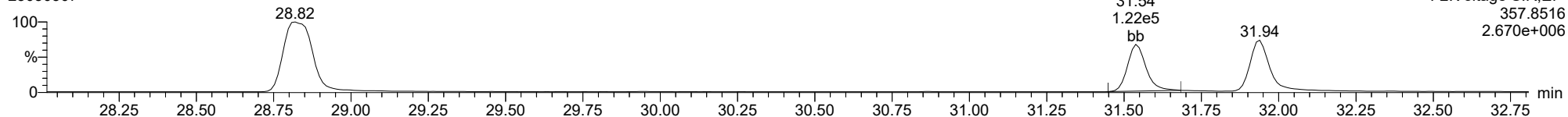
23030307



F2:Voltage SIR,EI+
357.8516
3.966e+006

12378-PeCDD

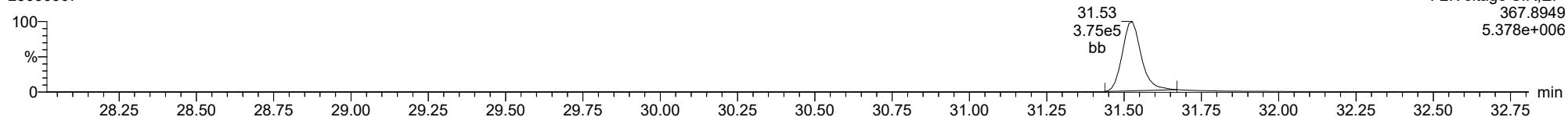
23030307



F2:Voltage SIR,EI+
357.8516
2.670e+006

13C-12378-PeCDD

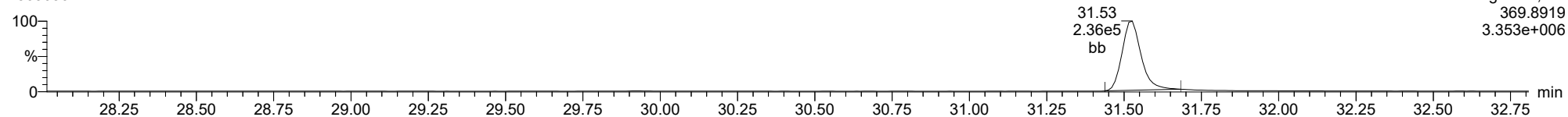
23030307



F2:Voltage SIR,EI+
367.8949
5.378e+006

13C-12378-PeCDD

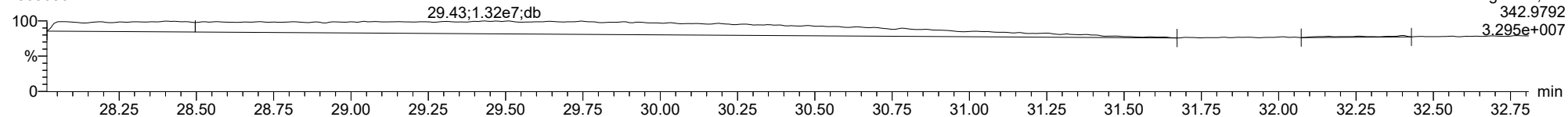
23030307



F2:Voltage SIR,EI+
369.8919
3.353e+006

FUNCTION2 PFK

23030307

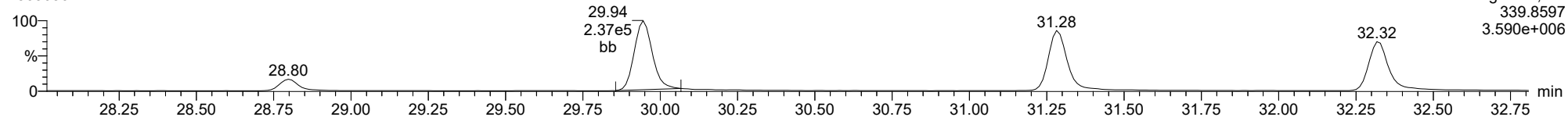


F2:Voltage SIR,EI+
342.9792
3.295e+007

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

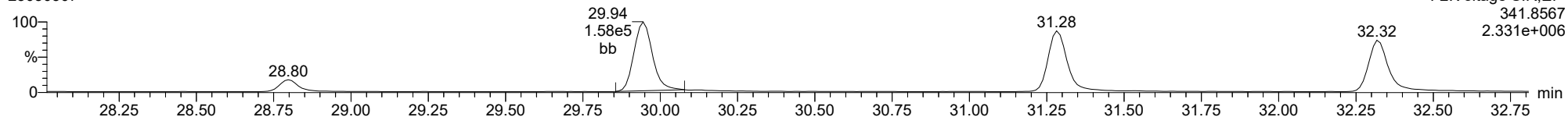
12378-PeCDF

23030307



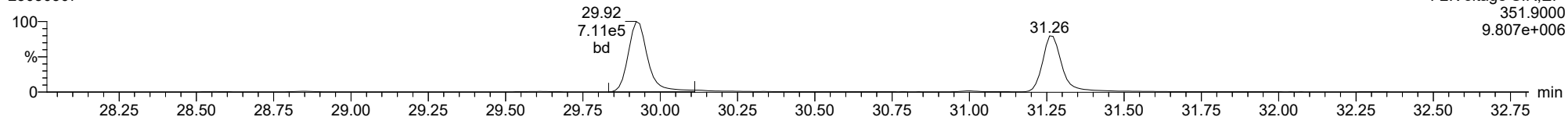
12378-PeCDF

23030307



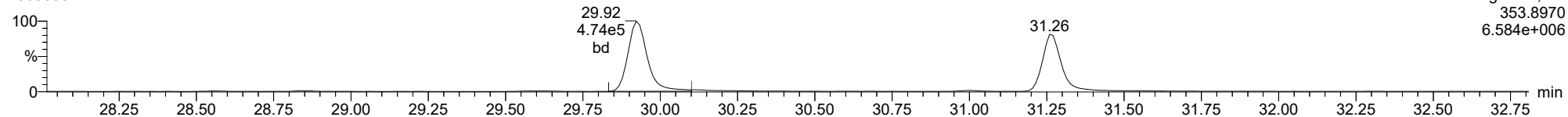
13C-12378-PeCDF

23030307



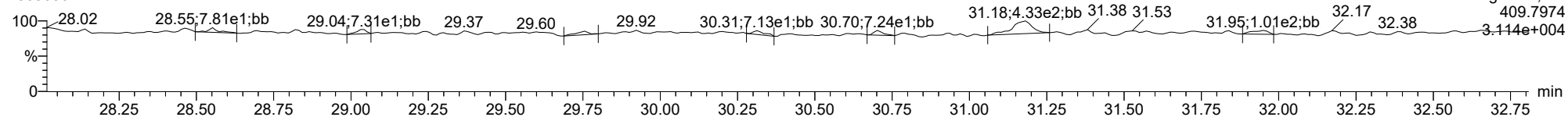
13C-12378-PeCDF

23030307



FUNCTION2 HPCDPE

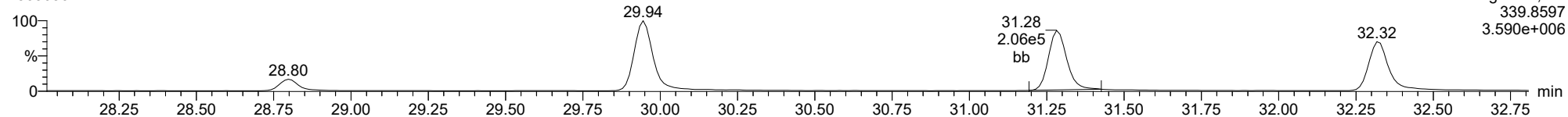
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

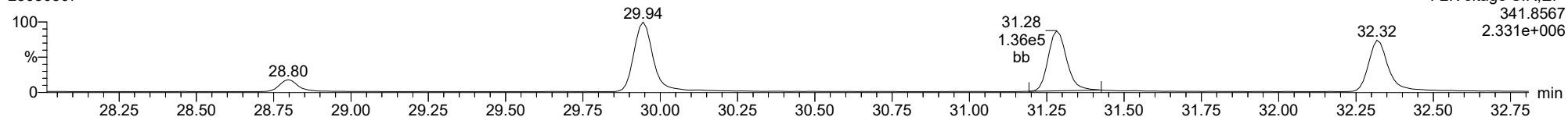
23478-PeCDF

23030307



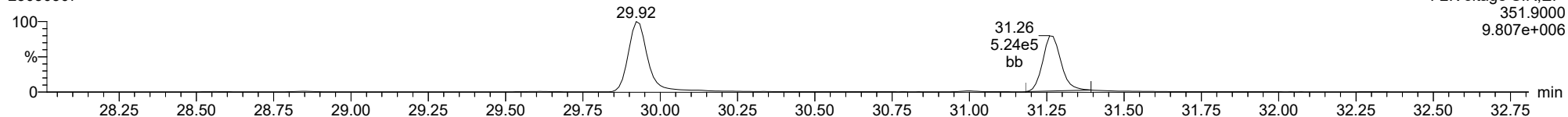
23478-PeCDF

23030307



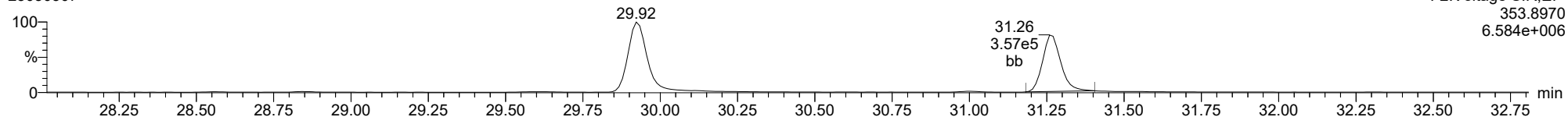
13C-23478-PeCDF

23030307



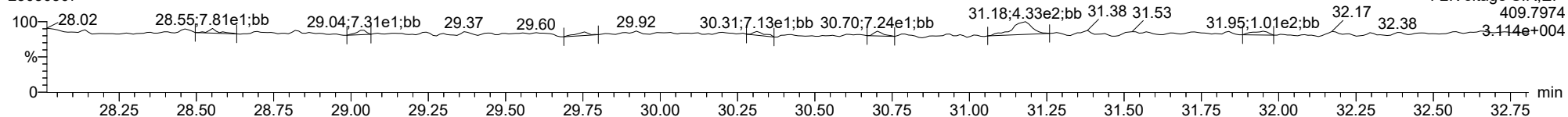
13C-23478-PeCDF

23030307



FUNCTION2 HPCDPE

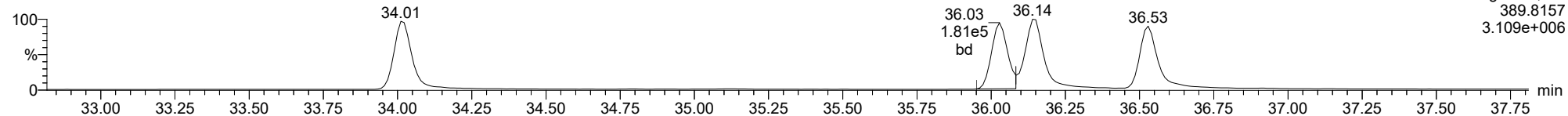
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

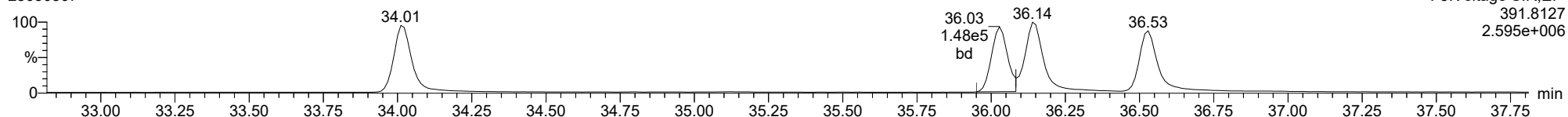
123478-HxCDD

23030307



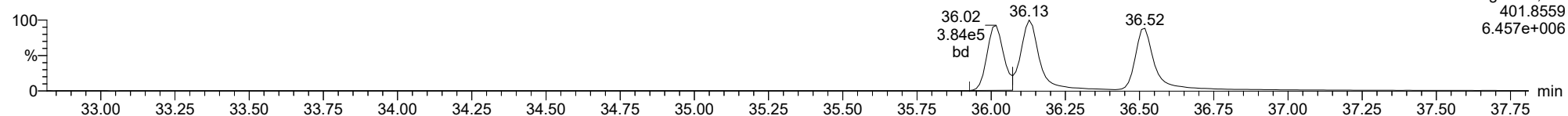
123478-HxCDD

23030307



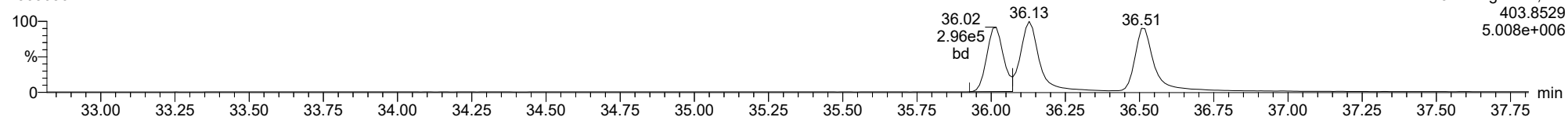
13C-123478-HxCDD

23030307



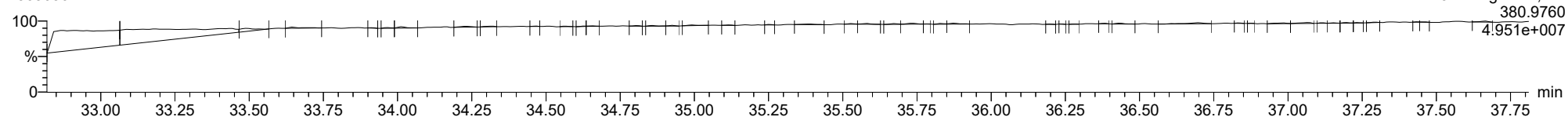
13C-123478-HxCDD

23030307



FUNCTION3 PFK

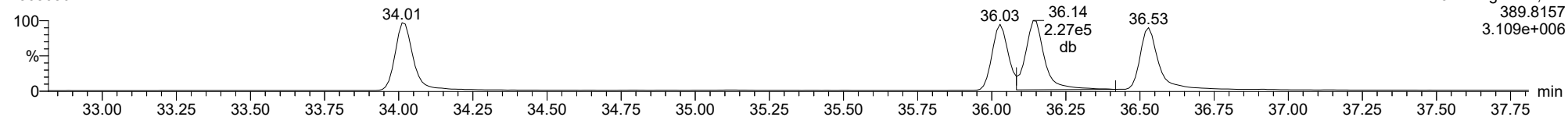
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

123678-HxCDD

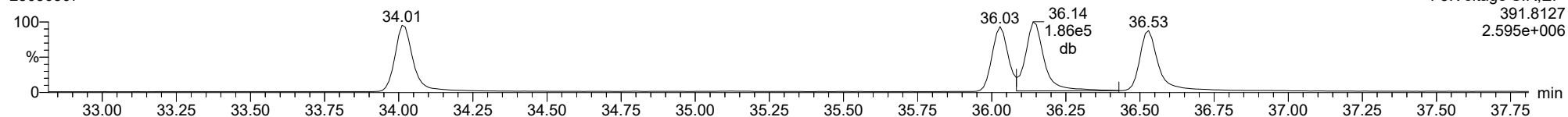
23030307



F3:Voltage SIR,EI+
389.8157
3.109e+006

123678-HxCDD

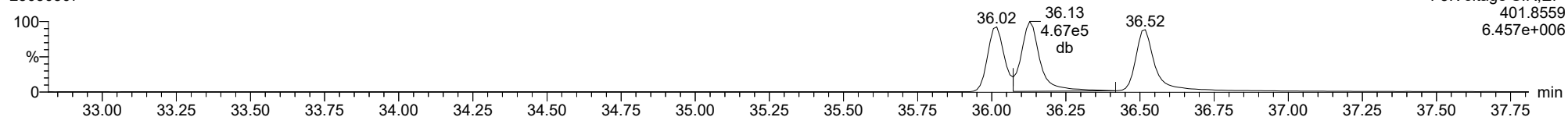
23030307



F3:Voltage SIR,EI+
391.8127
2.595e+006

13C-123678-HxCDD

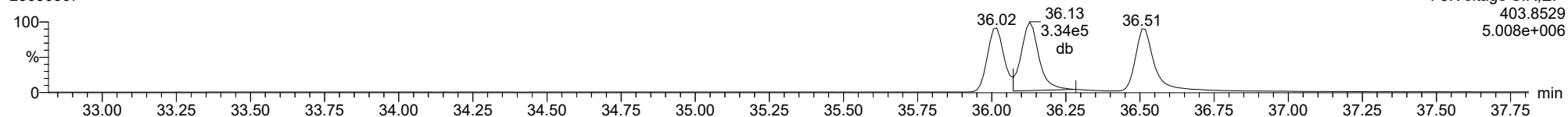
23030307



F3:Voltage SIR,EI+
401.8559
6.457e+006

13C-123678-HxCDD

23030307

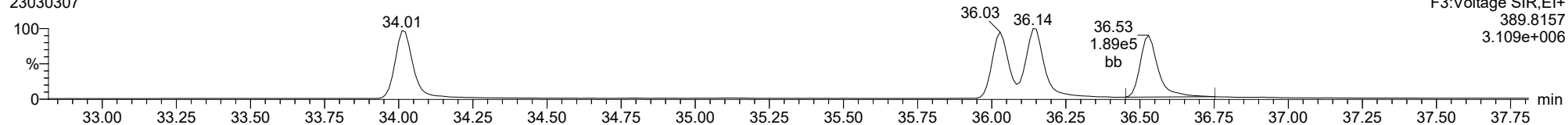


F3:Voltage SIR,EI+
403.8529
5.008e+006

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

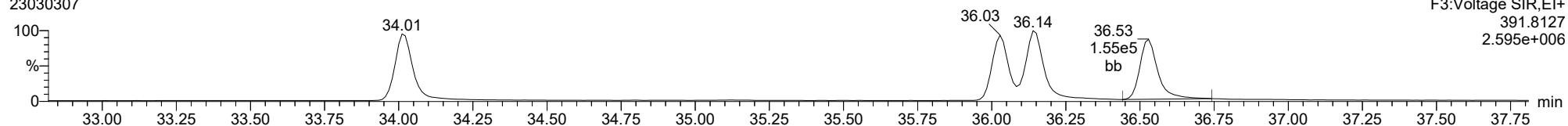
123789-HxCDD

23030307



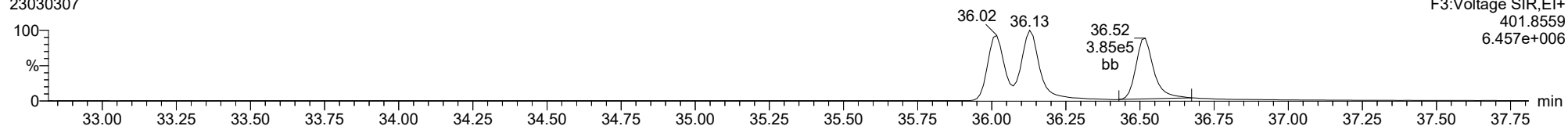
123789-HxCDD

23030307



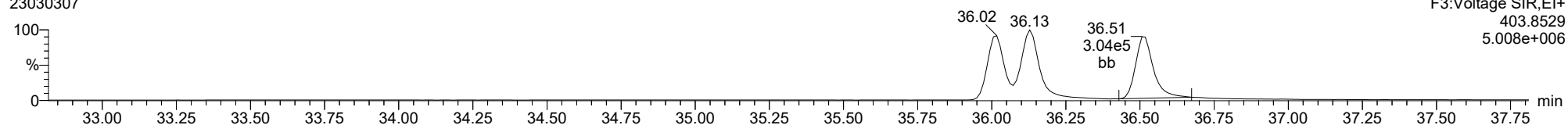
13C-123789-HxCDD

23030307



13C-123789-HxCDD

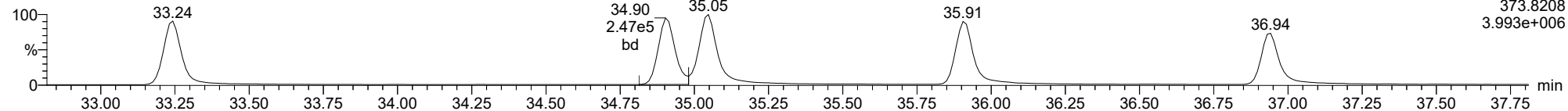
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

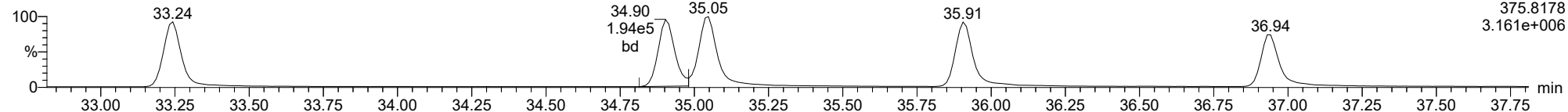
123478-HxCDF

23030307



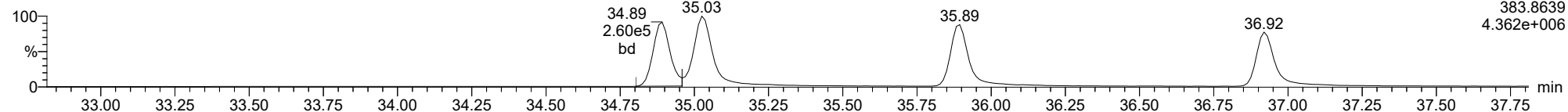
123478-HxCDF

23030307



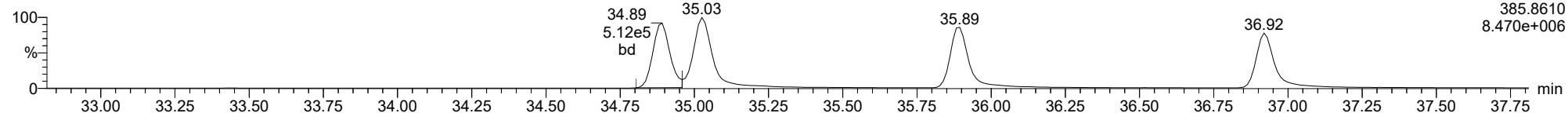
13C-123478-HxCDF

23030307



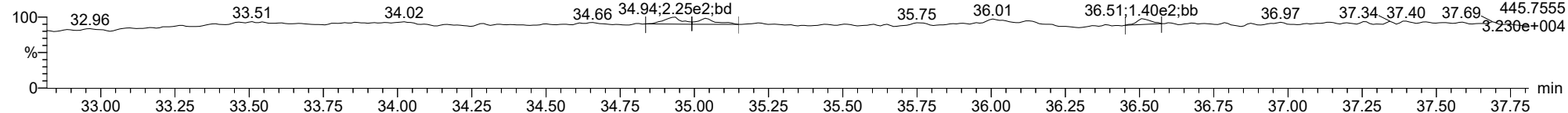
13C-123478-HxCDF

23030307



FUNCTION3 OCDPE

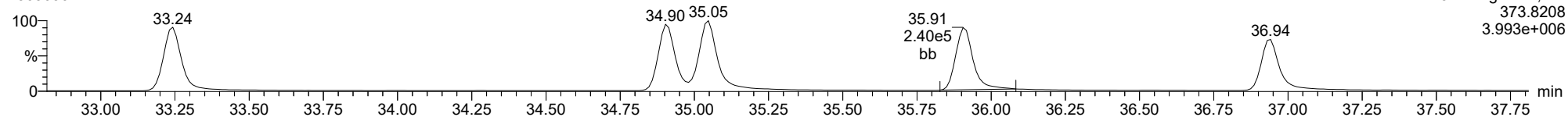
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

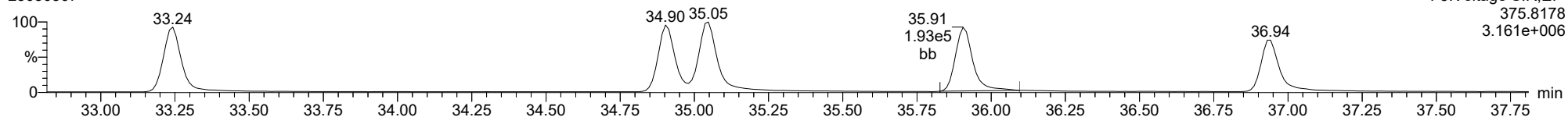
234678-HxCDF

23030307



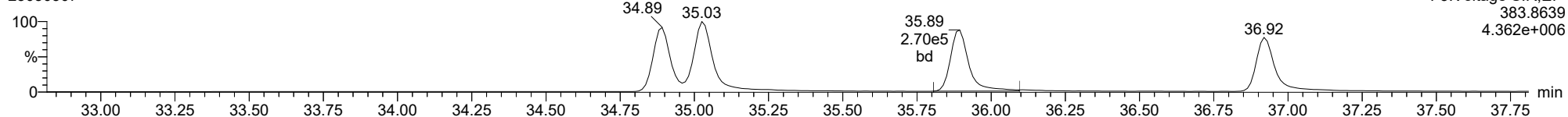
234678-HxCDF

23030307



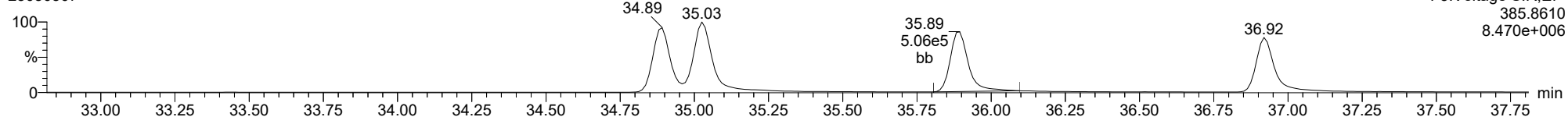
13C-234678-HxCDF

23030307



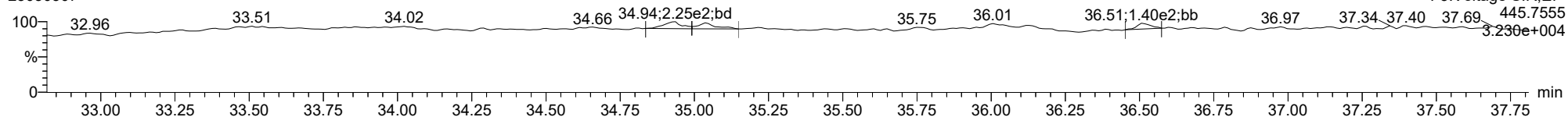
13C-234678-HxCDF

23030307



FUNCTION3 OCDPE

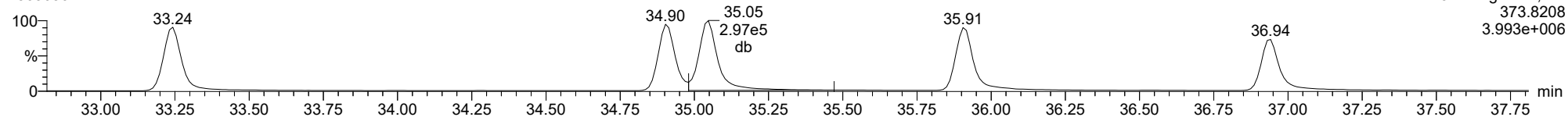
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

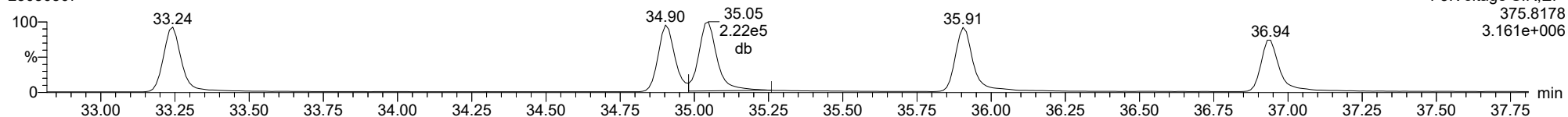
123678-HxCDF

23030307



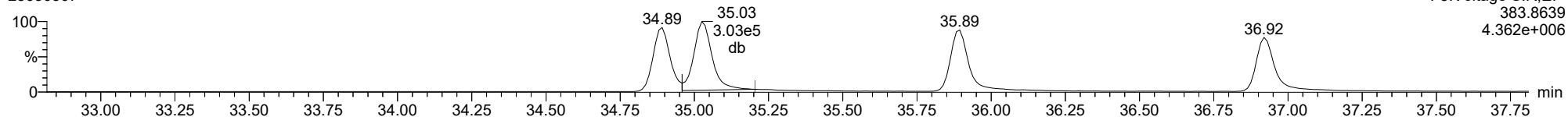
123678-HxCDF

23030307



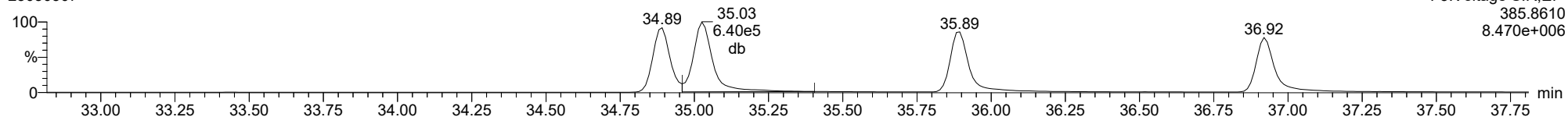
13C-123678-HxCDF

23030307



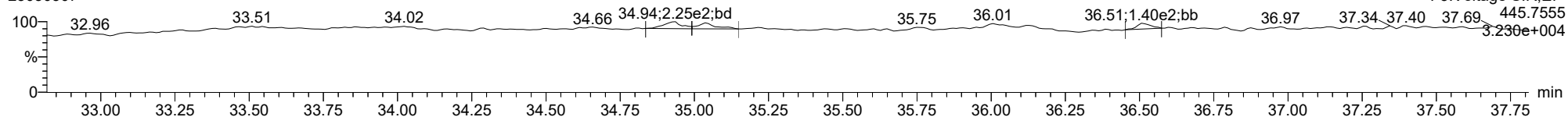
13C-123678-HxCDF

23030307



FUNCTION3 OCDPE

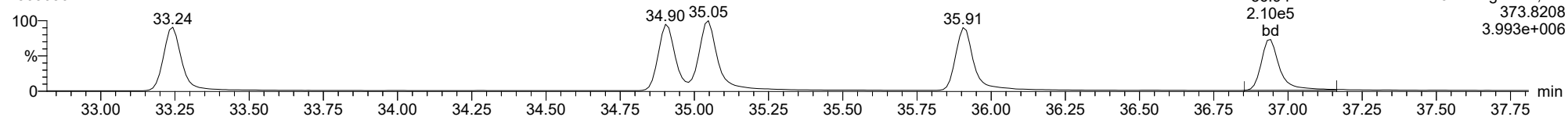
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

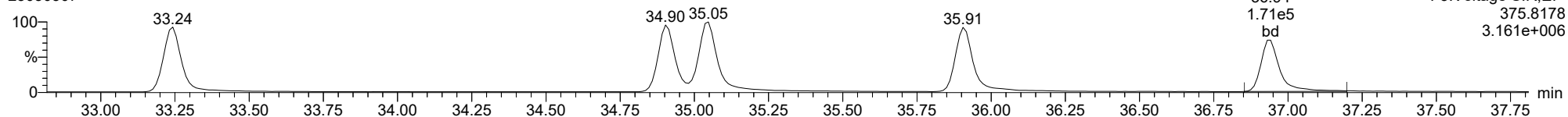
123789-HxCDF

23030307



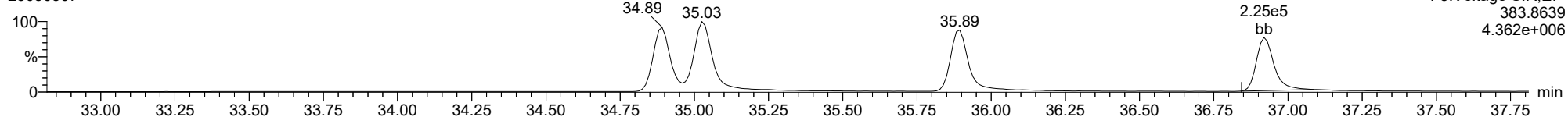
123789-HxCDF

23030307



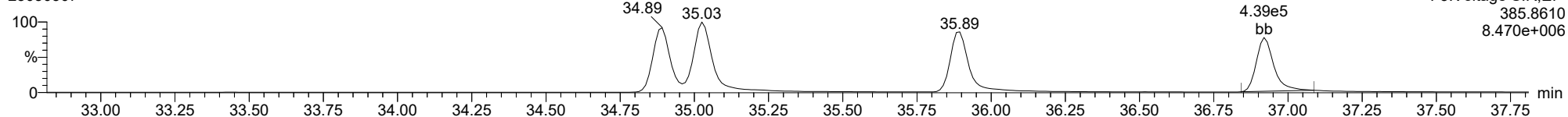
13C-123789-HxCDF

23030307



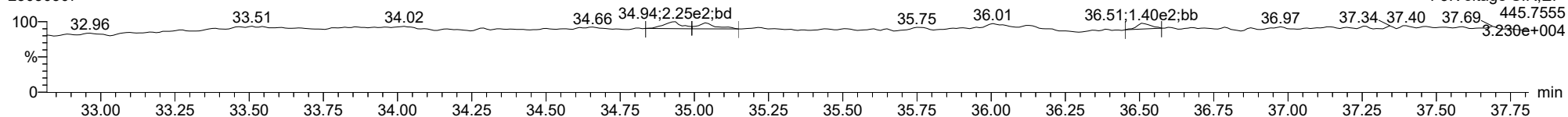
13C-123789-HxCDF

23030307



FUNCTION3 OCDPE

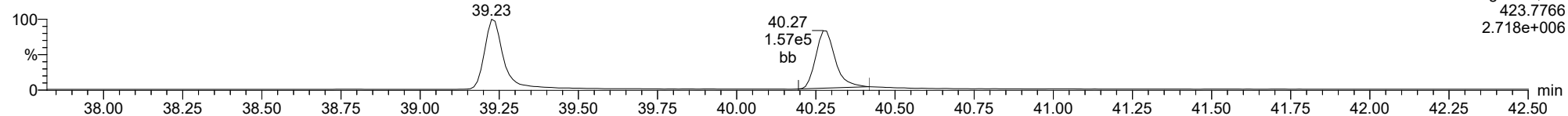
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

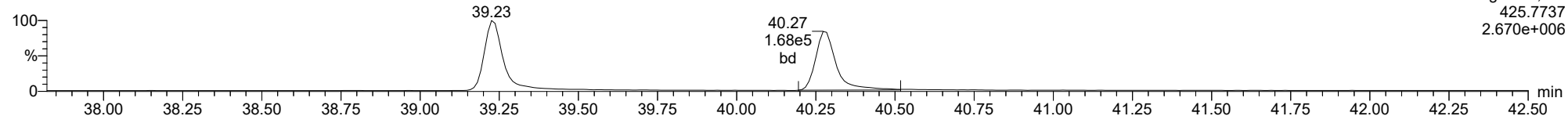
23030307



F4:Voltage SIR,EI+
423.7766
2.718e+006

1234678-HpCDD

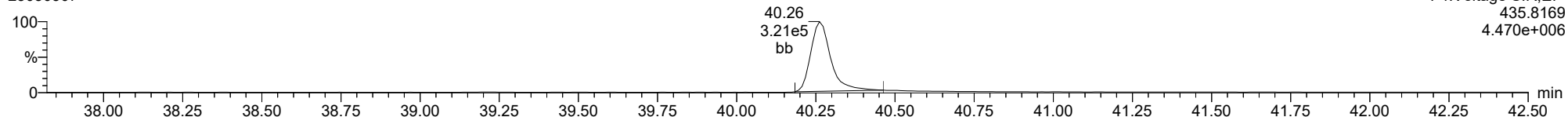
23030307



F4:Voltage SIR,EI+
425.7737
2.670e+006

13C-1234678-HpCDD

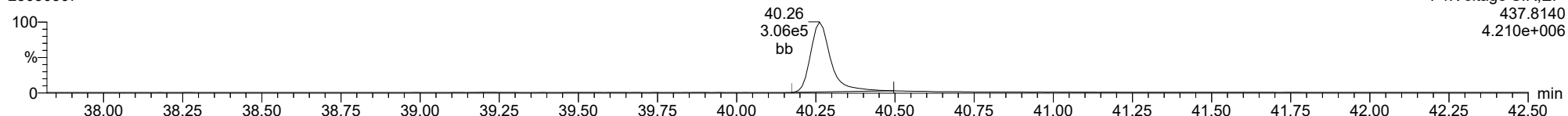
23030307



F4:Voltage SIR,EI+
435.8169
4.470e+006

13C-1234678-HpCDD

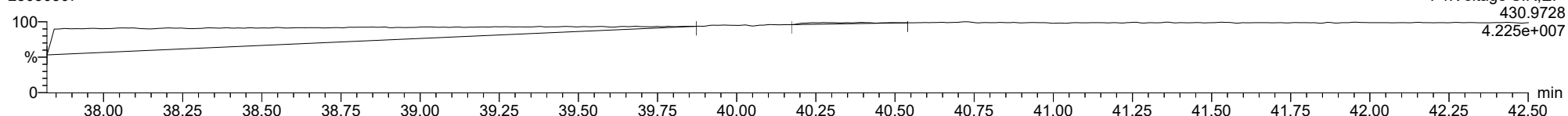
23030307



F4:Voltage SIR,EI+
437.8140
4.210e+006

FUNCTION4 PFK

23030307

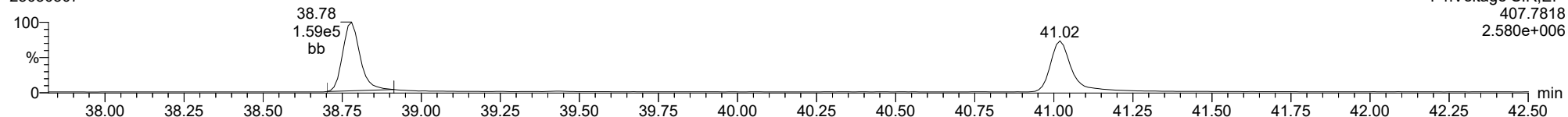


F4:Voltage SIR,EI+
430.9728
4.225e+007

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

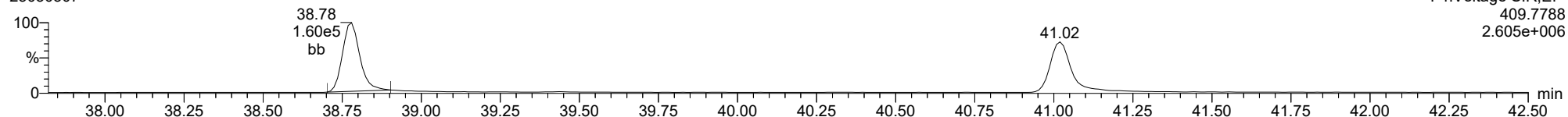
23030307



F4:Voltage SIR,EI+
407.7818
2.580e+006

1234678-HpCDF

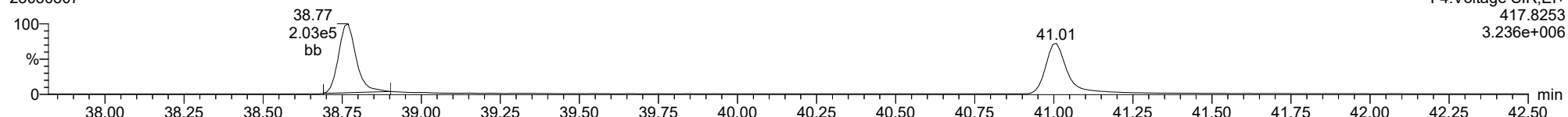
23030307



F4:Voltage SIR,EI+
409.7788
2.605e+006

13C-1234678-HpCDF

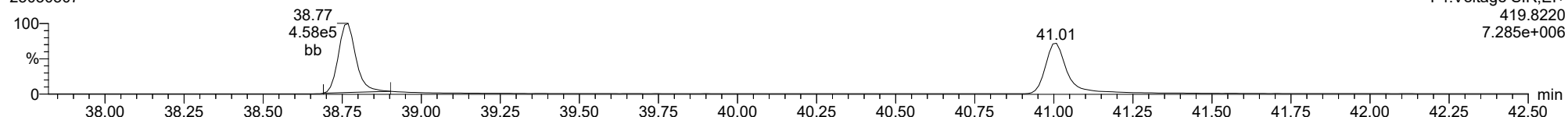
23030307



F4:Voltage SIR,EI+
417.8253
3.236e+006

13C-1234678-HpCDF

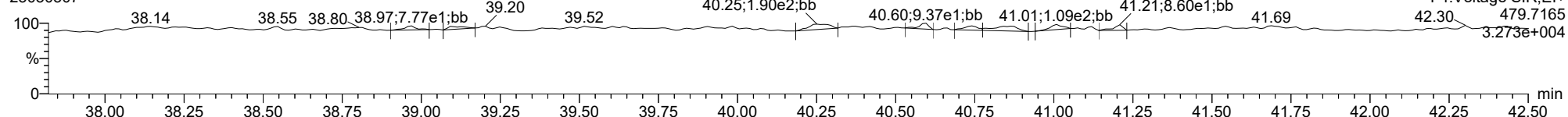
23030307



F4:Voltage SIR,EI+
419.8220
7.285e+006

FUNCTION4 NCDPE

23030307

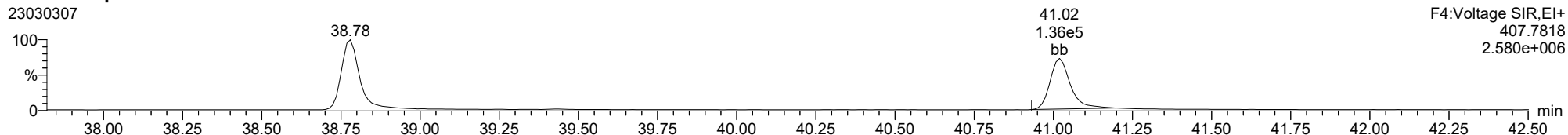


F4:Voltage SIR,EI+
479.7165
3.273e+004

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

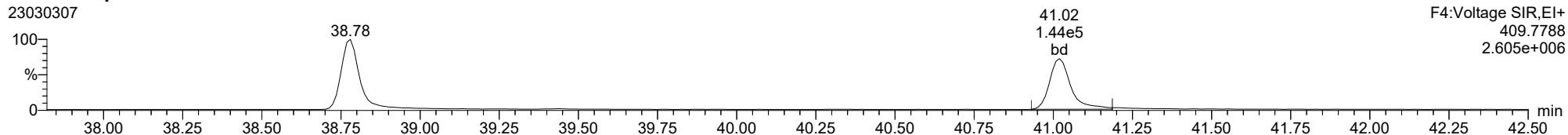
23030307



F4:Voltage SIR,El+
407.7818
2.580e+006

1234789-HpCDF

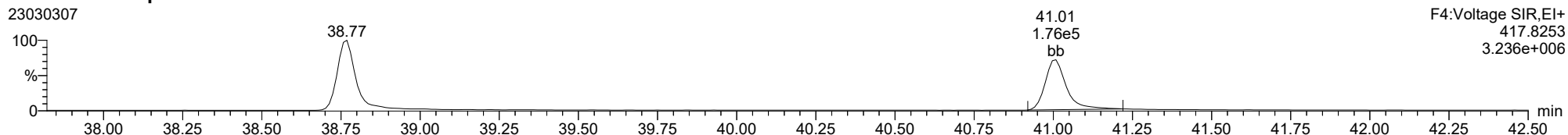
23030307



F4:Voltage SIR,El+
409.7788
2.605e+006

13C-1234789-HpCDF

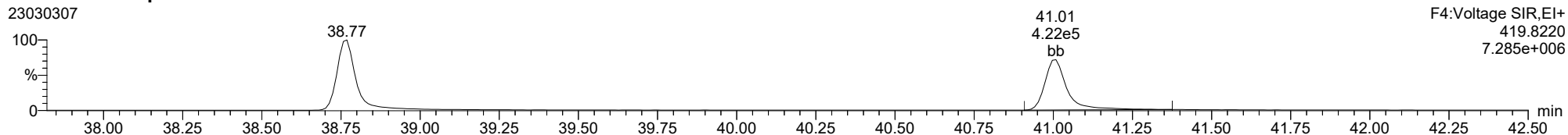
23030307



F4:Voltage SIR,El+
417.8253
3.236e+006

13C-1234789-HpCDF

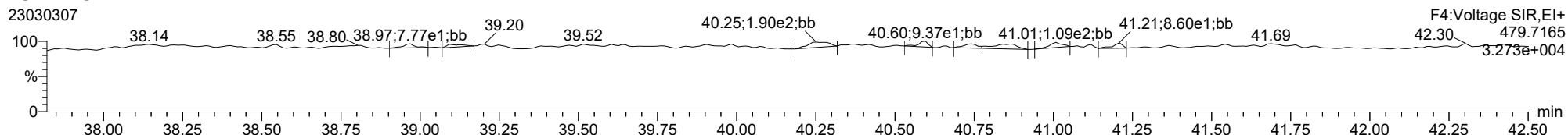
23030307



F4:Voltage SIR,El+
419.8220
7.285e+006

FUNCTION4 NCDPE

23030307

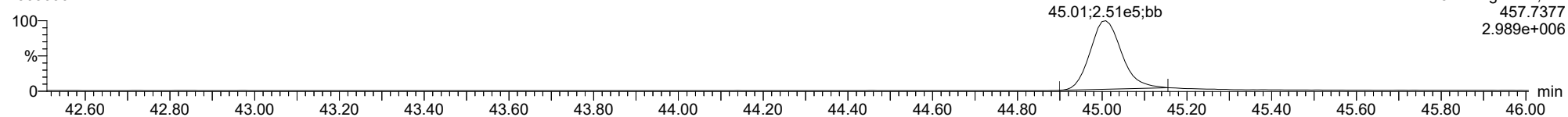


F4:Voltage SIR,El+
479.7165
3.273e+004

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

OCDD

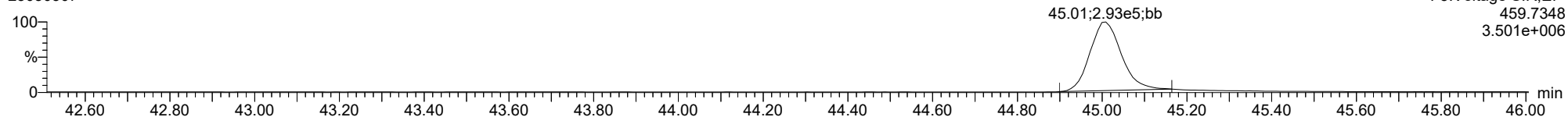
23030307



F5:Voltage SIR,EI+
457.7377
2.989e+006

OCDD

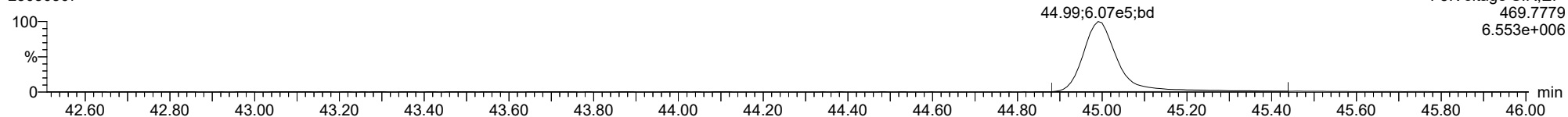
23030307



F5:Voltage SIR,EI+
459.7348
3.501e+006

13C-OCDD

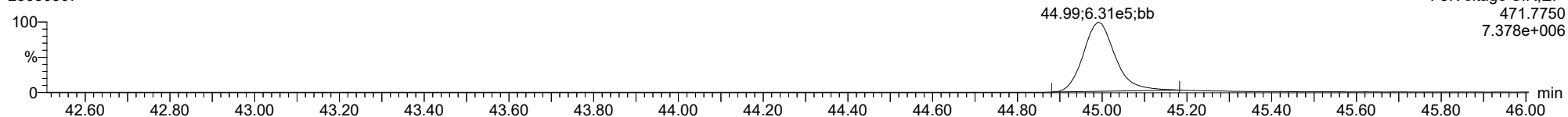
23030307



F5:Voltage SIR,EI+
469.7779
6.553e+006

13C-OCDD

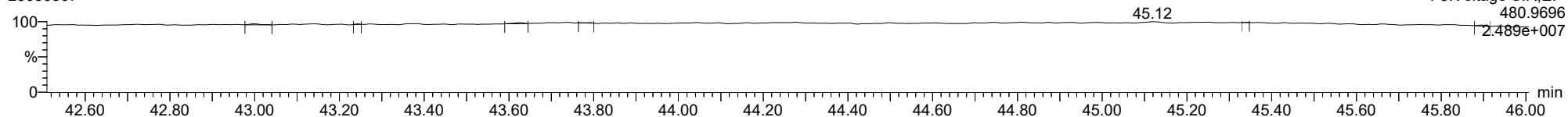
23030307



F5:Voltage SIR,EI+
471.7750
7.378e+006

FUNCTION5 PFK

23030307

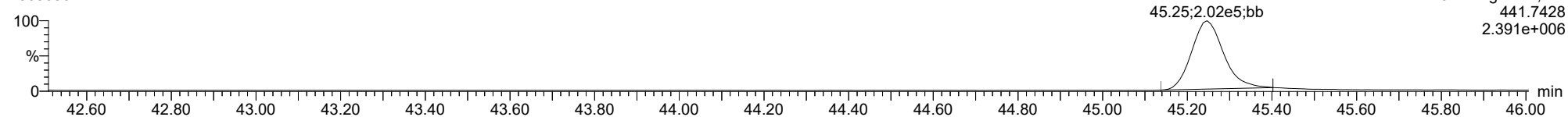


F5:Voltage SIR,EI+
480.9696
2.489e+007

ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

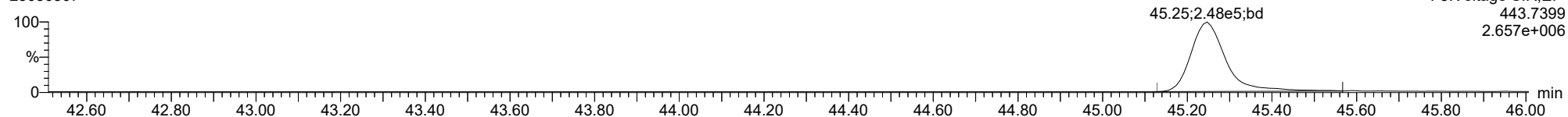
OCDF

23030307



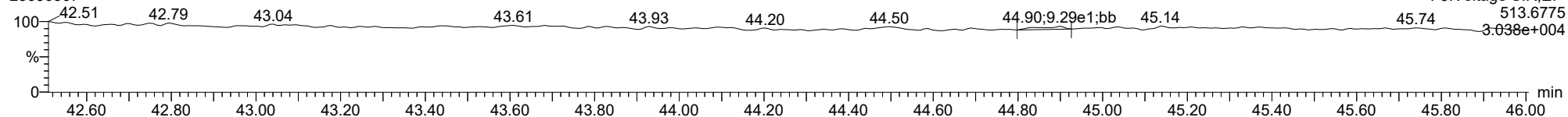
OCDF

23030307



FUNCTION5 DCDPE

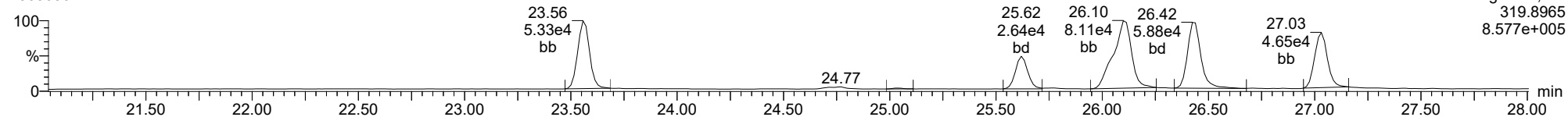
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

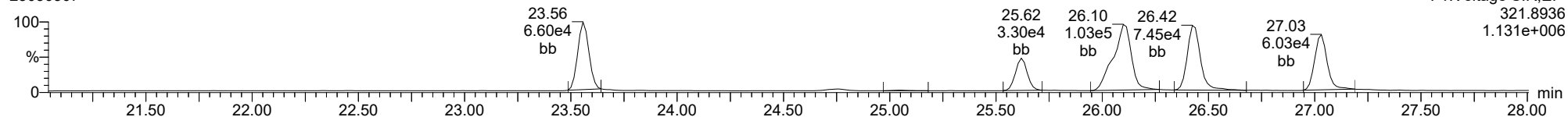
Total-tetradioxins

23030307



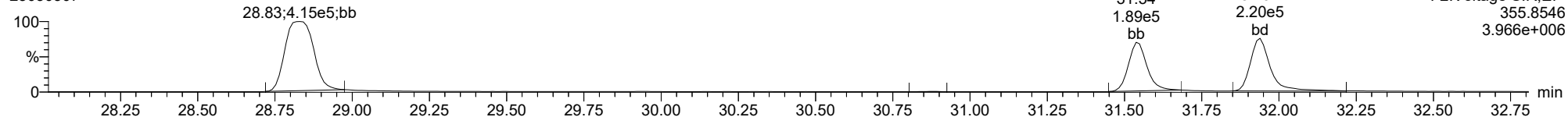
Total-tetradioxins

23030307



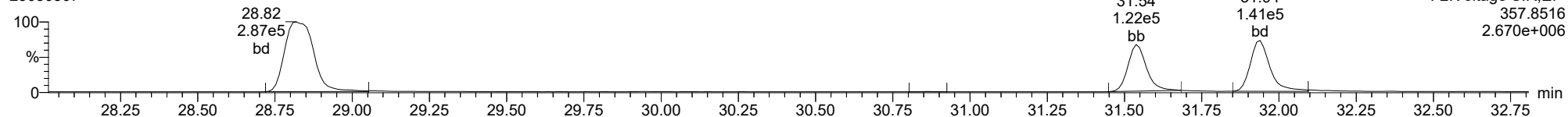
Total-pentadioxins

23030307



Total-pentadioxins

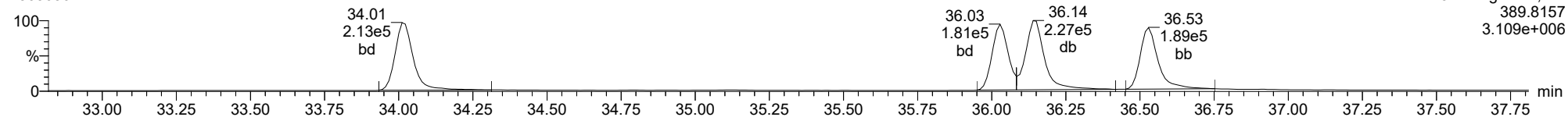
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

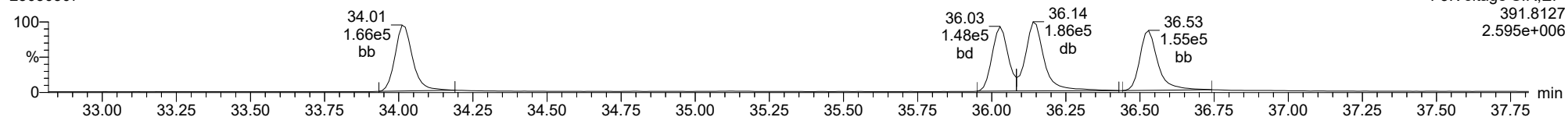
Total-hexadioxins

23030307



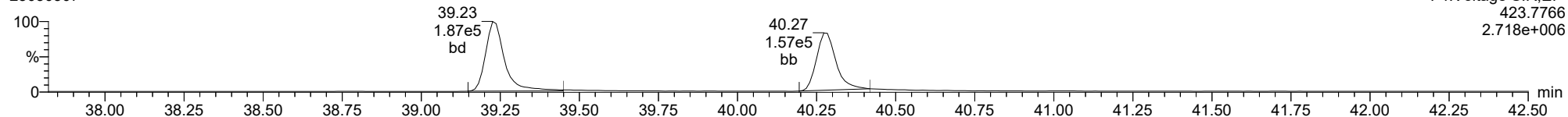
Total-hexadioxins

23030307



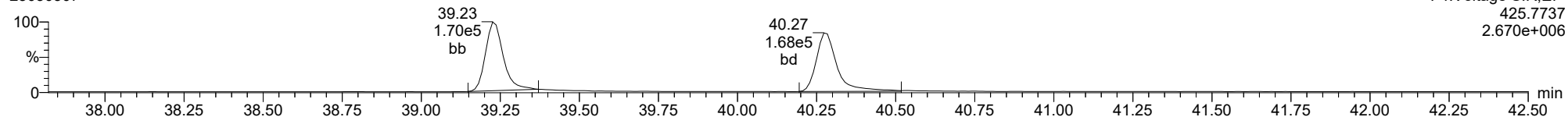
Total-heptadioxins

23030307



Total-heptadioxins

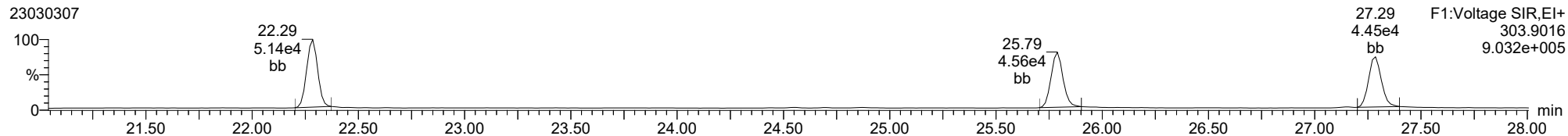
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

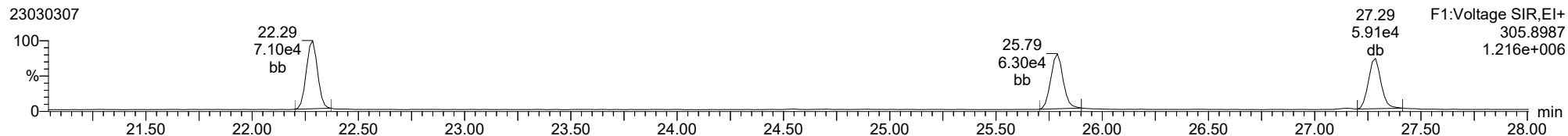
Total-tetrafurans

23030307



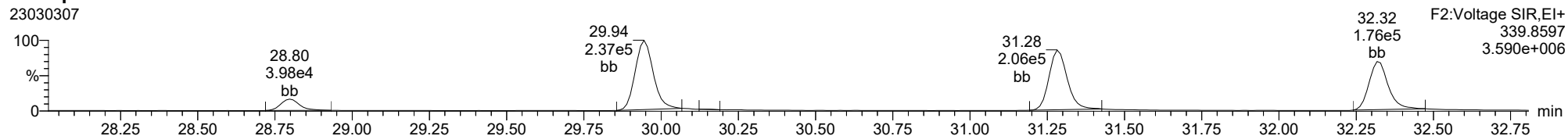
Total-tetrafurans

23030307



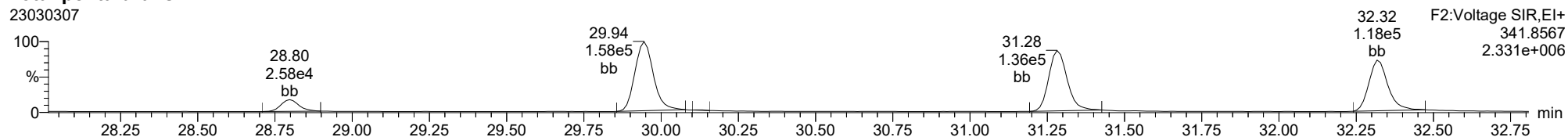
Total-pentafurans

23030307



Total-pentafurans

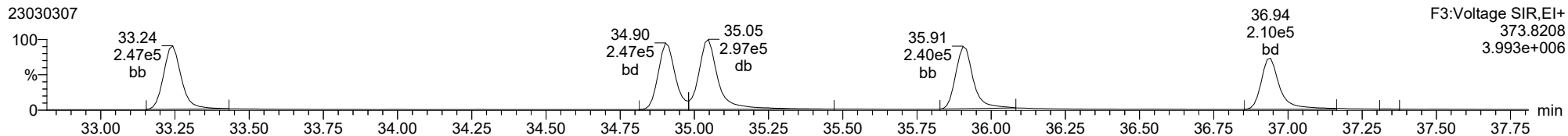
23030307



ID: CS3CW, Name: 23030307, Date: 03-Mar-2023, Time: 14:06:39, Conditions: AUTOSPEC01, User: pk

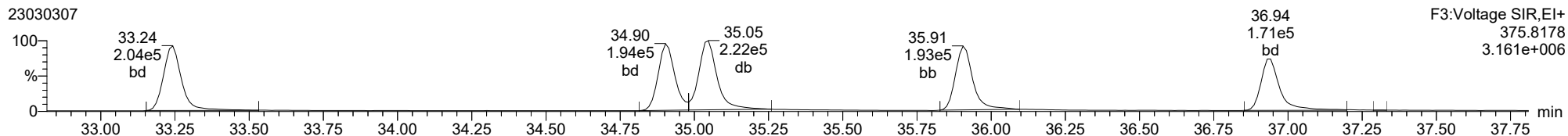
Total-hexafurans

23030307



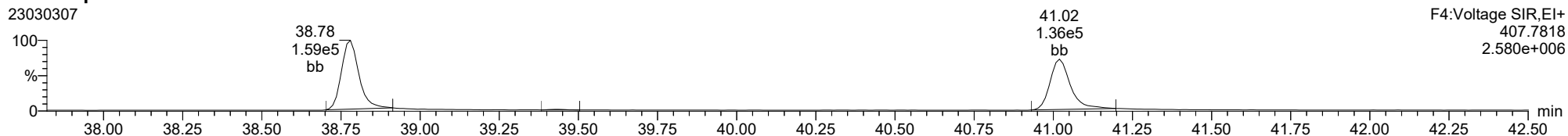
Total-hexafurans

23030307



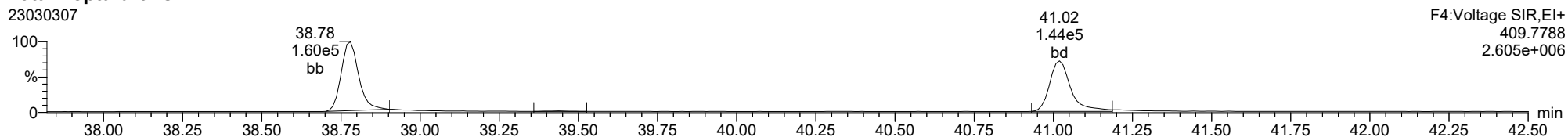
Total-heptafurans

23030307



Total-heptafurans

23030307



Dataset: T:\Autospec\Processed Data Batch\230303ICIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS4CW, **Name:** 23030308, **Date:** 03-Mar-2023, **Time:** 14:59:53, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.788	1.001	2.145e5	2.910e5	0.702	0.737	0.770	1085	2356	3.19e6	4.36e6	2939.3	1849.8	NO	bb	bb	41.038
12378-PeCDF	29.944	1.000	1.256e6	8.416e5	0.679	1.492	1.550	4273	3650	1.86e7	1.25e7	4360.5	3425.9	NO	bb	bb	202.935
23478-PeCDF	31.292	1.001	1.346e6	8.943e5	0.786	1.505	1.550	4273	3650	2.02e7	1.34e7	4738.5	3680.0	NO	bb	bb	201.175
123478-HxCDF	34.913	1.001	1.546e6	1.218e6	1.166	1.269	1.240	1919	2508	2.36e7	1.86e7	12323.4	7421.9	NO	bd	bd	197.711
234678-HxCDF	35.916	1.001	1.547e6	1.307e6	1.140	1.184	1.240	1919	2508	2.33e7	1.85e7	12125.4	7387.3	NO	bb	bd	210.207
123678-HxCDF	35.047	1.000	1.740e6	1.369e6	1.091	1.271	1.240	1919	2508	2.57e7	2.04e7	13394.0	8153.6	NO	db	db	189.797
123789-HxCDF	36.941	1.000	1.209e6	1.036e6	1.137	1.167	1.240	1919	2508	1.81e7	1.44e7	9441.6	5749.5	NO	bb	bd	200.361
1234678-HpCDF	38.779	1.000	8.720e5	8.418e5	1.003	1.036	1.050	3326	3780	1.44e7	1.42e7	4339.3	3745.4	NO	bb	bb	204.650
1234789-HpCDF	41.019	1.000	7.221e5	7.262e5	0.953	0.994	1.050	3326	3780	1.01e7	1.02e7	3041.3	2689.4	NO	bb	bb	208.465
OCDF	45.255	1.006	1.195e6	1.333e6	0.778	0.897	0.890	1809	2070	1.43e7	1.59e7	7923.8	7701.9	NO	bb	bb	419.788
2378-TCDD	26.438	1.001	2.573e5	3.218e5	1.149	0.799	0.770	1559	1107	3.81e6	4.84e6	2446.0	4371.1	NO	bb	bb	39.968
12378-PeCDD	31.549	1.001	1.294e6	8.446e5	1.022	1.532	1.550	1566	1736	1.89e7	1.24e7	12077.0	7164.9	NO	bb	bb	199.637
123478-HxCDD	36.027	1.000	1.162e6	9.482e5	0.996	1.225	1.240	1816	1276	1.93e7	1.57e7	10622.2	12327.7	NO	bd	bd	198.133
123678-HxCDD	36.150	1.001	1.363e6	1.125e6	1.001	1.212	1.240	1816	1276	1.97e7	1.61e7	10823.8	12618.8	NO	db	db	204.224
123789-HxCDD	36.528	1.011	1.168e6	9.477e5	0.907	1.232	1.240	1816	1276	1.77e7	1.44e7	9764.9	11291.0	NO	bb	bb	203.974
1234678-HpCDD	40.283	1.001	8.284e5	8.038e5	1.039	1.031	1.050	3177	2938	1.22e7	1.19e7	3841.2	4046.8	NO	bb	bb	198.376
OCDD	45.008	1.000	1.293e6	1.512e6	0.920	0.855	0.890	1475	2373	1.59e7	1.85e7	10744.0	7810.6	NO	bb	bb	394.016
13C-2378-TCDF	25.774	1.007	7.645e5	9.914e5	1.620	0.771	0.770	1843	2282	1.15e7	1.49e7	6238.3	6526.6	NO	bb	bb	101.535
13C-12378-PeCDF	29.933	1.169	9.119e5	6.098e5	1.240	1.495	1.550	3738	4574	1.28e7	8.50e6	3418.3	1857.5	NO	bd	bd	114.934
13C-23478-PeCDF	31.270	1.221	8.522e5	5.645e5	1.118	1.510	1.550	3738	4574	1.28e7	8.47e6	3423.2	1851.3	NO	bb	bb	118.746
13C-123478-HxCDF	34.891	0.956	4.043e5	7.946e5	1.168	0.509	0.510	3379	2646	6.26e6	1.23e7	1851.5	4643.3	NO	bd	bd	93.689
13C-123678-HxCDF	35.036	0.959	5.122e5	9.895e5	1.386	0.518	0.510	3379	2646	6.72e6	1.32e7	1988.7	4975.1	NO	db	dd	98.879
13C-234678-HxCDF	35.894	0.983	4.066e5	7.845e5	1.129	0.518	0.510	3379	2646	6.03e6	1.18e7	1785.1	4452.3	NO	bb	bb	96.294
13C-123789-HxCDF	36.930	1.011	3.312e5	6.542e5	0.932	0.506	0.510	3379	2646	4.85e6	9.52e6	1434.9	3598.2	NO	bb	bb	96.556
13C-1234678-HpCDF	38.768	1.062	2.524e5	5.825e5	0.895	0.433	0.440	1935	3511	4.16e6	9.49e6	2148.5	2703.4	NO	bb	bb	85.151
13C-1234789-HpCDF	41.007	1.123	2.205e5	5.084e5	0.770	0.434	0.440	1935	3511	3.02e6	6.92e6	1559.8	1971.4	NO	bb	bb	86.451
13C-1234-TCDD	25.605	0.000	4.743e5	5.931e5	1.000	0.800	0.770	2271	1813	7.33e6	9.12e6	3228.4	5028.5	NO	bb	bb	100.000
13C-2378-TCDD	26.410	1.031	5.640e5	6.974e5	1.152	0.809	0.770	2271	1813	8.09e6	1.01e7	3563.4	5571.0	NO	bb	bb	102.553
13C-12378-PeCDD	31.526	1.231	6.480e5	4.003e5	0.829	1.619	1.550	1212	1529	9.47e6	5.85e6	7814.9	3827.1	NO	bb	bb	118.505
13C-123478-HxCDD	36.016	0.986	6.052e5	4.646e5	0.995	1.303	1.240	1807	1475	9.78e6	7.54e6	5412.5	5108.2	NO	bd	bd	98.154
13C-123678-HxCDD	36.127	0.989	6.753e5	5.418e5	1.157	1.246	1.240	1807	1475	1.01e7	8.01e6	5594.1	5426.8	NO	db	db	96.059
13C-1234678-HpCDD	40.261	1.102	3.968e5	3.950e5	0.840	1.005	1.050	2357	2248	5.68e6	5.37e6	2408.3	2387.8	NO	bb	bb	86.051
13C-OCDD	44.999	1.232	7.332e5	8.149e5	0.767	0.900	0.890	1459	1173	8.67e6	9.61e6	5943.8	8191.6	NO	bb	bb	184.151
13C-123789-HxCDD	36.518	0.000	6.173e5	4.781e5	1.000	1.291	1.240	1807	1475	9.34e6	7.24e6	5171.1	4908.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.438	1.033	5.280e5		1.288			2576		7.74e6		3003.1			bb		38.410

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1085	2356								
1289-TCDF					0.678		0.770	1085	2356								
13468-PECDF					1.246		1.550	728	1112								
12389-PECDF					0.496		1.550	4273	3650								
123468-HXCDF					1.169		1.240	1919	2508								
1368-TCDD					1.015		0.770	1559	1107								
1289-TCDD					0.909		0.770	1559	1107								
12479-PECDD					2.301		1.550	1566	1736								
12389-PECDD					1.184		1.550	1566	1736								
124679-HXCDD					1.115		1.240	1816	1276								
1234679-HPCDD					1.137		1.050	3177	2938								
Total-tetrafurans			2.178e5		0.727			1085		3.24e6							41.692
Total-penta1			0.000e0					728		0.00e0							
Total-pentafurans			2.604e6		0.654			4273		3.89e7							404.382
Total-hexafurans			6.043e6		1.141			1919		9.07e7							798.266
Total-heptafurans			1.594e6		0.978			3326		2.45e7							413.115
Total-Furans			1.165e7		0.922			1085		1.72e8							2077.243
Total-tetradoxins			2.634e5		1.024			1559		3.88e6							41.026
Total-pentadoxins			1.295e6		1.502			1566		1.89e7							199.743
Total-hexadoxins			3.693e6		1.005			1816		5.67e7							606.331
Total-heptadoxins			8.286e5		1.088			3177		1.22e7							198.425
Total-Dioxins			7.373e6		1.130			1559		1.08e8							1439.540
Total-TEQ			1.903e7					1559		2.79e8							3516.783
FUNCTION1 PFK			2.654e6					566854		2.19e6							
FUNCTION2 PFK			2.398e5					242860		6.75e6							0.000
FUNCTION3 PFK			5.441e7					394639		2.11e7							0.000
FUNCTION4 PFK			0.000e0					306708		0.00e0							
FUNCTION5 PFK			3.395e4					230570		1.65e6							
FUNCTION1 HXCD...			4.934e2					625		6.74e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			1.574e3					915		2.35e4							0.000
FUNCTION3 OCDPE			8.696e2					844		1.47e4							0.000
FUNCTION4 NCDPE			3.767e2					925		5.85e3							0.000
FUNCTION5 DCDPE			0.000e0					629		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303\CIH.cdb 06 Mar 2023 10:57:27

ID: CS4CW, **Name:** 23030308, **Date:** 03-Mar-2023, **Time:** 14:59:53, **Conditions:** AUTOSPEC01, **User:** pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
2	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
3	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
2	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
3	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
4	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
5	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
6	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
2	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352
4	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
5	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
6	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175
7	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
8	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
9	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
10	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
11	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
12	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169
13	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
14	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465
15	OCDF	45.26	1.195e6	1.333e6	0.778	0.90	0.89	7923.8	YES	NO	bb	bb	419.788

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
2	Total-tetradoxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
2	Total-pentadoxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
2	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
3	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
2	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
2	Total-tetradioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059
3	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
4	Total-pentadioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106
5	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
6	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
7	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133
8	Total-heptadioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
9	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376
10	OCDD	45.01	1.293e6	1.512e6	0.920	0.86	0.89	10744.0	YES	NO	bb	bb	394.016

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.79	2.145e5	2.910e5	0.702	0.74	0.77	2939.3	YES	NO	bb	bb	41.038
2	Total-tetrafurans	24.88	1.531e3	2.327e3	0.727	0.66	0.77	20.3	YES	NO	bb	bb	0.302
3	Total-tetrafurans	24.56	1.778e3	2.714e3	0.727	0.66	0.77	29.5	YES	NO	bb	bb	0.352
4	Total-pentafurans	31.01	1.644e3	9.764e2	0.654	1.68	1.55	5.6	YES	NO	db	bd	0.273
5	12378-PeCDF	29.94	1.256e6	8.416e5	0.679	1.49	1.55	4360.5	YES	NO	bb	bb	202.935
6	23478-PeCDF	31.29	1.346e6	8.943e5	0.786	1.51	1.55	4738.5	YES	NO	bb	bb	201.175
7	123789-HxCDF	36.94	1.209e6	1.036e6	1.137	1.17	1.24	9441.6	YES	NO	bb	bd	200.361
8	234678-HxCDF	35.92	1.547e6	1.307e6	1.140	1.18	1.24	12125.4	YES	NO	bb	bd	210.207
9	Total-hexafurans	35.77	1.562e2	1.389e2	1.141	1.12	1.24	3.4	NO	NO	bb	bb	0.021
10	123678-HxCDF	35.05	1.740e6	1.369e6	1.091	1.27	1.24	13394.0	YES	NO	db	db	189.797
11	123478-HxCDF	34.91	1.546e6	1.218e6	1.166	1.27	1.24	12323.4	YES	NO	bd	bd	197.711
12	Total-hexafurans	34.76	1.255e3	1.100e3	1.141	1.14	1.24	11.9	YES	NO	bb	bb	0.169
13	1234678-HpCDF	38.78	8.720e5	8.418e5	1.003	1.04	1.05	4339.3	YES	NO	bb	bb	204.650
14	1234789-HpCDF	41.02	7.221e5	7.262e5	0.953	0.99	1.05	3041.3	YES	NO	bb	bb	208.465
15	OCDF	45.26	1.195e6	1.333e6	0.778	0.90	0.89	7923.8	YES	NO	bb	bb	419.788
16	2378-TCDD	26.44	2.573e5	3.218e5	1.149	0.80	0.77	2446.0	YES	NO	bb	bb	39.968
17	Total-tetradiioxins	26.06	6.115e3	7.563e3	1.024	0.81	0.77	45.2	YES	NO	bb	bb	1.059
18	12378-PeCDD	31.55	1.294e6	8.446e5	1.022	1.53	1.55	12077.0	YES	NO	bb	bb	199.637
19	Total-pentadiioxins	29.94	9.896e2	6.778e2	1.502	1.46	1.55	7.8	YES	NO	bb	bb	0.106
20	123789-HxCDD	36.53	1.168e6	9.477e5	0.907	1.23	1.24	9764.9	YES	NO	bb	bb	203.974
21	123678-HxCDD	36.15	1.363e6	1.125e6	1.001	1.21	1.24	10823.8	YES	NO	db	db	204.224
22	123478-HxCDD	36.03	1.162e6	9.482e5	0.996	1.23	1.24	10622.2	YES	NO	bd	bd	198.133
23	Total-heptadiioxins	40.57	2.148e2	2.026e2	1.088	1.06	1.05	2.3	NO	NO	bb	bb	0.048
24	1234678-HpCDD	40.28	8.284e5	8.038e5	1.039	1.03	1.05	3841.2	YES	NO	bb	bb	198.376
25	OCDD	45.01	1.293e6	1.512e6	0.920	0.86	0.89	10744.0	YES	NO	bb	bb	394.016

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	26.75	1.219e6					0.4	NO		bb		
2	FUNCTION1 PFK	21.17	1.435e6					3.4	YES		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.26	4.048e3					0.9	NO		bb		0.000
2	FUNCTION2 PFK	28.22	4.511e3					0.9	NO		bb		0.000
3	FUNCTION2 PFK	28.09	1.180e4					1.6	NO		bb		0.000
4	FUNCTION2 PFK	32.40	7.400e3					1.4	NO		bd		0.000
5	FUNCTION2 PFK	31.78	3.780e3					0.8	NO		db		0.000
6	FUNCTION2 PFK	31.75	1.880e3					0.6	NO		bd		0.000
7	FUNCTION2 PFK	31.70	9.648e3					1.7	NO		db		0.000
8	FUNCTION2 PFK	31.63	2.054e4					2.2	NO		bd		0.000
9	FUNCTION2 PFK	31.52	5.247e4					2.4	NO		db		0.000
10	FUNCTION2 PFK	31.37	1.454e4					1.4	NO		bd		0.000
11	FUNCTION2 PFK	31.10	7.031e3					1.1	NO		bb		0.000
12	FUNCTION2 PFK	30.32	1.036e4					1.3	NO		bb		0.000
13	FUNCTION2 PFK	30.01	2.058e3					0.8	NO		bb		0.000
14	FUNCTION2 PFK	29.82	6.711e3					1.2	NO		db		0.000
15	FUNCTION2 PFK	29.78	1.288e4					1.7	NO		bd		0.000
16	FUNCTION2 PFK	29.02	5.997e3					0.8	NO		bb		0.000
17	FUNCTION2 PFK	28.82	2.827e4					1.7	NO		bb		0.000
18	FUNCTION2 PFK	28.47	4.519e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	28.42	5.823e3					1.1	NO		bb		0.000
20	FUNCTION2 PFK	32.71	1.137e4					1.6	NO		bb		0.000
21	FUNCTION2 PFK	32.44	1.418e4					1.8	NO		db		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	36.64	7.406e6					25.3	YES		db		0.000
2	FUNCTION3 PFK	36.25	4.701e7					28.1	YES		bd		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.68	7.516e3					1.5	NO		bb		
2	FUNCTION5 PFK	45.50	5.255e3					1.2	NO		bb		
3	FUNCTION5 PFK	43.66	5.108e3					1.2	NO		bb		
4	FUNCTION5 PFK	43.06	3.867e3					1.1	NO		bb		
5	FUNCTION5 PFK	42.63	1.220e4					2.1	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	21.64	8.072e1					1.8	NO		bb		0.000
2	FUNCTION1 HXCD...	21.44	1.165e2					2.1	NO		db		0.000
3	FUNCTION1 HXCD...	21.34	7.544e1					2.3	NO		bd		0.000
4	FUNCTION1 HXCD...	26.42	1.399e2					2.7	NO		bb		0.000
5	FUNCTION1 HXCD...	21.99	8.086e1					2.0	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.18	1.574e3					25.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.15	3.227e2					5.7	YES		db		0.000
2	FUNCTION3 OCDPE	36.03	2.331e2					4.4	YES		bd		0.000
3	FUNCTION3 OCDPE	35.36	1.234e2					4.0	YES		bb		0.000
4	FUNCTION3 OCDPE	35.06	1.904e2					3.3	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.00	2.677e2					3.2	YES		bb		0.000
2	FUNCTION4 NCDPE	38.18	1.090e2					3.1	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:34:51 Pacific Standard Time

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

ETHERS6

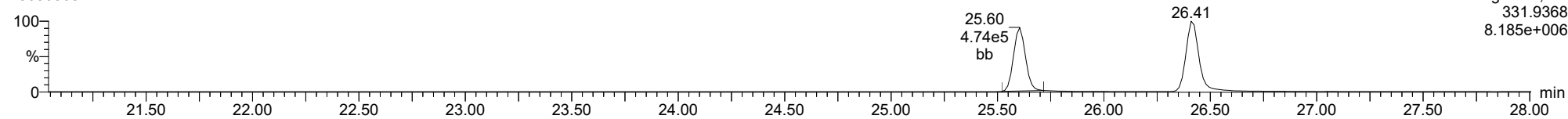
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

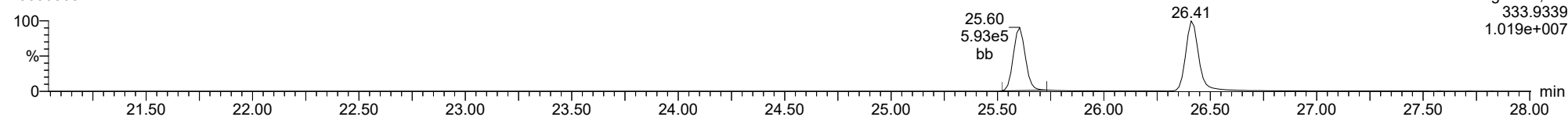
13C-1234-TCDD

23030308



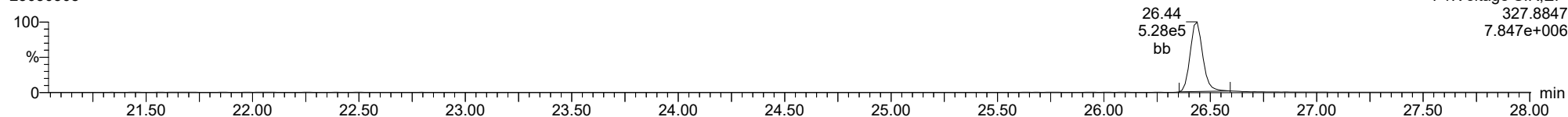
13C-1234-TCDD

23030308



37CL-2378-TCDD

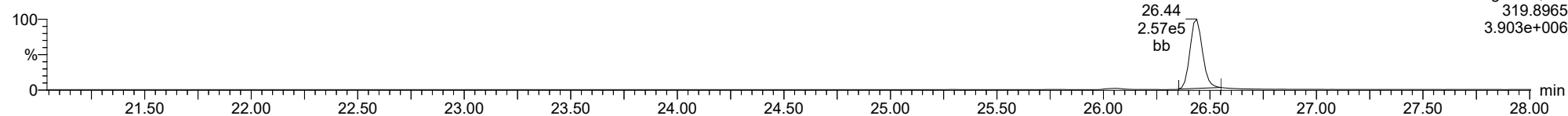
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

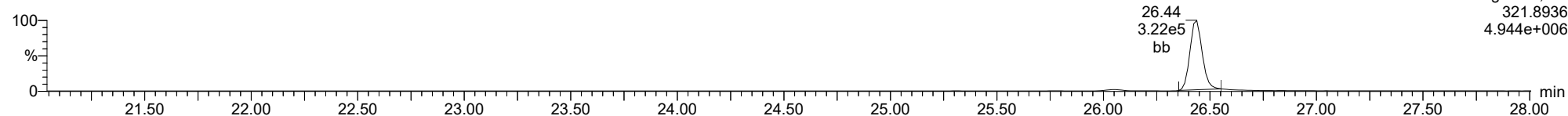
2378-TCDD

23030308



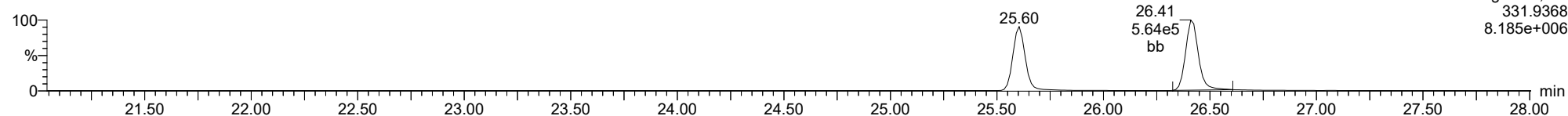
2378-TCDD

23030308



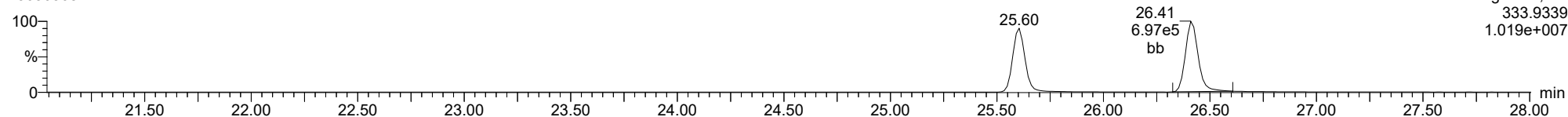
13C-2378-TCDD

23030308



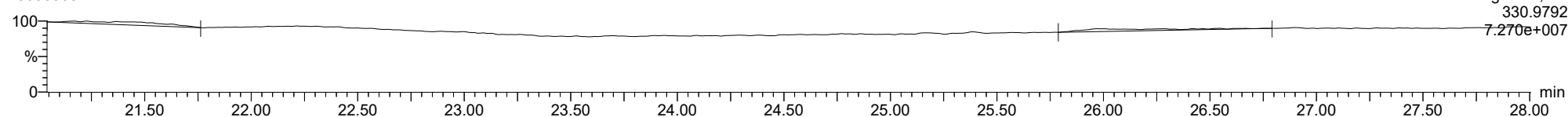
13C-2378-TCDD

23030308



FUNCTION1 PFK

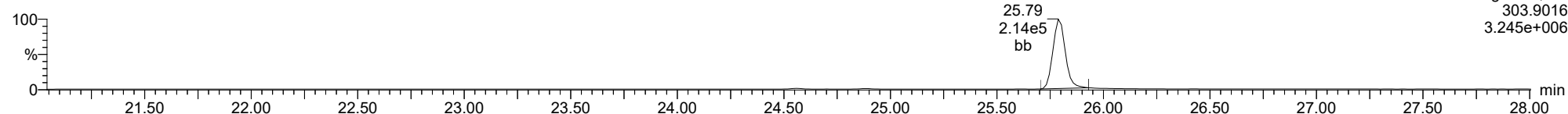
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

2378-TCDF

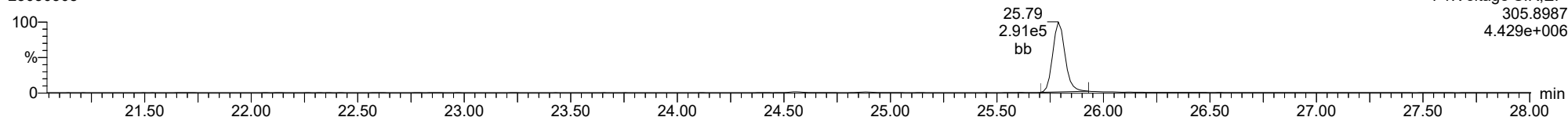
23030308



F1:Voltage SIR,EI+
303.9016
3.245e+006

2378-TCDF

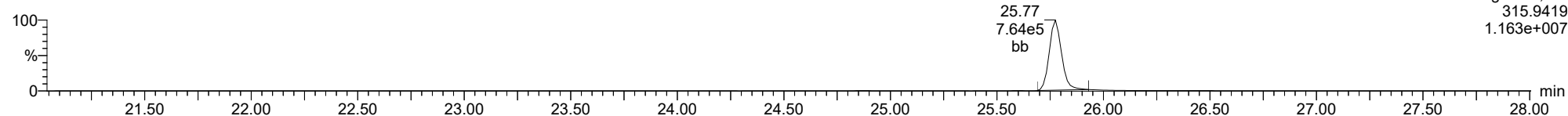
23030308



F1:Voltage SIR,EI+
305.8987
4.429e+006

13C-2378-TCDF

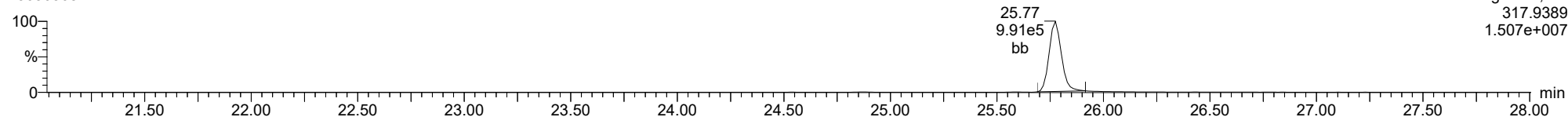
23030308



F1:Voltage SIR,EI+
315.9419
1.163e+007

13C-2378-TCDF

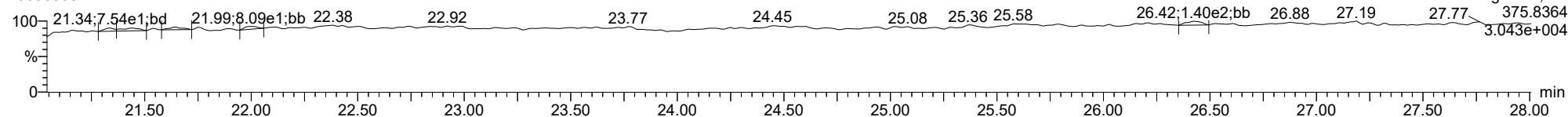
23030308



F1:Voltage SIR,EI+
317.9389
1.507e+007

FUNCTION1 HXCDFE

23030308

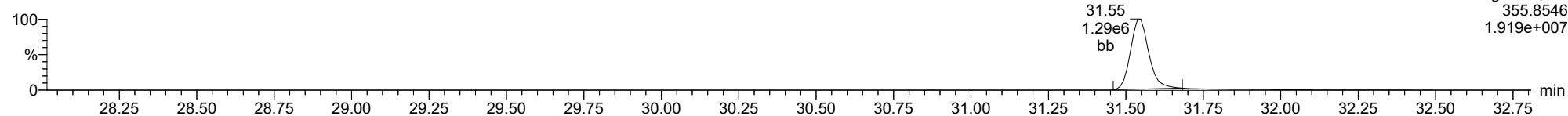


F1:Voltage SIR,EI+
375.8364
3.043e+004

ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

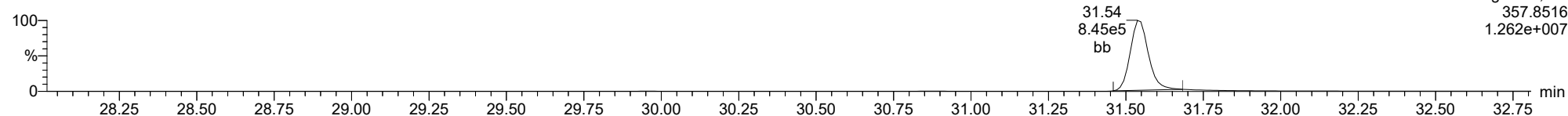
12378-PeCDD

23030308



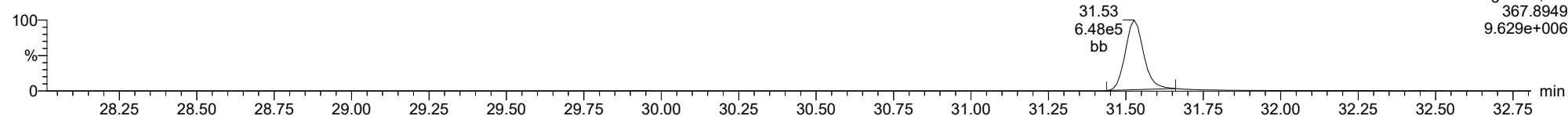
12378-PeCDD

23030308



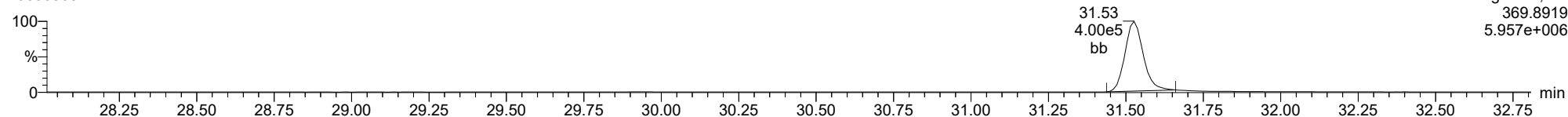
13C-12378-PeCDD

23030308



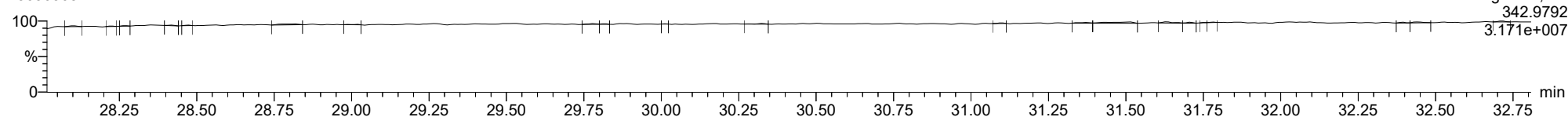
13C-12378-PeCDD

23030308



FUNCTION2 PFK

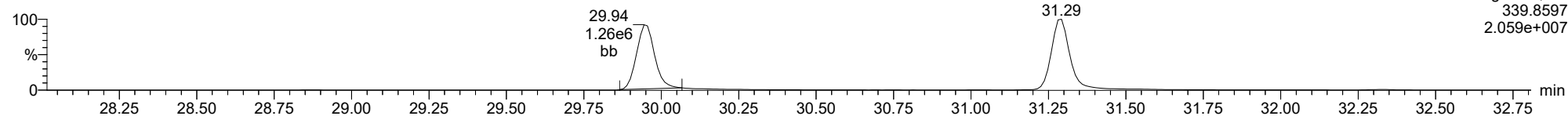
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

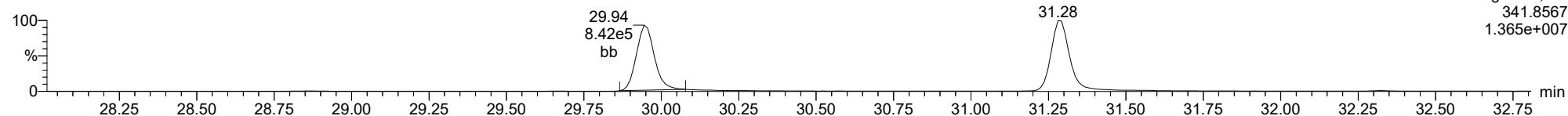
12378-PeCDF

23030308



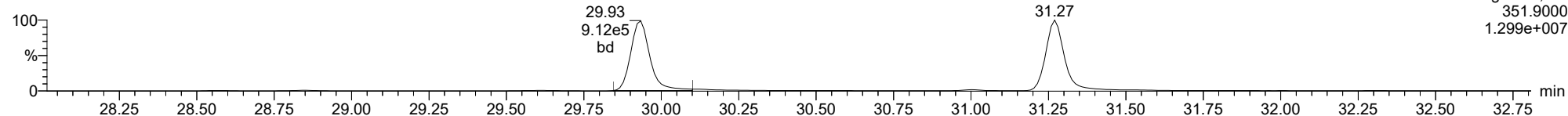
12378-PeCDF

23030308



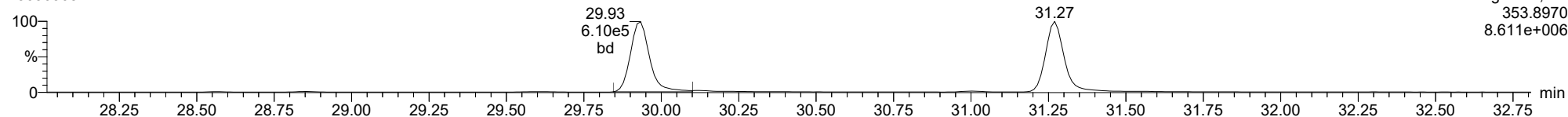
13C-12378-PeCDF

23030308



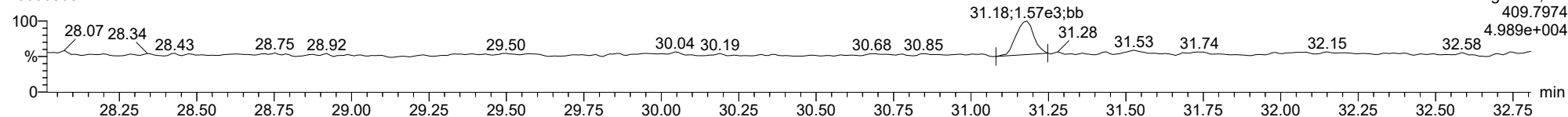
13C-12378-PeCDF

23030308



FUNCTION2 HPCDPE

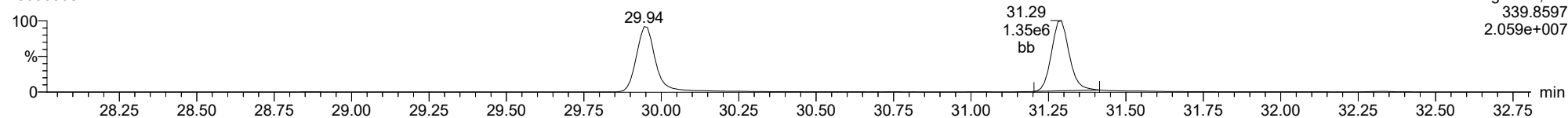
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

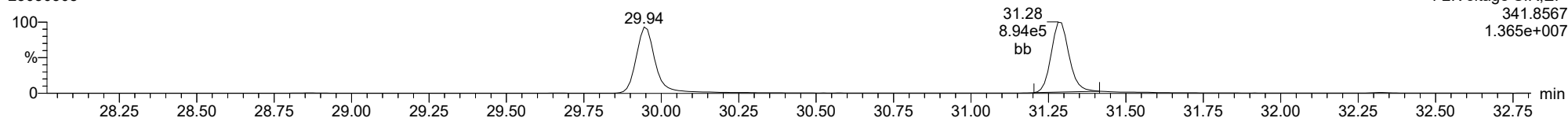
23478-PeCDF

23030308



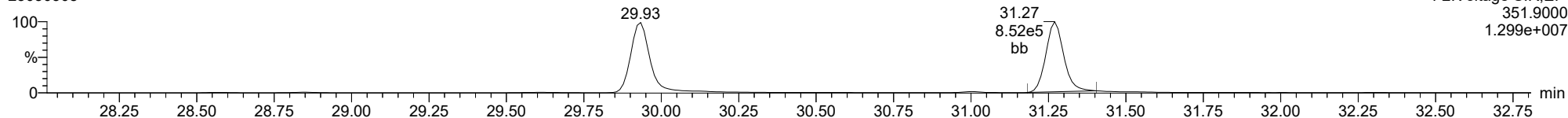
23478-PeCDF

23030308



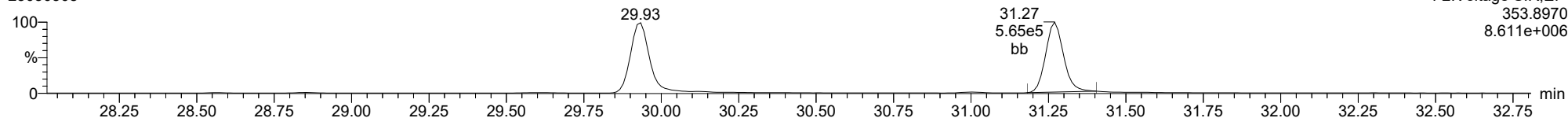
13C-23478-PeCDF

23030308



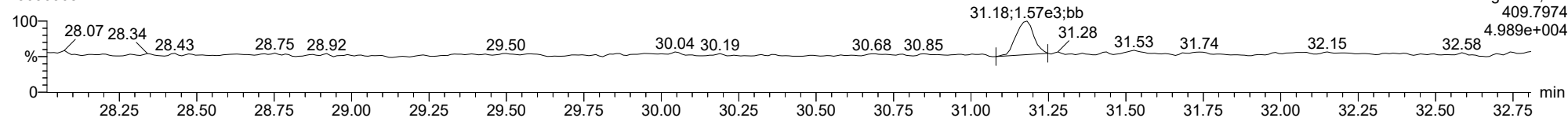
13C-23478-PeCDF

23030308



FUNCTION2 HPCDPE

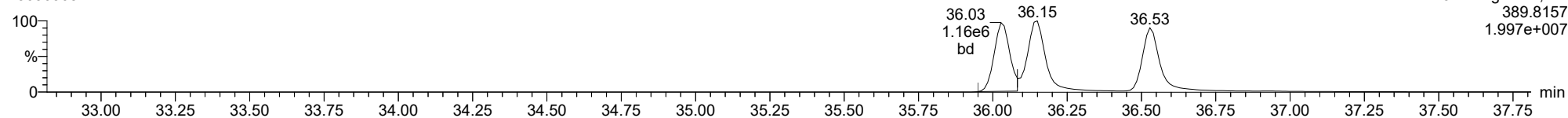
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

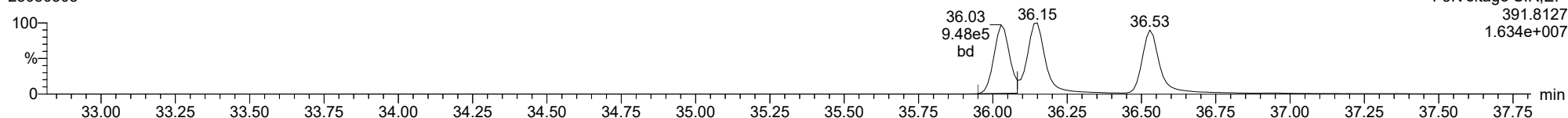
123478-HxCDD

23030308



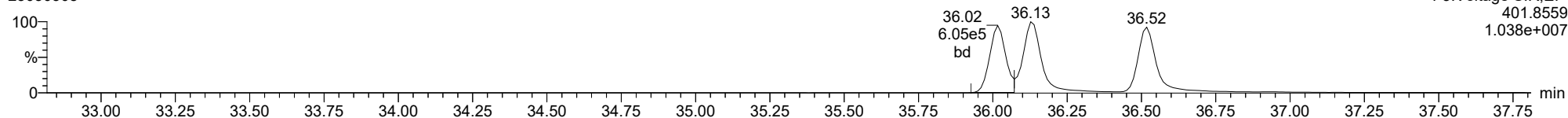
123478-HxCDD

23030308



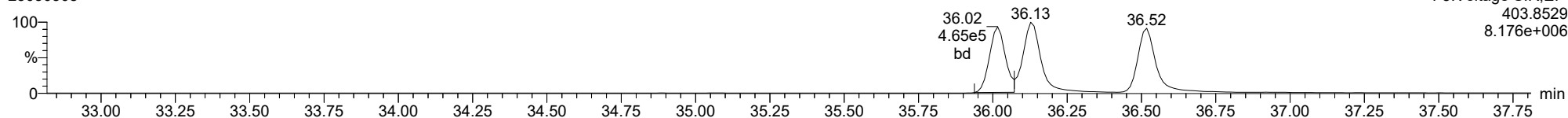
13C-123478-HxCDD

23030308



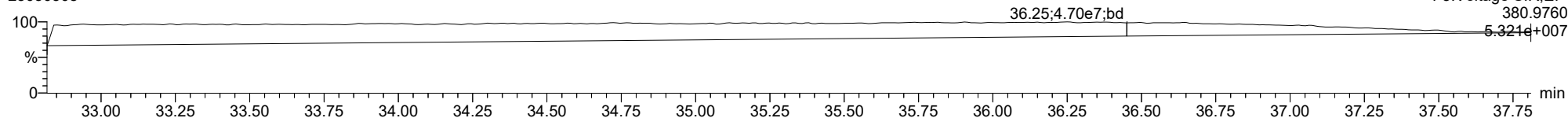
13C-123478-HxCDD

23030308



FUNCTION3 PFK

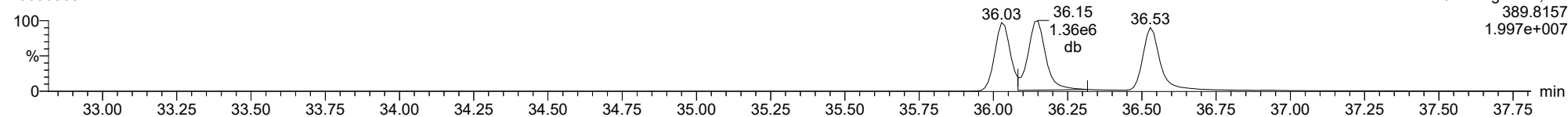
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

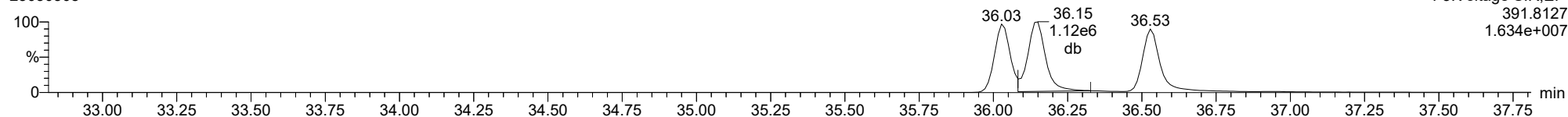
123678-HxCDD

23030308



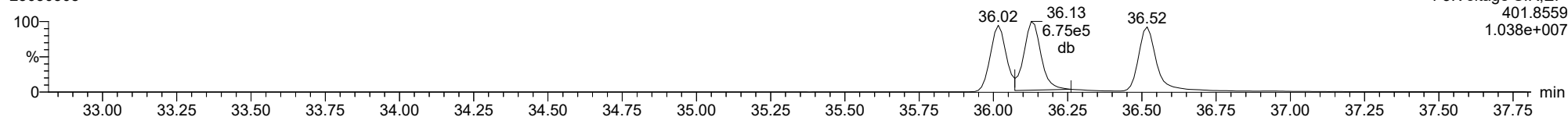
123678-HxCDD

23030308



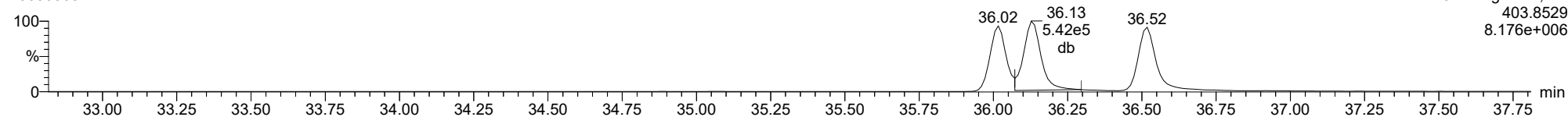
13C-123678-HxCDD

23030308



13C-123678-HxCDD

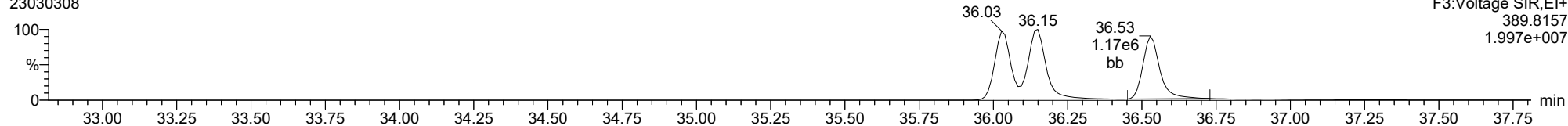
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

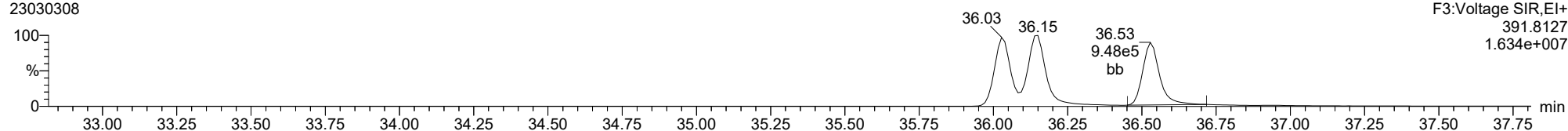
123789-HxCDD

23030308



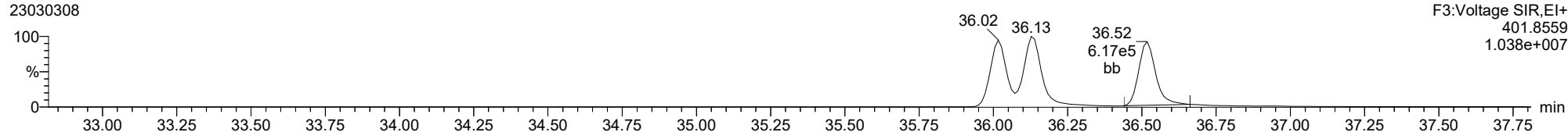
123789-HxCDD

23030308



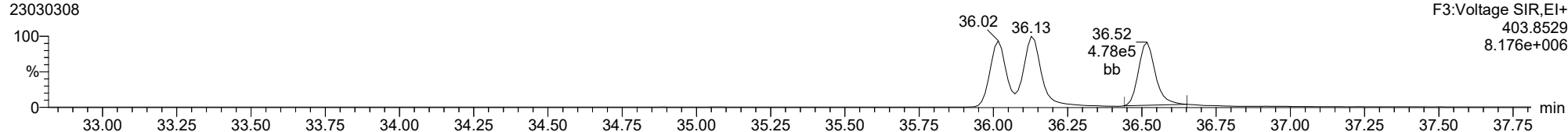
13C-123789-HxCDD

23030308



13C-123789-HxCDD

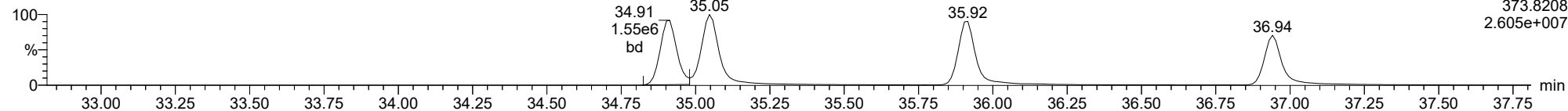
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

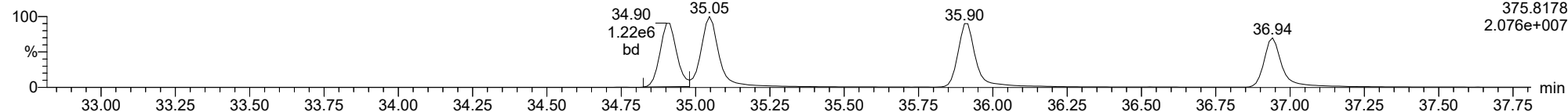
123478-HxCDF

23030308



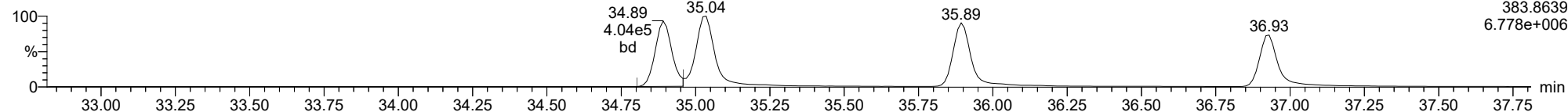
123478-HxCDF

23030308



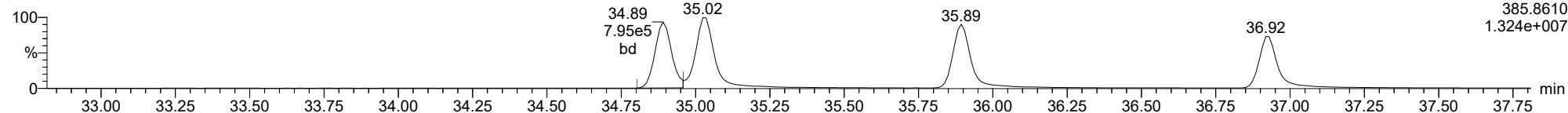
13C-123478-HxCDF

23030308



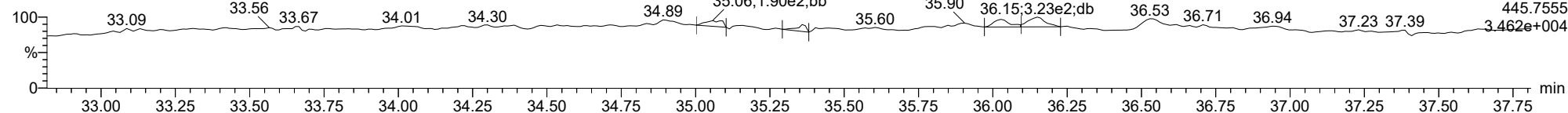
13C-123478-HxCDF

23030308



FUNCTION3 OCDPE

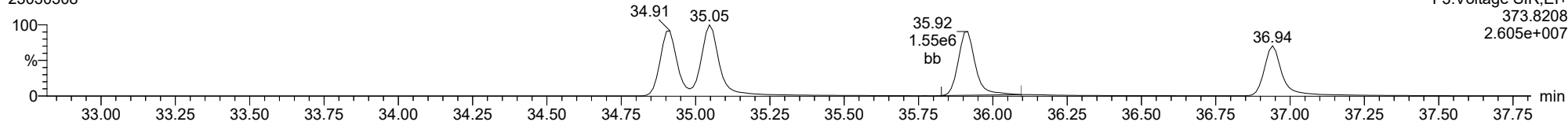
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

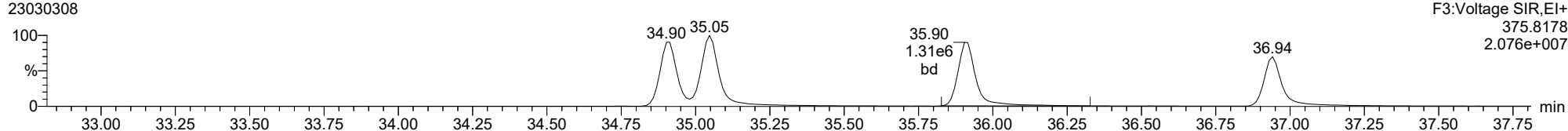
234678-HxCDF

23030308



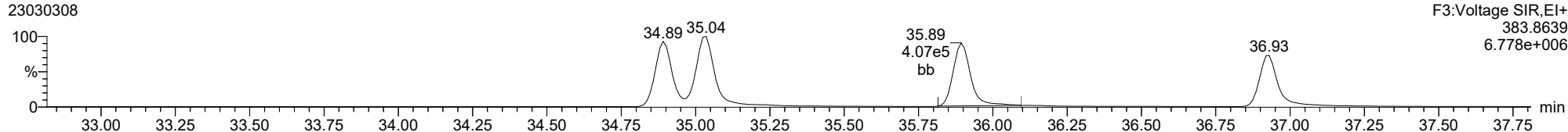
234678-HxCDF

23030308



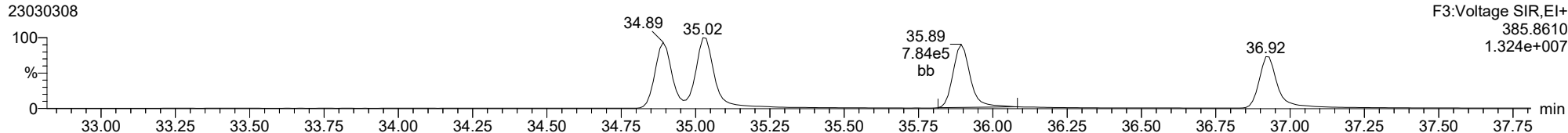
13C-234678-HxCDF

23030308



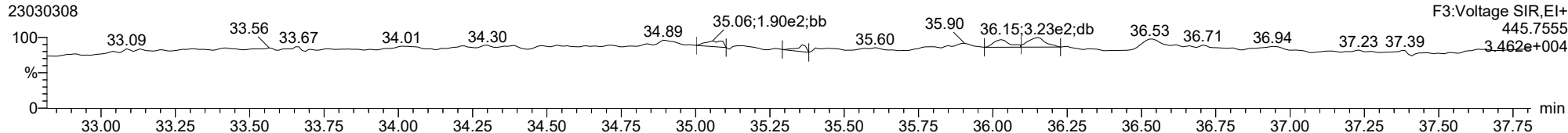
13C-234678-HxCDF

23030308



FUNCTION3 OCDPE

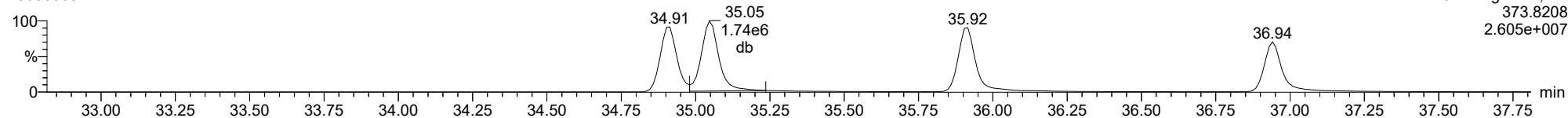
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

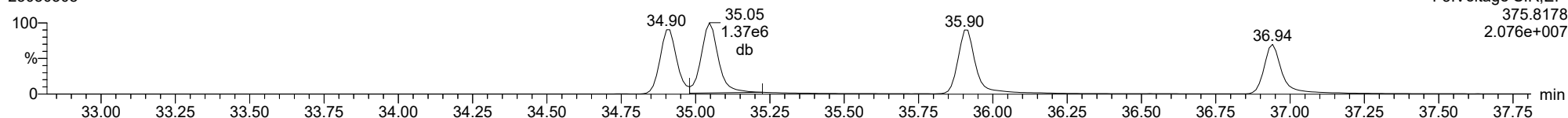
123678-HxCDF

23030308



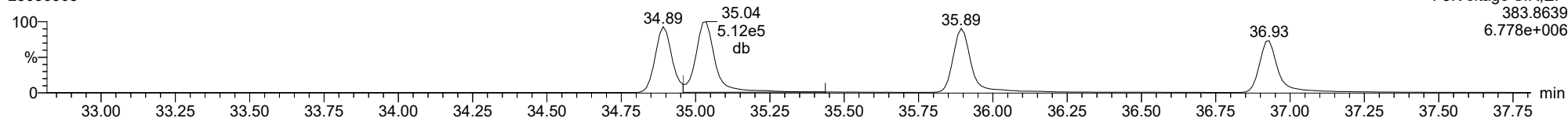
123678-HxCDF

23030308



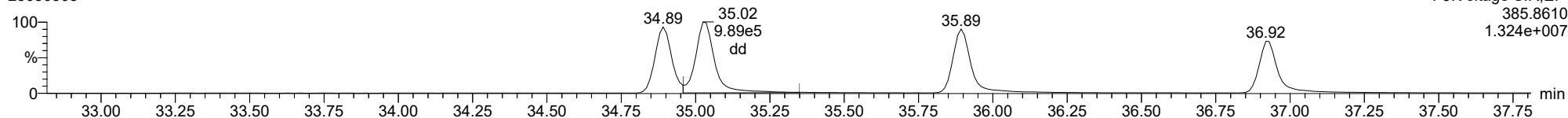
13C-123678-HxCDF

23030308



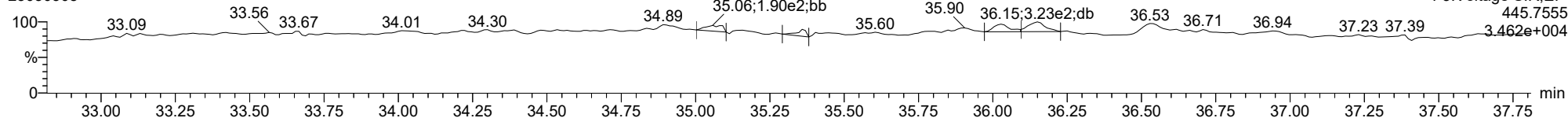
13C-123678-HxCDF

23030308



FUNCTION3 OCDPE

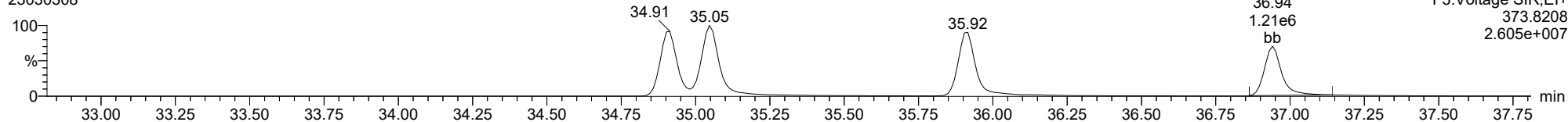
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

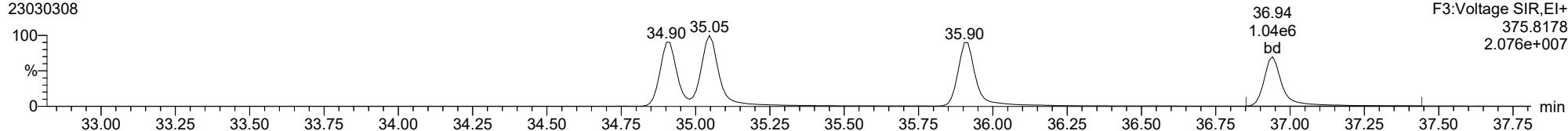
123789-HxCDF

23030308



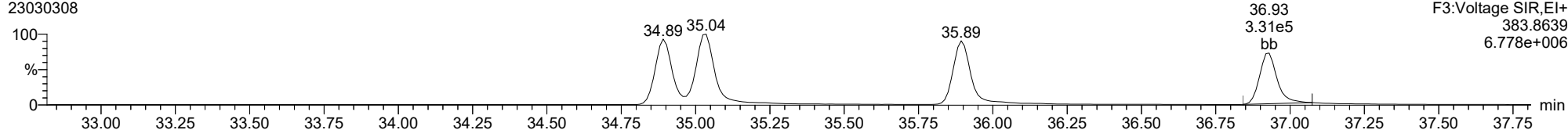
123789-HxCDF

23030308



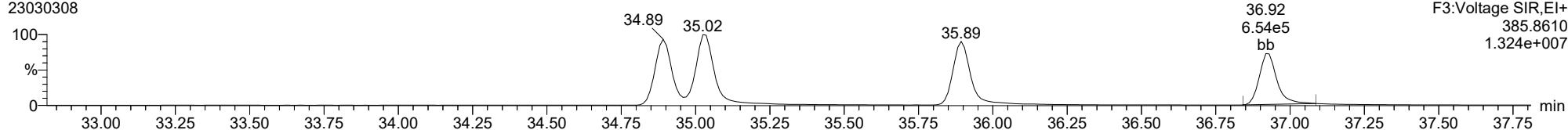
13C-123789-HxCDF

23030308



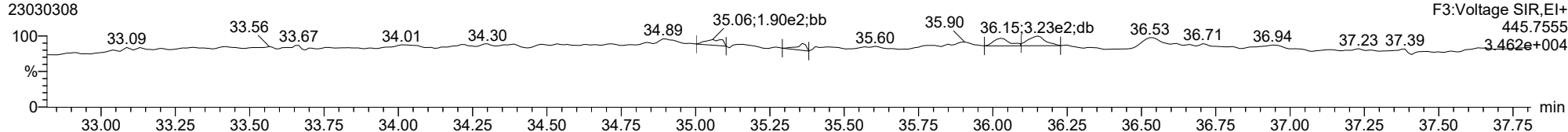
13C-123789-HxCDF

23030308



FUNCTION3 OCDPE

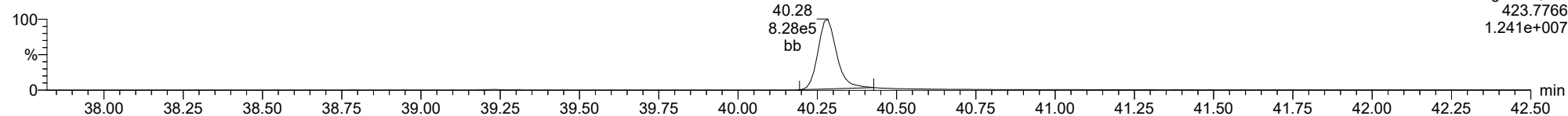
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

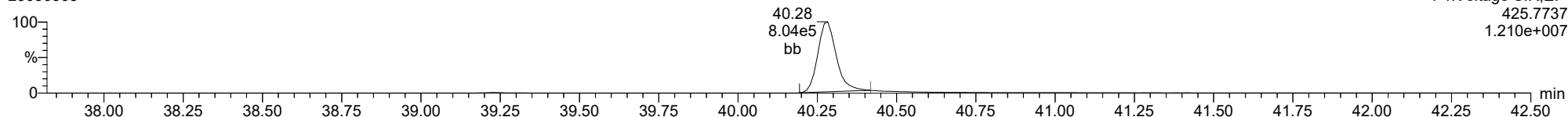
1234678-HpCDD

23030308



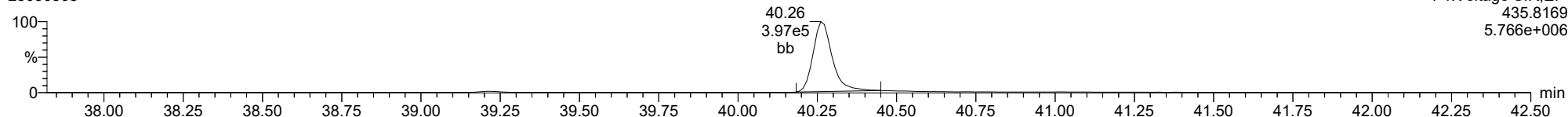
1234678-HpCDD

23030308



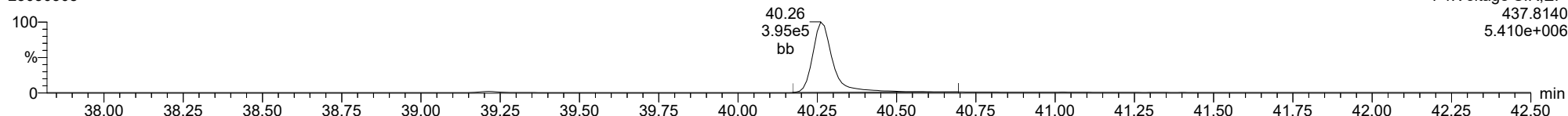
13C-1234678-HpCDD

23030308



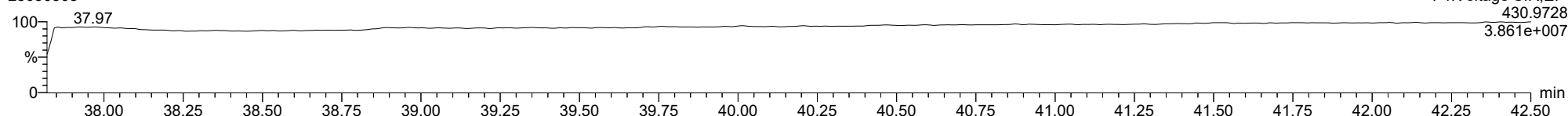
13C-1234678-HpCDD

23030308



FUNCTION4 PFK

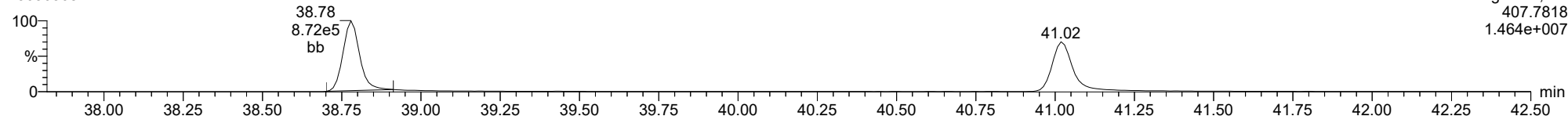
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

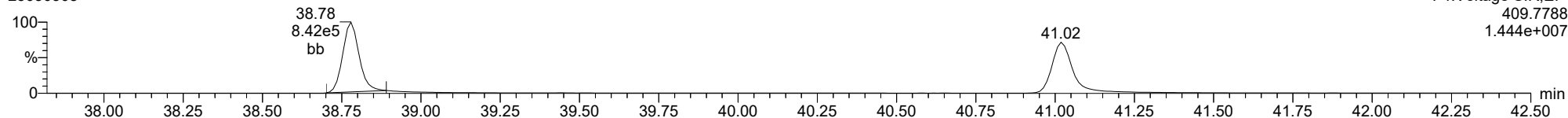
1234678-HpCDF

23030308



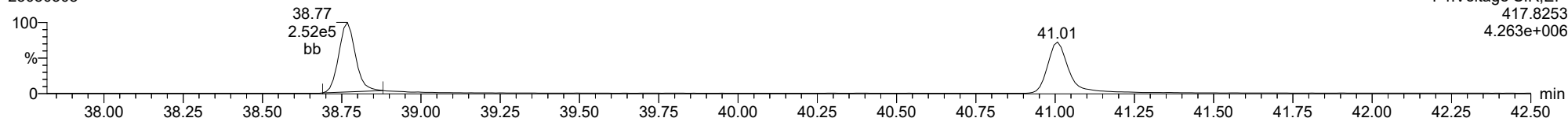
1234678-HpCDF

23030308



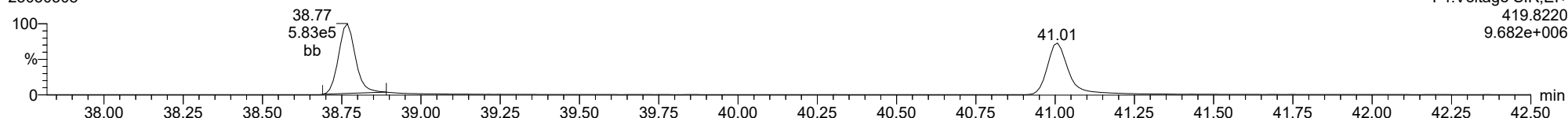
13C-1234678-HpCDF

23030308



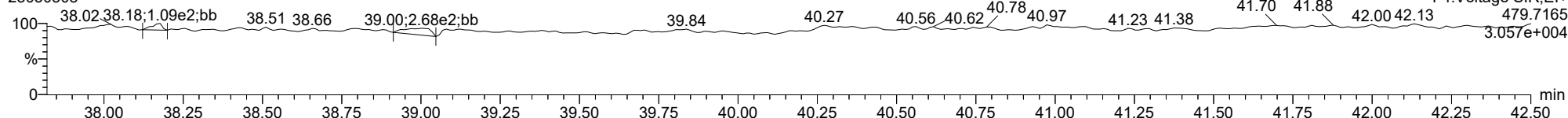
13C-1234678-HpCDF

23030308



FUNCTION4 NCDPE

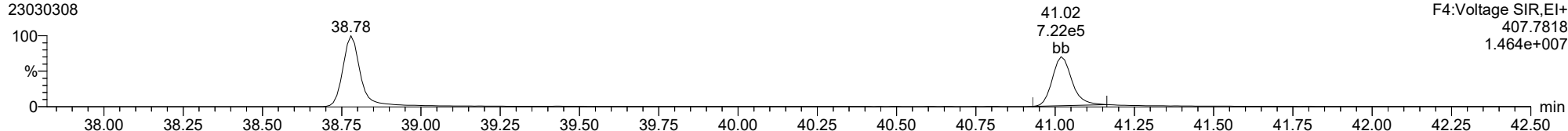
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

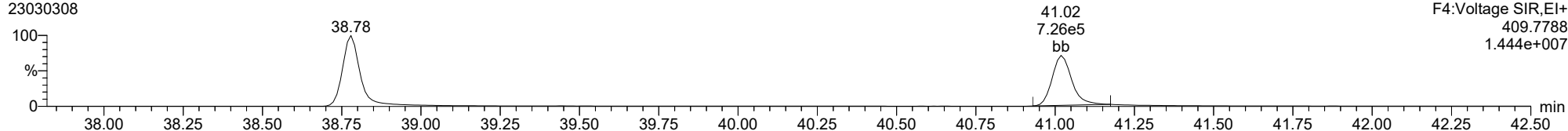
1234789-HpCDF

23030308



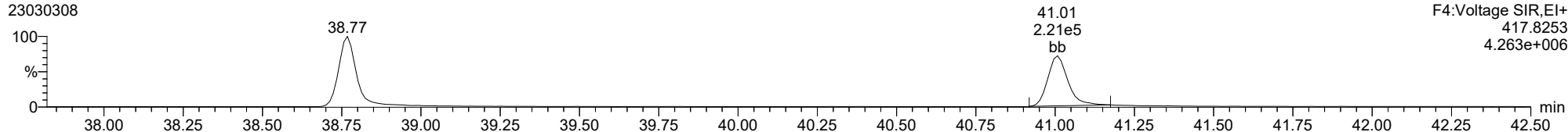
1234789-HpCDF

23030308



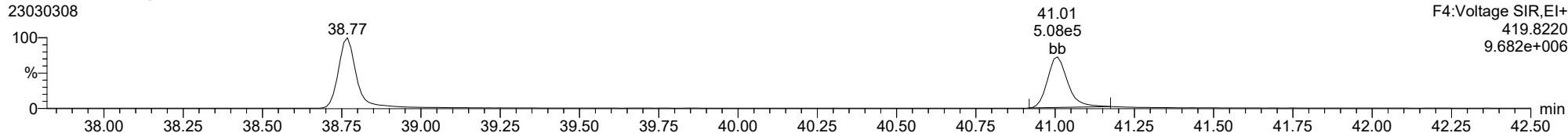
13C-1234789-HpCDF

23030308



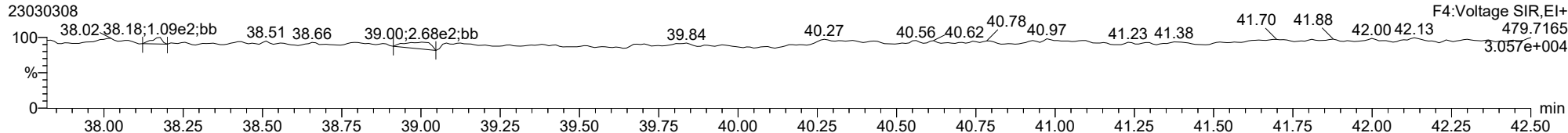
13C-1234789-HpCDF

23030308



FUNCTION4 NCDPE

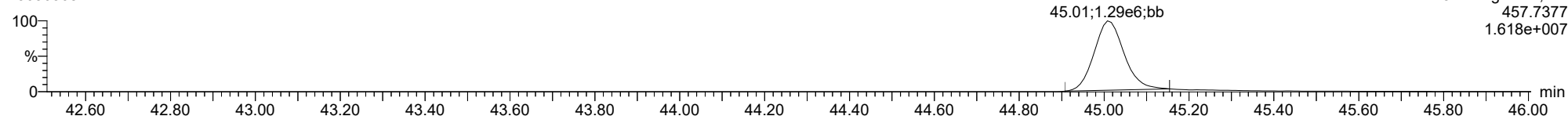
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

OCDD

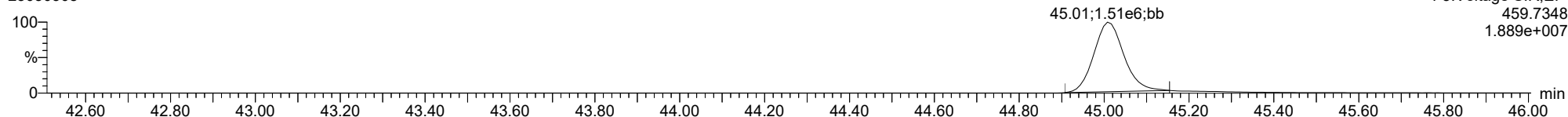
23030308



F5:Voltage SIR,EI+
457.7377
1.618e+007

OCDD

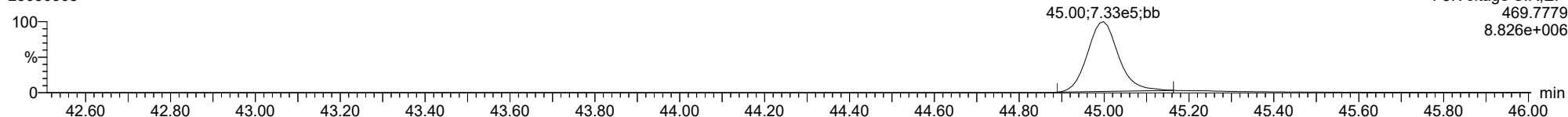
23030308



F5:Voltage SIR,EI+
459.7348
1.889e+007

13C-OCDD

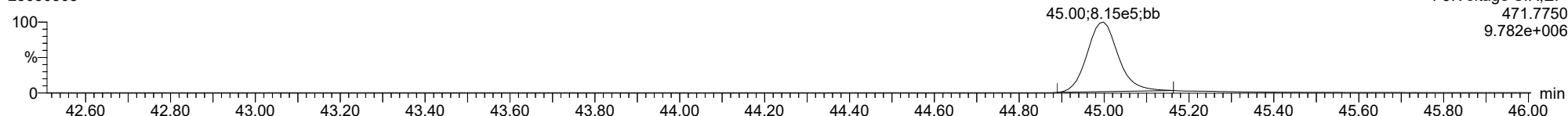
23030308



F5:Voltage SIR,EI+
469.7779
8.826e+006

13C-OCDD

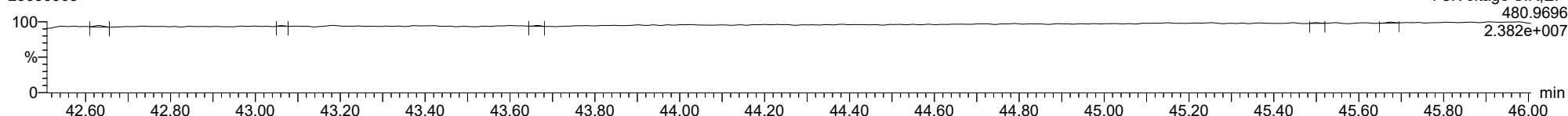
23030308



F5:Voltage SIR,EI+
471.7750
9.782e+006

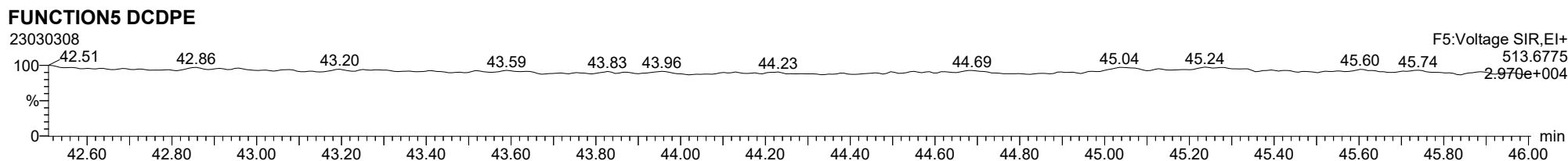
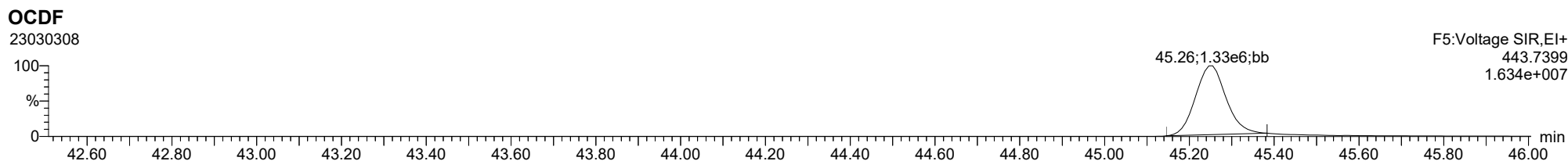
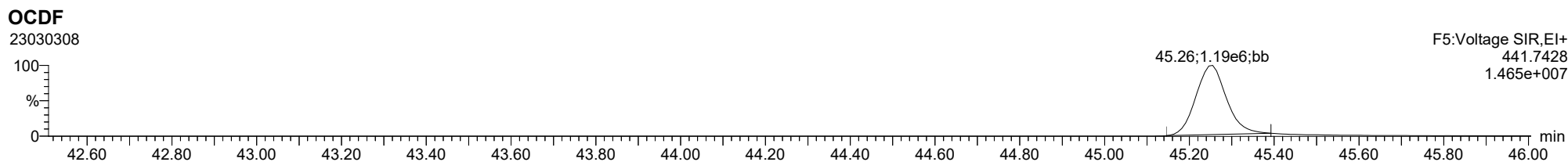
FUNCTION5 PFK

23030308



F5:Voltage SIR,EI+
480.9696
2.382e+007

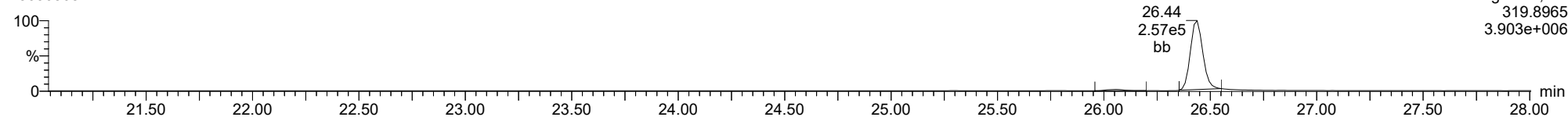
ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

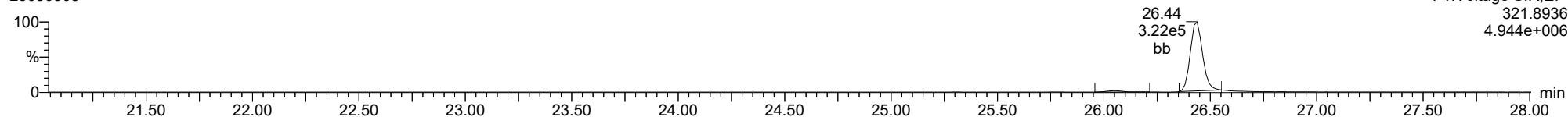
Total-tetradioxins

23030308



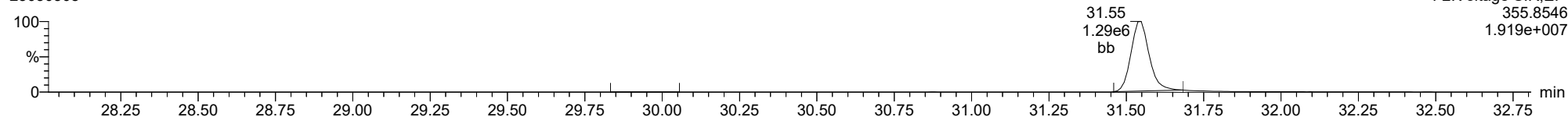
Total-tetradioxins

23030308



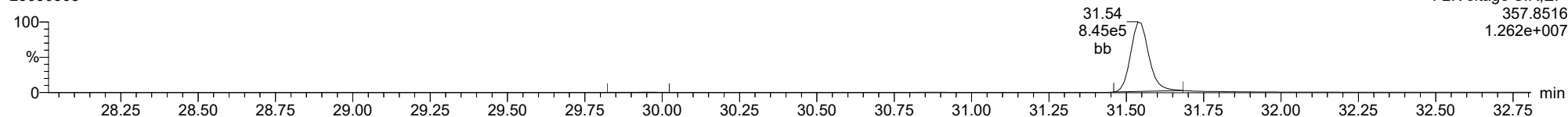
Total-pentadioxins

23030308



Total-pentadioxins

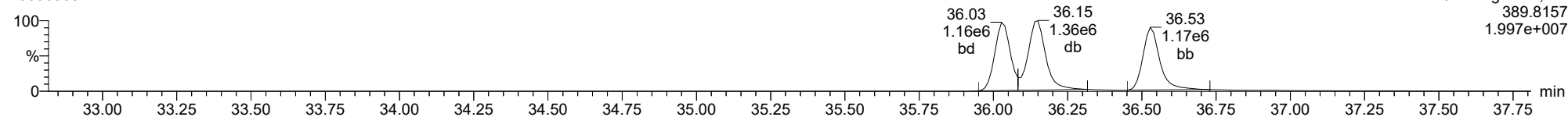
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

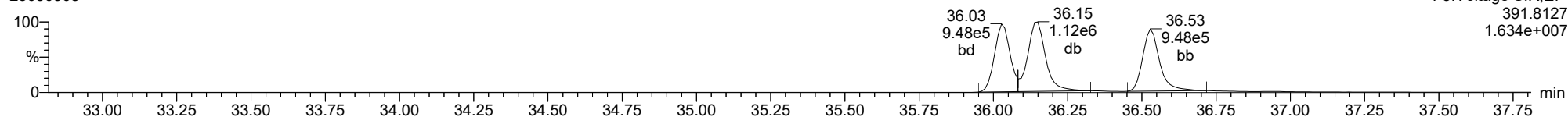
Total-hexadioxins

23030308



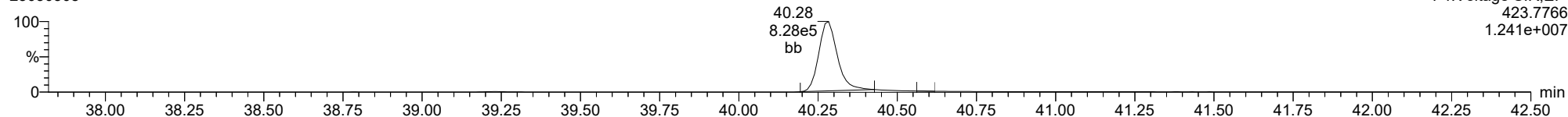
Total-hexadioxins

23030308



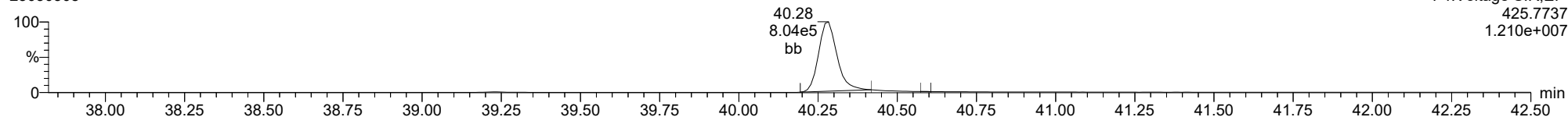
Total-heptadioxins

23030308



Total-heptadioxins

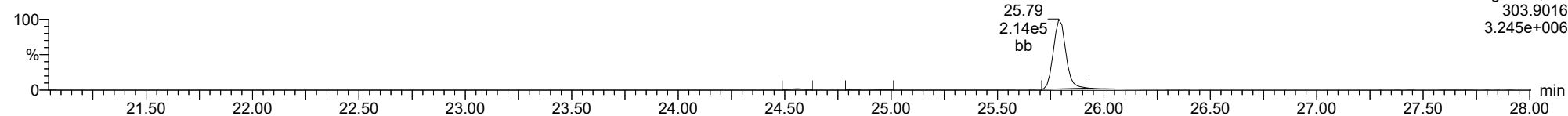
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

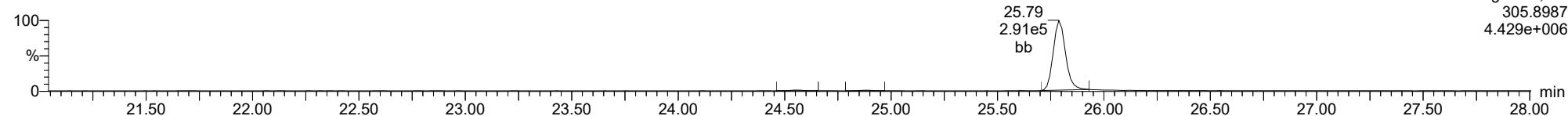
Total-tetrafurans

23030308



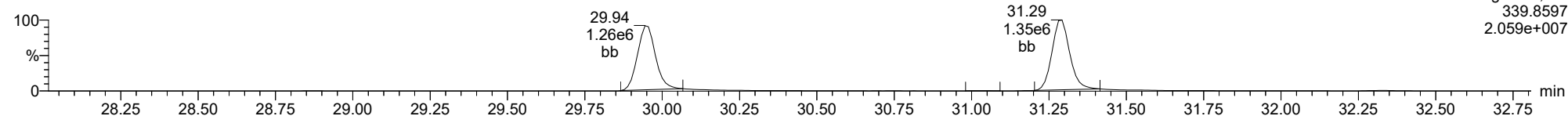
Total-tetrafurans

23030308



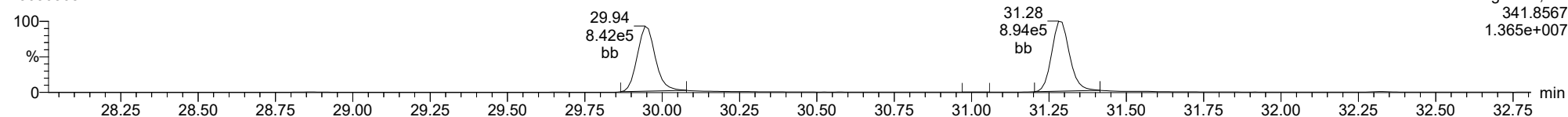
Total-pentafurans

23030308



Total-pentafurans

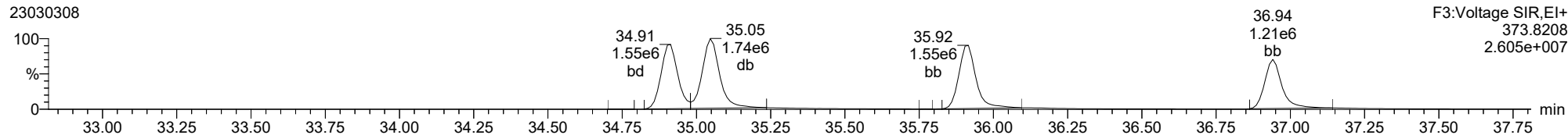
23030308



ID: CS4CW, Name: 23030308, Date: 03-Mar-2023, Time: 14:59:53, Conditions: AUTOSPEC01, User: pk

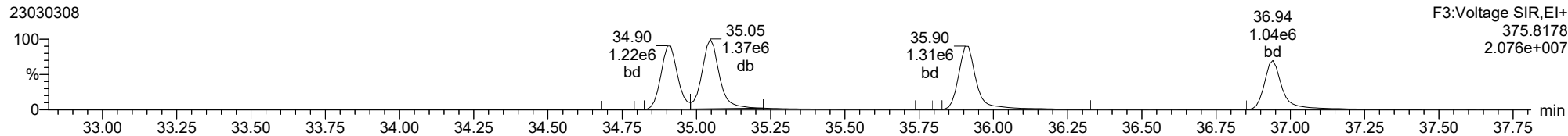
Total-hexafurans

23030308



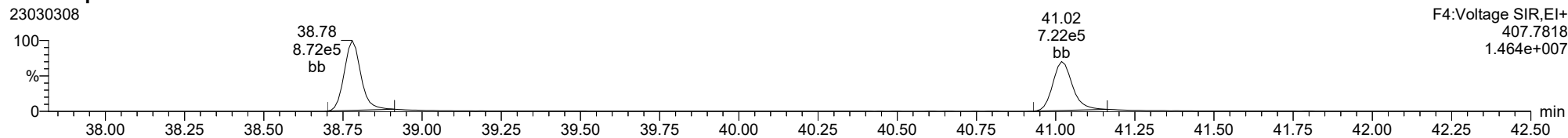
Total-hexafurans

23030308



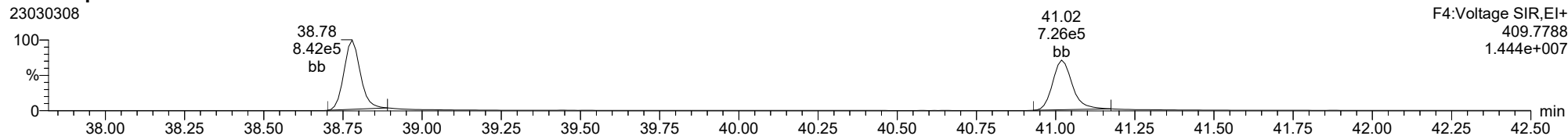
Total-heptafurans

23030308



Total-heptafurans

23030308



Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF					0.802		0.770	1816	2705								
1289-TCDF					0.678		0.770	1816	2705								
13468-PECDF					1.246		1.550	665	1133								
12389-PECDF					0.496		1.550	4787	5694								
123468-HXCDF					1.169		1.240	1657	3079								
1368-TCDD					1.015		0.770	1583	1421								
1289-TCDD					0.909		0.770	1583	1421								
12479-PECDD					2.301		1.550	3207	3258								
12389-PECDD					1.184		1.550	3207	3258								
124679-HXCDD					1.115		1.240	1269	1319								
1234679-HPCDD					1.137		1.050	4639	3285								
Total-tetrafurans			1.355e6		0.727			1816		2.10e7							203.619
Total-penta1			0.000e0					665		0.00e0							
Total-pentafurans			1.567e7		0.654			4787		2.43e8							2061.969
Total-hexafurans			3.237e7		1.141			1657		5.13e8							3971.633
Total-heptafurans			1.063e7		0.978			5984		1.72e8							2053.620
Total-Furans			6.803e7		0.922			1816		1.05e9							10443.382
Total-tetradoxins			1.660e6		1.024			1583		2.53e7							206.551
Total-pentadoxins			7.518e6		1.502			3207		1.15e8							988.757
Total-hexadoxins			1.981e7		1.005			1269		3.20e8							3089.249
Total-heptadoxins			5.468e6		1.088			4639		8.81e7							1010.701
Total-Dioxins			4.298e7		1.130			1583		6.58e8							7276.969
Total-TEQ			1.110e8					1583		1.71e9							17720.350
FUNCTION1 PFK			8.364e4					590794		3.29e6							
FUNCTION2 PFK			1.452e7					287139		1.24e7							0.000
FUNCTION3 PFK			2.904e5					447834		7.86e6							0.000
FUNCTION4 PFK			1.983e5					258971		5.49e6							
FUNCTION5 PFK			1.360e5					213310		3.56e6							
FUNCTION1 HXCD...			9.848e2					660		1.37e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			9.974e3					875		1.52e5							0.000
FUNCTION3 OCDPE			5.118e3					487		5.72e4							0.000
FUNCTION4 NCDPE			1.842e3					616		1.81e4							0.000
FUNCTION5 DCDPE			3.423e3					534		2.47e4							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303\CIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
2	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
3	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
4	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
5	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
6	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
2	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
3	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
4	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
5	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
6	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
7	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
8	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
2	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
3	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731
5	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
6	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
7	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
8	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
9	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
10	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415
11	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
12	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
13	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
14	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
15	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
16	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
17	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
18	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904
19	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
20	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
21	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...
22	OCDF	45.25	8.007e6	9.001e6	0.778	0.89	0.89	16387...	YES	NO	bb	bb	2152.5...

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
2	Total-tetradioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
3	Total-tetradioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
4	Total-tetradioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
2	Total-pentadioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
3	Total-pentadioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
4	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
5	Total-pentadioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
2	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
3	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
4	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-heptadioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
2	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
2	Total-tetradoxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
3	Total-tetradoxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
4	Total-tetradoxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199
5	Total-pentadoxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
6	Total-pentadoxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
7	Total-pentadoxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
8	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
9	Total-pentadoxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776
10	Total-hexadoxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
11	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
12	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
13	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...
14	Total-heptadoxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
15	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...
16	OCDD	45.01	8.523e6	9.997e6	0.920	0.85	0.89	89206.2	YES	NO	bb	bb	1981.7...

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDF	25.77	1.334e6	1.787e6	0.702	0.75	0.77	11389.3	YES	NO	bb	bb	200.466
2	Total-tetrafurans	24.87	8.544e3	1.186e4	0.727	0.72	0.77	70.8	YES	NO	bb	bb	1.264
3	Total-tetrafurans	24.67	1.054e3	1.493e3	0.727	0.71	0.77	9.1	YES	NO	db	db	0.158
4	Total-tetrafurans	24.55	1.152e4	1.641e4	0.727	0.70	0.77	91.4	YES	NO	bd	bd	1.731
5	23478-PeCDF	31.27	8.034e6	5.310e6	0.786	1.51	1.55	25734.3	YES	NO	bb	bb	1006.1...
6	Total-pentafurans	31.00	7.155e3	5.348e3	0.654	1.34	1.55	24.5	YES	NO	bb	bb	1.108
7	Total-pentafurans	30.22	6.707e3	3.991e3	0.654	1.68	1.55	18.6	YES	NO	bb	bb	0.948
8	12378-PeCDF	29.93	7.598e6	4.979e6	0.679	1.53	1.55	24983.0	YES	NO	bb	bb	1049.7...
9	Total-pentafurans	29.57	3.743e3	2.429e3	0.654	1.54	1.55	12.5	YES	NO	bd	bd	0.547
10	Total-pentafurans	28.85	2.348e4	1.505e4	0.654	1.56	1.55	59.4	YES	NO	bb	bb	3.415
11	123678-HxCDF	35.04	8.729e6	6.976e6	1.091	1.25	1.24	82564.4	YES	NO	db	db	1005.9...
12	123478-HxCDF	34.90	7.954e6	6.371e6	1.166	1.25	1.24	76946.6	YES	NO	bd	bd	988.542
13	Total-hexafurans	34.75	7.748e3	5.706e3	1.141	1.36	1.24	87.3	YES	NO	bb	bb	0.913
14	Total-hexafurans	33.44	5.026e3	3.534e3	1.141	1.42	1.24	38.8	YES	NO	db	bb	0.581
15	123789-HxCDF	36.93	7.107e6	5.643e6	1.137	1.26	1.24	69330.3	YES	NO	bb	bb	962.631
16	Total-hexafurans	36.53	1.628e4	1.267e4	1.141	1.29	1.24	124.4	YES	NO	dd	bd	1.966
17	Total-hexafurans	36.13	1.100e5	8.424e4	1.141	1.31	1.24	706.6	YES	NO	dd	dd	13.189
18	234678-HxCDF	35.89	8.440e6	6.648e6	1.140	1.27	1.24	79492.3	YES	NO	bd	bd	997.904
19	1234789-HpCDF	41.01	4.891e6	4.848e6	0.953	1.01	1.05	12213.8	YES	NO	bb	bb	1050.4...
20	Total-heptafurans	39.43	9.256e3	7.833e3	0.978	1.18	1.05	24.5	YES	NO	bb	bb	1.656
21	1234678-HpCDF	38.77	5.729e6	5.700e6	1.003	1.01	1.05	16498.3	YES	NO	bb	bb	1001.5...
22	OCDF	45.25	8.007e6	9.001e6	0.778	0.89	0.89	16387...	YES	NO	bb	bb	2152.5...
23	2378-TCDD	26.42	1.623e6	2.053e6	1.149	0.79	0.77	15719.4	YES	NO	bb	bb	201.416
24	Total-tetradiioxins	26.03	3.492e4	4.469e4	1.024	0.78	0.77	261.5	YES	NO	bb	bb	4.891
25	Total-tetradiioxins	25.59	3.088e2	4.283e2	1.024	0.72	0.77	3.2	YES	NO	bb	bb	0.045
26	Total-tetradiioxins	25.29	1.293e3	1.946e3	1.024	0.66	0.77	15.2	YES	NO	bb	bb	0.199
27	Total-pentadiioxins	30.29	1.049e3	6.224e2	1.502	1.68	1.55	4.4	YES	NO	dd	db	0.090
28	Total-pentadiioxins	30.15	1.847e3	1.302e3	1.502	1.42	1.55	8.1	YES	NO	dd	dd	0.170
29	Total-pentadiioxins	29.93	6.137e3	4.352e3	1.502	1.41	1.55	24.1	YES	NO	bd	bd	0.567
30	12378-PeCDD	31.53	7.500e6	4.933e6	1.022	1.52	1.55	35906.6	YES	NO	bb	bb	987.154
31	Total-pentadiioxins	30.86	8.777e3	5.596e3	1.502	1.57	1.55	39.8	YES	NO	bd	bb	0.776
32	Total-hexadiioxins	36.92	3.612e4	2.906e4	1.005	1.24	1.24	377.1	YES	NO	bb	bb	5.383
33	123789-HxCDD	36.52	6.387e6	5.242e6	0.907	1.22	1.24	81996.1	YES	NO	bb	bb	1063.9...
34	123678-HxCDD	36.14	6.944e6	5.798e6	1.001	1.20	1.24	87214.8	YES	NO	db	db	1011.1...
35	123478-HxCDD	36.02	6.446e6	5.113e6	0.996	1.26	1.24	82869.7	YES	NO	bd	bd	1008.7...
36	Total-heptadiioxins	40.66	1.670e2	1.486e2	1.088	1.12	1.05	0.0	NO	NO	bb	bb	0.028
37	1234678-HpCDD	40.27	5.468e6	5.342e6	1.039	1.02	1.05	19002.3	YES	NO	bb	bb	1010.6...

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	OCDD	45.01	8.523e6	9.997e6	0.920	0.85	0.89	89206.2	YES	NO	bb	bb	1981.7...

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.64	6.068e3					0.7	NO		bb		
2	FUNCTION1 PFK	21.78	2.376e4					1.4	NO		bb		
3	FUNCTION1 PFK	26.65	6.322e3					0.8	NO		bb		
4	FUNCTION1 PFK	26.20	6.018e3					0.7	NO		bb		
5	FUNCTION1 PFK	24.62	4.147e4					1.9	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.96	1.329e6					11.3	YES		db		0.000
2	FUNCTION2 PFK	29.68	9.729e6					13.1	YES		dd		0.000
3	FUNCTION2 PFK	29.12	3.197e6					12.0	YES		dd		0.000
4	FUNCTION2 PFK	28.11	2.639e5					6.8	YES		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.58	5.268e3					0.6	NO		bb		0.000
2	FUNCTION3 PFK	35.20	2.459e4					1.4	NO		bb		0.000
3	FUNCTION3 PFK	34.94	1.904e4					1.3	NO		bb		0.000
4	FUNCTION3 PFK	34.64	1.893e4					1.6	NO		bb		0.000
5	FUNCTION3 PFK	34.45	3.091e4					1.7	NO		bb		0.000
6	FUNCTION3 PFK	34.20	2.876e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	34.01	8.291e4					2.8	NO		bb		0.000
8	FUNCTION3 PFK	37.45	2.878e4					1.5	NO		bb		0.000
9	FUNCTION3 PFK	37.14	1.025e4					1.2	NO		bb		0.000
10	FUNCTION3 PFK	36.92	2.201e4					1.4	NO		bb		0.000
11	FUNCTION3 PFK	36.82	6.882e3					0.7	NO		bb		0.000
12	FUNCTION3 PFK	36.27	2.697e4					1.6	NO		bb		0.000
13	FUNCTION3 PFK	35.83	1.096e4					1.2	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.36	1.487e4					2.2	NO		db		
2	FUNCTION4 PFK	40.28	5.399e4					2.8	NO		bd		
3	FUNCTION4 PFK	39.84	7.632e3					1.3	NO		bb		
4	FUNCTION4 PFK	39.63	5.817e3					1.3	NO		bb		
5	FUNCTION4 PFK	39.58	2.233e4					2.4	NO		bb		
6	FUNCTION4 PFK	39.26	1.840e3					0.6	NO		bb		
7	FUNCTION4 PFK	39.15	1.821e4					2.0	NO		bb		
8	FUNCTION4 PFK	38.75	4.539e3					0.9	NO		bb		
9	FUNCTION4 PFK	38.40	3.735e3					0.9	NO		bb		
10	FUNCTION4 PFK	42.22	2.101e4					1.9	NO		bb		
11	FUNCTION4 PFK	41.91	9.871e3					1.2	NO		bb		
12	FUNCTION4 PFK	41.56	2.609e4					2.3	NO		bb		
13	FUNCTION4 PFK	40.96	8.343e3					1.4	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	45.55	1.986e4					1.8	NO		bb		
2	FUNCTION5 PFK	44.84	1.038e4					2.0	NO		bb		
3	FUNCTION5 PFK	44.32	5.641e3					1.1	NO		bb		
4	FUNCTION5 PFK	44.16	5.508e3					1.3	NO		bb		
5	FUNCTION5 PFK	43.92	3.533e3					1.2	NO		bb		
6	FUNCTION5 PFK	43.74	1.099e4					1.6	NO		bb		
7	FUNCTION5 PFK	43.65	5.197e4					3.3	YES		db		
8	FUNCTION5 PFK	43.53	1.828e4					2.1	NO		bd		
9	FUNCTION5 PFK	42.94	8.618e3					1.5	NO		bb		
10	FUNCTION5 PFK	42.73	1.271e3					0.6	NO		bb		

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.02	8.181e1					1.9	NO		bb		0.000
2	FUNCTION1 HXCD...	26.42	2.971e2					5.1	YES		bb		0.000
3	FUNCTION1 HXCD...	25.83	8.848e1					2.3	NO		db		0.000
4	FUNCTION1 HXCD...	25.77	1.170e2					2.5	NO		dd		0.000
5	FUNCTION1 HXCD...	25.59	1.285e2					2.6	NO		bd		0.000
6	FUNCTION1 HXCD...	24.84	1.183e2					1.2	NO		bb		0.000
7	FUNCTION1 HXCD...	24.11	7.501e1					1.5	NO		bb		0.000
8	FUNCTION1 HXCD...	22.26	7.865e1					3.6	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.55	8.739e2					12.4	YES		bb		0.000
2	FUNCTION2 HPCD...	31.16	9.100e3					161.2	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.02	1.011e3					23.2	YES		dd		0.000
2	FUNCTION3 OCDPE	35.92	4.171e2					12.8	YES		bd		0.000
3	FUNCTION3 OCDPE	35.05	6.001e2					12.0	YES		db		0.000
4	FUNCTION3 OCDPE	34.90	4.386e2					11.4	YES		bd		0.000
5	FUNCTION3 OCDPE	36.94	5.713e2					12.4	YES		bb		0.000
6	FUNCTION3 OCDPE	36.52	9.647e2					21.7	YES		bb		0.000
7	FUNCTION3 OCDPE	36.14	1.116e3					24.0	YES		db		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.03	4.935e2					7.5	YES		bb		0.000
2	FUNCTION4 NCDPE	40.28	7.486e2					12.2	YES		bb		0.000
3	FUNCTION4 NCDPE	38.78	6.004e2					9.6	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\CIH.qld
Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
Printed: Monday, March 06, 2023 11:35:04 Pacific Standard Time

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

ETHERS6

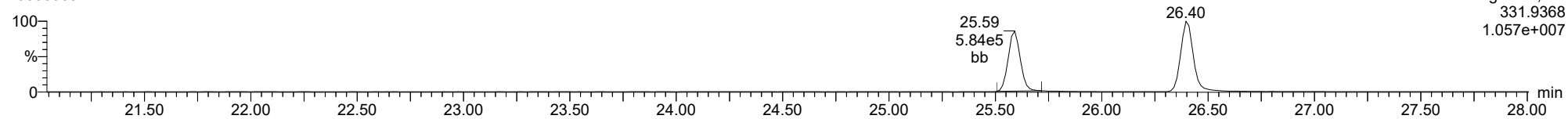
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.26	1.761e3					22.2	YES		db		0.000
2	FUNCTION5 DCDPE	45.02	1.661e3					24.0	YES		bd		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS5CW, **Name:** 23030309, **Date:** 03-Mar-2023, **Time:** 15:47:43, **Conditions:** AUTOSPEC01, **User:** pk

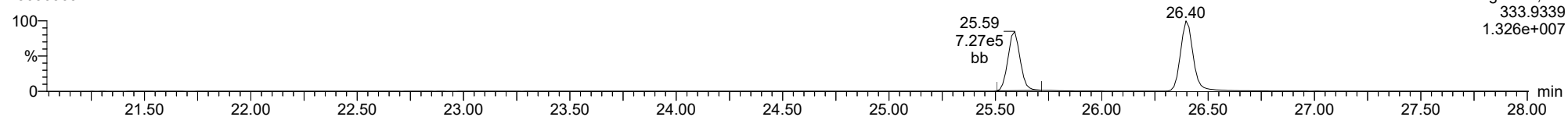
13C-1234-TCDD

23030309



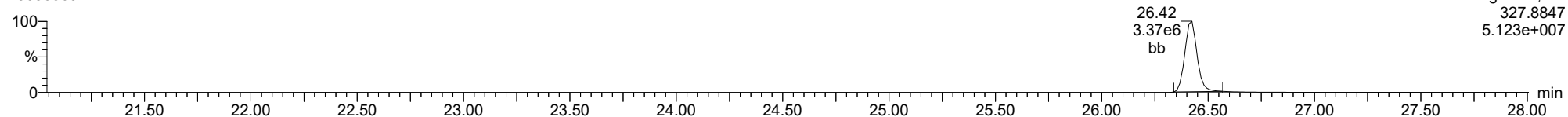
13C-1234-TCDD

23030309



37CL-2378-TCDD

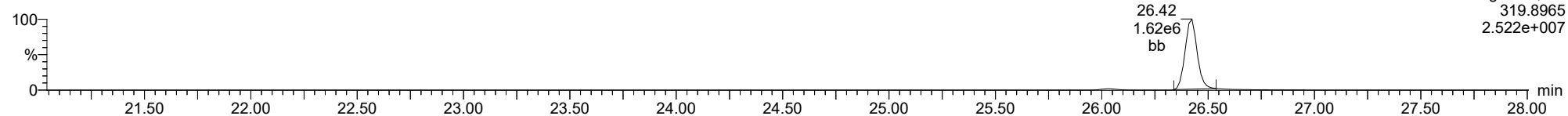
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

2378-TCDD

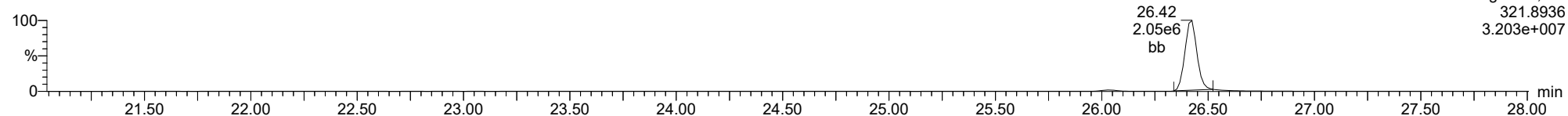
23030309



F1:Voltage SIR,EI+
319.8965
2.522e+007

2378-TCDD

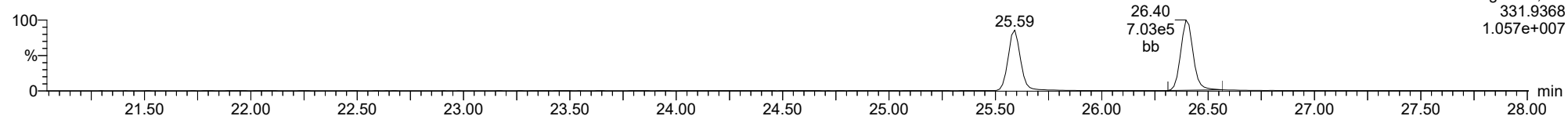
23030309



F1:Voltage SIR,EI+
321.8936
3.203e+007

13C-2378-TCDD

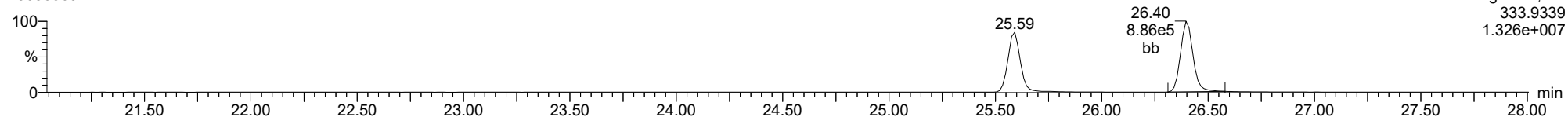
23030309



F1:Voltage SIR,EI+
331.9368
1.057e+007

13C-2378-TCDD

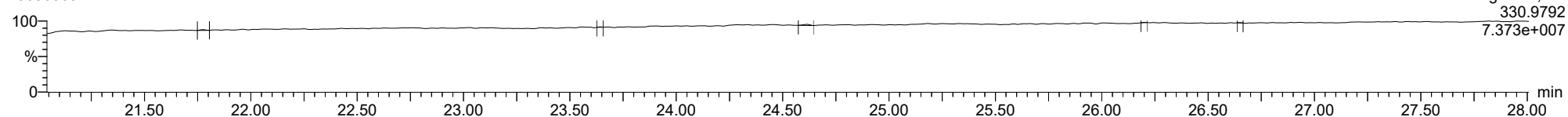
23030309



F1:Voltage SIR,EI+
333.9339
1.326e+007

FUNCTION1 PFK

23030309

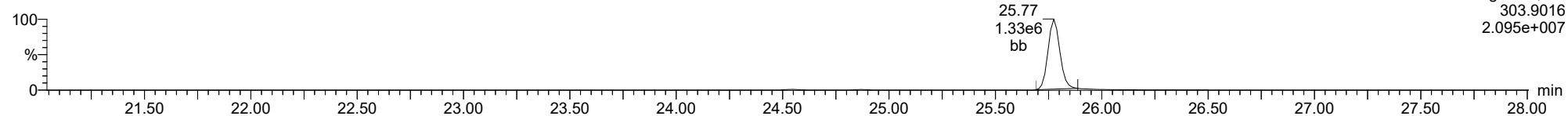


F1:Voltage SIR,EI+
330.9792
7.373e+007

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

2378-TCDF

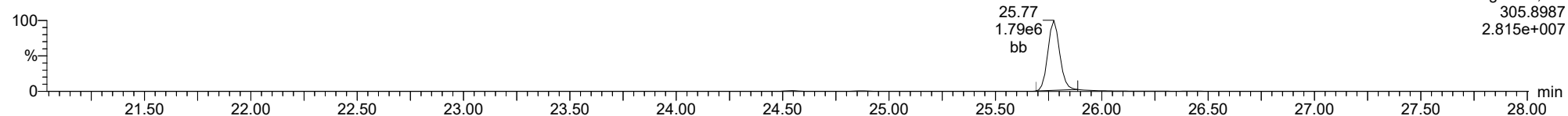
23030309



F1:Voltage SIR,EI+
303.9016
2.095e+007

2378-TCDF

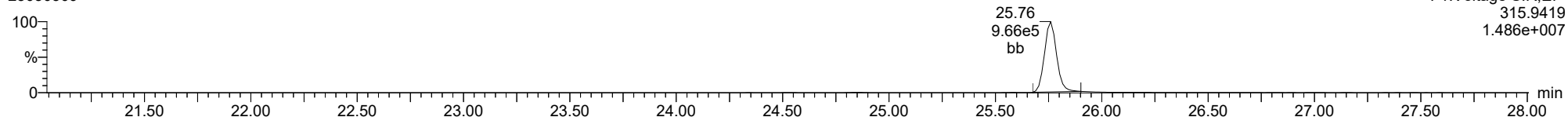
23030309



F1:Voltage SIR,EI+
305.8987
2.815e+007

13C-2378-TCDF

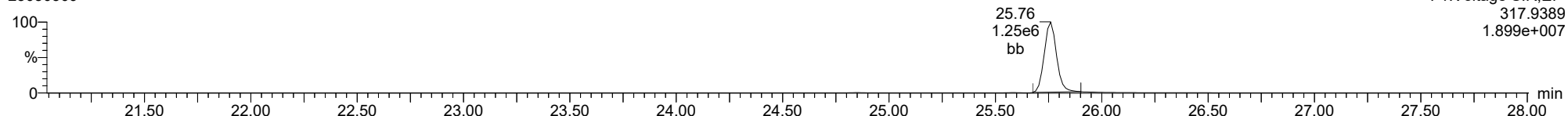
23030309



F1:Voltage SIR,EI+
315.9419
1.486e+007

13C-2378-TCDF

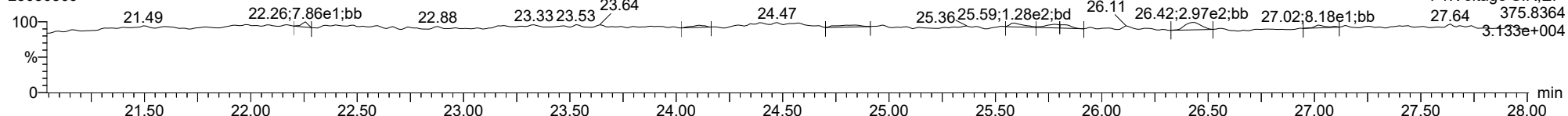
23030309



F1:Voltage SIR,EI+
317.9389
1.899e+007

FUNCTION1 HXCDPE

23030309

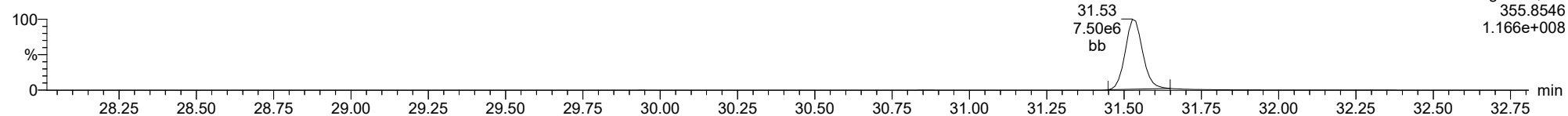


F1:Voltage SIR,EI+
375.8364
3.133e+004

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

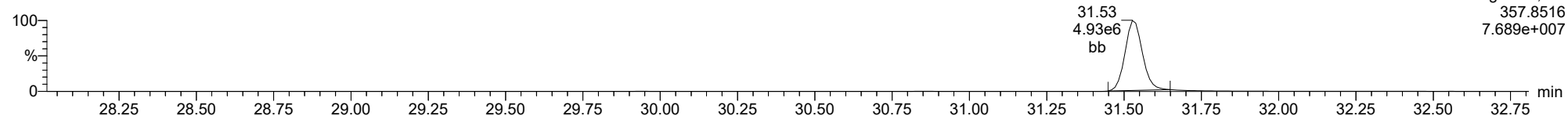
12378-PeCDD

23030309



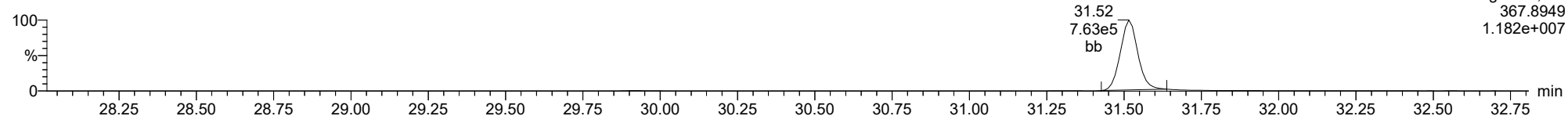
12378-PeCDD

23030309



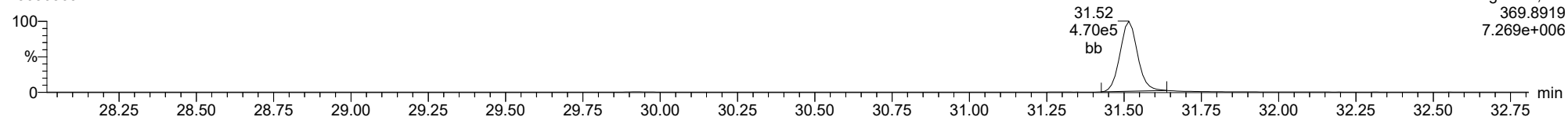
13C-12378-PeCDD

23030309



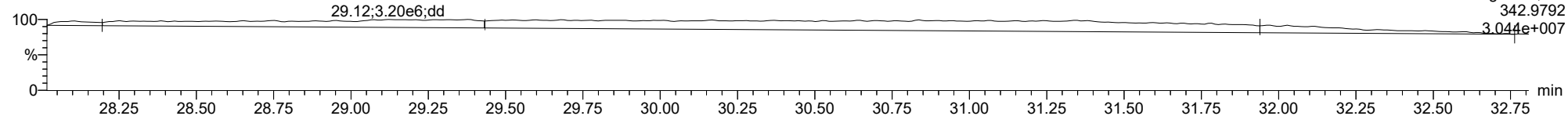
13C-12378-PeCDD

23030309



FUNCTION2 PFK

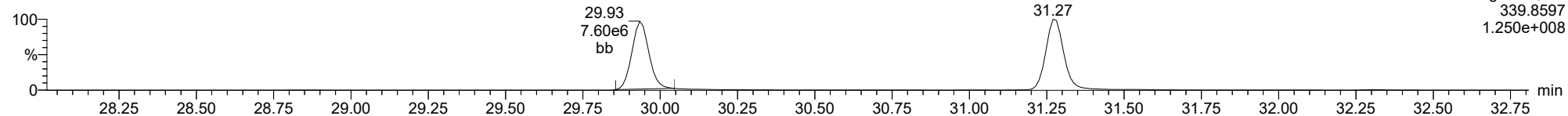
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

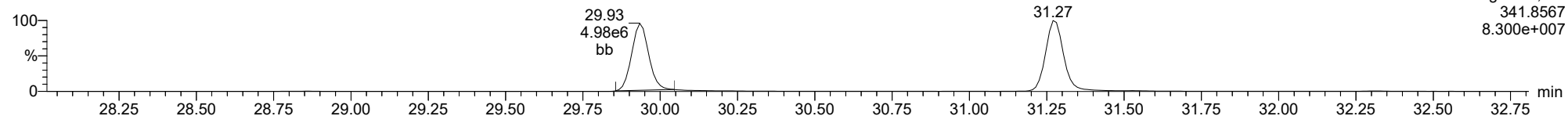
12378-PeCDF

23030309



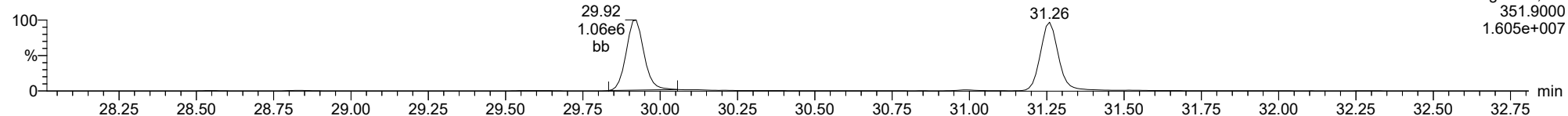
12378-PeCDF

23030309



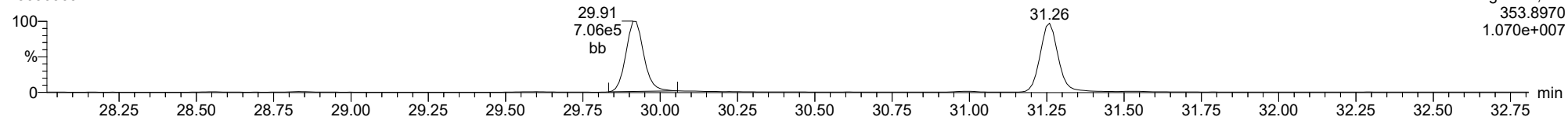
13C-12378-PeCDF

23030309



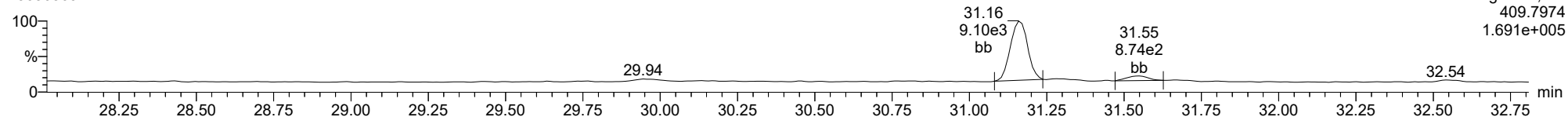
13C-12378-PeCDF

23030309



FUNCTION2 HPCDPE

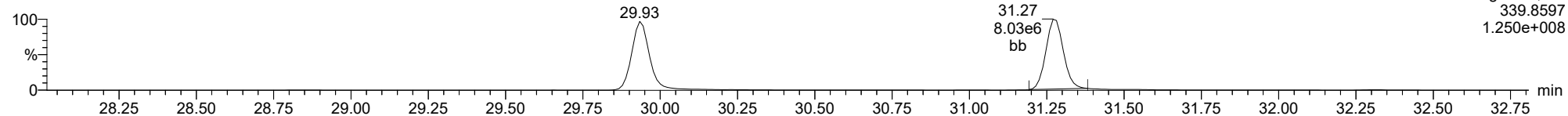
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

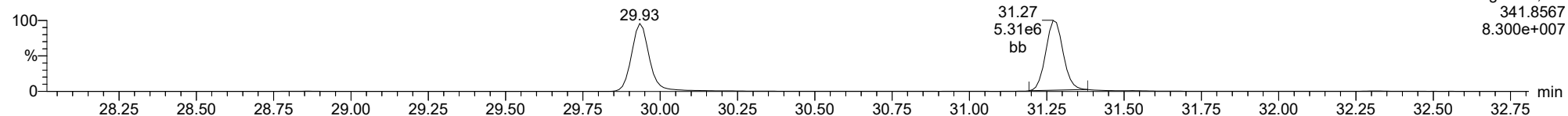
23478-PeCDF

23030309



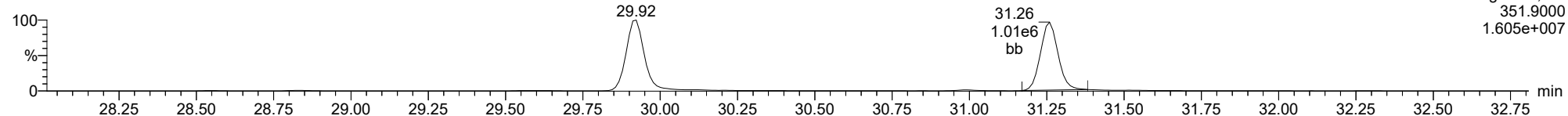
23478-PeCDF

23030309



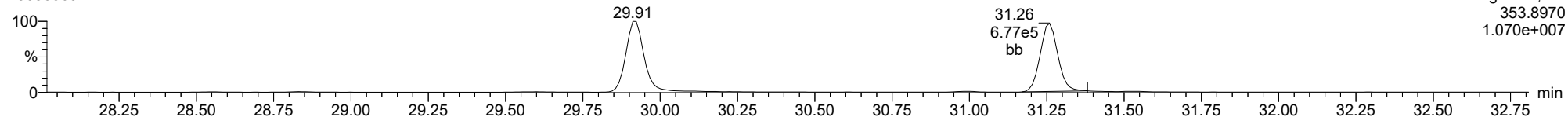
13C-23478-PeCDF

23030309



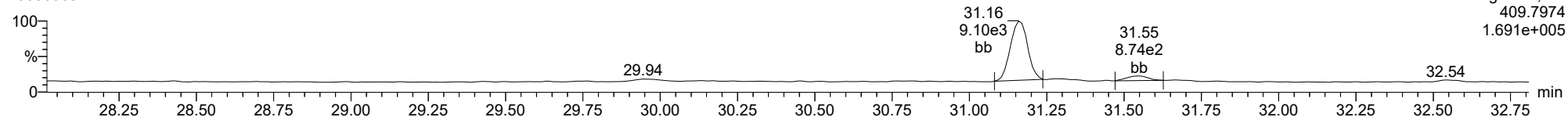
13C-23478-PeCDF

23030309



FUNCTION2 HPCDPE

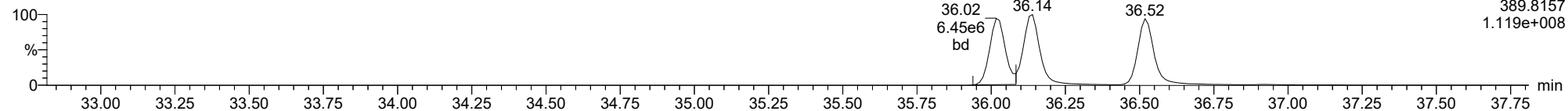
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

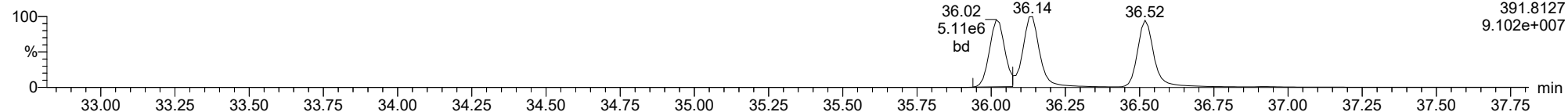
123478-HxCDD

23030309



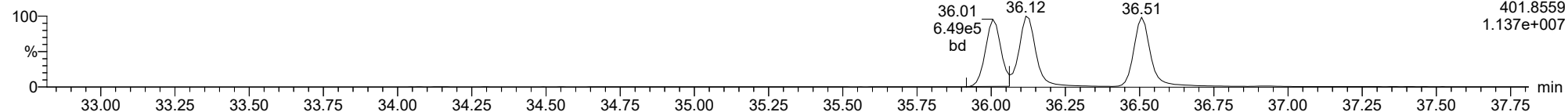
123478-HxCDD

23030309



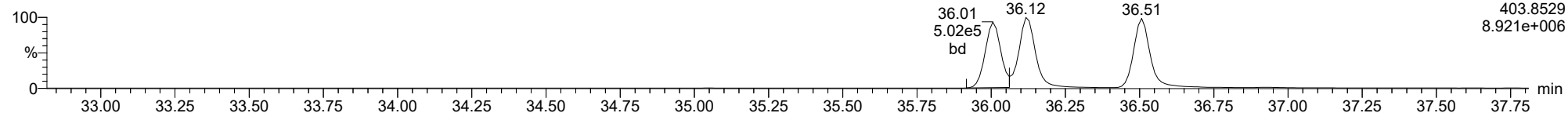
13C-123478-HxCDD

23030309



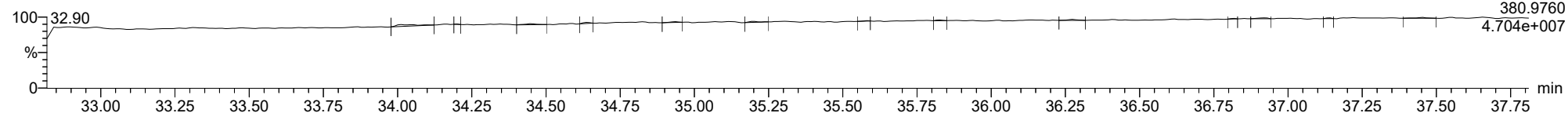
13C-123478-HxCDD

23030309



FUNCTION3 PFK

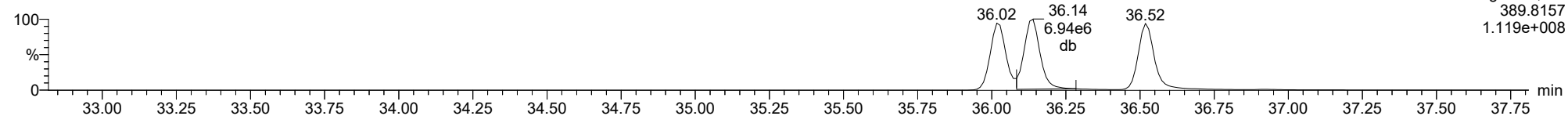
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

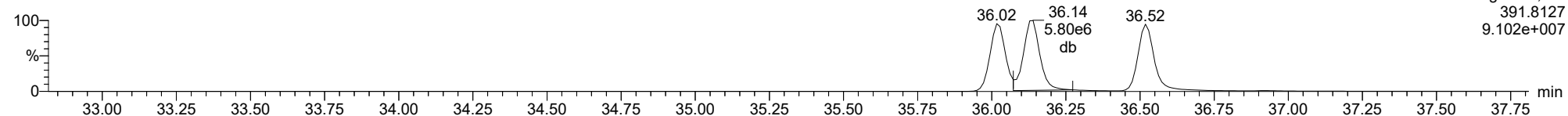
123678-HxCDD

23030309



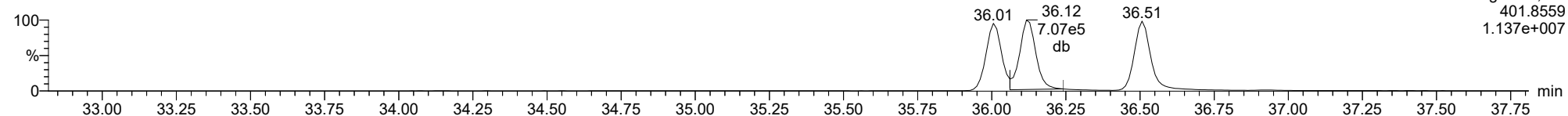
123678-HxCDD

23030309



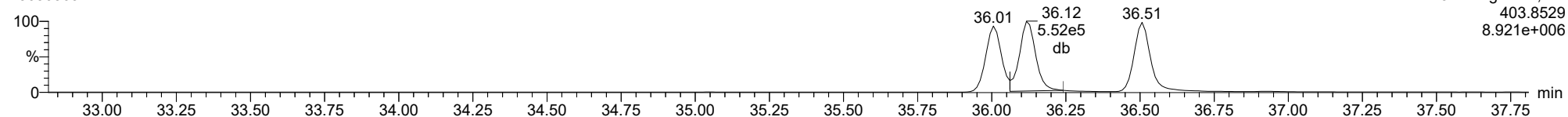
13C-123678-HxCDD

23030309



13C-123678-HxCDD

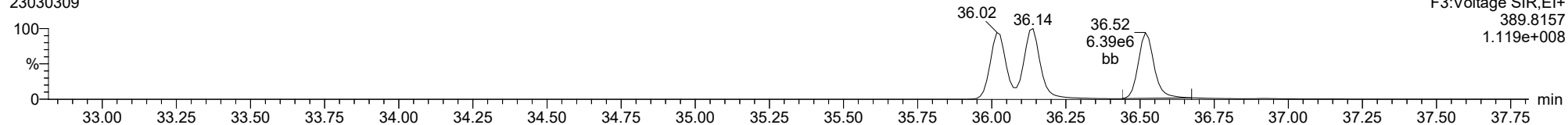
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

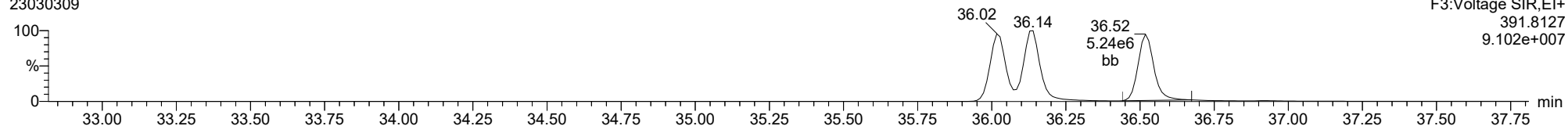
123789-HxCDD

23030309



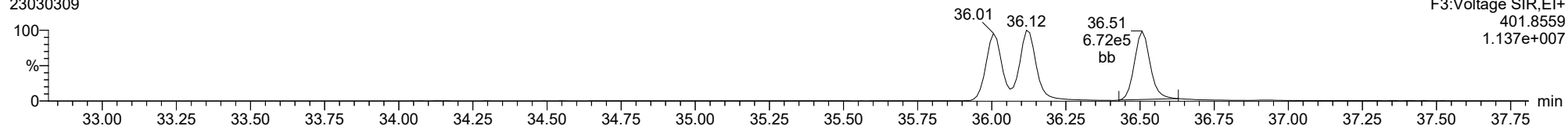
123789-HxCDD

23030309



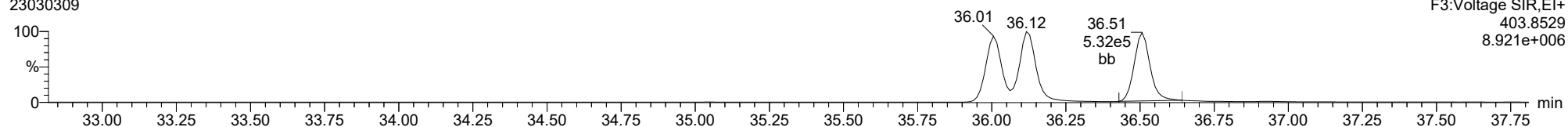
13C-123789-HxCDD

23030309



13C-123789-HxCDD

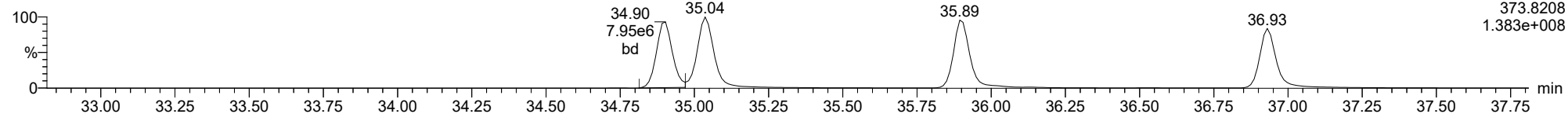
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

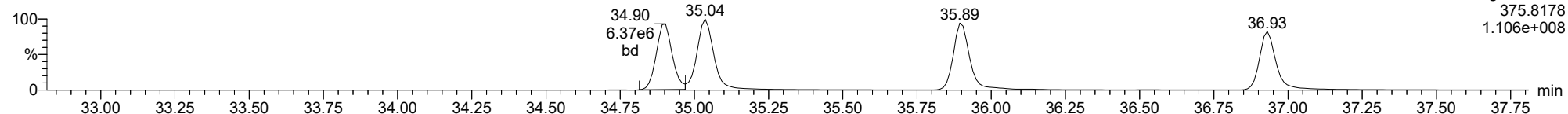
123478-HxCDF

23030309



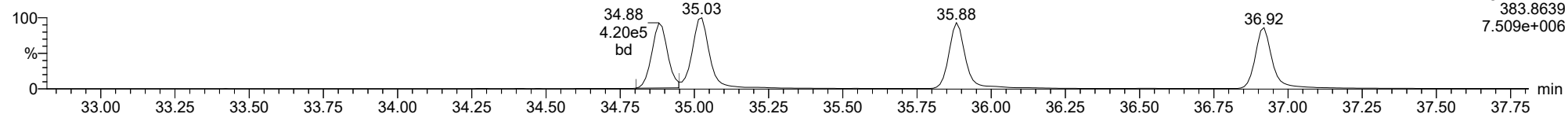
123478-HxCDF

23030309



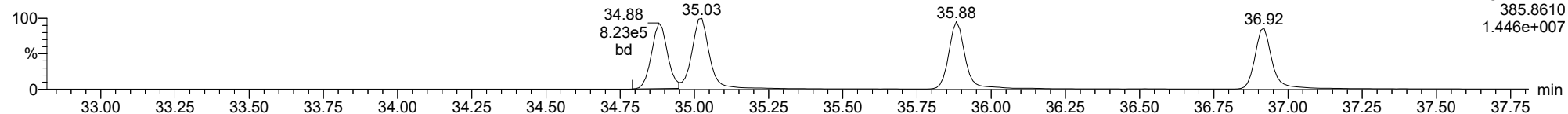
13C-123478-HxCDF

23030309



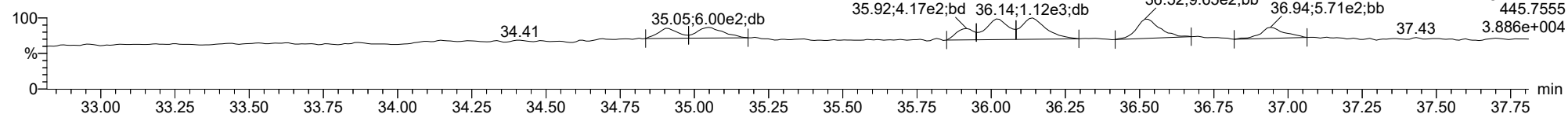
13C-123478-HxCDF

23030309



FUNCTION3 OCDPE

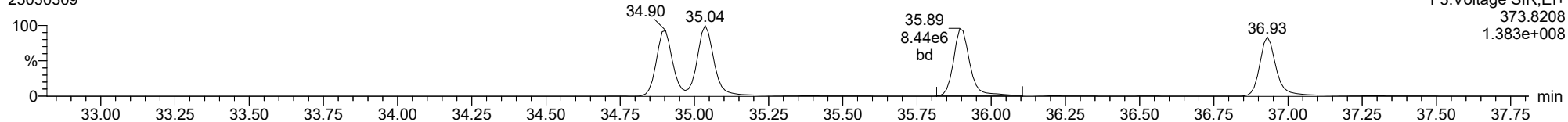
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

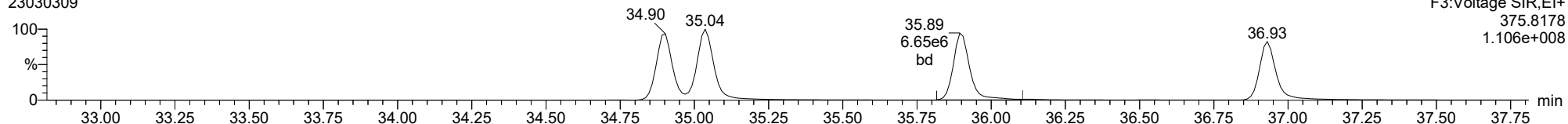
234678-HxCDF

23030309



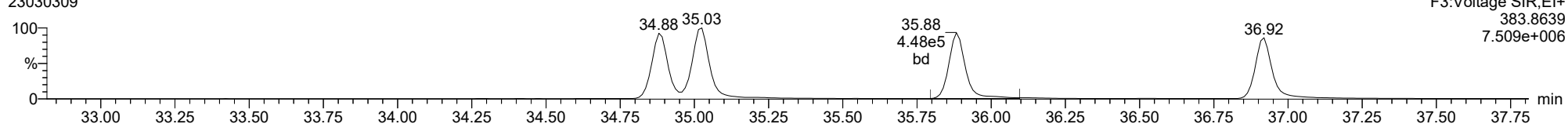
234678-HxCDF

23030309



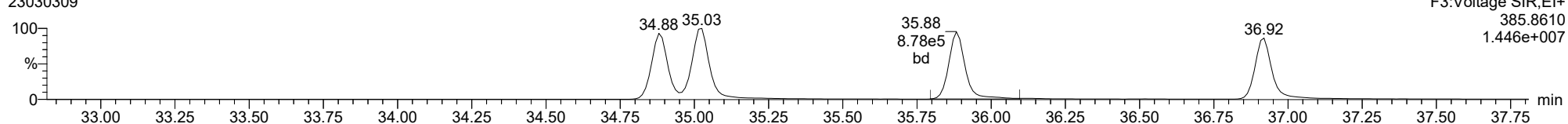
13C-234678-HxCDF

23030309



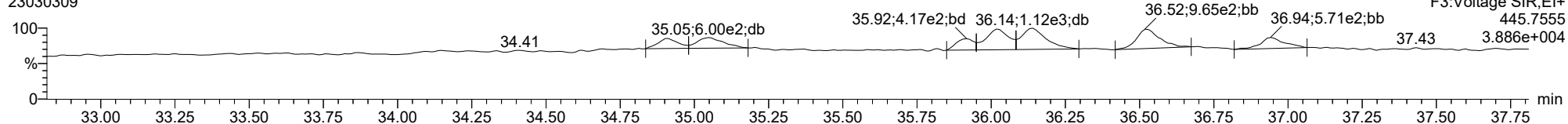
13C-234678-HxCDF

23030309



FUNCTION3 OCDPE

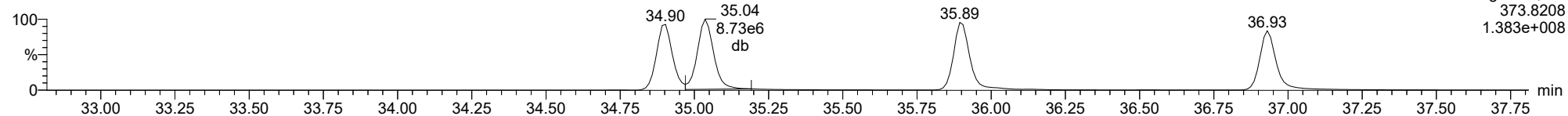
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

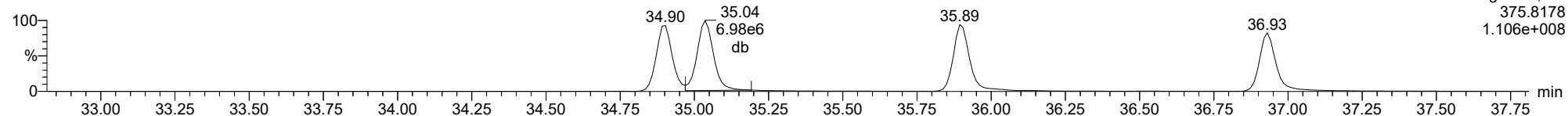
123678-HxCDF

23030309



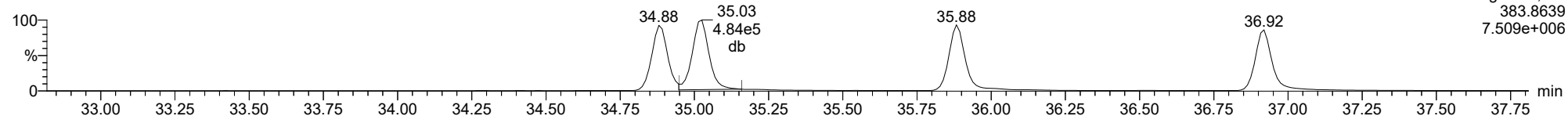
123678-HxCDF

23030309



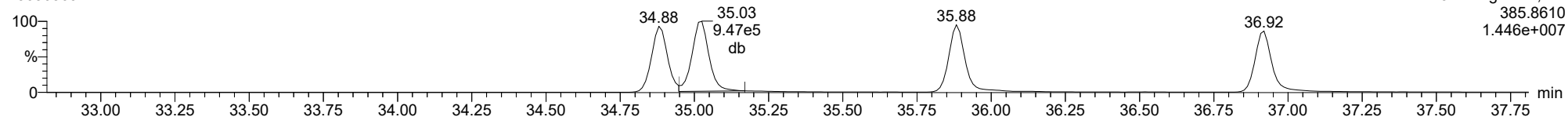
13C-123678-HxCDF

23030309



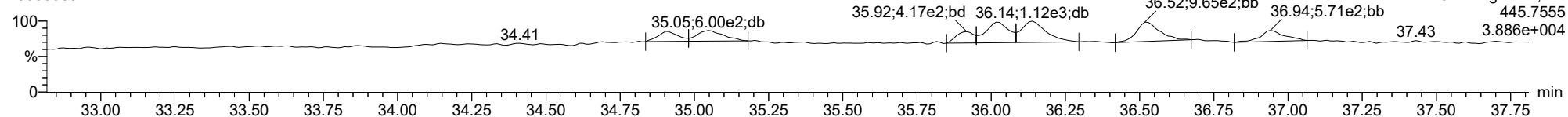
13C-123678-HxCDF

23030309



FUNCTION3 OCDPE

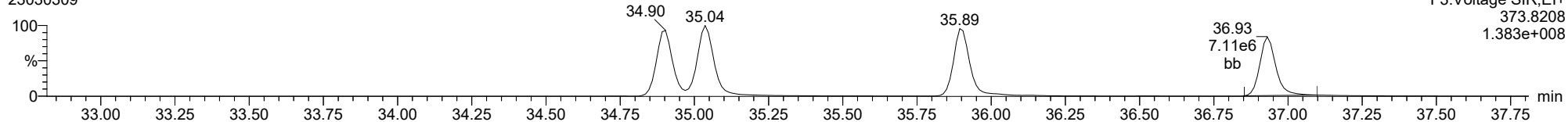
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

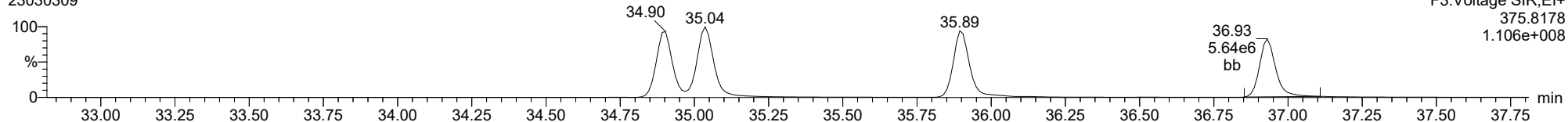
123789-HxCDF

23030309



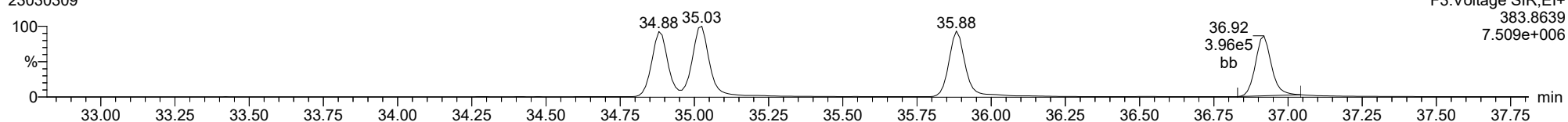
123789-HxCDF

23030309



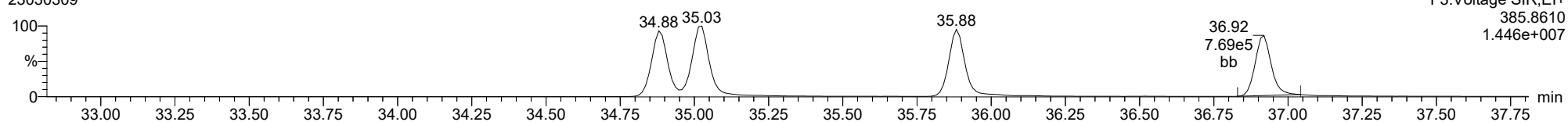
13C-123789-HxCDF

23030309



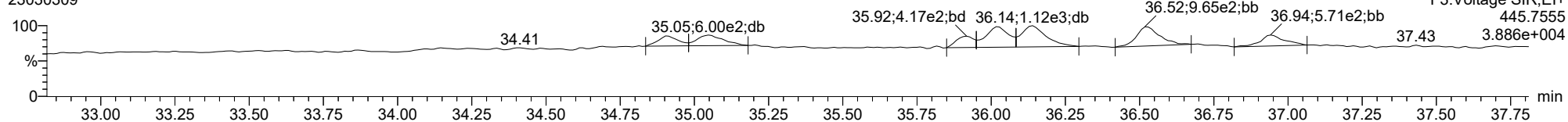
13C-123789-HxCDF

23030309



FUNCTION3 OCDPE

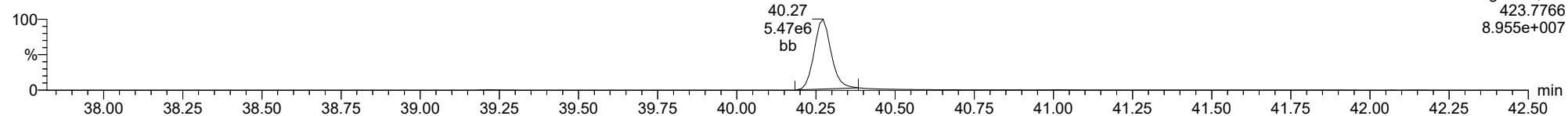
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

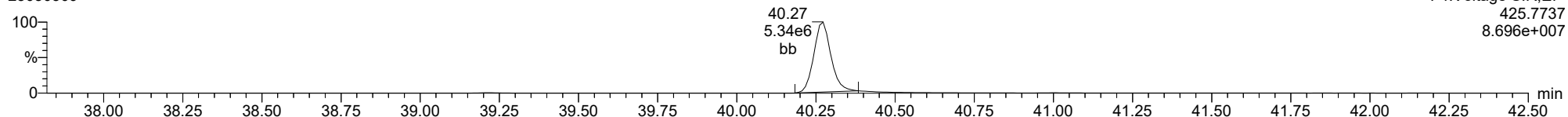
1234678-HpCDD

23030309



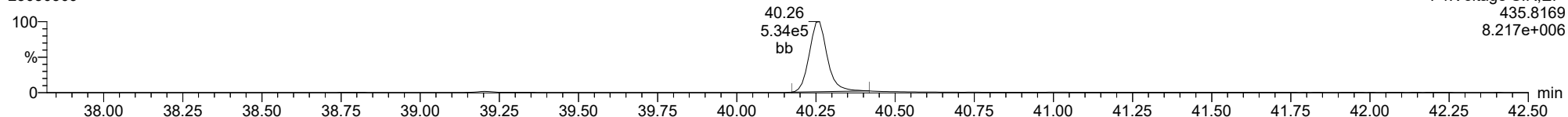
1234678-HpCDD

23030309



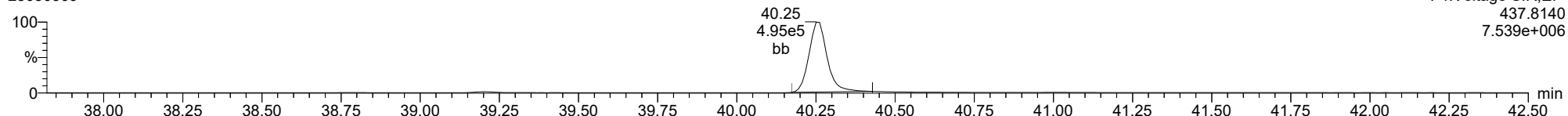
13C-1234678-HpCDD

23030309



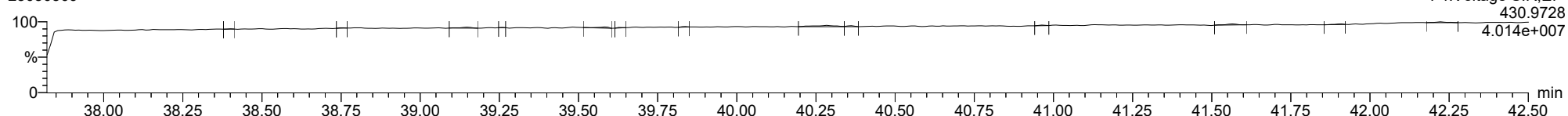
13C-1234678-HpCDD

23030309



FUNCTION4 PFK

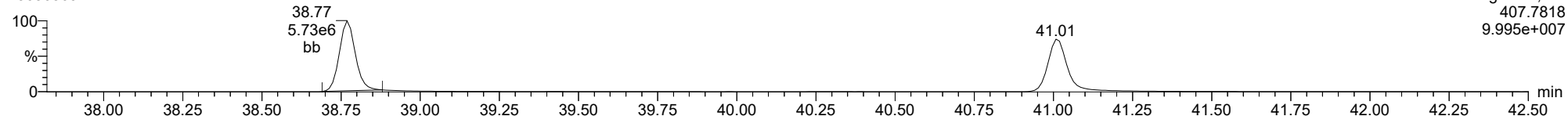
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

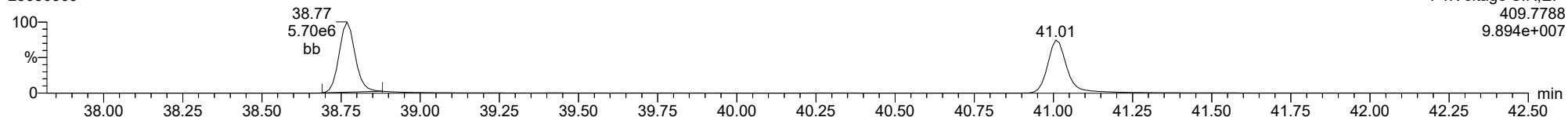
23030309



F4:Voltage SIR,EI+
407.7818
9.995e+007

1234678-HpCDF

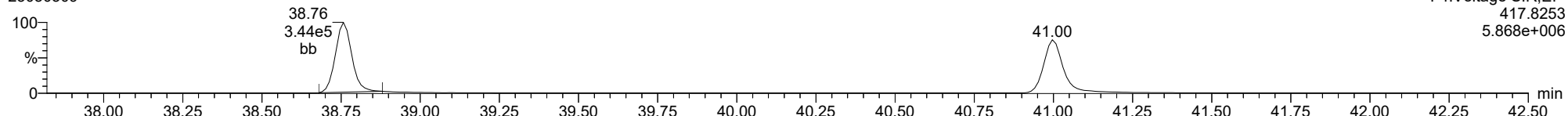
23030309



F4:Voltage SIR,EI+
409.7788
9.894e+007

13C-1234678-HpCDF

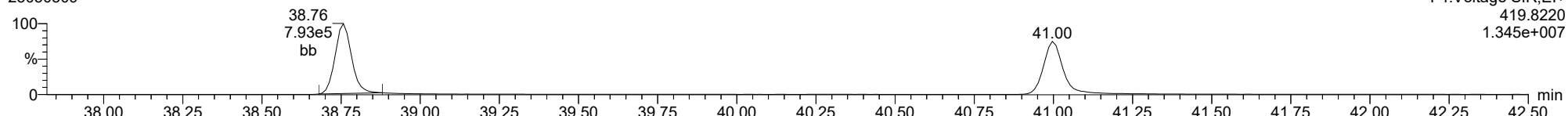
23030309



F4:Voltage SIR,EI+
417.8253
5.868e+006

13C-1234678-HpCDF

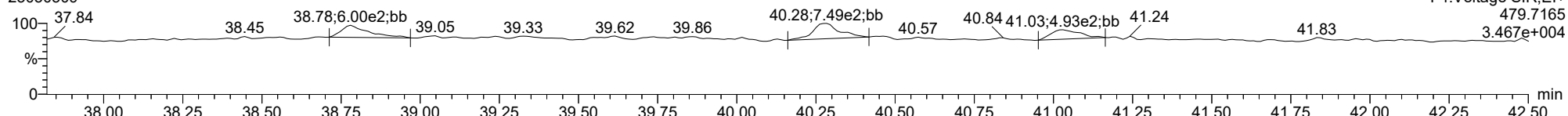
23030309



F4:Voltage SIR,EI+
419.8220
1.345e+007

FUNCTION4 NCDPE

23030309

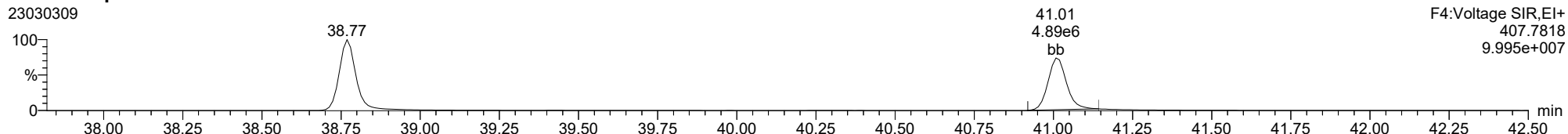


F4:Voltage SIR,EI+
479.7165
3.467e+004

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

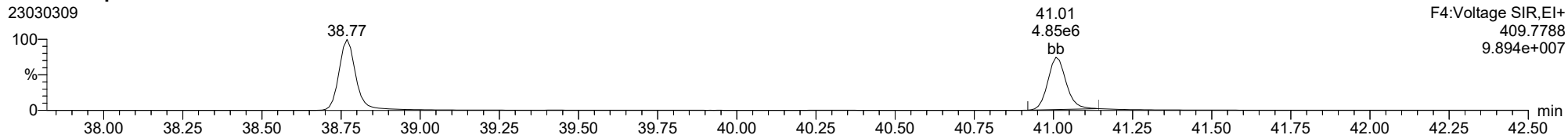
23030309



F4:Voltage SIR,EI+
407.7818
9.995e+007

1234789-HpCDF

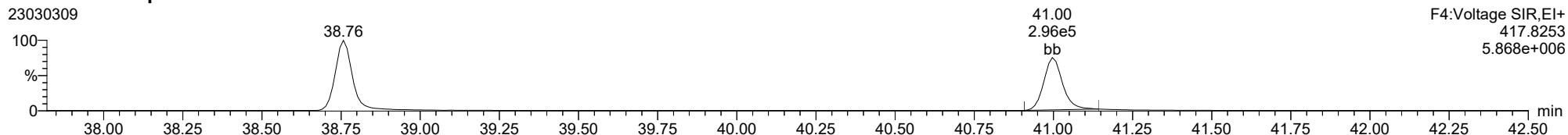
23030309



F4:Voltage SIR,EI+
409.7788
9.894e+007

13C-1234789-HpCDF

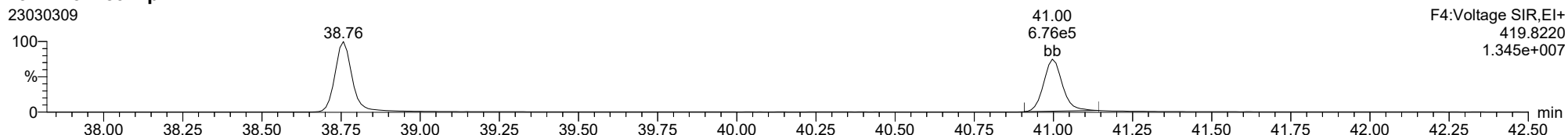
23030309



F4:Voltage SIR,EI+
417.8253
5.868e+006

13C-1234789-HpCDF

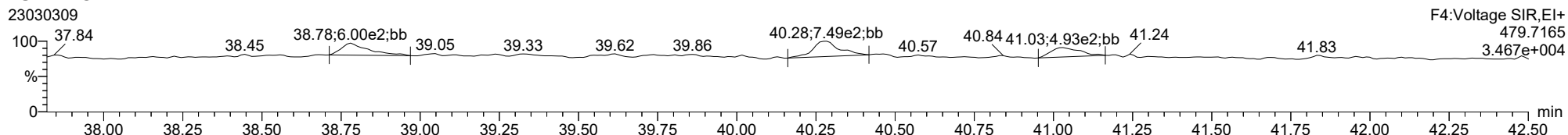
23030309



F4:Voltage SIR,EI+
419.8220
1.345e+007

FUNCTION4 NCDPE

23030309

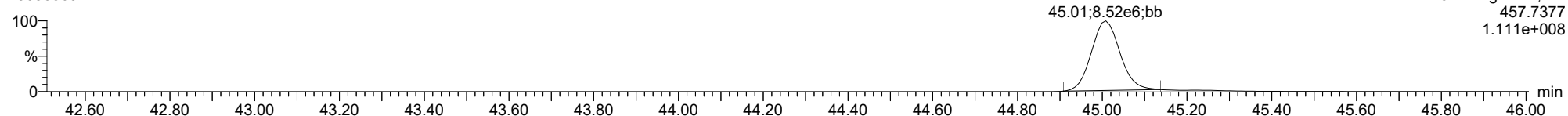


F4:Voltage SIR,EI+
479.7165
3.467e+004

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

OCDD

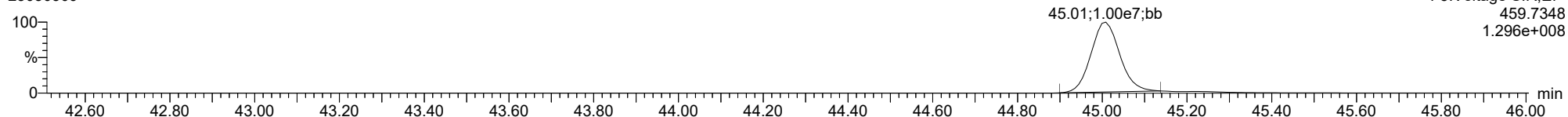
23030309



F5:Voltage SIR,EI+
457.7377
1.111e+008

OCDD

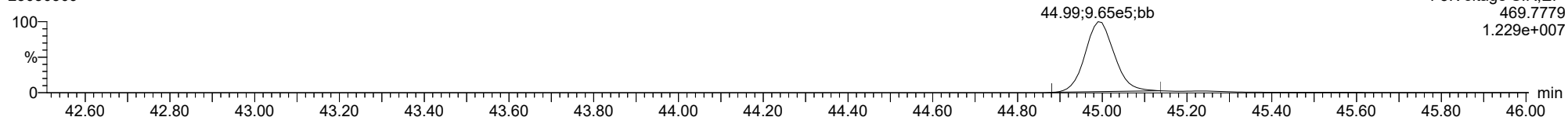
23030309



F5:Voltage SIR,EI+
459.7348
1.296e+008

13C-OCDD

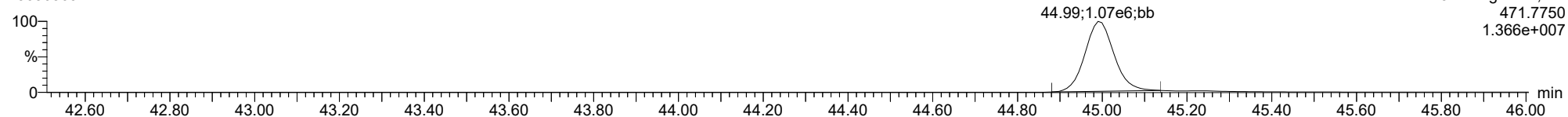
23030309



F5:Voltage SIR,EI+
469.7779
1.229e+007

13C-OCDD

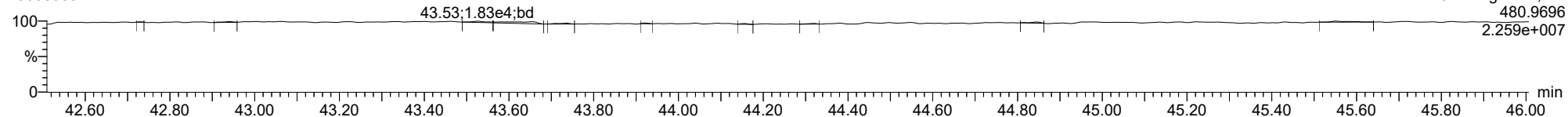
23030309



F5:Voltage SIR,EI+
471.7750
1.366e+007

FUNCTION5 PFK

23030309

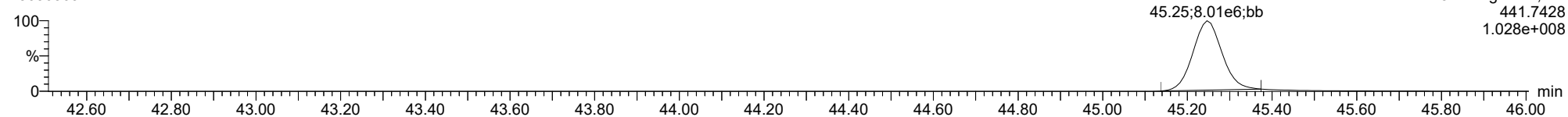


F5:Voltage SIR,EI+
480.9696
2.259e+007

ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

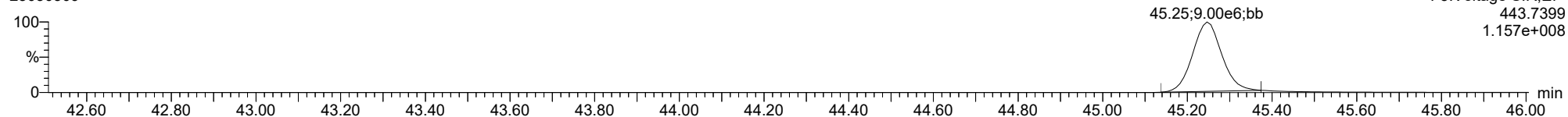
OCDF

23030309



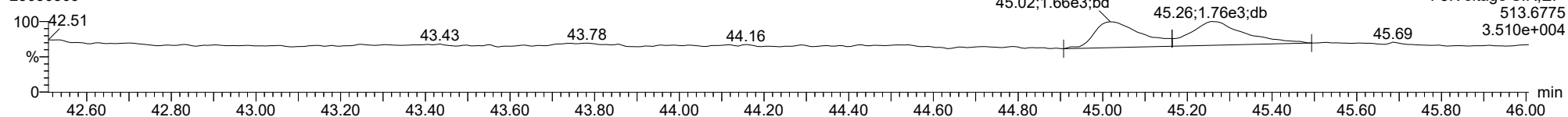
OCDF

23030309



FUNCTION5 DCDPE

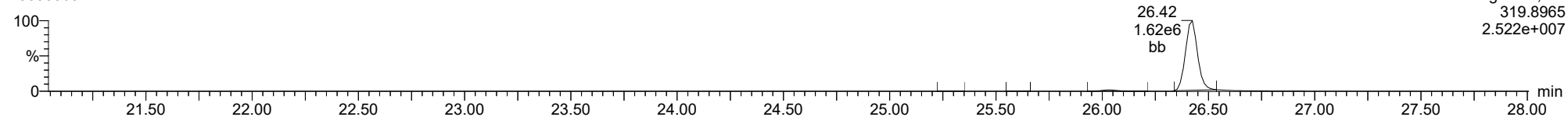
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

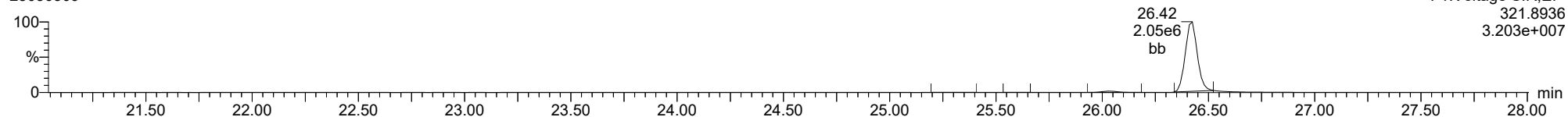
Total-tetradioxins

23030309



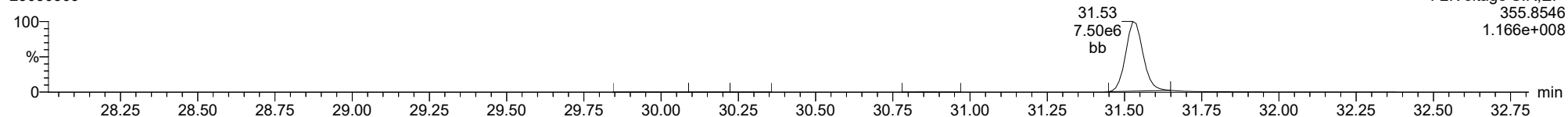
Total-tetradioxins

23030309



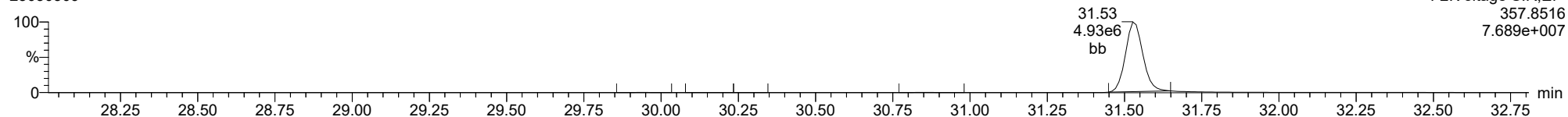
Total-pentadioxins

23030309



Total-pentadioxins

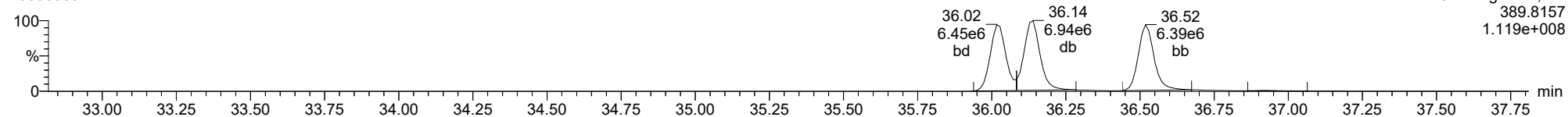
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

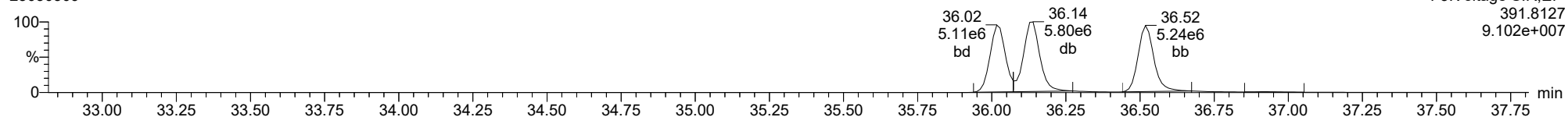
Total-hexadioxins

23030309



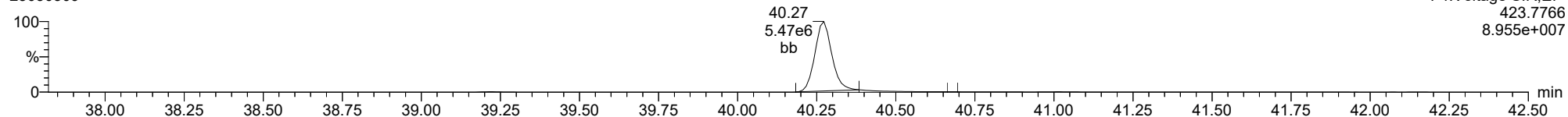
Total-hexadioxins

23030309



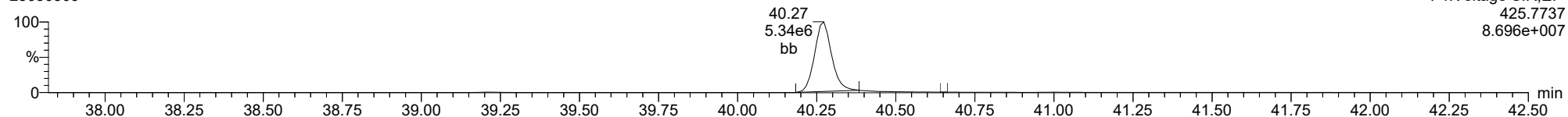
Total-heptadioxins

23030309



Total-heptadioxins

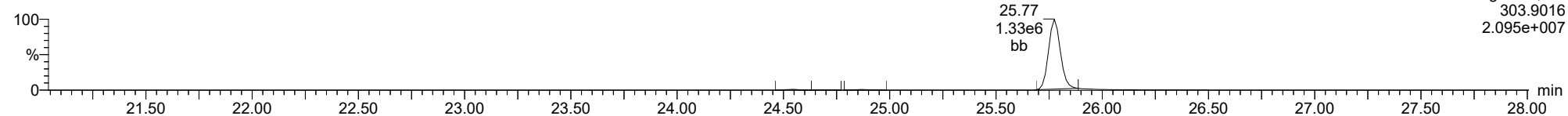
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

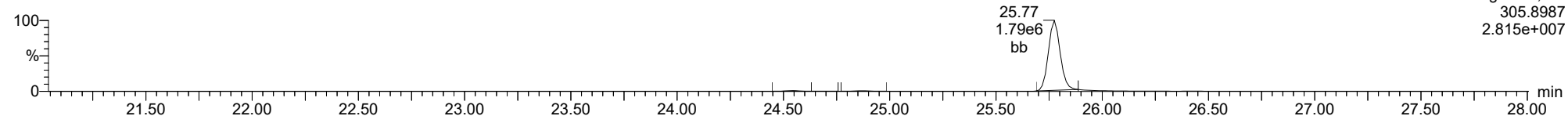
Total-tetrafurans

23030309



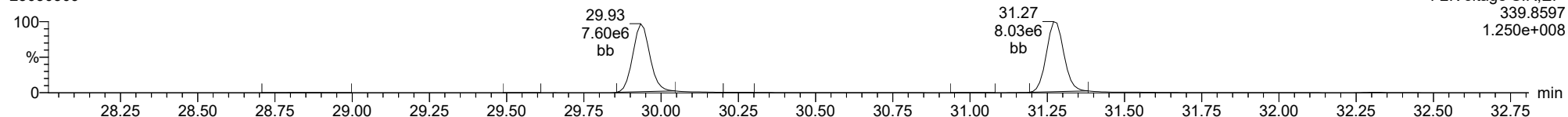
Total-tetrafurans

23030309



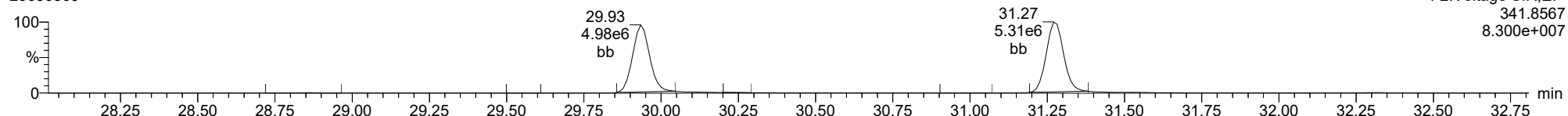
Total-pentafurans

23030309



Total-pentafurans

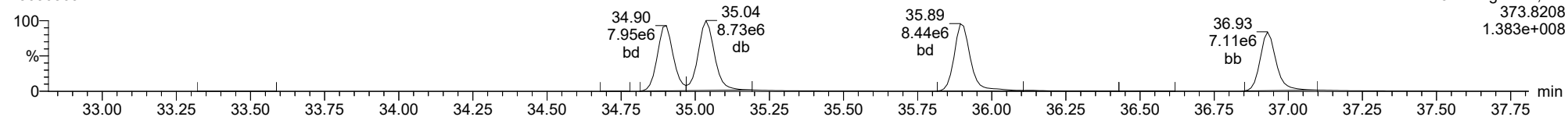
23030309



ID: CS5CW, Name: 23030309, Date: 03-Mar-2023, Time: 15:47:43, Conditions: AUTOSPEC01, User: pk

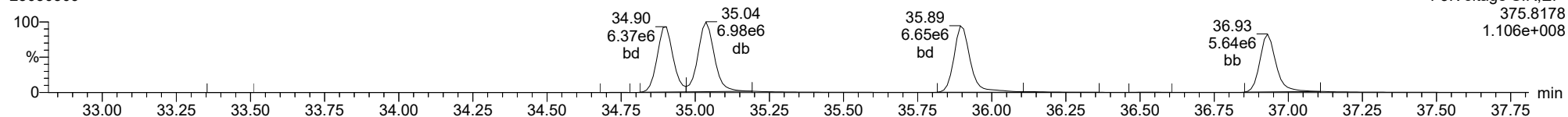
Total-hexafurans

23030309



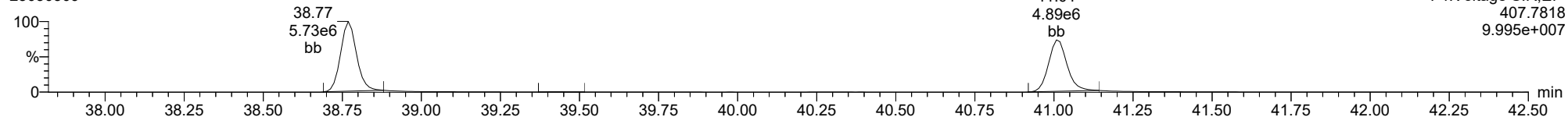
Total-hexafurans

23030309



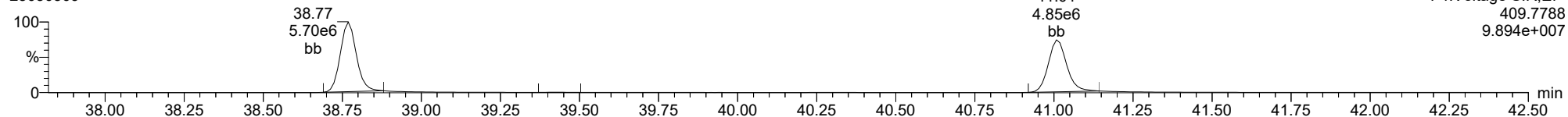
Total-heptafurans

23030309



Total-heptafurans

23030309



Dataset: T:\Autospec\Processed Data Batch\230303IHCIV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
 Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	5.338e4	7.452e4	0.702	0.716	0.770	1163	2029	8.36e5	1.13e6	718.7	556.3	NO	bb	bb	9.838
12378-PeCDF	29.934	1.000	2.214e5	1.526e5	0.679	1.451	1.550	3022	2812	3.24e6	2.15e6	1073.8	764.7	NO	bb	bd	51.391
23478-PeCDF	31.271	1.000	2.350e5	1.508e5	0.786	1.559	1.550	3022	2812	3.42e6	2.23e6	1131.6	792.3	NO	bb	bb	48.980
123478-HxCDF	34.903	1.001	2.903e5	2.325e5	1.166	1.248	1.240	3142	2543	4.30e6	3.42e6	1370.1	1344.7	NO	bd	bd	48.245
234678-HxCDF	35.905	1.001	2.873e5	2.291e5	1.140	1.254	1.240	3142	2543	4.27e6	3.38e6	1358.7	1330.7	NO	bb	bb	50.224
123678-HxCDF	35.036	1.001	3.271e5	2.812e5	1.091	1.163	1.240	3142	2543	4.70e6	3.76e6	1497.0	1479.3	NO	db	db	47.992
123789-HxCDF	36.930	1.001	2.403e5	1.952e5	1.137	1.231	1.240	3142	2543	3.49e6	2.77e6	1110.7	1088.1	NO	bb	bb	49.077
1234678-HpCDF	38.769	1.000	2.051e5	2.017e5	1.003	1.017	1.050	2774	2508	3.29e6	3.29e6	1185.4	1309.8	NO	bb	bb	51.838
1234789-HpCDF	41.008	1.000	1.584e5	1.578e5	0.953	1.004	1.050	2774	2508	2.19e6	2.22e6	790.9	884.0	NO	bb	bb	48.461
OCDF	45.237	1.006	2.094e5	2.177e5	0.778	0.962	0.890	1876	1660	2.24e6	2.46e6	1194.3	1483.7	NO	bd	bb	103.506
2378-TCDD	26.424	1.001	6.583e4	8.225e4	1.149	0.800	0.770	1514	1206	9.92e5	1.24e6	654.9	1028.2	NO	bb	bb	9.815
12378-PeCDD	31.538	1.001	2.257e5	1.459e5	1.022	1.547	1.550	2000	2144	3.28e6	2.13e6	1638.2	994.7	NO	bb	bb	48.547
123478-HxCDD	36.016	1.000	2.316e5	1.815e5	0.996	1.276	1.240	2983	1710	3.62e6	3.01e6	1214.5	1762.3	NO	bd	bd	50.799
123678-HxCDD	36.139	1.001	2.694e5	2.159e5	1.001	1.248	1.240	2983	1710	3.76e6	3.05e6	1260.5	1785.9	NO	db	db	50.174
123789-HxCDD	36.518	1.011	2.330e5	1.844e5	0.907	1.263	1.240	2983	1710	3.29e6	2.69e6	1104.0	1571.7	NO	bd	bb	51.608
1234678-HpCDD	40.272	1.001	1.962e5	1.803e5	1.039	1.088	1.050	2922	2339	2.72e6	2.60e6	932.5	1113.0	NO	bd	bb	49.199
OCDD	44.999	1.000	2.234e5	2.618e5	0.920	0.853	0.890	1774	1393	2.65e6	3.06e6	1496.5	2199.2	NO	bb	bb	99.422
13C-2378-TCDF	25.760	1.007	7.988e5	1.054e6	1.620	0.758	0.770	2799	1492	1.21e7	1.60e7	4320.8	10737.9	NO	bb	bb	96.925
13C-12378-PeCDF	29.923	1.169	6.425e5	4.290e5	1.240	1.498	1.550	3398	4585	8.78e6	5.86e6	2583.4	1278.4	NO	bd	bd	73.193
13C-23478-PeCDF	31.259	1.222	6.035e5	3.982e5	1.118	1.515	1.550	3398	4585	8.73e6	5.79e6	2568.3	1261.6	NO	bb	bb	75.943
13C-123478-HxCDF	34.880	0.955	3.186e5	6.107e5	1.168	0.522	0.510	2913	2215	4.74e6	9.25e6	1627.4	4175.4	NO	bd	bd	92.972
13C-123678-HxCDF	35.014	0.959	3.885e5	7.735e5	1.386	0.502	0.510	2913	2215	5.29e6	1.03e7	1816.0	4636.7	NO	dd	db	97.958
13C-234678-HxCDF	35.883	0.983	3.009e5	6.013e5	1.129	0.500	0.510	2913	2215	4.56e6	8.94e6	1567.0	4037.6	NO	bb	bb	93.371
13C-123789-HxCDF	36.908	1.011	2.634e5	5.171e5	0.932	0.509	0.510	2913	2215	3.83e6	7.41e6	1313.2	3346.2	NO	bb	bb	97.906
13C-1234678-HpCDF	38.757	1.062	2.395e5	5.428e5	0.895	0.441	0.440	2666	4327	3.79e6	8.70e6	1422.6	2009.5	NO	bb	bb	102.148
13C-1234789-HpCDF	40.997	1.123	1.971e5	4.875e5	0.770	0.404	0.440	2666	4327	2.64e6	6.15e6	990.0	1422.1	NO	bb	bb	103.953
13C-1234-TCDD	25.591	0.000	5.239e5	6.562e5	1.000	0.798	0.770	2541	1448	8.13e6	1.01e7	3200.8	6994.1	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	5.859e5	7.277e5	1.152	0.805	0.770	2541	1448	8.48e6	1.06e7	3338.5	7327.1	NO	bb	bb	96.583
13C-12378-PeCDD	31.515	1.232	4.640e5	2.850e5	0.829	1.628	1.550	1690	813	6.82e6	4.16e6	4037.7	5122.1	NO	bb	bb	76.570
13C-123478-HxCDD	36.005	0.986	4.566e5	3.601e5	0.995	1.268	1.240	2230	1571	7.33e6	5.72e6	3288.3	3642.7	NO	bd	bd	95.938
13C-123678-HxCDD	36.117	0.989	5.277e5	4.388e5	1.157	1.203	1.240	2230	1571	7.53e6	5.98e6	3378.3	3806.0	NO	db	db	97.660
13C-1234678-HpCDD	40.250	1.102	3.788e5	3.578e5	0.840	1.059	1.050	1327	2781	5.06e6	4.73e6	3813.0	1700.4	NO	bd	bb	102.476
13C-OCDD	44.981	1.232	5.015e5	5.594e5	0.767	0.896	0.890	2228	1562	5.65e6	6.37e6	2536.4	4080.5	NO	bb	bb	161.563
13C-123789-HxCDD	36.507	0.000	4.814e5	3.742e5	1.000	1.287	1.240	2230	1571	7.02e6	5.48e6	3149.1	3490.5	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	1.324e5		1.288			2249		1.92e6		853.0			bb		8.714

Dataset: T:\Autospec\Processed Data Batch\230303\HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	6.666e4	8.755e4	0.802	0.761	0.770	1163	2029	1.09e6	1.45e6	933.7	713.4	NO	bb	bb	10.382
1289-TCDF	27.272	1.059	5.306e4	7.400e4	0.678	0.717	0.770	1163	2029	8.00e5	1.11e6	688.3	549.0	NO	bb	db	10.112
13468-PECDF	27.130	0.907	5.428e5	3.536e5	1.246	1.535	1.550	921	1306	8.56e6	5.56e6	9287.8	4254.6	NO	bb	bb	67.124
12389-PECDF	32.307	1.080	2.363e5	1.551e5	0.496	1.524	1.550	3022	2812	3.29e6	2.19e6	1088.1	777.6	NO	bb	bb	73.589
123468-HXCDF	33.231	0.953	3.102e5	2.472e5	1.169	1.255	1.240	3142	2543	4.60e6	3.67e6	1465.3	1443.2	NO	bb	bb	51.304
1368-TCDD	23.557	0.892	6.641e4	8.365e4	1.015	0.794	0.770	1514	1206	1.07e6	1.32e6	704.3	1092.4	NO	bb	bb	11.251
1289-TCDD	27.017	1.023	6.055e4	8.062e4	0.909	0.751	0.770	1514	1206	8.59e5	1.12e6	567.6	932.6	NO	bd	bd	11.826
12479-PECDD	28.819	0.914	4.776e5	3.067e5	2.301	1.557	1.550	2000	2144	4.46e6	2.89e6	2227.8	1348.6	NO	bb	bb	45.504
12389-PECDD	31.928	1.013	2.675e5	1.746e5	1.184	1.532	1.550	2000	2144	3.96e6	2.51e6	1980.6	1171.6	NO	bb	bb	49.870
124679-HXCDD	34.011	0.945	2.545e5	2.054e5	1.115	1.239	1.240	2983	1710	3.72e6	3.05e6	1245.7	1780.9	NO	bb	bb	50.484
1234679-HPCDD	39.225	0.975	2.082e5	2.022e5	1.137	1.029	1.050	2922	2339	3.21e6	3.09e6	1099.8	1322.5	NO	bb	bb	49.010
Total-tetrafurans			1.731e5		0.727			1163		2.72e6							30.332
Total-penta1			5.428e5					921		8.56e6							67.124
Total-penta-furans			7.375e5		0.654			3022		1.06e7							184.995
Total-hexa-furans			1.455e6		1.141			3142		2.14e7							246.841
Total-hepta-furans			3.635e5		0.978			2774		5.48e6							100.299
Total-Furans			3.482e6		0.922			1163		5.10e7							733.097
Total-tetradiioxins			3.292e5		1.024			1514		4.53e6							56.345
Total-pentadiioxins			9.708e5		1.502			2000		1.17e7							143.922
Total-hexadiioxins			9.885e5		1.005			2983		1.44e7							203.065
Total-heptadiioxins			4.044e5		1.088			2922		5.94e6							98.208
Total-Dioxins			2.916e6		1.130			1514		3.92e7							600.962
Total-TEQ			6.398e6					1514		9.02e7							1334.059
FUNCTION1 PFK			0.000e0					539943		0.00e0							
FUNCTION2 PFK			2.253e6					228820		1.84e6							0.000
FUNCTION3 PFK			3.977e4					386595		8.75e5							0.000
FUNCTION4 PFK			7.296e4					280107		2.70e6							
FUNCTION5 PFK			1.323e3					209307		1.46e5							
FUNCTION1 HXCD...			6.633e2					708		9.34e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			5.152e2					1165		9.44e3							0.000
FUNCTION3 OCDPE			5.246e2					459		6.83e3							0.000
FUNCTION4 NCDPE			4.889e2					641		6.04e3							0.000
FUNCTION5 DCDPE			0.000e0					644		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\IHICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303\ICIH.cdb 06 Mar 2023 10:57:27

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
2	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
3	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
4	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
2	123468-HxCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
3	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
4	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
5	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
2	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382
4	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
5	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
6	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
7	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035
8	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
9	123468-HxCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
10	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
11	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
12	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992
13	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
14	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461
15	OCDF	45.24	2.094e5	2.177e5	0.778	0.96	0.89	1194.3	YES	NO	bd	bb	103.506
16	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
2	Total-tetradoxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
3	Total-tetradoxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
4	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
5	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
6	Total-tetradoxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
7	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
8	Total-tetradoxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
2	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
3	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HxCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
2	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
3	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
4	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
2	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
2	Total-tetradoxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
3	Total-tetradoxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
4	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
5	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
6	Total-tetradoxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
7	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
8	Total-tetradoxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347
9	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
10	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
11	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504
12	124679-HxCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
13	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
14	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
15	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799
16	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
17	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199
18	OCDD	45.00	2.234e5	2.618e5	0.920	0.85	0.89	1496.5	YES	NO	bb	bb	99.422

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	5.306e4	7.400e4	0.678	0.72	0.77	688.3	YES	NO	bb	db	10.112
2	2378-TCDF	25.77	5.338e4	7.452e4	0.702	0.72	0.77	718.7	YES	NO	bb	bb	9.838
3	1368-TCDF	22.27	6.666e4	8.755e4	0.802	0.76	0.77	933.7	YES	NO	bb	bb	10.382
4	12389-PECDF	32.31	2.363e5	1.551e5	0.496	1.52	1.55	1088.1	YES	NO	bb	bb	73.589
5	23478-PeCDF	31.27	2.350e5	1.508e5	0.786	1.56	1.55	1131.6	YES	NO	bb	bb	48.980
6	12378-PeCDF	29.93	2.214e5	1.526e5	0.679	1.45	1.55	1073.8	YES	NO	bb	bd	51.391
7	Total-pentafurans	28.79	4.479e4	3.002e4	0.654	1.49	1.55	225.2	YES	NO	bb	bb	11.035
8	123478-HxCDF	34.90	2.903e5	2.325e5	1.166	1.25	1.24	1370.1	YES	NO	bd	bd	48.245
9	123468-HxCDF	33.23	3.102e5	2.472e5	1.169	1.26	1.24	1465.3	YES	NO	bb	bb	51.304
10	123789-HxCDF	36.93	2.403e5	1.952e5	1.137	1.23	1.24	1110.7	YES	NO	bb	bb	49.077
11	234678-HxCDF	35.91	2.873e5	2.291e5	1.140	1.25	1.24	1358.7	YES	NO	bb	bb	50.224
12	123678-HxCDF	35.04	3.271e5	2.812e5	1.091	1.16	1.24	1497.0	YES	NO	db	db	47.992
13	1234678-HpCDF	38.77	2.051e5	2.017e5	1.003	1.02	1.05	1185.4	YES	NO	bb	bb	51.838
14	1234789-HpCDF	41.01	1.584e5	1.578e5	0.953	1.00	1.05	790.9	YES	NO	bb	bb	48.461
15	OCDF	45.24	2.094e5	2.177e5	0.778	0.96	0.89	1194.3	YES	NO	bd	bb	103.506
16	13468-PECDF	27.13	5.428e5	3.536e5	1.246	1.54	1.55	9287.8	YES	NO	bb	bb	67.124
17	Total-tetradioxins	25.60	3.327e4	3.983e4	1.024	0.84	0.77	333.8	YES	NO	bd	bb	5.433
18	Total-tetradioxins	25.04	8.004e2	1.202e3	1.024	0.67	0.77	7.4	YES	NO	bb	db	0.149
19	Total-tetradioxins	24.74	2.704e3	4.097e3	1.024	0.66	0.77	17.7	YES	NO	bb	bd	0.506
20	1368-TCDD	23.56	6.641e4	8.365e4	1.015	0.79	0.77	704.3	YES	NO	bb	bb	11.251
21	1289-TCDD	27.02	6.055e4	8.062e4	0.909	0.75	0.77	567.6	YES	NO	bd	bd	11.826
22	Total-tetradioxins	26.76	1.054e2	1.391e2	1.024	0.76	0.77	2.1	NO	NO	bb	bb	0.018
23	2378-TCDD	26.42	6.583e4	8.225e4	1.149	0.80	0.77	654.9	YES	NO	bb	bb	9.815
24	Total-tetradioxins	26.10	9.949e4	1.339e5	1.024	0.74	0.77	703.4	YES	NO	bb	bb	17.347
25	12389-PECDD	31.93	2.675e5	1.746e5	1.184	1.53	1.55	1980.6	YES	NO	bb	bb	49.870
26	12378-PeCDD	31.54	2.257e5	1.459e5	1.022	1.55	1.55	1638.2	YES	NO	bb	bb	48.547
27	12479-PECDD	28.82	4.776e5	3.067e5	2.301	1.56	1.55	2227.8	YES	NO	bb	bb	45.504
28	124679-HXCDD	34.01	2.545e5	2.054e5	1.115	1.24	1.24	1245.7	YES	NO	bb	bb	50.484
29	123789-HxCDD	36.52	2.330e5	1.844e5	0.907	1.26	1.24	1104.0	YES	NO	bd	bb	51.608
30	123678-HxCDD	36.14	2.694e5	2.159e5	1.001	1.25	1.24	1260.5	YES	NO	db	db	50.174
31	123478-HxCDD	36.02	2.316e5	1.815e5	0.996	1.28	1.24	1214.5	YES	NO	bd	bd	50.799
32	1234679-HPCDD	39.23	2.082e5	2.022e5	1.137	1.03	1.05	1099.8	YES	NO	bb	bb	49.010
33	1234678-HpCDD	40.27	1.962e5	1.803e5	1.039	1.09	1.05	932.5	YES	NO	bd	bb	49.199
34	OCDD	45.00	2.234e5	2.618e5	0.920	0.85	0.89	1496.5	YES	NO	bb	bb	99.422

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:19 Pacific Standard Time

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.14	2.253e6					8.0	YES		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	34.08	3.977e4					2.3	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	41.32	4.162e3					0.8	NO		bb		
2	FUNCTION4 PFK	40.68	1.340e4					1.2	NO		bb		
3	FUNCTION4 PFK	40.50	1.024e4					1.3	NO		bb		
4	FUNCTION4 PFK	40.07	1.056e4					1.2	NO		bb		
5	FUNCTION4 PFK	39.50	1.007e4					1.4	NO		bb		
6	FUNCTION4 PFK	42.14	1.085e4					1.0	NO		bb		
7	FUNCTION4 PFK	42.10	6.400e3					1.1	NO		bb		
8	FUNCTION4 PFK	41.87	1.885e3					0.6	NO		bb		
9	FUNCTION4 PFK	41.61	5.389e3					0.9	NO		bb		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.23	1.323e3					0.7	NO		bb		

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	26.55	1.589e2					2.0	NO		db		0.000
2	FUNCTION1 HXCD...	26.42	1.755e2					3.2	YES		bd		0.000
3	FUNCTION1 HXCD...	25.59	9.854e1					1.9	NO		bb		0.000
4	FUNCTION1 HXCD...	23.87	7.096e1					1.9	NO		bb		0.000
5	FUNCTION1 HXCD...	23.56	8.003e1					2.4	NO		bb		0.000
6	FUNCTION1 HXCD...	22.40	7.940e1					1.8	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	30.33	1.101e2					1.7	NO		bb		0.000
2	FUNCTION2 HPCD...	28.89	7.875e1					1.7	NO		bb		0.000
3	FUNCTION2 HPCD...	31.17	3.263e2					4.7	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	1.586e2					5.0	YES		bb		0.000
2	FUNCTION3 OCDPE	36.13	1.909e2					4.9	YES		db		0.000
3	FUNCTION3 OCDPE	35.99	1.751e2					5.1	YES		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.06	1.247e2					2.2	NO		db		0.000
2	FUNCTION4 NCDPE	40.94	7.187e1					1.7	NO		bd		0.000
3	FUNCTION4 NCDPE	40.37	7.003e1					1.7	NO		db		0.000
4	FUNCTION4 NCDPE	40.26	2.223e2					3.8	YES		bd		0.000

ETHERS6

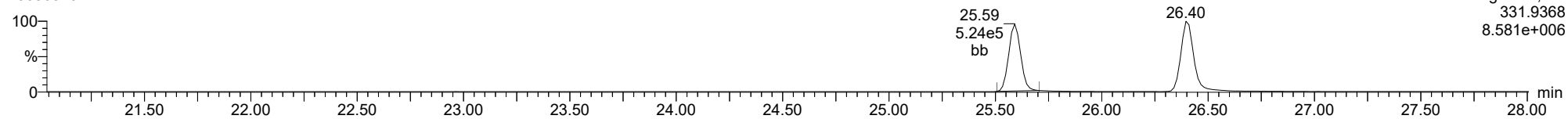
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: ICVCW, **Name:** 23030310, **Date:** 03-Mar-2023, **Time:** 16:36:24, **Conditions:** AUTOSPEC01, **User:** pk

13C-1234-TCDD

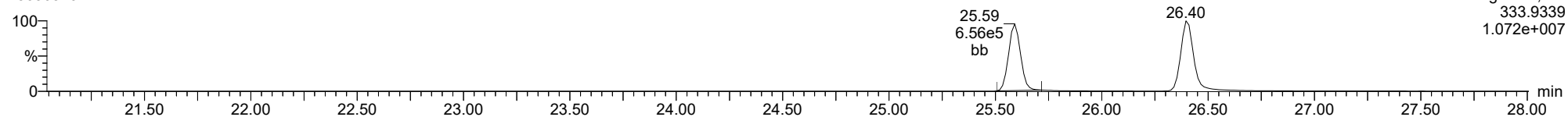
23030310



F1:Voltage SIR,El+
331.9368
8.581e+006

13C-1234-TCDD

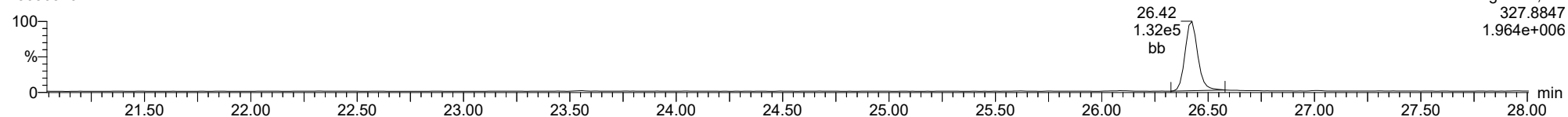
23030310



F1:Voltage SIR,El+
333.9339
1.072e+007

37CL-2378-TCDD

23030310

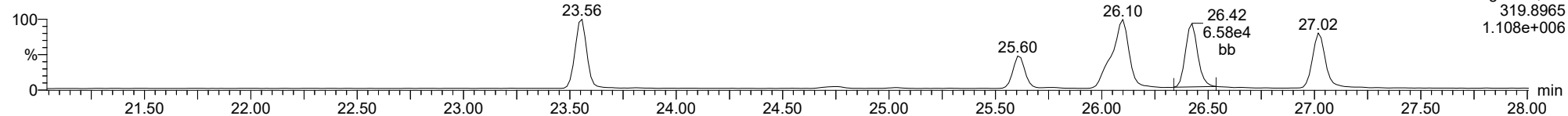


F1:Voltage SIR,El+
327.8847
1.964e+006

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

2378-TCDD

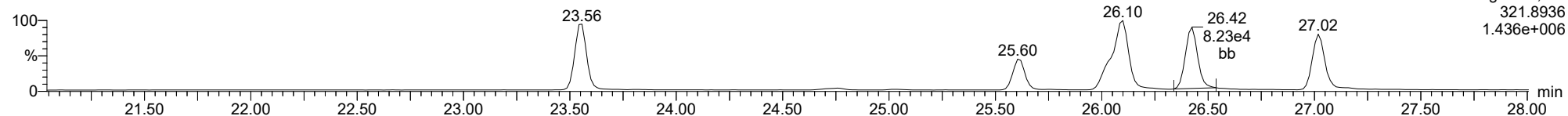
23030310



F1:Voltage SIR,EI+
319.8965
1.108e+006

2378-TCDD

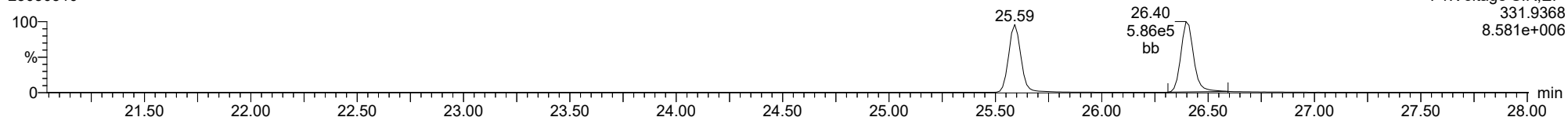
23030310



F1:Voltage SIR,EI+
321.8936
1.436e+006

13C-2378-TCDD

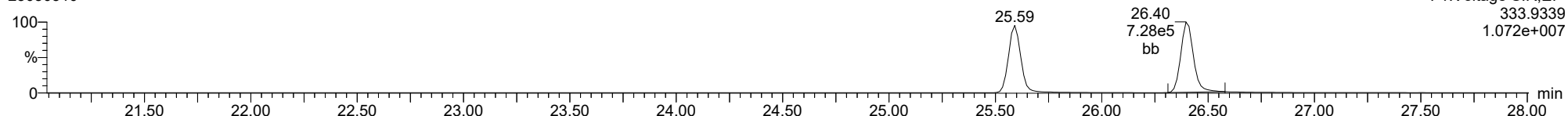
23030310



F1:Voltage SIR,EI+
331.9368
8.581e+006

13C-2378-TCDD

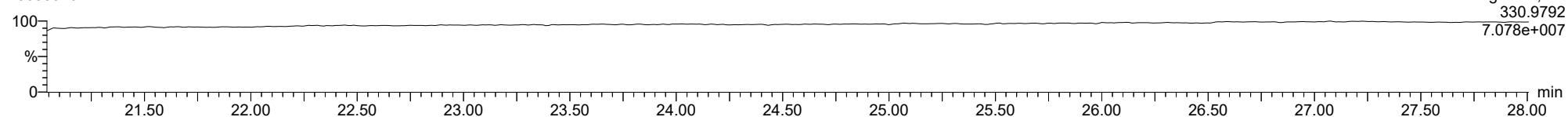
23030310



F1:Voltage SIR,EI+
333.9339
1.072e+007

FUNCTION1 PFK

23030310

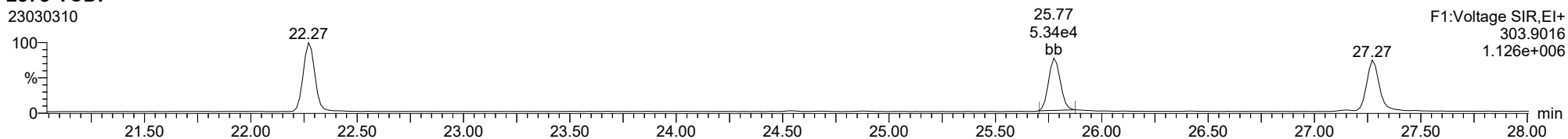


F1:Voltage SIR,EI+
330.9792
7.078e+007

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

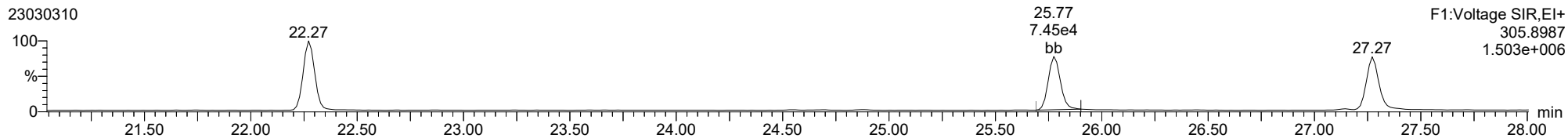
2378-TCDF

23030310



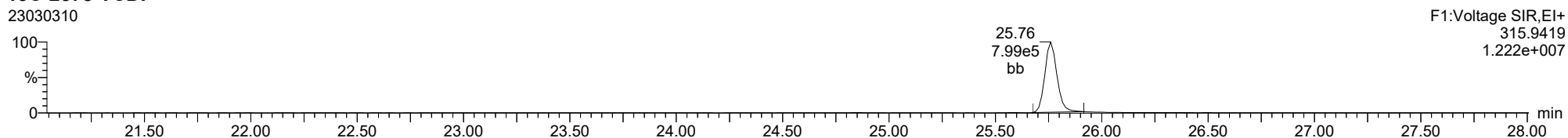
2378-TCDF

23030310



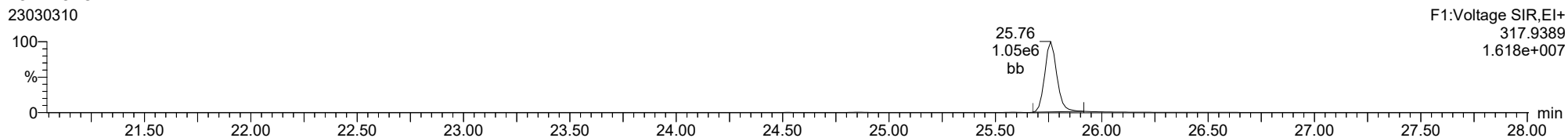
13C-2378-TCDF

23030310



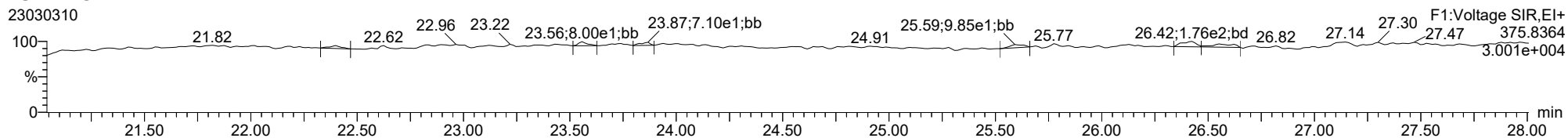
13C-2378-TCDF

23030310



FUNCTION1 HXCDPE

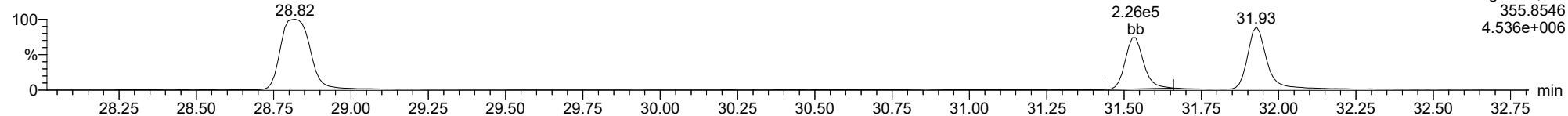
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

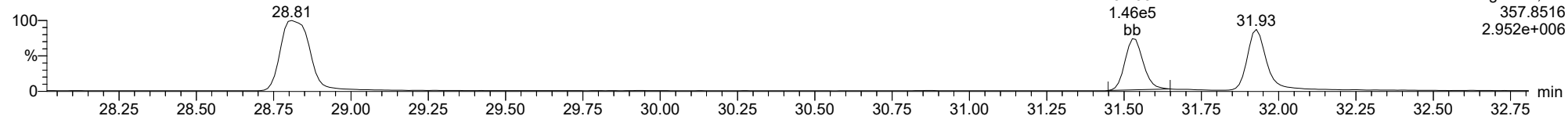
23030310



F2:Voltage SIR,EI+
357.8516
4.536e+006

12378-PeCDD

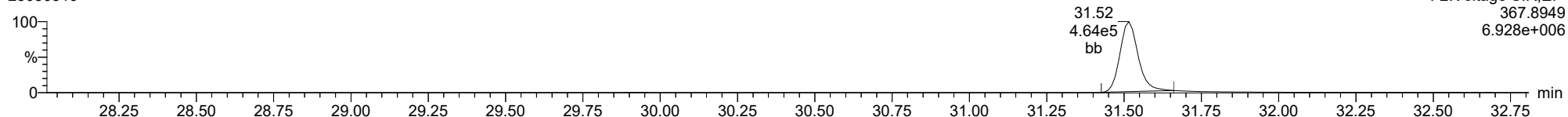
23030310



F2:Voltage SIR,EI+
357.8516
2.952e+006

13C-12378-PeCDD

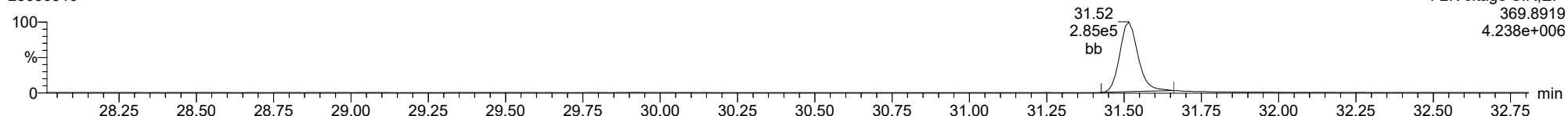
23030310



F2:Voltage SIR,EI+
367.8949
6.928e+006

13C-12378-PeCDD

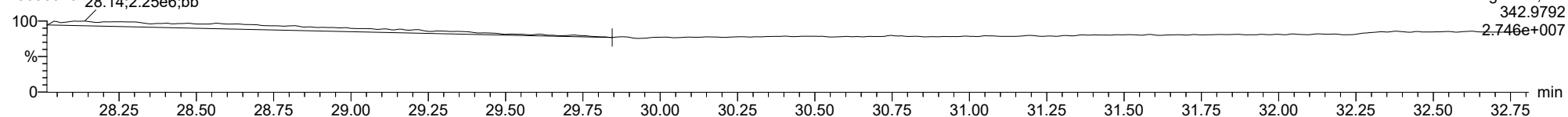
23030310



F2:Voltage SIR,EI+
369.8919
4.238e+006

FUNCTION2 PFK

23030310

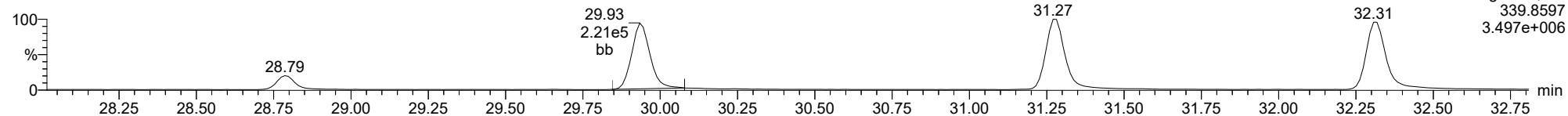


F2:Voltage SIR,EI+
342.9792
2.746e+007

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

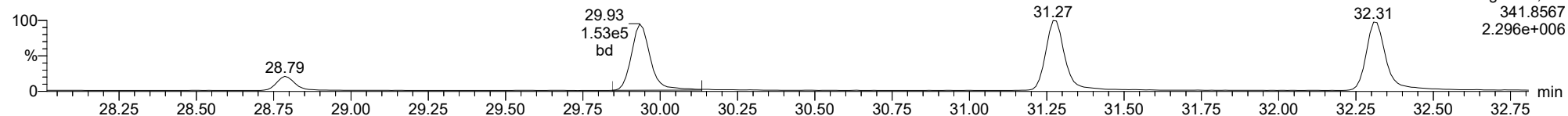
12378-PeCDF

23030310



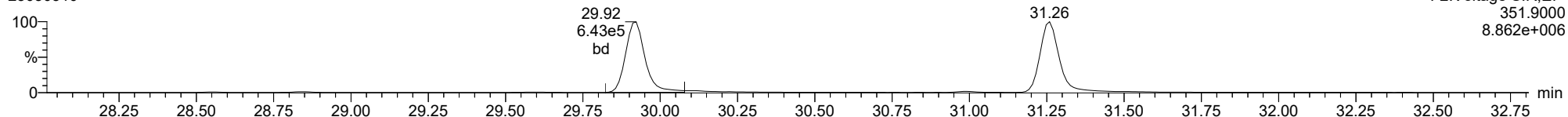
12378-PeCDF

23030310



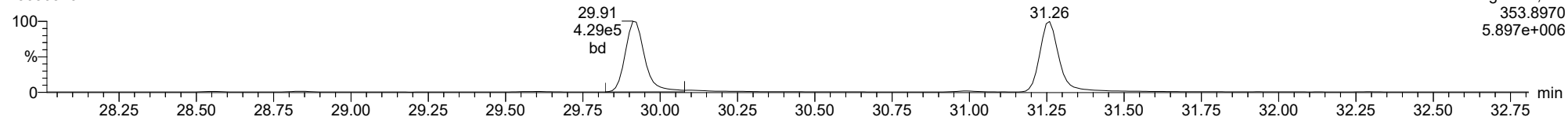
13C-12378-PeCDF

23030310



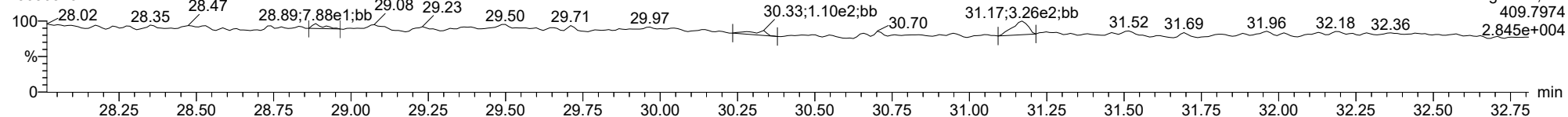
13C-12378-PeCDF

23030310



FUNCTION2 HPCDPE

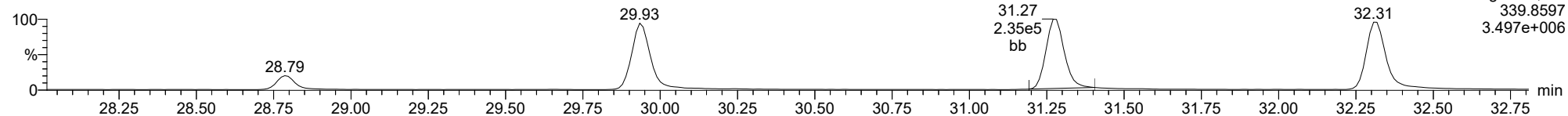
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

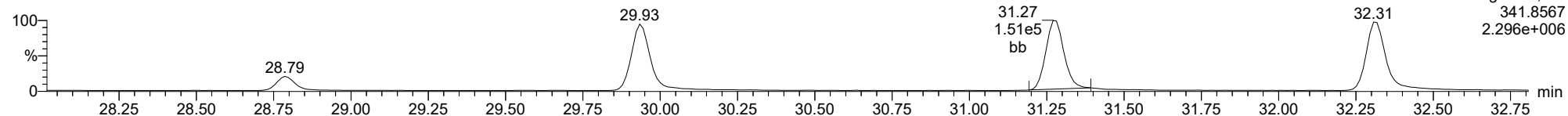
23478-PeCDF

23030310



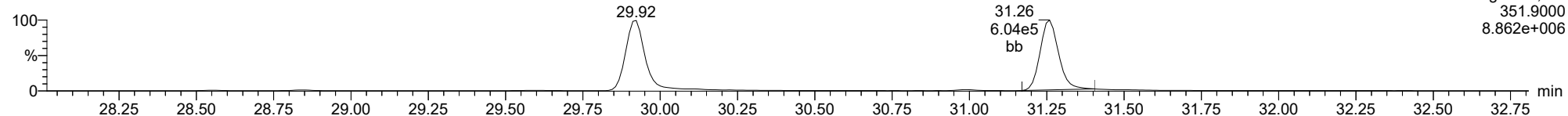
23478-PeCDF

23030310



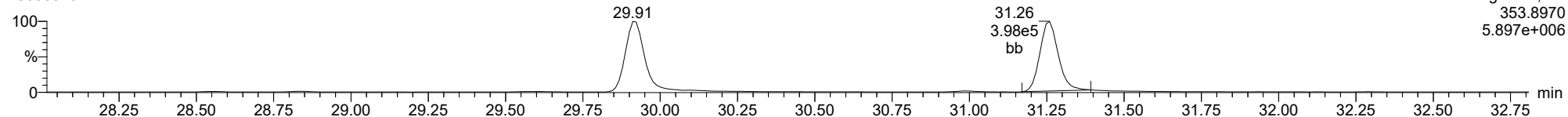
13C-23478-PeCDF

23030310



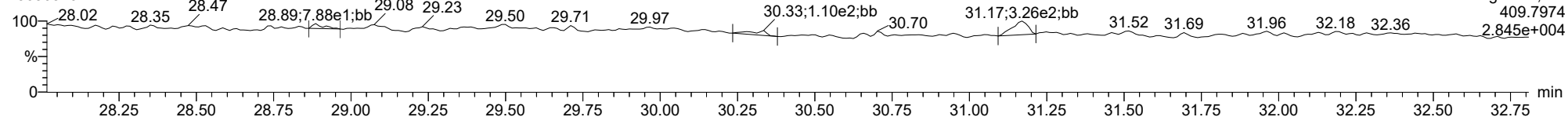
13C-23478-PeCDF

23030310



FUNCTION2 HPCDPE

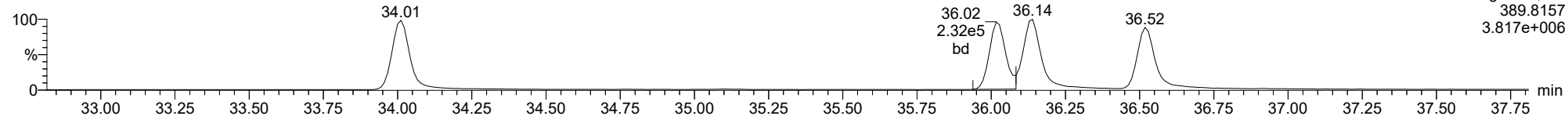
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

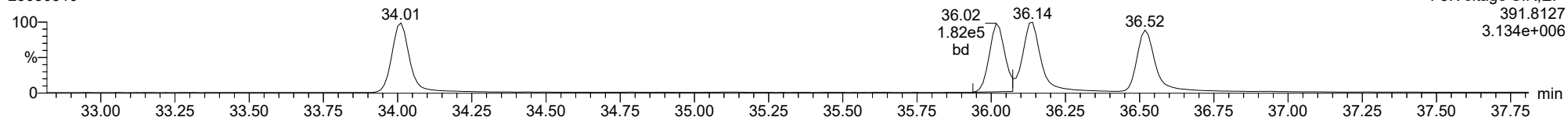
123478-HxCDD

23030310



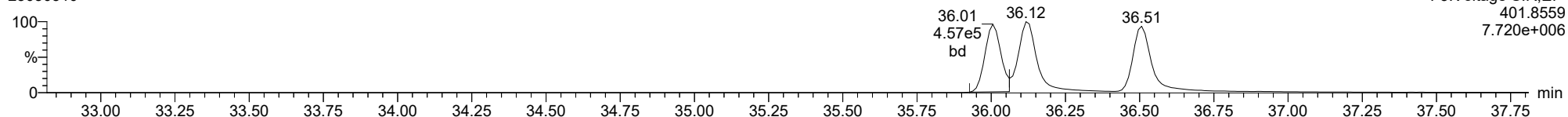
123478-HxCDD

23030310



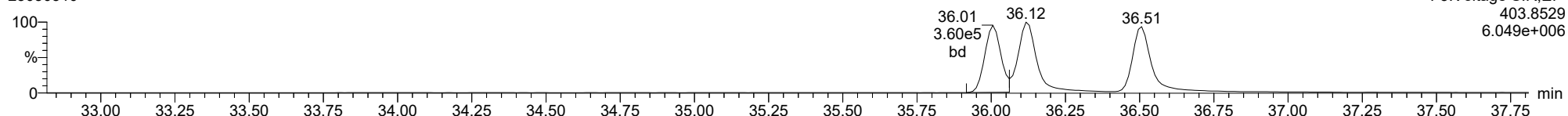
13C-123478-HxCDD

23030310



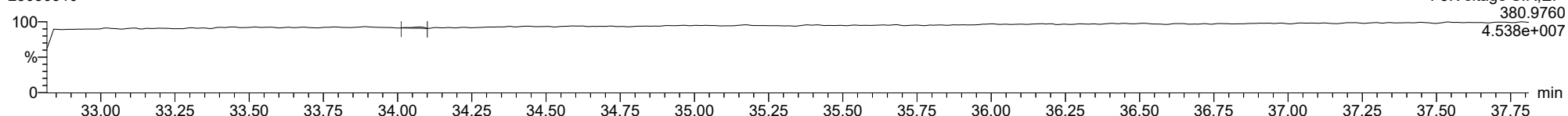
13C-123478-HxCDD

23030310



FUNCTION3 PFK

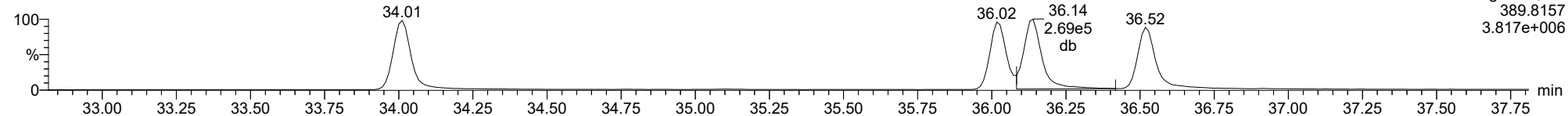
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

123678-HxCDD

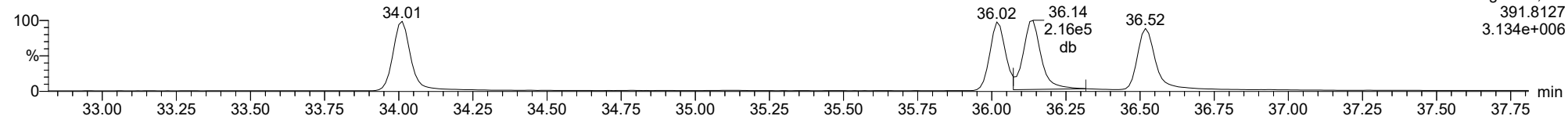
23030310



F3:Voltage SIR,EI+
389.8157
3.817e+006

123678-HxCDD

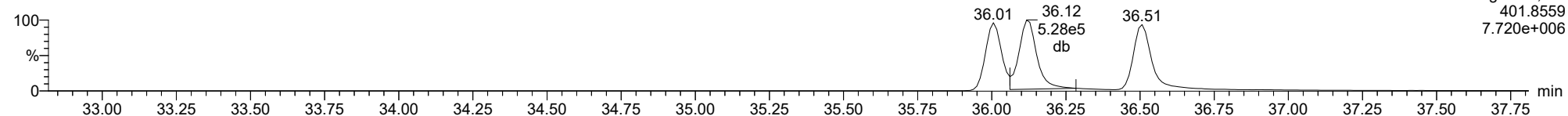
23030310



F3:Voltage SIR,EI+
391.8127
3.134e+006

13C-123678-HxCDD

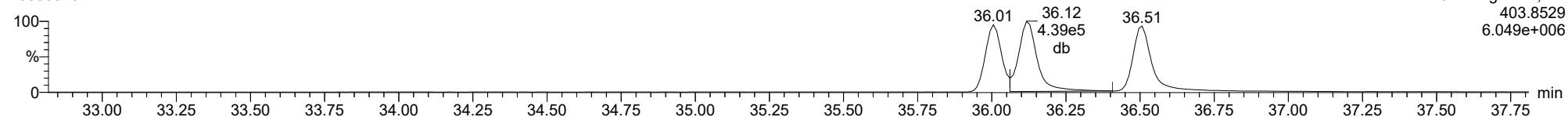
23030310



F3:Voltage SIR,EI+
401.8559
7.720e+006

13C-123678-HxCDD

23030310

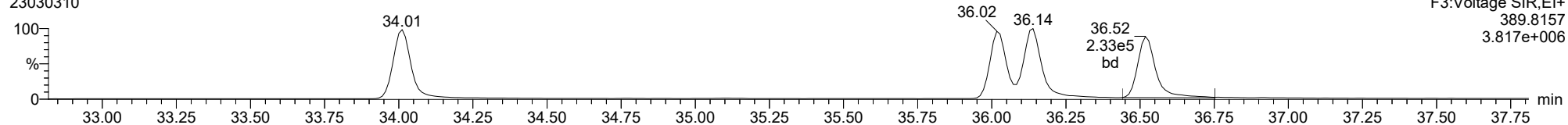


F3:Voltage SIR,EI+
403.8529
6.049e+006

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

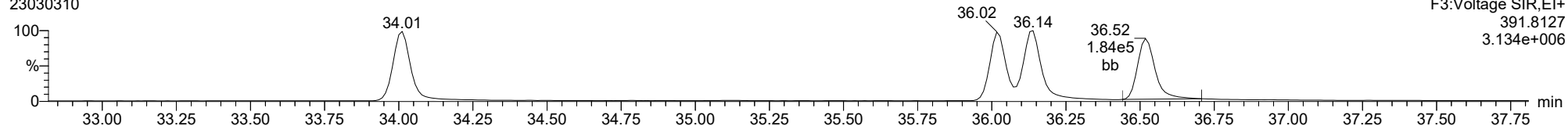
123789-HxCDD

23030310



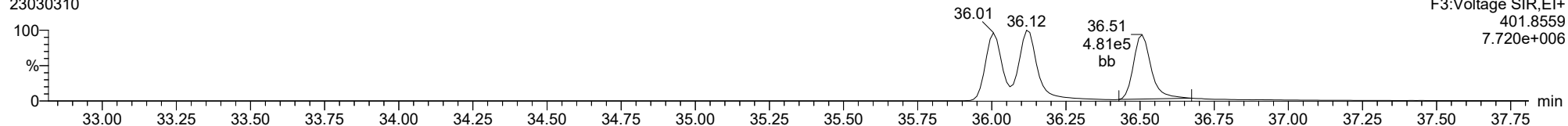
123789-HxCDD

23030310



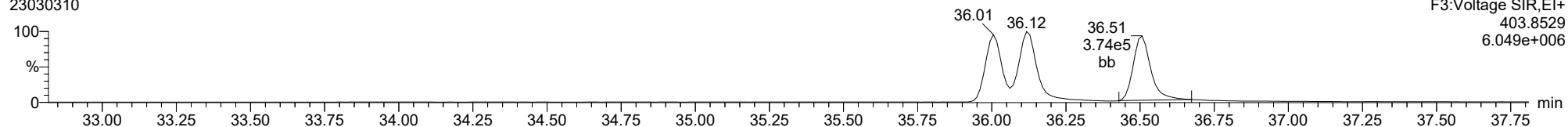
13C-123789-HxCDD

23030310



13C-123789-HxCDD

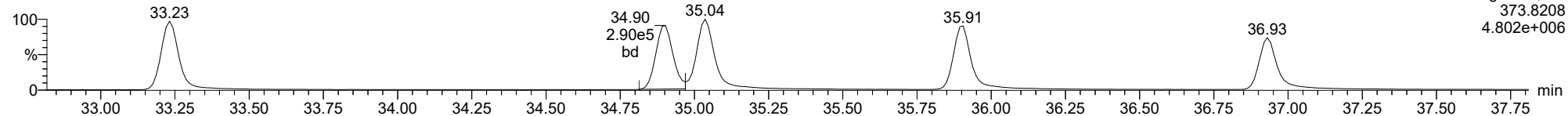
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

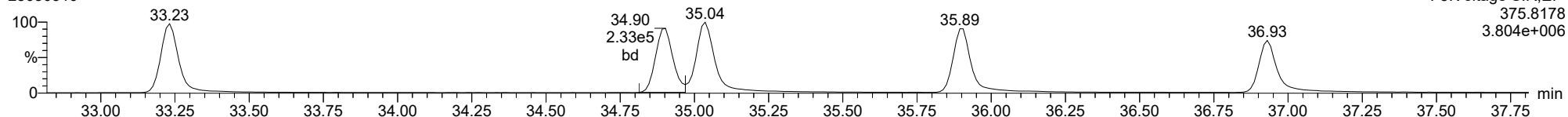
123478-HxCDF

23030310



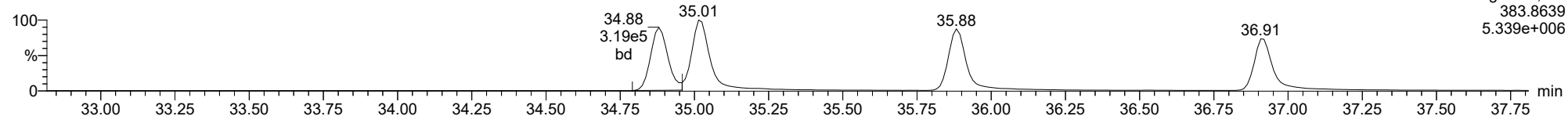
123478-HxCDF

23030310



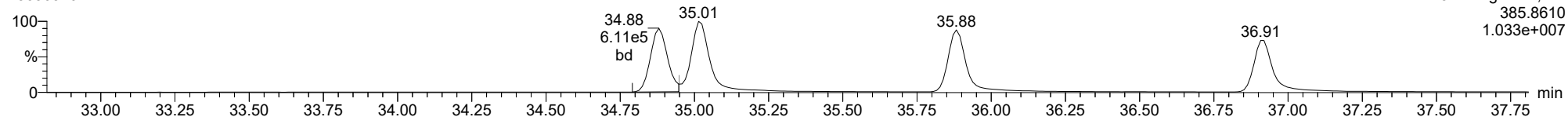
13C-123478-HxCDF

23030310



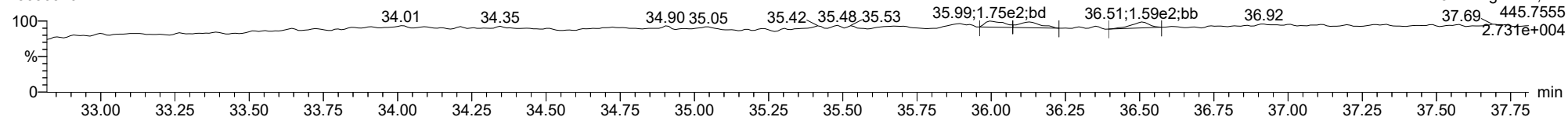
13C-123478-HxCDF

23030310



FUNCTION3 OCDPE

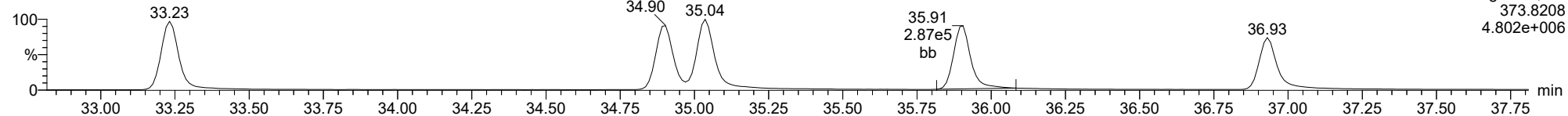
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

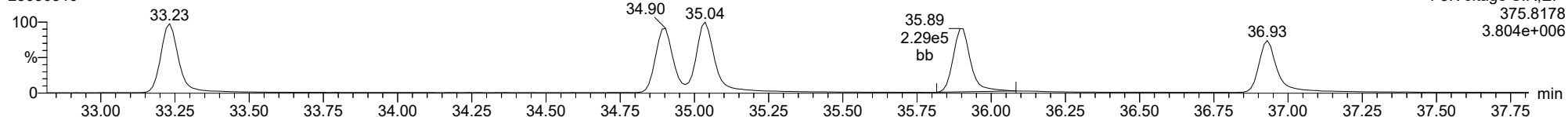
234678-HxCDF

23030310



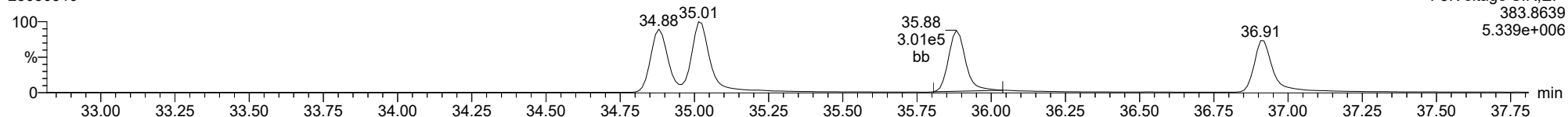
234678-HxCDF

23030310



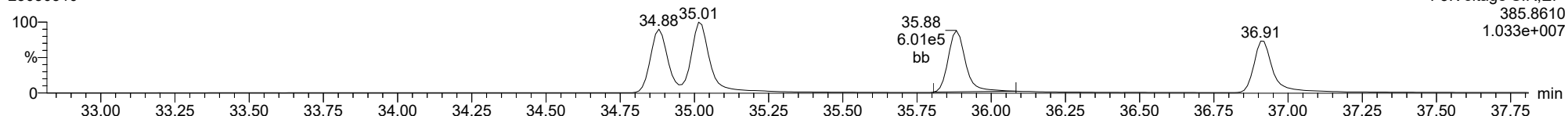
13C-234678-HxCDF

23030310



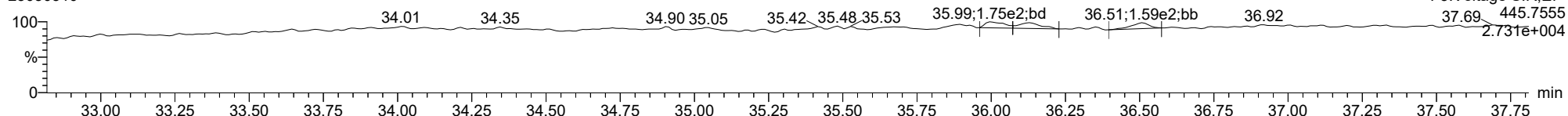
13C-234678-HxCDF

23030310



FUNCTION3 OCDPE

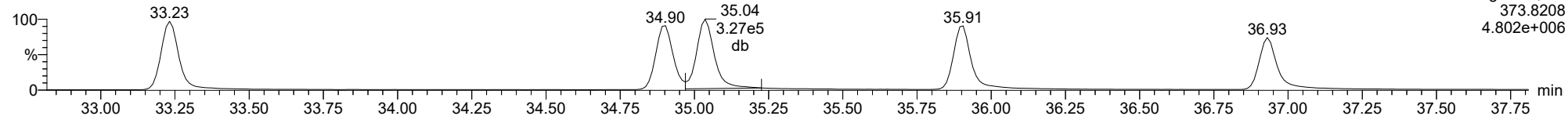
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

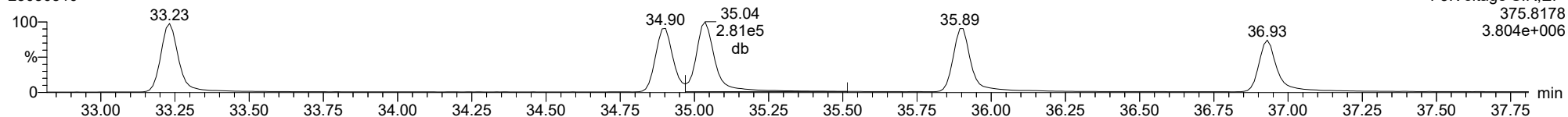
123678-HxCDF

23030310



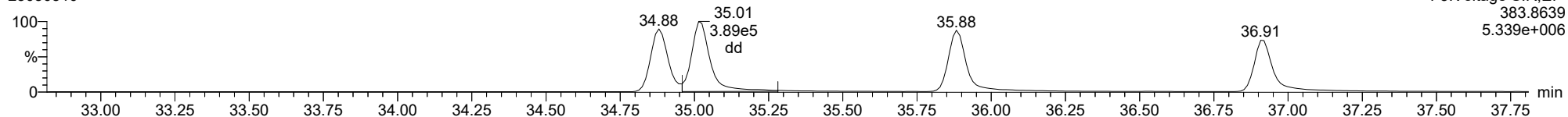
123678-HxCDF

23030310



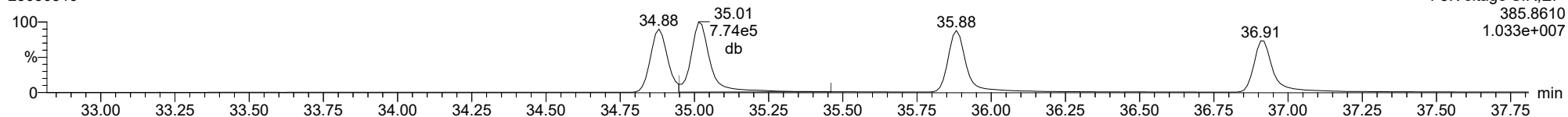
13C-123678-HxCDF

23030310



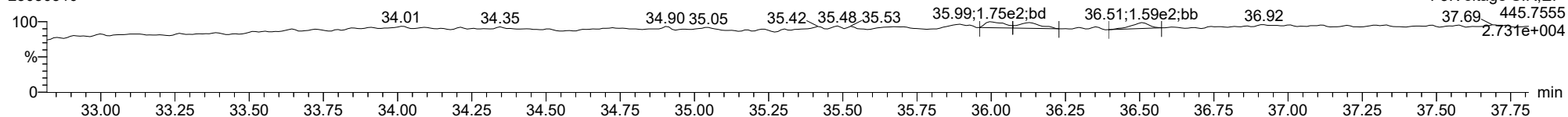
13C-123678-HxCDF

23030310



FUNCTION3 OCDPE

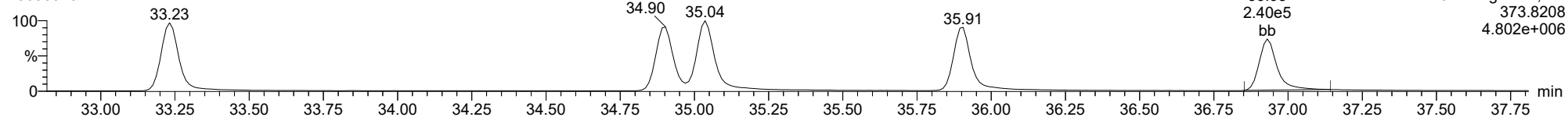
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

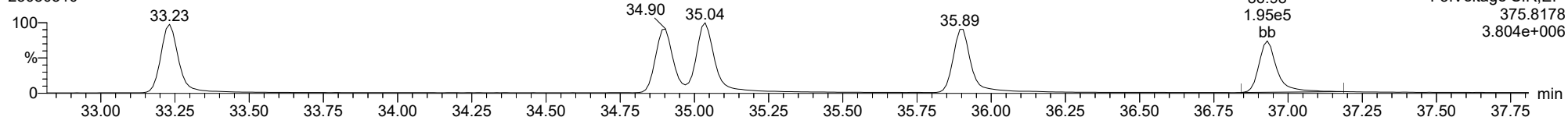
123789-HxCDF

23030310



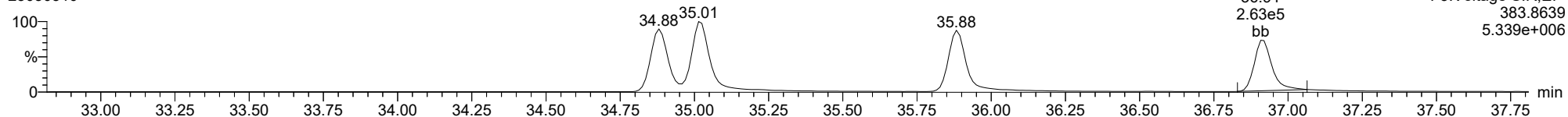
123789-HxCDF

23030310



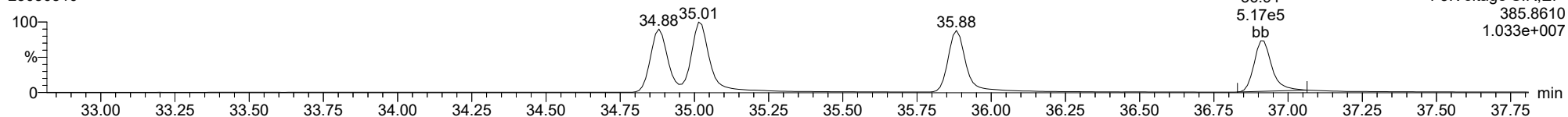
13C-123789-HxCDF

23030310



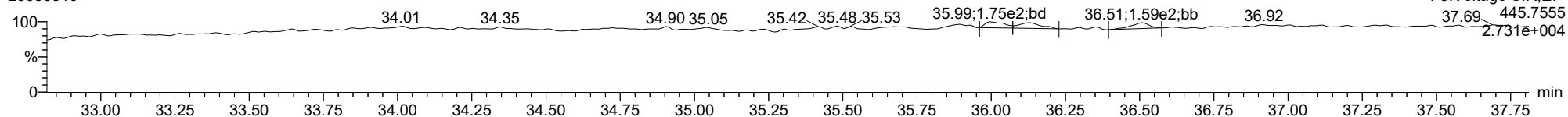
13C-123789-HxCDF

23030310



FUNCTION3 OCDPE

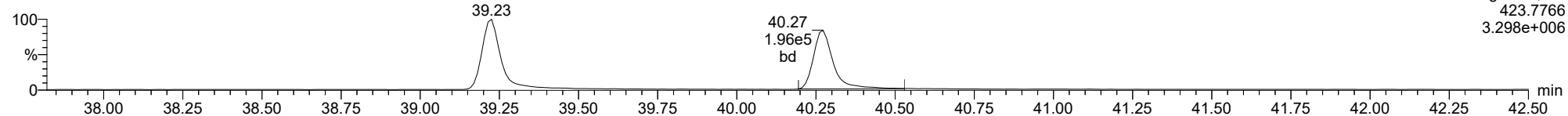
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

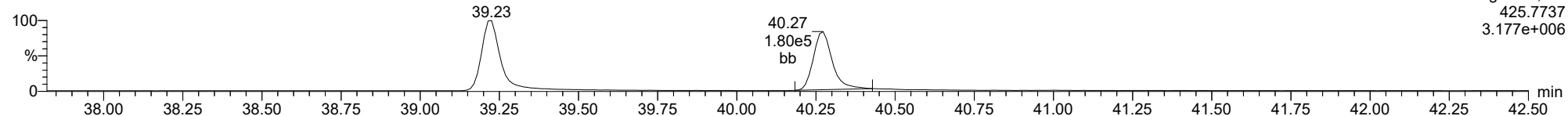
1234678-HpCDD

23030310



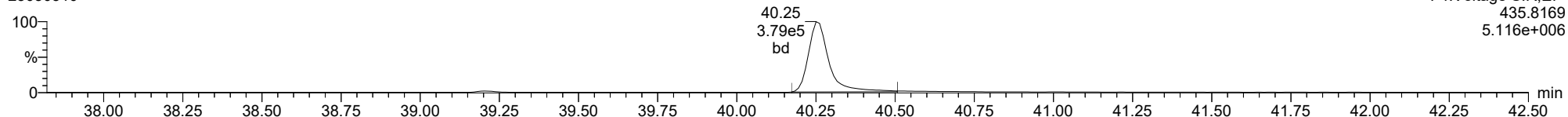
1234678-HpCDD

23030310



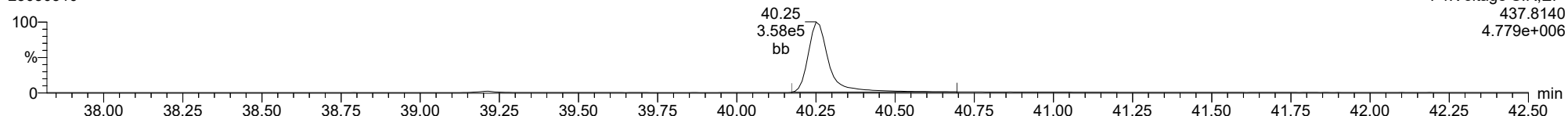
13C-1234678-HpCDD

23030310



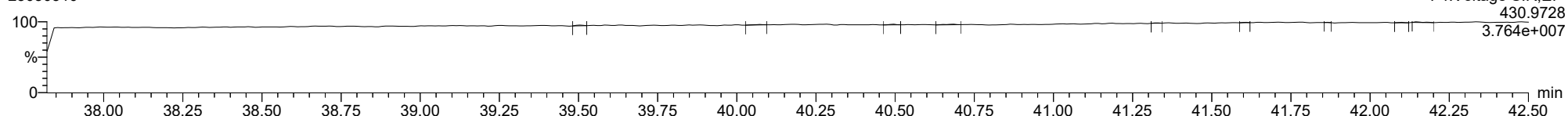
13C-1234678-HpCDD

23030310



FUNCTION4 PFK

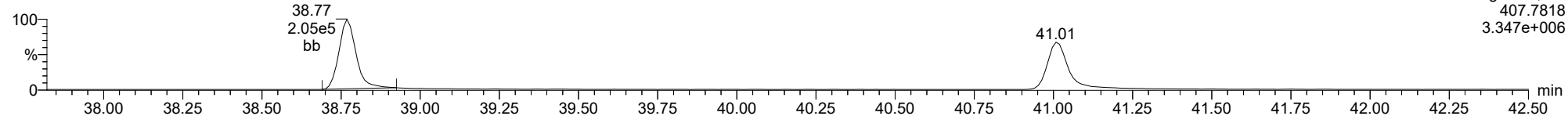
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

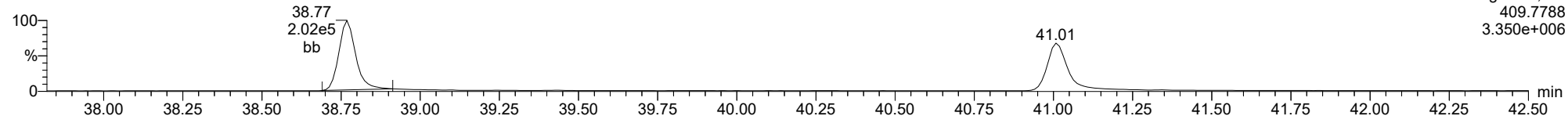
23030310



F4:Voltage SIR,EI+
407.7818
3.347e+006

1234678-HpCDF

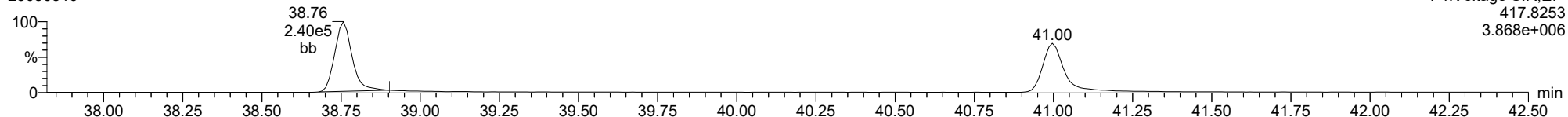
23030310



F4:Voltage SIR,EI+
409.7788
3.350e+006

13C-1234678-HpCDF

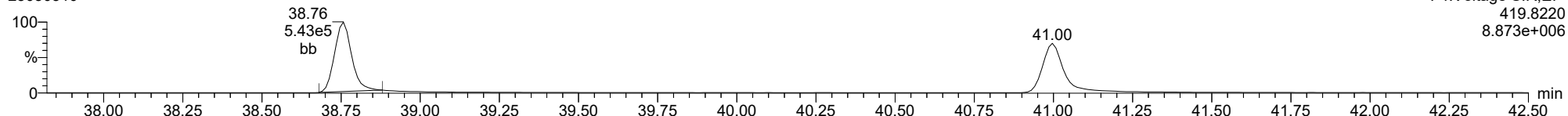
23030310



F4:Voltage SIR,EI+
417.8253
3.868e+006

13C-1234678-HpCDF

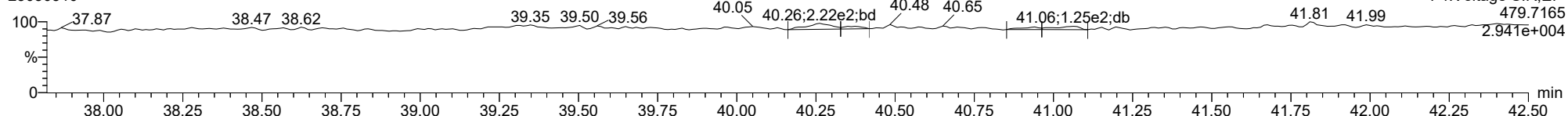
23030310



F4:Voltage SIR,EI+
419.8220
8.873e+006

FUNCTION4 NCDPE

23030310

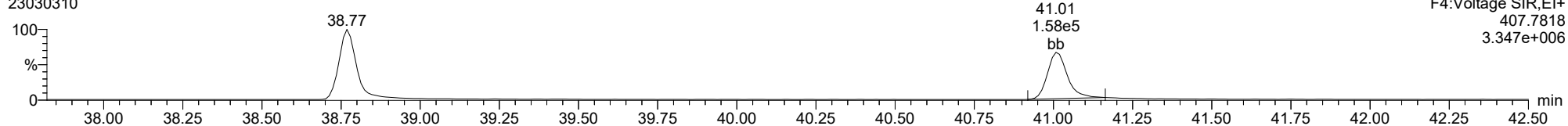


F4:Voltage SIR,EI+
479.7165
2.941e+004

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

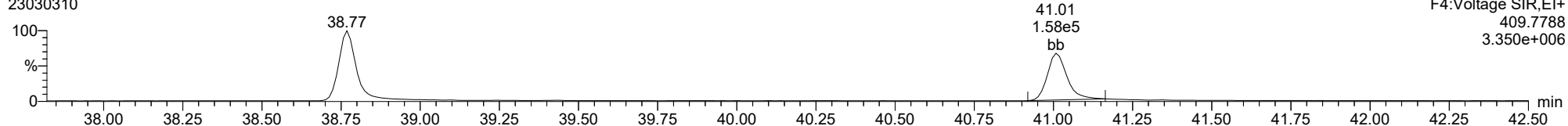
23030310



F4:Voltage SIR,EI+
407.7818
3.347e+006

1234789-HpCDF

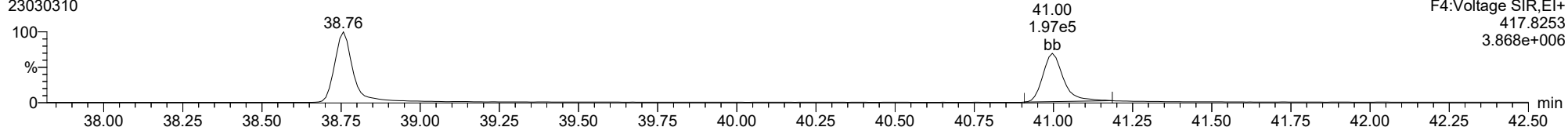
23030310



F4:Voltage SIR,EI+
409.7788
3.350e+006

13C-1234789-HpCDF

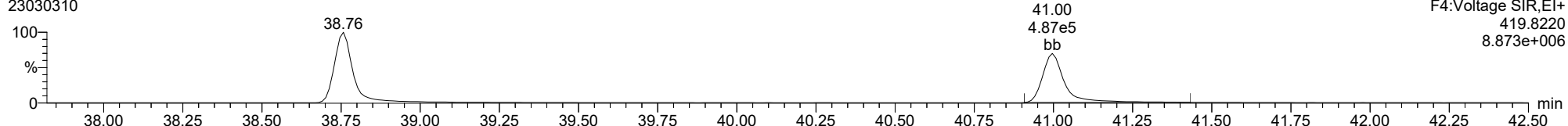
23030310



F4:Voltage SIR,EI+
417.8253
3.868e+006

13C-1234789-HpCDF

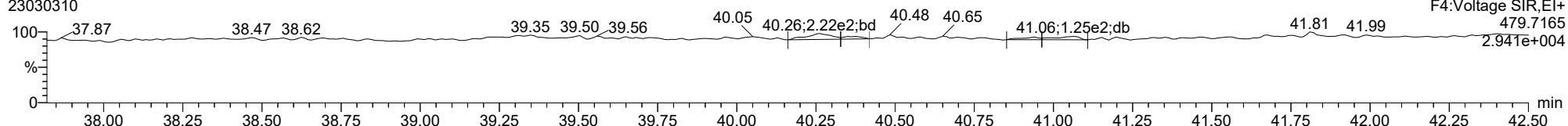
23030310



F4:Voltage SIR,EI+
419.8220
8.873e+006

FUNCTION4 NCDPE

23030310

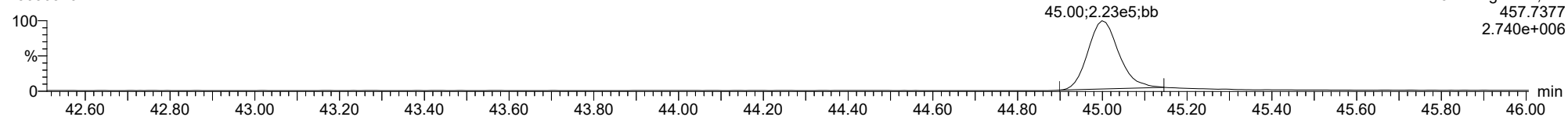


F4:Voltage SIR,EI+
479.7165
2.941e+004

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

OCDD

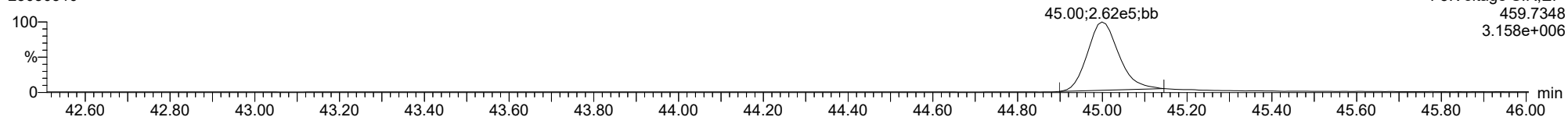
23030310



F5:Voltage SIR,EI+
457.7377
2.740e+006

OCDD

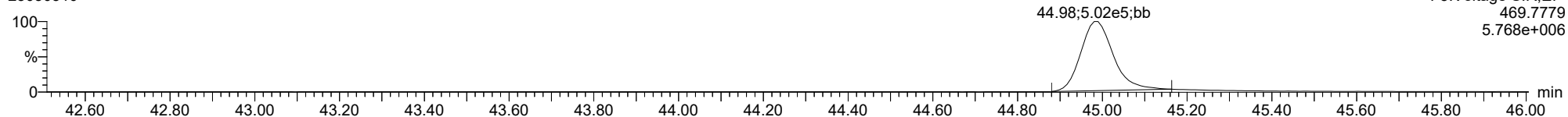
23030310



F5:Voltage SIR,EI+
459.7348
3.158e+006

13C-OCDD

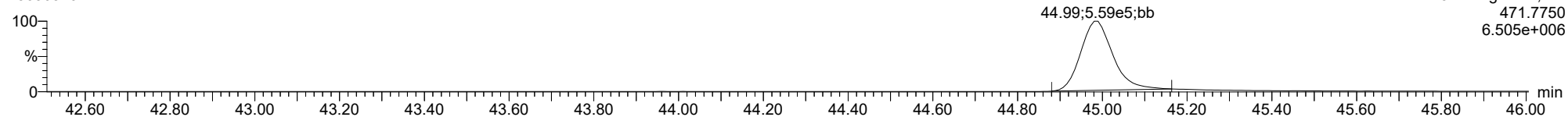
23030310



F5:Voltage SIR,EI+
469.7779
5.768e+006

13C-OCDD

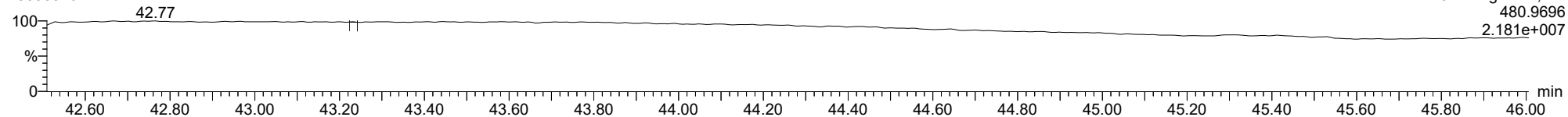
23030310



F5:Voltage SIR,EI+
471.7750
6.505e+006

FUNCTION5 PFK

23030310

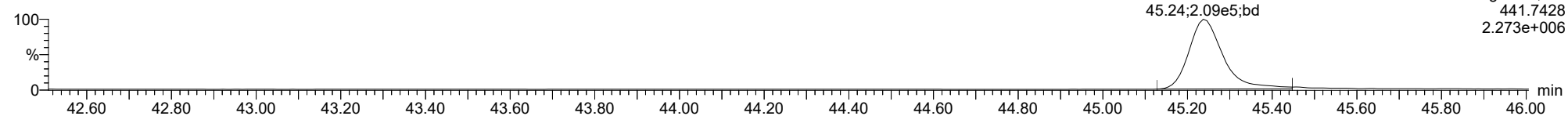


F5:Voltage SIR,EI+
480.9696
2.181e+007

ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

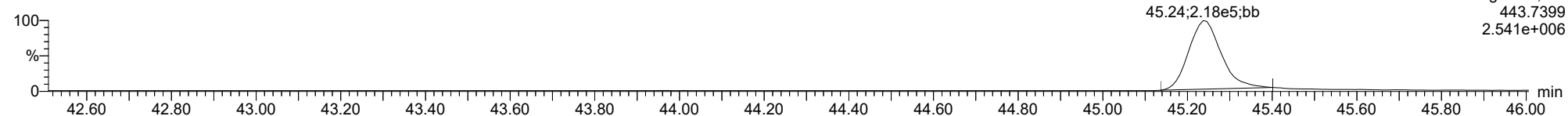
OCDF

23030310



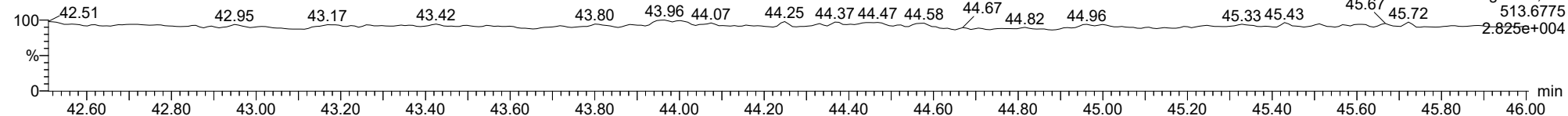
OCDF

23030310



FUNCTION5 DCDPE

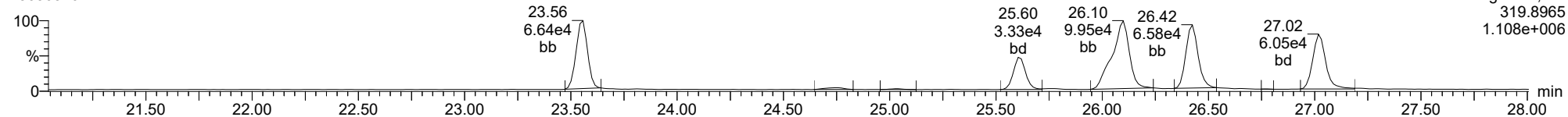
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

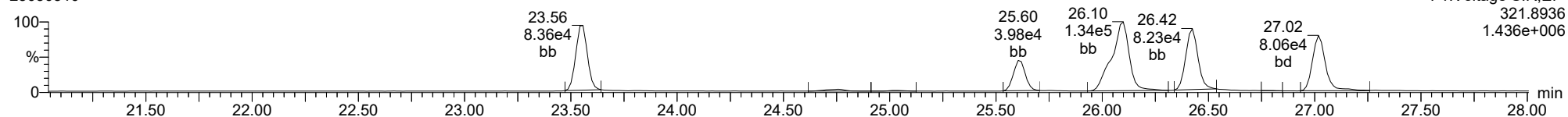
Total-tetradioxins

23030310



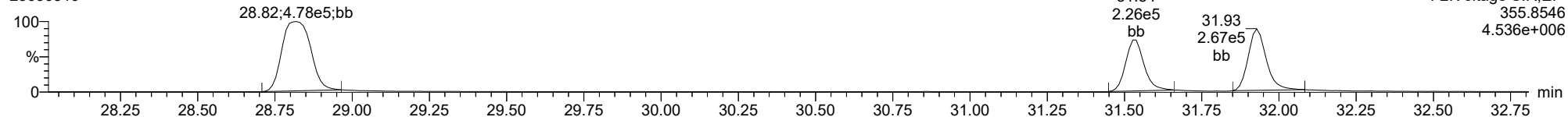
Total-tetradioxins

23030310



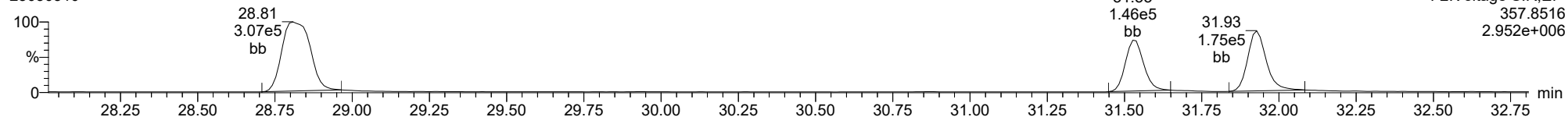
Total-pentadioxins

23030310



Total-pentadioxins

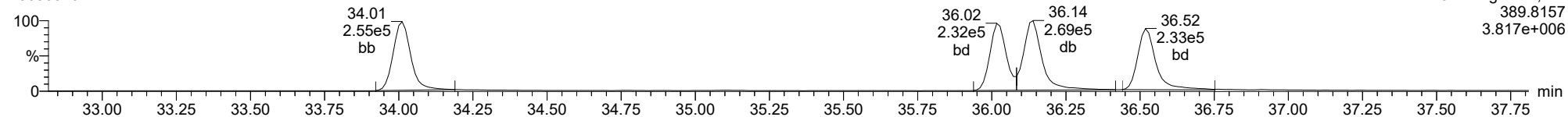
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

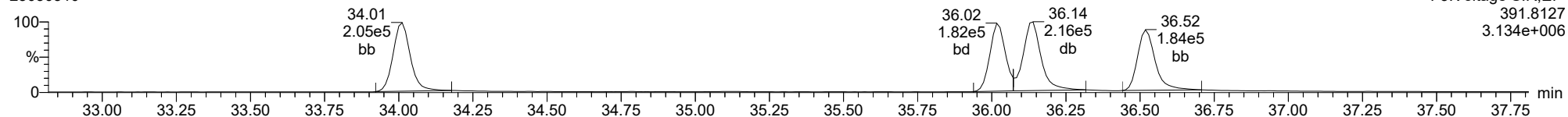
Total-hexadioxins

23030310



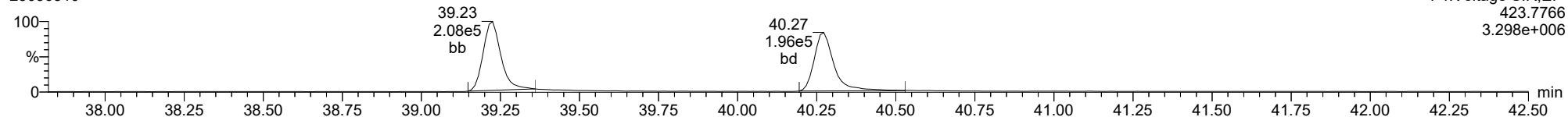
Total-hexadioxins

23030310



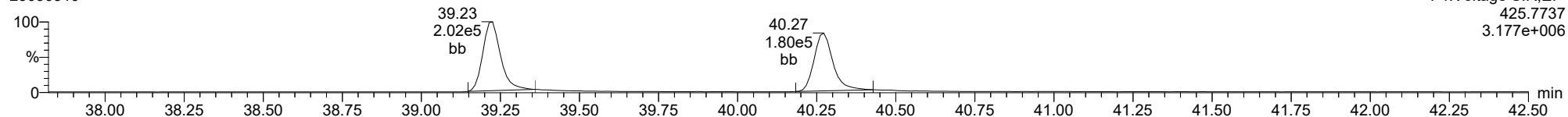
Total-heptadioxins

23030310



Total-heptadioxins

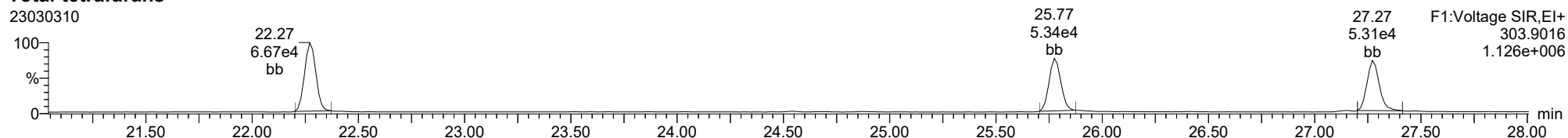
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

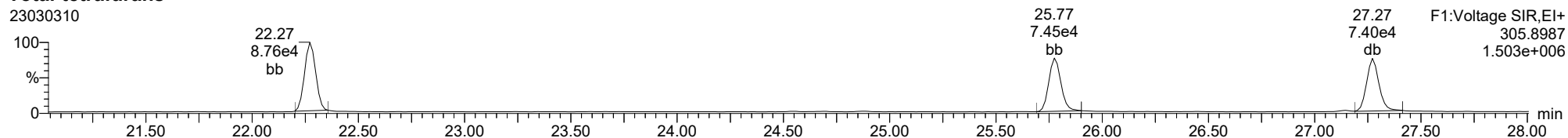
Total-tetrafurans

23030310



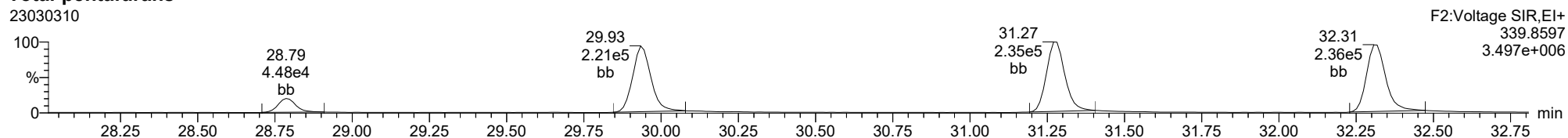
Total-tetrafurans

23030310



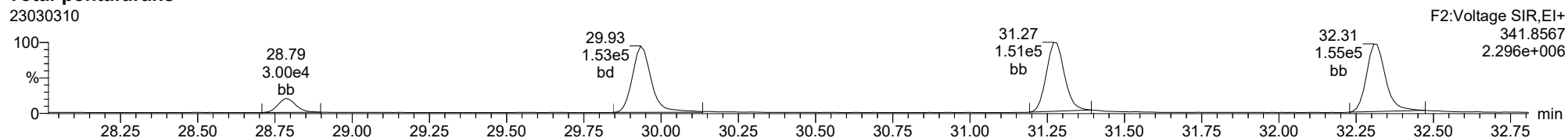
Total-pentafurans

23030310



Total-pentafurans

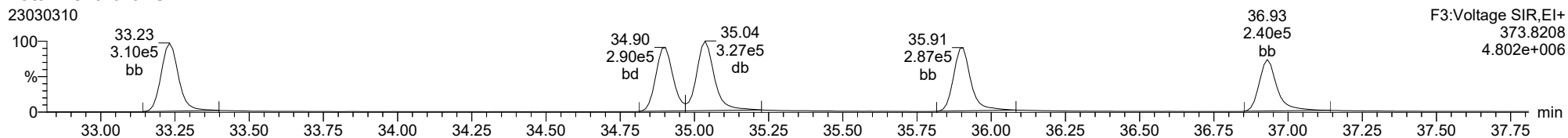
23030310



ID: ICVCW, Name: 23030310, Date: 03-Mar-2023, Time: 16:36:24, Conditions: AUTOSPEC01, User: pk

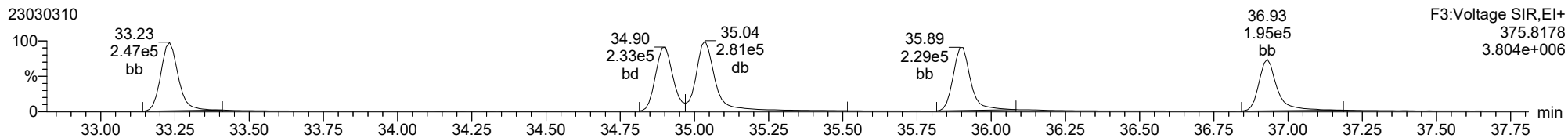
Total-hexafurans

23030310



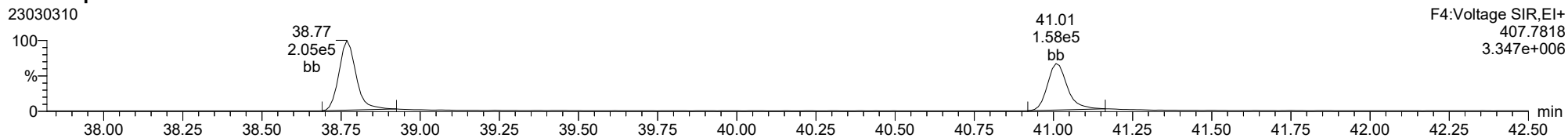
Total-hexafurans

23030310



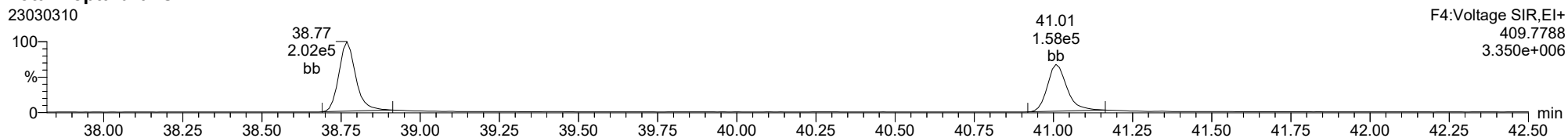
Total-heptafurans

23030310



Total-heptafurans

23030310



Dataset: T:\Autospec\Processed Data Batch\230303IHCIV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.000	4.131e4	5.488e4	0.702	0.753	0.770	1493	2220	6.02e5	8.13e5	403.0	366.2	NO	bb	bb	10.126
12378-PeCDF	29.934	1.000	2.094e5	1.387e5	0.679	1.510	1.550	3237	2768	3.10e6	2.08e6	956.2	750.8	NO	bb	bb	47.721
23478-PeCDF	31.282	1.001	2.189e5	1.466e5	0.786	1.493	1.550	3237	2768	3.25e6	2.13e6	1004.6	769.0	NO	bb	bb	48.580
123478-HxCDF	34.903	1.001	2.702e5	2.168e5	1.166	1.247	1.240	2948	2161	4.14e6	3.34e6	1404.3	1544.7	NO	bd	bd	47.304
234678-HxCDF	35.905	1.001	2.808e5	2.345e5	1.140	1.198	1.240	2948	2161	4.05e6	3.23e6	1375.6	1495.3	NO	bb	bd	52.050
123678-HxCDF	35.036	1.000	3.125e5	2.496e5	1.091	1.252	1.240	2948	2161	4.44e6	3.55e6	1506.3	1641.4	NO	db	db	51.387
123789-HxCDF	36.931	1.000	2.304e5	1.857e5	1.137	1.240	1.240	2948	2161	3.37e6	2.68e6	1143.7	1240.6	NO	bb	bb	48.904
1234678-HpCDF	38.769	1.000	1.725e5	1.737e5	1.003	0.993	1.050	2044	2260	2.71e6	2.74e6	1326.3	1210.9	NO	bb	bb	47.690
1234789-HpCDF	41.008	1.000	1.395e5	1.236e5	0.953	1.128	1.050	2044	2260	1.71e6	1.64e6	836.3	725.6	NO	bd	bb	53.601
OCDF	45.237	1.005	1.863e5	1.970e5	0.778	0.946	0.890	1162	1746	2.03e6	2.27e6	1745.6	1302.8	NO	bd	bb	95.021
2378-TCDD	26.424	1.001	4.111e4	5.488e4	1.149	0.749	0.770	1210	797	6.31e5	8.06e5	521.2	1010.5	NO	bb	bb	9.017
12378-PeCDD	31.538	1.001	2.212e5	1.442e5	1.022	1.534	1.550	2794	1649	3.14e6	2.05e6	1124.1	1244.9	NO	bb	bb	50.849
123478-HxCDD	36.017	1.000	2.147e5	1.744e5	0.996	1.231	1.240	3133	1871	3.31e6	2.68e6	1055.8	1434.4	NO	bd	bd	50.696
123678-HxCDD	36.139	1.001	2.532e5	2.091e5	1.001	1.211	1.240	3133	1871	3.49e6	2.85e6	1112.6	1520.4	NO	db	db	51.126
123789-HxCDD	36.518	1.011	2.114e5	1.814e5	0.907	1.166	1.240	3133	1871	3.08e6	2.54e6	982.1	1355.5	NO	bb	bd	51.723
1234678-HpCDD	40.273	1.000	1.700e5	1.663e5	1.039	1.022	1.050	1948	2105	2.22e6	2.15e6	1138.4	1022.1	NO	bd	bd	52.721
OCDD	45.000	1.000	2.152e5	2.483e5	0.920	0.867	0.890	885	1554	2.46e6	2.84e6	2785.0	1828.9	NO	bb	bb	97.150
13C-2378-TCDF	25.760	1.007	5.853e5	7.688e5	1.620	0.761	0.770	1921	2018	8.54e6	1.13e7	4445.5	5599.2	NO	bb	bb	89.420
13C-12378-PeCDF	29.923	1.169	6.466e5	4.272e5	1.240	1.513	1.550	2442	3390	8.85e6	5.90e6	3622.7	1739.1	NO	bb	bd	92.612
13C-23478-PeCDF	31.259	1.222	5.702e5	3.869e5	1.118	1.474	1.550	2442	3390	8.42e6	5.62e6	3447.3	1659.1	NO	bb	bb	91.616
13C-123478-HxCDF	34.881	0.955	2.992e5	5.837e5	1.168	0.513	0.510	2430	2952	4.46e6	8.67e6	1835.4	2935.2	NO	bd	bd	95.179
13C-123678-HxCDF	35.025	0.959	3.347e5	6.682e5	1.386	0.501	0.510	2430	2952	4.76e6	9.19e6	1958.9	3111.9	NO	db	db	91.102
13C-234678-HxCDF	35.883	0.983	2.956e5	5.730e5	1.129	0.516	0.510	2430	2952	4.27e6	8.35e6	1756.5	2829.2	NO	bb	bb	96.885
13C-123789-HxCDF	36.919	1.011	2.519e5	4.965e5	0.932	0.507	0.510	2430	2952	3.69e6	7.15e6	1518.9	2421.6	NO	bb	bb	101.167
13C-1234678-HpCDF	38.758	1.062	2.307e5	4.931e5	0.895	0.468	0.440	2487	3339	3.35e6	7.56e6	1347.2	2263.7	NO	bd	bb	101.839
13C-1234789-HpCDF	40.997	1.123	1.602e5	3.548e5	0.770	0.452	0.440	2487	3339	2.05e6	4.72e6	823.7	1413.6	NO	bb	bb	84.268
13C-1234-TCDD	25.591	0.000	4.152e5	5.195e5	1.000	0.799	0.770	2224	1360	6.53e6	8.14e6	2938.6	5984.1	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	4.083e5	5.184e5	1.152	0.788	0.770	2224	1360	5.76e6	7.36e6	2588.5	5411.0	NO	bb	bb	86.032
13C-12378-PeCDD	31.516	1.232	4.323e5	2.709e5	0.829	1.595	1.550	1217	913	6.32e6	3.99e6	5187.9	4362.9	NO	bb	bb	90.774
13C-123478-HxCDD	36.006	0.986	4.338e5	3.372e5	0.995	1.286	1.240	3851	1371	6.85e6	5.33e6	1778.6	3884.7	NO	bd	bd	97.589
13C-123678-HxCDD	36.117	0.989	5.114e5	3.919e5	1.157	1.305	1.240	3851	1371	7.20e6	5.65e6	1870.4	4120.3	NO	db	db	98.370
13C-1234678-HpCDD	40.262	1.103	3.166e5	2.972e5	0.840	1.065	1.050	1699	1520	4.20e6	3.95e6	2473.2	2598.3	NO	bb	bb	92.030
13C-OCDD	44.990	1.232	5.160e5	5.214e5	0.767	0.990	0.890	2001	1870	5.29e6	5.84e6	2645.0	3123.1	NO	bd	bb	170.247
13C-123789-HxCDD	36.507	0.000	4.452e5	3.487e5	1.000	1.277	1.240	3851	1371	6.49e6	5.07e6	1686.5	3694.9	NO	bb	bb	100.000
37CL-2378-TCDD	26.424	1.033	9.071e4		1.288			1721		1.34e6		776.4			bb		7.536

Dataset: T:\Autospec\Processed Data Batch\230303\HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	5.764e4	7.805e4	0.802	0.738	0.770	1493	2220	9.22e5	1.25e6	617.6	564.2	NO	bb	bb	12.503
1289-TCDF	27.272	1.059	3.446e4	4.665e4	0.678	0.739	0.770	1493	2220	5.07e5	6.62e5	339.5	298.3	NO	bb	db	8.835
13468-PECDF	27.130	0.907	3.611e5	2.330e5	1.246	1.550	1.550	743	1090	5.44e6	3.55e6	7323.2	3255.0	NO	bb	bb	44.390
12389-PECDF	32.318	1.080	2.101e5	1.516e5	0.496	1.387	1.550	3237	2768	2.95e6	1.97e6	910.6	713.0	NO	bb	bd	67.866
123468-HXCDF	33.231	0.953	2.880e5	2.384e5	1.169	1.208	1.240	2948	2161	4.12e6	3.25e6	1397.4	1503.0	NO	bb	bb	51.002
1368-TCDD	23.557	0.892	5.668e4	7.180e4	1.015	0.789	0.770	1210	797	9.15e5	1.16e6	755.8	1460.4	NO	bb	bb	13.654
1289-TCDD	27.017	1.023	3.648e4	4.783e4	0.909	0.763	0.770	1210	797	5.40e5	6.90e5	445.8	865.4	NO	bb	bb	10.012
12479-PECDD	28.819	0.914	3.593e5	2.367e5	2.301	1.518	1.550	2794	1649	3.42e6	2.21e6	1224.5	1341.7	NO	bb	bb	36.832
12389-PECDD	31.928	1.013	2.423e5	1.700e5	1.184	1.426	1.550	2794	1649	3.48e6	2.31e6	1246.0	1399.4	NO	bb	bd	49.543
124679-HXCDD	34.011	0.945	2.330e5	1.909e5	1.115	1.220	1.240	3133	1871	3.38e6	2.76e6	1078.1	1473.6	NO	bb	bb	49.292
1234679-HPCDD	39.225	0.974	2.020e5	1.832e5	1.137	1.103	1.050	1948	2105	2.83e6	2.72e6	1451.0	1293.3	NO	bd	bb	55.196
Total-tetrafurans			1.346e5		0.727			1493		2.05e6							31.724
Total-penta1			3.611e5					743		5.44e6							44.390
Total-pentafurans			6.730e5		0.654			3237		9.80e6							172.856
Total-hexafurans			1.382e6		1.141			2948		2.01e7							250.647
Total-heptafurans			3.120e5		0.978			2044		4.42e6							101.291
Total-Furans			3.049e6		0.922			1493		4.39e7							695.930
Total-tetradoxins			2.249e5		1.024			1210		3.13e6							54.516
Total-pentadoxins			8.229e5		1.502			2794		1.00e7							137.223
Total-hexadoxins			9.123e5		1.005			3133		1.32e7							202.837
Total-heptadoxins			3.720e5		1.088			1948		5.04e6							107.918
Total-Dioxins			2.547e6		1.130			1210		3.39e7							599.643
Total-TEQ			5.596e6					1210		7.78e7							1295.573
FUNCTION1 PFK			7.521e6					557945		8.00e6							
FUNCTION2 PFK			4.110e5					226700		1.13e7							0.000
FUNCTION3 PFK			8.443e6					414812		2.82e6							0.000
FUNCTION4 PFK			2.598e7					304689		2.22e7							
FUNCTION5 PFK			7.163e4					189891		2.74e6							
FUNCTION1 HXCD...			3.794e2					593		5.61e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			8.042e2					818		1.73e4							0.000
FUNCTION3 OCDPE			9.563e1					429		1.87e3							0.000
FUNCTION4 NCDPE			0.000e0					545		0.00e0							
FUNCTION5 DCDPE			0.000e0					542		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHCIV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
2	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
3	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
4	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
2	123468-HxCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
3	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
4	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
5	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
2	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\2303031HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503
6	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
7	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
8	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
9	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688
10	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
11	123468-HxCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
12	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
13	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
14	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387
15	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
16	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690
17	OCDF	45.24	1.863e5	1.970e5	0.778	0.95	0.89	1745.6	YES	NO	bd	bb	95.021
18	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
2	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
3	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
4	Total-tetradioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
5	Total-tetradioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
2	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
3	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HxCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
2	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
3	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
4	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
2	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
2	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
3	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
4	Total-tetradoxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
5	Total-tetradoxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591
6	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
7	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
8	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832
9	124679-HxCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
10	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
11	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
12	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696
13	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
14	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196
15	OCDD	45.00	2.152e5	2.483e5	0.920	0.87	0.89	2785.0	YES	NO	bb	bb	97.150

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\2303031HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.446e4	4.665e4	0.678	0.74	0.77	339.5	YES	NO	bb	db	8.835
2	2378-TCDF	25.77	4.131e4	5.488e4	0.702	0.75	0.77	403.0	YES	NO	bb	bb	10.126
3	Total-tetrafurans	24.86	6.389e2	7.978e2	0.727	0.80	0.77	6.2	YES	NO	bb	bb	0.146
4	Total-tetrafurans	24.55	5.238e2	5.981e2	0.727	0.88	0.77	6.0	YES	NO	bb	bb	0.114
5	1368-TCDF	22.27	5.764e4	7.805e4	0.802	0.74	0.77	617.6	YES	NO	bb	bb	12.503
6	12389-PECDF	32.32	2.101e5	1.516e5	0.496	1.39	1.55	910.6	YES	NO	bb	bd	67.866
7	23478-PeCDF	31.28	2.189e5	1.466e5	0.786	1.49	1.55	1004.6	YES	NO	bb	bb	48.580
8	12378-PeCDF	29.93	2.094e5	1.387e5	0.679	1.51	1.55	956.2	YES	NO	bb	bb	47.721
9	Total-pentafurans	28.80	3.458e4	2.311e4	0.654	1.50	1.55	155.8	YES	NO	bb	bb	8.688
10	123478-HxCDF	34.90	2.702e5	2.168e5	1.166	1.25	1.24	1404.3	YES	NO	bd	bd	47.304
11	123468-HxCDF	33.23	2.880e5	2.384e5	1.169	1.21	1.24	1397.4	YES	NO	bb	bb	51.002
12	123789-HxCDF	36.93	2.304e5	1.857e5	1.137	1.24	1.24	1143.7	YES	NO	bb	bb	48.904
13	234678-HxCDF	35.91	2.808e5	2.345e5	1.140	1.20	1.24	1375.6	YES	NO	bb	bd	52.050
14	123678-HxCDF	35.04	3.125e5	2.496e5	1.091	1.25	1.24	1506.3	YES	NO	db	db	51.387
15	1234789-HpCDF	41.01	1.395e5	1.236e5	0.953	1.13	1.05	836.3	YES	NO	bd	bb	53.601
16	1234678-HpCDF	38.77	1.725e5	1.737e5	1.003	0.99	1.05	1326.3	YES	NO	bb	bb	47.690
17	OCDF	45.24	1.863e5	1.970e5	0.778	0.95	0.89	1745.6	YES	NO	bd	bb	95.021
18	13468-PECDF	27.13	3.611e5	2.330e5	1.246	1.55	1.55	7323.2	YES	NO	bb	bb	44.390
19	1368-TCDD	23.56	5.668e4	7.180e4	1.015	0.79	0.77	755.8	YES	NO	bb	bb	13.654
20	1289-TCDD	27.02	3.648e4	4.783e4	0.909	0.76	0.77	445.8	YES	NO	bb	bb	10.012
21	2378-TCDD	26.42	4.111e4	5.488e4	1.149	0.75	0.77	521.2	YES	NO	bb	bb	9.017
22	Total-tetradiioxins	26.10	6.719e4	8.697e4	1.024	0.77	0.77	561.8	YES	NO	bb	bb	16.242
23	Total-tetradiioxins	25.60	2.343e4	2.963e4	1.024	0.79	0.77	301.6	YES	NO	bb	bb	5.591
24	12389-PECDD	31.93	2.423e5	1.700e5	1.184	1.43	1.55	1246.0	YES	NO	bb	bd	49.543
25	12378-PeCDD	31.54	2.212e5	1.442e5	1.022	1.53	1.55	1124.1	YES	NO	bb	bb	50.849
26	12479-PECDD	28.82	3.593e5	2.367e5	2.301	1.52	1.55	1224.5	YES	NO	bb	bb	36.832
27	124679-HXCDD	34.01	2.330e5	1.909e5	1.115	1.22	1.24	1078.1	YES	NO	bb	bb	49.292
28	123789-HxCDD	36.52	2.114e5	1.814e5	0.907	1.17	1.24	982.1	YES	NO	bb	bd	51.723
29	123678-HxCDD	36.14	2.532e5	2.091e5	1.001	1.21	1.24	1112.6	YES	NO	db	db	51.126
30	123478-HxCDD	36.02	2.147e5	1.744e5	0.996	1.23	1.24	1055.8	YES	NO	bd	bd	50.696
31	1234678-HpCDD	40.27	1.700e5	1.663e5	1.039	1.02	1.05	1138.4	YES	NO	bd	bd	52.721
32	1234679-HPCDD	39.23	2.020e5	1.832e5	1.137	1.10	1.05	1451.0	YES	NO	bd	bb	55.196
33	OCDD	45.00	2.152e5	2.483e5	0.920	0.87	0.89	2785.0	YES	NO	bb	bb	97.150

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHICV.qld
Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.45	3.397e6					9.1	YES		db		
2	FUNCTION1 PFK	22.00	4.124e6					5.2	YES		bd		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.25	2.674e4					2.5	NO		db		0.000
2	FUNCTION2 PFK	28.20	5.558e3					1.1	NO		dd		0.000
3	FUNCTION2 PFK	28.15	1.333e4					1.7	NO		bd		0.000
4	FUNCTION2 PFK	28.11	4.408e3					0.8	NO		bb		0.000
5	FUNCTION2 PFK	30.52	5.287e3					0.9	NO		bd		0.000
6	FUNCTION2 PFK	30.38	1.568e4					1.4	NO		bb		0.000
7	FUNCTION2 PFK	30.23	2.380e4					1.5	NO		db		0.000
8	FUNCTION2 PFK	30.10	2.694e4					1.7	NO		bd		0.000
9	FUNCTION2 PFK	29.99	2.076e3					0.5	NO		bb		0.000
10	FUNCTION2 PFK	29.89	7.421e3					1.2	NO		bb		0.000
11	FUNCTION2 PFK	29.80	6.022e3					0.5	NO		bb		0.000
12	FUNCTION2 PFK	29.62	1.101e4					1.2	NO		bb		0.000
13	FUNCTION2 PFK	29.52	2.200e4					2.0	NO		bb		0.000
14	FUNCTION2 PFK	29.42	7.036e3					1.0	NO		bb		0.000
15	FUNCTION2 PFK	29.29	2.309e4					2.2	NO		bb		0.000
16	FUNCTION2 PFK	29.03	1.036e4					1.7	NO		db		0.000
17	FUNCTION2 PFK	29.00	8.382e3					1.3	NO		bd		0.000
18	FUNCTION2 PFK	28.80	5.680e3					0.9	NO		bb		0.000
19	FUNCTION2 PFK	28.70	1.413e4					1.3	NO		bb		0.000
20	FUNCTION2 PFK	28.60	2.690e3					0.7	NO		bb		0.000
21	FUNCTION2 PFK	32.35	9.362e3					1.3	NO		bd		0.000
22	FUNCTION2 PFK	32.28	5.282e3					0.9	NO		bb		0.000
23	FUNCTION2 PFK	31.94	5.478e3					0.6	NO		bb		0.000
24	FUNCTION2 PFK	31.86	9.539e3					1.3	NO		bb		0.000
25	FUNCTION2 PFK	31.70	8.598e3					0.9	NO		bb		0.000
26	FUNCTION2 PFK	31.56	1.164e4					1.5	NO		bb		0.000
27	FUNCTION2 PFK	31.44	9.870e3					1.2	NO		bb		0.000
28	FUNCTION2 PFK	31.37	5.651e3					1.2	NO		bb		0.000
29	FUNCTION2 PFK	31.16	3.906e3					0.7	NO		db		0.000
30	FUNCTION2 PFK	31.10	5.259e3					1.0	NO		bd		0.000
31	FUNCTION2 PFK	31.00	2.220e3					0.5	NO		bb		0.000
32	FUNCTION2 PFK	30.93	4.197e3					0.6	NO		bb		0.000
33	FUNCTION2 PFK	30.84	1.813e4					1.7	NO		bb		0.000
34	FUNCTION2 PFK	30.68	6.046e3					1.3	NO		db		0.000
35	FUNCTION2 PFK	30.64	6.706e3					1.2	NO		dd		0.000
36	FUNCTION2 PFK	30.58	1.475e4					1.4	NO		dd		0.000
37	FUNCTION2 PFK	32.74	9.704e3					1.1	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303IHICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION2 PFK	32.61	1.975e3					0.6	NO		bb		0.000
39	FUNCTION2 PFK	32.55	1.171e3					0.5	NO		bb		0.000
40	FUNCTION2 PFK	32.51	7.325e3					1.0	NO		db		0.000
41	FUNCTION2 PFK	32.45	9.340e3					1.3	NO		dd		0.000
42	FUNCTION2 PFK	32.41	1.322e4					1.9	NO		dd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	37.70	5.175e4					1.9	NO		bb		0.000
2	FUNCTION3 PFK	35.52	3.681e5					3.3	YES		bb		0.000
3	FUNCTION3 PFK	34.42	8.023e6					1.5	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	40.67	5.668e6					23.1	YES		db		
2	FUNCTION4 PFK	39.84	1.814e7					26.9	YES		dd		
3	FUNCTION4 PFK	38.09	2.173e6					22.8	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.82	4.953e3					1.4	NO		bb		
2	FUNCTION5 PFK	45.79	4.078e3					1.3	NO		db		
3	FUNCTION5 PFK	45.76	2.296e3					0.8	NO		bd		
4	FUNCTION5 PFK	45.37	1.499e4					1.8	NO		bb		
5	FUNCTION5 PFK	45.31	3.040e3					1.0	NO		bb		
6	FUNCTION5 PFK	44.94	1.866e3					0.7	NO		bb		
7	FUNCTION5 PFK	44.62	4.342e3					1.3	NO		bb		
8	FUNCTION5 PFK	43.85	4.909e3					1.2	NO		bb		
9	FUNCTION5 PFK	43.55	9.698e3					1.7	NO		bb		
10	FUNCTION5 PFK	43.31	1.818e4					2.2	NO		bb		
11	FUNCTION5 PFK	43.18	3.274e3					1.0	NO		bb		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230303\HICV.qld
 Last Altered: Monday, March 06, 2023 11:49:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 14:47:33 Pacific Standard Time

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.14	7.703e1					2.6	NO		bb		0.000
2	FUNCTION1 HXCD...	25.58	1.369e2					3.0	NO		bb		0.000
3	FUNCTION1 HXCD...	24.29	7.654e1					1.4	NO		bb		0.000
4	FUNCTION1 HXCD...	23.49	8.895e1					2.4	NO		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.41	1.026e2					2.4	NO		db		0.000
2	FUNCTION2 HPCD...	32.32	1.299e2					2.2	NO		bd		0.000
3	FUNCTION2 HPCD...	31.19	1.035e2					3.9	YES		db		0.000
4	FUNCTION2 HPCD...	31.15	2.274e2					6.9	YES		bd		0.000
5	FUNCTION2 HPCD...	29.21	1.504e2					2.9	NO		bb		0.000
6	FUNCTION2 HPCD...	28.77	9.035e1					2.8	NO		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.51	9.563e1					4.4	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

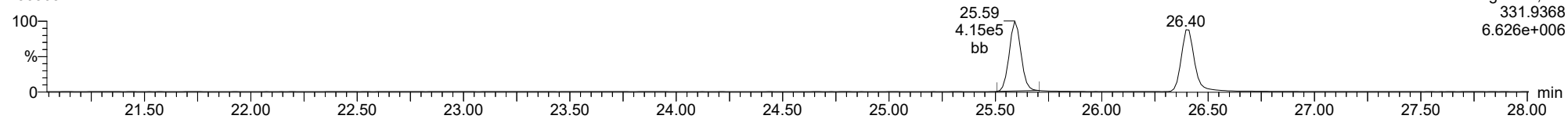
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

13C-1234-TCDD

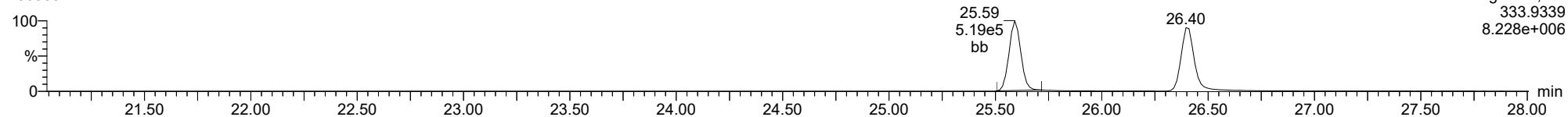
23030311



F1:Voltage SIR,El+
331.9368
6.626e+006

13C-1234-TCDD

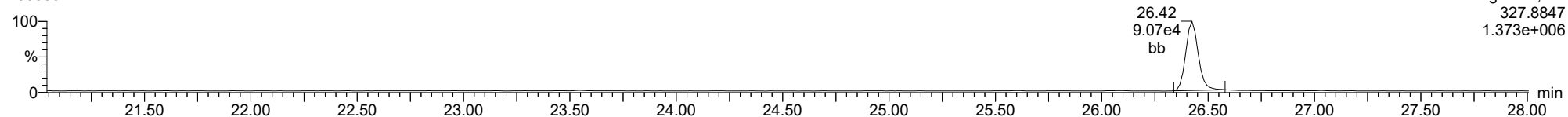
23030311



F1:Voltage SIR,El+
333.9339
8.228e+006

37CL-2378-TCDD

23030311

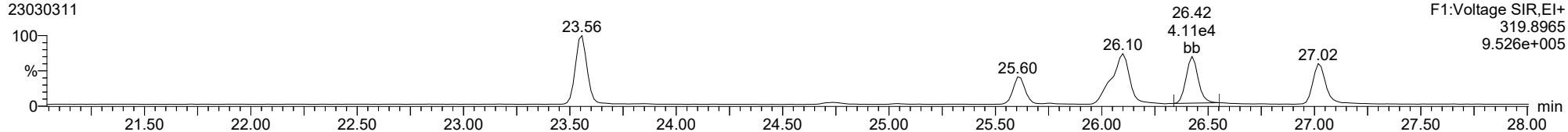


F1:Voltage SIR,El+
327.8847
1.373e+006

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

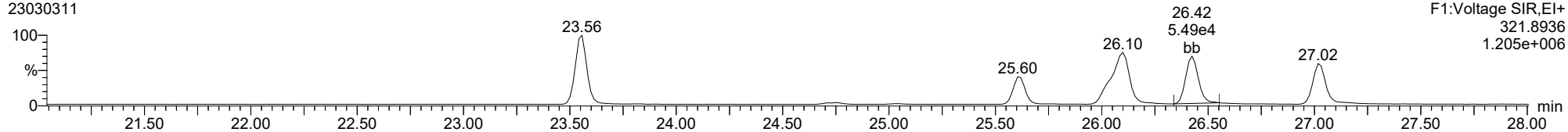
2378-TCDD

23030311



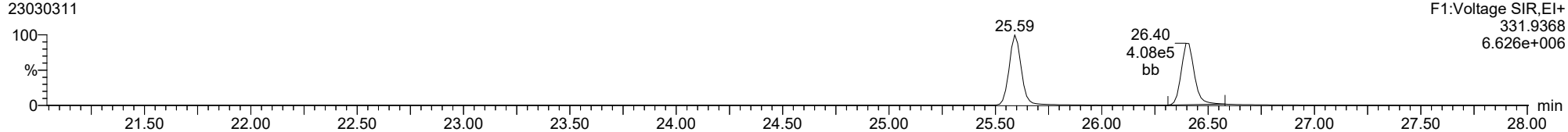
2378-TCDD

23030311



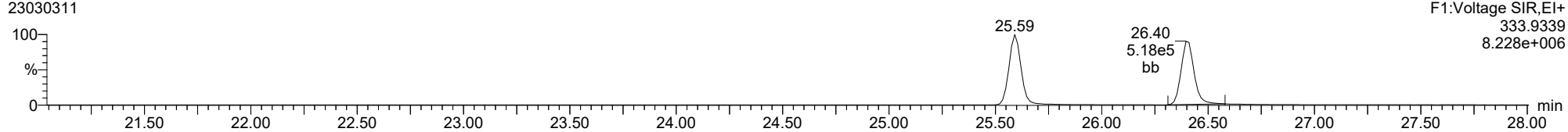
13C-2378-TCDD

23030311



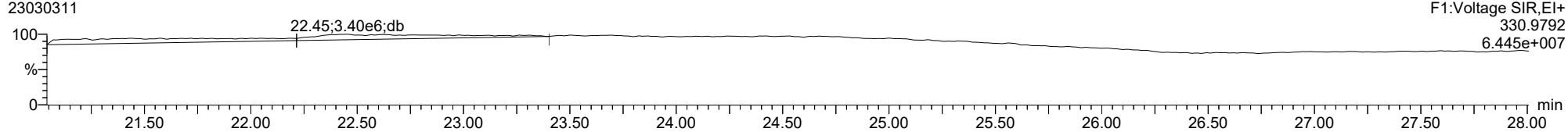
13C-2378-TCDD

23030311



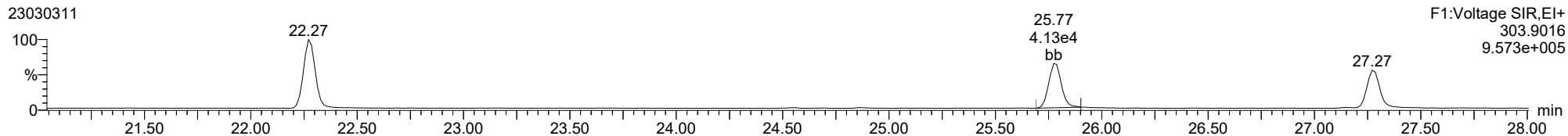
FUNCTION1 PFK

23030311

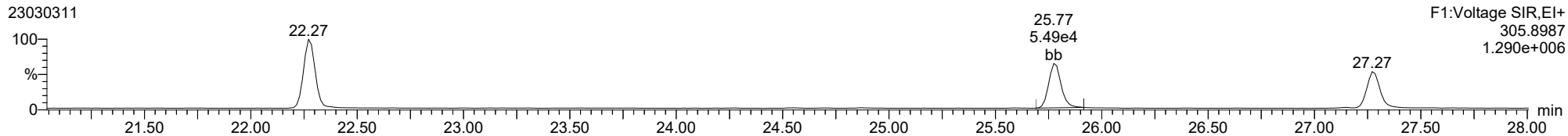


ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

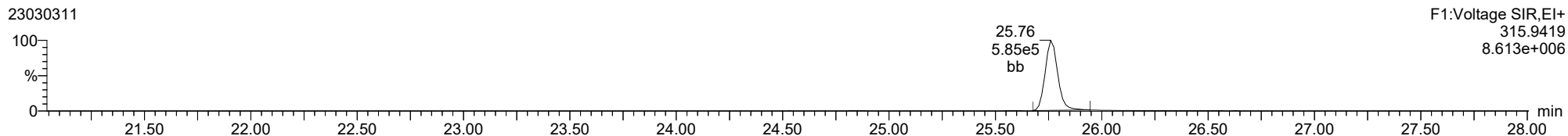
2378-TCDF



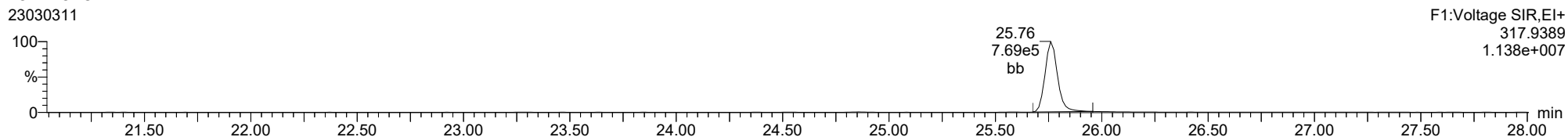
2378-TCDF



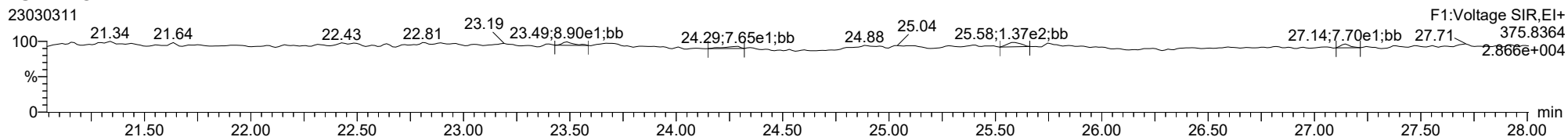
13C-2378-TCDF



13C-2378-TCDF



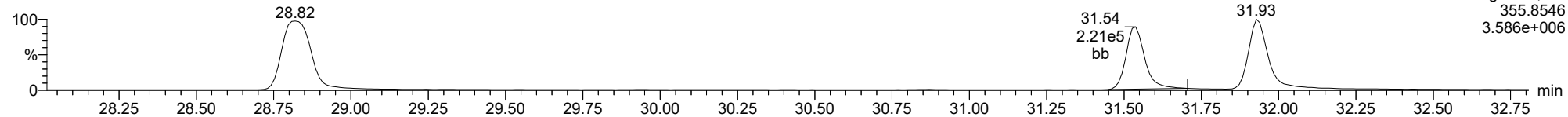
FUNCTION1 HXCDPE



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

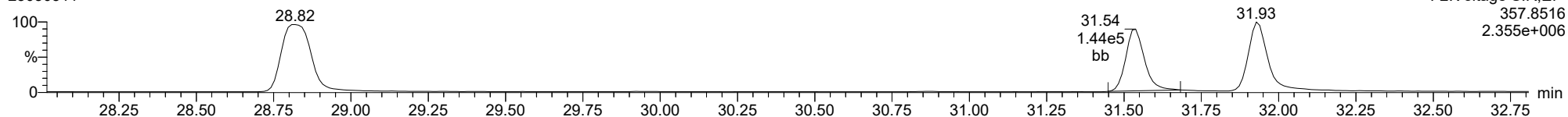
23030311



F2:Voltage SIR,EI+
355.8546
3.586e+006

12378-PeCDD

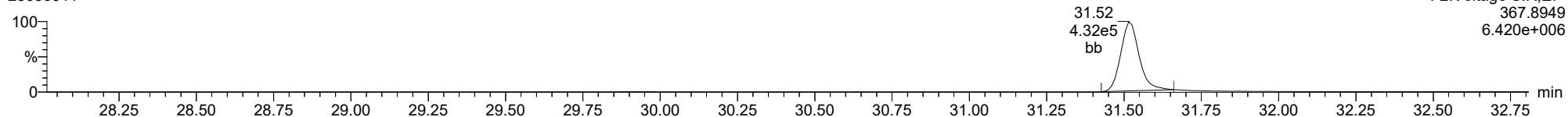
23030311



F2:Voltage SIR,EI+
357.8516
2.355e+006

13C-12378-PeCDD

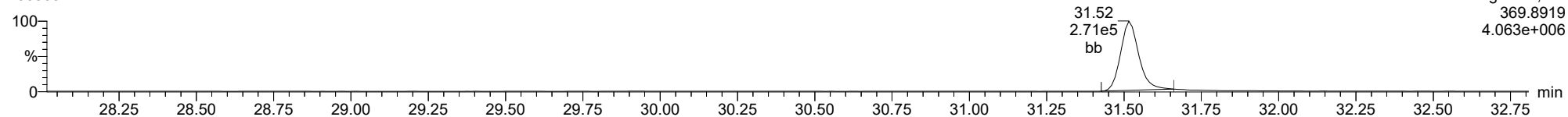
23030311



F2:Voltage SIR,EI+
367.8949
6.420e+006

13C-12378-PeCDD

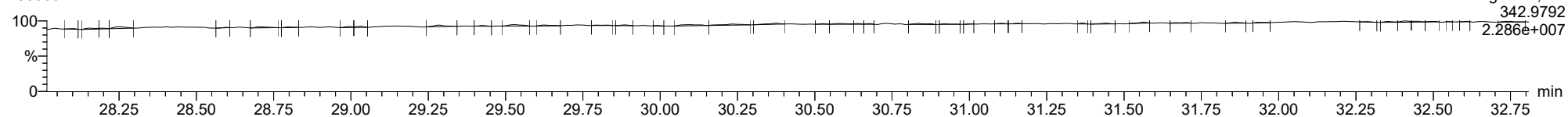
23030311



F2:Voltage SIR,EI+
369.8919
4.063e+006

FUNCTION2 PFK

23030311

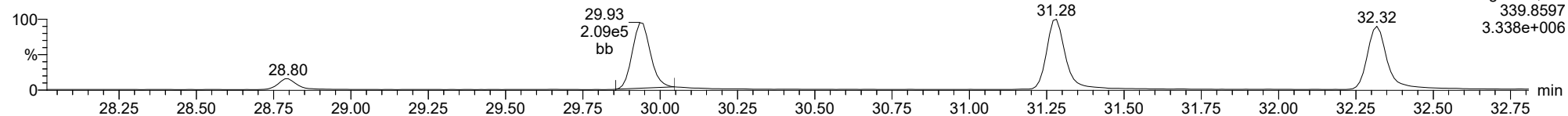


F2:Voltage SIR,EI+
342.9792
2.286e+007

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

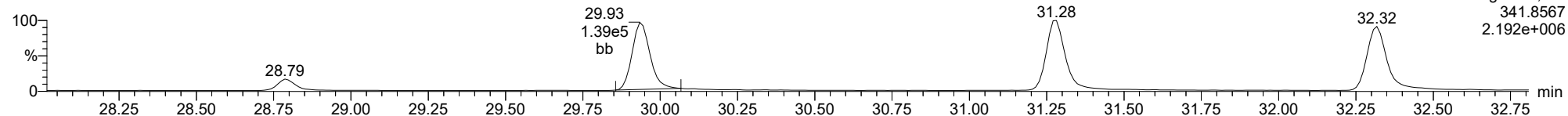
12378-PeCDF

23030311



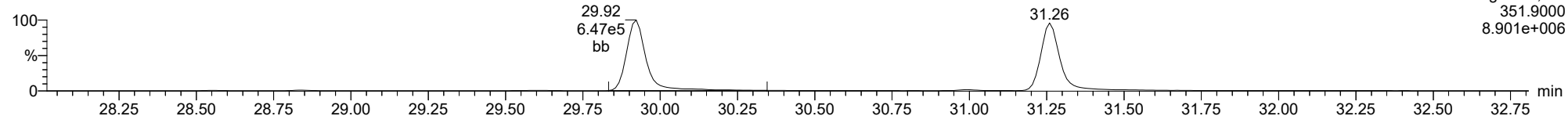
12378-PeCDF

23030311



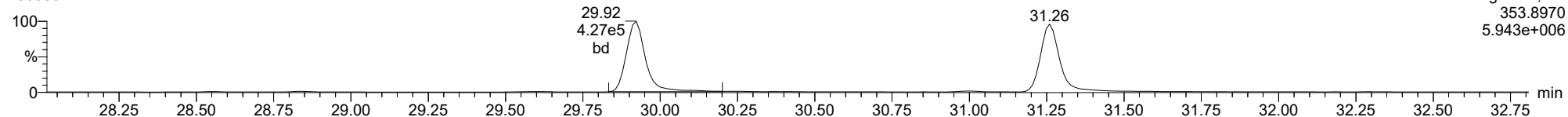
13C-12378-PeCDF

23030311



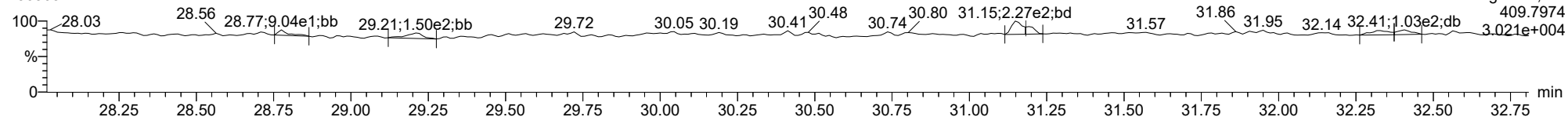
13C-12378-PeCDF

23030311



FUNCTION2 HPCDPE

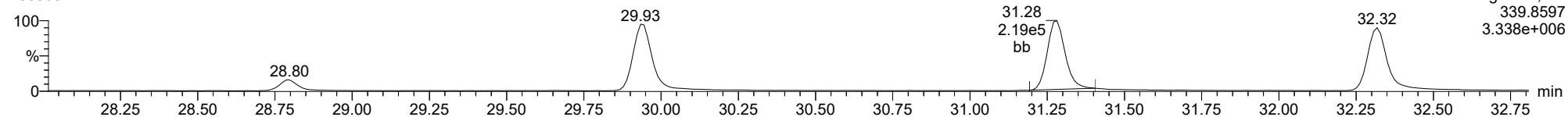
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

23478-PeCDF

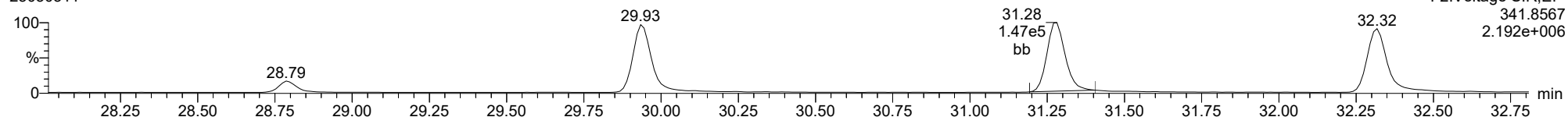
23030311



F2:Voltage SIR,EI+
339.8597
3.338e+006

23478-PeCDF

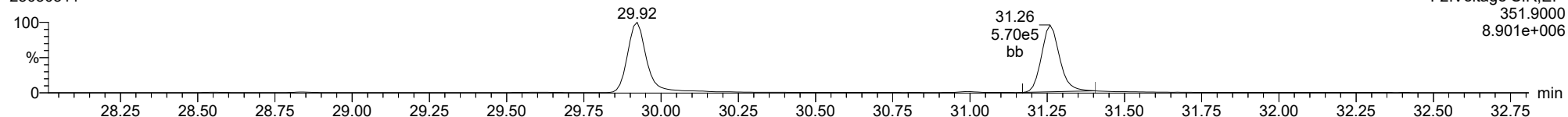
23030311



F2:Voltage SIR,EI+
341.8567
2.192e+006

13C-23478-PeCDF

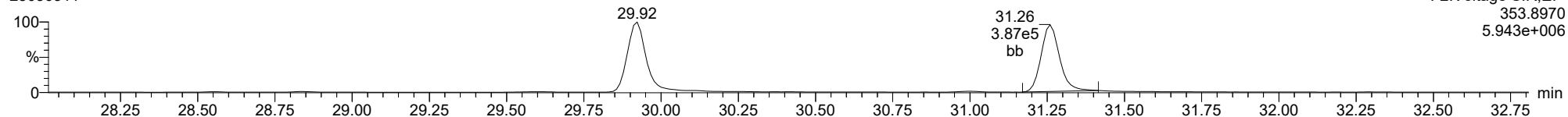
23030311



F2:Voltage SIR,EI+
351.9000
8.901e+006

13C-23478-PeCDF

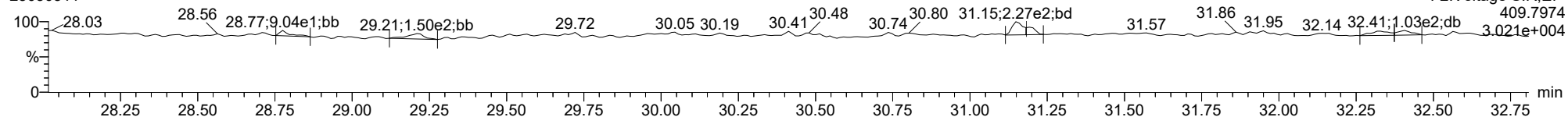
23030311



F2:Voltage SIR,EI+
353.8970
5.943e+006

FUNCTION2 HPCDPE

23030311

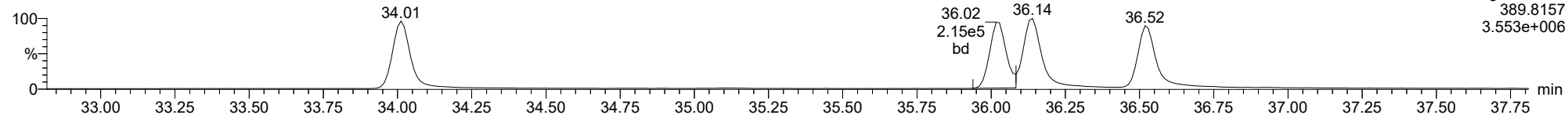


F2:Voltage SIR,EI+
409.7974
3.021e+004

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

123478-HxCDD

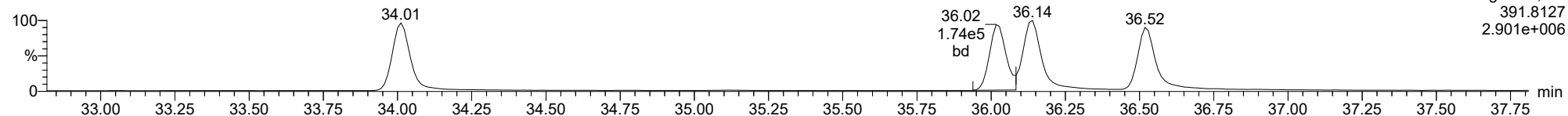
23030311



F3:Voltage SIR,EI+
389.8157
3.553e+006

123478-HxCDD

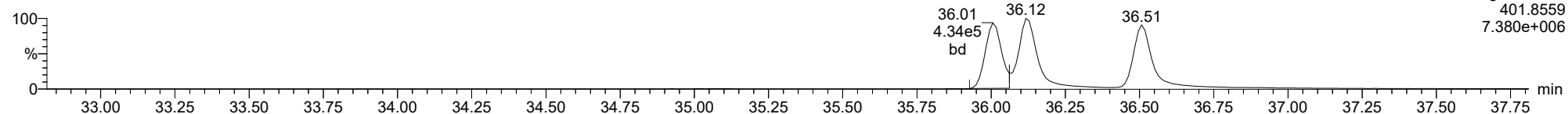
23030311



F3:Voltage SIR,EI+
391.8127
2.901e+006

13C-123478-HxCDD

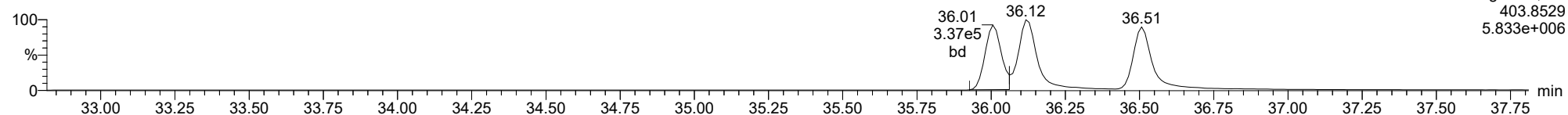
23030311



F3:Voltage SIR,EI+
401.8559
7.380e+006

13C-123478-HxCDD

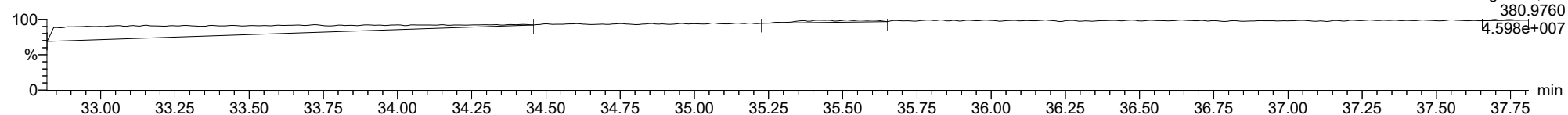
23030311



F3:Voltage SIR,EI+
403.8529
5.833e+006

FUNCTION3 PFK

23030311

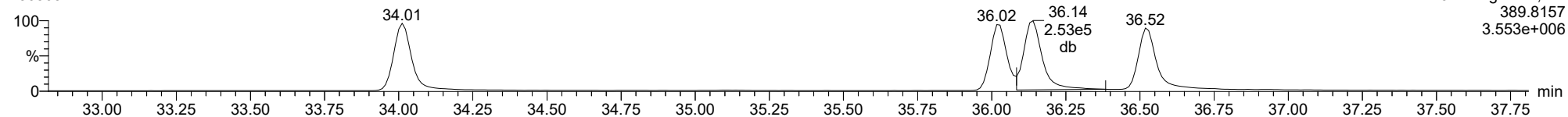


F3:Voltage SIR,EI+
380.9760
4.598e+007

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

123678-HxCDD

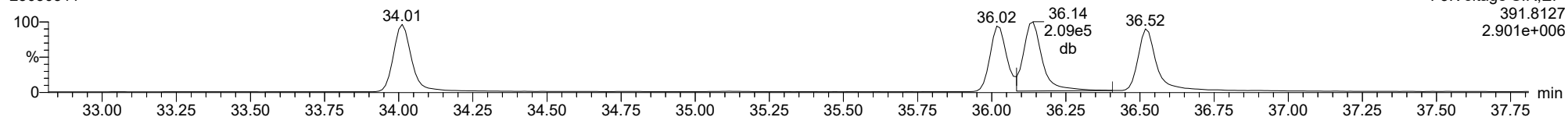
23030311



F3:Voltage SIR,EI+
389.8157
3.553e+006

123678-HxCDD

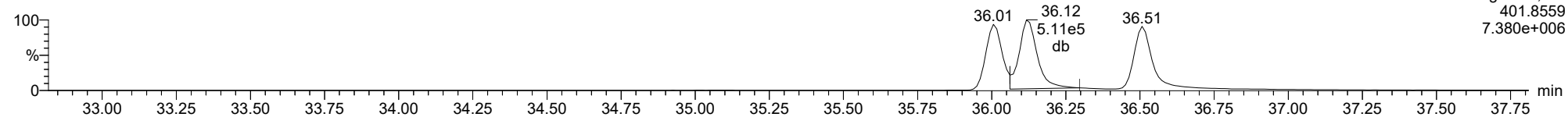
23030311



F3:Voltage SIR,EI+
391.8127
2.901e+006

13C-123678-HxCDD

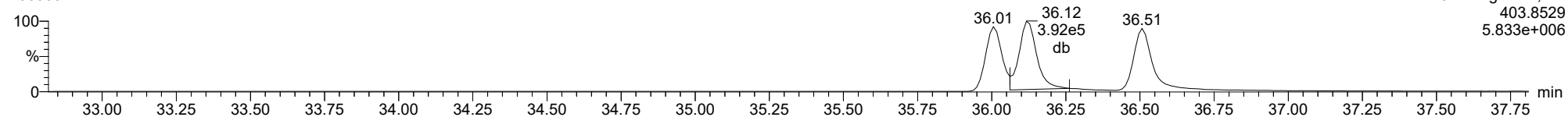
23030311



F3:Voltage SIR,EI+
401.8559
7.380e+006

13C-123678-HxCDD

23030311

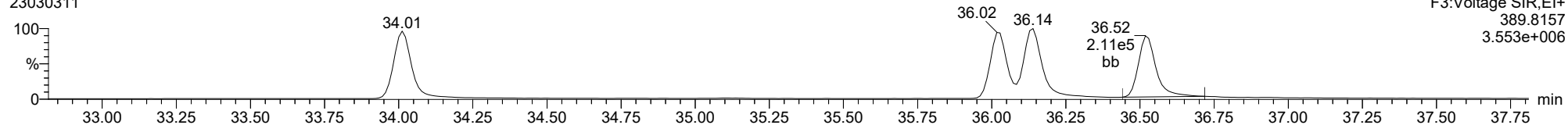


F3:Voltage SIR,EI+
403.8529
5.833e+006

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

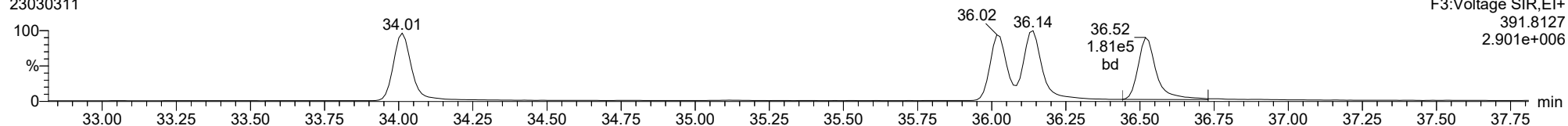
123789-HxCDD

23030311



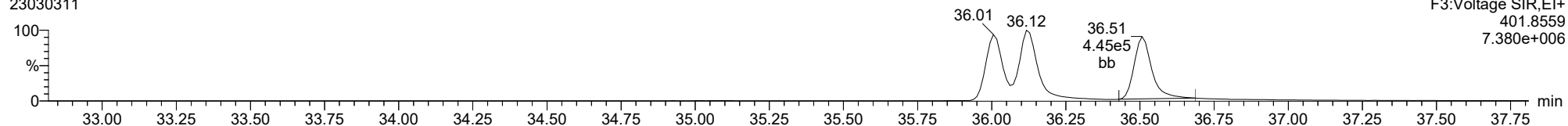
123789-HxCDD

23030311



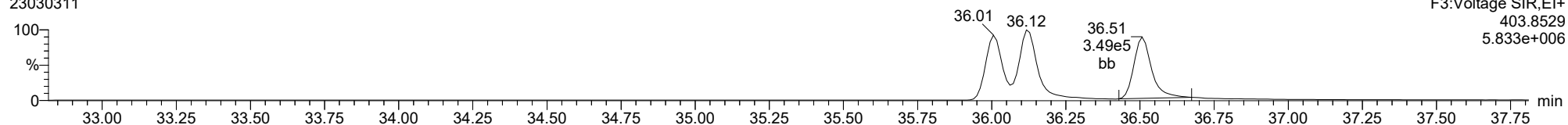
13C-123789-HxCDD

23030311



13C-123789-HxCDD

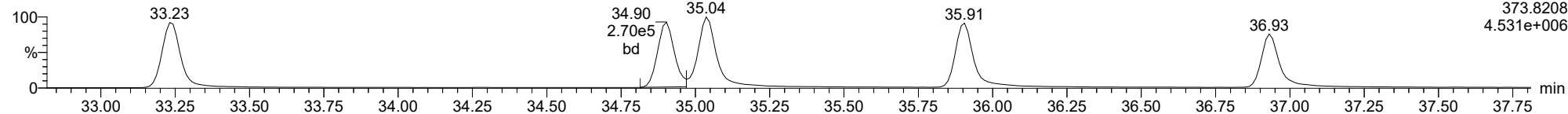
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

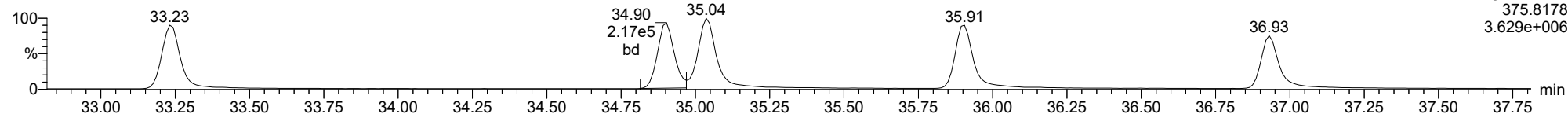
123478-HxCDF

23030311



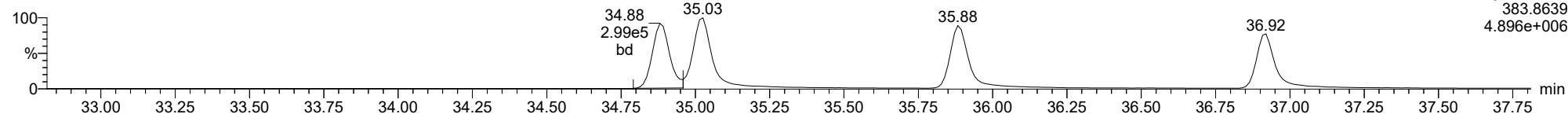
123478-HxCDF

23030311



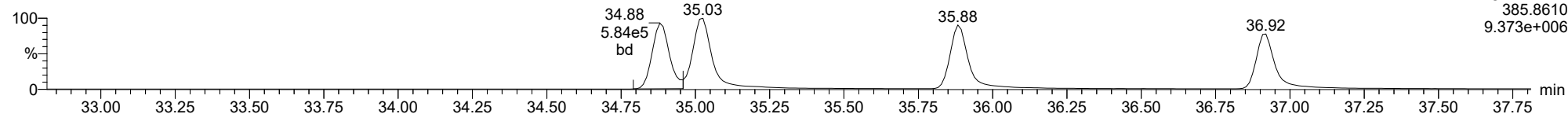
13C-123478-HxCDF

23030311



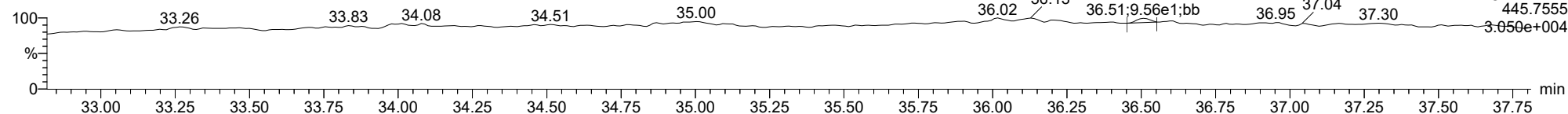
13C-123478-HxCDF

23030311



FUNCTION3 OCDPE

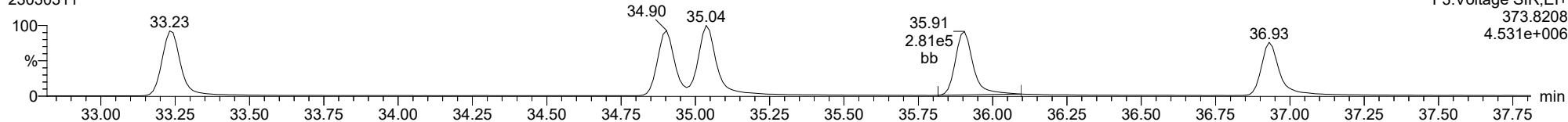
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

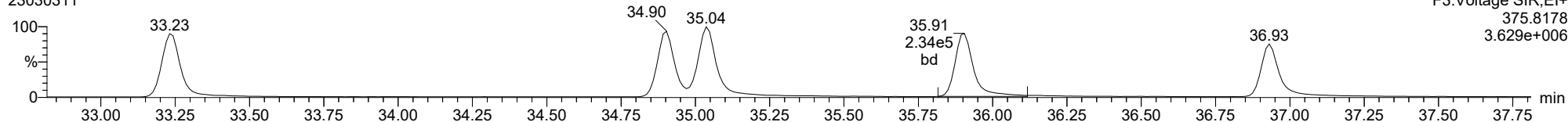
234678-HxCDF

23030311



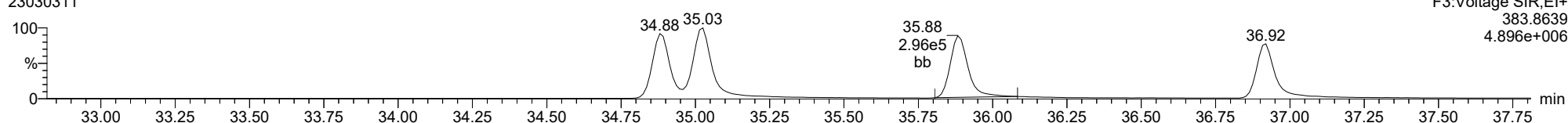
234678-HxCDF

23030311



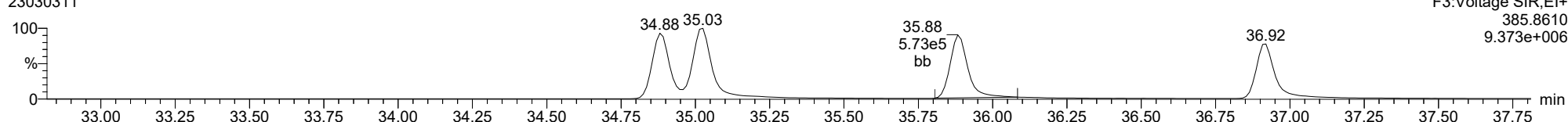
13C-234678-HxCDF

23030311



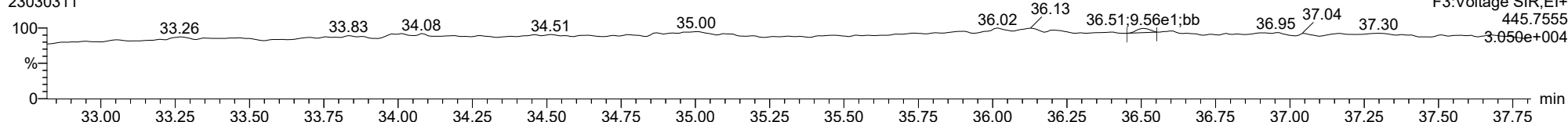
13C-234678-HxCDF

23030311



FUNCTION3 OCDPE

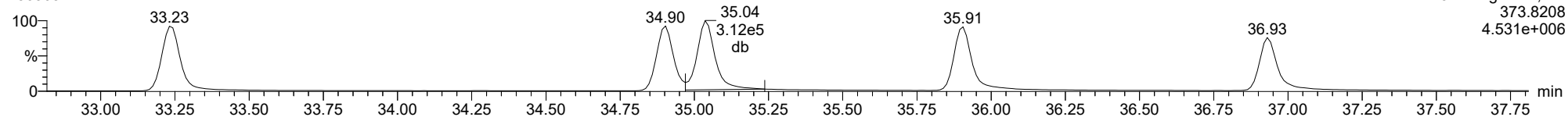
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

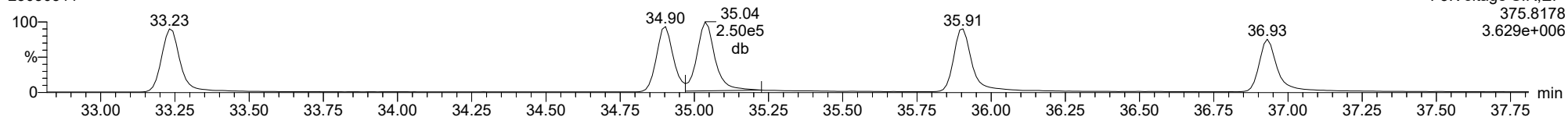
123678-HxCDF

23030311



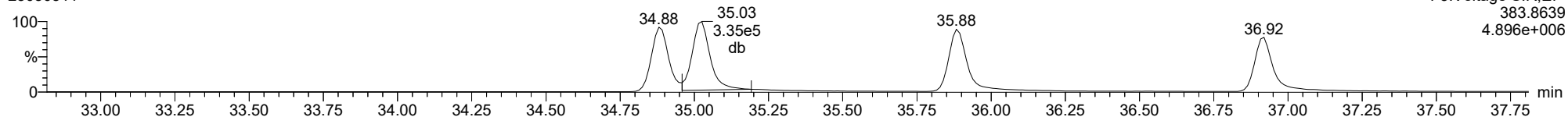
123678-HxCDF

23030311



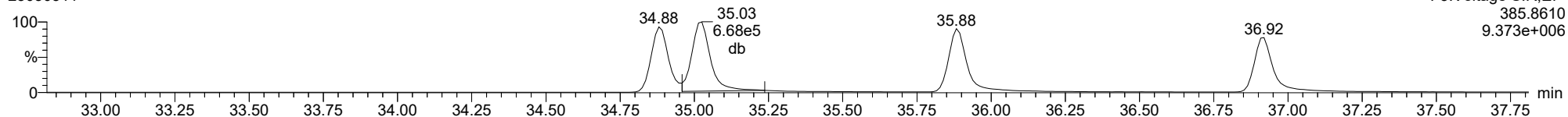
13C-123678-HxCDF

23030311



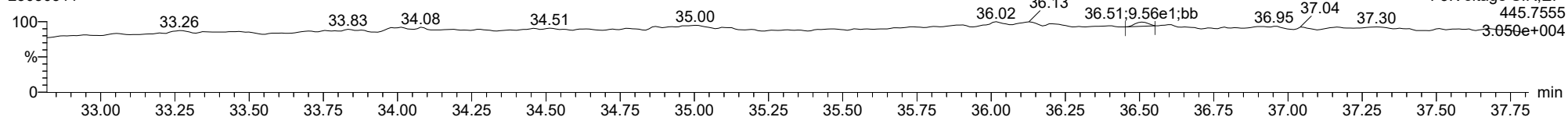
13C-123678-HxCDF

23030311



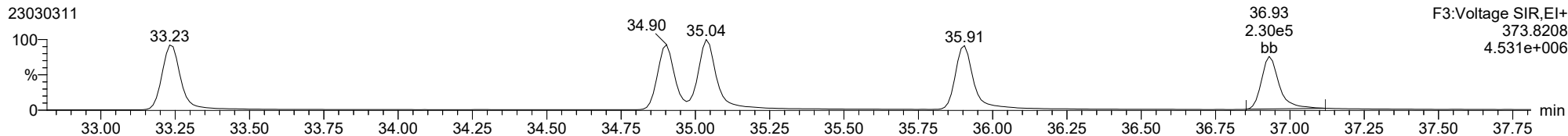
FUNCTION3 OCDPE

23030311

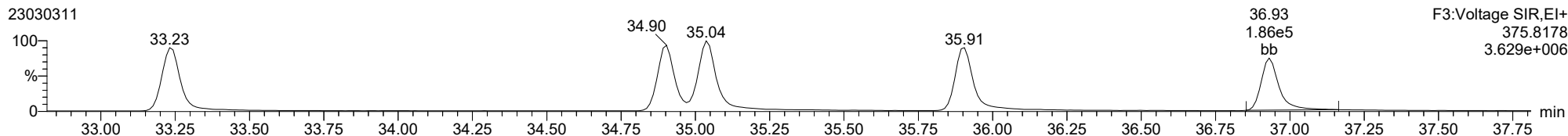


ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

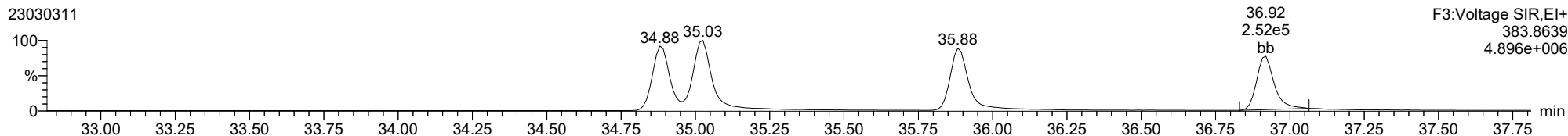
123789-HxCDF



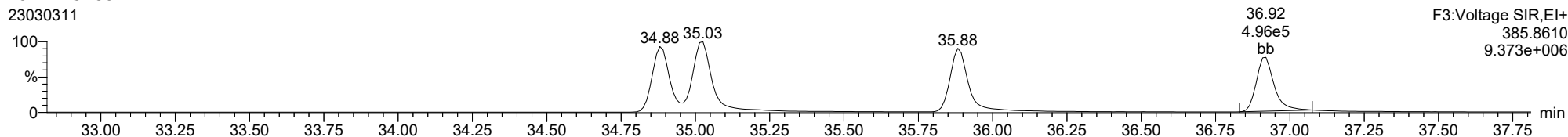
123789-HxCDF



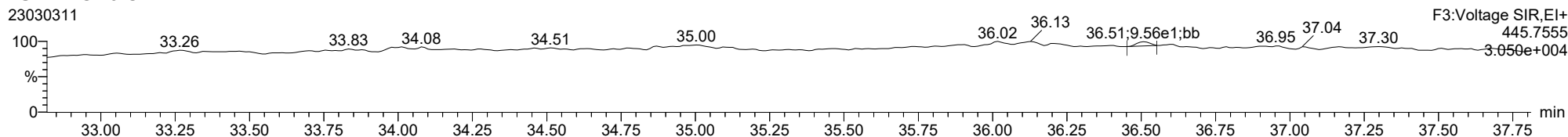
13C-123789-HxCDF



13C-123789-HxCDF



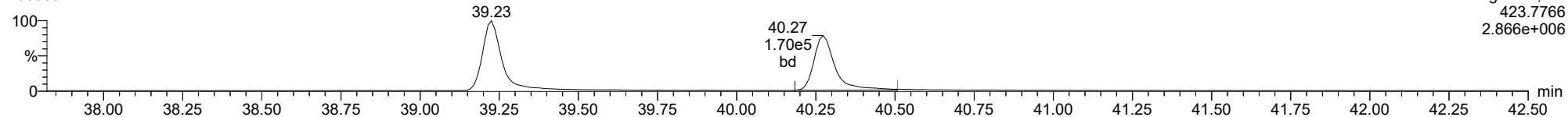
FUNCTION3 OCDPE



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

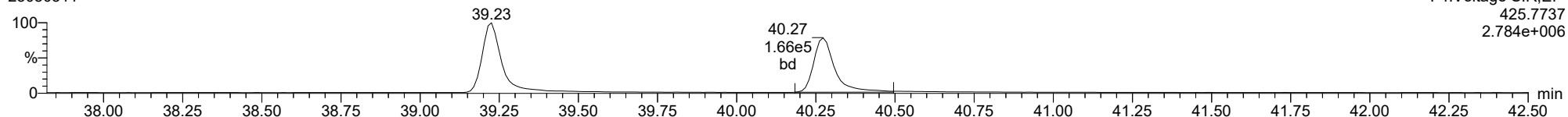
1234678-HpCDD

23030311



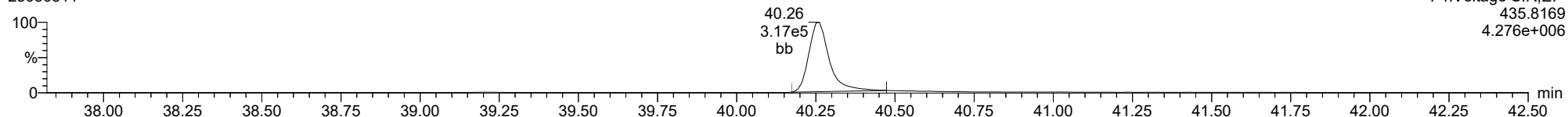
1234678-HpCDD

23030311



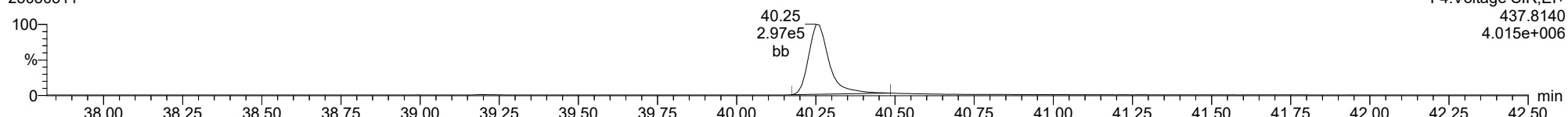
13C-1234678-HpCDD

23030311



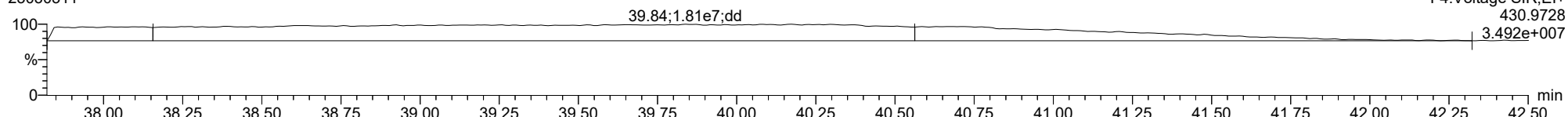
13C-1234678-HpCDD

23030311



FUNCTION4 PFK

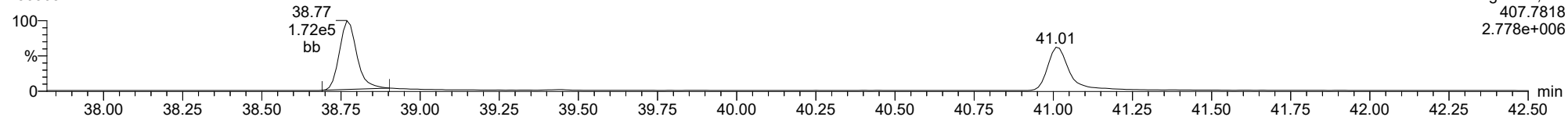
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

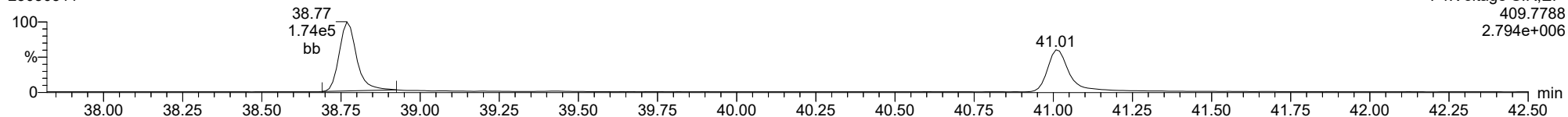
23030311



F4:Voltage SIR,El+
407.7818
2.778e+006

1234678-HpCDF

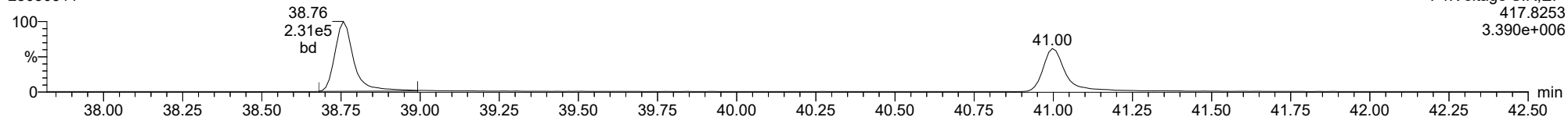
23030311



F4:Voltage SIR,El+
409.7788
2.794e+006

13C-1234678-HpCDF

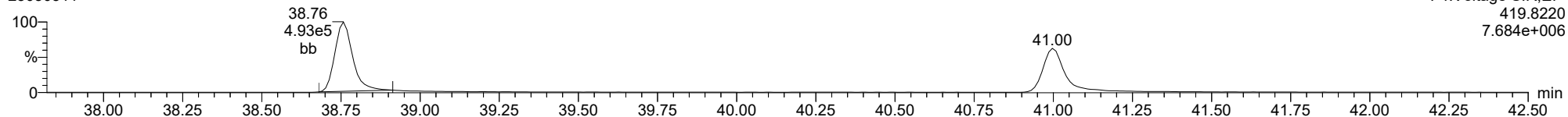
23030311



F4:Voltage SIR,El+
417.8253
3.390e+006

13C-1234678-HpCDF

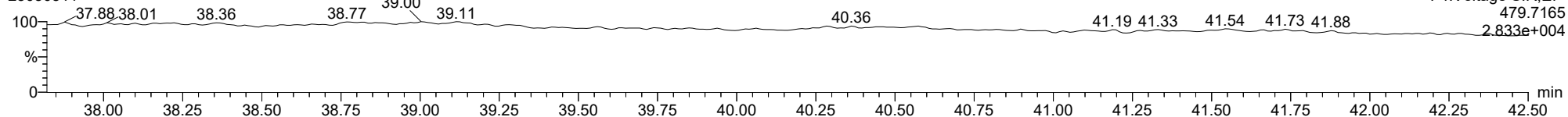
23030311



F4:Voltage SIR,El+
419.8220
7.684e+006

FUNCTION4 NCDPE

23030311

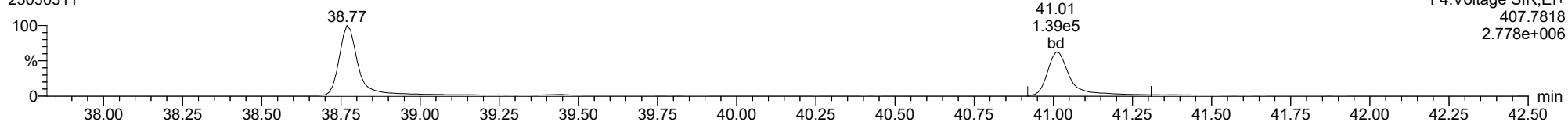


F4:Voltage SIR,El+
479.7165
2.833e+004

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

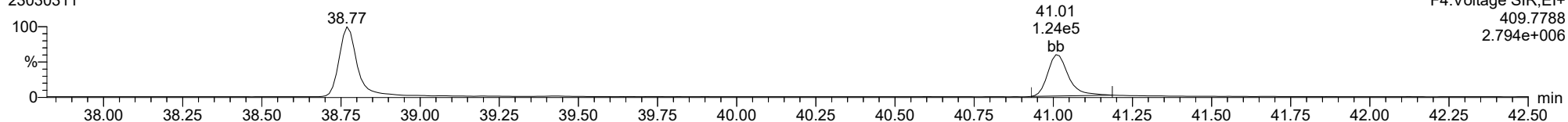
23030311



F4:Voltage SIR,El+
407.7818
2.778e+006

1234789-HpCDF

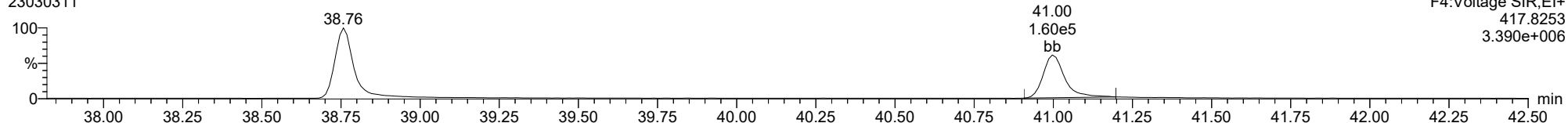
23030311



F4:Voltage SIR,El+
409.7788
2.794e+006

13C-1234789-HpCDF

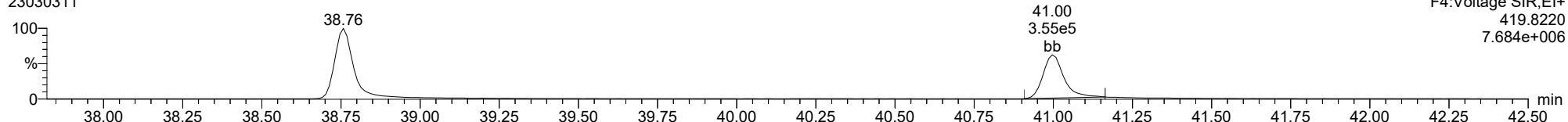
23030311



F4:Voltage SIR,El+
417.8253
3.390e+006

13C-1234789-HpCDF

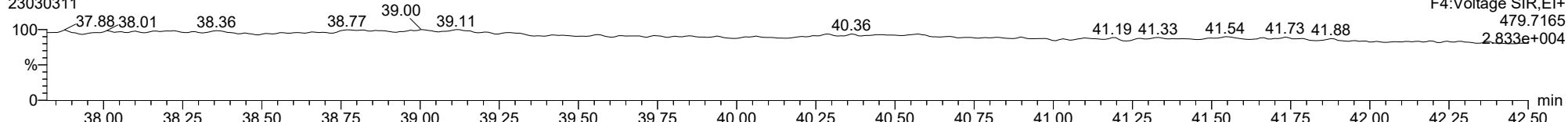
23030311



F4:Voltage SIR,El+
419.8220
7.684e+006

FUNCTION4 NCDPE

23030311

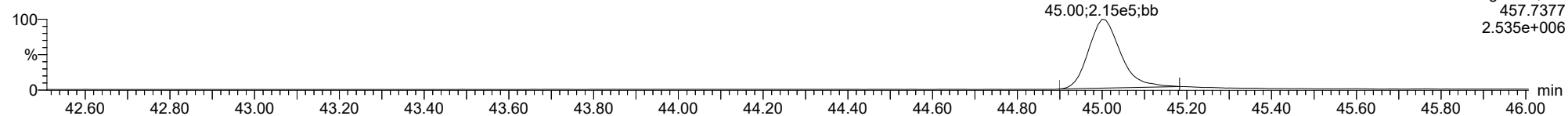


F4:Voltage SIR,El+
479.7165
2.833e+004

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

OCDD

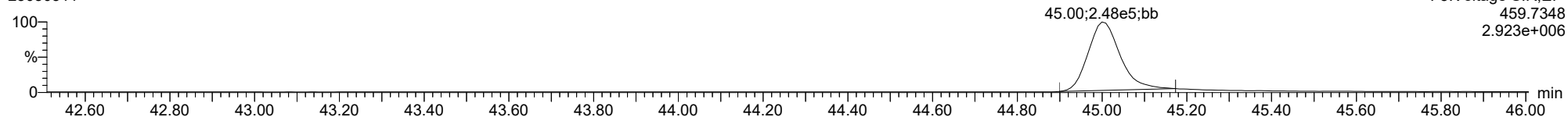
23030311



F5:Voltage SIR,EI+
457.7377
2.535e+006

OCDD

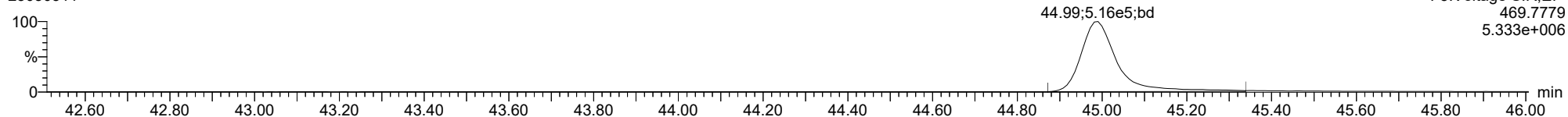
23030311



F5:Voltage SIR,EI+
459.7348
2.923e+006

13C-OCDD

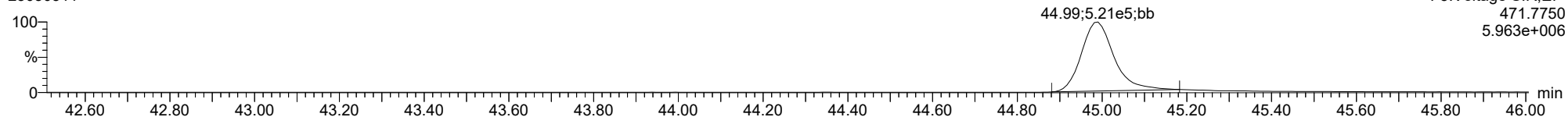
23030311



F5:Voltage SIR,EI+
469.7779
5.333e+006

13C-OCDD

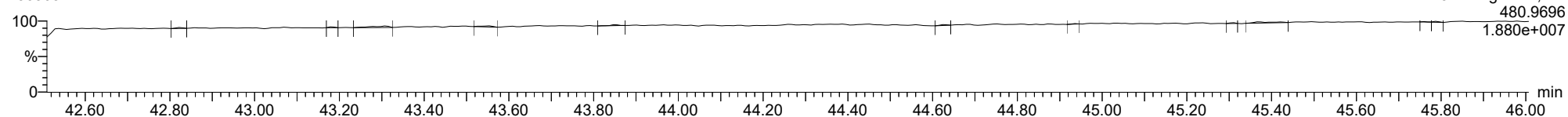
23030311



F5:Voltage SIR,EI+
471.7750
5.963e+006

FUNCTION5 PFK

23030311

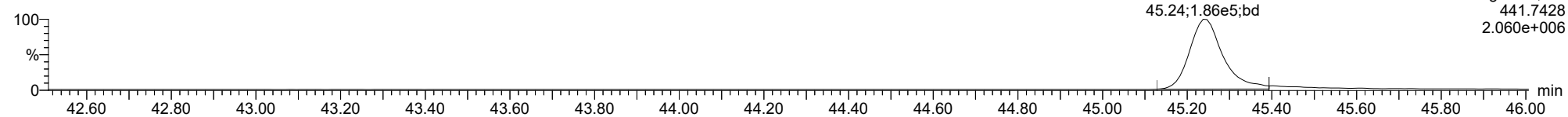


F5:Voltage SIR,EI+
480.9696
1.880e+007

ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

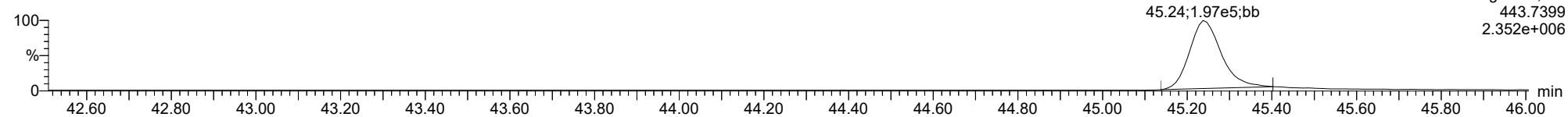
OCDF

23030311



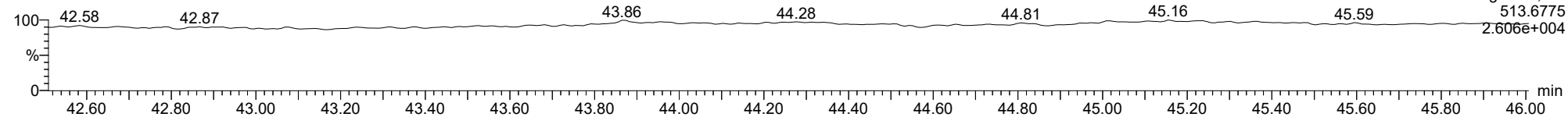
OCDF

23030311



FUNCTION5 DCDPE

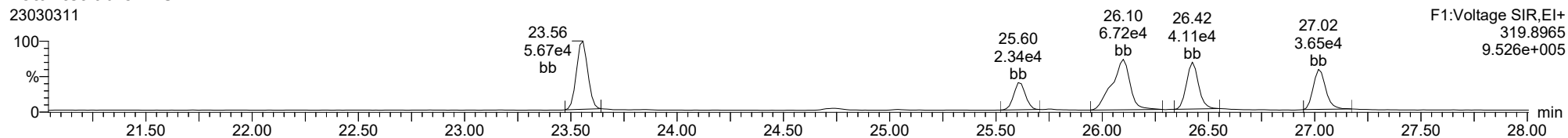
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

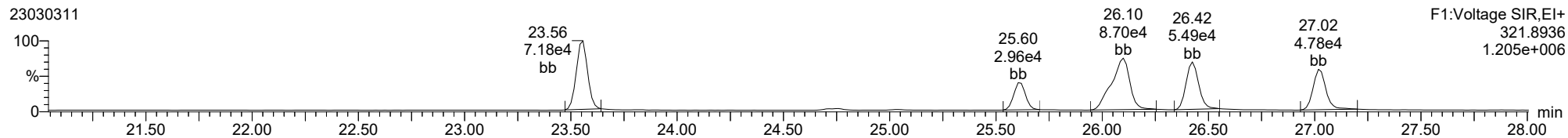
Total-tetradioxins

23030311



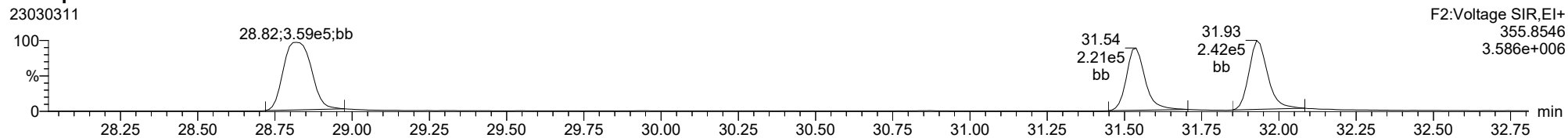
Total-tetradioxins

23030311



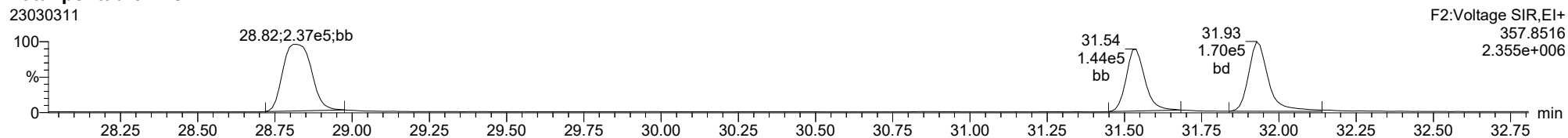
Total-pentadioxins

23030311



Total-pentadioxins

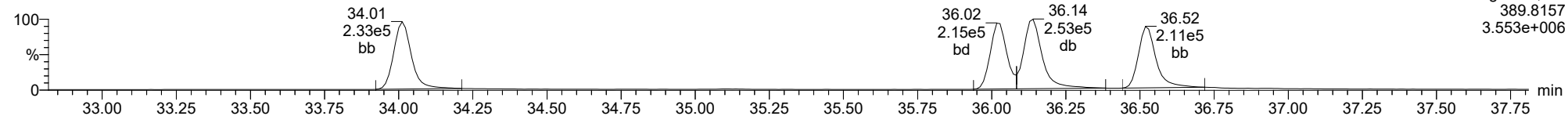
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

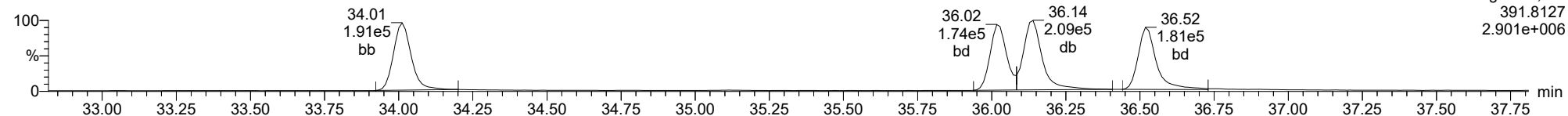
Total-hexadioxins

23030311



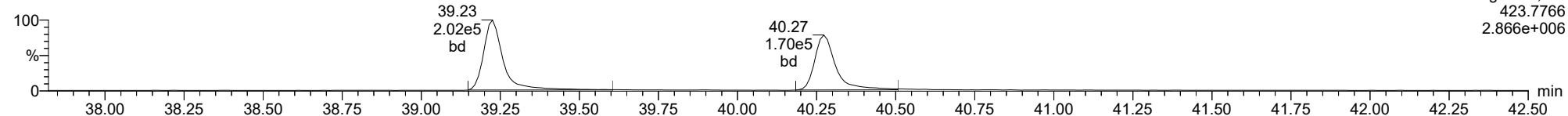
Total-hexadioxins

23030311



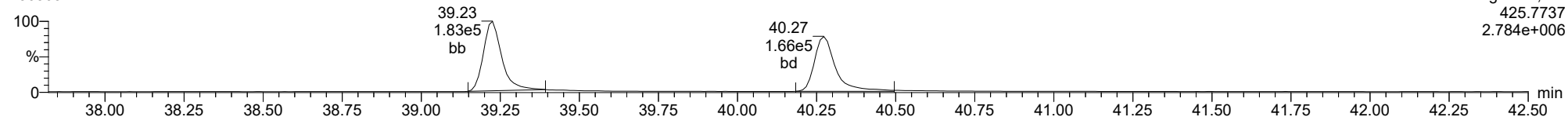
Total-heptadioxins

23030311



Total-heptadioxins

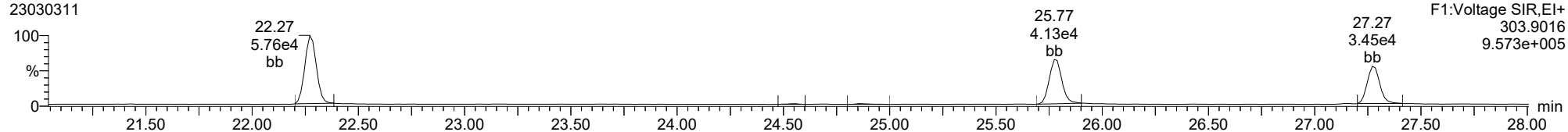
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

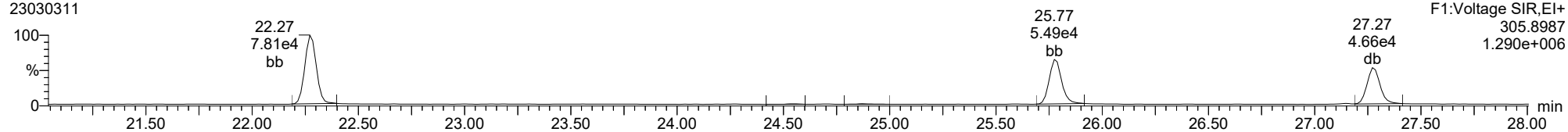
Total-tetrafurans

23030311



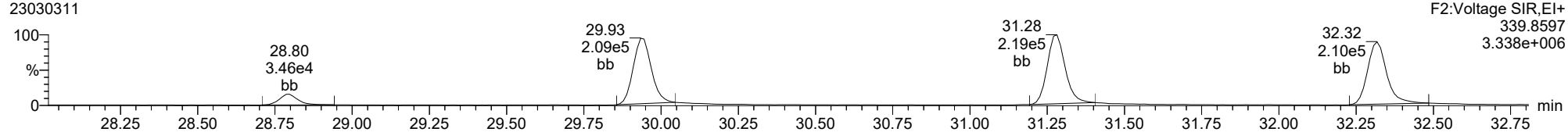
Total-tetrafurans

23030311



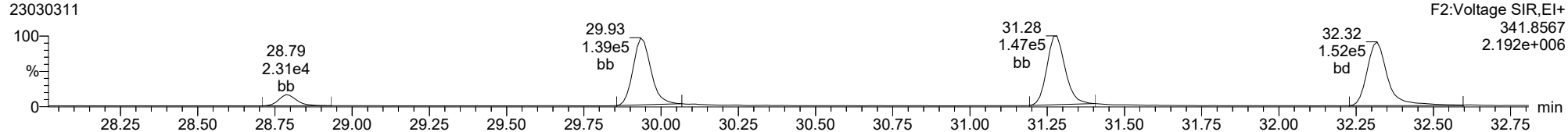
Total-pentafurans

23030311



Total-pentafurans

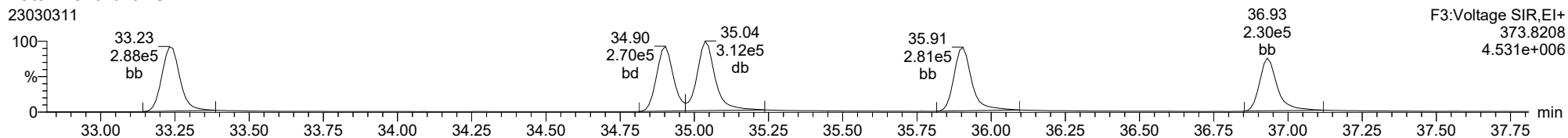
23030311



ID: CS3W2, Name: 23030311, Date: 03-Mar-2023, Time: 17:25:01, Conditions: AUTOSPEC01, User: pk

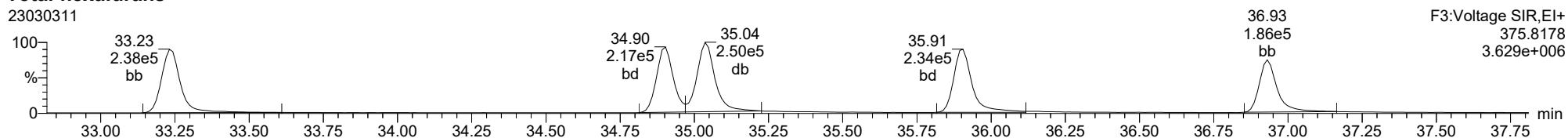
Total-hexafurans

23030311



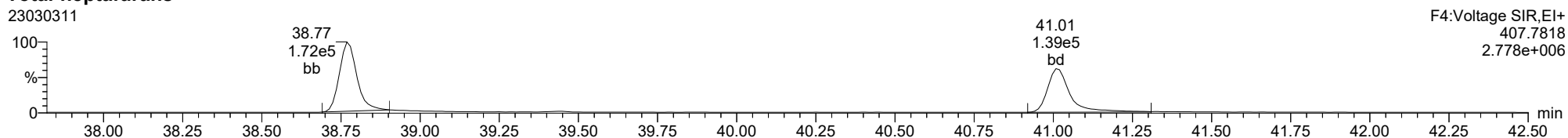
Total-hexafurans

23030311



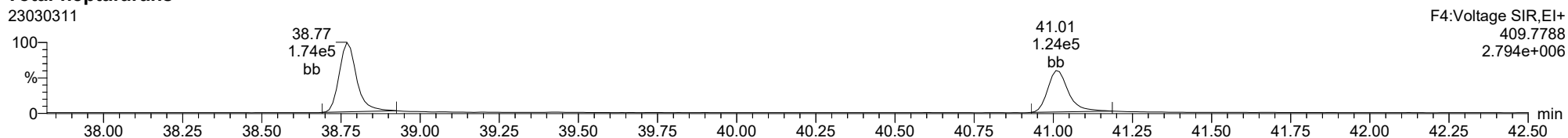
Total-heptafurans

23030311



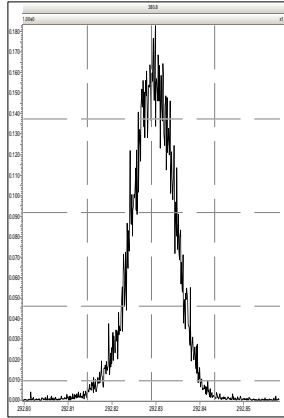
Total-heptafurans

23030311

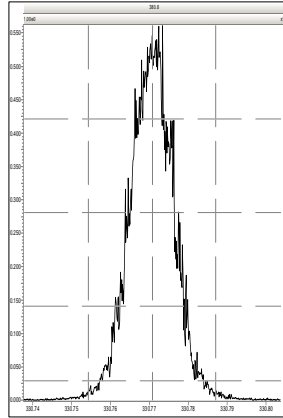


Printed: Friday, March 03, 2023 18:18:18 Pacific Standard Time

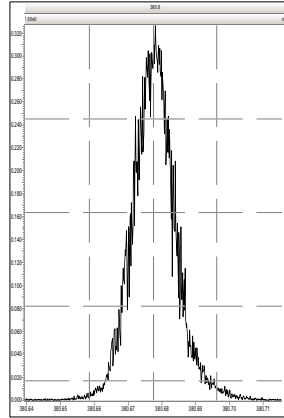
M 292.9824 R 13158



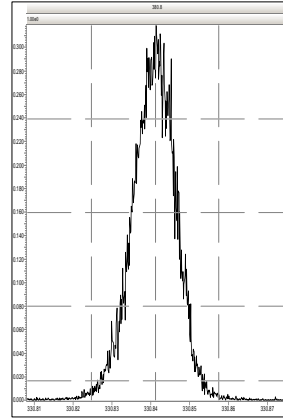
M 330.9792 R 12771



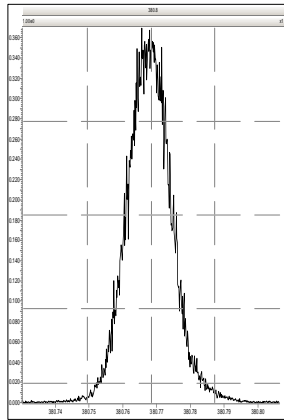
M 380.9760 R 12507



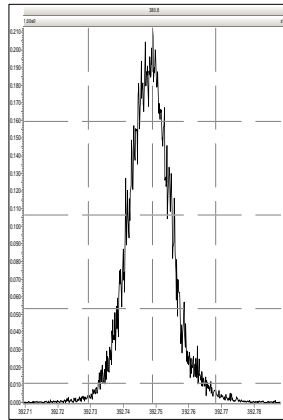
M 330.9792 R 13122



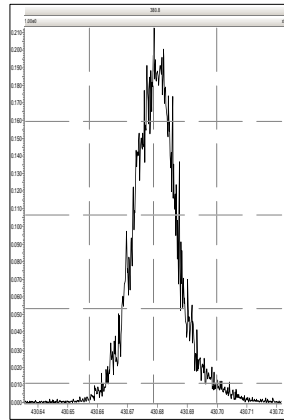
M 380.9760 R 12286



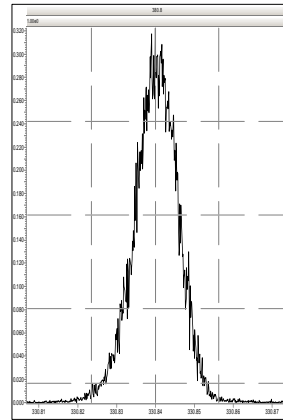
M 392.9760 R 11881



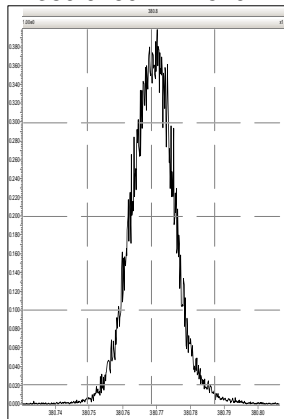
M 430.9728 R 12354



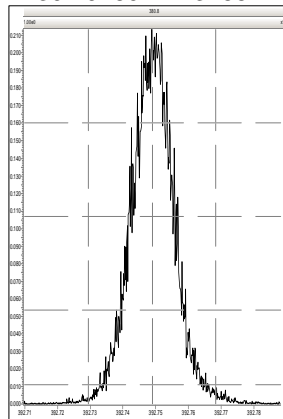
M 330.9792 R 12857



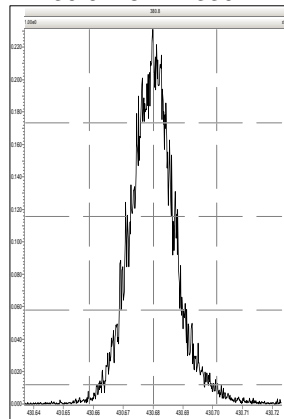
M 380.9760 R 12570



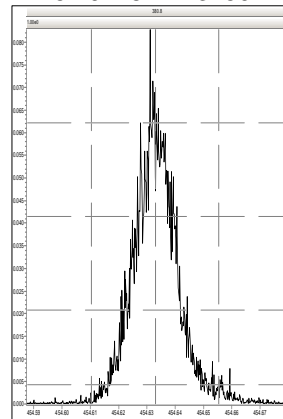
M 392.9760 R 13166



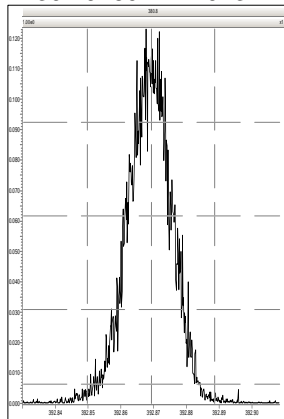
M 430.9728 R 13307



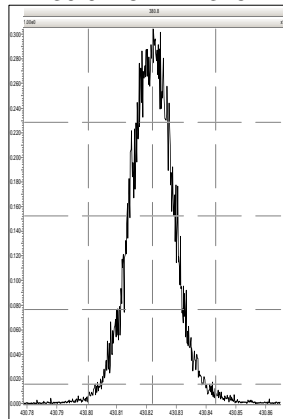
M 454.9728 R 13450



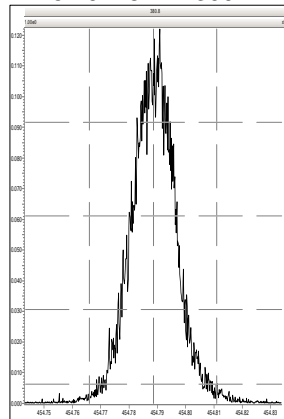
M 392.9760 R 12923



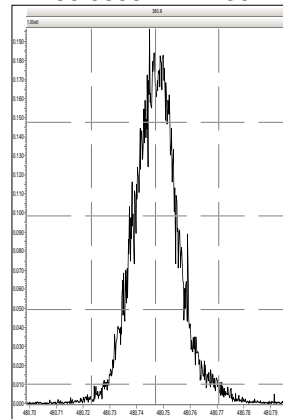
M 430.9728 R 12345



M 454.9728 R 13094

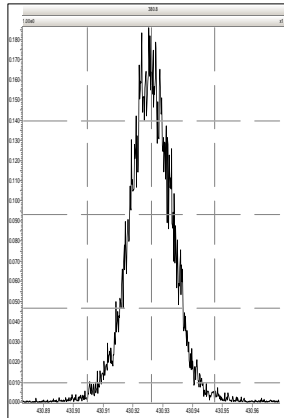


M 480.9696 R 12230

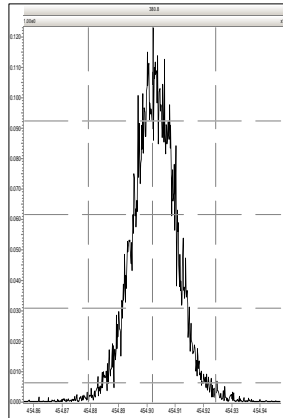


Printed: Friday, March 03, 2023 18:18:18 Pacific Standard Time

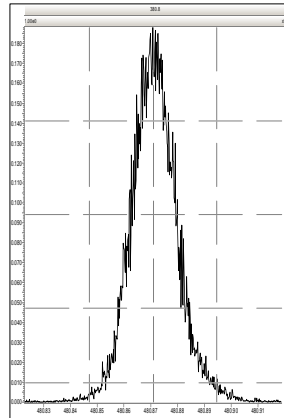
M 430.9728 R 12854



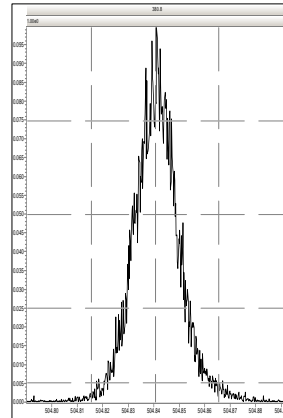
M 454.9728 R 13400



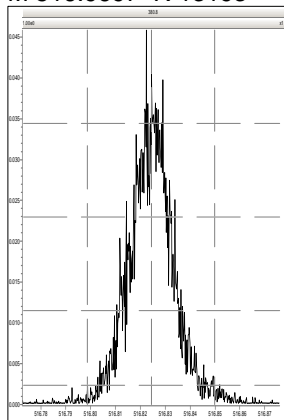
M 480.9696 R 11904



M 504.9696 R 12168



M 516.9697 R 13193

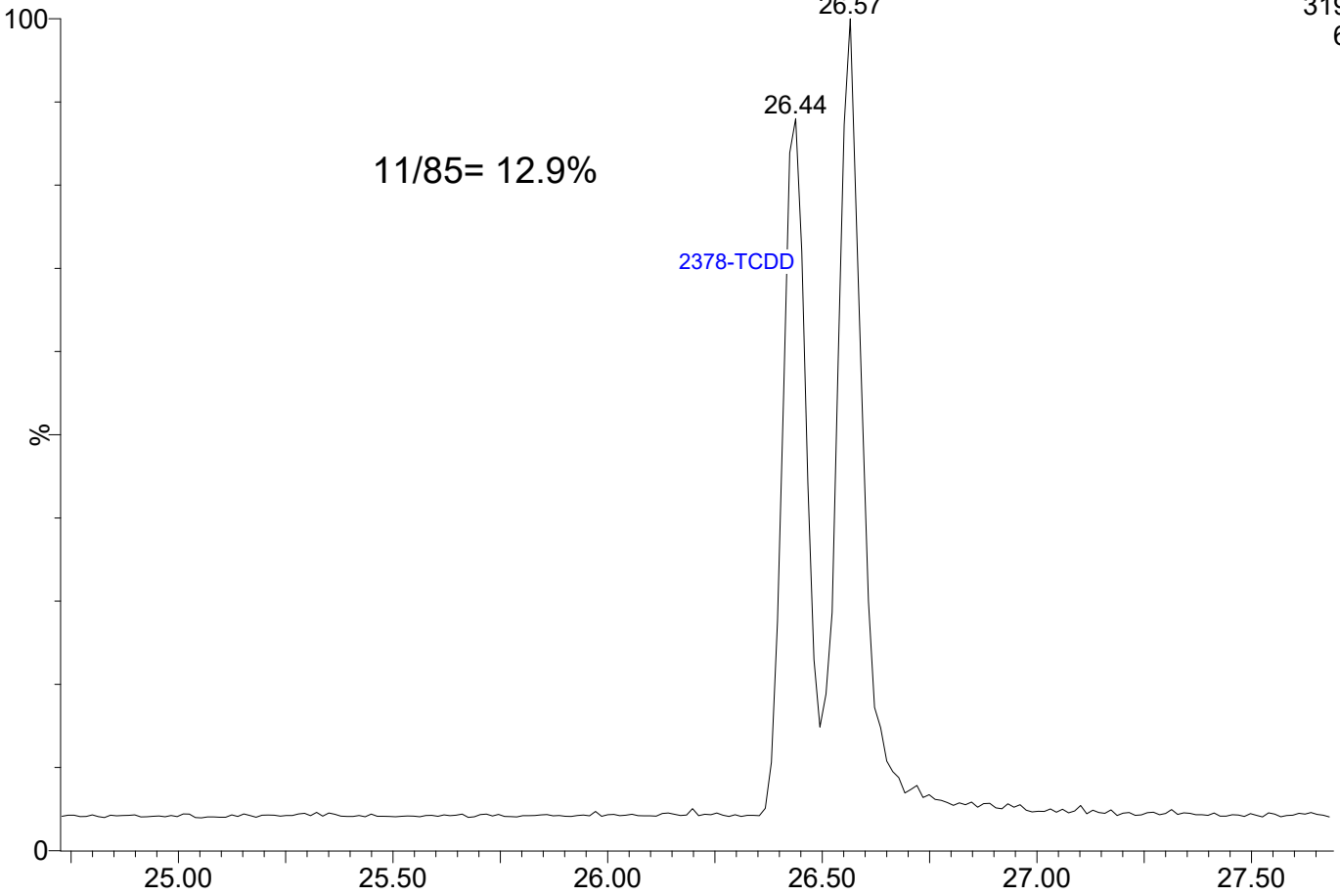


23030312

1: Voltage SIR 14 Channels EI+

319.8965

6.52e5

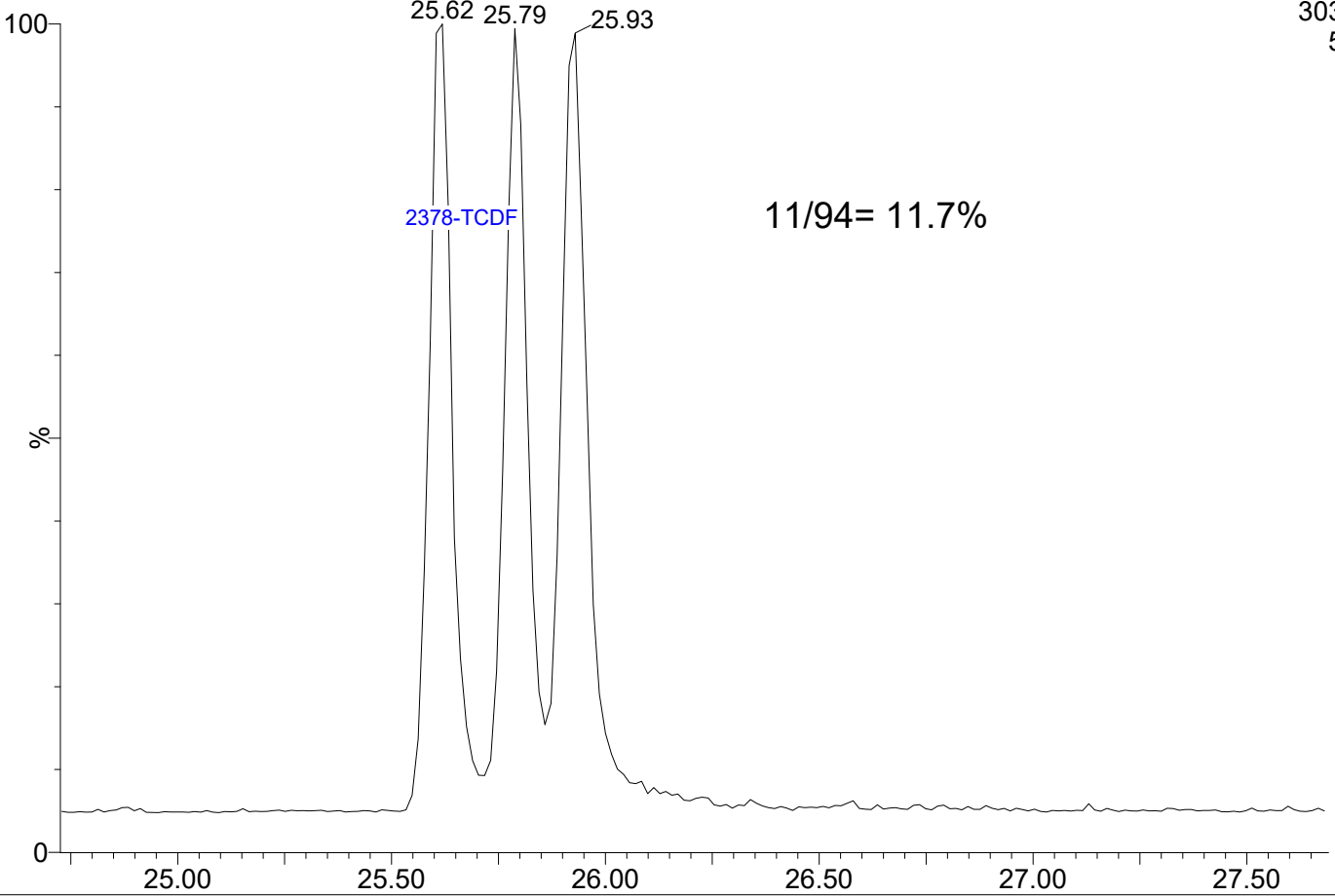


23030312

1: Voltage SIR 14 Channels EI+

303.9016

5.59e5





SECOND-SOURCE CALIBRATION VERIFICATION
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00015

Laboratory ID: SLC0045-SCV1

Sequence: SLC0045

Sequence Name: ICVCW

Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
2,3,7,8-TCDF	10.000	9.84	-1.6	
2,3,7,8-TCDD	10.000	9.81	-1.9	
1,2,3,7,8-PeCDF	50.000	51.4	2.8	
2,3,4,7,8-PeCDF	50.000	49.0	-2.0	
1,2,3,7,8-PeCDD	50.000	48.5	-2.9	
1,2,3,4,7,8-HxCDF	50.000	48.2	-3.5	
1,2,3,6,7,8-HxCDF	50.000	48.0	-4.0	
2,3,4,6,7,8-HxCDF	50.000	50.2	0.4	
1,2,3,7,8,9-HxCDF	50.000	49.1	-1.8	
1,2,3,4,7,8-HxCDD	50.000	50.8	1.6	
1,2,3,6,7,8-HxCDD	50.000	50.2	0.3	
1,2,3,7,8,9-HxCDD	50.000	51.6	3.2	
1,2,3,4,6,7,8-HpCDF	50.000	51.8	3.7	
1,2,3,4,7,8,9-HpCDF	50.000	48.5	-3.1	
1,2,3,4,6,7,8-HpCDD	50.000	49.2	-1.6	
OCDF	100.00	104	3.5	
OCDD	100.00	99.4	-0.6	
13C12-2,3,7,8-TCDF	100.00	96.9	-3.1	
13C12-2,3,7,8-TCDD	100.00	96.6	-3.4	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	-26.8	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	-24.1	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	-23.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	-7.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	-2.0	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	-6.6	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	-2.1	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	-4.1	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	2.1	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	4.0	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	2.5	
13C12-OCDD	200.00	162	-19.2	
37Cl4-2,3,7,8-TCDD	10.000	8.71	-12.9	



SECOND-SOURCE CALIBRATION VERIFICATION
EPA 1613B

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Calibration: GC00015

Sequence: SLC0045

SDG: 23A0326

Project: AOC5 MR Phase 1

Laboratory ID: SLC0045-SCV1

Sequence Name: ICVCW

Standard ID: H008219

* Indicates values outside of QC limits



**SECOND-SOURCE
CALIBRATION VERIFICATION
EPA 1613B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GC00015

Laboratory ID: SLC0045-SCV1

Sequence: SLC0045

Standard ID: H008219

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
OCDF	100.00	104	3.5	
OCDD	100.00	99.4	-0.6	
13C12-2,3,7,8-TCDF	100.00	96.9	-3.1	
13C12-2,3,7,8-TCDD	100.00	96.6	-3.4	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	-26.8	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	-24.1	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	-23.4	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	-7.0	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	-2.0	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	-6.6	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	-2.1	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	-4.1	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	2.1	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	4.0	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	2.5	
13C12-OCDD	200.00	162	-19.2	
37Cl4-2,3,7,8-TCDD	10.000	8.71	-12.9	

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030302

Calibration Date: 03/03/2023

Sequence: SLC0045

Injection Date: 03/03/23

Lab Sample ID: SLC0045-ICV1

Injection Time: 09:51

Sequence Name: CS3W1

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	9.55	0.7015272	0.6699659		-4.5	+/-16
2,3,7,8-TCDD	A	10.000	9.45	1.1486620	1.0855020		-5.5	+/-22
1,2,3,7,8-PeCDF	A	50.000	49.6	0.6792300	0.6743560		-0.7	+/-18
2,3,4,7,8-PeCDF	A	50.000	47.5	0.7861704	0.7472986		-4.9	+/-18
1,2,3,7,8-PeCDD	A	50.000	49.7	1.0218450	1.0147700		-0.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.1	1.1660380	1.0988190		-5.8	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	49.6	1.0907410	1.0813380		-0.9	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	49.3	1.1396990	1.1246750		-1.3	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	47.0	1.1370930	1.0679460		-6.1	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.1	0.9955689	0.9966266		0.1	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	49.6	1.0009380	0.9938861		-0.7	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	54.2	0.9071139	0.9838286		8.5	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.5	1.0029930	0.9526502		-5.0	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	50.2	0.9531152	0.9573187		0.4	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	47.6	1.0390130	0.9895371		-4.8	+/-14
OCDF	A	100.00	88.6	0.7778078	0.6890651		-11.4	+/-37
OCDD	A	100.00	98.4	0.9199537	0.9055309		-1.6	+/-21
13C12-2,3,7,8-TCDF	A	100.00	94.0	1.6201960	1.5232274		-6.0	+/-29
13C12-2,3,7,8-TCDD	A	100.00	102	1.1524090	1.1727116		1.8	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	92.2	1.2404520	1.1438587		-7.8	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	87.6	1.1177860	0.9791895		-12.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	84.3	0.8288129	0.6985475		-15.7	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	84.0	1.1683050	0.9815313		-16.0	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	74.6	1.3864660	1.0348865		-25.4	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	88.7	1.1292560	1.0010969		-11.3	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	99.9	0.9317541	0.9305560		-0.1	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	93.5	0.9950393	0.9299453		-6.5	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	86.9	1.1566890	1.0052205		-13.1	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	95.3	0.8952017	0.8530837		-4.7	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	98.7	0.7697516	0.7594900		-1.3	+/-23

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>AUTOSPEC01</u>	Calibration:	<u>GC00015</u>
Lab File ID:	<u>23030302</u>	Calibration Date:	<u>03/03/2023</u>
Sequence:	<u>SLC0045</u>	Injection Date:	<u>03/03/23</u>
Lab Sample ID:	<u>SLC0045-ICV1</u>	Injection Time:	<u>09:51</u>
Sequence Name:	<u>CS3W1</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	105	0.8401226	0.8828452		5.1	+/-28
13C12-OCDD	A	200.00	214	0.7674714	0.8220320		7.1	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	9.05	1.2878040	1.1649542		-9.5	

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030602

Calibration Date: 03/03/2023

Sequence: SLC0081

Injection Date: 03/06/23

Lab Sample ID: SLC0081-ICV1

Injection Time: 10:49

Sequence Name: CS3X1

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,3,7,8-TCDF	A	10.000	9.79	0.7015272	0.6869866		-2.1	+/-16
2,3,7,8-TCDD	A	10.000	10.0	1.1486620	1.1516370		0.3	+/-22
1,2,3,7,8-PeCDF	A	50.000	50.5	0.6792300	0.6862813		1.0	+/-18
2,3,4,7,8-PeCDF	A	50.000	49.9	0.7861704	0.7844346		-0.2	+/-18
1,2,3,7,8-PeCDD	A	50.000	51.9	1.0218450	1.0596610		3.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	49.6	1.1660380	1.1555900		-0.9	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	51.9	1.0907410	1.1331900		3.9	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	49.6	1.1396990	1.1313760		-0.7	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	49.4	1.1370930	1.1235120		-1.2	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	55.1	0.9955689	1.0962030		10.1	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	59.7	1.0009380	1.1948610		19.4	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	59.1	0.9071139	1.0721460		18.2	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	46.3	1.0029930	0.9288061		-7.4	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	50.2	0.9531152	0.9577664		0.5	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	48.7	1.0390130	1.0120730		-2.6	+/-14
OCDF	A	100.00	85.8	0.7778078	0.6676798		-14.2	+/-37
OCDD	A	100.00	98.3	0.9199537	0.9041731		-1.7	+/-21
13C12-2,3,7,8-TCDF	A	100.00	96.4	1.6201960	1.5623480		-3.6	+/-29
13C12-2,3,7,8-TCDD	A	100.00	101	1.1524090	1.1614340		0.8	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	107	1.2404520	1.3224884		6.6	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	109	1.1177860	1.2211629		9.2	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	107	0.8288129	0.8827476		6.5	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	108	1.1683050	1.2636496		8.2	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	100	1.3864660	1.3901601		0.3	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	110	1.1292560	1.2444251		10.2	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	112	0.9317541	1.0412311		11.7	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	98.4	0.9950393	0.9788827		-1.6	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	91.0	1.1566890	1.0527620		-9.0	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	108	0.8952017	0.9693210		8.3	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	80.2	0.7697516	0.6171476		-19.8	+/-23

* Values outside of QC limits



INITIAL CALIBRATION CHECK
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Instrument ID:	<u>AUTOSPEC01</u>	Calibration:	<u>GC00015</u>
Lab File ID:	<u>23030602</u>	Calibration Date:	<u>03/03/2023</u>
Sequence:	<u>SLC0081</u>	Injection Date:	<u>03/06/23</u>
Lab Sample ID:	<u>SLC0081-ICV1</u>	Injection Time:	<u>10:49</u>
Sequence Name:	<u>CS3X1</u>		

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	83.4	0.8401226	0.7004831		-16.6	+/-18
13C12-OCDD	A	200.00	198	0.7674714	0.7607429		-0.9	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	9.06	1.2878040	1.1662142		-9.4	+/-21

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X1, **Name:** 23030602, **Date:** 06-Mar-2023, **Time:** 10:49:33, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.774	1.001	3.727e4	5.376e4	0.702	0.693	0.770	1019	1775	5.68e5	8.37e5	558.0	471.6	NO	bb	bb	9.793
12378-PeCDF	29.922	1.000	2.294e5	1.554e5	0.679	1.476	1.550	1365	2184	3.46e6	2.37e6	2533.8	1084.4	NO	bb	bb	50.519
23478-PeCDF	31.270	1.001	2.419e5	1.643e5	0.786	1.473	1.550	1365	2184	3.58e6	2.43e6	2625.6	1112.1	NO	bb	bd	49.890
123478-HxCDF	34.891	1.001	3.141e5	2.489e5	1.166	1.262	1.240	1764	3090	4.84e6	3.81e6	2744.0	1231.4	NO	bd	bd	49.552
234678-HxCDF	35.883	1.000	3.018e5	2.410e5	1.140	1.252	1.240	1764	3090	4.54e6	3.65e6	2572.2	1179.5	NO	bb	bb	49.635
123678-HxCDF	35.025	1.001	3.395e5	2.678e5	1.091	1.268	1.240	1764	3090	5.04e6	3.99e6	2860.5	1292.3	NO	db	db	51.946
123789-HxCDF	36.919	1.001	2.483e5	2.027e5	1.137	1.225	1.240	1764	3090	3.87e6	3.10e6	2191.7	1002.1	NO	bb	bb	49.403
1234678-HpCDF	38.757	1.000	1.732e5	1.739e5	1.003	0.996	1.050	1874	2100	2.79e6	2.89e6	1487.5	1374.7	NO	bb	bb	46.302
1234789-HpCDF	40.986	1.000	1.131e5	1.148e5	0.953	0.985	1.050	1874	2100	1.57e6	1.62e6	837.6	769.7	NO	bb	bb	50.244
OCDF	45.219	1.006	1.875e5	2.041e5	0.778	0.919	0.890	1151	1871	2.18e6	2.46e6	1898.1	1315.3	NO	bd	bb	85.841
2378-TCDD	26.410	1.001	4.940e4	6.404e4	1.149	0.771	0.770	1931	1034	7.38e5	9.37e5	382.1	906.3	NO	bb	bb	10.026
12378-PeCDD	31.527	1.001	2.407e5	1.560e5	1.022	1.543	1.550	2305	1787	3.51e6	2.25e6	1522.9	1258.8	NO	bb	bb	51.850
123478-HxCDD	36.005	1.000	2.282e5	1.855e5	0.996	1.230	1.240	1680	2382	3.72e6	3.01e6	2216.8	1261.5	NO	bd	bd	55.054
123678-HxCDD	36.117	1.000	2.673e5	2.177e5	1.001	1.228	1.240	1680	2382	3.88e6	3.14e6	2311.8	1317.1	NO	db	db	59.687
123789-HxCDD	36.507	1.011	2.295e5	1.904e5	0.907	1.206	1.240	1680	2382	3.66e6	2.97e6	2181.1	1246.4	NO	bb	bb	59.097
1234678-HpCDD	40.250	1.000	1.395e5	1.338e5	1.039	1.042	1.050	1925	2141	2.09e6	2.02e6	1084.8	944.1	NO	bb	bb	48.704
OCDD	44.972	1.000	2.446e5	2.858e5	0.920	0.856	0.890	1485	1456	2.94e6	3.45e6	1982.5	2372.0	NO	bb	bb	98.285
13C-2378-TCDF	25.760	1.007	5.727e5	7.523e5	1.620	0.761	0.770	2774	1572	8.70e6	1.13e7	3134.2	7216.4	NO	bb	bb	96.430
13C-12378-PeCDF	29.911	1.169	6.659e5	4.557e5	1.240	1.461	1.550	2990	2735	1.02e7	6.64e6	3405.4	2427.8	NO	bb	bd	106.613
13C-23478-PeCDF	31.248	1.221	6.263e5	4.093e5	1.118	1.530	1.550	2990	2735	9.43e6	6.26e6	3154.9	2290.9	NO	bb	bb	109.248
13C-123478-HxCDF	34.869	0.955	3.337e5	6.406e5	1.168	0.521	0.510	1441	2896	5.15e6	1.00e7	3570.6	3458.0	NO	bd	bd	108.161
13C-123678-HxCDF	35.003	0.959	3.659e5	7.060e5	1.386	0.518	0.510	1441	2896	5.26e6	1.03e7	3651.2	3557.9	NO	db	db	100.266
13C-234678-HxCDF	35.872	0.983	3.142e5	6.453e5	1.129	0.487	0.510	1441	2896	4.82e6	9.44e6	3346.3	3260.6	NO	bb	bb	110.199
13C-123789-HxCDF	36.897	1.011	2.727e5	5.301e5	0.932	0.514	0.510	1441	2896	4.22e6	8.13e6	2928.2	2809.2	NO	bb	bb	111.750
13C-1234678-HpCDF	38.746	1.062	2.257e5	5.217e5	0.895	0.433	0.440	1764	3282	3.65e6	8.48e6	2069.5	2583.8	NO	bb	bb	108.280
13C-1234789-HpCDF	40.974	1.123	1.430e5	3.328e5	0.770	0.430	0.440	1764	3282	2.08e6	4.82e6	1179.8	1468.5	NO	bb	bb	80.175
13C-1234-TCDD	25.591	0.000	3.803e5	4.678e5	1.000	0.813	0.770	1648	1291	5.82e6	7.16e6	3529.3	5550.4	NO	bb	bb	100.000
13C-2378-TCDD	26.396	1.031	4.437e5	5.413e5	1.152	0.820	0.770	1648	1291	6.54e6	8.07e6	3971.2	6249.5	NO	bb	bb	100.783
13C-12378-PeCDD	31.504	1.231	4.648e5	2.838e5	0.829	1.638	1.550	1586	757	6.88e6	4.20e6	4338.9	5547.3	NO	bb	bb	106.508
13C-123478-HxCDD	35.994	0.986	4.314e5	3.234e5	0.995	1.334	1.240	2263	2855	7.08e6	5.25e6	3130.4	1837.8	NO	bd	bd	98.376
13C-123678-HxCDD	36.106	0.989	4.600e5	3.518e5	1.157	1.308	1.240	2263	2855	7.27e6	5.49e6	3213.5	1922.7	NO	db	db	91.015
13C-1234678-HpCDD	40.239	1.103	2.842e5	2.560e5	0.840	1.110	1.050	1991	1488	4.05e6	3.71e6	2033.1	2496.4	NO	bd	bb	83.379
13C-OCDD	44.963	1.232	5.588e5	6.144e5	0.767	0.910	0.890	1864	1517	6.66e6	7.37e6	3573.4	4859.2	NO	bb	bb	198.247
13C-123789-HxCDD	36.496	0.000	4.366e5	3.345e5	1.000	1.305	1.240	2263	2855	6.90e6	5.29e6	3051.5	1852.4	NO	bb	bb	100.000
37CL-2378-TCDD	26.410	1.032	9.890e4		1.288			1480		1.43e6		964.1			bb		9.056

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.271	0.865	6.088e4	8.537e4	0.802	0.713	0.770	1019	1775	9.71e5	1.37e6	953.5	769.3	NO	bb	bb	13.772
1289-TCDF	27.271	1.059	3.593e4	5.283e4	0.678	0.680	0.770	1019	1775	5.51e5	7.74e5	541.3	435.9	NO	bb	bb	9.880
13468-PECDF	27.130	0.907	3.732e5	2.344e5	1.246	1.592	1.550	752	1039	5.63e6	3.50e6	7480.9	3368.0	NO	bb	bb	43.462
12389-PECDF	32.306	1.080	2.332e5	1.493e5	0.496	1.562	1.550	1365	2184	3.33e6	2.22e6	2438.9	1019.0	NO	bb	bb	68.719
123468-HXCDF	33.220	0.953	3.224e5	2.536e5	1.169	1.271	1.240	1764	3090	4.90e6	3.82e6	2779.7	1237.5	NO	bb	bb	50.573
1368-TCDD	23.542	0.892	5.031e4	6.374e4	1.015	0.789	0.770	1931	1034	8.31e5	1.06e6	430.4	1020.8	NO	bb	bb	11.403
1289-TCDD	27.017	1.024	4.298e4	5.632e4	0.909	0.763	0.770	1931	1034	6.33e5	8.07e5	327.7	780.6	NO	bb	bb	11.094
12479-PECDD	28.797	0.914	4.122e5	2.665e5	2.301	1.547	1.550	2305	1787	4.02e6	2.59e6	1745.8	1450.6	NO	bb	bb	39.394
12389-PECDD	31.917	1.013	2.756e5	1.756e5	1.184	1.569	1.550	2305	1787	4.09e6	2.61e6	1773.0	1461.0	NO	bb	bb	50.930
124679-HXCDD	34.000	0.945	2.467e5	2.024e5	1.115	1.219	1.240	1680	2382	3.74e6	2.99e6	2223.7	1256.2	NO	bb	bb	53.354
1234679-HPCDD	39.203	0.974	1.820e5	1.809e5	1.137	1.006	1.050	1925	2141	2.85e6	2.84e6	1479.6	1324.1	NO	bb	bb	59.114
Total-tetrafurans			1.351e5		0.727			1019		2.10e6							33.702
Total-penta1			3.732e5					752		5.63e6							43.462
Total-pentafurans			7.451e5		0.654			1365		1.10e7							178.780
Total-hexafurans			1.526e6		1.141			1764		2.32e7							251.108
Total-heptafurans			2.875e5		0.978			1874		4.38e6							96.939
Total-Furans			3.254e6		0.922			1019		4.85e7							689.832
Total-tetradoxins			2.372e5		1.024			1931		3.32e6							53.896
Total-pentadoxins			9.297e5		1.502			2305		1.16e7							142.342
Total-hexadoxins			9.718e5		1.005			1680		1.50e7							227.192
Total-heptadoxins			3.215e5		1.088			1925		4.94e6							107.818
Total-Dioxins			2.705e6		1.130			1931		3.79e7							629.532
Total-TEQ			5.959e6					1931		8.63e7							1319.364
FUNCTION1 PFK			8.046e7					684022		6.54e7							
FUNCTION2 PFK			4.321e7					382527		4.20e7							0.000
FUNCTION3 PFK			1.928e5					498498		7.61e6							0.000
FUNCTION4 PFK			2.942e7					256005		5.59e7							
FUNCTION5 PFK			6.526e6					261785		1.00e6							
FUNCTION1 HXCD...			8.577e1					500		1.80e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			2.966e2					687		5.75e3							0.000
FUNCTION3 OCDPE			5.060e2					602		6.76e3							0.000
FUNCTION4 NCDPE			1.841e2					654		2.72e3							0.000
FUNCTION5 DCDPE			0.000e0					476		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.593e4	5.283e4	0.678	0.68	0.77	541.3	YES	NO	bb	bb	9.880
2	2378-TCDF	25.77	3.727e4	5.376e4	0.702	0.69	0.77	558.0	YES	NO	bb	bb	9.793
3	Total-tetrafurans	24.87	4.725e2	7.187e2	0.727	0.66	0.77	5.8	YES	NO	bb	bb	0.124
4	Total-tetrafurans	24.53	5.201e2	7.653e2	0.727	0.68	0.77	7.7	YES	NO	bd	bd	0.133
5	1368-TCDF	22.27	6.088e4	8.537e4	0.802	0.71	0.77	953.5	YES	NO	bb	bb	13.772

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDFF	27.13	3.732e5	2.344e5	1.246	1.59	1.55	7480.9	YES	NO	bb	bb	43.462

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDF	32.31	2.332e5	1.493e5	0.496	1.56	1.55	2438.9	YES	NO	bb	bb	68.719
2	Total-pentafurans	31.52	3.885e2	2.563e2	0.654	1.52	1.55	8.4	NO	NO	bd	bb	0.091
3	23478-PeCDF	31.27	2.419e5	1.643e5	0.786	1.47	1.55	2625.6	YES	NO	bb	bd	49.890
4	12378-PeCDF	29.92	2.294e5	1.554e5	0.679	1.48	1.55	2533.8	YES	NO	bb	bb	50.519
5	Total-pentafurans	28.79	4.010e4	2.734e4	0.654	1.47	1.55	449.2	YES	NO	bb	bb	9.561

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123478-HxCDF	34.89	3.141e5	2.489e5	1.166	1.26	1.24	2744.0	YES	NO	bd	bd	49.552
2	123468-HxCDF	33.22	3.224e5	2.536e5	1.169	1.27	1.24	2779.7	YES	NO	bb	bb	50.573
3	123789-HxCDF	36.92	2.483e5	2.027e5	1.137	1.23	1.24	2191.7	YES	NO	bb	bb	49.403
4	234678-HxCDF	35.88	3.018e5	2.410e5	1.140	1.25	1.24	2572.2	YES	NO	bb	bb	49.635
5	123678-HxCDF	35.03	3.395e5	2.678e5	1.091	1.27	1.24	2860.5	YES	NO	db	db	51.946

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.99	1.131e5	1.148e5	0.953	0.99	1.05	837.6	YES	NO	bb	bb	50.244
2	Total-heptafurans	39.43	1.183e3	1.170e3	0.978	1.01	1.05	10.3	YES	NO	db	bb	0.393
3	1234678-HpCDF	38.76	1.732e5	1.739e5	1.003	1.00	1.05	1487.5	YES	NO	bb	bb	46.302

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk**Furans,TF,PP,PF,HF,HPF,OF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.593e4	5.283e4	0.678	0.68	0.77	541.3	YES	NO	bb	bb	9.880
2	2378-TCDF	25.77	3.727e4	5.376e4	0.702	0.69	0.77	558.0	YES	NO	bb	bb	9.793
3	Total-tetrafurans	24.87	4.725e2	7.187e2	0.727	0.66	0.77	5.8	YES	NO	bb	bb	0.124
4	Total-tetrafurans	24.53	5.201e2	7.653e2	0.727	0.68	0.77	7.7	YES	NO	bd	bd	0.133
5	1368-TCDF	22.27	6.088e4	8.537e4	0.802	0.71	0.77	953.5	YES	NO	bb	bb	13.772
6	12389-PECDF	32.31	2.332e5	1.493e5	0.496	1.56	1.55	2438.9	YES	NO	bb	bb	68.719
7	Total-pentafurans	31.52	3.885e2	2.563e2	0.654	1.52	1.55	8.4	NO	NO	bd	bb	0.091
8	23478-PeCDF	31.27	2.419e5	1.643e5	0.786	1.47	1.55	2625.6	YES	NO	bb	bd	49.890
9	12378-PeCDF	29.92	2.294e5	1.554e5	0.679	1.48	1.55	2533.8	YES	NO	bb	bb	50.519
10	Total-pentafurans	28.79	4.010e4	2.734e4	0.654	1.47	1.55	449.2	YES	NO	bb	bb	9.561
11	123478-HxCDF	34.89	3.141e5	2.489e5	1.166	1.26	1.24	2744.0	YES	NO	bd	bd	49.552
12	123468-HxCDF	33.22	3.224e5	2.536e5	1.169	1.27	1.24	2779.7	YES	NO	bb	bb	50.573
13	123789-HxCDF	36.92	2.483e5	2.027e5	1.137	1.23	1.24	2191.7	YES	NO	bb	bb	49.403
14	234678-HxCDF	35.88	3.018e5	2.410e5	1.140	1.25	1.24	2572.2	YES	NO	bb	bb	49.635
15	123678-HxCDF	35.03	3.395e5	2.678e5	1.091	1.27	1.24	2860.5	YES	NO	db	db	51.946
16	1234789-HpCDF	40.99	1.131e5	1.148e5	0.953	0.99	1.05	837.6	YES	NO	bb	bb	50.244
17	Total-heptafurans	39.43	1.183e3	1.170e3	0.978	1.01	1.05	10.3	YES	NO	db	bb	0.393
18	1234678-HpCDF	38.76	1.732e5	1.739e5	1.003	1.00	1.05	1487.5	YES	NO	bb	bb	46.302
19	OCDF	45.22	1.875e5	2.041e5	0.778	0.92	0.89	1898.1	YES	NO	bd	bb	85.841
20	13468-PECDF	27.13	3.732e5	2.344e5	1.246	1.59	1.55	7480.9	YES	NO	bb	bb	43.462

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradioxins	25.03	4.782e2	5.648e2	1.024	0.85	0.77	4.5	YES	NO	bb	bb	0.103
2	1368-TCDD	23.54	5.031e4	6.374e4	1.015	0.79	0.77	430.4	YES	NO	bb	bb	11.403
3	1289-TCDD	27.02	4.298e4	5.632e4	0.909	0.76	0.77	327.7	YES	NO	bb	bb	11.094
4	2378-TCDD	26.41	4.940e4	6.404e4	1.149	0.77	0.77	382.1	YES	NO	bb	bb	10.026
5	Total-tetradioxins	26.08	7.132e4	9.148e4	1.024	0.78	0.77	390.6	YES	NO	bb	bb	16.137
6	Total-tetradioxins	25.60	2.272e4	2.907e4	1.024	0.78	0.77	185.4	YES	NO	bb	bb	5.133

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk**PD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.92	2.756e5	1.756e5	1.184	1.57	1.55	1773.0	YES	NO	bb	bb	50.930
2	12378-PeCDD	31.53	2.407e5	1.560e5	1.022	1.54	1.55	1522.9	YES	NO	bb	bb	51.850
3	Total-pentadioxins	30.86	1.051e3	6.136e2	1.502	1.71	1.55	6.8	YES	NO	bb	bb	0.148
4	Total-pentadioxins	29.15	1.377e2	8.963e1	1.502	1.54	1.55	1.7	NO	NO	bb	bb	0.020
5	12479-PECDD	28.80	4.122e5	2.665e5	2.301	1.55	1.55	1745.8	YES	NO	bb	bb	39.394

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	124679-HxCDD	34.00	2.467e5	2.024e5	1.115	1.22	1.24	2223.7	YES	NO	bb	bb	53.354
2	123789-HxCDD	36.51	2.295e5	1.904e5	0.907	1.21	1.24	2181.1	YES	NO	bb	bb	59.097
3	123678-HxCDD	36.12	2.673e5	2.177e5	1.001	1.23	1.24	2311.8	YES	NO	db	db	59.687
4	123478-HxCDD	36.01	2.282e5	1.855e5	0.996	1.23	1.24	2216.8	YES	NO	bd	bd	55.054

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.25	1.395e5	1.338e5	1.039	1.04	1.05	1084.8	YES	NO	bb	bb	48.704
2	1234679-HPCDD	39.20	1.820e5	1.809e5	1.137	1.01	1.05	1479.6	YES	NO	bb	bb	59.114

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk**Dioxins,TD,PD,HD,HPD,OD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-tetradoxins	25.03	4.782e2	5.648e2	1.024	0.85	0.77	4.5	YES	NO	bb	bb	0.103
2	1368-TCDD	23.54	5.031e4	6.374e4	1.015	0.79	0.77	430.4	YES	NO	bb	bb	11.403
3	1289-TCDD	27.02	4.298e4	5.632e4	0.909	0.76	0.77	327.7	YES	NO	bb	bb	11.094
4	2378-TCDD	26.41	4.940e4	6.404e4	1.149	0.77	0.77	382.1	YES	NO	bb	bb	10.026
5	Total-tetradoxins	26.08	7.132e4	9.148e4	1.024	0.78	0.77	390.6	YES	NO	bb	bb	16.137
6	Total-tetradoxins	25.60	2.272e4	2.907e4	1.024	0.78	0.77	185.4	YES	NO	bb	bb	5.133
7	12389-PECDD	31.92	2.756e5	1.756e5	1.184	1.57	1.55	1773.0	YES	NO	bb	bb	50.930
8	12378-PeCDD	31.53	2.407e5	1.560e5	1.022	1.54	1.55	1522.9	YES	NO	bb	bb	51.850
9	Total-pentadoxins	30.86	1.051e3	6.136e2	1.502	1.71	1.55	6.8	YES	NO	bb	bb	0.148
10	Total-pentadoxins	29.15	1.377e2	8.963e1	1.502	1.54	1.55	1.7	NO	NO	bb	bb	0.020
11	12479-PECDD	28.80	4.122e5	2.665e5	2.301	1.55	1.55	1745.8	YES	NO	bb	bb	39.394
12	124679-HxCDD	34.00	2.467e5	2.024e5	1.115	1.22	1.24	2223.7	YES	NO	bb	bb	53.354
13	123789-HxCDD	36.51	2.295e5	1.904e5	0.907	1.21	1.24	2181.1	YES	NO	bb	bb	59.097
14	123678-HxCDD	36.12	2.673e5	2.177e5	1.001	1.23	1.24	2311.8	YES	NO	db	db	59.687
15	123478-HxCDD	36.01	2.282e5	1.855e5	0.996	1.23	1.24	2216.8	YES	NO	bd	bd	55.054
16	1234678-HpCDD	40.25	1.395e5	1.338e5	1.039	1.04	1.05	1084.8	YES	NO	bb	bb	48.704
17	1234679-HPCDD	39.20	1.820e5	1.809e5	1.137	1.01	1.05	1479.6	YES	NO	bb	bb	59.114
18	OCDD	44.97	2.446e5	2.858e5	0.920	0.86	0.89	1982.5	YES	NO	bb	bb	98.285

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.27	3.593e4	5.283e4	0.678	0.68	0.77	541.3	YES	NO	bb	bb	9.880
2	2378-TCDF	25.77	3.727e4	5.376e4	0.702	0.69	0.77	558.0	YES	NO	bb	bb	9.793
3	Total-tetrafurans	24.87	4.725e2	7.187e2	0.727	0.66	0.77	5.8	YES	NO	bb	bb	0.124
4	Total-tetrafurans	24.53	5.201e2	7.653e2	0.727	0.68	0.77	7.7	YES	NO	bd	bd	0.133
5	1368-TCDF	22.27	6.088e4	8.537e4	0.802	0.71	0.77	953.5	YES	NO	bb	bb	13.772
6	12389-PECDF	32.31	2.332e5	1.493e5	0.496	1.56	1.55	2438.9	YES	NO	bb	bb	68.719
7	Total-pentafurans	31.52	3.885e2	2.563e2	0.654	1.52	1.55	8.4	NO	NO	bd	bb	0.091
8	23478-PeCDF	31.27	2.419e5	1.643e5	0.786	1.47	1.55	2625.6	YES	NO	bb	bd	49.890
9	12378-PeCDF	29.92	2.294e5	1.554e5	0.679	1.48	1.55	2533.8	YES	NO	bb	bb	50.519
10	Total-pentafurans	28.79	4.010e4	2.734e4	0.654	1.47	1.55	449.2	YES	NO	bb	bb	9.561
11	123478-HxCDF	34.89	3.141e5	2.489e5	1.166	1.26	1.24	2744.0	YES	NO	bd	bd	49.552
12	123468-HxCDF	33.22	3.224e5	2.536e5	1.169	1.27	1.24	2779.7	YES	NO	bb	bb	50.573
13	123789-HxCDF	36.92	2.483e5	2.027e5	1.137	1.23	1.24	2191.7	YES	NO	bb	bb	49.403
14	234678-HxCDF	35.88	3.018e5	2.410e5	1.140	1.25	1.24	2572.2	YES	NO	bb	bb	49.635
15	123678-HxCDF	35.03	3.395e5	2.678e5	1.091	1.27	1.24	2860.5	YES	NO	db	db	51.946
16	1234789-HpCDF	40.99	1.131e5	1.148e5	0.953	0.99	1.05	837.6	YES	NO	bb	bb	50.244
17	Total-heptafurans	39.43	1.183e3	1.170e3	0.978	1.01	1.05	10.3	YES	NO	db	bb	0.393
18	1234678-HpCDF	38.76	1.732e5	1.739e5	1.003	1.00	1.05	1487.5	YES	NO	bb	bb	46.302
19	OCDF	45.22	1.875e5	2.041e5	0.778	0.92	0.89	1898.1	YES	NO	bd	bb	85.841
20	13468-PECDF	27.13	3.732e5	2.344e5	1.246	1.59	1.55	7480.9	YES	NO	bb	bb	43.462
21	Total-tetradioxins	25.03	4.782e2	5.648e2	1.024	0.85	0.77	4.5	YES	NO	bb	bb	0.103
22	1368-TCDD	23.54	5.031e4	6.374e4	1.015	0.79	0.77	430.4	YES	NO	bb	bb	11.403
23	1289-TCDD	27.02	4.298e4	5.632e4	0.909	0.76	0.77	327.7	YES	NO	bb	bb	11.094
24	2378-TCDD	26.41	4.940e4	6.404e4	1.149	0.77	0.77	382.1	YES	NO	bb	bb	10.026
25	Total-tetradioxins	26.08	7.132e4	9.148e4	1.024	0.78	0.77	390.6	YES	NO	bb	bb	16.137
26	Total-tetradioxins	25.60	2.272e4	2.907e4	1.024	0.78	0.77	185.4	YES	NO	bb	bb	5.133
27	12389-PECDD	31.92	2.756e5	1.756e5	1.184	1.57	1.55	1773.0	YES	NO	bb	bb	50.930
28	12378-PeCDD	31.53	2.407e5	1.560e5	1.022	1.54	1.55	1522.9	YES	NO	bb	bb	51.850
29	Total-pentadioxins	30.86	1.051e3	6.136e2	1.502	1.71	1.55	6.8	YES	NO	bb	bb	0.148
30	Total-pentadioxins	29.15	1.377e2	8.963e1	1.502	1.54	1.55	1.7	NO	NO	bb	bb	0.020
31	12479-PECDD	28.80	4.122e5	2.665e5	2.301	1.55	1.55	1745.8	YES	NO	bb	bb	39.394
32	124679-HXCDD	34.00	2.467e5	2.024e5	1.115	1.22	1.24	2223.7	YES	NO	bb	bb	53.354
33	123789-HxCDD	36.51	2.295e5	1.904e5	0.907	1.21	1.24	2181.1	YES	NO	bb	bb	59.097
34	123678-HxCDD	36.12	2.673e5	2.177e5	1.001	1.23	1.24	2311.8	YES	NO	db	db	59.687
35	123478-HxCDD	36.01	2.282e5	1.855e5	0.996	1.23	1.24	2216.8	YES	NO	bd	bd	55.054
36	1234678-HpCDD	40.25	1.395e5	1.338e5	1.039	1.04	1.05	1084.8	YES	NO	bb	bb	48.704
37	1234679-HPCDD	39.20	1.820e5	1.809e5	1.137	1.01	1.05	1479.6	YES	NO	bb	bb	59.114

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk**TotalTEQ,Furans,Dioxins**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	OCDD	44.97	2.446e5	2.858e5	0.920	0.86	0.89	1982.5	YES	NO	bb	bb	98.285

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	22.48	3.794e7					47.2	YES		db		
2	FUNCTION1 PFK	22.23	4.253e7					48.4	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	31.91	1.702e6					6.9	YES		db		0.000
2	FUNCTION2 PFK	28.69	2.861e7					51.2	YES		dd		0.000
3	FUNCTION2 PFK	28.62	1.290e7					51.7	YES		bd		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.44	3.820e3					0.7	NO		bb		0.000
2	FUNCTION3 PFK	34.99	5.346e3					0.7	NO		bb		0.000
3	FUNCTION3 PFK	34.62	2.355e4					1.5	NO		bb		0.000
4	FUNCTION3 PFK	34.16	1.866e4					1.5	NO		bb		0.000
5	FUNCTION3 PFK	33.52	3.771e3					0.7	NO		bb		0.000
6	FUNCTION3 PFK	33.28	3.144e3					0.6	NO		bb		0.000
7	FUNCTION3 PFK	37.69	3.488e4					1.8	NO		bb		0.000
8	FUNCTION3 PFK	37.48	8.397e3					0.9	NO		bb		0.000
9	FUNCTION3 PFK	37.07	3.334e4					1.6	NO		bb		0.000
10	FUNCTION3 PFK	36.81	3.488e4					2.6	NO		bb		0.000
11	FUNCTION3 PFK	36.67	3.455e3					0.6	NO		bb		0.000
12	FUNCTION3 PFK	36.45	1.365e4					1.2	NO		bb		0.000
13	FUNCTION3 PFK	36.27	2.828e3					0.5	NO		bb		0.000
14	FUNCTION3 PFK	35.57	3.048e3					0.5	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk**PFK4**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.08	6.365e6					49.6	YES		db		
2	FUNCTION4 PFK	38.29	1.352e7					81.3	YES		dd		
3	FUNCTION4 PFK	38.03	9.539e6					87.2	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	44.62	9.122e4					2.4	NO		bb		
2	FUNCTION5 PFK	43.63	6.435e6					1.4	NO		bb		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.59	8.577e1					3.6	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.15	2.966e2					8.4	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.48	3.364e2					5.3	YES		bb		0.000
2	FUNCTION3 OCDPE	35.99	7.069e1					2.9	NO		bb		0.000
3	FUNCTION3 OCDPE	33.87	9.894e1					3.0	NO		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	41.89	1.113e2					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	41.41	7.287e1					2.2	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
Printed: Tuesday, March 07, 2023 09:03:18 Pacific Standard Time

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

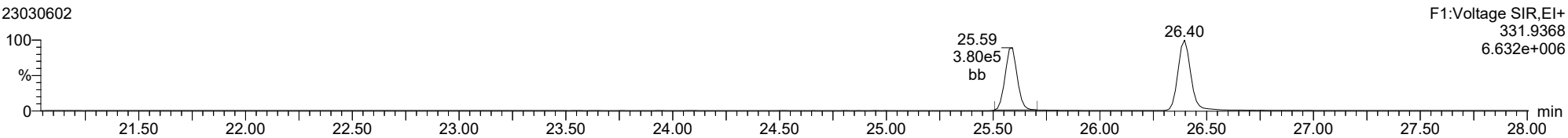
ETHERS6

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

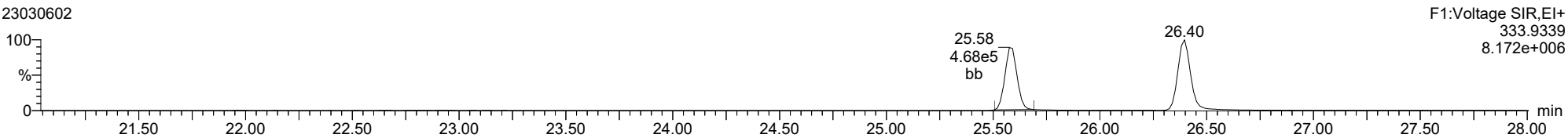
Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

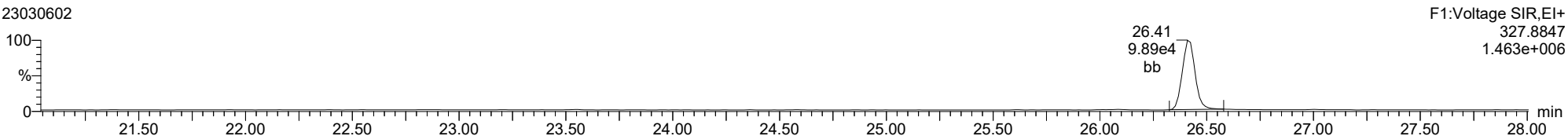
13C-1234-TCDD
23030602



13C-1234-TCDD
23030602



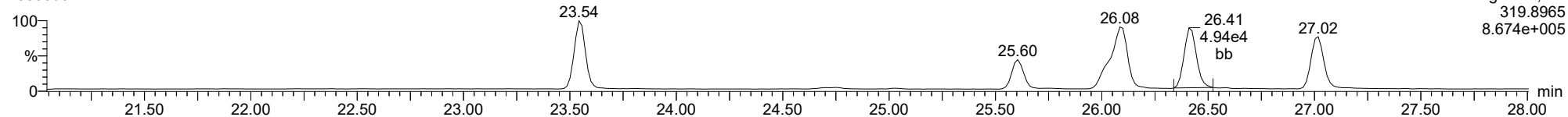
37CL-2378-TCDD
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

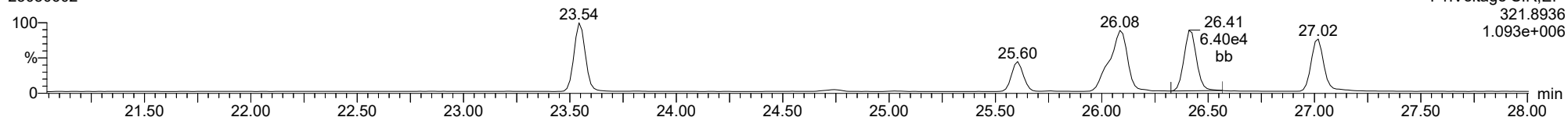
2378-TCDD

23030602



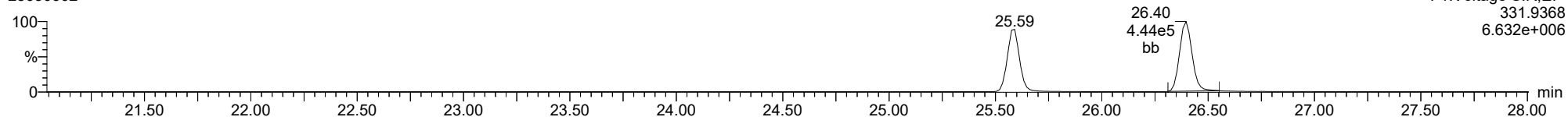
2378-TCDD

23030602



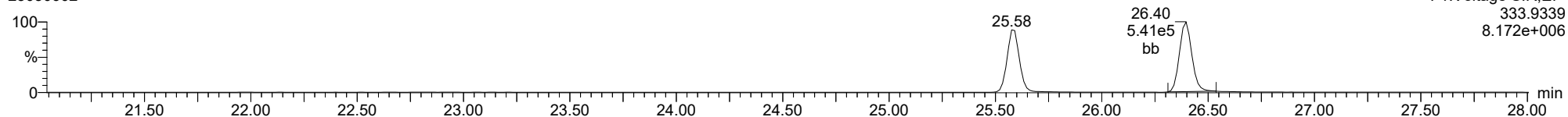
13C-2378-TCDD

23030602



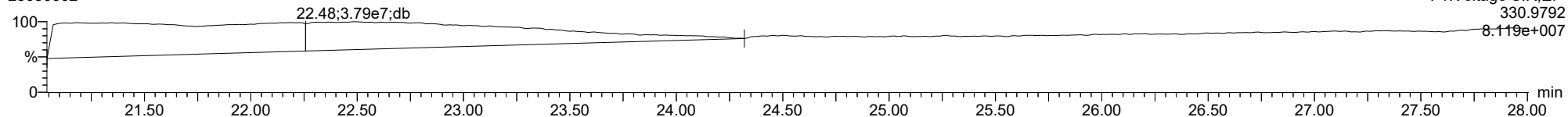
13C-2378-TCDD

23030602



FUNCTION1 PFK

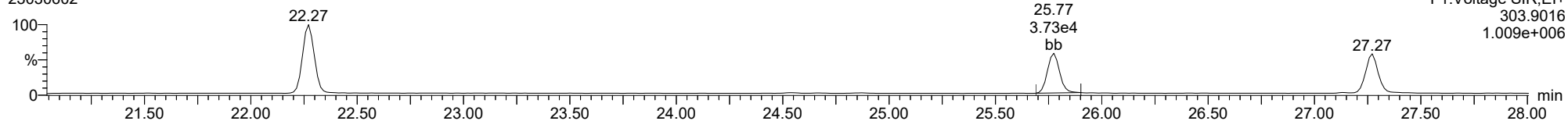
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

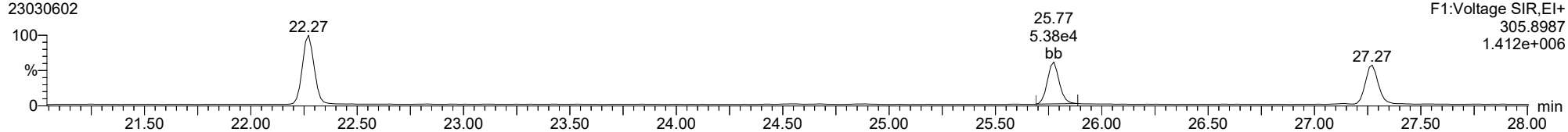
2378-TCDF

23030602



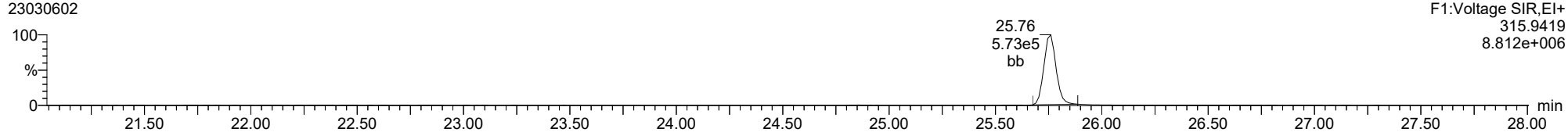
2378-TCDF

23030602



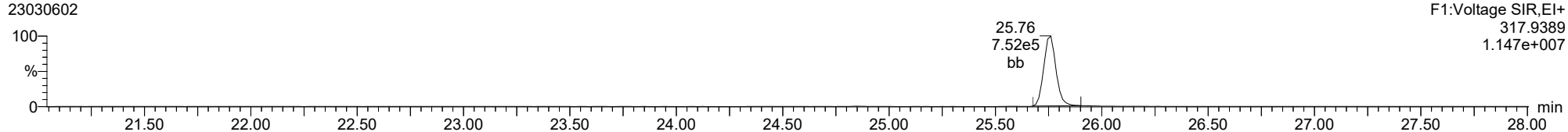
13C-2378-TCDF

23030602



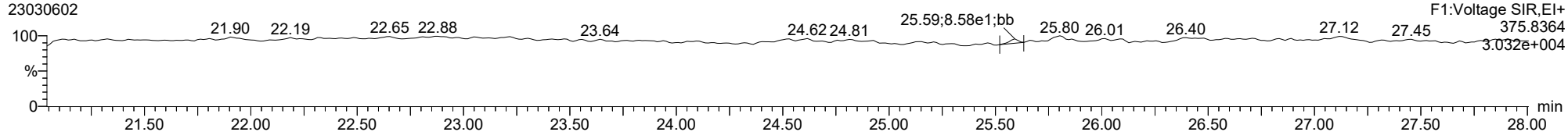
13C-2378-TCDF

23030602



FUNCTION1 HXCDPE

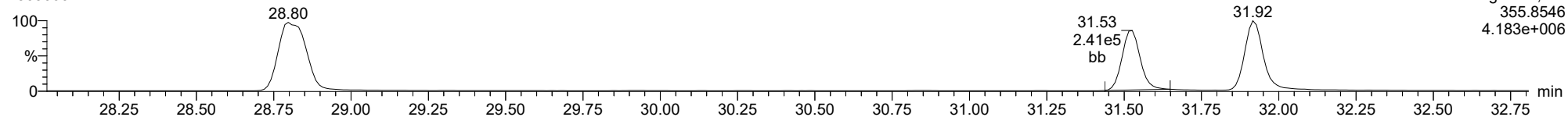
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

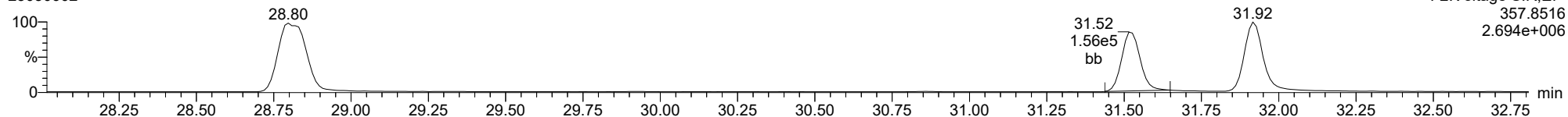
23030602



F2:Voltage SIR,EI+
355.8546
4.183e+006

12378-PeCDD

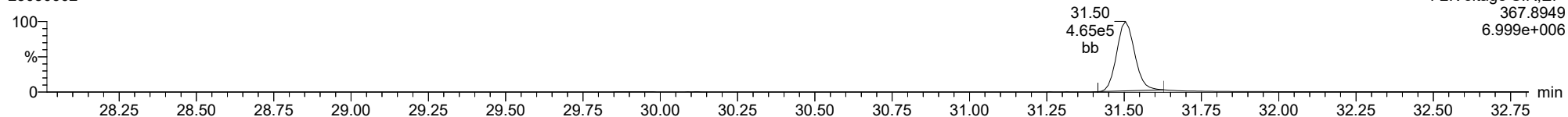
23030602



F2:Voltage SIR,EI+
357.8516
2.694e+006

13C-12378-PeCDD

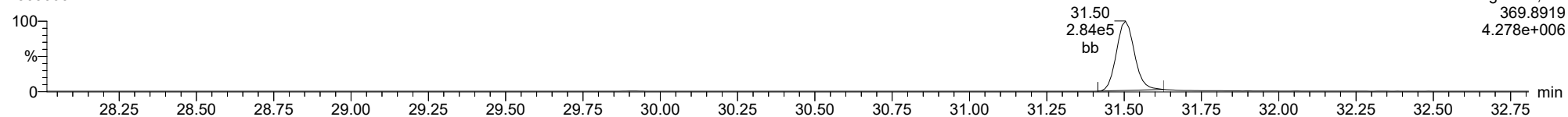
23030602



F2:Voltage SIR,EI+
367.8949
6.999e+006

13C-12378-PeCDD

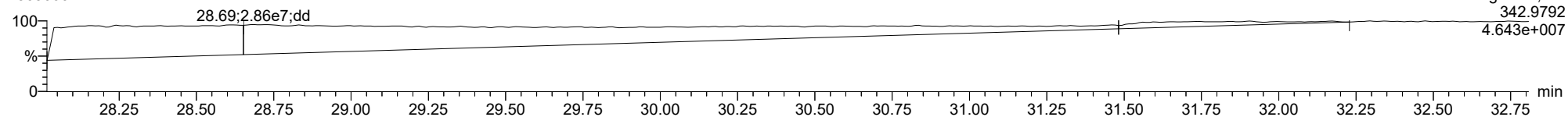
23030602



F2:Voltage SIR,EI+
369.8919
4.278e+006

FUNCTION2 PFK

23030602

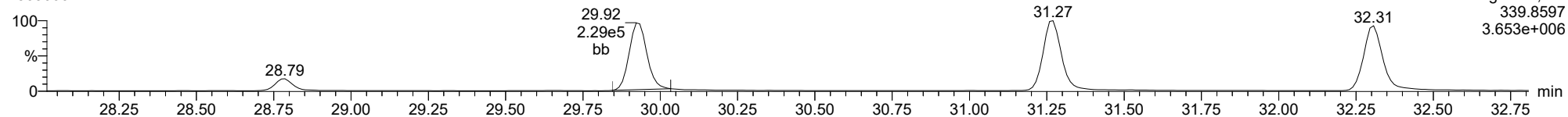


F2:Voltage SIR,EI+
342.9792
4.643e+007

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

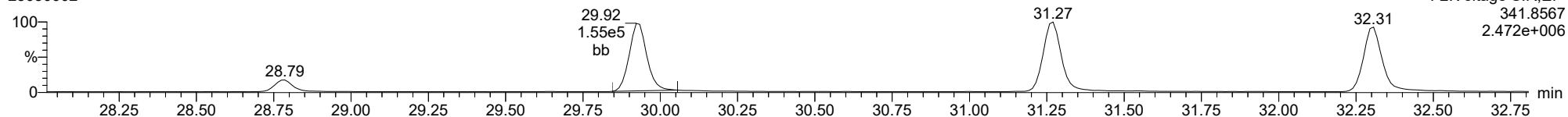
12378-PeCDF

23030602



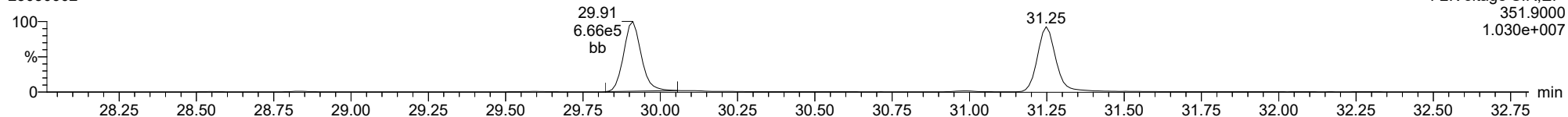
12378-PeCDF

23030602



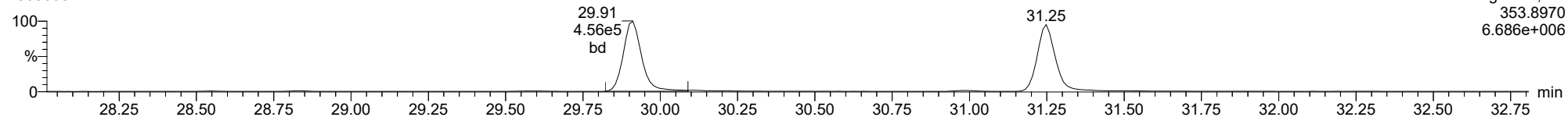
13C-12378-PeCDF

23030602



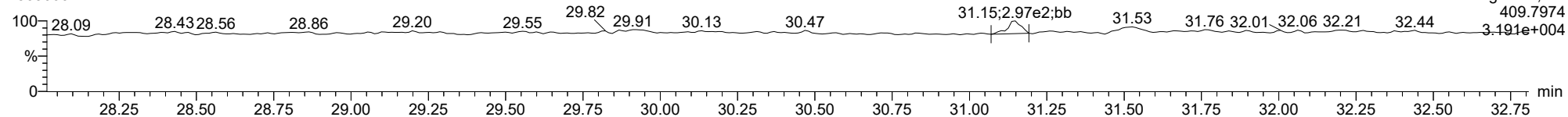
13C-12378-PeCDF

23030602



FUNCTION2 HPCDPE

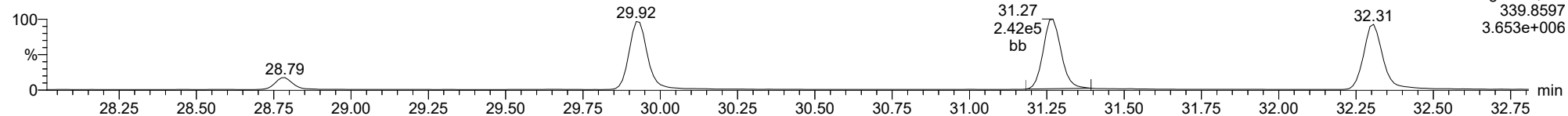
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

23478-PeCDF

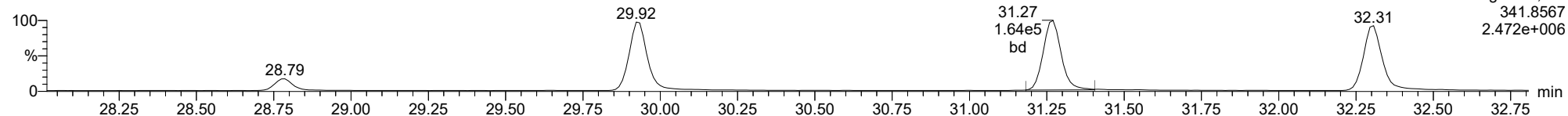
23030602



F2:Voltage SIR,EI+
339.8597
3.653e+006

23478-PeCDF

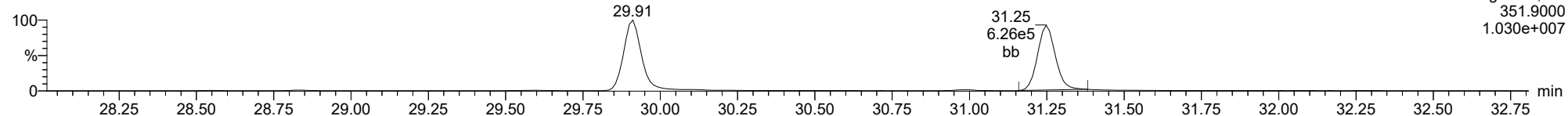
23030602



F2:Voltage SIR,EI+
341.8567
2.472e+006

13C-23478-PeCDF

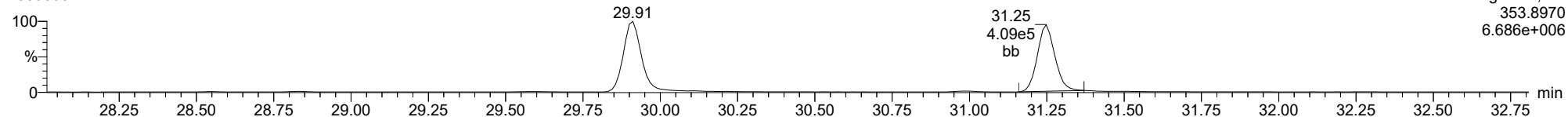
23030602



F2:Voltage SIR,EI+
351.9000
1.030e+007

13C-23478-PeCDF

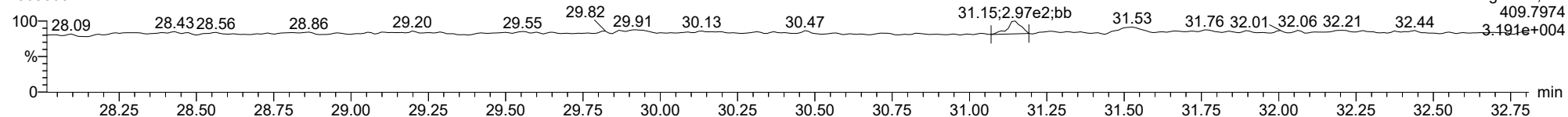
23030602



F2:Voltage SIR,EI+
353.8970
6.686e+006

FUNCTION2 HPCDPE

23030602

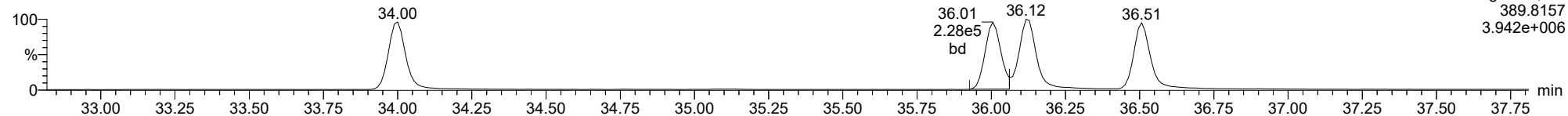


F2:Voltage SIR,EI+
409.7974
3.191e+004

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

123478-HxCDD

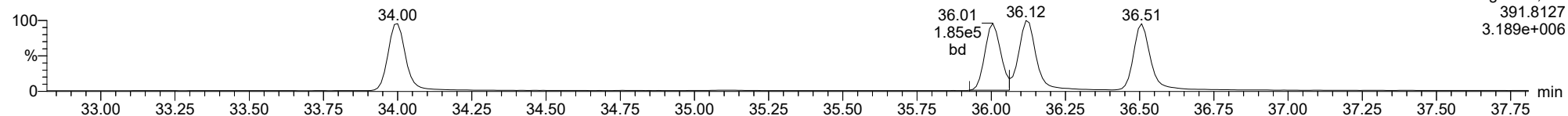
23030602



F3:Voltage SIR,El+
389.8157
3.942e+006

123478-HxCDD

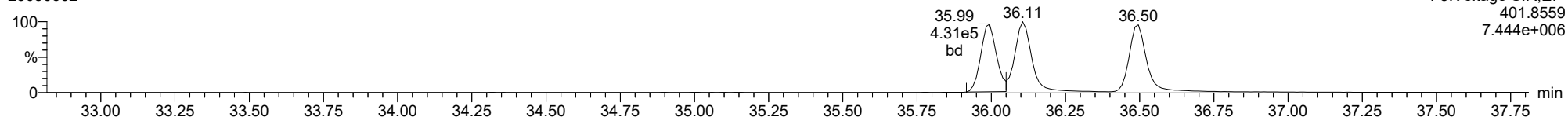
23030602



F3:Voltage SIR,El+
391.8127
3.189e+006

13C-123478-HxCDD

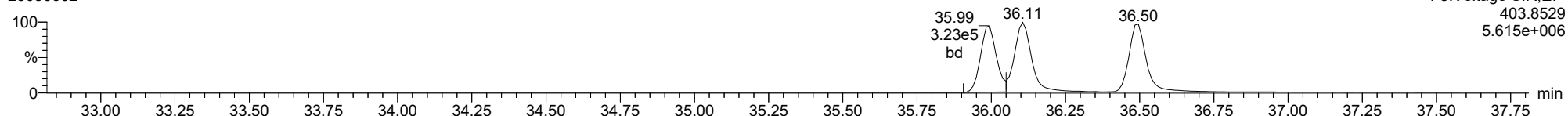
23030602



F3:Voltage SIR,El+
401.8559
7.444e+006

13C-123478-HxCDD

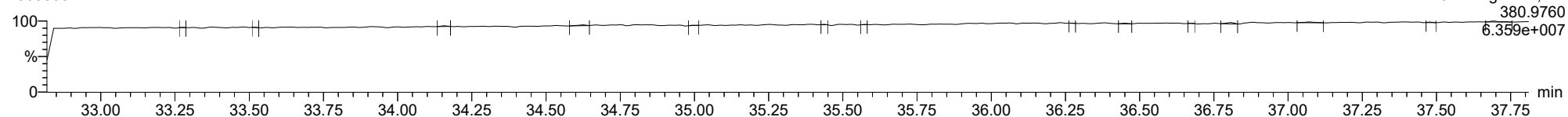
23030602



F3:Voltage SIR,El+
403.8529
5.615e+006

FUNCTION3 PFK

23030602

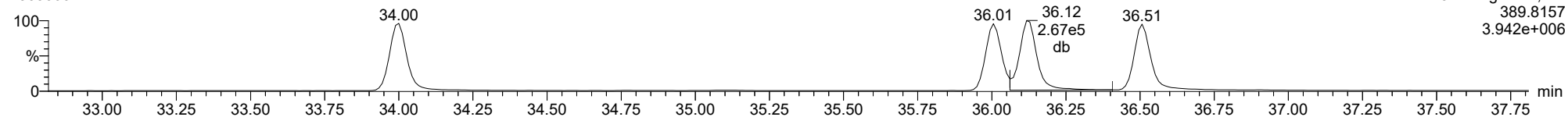


F3:Voltage SIR,El+
380.9760
6.359e+007

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

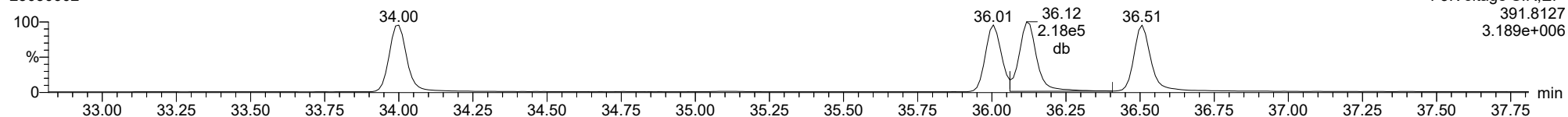
123678-HxCDD

23030602



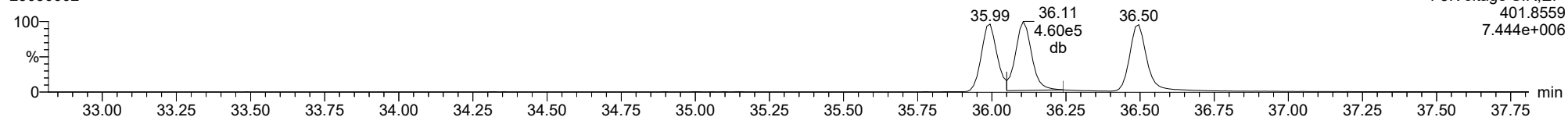
123678-HxCDD

23030602



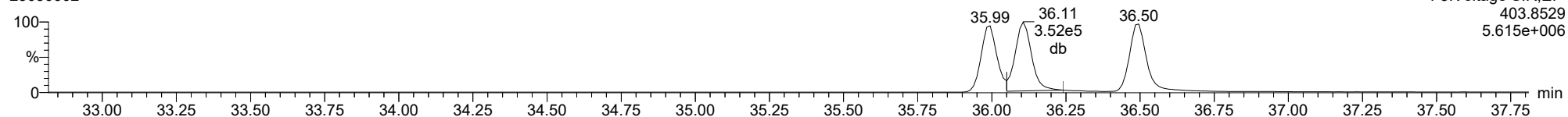
13C-123678-HxCDD

23030602



13C-123678-HxCDD

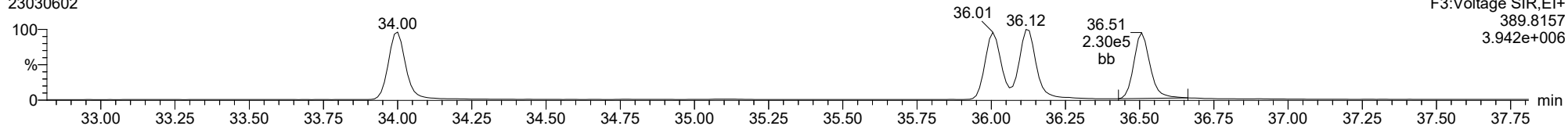
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

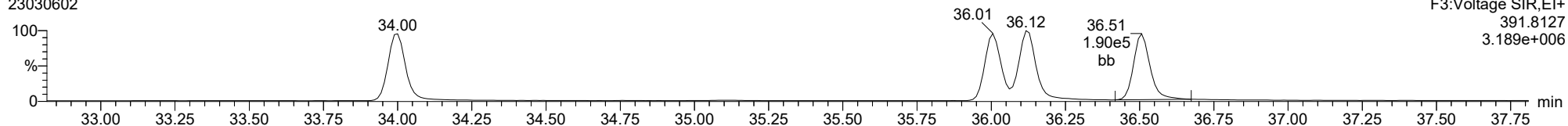
123789-HxCDD

23030602



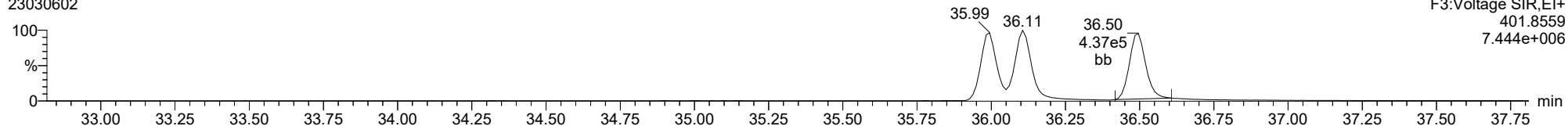
123789-HxCDD

23030602



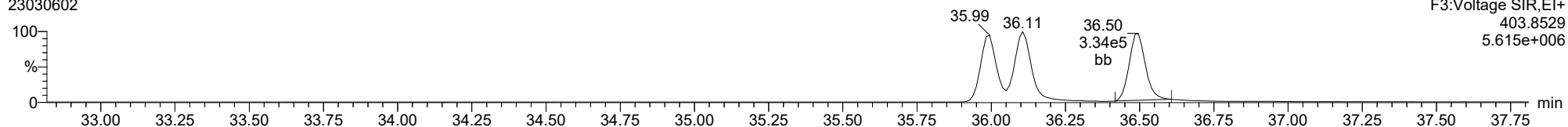
13C-123789-HxCDD

23030602



13C-123789-HxCDD

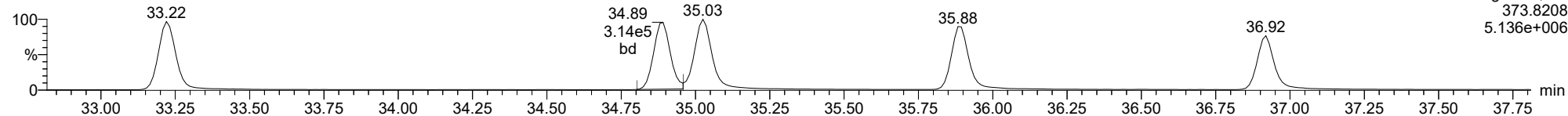
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

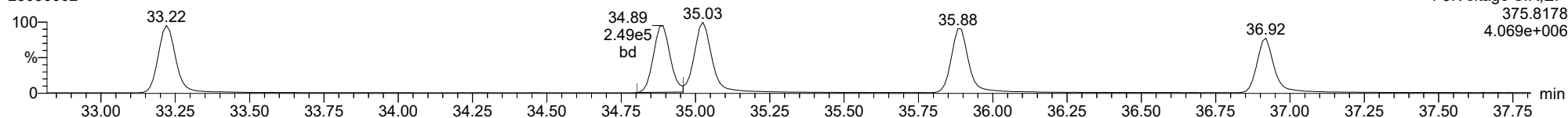
123478-HxCDF

23030602



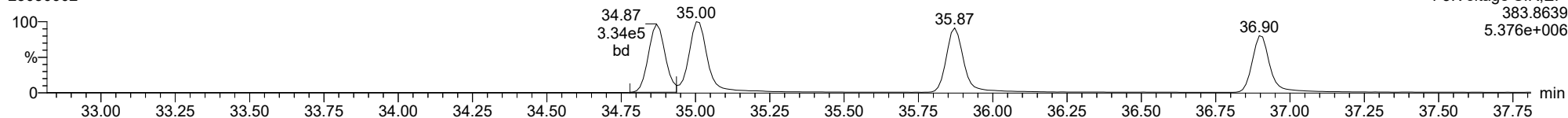
123478-HxCDF

23030602



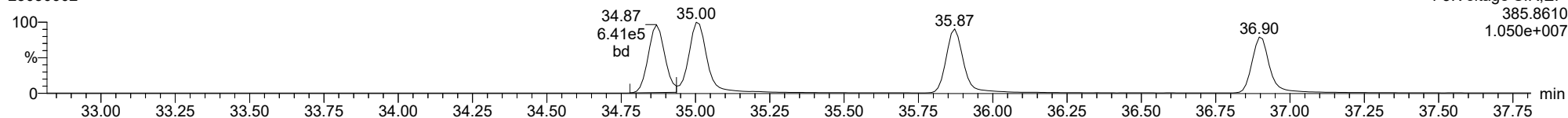
13C-123478-HxCDF

23030602



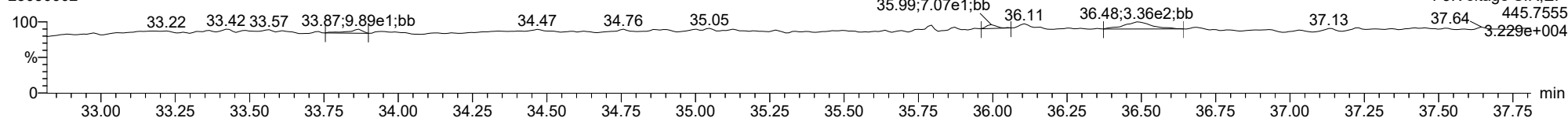
13C-123478-HxCDF

23030602



FUNCTION3 OCDPE

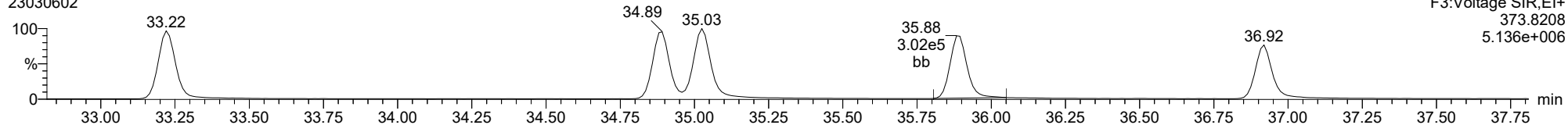
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

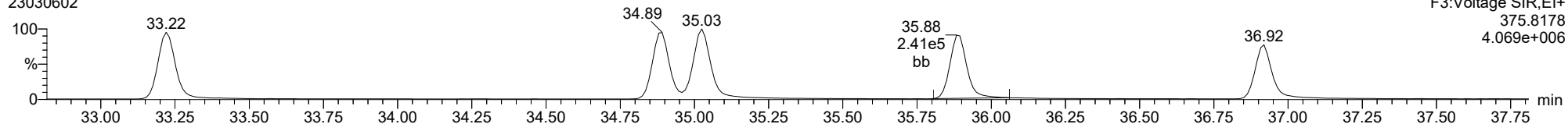
234678-HxCDF

23030602



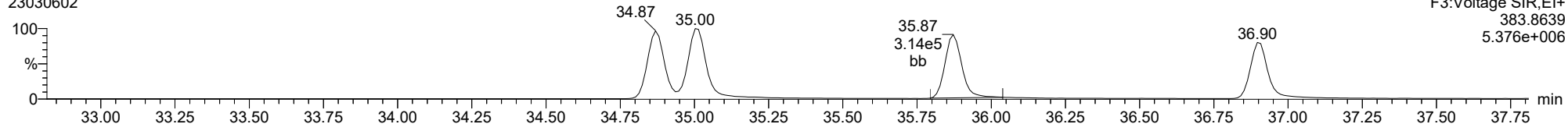
234678-HxCDF

23030602



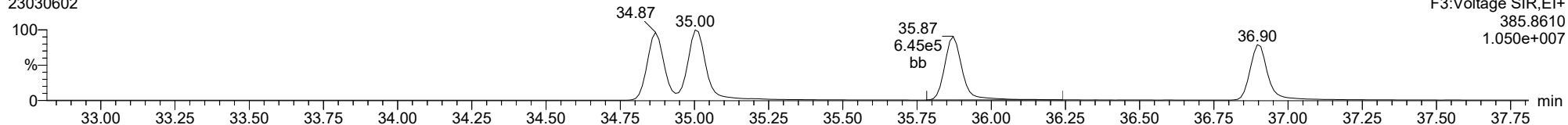
13C-234678-HxCDF

23030602



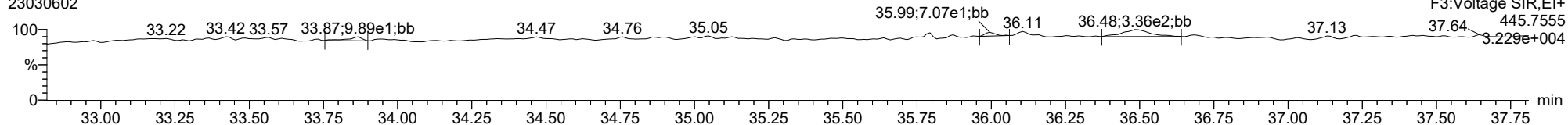
13C-234678-HxCDF

23030602



FUNCTION3 OCDPE

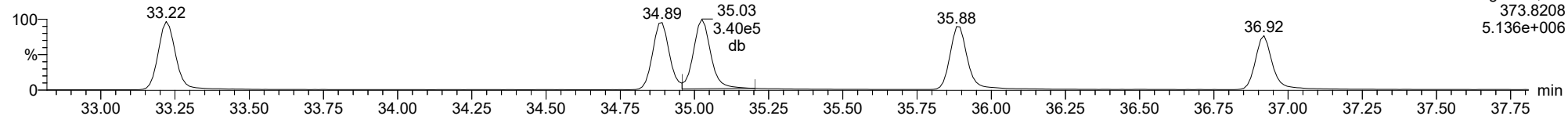
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

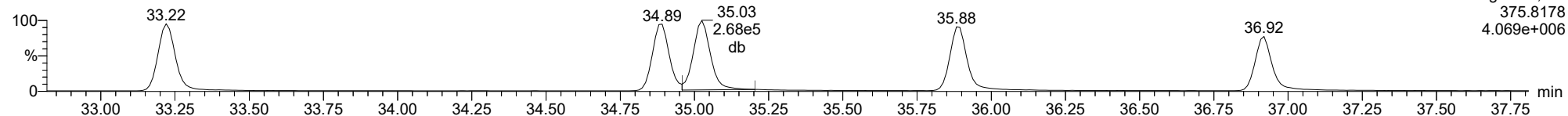
123678-HxCDF

23030602



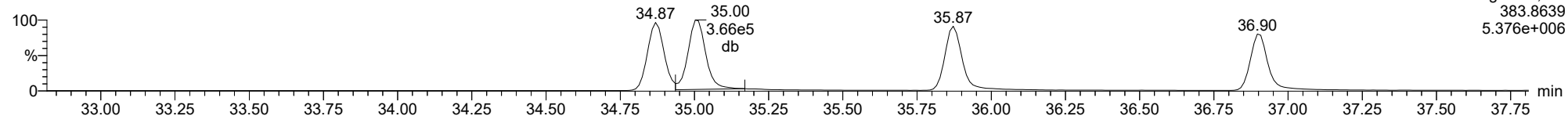
123678-HxCDF

23030602



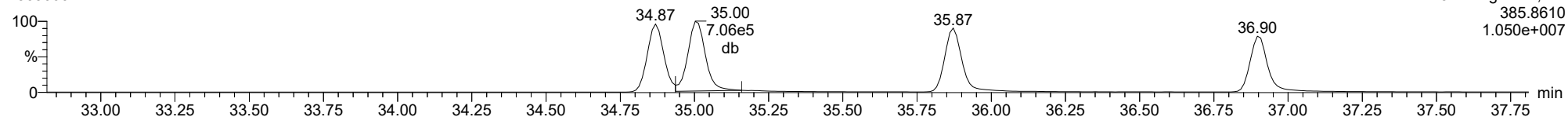
13C-123678-HxCDF

23030602



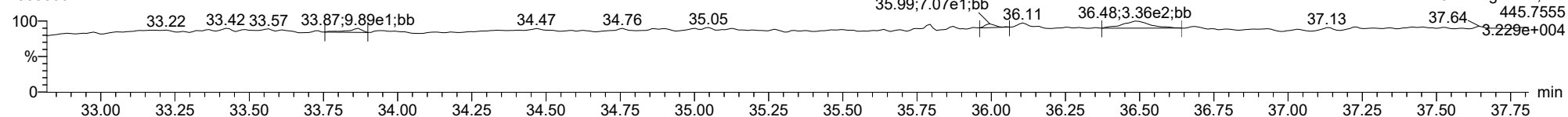
13C-123678-HxCDF

23030602



FUNCTION3 OCDPE

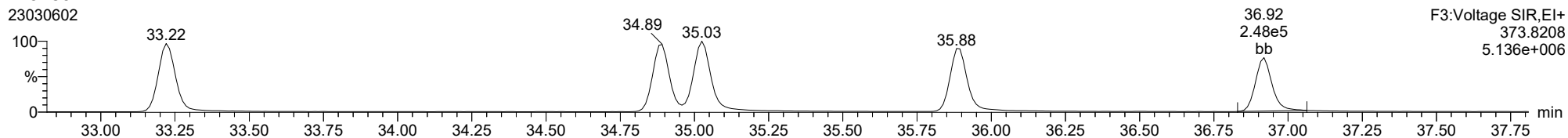
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

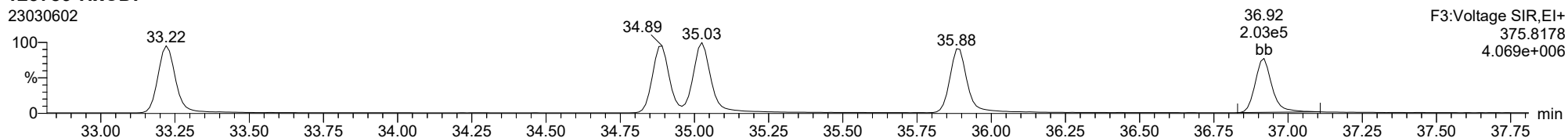
123789-HxCDF

23030602



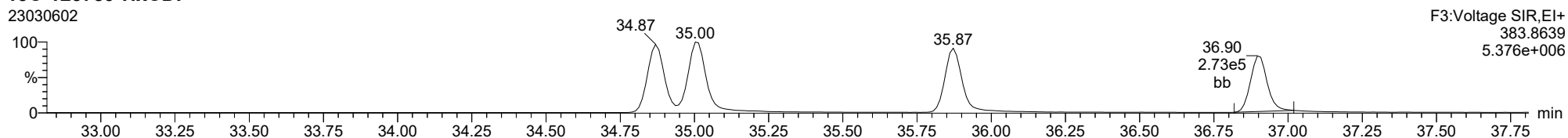
123789-HxCDF

23030602



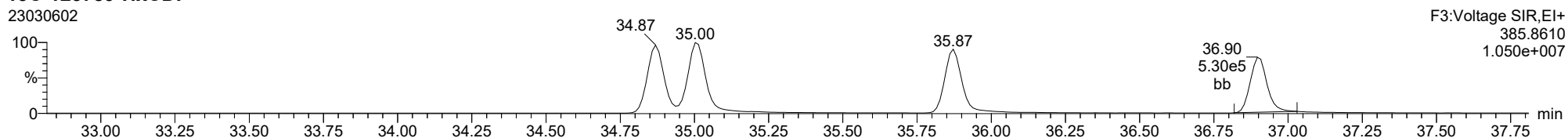
13C-123789-HxCDF

23030602



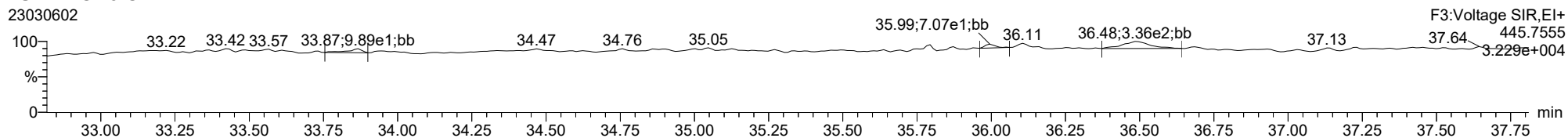
13C-123789-HxCDF

23030602



FUNCTION3 OCDPE

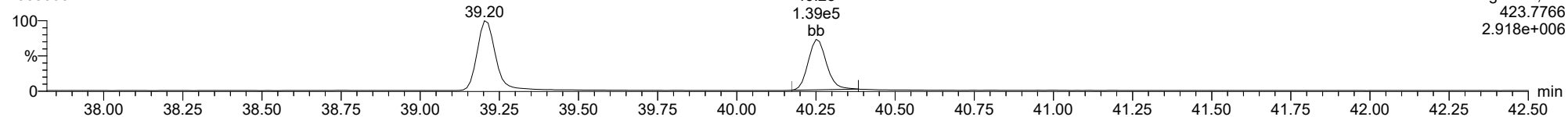
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

1234678-HpCDD

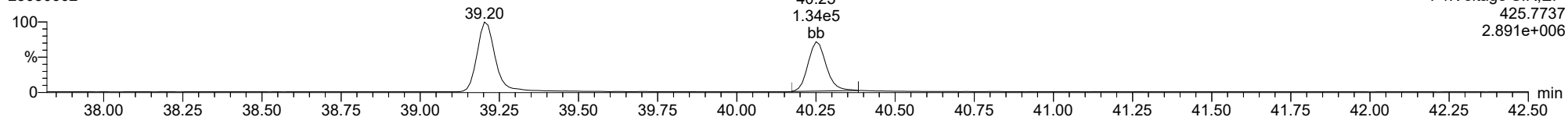
23030602



F4:Voltage SIR,EI+
423.7766
2.918e+006

1234678-HpCDD

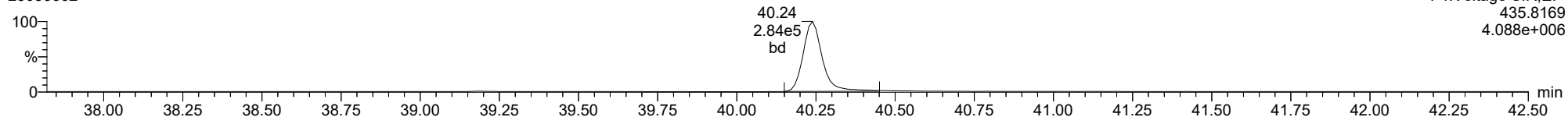
23030602



F4:Voltage SIR,EI+
425.7737
2.891e+006

13C-1234678-HpCDD

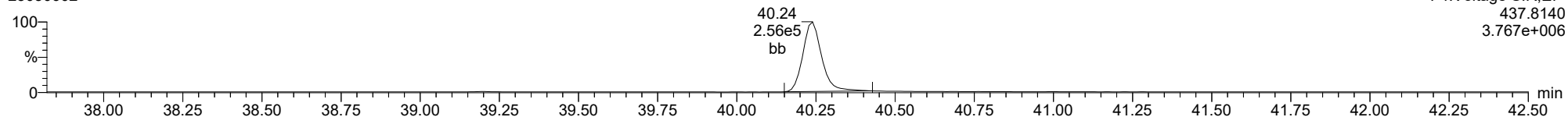
23030602



F4:Voltage SIR,EI+
435.8169
4.088e+006

13C-1234678-HpCDD

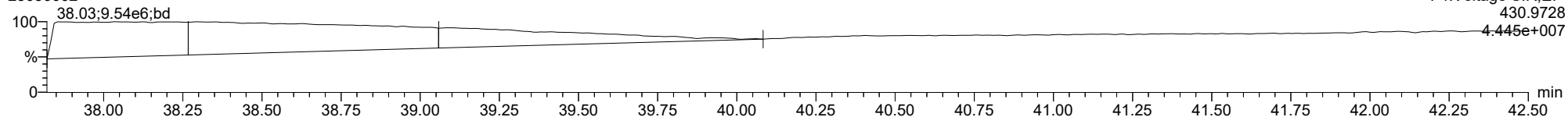
23030602



F4:Voltage SIR,EI+
437.8140
3.767e+006

FUNCTION4 PFK

23030602

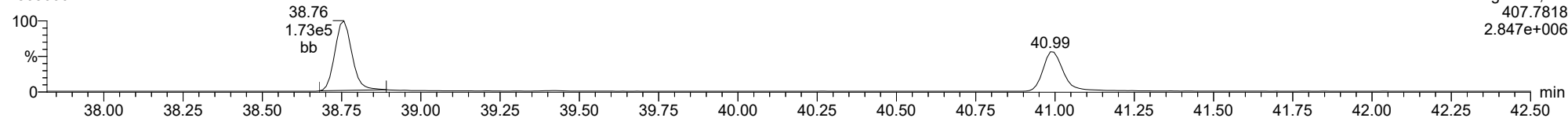


F4:Voltage SIR,EI+
430.9728
4.445e+007

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

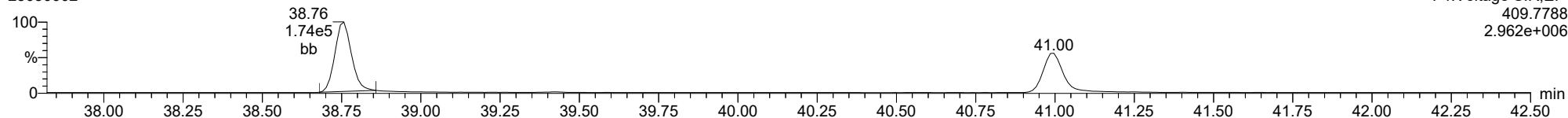
1234678-HpCDF

23030602



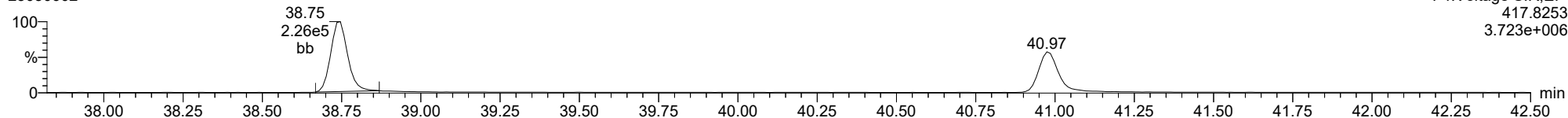
1234678-HpCDF

23030602



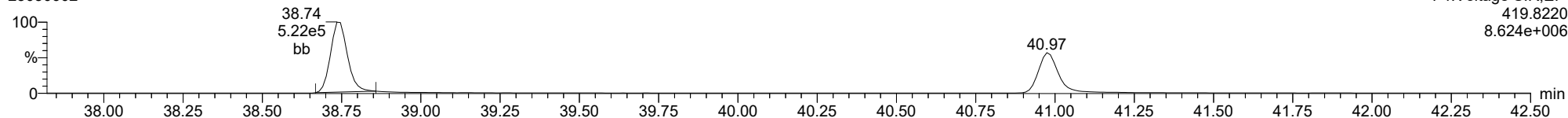
13C-1234678-HpCDF

23030602



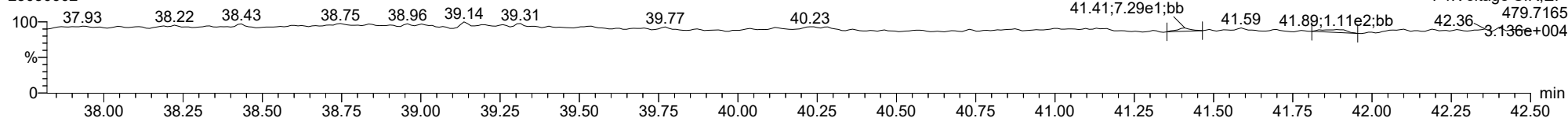
13C-1234678-HpCDF

23030602



FUNCTION4 NCDPE

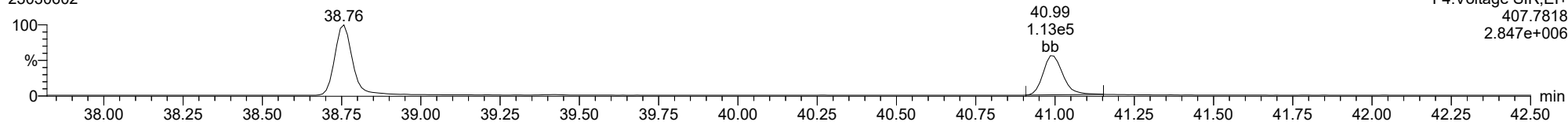
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

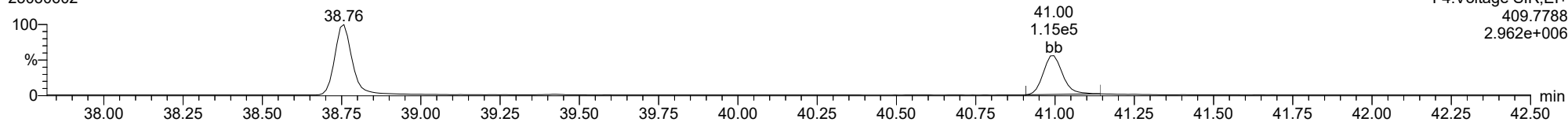
23030602



F4:Voltage SIR,EI+
407.7818
2.847e+006

1234789-HpCDF

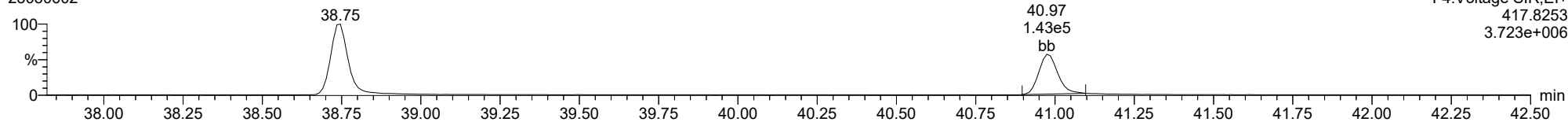
23030602



F4:Voltage SIR,EI+
409.7788
2.962e+006

13C-1234789-HpCDF

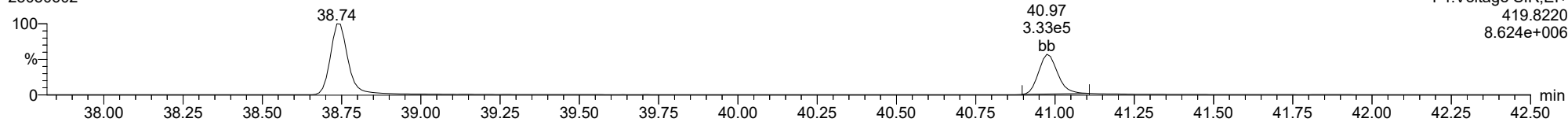
23030602



F4:Voltage SIR,EI+
417.8253
3.723e+006

13C-1234789-HpCDF

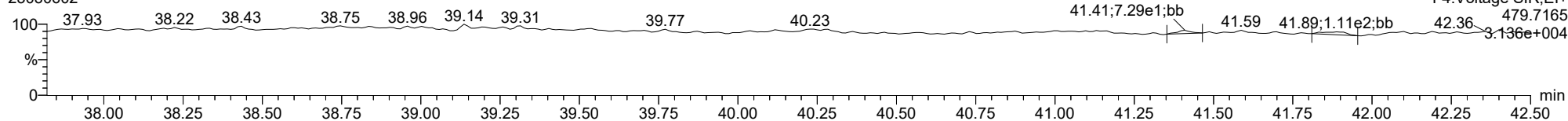
23030602



F4:Voltage SIR,EI+
419.8220
8.624e+006

FUNCTION4 NCDPE

23030602

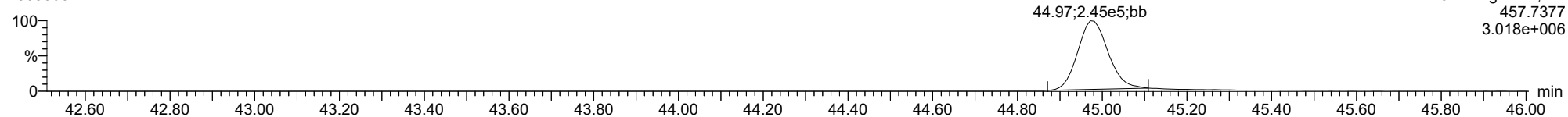


F4:Voltage SIR,EI+
479.7165
3.136e+004

ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

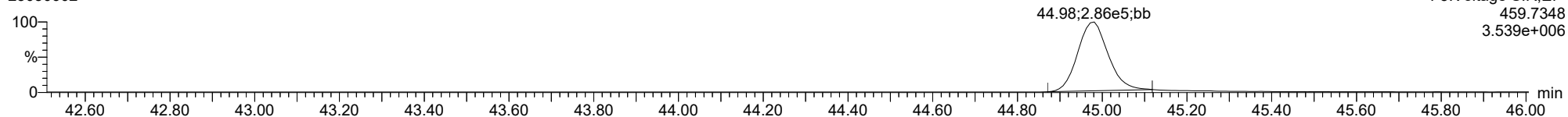
OCDD

23030602



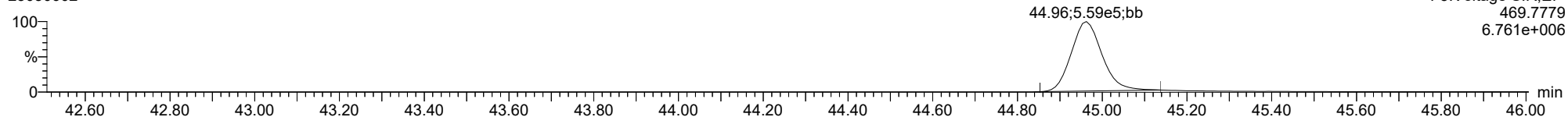
OCDD

23030602



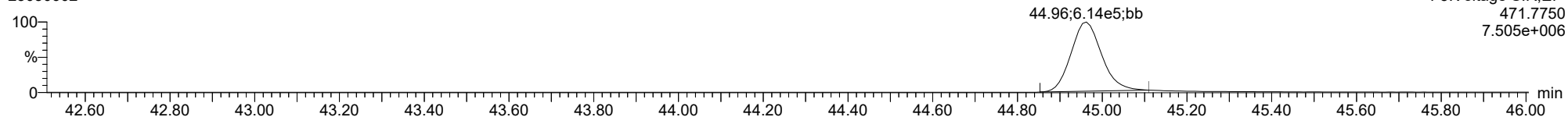
13C-OCDD

23030602



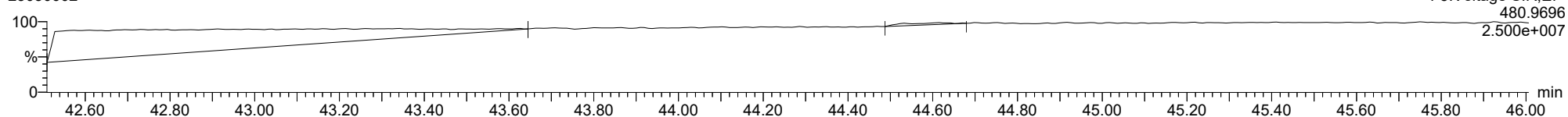
13C-OCDD

23030602



FUNCTIONS PFK

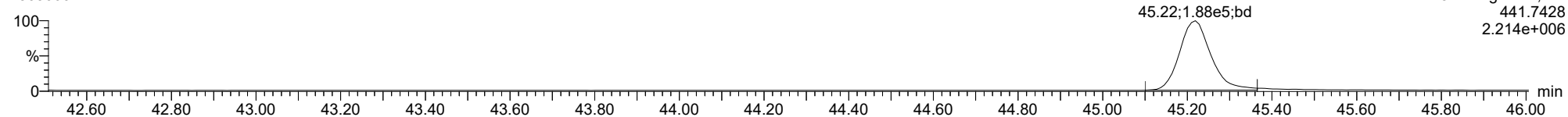
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

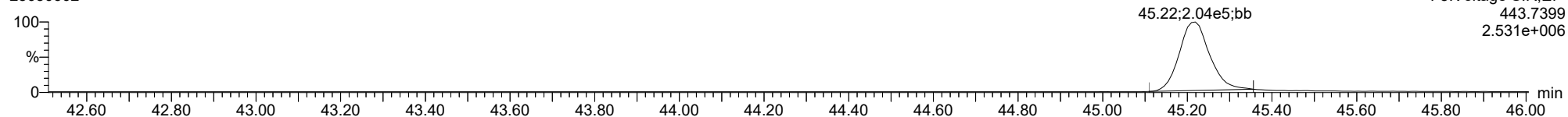
OCDF

23030602



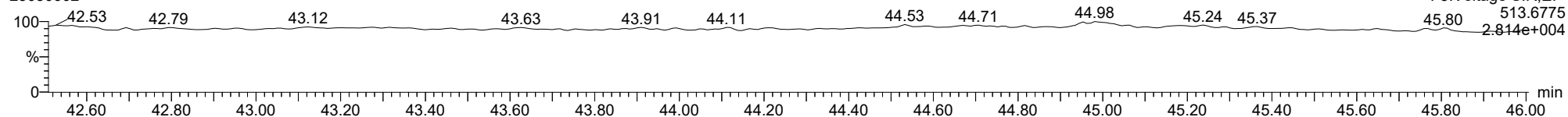
OCDF

23030602



FUNCTION5 DCDPE

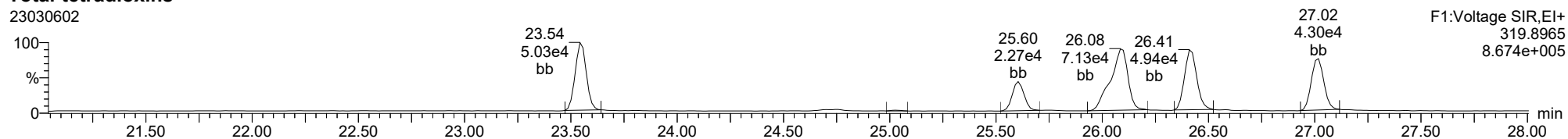
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

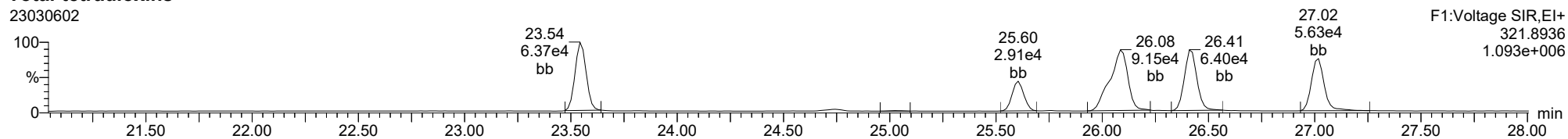
Total-tetradioxins

23030602



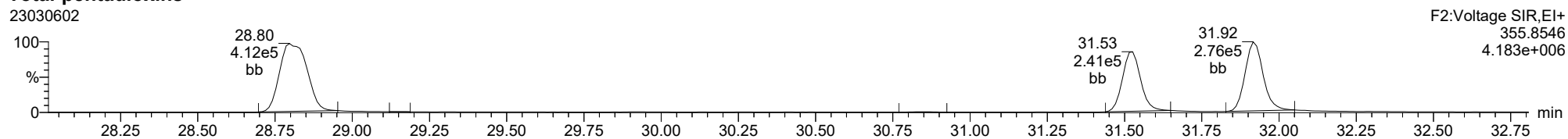
Total-tetradioxins

23030602



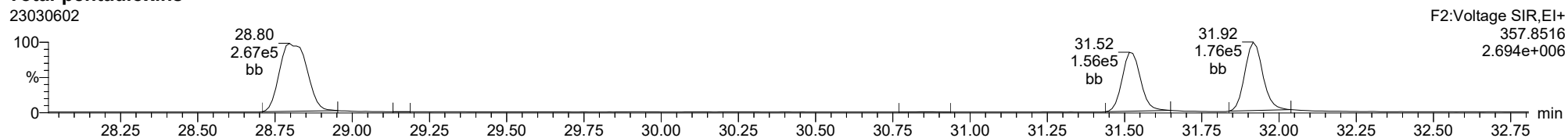
Total-pentadioxins

23030602



Total-pentadioxins

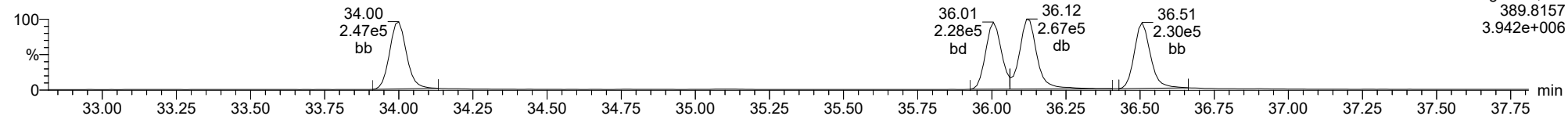
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

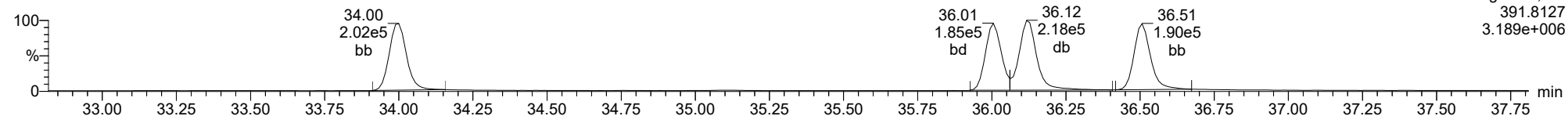
Total-hexadioxins

23030602



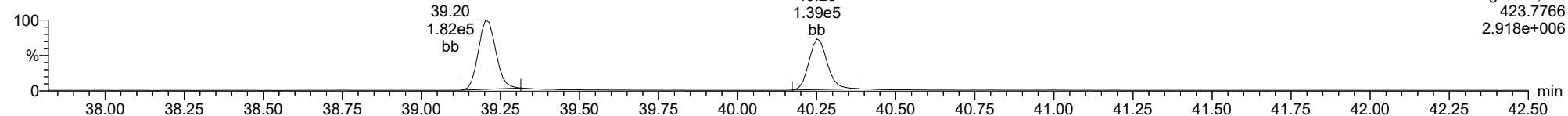
Total-hexadioxins

23030602



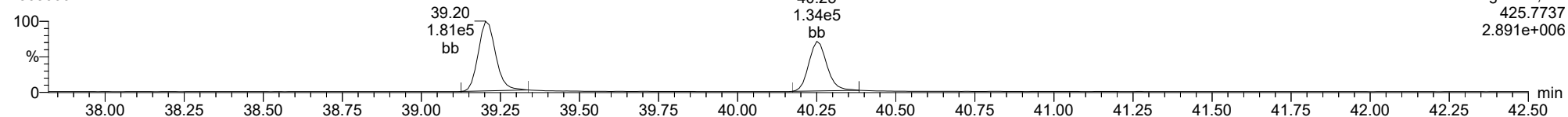
Total-heptadioxins

23030602



Total-heptadioxins

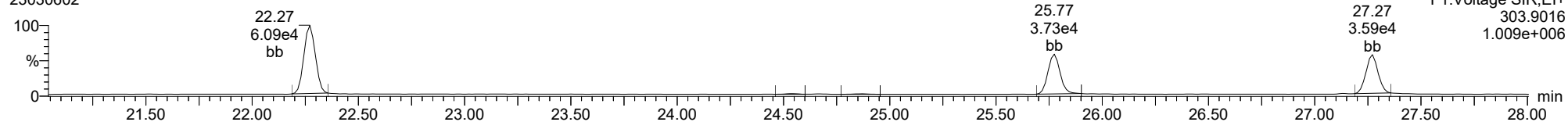
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

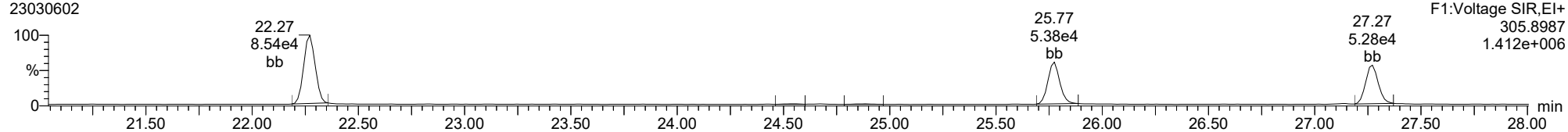
Total-tetrafurans

23030602



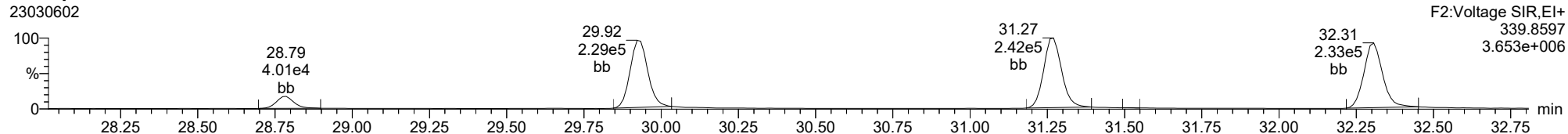
Total-tetrafurans

23030602



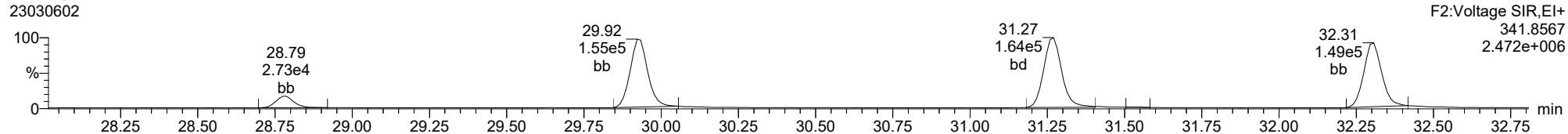
Total-pentafurans

23030602



Total-pentafurans

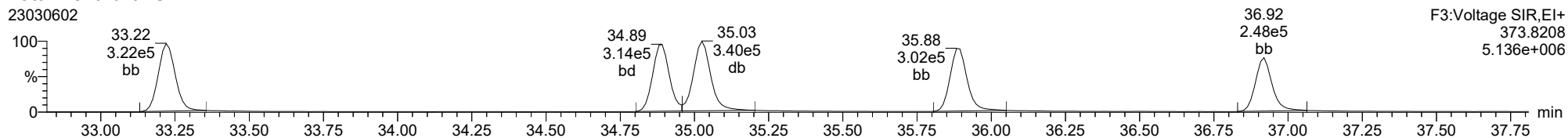
23030602



ID: CS3X1, Name: 23030602, Date: 06-Mar-2023, Time: 10:49:33, Conditions: AUTOSPEC01, User: pk

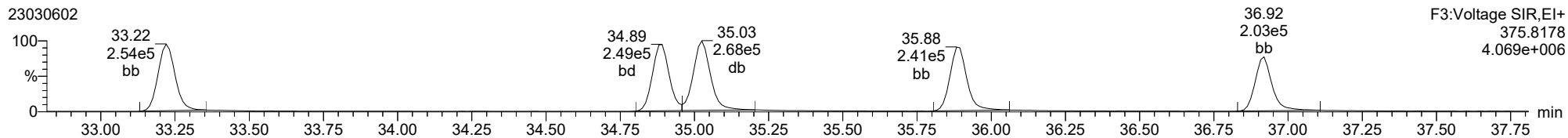
Total-hexafurans

23030602



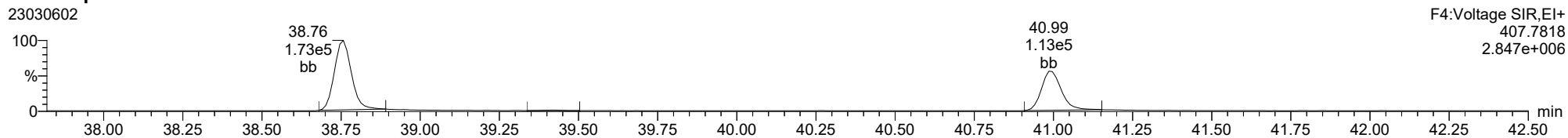
Total-hexafurans

23030602



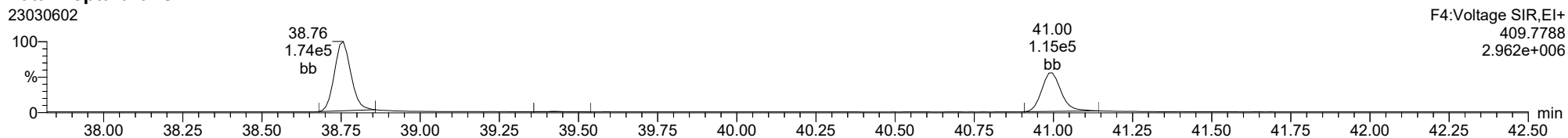
Total-heptafurans

23030602



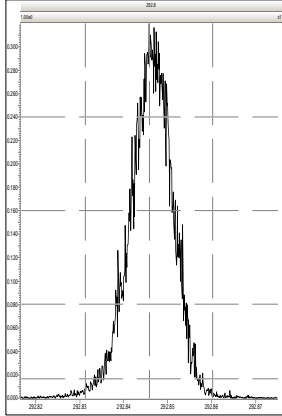
Total-heptafurans

23030602

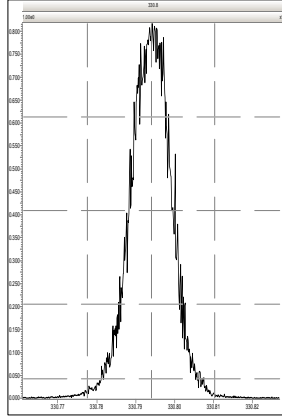


Printed: Monday, March 06, 2023 10:40:35 Pacific Standard Time

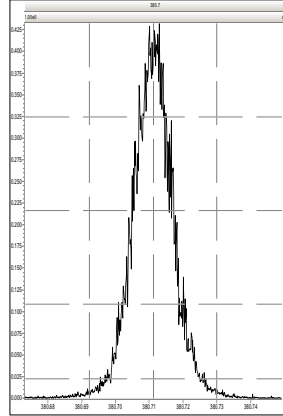
M 292.9824 R 13333



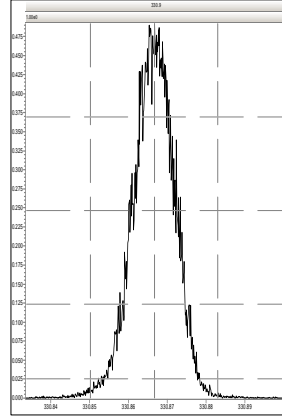
M 330.9792 R 13371



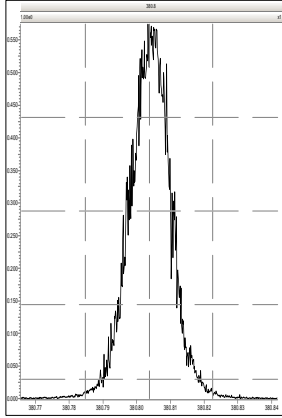
M 380.9760 R 14045



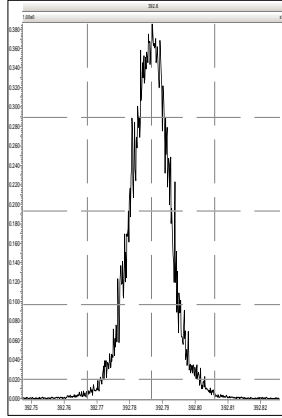
M 330.9792 R 13706



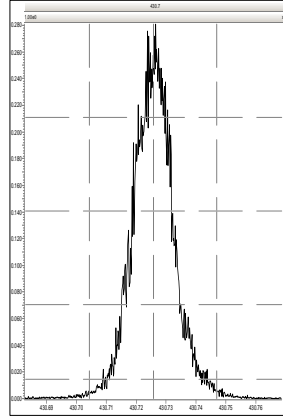
M 380.9760 R 13935



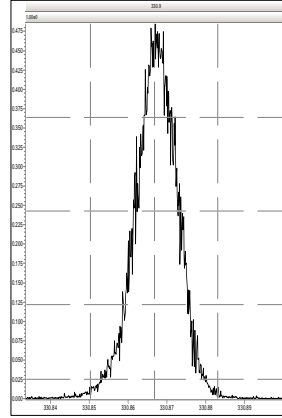
M 392.9760 R 13406



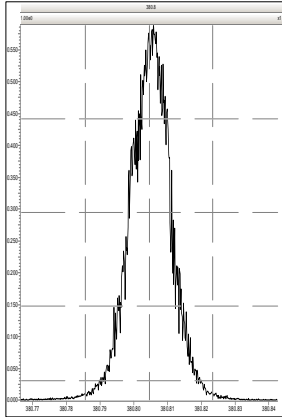
M 430.9728 R 13303



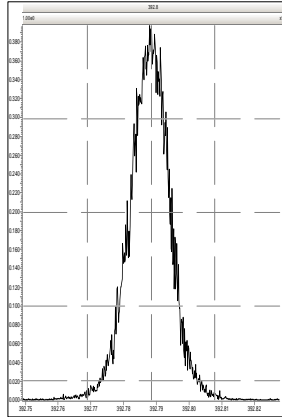
M 330.9792 R 12908



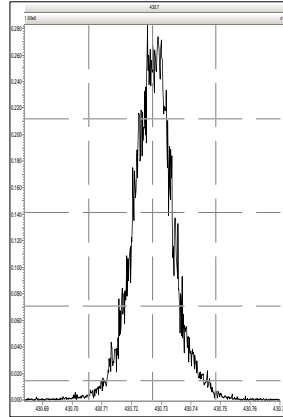
M 380.9760 R 13675



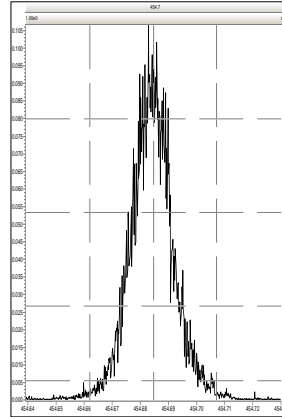
M 392.9760 R 13405



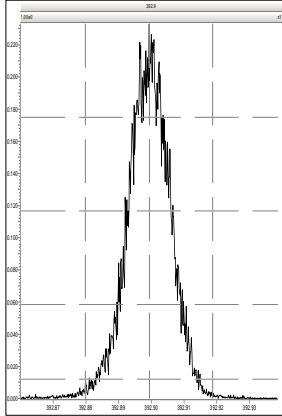
M 430.9728 R 13333



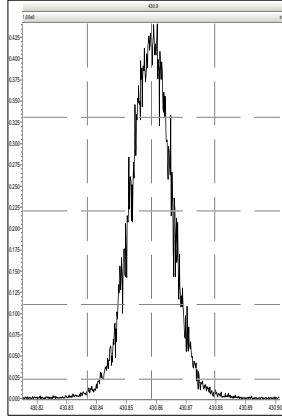
M 454.9728 R 13976



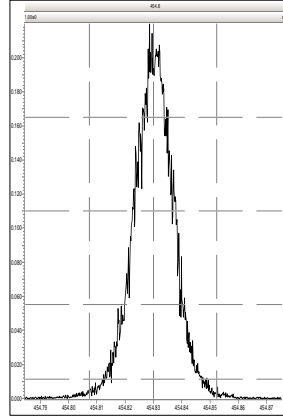
M 392.9760 R 13056



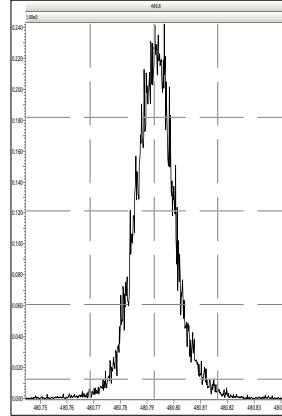
M 430.9728 R 13091



M 454.9728 R 13557

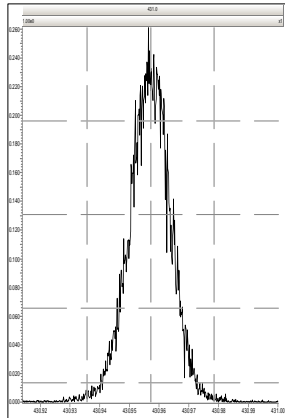


M 480.9696 R 14046

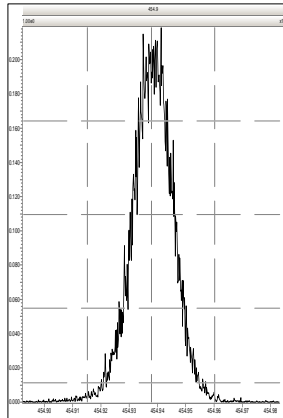


Printed: Monday, March 06, 2023 10:40:35 Pacific Standard Time

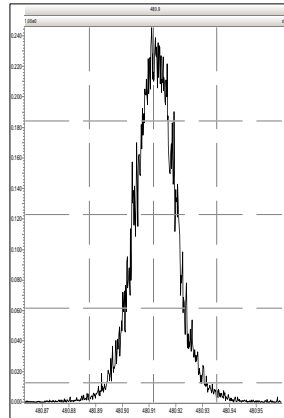
M 430.9728 R 13552



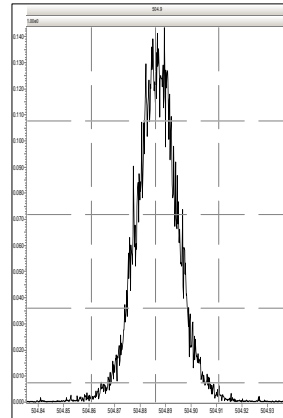
M 454.9728 R 14127



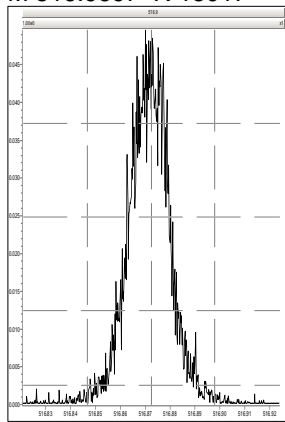
M 480.9696 R 13229



M 504.9696 R 13382



M 516.9697 R 15017

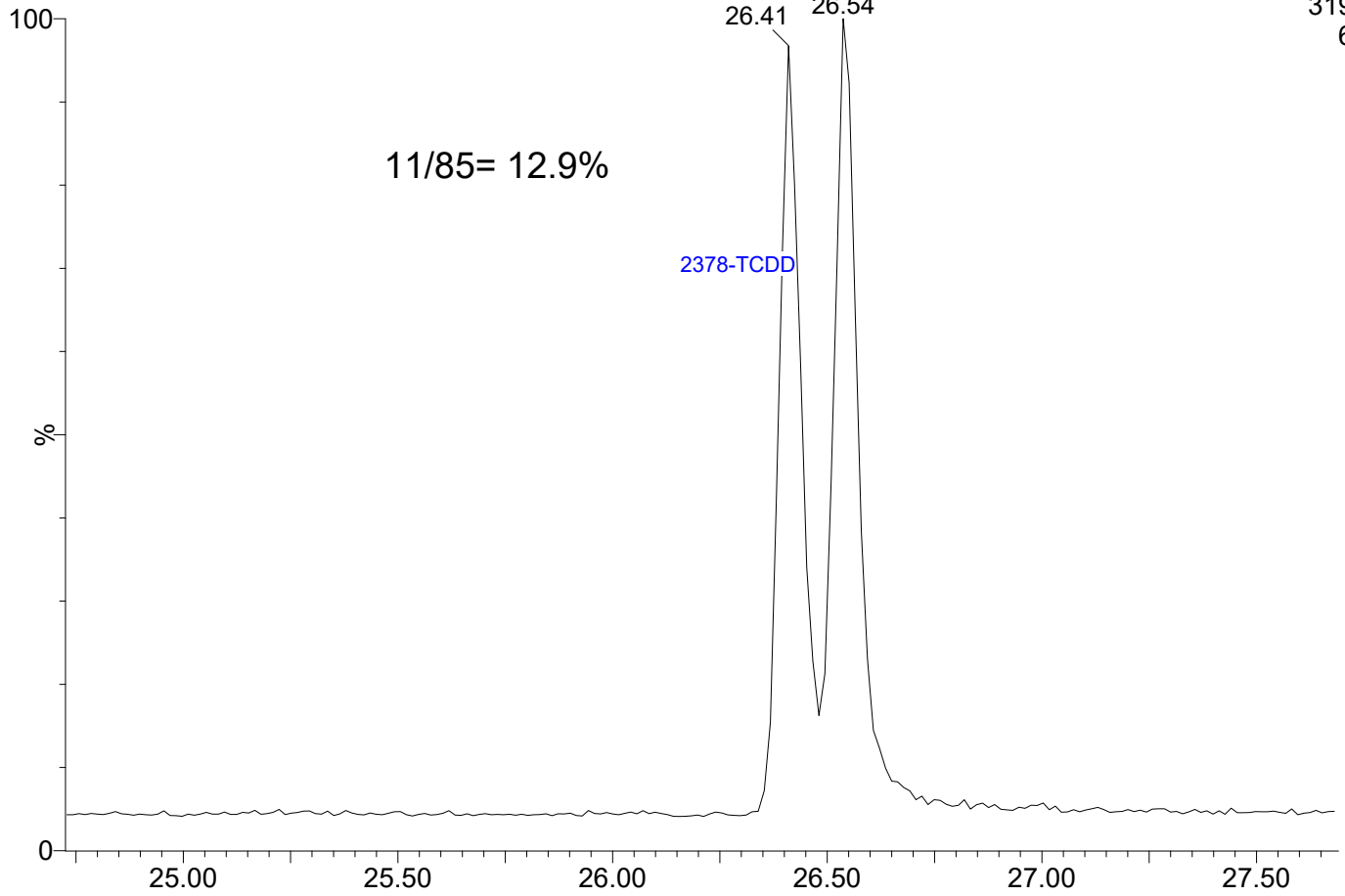


23030603

1: Voltage SIR 14 Channels EI+

319.8965

6.31e5

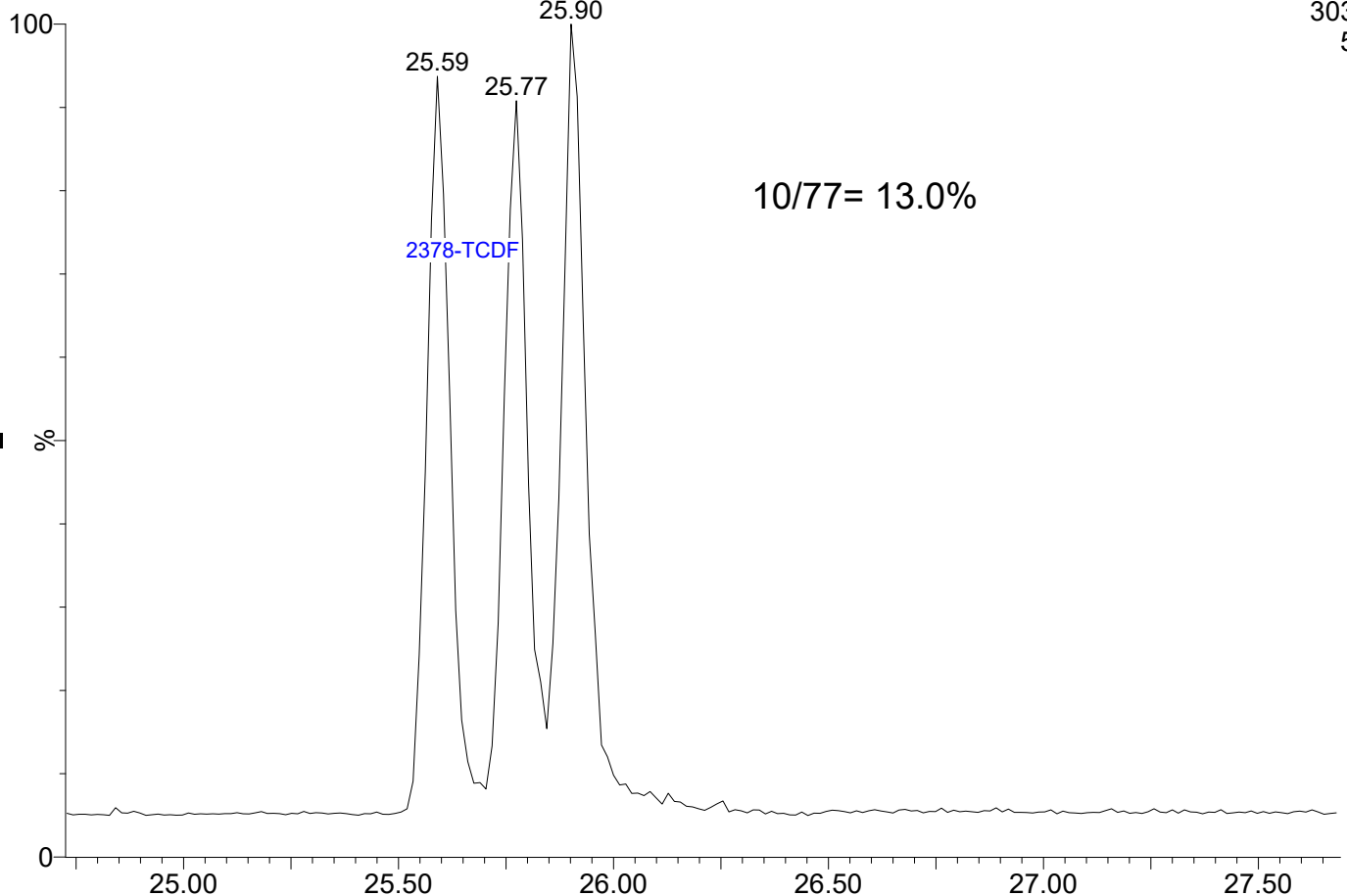


23030603

1: Voltage SIR 14 Channels EI+

303.9016

5.44e5





CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030311

Calibration Date: 03/03/2023

Sequence: SLC0045

Injection Date: 03/03/23

Lab Sample ID: SLC0045-CCV1

Injection Time: 17:25

Sequence Name: CS3V4

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	10.1	0.7015272	0.7103909		1.3	+/-16
2,3,7,8-TCDD	A	10.000	9.02	1.1486620	1.0358000		-9.8	+/-22
1,2,3,7,8-PeCDF	A	50.000	47.7	0.6792300	0.6482723		-4.6	+/-18
2,3,4,7,8-PeCDF	A	50.000	48.6	0.7861704	0.7638484		-2.8	+/-18
1,2,3,7,8-PeCDD	A	50.000	50.8	1.0218450	1.0391930		1.7	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.3	1.1660380	1.1031690		-5.4	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	51.4	1.0907410	1.1209930		2.8	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	52.1	1.1396990	1.1864330		4.1	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	48.9	1.1370930	1.1121660		-2.2	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	50.7	0.9955689	1.0094320		1.4	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	51.1	1.0009380	1.0234880		2.3	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	51.7	0.9071139	0.9383686		3.4	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.7	1.0029930	0.9566603		-4.6	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	53.6	0.9531152	1.0217610		7.2	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	52.7	1.0390130	1.0955650		5.4	+/-14
OCDF	A	100.00	95.0	0.7778078	0.7390842		-5.0	+/-37
OCDD	A	100.00	97.1	0.9199537	0.8937318		-2.9	+/-21
13C12-2,3,7,8-TCDF	A	100.00	89.4	1.6201960	1.4487738		-10.6	+/-29
13C12-2,3,7,8-TCDD	A	100.00	86.0	1.1524090	0.9914363		-14.0	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	92.6	1.2404520	1.1488109		-7.4	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	91.6	1.1177860	1.0240744		-8.4	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	90.8	0.8288129	0.7523463		-9.2	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	95.2	1.1683050	1.1119828		-4.8	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	91.1	1.3864660	1.2630996		-8.9	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	96.9	1.1292560	1.0940819		-3.1	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	101	0.9317541	0.9426254		1.2	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.6	0.9950393	0.9710534		-2.4	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	98.4	1.1566890	1.1378328		-1.6	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	0.8952017	0.9116661		1.8	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	84.3	0.7697516	0.6486548		-15.7	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	92.0	0.8401226	0.7731635		-8.0	+/-28
13C12-OCDD	A	200.00	170	0.7674714	0.6532994		-14.9	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	7.54	1.2878040	0.9705402		-24.6	

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits



**SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 1613B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030310

Calibration Date: 03/03/2023

Sequence: SLC0045

Injection Date: 03/03/23

Lab Sample ID: SLC0045-SCV1

Injection Time: 16:36

Sequence Name: ICVCW

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.84	0.7015272	0.6901560		-1.6	
2,3,7,8-TCDD	A	10.000	9.81	1.1486620	1.1273700		-1.9	
1,2,3,7,8-PeCDF	A	50.000	51.4	0.6792300	0.6981249		2.8	
2,3,4,7,8-PeCDF	A	50.000	49.0	0.7861704	0.7701368		-2.0	
1,2,3,7,8-PeCDD	A	50.000	48.5	1.0218450	0.9921504		-2.9	
1,2,3,4,7,8-HxCDF	A	50.000	48.2	1.1660380	1.1251100		-3.5	
1,2,3,6,7,8-HxCDF	A	50.000	48.0	1.0907410	1.0469270		-4.0	
2,3,4,6,7,8-HxCDF	A	50.000	50.2	1.1396990	1.1448090		0.4	
1,2,3,7,8,9-HxCDF	A	50.000	49.1	1.1370930	1.1161010		-1.8	
1,2,3,4,7,8-HxCDD	A	50.000	50.8	0.9955689	1.0114830		1.6	
1,2,3,6,7,8-HxCDD	A	50.000	50.2	1.0009380	1.0044310		0.3	
1,2,3,7,8,9-HxCDD	A	50.000	51.6	0.9071139	8347.938		3.2	
1,2,3,4,6,7,8-HpCDF	A	50.000	51.8	1.0029930	1.0398620		3.7	
1,2,3,4,7,8,9-HpCDF	A	50.000	48.5	0.9531152	0.9237809		-3.1	
1,2,3,4,6,7,8-HpCDD	A	50.000	49.2	1.0390130	1.0223590		-1.6	
OCDF	A	100.00	104	0.7778078	0.8050743		3.5	
OCDD	A	100.00	99.4	0.9199537	0.9146365		-0.6	
13C12-2,3,7,8-TCDF	A	100.00	96.9	1.6201960	1.5703703		-3.1	
13C12-2,3,7,8-TCDD	A	100.00	96.6	1.1524090	1.1130294		-3.4	
13C12-1,2,3,7,8-PeCDF	A	100.00	73.2	1.2404520	0.9079224		-26.8	
13C12-2,3,4,7,8-PeCDF	A	100.00	75.9	1.1177860	0.8488817		-24.1	
13C12-1,2,3,7,8-PeCDD	A	100.00	76.6	0.8288129	0.6346243		-23.4	
13C12-1,2,3,4,7,8-HxCDF	A	100.00	93.0	1.1683050	1.0861993		-7.0	
13C12-1,2,3,6,7,8-HxCDF	A	100.00	98.0	1.3864660	1.3581552		-2.0	
13C12-2,3,4,6,7,8-HxCDF	A	100.00	93.4	1.1292560	1.0544008		-6.6	
13C12-1,2,3,7,8,9-HxCDF	A	100.00	97.9	0.9317541	0.9122440		-2.1	
13C12-1,2,3,4,7,8-HxCDD	A	100.00	95.9	0.9950393	0.9546162		-4.1	
13C12-1,2,3,6,7,8-HxCDD	A	100.00	97.7	1.1566890	1.1296183		-2.3	
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	102	0.8952017	0.9144345		2.1	
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	104	0.7697516	0.8001798		4.0	
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	102	0.8401226	0.8609226		2.5	
13C12-OCDD	A	200.00	162	0.7674714	0.6199758		-19.2	
37C14-2,3,7,8-TCDD	A	10.000	8.71	1.2878040	1.1221835		-12.9	

* Values outside of QC limits



CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030612

Calibration Date: 03/03/2023

Sequence: SLC0081

Injection Date: 03/06/23

Lab Sample ID: SLC0081-CCV1

Injection Time: 19:10

Sequence Name: CS3X2

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.79	0.7015272	0.6866883		-2.1	+/-16
2,3,7,8-TCDD	A	10.000	9.65	1.1486620	1.1082710		-3.5	+/-22
1,2,3,7,8-PeCDF	A	50.000	49.7	0.6792300	0.6757999		-0.5	+/-18
2,3,4,7,8-PeCDF	A	50.000	49.5	0.7861704	0.7782984		-1.0	+/-18
1,2,3,7,8-PeCDD	A	50.000	49.8	1.0218450	1.0174520		-0.4	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	48.4	1.1660380	1.1297330		-3.1	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	51.1	1.0907410	1.1156300		2.3	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	51.3	1.1396990	1.1689670		2.6	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	49.0	1.1370930	1.1142680		-2.0	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	52.7	0.9955689	1.0500030		5.5	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	53.1	1.0009380	1.0621110		6.1	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	56.9	0.9071139	1.0331080		13.9	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.5	1.0029930	0.9526024		-5.0	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	51.2	0.9531152	0.9756444		2.4	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	48.5	1.0390130	1.0086850		-2.9	+/-14
OCDF	A	100.00	98.4	0.7778078	0.7657090		-1.6	+/-37
OCDD	A	100.00	101	0.9199537	0.9277365		0.8	+/-21
13C12-2,3,7,8-TCDF	A	100.00	92.6	1.6201960	1.5005079		-7.4	+/-29
13C12-2,3,7,8-TCDD	A	100.00	89.1	1.1524090	1.0263376		-10.9	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	79.6	1.2404520	0.9877451		-20.4	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	81.5	1.1177860	0.9113861		-18.5	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	80.5	0.8288129	0.6672966		-19.5	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	94.9	1.1683050	1.1087846		-5.1	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	89.3	1.3864660	1.2386992		-10.7	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	98.2	1.1292560	1.1086321		-1.8	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	105	0.9317541	0.9758546		4.7	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	95.1	0.9950393	0.9460772		-4.9	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	93.2	1.1566890	1.0781440		-6.8	+/-15
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	105	0.8952017	0.9357474		4.5	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	96.2	0.7697516	0.7407363		-3.8	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	104	0.8401226	0.8758762		4.3	+/-18
13C12-OCDD	A	200.00	172	0.7674714	0.6617064		-13.8	+/-52
37Cl4-2,3,7,8-TCDD	A	10.000	7.92	1.2878040	1.0201047		-20.8	+/-21

* Values outside of QC limits

* Values outside of QC limits

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X2, **Name:** 23030612, **Date:** 06-Mar-2023, **Time:** 19:10:29, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.760	1.001	5.505e4	7.297e4	0.702	0.754	0.770	980	1591	8.68e5	1.13e6	886.3	713.3	NO	bb	bb	9.788
12378-PeCDF	29.911	1.000	2.493e5	1.653e5	0.679	1.508	1.550	2903	3240	3.73e6	2.45e6	1283.3	756.7	NO	bb	bb	49.747
23478-PeCDF	31.260	1.001	2.659e5	1.748e5	0.786	1.521	1.550	2903	3240	3.95e6	2.58e6	1361.7	796.0	NO	bb	bb	49.499
123478-HxCDF	34.881	1.001	3.310e5	2.645e5	1.166	1.252	1.240	4122	2525	5.16e6	4.10e6	1250.7	1625.6	NO	bd	bd	48.443
234678-HxCDF	35.883	1.001	3.454e5	2.708e5	1.140	1.276	1.240	4122	2525	5.28e6	4.18e6	1280.4	1657.2	NO	bb	bb	51.284
123678-HxCDF	35.014	1.000	3.691e5	2.879e5	1.091	1.282	1.240	4122	2525	5.30e6	4.20e6	1285.1	1663.7	NO	db	db	51.141
123789-HxCDF	36.908	1.000	2.915e5	2.254e5	1.137	1.293	1.240	4122	2525	4.25e6	3.35e6	1031.4	1325.3	NO	bb	bb	48.996
1234678-HpCDF	38.758	1.001	2.134e5	2.104e5	1.003	1.014	1.050	2691	2373	3.38e6	3.38e6	1255.8	1422.9	NO	bb	bb	47.488
1234789-HpCDF	40.986	1.000	1.717e5	1.719e5	0.953	0.999	1.050	2691	2373	2.41e6	2.43e6	894.4	1022.7	NO	bb	bb	51.182
OCDF	45.210	1.006	2.343e5	2.475e5	0.778	0.947	0.890	1407	1341	2.47e6	2.78e6	1754.4	2074.7	NO	bd	bb	98.445
2378-TCDD	26.396	1.001	6.188e4	7.944e4	1.149	0.779	0.770	1258	1311	9.05e5	1.18e6	719.0	903.4	NO	bb	bb	9.648
12378-PeCDD	31.516	1.001	2.550e5	1.668e5	1.022	1.529	1.550	1725	1561	3.70e6	2.45e6	2143.5	1569.8	NO	bb	bb	49.785
123478-HxCDD	35.994	1.000	2.613e5	2.110e5	0.996	1.239	1.240	2462	1782	4.08e6	3.31e6	1657.4	1857.6	NO	bd	bd	52.734
123678-HxCDD	36.117	1.001	3.092e5	2.352e5	1.001	1.315	1.240	2462	1782	4.36e6	3.51e6	1769.7	1969.3	NO	dd	db	53.056
123789-HxCDD	36.496	1.011	2.837e5	2.134e5	0.907	1.330	1.240	2462	1782	3.91e6	3.20e6	1586.5	1797.9	NO	dd	bb	56.945
1234678-HpCDD	40.251	1.000	2.110e5	2.090e5	1.039	1.009	1.050	1909	1715	3.03e6	2.97e6	1585.0	1730.8	NO	bb	bb	48.541
OCDD	44.972	1.000	2.689e5	3.148e5	0.920	0.854	0.890	1164	1075	3.20e6	3.70e6	2751.7	3444.2	NO	bb	bb	100.846
13C-2378-TCDF	25.746	1.007	8.009e5	1.063e6	1.620	0.753	0.770	1972	1269	1.18e7	1.56e7	6006.9	12280.2	NO	bb	bb	92.613
13C-12378-PeCDF	29.900	1.170	7.522e5	4.750e5	1.240	1.584	1.550	2669	1863	1.05e7	6.97e6	3950.5	3738.6	NO	bd	bb	79.628
13C-23478-PeCDF	31.237	1.222	6.788e5	4.535e5	1.118	1.497	1.550	2669	1863	1.02e7	6.80e6	3806.1	3652.0	NO	bb	bb	81.535
13C-123478-HxCDF	34.858	0.955	3.576e5	6.967e5	1.168	0.513	0.510	2421	1700	5.41e6	1.06e7	2233.8	6230.2	NO	bd	bd	94.905
13C-123678-HxCDF	35.003	0.959	4.251e5	7.527e5	1.386	0.565	0.510	2421	1700	5.72e6	1.09e7	2363.6	6396.0	NO	db	db	89.342
13C-234678-HxCDF	35.861	0.983	3.577e5	6.964e5	1.129	0.514	0.510	2421	1700	5.24e6	1.03e7	2164.0	6055.5	NO	bb	bb	98.174
13C-123789-HxCDF	36.897	1.011	3.146e5	6.133e5	0.932	0.513	0.510	2421	1700	4.68e6	9.14e6	1933.4	5377.2	NO	bb	bb	104.733
13C-1234678-HpCDF	38.736	1.062	2.824e5	6.074e5	0.895	0.465	0.440	2084	2929	4.22e6	9.65e6	2024.9	3294.3	NO	bb	bb	104.529
13C-1234789-HpCDF	40.975	1.123	2.106e5	4.937e5	0.770	0.427	0.440	2084	2929	2.96e6	6.89e6	1418.6	2350.4	NO	bb	bb	96.231
13C-1234-TCDD	25.563	0.000	5.550e5	6.874e5	1.000	0.807	0.770	1630	1182	8.42e6	1.05e7	5165.1	8868.6	NO	bb	bb	100.000
13C-2378-TCDD	26.382	1.032	5.655e5	7.097e5	1.152	0.797	0.770	1630	1182	8.52e6	1.06e7	5227.7	8960.4	NO	bb	bb	89.060
13C-12378-PeCDD	31.493	1.232	5.099e5	3.192e5	0.829	1.598	1.550	885	1149	7.48e6	4.68e6	8450.1	4069.2	NO	bb	bb	80.512
13C-123478-HxCDD	35.984	0.986	5.085e5	3.911e5	0.995	1.300	1.240	1545	2578	8.23e6	6.37e6	5328.4	2470.0	NO	bd	bd	95.079
13C-123678-HxCDD	36.095	0.989	5.786e5	4.466e5	1.157	1.296	1.240	1545	2578	8.50e6	6.56e6	5503.6	2546.1	NO	db	db	93.209
13C-1234678-HpCDD	40.239	1.103	4.421e5	3.908e5	0.840	1.131	1.050	1772	1341	5.85e6	5.38e6	3299.7	4010.4	NO	bd	bb	104.256
13C-OCDD	44.954	1.232	5.979e5	6.605e5	0.767	0.905	0.890	2406	1203	7.00e6	7.71e6	2910.0	6412.2	NO	bb	bb	172.438
13C-123789-HxCDD	36.485	0.000	5.173e5	4.336e5	1.000	1.193	1.240	1545	2578	7.91e6	6.22e6	5119.9	2413.1	NO	bb	bd	100.000
37CL-2378-TCDD	26.396	1.033	1.267e5		1.288			1459		1.87e6		1281.7			bb		7.921

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.257	0.864	6.516e4	8.953e4	0.802	0.728	0.770	980	1591	1.03e6	1.42e6	1047.7	891.1	NO	bb	bb	10.352
1289-TCDF	27.258	1.059	4.244e4	5.608e4	0.678	0.757	0.770	980	1591	6.25e5	8.40e5	638.0	528.4	NO	bb	bb	7.795
13468-PECDF	27.116	0.907	4.158e5	2.664e5	1.246	1.561	1.550	765	1161	6.32e6	3.95e6	8255.5	3402.5	NO	bb	bb	44.599
12389-PECDF	32.296	1.080	2.488e5	1.640e5	0.496	1.517	1.550	2903	3240	3.48e6	2.28e6	1200.4	703.5	NO	bb	bb	67.776
123468-HXCDF	33.209	0.953	3.321e5	2.599e5	1.169	1.278	1.240	4122	2525	4.82e6	3.82e6	1168.9	1513.2	NO	bb	bb	48.030
1368-TCDD	23.528	0.892	6.468e4	8.605e4	1.015	0.752	0.770	1258	1311	1.06e6	1.41e6	839.0	1072.2	NO	bb	bb	11.641
1289-TCDD	27.003	1.024	4.591e4	5.532e4	0.909	0.830	0.770	1258	1311	6.79e5	8.02e5	539.9	611.9	NO	bb	bb	8.737
12479-PECDD	28.786	0.914	4.190e5	2.730e5	2.301	1.535	1.550	1725	1561	3.94e6	2.59e6	2285.7	1657.3	NO	bb	bb	36.268
12389-PECDD	31.906	1.013	2.799e5	1.872e5	1.184	1.495	1.550	1725	1561	4.18e6	2.75e6	2423.3	1764.3	NO	bb	bb	47.608
124679-HXCDD	33.989	0.945	2.744e5	2.222e5	1.115	1.235	1.240	2462	1782	3.98e6	3.25e6	1617.2	1823.7	NO	bd	bd	49.483
1234679-HPCDD	39.203	0.974	2.286e5	2.438e5	1.137	0.938	1.050	1909	1715	3.58e6	3.54e6	1874.1	2061.7	NO	bb	bd	49.896
Total-tetrafurans			1.631e5		0.727			980		2.53e6							28.014
Total-penta1			4.158e5					765		6.32e6							44.599
Total-penta1furans			8.038e5		0.654			2903		1.17e7							175.662
Total-hexa1furans			1.669e6		1.141			4122		2.48e7							247.916
Total-hepta1furans			3.851e5		0.978			2691		5.79e6							98.670
Total-Furans			3.671e6		0.922			980		5.37e7							693.306
Total-tetradiioxins			2.998e5		1.024			1258		4.15e6							52.038
Total-pentadiioxins			9.543e5		1.502			1725		1.18e7							133.714
Total-hexadiioxins			1.129e6		1.005			2462		1.63e7							212.217
Total-heptadiioxins			4.396e5		1.088			1909		6.60e6							98.436
Total-Dioxins			3.091e6		1.130			1258		4.21e7							597.251
Total-TEQ			6.763e6					1258		9.58e7							1290.558
FUNCTION1 PFK			1.189e8					451129		4.76e7							
FUNCTION2 PFK			5.915e4					214227		2.32e6							0.000
FUNCTION3 PFK			4.896e6					379291		3.04e6							0.000
FUNCTION4 PFK			2.715e7					246647		1.95e7							
FUNCTION5 PFK			7.942e4					200358		3.82e6							
FUNCTION1 HXCD...			1.050e3					459		1.68e4							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			5.320e2					625		9.01e3							0.000
FUNCTION3 OCDPE			2.510e2					504		4.33e3							0.000
FUNCTION4 NCDPE			9.381e1					505		1.31e3							0.000
FUNCTION5 DCDPE			6.637e2					580		1.29e4							0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
 Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.244e4	5.608e4	0.678	0.76	0.77	638.0	YES	NO	bb	bb	7.795
2	Total-tetrafurans	27.13	4.715e2	5.913e2	0.727	0.80	0.77	8.2	YES	NO	bb	bb	0.078
3	2378-TCDF	25.76	5.505e4	7.297e4	0.702	0.75	0.77	886.3	YES	NO	bb	bb	9.788
4	1368-TCDF	22.26	6.516e4	8.953e4	0.802	0.73	0.77	1047.7	YES	NO	bb	bb	10.352

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDF	27.12	4.158e5	2.664e5	1.246	1.56	1.55	8255.5	YES	NO	bb	bb	44.599

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12378-PeCDF	29.91	2.493e5	1.653e5	0.679	1.51	1.55	1283.3	YES	NO	bb	bb	49.747
2	Total-pentafurans	28.76	3.975e4	2.690e4	0.654	1.48	1.55	201.4	YES	NO	bb	bb	8.640
3	12389-PECDF	32.30	2.488e5	1.640e5	0.496	1.52	1.55	1200.4	YES	NO	bb	bb	67.776
4	23478-PeCDF	31.26	2.659e5	1.748e5	0.786	1.52	1.55	1361.7	YES	NO	bb	bb	49.499

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexafurans	37.37	1.563e2	1.104e2	1.141	1.42	1.24	1.3	NO	NO	bb	bb	0.022
2	123789-HxCDF	36.91	2.915e5	2.254e5	1.137	1.29	1.24	1031.4	YES	NO	bb	bb	48.996
3	234678-HxCDF	35.88	3.454e5	2.708e5	1.140	1.28	1.24	1280.4	YES	NO	bb	bb	51.284
4	123678-HxCDF	35.01	3.691e5	2.879e5	1.091	1.28	1.24	1285.1	YES	NO	db	db	51.141
5	123478-HxCDF	34.88	3.310e5	2.645e5	1.166	1.25	1.24	1250.7	YES	NO	bd	bd	48.443
6	123468-HXCDF	33.21	3.321e5	2.599e5	1.169	1.28	1.24	1168.9	YES	NO	bb	bb	48.030

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	40.99	1.717e5	1.719e5	0.953	1.00	1.05	894.4	YES	NO	bb	bb	51.182
2	1234678-HpCDF	38.76	2.134e5	2.104e5	1.003	1.01	1.05	1255.8	YES	NO	bb	bb	47.488

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.244e4	5.608e4	0.678	0.76	0.77	638.0	YES	NO	bb	bb	7.795
2	Total-tetrafurans	27.13	4.715e2	5.913e2	0.727	0.80	0.77	8.2	YES	NO	bb	bb	0.078
3	2378-TCDF	25.76	5.505e4	7.297e4	0.702	0.75	0.77	886.3	YES	NO	bb	bb	9.788
4	1368-TCDF	22.26	6.516e4	8.953e4	0.802	0.73	0.77	1047.7	YES	NO	bb	bb	10.352
5	12378-PeCDF	29.91	2.493e5	1.653e5	0.679	1.51	1.55	1283.3	YES	NO	bb	bb	49.747
6	Total-pentafurans	28.76	3.975e4	2.690e4	0.654	1.48	1.55	201.4	YES	NO	bb	bb	8.640
7	12389-PECDF	32.30	2.488e5	1.640e5	0.496	1.52	1.55	1200.4	YES	NO	bb	bb	67.776
8	23478-PeCDF	31.26	2.659e5	1.748e5	0.786	1.52	1.55	1361.7	YES	NO	bb	bb	49.499
9	Total-hexafurans	37.37	1.563e2	1.104e2	1.141	1.42	1.24	1.3	NO	NO	bb	bb	0.022
10	123789-HxCDF	36.91	2.915e5	2.254e5	1.137	1.29	1.24	1031.4	YES	NO	bb	bb	48.996
11	234678-HxCDF	35.88	3.454e5	2.708e5	1.140	1.28	1.24	1280.4	YES	NO	bb	bb	51.284
12	123678-HxCDF	35.01	3.691e5	2.879e5	1.091	1.28	1.24	1285.1	YES	NO	db	db	51.141
13	123478-HxCDF	34.88	3.310e5	2.645e5	1.166	1.25	1.24	1250.7	YES	NO	bd	bd	48.443
14	123468-HXCDF	33.21	3.321e5	2.599e5	1.169	1.28	1.24	1168.9	YES	NO	bb	bb	48.030
15	1234789-HpCDF	40.99	1.717e5	1.719e5	0.953	1.00	1.05	894.4	YES	NO	bb	bb	51.182
16	1234678-HpCDF	38.76	2.134e5	2.104e5	1.003	1.01	1.05	1255.8	YES	NO	bb	bb	47.488
17	OCDF	45.21	2.343e5	2.475e5	0.778	0.95	0.89	1754.4	YES	NO	bd	bb	98.445
18	13468-PECDF	27.12	4.158e5	2.664e5	1.246	1.56	1.55	8255.5	YES	NO	bb	bb	44.599

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.00	4.591e4	5.532e4	0.909	0.83	0.77	539.9	YES	NO	bb	bb	8.737
2	2378-TCDD	26.40	6.188e4	7.944e4	1.149	0.78	0.77	719.0	YES	NO	bb	bb	9.648
3	Total-tetradioxins	26.07	9.228e4	1.163e5	1.024	0.79	0.77	771.6	YES	NO	bb	bb	15.972
4	Total-tetradioxins	25.59	3.219e4	4.029e4	1.024	0.80	0.77	407.4	YES	NO	bd	bb	5.549
5	Total-tetradioxins	24.73	2.847e3	3.564e3	1.024	0.80	0.77	22.1	YES	NO	bb	bb	0.491
6	1368-TCDD	23.53	6.468e4	8.605e4	1.015	0.75	0.77	839.0	YES	NO	bb	bb	11.641

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.91	2.799e5	1.872e5	1.184	1.50	1.55	2423.3	YES	NO	bb	bb	47.608
2	12378-PeCDD	31.52	2.550e5	1.668e5	1.022	1.53	1.55	2143.5	YES	NO	bb	bb	49.785
3	Total-pentadioxins	29.12	1.887e2	1.393e2	1.502	1.35	1.55	3.3	YES	NO	bb	bb	0.026
4	12479-PECDD	28.79	4.190e5	2.730e5	2.301	1.53	1.55	2285.7	YES	NO	bb	bb	36.268
5	Total-pentadioxins	32.16	2.099e2	1.239e2	1.502	1.69	1.55	1.8	NO	NO	bb	bb	0.027

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk**HD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.50	2.837e5	2.134e5	0.907	1.33	1.24	1586.5	YES	NO	dd	bb	56.945
2	123678-HxCDD	36.12	3.092e5	2.352e5	1.001	1.31	1.24	1769.7	YES	NO	dd	db	53.056
3	123478-HxCDD	35.99	2.613e5	2.110e5	0.996	1.24	1.24	1657.4	YES	NO	bd	bd	52.734
4	124679-HXCDD	33.99	2.744e5	2.222e5	1.115	1.23	1.24	1617.2	YES	NO	bd	bd	49.483

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.25	2.110e5	2.090e5	1.039	1.01	1.05	1585.0	YES	NO	bb	bb	48.541
2	1234679-HPCDD	39.20	2.286e5	2.438e5	1.137	0.94	1.05	1874.1	YES	NO	bb	bd	49.896

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.00	4.591e4	5.532e4	0.909	0.83	0.77	539.9	YES	NO	bb	bb	8.737
2	2378-TCDD	26.40	6.188e4	7.944e4	1.149	0.78	0.77	719.0	YES	NO	bb	bb	9.648
3	Total-tetradoxins	26.07	9.228e4	1.163e5	1.024	0.79	0.77	771.6	YES	NO	bb	bb	15.972
4	Total-tetradoxins	25.59	3.219e4	4.029e4	1.024	0.80	0.77	407.4	YES	NO	bd	bb	5.549
5	Total-tetradoxins	24.73	2.847e3	3.564e3	1.024	0.80	0.77	22.1	YES	NO	bb	bb	0.491
6	1368-TCDD	23.53	6.468e4	8.605e4	1.015	0.75	0.77	839.0	YES	NO	bb	bb	11.641
7	12389-PECDD	31.91	2.799e5	1.872e5	1.184	1.50	1.55	2423.3	YES	NO	bb	bb	47.608
8	12378-PeCDD	31.52	2.550e5	1.668e5	1.022	1.53	1.55	2143.5	YES	NO	bb	bb	49.785
9	Total-pentadoxins	29.12	1.887e2	1.393e2	1.502	1.35	1.55	3.3	YES	NO	bb	bb	0.026
10	12479-PECDD	28.79	4.190e5	2.730e5	2.301	1.53	1.55	2285.7	YES	NO	bb	bb	36.268
11	Total-pentadoxins	32.16	2.099e2	1.239e2	1.502	1.69	1.55	1.8	NO	NO	bb	bb	0.027
12	123789-HxCDD	36.50	2.837e5	2.134e5	0.907	1.33	1.24	1586.5	YES	NO	dd	bb	56.945
13	123678-HxCDD	36.12	3.092e5	2.352e5	1.001	1.31	1.24	1769.7	YES	NO	dd	db	53.056
14	123478-HxCDD	35.99	2.613e5	2.110e5	0.996	1.24	1.24	1657.4	YES	NO	bd	bd	52.734
15	124679-HXCDD	33.99	2.744e5	2.222e5	1.115	1.23	1.24	1617.2	YES	NO	bd	bd	49.483
16	1234678-HpCDD	40.25	2.110e5	2.090e5	1.039	1.01	1.05	1585.0	YES	NO	bb	bb	48.541
17	1234679-HPCDD	39.20	2.286e5	2.438e5	1.137	0.94	1.05	1874.1	YES	NO	bb	bd	49.896
18	OCDD	44.97	2.689e5	3.148e5	0.920	0.85	0.89	2751.7	YES	NO	bb	bb	100.846

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.244e4	5.608e4	0.678	0.76	0.77	638.0	YES	NO	bb	bb	7.795
2	Total-tetrafurans	27.13	4.715e2	5.913e2	0.727	0.80	0.77	8.2	YES	NO	bb	bb	0.078
3	2378-TCDF	25.76	5.505e4	7.297e4	0.702	0.75	0.77	886.3	YES	NO	bb	bb	9.788
4	1368-TCDF	22.26	6.516e4	8.953e4	0.802	0.73	0.77	1047.7	YES	NO	bb	bb	10.352
5	12378-PeCDF	29.91	2.493e5	1.653e5	0.679	1.51	1.55	1283.3	YES	NO	bb	bb	49.747
6	Total-pentafurans	28.76	3.975e4	2.690e4	0.654	1.48	1.55	201.4	YES	NO	bb	bb	8.640
7	12389-PECDF	32.30	2.488e5	1.640e5	0.496	1.52	1.55	1200.4	YES	NO	bb	bb	67.776
8	23478-PeCDF	31.26	2.659e5	1.748e5	0.786	1.52	1.55	1361.7	YES	NO	bb	bb	49.499
9	Total-hexafurans	37.37	1.563e2	1.104e2	1.141	1.42	1.24	1.3	NO	NO	bb	bb	0.022
10	123789-HxCDF	36.91	2.915e5	2.254e5	1.137	1.29	1.24	1031.4	YES	NO	bb	bb	48.996
11	234678-HxCDF	35.88	3.454e5	2.708e5	1.140	1.28	1.24	1280.4	YES	NO	bb	bb	51.284
12	123678-HxCDF	35.01	3.691e5	2.879e5	1.091	1.28	1.24	1285.1	YES	NO	db	db	51.141
13	123478-HxCDF	34.88	3.310e5	2.645e5	1.166	1.25	1.24	1250.7	YES	NO	bd	bd	48.443
14	123468-HXCDF	33.21	3.321e5	2.599e5	1.169	1.28	1.24	1168.9	YES	NO	bb	bb	48.030
15	1234789-HpCDF	40.99	1.717e5	1.719e5	0.953	1.00	1.05	894.4	YES	NO	bb	bb	51.182
16	1234678-HpCDF	38.76	2.134e5	2.104e5	1.003	1.01	1.05	1255.8	YES	NO	bb	bb	47.488
17	OCDF	45.21	2.343e5	2.475e5	0.778	0.95	0.89	1754.4	YES	NO	bd	bb	98.445
18	13468-PECDF	27.12	4.158e5	2.664e5	1.246	1.56	1.55	8255.5	YES	NO	bb	bb	44.599
19	1289-TCDD	27.00	4.591e4	5.532e4	0.909	0.83	0.77	539.9	YES	NO	bb	bb	8.737
20	2378-TCDD	26.40	6.188e4	7.944e4	1.149	0.78	0.77	719.0	YES	NO	bb	bb	9.648
21	Total-tetradiioxins	26.07	9.228e4	1.163e5	1.024	0.79	0.77	771.6	YES	NO	bb	bb	15.972
22	Total-tetradiioxins	25.59	3.219e4	4.029e4	1.024	0.80	0.77	407.4	YES	NO	bd	bb	5.549
23	Total-tetradiioxins	24.73	2.847e3	3.564e3	1.024	0.80	0.77	22.1	YES	NO	bb	bb	0.491
24	1368-TCDD	23.53	6.468e4	8.605e4	1.015	0.75	0.77	839.0	YES	NO	bb	bb	11.641
25	12389-PECDD	31.91	2.799e5	1.872e5	1.184	1.50	1.55	2423.3	YES	NO	bb	bb	47.608
26	12378-PeCDD	31.52	2.550e5	1.668e5	1.022	1.53	1.55	2143.5	YES	NO	bb	bb	49.785
27	Total-pentadiioxins	29.12	1.887e2	1.393e2	1.502	1.35	1.55	3.3	YES	NO	bb	bb	0.026
28	12479-PECDD	28.79	4.190e5	2.730e5	2.301	1.53	1.55	2285.7	YES	NO	bb	bb	36.268
29	Total-pentadiioxins	32.16	2.099e2	1.239e2	1.502	1.69	1.55	1.8	NO	NO	bb	bb	0.027
30	123789-HxCDD	36.50	2.837e5	2.134e5	0.907	1.33	1.24	1586.5	YES	NO	dd	bb	56.945
31	123678-HxCDD	36.12	3.092e5	2.352e5	1.001	1.31	1.24	1769.7	YES	NO	dd	db	53.056
32	123478-HxCDD	35.99	2.613e5	2.110e5	0.996	1.24	1.24	1657.4	YES	NO	bd	bd	52.734
33	124679-HXCDD	33.99	2.744e5	2.222e5	1.115	1.23	1.24	1617.2	YES	NO	bd	bd	49.483
34	1234678-HpCDD	40.25	2.110e5	2.090e5	1.039	1.01	1.05	1585.0	YES	NO	bb	bb	48.541
35	1234679-HPCDD	39.20	2.286e5	2.438e5	1.137	0.94	1.05	1874.1	YES	NO	bb	bd	49.896
36	OCDD	44.97	2.689e5	3.148e5	0.920	0.85	0.89	2751.7	YES	NO	bb	bb	100.846

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk**PFK1**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	23.70	9.052e7					51.8	YES		db		
2	FUNCTION1 PFK	21.88	2.841e7					53.6	YES		bd		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	30.13	1.367e4					2.1	NO		bb		0.000
2	FUNCTION2 PFK	29.50	1.220e3					0.5	NO		bb		0.000
3	FUNCTION2 PFK	32.35	5.315e3					1.2	NO		bb		0.000
4	FUNCTION2 PFK	32.15	4.521e3					1.0	NO		bb		0.000
5	FUNCTION2 PFK	31.43	3.184e3					0.8	NO		bb		0.000
6	FUNCTION2 PFK	31.22	1.228e4					1.4	NO		bb		0.000
7	FUNCTION2 PFK	30.83	7.838e3					1.3	NO		bb		0.000
8	FUNCTION2 PFK	30.67	9.721e3					1.9	NO		bb		0.000
9	FUNCTION2 PFK	30.62	1.397e3					0.6	NO		bb		0.000

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	35.74	2.393e5					1.6	NO		bb		0.000
2	FUNCTION3 PFK	33.70	4.657e6					6.5	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	41.40	4.501e6					24.3	YES		db		
2	FUNCTION4 PFK	40.38	1.723e7					27.5	YES		dd		
3	FUNCTION4 PFK	38.56	5.411e6					27.1	YES		bd		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk**PFK5**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	42.59	1.809e3					0.6	NO		bb		
2	FUNCTION5 PFK	45.49	2.456e3					0.7	NO		bd		
3	FUNCTION5 PFK	45.27	7.523e2					0.4	NO		bb		
4	FUNCTION5 PFK	45.07	3.319e3					1.0	NO		bb		
5	FUNCTION5 PFK	44.95	6.329e3					0.9	NO		db		
6	FUNCTION5 PFK	44.89	8.640e3					1.7	NO		bd		
7	FUNCTION5 PFK	44.60	7.757e2					0.4	NO		bb		
8	FUNCTION5 PFK	44.06	1.195e3					0.7	NO		bb		
9	FUNCTION5 PFK	43.93	2.527e3					0.8	NO		bb		
10	FUNCTION5 PFK	43.80	7.972e2					0.4	NO		bb		
11	FUNCTION5 PFK	43.68	5.300e3					0.9	NO		bb		
12	FUNCTION5 PFK	43.50	5.216e3					1.4	NO		bb		
13	FUNCTION5 PFK	43.32	2.253e3					0.7	NO		bb		
14	FUNCTION5 PFK	43.26	5.652e3					1.1	NO		bb		
15	FUNCTION5 PFK	43.08	3.537e3					0.9	NO		bb		
16	FUNCTION5 PFK	42.89	2.104e3					0.8	NO		bb		
17	FUNCTION5 PFK	42.65	5.454e3					1.3	NO		bb		
18	FUNCTION5 PFK	45.81	5.303e3					1.1	NO		bb		
19	FUNCTION5 PFK	45.72	2.184e3					0.8	NO		bb		
20	FUNCTION5 PFK	45.63	9.246e3					1.4	NO		bb		
21	FUNCTION5 PFK	45.52	4.569e3					1.1	NO		db		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	27.13	1.638e2					4.2	YES		bb		0.000
2	FUNCTION1 HXCD...	26.38	1.082e2					3.5	YES		bb		0.000
3	FUNCTION1 HXCD...	25.99	7.429e1					2.0	NO		db		0.000
4	FUNCTION1 HXCD...	25.77	1.638e2					3.9	YES		bd		0.000
5	FUNCTION1 HXCD...	25.56	7.594e1					3.4	YES		bb		0.000
6	FUNCTION1 HXCD...	24.76	9.078e1					2.3	NO		bb		0.000
7	FUNCTION1 HXCD...	22.51	7.466e1					3.5	YES		bb		0.000
8	FUNCTION1 HXCD...	21.11	2.987e2					13.9	YES		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:04:53 Pacific Standard Time

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk**ETHERS2**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.15	4.346e2					10.9	YES		bb		0.000
2	FUNCTION2 HPCD...	28.33	9.739e1					3.5	YES		bb		0.000

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.50	1.428e2					4.8	YES		bb		0.000
2	FUNCTION3 OCDPE	35.97	1.082e2					3.8	YES		bb		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	39.20	9.381e1					2.6	NO		bb		0.000

ETHERS6

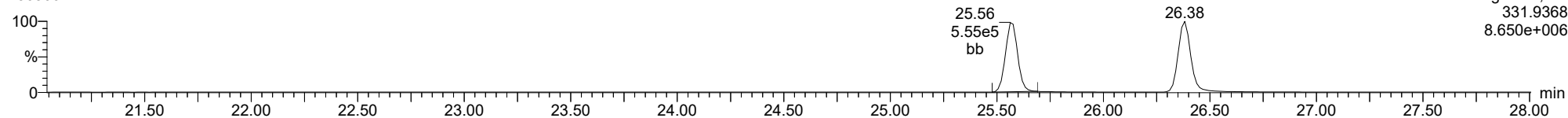
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	42.73	6.637e2					22.2	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X2, **Name:** 23030612, **Date:** 06-Mar-2023, **Time:** 19:10:29, **Conditions:** AUTOSPEC01, **User:** pk

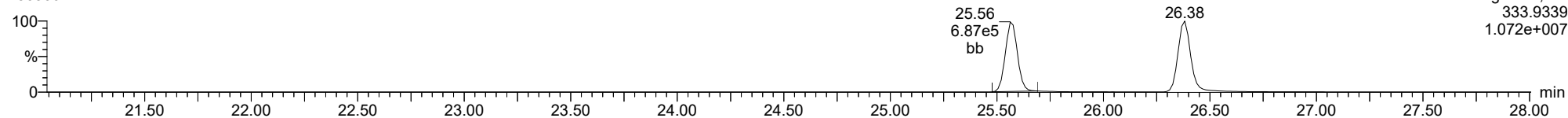
13C-1234-TCDD

23030612



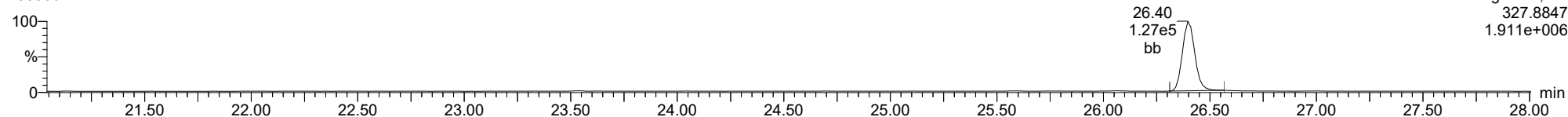
13C-1234-TCDD

23030612



37CL-2378-TCDD

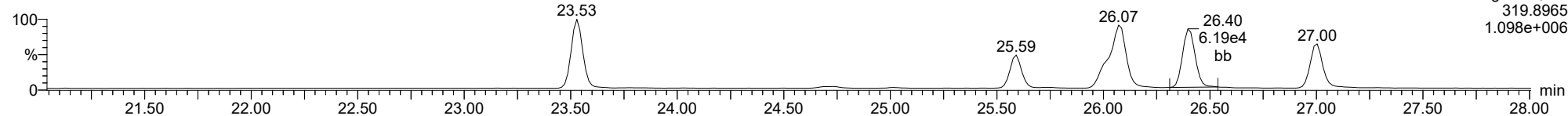
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

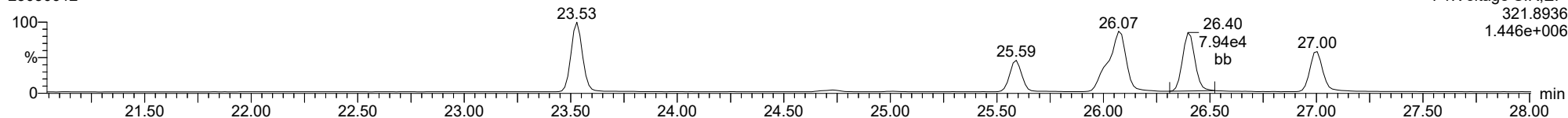
2378-TCDD

23030612



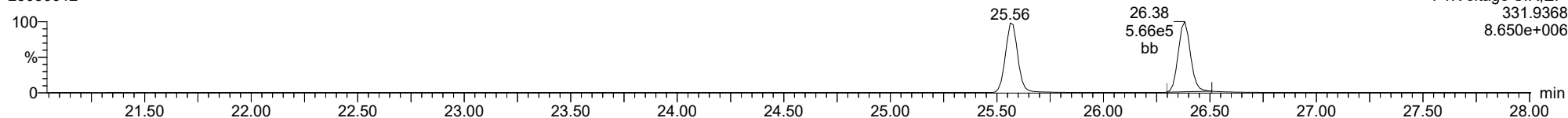
2378-TCDD

23030612



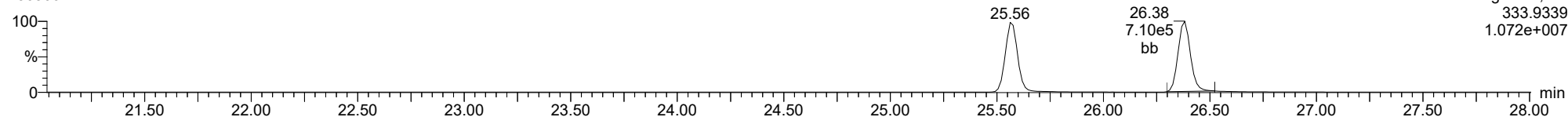
13C-2378-TCDD

23030612



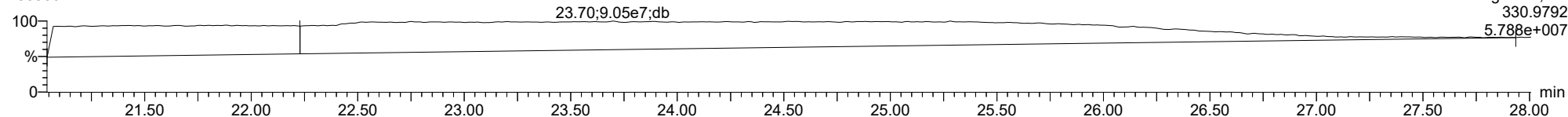
13C-2378-TCDD

23030612



FUNCTION1 PFK

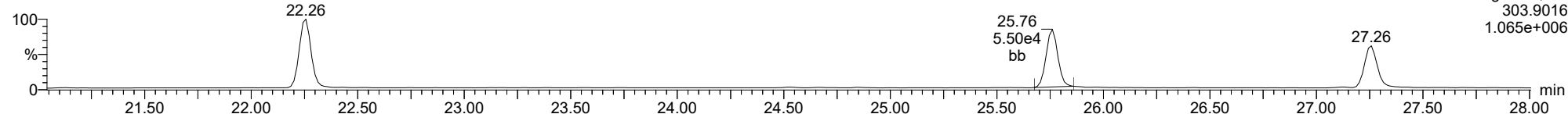
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

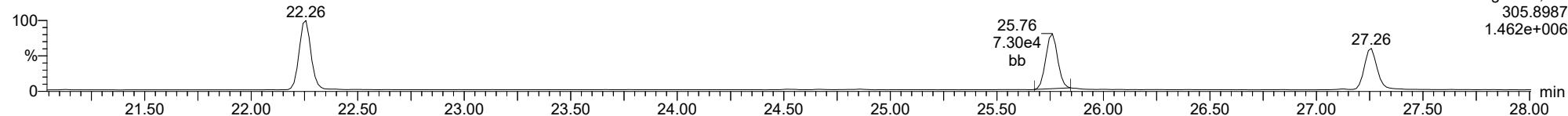
2378-TCDF

23030612



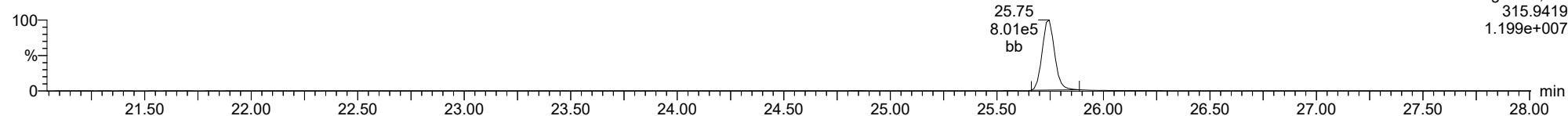
2378-TCDF

23030612



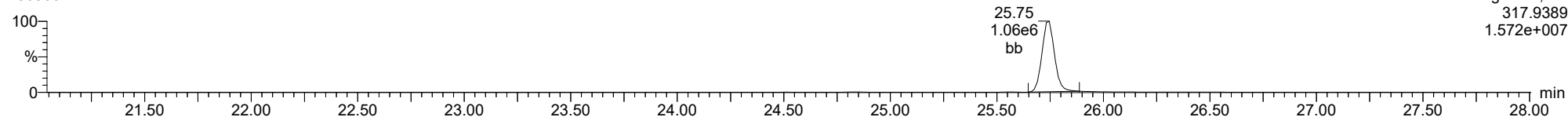
13C-2378-TCDF

23030612



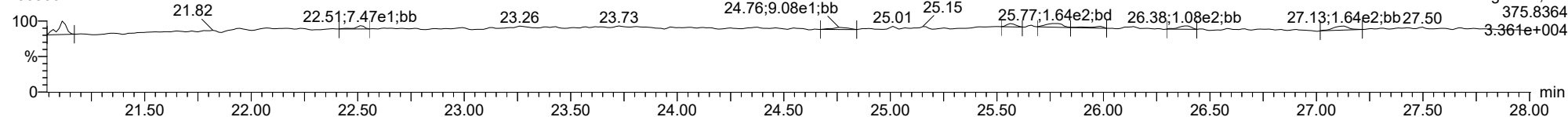
13C-2378-TCDF

23030612



FUNCTION1 HXCDPE

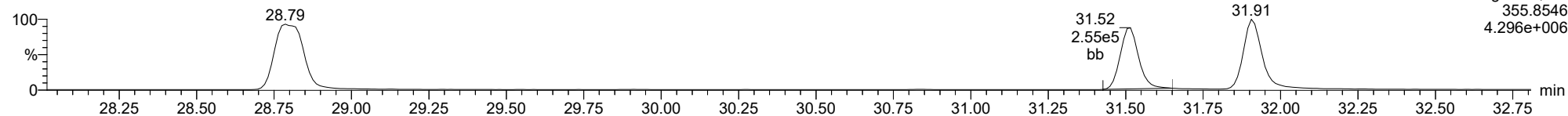
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

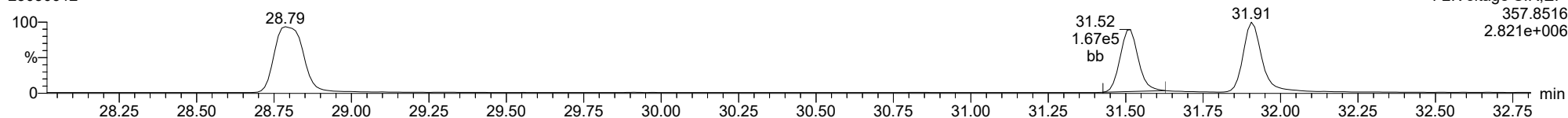
12378-PeCDD

23030612



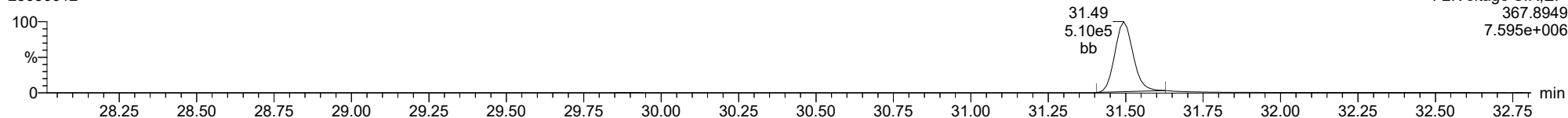
12378-PeCDD

23030612



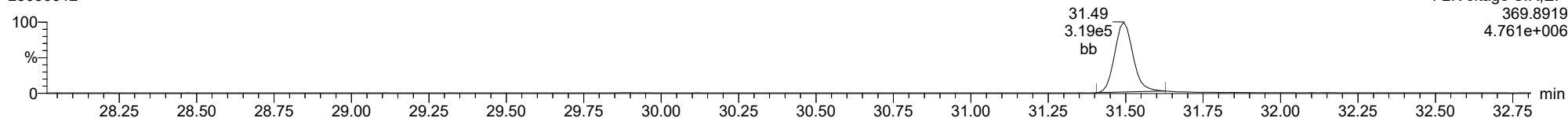
13C-12378-PeCDD

23030612



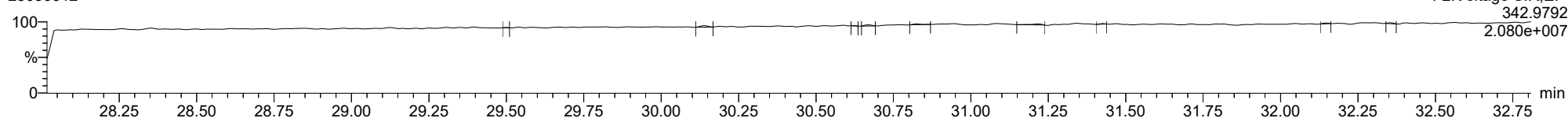
13C-12378-PeCDD

23030612



FUNCTION2 PFK

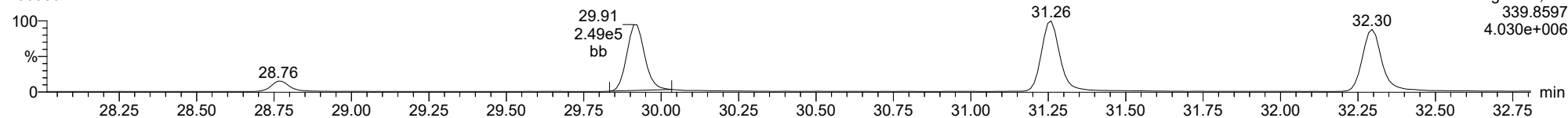
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

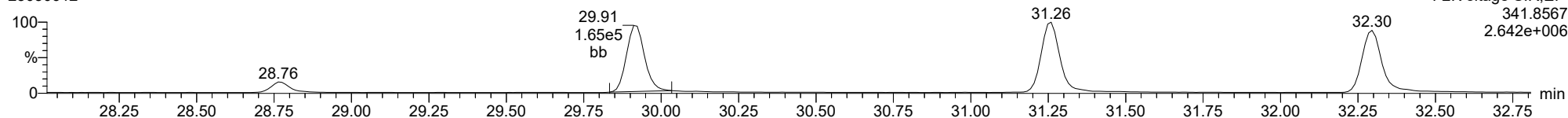
12378-PeCDF

23030612



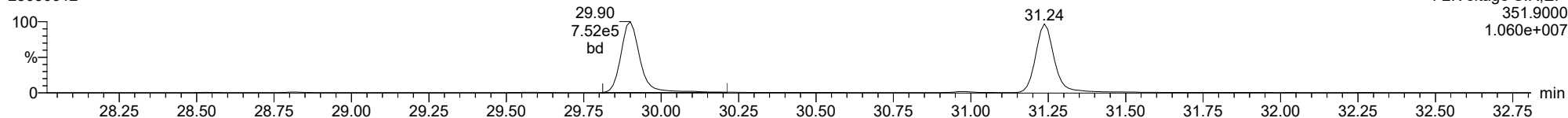
12378-PeCDF

23030612



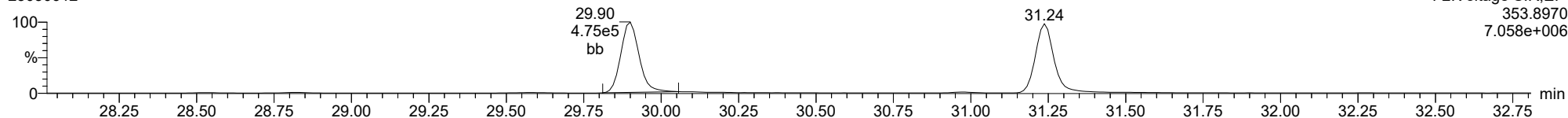
13C-12378-PeCDF

23030612



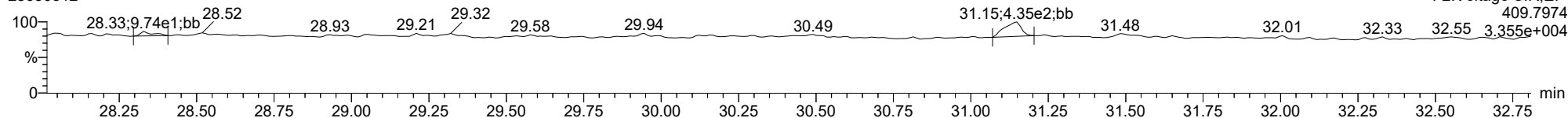
13C-12378-PeCDF

23030612



FUNCTION2 HPCDPE

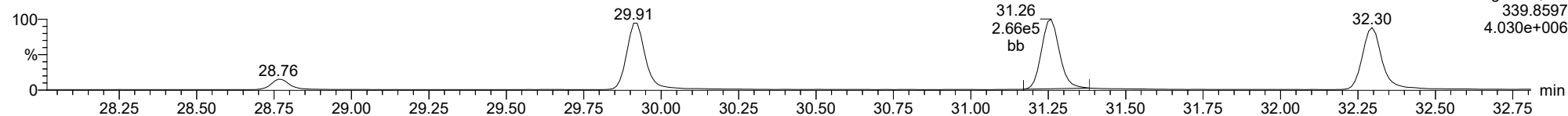
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

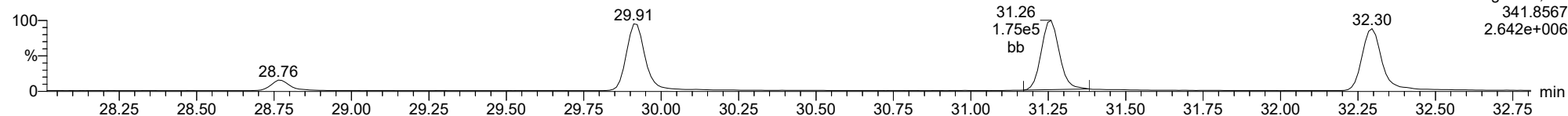
23478-PeCDF

23030612



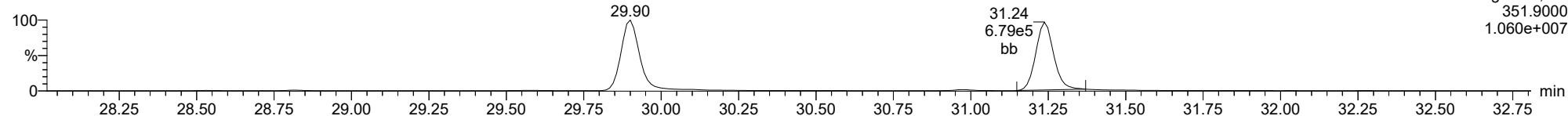
23478-PeCDF

23030612



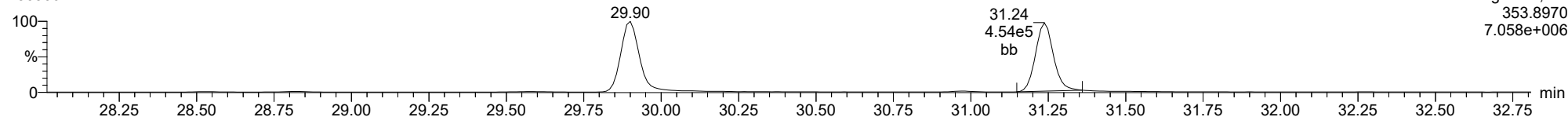
13C-23478-PeCDF

23030612



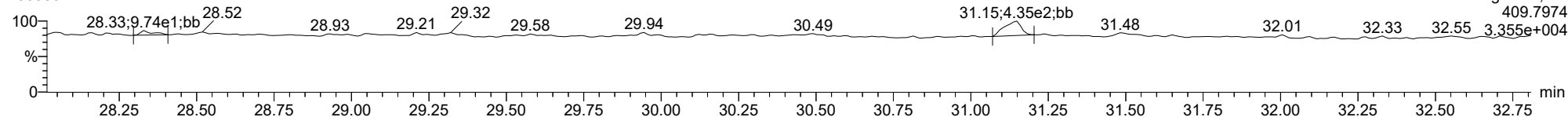
13C-23478-PeCDF

23030612



FUNCTION2 HPCDPE

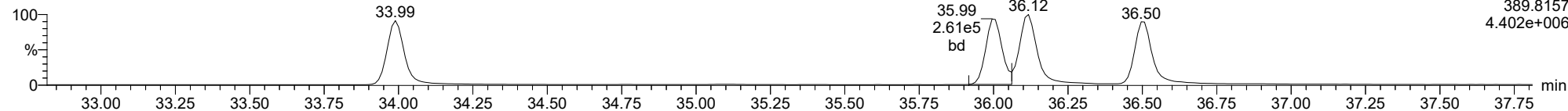
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

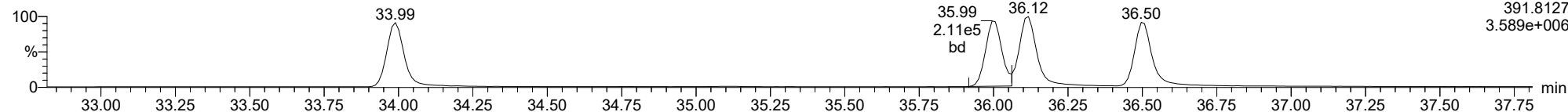
123478-HxCDD

23030612



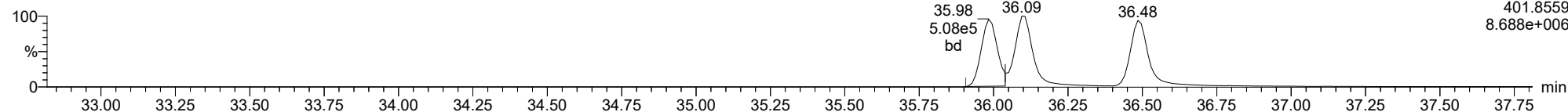
123478-HxCDD

23030612



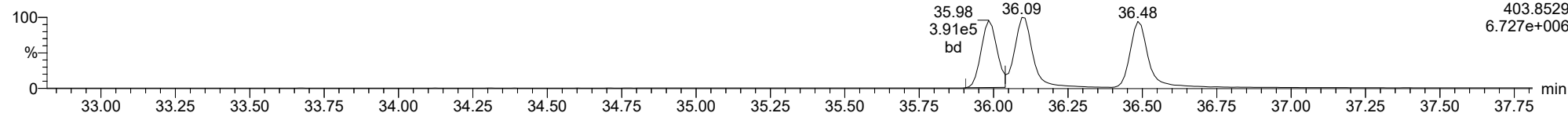
13C-123478-HxCDD

23030612



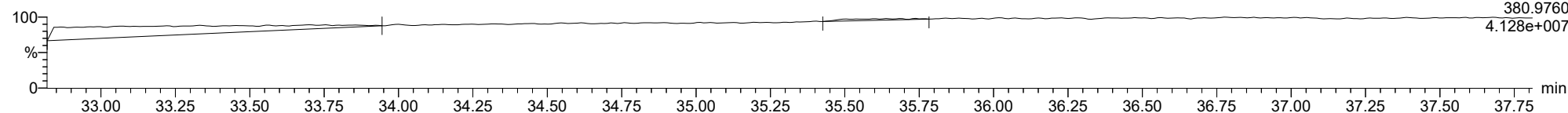
13C-123478-HxCDD

23030612



FUNCTION3 PFK

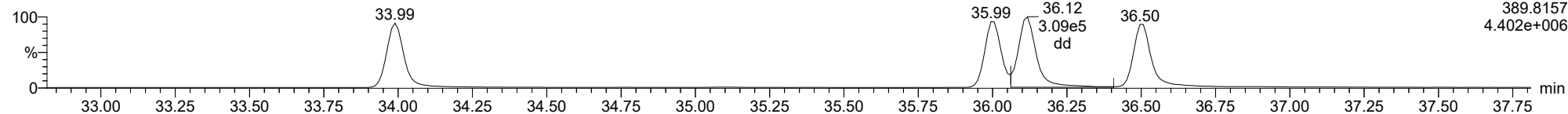
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

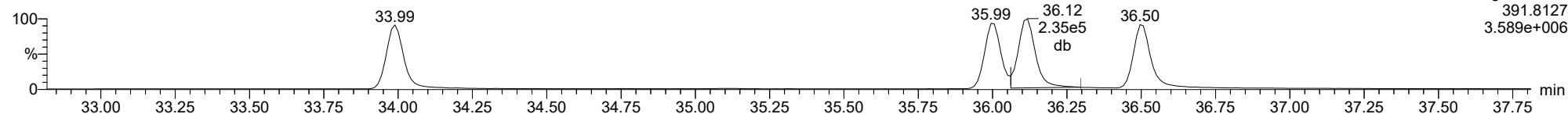
123678-HxCDD

23030612



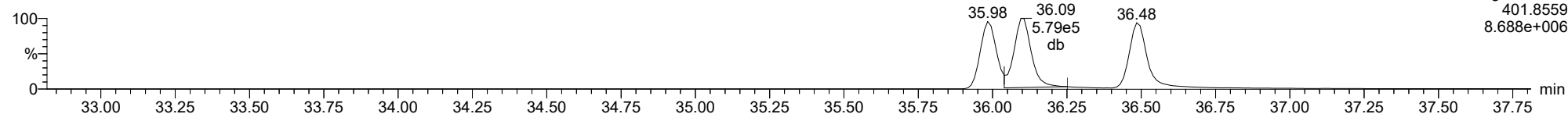
123678-HxCDD

23030612



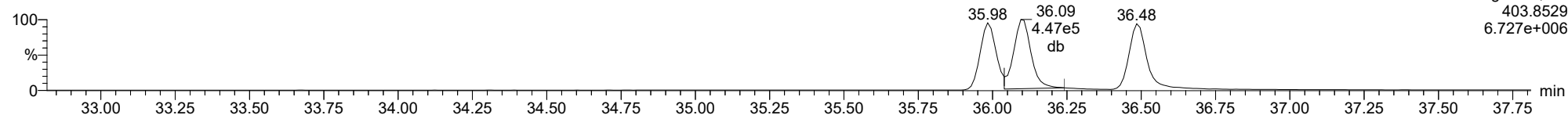
13C-123678-HxCDD

23030612



13C-123678-HxCDD

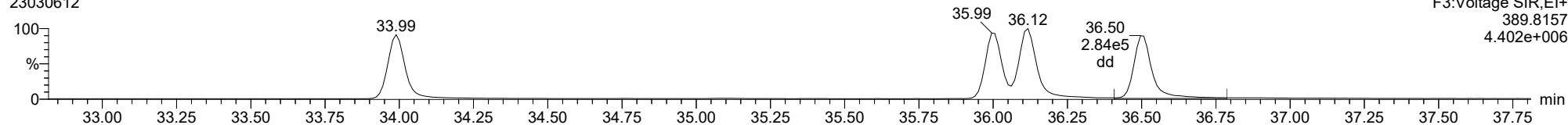
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

123789-HxCDD

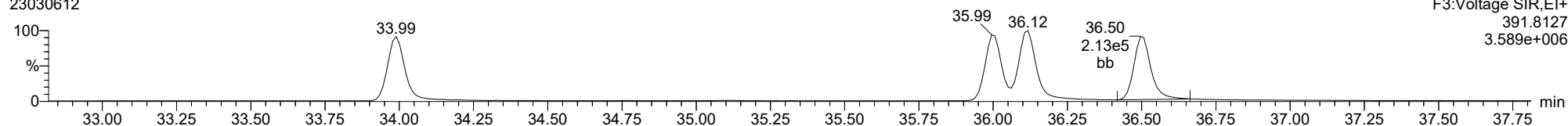
23030612



F3:Voltage SIR,EI+
389.8157
4.402e+006

123789-HxCDD

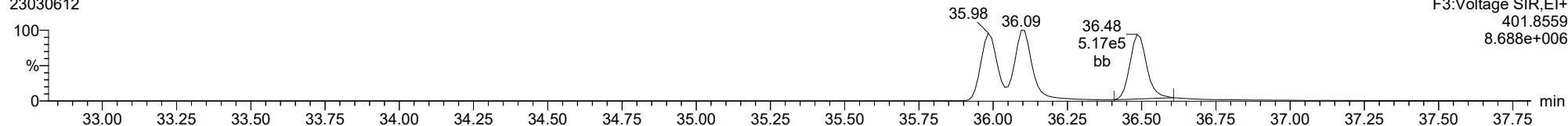
23030612



F3:Voltage SIR,EI+
391.8127
3.589e+006

13C-123789-HxCDD

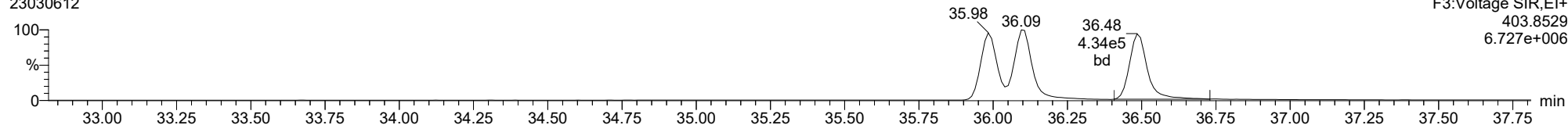
23030612



F3:Voltage SIR,EI+
401.8559
8.688e+006

13C-123789-HxCDD

23030612

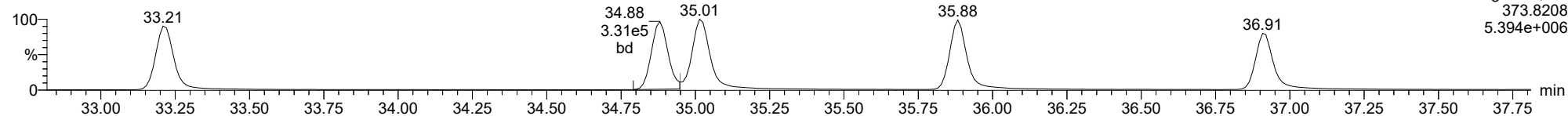


F3:Voltage SIR,EI+
403.8529
6.727e+006

ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

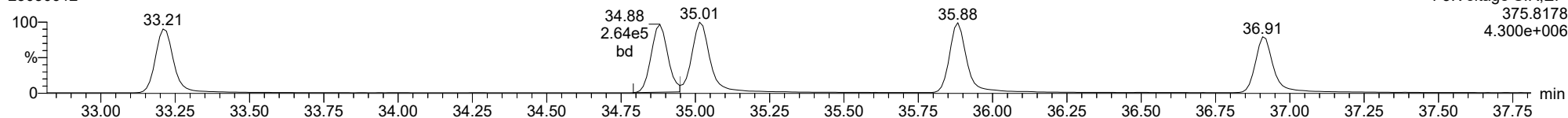
123478-HxCDF

23030612



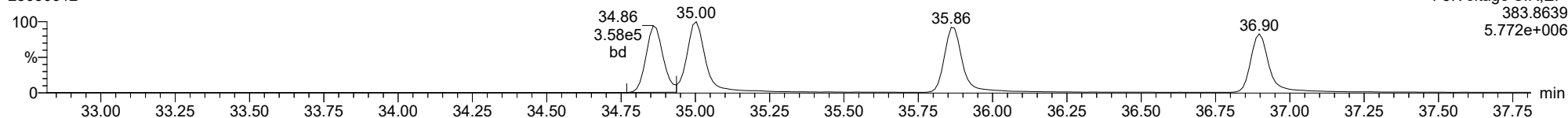
123478-HxCDF

23030612



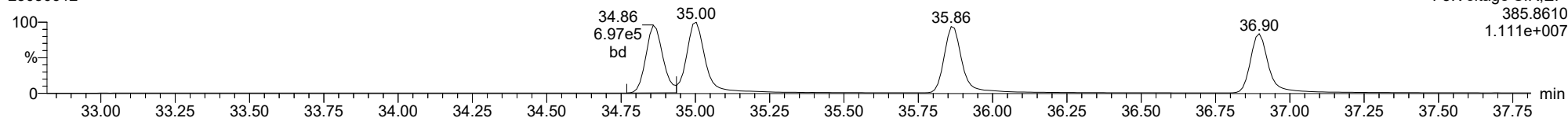
13C-123478-HxCDF

23030612



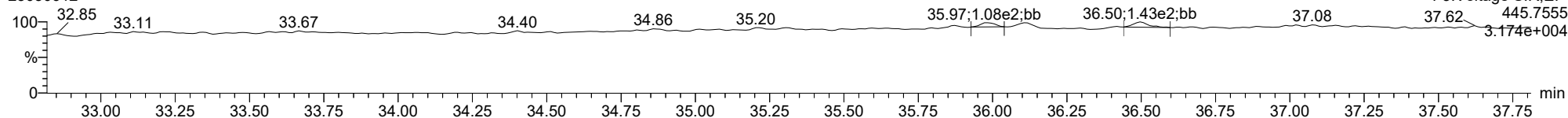
13C-123478-HxCDF

23030612



FUNCTION3 OCDPE

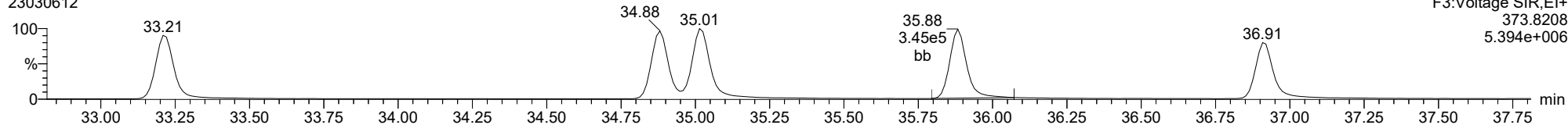
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

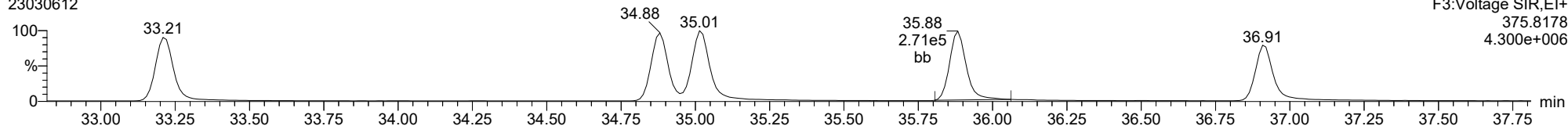
234678-HxCDF

23030612



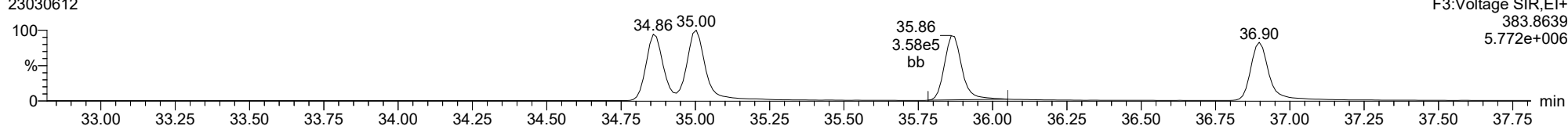
234678-HxCDF

23030612



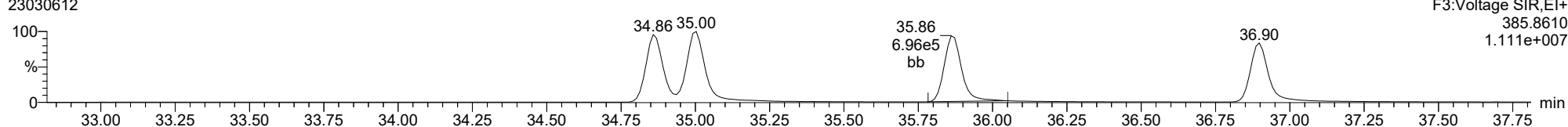
13C-234678-HxCDF

23030612



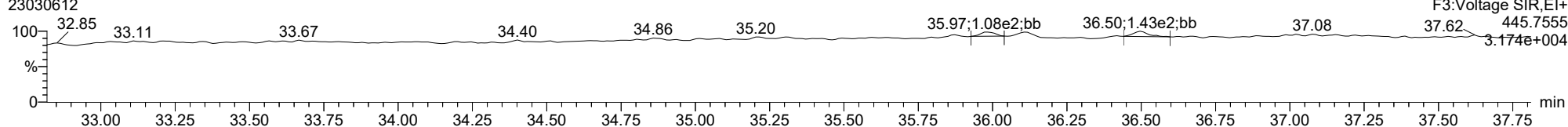
13C-234678-HxCDF

23030612



FUNCTION3 OCDPE

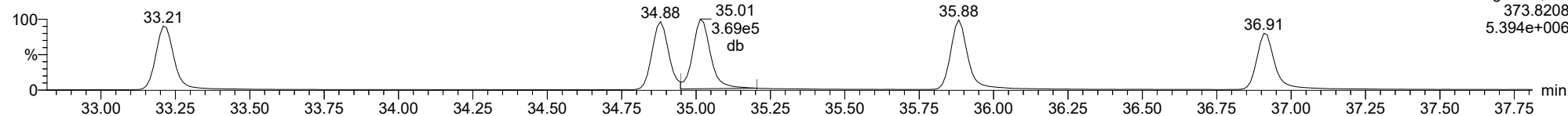
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

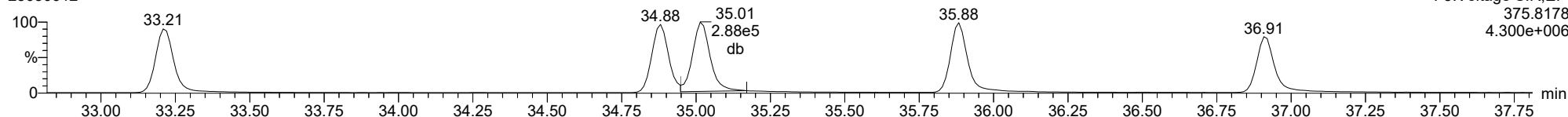
123678-HxCDF

23030612



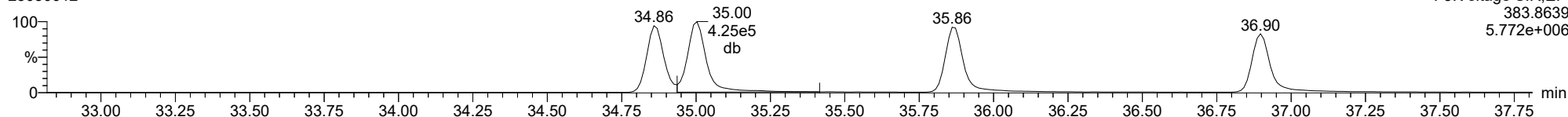
123678-HxCDF

23030612



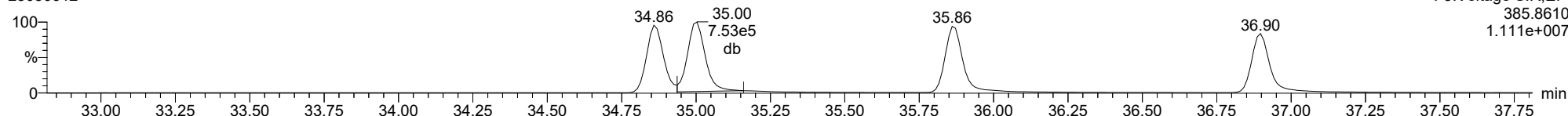
13C-123678-HxCDF

23030612



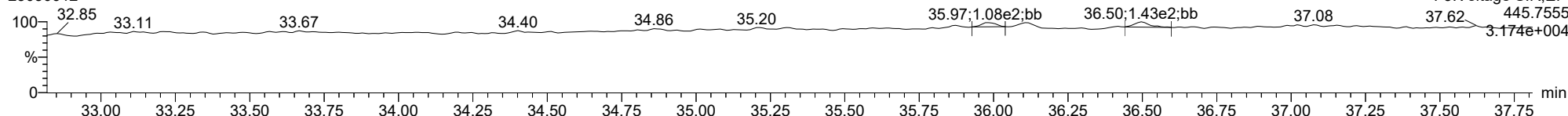
13C-123678-HxCDF

23030612



FUNCTION3 OCDPE

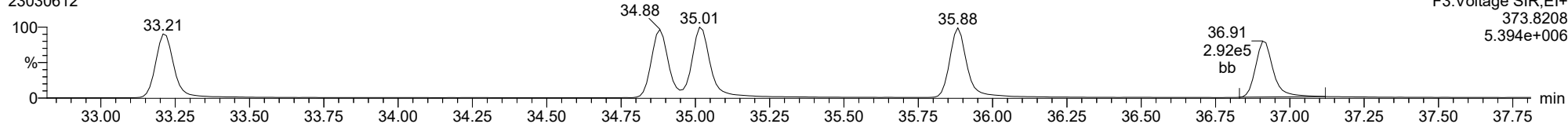
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

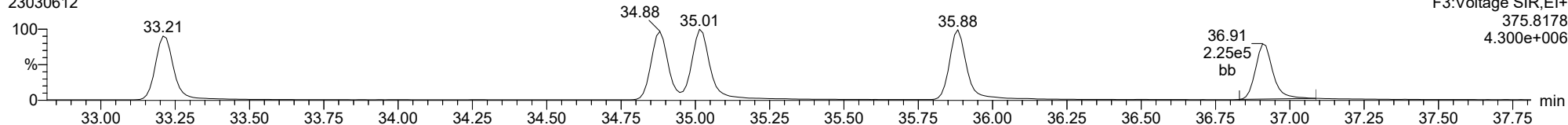
123789-HxCDF

23030612



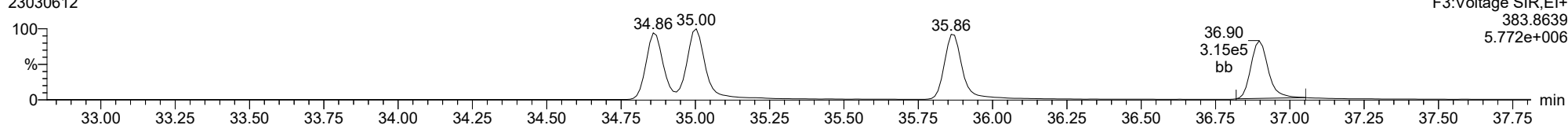
123789-HxCDF

23030612



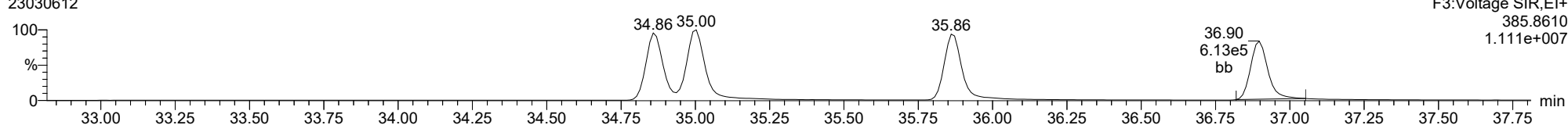
13C-123789-HxCDF

23030612



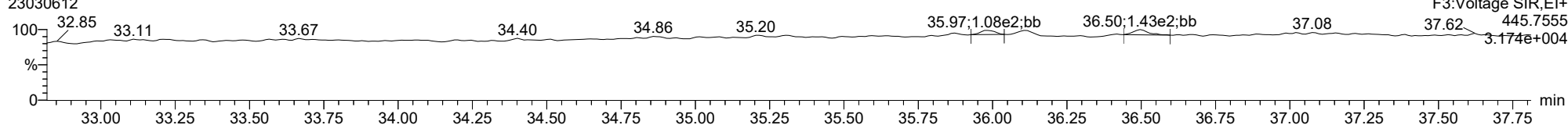
13C-123789-HxCDF

23030612



FUNCTION3 OCDPE

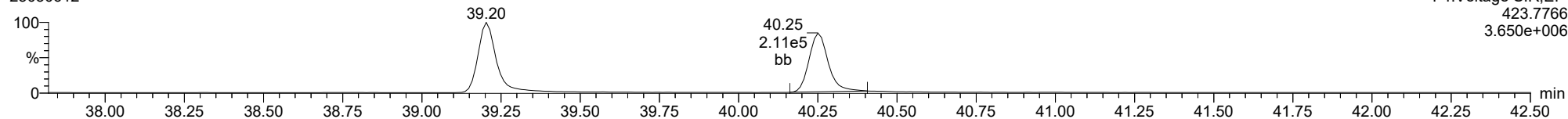
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

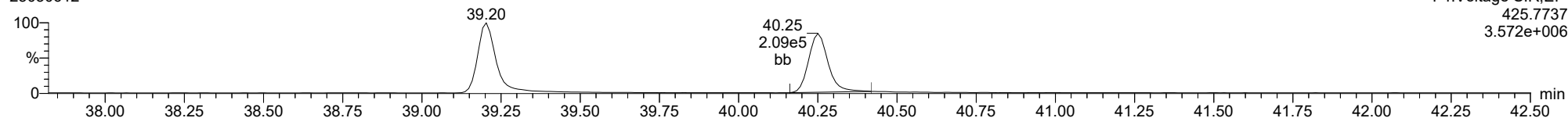
1234678-HpCDD

23030612



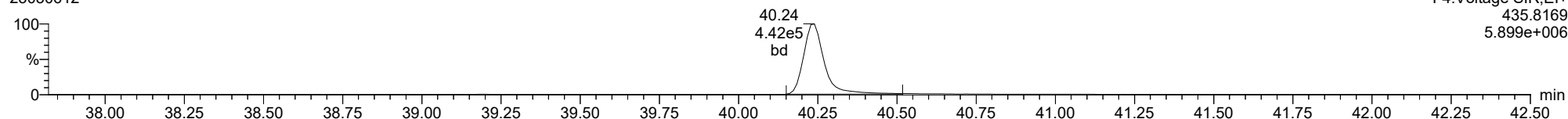
1234678-HpCDD

23030612



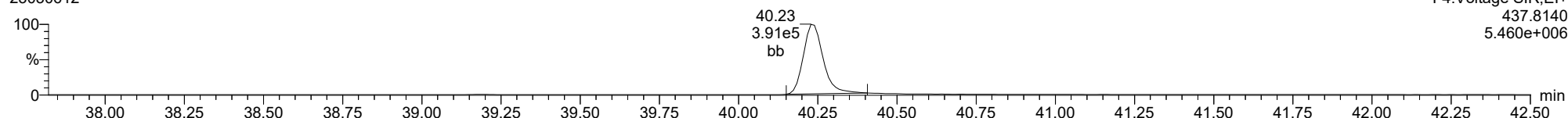
13C-1234678-HpCDD

23030612



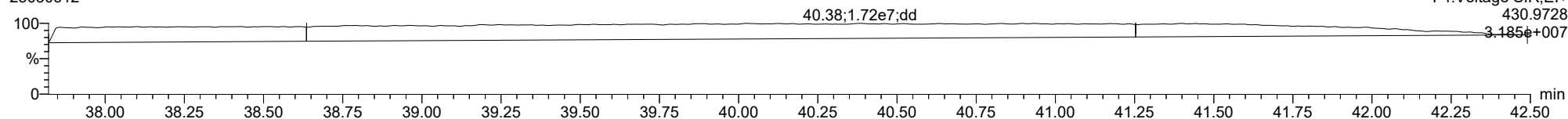
13C-1234678-HpCDD

23030612



FUNCTION4 PFK

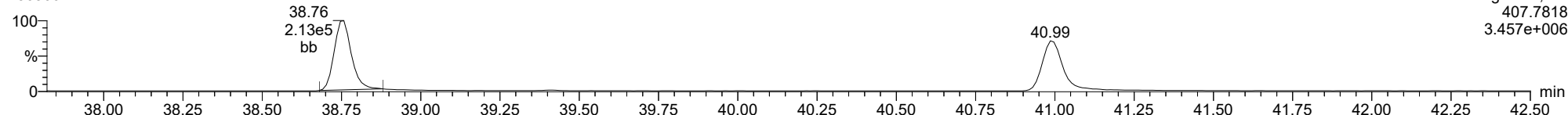
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

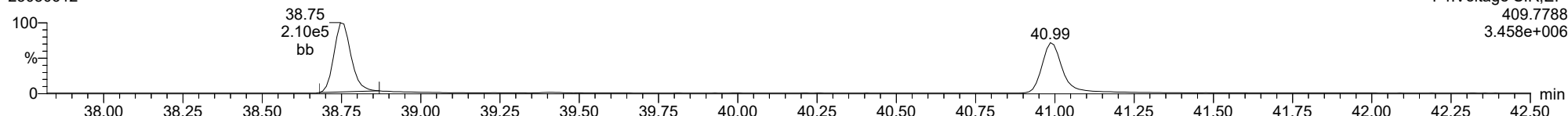
1234678-HpCDF

23030612



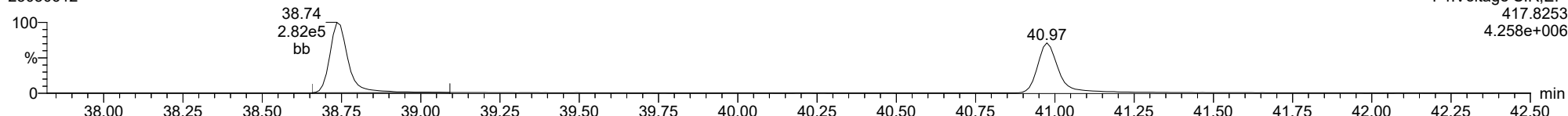
1234678-HpCDF

23030612



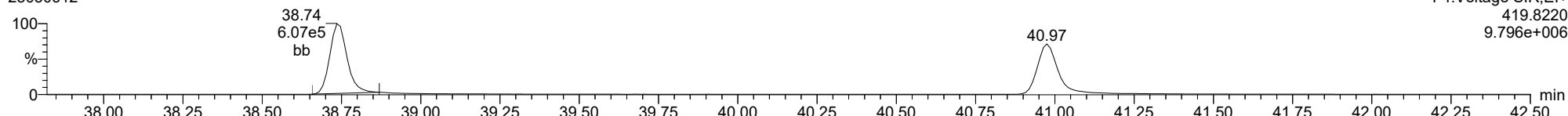
13C-1234678-HpCDF

23030612



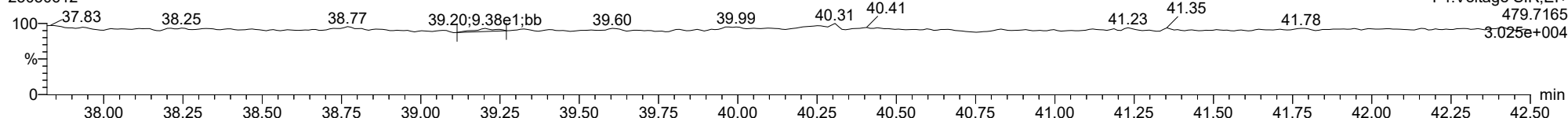
13C-1234678-HpCDF

23030612



FUNCTION4 NCDPE

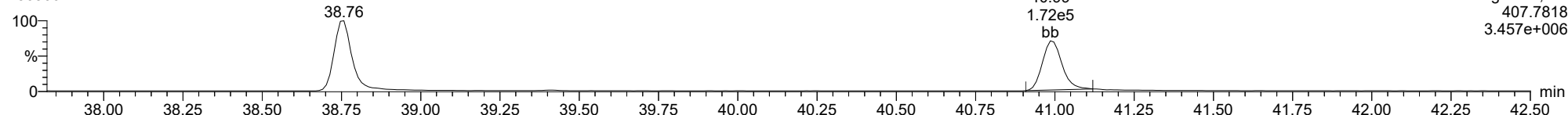
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

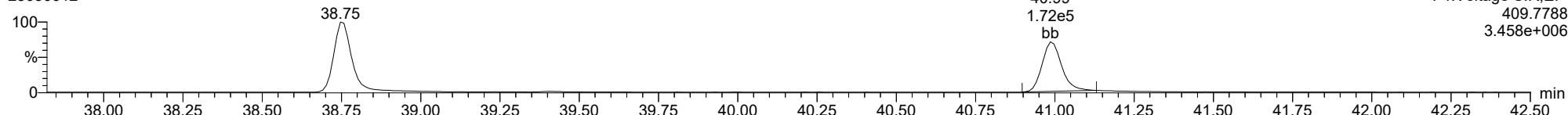
1234789-HpCDF

23030612



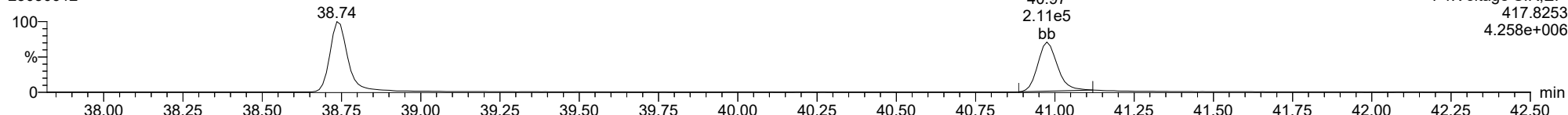
1234789-HpCDF

23030612



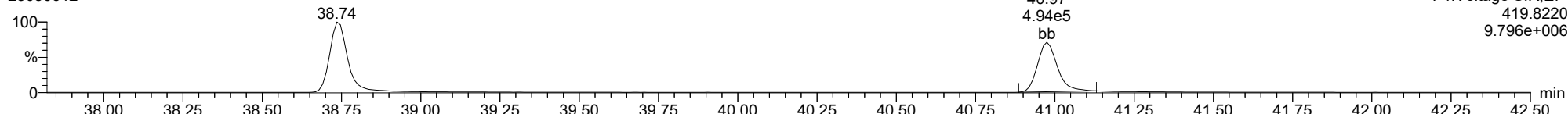
13C-1234789-HpCDF

23030612



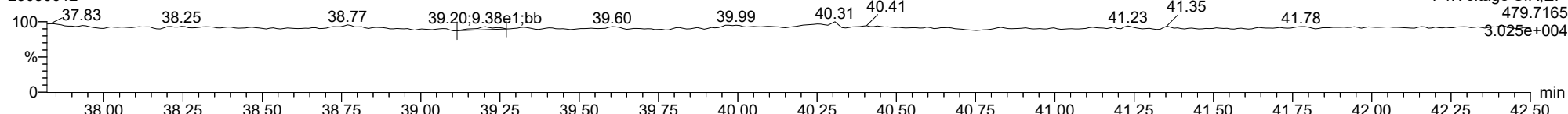
13C-1234789-HpCDF

23030612



FUNCTION4 NCDPE

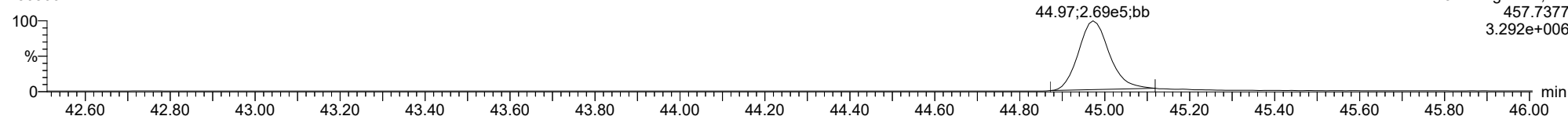
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

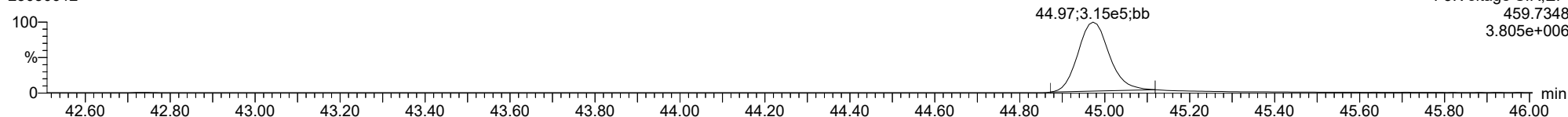
OCDD

23030612



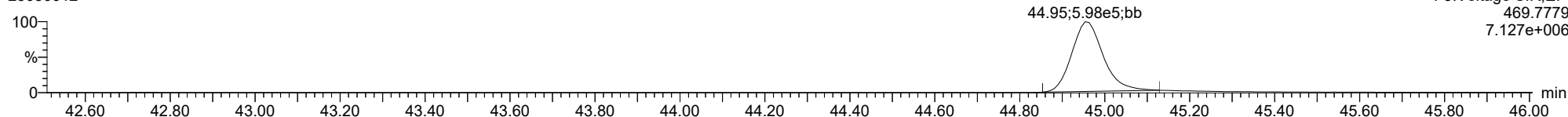
OCDD

23030612



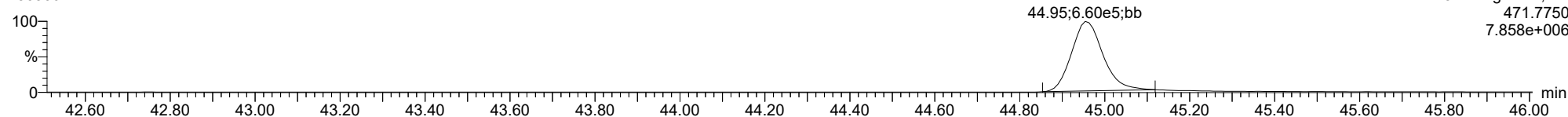
13C-OCDD

23030612



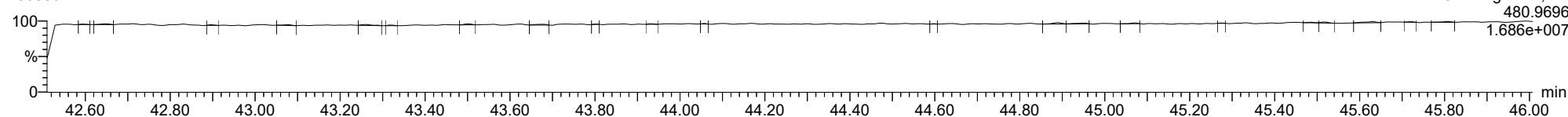
13C-OCDD

23030612

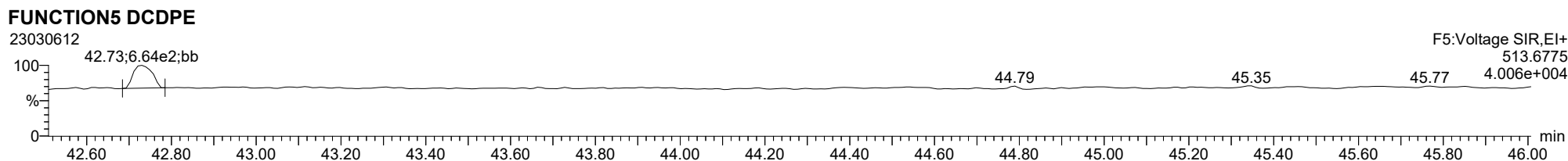
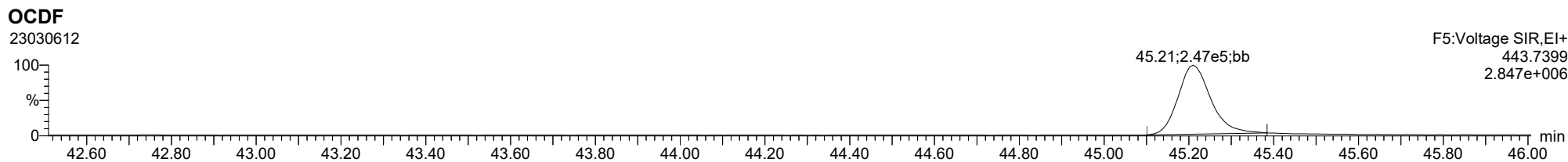
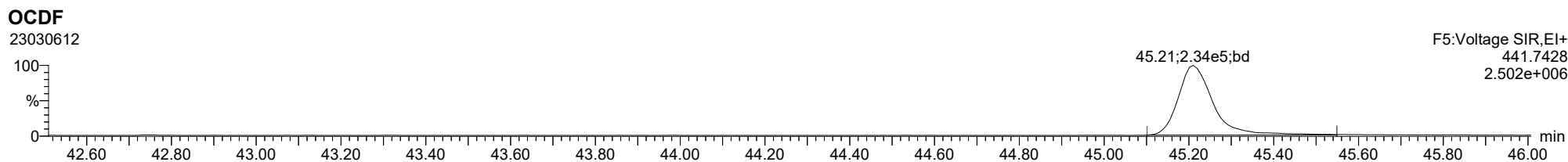


FUNCTION5 PFK

23030612



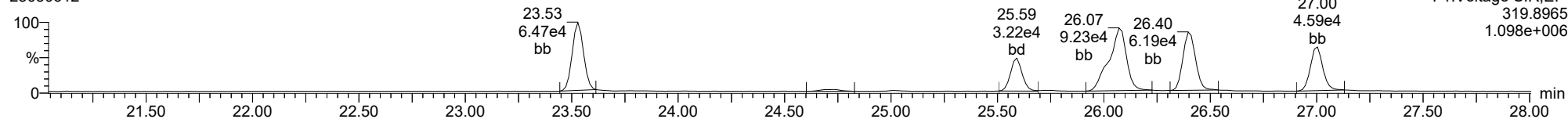
ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

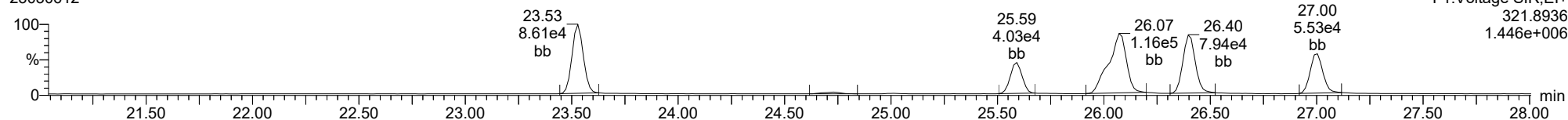
Total-tetradioxins

23030612



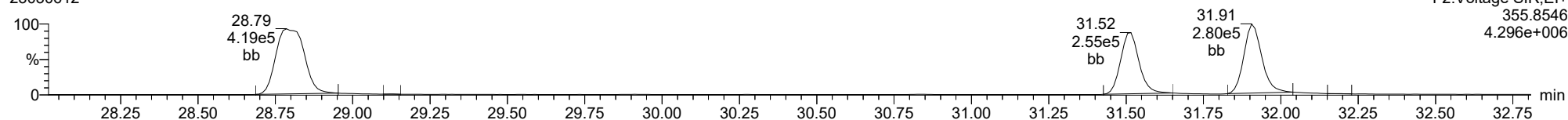
Total-tetradioxins

23030612



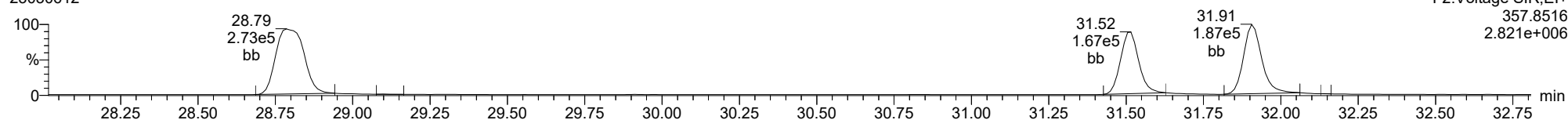
Total-pentadioxins

23030612



Total-pentadioxins

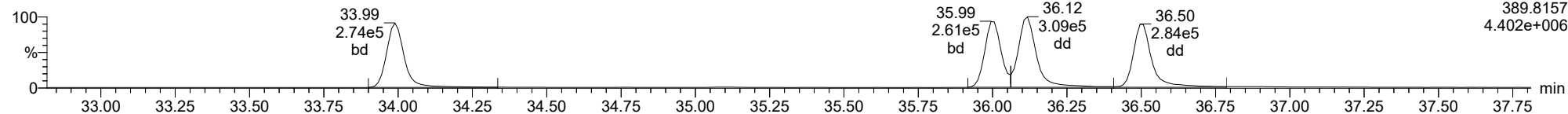
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

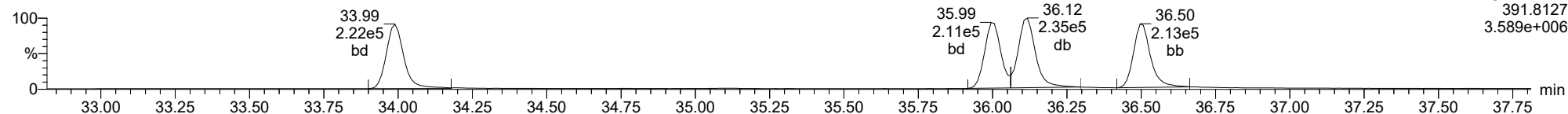
Total-hexadioxins

23030612



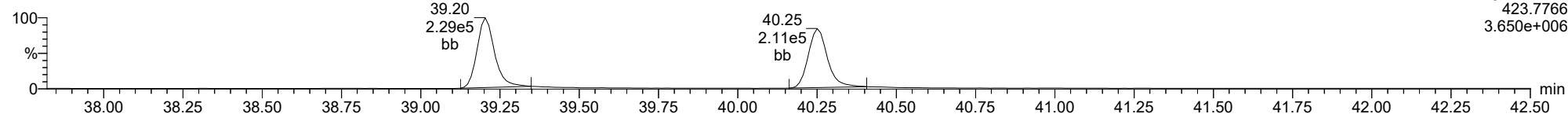
Total-hexadioxins

23030612



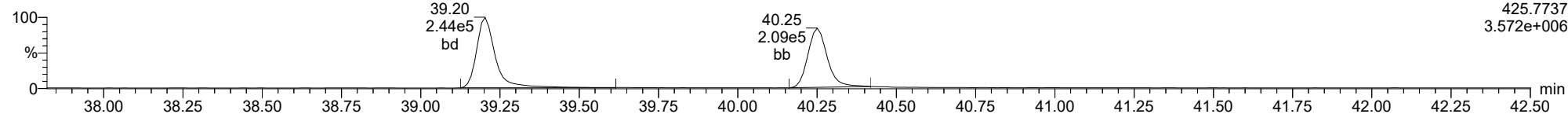
Total-heptadioxins

23030612



Total-heptadioxins

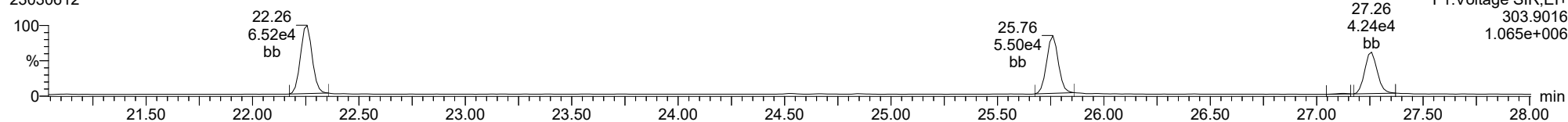
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

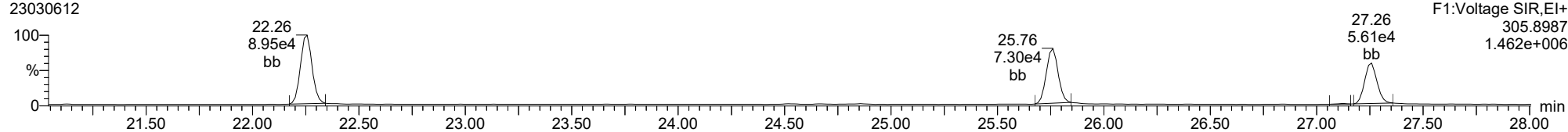
Total-tetrafurans

23030612



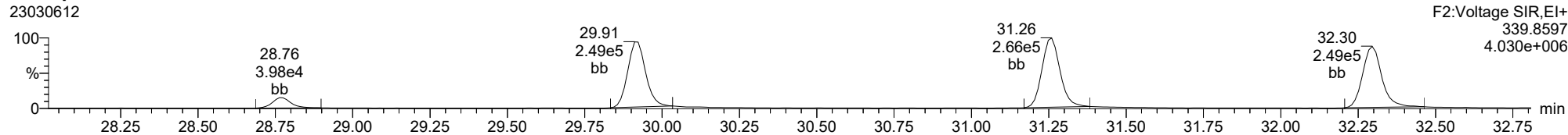
Total-tetrafurans

23030612



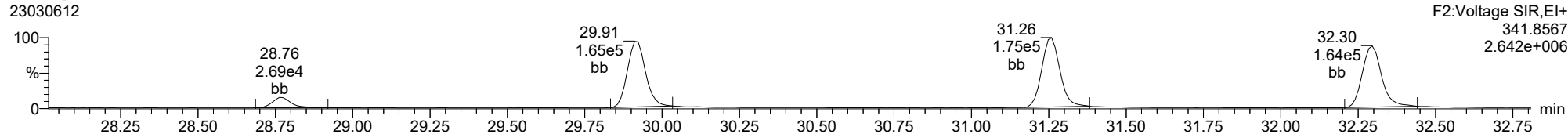
Total-pentafurans

23030612



Total-pentafurans

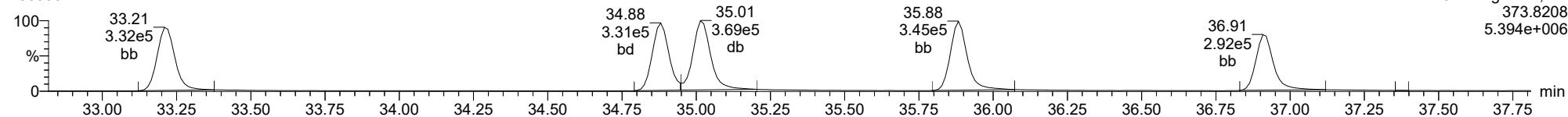
23030612



ID: CS3X2, Name: 23030612, Date: 06-Mar-2023, Time: 19:10:29, Conditions: AUTOSPEC01, User: pk

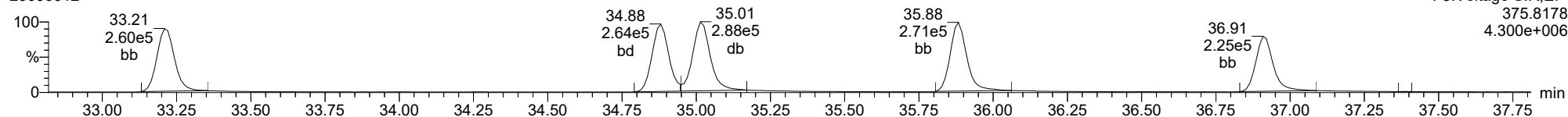
Total-hexafurans

23030612



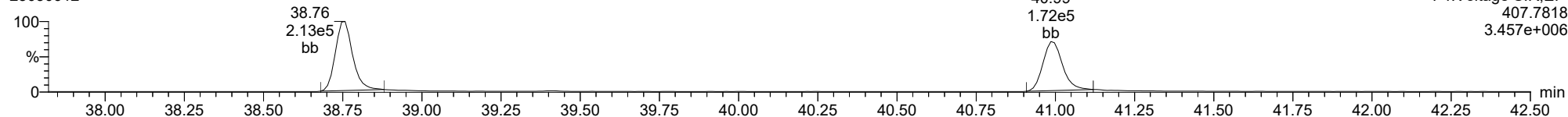
Total-hexafurans

23030612



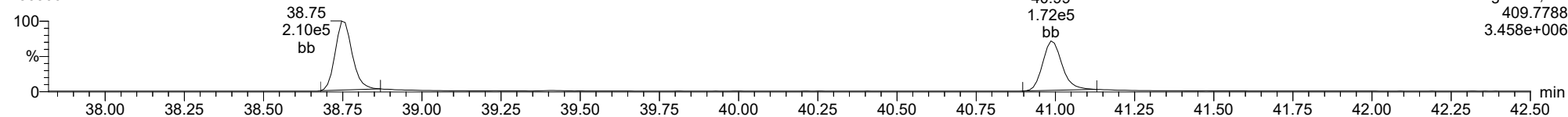
Total-heptafurans

23030612

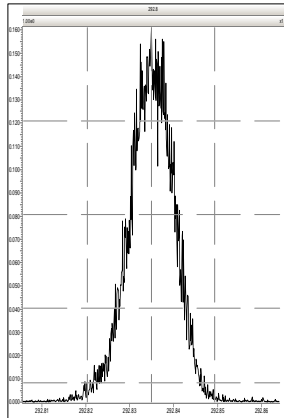


Total-heptafurans

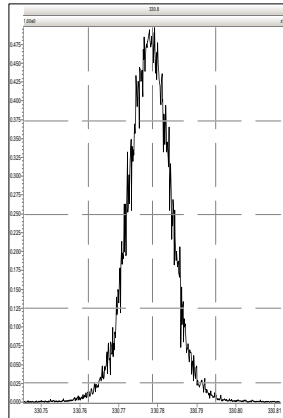
23030612



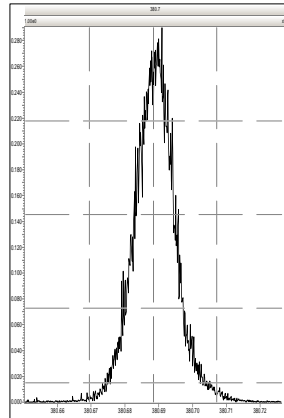
M 292.9824 R 12594



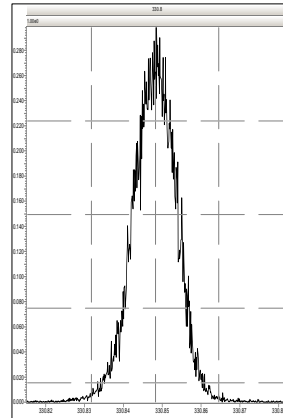
M 330.9792 R 13088



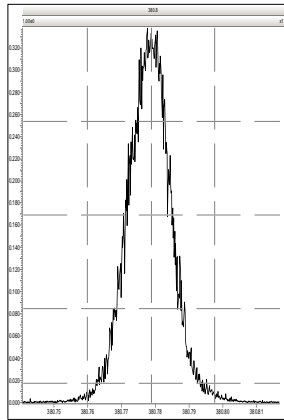
M 380.9760 R 13405



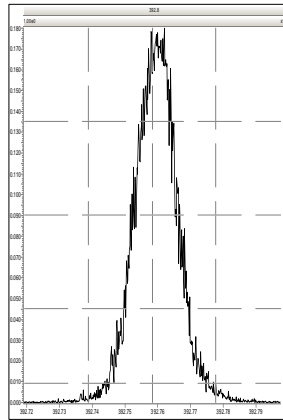
M 330.9792 R 12724



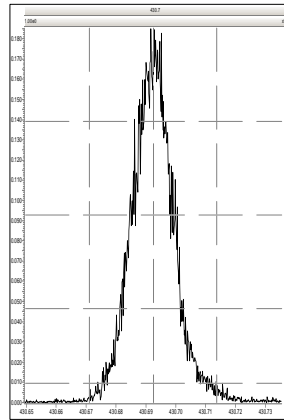
M 380.9760 R 12759



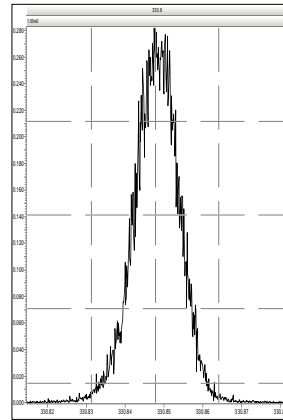
M 392.9760 R 13404



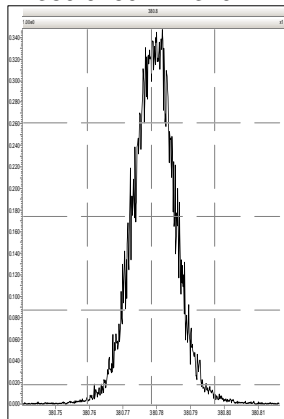
M 430.9728 R 12293



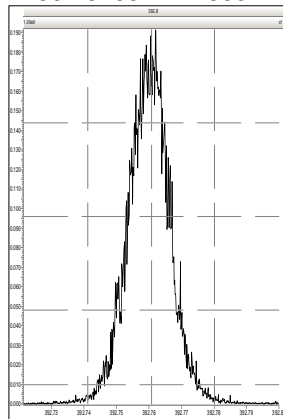
M 330.9792 R 12437



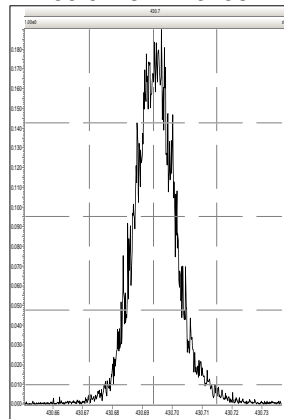
M 380.9760 R 13192



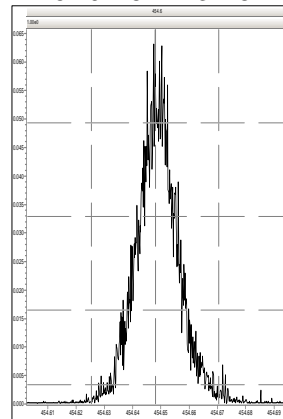
M 392.9760 R 12993



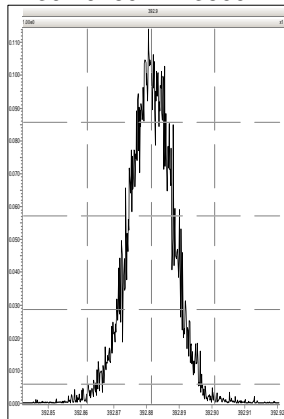
M 430.9728 R 13236



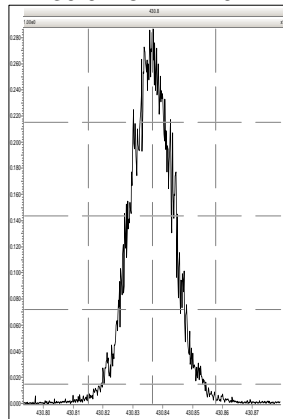
M 454.9728 R 13778



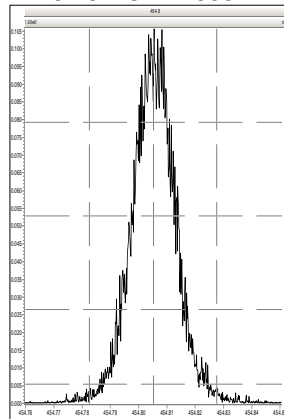
M 392.9760 R 13600



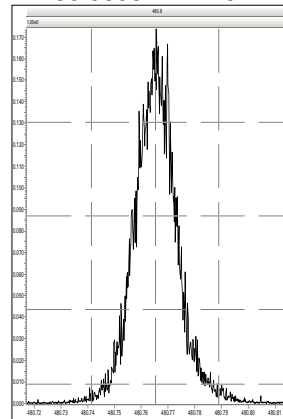
M 430.9728 R 12791



M 454.9728 R 13037

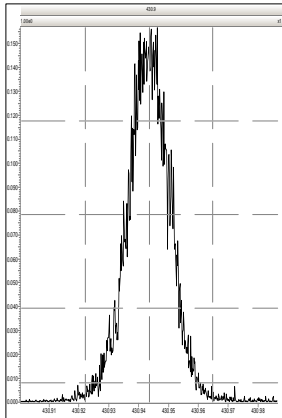


M 480.9696 R 12791

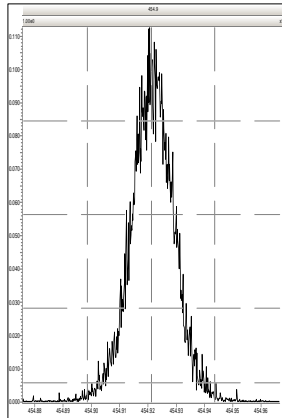


Printed: Monday, March 06, 2023 20:03:27 Pacific Standard Time

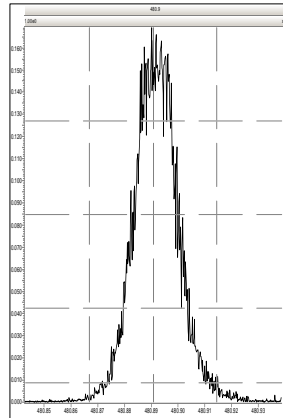
M 430.9728 R 13476



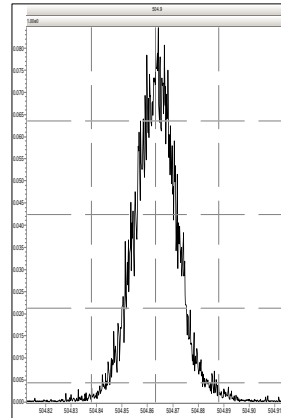
M 454.9728 R 13646



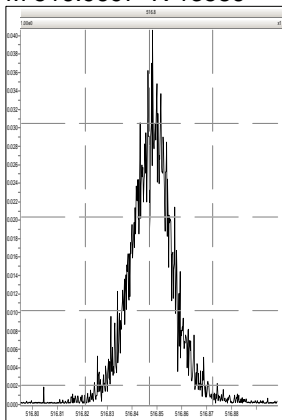
M 480.9696 R 12407



M 504.9696 R 13194



M 516.9697 R 13586

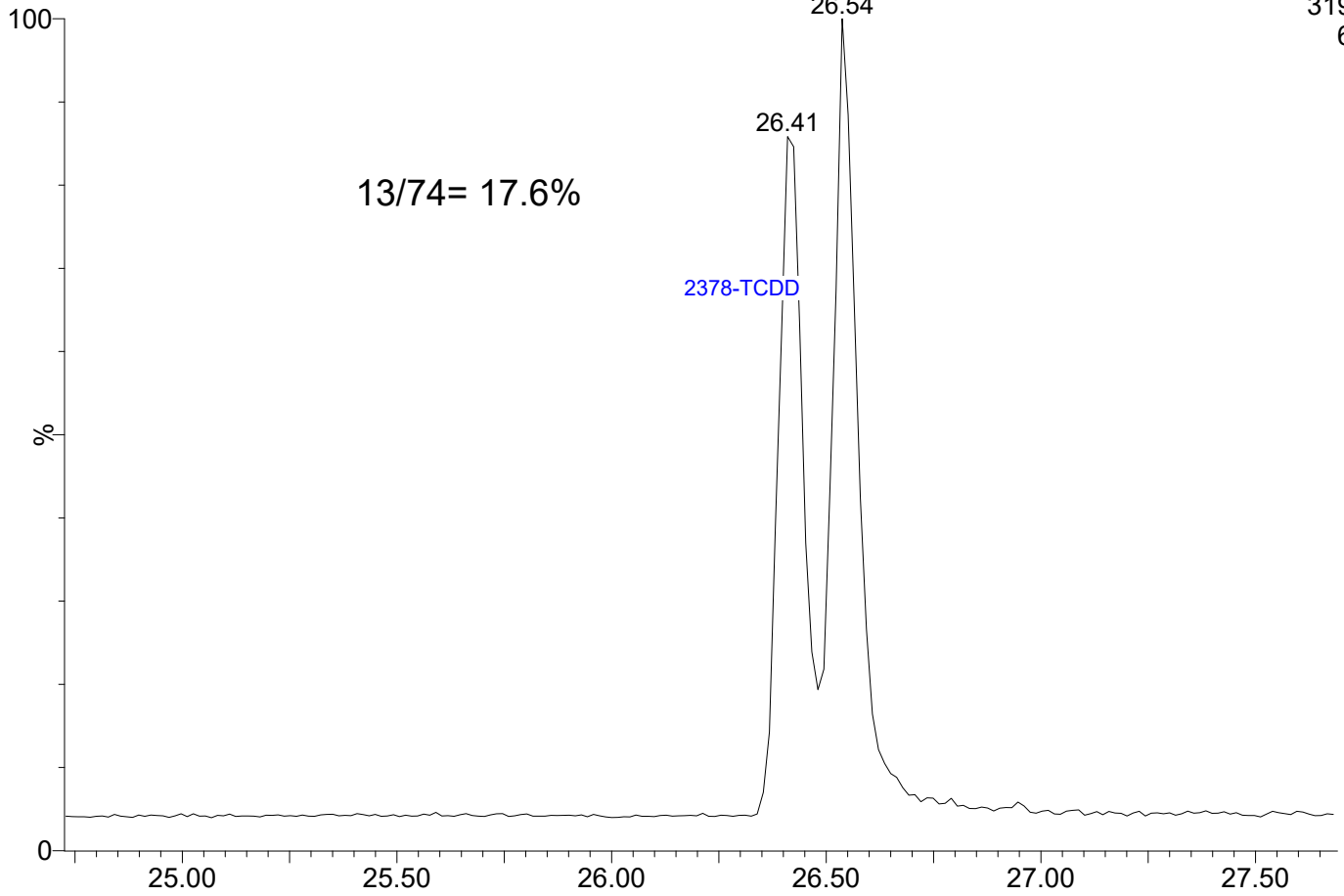


23030613

1: Voltage SIR 14 Channels EI+

319.8965

6.78e5

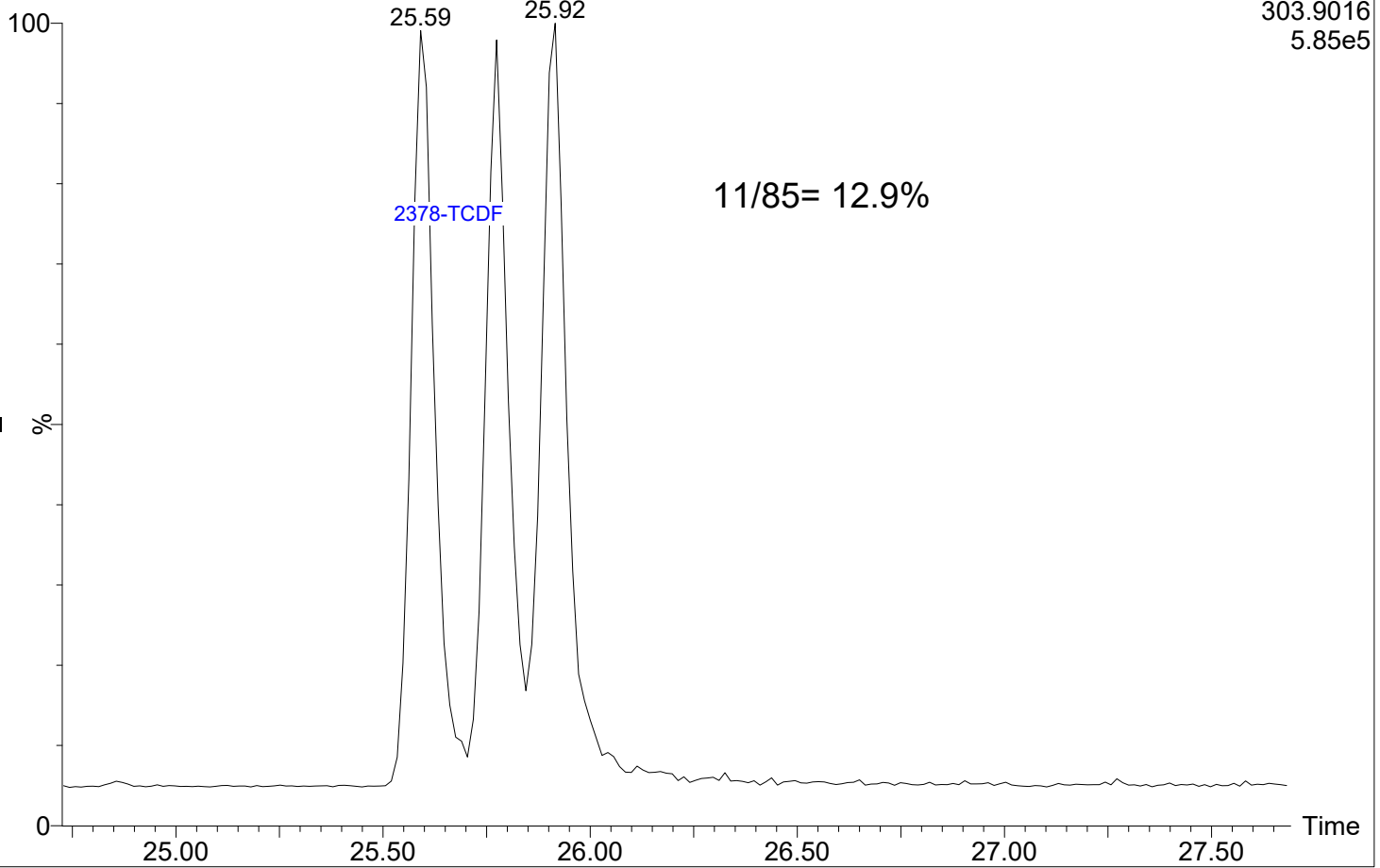


23030613

1: Voltage SIR 14 Channels EI+

303.9016

5.85e5





CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030623

Calibration Date: 03/03/2023

Sequence: SLC0081

Injection Date: 03/07/23

Lab Sample ID: SLC0081-CCV2

Injection Time: 04:16

Sequence Name: CS3X3

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.93	0.7015272	0.6962954		-0.7	+/-16
2,3,7,8-TCDD	A	10.000	9.30	1.1486620	1.0680310		-7.0	+/-22
1,2,3,7,8-PeCDF	A	50.000	50.3	0.6792300	0.6827034		0.5	+/-18
2,3,4,7,8-PeCDF	A	50.000	47.7	0.7861704	0.7492785		-4.7	+/-18
1,2,3,7,8-PeCDD	A	50.000	49.4	1.0218450	1.0105560		-1.1	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	47.1	1.1660380	1.0993570		-5.7	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	48.4	1.0907410	1.0553420		-3.2	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	48.6	1.1396990	1.1089020		-2.7	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	45.6	1.1370930	1.0374310		-8.8	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	49.4	0.9955689	0.9832304		-1.2	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	51.5	1.0009380	1.0302750		2.9	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	55.5	0.9071139	1.0072050		11.0	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	46.9	1.0029930	0.9413993		-6.1	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	49.3	0.9531152	0.9396412		-1.4	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	48.2	1.0390130	1.0020460		-3.6	+/-14
OCDF	A	100.00	85.2	0.7778078	0.6625677		-14.8	+/-37
OCDD	A	100.00	100	0.9199537	0.9223568		0.3	+/-21
13C12-2,3,7,8-TCDF	A	100.00	89.0	1.6201960	1.4419719		-11.0	+/-29
13C12-2,3,7,8-TCDD	A	100.00	100	1.1524090	1.1578808		0.5	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	95.9	1.2404520	1.1894129		-4.1	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	102	1.1177860	1.1405438		2.0	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	106	0.8288129	0.8791184		6.1	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	106	1.1683050	1.2412956		6.2	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	90.6	1.3864660	1.2555523		-9.4	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	89.6	1.1292560	1.0123268		-10.4	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	94.8	0.9317541	0.8835846		-5.2	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	97.0	0.9950393	0.9654653		-3.0	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	81.9	1.1566890	0.9478190		-18.1	+/-15 *
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	96.9	0.8952017	0.8671842		-3.1	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	92.8	0.7697516	0.7145819		-7.2	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	101	0.8401226	0.8484129		1.0	+/-18
13C12-OCDD	A	200.00	194	0.7674714	0.7438974		-3.1	+/-52
37C14-2,3,7,8-TCDD	A	10.000	8.86	1.2878040	1.1415726		-11.4	+/-21

* Values outside of QC limits

* Values outside of QC limits

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X3, **Name:** 23030623, **Date:** 07-Mar-2023, **Time:** 04:16:35, **Conditions:** AUTOSPEC01, **User:** pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.760	1.001	5.009e4	6.741e4	0.702	0.743	0.770	667	1092	7.98e5	1.07e6	1196.4	983.0	NO	bb	bb	9.925
12378-PeCDF	29.922	1.001	2.847e5	1.905e5	0.679	1.495	1.550	1527	2047	4.47e6	2.95e6	2927.0	1439.3	NO	bb	bb	50.256
23478-PeCDF	31.259	1.001	2.987e5	2.014e5	0.786	1.483	1.550	1527	2047	4.63e6	3.16e6	3033.4	1545.4	NO	bb	bb	47.654
123478-HxCDF	34.880	1.000	3.656e5	2.881e5	1.166	1.269	1.240	1525	1313	5.86e6	4.61e6	3844.5	3508.0	NO	bd	bd	47.141
234678-HxCDF	35.883	1.000	2.997e5	2.380e5	1.140	1.259	1.240	1525	1313	4.94e6	3.95e6	3242.8	3006.6	NO	bb	bb	48.649
123678-HxCDF	35.025	1.001	3.531e5	2.816e5	1.091	1.254	1.240	1525	1313	5.63e6	4.48e6	3692.6	3411.4	NO	db	db	48.377
123789-HxCDF	36.919	1.001	2.435e5	1.956e5	1.137	1.245	1.240	1525	1313	3.97e6	3.13e6	2606.8	2386.9	NO	bb	bb	45.618
1234678-HpCDF	38.757	1.000	1.945e5	1.966e5	1.003	0.989	1.050	1514	1216	3.21e6	3.23e6	2118.1	2660.3	NO	bb	bb	46.930
1234789-HpCDF	40.997	1.000	1.606e5	1.610e5	0.953	0.997	1.050	1514	1216	2.41e6	2.42e6	1591.2	1988.8	NO	bb	bb	49.293
OCDF	45.219	1.005	2.228e5	2.494e5	0.778	0.893	0.890	2056	920	2.67e6	3.02e6	1298.2	3284.7	NO	bb	bb	85.184
2378-TCDD	26.396	1.001	6.374e4	8.098e4	1.149	0.787	0.770	899	1349	9.84e5	1.23e6	1094.0	911.0	NO	bb	bb	9.298
12378-PeCDD	31.515	1.001	3.135e5	2.063e5	1.022	1.519	1.550	1509	1499	4.98e6	3.28e6	3298.8	2189.9	NO	bb	bb	49.448
123478-HxCDD	36.006	1.001	2.501e5	2.046e5	0.996	1.222	1.240	1502	1178	4.16e6	3.38e6	2767.3	2868.9	NO	bd	bd	49.380
123678-HxCDD	36.117	1.000	2.562e5	2.115e5	1.001	1.211	1.240	1502	1178	4.14e6	3.44e6	2758.0	2922.8	NO	db	db	51.465
123789-HxCDD	36.507	1.011	2.513e5	2.103e5	0.907	1.195	1.240	1502	1178	4.17e6	3.40e6	2775.5	2887.8	NO	bb	bb	55.517
1234678-HpCDD	40.262	1.001	2.079e5	1.994e5	1.039	1.043	1.050	1284	1369	3.12e6	3.08e6	2432.8	2248.9	NO	bb	bb	48.221
OCDD	44.981	1.000	3.023e5	3.551e5	0.920	0.851	0.890	1848	1446	3.74e6	4.37e6	2025.1	3023.4	NO	bb	bb	100.261
13C-2378-TCDF	25.746	1.007	7.284e5	9.591e5	1.620	0.759	0.770	1604	1473	1.13e7	1.49e7	7053.5	10135.5	NO	bb	bb	89.000
13C-12378-PeCDF	29.900	1.170	8.360e5	5.559e5	1.240	1.504	1.550	1259	1618	1.31e7	8.78e6	10425.6	5424.3	NO	bb	bb	95.885
13C-23478-PeCDF	31.237	1.222	8.002e5	5.346e5	1.118	1.497	1.550	1259	1618	1.26e7	8.46e6	10009.2	5225.6	NO	bb	bb	102.036
13C-123478-HxCDF	34.869	0.956	4.014e5	7.878e5	1.168	0.510	0.510	1715	2003	6.38e6	1.26e7	3718.6	6278.0	NO	bd	bd	106.248
13C-123678-HxCDF	35.003	0.959	4.062e5	7.966e5	1.386	0.510	0.510	1715	2003	6.60e6	1.29e7	3846.0	6448.6	NO	db	db	90.558
13C-234678-HxCDF	35.872	0.983	3.252e5	6.446e5	1.129	0.504	0.510	1715	2003	5.51e6	1.07e7	3212.7	5346.0	NO	bb	bb	89.645
13C-123789-HxCDF	36.897	1.011	2.885e5	5.580e5	0.932	0.517	0.510	1715	2003	4.81e6	9.38e6	2801.3	4683.3	NO	bb	bb	94.830
13C-1234678-HpCDF	38.746	1.062	2.509e5	5.799e5	0.895	0.433	0.440	1151	1645	4.19e6	9.60e6	3640.7	5839.5	NO	bb	bb	96.870
13C-1234789-HpCDF	40.986	1.123	2.085e5	4.761e5	0.770	0.438	0.440	1151	1645	3.03e6	6.97e6	2633.1	4237.9	NO	bb	bb	92.833
13C-1234-TCDD	25.562	0.000	5.188e5	6.515e5	1.000	0.796	0.770	1236	699	8.07e6	1.02e7	6532.3	14580.9	NO	bb	bb	100.000
13C-2378-TCDD	26.382	1.032	6.001e5	7.550e5	1.152	0.795	0.770	1236	699	9.39e6	1.18e7	7593.3	16870.3	NO	bb	bb	100.475
13C-12378-PeCDD	31.493	1.232	6.381e5	3.907e5	0.829	1.633	1.550	873	1257	9.88e6	6.16e6	11325.7	4901.5	NO	bb	bb	106.070
13C-123478-HxCDD	35.983	0.986	5.206e5	4.043e5	0.995	1.288	1.240	1071	924	8.35e6	6.49e6	7796.0	7022.6	NO	bd	bd	97.028
13C-123678-HxCDD	36.106	0.990	5.118e5	3.962e5	1.157	1.292	1.240	1071	924	8.36e6	6.52e6	7804.9	7054.8	NO	db	db	81.942
13C-1234678-HpCDD	40.239	1.103	4.244e5	3.884e5	0.840	1.093	1.050	1042	851	6.39e6	5.97e6	6129.9	7022.6	NO	bd	bb	100.987
13C-OCDD	44.972	1.233	6.733e5	7.520e5	0.767	0.895	0.890	2338	1248	8.15e6	9.12e6	3483.9	7302.7	NO	bb	bb	193.857
13C-123789-HxCDD	36.485	0.000	5.371e5	4.209e5	1.000	1.276	1.240	1071	924	8.74e6	6.91e6	8159.4	7470.8	NO	bb	bb	100.000
37CL-2378-TCDD	26.396	1.033	1.336e5		1.288			979		2.03e6		2078.5			bb		8.864

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.257	0.864	5.523e4	7.593e4	0.802	0.727	0.770	667	1092	9.01e5	1.22e6	1351.0	1112.8	NO	bb	bb	9.698
1289-TCDF	27.257	1.059	4.958e4	6.712e4	0.678	0.739	0.770	667	1092	7.93e5	1.04e6	1189.1	954.1	NO	db	db	10.200
13468-PECDF	27.116	0.907	5.047e5	3.257e5	1.246	1.549	1.550	550	700	7.94e6	5.09e6	14435.1	7276.5	NO	bb	bb	47.863
12389-PECDF	32.295	1.080	2.900e5	1.948e5	0.496	1.488	1.550	1527	2047	4.45e6	2.93e6	2917.7	1432.1	NO	bb	bb	70.172
123468-HXCDF	33.220	0.953	3.786e5	3.008e5	1.169	1.259	1.240	1525	1313	5.98e6	4.76e6	3921.9	3626.5	NO	bb	bb	48.869
1368-TCDD	23.528	0.892	5.505e4	7.032e4	1.015	0.783	0.770	899	1349	8.87e5	1.15e6	986.3	850.0	NO	bb	bb	9.111
1289-TCDD	27.003	1.024	5.514e4	7.127e4	0.909	0.774	0.770	899	1349	8.48e5	1.11e6	943.5	822.7	NO	bb	bb	10.266
12479-PECDD	28.786	0.914	4.975e5	3.240e5	2.301	1.535	1.550	1509	1499	4.87e6	3.13e6	3224.5	2088.5	NO	bb	bb	34.697
12389-PECDD	31.906	1.013	3.685e5	2.418e5	1.184	1.524	1.550	1509	1499	5.77e6	3.81e6	3825.2	2541.1	NO	bb	bb	50.120
124679-HXCDD	33.989	0.945	3.200e5	2.635e5	1.115	1.214	1.240	1502	1178	5.10e6	4.16e6	3396.9	3531.5	NO	bb	bb	56.559
1234679-HPCDD	39.214	0.975	2.291e5	2.235e5	1.137	1.025	1.050	1284	1369	3.82e6	3.74e6	2974.2	2727.5	NO	bb	bb	48.984
Total-tetrafurans			1.568e5		0.727			667		2.52e6							30.182
Total-penta1			5.047e5					550		7.94e6							47.863
Total-pentafurans			9.178e5		0.654			1527		1.43e7							176.348
Total-hexafurans			1.641e6		1.141			1525		2.64e7							238.654
Total-heptafurans			3.571e5		0.978			1514		5.64e6							96.724
Total-Furans			3.800e6		0.922			667		5.94e7							674.955
Total-tetradoxins			3.005e5		1.024			899		4.21e6							49.384
Total-pentadoxins			1.179e6		1.502			1509		1.56e7							134.265
Total-hexadoxins			1.078e6		1.005			1502		1.76e7							213.054
Total-heptadoxins			4.370e5		1.088			1284		6.94e6							97.205
Total-Dioxins			3.297e6		1.130			899		4.81e7							594.170
Total-TEQ			7.097e6					899		1.08e8							1269.125
FUNCTION1 PFK			6.513e4					278853		2.20e6							
FUNCTION2 PFK			1.663e5					135122		4.22e6							0.000
FUNCTION3 PFK			2.251e6					262049		1.52e6							0.000
FUNCTION4 PFK			2.159e5					206393		5.72e6							
FUNCTION5 PFK			7.729e4					137286		2.75e6							
FUNCTION1 HXCD...			1.782e2					472		2.96e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			7.958e2					500		1.47e4							0.000
FUNCTION3 OCDPE			1.906e2					486		2.04e3							0.000
FUNCTION4 NCDPE			0.000e0					534		0.00e0							
FUNCTION5 DCDPE			0.000e0					586		0.00e0							

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50**Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27****ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk****TF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.958e4	6.712e4	0.678	0.74	0.77	1189.1	YES	NO	db	db	10.200
2	Total-tetrafurans	27.13	1.324e3	1.848e3	0.727	0.72	0.77	30.2	YES	NO	bd	bd	0.259
3	2378-TCDF	25.76	5.009e4	6.741e4	0.702	0.74	0.77	1196.4	YES	NO	bb	bb	9.925
4	Total-tetrafurans	24.52	5.755e2	6.555e2	0.727	0.88	0.77	15.6	YES	NO	bd	bb	0.100
5	1368-TCDF	22.26	5.523e4	7.593e4	0.802	0.73	0.77	1351.0	YES	NO	bb	bb	9.698

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDFF	27.12	5.047e5	3.257e5	1.246	1.55	1.55	14435.1	YES	NO	bb	bb	47.863

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.26	2.987e5	2.014e5	0.786	1.48	1.55	3033.4	YES	NO	bb	bb	47.654
2	Total-pentafurans	31.14	3.200e2	2.022e2	0.654	1.58	1.55	4.7	NO	NO	bb	bb	0.059
3	12378-PeCDF	29.92	2.847e5	1.905e5	0.679	1.49	1.55	2927.0	YES	NO	bb	bb	50.256
4	Total-pentafurans	28.77	4.416e4	2.902e4	0.654	1.52	1.55	457.3	YES	NO	bb	bb	8.208
5	12389-PECDF	32.30	2.900e5	1.948e5	0.496	1.49	1.55	2917.7	YES	NO	bb	bb	70.172

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.92	2.435e5	1.956e5	1.137	1.24	1.24	2606.8	YES	NO	bb	bb	45.618
2	234678-HxCDF	35.88	2.997e5	2.380e5	1.140	1.26	1.24	3242.8	YES	NO	bb	bb	48.649
3	123678-HxCDF	35.03	3.531e5	2.816e5	1.091	1.25	1.24	3692.6	YES	NO	db	db	48.377
4	123478-HxCDF	34.88	3.656e5	2.881e5	1.166	1.27	1.24	3844.5	YES	NO	bd	bd	47.141
5	123468-HXCDF	33.22	3.786e5	3.008e5	1.169	1.26	1.24	3921.9	YES	NO	bb	bb	48.869

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.00	1.606e5	1.610e5	0.953	1.00	1.05	1591.2	YES	NO	bb	bb	49.293
2	Total-heptafurans	39.43	1.995e3	1.719e3	0.978	1.16	1.05	17.6	YES	NO	bb	bb	0.501
3	1234678-HpCDF	38.76	1.945e5	1.966e5	1.003	0.99	1.05	2118.1	YES	NO	bb	bb	46.930

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk**Furans,TF,PP,PF,HF,HPF,OF**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.958e4	6.712e4	0.678	0.74	0.77	1189.1	YES	NO	db	db	10.200
2	Total-tetrafurans	27.13	1.324e3	1.848e3	0.727	0.72	0.77	30.2	YES	NO	bd	bd	0.259
3	2378-TCDF	25.76	5.009e4	6.741e4	0.702	0.74	0.77	1196.4	YES	NO	bb	bb	9.925
4	Total-tetrafurans	24.52	5.755e2	6.555e2	0.727	0.88	0.77	15.6	YES	NO	bd	bb	0.100
5	1368-TCDF	22.26	5.523e4	7.593e4	0.802	0.73	0.77	1351.0	YES	NO	bb	bb	9.698
6	23478-PeCDF	31.26	2.987e5	2.014e5	0.786	1.48	1.55	3033.4	YES	NO	bb	bb	47.654
7	Total-pentafurans	31.14	3.200e2	2.022e2	0.654	1.58	1.55	4.7	NO	NO	bb	bb	0.059
8	12378-PeCDF	29.92	2.847e5	1.905e5	0.679	1.49	1.55	2927.0	YES	NO	bb	bb	50.256
9	Total-pentafurans	28.77	4.416e4	2.902e4	0.654	1.52	1.55	457.3	YES	NO	bb	bb	8.208
10	12389-PECDF	32.30	2.900e5	1.948e5	0.496	1.49	1.55	2917.7	YES	NO	bb	bb	70.172
11	123789-HxCDF	36.92	2.435e5	1.956e5	1.137	1.24	1.24	2606.8	YES	NO	bb	bb	45.618
12	234678-HxCDF	35.88	2.997e5	2.380e5	1.140	1.26	1.24	3242.8	YES	NO	bb	bb	48.649
13	123678-HxCDF	35.03	3.531e5	2.816e5	1.091	1.25	1.24	3692.6	YES	NO	db	db	48.377
14	123478-HxCDF	34.88	3.656e5	2.881e5	1.166	1.27	1.24	3844.5	YES	NO	bd	bd	47.141
15	123468-HXCDF	33.22	3.786e5	3.008e5	1.169	1.26	1.24	3921.9	YES	NO	bb	bb	48.869
16	1234789-HpCDF	41.00	1.606e5	1.610e5	0.953	1.00	1.05	1591.2	YES	NO	bb	bb	49.293
17	Total-heptafurans	39.43	1.995e3	1.719e3	0.978	1.16	1.05	17.6	YES	NO	bb	bb	0.501
18	1234678-HpCDF	38.76	1.945e5	1.966e5	1.003	0.99	1.05	2118.1	YES	NO	bb	bb	46.930
19	OCDF	45.22	2.228e5	2.494e5	0.778	0.89	0.89	1298.2	YES	NO	bb	bb	85.184
20	13468-PECDF	27.12	5.047e5	3.257e5	1.246	1.55	1.55	14435.1	YES	NO	bb	bb	47.863

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.40	6.374e4	8.098e4	1.149	0.79	0.77	1094.0	YES	NO	bb	bb	9.298
2	Total-tetradioxins	26.07	9.345e4	1.194e5	1.024	0.78	0.77	1089.8	YES	NO	bb	bb	15.338
3	Total-tetradioxins	25.59	2.951e4	3.713e4	1.024	0.79	0.77	527.6	YES	NO	bb	bb	4.801
4	Total-tetradioxins	25.00	7.064e2	8.707e2	1.024	0.81	0.77	10.2	YES	NO	bb	bb	0.114
5	Total-tetradioxins	24.73	2.615e3	3.110e3	1.024	0.84	0.77	28.3	YES	NO	bb	bb	0.413
6	Total-tetradioxins	23.80	2.579e2	3.337e2	1.024	0.77	0.77	4.3	YES	NO	bb	bb	0.043
7	1368-TCDD	23.53	5.505e4	7.032e4	1.015	0.78	0.77	986.3	YES	NO	bb	bb	9.111
8	1289-TCDD	27.00	5.514e4	7.127e4	0.909	0.77	0.77	943.5	YES	NO	bb	bb	10.266

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk**PD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	12389-PECDD	31.91	3.685e5	2.418e5	1.184	1.52	1.55	3825.2	YES	NO	bb	bb	50.120
2	12378-PeCDD	31.52	3.135e5	2.063e5	1.022	1.52	1.55	3298.8	YES	NO	bb	bb	49.448
3	12479-PECDD	28.79	4.975e5	3.240e5	2.301	1.54	1.55	3224.5	YES	NO	bb	bb	34.697

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDD	36.51	2.513e5	2.103e5	0.907	1.20	1.24	2775.5	YES	NO	bb	bb	55.517
2	123678-HxCDD	36.12	2.562e5	2.115e5	1.001	1.21	1.24	2758.0	YES	NO	db	db	51.465
3	123478-HxCDD	36.01	2.501e5	2.046e5	0.996	1.22	1.24	2767.3	YES	NO	bd	bd	49.380
4	Total-hexadioxins	34.76	6.501e2	5.641e2	1.005	1.15	1.24	7.8	YES	NO	bb	bd	0.132
5	124679-HXCDD	33.99	3.200e5	2.635e5	1.115	1.21	1.24	3396.9	YES	NO	bb	bb	56.559

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.26	2.079e5	1.994e5	1.039	1.04	1.05	2432.8	YES	NO	bb	bb	48.221
2	1234679-HPCDD	39.21	2.291e5	2.235e5	1.137	1.02	1.05	2974.2	YES	NO	bb	bb	48.984

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk**Dioxins,TD,PD,HD,HPD,OD**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	2378-TCDD	26.40	6.374e4	8.098e4	1.149	0.79	0.77	1094.0	YES	NO	bb	bb	9.298
2	Total-tetradoxins	26.07	9.345e4	1.194e5	1.024	0.78	0.77	1089.8	YES	NO	bb	bb	15.338
3	Total-tetradoxins	25.59	2.951e4	3.713e4	1.024	0.79	0.77	527.6	YES	NO	bb	bb	4.801
4	Total-tetradoxins	25.00	7.064e2	8.707e2	1.024	0.81	0.77	10.2	YES	NO	bb	bb	0.114
5	Total-tetradoxins	24.73	2.615e3	3.110e3	1.024	0.84	0.77	28.3	YES	NO	bb	bb	0.413
6	Total-tetradoxins	23.80	2.579e2	3.337e2	1.024	0.77	0.77	4.3	YES	NO	bb	bb	0.043
7	1368-TCDD	23.53	5.505e4	7.032e4	1.015	0.78	0.77	986.3	YES	NO	bb	bb	9.111
8	1289-TCDD	27.00	5.514e4	7.127e4	0.909	0.77	0.77	943.5	YES	NO	bb	bb	10.266
9	12389-PECDD	31.91	3.685e5	2.418e5	1.184	1.52	1.55	3825.2	YES	NO	bb	bb	50.120
10	12378-PeCDD	31.52	3.135e5	2.063e5	1.022	1.52	1.55	3298.8	YES	NO	bb	bb	49.448
11	12479-PECDD	28.79	4.975e5	3.240e5	2.301	1.54	1.55	3224.5	YES	NO	bb	bb	34.697
12	123789-HxCDD	36.51	2.513e5	2.103e5	0.907	1.20	1.24	2775.5	YES	NO	bb	bb	55.517
13	123678-HxCDD	36.12	2.562e5	2.115e5	1.001	1.21	1.24	2758.0	YES	NO	db	db	51.465
14	123478-HxCDD	36.01	2.501e5	2.046e5	0.996	1.22	1.24	2767.3	YES	NO	bd	bd	49.380
15	Total-hexadioxins	34.76	6.501e2	5.641e2	1.005	1.15	1.24	7.8	YES	NO	bb	bd	0.132
16	124679-HXCDD	33.99	3.200e5	2.635e5	1.115	1.21	1.24	3396.9	YES	NO	bb	bb	56.559
17	1234678-HpCDD	40.26	2.079e5	1.994e5	1.039	1.04	1.05	2432.8	YES	NO	bb	bb	48.221
18	1234679-HPCDD	39.21	2.291e5	2.235e5	1.137	1.02	1.05	2974.2	YES	NO	bb	bb	48.984
19	OCDD	44.98	3.023e5	3.551e5	0.920	0.85	0.89	2025.1	YES	NO	bb	bb	100.261

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.958e4	6.712e4	0.678	0.74	0.77	1189.1	YES	NO	db	db	10.200
2	Total-tetrafurans	27.13	1.324e3	1.848e3	0.727	0.72	0.77	30.2	YES	NO	bd	bd	0.259
3	2378-TCDF	25.76	5.009e4	6.741e4	0.702	0.74	0.77	1196.4	YES	NO	bb	bb	9.925
4	Total-tetrafurans	24.52	5.755e2	6.555e2	0.727	0.88	0.77	15.6	YES	NO	bd	bb	0.100
5	1368-TCDF	22.26	5.523e4	7.593e4	0.802	0.73	0.77	1351.0	YES	NO	bb	bb	9.698
6	23478-PeCDF	31.26	2.987e5	2.014e5	0.786	1.48	1.55	3033.4	YES	NO	bb	bb	47.654
7	Total-pentafurans	31.14	3.200e2	2.022e2	0.654	1.58	1.55	4.7	NO	NO	bb	bb	0.059
8	12378-PeCDF	29.92	2.847e5	1.905e5	0.679	1.49	1.55	2927.0	YES	NO	bb	bb	50.256
9	Total-pentafurans	28.77	4.416e4	2.902e4	0.654	1.52	1.55	457.3	YES	NO	bb	bb	8.208
10	12389-PECDF	32.30	2.900e5	1.948e5	0.496	1.49	1.55	2917.7	YES	NO	bb	bb	70.172
11	123789-HxCDF	36.92	2.435e5	1.956e5	1.137	1.24	1.24	2606.8	YES	NO	bb	bb	45.618
12	234678-HxCDF	35.88	2.997e5	2.380e5	1.140	1.26	1.24	3242.8	YES	NO	bb	bb	48.649
13	123678-HxCDF	35.03	3.531e5	2.816e5	1.091	1.25	1.24	3692.6	YES	NO	db	db	48.377
14	123478-HxCDF	34.88	3.656e5	2.881e5	1.166	1.27	1.24	3844.5	YES	NO	bd	bd	47.141
15	123468-HXCDF	33.22	3.786e5	3.008e5	1.169	1.26	1.24	3921.9	YES	NO	bb	bb	48.869
16	1234789-HpCDF	41.00	1.606e5	1.610e5	0.953	1.00	1.05	1591.2	YES	NO	bb	bb	49.293
17	Total-heptafurans	39.43	1.995e3	1.719e3	0.978	1.16	1.05	17.6	YES	NO	bb	bb	0.501
18	1234678-HpCDF	38.76	1.945e5	1.966e5	1.003	0.99	1.05	2118.1	YES	NO	bb	bb	46.930
19	OCDF	45.22	2.228e5	2.494e5	0.778	0.89	0.89	1298.2	YES	NO	bb	bb	85.184
20	13468-PECDF	27.12	5.047e5	3.257e5	1.246	1.55	1.55	14435.1	YES	NO	bb	bb	47.863
21	2378-TCDD	26.40	6.374e4	8.098e4	1.149	0.79	0.77	1094.0	YES	NO	bb	bb	9.298
22	Total-tetradiioxins	26.07	9.345e4	1.194e5	1.024	0.78	0.77	1089.8	YES	NO	bb	bb	15.338
23	Total-tetradiioxins	25.59	2.951e4	3.713e4	1.024	0.79	0.77	527.6	YES	NO	bb	bb	4.801
24	Total-tetradiioxins	25.00	7.064e2	8.707e2	1.024	0.81	0.77	10.2	YES	NO	bb	bb	0.114
25	Total-tetradiioxins	24.73	2.615e3	3.110e3	1.024	0.84	0.77	28.3	YES	NO	bb	bb	0.413
26	Total-tetradiioxins	23.80	2.579e2	3.337e2	1.024	0.77	0.77	4.3	YES	NO	bb	bb	0.043
27	1368-TCDD	23.53	5.505e4	7.032e4	1.015	0.78	0.77	986.3	YES	NO	bb	bb	9.111
28	1289-TCDD	27.00	5.514e4	7.127e4	0.909	0.77	0.77	943.5	YES	NO	bb	bb	10.266
29	12389-PECDD	31.91	3.685e5	2.418e5	1.184	1.52	1.55	3825.2	YES	NO	bb	bb	50.120
30	12378-PeCDD	31.52	3.135e5	2.063e5	1.022	1.52	1.55	3298.8	YES	NO	bb	bb	49.448
31	12479-PECDD	28.79	4.975e5	3.240e5	2.301	1.54	1.55	3224.5	YES	NO	bb	bb	34.697
32	123789-HxCDD	36.51	2.513e5	2.103e5	0.907	1.20	1.24	2775.5	YES	NO	bb	bb	55.517
33	123678-HxCDD	36.12	2.562e5	2.115e5	1.001	1.21	1.24	2758.0	YES	NO	db	db	51.465
34	123478-HxCDD	36.01	2.501e5	2.046e5	0.996	1.22	1.24	2767.3	YES	NO	bd	bd	49.380
35	Total-hexadiioxins	34.76	6.501e2	5.641e2	1.005	1.15	1.24	7.8	YES	NO	bb	bd	0.132
36	124679-HXCDD	33.99	3.200e5	2.635e5	1.115	1.21	1.24	3396.9	YES	NO	bb	bb	56.559
37	1234678-HpCDD	40.26	2.079e5	1.994e5	1.039	1.04	1.05	2432.8	YES	NO	bb	bb	48.221

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk**TotalTEQ,Furans,Dioxins**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	1234679-HPCDD	39.21	2.291e5	2.235e5	1.137	1.02	1.05	2974.2	YES	NO	bb	bb	48.984
39	OCDD	44.98	3.023e5	3.551e5	0.920	0.85	0.89	2025.1	YES	NO	bb	bb	100.261

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	27.23	1.344e4					1.5	NO		bb		
2	FUNCTION1 PFK	26.99	3.002e3					0.8	NO		bb		
3	FUNCTION1 PFK	26.71	2.245e4					1.6	NO		bb		
4	FUNCTION1 PFK	26.47	6.709e3					1.0	NO		bb		
5	FUNCTION1 PFK	23.78	2.695e3					0.7	NO		bb		
6	FUNCTION1 PFK	22.07	1.126e4					1.4	NO		bb		
7	FUNCTION1 PFK	21.42	5.573e3					0.9	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	28.05	2.995e4					3.9	YES		bd		0.000
2	FUNCTION2 PFK	32.23	3.614e3					1.2	NO		bd		0.000
3	FUNCTION2 PFK	32.06	6.310e2					0.4	NO		bb		0.000
4	FUNCTION2 PFK	31.95	3.840e3					1.3	NO		bb		0.000
5	FUNCTION2 PFK	31.66	6.383e3					1.3	NO		bb		0.000
6	FUNCTION2 PFK	31.53	1.068e4					2.0	NO		bb		0.000
7	FUNCTION2 PFK	31.23	6.238e3					1.5	NO		bb		0.000
8	FUNCTION2 PFK	31.15	6.262e2					0.4	NO		bb		0.000
9	FUNCTION2 PFK	30.93	2.340e3					0.8	NO		bb		0.000
10	FUNCTION2 PFK	30.54	9.324e2					0.6	NO		bb		0.000
11	FUNCTION2 PFK	30.32	6.365e3					1.2	NO		bb		0.000
12	FUNCTION2 PFK	29.92	3.513e3					1.0	NO		bb		0.000
13	FUNCTION2 PFK	29.44	3.508e3					1.2	NO		bb		0.000
14	FUNCTION2 PFK	28.35	1.304e4					2.2	NO		db		0.000
15	FUNCTION2 PFK	28.25	2.633e4					3.4	YES		dd		0.000
16	FUNCTION2 PFK	28.21	1.268e4					3.0	YES		dd		0.000
17	FUNCTION2 PFK	28.15	2.535e4					2.9	NO		dd		0.000
18	FUNCTION2 PFK	32.57	4.708e3					1.3	NO		bb		0.000
19	FUNCTION2 PFK	32.47	1.672e3					0.7	NO		bb		0.000
20	FUNCTION2 PFK	32.27	3.857e3					0.9	NO		db		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk**PFK3**

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	33.69	2.251e6					5.8	YES		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	39.78	1.807e4					2.0	NO		bd		
2	FUNCTION4 PFK	39.68	4.190e3					0.7	NO		bb		
3	FUNCTION4 PFK	39.06	1.582e4					1.7	NO		bb		
4	FUNCTION4 PFK	38.88	4.374e3					0.8	NO		db		
5	FUNCTION4 PFK	38.82	1.181e4					1.6	NO		bd		
6	FUNCTION4 PFK	38.45	1.175e4					1.5	NO		bb		
7	FUNCTION4 PFK	38.38	8.038e3					1.2	NO		bb		
8	FUNCTION4 PFK	38.23	4.155e3					0.6	NO		bb		
9	FUNCTION4 PFK	37.97	7.379e3					1.4	NO		db		
10	FUNCTION4 PFK	37.93	1.983e4					1.9	NO		bd		
11	FUNCTION4 PFK	42.38	1.773e4					1.2	NO		bb		
12	FUNCTION4 PFK	42.29	8.377e2					0.4	NO		bb		
13	FUNCTION4 PFK	42.06	2.744e3					0.7	NO		bb		
14	FUNCTION4 PFK	41.93	1.396e4					1.6	NO		bb		
15	FUNCTION4 PFK	41.71	4.603e3					1.0	NO		bb		
16	FUNCTION4 PFK	41.52	1.252e4					1.6	NO		db		
17	FUNCTION4 PFK	41.42	1.272e4					1.1	NO		bd		
18	FUNCTION4 PFK	41.31	7.412e3					1.1	NO		bb		
19	FUNCTION4 PFK	41.25	6.485e3					1.3	NO		db		
20	FUNCTION4 PFK	41.21	5.319e3					1.0	NO		bd		
21	FUNCTION4 PFK	40.15	1.316e4					1.1	NO		bb		
22	FUNCTION4 PFK	39.88	3.364e3					0.7	NO		bb		
23	FUNCTION4 PFK	39.83	9.660e3					1.6	NO		db		

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 PFK	43.19	1.029e3					0.8	NO		bb		
2	FUNCTION5 PFK	42.94	6.034e3					1.5	NO		bb		
3	FUNCTION5 PFK	45.97	3.777e3					1.4	NO		bb		
4	FUNCTION5 PFK	45.71	4.792e3					1.4	NO		bb		
5	FUNCTION5 PFK	45.37	2.253e3					0.7	NO		bb		
6	FUNCTION5 PFK	45.28	5.520e3					1.3	NO		bb		
7	FUNCTION5 PFK	45.08	4.121e3					0.9	NO		bb		
8	FUNCTION5 PFK	44.99	3.839e3					0.9	NO		bb		
9	FUNCTION5 PFK	44.74	2.345e3					1.1	NO		bb		
10	FUNCTION5 PFK	44.52	5.169e3					1.0	NO		db		
11	FUNCTION5 PFK	44.50	2.806e3					0.9	NO		bd		
12	FUNCTION5 PFK	44.29	5.781e3					1.4	NO		bb		
13	FUNCTION5 PFK	43.91	2.723e3					0.9	NO		bb		
14	FUNCTION5 PFK	43.49	1.165e4					2.3	NO		db		
15	FUNCTION5 PFK	43.42	1.105e4					2.0	NO		dd		
16	FUNCTION5 PFK	43.37	4.405e3					1.5	NO		bd		

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.55	8.582e1					2.5	NO		bb		0.000
2	FUNCTION1 HXCD...	27.67	9.239e1					3.8	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	32.09	1.038e2					6.8	YES		bb		0.000
2	FUNCTION2 HPCD...	31.53	9.854e1					2.6	NO		bb		0.000
3	FUNCTION2 HPCD...	31.24	1.381e2					6.2	YES		db		0.000
4	FUNCTION2 HPCD...	31.13	4.553e2					13.8	YES		bd		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld

Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time

Printed: Tuesday, March 07, 2023 09:07:35 Pacific Standard Time

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	33.35	9.686e1					2.1	NO		db		0.000
2	FUNCTION3 OCDPE	33.22	9.375e1					2.1	NO		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS6

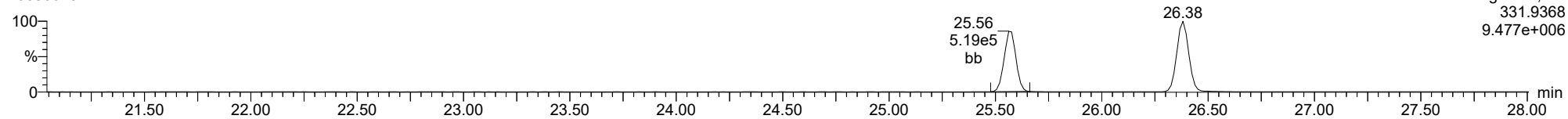
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

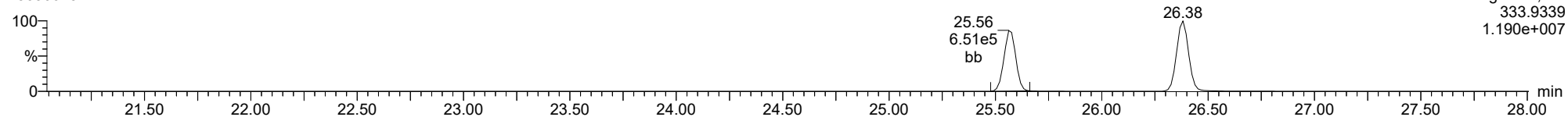
13C-1234-TCDD

23030623



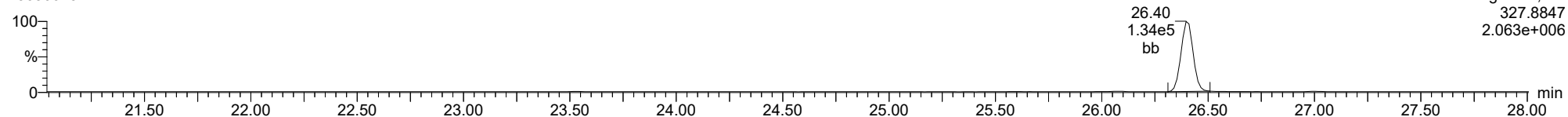
13C-1234-TCDD

23030623



37CL-2378-TCDD

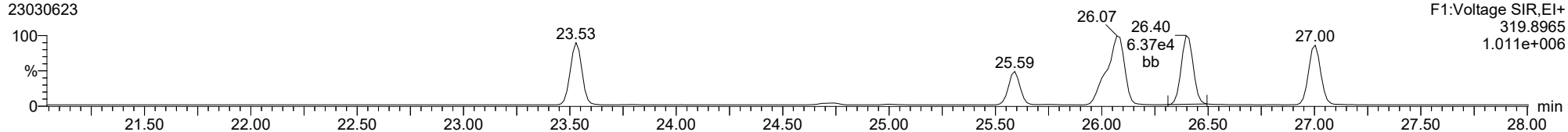
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

2378-TCDD

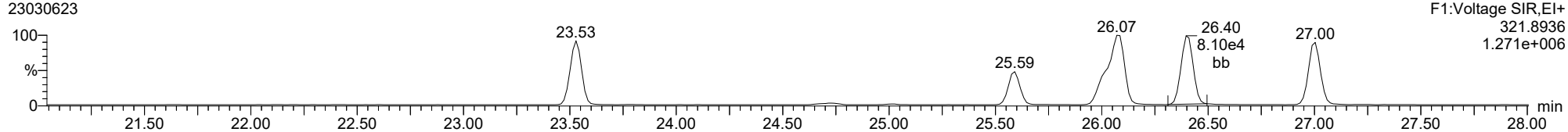
23030623



F1:Voltage SIR,EI+
319.8965
1.011e+006

2378-TCDD

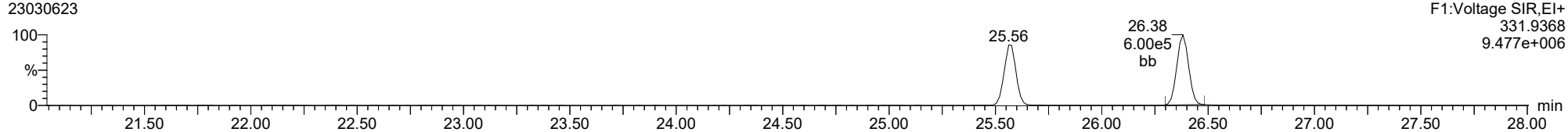
23030623



F1:Voltage SIR,EI+
321.8936
1.271e+006

13C-2378-TCDD

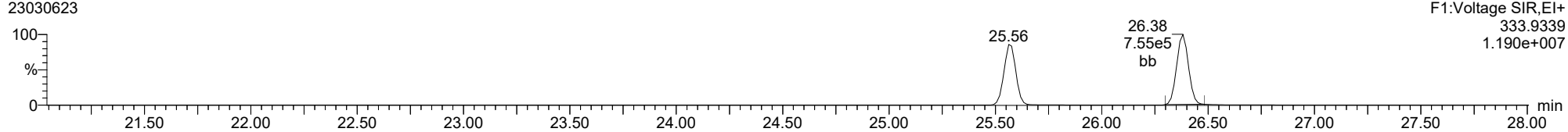
23030623



F1:Voltage SIR,EI+
331.9368
9.477e+006

13C-2378-TCDD

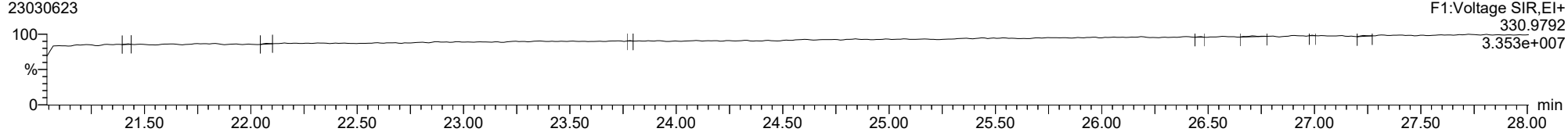
23030623



F1:Voltage SIR,EI+
333.9339
1.190e+007

FUNCTION1 PFK

23030623

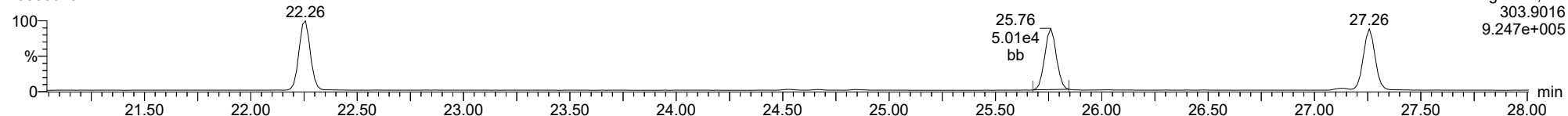


F1:Voltage SIR,EI+
330.9792
3.353e+007

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

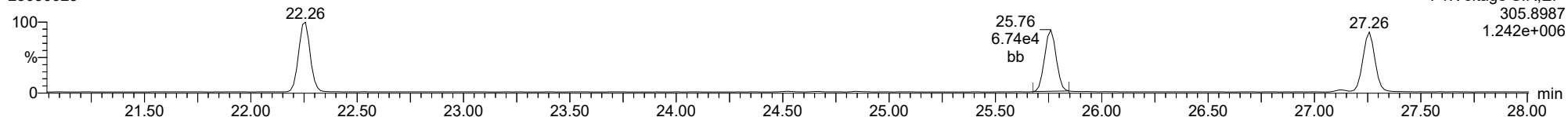
2378-TCDF

23030623



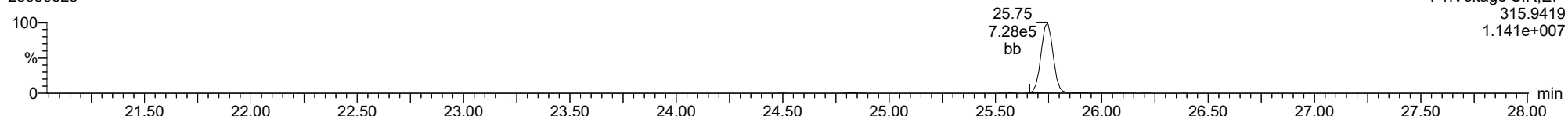
2378-TCDF

23030623



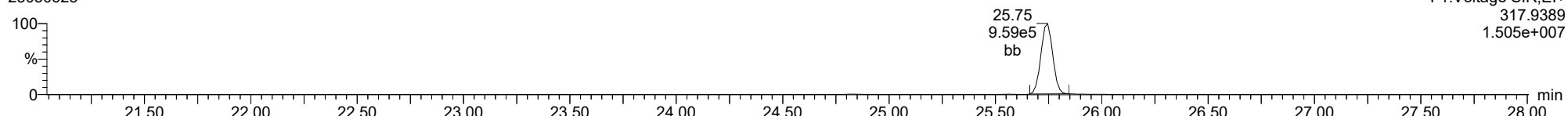
13C-2378-TCDF

23030623



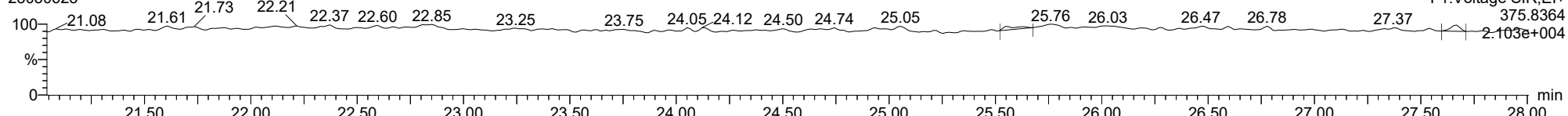
13C-2378-TCDF

23030623



FUNCTION1 HXCDFE

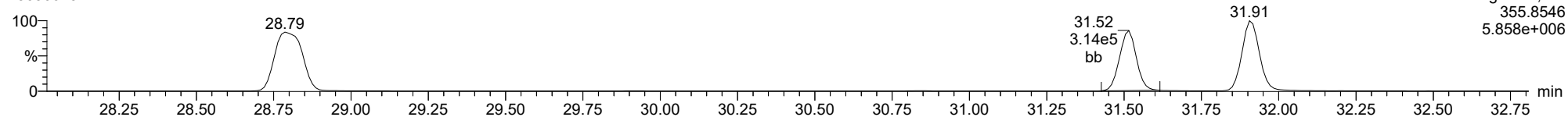
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

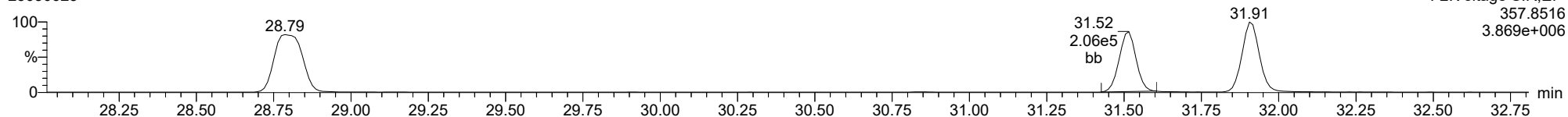
23030623



F2:Voltage SIR,EI+
355.8546
5.858e+006

12378-PeCDD

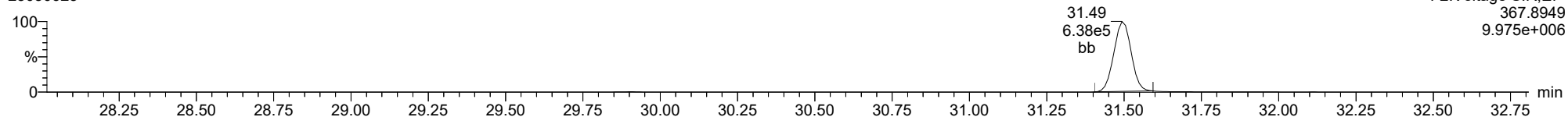
23030623



F2:Voltage SIR,EI+
357.8516
3.869e+006

13C-12378-PeCDD

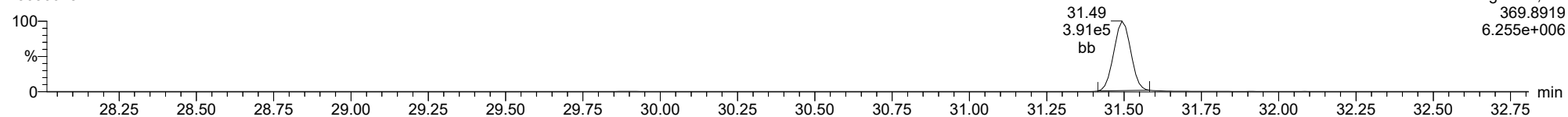
23030623



F2:Voltage SIR,EI+
367.8949
9.975e+006

13C-12378-PeCDD

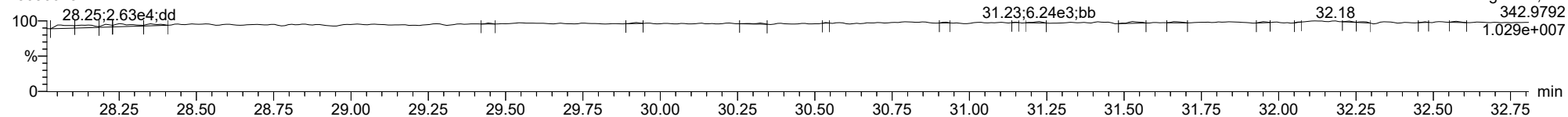
23030623



F2:Voltage SIR,EI+
369.8919
6.255e+006

FUNCTION2 PFK

23030623

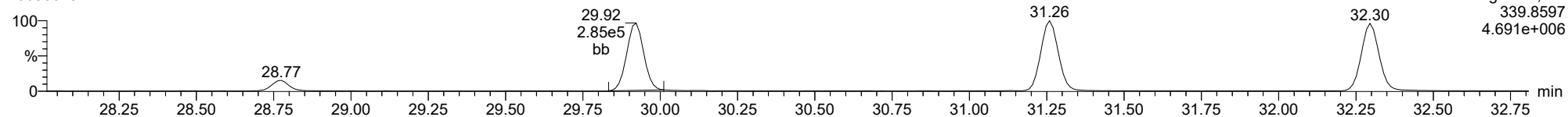


F2:Voltage SIR,EI+
342.9792
1.029e+007

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

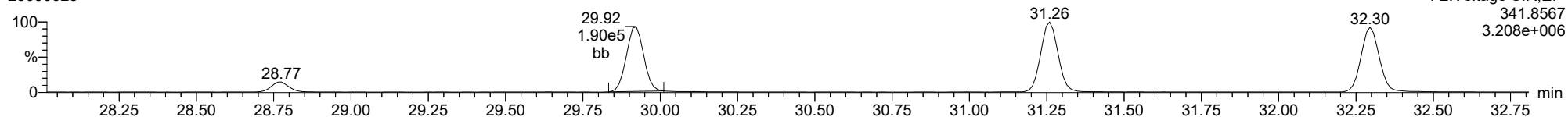
12378-PeCDF

23030623



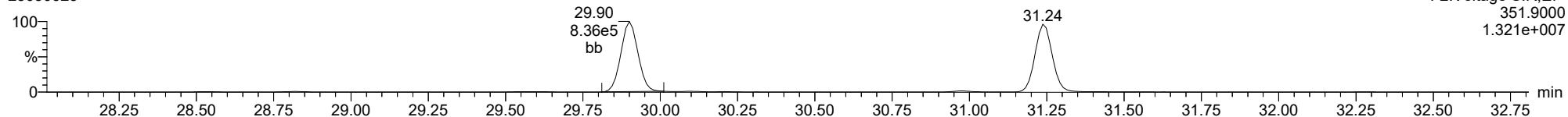
12378-PeCDF

23030623



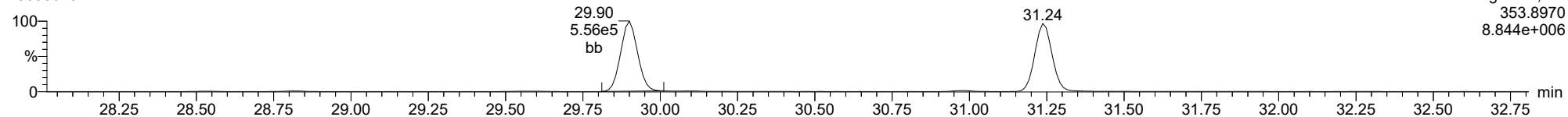
13C-12378-PeCDF

23030623



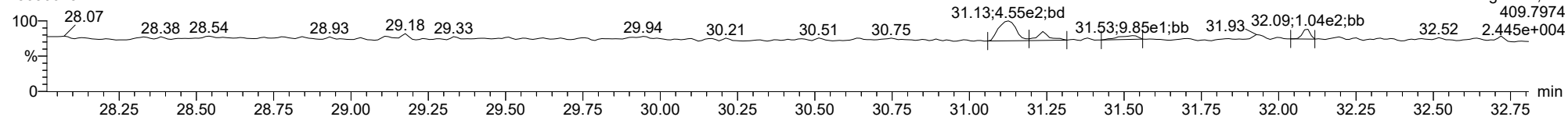
13C-12378-PeCDF

23030623



FUNCTION2 HPCDPE

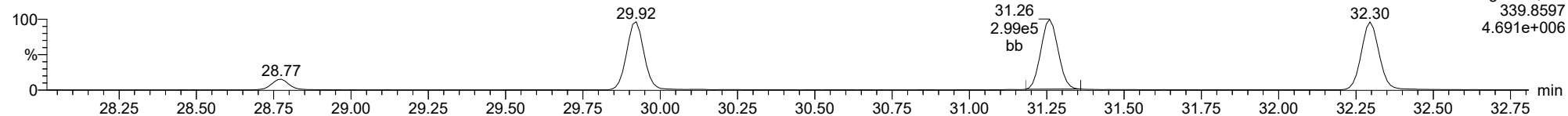
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

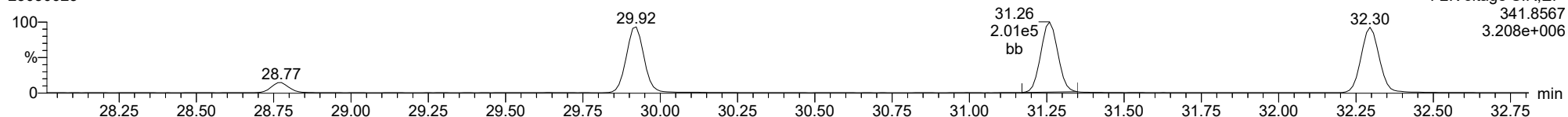
23478-PeCDF

23030623



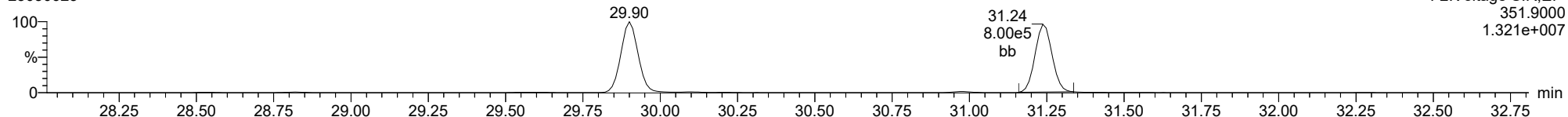
23478-PeCDF

23030623



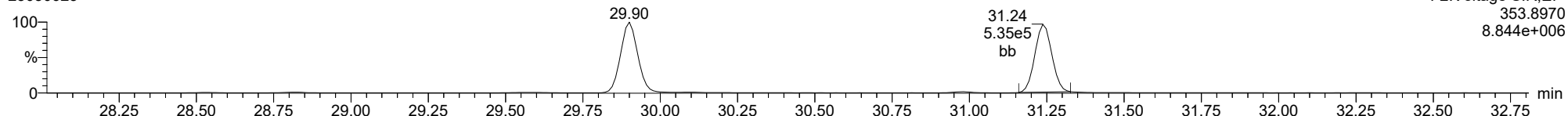
13C-23478-PeCDF

23030623



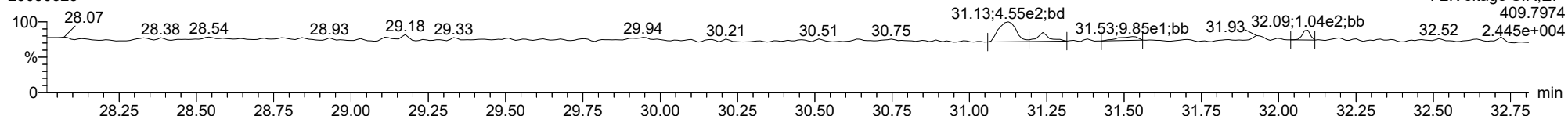
13C-23478-PeCDF

23030623



FUNCTION2 HPCDPE

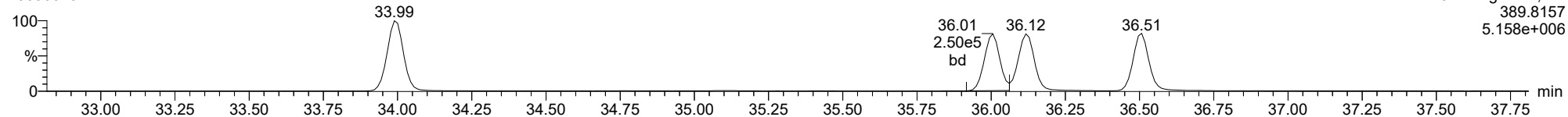
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

123478-HxCDD

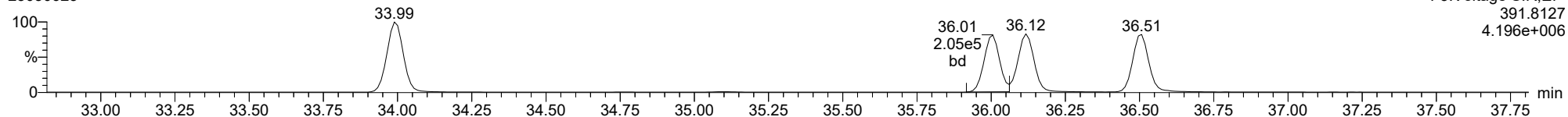
23030623



F3:Voltage SIR,EI+
389.8157
5.158e+006

123478-HxCDD

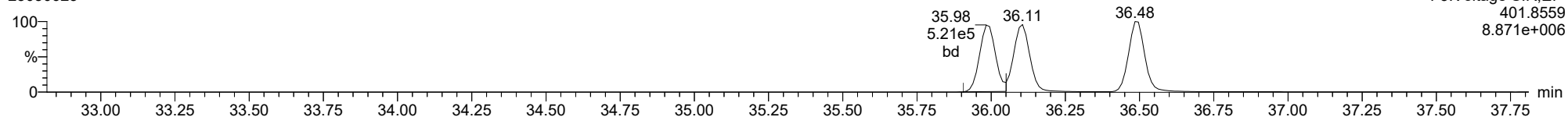
23030623



F3:Voltage SIR,EI+
391.8127
4.196e+006

13C-123478-HxCDD

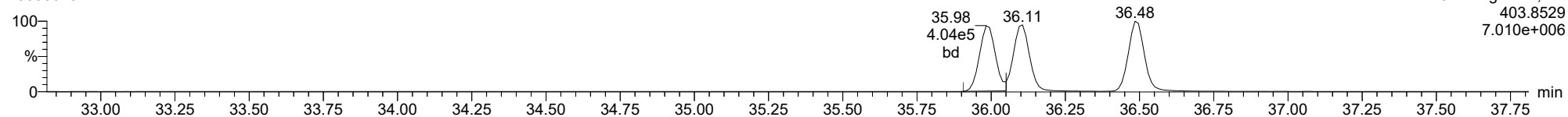
23030623



F3:Voltage SIR,EI+
401.8559
8.871e+006

13C-123478-HxCDD

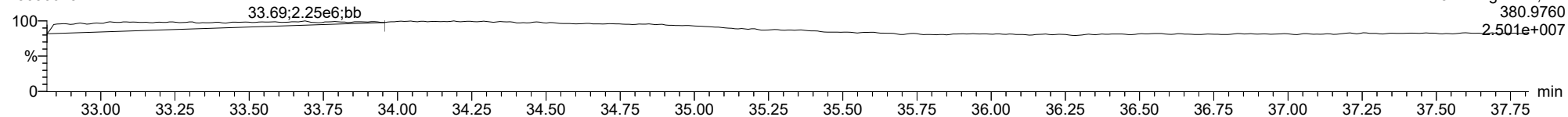
23030623



F3:Voltage SIR,EI+
403.8529
7.010e+006

FUNCTION3 PFK

23030623

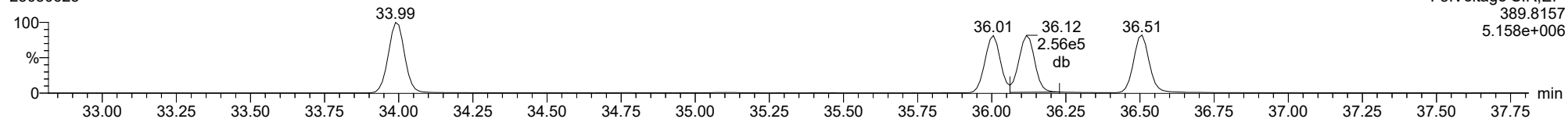


F3:Voltage SIR,EI+
380.9760
2.501e+007

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

123678-HxCDD

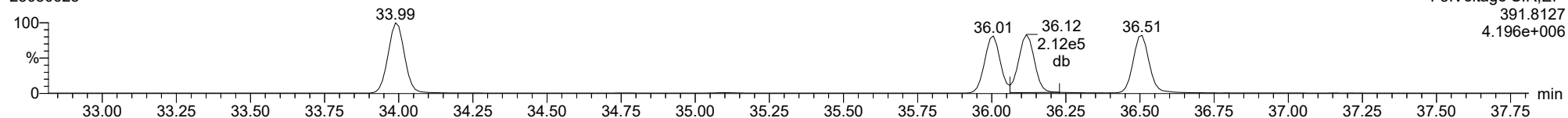
23030623



F3:Voltage SIR,EI+
389.8157
5.158e+006

123678-HxCDD

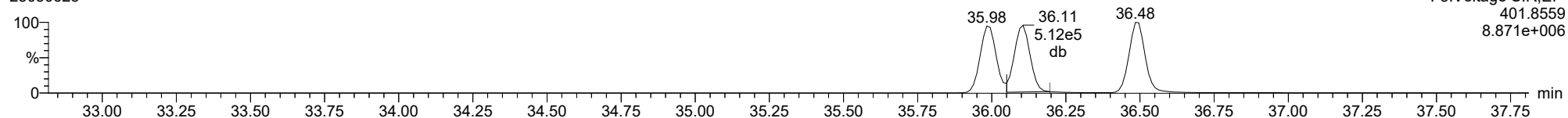
23030623



F3:Voltage SIR,EI+
391.8127
4.196e+006

13C-123678-HxCDD

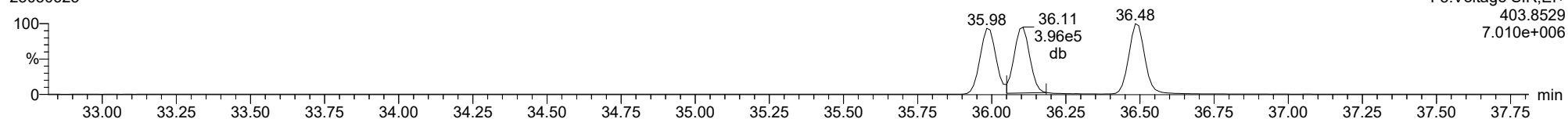
23030623



F3:Voltage SIR,EI+
401.8559
8.871e+006

13C-123678-HxCDD

23030623

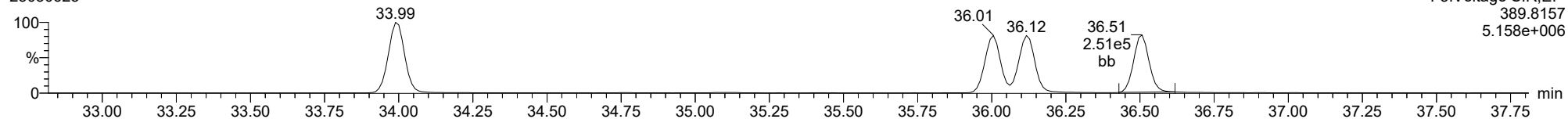


F3:Voltage SIR,EI+
403.8529
7.010e+006

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

123789-HxCDD

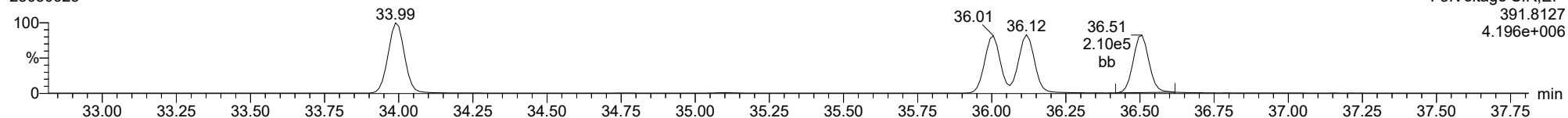
23030623



F3:Voltage SIR,EI+
389.8157
5.158e+006

123789-HxCDD

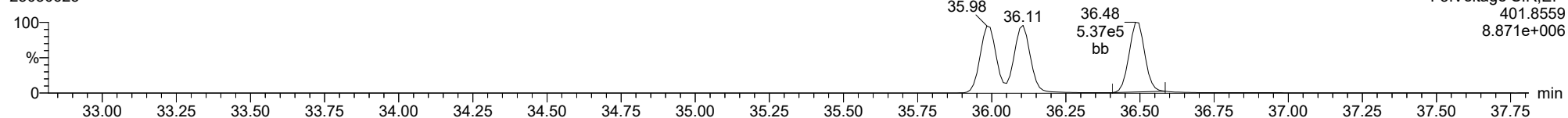
23030623



F3:Voltage SIR,EI+
391.8127
4.196e+006

13C-123789-HxCDD

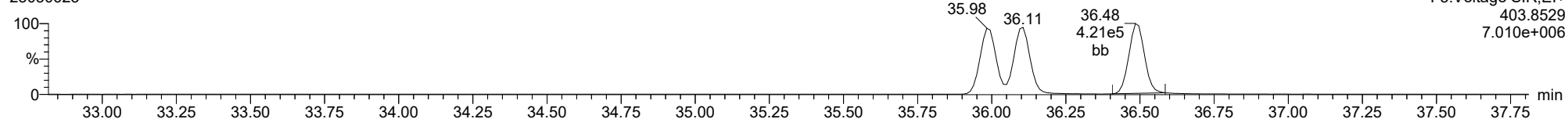
23030623



F3:Voltage SIR,EI+
401.8559
8.871e+006

13C-123789-HxCDD

23030623

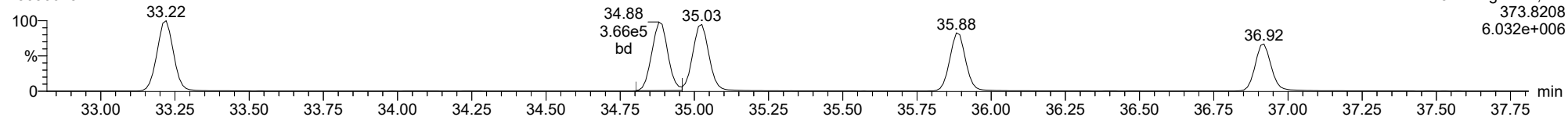


F3:Voltage SIR,EI+
403.8529
7.010e+006

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

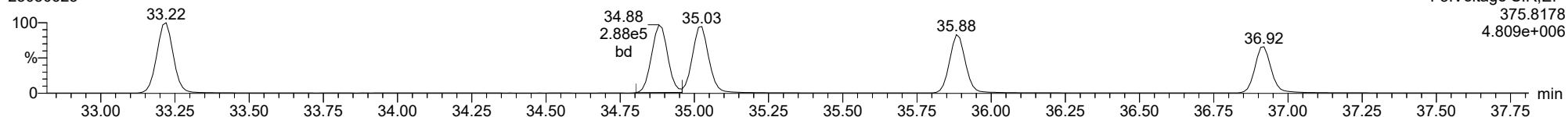
123478-HxCDF

23030623



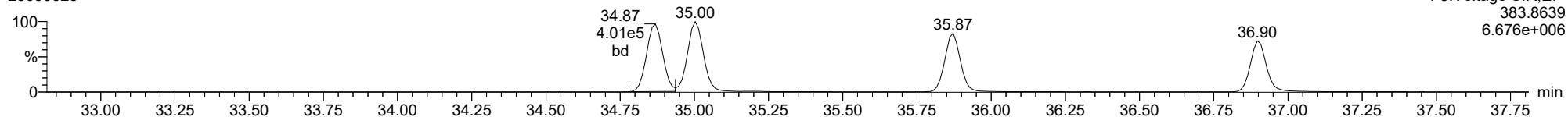
123478-HxCDF

23030623



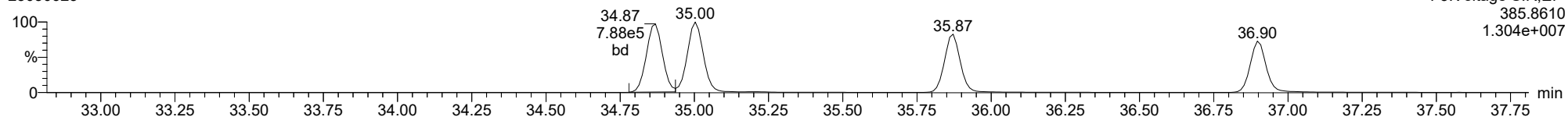
13C-123478-HxCDF

23030623



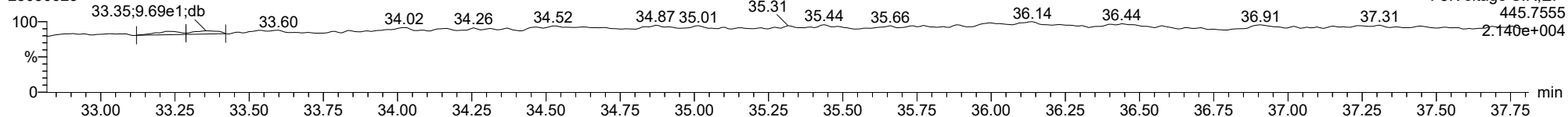
13C-123478-HxCDF

23030623



FUNCTION3 OCDPE

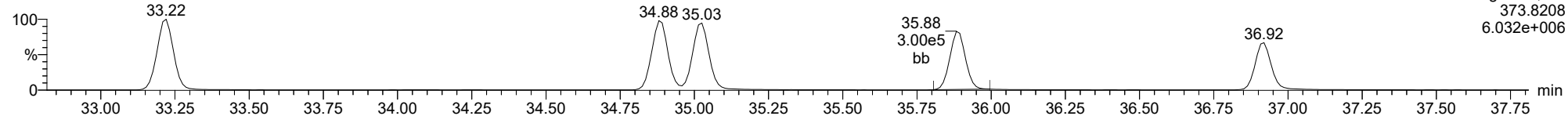
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

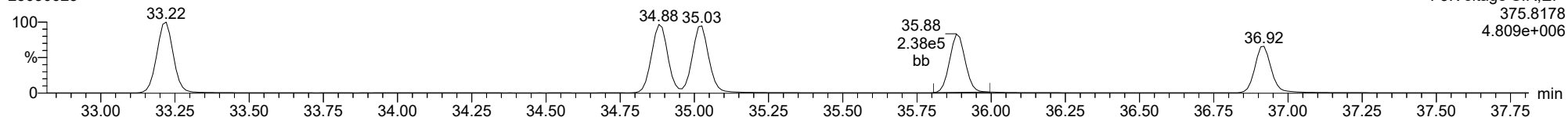
234678-HxCDF

23030623



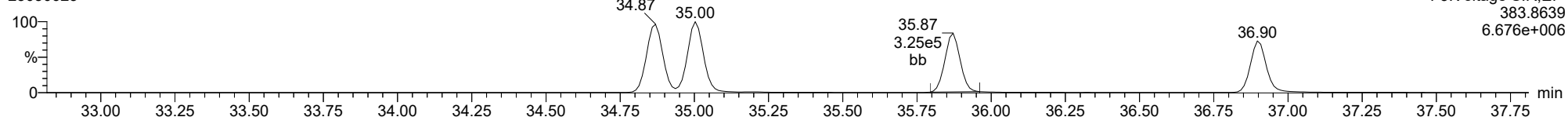
234678-HxCDF

23030623



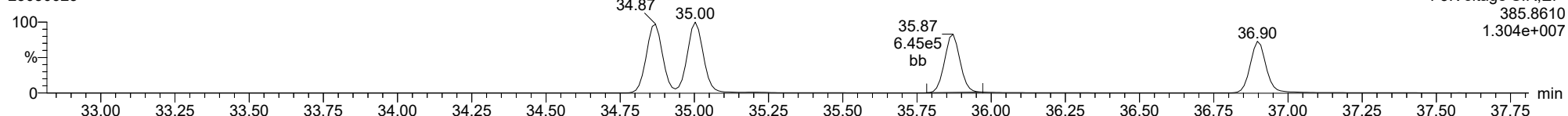
13C-234678-HxCDF

23030623



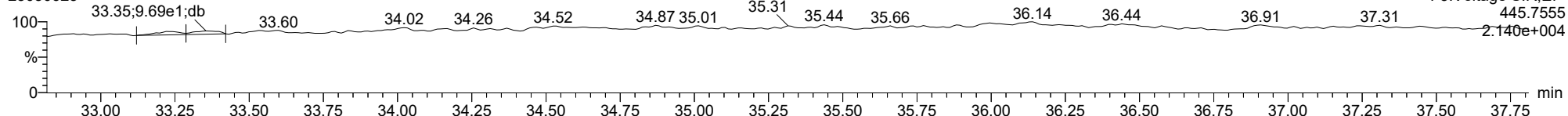
13C-234678-HxCDF

23030623



FUNCTION3 OCDPE

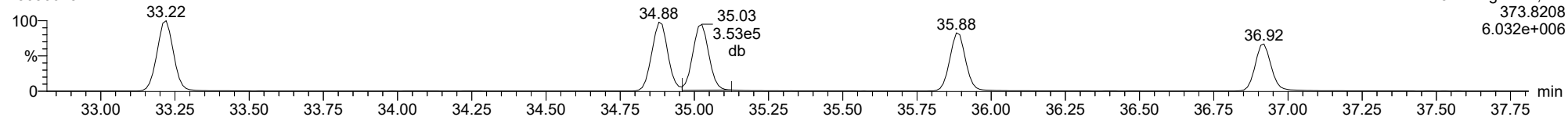
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

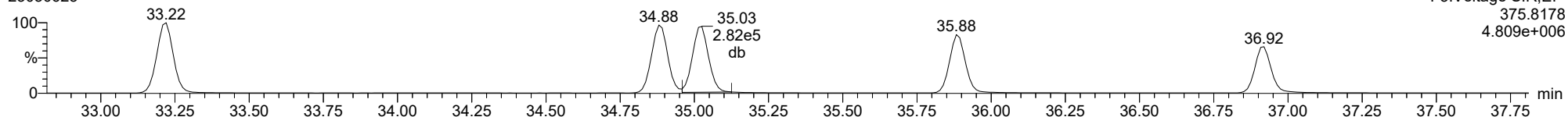
123678-HxCDF

23030623



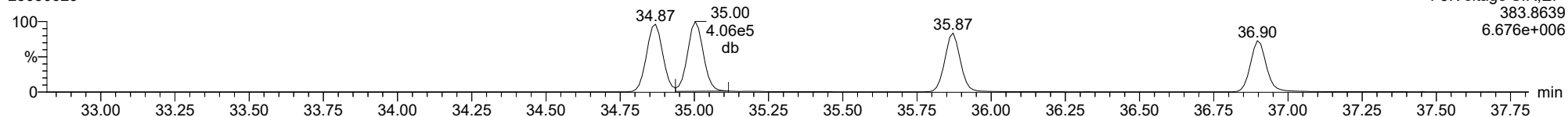
123678-HxCDF

23030623



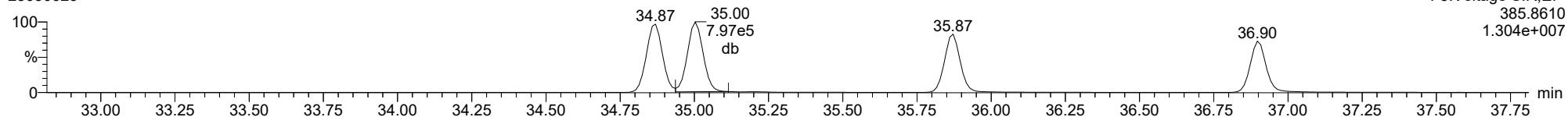
13C-123678-HxCDF

23030623



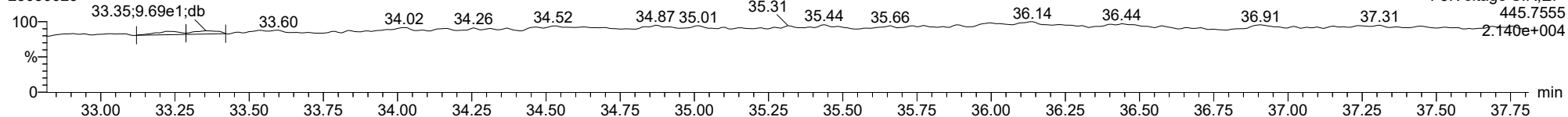
13C-123678-HxCDF

23030623



FUNCTION3 OCDPE

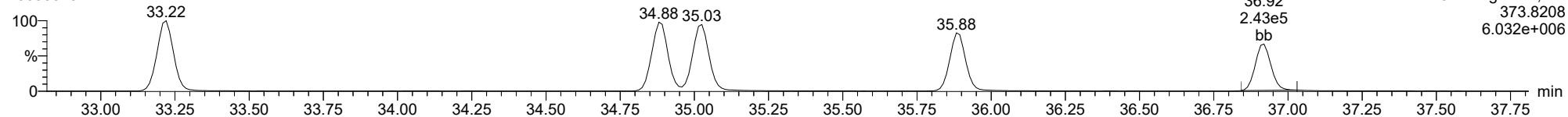
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

123789-HxCDF

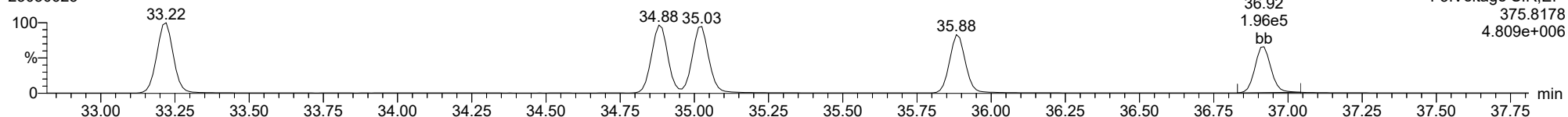
23030623



F3:Voltage SIR,EI+
373.8208
6.032e+006

123789-HxCDF

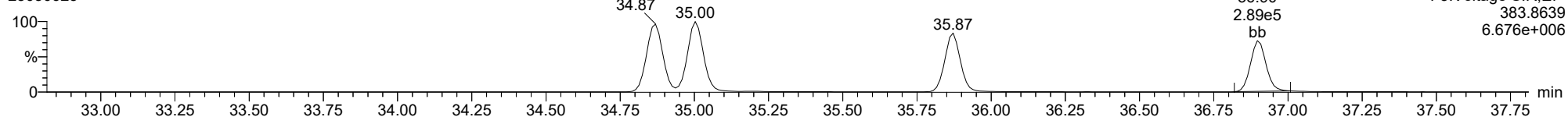
23030623



F3:Voltage SIR,EI+
375.8178
4.809e+006

13C-123789-HxCDF

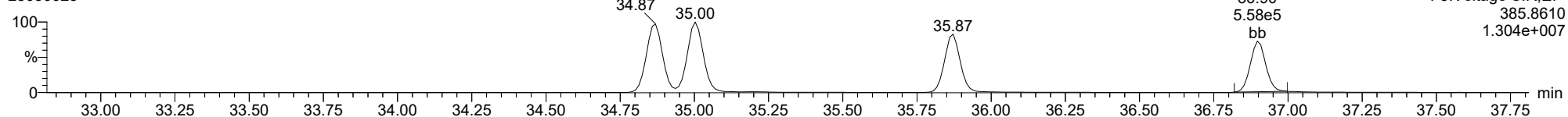
23030623



F3:Voltage SIR,EI+
383.8639
6.676e+006

13C-123789-HxCDF

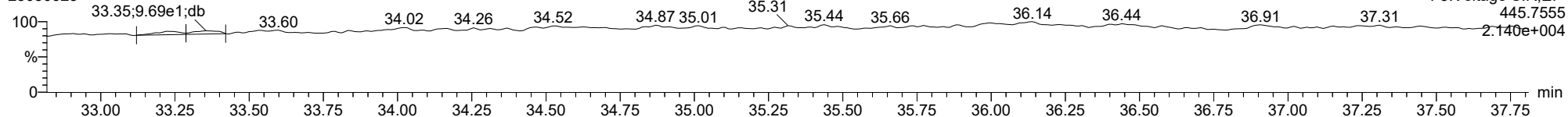
23030623



F3:Voltage SIR,EI+
385.8610
1.304e+007

FUNCTION3 OCDPE

23030623

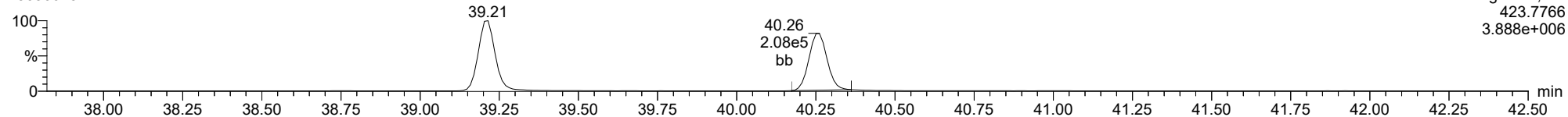


F3:Voltage SIR,EI+
445.7555
2.140e+004

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

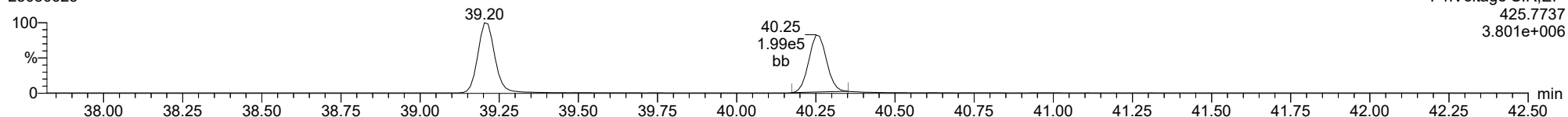
1234678-HpCDD

23030623



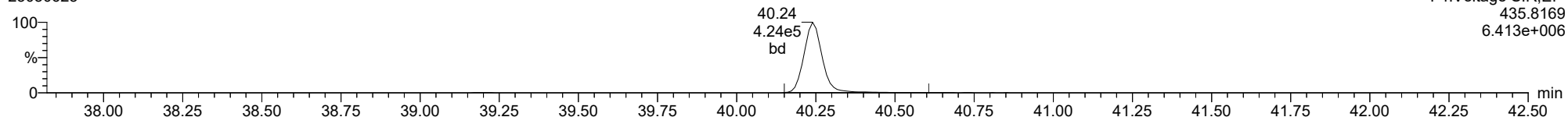
1234678-HpCDD

23030623



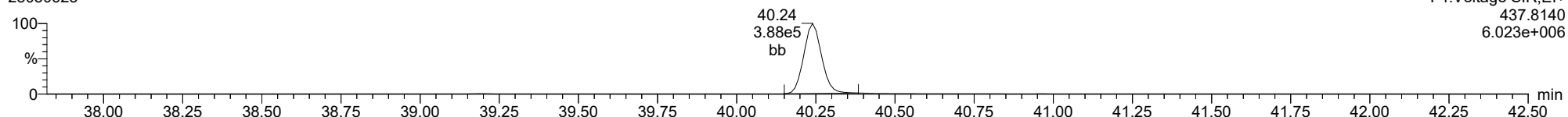
13C-1234678-HpCDD

23030623



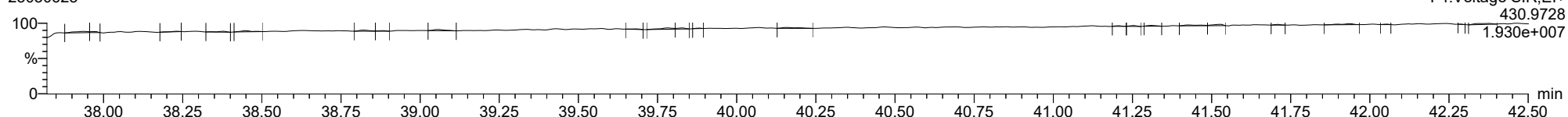
13C-1234678-HpCDD

23030623



FUNCTION4 PFK

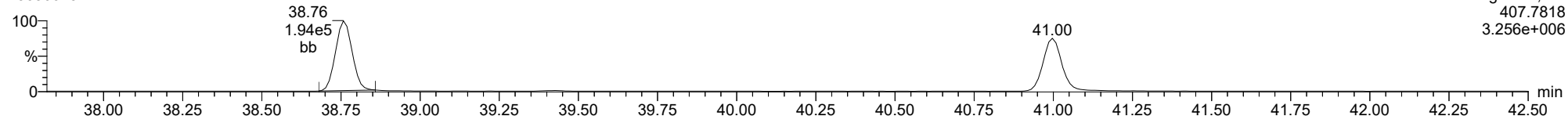
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

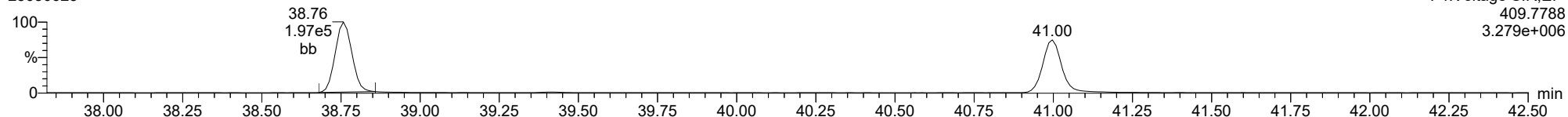
23030623



F4:Voltage SIR,EI+
407.7818
3.256e+006

1234678-HpCDF

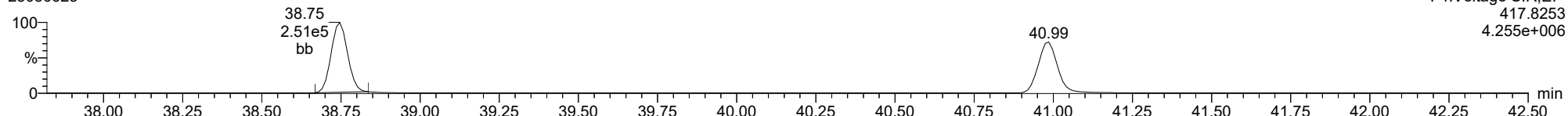
23030623



F4:Voltage SIR,EI+
409.7788
3.279e+006

13C-1234678-HpCDF

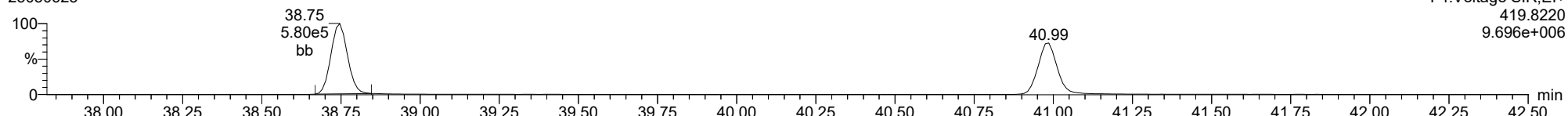
23030623



F4:Voltage SIR,EI+
417.8253
4.255e+006

13C-1234678-HpCDF

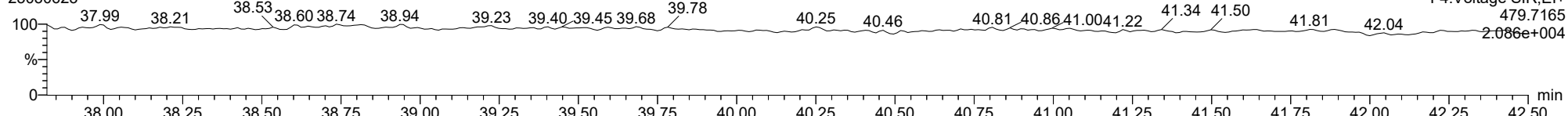
23030623



F4:Voltage SIR,EI+
419.8220
9.696e+006

FUNCTION4 NCDPE

23030623

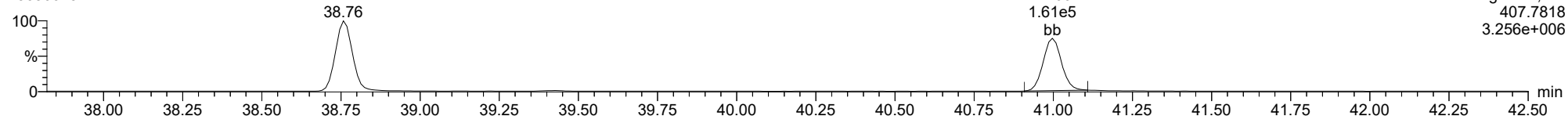


F4:Voltage SIR,EI+
479.7165
2.086e+004

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

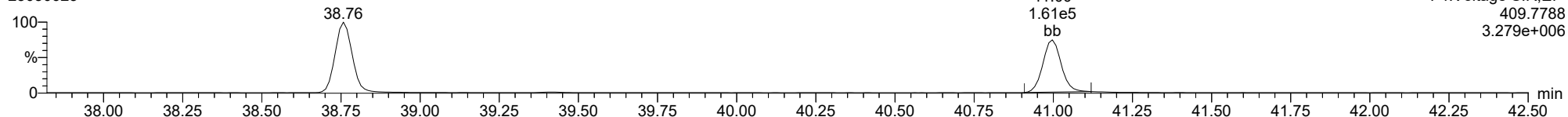
23030623



F4:Voltage SIR,EI+
407.7818
3.256e+006

1234789-HpCDF

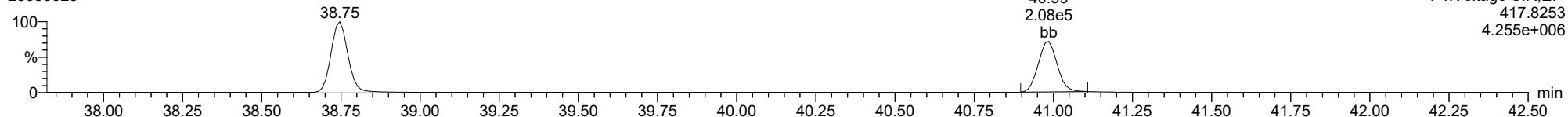
23030623



F4:Voltage SIR,EI+
409.7788
3.279e+006

13C-1234789-HpCDF

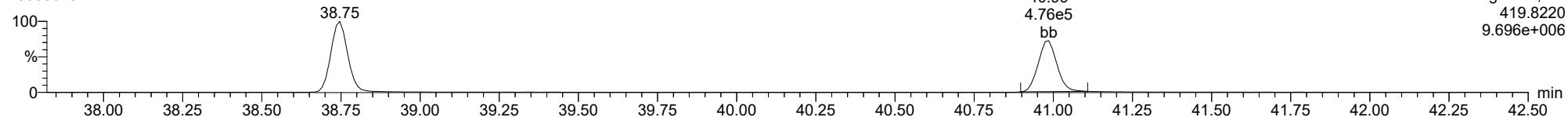
23030623



F4:Voltage SIR,EI+
417.8253
4.255e+006

13C-1234789-HpCDF

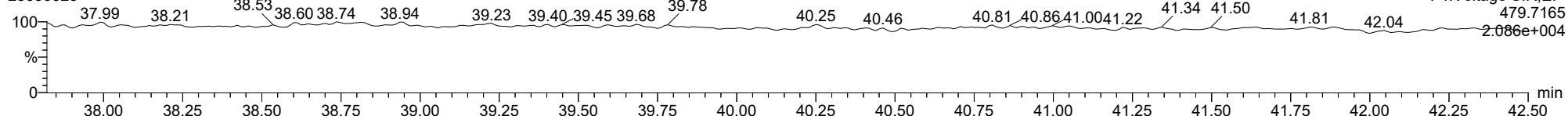
23030623



F4:Voltage SIR,EI+
419.8220
9.696e+006

FUNCTION4 NCDPE

23030623

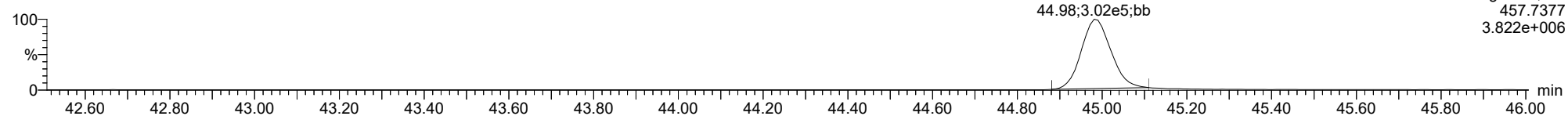


F4:Voltage SIR,EI+
479.7165
2.086e+004

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

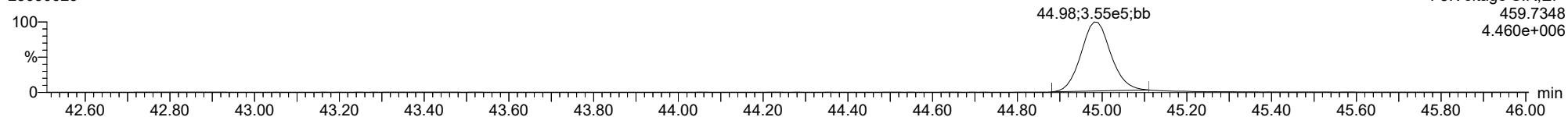
OCDD

23030623



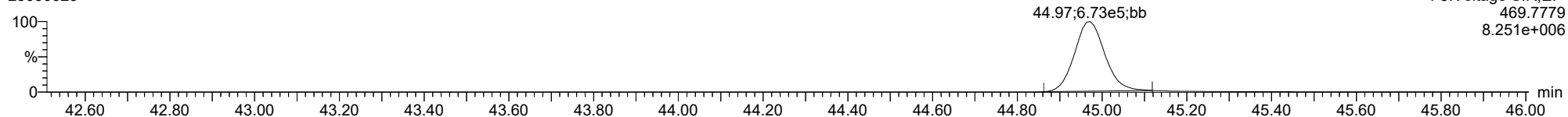
OCDD

23030623



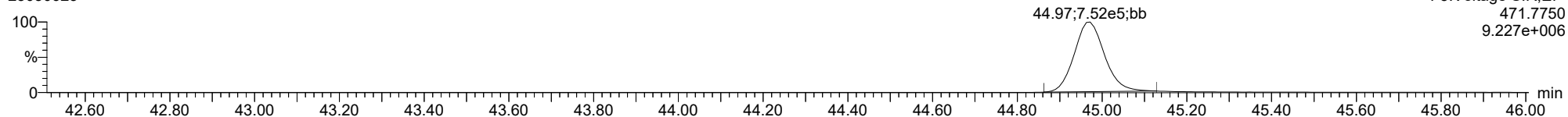
13C-OCDD

23030623



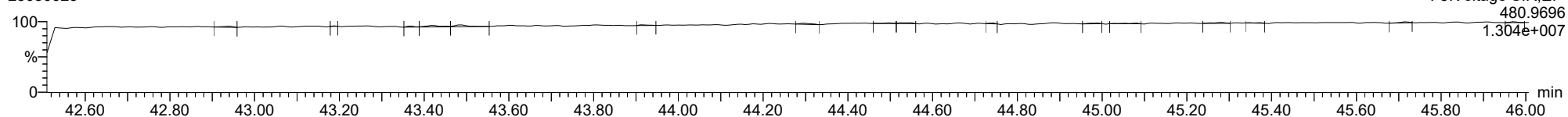
13C-OCDD

23030623



FUNCTION5 PFK

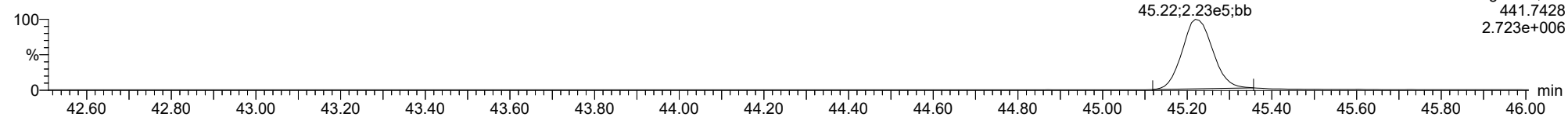
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

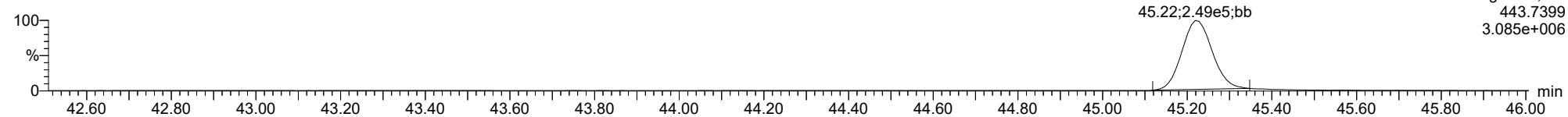
OCDF

23030623



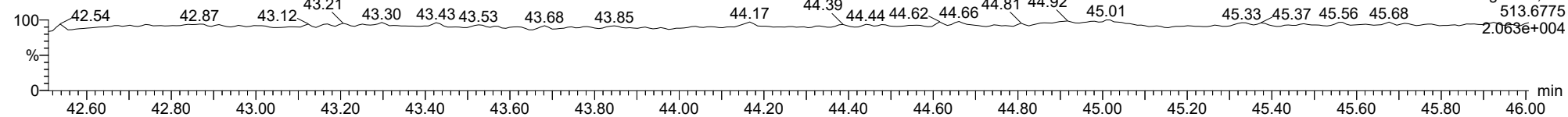
OCDF

23030623



FUNCTION5 DCDPE

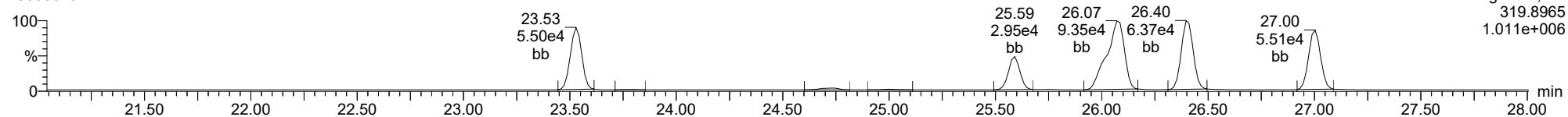
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

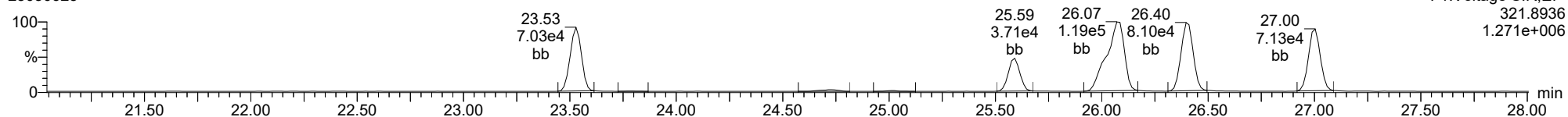
Total-tetradioxins

23030623



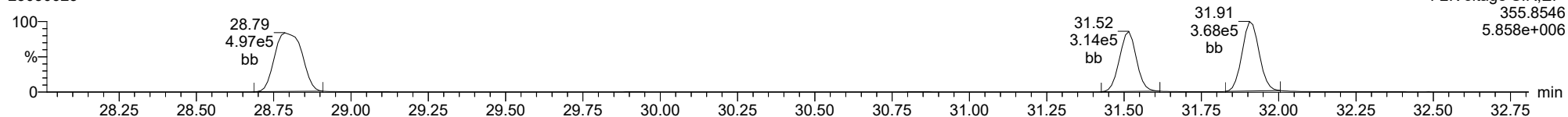
Total-tetradioxins

23030623



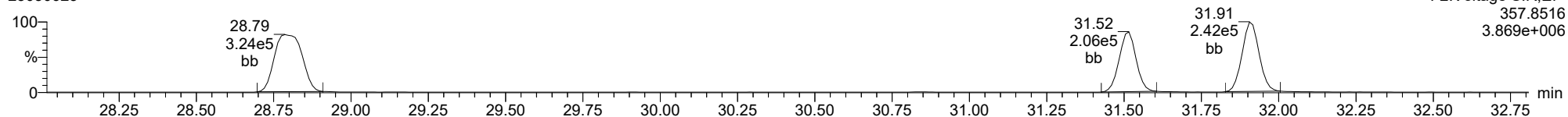
Total-pentadioxins

23030623



Total-pentadioxins

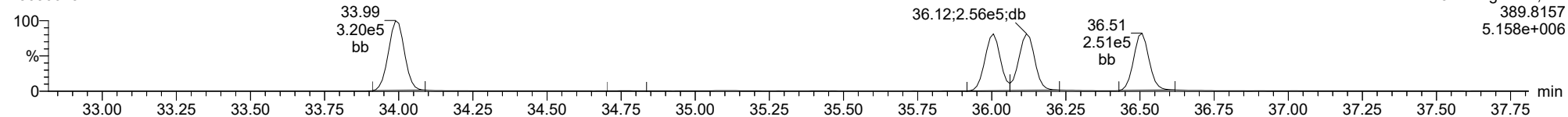
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

Total-hexadioxins

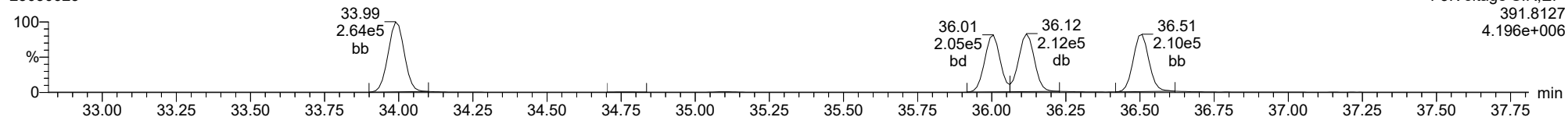
23030623



F3:Voltage SIR,EI+
389.8157
5.158e+006

Total-hexadioxins

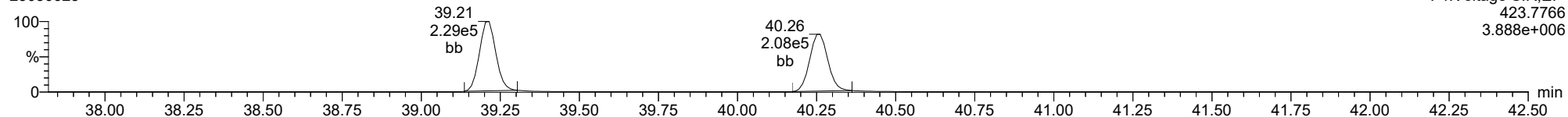
23030623



F3:Voltage SIR,EI+
391.8127
4.196e+006

Total-heptadioxins

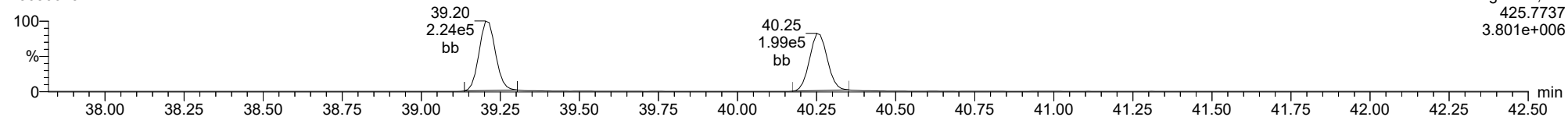
23030623



F4:Voltage SIR,EI+
423.7766
3.888e+006

Total-heptadioxins

23030623

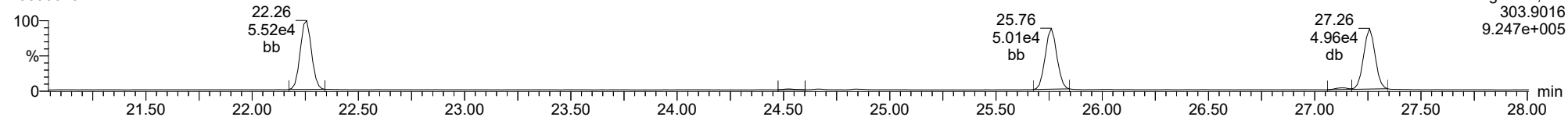


F4:Voltage SIR,EI+
425.7737
3.801e+006

ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

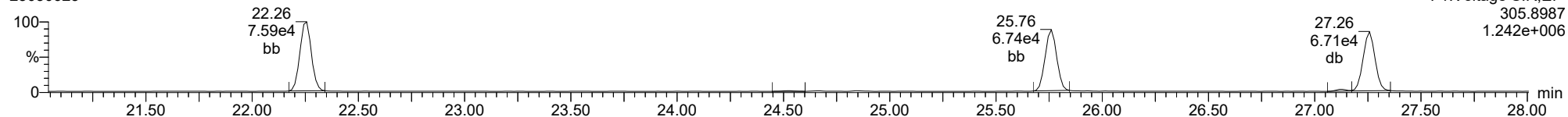
Total-tetrafurans

23030623



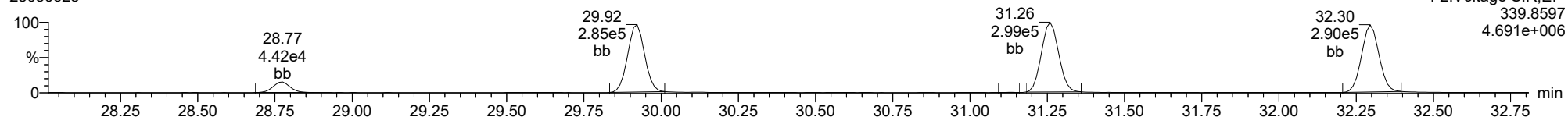
Total-tetrafurans

23030623



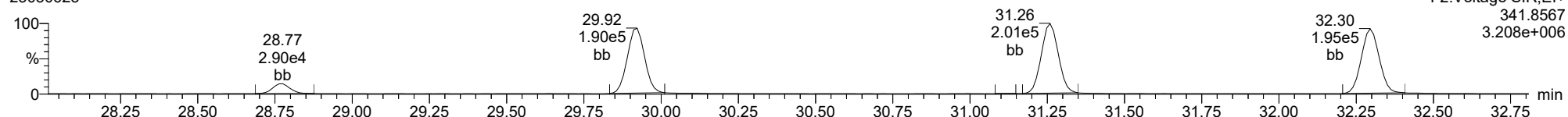
Total-pentafurans

23030623



Total-pentafurans

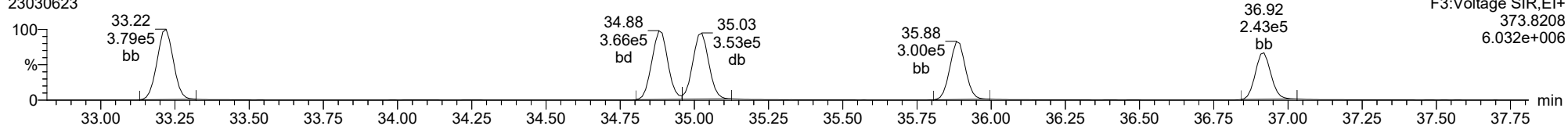
23030623



ID: CS3X3, Name: 23030623, Date: 07-Mar-2023, Time: 04:16:35, Conditions: AUTOSPEC01, User: pk

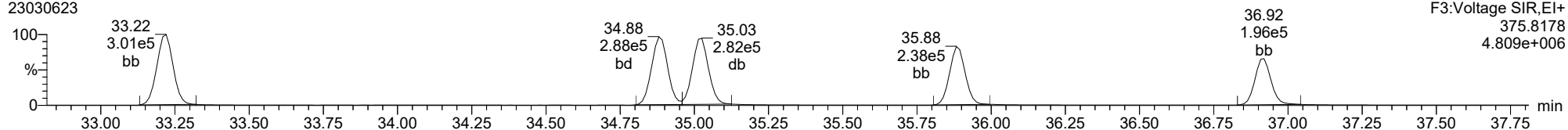
Total-hexafurans

23030623



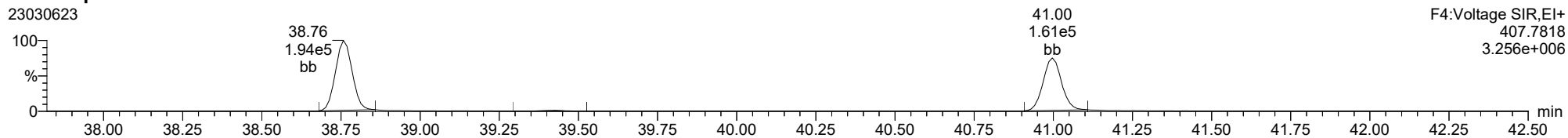
Total-hexafurans

23030623



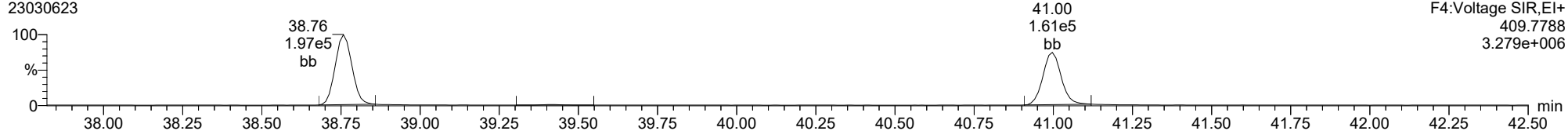
Total-heptafurans

23030623

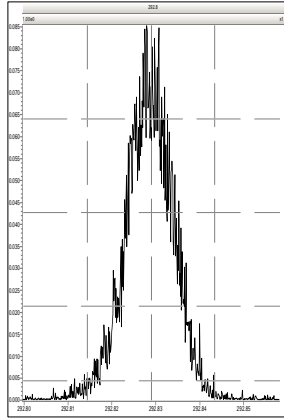


Total-heptafurans

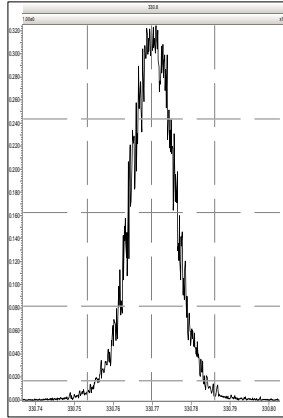
23030623



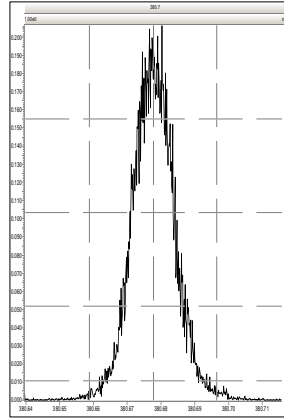
M 292.9824 R 11823



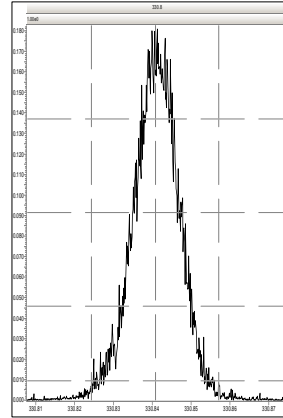
M 330.9792 R 12255



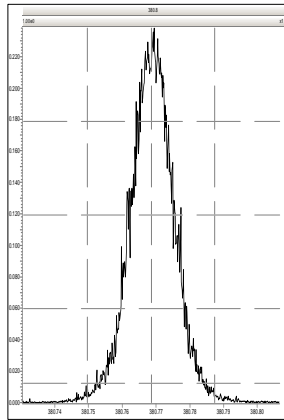
M 380.9760 R 12757



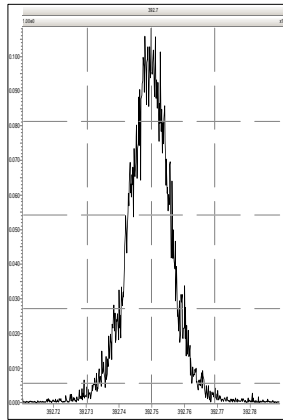
M 330.9792 R 12723



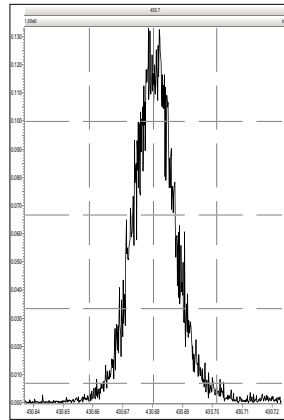
M 380.9760 R 12437



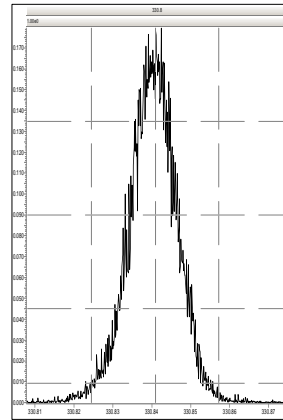
M 392.9760 R 13557



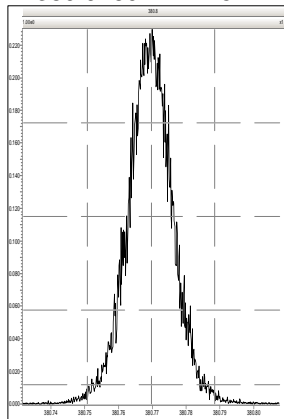
M 430.9728 R 13123



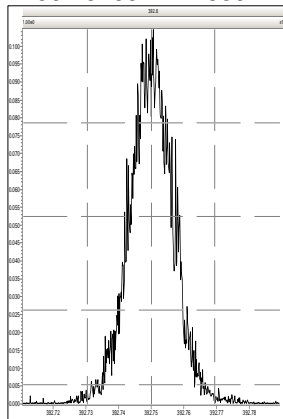
M 330.9792 R 11683



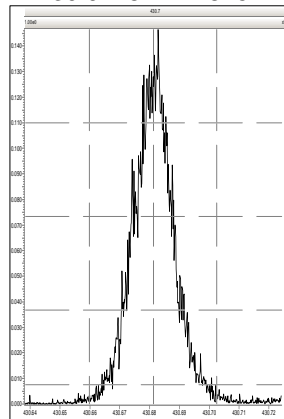
M 380.9760 R 12757



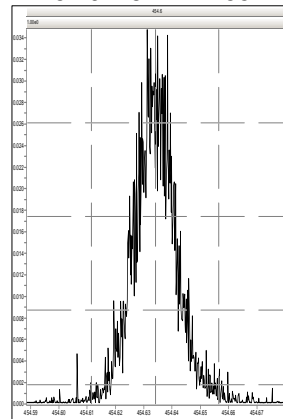
M 392.9760 R 12859



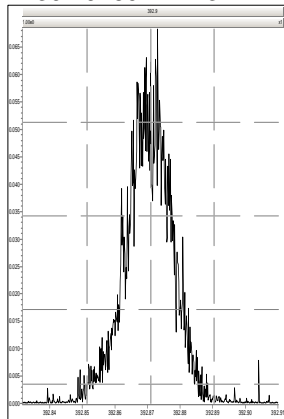
M 430.9728 R 12825



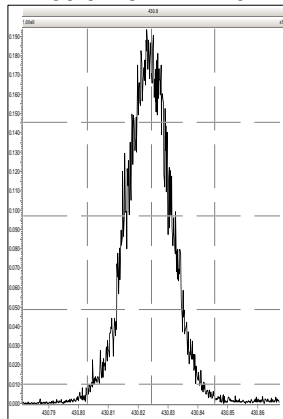
M 454.9728 R 14755



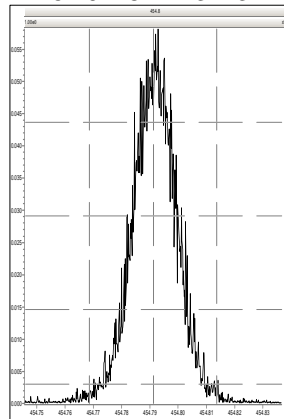
M 392.9760 R 12347



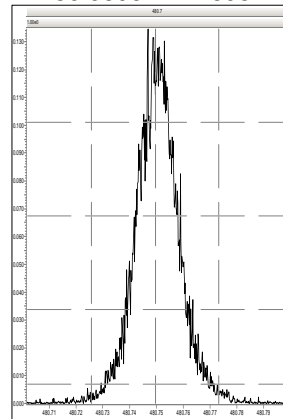
M 430.9728 R 12440



M 454.9728 R 13123

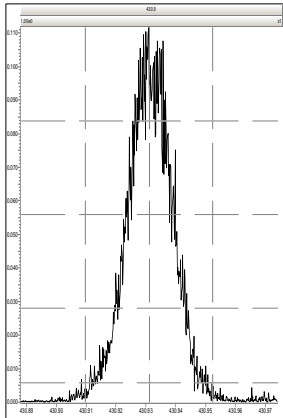


M 480.9696 R 12698

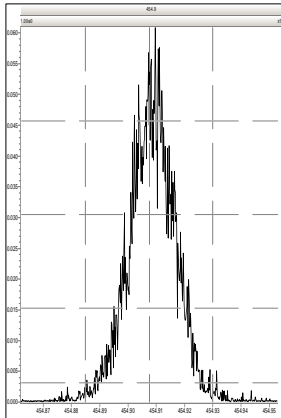


Printed: Tuesday, March 07, 2023 05:09:38 Pacific Standard Time

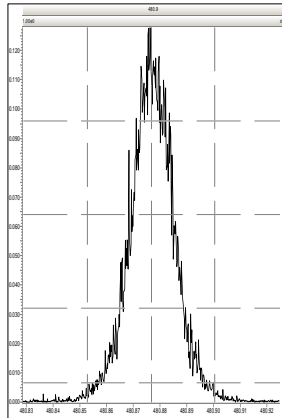
M 430.9728 R 12530



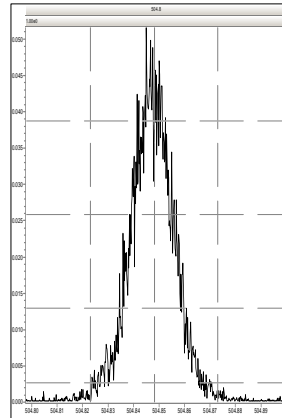
M 454.9728 R 13479



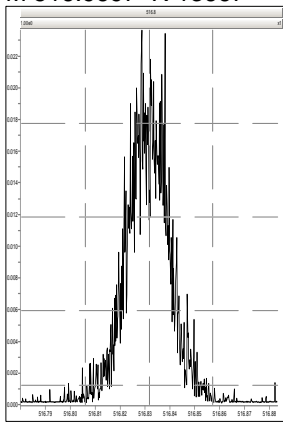
M 480.9696 R 12228



M 504.9696 R 12975



M 516.9697 R 13667

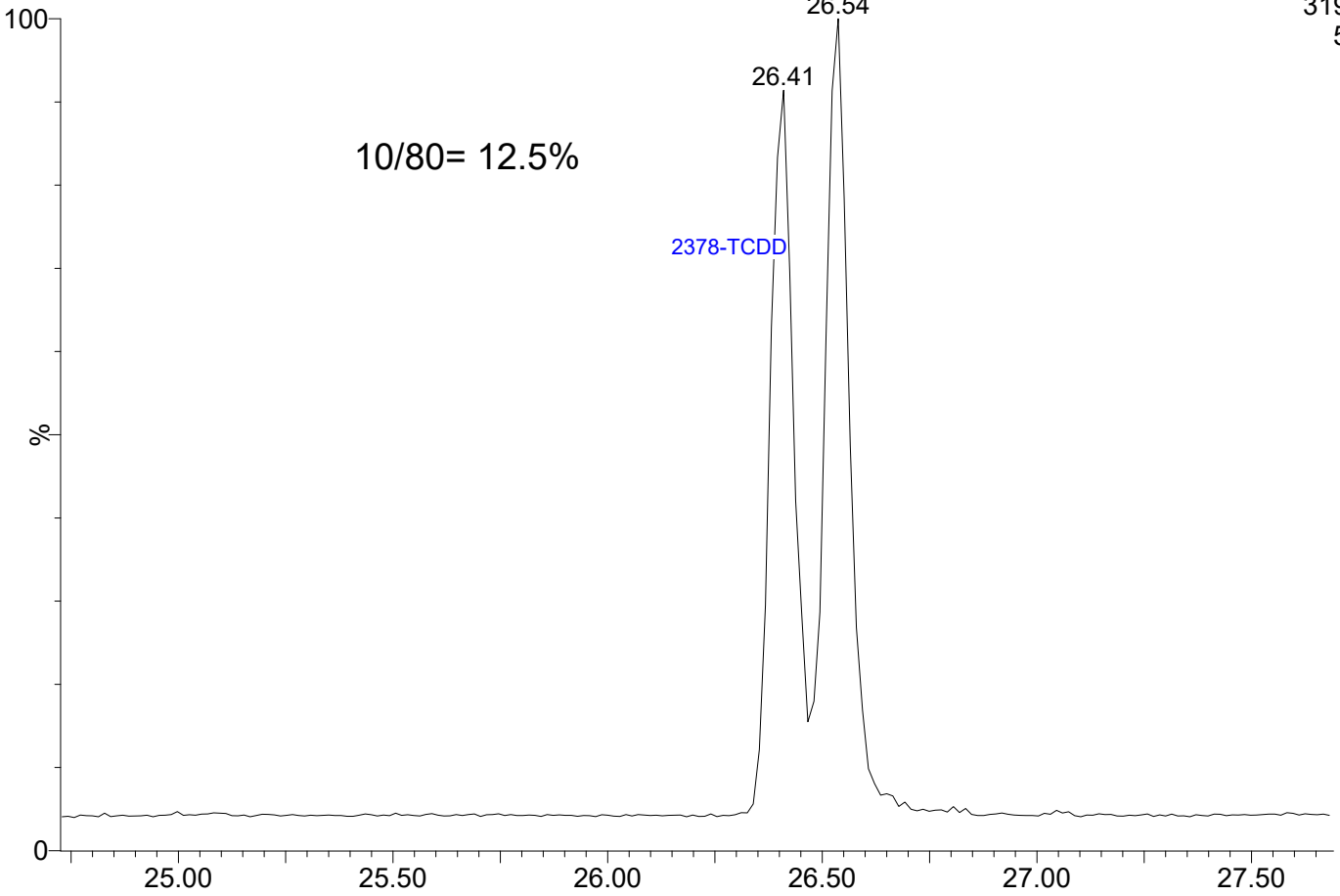


23030624

1: Voltage SIR 14 Channels EI+

319.8965

5.32e5

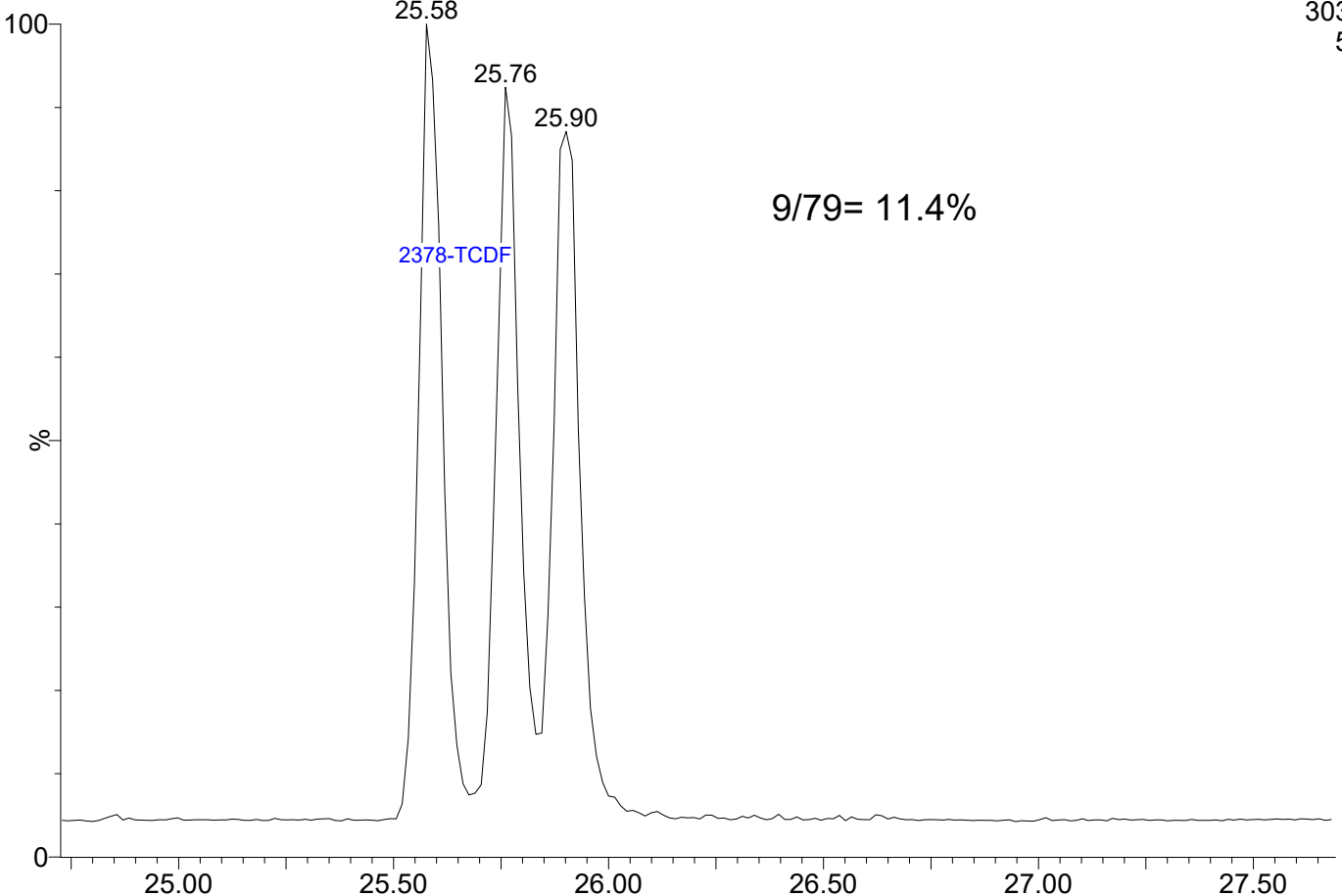


23030624

1: Voltage SIR 14 Channels EI+

303.9016

5.10e5





CONTINUING CALIBRATION CHECK
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: AUTOSPEC01

Calibration: GC00015

Lab File ID: 23030633

Calibration Date: 03/03/2023

Sequence: SLC0081

Injection Date: 03/07/23

Lab Sample ID: SLC0081-CCV3

Injection Time: 12:33

Sequence Name: CS3X4

COMPOUND	TYPE	CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,3,7,8-TCDF	A	10.000	9.78	0.7015272	0.6861944		-2.2	+/-16
2,3,7,8-TCDD	A	10.000	9.31	1.1486620	1.0693530		-6.9	+/-22
1,2,3,7,8-PeCDF	A	50.000	50.2	0.6792300	0.6826255		0.5	+/-18
2,3,4,7,8-PeCDF	A	50.000	48.0	0.7861704	0.7548584		-4.0	+/-18
1,2,3,7,8-PeCDD	A	50.000	49.6	1.0218450	1.0134130		-0.8	+/-22
1,2,3,4,7,8-HxCDF	A	50.000	48.2	1.1660380	1.1240870		-3.6	+/-10
1,2,3,6,7,8-HxCDF	A	50.000	50.6	1.0907410	1.1029070		1.1	+/-12
2,3,4,6,7,8-HxCDF	A	50.000	49.6	1.1396990	1.1313450		-0.7	+/-12
1,2,3,7,8,9-HxCDF	A	50.000	47.2	1.1370930	1.0741020		-5.5	+/-10
1,2,3,4,7,8-HxCDD	A	50.000	48.3	0.9955689	0.9617515		-3.4	+/-22
1,2,3,6,7,8-HxCDD	A	50.000	49.9	1.0009380	0.9987032		-0.2	+/-22
1,2,3,7,8,9-HxCDD	A	50.000	56.2	0.9071139	1.0188970		12.3	+/-18
1,2,3,4,6,7,8-HpCDF	A	50.000	47.2	1.0029930	0.9461687		-5.7	+/-10
1,2,3,4,7,8,9-HpCDF	A	50.000	50.3	0.9531152	0.9591665		0.6	+/-14
1,2,3,4,6,7,8-HpCDD	A	50.000	48.7	1.0390130	1.0126690		-2.5	+/-14
OCDF	A	100.00	87.0	0.7778078	0.6765827		-13.0	+/-37
OCDD	A	100.00	102	0.9199537	0.9400237		2.2	+/-21
13C12-2,3,7,8-TCDF	A	100.00	88.9	1.6201960	1.4403634		-11.1	+/-29
13C12-2,3,7,8-TCDD	A	100.00	87.4	1.1524090	1.0066480		-12.6	+/-18
13C12-1,2,3,7,8-PeCDF	A	100.00	84.7	1.2404520	1.0509505		-15.3	+/-24
13C12-2,3,4,7,8-PeCDF	A	100.00	89.7	1.1177860	1.0023584		-10.3	+/-23
13C12-1,2,3,7,8-PeCDD	A	100.00	91.0	0.8288129	0.7539762		-9.0	+/-38
13C12-1,2,3,4,7,8-HxCDF	A	100.00	89.2	1.1683050	1.0421841		-10.8	+/-24
13C12-1,2,3,6,7,8-HxCDF	A	100.00	78.4	1.3864660	1.0872169		-21.6	+/-30
13C12-2,3,4,6,7,8-HxCDF	A	100.00	88.9	1.1292560	1.0043779		-11.1	+/-27
13C12-1,2,3,7,8,9-HxCDF	A	100.00	97.5	0.9317541	0.9086748		-2.5	+/-26
13C12-1,2,3,4,7,8-HxCDD	A	100.00	95.5	0.9950393	0.9498090		-4.5	+/-15
13C12-1,2,3,6,7,8-HxCDD	A	100.00	84.1	1.1566890	0.9730717		-15.9	+/-15 *
13C12-1,2,3,4,6,7,8-HpCDF	A	100.00	92.5	0.8952017	0.8280293		-7.5	+/-22
13C12-1,2,3,4,7,8,9-HpCDF	A	100.00	86.9	0.7697516	0.6688447		-13.1	+/-23
13C12-1,2,3,4,6,7,8-HpCDD	A	100.00	93.8	0.8401226	0.7877608		-6.2	+/-18
13C12-OCDD	A	200.00	153	0.7674714	0.5877733		-23.4	+/-52
37C14-2,3,7,8-TCDD	A	10.000	7.70	1.2878040	0.9918342		-23.0	+/-21

* Values outside of QC limits

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
2378-TCDF	25.760	1.001	5.362e4	7.089e4	0.702	0.757	0.770	1009	1232	8.49e5	1.10e6	841.3	892.7	NO	bb	bb	9.781
12378-PeCDF	29.922	1.001	2.728e5	1.790e5	0.679	1.524	1.550	1979	1899	4.29e6	2.83e6	2169.0	1489.5	NO	bb	bb	50.250
23478-PeCDF	31.259	1.001	2.839e5	1.927e5	0.786	1.473	1.550	1979	1899	4.47e6	3.06e6	2260.2	1610.2	NO	bb	bb	48.009
123478-HxCDF	34.891	1.001	3.937e5	3.126e5	1.166	1.259	1.240	2110	1713	6.26e6	4.96e6	2966.3	2897.4	NO	bd	bd	48.201
234678-HxCDF	35.894	1.001	3.849e5	3.002e5	1.140	1.282	1.240	2110	1713	6.24e6	4.88e6	2958.8	2849.2	NO	bb	bb	49.634
123678-HxCDF	35.025	1.000	4.043e5	3.187e5	1.091	1.269	1.240	2110	1713	6.42e6	5.04e6	3042.9	2942.6	NO	db	db	50.558
123789-HxCDF	36.919	1.000	3.256e5	2.628e5	1.137	1.239	1.240	2110	1713	5.26e6	4.23e6	2491.5	2467.2	NO	bb	bb	47.230
1234678-HpCDF	38.769	1.001	2.374e5	2.350e5	1.003	1.010	1.050	1965	1636	3.96e6	3.97e6	2017.3	2430.0	NO	bb	bb	47.167
1234789-HpCDF	40.997	1.000	1.915e5	1.953e5	0.953	0.981	1.050	1965	1636	2.94e6	2.97e6	1496.9	1818.6	NO	bb	bb	50.317
OCDF	45.237	1.006	2.232e5	2.563e5	0.778	0.871	0.890	981	1557	2.78e6	3.13e6	2830.6	2011.3	NO	bb	bb	86.986
2378-TCDD	26.396	1.001	5.869e4	7.692e4	1.149	0.763	0.770	985	957	8.92e5	1.19e6	905.7	1239.7	NO	bb	bb	9.310
12378-PeCDD	31.515	1.001	2.875e5	1.938e5	1.022	1.484	1.550	1817	1288	4.44e6	2.99e6	2444.3	2322.0	NO	bb	bb	49.587
123478-HxCDD	36.005	1.000	3.039e5	2.468e5	0.996	1.231	1.240	2350	1394	5.06e6	4.10e6	2152.2	2937.6	NO	bd	bd	48.302
123678-HxCDD	36.117	1.000	3.243e5	2.616e5	1.001	1.240	1.240	2350	1394	5.22e6	4.21e6	2223.1	3020.1	NO	db	db	49.888
123789-HxCDD	36.507	1.011	3.238e5	2.668e5	0.907	1.214	1.240	2350	1394	5.31e6	4.39e6	2259.7	3149.1	NO	bb	bb	56.162
1234678-HpCDD	40.261	1.000	2.452e5	2.357e5	1.039	1.040	1.050	2204	1470	3.86e6	3.72e6	1752.5	2531.0	NO	bb	bb	48.732
OCDD	44.999	1.000	3.080e5	3.583e5	0.920	0.860	0.890	1460	1111	3.87e6	4.47e6	2649.0	4025.2	NO	bb	bb	102.182
13C-2378-TCDF	25.746	1.007	7.838e5	1.031e6	1.620	0.760	0.770	1766	1321	1.23e7	1.62e7	6945.2	12262.9	NO	bb	bb	88.901
13C-12378-PeCDF	29.900	1.170	7.936e5	5.303e5	1.240	1.497	1.550	1346	1885	1.24e7	8.37e6	9246.3	4437.9	NO	bb	bb	84.723
13C-23478-PeCDF	31.237	1.222	7.544e5	5.083e5	1.118	1.484	1.550	1346	1885	1.16e7	7.83e6	8636.6	4150.9	NO	bb	bb	89.674
13C-123478-HxCDF	34.869	0.955	4.241e5	8.326e5	1.168	0.509	0.510	1276	2003	6.96e6	1.36e7	5456.0	6775.7	NO	bd	bd	89.205
13C-123678-HxCDF	35.014	0.959	4.436e5	8.674e5	1.386	0.511	0.510	1276	2003	6.91e6	1.35e7	5411.2	6726.8	NO	db	db	78.416
13C-234678-HxCDF	35.872	0.983	4.104e5	8.008e5	1.129	0.512	0.510	1276	2003	6.69e6	1.31e7	5240.4	6530.8	NO	bb	bb	88.942
13C-123789-HxCDF	36.908	1.011	3.708e5	7.249e5	0.932	0.512	0.510	1276	2003	5.92e6	1.17e7	4638.2	5833.0	NO	bb	bb	97.523
13C-1234678-HpCDF	38.746	1.062	3.028e5	6.957e5	0.895	0.435	0.440	1657	1949	5.14e6	1.18e7	3103.1	6047.1	NO	bb	bb	92.496
13C-1234789-HpCDF	40.986	1.123	2.463e5	5.602e5	0.770	0.440	0.440	1657	1949	3.75e6	8.59e6	2261.0	4406.5	NO	bb	bb	86.891
13C-1234-TCDD	25.562	0.000	5.622e5	6.975e5	1.000	0.806	0.770	1443	972	8.78e6	1.09e7	6087.0	11252.5	NO	bb	bb	100.000
13C-2378-TCDD	26.382	1.032	5.580e5	7.101e5	1.152	0.786	0.770	1443	972	8.62e6	1.10e7	5970.0	11341.2	NO	bb	bb	87.352
13C-12378-PeCDD	31.493	1.232	5.851e5	3.648e5	0.829	1.604	1.550	945	992	9.17e6	5.76e6	9700.2	5808.1	NO	bb	bb	90.971
13C-123478-HxCDD	35.994	0.986	6.434e5	5.019e5	0.995	1.282	1.240	1384	1588	1.04e7	8.06e6	7547.2	5073.0	NO	bd	bd	95.454
13C-123678-HxCDD	36.106	0.989	6.575e5	5.158e5	1.157	1.275	1.240	1384	1588	1.09e7	8.52e6	7890.7	5362.0	NO	db	db	84.126
13C-1234678-HpCDD	40.250	1.103	4.905e5	4.595e5	0.840	1.067	1.050	1567	980	7.51e6	6.97e6	4795.0	7113.4	NO	bb	bb	93.767
13C-OCDD	44.981	1.233	6.703e5	7.472e5	0.767	0.897	0.890	1450	1549	8.25e6	9.21e6	5692.9	5944.5	NO	bb	bb	153.171
13C-123789-HxCDD	36.496	0.000	6.736e5	5.322e5	1.000	1.266	1.240	1384	1588	1.11e7	8.80e6	8045.6	5541.2	NO	bb	bb	100.000
37CL-2378-TCDD	26.396	1.033	1.249e5		1.288			1494		1.89e6		1266.6			bb		7.702

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	S/N 2	EMPC	Int.1	Int.2	pg
1368-TCDF	22.257	0.864	6.416e4	8.348e4	0.802	0.768	0.770	1009	1232	1.04e6	1.35e6	1034.4	1092.8	NO	bb	bb	10.151
1289-TCDF	27.257	1.059	4.116e4	5.901e4	0.678	0.697	0.770	1009	1232	6.46e5	8.89e5	640.3	721.7	NO	db	db	8.143
13468-PECDF	27.116	0.907	4.330e5	2.793e5	1.246	1.550	1.550	786	871	6.81e6	4.34e6	8667.1	4989.2	NO	bb	bb	43.165
12389-PECDF	32.296	1.080	2.729e5	1.835e5	0.496	1.487	1.550	1979	1899	4.11e6	2.74e6	2077.9	1442.3	NO	bb	bb	69.440
123468-HXCDF	33.220	0.953	3.697e5	2.972e5	1.169	1.244	1.240	2110	1713	5.75e6	4.60e6	2722.9	2687.3	NO	bb	bb	45.392
1368-TCDD	23.528	0.892	6.588e4	8.403e4	1.015	0.784	0.770	985	957	1.07e6	1.38e6	1082.4	1437.4	NO	bb	bb	11.642
1289-TCDD	27.003	1.024	4.746e4	5.810e4	0.909	0.817	0.770	985	957	7.40e5	8.85e5	750.9	924.6	NO	bb	bb	9.160
12479-PECDD	28.786	0.914	4.579e5	3.023e5	2.301	1.515	1.550	1817	1288	4.46e6	2.97e6	2457.2	2307.0	NO	bb	bb	34.778
12389-PECDD	31.917	1.013	3.446e5	2.250e5	1.184	1.531	1.550	1817	1288	5.19e6	3.36e6	2859.4	2604.5	NO	bb	bb	50.665
124679-HXCDD	34.000	0.945	3.107e5	2.517e5	1.115	1.235	1.240	2350	1394	4.82e6	3.86e6	2052.1	2767.8	NO	bb	bb	44.027
1234679-HPCDD	39.214	0.974	2.747e5	2.742e5	1.137	1.002	1.050	2204	1470	4.61e6	4.58e6	2090.9	3117.3	NO	bb	bb	50.830
Total-tetrafurans			1.607e5		0.727			1009		2.57e6							28.356
Total-penta1			4.330e5					786		6.81e6							43.165
Total-pentafurans			8.722e5		0.654			1979		1.35e7							176.004
Total-hexafurans			1.878e6		1.141			2110		2.99e7							241.015
Total-heptafurans			4.312e5		0.978			1965		6.94e6							97.984
Total-Furans			3.999e6		0.922			1009		6.25e7							673.509
Total-tetradoxins			3.002e5		1.024			985		4.26e6							52.659
Total-pentadoxins			1.091e6		1.502			1817		1.41e7							135.127
Total-hexadoxins			1.264e6		1.005			2350		2.04e7							198.484
Total-heptadoxins			5.199e5		1.088			2204		8.47e6							99.562
Total-Dioxins			3.482e6		1.130			985		5.11e7							588.013
Total-TEQ			7.481e6					985		1.14e8							1261.522
FUNCTION1 PFK			1.193e7					402067		4.01e6							
FUNCTION2 PFK			6.624e4					223390		1.95e6							0.000
FUNCTION3 PFK			8.010e5					285567		2.00e7							0.000
FUNCTION4 PFK			3.297e7					217344		1.32e7							
FUNCTION5 PFK			0.000e0					142469		0.00e0							
FUNCTION1 HXCD...			4.083e2					623		4.46e3							0.000
FUNCTION1 HPCD...																	
FUNCTION2 HPCD...			5.537e2					818		9.11e3							0.000
FUNCTION3 OCDPE			1.512e3					692		2.42e4							0.000
FUNCTION4 NCDPE			3.738e2					649		5.49e3							0.000
FUNCTION5 DCDPE			8.868e1					513		2.09e3							0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50

Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

TF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.116e4	5.901e4	0.678	0.70	0.77	640.3	YES	NO	db	db	8.143
2	Total-tetrafurans	27.12	1.061e3	1.213e3	0.727	0.87	0.77	17.7	YES	NO	bd	bd	0.172
3	2378-TCDF	25.76	5.362e4	7.089e4	0.702	0.76	0.77	841.3	YES	NO	bb	bb	9.781
4	Total-tetrafurans	24.52	6.667e2	7.578e2	0.727	0.88	0.77	11.2	YES	NO	bd	bd	0.108
5	1368-TCDF	22.26	6.416e4	8.348e4	0.802	0.77	0.77	1034.4	YES	NO	bb	bb	10.151

PP

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	13468-PECDFF	27.12	4.330e5	2.793e5	1.246	1.55	1.55	8667.1	YES	NO	bb	bb	43.165

PF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	23478-PeCDF	31.26	2.839e5	1.927e5	0.786	1.47	1.55	2260.2	YES	NO	bb	bb	48.009
2	12378-PeCDF	29.92	2.728e5	1.790e5	0.679	1.52	1.55	2169.0	YES	NO	bb	bb	50.250
3	Total-pentafurans	28.77	4.246e4	2.748e4	0.654	1.55	1.55	321.0	YES	NO	bb	bb	8.269
4	12389-PECDF	32.30	2.729e5	1.835e5	0.496	1.49	1.55	2077.9	YES	NO	bb	bb	69.440
5	Total-pentafurans	31.50	1.953e2	1.104e2	0.654	1.77	1.55	3.8	NO	NO	bb	bb	0.036

HF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	123789-HxCDF	36.92	3.256e5	2.628e5	1.137	1.24	1.24	2491.5	YES	NO	bb	bb	47.230
2	234678-HxCDF	35.89	3.849e5	3.002e5	1.140	1.28	1.24	2958.8	YES	NO	bb	bb	49.634
3	123678-HxCDF	35.03	4.043e5	3.187e5	1.091	1.27	1.24	3042.9	YES	NO	db	db	50.558
4	123478-HxCDF	34.89	3.937e5	3.126e5	1.166	1.26	1.24	2966.3	YES	NO	bd	bd	48.201
5	123468-HxCDF	33.22	3.697e5	2.972e5	1.169	1.24	1.24	2722.9	YES	NO	bb	bb	45.392

HPF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234789-HpCDF	41.00	1.915e5	1.953e5	0.953	0.98	1.05	1496.9	YES	NO	bb	bb	50.317
2	Total-heptafurans	39.43	2.259e3	2.146e3	0.978	1.05	1.05	17.9	YES	NO	bb	bb	0.499
3	1234678-HpCDF	38.77	2.374e5	2.350e5	1.003	1.01	1.05	2017.3	YES	NO	bb	bb	47.167

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

Furans,TF,PP,PF,HF,HPF,OF

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.116e4	5.901e4	0.678	0.70	0.77	640.3	YES	NO	db	db	8.143
2	Total-tetrafurans	27.12	1.061e3	1.213e3	0.727	0.87	0.77	17.7	YES	NO	bd	bd	0.172
3	2378-TCDF	25.76	5.362e4	7.089e4	0.702	0.76	0.77	841.3	YES	NO	bb	bb	9.781
4	Total-tetrafurans	24.52	6.667e2	7.578e2	0.727	0.88	0.77	11.2	YES	NO	bd	bd	0.108
5	1368-TCDF	22.26	6.416e4	8.348e4	0.802	0.77	0.77	1034.4	YES	NO	bb	bb	10.151
6	23478-PeCDF	31.26	2.839e5	1.927e5	0.786	1.47	1.55	2260.2	YES	NO	bb	bb	48.009
7	12378-PeCDF	29.92	2.728e5	1.790e5	0.679	1.52	1.55	2169.0	YES	NO	bb	bb	50.250
8	Total-pentafurans	28.77	4.246e4	2.748e4	0.654	1.55	1.55	321.0	YES	NO	bb	bb	8.269
9	12389-PECDF	32.30	2.729e5	1.835e5	0.496	1.49	1.55	2077.9	YES	NO	bb	bb	69.440
10	Total-pentafurans	31.50	1.953e2	1.104e2	0.654	1.77	1.55	3.8	NO	NO	bb	bb	0.036
11	123789-HxCDF	36.92	3.256e5	2.628e5	1.137	1.24	1.24	2491.5	YES	NO	bb	bb	47.230
12	234678-HxCDF	35.89	3.849e5	3.002e5	1.140	1.28	1.24	2958.8	YES	NO	bb	bb	49.634
13	123678-HxCDF	35.03	4.043e5	3.187e5	1.091	1.27	1.24	3042.9	YES	NO	db	db	50.558
14	123478-HxCDF	34.89	3.937e5	3.126e5	1.166	1.26	1.24	2966.3	YES	NO	bd	bd	48.201
15	123468-HXCDF	33.22	3.697e5	2.972e5	1.169	1.24	1.24	2722.9	YES	NO	bb	bb	45.392
16	1234789-HpCDF	41.00	1.915e5	1.953e5	0.953	0.98	1.05	1496.9	YES	NO	bb	bb	50.317
17	Total-heptafurans	39.43	2.259e3	2.146e3	0.978	1.05	1.05	17.9	YES	NO	bb	bb	0.499
18	1234678-HpCDF	38.77	2.374e5	2.350e5	1.003	1.01	1.05	2017.3	YES	NO	bb	bb	47.167
19	OCDF	45.24	2.232e5	2.563e5	0.778	0.87	0.89	2830.6	YES	NO	bb	bb	86.986
20	13468-PECDF	27.12	4.330e5	2.793e5	1.246	1.55	1.55	8667.1	YES	NO	bb	bb	43.165

TD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.00	4.746e4	5.810e4	0.909	0.82	0.77	750.9	YES	NO	bb	bb	9.160
2	2378-TCDD	26.40	5.869e4	7.692e4	1.149	0.76	0.77	905.7	YES	NO	bb	bb	9.310
3	Total-tetradioxins	26.07	9.232e4	1.193e5	1.024	0.77	0.77	1024.4	YES	NO	bb	bb	16.291
4	Total-tetradioxins	25.59	3.296e4	4.192e4	1.024	0.79	0.77	528.9	YES	NO	bd	bb	5.765
5	Total-tetradioxins	25.25	1.381e2	1.569e2	1.024	0.88	0.77	3.6	NO	NO	bb	bb	0.023
6	Total-tetradioxins	24.73	2.745e3	3.352e3	1.024	0.82	0.77	29.5	YES	NO	bb	bb	0.469
7	1368-TCDD	23.53	6.588e4	8.403e4	1.015	0.78	0.77	1082.4	YES	NO	bb	bb	11.642

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

PD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-pentadioxins	29.91	8.638e2	5.174e2	1.502	1.67	1.55	8.2	YES	NO	bb	bb	0.097
2	12479-PECDD	28.79	4.579e5	3.023e5	2.301	1.51	1.55	2457.2	YES	NO	bb	bb	34.778
3	12389-PECDD	31.92	3.446e5	2.250e5	1.184	1.53	1.55	2859.4	YES	NO	bb	bb	50.665
4	12378-PeCDD	31.52	2.875e5	1.938e5	1.022	1.48	1.55	2444.3	YES	NO	bb	bb	49.587

HD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	Total-hexadioxins	34.77	6.642e2	5.557e2	1.005	1.20	1.24	4.9	YES	NO	bd	bb	0.105
2	124679-HXCDD	34.00	3.107e5	2.517e5	1.115	1.23	1.24	2052.1	YES	NO	bb	bb	44.027
3	123789-HxCDD	36.51	3.238e5	2.668e5	0.907	1.21	1.24	2259.7	YES	NO	bb	bb	56.162
4	123678-HxCDD	36.12	3.243e5	2.616e5	1.001	1.24	1.24	2223.1	YES	NO	db	db	49.888
5	123478-HxCDD	36.01	3.039e5	2.468e5	0.996	1.23	1.24	2152.2	YES	NO	bd	bd	48.302

HPD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1234678-HpCDD	40.26	2.452e5	2.357e5	1.039	1.04	1.05	1752.5	YES	NO	bb	bb	48.732
2	1234679-HPCDD	39.21	2.747e5	2.742e5	1.137	1.00	1.05	2090.9	YES	NO	bb	bb	50.830

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

Dioxins,TD,PD,HD,HPD,OD

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDD	27.00	4.746e4	5.810e4	0.909	0.82	0.77	750.9	YES	NO	bb	bb	9.160
2	2378-TCDD	26.40	5.869e4	7.692e4	1.149	0.76	0.77	905.7	YES	NO	bb	bb	9.310
3	Total-tetradoxins	26.07	9.232e4	1.193e5	1.024	0.77	0.77	1024.4	YES	NO	bb	bb	16.291
4	Total-tetradoxins	25.59	3.296e4	4.192e4	1.024	0.79	0.77	528.9	YES	NO	bd	bb	5.765
5	Total-tetradoxins	25.25	1.381e2	1.569e2	1.024	0.88	0.77	3.6	NO	NO	bb	bb	0.023
6	Total-tetradoxins	24.73	2.745e3	3.352e3	1.024	0.82	0.77	29.5	YES	NO	bb	bb	0.469
7	1368-TCDD	23.53	6.588e4	8.403e4	1.015	0.78	0.77	1082.4	YES	NO	bb	bb	11.642
8	Total-pentadoxins	29.91	8.638e2	5.174e2	1.502	1.67	1.55	8.2	YES	NO	bb	bb	0.097
9	12479-PECDD	28.79	4.579e5	3.023e5	2.301	1.51	1.55	2457.2	YES	NO	bb	bb	34.778
10	Total-hexadoxins	34.77	6.642e2	5.557e2	1.005	1.20	1.24	4.9	YES	NO	bd	bb	0.105
11	124679-HXCDD	34.00	3.107e5	2.517e5	1.115	1.23	1.24	2052.1	YES	NO	bb	bb	44.027
12	12389-PECDD	31.92	3.446e5	2.250e5	1.184	1.53	1.55	2859.4	YES	NO	bb	bb	50.665
13	12378-PeCDD	31.52	2.875e5	1.938e5	1.022	1.48	1.55	2444.3	YES	NO	bb	bb	49.587
14	123789-HxCDD	36.51	3.238e5	2.668e5	0.907	1.21	1.24	2259.7	YES	NO	bb	bb	56.162
15	123678-HxCDD	36.12	3.243e5	2.616e5	1.001	1.24	1.24	2223.1	YES	NO	db	db	49.888
16	123478-HxCDD	36.01	3.039e5	2.468e5	0.996	1.23	1.24	2152.2	YES	NO	bd	bd	48.302
17	1234678-HpCDD	40.26	2.452e5	2.357e5	1.039	1.04	1.05	1752.5	YES	NO	bb	bb	48.732
18	1234679-HPCDD	39.21	2.747e5	2.742e5	1.137	1.00	1.05	2090.9	YES	NO	bb	bb	50.830
19	OCDD	45.00	3.080e5	3.583e5	0.920	0.86	0.89	2649.0	YES	NO	bb	bb	102.182

Quantify Totals Report MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	1289-TCDF	27.26	4.116e4	5.901e4	0.678	0.70	0.77	640.3	YES	NO	db	db	8.143
2	Total-tetrafurans	27.12	1.061e3	1.213e3	0.727	0.87	0.77	17.7	YES	NO	bd	bd	0.172
3	2378-TCDF	25.76	5.362e4	7.089e4	0.702	0.76	0.77	841.3	YES	NO	bb	bb	9.781
4	Total-tetrafurans	24.52	6.667e2	7.578e2	0.727	0.88	0.77	11.2	YES	NO	bd	bd	0.108
5	1368-TCDF	22.26	6.416e4	8.348e4	0.802	0.77	0.77	1034.4	YES	NO	bb	bb	10.151
6	23478-PeCDF	31.26	2.839e5	1.927e5	0.786	1.47	1.55	2260.2	YES	NO	bb	bb	48.009
7	12378-PeCDF	29.92	2.728e5	1.790e5	0.679	1.52	1.55	2169.0	YES	NO	bb	bb	50.250
8	Total-pentafurans	28.77	4.246e4	2.748e4	0.654	1.55	1.55	321.0	YES	NO	bb	bb	8.269
9	12389-PECDF	32.30	2.729e5	1.835e5	0.496	1.49	1.55	2077.9	YES	NO	bb	bb	69.440
10	Total-pentafurans	31.50	1.953e2	1.104e2	0.654	1.77	1.55	3.8	NO	NO	bb	bb	0.036
11	123789-HxCDF	36.92	3.256e5	2.628e5	1.137	1.24	1.24	2491.5	YES	NO	bb	bb	47.230
12	234678-HxCDF	35.89	3.849e5	3.002e5	1.140	1.28	1.24	2958.8	YES	NO	bb	bb	49.634
13	123678-HxCDF	35.03	4.043e5	3.187e5	1.091	1.27	1.24	3042.9	YES	NO	db	db	50.558
14	123478-HxCDF	34.89	3.937e5	3.126e5	1.166	1.26	1.24	2966.3	YES	NO	bd	bd	48.201
15	123468-HXCDF	33.22	3.697e5	2.972e5	1.169	1.24	1.24	2722.9	YES	NO	bb	bb	45.392
16	1234789-HpCDF	41.00	1.915e5	1.953e5	0.953	0.98	1.05	1496.9	YES	NO	bb	bb	50.317
17	Total-heptafurans	39.43	2.259e3	2.146e3	0.978	1.05	1.05	17.9	YES	NO	bb	bb	0.499
18	1234678-HpCDF	38.77	2.374e5	2.350e5	1.003	1.01	1.05	2017.3	YES	NO	bb	bb	47.167
19	OCDF	45.24	2.232e5	2.563e5	0.778	0.87	0.89	2830.6	YES	NO	bb	bb	86.986
20	13468-PECDF	27.12	4.330e5	2.793e5	1.246	1.55	1.55	8667.1	YES	NO	bb	bb	43.165
21	1289-TCDD	27.00	4.746e4	5.810e4	0.909	0.82	0.77	750.9	YES	NO	bb	bb	9.160
22	2378-TCDD	26.40	5.869e4	7.692e4	1.149	0.76	0.77	905.7	YES	NO	bb	bb	9.310
23	Total-tetradioxins	26.07	9.232e4	1.193e5	1.024	0.77	0.77	1024.4	YES	NO	bb	bb	16.291
24	Total-tetradioxins	25.59	3.296e4	4.192e4	1.024	0.79	0.77	528.9	YES	NO	bd	bb	5.765
25	Total-tetradioxins	25.25	1.381e2	1.569e2	1.024	0.88	0.77	3.6	NO	NO	bb	bb	0.023
26	Total-tetradioxins	24.73	2.745e3	3.352e3	1.024	0.82	0.77	29.5	YES	NO	bb	bb	0.469
27	1368-TCDD	23.53	6.588e4	8.403e4	1.015	0.78	0.77	1082.4	YES	NO	bb	bb	11.642
28	Total-pentadioxins	29.91	8.638e2	5.174e2	1.502	1.67	1.55	8.2	YES	NO	bb	bb	0.097
29	12479-PECDD	28.79	4.579e5	3.023e5	2.301	1.51	1.55	2457.2	YES	NO	bb	bb	34.778
30	Total-hexadioxins	34.77	6.642e2	5.557e2	1.005	1.20	1.24	4.9	YES	NO	bd	bb	0.105
31	124679-HXCDD	34.00	3.107e5	2.517e5	1.115	1.23	1.24	2052.1	YES	NO	bb	bb	44.027
32	12389-PECDD	31.92	3.446e5	2.250e5	1.184	1.53	1.55	2859.4	YES	NO	bb	bb	50.665
33	12378-PeCDD	31.52	2.875e5	1.938e5	1.022	1.48	1.55	2444.3	YES	NO	bb	bb	49.587
34	123789-HxCDD	36.51	3.238e5	2.668e5	0.907	1.21	1.24	2259.7	YES	NO	bb	bb	56.162
35	123678-HxCDD	36.12	3.243e5	2.616e5	1.001	1.24	1.24	2223.1	YES	NO	db	db	49.888
36	123478-HxCDD	36.01	3.039e5	2.468e5	0.996	1.23	1.24	2152.2	YES	NO	bd	bd	48.302
37	1234678-HpCDD	40.26	2.452e5	2.357e5	1.039	1.04	1.05	1752.5	YES	NO	bb	bb	48.732

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

TotalTEQ,Furans,Dioxins

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	1234679-HPCDD	39.21	2.747e5	2.742e5	1.137	1.00	1.05	2090.9	YES	NO	bb	bb	50.830
39	OCDD	45.00	3.080e5	3.583e5	0.920	0.86	0.89	2649.0	YES	NO	bb	bb	102.182

PFK1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 PFK	24.45	9.943e6					8.2	YES		bb		
2	FUNCTION1 PFK	22.41	1.987e6					1.8	NO		bb		

PFK2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 PFK	32.56	7.871e3					1.3	NO		bb		0.000
2	FUNCTION2 PFK	31.87	3.713e3					0.9	NO		bb		0.000
3	FUNCTION2 PFK	31.40	4.750e3					0.9	NO		bb		0.000
4	FUNCTION2 PFK	30.62	1.703e4					1.9	NO		bb		0.000
5	FUNCTION2 PFK	29.64	4.111e3					0.9	NO		bb		0.000
6	FUNCTION2 PFK	28.30	2.145e4					1.6	NO		bb		0.000
7	FUNCTION2 PFK	28.20	7.318e3					1.3	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 PFK	32.90	3.086e3					0.7	NO		bd		0.000
2	FUNCTION3 PFK	34.56	1.466e4					1.6	NO		bb		0.000
3	FUNCTION3 PFK	34.48	7.245e3					1.1	NO		db		0.000
4	FUNCTION3 PFK	34.45	7.875e3					0.9	NO		bd		0.000
5	FUNCTION3 PFK	34.23	3.215e4					2.3	NO		bb		0.000
6	FUNCTION3 PFK	34.02	3.659e4					1.6	NO		db		0.000
7	FUNCTION3 PFK	33.91	1.406e4					1.5	NO		bd		0.000
8	FUNCTION3 PFK	33.82	2.944e4					2.3	NO		db		0.000
9	FUNCTION3 PFK	33.71	1.894e4					1.3	NO		dd		0.000
10	FUNCTION3 PFK	33.63	2.865e4					2.4	NO		dd		0.000
11	FUNCTION3 PFK	33.58	1.357e4					1.5	NO		bd		0.000
12	FUNCTION3 PFK	33.44	1.612e4					2.0	NO		bb		0.000
13	FUNCTION3 PFK	33.38	2.118e4					2.0	NO		bb		0.000
14	FUNCTION3 PFK	33.16	7.251e3					1.2	NO		db		0.000
15	FUNCTION3 PFK	33.13	1.931e4					1.9	NO		dd		0.000
16	FUNCTION3 PFK	33.04	6.861e4					3.5	YES		bd		0.000
17	FUNCTION3 PFK	32.98	3.016e4					1.4	NO		db		0.000
18	FUNCTION3 PFK	36.28	2.389e4					2.1	NO		bb		0.000
19	FUNCTION3 PFK	36.08	1.303e4					1.0	NO		db		0.000
20	FUNCTION3 PFK	35.98	1.981e4					1.9	NO		bd		0.000
21	FUNCTION3 PFK	35.88	3.122e4					2.0	NO		db		0.000
22	FUNCTION3 PFK	35.83	2.160e4					2.1	NO		dd		0.000
23	FUNCTION3 PFK	35.78	3.035e4					2.5	NO		bd		0.000
24	FUNCTION3 PFK	35.70	2.528e4					1.7	NO		db		0.000
25	FUNCTION3 PFK	35.64	2.297e4					1.8	NO		dd		0.000
26	FUNCTION3 PFK	35.57	1.748e4					1.1	NO		bd		0.000
27	FUNCTION3 PFK	35.46	1.192e4					1.6	NO		bb		0.000
28	FUNCTION3 PFK	35.39	9.776e3					1.3	NO		db		0.000
29	FUNCTION3 PFK	35.36	1.681e4					1.9	NO		bd		0.000
30	FUNCTION3 PFK	35.11	1.070e4					1.3	NO		db		0.000
31	FUNCTION3 PFK	35.05	4.570e3					0.8	NO		bd		0.000
32	FUNCTION3 PFK	35.00	1.299e4					1.6	NO		db		0.000
33	FUNCTION3 PFK	34.91	2.324e4					1.9	NO		bd		0.000
34	FUNCTION3 PFK	37.65	1.673e4					1.1	NO		bb		0.000
35	FUNCTION3 PFK	37.60	1.656e4					0.9	NO		bb		0.000
36	FUNCTION3 PFK	37.19	1.063e4					1.2	NO		bb		0.000
37	FUNCTION3 PFK	36.97	1.295e3					0.4	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

PFK3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
38	FUNCTION3 PFK	36.85	1.392e4					1.2	NO		db		0.000
39	FUNCTION3 PFK	36.80	1.128e4					1.2	NO		bd		0.000
40	FUNCTION3 PFK	36.74	1.247e4					1.8	NO		bb		0.000
41	FUNCTION3 PFK	36.69	3.112e3					0.7	NO		bb		0.000
42	FUNCTION3 PFK	36.63	1.814e4					2.1	NO		db		0.000
43	FUNCTION3 PFK	36.57	1.500e4					1.7	NO		bd		0.000
44	FUNCTION3 PFK	36.48	1.733e4					1.8	NO		bb		0.000

PFK4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 PFK	42.27	2.270e5					8.8	YES		db		
2	FUNCTION4 PFK	41.53	2.630e6					25.1	YES		dd		
3	FUNCTION4 PFK	41.39	3.011e7					27.0	YES		bd		

PFK5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS1

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION1 HXCD...	25.58	1.874e2					4.1	YES		bb		0.000
2	FUNCTION1 HXCD...	21.49	2.209e2					3.1	YES		bb		0.000

ETHERS2

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1													

ETHERS3

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION2 HPCD...	31.11	3.432e2					6.7	YES		db		0.000
2	FUNCTION2 HPCD...	31.01	1.283e2					2.8	NO		bd		0.000
3	FUNCTION2 HPCD...	30.20	8.223e1					1.7	NO		bb		0.000

Quantify Totals Report MassLynx MassLynx V4.1 SCN909

Dataset: T:\Autospec\Processed Data Batch\230306D2CL.qld
 Last Altered: Tuesday, March 07, 2023 14:26:37 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 14:27:33 Pacific Standard Time

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

ETHERS4

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION3 OCDPE	36.11	2.636e2					5.2	YES		db		0.000
2	FUNCTION3 OCDPE	35.99	2.069e2					4.6	YES		bd		0.000
3	FUNCTION3 OCDPE	34.20	7.690e1					2.3	NO		bb		0.000
4	FUNCTION3 OCDPE	33.88	1.067e2					2.5	NO		db		0.000
5	FUNCTION3 OCDPE	33.79	1.734e2					3.1	YES		dd		0.000
6	FUNCTION3 OCDPE	33.71	8.017e1					2.7	NO		dd		0.000
7	FUNCTION3 OCDPE	33.62	1.200e2					2.7	NO		bd		0.000
8	FUNCTION3 OCDPE	33.31	7.149e1					1.3	NO		bb		0.000
9	FUNCTION3 OCDPE	36.57	7.336e1					2.3	NO		db		0.000
10	FUNCTION3 OCDPE	36.50	2.679e2					6.2	YES		dd		0.000
11	FUNCTION3 OCDPE	36.38	7.161e1					2.1	NO		bd		0.000

ETHERS5

	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION4 NCDPE	40.57	1.331e2					1.9	NO		bb		0.000
2	FUNCTION4 NCDPE	39.67	8.975e1					1.5	NO		bb		0.000
3	FUNCTION4 NCDPE	39.15	8.030e1					2.8	NO		bb		0.000
4	FUNCTION4 NCDPE	38.80	7.063e1					2.2	NO		bb		0.000

ETHERS6

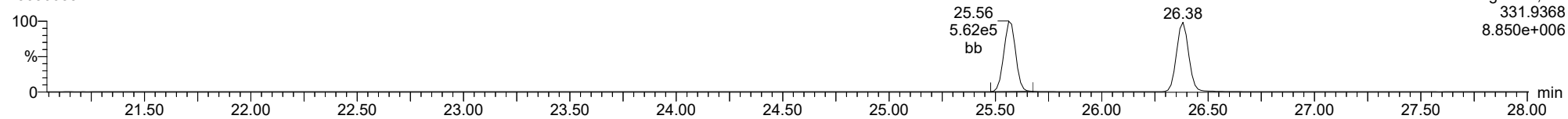
	Compound	RT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
1	FUNCTION5 DCDPE	45.48	8.868e1					4.1	YES		bb		0.000

Method: T:\Autospec\Methods\Dioxin230303.mdb 03 Mar 2023 14:58:50
Calibration: T:\Autospec\Curves\230303ICIH.cdb 06 Mar 2023 10:57:27

ID: CS3X3, **Name:** 23030633, **Date:** 07-Mar-2023, **Time:** 12:33:50, **Conditions:** AUTOSPEC01, **User:** pk

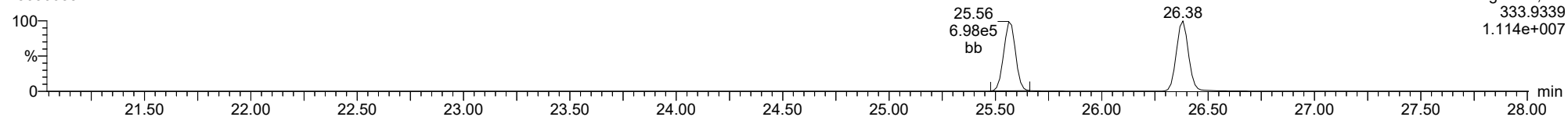
13C-1234-TCDD

23030633



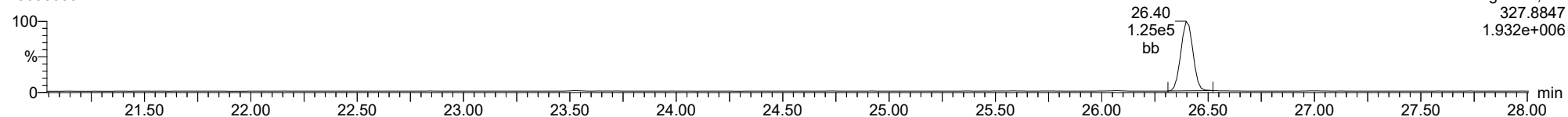
13C-1234-TCDD

23030633



37CL-2378-TCDD

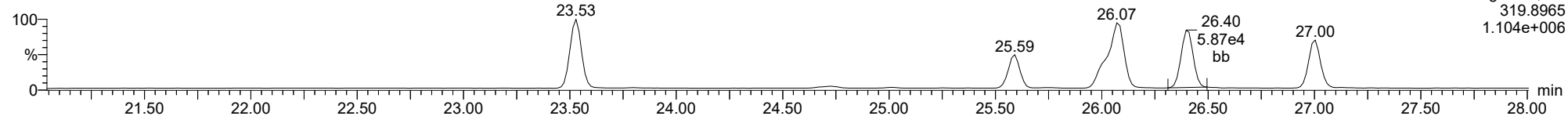
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

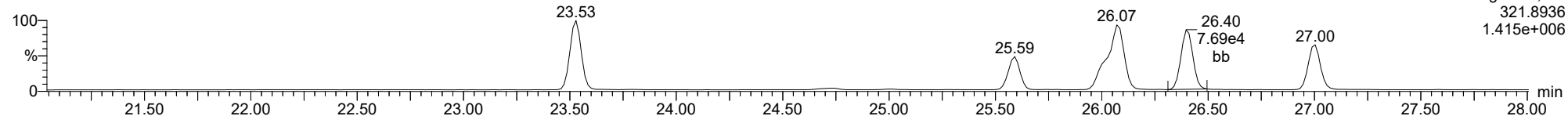
2378-TCDD

23030633



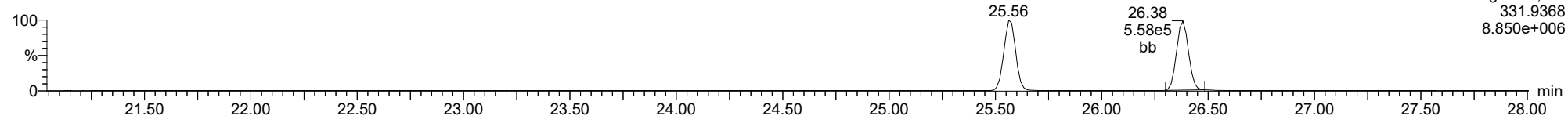
2378-TCDD

23030633



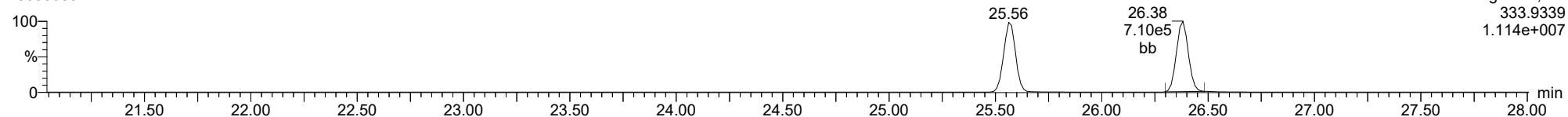
13C-2378-TCDD

23030633



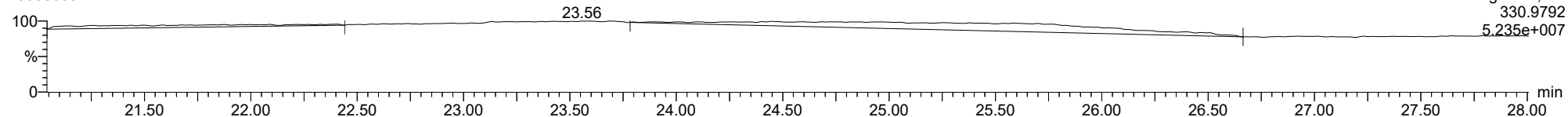
13C-2378-TCDD

23030633



FUNCTION1 PFK

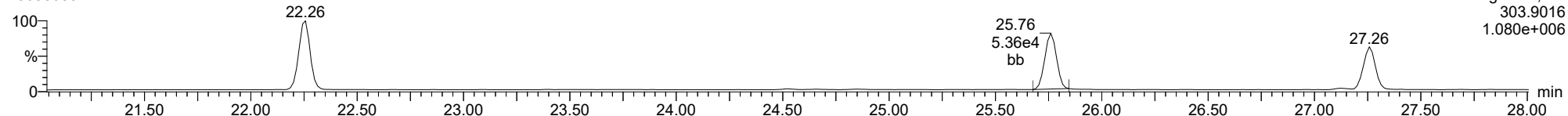
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

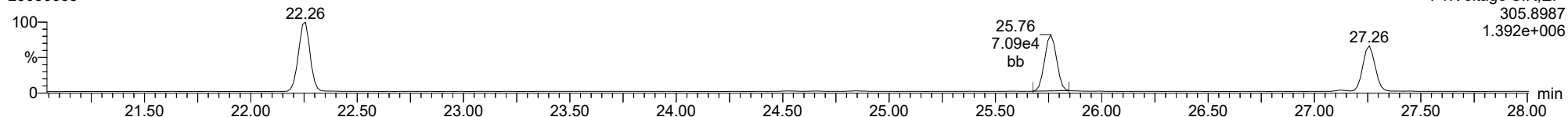
2378-TCDF

23030633



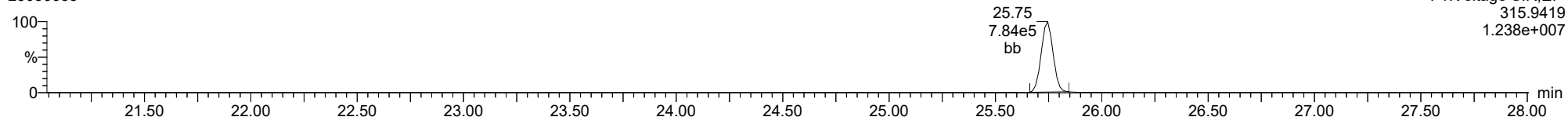
2378-TCDF

23030633



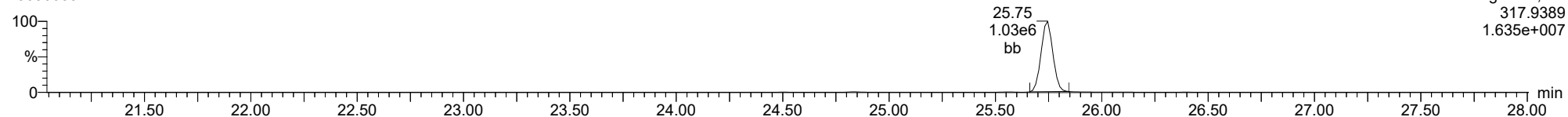
13C-2378-TCDF

23030633



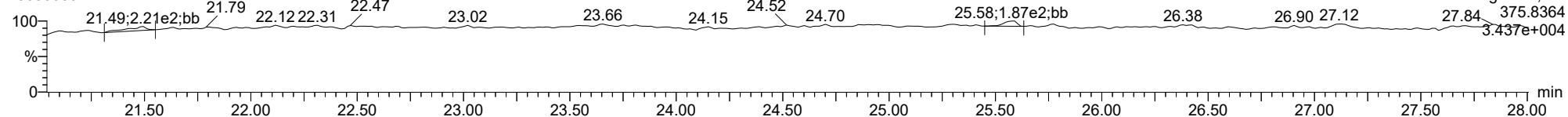
13C-2378-TCDF

23030633



FUNCTION1 HXCDPE

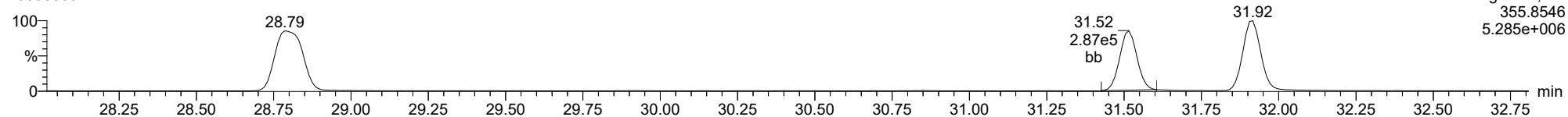
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

12378-PeCDD

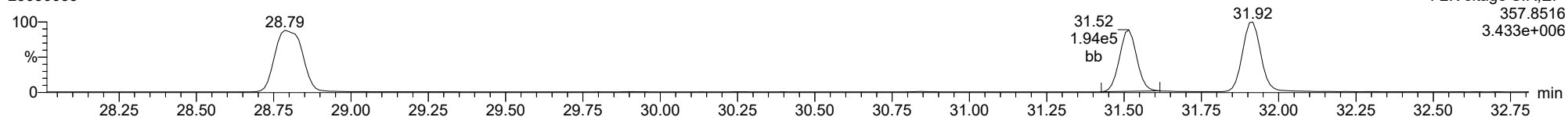
23030633



F2:Voltage SIR,El+
355.8546
5.285e+006

12378-PeCDD

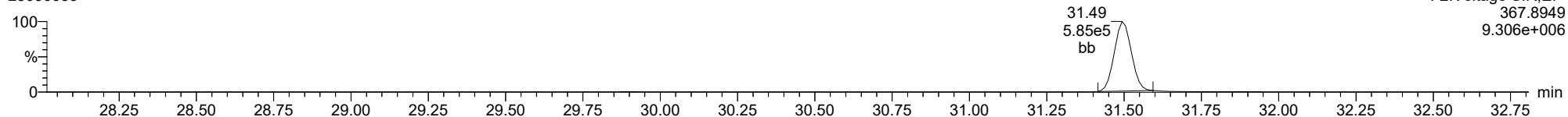
23030633



F2:Voltage SIR,El+
357.8516
3.433e+006

13C-12378-PeCDD

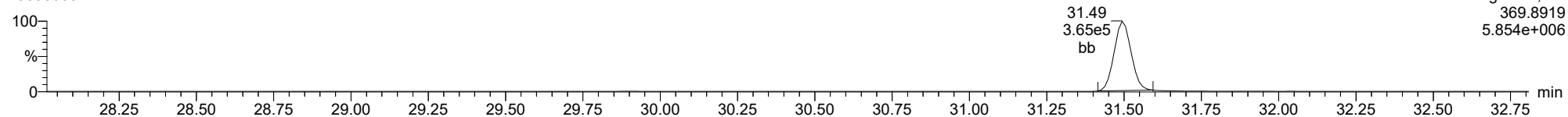
23030633



F2:Voltage SIR,El+
367.8949
9.306e+006

13C-12378-PeCDD

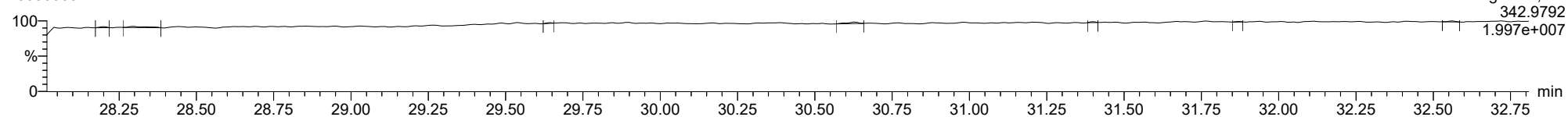
23030633



F2:Voltage SIR,El+
369.8919
5.854e+006

FUNCTION2 PFK

23030633

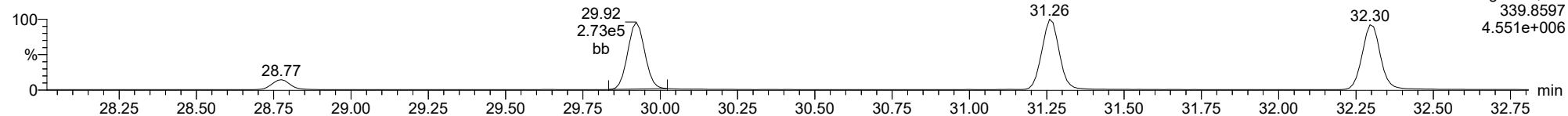


F2:Voltage SIR,El+
342.9792
1.997e+007

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

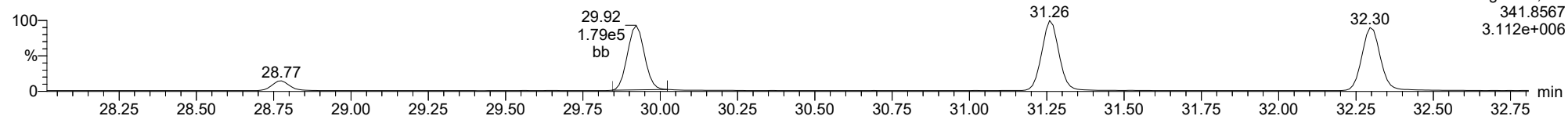
12378-PeCDF

23030633



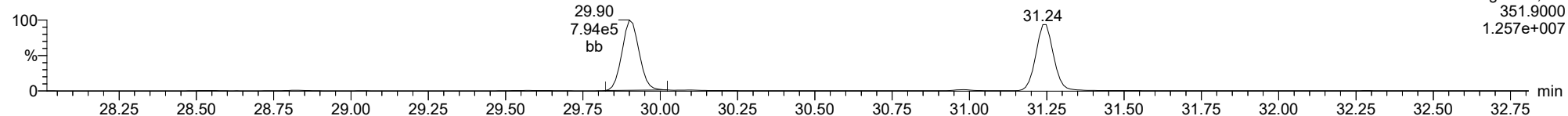
12378-PeCDF

23030633



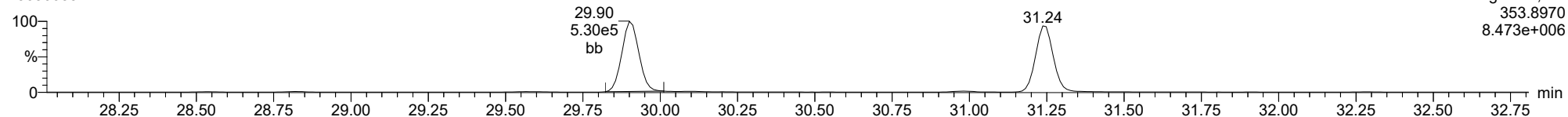
13C-12378-PeCDF

23030633



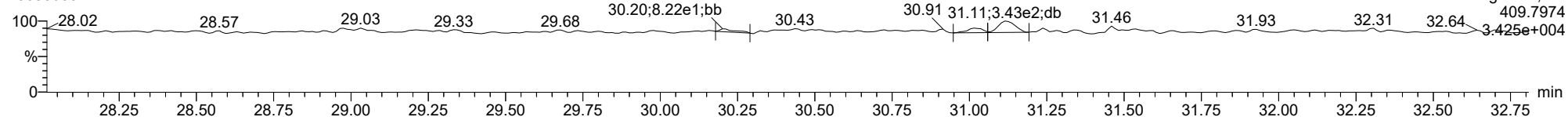
13C-12378-PeCDF

23030633



FUNCTION2 HPCDPE

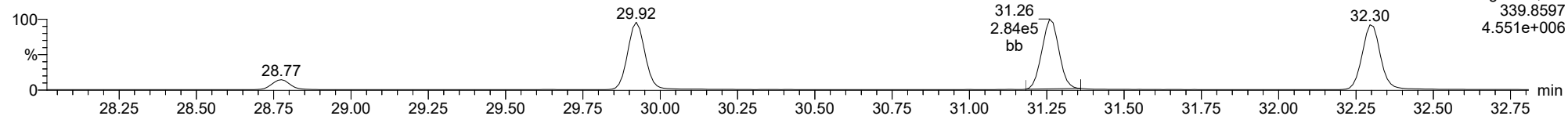
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

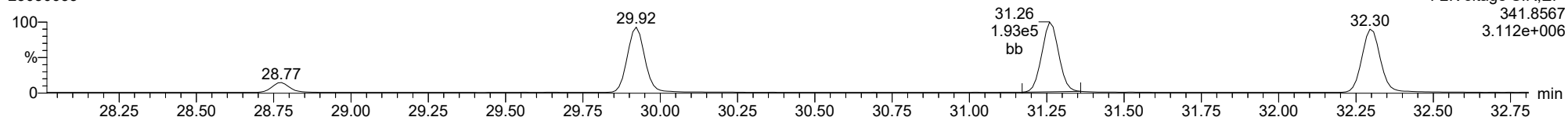
23478-PeCDF

23030633



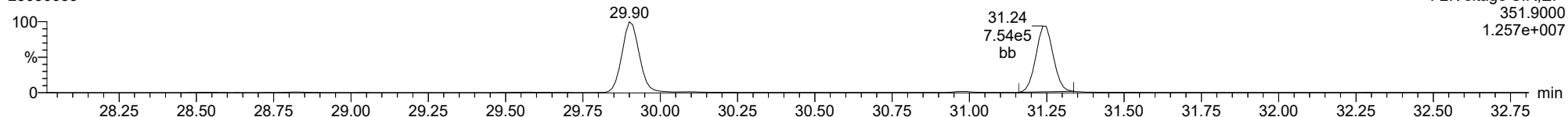
23478-PeCDF

23030633



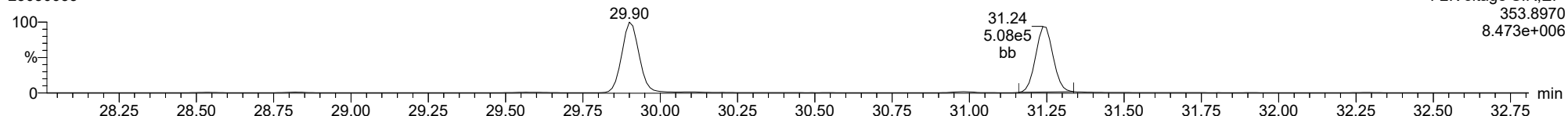
13C-23478-PeCDF

23030633



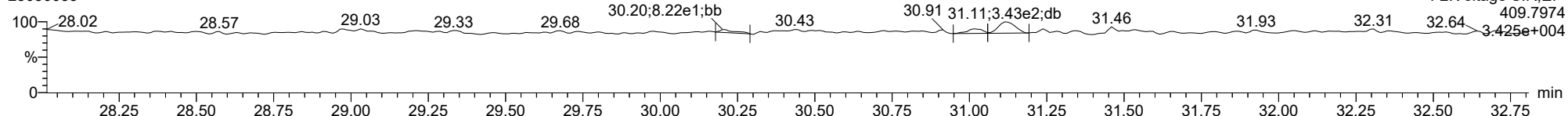
13C-23478-PeCDF

23030633



FUNCTION2 HPCDPE

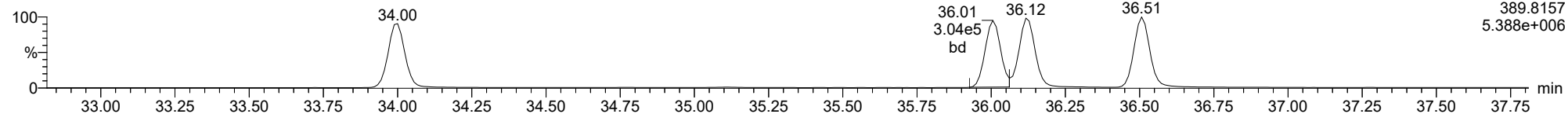
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

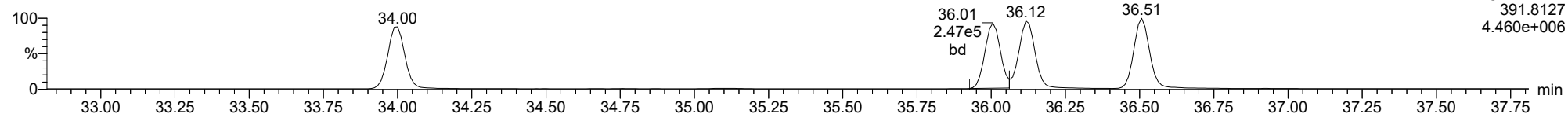
123478-HxCDD

23030633



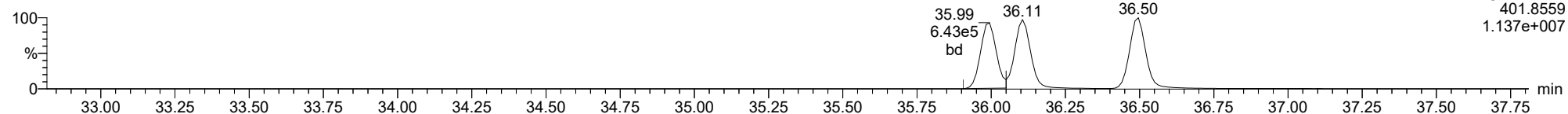
123478-HxCDD

23030633



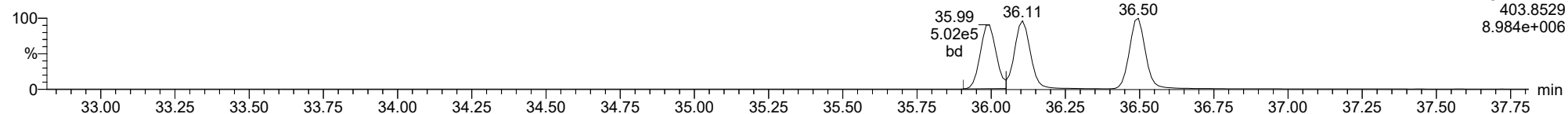
13C-123478-HxCDD

23030633



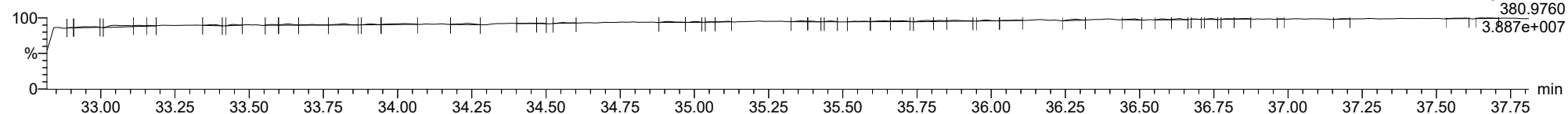
13C-123478-HxCDD

23030633



FUNCTION3 PFK

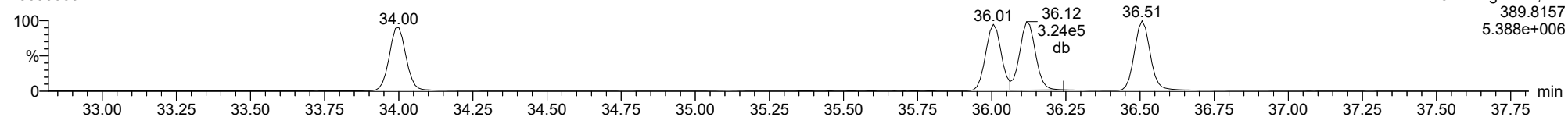
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

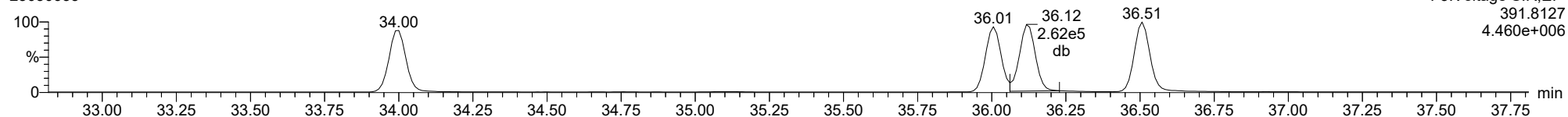
123678-HxCDD

23030633



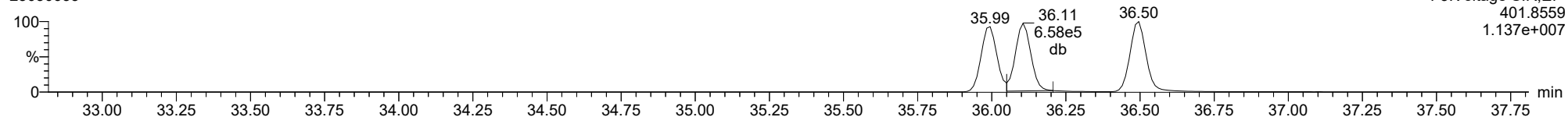
123678-HxCDD

23030633



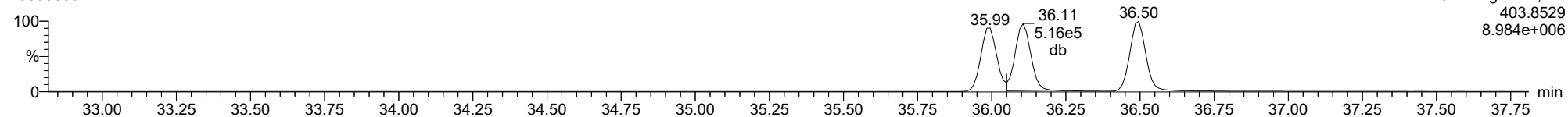
13C-123678-HxCDD

23030633



13C-123678-HxCDD

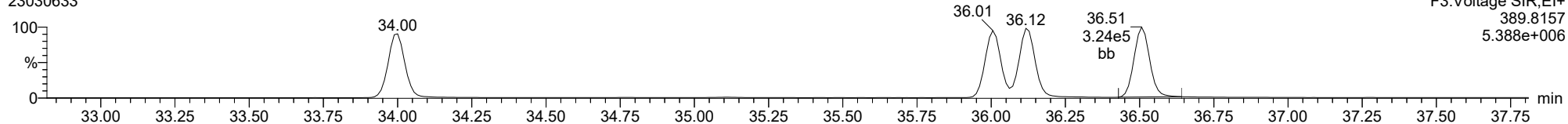
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

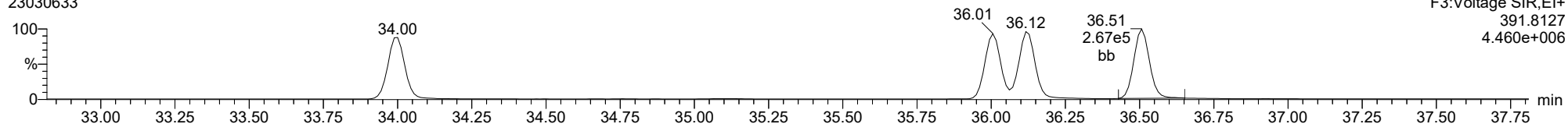
123789-HxCDD

23030633



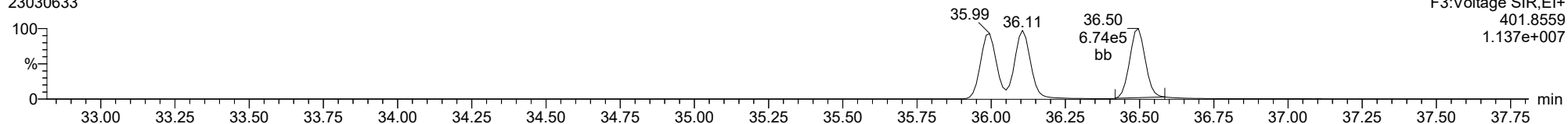
123789-HxCDD

23030633



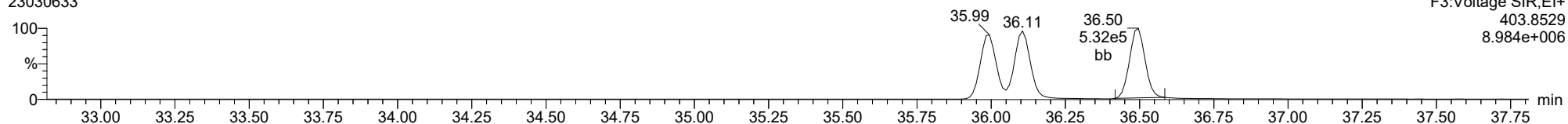
13C-123789-HxCDD

23030633



13C-123789-HxCDD

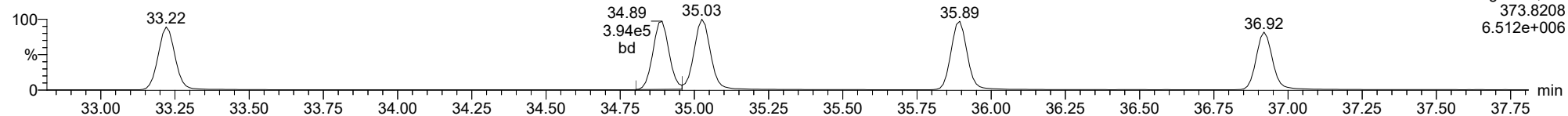
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

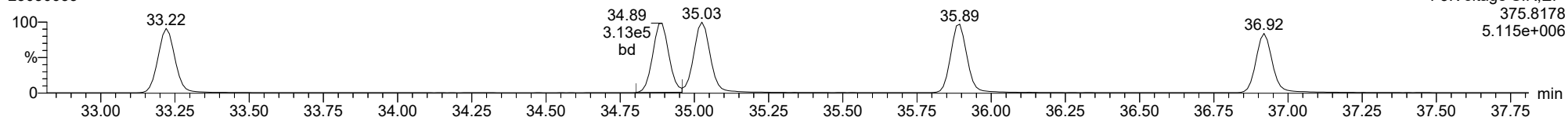
123478-HxCDF

23030633



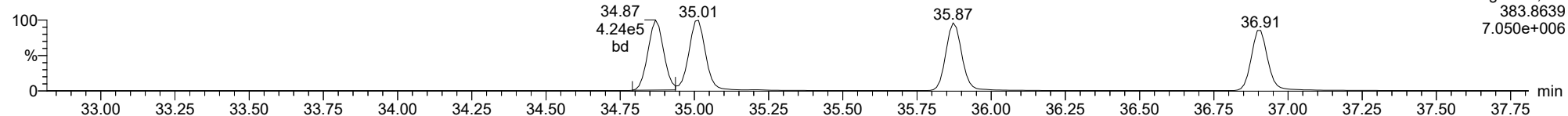
123478-HxCDF

23030633



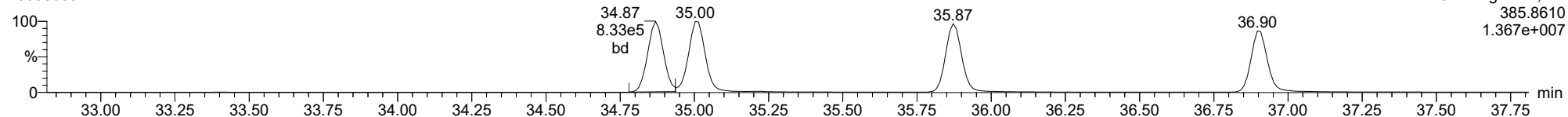
13C-123478-HxCDF

23030633



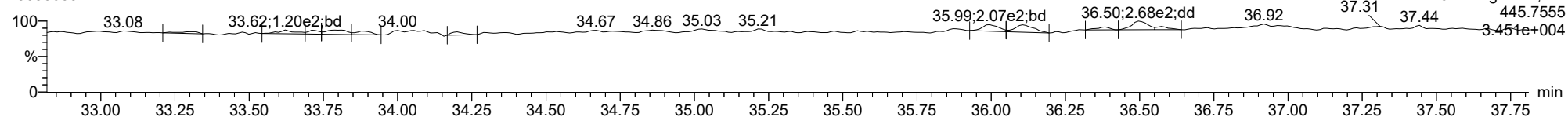
13C-123478-HxCDF

23030633



FUNCTION3 OCDPE

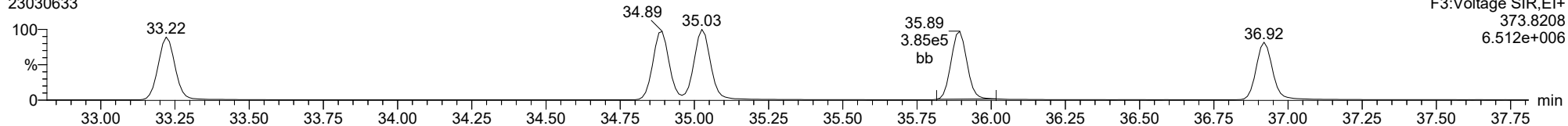
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

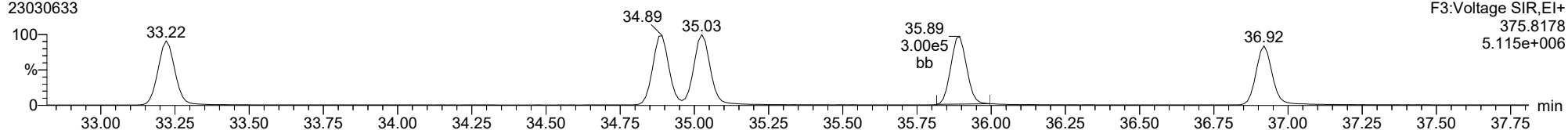
234678-HxCDF

23030633



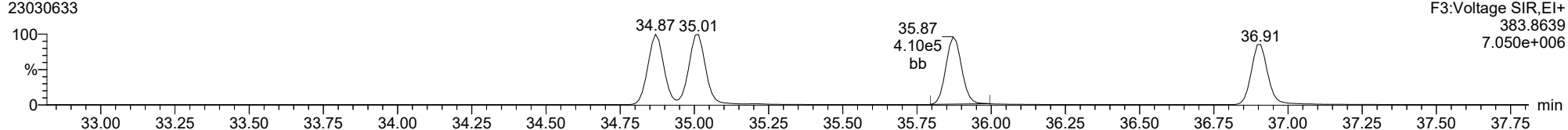
234678-HxCDF

23030633



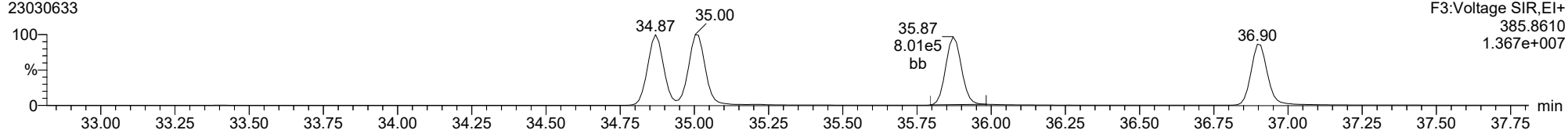
13C-234678-HxCDF

23030633



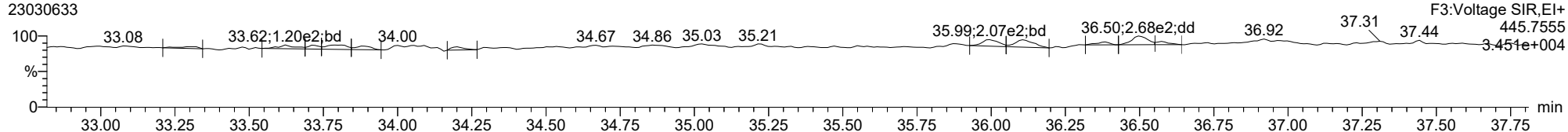
13C-234678-HxCDF

23030633



FUNCTION3 OCDPE

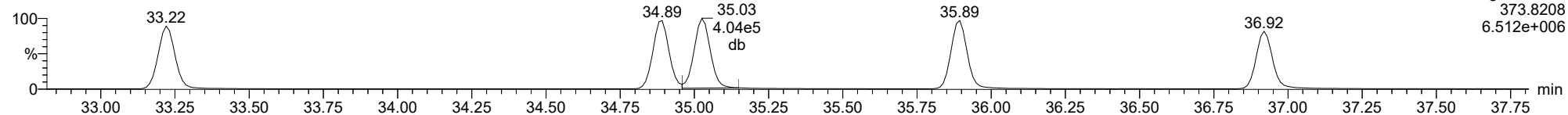
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

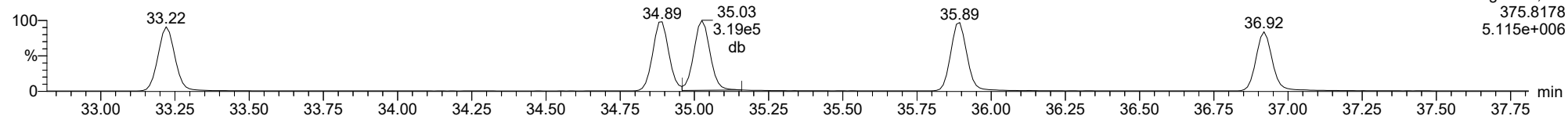
123678-HxCDF

23030633



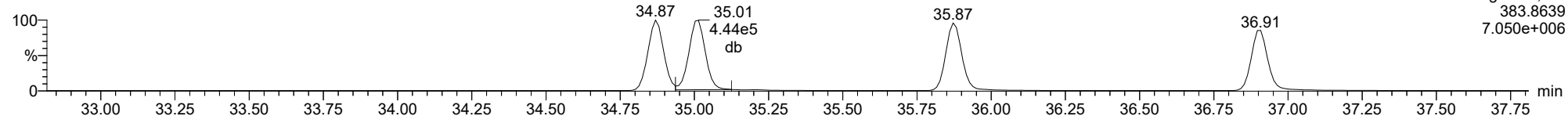
123678-HxCDF

23030633



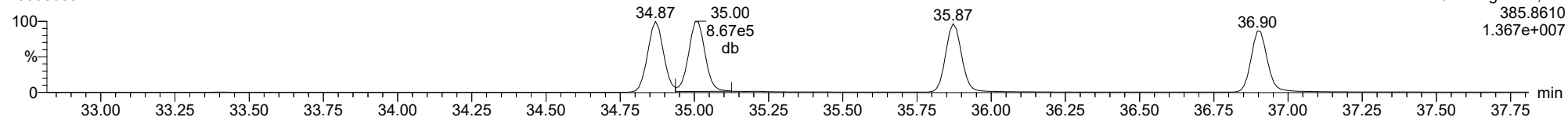
13C-123678-HxCDF

23030633



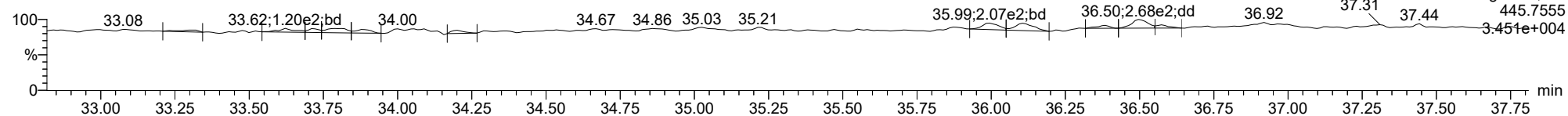
13C-123678-HxCDF

23030633



FUNCTION3 OCDPE

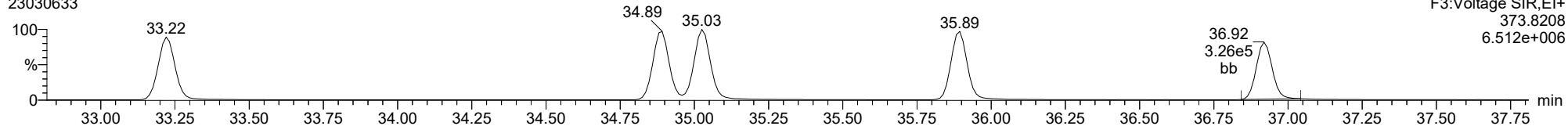
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

123789-HxCDF

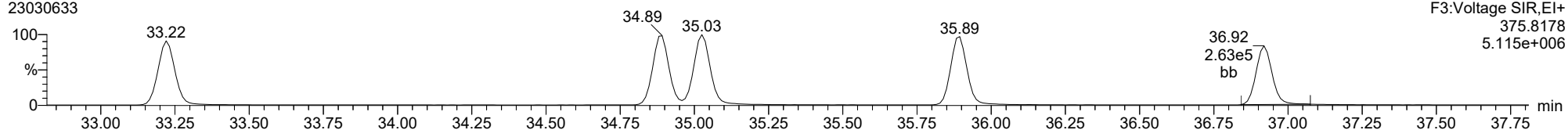
23030633



F3:Voltage SIR,EI+
373.8208
6.512e+006

123789-HxCDF

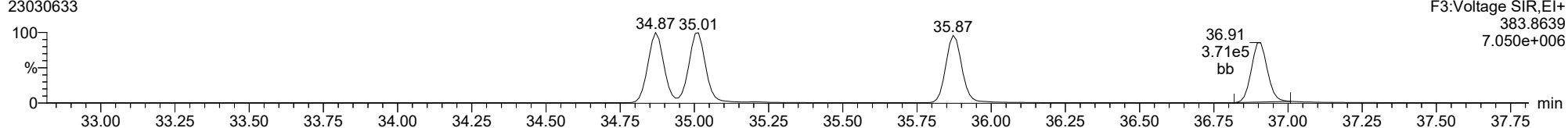
23030633



F3:Voltage SIR,EI+
375.8178
5.115e+006

13C-123789-HxCDF

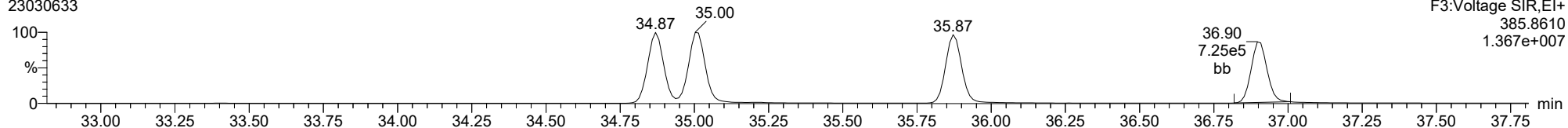
23030633



F3:Voltage SIR,EI+
383.8639
7.050e+006

13C-123789-HxCDF

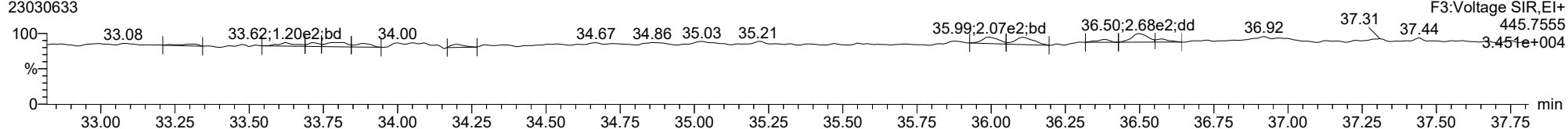
23030633



F3:Voltage SIR,EI+
385.8610
1.367e+007

FUNCTION3 OCDPE

23030633

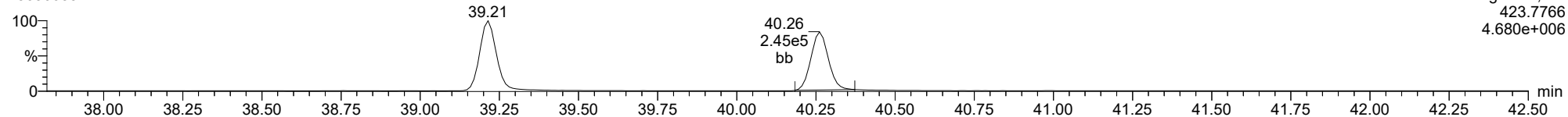


F3:Voltage SIR,EI+
445.7555
3.451e+004

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

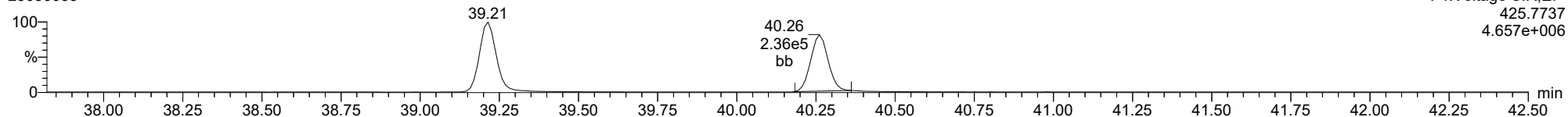
1234678-HpCDD

23030633



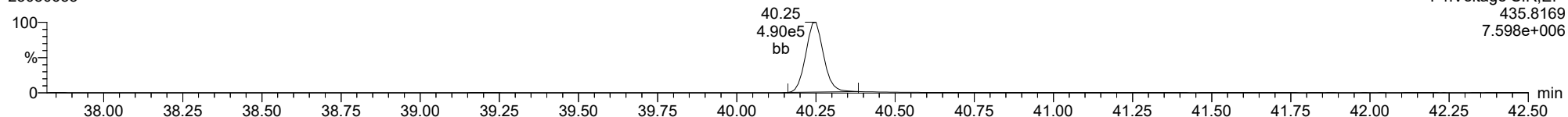
1234678-HpCDD

23030633



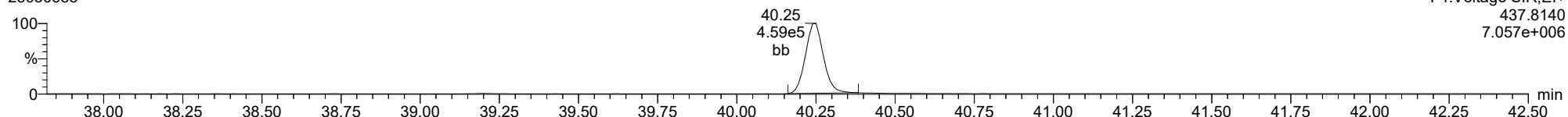
13C-1234678-HpCDD

23030633



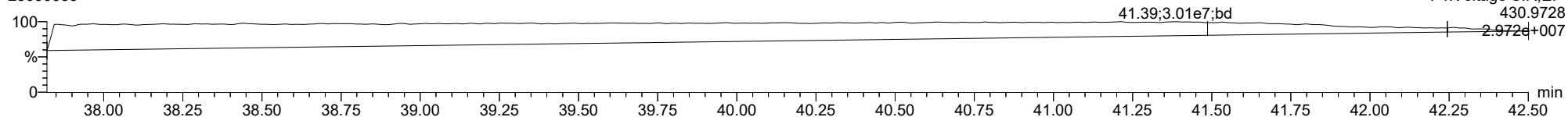
13C-1234678-HpCDD

23030633



FUNCTION4 PFK

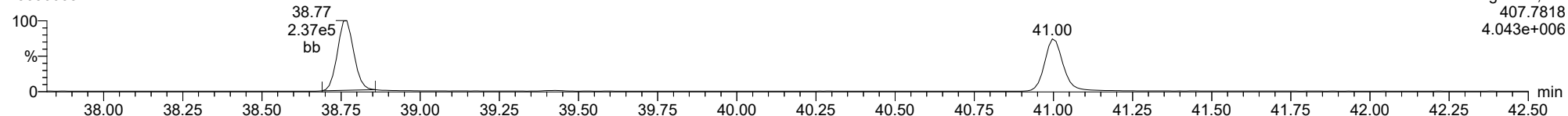
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

1234678-HpCDF

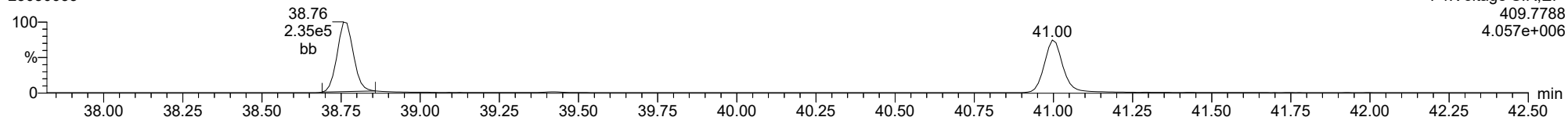
23030633



F4:Voltage SIR,EI+
407.7818
4.043e+006

1234678-HpCDF

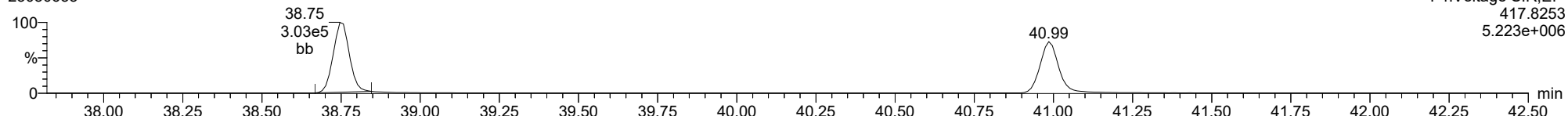
23030633



F4:Voltage SIR,EI+
409.7788
4.057e+006

13C-1234678-HpCDF

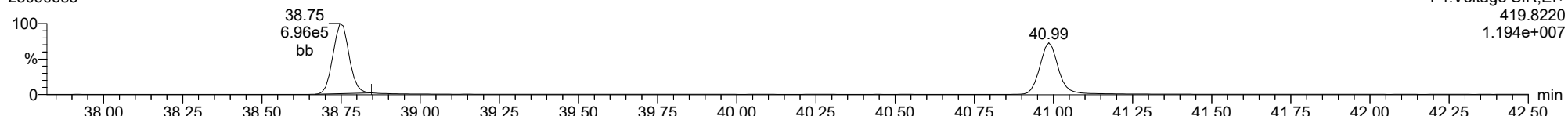
23030633



F4:Voltage SIR,EI+
417.8253
5.223e+006

13C-1234678-HpCDF

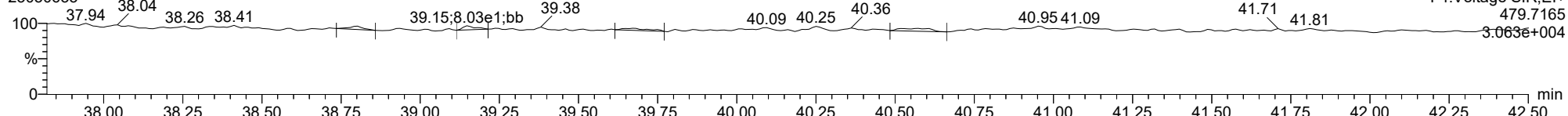
23030633



F4:Voltage SIR,EI+
419.8220
1.194e+007

FUNCTION4 NCDPE

23030633

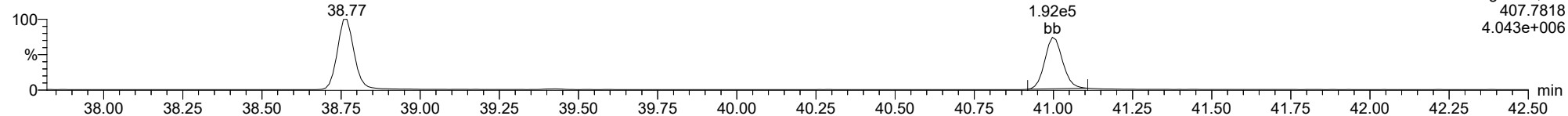


F4:Voltage SIR,EI+
479.7165
3.063e+004

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

1234789-HpCDF

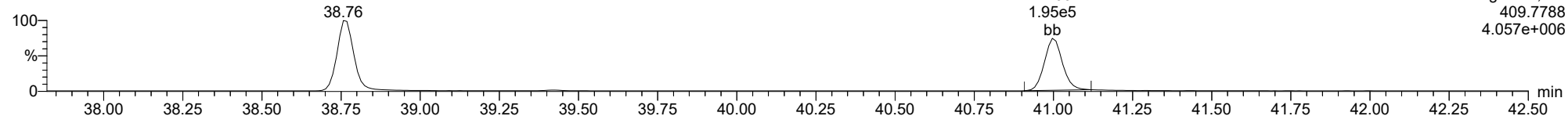
23030633



F4:Voltage SIR,EI+
407.7818
4.043e+006

1234789-HpCDF

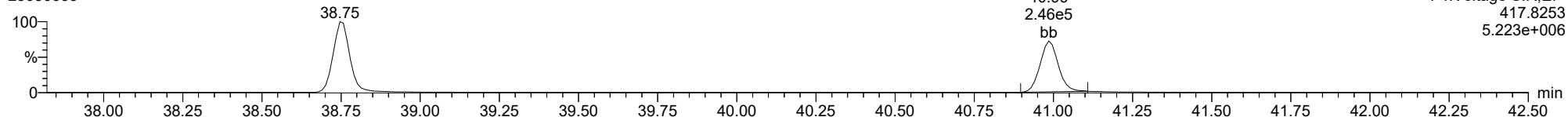
23030633



F4:Voltage SIR,EI+
409.7788
4.057e+006

13C-1234789-HpCDF

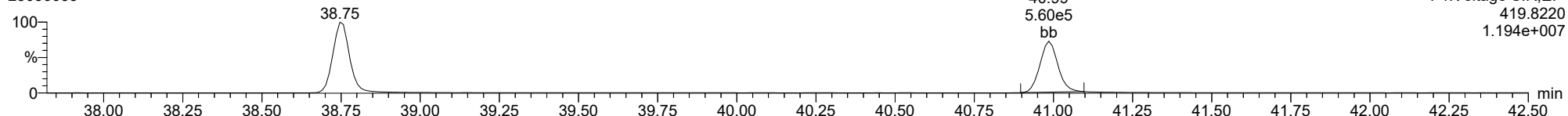
23030633



F4:Voltage SIR,EI+
417.8253
5.223e+006

13C-1234789-HpCDF

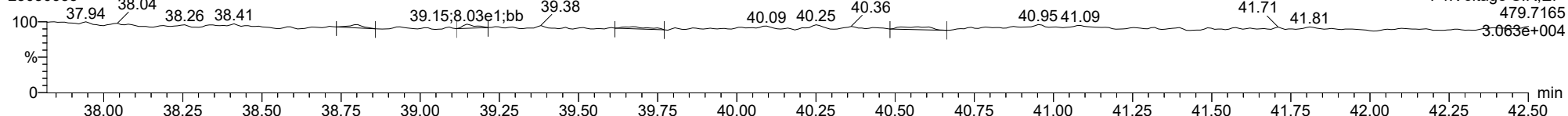
23030633



F4:Voltage SIR,EI+
419.8220
1.194e+007

FUNCTION4 NCDPE

23030633

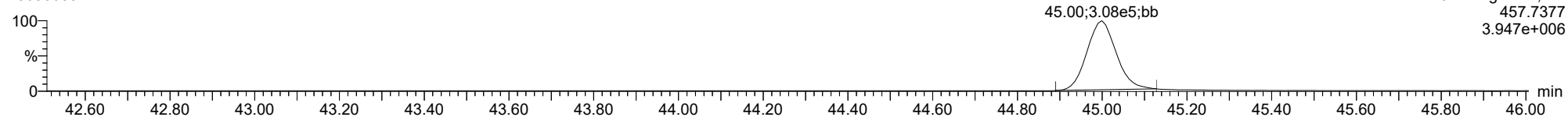


F4:Voltage SIR,EI+
479.7165
3.063e+004

ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

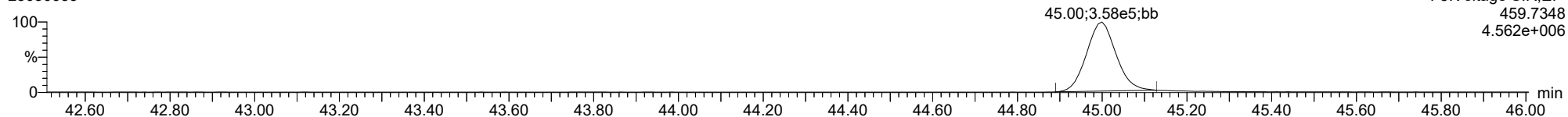
OCDD

23030633



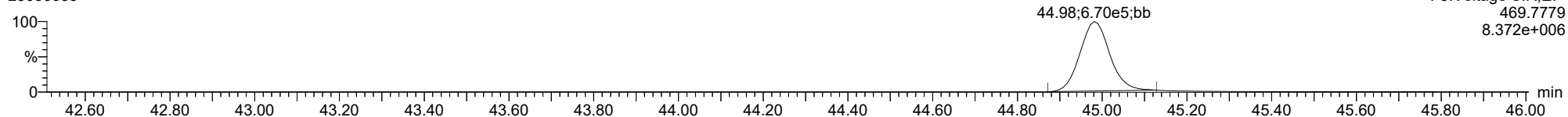
OCDD

23030633



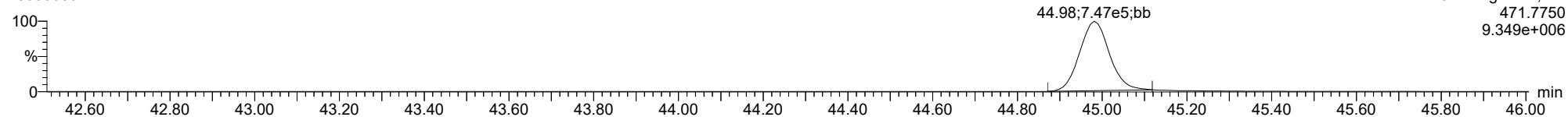
13C-OCDD

23030633



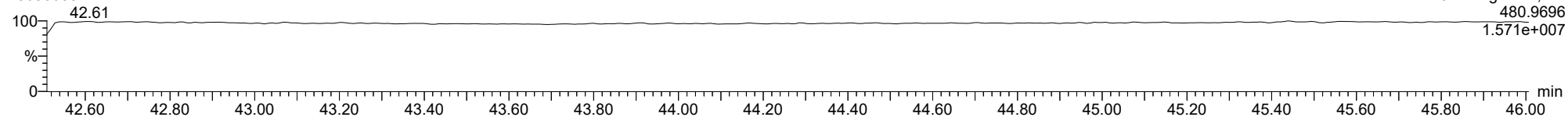
13C-OCDD

23030633



FUNCTION5 PFK

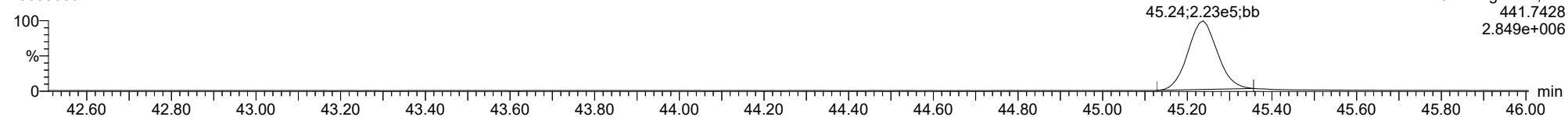
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

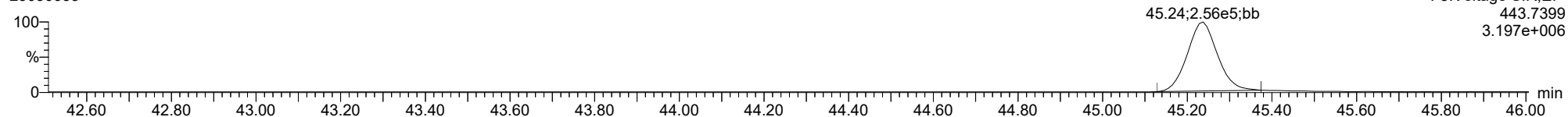
OCDF

23030633



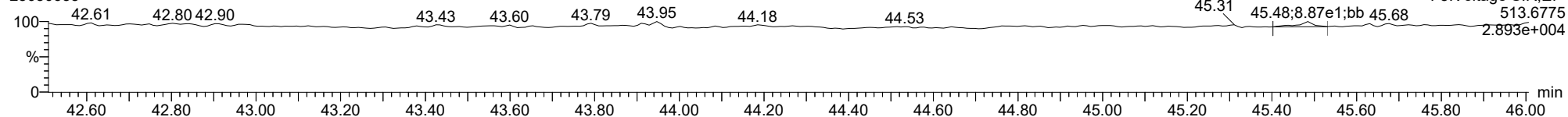
OCDF

23030633



FUNCTION5 DCDPE

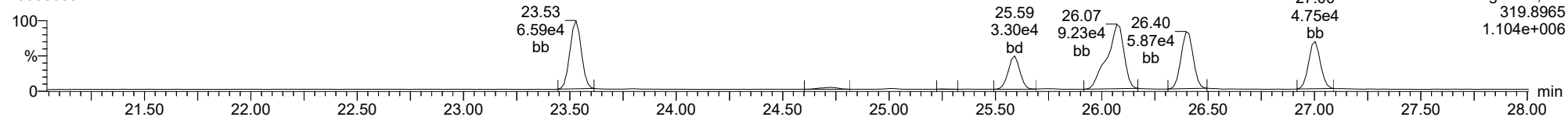
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

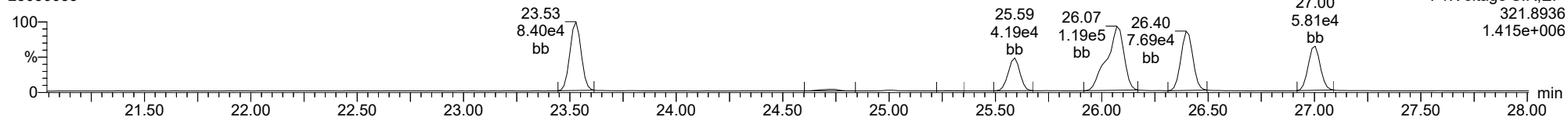
Total-tetradioxins

23030633



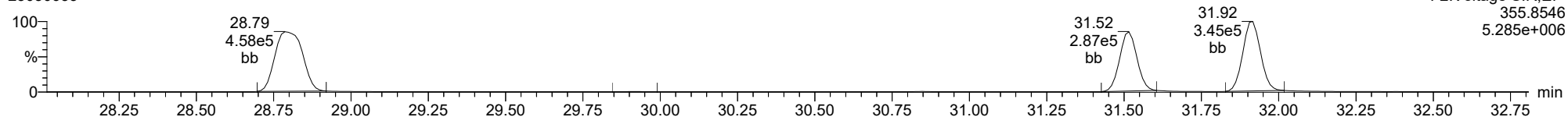
Total-tetradioxins

23030633



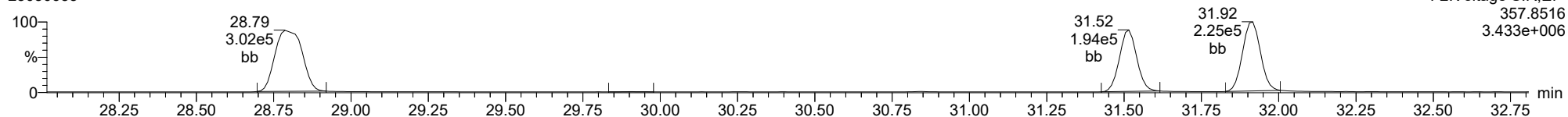
Total-pentadioxins

23030633



Total-pentadioxins

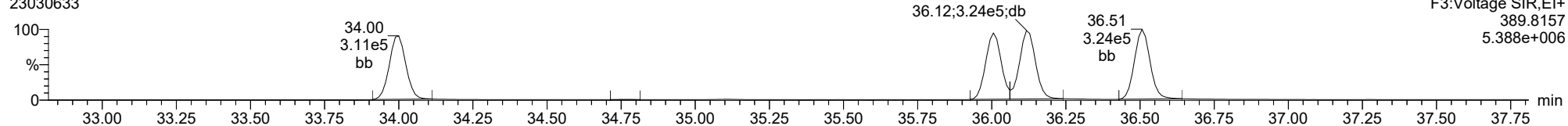
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

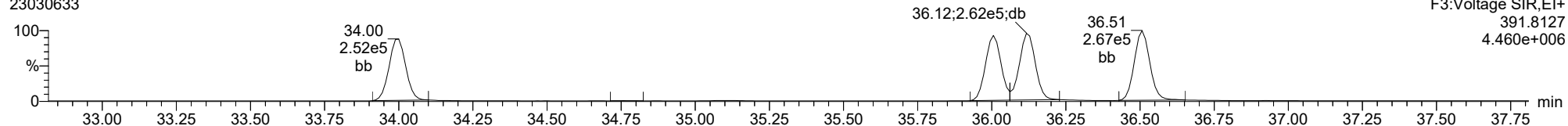
Total-hexadioxins

23030633



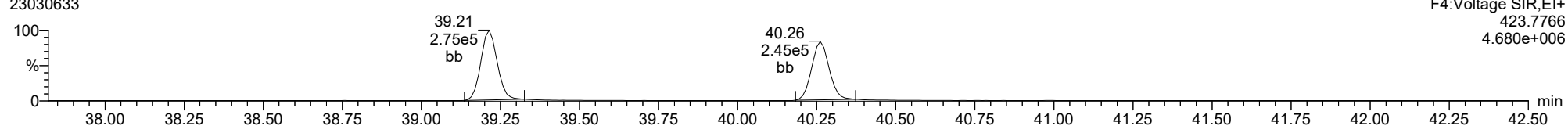
Total-hexadioxins

23030633



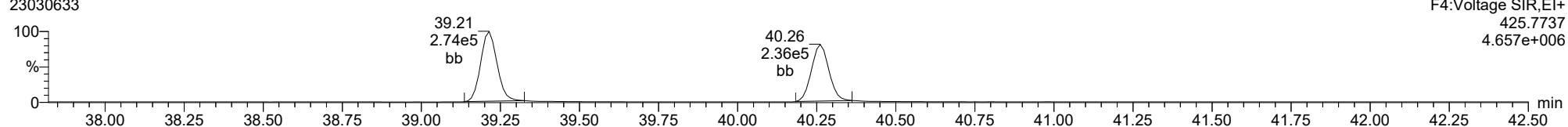
Total-heptadioxins

23030633



Total-heptadioxins

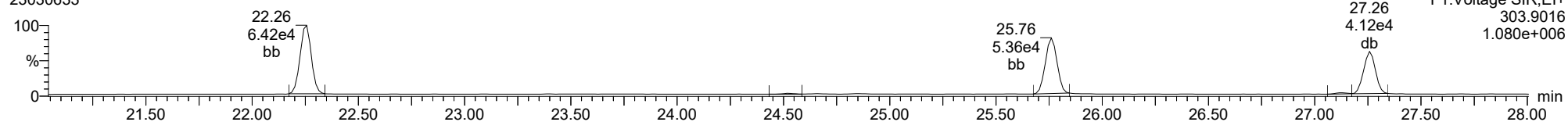
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

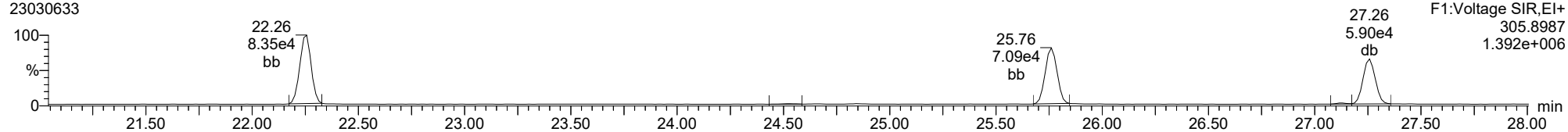
Total-tetrafurans

23030633



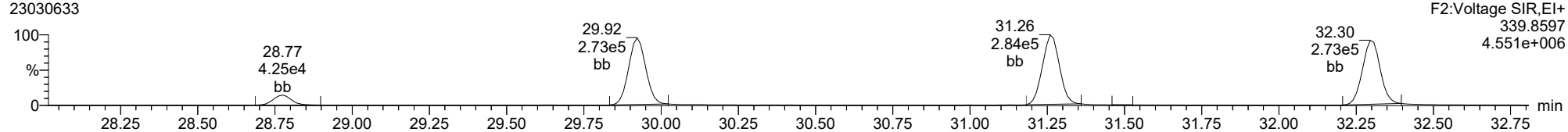
Total-tetrafurans

23030633



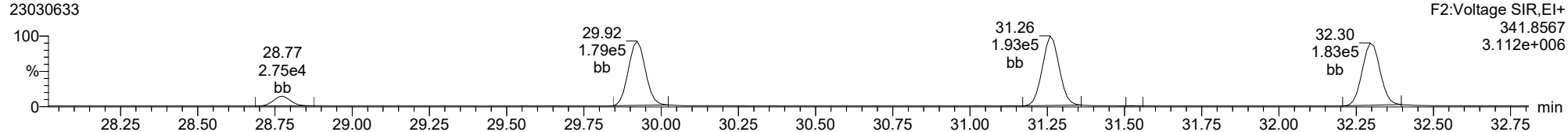
Total-pentafurans

23030633



Total-pentafurans

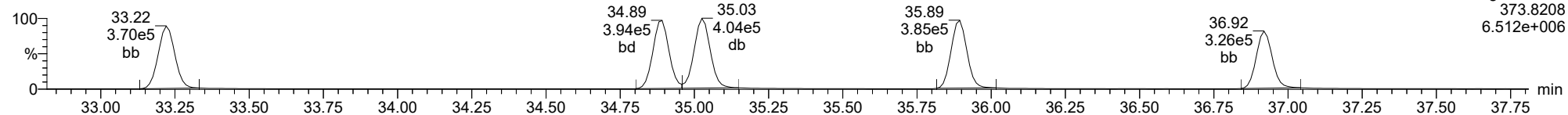
23030633



ID: CS3X3, Name: 23030633, Date: 07-Mar-2023, Time: 12:33:50, Conditions: AUTOSPEC01, User: pk

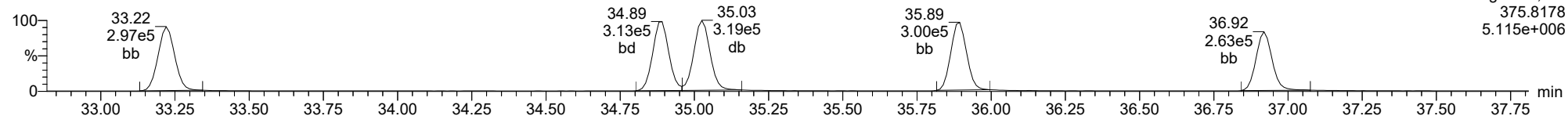
Total-hexafurans

23030633



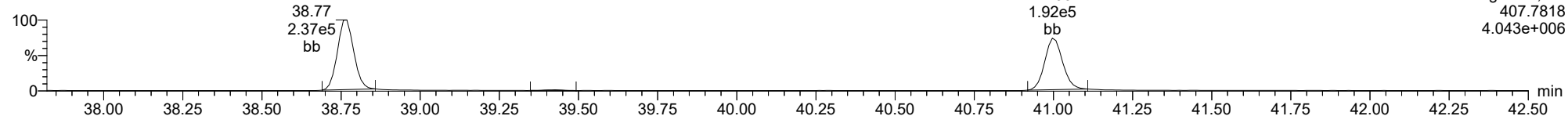
Total-hexafurans

23030633



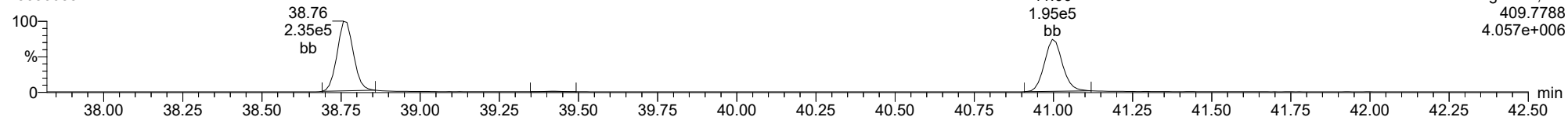
Total-heptafurans

23030633

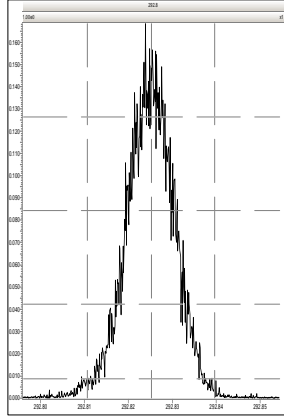


Total-heptafurans

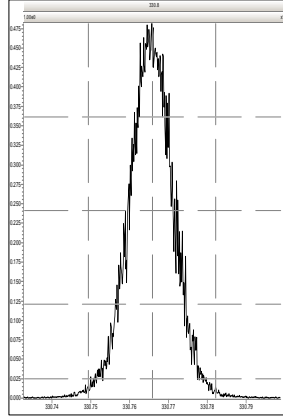
23030633



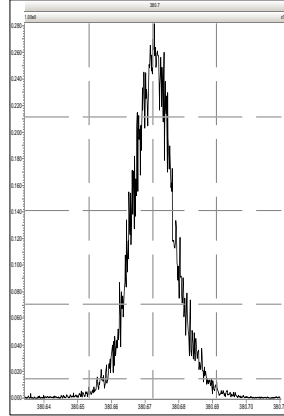
M 292.9824 R 11709



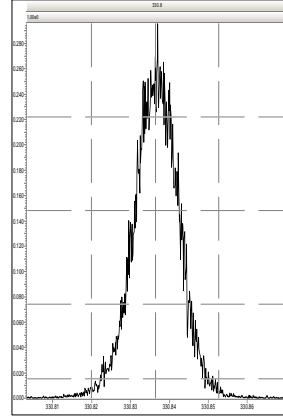
M 330.9792 R 12196



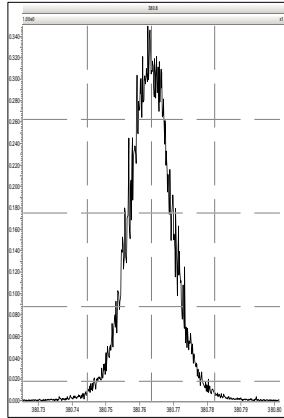
M 380.9760 R 12775



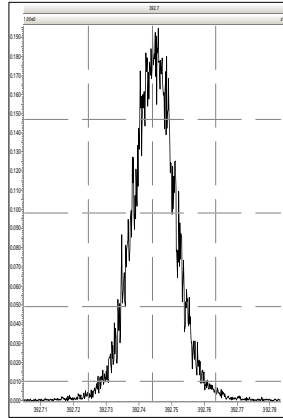
M 330.9792 R 12329



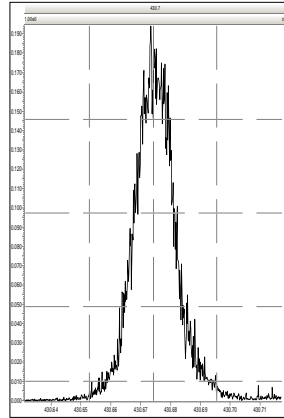
M 380.9760 R 12376



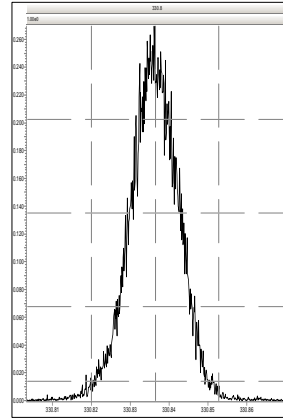
M 392.9760 R 12787



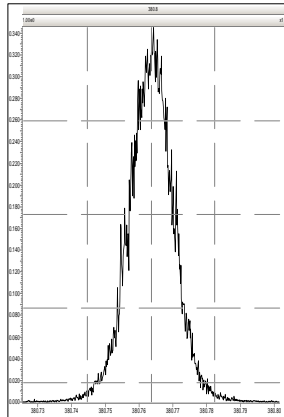
M 430.9728 R 12499



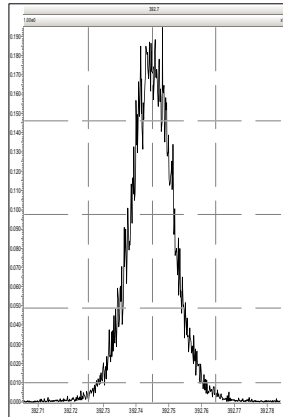
M 330.9792 R 11629



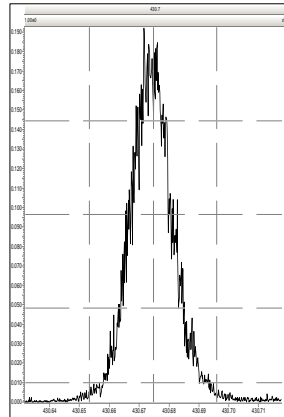
M 380.9760 R 12106



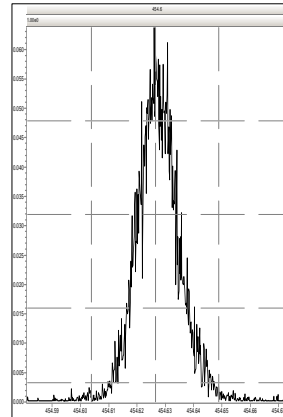
M 392.9760 R 12475



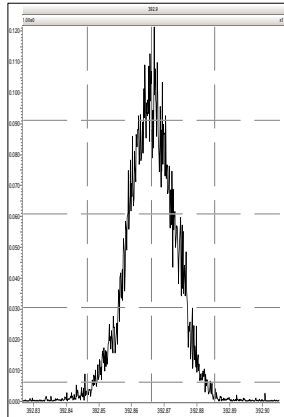
M 430.9728 R 13129



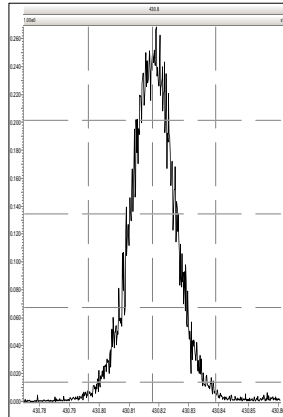
M 454.9728 R 14805



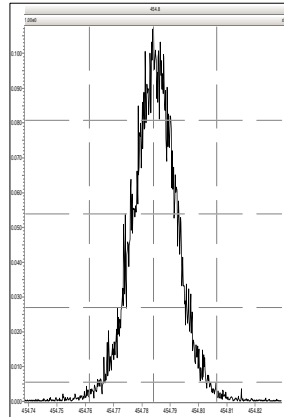
M 392.9760 R 11765



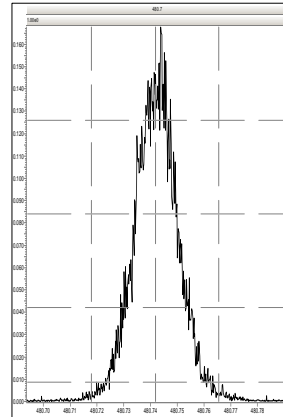
M 430.9728 R 12261



M 454.9728 R 12598

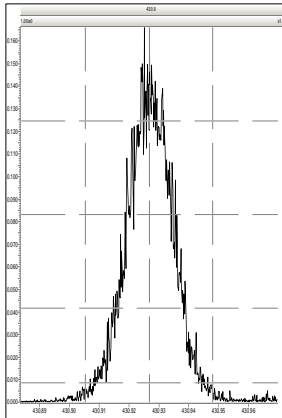


M 480.9696 R 12926

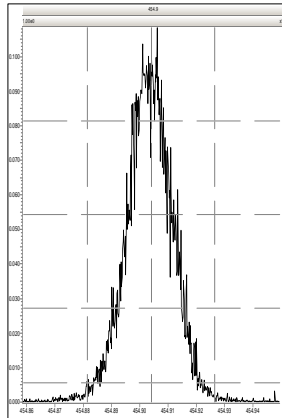


Printed: Tuesday, March 07, 2023 13:26:53 Pacific Standard Time

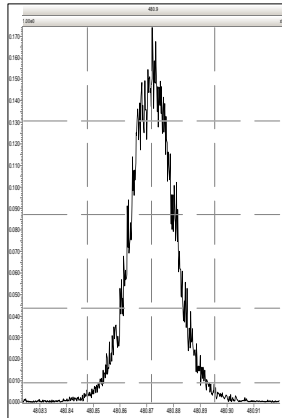
M 430.9728 R 12140



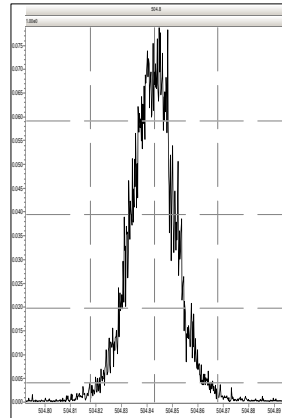
M 454.9728 R 12284



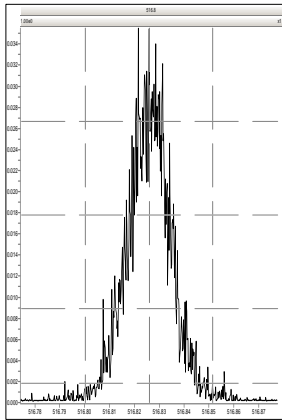
M 480.9696 R 12197



M 504.9696 R 13026



M 516.9697 R 13888

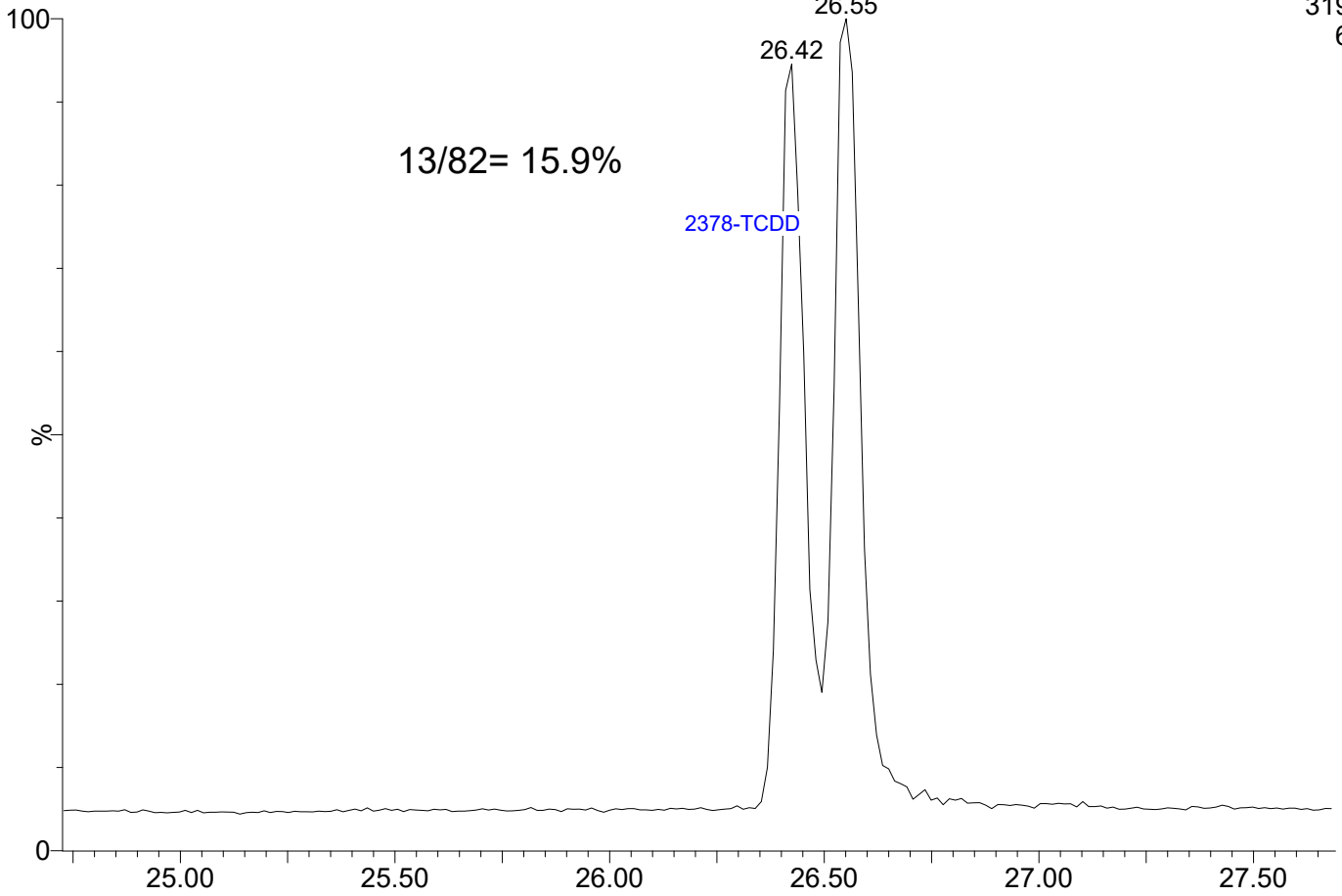


23030634

1: Voltage SIR 14 Channels EI+

319.8965

6.12e5

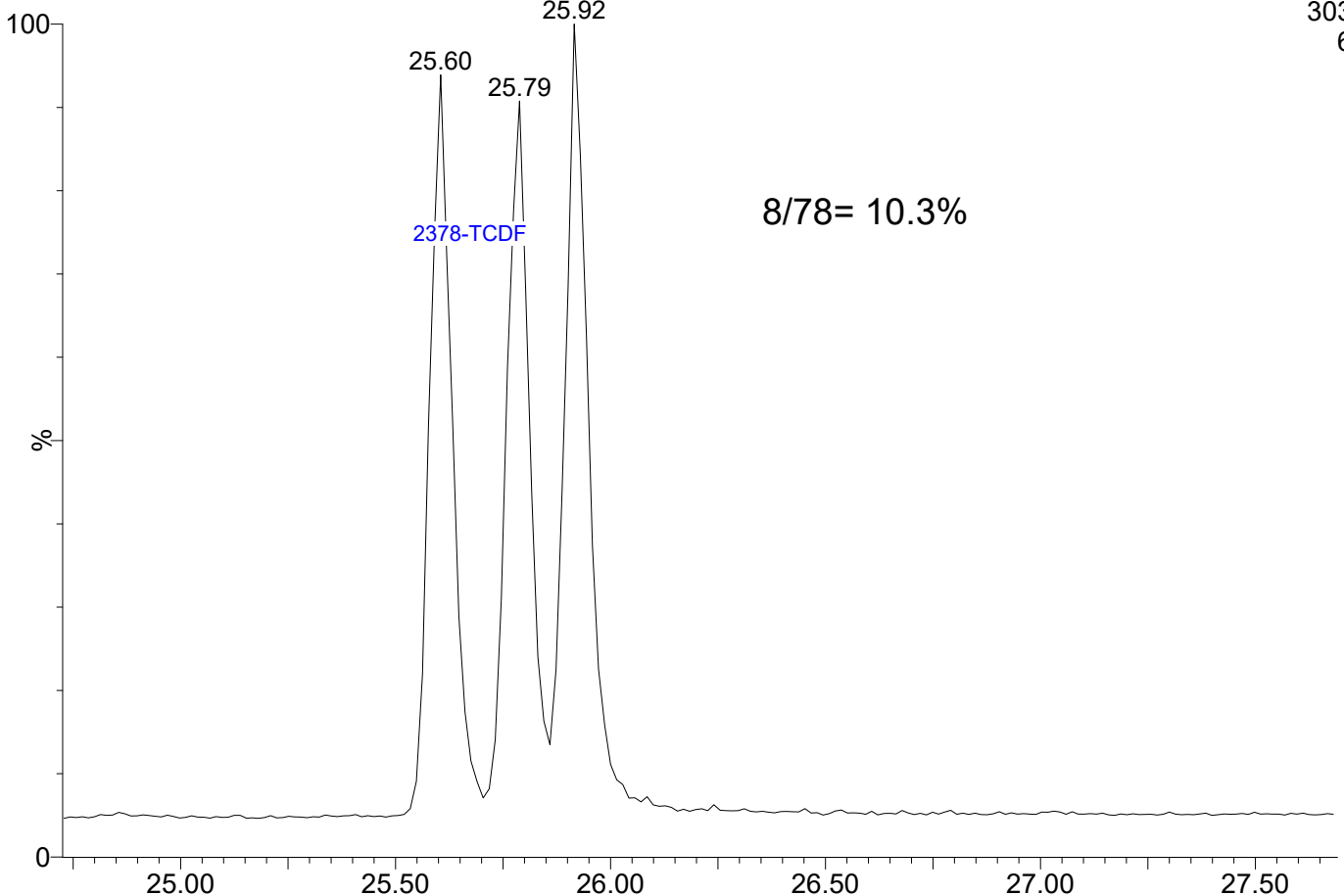


23030634

1: Voltage SIR 14 Channels EI+

303.9016

6.09e5





**CDD/CDF CHROMATOGRAPHIC
RESOLUTION SUMMARY
EPA 1613B**

Lab Name: Analytical Resources, LLC SDG: 23A0326
Instrument .ID: AUTOSPEC01 Lab File ID: 23030303
Date Analyzed: 03/03/23 Time Analyzed: 10:39
Lab Sample ID: SLC0045-RES1 Sequence: SLC0045

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 8.8

3467-TCDF/2378-TCDF: 8.2

Quality Control (QC) Limits: $\leq 25\%$

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0045-ICV1	CS3W1	23030302	03/03/2023	09:51
SLC0045-RES1	ISCW1	23030303	03/03/2023	10:39
SLC0045-CAL1	CSLCW	23030304	03/03/2023	11:28
SLC0045-CAL2	CS1CW	23030305	03/03/2023	12:23
SLC0045-CAL3	CS2CW	23030306	03/03/2023	13:16
SLC0045-CAL4	CS3CW	23030307	03/03/2023	14:06
SLC0045-CAL5	CS4CW	23030308	03/03/2023	14:59
SLC0045-CAL6	CS5CW	23030309	03/03/2023	15:47
SLC0045-SCV1	ICVCW	23030310	03/03/2023	16:36
SLC0045-CCV1	CS3V4	23030311	03/03/2023	17:25
SLC0045-RES2	ISCV4	23030312	03/03/2023	18:18



**CDD/CDF CHROMATOGRAPHIC
RESOLUTION SUMMARY
EPA 1613B**

Lab Name: Analytical Resources, LLC SDG: 23A0326
Instrument ID: AUTOSPEC01 Lab File ID: 23030624
Date Analyzed: 03/07/23 Time Analyzed: 05:09
Lab Sample ID: SLC0081-RES3 Sequence: SLC0081

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 12.5

3467-TCDF/2378-TCDF: 11.4

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SLC0081-ICV1	CS3X1	23030602	03/06/2023	10:49
SLC0081-RES1	ISCX1	23030603	03/06/2023	11:41
SLC0081-CCV1	CS3X2	23030612	03/06/2023	19:10
SLC0081-RES2	ISCX2	23030613	03/06/2023	20:03
BLA0398-BLK1	Blank	23030614	03/06/2023	20:55
BLA0398-BS1	LCS	23030615	03/06/2023	21:44
BLA0398-SRM1	Reference	23030616	03/06/2023	22:33
SLC0081-CCV2	CS3X3	23030623	03/07/2023	04:16
SLC0081-RES3	ISCX3	23030624	03/07/2023	05:09
23A0326-01	LDW23-SC1028	23030627	03/07/2023	07:39
23A0326-09	LDW23-IT1127	23030628	03/07/2023	08:28
23A0326-12	LDW23-SC1162B	23030629	03/07/2023	09:17
SLC0081-CCV3	CS3X4	23030633	03/07/2023	12:33
SLC0081-RES4	ISCX4	23030634	03/07/2023	13:26



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0045

Instrument: AUTOSPEC01

Calibration: GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3W1	SLC0045-ICV1	23030302	NA	03/03/23 09:51
ISCW1	SLC0045-RES1	23030303	NA	03/03/23 10:39
CSLCW	SLC0045-CAL1	23030304	NA	03/03/23 11:28
CS1CW	SLC0045-CAL2	23030305	NA	03/03/23 12:23
CS2CW	SLC0045-CAL3	23030306	NA	03/03/23 13:16
CS3CW	SLC0045-CAL4	23030307	NA	03/03/23 14:06
CS4CW	SLC0045-CAL5	23030308	NA	03/03/23 14:59
CS5CW	SLC0045-CAL6	23030309	NA	03/03/23 15:47
ICVCW	SLC0045-SCV1	23030310	NA	03/03/23 16:36
CS3V4	SLC0045-CCV1	23030311	NA	03/03/23 17:25
ISCV4	SLC0045-RES2	23030312	NA	03/03/23 18:18



ANALYSIS SEQUENCE

SLC0045

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 9:51, 18:18

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0045-ICV1	CS3W1	QC		1	K009821		03/03/2023 09:51	23030302	PK	
SLC0045-RES1	ISCW1	QC		2	L002084		03/03/2023 10:39	23030303	PK	
SLC0045-CAL1	CSLCW	QC		3	I005460		03/03/2023 11:28	23030304	PK	
SLC0045-CAL2	CS1CW	QC		4	I005456		03/03/2023 12:23	23030305	PK	
SLC0045-CAL3	CS2CW	QC		5	I005457		03/03/2023 13:16	23030306	PK	
SLC0045-CAL4	CS3CW	QC		6	K009821		03/03/2023 14:06	23030307	PK	
SLC0045-CAL5	CS4CW	QC		7	I005458		03/03/2023 14:59	23030308	PK	
SLC0045-CAL6	CS5CW	QC		8	I005459		03/03/2023 15:47	23030309	PK	
SLC0045-SCV1	ICVCW	QC		9	H008219		03/03/2023 16:36	23030310	PK	
SLC0045-CCV1	CS3V4	QC		10	K009821		03/03/2023 17:25	23030311	PK	
SLC0045-RES2	ISCV4	QC		11	L002084		03/03/2023 18:18	23030312	PK	

Dataset: T:\Autospec\Processed Data Batch\2303031CIH.qld
 Last Altered: Monday, March 06, 2023 10:57:27 Pacific Standard Time
 Printed: Monday, March 06, 2023 10:58:44 Pacific Standard Time

3/6/23 PK

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Calibrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030304, Compound:TD, RT:26.410	1
Peak deleted	Sample:23030304, Compound:OD, RT:44.990	1
Peak deleted	Sample:23030304, Compound:TF, RT:25.774	1
Pre modification peak	Sample:23030305, Compound:TF, RT:25.774	2
Peak modified	Sample:23030305, Compound:TF, RT:25.774	2
Pre modification peak	Sample:23030304, Compound:HPD, RT:40.261	1
Peak modified	Sample:23030304, Compound:HPD, RT:40.261	1
Peak deleted	Sample:23030308, Compound:PF, RT:32.328	5
Peak deleted	Sample:23030309, Compound:PF, RT:32.307	6
Peak deleted	Sample:23030309, Compound:HF, RT:33.220	6
Peak deleted	Sample:23030309, Compound:TD, RT:27.017	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.995	6
Peak deleted	Sample:23030309, Compound:PD, RT:31.917	6
Peak deleted	Sample:23030308, Compound:HD, RT:34.000	5
Peak deleted	Sample:23030308, Compound:HPD, RT:39.225	5
Peak deleted	Sample:23030309, Compound:HPD, RT:39.214	6
Pre modification peak	Sample:23030305, Compound:OF, RT:45.237	2
Peak modified	Sample:23030305, Compound:OF, RT:45.237	2
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\2303031CIH.qld'	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0081

Instrument: AUTOSPEC01

Calibration: GC00015

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CS3X1	SLC0081-ICV1	23030602	NA	03/06/23 10:49
ISCX1	SLC0081-RES1	23030603	NA	03/06/23 11:41
CS3X2	SLC0081-CCV1	23030612	NA	03/06/23 19:10
ISCX2	SLC0081-RES2	23030613	NA	03/06/23 20:03
Blank	BLA0398-BLK1	23030614	Solid	03/06/23 20:55
LCS	BLA0398-BS1	23030615	Solid	03/06/23 21:44
Reference	BLA0398-SRM1	23030616	Solid	03/06/23 22:33
CS3X3	SLC0081-CCV2	23030623	NA	03/07/23 04:16
ISCX3	SLC0081-RES3	23030624	NA	03/07/23 05:09
LDW23-SC1028	23A0326-01	23030627	Solid	03/07/23 07:39
LDW23-IT1127	23A0326-09	23030628	Solid	03/07/23 08:28
LDW23-SC1162B	23A0326-12	23030629	Solid	03/07/23 09:17
CS3X4	SLC0081-CCV3	23030633	NA	03/07/23 12:33
ISCX4	SLC0081-RES4	23030634	NA	03/07/23 13:26



ANALYSIS SEQUENCE

SLC0081

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
 Calibration ID: GC00015 Tune File: FEB0923_1-5
 EM Voltage: 350 Resolution check times : 10:40, 20:03, 05:09, 13:26

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLC0081-ICV1	CS3X1	QC		1	K009821		03/06/2023 10:49	23030602	PK	
SLC0081-RES1	ISCX1	QC		2	L002084		03/06/2023 11:41	23030603	PK	
BLA0125-BLK1	DBLK06	QC		3		K011414	03/06/2023 15:54	23030608	PK	
BLA0125-BS1	DLCS06	QC		4		K011414	03/06/2023 16:43	23030609	PK	
BLA0125-BSD1	DLCSD06	QC		5		K011414	03/06/2023 17:32	23030610	PK	
23A0084-03	45-334 January Sample	1613B Dioxin	A 01	6		K011414	03/06/2023 18:21	23030611	PK	
SLC0081-CCV1	CS3X2	QC		7	K009821		03/06/2023 19:10	23030612	PK	
SLC0081-RES2	ISCX2	QC		8	L002084		03/06/2023 20:03	23030613	PK	
BLA0398-BLK1	Blank	QC		9		K011414	03/06/2023 20:55	23030614	PK	
BLA0398-BS1	LCS	QC		10		K011414	03/06/2023 21:44	23030615	PK	
BLA0398-SRM1	Reference	QC		11		K011414	03/06/2023 22:33	23030616	PK	
BLA0398-DUP1	Duplicate	QC		12		K011414	03/06/2023 23:22	23030617	PK	
23A0099-01	LDW23-IT1154	1613B Dioxin	C 01	13		K011414	03/07/2023 00:11	23030618	PK	
23A0099-04	LDW23-SC1186	1613B Dioxin	C 01	14		K011414	03/07/2023 01:00	23030619	PK	
23A0099-05	LDW23-SC1186-FD	1613B Dioxin	C 01	15		K011414	03/07/2023 01:49	23030620	PK	
23A0099-10	LDW23-IT1160	1613B Dioxin	C 01	16		K011414	03/07/2023 02:38	23030621	PK	
23A0099-11	LDW23-IT1160-FD	1613B Dioxin	C 01	17		K011414	03/07/2023 03:27	23030622	PK	
SLC0081-CCV2	CS3X3	QC		18	K009821		03/07/2023 04:16	23030623	PK	
SLC0081-RES3	ISCX3	QC		19	K003933		03/07/2023 05:09	23030624	PK	
23A0295-02	LDW23-SC1075	1613B Dioxin	B 01	20		K011414	03/07/2023 06:01	23030625	PK	
23A0313-12	LDW23-IT1148	1613B Dioxin	C 01	21		K011414	03/07/2023 06:50	23030626	PK	
23A0326-01	LDW23-SC1028	1613B Dioxin	C 01	22		K011414	03/07/2023 07:39	23030627	PK	



ANALYSIS SEQUENCE

SLC0081

Instrument: AUTOSPEC01 HRGCMS Column ID: K2310
Calibration ID: GC00015 Tune File: FEB0923_1-5
EM Voltage: 350 Resolution check times : 10:40, 20:03, 05:09, 13:26

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
23A0326-09	LDW23-IT1127	1613B Dioxin	C 01	23		K011414	03/07/2023 08:28	23030628	PK	
23A0326-12	LDW23-SC1162B	1613B Dioxin	C 01	24		K011414	03/07/2023 09:17	23030629	PK	
23A0328-06	LDW23-SS1168	1613B Dioxin	C 01	25		K011414	03/07/2023 10:06	23030630	PK	
23A0328-07	LDW23-SS1176	1613B Dioxin	C 01	26		K011414	03/07/2023 10:55	23030631	PK	
23A0328-12	LDW23-SS1162	1613B Dioxin	C 01	27		K011414	03/07/2023 11:44	23030632	PK	
SLC0081-CCV3	CS3X4	QC		28	K009821		03/07/2023 12:33	23030633	PK	
SLC0081-RES4	ISCX4	QC		29	K003933		03/07/2023 13:26	23030634	PK	

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
 Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 09:02:03 Pacific Standard Time

3/7/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Peak deleted	Sample:23030603, Compound:13C-123789-HxCDD, RT:36.495	2
Peak deleted	Sample:23030613, Compound:13C-123789-HxCDD, RT:36.518	12
Peak deleted	Sample:23030613, Compound:13C-1234-TCDD, RT:25.732	12
Peak deleted	Sample:23030624, Compound:13C-123789-HxCDD, RT:36.496	23
Pre modification peak	Sample:23030605, Compound:TD, RT:26.410	4
Peak modified	Sample:23030605, Compound:TD, RT:26.410	4
Pre modification peak	Sample:23030607, Compound:TF, RT:25.774	6
Peak modified	Sample:23030607, Compound:TF, RT:25.774	6
Pre modification peak	Sample:23030607, Compound:HF, RT:35.872	6
Peak modified	Sample:23030607, Compound:HF, RT:35.872	6
Pre modification peak	Sample:23030607, Compound:HF, RT:35.025	6
Peak modified	Sample:23030607, Compound:HF, RT:35.025	6
Peak deleted	Sample:23030608, Compound:TD, RT:26.396	7
Peak deleted	Sample:23030608, Compound:HD, RT:36.496	7
Pre modification peak	Sample:23030608, Compound:OD, RT:44.954	7
Peak modified	Sample:23030608, Compound:OD, RT:44.954	7
Peak deleted	Sample:23030611, Compound:HD, RT:36.127	10
Peak deleted	Sample:23030611, Compound:HD, RT:36.094	10
Peak deleted	Sample:23030614, Compound:TD, RT:26.396	13
Pre modification peak	Sample:23030617, Compound:TF, RT:25.760	16
Peak modified	Sample:23030617, Compound:TF, RT:25.760	16
Pre modification peak	Sample:23030617, Compound:HF, RT:36.886	16
Peak modified	Sample:23030617, Compound:HF, RT:36.886	16
Pre modification peak	Sample:23030618, Compound:PF, RT:29.923	17
Peak modified	Sample:23030618, Compound:PF, RT:29.923	17
Pre modification peak	Sample:23030619, Compound:PF, RT:29.933	18
Peak modified	Sample:23030619, Compound:PF, RT:29.933	18
Pre modification peak	Sample:23030619, Compound:HF, RT:35.860	18
Peak modified	Sample:23030619, Compound:HF, RT:35.860	18
Peak added	Sample:23030619, Compound:HF, RT:35.894	18
Peak added	Sample:23030619, Compound:HF, RT:35.894	18
Pre modification peak	Sample:23030620, Compound:HF, RT:35.894	19
Peak modified	Sample:23030620, Compound:HF, RT:35.894	19
Pre modification peak	Sample:23030620, Compound:HF, RT:35.894	19
Peak modified	Sample:23030620, Compound:HF, RT:35.894	19
Pre modification peak	Sample:23030622, Compound:HF, RT:35.950	21
Peak modified	Sample:23030622, Compound:HF, RT:35.950	21
Pre modification peak	Sample:23030622, Compound:HF, RT:35.939	21
Peak modified	Sample:23030622, Compound:HF, RT:35.939	21
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230306D1.qld'	
Peak deleted	Sample:23030610, Compound:HF, RT:35.638	9
Peak deleted	Sample:23030610, Compound:TD, RT:26.706	9
Peak deleted	Sample:23030611, Compound:TF, RT:26.085	10
Peak deleted	Sample:23030611, Compound:TF, RT:23.853	10
Peak deleted	Sample:23030616, Compound:TF, RT:26.142	15
Peak deleted	Sample:23030616, Compound:PP, RT:27.893	15
Peak deleted	Sample:23030616, Compound:PF, RT:29.087	15
Peak deleted	Sample:23030617, Compound:TF, RT:26.283	16
Peak deleted	Sample:23030617, Compound:HD, RT:36.975	16
Peak deleted	Sample:23030618, Compound:TF, RT:27.173	17
Peak deleted	Sample:23030619, Compound:TD, RT:25.365	17

Dataset: T:\Autospec\Processed Data Batch\230306D1.qld
Last Altered: Tuesday, March 07, 2023 08:54:19 Pacific Standard Time
Printed: Tuesday, March 07, 2023 09:02:03 Pacific Standard Time

Event	Details	Sample ID
Peak added	Sample:23030619, Compound:TD, RT:24.531	18
Peak added	Sample:23030619, Compound:TD, RT:24.531	18
Peak deleted	Sample:23030620, Compound:HD, RT:36.975	19
Peak deleted	Sample:23030621, Compound:HD, RT:36.997	20
Peak deleted	Sample:23030622, Compound:HD, RT:36.997	21
Peak deleted	Sample:23030622, Compound:HD, RT:33.777	21
Peak deleted	Sample:23030622, Compound:HPD, RT:40.629	21
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230306D1.qld'	

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
 Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
 Printed: Tuesday, March 07, 2023 13:17:16 Pacific Standard Time

3/7/23 pk

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Pre modification peak	Sample:23030626, Compound:PF, RT:29.934	2
Peak modified	Sample:23030626, Compound:PF, RT:29.934	2
Pre modification peak	Sample:23030626, Compound:HF, RT:35.025	2
Peak modified	Sample:23030626, Compound:HF, RT:35.025	2
Peak added	Sample:23030626, Compound:HF, RT:36.886	2
Peak added	Sample:23030626, Compound:HF, RT:36.897	2
Peak added	Sample:23030626, Compound:PF, RT:31.248	2
Peak added	Sample:23030626, Compound:PF, RT:31.259	2
Pre modification peak	Sample:23030626, Compound:PF, RT:31.259	2
Peak modified	Sample:23030626, Compound:PF, RT:31.259	2
Peak added	Sample:23030626, Compound:PD, RT:31.504	2
Peak added	Sample:23030626, Compound:PD, RT:31.482	2
Peak added	Sample:23030627, Compound:HF, RT:35.883	3
Peak added	Sample:23030627, Compound:HF, RT:35.894	3
Pre modification peak	Sample:23030627, Compound:HF, RT:35.894	3
Peak modified	Sample:23030627, Compound:HF, RT:35.894	3
Pre modification peak	Sample:23030630, Compound:HF, RT:35.883	6
Peak modified	Sample:23030630, Compound:HF, RT:35.883	6
Pre modification peak	Sample:23030631, Compound:PF, RT:29.934	7
Peak modified	Sample:23030631, Compound:PF, RT:29.934	7
Pre modification peak	Sample:23030631, Compound:HF, RT:35.905	7
Peak modified	Sample:23030631, Compound:HF, RT:35.905	7
Pre modification peak	Sample:23030631, Compound:HF, RT:35.894	7
Peak modified	Sample:23030631, Compound:HF, RT:35.894	7
Pre modification peak	Sample:23030631, Compound:HF, RT:36.908	7
Peak modified	Sample:23030631, Compound:HF, RT:36.908	7
Pre modification peak	Sample:23030632, Compound:HF, RT:35.927	8
Peak modified	Sample:23030632, Compound:HF, RT:35.927	8
Pre modification peak	Sample:23030632, Compound:HF, RT:35.905	8
Peak modified	Sample:23030632, Compound:HF, RT:35.905	8
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230306D2.qld'	
Peak deleted	Sample:23030625, Compound:TF, RT:27.695	1
Peak added	Sample:23030625, Compound:PF, RT:28.875	1
Peak added	Sample:23030625, Compound:PF, RT:28.875	1
Peak added	Sample:23030625, Compound:PD, RT:28.830	1
Peak added	Sample:23030625, Compound:PD, RT:28.853	1
Peak deleted	Sample:23030626, Compound:TF, RT:27.667	2
Peak deleted	Sample:23030626, Compound:PF, RT:31.248	2
Peak deleted	Sample:23030627, Compound:TF, RT:23.585	3
Peak added	Sample:23030627, Compound:PF, RT:28.853	3
Peak added	Sample:23030627, Compound:PF, RT:28.853	3
Peak added	Sample:23030627, Compound:PD, RT:28.809	3
Peak added	Sample:23030627, Compound:PD, RT:28.820	3
Pre modification peak	Sample:23030628, Compound:PF, RT:28.875	4
Peak modified	Sample:23030628, Compound:PF, RT:28.875	4
Pre modification peak	Sample:23030628, Compound:PF, RT:28.875	4
Peak modified	Sample:23030628, Compound:PF, RT:28.875	4
Peak added	Sample:23030628, Compound:PD, RT:28.864	4
Peak added	Sample:23030628, Compound:PD, RT:28.853	4
Peak deleted	Sample:23030628, Compound:PD, RT:32.295	4
Peak deleted	Sample:23030629, Compound:HF, RT:35.280	4

Dataset: T:\Autospec\Processed Data Batch\230306D2.qld
Last Altered: Tuesday, March 07, 2023 13:16:23 Pacific Standard Time
Printed: Tuesday, March 07, 2023 13:17:16 Pacific Standard Time

Event	Details	Sample ID
Peak added	Sample:23030629, Compound:PD, RT:28.830	5
Peak added	Sample:23030629, Compound:PD, RT:28.864	5
Peak deleted	Sample:23030629, Compound:HPD, RT:40.584	5
Peak deleted	Sample:23030630, Compound:HD, RT:36.986	6
Peak deleted	Sample:23030630, Compound:HPD, RT:40.528	6
Pre modification peak	Sample:23030631, Compound:PD, RT:28.808	7
Peak modified	Sample:23030631, Compound:PD, RT:28.808	7
Pre modification peak	Sample:23030631, Compound:PD, RT:28.808	7
Peak modified	Sample:23030631, Compound:PD, RT:28.808	7
Peak added	Sample:23030631, Compound:PD, RT:28.853	7
Peak added	Sample:23030631, Compound:PD, RT:28.853	7
Peak added	Sample:23030631, Compound:PD, RT:28.853	7
Peak added	Sample:23030631, Compound:PD, RT:28.853	7
Peak added	Sample:23030631, Compound:PD, RT:28.853	7
Peak added	Sample:23030631, Compound:PD, RT:28.853	7
Peak deleted	Sample:23030631, Compound:HD, RT:36.986	7
Peak deleted	Sample:23030632, Compound:PF, RT:28.697	8
Peak deleted	Sample:23030632, Compound:HF, RT:33.142	8
Peak added	Sample:23030632, Compound:PD, RT:28.864	8
Peak added	Sample:23030632, Compound:PD, RT:28.853	8
Peak deleted	Sample:23030632, Compound:HD, RT:36.974	8
Peak deleted	Sample:23030632, Compound:HPD, RT:40.440	8
Dataset Saved	Saved to 'T:\Autospec\Processed Data Batch\230306D2.qld'	



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLC0045

Instrument: AUTOSPEC01

Sample ID: SLC0045-ICV1

Calibration: GC00015

File ID: 23030302

Analyzed: 03/03/23 09:51

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	94.0	71 - 129	25.7745	25.76487	0.0096	N/A	
13C12-2,3,7,8-TCDD	100.00	102	82 - 118	26.4242	26.40287	0.0213	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	92.2	76 - 124	29.9337	29.92235	0.0114	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	87.6	77 - 123	31.2707	31.2611	0.0096	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	84.3	62 - 138	31.5268	31.5192	0.0076	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	84.0	76 - 124	34.8915	34.88393	0.0076	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	74.6	70 - 130	35.0363	35.02318	0.0131	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	88.7	73 - 127	35.8942	35.88653	0.0077	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	99.9	74 - 126	36.9303	36.91718	0.0131	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	93.5	85 - 115	36.0167	36.00728	0.0094	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	86.9	85 - 115	36.1393	36.12053	0.0188	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	95.3	78 - 122	38.7685	38.7593	0.0092	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	98.7	77 - 123	41.008	40.99867	0.0093	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	105	72 - 128	40.2615	40.25773	0.0038	N/A	
13C12-OCDD	200.00	107	48 - 152	44.9993	44.98705	0.0122	N/A	
37Cl4-2,3,7,8-TCDD	10.000	90.5	0 - 200	26.4383	26.42402	0.0143	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0045</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>SLC0045-SCV1</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030310</u>	Analyzed:	<u>03/03/23 16:36</u>

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	96.9	0 - 200	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	100.00	96.6	0 - 200	26.3958	26.40287	-0.0071	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	73.2	0 - 200	29.9225	29.92235	0.0001	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	75.9	0 - 200	31.2593	31.2611	-0.0018	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	76.6	0 - 200	31.5155	31.5192	-0.0037	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.0	0 - 200	34.8802	34.88393	-0.0037	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	98.0	0 - 200	35.014	35.02318	-0.0092	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.4	0 - 200	35.8828	35.88653	-0.0037	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.9	0 - 200	36.9078	36.91718	-0.0094	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.9	0 - 200	36.0053	36.00728	-0.0020	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	97.7	0 - 200	36.1168	36.12053	-0.0037	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	0 - 200	38.7573	38.7593	-0.0020	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	104	0 - 200	40.9967	40.99867	-0.0020	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	102	0 - 200	40.2502	40.25773	-0.0075	N/A	
13C12-OCDD	200.00	80.8	0 - 200	44.9807	44.98705	-0.0064	N/A	
37C14-2,3,7,8-TCDD	10.000	87.1	0 - 200	26.4242	26.42402	0.0002	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Sequence: SLC0045 Instrument: AUTOSPEC01
Sample ID: SLC0045-CCV1 Calibration: GC00015
File ID: 23030311 Analyzed: 03/03/23 17:25

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	89.4	71 - 129	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	100.00	86.0	82 - 118	26.3958	26.40287	-0.0071	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	92.6	76 - 124	29.9225	29.92235	0.0001	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	91.6	77 - 123	31.2593	31.2611	-0.0018	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	90.8	62 - 138	31.5157	31.5192	-0.0035	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	95.2	76 - 124	34.8805	34.88393	-0.0034	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	91.1	70 - 130	35.0253	35.02318	0.0021	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	96.9	73 - 127	35.883	35.88653	-0.0035	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	101	74 - 126	36.9193	36.91718	0.0021	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.6	85 - 115	36.0057	36.00728	-0.0016	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	98.4	85 - 115	36.117	36.12053	-0.0035	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	102	78 - 122	38.7577	38.7593	-0.0016	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	84.3	77 - 123	40.997	40.99867	-0.0017	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	92.0	72 - 128	40.2617	40.25773	0.0040	N/A	
13C12-OCDD	200.00	85.1	48 - 152	44.9903	44.98705	0.0032	N/A	
37C14-2,3,7,8-TCDD	10.000	75.4	0 - 200	26.424	26.42402	0.0000	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0081</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>SLC0081-CCV1</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030612</u>	Analyzed:	<u>03/06/23 19:10</u>

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	92.6	71 - 129	25.7462	25.76487	-0.0187	N/A	
13C12-2,3,7,8-TCDD	100.00	89.1	82 - 118	26.3818	26.40287	-0.0211	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	79.6	76 - 124	29.9003	29.92235	-0.0221	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	81.5	77 - 123	31.2372	31.2611	-0.0239	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	80.5	62 - 138	31.4935	31.5192	-0.0257	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	94.9	76 - 124	34.8582	34.88393	-0.0257	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	89.3	70 - 130	35.003	35.02318	-0.0202	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	98.2	73 - 127	35.8608	35.88653	-0.0257	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	105	74 - 126	36.8972	36.91718	-0.0200	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.1	85 - 115	35.9835	36.00728	-0.0238	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	93.2	85 - 115	36.0948	36.12053	-0.0257	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	105	78 - 122	38.7355	38.7593	-0.0238	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	96.2	77 - 123	40.975	40.99867	-0.0237	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	104	82 - 118	40.2395	40.25773	-0.0182	N/A	
13C12-OCDD	200.00	86.2	48 - 152	44.9542	44.98705	-0.0329	N/A	
37C14-2,3,7,8-TCDD	10.000	79.2	79 - 121	26.396	26.42402	-0.0280	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0081</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>BLA0398-BLK1</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030614</u>	Analyzed:	<u>03/06/23 20:55</u>

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.80	79.8	24 - 169	25.7318	25.76487	-0.0331	N/A	
13C12-2,3,7,8-TCDD	199.80	90.5	25 - 164	26.3675	26.40287	-0.0354	N/A	
13C12-1,2,3,7,8-PeCDF	199.80	82.7	24 - 185	29.8888	29.92235	-0.0336	N/A	
13C12-2,3,4,7,8-PeCDF	199.80	81.5	21 - 178	31.2257	31.2611	-0.0354	N/A	
13C12-1,2,3,7,8-PeCDD	199.80	82.6	25 - 181	31.482	31.5192	-0.0372	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.80	119	26 - 152	34.8467	34.88393	-0.0372	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.80	119	26 - 123	34.9915	35.02318	-0.0317	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.80	116	28 - 136	35.8493	35.88653	-0.0372	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.80	118	29 - 147	36.8855	36.91718	-0.0317	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.80	118	32 - 141	35.972	36.00728	-0.0353	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.80	113	28 - 130	36.0833	36.12053	-0.0372	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.80	125	28 - 143	38.724	38.7593	-0.0353	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.80	106	26 - 138	40.9633	40.99867	-0.0354	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.80	117	23 - 140	40.2168	40.25773	-0.0409	N/A	
13C12-OCDD	399.60	84.5	17 - 157	44.9443	44.98705	-0.0428	N/A	
37C14-2,3,7,8-TCDD	79.920	71.2	35 - 197	26.3958	26.42402	-0.0282	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0081</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>BLA0398-BS1</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030615</u>	Analyzed:	<u>03/06/23 21:44</u>

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.80	73.5	24 - 169	25.732	25.76487	-0.0329	N/A	
13C12-2,3,7,8-TCDD	199.80	80.0	25 - 164	26.3817	26.40287	-0.0212	N/A	
13C12-1,2,3,7,8-PeCDF	199.80	97.9	24 - 185	29.8888	29.92235	-0.0336	N/A	
13C12-2,3,4,7,8-PeCDF	199.80	98.9	21 - 178	31.2257	31.2611	-0.0354	N/A	
13C12-1,2,3,7,8-PeCDD	199.80	101	25 - 181	31.4818	31.5192	-0.0374	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.80	107	26 - 152	34.8577	34.88393	-0.0262	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.80	99.9	26 - 123	34.9913	35.02318	-0.0319	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.80	104	28 - 136	35.8602	35.88653	-0.0263	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.80	106	29 - 147	36.8852	36.91718	-0.0320	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.80	109	32 - 141	35.9717	36.00728	-0.0356	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.80	101	28 - 130	36.0942	36.12053	-0.0263	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.80	103	28 - 143	38.7347	38.7593	-0.0246	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.80	74.0	26 - 138	40.9628	40.99867	-0.0359	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.80	82.1	23 - 140	40.2275	40.25773	-0.0302	N/A	
13C12-OCDD	399.60	75.6	17 - 157	44.9532	44.98705	-0.0339	N/A	
37C14-2,3,7,8-TCDD	79.920	65.2	35 - 197	26.3958	26.42402	-0.0282	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0081</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>BLA0398-SRM1</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030616</u>	Analyzed:	<u>03/06/23 22:33</u>

Surrogate Compound	Spike Level ng/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	92.0	24 - 169	25.7318	25.76487	-0.0331	N/A	
13C12-2,3,7,8-TCDD	200.00	105	25 - 164	26.3817	26.40287	-0.0212	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	107	24 - 185	29.8888	29.92235	-0.0336	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	114	21 - 178	31.2368	31.2611	-0.0243	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	111	25 - 181	31.4932	31.5192	-0.0260	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	109	26 - 152	34.8578	34.88393	-0.0261	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	101	26 - 123	35.0027	35.02318	-0.0205	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	104	28 - 136	35.8717	35.88653	-0.0148	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	118	29 - 147	36.8857	36.91718	-0.0315	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	101	32 - 141	35.9942	36.00728	-0.0131	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	91.3	28 - 130	36.1057	36.12053	-0.0148	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	104	28 - 143	38.735	38.7593	-0.0243	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	114	26 - 138	40.9745	40.99867	-0.0242	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	112	23 - 140	40.2278	40.25773	-0.0299	N/A	
13C12-OCDD	400.00	112	17 - 157	44.9625	44.98705	-0.0246	N/A	
37C14-2,3,7,8-TCDD	80.000	84.3	35 - 197	26.3957	26.42402	-0.0283	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY EPA 1613B

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Sequence: SLC0081 Instrument: AUTOSPEC01
Sample ID: SLC0081-CCV2 Calibration: GC00015
File ID: 23030623 Analyzed: 03/07/23 04:16

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	89.0	71 - 129	25.746	25.76487	-0.0189	N/A	
13C12-2,3,7,8-TCDD	100.00	100	82 - 118	26.3817	26.40287	-0.0212	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	95.9	76 - 124	29.9	29.92235	-0.0224	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	102	77 - 123	31.237	31.2611	-0.0241	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	106	62 - 138	31.4932	31.5192	-0.0260	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	106	76 - 124	34.8692	34.88393	-0.0147	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	90.6	70 - 130	35.0028	35.02318	-0.0204	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	89.6	73 - 127	35.8718	35.88653	-0.0147	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	94.8	74 - 126	36.897	36.91718	-0.0202	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	97.0	85 - 115	35.9833	36.00728	-0.0240	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	81.9	85 - 115	36.1058	36.12053	-0.0147	N/A	*
13C12-1,2,3,4,6,7,8-HpCDF	100.00	96.9	78 - 122	38.7463	38.7593	-0.0130	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	92.8	77 - 123	40.9858	40.99867	-0.0129	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	101	82 - 118	40.2393	40.25773	-0.0184	N/A	
13C12-OCDD	200.00	96.9	48 - 152	44.972	44.98705	-0.0151	N/A	
37Cl4-2,3,7,8-TCDD	10.000	88.6	79 - 121	26.3958	26.42402	-0.0282	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0081</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>23A0326-01</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030627</u>	Analyzed:	<u>03/07/23 07:39</u>

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.32	92.9	24 - 169	25.7462	25.76487	-0.0187	N/A	
13C12-2,3,7,8-TCDD	199.32	103	25 - 164	26.3818	26.40287	-0.0211	N/A	
13C12-1,2,3,7,8-PeCDF	199.32	98.0	24 - 185	29.9115	29.92235	-0.0109	N/A	
13C12-2,3,4,7,8-PeCDF	199.32	104	21 - 178	31.2483	31.2611	-0.0128	N/A	
13C12-1,2,3,7,8-PeCDD	199.32	104	25 - 181	31.5045	31.5192	-0.0147	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.32	88.9	26 - 152	34.8692	34.88393	-0.0147	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.32	77.8	26 - 123	35.014	35.02318	-0.0092	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.32	90.3	28 - 136	35.894	35.88653	0.0075	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.32	103	29 - 147	36.908	36.91718	-0.0092	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.32	95.4	32 - 141	36.0055	36.00728	-0.0018	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.32	81.7	28 - 130	36.128	36.12053	0.0075	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.32	103	28 - 143	38.7575	38.7593	-0.0018	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.32	105	26 - 138	40.9857	40.99867	-0.0130	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.32	108	23 - 140	40.2503	40.25773	-0.0074	N/A	
13C12-OCDD	398.65	108	17 - 157	44.9902	44.98705	0.0031	N/A	
37C14-2,3,7,8-TCDD	79.729	86.2	35 - 197	26.41	26.42402	-0.0140	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory: Analytical Resources, LLC SDG: 23A0326
 Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
 Sequence: SLC0081 Instrument: AUTOSPEC01
 Sample ID: 23A0326-09 Calibration: GC00015
 File ID: 23030628 Analyzed: 03/07/23 08:28

Surrogate Compound	Spike Level ng/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.04	89.8	24 - 169	25.7602	25.76487	-0.0047	N/A	
13C12-2,3,7,8-TCDD	199.04	101	25 - 164	26.3957	26.40287	-0.0072	N/A	
13C12-1,2,3,7,8-PeCDF	199.04	78.6	24 - 185	29.9222	29.92235	-0.0002	N/A	
13C12-2,3,4,7,8-PeCDF	199.04	83.9	21 - 178	31.259	31.2611	-0.0021	N/A	
13C12-1,2,3,7,8-PeCDD	199.04	87.6	25 - 181	31.5153	31.5192	-0.0039	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.04	88.6	26 - 152	34.8912	34.88393	0.0073	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.04	76.9	26 - 123	35.0248	35.02318	0.0016	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.04	89.1	28 - 136	35.9048	35.88653	0.0183	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.04	100	29 - 147	36.9188	36.91718	0.0016	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.04	94.3	32 - 141	36.0163	36.00728	0.0090	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.04	80.7	28 - 130	36.1388	36.12053	0.0183	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.04	95.4	28 - 143	38.7682	38.7593	0.0089	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.04	98.1	26 - 138	41.0077	40.99867	0.0090	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.04	103	23 - 140	40.261	40.25773	0.0033	N/A	
13C12-OCDD	398.08	86.7	17 - 157	45.008	44.98705	0.0209	N/A	
37C14-2,3,7,8-TCDD	79.616	86.5	35 - 197	26.424	26.42402	0.0000	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLC0081</u>	Instrument:	<u>AUTOSPEC01</u>
Sample ID:	<u>SLC0081-CCV3</u>	Calibration:	<u>GC00015</u>
File ID:	<u>23030633</u>	Analyzed:	<u>03/07/23 12:33</u>

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	88.9	71 - 129	25.746	25.76487	-0.0189	N/A	
13C12-2,3,7,8-TCDD	100.00	87.4	82 - 118	26.3817	26.40287	-0.0212	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	84.7	76 - 124	29.9002	29.92235	-0.0221	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	89.7	77 - 123	31.237	31.2611	-0.0241	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	91.0	62 - 138	31.4933	31.5192	-0.0259	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	89.2	76 - 124	34.8692	34.88393	-0.0147	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	78.4	70 - 130	35.014	35.02318	-0.0092	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	88.9	73 - 127	35.8717	35.88653	-0.0148	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	97.5	74 - 126	36.908	36.91718	-0.0092	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	95.5	85 - 115	35.9943	36.00728	-0.0130	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	84.1	85 - 115	36.1057	36.12053	-0.0148	N/A	*
13C12-1,2,3,4,6,7,8-HpCDF	100.00	92.5	78 - 122	38.7463	38.7593	-0.0130	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	86.9	77 - 123	40.9857	40.99867	-0.0130	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	93.8	82 - 118	40.2503	40.25773	-0.0074	N/A	
13C12-OCDD	200.00	76.6	48 - 152	44.9812	44.98705	-0.0059	N/A	
37C14-2,3,7,8-TCDD	10.000	77.0	50 - 150	26.3958	26.42402	-0.0282	N/A	

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 1613B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	01/24/23 07:31	7	365	03/07/23 07:39	42	365	
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	01/24/23 07:31	6	365	03/07/23 08:28	42	365	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	01/24/23 07:31	6	365	03/07/23 09:17	42	365	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS
EPA 1613B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: AUTOSPEC01

Analyte	MDL	RL	Units
2,3,7,8-TCDF	0.058	1.00	ng/kg
2,3,7,8-TCDD	0.150	1.00	ng/kg
1,2,3,7,8-PeCDF	0.240	1.00	ng/kg
2,3,4,7,8-PeCDF	0.220	1.00	ng/kg
1,2,3,7,8-PeCDD	0.170	1.00	ng/kg
1,2,3,4,7,8-HxCDF	0.280	1.00	ng/kg
1,2,3,6,7,8-HxCDF	0.200	1.00	ng/kg
2,3,4,6,7,8-HxCDF	0.170	1.00	ng/kg
1,2,3,7,8,9-HxCDF	0.190	1.00	ng/kg
1,2,3,4,7,8-HxCDD	0.170	1.00	ng/kg
1,2,3,6,7,8-HxCDD	0.180	1.00	ng/kg
1,2,3,7,8,9-HxCDD	0.220	1.00	ng/kg
1,2,3,4,6,7,8-HpCDF	0.210	1.00	ng/kg
1,2,3,4,7,8,9-HpCDF	0.240	1.00	ng/kg
1,2,3,4,6,7,8-HpCDD	0.560	2.50	ng/kg
OCDF	1.10	2.50	ng/kg
OCDD	4.60	10.0	ng/kg
Total TCDF		1.00	ng/kg
Total TCDD		1.00	ng/kg
Total PeCDF		1.00	ng/kg
Total PeCDD		1.00	ng/kg
Total HxCDF		1.00	ng/kg
Total HxCDD		1.00	ng/kg
Total HpCDF		1.00	ng/kg
Total HpCDD		1.00	ng/kg



CS3WT

**Calibration and Verification Solution (EPA-1613CS3)
combined with Window Defining and 2,3,7,8-TCDD
Resolution Testing Congeners**

PRODUCT CODE: CS3WT
LOT NUMBER: CS3WT0918
SOLVENT(S): Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy) 10/24/2018
LAST TESTED: (mm/dd/yyyy) 10/29/2018
EXPIRY DATE: (mm/dd/yyyy) 10/29/2025
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native and ¹³C₁₂-labelled chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

CS3WT was designed and prepared to be used as a HRMS calibration standard according to U.S. EPA Method 1613B.

It is to be used for calibration verification in place of EPA-1613CS3 (Lot: 13CS30918). It also contains the PCDD and PCDF window defining congeners for a DB-5 (or equivalent) capillary column as well as the TCDD isomers required to test and confirm the resolution of 2,3,7,8-TCDD.

The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-³⁷Cl₄-tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

<u>PRODUCT CODE</u>	<u>LOT NUMBER</u>
EPA-1613CS1	13CS10918
EPA-1613CS2	13CS20918
EPA-1613CS3	13CS30918
EPA-1613CS4	13CS40918
EPA-1613CS5	13CS50918
EPA-1613CSL	13CSL0918
EPA-1613CS0.5	13CS0.50918

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.
- Only the 2,3,7,8-substituted PCDDs and PCDFs should be used for quantitation. The other congeners (window defining and 2378-TCDD resolution testing) should be considered semi-quantitative (within $\pm 20\%$ of their design value). Impurities have been identified where possible.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: CS3WT; Components and Concentrations (ng/ml, in nonane/4.5% toluene)

<u>QUANTITATIVE ANALYTES (ng/ml, ±5%)</u>		<u>SEMI-QUANTITATIVE ANALYTES (ng/ml, ±20%)</u>	
Native PCDDs & PCDFs:		Window Definers:*	
2,3,7,8-TCDD	10	1,3,6,8-TCDD	10
2,3,7,8-TCDF	10	1,2,8,9-TCDD	10
1,2,3,7,8-PeCDD	50	1,3,6,8-TCDF	10
1,2,3,7,8-PeCDF	50	1,2,8,9-TCDF	10
2,3,4,7,8-PeCDF	50	1,2,4,6,8/1,2,4,7,9-PeCDD	50
1,2,3,4,7,8-HxCDD	50	1,2,3,8,9-PeCDD	50
1,2,3,6,7,8-HxCDD	50	1,3,4,6,8-PeCDF	50
1,2,3,7,8,9-HxCDD	50	1,2,3,8,9-PeCDF	50
1,2,3,4,7,8-HxCDF	50	1,2,4,6,7,9-HxCDD	50
1,2,3,6,7,8-HxCDF	50	1,2,3,4,6,8-HxCDF	50
1,2,3,7,8,9-HxCDF	50	1,2,3,4,6,7,9-HpCDD	50
2,3,4,6,7,8-HxCDF	50		
1,2,3,4,6,7,8-HpCDD (WD)	50	2378-TCDD Resolution Testing Isomers:	
1,2,3,4,6,7,8-HpCDF (WD)	50	1,2,3,4-TCDD	5
1,2,3,4,7,8,9-HpCDF (WD)	50	1,2,3,7/1,2,3,8-TCDD	5
OCDD	100	1,2,3,9-TCDD	10
OCDF	100		
Labelled PCDDs & PCDFs:			
¹³ C ₁₂ -2,3,7,8-TCDD	100		
¹³ C ₁₂ -2,3,7,8-TCDF	100	* 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD. Use 1,2,3,4,6,7,9-HpCDD to set window.	
¹³ C ₁₂ -1,2,3,7,8-PeCDD	100		
¹³ C ₁₂ -1,2,3,7,8-PeCDF	100		
¹³ C ₁₂ -2,3,4,7,8-PeCDF	100	* 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF. Use 1,2,3,4,6,7,8-HpCDF to set window.	
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	100		
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	100		
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	100		
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	100		
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	100		
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	100		
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	100		
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	100		
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	100		
¹³ C ₁₂ -OCDD	200		
Cleanup Standard:			
³⁷ Cl ₄ -2,3,7,8-TCDD	10		
Internal Standards:			
¹³ C ₁₂ -1,2,3,4-TCDD	100		
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	100		

WD – Window Definer

Certified By:  Date: 10/30/2018
(mm/dd/yyyy)
 B.G. Chittim, General Manager

Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

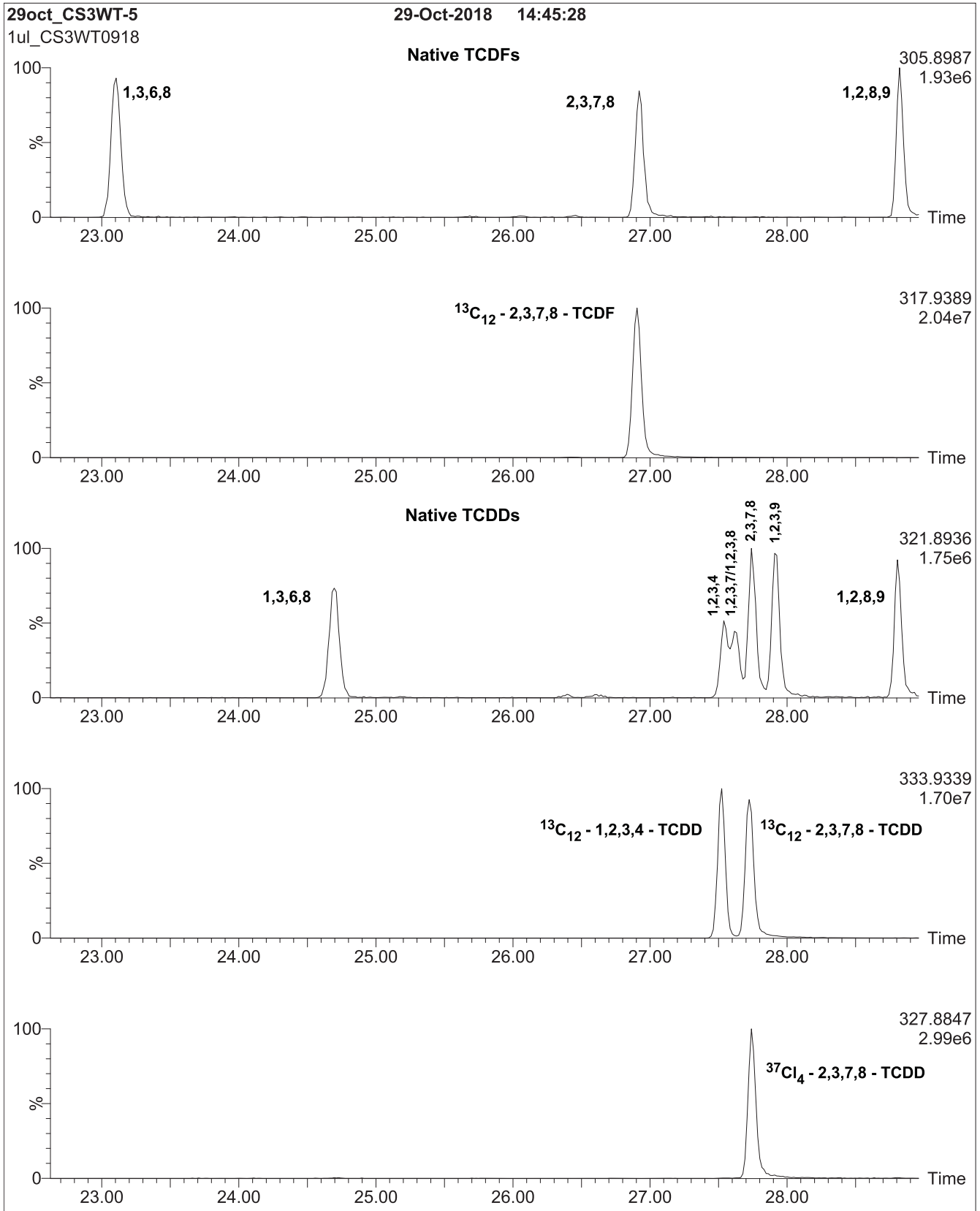


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

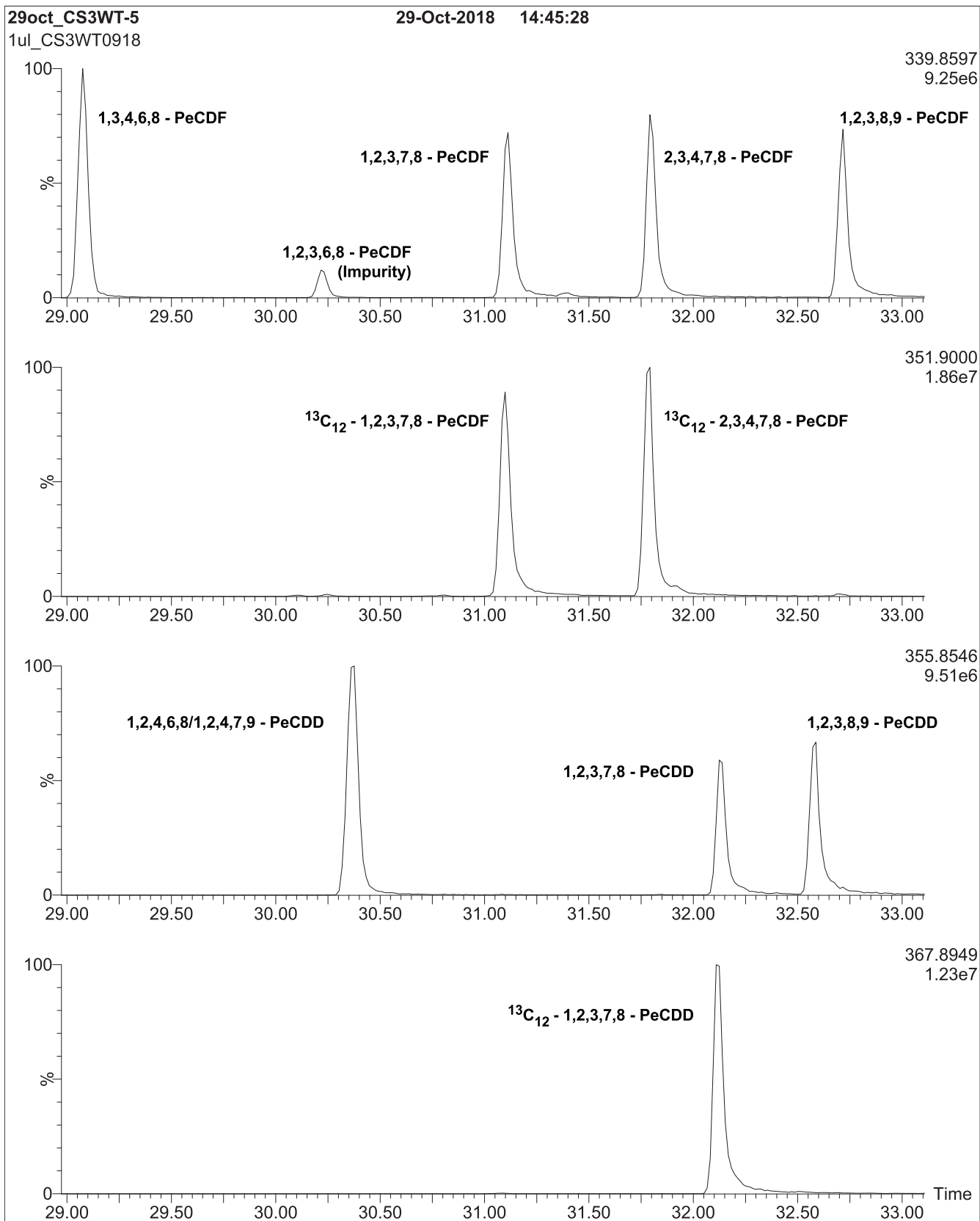


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

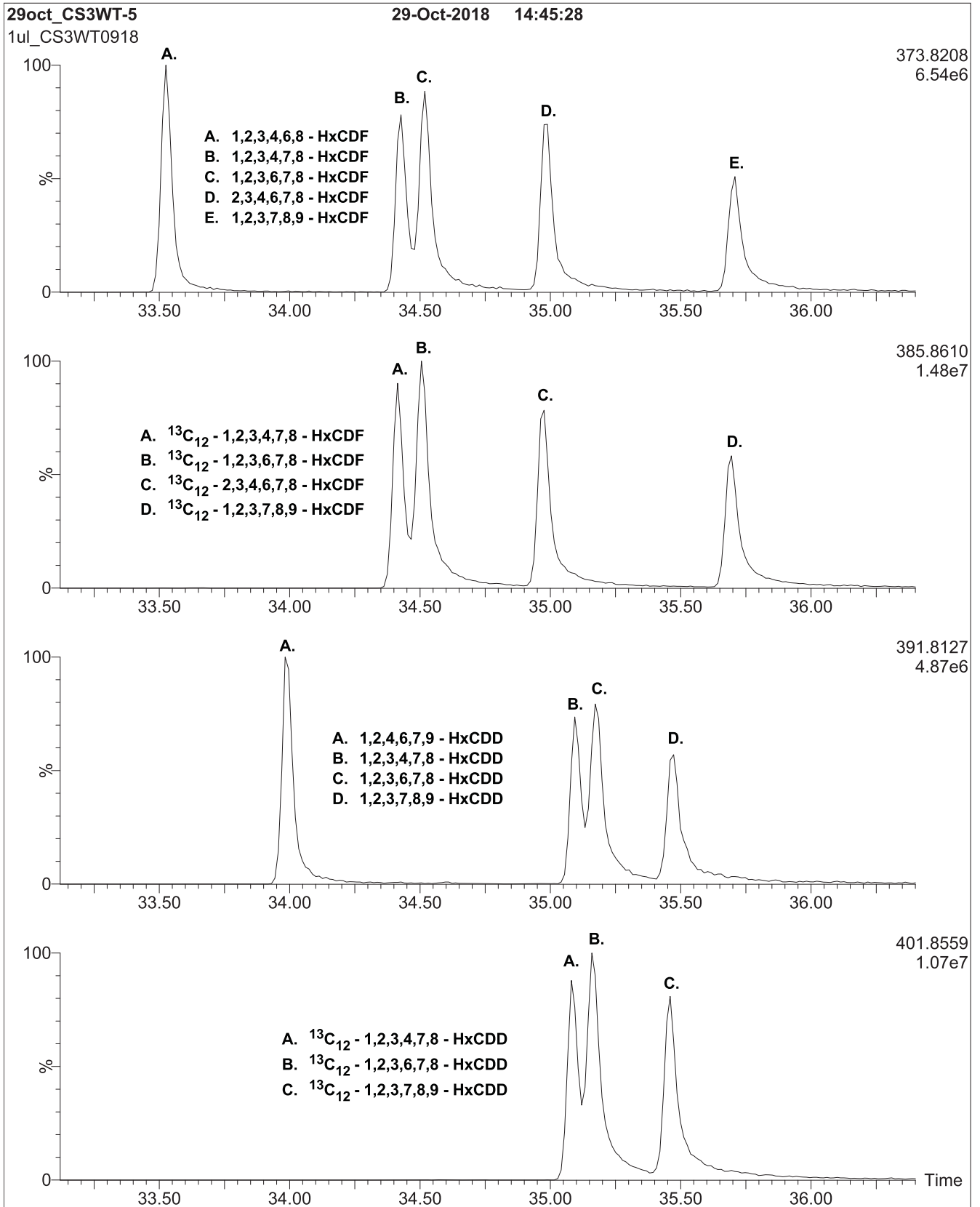


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

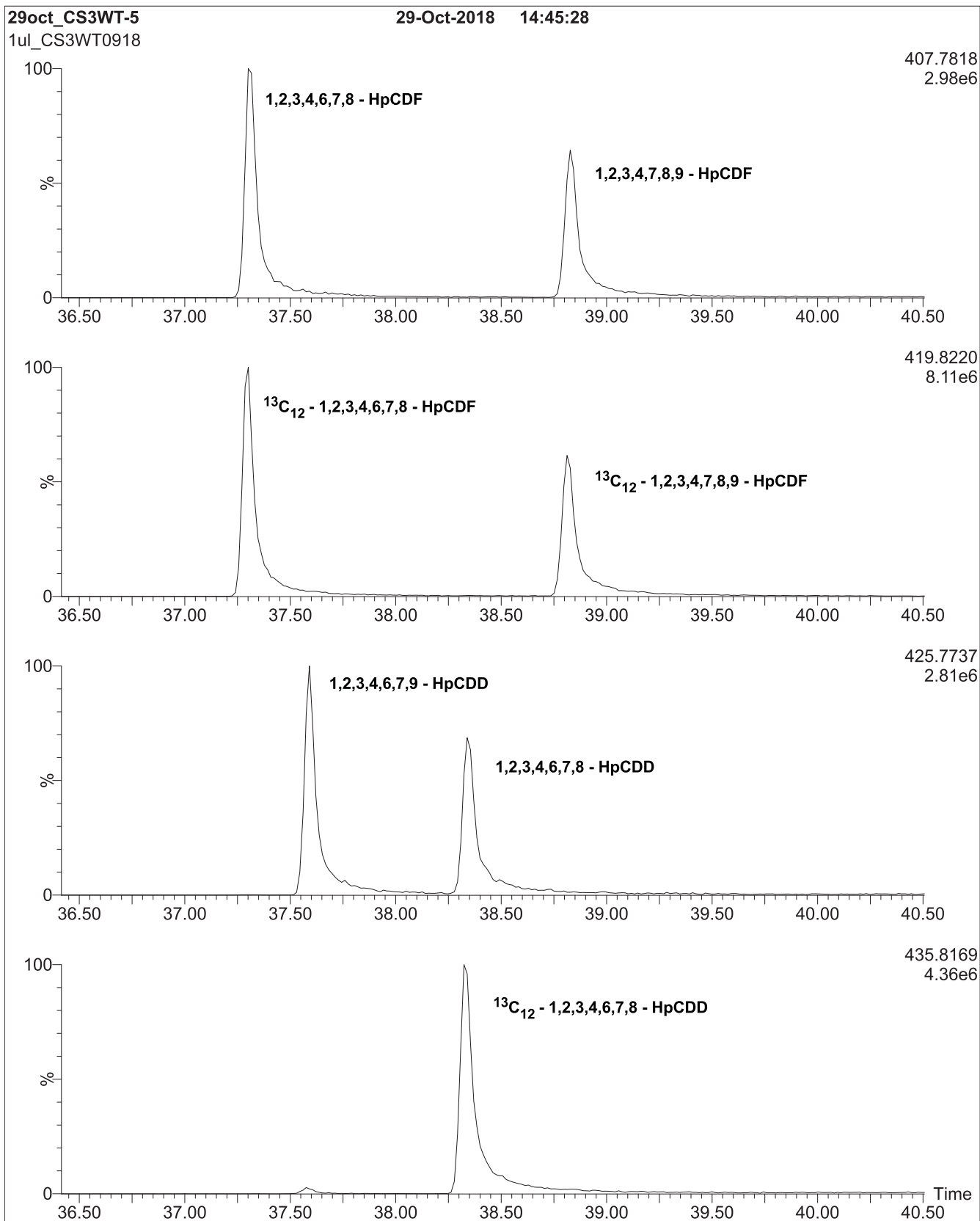
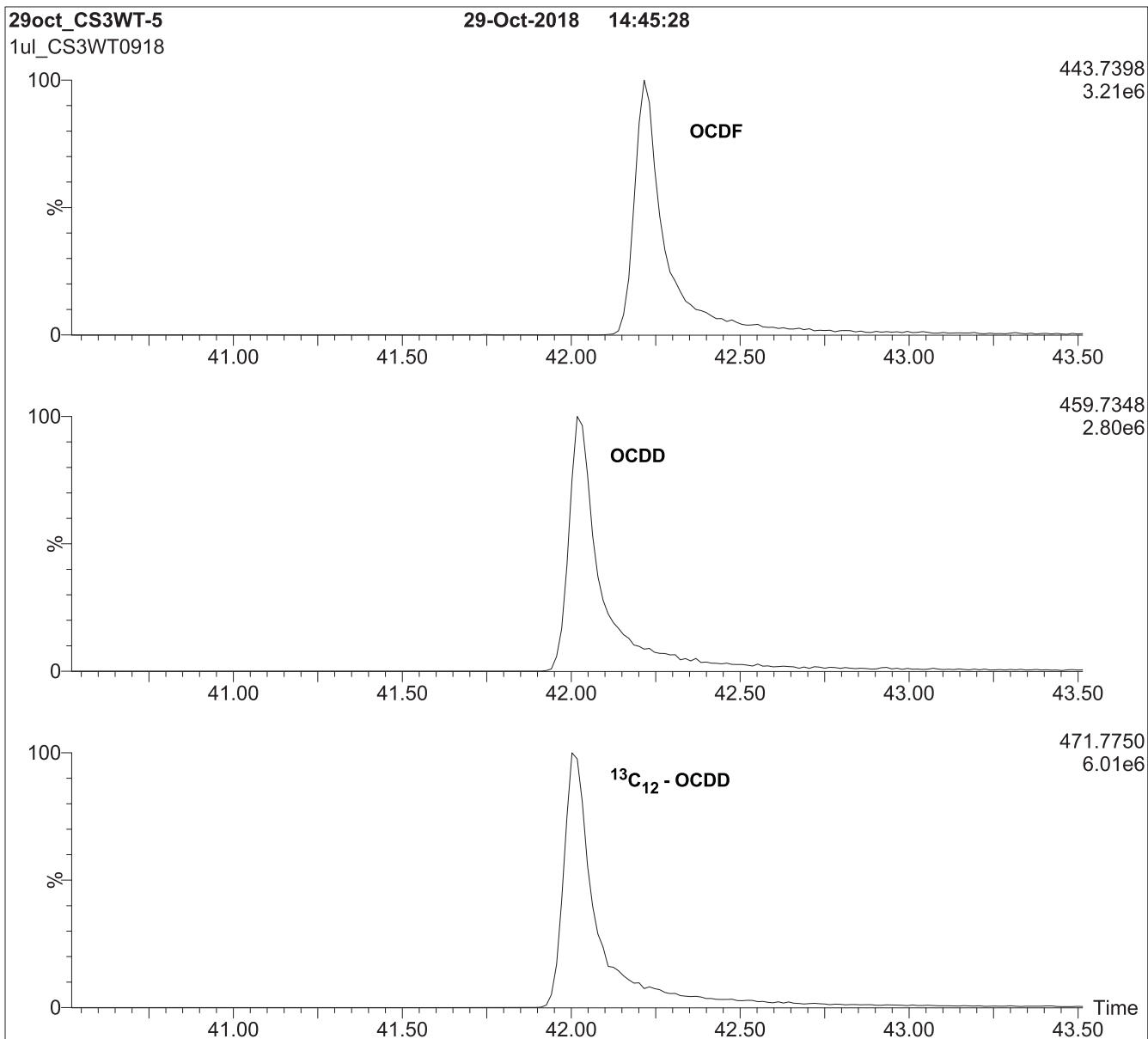


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min

Injector: 280 °C (Splitless Injection)

Ionization: EI+

Detector: 280 °C

SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)

12 °C/min to 200 °C

3 °C/min to 235 °C

235 °C (8 min)

8 °C/min to 310 °C

310 °C (8 min)



EPA-1613CVS

**U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5**

<u>PRODUCT CODES:</u>	EPA-1613CVS	<u>LOT NUMBERS:</u>	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/22/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	10/24/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	10/24/2026
<u>RECOMMENDED STORAGE:</u>	Store ampoules in a cool, dark place

I005456
1613 CS1 CAL STD Expires 10/24/2026 <i>Prepared By Joshua Rains 6/23/2020</i>

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native (¹²C₁₂) and mass-labelled (¹³C₁₂ and ³⁷Cl₄) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-³⁷Cl₄-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations

Table B: 5-point HRGC/HRMS Calibration and RRF Summary

Table C: 7-point HRGC/HRMS Calibration and RRF Summary

Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

**Table A: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
	CS1	CS2	CS3	CS4	CS5	CSL	CS0.5
Native PCDDs and PCDFs:							
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
¹³ C ₁₂ -2,3,7,8-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,7,8-TCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
³⁷ Cl ₄ -2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
¹³ C ₁₂ -1,2,3,4-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: 
B.G. Chittim, General Manager

Date: 10/25/2019
(mm/dd/yyyy)

Table B: EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

**Table C: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

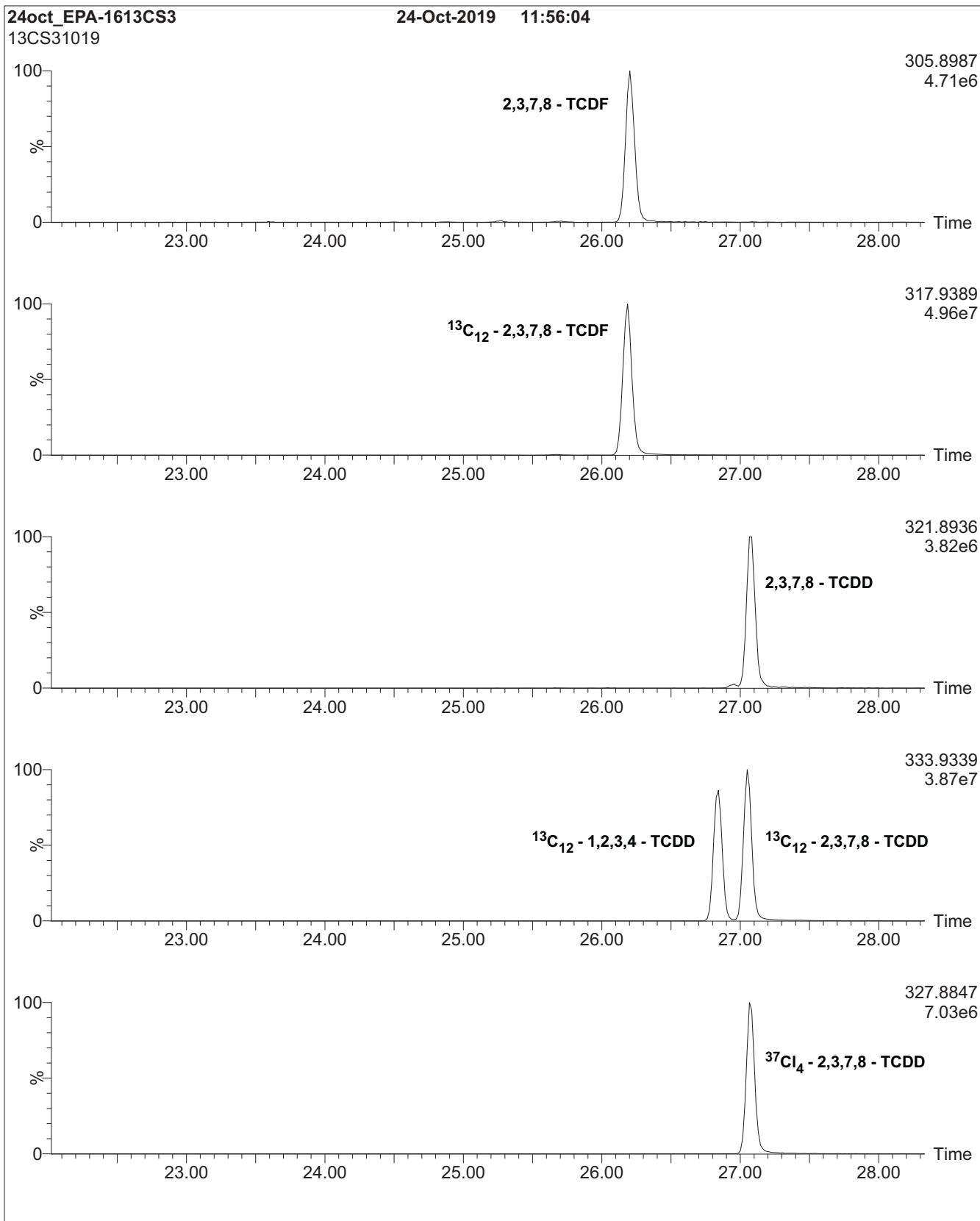


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

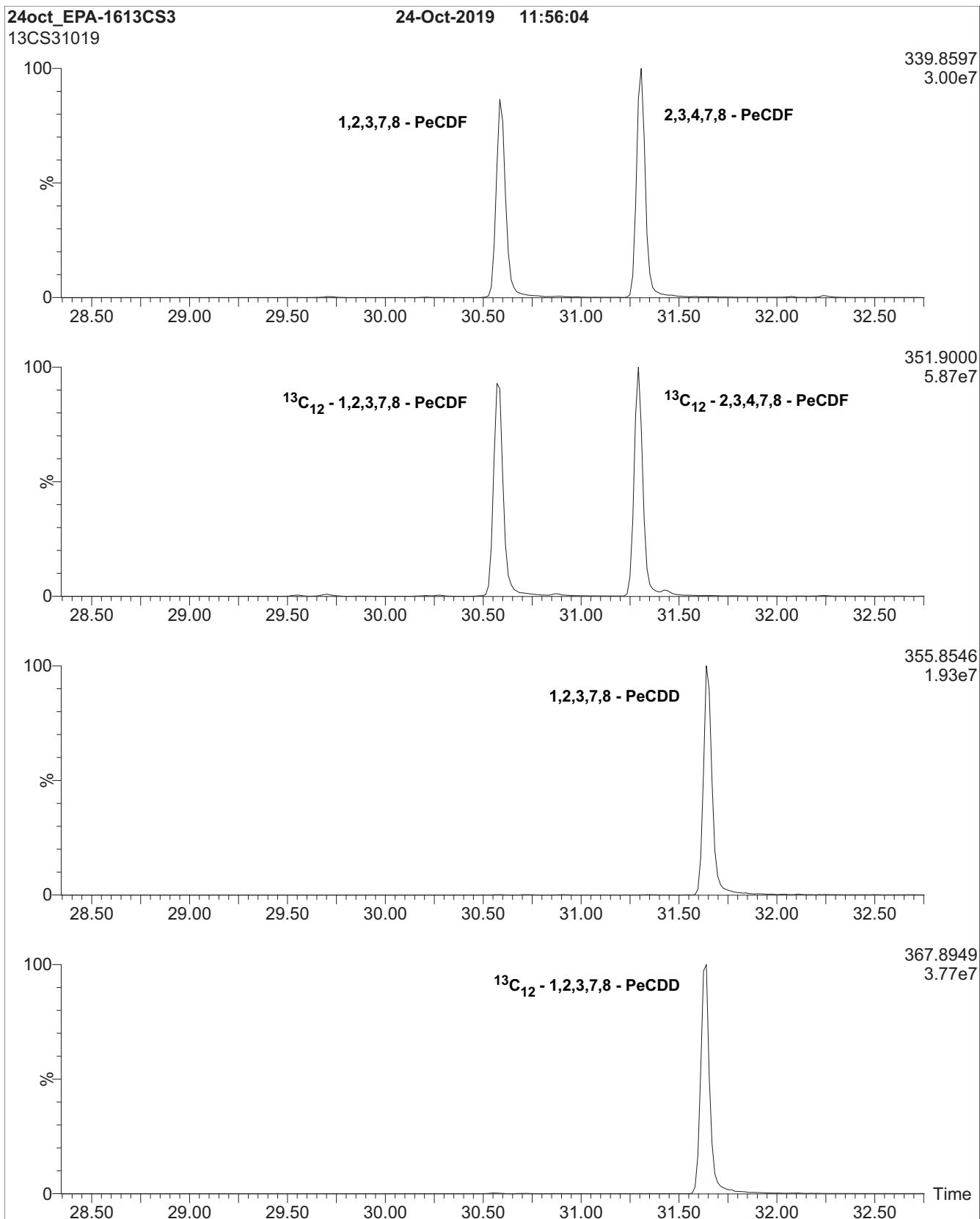


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

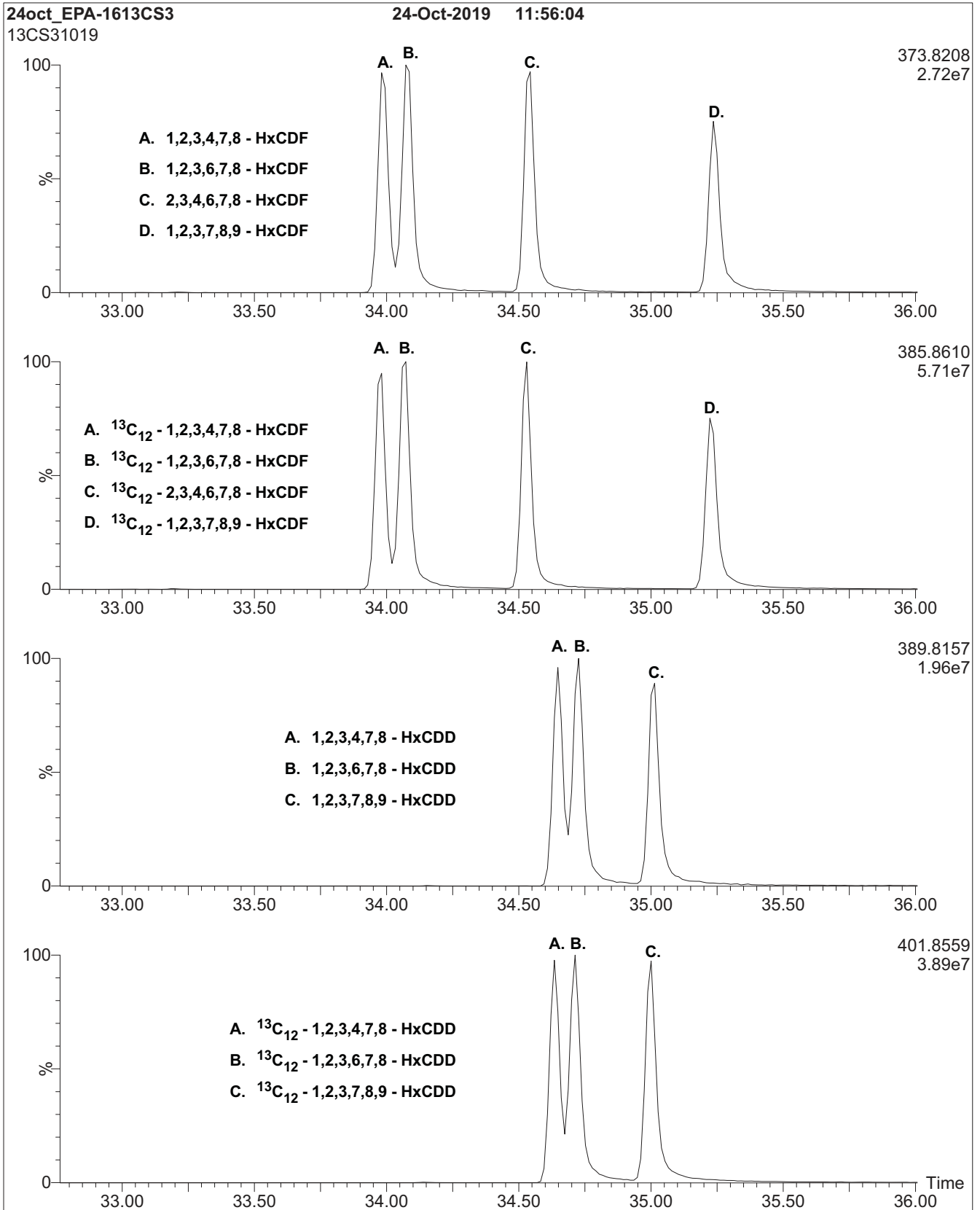


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

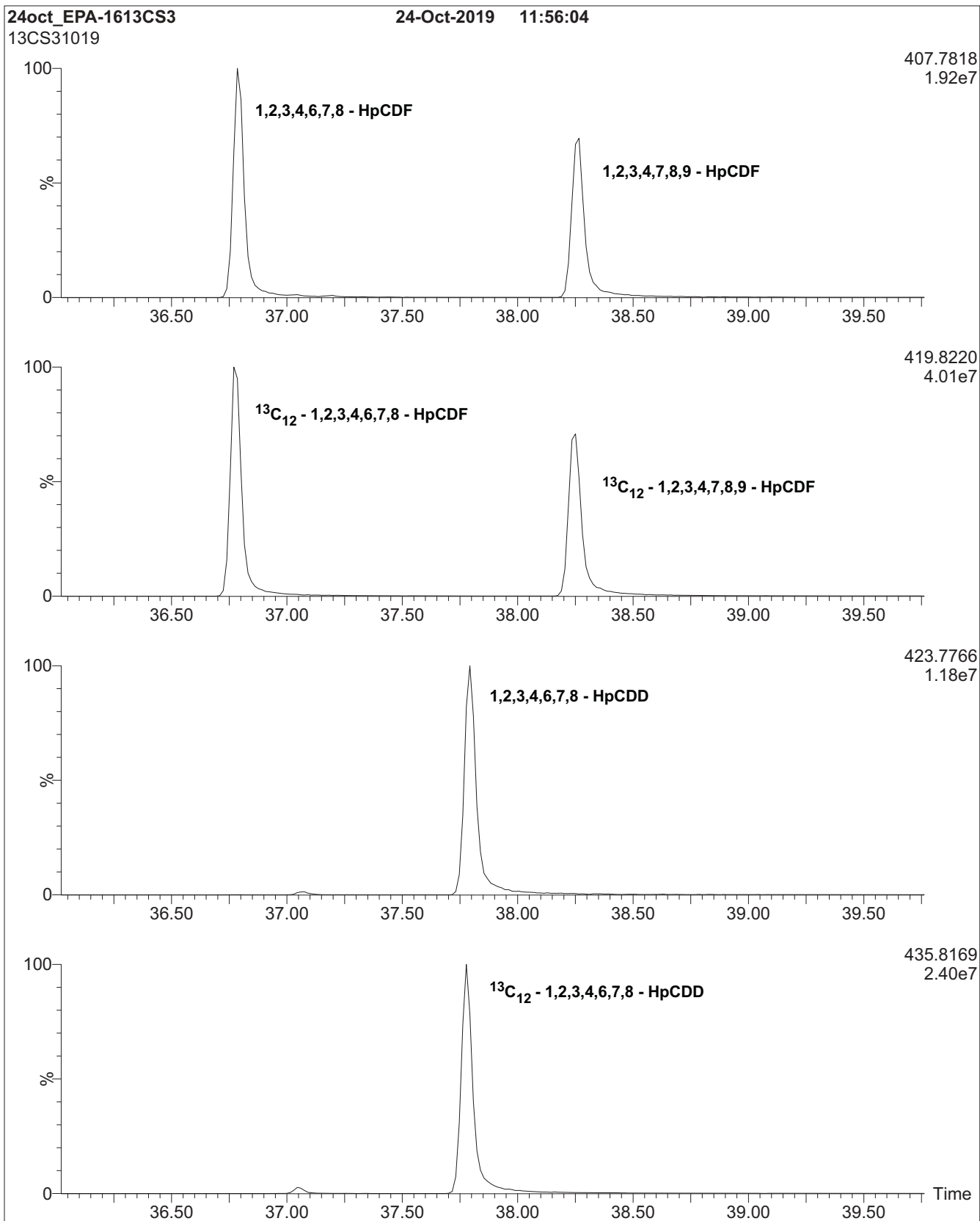
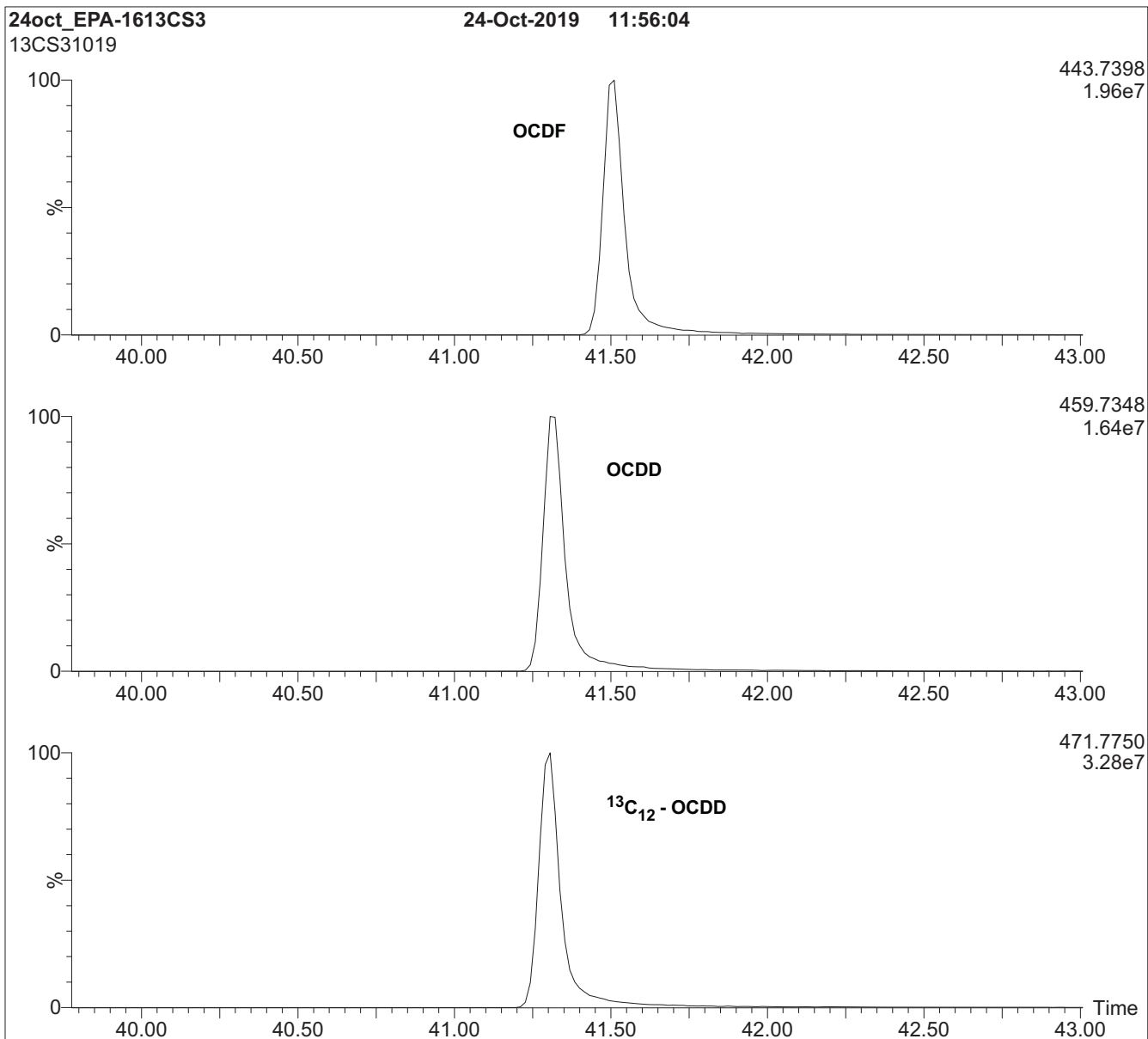


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min

Injector: 280 °C (Splitless Injection)

Ionization: EI+

Detector: 280 °C

SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)

12 °C/min to 200 °C

3 °C/min to 235 °C

235 °C (8 min)

8 °C/min to 310 °C

310 °C (8 min)



EPA-1613CVS

**U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5**

<u>PRODUCT CODES:</u>	EPA-1613CVS	<u>LOT NUMBERS:</u>	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/22/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	10/24/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	10/24/2026
<u>RECOMMENDED STORAGE:</u>	Store ampoules in a cool, dark place

1005457
1613 CS2 CAL STD
Expires 10/24/2026
<i>Prepared By Joshua Rains 6/23/2020</i>

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native (¹²C₁₂) and mass-labelled (¹³C₁₂ and ³⁷Cl₄) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-³⁷Cl₄-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations

Table B: 5-point HRGC/HRMS Calibration and RRF Summary

Table C: 7-point HRGC/HRMS Calibration and RRF Summary

Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

**Table A: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
	CS1	CS2	CS3	CS4	CS5	CSL	CS0.5
Native PCDDs and PCDFs:							
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
¹³ C ₁₂ -2,3,7,8-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,7,8-TCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
³⁷ Cl ₄ -2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
¹³ C ₁₂ -1,2,3,4-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: 
B.G. Chittim, General Manager

Date: 10/25/2019
(mm/dd/yyyy)

Table B: EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

**Table C: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

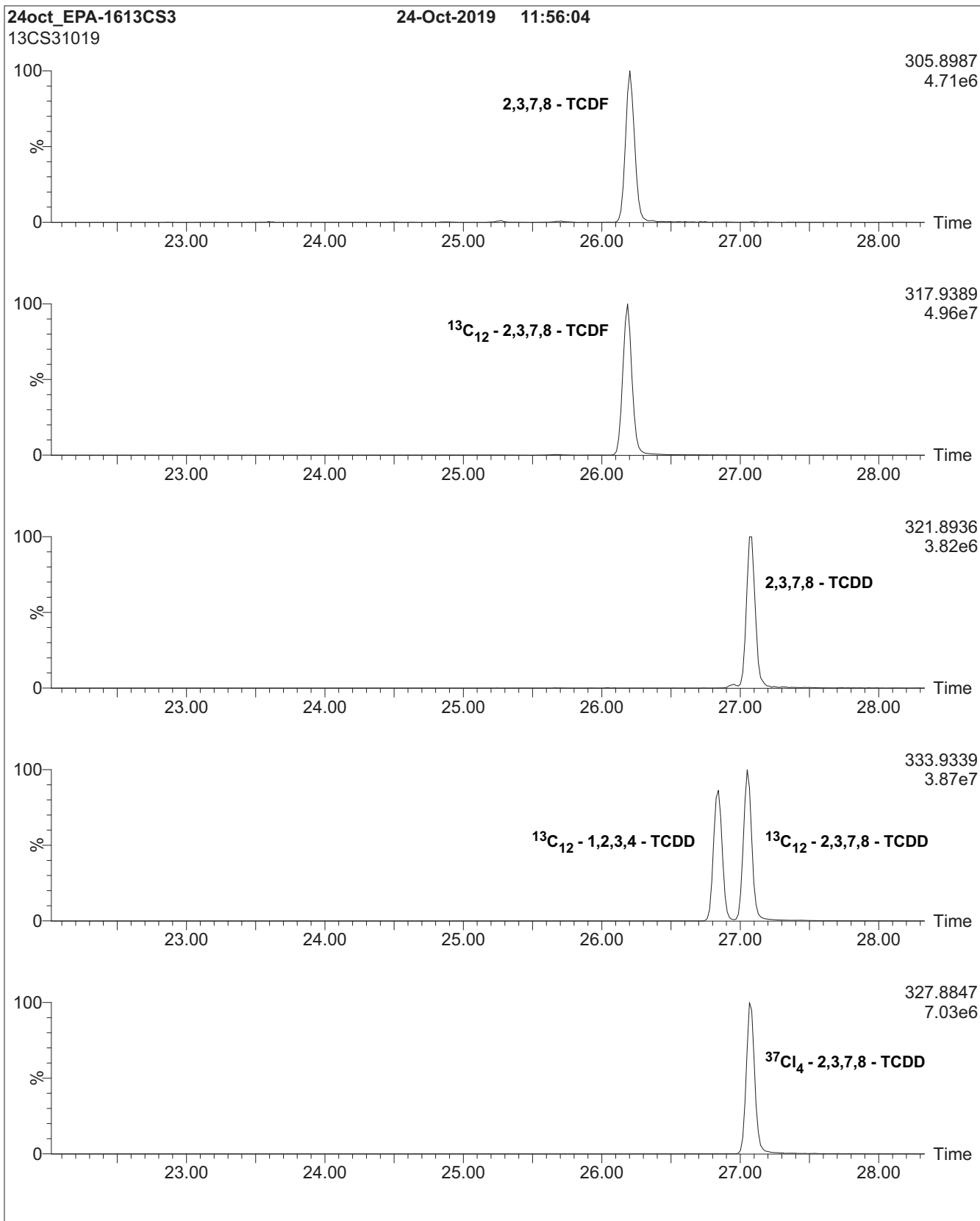


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

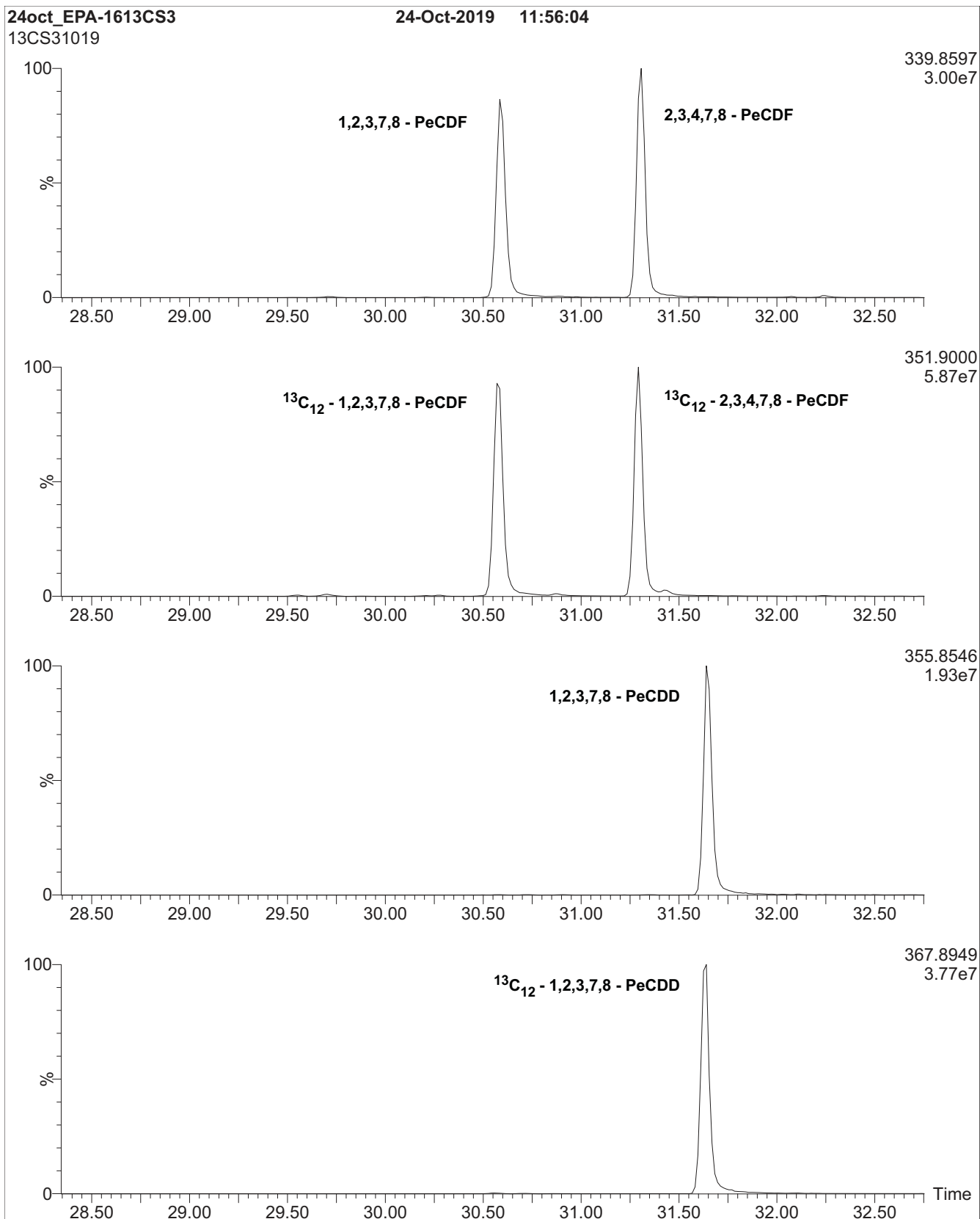


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

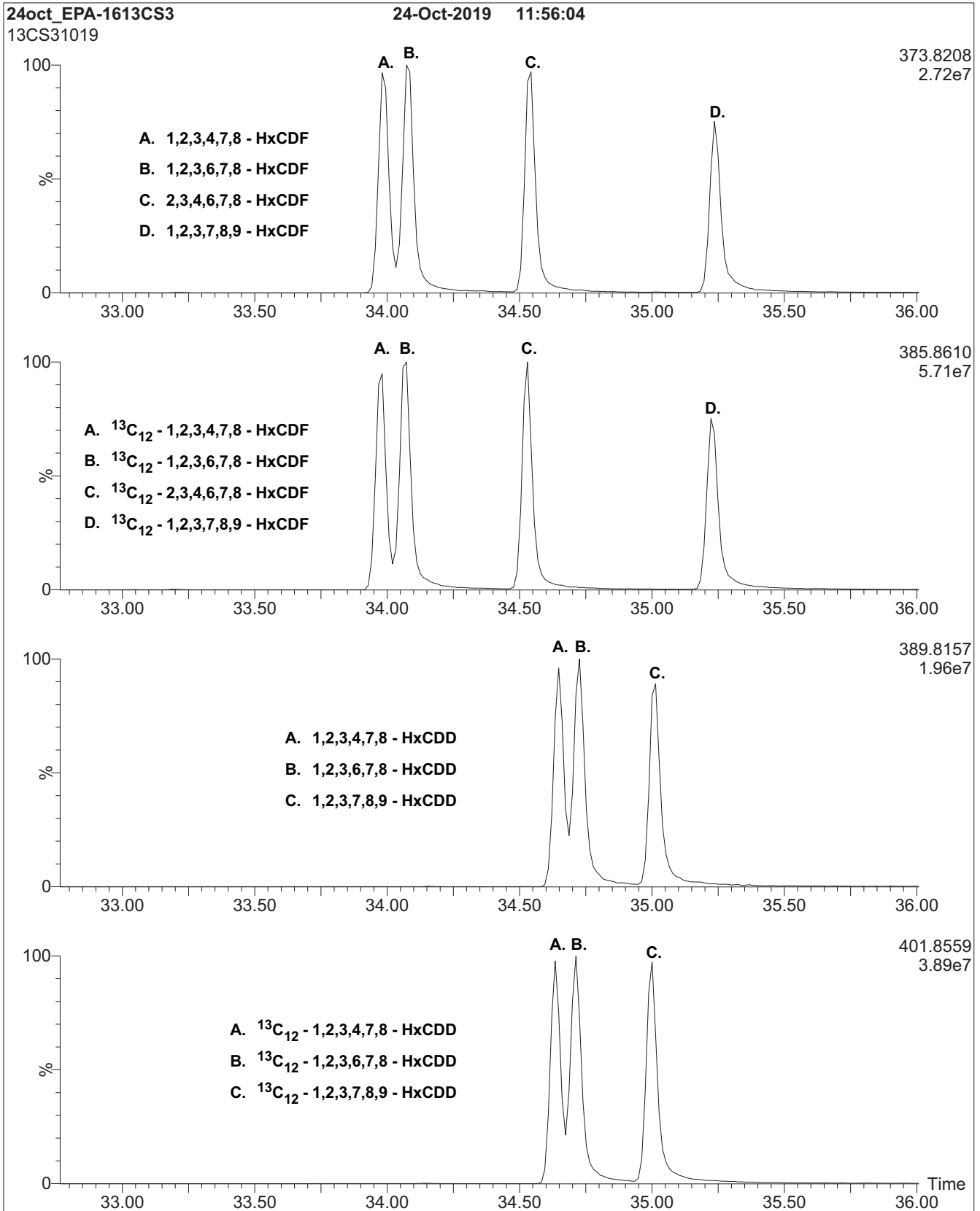


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

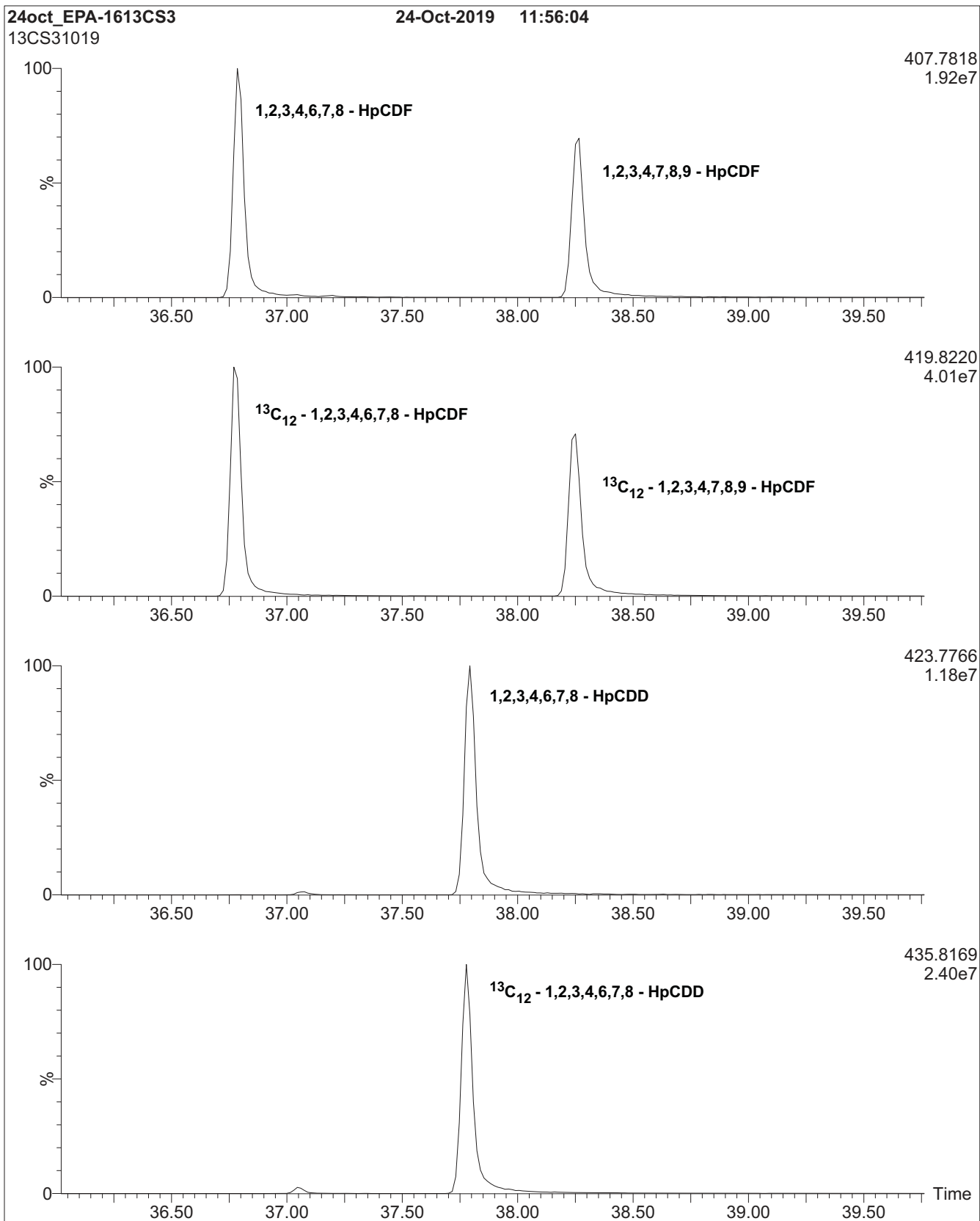
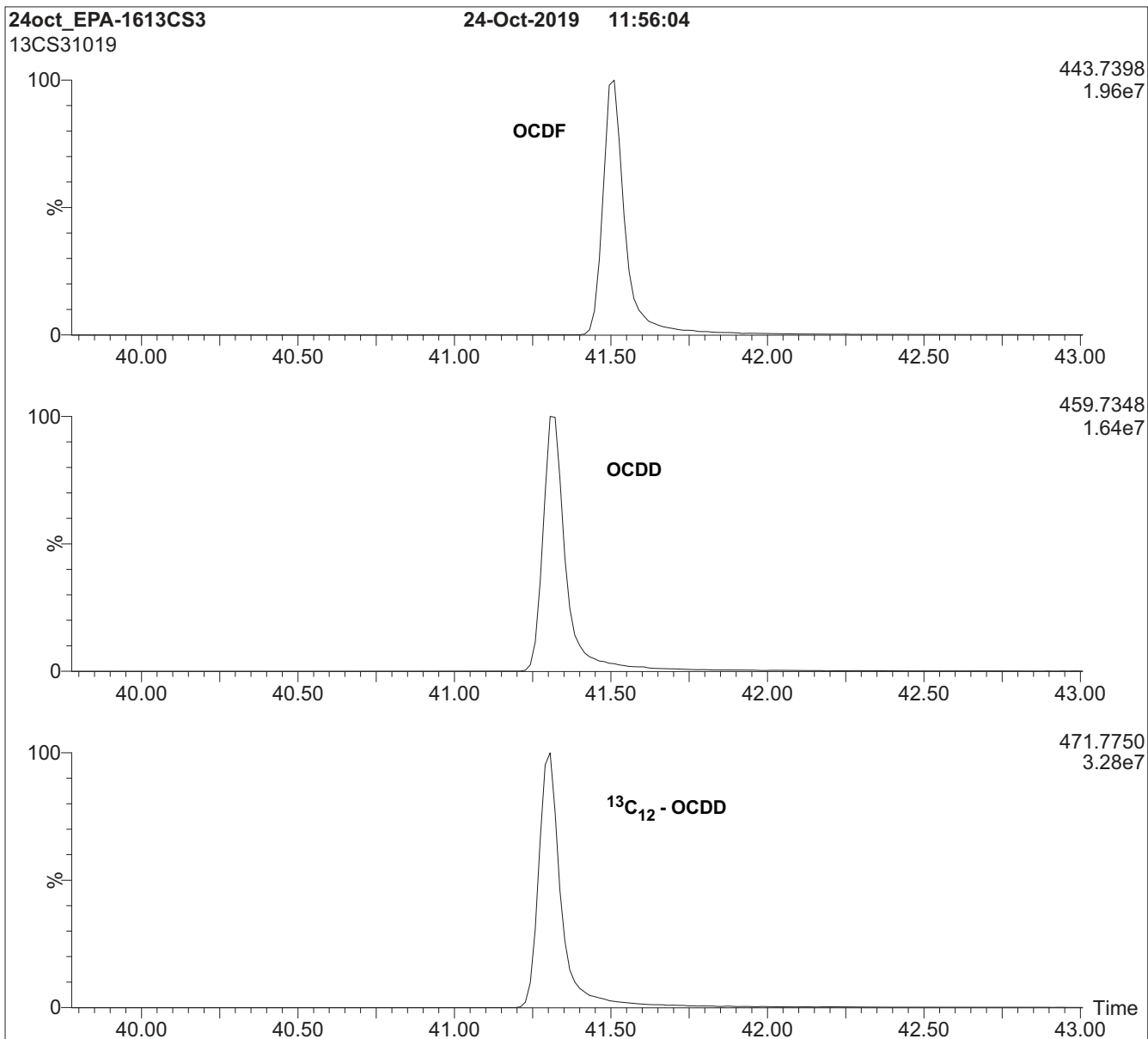


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min

Injector: 280 °C (Splitless Injection)

Ionization: EI+

Detector: 280 °C

SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)

12 °C/min to 200 °C

3 °C/min to 235 °C

235 °C (8 min)

8 °C/min to 310 °C

310 °C (8 min)



EPA-1613CVS

**U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5**

<u>PRODUCT CODES:</u>	EPA-1613CVS	<u>LOT NUMBERS:</u>	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/22/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	10/24/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	10/24/2026
<u>RECOMMENDED STORAGE:</u>	Store ampoules in a cool, dark place

1005458
1613 CS4 CAL STD
Expires 10/24/2026
<i>Prepared By Joshua Rains 6/23/2020</i>

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native (¹²C₁₂) and mass-labelled (¹³C₁₂ and ³⁷Cl₄) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-³⁷Cl₄-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations

Table B: 5-point HRGC/HRMS Calibration and RRF Summary

Table C: 7-point HRGC/HRMS Calibration and RRF Summary

Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

**Table A: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
	CS1	CS2	CS3	CS4	CS5	CSL	CS0.5
Native PCDDs and PCDFs:							
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
¹³ C ₁₂ -2,3,7,8-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,7,8-TCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
³⁷ Cl ₄ -2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
¹³ C ₁₂ -1,2,3,4-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

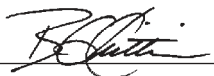
Certified By:  Date: 10/25/2019
(mm/dd/yyyy)
 B.G. Chittim, General Manager

Table B: EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

**Table C: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

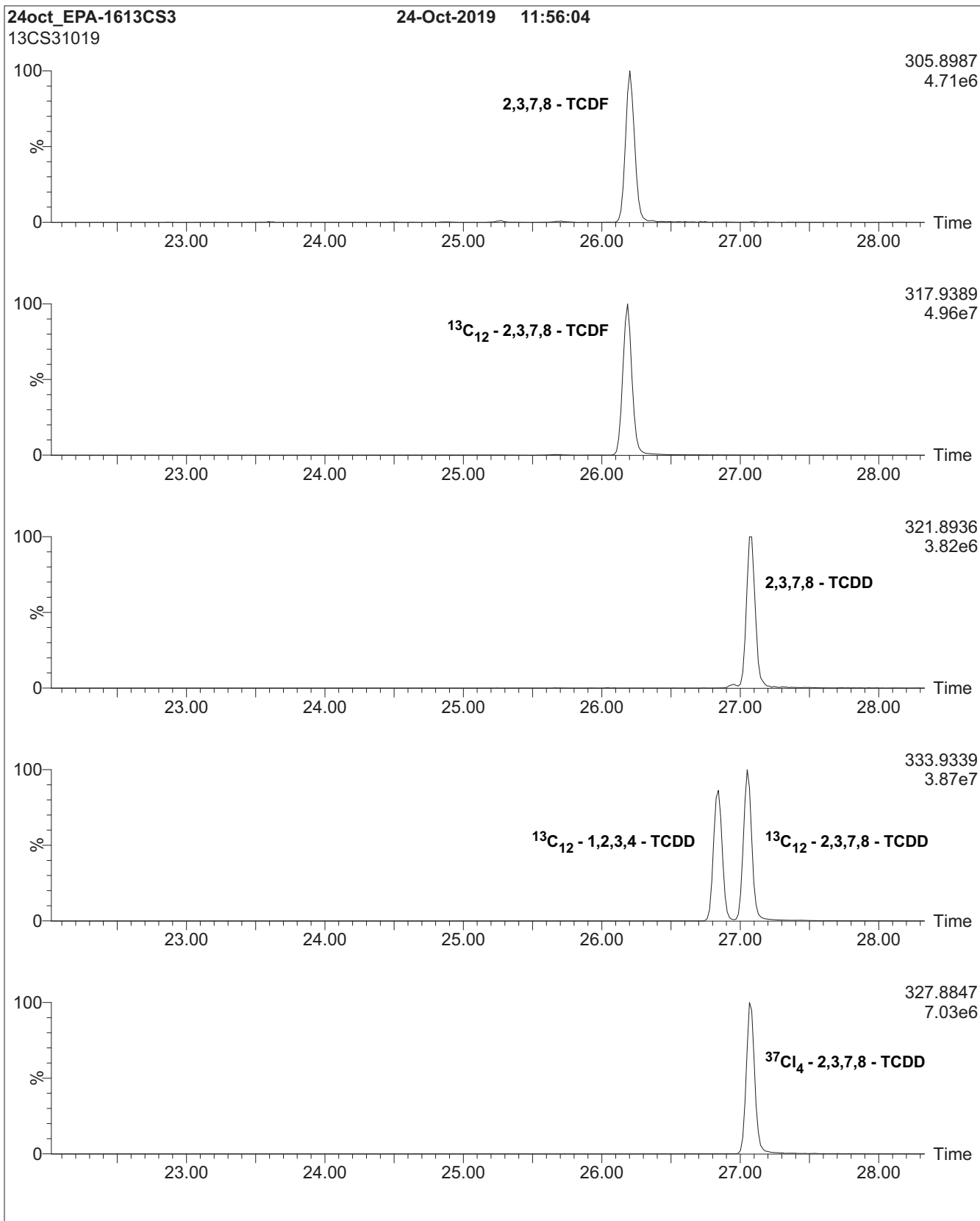


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

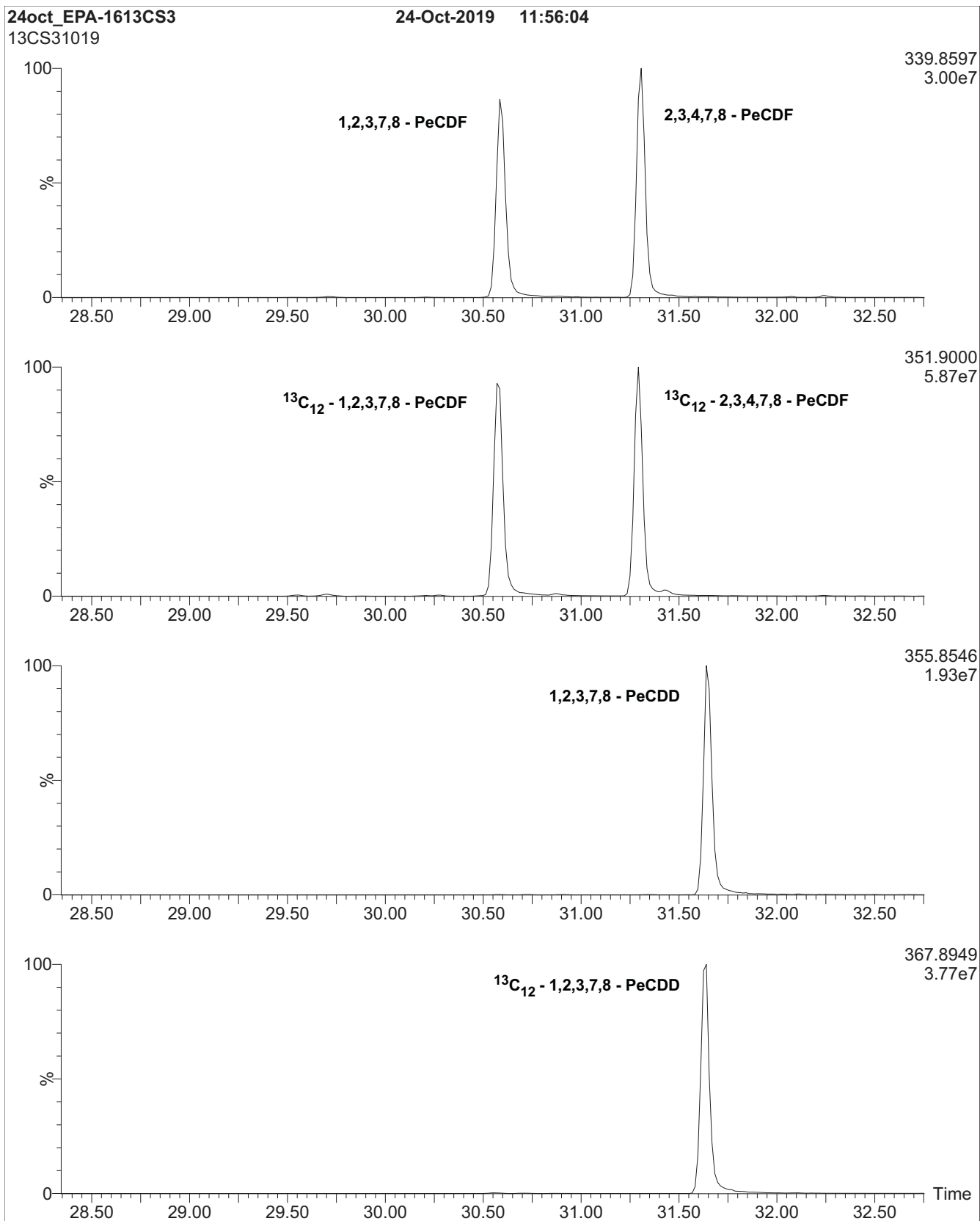


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

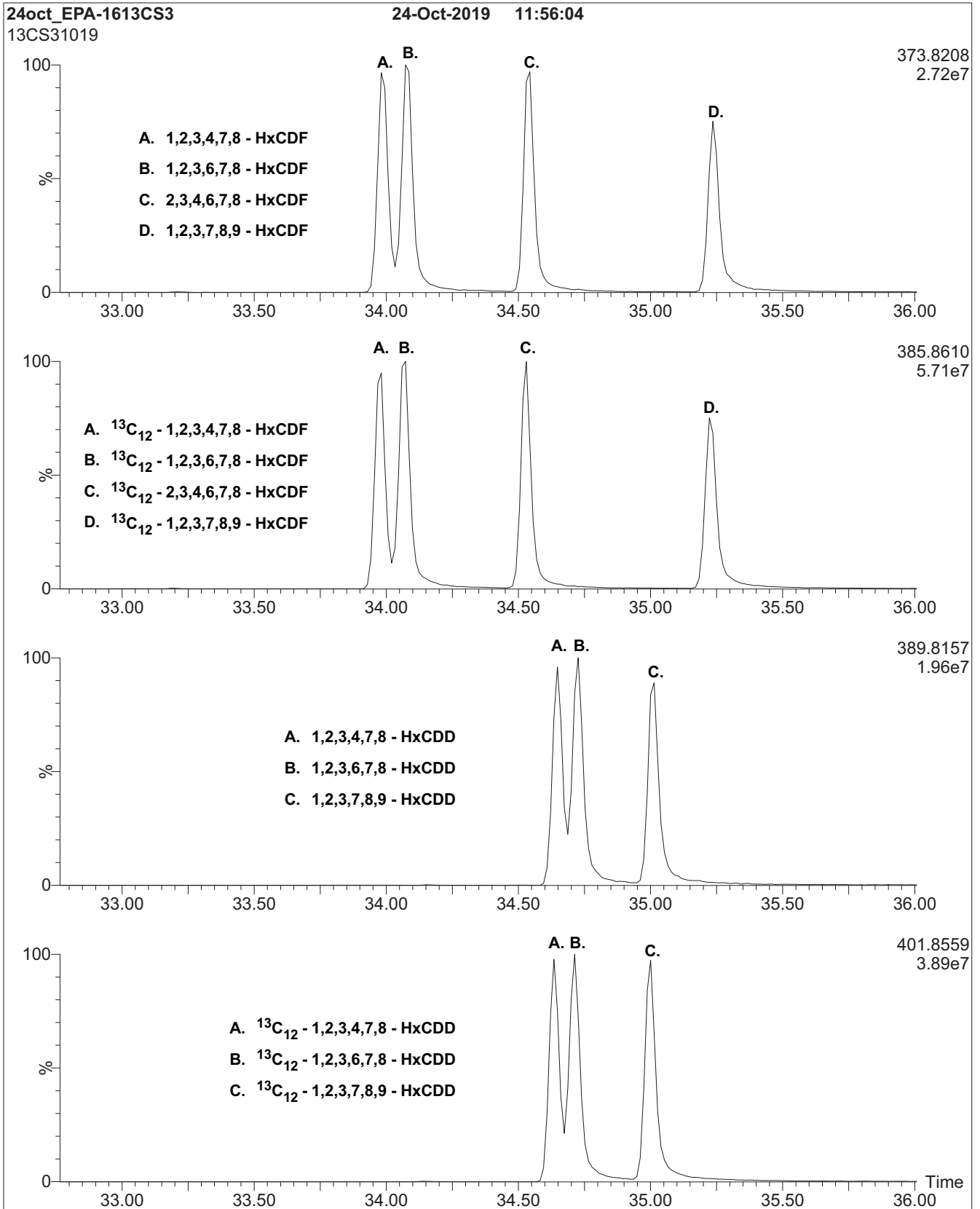


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

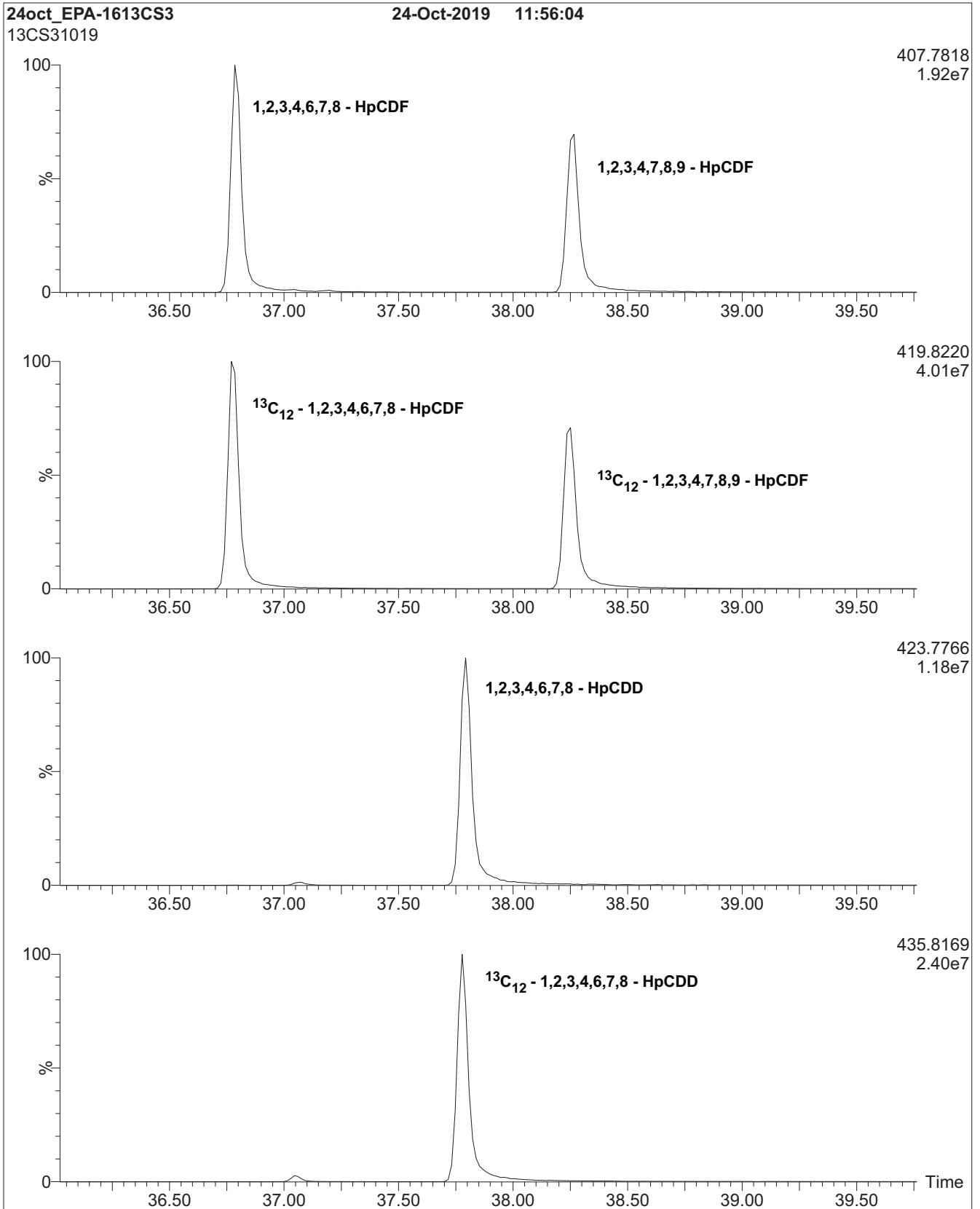
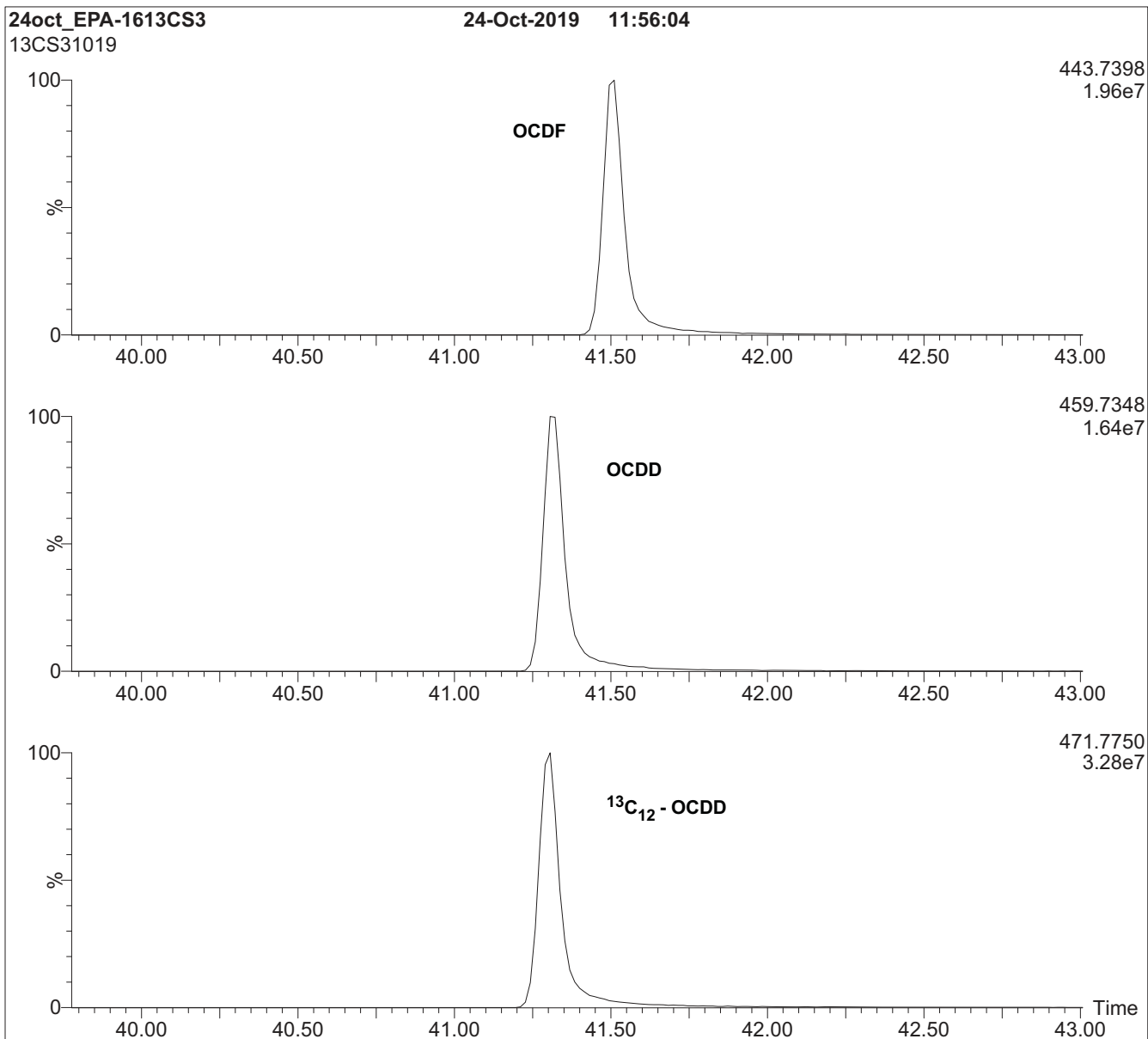


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min

Injector: 280 °C (Splitless Injection)

Ionization: EI+

Detector: 280 °C

SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)

12 °C/min to 200 °C

3 °C/min to 235 °C

235 °C (8 min)

8 °C/min to 310 °C

310 °C (8 min)



EPA-1613CVS

**U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5**

<u>PRODUCT CODES:</u>	EPA-1613CVS	<u>LOT NUMBERS:</u>	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/22/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	10/24/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	10/24/2026
<u>RECOMMENDED STORAGE:</u>	Store ampoules in a cool, dark place

I005459
1613 CS5 CAL STD
Expires 10/24/2026
<i>Prepared By Joshua Rains 6/23/2020</i>

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native (¹²C₁₂) and mass-labelled (¹³C₁₂ and ³⁷Cl₄) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-³⁷Cl₄-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations

Table B: 5-point HRGC/HRMS Calibration and RRF Summary

Table C: 7-point HRGC/HRMS Calibration and RRF Summary

Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

**Table A: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
	CS1	CS2	CS3	CS4	CS5	CSL	CS0.5
Native PCDDs and PCDFs:							
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
¹³ C ₁₂ -2,3,7,8-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,7,8-TCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
³⁷ Cl ₄ -2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
¹³ C ₁₂ -1,2,3,4-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: 
B.G. Chittim, General Manager

Date: 10/25/2019
(mm/dd/yyyy)

Table B: EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

**Table C: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

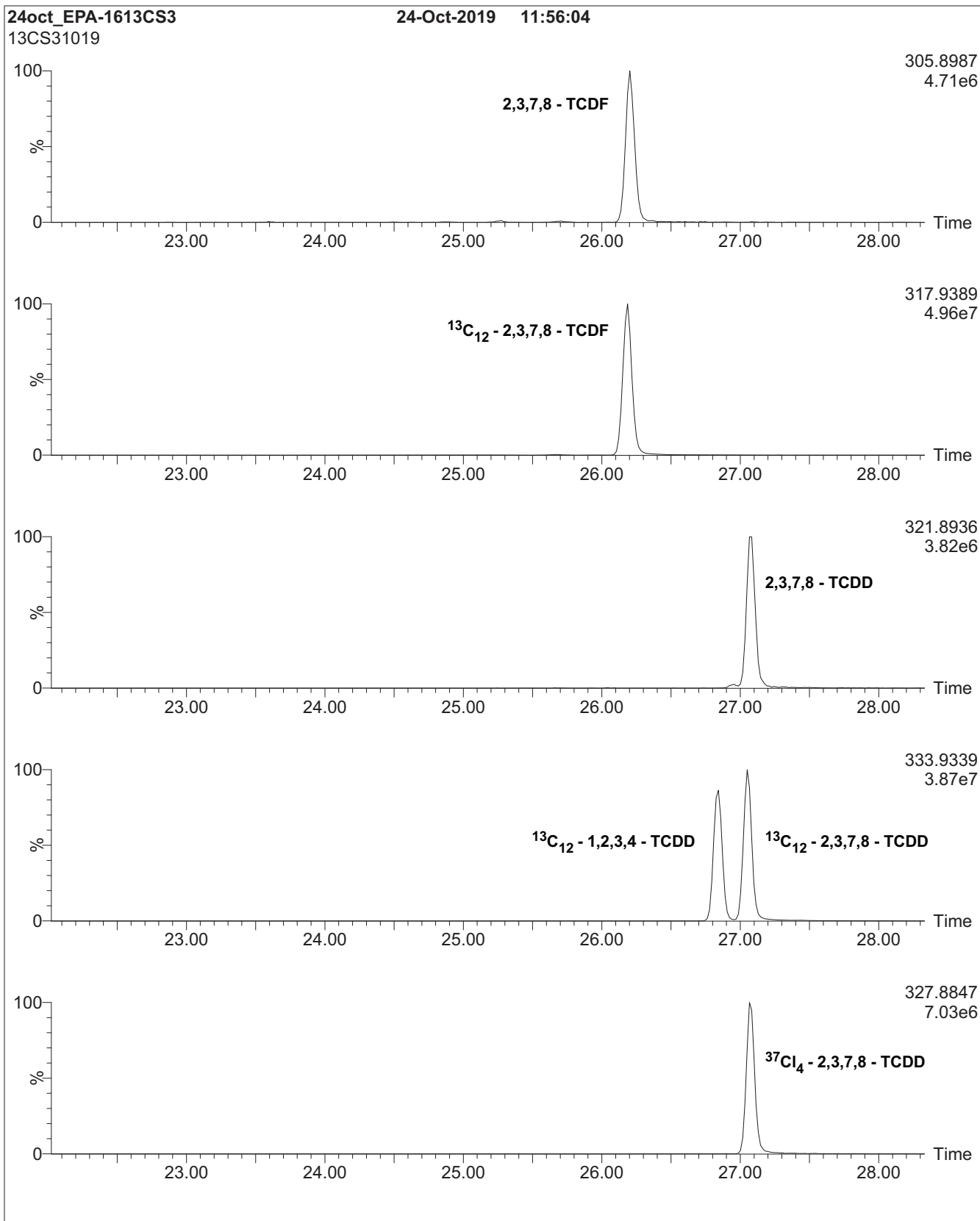


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

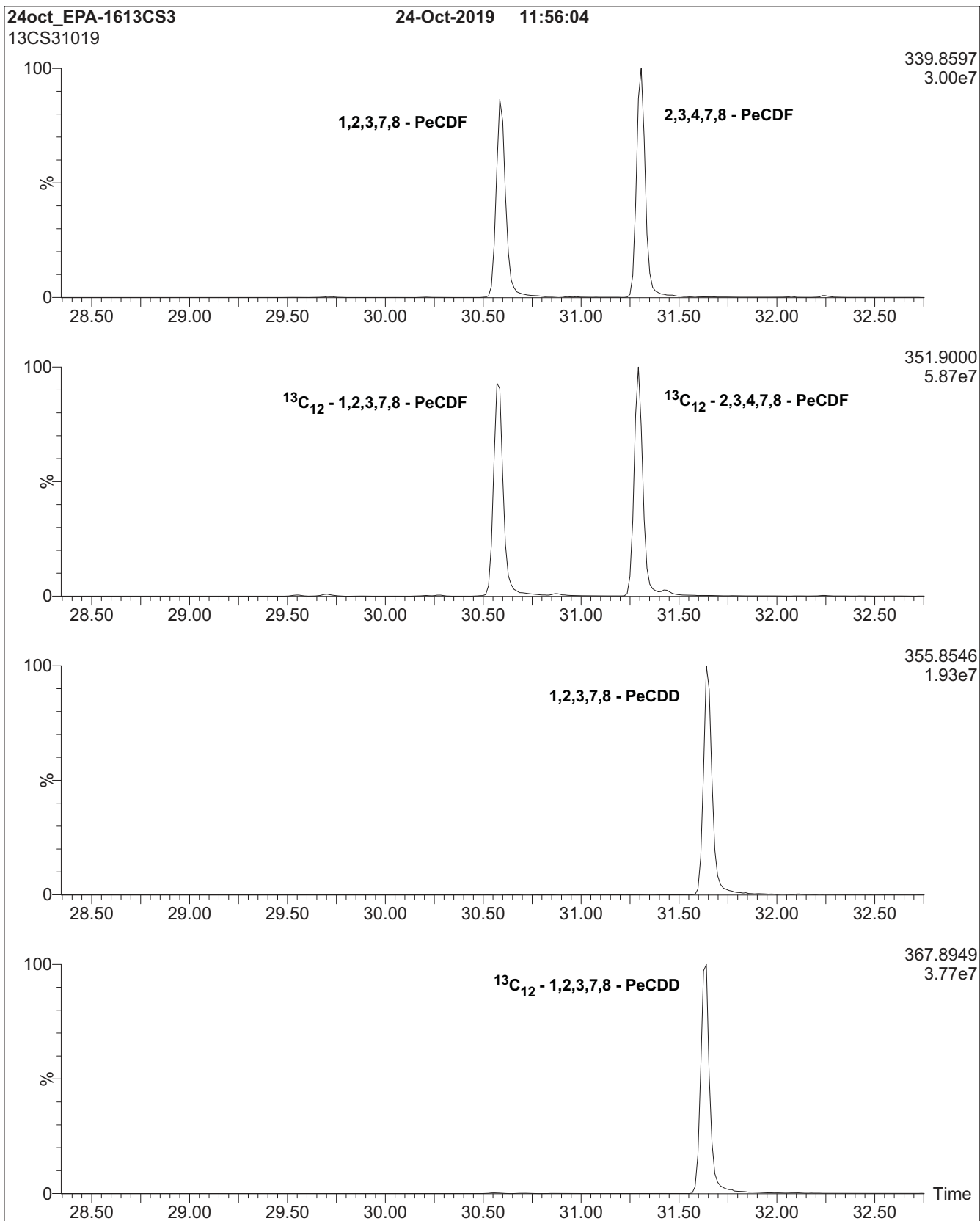


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

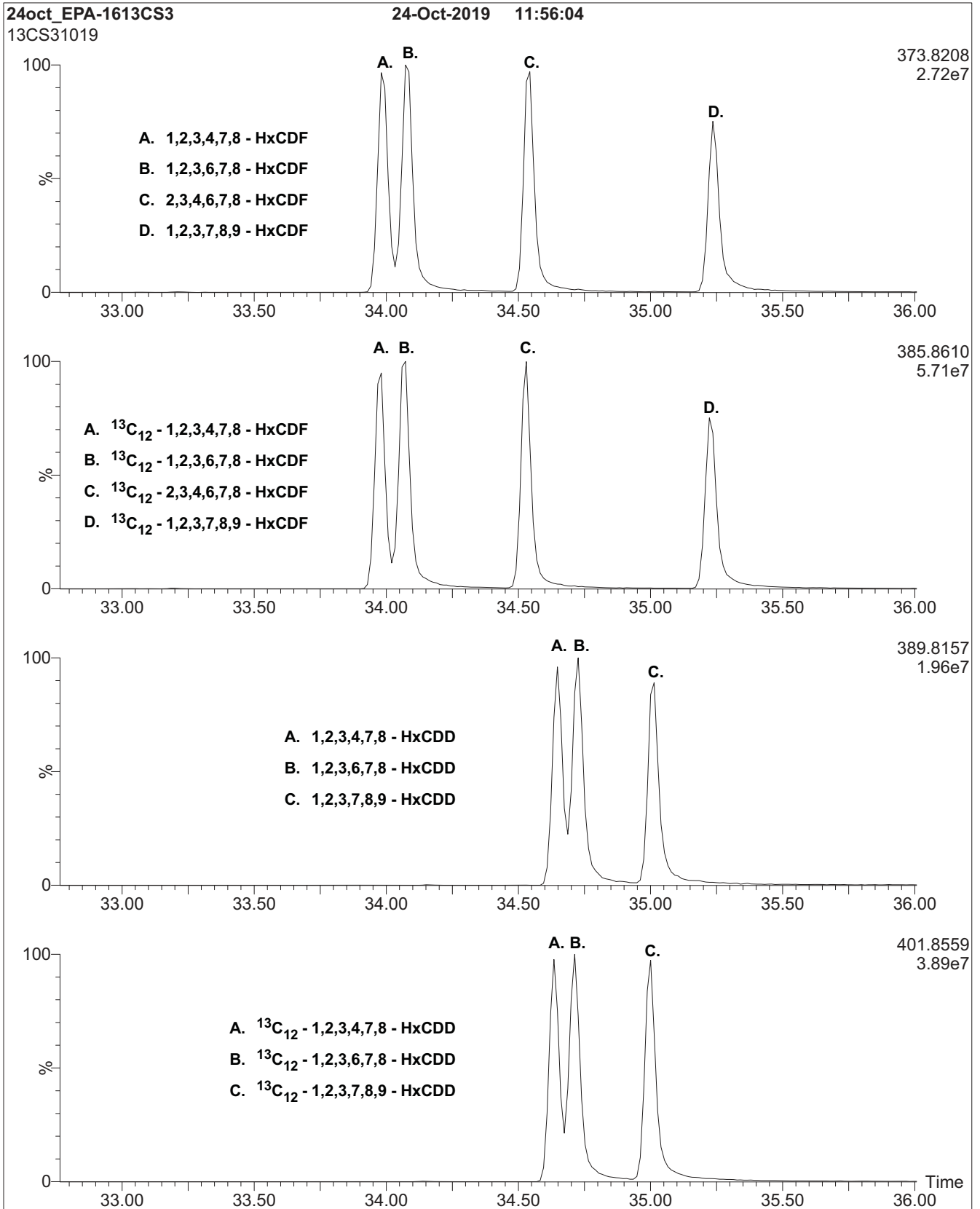


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

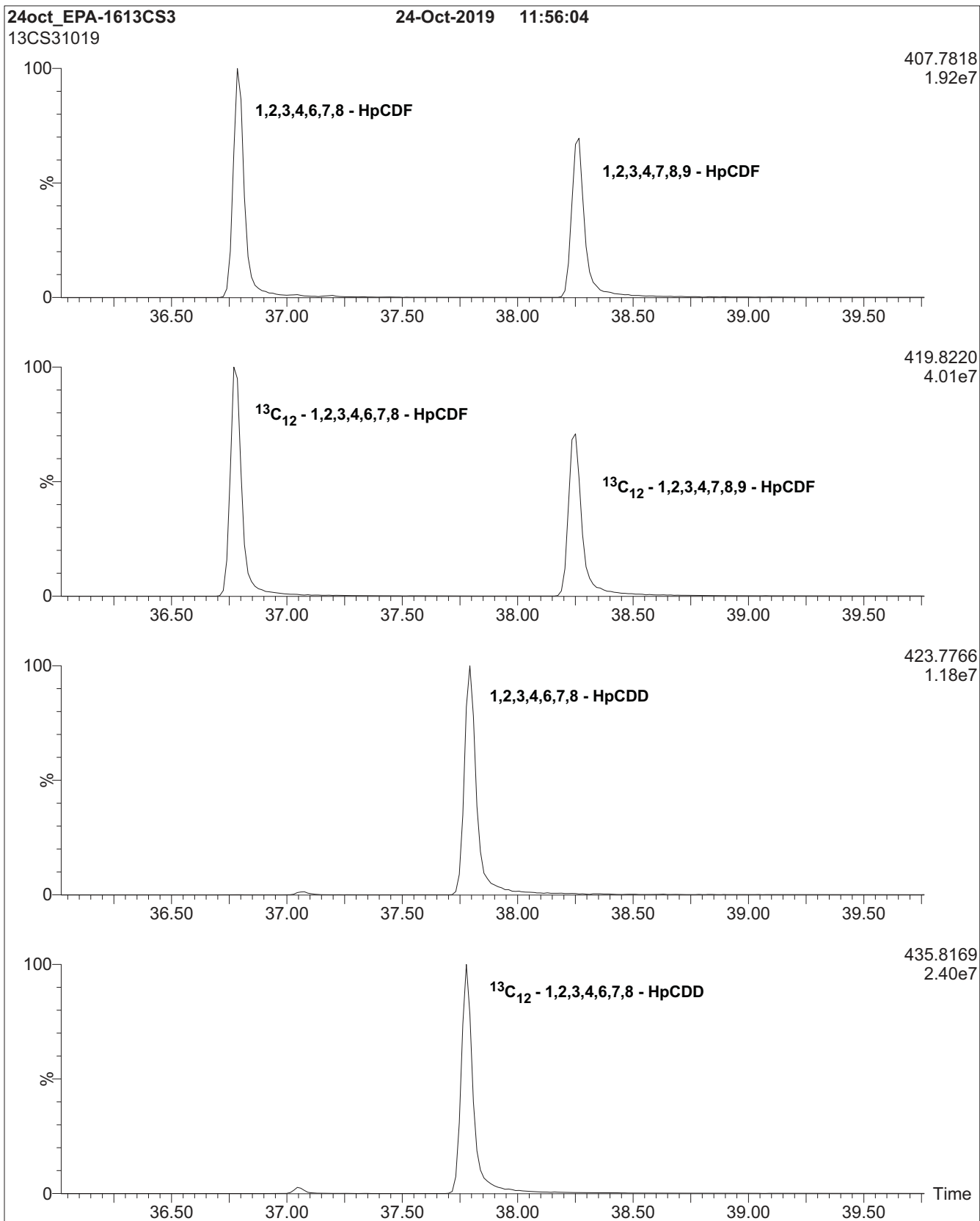
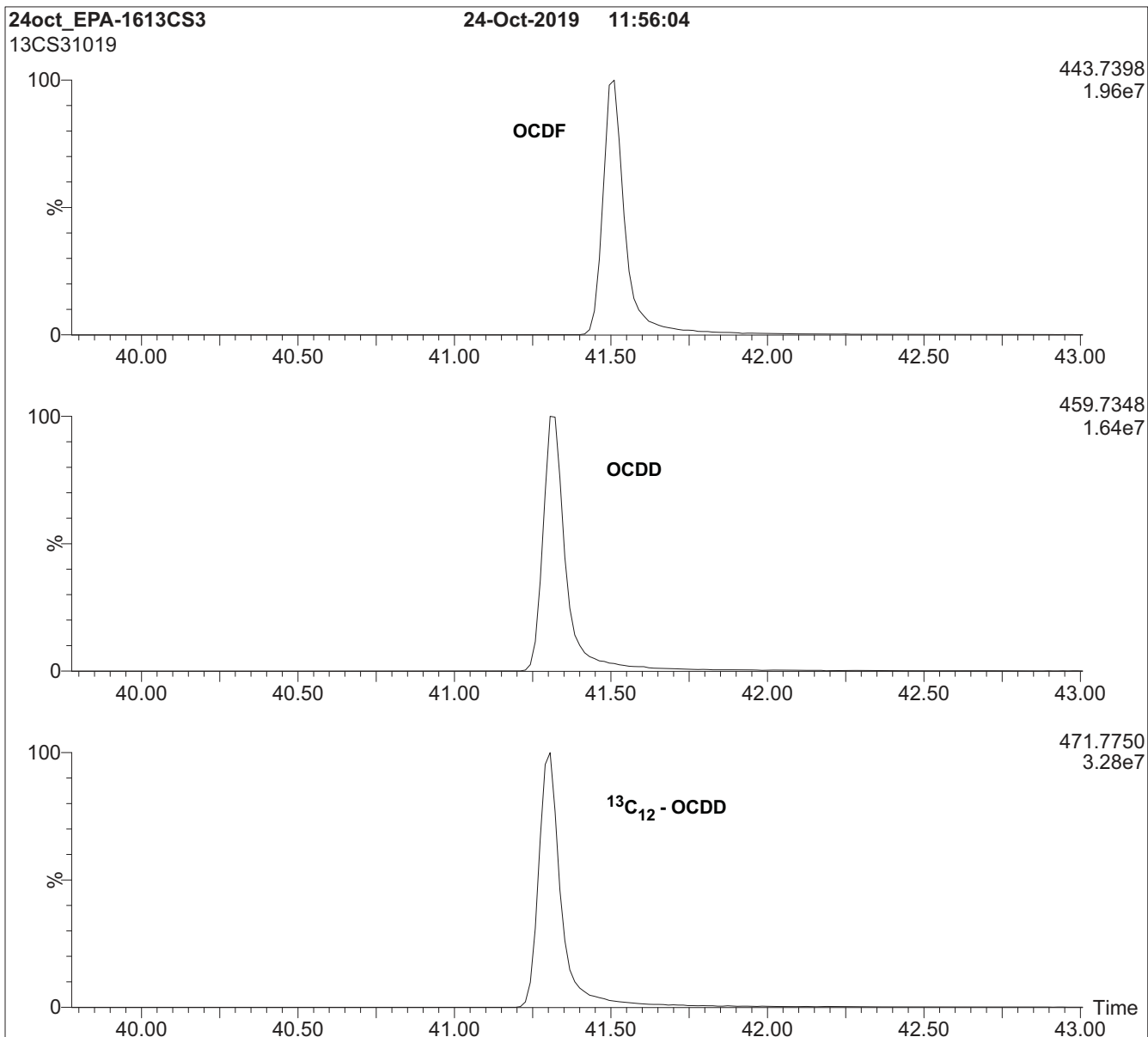


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min

Injector: 280 °C (Splitless Injection)

Ionization: EI+

Detector: 280 °C

SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)

12 °C/min to 200 °C

3 °C/min to 235 °C

235 °C (8 min)

8 °C/min to 310 °C

310 °C (8 min)



EPA-1613CVS

**U.S. EPA Method 1613 Calibration and Verification Solutions
plus Supplemental Calibration Solutions EPA-1613CSL & EPA-1613CS0.5**

<u>PRODUCT CODES:</u>	EPA-1613CVS	<u>LOT NUMBERS:</u>	(see below)
	EPA-1613CS1		13CS11019
	EPA-1613CS2		13CS21019
	EPA-1613CS3		13CS31019
	EPA-1613CS4		13CS41019
	EPA-1613CS5		13CS51019

Note: EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to this calibration set that must be ordered separately.

EPA-1613CS0.5	13CS0.51019
EPA-1613CSL	13CSL1019

<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/22/2019
<u>LAST TESTED:</u> (mm/dd/yyyy)	10/24/2019
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	10/24/2026
<u>RECOMMENDED STORAGE:</u>	Store ampoules in a cool, dark place

I005460
1613 CSL CAL STD
Expires 10/24/2026
<i>Prepared By Joshua Rains 6/23/2020</i>

DESCRIPTION:

EPA-1613CVS is a series of 5 calibration solutions containing native (¹²C₁₂) and mass-labelled (¹³C₁₂ and ³⁷Cl₄) chlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs). The components of each solution, and their concentrations, are given in Table A.

They were designed for, and prepared to be used according to, U.S. EPA Method 1613 (Revision B). They are to be used as received.

EPA-1613CSL and EPA-1613CS0.5 are lower level extensions to EPA-1613CVS. Neither is required by the method, but either or both can be used to extend the calibration to lower levels.

The individual native PCDDs and PCDFs all have chemical purities of >98%. The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-³⁷Cl₄-Tetrachlorodibenzo-p-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations

Table B: 5-point HRGC/HRMS Calibration and RRF Summary

Table C: 7-point HRGC/HRMS Calibration and RRF Summary

Figure 1: HRGC/HRMS Data for EPA-1613CS3 (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 3 for further details.

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a series of standards for the identification and quantification of specific chemical compounds.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned values, and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analytes is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

**Table A: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
Components and Concentrations (ng/ml, ± 5% in nonane/toluene)**

Compound	Concentration (ng/ml)						
	CS1	CS2	CS3	CS4	CS5	CSL	CS0.5
Native PCDDs and PCDFs:							
2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
2,3,7,8-TCDF	0.5	2	10	40	200	0.1	0.25
1,2,3,7,8-PeCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,7,8-PeCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,7,8,9-HxCDF	2.5	10	50	200	1000	0.5	1.25
2,3,4,6,7,8-HxCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDD	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,6,7,8-HpCDF	2.5	10	50	200	1000	0.5	1.25
1,2,3,4,7,8,9-HpCDF	2.5	10	50	200	1000	0.5	1.25
OCDD	5.0	20	100	400	2000	1.0	2.5
OCDF	5.0	20	100	400	2000	1.0	2.5
Labelled PCDDs and PCDFs:							
¹³ C ₁₂ -2,3,7,8-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,7,8-TCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,7,8-PeCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100	100
¹³ C ₁₂ -OCDD	200	200	200	200	200	200	200
Cleanup Standard:							
³⁷ Cl ₄ -2,3,7,8-TCDD	0.5	2	10	40	200	0.1	0.25
Internal Standards:							
¹³ C ₁₂ -1,2,3,4-TCDD	100	100	100	100	100	100	100
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	100	100	100	100	100	100	100
Percent toluene (v/v)	3.6%	3.7%	4.2%	6.1%	16.2%	3.6%	3.6%

Certified By: 
B.G. Chittim, General Manager

Date: 10/25/2019
(mm/dd/yyyy)

Table B: EPA-1613CVS; 5-point HRGC/HRMS Calibration and RRF Summary

Calibration RRF Summary				Calibration Standard				
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5
2,3,7,8-TCDF	0.93	0.013	1.4	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.015	1.6	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.04	0.019	1.8	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.035	3.7	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.93	0.013	1.4	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.96	0.022	2.3	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.89	0.021	2.4	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.91	0.011	1.2	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.010	1.1	0.90	0.90	0.92	0.91	0.92
OCDF	1.19	0.056	4.7	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.05	0.023	2.2	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.97	0.018	1.9	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	1.00	0.019	1.9	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.98	0.032	3.2	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.97	0.016	1.6	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.025	2.5	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.013	1.3	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.57	0.047	3.0	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.21	0.078	6.5	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.17	0.081	6.9	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.020	1.5	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.51	0.034	2.2	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.38	0.012	0.9	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.014	1.2	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.033	2.5	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.08	0.046	4.3	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.13	0.036	3.2	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.79	0.047	5.9	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.027	3.1	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.04	0.010	1.0	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.017	2.1	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.74	0.055	7.4	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.026	2.6	0.95	0.94	0.99	0.99	0.99

**Table C: EPA-1613CVS (with EPA-1613CSL and EPA-1613CS0.5);
7-point HRGC/HRMS Calibration and RRF Summary**

Calibration RRF Summary				Calibration Standard						
Calibration Filename: 24oct_EPA1613CVS-CAL.QLD				CSL	CS0.5	CS1	CS2	CS3	CS4	CS5
Name	Mean	S. D.	%RSD	RRF#1	RRF#2	RRF#3	RRF#4	RRF#5	RRF#6	RRF#7
2,3,7,8-TCDF	0.92	0.045	4.8	0.96	0.83	0.92	0.95	0.93	0.92	0.95
1,2,3,7,8-PeCDF	0.93	0.013	1.4	0.94	0.92	0.92	0.92	0.93	0.93	0.95
2,3,4,7,8-PeCDF	1.02	0.058	5.7	0.90	1.00	1.03	1.02	1.05	1.05	1.07
1,2,3,4,7,8-HxCDF	0.96	0.029	3.0	0.96	0.97	0.94	0.92	0.98	0.99	1.00
1,2,3,6,7,8-HxCDF	0.92	0.030	3.3	0.90	0.86	0.92	0.94	0.94	0.91	0.94
2,3,4,6,7,8-HxCDF	0.94	0.047	5.0	0.87	0.89	0.95	0.94	0.97	0.97	0.99
1,2,3,7,8,9-HxCDF	0.88	0.029	3.3	0.83	0.88	0.87	0.88	0.90	0.90	0.92
1,2,3,4,6,7,8-HpCDF	0.90	0.033	3.7	0.83	0.93	0.90	0.90	0.90	0.92	0.92
1,2,3,4,7,8,9-HpCDF	0.91	0.018	1.9	0.89	0.94	0.90	0.90	0.92	0.91	0.92
OCDF	1.18	0.052	4.4	1.15	1.14	1.11	1.17	1.19	1.23	1.26
2,3,7,8-TCDD	1.03	0.051	5.0	1.03	0.92	1.01	1.06	1.05	1.05	1.07
1,2,3,7,8-PeCDD	0.95	0.042	4.4	0.87	0.98	0.95	0.95	0.98	0.97	0.99
1,2,3,4,7,8-HxCDD	0.97	0.066	6.8	0.83	0.98	1.01	1.00	1.00	0.96	1.01
1,2,3,6,7,8-HxCDD	0.96	0.044	4.5	0.90	0.92	0.93	0.98	0.99	1.01	1.01
1,2,3,7,8,9-HxCDD	0.94	0.054	5.7	0.83	0.92	0.95	0.96	0.98	0.99	0.98
1,2,3,4,6,7,8-HpCDD	1.01	0.033	3.3	0.95	1.03	1.01	0.97	1.02	1.03	1.04
OCDD	1.00	0.023	2.3	0.95	1.00	1.00	0.99	1.02	1.02	1.00
¹³ C ₁₂ -2,3,7,8-TCDF	1.56	0.042	2.7	1.52	1.54	1.52	1.55	1.55	1.57	1.65
¹³ C ₁₂ -1,2,3,7,8-PeCDF	1.20	0.066	5.5	1.18	1.17	1.13	1.20	1.17	1.20	1.34
¹³ C ₁₂ -2,3,4,7,8-PeCDF	1.16	0.071	6.1	1.12	1.13	1.09	1.15	1.13	1.17	1.31
¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	1.33	0.018	1.4	1.32	1.35	1.35	1.33	1.33	1.32	1.30
¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	1.53	0.045	3.0	1.60	1.56	1.47	1.48	1.53	1.53	1.54
¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	1.39	0.019	1.4	1.39	1.42	1.38	1.38	1.40	1.37	1.36
¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	1.19	0.012	1.0	1.19	1.19	1.18	1.16	1.20	1.19	1.20
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	1.31	0.028	2.2	1.30	1.33	1.31	1.26	1.33	1.31	1.35
¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	1.07	0.045	4.2	1.02	1.08	1.06	1.03	1.09	1.08	1.15
¹³ C ₁₂ -2,3,7,8-TCDD	1.12	0.033	3.0	1.09	1.11	1.10	1.11	1.11	1.13	1.19
¹³ C ₁₂ -1,2,3,7,8-PeCDD	0.78	0.040	5.1	0.75	0.78	0.74	0.78	0.75	0.79	0.86
¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	0.87	0.025	2.9	0.86	0.90	0.85	0.83	0.89	0.88	0.89
¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	1.05	0.015	1.5	1.08	1.06	1.05	1.05	1.04	1.05	1.03
¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	0.81	0.016	2.0	0.79	0.81	0.81	0.80	0.80	0.81	0.84
¹³ C ₁₂ -OCDD	0.73	0.046	6.3	0.71	0.72	0.70	0.70	0.73	0.72	0.83
¹³ C ₁₂ -1,2,3,4-TCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	1.00	0.000	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
³⁷ Cl ₄ -2,3,7,8-TCDD	0.97	0.053	5.4	0.90	1.07	0.95	0.94	0.99	0.99	0.99

Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

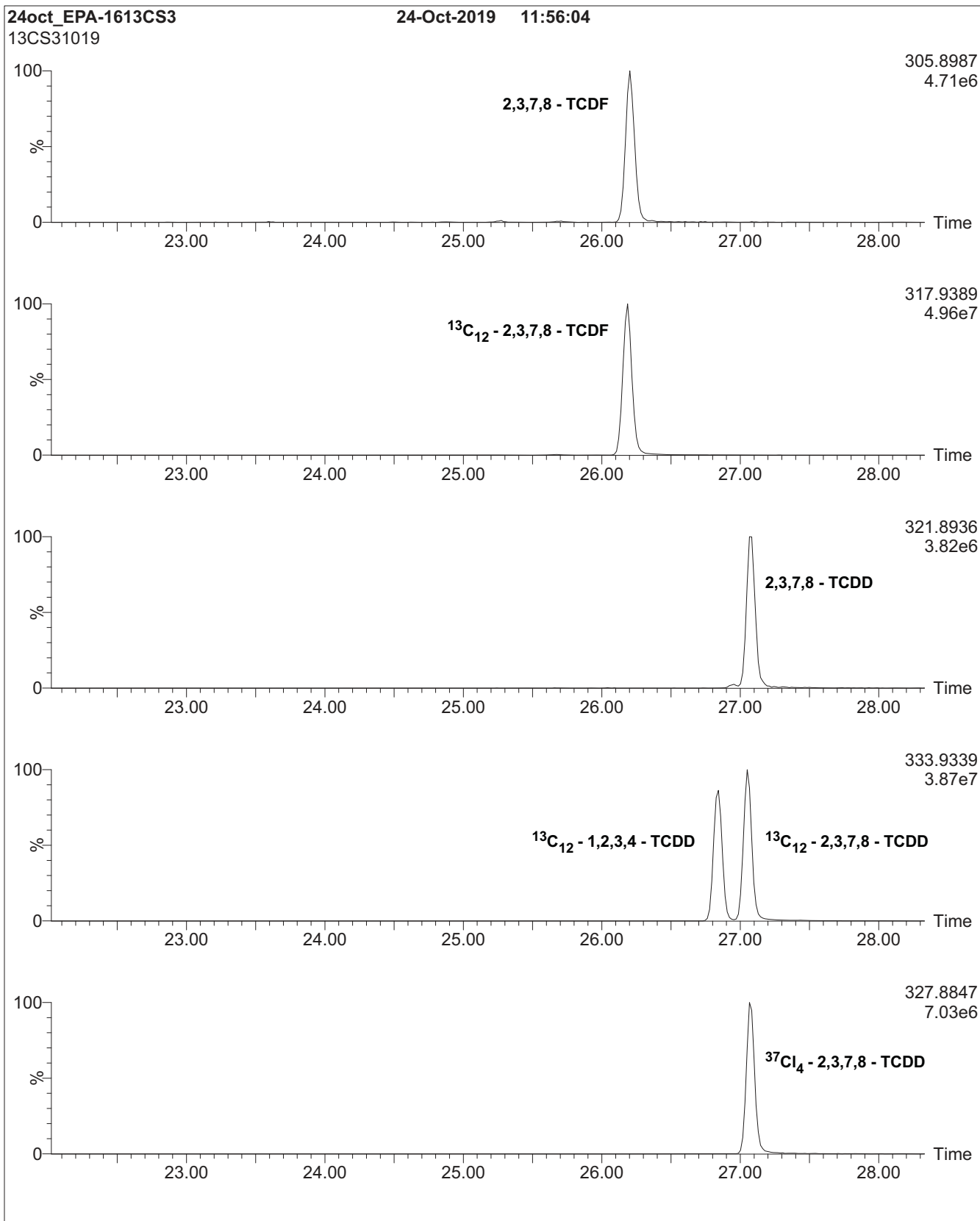


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

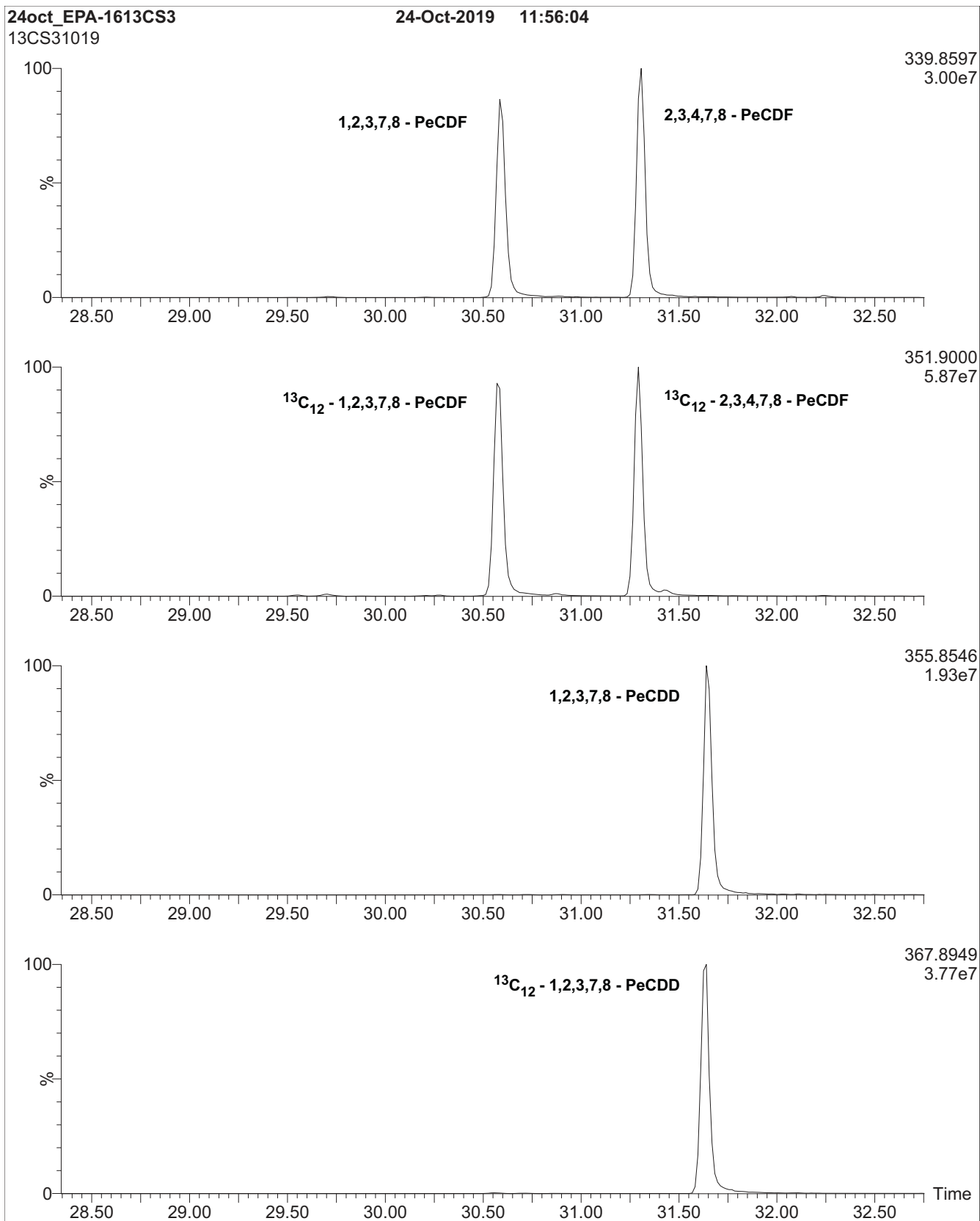


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

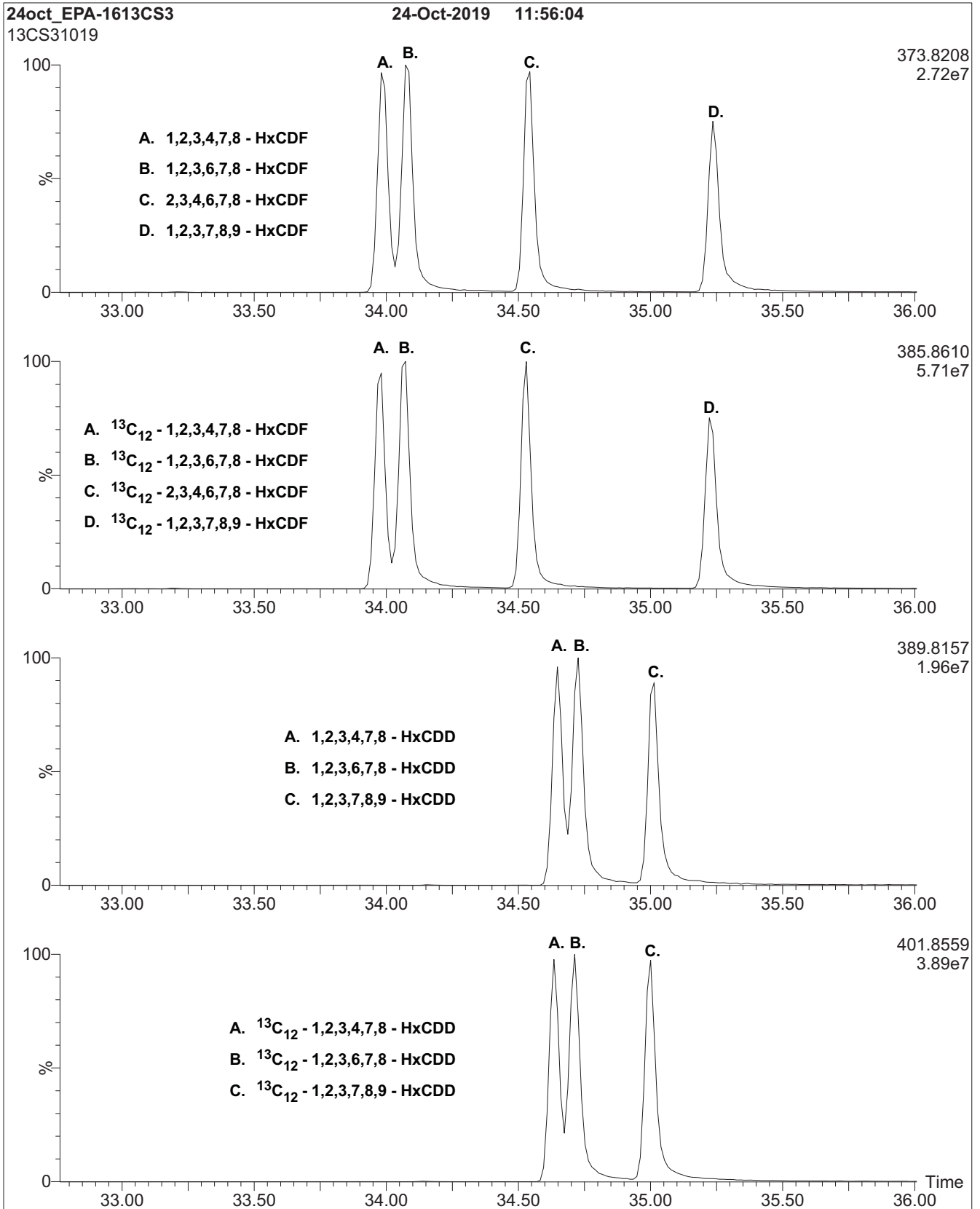


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)

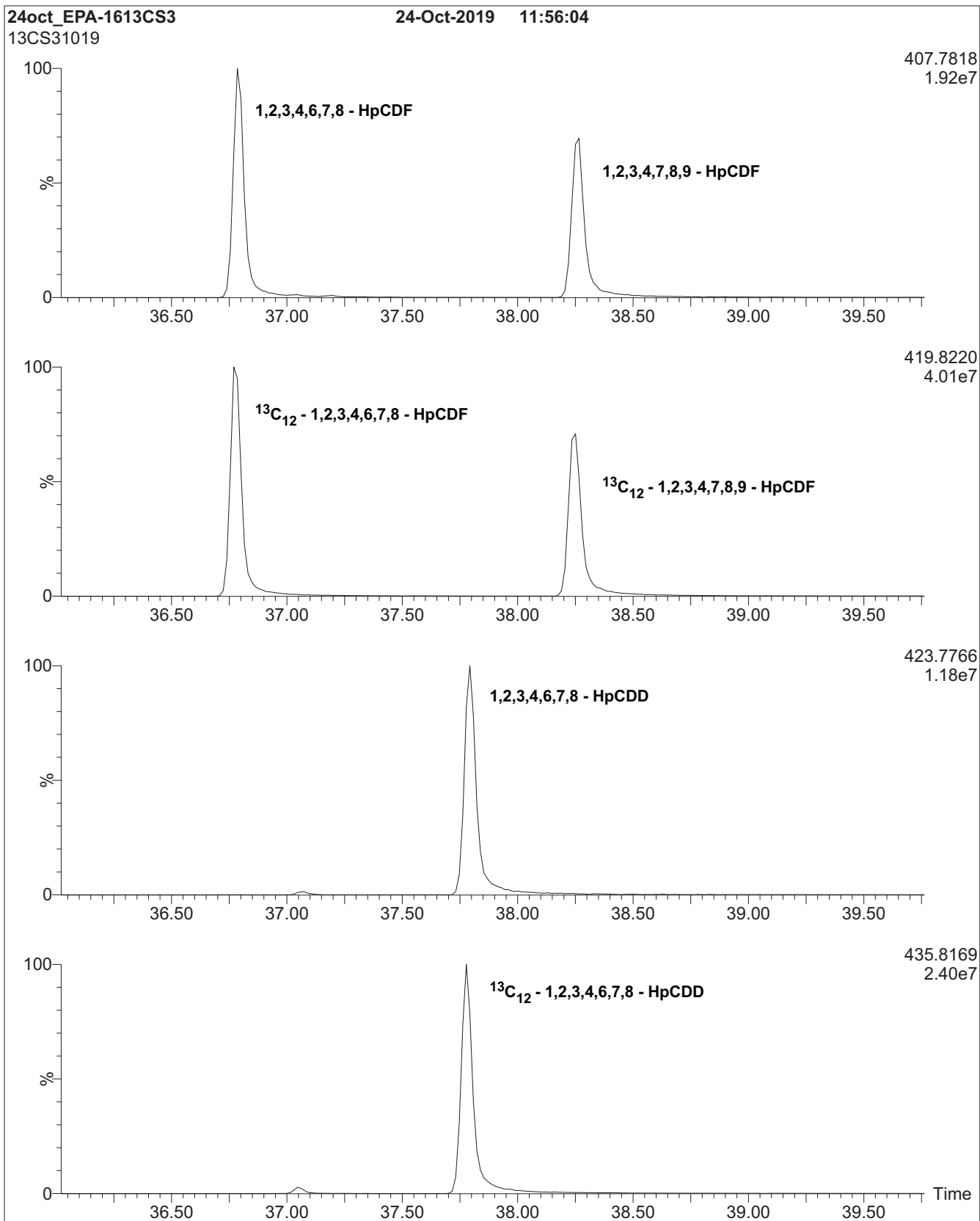
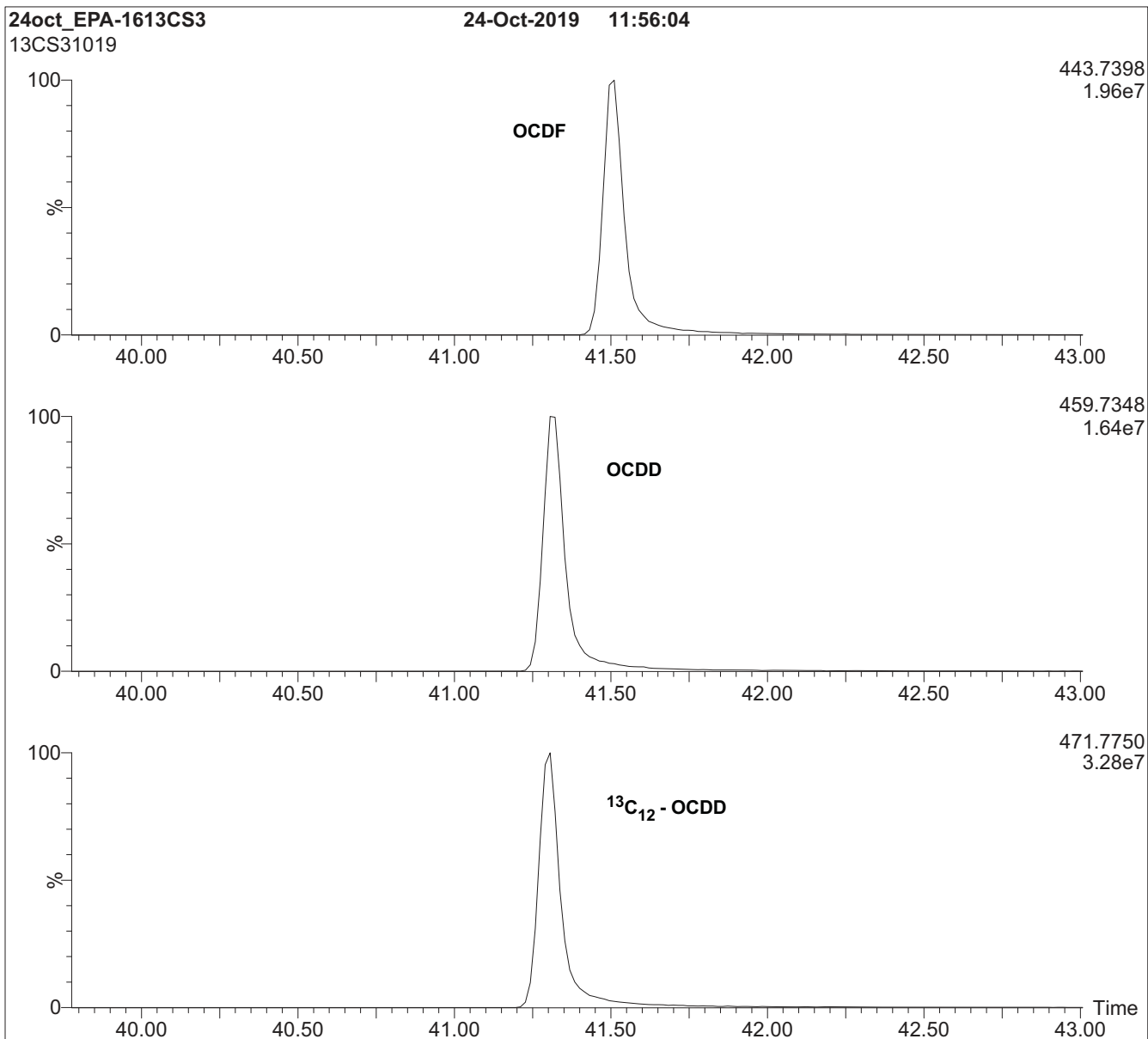


Figure 1: EPA-1613CS3; HRGC/HRMS Data (60 m DB-5 Column)



HRGC/HRMS:

Agilent 6890N (HRGC)
Autospec Ultima (HRMS)

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W

Flow: Constant at 1 ml/min

Injector: 280 °C (Splitless Injection)

Ionization: EI+

Detector: 280 °C

SIR at 10,000 mass resolving power

Oven: 150 °C (1 min)

12 °C/min to 200 °C

3 °C/min to 235 °C

235 °C (8 min)

8 °C/min to 310 °C

310 °C (8 min)



EPA-1613PAR

**U.S. EPA Method 1613 Native PCDD/PCDF
Precision and Recovery Stock Solution**

<u>PRODUCT CODE:</u>	EPA-1613PAR
<u>LOT NUMBER:</u>	13PAR1021
<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/25/2021
<u>LAST TESTED:</u> (mm/dd/yyyy)	11/03/2021
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	11/03/2028
<u>RECOMMENDED STORAGE:</u>	Store ampoule in a cool, dark place

J013397
Rec'd. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

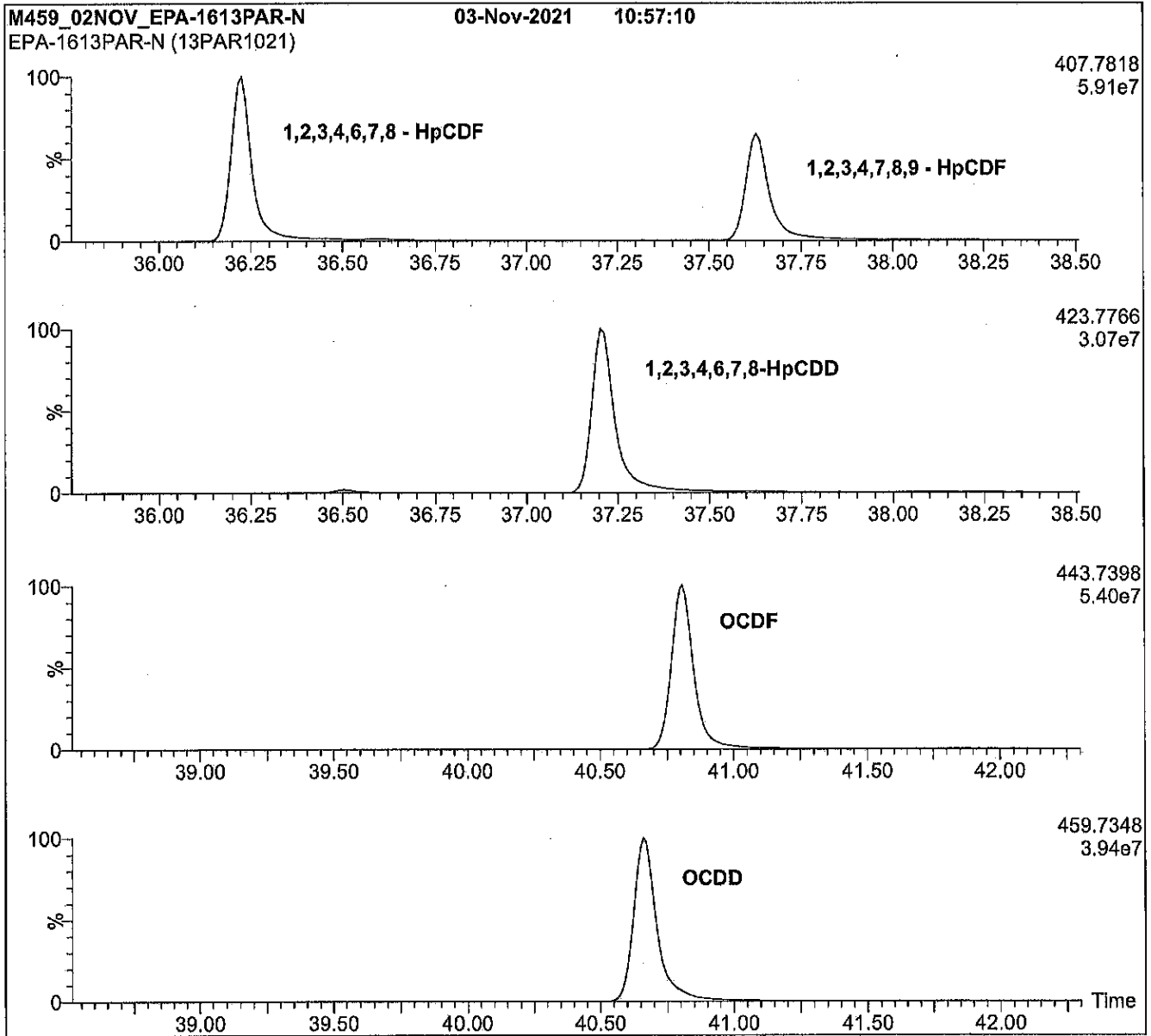
Table A: EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo- <i>p</i> -dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo- <i>p</i> -dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo- <i>p</i> -dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo- <i>p</i> -dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: 
 B.G. Chittim, General Manager

Date: 11/05/2021
(mm/dd/yyyy)

Figure 1: EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W	
Flow:	Constant at 1.4 mL/min	Oven:
Injector:	280°C (Splitless Injection)	150°C (1 min)
Ionization:	EI+	12°C/min to 200°C
Detector:	280°C	3°C/min to 235°C
	SIR at 10,000 mass resolving power	235°C (8 min)
		8°C/min to 310°C
		310°C (8 min)



EPA-1613PAR

**U.S. EPA Method 1613 Native PCDD/PCDF
Precision and Recovery Stock Solution**

<u>PRODUCT CODE:</u>	EPA-1613PAR
<u>LOT NUMBER:</u>	13PAR1021
<u>SOLVENT(S):</u>	Nonane/Toluene
<u>DATE PREPARED:</u> (mm/dd/yyyy)	10/25/2021
<u>LAST TESTED:</u> (mm/dd/yyyy)	11/03/2021
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	11/03/2028
<u>RECOMMENDED STORAGE:</u>	Store ampoule in a cool, dark place

J013397
Rec'd. JR
12/20/21

DESCRIPTION:

EPA-1613PAR is a solution/mixture of all the 2,3,7,8-substituted polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613PAR was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual PCDDs and PCDFs all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: EPA-1613PAR; Components and Concentrations (ng/mL, ± 5% in nonane/2.4% toluene)

Compound	Acronym	CAS #	Concentration (ng/mL)
PCDDs:			
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin	2,3,7,8-TCDD	1746-01-6	40.0
1,2,3,7,8-Pentachlorodibenzo- <i>p</i> -dioxin	1,2,3,7,8-PeCDD	40321-76-4	200
1,2,3,4,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	1,2,3,4,7,8-HxCDD	39227-28-6	200
1,2,3,6,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	1,2,3,6,7,8-HxCDD	57653-85-7	200
1,2,3,7,8,9-Hexachlorodibenzo- <i>p</i> -dioxin	1,2,3,7,8,9-HxCDD	19408-74-3	200
1,2,3,4,6,7,8-Heptachlorodibenzo- <i>p</i> -dioxin	1,2,3,4,6,7,8-HpCDD	35822-46-9	200
Octachlorodibenzo- <i>p</i> -dioxin	OCDD	3268-87-9	400
PCDFs:			
2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF	51207-31-9	40.0
1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF	57117-41-6	200
2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF	57117-31-4	200
1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF	70648-26-9	200
1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF	57117-44-9	200
1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF	72918-21-9	200
2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF	60851-34-5	200
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF	67562-39-4	200
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF	55673-89-7	200
Octachlorodibenzofuran	OCDF	39001-02-0	400

Certified By: 
 B.G. Chittim, General Manager

Date: 11/05/2021
(mm/dd/yyyy)

Figure 1: EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)

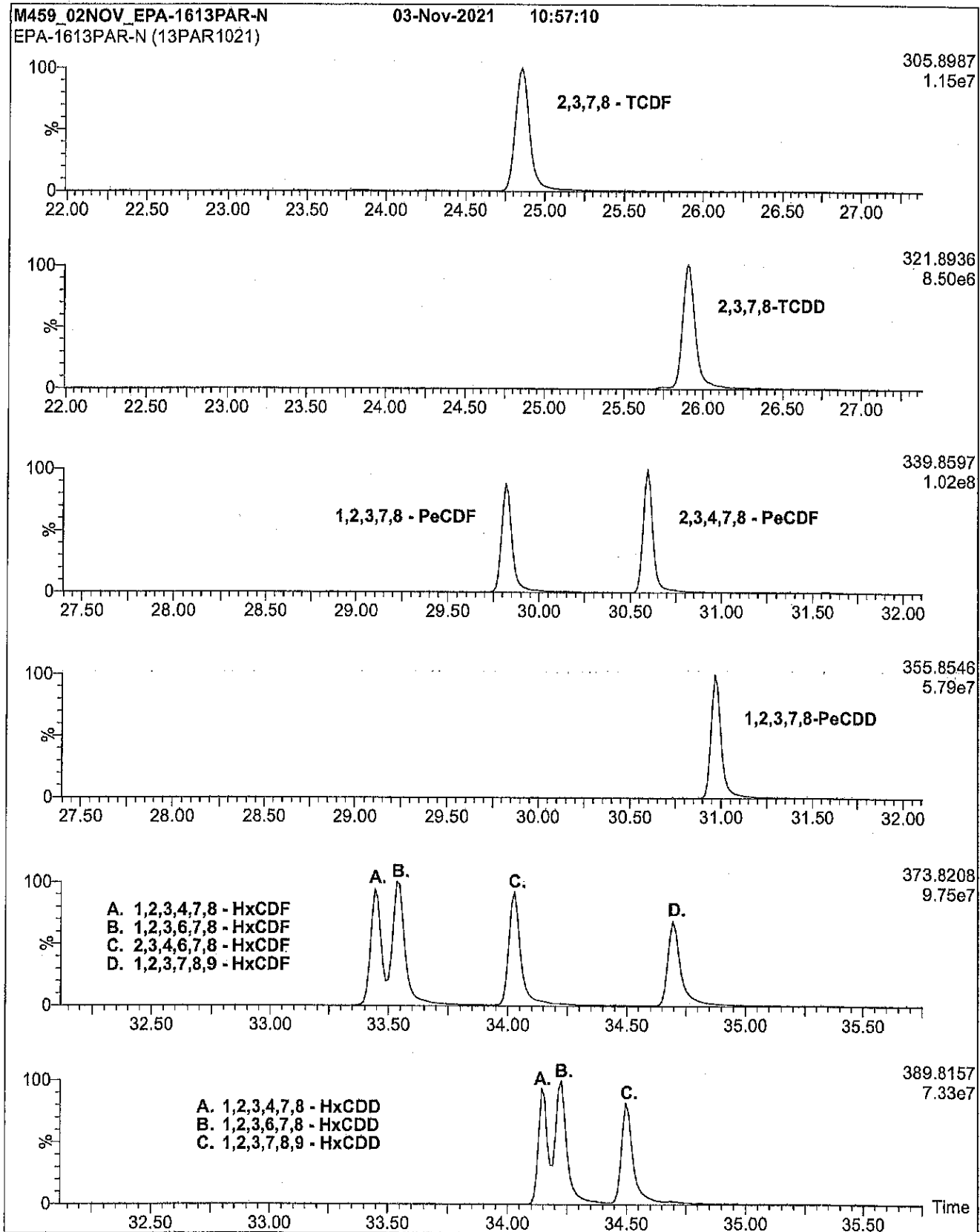
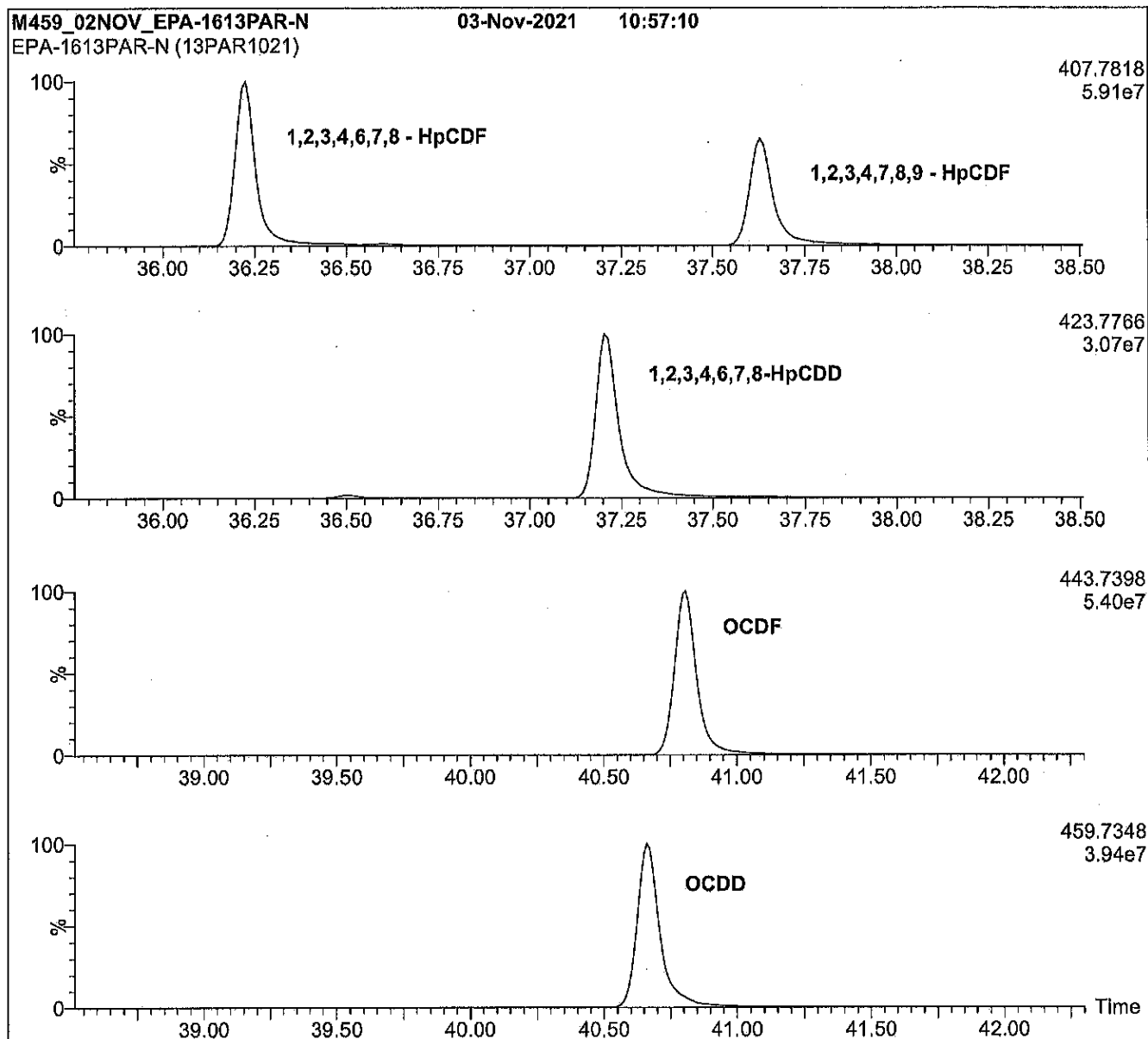


Figure 1: EPA-1613PAR; HRGC/HRMS Data (60 m DB-5 Column)



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W	
Flow:	Constant at 1.4 mL/min	Oven: 150°C (1 min)
Injector:	280°C (Splitless Injection)	12°C/min to 200°C
Ionization:	EI+	3°C/min to 235°C
Detector:	280°C	235°C (8 min)
	SIR at 10,000 mass resolving power	8°C/min to 310°C
		310°C (8 min)



EPA-1613CSS

**U.S. EPA Method 1613 Cleanup Standard
Spiking Solution**

PRODUCT CODE: EPA-1613CSS
LOT NUMBER: 13CSS1021
SOLVENT(S): Nonane
DATE PREPARED: (mm/dd/yyyy) 10/29/2021
LAST TESTED: (mm/dd/yyyy) 10/31/2021
EXPIRY DATE: (mm/dd/yyyy) 10/31/2028
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

K003104

EPA-1613CSS contains 2,3,7,8-(³⁷Cl₄)tetrachlorodibenzo-*p*-dioxin at the concentration given in Table A.

EPA-1613CSS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

2,3,7,8-(³⁷Cl₄)Tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution
 Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

Table A: EPA-1613CSS; Components and Concentrations (ng/mL, ± 5% in nonane)

Compound	Acronym	CAS #	Concentration (ng/mL)
2,3,7,8-(³⁷ Cl ₄)Tetrachlorodibenzo- <i>p</i> -dioxin	³⁷ Cl ₄ -2,3,7,8-TCDD	85508-50-5	40.0

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager
Date: 11/05/2021
 (mm/dd/yyyy)

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

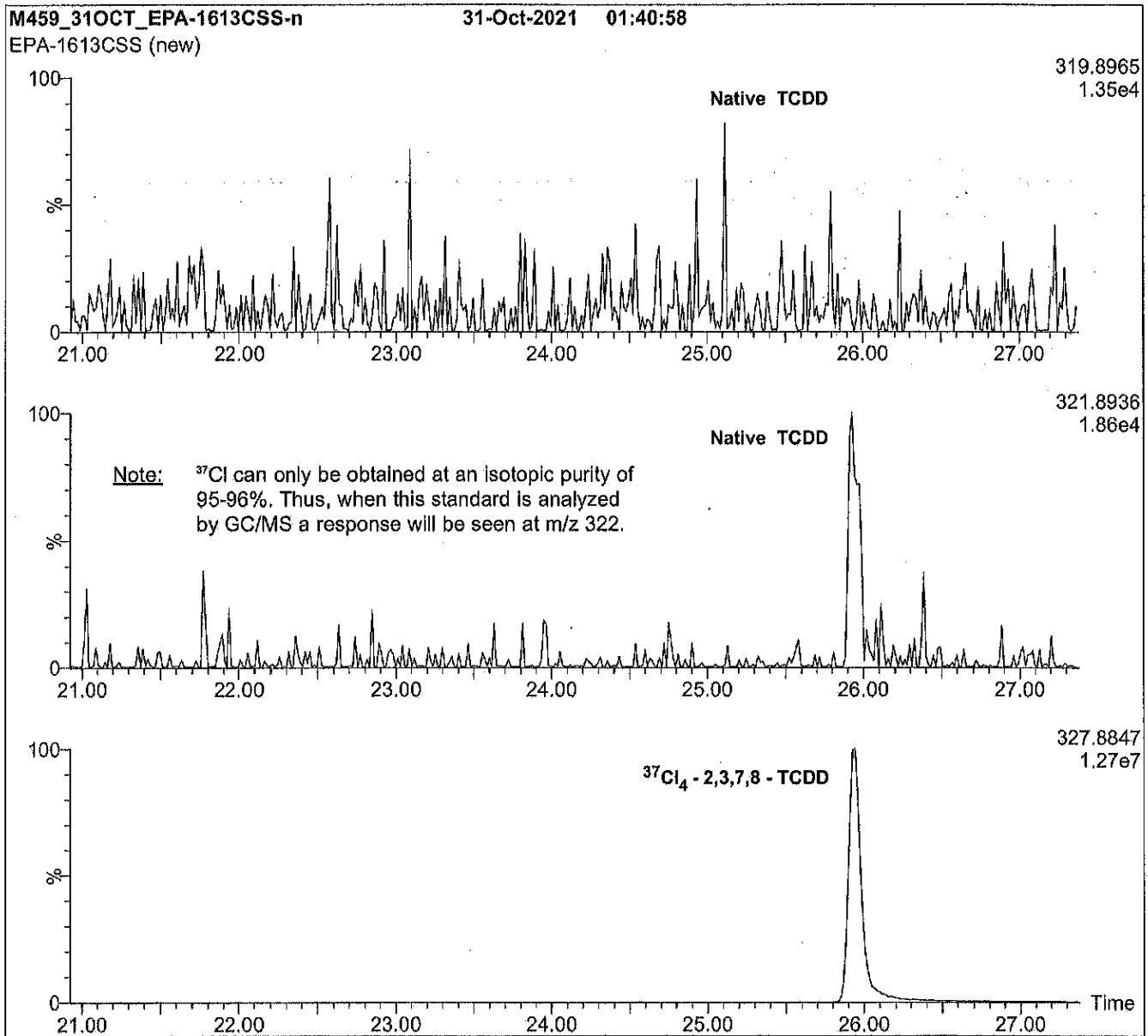
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: EPA-1613CSS; HRGC/HRMS Data (60 m DB-5 Column)



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W	
Flow:	Constant at 1.4 mL/min	Oven: 150°C (1 min)
Injector:	280°C (Splitless Injection)	12°C/min to 200°C
Ionization:	EI+	3°C/min to 235°C
Detector:	280°C	235°C (8 min)
	SIR at 10,000 mass resolving power	8°C/min to 310°C
		310°C (8 min)



EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE: EPA-1613LCS
LOT NUMBER: 13LCS1021
SOLVENT(S): Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy) 10/29/2021
LAST TESTED: (mm/dd/yyyy) 10/31/2021
EXPIRY DATE: (mm/dd/yyyy) 10/31/2028
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

K3105

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}\text{C}_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C -labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of $\geq 99\%$.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

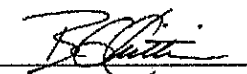
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By: 
 B.G. Chittim, General Manager

Date: 11/05/2021
(mm/dd/yyyy)

Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

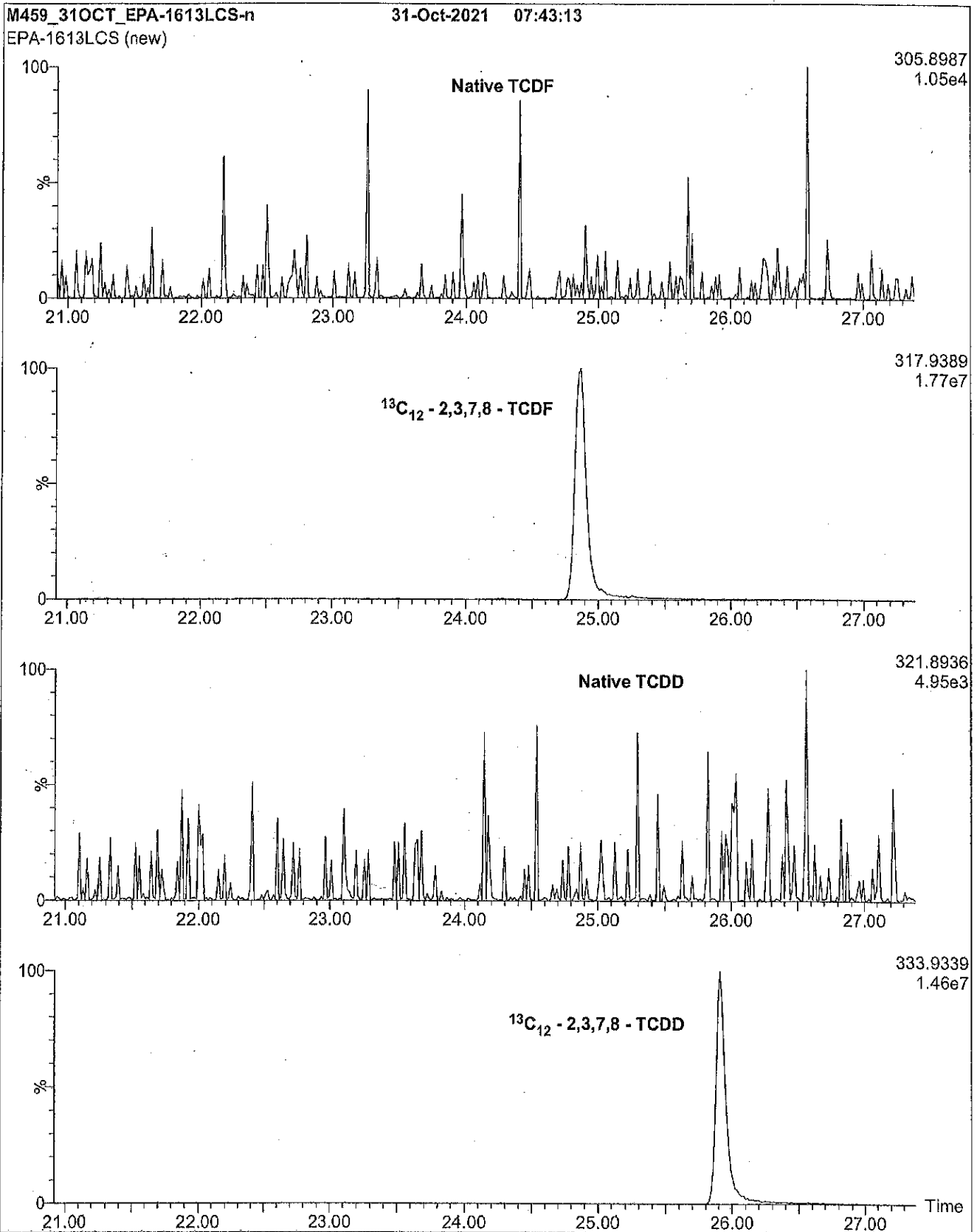


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

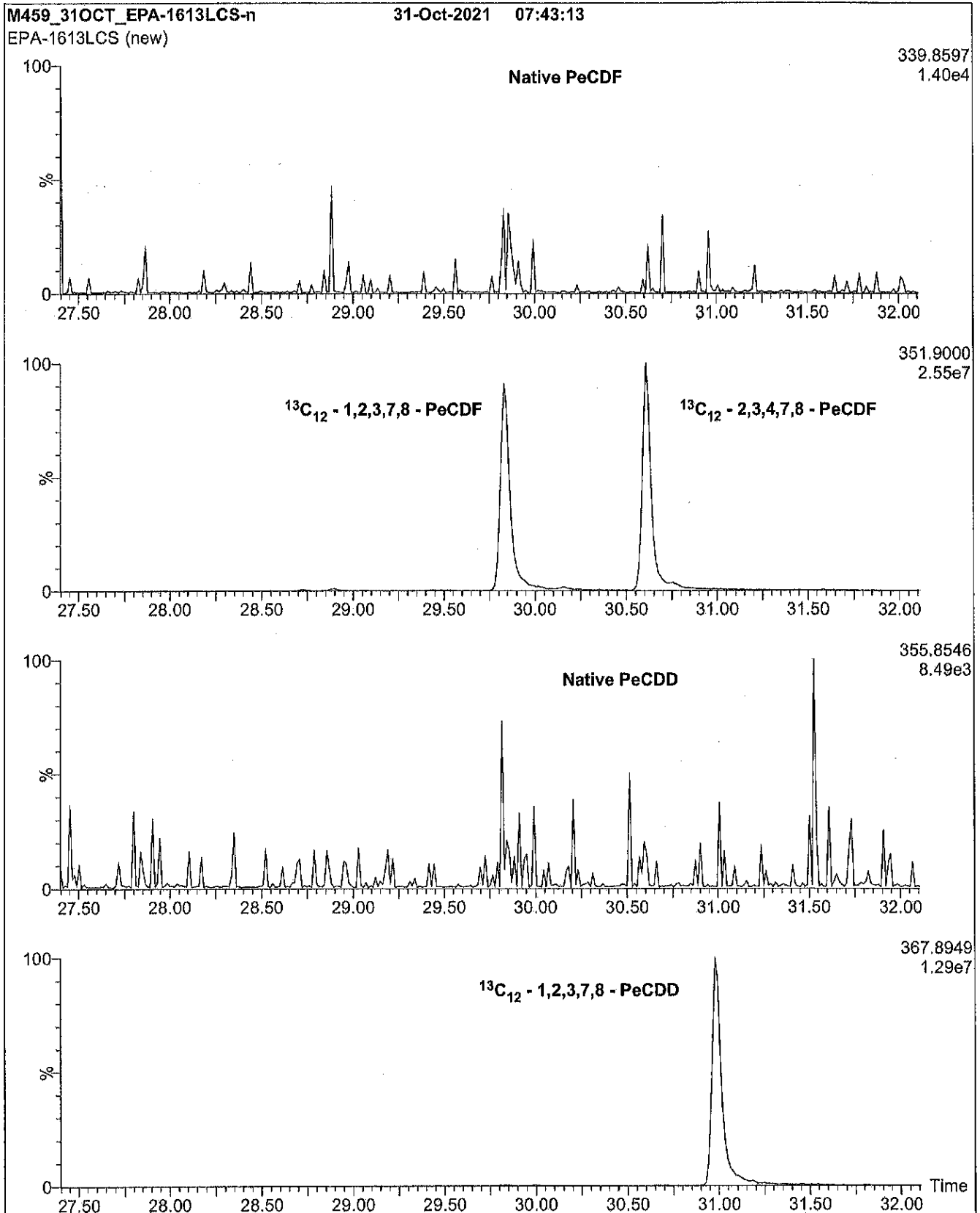


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

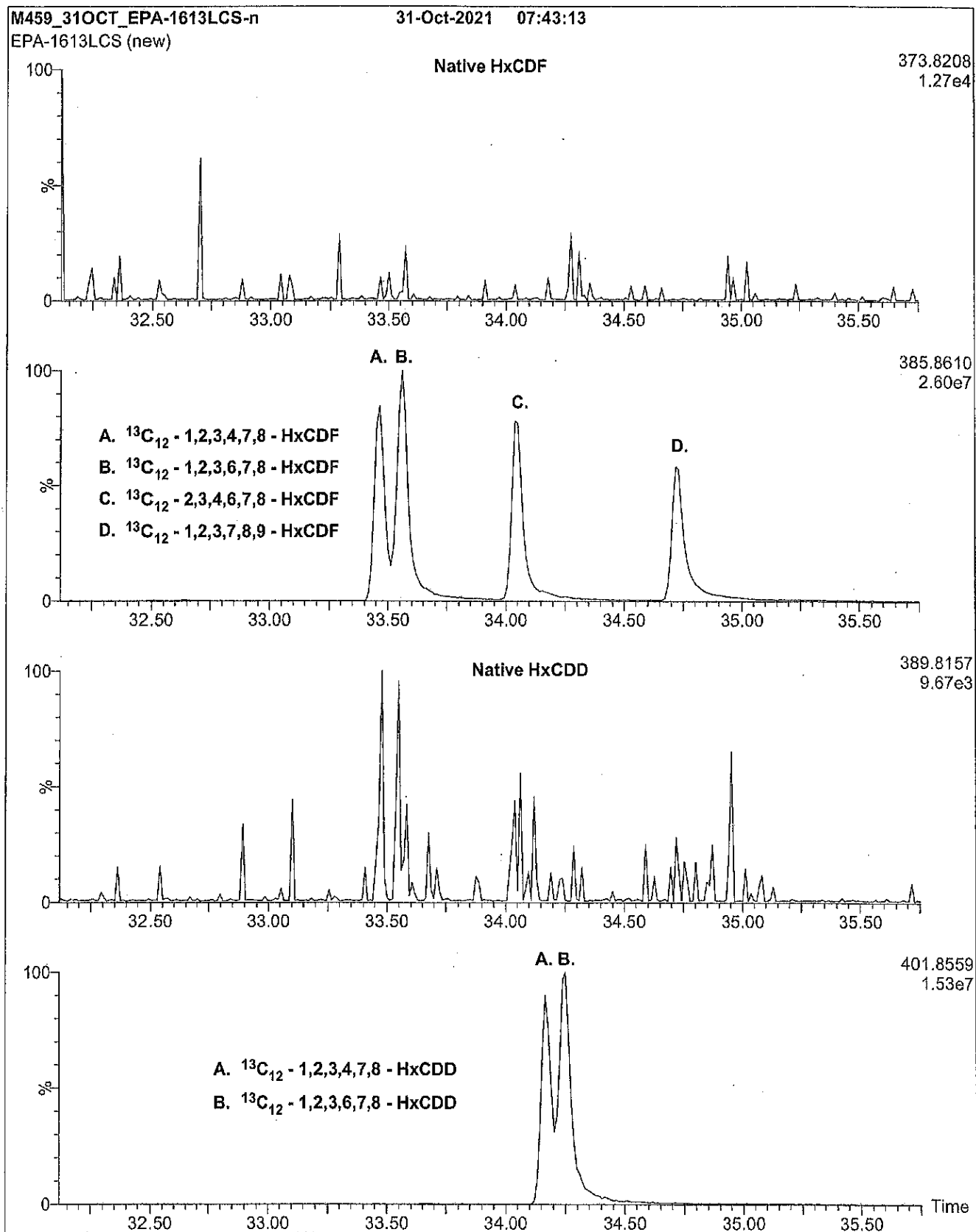


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

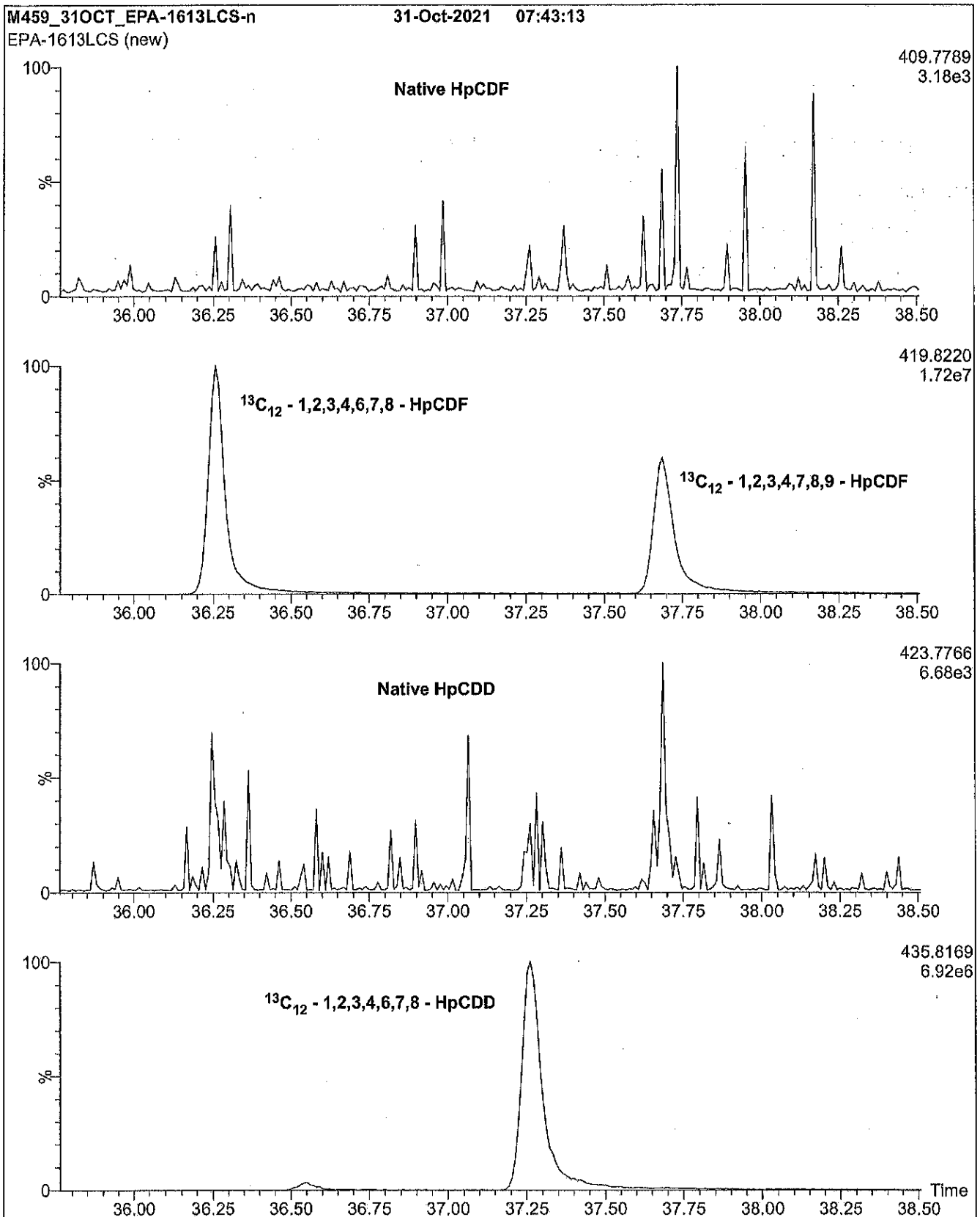
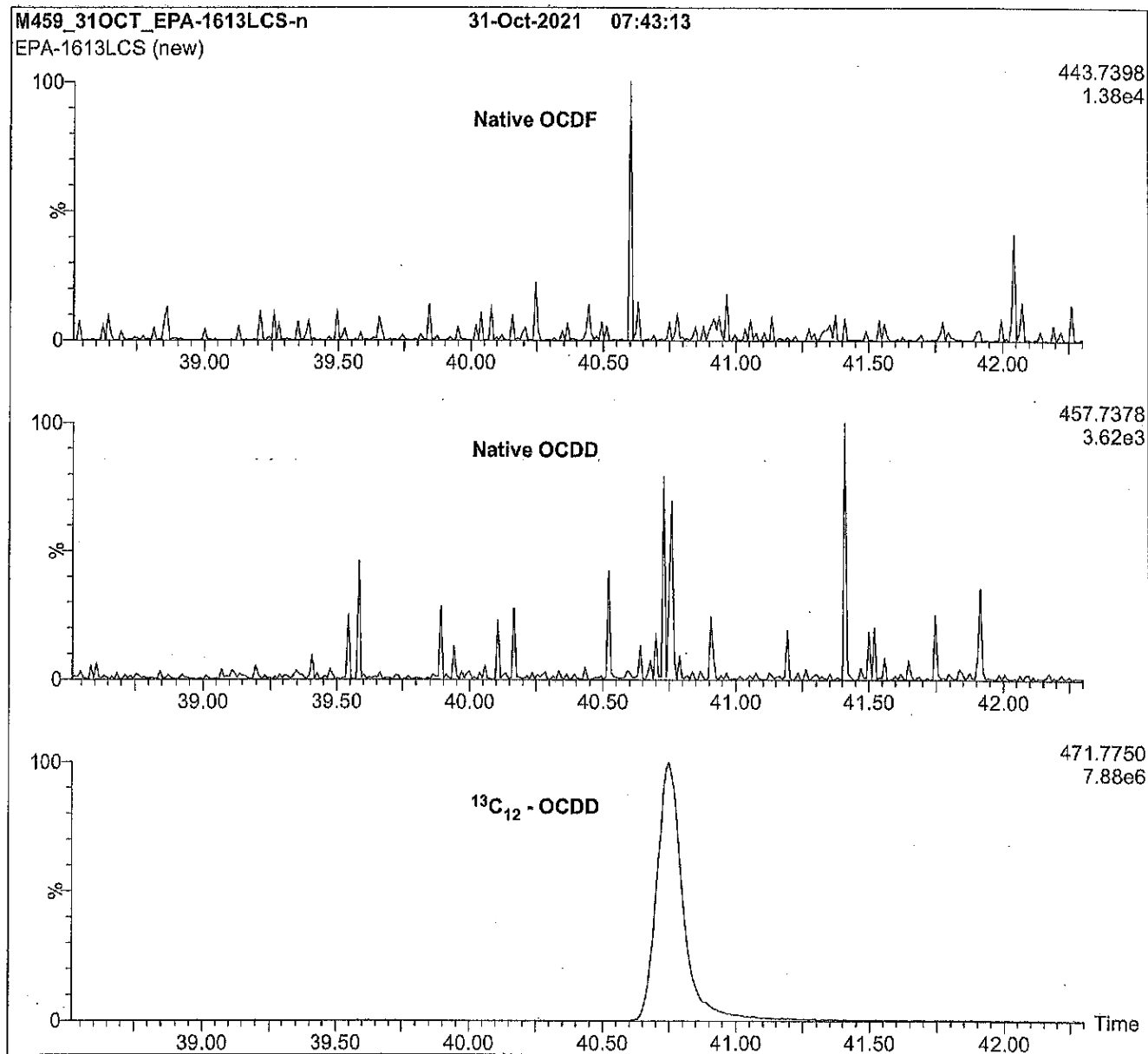


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)



Conditions for Figure 1:

Agilent 6890N HRGC
 Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 µm film thickness) Agilent J&W		
Flow:	Constant at 1.4 mL/min	Oven:	150°C (1 min)
Injector:	280°C (Splitless Injection)		12°C/min to 200°C
Ionization:	EI+		3°C/min to 235°C
Detector:	280°C		235°C (8 min)
	SIR at 10,000 mass resolving power		8°C/min to 310°C
			310°C (8 min)



K9821

CS3WT

**Calibration and Verification Solution (EPA-1613CS3)
combined with Window Defining and 2,3,7,8-TCDD
Resolution Testing Congeners**

PRODUCT CODE: CS3WT
LOT NUMBER: CS3WT1021
SOLVENT(S): Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy) 11/01/2021
LAST TESTED: (mm/dd/yyyy) 11/02/2021
EXPIRY DATE: (mm/dd/yyyy) 11/02/2028
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

CS3WT is a solution/mixture of native (¹²C₁₂) and mass-labelled (¹³C₁₂) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Tables A and B.

CS3WT is an HRGC/HRMS calibration solution that was designed and prepared to be used according to U.S. EPA Method 1613, Revision B, in place of EPA-1613CS3 (lot: 13CS31021). Additionally, it contains the PCDD and PCDF isomers required to set retention time windows as well as test and establish isomer specificity for 2,3,7,8-TCDD on a DB-5 (or equivalent) capillary column.

The individual ¹³C-labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of ≥99%. The 2,3,7,8-(³⁷Cl₄)tetrachlorodibenzo-*p*-dioxin has a chemical purity of >98% and an isotopic (³⁷Cl) purity of ≥95%. The individual native 2,3,7,8-substituted PCDD and PCDF congeners all have chemical purities of >98%; the other congeners (window defining and resolution testing) should only be considered semi-quantitative.

This current lot of CS3WT is to be used with the 1613 calibration solutions having the following lot numbers:

<u>PRODUCT CODE</u>	<u>LOT NUMBER</u>
EPA-1613CS1	13CS11021
EPA-1613CS2	13CS21021
EPA-1613CS3	13CS31021
EPA-1613CS4	13CS41021
EPA-1613CS5	13CS51021
EPA-1613CSL	13CSL1021
EPA-1613CS0.5	13CS0.51021

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) has been assigned to the quantitative components in this product. A maximum combined percent relative uncertainty of $\pm 20\%$ has been assigned to the semi-quantitative components in this product.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: CS3WT; Quantitative Components and Concentrations (ng/mL, ± 5%, in nonane/4.5% toluene)

Compound	Designation ^a	Acronym	CAS #	Concentration (ng/mL)
Native PCDDs:				
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin		2,3,7,8-TCDD	1746-01-6	10.0
1,2,3,7,8-Pentachlorodibenzo- <i>p</i> -dioxin		1,2,3,7,8-PeCDD	40321-76-4	50.0
1,2,3,4,7,8-Hexachlorodibenzo- <i>p</i> -dioxin		1,2,3,4,7,8-HxCDD	39227-28-6	50.0
1,2,3,6,7,8-Hexachlorodibenzo- <i>p</i> -dioxin		1,2,3,6,7,8-HxCDD	57653-85-7	50.0
1,2,3,7,8,9-Hexachlorodibenzo- <i>p</i> -dioxin	Last HxCDD ^b	1,2,3,7,8,9-HxCDD	19408-74-3	50.0
1,2,3,4,6,7,8-Heptachlorodibenzo- <i>p</i> -dioxin	Last HpCDD	1,2,3,4,6,7,8-HpCDD	35822-46-9	50.0
Octachlorodibenzo- <i>p</i> -dioxin		OCDD	3268-87-9	100
Native PCDFs:				
2,3,7,8-Tetrachlorodibenzofuran		2,3,7,8-TCDF	51207-31-9	10.0
1,2,3,7,8-Pentachlorodibenzofuran		1,2,3,7,8-PeCDF	57117-41-6	50.0
2,3,4,7,8-Pentachlorodibenzofuran		2,3,4,7,8-PeCDF	57117-31-4	50.0
1,2,3,4,7,8-Hexachlorodibenzofuran		1,2,3,4,7,8-HxCDF	70648-26-9	50.0
1,2,3,6,7,8-Hexachlorodibenzofuran		1,2,3,6,7,8-HxCDF	57117-44-9	50.0
1,2,3,7,8,9-Hexachlorodibenzofuran		1,2,3,7,8,9-HxCDF	72918-21-9	50.0
2,3,4,6,7,8-Hexachlorodibenzofuran		2,3,4,6,7,8-HxCDF	60851-34-5	50.0
1,2,3,4,6,7,8-Heptachlorodibenzofuran	First HpCDF ^c	1,2,3,4,6,7,8-HpCDF	67562-39-4	50.0
1,2,3,4,7,8,9-Heptachlorodibenzofuran	Last HpCDF	1,2,3,4,7,8,9-HpCDF	55673-89-7	50.0
Octachlorodibenzofuran		OCDF	39001-02-0	100
Mass-Labelled PCDDs:				
2,3,7,8-Tetrachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -OCDD	114423-97-1	200
Mass-Labelled PCDFs:				
2,3,7,8-Tetrachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro(¹³ C ₁₂)dibenzofuran		¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	109719-94-0	100
Cleanup Standard:				
2,3,7,8-(³⁷ Cl ₄)Tetrachlorodibenzo- <i>p</i> -dioxin		³⁷ Cl ₄ -2,3,7,8-TCDD	85508-50-5	10.0
Internal Standards:				
1,2,3,4-Tetrachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -1,2,3,4-TCDD	114423-99-3	100
1,2,3,7,8,9-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin		¹³ C ₁₂ -1,2,3,7,8,9-HxCDD	109719-82-6	100

^a First/Last eluting isomer for the specified homologue group (see Table B for additional Window Definers).

^{b,c} – see Table B for footnote.

Table B: CS3WT; Semi-Quantitative Components and Concentrations (ng/mL, ± 20%, in nonane/4.5% toluene)

Compound	Designation ^a	Acronym	CAS #	Concentration (ng/mL)
PCDD Window Definers:				
1,3,6,8-Tetrachlorodibenzo- <i>p</i> -dioxin	First TCDD	1,3,6,8-TCDD	33423-92-6	10.0
1,2,8,9-Tetrachlorodibenzo- <i>p</i> -dioxin	Last TCDD	1,2,8,9-TCDD	62470-54-6	10.0
1,2,4,6,8-/1,2,4,7,9-Pentachlorodibenzo- <i>p</i> -dioxin	First PeCDD	1,2,4,6,8-PeCDD	71998-76-0	50.0 ^d
		1,2,4,7,9-PeCDD	82291-37-0	
1,2,3,8,9-Pentachlorodibenzo- <i>p</i> -dioxin	Last PeCDD	1,2,3,8,9-PeCDD	71925-18-3	50.0
1,2,4,6,7,9-Hexachlorodibenzo- <i>p</i> -dioxin	First HxCDD	1,2,4,6,7,9-HxCDD	39227-62-8	50.0
1,2,3,4,6,7,9-Heptachlorodibenzo- <i>p</i> -dioxin	First HpCDD	1,2,3,4,6,7,9-HpCDD	58200-70-7	50.0
PCDF Window Definers:				
1,3,6,8-Tetrachlorodibenzofuran	First TCDF	1,3,6,8-TCDF	71998-72-6	10.0
1,2,8,9-Tetrachlorodibenzofuran	Last TCDF	1,2,8,9-TCDF	70648-22-5	10.0
1,3,4,6,8-Pentachlorodibenzofuran	First PeCDF	1,3,4,6,8-PeCDF	83704-55-6	50.0
1,2,3,8,9-Pentachlorodibenzofuran	Last PeCDF	1,2,3,8,9-PeCDF	83704-54-5	50.0
1,2,3,4,6,8-Hexachlorodibenzofuran	First HxCDF	1,2,3,4,6,8-HxCDF	69698-60-8	50.0
2,3,7,8-TCDD Resolution Testing Isomers:				
1,2,3,4-Tetrachlorodibenzo- <i>p</i> -dioxin		1,2,3,4-TCDD	30746-58-8	5.00
1,2,3,7-/1,2,3,8-Tetrachlorodibenzo- <i>p</i> -dioxin		1,2,3,7-TCDD	67028-18-6	5.00 ^d
		1,2,3,8-TCDD	53555-02-5	
1,2,3,9-Tetrachlorodibenzo- <i>p</i> -dioxin		1,2,3,9-TCDD	71669-26-6	10.0

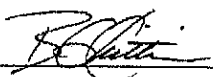
^a First/Last eluting isomer for the specified homologue group (see Table A for additional Window Definers).

^b 1,2,3,4,6,7-HxCDD (last eluting HxCDD) not included; coelutes with 1,2,3,7,8,9-HxCDD on a 60 m DB-5 column. Use 1,2,3,7,8,9-HxCDD (see Table A) and 1,2,3,4,6,7,9-HpCDD to approximate the end of the HxCDD window.

^c 1,2,3,4,8,9-HxCDF (last eluting HxCDF) not included; can interfere with 1,2,3,7,8,9-HxCDF on a 60 m DB-5 column. Use 1,2,3,4,6,7,8-HpCDF (see Table A) to approximate the end of the HxCDF window.

^d Total concentration of isomers.

Certified By: _____



B.G. Chittim, General Manager

Date: 11/05/2021
(mm/dd/yyyy)

Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

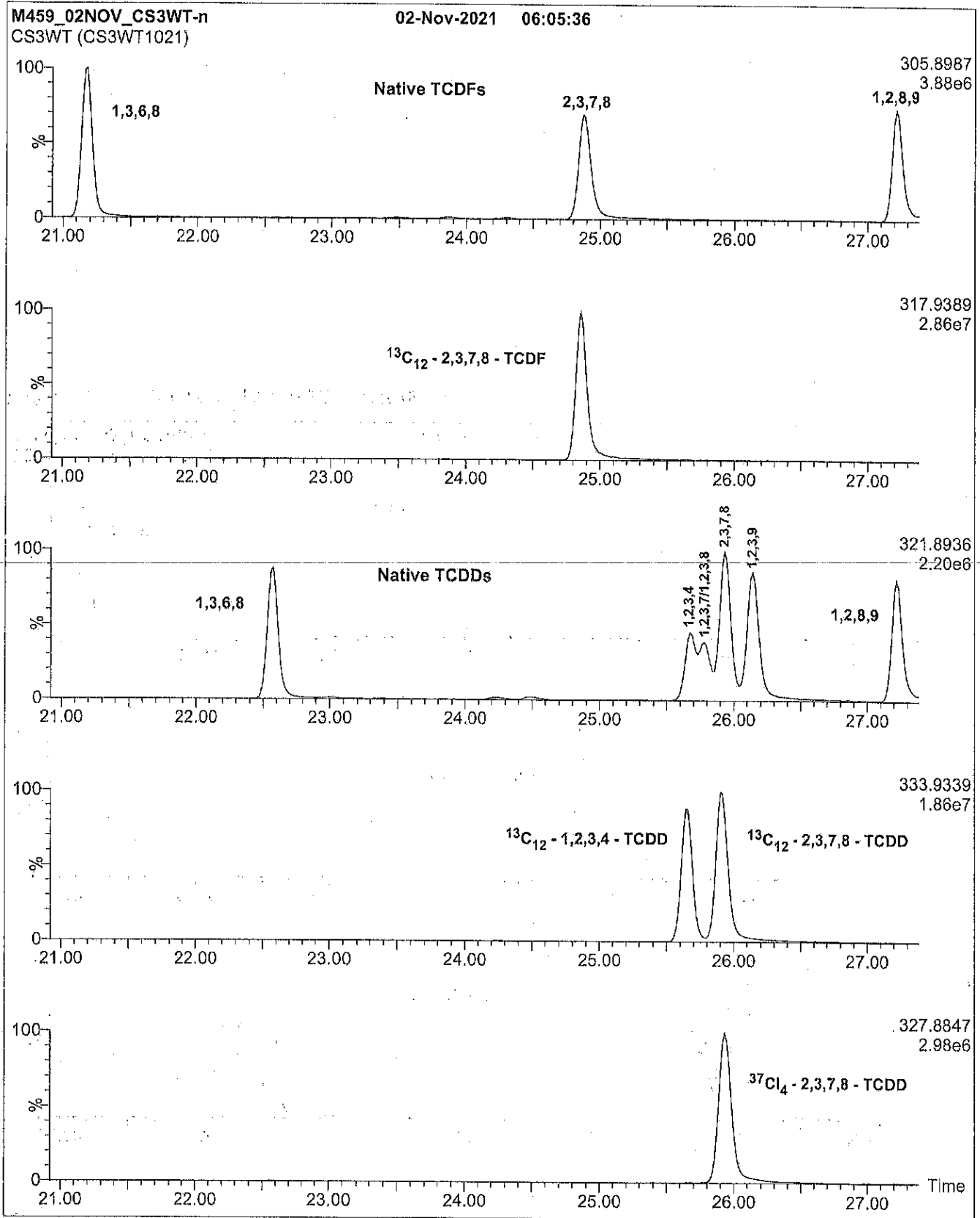


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

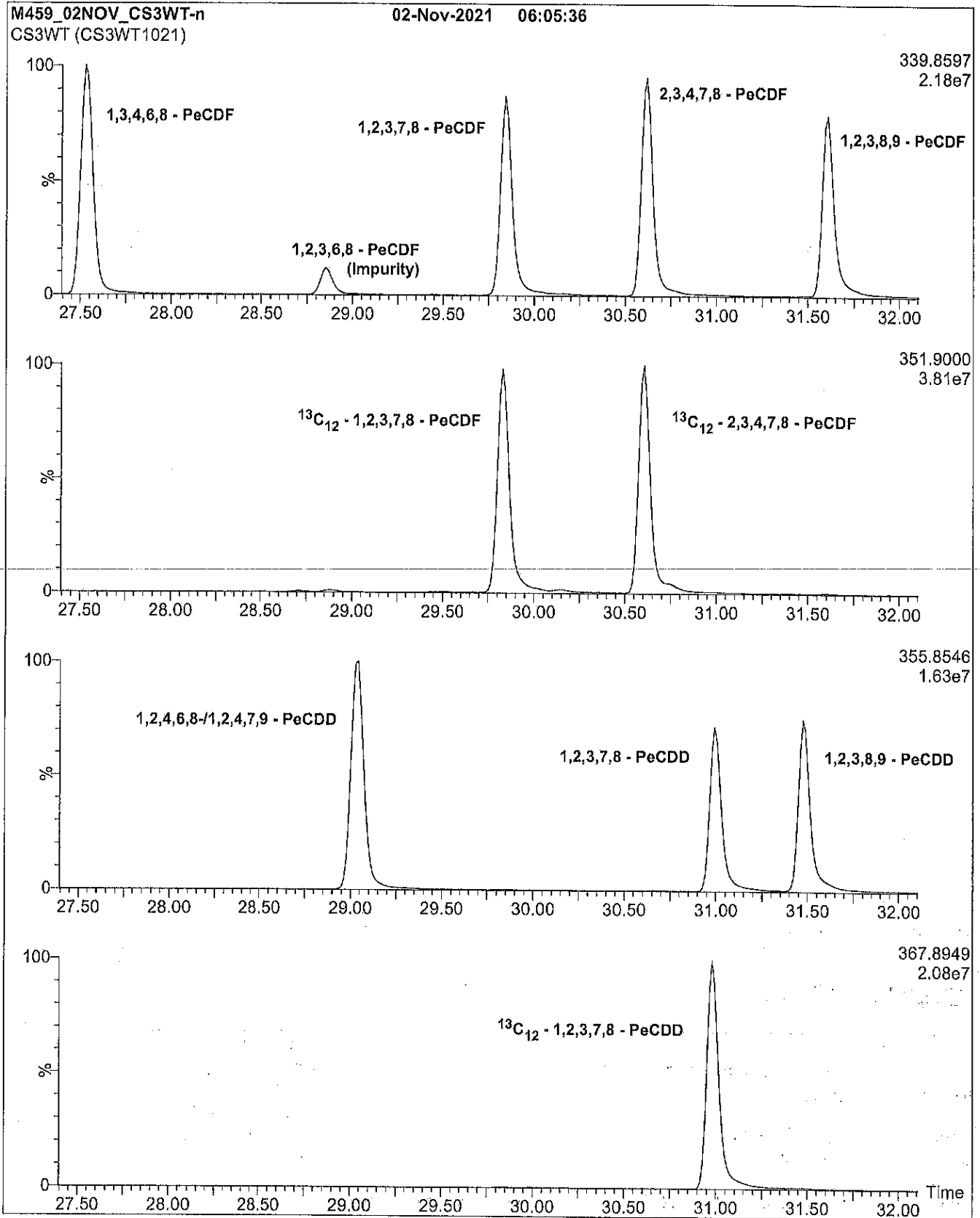


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

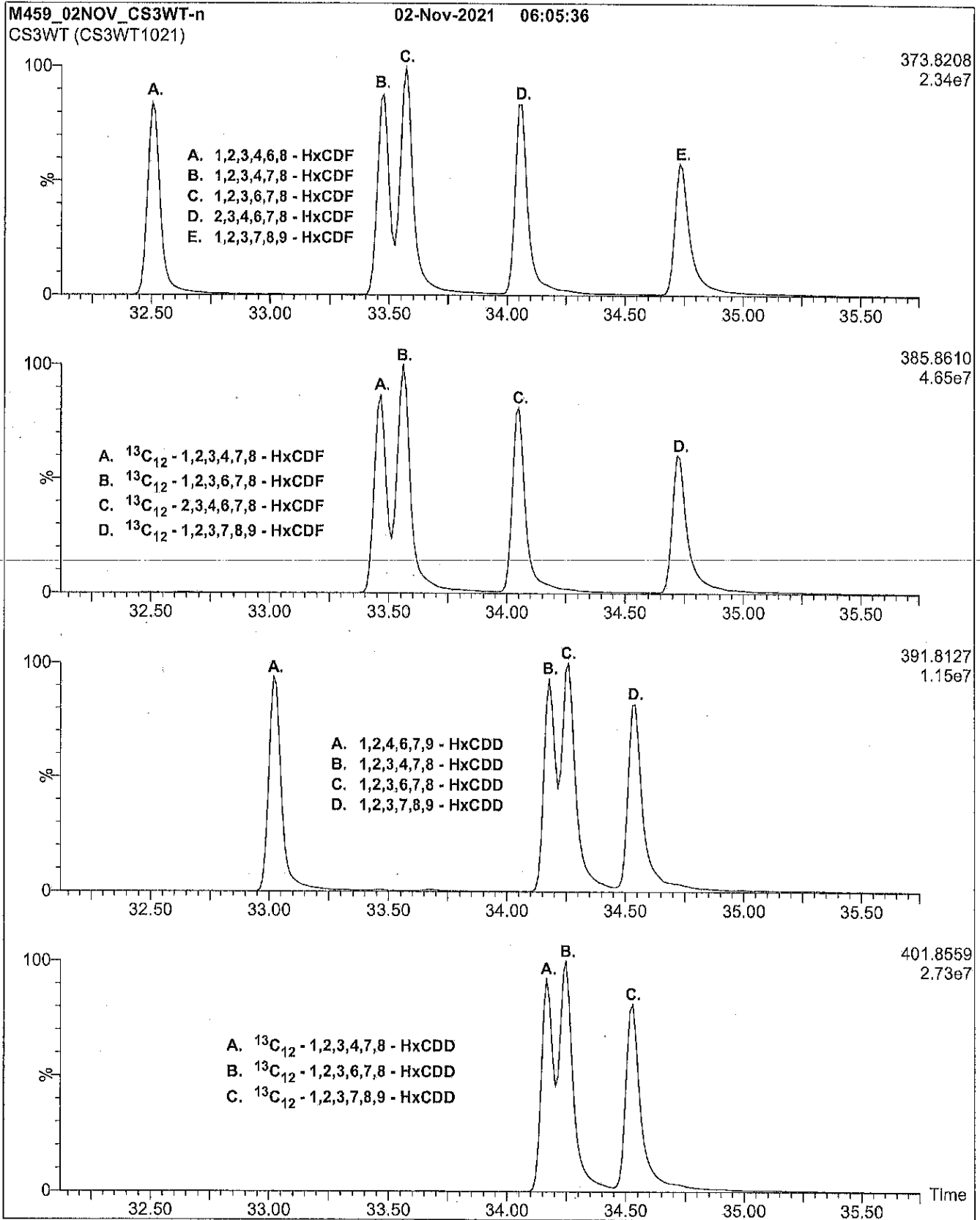


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)

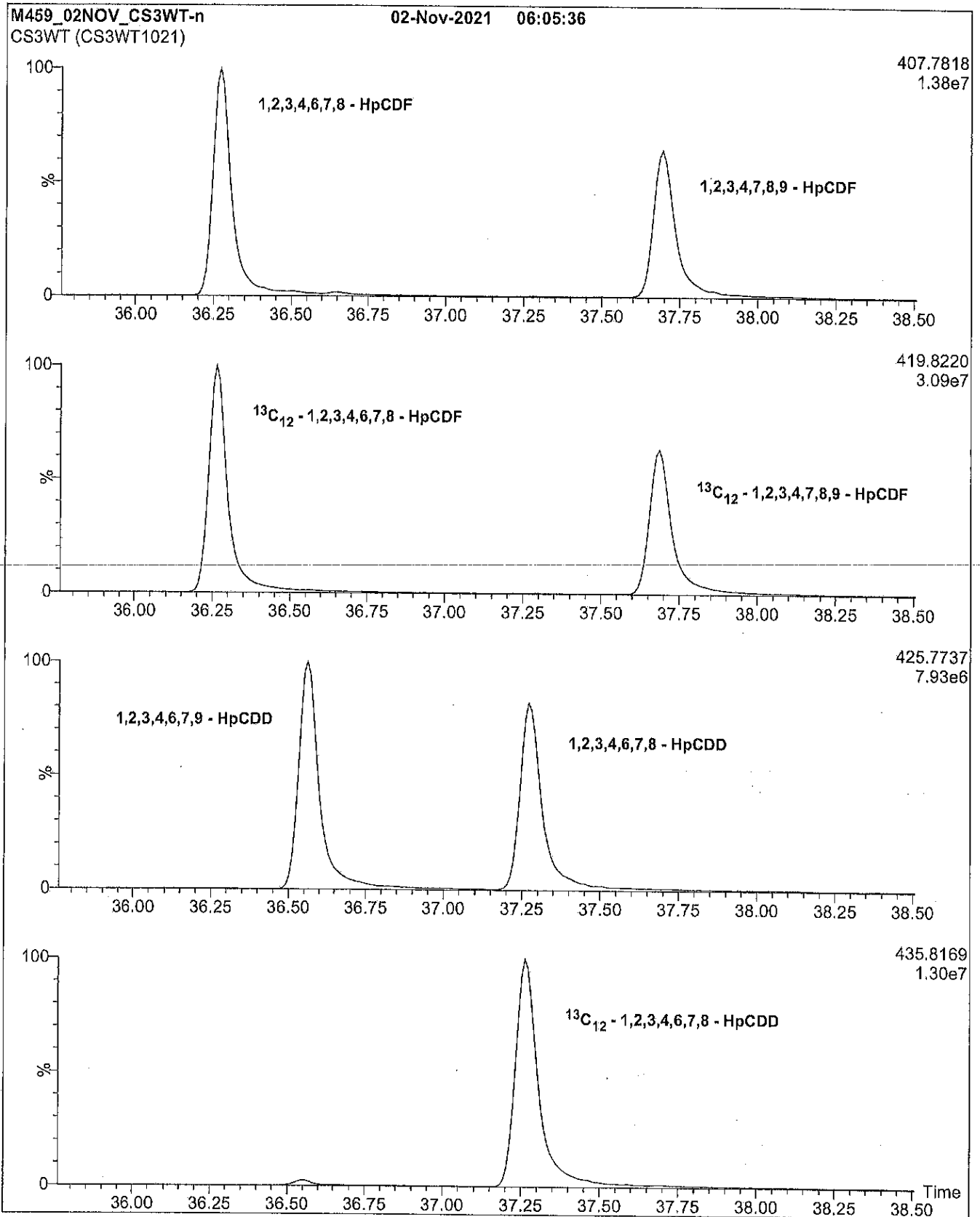
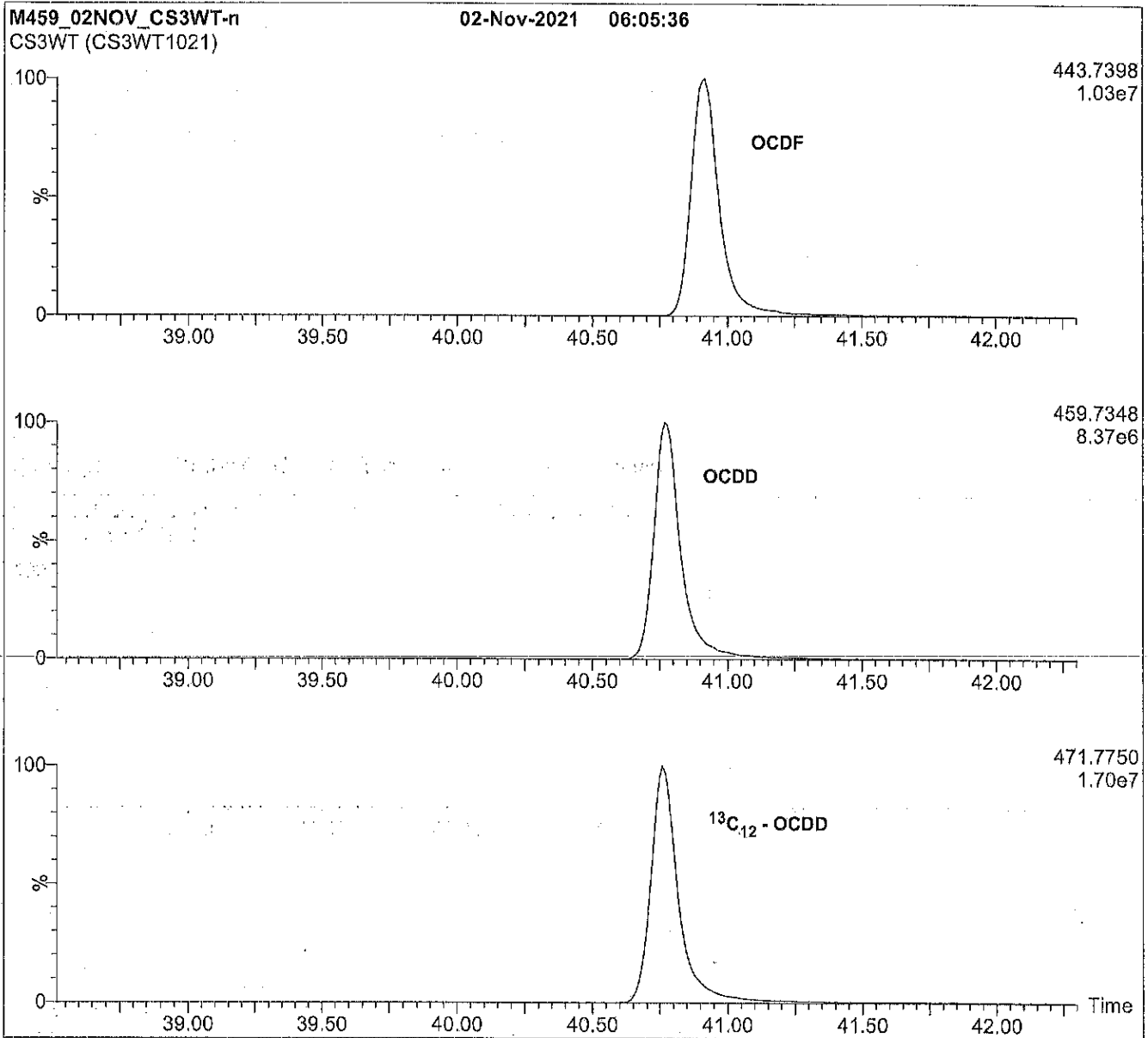


Figure 1: CS3WT; HRGC/HRMS Data (60 m DB-5 Column)



Conditions for Figure 1:

Agilent 6890N HRGC
Autospec Ultima HRMS

Chromatographic Conditions:

Column: 60 m DB-5 (0.25 mm id, 0.25 μm film thickness) Agilent J&W

Flow: Constant at 1.4 mL/min
Injector: 280°C (Splitless Injection)

Ionization: EI+
Detector: 280°C

SIR at 10,000 mass resolving power

Oven: 150°C (1 min)
12°C/min to 200°C
3°C/min to 235°C
235°C (8 min)
8°C/min to 310°C
310°C (8 min)



EPA-1613LCS

U.S. EPA Method 1613
Labelled Compound Stock Solution

PRODUCT CODE: EPA-1613LCS
LOT NUMBER: 13LCS1021
SOLVENT(S): Nonane/Toluene
DATE PREPARED: (mm/dd/yyyy) 10/29/2021
LAST TESTED: (mm/dd/yyyy) 10/31/2021
EXPIRY DATE: (mm/dd/yyyy) 10/31/2028
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

K 9985
JK Reed
10/27/22

DESCRIPTION:

EPA-1613LCS is a solution/mixture of mass-labelled ($^{13}\text{C}_{12}$) polychlorinated dibenzo-*p*-dioxins (PCDDs) and dibenzofurans (PCDFs). The components and their concentrations are given in Table A.

EPA-1613LCS was designed and prepared to be used according to U.S. EPA Method 1613, Revision B.

The individual ^{13}C -labelled PCDDs and PCDFs all have chemical purities of >98% and isotopic purities of $\geq 99\%$.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations
Figure 1: HRGC/HRMS Data (SIR; 10,000 mass resolving power)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).

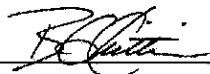


For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: EPA-1613LCS; Components and Concentrations (ng/mL, ± 5% in nonane/3.2% toluene)

Compound	Acronym	CAS #	Concentration (ng/mL)
Mass-Labelled PCDDs:			
2,3,7,8-Tetrachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -2,3,7,8-TCDD	76523-40-5	100
1,2,3,7,8-Pentachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,7,8-PeCDD	109719-79-1	100
1,2,3,4,7,8-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,4,7,8-HxCDD	109719-80-4	100
1,2,3,6,7,8-Hexachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,6,7,8-HxCDD	109719-81-5	100
1,2,3,4,6,7,8-Heptachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD	109719-83-7	100
Octachloro(¹³ C ₁₂)dibenzo- <i>p</i> -dioxin	¹³ C ₁₂ -OCDD	114423-97-1	200
Mass-Labelled PCDFs:			
2,3,7,8-Tetrachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -2,3,7,8-TCDF	89059-46-1	100
1,2,3,7,8-Pentachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,7,8-PeCDF	109719-77-9	100
2,3,4,7,8-Pentachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -2,3,4,7,8-PeCDF	116843-02-8	100
1,2,3,4,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,4,7,8-HxCDF	114423-98-2	100
1,2,3,6,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,6,7,8-HxCDF	116843-03-9	100
1,2,3,7,8,9-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	116843-04-0	100
2,3,4,6,7,8-Hexachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -2,3,4,6,7,8-HxCDF	116843-05-1	100
1,2,3,4,6,7,8-Heptachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF	109719-84-8	100
1,2,3,4,7,8,9-Heptachloro(¹³ C ₁₂)dibenzofuran	¹³ C ₁₂ -1,2,3,4,7,8,9-HpCDF	109719-94-0	100

Certified By:



B.G. Chittim, General Manager

Date: 11/05/2021

(mm/dd/yyyy)

Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

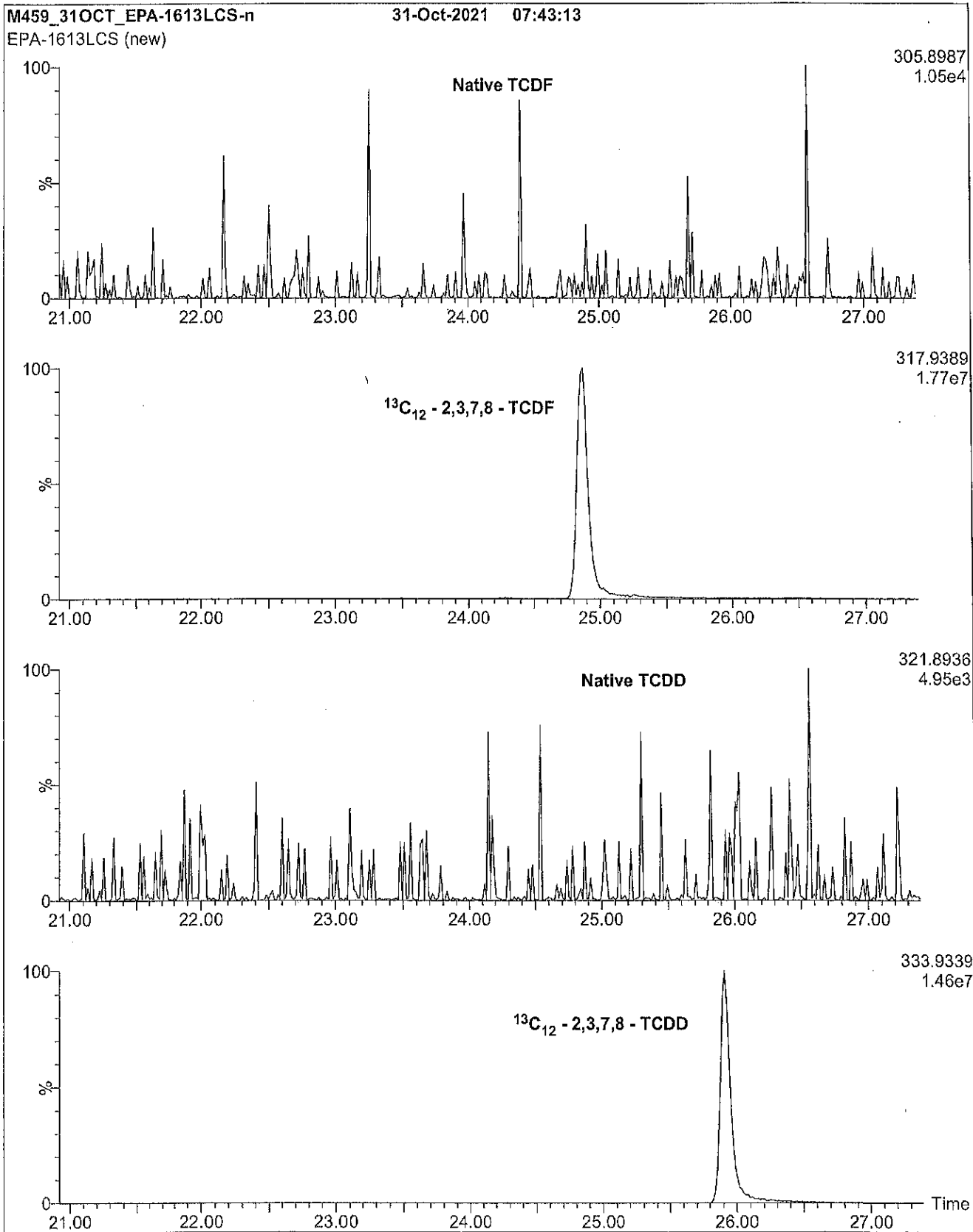


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

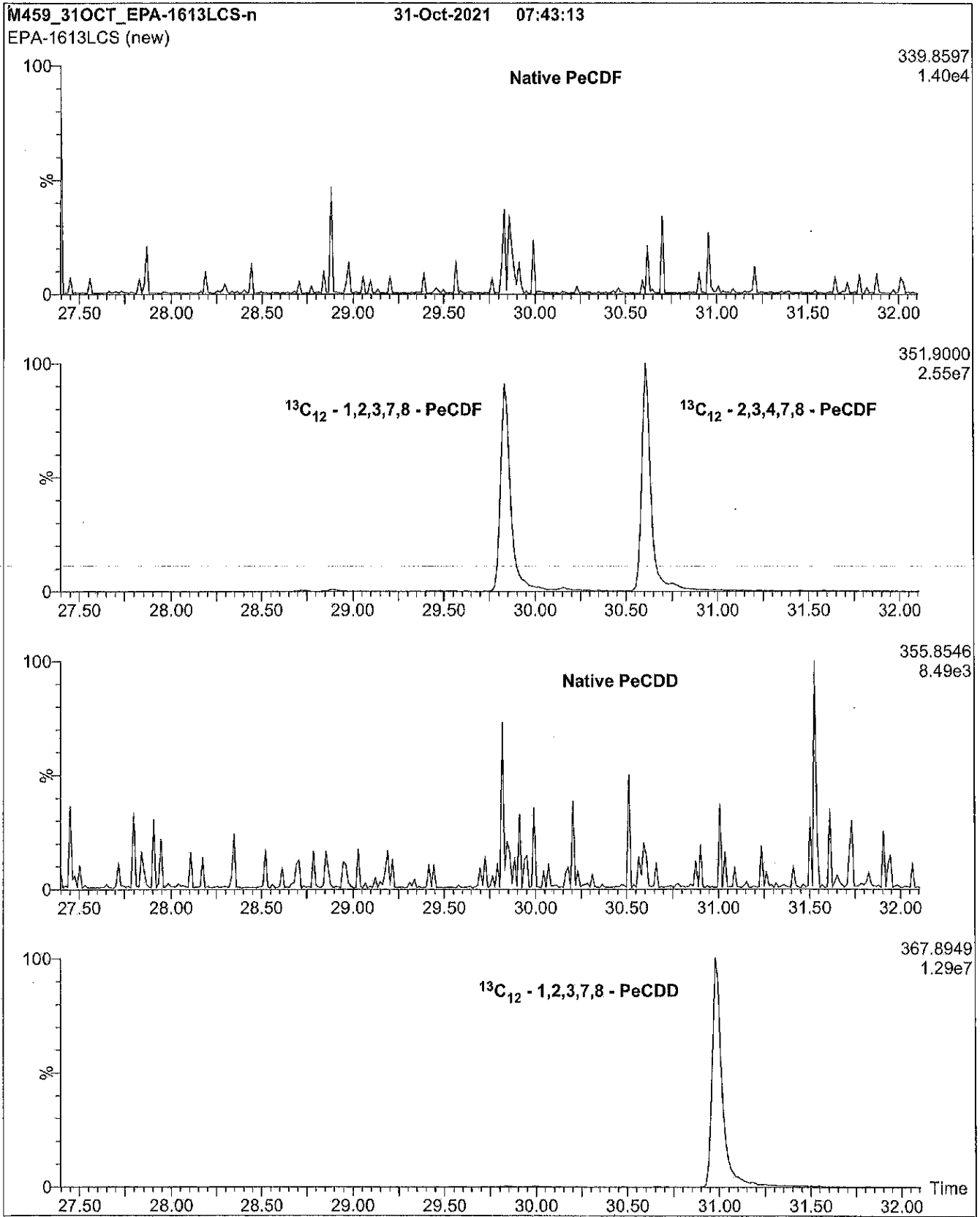


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

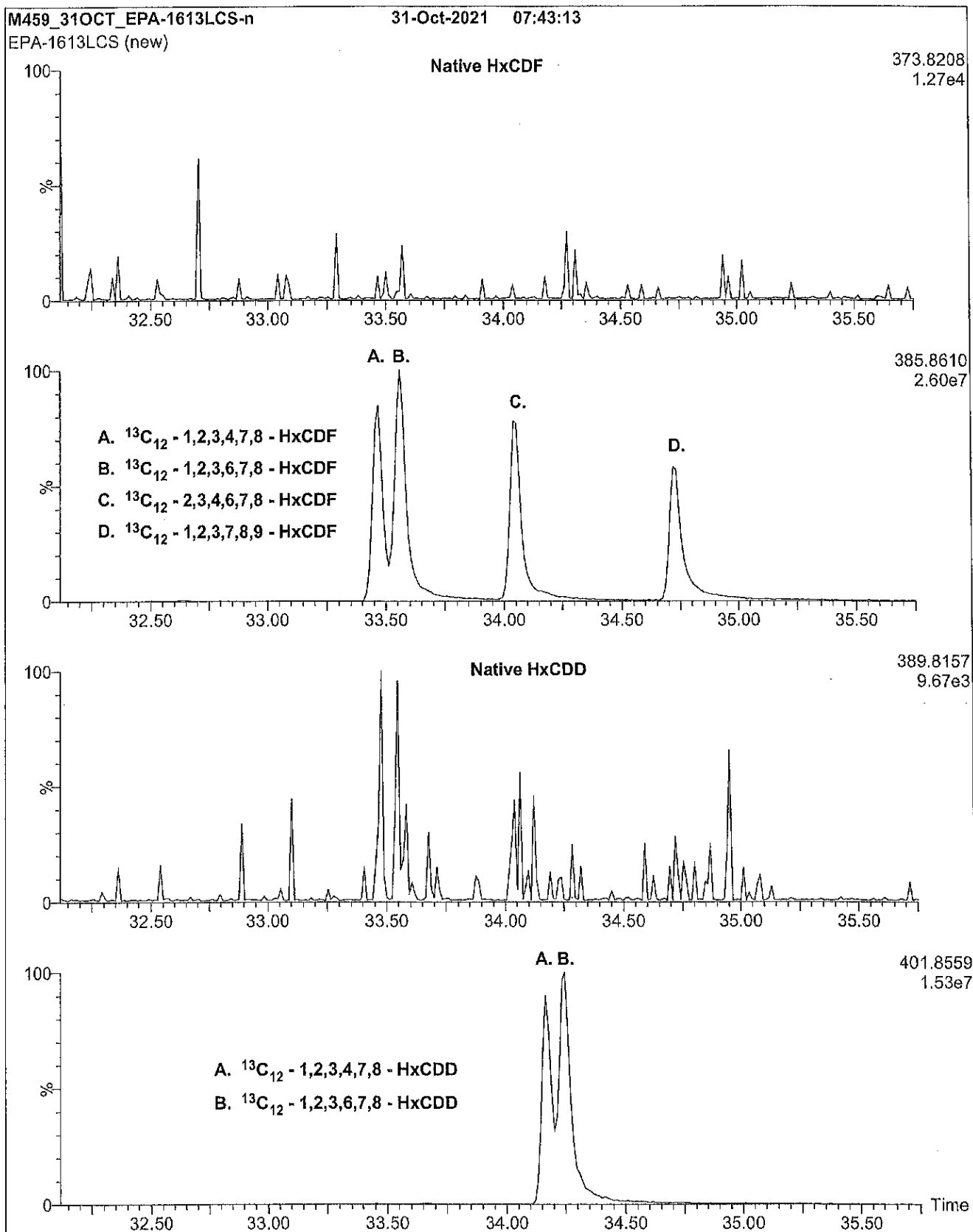


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)

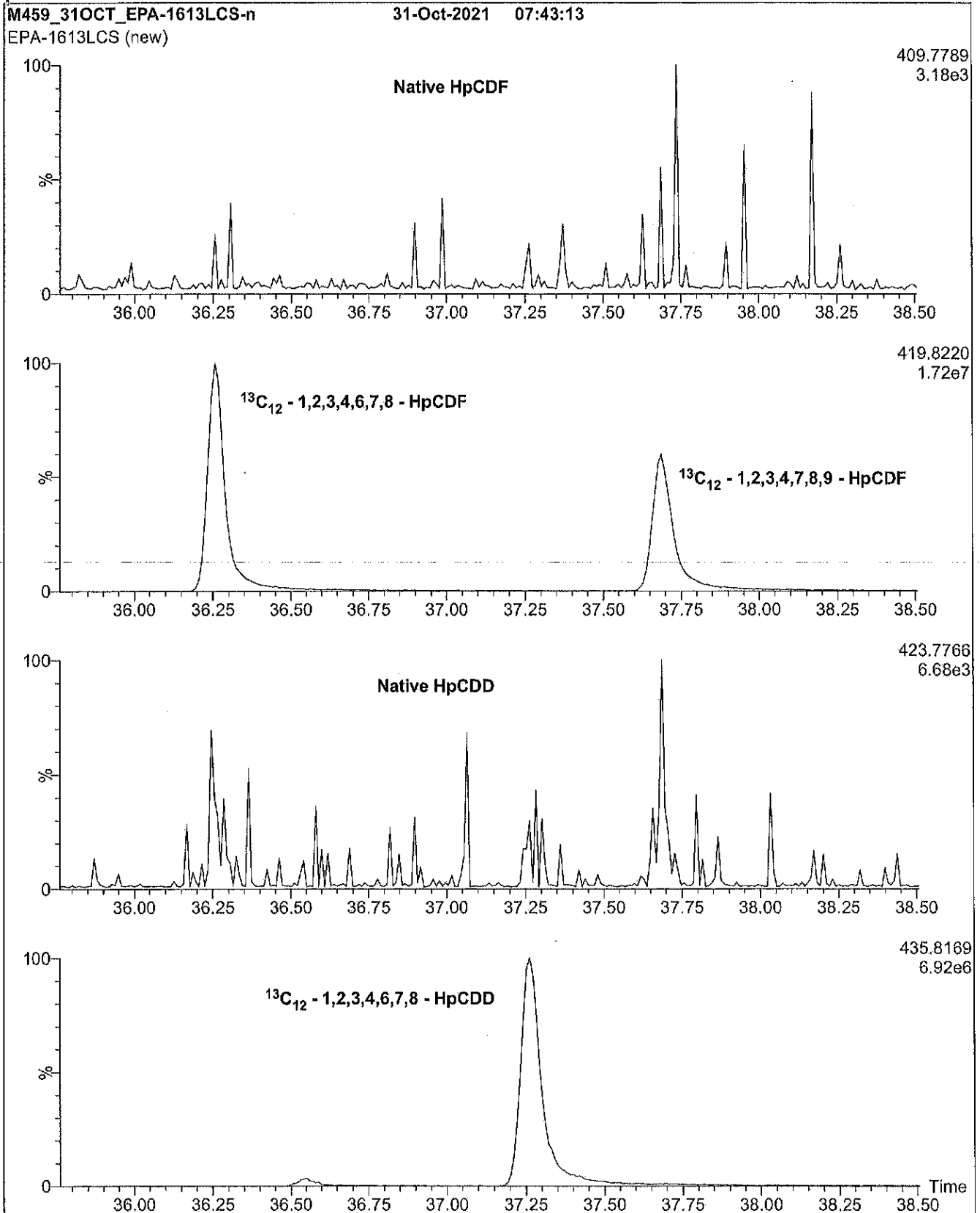
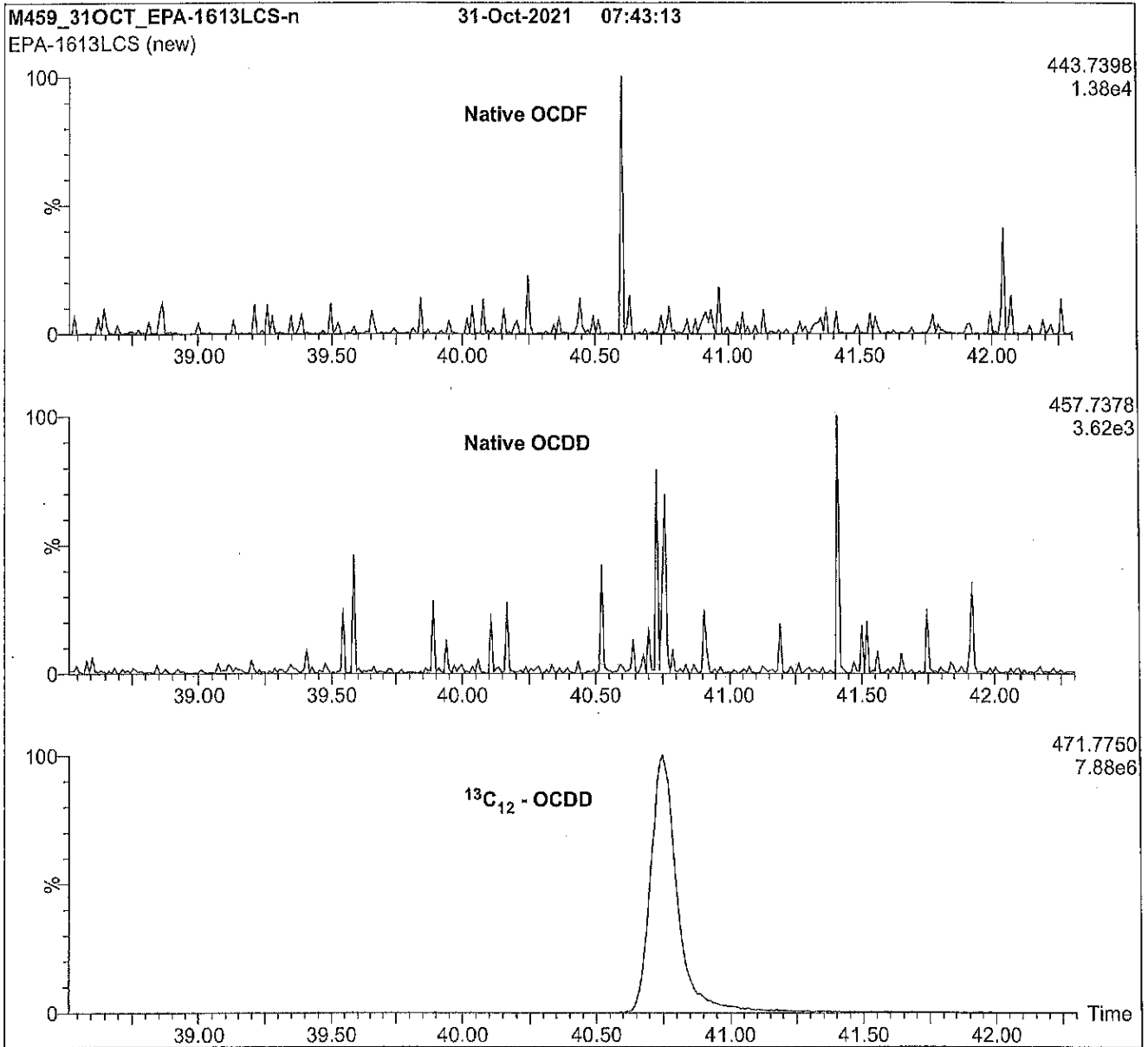


Figure 1: EPA-1613LCS; HRGC/HRMS Data (60 m DB-5 Column)



Conditions for Figure 1:

Agilent 6890N HRGC
 Autospec Ultima HRMS

Chromatographic Conditions:

Column:	60 m DB-5 (0.25 mm id, 0.25 μm film thickness) Agilent J&W	
Flow:	Constant at 1.4 mL/min	Oven: 150°C (1 min)
Injector:	280°C (Splitless Injection)	12°C/min to 200°C
Ionization:	Ei+	3°C/min to 235°C
Detector:	280°C	235°C (8 min)
	SIR at 10,000 mass resolving power	8°C/min to 310°C
		310°C (8 min)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15570

Order Number: CB014985

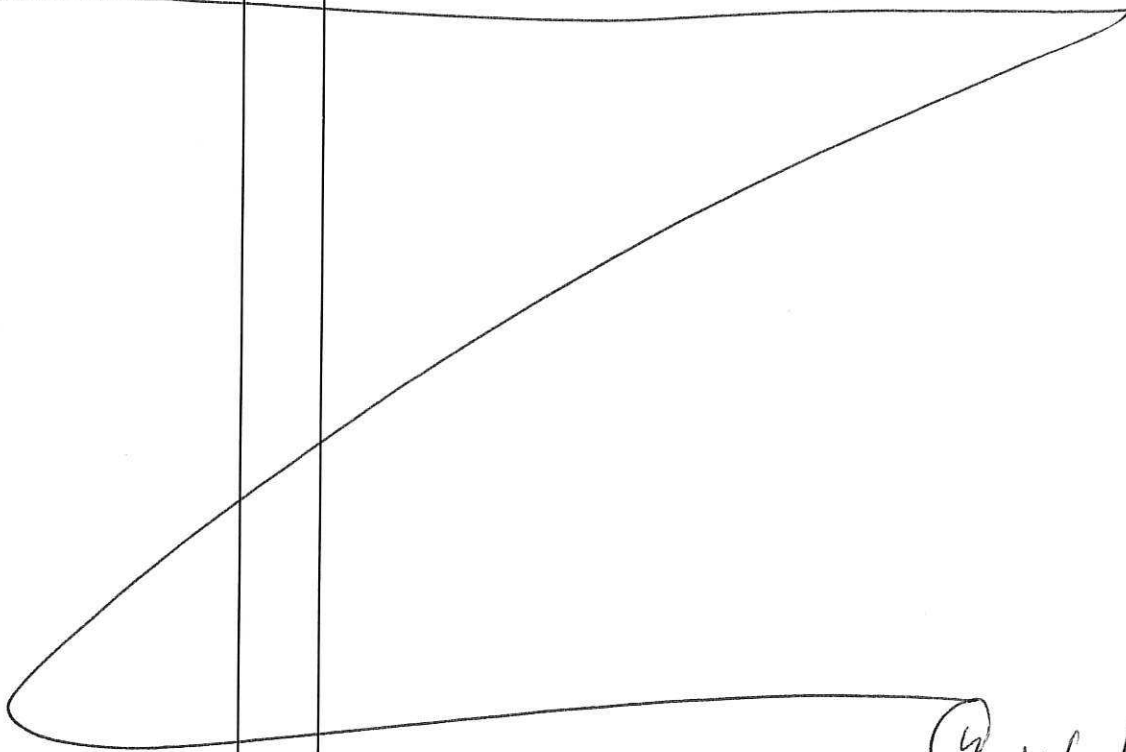
Date Shipped: 12/12/2022

AirBill No(s):


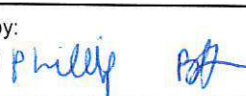
From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

519204142631

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
K011477 PSRM0168	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
K011478 PSRM0169	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
K011479 PSRM0171	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
				
<p>12/12/2022</p> <p>PUGET SOUND SRM FOR DUWAMISH AOC4 PROJECT.</p>				

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature) 	Date/Time (1400) 12/12/2022	Received by: (Signature) 	Date/Time 12/12/22 11:15
Custody Seal(s): <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time



Analytical Standard Record
Standard ID: L002084

Printed: 3/2/2023 8:59:18AM

Description:	Dioxin ISC Mix	Expires:	24-Feb-2024
Standard Type:	Other	Prepared:	24-Feb-2023
Solvent:	Nonane	Prepared By:	Peter Kepler
Final Volume (mls):	1	Department:	HRGCMS
Vials:	1	Last Edit:	24-Feb-2023 11:19 by PK
Vendor:	NA	Lot #:	1234
Vendor Catalog #:			

Comments

Stock: H9902: 2378-TCDF, 3467-TCDF, 2348-TCDF, 1278-TCDD, 2378-TCDD. each @ 1000 ng/mL

10 ul to 1 mL FV in Nonane. Final Conc = 10 ng/mL. Analytes and units not available in Element.

Analyte	CAS Number	Concentration	Units
2,3,7,8-TCDF	51207-31-9	10	ug/mL
2,3,7,8-TCDD	1746-01-6	10	ug/mL



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1028

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-01 D SDG: 23A0326
 Sampled: 01/16/23 15:17 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-085
 % Solids: 58.80 Preparation: SWN EPA 3050B Analyzed: 04/28/23 00:36
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.037 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.1	20	0.06	0.33	
7440-43-9	Cadmium	0.35	20	0.05	0.16	
7440-50-8	Copper	60.0	20	0.29	0.82	B
7440-66-6	Zinc	115	20	4.8	9.8	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1032

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-02 D SDG: 23A0326
 Sampled: 01/16/23 15:32 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-084
 % Solids: 54.85 Preparation: SWN EPA 3050B Analyzed: 04/28/23 00:31
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.075 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.8	20	0.06	0.34	
7440-43-9	Cadmium	0.36	20	0.05	0.17	
7440-50-8	Copper	65.7	20	0.30	0.85	B
7440-66-6	Zinc	120	20	5.0	10.2	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1170A

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-04 C SDG: 23A0326
 Sampled: 01/17/23 10:33 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-097
 % Solids: 52.70 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:32
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.059 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	12.9	20	0.07	0.36	
7440-43-9	Cadmium	0.33	20	0.05	0.18	
7440-50-8	Copper	54.0	20	0.31	0.90	B
7440-66-6	Zinc	110	20	5.2	10.8	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1169C

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-05 C SDG: 23A0326
 Sampled: 01/17/23 11:08 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-098
 % Solids: 54.90 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:36
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.058 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	13.7	20	0.07	0.34	
7440-43-9	Cadmium	0.61	20	0.05	0.17	
7440-50-8	Copper	63.7	20	0.30	0.86	B
7440-66-6	Zinc	181	20	5.0	10.3	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-IT1181

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-08 D SDG: 23A0326
 Sampled: 01/17/23 12:31 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-107
 % Solids: 76.00 Preparation: SWN EPA 3050B Analyzed: 04/28/23 02:19
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.042 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	6.14	20	0.05	0.25	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-IT1127

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-09 D SDG: 23A0326
 Sampled: 01/17/23 13:32 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-108
 % Solids: 59.97 Preparation: SWN EPA 3050B Analyzed: 04/28/23 02:23
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.036 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.1	20	0.06	0.32	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1161

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-10 D SDG: 23A0326
 Sampled: 01/17/23 14:18 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-099
 % Solids: 55.79 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:41
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.091 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.4	20	0.06	0.33	
7440-43-9	Cadmium	0.29	20	0.05	0.16	
7440-50-8	Copper	59.8	20	0.29	0.82	B
7440-66-6	Zinc	132	20	4.8	9.9	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1155

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-11 D SDG: 23A0326
 Sampled: 01/17/23 14:06 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-100
 % Solids: 53.96 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:45
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.025 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.6	20	0.07	0.36	
7440-43-9	Cadmium	0.31	20	0.05	0.18	
7440-50-8	Copper	55.6	20	0.31	0.90	B
7440-66-6	Zinc	119	20	5.3	10.8	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED
Total Metals

LDW23-SC1162B

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-12 D SDG: 23A0326
 Sampled: 01/17/23 14:37 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-101
 % Solids: 53.76 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:49
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.056 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	14.5	20	0.07	0.35	
7440-43-9	Cadmium	0.54	20	0.05	0.18	
7440-50-8	Copper	68.5	20	0.31	0.88	B
7440-66-6	Zinc	184	20	5.1	10.6	



PREPARATION BATCH SUMMARY
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLD0394

Batch Matrix: Solid

Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	04/17/23 16:50	
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	04/17/23 16:50	
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	04/17/23 16:50	
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	04/17/23 16:50	
LDW23-IT1181	23A0326-08	XDT_m1230427A-107	04/17/23 16:50	
LDW23-IT1127	23A0326-09	XDT_m1230427A-108	04/17/23 16:50	
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	04/17/23 16:50	
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	04/17/23 16:50	
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	04/17/23 16:50	
Blank	BLD0394-BLK1	XDT_m1230427A-069	04/14/23 16:50	
LCS	BLD0394-BS1	XDT_m1230427A-070	04/14/23 16:50	
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	04/14/23 16:50	
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	04/14/23 16:50	
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	04/14/23 16:50	



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: ATZ Date: 4/17/23 Time: 1220-1820 Balance ID: BAL10
Matrix: Soil Block ID: 10 Block Temp: 90 C Thermometer: 20.4

ARI Sample ID	Btl #	pH<2	Prep Code: <u>SUN</u>		Prep Code:		Comments
			Initial Wt (g) Vol (mL)	Final Vol (mL)	Initial Wt (g) Vol (mL)	Final Vol (mL)	
<u>23A326-01</u>	<u>D</u>	|	<u>1.037</u>	<u>50</u>			
<u>-02</u>	<u>↓</u>	|	<u>1.075</u>	|			
<u>-04</u>	<u>C</u>	|	<u>1.059</u>	|			
<u>-05</u>	<u>↓</u>	|	<u>1.058</u>	|			
<u>-08</u>	<u>D</u>	|	<u>1.042</u>	|			
<u>-09</u>	|	|	<u>1.036</u>	|			
<u>-10</u>	|	|	<u>1.091</u>	|			
<u>-11</u>	|	|	<u>1.025</u>	|			
<u>↓ -12</u>	|	|	<u>1.056</u>	|			
<u>23A418-01</u>	|	|	<u>1.001</u>	|			
<u>-02</u>	|	|	<u>1.080</u>	|			
<u>-04</u>	|	|	<u>1.010</u>	|			
<u>-05</u>	|	|	<u>1.047</u>	|			
<u>-06</u>	|	|	<u>1.035</u>	|			
<u>-07</u>	|	|	<u>1.073</u>	|			
<u>-08</u>	|	|	<u>1.057</u>	|			
<u>-09</u>	|	|	<u>1.037</u>	|			
<u>-10</u>	|	|	<u>1.074</u>	|			
<u>-11</u>	|	|	<u>1.051</u>	|			
<u>↓ -12</u>	<u>↓</u>	|	<u>1.001</u>	|			
<u>BLD394-blk</u>	<u>-</u>	|	<u>-</u>	|			<u>23A326-01</u>
<u>-bs</u>	<u>-</u>	|	<u>-</u>	|			|
<u>-dup</u>	<u>-</u>	|	<u>1.038</u>	|			|
<u>-ms</u>	<u>-</u>	|	<u>1.033</u>	|			|
<u>↓ -MSD</u>	<u>-</u>	|	<u>1.034</u>	<u>↓</u>			<u>↓</u>

Chemical/Reagent ID:

HNO₃: L2478 1:1 HNO₃: L3305 HCl: ~~L7948~~ H₂O₂: K11056

Tube Lot#: 221017 Boiling Chip Lot#: - (DoD Only)



Form I
METHOD BLANK DATA SHEET
EPA 6020B UCT-KED
Total Metals

Blank

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLD0394

Laboratory ID: BLD0394-BLK1

Prepared: 04/14/23 16:50

Matrix: Solid

Preparation: SWN EPA 3050B

Analyzed: 04/27/23 23:22

Sequence: SLD0418

Calibration: GD00078

Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	0.29	20	0.17	0.50	J
7440-66-6	Zinc-66	ND	20	2.9	6.0	U



LCS / LCS DUPLICATE RECOVERY
EPA 6020B UCT-KED
Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/27/23 23:27</u>
Batch:	<u>BLD0394</u>	Laboratory ID:	<u>BLD0394-BS1</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>1 g / 50 mL</u>		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	23.5		94.0	80 - 120
Cadmium-111	25.0	26.6		106	80 - 120
Copper-63	25.0	26.3	B	105	80 - 120
Zinc-66	80.0	77.5		96.9	80 - 120

* Indicates values outside of QC limits



DUPLICATES
EPA 6020B UCT-KED
Total Metals

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLD0394-DUP1

Batch: BLD0394

Lab Source ID: 23A0326-01

Preparation: SWN EPA 3050B

Initial/Final: 1.038 g / 50 mL

Source Sample Name: LDW23-SC1028

% Solids: 58.80

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Arsenic-75a	20	10.1	11.0	8.33	
Cadmium-111	20	0.35	0.34	4.86	
Copper-63	20	60.0	64.3	7.03	
Zinc-66	20	115	118	2.58	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD



MS / MS DUPLICATE RECOVERY
EPA 6020B UCT-KED
Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/28/23 00:45</u>
Batch:	<u>BLD0394</u>	Laboratory ID:	<u>BLD0394-MS1</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>1.033 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Arsenic-75a	41.2	10.1		51.2		99.6	75 - 125
Cadmium-111	41.2	0.35		43.3		104	75 - 125
Copper-63	41.2	60.0	B	104	B	108	75 - 125
Zinc-66	132	115		244		97.8	75 - 125

* Values outside of QC limits



MS / MS DUPLICATE RECOVERY
EPA 6020B UCT-KED
Total Metals

Laboratory: <u>Analytical Resources, LLC</u>	SDG: <u>23A0326</u>
Client: <u>Anchor QEA, LLC</u>	Project: <u>AOC5 MR Phase 1</u>
Matrix: <u>Solid</u>	Analyzed: <u>04/28/23 00:49</u>
Batch: <u>BLD0394</u>	Laboratory ID: <u>BLD0394-MSD1</u>
Preparation: <u>SWN EPA 3050B</u>	Sequence Name: <u>Matrix Spike Dup</u>
Initial/Final: <u>1.034 g / 50 mL</u>	Source Sample: <u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Arsenic-75a	41.1	51.5		101	0.756	20	75 - 125
Cadmium-111	41.1	42.8		103	1.15	20	75 - 125
Copper-63	41.1	107	B	114	2.40	20	75 - 125
Zinc-66	132	252		104	2.99	20	75 - 125

* Values outside of QC limits



INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00078

Instrument: ICPMS1

Calibration Date: 04/27/2023 16:58

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	20680	10	20613.2	20	20394.2	50	19514.82	100	18973.35
Chromium-52	0	0	0.5	60058	10	22971.9	20	20912.25	50	20531.68	100	19711.23
Chromium-53	0	0	0.5	2774	10	2415.2	20	2388.25	50	2328.72	100	2311.61
Lead-208	0	0	0.1	88180	10	83830.4	20	82680.5	50	81699.76	100	78746.71



INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC

Instrument: ICPMS1

Calibration: GD00078

Calibration Date: 4/27/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	16695.93	49.2	0.9997		0.998	
Chromium-52	24030.84	81.5	0.9997		0.998	
Chromium-53	2036.297	49.7	1.0000		0.998	
Lead-208	69189.56	49.2	0.9996		0.998	



INITIAL CALIBRATION DATA
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00078

Instrument: ICPMS1

Calibration Date: 04/27/2023 16:58

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	365	10	312.7	20	314.3	50	308.26	100	305.08
Cadmium-111	0	0	0.1	380	10	339.5	20	337.4	50	329.12	100	313.93
Cadmium-114	0	0	0.1	900	10	860.3	20	868.9	50	848.76	100	828.31
Copper-63	0	0	0.5	4880	10	4738.3	20	4592.95	50	4511.9	100	4380.14
Copper-65	0	0	0.5	2596	10	2314.1	20	2327.65	50	2321.52	100	2196.8
Zinc-66	0	0	6	644.1667	10	621.3	20	609.5	50	589.24	100	564.98
Zinc-67	0	0	6	99.5	10	99.1	20	102.2	50	98.12	100	94.98



INITIAL CALIBRATION DATA
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Calibration: GD00078

Instrument: ICPMS1
Calibration Date: 4/27/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	267.5567	49.7	1.0000		0.998	
Cadmium-111	283.325	49.6	0.9994		0.998	
Cadmium-114	717.7117	49.1	0.9998		0.998	
Copper-63	3850.548	49.2	0.9997		0.998	
Copper-65	1959.345	49.4	0.9992		0.998	
Zinc-66	504.8644	49.3	0.9996		0.998	
Zinc-67	82.31667	49.1	0.9996		0.998	



Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: ms Sequence: SLOφ418 Cal: G0φφφ78

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L4687		
		-CAL2	L4627		
		-CAL3	L4628		
		-CAL4	L4629		
		-CAL5	L4624		
		-CAL6	L463φ		
		-IBL1	—		
	✓	-ICV1	—		Std mode noisy
		-ICV1	L3575		
		-ICB1	L4687		
		-CCV1	L4624		
		-CCB1	L4687		
	✓	-CRL1	⊥		Pb↑
	↓	-CRL1	⊥		Cr↑ / Repoured
		-CAL1	⊥		↓ / New Tube
	✓	-CAL1	⊥		
		-CCV2			Std. mode noisy - %R analytes OK
		-CCB2			
		-CRL1	L4627		
	✓	-IFA1	—		Cr ⁵³ ↑ / Ni ⁶⁰ noisy
		-IFB1	L4689		↓
		-HCV1	L3671		Mo, Tl↑ - Mo, Tl < 100
		-HCV2	L3672		Tl, Pb↑ - Pb < 200
	✓	-IBL2	—		(Sb↑)



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. MS 4/27/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IFAI	L4688		Cr ⁵³ ↑
		↓ -IBL3	—		
		↓ -CCV3			
		↓ -CCB3			
		BLDΦ232-BLK2	REN		Ag, Cd, Ni, RSB only
		↓ -BS2	↓		↓
		BLDΦ717-BLK2			Ag, Mn only
		↓ -BS2	↓		↓
		230Φ576-Φ1	↓	10	Mn only
		23CΦ673-Φ1	SWN	50	Cr only
		23CΦ658-Φ2	REN	5	Ba only
		↓ -Φ4	↓	↓	↓
		23CΦ735-Φ1	↓	10	↓ +Tl
		SEQ-IBL4			
		↓ -CCV4			
		↓ -CCB4			
	✓	C93-1 BOTTLE TEST			
	✓	C93-2 BOTTLE TEST			
	✓	23CΦ678-Φ8	REN		Tl only
	✓	↓ -Φ9	↓		↓
	✓	23CΦ732-Φ1	↓		
	✓	23CΦ741-Φ1	↓		Sc↑ - Mat needed
		23CΦ699-Φ2	↓		Mo only
		SEQ-IBL5			



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MJ Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCV5			Tl ↑
		↓ -CCB5			
	✓	↓ -CAL1			Ba, Mn, Mo, Sb, Se, Tl Removed
		↓ -CCV6			
		↓ ✓ -CCB6			
		23AΦ295-Φ8	SWN	20	
		23CΦ774-Φ2	↓	↓	Sc ↑ / In noisy %R + Analytes OK Cr NR
		↓ -Φ3	↓	↓	↓
		↓ -Φ4	↓	↓	↓
		↓ -Φ1	↓	↓	↓ / In noisy %R + Analytes OK / Match Dup
		BLOΦ365-DPI	↓	↓	↓
		↓ -MS1	↓	↓	Sc, In, Tb st. noisy %R + Analytes OK
		↓ -MSD1	↓	↓	Sc ↑ / Ag %R ↓
		↓ -PS1	↓	↓	60.22 / K7409 / Sc ↑
		SEQ-IBL7			
		↓ -CCV7			
		↓ -CCB7			
		BLOΦ394-BUK1	SWN	20	Cr %R - Samples > 10x cond.
		↓ -BS1	↓	↓	
		23CΦ774-Φ5	↓	↓	Sc ↑ Cr NR
		↓ -Φ6	↓	↓	↓
		↓ -Φ7	↓	↓	↓
		↓ -Φ8	↓	↓	↓
		↓ -Φ9	↓	↓	↓



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦ774-1Φ	SWN	20	Tb st. noisy - %R + Analytes OK
		↓ -11	↓	↓	Sc↑ Cr NR
		SEQ-IBL8			
		↓ -CCV8			
		↓ -CCB8			
		23CΦ774-12	SWN	20	Sc↑ Cr NR
		↓ -13	↓	↓	↓
		↓ -14	↓	↓	
		23AΦ326-Φ2			Sc↑ Cr NR
		↓ -Φ1			↓
		BLDΦ394-DUPI			
		↓ -MSI			
		↓ -MSO1			
		↓ -PSI	↓	↓	
		SEQ-IBL9			
		↓ -CCV9			
		↓ -CCB9			
		BLDΦ659-BLK1	REN		
		↓ -BS1	↓		
		BLDΦ754-BLK1			
		↓ -BS1	↓		Sc, In, Tb noisy - %R + Analytes OK
		23AΦ326-Φ4	SWN	20	Sc↑ Cr NR
		↓ -Φ5	↓	↓	↓
32A → 23A		↓ -1Φ	↓	↓	



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ326-11	SWN	20	Se↑ C-NR
		↓ -12	↓	↓	↓
		SEQ-IBLA			
		↓ -CCVA			
		↓ -CCBA			
		BLOΦ4ΦZ-BLK1	REN		
		↓ -BS1	↓		
		23AΦ326-Φ8	SWN	20	
		↓ -Φ9			
		23AΦ418-Φ1			
		↓ -Φ2			
		↓ -Φ4			
		↓ -Φ5			
		↓ -Φ6			
		SEQ-IBLB			
		↓ -CCVB			
		↓ -CCBB			
	✓	↓ -CAL1			
		↓ -CCVC			
		↓ -CCBC			
		230Φ124-Φ2	REN	5	Zn only
		BLOΦ51Φ-DUPZ	↓	↓	↓
		↓ -MS2	↓	↓	Zn%.R↑(126%)
		23AΦ418-Φ7	SWN	20	



Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23AΦ418-Φ8	SWN	20	ScI ⁺ Not Needed
		↓ -Φ9	↓	↓	
		↓ -1Φ	↓	↓	
		↓ -11	↓	↓	
		↓ -12	↓	↓	
		SEQ-IBLD			
		↓ -CCVD			
		↓ -CCBD			
		230ΦΦ76-ΦIRE1	REN		Pb only
		230ΦΦΦ4-Φ2	↓		
		↓ -Φ4	↓		
		230ΦΦΦ3-Φ4	↓		
		↓ -Φ6	↓		
		↓ -Φ8	↓		
		↓ -Φ2	↓		
		BLOΦ4Φ2-DUP1	↓		
		↓ -MS1	↓		
		SEQ-IBLE			
		↓ -CCVE			
		↓ -CCBE			
		230ΦΦΦ5-Φ2	REN		
		↓ -Φ4	↓		
		230ΦΦΦ6-Φ3	↓		
		↓ -Φ4	↓		



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		2300020-02	REN		
		2300162-02			
		↓ -94			
		↓ -06			
		2300182-01	↓	20	
		SEQ-IBLF			(Cr53↑/Sc,In,Tb noisy)
		↓ -CCVF			
		↓ -CCBF			
		2300135-04	REN		
		↓ -06			Pbst noisy - %R + Analytes OK
		↓ -08			
		↓ -10			
		↓ -12			
		↓ -14			
		↓ -16			
		2300170-02			
		↓ -04			
		SEQ-IBLG			
		↓ -CCVG			
		↓ -CCBG			
	✓	↓ -CALI			
		↓ -CCVH			
		↓ -CCBH			
		2300081-04REI	REN		Pb only



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted. MS 4/27/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230ΦΦ89-Φ1RE1	REN		Pb only
		230ΦΦ62-Φ1RE1	↓		↓
		-Φ5RE1	↓		↓
		-Φ7RE1	↓		↓
		-Φ3RE1	↓		↑/↓
		BLDΦ754-DUP1			No Cu, Ni, Zn
		-MS1	↓		↓
		-MS01	↓		↓
		SEQ, IBLI			
		-CCVI			Ge noisy / Ag, Cu, Ni, Zn ↑
		-CCBI			
✓		230Φ133-Φ1	REN		Zn ↑
✓		-Φ2	↓		
✓		-Φ3	↓		
		230Φ135-Φ2			Sc ↑ - Not needed Cd only
		BLDΦ5Φ9-DUP1			↓ ↓ ↓
		-MS1			
		230Φ262-Φ1			Ag, Cd, Cr only
		BLDΦ717-DUP1			↓
		-MS1	↓		↓
		SEQ-IBLJ			
		-CCVJ			Pb ↑
		-CCBJ			
		230Φ2Φ6-Φ1	REN		



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230φ2φ6-φ3	REN		
		↓ -φ5	↓	2	
		230φ2φ5-φ1			
		↓ -φ3			
		↓ -φ5			
		230φ2φ2-φ1			No Pb
		BLOφ659-DUP1			↓
		↓ -MS1	↓		
		SEQ-IBLK			
		↓ -CCVK			
		↓ -CCBK			
		230φ151-φ1	REN		
		230φ211-φ1	↓		No Pb
		↓ -φ2			↓
		230φ214-φ1			
		↓ -φ2			
		230φ216-φ1			
		↓ -φ2			
		↓ -φ3			
		↓ -φ4	↓		
		SEQ-IBLL			
		↓ -CCVL			Pb↑
		↓ -CCBL			
		230φ215-φ1	REN	2	No Cu, Pb



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MS Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	2300248-01	REN		As↑↑
		SEQ-IBLM			(As↑)
REI		2300654-01REI	REN	10,000	Ni, Zn only
		↓ -01	↓	100	Ni, Zn↑
		SEQ-IBLN+0			Mi, Zn NR, No Cu, Pb
	✓	BLO0394-BLK2	SWN	20	Cu > 1/2 RL
		SEQ-CCVM			Cu ⁶³ , Pb↑
		↓ -CCBM			
	✓	↓ -CALI			All but Cr Removed
		↓ -CCVN			
		↓ -CCBN			
		2300774-02REI	SWN	50	Cr only
		↓ -03REI	↓	↓	↓
		↓ -04REI	↓	↓	↓
		↓ -05REI	↓	↓	↓
		↓ -06REI	↓	↓	↓
	✓	↓ -01REI	↓	↓	Sc↑
		BLO0365-DUP2			
		↓ -MS2	↓	↓	↓
		↓ -MS02	↓	↓	Sc↑
	✓	↓ -PS2	↓	↓	60 mL K7409 ↓
		SEQ-CCVO			
		↓ -CCB0			
	✓	↓ -CCVP			



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	SEQ-CAL1			
		↓ -CCVP			
		↓ -CCBP			
C [→] A		23AΦ326-Φ2RE1	SWN	50	Cr only
↓		↓ -Φ4RE1	↓	↓	↓
		↓ -Φ5RE1			
		↓ -11RE1			
		↓ -12RE1			
↓		↓ -Φ1RE1			
		BLDΦ394-DUP2			
		↓ -MS2			
		↓ -MSD2			
		↓ -PS2	↓	↓	60μL K7409
		SEQ-CCVQ			
		↓ -CCBQ			
		23CΦ774-Φ7RE1	SWN	50	Cr only
		↓ -Φ8RE1	↓	↓	↓
		↓ -Φ9RE1			
		↓ -11RE1			
		↓ -12RE1			
		↓ -13RE1		↓	
		↓ -Φ1RE1		100	
		BLDΦ365-DUP2			
		↓ -MS2	↓	↓	↓



ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 4/27/23 Analyst: MB Sequence: _____ Cal: _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLOP365-MSO2	SWN	100	Cr only
		SEQ-CCVR			
		↓ -CCBR			
		Rinse/DI			
MB 4/27/23					

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, April 27, 2023 12:24:31

Sample Description:

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth

Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.053

MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		6556.9		6556.905		99.581		1.5	Standard	
In	114.9		83277.2		-433581.303		983.057		0.2	Standard	
U	238.1		93754.7		93754.664		1793.744		1.9	Standard	
[	CeO	155.9		2845.6		0.023		0.000		1.8	Standard
|>	Ce	139.9		124548.5		124548.507		1542.105		1.2	Standard
[	Ce++	70.0		1081.4		0.009		0.000		3.7	Standard
	Bkgd	220.0		4.9		4.900		1.283		26.2	Standard

Current Conditions File Data

Current Value	Description
0.93	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
950.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.93	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, April 27, 2023 12:26:35

Page 1

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, April 27, 2023 12:33:52

Sample Description:

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth

Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.059

MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		6198.2		6198.211		96.905		1.6	Standard	
In	114.9		84308.5		84308.480		1123.207		1.3	Standard	
U	238.1		91250.0		91249.955		1383.393		1.5	Standard	
[	CeO	155.9		2976.7		0.025		0.000		1.2	Standard
|>	Ce	139.9		120320.3		120320.269		1090.071		0.9	Standard
[	Ce++	70.0		1004.0		0.008		0.000		2.0	Standard
	Bkgd	220.0		1.7		1.700		0.558		32.8	Standard

Current Conditions File Data

Current Value	Description
0.93	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
950.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.93	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, April 27, 2023 12:35:56

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 4/27/2023 12:24:29 PM

End Time: 4/27/2023 12:35:57 PM

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 6556.90

Obtained Intensity (In 115): 83277.18

Obtained Intensity (U 238): 93754.66

Obtained Intensity (Bkgd 220): 4.90

Obtained Formula (Ce++ 70 / Ce 140): 0.009 (=1081.37 / 124548.51)

Obtained Formula (CeO 156 / Ce 140): 0.023 (=2845.55 / 124548.51)

Obtained RSD (Be 9): 0.0152

Obtained RSD (In 115): 0.0023

Obtained RSD (U 238): 0.0191

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.99 mm	0.55 mm	111257.56

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.93

Obtained Intensity (In 115): 81526.97

Obtained Formula (CeO 156 / Ce 140): 0.0245 (=2959.31 / 120619.07)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.724)

Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.686)

Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.691)

Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.673)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.993; Intercept = -15.46

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.991; Intercept = -14.25

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 6198.21

Obtained Intensity (In 115): 84308.48

Obtained Intensity (U 238): 91249.95

Obtained Intensity (Bkgd 220): 1.70

Obtained Formula (Ce++ 70 / Ce 140): 0.008 (=1004.04 / 120320.27)

Obtained Formula (CeO 156 / Ce 140): 0.025 (=2976.71 / 120320.27)

Obtained RSD (Be 9): 0.0156

Obtained RSD (In 115): 0.0133

Obtained RSD (U 238): 0.0152

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 4/27/2023 12:24:29 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 6556.90
Obtained Intensity (In 115): 83277.18
Obtained Intensity (U 238): 93754.66
Obtained Intensity (Bkgd 220): 4.90
Obtained Formula (Ce++ 70 / Ce 140): 0.009 (=1081.37 / 124548.51)
Obtained Formula (CeO 156 / Ce 140): 0.023 (=2845.55 / 124548.51)
Obtained RSD (Be 9): 0.0152
Obtained RSD (In 115): 0.0023
Obtained RSD (U 238): 0.0191

[Passed] Optimum value(s): N/A

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.
Intensity Criterion: In 115 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	0.99 mm	0.55 mm	111257.56

Nebulizer Gas Flow STD/KED [NEB]

Optimization Settings:

Method: Optimize.mth.
Initial Try - Start/End/Step: 0.89/0.96/0.01.
Intensity Criterion: In 115 Maximum
Formula Criterion: CeO 156 / Ce 140 <= 0.025

Optimization Results:

Initial Try

Obtained Intensity (In 115): 81526.97
Obtained Formula (CeO 156 / Ce 140): 0.0245 (=2959.31 / 120619.07)

[Passed] Optimum value(s): 0.93

Mass Calibration and Resolution

Optimization Settings:

Method: Tuning.mth.
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:

Initial Try

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.724)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.686)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.691)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.673)

[Passed] Optimum value(s): N/A

QID STD/DRC

Optimization Settings:

Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.993; Intercept = -15.46

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-15.5	36542.7
Mg	24	41	-15.5	45400
In	115	41	-11.5	84489.1
Ce	140	41	-11.5	129403
Pb	208	41	-11.5	56925.2
U	238	41	-11.5	92816.5

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.991; Intercept = -14.25

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-14.5	24008.2
Mg	24	41	-14.5	53700.7
In	115	41	-12.5	119671
Ce	140	41	-11	114570
Pb	208	41	-10	52030.6
U	238	41	-10	118231

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000

Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 6198.21
Obtained Intensity (In 115): 84308.48
Obtained Intensity (U 238): 91249.95
Obtained Intensity (Bkgd 220): 1.70
Obtained Formula (Ce++ 70 / Ce 140): 0.008 (=1004.04 / 120320.27)
Obtained Formula (CeO 156 / Ce 140): 0.025 (=2976.71 / 120320.27)
Obtained RSD (Be 9): 0.0156
Obtained RSD (In 115): 0.0133
Obtained RSD (U 238): 0.0152

[Passed] Optimum value(s): N/A

End Time: 4/27/2023 12:35:57 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 4/27/2023 12:43:09 PM

End Time: 4/27/2023 12:44:48 PM

Detector Voltages - [Passed]

Pulse Stage Voltage - [Passed] Optimum value(s): 1000

Analog Stage Voltage - [Passed] Optimum value(s): -1600

Pulse Stage Voltage (Fine-tune) - [Passed] Optimum value(s): 1000

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 4/27/2023 12:43:09 PM

Detector Voltages

Pulse Stage Voltage Optimization Settings:

Method: Pulse Stage Optimization.mth.

Initial Try - Start/End/Step: 800/1300/50.

Retry 1 - Start/End/Step: 800/1800/50.

Optimization Criterion (Pulse 76): 0.1

Analog Stage Voltage Optimization Settings:

Method: Analog Stage Optimization.mth.

Initial Try - Start/End: -1300/-1900.

Retry 1 - Start/End: -1300/-2400.

Optimization Criterion (Analog 80): Target Gain 10000

Pulse Stage Voltage Results:

Initial Try

Intensity Obtained For Criterion (Pulse 76): 59924.42

[Passed] Optimum value(s): 1000

Analog Stage Voltage Results:

Initial Try

Interim Gain values: 9489.64 (-1600V)

Analyte: Analog 80

ACEM(volts): -1600

Achieved Gain: 9489.64

Achieved NMax: 1.31929e+009

Conversion Factor: 0.0970217

Passes: 1

Points Collected: 31

Points Used: 3

Coefficient: 1

[Passed] Optimum value(s): -1600

Pulse Stage Voltage (Fine-tune) Results:

Initial Try

Intensity Obtained For Criterion (Pulse 76): 60819.19

[Passed] Optimum value(s): 1000

End Time: 4/27/2023 12:44:48 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 4/27/2023 12:51:27 PM

End Time: 4/27/2023 12:58:56 PM

Dual Detector Calibration

Points Collected: 401

Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 4/27/2023 12:51:27 PM

Dual Detector Calibration

Optimization Settings:

Method: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\DualDetectorNew.mth.

Initial Try - Start/End/Step: -20/0/0.05.

Optimization Results:

Initial Try

Points Collected: 401

Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

End Time: 4/27/2023 12:58:56 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 4/27/2023 12:59:37 PM

End Time: 4/27/2023 1:07:07 PM

Dual Detector Calibration

Points Collected: 401

Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 4/27/2023 12:59:37 PM

Dual Detector Calibration

Optimization Settings:

Method: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\DualDetectorNew.mth.

Initial Try - Start/End/Step: -20/0/0.05.

Optimization Results:

Initial Try

Points Collected: 401

Calibration unsuccessful for some masses due to insufficient pulse/analog crossover points

End Time: 4/27/2023 1:07:07 PM

Performance Check Report

Sample ID: STD Performance Check

Sample Date/Time: Thursday, April 27, 2023 13:24:10

Sample Description:

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth

Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.069

MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 35

Current Dead Time (ns): 35

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens. SD	Net Intens. RSD	Mode
Be	9.0		6057.6		6057.618	91.925	1.5	Standard
In	114.9		93330.6		93330.635	903.868	1.0	Standard
U	238.1		101853.9		101853.890	757.028	0.7	Standard
[CeO	155.9		3189.6		0.024	0.000	1.1	Standard
] > Ce	139.9		131488.2		131488.246	1048.687	0.8	Standard
[Ce++	70.0		1070.6		0.008	0.000	2.9	Standard
Bkgd	220.0		3.1		3.133	0.946	30.2	Standard

Current Conditions File Data

Current Value	Description
0.93	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.93	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

Sample ID: STD Performance Check

Report Date/Time: Thursday, April 27, 2023 13:26:14

Page 1

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\wizard\SmartTune\ARISmartTuneDual.swz

Start Time: 4/27/2023 1:24:10 PM

End Time: 4/27/2023 1:26:14 PM

STD Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9): 6057.62

Obtained Intensity (In 115): 93330.63

Obtained Intensity (U 238): 101853.89

Obtained Intensity (Bkgd 220): 3.13

Obtained Formula (Ce++ 70 / Ce 140): 0.008 (=1070.64 / 131488.25)

Obtained Formula (CeO 156 / Ce 140): 0.024 (=3189.62 / 131488.25)

Obtained RSD (Be 9): 0.0152

Obtained RSD (In 115): 0.0097

Obtained RSD (U 238): 0.0074

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDual.swz

Optimization Status

Start Time: 4/27/2023 1:24:10 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 10
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: Ce0 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 6057.62
Obtained Intensity (In 115): 93330.63
Obtained Intensity (U 238): 101853.89
Obtained Intensity (Bkgd 220): 3.13
Obtained Formula (Ce++ 70 / Ce 140): 0.008 (=1070.64 / 131488.25)
Obtained Formula (Ce0 156 / Ce 140): 0.024 (=3189.62 / 131488.25)
Obtained RSD (Be 9): 0.0152
Obtained RSD (In 115): 0.0097
Obtained RSD (U 238): 0.0074

[Passed] Optimum value(s): N/A

End Time: 4/27/2023 1:26:14 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 16:58:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L				26689	1	Standard
Cl	37	ug/L				5423072	2	Standard
[> Sc	45	ug/L				511056	1	Standard
| Cr	52	ug/L				19523	1	Standard
| Cr	53	ug/L				207	3	Standard
| Mn	55	ug/L				581	1	Standard
[> Ge	72	ug/L				39672	0	KED
| Ni	60	ug/L				29	19	KED
| Ni	62	ug/L				7	66	KED
| Cu	63	ug/L				87	7	KED
| Cu	65	ug/L				44	19	KED
| Zn	66	ug/L				103	6	KED
| Zn	67	ug/L				20	42	KED
| As	75	ug/L				4	6	KED
| Se	78	ug/L				12	8	KED
Y	89	ug/L				311168	3	Standard
Kr	83	ug/L				55	19	Standard
[> In-1	115	ug/L				10463	2	KED
| Mo	98	ug/L				14	7	KED
| Cd	111	ug/L				3	75	KED
| Cd	114	ug/L				4	82	KED
[> In	115	ug/L				503680	0	Standard
| Ag	107	ug/L				29	32	Standard
| Sb	121	ug/L				200	4	Standard
| Sb	123	ug/L				145	8	Standard
| Ba	135	ug/L				96	25	Standard
| Ba	137	ug/L				175	21	Standard
[> Tb	159	ug/L				1211159	2	Standard
| Tl	205	ug/L				139	9	Standard
| Pb	208	ug/L				520	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:02:57

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			26689	28097	1	Standard
Cl	37	ug/L			5423072	5315354	3	Standard
[> Sc	45	ug/L			511056	504023	0	Standard
| Cr	52	0.500	0.024	4	19523	30029	0	Standard
| Cr	53	0.500	0.049	9	207	1387	8	Standard
| Mn	55	0.500	0.006	1	581	16104	1	Standard
[> Ge	72	ug/L			39672	39375	1	KED
| Ni	60	0.500	0.019	3	29	833	3	KED
| Ni	62	0.500	0.095	19	7	139	17	KED
| Cu	63	0.500	0.018	3	87	2440	5	KED
| Cu	65	0.500	0.032	6	44	1298	5	KED
| Zn	66	6.000	0.089	1	103	3865	0	KED
| Zn	67	6.000	0.452	7	20	597	5	KED
| As	75	0.200	0.029	14	4	73	13	KED
| Se	78	0.500	0.150	29	12	29	15	KED
Y	89	ug/L			311168	305270	1	Standard
Kr	83	ug/L			55	48	23	Standard
[> In-1	115	ug/L			10463	9791	2	KED
| Mo	98	0.200	0.007	3	14	313	1	KED
| Cd	111	0.100	0.030	29	3	38	25	KED
| Cd	114	0.100	0.015	14	4	90	14	KED
[> In	115	ug/L			503680	511394	1	Standard
| Ag	107	0.200	0.002	1	29	4136	1	Standard
| Sb	121	0.200	0.006	3	200	3416	3	Standard
| Sb	123	0.200	0.008	4	145	2633	5	Standard
| Ba	135	0.500	0.004	0	96	3256	0	Standard
| Ba	137	0.500	0.016	3	175	5850	1	Standard
[> Tb	159	ug/L			1211159	1204706	0	Standard
| Tl	205	0.200	0.004	1	139	13029	2	Standard
| Pb	208	0.100	0.003	2	520	8818	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:07:52

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			26689	30451	2	Standard
Cl	37	ug/L			5423072	5547323	2	Standard
[> Sc	45	ug/L			511056	514541	0	Standard
| Cr	52	9.999	ug/L	0.037	19523	229719	0	Standard
| Cr	53	10.000	ug/L	0.133	207	24152	0	Standard
| Mn	55	10.000	ug/L	0.172	581	319100	1	Standard
[> Ge	72		ug/L		39672	39475	2	KED
| Ni	60	10.001	ug/L	0.358	29	16650	1	KED
| Ni	62	10.000	ug/L	0.164	7	2676	2	KED
| Cu	63	10.000	ug/L	0.080	87	47383	2	KED
| Cu	65	9.998	ug/L	0.194	44	23141	2	KED
| Zn	66	9.925	ug/L	0.311	103	6213	1	KED
| Zn	67	10.017	ug/L	0.092	20	991	3	KED
| As	75	10.000	ug/L	0.213	4	3127	1	KED
| Se	78	9.996	ug/L	0.145	12	308	1	KED
Y	89		ug/L		311168	305991	0	Standard
Kr	83		ug/L		55	50	10	Standard
[> In-1	115		ug/L		10463	10031	1	KED
| Mo	98	10.000	ug/L	0.172	14	15221	0	KED
| Cd	111	10.000	ug/L	0.328	3	3395	1	KED
| Cd	114	10.000	ug/L	0.101	4	8603	1	KED
[> In	115		ug/L		503680	506102	3	Standard
| Ag	107	10.000	ug/L	0.107	29	206132	3	Standard
| Sb	121	10.000	ug/L	0.277	200	166162	1	Standard
| Sb	123	10.000	ug/L	0.239	145	129066	0	Standard
| Ba	135	10.000	ug/L	0.169	96	63704	1	Standard
| Ba	137	10.002	ug/L	0.394	175	119752	2	Standard
[> Tb	159		ug/L		1211159	1217979	0	Standard
| Tl	205	10.000	ug/L	0.081	139	638937	1	Standard
| Pb	208	10.000	ug/L	0.094	520	838304	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:13:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			26689	29505	0	Standard
Cl	37	ug/L			5423072	5724399	2	Standard
[> Sc	45	ug/L			511056	507150	0	Standard
| Cr	52	19.848	0.123	0	19523	418245	0	Standard
| Cr	53	20.030	0.155	0	207	47765	0	Standard
| Mn	55	19.911	0.171	0	581	614783	0	Standard
[> Ge	72	ug/L			39672	39671	1	KED
| Ni	60	19.896	0.448	2	29	32606	2	KED
| Ni	62	19.829	0.410	2	7	5150	0	KED
| Cu	63	19.857	0.152	0	87	91859	1	KED
| Cu	65	20.006	0.250	1	44	46553	0	KED
| Zn	66	19.877	0.201	1	103	12190	2	KED
| Zn	67	20.191	0.855	4	20	2044	3	KED
| As	75	20.002	0.314	1	4	6286	0	KED
| Se	78	19.969	0.570	2	12	603	3	KED
Y	89	ug/L			311168	305419	1	Standard
Kr	83	ug/L			55	65	4	Standard
[> In-1	115	ug/L			10463	9885	2	KED
| Mo	98	20.011	0.452	2	14	30066	0	KED
| Cd	111	20.036	0.618	3	3	6748	0	KED
| Cd	114	20.099	0.320	1	4	17378	0	KED
[> In	115	ug/L			503680	501331	1	Standard
| Ag	107	19.996	0.288	1	29	407884	0	Standard
| Sb	121	19.979	0.121	0	200	327467	1	Standard
| Sb	123	19.947	0.182	0	145	252327	1	Standard
| Ba	135	19.986	0.191	0	96	125724	1	Standard
| Ba	137	19.901	0.256	1	175	231456	1	Standard
[> Tb	159	ug/L			1211159	1261913	0	Standard
| Tl	205	19.864	0.066	0	139	1279865	0	Standard
| Pb	208	19.801	0.403	2	520	1653610	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:18:20

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			26689	31534	1	Standard
Cl	37	ug/L			5423072	5831050	2	Standard
[> Sc	45	ug/L			511056	510162	2	Standard
| Cr	52	49.971	1.292	2	19523	1026584	2	Standard
| Cr	53	49.778	1.823	3	207	116436	1	Standard
| Mn	55	49.786	1.485	2	581	1512302	0	Standard
[> Ge	72	ug/L			39672	38936	0	KED
| Ni	60	49.949	0.625	1	29	79891	0	KED
| Ni	62	50.111	0.265	0	7	12908	0	KED
| Cu	63	49.953	0.348	0	87	225595	0	KED
| Cu	65	50.140	0.537	1	44	116076	1	KED
| Zn	66	49.857	0.688	1	103	29462	0	KED
| Zn	67	49.937	1.354	2	20	4906	2	KED
| As	75	49.997	0.373	0	4	15413	0	KED
| Se	78	50.018	0.932	1	12	1467	1	KED
Y	89	ug/L			311168	300093	0	Standard
Kr	83	ug/L			55	60	6	Standard
[> In-1	115	ug/L			10463	9646	1	KED
| Mo	98	50.243	0.123	0	14	75499	1	KED
| Cd	111	50.011	0.237	0	3	16456	1	KED
| Cd	114	50.050	0.486	0	4	42438	0	KED
[> In	115	ug/L			503680	489650	1	Standard
| Ag	107	49.826	0.437	0	29	975741	2	Standard
| Sb	121	49.985	0.733	1	200	798834	2	Standard
| Sb	123	50.204	0.240	0	145	632954	1	Standard
| Ba	135	49.914	0.650	1	96	303930	2	Standard
| Ba	137	49.814	0.476	0	175	555352	2	Standard
[> Tb	159	ug/L			1211159	1205617	1	Standard
| Tl	205	50.253	1.332	2	139	3172788	1	Standard
| Pb	208	50.199	1.140	2	520	4084988	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:25:19

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			26689	29987	2	Standard
Cl	37	ug/L			5423072	5871612	2	Standard
[> Sc	45	ug/L			511056	510313	0	Standard
| Cr	52	99.240	1.079	1	19523	1971123	1	Standard
| Cr	53	99.723	1.310	1	207	231161	1	Standard
| Mn	55	99.651	0.637	0	581	2994194	1	Standard
[> Ge	72	ug/L			39672	38267	0	KED
| Ni	60	99.806	2.507	2	29	155856	2	KED
| Ni	62	99.879	1.560	1	7	25177	1	KED
| Cu	63	99.697	0.925	0	87	438014	0	KED
| Cu	65	99.186	1.175	1	44	219680	1	KED
| Zn	66	99.393	1.046	1	103	56498	0	KED
| Zn	67	99.662	0.764	0	20	9498	0	KED
| As	75	100.161	0.535	0	4	30508	0	KED
[Se	78	99.594	0.876	0	12	2821	1	KED
Y	89	ug/L			311168	302962	2	Standard
Kr	83	ug/L			55	67	20	Standard
[> In-1	115	ug/L			10463	9482	0	KED
| Mo	98	100.486	0.365	0	14	150861	0	KED
| Cd	111	99.305	0.903	0	3	31393	0	KED
| Cd	114	99.855	0.806	0	4	82831	0	KED
[> In	115	ug/L			503680	481430	1	Standard
| Ag	107	99.660	0.647	0	29	1897335	1	Standard
| Sb	121	99.636	0.835	0	200	1546429	1	Standard
| Sb	123	99.584	1.506	1	145	1217417	1	Standard
| Ba	135	98.923	2.800	2	96	571731	4	Standard
[Ba	137	99.192	1.615	1	175	1058491	1	Standard
[> Tb	159	ug/L			1211159	1189191	1	Standard
| Tl	205	99.451	1.381	1	139	6082930	0	Standard
[Pb	208	99.556	1.973	1	520	7874671	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:32:59

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			26689	26330	3	Standard
Cl	37	ug/L			5423072	5540103	1	Standard
[> Sc	45	ug/L			511056	502754	1	Standard
| Cr	52	-0.007	0.037	517	19523	19064	2	Standard
| Cr	53	-0.016	0.002	13	207	166	1	Standard
| Mn	55	0.001	0.000	62	581	587	1	Standard
[> Ge	72	ug/L			39672	38828	1	KED
| Ni	60	0.002	0.004	259	29	31	21	KED
| Ni	62	0.003	0.024	775	7	8	74	KED
| Cu	63	-0.000	0.005	965	87	83	25	KED
| Cu	65	0.000	0.003	2074	44	43	15	KED
| Zn	66	0.015	0.016	107	103	109	8	KED
| Zn	67	-0.022	0.013	60	20	17	6	KED
| As	75	0.003	0.005	173	4	4	31	KED
| Se	78	0.110	0.107	97	12	15	19	KED
Y	89	ug/L			311168	298740	1	Standard
Kr	83	ug/L			55	57	22	Standard
[> In-1	115	ug/L			10463	9777	0	KED
| Mo	98	0.013	0.004	31	14	32	19	KED
| Cd	111	0.004	0.006	170	3	4	48	KED
| Cd	114	0.001	0.004	374	4	5	66	KED
[> In	115	ug/L			503680	493364	1	Standard
| Ag	107	0.004	0.000	3	29	105	2	Standard
| Sb	121	0.107	0.006	6	200	1894	3	Standard
| Sb	123	0.098	0.009	9	145	1363	6	Standard
| Ba	135	-0.002	0.004	229	96	84	29	Standard
| Ba	137	0.000	0.000	40	175	177	2	Standard
[> Tb	159	ug/L			1211159	1185756	1	Standard
| Tl	205	0.006	0.000	2	139	517	1	Standard
| Pb	208	0.001	0.000	48	520	579	6	Standard

Sample Information

Sample Date/Time: Thursday, April 27, 2023 17:25:19

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m

Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	0.9999	0.039	0.50	10	20	50	100
Cr	53	1.0000	0.005	0.50	10	20	50	100
Mn	55	1.0000	0.059	0.50	10	20	50	100
Ge	72							
Ni	60	1.0000	0.041	0.50	10	20	50	100
Ni	62	1.0000	0.007	0.50	10	20	50	100
Cu	63	1.0000	0.115	0.50	10	20	50	100
Cu	65	0.9999	0.058	0.50	10	20	50	100
Zn	66	0.9999	0.015	6.00	10	20	50	100
Zn	67	1.0000	0.002	6.00	10	20	50	100
As	75	1.0000	0.008	0.20	10	20	50	100
Se	78	1.0000	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Mo	98	0.9999	0.158	0.20	10	20	50	100
Cd	111	0.9999	0.033	0.10	10	20	50	100
Cd	114	1.0000	0.087	0.10	10	20	50	100
In	115							
Ag	107	1.0000	0.040	0.20	10	20	50	100
Sb	121	1.0000	0.032	0.20	10	20	50	100
Sb	123	1.0000	0.025	0.20	10	20	50	100
Ba	135	0.9998	0.012	0.50	10	20	50	100
Ba	137	0.9999	0.022	0.50	10	20	50	100
Tb	159							
Tl	205	0.9999	0.051	0.20	10	20	50	100
Pb	208	1.0000	0.067	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:39:18

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	31167	3	Standard
Cl	37		ug/L			5423072	5831327	3	Standard
> Sc	45		ug/L			511056	483577	10	Standard
Cr	52	55.002	ug/L	4.804	8	19523	1037224	2	Standard
Cr	53	55.392	ug/L	5.295	9	207	120941	1	Standard
Mn	55	55.994	ug/L	4.851	8	581	1584840	2	Standard
> Ge	72		ug/L			39672	38767	0	KED
Ni	60	52.176	ug/L	0.417	0	29	82561	1	KED
Ni	62	52.710	ug/L	0.544	1	7	13464	1	KED
Cu	63	51.751	ug/L	1.021	1	87	230360	1	KED
Cu	65	53.183	ug/L	1.134	2	44	119336	1	KED
Zn	66	51.383	ug/L	0.515	1	103	29638	0	KED
Zn	67	51.626	ug/L	1.035	2	20	4994	2	KED
As	75	48.542	ug/L	0.890	1	4	14979	1	KED
Se	78	79.058	ug/L	0.465	0	12	2271	0	KED
Y	89		ug/L			311168	299073	10	Standard
Kr	83		ug/L			55	66	16	Standard
> In-1	115		ug/L			10463	10117	1	KED
Mo	98	47.979	ug/L	0.566	1	14	76854	0	KED
Cd	111	50.284	ug/L	0.626	1	3	16960	0	KED
Cd	114	48.945	ug/L	1.365	2	4	43312	1	KED
> In	115		ug/L			503680	470509	11	Standard
Ag	107	55.476	ug/L	5.760	10	29	1024296	2	Standard
Sb	121	54.495	ug/L	5.716	10	200	820365	2	Standard
Sb	123	54.055	ug/L	5.371	9	145	641157	1	Standard
Ba	135	56.639	ug/L	5.755	10	96	317478	1	Standard
Ba	137	56.083	ug/L	5.424	9	175	580785	2	Standard
> Tb	159		ug/L			1211159	1157854	11	Standard
Tl	205	55.062	ug/L	5.568	10	139	3254696	1	Standard
Pb	208	54.700	ug/L	6.512	11	520	4175916	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:46:57

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	31593	1	Standard
Cl	37		ug/L			5423072	5848553	2	Standard
[> Sc	45		ug/L			511056	513162	2	Standard
| Cr	52	52.915	ug/L	2.332	4	19523	1065402	2	Standard
| Cr	53	51.695	ug/L	0.853	1	207	120571	1	Standard
| Mn	55	51.799	ug/L	0.251	0	581	1565215	2	Standard
[> Ge	72		ug/L			39672	39132	0	KED
| Ni	60	51.230	ug/L	1.655	3	29	81823	3	KED
| Ni	62	51.169	ug/L	0.617	1	7	13194	1	KED
| Cu	63	51.386	ug/L	0.483	0	87	230900	0	KED
| Cu	65	52.122	ug/L	0.513	0	44	118064	0	KED
| Zn	66	50.394	ug/L	0.254	0	103	29343	0	KED
| Zn	67	50.223	ug/L	0.828	1	20	4904	2	KED
| As	75	48.238	ug/L	0.742	1	4	15026	1	KED
| Se	78	79.473	ug/L	0.694	0	12	2304	0	KED
Y	89		ug/L			311168	310712	3	Standard
Kr	83		ug/L			55	55	3	Standard
[> In-1	115		ug/L			10463	10017	0	KED
| Mo	98	48.586	ug/L	0.883	1	14	77069	2	KED
| Cd	111	50.593	ug/L	0.404	0	3	16898	1	KED
| Cd	114	49.505	ug/L	0.830	1	4	43385	1	KED
[> In	115		ug/L			503680	502834	1	Standard
| Ag	107	50.936	ug/L	2.422	4	29	1012418	3	Standard
| Sb	121	50.031	ug/L	1.820	3	200	810872	2	Standard
| Sb	123	49.354	ug/L	0.952	1	145	630167	0	Standard
| Ba	135	52.460	ug/L	1.610	3	96	316563	1	Standard
| Ba	137	50.542	ug/L	1.202	2	175	563292	0	Standard
[> Tb	159		ug/L			1211159	1219095	1	Standard
| Tl	205	51.432	ug/L	1.160	2	139	3224779	1	Standard
| Pb	208	51.012	ug/L	0.808	1	520	4136745	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 17:54:35

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	26243	2	Standard
Cl	37		ug/L			5423072	5614755	1	Standard
[> Sc	45		ug/L			511056	505931	1	Standard
| Cr	52	-0.010	ug/L	0.045	450	19523	19139	5	Standard
| Cr	53	-0.016	ug/L	0.004	24	207	169	5	Standard
| Mn	55	-0.001	ug/L	0.001	188	581	558	7	Standard
[> Ge	72		ug/L			39672	39147	0	KED
| Ni	60	-0.001	ug/L	0.004	316	29	26	24	KED
| Ni	62	-0.012	ug/L	0.018	153	7	4	107	KED
| Cu	63	0.002	ug/L	0.002	67	87	97	7	KED
| Cu	65	-0.001	ug/L	0.002	258	44	41	12	KED
| Zn	66	-0.004	ug/L	0.031	757	103	99	17	KED
| Zn	67	-0.049	ug/L	0.020	40	20	15	12	KED
| As	75	0.003	ug/L	0.003	126	4	4	22	KED
| Se	78	0.017	ug/L	0.043	247	12	12	10	KED
Y	89		ug/L			311168	308379	3	Standard
Kr	83		ug/L			55	57	24	Standard
[> In-1	115		ug/L			10463	9878	1	KED
| Mo	98	0.008	ug/L	0.003	33	14	26	16	KED
| Cd	111	0.006	ug/L	0.002	28	3	5	10	KED
| Cd	114	0.002	ug/L	0.003	192	4	6	49	KED
[> In	115		ug/L			503680	498215	2	Standard
| Ag	107	0.002	ug/L	0.001	30	29	65	19	Standard
| Sb	121	0.033	ug/L	0.001	3	200	727	3	Standard
| Sb	123	0.034	ug/L	0.002	6	145	579	5	Standard
| Ba	135	-0.000	ug/L	0.003	1375	96	94	19	Standard
| Ba	137	0.000	ug/L	0.002	1252	175	175	13	Standard
[> Tb	159		ug/L			1211159	1200308	1	Standard
| Tl	205	0.003	ug/L	0.000	11	139	347	7	Standard
| Pb	208	0.001	ug/L	0.000	45	520	582	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:00:16

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	30332	2	Standard
Cl	37		ug/L			5423072	5825479	1	Standard
[> Sc	45		ug/L			511056	511595	1	Standard
| Cr	52	51.670	ug/L	0.577	1	19523	1038130	1	Standard
| Cr	53	50.490	ug/L	0.716	1	207	117425	2	Standard
| Mn	55	50.994	ug/L	0.700	1	581	1536115	0	Standard
[> Ge	72		ug/L			39672	39129	0	KED
| Ni	60	50.053	ug/L	0.616	1	29	79937	0	KED
| Ni	62	50.454	ug/L	1.902	3	7	13009	3	KED
| Cu	63	50.662	ug/L	0.820	1	87	227630	1	KED
| Cu	65	51.110	ug/L	0.630	1	44	115765	0	KED
| Zn	66	50.519	ug/L	0.386	0	103	29414	0	KED
| Zn	67	51.089	ug/L	0.998	1	20	4988	2	KED
| As	75	50.112	ug/L	0.656	1	4	15609	1	KED
| Se	78	50.654	ug/L	1.269	2	12	1473	2	KED
Y	89		ug/L			311168	306600	1	Standard
Kr	83		ug/L			55	52	12	Standard
[> In-1	115		ug/L			10463	9815	1	KED
| Mo	98	49.060	ug/L	1.312	2	14	76230	1	KED
| Cd	111	50.431	ug/L	0.865	1	3	16502	0	KED
| Cd	114	49.130	ug/L	1.527	3	4	42177	1	KED
[> In	115		ug/L			503680	492187	1	Standard
| Ag	107	50.624	ug/L	0.323	0	29	985308	1	Standard
| Sb	121	50.635	ug/L	0.755	1	200	803592	2	Standard
| Sb	123	50.221	ug/L	1.223	2	145	627664	1	Standard
| Ba	135	51.943	ug/L	1.521	2	96	306827	1	Standard
| Ba	137	51.468	ug/L	0.182	0	175	561615	1	Standard
[> Tb	159		ug/L			1211159	1215164	1	Standard
| Tl	205	50.636	ug/L	0.811	1	139	3164607	1	Standard
| Pb	208	50.478	ug/L	0.592	1	520	4080083	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:07:55

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	26416	2	Standard
Cl	37		ug/L			5423072	5635681	2	Standard
[> Sc	45		ug/L			511056	494535	1	Standard
| Cr	52	0.010	ug/L	0.024	237	19523	19080	2	Standard
| Cr	53	-0.019	ug/L	0.008	44	207	159	12	Standard
| Mn	55	0.000	ug/L	0.001	364	581	572	4	Standard
[> Ge	72		ug/L			39672	38936	1	KED
| Ni	60	0.002	ug/L	0.003	145	29	31	13	KED
| Ni	62	0.003	ug/L	0.011	375	7	8	35	KED
| Cu	63	0.002	ug/L	0.004	238	87	93	19	KED
| Cu	65	0.005	ug/L	0.006	115	44	54	23	KED
| Zn	66	-0.003	ug/L	0.005	158	103	99	3	KED
| Zn	67	0.003	ug/L	0.058	1675	20	20	28	KED
| As	75	-0.001	ug/L	0.005	354	4	3	39	KED
| Se	78	0.147	ug/L	0.112	76	12	16	20	KED
Y	89		ug/L			311168	303467	2	Standard
Kr	83		ug/L			55	53	9	Standard
[> In-1	115		ug/L			10463	9813	0	KED
| Mo	98	0.004	ug/L	0.005	120	14	19	37	KED
| Cd	111	0.010	ug/L	0.006	58	3	6	31	KED
| Cd	114	-0.003	ug/L	0.001	56	4	2	53	KED
[> In	115		ug/L			503680	486011	2	Standard
| Ag	107	0.002	ug/L	0.000	17	29	75	11	Standard
| Sb	121	0.055	ug/L	0.004	8	200	1048	5	Standard
| Sb	123	0.055	ug/L	0.003	4	145	821	1	Standard
| Ba	135	0.001	ug/L	0.003	224	96	100	15	Standard
| Ba	137	0.002	ug/L	0.002	117	175	188	14	Standard
[> Tb	159		ug/L			1211159	1206299	2	Standard
| Tl	205	0.003	ug/L	0.000	16	139	313	11	Standard
| Pb	208	0.000	ug/L	0.000	45	520	532	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:12:50

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	27116	2	Standard
Cl	37		ug/L			5423072	5531788	1	Standard
[> Sc	45		ug/L			511056	505858	2	Standard
| Cr	52	0.517	ug/L	0.026	4	19523	29391	0	Standard
| Cr	53	0.509	ug/L	0.011	2	207	1374	3	Standard
| Mn	55	0.541	ug/L	0.007	1	581	16687	1	Standard
[> Ge	72		ug/L			39672	38999	1	KED
| Ni	60	0.587	ug/L	0.030	5	29	962	4	KED
| Ni	62	0.616	ug/L	0.031	5	7	165	5	KED
| Cu	63	0.502	ug/L	0.017	3	87	2334	3	KED
| Cu	65	0.554	ug/L	0.032	5	44	1294	6	KED
| Zn	66	6.276	ug/L	0.135	2	103	3731	2	KED
| Zn	67	5.761	ug/L	0.231	4	20	578	4	KED
| As	75	0.195	ug/L	0.006	3	4	64	3	KED
| Se	78	0.591	ug/L	0.056	9	12	29	5	KED
Y	89		ug/L			311168	305731	2	Standard
Kr	83		ug/L			55	45	17	Standard
[> In-1	115		ug/L			10463	9793	2	KED
| Mo	98	0.191	ug/L	0.012	6	14	309	7	KED
| Cd	111	0.113	ug/L	0.018	15	3	40	15	KED
| Cd	114	0.106	ug/L	0.002	1	4	95	4	KED
[> In	115		ug/L			503680	497663	1	Standard
| Ag	107	0.207	ug/L	0.009	4	29	4094	5	Standard
| Sb	121	0.213	ug/L	0.004	2	200	3612	0	Standard
| Sb	123	0.209	ug/L	0.004	2	145	2785	1	Standard
| Ba	135	0.537	ug/L	0.006	1	96	3304	1	Standard
| Ba	137	0.524	ug/L	0.002	0	175	5950	0	Standard
[> Tb	159		ug/L			1211159	1229830	0	Standard
| Tl	205	0.203	ug/L	0.003	1	139	12957	1	Standard
| Pb	208	0.157	ug/L	0.003	1	520	13342	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:18:31

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	25907	2	Standard
Cl	37		ug/L			5423072	5543137	1	Standard
[> Sc	45		ug/L			511056	510709	1	Standard
| Cr	52	0.519	ug/L	0.043	8	19523	29721	1	Standard
| Cr	53	0.483	ug/L	0.022	4	207	1327	2	Standard
| Mn	55	0.515	ug/L	0.007	1	581	16054	0	Standard
[> Ge	72		ug/L			39672	38610	1	KED
| Ni	60	0.504	ug/L	0.003	0	29	822	1	KED
| Ni	62	0.543	ug/L	0.059	10	7	145	9	KED
| Cu	63	1.504	ug/L	0.018	1	87	6750	0	KED
| Cu	65	1.555	ug/L	0.044	2	44	3515	2	KED
| Zn	66	6.374	ug/L	0.078	1	103	3749	1	KED
| Zn	67	5.717	ug/L	0.261	4	20	568	3	KED
| As	75	0.202	ug/L	0.009	4	4	66	4	KED
| Se	78	0.647	ug/L	0.162	25	12	30	15	KED
Y	89		ug/L			311168	311146	1	Standard
Kr	83		ug/L			55	52	14	Standard
[> In-1	115		ug/L			10463	9944	0	KED
| Mo	98	0.180	ug/L	0.004	2	14	296	2	KED
| Cd	111	0.099	ug/L	0.027	27	3	35	26	KED
| Cd	114	0.096	ug/L	0.016	16	4	88	15	KED
[> In	115		ug/L			503680	506227	0	Standard
| Ag	107	0.208	ug/L	0.005	2	29	4199	2	Standard
| Sb	121	0.203	ug/L	0.008	3	200	3515	3	Standard
| Sb	123	0.199	ug/L	0.004	2	145	2707	1	Standard
| Ba	135	0.504	ug/L	0.026	5	96	3158	4	Standard
| Ba	137	0.515	ug/L	0.002	0	175	5951	0	Standard
[> Tb	159		ug/L			1211159	1223254	1	Standard
| Tl	205	0.202	ug/L	0.004	2	139	12848	0	Standard
| Pb	208	0.102	ug/L	0.005	5	520	8784	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:25:02

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26689	26209	2	Standard
Cl	37		ug/L			5423072	5486888	1	Standard
[> Sc	45		ug/L			511056	505597	1	Standard
| Cr	52	0.527	ug/L	0.052	9	19523	29565	1	Standard
| Cr	53	0.509	ug/L	0.015	2	207	1373	0	Standard
| Mn	55	0.521	ug/L	0.018	3	581	16062	1	Standard
[> Ge	72		ug/L			39672	39680	0	KED
| Ni	60	0.501	ug/L	0.013	2	29	840	3	KED
| Ni	62	0.585	ug/L	0.018	3	7	160	3	KED
| Cu	63	0.929	ug/L	0.006	0	87	4319	1	KED
| Cu	65	0.922	ug/L	0.010	1	44	2160	1	KED
| Zn	66	6.103	ug/L	0.160	2	103	3693	1	KED
| Zn	67	5.758	ug/L	0.356	6	20	587	5	KED
| As	75	0.196	ug/L	0.015	7	4	66	7	KED
| Se	78	0.411	ug/L	0.028	6	12	24	3	KED
Y	89		ug/L			311168	310688	0	Standard
Kr	83		ug/L			55	51	18	Standard
[> In-1	115		ug/L			10463	9960	1	KED
| Mo	98	0.206	ug/L	0.016	7	14	339	8	KED
| Cd	111	0.096	ug/L	0.002	2	3	34	1	KED
| Cd	114	0.099	ug/L	0.011	11	4	90	9	KED
[> In	115		ug/L			503680	505491	2	Standard
| Ag	107	0.203	ug/L	0.005	2	29	4095	2	Standard
| Sb	121	0.202	ug/L	0.008	4	200	3487	2	Standard
| Sb	123	0.191	ug/L	0.012	6	145	2599	3	Standard
| Ba	135	0.493	ug/L	0.017	3	96	3085	1	Standard
| Ba	137	0.510	ug/L	0.018	3	175	5885	1	Standard
[> Tb	159		ug/L			1211159	1220625	1	Standard
| Tl	205	0.200	ug/L	0.003	1	139	12674	0	Standard
| Pb	208	0.103	ug/L	0.003	2	520	8879	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:32:56

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L				25241	1	Standard
Cl	37		ug/L				5384034	2	Standard
[> Sc	45		ug/L				495146	0	Standard
| Cr	52		ug/L				19255	1	Standard
| Cr	53		ug/L				166	8	Standard
| Mn	55		ug/L				514	3	Standard
[> Ge	72		ug/L				38398	1	KED
| Ni	60		ug/L				25	11	KED
| Ni	62		ug/L				1		KED
| Cu	63		ug/L				59	16	KED
| Cu	65		ug/L				45	13	KED
| Zn	66		ug/L				76	9	KED
| Zn	67		ug/L				17	19	KED
| As	75		ug/L				2	16	KED
| Se	78		ug/L				14	6	KED
Y	89		ug/L				301489	2	Standard
Kr	83		ug/L				55	17	Standard
[> In-1	115		ug/L				9770	4	KED
| Mo	98		ug/L				8	49	KED
| Cd	111		ug/L				4	32	KED
| Cd	114		ug/L				4	72	KED
[> In	115		ug/L				485826	1	Standard
| Ag	107		ug/L				26	25	Standard
| Sb	121		ug/L				201	9	Standard
| Sb	123		ug/L				168	8	Standard
| Ba	135		ug/L				84	7	Standard
| Ba	137		ug/L				154	14	Standard
[> Tb	159		ug/L				1205564	2	Standard
| Tl	205		ug/L				157	14	Standard
| Pb	208		ug/L				403	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:37:52

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	29934	2	Standard
Cl	37		ug/L			5384034	5751963	2	Standard
[> Sc	45		ug/L			495146	471964	6	Standard
| Cr	52	51.471	ug/L	0.678	1	19255	954080	5	Standard
| Cr	53	51.301	ug/L	0.844	1	166	109957	5	Standard
| Mn	55	51.622	ug/L	0.780	1	514	1433964	5	Standard
[> Ge	72		ug/L			38398	39341	0	KED
| Ni	60	50.070	ug/L	0.113	0	25	80399	0	KED
| Ni	62	50.286	ug/L	0.827	1	1	13030	1	KED
| Cu	63	50.551	ug/L	0.496	0	59	228341	0	KED
| Cu	65	50.592	ug/L	0.259	0	45	115220	0	KED
| Zn	66	50.959	ug/L	0.982	1	76	29805	1	KED
| Zn	67	50.247	ug/L	2.213	4	17	4930	4	KED
| As	75	49.887	ug/L	0.089	0	2	15622	0	KED
[Se	78	50.106	ug/L	0.456	0	14	1468	1	KED
Y	89		ug/L			301489	284863	6	Standard
Kr	83		ug/L			55	55	31	Standard
[> In-1	115		ug/L			9770	9675	0	KED
| Mo	98	49.637	ug/L	0.845	1	8	76041	1	KED
| Cd	111	50.873	ug/L	0.610	1	4	16412	0	KED
| Cd	114	50.003	ug/L	1.170	2	4	42322	1	KED
[> In	115		ug/L			485826	460250	6	Standard
| Ag	107	51.143	ug/L	1.522	2	26	929794	4	Standard
| Sb	121	50.788	ug/L	1.499	2	201	752768	4	Standard
| Sb	123	50.646	ug/L	0.811	1	168	591647	5	Standard
| Ba	135	51.903	ug/L	0.609	1	84	286634	5	Standard
| Ba	137	51.489	ug/L	1.427	2	154	524725	3	Standard
[> Tb	159		ug/L			1205564	1139416	6	Standard
| Tl	205	51.282	ug/L	1.474	2	157	3003885	5	Standard
[Pb	208	50.089	ug/L	0.511	1	403	3795082	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:45:31

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	25406	2	Standard
Cl	37		ug/L			5384034	5535654	2	Standard
[> Sc	45		ug/L			495146	505044	1	Standard
| Cr	52	-0.040	ug/L	0.010	25	19255	18863	2	Standard
| Cr	53	-0.002	ug/L	0.004	208	166	165	3	Standard
| Mn	55	-0.001	ug/L	0.002	182	514	499	9	Standard
[> Ge	72		ug/L			38398	38844	1	KED
| Ni	60	0.006	ug/L	0.007	107	25	35	29	KED
| Ni	62	0.010	ug/L	0.017	174	1	4	98	KED
| Cu	63	0.011	ug/L	0.013	116	59	108	51	KED
| Cu	65	-0.002	ug/L	0.006	245	45	40	34	KED
| Zn	66	-0.005	ug/L	0.012	246	76	74	9	KED
| Zn	67	-0.054	ug/L	0.070	128	17	12	55	KED
| As	75	0.014	ug/L	0.012	83	2	7	49	KED
| Se	78	0.017	ug/L	0.077	445	14	15	13	KED
Y	89		ug/L			301489	301508	2	Standard
Kr	83		ug/L			55	46	22	Standard
[> In-1	115		ug/L			9770	9862	2	KED
| Mo	98	0.007	ug/L	0.001	14	8	19	5	KED
| Cd	111	-0.003	ug/L	0.001	46	4	3	15	KED
| Cd	114	-0.001	ug/L	0.002	331	4	3	55	KED
[> In	115		ug/L			485826	500016	2	Standard
| Ag	107	0.002	ug/L	0.001	68	26	63	40	Standard
| Sb	121	0.046	ug/L	0.001	1	201	956	1	Standard
| Sb	123	0.043	ug/L	0.003	6	168	720	6	Standard
| Ba	135	-0.004	ug/L	0.000	12	84	64	5	Standard
| Ba	137	-0.002	ug/L	0.002	113	154	140	16	Standard
[> Tb	159		ug/L			1205564	1205667	1	Standard
| Tl	205	0.002	ug/L	0.002	71	157	292	34	Standard
| Pb	208	0.001	ug/L	0.001	122	403	496	24	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:51:11

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	28184	2	Standard
Cl	37		ug/L			5384034	5515602	2	Standard
[> Sc	45		ug/L			495146	497022	2	Standard
| Cr	52	0.539	ug/L	0.057	10	19255	29630	1	Standard
| Cr	53	0.525	ug/L	0.016	3	166	1350	1	Standard
| Mn	55	0.561	ug/L	0.013	2	514	16927	1	Standard
[> Ge	72		ug/L			38398	39432	1	KED
| Ni	60	0.553	ug/L	0.039	7	25	914	6	KED
| Ni	62	0.508	ug/L	0.085	16	1	133	16	KED
| Cu	63	0.577	ug/L	0.006	1	59	2671	2	KED
| Cu	65	0.569	ug/L	0.014	2	45	1343	1	KED
| Zn	66	6.876	ug/L	0.282	4	76	4098	3	KED
| Zn	67	6.010	ug/L	0.356	5	17	606	4	KED
| As	75	0.200	ug/L	0.004	2	2	65	3	KED
[Se	78	0.452	ug/L	0.086	18	14	28	10	KED
Y	89		ug/L			301489	298659	3	Standard
Kr	83		ug/L			55	63	15	Standard
[> In-1	115		ug/L			9770	9738	2	KED
| Mo	98	0.191	ug/L	0.014	7	8	303	7	KED
| Cd	111	0.095	ug/L	0.014	14	4	35	15	KED
| Cd	114	0.096	ug/L	0.015	15	4	85	13	KED
[> In	115		ug/L			485826	493674	3	Standard
| Ag	107	0.213	ug/L	0.003	1	26	4187	2	Standard
| Sb	121	0.213	ug/L	0.005	2	201	3587	2	Standard
| Sb	123	0.217	ug/L	0.006	2	168	2883	1	Standard
| Ba	135	0.627	ug/L	0.007	1	84	3797	2	Standard
[Ba	137	0.628	ug/L	0.023	3	154	7021	2	Standard
[> Tb	159		ug/L			1205564	1198167	0	Standard
| Tl	205	0.206	ug/L	0.004	2	157	12862	2	Standard
[Pb	208	0.120	ug/L	0.001	1	403	9998	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 18:56:27

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	117217	2	Standard
Cl	37		ug/L			5384034	10906136	3	Standard
> Sc	45		ug/L			495146	514166	1	Standard
| Cr	52	0.644	ug/L	0.013	2	19255	32749	2	Standard
| Cr	53	6.788	ug/L	0.221	3	166	16009	2	Standard
| Mn	55	0.165	ug/L	0.003	1	514	5514	1	Standard
> Ge	72		ug/L			38398	38473	1	KED
| Ni	60	0.472	ug/L	0.562	119	25	774	116	KED
| Ni	62	0.193	ug/L	0.023	11	1	50	10	KED
| Cu	63	0.087	ug/L	0.006	7	59	445	5	KED
| Cu	65	0.089	ug/L	0.007	8	45	243	7	KED
| Zn	66	0.725	ug/L	0.007	0	76	490	2	KED
| Zn	67	0.591	ug/L	0.062	10	17	73	7	KED
| As	75	0.035	ug/L	0.006	16	2	13	12	KED
| Se	78	-0.113	ug/L	0.208	183	14	11	49	KED
Y	89		ug/L			301489	318222	2	Standard
Kr	83		ug/L			55	100	23	Standard
> In-1	115		ug/L			9770	8999	3	KED
| Mo	98	408.052	ug/L	15.229	3	8	580913	0	KED
| Cd	111	0.094	ug/L	0.013	13	4	32	8	KED
| Cd	114	0.072	ug/L	0.016	21	4	60	16	KED
> In	115		ug/L			485826	505355	1	Standard
| Ag	107	0.005	ug/L	0.001	13	26	135	9	Standard
| Sb	121	0.036	ug/L	0.004	11	201	796	6	Standard
| Sb	123	0.034	ug/L	0.001	3	168	607	2	Standard
| Ba	135	0.123	ug/L	0.007	6	84	834	3	Standard
| Ba	137	0.125	ug/L	0.001	0	154	1564	1	Standard
> Tb	159		ug/L			1205564	1202347	1	Standard
| Tl	205	0.016	ug/L	0.001	6	157	1131	4	Standard
| Pb	208	0.043	ug/L	0.001	3	403	3819	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:01:23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	115144	3	Standard
Cl	37		ug/L			5384034	10776592	2	Standard
[> Sc	45		ug/L			495146	500749	3	Standard
| Cr	52	19.641	ug/L	0.555	2	19255	398353	2	Standard
| Cr	53	25.230	ug/L	0.459	1	166	57479	1	Standard
| Mn	55	19.058	ug/L	0.359	1	514	562066	1	Standard
[> Ge	72		ug/L			38398	36690	0	KED
| Ni	60	21.222	ug/L	0.428	2	25	31795	2	KED
| Ni	62	21.427	ug/L	0.521	2	1	5179	2	KED
| Cu	63	20.947	ug/L	0.474	2	59	88281	2	KED
| Cu	65	20.866	ug/L	0.295	1	45	44346	1	KED
| Zn	66	20.181	ug/L	0.510	2	76	11053	2	KED
| Zn	67	18.362	ug/L	0.387	2	17	1690	2	KED
| As	75	19.815	ug/L	0.125	0	2	5788	0	KED
[Se	78	-0.012	ug/L	0.109	946	14	13	21	KED
| Y	89		ug/L			301489	318876	2	Standard
| Kr	83		ug/L			55	107	15	Standard
[> In-1	115		ug/L			9770	8799	2	KED
| Mo	98	417.029	ug/L	10.464	2	8	580792	1	KED
| Cd	111	19.752	ug/L	0.366	1	4	5796	0	KED
| Cd	114	19.659	ug/L	0.477	2	4	15131	1	KED
[> In	115		ug/L			485826	505923	3	Standard
| Ag	107	17.649	ug/L	0.271	1	26	353011	2	Standard
| Sb	121	0.029	ug/L	0.001	5	201	679	5	Standard
| Sb	123	0.027	ug/L	0.002	7	168	522	5	Standard
| Ba	135	0.107	ug/L	0.011	10	84	734	7	Standard
| Ba	137	0.091	ug/L	0.006	6	154	1181	5	Standard
[> Tb	159		ug/L			1205564	1171741	2	Standard
| Tl	205	0.009	ug/L	0.000	4	157	696	1	Standard
| Pb	208	0.020	ug/L	0.001	6	403	1968	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:06:18

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	32058	3	Standard
Cl	37		ug/L			5384034	5526356	3	Standard
[> Sc	45		ug/L			495146	476950	1	Standard
| Cr	52	199.398	ug/L	9.474	4	19255	3682094	3	Standard
| Cr	53	193.344	ug/L	6.847	3	166	418606	3	Standard
| Mn	55	200.497	ug/L	10.095	5	514	5627306	3	Standard
[> Ge	72		ug/L			38398	35782	0	KED
| Ni	60	202.266	ug/L	3.794	1	25	295297	1	KED
| Ni	62	205.894	ug/L	2.831	1	1	48515	0	KED
| Cu	63	200.992	ug/L	2.522	1	59	825557	0	KED
| Cu	65	203.917	ug/L	1.665	0	45	422279	1	KED
| Zn	66	197.632	ug/L	1.380	0	76	104933	0	KED
| Zn	67	197.688	ug/L	5.022	2	17	17594	1	KED
| As	75	202.711	ug/L	2.287	1	2	57727	0	KED
| Se	78	192.406	ug/L	4.077	2	14	5089	1	KED
Y	89		ug/L			301489	299298	2	Standard
Kr	83		ug/L			55	104	6	Standard
[> In-1	115		ug/L			9770	8342	1	KED
| Mo	98	221.077	ug/L	6.264	2	8	291889	1	KED
| Cd	111	208.837	ug/L	3.885	1	4	58070	0	KED
| Cd	114	205.171	ug/L	3.276	1	4	149705	0	KED
[> In	115		ug/L			485826	470408	1	Standard
| Ag	107	195.056	ug/L	6.333	3	26	3626903	1	Standard
| Sb	121	208.448	ug/L	3.041	1	201	3160503	0	Standard
| Sb	123	208.555	ug/L	4.495	2	168	2490506	0	Standard
| Ba	135	198.965	ug/L	2.280	1	84	1123149	1	Standard
| Ba	137	192.015	ug/L	8.204	4	154	2001576	3	Standard
[> Tb	159		ug/L			1205564	1099837	2	Standard
| Tl	205	221.368	ug/L	4.014	1	157	12520957	1	Standard
| Pb	208	220.394	ug/L	7.264	3	403	16116629	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:11:13

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	33515	2	Standard
Cl	37		ug/L			5384034	5467445	2	Standard
[> Sc	45		ug/L			495146	470305	1	Standard
| Cr	52	309.883	ug/L	6.343	2	19255	5635951	3	Standard
| Cr	53	298.477	ug/L	0.838	0	166	637209	2	Standard
| Mn	55	302.171	ug/L	5.273	1	514	8367470	3	Standard
[> Ge	72		ug/L			38398	34565	0	KED
| Ni	60	301.446	ug/L	3.829	1	25	425163	1	KED
| Ni	62	304.938	ug/L	5.609	1	1	69413	1	KED
| Cu	63	297.325	ug/L	2.975	1	59	1179710	0	KED
| Cu	65	296.409	ug/L	2.939	0	45	592921	1	KED
| Zn	66	289.061	ug/L	3.308	1	76	148234	1	KED
| Zn	67	286.457	ug/L	7.130	2	17	24622	1	KED
| As	75	305.135	ug/L	4.414	1	2	83937	0	KED
| Se	78	290.799	ug/L	1.556	0	14	7423	0	KED
Y	89		ug/L			301489	290622	4	Standard
Kr	83		ug/L			55	246	22	Standard
[> In-1	115		ug/L			9770	8458	0	KED
| Mo	98	318.874	ug/L	3.022	0	8	427024	1	KED
| Cd	111	296.252	ug/L	2.038	0	4	83541	0	KED
| Cd	114	293.773	ug/L	2.050	0	4	217380	0	KED
[> In	115		ug/L			485826	451081	1	Standard
| Ag	107	290.692	ug/L	14.513	4	26	5182440	3	Standard
| Sb	121	305.181	ug/L	4.599	1	201	4436953	0	Standard
| Sb	123	307.344	ug/L	4.684	1	168	3519925	1	Standard
| Ba	135	283.169	ug/L	5.786	2	84	1532660	1	Standard
| Ba	137	284.468	ug/L	10.533	3	154	2843164	2	Standard
[> Tb	159		ug/L			1205564	1027172	3	Standard
| Tl	205	344.783	ug/L	17.413	5	157	18193384	1	Standard
| Pb	208	341.295	ug/L	9.850	2	403	23302481	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:18:52

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	29179	3	Standard
Cl	37		ug/L			5384034	5562719	3	Standard
[> Sc	45		ug/L			495146	488426	1	Standard
| Cr	52	-0.061	ug/L	0.022	35	19255	17839	3	Standard
| Cr	53	0.070	ug/L	0.012	17	166	318	7	Standard
| Mn	55	0.015	ug/L	0.001	3	514	926	2	Standard
[> Ge	72		ug/L			38398	39004	1	KED
| Ni	60	0.007	ug/L	0.000	6	25	36	0	KED
| Ni	62	0.057	ug/L	0.046	80	1	16	69	KED
| Cu	63	0.014	ug/L	0.007	49	59	125	24	KED
| Cu	65	0.012	ug/L	0.006	49	45	72	18	KED
| Zn	66	0.018	ug/L	0.042	231	76	87	26	KED
| Zn	67	0.036	ug/L	0.016	44	17	20	9	KED
| As	75	0.013	ug/L	0.002	16	2	6	10	KED
| Se	78	0.068	ug/L	0.064	95	14	17	12	KED
Y	89		ug/L			301489	296018	2	Standard
Kr	83		ug/L			55	50	13	Standard
[> In-1	115		ug/L			9770	9501	1	KED
| Mo	98	0.028	ug/L	0.006	22	8	50	18	KED
| Cd	111	0.007	ug/L	0.003	41	4	6	14	KED
| Cd	114	0.004	ug/L	0.008	205	4	7	92	KED
[> In	115		ug/L			485826	501094	0	Standard
| Ag	107	0.007	ug/L	0.000	6	26	167	5	Standard
| Sb	121	0.218	ug/L	0.007	3	201	3735	2	Standard
| Sb	123	0.206	ug/L	0.001	0	168	2790	0	Standard
| Ba	135	0.016	ug/L	0.002	13	84	182	7	Standard
| Ba	137	0.014	ug/L	0.003	23	154	320	11	Standard
[> Tb	159		ug/L			1205564	1197164	2	Standard
| Tl	205	0.017	ug/L	0.001	5	157	1200	4	Standard
| Pb	208	0.006	ug/L	0.001	12	403	845	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:25:42

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	115956	3	Standard
Cl	37		ug/L			5384034	10812775	3	Standard
[> Sc	45		ug/L			495146	503665	2	Standard
| Cr	52	0.584	ug/L	0.010	1	19255	30913	2	Standard
| Cr	53	5.854	ug/L	0.068	1	166	13545	1	Standard
| Mn	55	0.104	ug/L	0.003	2	514	3616	0	Standard
[> Ge	72		ug/L			38398	37252	0	KED
| Ni	60	0.122	ug/L	0.016	13	25	209	11	KED
| Ni	62	0.171	ug/L	0.009	5	1	43	4	KED
| Cu	63	0.044	ug/L	0.001	2	59	247	1	KED
| Cu	65	0.045	ug/L	0.004	9	45	140	5	KED
| Zn	66	0.274	ug/L	0.036	13	76	225	9	KED
| Zn	67	0.143	ug/L	0.097	68	17	29	29	KED
| As	75	0.035	ug/L	0.008	23	2	13	18	KED
| Se	78	-0.077	ug/L	0.011	14	14	12	2	KED
Y	89		ug/L			301489	314104	3	Standard
Kr	83		ug/L			55	116	7	Standard
[> In-1	115		ug/L			9770	8903	2	KED
| Mo	98	404.794	ug/L	14.755	3	8	570298	1	KED
| Cd	111	0.080	ug/L	0.016	19	4	27	15	KED
| Cd	114	0.073	ug/L	0.013	17	4	60	17	KED
[> In	115		ug/L			485826	497237	1	Standard
| Ag	107	0.006	ug/L	0.001	12	26	151	11	Standard
| Sb	121	0.101	ug/L	0.006	6	201	1821	6	Standard
| Sb	123	0.101	ug/L	0.006	6	168	1446	7	Standard
| Ba	135	0.107	ug/L	0.001	1	84	723	2	Standard
| Ba	137	0.102	ug/L	0.003	3	154	1280	3	Standard
[> Tb	159		ug/L			1205564	1182086	1	Standard
| Tl	205	0.021	ug/L	0.001	6	157	1408	4	Standard
| Pb	208	0.031	ug/L	0.001	4	403	2840	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:30:37

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	29638	1	Standard
Cl	37		ug/L			5384034	5322644	2	Standard
[> Sc	45		ug/L			495146	484991	1	Standard
| Cr	52	-0.082	ug/L	0.036	44	19255	17325	3	Standard
| Cr	53	<u>0.301</u>	ug/L	0.026	8	166	823	5	Standard
| Mn	55	0.012	ug/L	0.001	5	514	833	1	Standard
[> Ge	72		ug/L			38398	37291	0	KED
| Ni	60	0.007	ug/L	0.007	102	25	34	30	KED
| Ni	62	0.013	ug/L	0.009	69	1	5	43	KED
| Cu	63	0.012	ug/L	0.004	32	59	109	15	KED
| Cu	65	0.004	ug/L	0.008	218	45	51	32	KED
| Zn	66	0.022	ug/L	0.009	42	76	86	7	KED
| Zn	67	-0.002	ug/L	0.047	2926	17	16	26	KED
| As	75	0.002	ug/L	0.002	74	2	3	15	KED
[Se	78	-0.062	ug/L	0.045	73	14	12	9	KED
Y	89		ug/L			301489	315351	1	Standard
Kr	83		ug/L			55	40	16	Standard
[> In-1	115		ug/L			9770	9347	1	KED
| Mo	98	0.029	ug/L	0.003	11	8	50	9	KED
| Cd	111	0.005	ug/L	0.005	109	4	5	28	KED
| Cd	114	0.004	ug/L	0.005	139	4	6	57	KED
[> In	115		ug/L			485826	526003	2	Standard
| Ag	107	0.002	ug/L	0.000	23	26	62	11	Standard
| Sb	121	0.030	ug/L	0.002	6	201	732	2	Standard
| Sb	123	0.028	ug/L	0.004	15	168	555	11	Standard
| Ba	135	0.014	ug/L	0.001	4	84	177	0	Standard
[Ba	137	0.018	ug/L	0.002	10	154	382	3	Standard
[> Tb	159		ug/L			1205564	1254159	1	Standard
| Tl	205	0.004	ug/L	0.001	13	157	426	7	Standard
[Pb	208	0.003	ug/L	0.000	7	403	700	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:36:37

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	31949	2	Standard
Cl	37		ug/L			5384034	5669079	2	Standard
[> Sc	45		ug/L			495146	504016	1	Standard
| Cr	52	50.346	ug/L	1.038	2	19255	997328	1	Standard
| Cr	53	48.759	ug/L	1.682	3	166	111668	2	Standard
| Mn	55	50.238	ug/L	2.012	4	514	1490592	2	Standard
[> Ge	72		ug/L			38398	37407	2	KED
| Ni	60	52.185	ug/L	1.165	2	25	79641	0	KED
| Ni	62	52.275	ug/L	0.275	0	1	12878	2	KED
| Cu	63	52.362	ug/L	0.885	1	59	224930	3	KED
| Cu	65	53.199	ug/L	1.041	1	45	115169	1	KED
| Zn	66	52.581	ug/L	0.052	0	76	29241	2	KED
| Zn	67	52.372	ug/L	1.469	2	17	4885	3	KED
| As	75	50.066	ug/L	1.083	2	2	14902	0	KED
| Se	78	50.071	ug/L	1.140	2	14	1395	3	KED
Y	89		ug/L			301489	312808	3	Standard
Kr	83		ug/L			55	49	26	Standard
[> In-1	115		ug/L			9770	9150	0	KED
| Mo	98	51.161	ug/L	0.707	1	8	74122	1	KED
| Cd	111	51.529	ug/L	0.315	0	4	15722	0	KED
| Cd	114	51.733	ug/L	0.601	1	4	41413	0	KED
[> In	115		ug/L			485826	507580	3	Standard
| Ag	107	48.661	ug/L	1.964	4	26	975821	1	Standard
| Sb	121	50.197	ug/L	0.563	1	201	821432	3	Standard
| Sb	123	49.924	ug/L	1.190	2	168	643388	2	Standard
| Ba	135	51.523	ug/L	1.013	1	84	313782	1	Standard
| Ba	137	50.673	ug/L	1.261	2	154	570024	3	Standard
[> Tb	159		ug/L			1205564	1244359	0	Standard
| Tl	205	53.195	ug/L	0.839	1	157	3404710	0	Standard
| Pb	208	52.805	ug/L	0.762	1	403	4370976	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 19:46:03

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	27375	1	Standard
Cl	37		ug/L			5384034	5510959	2	Standard
[> Sc	45		ug/L			495146	495143	1	Standard
| Cr	52	-0.109	ug/L	0.030	27	19255	17179	2	Standard
| Cr	53	0.083	ug/L	0.010	11	166	352	5	Standard
| Mn	55	0.001	ug/L	0.001	84	514	539	4	Standard
[> Ge	72		ug/L			38398	38529	1	KED
| Ni	60	-0.003	ug/L	0.004	118	25	20	30	KED
| Ni	62	0.015	ug/L	0.007	49	1	5	33	KED
| Cu	63	0.007	ug/L	0.002	29	59	88	10	KED
| Cu	65	-0.003	ug/L	0.002	55	45	38	10	KED
| Zn	66	-0.009	ug/L	0.018	197	76	71	13	KED
| Zn	67	-0.047	ug/L	0.049	103	17	12	37	KED
| As	75	0.008	ug/L	0.004	52	2	5	25	KED
| Se	78	-0.148	ug/L	0.131	88	14	10	34	KED
Y	89		ug/L			301489	304643	0	Standard
Kr	83		ug/L			55	41	29	Standard
[> In-1	115		ug/L			9770	9252	2	KED
| Mo	98	0.007	ug/L	0.004	49	8	18	26	KED
| Cd	111	-0.000	ug/L	0.001	503	4	4	13	KED
| Cd	114	0.002	ug/L	0.004	213	4	5	61	KED
[> In	115		ug/L			485826	505701	1	Standard
| Ag	107	0.002	ug/L	0.000	5	26	67	4	Standard
| Sb	121	0.060	ug/L	0.005	8	201	1195	8	Standard
| Sb	123	0.057	ug/L	0.006	11	168	901	8	Standard
| Ba	135	-0.001	ug/L	0.001	110	84	81	7	Standard
| Ba	137	-0.001	ug/L	0.001	61	154	147	3	Standard
[> Tb	159		ug/L			1205564	1238341	1	Standard
| Tl	205	0.003	ug/L	0.001	16	157	375	10	Standard
| Pb	208	0.001	ug/L	0.000	21	403	499	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0232-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, April 27, 2023 19:52:16**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	57786	3	Standard
Cl	37		ug/L			5384034	5425428	4	Standard
> Sc	45		ug/L			495146	509371	2	Standard
| Cr	52	0.082	ug/L	0.020	24	19255	21411	2	Standard
| Cr	53	0.190	ug/L	0.008	4	166	609	5	Standard
| Mn	55	0.055	ug/L	0.003	6	514	2168	6	Standard
> Ge	72		ug/L			38398	38581	0	KED
| Ni	60	0.003	ug/L	0.006	204	25	30	33	KED
| Ni	62	0.022	ug/L	0.008	33	1	7	25	KED
| Cu	63	0.027	ug/L	0.002	7	59	178	4	KED
| Cu	65	0.023	ug/L	0.008	31	45	97	17	KED
| Zn	66	1.035	ug/L	0.047	4	76	668	3	KED
| Zn	67	0.886	ug/L	0.080	9	17	102	7	KED
| As	75	0.007	ug/L	0.009	124	2	5	54	KED
| Se	78	-0.076	ug/L	0.048	63	14	12	10	KED
| Y	89		ug/L			301489	314241	4	Standard
| Kr	83		ug/L			55	55	26	Standard
> In-1	115		ug/L			9770	9604	0	KED
| Mo	98	0.021	ug/L	0.001	5	8	39	4	KED
| Cd	111	-0.007	ug/L	0.005	69	4	2	65	KED
| Cd	114	0.000	ug/L	0.001	3320	4	4	27	KED
> In	115		ug/L			485826	515080	2	Standard
| Ag	107	0.001	ug/L	0.000	13	26	49	3	Standard
| Sb	121	0.030	ug/L	0.001	4	201	708	1	Standard
| Sb	123	0.029	ug/L	0.004	15	168	555	9	Standard
| Ba	135	0.033	ug/L	0.009	25	84	293	18	Standard
| Ba	137	0.041	ug/L	0.006	14	154	626	9	Standard
> Tb	159		ug/L			1205564	1270390	3	Standard
| Tl	205	0.002	ug/L	0.000	22	157	291	7	Standard
| Pb	208	0.015	ug/L	0.000	0	403	1650	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0232-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: **Thursday, April 27, 2023 19:57:11**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	59660	4	Standard
Cl	37		ug/L			5384034	5573653	3	Standard
> Sc	45		ug/L			495146	513251	1	Standard
| Cr	52	25.985	ug/L	0.194	0	19255	533882	0	Standard
| Cr	53	25.998	ug/L	0.278	1	166	60720	0	Standard
| Mn	55	25.938	ug/L	0.204	0	514	784178	1	Standard
> Ge	72		ug/L			38398	38893	0	KED
| Ni	60	26.861	ug/L	0.324	1	25	42649	0	KED
| Ni	62	27.090	ug/L	0.180	0	1	6940	1	KED
| Cu	63	28.269	ug/L	0.280	0	59	126276	1	KED
| Cu	65	28.633	ug/L	0.683	2	45	64479	1	KED
| Zn	66	85.311	ug/L	1.818	2	76	49273	1	KED
| Zn	67	80.528	ug/L	2.040	2	17	7802	3	KED
| As	75	24.780	ug/L	0.462	1	2	7672	1	KED
| Se	78	76.032	ug/L	2.992	3	14	2195	3	KED
| Y	89		ug/L			301489	316803	2	Standard
| Kr	83		ug/L			55	63	6	Standard
> In-1	115		ug/L			9770	9434	0	KED
| Mo	98	26.689	ug/L	0.434	1	8	39866	1	KED
| Cd	111	25.903	ug/L	0.416	1	4	8150	1	KED
| Cd	114	25.548	ug/L	0.422	1	4	21087	1	KED
> In	115		ug/L			485826	522941	2	Standard
| Ag	107	25.463	ug/L	0.573	2	26	526410	0	Standard
| Sb	121	26.201	ug/L	0.542	2	201	441750	0	Standard
| Sb	123	26.153	ug/L	0.411	1	168	347368	1	Standard
| Ba	135	27.161	ug/L	0.677	2	84	170479	0	Standard
| Ba	137	26.481	ug/L	0.272	1	154	307056	1	Standard
> Tb	159		ug/L			1205564	1250214	1	Standard
| Tl	205	27.054	ug/L	0.205	0	157	1739866	0	Standard
| Pb	208	27.476	ug/L	0.062	0	403	2285424	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0717-BLK2**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 20:02:06

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	44781	0	Standard
Cl	37		ug/L			5384034	5475261	3	Standard
> Sc	45		ug/L			495146	506902	3	Standard
| Cr	52	0.011	ug/L	0.051	477	19255	19902	2	Standard
| Cr	53	0.100	ug/L	0.004	4	166	399	0	Standard
| Mn	55	0.041	ug/L	0.006	14	514	1742	13	Standard
> Ge	72		ug/L			38398	39158	1	KED
| Ni	60	0.018	ug/L	0.006	34	25	53	16	KED
| Ni	62	0.027	ug/L	0.026	96	1	8	75	KED
| Cu	63	0.111	ug/L	0.016	14	59	557	12	KED
| Cu	65	0.088	ug/L	0.006	6	45	245	6	KED
| Zn	66	0.305	ug/L	0.046	15	76	254	10	KED
| Zn	67	0.225	ug/L	0.102	45	17	39	24	KED
| As	75	0.010	ug/L	0.010	108	2	5	53	KED
| Se	78	0.095	ug/L	0.152	160	14	17	23	KED
| Y	89		ug/L			301489	310458	2	Standard
| Kr	83		ug/L			55	60	13	Standard
> In-1	115		ug/L			9770	9404	1	KED
| Mo	98	0.005	ug/L	0.003	50	8	16	24	KED
| Cd	111	-0.006	ug/L	0.008	138	4	2	94	KED
| Cd	114	0.000	ug/L	0.003	814	4	4	53	KED
> In	115		ug/L			485826	506388	2	Standard
| Ag	107	0.007	ug/L	0.005	75	26	169	64	Standard
| Sb	121	0.014	ug/L	0.008	59	201	439	32	Standard
| Sb	123	0.013	ug/L	0.005	41	168	340	21	Standard
| Ba	135	0.050	ug/L	0.007	13	84	393	11	Standard
| Ba	137	0.051	ug/L	0.012	23	154	730	18	Standard
> Tb	159		ug/L			1205564	1252426	1	Standard
| Tl	205	0.006	ug/L	0.007	116	157	565	83	Standard
| Pb	208	0.008	ug/L	0.008	90	403	1118	57	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0717-BS2**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 20:07:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	45701	0	Standard
Cl	37		ug/L			5384034	5779388	4	Standard
> Sc	45		ug/L			495146	491400	6	Standard
Cr	52	27.063	ug/L	1.695	6	19255	530142	1	Standard
Cr	53	26.776	ug/L	0.913	3	166	59789	4	Standard
Mn	55	27.150	ug/L	1.609	5	514	783860	2	Standard
> Ge	72		ug/L			38398	38719	2	KED
Ni	60	26.149	ug/L	0.220	0	25	41331	1	KED
Ni	62	26.716	ug/L	0.879	3	1	6811	1	KED
Cu	63	26.679	ug/L	0.806	3	59	118586	1	KED
Cu	65	26.585	ug/L	0.617	2	45	59591	0	KED
Zn	66	84.866	ug/L	2.531	2	76	48782	0	KED
Zn	67	80.119	ug/L	1.356	1	17	7728	3	KED
As	75	25.432	ug/L	0.807	3	2	7836	1	KED
Se	78	82.938	ug/L	1.816	2	14	2381	0	KED
Y	89		ug/L			301489	296406	9	Standard
Kr	83		ug/L			55	58	4	Standard
> In-1	115		ug/L			9770	9303	1	KED
Mo	98	0.090	ug/L	0.017	18	8	141	19	KED
Cd	111	26.649	ug/L	0.714	2	4	8266	1	KED
Cd	114	25.986	ug/L	0.390	1	4	21149	1	KED
> In	115		ug/L			485826	481349	7	Standard
Ag	107	25.966	ug/L	1.421	5	26	492857	2	Standard
Sb	121	0.080	ug/L	0.006	6	201	1430	3	Standard
Sb	123	0.073	ug/L	0.005	7	168	1057	2	Standard
Ba	135	28.133	ug/L	2.586	9	84	161810	1	Standard
Ba	137	28.122	ug/L	2.332	8	154	298920	2	Standard
> Tb	159		ug/L			1205564	1189858	6	Standard
Tl	205	27.657	ug/L	2.006	7	157	1687530	0	Standard
Pb	208	27.887	ug/L	1.978	7	403	2200813	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0576-01**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 20:12:38**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	110826	1	Standard
Cl	37		ug/L			5384034	5746628	4	Standard
[> Sc	45		ug/L			495146	516321	0	Standard
| Cr	52	7.451	ug/L	0.062	0	19255	168335	1	Standard
| Cr	53	7.423	ug/L	0.130	1	166	17567	2	Standard
| Mn	55	16.916	ug/L	0.284	1	514	514663	1	Standard
[> Ge	72		ug/L			38398	38259	0	KED
| Ni	60	1.793	ug/L	0.064	3	25	2824	2	KED
| Ni	62	1.981	ug/L	0.066	3	1	500	2	KED
| Cu	63	0.406	ug/L	0.014	3	59	1842	2	KED
| Cu	65	0.422	ug/L	0.025	5	45	977	4	KED
| Zn	66	10.463	ug/L	0.127	1	76	6011	0	KED
| Zn	67	9.802	ug/L	0.259	2	17	949	3	KED
| As	75	0.053	ug/L	0.003	5	2	19	5	KED
| Se	78	0.023	ug/L	0.102	439	14	15	18	KED
| Y	89		ug/L			301489	311589	0	Standard
| Kr	83		ug/L			55	59	20	Standard
[> In-1	115		ug/L			9770	9266	2	KED
| Mo	98	0.458	ug/L	0.043	9	8	678	7	KED
| Cd	111	0.211	ug/L	0.016	7	4	69	9	KED
| Cd	114	0.213	ug/L	0.029	13	4	176	13	KED
[> In	115		ug/L			485826	515800	2	Standard
| Ag	107	0.025	ug/L	0.004	13	26	546	14	Standard
| Sb	121	0.055	ug/L	0.001	1	201	1122	2	Standard
| Sb	123	0.055	ug/L	0.002	3	168	904	1	Standard
| Ba	135	2.478	ug/L	0.126	5	84	15419	3	Standard
| Ba	137	2.403	ug/L	0.102	4	154	27621	2	Standard
[> Tb	159		ug/L			1205564	1281494	2	Standard
| Tl	205	0.007	ug/L	0.005	73	157	631	54	Standard
| Pb	208	0.023	ug/L	0.005	21	403	2382	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0673-01**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 20:19:00**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	60016	1	Standard
Cl	37		ug/L			5384034	5661498	3	Standard
[> Sc	45		ug/L			495146	549375	0	Standard
| Cr	52	9.338	ug/L	0.273	2	19255	219042	2	Standard
| Cr	53	9.387	ug/L	0.040	0	166	23586	0	Standard
| Mn	55	118.448	ug/L	2.272	1	514	3830965	1	Standard
[> Ge	72		ug/L			38398	38465	1	KED
| Ni	60	8.875	ug/L	0.124	1	25	13953	0	KED
| Ni	62	8.763	ug/L	0.169	1	1	2221	2	KED
| Cu	63	17.457	ug/L	0.215	1	59	77137	1	KED
| Cu	65	17.659	ug/L	0.228	1	45	39347	0	KED
| Zn	66	73.637	ug/L	1.108	1	76	42073	0	KED
| Zn	67	69.322	ug/L	3.272	4	17	6642	3	KED
| As	75	1.260	ug/L	0.055	4	2	388	3	KED
| Se	78	0.177	ug/L	0.072	40	14	20	11	KED
| Y	89		ug/L			301489	406780	2	Standard
| Kr	83		ug/L			55	88	31	Standard
[> In-1	115		ug/L			9770	9460	2	KED
| Mo	98	0.492	ug/L	0.016	3	8	744	2	KED
| Cd	111	0.072	ug/L	0.014	19	4	26	15	KED
| Cd	114	0.081	ug/L	0.021	26	4	71	27	KED
[> In	115		ug/L			485826	516382	2	Standard
| Ag	107	0.034	ug/L	0.003	7	26	728	7	Standard
| Sb	121	0.067	ug/L	0.004	5	201	1332	7	Standard
| Sb	123	0.072	ug/L	0.005	7	168	1120	4	Standard
| Ba	135	35.637	ug/L	0.444	1	84	220885	1	Standard
| Ba	137	35.212	ug/L	0.675	1	154	403127	2	Standard
[> Tb	159		ug/L			1205564	1277177	0	Standard
| Tl	205	0.013	ug/L	0.001	4	157	1038	4	Standard
| Pb	208	6.672	ug/L	0.089	1	403	567227	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0658-02**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 20:23:55**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			25241	34891	5	Standard
Cl	37	ug/L			5384034	7838901	3	Standard
[> Sc	45	ug/L			495146	513300	0	Standard
| Cr	52	0.273	0.023	8	19255	25368	1	Standard
| Cr	53	4.059	0.014	0	166	9626	1	Standard
| Mn	55	0.024	0.003	14	514	1261	7	Standard
[> Ge	72	ug/L			38398	34565	2	KED
| Ni	60	0.035	0.001	2	25	72	2	KED
| Ni	62	0.065	0.014	21	1	16	17	KED
| Cu	63	0.369	0.016	4	59	1518	1	KED
| Cu	65	0.378	0.041	10	45	796	10	KED
| Zn	66	0.132	0.027	20	76	135	8	KED
| Zn	67	0.487	0.107	22	17	57	14	KED
| As	75	28.267	0.349	1	2	7777	1	KED
[Se	78	3.924	0.103	2	14	113	4	KED
| Y	89	ug/L			301489	305094	4	Standard
| Kr	83	ug/L			55	78	13	Standard
[> In-1	115	ug/L			9770	8037	1	KED
| Mo	98	26.519	0.601	2	8	33745	1	KED
| Cd	111	0.004	0.006	147	4	4	34	KED
| Cd	114	0.004	0.007	172	4	6	78	KED
[> In	115	ug/L			485826	473657	3	Standard
| Ag	107	0.002	0.000	23	26	56	10	Standard
| Sb	121	0.191	0.004	2	201	3112	1	Standard
| Sb	123	0.194	0.008	4	168	2494	3	Standard
| Ba	135	4.643	0.086	1	84	26464	1	Standard
[Ba	137	4.589	0.109	2	154	48296	0	Standard
[> Tb	159	ug/L			1205564	1223329	2	Standard
| Tl	205	0.002	0.000	16	157	254	7	Standard
[Pb	208	0.003	0.001	26	403	649	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0658-04**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 20:29:49**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	32863	2	Standard
Cl	37		ug/L			5384034	5440547	3	Standard
[> Sc	45		ug/L			495146	499635	1	Standard
| Cr	52	0.099	ug/L	0.029	29	19255	21335	3	Standard
| Cr	53	1.125	ug/L	0.041	3	166	2718	3	Standard
| Mn	55	0.065	ug/L	0.001	1	514	2431	2	Standard
[> Ge	72		ug/L			38398	36714	1	KED
| Ni	60	0.084	ug/L	0.010	11	25	150	10	KED
| Ni	62	0.135	ug/L	0.036	26	1	34	24	KED
| Cu	63	0.439	ug/L	0.013	2	59	1908	3	KED
| Cu	65	0.418	ug/L	0.022	5	45	931	4	KED
| Zn	66	0.241	ug/L	0.026	10	76	203	5	KED
| Zn	67	0.446	ug/L	0.129	28	17	57	21	KED
| As	75	39.752	ug/L	0.304	0	2	11617	0	KED
| Se	78	0.503	ug/L	0.143	28	14	27	14	KED
Y	89		ug/L			301489	307791	1	Standard
Kr	83		ug/L			55	74	14	Standard
[> In-1	115		ug/L			9770	8376	4	KED
| Mo	98	25.490	ug/L	1.069	4	8	33770	0	KED
| Cd	111	0.014	ug/L	0.007	49	4	7	21	KED
| Cd	114	0.008	ug/L	0.006	79	4	9	53	KED
[> In	115		ug/L			485826	505390	0	Standard
| Ag	107	-0.000	ug/L	0.000	199	26	24	25	Standard
| Sb	121	0.281	ug/L	0.008	2	201	4788	1	Standard
| Sb	123	0.285	ug/L	0.011	4	168	3835	4	Standard
| Ba	135	4.542	ug/L	0.141	3	84	27627	2	Standard
| Ba	137	4.487	ug/L	0.053	1	154	50410	0	Standard
[> Tb	159		ug/L			1205564	1234350	1	Standard
| Tl	205	0.001	ug/L	0.000	30	157	243	10	Standard
| Pb	208	0.004	ug/L	0.001	21	403	777	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0735-01**

Sample Dil Factor: **10**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 20:36:31**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	155722	2	Standard
Cl	37		ug/L			5384034	10820494	6	Standard
> Sc	45		ug/L			495146	511684	2	Standard
| Cr	52	16.919	ug/L	0.372	2	19255	353397	1	Standard
| Cr	53	26.088	ug/L	0.764	2	166	60719	1	Standard
| Mn	55	82.393	ug/L	2.169	2	514	2481485	1	Standard
> Ge	72		ug/L			38398	34004	1	KED
| Ni	60	19.619	ug/L	0.631	3	25	27234	1	KED
| Ni	62	19.779	ug/L	0.714	3	1	4429	3	KED
| Cu	63	3.077	ug/L	0.065	2	59	12059	0	KED
| Cu	65	3.026	ug/L	0.052	1	45	5993	1	KED
| Zn	66	9.923	ug/L	0.633	6	76	5067	4	KED
| Zn	67	15.203	ug/L	0.421	2	17	1299	1	KED
| As	75	8.066	ug/L	0.221	2	2	2185	2	KED
| Se	78	0.207	ug/L	0.135	65	14	18	17	KED
Y	89		ug/L			301489	298366	2	Standard
Kr	83		ug/L			55	125	4	Standard
> In-1	115		ug/L			9770	8007	1	KED
| Mo	98	1.484	ug/L	0.087	5	8	1887	4	KED
| Cd	111	0.024	ug/L	0.014	57	4	10	37	KED
| Cd	114	0.011	ug/L	0.015	135	4	11	94	KED
> In	115		ug/L			485826	433195	2	Standard
| Ag	107	0.035	ug/L	0.005	13	26	618	10	Standard
| Sb	121	0.702	ug/L	0.025	3	201	9983	1	Standard
| Sb	123	0.698	ug/L	0.017	2	168	7823	0	Standard
| Ba	135	91.442	ug/L	0.967	1	84	475387	2	Standard
| Ba	137	89.940	ug/L	2.797	3	154	863211	1	Standard
> Tb	159		ug/L			1205564	1161310	2	Standard
| Tl	205	0.001	ug/L	0.001	49	157	240	16	Standard
| Pb	208	0.369	ug/L	0.014	3	403	28881	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 20:41:36

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	30604	1	Standard
Cl	37		ug/L			5384034	5599512	1	Standard
[> Sc	45		ug/L			495146	491859	2	Standard
| Cr	52	-0.052	ug/L	0.007	13	19255	18144	2	Standard
| Cr	53	<u>0.388</u>	ug/L	0.005	1	166	1031	1	Standard
| Mn	55	0.049	ug/L	0.010	19	514	1933	14	Standard
[> Ge	72		ug/L			38398	37214	1	KED
| Ni	60	0.104	ug/L	0.016	15	25	181	11	KED
| Ni	62	0.127	ug/L	0.055	43	1	33	41	KED
| Cu	63	0.051	ug/L	0.004	7	59	276	4	KED
| Cu	65	0.035	ug/L	0.009	25	45	119	15	KED
| Zn	66	0.679	ug/L	0.033	4	76	448	3	KED
| Zn	67	0.646	ug/L	0.209	32	17	76	23	KED
| As	75	0.005	ug/L	0.006	122	2	4	40	KED
| Se	78	-0.203	ug/L	0.049	24	14	8	15	KED
Y	89		ug/L			301489	302642	2	Standard
Kr	83		ug/L			55	66	14	Standard
[> In-1	115		ug/L			9770	9036	0	KED
| Mo	98	0.001	ug/L	0.003	199	8	9	41	KED
| Cd	111	-0.002	ug/L	0.006	310	4	3	56	KED
| Cd	114	0.001	ug/L	0.001	104	4	4	19	KED
[> In	115		ug/L			485826	508408	0	Standard
| Ag	107	0.001	ug/L	0.000	10	26	37	2	Standard
| Sb	121	-0.004	ug/L	0.001	18	201	151	7	Standard
| Sb	123	-0.005	ug/L	0.000	7	168	108	4	Standard
| Ba	135	0.036	ug/L	0.011	30	84	306	21	Standard
| Ba	137	0.034	ug/L	0.008	23	154	539	16	Standard
[> Tb	159		ug/L			1205564	1215481	0	Standard
| Tl	205	0.001	ug/L	0.000	21	157	249	6	Standard
| Pb	208	0.023	ug/L	0.001	3	403	2236	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 20:46:32

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	31272	4	Standard
Cl	37		ug/L			5384034	5650453	3	Standard
[> Sc	45		ug/L			495146	486643	1	Standard
| Cr	52	49.978	ug/L	0.305	0	19255	956131	1	Standard
| Cr	53	49.737	ug/L	0.357	0	166	109997	1	Standard
| Mn	55	50.378	ug/L	0.844	1	514	1443758	2	Standard
[> Ge	72		ug/L			38398	37519	1	KED
| Ni	60	51.117	ug/L	1.365	2	25	78250	0	KED
| Ni	62	52.315	ug/L	2.449	4	1	12920	2	KED
| Cu	63	51.869	ug/L	1.324	2	59	223378	0	KED
| Cu	65	51.979	ug/L	1.067	2	45	112872	1	KED
| Zn	66	51.949	ug/L	0.463	0	76	28973	1	KED
| Zn	67	50.755	ug/L	0.375	0	17	4749	1	KED
| As	75	49.479	ug/L	1.345	2	2	14772	0	KED
| Se	78	49.965	ug/L	1.428	2	14	1396	1	KED
Y	89		ug/L			301489	297416	3	Standard
Kr	83		ug/L			55	54	17	Standard
[> In-1	115		ug/L			9770	8987	1	KED
| Mo	98	50.644	ug/L	0.462	0	8	72059	0	KED
| Cd	111	51.138	ug/L	1.069	2	4	15322	0	KED
| Cd	114	50.467	ug/L	1.383	2	4	39670	1	KED
[> In	115		ug/L			485826	488192	2	Standard
| Ag	107	49.111	ug/L	1.568	3	26	947651	0	Standard
| Sb	121	51.393	ug/L	0.927	1	201	808753	0	Standard
| Sb	123	50.896	ug/L	0.583	1	168	630982	1	Standard
| Ba	135	52.098	ug/L	1.074	2	84	305217	1	Standard
| Ba	137	51.937	ug/L	1.250	2	154	561927	1	Standard
[> Tb	159		ug/L			1205564	1233782	1	Standard
| Tl	205	53.067	ug/L	1.159	2	157	3367237	0	Standard
| Pb	208	52.265	ug/L	1.238	2	403	4288822	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 20:54:11

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	26785	2	Standard
Cl	37		ug/L			5384034	5555097	2	Standard
[> Sc	45		ug/L			495146	483282	1	Standard
| Cr	52	-0.091	ug/L	0.014	15	19255	17100	2	Standard
| Cr	53	0.083	ug/L	0.010	11	166	344	5	Standard
| Mn	55	0.001	ug/L	0.000	27	514	538	0	Standard
[> Ge	72		ug/L			38398	38037	0	KED
| Ni	60	0.007	ug/L	0.007	88	25	36	28	KED
| Ni	62	0.015	ug/L	0.013	86	1	5	57	KED
| Cu	63	0.004	ug/L	0.003	74	59	77	18	KED
| Cu	65	-0.003	ug/L	0.001	47	45	38	8	KED
| Zn	66	-0.040	ug/L	0.005	12	76	52	5	KED
| Zn	67	-0.018	ug/L	0.020	107	17	15	12	KED
| As	75	0.004	ug/L	0.006	128	2	4	40	KED
| Se	78	0.010	ug/L	0.014	134	14	15	3	KED
Y	89		ug/L			301489	291604	3	Standard
Kr	83		ug/L			55	53	25	Standard
[> In-1	115		ug/L			9770	9273	1	KED
| Mo	98	0.009	ug/L	0.004	43	8	21	28	KED
| Cd	111	-0.004	ug/L	0.005	121	4	2	57	KED
| Cd	114	0.002	ug/L	0.002	119	4	5	34	KED
[> In	115		ug/L			485826	496417	1	Standard
| Ag	107	0.002	ug/L	0.000	21	26	60	13	Standard
| Sb	121	0.044	ug/L	0.003	7	201	904	4	Standard
| Sb	123	0.039	ug/L	0.003	6	168	660	4	Standard
| Ba	135	-0.001	ug/L	0.001	65	84	78	5	Standard
| Ba	137	-0.000	ug/L	0.001	384	154	153	8	Standard
[> Tb	159		ug/L			1205564	1225241	1	Standard
| Tl	205	0.001	ug/L	0.001	39	157	247	15	Standard
| Pb	208	0.001	ug/L	0.000	30	403	467	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: C93-1 BOTTLE TEST

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 20:59:54

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	351889	2	Standard
Cl	37		ug/L			5384034	9074198	1	Standard
> Sc	45		ug/L			495146	551416	2	Standard
| Cr	52	1.215	ug/L	0.073	5	19255	47248	1	Standard
| Cr	53	7.978	ug/L	0.261	3	166	20138	1	Standard
| Mn	55	204.984	ug/L	3.652	1	514	6652535	0	Standard
> Ge	72		ug/L			38398	34874	0	KED
| Ni	60	2.221	ug/L	0.100	4	25	3183	4	KED
| Ni	62	2.464	ug/L	0.087	3	1	567	3	KED
| Cu	63	14.785	ug/L	0.372	2	59	59241	2	KED
| Cu	65	15.019	ug/L	0.172	1	45	30350	1	KED
| Zn	66	97.590	ug/L	1.930	1	76	50536	1	KED
| Zn	67	89.938	ug/L	3.909	4	17	7811	4	KED
| As	75	1.389	ug/L	0.086	6	2	388	5	KED
| Se	78	0.086	ug/L	0.029	34	14	15	4	KED
Y	89		ug/L			301489	291838	2	Standard
Kr	83		ug/L			55	137	2	Standard
> In-1	115		ug/L			9770	8381	0	KED
| Mo	98	3.782	ug/L	0.100	2	8	5025	2	KED
| Cd	111	0.136	ug/L	0.042	30	4	41	27	KED
| Cd	114	0.123	ug/L	0.015	12	4	93	11	KED
> In	115		ug/L			485826	450271	1	Standard
| Ag	107	0.008	ug/L	0.001	9	26	166	7	Standard
| Sb	121	0.557	ug/L	0.017	3	201	8267	3	Standard
| Sb	123	0.557	ug/L	0.018	3	168	6527	4	Standard
| Ba	135	21.980	ug/L	0.342	1	84	118830	0	Standard
| Ba	137	22.108	ug/L	0.206	0	154	220768	1	Standard
> Tb	159		ug/L			1205564	1156043	1	Standard
| Tl	205	0.012	ug/L	0.001	4	157	864	3	Standard
| Pb	208	0.864	ug/L	0.017	1	403	66794	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: C93-2 BOTTLE TEST

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:05:59

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	474407	2	Standard
Cl	37		ug/L			5384034	7854616	4	Standard
[> Sc	45		ug/L			495146	519223	2	Standard
| Cr	52	1.451	ug/L	0.025	1	19255	49223	1	Standard
| Cr	53	4.317	ug/L	0.130	3	166	10343	1	Standard
| Mn	55	161.943	ug/L	2.508	1	514	4949352	0	Standard
[> Ge	72		ug/L			38398	34657	1	KED
| Ni	60	1.916	ug/L	0.010	0	25	2732	1	KED
| Ni	62	1.866	ug/L	0.140	7	1	427	6	KED
| Cu	63	7.831	ug/L	0.091	1	59	31206	1	KED
| Cu	65	7.923	ug/L	0.212	2	45	15925	2	KED
| Zn	66	144.870	ug/L	3.553	2	76	74496	0	KED
| Zn	67	133.867	ug/L	0.846	0	17	11546	2	KED
| As	75	2.580	ug/L	0.094	3	2	713	1	KED
| Se	78	0.026	ug/L	0.029	114	14	14	3	KED
| Y	89		ug/L			301489	284463	4	Standard
| Kr	83		ug/L			55	69	20	Standard
[> In-1	115		ug/L			9770	8132	6	KED
| Mo	98	4.919	ug/L	0.250	5	8	6326	1	KED
| Cd	111	0.088	ug/L	0.015	16	4	27	19	KED
| Cd	114	0.073	ug/L	0.012	16	4	55	19	KED
[> In	115		ug/L			485826	456807	2	Standard
| Ag	107	0.002	ug/L	0.000	16	26	54	7	Standard
| Sb	121	0.141	ug/L	0.002	1	201	2266	2	Standard
| Sb	123	0.138	ug/L	0.003	1	168	1756	3	Standard
| Ba	135	21.576	ug/L	0.296	1	84	118336	1	Standard
| Ba	137	21.151	ug/L	0.024	0	154	214274	1	Standard
[> Tb	159		ug/L			1205564	1130525	2	Standard
| Tl	205	0.005	ug/L	0.000	3	157	455	4	Standard
| Pb	208	0.591	ug/L	0.017	2	403	44833	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0678-08**

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:11:17

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	78906	1	Standard
Cl	37		ug/L			5384034	6540716	3	Standard
[> Sc	45		ug/L			495146	577486	2	Standard
| Cr	52	0.416	ug/L	0.049	11	19255	31696	2	Standard
| Cr	53	1.229	ug/L	0.034	2	166	3415	3	Standard
| Mn	55	474.840	ug/L	11.606	2	514	16138128	1	Standard
[> Ge	72		ug/L			38398	34112	0	KED
| Ni	60	0.966	ug/L	0.020	2	25	1367	2	KED
| Ni	62	1.007	ug/L	0.119	11	1	227	11	KED
| Cu	63	0.542	ug/L	0.024	4	59	2176	4	KED
| Cu	65	0.553	ug/L	0.029	5	45	1130	4	KED
| Zn	66	4.426	ug/L	0.131	2	76	2306	3	KED
| Zn	67	8.073	ug/L	0.386	4	17	699	4	KED
| As	75	0.728	ug/L	0.051	7	2	200	7	KED
| Se	78	0.114	ug/L	0.113	99	14	16	17	KED
Y	89		ug/L			301489	284873	1	Standard
Kr	83		ug/L			55	85	3	Standard
[> In-1	115		ug/L			9770	8314	3	KED
| Mo	98	0.282	ug/L	0.031	10	8	378	10	KED
| Cd	111	0.016	ug/L	0.010	60	4	8	35	KED
| Cd	114	0.017	ug/L	0.005	31	4	16	25	KED
[> In	115		ug/L			485826	446101	1	Standard
| Ag	107	0.002	ug/L	0.001	41	26	67	25	Standard
| Sb	121	0.153	ug/L	0.002	1	201	2383	1	Standard
| Sb	123	0.155	ug/L	0.009	5	168	1910	4	Standard
| Ba	135	61.850	ug/L	1.197	1	84	331232	3	Standard
| Ba	137	60.491	ug/L	0.883	1	154	598132	0	Standard
[> Tb	159		ug/L			1205564	1133365	1	Standard
| Tl	205	0.002	ug/L	0.000	4	157	245	3	Standard
| Pb	208	0.345	ug/L	0.010	2	403	26402	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0678-09**

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:16:12

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	64134	2	Standard
Cl	37		ug/L			5384034	6449073	3	Standard
[> Sc	45		ug/L			495146	582936	2	Standard
| Cr	52	0.252	ug/L	0.020	7	19255	28325	1	Standard
| Cr	53	1.072	ug/L	0.030	2	166	3029	2	Standard
| Mn	55	480.064	ug/L	19.130	3	514	16462516	1	Standard
[> Ge	72		ug/L			38398	33232	0	KED
| Ni	60	0.934	ug/L	0.018	1	25	1288	1	KED
| Ni	62	0.999	ug/L	0.072	7	1	220	7	KED
| Cu	63	0.427	ug/L	0.024	5	59	1682	5	KED
| Cu	65	0.423	ug/L	0.013	3	45	852	3	KED
| Zn	66	1.930	ug/L	0.144	7	76	1017	6	KED
| Zn	67	5.546	ug/L	0.413	7	17	473	7	KED
| As	75	0.538	ug/L	0.026	4	2	144	4	KED
| Se	78	0.242	ug/L	0.067	27	14	18	8	KED
| Y	89		ug/L			301489	285940	2	Standard
| Kr	83		ug/L			55	93	14	Standard
[> In-1	115		ug/L			9770	8148	0	KED
| Mo	98	0.142	ug/L	0.012	8	8	189	7	KED
| Cd	111	0.004	ug/L	0.009	239	4	4	52	KED
| Cd	114	0.004	ug/L	0.007	184	4	6	80	KED
[> In	115		ug/L			485826	443663	2	Standard
| Ag	107	0.001	ug/L	0.001	46	26	48	21	Standard
| Sb	121	0.183	ug/L	0.005	2	201	2803	3	Standard
| Sb	123	0.180	ug/L	0.009	5	168	2184	2	Standard
| Ba	135	62.916	ug/L	2.476	3	84	334906	2	Standard
| Ba	137	61.480	ug/L	1.384	2	154	604474	1	Standard
[> Tb	159		ug/L			1205564	1150068	1	Standard
| Tl	205	0.000	ug/L	0.000	56	157	168	5	Standard
| Pb	208	0.040	ug/L	0.001	3	403	3430	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0732-01**

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:21:07

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	52021	3	Standard
Cl	37		ug/L			5384034	5041203	3	Standard
> Sc	45		ug/L			495146	457653	0	Standard
Cr	52	0.351	ug/L	0.032	9	19255	23980	1	Standard
Cr	53	1.018	ug/L	0.052	5	166	2268	5	Standard
Mn	55	10.412	ug/L	0.311	2	514	280953	2	Standard
> Ge	72		ug/L			38398	31030	0	KED
Ni	60	0.749	ug/L	0.041	5	25	968	4	KED
Ni	62	0.803	ug/L	0.016	2	1	165	1	KED
Cu	63	1.321	ug/L	0.028	2	59	4754	2	KED
Cu	65	1.270	ug/L	0.012	0	45	2317	0	KED
Zn	66	2.113	ug/L	0.047	2	76	1033	2	KED
Zn	67	2.166	ug/L	0.143	6	17	180	6	KED
As	75	1.494	ug/L	0.099	6	2	371	6	KED
Se	78	0.567	ug/L	0.161	28	14	25	14	KED
Y	89		ug/L			301489	277800	2	Standard
Kr	83		ug/L			55	64	22	Standard
> In-1	115		ug/L			9770	7568	1	KED
Mo	98	11.782	ug/L	0.098	0	8	14122	0	KED
Cd	111	0.048	ug/L	0.017	36	4	15	30	KED
Cd	114	0.015	ug/L	0.006	39	4	13	31	KED
> In	115		ug/L			485826	425662	3	Standard
Ag	107	0.003	ug/L	0.001	25	26	65	13	Standard
Sb	121	0.765	ug/L	0.023	2	201	10667	1	Standard
Sb	123	0.757	ug/L	0.032	4	168	8323	0	Standard
Ba	135	8.079	ug/L	0.245	3	84	41309	0	Standard
Ba	137	8.021	ug/L	0.213	2	154	75755	1	Standard
> Tb	159		ug/L			1205564	1137020	1	Standard
Tl	205	0.062	ug/L	0.001	1	157	3771	0	Standard
Pb	208	0.177	ug/L	0.004	2	403	13727	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0741-01**

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: **Thursday, April 27, 2023 21:26:01**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	62364	3	Standard
Cl	37		ug/L			5384034	7903423	4	Standard
Sc	45		ug/L			495146	628786	2	Standard
Cr	52	0.502	ug/L	0.023	4	19255	36617	2	Standard
Cr	53	1.880	ug/L	0.034	1	166	5576	2	Standard
Mn	55	2186.464	ug/L	24.559	1	514	80937426	2	Standard
Ge	72		ug/L			38398	30558	0	KED
Ni	60	1.127	ug/L	0.021	1	25	1425	1	KED
Ni	62	1.078	ug/L	0.172	15	1	218	15	KED
Cu	63	0.514	ug/L	0.024	4	59	1850	4	KED
Cu	65	0.514	ug/L	0.017	3	45	944	2	KED
Zn	66	1.528	ug/L	0.063	4	76	753	3	KED
Zn	67	7.086	ug/L	0.611	8	17	551	8	KED
As	75	1.173	ug/L	0.041	3	2	287	3	KED
Se	78	0.125	ug/L	0.097	77	14	14	15	KED
Y	89		ug/L			301489	281292	2	Standard
Kr	83		ug/L			55	121	11	Standard
In-1	115		ug/L			9770	7420	3	KED
Mo	98	0.111	ug/L	0.027	23	8	136	18	KED
Cd	111	0.008	ug/L	0.010	117	4	5	44	KED
Cd	114	0.000	ug/L	0.005	1867	4	3	92	KED
In	115		ug/L			485826	419710	1	Standard
Ag	107	0.003	ug/L	0.001	24	26	76	17	Standard
Sb	121	0.098	ug/L	0.002	1	201	1504	1	Standard
Sb	123	0.099	ug/L	0.010	10	168	1200	9	Standard
Ba	135	97.879	ug/L	0.358	0	84	493076	1	Standard
Ba	137	95.010	ug/L	2.406	2	154	883675	1	Standard
Tb	159		ug/L			1205564	1044391	0	Standard
Tl	205	-0.000	ug/L	0.000	201	157	133	3	Standard
Pb	208	0.422	ug/L	0.003	0	403	29678	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0699-02**

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:31:25

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	76887	2	Standard
Cl	37		ug/L			5384034	4983068	3	Standard
[> Sc	45		ug/L			495146	446271	1	Standard
| Cr	52	1.099	ug/L	0.030	2	19255	36248	1	Standard
| Cr	53	1.500	ug/L	0.023	1	166	3188	2	Standard
| Mn	55	1.266	ug/L	0.013	1	514	33711	0	Standard
[> Ge	72		ug/L			38398	33314	1	KED
| Ni	60	0.274	ug/L	0.010	3	25	394	3	KED
| Ni	62	0.374	ug/L	0.045	12	1	83	12	KED
| Cu	63	14.923	ug/L	0.102	0	59	57115	0	KED
| Cu	65	14.922	ug/L	0.358	2	45	28799	1	KED
| Zn	66	4.876	ug/L	0.143	2	76	2474	1	KED
| Zn	67	4.358	ug/L	0.342	7	17	375	8	KED
| As	75	0.070	ug/L	0.015	21	2	21	19	KED
| Se	78	0.190	ug/L	0.068	36	14	17	10	KED
| Y	89		ug/L			301489	287922	2	Standard
| Kr	83		ug/L			55	59	5	Standard
[> In-1	115		ug/L			9770	7735	2	KED
| Mo	98	0.677	ug/L	0.030	4	8	835	2	KED
| Cd	111	0.006	ug/L	0.015	251	4	5	78	KED
| Cd	114	-0.001	ug/L	0.003	341	4	2	78	KED
[> In	115		ug/L			485826	451288	2	Standard
| Ag	107	0.003	ug/L	0.000	7	26	80	7	Standard
| Sb	121	0.070	ug/L	0.003	4	201	1201	4	Standard
| Sb	123	0.072	ug/L	0.007	10	168	981	9	Standard
| Ba	135	0.291	ug/L	0.003	0	84	1655	2	Standard
| Ba	137	0.274	ug/L	0.008	2	154	2882	0	Standard
[> Tb	159		ug/L			1205564	1197191	1	Standard
| Tl	205	0.002	ug/L	0.000	26	157	256	11	Standard
| Pb	208	0.019	ug/L	0.000	1	403	1941	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:36:21

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	30014	5	Standard
Cl	37		ug/L			5384034	5191007	3	Standard
[> Sc	45		ug/L			495146	457811	2	Standard
| Cr	52	-0.127	ug/L	0.029	22	19255	15557	2	Standard
| Cr	53	0.068	ug/L	0.015	22	166	295	12	Standard
| Mn	55	0.055	ug/L	0.003	5	514	1960	2	Standard
[> Ge	72		ug/L			38398	35634	3	KED
| Ni	60	0.119	ug/L	0.010	8	25	196	6	KED
| Ni	62	0.158	ug/L	0.018	11	1	38	7	KED
| Cu	63	0.054	ug/L	0.003	6	59	277	6	KED
| Cu	65	0.043	ug/L	0.004	8	45	130	3	KED
| Zn	66	0.683	ug/L	0.030	4	76	431	3	KED
| Zn	67	0.751	ug/L	0.149	19	17	82	17	KED
| As	75	0.006	ug/L	0.005	80	2	4	32	KED
| Se	78	-0.057	ug/L	0.060	105	14	12	12	KED
Y	89		ug/L			301489	286127	2	Standard
Kr	83		ug/L			55	71	14	Standard
[> In-1	115		ug/L			9770	8359	3	KED
| Mo	98	-0.001	ug/L	0.004	312	8	5	83	KED
| Cd	111	-0.001	ug/L	0.007	666	4	3	56	KED
| Cd	114	0.002	ug/L	0.004	250	4	4	63	KED
[> In	115		ug/L			485826	486807	4	Standard
| Ag	107	0.001	ug/L	0.001	162	26	41	58	Standard
| Sb	121	-0.006	ug/L	0.001	20	201	104	19	Standard
| Sb	123	-0.007	ug/L	0.001	14	168	84	11	Standard
| Ba	135	0.026	ug/L	0.003	12	84	236	9	Standard
| Ba	137	0.029	ug/L	0.001	4	154	465	3	Standard
[> Tb	159		ug/L			1205564	1213468	1	Standard
| Tl	205	-0.000	ug/L	0.000	217	157	146	19	Standard
| Pb	208	0.023	ug/L	0.001	4	403	2245	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:42:04

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	30473	3	Standard
Cl	37		ug/L			5384034	5289537	3	Standard
[> Sc	45		ug/L			495146	471381	1	Standard
| Cr	52	47.744	ug/L	1.037	2	19255	885798	3	Standard
| Cr	53	48.007	ug/L	0.803	1	166	102859	2	Standard
| Mn	55	48.011	ug/L	0.707	1	514	1332797	2	Standard
[> Ge	72		ug/L			38398	36242	0	KED
| Ni	60	51.925	ug/L	0.689	1	25	76805	0	KED
| Ni	62	51.321	ug/L	1.475	2	1	12250	2	KED
| Cu	63	51.736	ug/L	0.466	0	59	215293	1	KED
| Cu	65	52.335	ug/L	0.450	0	45	109796	0	KED
| Zn	66	52.285	ug/L	1.121	2	76	28172	2	KED
| Zn	67	52.201	ug/L	1.841	3	17	4718	3	KED
| As	75	50.553	ug/L	0.141	0	2	14584	0	KED
| Se	78	49.083	ug/L	1.150	2	14	1325	1	KED
Y	89		ug/L			301489	288619	1	Standard
Kr	83		ug/L			55	71	20	Standard
[> In-1	115		ug/L			9770	8451	1	KED
| Mo	98	52.312	ug/L	1.773	3	8	69978	1	KED
| Cd	111	52.897	ug/L	1.496	2	4	14903	1	KED
| Cd	114	51.829	ug/L	1.814	3	4	38310	2	KED
[> In	115		ug/L			485826	486068	1	Standard
| Ag	107	47.228	ug/L	0.750	1	26	907680	0	Standard
| Sb	121	50.907	ug/L	0.430	0	201	797776	0	Standard
| Sb	123	51.107	ug/L	0.250	0	168	630949	1	Standard
| Ba	135	51.666	ug/L	1.281	2	84	301395	1	Standard
| Ba	137	51.098	ug/L	0.810	1	154	550666	2	Standard
[> Tb	159		ug/L			1205564	1206401	1	Standard
| Tl	205	55.612	ug/L	0.787	1	157	3451516	2	Standard
| Pb	208	54.940	ug/L	0.762	1	403	4408829	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 21:49:43

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25241	28200	1	Standard
Cl	37		ug/L			5384034	5295136	2	Standard
[> Sc	45		ug/L			495146	458783	2	Standard
| Cr	52	-0.110	ug/L	0.010	9	19255	15901	1	Standard
| Cr	53	0.015	ug/L	0.005	34	166	184	3	Standard
| Mn	55	0.011	ug/L	0.001	11	514	762	2	Standard
[> Ge	72		ug/L			38398	36593	2	KED
| Ni	60	0.040	ug/L	0.004	11	25	84	9	KED
| Ni	62	0.051	ug/L	0.033	65	1	13	55	KED
| Cu	63	0.003	ug/L	0.001	33	59	70	4	KED
| Cu	65	-0.000	ug/L	0.001	407	45	42	5	KED
| Zn	66	-0.014	ug/L	0.015	106	76	64	10	KED
| Zn	67	-0.040	ug/L	0.029	72	17	12	22	KED
| As	75	0.008	ug/L	0.009	108	2	5	51	KED
| Se	78	-0.028	ug/L	0.084	303	14	13	19	KED
Y	89		ug/L			301489	288022	3	Standard
Kr	83		ug/L			55	74	10	Standard
[> In-1	115		ug/L			9770	8928	2	KED
| Mo	98	0.008	ug/L	0.008	93	8	19	54	KED
| Cd	111	-0.001	ug/L	0.000	38	4	3	0	KED
| Cd	114	0.001	ug/L	0.004	286	4	4	58	KED
[> In	115		ug/L			485826	482240	1	Standard
| Ag	107	0.001	ug/L	0.000	14	26	48	8	Standard
| Sb	121	0.041	ug/L	0.001	2	201	837	0	Standard
| Sb	123	0.042	ug/L	0.002	4	168	685	3	Standard
| Ba	135	0.002	ug/L	0.002	135	84	93	12	Standard
| Ba	137	0.001	ug/L	0.001	78	154	160	3	Standard
[> Tb	159		ug/L			1205564	1201037	2	Standard
| Tl	205	0.001	ug/L	0.000	33	157	241	10	Standard
| Pb	208	0.002	ug/L	0.001	60	403	544	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 22:05:07

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13	ug/L				26020	0	Standard
	Cl	37	ug/L				5354462	1	Standard
[>	Sc	45	ug/L				474891	0	Standard
|	Cr	52	ug/L				16718	3	Standard
|	Cr	53	ug/L				209	3	Standard
[>	Ge	72	ug/L				34387	7	KED
|	Ni	60	ug/L				146	16	KED
|	Ni	62	ug/L				34	24	KED
|	Cu	63	ug/L				114	3	KED
|	Cu	65	ug/L				56	5	KED
|	Zn	66	ug/L				76	25	KED
|	Zn	67	ug/L				13	34	KED
|	As	75	ug/L				6	11	KED
	Y	89	ug/L				289124	1	Standard
	Kr	83	ug/L				80	14	Standard
[>	In-1	115	ug/L				9102	0	KED
|	Cd	111	ug/L				3	68	KED
|	Cd	114	ug/L				3	76	KED
[>	In	115	ug/L				483935	2	Standard
|	Ag	107	ug/L				106	17	Standard
[>	Tb	159	ug/L				1215870	1	Standard
|	Pb	208	ug/L				593	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 22:09:33

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	31248	0	Standard
Cl	37		ug/L			5354462	5583700	2	Standard
[> Sc	45		ug/L			474891	488894	1	Standard
| Cr	52	49.777	ug/L	1.546	3	16718	954685	1	Standard
| Cr	53	49.292	ug/L	0.800	1	209	109555	0	Standard
[> Ge	72		ug/L			34387	37126	0	KED
| Ni	60	51.468	ug/L	0.217	0	146	78119	0	KED
| Ni	62	50.924	ug/L	0.950	1	34	12488	2	KED
| Cu	63	50.950	ug/L	0.682	1	114	217244	1	KED
| Cu	65	51.166	ug/L	0.194	0	56	109984	1	KED
| Zn	66	51.097	ug/L	0.624	1	76	28213	1	KED
| Zn	67	51.231	ug/L	1.534	2	13	4743	3	KED
| As	75	49.924	ug/L	0.532	1	6	14757	0	KED
Y	89		ug/L			289124	286806	0	Standard
Kr	83		ug/L			80	56	19	Standard
[> In-1	115		ug/L			9102	8510	1	KED
| Cd	111	52.471	ug/L	1.586	3	3	14884	1	KED
| Cd	114	52.452	ug/L	1.552	2	3	39038	1	KED
[> In	115		ug/L			483935	488072	2	Standard
| Ag	107	48.040	ug/L	1.494	3	106	926830	0	Standard
[> Tb	159		ug/L			1215870	1222863	0	Standard
| Pb	208	53.075	ug/L	0.864	1	593	4317825	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 22:16:43

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	27098	1	Standard
Cl	37		ug/L			5354462	5501217	3	Standard
[> Sc	45		ug/L			474891	482710	1	Standard
| Cr	52	0.002	ug/L	0.013	700	16718	17030	2	Standard
| Cr	53	-0.004	ug/L	0.029	818	209	205	32	Standard
[> Ge	72		ug/L			34387	37464	1	KED
| Ni	60	-0.015	ug/L	0.010	63	146	135	11	KED
| Ni	62	-0.057	ug/L	0.023	40	34	24	24	KED
| Cu	63	-0.004	ug/L	0.012	308	114	107	50	KED
| Cu	65	-0.007	ug/L	0.011	162	56	46	52	KED
| Zn	66	-0.049	ug/L	0.022	45	76	55	23	KED
| Zn	67	-0.041	ug/L	0.054	133	13	11	44	KED
| As	75	-0.003	ug/L	0.008	253	6	6	38	KED
Y	89		ug/L			289124	289893	1	Standard
Kr	83		ug/L			80	54	16	Standard
[> In-1	115		ug/L			9102	8925	3	KED
| Cd	111	0.010	ug/L	0.006	62	3	6	31	KED
| Cd	114	0.001	ug/L	0.002	122	3	4	22	KED
[> In	115		ug/L			483935	480315	0	Standard
| Ag	107	0.020	ug/L	0.016	80	106	490	63	Standard
[> Tb	159		ug/L			1215870	1194010	2	Standard
| Pb	208	0.012	ug/L	0.022	185	593	1535	115	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0295-08**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:22:56**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	55099	2	Standard
Cl	37		ug/L			5354462	5300027	1	Standard
[> Sc	45		ug/L			474891	554971	1	Standard
| Cr	52	9.139	ug/L	0.198	2	16718	214934	0	Standard
| Cr	53	8.940	ug/L	0.162	1	209	22755	0	Standard
[> Ge	72		ug/L			34387	38049	0	KED
| Ni	60	7.108	ug/L	0.062	0	146	11196	1	KED
| Ni	62	7.339	ug/L	0.112	1	34	1877	1	KED
| Cu	63	9.924	ug/L	0.186	1	114	43473	2	KED
| Cu	65	10.003	ug/L	0.190	1	56	22086	1	KED
| Zn	66	24.139	ug/L	0.118	0	76	13703	0	KED
| Zn	67	23.308	ug/L	0.664	2	13	2219	3	KED
| As	75	3.794	ug/L	0.139	3	6	1155	3	KED
Y	89		ug/L			289124	455668	1	Standard
Kr	83		ug/L			80	66	12	Standard
[> In-1	115		ug/L			9102	9152	1	KED
| Cd	111	0.037	ug/L	0.001	2	3	14	3	KED
| Cd	114	0.043	ug/L	0.009	21	3	38	20	KED
[> In	115		ug/L			483935	494943	3	Standard
| Ag	107	0.029	ug/L	0.002	8	106	666	6	Standard
[> Tb	159		ug/L			1215870	1254248	2	Standard
| Pb	208	9.220	ug/L	0.154	1	593	769618	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-02**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:29:11**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	59818	5	Standard
Cl	37		ug/L			5354462	5150680	3	Standard
Sc	45		ug/L			474891	613581	6	Standard
Cr	52	13.651	ug/L	0.553	4	16718	343834	2	Standard
Cr	53	13.384	ug/L	0.731	5	209	37453	1	Standard
Ge	72		ug/L			34387	36816	1	KED
Ni	60	14.766	ug/L	0.514	3	146	22332	2	KED
Ni	62	14.516	ug/L	0.158	1	34	3557	2	KED
Cu	63	28.468	ug/L	0.307	1	114	120424	0	KED
Cu	65	28.805	ug/L	0.297	1	56	61427	1	KED
Zn	66	60.858	ug/L	0.452	0	76	33306	1	KED
Zn	67	59.861	ug/L	1.224	2	13	5491	1	KED
As	75	6.370	ug/L	0.056	0	6	1873	0	KED
Y	89		ug/L			289124	570390	3	Standard
Kr	83		ug/L			80	93	10	Standard
In-1	115		ug/L			9102	8841	1	KED
Cd	111	0.185	ug/L	0.007	3	3	57	2	KED
Cd	114	0.178	ug/L	0.027	14	3	141	13	KED
In	115		ug/L			483935	462866	10	Standard
Ag	107	0.129	ug/L	0.011	8	106	2445	2	Standard
Tb	159		ug/L			1215870	1161909	5	Standard
Pb	208	12.486	ug/L	0.739	5	593	963419	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-03**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:34:56**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	60188	2	Standard
Cl	37		ug/L			5354462	5217808	2	Standard
Sc	45		ug/L			474891	633545	2	Standard
Cr	52	14.127	ug/L	0.225	1	16718	367254	3	Standard
Cr	53	14.144	ug/L	0.069	0	209	40947	2	Standard
Ge	72		ug/L			34387	36811	2	KED
Ni	60	15.795	ug/L	0.216	1	146	23874	1	KED
Ni	62	15.793	ug/L	0.077	0	34	3865	2	KED
Cu	63	33.069	ug/L	0.890	2	114	139798	0	KED
Cu	65	32.589	ug/L	0.594	1	56	69460	1	KED
Zn	66	63.271	ug/L	0.972	1	76	34611	1	KED
Zn	67	62.211	ug/L	0.554	0	13	5706	2	KED
As	75	6.789	ug/L	0.093	1	6	1995	1	KED
Y	89		ug/L			289124	587501	5	Standard
Kr	83		ug/L			80	101	1	Standard
In-1	115		ug/L			9102	8778	0	KED
Cd	111	0.203	ug/L	0.047	23	3	62	22	KED
Cd	114	0.191	ug/L	0.012	6	3	150	5	KED
In	115		ug/L			483935	481530	3	Standard
Ag	107	0.140	ug/L	0.011	7	106	2780	9	Standard
Tb	159		ug/L			1215870	1203948	2	Standard
Pb	208	13.728	ug/L	0.134	0	593	1099884	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-04**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:40:02**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	66696	5	Standard
Cl	37		ug/L			5354462	5181847	2	Standard
> Sc	45		ug/L			474891	636324	1	Standard
Cr	52	14.556	ug/L	0.141	0	16718	379346	1	Standard
Cr	53	14.396	ug/L	0.157	1	209	41848	0	Standard
> Ge	72		ug/L			34387	37345	1	KED
Ni	60	14.609	ug/L	0.260	1	146	22420	2	KED
Ni	62	14.671	ug/L	0.423	2	34	3645	1	KED
Cu	63	38.371	ug/L	0.583	1	114	164607	1	KED
Cu	65	38.311	ug/L	1.092	2	56	82839	2	KED
Zn	66	71.381	ug/L	0.740	1	76	39609	0	KED
Zn	67	67.855	ug/L	1.471	2	13	6312	1	KED
As	75	7.763	ug/L	0.117	1	6	2314	0	KED
Y	89		ug/L			289124	579604	0	Standard
Kr	83		ug/L			80	97	7	Standard
> In-1	115		ug/L			9102	8703	2	KED
Cd	111	0.225	ug/L	0.015	6	3	68	3	KED
Cd	114	0.227	ug/L	<u>0.052</u>	22	3	176	21	KED
> In	115		ug/L			483935	486705	2	Standard
Ag	107	0.180	ug/L	0.010	5	106	3568	3	Standard
> Tb	159		ug/L			1215870	1236350	1	Standard
Pb	208	18.806	ug/L	0.400	2	593	1546872	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-01**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:44:28**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	63424	4	Standard
Cl	37		ug/L			5354462	5124918	2	Standard
> Sc	45		ug/L			474891	613320	3	Standard
Cr	52	13.347	ug/L	0.215	1	16718	337103	4	Standard
Cr	53	13.137	ug/L	0.074	0	209	36832	3	Standard
> Ge	72		ug/L			34387	37540	0	KED
Ni	60	14.132	ug/L	0.141	0	146	21805	1	KED
Ni	62	14.272	ug/L	0.436	3	34	3566	3	KED
Cu	63	28.865	ug/L	0.454	1	114	124510	1	KED
Cu	65	29.262	ug/L	0.713	2	56	63627	2	KED
Zn	66	59.732	ug/L	0.751	1	76	33333	0	KED
Zn	67	59.071	ug/L	1.641	2	13	5526	2	KED
As	75	6.838	ug/L	0.095	1	6	2050	1	KED
Y	89		ug/L			289124	549543	5	Standard
Kr	83		ug/L			80	90	2	Standard
> In-1	115		ug/L			9102	7146	25	KED
Cd	111	0.225	ug/L	0.077	34	3	53	11	KED
Cd	114	0.244	ug/L	0.081	33	3	146	4	KED
> In	115		ug/L			483935	466975	5	Standard
Ag	107	0.154	ug/L	0.002	1	106	2945	5	Standard
> Tb	159		ug/L			1215870	1206526	2	Standard
Pb	208	12.270	ug/L	0.274	2	593	985604	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-DUP1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:48:53**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	64094	1	Standard
Cl	37		ug/L			5354462	5051319	2	Standard
> Sc	45		ug/L			474891	620819	0	Standard
Cr	52	14.227	ug/L	0.259	1	16718	362218	1	Standard
Cr	53	13.980	ug/L	0.338	2	209	39659	2	Standard
> Ge	72		ug/L			34387	36725	0	KED
Ni	60	14.622	ug/L	0.298	2	146	22067	2	KED
Ni	62	14.580	ug/L	0.339	2	34	3562	1	KED
Cu	63	29.935	ug/L	0.090	0	114	126318	0	KED
Cu	65	30.214	ug/L	0.324	1	56	64272	1	KED
Zn	66	62.651	ug/L	2.091	3	76	34193	2	KED
Zn	67	61.809	ug/L	0.658	1	13	5656	0	KED
As	75	6.599	ug/L	0.136	2	6	1935	1	KED
Y	89		ug/L			289124	582555	0	Standard
Kr	83		ug/L			80	102	21	Standard
> In-1	115		ug/L			9102	8603	1	KED
Cd	111	0.198	ug/L	0.031	15	3	60	12	KED
Cd	114	0.210	ug/L	0.042	19	3	161	18	KED
> In	115		ug/L			483935	476901	3	Standard
Ag	107	0.126	ug/L	0.007	5	106	2485	4	Standard
> Tb	159		ug/L			1215870	1220840	0	Standard
Pb	208	12.800	ug/L	0.224	1	593	1039969	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-MS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:53:19**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	59554	0	Standard
Cl	37		ug/L			5354462	5039249	0	Standard
> Sc	45		ug/L			474891	572945	6	Standard
| Cr	52	33.098	ug/L	1.741	5	16718	749198	2	Standard
| Cr	53	32.721	ug/L	1.591	4	209	85139	2	Standard
> Ge	72		ug/L			34387	36355	0	KED
| Ni	60	39.045	ug/L	0.701	1	146	58072	1	KED
| Ni	62	40.015	ug/L	0.562	1	34	9617	1	KED
| Cu	63	53.975	ug/L	0.556	1	114	225370	1	KED
| Cu	65	53.175	ug/L	1.105	2	56	111923	1	KED
| Zn	66	137.561	ug/L	0.631	0	76	74239	0	KED
| Zn	67	131.587	ug/L	2.598	1	13	11904	1	KED
| As	75	30.459	ug/L	0.329	1	6	8819	1	KED
Y	89		ug/L			289124	511256	4	Standard
Kr	83		ug/L			80	105	15	Standard
> In-1	115		ug/L			9102	8481	1	KED
| Cd	111	25.287	ug/L	0.512	2	3	7151	1	KED
| Cd	114	24.632	ug/L	1.069	4	3	18274	3	KED
> In	115		ug/L			483935	449515	8	Standard
| Ag	107	21.692	ug/L	1.043	4	106	384723	4	Standard
> Tb	159		ug/L			1215870	1136686	7	Standard
| Pb	208	39.330	ug/L	2.129	5	593	2966621	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-MSD1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 22:57:45**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	55835	2	Standard
Cl	37		ug/L			5354462	5053592	2	Standard
> Sc	45		ug/L			474891	609940	1	Standard
Cr	52	32.465	ug/L	0.226	0	16718	784592	1	Standard
Cr	53	32.689	ug/L	0.190	0	209	90755	1	Standard
> Ge	72		ug/L			34387	36173	0	KED
Ni	60	40.167	ug/L	0.352	0	146	59436	0	KED
Ni	62	39.629	ug/L	1.135	2	34	9476	2	KED
Cu	63	53.956	ug/L	1.134	2	114	224143	1	KED
Cu	65	54.584	ug/L	0.671	1	56	114310	0	KED
Zn	66	140.471	ug/L	1.376	0	76	75425	0	KED
Zn	67	135.476	ug/L	1.463	1	13	12195	1	KED
As	75	30.482	ug/L	0.270	0	6	8781	0	KED
Y	89		ug/L			289124	558330	2	Standard
Kr	83		ug/L			80	114	8	Standard
> In-1	115		ug/L			9102	8495	0	KED
Cd	111	25.054	ug/L	0.369	1	3	7099	1	KED
Cd	114	24.568	ug/L	0.149	0	3	18262	0	KED
> In	115		ug/L			483935	480160	0	Standard
Ag	107	15.700	ug/L	0.101	0	106	298205	0	Standard
> Tb	159		ug/L			1215870	1199894	0	Standard
Pb	208	38.272	ug/L	0.253	0	593	3055196	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-PS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:02:10**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	64295	1	Standard
Cl	37		ug/L			5354462	5102524	3	Standard
> Sc	45		ug/L			474891	605116	2	Standard
Cr	52	32.761	ug/L	0.935	2	16718	784977	1	Standard
Cr	53	32.681	ug/L	0.813	2	209	89977	0	Standard
> Ge	72		ug/L			34387	35711	1	KED
Ni	60	40.311	ug/L	0.839	2	146	58875	0	KED
Ni	62	40.177	ug/L	0.865	2	34	9483	1	KED
Cu	63	55.655	ug/L	0.652	1	114	228238	0	KED
Cu	65	55.446	ug/L	1.161	2	56	114615	1	KED
Zn	66	138.792	ug/L	0.957	0	76	73572	1	KED
Zn	67	133.316	ug/L	5.004	3	13	11843	2	KED
As	75	31.439	ug/L	0.639	2	6	8940	0	KED
Y	89		ug/L			289124	545227	1	Standard
Kr	83		ug/L			80	112	8	Standard
> In-1	115		ug/L			9102	8257	0	KED
Cd	111	25.383	ug/L	0.194	0	3	6990	0	KED
Cd	114	25.526	ug/L	0.396	1	3	18440	0	KED
> In	115		ug/L			483935	475572	0	Standard
> Ag	107	24.100	ug/L	0.143	0	106	453318	0	Standard
> Tb	159		ug/L			1215870	1201378	1	Standard
Pb	208	37.661	ug/L	0.928	2	593	3009665	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 23:06:37

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	29555	1	Standard
Cl	37		ug/L			5354462	5012101	4	Standard
[> Sc	45		ug/L			474891	473315	0	Standard
| Cr	52	0.019	ug/L	0.075	404	16718	16995	7	Standard
| Cr	53	0.010	ug/L	0.060	576	209	230	54	Standard
[> Ge	72		ug/L			34387	35740	0	KED
| Ni	60	-0.010	ug/L	0.020	210	146	137	20	KED
| Ni	62	-0.060	ug/L	0.020	33	34	22	21	KED
| Cu	63	-0.003	ug/L	0.001	36	114	106	4	KED
| Cu	65	-0.001	ug/L	0.001	53	56	55	1	KED
| Zn	66	0.164	ug/L	0.021	12	76	166	6	KED
| Zn	67	0.143	ug/L	0.100	69	13	27	32	KED
| As	75	-0.011	ug/L	0.001	8	6	3	7	KED
Y	89		ug/L			289124	278672	2	Standard
Kr	83		ug/L			80	71	12	Standard
[> In-1	115		ug/L			9102	6583	27	KED
| Cd	111	0.016	ug/L	0.031	196	3	4	91	KED
| Cd	114	0.002	ug/L	0.002	115	3	3	2	KED
[> In	115		ug/L			483935	479155	2	Standard
| Ag	107	0.026	ug/L	0.041	153	106	615	127	Standard
[> Tb	159		ug/L			1215870	1175714	1	Standard
| Pb	208	0.042	ug/L	0.066	156	593	3834	132	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 23:11:03

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	30033	1	Standard
Cl	37		ug/L			5354462	5406692	1	Standard
[> Sc	45		ug/L			474891	480313	1	Standard
| Cr	52	49.908	ug/L	0.325	0	16718	940739	1	Standard
| Cr	53	48.543	ug/L	0.156	0	209	106018	0	Standard
[> Ge	72		ug/L			34387	36149	2	KED
| Ni	60	51.323	ug/L	1.546	3	146	75809	0	KED
| Ni	62	51.166	ug/L	2.415	4	34	12207	2	KED
| Cu	63	51.730	ug/L	0.612	1	114	214730	1	KED
| Cu	65	51.395	ug/L	1.290	2	56	107521	1	KED
| Zn	66	51.008	ug/L	1.987	3	76	27402	1	KED
| Zn	67	50.921	ug/L	1.303	2	13	4589	3	KED
| As	75	50.056	ug/L	1.029	2	6	14402	0	KED
Y	89		ug/L			289124	284971	1	Standard
Kr	83		ug/L			80	83	16	Standard
[> In-1	115		ug/L			9102	8480	0	KED
| Cd	111	51.976	ug/L	0.071	0	3	14697	0	KED
| Cd	114	49.833	ug/L	0.253	0	3	36972	0	KED
[> In	115		ug/L			483935	468623	0	Standard
| Ag	107	48.449	ug/L	2.254	4	106	897735	4	Standard
[> Tb	159		ug/L			1215870	1194156	0	Standard
| Pb	208	51.689	ug/L	1.360	2	593	4106517	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7

Sample Dil Factor:

Comments:

Sample Date/Time: Thursday, April 27, 2023 23:18:13

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	27211	2	Standard
Cl	37		ug/L			5354462	5263540	1	Standard
[> Sc	45		ug/L			474891	471142	1	Standard
| Cr	52	0.019	ug/L	0.054	281	16718	16923	4	Standard
| Cr	53	-0.015	ug/L	0.019	126	209	174	22	Standard
[> Ge	72		ug/L			34387	35349	2	KED
| Ni	60	-0.008	ug/L	0.008	92	146	137	6	KED
| Ni	62	-0.042	ug/L	0.029	67	34	26	25	KED
| Cu	63	-0.015	ug/L	0.002	11	114	55	13	KED
| Cu	65	-0.014	ug/L	0.006	39	56	29	37	KED
| Zn	66	-0.056	ug/L	0.010	16	76	48	11	KED
| Zn	67	-0.033	ug/L	0.024	73	13	11	16	KED
| As	75	-0.001	ug/L	0.009	708	6	6	40	KED
Y	89		ug/L			289124	282893	1	Standard
Kr	83		ug/L			80	54	5	Standard
[> In-1	115		ug/L			9102	8593	2	KED
| Cd	111	0.002	ug/L	0.012	719	3	3	90	KED
| Cd	114	-0.003	ug/L	0.002	90	3	1	116	KED
[> In	115		ug/L			483935	483377	1	Standard
| Ag	107	0.013	ug/L	0.011	88	106	354	63	Standard
[> Tb	159		ug/L			1215870	1186069	0	Standard
| Pb	208	0.005	ug/L	0.010	208	593	958	82	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-BLK1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:22:39**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	42023	1	Standard
Cl	37		ug/L			5354462	5125459	1	Standard
> Sc	45		ug/L			474891	488422	1	Standard
| Cr	52	0.026	ug/L	0.041	159	16718	17672	2	Standard
| Cr	53	-0.030	ug/L	0.002	6	209	149	2	Standard
> Ge	72		ug/L			34387	35873	0	KED
| Ni	60	-0.044	ug/L	0.003	7	146	87	5	KED
| Ni	62	-0.100	ug/L	0.026	25	34	12	48	KED
| Cu	63	0.291	ug/L	0.014	4	114	1318	3	KED
| Cu	65	0.295	ug/L	0.022	7	56	671	7	KED
| Zn	66	0.011	ug/L	0.039	367	76	85	23	KED
| Zn	67	0.007	ug/L	0.021	280	13	15	12	KED
| As	75	-0.010	ug/L	0.003	25	6	3	19	KED
Y	89		ug/L			289124	279350	2	Standard
Kr	83		ug/L			80	50	22	Standard
> In-1	115		ug/L			9102	8511	0	KED
| Cd	111	0.004	ug/L	0.004	91	3	4	24	KED
| Cd	114	0.003	ug/L	0.005	198	3	5	68	KED
> In	115		ug/L			483935	480748	1	Standard
| Ag	107	0.001	ug/L	0.001	95	106	125	13	Standard
> Tb	159		ug/L			1215870	1193884	1	Standard
| Pb	208	-0.002	ug/L	0.000	6	593	427	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-BS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:27:04**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	34789	1	Standard
Cl	37		ug/L			5354462	5267253	2	Standard
[> Sc	45		ug/L			474891	488381	0	Standard
[Cr	52	28.658	ug/L	0.332	1	16718	556548	1	Standard
[Cr	53	27.741	ug/L	0.527	1	209	61702	2	Standard
[> Ge	72		ug/L			34387	36533	1	KED
[Ni	60	25.198	ug/L	0.213	0	146	37715	1	KED
[Ni	62	25.858	ug/L	0.729	2	34	6257	2	KED
[Cu	63	26.321	ug/L	0.294	1	114	110507	1	KED
[Cu	65	26.763	ug/L	0.313	1	56	56637	1	KED
[Zn	66	77.529	ug/L	1.357	1	76	42084	2	KED
[Zn	67	74.181	ug/L	0.611	0	13	6750	1	KED
[As	75	23.499	ug/L	0.086	0	6	6839	0	KED
Y	89		ug/L			289124	290550	0	Standard
Kr	83		ug/L			80	67	19	Standard
[> In-1	115		ug/L			9102	8352	1	KED
[Cd	111	26.600	ug/L	0.232	0	3	7408	1	KED
[Cd	114	26.486	ug/L	0.366	1	3	19352	1	KED
[> In	115		ug/L			483935	480893	0	Standard
[Ag	107	28.010	ug/L	0.525	1	106	532678	0	Standard
[> Tb	159		ug/L			1215870	1213724	0	Standard
[Pb	208	28.735	ug/L	0.234	0	593	2320471	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-05**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:31:30**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	62168	1	Standard
Cl	37		ug/L			5354462	5049185	2	Standard
Sc	45		ug/L			474891	620918	2	Standard
Cr	52	12.854	ug/L	0.467	3	16718	329289	2	Standard
Cr	53	12.957	ug/L	0.159	1	209	36774	1	Standard
Ge	72		ug/L			34387	36402	1	KED
Ni	60	14.073	ug/L	0.105	0	146	21057	1	KED
Ni	62	13.986	ug/L	0.292	2	34	3389	2	KED
Cu	63	30.915	ug/L	0.232	0	114	129296	0	KED
Cu	65	31.050	ug/L	0.443	1	56	65467	2	KED
Zn	66	58.128	ug/L	0.327	0	76	31456	0	KED
Zn	67	55.703	ug/L	1.272	2	13	5054	2	KED
As	75	6.656	ug/L	0.063	0	6	1935	1	KED
Y	89		ug/L			289124	570898	0	Standard
Kr	83		ug/L			80	109	10	Standard
In-1	115		ug/L			9102	8442	2	KED
Cd	111	0.187	ug/L	0.013	7	3	55	4	KED
Cd	114	0.175	ug/L	0.008	4	3	132	3	KED
In	115		ug/L			483935	469126	0	Standard
Ag	107	0.144	ug/L	0.005	3	106	2774	2	Standard
Tb	159		ug/L			1215870	1185646	1	Standard
Pb	208	13.092	ug/L	0.315	2	593	1032863	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-06**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:35:55**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	60242	0	Standard
Cl	37		ug/L			5354462	5078176	3	Standard
Sc	45		ug/L			474891	621011	0	Standard
Cr	52	13.135	ug/L	0.029	0	16718	336205	0	Standard
Cr	53	13.006	ug/L	0.252	1	209	36928	2	Standard
Ge	72		ug/L			34387	35268	1	KED
Ni	60	14.451	ug/L	0.330	2	146	20939	0	KED
Ni	62	14.642	ug/L	0.510	3	34	3435	2	KED
Cu	63	29.539	ug/L	0.784	2	114	119665	0	KED
Cu	65	29.456	ug/L	0.573	1	56	60161	1	KED
Zn	66	56.235	ug/L	0.707	1	76	29492	3	KED
Zn	67	55.201	ug/L	1.427	2	13	4851	1	KED
As	75	5.999	ug/L	0.222	3	6	1689	1	KED
Y	89		ug/L			289124	555563	1	Standard
Kr	83		ug/L			80	98	11	Standard
In-1	115		ug/L			9102	8621	0	KED
Cd	111	0.233	ug/L	0.024	10	3	70	9	KED
Cd	114	0.235	ug/L	0.015	6	3	180	6	KED
In	115		ug/L			483935	465337	1	Standard
Ag	107	0.119	ug/L	0.005	4	106	2283	2	Standard
Tb	159		ug/L			1215870	1205291	1	Standard
Pb	208	11.285	ug/L	0.244	2	593	905191	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-07**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:40:21**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	56584	1	Standard
Cl	37		ug/L			5354462	5016397	2	Standard
Sc	45		ug/L			474891	634489	0	Standard
Cr	52	13.186	ug/L	0.361	2	16718	344762	2	Standard
Cr	53	12.932	ug/L	0.236	1	209	37516	2	Standard
Ge	72		ug/L			34387	36484	1	KED
Ni	60	15.033	ug/L	0.254	1	146	22530	0	KED
Ni	62	14.538	ug/L	0.267	1	34	3530	3	KED
Cu	63	28.492	ug/L	0.648	2	114	119421	1	KED
Cu	65	29.174	ug/L	0.431	1	56	61643	0	KED
Zn	66	57.245	ug/L	1.089	1	76	31046	0	KED
Zn	67	55.639	ug/L	1.014	1	13	5059	0	KED
As	75	6.241	ug/L	0.133	2	6	1819	2	KED
Y	89		ug/L			289124	595462	1	Standard
Kr	83		ug/L			80	118	24	Standard
In-1	115		ug/L			9102	8304	0	KED
Cd	111	0.186	ug/L	0.054	28	3	54	27	KED
Cd	114	0.180	ug/L	0.016	8	3	134	8	KED
In	115		ug/L			483935	461005	2	Standard
Ag	107	0.132	ug/L	0.005	4	106	2503	5	Standard
Tb	159		ug/L			1215870	1173626	1	Standard
Pb	208	11.327	ug/L	0.156	1	593	884760	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-08**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:44:46**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	59244	0	Standard
Cl	37		ug/L			5354462	5040995	2	Standard
Sc	45		ug/L			474891	607472	1	Standard
Cr	52	13.278	ug/L	0.396	2	16718	332177	2	Standard
Cr	53	13.135	ug/L	0.087	0	209	36474	0	Standard
Ge	72		ug/L			34387	36028	1	KED
Ni	60	13.744	ug/L	0.191	1	146	20354	0	KED
Ni	62	13.744	ug/L	0.089	0	34	3297	1	KED
Cu	63	32.525	ug/L	0.790	2	114	134607	1	KED
Cu	65	32.863	ug/L	0.527	1	56	68560	0	KED
Zn	66	66.838	ug/L	1.123	1	76	35784	1	KED
Zn	67	63.446	ug/L	2.522	3	13	5693	2	KED
As	75	7.141	ug/L	0.212	2	6	2053	2	KED
Y	89		ug/L			289124	549241	2	Standard
Kr	83		ug/L			80	86	21	Standard
In-1	115		ug/L			9102	8591	1	KED
Cd	111	0.258	ug/L	0.044	16	3	77	16	KED
Cd	114	0.225	ug/L	0.021	9	3	172	7	KED
In	115		ug/L			483935	465228	3	Standard
Ag	107	0.147	ug/L	0.008	5	106	2809	3	Standard
Tb	159		ug/L			1215870	1187637	2	Standard
Pb	208	15.694	ug/L	0.250	1	593	1240101	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-09**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:49:12**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	58607	2	Standard
Cl	37		ug/L			5354462	4966328	2	Standard
> Sc	45		ug/L			474891	632037	2	Standard
Cr	52	14.991	ug/L	0.351	2	16718	387276	0	Standard
Cr	53	14.834	ug/L	0.114	0	209	42827	2	Standard
> Ge	72		ug/L			34387	35777	0	KED
Ni	60	18.025	ug/L	0.309	1	146	26463	1	KED
Ni	62	18.545	ug/L	0.243	1	34	4405	1	KED
Cu	63	28.986	ug/L	0.015	0	114	119161	0	KED
Cu	65	28.931	ug/L	0.152	0	56	59953	0	KED
Zn	66	56.372	ug/L	0.402	0	76	29986	0	KED
Zn	67	53.121	ug/L	1.900	3	13	4737	3	KED
As	75	5.824	ug/L	0.199	3	6	1664	3	KED
Y	89		ug/L			289124	611592	1	Standard
Kr	83		ug/L			80	123	10	Standard
> In-1	115		ug/L			9102	8561	1	KED
Cd	111	0.166	ug/L	0.003	1	3	50	2	KED
Cd	114	0.149	ug/L	0.018	12	3	114	10	KED
> In	115		ug/L			483935	461165	1	Standard
Ag	107	0.134	ug/L	0.005	4	106	2549	2	Standard
> Tb	159		ug/L			1215870	1179672	2	Standard
Pb	208	12.112	ug/L	0.391	3	593	950551	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-10**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:53:38**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	55053	2	Standard
Cl	37		ug/L			5354462	4942631	3	Standard
> Sc	45		ug/L			474891	593178	5	Standard
| Cr	52	14.412	ug/L	0.729	5	16718	349719	2	Standard
| Cr	53	14.196	ug/L	0.752	5	209	38396	1	Standard
> Ge	72		ug/L			34387	35572	1	KED
| Ni	60	13.690	ug/L	0.335	2	146	20020	2	KED
| Ni	62	13.796	ug/L	0.185	1	34	3267	0	KED
| Cu	63	32.110	ug/L	0.597	1	114	131253	3	KED
| Cu	65	32.153	ug/L	0.032	0	56	66243	1	KED
| Zn	66	67.325	ug/L	0.595	0	76	35589	0	KED
| Zn	67	64.901	ug/L	2.443	3	13	5750	2	KED
| As	75	6.722	ug/L	0.263	3	6	1909	4	KED
Y	89		ug/L			289124	566885	5	Standard
Kr	83		ug/L			80	113	16	Standard
> In-1	115		ug/L			9102	8235	1	KED
| Cd	111	0.274	ug/L	0.036	13	3	78	12	KED
| Cd	114	0.281	ug/L	0.035	12	3	205	11	KED
> In	115		ug/L			483935	448693	5	Standard
| Ag	107	0.240	ug/L	0.002	0	106	4351	4	Standard
> Tb	159		ug/L			1215870	1154559	6	Standard
| Pb	208	23.745	ug/L	1.282	5	593	1820256	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-11**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Thursday, April 27, 2023 23:58:03**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	60011	0	Standard
Cl	37		ug/L			5354462	5027483	1	Standard
Sc	45		ug/L			474891	604277	0	Standard
Cr	52	13.149	ug/L	0.305	2	16718	327441	1	Standard
Cr	53	13.211	ug/L	0.184	1	209	36493	1	Standard
Ge	72		ug/L			34387	35294	2	KED
Ni	60	14.165	ug/L	0.207	1	146	20547	2	KED
Ni	62	14.520	ug/L	0.180	1	34	3410	2	KED
Cu	63	29.637	ug/L	0.182	0	114	120178	1	KED
Cu	65	29.537	ug/L	0.388	1	56	60390	3	KED
Zn	66	72.413	ug/L	0.639	0	76	37974	1	KED
Zn	67	69.878	ug/L	0.646	0	13	6144	2	KED
As	75	6.313	ug/L	0.199	3	6	1778	1	KED
Y	89		ug/L			289124	548659	4	Standard
Kr	83		ug/L			80	95	18	Standard
In-1	115		ug/L			9102	8436	0	KED
Cd	111	0.160	ug/L	0.028	17	3	48	16	KED
Cd	114	0.155	ug/L	0.014	8	3	118	8	KED
In	115		ug/L			483935	467072	1	Standard
Ag	107	0.140	ug/L	0.003	2	106	2680	1	Standard
Tb	159		ug/L			1215870	1176563	2	Standard
Pb	208	12.325	ug/L	0.216	1	593	964931	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 00:02:29

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	29535	4	Standard
Cl	37		ug/L			5354462	4943850	2	Standard
[> Sc	45		ug/L			474891	469911	1	Standard
| Cr	52	-0.026	ug/L	0.009	32	16718	16065	1	Standard
| Cr	53	-0.031	ug/L	0.005	17	209	141	9	Standard
[> Ge	72		ug/L			34387	35624	2	KED
| Ni	60	-0.027	ug/L	0.014	50	146	111	15	KED
| Ni	62	-0.054	ug/L	0.024	45	34	23	24	KED
| Cu	63	-0.003	ug/L	0.002	59	114	106	8	KED
| Cu	65	-0.003	ug/L	0.001	27	56	53	3	KED
| Zn	66	0.124	ug/L	0.027	22	76	144	7	KED
| Zn	67	0.044	ug/L	0.040	91	13	18	21	KED
| As	75	-0.003	ug/L	0.007	224	6	5	30	KED
Y	89		ug/L			289124	283159	1	Standard
Kr	83		ug/L			80	45	28	Standard
[> In-1	115		ug/L			9102	8106	1	KED
| Cd	111	0.003	ug/L	0.012	469	3	3	86	KED
| Cd	114	0.003	ug/L	0.006	206	3	5	72	KED
[> In	115		ug/L			483935	471303	0	Standard
| Ag	107	-0.003	ug/L	0.001	20	106	50	20	Standard
[> Tb	159		ug/L			1215870	1183491	2	Standard
| Pb	208	0.004	ug/L	0.000	11	593	908	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 00:06:55

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	29606	1	Standard
Cl	37		ug/L			5354462	5415436	1	Standard
[> Sc	45		ug/L			474891	478241	2	Standard
| Cr	52	49.398	ug/L	1.510	3	16718	926876	1	Standard
| Cr	53	48.483	ug/L	0.719	1	209	105416	1	Standard
[> Ge	72		ug/L			34387	35839	2	KED
| Ni	60	49.635	ug/L	0.901	1	146	72712	0	KED
| Ni	62	49.644	ug/L	1.466	2	34	11750	2	KED
| Cu	63	51.325	ug/L	0.844	1	114	211256	2	KED
| Cu	65	51.760	ug/L	0.845	1	56	107388	1	KED
| Zn	66	51.012	ug/L	1.294	2	76	27179	0	KED
| Zn	67	50.230	ug/L	2.103	4	13	4486	2	KED
| As	75	49.197	ug/L	0.986	2	6	14035	1	KED
Y	89		ug/L			289124	282775	0	Standard
Kr	83		ug/L			80	58	16	Standard
[> In-1	115		ug/L			9102	8334	1	KED
| Cd	111	50.800	ug/L	0.621	1	3	14115	0	KED
| Cd	114	50.246	ug/L	1.138	2	3	36628	0	KED
[> In	115		ug/L			483935	461352	2	Standard
| Ag	107	48.841	ug/L	1.103	2	106	890851	1	Standard
[> Tb	159		ug/L			1215870	1162639	1	Standard
| Pb	208	53.083	ug/L	0.622	1	593	4105335	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 00:14:05

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	26752	1	Standard
Cl	37		ug/L			5354462	5177482	1	Standard
[> Sc	45		ug/L			474891	472005	1	Standard
| Cr	52	0.018	ug/L	0.005	27	16718	16941	1	Standard
| Cr	53	-0.033	ug/L	0.003	8	209	136	3	Standard
[> Ge	72		ug/L			34387	36189	0	KED
| Ni	60	-0.018	ug/L	0.017	95	146	126	19	KED
| Ni	62	-0.034	ug/L	0.021	62	34	28	17	KED
| Cu	63	-0.016	ug/L	0.001	4	114	52	5	KED
| Cu	65	-0.011	ug/L	0.001	8	56	36	5	KED
| Zn	66	-0.045	ug/L	0.026	57	76	55	25	KED
| Zn	67	-0.015	ug/L	0.064	417	13	13	42	KED
| As	75	-0.003	ug/L	0.009	254	6	5	43	KED
Y	89		ug/L			289124	274500	1	Standard
Kr	83		ug/L			80	54	4	Standard
[> In-1	115		ug/L			9102	8801	2	KED
| Cd	111	0.017	ug/L	0.008	48	3	8	26	KED
| Cd	114	0.003	ug/L	0.006	204	3	6	77	KED
[> In	115		ug/L			483935	470068	3	Standard
| Ag	107	0.005	ug/L	0.001	12	106	197	2	Standard
[> Tb	159		ug/L			1215870	1165917	0	Standard
| Pb	208	-0.001	ug/L	0.000	11	593	501	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-12**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:18:32**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	54636	1	Standard
Cl	37		ug/L			5354462	5014401	2	Standard
[> Sc	45		ug/L			474891	607772	1	Standard
Cr	52	13.545	ug/L	0.154	1	16718	338650	1	Standard
Cr	53	13.397	ug/L	0.147	1	209	37215	0	Standard
[> Ge	72		ug/L			34387	35728	1	KED
Ni	60	14.146	ug/L	0.202	1	146	20771	1	KED
Ni	62	14.085	ug/L	0.142	1	34	3350	1	KED
Cu	63	32.095	ug/L	0.739	2	114	131727	1	KED
Cu	65	32.239	ug/L	0.588	1	56	66702	0	KED
Zn	66	73.070	ug/L	0.722	0	76	38790	1	KED
Zn	67	70.876	ug/L	2.477	3	13	6307	3	KED
[As	75	7.062	ug/L	0.171	2	6	2014	1	KED
Y	89		ug/L			289124	551578	1	Standard
Kr	83		ug/L			80	114	1	Standard
[> In-1	115		ug/L			9102	8539	3	KED
[Cd	111	0.187	ug/L	<u>0.056</u>	29	3	56	24	KED
[Cd	114	0.190	ug/L	0.034	17	3	145	14	KED
[> In	115		ug/L			483935	467332	2	Standard
[Ag	107	0.151	ug/L	0.001	0	106	2898	2	Standard
[> Tb	159		ug/L			1215870	1186574	1	Standard
[Pb	208	15.382	ug/L	0.284	1	593	1214421	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-13**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:22:58**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	55870	1	Standard
Cl	37		ug/L			5354462	5015011	3	Standard
Sc	45		ug/L			474891	631512	1	Standard
Cr	52	13.713	ug/L	0.233	1	16718	355904	0	Standard
Cr	53	14.001	ug/L	0.123	0	209	40399	0	Standard
Ge	72		ug/L			34387	35976	1	KED
Ni	60	16.504	ug/L	0.020	0	146	24379	1	KED
Ni	62	16.391	ug/L	0.448	2	34	3919	2	KED
Cu	63	30.804	ug/L	0.355	1	114	127315	0	KED
Cu	65	30.345	ug/L	0.225	0	56	63228	1	KED
Zn	66	60.418	ug/L	1.015	1	76	32305	0	KED
Zn	67	58.026	ug/L	1.322	2	13	5202	1	KED
As	75	6.152	ug/L	0.192	3	6	1767	1	KED
Y	89		ug/L			289124	574026	0	Standard
Kr	83		ug/L			80	106	36	Standard
In-1	115		ug/L			9102	8078	1	KED
Cd	111	0.185	ug/L	0.038	20	3	53	19	KED
Cd	114	0.231	ug/L	0.035	15	3	166	13	KED
In	115		ug/L			483935	461686	0	Standard
Ag	107	0.156	ug/L	0.004	2	106	2939	1	Standard
Tb	159		ug/L			1215870	1170045	2	Standard
Pb	208	15.017	ug/L	0.419	2	593	1168901	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-14**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:27:24**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	52168	1	Standard
Cl	37		ug/L			5354462	4949352	3	Standard
> Sc	45		ug/L			474891	590528	0	Standard
| Cr	52	12.675	ug/L	0.234	1	16718	309213	1	Standard
| Cr	53	12.569	ug/L	0.229	1	209	33942	1	Standard
> Ge	72		ug/L			34387	35965	0	KED
| Ni	60	12.625	ug/L	0.215	1	146	18677	1	KED
| Ni	62	12.943	ug/L	0.297	2	34	3101	2	KED
| Cu	63	31.445	ug/L	0.310	0	114	129942	1	KED
| Cu	65	31.236	ug/L	0.648	2	56	65060	1	KED
| Zn	66	61.640	ug/L	0.250	0	76	32953	1	KED
| Zn	67	58.078	ug/L	0.292	0	13	5206	0	KED
| As	75	5.642	ug/L	0.060	1	6	1621	1	KED
Y	89		ug/L			289124	532615	4	Standard
Kr	83		ug/L			80	88	8	Standard
> In-1	115		ug/L			9102	8348	0	KED
| Cd	111	0.195	ug/L	0.019	9	3	57	8	KED
| Cd	114	0.171	ug/L	0.011	6	3	128	7	KED
> In	115		ug/L			483935	456932	3	Standard
> Ag	107	0.126	ug/L	0.003	2	106	2384	3	Standard
> Tb	159		ug/L			1215870	1163134	1	Standard
| Pb	208	13.204	ug/L	0.213	1	593	1022008	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-02**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:31:50**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	60284	2	Standard
Cl	37		ug/L			5354462	4979729	2	Standard
Sc	45		ug/L			474891	618471	1	Standard
Cr	52	15.598	ug/L	0.247	1	16718	393457	0	Standard
Cr	53	15.208	ug/L	0.171	1	209	42954	1	Standard
Ge	72		ug/L			34387	35900	1	KED
Ni	60	15.161	ug/L	0.082	0	146	22359	0	KED
Ni	62	15.321	ug/L	0.638	4	34	3657	3	KED
Cu	63	38.720	ug/L	1.141	2	114	159651	2	KED
Cu	65	39.051	ug/L	0.900	2	56	81174	1	KED
Zn	66	70.722	ug/L	0.953	1	76	37724	0	KED
Zn	67	68.940	ug/L	1.835	2	13	6164	1	KED
As	75	6.960	ug/L	0.046	0	6	1995	1	KED
Y	89		ug/L			289124	557620	3	Standard
Kr	83		ug/L			80	101	3	Standard
In-1	115		ug/L			9102	8242	3	KED
Cd	111	0.212	ug/L	0.033	15	3	61	13	KED
Cd	114	0.212	ug/L	0.034	15	3	156	15	KED
In	115		ug/L			483935	468987	1	Standard
Ag	107	0.195	ug/L	0.005	2	106	3724	3	Standard
Tb	159		ug/L			1215870	1184177	0	Standard
Pb	208	21.914	ug/L	0.115	0	593	1726688	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-01**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:36:15**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	60993	3	Standard
Cl	37		ug/L			5354462	4932307	1	Standard
Sc	45		ug/L			474891	607815	2	Standard
Cr	52	13.487	ug/L	0.172	1	16718	337244	1	Standard
Cr	53	13.202	ug/L	0.257	1	209	36672	0	Standard
Ge	72		ug/L			34387	36361	1	KED
Ni	60	13.717	ug/L	0.231	1	146	20502	0	KED
Ni	62	13.549	ug/L	0.229	1	34	3281	2	KED
Cu	63	36.573	ug/L	0.479	1	114	152769	1	KED
Cu	65	36.892	ug/L	0.791	2	56	77672	1	KED
Zn	66	70.324	ug/L	2.020	2	76	37990	1	KED
Zn	67	69.078	ug/L	1.504	2	13	6257	2	KED
As	75	6.185	ug/L	0.046	0	6	1796	1	KED
Y	89		ug/L			289124	547994	0	Standard
Kr	83		ug/L			80	98	9	Standard
In-1	115		ug/L			9102	8351	0	KED
Cd	111	0.215	ug/L	0.034	15	3	63	15	KED
Cd	114	0.205	ug/L	0.019	9	3	153	9	KED
In	115		ug/L			483935	452765	2	Standard
Ag	107	0.148	ug/L	0.009	5	106	2741	4	Standard
Tb	159		ug/L			1215870	1171547	3	Standard
Pb	208	16.446	ug/L	0.378	2	593	1281561	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-DUP1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:40:41**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	58674	0	Standard
Cl	37		ug/L			5354462	4896318	1	Standard
Sc	45		ug/L			474891	610143	0	Standard
Cr	52	14.056	ug/L	0.150	1	16718	351985	1	Standard
Cr	53	14.170	ug/L	0.337	2	209	39503	2	Standard
Ge	72		ug/L			34387	35024	0	KED
Ni	60	14.667	ug/L	0.682	4	146	21103	3	KED
Ni	62	14.971	ug/L	0.520	3	34	3489	4	KED
Cu	63	39.276	ug/L	0.309	0	114	158018	0	KED
Cu	65	39.700	ug/L	0.538	1	56	80512	0	KED
Zn	66	72.234	ug/L	1.988	2	76	37591	2	KED
Zn	67	69.385	ug/L	2.358	3	13	6053	2	KED
As	75	6.729	ug/L	0.120	1	6	1882	2	KED
Y	89		ug/L			289124	555798	1	Standard
Kr	83		ug/L			80	93	15	Standard
In-1	115		ug/L			9102	8250	1	KED
Cd	111	0.205	ug/L	0.036	17	3	59	14	KED
Cd	114	0.201	ug/L	0.008	3	3	148	3	KED
In	115		ug/L			483935	457175	1	Standard
Ag	107	0.158	ug/L	0.011	6	106	2963	4	Standard
Tb	159		ug/L			1215870	1169613	1	Standard
Pb	208	17.401	ug/L	0.356	2	593	1354118	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-MS1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:45:07**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	48601	1	Standard
Cl	37		ug/L			5354462	4935993	1	Standard
Sc	45		ug/L			474891	597632	0	Standard
Cr	52	33.122	ug/L	0.681	2	16718	783864	2	Standard
Cr	53	33.216	ug/L	0.263	0	209	90350	1	Standard
Ge	72		ug/L			34387	35435	0	KED
Ni	60	39.350	ug/L	0.293	0	146	57043	0	KED
Ni	62	40.295	ug/L	1.947	4	34	9438	4	KED
Cu	63	63.349	ug/L	0.797	1	114	257791	0	KED
Cu	65	63.365	ug/L	0.413	0	56	129986	0	KED
Zn	66	148.326	ug/L	2.782	1	76	78015	1	KED
Zn	67	142.840	ug/L	3.177	2	13	12594	1	KED
As	75	31.071	ug/L	0.250	0	6	8768	0	KED
Y	89		ug/L			289124	547371	1	Standard
Kr	83		ug/L			80	101	19	Standard
In-1	115		ug/L			9102	8061	1	KED
Cd	111	26.327	ug/L	0.355	1	3	7077	0	KED
Cd	114	26.084	ug/L	0.234	0	3	18397	0	KED
In	115		ug/L			483935	462261	3	Standard
Ag	107	23.022	ug/L	0.722	3	106	420627	1	Standard
Tb	159		ug/L			1215870	1183072	2	Standard
Pb	208	42.609	ug/L	1.288	3	593	3352146	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-MSD1**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 00:49:33**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	46411	1	Standard
Cl	37		ug/L			5354462	4981253	2	Standard
[> Sc	45		ug/L			474891	598298	0	Standard
Cr	52	34.836	ug/L	0.644	1	16718	824193	1	Standard
Cr	53	34.703	ug/L	0.257	0	209	94484	0	Standard
[> Ge	72		ug/L			34387	35533	1	KED
Ni	60	40.749	ug/L	1.101	2	146	59211	1	KED
Ni	62	39.650	ug/L	0.941	2	34	9312	1	KED
Cu	63	64.949	ug/L	0.527	0	114	265008	0	KED
Cu	65	64.378	ug/L	1.459	2	56	132398	0	KED
Zn	66	152.981	ug/L	3.840	2	76	80663	0	KED
Zn	67	145.607	ug/L	1.496	1	13	12873	1	KED
[As	75	31.337	ug/L	0.488	1	6	8867	0	KED
Y	89		ug/L			289124	568588	1	Standard
Kr	83		ug/L			80	104	10	Standard
[> In-1	115		ug/L			9102	8259	0	KED
[Cd	111	26.051	ug/L	0.507	1	3	7175	1	KED
[Cd	114	25.728	ug/L	0.643	2	3	18590	2	KED
[> In	115		ug/L			483935	453656	3	Standard
[Ag	107	23.491	ug/L	0.141	0	106	421515	3	Standard
[> Tb	159		ug/L			1215870	1169841	0	Standard
[Pb	208	43.771	ug/L	0.529	1	593	3406521	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0394-PS1

Sample Dil Factor: 20

Comments:

Sample Date/Time: Friday, April 28, 2023 00:53:59

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	62533	1	Standard
Cl	37		ug/L			5354462	4934108	2	Standard
[> Sc	45		ug/L			474891	590492	1	Standard
| Cr	52	33.483	ug/L	0.351	1	16718	782677	1	Standard
| Cr	53	33.075	ug/L	0.190	0	209	88887	1	Standard
[> Ge	72		ug/L			34387	35069	1	KED
| Ni	60	39.626	ug/L	0.227	0	146	56846	1	KED
| Ni	62	40.094	ug/L	0.764	1	34	9294	1	KED
| Cu	63	62.824	ug/L	0.956	1	114	253007	1	KED
| Cu	65	62.856	ug/L	0.962	1	56	127594	0	KED
| Zn	66	149.962	ug/L	3.216	2	76	78051	1	KED
| Zn	67	146.738	ug/L	0.314	0	13	12803	1	KED
| As	75	30.752	ug/L	0.586	1	6	8587	0	KED
Y	89		ug/L			289124	541476	2	Standard
Kr	83		ug/L			80	93	26	Standard
[> In-1	115		ug/L			9102	8259	1	KED
| Cd	111	25.784	ug/L	0.434	1	3	7102	1	KED
| Cd	114	25.494	ug/L	0.358	1	3	18424	2	KED
[> In	115		ug/L			483935	453140	4	Standard
| Ag	107	24.844	ug/L	0.718	2	106	444930	2	Standard
[> Tb	159		ug/L			1215870	1152721	1	Standard
| Pb	208	43.412	ug/L	0.381	0	593	3329211	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 00:58:26

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	28813	2	Standard
Cl	37		ug/L			5354462	4934746	3	Standard
[> Sc	45		ug/L			474891	462352	1	Standard
| Cr	52	0.002	ug/L	0.006	248	16718	16319	0	Standard
| Cr	53	-0.040	ug/L	0.002	5	209	120	2	Standard
[> Ge	72		ug/L			34387	34406	1	KED
| Ni	60	-0.035	ug/L	0.010	27	146	96	12	KED
| Ni	62	-0.067	ug/L	0.016	24	34	19	20	KED
| Cu	63	-0.001	ug/L	0.002	117	114	108	7	KED
| Cu	65	-0.004	ug/L	0.005	130	56	48	21	KED
| Zn	66	0.154	ug/L	0.027	17	76	154	7	KED
| Zn	67	0.148	ug/L	0.056	37	13	26	18	KED
| As	75	-0.005	ug/L	0.002	40	6	5	10	KED
Y	89		ug/L			289124	280782	4	Standard
Kr	83		ug/L			80	61	31	Standard
[> In-1	115		ug/L			9102	8223	0	KED
| Cd	111	0.005	ug/L	0.011	225	3	4	65	KED
| Cd	114	0.003	ug/L	0.006	164	3	5	66	KED
[> In	115		ug/L			483935	465580	1	Standard
| Ag	107	0.004	ug/L	0.000	5	106	180	3	Standard
[> Tb	159		ug/L			1215870	1152163	1	Standard
| Pb	208	0.006	ug/L	0.001	12	593	1001	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 01:02:52

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	29765	2	Standard
Cl	37		ug/L			5354462	5423142	2	Standard
[> Sc	45		ug/L			474891	475419	2	Standard
| Cr	52	49.583	ug/L	1.303	2	16718	924780	0	Standard
| Cr	53	48.714	ug/L	0.959	1	209	105276	0	Standard
[> Ge	72		ug/L			34387	34948	1	KED
| Ni	60	51.474	ug/L	0.216	0	146	73545	0	KED
| Ni	62	52.086	ug/L	0.081	0	34	12023	1	KED
| Cu	63	52.037	ug/L	0.165	0	114	208878	1	KED
| Cu	65	52.209	ug/L	0.927	1	56	105640	2	KED
| Zn	66	51.929	ug/L	0.738	1	76	26987	1	KED
| Zn	67	51.867	ug/L	1.004	1	13	4518	0	KED
| As	75	50.014	ug/L	0.252	0	6	13918	1	KED
Y	89		ug/L			289124	278534	0	Standard
Kr	83		ug/L			80	47	6	Standard
[> In-1	115		ug/L			9102	8235	1	KED
| Cd	111	51.734	ug/L	0.941	1	3	14205	1	KED
| Cd	114	50.276	ug/L	1.178	2	3	36220	1	KED
[> In	115		ug/L			483935	458655	3	Standard
| Ag	107	48.434	ug/L	1.768	3	106	877862	0	Standard
[> Tb	159		ug/L			1215870	1159096	0	Standard
| Pb	208	52.724	ug/L	0.383	0	593	4065529	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 01:10:03

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	27590	3	Standard
Cl	37		ug/L			5354462	5166354	2	Standard
[> Sc	45		ug/L			474891	465586	0	Standard
| Cr	52	0.004	ug/L	0.032	758	16718	16465	3	Standard
| Cr	53	-0.038	ug/L	0.004	11	209	124	7	Standard
[> Ge	72		ug/L			34387	36189	1	KED
| Ni	60	-0.021	ug/L	0.012	55	146	122	12	KED
| Ni	62	-0.061	ug/L	0.029	47	34	22	30	KED
| Cu	63	-0.013	ug/L	0.002	17	114	64	16	KED
| Cu	65	-0.014	ug/L	0.006	43	56	31	40	KED
| Zn	66	-0.057	ug/L	0.024	42	76	49	27	KED
| Zn	67	-0.072	ug/L	0.064	89	13	8	70	KED
| As	75	-0.009	ug/L	0.006	66	6	4	40	KED
Y	89		ug/L			289124	273907	2	Standard
Kr	83		ug/L			80	53	16	Standard
[> In-1	115		ug/L			9102	8502	0	KED
| Cd	111	0.008	ug/L	0.012	157	3	5	61	KED
| Cd	114	0.002	ug/L	0.003	184	3	4	45	KED
[> In	115		ug/L			483935	447992	3	Standard
| Ag	107	0.007	ug/L	0.000	5	106	220	6	Standard
[> Tb	159		ug/L			1215870	1142721	1	Standard
| Pb	208	-0.001	ug/L	0.000	51	593	484	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0659-BLK1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:14:30**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	40979	1	Standard
Cl	37		ug/L			5354462	5066161	2	Standard
> Sc	45		ug/L			474891	464373	1	Standard
| Cr	52	0.084	ug/L	0.012	14	16718	17844	2	Standard
| Cr	53	-0.011	ug/L	0.007	61	209	181	8	Standard
> Ge	72		ug/L			34387	35042	2	KED
| Ni	60	-0.056	ug/L	0.005	9	146	68	12	KED
| Ni	62	-0.085	ug/L	0.025	29	34	15	36	KED
| Cu	63	0.013	ug/L	0.006	46	114	168	12	KED
| Cu	65	0.011	ug/L	0.006	58	56	80	16	KED
| Zn	66	0.237	ug/L	0.036	15	76	200	8	KED
| Zn	67	0.230	ug/L	0.051	22	13	34	14	KED
| As	75	-0.006	ug/L	0.001	21	6	4	10	KED
Y	89		ug/L			289124	274892	2	Standard
Kr	83		ug/L			80	49	13	Standard
> In-1	115		ug/L			9102	8384	2	KED
| Cd	111	0.007	ug/L	0.004	61	3	5	21	KED
| Cd	114	0.006	ug/L	0.004	75	3	7	40	KED
> In	115		ug/L			483935	455927	0	Standard
| Ag	107	0.001	ug/L	0.001	127	106	120	22	Standard
> Tb	159		ug/L			1215870	1146225	3	Standard
| Pb	208	0.002	ug/L	0.001	51	593	716	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0659-BS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:18:56**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	43212	2	Standard
Cl	37		ug/L			5354462	5169624	3	Standard
> Sc	45		ug/L			474891	474979	1	Standard
| Cr	52	25.233	ug/L	0.185	0	16718	478548	1	Standard
| Cr	53	24.929	ug/L	0.430	1	209	53939	1	Standard
> Ge	72		ug/L			34387	35892	0	KED
| Ni	60	26.021	ug/L	0.328	1	146	38258	1	KED
| Ni	62	25.879	ug/L	0.572	2	34	6153	1	KED
| Cu	63	27.042	ug/L	0.102	0	114	111533	1	KED
| Cu	65	27.004	ug/L	0.403	1	56	56148	2	KED
| Zn	66	84.393	ug/L	1.225	1	76	44999	2	KED
| Zn	67	78.237	ug/L	0.809	1	13	6993	0	KED
| As	75	24.720	ug/L	0.314	1	6	7068	1	KED
Y	89		ug/L			289124	274758	3	Standard
Kr	83		ug/L			80	65	6	Standard
> In-1	115		ug/L			9102	8164	1	KED
| Cd	111	26.899	ug/L	0.228	0	3	7323	0	KED
| Cd	114	26.252	ug/L	0.503	1	3	18749	1	KED
> In	115		ug/L			483935	453297	2	Standard
| Ag	107	25.561	ug/L	0.306	1	106	458197	1	Standard
> Tb	159		ug/L			1215870	1151041	1	Standard
| Pb	208	26.523	ug/L	0.413	1	593	2030976	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0754-BLK1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:23:21**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	42999	1	Standard
Cl	37		ug/L			5354462	5077607	1	Standard
> Sc	45		ug/L			474891	474587	1	Standard
| Cr	52	0.049	ug/L	0.027	54	16718	17601	1	Standard
| Cr	53	-0.015	ug/L	0.005	33	209	176	4	Standard
> Ge	72		ug/L			34387	35503	1	KED
| Ni	60	-0.055	ug/L	0.009	16	146	71	17	KED
| Ni	62	-0.097	ug/L	0.029	29	34	13	51	KED
| Cu	63	0.035	ug/L	0.009	24	114	259	12	KED
| Cu	65	0.034	ug/L	0.007	21	56	127	12	KED
| Zn	66	0.126	ug/L	0.052	41	76	144	18	KED
| Zn	67	0.125	ug/L	0.074	58	13	25	24	KED
| As	75	-0.007	ug/L	0.008	117	6	4	47	KED
Y	89		ug/L			289124	274227	0	Standard
Kr	83		ug/L			80	48	35	Standard
> In-1	115		ug/L			9102	8200	3	KED
| Cd	111	-0.002	ug/L	0.002	88	3	2	21	KED
| Cd	114	0.001	ug/L	0.003	394	3	4	56	KED
> In	115		ug/L			483935	456331	1	Standard
| Ag	107	0.004	ug/L	0.001	19	106	177	10	Standard
> Tb	159		ug/L			1215870	1149148	0	Standard
| Pb	208	0.005	ug/L	0.000	4	593	959	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0754-BS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:27:47**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	44082	1	Standard
Cl	37		ug/L			5354462	5083497	0	Standard
[> Sc	45		ug/L			474891	449705	9	Standard
[Cr	52	27.763	ug/L	2.646	9	16718	494127	0	Standard
[Cr	53	27.346	ug/L	2.637	9	209	55672	0	Standard
[> Ge	72		ug/L			34387	35592	2	KED
[Ni	60	27.604	ug/L	0.289	1	146	40231	1	KED
[Ni	62	27.474	ug/L	0.902	3	34	6473	1	KED
[Cu	63	28.327	ug/L	0.755	2	114	115816	1	KED
[Cu	65	28.652	ug/L	0.233	0	56	59064	1	KED
[Zn	66	89.894	ug/L	2.720	3	76	47508	2	KED
[Zn	67	84.316	ug/L	2.064	2	13	7471	1	KED
[As	75	26.011	ug/L	0.495	1	6	7372	0	KED
[Y	89		ug/L			289124	263370	7	Standard
[Kr	83		ug/L			80	63	14	Standard
[> In-1	115		ug/L			9102	8256	0	KED
[Cd	111	27.231	ug/L	0.504	1	3	7498	1	KED
[Cd	114	27.029	ug/L	0.155	0	3	19525	0	KED
[> In	115		ug/L			483935	433018	8	Standard
[Ag	107	27.933	ug/L	2.709	9	106	475856	1	Standard
[> Tb	159		ug/L			1215870	1088144	9	Standard
[Pb	208	29.318	ug/L	2.332	7	593	2112388	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-04**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:32:13**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	59962	2	Standard
Cl	37		ug/L			5354462	5017977	2	Standard
> Sc	45		ug/L			474891	603860	1	Standard
Cr	52	13.765	ug/L	0.193	1	16718	341535	0	Standard
Cr	53	13.576	ug/L	0.176	1	209	37464	0	Standard
> Ge	72		ug/L			34387	35179	0	KED
Ni	60	14.767	ug/L	0.378	2	146	21343	2	KED
Ni	62	14.484	ug/L	0.518	3	34	3390	2	KED
Cu	63	30.148	ug/L	0.260	0	114	121855	0	KED
Cu	65	30.334	ug/L	0.639	2	56	61803	1	KED
Zn	66	61.331	ug/L	0.904	1	76	32070	1	KED
Zn	67	59.524	ug/L	0.823	1	13	5218	1	KED
As	75	7.181	ug/L	0.214	2	6	2016	2	KED
Y	89		ug/L			289124	549424	2	Standard
Kr	83		ug/L			80	102	3	Standard
> In-1	115		ug/L			9102	8177	2	KED
Cd	111	0.183	ug/L	0.013	6	3	53	7	KED
Cd	114	0.143	ug/L	0.015	10	3	105	8	KED
> In	115		ug/L			483935	453255	2	Standard
Ag	107	0.118	ug/L	0.007	5	106	2215	3	Standard
> Tb	159		ug/L			1215870	1144981	1	Standard
Pb	208	10.765	ug/L	0.169	1	593	820266	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-05**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:36:39**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	49769	2	Standard
Cl	37		ug/L			5354462	4898396	3	Standard
Sc	45		ug/L			474891	614877	0	Standard
Cr	52	13.885	ug/L	0.294	2	16718	350639	1	Standard
Cr	53	14.136	ug/L	0.100	0	209	39712	0	Standard
Ge	72		ug/L			34387	34776	2	KED
Ni	60	15.778	ug/L	0.395	2	146	22528	1	KED
Ni	62	16.120	ug/L	0.301	1	34	3726	0	KED
Cu	63	37.025	ug/L	0.956	2	114	147864	0	KED
Cu	65	36.352	ug/L	1.120	3	56	73180	1	KED
Zn	66	105.271	ug/L	2.813	2	76	54344	1	KED
Zn	67	103.096	ug/L	2.415	2	13	8922	0	KED
As	75	7.951	ug/L	0.118	1	6	2206	0	KED
Y	89		ug/L			289124	604384	2	Standard
Kr	83		ug/L			80	101	2	Standard
In-1	115		ug/L			9102	7855	2	KED
Cd	111	0.356	ug/L	0.089	24	3	95	22	KED
Cd	114	0.357	ug/L	0.038	10	3	248	9	KED
In	115		ug/L			483935	455229	0	Standard
Ag	107	0.332	ug/L	0.004	1	106	6077	1	Standard
Tb	159		ug/L			1215870	1146764	2	Standard
Pb	208	24.559	ug/L	0.368	1	593	1873566	0	Standard

Sample ID: **32A0326-10**Sample Dil Factor: **20**

Comments:

Sample Date/Time: Friday, April 28, 2023 01:41:05

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	55402	1	Standard
Cl	37		ug/L			5354462	4953260	3	Standard
[> Sc	45		ug/L			474891	590473	1	Standard
[Cr	52	14.307	ug/L	0.299	2	16718	346325	1	Standard
[Cr	53	14.183	ug/L	0.056	0	209	38265	1	Standard
[> Ge	72		ug/L			34387	34815	1	KED
[Ni	60	15.345	ug/L	0.239	1	146	21943	0	KED
[Ni	62	15.467	ug/L	0.563	3	34	3580	2	KED
[Cu	63	36.379	ug/L	1.232	3	114	145449	1	KED
[Cu	65	36.235	ug/L	0.107	0	56	73056	1	KED
[Zn	66	80.153	ug/L	1.036	1	76	41451	0	KED
[Zn	67	75.807	ug/L	1.147	1	13	6574	3	KED
[As	75	6.942	ug/L	0.069	1	6	1929	0	KED
Y	89		ug/L			289124	554626	0	Standard
Kr	83		ug/L			80	106	10	Standard
[> In-1	115		ug/L			9102	7952	1	KED
[Cd	111	0.174	ug/L	0.016	9	3	49	7	KED
[Cd	114	0.189	ug/L	0.030	15	3	134	16	KED
[> In	115		ug/L			483935	457900	1	Standard
[Ag	107	0.124	ug/L	0.005	3	106	2353	3	Standard
[> Tb	159		ug/L			1215870	1156337	0	Standard
[Pb	208	13.842	ug/L	0.120	0	593	1065246	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-11**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:45:31**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	54867	2	Standard
Cl	37		ug/L			5354462	4905422	2	Standard
Sc	45		ug/L			474891	601505	0	Standard
Cr	52	13.625	ug/L	0.188	1	16718	337014	1	Standard
Cr	53	13.738	ug/L	0.164	1	209	37766	1	Standard
Ge	72		ug/L			34387	35652	2	KED
Ni	60	14.091	ug/L	0.264	1	146	20643	0	KED
Ni	62	14.171	ug/L	0.610	4	34	3361	1	KED
Cu	63	30.760	ug/L	0.793	2	114	125952	0	KED
Cu	65	31.094	ug/L	0.793	2	56	64183	1	KED
Zn	66	66.082	ug/L	0.968	1	76	35009	1	KED
Zn	67	62.019	ug/L	2.043	3	13	5507	0	KED
As	75	5.870	ug/L	0.069	1	6	1671	1	KED
Y	89		ug/L			289124	549064	2	Standard
Kr	83		ug/L			80	107	7	Standard
In-1	115		ug/L			9102	8052	3	KED
Cd	111	0.174	ug/L	0.033	18	3	49	16	KED
Cd	114	0.176	ug/L	0.007	3	3	127	7	KED
In	115		ug/L			483935	457001	1	Standard
Ag	107	0.126	ug/L	0.005	4	106	2372	2	Standard
Tb	159		ug/L			1215870	1166852	1	Standard
Pb	208	12.186	ug/L	0.150	1	593	946337	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-12**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 01:49:57**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	52212	3	Standard
Cl	37		ug/L			5354462	4897302	2	Standard
Sc	45		ug/L			474891	609390	2	Standard
Cr	52	14.448	ug/L	0.112	0	16718	360721	1	Standard
Cr	53	14.451	ug/L	0.197	1	209	40225	1	Standard
Ge	72		ug/L			34387	35091	0	KED
Ni	60	15.115	ug/L	0.141	0	146	21788	0	KED
Ni	62	15.253	ug/L	0.449	2	34	3561	3	KED
Cu	63	38.911	ug/L	0.116	0	114	156855	1	KED
Cu	65	39.370	ug/L	0.689	1	56	79995	1	KED
Zn	66	104.697	ug/L	1.916	1	76	54559	2	KED
Zn	67	100.441	ug/L	0.511	0	13	8774	0	KED
As	75	8.206	ug/L	0.062	0	6	2298	1	KED
Y	89		ug/L			289124	570748	2	Standard
Kr	83		ug/L			80	97	9	Standard
In-1	115		ug/L			9102	8027	1	KED
Cd	111	0.309	ug/L	0.022	6	3	85	7	KED
Cd	114	0.265	ug/L	0.014	5	3	189	6	KED
In	115		ug/L			483935	459117	1	Standard
Ag	107	0.183	ug/L	0.003	1	106	3422	1	Standard
Tb	159		ug/L			1215870	1146645	0	Standard
Pb	208	20.027	ug/L	0.145	0	593	1528124	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 01:54:25

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	28798	3	Standard
Cl	37		ug/L			5354462	4875184	2	Standard
[> Sc	45		ug/L			474891	467610	1	Standard
| Cr	52	-0.045	ug/L	0.034	75	16718	15647	2	Standard
| Cr	53	-0.037	ug/L	0.003	8	209	127	6	Standard
[> Ge	72		ug/L			34387	34862	0	KED
| Ni	60	-0.027	ug/L	0.007	24	146	109	8	KED
| Ni	62	-0.066	ug/L	0.017	26	34	20	19	KED
| Cu	63	0.001	ug/L	0.007	679	114	120	23	KED
| Cu	65	-0.005	ug/L	0.004	82	56	46	18	KED
| Zn	66	0.125	ug/L	0.025	19	76	141	8	KED
| Zn	67	0.130	ug/L	0.011	8	13	25	4	KED
| As	75	-0.011	ug/L	0.005	45	6	3	42	KED
Y	89		ug/L			289124	275583	3	Standard
Kr	83		ug/L			80	64	10	Standard
[> In-1	115		ug/L			9102	8162	0	KED
| Cd	111	0.008	ug/L	0.004	47	3	5	20	KED
| Cd	114	-0.004	ug/L	0.002	34	3	0	298	KED
[> In	115		ug/L			483935	460987	2	Standard
| Ag	107	-0.003	ug/L	0.000	17	106	51	16	Standard
[> Tb	159		ug/L			1215870	1150231	0	Standard
| Pb	208	0.005	ug/L	0.000	5	593	928	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 01:58:51

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	29291	2	Standard
Cl	37		ug/L			5354462	5364509	1	Standard
[> Sc	45		ug/L			474891	472851	2	Standard
| Cr	52	48.224	ug/L	1.444	2	16718	895011	1	Standard
| Cr	53	47.968	ug/L	0.539	1	209	103126	1	Standard
[> Ge	72		ug/L			34387	34891	1	KED
| Ni	60	50.691	ug/L	0.548	1	146	72306	0	KED
| Ni	62	50.981	ug/L	1.179	2	34	11747	1	KED
| Cu	63	51.734	ug/L	1.103	2	114	207277	0	KED
| Cu	65	51.291	ug/L	0.823	1	56	103599	0	KED
| Zn	66	51.903	ug/L	0.919	1	76	26927	0	KED
| Zn	67	50.982	ug/L	1.312	2	13	4434	2	KED
| As	75	50.023	ug/L	0.316	0	6	13896	0	KED
Y	89		ug/L			289124	277247	3	Standard
Kr	83		ug/L			80	55	15	Standard
[> In-1	115		ug/L			9102	8240	1	KED
| Cd	111	50.681	ug/L	0.961	1	3	13922	0	KED
| Cd	114	49.679	ug/L	0.919	1	3	35809	1	KED
[> In	115		ug/L			483935	447325	1	Standard
| Ag	107	49.328	ug/L	0.636	1	106	872527	0	Standard
[> Tb	159		ug/L			1215870	1169179	0	Standard
| Pb	208	52.023	ug/L	1.040	1	593	4046176	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 02:06:02

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	26904	2	Standard
Cl	37		ug/L			5354462	5188028	3	Standard
[> Sc	45		ug/L			474891	460114	0	Standard
| Cr	52	0.016	ug/L	0.015	92	16718	16479	2	Standard
| Cr	53	-0.046	ug/L	0.009	20	209	107	18	Standard
[> Ge	72		ug/L			34387	35147	1	KED
| Ni	60	-0.027	ug/L	0.008	30	146	111	8	KED
| Ni	62	-0.055	ug/L	0.025	45	34	22	25	KED
| Cu	63	-0.017	ug/L	0.002	14	114	48	19	KED
| Cu	65	-0.011	ug/L	0.002	14	56	36	10	KED
| Zn	66	-0.061	ug/L	0.017	27	76	46	20	KED
| Zn	67	-0.047	ug/L	0.027	57	13	10	21	KED
| As	75	-0.003	ug/L	0.008	227	6	5	40	KED
Y	89		ug/L			289124	270190	0	Standard
Kr	83		ug/L			80	50	22	Standard
[> In-1	115		ug/L			9102	8388	2	KED
| Cd	111	-0.001	ug/L	0.007	477	3	2	66	KED
| Cd	114	0.006	ug/L	0.005	89	3	8	50	KED
[> In	115		ug/L			483935	445981	1	Standard
| Ag	107	0.005	ug/L	0.001	28	106	190	15	Standard
[> Tb	159		ug/L			1215870	1146541	0	Standard
| Pb	208	-0.001	ug/L	0.000	39	593	474	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0402-BLK1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:10:28**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	45875	1	Standard
Cl	37		ug/L			5354462	5072646	1	Standard
[> Sc	45		ug/L			474891	473838	1	Standard
| Cr	52	0.122	ug/L	0.035	28	16718	18898	2	Standard
| Cr	53	0.051	ug/L	0.019	37	209	318	12	Standard
[> Ge	72		ug/L			34387	34863	1	KED
| Ni	60	-0.045	ug/L	0.011	25	146	84	20	KED
| Ni	62	-0.077	ug/L	0.026	33	34	17	34	KED
| Cu	63	0.044	ug/L	0.007	16	114	290	8	KED
| Cu	65	0.043	ug/L	0.008	18	56	144	12	KED
| Zn	66	0.324	ug/L	0.050	15	76	245	11	KED
| Zn	67	0.268	ug/L	0.125	46	13	37	29	KED
| As	75	-0.002	ug/L	0.003	164	6	5	16	KED
| Y	89		ug/L			289124	279899	3	Standard
| Kr	83		ug/L			80	48	37	Standard
[> In-1	115		ug/L			9102	8219	1	KED
| Cd	111	0.004	ug/L	0.007	205	3	4	48	KED
| Cd	114	-0.005	ug/L	0.000	3	3	0	44	KED
[> In	115		ug/L			483935	461447	1	Standard
| Ag	107	0.005	ug/L	0.009	157	106	202	79	Standard
[> Tb	159		ug/L			1215870	1165962	1	Standard
| Pb	208	0.006	ug/L	0.008	134	593	1046	61	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0402-BS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:14:54**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	44029	1	Standard
Cl	37		ug/L			5354462	5135797	2	Standard
[> Sc	45		ug/L			474891	466034	1	Standard
[Cr	52	26.345	ug/L	0.253	0	16718	489496	0	Standard
[Cr	53	25.916	ug/L	0.345	1	209	55007	0	Standard
[> Ge	72		ug/L			34387	35387	1	KED
[Ni	60	26.888	ug/L	0.196	0	146	38972	1	KED
[Ni	62	27.299	ug/L	0.732	2	34	6396	1	KED
[Cu	63	28.492	ug/L	0.942	3	114	115853	3	KED
[Cu	65	28.214	ug/L	1.034	3	56	57835	4	KED
[Zn	66	83.678	ug/L	0.627	0	76	43985	1	KED
[Zn	67	78.236	ug/L	0.525	0	13	6894	1	KED
[As	75	25.168	ug/L	0.202	0	6	7094	0	KED
Y	89		ug/L			289124	273775	1	Standard
Kr	83		ug/L			80	65	19	Standard
[> In-1	115		ug/L			9102	8381	2	KED
[Cd	111	26.070	ug/L	0.674	2	3	7285	0	KED
[Cd	114	26.034	ug/L	0.712	2	3	19085	0	KED
[> In	115		ug/L			483935	452742	1	Standard
[Ag	107	26.038	ug/L	0.800	3	106	466084	1	Standard
[> Tb	159		ug/L			1215870	1162549	2	Standard
[Pb	208	26.815	ug/L	0.625	2	593	2073553	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-08**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:19:20**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	47937	2	Standard
Cl	37		ug/L			5354462	5071870	1	Standard
[> Sc	45		ug/L			474891	551937	2	Standard
| Cr	52	12.123	ug/L	0.246	2	16718	277233	2	Standard
| Cr	53	12.053	ug/L	0.216	1	209	30425	1	Standard
[> Ge	72		ug/L			34387	35559	2	KED
| Ni	60	9.909	ug/L	0.363	3	146	14521	2	KED
| Ni	62	10.279	ug/L	0.181	1	34	2442	1	KED
| Cu	63	20.759	ug/L	0.491	2	114	84828	1	KED
| Cu	65	21.013	ug/L	0.508	2	56	43282	0	KED
| Zn	66	44.029	ug/L	0.618	1	76	23290	0	KED
| Zn	67	42.450	ug/L	1.453	3	13	3764	1	KED
| As	75	4.859	ug/L	0.080	1	6	1381	2	KED
| Y	89		ug/L			289124	472370	2	Standard
| Kr	83		ug/L			80	80	23	Standard
[> In-1	115		ug/L			9102	8185	1	KED
| Cd	111	0.064	ug/L	0.011	17	3	20	14	KED
| Cd	114	0.051	ug/L	0.008	15	3	40	15	KED
[> In	115		ug/L			483935	458600	3	Standard
| Ag	107	0.084	ug/L	0.008	9	106	1614	7	Standard
[> Tb	159		ug/L			1215870	1177226	0	Standard
| Pb	208	26.366	ug/L	0.212	0	593	2065172	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0326-09**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:23:46**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	55289	2	Standard
Cl	37		ug/L			5354462	4984510	2	Standard
[> Sc	45		ug/L			474891	592167	2	Standard
| Cr	52	15.662	ug/L	0.261	1	16718	378161	0	Standard
| Cr	53	15.430	ug/L	0.212	1	209	41717	0	Standard
[> Ge	72		ug/L			34387	35590	1	KED
| Ni	60	13.129	ug/L	0.218	1	146	19217	2	KED
| Ni	62	13.272	ug/L	0.363	2	34	3146	1	KED
| Cu	63	25.739	ug/L	0.364	1	114	105265	0	KED
| Cu	65	26.073	ug/L	0.169	0	56	53756	1	KED
| Zn	66	67.543	ug/L	1.090	1	76	35725	1	KED
| Zn	67	63.242	ug/L	2.374	3	13	5607	2	KED
| As	75	6.245	ug/L	0.176	2	6	1775	2	KED
| Y	89		ug/L			289124	536746	0	Standard
| Kr	83		ug/L			80	91	18	Standard
[> In-1	115		ug/L			9102	8280	2	KED
| Cd	111	0.431	ug/L	0.088	20	3	121	17	KED
| Cd	114	0.414	ug/L	0.042	10	3	302	8	KED
[> In	115		ug/L			483935	464614	3	Standard
| Ag	107	0.170	ug/L	0.011	6	106	3225	2	Standard
[> Tb	159		ug/L			1215870	1192905	1	Standard
| Pb	208	38.163	ug/L	0.246	0	593	3028666	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-01**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:28:12**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	42765	3	Standard
Cl	37		ug/L			5354462	4973160	3	Standard
[> Sc	45		ug/L			474891	529878	2	Standard
| Cr	52	8.520	ug/L	0.183	2	16718	192586	1	Standard
| Cr	53	8.549	ug/L	0.373	4	209	20781	3	Standard
[> Ge	72		ug/L			34387	36104	0	KED
| Ni	60	7.704	ug/L	0.134	1	146	11501	1	KED
| Ni	62	7.916	ug/L	0.192	2	34	1918	2	KED
| Cu	63	11.960	ug/L	0.363	3	114	49679	2	KED
| Cu	65	11.944	ug/L	0.286	2	56	25011	2	KED
| Zn	66	27.346	ug/L	0.296	1	76	14721	1	KED
| Zn	67	25.960	ug/L	0.792	3	13	2344	3	KED
| As	75	2.186	ug/L	0.008	0	6	634	0	KED
| Y	89		ug/L			289124	444957	4	Standard
| Kr	83		ug/L			80	85	8	Standard
[> In-1	115		ug/L			9102	8357	5	KED
| Cd	111	0.042	ug/L	0.008	19	3	14	13	KED
| Cd	114	0.024	ug/L	0.007	27	3	21	27	KED
[> In	115		ug/L			483935	455054	3	Standard
| Ag	107	0.036	ug/L	0.002	5	106	749	8	Standard
[> Tb	159		ug/L			1215870	1162098	1	Standard
| Pb	208	2.460	ug/L	0.003	0	593	190698	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-02**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:32:37**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	45771	1	Standard
Cl	37		ug/L			5354462	5076346	0	Standard
[> Sc	45		ug/L			474891	531285	2	Standard
| Cr	52	9.959	ug/L	0.171	1	16718	222534	1	Standard
| Cr	53	9.939	ug/L	0.355	3	209	24182	0	Standard
[> Ge	72		ug/L			34387	34997	1	KED
| Ni	60	10.371	ug/L	0.200	1	146	14958	2	KED
| Ni	62	10.727	ug/L	0.407	3	34	2508	5	KED
| Cu	63	31.667	ug/L	0.635	2	114	127307	1	KED
| Cu	65	31.372	ug/L	0.459	1	56	63578	0	KED
| Zn	66	56.618	ug/L	1.285	2	76	29453	1	KED
| Zn	67	52.731	ug/L	2.224	4	13	4598	2	KED
| As	75	3.544	ug/L	0.003	0	6	993	1	KED
| Y	89		ug/L			289124	458899	1	Standard
| Kr	83		ug/L			80	82	8	Standard
[> In-1	115		ug/L			9102	8213	0	KED
| Cd	111	0.069	ug/L	0.016	23	3	21	19	KED
| Cd	114	0.050	ug/L	0.006	11	3	39	10	KED
[> In	115		ug/L			483935	456388	1	Standard
| Ag	107	0.062	ug/L	0.004	6	106	1212	4	Standard
[> Tb	159		ug/L			1215870	1155946	0	Standard
| Pb	208	15.378	ug/L	0.042	0	593	1183021	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-04**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:37:03**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	49049	3	Standard
Cl	37		ug/L			5354462	4988445	2	Standard
[> Sc	45		ug/L			474891	558898	0	Standard
| Cr	52	11.705	ug/L	0.125	1	16718	271773	0	Standard
| Cr	53	11.500	ug/L	0.134	1	209	29415	1	Standard
[> Ge	72		ug/L			34387	35795	2	KED
| Ni	60	11.969	ug/L	0.345	2	146	17626	0	KED
| Ni	62	12.279	ug/L	0.228	1	34	2931	3	KED
| Cu	63	23.350	ug/L	0.775	3	114	96016	1	KED
| Cu	65	23.075	ug/L	0.356	1	56	47847	1	KED
| Zn	66	84.378	ug/L	1.281	1	76	44862	2	KED
| Zn	67	80.441	ug/L	1.381	1	13	7169	0	KED
| As	75	4.931	ug/L	0.141	2	6	1410	0	KED
Y	89		ug/L			289124	489819	1	Standard
Kr	83		ug/L			80	83	8	Standard
[> In-1	115		ug/L			9102	8303	1	KED
| Cd	111	0.081	ug/L	0.036	43	3	25	39	KED
| Cd	114	0.084	ug/L	0.002	2	3	64	4	KED
[> In	115		ug/L			483935	466016	2	Standard
| Ag	107	0.071	ug/L	0.002	2	106	1412	3	Standard
[> Tb	159		ug/L			1215870	1165812	2	Standard
| Pb	208	11.779	ug/L	0.284	2	593	913679	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-05**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:41:29**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	48514	1	Standard
Cl	37		ug/L			5354462	5024698	1	Standard
[> Sc	45		ug/L			474891	535364	1	Standard
| Cr	52	11.852	ug/L	0.034	0	16718	263379	1	Standard
| Cr	53	11.651	ug/L	0.138	1	209	28538	1	Standard
[> Ge	72		ug/L			34387	34992	0	KED
| Ni	60	11.689	ug/L	0.057	0	146	16838	0	KED
| Ni	62	11.483	ug/L	0.195	1	34	2681	1	KED
| Cu	63	27.568	ug/L	0.438	1	114	110844	1	KED
| Cu	65	27.730	ug/L	0.284	1	56	56204	0	KED
| Zn	66	70.399	ug/L	1.105	1	76	36608	2	KED
| Zn	67	68.008	ug/L	2.111	3	13	5928	3	KED
| As	75	3.627	ug/L	0.199	5	6	1016	4	KED
| Y	89		ug/L			289124	475686	2	Standard
| Kr	83		ug/L			80	74	9	Standard
[> In-1	115		ug/L			9102	8408	1	KED
| Cd	111	0.102	ug/L	0.023	22	3	31	21	KED
| Cd	114	0.096	ug/L	0.018	18	3	74	17	KED
[> In	115		ug/L			483935	464964	0	Standard
| Ag	107	0.103	ug/L	0.002	2	106	1995	2	Standard
[> Tb	159		ug/L			1215870	1168236	1	Standard
| Pb	208	42.428	ug/L	0.797	1	593	3297243	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-06**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 02:45:55**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	51471	2	Standard
Cl	37		ug/L			5354462	5022993	2	Standard
[> Sc	45		ug/L			474891	533089	1	Standard
| Cr	52	15.592	ug/L	0.350	2	16718	339030	0	Standard
| Cr	53	15.654	ug/L	0.628	4	209	38093	2	Standard
[> Ge	72		ug/L			34387	35324	1	KED
| Ni	60	11.385	ug/L	0.276	2	146	16554	0	KED
| Ni	62	11.525	ug/L	0.462	4	34	2715	2	KED
| Cu	63	25.630	ug/L	0.285	1	114	104031	0	KED
| Cu	65	25.747	ug/L	0.496	1	56	52675	0	KED
| Zn	66	59.711	ug/L	0.774	1	76	31353	1	KED
| Zn	67	55.778	ug/L	1.457	2	13	4910	1	KED
| As	75	2.984	ug/L	0.050	1	6	845	1	KED
Y	89		ug/L			289124	424137	0	Standard
Kr	83		ug/L			80	65	4	Standard
[> In-1	115		ug/L			9102	8323	3	KED
| Cd	111	0.121	ug/L	0.027	22	3	36	22	KED
| Cd	114	0.126	ug/L	0.013	10	3	95	6	KED
[> In	115		ug/L			483935	463903	2	Standard
| Ag	107	0.091	ug/L	0.004	4	106	1761	1	Standard
[> Tb	159		ug/L			1215870	1182176	1	Standard
| Pb	208	39.890	ug/L	0.559	1	593	3136852	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 02:50:21

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	27712	2	Standard
Cl	37		ug/L			5354462	4894544	1	Standard
[> Sc	45		ug/L			474891	451342	1	Standard
| Cr	52	0.006	ug/L	0.017	293	16718	15985	1	Standard
| Cr	53	-0.041	ug/L	0.004	10	209	114	8	Standard
[> Ge	72		ug/L			34387	35281	0	KED
| Ni	60	-0.030	ug/L	0.001	3	146	106	1	KED
| Ni	62	-0.086	ug/L	0.005	5	34	15	6	KED
| Cu	63	-0.004	ug/L	0.003	79	114	101	11	KED
| Cu	65	-0.003	ug/L	0.004	132	56	51	16	KED
| Zn	66	0.133	ug/L	0.019	14	76	147	6	KED
| Zn	67	0.184	ug/L	0.058	31	13	30	16	KED
| As	75	-0.007	ug/L	0.006	88	6	4	36	KED
Y	89		ug/L			289124	269353	2	Standard
Kr	83		ug/L			80	53	25	Standard
[> In-1	115		ug/L			9102	8408	0	KED
| Cd	111	0.012	ug/L	0.010	82	3	6	42	KED
| Cd	114	0.008	ug/L	0.009	121	3	9	73	KED
[> In	115		ug/L			483935	444619	0	Standard
| Ag	107	-0.003	ug/L	0.001	24	106	48	25	Standard
[> Tb	159		ug/L			1215870	1122441	1	Standard
| Pb	208	0.005	ug/L	0.000	5	593	940	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 02:54:48

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	29140	2	Standard
Cl	37		ug/L			5354462	5347339	1	Standard
[> Sc	45		ug/L			474891	465488	1	Standard
| Cr	52	49.253	ug/L	0.326	0	16718	899890	1	Standard
| Cr	53	48.449	ug/L	0.592	1	209	102538	1	Standard
[> Ge	72		ug/L			34387	35562	1	KED
| Ni	60	49.703	ug/L	2.722	5	146	72235	4	KED
| Ni	62	49.078	ug/L	1.675	3	34	11527	2	KED
| Cu	63	50.300	ug/L	2.320	4	114	205371	3	KED
| Cu	65	51.234	ug/L	2.562	5	56	105450	3	KED
| Zn	66	49.750	ug/L	2.713	5	76	26302	4	KED
| Zn	67	51.039	ug/L	2.233	4	13	4523	3	KED
[As	75	48.249	ug/L	2.480	5	6	13656	3	KED
Y	89		ug/L			289124	274074	1	Standard
Kr	83		ug/L			80	58	19	Standard
[> In-1	115		ug/L			9102	8303	0	KED
| Cd	111	50.601	ug/L	0.678	1	3	14010	1	KED
| Cd	114	50.849	ug/L	0.664	1	3	36939	1	KED
[> In	115		ug/L			483935	442236	1	Standard
| Ag	107	48.673	ug/L	0.987	2	106	851100	0	Standard
[> Tb	159		ug/L			1215870	1135430	2	Standard
[Pb	208	52.464	ug/L	1.591	3	593	3961205	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 03:01:58

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26020	26938	0	Standard
Cl	37		ug/L			5354462	5194250	1	Standard
[> Sc	45		ug/L			474891	458058	1	Standard
| Cr	52	0.006	ug/L	0.028	447	16718	16232	2	Standard
| Cr	53	-0.047	ug/L	0.003	6	209	104	5	Standard
[> Ge	72		ug/L			34387	35101	0	KED
| Ni	60	-0.034	ug/L	0.007	19	146	99	9	KED
| Ni	62	-0.066	ug/L	0.027	40	34	20	30	KED
| Cu	63	-0.015	ug/L	0.003	19	114	55	21	KED
| Cu	65	-0.018	ug/L	0.003	16	56	21	28	KED
| Zn	66	-0.073	ug/L	0.004	5	76	40	4	KED
| Zn	67	-0.076	ug/L	0.021	28	13	7	25	KED
| As	75	0.001	ug/L	0.006	449	6	6	22	KED
Y	89		ug/L			289124	267450	2	Standard
Kr	83		ug/L			80	50	19	Standard
[> In-1	115		ug/L			9102	8486	1	KED
| Cd	111	0.002	ug/L	0.000	9	3	3	0	KED
| Cd	114	-0.001	ug/L	0.005	559	3	2	135	KED
[> In	115		ug/L			483935	455822	2	Standard
| Ag	107	0.005	ug/L	0.001	25	106	183	11	Standard
[> Tb	159		ug/L			1215870	1123140	0	Standard
| Pb	208	-0.001	ug/L	0.001	42	593	459	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 03:06:24

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13	ug/L				26724	1	Standard
	Cl	37	ug/L				5151969	1	Standard
[>	Sc	45	ug/L				453223	2	Standard
|	Cr	52	ug/L				16290	1	Standard
|	Cr	53	ug/L				110	3	Standard
[>	Ge	72	ug/L				35046	0	KED
|	Ni	60	ug/L				104	12	KED
|	Ni	62	ug/L				17	16	KED
|	Cu	63	ug/L				50	32	KED
|	Cu	65	ug/L				24	7	KED
|	Zn	66	ug/L				45	19	KED
|	Zn	67	ug/L				5	57	KED
|	As	75	ug/L				4	14	KED
	Y	89	ug/L				264383	3	Standard
	Kr	83	ug/L				57	15	Standard
[>	In-1	115	ug/L				8211	0	KED
|	Cd	111	ug/L				8	53	KED
|	Cd	114	ug/L				5	67	KED
[>	In	115	ug/L				441019	1	Standard
|	Ag	107	ug/L				84	22	Standard
[>	Tb	159	ug/L				1096960	2	Standard
|	Pb	208	ug/L				408	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 03:10:51

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	29490	2	Standard
Cl	37		ug/L			5151969	5472504	2	Standard
[> Sc	45		ug/L			453223	467679	0	Standard
| Cr	52	49.357	ug/L	0.705	1	16290	906342	1	Standard
| Cr	53	48.874	ug/L	1.105	2	110	103830	1	Standard
[> Ge	72		ug/L			35046	34753	1	KED
| Ni	60	51.397	ug/L	1.848	3	104	72956	2	KED
| Ni	62	51.377	ug/L	1.067	2	17	11773	0	KED
| Cu	63	50.799	ug/L	1.591	3	50	202659	2	KED
| Cu	65	51.522	ug/L	0.510	0	24	103627	0	KED
| Zn	66	51.595	ug/L	0.969	1	45	26629	1	KED
| Zn	67	50.703	ug/L	1.970	3	5	4384	3	KED
| As	75	50.273	ug/L	1.404	2	4	13905	1	KED
Y	89		ug/L			264383	278710	2	Standard
Kr	83		ug/L			57	50	28	Standard
[> In-1	115		ug/L			8211	7991	1	KED
| Cd	111	50.671	ug/L	1.064	2	8	13508	2	KED
| Cd	114	50.626	ug/L	0.090	0	5	35398	0	KED
[> In	115		ug/L			441019	441687	2	Standard
| Ag	107	49.958	ug/L	1.694	3	84	872191	1	Standard
[> Tb	159		ug/L			1096960	1139751	1	Standard
| Pb	208	52.707	ug/L	1.412	2	408	3995140	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 03:18:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	27230	2	Standard
Cl	37		ug/L			5151969	5276386	0	Standard
[> Sc	45		ug/L			453223	464883	0	Standard
| Cr	52	-0.014	ug/L	0.021	151	16290	16463	2	Standard
| Cr	53	-0.007	ug/L	0.005	71	110	99	10	Standard
[> Ge	72		ug/L			35046	34551	2	KED
| Ni	60	0.013	ug/L	0.011	83	104	121	14	KED
| Ni	62	0.029	ug/L	0.009	31	17	24	9	KED
| Cu	63	0.000	ug/L	0.003	1551	50	50	21	KED
| Cu	65	-0.000	ug/L	0.001	622	24	24	9	KED
| Zn	66	0.000	ug/L	0.007	7767	45	44	6	KED
| Zn	67	0.023	ug/L	0.021	91	5	7	25	KED
| As	75	0.004	ug/L	0.005	108	4	6	19	KED
Y	89		ug/L			264383	274511	1	Standard
Kr	83		ug/L			57	58	6	Standard
[> In-1	115		ug/L			8211	8418	1	KED
| Cd	111	-0.012	ug/L	0.014	116	8	5	75	KED
| Cd	114	-0.000	ug/L	0.002	2739	5	5	34	KED
[> In	115		ug/L			441019	459027	1	Standard
| Ag	107	0.006	ug/L	0.000	5	84	205	4	Standard
[> Tb	159		ug/L			1096960	1145283	1	Standard
| Pb	208	0.001	ug/L	0.000	44	408	482	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0124-02**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:22:28**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	38423	2	Standard
Cl	37		ug/L			5151969	5466503	2	Standard
[> Sc	45		ug/L			453223	446220	5	Standard
| Cr	52	1.144	ug/L	0.084	7	16290	35673	2	Standard
| Cr	53	1.144	ug/L	0.024	2	110	2426	6	Standard
[> Ge	72		ug/L			35046	35433	1	KED
| Ni	60	0.208	ug/L	0.032	15	104	405	10	KED
| Ni	62	0.239	ug/L	0.052	21	17	73	15	KED
| Cu	63	5.264	ug/L	0.042	0	50	21463	1	KED
| Cu	65	5.273	ug/L	0.090	1	24	10836	2	KED
| Zn	66	47.133	ug/L	1.919	4	45	24799	2	KED
| Zn	67	43.562	ug/L	0.949	2	5	3841	2	KED
| As	75	0.215	ug/L	0.028	12	4	65	10	KED
| Y	89		ug/L			264383	259708	5	Standard
| Kr	83		ug/L			57	54	32	Standard
[> In-1	115		ug/L			8211	8229	0	KED
| Cd	111	-0.016	ug/L	0.009	56	8	3	66	KED
| Cd	114	0.002	ug/L	0.002	129	5	6	26	KED
[> In	115		ug/L			441019	436584	3	Standard
| Ag	107	0.006	ug/L	0.002	41	84	182	23	Standard
[> Tb	159		ug/L			1096960	1103223	2	Standard
| Pb	208	0.006	ug/L	0.001	9	408	881	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0510-DUP2**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:26:54**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	39355	1	Standard
Cl	37		ug/L			5151969	5490228	3	Standard
Sc	45		ug/L			453223	472467	1	Standard
Cr	52	1.056	ug/L	0.034	3	16290	36212	0	Standard
Cr	53	1.063	ug/L	0.038	3	110	2393	2	Standard
Ge	72		ug/L			35046	35151	1	KED
Ni	60	0.180	ug/L	0.007	3	104	363	3	KED
Ni	62	0.230	ug/L	0.028	12	17	71	10	KED
Cu	63	5.109	ug/L	0.027	0	50	20667	0	KED
Cu	65	5.162	ug/L	0.044	0	24	10525	1	KED
Zn	66	44.675	ug/L	0.837	1	45	23332	2	KED
Zn	67	41.889	ug/L	2.173	5	5	3663	4	KED
As	75	0.187	ug/L	0.023	12	4	57	11	KED
Y	89		ug/L			264383	274976	1	Standard
Kr	83		ug/L			57	52	13	Standard
In-1	115		ug/L			8211	8057	0	KED
Cd	111	-0.005	ug/L	0.004	68	8	6	14	KED
Cd	114	-0.006	ug/L	0.003	45	5	1	151	KED
In	115		ug/L			441019	459931	0	Standard
Ag	107	0.002	ug/L	0.000	7	84	132	1	Standard
Tb	159		ug/L			1096960	1156435	1	Standard
Pb	208	0.005	ug/L	0.001	18	408	799	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0510-MS2**

Sample Dil Factor: **5**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:31:20**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	39443	0	Standard
Cl	37		ug/L			5151969	5559199	3	Standard
Sc	45		ug/L			453223	464997	1	Standard
Cr	52	6.703	ug/L	0.274	4	16290	136777	2	Standard
Cr	53	6.762	ug/L	0.207	3	110	14379	1	Standard
Ge	72		ug/L			35046	34781	0	KED
Ni	60	5.957	ug/L	0.073	1	104	8557	1	KED
Ni	62	6.193	ug/L	0.203	3	17	1436	3	KED
Cu	63	11.447	ug/L	0.177	1	50	45751	1	KED
Cu	65	11.612	ug/L	0.242	2	24	23395	2	KED
Zn	66	67.354	ug/L	0.811	1	45	34783	1	KED
Zn	67	62.957	ug/L	0.499	0	5	5448	0	KED
As	75	5.913	ug/L	0.032	0	4	1641	0	KED
Y	89		ug/L			264383	272554	0	Standard
Kr	83		ug/L			57	44	9	Standard
In-1	115		ug/L			8211	8075	2	KED
Cd	111	5.836	ug/L	0.378	6	8	1577	4	KED
Cd	114	5.856	ug/L	0.368	6	5	4137	4	KED
In	115		ug/L			441019	450680	2	Standard
Ag	107	5.437	ug/L	0.144	2	84	96942	0	Standard
Tb	159		ug/L			1096960	1130933	0	Standard
Pb	208	5.876	ug/L	0.075	1	408	442433	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-07**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:35:39**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	43421	2	Standard
Cl	37		ug/L			5151969	5276954	1	Standard
[> Sc	45		ug/L			453223	542956	2	Standard
| Cr	52	13.815	ug/L	0.293	2	16290	308478	0	Standard
| Cr	53	13.613	ug/L	0.402	2	110	33661	0	Standard
[> Ge	72		ug/L			35046	34836	1	KED
| Ni	60	17.092	ug/L	0.280	1	104	24394	1	KED
| Ni	62	17.321	ug/L	0.861	4	17	3989	3	KED
| Cu	63	33.208	ug/L	0.162	0	50	132847	1	KED
| Cu	65	33.335	ug/L	0.788	2	24	67211	1	KED
| Zn	66	109.695	ug/L	1.218	1	45	56705	0	KED
| Zn	67	100.160	ug/L	2.264	2	5	8676	1	KED
[As	75	5.263	ug/L	0.136	2	4	1464	3	KED
| Y	89		ug/L			264383	469146	1	Standard
| Kr	83		ug/L			57	67	11	Standard
[> In-1	115		ug/L			8211	8110	2	KED
| Cd	111	0.083	ug/L	0.029	35	8	30	25	KED
| Cd	114	0.105	ug/L	0.018	17	5	79	16	KED
[> In	115		ug/L			441019	454928	1	Standard
| Ag	107	0.050	ug/L	0.004	8	84	993	7	Standard
[> Tb	159		ug/L			1096960	1139678	0	Standard
| Pb	208	23.344	ug/L	0.465	1	408	1770193	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-08**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:40:05**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	49597	2	Standard
Cl	37		ug/L			5151969	5196412	2	Standard
> Sc	45		ug/L			453223	590129	1	Standard
Cr	52	21.980	ug/L	0.391	1	16290	521049	1	Standard
Cr	53	21.927	ug/L	0.385	1	110	58858	0	Standard
> Ge	72		ug/L			35046	34438	0	KED
Ni	60	22.111	ug/L	0.661	2	104	31170	2	KED
Ni	62	22.258	ug/L	0.479	2	17	5065	1	KED
Cu	63	48.214	ug/L	0.881	1	50	190633	1	KED
Cu	65	47.365	ug/L	0.320	0	24	94415	1	KED
Zn	66	427.693	ug/L	3.194	0	45	218449	0	KED
Zn	67	402.872	ug/L	9.224	2	5	34485	1	KED
As	75	12.874	ug/L	0.105	0	4	3533	1	KED
Y	89		ug/L			264383	541930	1	Standard
Kr	83		ug/L			57	88	18	Standard
> In-1	115		ug/L			8211	8208	1	KED
Cd	111	0.620	ug/L	0.082	13	8	177	11	KED
Cd	114	0.658	ug/L	0.078	11	5	478	12	KED
> In	115		ug/L			441019	457981	2	Standard
Ag	107	0.422	ug/L	0.013	3	84	7720	1	Standard
> Tb	159		ug/L			1096960	1158647	0	Standard
Pb	208	49.602	ug/L	0.891	1	408	3823474	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-09**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:44:31**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	53033	3	Standard
Cl	37		ug/L			5151969	5065662	2	Standard
[> Sc	45		ug/L			453223	542719	1	Standard
| Cr	52	8.705	ug/L	0.079	0	16290	201559	0	Standard
| Cr	53	8.738	ug/L	0.123	1	110	21651	0	Standard
[> Ge	72		ug/L			35046	34451	1	KED
| Ni	60	9.965	ug/L	0.172	1	104	14107	0	KED
| Ni	62	9.773	ug/L	0.576	5	17	2234	5	KED
| Cu	63	15.433	ug/L	0.228	1	50	61080	1	KED
| Cu	65	15.431	ug/L	0.219	1	24	30786	1	KED
| Zn	66	50.956	ug/L	1.166	2	45	26074	2	KED
| Zn	67	48.156	ug/L	1.224	2	5	4128	1	KED
| As	75	5.804	ug/L	0.064	1	4	1596	0	KED
| Y	89		ug/L			264383	452388	1	Standard
| Kr	83		ug/L			57	78	5	Standard
[> In-1	115		ug/L			8211	8038	2	KED
| Cd	111	0.040	ug/L	0.005	11	8	18	7	KED
| Cd	114	0.028	ug/L	0.015	51	5	25	42	KED
[> In	115		ug/L			441019	456542	4	Standard
| Ag	107	0.037	ug/L	0.002	6	84	760	2	Standard
[> Tb	159		ug/L			1096960	1173995	0	Standard
| Pb	208	4.042	ug/L	0.062	1	408	316070	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-10**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:48:57**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	44959	3	Standard
Cl	37		ug/L			5151969	4972065	1	Standard
[> Sc	45		ug/L			453223	523563	1	Standard
| Cr	52	9.785	ug/L	0.165	1	16290	216245	2	Standard
| Cr	53	9.998	ug/L	0.111	1	110	23880	0	Standard
[> Ge	72		ug/L			35046	34558	0	KED
| Ni	60	9.085	ug/L	0.141	1	104	12912	0	KED
| Ni	62	9.303	ug/L	0.191	2	17	2134	2	KED
| Cu	63	14.445	ug/L	0.192	1	50	57351	1	KED
| Cu	65	14.425	ug/L	0.140	0	24	28870	1	KED
| Zn	66	31.677	ug/L	0.247	0	45	16277	1	KED
| Zn	67	30.320	ug/L	0.275	0	5	2609	0	KED
[As	75	1.900	ug/L	0.102	5	4	527	5	KED
| Y	89		ug/L			264383	459360	0	Standard
| Kr	83		ug/L			57	75	8	Standard
[> In-1	115		ug/L			8211	8015	4	KED
| Cd	111	0.013	ug/L	0.015	113	8	11	30	KED
| Cd	114	0.034	ug/L	0.008	22	5	28	15	KED
[> In	115		ug/L			441019	463699	3	Standard
| Ag	107	0.040	ug/L	0.003	8	84	814	4	Standard
[> Tb	159		ug/L			1096960	1169387	0	Standard
[Pb	208	2.140	ug/L	0.014	0	408	166899	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-11**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:53:23**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	54013	1	Standard
Cl	37		ug/L			5151969	4944114	2	Standard
[> Sc	45		ug/L			453223	523371	1	Standard
| Cr	52	11.119	ug/L	0.160	1	16290	243033	0	Standard
| Cr	53	11.094	ug/L	0.224	2	110	26471	0	Standard
[> Ge	72		ug/L			35046	34694	1	KED
| Ni	60	8.359	ug/L	0.259	3	104	11932	1	KED
| Ni	62	7.882	ug/L	0.387	4	17	1817	3	KED
| Cu	63	16.960	ug/L	0.539	3	50	67567	1	KED
| Cu	65	17.172	ug/L	0.302	1	24	34492	0	KED
| Zn	66	41.142	ug/L	0.984	2	45	21204	0	KED
| Zn	67	39.796	ug/L	0.305	0	5	3437	1	KED
[As	75	2.358	ug/L	0.019	0	4	656	1	KED
| Y	89		ug/L			264383	440438	1	Standard
| Kr	83		ug/L			57	74	25	Standard
[> In-1	115		ug/L			8211	8025	1	KED
| Cd	111	0.048	ug/L	0.008	17	8	20	9	KED
| Cd	114	0.072	ug/L	0.006	8	5	55	7	KED
[> In	115		ug/L			441019	452239	1	Standard
| Ag	107	0.074	ug/L	0.005	6	84	1412	5	Standard
[> Tb	159		ug/L			1096960	1157893	1	Standard
[Pb	208	9.547	ug/L	0.086	0	408	735720	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23A0418-12**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 03:57:49**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	49323	1	Standard
Cl	37		ug/L			5151969	4975031	2	Standard
> Sc	45		ug/L			453223	522366	1	Standard
| Cr	52	11.246	ug/L	0.027	0	16290	245152	1	Standard
| Cr	53	11.144	ug/L	0.174	1	110	26545	1	Standard
> Ge	72		ug/L			35046	33950	2	KED
| Ni	60	5.359	ug/L	0.124	2	104	7522	2	KED
| Ni	62	5.731	ug/L	0.141	2	17	1299	4	KED
| Cu	63	26.673	ug/L	0.852	3	50	103943	1	KED
| Cu	65	26.341	ug/L	0.729	2	24	51750	1	KED
| Zn	66	28.790	ug/L	0.140	0	45	14536	2	KED
| Zn	67	27.316	ug/L	0.917	3	5	2309	1	KED
| As	75	3.510	ug/L	0.093	2	4	952	0	KED
| Y	89		ug/L			264383	419189	1	Standard
| Kr	83		ug/L			57	76	6	Standard
> In-1	115		ug/L			8211	8089	2	KED
| Cd	111	0.009	ug/L	0.015	165	8	10	36	KED
| Cd	114	0.033	ug/L	0.007	20	5	28	16	KED
> In	115		ug/L			441019	444771	2	Standard
| Ag	107	0.027	ug/L	0.002	7	84	553	5	Standard
> Tb	159		ug/L			1096960	1174496	0	Standard
| Pb	208	6.179	ug/L	0.015	0	408	483165	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 04:02:15

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	27936	1	Standard
Cl	37		ug/L			5151969	4849616	2	Standard
[> Sc	45		ug/L			453223	450715	0	Standard
| Cr	52	-0.031	ug/L	0.015	48	16290	15662	1	Standard
| Cr	53	0.008	ug/L	0.012	149	110	126	19	Standard
[> Ge	72		ug/L			35046	33446	1	KED
| Ni	60	-0.007	ug/L	0.020	268	104	89	31	KED
| Ni	62	-0.028	ug/L	0.027	96	17	10	53	KED
| Cu	63	0.013	ug/L	0.001	6	50	97	3	KED
| Cu	65	0.018	ug/L	0.007	37	24	57	21	KED
| Zn	66	0.232	ug/L	0.011	4	45	158	2	KED
| Zn	67	0.171	ug/L	0.081	47	5	19	33	KED
| As	75	0.001	ug/L	0.012	815	4	5	60	KED
Y	89		ug/L			264383	262945	0	Standard
Kr	83		ug/L			57	48	18	Standard
[> In-1	115		ug/L			8211	7697	2	KED
| Cd	111	-0.017	ug/L	0.005	32	8	3	41	KED
| Cd	114	-0.000	ug/L	0.004	1155	5	4	45	KED
[> In	115		ug/L			441019	439046	4	Standard
| Ag	107	-0.002	ug/L	0.000	19	84	47	10	Standard
[> Tb	159		ug/L			1096960	1096711	1	Standard
| Pb	208	0.011	ug/L	0.008	75	408	1212	49	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 04:06:42

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	28398	1	Standard
Cl	37		ug/L			5151969	5362388	2	Standard
[> Sc	45		ug/L			453223	454194	1	Standard
| Cr	52	49.819	ug/L	0.180	0	16290	888289	1	Standard
| Cr	53	49.410	ug/L	0.997	2	110	101933	0	Standard
[> Ge	72		ug/L			35046	34289	2	KED
| Ni	60	49.925	ug/L	3.362	6	104	69879	4	KED
| Ni	62	50.599	ug/L	3.304	6	17	11433	4	KED
| Cu	63	50.552	ug/L	3.144	6	50	198852	4	KED
| Cu	65	50.455	ug/L	1.014	2	24	100108	0	KED
| Zn	66	49.746	ug/L	1.977	3	45	25323	1	KED
| Zn	67	50.913	ug/L	2.648	5	5	4341	3	KED
| As	75	48.850	ug/L	2.563	5	4	13325	3	KED
Y	89		ug/L			264383	269910	2	Standard
Kr	83		ug/L			57	61	23	Standard
[> In-1	115		ug/L			8211	7899	0	KED
| Cd	111	51.112	ug/L	0.491	0	8	13467	0	KED
| Cd	114	50.400	ug/L	0.620	1	5	34833	0	KED
[> In	115		ug/L			441019	432441	1	Standard
| Ag	107	49.864	ug/L	0.577	1	84	852685	0	Standard
[> Tb	159		ug/L			1096960	1112317	1	Standard
| Pb	208	52.502	ug/L	0.378	0	408	3885221	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 04:13:52

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	26737	2	Standard
Cl	37		ug/L			5151969	5109675	2	Standard
[> Sc	45		ug/L			453223	461211	1	Standard
| Cr	52	-0.029	ug/L	0.013	44	16290	16066	1	Standard
| Cr	53	-0.005	ug/L	0.004	80	110	103	6	Standard
[> Ge	72		ug/L			35046	34794	1	KED
| Ni	60	-0.046	ug/L	0.001	1	104	38	5	KED
| Ni	62	-0.033	ug/L	0.013	39	17	10	28	KED
| Cu	63	-0.002	ug/L	0.003	184	50	43	29	KED
| Cu	65	-0.002	ug/L	0.004	221	24	20	36	KED
| Zn	66	-0.029	ug/L	0.014	47	45	29	22	KED
| Zn	67	0.001	ug/L	0.059	9420	5	5	88	KED
| As	75	0.000	ug/L	0.006	3835	4	4	31	KED
Y	89		ug/L			264383	269121	0	Standard
Kr	83		ug/L			57	55	16	Standard
[> In-1	115		ug/L			8211	8268	2	KED
| Cd	111	-0.011	ug/L	0.002	23	8	5	10	KED
| Cd	114	-0.003	ug/L	0.003	105	5	3	58	KED
[> In	115		ug/L			441019	445278	0	Standard
| Ag	107	0.004	ug/L	0.001	22	84	153	9	Standard
[> Tb	159		ug/L			1096960	1133295	1	Standard
| Pb	208	-0.001	ug/L	0.000	20	408	320	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0076-01RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:18:18**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	40898	0	Standard
Cl	37		ug/L			5151969	5045402	3	Standard
[> Sc	45		ug/L			453223	474341	2	Standard
| Cr	52	0.179	ug/L	0.029	16	16290	20305	0	Standard
| Cr	53	0.182	ug/L	0.003	1	110	507	1	Standard
[> Ge	72		ug/L			35046	34922	0	KED
| Ni	60	0.035	ug/L	0.014	39	104	154	13	KED
| Ni	62	0.039	ug/L	0.052	133	17	26	44	KED
| Cu	63	11.738	ug/L	0.095	0	50	47106	0	KED
| Cu	65	11.678	ug/L	0.151	1	24	23623	1	KED
| Zn	66	6.505	ug/L	0.014	0	45	3413	0	KED
| Zn	67	5.868	ug/L	0.346	5	5	514	5	KED
| As	75	0.009	ug/L	0.005	63	4	7	20	KED
Y	89		ug/L			264383	274475	2	Standard
Kr	83		ug/L			57	45	4	Standard
[> In-1	115		ug/L			8211	8122	1	KED
| Cd	111	-0.004	ug/L	0.009	215	8	6	34	KED
| Cd	114	0.001	ug/L	0.002	132	5	6	20	KED
[> In	115		ug/L			441019	450203	0	Standard
| Ag	107	0.003	ug/L	0.001	27	84	145	10	Standard
[> Tb	159		ug/L			1096960	1148419	1	Standard
| Pb	208	0.420	ug/L	0.012	2	408	32475	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0004-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:23:08**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	51686	0	Standard
Cl	37		ug/L			5151969	5793454	2	Standard
[> Sc	45		ug/L			453223	496329	2	Standard
| Cr	52	0.468	ug/L	0.025	5	16290	26773	0	Standard
| Cr	53	1.577	ug/L	0.045	2	110	3671	2	Standard
[> Ge	72		ug/L			35046	33841	1	KED
| Ni	60	0.747	ug/L	0.050	6	104	1132	5	KED
| Ni	62	0.741	ug/L	0.065	8	17	182	6	KED
| Cu	63	1.330	ug/L	0.020	1	50	5216	2	KED
| Cu	65	1.407	ug/L	0.087	6	24	2779	5	KED
| Zn	66	4.764	ug/L	0.115	2	45	2433	1	KED
| Zn	67	4.695	ug/L	0.351	7	5	400	8	KED
| As	75	0.636	ug/L	0.050	7	4	176	8	KED
Y	89		ug/L			264383	281365	2	Standard
Kr	83		ug/L			57	41	30	Standard
[> In-1	115		ug/L			8211	7890	3	KED
| Cd	111	-0.011	ug/L	0.009	77	8	5	47	KED
| Cd	114	0.002	ug/L	0.008	324	5	7	79	KED
[> In	115		ug/L			441019	436615	3	Standard
| Ag	107	0.002	ug/L	0.000	18	84	119	2	Standard
[> Tb	159		ug/L			1096960	1147775	0	Standard
| Pb	208	0.143	ug/L	0.002	1	408	11331	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0004-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:27:34**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	52990	2	Standard
Cl	37		ug/L			5151969	6929736	0	Standard
[> Sc	45		ug/L			453223	487499	1	Standard
| Cr	52	0.463	ug/L	0.008	1	16290	26223	1	Standard
| Cr	53	2.805	ug/L	0.041	1	110	6323	1	Standard
[> Ge	72		ug/L			35046	32564	0	KED
| Ni	60	0.719	ug/L	0.035	4	104	1052	5	KED
| Ni	62	0.696	ug/L	0.080	11	17	165	10	KED
| Cu	63	0.716	ug/L	0.009	1	50	2722	1	KED
| Cu	65	0.696	ug/L	0.026	3	24	1335	3	KED
| Zn	66	6.401	ug/L	0.358	5	45	3131	4	KED
| Zn	67	6.335	ug/L	0.528	8	5	518	8	KED
| As	75	0.567	ug/L	0.039	6	4	151	6	KED
Y	89		ug/L			264383	272193	1	Standard
Kr	83		ug/L			57	57	6	Standard
[> In-1	115		ug/L			8211	7547	2	KED
| Cd	111	-0.004	ug/L	0.010	254	8	6	37	KED
| Cd	114	-0.001	ug/L	0.006	727	5	4	84	KED
[> In	115		ug/L			441019	439178	0	Standard
| Ag	107	-0.000	ug/L	0.001	499	84	81	12	Standard
[> Tb	159		ug/L			1096960	1133575	2	Standard
| Pb	208	0.055	ug/L	0.002	3	408	4578	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0003-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:31:54**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	46927	1	Standard
Cl	37		ug/L			5151969	5240521	2	Standard
> Sc	45		ug/L			453223	477465	0	Standard
| Cr	52	1.153	ug/L	0.028	2	16290	38380	1	Standard
| Cr	53	1.338	ug/L	0.011	0	110	3015	1	Standard
> Ge	72		ug/L			35046	34242	0	KED
| Ni	60	1.855	ug/L	0.033	1	104	2692	1	KED
| Ni	62	2.004	ug/L	0.063	3	17	469	3	KED
| Cu	63	57.947	ug/L	0.622	1	50	227810	0	KED
| Cu	65	58.761	ug/L	0.426	0	24	116454	0	KED
| Zn	66	48.589	ug/L	1.446	2	45	24715	3	KED
| Zn	67	45.469	ug/L	0.693	1	5	3875	1	KED
| As	75	0.422	ug/L	0.022	5	4	119	5	KED
| Y	89		ug/L			264383	273068	1	Standard
| Kr	83		ug/L			57	46	18	Standard
> In-1	115		ug/L			8211	7960	1	KED
| Cd	111	-0.005	ug/L	0.010	200	8	6	37	KED
| Cd	114	0.013	ug/L	0.010	77	5	14	47	KED
> In	115		ug/L			441019	453661	1	Standard
| Ag	107	0.000	ug/L	0.001	178	84	95	17	Standard
> Tb	159		ug/L			1096960	1158134	0	Standard
| Pb	208	0.095	ug/L	0.001	1	408	7767	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0003-06**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:36:20**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	47956	1	Standard
Cl	37		ug/L			5151969	5080531	2	Standard
> Sc	45		ug/L			453223	470606	2	Standard
| Cr	52	1.155	ug/L	0.047	4	16290	37842	0	Standard
| Cr	53	1.334	ug/L	0.019	1	110	2964	3	Standard
> Ge	72		ug/L			35046	33626	0	KED
| Ni	60	2.312	ug/L	0.054	2	104	3272	3	KED
| Ni	62	2.527	ug/L	0.076	2	17	576	2	KED
| Cu	63	87.939	ug/L	2.570	2	50	339465	2	KED
| Cu	65	87.224	ug/L	0.980	1	24	169753	1	KED
| Zn	66	77.964	ug/L	0.781	1	45	38921	1	KED
| Zn	67	70.686	ug/L	1.369	1	5	5912	1	KED
| As	75	1.263	ug/L	0.050	3	4	342	4	KED
| Y	89		ug/L			264383	280637	0	Standard
| Kr	83		ug/L			57	39	5	Standard
> In-1	115		ug/L			8211	7896	1	KED
| Cd	111	-0.005	ug/L	0.004	74	8	6	14	KED
| Cd	114	0.010	ug/L	0.008	80	5	12	45	KED
> In	115		ug/L			441019	452247	0	Standard
| Ag	107	0.002	ug/L	0.001	48	84	128	16	Standard
> Tb	159		ug/L			1096960	1165527	2	Standard
| Pb	208	0.074	ug/L	0.004	5	408	6164	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0003-08**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:40:45**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	48934	1	Standard
Cl	37		ug/L			5151969	5339107	3	Standard
> Sc	45		ug/L			453223	474971	1	Standard
| Cr	52	0.939	ug/L	0.017	1	16290	34251	0	Standard
| Cr	53	0.993	ug/L	0.017	1	110	2256	3	Standard
> Ge	72		ug/L			35046	34291	1	KED
| Ni	60	1.580	ug/L	0.066	4	104	2311	3	KED
| Ni	62	1.719	ug/L	0.096	5	17	405	5	KED
| Cu	63	58.052	ug/L	0.674	1	50	228558	1	KED
| Cu	65	58.916	ug/L	1.512	2	24	116915	1	KED
| Zn	66	27.774	ug/L	0.672	2	45	14164	1	KED
| Zn	67	26.421	ug/L	0.717	2	5	2257	2	KED
| As	75	0.408	ug/L	0.002	0	4	116	0	KED
Y	89		ug/L			264383	269853	1	Standard
Kr	83		ug/L			57	46	10	Standard
> In-1	115		ug/L			8211	7964	1	KED
| Cd	111	0.065	ug/L	0.040	61	8	25	42	KED
| Cd	114	0.090	ug/L	0.033	36	5	68	32	KED
> In	115		ug/L			441019	447527	1	Standard
| Ag	107	-0.000	ug/L	0.001	535	84	81	22	Standard
> Tb	159		ug/L			1096960	1139548	2	Standard
| Pb	208	0.016	ug/L	0.001	8	408	1639	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0003-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:45:11**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	48424	2	Standard
Cl	37		ug/L			5151969	5407440	1	Standard
Sc	45		ug/L			453223	480629	0	Standard
Cr	52	1.201	ug/L	0.030	2	16290	39530	2	Standard
Cr	53	1.323	ug/L	0.037	2	110	3003	2	Standard
Ge	72		ug/L			35046	33981	1	KED
Ni	60	1.995	ug/L	0.022	1	104	2867	2	KED
Ni	62	1.992	ug/L	0.157	7	17	463	9	KED
Cu	63	60.831	ug/L	1.498	2	50	237340	3	KED
Cu	65	61.498	ug/L	1.535	2	24	120942	2	KED
Zn	66	50.662	ug/L	0.789	1	45	25571	2	KED
Zn	67	47.360	ug/L	0.307	0	5	4005	2	KED
As	75	0.469	ug/L	0.026	5	4	131	4	KED
Y	89		ug/L			264383	271078	1	Standard
Kr	83		ug/L			57	46	16	Standard
In-1	115		ug/L			8211	8042	3	KED
Cd	111	-0.012	ug/L	0.004	33	8	4	20	KED
Cd	114	0.005	ug/L	0.012	242	5	8	97	KED
In	115		ug/L			441019	452672	0	Standard
Ag	107	0.000	ug/L	0.000	57	84	93	3	Standard
Tb	159		ug/L			1096960	1155513	0	Standard
Pb	208	0.106	ug/L	0.001	1	408	8595	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0402-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:49:31**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	47478	2	Standard
Cl	37		ug/L			5151969	5465949	2	Standard
[> Sc	45		ug/L			453223	483625	0	Standard
[Cr	52	1.288	ug/L	0.050	3	16290	41388	2	Standard
[Cr	53	1.412	ug/L	0.073	5	110	3216	4	Standard
[> Ge	72		ug/L			35046	34577	1	KED
[Ni	60	1.854	ug/L	0.043	2	104	2718	2	KED
[Ni	62	2.023	ug/L	0.057	2	17	478	1	KED
[Cu	63	61.275	ug/L	0.808	1	50	243232	1	KED
[Cu	65	60.258	ug/L	0.635	1	24	120577	0	KED
[Zn	66	49.298	ug/L	1.708	3	45	25312	2	KED
[Zn	67	46.039	ug/L	2.028	4	5	3963	5	KED
[As	75	0.441	ug/L	0.007	1	4	126	2	KED
[Y	89		ug/L			264383	272220	3	Standard
[Kr	83		ug/L			57	43	22	Standard
[> In-1	115		ug/L			8211	7832	3	KED
[Cd	111	0.008	ug/L	0.003	35	8	9	5	KED
[Cd	114	0.010	ug/L	0.009	97	5	11	56	KED
[> In	115		ug/L			441019	453108	2	Standard
[Ag	107	0.001	ug/L	0.001	167	84	96	18	Standard
[> Tb	159		ug/L			1096960	1154266	0	Standard
[Pb	208	0.108	ug/L	0.002	1	408	8758	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0402-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 04:54:21**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	47835	0	Standard
Cl	37		ug/L			5151969	5571366	2	Standard
[> Sc	45		ug/L			453223	477780	1	Standard
[Cr	52	25.580	ug/L	0.757	2	16290	488018	1	Standard
[Cr	53	25.632	ug/L	0.248	0	110	55688	1	Standard
[> Ge	72		ug/L			35046	34009	1	KED
[Ni	60	28.605	ug/L	0.295	1	104	39791	0	KED
[Ni	62	28.857	ug/L	0.731	2	17	6479	2	KED
[Cu	63	87.350	ug/L	0.661	0	50	341049	1	KED
[Cu	65	86.223	ug/L	0.914	1	24	169707	1	KED
[Zn	66	131.780	ug/L	1.361	1	45	66497	0	KED
[Zn	67	119.613	ug/L	0.504	0	5	10115	0	KED
[As	75	25.703	ug/L	0.307	1	4	6961	0	KED
Y	89		ug/L			264383	275434	2	Standard
Kr	83		ug/L			57	45	19	Standard
[> In-1	115		ug/L			8211	7794	3	KED
[Cd	111	26.082	ug/L	1.186	4	8	6778	1	KED
[Cd	114	25.568	ug/L	0.950	3	5	17425	0	KED
[> In	115		ug/L			441019	452453	0	Standard
[Ag	107	24.820	ug/L	0.351	1	84	444153	1	Standard
[> Tb	159		ug/L			1096960	1154443	1	Standard
[Pb	208	26.962	ug/L	0.529	1	408	2070578	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 04:58:47

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	28735	0	Standard
Cl	37		ug/L			5151969	5627366	2	Standard
[> Sc	45		ug/L			453223	444057	3	Standard
| Cr	52	-0.032	ug/L	0.004	11	16290	15408	2	Standard
| Cr	53	0.019	ug/L	0.007	37	110	147	6	Standard
[> Ge	72		ug/L			35046	33129	1	KED
| Ni	60	-0.013	ug/L	0.009	72	104	80	16	KED
| Ni	62	-0.019	ug/L	0.014	73	17	12	22	KED
| Cu	63	0.018	ug/L	0.001	5	50	115	3	KED
| Cu	65	0.024	ug/L	0.004	18	24	68	11	KED
| Zn	66	0.182	ug/L	0.036	20	45	132	13	KED
| Zn	67	0.197	ug/L	0.016	8	5	21	5	KED
| As	75	-0.003	ug/L	0.002	61	4	3	12	KED
Y	89		ug/L			264383	266560	3	Standard
Kr	83		ug/L			57	39	10	Standard
[> In-1	115		ug/L			8211	7474	1	KED
| Cd	111	-0.016	ug/L	0.008	50	8	3	56	KED
| Cd	114	0.004	ug/L	0.003	74	5	7	24	KED
[> In	115		ug/L			441019	441152	0	Standard
| Ag	107	0.003	ug/L	0.001	26	84	138	9	Standard
[> Tb	159		ug/L			1096960	1132360	2	Standard
| Pb	208	0.006	ug/L	0.000	3	408	892	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 05:03:13

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	29357	2	Standard
Cl	37		ug/L			5151969	5672751	2	Standard
[> Sc	45		ug/L			453223	460804	0	Standard
| Cr	52	50.032	ug/L	0.274	0	16290	905030	0	Standard
| Cr	53	48.384	ug/L	0.947	1	110	101282	1	Standard
[> Ge	72		ug/L			35046	33813	2	KED
| Ni	60	51.580	ug/L	0.726	1	104	71250	1	KED
| Ni	62	52.671	ug/L	0.580	1	17	11744	1	KED
| Cu	63	51.441	ug/L	1.070	2	50	199655	0	KED
| Cu	65	51.741	ug/L	0.176	0	24	101261	2	KED
| Zn	66	51.010	ug/L	1.060	2	45	25613	0	KED
| Zn	67	51.505	ug/L	1.196	2	5	4332	0	KED
| As	75	50.041	ug/L	1.120	2	4	13467	0	KED
Y	89		ug/L			264383	272750	0	Standard
Kr	83		ug/L			57	44	8	Standard
[> In-1	115		ug/L			8211	7865	2	KED
| Cd	111	51.413	ug/L	1.279	2	8	13483	0	KED
| Cd	114	50.414	ug/L	1.260	2	5	34679	0	KED
[> In	115		ug/L			441019	445575	2	Standard
| Ag	107	48.900	ug/L	0.663	1	84	861478	1	Standard
[> Tb	159		ug/L			1096960	1144812	0	Standard
| Pb	208	51.760	ug/L	1.752	3	408	3942104	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 05:10:23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	26104	3	Standard
Cl	37		ug/L			5151969	5639187	2	Standard
[> Sc	45		ug/L			453223	448332	2	Standard
| Cr	52	-0.025	ug/L	0.012	48	16290	15687	2	Standard
| Cr	53	0.004	ug/L	0.001	38	110	117	4	Standard
[> Ge	72		ug/L			35046	33966	0	KED
| Ni	60	-0.045	ug/L	0.003	6	104	38	10	KED
| Ni	62	-0.046	ug/L	0.018	39	17	6	56	KED
| Cu	63	-0.001	ug/L	0.002	185	50	45	15	KED
| Cu	65	0.001	ug/L	0.003	443	24	25	24	KED
| Zn	66	-0.044	ug/L	0.006	14	45	21	13	KED
| Zn	67	-0.005	ug/L	0.047	866	5	5	78	KED
| As	75	-0.001	ug/L	0.004	321	4	4	22	KED
Y	89		ug/L			264383	260386	4	Standard
Kr	83		ug/L			57	43	17	Standard
[> In-1	115		ug/L			8211	8065	1	KED
| Cd	111	-0.011	ug/L	0.002	20	8	5	10	KED
| Cd	114	0.002	ug/L	0.001	64	5	6	15	KED
[> In	115		ug/L			441019	436923	2	Standard
| Ag	107	0.006	ug/L	0.000	7	84	186	4	Standard
[> Tb	159		ug/L			1096960	1110321	1	Standard
| Pb	208	-0.001	ug/L	0.000	23	408	315	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0005-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:14:50**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	55673	1	Standard
Cl	37		ug/L			5151969	7590899	3	Standard
[> Sc	45		ug/L			453223	495597	1	Standard
| Cr	52	8.269	ug/L	0.110	1	16290	175731	1	Standard
| Cr	53	11.313	ug/L	0.109	0	110	25562	0	Standard
[> Ge	72		ug/L			35046	32312	1	KED
| Ni	60	2.230	ug/L	0.122	5	104	3034	4	KED
| Ni	62	2.079	ug/L	0.205	9	17	458	8	KED
| Cu	63	12.649	ug/L	0.191	1	50	46962	1	KED
| Cu	65	12.834	ug/L	0.179	1	24	24020	2	KED
| Zn	66	36.470	ug/L	0.711	1	45	17514	1	KED
| Zn	67	34.758	ug/L	0.770	2	5	2797	3	KED
| As	75	1.264	ug/L	0.075	5	4	329	4	KED
Y	89		ug/L			264383	273096	0	Standard
Kr	83		ug/L			57	38	34	Standard
[> In-1	115		ug/L			8211	7637	2	KED
| Cd	111	0.012	ug/L	0.016	126	8	10	35	KED
| Cd	114	0.037	ug/L	0.013	35	5	29	31	KED
[> In	115		ug/L			441019	435406	1	Standard
| Ag	107	0.007	ug/L	0.001	8	84	209	3	Standard
[> Tb	159		ug/L			1096960	1132379	1	Standard
| Pb	208	0.570	ug/L	0.007	1	408	43342	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0005-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:19:16**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	56028	1	Standard
Cl	37		ug/L			5151969	7997560	2	Standard
[> Sc	45		ug/L			453223	487585	0	Standard
| Cr	52	4.013	ug/L	0.073	1	16290	92923	0	Standard
| Cr	53	8.147	ug/L	0.150	1	110	18144	1	Standard
[> Ge	72		ug/L			35046	32113	0	KED
| Ni	60	14.669	ug/L	0.095	0	104	19315	0	KED
| Ni	62	14.488	ug/L	0.202	1	17	3080	1	KED
| Cu	63	9.766	ug/L	0.107	1	50	36045	1	KED
| Cu	65	9.809	ug/L	0.219	2	24	18250	2	KED
| Zn	66	13.618	ug/L	0.197	1	45	6525	1	KED
| Zn	67	14.922	ug/L	0.354	2	5	1196	2	KED
| As	75	0.377	ug/L	0.006	1	4	100	1	KED
Y	89		ug/L			264383	269563	0	Standard
Kr	83		ug/L			57	43	2	Standard
[> In-1	115		ug/L			8211	7622	0	KED
| Cd	111	0.002	ug/L	0.002	103	8	8	6	KED
| Cd	114	0.018	ug/L	0.014	77	5	16	54	KED
[> In	115		ug/L			441019	428873	1	Standard
| Ag	107	0.004	ug/L	0.001	29	84	146	14	Standard
[> Tb	159		ug/L			1096960	1123620	1	Standard
| Pb	208	0.478	ug/L	0.005	1	408	36111	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0006-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:23:35**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	54788	1	Standard
Cl	37		ug/L			5151969	7095519	1	Standard
Sc	45		ug/L			453223	483205	2	Standard
Cr	52	10.499	ug/L	0.258	2	16290	212807	0	Standard
Cr	53	13.490	ug/L	0.490	3	110	29684	1	Standard
Ge	72		ug/L			35046	32318	0	KED
Ni	60	5.257	ug/L	0.093	1	104	7027	1	KED
Ni	62	5.138	ug/L	0.255	4	17	1109	4	KED
Cu	63	12.693	ug/L	0.297	2	50	47133	2	KED
Cu	65	12.851	ug/L	0.404	3	24	24054	2	KED
Zn	66	38.995	ug/L	0.363	0	45	18729	1	KED
Zn	67	37.422	ug/L	0.178	0	5	3011	0	KED
As	75	1.317	ug/L	0.071	5	4	343	5	KED
Y	89		ug/L			264383	268579	2	Standard
Kr	83		ug/L			57	44	4	Standard
In-1	115		ug/L			8211	7665	2	KED
Cd	111	0.018	ug/L	0.019	105	8	12	40	KED
Cd	114	0.022	ug/L	0.014	60	5	20	45	KED
In	115		ug/L			441019	437379	2	Standard
Ag	107	0.004	ug/L	0.001	20	84	150	10	Standard
Tb	159		ug/L			1096960	1125797	1	Standard
Pb	208	0.455	ug/L	0.003	0	408	34520	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0006-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:28:01**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	54698	3	Standard
Cl	37		ug/L			5151969	7127461	2	Standard
[> Sc	45		ug/L			453223	484839	2	Standard
[Cr	52	10.856	ug/L	0.383	3	16290	220166	1	Standard
[Cr	53	14.537	ug/L	0.200	1	110	32100	1	Standard
[> Ge	72		ug/L			35046	32492	0	KED
[Ni	60	6.053	ug/L	0.117	1	104	8121	1	KED
[Ni	62	6.458	ug/L	0.118	1	17	1398	1	KED
[Cu	63	13.283	ug/L	0.030	0	50	49587	0	KED
[Cu	65	13.246	ug/L	0.072	0	24	24928	0	KED
[Zn	66	42.630	ug/L	0.714	1	45	20580	1	KED
[Zn	67	42.089	ug/L	1.834	4	5	3404	4	KED
[As	75	1.366	ug/L	0.071	5	4	357	5	KED
[Y	89		ug/L			264383	269409	1	Standard
[Kr	83		ug/L			57	55	26	Standard
[> In-1	115		ug/L			8211	7642	1	KED
[Cd	111	0.012	ug/L	0.012	96	8	10	28	KED
[Cd	114	0.020	ug/L	0.019	98	5	18	71	KED
[> In	115		ug/L			441019	432428	1	Standard
[Ag	107	0.003	ug/L	0.002	49	84	139	19	Standard
[> Tb	159		ug/L			1096960	1139318	1	Standard
[Pb	208	0.485	ug/L	0.005	1	408	37139	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0020-02**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 05:32:21

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	44572	2	Standard
Cl	37		ug/L			5151969	5754319	3	Standard
[> Sc	45		ug/L			453223	514824	1	Standard
| Cr	52	0.210	ug/L	0.034	16	16290	22661	1	Standard
| Cr	53	0.899	ug/L	0.007	0	110	2227	2	Standard
[> Ge	72		ug/L			35046	33580	1	KED
| Ni	60	0.884	ug/L	0.021	2	104	1311	2	KED
| Ni	62	0.952	ug/L	0.093	9	17	227	7	KED
| Cu	63	1.695	ug/L	0.044	2	50	6579	1	KED
| Cu	65	1.696	ug/L	0.040	2	24	3318	1	KED
| Zn	66	8.186	ug/L	0.272	3	45	4118	3	KED
| Zn	67	8.259	ug/L	0.342	4	5	694	3	KED
| As	75	3.585	ug/L	0.127	3	4	963	4	KED
Y	89		ug/L			264383	285153	2	Standard
Kr	83		ug/L			57	45	19	Standard
[> In-1	115		ug/L			8211	7857	1	KED
| Cd	111	-0.008	ug/L	0.007	90	8	5	33	KED
| Cd	114	0.001	ug/L	0.002	148	5	6	18	KED
[> In	115		ug/L			441019	448740	1	Standard
| Ag	107	-0.001	ug/L	0.000	19	84	67	4	Standard
[> Tb	159		ug/L			1096960	1135698	1	Standard
| Pb	208	0.021	ug/L	0.001	3	408	2027	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0162-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:36:41**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	57968	1	Standard
Cl	37		ug/L			5151969	8042294	3	Standard
[> Sc	45		ug/L			453223	495239	1	Standard
| Cr	52	5.232	ug/L	0.098	1	16290	117637	1	Standard
| Cr	53	8.737	ug/L	0.140	1	110	19758	2	Standard
[> Ge	72		ug/L			35046	32193	0	KED
| Ni	60	2.491	ug/L	0.052	2	104	3368	2	KED
| Ni	62	2.599	ug/L	0.224	8	17	567	9	KED
| Cu	63	15.685	ug/L	0.340	2	50	58012	2	KED
| Cu	65	16.252	ug/L	0.048	0	24	30298	0	KED
| Zn	66	36.502	ug/L	0.270	0	45	17466	1	KED
| Zn	67	36.095	ug/L	0.708	1	5	2893	2	KED
| As	75	1.629	ug/L	0.059	3	4	421	3	KED
Y	89		ug/L			264383	272545	2	Standard
Kr	83		ug/L			57	51	13	Standard
[> In-1	115		ug/L			8211	7497	2	KED
| Cd	111	0.025	ug/L	0.011	44	8	13	17	KED
| Cd	114	0.024	ug/L	0.012	51	5	20	40	KED
[> In	115		ug/L			441019	430879	0	Standard
| Ag	107	0.006	ug/L	0.001	22	84	189	12	Standard
[> Tb	159		ug/L			1096960	1137120	1	Standard
| Pb	208	0.677	ug/L	0.012	1	408	51628	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0162-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:41:07**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	59440	3	Standard
Cl	37		ug/L			5151969	8285639	2	Standard
Sc	45		ug/L			453223	496290	1	Standard
Cr	52	5.854	ug/L	0.030	0	16290	129803	1	Standard
Cr	53	10.450	ug/L	0.083	0	110	23659	2	Standard
Ge	72		ug/L			35046	32174	1	KED
Ni	60	2.437	ug/L	0.018	0	104	3294	1	KED
Ni	62	2.689	ug/L	0.128	4	17	586	4	KED
Cu	63	16.297	ug/L	0.170	1	50	60230	0	KED
Cu	65	16.232	ug/L	0.214	1	24	30240	0	KED
Zn	66	44.805	ug/L	0.542	1	45	21417	1	KED
Zn	67	42.705	ug/L	0.472	1	5	3420	1	KED
As	75	1.621	ug/L	0.035	2	4	419	2	KED
Y	89		ug/L			264383	264749	1	Standard
Kr	83		ug/L			57	48	4	Standard
In-1	115		ug/L			8211	7295	1	KED
Cd	111	0.047	ug/L	0.013	27	8	18	16	KED
Cd	114	0.031	ug/L	0.015	47	5	24	38	KED
In	115		ug/L			441019	426842	2	Standard
Ag	107	0.006	ug/L	0.001	10	84	189	6	Standard
Tb	159		ug/L			1096960	1112877	0	Standard
Pb	208	0.780	ug/L	0.002	0	408	58127	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0162-06**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:45:33**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	58384	2	Standard
Cl	37		ug/L			5151969	8247946	1	Standard
Sc	45		ug/L			453223	505191	1	Standard
Cr	52	5.353	ug/L	0.023	0	16290	122378	0	Standard
Cr	53	10.107	ug/L	0.175	1	110	23293	1	Standard
Ge	72		ug/L			35046	31912	0	KED
Ni	60	3.706	ug/L	0.076	2	104	4920	1	KED
Ni	62	3.869	ug/L	0.193	4	17	829	4	KED
Cu	63	17.439	ug/L	0.153	0	50	63924	0	KED
Cu	65	17.175	ug/L	0.127	0	24	31738	1	KED
Zn	66	38.532	ug/L	0.666	1	45	18274	1	KED
Zn	67	37.401	ug/L	1.146	3	5	2971	3	KED
As	75	1.609	ug/L	0.040	2	4	413	2	KED
Y	89		ug/L			264383	266809	1	Standard
Kr	83		ug/L			57	45	20	Standard
In-1	115		ug/L			8211	7396	1	KED
Cd	111	0.029	ug/L	0.030	100	8	14	48	KED
Cd	114	0.032	ug/L	0.010	31	5	25	27	KED
In	115		ug/L			441019	431470	1	Standard
Ag	107	0.006	ug/L	0.003	43	84	181	25	Standard
Tb	159		ug/L			1096960	1138489	0	Standard
Pb	208	0.720	ug/L	0.009	1	408	54969	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0182-01**

Sample Dil Factor: **20**

Comments:

Sample Date/Time: **Friday, April 28, 2023 05:49:53**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	70104	2	Standard
Cl	37		ug/L			5151969	5615906	1	Standard
> Sc	45		ug/L			453223	467243	1	Standard
| Cr	52	86.810	ug/L	1.050	1	16290	1579818	1	Standard
| Cr	53	86.686	ug/L	0.708	0	110	183914	0	Standard
> Ge	72		ug/L			35046	34244	0	KED
| Ni	60	0.649	ug/L	0.054	8	104	1008	7	KED
| Ni	62	0.740	ug/L	0.099	13	17	184	11	KED
| Cu	63	1.464	ug/L	0.058	3	50	5806	4	KED
| Cu	65	1.515	ug/L	0.065	4	24	3027	4	KED
| Zn	66	87.431	ug/L	1.560	1	45	44443	2	KED
| Zn	67	78.733	ug/L	2.244	2	5	6706	2	KED
| As	75	0.088	ug/L	0.023	26	4	28	21	KED
Y	89		ug/L			264383	270455	1	Standard
Kr	83		ug/L			57	42	14	Standard
> In-1	115		ug/L			8211	7868	0	KED
| Cd	111	0.562	ug/L	<u>0.053</u>	9	8	155	8	KED
| Cd	114	0.552	ug/L	0.031	5	5	385	5	KED
> In	115		ug/L			441019	453653	0	Standard
| Ag	107	0.082	ug/L	0.006	6	84	1555	6	Standard
> Tb	159		ug/L			1096960	1154919	1	Standard
| Pb	208	0.064	ug/L	0.002	3	408	5322	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 05:54:14

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	27520	1	Standard
Cl	37		ug/L			5151969	5594911	3	Standard
[> Sc	45		ug/L			453223	419541	13	Standard
| Cr	52	0.025	ug/L	0.105	422	16290	15336	4	Standard
| Cr	53	0.531	ug/L	0.095	17	110	1096	1	Standard
[> Ge	72		ug/L			35046	32787	1	KED
| Ni	60	-0.015	ug/L	0.008	51	104	76	14	KED
| Ni	62	-0.036	ug/L	0.006	16	17	8	12	KED
| Cu	63	0.022	ug/L	0.003	12	50	132	9	KED
| Cu	65	0.017	ug/L	0.004	25	24	55	16	KED
| Zn	66	0.244	ug/L	0.098	40	45	160	28	KED
| Zn	67	0.207	ug/L	0.072	34	5	22	27	KED
| As	75	-0.007	ug/L	0.002	30	4	2	20	KED
Y	89		ug/L			264383	243011	11	Standard
Kr	83		ug/L			57	45	25	Standard
[> In-1	115		ug/L			8211	7720	2	KED
| Cd	111	-0.017	ug/L	0.002	11	8	3	15	KED
| Cd	114	0.002	ug/L	0.003	158	5	6	34	KED
[> In	115		ug/L			441019	415908	13	Standard
| Ag	107	-0.003	ug/L	0.001	53	84	36	48	Standard
[> Tb	159		ug/L			1096960	1046961	13	Standard
| Pb	208	0.006	ug/L	0.002	31	408	828	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 05:58:40

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	28075	1	Standard
Cl	37		ug/L			5151969	5694480	2	Standard
[> Sc	45		ug/L			453223	456874	1	Standard
| Cr	52	49.969	ug/L	1.107	2	16290	896054	1	Standard
| Cr	53	49.690	ug/L	0.742	1	110	103131	1	Standard
[> Ge	72		ug/L			35046	33353	1	KED
| Ni	60	51.299	ug/L	1.401	2	104	69885	0	KED
| Ni	62	52.138	ug/L	0.077	0	17	11468	1	KED
| Cu	63	52.196	ug/L	0.753	1	50	199846	0	KED
| Cu	65	52.317	ug/L	1.803	3	24	100950	1	KED
| Zn	66	52.889	ug/L	2.050	3	45	26187	2	KED
| Zn	67	51.461	ug/L	1.400	2	5	4269	0	KED
| As	75	50.563	ug/L	1.311	2	4	13421	0	KED
Y	89		ug/L			264383	266216	2	Standard
Kr	83		ug/L			57	57	10	Standard
[> In-1	115		ug/L			8211	7662	2	KED
| Cd	111	52.794	ug/L	2.039	3	8	13484	1	KED
| Cd	114	52.827	ug/L	1.703	3	5	35398	1	KED
[> In	115		ug/L			441019	435183	2	Standard
| Ag	107	49.160	ug/L	0.939	1	84	845799	0	Standard
[> Tb	159		ug/L			1096960	1116804	0	Standard
| Pb	208	54.586	ug/L	0.583	1	408	4055465	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 06:05:50

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	26208	2	Standard
Cl	37		ug/L			5151969	5636720	3	Standard
[> Sc	45		ug/L			453223	450586	2	Standard
| Cr	52	-0.029	ug/L	0.031	104	16290	15682	1	Standard
| Cr	53	0.136	ug/L	0.004	3	110	388	3	Standard
[> Ge	72		ug/L			35046	33485	1	KED
| Ni	60	-0.057	ug/L	0.001	2	104	20	9	KED
| Ni	62	-0.054	ug/L	0.005	8	17	5	21	KED
| Cu	63	-0.001	ug/L	0.002	186	50	44	17	KED
| Cu	65	-0.002	ug/L	0.004	233	24	20	37	KED
| Zn	66	-0.026	ug/L	0.026	98	45	29	41	KED
| Zn	67	-0.012	ug/L	0.026	207	5	4	49	KED
| As	75	0.001	ug/L	0.002	305	4	4	14	KED
Y	89		ug/L			264383	266469	1	Standard
Kr	83		ug/L			57	51	9	Standard
[> In-1	115		ug/L			8211	7883	0	KED
| Cd	111	-0.013	ug/L	0.008	63	8	4	49	KED
| Cd	114	0.003	ug/L	0.003	88	5	7	25	KED
[> In	115		ug/L			441019	446411	1	Standard
| Ag	107	0.004	ug/L	0.000	10	84	150	3	Standard
[> Tb	159		ug/L			1096960	1126708	1	Standard
| Pb	208	-0.001	ug/L	0.000	33	408	335	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-04**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 06:10:17

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	45758	4	Standard
Cl	37		ug/L			5151969	5291893	3	Standard
> Sc	45		ug/L			453223	559644	1	Standard
| Cr	52	0.205	ug/L	0.017	8	16290	24527	1	Standard
| Cr	53	0.995	ug/L	0.023	2	110	2664	2	Standard
> Ge	72		ug/L			35046	33482	0	KED
| Ni	60	0.595	ug/L	0.048	8	104	912	6	KED
| Ni	62	0.539	ug/L	0.100	18	17	135	16	KED
| Cu	63	0.718	ug/L	0.021	2	50	2808	2	KED
| Cu	65	0.719	ug/L	0.018	2	24	1417	1	KED
| Zn	66	2.111	ug/L	0.147	6	45	1091	7	KED
| Zn	67	2.346	ug/L	0.119	5	5	200	4	KED
| As	75	0.672	ug/L	0.035	5	4	183	4	KED
| Y	89		ug/L			264383	280465	1	Standard
| Kr	83		ug/L			57	44	16	Standard
> In-1	115		ug/L			8211	7838	2	KED
| Cd	111	0.033	ug/L	0.043	130	8	16	68	KED
| Cd	114	0.064	ug/L	0.070	109	5	49	98	KED
> In	115		ug/L			441019	454288	1	Standard
| Ag	107	0.002	ug/L	0.001	35	84	120	8	Standard
> Tb	159		ug/L			1096960	1158380	0	Standard
| Pb	208	0.047	ug/L	0.002	3	408	4074	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-06**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:14:42**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	46330	3	Standard
Cl	37		ug/L			5151969	5129311	2	Standard
[> Sc	45		ug/L			453223	520085	6	Standard
| Cr	52	0.481	ug/L	0.107	22	16290	28257	2	Standard
| Cr	53	1.257	ug/L	0.089	7	110	3085	2	Standard
[> Ge	72		ug/L			35046	33126	1	KED
| Ni	60	0.260	ug/L	0.004	1	104	450	1	KED
| Ni	62	0.316	ug/L	0.044	14	17	85	11	KED
| Cu	63	0.429	ug/L	0.001	0	50	1680	1	KED
| Cu	65	0.424	ug/L	0.029	6	24	836	6	KED
| Zn	66	1.938	ug/L	0.037	1	45	994	0	KED
| Zn	67	2.218	ug/L	0.347	15	5	187	14	KED
| As	75	0.667	ug/L	0.028	4	4	180	2	KED
| Y	89		ug/L			264383	251746	9	Standard
| Kr	83		ug/L			57	48	21	Standard
[> In-1	115		ug/L			8211	7726	4	KED
| Cd	111	-0.014	ug/L	0.009	67	8	4	53	KED
| Cd	114	0.002	ug/L	0.012	495	5	6	112	KED
[> In	115		ug/L			441019	402311	9	Standard
| Ag	107	-0.001	ug/L	0.001	57	84	60	9	Standard
[> Tb	159		ug/L			1096960	1047316	7	Standard
| Pb	208	0.020	ug/L	0.002	11	408	1810	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-08**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:19:08**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	47426	1	Standard
Cl	37		ug/L			5151969	5094431	1	Standard
[> Sc	45		ug/L			453223	550045	1	Standard
[Cr	52	0.194	ug/L	0.014	7	16290	23876	2	Standard
[Cr	53	0.945	ug/L	0.013	1	110	2493	1	Standard
[> Ge	72		ug/L			35046	32723	0	KED
[Ni	60	0.340	ug/L	0.008	2	104	551	1	KED
[Ni	62	0.353	ug/L	0.080	22	17	92	18	KED
[Cu	63	0.481	ug/L	0.025	5	50	1854	5	KED
[Cu	65	0.492	ug/L	0.019	3	24	954	3	KED
[Zn	66	2.203	ug/L	0.014	0	45	1111	0	KED
[Zn	67	2.339	ug/L	0.067	2	5	195	3	KED
[As	75	0.917	ug/L	0.055	6	4	243	5	KED
[Y	89		ug/L			264383	273775	0	Standard
[Kr	83		ug/L			57	43	6	Standard
[> In-1	115		ug/L			8211	7520	1	KED
[Cd	111	-0.014	ug/L	0.006	45	8	4	35	KED
[Cd	114	0.004	ug/L	0.005	129	5	7	40	KED
[> In	115		ug/L			441019	446013	1	Standard
[Ag	107	-0.001	ug/L	0.001	89	84	70	18	Standard
[> Tb	159		ug/L			1096960	1157010	1	Standard
[Pb	208	0.026	ug/L	0.001	2	408	2401	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-10**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:23:34**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	48318	4	Standard
Cl	37		ug/L			5151969	5103771	2	Standard
> Sc	45		ug/L			453223	556871	2	Standard
| Cr	52	0.112	ug/L	0.035	31	16290	22409	1	Standard
| Cr	53	0.950	ug/L	0.023	2	110	2538	3	Standard
> Ge	72		ug/L			35046	33373	1	KED
| Ni	60	0.324	ug/L	0.024	7	104	539	5	KED
| Ni	62	0.368	ug/L	0.020	5	17	97	4	KED
| Cu	63	0.445	ug/L	0.015	3	50	1753	2	KED
| Cu	65	0.431	ug/L	0.028	6	24	856	6	KED
| Zn	66	2.860	ug/L	0.117	4	45	1457	2	KED
| Zn	67	2.957	ug/L	0.351	11	5	250	12	KED
| As	75	0.623	ug/L	0.046	7	4	170	5	KED
Y	89		ug/L			264383	274145	1	Standard
Kr	83		ug/L			57	40	17	Standard
> In-1	115		ug/L			8211	7652	1	KED
| Cd	111	-0.000	ug/L	0.010	3237	8	7	33	KED
| Cd	114	0.002	ug/L	0.005	226	5	6	50	KED
> In	115		ug/L			441019	451327	1	Standard
| Ag	107	-0.002	ug/L	0.000	22	84	51	16	Standard
> Tb	159		ug/L			1096960	1151557	1	Standard
| Pb	208	0.027	ug/L	0.000	0	408	2521	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-12**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:28:00**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	45980	4	Standard
Cl	37		ug/L			5151969	5026915	2	Standard
[> Sc	45		ug/L			453223	550880	1	Standard
[Cr	52	0.066	ug/L	0.011	17	16290	21194	2	Standard
[Cr	53	0.921	ug/L	0.018	1	110	2437	1	Standard
[> Ge	72		ug/L			35046	33012	2	KED
[Ni	60	0.406	ug/L	0.012	2	104	645	4	KED
[Ni	62	0.385	ug/L	0.042	10	17	100	7	KED
[Cu	63	0.427	ug/L	0.003	0	50	1667	1	KED
[Cu	65	0.405	ug/L	0.016	4	24	796	5	KED
[Zn	66	2.059	ug/L	0.083	4	45	1050	3	KED
[Zn	67	2.325	ug/L	0.148	6	5	196	6	KED
[As	75	0.490	ug/L	0.071	14	4	133	14	KED
[Y	89		ug/L			264383	273769	2	Standard
[Kr	83		ug/L			57	45	4	Standard
[> In-1	115		ug/L			8211	7867	1	KED
[Cd	111	-0.017	ug/L	0.004	25	8	3	31	KED
[Cd	114	-0.001	ug/L	0.007	596	5	4	117	KED
[> In	115		ug/L			441019	435133	1	Standard
[Ag	107	-0.002	ug/L	0.000	11	84	40	11	Standard
[> Tb	159		ug/L			1096960	1151228	1	Standard
[Pb	208	0.023	ug/L	0.001	2	408	2189	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-14**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:32:26**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	53796	3	Standard
Cl	37		ug/L			5151969	5465727	2	Standard
[> Sc	45		ug/L			453223	538143	1	Standard
| Cr	52	0.115	ug/L	0.032	27	16290	21720	1	Standard
| Cr	53	0.901	ug/L	0.043	4	110	2332	5	Standard
[> Ge	72		ug/L			35046	33204	1	KED
| Ni	60	0.991	ug/L	0.047	4	104	1440	3	KED
| Ni	62	0.974	ug/L	0.019	1	17	229	0	KED
| Cu	63	1.893	ug/L	0.011	0	50	7264	1	KED
| Cu	65	1.898	ug/L	0.024	1	24	3669	0	KED
| Zn	66	3.907	ug/L	0.162	4	45	1965	3	KED
| Zn	67	4.500	ug/L	0.316	7	5	376	5	KED
| As	75	0.475	ug/L	0.019	3	4	130	5	KED
| Y	89		ug/L			264383	276199	0	Standard
| Kr	83		ug/L			57	48	47	Standard
[> In-1	115		ug/L			8211	7618	2	KED
| Cd	111	-0.004	ug/L	0.004	103	8	6	14	KED
| Cd	114	0.007	ug/L	0.009	133	5	9	63	KED
[> In	115		ug/L			441019	444154	1	Standard
| Ag	107	-0.001	ug/L	0.001	86	84	64	26	Standard
[> Tb	159		ug/L			1096960	1150870	0	Standard
| Pb	208	0.053	ug/L	0.002	4	408	4476	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-16**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:36:45**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	46219	4	Standard
Cl	37		ug/L			5151969	5118073	3	Standard
[> Sc	45		ug/L			453223	550872	1	Standard
[Cr	52	0.090	ug/L	0.021	23	16290	21706	2	Standard
[Cr	53	0.909	ug/L	0.020	2	110	2408	2	Standard
[> Ge	72		ug/L			35046	32894	1	KED
[Ni	60	0.332	ug/L	0.017	5	104	542	3	KED
[Ni	62	0.339	ug/L	0.035	10	17	90	8	KED
[Cu	63	0.529	ug/L	0.009	1	50	2044	2	KED
[Cu	65	0.505	ug/L	0.016	3	24	984	2	KED
[Zn	66	1.845	ug/L	0.146	7	45	942	8	KED
[Zn	67	2.147	ug/L	0.200	9	5	180	9	KED
[As	75	0.604	ug/L	0.043	7	4	162	5	KED
[Y	89		ug/L			264383	270097	1	Standard
[Kr	83		ug/L			57	48	19	Standard
[> In-1	115		ug/L			8211	7532	1	KED
[Cd	111	-0.006	ug/L	0.013	212	8	6	50	KED
[Cd	114	0.003	ug/L	0.003	98	5	6	25	KED
[> In	115		ug/L			441019	443155	2	Standard
[Ag	107	-0.001	ug/L	0.001	47	84	58	18	Standard
[> Tb	159		ug/L			1096960	1152843	2	Standard
[Pb	208	0.085	ug/L	0.004	4	408	6970	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0170-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 06:41:35**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	51591	1	Standard
Cl	37		ug/L			5151969	7385261	3	Standard
[> Sc	45		ug/L			453223	489992	5	Standard
| Cr	52	0.205	ug/L	0.032	15	16290	21459	3	Standard
| Cr	53	3.991	ug/L	0.232	5	110	8975	2	Standard
[> Ge	72		ug/L			35046	32000	0	KED
| Ni	60	0.670	ug/L	0.031	4	104	970	3	KED
| Ni	62	0.640	ug/L	0.060	9	17	151	8	KED
| Cu	63	0.755	ug/L	0.014	1	50	2819	2	KED
| Cu	65	0.772	ug/L	0.020	2	24	1452	2	KED
| Zn	66	4.516	ug/L	0.217	4	45	2183	4	KED
| Zn	67	4.829	ug/L	0.275	5	5	389	5	KED
| As	75	0.651	ug/L	0.012	1	4	170	2	KED
Y	89		ug/L			264383	252448	7	Standard
Kr	83		ug/L			57	48	13	Standard
[> In-1	115		ug/L			8211	7472	0	KED
| Cd	111	-0.005	ug/L	0.008	177	8	6	31	KED
| Cd	114	0.002	ug/L	0.002	78	5	6	18	KED
[> In	115		ug/L			441019	400364	7	Standard
| Ag	107	-0.002	ug/L	0.000	11	84	48	8	Standard
[> Tb	159		ug/L			1096960	1073060	8	Standard
| Pb	208	0.053	ug/L	0.004	8	408	4166	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0170-04**

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 06:46:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	50697	0	Standard
Cl	37		ug/L			5151969	5947249	2	Standard
[> Sc	45		ug/L			453223	497923	0	Standard
| Cr	52	0.521	ug/L	0.033	6	16290	27895	2	Standard
| Cr	53	1.766	ug/L	0.024	1	110	4112	1	Standard
[> Ge	72		ug/L			35046	32775	0	KED
| Ni	60	0.846	ug/L	0.086	10	104	1227	8	KED
| Ni	62	0.938	ug/L	0.077	8	17	219	7	KED
| Cu	63	3.118	ug/L	0.079	2	50	11776	1	KED
| Cu	65	3.251	ug/L	0.011	0	24	6188	0	KED
| Zn	66	10.735	ug/L	0.333	3	45	5258	2	KED
| Zn	67	10.057	ug/L	0.428	4	5	824	5	KED
| As	75	0.652	ug/L	0.046	7	4	174	6	KED
Y	89		ug/L			264383	275555	0	Standard
Kr	83		ug/L			57	36	31	Standard
[> In-1	115		ug/L			8211	7743	2	KED
| Cd	111	0.020	ug/L	0.005	24	8	13	8	KED
| Cd	114	0.015	ug/L	0.003	21	5	15	12	KED
[> In	115		ug/L			441019	444651	2	Standard
| Ag	107	-0.001	ug/L	0.001	65	84	59	30	Standard
[> Tb	159		ug/L			1096960	1165479	1	Standard
| Pb	208	0.330	ug/L	0.001	0	408	26002	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 06:50:27

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	28102	1	Standard
Cl	37		ug/L			5151969	5428643	2	Standard
[> Sc	45		ug/L			453223	462383	0	Standard
| Cr	52	-0.013	ug/L	0.020	155	16290	16391	1	Standard
| Cr	53	0.224	ug/L	0.009	4	110	582	3	Standard
[> Ge	72		ug/L			35046	33311	0	KED
| Ni	60	-0.055	ug/L	0.006	11	104	24	33	KED
| Ni	62	-0.060	ug/L	0.000	0	17	3	0	KED
| Cu	63	0.020	ug/L	0.006	32	50	124	19	KED
| Cu	65	0.026	ug/L	0.002	8	24	73	5	KED
| Zn	66	0.019	ug/L	0.019	102	45	52	18	KED
| Zn	67	0.034	ug/L	0.093	272	5	8	93	KED
| As	75	-0.004	ug/L	0.009	234	4	3	65	KED
Y	89		ug/L			264383	269695	2	Standard
Kr	83		ug/L			57	50	20	Standard
[> In-1	115		ug/L			8211	7755	3	KED
| Cd	111	-0.018	ug/L	0.002	13	8	3	17	KED
| Cd	114	-0.002	ug/L	0.003	136	5	3	55	KED
[> In	115		ug/L			441019	445374	2	Standard
| Ag	107	-0.003	ug/L	0.000	14	84	34	22	Standard
[> Tb	159		ug/L			1096960	1134139	1	Standard
| Pb	208	0.001	ug/L	0.001	96	408	488	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 06:54:54

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	28410	2	Standard
Cl	37		ug/L			5151969	5601757	3	Standard
[> Sc	45		ug/L			453223	461132	1	Standard
| Cr	52	49.252	ug/L	0.921	1	16290	891638	0	Standard
| Cr	53	48.937	ug/L	0.436	0	110	102519	1	Standard
[> Ge	72		ug/L			35046	33443	0	KED
| Ni	60	52.317	ug/L	0.311	0	104	71486	0	KED
| Ni	62	52.843	ug/L	0.492	0	17	11654	0	KED
| Cu	63	53.503	ug/L	0.753	1	50	205437	1	KED
| Cu	65	53.751	ug/L	0.608	1	24	104047	1	KED
| Zn	66	53.400	ug/L	0.547	1	45	26526	1	KED
| Zn	67	52.447	ug/L	1.749	3	5	4364	2	KED
| As	75	51.424	ug/L	0.424	0	4	13691	0	KED
Y	89		ug/L			264383	268199	1	Standard
Kr	83		ug/L			57	53	11	Standard
[> In-1	115		ug/L			8211	7701	2	KED
| Cd	111	52.311	ug/L	1.429	2	8	13431	0	KED
| Cd	114	51.426	ug/L	1.039	2	5	34638	0	KED
[> In	115		ug/L			441019	444742	1	Standard
| Ag	107	48.940	ug/L	1.576	3	84	860635	2	Standard
[> Tb	159		ug/L			1096960	1147445	1	Standard
| Pb	208	54.160	ug/L	0.369	0	408	4134140	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 07:02:04

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26724	26939	5	Standard
Cl	37		ug/L			5151969	5455098	2	Standard
[> Sc	45		ug/L			453223	460899	1	Standard
| Cr	52	-0.016	ug/L	0.009	54	16290	16279	0	Standard
| Cr	53	0.105	ug/L	0.028	26	110	331	17	Standard
[> Ge	72		ug/L			35046	34621	0	KED
| Ni	60	-0.064	ug/L	0.003	5	104	12	39	KED
| Ni	62	-0.052	ug/L	0.000	0	17	5	0	KED
| Cu	63	0.000	ug/L	0.002	1086	50	50	13	KED
| Cu	65	-0.002	ug/L	0.002	98	24	19	24	KED
| Zn	66	-0.027	ug/L	0.017	60	45	30	28	KED
| Zn	67	-0.044	ug/L	0.022	50	5	1	100	KED
| As	75	-0.003	ug/L	0.005	168	4	3	38	KED
Y	89		ug/L			264383	273658	2	Standard
Kr	83		ug/L			57	39	5	Standard
[> In-1	115		ug/L			8211	8278	1	KED
| Cd	111	-0.012	ug/L	0.005	42	8	5	28	KED
| Cd	114	-0.001	ug/L	0.004	428	5	4	59	KED
[> In	115		ug/L			441019	462299	1	Standard
| Ag	107	0.013	ug/L	0.014	102	84	335	76	Standard
[> Tb	159		ug/L			1096960	1168373	0	Standard
| Pb	208	0.008	ug/L	0.016	199	408	1059	117	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 07:06:30

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L				27642	4	Standard
Cl	37		ug/L				5444164	1	Standard
[> Sc	45		ug/L				458454	3	Standard
| Cr	52		ug/L				15942	2	Standard
| Cr	53		ug/L				279	10	Standard
[> Ge	72		ug/L				33055	0	KED
| Ni	60		ug/L				65	24	KED
| Ni	62		ug/L				13	28	KED
| Cu	63		ug/L				48	5	KED
| Cu	65		ug/L				27	30	KED
| Zn	66		ug/L				33	26	KED
| Zn	67		ug/L				4	24	KED
| As	75		ug/L				4	21	KED
Y	89		ug/L				263626	1	Standard
Kr	83		ug/L				46	14	Standard
[> In-1	115		ug/L				7645	3	KED
| Cd	111		ug/L				3	45	KED
| Cd	114		ug/L				6	64	KED
[> In	115		ug/L				437453	3	Standard
| Ag	107		ug/L				109	55	Standard
[> Tb	159		ug/L				1136980	1	Standard
| Pb	208		ug/L				605	58	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 07:10:56

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	28086	3	Standard
Cl	37		ug/L			5444164	5572198	2	Standard
[> Sc	45		ug/L			458454	457903	0	Standard
| Cr	52	50.616	ug/L	0.639	1	15942	909102	1	Standard
| Cr	53	49.174	ug/L	0.198	0	279	102463	0	Standard
[> Ge	72		ug/L			33055	33593	0	KED
| Ni	60	52.189	ug/L	0.948	1	65	71599	1	KED
| Ni	62	52.649	ug/L	0.852	1	13	11661	1	KED
| Cu	63	52.645	ug/L	0.749	1	48	203060	1	KED
| Cu	65	52.748	ug/L	0.343	0	27	102566	0	KED
| Zn	66	53.278	ug/L	0.529	0	33	26574	0	KED
| Zn	67	52.333	ug/L	0.317	0	4	4374	0	KED
| As	75	51.318	ug/L	0.097	0	4	13725	0	KED
Y	89		ug/L			263626	270416	2	Standard
Kr	83		ug/L			46	59	32	Standard
[> In-1	115		ug/L			7645	7847	1	KED
| Cd	111	51.836	ug/L	0.695	1	3	13562	0	KED
| Cd	114	51.517	ug/L	1.113	2	6	35367	1	KED
[> In	115		ug/L			437453	434409	0	Standard
| Ag	107	49.306	ug/L	0.400	0	109	847100	1	Standard
[> Tb	159		ug/L			1136980	1128082	2	Standard
| Pb	208	54.336	ug/L	1.547	2	605	4077180	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 07:18:06

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	27217	2	Standard
Cl	37		ug/L			5444164	5502187	2	Standard
[> Sc	45		ug/L			458454	456463	0	Standard
| Cr	52	0.018	ug/L	0.012	68	15942	16190	1	Standard
| Cr	53	-0.026	ug/L	0.005	18	279	223	4	Standard
[> Ge	72		ug/L			33055	34354	1	KED
| Ni	60	-0.011	ug/L	0.030	273	65	52	79	KED
| Ni	62	-0.025	ug/L	0.020	79	13	8	49	KED
| Cu	63	0.013	ug/L	0.028	205	48	104	105	KED
| Cu	65	0.009	ug/L	0.020	216	27	47	84	KED
| Zn	66	-0.003	ug/L	0.021	792	33	33	31	KED
| Zn	67	0.013	ug/L	0.067	511	4	5	100	KED
| As	75	0.017	ug/L	0.025	151	4	9	74	KED
Y	89		ug/L			263626	265671	3	Standard
Kr	83		ug/L			46	53	9	Standard
[> In-1	115		ug/L			7645	8016	1	KED
| Cd	111	0.009	ug/L	0.003	37	3	5	16	KED
| Cd	114	0.001	ug/L	0.010	781	6	7	92	KED
[> In	115		ug/L			437453	442083	2	Standard
| Ag	107	0.005	ug/L	0.001	21	109	190	7	Standard
[> Tb	159		ug/L			1136980	1126486	1	Standard
| Pb	208	-0.004	ug/L	0.000	4	605	313	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0081-04RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:22:33**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	47775	2	Standard
Cl	37		ug/L			5444164	5651285	2	Standard
[> Sc	45		ug/L			458454	476626	1	Standard
| Cr	52	0.345	ug/L	0.032	9	15942	22908	1	Standard
| Cr	53	1.003	ug/L	0.027	2	279	2460	1	Standard
[> Ge	72		ug/L			33055	33161	1	KED
| Ni	60	0.339	ug/L	0.027	7	65	524	6	KED
| Ni	62	0.433	ug/L	0.042	9	13	108	7	KED
| Cu	63	3.151	ug/L	0.065	2	48	12043	1	KED
| Cu	65	3.064	ug/L	0.090	2	27	5907	1	KED
| Zn	66	28.127	ug/L	0.189	0	33	13864	0	KED
| Zn	67	25.922	ug/L	1.011	3	4	2141	4	KED
| As	75	3.404	ug/L	0.062	1	4	903	2	KED
Y	89		ug/L			263626	270242	4	Standard
Kr	83		ug/L			46	40	33	Standard
[> In-1	115		ug/L			7645	7564	2	KED
| Cd	111	0.067	ug/L	0.008	11	3	20	9	KED
| Cd	114	0.071	ug/L	0.017	23	6	53	22	KED
[> In	115		ug/L			437453	438509	2	Standard
| Ag	107	0.005	ug/L	0.001	12	109	191	8	Standard
[> Tb	159		ug/L			1136980	1138740	0	Standard
| Pb	208	0.277	ug/L	0.003	1	605	21563	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0089-01RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:27:22**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	62040	2	Standard
Cl	37		ug/L			5444164	8983706	5	Standard
[> Sc	45		ug/L			458454	533580	0	Standard
| Cr	52	0.742	ug/L	0.013	1	15942	33800	0	Standard
| Cr	53	6.745	ug/L	0.128	1	279	16659	2	Standard
[> Ge	72		ug/L			33055	31830	2	KED
| Ni	60	2.183	ug/L	0.029	1	65	2898	1	KED
| Ni	62	2.085	ug/L	0.149	7	13	450	4	KED
| Cu	63	15.088	ug/L	0.178	1	48	55165	1	KED
| Cu	65	15.321	ug/L	0.208	1	27	28241	0	KED
| Zn	66	87.219	ug/L	1.623	1	33	41189	0	KED
| Zn	67	80.426	ug/L	1.738	2	4	6365	2	KED
| As	75	1.352	ug/L	0.066	4	4	346	3	KED
Y	89		ug/L			263626	284194	0	Standard
Kr	83		ug/L			46	43	4	Standard
[> In-1	115		ug/L			7645	7484	2	KED
| Cd	111	0.065	ug/L	0.019	28	3	19	23	KED
| Cd	114	0.052	ug/L	0.016	30	6	40	26	KED
[> In	115		ug/L			437453	434665	0	Standard
| Ag	107	0.046	ug/L	0.002	5	109	892	4	Standard
[> Tb	159		ug/L			1136980	1136319	1	Standard
| Pb	208	0.692	ug/L	0.010	1	605	52881	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0062-01RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:32:12**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	50715	2	Standard
Cl	37		ug/L			5444164	5297783	1	Standard
[> Sc	45		ug/L			458454	514255	2	Standard
| Cr	52	0.208	ug/L	0.011	5	15942	22002	1	Standard
| Cr	53	0.882	ug/L	0.028	3	279	2371	0	Standard
[> Ge	72		ug/L			33055	33477	0	KED
| Ni	60	0.057	ug/L	0.011	19	65	143	10	KED
| Ni	62	0.016	ug/L	0.018	107	13	17	22	KED
| Cu	63	0.142	ug/L	0.012	8	48	594	8	KED
| Cu	65	0.150	ug/L	0.020	13	27	318	11	KED
| Zn	66	1.018	ug/L	0.078	7	33	539	7	KED
| Zn	67	1.060	ug/L	0.272	25	4	92	24	KED
| As	75	0.208	ug/L	0.017	8	4	60	7	KED
Y	89		ug/L			263626	275566	2	Standard
Kr	83		ug/L			46	48	6	Standard
[> In-1	115		ug/L			7645	8023	2	KED
| Cd	111	0.003	ug/L	0.008	251	3	4	48	KED
| Cd	114	0.004	ug/L	0.005	142	6	9	41	KED
[> In	115		ug/L			437453	448326	0	Standard
| Ag	107	-0.003	ug/L	0.000	16	109	64	12	Standard
[> Tb	159		ug/L			1136980	1180887	1	Standard
| Pb	208	0.020	ug/L	0.001	4	605	2206	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0062-05RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:36:38**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	47838	1	Standard
Cl	37		ug/L			5444164	5135506	2	Standard
[> Sc	45		ug/L			458454	527090	2	Standard
| Cr	52	0.250	ug/L	0.014	5	15942	23406	1	Standard
| Cr	53	0.706	ug/L	0.023	3	279	2009	1	Standard
[> Ge	72		ug/L			33055	33070	0	KED
| Ni	60	0.112	ug/L	0.029	25	65	217	18	KED
| Ni	62	0.099	ug/L	0.026	26	13	35	16	KED
| Cu	63	0.265	ug/L	0.011	3	48	1056	4	KED
| Cu	65	0.241	ug/L	0.019	7	27	489	8	KED
| Zn	66	0.513	ug/L	0.081	15	33	285	14	KED
| Zn	67	0.594	ug/L	0.113	18	4	53	17	KED
| As	75	0.461	ug/L	0.025	5	4	126	5	KED
Y	89		ug/L			263626	272609	1	Standard
Kr	83		ug/L			46	50	14	Standard
[> In-1	115		ug/L			7645	7639	1	KED
| Cd	111	0.004	ug/L	0.011	291	3	4	66	KED
| Cd	114	-0.002	ug/L	0.006	253	6	4	84	KED
[> In	115		ug/L			437453	449705	1	Standard
| Ag	107	-0.001	ug/L	0.003	229	109	86	70	Standard
[> Tb	159		ug/L			1136980	1168798	1	Standard
| Pb	208	0.054	ug/L	0.004	7	605	4833	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0062-07RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:41:04**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	44416	2	Standard
Cl	37		ug/L			5444164	5340160	2	Standard
[> Sc	45		ug/L			458454	464655	1	Standard
| Cr	52	0.119	ug/L	0.004	3	15942	18290	1	Standard
| Cr	53	0.239	ug/L	0.012	5	279	787	2	Standard
[> Ge	72		ug/L			33055	33629	0	KED
| Ni	60	0.137	ug/L	0.014	9	65	254	6	KED
| Ni	62	0.125	ug/L	0.046	36	13	41	24	KED
| Cu	63	0.415	ug/L	0.012	3	48	1650	2	KED
| Cu	65	0.461	ug/L	0.051	11	27	925	11	KED
| Zn	66	0.240	ug/L	0.064	26	33	153	20	KED
| Zn	67	0.394	ug/L	0.183	46	4	37	40	KED
| As	75	0.004	ug/L	0.005	119	4	5	22	KED
Y	89		ug/L			263626	269197	0	Standard
Kr	83		ug/L			46	57	15	Standard
[> In-1	115		ug/L			7645	7854	3	KED
| Cd	111	0.007	ug/L	0.011	152	3	5	54	KED
| Cd	114	-0.003	ug/L	0.004	132	6	4	70	KED
[> In	115		ug/L			437453	450662	0	Standard
[> Ag	107	-0.004	ug/L	0.000	10	109	45	15	Standard
[> Tb	159		ug/L			1136980	1144557	2	Standard
| Pb	208	0.001	ug/L	0.000	6	605	678	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0062-03RE1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:45:30**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49968	3	Standard
Cl	37		ug/L			5444164	5156154	3	Standard
[> Sc	45		ug/L			458454	527004	1	Standard
[Cr	52	0.224	ug/L	0.023	10	15942	22872	1	Standard
[Cr	53	0.541	ug/L	0.005	0	279	1615	0	Standard
[> Ge	72		ug/L			33055	33384	0	KED
[Ni	60	0.120	ug/L	0.001	0	65	229	0	KED
[Ni	62	0.129	ug/L	0.041	31	13	42	21	KED
[Cu	63	0.267	ug/L	0.010	3	48	1071	3	KED
[Cu	65	0.268	ug/L	0.006	2	27	546	2	KED
[Zn	66	0.444	ug/L	0.005	1	33	253	0	KED
[Zn	67	0.665	ug/L	0.096	14	4	59	13	KED
[As	75	0.491	ug/L	0.024	4	4	135	4	KED
[Y	89		ug/L			263626	278012	2	Standard
[Kr	83		ug/L			46	48	11	Standard
[> In-1	115		ug/L			7645	7827	2	KED
[Cd	111	0.011	ug/L	0.003	24	3	6	9	KED
[Cd	114	0.008	ug/L	0.007	89	6	11	41	KED
[> In	115		ug/L			437453	455796	2	Standard
[Ag	107	-0.004	ug/L	0.001	22	109	46	31	Standard
[> Tb	159		ug/L			1136980	1167706	1	Standard
[Pb	208	0.051	ug/L	0.001	1	605	4583	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0754-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:49:55**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49176	3	Standard
Cl	37		ug/L			5444164	5101734	3	Standard
[> Sc	45		ug/L			458454	526641	3	Standard
[Cr	52	0.140	ug/L	0.032	22	15942	21136	3	Standard
[Cr	53	0.447	ug/L	0.011	2	279	1387	1	Standard
[> Ge	72		ug/L			33055	33861	0	KED
[Ni	60	0.125	ug/L	0.007	5	65	240	3	KED
[Ni	62	0.147	ug/L	0.061	41	13	46	28	KED
[Cu	63	0.262	ug/L	0.014	5	48	1068	5	KED
[Cu	65	0.260	ug/L	0.013	4	27	537	4	KED
[Zn	66	0.914	ug/L	0.071	7	33	493	7	KED
[Zn	67	1.048	ug/L	0.196	18	4	92	17	KED
[As	75	0.456	ug/L	0.037	8	4	127	7	KED
Y	89		ug/L			263626	269411	1	Standard
Kr	83		ug/L			46	49	16	Standard
[> In-1	115		ug/L			7645	7846	2	KED
[Cd	111	0.003	ug/L	0.005	134	3	4	26	KED
[Cd	114	-0.007	ug/L	0.005	72	6	1	236	KED
[> In	115		ug/L			437453	449389	1	Standard
[Ag	107	-0.003	ug/L	0.001	19	109	52	22	Standard
[> Tb	159		ug/L			1136980	1165640	1	Standard
[Pb	208	0.055	ug/L	0.002	3	605	4900	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0754-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:54:16**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49571	0	Standard
Cl	37		ug/L			5444164	5164483	1	Standard
[> Sc	45		ug/L			458454	528812	1	Standard
[Cr	52	22.894	ug/L	0.225	0	15942	484953	2	Standard
[Cr	53	22.998	ug/L	0.148	0	279	55510	1	Standard
[> Ge	72		ug/L			33055	33917	0	KED
[Ni	60	27.256	ug/L	0.387	1	65	37782	0	KED
[Ni	62	27.282	ug/L	0.688	2	13	6107	1	KED
[Cu	63	27.894	ug/L	0.419	1	48	108639	0	KED
[Cu	65	28.255	ug/L	0.445	1	27	55478	0	KED
[Zn	66	85.868	ug/L	0.857	0	33	43218	0	KED
[Zn	67	79.691	ug/L	1.362	1	4	6722	1	KED
[As	75	26.197	ug/L	0.094	0	4	7076	0	KED
[Y	89		ug/L			263626	273779	3	Standard
[Kr	83		ug/L			46	43	15	Standard
[> In-1	115		ug/L			7645	7704	2	KED
[Cd	111	27.014	ug/L	0.693	2	3	6939	0	KED
[Cd	114	26.709	ug/L	0.828	3	6	18000	1	KED
[> In	115		ug/L			437453	448494	1	Standard
[Ag	107	25.515	ug/L	0.526	2	109	452588	2	Standard
[> Tb	159		ug/L			1136980	1170013	1	Standard
[Pb	208	27.641	ug/L	0.347	1	605	2151517	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0754-MSD1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 07:59:06**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	47881	1	Standard
Cl	37		ug/L			5444164	5155281	3	Standard
> Sc	45		ug/L			458454	521080	1	Standard
| Cr	52	22.984	ug/L	0.289	1	15942	479591	0	Standard
| Cr	53	23.012	ug/L	0.674	2	279	54722	2	Standard
> Ge	72		ug/L			33055	33929	1	KED
| Ni	60	27.624	ug/L	0.427	1	65	38303	0	KED
| Ni	62	27.734	ug/L	1.084	3	13	6209	2	KED
| Cu	63	28.334	ug/L	0.242	0	48	110395	0	KED
| Cu	65	27.901	ug/L	0.455	1	27	54811	2	KED
| Zn	66	83.284	ug/L	1.892	2	33	41931	1	KED
| Zn	67	79.933	ug/L	0.184	0	4	6745	1	KED
| As	75	26.558	ug/L	0.105	0	4	7176	0	KED
Y	89		ug/L			263626	274141	0	Standard
Kr	83		ug/L			46	57	13	Standard
> In-1	115		ug/L			7645	7821	2	KED
| Cd	111	26.881	ug/L	1.115	4	3	7007	2	KED
| Cd	114	26.506	ug/L	1.117	4	6	18128	2	KED
> In	115		ug/L			437453	452311	0	Standard
> Ag	107	25.663	ug/L	0.457	1	109	459112	1	Standard
> Tb	159		ug/L			1136980	1165357	0	Standard
| Pb	208	27.645	ug/L	0.276	0	605	2143552	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 08:03:32

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	28364	3	Standard
Cl	37		ug/L			5444164	5374223	2	Standard
[> Sc	45		ug/L			458454	448922	0	Standard
| Cr	52	0.038	ug/L	0.014	36	15942	16267	1	Standard
| Cr	53	0.006	ug/L	0.003	44	279	286	1	Standard
[> Ge	72		ug/L			33055	33440	0	KED
| Ni	60	-0.028	ug/L	0.000	0	65	28	0	KED
| Ni	62	-0.035	ug/L	0.013	36	13	6	45	KED
| Cu	63	0.020	ug/L	0.004	18	48	125	10	KED
| Cu	65	0.020	ug/L	0.007	34	27	67	19	KED
| Zn	66	0.043	ug/L	0.020	46	33	55	18	KED
| Zn	67	0.114	ug/L	0.075	65	4	13	43	KED
| As	75	-0.006	ug/L	0.004	66	4	3	31	KED
Y	89		ug/L			263626	260194	0	Standard
Kr	83		ug/L			46	45	4	Standard
[> In-1	115		ug/L			7645	7614	1	KED
| Cd	111	0.011	ug/L	0.013	117	3	6	55	KED
| Cd	114	0.002	ug/L	0.003	155	6	7	25	KED
[> In	115		ug/L			437453	434617	1	Standard
| Ag	107	0.003	ug/L	0.001	44	109	157	12	Standard
[> Tb	159		ug/L			1136980	1131323	1	Standard
| Pb	208	0.001	ug/L	0.000	62	605	643	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 08:07:59

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	28908	3	Standard
Cl	37		ug/L			5444164	5563079	1	Standard
[> Sc	45		ug/L			458454	468208	1	Standard
[Cr	52	48.947	ug/L	0.439	0	15942	899361	1	Standard
[Cr	53	48.418	ug/L	1.559	3	279	103137	2	Standard
[> Ge	72		ug/L			33055	31130	13	KED
[Ni	60	57.280	ug/L	7.641	13	65	71948	1	KED
[Ni	62	57.960	ug/L	9.285	16	13	11725	1	KED
[Cu	63	58.269	ug/L	7.730	13	48	205798	1	KED
[Cu	65	57.814	ug/L	8.502	14	27	102804	1	KED
[Zn	66	56.939	ug/L	7.128	12	33	26023	2	KED
[Zn	67	58.128	ug/L	7.337	12	4	4450	1	KED
[As	75	55.706	ug/L	7.949	14	4	13629	0	KED
[Y	89		ug/L			263626	269414	0	Standard
[Kr	83		ug/L			46	64	6	Standard
[> In-1	115		ug/L			7645	7694	0	KED
[Cd	111	53.496	ug/L	0.166	0	3	13725	1	KED
[Cd	114	52.652	ug/L	0.902	1	6	35444	1	KED
[> In	115		ug/L			437453	442536	0	Standard
[Ag	107	48.283	ug/L	0.867	1	109	845031	1	Standard
[> Tb	159		ug/L			1136980	1142922	1	Standard
[Pb	208	54.748	ug/L	1.354	2	605	4161893	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 08:15:09

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	26864	3	Standard
Cl	37		ug/L			5444164	5428699	2	Standard
[> Sc	45		ug/L			458454	453900	0	Standard
| Cr	52	0.029	ug/L	0.004	12	15942	16285	0	Standard
| Cr	53	-0.014	ug/L	0.008	55	279	246	5	Standard
[> Ge	72		ug/L			33055	33913	0	KED
| Ni	60	-0.030	ug/L	0.007	22	65	26	34	KED
| Ni	62	-0.039	ug/L	0.008	21	13	5	33	KED
| Cu	63	-0.001	ug/L	0.003	526	48	47	28	KED
| Cu	65	-0.005	ug/L	0.002	38	27	19	20	KED
| Zn	66	-0.029	ug/L	0.019	64	33	19	47	KED
| Zn	67	-0.039	ug/L	0.013	33	4	1	86	KED
| As	75	-0.000	ug/L	0.007	1540	4	4	43	KED
Y	89		ug/L			263626	261506	1	Standard
Kr	83		ug/L			46	47	8	Standard
[> In-1	115		ug/L			7645	8012	2	KED
| Cd	111	0.014	ug/L	0.005	35	3	6	20	KED
| Cd	114	-0.005	ug/L	0.001	29	6	3	35	KED
[> In	115		ug/L			437453	437556	1	Standard
| Ag	107	0.009	ug/L	0.005	55	109	269	31	Standard
[> Tb	159		ug/L			1136980	1110788	2	Standard
| Pb	208	0.000	ug/L	0.006	1669	605	613	75	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0133-01

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 08:19:35

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	58659	2	Standard
Cl	37		ug/L			5444164	5636374	2	Standard
[> Sc	45		ug/L			458454	477842	1	Standard
| Cr	52	0.990	ug/L	0.075	7	15942	34839	3	Standard
| Cr	53	1.351	ug/L	0.025	1	279	3219	1	Standard
[> Ge	72		ug/L			33055	33365	0	KED
| Ni	60	0.762	ug/L	0.020	2	65	1103	3	KED
| Ni	62	0.832	ug/L	0.071	8	13	196	8	KED
| Cu	63	21.095	ug/L	0.498	2	48	80837	1	KED
| Cu	65	21.168	ug/L	0.148	0	27	40897	1	KED
| Zn	66	279.934	ug/L	3.815	1	33	138535	1	KED
| Zn	67	258.175	ug/L	5.700	2	4	21412	1	KED
[As	75	7.588	ug/L	0.132	1	4	2019	1	KED
Y	89		ug/L			263626	269906	1	Standard
Kr	83		ug/L			46	41	13	Standard
[> In-1	115		ug/L			7645	7901	1	KED
| Cd	111	0.147	ug/L	0.025	17	3	41	14	KED
| Cd	114	0.118	ug/L	0.026	22	6	87	18	KED
[> In	115		ug/L			437453	455655	2	Standard
| Ag	107	0.009	ug/L	0.000	3	109	283	2	Standard
[> Tb	159		ug/L			1136980	1157879	1	Standard
[Pb	208	1.129	ug/L	0.017	1	605	87532	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0133-02

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 08:24:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	48375	2	Standard
Cl	37		ug/L			5444164	5413995	2	Standard
[> Sc	45		ug/L			458454	461415	2	Standard
| Cr	52	0.402	ug/L	0.016	4	15942	23184	2	Standard
| Cr	53	0.364	ug/L	0.012	3	279	1042	3	Standard
[> Ge	72		ug/L			33055	34114	2	KED
| Ni	60	0.328	ug/L	0.011	3	65	523	4	KED
| Ni	62	0.320	ug/L	0.040	12	13	86	12	KED
| Cu	63	3.717	ug/L	0.068	1	48	14601	0	KED
| Cu	65	3.741	ug/L	0.083	2	27	7411	0	KED
| Zn	66	29.332	ug/L	1.049	3	33	14866	2	KED
| Zn	67	27.330	ug/L	0.665	2	4	2321	2	KED
| As	75	2.583	ug/L	0.057	2	4	706	3	KED
Y	89		ug/L			263626	268088	1	Standard
Kr	83		ug/L			46	44	29	Standard
[> In-1	115		ug/L			7645	7943	0	KED
| Cd	111	0.038	ug/L	0.010	25	3	13	18	KED
| Cd	114	0.012	ug/L	0.007	57	6	14	31	KED
[> In	115		ug/L			437453	443135	0	Standard
| Ag	107	0.002	ug/L	0.001	48	109	150	12	Standard
[> Tb	159		ug/L			1136980	1141276	0	Standard
| Pb	208	0.285	ug/L	0.002	0	605	22263	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0133-03

Sample Dil Factor:

Comments:

DEL

Sample Date/Time: Friday, April 28, 2023 08:28:27

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	48385	2	Standard
Cl	37		ug/L			5444164	5400581	2	Standard
[> Sc	45		ug/L			458454	469692	3	Standard
| Cr	52	1.249	ug/L	0.067	5	15942	38922	3	Standard
| Cr	53	1.321	ug/L	0.045	3	279	3100	4	Standard
[> Ge	72		ug/L			33055	33766	0	KED
| Ni	60	2.187	ug/L	0.084	3	65	3080	3	KED
| Ni	62	2.131	ug/L	0.102	4	13	488	5	KED
| Cu	63	10.712	ug/L	0.025	0	48	41568	0	KED
| Cu	65	10.687	ug/L	0.242	2	27	20908	1	KED
| Zn	66	175.862	ug/L	0.830	0	33	88093	1	KED
| Zn	67	161.912	ug/L	4.999	3	4	13591	2	KED
| As	75	0.520	ug/L	0.047	9	4	144	9	KED
Y	89		ug/L			263626	266655	2	Standard
Kr	83		ug/L			46	41	2	Standard
[> In-1	115		ug/L			7645	7916	3	KED
| Cd	111	0.205	ug/L	0.036	17	3	57	15	KED
| Cd	114	0.206	ug/L	0.045	21	6	148	18	KED
[> In	115		ug/L			437453	445865	2	Standard
| Ag	107	0.040	ug/L	0.054	132	109	831	115	Standard
[> Tb	159		ug/L			1136980	1136881	2	Standard
| Pb	208	2.422	ug/L	0.069	2	605	183692	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0135-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 08:33:17**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	50849	3	Standard
Cl	37		ug/L			5444164	5229310	3	Standard
[> Sc	45		ug/L			458454	574071	1	Standard
[Cr	52	0.184	ug/L	0.023	12	15942	24021	1	Standard
[Cr	53	0.830	ug/L	0.017	2	279	2511	0	Standard
[> Ge	72		ug/L			33055	33143	0	KED
[Ni	60	0.241	ug/L	0.029	12	65	391	9	KED
[Ni	62	0.221	ug/L	0.050	22	13	62	16	KED
[Cu	63	0.582	ug/L	0.032	5	48	2264	5	KED
[Cu	65	0.588	ug/L	0.022	3	27	1156	3	KED
[Zn	66	1.623	ug/L	0.136	8	33	831	7	KED
[Zn	67	1.812	ug/L	0.200	11	4	153	10	KED
[As	75	0.738	ug/L	0.019	2	4	199	2	KED
Y	89		ug/L			263626	281569	0	Standard
Kr	83		ug/L			46	44	20	Standard
[> In-1	115		ug/L			7645	7687	1	KED
[Cd	111	0.010	ug/L	0.004	38	3	5	16	KED
[Cd	114	0.006	ug/L	0.004	70	6	10	25	KED
[> In	115		ug/L			437453	440740	0	Standard
[Ag	107	-0.003	ug/L	0.000	4	109	66	2	Standard
[> Tb	159		ug/L			1136980	1185265	1	Standard
[Pb	208	0.056	ug/L	0.001	2	605	5075	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0509-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 08:37:43**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	54626	3	Standard
Cl	37		ug/L			5444164	5191755	3	Standard
[> Sc	45		ug/L			458454	575706	2	Standard
Cr	52	0.178	ug/L	0.041	22	15942	23953	2	Standard
Cr	53	0.828	ug/L	0.011	1	279	2513	2	Standard
[> Ge	72		ug/L			33055	32797	1	KED
Ni	60	0.199	ug/L	0.002	0	65	331	0	KED
Ni	62	0.257	ug/L	0.078	30	13	69	23	KED
Cu	63	0.387	ug/L	0.008	2	48	1505	1	KED
Cu	65	0.382	ug/L	0.019	4	27	753	4	KED
Zn	66	1.201	ug/L	0.081	6	33	617	5	KED
Zn	67	1.388	ug/L	0.247	17	4	117	16	KED
As	75	0.738	ug/L	0.027	3	4	197	2	KED
Y	89		ug/L			263626	275073	2	Standard
Kr	83		ug/L			46	46	21	Standard
[> In-1	115		ug/L			7645	7514	1	KED
[> Cd	111	0.017	ug/L	0.006	34	3	7	19	KED
Cl	114	0.003	ug/L	0.007	193	6	8	51	KED
[> In	115		ug/L			437453	451989	2	Standard
Ag	107	-0.003	ug/L	0.000	13	109	62	13	Standard
[> Tb	159		ug/L			1136980	1162738	0	Standard
Pb	208	0.037	ug/L	0.000	1	605	3467	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0509-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 08:42:03**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	52290	2	Standard
Cl	37		ug/L			5444164	5169347	2	Standard
> Sc	45		ug/L			458454	567248	0	Standard
| Cr	52	21.768	ug/L	0.417	1	15942	495596	2	Standard
| Cr	53	21.885	ug/L	0.321	1	279	56678	0	Standard
> Ge	72		ug/L			33055	33430	1	KED
| Ni	60	27.860	ug/L	0.469	1	65	38063	1	KED
| Ni	62	27.435	ug/L	0.296	1	13	6053	1	KED
| Cu	63	28.421	ug/L	0.443	1	48	109109	1	KED
| Cu	65	28.508	ug/L	0.588	2	27	55168	0	KED
| Zn	66	86.611	ug/L	2.255	2	33	42962	1	KED
| Zn	67	81.284	ug/L	2.199	2	4	6757	1	KED
| As	75	26.929	ug/L	0.251	0	4	7168	0	KED
Y	89		ug/L			263626	272871	2	Standard
Kr	83		ug/L			46	49	6	Standard
> In-1	115		ug/L			7645	7747	3	KED
| Cd	111	26.823	ug/L	1.226	4	3	6922	0	KED
| Cd	114	26.703	ug/L	1.575	5	6	18077	2	KED
> In	115		ug/L			437453	454894	2	Standard
| Ag	107	24.869	ug/L	0.742	2	109	447262	1	Standard
> Tb	159		ug/L			1136980	1175241	0	Standard
| Pb	208	27.735	ug/L	0.077	0	605	2168776	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0262-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 08:47:53**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	51698	3	Standard
Cl	37		ug/L			5444164	5892871	4	Standard
[> Sc	45		ug/L			458454	554847	2	Standard
[Cr	52	0.120	ug/L	0.029	24	15942	21841	1	Standard
[Cr	53	1.526	ug/L	0.030	1	279	4179	1	Standard
[> Ge	72		ug/L			33055	32389	1	KED
[Ni	60	3.225	ug/L	0.025	0	65	4326	0	KED
[Ni	62	3.160	ug/L	0.102	3	13	687	1	KED
[Cu	63	0.524	ug/L	0.032	6	48	1994	6	KED
[Cu	65	0.522	ug/L	0.034	6	27	1004	5	KED
[Zn	66	4.908	ug/L	0.033	0	33	2390	0	KED
[Zn	67	5.675	ug/L	0.474	8	4	460	7	KED
[As	75	0.600	ug/L	0.033	5	4	159	4	KED
Y	89		ug/L			263626	274458	1	Standard
Kr	83		ug/L			46	45	18	Standard
[> In-1	115		ug/L			7645	7629	1	KED
[Cd	111	0.036	ug/L	0.007	18	3	12	13	KED
[Cd	114	0.034	ug/L	0.014	41	6	28	32	KED
[> In	115		ug/L			437453	430318	1	Standard
[Ag	107	0.000	ug/L	0.001	289	109	115	18	Standard
[> Tb	159		ug/L			1136980	1153004	2	Standard
[Pb	208	0.030	ug/L	0.001	2	605	2946	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0717-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 08:52:18**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	50065	2	Standard
Cl	37		ug/L			5444164	5906216	3	Standard
> Sc	45		ug/L			458454	544666	2	Standard
| Cr	52	0.028	ug/L	0.009	31	15942	19524	1	Standard
| Cr	53	1.420	ug/L	0.076	5	279	3839	3	Standard
> Ge	72		ug/L			33055	31632	2	KED
| Ni	60	3.028	ug/L	0.072	2	65	3968	0	KED
| Ni	62	3.232	ug/L	0.118	3	13	686	2	KED
| Cu	63	0.504	ug/L	0.036	7	48	1874	4	KED
| Cu	65	0.472	ug/L	0.043	9	27	890	8	KED
| Zn	66	2.444	ug/L	0.127	5	33	1177	3	KED
| Zn	67	3.708	ug/L	0.175	4	4	295	6	KED
| As	75	0.612	ug/L	0.031	5	4	158	3	KED
Y	89		ug/L			263626	278212	2	Standard
Kr	83		ug/L			46	50	19	Standard
> In-1	115		ug/L			7645	7352	1	KED
| Cd	111	0.034	ug/L	0.007	20	3	11	14	KED
| Cd	114	0.015	ug/L	0.014	97	6	15	60	KED
> In	115		ug/L			437453	442091	1	Standard
| Ag	107	-0.002	ug/L	0.000	26	109	79	8	Standard
> Tb	159		ug/L			1136980	1157345	1	Standard
| Pb	208	0.022	ug/L	0.000	1	605	2308	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0717-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 08:57:09**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	48203	2	Standard
Cl	37		ug/L			5444164	5890598	4	Standard
> Sc	45		ug/L			458454	541501	1	Standard
| Cr	52	19.881	ug/L	0.107	0	15942	433700	1	Standard
| Cr	53	20.945	ug/L	0.470	2	279	51806	3	Standard
> Ge	72		ug/L			33055	31242	1	KED
| Ni	60	29.323	ug/L	0.315	1	65	37438	0	KED
| Ni	62	29.310	ug/L	0.864	2	13	6044	3	KED
| Cu	63	26.218	ug/L	0.083	0	48	94073	1	KED
| Cu	65	26.427	ug/L	0.266	1	27	47799	0	KED
| Zn	66	81.916	ug/L	0.540	0	33	37983	1	KED
| Zn	67	78.430	ug/L	2.501	3	4	6093	2	KED
| As	75	26.303	ug/L	0.296	1	4	6544	2	KED
Y	89		ug/L			263626	266970	1	Standard
Kr	83		ug/L			46	62	28	Standard
> In-1	115		ug/L			7645	7372	2	KED
| Cd	111	25.262	ug/L	0.391	1	3	6209	1	KED
| Cd	114	25.556	ug/L	0.431	1	6	16482	1	KED
> In	115		ug/L			437453	434019	1	Standard
> Ag	107	22.733	ug/L	0.105	0	109	390290	2	Standard
> Tb	159		ug/L			1136980	1139513	1	Standard
| Pb	208	26.395	ug/L	0.387	1	605	2001109	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 09:01:36

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	27849	3	Standard
Cl	37		ug/L			5444164	5313982	2	Standard
[> Sc	45		ug/L			458454	440679	1	Standard
| Cr	52	0.033	ug/L	0.010	29	15942	15888	1	Standard
| Cr	53	0.057	ug/L	0.006	10	279	381	2	Standard
[> Ge	72		ug/L			33055	34094	2	KED
| Ni	60	-0.028	ug/L	0.009	33	65	28	43	KED
| Ni	62	-0.042	ug/L	0.009	22	13	5	43	KED
| Cu	63	0.024	ug/L	0.001	2	48	142	2	KED
| Cu	65	0.022	ug/L	0.008	36	27	73	21	KED
| Zn	66	0.048	ug/L	0.026	54	33	59	24	KED
| Zn	67	0.021	ug/L	0.048	224	4	6	62	KED
| As	75	-0.002	ug/L	0.006	349	4	4	33	KED
Y	89		ug/L			263626	265319	4	Standard
Kr	83		ug/L			46	45	42	Standard
[> In-1	115		ug/L			7645	7763	2	KED
| Cd	111	0.002	ug/L	0.015	620	3	3	100	KED
| Cd	114	0.004	ug/L	0.009	213	6	9	69	KED
[> In	115		ug/L			437453	450614	0	Standard
| Ag	107	0.000	ug/L	0.001	309	109	117	11	Standard
[> Tb	159		ug/L			1136980	1127531	4	Standard
| Pb	208	0.000	ug/L	0.000	144	605	619	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 09:06:02

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	29075	5	Standard
Cl	37		ug/L			5444164	5592610	4	Standard
[> Sc	45		ug/L			458454	458554	2	Standard
| Cr	52	49.433	ug/L	1.107	2	15942	889170	1	Standard
| Cr	53	48.789	ug/L	0.737	1	279	101791	2	Standard
[> Ge	72		ug/L			33055	32696	2	KED
| Ni	60	53.563	ug/L	1.896	3	65	71471	0	KED
| Ni	62	53.323	ug/L	2.183	4	13	11487	1	KED
| Cu	63	54.006	ug/L	1.467	2	48	202641	0	KED
| Cu	65	54.204	ug/L	2.340	4	27	102504	1	KED
| Zn	66	53.342	ug/L	2.740	5	33	25872	2	KED
| Zn	67	52.711	ug/L	2.387	4	4	4284	2	KED
| As	75	51.817	ug/L	1.615	3	4	13480	1	KED
Y	89		ug/L			263626	266807	1	Standard
Kr	83		ug/L			46	52	17	Standard
[> In-1	115		ug/L			7645	7514	0	KED
| Cd	111	54.284	ug/L	1.168	2	3	13599	1	KED
| Cd	114	53.784	ug/L	1.145	2	6	35360	2	KED
[> In	115		ug/L			437453	451563	1	Standard
| Ag	107	47.489	ug/L	1.702	3	109	848163	4	Standard
[> Tb	159		ug/L			1136980	1151162	0	Standard
| Pb	208	55.759	ug/L	0.837	1	605	4270110	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 09:13:12

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	27340	2	Standard
Cl	37		ug/L			5444164	5549969	2	Standard
[> Sc	45		ug/L			458454	456059	0	Standard
| Cr	52	-0.008	ug/L	0.023	286	15942	15721	2	Standard
| Cr	53	-0.028	ug/L	0.008	29	279	220	7	Standard
[> Ge	72		ug/L			33055	33863	0	KED
| Ni	60	-0.034	ug/L	0.006	16	65	20	39	KED
| Ni	62	-0.053	ug/L	0.005	9	13	2	43	KED
| Cu	63	0.001	ug/L	0.003	307	48	53	18	KED
| Cu	65	-0.002	ug/L	0.003	148	27	24	27	KED
| Zn	66	-0.024	ug/L	0.012	47	33	22	26	KED
| Zn	67	0.021	ug/L	0.013	60	4	6	17	KED
| As	75	0.000	ug/L	0.006	3845	4	4	36	KED
Y	89		ug/L			263626	262920	3	Standard
Kr	83		ug/L			46	47	4	Standard
[> In-1	115		ug/L			7645	7966	2	KED
| Cd	111	0.020	ug/L	0.004	20	3	8	11	KED
| Cd	114	0.009	ug/L	0.009	100	6	12	48	KED
[> In	115		ug/L			437453	456600	1	Standard
| Ag	107	0.005	ug/L	0.002	38	109	205	18	Standard
[> Tb	159		ug/L			1136980	1140147	2	Standard
| Pb	208	-0.003	ug/L	0.000	8	605	350	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0206-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:17:38**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	59608	5	Standard
Cl	37		ug/L			5444164	7627636	1	Standard
[> Sc	45		ug/L			458454	523934	0	Standard
| Cr	52	8.669	ug/L	0.127	1	15942	193262	1	Standard
| Cr	53	10.900	ug/L	0.216	1	279	26233	1	Standard
[> Ge	72		ug/L			33055	32803	1	KED
| Ni	60	5.977	ug/L	0.119	1	65	8063	1	KED
| Ni	62	6.299	ug/L	0.346	5	13	1374	4	KED
| Cu	63	33.322	ug/L	0.662	1	48	125504	1	KED
| Cu	65	33.983	ug/L	0.215	0	27	64538	1	KED
| Zn	66	125.707	ug/L	2.761	2	33	61188	3	KED
| Zn	67	118.307	ug/L	1.072	0	4	9649	1	KED
| As	75	2.292	ug/L	0.019	0	4	603	2	KED
Y	89		ug/L			263626	296158	3	Standard
Kr	83		ug/L			46	60	11	Standard
[> In-1	115		ug/L			7645	7535	0	KED
| Cd	111	0.176	ug/L	0.046	26	3	47	25	KED
| Cd	114	0.200	ug/L	0.010	5	6	138	4	KED
[> In	115		ug/L			437453	439173	0	Standard
| Ag	107	0.041	ug/L	0.002	5	109	815	4	Standard
[> Tb	159		ug/L			1136980	1168876	1	Standard
| Pb	208	21.398	ug/L	0.334	1	605	1664109	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0206-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:22:03**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	52376	2	Standard
Cl	37		ug/L			5444164	7670624	2	Standard
[> Sc	45		ug/L			458454	508776	0	Standard
| Cr	52	3.576	ug/L	0.106	2	15942	87812	2	Standard
| Cr	53	6.480	ug/L	0.230	3	279	15273	4	Standard
[> Ge	72		ug/L			33055	32992	1	KED
| Ni	60	5.724	ug/L	0.105	1	65	7771	2	KED
| Ni	62	5.963	ug/L	0.221	3	13	1309	5	KED
| Cu	63	9.811	ug/L	0.275	2	48	37214	4	KED
| Cu	65	9.780	ug/L	0.273	2	27	18697	2	KED
| Zn	66	15.226	ug/L	0.261	1	33	7481	1	KED
| Zn	67	16.428	ug/L	0.737	4	4	1351	5	KED
| As	75	0.569	ug/L	0.060	10	4	153	9	KED
Y	89		ug/L			263626	274154	1	Standard
Kr	83		ug/L			46	52	12	Standard
[> In-1	115		ug/L			7645	7396	2	KED
| Cd	111	0.035	ug/L	0.024	67	3	11	49	KED
| Cd	114	0.030	ug/L	0.014	45	6	25	35	KED
[> In	115		ug/L			437453	448439	3	Standard
| Ag	107	0.008	ug/L	0.000	3	109	252	2	Standard
[> Tb	159		ug/L			1136980	1168273	1	Standard
| Pb	208	1.849	ug/L	0.032	1	605	144288	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0206-05**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:26:29**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	48722	3	Standard
Cl	37		ug/L			5444164	6581514	2	Standard
[> Sc	45		ug/L			458454	497441	1	Standard
| Cr	52	5.252	ug/L	0.102	1	15942	117957	1	Standard
| Cr	53	6.912	ug/L	0.071	1	279	15907	2	Standard
[> Ge	72		ug/L			33055	33033	0	KED
| Ni	60	6.252	ug/L	0.140	2	65	8490	1	KED
| Ni	62	6.220	ug/L	0.208	3	13	1367	3	KED
| Cu	63	20.244	ug/L	0.189	0	48	76812	1	KED
| Cu	65	19.813	ug/L	0.418	2	27	37901	2	KED
| Zn	66	84.258	ug/L	0.596	0	33	41306	0	KED
| Zn	67	79.791	ug/L	1.675	2	4	6555	1	KED
| As	75	1.376	ug/L	0.021	1	4	366	1	KED
Y	89		ug/L			263626	284049	1	Standard
Kr	83		ug/L			46	50	28	Standard
[> In-1	115		ug/L			7645	7535	2	KED
| Cd	111	0.142	ug/L	0.025	17	3	38	16	KED
| Cd	114	0.103	ug/L	0.017	16	6	74	14	KED
[> In	115		ug/L			437453	452547	2	Standard
| Ag	107	0.019	ug/L	0.003	15	109	457	9	Standard
[> Tb	159		ug/L			1136980	1163049	1	Standard
| Pb	208	14.972	ug/L	0.341	2	605	1158757	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0205-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:31:18**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	57098	1	Standard
Cl	37		ug/L			5444164	7689540	3	Standard
Sc	45		ug/L			458454	514288	0	Standard
Cr	52	7.051	ug/L	0.229	3	15942	157608	2	Standard
Cr	53	9.529	ug/L	0.238	2	279	22553	2	Standard
Ge	72		ug/L			33055	32478	1	KED
Ni	60	4.263	ug/L	0.059	1	65	5712	0	KED
Ni	62	4.278	ug/L	0.201	4	13	928	5	KED
Cu	63	20.249	ug/L	0.363	1	48	75532	1	KED
Cu	65	20.276	ug/L	0.288	1	27	38135	2	KED
Zn	66	64.864	ug/L	1.366	2	33	31267	1	KED
Zn	67	61.636	ug/L	0.970	1	4	4979	1	KED
As	75	1.838	ug/L	0.124	6	4	479	5	KED
Y	89		ug/L			263626	276137	4	Standard
Kr	83		ug/L			46	43	13	Standard
In-1	115		ug/L			7645	7617	4	KED
Cd	111	0.083	ug/L	0.006	7	3	24	2	KED
Cd	114	0.058	ug/L	0.018	30	6	45	28	KED
In	115		ug/L			437453	434000	1	Standard
Ag	107	0.021	ug/L	0.001	2	109	466	2	Standard
Tb	159		ug/L			1136980	1156688	1	Standard
Pb	208	4.882	ug/L	0.123	2	605	376147	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0205-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:35:43**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	54503	2	Standard
Cl	37		ug/L			5444164	7576570	2	Standard
[> Sc	45		ug/L			458454	510028	0	Standard
| Cr	52	6.035	ug/L	0.061	1	15942	136341	0	Standard
| Cr	53	8.761	ug/L	0.067	0	279	20587	0	Standard
[> Ge	72		ug/L			33055	32363	1	KED
| Ni	60	3.344	ug/L	0.045	1	65	4479	0	KED
| Ni	62	3.457	ug/L	0.043	1	13	750	1	KED
| Cu	63	14.018	ug/L	0.118	0	48	52122	0	KED
| Cu	65	14.173	ug/L	0.196	1	27	26570	2	KED
| Zn	66	44.124	ug/L	0.274	0	33	21207	0	KED
| Zn	67	41.673	ug/L	1.003	2	4	3356	2	KED
| As	75	1.546	ug/L	0.055	3	4	402	4	KED
Y	89		ug/L			263626	276876	0	Standard
Kr	83		ug/L			46	33	12	Standard
[> In-1	115		ug/L			7645	7200	2	KED
| Cd	111	0.034	ug/L	0.003	9	3	11	4	KED
| Cd	114	0.028	ug/L	0.028	100	6	23	74	KED
[> In	115		ug/L			437453	439455	2	Standard
| Ag	107	0.009	ug/L	0.001	12	109	270	4	Standard
[> Tb	159		ug/L			1136980	1170770	1	Standard
| Pb	208	2.029	ug/L	0.029	1	605	158639	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0205-05**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:40:08**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	57939	2	Standard
Cl	37		ug/L			5444164	7825750	4	Standard
[> Sc	45		ug/L			458454	516964	2	Standard
| Cr	52	7.227	ug/L	0.122	1	15942	161910	1	Standard
| Cr	53	10.049	ug/L	0.147	1	279	23885	1	Standard
[> Ge	72		ug/L			33055	32155	1	KED
| Ni	60	4.256	ug/L	0.186	4	65	5646	3	KED
| Ni	62	4.141	ug/L	0.168	4	13	890	2	KED
| Cu	63	20.271	ug/L	0.447	2	48	74852	0	KED
| Cu	65	20.212	ug/L	0.562	2	27	37625	1	KED
| Zn	66	62.555	ug/L	2.073	3	33	29850	1	KED
| Zn	67	58.946	ug/L	1.211	2	4	4714	0	KED
| As	75	1.874	ug/L	0.043	2	4	484	3	KED
Y	89		ug/L			263626	284285	0	Standard
Kr	83		ug/L			46	47	28	Standard
[> In-1	115		ug/L			7645	7489	2	KED
| Cd	111	0.050	ug/L	0.019	38	3	15	31	KED
| Cd	114	0.067	ug/L	0.031	45	6	50	40	KED
[> In	115		ug/L			437453	440706	1	Standard
| Ag	107	0.017	ug/L	0.001	8	109	406	4	Standard
[> Tb	159		ug/L			1136980	1159950	0	Standard
| Pb	208	4.835	ug/L	0.060	1	605	373640	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0202-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:44:57**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49507	1	Standard
Cl	37		ug/L			5444164	5952695	2	Standard
> Sc	45		ug/L			458454	483574	3	Standard
| Cr	52	0.273	ug/L	0.048	17	15942	21894	1	Standard
| Cr	53	0.823	ug/L	0.014	1	279	2099	1	Standard
> Ge	72		ug/L			33055	33901	0	KED
| Ni	60	0.742	ug/L	0.029	3	65	1093	3	KED
| Ni	62	0.829	ug/L	0.081	9	13	199	9	KED
| Cu	63	30.469	ug/L	0.472	1	48	118618	1	KED
| Cu	65	30.775	ug/L	0.455	1	27	60398	1	KED
| Zn	66	89.064	ug/L	0.983	1	33	44807	1	KED
| Zn	67	81.937	ug/L	2.336	2	4	6908	2	KED
| As	75	0.458	ug/L	0.013	2	4	128	2	KED
Y	89		ug/L			263626	278525	2	Standard
Kr	83		ug/L			46	43	22	Standard
> In-1	115		ug/L			7645	8012	3	KED
| Cd	111	0.121	ug/L	0.006	5	3	35	7	KED
| Cd	114	0.100	ug/L	0.010	9	6	76	11	KED
> In	115		ug/L			437453	451734	3	Standard
| Ag	107	0.000	ug/L	0.000	91	109	120	6	Standard
> Tb	159		ug/L			1136980	1174620	1	Standard
| Pb	208	0.175	ug/L	0.005	2	605	14259	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0659-DUP1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:49:22**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	50323	2	Standard
Cl	37		ug/L			5444164	6001725	3	Standard
> Sc	45		ug/L			458454	472453	2	Standard
| Cr	52	0.289	ug/L	0.011	3	15942	21687	2	Standard
| Cr	53	0.700	ug/L	0.005	0	279	1787	1	Standard
> Ge	72		ug/L			33055	34372	0	KED
| Ni	60	0.762	ug/L	0.038	5	65	1136	4	KED
| Ni	62	0.842	ug/L	0.058	6	13	205	6	KED
| Cu	63	31.667	ug/L	0.590	1	48	124989	1	KED
| Cu	65	31.874	ug/L	0.245	0	27	63426	0	KED
| Zn	66	92.410	ug/L	1.416	1	33	47135	1	KED
| Zn	67	84.950	ug/L	2.521	2	4	7262	3	KED
| As	75	0.458	ug/L	0.033	7	4	130	7	KED
Y	89		ug/L			263626	267633	5	Standard
Kr	83		ug/L			46	54	14	Standard
> In-1	115		ug/L			7645	7903	0	KED
| Cd	111	0.118	ug/L	0.011	9	3	34	8	KED
| Cd	114	0.092	ug/L	0.016	17	6	69	14	KED
> In	115		ug/L			437453	460059	2	Standard
| Ag	107	0.000	ug/L	0.001	6456	109	115	17	Standard
> Tb	159		ug/L			1136980	1161893	2	Standard
| Pb	208	0.179	ug/L	0.007	3	605	14467	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0659-MS1**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 09:54:12**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	48103	3	Standard
Cl	37		ug/L			5444164	6045641	2	Standard
> Sc	45		ug/L			458454	473185	1	Standard
| Cr	52	25.171	ug/L	0.418	1	15942	475414	1	Standard
| Cr	53	25.235	ug/L	0.239	0	279	54471	1	Standard
> Ge	72		ug/L			33055	34238	4	KED
| Ni	60	27.141	ug/L	1.100	4	65	37939	0	KED
| Ni	62	27.198	ug/L	0.738	2	13	6142	1	KED
| Cu	63	56.779	ug/L	1.618	2	48	223022	1	KED
| Cu	65	56.565	ug/L	1.574	2	27	112012	1	KED
| Zn	66	166.109	ug/L	5.734	3	33	84286	0	KED
| Zn	67	156.999	ug/L	7.399	4	4	13347	1	KED
| As	75	25.560	ug/L	0.907	3	4	6962	0	KED
Y	89		ug/L			263626	275405	0	Standard
Kr	83		ug/L			46	55	7	Standard
> In-1	115		ug/L			7645	8014	1	KED
| Cd	111	25.600	ug/L	0.802	3	3	6842	2	KED
| Cd	114	25.710	ug/L	0.272	1	6	18031	1	KED
> In	115		ug/L			437453	460121	1	Standard
| Ag	107	24.642	ug/L	0.383	1	109	448377	0	Standard
> Tb	159		ug/L			1136980	1177650	1	Standard
| Pb	208	27.252	ug/L	0.407	1	605	2135227	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLK

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 09:58:39

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	29328	2	Standard
Cl	37		ug/L			5444164	5919104	3	Standard
[> Sc	45		ug/L			458454	449694	1	Standard
| Cr	52	0.044	ug/L	0.030	68	15942	16400	2	Standard
| Cr	53	0.214	ug/L	0.013	6	279	709	2	Standard
[> Ge	72		ug/L			33055	33559	2	KED
| Ni	60	-0.033	ug/L	0.004	11	65	20	27	KED
| Ni	62	-0.033	ug/L	0.004	13	13	6	15	KED
| Cu	63	0.018	ug/L	0.002	8	48	118	4	KED
| Cu	65	0.025	ug/L	0.001	5	27	76	3	KED
| Zn	66	0.031	ug/L	0.029	94	33	49	29	KED
| Zn	67	0.105	ug/L	0.065	62	4	13	42	KED
| As	75	-0.002	ug/L	0.004	296	4	4	29	KED
Y	89		ug/L			263626	264674	2	Standard
Kr	83		ug/L			46	44	9	Standard
[> In-1	115		ug/L			7645	7675	2	KED
| Cd	111	0.010	ug/L	0.010	98	3	5	44	KED
| Cd	114	-0.002	ug/L	0.002	91	6	5	23	KED
[> In	115		ug/L			437453	447823	2	Standard
| Ag	107	-0.000	ug/L	0.001	274	109	106	19	Standard
[> Tb	159		ug/L			1136980	1135724	1	Standard
| Pb	208	0.000	ug/L	0.001	193	605	634	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 10:03:05

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	28881	3	Standard
Cl	37		ug/L			5444164	5837037	2	Standard
[> Sc	45		ug/L			458454	461826	0	Standard
| Cr	52	50.357	ug/L	0.592	1	15942	912234	0	Standard
| Cr	53	49.556	ug/L	0.827	1	279	104135	1	Standard
[> Ge	72		ug/L			33055	33716	0	KED
| Ni	60	52.616	ug/L	0.237	0	65	72448	0	KED
| Ni	62	51.994	ug/L	0.725	1	13	11558	0	KED
| Cu	63	53.087	ug/L	1.060	1	48	205514	2	KED
| Cu	65	52.885	ug/L	0.528	0	27	103205	0	KED
| Zn	66	53.382	ug/L	0.423	0	33	26722	0	KED
| Zn	67	51.405	ug/L	1.907	3	4	4311	3	KED
| As	75	51.341	ug/L	0.525	1	4	13780	0	KED
Y	89		ug/L			263626	267856	1	Standard
Kr	83		ug/L			46	47	10	Standard
[> In-1	115		ug/L			7645	7800	2	KED
| Cd	111	53.213	ug/L	1.127	2	3	13835	0	KED
| Cd	114	52.289	ug/L	1.215	2	6	35674	1	KED
[> In	115		ug/L			437453	443145	0	Standard
| Ag	107	48.628	ug/L	0.177	0	109	852247	1	Standard
[> Tb	159		ug/L			1136980	1157037	0	Standard
| Pb	208	54.283	ug/L	0.939	1	605	4178201	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 10:10:15

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	28033	2	Standard
Cl	37		ug/L			5444164	5779277	3	Standard
[> Sc	45		ug/L			458454	455680	1	Standard
| Cr	52	-0.006	ug/L	0.007	106	15942	15734	1	Standard
| Cr	53	0.063	ug/L	0.013	20	279	407	6	Standard
[> Ge	72		ug/L			33055	33367	3	KED
| Ni	60	-0.037	ug/L	0.002	4	65	15	12	KED
| Ni	62	-0.026	ug/L	0.015	55	13	8	35	KED
| Cu	63	-0.001	ug/L	0.004	277	48	43	30	KED
| Cu	65	-0.004	ug/L	0.003	84	27	20	28	KED
| Zn	66	-0.016	ug/L	0.013	80	33	26	23	KED
| Zn	67	0.023	ug/L	0.027	118	4	6	34	KED
| As	75	-0.001	ug/L	0.004	291	4	4	22	KED
Y	89		ug/L			263626	257297	4	Standard
Kr	83		ug/L			46	47	17	Standard
[> In-1	115		ug/L			7645	7939	0	KED
| Cd	111	0.007	ug/L	0.002	31	3	5	10	KED
| Cd	114	-0.003	ug/L	0.006	171	6	4	95	KED
[> In	115		ug/L			437453	439459	3	Standard
| Ag	107	0.005	ug/L	0.001	22	109	191	6	Standard
[> Tb	159		ug/L			1136980	1117786	3	Standard
| Pb	208	-0.003	ug/L	0.000	3	605	348	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0151-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:14:42**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	76728	5	Standard
Cl	37		ug/L			5444164	6337434	3	Standard
[> Sc	45		ug/L			458454	506281	0	Standard
| Cr	52	3.066	ug/L	0.045	1	15942	77435	1	Standard
| Cr	53	3.902	ug/L	0.023	0	279	9273	0	Standard
[> Ge	72		ug/L			33055	33725	3	KED
| Ni	60	2.911	ug/L	0.124	4	65	4068	1	KED
| Ni	62	2.998	ug/L	0.149	4	13	679	2	KED
| Cu	63	19.288	ug/L	0.634	3	48	74666	0	KED
| Cu	65	19.166	ug/L	0.547	2	27	37408	0	KED
| Zn	66	259.132	ug/L	7.475	2	33	129545	0	KED
| Zn	67	241.515	ug/L	4.545	1	4	20242	2	KED
| As	75	0.824	ug/L	0.043	5	4	225	1	KED
Y	89		ug/L			263626	285745	1	Standard
Kr	83		ug/L			46	48	40	Standard
[> In-1	115		ug/L			7645	7931	3	KED
| Cd	111	0.570	ug/L	0.019	3	3	153	0	KED
| Cd	114	0.576	ug/L	0.026	4	6	406	7	KED
[> In	115		ug/L			437453	458660	1	Standard
| Ag	107	0.019	ug/L	0.003	15	109	450	10	Standard
[> Tb	159		ug/L			1136980	1158814	0	Standard
| Pb	208	4.660	ug/L	0.045	0	605	359789	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0211-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:19:03**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	51714	3	Standard
Cl	37		ug/L			5444164	5609268	3	Standard
> Sc	45		ug/L			458454	481830	1	Standard
| Cr	52	0.517	ug/L	0.042	8	15942	26346	2	Standard
| Cr	53	0.738	ug/L	0.024	3	279	1907	1	Standard
> Ge	72		ug/L			33055	34473	2	KED
| Ni	60	0.339	ug/L	0.021	6	65	545	5	KED
| Ni	62	0.274	ug/L	0.036	13	13	76	11	KED
| Cu	63	2.479	ug/L	0.030	1	48	9860	1	KED
| Cu	65	2.413	ug/L	0.030	1	27	4841	1	KED
| Zn	66	76.492	ug/L	0.843	1	33	39132	1	KED
| Zn	67	69.613	ug/L	0.402	0	4	5968	2	KED
| As	75	0.163	ug/L	0.027	16	4	49	13	KED
Y	89		ug/L			263626	277040	3	Standard
Kr	83		ug/L			46	40	18	Standard
> In-1	115		ug/L			7645	8045	1	KED
| Cd	111	0.021	ug/L	0.012	58	3	8	37	KED
| Cd	114	0.026	ug/L	0.017	65	6	24	46	KED
> In	115		ug/L			437453	452700	3	Standard
| Ag	107	0.001	ug/L	0.001	54	109	137	9	Standard
> Tb	159		ug/L			1136980	1163850	1	Standard
| Pb	208	1.065	ug/L	0.022	2	605	83086	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0211-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:23:30**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	51785	2	Standard
Cl	37		ug/L			5444164	5649761	1	Standard
[> Sc	45		ug/L			458454	483282	1	Standard
| Cr	52	0.321	ug/L	0.017	5	15942	22777	2	Standard
| Cr	53	0.370	ug/L	0.004	1	279	1105	2	Standard
[> Ge	72		ug/L			33055	34449	1	KED
| Ni	60	0.216	ug/L	0.029	13	65	372	12	KED
| Ni	62	0.255	ug/L	0.022	8	13	72	7	KED
| Cu	63	2.230	ug/L	0.012	0	48	8870	1	KED
| Cu	65	2.183	ug/L	0.021	0	27	4380	0	KED
| Zn	66	50.608	ug/L	0.308	0	33	25886	1	KED
| Zn	67	46.208	ug/L	0.593	1	4	3960	0	KED
| As	75	0.163	ug/L	0.023	14	4	49	13	KED
Y	89		ug/L			263626	278686	2	Standard
Kr	83		ug/L			46	53	5	Standard
[> In-1	115		ug/L			7645	8072	1	KED
| Cd	111	0.023	ug/L	0.018	77	3	9	50	KED
| Cd	114	0.012	ug/L	0.006	49	6	15	29	KED
[> In	115		ug/L			437453	458245	1	Standard
| Ag	107	-0.001	ug/L	0.000	9	109	99	1	Standard
[> Tb	159		ug/L			1136980	1182221	2	Standard
| Pb	208	0.230	ug/L	0.005	2	605	18748	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0214-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:28:21**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49665	3	Standard
Cl	37		ug/L			5444164	5648430	4	Standard
Sc	45		ug/L			458454	469678	3	Standard
Cr	52	0.591	ug/L	0.025	4	15942	27026	1	Standard
Cr	53	0.613	ug/L	0.017	2	279	1594	5	Standard
Ge	72		ug/L			33055	34232	0	KED
Ni	60	0.138	ug/L	0.018	12	65	260	9	KED
Ni	62	0.144	ug/L	0.025	17	13	46	12	KED
Cu	63	1.382	ug/L	0.043	3	48	5479	3	KED
Cu	65	1.403	ug/L	0.033	2	27	2808	2	KED
Zn	66	26.733	ug/L	0.299	1	33	13605	1	KED
Zn	67	25.487	ug/L	0.846	3	4	2172	2	KED
As	75	0.082	ug/L	0.002	2	4	26	2	KED
Y	89		ug/L			263626	271430	4	Standard
Kr	83		ug/L			46	39	28	Standard
In-1	115		ug/L			7645	7996	2	KED
Cd	111	0.031	ug/L	0.018	58	3	11	44	KED
Cd	114	0.018	ug/L	0.006	31	6	19	22	KED
In	115		ug/L			437453	454546	2	Standard
Ag	107	-0.003	ug/L	0.000	6	109	64	5	Standard
Tb	159		ug/L			1136980	1134808	1	Standard
Pb	208	0.198	ug/L	0.005	2	605	15529	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0214-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:32:47**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49979	3	Standard
Cl	37		ug/L			5444164	5617998	3	Standard
[> Sc	45		ug/L			458454	487646	1	Standard
| Cr	52	0.454	ug/L	0.035	7	15942	25493	3	Standard
| Cr	53	0.478	ug/L	0.025	5	279	1355	4	Standard
[> Ge	72		ug/L			33055	34488	0	KED
| Ni	60	0.166	ug/L	0.012	7	65	301	5	KED
| Ni	62	0.185	ug/L	0.064	34	13	56	25	KED
| Cu	63	1.350	ug/L	0.027	1	48	5395	1	KED
| Cu	65	1.307	ug/L	0.058	4	27	2636	3	KED
| Zn	66	17.184	ug/L	0.358	2	33	8823	1	KED
| Zn	67	16.699	ug/L	0.609	3	4	1436	4	KED
| As	75	0.059	ug/L	0.006	9	4	21	7	KED
Y	89		ug/L			263626	283316	0	Standard
Kr	83		ug/L			46	45	11	Standard
[> In-1	115		ug/L			7645	8024	3	KED
| Cd	111	0.013	ug/L	0.023	170	3	6	87	KED
| Cd	114	0.009	ug/L	0.001	9	6	12	7	KED
[> In	115		ug/L			437453	472154	3	Standard
| Ag	107	-0.003	ug/L	0.001	21	109	66	20	Standard
[> Tb	159		ug/L			1136980	1189107	1	Standard
| Pb	208	0.350	ug/L	0.002	0	605	28314	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0216-01**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:37:08**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	50951	3	Standard
Cl	37		ug/L			5444164	42464996	5	Standard
[> Sc	45		ug/L			458454	503460	3	Standard
| Cr	52	0.809	ug/L	0.042	5	15942	33188	2	Standard
| Cr	53	44.513	ug/L	0.325	0	279	101993	3	Standard
[> Ge	72		ug/L			33055	26053	11	KED
| Ni	60	1.657	ug/L	0.127	7	65	1802	4	KED
| Ni	62	1.666	ug/L	0.356	21	13	292	8	KED
| Cu	63	0.215	ug/L	0.007	3	48	680	12	KED
| Cu	65	0.210	ug/L	0.008	3	27	338	8	KED
| Zn	66	4.854	ug/L	0.551	11	33	1885	1	KED
| Zn	67	8.278	ug/L	0.875	10	4	535	3	KED
| As	75	0.144	ug/L	0.050	34	4	32	19	KED
Y	89		ug/L			263626	236567	4	Standard
Kr	83		ug/L			46	147	14	Standard
[> In-1	115		ug/L			7645	6604	2	KED
| Cd	111	0.102	ug/L	0.029	28	3	25	22	KED
| Cd	114	0.083	ug/L	0.019	23	6	53	20	KED
[> In	115		ug/L			437453	329745	1	Standard
| Ag	107	-0.001	ug/L	0.001	92	109	74	11	Standard
[> Tb	159		ug/L			1136980	966312	0	Standard
| Pb	208	0.042	ug/L	0.001	3	605	3243	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0216-02**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:44:20**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	54143	2	Standard
Cl	37		ug/L			5444164	6827464	1	Standard
[> Sc	45		ug/L			458454	509590	1	Standard
| Cr	52	0.784	ug/L	0.034	4	15942	33112	0	Standard
| Cr	53	3.590	ug/L	0.038	1	279	8611	0	Standard
[> Ge	72		ug/L			33055	35168	1	KED
| Ni	60	0.212	ug/L	0.020	9	65	373	8	KED
| Ni	62	0.240	ug/L	0.017	7	13	70	7	KED
| Cu	63	2.598	ug/L	0.077	2	48	10539	1	KED
| Cu	65	2.548	ug/L	0.046	1	27	5215	1	KED
| Zn	66	3.129	ug/L	0.176	5	33	1666	4	KED
| Zn	67	5.923	ug/L	0.360	6	4	522	6	KED
| As	75	2.522	ug/L	0.047	1	4	710	0	KED
Y	89		ug/L			263626	283522	1	Standard
Kr	83		ug/L			46	52	12	Standard
[> In-1	115		ug/L			7645	7973	3	KED
| Cd	111	0.013	ug/L	0.006	44	3	6	24	KED
| Cd	114	0.006	ug/L	0.008	125	6	10	46	KED
[> In	115		ug/L			437453	462915	1	Standard
| Ag	107	-0.004	ug/L	0.000	8	109	43	15	Standard
[> Tb	159		ug/L			1136980	1193712	0	Standard
| Pb	208	0.231	ug/L	0.007	3	605	18966	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0216-03**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:48:47**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	51782	2	Standard
Cl	37		ug/L			5444164	5908336	2	Standard
[> Sc	45		ug/L			458454	504093	1	Standard
| Cr	52	0.356	ug/L	0.031	8	15942	24430	1	Standard
| Cr	53	1.504	ug/L	0.065	4	279	3746	3	Standard
[> Ge	72		ug/L			33055	35048	2	KED
| Ni	60	0.451	ug/L	0.005	1	65	714	2	KED
| Ni	62	0.416	ug/L	0.124	29	13	110	23	KED
| Cu	63	3.519	ug/L	0.051	1	48	14207	0	KED
| Cu	65	3.586	ug/L	0.031	0	27	7302	2	KED
| Zn	66	51.412	ug/L	1.976	3	33	26739	1	KED
| Zn	67	53.984	ug/L	0.806	1	4	4707	2	KED
| As	75	0.410	ug/L	0.013	3	4	119	5	KED
Y	89		ug/L			263626	290437	1	Standard
Kr	83		ug/L			46	48	32	Standard
[> In-1	115		ug/L			7645	7961	3	KED
| Cd	111	0.043	ug/L	0.010	22	3	14	16	KED
| Cd	114	0.027	ug/L	0.027	101	6	24	72	KED
[> In	115		ug/L			437453	474699	2	Standard
| Ag	107	-0.003	ug/L	0.001	19	109	54	25	Standard
[> Tb	159		ug/L			1136980	1225867	0	Standard
| Pb	208	0.973	ug/L	0.012	1	605	79969	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0216-04**

Sample Dil Factor:

Comments:

Sample Date/Time: **Friday, April 28, 2023 10:53:14**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	49633	2	Standard
Cl	37		ug/L			5444164	5846058	2	Standard
[> Sc	45		ug/L			458454	495858	2	Standard
| Cr	52	0.285	ug/L	0.031	11	15942	22678	0	Standard
| Cr	53	0.998	ug/L	0.014	1	279	2546	1	Standard
[> Ge	72		ug/L			33055	34817	0	KED
| Ni	60	0.667	ug/L	0.064	9	65	1017	9	KED
| Ni	62	0.603	ug/L	0.041	6	13	153	5	KED
| Cu	63	0.940	ug/L	0.041	4	48	3810	4	KED
| Cu	65	0.972	ug/L	0.043	4	27	1988	4	KED
| Zn	66	30.648	ug/L	0.264	0	33	15858	0	KED
| Zn	67	41.803	ug/L	0.322	0	4	3622	0	KED
| As	75	0.088	ug/L	0.013	14	4	29	11	KED
Y	89		ug/L			263626	285701	2	Standard
Kr	83		ug/L			46	58	35	Standard
[> In-1	115		ug/L			7645	7876	0	KED
| Cd	111	0.073	ug/L	0.008	10	3	22	8	KED
| Cd	114	0.062	ug/L	0.004	6	6	49	4	KED
[> In	115		ug/L			437453	472393	1	Standard
| Ag	107	0.000	ug/L	0.000	374	109	120	4	Standard
[> Tb	159		ug/L			1136980	1187787	1	Standard
| Pb	208	4.029	ug/L	0.097	2	605	318885	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLL

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 10:57:41

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	31544	2	Standard
Cl	37		ug/L			5444164	5784626	3	Standard
[> Sc	45		ug/L			458454	477975	1	Standard
| Cr	52	-0.001	ug/L	0.016	1561	15942	16600	1	Standard
| Cr	53	<u>0.238</u>	ug/L	0.011	4	279	807	2	Standard
[> Ge	72		ug/L			33055	34560	1	KED
| Ni	60	-0.032	ug/L	0.006	17	65	22	36	KED
| Ni	62	-0.039	ug/L	0.017	43	13	5	66	KED
| Cu	63	0.017	ug/L	0.003	19	48	120	12	KED
| Cu	65	0.017	ug/L	0.006	34	27	63	17	KED
| Zn	66	0.050	ug/L	0.008	16	33	60	8	KED
| Zn	67	0.101	ug/L	0.045	44	4	13	28	KED
| As	75	-0.009	ug/L	0.004	49	4	2	52	KED
Y	89		ug/L			263626	274297	1	Standard
Kr	83		ug/L			46	39	24	Standard
[> In-1	115		ug/L			7645	7846	1	KED
| Cd	111	0.008	ug/L	0.006	71	3	5	26	KED
| Cd	114	-0.008	ug/L	0.002	19	6	1	90	KED
[> In	115		ug/L			437453	466007	2	Standard
| Ag	107	-0.005	ug/L	0.000	10	109	26	36	Standard
[> Tb	159		ug/L			1136980	1163822	0	Standard
| Pb	208	0.000	ug/L	0.002	488	605	653	25	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVL

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 11:02:07

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	30712	2	Standard
Cl	37		ug/L			5444164	5728917	2	Standard
[> Sc	45		ug/L			458454	483340	1	Standard
| Cr	52	49.970	ug/L	0.577	1	15942	947631	2	Standard
| Cr	53	49.162	ug/L	0.195	0	279	108127	0	Standard
[> Ge	72		ug/L			33055	34350	1	KED
| Ni	60	53.470	ug/L	0.272	0	65	75005	0	KED
| Ni	62	51.200	ug/L	0.893	1	13	11595	1	KED
| Cu	63	53.378	ug/L	1.115	2	48	210482	0	KED
| Cu	65	54.781	ug/L	0.508	0	27	108915	1	KED
| Zn	66	52.840	ug/L	1.954	3	33	26940	2	KED
| Zn	67	52.845	ug/L	0.755	1	4	4515	0	KED
| As	75	51.350	ug/L	0.768	1	4	14041	0	KED
Y	89		ug/L			263626	281016	1	Standard
Kr	83		ug/L			46	48	12	Standard
[> In-1	115		ug/L			7645	7854	1	KED
| Cd	111	52.339	ug/L	0.875	1	3	13705	0	KED
| Cd	114	52.140	ug/L	1.486	2	6	35824	1	KED
[> In	115		ug/L			437453	461895	0	Standard
| Ag	107	47.826	ug/L	0.662	1	109	873670	1	Standard
[> Tb	159		ug/L			1136980	1185506	2	Standard
| Pb	208	55.570	ug/L	1.222	2	605	4381108	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBL

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 11:09:17

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	30136	2	Standard
Cl	37		ug/L			5444164	5693760	3	Standard
[> Sc	45		ug/L			458454	477568	1	Standard
| Cr	52	-0.014	ug/L	0.036	262	15942	16347	3	Standard
| Cr	53	0.074	ug/L	0.010	13	279	451	4	Standard
[> Ge	72		ug/L			33055	35157	2	KED
| Ni	60	-0.035	ug/L	0.001	1	65	19	5	KED
| Ni	62	-0.042	ug/L	0.025	58	13	5	108	KED
| Cu	63	-0.001	ug/L	0.003	261	48	47	20	KED
| Cu	65	-0.005	ug/L	0.003	70	27	20	32	KED
| Zn	66	0.002	ug/L	0.027	1245	33	36	37	KED
| Zn	67	0.019	ug/L	0.035	184	4	6	45	KED
| As	75	0.001	ug/L	0.007	549	4	5	36	KED
Y	89		ug/L			263626	279570	1	Standard
Kr	83		ug/L			46	62	6	Standard
[> In-1	115		ug/L			7645	8503	0	KED
| Cd	111	0.004	ug/L	0.003	77	3	4	20	KED
| Cd	114	0.002	ug/L	0.008	321	6	8	66	KED
[> In	115		ug/L			437453	467643	1	Standard
| Ag	107	0.005	ug/L	0.001	18	109	215	7	Standard
[> Tb	159		ug/L			1136980	1167315	2	Standard
| Pb	208	-0.003	ug/L	0.000	7	605	394	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23D0215-01**

Sample Dil Factor: **2**

Comments:

Sample Date/Time: **Friday, April 28, 2023 11:16:47**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	46196	1	Standard
Cl	37		ug/L			5444164	8284309	2	Standard
> Sc	45		ug/L			458454	505527	0	Standard
| Cr	52	51.308	ug/L	0.740	1	15942	1017200	2	Standard
| Cr	53	54.313	ug/L	0.920	1	279	124920	2	Standard
> Ge	72		ug/L			33055	34231	1	KED
| Ni	60	2.056	ug/L	0.009	0	65	2939	1	KED
| Ni	62	2.067	ug/L	0.103	4	13	480	6	KED
| Cu	63	11.240	ug/L	0.213	1	48	44211	1	KED
| Cu	65	11.273	ug/L	0.174	1	27	22354	0	KED
| Zn	66	33.294	ug/L	0.997	2	33	16930	1	KED
| Zn	67	30.314	ug/L	0.071	0	4	2583	1	KED
| As	75	0.119	ug/L	0.006	4	4	37	3	KED
Y	89		ug/L			263626	285225	2	Standard
Kr	83		ug/L			46	50	36	Standard
> In-1	115		ug/L			7645	8109	1	KED
| Cd	111	0.791	ug/L	0.046	5	3	217	5	KED
| Cd	114	0.774	ug/L	0.058	7	6	555	7	KED
> In	115		ug/L			437453	461198	2	Standard
| Ag	107	0.018	ug/L	0.001	8	109	446	6	Standard
> Tb	159		ug/L			1136980	1197132	0	Standard
| Pb	208	0.249	ug/L	0.003	1	605	20490	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0248-01

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 11:21:07

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	107240	8	Standard
Cl	37		ug/L			5444164	10027694	6	Standard
[> Sc	45		ug/L			458454	447521	4	Standard
| Cr	52	1.216	ug/L	0.025	2	15942	36530	4	Standard
| Cr	53	6.095	ug/L	0.158	2	279	12645	3	Standard
[> Ge	72		ug/L			33055	24956	1	KED
| Ni	60	13.877	ug/L	0.100	0	65	14180	1	KED
| Ni	62	13.765	ug/L	0.271	1	13	2272	1	KED
| Cu	63	1.217	ug/L	0.041	3	48	3521	2	KED
| Cu	65	1.258	ug/L	0.056	4	27	1838	4	KED
| Zn	66	14.676	ug/L	0.523	3	33	5455	2	KED
| Zn	67	16.902	ug/L	0.853	5	4	1051	4	KED
[As	75	5056.515	ug/L	70.621	1	4	1004202	0	KED
Y	89		ug/L			263626	244825	1	Standard
Kr	83		ug/L			46	130	5	Standard
[> In-1	115		ug/L			7645	5770	1	KED
| Cd	111	0.175	ug/L	0.063	36	3	36	34	KED
| Cd	114	0.107	ug/L	0.024	22	6	58	21	KED
[> In	115		ug/L			437453	342939	2	Standard
| Ag	107	0.004	ug/L	0.001	22	109	135	6	Standard
[> Tb	159		ug/L			1136980	975969	2	Standard
[Pb	208	0.046	ug/L	0.001	1	605	3495	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLM

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 11:25:27

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	31568	4	Standard
Cl	37		ug/L			5444164	5881618	5	Standard
[> Sc	45		ug/L			458454	470623	1	Standard
| Cr	52	-0.057	ug/L	0.030	52	15942	15321	3	Standard
| Cr	53	0.185	ug/L	0.016	8	279	680	2	Standard
[> Ge	72		ug/L			33055	34607	1	KED
| Ni	60	-0.031	ug/L	0.008	26	65	24	47	KED
| Ni	62	-0.034	ug/L	0.005	14	13	6	15	KED
| Cu	63	0.020	ug/L	0.004	22	48	130	14	KED
| Cu	65	0.022	ug/L	0.003	12	27	73	6	KED
| Zn	66	0.060	ug/L	0.008	13	33	66	7	KED
| Zn	67	0.050	ug/L	0.052	105	4	8	49	KED
| As	75	0.228	ug/L	0.050	22	4	67	18	KED
Y	89		ug/L			263626	296872	1	Standard
Kr	83		ug/L			46	41	20	Standard
[> In-1	115		ug/L			7645	7356	2	KED
| Cd	111	-0.001	ug/L	0.008	859	3	2	66	KED
| Cd	114	-0.010	ug/L	0.000	1	6	0	41	KED
[> In	115		ug/L			437453	477042	1	Standard
| Ag	107	-0.005	ug/L	0.000	8	109	33	23	Standard
[> Tb	159		ug/L			1136980	1225773	1	Standard
| Pb	208	-0.000	ug/L	0.000	169	605	638	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0654-01** RE1

Sample Dil Factor: **10000**

Comments:

Sample Date/Time: **Friday, April 28, 2023 11:29:59**

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	38755	4	Standard
Cl	37		ug/L			5444164	5766458	3	Standard
> Sc	45		ug/L			458454	460830	0	Standard
| Cr	52	-0.048	ug/L	0.013	27	15942	15172	1	Standard
| Cr	53	0.089	ug/L	0.022	25	279	467	9	Standard
> Ge	72		ug/L			33055	34765	0	KED
| Ni	60	12.127	ug/L	0.172	1	65	17270	1	KED
| Ni	62	11.887	ug/L	0.173	1	13	2736	1	KED
| Cu	63	0.010	ug/L	0.004	39	48	92	17	KED
| Cu	65	0.008	ug/L	0.004	43	27	46	15	KED
| Zn	66	73.551	ug/L	0.805	1	33	37953	1	KED
| Zn	67	67.324	ug/L	0.673	1	4	5822	1	KED
| As	75	0.011	ug/L	0.007	61	4	7	24	KED
| Y	89		ug/L			263626	289040	1	Standard
| Kr	83		ug/L			46	44	25	Standard
> In-1	115		ug/L			7645	7504	0	KED
| Cd	111	0.009	ug/L	0.005	49	3	5	20	KED
| Cd	114	-0.002	ug/L	0.006	308	6	4	81	KED
> In	115		ug/L			437453	470304	2	Standard
| Ag	107	-0.005	ug/L	0.000	4	109	29	16	Standard
> Tb	159		ug/L			1136980	1197455	1	Standard
| Pb	208	0.001	ug/L	0.000	37	605	695	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0654-01**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, April 28, 2023 11:35:49**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	96247	4	Standard
Cl	37		ug/L			5444164	5499665	4	Standard
> Sc	45		ug/L			458454	445938	2	Standard
| Cr	52	0.747	ug/L	0.040	5	15942	28352	4	Standard
| Cr	53	0.739	ug/L	0.027	3	279	1767	3	Standard
> Ge	72		ug/L			33055	32582	1	KED
| Ni	60	1198.905	ug/L	24.441	2	65	1593757	1	KED
| Ni	62	1211.720	ug/L	25.753	2	13	259972	0	KED
| Cu	63	0.656	ug/L	0.036	5	48	2500	4	KED
| Cu	65	0.704	ug/L	0.020	2	27	1354	3	KED
| Zn	66	7295.255	ug/L	246.372	3	33	3523830	2	KED
| Zn	67	6460.455	ug/L	94.872	1	4	523122	0	KED
| As	75	0.019	ug/L	0.004	18	4	9	8	KED
| Y	89		ug/L			263626	280069	4	Standard
| Kr	83		ug/L			46	78	8	Standard
> In-1	115		ug/L			7645	7374	2	KED
| Cd	111	0.029	ug/L	0.007	23	3	10	14	KED
| Cd	114	0.022	ug/L	0.008	36	6	20	24	KED
> In	115		ug/L			437453	448096	2	Standard
| Ag	107	0.002	ug/L	0.001	33	109	144	5	Standard
> Tb	159		ug/L			1136980	1163718	1	Standard
| Pb	208	0.265	ug/L	0.003	1	605	21162	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLN

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 11:43:40

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	30233	4	Standard
Cl	37		ug/L			5444164	5848317	3	Standard
[> Sc	45		ug/L			458454	455471	1	Standard
| Cr	52	-0.068	ug/L	0.003	4	15942	14643	1	Standard
| Cr	53	-0.012	ug/L	0.006	49	279	252	3	Standard
[> Ge	72		ug/L			33055	33987	1	KED
| Ni	60	-0.023	ug/L	0.007	28	65	35	26	KED
| Ni	62	-0.039	ug/L	0.008	20	13	5	33	KED
| Cu	63	0.019	ug/L	0.004	19	48	125	13	KED
| Cu	65	0.023	ug/L	0.016	67	27	74	43	KED
| Zn	66	0.088	ug/L	0.028	31	33	78	16	KED
| Zn	67	0.067	ug/L	0.048	72	4	10	39	KED
| As	75	0.001	ug/L	0.001	182	4	4	5	KED
Y	89		ug/L			263626	280518	2	Standard
Kr	83		ug/L			46	36	14	Standard
[> In-1	115		ug/L			7645	7775	0	KED
| Cd	111	0.008	ug/L	0.011	126	3	5	50	KED
| Cd	114	-0.008	ug/L	0.002	22	6	0	143	KED
[> In	115		ug/L			437453	462544	2	Standard
| Ag	107	-0.005	ug/L	0.000	5	109	33	12	Standard
[> Tb	159		ug/L			1136980	1167530	2	Standard
| Pb	208	0.000	ug/L	0.001	313	605	640	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLO

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 11:50:24

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	30351	1	Standard
Cl	37		ug/L			5444164	5896945	3	Standard
[> Sc	45		ug/L			458454	466622	1	Standard
| Cr	52	-0.059	ug/L	0.020	34	15942	15164	2	Standard
| Cr	53	-0.022	ug/L	0.005	21	279	237	5	Standard
[> Ge	72		ug/L			33055	33428	0	KED
| Ni	60	-0.031	ug/L	0.006	18	65	24	32	KED
| Ni	62	-0.027	ug/L	0.010	36	13	8	26	KED
| Cu	63	0.027	ug/L	0.002	7	48	152	4	KED
| Cu	65	0.016	ug/L	0.005	29	27	58	15	KED
| Zn	66	0.058	ug/L	0.021	36	33	62	16	KED
| Zn	67	0.068	ug/L	0.036	52	4	10	28	KED
| As	75	-0.005	ug/L	0.005	96	4	3	37	KED
Y	89		ug/L			263626	290666	1	Standard
Kr	83		ug/L			46	41	39	Standard
[> In-1	115		ug/L			7645	7423	2	KED
| Cd	111	0.002	ug/L	0.006	354	3	3	41	KED
| Cd	114	-0.007	ug/L	0.003	42	6	1	109	KED
[> In	115		ug/L			437453	469149	2	Standard
| Ag	107	-0.005	ug/L	0.000	3	109	30	10	Standard
[> Tb	159		ug/L			1136980	1202261	0	Standard
| Pb	208	-0.000	ug/L	0.000	48	605	602	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0394-BLK2

Sample Dil Factor: 20

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 11:55:14

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	41926	2	Standard
Cl	37		ug/L			5444164	5910138	3	Standard
[> Sc	45		ug/L			458454	476533	2	Standard
| Cr	52	-0.069	ug/L	0.031	45	15942	15296	1	Standard
| Cr	53	-0.026	ug/L	0.012	44	279	233	11	Standard
[> Ge	72		ug/L			33055	34576	0	KED
| Ni	60	-0.038	ug/L	0.006	14	65	14	52	KED
| Ni	62	-0.047	ug/L	0.015	30	13	3	86	KED
| Cu	63	0.301	ug/L	0.010	3	48	1247	2	KED
| Cu	65	0.300	ug/L	0.013	4	27	629	5	KED
| Zn	66	0.189	ug/L	0.024	12	33	132	10	KED
| Zn	67	0.168	ug/L	0.040	23	4	19	17	KED
| As	75	0.001	ug/L	0.006	573	4	5	30	KED
Y	89		ug/L			263626	298752	1	Standard
Kr	83		ug/L			46	55	24	Standard
[> In-1	115		ug/L			7645	7852	1	KED
| Cd	111	0.005	ug/L	0.009	202	3	4	53	KED
| Cd	114	-0.006	ug/L	0.003	54	6	2	96	KED
[> In	115		ug/L			437453	480704	0	Standard
| Ag	107	-0.005	ug/L	0.000	6	109	29	20	Standard
[> Tb	159		ug/L			1136980	1215403	0	Standard
| Pb	208	-0.002	ug/L	0.000	12	605	480	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVM

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 11:59:40

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	29748	3	Standard
Cl	37		ug/L			5444164	5544468	3	Standard
[> Sc	45		ug/L			458454	471963	2	Standard
| Cr	52	48.063	ug/L	0.806	1	15942	890435	1	Standard
| Cr	53	47.548	ug/L	0.700	1	279	102106	0	Standard
[> Ge	72		ug/L			33055	33617	1	KED
| Ni	60	54.520	ug/L	0.500	0	65	74845	1	KED
| Ni	62	54.253	ug/L	1.008	1	13	12026	2	KED
| Cu	63	55.226	ug/L	0.738	1	48	213143	0	KED
| Cu	65	54.698	ug/L	0.818	1	27	106420	0	KED
| Zn	66	54.177	ug/L	1.148	2	33	27039	2	KED
| Zn	67	52.963	ug/L	1.201	2	4	4429	1	KED
| As	75	51.433	ug/L	0.563	1	4	13764	1	KED
Y	89		ug/L			263626	296548	2	Standard
Kr	83		ug/L			46	57	26	Standard
[> In-1	115		ug/L			7645	7420	0	KED
| Cd	111	54.938	ug/L	0.395	0	3	13592	0	KED
| Cd	114	54.220	ug/L	0.808	1	6	35198	1	KED
[> In	115		ug/L			437453	480588	2	Standard
| Ag	107	46.918	ug/L	1.195	2	109	891516	1	Standard
[> Tb	159		ug/L			1136980	1207200	1	Standard
| Pb	208	59.998	ug/L	0.749	1	605	4818191	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBM

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:06:50

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27642	29535	2	Standard
Cl	37		ug/L			5444164	5504155	2	Standard
[> Sc	45		ug/L			458454	444874	4	Standard
| Cr	52	-0.050	ug/L	0.058	116	15942	14585	2	Standard
| Cr	53	-0.033	ug/L	0.014	40	279	203	11	Standard
[> Ge	72		ug/L			33055	34055	0	KED
| Ni	60	-0.042	ug/L	0.005	11	65	9	72	KED
| Ni	62	-0.050	ug/L	0.018	35	13	3	124	KED
| Cu	63	0.003	ug/L	0.001	46	48	60	7	KED
| Cu	65	-0.003	ug/L	0.004	146	27	23	32	KED
| Zn	66	0.004	ug/L	0.019	442	33	36	26	KED
| Zn	67	0.006	ug/L	0.034	583	4	5	57	KED
| As	75	0.004	ug/L	0.005	131	4	5	22	KED
Y	89		ug/L			263626	277251	3	Standard
Kr	83		ug/L			46	43	30	Standard
[> In-1	115		ug/L			7645	7706	1	KED
| Cd	111	0.013	ug/L	0.003	25	3	6	14	KED
| Cd	114	-0.000	ug/L	0.004	2867	6	6	48	KED
[> In	115		ug/L			437453	464495	6	Standard
| Ag	107	0.004	ug/L	0.001	23	109	185	4	Standard
[> Tb	159		ug/L			1136980	1150372	4	Standard
| Pb	208	-0.002	ug/L	0.000	15	605	446	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:14:29

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L				28891	1	Standard
Cl	37		ug/L				6767002	0	Standard
[> Sc	45		ug/L				503319	4	Standard
| Cr	52		ug/L				16327	3	Standard
[Cr	53		ug/L				222	8	Standard
Y	89		ug/L				315437	1	Standard
Kr	83		ug/L				57	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVN

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:15:56

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L			28891	29061	1	Standard
Cl	37	ug/L			6767002	6954292	1	Standard
Sc	45	ug/L			503319	515659	2	Standard
Cr	52	48.290	0.697	1	16327	976167	1	Standard
Cr	53	48.169	0.842	1	222	112930	2	Standard
Y	89	ug/L			315437	317932	0	Standard
Kr	83	ug/L			57	57	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBN

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:20:07

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	29901	4	Standard
Cl	37		ug/L			6767002	7132894	0	Standard
Sc	45		ug/L			503319	523133	1	Standard
Cr	52	0.004	ug/L	0.026	674	16327	17045	2	Standard
Cr	53	-0.009	ug/L	0.002	24	222	209	2	Standard
Y	89		ug/L			315437	322304	1	Standard
Kr	83		ug/L			57	45	35	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-02RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 12:24:29**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	43539	2	Standard
Cl	37		ug/L			6767002	7170421	0	Standard
Sc	45		ug/L			503319	628167	0	Standard
Cr	52	5.935	ug/L	0.044	0	16327	164052	0	Standard
Cr	53	5.961	ug/L	0.076	1	222	17271	1	Standard
Y	89		ug/L			315437	470921	3	Standard
Kr	83		ug/L			57	74	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-03RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 12:25:57**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	42227	1	Standard
Cl	37		ug/L			6767002	7109210	1	Standard
Sc	45		ug/L			503319	619013	2	Standard
Cr	52	6.827	ug/L	0.237	3	16327	182857	0	Standard
Cr	53	6.762	ug/L	0.123	1	222	19265	1	Standard
Y	89		ug/L			315437	490167	0	Standard
Kr	83		ug/L			57	68	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-04RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 12:27:25**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	46375	2	Standard
Cl	37		ug/L			6767002	7011567	1	Standard
Sc	45		ug/L			503319	615828	0	Standard
Cr	52	6.818	ug/L	0.070	1	16327	181770	0	Standard
Cr	53	6.788	ug/L	0.054	0	222	19244	1	Standard
Y	89		ug/L			315437	475332	1	Standard
Kr	83		ug/L			57	62	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-05RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 12:28:52**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	44895	3	Standard
Cl	37		ug/L			6767002	6972211	0	Standard
Sc	45		ug/L			503319	620479	2	Standard
Cr	52	6.039	ug/L	0.105	1	16327	164486	1	Standard
Cr	53	6.025	ug/L	0.174	2	222	17235	2	Standard
Y	89		ug/L			315437	474937	1	Standard
Kr	83		ug/L			57	62	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-06RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 12:30:20**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	44001	2	Standard
Cl	37		ug/L			6767002	6997321	0	Standard
Sc	45		ug/L			503319	614839	1	Standard
Cr	52	6.094	ug/L	0.179	2	16327	164303	1	Standard
Cr	53	5.943	ug/L	0.155	2	222	16852	1	Standard
Y	89		ug/L			315437	476373	1	Standard
Kr	83		ug/L			57	57	23	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0774-01RE1

Sample Dil Factor: 50

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 12:31:47

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	45080	1	Standard
Cl	37		ug/L			6767002	6979431	0	Standard
[> Sc	45		ug/L			503319	630116	0	Standard
| Cr	52	5.922	ug/L	0.085	1	16327	164237	0	Standard
| Cr	53	5.964	ug/L	0.162	2	222	17332	2	Standard
Y	89		ug/L			315437	471040	2	Standard
Kr	83		ug/L			57	71	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0365-DUP2

Sample Dil Factor: 50

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 12:33:14

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	45462	2	Standard
Cl	37		ug/L			6767002	7006980	1	Standard
Sc	45		ug/L			503319	619361	1	Standard
Cr	52	6.642	ug/L	0.139	2	16327	178590	1	Standard
Cr	53	6.508	ug/L	0.098	1	222	18566	2	Standard
Y	89		ug/L			315437	474550	2	Standard
Kr	83		ug/L			57	76	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0365-MS2

Sample Dil Factor: 50

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 12:34:41

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	43126	1	Standard
Cl	37		ug/L			6767002	6951285	0	Standard
Sc	45		ug/L			503319	624699	0	Standard
Cr	52	15.065	ug/L	0.139	0	16327	382948	1	Standard
Cr	53	14.732	ug/L	0.313	2	222	42036	1	Standard
Y	89		ug/L			315437	466197	1	Standard
Kr	83		ug/L			57	76	29	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0365-MSD2

Sample Dil Factor: 50

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 12:36:08

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	41008	2	Standard
Cl	37		ug/L			6767002	7068704	0	Standard
[> Sc	45		ug/L			503319	635016	1	Standard
| Cr	52	15.022	ug/L	0.330	2	16327	388176	1	Standard
| Cr	53	14.600	ug/L	0.178	1	222	42349	0	Standard
Y	89		ug/L			315437	469575	0	Standard
Kr	83		ug/L			57	71	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0365-PS2

Sample Dil Factor: 50

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 12:37:36

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	47443	3	Standard
Cl	37		ug/L			6767002	7115779	1	Standard
Sc	45		ug/L			503319	629591	1	Standard
Cr	52	28.157	ug/L	1.095	3	16327	703374	2	Standard
Cr	53	27.778	ug/L	0.450	1	222	79649	2	Standard
Y	89		ug/L			315437	480416	3	Standard
Kr	83		ug/L			57	74	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVO

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:40:08

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	30642	1	Standard
Cl	37		ug/L			6767002	7284902	1	Standard
Sc	45		ug/L			503319	561347	1	Standard
Cr	52	48.695	ug/L	1.253	2	16327	1071391	1	Standard
Cr	53	47.717	ug/L	1.683	3	222	121768	2	Standard
Y	89		ug/L			315437	338544	2	Standard
Kr	83		ug/L			57	60	22	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBO

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:44:19

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	30901	1	Standard
Cl	37		ug/L			6767002	7220129	0	Standard
[> Sc	45		ug/L			503319	552789	1	Standard
| Cr	52	0.017	ug/L	0.041	241	16327	18287	3	Standard
[Cr	53	0.013	ug/L	0.017	134	222	277	16	Standard
Y	89		ug/L			315437	325757	2	Standard
Kr	83		ug/L			57	53	34	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVP

Sample Dil Factor:

DEL

Comments:

Sample Date/Time: Friday, April 28, 2023 12:45:49

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			28891	30531	2	Standard
Cl	37		ug/L			6767002	7420876	0	Standard
Sc	45		ug/L			503319	568935	2	Standard
Cr	52	48.327	ug/L	0.910	1	16327	1077742	2	Standard
Cr	53	47.973	ug/L	1.076	2	222	124076	2	Standard
Y	89		ug/L			315437	337514	1	Standard
Kr	83		ug/L			57	60	30	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:50:01

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13	ug/L				30904	2	Standard
Cl	37	ug/L				7372498	0	Standard
[> Sc	45	ug/L				563792	1	Standard
| Cr	52	ug/L				18264	1	Standard
[Cr	53	ug/L				231	3	Standard
Y	89	ug/L				328331	0	Standard
Kr	83	ug/L				58	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVP

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:51:29

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	30866	1	Standard
Cl	37		ug/L			7372498	7516620	0	Standard
[> Sc	45		ug/L			563792	571030	3	Standard
| Cr	52	48.459	ug/L	0.564	1	18264	1084557	2	Standard
[Cr	53	47.731	ug/L	1.002	2	231	123865	2	Standard
Y	89		ug/L			328331	345136	4	Standard
Kr	83		ug/L			58	69	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBP

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 12:55:40

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13	ug/L			30904	32058	1	Standard
	Cl	37	ug/L			7372498	7488004	0	Standard
[>	Sc	45	ug/L			563792	571446	0	Standard
|	Cr	0.007	ug/L	0.009	118	18264	18672	0	Standard
[	Cr	-0.017	ug/L	0.004	22	231	189	5	Standard
	Y	89	ug/L			328331	341473	1	Standard
	Kr	83	ug/L			58	57	15	Standard

23A0326 ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0326-02RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 12:57:59

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	48189	2	Standard
Cl	37		ug/L			7372498	7391414	1	Standard
Sc	45		ug/L			563792	649129	0	Standard
Cr	52	7.097	ug/L	0.092	1	18264	198550	0	Standard
Cr	53	7.134	ug/L	0.031	0	231	21282	0	Standard
Y	89		ug/L			328331	476111	1	Standard
Kr	83		ug/L			58	82	13	Standard

Sample ID: **23C0326-04RE1**Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 12:59:26

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	46746	2	Standard
Cl	37		ug/L			7372498	7400893	0	Standard
Sc	45		ug/L			563792	660190	0	Standard
Cr	52	6.173	ug/L	0.159	2	18264	178406	1	Standard
Cr	53	6.053	ug/L	0.137	2	231	18404	1	Standard
Y	89		ug/L			328331	478356	0	Standard
Kr	83		ug/L			58	70	9	Standard

Sample ID: **23C0326-05RE1**Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 13:00:53

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	42154	3	Standard
Cl	37		ug/L			7372498	7296514	1	Standard
Sc	45		ug/L			563792	657273	0	Standard
Cr	52	6.295	ug/L	0.048	0	18264	180755	1	Standard
Cr	53	6.208	ug/L	0.091	1	231	18784	0	Standard
Y	89		ug/L			328331	493519	2	Standard
Kr	83		ug/L			58	88	8	Standard

Sample ID: **23C0326-11RE1**Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 13:02:20

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	44109	1	Standard
Cl	37		ug/L			7372498	7251435	1	Standard
Sc	45		ug/L			563792	645289	2	Standard
Cr	52	6.119	ug/L	0.096	1	18264	173032	1	Standard
Cr	53	6.066	ug/L	0.111	1	231	18023	1	Standard
Y	89		ug/L			328331	468437	2	Standard
Kr	83		ug/L			58	53	16	Standard

Sample ID: **23C0326-12RE1**Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 13:03:47

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	44137	1	Standard
Cl	37		ug/L			7372498	7168495	0	Standard
Sc	45		ug/L			563792	653272	2	Standard
Cr	52	6.729	ug/L	0.162	2	18264	190512	0	Standard
Cr	53	6.677	ug/L	0.061	0	231	20061	1	Standard
Y	89		ug/L			328331	488584	1	Standard
Kr	83		ug/L			58	71	5	Standard

Sample ID: **23C0326-01RE1**Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 13:05:14

MB 4/27/23

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	47332	0	Standard
Cl	37		ug/L			7372498	7228541	1	Standard
Sc	45		ug/L			563792	640968	0	Standard
Cr	52	5.951	ug/L	0.103	1	18264	167758	2	Standard
Cr	53	6.009	ug/L	0.099	1	231	17742	0	Standard
Y	89		ug/L			328331	461971	1	Standard
Kr	83		ug/L			58	66	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-DUP2**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:06:41**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	47155	0	Standard
Cl	37		ug/L			7372498	7207408	0	Standard
Sc	45		ug/L			563792	651649	3	Standard
Cr	52	6.522	ug/L	0.038	0	18264	184861	3	Standard
Cr	53	6.502	ug/L	0.137	2	231	19484	1	Standard
Y	89		ug/L			328331	477008	1	Standard
Kr	83		ug/L			58	68	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-MS2**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:08:08**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	44067	0	Standard
Cl	37		ug/L			7372498	7289752	0	Standard
Sc	45		ug/L			563792	636339	0	Standard
Cr	52	15.444	ug/L	0.405	2	18264	399312	1	Standard
Cr	53	15.545	ug/L	0.337	2	231	45147	1	Standard
Y	89		ug/L			328331	474933	0	Standard
Kr	83		ug/L			58	73	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0394-MSD2**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:09:35**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	42593	1	Standard
Cl	37		ug/L			7372498	7199938	0	Standard
Sc	45		ug/L			563792	657057	2	Standard
Cr	52	15.853	ug/L	0.392	2	18264	422574	0	Standard
Cr	53	15.519	ug/L	0.513	3	231	46523	1	Standard
Y	89		ug/L			328331	478053	2	Standard
Kr	83		ug/L			58	74	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0394-PS2

Sample Dil Factor: 50

Comments:

Sample Date/Time: Friday, April 28, 2023 13:11:02

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	50508	1	Standard
Cl	37		ug/L			7372498	7163838	0	Standard
Sc	45		ug/L			563792	636970	1	Standard
Cr	52	28.960	ug/L	0.439	1	18264	731507	1	Standard
Cr	53	27.946	ug/L	0.323	1	231	81037	0	Standard
Y	89		ug/L			328331	470740	0	Standard
Kr	83		ug/L			58	78	22	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVQ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:13:34

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	31523	0	Standard
Cl	37		ug/L			7372498	7383903	1	Standard
Sc	45		ug/L			563792	591400	2	Standard
Cr	52	47.206	ug/L	0.632	1	18264	1094945	2	Standard
Cr	53	47.217	ug/L	0.051	0	231	126968	2	Standard
Y	89		ug/L			328331	345527	2	Standard
Kr	83		ug/L			58	64	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBQ

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:19:09

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30904	31674	1	Standard
	Cl	37		ug/L			7372498	7339488	1	Standard
[>	Sc	45		ug/L			563792	563527	0	Standard
|	Cr	52	0.019	ug/L	0.010	54	18264	18672	1	Standard
|	Cr	53	-0.010	ug/L	0.006	64	231	206	7	Standard
	Y	89		ug/L			328331	325589	0	Standard
	Kr	83		ug/L			58	49	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-07RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 13:23:41

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	45687	0	Standard
Cl	37		ug/L			7372498	7421887	0	Standard
Sc	45		ug/L			563792	679172	1	Standard
Cr	52	6.159	ug/L	0.080	1	18264	183185	0	Standard
Cr	53	6.296	ug/L	0.078	1	231	19681	0	Standard
Y	89		ug/L			328331	512362	1	Standard
Kr	83		ug/L			58	67	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-08RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:25:09**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	48275	4	Standard
Cl	37		ug/L			7372498	7386328	1	Standard
Sc	45		ug/L			563792	663423	2	Standard
Cr	52	6.076	ug/L	0.061	1	18264	176857	3	Standard
Cr	53	6.104	ug/L	0.136	2	231	18643	1	Standard
Y	89		ug/L			328331	472749	2	Standard
Kr	83		ug/L			58	66	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-09RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: Friday, April 28, 2023 13:26:36

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	47604	2	Standard
Cl	37		ug/L			7372498	7317135	1	Standard
Sc	45		ug/L			563792	687012	0	Standard
Cr	52	7.067	ug/L	0.060	0	18264	209351	0	Standard
Cr	53	7.004	ug/L	0.079	1	231	22117	1	Standard
Y	89		ug/L			328331	515249	2	Standard
Kr	83		ug/L			58	91	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-11RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:28:03**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	46884	2	Standard
Cl	37		ug/L			7372498	7272790	0	Standard
Sc	45		ug/L			563792	665206	1	Standard
Cr	52	6.245	ug/L	0.005	0	18264	181643	1	Standard
Cr	53	6.175	ug/L	0.098	1	231	18911	0	Standard
Y	89		ug/L			328331	485504	2	Standard
Kr	83		ug/L			58	61	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-12RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:29:30**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	47155	0	Standard
Cl	37		ug/L			7372498	7280398	0	Standard
Sc	45		ug/L			563792	658214	2	Standard
Cr	52	6.242	ug/L	0.152	2	18264	179609	1	Standard
Cr	53	6.200	ug/L	0.133	2	231	18784	0	Standard
Y	89		ug/L			328331	480773	0	Standard
Kr	83		ug/L			58	67	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-13RE1**

Sample Dil Factor: **50**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:30:57**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	45155	1	Standard
Cl	37		ug/L			7372498	7262895	1	Standard
Sc	45		ug/L			563792	665430	1	Standard
Cr	52	6.674	ug/L	0.037	0	18264	192702	2	Standard
Cr	53	6.614	ug/L	0.175	2	231	20244	2	Standard
Y	89		ug/L			328331	494194	0	Standard
Kr	83		ug/L			58	71	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **23C0774-01RE1**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:34:04**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	40783	1	Standard
Cl	37		ug/L			7372498	7273053	0	Standard
Sc	45		ug/L			563792	637301	0	Standard
Cr	52	3.057	ug/L	0.082	2	18264	95719	1	Standard
Cr	53	3.108	ug/L	0.013	0	231	9249	1	Standard
Y	89		ug/L			328331	408333	0	Standard
Kr	83		ug/L			58	73	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-DUP2**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:35:31**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	41383	3	Standard
Cl	37		ug/L			7372498	7314571	0	Standard
Sc	45		ug/L			563792	649469	0	Standard
Cr	52	3.459	ug/L	0.082	2	18264	107617	1	Standard
Cr	53	3.424	ug/L	0.020	0	231	10359	0	Standard
Y	89		ug/L			328331	420128	1	Standard
Kr	83		ug/L			58	75	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-MS2**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:36:58**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	39720	2	Standard
Cl	37		ug/L			7372498	7243009	0	Standard
Sc	45		ug/L			563792	623609	4	Standard
Cr	52	7.959	ug/L	0.175	2	18264	211447	4	Standard
Cr	53	7.811	ug/L	0.139	1	231	22351	3	Standard
Y	89		ug/L			328331	400584	2	Standard
Kr	83		ug/L			58	70	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: **BLD0365-MSD2**

Sample Dil Factor: **100**

Comments:

Sample Date/Time: **Friday, April 28, 2023 13:38:25**

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	38290	2	Standard
Cl	37		ug/L			7372498	7235013	0	Standard
Sc	45		ug/L			563792	620143	1	Standard
Cr	52	8.157	ug/L	0.070	0	18264	215014	0	Standard
Cr	53	8.187	ug/L	0.112	1	231	23293	1	Standard
Y	89		ug/L			328331	414819	0	Standard
Kr	83		ug/L			58	56	23	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVR

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:40:57

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	32070	1	Standard
Cl	37		ug/L			7372498	7536936	0	Standard
Sc	45		ug/L			563792	588958	1	Standard
Cr	52	49.621	ug/L	0.733	1	18264	1145093	0	Standard
Cr	53	49.145	ug/L	0.909	1	231	131563	0	Standard
Y	89		ug/L			328331	343419	2	Standard
Kr	83		ug/L			58	62	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBR

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:45:08

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	31474	3	Standard
Cl	37		ug/L			7372498	7403997	1	Standard
Sc	45		ug/L			563792	586878	2	Standard
Cr	52	0.019	ug/L	0.017	86	18264	19447	1	Standard
Cr	53	-0.016	ug/L	0.004	25	231	197	3	Standard
Y	89		ug/L			328331	329282	2	Standard
Kr	83		ug/L			58	50	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:47:15

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

	Analyte Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13	ug/L			30904	37745	1	Standard
	Cl	37	ug/L			7372498	7615414	0	Standard
[>	Sc	45	ug/L			563792	656201	1	Standard
|	Cr	0.076	ug/L	0.012	16	18264	23175	1	Standard
[	Cr	-0.009	ug/L	0.003	34	231	241	3	Standard
	Y	89	ug/L			328331	390404	3	Standard
	Kr	83	ug/L			58	54	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:48:42

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	38687	2	Standard
Cl	37		ug/L			7372498	7860200	0	Standard
Sc	45		ug/L			563792	701238	2	Standard
Cr	52	0.052	ug/L	0.029	55	18264	24109	1	Standard
Cr	53	-0.013	ug/L	0.001	9	231	246	3	Standard
Y	89		ug/L			328331	419056	3	Standard
Kr	83		ug/L			58	65	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:50:10

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	36093	2	Standard
Cl	37		ug/L			7372498	7939870	0	Standard
Sc	45		ug/L			563792	2492	15	Standard
Cr	52	218.908	ug/L	34.416	15	18264	20760	1	Standard
Cr	53	19.116	ug/L	1.730	9	231	215	7	Standard
Y	89		ug/L			328331	405	30	Standard
Kr	83		ug/L			58	58	30	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI

Sample Dil Factor:

Comments:

Sample Date/Time: Friday, April 28, 2023 13:51:37

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\042723C.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30904	35778	0	Standard
Cl	37		ug/L			7372498	8188939	0	Standard
Sc	45		ug/L			563792	1354	34	Standard
Cr	52	437.820	ug/L	123.598	28	18264	21427	0	Standard
Cr	53	37.425	ug/L	13.029	34	231	212	8	Standard
Y	89		ug/L			328331	333	83	Standard
Kr	83		ug/L			58	61	18	Standard



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-ICV1	Arsenic-75a	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLD0418-CCV1	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLD0418-CCV2	Arsenic-75a	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLD0418-CCV3	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.4	105	ug/L	PA 6020B UCT-KE
SLD0418-CCV4	Arsenic-75a	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.9	104	ug/L	PA 6020B UCT-KE



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-CCV4	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLD0418-CCV5	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.2	104	ug/L	PA 6020B UCT-KE
SLD0418-CCV6	Arsenic-75a	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.2	102	ug/L	PA 6020B UCT-KE
SLD0418-CCV7	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLD0418-CCV8	Arsenic-75a	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLD0418-CCV9	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.2	104	ug/L	PA 6020B UCT-KE



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-CCV9	Zinc-66	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.9	104	ug/L	PA 6020B UCT-KE
SLD0418-CCVA	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.9	104	ug/L	PA 6020B UCT-KE
SLD0418-CCVB	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Arsenic-75a	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.2	102	ug/L	PA 6020B UCT-KE
SLD0418-CCVC	Zinc-66	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLD0418-CCVD	Copper-65	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Arsenic-75a	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLD0418-CCVE	Copper-63	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLD0418-CCVE	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method	
SLD0418-CCVE	Copper-65	50.000	51.7	103	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	51.5	103	ug/L	PA 6020B UCT-KE	
SLD0418-CCVF	Arsenic-75a	50.000	50.6	101	ug/L	PA 6020B UCT-KE	
	Cadmium-111	50.000	52.8	106	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	52.8	106	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	52.2	104	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	52.3	105	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	52.9	106	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	51.5	103	ug/L	PA 6020B UCT-KE	
	SLD0418-CCVG	Arsenic-75a	50.000	51.4	103	ug/L	PA 6020B UCT-KE
		Cadmium-111	50.000	52.3	105	ug/L	PA 6020B UCT-KE
Cadmium-114		50.000	51.4	103	ug/L	PA 6020B UCT-KE	
Copper-63		50.000	53.5	107	ug/L	PA 6020B UCT-KE	
Copper-65		50.000	53.8	108	ug/L	PA 6020B UCT-KE	
Zinc-66		50.000	53.4	107	ug/L	PA 6020B UCT-KE	
Zinc-67		50.000	52.4	105	ug/L	PA 6020B UCT-KE	
SLD0418-CCVH		Arsenic-75a	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.8	104	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	51.5	103	ug/L	PA 6020B UCT-KE	
	Copper-63	50.000	52.6	105	ug/L	PA 6020B UCT-KE	
	Copper-65	50.000	52.7	105	ug/L	PA 6020B UCT-KE	
	Zinc-66	50.000	53.3	107	ug/L	PA 6020B UCT-KE	
	Zinc-67	50.000	52.3	105	ug/L	PA 6020B UCT-KE	
	SLD0418-CCVI	Arsenic-75a	50.000	55.7	111	ug/L	PA 6020B UCT-KE
Cadmium-111		50.000	53.5	107	ug/L	PA 6020B UCT-KE	
Cadmium-114		50.000	52.7	105	ug/L	PA 6020B UCT-KE	
Copper-63		50.000	58.3	117	ug/L	PA 6020B UCT-KE	
Copper-65		50.000	57.8	116	ug/L	PA 6020B UCT-KE	
Zinc-66		50.000	56.9	114	ug/L	PA 6020B UCT-KE	
Zinc-67		50.000	58.1	116	ug/L	PA 6020B UCT-KE	
SLD0418-CCVJ		Arsenic-75a	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	54.3	109	ug/L	PA 6020B UCT-KE	
	Cadmium-114	50.000	53.8	108	ug/L	PA 6020B UCT-KE	



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-CCVJ	Copper-63	50.000	54.0	108	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	54.2	108	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	53.3	107	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.7	105	ug/L	PA 6020B UCT-KE
SLD0418-CCVK	Arsenic-75a	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.1	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	53.4	107	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLD0418-CCVL	Arsenic-75a	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.4	107	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	54.8	110	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.8	106	ug/L	PA 6020B UCT-KE
SLD0418-CCVM	Arsenic-75a	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	54.9	110	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	54.2	108	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	55.2	110	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	54.7	109	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	54.2	108	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	53.0	106	ug/L	PA 6020B UCT-KE

* Values outside of QC limits



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/27/23 17:32

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-IBL1	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLD0418-IBL1	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLD0418-IBL1	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0418-IBL1	Copper-63	0.00	0.173	0.500	ug/L	
SLD0418-IBL1	Copper-65	0.00	0.35	0.500	ug/L	
SLD0418-IBL1	Zinc-66	0.0150	2.92	6.00	ug/L	
SLD0418-IBL1	Zinc-67	-0.0220	0.94	6.00	ug/L	
SLD0418-ICB1	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLD0418-ICB1	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLD0418-ICB1	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-ICB1	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0418-ICB1	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0418-ICB1	Zinc-66	-0.0040	2.92	6.00	ug/L	
SLD0418-ICB1	Zinc-67	-0.0490	0.94	6.00	ug/L	
SLD0418-CCB1	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0418-CCB1	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLD0418-CCB1	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0418-CCB1	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0418-CCB1	Copper-65	0.00500	0.35	0.500	ug/L	
SLD0418-CCB1	Zinc-66	-0.0030	2.92	6.00	ug/L	
SLD0418-CCB1	Zinc-67	0.0030	0.94	6.00	ug/L	
SLD0418-CCB2	Arsenic-75a	0.0140	0.0373	0.200	ug/L	
SLD0418-CCB2	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0418-CCB2	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0418-CCB2	Copper-63	0.0110	0.173	0.500	ug/L	
SLD0418-CCB2	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0418-CCB2	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLD0418-CCB2	Zinc-67	-0.0540	0.94	6.00	ug/L	
SLD0418-IBL2	Arsenic-75a	0.0130	0.0373	0.200	ug/L	
SLD0418-IBL2	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLD0418-IBL2	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0418-IBL2	Copper-63	0.0140	0.173	0.500	ug/L	
SLD0418-IBL2	Copper-65	0.0120	0.35	0.500	ug/L	
SLD0418-IBL2	Zinc-66	0.0180	2.92	6.00	ug/L	
SLD0418-IBL2	Zinc-67	0.0360	0.94	6.00	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/27/23 19:30

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-IBL3	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLD0418-IBL3	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLD0418-IBL3	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0418-IBL3	Copper-63	0.0120	0.173	0.500	ug/L	
SLD0418-IBL3	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0418-IBL3	Zinc-66	0.0220	2.92	6.00	ug/L	
SLD0418-IBL3	Zinc-67	-0.0020	0.94	6.00	ug/L	
SLD0418-CCB3	Arsenic-75a	0.00800	0.0373	0.200	ug/L	
SLD0418-CCB3	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0418-CCB3	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-CCB3	Copper-63	0.00700	0.173	0.500	ug/L	
SLD0418-CCB3	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0418-CCB3	Zinc-66	-0.0090	2.92	6.00	ug/L	
SLD0418-CCB3	Zinc-67	-0.0470	0.94	6.00	ug/L	
SLD0418-IBL4	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLD0418-IBL4	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLD0418-IBL4	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0418-IBL4	Copper-63	0.0510	0.173	0.500	ug/L	
SLD0418-IBL4	Copper-65	0.0350	0.35	0.500	ug/L	
SLD0418-IBL4	Zinc-66	0.679	2.92	6.00	ug/L	
SLD0418-IBL4	Zinc-67	0.646	0.94	6.00	ug/L	
SLD0418-CCB4	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLD0418-CCB4	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLD0418-CCB4	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-CCB4	Copper-63	0.00400	0.173	0.500	ug/L	
SLD0418-CCB4	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0418-CCB4	Zinc-66	-0.0400	2.92	6.00	ug/L	
SLD0418-CCB4	Zinc-67	-0.0180	0.94	6.00	ug/L	
SLD0418-IBL5	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLD0418-IBL5	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0418-IBL5	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-IBL5	Copper-63	0.0540	0.173	0.500	ug/L	
SLD0418-IBL5	Copper-65	0.0430	0.35	0.500	ug/L	
SLD0418-IBL5	Zinc-66	0.683	2.92	6.00	ug/L	
SLD0418-IBL5	Zinc-67	0.751	0.94	6.00	ug/L	
SLD0418-CCB5	Arsenic-75a	0.00800	0.0373	0.200	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/27/23 21:49

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCB5	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0418-CCB5	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0418-CCB5	Copper-63	0.00300	0.173	0.500	ug/L	
SLD0418-CCB5	Copper-65	0.00	0.35	0.500	ug/L	
SLD0418-CCB5	Zinc-66	-0.0140	2.92	6.00	ug/L	
SLD0418-CCB5	Zinc-67	-0.0400	0.94	6.00	ug/L	
SLD0418-CCB6	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0418-CCB6	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLD0418-CCB6	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0418-CCB6	Copper-63	-0.00400	0.173	0.500	ug/L	
SLD0418-CCB6	Copper-65	-0.00700	0.35	0.500	ug/L	
SLD0418-CCB6	Zinc-66	-0.0490	2.92	6.00	ug/L	
SLD0418-CCB6	Zinc-67	-0.0410	0.94	6.00	ug/L	
SLD0418-IBL7	Arsenic-75a	-0.0110	0.0373	0.200	ug/L	
SLD0418-IBL7	Cadmium-111	0.0160	0.03	0.100	ug/L	
SLD0418-IBL7	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-IBL7	Copper-63	-0.00300	0.173	0.500	ug/L	
SLD0418-IBL7	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0418-IBL7	Zinc-66	0.164	2.92	6.00	ug/L	
SLD0418-IBL7	Zinc-67	0.143	0.94	6.00	ug/L	
SLD0418-CCB7	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0418-CCB7	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0418-CCB7	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0418-CCB7	Copper-63	-0.0150	0.173	0.500	ug/L	
SLD0418-CCB7	Copper-65	-0.0140	0.35	0.500	ug/L	
SLD0418-CCB7	Zinc-66	-0.0560	2.92	6.00	ug/L	
SLD0418-CCB7	Zinc-67	-0.0330	0.94	6.00	ug/L	
SLD0418-IBL8	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0418-IBL8	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLD0418-IBL8	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0418-IBL8	Copper-63	-0.00300	0.173	0.500	ug/L	
SLD0418-IBL8	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0418-IBL8	Zinc-66	0.124	2.92	6.00	ug/L	
SLD0418-IBL8	Zinc-67	0.0440	0.94	6.00	ug/L	
SLD0418-CCB8	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0418-CCB8	Cadmium-111	0.0170	0.03	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 00:14

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCB8	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0418-CCB8	Copper-63	-0.0160	0.173	0.500	ug/L	
SLD0418-CCB8	Copper-65	-0.0110	0.35	0.500	ug/L	
SLD0418-CCB8	Zinc-66	-0.0450	2.92	6.00	ug/L	
SLD0418-CCB8	Zinc-67	-0.0150	0.94	6.00	ug/L	
SLD0418-IBL9	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLD0418-IBL9	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLD0418-IBL9	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0418-IBL9	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0418-IBL9	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0418-IBL9	Zinc-66	0.154	2.92	6.00	ug/L	
SLD0418-IBL9	Zinc-67	0.148	0.94	6.00	ug/L	
SLD0418-CCB9	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLD0418-CCB9	Cadmium-111	0.00800	0.03	0.100	ug/L	
SLD0418-CCB9	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-CCB9	Copper-63	-0.0130	0.173	0.500	ug/L	
SLD0418-CCB9	Copper-65	-0.0140	0.35	0.500	ug/L	
SLD0418-CCB9	Zinc-66	-0.0570	2.92	6.00	ug/L	
SLD0418-CCB9	Zinc-67	-0.0720	0.94	6.00	ug/L	
SLD0418-IBLA	Arsenic-75a	-0.0110	0.0373	0.200	ug/L	
SLD0418-IBLA	Cadmium-111	0.00800	0.03	0.100	ug/L	
SLD0418-IBLA	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLD0418-IBLA	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0418-IBLA	Copper-65	-0.00500	0.35	0.500	ug/L	
SLD0418-IBLA	Zinc-66	0.125	2.92	6.00	ug/L	
SLD0418-IBLA	Zinc-67	0.130	0.94	6.00	ug/L	
SLD0418-CCBA	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0418-CCBA	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0418-CCBA	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLD0418-CCBA	Copper-63	-0.0170	0.173	0.500	ug/L	
SLD0418-CCBA	Copper-65	-0.0110	0.35	0.500	ug/L	
SLD0418-CCBA	Zinc-66	-0.0610	2.92	6.00	ug/L	
SLD0418-CCBA	Zinc-67	-0.0470	0.94	6.00	ug/L	
SLD0418-IBLB	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLD0418-IBLB	Cadmium-111	0.0120	0.03	0.100	ug/L	
SLD0418-IBLB	Cadmium-114	0.00800	0.04	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 02:50

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-IBLB	Copper-63	-0.00400	0.173	0.500	ug/L	
SLD0418-IBLB	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0418-IBLB	Zinc-66	0.133	2.92	6.00	ug/L	
SLD0418-IBLB	Zinc-67	0.184	0.94	6.00	ug/L	
SLD0418-CCBB	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0418-CCBB	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0418-CCBB	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0418-CCBB	Copper-63	-0.0150	0.173	0.500	ug/L	
SLD0418-CCBB	Copper-65	-0.0180	0.35	0.500	ug/L	
SLD0418-CCBB	Zinc-66	-0.0730	2.92	6.00	ug/L	
SLD0418-CCBB	Zinc-67	-0.0760	0.94	6.00	ug/L	
SLD0418-CCBC	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLD0418-CCBC	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLD0418-CCBC	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0418-CCBC	Copper-63	0.00	0.173	0.500	ug/L	
SLD0418-CCBC	Copper-65	0.00	0.35	0.500	ug/L	
SLD0418-CCBC	Zinc-66	0.00	2.92	6.00	ug/L	
SLD0418-CCBC	Zinc-67	0.0230	0.94	6.00	ug/L	
SLD0418-IBLD	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0418-IBLD	Cadmium-111	-0.0170	0.03	0.100	ug/L	
SLD0418-IBLD	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0418-IBLD	Copper-63	0.0130	0.173	0.500	ug/L	
SLD0418-IBLD	Copper-65	0.0180	0.35	0.500	ug/L	
SLD0418-IBLD	Zinc-66	0.232	2.92	6.00	ug/L	
SLD0418-IBLD	Zinc-67	0.171	0.94	6.00	ug/L	
SLD0418-CCBD	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0418-CCBD	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLD0418-CCBD	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0418-CCBD	Copper-63	-0.00200	0.173	0.500	ug/L	
SLD0418-CCBD	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0418-CCBD	Zinc-66	-0.0290	2.92	6.00	ug/L	
SLD0418-CCBD	Zinc-67	0.0010	0.94	6.00	ug/L	
SLD0418-IBLE	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0418-IBLE	Cadmium-111	-0.0160	0.03	0.100	ug/L	
SLD0418-IBLE	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0418-IBLE	Copper-63	0.0180	0.173	0.500	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 04:58

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-IBLE	Copper-65	0.0240	0.35	0.500	ug/L	
SLD0418-IBLE	Zinc-66	0.182	2.92	6.00	ug/L	
SLD0418-IBLE	Zinc-67	0.197	0.94	6.00	ug/L	
SLD0418-CCBE	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0418-CCBE	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLD0418-CCBE	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-CCBE	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0418-CCBE	Copper-65	0.00100	0.35	0.500	ug/L	
SLD0418-CCBE	Zinc-66	-0.0440	2.92	6.00	ug/L	
SLD0418-CCBE	Zinc-67	-0.0050	0.94	6.00	ug/L	
SLD0418-IBLF	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLD0418-IBLF	Cadmium-111	-0.0170	0.03	0.100	ug/L	
SLD0418-IBLF	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-IBLF	Copper-63	0.0220	0.173	0.500	ug/L	
SLD0418-IBLF	Copper-65	0.0170	0.35	0.500	ug/L	
SLD0418-IBLF	Zinc-66	0.244	2.92	6.00	ug/L	
SLD0418-IBLF	Zinc-67	0.207	0.94	6.00	ug/L	
SLD0418-CCBF	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0418-CCBF	Cadmium-111	-0.0130	0.03	0.100	ug/L	
SLD0418-CCBF	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0418-CCBF	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0418-CCBF	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0418-CCBF	Zinc-66	-0.0260	2.92	6.00	ug/L	
SLD0418-CCBF	Zinc-67	-0.0120	0.94	6.00	ug/L	
SLD0418-IBLG	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLD0418-IBLG	Cadmium-111	-0.0180	0.03	0.100	ug/L	
SLD0418-IBLG	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0418-IBLG	Copper-63	0.0200	0.173	0.500	ug/L	
SLD0418-IBLG	Copper-65	0.0260	0.35	0.500	ug/L	
SLD0418-IBLG	Zinc-66	0.0190	2.92	6.00	ug/L	
SLD0418-IBLG	Zinc-67	0.0340	0.94	6.00	ug/L	
SLD0418-CCBG	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0418-CCBG	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLD0418-CCBG	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0418-CCBG	Copper-63	0.00	0.173	0.500	ug/L	
SLD0418-CCBG	Copper-65	-0.00200	0.35	0.500	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 07:02

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCBG	Zinc-66	-0.0270	2.92	6.00	ug/L	
SLD0418-CCBG	Zinc-67	-0.0440	0.94	6.00	ug/L	
SLD0418-CCBH	Arsenic-75a	0.0170	0.0373	0.200	ug/L	
SLD0418-CCBH	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLD0418-CCBH	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0418-CCBH	Copper-63	0.0130	0.173	0.500	ug/L	
SLD0418-CCBH	Copper-65	0.00900	0.35	0.500	ug/L	
SLD0418-CCBH	Zinc-66	-0.0030	2.92	6.00	ug/L	
SLD0418-CCBH	Zinc-67	0.0130	0.94	6.00	ug/L	
SLD0418-IBLI	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLD0418-IBLI	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLD0418-IBLI	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-IBLI	Copper-63	0.0200	0.173	0.500	ug/L	
SLD0418-IBLI	Copper-65	0.0200	0.35	0.500	ug/L	
SLD0418-IBLI	Zinc-66	0.0430	2.92	6.00	ug/L	
SLD0418-IBLI	Zinc-67	0.114	0.94	6.00	ug/L	
SLD0418-CCBI	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0418-CCBI	Cadmium-111	0.0140	0.03	0.100	ug/L	
SLD0418-CCBI	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLD0418-CCBI	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0418-CCBI	Copper-65	-0.00500	0.35	0.500	ug/L	
SLD0418-CCBI	Zinc-66	-0.0290	2.92	6.00	ug/L	
SLD0418-CCBI	Zinc-67	-0.0390	0.94	6.00	ug/L	
SLD0418-IBLJ	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLD0418-IBLJ	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0418-IBLJ	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0418-IBLJ	Copper-63	0.0240	0.173	0.500	ug/L	
SLD0418-IBLJ	Copper-65	0.0220	0.35	0.500	ug/L	
SLD0418-IBLJ	Zinc-66	0.0480	2.92	6.00	ug/L	
SLD0418-IBLJ	Zinc-67	0.0210	0.94	6.00	ug/L	
SLD0418-CCBJ	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLD0418-CCBJ	Cadmium-111	0.0200	0.03	0.100	ug/L	
SLD0418-CCBJ	Cadmium-114	0.00900	0.04	0.100	ug/L	
SLD0418-CCBJ	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0418-CCBJ	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0418-CCBJ	Zinc-66	-0.0240	2.92	6.00	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 09:13

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCBJ	Zinc-67	0.0210	0.94	6.00	ug/L	
SLD0418-IBLK	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLD0418-IBLK	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLD0418-IBLK	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0418-IBLK	Copper-63	0.0180	0.173	0.500	ug/L	
SLD0418-IBLK	Copper-65	0.0250	0.35	0.500	ug/L	
SLD0418-IBLK	Zinc-66	0.0310	2.92	6.00	ug/L	
SLD0418-IBLK	Zinc-67	0.105	0.94	6.00	ug/L	
SLD0418-CCBK	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0418-CCBK	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLD0418-CCBK	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0418-CCBK	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0418-CCBK	Copper-65	-0.00400	0.35	0.500	ug/L	
SLD0418-CCBK	Zinc-66	-0.0160	2.92	6.00	ug/L	
SLD0418-CCBK	Zinc-67	0.0230	0.94	6.00	ug/L	
SLD0418-IBLL	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLD0418-IBLL	Cadmium-111	0.00800	0.03	0.100	ug/L	
SLD0418-IBLL	Cadmium-114	-0.00800	0.04	0.100	ug/L	
SLD0418-IBLL	Copper-63	0.0170	0.173	0.500	ug/L	
SLD0418-IBLL	Copper-65	0.0170	0.35	0.500	ug/L	
SLD0418-IBLL	Zinc-66	0.0500	2.92	6.00	ug/L	
SLD0418-IBLL	Zinc-67	0.101	0.94	6.00	ug/L	
SLD0418-CCBL	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0418-CCBL	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLD0418-CCBL	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0418-CCBL	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0418-CCBL	Copper-65	-0.00500	0.35	0.500	ug/L	
SLD0418-CCBL	Zinc-66	0.0020	2.92	6.00	ug/L	
SLD0418-CCBL	Zinc-67	0.0190	0.94	6.00	ug/L	
SLD0418-IBLM	Arsenic-75a	0.228	0.0373	0.200	ug/L	
SLD0418-IBLM	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0418-IBLM	Cadmium-114	-0.0100	0.04	0.100	ug/L	
SLD0418-IBLM	Copper-63	0.0200	0.173	0.500	ug/L	
SLD0418-IBLM	Copper-65	0.0220	0.35	0.500	ug/L	
SLD0418-IBLM	Zinc-66	0.0600	2.92	6.00	ug/L	
SLD0418-IBLM	Zinc-67	0.0500	0.94	6.00	ug/L	



INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 11:43

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-IBLN	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0418-IBLN	Cadmium-111	0.00800	0.03	0.100	ug/L	
SLD0418-IBLN	Cadmium-114	-0.00800	0.04	0.100	ug/L	
SLD0418-IBLN	Copper-63	0.0190	0.173	0.500	ug/L	
SLD0418-IBLN	Copper-65	0.0230	0.35	0.500	ug/L	
SLD0418-IBLN	Zinc-66	0.0880	2.92	6.00	ug/L	
SLD0418-IBLN	Zinc-67	0.0670	0.94	6.00	ug/L	
SLD0418-IBLO	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLD0418-IBLO	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0418-IBLO	Cadmium-114	-0.00700	0.04	0.100	ug/L	
SLD0418-IBLO	Copper-63	0.0270	0.173	0.500	ug/L	
SLD0418-IBLO	Copper-65	0.0160	0.35	0.500	ug/L	
SLD0418-IBLO	Zinc-66	0.0580	2.92	6.00	ug/L	
SLD0418-IBLO	Zinc-67	0.0680	0.94	6.00	ug/L	
SLD0418-CCBM	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLD0418-CCBM	Cadmium-111	0.0130	0.03	0.100	ug/L	
SLD0418-CCBM	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0418-CCBM	Copper-63	0.00300	0.173	0.500	ug/L	
SLD0418-CCBM	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0418-CCBM	Zinc-66	0.0040	2.92	6.00	ug/L	
SLD0418-CCBM	Zinc-67	0.0060	0.94	6.00	ug/L	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0418-CAL1	XDT_m1230427A-003	NA	04/27/23 16:58
CAL 1 - LOW CHECK	SLD0418-CAL2	XDT_m1230427A-004	NA	04/27/23 17:02
CAL 2	SLD0418-CAL3	XDT_m1230427A-005	NA	04/27/23 17:07
CAL 3	SLD0418-CAL4	XDT_m1230427A-006	NA	04/27/23 17:13
CAL 4	SLD0418-CAL5	XDT_m1230427A-007	NA	04/27/23 17:18
CAL 5	SLD0418-CAL6	XDT_m1230427A-008	NA	04/27/23 17:25
RINSE	SLD0418-IBL1	XDT_m1230427A-009	NA	04/27/23 17:32
Initial Cal Check	SLD0418-ICV1	XDT_m1230427A-012	NA	04/27/23 17:46
Initial Cal Blank	SLD0418-ICB1	XDT_m1230427A-013	NA	04/27/23 17:54
Calibration Check	SLD0418-CCV1	XDT_m1230427A-014	NA	04/27/23 18:00
Calibration Blank	SLD0418-CCB1	XDT_m1230427A-015	NA	04/27/23 18:07
Calibration Check	SLD0418-CCV2	XDT_m1230427A-020	NA	04/27/23 18:37
Calibration Blank	SLD0418-CCB2	XDT_m1230427A-021	NA	04/27/23 18:45
Instrument RL Check	SLD0418-CRL1	XDT_m1230427A-022	NA	04/27/23 18:51
Interference Check B	SLD0418-IFB1	XDT_m1230427A-024	NA	04/27/23 19:01
LR200	SLD0418-HCV1	XDT_m1230427A-025	NA	04/27/23 19:06
LR300	SLD0418-HCV2	XDT_m1230427A-026	NA	04/27/23 19:11
Instrument Blank	SLD0418-IBL2	XDT_m1230427A-027	NA	04/27/23 19:18
Interference Check A	SLD0418-IFA1	XDT_m1230427A-028	NA	04/27/23 19:25
Instrument Blank	SLD0418-IBL3	XDT_m1230427A-029	NA	04/27/23 19:30
Calibration Check	SLD0418-CCV3	XDT_m1230427A-030	NA	04/27/23 19:36
Calibration Blank	SLD0418-CCB3	XDT_m1230427A-031	NA	04/27/23 19:46
Instrument Blank	SLD0418-IBL4	XDT_m1230427A-041	NA	04/27/23 20:41
Calibration Check	SLD0418-CCV4	XDT_m1230427A-042	NA	04/27/23 20:46
Calibration Blank	SLD0418-CCB4	XDT_m1230427A-043	NA	04/27/23 20:54
Instrument Blank	SLD0418-IBL5	XDT_m1230427A-051	NA	04/27/23 21:36
Calibration Check	SLD0418-CCV5	XDT_m1230427A-052	NA	04/27/23 21:42
Calibration Blank	SLD0418-CCB5	XDT_m1230427A-053	NA	04/27/23 21:49
Calibration Check	SLD0418-CCV6	XDT_m1230427A-055	NA	04/27/23 22:09



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0418-CCB6	XDT_m1230427A-056	NA	04/27/23 22:16
ZZZZZ	23A0295-08	XDT_m1230427A-057	Solid	04/27/23 22:22
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	BLD0365-DUP1	XDT_m1230427A-062	Solid	04/27/23 22:48
ZZZZZ	BLD0365-MS1	XDT_m1230427A-063	Solid	04/27/23 22:53
ZZZZZ	BLD0365-MSD1	XDT_m1230427A-064	Solid	04/27/23 22:57
Instrument Blank	SLD0418-IBL7	XDT_m1230427A-066	NA	04/27/23 23:06
Calibration Check	SLD0418-CCV7	XDT_m1230427A-067	NA	04/27/23 23:11
Calibration Blank	SLD0418-CCB7	XDT_m1230427A-068	NA	04/27/23 23:18
Blank	BLD0394-BLK1	XDT_m1230427A-069	Solid	04/27/23 23:22
LCS	BLD0394-BS1	XDT_m1230427A-070	Solid	04/27/23 23:27
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
Instrument Blank	SLD0418-IBL8	XDT_m1230427A-078	NA	04/28/23 00:02
Calibration Check	SLD0418-CCV8	XDT_m1230427A-079	NA	04/28/23 00:06
Calibration Blank	SLD0418-CCB8	XDT_m1230427A-080	NA	04/28/23 00:14
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	Solid	04/28/23 00:31
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	Solid	04/28/23 00:31
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	Solid	04/28/23 00:31
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	Solid	04/28/23 00:31
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	Solid	04/28/23 00:36
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	Solid	04/28/23 00:36
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	Solid	04/28/23 00:36
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	Solid	04/28/23 00:36
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
Instrument Blank	SLD0418-IBL9	XDT_m1230427A-090	NA	04/28/23 00:58
Calibration Check	SLD0418-CCV9	XDT_m1230427A-091	NA	04/28/23 01:02
Calibration Blank	SLD0418-CCB9	XDT_m1230427A-092	NA	04/28/23 01:10
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	Solid	04/28/23 01:32
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	Solid	04/28/23 01:32
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	Solid	04/28/23 01:32
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	Solid	04/28/23 01:32
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	Solid	04/28/23 01:36
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	Solid	04/28/23 01:36
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	Solid	04/28/23 01:36
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	Solid	04/28/23 01:36
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	Solid	04/28/23 01:45
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	Solid	04/28/23 01:45
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	Solid	04/28/23 01:45



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	Solid	04/28/23 01:45
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	Solid	04/28/23 01:49
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	Solid	04/28/23 01:49
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	Solid	04/28/23 01:49
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	Solid	04/28/23 01:49
Instrument Blank	SLD0418-IBLA	XDT_m1230427A-102	NA	04/28/23 01:54
Calibration Check	SLD0418-CCVA	XDT_m1230427A-103	NA	04/28/23 01:58
Calibration Blank	SLD0418-CCBA	XDT_m1230427A-104	NA	04/28/23 02:06
LDW23-IT1181	23A0326-08	XDT_m1230427A-107	Solid	04/28/23 02:19
LDW23-IT1127	23A0326-09	XDT_m1230427A-108	Solid	04/28/23 02:23
ZZZZZ	23A0418-01	XDT_m1230427A-109	Solid	04/28/23 02:28
ZZZZZ	23A0418-02	XDT_m1230427A-110	Solid	04/28/23 02:32
ZZZZZ	23A0418-04	XDT_m1230427A-111	Solid	04/28/23 02:37
ZZZZZ	23A0418-05	XDT_m1230427A-112	Solid	04/28/23 02:41
ZZZZZ	23A0418-06	XDT_m1230427A-113	Solid	04/28/23 02:45
Instrument Blank	SLD0418-IBLB	XDT_m1230427A-114	NA	04/28/23 02:50
Calibration Check	SLD0418-CCVB	XDT_m1230427A-115	NA	04/28/23 02:54
Calibration Blank	SLD0418-CCBB	XDT_m1230427A-116	NA	04/28/23 03:01
Calibration Check	SLD0418-CCVC	XDT_m1230427A-118	NA	04/28/23 03:10
Calibration Blank	SLD0418-CCBC	XDT_m1230427A-119	NA	04/28/23 03:18
ZZZZZ	23A0418-07	XDT_m1230427A-123	Solid	04/28/23 03:35
ZZZZZ	23A0418-08	XDT_m1230427A-124	Solid	04/28/23 03:40
ZZZZZ	23A0418-09	XDT_m1230427A-125	Solid	04/28/23 03:44
ZZZZZ	23A0418-10	XDT_m1230427A-126	Solid	04/28/23 03:48
ZZZZZ	23A0418-11	XDT_m1230427A-127	Solid	04/28/23 03:53
ZZZZZ	23A0418-12	XDT_m1230427A-128	Solid	04/28/23 03:57
Instrument Blank	SLD0418-IBLD	XDT_m1230427A-129	NA	04/28/23 04:02
Calibration Check	SLD0418-CCVD	XDT_m1230427A-130	NA	04/28/23 04:06
Calibration Blank	SLD0418-CCBD	XDT_m1230427A-131	NA	04/28/23 04:13



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLD0418-IBLE	XDT_m1230427A-141	NA	04/28/23 04:58
Calibration Check	SLD0418-CCVE	XDT_m1230427A-142	NA	04/28/23 05:03
Calibration Blank	SLD0418-CCBE	XDT_m1230427A-143	NA	04/28/23 05:10
Instrument Blank	SLD0418-IBLF	XDT_m1230427A-153	NA	04/28/23 05:54
Calibration Check	SLD0418-CCVF	XDT_m1230427A-154	NA	04/28/23 05:58
Calibration Blank	SLD0418-CCBF	XDT_m1230427A-155	NA	04/28/23 06:05
Instrument Blank	SLD0418-IBLG	XDT_m1230427A-165	NA	04/28/23 06:50
Calibration Check	SLD0418-CCVG	XDT_m1230427A-166	NA	04/28/23 06:54
Calibration Blank	SLD0418-CCBG	XDT_m1230427A-167	NA	04/28/23 07:02
Calibration Check	SLD0418-CCVH	XDT_m1230427A-169	NA	04/28/23 07:10
Calibration Blank	SLD0418-CCBH	XDT_m1230427A-170	NA	04/28/23 07:18
Instrument Blank	SLD0418-IBLI	XDT_m1230427A-180	NA	04/28/23 08:03
Calibration Check	SLD0418-CCVI	XDT_m1230427A-181	NA	04/28/23 08:07
Calibration Blank	SLD0418-CCBI	XDT_m1230427A-182	NA	04/28/23 08:15
Instrument Blank	SLD0418-IBLJ	XDT_m1230427A-192	NA	04/28/23 09:01
Calibration Check	SLD0418-CCVJ	XDT_m1230427A-193	NA	04/28/23 09:06
Calibration Blank	SLD0418-CCBJ	XDT_m1230427A-194	NA	04/28/23 09:13
Instrument Blank	SLD0418-IBLK	XDT_m1230427A-204	NA	04/28/23 09:58
Calibration Check	SLD0418-CCVK	XDT_m1230427A-205	NA	04/28/23 10:03
Calibration Blank	SLD0418-CCBK	XDT_m1230427A-206	NA	04/28/23 10:10
Instrument Blank	SLD0418-IBLL	XDT_m1230427A-216	NA	04/28/23 10:57
Calibration Check	SLD0418-CCVL	XDT_m1230427A-217	NA	04/28/23 11:02
Calibration Blank	SLD0418-CCBL	XDT_m1230427A-218	NA	04/28/23 11:09
Instrument Blank	SLD0418-IBLM	XDT_m1230427A-221	NA	04/28/23 11:25
Instrument Blank	SLD0418-IBLN	XDT_m1230427A-224	NA	04/28/23 11:43
Instrument Blank	SLD0418-IBLO	XDT_m1230427A-225	NA	04/28/23 11:50
Calibration Check	SLD0418-CCVM	XDT_m1230427A-227	NA	04/28/23 11:59
Calibration Blank	SLD0418-CCBM	XDT_m1230427A-228	NA	04/28/23 12:06



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0418-IFA1	Arsenic-75a	0	0.0350		ug/L
	Cadmium-111	0	0.0800		ug/L
	Cadmium-114	0	0.0730		ug/L
	Copper-63	0	0.0440		ug/L
	Copper-65	0	0.0450		ug/L
	Zinc-66	0	0.2740		ug/L
	Zinc-67	0	0.1430		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0418-IFB1	Arsenic-75a	20.000	19.815	99.1	ug/L
	Cadmium-111	20.000	19.752	98.8	ug/L
	Cadmium-114	20.000	19.659	98.3	ug/L
	Copper-63	20.000	20.947	105	ug/L
	Copper-65	20.000	20.866	104	ug/L
	Zinc-66	20.000	20.181	101	ug/L
	Zinc-67	20.000	18.362	91.8	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Lab Sample ID: SLD0418-CRL1

Analyte	True	Found	%R	Units	QC Limits
Arsenic-75a	0.20000	0.200	100	ug/L	50 - 150
Cadmium-111	0.10000	0.0950	95.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0960	96.0	ug/L	50 - 150
Copper-63	0.50000	0.577	115	ug/L	50 - 150
Copper-65	0.50000	0.569	114	ug/L	50 - 150
Zinc-66	6.0000	6.88	115	ug/L	50 - 150
Zinc-67	6.0000	6.01	100	ug/L	50 - 150

* Values outside of QC limits



HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00078

Laboratory ID: SLD0418-HCV1

Sequence: SLD0418

Standard ID: L003671

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	203	1.4	10.00
Cadmium-111	200.00	209	4.4	10.00
Cadmium-114	200.00	205	2.6	10.00
Copper-63	200.00	201	0.5	10.00
Copper-65	200.00	204	2.0	10.00
Zinc-66	200.00	198	-1.2	10.00
Zinc-67	200.00	198	-1.2	10.00

* Values outside of QC limits



HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00078

Laboratory ID: SLD0418-HCV2

Sequence: SLD0418

Standard ID: L003672

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	305	1.7	10.00
Cadmium-111	300.00	296	-1.2	10.00
Cadmium-114	300.00	294	-2.1	10.00
Copper-63	300.00	297	-0.9	10.00
Copper-65	300.00	296	-1.2	10.00
Zinc-66	300.00	289	-3.6	10.00
Zinc-67	300.00	286	-4.5	10.00

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	04/17/23 16:50	91	180	04/28/23 00:36	101	180	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	04/17/23 16:50	91	180	04/28/23 00:31	101	180	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:32	101	180	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:36	101	180	
LDW23-IT1181 23A0326-08	01/17/23 12:31	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 02:19	101	180	
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 02:23	101	180	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:41	100	180	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:45	100	180	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:49	100	180	
Duplicate BLD0394-DUP1	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 00:40	101	180	
Matrix Spike BLD0394-MS1	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 00:45	101	180	
Matrix Spike Dup BLD0394-MSD1	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 00:49	101	180	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS
EPA 6020B UCT-KED**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ICPMS1

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCU10
 Lot Number: P2-CU682108
 Matrix: 3% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Copper
 Starting Material: Cu Metal
 Starting Material Lot#: 2095
 Starting Material Purity: 99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL
Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9977 ± 50 µg/mL ICP Assay NIST SRM 3114 Lot Number: 121207
Assay Method #2	10024 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10007 ± 46 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.007542	M Eu < 0.000942	O Na < 0.001434	M Se < 0.016971	M Zn < 0.005657
O Al < 0.000609	O Fe < 0.008700	M Nb < 0.000942	O Si < 0.003052	M Zr < 0.000942
M As < 0.010371	M Ga < 0.000942	M Nd < 0.000942	M Sm < 0.000942	
M Au < 0.001885	M Gd < 0.000942	M Ni < 0.003781	M Sn < 0.005657	
O B < 0.003663	M Ge < 0.005657	M Os < 0.000942	M Sr < 0.000942	
M Ba < 0.004253	M Hf < 0.000942	O P < 0.031668	M Ta < 0.000942	
M Be < 0.000942	O Hg < 0.007064	M Pb < 0.005789	M Tb < 0.000942	
M Bi < 0.000942	M Ho < 0.000942	M Pd < 0.000942	M Te < 0.004714	
O Ca < 0.002304	M In < 0.000942	M Pr < 0.000942	M Th < 0.000942	
M Cd < 0.000942	M Ir < 0.000942	M Pt < 0.000942	O Ti < 0.002801	
M Ce < 0.000942	O K < 0.000763	M Rb < 0.000942	M Tl < 0.000942	
M Co < 0.001890	M La < 0.000942	M Re < 0.000942	M Tm < 0.000942	
M Cr < 0.005657	O Li < 0.000243	i Rh <	M U < 0.000942	
M Cs < 0.000942	M Lu < 0.000942	M Ru < 0.039588	M V < 0.003771	
s Cu <	O Mg < 0.000320	O S < 0.007174	M W < 0.005657	
M Dy < 0.000942	O Mn < 0.000793	M Sb < 0.001885	M Y < 0.000942	
M Er < 0.000942	M Mo < 0.005657	M Sc < 0.000942	M Yb < 0.000942	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 Cu(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGPB10
Lot Number: S2-PB713228
Matrix: 0.5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Lead
Starting Material: Lead Nitrate
Starting Material Lot#: 2343
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL
Density: 1.015 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000310	M Eu < 0.000310	M Na < 0.001470	M Se < 0.009100	O Zn < 0.006155
O Al < 0.017098	O Fe < 0.002496	M Nb < 0.000310	O Si < 0.003761	O Zr < 0.001700
M As < 0.003100	M Ga < 0.000310	M Nd < 0.000310	M Sm < 0.000310	
M Au < 0.000910	M Gd < 0.000310	O Ni < 0.001709	M Sn < 0.001300	
O B < 0.005600	M Ge < 0.002200	M Os < 0.000310	O Sr < 0.000444	
O Ba < 0.007865	M Hf < 0.000310	O P < 0.038000	M Ta < 0.000310	
O Be < 0.000320	M Hg < 0.002200	s Pb < 0.000610	M Tb < 0.000610	
M Bi < 0.028000	M Ho < 0.000310	M Pd < 0.000610	M Te < 0.000310	
O Ca < 0.019834	M In < 0.000310	M Pr < 0.000310	M Th < 0.000310	
O Cd < 0.000630	M Ir < 0.000310	M Pt < 0.000910	O Ti < 0.005129	
M Ce < 0.004787	O K < 0.008207	M Rb < 0.006700	M Tl < 0.016000	
M Co < 0.000610	M La < 0.001900	M Re < 0.000310	M Tm < 0.000310	
O Cr < 0.001500	O Li < 0.000110	O Rh < 0.007700	M U < 0.000310	
M Cs < 0.006100	M Lu < 0.000310	M Ru < 0.001300	M V < 0.001600	
M Cu < 0.001600	O Mg < 0.003317	O S < 0.052000	M W < 0.000910	
M Dy < 0.000310	O Mn < 0.001600	O Sb < 0.015000	M Y < 0.000310	
M Er < 0.000310	M Mo < 0.000610	O Sc < 0.000630	M Yb < 0.000310	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, HF and HNO₃. Avoid H₂SO₄. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H₂O / HNO₃); Oxides (The many different Pb oxides are soluble in HNO₃ with the exception of PbO₂ which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H₂O / HNO₃); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGZN10
Lot Number: S2-ZN711249
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Zinc
Starting Material: Zinc Metal
Starting Material Lot#: 2349
Starting Material Purity: 99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9981 ± 56 µg/mL ICP Assay NIST SRM 3168a Lot Number: 120629
Assay Method #2	9987 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10002 ± 32 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.002000	M Eu < 0.000500	O Na < 0.008713	M Se < 0.048000	s Zn <
O Al < 0.011000	O Fe < 0.015467	M Nb < 0.000500	O Si < 0.007842	M Zr < 0.000500
O As < 0.012000	M Ga < 0.004900	M Nd < 0.000500	M Sm < 0.000500	
M Au < 0.006500	M Gd < 0.000500	O Ni < 0.003049	M Sn < 0.002614	
O B < 0.019000	M Ge < 0.009100	M Os < 0.000500	M Sr < 0.000500	
M Ba < 0.000500	M Hf < 0.000500	O P < 0.059000	M Ta < 0.000500	
O Be < 0.000230	O Hg < 0.003800	M Pb < 0.016774	M Tb < 0.000500	
M Bi < 0.002400	M Ho < 0.000500	M Pd < 0.001000	M Te < 0.017000	
O Ca < 0.052283	M In < 0.003500	M Pr < 0.000500	M Th < 0.000500	
O Cd < 0.000588	M Ir < 0.001000	M Pt < 0.000500	M Ti < 0.002000	
M Ce < 0.000500	O K < 0.017209	M Rb < 0.002500	M Tl < 0.000500	
M Co < 0.000653	M La < 0.000500	M Re < 0.000500	M Tm < 0.000500	
O Cr < 0.001089	O Li < 0.000230	M Rh < 0.000500	M U < 0.000500	
M Cs < 0.000500	M Lu < 0.000500	M Ru < 0.005000	M V < 0.000500	
O Cu < 0.001938	O Mg < 0.000871	O S < 0.048000	M W < 0.001000	
M Dy < 0.000500	O Mn < 0.000172	M Sb < 0.004300	M Y < 0.000500	
M Er < 0.000500	M Mo < 0.001500	O Sc < 0.000900	M Yb < 0.000500	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSE10
Lot Number: S2-SE711004
Matrix: 3% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Selenium
Starting Material: Se Metal
Starting Material Lot#: 1962
Starting Material Purity: 99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/(u_{char i}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.002242	M	Eu <	0.000373	O Na	0.013654	s	Se <		O Zn	0.002374
M Al	0.004450	M	Fe	0.008478	O Nb <	0.002975	O Si	0.006249	M Zr <	0.001868	
O As <	0.022040	M	Ga <	0.000373	M Nd <	0.000373	M Sm <	0.000373			
M Au <	0.000373	M	Gd <	0.000373	O Ni	0.001843	M Sn	0.000847			
O B <	0.007714	M	Ge <	0.002616	M Os <	0.000373	M Sr <	0.001121			
M Ba <	0.001495	M	Hf <	0.000373	O P <	0.022040	M Ta <	0.000373			
M Be <	0.001495	M	Hg <	0.002240	M Pb	0.006358	M Tb <	0.006353			
M Bi <	0.000373	M	Ho <	0.000373	M Pd <	0.000373	M Te <	0.012707			
O Ca	0.006530	M	In <	0.000373	M Pr <	0.001495	M Th <	0.002990			
M Cd	0.001165	M	Ir <	0.000373	M Pt <	0.000373	M Ti <	0.003363			
M Ce <	0.000373	O K	0.001999	M Rb <	0.001868	M Tl	0.008584				
M Co <	0.000373	M La <	0.001121	M Re <	0.000373	M Tm <	0.000373				
M Cr	0.002861	O Li	0.000062	M Rh <	0.000373	M U <	0.000373				
M Cs <	0.001121	M Lu <	0.000373	M Ru <	0.001493	M V <	0.000747				
M Cu <	0.000747	O Mg	0.001156	O S	0.024591	M W <	0.002242				
M Dy <	0.000373	M Mn <	0.000373	M Sb <	0.002242	M Y <	0.000373				
M Er <	0.000373	O Mo <	0.003195	M Sc <	0.001121	M Yb <	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H₂SeO₃

Chemical Compatibility -Soluble in HCl, HNO₃,H₃PO₄, H₂SO₄ and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO₃or HNO₃ / HF); Organic Matrices (acid digestion with hot concentrated H₂SO₄ accompanied by the careful dropwise addition of H₂O₂ until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMO10
Lot Number: S2-MO706255
Matrix: H2O
tr. NH4OH
Value / Analyte(s): 10 000 µg/mL ea:
Molybdenum
Starting Material: Ammonium Molybdate
Starting Material Lot#: 2361
Starting Material Purity: 99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL
Density: 1.011 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000590	M Eu < 0.000300	M Na < 0.008739	M Se < 0.008000	M Zn < 0.005942
M Al < 0.005592	M Fe < 0.006500	M Nb < 0.029000	i Si < 0.001800	M Zr < 0.001800
M As < 0.002100	M Ga < 0.000300	i Nd < 0.000300	M Sm < 0.000300	
M Au < 0.000300	M Gd < 0.000300	M Ni < 0.008000	M Sn < 0.008900	
M B < 0.003300	M Ge < 0.000300	M Os < 0.000590	M Sr < 0.001747	
M Ba < 0.016778	M Hf < 0.001800	i P < 0.004200	M Ta < 0.004200	
M Be < 0.000890	M Hg < 0.003300	M Pb < 0.000300	M Tb < 0.000300	
M Bi < 0.000890	M Ho < 0.000300	M Pd < 0.001800	M Te < 0.021000	
O Ca < 0.062920	M In < 0.032000	M Pr < 0.013000	M Th < 0.000300	
O Cd < 0.026000	M Ir < 0.000300	M Pt < 0.000300	O Ti < 0.032000	
M Ce < 0.008300	M K < 1.293372	M Rb < 0.045442	M Tl < 0.012584	
M Co < 0.005942	M La < 0.000300	M Re < 0.000300	M Tm < 0.000300	
M Cr < 0.005243	O Li < 0.000594	M Rh < 0.000300	M U < 0.005300	
M Cs < 0.005243	M Lu < 0.000300	M Ru < 0.079000	M V < 0.000890	
M Cu < 0.022371	M Mg < 0.005592	i S < 0.873900	M W < 0.873900	
M Dy < 0.000300	M Mn < 0.005900	M Sb < 0.015031	M Y < 0.000300	
M Er < 0.000300	s Mo < 0.001200	M Sc < 0.001200	M Yb < 0.000300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9

[MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 60,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGTL10
Lot Number: T2-TL714687
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Thallium
Starting Material: TINO₃
Starting Material Lot#: 2118
Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL
Density: 1.036 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000200	M Eu < 0.000200	O Na < 0.002489	M Se < 0.011019	O Zn < 0.002298
O Al < 0.004184	O Fe < 0.002824	M Nb < 0.000200	O Si < 0.003760	M Zr < 0.000200
M As < 0.002003	M Ga < 0.000200	M Nd < 0.000200	M Sm < 0.000200	
O Au < 0.002824	M Gd < 0.000200	M Ni < 0.001724	M Sn < 0.000601	
O B < 0.004184	M Ge < 0.000801	M Os < 0.000198	O Sr < 0.000313	
M Ba < 0.000400	M Hf < 0.000200	O P < 0.010460	M Ta < 0.000200	
O Be < 0.000104	M Hg < 0.000794	M Pb < 0.000811	M Tb < 0.000200	
M Bi < 0.005209	M Ho < 0.000200	M Pd < 0.000400	M Te < 0.005008	
O Ca < 0.002436	M In < 0.000200	M Pr < 0.000200	M Th < 0.000200	
M Cd < 0.001318	M Ir < 0.000198	M Pt < 0.000801	O Ti < 0.001255	
M Ce < 0.000200	O K < 0.006175	M Rb < 0.000200	s Tl <	
M Co < 0.000601	M La < 0.000200	M Re < 0.000200	M Tm < 0.000200	
M Cr < 0.000801	O Li < 0.000177	M Rh < 0.000200	M U < 0.000200	
M Cs < 0.003606	M Lu < 0.000200	M Ru < 0.000397	M V < 0.002203	
M Cu < 0.001001	O Mg < 0.000529	O S < 0.015690	M W < 0.000601	
M Dy < 0.000200	M Mn < 0.000801	M Sb < 0.000400	M Y < 0.000200	
M Er < 0.000200	M Mo < 0.001202	O Sc < 0.000711	M Yb < 0.000200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Ti(H₂O)₆¹⁺
Chemical Compatibility - Soluble in HCl, HNO₃, and H₂SO₄. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Ti Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO₃ which forms chiefly the Ti¹⁺ ion.); Oxide (The thalious oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt₀ followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCD10
Lot Number: S2-CD710508
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Cadmium
Starting Material: Cd Metal
Starting Material Lot#: 1953
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10010 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	10011 ± 30 µg/mL ICP Assay NIST SRM 3108 Lot Number: 130116
Assay Method #3	10003 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

O Ag < 0.003200	O Eu < 0.002500	O Na < 0.005499	M Se < 0.005700	O Zn < 0.001100
O Al < 0.008903	O Fe < 0.000602	M Nb < 0.000400	O Si < 0.016758	O Zr < 0.002600
M As < 0.003600	M Ga < 0.001200	M Nd < 0.000800	M Sm < 0.000400	
M Au < 0.000810	M Gd < 0.000400	M Ni < 0.003600	M Sn < 0.003200	
O B < 0.004189	O Ge < 0.012000	M Os < 0.000810	O Sr < 0.000330	
M Ba < 0.002400	M Hf < 0.000400	O P < 0.022000	M Ta < 0.000800	
M Be < 0.000400	M Hg < 0.001700	M Pb < 0.002400	M Tb < 0.000400	
M Bi < 0.000400	M Ho < 0.000400	M Pd < 0.001200	M Te < 0.008000	
O Ca < 0.011259	O In < 0.013000	M Pr < 0.000400	M Th < 0.000400	
s Cd < 0.000400	M Ir < 0.000410	M Pt < 0.000400	O Ti < 0.000602	
M Ce < 0.000400	O K < 0.005237	M Rb < 0.004400	M Tl < 0.000523	
M Co < 0.000400	M La < 0.000400	M Re < 0.000400	M Tm < 0.000400	
O Cr < 0.005100	O Li < 0.000054	M Rh < 0.000400	M U < 0.000400	
M Cs < 0.002400	M Lu < 0.000400	M Ru < 0.002500	M V < 0.002000	
O Cu < 0.004800	O Mg < 0.000288	O S < 0.022000	M W < 0.000400	
M Dy < 0.000400	O Mn < 0.000860	O Sb < 0.018000	M Y < 0.000400	
M Er < 0.000400	M Mo < 0.001600	O Sc < 0.000430	M Yb < 0.000400	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd₂(OH)(aq)₃₊ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃ / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (soluble in HCl or HNO₃); Ores (dissolve in HCl /HNO₃ then take to fumes with H₂SO₄. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMN10
Lot Number: S2-MN704240
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Manganese
Starting Material: Mn Metal
Starting Material Lot#: 2275
Starting Material Purity: 99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9989 ± 69 µg/mL ICP Assay NIST SRM 3132 Lot Number: 050429
Assay Method #2	10011 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10024 ± 47 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001500	M Eu < 0.000730	O Na 0.176097	M Se < 0.006600	M Zn 0.009925
O Al 0.004322	M Fe < 0.650000	M Nb < 0.000730	O Si 0.097654	M Zr < 0.000730
M As < 0.008000	M Ga 0.004322	M Nd < 0.001500	M Sm < 0.000730	
M Au < 0.000730	M Gd < 0.000730	M Ni 0.024013	M Sn < 0.002200	
M B 0.068838	M Ge < 0.004400	M Os < 0.000730	O Sr 0.000928	
M Ba < 0.001500	M Hf < 0.000730	i P <	M Ta < 0.000730	
M Be < 0.000730	M Hg < 0.002200	M Pb 0.007364	M Tb < 0.000730	
M Bi < 0.003000	M Ho < 0.000730	M Pd < 0.000730	M Te < 0.019000	
O Ca 0.062434	M In < 0.003000	M Pr < 0.000730	M Th < 0.000730	
M Cd < 0.001500	M Ir < 0.000730	M Pt < 0.000730	O Ti < 0.006500	
M Ce < 0.007300	O K 0.006403	M Rb < 0.006600	M Tl < 0.000730	
O Co 0.014728	M La < 0.003000	M Re < 0.000730	M Tm < 0.000730	
O Cr 0.272151	O Li 0.000416	M Rh < 0.003000	M U < 0.001500	
M Cs < 0.000730	M Lu < 0.000730	M Ru < 0.004400	M V < 0.000730	
O Cu 0.007684	O Mg 0.320177	i S <	M W < 0.004400	
M Dy < 0.001500	s Mn <	M Sb < 0.021000	O Y 0.001360	
M Er < 0.001500	M Mo 0.010245	O Sc < 0.004100	M Yb < 0.000730	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 Mn(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H₂SO₄ and heat to SO₃ fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16 O,37Cl18O,40Ar15 N,38Ar17O,36Ar18O 1H ,38Ar16O1H,37Cl17 O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGSB10
 Lot Number: R2-SB688559
 Matrix: 3% (v/v) HNO3
 3% (w/v) tartaric acid
 Value / Analyte(s): 10 000 µg/mL ea:
 Antimony
 Starting Material: Antimony Metal
 Starting Material Lot#: 1857
 Starting Material Purity: 99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL
Density: 1.061 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 10003 ± 41 µg/mL
 ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char} = [\sum((w_i)^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.000200	M Eu <	0.000300	O Na	0.140000	M Se <	0.007300	O Zn	0.005000
M Al	0.003200	O Fe	0.060000	M Nb <	0.000100	O Si	0.150000	O Zr <	0.006300
M As <	0.004400	M Ga <	0.000400	M Nd <	0.000100	M Sm <	0.000100		
M Au <	0.000210	M Gd <	0.000100	O Ni	0.004800	M Sn <	0.001800		
M B <	0.011000	M Ge <	0.000600	M Os <	0.000110	O Sr	0.000750		
O Ba <	0.004900	M Hf <	0.000100	O P	0.540000	M Ta	0.003300		
M Be <	0.000400	M Hg <	0.000110	M Pb <	0.000400	M Tb <	0.000100		
M Bi <	0.000200	M Ho <	0.000100	M Pd <	0.000210	M Te <	0.000600		
O Ca	0.110000	M In <	0.000100	M Pr <	0.001600	M Th <	0.000100		
M Cd <	0.000200	M Ir <	0.000110	M Pt <	0.000600	M Ti <	0.002800		
M Ce	0.006500	O K	0.020000	M Rb <	0.001000	M Tl <	0.000100		
M Co <	0.000200	O La <	0.016000	M Re <	0.000100	M Tm <	0.000100		
M Cr	0.006900	O Li <	0.000430	M Rh <	0.000300	M U <	0.000100		
M Cs <	0.000200	M Lu <	0.000100	M Ru <	0.000310	M V <	0.000800		
M Cu <	0.000600	O Mg	0.021000	n S <		M W <	0.000200		
M Dy <	0.000100	O Mn	0.001900	s Sb <		M Y <	0.000100		
M Er <	0.000100	M Mo <	0.000500	O Sc <	0.002300	M Yb <	0.000100		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAS10
Lot Number: T2-AS718260
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Arsenic
Starting Material: As Metal
Starting Material Lot#: 2208
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL
Density: 1.037 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.003200	M Eu < 0.000530	O Na < 0.032544	M Se < 0.006300	O Zn < 0.001952
M Al < 0.007593	O Fe < 0.001475	O Nb < 0.012000	O Si < 0.238658	O Zr < 0.004100
s As < 0.000530	M Ga < 0.000530	M Nd < 0.000530	M Sm < 0.000530	
M Au < 0.003100	M Gd < 0.000530	M Ni < 0.002100	M Sn < 0.000530	
M B < 0.026035	M Ge < 0.001600	M Os < 0.000520	M Sr < 0.000530	
M Ba < 0.000530	M Hf < 0.000530	O P < 0.043000	M Ta < 0.000530	
O Be < 0.000360	M Hg < 0.001600	M Pb < 0.002100	M Tb < 0.000530	
M Bi < 0.000530	M Ho < 0.000530	M Pd < 0.001100	M Te < 0.004700	
O Ca < 0.004339	M In < 0.023000	M Pr < 0.005300	M Th < 0.000530	
M Cd < 0.001100	M Ir < 0.000520	M Pt < 0.000530	O Ti < 0.002300	
M Ce < 0.000530	O K < 0.002061	M Rb < 0.000530	M Tl < 0.000530	
M Co < 0.000530	M La < 0.001100	M Re < 0.000530	M Tm < 0.000530	
O Cr < 0.001800	O Li < 0.000120	M Rh < 0.000530	M U < 0.000530	
M Cs < 0.005300	M Lu < 0.000530	M Ru < 0.000520	M V < 0.002700	
M Cu < 0.001600	O Mg < 0.000154	O S < 0.028205	M W < 0.012000	
M Dy < 0.000530	O Mn < 0.000154	M Sb < 0.000530	M Y < 0.000530	
M Er < 0.000530	M Mo < 0.000530	O Sc < 0.001700	M Yb < 0.000530	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3, H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphous form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powdered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37C I,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGBA10
Lot Number: R2-BA692576
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Barium
Starting Material: Barium Nitrate
Starting Material Lot#: 1969
Starting Material Purity: 99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL
Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10018 ± 50 µg/mL ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	10023 ± 31 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	10023 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an UPLA-Filtered Clean Room. An UPLA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000410	O Eu < 0.005200	O Na 0.004610	M Se < 0.003700	O Zn 0.000658
M Al < 0.003100	O Fe 0.015707	M Nb < 0.000210	O Si 0.005573	M Zr < 0.001300
M As < 0.001300	M Ga < 0.000210	M Nd < 0.000210	O Sm < 0.021000	
M Au < 0.001300	M Gd < 0.000210	M Ni < 0.000810	M Sn < 0.000410	
O B < 0.005200	M Ge < 0.002500	M Os < 0.000410	O Sr 0.003850	
s Ba <	M Hf < 0.000810	O P < 0.026000	M Ta < 0.000410	
O Be < 0.000320	M Hg < 0.000210	M Pb < 0.002300	M Tb < 0.000210	
M Bi < 0.000210	M Ho < 0.000210	M Pd < 0.000210	M Te < 0.001900	
O Ca 0.007093	M In < 0.000210	M Pr < 0.000210	M Th < 0.000210	
M Cd < 0.000210	M Ir < 0.000210	M Pt < 0.000210	M Ti < 0.002100	
M Ce < 0.001300	O K 0.035467	M Rb < 0.002100	M Tl < 0.000210	
M Co < 0.000410	O La < 0.005200	M Re < 0.000210	M Tm < 0.000410	
M Cr < 0.001700	O Li < 0.000630	M Rh < 0.000210	M U < 0.000210	
M Cs < 0.003300	M Lu < 0.001700	M Ru < 0.000210	O V < 0.005200	
M Cu < 0.001300	O Mg 0.000861	O S 0.268539	M W < 0.000410	
M Dy < 0.000210	M Mn < 0.000410	M Sb < 0.001300	O Y < 0.005200	
M Er < 0.001300	M Mo < 0.000410	M Sc < 0.000410	M Yb < 0.001300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 Ba(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO₃ / LDPE container.

Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO₃); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent BaSO₄ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGBE10
 Lot Number: R2-BE692992
 Matrix: 6% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Beryllium
 Starting Material: Beryllium Acetate
 Starting Material Lot#: 2281
 Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL
Density: 1.128 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10042 ± 67 µg/mL ICP Assay NIST SRM 3105a Lot Number: 090514
Assay Method #2	10025 ± 51 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i}^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001100	M Eu < 0.000270	O Na < 0.040962	M Se < 0.005000	M Zn < 0.013054
O Al < 0.016205	O Fe < 0.015754	M Nb < 0.000270	O Si < 0.024307	O Zr < 0.001900
M As < 0.002900	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000520	M Gd < 0.000270	M Ni < 0.003700	M Sn < 0.000790	
M B < 0.091000	M Ge < 0.000270	M Os < 0.000260	M Sr < 0.000630	
M Ba < 0.002700	M Hf < 0.000270	O P < 0.066000	M Ta < 0.000270	
s Be < 0.000530	M Hg < 0.000520	M Pb < 0.000270	M Tb < 0.000270	
M Bi < 0.072022	M Ho < 0.000270	M Pd < 0.000520	M Te < 0.003700	
O Ca < 0.000790	M In < 0.000790	M Pr < 0.000270	M Th < 0.000270	
M Cd < 0.000270	M Ir < 0.000260	M Pt < 0.000270	O Ti < 0.000400	
M Ce < 0.000270	O K < 0.045014	M Rb < 0.000270	M Tl < 0.000790	
O Co < 0.003200	M La < 0.000270	M Re < 0.000270	M Tm < 0.000270	
O Cr < 0.001800	O Li < 0.000660	M Rh < 0.001100	M U < 0.000270	
M Cs < 0.001440	M Lu < 0.000270	M Ru < 0.000260	M V < 0.000790	
M Cu < 0.002100	O Mg < 0.016205	i S < 0.000270	M W < 0.000530	
M Dy < 0.000270	M Mn < 0.001215	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.000530	O Sc < 0.000930	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 Be(H₂O)₄+2

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO₃ / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta I(is best dissolved in diluted H₂SO₄); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO₄ fusion); Ores (H₂SO₄/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCO10
 Lot Number: R2-CO695285
 Matrix: 3% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Cobalt
 Starting Material: Co Metal
 Starting Material Lot#: 2326
 Starting Material Purity: 99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10031 ± 67 µg/mL ICP Assay NIST SRM 3113 Lot Number: 190630
Assay Method #2	10019 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10000 ± 35 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/CRM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) X_i$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an UPLA-Filtered Clean Room. An UPLA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.014660	M Eu	<	0.000590	O Na	0.007534	M Se	<	0.019000	M Zn	0.003461	
M Al	<	0.024000	M Fe	0.050905	M Nb	<	0.000590	O Si	0.075340	M Zr	<	0.001200
i As	<		M Ga	<	0.000590	M Nd	<	0.000590	M Sm	<	0.000590	
M Au	<	0.004100	M Gd	<	0.000590	O Ni	0.427608	M Sn	<	0.001200		
M B	<	0.031000	M Ge	<	0.003000	M Os	<	0.000590	O Sr	<	0.000260	
M Ba	<	0.000590	M Hf	<	0.000590	n P	<		M Ta	<	0.001200	
O Be	<	0.001300	M Hg	<	0.001800	M Pb	0.003257	M Tb	<	0.000590		
M Bi	<	0.003000	M Ho	<	0.000590	M Pd	<	0.000590	M Te	<	0.005300	
O Ca	0.010588	M In	<	0.001200	M Pr	<	0.000590	M Th	<	0.000590		
M Cd	<	0.004700	M Ir	<	0.001200	M Pt	<	0.002400	M Ti	<	0.014000	
M Ce	<	0.000590	O K	0.008144	M Rb	<	0.000590	M Tl	0.002647			
s Co	<		M La	<	0.000590	M Re	<	0.000590	M Tm	<	0.000590	
M Cr	<	0.021000	O Li	<	0.000130	M Rh	<	0.000590	M U	<	0.000590	
M Cs	<	0.002400	M Lu	<	0.000590	M Ru	<	0.007100	O V	<	0.000880	
M Cu	0.189369	O Mg	0.001893	n S	<			M W	<	0.000590		
M Dy	<	0.000590	M Mn	<	0.001800	M Sb	<	0.003600	M Y	<	0.000590	
M Er	<	0.000590	M Mo	<	0.002400	O Sc	<	0.001600	M Yb	<	0.000590	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 Co(H₂O)₆²⁺

Chemical Compatibility - Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAG10
Lot Number: S2-AG712977
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Silver
Starting Material: Ag Shot
Starting Material Lot#: 2289
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10051 ± 52 µg/mL ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	10051 ± 19 µg/mL Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	10049 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s Ag <	M Eu <	0.000260	O Na	0.003811	M Se <	0.003900	O Zn	0.048146	
M Al	0.002688	O Fe	0.006419	M Nb <	0.000260	O Si	0.005215	M Zr <	0.000260
M As <	0.001100	M Ga <	0.000260	M Nd <	0.000260	M Sm <	0.000260		
M Au <	0.000260	M Gd <	0.000260	O Ni	0.001765	M Sn	0.020060		
O B <	0.004300	M Ge <	0.002300	M Os <	0.001100	O Sr <	0.000110		
M Ba <	0.000520	M Hf <	0.000260	O P <	0.017000	M Ta <	0.000260		
O Be <	0.001100	M Hg <	0.000770	M Pb <	0.003600	M Tb <	0.000260		
M Bi	0.004814	M Ho <	0.000260	M Pd	0.044134	M Te <	0.009000		
O Ca	0.005215	M In	0.003691	M Pr <	0.000260	M Th <	0.000260		
M Cd <	0.000260	M Ir <	0.000520	M Pt <	0.001100	O Ti <	0.000440		
M Ce <	0.002100	O K <	0.008700	M Rb <	0.001100	M Tl <	0.004100		
O Co <	0.000330	M La <	0.000260	M Re <	0.000260	M Tm <	0.000260		
O Cr <	0.002500	O Li <	0.000110	M Rh <	0.000520	M U <	0.000260		
M Cs <	0.002600	M Lu <	0.000260	M Ru <	0.000260	M V <	0.000260		
O Cu	0.357085	O Mg	0.001203	O S <	0.017000	M W <	0.000260		
M Dy <	0.000260	O Mn <	0.000220	M Sb <	0.014000	M Y <	0.000260		
M Er <	0.000260	M Mo <	0.000260	O Sc <	0.000220	M Yb <	0.000260		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 Ag(H₂O)₆⁺
Chemical Compatibility - Stable in HNO₃, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [AgCl_x1-x] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite, bromide, chloride, iodide, carbonate, chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ag Containing Samples (Preparation and Solution) - Metal (Soluble in HNO₃); Oxides (Soluble in HNO₃); Ores (Digestion with conc. HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCR(3)10
Lot Number: S2-CR709784
Matrix: 10% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Chromium
Starting Material: Cr Metal
Starting Material Lot#: 2328
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL
Density: 1.072 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char\ i}^2) / (\sum(1/(u_{char\ i}^2)))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 u_{char} = $[\sum((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char\ a})$$

X_a = mean of Assay Method A with
 $u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char\ a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.001700	M	Eu <	0.003400	O	Na	0.090372	M	Se <	0.012000	O	Zn <	0.006100
M Al	0.034916	O	Fe	0.246471	M	Nb <	0.017000	n	Si <		M	Zr <	0.007800
M As <	0.028000	O	Ga <	0.013000	M	Nd <	0.013000	M	Sm <	0.006900			
M Au <	0.001700	M	Gd <	0.000560	M	Ni	0.016020	M	Sn	0.006983			
O B <	0.025000	O	Ge <	0.014000	M	Os <	0.000560	M	Sr	0.006367			
M Ba <	0.008900	M	Hf <	0.000560	i	P <		M	Ta <	0.000560			
M Be <	0.013000	M	Hg <	0.001700	M	Pb	0.010064	M	Tb <	0.000560			
M Bi <	0.002300	M	Ho <	0.000560	M	Pd <	0.021000	M	Te <	0.010000			
O Ca	0.075995	M	In <	0.000560	M	Pr <	0.001700	M	Th <	0.000560			
M Cd <	0.000560	M	Ir <	0.000560	M	Pt <	0.001200	O	Ti	0.013555			
M Ce <	0.001200	O	K	0.043132	i	Rb <		M	Tl <	0.000560			
M Co <	0.002600	M	La <	0.001200	M	Re <	0.001200	O	Tm <	0.013000			
s Cr <		O	Li	0.000390	M	Rh <	0.095000	M	U <	0.000560			
M Cs <	0.007800	M	Lu <	0.000560	M	Ru <	0.087000	O	V	0.014993			
O Cu	0.007599	O	Mg	0.000883	i	S <		M	W <	0.049000			
M Dy <	0.000560	M	Mn	0.008626	M	Sb <	0.003400	M	Y <	0.001700			
M Er <	0.019000	M	Mo <	0.032000	M	Sc	0.003080	M	Yb <	0.000560			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 Cr(H₂O)₆3+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cr₃ Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with KHSO₄ and extraction with hot KCl. The residue fused with Na₂CO₃ and KClO₃, 3:1. B. Fusion with NaKSO₄ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na₂O₂ or NaOH and KNO₃ or NaOH and Na₂O₂. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGNI10
 Lot Number: P2-NI686384
 Matrix: 3% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Nickel
 Starting Material: Ni Metal
 Starting Material Lot#: 2277 and 2282
 Starting Material Purity: 99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL
Density: 1.038 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9971 ± 54 µg/mL ICP Assay NIST SRM 3136 Lot Number: 120619
Assay Method #2	9970 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	9993 ± 33 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.002606	M Eu	<	0.001100	O Na	0.004965	O Se	<	0.067000	M Zn	0.006578	
M Al	<	0.013000	O Fe	0.018618	M Nb	<	0.001100	O Si	0.010923	M Zr	<	0.001100
O As	<	0.067000	M Ga	<	0.001100	M Nd	<	0.001100	M Sm	<	0.001100	
M Au	<	0.002100	M Gd	<	0.001100	s Ni	<		M Sn	<	0.016000	
M B	<	0.017000	M Ge	<	0.004200	M Os	0.002110	O Sr	<	0.000940		
M Ba	<	0.001100	M Hf	<	0.001100	i P	<		M Ta	<	0.001100	
O Be	<	0.000410	M Hg	0.014895	M Pb	0.006578	M Tb	<	0.001100			
M Bi	<	0.004200	M Ho	<	0.001100	M Pd	<	0.001100	M Te	<	0.015000	
O Ca	0.003351	M In	<	0.001100	M Pr	<	0.001100	M Th	<	0.001100		
M Cd	0.001365	M Ir	0.004716	M Pt	<	0.001100	M Ti	<	0.004200			
M Ce	<	0.001100	O K	0.004716	M Rb	<	0.001100	M Tl	<	0.001100		
O Co	0.017377	M La	<	0.001100	M Re	0.001737	M Tm	<	0.001100			
O Cr	<	0.006700	O Li	<	0.000140	M Rh	<	0.006300	M U	<	0.001100	
M Cs	<	0.007300	M Lu	<	0.001100	M Ru	<	0.019000	M V	<	0.002100	
M Cu	0.004096	O Mg	0.000372	i S	<			M W	<	0.006300		
M Dy	<	0.001100	O Mn	<	0.001900	M Sb	0.005833	O Y	<	0.000540		
M Er	<	0.001100	M Mo	<	0.008400	M Sc	<	0.002100	M Yb	<	0.001100	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H₂O)₆²⁺

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGV10
Lot Number: S2-V711005
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Vanadium
Starting Material: Vanadium Pentoxide
Starting Material Lot#: 1782
Starting Material Purity: 99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL
Density: 1.104 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000110	M Eu < 0.000110	O Na 0.120000	M Se < 0.009400	M Zn 0.009400
O Al 0.120000	O Fe 0.460000	M Nb < 0.001300	O Si 0.270000	M Zr < 0.002900
M As < 0.000210	M Ga < 0.009300	M Nd < 0.000610	M Sm < 0.000110	
M Au < 0.004700	M Gd < 0.000110	M Ni 0.012000	M Sn 0.003900	
M B 0.051000	M Ge < 0.000410	M Os < 0.000110	O Sr 0.007100	
M Ba 0.003600	M Hf < 0.000110	O P < 0.034000	M Ta < 0.000110	
O Be < 0.000560	M Hg < 0.000410	M Pb 0.001400	M Tb < 0.000110	
M Bi < 0.000210	M Ho < 0.000110	M Pd < 0.000410	M Te < 0.000110	
O Ca 0.730000	M In < 0.000110	M Pr < 0.000110	M Th < 0.000210	
M Cd < 0.000610	M Ir < 0.000110	M Pt < 0.000110	M Ti 0.017000	
M Ce < 0.000610	M K 0.052000	M Rb < 0.000310	M Tl < 0.000110	
M Co < 0.001300	M La < 0.000410	M Re 0.001700	M Tm < 0.000110	
O Cr 0.170000	M Li < 0.000810	M Rh < 0.000110	M U < 0.000410	
M Cs 0.005600	M Lu < 0.000110	M Ru < 0.000110	s V <	
M Cu < 0.001300	M Mg 0.053000	i S <	M W 0.002000	
M Dy < 0.000110	M Mn 0.007900	M Sb 0.078000	M Y < 0.000110	
M Er < 0.000110	M Mo 0.094000	M Sc < 0.000410	M Yb < 0.000110	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H₂V₁₀O₂₈-

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄, HF, H₃PO₄ and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in NiO or Na₂CO₃ / KNO₃); Oxides (V₂O₃ - use HCl, V₂O₄ - use HCl or HNO₃, V₂O₅ - use concentrated acids); Ores (Na₂CO₃ / KNO₃ in PtO caution - nitrates attack PtO followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V₂O₅ above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAL10
Lot Number: T2-AL716102
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Aluminum
Starting Material: Aluminum Nitrate Nonahydrate
Starting Material Lot#: 2460
Starting Material Purity: 99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL
Density: 1.087 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10059 ± 40 µg/mL ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	10044 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10049 ± 35 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.002100	M Eu < 0.002100	O Na < 0.352819	M Se < 0.005200	M Zn < 0.006018
s Al < 0.002100	O Fe < 0.074714	M Nb < 0.000520	O Si < 0.017848	O Zr < 0.004358
M As < 0.008716	O Ga < 0.112072	M Nd < 0.000520	M Sm < 0.000520	
M Au < 0.008400	M Gd < 0.001100	O Ni < 0.006000	M Sn < 0.000747	
O B < 0.014000	M Ge < 0.005200	M Os < 0.000650	O Sr < 0.000518	
O Ba < 0.012867	M Hf < 0.004100	n P < 0.000520	M Ta < 0.000520	
O Be < 0.000270	M Hg < 0.002000	M Pb < 0.002282	M Tb < 0.000520	
M Bi < 0.001930	M Ho < 0.000520	M Pd < 0.000520	M Te < 0.001100	
O Ca < 0.076790	M In < 0.002100	M Pr < 0.000520	M Th < 0.000520	
M Cd < 0.000520	M Ir < 0.000650	M Pt < 0.000520	O Ti < 0.001930	
M Ce < 0.001100	O K < 0.043583	M Rb < 0.000520	M Tl < 0.000520	
O Co < 0.005400	M La < 0.002100	M Re < 0.000520	M Tm < 0.000520	
O Cr < 0.006018	O Li < 0.000112	M Rh < 0.000520	M U < 0.000520	
M Cs < 0.000643	M Lu < 0.000520	M Ru < 0.002000	M V < 0.001286	
O Cu < 0.008300	O Mg < 0.068488	i S < 0.000520	M W < 0.009800	
M Dy < 0.002100	O Mn < 0.000913	M Sb < 0.003100	M Y < 0.001100	
M Er < 0.000520	M Mo < 0.005396	O Sc < 0.000950	M Yb < 0.000520	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H₂O)₆+3

Chemical Compatibility -Soluble in HCl, HNO₃, vF and v₂SO₄. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)₄(H₂O)₂⁻ species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO₃); a- Al₂O₃ (Na₂CO₃ fusion in PtO);

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGK10
Lot Number: S2-K711973
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Potassium
Starting Material: KNO₃
Starting Material Lot#: 2313
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.024 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9987 ± 24 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	10004 ± 84 µg/mL ICP Assay NIST SRM 3141a Lot Number: 140813
Assay Method #3	10007 ± 45 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001400	M Eu < 0.000660	O Na < 0.246220	M Se < 0.007900	O Zn < 0.018056
O Al < 0.001592	O Fe < 0.005909	M Nb < 0.000660	O Si < 0.011490	O Zr < 0.001600
M As < 0.005300	M Ga < 0.000660	M Nd < 0.000660	M Sm < 0.000660	
M Au < 0.002000	M Gd < 0.000660	O Ni < 0.004900	M Sn < 0.000660	
O B < 0.005600	M Ge < 0.002000	M Os < 0.003300	O Sr < 0.000055	
O Ba < 0.000860	M Hf < 0.000660	O P < 0.032000	M Ta < 0.000660	
O Be < 0.000082	M Hg < 0.002000	M Pb < 0.002300	M Tb < 0.000660	
M Bi < 0.006600	M Ho < 0.000660	M Pd < 0.000660	M Te < 0.017000	
O Ca < 0.031187	M In < 0.000660	M Pr < 0.000660	M Th < 0.000660	
O Cd < 0.000450	M Ir < 0.000660	M Pt < 0.002700	M Ti < 0.000660	
M Ce < 0.000660	s K <	M Rb < 0.476026	M Tl < 0.000660	
O Co < 0.000780	M La < 0.000660	M Re < 0.000660	M Tm < 0.000660	
O Cr < 0.000541	O Li < 0.000084	M Rh < 0.000660	M U < 0.000660	
M Cs < 0.000660	M Lu < 0.000660	M Ru < 0.000660	O V < 0.001100	
M Cu < 0.002700	O Mg < 0.006237	O S < 0.027905	M W < 0.000660	
M Dy < 0.000660	O Mn < 0.000476	M Sb < 0.000660	M Y < 0.000660	
M Er < 0.000660	M Mo < 0.000660	O Sc < 0.000340	O Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Avoid use of HClO₄ due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO₄⁻.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMG10
Lot Number: S2-MG704239
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Magnesium
Starting Material: Magnesium Metal
Starting Material Lot#: 2168
Starting Material Purity: 99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL
Density: 1.053 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10022 ± 62 µg/mL ICP Assay NIST SRM 3131a Lot Number: 140110
Assay Method #2	10078 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10033 ± 26 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char\ i})^2 / (\sum(1/(u_{char\ i})^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$$u_{char} = [\sum((w_i)^2 (u_{char\ i})^2)]^{1/2}$$
 where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with
 $u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O Ag	0.002106	M	Eu <	0.000910	O Na	0.071075	O Se <	0.048000	O Zn	0.003299
M Al	0.003553	M	Fe	0.002538	M Nb <	0.000460	O Si <	0.032000	O Zr <	0.002700
M As <	0.001400	M	Ga <	0.000460	M Nd <	0.000910	M Sm <	0.000460		
M Au <	0.001400	M	Gd <	0.000460	O Ni <	0.001600	M Sn <	0.002300		
O B	0.006853	M	Ge <	0.001400	M Os <	0.000460	O Sr	0.000279		
O Ba	0.000964	M	Hf <	0.000460	O P	0.015230	M Ta <	0.000460		
O Be <	0.000120	M	Hg <	0.000460	M Pb <	0.000460	M Tb <	0.000460		
M Bi <	0.000460	M	Ho <	0.000460	M Pd <	0.003200	M Te <	0.007300		
O Ca	0.053306	M	In <	0.000460	M Pr <	0.000460	M Th <	0.000460		
O Cd <	0.000360	M	Ir <	0.000460	M Pt <	0.001900	O Ti <	0.001700		
M Ce <	0.002300	M	K	0.048229	M Rb	0.002411	M Tl	0.003046		
M Co <	0.000910	M	La <	0.002800	M Re <	0.000460	M Tm <	0.000460		
M Cr <	0.002300	O	Li	0.027922	M Rh <	0.000460	M U <	0.000460		
M Cs	0.001040	M	Lu <	0.000460	M Ru <	0.000460	M V <	0.000460		
O Cu <	0.003000	s	Mg <		O S <	0.190000	M W <	0.000460		
M Dy <	0.000460	O	Mn	0.015230	M Sb	0.020814	O Y <	0.000720		
M Er <	0.000460	M	Mo <	0.000910	O Sc <	0.000480	M Yb <	0.000460		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H₂O)₆+2

Chemical Compatibility -Soluble in HCl, HNO₃, and H₂SO₄ avoid HF, H₃PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
 Christiansburg, VA 24073 USA
 inorganicventures.com

P: 800-669-6799/540-585-3030
 F: 540-585-3012
 info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCA10
 Lot Number: T2-CA716103
 Matrix: 2% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Calcium
 Starting Material: CaCO₃
 Starting Material Lot#: 2472
 Starting Material Purity: 99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL
Density: 1.039 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10005 ± 45 µg/mL ICP Assay NIST SRM 3109a Lot Number: 130213
Assay Method #2	10005 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10005 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001200	M Eu < 0.001200	O Na < 0.006112	M Se < 0.024000	M Zn < 0.005362
M Al < 0.065419	O Fe < 0.009115	M Nb < 0.001200	O Si < 0.139417	O Zr < 0.006700
O As < 0.013000	M Ga < 0.015000	M Nd < 0.020000	M Sm < 0.001200	
M Au < 0.017000	M Gd < 0.004800	O Ni < 0.000793	M Sn < 0.003600	
O B < 0.001179	M Ge < 0.003600	M Os < 0.001200	M Sr < 0.081505	
O Ba < 0.002788	M Hf < 0.001200	O P < 0.041000	M Ta < 0.001200	
O Be < 0.000410	M Hg < 0.004800	M Pb < 0.001608	M Tb < 0.001200	
M Bi < 0.001608	M Ho < 0.001200	M Pd < 0.001200	M Te < 0.003600	
s Ca <	M In < 0.001200	M Pr < 0.000257	M Th < 0.001200	
O Cd < 0.001300	M Ir < 0.001200	M Pt < 0.003600	O Ti < 0.001900	
M Ce < 0.001029	O K < 0.009759	M Rb < 0.001200	M Tl < 0.001200	
O Co < 0.000418	M La < 0.001823	M Re < 0.001200	M Tm < 0.001200	
O Cr < 0.003324	O Li < 0.007300	M Rh < 0.001200	M U < 0.002144	
M Cs < 0.007399	M Lu < 0.000128	M Ru < 0.001200	M V < 0.001286	
O Cu < 0.011000	M Mg < 1.286934	O S < 0.055767	O W < 0.024000	
M Dy < 0.002400	O Mn < 0.004611	M Sb < 0.009600	O Y < 0.000536	
M Er < 0.002400	M Mo < 0.003539	O Sc < 0.001400	M Yb < 0.001200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H₂O)₆+2
Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₂SO₄, vF, v3PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Ca Containing Samples)Preparation and Solution -Metal (best dissolved in diluted HNO₃); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO₂). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO₃. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na₂CO₃ followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGNA10
Lot Number: T2-NA717221
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Sodium
Starting Material: Na₂CO₃
Starting Material Lot#: 2358 and 2453
Starting Material Purity: 99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL
Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9974 ± 18 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	9977 ± 34 µg/mL ICP Assay NIST SRM 3152a Lot Number: 200413
Assay Method #3	9987 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000930	M Eu < 0.000930	s Na <	M Se < 0.003800	O Zn < 0.000138
M Al < 0.004409	O Fe < 0.002393	M Nb < 0.000930	O Si < 0.056696	O Zr < 0.003200
O As < 0.023000	M Ga < 0.000930	M Nd < 0.000930	M Sm < 0.000930	
O Au < 0.004100	M Gd < 0.000930	O Ni < 0.003000	M Sn < 0.002800	
O B < 0.001385	M Ge < 0.004700	M Os < 0.000930	O Sr < 0.000251	
M Ba < 0.004031	M Hf < 0.000930	O P < 0.010205	M Ta < 0.000930	
O Be < 0.000130	M Hg < 0.000930	M Pb < 0.000930	M Tb < 0.000930	
M Bi < 0.000930	M Ho < 0.000930	M Pd < 0.000930	M Te < 0.001900	
O Ca < 0.176388	M In < 0.000930	M Pr < 0.000930	M Th < 0.000352	
O Cd < 0.000860	M Ir < 0.000930	M Pt < 0.000930	O Ti < 0.000592	
M Ce < 0.001900	O K < 0.302380	M Rb < 0.000930	M Tl < 0.000930	
O Co < 0.001800	O La < 0.002100	M Re < 0.000930	M Tm < 0.000930	
M Cr < 0.002800	O Li < 0.000031	M Rh < 0.000930	M U < 0.000930	
M Cs < 0.000930	M Lu < 0.000930	M Ru < 0.001900	O V < 0.001600	
O Cu < 0.003900	O Mg < 0.026458	O S < 0.040317	O W < 0.028000	
M Dy < 0.000930	O Mn < 0.000740	M Sb < 0.000930	O Y < 0.000860	
M Er < 0.000930	O Mo < 0.003600	O Sc < 0.000610	O Yb < 0.000250	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGU1
Lot Number: S2-U707914
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Uranium
Starting Material: Uranyl Nitrate Hexahydrate
Starting Material Lot#: P2-2322
Starting Material Purity: 99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL
Density: 1.010 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000270	M Eu < 0.000270	M Na < 0.011000	M Se < 0.009300	M Zn < 0.002358
M Al < 0.011000	M Fe < 0.003222	M Nb < 0.000270	M Si < 0.160000	M Zr < 0.001100
M As < 0.002400	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000270	M Gd < 0.000270	M Ni < 0.020000	M Sn < 0.011000	
M B < 0.000270	M Ge < 0.000800	M Os < 0.001900	M Sr < 0.000270	
M Ba < 0.003800	M Hf < 0.000270	i P <	M Ta < 0.000270	
M Be < 0.000270	M Hg < 0.000540	M Pb < 0.002200	M Tb < 0.000270	
M Bi < 0.000270	M Ho < 0.000270	M Pd < 0.000540	M Te < 0.003800	
M Ca < 0.140000	M In < 0.000270	M Pr < 0.000270	M Th < 0.000129	
M Cd < 0.000270	M Ir < 0.000270	M Pt < 0.000270	M Ti < 0.002700	
M Ce < 0.000540	O K < 0.250000	M Rb < 0.000800	M Tl < 0.000270	
M Co < 0.000800	M La < 0.000117	M Re < 0.064000	M Tm < 0.000270	
M Cr < 0.000943	M Li < 0.003000	M Rh < 0.000270	s U <	
M Cs < 0.000106	M Lu < 0.000270	M Ru < 0.000540	M V < 0.000540	
M Cu < 0.001100	M Mg < 0.003000	i S <	M W < 0.000540	
M Dy < 0.000270	M Mn < 0.006900	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.006400	M Sc < 0.000540	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO₂²⁺(uranyl)

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₃PO₄. H₂SO₄ and HF matrices should not be a problem depending upon [U]. Although the UO₂²⁺ ion is distinctly basic, any U+4 will precipitate in basic media. UO₂²⁺salts are generally soluble in water and UO₂²⁺ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF₄ and UF₆ are water soluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO₃); Oxide (Soluble in HNO₃); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO₃. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H₂SO₄.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: AR-ICVMS-2
Lot Number: T2-MEB719895
Matrix: 3% (v/v) HNO3
tr. HF
Value / Analyte(s): 2.5 µg/mL ea:
Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.499 ± 0.015 µg/mL	Molybdenum, Mo	2.500 ± 0.017 µg/mL

Density: 1.014 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
 Christiansburg, VA 24073 USA
 inorganicventures.com

P: 800-669-6799/540-585-3030
 F: 540-585-3012
 info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	AR-ICVMS-3	
Lot Number:	T2-MEB719896	
Matrix:	7% (v/v) HNO3	
Value / Analyte(s):	250 µg/mL ea:	
	Aluminum,	Calcium,
	Iron,	Potassium,
	Magnesium,	Sodium,
	4 µg/mL ea:	
	Selenium,	
	2.5 µg/mL ea:	
	Thorium,	Thallium,
	Uranium,	Vanadium,
	Zinc,	Manganese,
	Cadmium,	Cobalt,
	Chromium,	Copper,
	Arsenic,	Barium,
	Beryllium,	Nickel,
	Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/(u_{\text{char } j}^2)))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

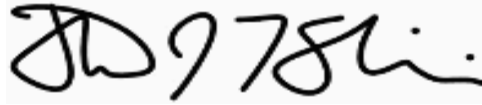
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: AR-6020ICS-0A10
 Lot Number: T2-MEB719898
 Matrix: 1.4% (v/v) HNO3
 Value / Analyte(s):
 1 000 µg/mL ea:
 Chloride,
 200 µg/mL ea:
 Carbon,
 100 µg/mL ea:
 Calcium, Aluminum,
 Iron, Potassium,
 Magnesium, Sodium,
 Phosphorus, Sulfur,
 2 µg/mL ea:
 Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.4 µg/mL	Calcium, Ca	100.0 ± 0.5 µg/mL
Carbon, C	200.1 ± 0.5 µg/mL	Chloride, Cl	1 000 ± 5 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Magnesium, Mg	100.0 ± 0.5 µg/mL
Molybdenum, Mo	2.001 ± 0.014 µg/mL	Phosphorus, P	100.0 ± 0.6 µg/mL
Potassium, K	100.0 ± 0.5 µg/mL	Sodium, Na	100.0 ± 0.5 µg/mL
Sulfur, S	100.0 ± 0.5 µg/mL	Titanium, Ti	2.001 ± 0.015 µg/mL

Density: 1.009 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

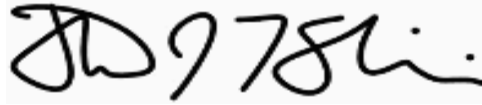
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1028

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-01 D SDG: 23A0326
 Sampled: 01/16/23 15:17 Prepared: 04/17/23 11:52 File ID: SMM 04-18-23-042
 % Solids: 58.80 Preparation: SMM EPA 7471B Analyzed: 04/18/23 12:48
 Batch: BLD0395 Sequence: SLD0238 Initial/Final: 0.232 g Wet / 50 mL
 Instrument: HYDRA Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.130	1	0.00770	0.0367	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1032

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-02 D SDG: 23A0326
 Sampled: 01/16/23 15:32 Prepared: 04/17/23 11:52 File ID: SMM 04-18-23-048
 % Solids: 54.85 Preparation: SMM EPA 7471B Analyzed: 04/18/23 13:02
 Batch: BLD0395 Sequence: SLD0238 Initial/Final: 0.242 g Wet / 50 mL
 Instrument: HYDRA Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.145	1	0.00791	0.0377	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1170A

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-04 C SDG: 23A0326
 Sampled: 01/17/23 10:33 Prepared: 04/17/23 11:52 File ID: SMM 04-18-23-049
 % Solids: 52.70 Preparation: SMM EPA 7471B Analyzed: 04/18/23 13:04
 Batch: BLD0395 Sequence: SLD0238 Initial/Final: 0.213 g Wet / 50 mL
 Instrument: HYDRA Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.115	1	0.00935	0.0445	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1169C

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-05 C SDG: 23A0326
 Sampled: 01/17/23 11:08 Prepared: 04/17/23 11:52 File ID: SMM 04-18-23-050
 % Solids: 54.90 Preparation: SMM EPA 7471B Analyzed: 04/18/23 13:07
 Batch: BLD0395 Sequence: SLD0238 Initial/Final: 0.244 g Wet / 50 mL
 Instrument: HYDRA Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.150	1	0.00784	0.0373	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1161

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-10 D SDG: 23A0326
 Sampled: 01/17/23 14:18 Prepared: 04/17/23 11:52 File ID: SMM 04-18-23-051
 % Solids: 55.79 Preparation: SMM EPA 7471B Analyzed: 04/18/23 13:09
 Batch: BLD0395 Sequence: SLD0238 Initial/Final: 0.228 g Wet / 50 mL
 Instrument: HYDRA Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.190	1	0.00826	0.0393	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B
Total Metals

LDW23-SC1155

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-11 D SDG: 23A0326
 Sampled: 01/17/23 14:06 Prepared: 04/17/23 11:52 File ID: SMM 04-18-23-052
 % Solids: 53.96 Preparation: SMM EPA 7471B Analyzed: 04/18/23 13:11
 Batch: BLD0395 Sequence: SLD0238 Initial/Final: 0.21 g Wet / 50 mL
 Instrument: HYDRA Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.127	1	0.00927	0.0441	



Form I
INORGANIC ANALYSIS DATA SHEET

LDW23-SC1162B

EPA 7471B

Total Metals

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-12 D

SDG: 23A0326

Sampled: 01/17/23 14:37

Prepared: 04/17/23 11:52

File ID: SMM 04-18-23-053

% Solids: 53.76

Preparation: SMM EPA 7471B

Analyzed: 04/18/23 13:14

Batch: BLD0395

Sequence: SLD0238

Initial/Final: 0.254 g Wet / 50 mL

Instrument: HYDRA

Calibration: GD00044

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.153	1	0.00769	0.0366	



PREPARATION BATCH SUMMARY
EPA 7471B

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLD0395 Batch Matrix: Solid Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	SMM 04-18-23-042	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
LDW23-SC1032	23A0326-02	SMM 04-18-23-048	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
LDW23-SC1170A	23A0326-04	SMM 04-18-23-049	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
LDW23-SC1169C	23A0326-05	SMM 04-18-23-050	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
LDW23-SC1161	23A0326-10	SMM 04-18-23-051	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
LDW23-SC1155	23A0326-11	SMM 04-18-23-052	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
LDW23-SC1162B	23A0326-12	SMM 04-18-23-053	04/17/23 11:52	Store frozen; FROZEN VOLUME USED
Blank	BLD0395-BLK1	SMM 04-18-23-040	04/17/23 11:52	
LCS	BLD0395-BS1	SMM 04-18-23-041	04/17/23 11:52	
LDW23-SC1028	BLD0395-DUP1	SMM 04-18-23-043	04/17/23 11:52	
LDW23-SC1028	BLD0395-MS1	SMM 04-18-23-044	04/17/23 11:52	
LDW23-SC1028	BLD0395-MSD1	SMM 04-18-23-045	04/17/23 11:52	



Mercury Digestion Log

Prep Code: SMM
Analyst: ATZ
Bath Temp: 95

Balance ID: BAL10
Block ID: 9
Start Time: 1055

Matrix: SOIL
Date: 04/17/23
End Time: 1152

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) Volume (mL)	Final Volume (mL)	# KMnO ₄ Aliquots	CLP	Comments
73A326-01	D	|	0.232	50	1		
-02	↓	|	0.242	↓	↓		
-04	C	|	0.213	↓	↓		
-05	↓	|	0.244	↓	↓		
-10	D	|	0.228	↓	↓		
-11	↓	|	0.210	↓	↓		
-12	↓	|	0.254	↓	↓		
BLD395-blk	-	|	-	↓	↓		73A326-01
-bs	-	|	-	↓	↓		↓
-dwp	-	|	0.231	↓	↓		
-ms	-	|	0.229	↓	↓		
-USD	-	|	0.232	↓	↓		
ML 04/17/23							

Chemical/Reagent ID:

HNO₃: L2678
5% K₂S₂O₈: L3350

H₂SO₄: L922
5% KMnO₄: K11727

HCl: -
Digest Tube Lot: 2210117



Form I
METHOD BLANK DATA SHEET
EPA 7471B
Total Metals

Blank

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLD0395

Laboratory ID: BLD0395-BLK1

Prepared: 04/17/23 11:52

Matrix: Solid

Preparation: SMM EPA 7471B

Analyzed: 04/18/23 12:43

Sequence: SLD0238

Calibration: GD00044

Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U



LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/18/23 12:46</u>
Batch:	<u>BLD0395</u>	Laboratory ID:	<u>BLD0395-BS1</u>
Preparation:	<u>SMM EPA 7471B</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>0.2 g / 50 mL</u>		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.435		87.0	80 - 120

* Indicates values outside of QC limits



DUPLICATES

EPA 7471B

Total Metals

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLD0395-DUP1

Batch: BLD0395

Lab Source ID: 23A0326-01

Preparation: SMM EPA 7471B

Initial/Final: 0.234 g / 50 mL

Source Sample Name: LDW23-SC1028

% Solids: 58.80

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Mercury	20	0.130	0.139	6.50	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/-RL instead of 20% RPD



MS / MS DUPLICATE RECOVERY
EPA 7471B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/18/23 12:53</u>
Batch:	<u>BLD0395</u>	Laboratory ID:	<u>BLD0395-MS1</u>
Preparation:	<u>SMM EPA 7471B</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>0.229 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Mercury	0.371	0.130		0.494		97.9	75 - 125

* Values outside of QC limits



MS / MS DUPLICATE RECOVERY
EPA 7471B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/18/23 12:55</u>
Batch:	<u>BLD0395</u>	Laboratory ID:	<u>BLD0395-MSD1</u>
Preparation:	<u>SMM EPA 7471B</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>0.232 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Mercury	0.367	0.645	*	140 *	26.5 *	20	75 - 125

* Values outside of QC limits



POST DIGEST SPIKE SAMPLE RECOVERY

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLD0395-PS1

Batch: BLD0395

Lab Source ID: 23A0326-01

Preparation: SMM EPA 7471B

Initial/Final: 0.0464 g / 10 mL

Source Sample Name: LDW23-SC1028

% Solids: 58.80

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/L)	Sample Result (SR) (mg/L)	Spike Added (SA) (mg/L)	%R
Mercury	0 - 200	0.00145	0.130	0.0010000	109

* Values outside of QC limits



INITIAL CALIBRATION DATA

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00044

Instrument: HYDRA

Calibration Date: 04/18/2023 14:55

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	6220000	0.0005	5798000	0.001	5633000	0.002	5694500	0.005	5670800



INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00044	Instrument:	HYDRA
Calibration Date:	04/18/2023 14:55		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Mercury	4836050	49.2	1.0000		0.99	

Sample ID	Mean	Units	Date	Method
SEQ-CAL1	41	PPB	18 Apr 2023 10:43:38	ARI 5 ppb (NO 0.05)
SEQ-CAL2	622	PPB	18 Apr 2023 10:45:59	ARI 5 ppb (NO 0.05)
SEQ-CAL3	2899	PPB	18 Apr 2023 10:48:21	ARI 5 ppb (NO 0.05)
SEQ-CAL4	5633	PPB	18 Apr 2023 10:50:42	ARI 5 ppb (NO 0.05)
SEQ-CAL5	11389	PPB	18 Apr 2023 10:53:02	ARI 5 ppb (NO 0.05)
SEQ-CAL6	28354	PPB	18 Apr 2023 10:55:22	ARI 5 ppb (NO 0.05)
SEQ-ICV	101.0% 4.0390	PPB ✓	18 Apr 2023 11:26:55	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0069	PPB ✓	18 Apr 2023 11:29:14	ARI 5 ppb (NO 0.05)
SEQ-CRL	97.1% 0.0971	PPB ✓	18 Apr 2023 11:31:36	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.1% 4.0836	PPB ✓	18 Apr 2023 11:33:57	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0074	PPB ✓	18 Apr 2023 11:36:15	ARI 5 ppb (NO 0.05)
BLD0366-BLK1	-0.0025	PPB	18 Apr 2023 11:38:36	ARI 5 ppb (NO 0.05)
BLD0366-BS1	1.7945	PPB ✓	18 Apr 2023 11:40:55	ARI 5 ppb (NO 0.05)
23C0774-01	0.3480	PPB	18 Apr 2023 11:43:14	ARI 5 ppb (NO 0.05)
BLD0366-DUP1	0.4567	PPB	18 Apr 2023 11:45:33	ARI 5 ppb (NO 0.05)
BLD0366-MS1	1.3197	PPB ✓	18 Apr 2023 11:47:52	ARI 5 ppb (NO 0.05)
BLD0366-MSD1	1.4154	PPB ✓	18 Apr 2023 11:50:11	ARI 5 ppb (NO 0.05)
23C0752-01	0.4056	PPB	18 Apr 2023 11:52:30	ARI 5 ppb (NO 0.05)
23C0752-02	0.7056	PPB	18 Apr 2023 11:54:49	ARI 5 ppb (NO 0.05)
23C0752-03	0.3333	PPB	18 Apr 2023 11:57:09	ARI 5 ppb (NO 0.05)
23C0752-04	0.5101	PPB	18 Apr 2023 11:59:29	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.4% 4.0143	PPB ✓	18 Apr 2023 12:01:50	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0103	PPB ✓	18 Apr 2023 12:04:08	ARI 5 ppb (NO 0.05)
23C0752-06	0.4463	PPB	18 Apr 2023 12:06:29	ARI 5 ppb (NO 0.05)
23C0774-02	0.3073	PPB	18 Apr 2023 12:08:50	ARI 5 ppb (NO 0.05)
23C0774-03	0.3795	PPB	18 Apr 2023 12:11:11	ARI 5 ppb (NO 0.05)
23C0774-04	0.4909	PPB	18 Apr 2023 12:13:30	ARI 5 ppb (NO 0.05)
23C0774-05	0.4217	PPB	18 Apr 2023 12:15:49	ARI 5 ppb (NO 0.05)
23C0774-06	0.3910	PPB	18 Apr 2023 12:18:08	ARI 5 ppb (NO 0.05)
23C0774-07	0.3009	PPB	18 Apr 2023 12:20:27	ARI 5 ppb (NO 0.05)
23C0774-08	0.4248	PPB	18 Apr 2023 12:22:46	ARI 5 ppb (NO 0.05)
23C0774-09	0.4787	PPB	18 Apr 2023 12:25:05	ARI 5 ppb (NO 0.05)
23C0774-10	0.3613	PPB	18 Apr 2023 12:27:24	ARI 5 ppb (NO 0.05)
SEQ-CCV	97.4% 3.8947	PPB ✓	18 Apr 2023 12:29:45	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0094	PPB ✓	18 Apr 2023 12:32:03	ARI 5 ppb (NO 0.05)
23C0774-11	0.3332	PPB	18 Apr 2023 12:34:25	ARI 5 ppb (NO 0.05)
23C0774-12	0.4412	PPB	18 Apr 2023 12:36:45	ARI 5 ppb (NO 0.05)
23C0774-13	0.4327	PPB	18 Apr 2023 12:39:06	ARI 5 ppb (NO 0.05)
23C0774-14	0.3774	PPB	18 Apr 2023 12:41:27	ARI 5 ppb (NO 0.05)
BLD0395-BLK1	-0.0015	PPB	18 Apr 2023 12:43:48	ARI 5 ppb (NO 0.05)
BLD0395-BS1	1.7394	PPB ✓	18 Apr 2023 12:46:07	ARI 5 ppb (NO 0.05)
23A0326-01	0.3559	PPB	18 Apr 2023 12:48:26	ARI 5 ppb (NO 0.05)
BLD0395-DUP1	0.3831	PPB	18 Apr 2023 12:50:46	ARI 5 ppb (NO 0.05)
BLD0395-MS1	1.3299	PPB ✓	18 Apr 2023 12:53:05	ARI 5 ppb (NO 0.05)
BLD0395-MSD1	1.7590	PPB ✓	18 Apr 2023 12:55:25	ARI 5 ppb (NO 0.05)
SEQ-CCV	96.7% 3.8693	PPB ✓	18 Apr 2023 12:57:44	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0118	PPB ✓	18 Apr 2023 13:00:03	ARI 5 ppb (NO 0.05)
23A0326-02	0.3851	PPB	18 Apr 2023 13:02:26	ARI 5 ppb (NO 0.05)
23A0326-04	0.2588	PPB	18 Apr 2023 13:04:45	ARI 5 ppb (NO 0.05)
23A0326-05	0.4026	PPB	18 Apr 2023 13:07:05	ARI 5 ppb (NO 0.05)
23A0326-10	0.4821	PPB	18 Apr 2023 13:09:25	ARI 5 ppb (NO 0.05)
23A0326-11	0.2881	PPB	18 Apr 2023 13:11:46	ARI 5 ppb (NO 0.05)
23A0326-12	0.4171	PPB	18 Apr 2023 13:14:07	ARI 5 ppb (NO 0.05)
BLD0395-PS1	1.4477	PPB ✓	18 Apr 2023 13:16:28	ARI 5 ppb (NO 0.05)
BLD0397-BLK1	-0.0054	PPB	18 Apr 2023 13:18:47	ARI 5 ppb (NO 0.05)
BLD0397-BS1	1.7478	PPB ✓	18 Apr 2023 13:21:06	ARI 5 ppb (NO 0.05)
23A0417-01	0.6496	PPB	18 Apr 2023 13:23:26	ARI 5 ppb (NO 0.05)
SEQ-CCV	90.2% 3.6061	PPB ✓	18 Apr 2023 13:25:45	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0143	PPB ✓	18 Apr 2023 13:28:04	ARI 5 ppb (NO 0.05)
BLD0397-DUP1	0.2720	PPB	18 Apr 2023 13:30:26	ARI 5 ppb (NO 0.05)

SMM 04-18-23

Method: ARI 5 ppb (NO 0.05)

Operator: Admin

Date of Analysis: 18 Apr 2023 10:42:59

Sample ID	Mean	Units	Date	Method
BLD0397-MS1	1.3013	PPB	18 Apr 2023 13:32:45	ARI 5 ppb (NO 0.05)
BLD0397-MSD1	1.3720	PPB	18 Apr 2023 13:35:05	ARI 5 ppb (NO 0.05)
23A0417-02	0.3749	PPB	18 Apr 2023 13:37:25	ARI 5 ppb (NO 0.05)
23A0417-03	0.3667	PPB	18 Apr 2023 13:39:45	ARI 5 ppb (NO 0.05)
23A0417-04	0.3830	PPB	18 Apr 2023 13:42:05	ARI 5 ppb (NO 0.05)
23A0417-05	0.2081	PPB	18 Apr 2023 13:44:26	ARI 5 ppb (NO 0.05)
23A0417-06	0.3202	PPB	18 Apr 2023 13:46:46	ARI 5 ppb (NO 0.05)
23A0417-07	0.2233	PPB	18 Apr 2023 13:49:07	ARI 5 ppb (NO 0.05)
23A0417-08	0.9043	PPB	18 Apr 2023 13:51:27	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.1% 3.9230	PPB	18 Apr 2023 13:53:46	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0100	PPB	18 Apr 2023 13:56:05	ARI 5 ppb (NO 0.05)
23A0417-09	0.2642	PPB	18 Apr 2023 13:58:26	ARI 5 ppb (NO 0.05)
23A0417-10	0.2636	PPB	18 Apr 2023 14:00:45	ARI 5 ppb (NO 0.05)
23A0417-11	0.2958	PPB	18 Apr 2023 14:03:05	ARI 5 ppb (NO 0.05)
23A0417-12	0.2787	PPB	18 Apr 2023 14:05:25	ARI 5 ppb (NO 0.05)
23A0417-13	0.2837	PPB	18 Apr 2023 14:07:45	ARI 5 ppb (NO 0.05)
23A0417-14	0.5607	PPB	18 Apr 2023 14:10:05	ARI 5 ppb (NO 0.05)
23A0417-15	0.2086	PPB	18 Apr 2023 14:12:24	ARI 5 ppb (NO 0.05)
23A0420-01	0.3929	PPB	18 Apr 2023 14:14:44	ARI 5 ppb (NO 0.05)
23A0420-07	0.5354	PPB	18 Apr 2023 14:17:04	ARI 5 ppb (NO 0.05)
23A0420-08	0.4502	PPB	18 Apr 2023 14:19:25	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.5% 3.9388	PPB	18 Apr 2023 14:21:46	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0098	PPB	18 Apr 2023 14:24:05	ARI 5 ppb (NO 0.05)
23A0420-09	10.1167	PPB	18 Apr 2023 14:26:26	ARI 5 ppb (NO 0.05)
BLD0397-PS1	1.9006	PPB	18 Apr 2023 14:28:46	ARI 5 ppb (NO 0.05)
SEQ-CCV	99.7% 3.9878	PPB	18 Apr 2023 14:31:08	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0103	PPB	18 Apr 2023 14:33:26	ARI 5 ppb (NO 0.05)
23A0420-09	1.9110	PPB	18 Apr 2023 14:36:03	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.1% 3.9258	PPB	18 Apr 2023 14:38:23	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0097	PPB	18 Apr 2023 14:40:42	ARI 5 ppb (NO 0.05)

X

X

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

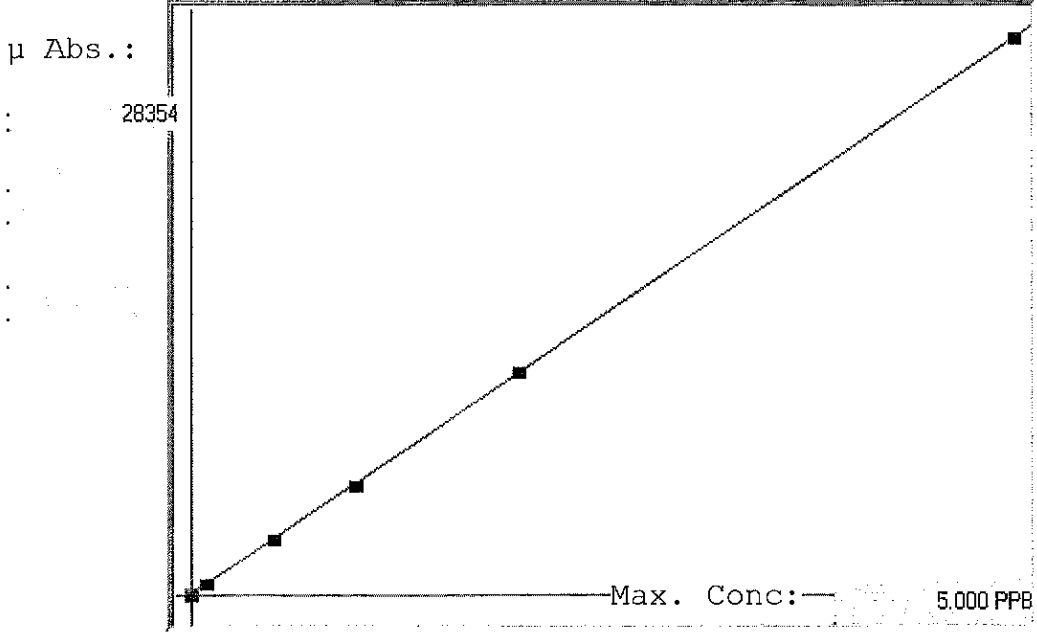
✓

Del

5x

ARI 5 ppb (NO 0.05)

Linear



A= 0.0000e+000

B= 1.7660e-004

C= -7.0735e-003

Rho= 0.9999944

Accept=Accepted

Accepted Date=

04/18/23 10:58

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	0.000	0.000	41	0.000	41	41	41		
SEQ-CAL2 - 0.1 PPB	0.100	0.103	0.003	622	1.3 %	618	633	615		
SEQ-CAL3 - 0.5 PPB	0.500	0.505	0.005	2899	0.2 %	2901	2892	2905		
SEQ-CAL4 - 1.0 PPB	1.000	0.988	-0.012	5633	1.5 %	5527	5638	5734		
SEQ-CAL5 - 2.0 PPB	2.000	2.004	0.004	11389	0.8 %	11258	11427	11483		
SEQ-CAL6 - 5.0 PPB	5.000	5.000	0.000	28354	0.1 %	28315	28384	28363		

ADC

SWN

SMM

Work	ICPMS Samples	HG Samples
23A0157	10	10
23A0158	13	13
23A0179	12	12
23A0180	4	4
23A0206	14	14
23A0207	12	0
23A0249	8	7
23A0295	10	9
23A0313	8	5
23A0326	9	7
23A0328	11	11
23A0417	15	15
23A0418	11	0
23A0419	12	12
23A0420	5	4
23A0455	18	18
23A0467	9	9
23C0071	7	7
23C0107		
23C0108	5	5
23C0109	2	2
23C0752	5	5
22C0774	54	54
23D0008		
23D0037		
23D0063		
23D0136		



Mercury Analysis Log

Analyst: ML
 Instrument: HYDRA

Date: 04/18/23
 Page: 1 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -CA11	Smm	1X		
-CA12				
-CA13				
-CA14				
-CA15				
-CA16				
-ICV			✓ 4.03	
-ICB			✓ -0.006	
-CRL			✓ 0.097	
-CCV			✓ 4.08	
-CCB			✓ -0.007	
BLD0366 -BKI				
-BSI			✓ 1.794	89.71R
23C0774 -01				
BLD0366 -DPA				RPD=27.01
-MSI			✓ 1.319	97.11R
-MSDI			✓ 1.415	106.71R
23C0772 -01				
-02				
-03				
-04				
SEQ -CCV			✓ 4.01	
-CCB			✓ -0.010	
23C0752 -06				
23C0774 -02				
-03				
-04				
-05				
-06				
-07				

Chemical/Reagent ID:
 10% SnCl₂: L3091

14% NH₂OH/NaCl: L3551

Standard ID:
 Standard: L4167-L4172

ICV/CCV: L4165

Mercury Analysis Log

Analyst:
 Instrument:

Date:
 Page: 2 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
-08				
-09				
↓ -10				
SEQ -CCV			✓ 3.89	
↓ -CCB			✓ -0.009	
23C0774 -11				
-12				
-13				
↓ -14				
BLD0395 -BIKI				
↓ -BSI			✓ 1.739	86.9 %R
23A0326 -01				
BLD0395 -DUPI				
-MSI			✓ 1.329	97.4 %R
↓ -MSDI			× 1.759	140.3 %R
SEQ -CCV			✓ 3.86	
↓ -CCB			✓ -0.011	
23A0326 -02				
-04				
-05				
-10				
-11				
↓ -12				
BLD0395 -PSI			✓ 1.447	109.1 %R
BLD0397 -BIKI				
↓ -BSI			✓ 1.747	87.3 %R
23A0417 -01				
SEQ -CCV			✓ 3.60	
↓ -CCB				
BLD0397 -DUPI				NO RPD

Chemical/Reagent ID:
 10% SnCl₂:
 Standard ID:
 Standard:

14% NH₂OH/NaCl:
 ICV/CCV:

Mercury Analysis Log

Analyst: _____
 Instrument: _____

Date: _____
 Page: 3 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
↓ -MS1			x 1.301	65.1 /R
↓ -MSD1			x 1.372	72.2 /R
23A0417 -02				
↓ -03				
↓ -04				
↓ -05				
↓ -06				
↓ -07				
↓ -08				
SEQ -CCV			√ 3.92	
↓ -CCB			√ -0.01	
23A0417 -09				
↓ -10				
↓ -11				
↓ -12				
↓ -13				
↓ -14				
↓ -15				
23A 23A0420 -01				
↓ -07				
↓ -08				
SEQ -CCV			√ 3.93	
↓ -CCB			√ -0.009	
23A0420 -09				refun at dil
BLD03A7 -PS1			1.90	125.1 /R
SEQ -CCV			√ 3.98	
↓ -CCB		↓	√ -0.01	
23A0420 -09		5x		
SEQ -CCV		1x		
↓ -CCB	↓	↓		

Chemical/Reagent ID:
 10% SnCl₂: _____

14% NH₂OH/NaCl: _____

Standard ID:
 Standard: _____

ICV/CCV: _____



INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: HYDRA

Calibration: GD00044

Control Limit: +/- 20.00%

Sequence: SLD0238

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0238-ICV1	Mercury	0.0040000	0.00404	101	mg/L	EPA 7471B
SLD0238-CCV1	Mercury	0.0040000	0.00408	102	mg/L	EPA 7471B
SLD0238-CCV2	Mercury	0.0040000	0.00401	100	mg/L	EPA 7471B
SLD0238-CCV3	Mercury	0.0040000	0.00389	97.4	mg/L	EPA 7471B
SLD0238-CCV4	Mercury	0.0040000	0.00387	96.7	mg/L	EPA 7471B
SLD0238-CCV5	Mercury	0.0040000	0.00361	90.2	mg/L	EPA 7471B
SLD0238-CCV6	Mercury	0.0040000	0.00392	98.1	mg/L	EPA 7471B
SLD0238-CCV7	Mercury	0.0040000	0.00394	98.5	mg/L	EPA 7471B
SLD0238-CCV8	Mercury	0.0040000	0.00399	99.7	mg/L	EPA 7471B
SLD0238-CCV9	Mercury	0.0040000	0.00393	98.1	mg/L	EPA 7471B

* Values outside of QC limits



INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: HYDRA

Calibration: GD00044

Sequence: SLD0238

Date Analyzed: 04/18/23 11:29

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0238-ICB1	Mercury	-0.000007	0.000021	0.000100	mg/L	
SLD0238-CCB1	Mercury	-0.000007	0.000021	0.000100	mg/L	
SLD0238-CCB2	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB3	Mercury	-0.000009	0.000021	0.000100	mg/L	
SLD0238-CCB4	Mercury	-0.000012	0.000021	0.000100	mg/L	
SLD0238-CCB5	Mercury	-0.000014	0.000021	0.000100	mg/L	
SLD0238-CCB6	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB7	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB8	Mercury	-0.000010	0.000021	0.000100	mg/L	
SLD0238-CCB9	Mercury	-0.000010	0.000021	0.000100	mg/L	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0238

Instrument: HYDRA

Calibration: GD00044

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLD0238-CAL1	SMM 04-18-23-001	NA	04/18/23 10:43
Cal Standard	SLD0238-CAL2	SMM 04-18-23-002	NA	04/18/23 10:45
Cal Standard	SLD0238-CAL3	SMM 04-18-23-003	NA	04/18/23 10:48
Cal Standard	SLD0238-CAL4	SMM 04-18-23-004	NA	04/18/23 10:50
Cal Standard	SLD0238-CAL5	SMM 04-18-23-005	NA	04/18/23 10:53
Cal Standard	SLD0238-CAL6	SMM 04-18-23-006	NA	04/18/23 10:55
Initial Cal Check	SLD0238-ICV1	SMM 04-18-23-007	NA	04/18/23 11:26
Initial Cal Blank	SLD0238-ICB1	SMM 04-18-23-008	NA	04/18/23 11:29
Instrument RL Check	SLD0238-CRL1	SMM 04-18-23-009	NA	04/18/23 11:31
Calibration Check	SLD0238-CCV1	SMM 04-18-23-010	NA	04/18/23 11:33
Calibration Blank	SLD0238-CCB1	SMM 04-18-23-011	NA	04/18/23 11:36
Calibration Check	SLD0238-CCV2	SMM 04-18-23-022	NA	04/18/23 12:01
Calibration Blank	SLD0238-CCB2	SMM 04-18-23-023	NA	04/18/23 12:04
Calibration Check	SLD0238-CCV3	SMM 04-18-23-034	NA	04/18/23 12:29
Calibration Blank	SLD0238-CCB3	SMM 04-18-23-035	NA	04/18/23 12:32
Blank	BLD0395-BLK1	SMM 04-18-23-040	Solid	04/18/23 12:43
LCS	BLD0395-BS1	SMM 04-18-23-041	Solid	04/18/23 12:46
LDW23-SC1028	23A0326-01	SMM 04-18-23-042	Solid	04/18/23 12:48
LDW23-SC1028	BLD0395-DUP1	SMM 04-18-23-043	Solid	04/18/23 12:50
LDW23-SC1028	BLD0395-MS1	SMM 04-18-23-044	Solid	04/18/23 12:53
LDW23-SC1028	BLD0395-MSD1	SMM 04-18-23-045	Solid	04/18/23 12:55
Calibration Check	SLD0238-CCV4	SMM 04-18-23-046	NA	04/18/23 12:57
Calibration Blank	SLD0238-CCB4	SMM 04-18-23-047	NA	04/18/23 13:00
LDW23-SC1032	23A0326-02	SMM 04-18-23-048	Solid	04/18/23 13:02
LDW23-SC1170A	23A0326-04	SMM 04-18-23-049	Solid	04/18/23 13:04
LDW23-SC1169C	23A0326-05	SMM 04-18-23-050	Solid	04/18/23 13:07
LDW23-SC1161	23A0326-10	SMM 04-18-23-051	Solid	04/18/23 13:09
LDW23-SC1155	23A0326-11	SMM 04-18-23-052	Solid	04/18/23 13:11
LDW23-SC1162B	23A0326-12	SMM 04-18-23-053	Solid	04/18/23 13:14



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0238

Instrument: HYDRA

Calibration: GD00044

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1028	BLD0395-PS1	SMM 04-18-23-054	Solid	04/18/23 13:16
Calibration Check	SLD0238-CCV5	SMM 04-18-23-058	NA	04/18/23 13:25
Calibration Blank	SLD0238-CCB5	SMM 04-18-23-059	NA	04/18/23 13:28
Calibration Check	SLD0238-CCV6	SMM 04-18-23-070	NA	04/18/23 13:53
Calibration Blank	SLD0238-CCB6	SMM 04-18-23-071	NA	04/18/23 13:56
Calibration Check	SLD0238-CCV7	SMM 04-18-23-082	NA	04/18/23 14:21
Calibration Blank	SLD0238-CCB7	SMM 04-18-23-083	NA	04/18/23 14:24
Calibration Check	SLD0238-CCV8	SMM 04-18-23-086	NA	04/18/23 14:31
Calibration Blank	SLD0238-CCB8	SMM 04-18-23-087	NA	04/18/23 14:33
Calibration Check	SLD0238-CCV9	SMM 04-18-23-089	NA	04/18/23 14:38
Calibration Blank	SLD0238-CCB9	SMM 04-18-23-090	NA	04/18/23 14:40



DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: HYDRA

Calibration: GD00044

Sequence: SLD0238

Lab Sample ID: SLD0238-CRL1

Analyte	True	Found	%R	Units	QC Limits
Mercury	0.000100	0.000097	97.1	mg/L	70 - 130

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 12:48	92	180	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 13:02	92	180	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 13:04	91	180	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 13:07	91	180	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	04/17/23 11:52	89	180	04/18/23 13:09	91	180	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	04/17/23 11:52	89	180	04/18/23 13:11	91	180	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	04/17/23 11:52	89	180	04/18/23 13:14	91	180	
Duplicate BLD0395-DUP1	01/16/23 15:17	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 12:50	92	180	
Matrix Spike BLD0395-MS1	01/16/23 15:17	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 12:53	92	180	
Matrix Spike Dup BLD0395-MSD1	01/16/23 15:17	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 12:55	92	180	
Post Spike BLD0395-PS1	01/16/23 15:17	01/17/23 16:46	04/17/23 11:52	90	180	04/18/23 13:16	92	180	

* Indicates hold time exceedance.



Analytical Resources, LLC
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

EPA 7471B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGHG1
Lot Number: S2-HG711246
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Mercury
Starting Material: Hg Metal
Starting Material Lot#: 1959
Starting Material Purity: 99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL
Density: 1.026 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	1004 ± 6 µg/mL ICP Assay NIST SRM 3133 Lot Number: 160921
Assay Method #2	998 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	1001 ± 3 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000210	M Eu < 0.000210	O Na < 0.000626	M Se < 0.008100	M Zn < 0.000810
M Al < 0.000161	O Fe < 0.001600	M Nb < 0.000410	O Si < 0.000626	M Zr < 0.000410
M As < 0.002500	M Ga < 0.000210	M Nd < 0.000210	M Sm < 0.000210	
O Au < 0.001700	M Gd < 0.000210	O Ni < 0.001400	M Sn < 0.000410	
M B < 0.008500	M Ge < 0.000410	M Os < 0.003900	O Sr < 0.000110	
M Ba < 0.000210	M Hf < 0.000210	O P < 0.029000	M Ta < 0.000210	
O Be < 0.000110	s Hg < 0.000210	M Pb < 0.000210	M Tb < 0.000210	
M Bi < 0.001100	M Ho < 0.000210	M Pd < 0.003500	M Te < 0.005700	
O Ca < 0.004754	M In < 0.000210	M Pr < 0.000210	M Th < 0.000210	
M Cd < 0.000210	M Ir < 0.000210	M Pt < 0.000210	O Ti < 0.000430	
M Ce < 0.000210	O K < 0.000731	M Rb < 0.000210	O Tl < 0.005400	
M Co < 0.000210	M La < 0.000210	M Re < 0.000210	M Tm < 0.000210	
O Cr < 0.003300	O Li < 0.000110	M Rh < 0.001100	M U < 0.000410	
M Cs < 0.000410	M Lu < 0.000210	M Ru < 0.000810	M V < 0.000210	
M Cu < 0.000810	O Mg < 0.000104	O S < 0.022000	M W < 0.001100	
M Dy < 0.000210	O Mn < 0.000430	M Sb < 0.000210	M Y < 0.000210	
M Er < 0.000210	M Mo < 0.000210	M Sc < 0.000210	M Yb < 0.000210	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO₃. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO₃ / LDPE container, stable in 10% HNO₃ packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO₃ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO₃ / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxide (Soluble in HNO₃); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th, Rh, Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: QCP-QCS-4
Lot Number: R2-MEB695951
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 5 µg/mL ea:
Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	5.011 ± 0.023 µg/mL		

Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u^2_{char} + u^2_{bb} + u^2_{Its} + u^2_{ts})^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u^2_{char a} + u^2_{bb} + u^2_{Its} + u^2_{ts})^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1028

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-01 D SDG: 23A0326

Sampled: 01/16/23 15:17 Prepared: 01/18/23 11:12 File ID:

% Solids: 58.80 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	58.80	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1032

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-02 D SDG: 23A0326

Sampled: 01/16/23 15:32 Prepared: 01/18/23 11:12 File ID:

% Solids: 54.85 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence: Initial/Final: 5 g Wet / 5 g

Instrument: BAL2 Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	54.85	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1128

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-03 C SDG: 23A0326
 Sampled: 01/17/23 08:36 Prepared: 01/18/23 11:12 File ID:
 % Solids: 53.95 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14
 Batch: BLA0439 Sequence:
 Instrument: BAL2 Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	53.95	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1170A

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-04 C SDG: 23A0326

Sampled: 01/17/23 10:33 Prepared: 01/18/23 11:12 File ID:

% Solids: 52.70 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	52.70	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1169C

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-05 C SDG: 23A0326

Sampled: 01/17/23 11:08 Prepared: 01/18/23 11:12 File ID:

% Solids: 54.90 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	54.90	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1168

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-06 C SDG: 23A0326

Sampled: 01/17/23 11:51 Prepared: 01/18/23 11:12 File ID:

% Solids: 56.60 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	56.60	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1176

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-07 C SDG: 23A0326

Sampled: 01/17/23 12:11 Prepared: 01/18/23 11:12 File ID:

% Solids: 80.68 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	80.68	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-IT1181

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-08 D

SDG: 23A0326

Sampled: 01/17/23 12:31

Prepared: 01/18/23 11:12

File ID:

% Solids: 76.00

Preparation: No Prep Wet Chem

Analyzed: 01/18/23 11:14

Batch: BLA0439

Sequence:

Initial/Final: 5 g Wet / 5 g

Instrument: BAL2

Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	76.00	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-IT1127

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-09 D SDG: 23A0326

Sampled: 01/17/23 13:32 Prepared: 01/18/23 11:12 File ID:

% Solids: 59.97 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.97	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1161

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-10 D SDG: 23A0326
 Sampled: 01/17/23 14:18 Prepared: 01/18/23 11:12 File ID:
 % Solids: 55.79 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14
 Batch: BLA0439 Sequence:
 Instrument: BAL2 Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	55.79	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1155

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-11 D SDG: 23A0326

Sampled: 01/17/23 14:06 Prepared: 01/18/23 11:12 File ID:

% Solids: 53.96 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14

Batch: BLA0439 Sequence:

Instrument: BAL2 Calibration: 5 g Wet / 5 g

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	53.96	1	0.04	0.04	



Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1162B

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-12 D SDG: 23A0326
 Sampled: 01/17/23 14:37 Prepared: 01/18/23 11:12 File ID:
 % Solids: 53.76 Preparation: No Prep Wet Chem Analyzed: 01/18/23 11:14
 Batch: BLA0439 Sequence:
 Instrument: BAL2 Calibration:

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	53.76	1	0.04	0.04	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples													Batch: BLA0439							
Method: PSEP 1986, SM2540, EPA 160.1													Date: 1/18/2023 11:14							
(dry at 104 (12-24 hr) then combust at 550 (30 min))													Analyst: UW							
Instrumentation			Drying Ovens: 120			Analytical Balance: BAL2			Muffle Furnace: 2											
Batch drying time				Oven Temps, °C				TVS (mg/kg dry wt) calculated as:												
record times as mm/dd/yy hh:mm				TS (%) calculated as:				Final ash wt (g) = (min ash wt - tare wt)												
date/time in oven: 1/18/2023 12:10				Final dry wt (g) = (Dry Wt - Tare Wt)				TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000												
date/time out: 1/19/2023 8:25				TS = (Final Dry Wt)/(grams Sample-Tare)				if ash wt > dry wt, "Chk for Err"												
elapsed hrs = 20.3 OK				Start Temp 103				if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000												
Dry Cycle 1 103																				
Dry Cycle 2																				
Dry Cycle 3																				
Balance Calibration Check																				
Record weights to 4 places													CV-02		CV-02		CV-02			
Cal Weight ID:		CV-02	CV-02	CV-02	CV-02	CV-02					CV-02	CV-02	CV-02							
Date & Time:		1/18/23 11:20	1/18/23 11:35	1/19/23 9:55																
Cal Wt (g):		10.0000	10.0001	10.0000	10.0000															
		Cal OK!	Cal OK!	Cal OK!																
Sample ID	Dish #	Tare Wt. (g)	Dish & Sample (g)	Dry Wt 104C (grams)			dry Wt (g)	TS (%)	Notes	ASH WT 550C (grams)			Ash Wt (g)	TVS		Notes				
				1	2	3				1	2	3		(mg/kg)	(%)					
BLA0439-BLK1	1	0.8263	0.0000	0.8262			-0.0001	0.01%												
23A0318-02	2	0.8073	4.4790	1.6653			0.8580	23.37%												
23A0326-01	3	0.7927	6.2357	3.9933			3.2006	58.80%												
BLA0439-DUP1	4	0.7988	7.2184	4.5697			3.7709	58.74%	RPD=0.1											
BLA0439-DUP2	5	0.8285	6.2286	3.9996			3.1711	58.72%	RSD=0.1											
23A0326-02	6	0.7949	7.3566	4.3942			3.5993	54.85%												
23A0326-03	7	0.8270	9.4045	5.4547			4.6277	53.95%												
23A0326-04	8	0.8261	9.3067	5.2952			4.4691	52.70%												
23A0326-05	9	0.8050	7.7425	4.6136			3.8086	54.90%												
23A0326-06	10	0.8258	8.3921	5.1082			4.2824	56.60%												
23A0326-07	11	0.8013	9.7582	8.0281			7.2268	80.68%												
23A0326-08	12	0.8316	7.0655	5.5692			4.7376	76.00%												
23A0326-09	13	0.8144	6.7798	4.3916			3.5772	59.97%												
23A0326-10	14	0.7883	7.6618	4.6228			3.8345	55.79%												
23A0326-11	15	0.8225	5.5297	3.3626			2.5401	53.96%												
23A0326-12	16	0.8430	7.7533	4.5577			3.7147	53.76%												



Form I
METHOD BLANK DATA SHEET
SM 2540 G-97
TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLA0439

Laboratory ID: BLA0439-BLK1

Prepared: 01/18/23 11:12

Matrix: Solid

Preparation: No Prep Wet Chem

Analyzed: 01/18/23 11:14

Sequence:

Calibration:

Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U



DUPLICATES
SM 2540 G-97

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0439-DUP1

Batch: BLA0439

Lab Source ID: 23A0326-01

Preparation: No Prep Wet Chem

Initial/Final: 5 g / 5 g

Source Sample Name: LDW23-SC1028

% Solids: 58.80

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	58.80	58.74	0.105	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/-RL instead of 20% RPD



DUPLICATES
SM 2540 G-97

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0439-DUP2

Batch: BLA0439

Lab Source ID: 23A0326-01

Preparation: No Prep Wet Chem

Initial/Final: 5 g / 5 g

Source Sample Name: LDW23-SC1028

% Solids: 58.80

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	58.80	58.72	0.135	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/-RL instead of 20% RPD



HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	2	180	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	2	180	
LDW23-SC1128 23A0326-03	01/17/23 08:36	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	1	180	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	1	180	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	1	180	
LDW23-SC1168 23A0326-06	01/17/23 11:51	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
LDW23-SC1176 23A0326-07	01/17/23 12:11	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
LDW23-IT1181 23A0326-08	01/17/23 12:31	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	01/18/23 11:12	0	180	01/18/23 11:14	1	180	
Duplicate BLA0439-DUP1	01/16/23 15:17	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	2	180	
Duplicate BLA0439-DUP2	01/16/23 15:17	01/17/23 16:46	01/18/23 11:12	1	180	01/18/23 11:14	2	180	

* Indicates hold time exceedance.



Analytical Resources, LLC
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1028

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-01 D SDG: 23A0326
 Sampled: 01/16/23 15:17 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-085
 % Solids: 58.80 Preparation: SWN EPA 3050B Analyzed: 04/28/23 00:36
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.037 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	27.0	20	0.09	0.16	
7440-22-4	Silver	0.24	20	0.04	0.33	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1028

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-01RE1 D SDG: 23A0326
 Sampled: 01/16/23 15:17 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-253
 % Solids: 58.80 Preparation: SWN EPA 3050B Analyzed: 04/28/23 13:05
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.037 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	24.4	50	1.07	2.05	D



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1032

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-02 D SDG: 23A0326
 Sampled: 01/16/23 15:32 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-084
 % Solids: 54.85 Preparation: SWN EPA 3050B Analyzed: 04/28/23 00:31
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.075 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	37.2	20	0.09	0.17	
7440-22-4	Silver	0.33	20	0.04	0.34	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1032

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-02RE1 D SDG: 23A0326
 Sampled: 01/16/23 15:32 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-248
 % Solids: 54.85 Preparation: SWN EPA 3050B Analyzed: 04/28/23 12:57
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.075 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	30.1	50	1.10	2.12	D



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1170A

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-04 C SDG: 23A0326
 Sampled: 01/17/23 10:33 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-097
 % Solids: 52.70 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:32
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.059 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	19.3	20	0.09	0.18	
7440-22-4	Silver	0.21	20	0.04	0.36	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1170A

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-04RE1 C SDG: 23A0326
 Sampled: 01/17/23 10:33 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-249
 % Solids: 52.70 Preparation: SWN EPA 3050B Analyzed: 04/28/23 12:59
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.059 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	27.7	50	1.16	2.24	D



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1169C

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-05 C SDG: 23A0326
 Sampled: 01/17/23 11:08 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-098
 % Solids: 54.90 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:36
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.058 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	42.3	20	0.09	0.17	
7440-22-4	Silver	0.57	20	0.04	0.34	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1169C

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-05RE1 C SDG: 23A0326
 Sampled: 01/17/23 11:08 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-250
 % Solids: 54.90 Preparation: SWN EPA 3050B Analyzed: 04/28/23 13:00
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.058 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	27.1	50	1.12	2.15	D



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1161

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-10 D SDG: 23A0326
 Sampled: 01/17/23 14:18 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-099
 % Solids: 55.79 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:41
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.091 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	23.5	20	0.43	0.82	
7439-92-1	Lead	22.7	20	0.09	0.16	
7440-22-4	Silver	0.20	20	0.04	0.33	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1155

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-11 D SDG: 23A0326
 Sampled: 01/17/23 14:06 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-100
 % Solids: 53.96 Preparation: SWN EPA 3050B Analyzed: 04/28/23 01:45
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.025 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	22.0	20	0.09	0.18	
7440-22-4	Silver	0.23	20	0.04	0.36	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1155

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-11RE1 D SDG: 23A0326
 Sampled: 01/17/23 14:06 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-251
 % Solids: 53.96 Preparation: SWN EPA 3050B Analyzed: 04/28/23 13:02
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.025 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	27.7	50	1.18	2.26	D



Form I
INORGANIC ANALYSIS DATA SHEET

LDW23-SC1162B

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment

Laboratory ID: 23A0326-12 D

SDG: 23A0326

Sampled: 01/17/23 14:37

Prepared: 04/17/23 16:50

File ID: XDT_m1230427A-101

% Solids: 53.76

Preparation: SWN EPA 3050B

Analyzed: 04/28/23 01:49

Batch: BLD0394

Sequence: SLD0418

Initial/Final: 1.056 g Wet / 50 mL

Instrument: ICPMS1

Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	35.3	20	0.09	0.18	
7440-22-4	Silver	0.32	20	0.04	0.35	J



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1162B

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-12RE1 D SDG: 23A0326
 Sampled: 01/17/23 14:37 Prepared: 04/17/23 16:50 File ID: XDT_m1230427A-252
 % Solids: 53.76 Preparation: SWN EPA 3050B Analyzed: 04/28/23 13:03
 Batch: BLD0394 Sequence: SLD0418 Initial/Final: 1.056 g Wet / 50 mL
 Instrument: ICPMS1 Calibration: GD00078

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	29.6	50	1.15	2.20	D



PREPARATION BATCH SUMMARY EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLD0394 Batch Matrix: Solid Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01		04/17/23 16:50	
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	04/17/23 16:50	
LDW23-SC1028	23A0326-01RE1	XDT_m1230427A-253	04/17/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1032	23A0326-02		04/17/23 16:50	
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	04/17/23 16:50	
LDW23-SC1032	23A0326-02RE1	XDT_m1230427A-248	04/17/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	04/17/23 16:50	
LDW23-SC1170A	23A0326-04		04/17/23 16:50	
LDW23-SC1170A	23A0326-04RE1	XDT_m1230427A-249	04/17/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	04/17/23 16:50	
LDW23-SC1169C	23A0326-05		04/17/23 16:50	
LDW23-SC1169C	23A0326-05RE1	XDT_m1230427A-250	04/17/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	04/17/23 16:50	
LDW23-SC1155	23A0326-11		04/17/23 16:50	
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	04/17/23 16:50	
LDW23-SC1155	23A0326-11RE1	XDT_m1230427A-251	04/17/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	04/17/23 16:50	
LDW23-SC1162B	23A0326-12		04/17/23 16:50	
LDW23-SC1162B	23A0326-12RE1	XDT_m1230427A-252	04/17/23 16:50	Added 4/28/2023 by MCB
Blank	BLD0394-BLK1	XDT_m1230427A-069	04/14/23 16:50	
LCS	BLD0394-BS1	XDT_m1230427A-070	04/14/23 16:50	
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	04/14/23 16:50	
LDW23-SC1028	BLD0394-DUP2	XDT_m1230427A-254	04/14/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	04/14/23 16:50	
LDW23-SC1028	BLD0394-MS2	XDT_m1230427A-255	04/14/23 16:50	Added 4/28/2023 by MCB
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	04/14/23 16:50	
LDW23-SC1028	BLD0394-MSD2	XDT_m1230427A-256	04/14/23 16:50	Added 4/28/2023 by MCB



Digestion Log

Analyst: ATZ Date: 4/17/23 Time: 1220-1820 Balance ID: BAL10
Matrix: Soil Block ID: 10 Block Temp: 90 C Thermometer: 20.4

ARI Sample ID	Btl #	pH<2	Prep Code: <u>SUN</u>		Prep Code:		Comments
			Initial Wt (g) Vol (mL)	Final Vol (mL)	Initial Wt (g) Vol (mL)	Final Vol (mL)	
<u>23A326-01</u>	<u>D</u>	|	<u>1.037</u>	<u>50</u>			
<u>-02</u>	<u>↓</u>	|	<u>1.075</u>	|			
<u>-04</u>	<u>C</u>	|	<u>1.059</u>	|			
<u>-05</u>	<u>↓</u>	|	<u>1.058</u>	|			
<u>-08</u>	<u>D</u>	|	<u>1.042</u>	|			
<u>-09</u>	|	|	<u>1.036</u>	|			
<u>-10</u>	|	|	<u>1.091</u>	|			
<u>-11</u>	|	|	<u>1.025</u>	|			
<u>↓ -12</u>	|	|	<u>1.056</u>	|			
<u>23A418-01</u>	|	|	<u>1.001</u>	|			
<u>-02</u>	|	|	<u>1.080</u>	|			
<u>-04</u>	|	|	<u>1.010</u>	|			
<u>-05</u>	|	|	<u>1.047</u>	|			
<u>-06</u>	|	|	<u>1.035</u>	|			
<u>-07</u>	|	|	<u>1.013</u>	|			
<u>-08</u>	|	|	<u>1.057</u>	|			
<u>-09</u>	|	|	<u>1.037</u>	|			
<u>-10</u>	|	|	<u>1.074</u>	|			
<u>-11</u>	|	|	<u>1.051</u>	|			
<u>↓ -12</u>	<u>↓</u>	|	<u>1.001</u>	|			
<u>BLD394-blk</u>	<u>-</u>	|	<u>-</u>	|			<u>23A326-01</u>
<u>-bs</u>	<u>-</u>	|	<u>-</u>	|			|
<u>-dup</u>	<u>-</u>	|	<u>1.038</u>	|			|
<u>-ms</u>	<u>-</u>	|	<u>1.033</u>	|			|
<u>↓ -MSD</u>	<u>-</u>	|	<u>1.034</u>	<u>↓</u>			<u>↓</u>

Chemical/Reagent ID:

HNO₃: L2478 1:1 HNO₃: L3305 HCl: ~~L7948~~ H₂O₂: K11056

Tube Lot#: 221017 Boiling Chip Lot#: - (DoD Only)



Form I
METHOD BLANK DATA SHEET
EPA 6020B
Total Metals

Blank

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLD0394

Laboratory ID: BLD0394-BLK1

Prepared: 04/14/23 16:50

Matrix: Solid

Preparation: SWN EPA 3050B

Analyzed: 04/27/23 23:22

Sequence: SLD0418

Calibration: GD00078

Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U
7440-22-4	Silver-107	ND	20	0.02	0.20	U



LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Analyzed: 04/27/23 23:27

Batch: BLD0394

Laboratory ID: BLD0394-BS1

Preparation: SWN EPA 3050B

Sequence Name: LCS

Initial/Final: 1 g / 50 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	28.7		115	80 - 120
Lead-208	25.0	28.7		115	80 - 120
Silver-107	25.0	28.0		112	80 - 120

* Indicates values outside of QC limits



DUPLICATES

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLD0394-DUP1

Batch: BLD0394

Lab Source ID: 23A0326-01

Preparation: SWN EPA 3050B

Initial/Final: 1.038 g / 50 mL

Source Sample Name: LDW23-SC1028

% Solids: 58.80

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Lead-208	20	27.0	28.5	5.55	
Silver-107	20	0.24	0.26	6.44	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD



DUPLICATES

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLD0394-DUP2

Batch: BLD0394

Lab Source ID: 23A0326-01RE1

Preparation: SWN EPA 3050B

Initial/Final: 1.038 g / 50 mL

Source Sample Name: LDW23-SC1028

% Solids: 58.80

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Chromium-52	20	24.4	26.7	9.06	

*: Values outside of QC limits

L: Analyte concentration is ≤ 5 times the reporting limit and the replicate control limit defaults to Dup = +/-RL instead of 20% RPD



MS / MS DUPLICATE RECOVERY
EPA 6020B
Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/28/23 00:45</u>
Batch:	<u>BLD0394</u>	Laboratory ID:	<u>BLD0394-MS1</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>1.033 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Lead-208	41.2	27.0		70.1		105	75 - 125
Silver-107	41.2	0.24	J	37.9		91.5	75 - 125

* Values outside of QC limits



MS / MS DUPLICATE RECOVERY
EPA 6020B
Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/28/23 00:49</u>
Batch:	<u>BLD0394</u>	Laboratory ID:	<u>BLD0394-MSD1</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>1.034 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Lead-208	41.1	72.0		109	2.59	20	75 - 125
Silver-107	41.1	38.6		93.4	1.92	20	75 - 125

* Values outside of QC limits



MS / MS DUPLICATE RECOVERY
EPA 6020B
Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/28/23 13:08</u>
Batch:	<u>BLD0394</u>	Laboratory ID:	<u>BLD0394-MS2</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>1.033 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Chromium-52	41.2	24.4	D	63.6	D	95.2	75 - 125

* Values outside of QC limits



MS / MS DUPLICATE RECOVERY
EPA 6020B
Total Metals

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>04/28/23 13:09</u>
Batch:	<u>BLD0394</u>	Laboratory ID:	<u>BLD0394-MSD2</u>
Preparation:	<u>SWN EPA 3050B</u>	Sequence Name:	<u>Matrix Spike Dup</u>
Initial/Final:	<u>1.034 g / 50 mL</u>	Source Sample:	<u>LDW23-SC1028</u>

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Chromium-52	41.1	65.2	D	99.2	2.52	20	75 - 125

* Values outside of QC limits



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-ICV1	Chromium-52	50.000	52.9	106	ug/L	EPA 6020B
	Chromium-53	50.000	51.7	103	ug/L	EPA 6020B
	Lead-208	50.000	51.0	102	ug/L	EPA 6020B
	Silver-107	50.000	50.9	102	ug/L	EPA 6020B
SLD0418-CCV1	Chromium-52	50.000	51.7	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
	Lead-208	50.000	50.5	101	ug/L	EPA 6020B
	Silver-107	50.000	50.6	101	ug/L	EPA 6020B
SLD0418-CCV2	Chromium-52	50.000	51.5	103	ug/L	EPA 6020B
	Chromium-53	50.000	51.3	103	ug/L	EPA 6020B
	Lead-208	50.000	50.1	100	ug/L	EPA 6020B
	Silver-107	50.000	51.1	102	ug/L	EPA 6020B
SLD0418-CCV3	Chromium-52	50.000	50.3	101	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.5	ug/L	EPA 6020B
	Lead-208	50.000	52.8	106	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.3	ug/L	EPA 6020B
SLD0418-CCV4	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.5	ug/L	EPA 6020B
	Lead-208	50.000	52.3	105	ug/L	EPA 6020B
	Silver-107	50.000	49.1	98.2	ug/L	EPA 6020B
SLD0418-CCV5	Chromium-52	50.000	47.7	95.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	96.0	ug/L	EPA 6020B
	Lead-208	50.000	54.9	110	ug/L	EPA 6020B
	Silver-107	50.000	47.2	94.5	ug/L	EPA 6020B
SLD0418-CCV6	Chromium-52	50.000	49.8	99.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.6	ug/L	EPA 6020B
	Lead-208	50.000	53.1	106	ug/L	EPA 6020B
	Silver-107	50.000	48.0	96.1	ug/L	EPA 6020B
SLD0418-CCV7	Chromium-52	50.000	49.9	99.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	97.1	ug/L	EPA 6020B
	Lead-208	50.000	51.7	103	ug/L	EPA 6020B
	Silver-107	50.000	48.4	96.9	ug/L	EPA 6020B
SLD0418-CCV8	Chromium-52	50.000	49.4	98.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	97.0	ug/L	EPA 6020B



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-CCV8	Lead-208	50.000	53.1	106	ug/L	EPA 6020B
	Silver-107	50.000	48.8	97.7	ug/L	EPA 6020B
SLD0418-CCV9	Chromium-52	50.000	49.6	99.2	ug/L	EPA 6020B
	Chromium-53	50.000	48.7	97.4	ug/L	EPA 6020B
	Lead-208	50.000	52.7	105	ug/L	EPA 6020B
SLD0418-CCVA	Silver-107	50.000	48.4	96.9	ug/L	EPA 6020B
	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
SLD0418-CCVA	Chromium-53	50.000	48.0	95.9	ug/L	EPA 6020B
	Lead-208	50.000	52.0	104	ug/L	EPA 6020B
	Silver-107	50.000	49.3	98.7	ug/L	EPA 6020B
	Chromium-52	50.000	49.3	98.5	ug/L	EPA 6020B
SLD0418-CCVB	Chromium-53	50.000	48.4	96.9	ug/L	EPA 6020B
	Lead-208	50.000	52.5	105	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.3	ug/L	EPA 6020B
	Chromium-52	50.000	49.4	98.7	ug/L	EPA 6020B
SLD0418-CCVC	Chromium-53	50.000	48.9	97.7	ug/L	EPA 6020B
	Lead-208	50.000	52.7	105	ug/L	EPA 6020B
	Silver-107	50.000	50.0	99.9	ug/L	EPA 6020B
	Chromium-52	50.000	49.8	99.6	ug/L	EPA 6020B
SLD0418-CCVD	Chromium-53	50.000	49.4	98.8	ug/L	EPA 6020B
	Lead-208	50.000	52.5	105	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.7	ug/L	EPA 6020B
	Chromium-52	50.000	50.0	100	ug/L	EPA 6020B
SLD0418-CCVE	Chromium-53	50.000	48.4	96.8	ug/L	EPA 6020B
	Lead-208	50.000	51.8	104	ug/L	EPA 6020B
	Silver-107	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-52	50.000	50.0	99.9	ug/L	EPA 6020B
SLD0418-CCVF	Chromium-53	50.000	49.7	99.4	ug/L	EPA 6020B
	Lead-208	50.000	54.6	109	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.3	ug/L	EPA 6020B
	Chromium-52	50.000	49.3	98.5	ug/L	EPA 6020B
SLD0418-CCVG	Chromium-53	50.000	48.9	97.9	ug/L	EPA 6020B
	Lead-208	50.000	54.2	108	ug/L	EPA 6020B
	Silver-107	50.000	48.9	97.9	ug/L	EPA 6020B
	Chromium-52	50.000	49.3	98.5	ug/L	EPA 6020B



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Control Limit: +/- 10.00%

Sequence: SLD0418

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0418-CCVH	Chromium-52	50.000	50.6	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.3	ug/L	EPA 6020B
	Lead-208	50.000	54.3	109	ug/L	EPA 6020B
	Silver-107	50.000	49.3	98.6	ug/L	EPA 6020B
SLD0418-CCVI	Chromium-52	50.000	48.9	97.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.8	ug/L	EPA 6020B
	Lead-208	50.000	54.7	109	ug/L	EPA 6020B
	Silver-107	50.000	48.3	96.6	ug/L	EPA 6020B
SLD0418-CCVJ	Chromium-52	50.000	49.4	98.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.6	ug/L	EPA 6020B
	Lead-208	50.000	55.8	112	ug/L	EPA 6020B
	Silver-107	50.000	47.5	95.0	ug/L	EPA 6020B
SLD0418-CCVK	Chromium-52	50.000	50.4	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.6	99.1	ug/L	EPA 6020B
	Lead-208	50.000	54.3	109	ug/L	EPA 6020B
	Silver-107	50.000	48.6	97.3	ug/L	EPA 6020B
SLD0418-CCVL	Chromium-52	50.000	50.0	99.9	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.3	ug/L	EPA 6020B
	Lead-208	50.000	55.6	111	ug/L	EPA 6020B
	Silver-107	50.000	47.8	95.7	ug/L	EPA 6020B
SLD0418-CCVM	Chromium-52	50.000	48.1	96.1	ug/L	EPA 6020B
	Chromium-53	50.000	47.5	95.1	ug/L	EPA 6020B
	Lead-208	50.000	60.0	120	ug/L	EPA 6020B
	Silver-107	50.000	46.9	93.8	ug/L	EPA 6020B
SLD0418-CCVN	Chromium-52	50.000	48.3	96.6	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.3	ug/L	EPA 6020B
SLD0418-CCVO	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	47.7	95.4	ug/L	EPA 6020B
SLD0418-CCVP	Chromium-52	50.000	48.5	96.9	ug/L	EPA 6020B
	Chromium-53	50.000	47.7	95.5	ug/L	EPA 6020B
SLD0418-CCVQ	Chromium-52	50.000	47.2	94.4	ug/L	EPA 6020B
	Chromium-53	50.000	47.2	94.4	ug/L	EPA 6020B
SLD0418-CCVR	Chromium-52	50.000	49.6	99.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.1	98.3	ug/L	EPA 6020B

* Values outside of QC limits



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/27/23 17:32

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-IBL1	Chromium-52	-0.00700	0.26	0.500	ug/L	
SLD0418-IBL1	Chromium-53	-0.0160	0.239	0.500	ug/L	
SLD0418-IBL1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-IBL1	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0418-ICB1	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLD0418-ICB1	Chromium-53	-0.0160	0.239	0.500	ug/L	
SLD0418-ICB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-ICB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0418-CCB1	Chromium-52	0.0100	0.26	0.500	ug/L	
SLD0418-CCB1	Chromium-53	-0.0190	0.239	0.500	ug/L	
SLD0418-CCB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-CCB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0418-CCB2	Chromium-52	-0.0400	0.26	0.500	ug/L	
SLD0418-CCB2	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLD0418-CCB2	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-CCB2	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0418-IBL2	Chromium-52	-0.0610	0.26	0.500	ug/L	
SLD0418-IBL2	Chromium-53	0.0700	0.239	0.500	ug/L	
SLD0418-IBL2	Lead-208	0.00600	0.0513	0.100	ug/L	
SLD0418-IBL2	Silver-107	0.00700	0.022	0.200	ug/L	
SLD0418-IBL3	Chromium-52	-0.0820	0.26	0.500	ug/L	
SLD0418-IBL3	Chromium-53	0.301	0.239	0.500	ug/L	
SLD0418-IBL3	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0418-IBL3	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0418-CCB3	Chromium-52	-0.109	0.26	0.500	ug/L	
SLD0418-CCB3	Chromium-53	0.0830	0.239	0.500	ug/L	
SLD0418-CCB3	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-CCB3	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0418-IBL4	Chromium-52	-0.0520	0.26	0.500	ug/L	
SLD0418-IBL4	Chromium-53	0.388	0.239	0.500	ug/L	
SLD0418-IBL4	Lead-208	0.0230	0.0513	0.100	ug/L	
SLD0418-IBL4	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0418-CCB4	Chromium-52	-0.0910	0.26	0.500	ug/L	
SLD0418-CCB4	Chromium-53	0.0830	0.239	0.500	ug/L	
SLD0418-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/27/23 20:54

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCB4	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0418-IBL5	Chromium-52	-0.127	0.26	0.500	ug/L	
SLD0418-IBL5	Chromium-53	0.0680	0.239	0.500	ug/L	
SLD0418-IBL5	Lead-208	0.0230	0.0513	0.100	ug/L	
SLD0418-IBL5	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0418-CCB5	Chromium-52	-0.110	0.26	0.500	ug/L	
SLD0418-CCB5	Chromium-53	0.0150	0.239	0.500	ug/L	
SLD0418-CCB5	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0418-CCB5	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0418-CCB6	Chromium-52	0.00200	0.26	0.500	ug/L	
SLD0418-CCB6	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLD0418-CCB6	Lead-208	0.0120	0.0513	0.100	ug/L	
SLD0418-CCB6	Silver-107	0.0200	0.022	0.200	ug/L	
SLD0418-IBL7	Chromium-52	0.0190	0.26	0.500	ug/L	
SLD0418-IBL7	Chromium-53	0.0100	0.239	0.500	ug/L	
SLD0418-IBL7	Lead-208	0.0420	0.0513	0.100	ug/L	
SLD0418-IBL7	Silver-107	0.0260	0.022	0.200	ug/L	
SLD0418-CCB7	Chromium-52	0.0190	0.26	0.500	ug/L	
SLD0418-CCB7	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLD0418-CCB7	Lead-208	0.00500	0.0513	0.100	ug/L	
SLD0418-CCB7	Silver-107	0.0130	0.022	0.200	ug/L	
SLD0418-IBL8	Chromium-52	-0.0260	0.26	0.500	ug/L	
SLD0418-IBL8	Chromium-53	-0.0310	0.239	0.500	ug/L	
SLD0418-IBL8	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0418-IBL8	Silver-107	-0.00300	0.022	0.200	ug/L	
SLD0418-CCB8	Chromium-52	0.0180	0.26	0.500	ug/L	
SLD0418-CCB8	Chromium-53	-0.0330	0.239	0.500	ug/L	
SLD0418-CCB8	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0418-CCB8	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-IBL9	Chromium-52	0.00200	0.26	0.500	ug/L	
SLD0418-IBL9	Chromium-53	-0.0400	0.239	0.500	ug/L	
SLD0418-IBL9	Lead-208	0.00600	0.0513	0.100	ug/L	
SLD0418-IBL9	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0418-CCB9	Chromium-52	0.00400	0.26	0.500	ug/L	
SLD0418-CCB9	Chromium-53	-0.0380	0.239	0.500	ug/L	
SLD0418-CCB9	Lead-208	-0.00100	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 01:10

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCB9	Silver-107	0.00700	0.022	0.200	ug/L	
SLD0418-IBLA	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLD0418-IBLA	Chromium-53	-0.0370	0.239	0.500	ug/L	
SLD0418-IBLA	Lead-208	0.00500	0.0513	0.100	ug/L	
SLD0418-IBLA	Silver-107	-0.00300	0.022	0.200	ug/L	
SLD0418-CCBA	Chromium-52	0.0160	0.26	0.500	ug/L	
SLD0418-CCBA	Chromium-53	-0.0460	0.239	0.500	ug/L	
SLD0418-CCBA	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0418-CCBA	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-IBLB	Chromium-52	0.00600	0.26	0.500	ug/L	
SLD0418-IBLB	Chromium-53	-0.0410	0.239	0.500	ug/L	
SLD0418-IBLB	Lead-208	0.00500	0.0513	0.100	ug/L	
SLD0418-IBLB	Silver-107	-0.00300	0.022	0.200	ug/L	
SLD0418-CCBB	Chromium-52	0.00600	0.26	0.500	ug/L	
SLD0418-CCBB	Chromium-53	-0.0470	0.239	0.500	ug/L	
SLD0418-CCBB	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0418-CCBB	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-CCBC	Chromium-52	-0.0140	0.26	0.500	ug/L	
SLD0418-CCBC	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLD0418-CCBC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-CCBC	Silver-107	0.00600	0.022	0.200	ug/L	
SLD0418-IBLD	Chromium-52	-0.0310	0.26	0.500	ug/L	
SLD0418-IBLD	Chromium-53	0.00800	0.239	0.500	ug/L	
SLD0418-IBLD	Lead-208	0.0110	0.0513	0.100	ug/L	
SLD0418-IBLD	Silver-107	-0.00200	0.022	0.200	ug/L	
SLD0418-CCBD	Chromium-52	-0.0290	0.26	0.500	ug/L	
SLD0418-CCBD	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLD0418-CCBD	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0418-CCBD	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0418-IBLE	Chromium-52	-0.0320	0.26	0.500	ug/L	
SLD0418-IBLE	Chromium-53	0.0190	0.239	0.500	ug/L	
SLD0418-IBLE	Lead-208	0.00600	0.0513	0.100	ug/L	
SLD0418-IBLE	Silver-107	0.00300	0.022	0.200	ug/L	
SLD0418-CCBE	Chromium-52	-0.0250	0.26	0.500	ug/L	
SLD0418-CCBE	Chromium-53	0.00400	0.239	0.500	ug/L	
SLD0418-CCBE	Lead-208	-0.00100	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 05:10

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCBE	Silver-107	0.00600	0.022	0.200	ug/L	
SLD0418-IBLF	Chromium-52	0.0250	0.26	0.500	ug/L	
SLD0418-IBLF	Chromium-53	0.531	0.239	0.500	ug/L	
SLD0418-IBLF	Lead-208	0.00600	0.0513	0.100	ug/L	
SLD0418-IBLF	Silver-107	-0.00300	0.022	0.200	ug/L	
SLD0418-CCBF	Chromium-52	-0.0290	0.26	0.500	ug/L	
SLD0418-CCBF	Chromium-53	0.136	0.239	0.500	ug/L	
SLD0418-CCBF	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLD0418-CCBF	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0418-IBLG	Chromium-52	-0.0130	0.26	0.500	ug/L	
SLD0418-IBLG	Chromium-53	0.224	0.239	0.500	ug/L	
SLD0418-IBLG	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-IBLG	Silver-107	-0.00300	0.022	0.200	ug/L	
SLD0418-CCBG	Chromium-52	-0.0160	0.26	0.500	ug/L	
SLD0418-CCBG	Chromium-53	0.105	0.239	0.500	ug/L	
SLD0418-CCBG	Lead-208	0.00800	0.0513	0.100	ug/L	
SLD0418-CCBG	Silver-107	0.0130	0.022	0.200	ug/L	
SLD0418-CCBH	Chromium-52	0.0180	0.26	0.500	ug/L	
SLD0418-CCBH	Chromium-53	-0.0260	0.239	0.500	ug/L	
SLD0418-CCBH	Lead-208	-0.00400	0.0513	0.100	ug/L	
SLD0418-CCBH	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-IBLI	Chromium-52	0.0380	0.26	0.500	ug/L	
SLD0418-IBLI	Chromium-53	0.00600	0.239	0.500	ug/L	
SLD0418-IBLI	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0418-IBLI	Silver-107	0.00300	0.022	0.200	ug/L	
SLD0418-CCBI	Chromium-52	0.0290	0.26	0.500	ug/L	
SLD0418-CCBI	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLD0418-CCBI	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-CCBI	Silver-107	0.00900	0.022	0.200	ug/L	
SLD0418-IBLJ	Chromium-52	0.0330	0.26	0.500	ug/L	
SLD0418-IBLJ	Chromium-53	0.0570	0.239	0.500	ug/L	
SLD0418-IBLJ	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-IBLJ	Silver-107	0.00	0.022	0.200	ug/L	
SLD0418-CCBJ	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLD0418-CCBJ	Chromium-53	-0.0280	0.239	0.500	ug/L	
SLD0418-CCBJ	Lead-208	-0.00300	0.0513	0.100	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 09:13

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCBJ	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-IBLK	Chromium-52	0.0440	0.26	0.500	ug/L	
SLD0418-IBLK	Chromium-53	0.214	0.239	0.500	ug/L	
SLD0418-IBLK	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-IBLK	Silver-107	0.00	0.022	0.200	ug/L	
SLD0418-CCBK	Chromium-52	-0.00600	0.26	0.500	ug/L	
SLD0418-CCBK	Chromium-53	0.0630	0.239	0.500	ug/L	
SLD0418-CCBK	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLD0418-CCBK	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-IBLL	Chromium-52	-0.00100	0.26	0.500	ug/L	
SLD0418-IBLL	Chromium-53	0.238	0.239	0.500	ug/L	
SLD0418-IBLL	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-IBLL	Silver-107	-0.00500	0.022	0.200	ug/L	
SLD0418-CCBL	Chromium-52	-0.0140	0.26	0.500	ug/L	
SLD0418-CCBL	Chromium-53	0.0740	0.239	0.500	ug/L	
SLD0418-CCBL	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLD0418-CCBL	Silver-107	0.00500	0.022	0.200	ug/L	
SLD0418-IBLM	Chromium-52	-0.0570	0.26	0.500	ug/L	
SLD0418-IBLM	Chromium-53	0.185	0.239	0.500	ug/L	
SLD0418-IBLM	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-IBLM	Silver-107	-0.00500	0.022	0.200	ug/L	
SLD0418-IBLN	Chromium-52	-0.0680	0.26	0.500	ug/L	
SLD0418-IBLN	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLD0418-IBLN	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-IBLN	Silver-107	-0.00500	0.022	0.200	ug/L	
SLD0418-IBLO	Chromium-52	-0.0590	0.26	0.500	ug/L	
SLD0418-IBLO	Chromium-53	-0.0220	0.239	0.500	ug/L	
SLD0418-IBLO	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0418-IBLO	Silver-107	-0.00500	0.022	0.200	ug/L	
SLD0418-CCBM	Chromium-52	-0.0500	0.26	0.500	ug/L	
SLD0418-CCBM	Chromium-53	-0.0330	0.239	0.500	ug/L	
SLD0418-CCBM	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLD0418-CCBM	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0418-CCBN	Chromium-52	0.00400	0.26	0.500	ug/L	
SLD0418-CCBN	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLD0418-CCBO	Chromium-52	0.0170	0.26	0.500	ug/L	



INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Date Analyzed: 04/28/23 12:44

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0418-CCBO	Chromium-53	0.0130	0.239	0.500	ug/L	
SLD0418-CCBP	Chromium-52	0.00700	0.26	0.500	ug/L	
SLD0418-CCBP	Chromium-53	-0.0170	0.239	0.500	ug/L	
SLD0418-CCBQ	Chromium-52	0.0190	0.26	0.500	ug/L	
SLD0418-CCBQ	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLD0418-CCBR	Chromium-52	0.0190	0.26	0.500	ug/L	
SLD0418-CCBR	Chromium-53	-0.0160	0.239	0.500	ug/L	



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLD0418</u>	Instrument:	<u>ICPMS1</u>
		Calibration:	<u>GD00078</u>

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0418-CAL1	XDT_m1230427A-003	NA	04/27/23 16:58
CAL 1 - LOW CHECK	SLD0418-CAL2	XDT_m1230427A-004	NA	04/27/23 17:02
CAL 2	SLD0418-CAL3	XDT_m1230427A-005	NA	04/27/23 17:07
CAL 3	SLD0418-CAL4	XDT_m1230427A-006	NA	04/27/23 17:13
CAL 4	SLD0418-CAL5	XDT_m1230427A-007	NA	04/27/23 17:18
CAL 5	SLD0418-CAL6	XDT_m1230427A-008	NA	04/27/23 17:25
RINSE	SLD0418-IBL1	XDT_m1230427A-009	NA	04/27/23 17:32
Initial Cal Check	SLD0418-ICV1	XDT_m1230427A-012	NA	04/27/23 17:46
Initial Cal Blank	SLD0418-ICB1	XDT_m1230427A-013	NA	04/27/23 17:54
Calibration Check	SLD0418-CCV1	XDT_m1230427A-014	NA	04/27/23 18:00
Calibration Blank	SLD0418-CCB1	XDT_m1230427A-015	NA	04/27/23 18:07
Calibration Check	SLD0418-CCV2	XDT_m1230427A-020	NA	04/27/23 18:37
Calibration Blank	SLD0418-CCB2	XDT_m1230427A-021	NA	04/27/23 18:45
Instrument RL Check	SLD0418-CRL1	XDT_m1230427A-022	NA	04/27/23 18:51
Interference Check B	SLD0418-IFB1	XDT_m1230427A-024	NA	04/27/23 19:01
LR200	SLD0418-HCV1	XDT_m1230427A-025	NA	04/27/23 19:06
LR300	SLD0418-HCV2	XDT_m1230427A-026	NA	04/27/23 19:11
Instrument Blank	SLD0418-IBL2	XDT_m1230427A-027	NA	04/27/23 19:18
Interference Check A	SLD0418-IFA1	XDT_m1230427A-028	NA	04/27/23 19:25
Instrument Blank	SLD0418-IBL3	XDT_m1230427A-029	NA	04/27/23 19:30
Calibration Check	SLD0418-CCV3	XDT_m1230427A-030	NA	04/27/23 19:36
Calibration Blank	SLD0418-CCB3	XDT_m1230427A-031	NA	04/27/23 19:46
ZZZZZ	23C0658-02	XDT_m1230427A-038	Water	04/27/23 20:23
ZZZZZ	23C0658-04	XDT_m1230427A-039	Water	04/27/23 20:29
Instrument Blank	SLD0418-IBL4	XDT_m1230427A-041	NA	04/27/23 20:41
Calibration Check	SLD0418-CCV4	XDT_m1230427A-042	NA	04/27/23 20:46
Calibration Blank	SLD0418-CCB4	XDT_m1230427A-043	NA	04/27/23 20:54
Instrument Blank	SLD0418-IBL5	XDT_m1230427A-051	NA	04/27/23 21:36
Calibration Check	SLD0418-CCV5	XDT_m1230427A-052	NA	04/27/23 21:42



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0418-CCB5	XDT_m1230427A-053	NA	04/27/23 21:49
Calibration Check	SLD0418-CCV6	XDT_m1230427A-055	NA	04/27/23 22:09
Calibration Blank	SLD0418-CCB6	XDT_m1230427A-056	NA	04/27/23 22:16
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-02	XDT_m1230427A-058	Solid	04/27/23 22:29
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-03	XDT_m1230427A-059	Solid	04/27/23 22:34
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-04	XDT_m1230427A-060	Solid	04/27/23 22:40
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	23C0774-01	XDT_m1230427A-061	Solid	04/27/23 22:44
ZZZZZ	BLD0365-DUP1	XDT_m1230427A-062	Solid	04/27/23 22:48
ZZZZZ	BLD0365-MS1	XDT_m1230427A-063	Solid	04/27/23 22:53
ZZZZZ	BLD0365-MSD1	XDT_m1230427A-064	Solid	04/27/23 22:57
ZZZZZ	BLD0365-PS1	XDT_m1230427A-065	Solid	04/27/23 23:02
Instrument Blank	SLD0418-IBL7	XDT_m1230427A-066	NA	04/27/23 23:06
Calibration Check	SLD0418-CCV7	XDT_m1230427A-067	NA	04/27/23 23:11
Calibration Blank	SLD0418-CCB7	XDT_m1230427A-068	NA	04/27/23 23:18
Blank	BLD0394-BLK1	XDT_m1230427A-069	Solid	04/27/23 23:22
LCS	BLD0394-BS1	XDT_m1230427A-070	Solid	04/27/23 23:27
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31
ZZZZZ	23C0774-05	XDT_m1230427A-071	Solid	04/27/23 23:31
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0774-06	XDT_m1230427A-072	Solid	04/27/23 23:35
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-07	XDT_m1230427A-073	Solid	04/27/23 23:40
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-08	XDT_m1230427A-074	Solid	04/27/23 23:44
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-09	XDT_m1230427A-075	Solid	04/27/23 23:49
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-10	XDT_m1230427A-076	Solid	04/27/23 23:53
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
ZZZZZ	23C0774-11	XDT_m1230427A-077	Solid	04/27/23 23:58
Instrument Blank	SLD0418-IBL8	XDT_m1230427A-078	NA	04/28/23 00:02
Calibration Check	SLD0418-CCV8	XDT_m1230427A-079	NA	04/28/23 00:06
Calibration Blank	SLD0418-CCB8	XDT_m1230427A-080	NA	04/28/23 00:14
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18
ZZZZZ	23C0774-12	XDT_m1230427A-081	Solid	04/28/23 00:18
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-13	XDT_m1230427A-082	Solid	04/28/23 00:22
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
ZZZZZ	23C0774-14	XDT_m1230427A-083	Solid	04/28/23 00:27
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	Solid	04/28/23 00:31



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1032	23A0326-02	XDT_m1230427A-084	Solid	04/28/23 00:31
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	Solid	04/28/23 00:36
LDW23-SC1028	23A0326-01	XDT_m1230427A-085	Solid	04/28/23 00:36
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-DUP1	XDT_m1230427A-086	Solid	04/28/23 00:40
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MS1	XDT_m1230427A-087	Solid	04/28/23 00:45
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
LDW23-SC1028	BLD0394-MSD1	XDT_m1230427A-088	Solid	04/28/23 00:49
Instrument Blank	SLD0418-IBL9	XDT_m1230427A-090	NA	04/28/23 00:58
Calibration Check	SLD0418-CCV9	XDT_m1230427A-091	NA	04/28/23 01:02
Calibration Blank	SLD0418-CCB9	XDT_m1230427A-092	NA	04/28/23 01:10
ZZZZZ	BLD0754-BLK1	XDT_m1230427A-095	Water	04/28/23 01:23
ZZZZZ	BLD0754-BS1	XDT_m1230427A-096	Water	04/28/23 01:27



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	Solid	04/28/23 01:32
LDW23-SC1170A	23A0326-04	XDT_m1230427A-097	Solid	04/28/23 01:32
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	Solid	04/28/23 01:36
LDW23-SC1169C	23A0326-05	XDT_m1230427A-098	Solid	04/28/23 01:36
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1161	23A0326-10	XDT_m1230427A-099	Solid	04/28/23 01:41
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	Solid	04/28/23 01:45
LDW23-SC1155	23A0326-11	XDT_m1230427A-100	Solid	04/28/23 01:45
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	Solid	04/28/23 01:49
LDW23-SC1162B	23A0326-12	XDT_m1230427A-101	Solid	04/28/23 01:49
Instrument Blank	SLD0418-IBLA	XDT_m1230427A-102	NA	04/28/23 01:54
Calibration Check	SLD0418-CCVA	XDT_m1230427A-103	NA	04/28/23 01:58
Calibration Blank	SLD0418-CCBA	XDT_m1230427A-104	NA	04/28/23 02:06
Instrument Blank	SLD0418-IBLB	XDT_m1230427A-114	NA	04/28/23 02:50
Calibration Check	SLD0418-CCVB	XDT_m1230427A-115	NA	04/28/23 02:54
Calibration Blank	SLD0418-CCBB	XDT_m1230427A-116	NA	04/28/23 03:01
Calibration Check	SLD0418-CCVC	XDT_m1230427A-118	NA	04/28/23 03:10
Calibration Blank	SLD0418-CCBC	XDT_m1230427A-119	NA	04/28/23 03:18
Instrument Blank	SLD0418-IBLD	XDT_m1230427A-129	NA	04/28/23 04:02
Calibration Check	SLD0418-CCVD	XDT_m1230427A-130	NA	04/28/23 04:06
Calibration Blank	SLD0418-CCBD	XDT_m1230427A-131	NA	04/28/23 04:13
Instrument Blank	SLD0418-IBLE	XDT_m1230427A-141	NA	04/28/23 04:58
Calibration Check	SLD0418-CCVE	XDT_m1230427A-142	NA	04/28/23 05:03
Calibration Blank	SLD0418-CCBE	XDT_m1230427A-143	NA	04/28/23 05:10
Instrument Blank	SLD0418-IBLF	XDT_m1230427A-153	NA	04/28/23 05:54
Calibration Check	SLD0418-CCVF	XDT_m1230427A-154	NA	04/28/23 05:58
Calibration Blank	SLD0418-CCBF	XDT_m1230427A-155	NA	04/28/23 06:05
Instrument Blank	SLD0418-IBLG	XDT_m1230427A-165	NA	04/28/23 06:50



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLD0418-CCVG	XDT_m1230427A-166	NA	04/28/23 06:54
Calibration Blank	SLD0418-CCBG	XDT_m1230427A-167	NA	04/28/23 07:02
Calibration Check	SLD0418-CCVH	XDT_m1230427A-169	NA	04/28/23 07:10
Calibration Blank	SLD0418-CCBH	XDT_m1230427A-170	NA	04/28/23 07:18
ZZZZZ	23D0062-01RE1	XDT_m1230427A-173	Water	04/28/23 07:32
ZZZZZ	23D0062-05RE1	XDT_m1230427A-174	Water	04/28/23 07:36
ZZZZZ	23D0062-07RE1	XDT_m1230427A-175	Water	04/28/23 07:41
ZZZZZ	23D0062-03RE1	XDT_m1230427A-176	Water	04/28/23 07:45
ZZZZZ	BLD0754-DUP1	XDT_m1230427A-177	Water	04/28/23 07:49
ZZZZZ	BLD0754-MS1	XDT_m1230427A-178	Water	04/28/23 07:54
ZZZZZ	BLD0754-MSD1	XDT_m1230427A-179	Water	04/28/23 07:59
Instrument Blank	SLD0418-IBLI	XDT_m1230427A-180	NA	04/28/23 08:03
Calibration Check	SLD0418-CCVI	XDT_m1230427A-181	NA	04/28/23 08:07
Calibration Blank	SLD0418-CCBI	XDT_m1230427A-182	NA	04/28/23 08:15
Instrument Blank	SLD0418-IBLJ	XDT_m1230427A-192	NA	04/28/23 09:01
Calibration Check	SLD0418-CCVJ	XDT_m1230427A-193	NA	04/28/23 09:06
Calibration Blank	SLD0418-CCBJ	XDT_m1230427A-194	NA	04/28/23 09:13
Instrument Blank	SLD0418-IBLK	XDT_m1230427A-204	NA	04/28/23 09:58
Calibration Check	SLD0418-CCVK	XDT_m1230427A-205	NA	04/28/23 10:03
Calibration Blank	SLD0418-CCBK	XDT_m1230427A-206	NA	04/28/23 10:10
Instrument Blank	SLD0418-IBLL	XDT_m1230427A-216	NA	04/28/23 10:57
Calibration Check	SLD0418-CCVL	XDT_m1230427A-217	NA	04/28/23 11:02
Calibration Blank	SLD0418-CCBL	XDT_m1230427A-218	NA	04/28/23 11:09
Instrument Blank	SLD0418-IBLM	XDT_m1230427A-221	NA	04/28/23 11:25
Instrument Blank	SLD0418-IBLN	XDT_m1230427A-224	NA	04/28/23 11:43
Instrument Blank	SLD0418-IBLO	XDT_m1230427A-225	NA	04/28/23 11:50
Calibration Check	SLD0418-CCVM	XDT_m1230427A-227	NA	04/28/23 11:59
Calibration Blank	SLD0418-CCBM	XDT_m1230427A-228	NA	04/28/23 12:06
Calibration Check	SLD0418-CCVN	XDT_m1230427A-230	NA	04/28/23 12:15



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0418-CCBN	XDT_m1230427A-231	NA	04/28/23 12:20
ZZZZZ	23C0774-02RE1	XDT_m1230427A-232	Solid	04/28/23 12:24
ZZZZZ	23C0774-03RE1	XDT_m1230427A-233	Solid	04/28/23 12:25
ZZZZZ	23C0774-04RE1	XDT_m1230427A-234	Solid	04/28/23 12:27
ZZZZZ	23C0774-05RE1	XDT_m1230427A-235	Solid	04/28/23 12:28
ZZZZZ	23C0774-06RE1	XDT_m1230427A-236	Solid	04/28/23 12:30
Calibration Check	SLD0418-CCVO	XDT_m1230427A-242	NA	04/28/23 12:40
Calibration Blank	SLD0418-CCBO	XDT_m1230427A-243	NA	04/28/23 12:44
Calibration Check	SLD0418-CCVP	XDT_m1230427A-246	NA	04/28/23 12:51
Calibration Blank	SLD0418-CCBP	XDT_m1230427A-247	NA	04/28/23 12:55
LDW23-SC1032	23A0326-02RE1	XDT_m1230427A-248	Solid	04/28/23 12:57
LDW23-SC1170A	23A0326-04RE1	XDT_m1230427A-249	Solid	04/28/23 12:59
LDW23-SC1169C	23A0326-05RE1	XDT_m1230427A-250	Solid	04/28/23 13:00
LDW23-SC1155	23A0326-11RE1	XDT_m1230427A-251	Solid	04/28/23 13:02
LDW23-SC1162B	23A0326-12RE1	XDT_m1230427A-252	Solid	04/28/23 13:03
LDW23-SC1028	23A0326-01RE1	XDT_m1230427A-253	Solid	04/28/23 13:05
LDW23-SC1028	BLD0394-DUP2	XDT_m1230427A-254	Solid	04/28/23 13:06
LDW23-SC1028	BLD0394-MS2	XDT_m1230427A-255	Solid	04/28/23 13:08
LDW23-SC1028	BLD0394-MSD2	XDT_m1230427A-256	Solid	04/28/23 13:09
Calibration Check	SLD0418-CCVQ	XDT_m1230427A-258	NA	04/28/23 13:13
Calibration Blank	SLD0418-CCBQ	XDT_m1230427A-259	NA	04/28/23 13:19
ZZZZZ	23C0774-07RE1	XDT_m1230427A-260	Solid	04/28/23 13:23
ZZZZZ	23C0774-08RE1	XDT_m1230427A-261	Solid	04/28/23 13:25
ZZZZZ	23C0774-09RE1	XDT_m1230427A-262	Solid	04/28/23 13:26
ZZZZZ	23C0774-11RE1	XDT_m1230427A-263	Solid	04/28/23 13:28
ZZZZZ	23C0774-12RE1	XDT_m1230427A-264	Solid	04/28/23 13:29
ZZZZZ	23C0774-13RE1	XDT_m1230427A-265	Solid	04/28/23 13:30
ZZZZZ	23C0774-01RE1	XDT_m1230427A-266	Solid	04/28/23 13:34
ZZZZZ	BLD0365-DUP2	XDT_m1230427A-267	Solid	04/28/23 13:35



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SLD0418

Instrument: ICPMS1

Calibration: GD00078

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
<i>ZZZZZ</i>	BLD0365-MS2	XDT_m1230427A-268	Solid	04/28/23 13:36
<i>ZZZZZ</i>	BLD0365-MSD2	XDT_m1230427A-269	Solid	04/28/23 13:38
Calibration Check	SLD0418-CCVR	XDT_m1230427A-270	NA	04/28/23 13:40
Calibration Blank	SLD0418-CCBR	XDT_m1230427A-271	NA	04/28/23 13:45



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0418-IFA1	Chromium-52	0	0.5840		ug/L
	Chromium-53	0	5.8540		ug/L
	Lead-208	0	0.0310		ug/L
	Silver-107	0	0.0060		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



ICP INTERFERENCE CHECK SAMPLE
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0418-IFB1	Chromium-52	20.000	19.641	98.2	ug/L
	Chromium-53	20.000	25.230	126	ug/L
	Lead-208	0	0.0200		ug/L
	Silver-107	20.000	17.649	88.2	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.



DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: ICPMS1

Calibration: GD00078

Sequence: SLD0418

Lab Sample ID: SLD0418-CRL1

Analyte	True	Found	%R	Units	QC Limits
Chromium-52	0.50000	0.539	108	ug/L	50 - 150
Chromium-53	0.50000	0.525	105	ug/L	50 - 150
Lead-208	0.10000	0.120	120	ug/L	50 - 150
Silver-107	0.20000	0.213	107	ug/L	50 - 150

* Values outside of QC limits



**HIGH-CONCENTRATION
CALIBRATION VERIFICATION
EPA 6020B**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00078

Laboratory ID: SLD0418-HCV1

Sequence: SLD0418

Standard ID: L003671

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	199	-0.3	10.00
Chromium-53	200.00	193	-3.3	10.00
Lead-208	200.00	220	10.2	10.00
Silver-107	200.00	195	-2.5	10.00

* Values outside of QC limits



HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: GD00078

Laboratory ID: SLD0418-HCV2

Sequence: SLD0418

Standard ID: L003672

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	310	3.3	10.00
Chromium-53	300.00	298	-0.5	10.00
Lead-208	300.00	341	13.8	10.00
Silver-107	300.00	291	-3.1	10.00

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	04/17/23 16:50	91	180	04/28/23 00:36	101	180	
LDW23-SC1028 23A0326-01RE1	01/16/23 15:17	01/17/23 16:46	04/17/23 16:50	91	180	04/28/23 13:05	102	180	
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	04/17/23 16:50	91	180	04/28/23 00:31	101	180	
LDW23-SC1032 23A0326-02RE1	01/16/23 15:32	01/17/23 16:46	04/17/23 16:50	91	180	04/28/23 12:57	102	180	
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:32	101	180	
LDW23-SC1170A 23A0326-04RE1	01/17/23 10:33	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 12:59	101	180	
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:36	101	180	
LDW23-SC1169C 23A0326-05RE1	01/17/23 11:08	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 13:00	101	180	
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:41	100	180	
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:45	100	180	
LDW23-SC1155 23A0326-11RE1	01/17/23 14:06	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 13:02	101	180	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 01:49	100	180	
LDW23-SC1162B 23A0326-12RE1	01/17/23 14:37	01/17/23 16:46	04/17/23 16:50	90	180	04/28/23 13:03	101	180	
Duplicate BLD0394-DUP1	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 00:40	101	180	
Duplicate BLD0394-DUP2	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 13:06	102	180	
Matrix Spike BLD0394-MS1	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 00:45	101	180	
Matrix Spike BLD0394-MS2	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 13:08	102	180	
Matrix Spike Dup BLD0394-MSD1	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 00:49	101	180	
Matrix Spike Dup BLD0394-MSD2	01/16/23 15:17	01/17/23 16:46	04/14/23 16:50	88	180	04/28/23 13:09	102	180	

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**
EPA 6020B

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: ICPMS1

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCU10
 Lot Number: P2-CU682108
 Matrix: 3% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Copper
 Starting Material: Cu Metal
 Starting Material Lot#: 2095
 Starting Material Purity: 99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL
Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9977 ± 50 µg/mL ICP Assay NIST SRM 3114 Lot Number: 121207
Assay Method #2	10024 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10007 ± 46 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/(u_{char\ i}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.007542	M Eu < 0.000942	O Na < 0.001434	M Se < 0.016971	M Zn < 0.005657
O Al < 0.000609	O Fe < 0.008700	M Nb < 0.000942	O Si < 0.003052	M Zr < 0.000942
M As < 0.010371	M Ga < 0.000942	M Nd < 0.000942	M Sm < 0.000942	
M Au < 0.001885	M Gd < 0.000942	M Ni < 0.003781	M Sn < 0.005657	
O B < 0.003663	M Ge < 0.005657	M Os < 0.000942	M Sr < 0.000942	
M Ba < 0.004253	M Hf < 0.000942	O P < 0.031668	M Ta < 0.000942	
M Be < 0.000942	O Hg < 0.007064	M Pb < 0.005789	M Tb < 0.000942	
M Bi < 0.000942	M Ho < 0.000942	M Pd < 0.000942	M Te < 0.004714	
O Ca < 0.002304	M In < 0.000942	M Pr < 0.000942	M Th < 0.000942	
M Cd < 0.000942	M Ir < 0.000942	M Pt < 0.000942	O Ti < 0.002801	
M Ce < 0.000942	O K < 0.000763	M Rb < 0.000942	M Tl < 0.000942	
M Co < 0.001890	M La < 0.000942	M Re < 0.000942	M Tm < 0.000942	
M Cr < 0.005657	O Li < 0.000243	i Rh <	M U < 0.000942	
M Cs < 0.000942	M Lu < 0.000942	M Ru < 0.039588	M V < 0.003771	
s Cu <	O Mg < 0.000320	O S < 0.007174	M W < 0.005657	
M Dy < 0.000942	O Mn < 0.000793	M Sb < 0.001885	M Y < 0.000942	
M Er < 0.000942	M Mo < 0.005657	M Sc < 0.000942	M Yb < 0.000942	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 Cu(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGPB10
Lot Number: S2-PB713228
Matrix: 0.5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Lead
Starting Material: Lead Nitrate
Starting Material Lot#: 2343
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL
Density: 1.015 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000310	M Eu < 0.000310	M Na < 0.001470	M Se < 0.009100	O Zn < 0.006155
O Al < 0.017098	O Fe < 0.002496	M Nb < 0.000310	O Si < 0.003761	O Zr < 0.001700
M As < 0.003100	M Ga < 0.000310	M Nd < 0.000310	M Sm < 0.000310	
M Au < 0.000910	M Gd < 0.000310	O Ni < 0.001709	M Sn < 0.001300	
O B < 0.005600	M Ge < 0.002200	M Os < 0.000310	O Sr < 0.000444	
O Ba < 0.007865	M Hf < 0.000310	O P < 0.038000	M Ta < 0.000310	
O Be < 0.000320	M Hg < 0.002200	s Pb < 0.000610	M Tb < 0.000610	
M Bi < 0.028000	M Ho < 0.000310	M Pd < 0.000610	M Te < 0.000310	
O Ca < 0.019834	M In < 0.000310	M Pr < 0.000310	M Th < 0.000310	
O Cd < 0.000630	M Ir < 0.000310	M Pt < 0.000910	O Ti < 0.005129	
M Ce < 0.004787	O K < 0.008207	M Rb < 0.006700	M Tl < 0.016000	
M Co < 0.000610	M La < 0.001900	M Re < 0.000310	M Tm < 0.000310	
O Cr < 0.001500	O Li < 0.000110	O Rh < 0.007700	M U < 0.000310	
M Cs < 0.006100	M Lu < 0.000310	M Ru < 0.001300	M V < 0.001600	
M Cu < 0.001600	O Mg < 0.003317	O S < 0.052000	M W < 0.000910	
M Dy < 0.000310	O Mn < 0.001600	O Sb < 0.015000	M Y < 0.000310	
M Er < 0.000310	M Mo < 0.000610	O Sc < 0.000630	M Yb < 0.000310	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, HF and HNO₃. Avoid H₂SO₄. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H₂O / HNO₃); Oxides (The many different Pb oxides are soluble in HNO₃ with the exception of PbO₂ which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H₂O / HNO₃); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGZN10
Lot Number: S2-ZN711249
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Zinc
Starting Material: Zinc Metal
Starting Material Lot#: 2349
Starting Material Purity: 99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9981 ± 56 µg/mL ICP Assay NIST SRM 3168a Lot Number: 120629
Assay Method #2	9987 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10002 ± 32 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.002000	M Eu < 0.000500	O Na < 0.008713	M Se < 0.048000	s Zn <
O Al < 0.011000	O Fe < 0.015467	M Nb < 0.000500	O Si < 0.007842	M Zr < 0.000500
O As < 0.012000	M Ga < 0.004900	M Nd < 0.000500	M Sm < 0.000500	
M Au < 0.006500	M Gd < 0.000500	O Ni < 0.003049	M Sn < 0.002614	
O B < 0.019000	M Ge < 0.009100	M Os < 0.000500	M Sr < 0.000500	
M Ba < 0.000500	M Hf < 0.000500	O P < 0.059000	M Ta < 0.000500	
O Be < 0.000230	O Hg < 0.003800	M Pb < 0.016774	M Tb < 0.000500	
M Bi < 0.002400	M Ho < 0.000500	M Pd < 0.001000	M Te < 0.017000	
O Ca < 0.052283	M In < 0.003500	M Pr < 0.000500	M Th < 0.000500	
O Cd < 0.000588	M Ir < 0.001000	M Pt < 0.000500	M Ti < 0.002000	
M Ce < 0.000500	O K < 0.017209	M Rb < 0.002500	M Tl < 0.000500	
M Co < 0.000653	M La < 0.000500	M Re < 0.000500	M Tm < 0.000500	
O Cr < 0.001089	O Li < 0.000230	M Rh < 0.000500	M U < 0.000500	
M Cs < 0.000500	M Lu < 0.000500	M Ru < 0.005000	M V < 0.000500	
O Cu < 0.001938	O Mg < 0.000871	O S < 0.048000	M W < 0.001000	
M Dy < 0.000500	O Mn < 0.000172	M Sb < 0.004300	M Y < 0.000500	
M Er < 0.000500	M Mo < 0.001500	O Sc < 0.000900	M Yb < 0.000500	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSE10
Lot Number: S2-SE711004
Matrix: 3% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Selenium
Starting Material: Se Metal
Starting Material Lot#: 1962
Starting Material Purity: 99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/(u_{char i}^2)))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 u_{char} = $[\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{Its} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.002242	M	Eu <	0.000373	O Na	0.013654	s	Se <		O Zn	0.002374
M Al	0.004450	M	Fe	0.008478	O Nb <	0.002975	O Si	0.006249	M Zr <	0.001868	
O As <	0.022040	M	Ga <	0.000373	M Nd <	0.000373	M Sm <	0.000373			
M Au <	0.000373	M	Gd <	0.000373	O Ni	0.001843	M Sn	0.000847			
O B <	0.007714	M	Ge <	0.002616	M Os <	0.000373	M Sr <	0.001121			
M Ba <	0.001495	M	Hf <	0.000373	O P <	0.022040	M Ta <	0.000373			
M Be <	0.001495	M	Hg <	0.002240	M Pb	0.006358	M Tb <	0.006353			
M Bi <	0.000373	M	Ho <	0.000373	M Pd <	0.000373	M Te <	0.012707			
O Ca	0.006530	M	In <	0.000373	M Pr <	0.001495	M Th <	0.002990			
M Cd	0.001165	M	Ir <	0.000373	M Pt <	0.000373	M Ti <	0.003363			
M Ce <	0.000373	O K	0.001999	M Rb <	0.001868	M Tl	0.008584				
M Co <	0.000373	M La <	0.001121	M Re <	0.000373	M Tm <	0.000373				
M Cr	0.002861	O Li	0.000062	M Rh <	0.000373	M U <	0.000373				
M Cs <	0.001121	M Lu <	0.000373	M Ru <	0.001493	M V <	0.000747				
M Cu <	0.000747	O Mg	0.001156	O S	0.024591	M W <	0.002242				
M Dy <	0.000373	M Mn <	0.000373	M Sb <	0.002242	M Y <	0.000373				
M Er <	0.000373	O Mo <	0.003195	M Sc <	0.001121	M Yb <	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H₂SeO₃

Chemical Compatibility -Soluble in HCl, HNO₃,H₃PO₄, H₂SO₄ and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO₃or HNO₃ / HF); Organic Matrices (acid digestion with hot concentrated H₂SO₄ accompanied by the careful dropwise addition of H₂O₂ until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMO10
Lot Number: S2-MO706255
Matrix: H2O
tr. NH4OH
Value / Analyte(s): 10 000 µg/mL ea:
Molybdenum
Starting Material: Ammonium Molybdate
Starting Material Lot#: 2361
Starting Material Purity: 99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL
Density: 1.011 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000590	M Eu < 0.000300	M Na < 0.008739	M Se < 0.008000	M Zn < 0.005942
M Al < 0.005592	M Fe < 0.006500	M Nb < 0.029000	i Si < 0.001800	M Zr < 0.001800
M As < 0.002100	M Ga < 0.000300	i Nd < 0.000300	M Sm < 0.000300	
M Au < 0.000300	M Gd < 0.000300	M Ni < 0.008000	M Sn < 0.008900	
M B < 0.003300	M Ge < 0.000300	M Os < 0.000590	M Sr < 0.001747	
M Ba < 0.016778	M Hf < 0.001800	i P < 0.004200	M Ta < 0.004200	
M Be < 0.000890	M Hg < 0.003300	M Pb < 0.000300	M Tb < 0.000300	
M Bi < 0.000890	M Ho < 0.000300	M Pd < 0.001800	M Te < 0.021000	
O Ca < 0.062920	M In < 0.032000	M Pr < 0.013000	M Th < 0.000300	
O Cd < 0.026000	M Ir < 0.000300	M Pt < 0.000300	O Ti < 0.032000	
M Ce < 0.008300	M K < 1.293372	M Rb < 0.045442	M Tl < 0.012584	
M Co < 0.005942	M La < 0.000300	M Re < 0.000300	M Tm < 0.000300	
M Cr < 0.005243	O Li < 0.000594	M Rh < 0.000300	M U < 0.005300	
M Cs < 0.005243	M Lu < 0.000300	M Ru < 0.079000	M V < 0.000890	
M Cu < 0.022371	M Mg < 0.005592	i S < 0.873900	M W < 0.873900	
M Dy < 0.000300	M Mn < 0.005900	M Sb < 0.015031	M Y < 0.000300	
M Er < 0.000300	s Mo < 0.001200	M Sc < 0.001200	M Yb < 0.000300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9

[MoO₄]²⁻(chemical form as received)

Chemical Compatibility -Mo is received in a NH₄OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO₄]²⁻ is soluble in concentrated HCl [MoOCl₅]²⁻, dilute HF / HNO₃ [MoOF₅]²⁻ and basic media [MoO₄]²⁻. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO₄]²⁻ chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF₅]²⁻ for months in 1% HNO₃ / LDPE container. 1-10,000 ppm single element solutions as the [MoO₄]²⁻ chemically stable for years in 1% NH₄OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO₃ or hot dilute HCl); Oxide (soluble in HF or NH₄OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 60,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGTL10
Lot Number: T2-TL714687
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Thallium
Starting Material: TINO₃
Starting Material Lot#: 2118
Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL
Density: 1.036 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000200	M Eu < 0.000200	O Na < 0.002489	M Se < 0.011019	O Zn < 0.002298
O Al < 0.004184	O Fe < 0.002824	M Nb < 0.000200	O Si < 0.003760	M Zr < 0.000200
M As < 0.002003	M Ga < 0.000200	M Nd < 0.000200	M Sm < 0.000200	
O Au < 0.002824	M Gd < 0.000200	M Ni < 0.001724	M Sn < 0.000601	
O B < 0.004184	M Ge < 0.000801	M Os < 0.000198	O Sr < 0.000313	
M Ba < 0.000400	M Hf < 0.000200	O P < 0.010460	M Ta < 0.000200	
O Be < 0.000104	M Hg < 0.000794	M Pb < 0.000811	M Tb < 0.000200	
M Bi < 0.005209	M Ho < 0.000200	M Pd < 0.000400	M Te < 0.005008	
O Ca < 0.002436	M In < 0.000200	M Pr < 0.000200	M Th < 0.000200	
M Cd < 0.001318	M Ir < 0.000198	M Pt < 0.000801	O Ti < 0.001255	
M Ce < 0.000200	O K < 0.006175	M Rb < 0.000200	s Tl <	
M Co < 0.000601	M La < 0.000200	M Re < 0.000200	M Tm < 0.000200	
M Cr < 0.000801	O Li < 0.000177	M Rh < 0.000200	M U < 0.000200	
M Cs < 0.003606	M Lu < 0.000200	M Ru < 0.000397	M V < 0.002203	
M Cu < 0.001001	O Mg < 0.000529	O S < 0.015690	M W < 0.000601	
M Dy < 0.000200	M Mn < 0.000801	M Sb < 0.000400	M Y < 0.000200	
M Er < 0.000200	M Mo < 0.001202	O Sc < 0.000711	M Yb < 0.000200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Ti(H₂O)₆¹⁺
Chemical Compatibility - Soluble in HCl, HNO₃, and H₂SO₄. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Ti Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO₃ which forms chiefly the Ti¹⁺ ion.); Oxide (The thalious oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt₀ followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCD10
Lot Number: S2-CD710508
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Cadmium
Starting Material: Cd Metal
Starting Material Lot#: 1953
Starting Material Purity: 99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL
Density: 1.029 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10010 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	10011 ± 30 µg/mL ICP Assay NIST SRM 3108 Lot Number: 130116
Assay Method #3	10003 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

O Ag < 0.003200	O Eu < 0.002500	O Na < 0.005499	M Se < 0.005700	O Zn < 0.001100
O Al < 0.008903	O Fe < 0.000602	M Nb < 0.000400	O Si < 0.016758	O Zr < 0.002600
M As < 0.003600	M Ga < 0.001200	M Nd < 0.000800	M Sm < 0.000400	
M Au < 0.000810	M Gd < 0.000400	M Ni < 0.003600	M Sn < 0.003200	
O B < 0.004189	O Ge < 0.012000	M Os < 0.000810	O Sr < 0.000330	
M Ba < 0.002400	M Hf < 0.000400	O P < 0.022000	M Ta < 0.000800	
M Be < 0.000400	M Hg < 0.001700	M Pb < 0.002400	M Tb < 0.000400	
M Bi < 0.000400	M Ho < 0.000400	M Pd < 0.001200	M Te < 0.008000	
O Ca < 0.011259	O In < 0.013000	M Pr < 0.000400	M Th < 0.000400	
s Cd < 0.000400	M Ir < 0.000410	M Pt < 0.000400	O Ti < 0.000602	
M Ce < 0.000400	O K < 0.005237	M Rb < 0.004400	M Tl < 0.000523	
M Co < 0.000400	M La < 0.000400	M Re < 0.000400	M Tm < 0.000400	
O Cr < 0.005100	O Li < 0.000054	M Rh < 0.000400	M U < 0.000400	
M Cs < 0.002400	M Lu < 0.000400	M Ru < 0.002500	M V < 0.002000	
O Cu < 0.004800	O Mg < 0.000288	O S < 0.022000	M W < 0.000400	
M Dy < 0.000400	O Mn < 0.000860	O Sb < 0.018000	M Y < 0.000400	
M Er < 0.000400	M Mo < 0.001600	O Sc < 0.000430	M Yb < 0.000400	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd₂(OH)₃+ and Cd(OH)₂(aq)

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃ / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO₃); Oxides (soluble in HCl or HNO₃); Ores (dissolve in HCl /HNO₃ then take to fumes with H₂SO₄. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMN10
Lot Number: S2-MN704240
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Manganese
Starting Material: Mn Metal
Starting Material Lot#: 2275
Starting Material Purity: 99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL
Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9989 ± 69 µg/mL ICP Assay NIST SRM 3132 Lot Number: 050429
Assay Method #2	10011 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10024 ± 47 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001500	M Eu < 0.000730	O Na 0.176097	M Se < 0.006600	M Zn 0.009925
O Al 0.004322	M Fe < 0.650000	M Nb < 0.000730	O Si 0.097654	M Zr < 0.000730
M As < 0.008000	M Ga 0.004322	M Nd < 0.001500	M Sm < 0.000730	
M Au < 0.000730	M Gd < 0.000730	M Ni 0.024013	M Sn < 0.002200	
M B 0.068838	M Ge < 0.004400	M Os < 0.000730	O Sr 0.000928	
M Ba < 0.001500	M Hf < 0.000730	i P <	M Ta < 0.000730	
M Be < 0.000730	M Hg < 0.002200	M Pb 0.007364	M Tb < 0.000730	
M Bi < 0.003000	M Ho < 0.000730	M Pd < 0.000730	M Te < 0.019000	
O Ca 0.062434	M In < 0.003000	M Pr < 0.000730	M Th < 0.000730	
M Cd < 0.001500	M Ir < 0.000730	M Pt < 0.000730	O Ti < 0.006500	
M Ce < 0.007300	O K 0.006403	M Rb < 0.006600	M Tl < 0.000730	
O Co 0.014728	M La < 0.003000	M Re < 0.000730	M Tm < 0.000730	
O Cr 0.272151	O Li 0.000416	M Rh < 0.003000	M U < 0.001500	
M Cs < 0.000730	M Lu < 0.000730	M Ru < 0.004400	M V < 0.000730	
O Cu 0.007684	O Mg 0.320177	i S <	M W < 0.004400	
M Dy < 0.001500	s Mn <	M Sb < 0.021000	O Y 0.001360	
M Er < 0.001500	M Mo 0.010245	O Sc < 0.004100	M Yb < 0.000730	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 Mn(H₂O)₆2+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO₃/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H₂SO₄ and heat to SO₃ fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16 O,37Cl18O,40Ar15 N,38Ar17O,36Ar18O 1H ,38Ar16O1H,37Cl17 O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGSB10
 Lot Number: R2-SB688559
 Matrix: 3% (v/v) HNO3
 3% (w/v) tartaric acid
 Value / Analyte(s): 10 000 µg/mL ea:
 Antimony
 Starting Material: Antimony Metal
 Starting Material Lot#: 1857
 Starting Material Purity: 99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL
Density: 1.061 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 10003 ± 41 µg/mL
 ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance:
 $w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with
 $u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2
 $u_{char a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.000200	M Eu <	0.000300	O Na	0.140000	M Se <	0.007300	O Zn	0.005000
M Al	0.003200	O Fe	0.060000	M Nb <	0.000100	O Si	0.150000	O Zr <	0.006300
M As <	0.004400	M Ga <	0.000400	M Nd <	0.000100	M Sm <	0.000100		
M Au <	0.000210	M Gd <	0.000100	O Ni	0.004800	M Sn <	0.001800		
M B <	0.011000	M Ge <	0.000600	M Os <	0.000110	O Sr	0.000750		
O Ba <	0.004900	M Hf <	0.000100	O P	0.540000	M Ta	0.003300		
M Be <	0.000400	M Hg <	0.000110	M Pb <	0.000400	M Tb <	0.000100		
M Bi <	0.000200	M Ho <	0.000100	M Pd <	0.000210	M Te <	0.000600		
O Ca	0.110000	M In <	0.000100	M Pr <	0.001600	M Th <	0.000100		
M Cd <	0.000200	M Ir <	0.000110	M Pt <	0.000600	M Ti <	0.002800		
M Ce	0.006500	O K	0.020000	M Rb <	0.001000	M Tl <	0.000100		
M Co <	0.000200	O La <	0.016000	M Re <	0.000100	M Tm <	0.000100		
M Cr	0.006900	O Li <	0.000430	M Rh <	0.000300	M U <	0.000100		
M Cs <	0.000200	M Lu <	0.000100	M Ru <	0.000310	M V <	0.000800		
M Cu <	0.000600	O Mg	0.021000	n S <		M W <	0.000200		
M Dy <	0.000100	O Mn	0.001900	s Sb <		M Y <	0.000100		
M Er <	0.000100	M Mo <	0.000500	O Sc <	0.002300	M Yb <	0.000100		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C₄H₄O₆-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO₃ as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO₃ / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H₂O / HF / HNO₃ mixture); Oxides (Soluble in HCl and tartaric acid or H₂O / HF / HNO₃ mixtures); Ores (fusion with Na₂CO₃ in PtO followed by dissolving the fuseate in a H₂O / HF / HNO₃ mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAS10
Lot Number: T2-AS718260
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Arsenic
Starting Material: As Metal
Starting Material Lot#: 2208
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL
Density: 1.037 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.003200	M Eu < 0.000530	O Na < 0.032544	M Se < 0.006300	O Zn < 0.001952
M Al < 0.007593	O Fe < 0.001475	O Nb < 0.012000	O Si < 0.238658	O Zr < 0.004100
s As < 0.000530	M Ga < 0.000530	M Nd < 0.000530	M Sm < 0.000530	
M Au < 0.003100	M Gd < 0.000530	M Ni < 0.002100	M Sn < 0.000530	
M B < 0.026035	M Ge < 0.001600	M Os < 0.000520	M Sr < 0.000530	
M Ba < 0.000530	M Hf < 0.000530	O P < 0.043000	M Ta < 0.000530	
O Be < 0.000360	M Hg < 0.001600	M Pb < 0.002100	M Tb < 0.000530	
M Bi < 0.000530	M Ho < 0.000530	M Pd < 0.001100	M Te < 0.004700	
O Ca < 0.004339	M In < 0.023000	M Pr < 0.005300	M Th < 0.000530	
M Cd < 0.001100	M Ir < 0.000520	M Pt < 0.000530	O Ti < 0.002300	
M Ce < 0.000530	O K < 0.002061	M Rb < 0.000530	M Tl < 0.000530	
M Co < 0.000530	M La < 0.001100	M Re < 0.000530	M Tm < 0.000530	
O Cr < 0.001800	O Li < 0.000120	M Rh < 0.000530	M U < 0.000530	
M Cs < 0.005300	M Lu < 0.000530	M Ru < 0.000520	M V < 0.002700	
M Cu < 0.001600	O Mg < 0.000154	O S < 0.028205	M W < 0.012000	
M Dy < 0.000530	O Mn < 0.000154	M Sb < 0.000530	M Y < 0.000530	
M Er < 0.000530	M Mo < 0.000530	O Sc < 0.001700	M Yb < 0.000530	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3, H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphous form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powdered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37C I,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGBA10
 Lot Number: R2-BA692576
 Matrix: 2% (v/v) HNO₃
 Value / Analyte(s): 10 000 µg/mL ea:
 Barium
 Starting Material: Barium Nitrate
 Starting Material Lot#: 1969
 Starting Material Purity: 99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL
Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10018 ± 50 µg/mL ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	10023 ± 31 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	10023 ± 30 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/CRM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an UPLA-Filtered Clean Room. An UPLA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000410	O Eu < 0.005200	O Na 0.004610	M Se < 0.003700	O Zn 0.000658
M Al < 0.003100	O Fe 0.015707	M Nb < 0.000210	O Si 0.005573	M Zr < 0.001300
M As < 0.001300	M Ga < 0.000210	M Nd < 0.000210	O Sm < 0.021000	
M Au < 0.001300	M Gd < 0.000210	M Ni < 0.000810	M Sn < 0.000410	
O B < 0.005200	M Ge < 0.002500	M Os < 0.000410	O Sr 0.003850	
s Ba <	M Hf < 0.000810	O P < 0.026000	M Ta < 0.000410	
O Be < 0.000320	M Hg < 0.000210	M Pb < 0.002300	M Tb < 0.000210	
M Bi < 0.000210	M Ho < 0.000210	M Pd < 0.000210	M Te < 0.001900	
O Ca 0.007093	M In < 0.000210	M Pr < 0.000210	M Th < 0.000210	
M Cd < 0.000210	M Ir < 0.000210	M Pt < 0.000210	M Ti < 0.002100	
M Ce < 0.001300	O K 0.035467	M Rb < 0.002100	M Tl < 0.000210	
M Co < 0.000410	O La < 0.005200	M Re < 0.000210	M Tm < 0.000410	
M Cr < 0.001700	O Li < 0.000630	M Rh < 0.000210	M U < 0.000210	
M Cs < 0.003300	M Lu < 0.001700	M Ru < 0.000210	O V < 0.005200	
M Cu < 0.001300	O Mg 0.000861	O S 0.268539	M W < 0.000410	
M Dy < 0.000210	M Mn < 0.000410	M Sb < 0.001300	O Y < 0.005200	
M Er < 0.001300	M Mo < 0.000410	M Sc < 0.000410	M Yb < 0.001300	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 Ba(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO₃ / LDPE container.

Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO₃); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent BaSO₄ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGBE10
Lot Number: R2-BE692992
Matrix: 6% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Beryllium
Starting Material: Beryllium Acetate
Starting Material Lot#: 2281
Starting Material Purity: 99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL
Density: 1.128 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001100	M Eu < 0.000270	O Na < 0.040962	M Se < 0.005000	M Zn < 0.013054
O Al < 0.016205	O Fe < 0.015754	M Nb < 0.000270	O Si < 0.024307	O Zr < 0.001900
M As < 0.002900	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000520	M Gd < 0.000270	M Ni < 0.003700	M Sn < 0.000790	
M B < 0.091000	M Ge < 0.000270	M Os < 0.000260	M Sr < 0.000630	
M Ba < 0.002700	M Hf < 0.000270	O P < 0.066000	M Ta < 0.000270	
s Be < 0.000530	M Hg < 0.000520	M Pb < 0.000270	M Tb < 0.000270	
M Bi < 0.072022	M Ho < 0.000270	M Pd < 0.000520	M Te < 0.003700	
O Ca < 0.000790	M In < 0.000790	M Pr < 0.000270	M Th < 0.000270	
M Cd < 0.000270	M Ir < 0.000260	M Pt < 0.000270	O Ti < 0.000400	
M Ce < 0.000270	O K < 0.045014	M Rb < 0.000270	M Tl < 0.000790	
O Co < 0.003200	M La < 0.000270	M Re < 0.000270	M Tm < 0.000270	
O Cr < 0.001800	O Li < 0.000660	M Rh < 0.001100	M U < 0.000270	
M Cs < 0.001440	M Lu < 0.000270	M Ru < 0.000260	M V < 0.000790	
M Cu < 0.002100	O Mg < 0.016205	i S < 0.000270	M W < 0.000530	
M Dy < 0.000270	M Mn < 0.001215	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.000530	O Sc < 0.000930	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 Be(H₂O)₄+2

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO₃ / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta I(is best dissolved in diluted H₂SO₄); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO₄ fusion); Ores (H₂SO₄/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGCO10
 Lot Number: R2-CO695285
 Matrix: 3% (v/v) HNO3
 Value / Analyte(s): 10 000 µg/mL ea:
 Cobalt
 Starting Material: Co Metal
 Starting Material Lot#: 2326
 Starting Material Purity: 99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

- Assay Method #1** **10031 ± 67 µg/mL**
 ICP Assay NIST SRM 3113 Lot Number: 190630

- Assay Method #2** **10019 ± 32 µg/mL**
 EDTA NIST SRM 928 Lot Number: 928

- Assay Method #3** **10000 ± 35 µg/mL**
 Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/CRM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an UPLA-Filtered Clean Room. An UPLA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.014660	M Eu	<	0.000590	O Na	0.007534	M Se	<	0.019000	M Zn	0.003461	
M Al	<	0.024000	M Fe	0.050905	M Nb	<	0.000590	O Si	0.075340	M Zr	<	0.001200
i As	<		M Ga	<	0.000590	M Nd	<	0.000590	M Sm	<	0.000590	
M Au	<	0.004100	M Gd	<	0.000590	O Ni	0.427608	M Sn	<	0.001200		
M B	<	0.031000	M Ge	<	0.003000	M Os	<	0.000590	O Sr	<	0.000260	
M Ba	<	0.000590	M Hf	<	0.000590	n P	<		M Ta	<	0.001200	
O Be	<	0.001300	M Hg	<	0.001800	M Pb	0.003257	M Tb	<	0.000590		
M Bi	<	0.003000	M Ho	<	0.000590	M Pd	<	0.000590	M Te	<	0.005300	
O Ca	0.010588	M In	<	0.001200	M Pr	<	0.000590	M Th	<	0.000590		
M Cd	<	0.004700	M Ir	<	0.001200	M Pt	<	0.002400	M Ti	<	0.014000	
M Ce	<	0.000590	O K	0.008144	M Rb	<	0.000590	M Tl	0.002647			
s Co	<		M La	<	0.000590	M Re	<	0.000590	M Tm	<	0.000590	
M Cr	<	0.021000	O Li	<	0.000130	M Rh	<	0.000590	M U	<	0.000590	
M Cs	<	0.002400	M Lu	<	0.000590	M Ru	<	0.007100	O V	<	0.000880	
M Cu	0.189369	O Mg	0.001893	n S	<			M W	<	0.000590		
M Dy	<	0.000590	M Mn	<	0.001800	M Sb	<	0.003600	M Y	<	0.000590	
M Er	<	0.000590	M Mo	<	0.002400	O Sc	<	0.001600	M Yb	<	0.000590	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 Co(H₂O)₆²⁺

Chemical Compatibility - Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAG10
Lot Number: S2-AG712977
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Silver
Starting Material: Ag Shot
Starting Material Lot#: 2289
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL
Density: 1.056 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10051 ± 52 µg/mL ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	10051 ± 19 µg/mL Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	10049 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s Ag <	M Eu <	0.000260	O Na	0.003811	M Se <	0.003900	O Zn	0.048146	
M Al	0.002688	O Fe	0.006419	M Nb <	0.000260	O Si	0.005215	M Zr <	0.000260
M As <	0.001100	M Ga <	0.000260	M Nd <	0.000260	M Sm <	0.000260		
M Au <	0.000260	M Gd <	0.000260	O Ni	0.001765	M Sn	0.020060		
O B <	0.004300	M Ge <	0.002300	M Os <	0.001100	O Sr <	0.000110		
M Ba <	0.000520	M Hf <	0.000260	O P <	0.017000	M Ta <	0.000260		
O Be <	0.001100	M Hg <	0.000770	M Pb <	0.003600	M Tb <	0.000260		
M Bi	0.004814	M Ho <	0.000260	M Pd	0.044134	M Te <	0.009000		
O Ca	0.005215	M In	0.003691	M Pr <	0.000260	M Th <	0.000260		
M Cd <	0.000260	M Ir <	0.000520	M Pt <	0.001100	O Ti <	0.000440		
M Ce <	0.002100	O K <	0.008700	M Rb <	0.001100	M Tl <	0.004100		
O Co <	0.000330	M La <	0.000260	M Re <	0.000260	M Tm <	0.000260		
O Cr <	0.002500	O Li <	0.000110	M Rh <	0.000520	M U <	0.000260		
M Cs <	0.002600	M Lu <	0.000260	M Ru <	0.000260	M V <	0.000260		
O Cu	0.357085	O Mg	0.001203	O S <	0.017000	M W <	0.000260		
M Dy <	0.000260	O Mn <	0.000220	M Sb <	0.014000	M Y <	0.000260		
M Er <	0.000260	M Mo <	0.000260	O Sc <	0.000220	M Yb <	0.000260		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 Ag(H₂O)₆⁺
Chemical Compatibility - Stable in HNO₃, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [AgCl_x1-x] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite, bromide, chloride, iodide, carbonate, chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ag Containing Samples (Preparation and Solution) - Metal (Soluble in HNO₃); Oxides (Soluble in HNO₃); Ores (Digestion with conc. HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCR(3)10
Lot Number: S2-CR709784
Matrix: 10% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Chromium
Starting Material: Cr Metal
Starting Material Lot#: 2328
Starting Material Purity: 99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL
Density: 1.072 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/(u_{char j}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $[\sum(w_j)^2 (u_{char j})^2]^{1/2}$ where $u_{char j}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag <	0.001700	M	Eu <	0.003400	O	Na	0.090372	M	Se <	0.012000	O	Zn <	0.006100
M Al	0.034916	O	Fe	0.246471	M	Nb <	0.017000	n	Si <		M	Zr <	0.007800
M As <	0.028000	O	Ga <	0.013000	M	Nd <	0.013000	M	Sm <	0.006900			
M Au <	0.001700	M	Gd <	0.000560	M	Ni	0.016020	M	Sn	0.006983			
O B <	0.025000	O	Ge <	0.014000	M	Os <	0.000560	M	Sr	0.006367			
M Ba <	0.008900	M	Hf <	0.000560	i	P <		M	Ta <	0.000560			
M Be <	0.013000	M	Hg <	0.001700	M	Pb	0.010064	M	Tb <	0.000560			
M Bi <	0.002300	M	Ho <	0.000560	M	Pd <	0.021000	M	Te <	0.010000			
O Ca	0.075995	M	In <	0.000560	M	Pr <	0.001700	M	Th <	0.000560			
M Cd <	0.000560	M	Ir <	0.000560	M	Pt <	0.001200	O	Ti	0.013555			
M Ce <	0.001200	O	K	0.043132	i	Rb <		M	Tl <	0.000560			
M Co <	0.002600	M	La <	0.001200	M	Re <	0.001200	O	Tm <	0.013000			
s Cr <		O	Li	0.000390	M	Rh <	0.095000	M	U <	0.000560			
M Cs <	0.007800	M	Lu <	0.000560	M	Ru <	0.087000	O	V	0.014993			
O Cu	0.007599	O	Mg	0.000883	i	S <		M	W <	0.049000			
M Dy <	0.000560	M	Mn	0.008626	M	Sb <	0.003400	M	Y <	0.001700			
M Er <	0.019000	M	Mo <	0.032000	M	Sc	0.003080	M	Yb <	0.000560			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 Cr(H₂O)₆3+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Cr₃ Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with KHSO₄ and extraction with hot KCl. The residue fused with Na₂CO₃ and KClO₃, 3:1. B. Fusion with NaKSO₄ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na₂O₂ or NaOH and KNO₃ or NaOH and Na₂O₂. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGNI10
Lot Number: P2-NI686384
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Nickel
Starting Material: Ni Metal
Starting Material Lot#: 2277 and 2282
Starting Material Purity: 99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL
Density: 1.038 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9971 ± 54 µg/mL ICP Assay NIST SRM 3136 Lot Number: 120619
Assay Method #2	9970 ± 32 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	9993 ± 33 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag	0.002606	M Eu	<	0.001100	O Na	0.004965	O Se	<	0.067000	M Zn	0.006578	
M Al	<	0.013000	O Fe	0.018618	M Nb	<	0.001100	O Si	0.010923	M Zr	<	0.001100
O As	<	0.067000	M Ga	<	0.001100	M Nd	<	0.001100	M Sm	<	0.001100	
M Au	<	0.002100	M Gd	<	0.001100	s Ni	<		M Sn	<	0.016000	
M B	<	0.017000	M Ge	<	0.004200	M Os	0.002110	O Sr	<	0.000940		
M Ba	<	0.001100	M Hf	<	0.001100	i P	<		M Ta	<	0.001100	
O Be	<	0.000410	M Hg	0.014895	M Pb	0.006578	M Tb	<	0.001100			
M Bi	<	0.004200	M Ho	<	0.001100	M Pd	<	0.001100	M Te	<	0.015000	
O Ca	0.003351	M In	<	0.001100	M Pr	<	0.001100	M Th	<	0.001100		
M Cd	0.001365	M Ir	0.004716	M Pt	<	0.001100	M Ti	<	0.004200			
M Ce	<	0.001100	O K	0.004716	M Rb	<	0.001100	M Tl	<	0.001100		
O Co	0.017377	M La	<	0.001100	M Re	0.001737	M Tm	<	0.001100			
O Cr	<	0.006700	O Li	<	0.000140	M Rh	<	0.006300	M U	<	0.001100	
M Cs	<	0.007300	M Lu	<	0.001100	M Ru	<	0.019000	M V	<	0.002100	
M Cu	0.004096	O Mg	0.000372	i S	<			M W	<	0.006300		
M Dy	<	0.001100	O Mn	<	0.001900	M Sb	0.005833	O Y	<	0.000540		
M Er	<	0.001100	M Mo	<	0.008400	M Sc	<	0.002100	M Yb	<	0.001100	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H₂O)₆²⁺

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF, H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO₃); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO₃).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGV10
Lot Number: S2-V711005
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Vanadium
Starting Material: Vanadium Pentoxide
Starting Material Lot#: 1782
Starting Material Purity: 99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL
Density: 1.104 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.000110	M Eu < 0.000110	O Na 0.120000	M Se < 0.009400	M Zn 0.009400
O Al 0.120000	O Fe 0.460000	M Nb < 0.001300	O Si 0.270000	M Zr < 0.002900
M As < 0.000210	M Ga < 0.009300	M Nd < 0.000610	M Sm < 0.000110	
M Au < 0.004700	M Gd < 0.000110	M Ni 0.012000	M Sn 0.003900	
M B 0.051000	M Ge < 0.000410	M Os < 0.000110	O Sr 0.007100	
M Ba 0.003600	M Hf < 0.000110	O P < 0.034000	M Ta < 0.000110	
O Be < 0.000560	M Hg < 0.000410	M Pb 0.001400	M Tb < 0.000110	
M Bi < 0.000210	M Ho < 0.000110	M Pd < 0.000410	M Te < 0.000110	
O Ca 0.730000	M In < 0.000110	M Pr < 0.000110	M Th < 0.000210	
M Cd < 0.000610	M Ir < 0.000110	M Pt < 0.000110	M Ti 0.017000	
M Ce < 0.000610	M K 0.052000	M Rb < 0.000310	M Tl < 0.000110	
M Co < 0.001300	M La < 0.000410	M Re 0.001700	M Tm < 0.000110	
O Cr 0.170000	M Li < 0.000810	M Rh < 0.000110	M U < 0.000410	
M Cs 0.005600	M Lu < 0.000110	M Ru < 0.000110	s V <	
M Cu < 0.001300	M Mg 0.053000	i S <	M W 0.002000	
M Dy < 0.000110	M Mn 0.007900	M Sb 0.078000	M Y < 0.000110	
M Er < 0.000110	M Mo 0.094000	M Sc < 0.000410	M Yb < 0.000110	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H₂V₁₀O₂₈-

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄, HF, H₃PO₄ and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in NiO or Na₂CO₃ / KNO₃); Oxides (V₂O₃ - use HCl, V₂O₄ - use HCl or HNO₃, V₂O₅ - use concentrated acids); Ores (Na₂CO₃ / KNO₃ in PtO caution - nitrates attack PtO followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V₂O₅ above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGAL10
Lot Number: T2-AL716102
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Aluminum
Starting Material: Aluminum Nitrate Nonahydrate
Starting Material Lot#: 2460
Starting Material Purity: 99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL
Density: 1.087 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10059 ± 40 µg/mL ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	10044 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10049 ± 35 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.002100	M Eu < 0.002100	O Na < 0.352819	M Se < 0.005200	M Zn < 0.006018
s Al < 0.002100	O Fe < 0.074714	M Nb < 0.000520	O Si < 0.017848	O Zr < 0.004358
M As < 0.008716	O Ga < 0.112072	M Nd < 0.000520	M Sm < 0.000520	
M Au < 0.008400	M Gd < 0.001100	O Ni < 0.006000	M Sn < 0.000747	
O B < 0.014000	M Ge < 0.005200	M Os < 0.000650	O Sr < 0.000518	
O Ba < 0.012867	M Hf < 0.004100	n P < 0.000520	M Ta < 0.000520	
O Be < 0.000270	M Hg < 0.002000	M Pb < 0.002282	M Tb < 0.000520	
M Bi < 0.001930	M Ho < 0.000520	M Pd < 0.000520	M Te < 0.001100	
O Ca < 0.076790	M In < 0.002100	M Pr < 0.000520	M Th < 0.000520	
M Cd < 0.000520	M Ir < 0.000650	M Pt < 0.000520	O Ti < 0.001930	
M Ce < 0.001100	O K < 0.043583	M Rb < 0.000520	M Tl < 0.000520	
O Co < 0.005400	M La < 0.002100	M Re < 0.000520	M Tm < 0.000520	
O Cr < 0.006018	O Li < 0.000112	M Rh < 0.000520	M U < 0.000520	
M Cs < 0.000643	M Lu < 0.000520	M Ru < 0.002000	M V < 0.001286	
O Cu < 0.008300	O Mg < 0.068488	i S < 0.000520	M W < 0.009800	
M Dy < 0.002100	O Mn < 0.000913	M Sb < 0.003100	M Y < 0.001100	
M Er < 0.000520	M Mo < 0.005396	O Sc < 0.000950	M Yb < 0.000520	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H₂O)₆+3

Chemical Compatibility -Soluble in HCl, HNO₃, vF and v₂SO₄. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)₄(H₂O)₂⁻ species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO₃); a- Al₂O₃ (Na₂CO₃ fusion in PtO);

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGK10
Lot Number: S2-K711973
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Potassium
Starting Material: KNO₃
Starting Material Lot#: 2313
Starting Material Purity: 99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL
Density: 1.024 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9987 ± 24 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	10004 ± 84 µg/mL ICP Assay NIST SRM 3141a Lot Number: 140813
Assay Method #3	10007 ± 45 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum(1/u_{char\ j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.001400	M Eu < 0.000660	O Na < 0.246220	M Se < 0.007900	O Zn < 0.018056
O Al < 0.001592	O Fe < 0.005909	M Nb < 0.000660	O Si < 0.011490	O Zr < 0.001600
M As < 0.005300	M Ga < 0.000660	M Nd < 0.000660	M Sm < 0.000660	
M Au < 0.002000	M Gd < 0.000660	O Ni < 0.004900	M Sn < 0.000660	
O B < 0.005600	M Ge < 0.002000	M Os < 0.003300	O Sr < 0.000055	
O Ba < 0.000860	M Hf < 0.000660	O P < 0.032000	M Ta < 0.000660	
O Be < 0.000082	M Hg < 0.002000	M Pb < 0.002300	M Tb < 0.000660	
M Bi < 0.006600	M Ho < 0.000660	M Pd < 0.000660	M Te < 0.017000	
O Ca < 0.031187	M In < 0.000660	M Pr < 0.000660	M Th < 0.000660	
O Cd < 0.000450	M Ir < 0.000660	M Pt < 0.002700	M Ti < 0.000660	
M Ce < 0.000660	s K <	M Rb < 0.476026	M Tl < 0.000660	
O Co < 0.000780	M La < 0.000660	M Re < 0.000660	M Tm < 0.000660	
O Cr < 0.000541	O Li < 0.000084	M Rh < 0.000660	M U < 0.000660	
M Cs < 0.000660	M Lu < 0.000660	M Ru < 0.000660	O V < 0.001100	
M Cu < 0.002700	O Mg < 0.006237	O S < 0.027905	M W < 0.000660	
M Dy < 0.000660	O Mn < 0.000476	M Sb < 0.000660	M Y < 0.000660	
M Er < 0.000660	M Mo < 0.000660	O Sc < 0.000340	O Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Avoid use of HClO₄ due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO₄⁻.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMG10
Lot Number: S2-MG704239
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Magnesium
Starting Material: Magnesium Metal
Starting Material Lot#: 2168
Starting Material Purity: 99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL
Density: 1.053 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10022 ± 62 µg/mL ICP Assay NIST SRM 3131a Lot Number: 140110
Assay Method #2	10078 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10033 ± 26 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O Ag	0.002106	M	Eu <	0.000910	O Na	0.071075	O Se <	0.048000	O Zn	0.003299
M Al	0.003553	M	Fe	0.002538	M Nb <	0.000460	O Si <	0.032000	O Zr <	0.002700
M As <	0.001400	M	Ga <	0.000460	M Nd <	0.000910	M Sm <	0.000460		
M Au <	0.001400	M	Gd <	0.000460	O Ni <	0.001600	M Sn <	0.002300		
O B	0.006853	M	Ge <	0.001400	M Os <	0.000460	O Sr	0.000279		
O Ba	0.000964	M	Hf <	0.000460	O P	0.015230	M Ta <	0.000460		
O Be <	0.000120	M	Hg <	0.000460	M Pb <	0.000460	M Tb <	0.000460		
M Bi <	0.000460	M	Ho <	0.000460	M Pd <	0.003200	M Te <	0.007300		
O Ca	0.053306	M	In <	0.000460	M Pr <	0.000460	M Th <	0.000460		
O Cd <	0.000360	M	Ir <	0.000460	M Pt <	0.001900	O Ti <	0.001700		
M Ce <	0.002300	M	K	0.048229	M Rb	0.002411	M Tl	0.003046		
M Co <	0.000910	M	La <	0.002800	M Re <	0.000460	M Tm <	0.000460		
M Cr <	0.002300	O	Li	0.027922	M Rh <	0.000460	M U <	0.000460		
M Cs	0.001040	M	Lu <	0.000460	M Ru <	0.000460	M V <	0.000460		
O Cu <	0.003000	s	Mg <		O S <	0.190000	M W <	0.000460		
M Dy <	0.000460	O	Mn	0.015230	M Sb	0.020814	O Y <	0.000720		
M Er <	0.000460	M	Mo <	0.000910	O Sc <	0.000480	M Yb <	0.000460		

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H₂O)₆+2

Chemical Compatibility -Soluble in HCl, HNO₃, and H₂SO₄ avoid HF, H₃PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGCA10
Lot Number: T2-CA716103
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Calcium
Starting Material: CaCO₃
Starting Material Lot#: 2472
Starting Material Purity: 99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL
Density: 1.039 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	10005 ± 45 µg/mL ICP Assay NIST SRM 3109a Lot Number: 130213
Assay Method #2	10005 ± 25 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	10005 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char j}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 μm .

M Ag < 0.001200	M Eu < 0.001200	O Na < 0.006112	M Se < 0.024000	M Zn < 0.005362
M Al < 0.065419	O Fe < 0.009115	M Nb < 0.001200	O Si < 0.139417	O Zr < 0.006700
O As < 0.013000	M Ga < 0.015000	M Nd < 0.020000	M Sm < 0.001200	
M Au < 0.017000	M Gd < 0.004800	O Ni < 0.000793	M Sn < 0.003600	
O B < 0.001179	M Ge < 0.003600	M Os < 0.001200	M Sr < 0.081505	
O Ba < 0.002788	M Hf < 0.001200	O P < 0.041000	M Ta < 0.001200	
O Be < 0.000410	M Hg < 0.004800	M Pb < 0.001608	M Tb < 0.001200	
M Bi < 0.001608	M Ho < 0.001200	M Pd < 0.001200	M Te < 0.003600	
s Ca <	M In < 0.001200	M Pr < 0.000257	M Th < 0.001200	
O Cd < 0.001300	M Ir < 0.001200	M Pt < 0.003600	O Ti < 0.001900	
M Ce < 0.001029	O K < 0.009759	M Rb < 0.001200	M Tl < 0.001200	
O Co < 0.000418	M La < 0.001823	M Re < 0.001200	M Tm < 0.001200	
O Cr < 0.003324	O Li < 0.007300	M Rh < 0.001200	M U < 0.002144	
M Cs < 0.007399	M Lu < 0.000128	M Ru < 0.001200	M V < 0.001286	
O Cu < 0.011000	M Mg < 1.286934	O S < 0.055767	O W < 0.024000	
M Dy < 0.002400	O Mn < 0.004611	M Sb < 0.009600	O Y < 0.000536	
M Er < 0.002400	M Mo < 0.003539	O Sc < 0.001400	M Yb < 0.001200	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H₂O)₆+2

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₂SO₄, vF, v3PO₄ and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO₃ / LDPE container.

Ca Containing Samples)Preparation and Solution -Metal (best dissolved in diluted HNO₃); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO₂). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO₃. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na₂CO₃ followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O ² 12C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGNA10
Lot Number: T2-NA717221
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Sodium
Starting Material: Na₂CO₃
Starting Material Lot#: 2358 and 2453
Starting Material Purity: 99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL
Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	9974 ± 18 µg/mL Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	9977 ± 34 µg/mL ICP Assay NIST SRM 3152a Lot Number: 200413
Assay Method #3	9987 ± 31 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/(u_{char j}^2)))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000930	M Eu < 0.000930	s Na <	M Se < 0.003800	O Zn < 0.000138
M Al < 0.004409	O Fe < 0.002393	M Nb < 0.000930	O Si < 0.056696	O Zr < 0.003200
O As < 0.023000	M Ga < 0.000930	M Nd < 0.000930	M Sm < 0.000930	
O Au < 0.004100	M Gd < 0.000930	O Ni < 0.003000	M Sn < 0.002800	
O B < 0.001385	M Ge < 0.004700	M Os < 0.000930	O Sr < 0.000251	
M Ba < 0.004031	M Hf < 0.000930	O P < 0.010205	M Ta < 0.000930	
O Be < 0.000130	M Hg < 0.000930	M Pb < 0.000930	M Tb < 0.000930	
M Bi < 0.000930	M Ho < 0.000930	M Pd < 0.000930	M Te < 0.001900	
O Ca < 0.176388	M In < 0.000930	M Pr < 0.000930	M Th < 0.000352	
O Cd < 0.000860	M Ir < 0.000930	M Pt < 0.000930	O Ti < 0.000592	
M Ce < 0.001900	O K < 0.302380	M Rb < 0.000930	M Tl < 0.000930	
O Co < 0.001800	O La < 0.002100	M Re < 0.000930	M Tm < 0.000930	
M Cr < 0.002800	O Li < 0.000031	M Rh < 0.000930	M U < 0.000930	
M Cs < 0.000930	M Lu < 0.000930	M Ru < 0.001900	O V < 0.001600	
O Cu < 0.003900	O Mg < 0.026458	O S < 0.040317	O W < 0.028000	
M Dy < 0.000930	O Mn < 0.000740	M Sb < 0.000930	O Y < 0.000860	
M Er < 0.000930	O Mo < 0.003600	O Sc < 0.000610	O Yb < 0.000250	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO₃, H₂SO₄ and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGU1
Lot Number: S2-U707914
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Uranium
Starting Material: Uranyl Nitrate Hexahydrate
Starting Material Lot#: P2-2322
Starting Material Purity: 99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL
Density: 1.010 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2 (u_{char i})^2]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{Its}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000270	M Eu < 0.000270	M Na < 0.011000	M Se < 0.009300	M Zn < 0.002358
M Al < 0.011000	M Fe < 0.003222	M Nb < 0.000270	M Si < 0.160000	M Zr < 0.001100
M As < 0.002400	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.000270	M Gd < 0.000270	M Ni < 0.020000	M Sn < 0.011000	
M B < 0.000270	M Ge < 0.000800	M Os < 0.001900	M Sr < 0.000270	
M Ba < 0.003800	M Hf < 0.000270	i P <	M Ta < 0.000270	
M Be < 0.000270	M Hg < 0.000540	M Pb < 0.002200	M Tb < 0.000270	
M Bi < 0.000270	M Ho < 0.000270	M Pd < 0.000540	M Te < 0.003800	
M Ca < 0.140000	M In < 0.000270	M Pr < 0.000270	M Th < 0.000129	
M Cd < 0.000270	M Ir < 0.000270	M Pt < 0.000270	M Ti < 0.002700	
M Ce < 0.000540	O K < 0.250000	M Rb < 0.000800	M Tl < 0.000270	
M Co < 0.000800	M La < 0.000117	M Re < 0.064000	M Tm < 0.000270	
M Cr < 0.000943	M Li < 0.003000	M Rh < 0.000270	s U <	
M Cs < 0.000106	M Lu < 0.000270	M Ru < 0.000540	M V < 0.000540	
M Cu < 0.001100	M Mg < 0.003000	i S <	M W < 0.000540	
M Dy < 0.000270	M Mn < 0.006900	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo < 0.006400	M Sc < 0.000540	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO₂²⁺(uranyl)

Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₃PO₄. H₂SO₄ and HF matrices should not be a problem depending upon [U]. Although the UO₂²⁺ ion is distinctly basic, any U+4 will precipitate in basic media. UO₂²⁺ salts are generally soluble in water and UO₂²⁺ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF₄ and UF₆ are water soluble.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.

U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO₃); Oxide (Soluble in HNO₃); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO₃. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H₂SO₄.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: AR-ICVMS-2
Lot Number: T2-MEB719895
Matrix: 3% (v/v) HNO3
tr. HF
Value / Analyte(s): 2.5 µg/mL ea:
Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.499 ± 0.015 µg/mL	Molybdenum, Mo	2.500 ± 0.017 µg/mL

Density: 1.014 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum((w_i)^2 (u_{char i})^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	AR-ICVMS-3	
Lot Number:	T2-MEB719896	
Matrix:	7% (v/v) HNO ₃	
Value / Analyte(s):	250 µg/mL ea:	
	Aluminum,	Calcium,
	Iron,	Potassium,
	Magnesium,	Sodium,
	4 µg/mL ea:	
	Selenium,	
	2.5 µg/mL ea:	
	Thorium,	Thallium,
	Uranium,	Vanadium,
	Zinc,	Manganese,
	Cadmium,	Cobalt,
	Chromium,	Copper,
	Arsenic,	Barium,
	Beryllium,	Nickel,
	Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/(u_{\text{char } j}^2)))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

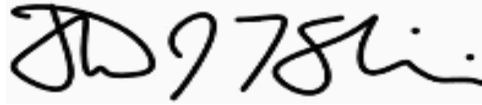
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: AR-6020ICS-0A10
 Lot Number: T2-MEB719898
 Matrix: 1.4% (v/v) HNO3
 Value / Analyte(s):
 1 000 µg/mL ea:
 Chloride,
 200 µg/mL ea:
 Carbon,
 100 µg/mL ea:
 Calcium, Aluminum,
 Iron, Potassium,
 Magnesium, Sodium,
 Phosphorus, Sulfur,
 2 µg/mL ea:
 Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.4 µg/mL	Calcium, Ca	100.0 ± 0.5 µg/mL
Carbon, C	200.1 ± 0.5 µg/mL	Chloride, Cl	1 000 ± 5 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Magnesium, Mg	100.0 ± 0.5 µg/mL
Molybdenum, Mo	2.001 ± 0.014 µg/mL	Phosphorus, P	100.0 ± 0.6 µg/mL
Potassium, K	100.0 ± 0.5 µg/mL	Sodium, Na	100.0 ± 0.5 µg/mL
Sulfur, S	100.0 ± 0.5 µg/mL	Titanium, Ti	2.001 ± 0.015 µg/mL

Density: 1.009 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1028

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-01 D SDG: 23A0326
 Sampled: 01/16/23 15:17 Prepared: 01/18/23 10:40 File ID: CubeData_01212023@1654-032
 % Solids: 58.80 Preparation: Plumb 1981 Analyzed: 01/20/23 01:19
 Batch: BLA0432 Sequence: SLA0205 Initial/Final: 0.5 g Wet / 0.5 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.34	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1032

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-02 D SDG: 23A0326
 Sampled: 01/16/23 15:32 Prepared: 01/18/23 10:40 File ID: CubeData_01212023@1654-033
 % Solids: 54.85 Preparation: Plumb 1981 Analyzed: 01/20/23 01:50
 Batch: BLA0432 Sequence: SLA0205 Initial/Final: 0.5372 g Wet / 0.5372 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.77	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1128

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-03 C SDG: 23A0326

Sampled: 01/17/23 08:36 Prepared: 01/18/23 10:40 File ID: CubeData_01212023@1654-034

% Solids: 53.95 Preparation: Plumb 1981 Analyzed: 01/20/23 02:20

Batch: BLA0432 Sequence: SLA0205 Initial/Final: 0.5389 g Wet / 0.5389 g

Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.10	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1170A

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-04 C SDG: 23A0326
 Sampled: 01/17/23 10:33 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-041
 % Solids: 52.70 Preparation: Plumb 1981 Analyzed: 01/20/23 05:53
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5113 g Wet / 0.5113 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.45	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1169C

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-05 C SDG: 23A0326
 Sampled: 01/17/23 11:08 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-044
 % Solids: 54.90 Preparation: Plumb 1981 Analyzed: 01/20/23 07:23
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5352 g Wet / 0.5352 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.62	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1168

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-06 C SDG: 23A0326
 Sampled: 01/17/23 11:51 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-045
 % Solids: 56.60 Preparation: Plumb 1981 Analyzed: 01/20/23 07:54
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5547 g Wet / 0.5547 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.97	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1176

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-07 C SDG: 23A0326
 Sampled: 01/17/23 12:11 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-046
 % Solids: 80.68 Preparation: Plumb 1981 Analyzed: 01/20/23 08:24
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5022 g Wet / 0.5022 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.30	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-IT1181

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-08 D SDG: 23A0326
 Sampled: 01/17/23 12:31 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-047
 % Solids: 76.00 Preparation: Plumb 1981 Analyzed: 01/20/23 08:55
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.6251 g Wet / 0.6251 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.41	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-IT1127

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-09 D SDG: 23A0326
 Sampled: 01/17/23 13:32 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-052
 % Solids: 59.97 Preparation: Plumb 1981 Analyzed: 01/20/23 11:57
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5307 g Wet / 0.5307 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.82	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1161

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-10 D SDG: 23A0326
 Sampled: 01/17/23 14:18 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-053
 % Solids: 55.79 Preparation: Plumb 1981 Analyzed: 01/20/23 12:27
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5298 g Wet / 0.5298 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.96	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1155

Laboratory: Analytical Resources, LLC
 Client: Anchor QEA, LLC
 Project: AOC5 MR Phase 1
 Matrix: Sediment Laboratory ID: 23A0326-11 D SDG: 23A0326
 Sampled: 01/17/23 14:06 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-054
 % Solids: 53.96 Preparation: Plumb 1981 Analyzed: 01/20/23 12:58
 Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.503 g Wet / 0.503 g
 Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.24	1	0.02	0.02	



Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1162B

Laboratory: Analytical Resources, LLC

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Sediment Laboratory ID: 23A0326-12 D SDG: 23A0326

Sampled: 01/17/23 14:37 Prepared: 01/19/23 08:55 File ID: CubeData_01212023@1654-055

% Solids: 53.76 Preparation: Plumb 1981 Analyzed: 01/20/23 13:28

Batch: BLA0442 Sequence: SLA0205 Initial/Final: 0.5405 g Wet / 0.5405 g

Instrument: TOC Cube Calibration: FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.75	1	0.02	0.02	



PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0432 Batch Matrix: Solid Preparation: Plumb 1981

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01	eData_01212023@1654	01/18/23 10:40	
LDW23-SC1032	23A0326-02	eData_01212023@1654	01/18/23 10:40	
LDW23-SC1128	23A0326-03	eData_01212023@1654	01/18/23 10:40	
Blank	BLA0432-BLK1	eData_01212023@1654	01/18/23 10:40	
LCS	BLA0432-BS1	eData_01212023@1654	01/18/23 10:40	
MRL Check	BLA0432-MRL1	eData_01212023@1654	01/18/23 10:40	
Reference	BLA0432-SRM1	eData_01212023@1654	01/18/23 10:40	



PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0442 Batch Matrix: Solid Preparation: Plumb 1981

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1170A	23A0326-04	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1169C	23A0326-05	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1168	23A0326-06	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1176	23A0326-07	eData_01212023@1654	01/19/23 08:55	
LDW23-IT1181	23A0326-08	eData_01212023@1654	01/19/23 08:55	
LDW23-IT1127	23A0326-09	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1161	23A0326-10	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1155	23A0326-11	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1162B	23A0326-12	eData_01212023@1654	01/19/23 08:55	
Blank	BLA0442-BLK1	eData_01212023@1654	01/19/23 08:55	
LCS	BLA0442-BS1	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1170A	BLA0442-DUP1	eData_01212023@1654	01/19/23 08:55	
MRL Check	BLA0442-MRL1	eData_01212023@1654	01/19/23 08:55	
LDW23-SC1170A	BLA0442-MS1	eData_01212023@1654	01/19/23 08:55	
Reference	BLA0442-SRM1	eData_01212023@1654	01/19/23 08:55	



Form I
METHOD BLANK DATA SHEET
EPA 9060A m
TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLA0432

Laboratory ID: BLA0432-BLK1

Prepared: 01/18/23 10:40

Matrix: Solid

Preparation: Plumb 1981

Analyzed: 01/19/23 12:11

Sequence: SLA0205

Calibration: FD00070

Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U



Form I
METHOD BLANK DATA SHEET
EPA 9060A m
TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Batch: BLA0442

Laboratory ID: BLA0442-BLK1

Prepared: 01/19/23 08:55

Matrix: Solid

Preparation: Plumb 1981

Analyzed: 01/20/23 03:21

Sequence: SLA0205

Calibration: FD00070

Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U



LCS / LCS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>01/19/23 12:41</u>
Batch:	<u>BLA0432</u>	Laboratory ID:	<u>BLA0432-BS1</u>
Preparation:	<u>Plumb 1981</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>0.019 g / 0.019 g</u>		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	43.9		98.8	80 - 120

* Indicates values outside of QC limits



LCS / LCS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>01/20/23 03:51</u>
Batch:	<u>BLA0442</u>	Laboratory ID:	<u>BLA0442-BS1</u>
Preparation:	<u>Plumb 1981</u>	Sequence Name:	<u>LCS</u>
Initial/Final:	<u>0.0186 g / 0.0186 g</u>		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	43.5		98.0	80 - 120

* Indicates values outside of QC limits



DUPLICATES

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0442-DUP1

Batch: BLA0442

Lab Source ID: 23A0326-04

Preparation: Plumb 1981

Initial/Final: 0.5127 g / 0.5127 g

Source Sample Name: LDW23-SC1170A

% Solids: 52.70

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Organic Carbon	20	2.45	2.45	0.155	

*: Values outside of QC limits

L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD



MS / MS DUPLICATE RECOVERY
EPA 9060A m

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor OEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Matrix:	<u>Solid</u>	Analyzed:	<u>01/20/23 06:53</u>
Batch:	<u>BLA0442</u>	Laboratory ID:	<u>BLA0442-MS1</u>
Preparation:	<u>Plumb 1981</u>	Sequence Name:	<u>Matrix Spike</u>
Initial/Final:	<u>0.507 g / 0.507 g</u>	Source Sample:	<u>LDW23-SC1170A</u>

COMPOUND	SPIKE ADDED (% dry)	SAMPLE CONCENTRATION (% dry)	Q	MS CONCENTRATION (% dry)	Q	MS % REC. #	QC LIMITS REC.
Total Organic Carbon	1.43	2.45		3.94		104	75 - 125

* Values outside of QC limits



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sequence: SKD0371

Instrument: TOC Cube

Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SKD0371-CAL1	CubeData_04272022@1136-001	NA	04/26/22 12:30
Cal Standard	SKD0371-CAL2	CubeData_04272022@1136-002	NA	04/26/22 13:00
Cal Standard	SKD0371-CAL3	CubeData_04272022@1136-003	NA	04/26/22 13:30
Cal Standard	SKD0371-CAL4	CubeData_04272022@1136-004	NA	04/26/22 14:00
Cal Standard	SKD0371-CAL5	CubeData_04272022@1136-005	NA	04/26/22 14:30
Cal Standard	SKD0371-CAL6	CubeData_04272022@1136-006	NA	04/26/22 15:00
Cal Standard	SKD0371-CAL7	CubeData_04272022@1136-007	NA	04/26/22 15:30
Cal Standard	SKD0371-CAL8	CubeData_04272022@1136-008	NA	04/26/22 16:00
Cal Standard	SKD0371-CAL9	CubeData_04272022@1136-009	NA	04/26/22 16:30
Cal Standard	SKD0371-CALA	CubeData_04272022@1136-010	NA	04/26/22 17:00
Cal Standard	SKD0371-CALB	CubeData_04272022@1136-011	NA	04/26/22 17:30
Cal Standard	SKD0371-CALC	CubeData_04272022@1136-012	NA	04/26/22 18:00
Cal Standard	SKD0371-CALD	CubeData_04272022@1136-013	NA	04/26/22 18:30
Cal Standard	SKD0371-CALE	CubeData_04272022@1136-014	NA	04/26/22 19:00
Cal Standard	SKD0371-CALF	CubeData_04272022@1136-015	NA	04/26/22 19:31
Cal Standard	SKD0371-CALG	CubeData_04272022@1136-016	NA	04/26/22 20:01
Cal Standard	SKD0371-CALH	CubeData_04272022@1136-017	NA	04/26/22 20:31
Cal Standard	SKD0371-CALI	CubeData_04272022@1136-018	NA	04/26/22 21:01
Cal Standard	SKD0371-CALJ	CubeData_04272022@1136-019	NA	04/26/22 21:31
Cal Standard	SKD0371-CALK	CubeData_04272022@1136-020	NA	04/26/22 22:01
Initial Cal Check	SKD0371-ICV1	CubeData_04272022@1136-027	NA	04/27/22 02:03
Initial Cal Blank	SKD0371-ICB1	CubeData_04272022@1136-028	NA	04/27/22 02:33
Cal Standard	SKD0371-CALL	CubeData_04272022@1136-021	NA	04/27/22 11:08
Cal Standard	SKD0371-CALM	CubeData_04272022@1136-022	NA	04/27/22 11:08
Cal Standard	SKD0371-CALN	CubeData_04272022@1136-023	NA	04/27/22 11:09
Cal Standard	SKD0371-CALO	CubeData_04272022@1136-024	NA	04/27/22 11:09



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory:	<u>Analytical Resources, LLC</u>	SDG:	<u>23A0326</u>
Client:	<u>Anchor QEA, LLC</u>	Project:	<u>AOC5 MR Phase 1</u>
Sequence:	<u>SLA0205</u>	Instrument:	<u>TOC Cube</u>
		Calibration:	<u>FD00070</u>

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLA0205-ICV1	CubeData_01212023@1654-003	NA	01/19/23 10:40
Initial Cal Blank	SLA0205-ICB1	CubeData_01212023@1654-004	NA	01/19/23 11:10
MRL Check	BLA0432-MRL1	CubeData_01212023@1654-005	Solid	01/19/23 11:41
Blank	BLA0432-BLK1	CubeData_01212023@1654-006	Solid	01/19/23 12:11
LCS	BLA0432-BS1	CubeData_01212023@1654-007	Solid	01/19/23 12:41
Reference	BLA0432-SRM1	CubeData_01212023@1654-008	Solid	01/19/23 13:11
Calibration Check	SLA0205-CCV1	CubeData_01212023@1654-015	NA	01/19/23 16:43
Calibration Blank	SLA0205-CCB1	CubeData_01212023@1654-016	NA	01/19/23 17:14
Calibration Check	SLA0205-CCV2	CubeData_01212023@1654-027	NA	01/19/23 22:48
Calibration Blank	SLA0205-CCB2	CubeData_01212023@1654-028	NA	01/19/23 23:18
LDW23-SC1028	23A0326-01	CubeData_01212023@1654-032	Solid	01/20/23 01:19
LDW23-SC1032	23A0326-02	CubeData_01212023@1654-033	Solid	01/20/23 01:50
LDW23-SC1128	23A0326-03	CubeData_01212023@1654-034	Solid	01/20/23 02:20
MRL Check	BLA0442-MRL1	CubeData_01212023@1654-035	Solid	01/20/23 02:51
Blank	BLA0442-BLK1	CubeData_01212023@1654-036	Solid	01/20/23 03:21
LCS	BLA0442-BS1	CubeData_01212023@1654-037	Solid	01/20/23 03:51
Reference	BLA0442-SRM1	CubeData_01212023@1654-038	Solid	01/20/23 04:22
Calibration Check	SLA0205-CCV3	CubeData_01212023@1654-039	NA	01/20/23 04:52
Calibration Blank	SLA0205-CCB3	CubeData_01212023@1654-040	NA	01/20/23 05:22
LDW23-SC1170A	23A0326-04	CubeData_01212023@1654-041	Solid	01/20/23 05:53
LDW23-SC1170A	BLA0442-DUP1	CubeData_01212023@1654-042	Solid	01/20/23 06:23
LDW23-SC1170A	BLA0442-MS1	CubeData_01212023@1654-043	Solid	01/20/23 06:53
LDW23-SC1169C	23A0326-05	CubeData_01212023@1654-044	Solid	01/20/23 07:23
LDW23-SC1168	23A0326-06	CubeData_01212023@1654-045	Solid	01/20/23 07:54
LDW23-SC1176	23A0326-07	CubeData_01212023@1654-046	Solid	01/20/23 08:24
LDW23-IT1181	23A0326-08	CubeData_01212023@1654-047	Solid	01/20/23 08:55
Calibration Check	SLA0205-CCV4	CubeData_01212023@1654-050	NA	01/20/23 10:56
Calibration Blank	SLA0205-CCB4	CubeData_01212023@1654-051	NA	01/20/23 11:27
LDW23-IT1127	23A0326-09	CubeData_01212023@1654-052	Solid	01/20/23 11:57



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

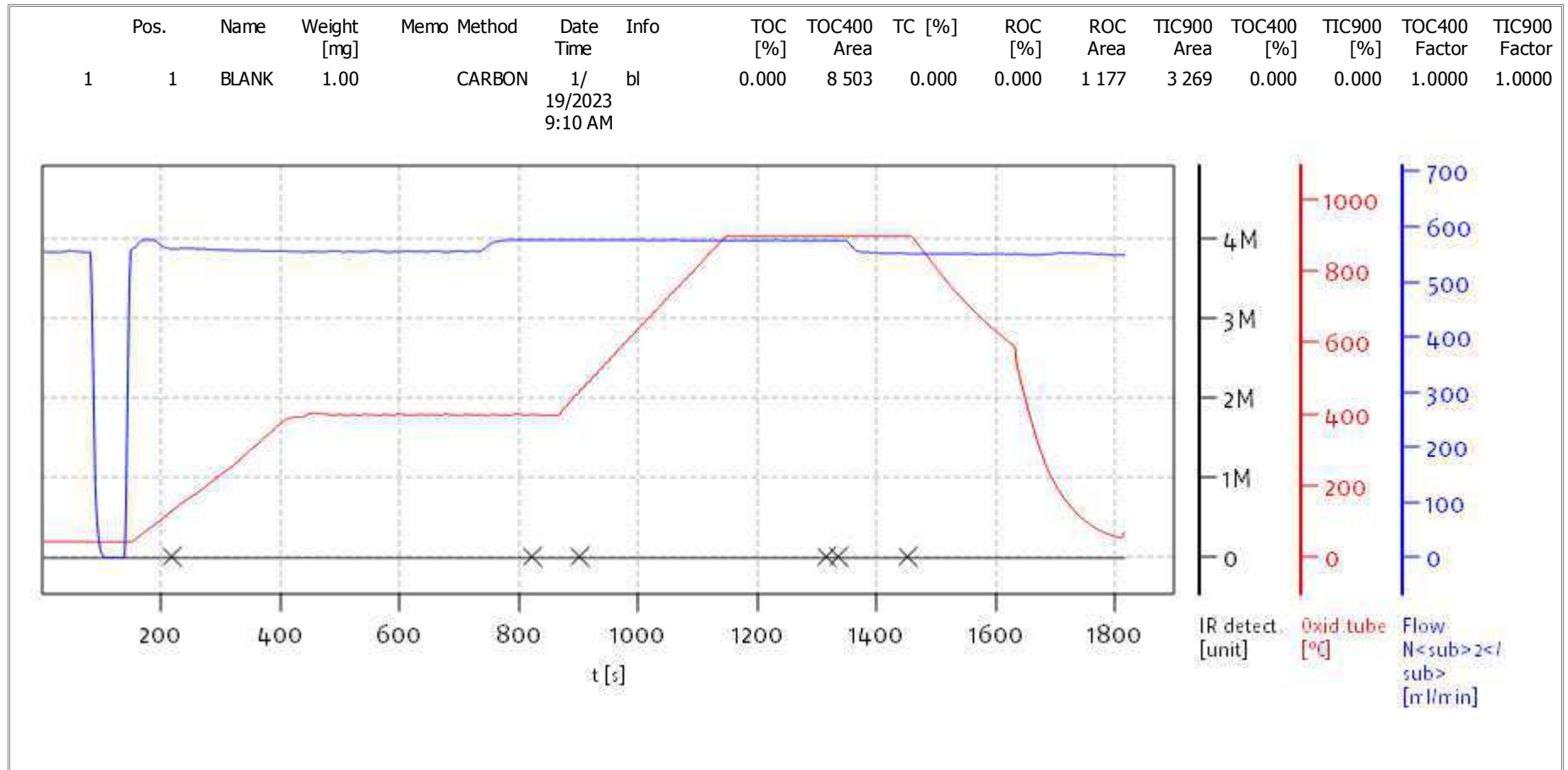
Sequence: SLA0205

Instrument: TOC Cube

Calibration: FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1161	23A0326-10	CubeData_01212023@1654-053	Solid	01/20/23 12:27
LDW23-SC1155	23A0326-11	CubeData_01212023@1654-054	Solid	01/20/23 12:58
LDW23-SC1162B	23A0326-12	CubeData_01212023@1654-055	Solid	01/20/23 13:28
Calibration Check	SLA0205-CCV5	CubeData_01212023@1654-062	NA	01/20/23 17:00
Calibration Blank	SLA0205-CCB5	CubeData_01212023@1654-063	NA	01/20/23 17:30
Calibration Check	SLA0205-CCV6	CubeData_01212023@1654-074	NA	01/20/23 23:05
Calibration Blank	SLA0205-CCB6	CubeData_01212023@1654-075	NA	01/20/23 23:35
Calibration Check	SLA0205-CCV7	CubeData_01212023@1654-080	NA	01/21/23 02:08
Calibration Blank	SLA0205-CCB7	CubeData_01212023@1654-081	NA	01/21/23 02:39

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

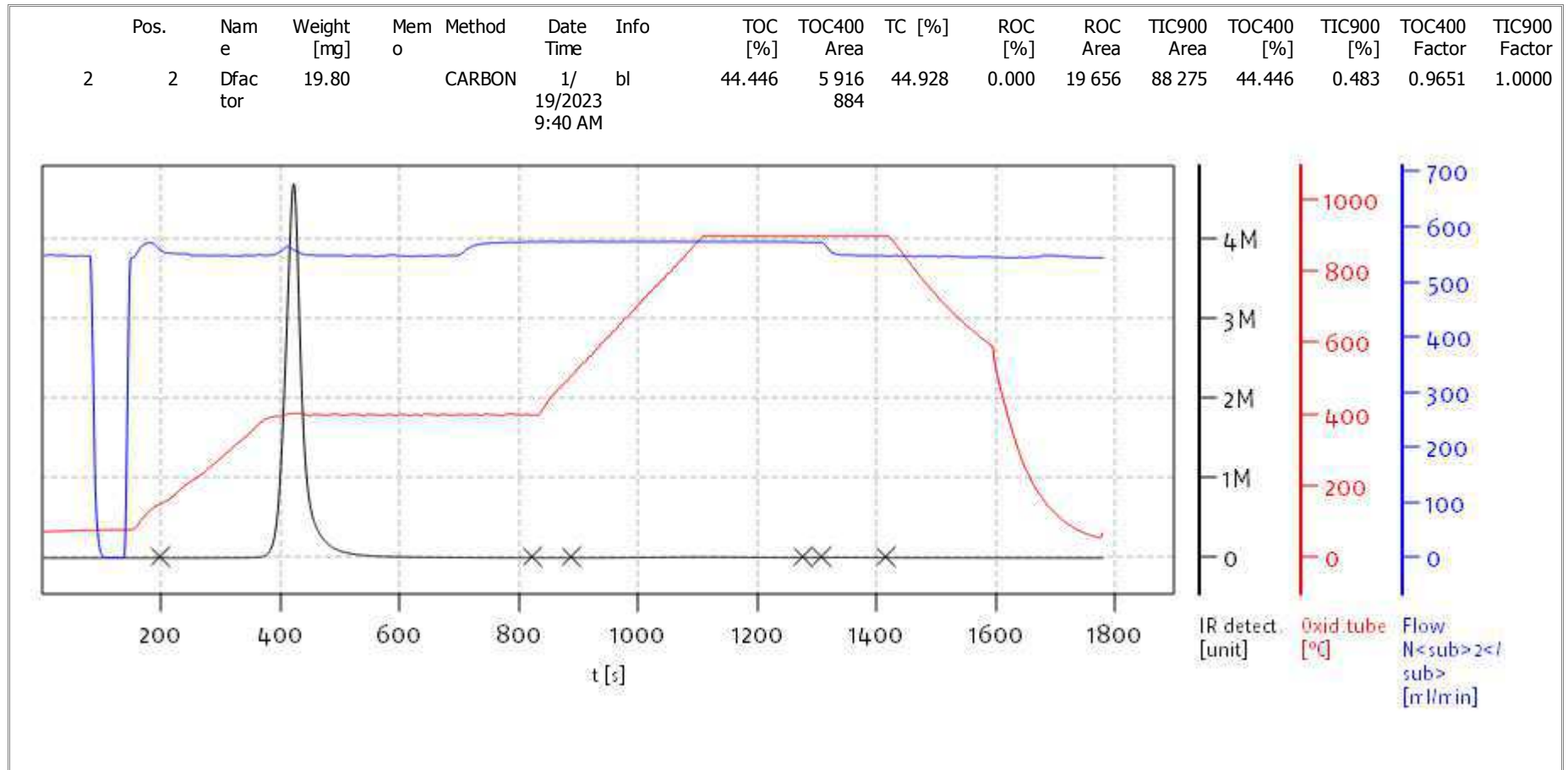
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

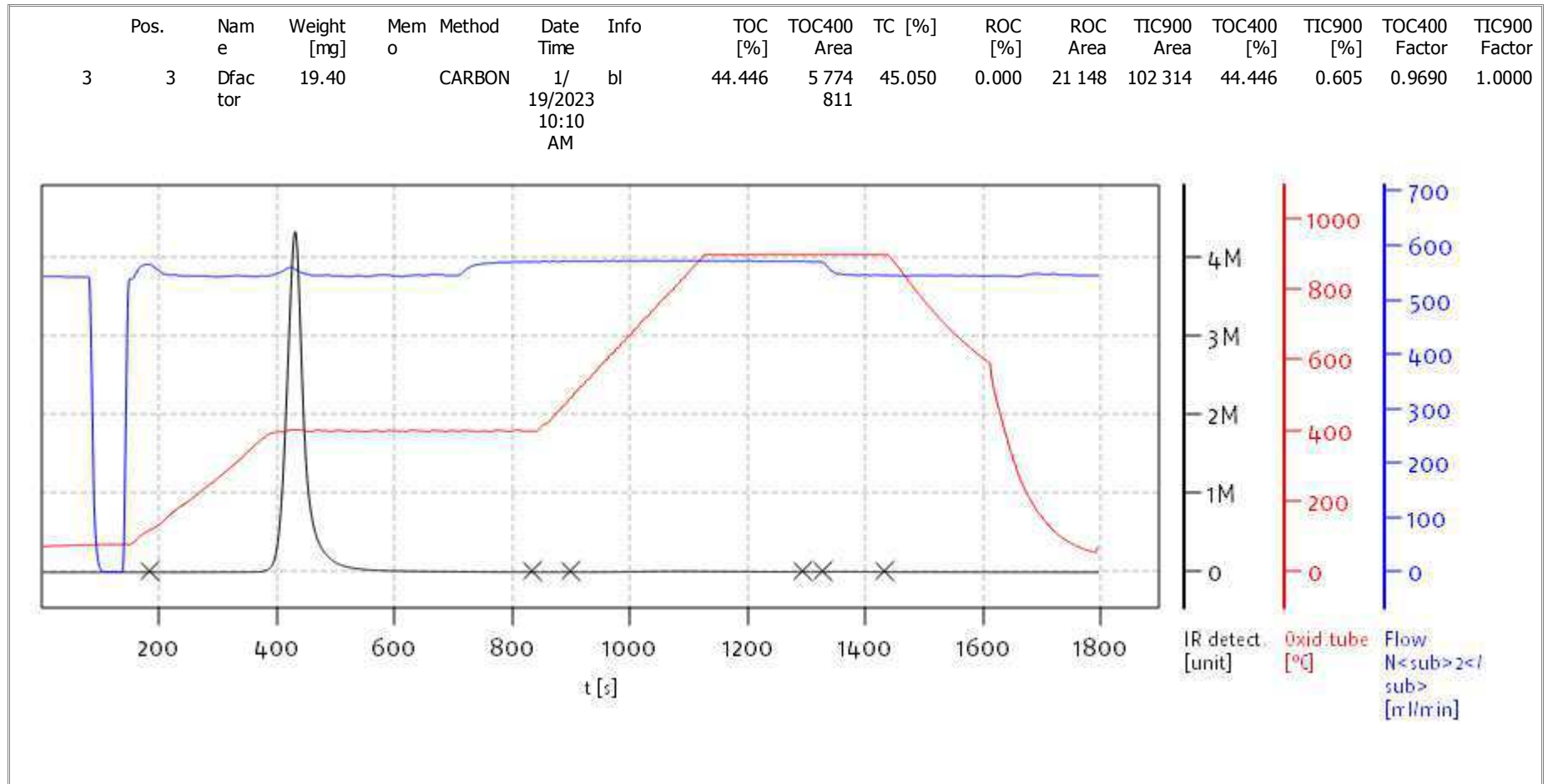
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

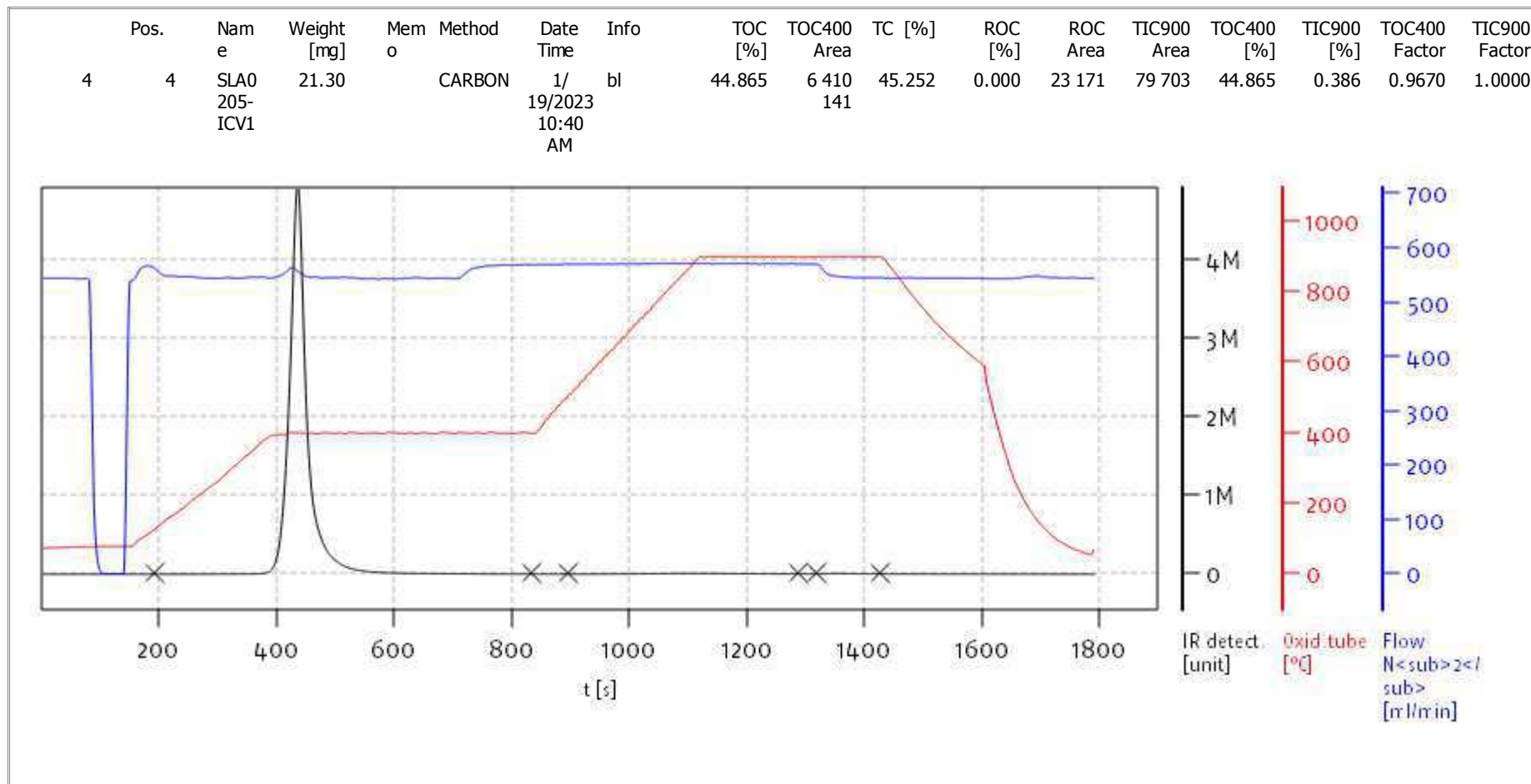
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

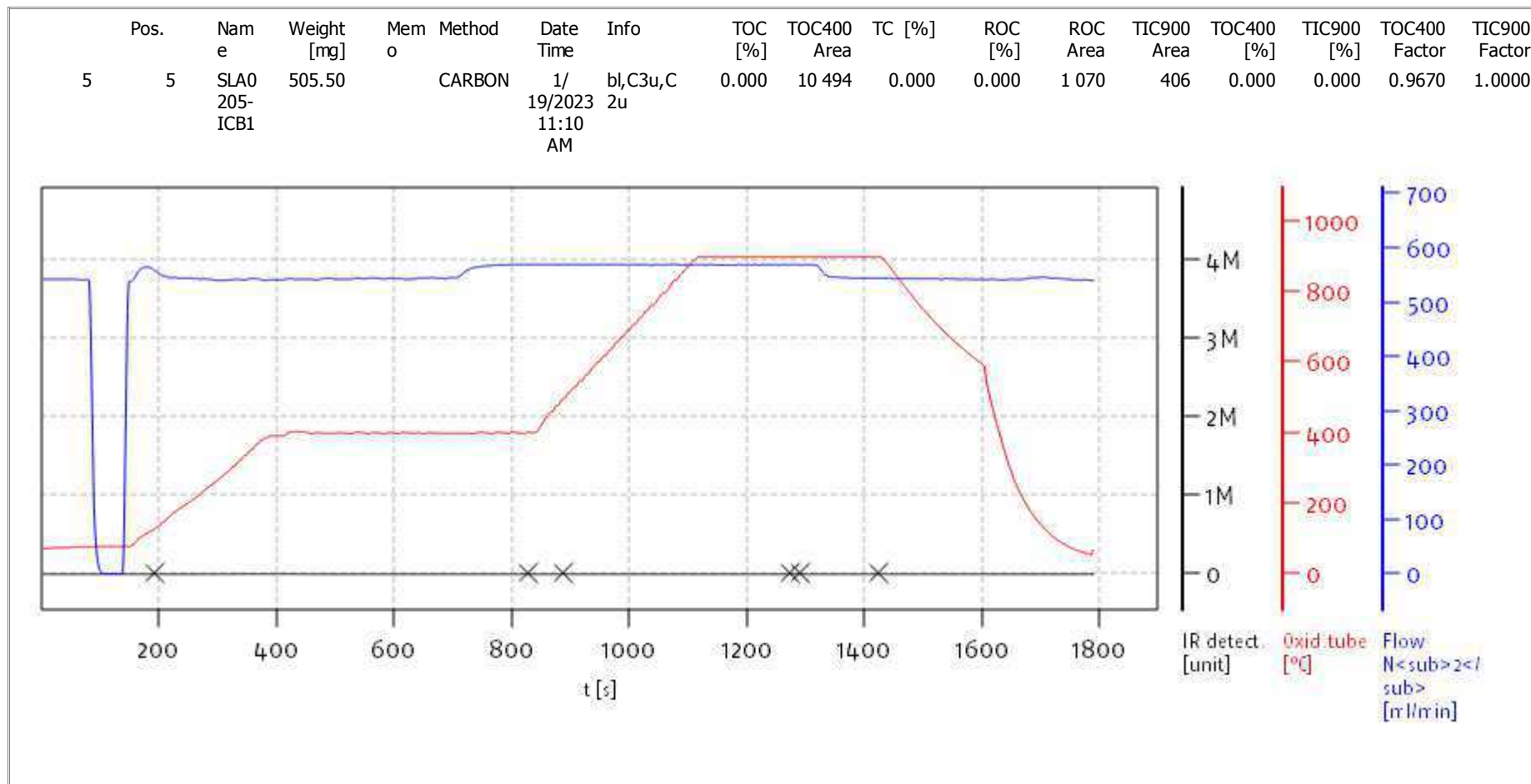
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

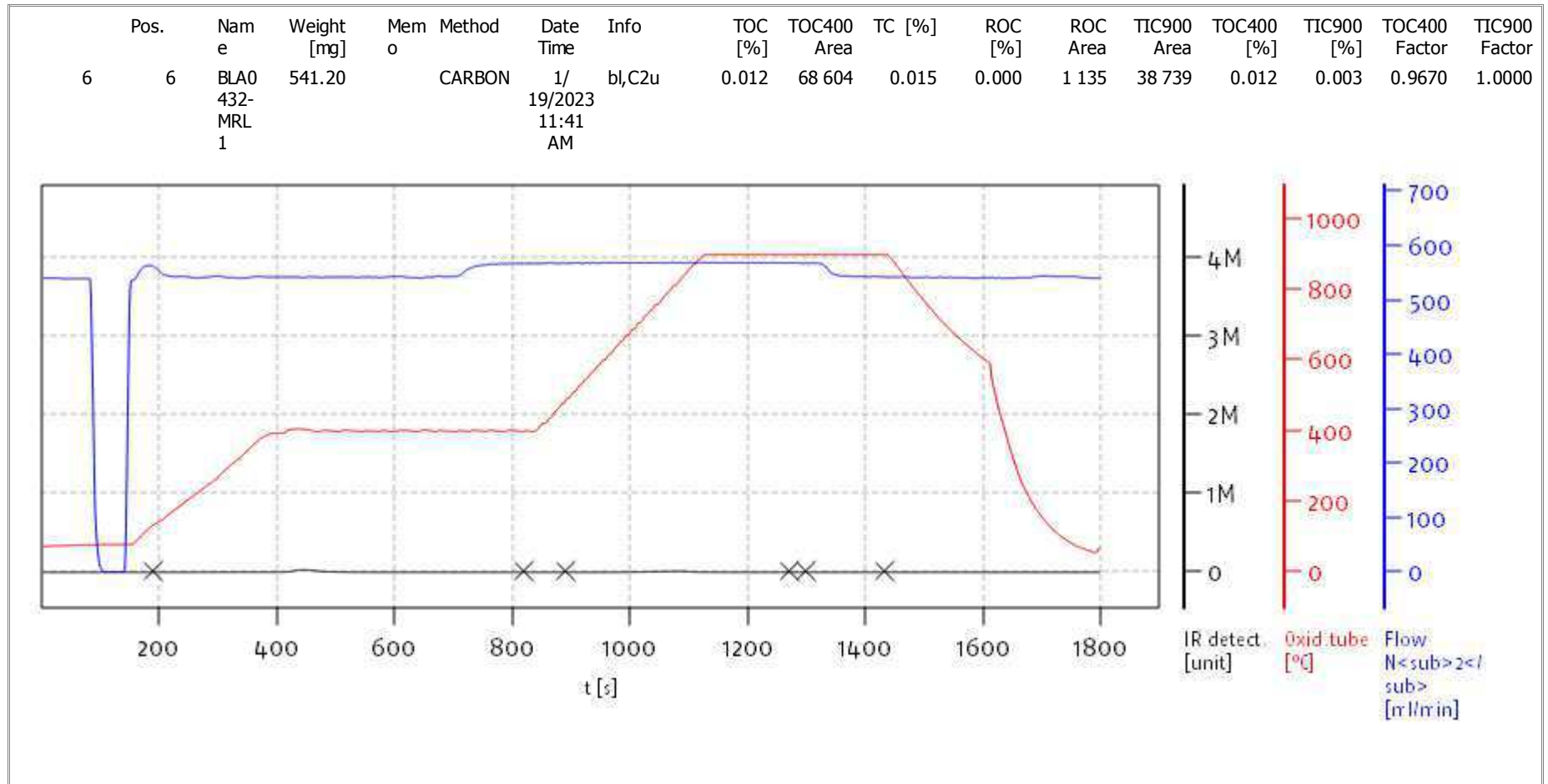
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

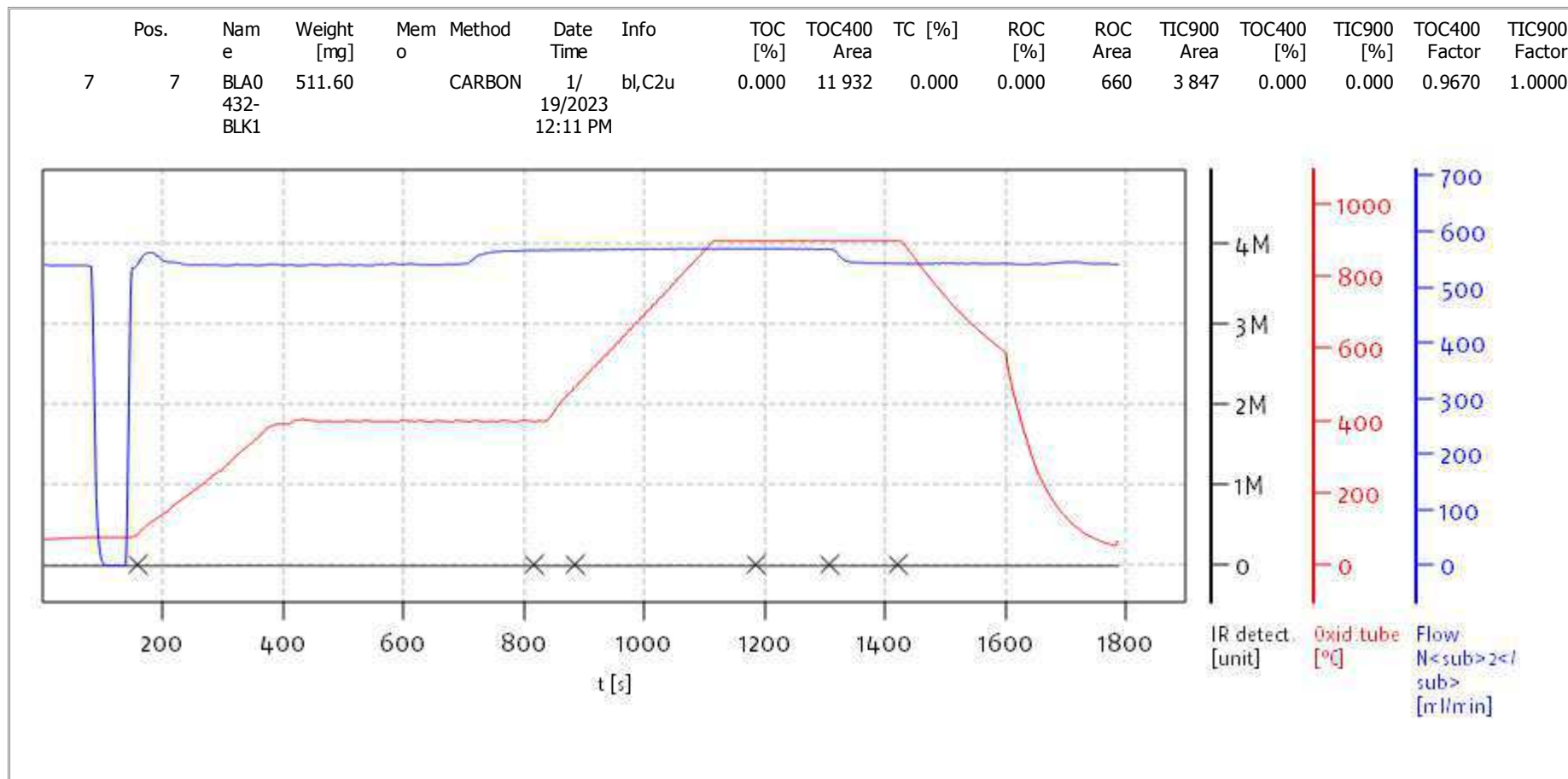
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

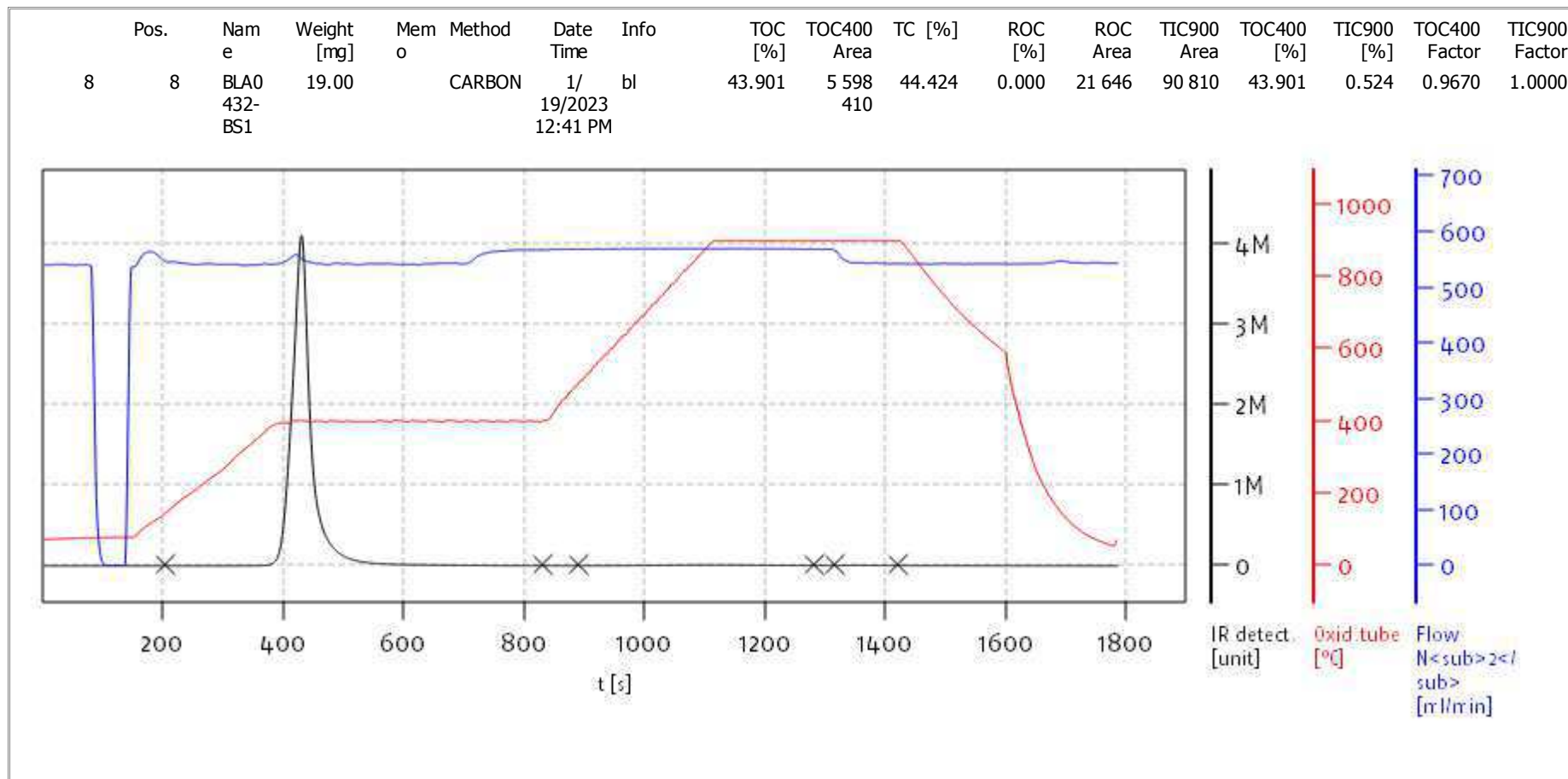
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

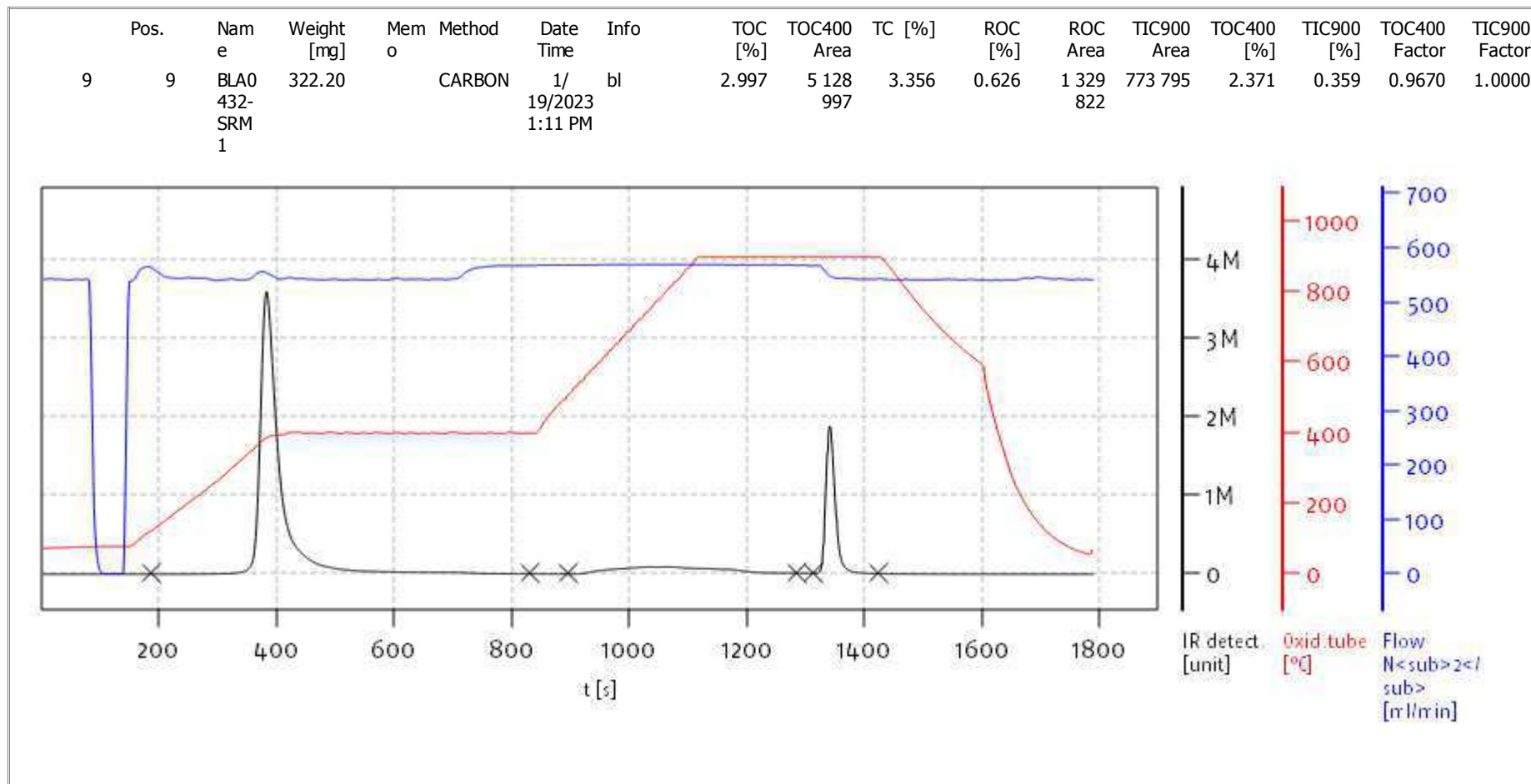
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

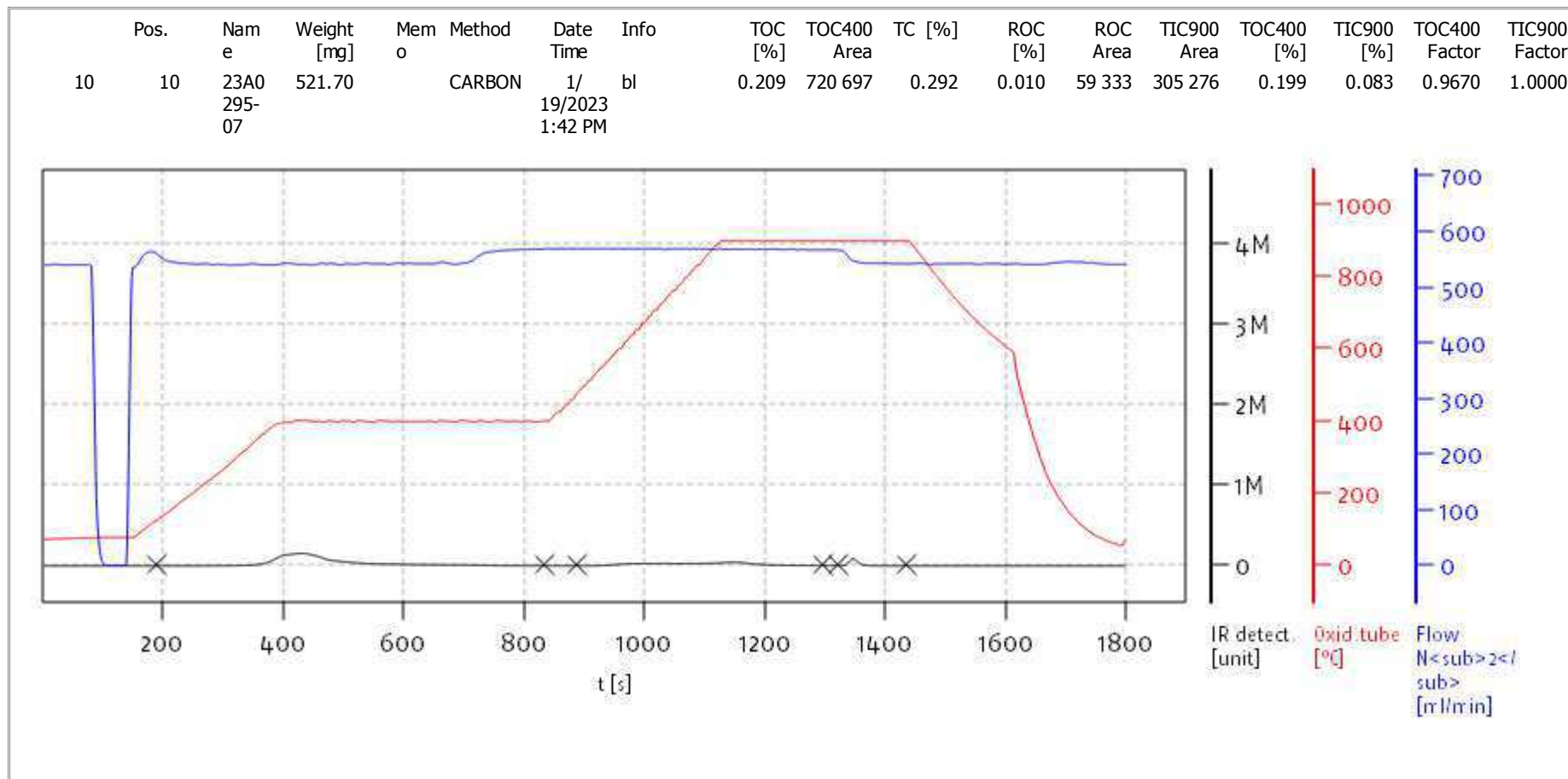
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

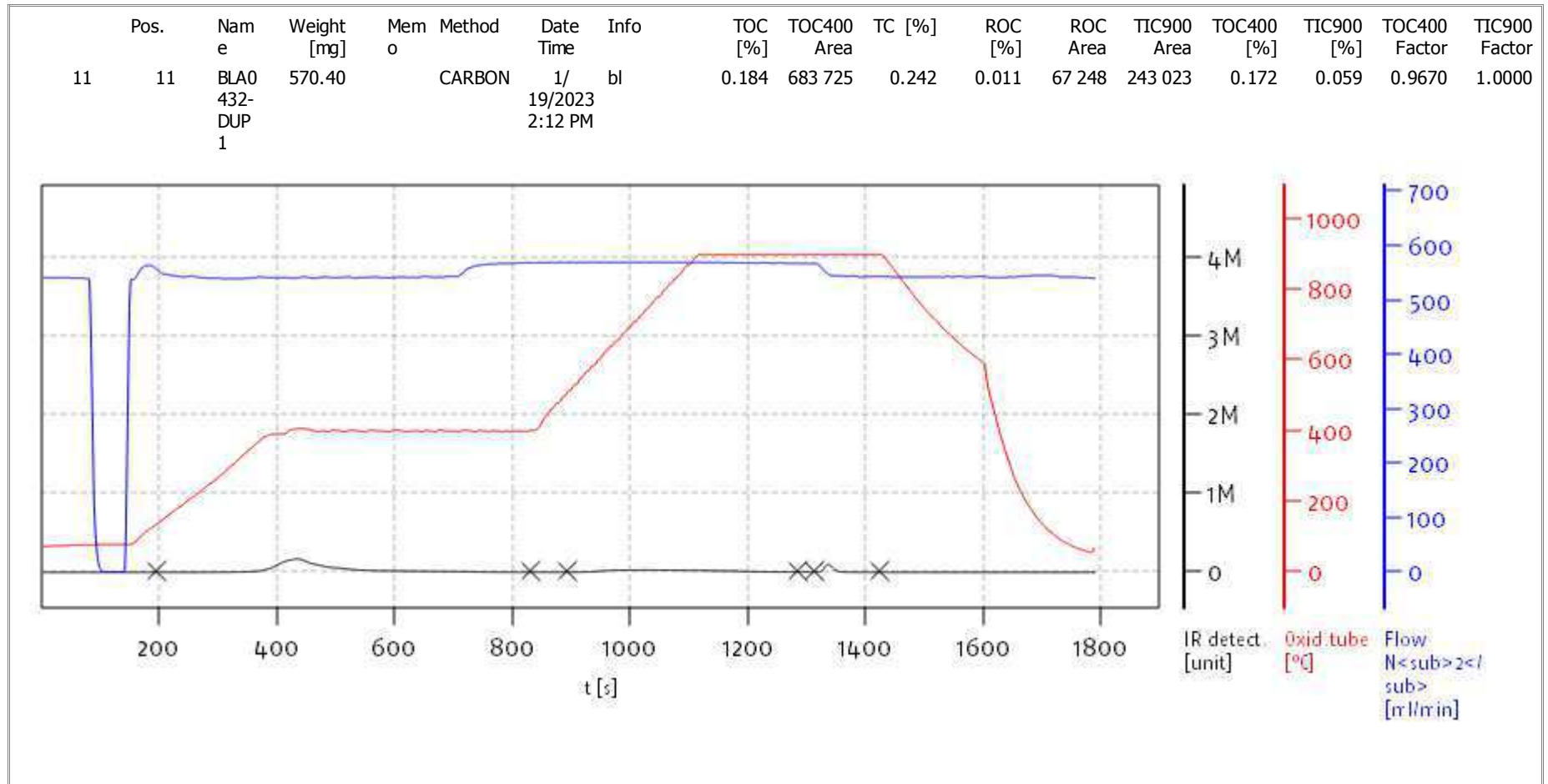
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

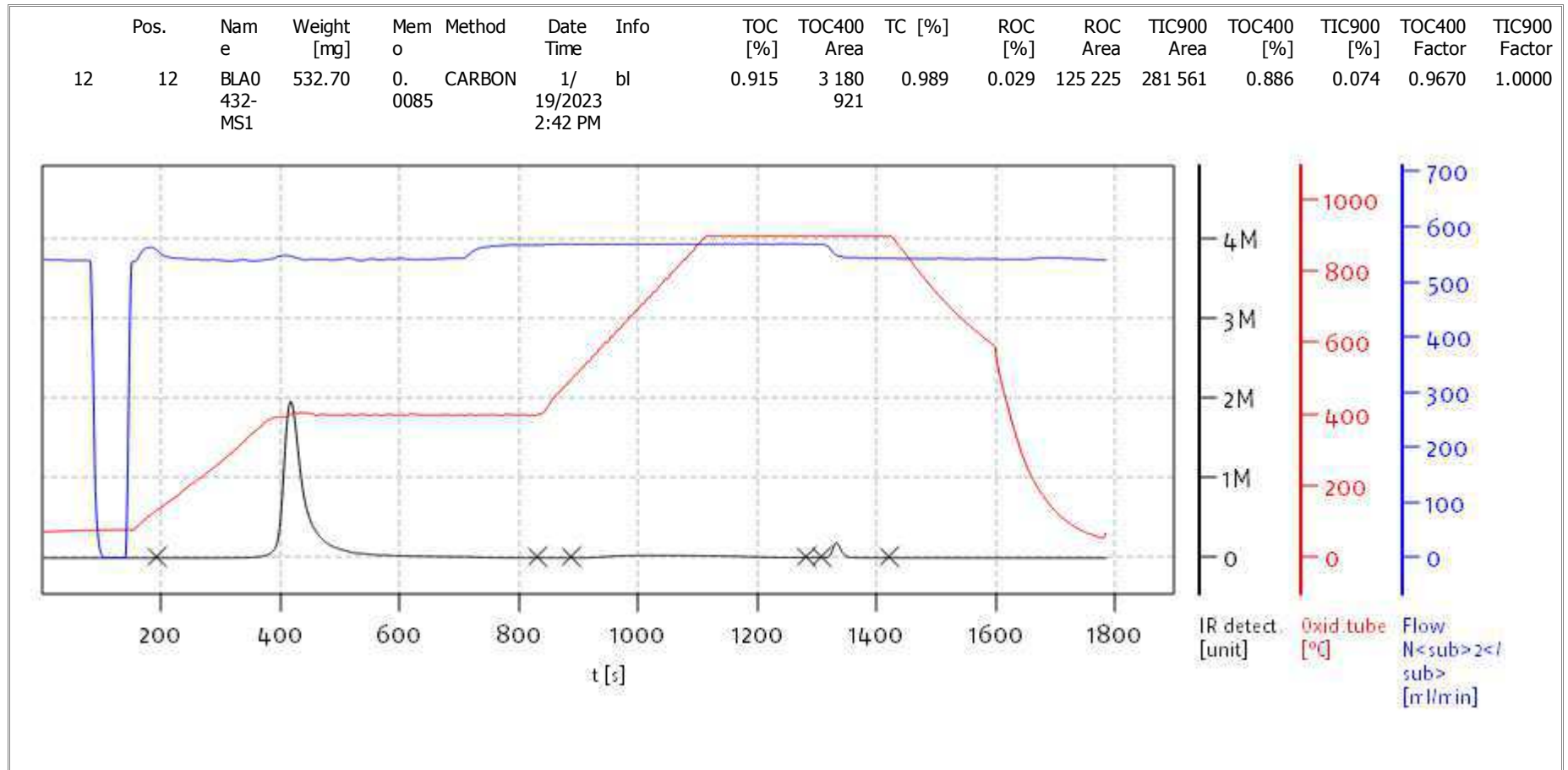
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

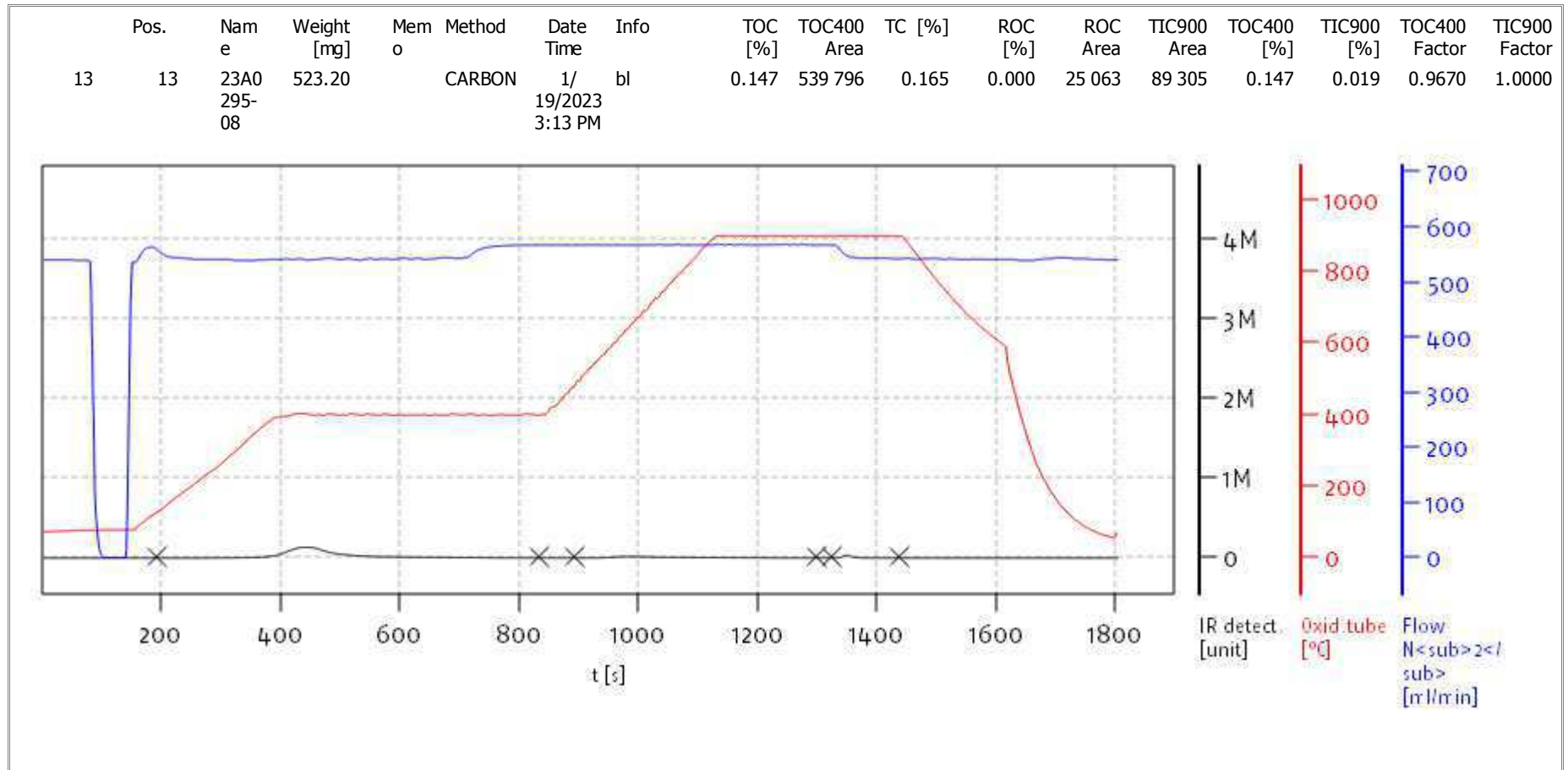
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

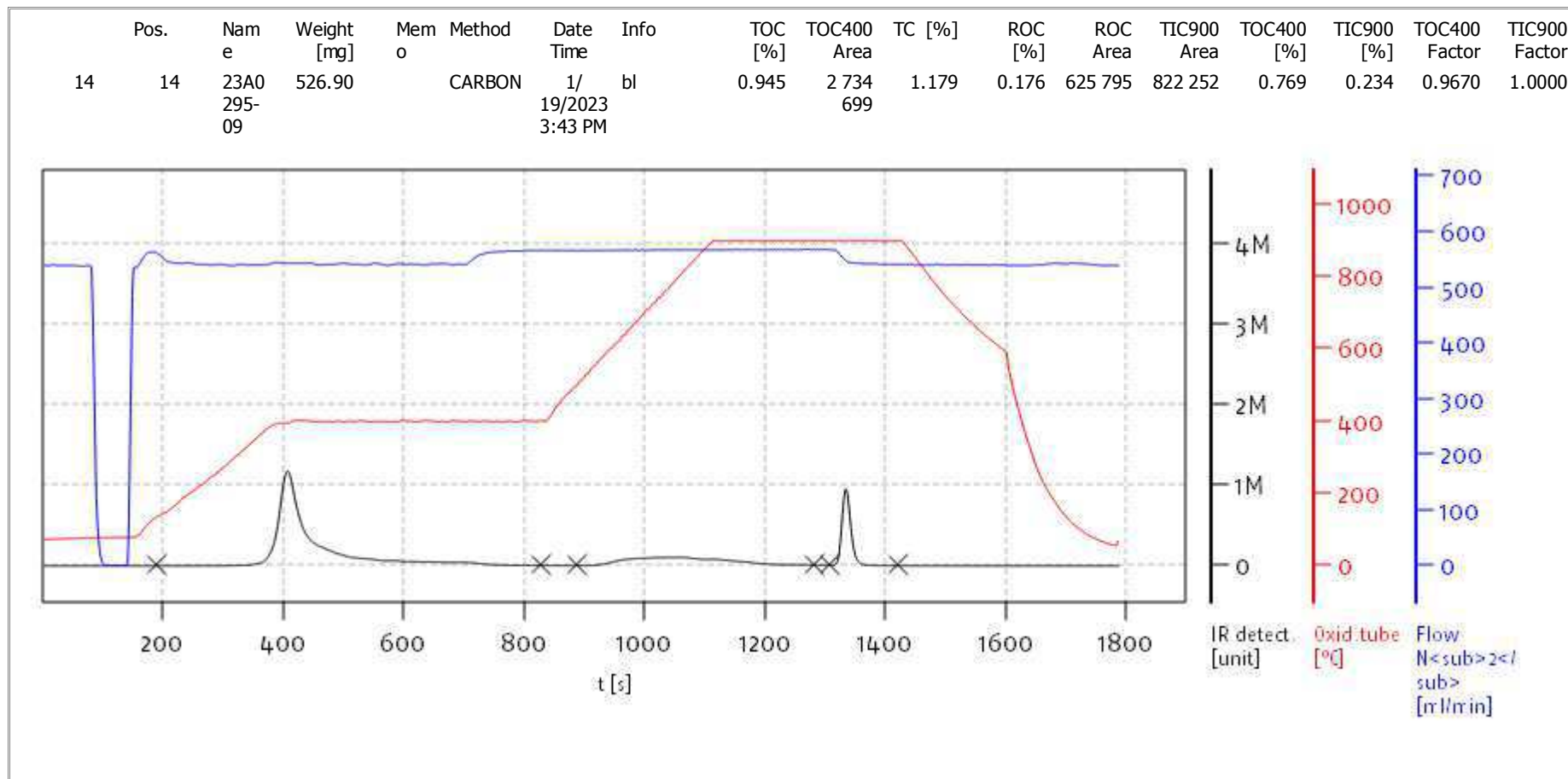
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: soliTOC superuser

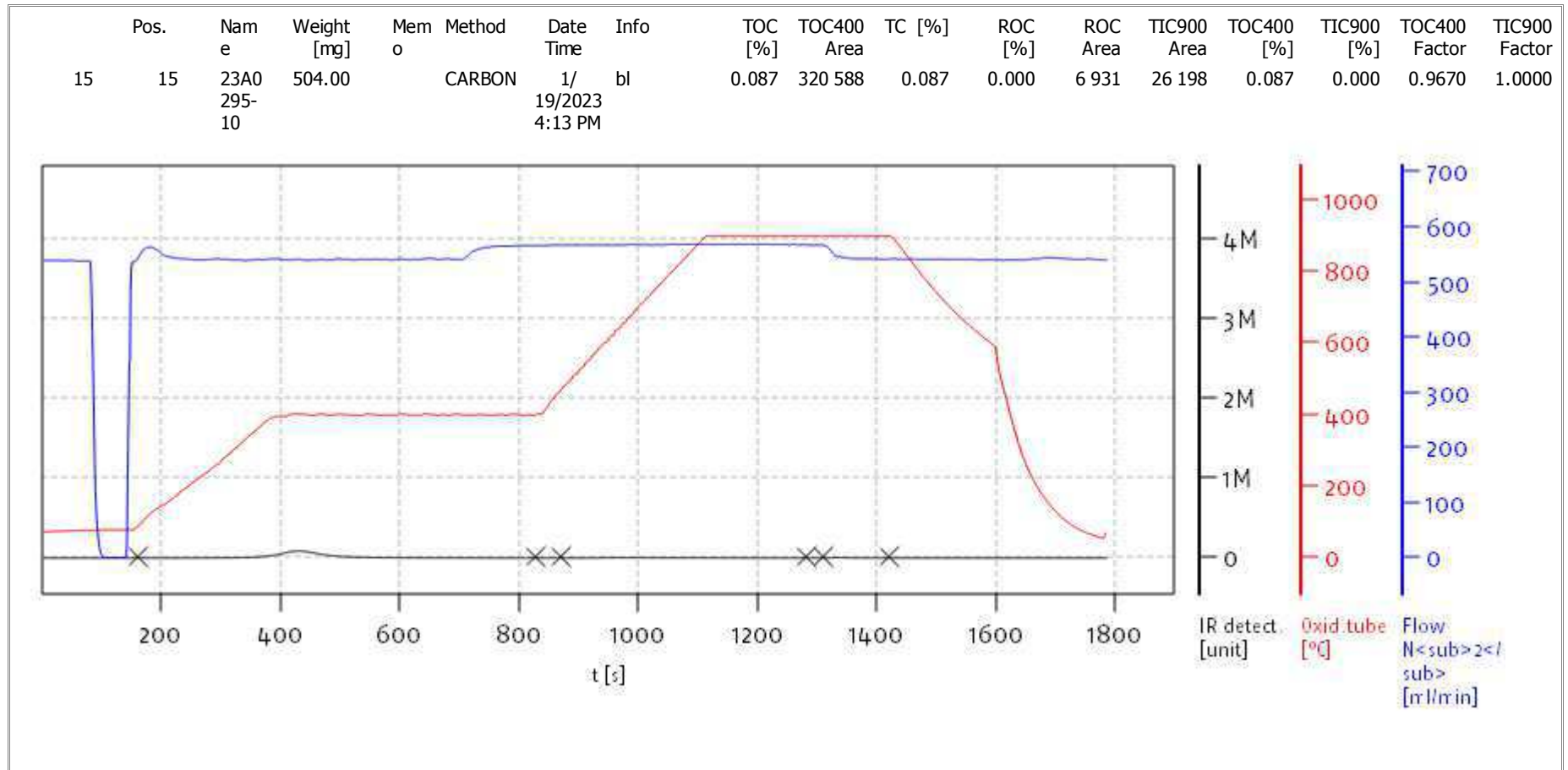
Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

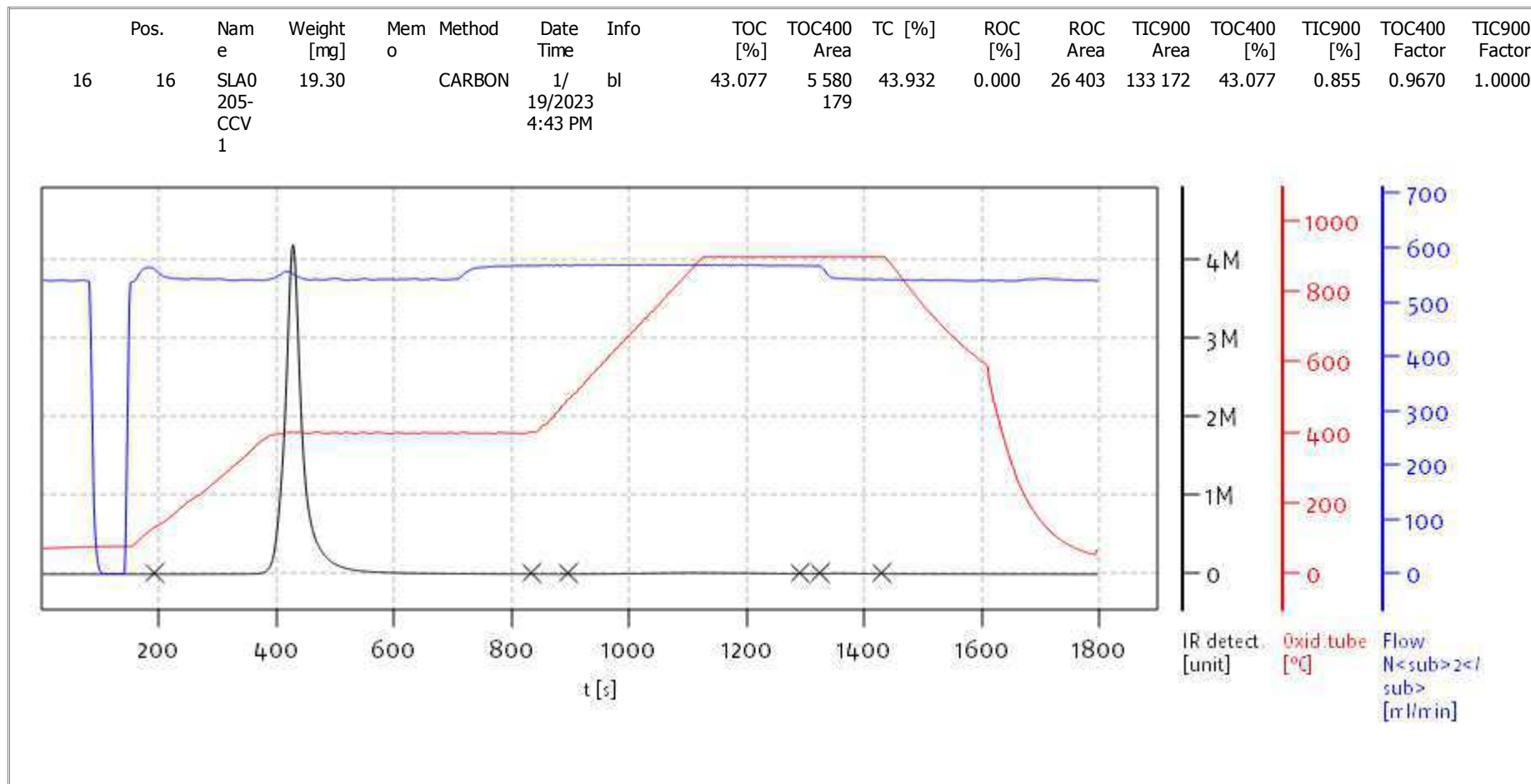
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

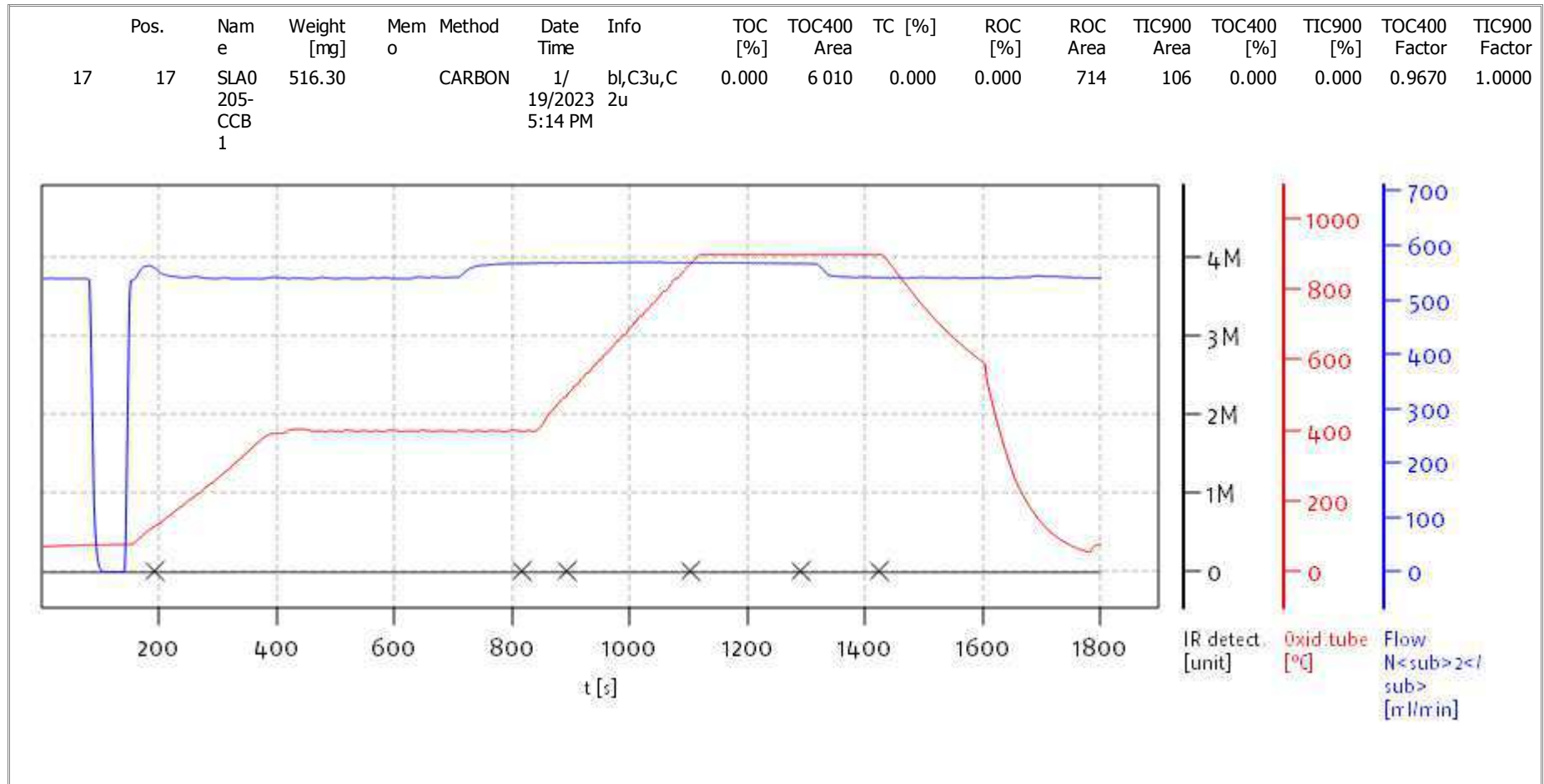
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

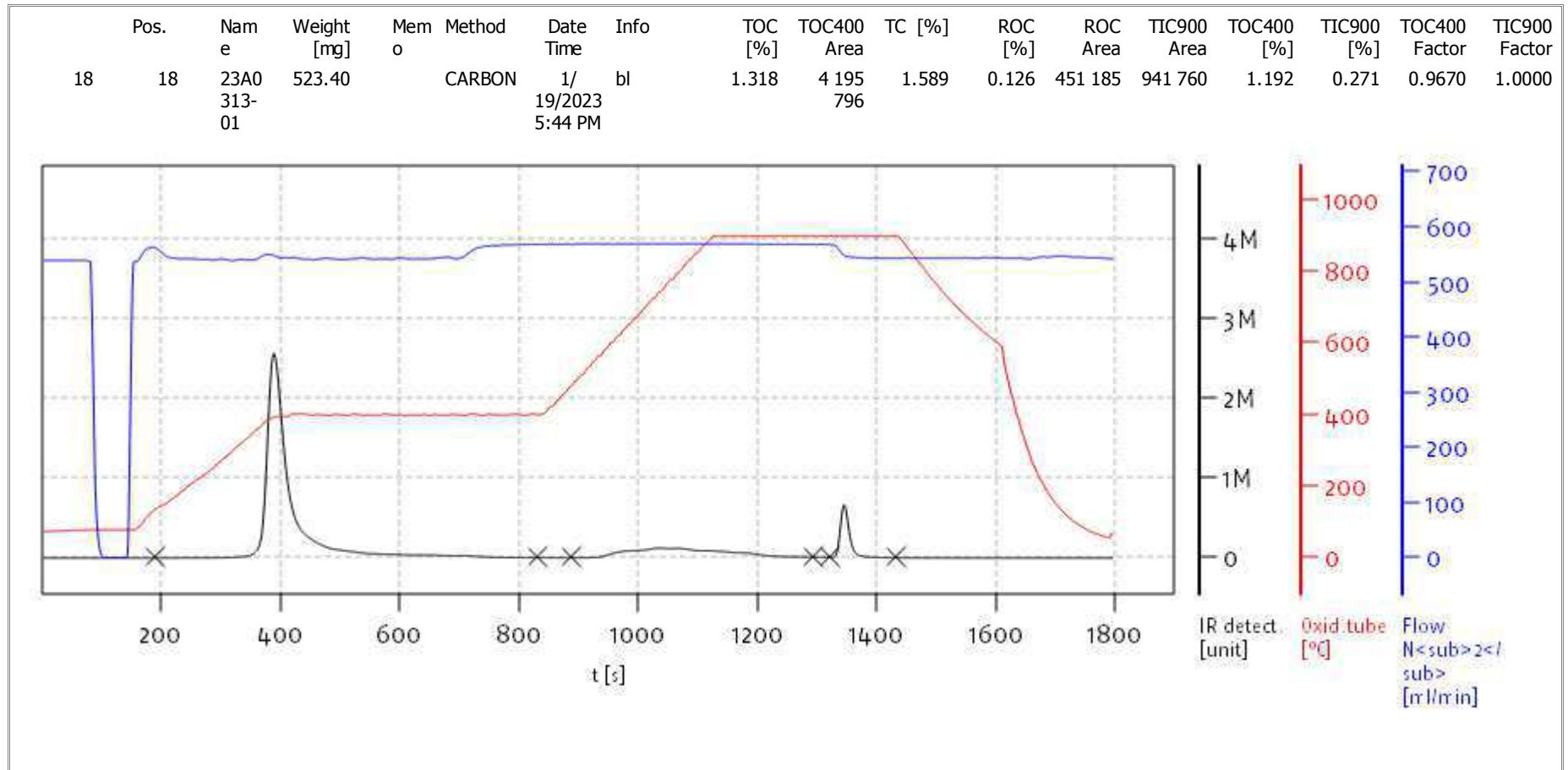
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

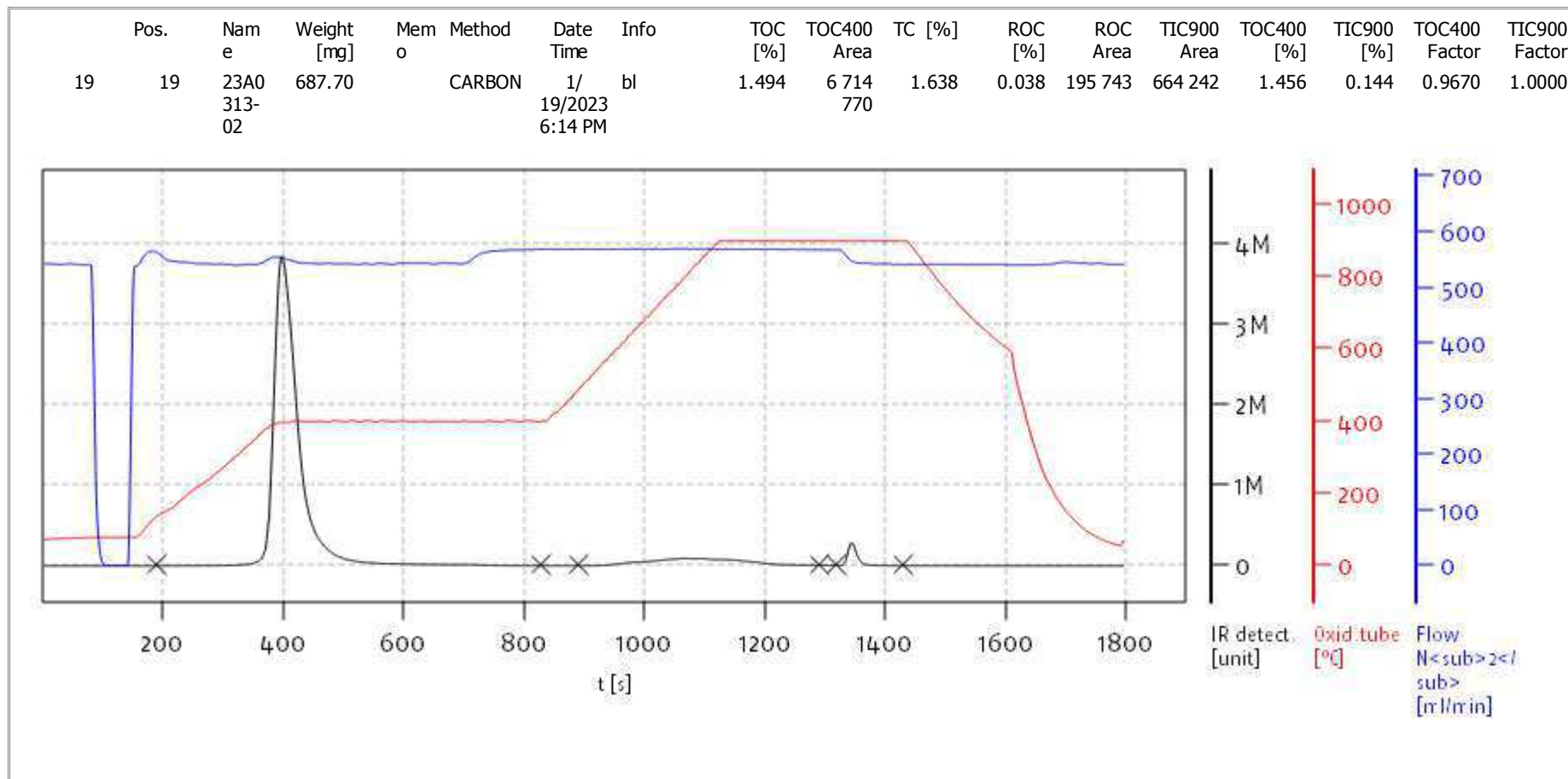
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

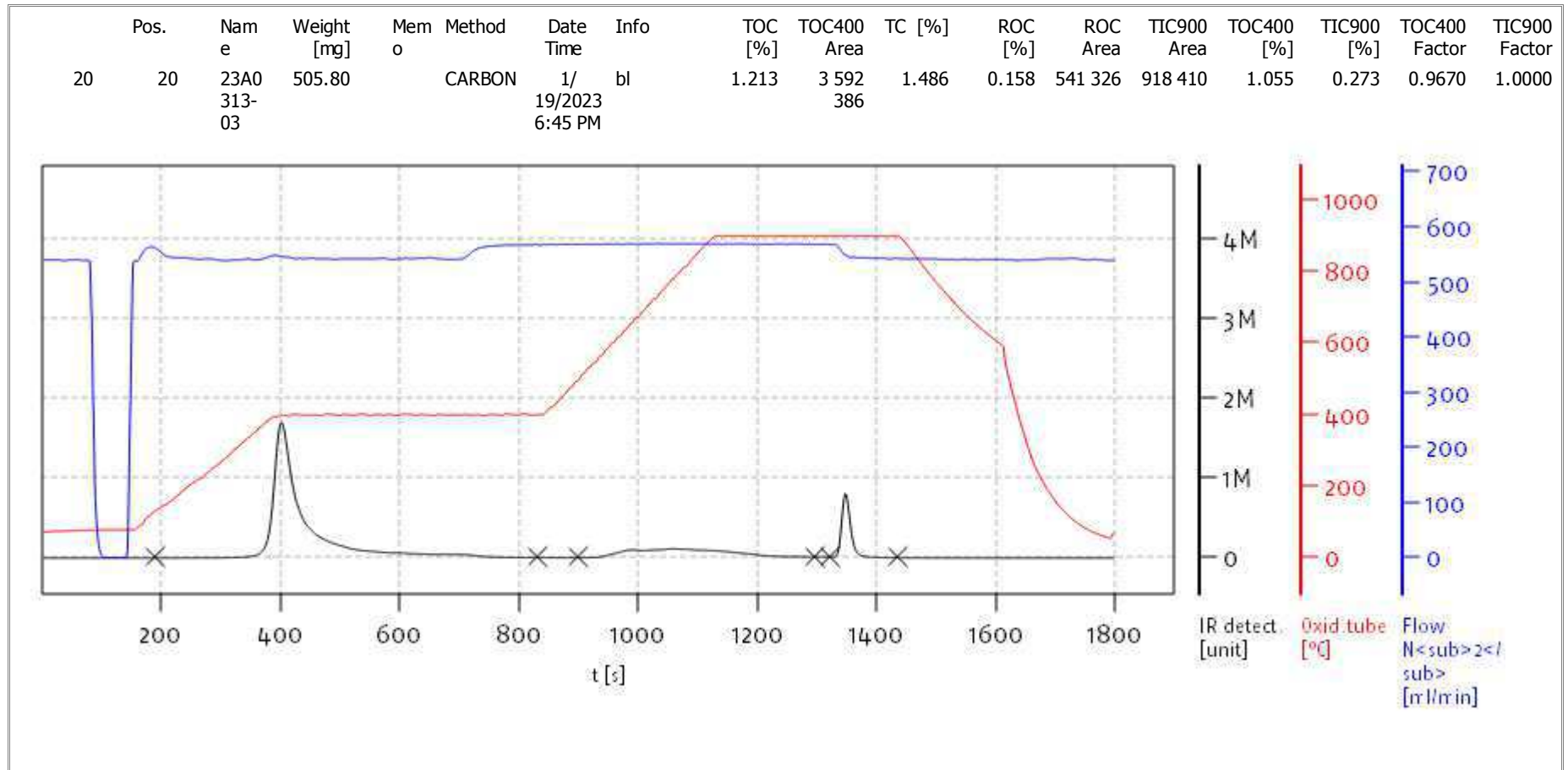
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

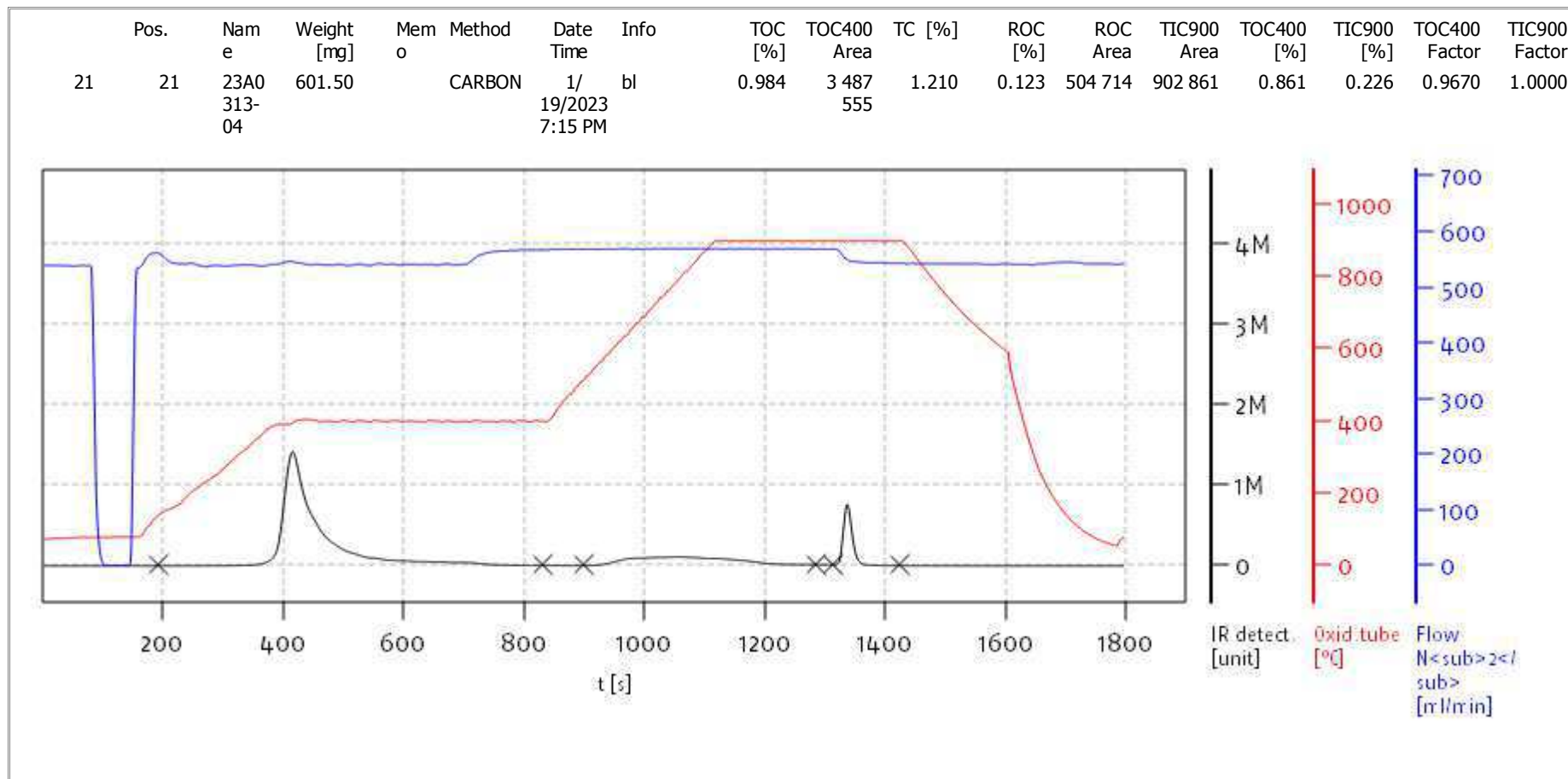
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

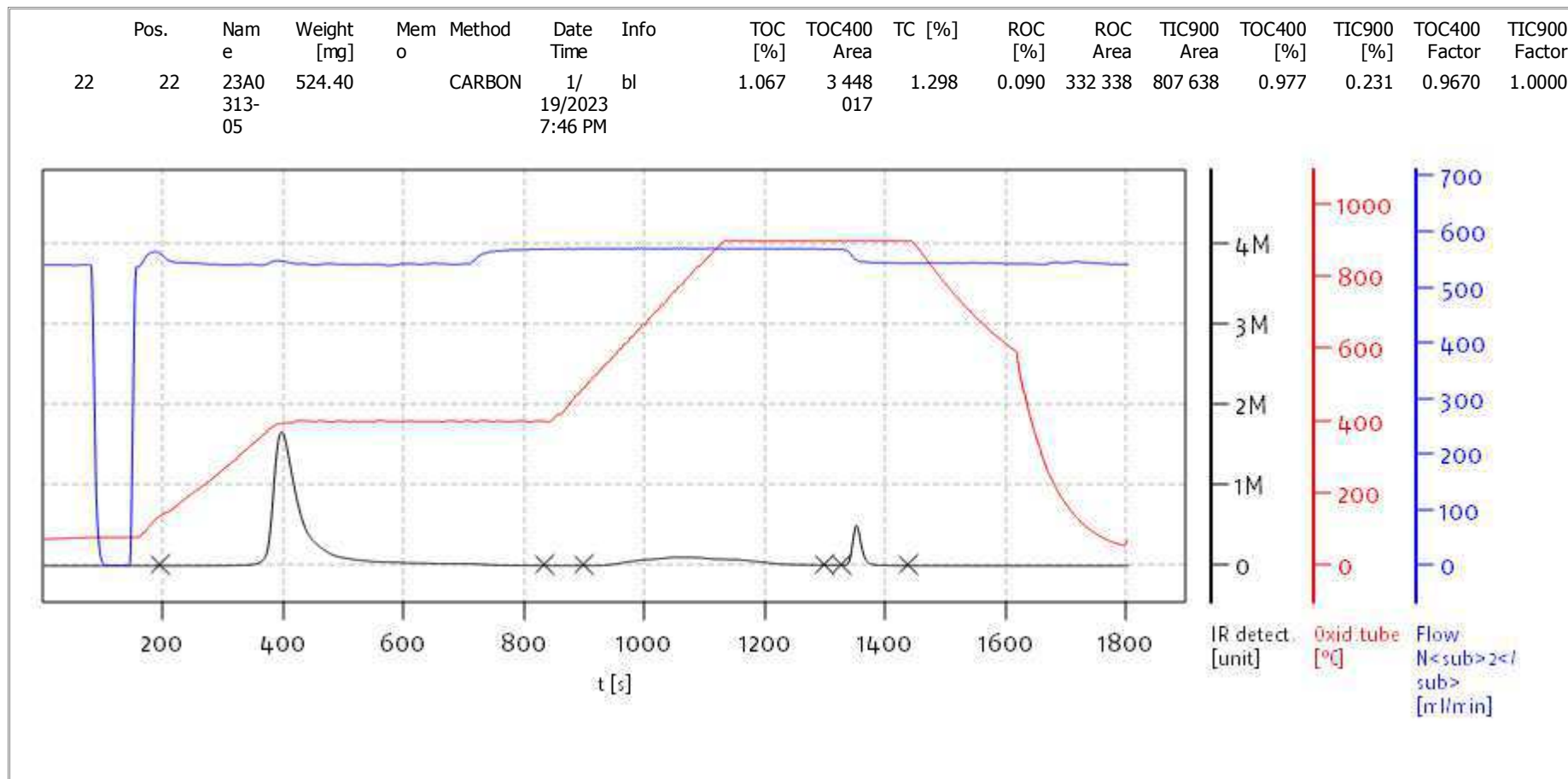
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

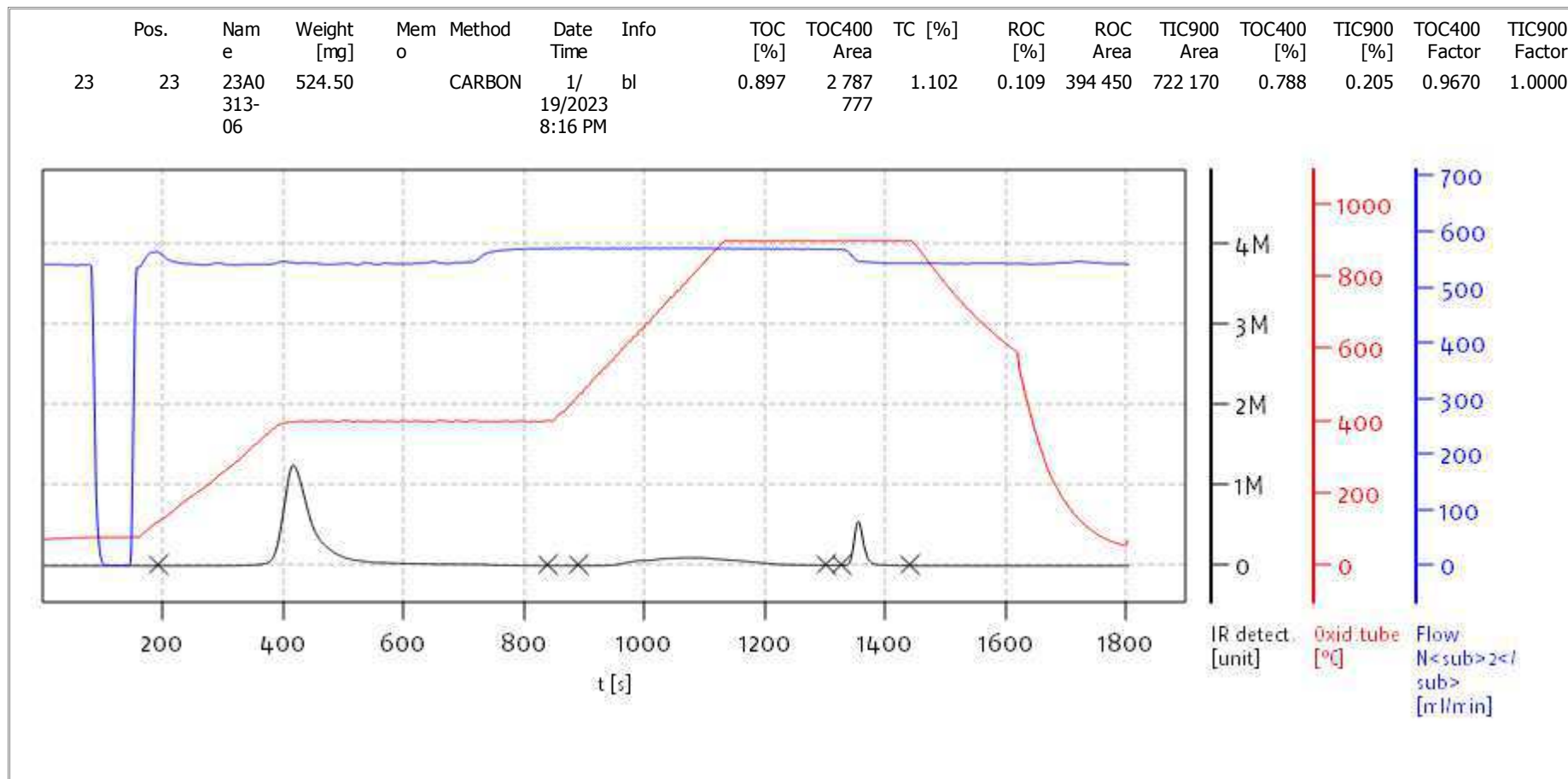
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: soliTOC superuser

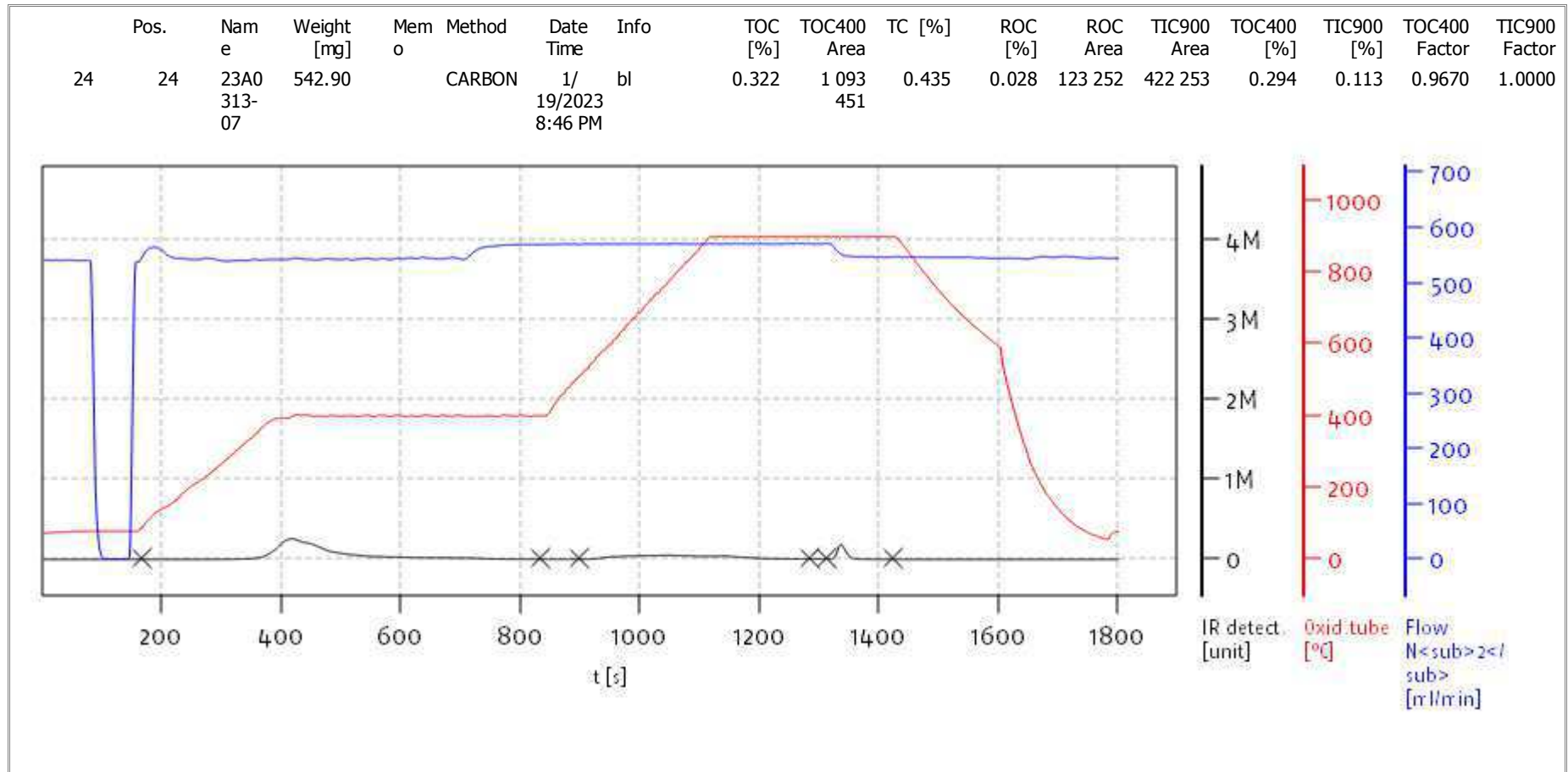
Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

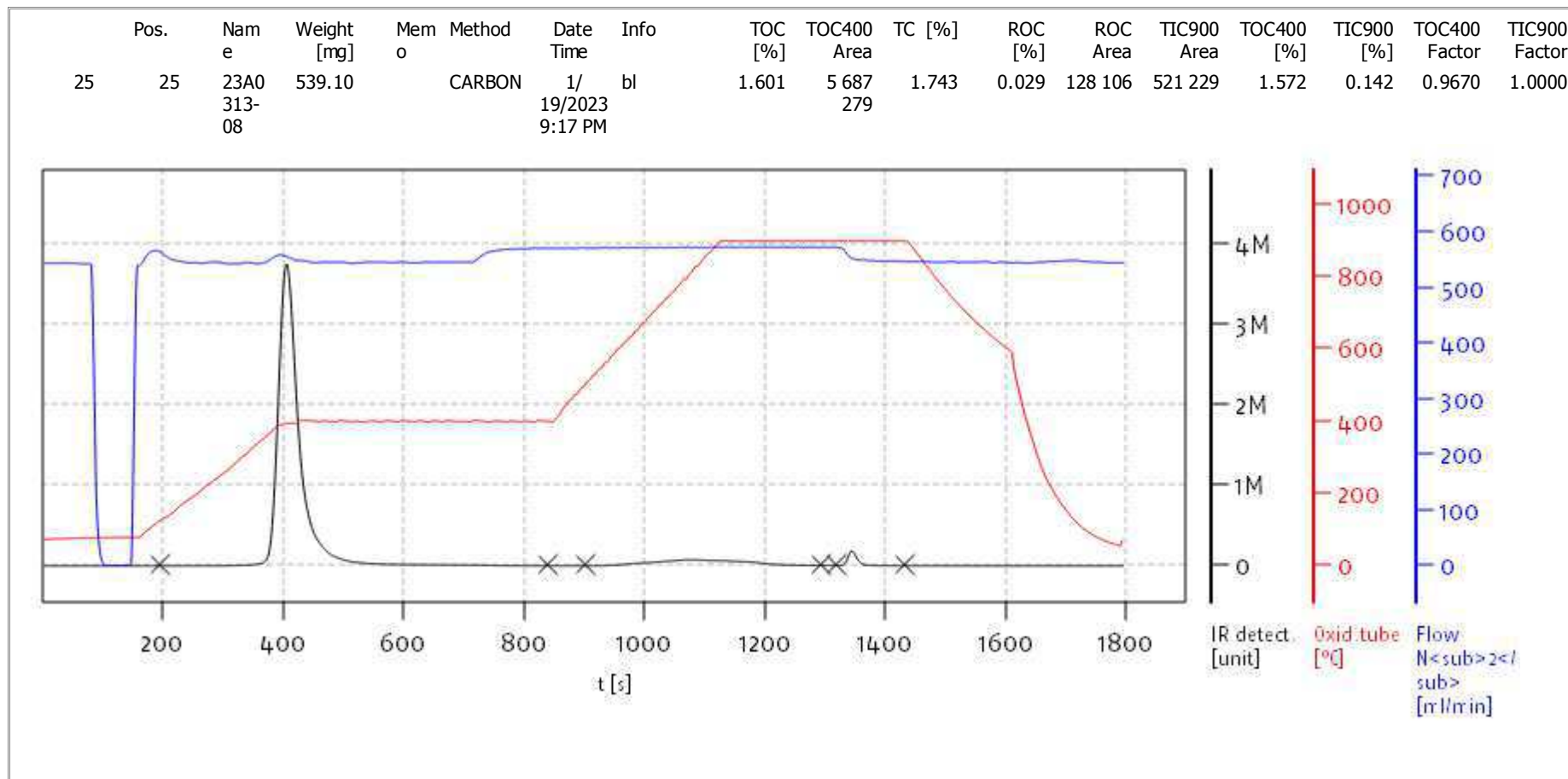
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

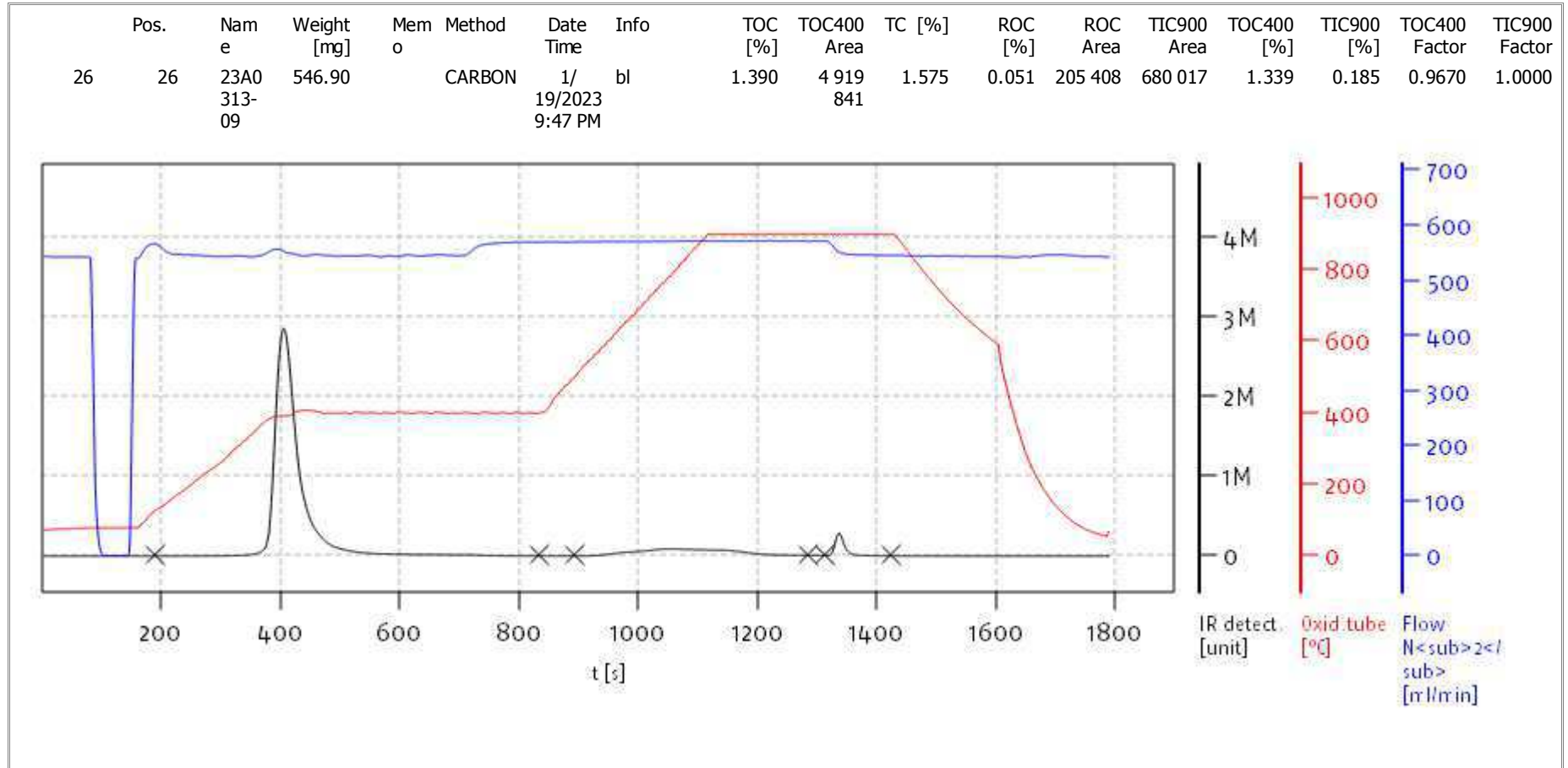
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: soliTOC superuser

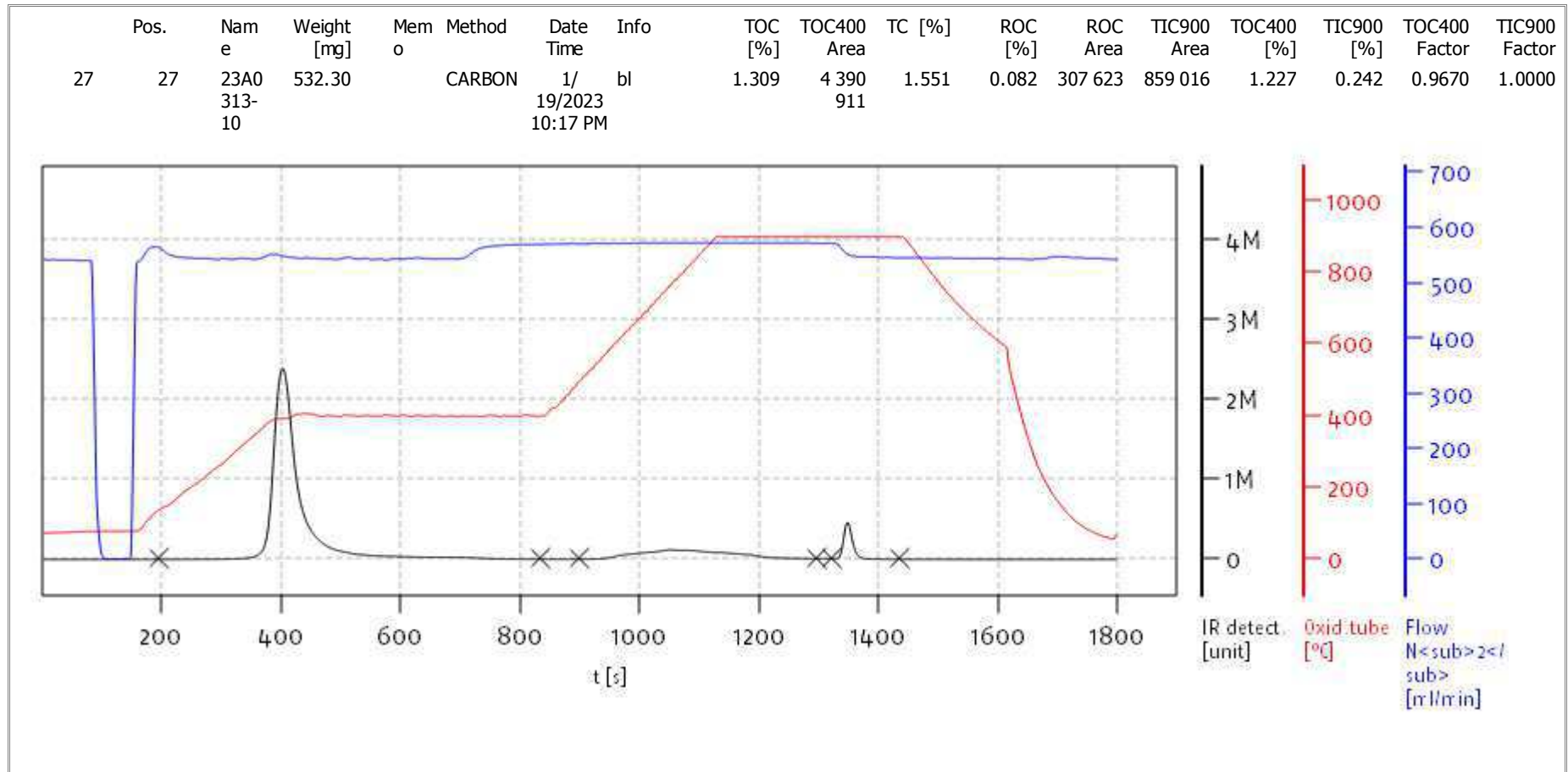
Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

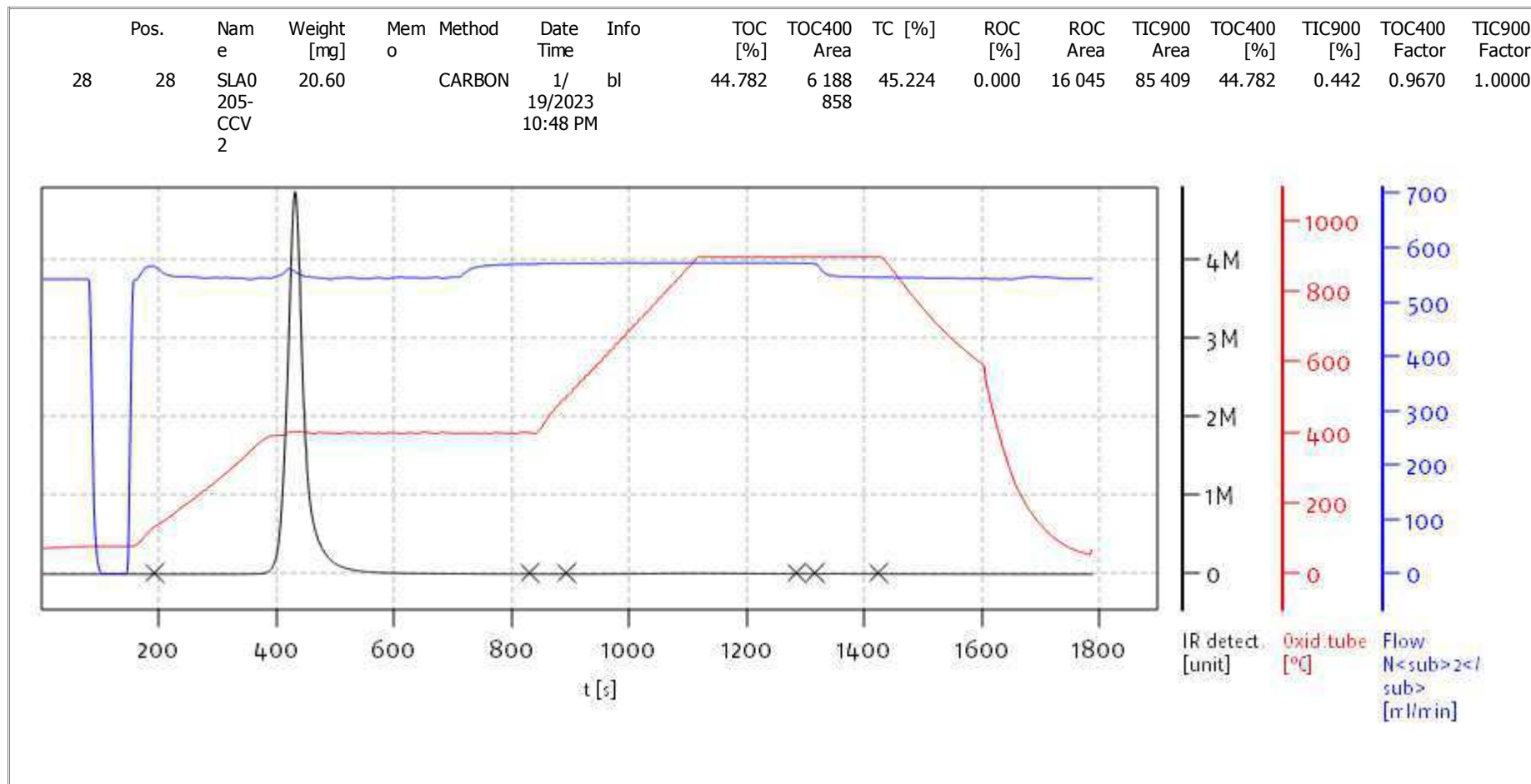
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

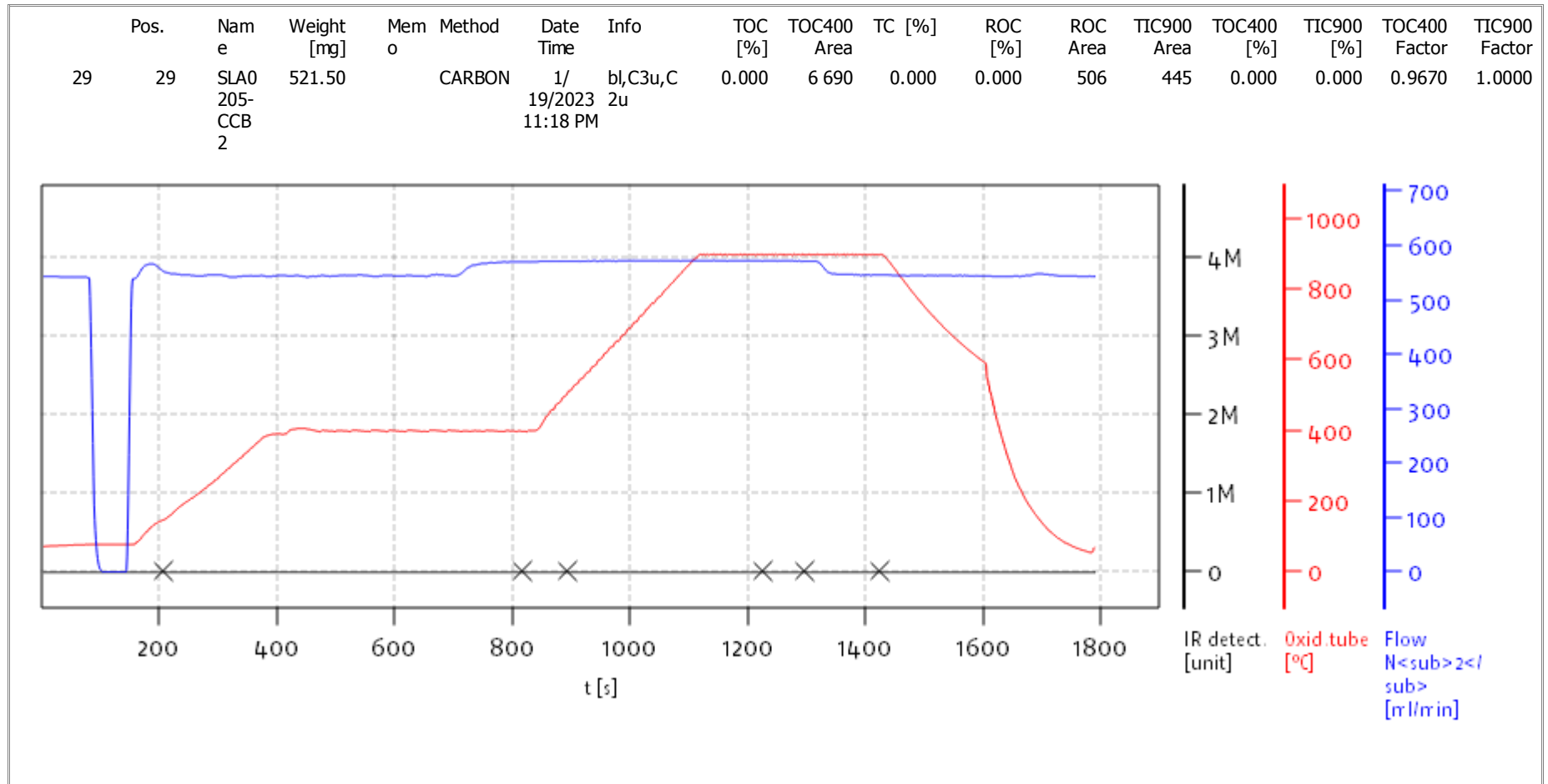
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

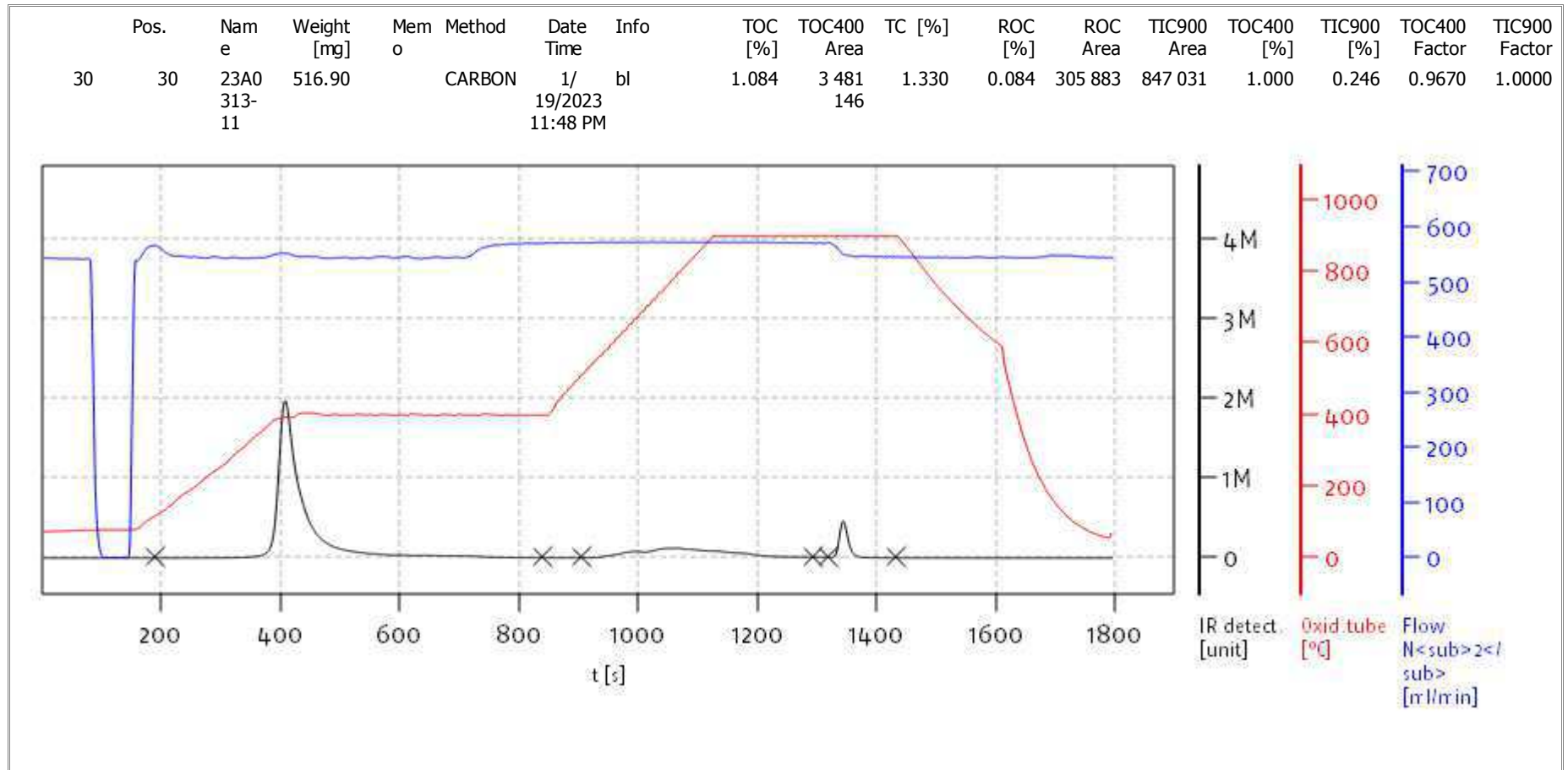
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: soliTOC superuser

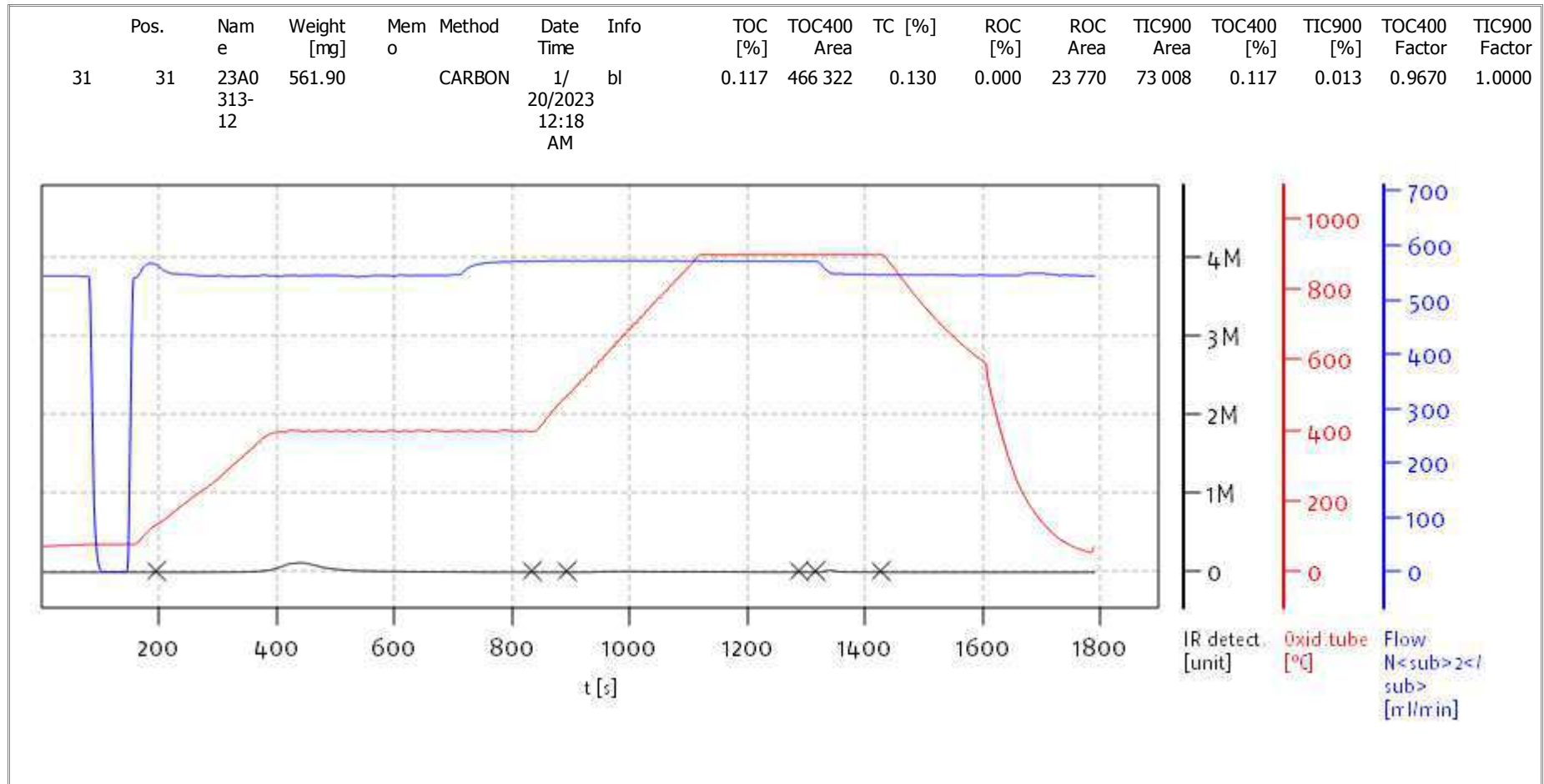
Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

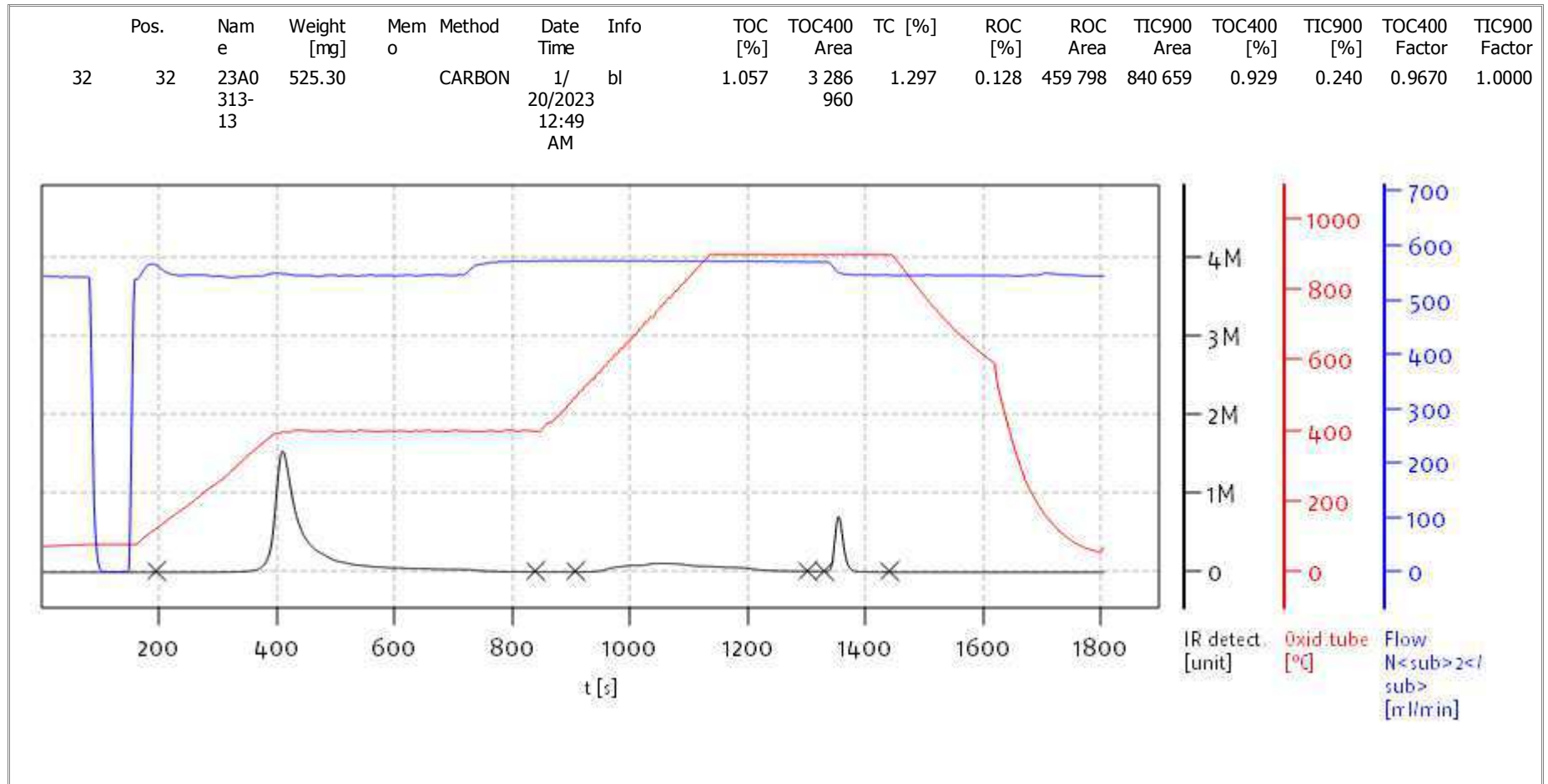
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

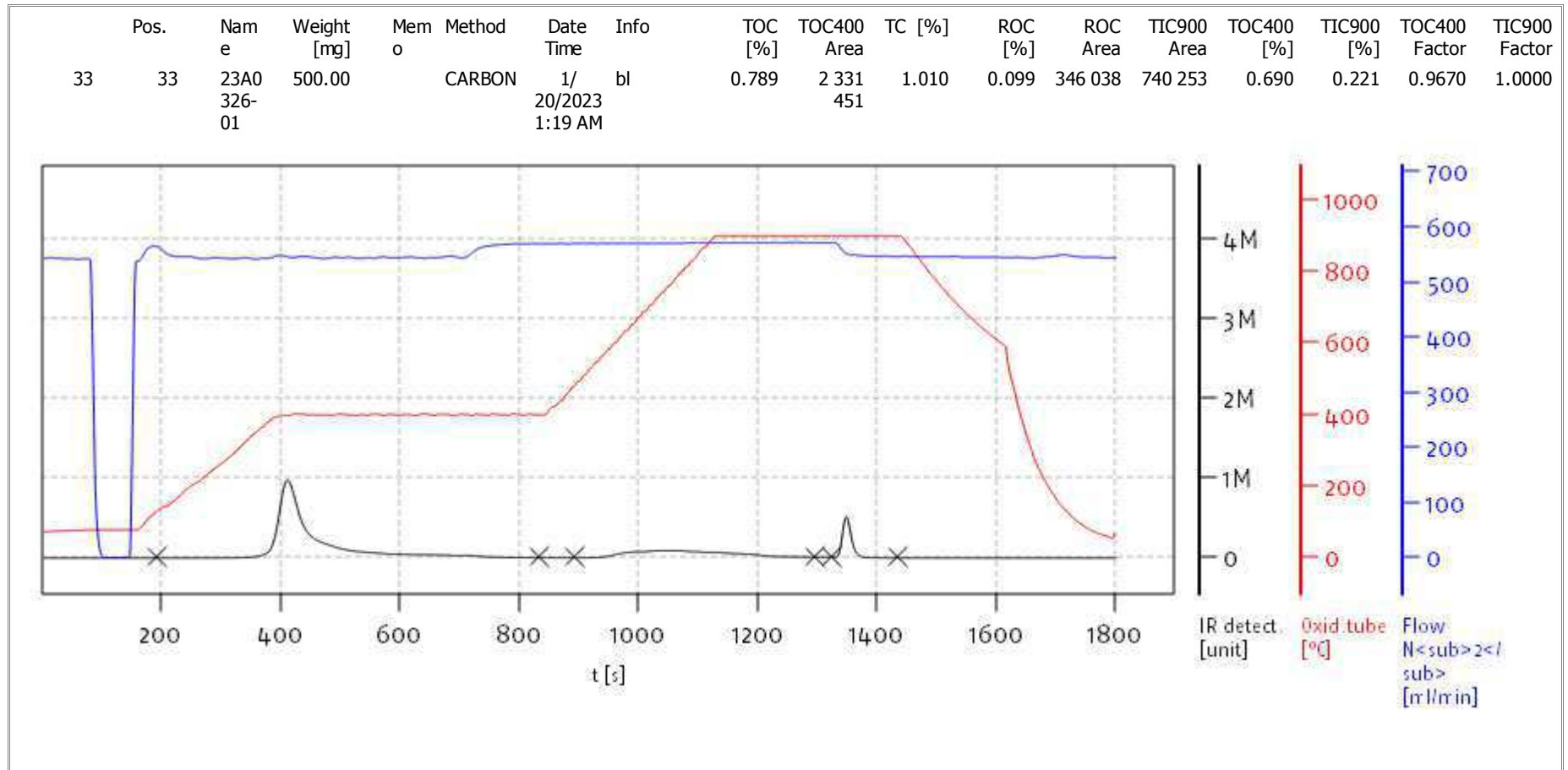
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

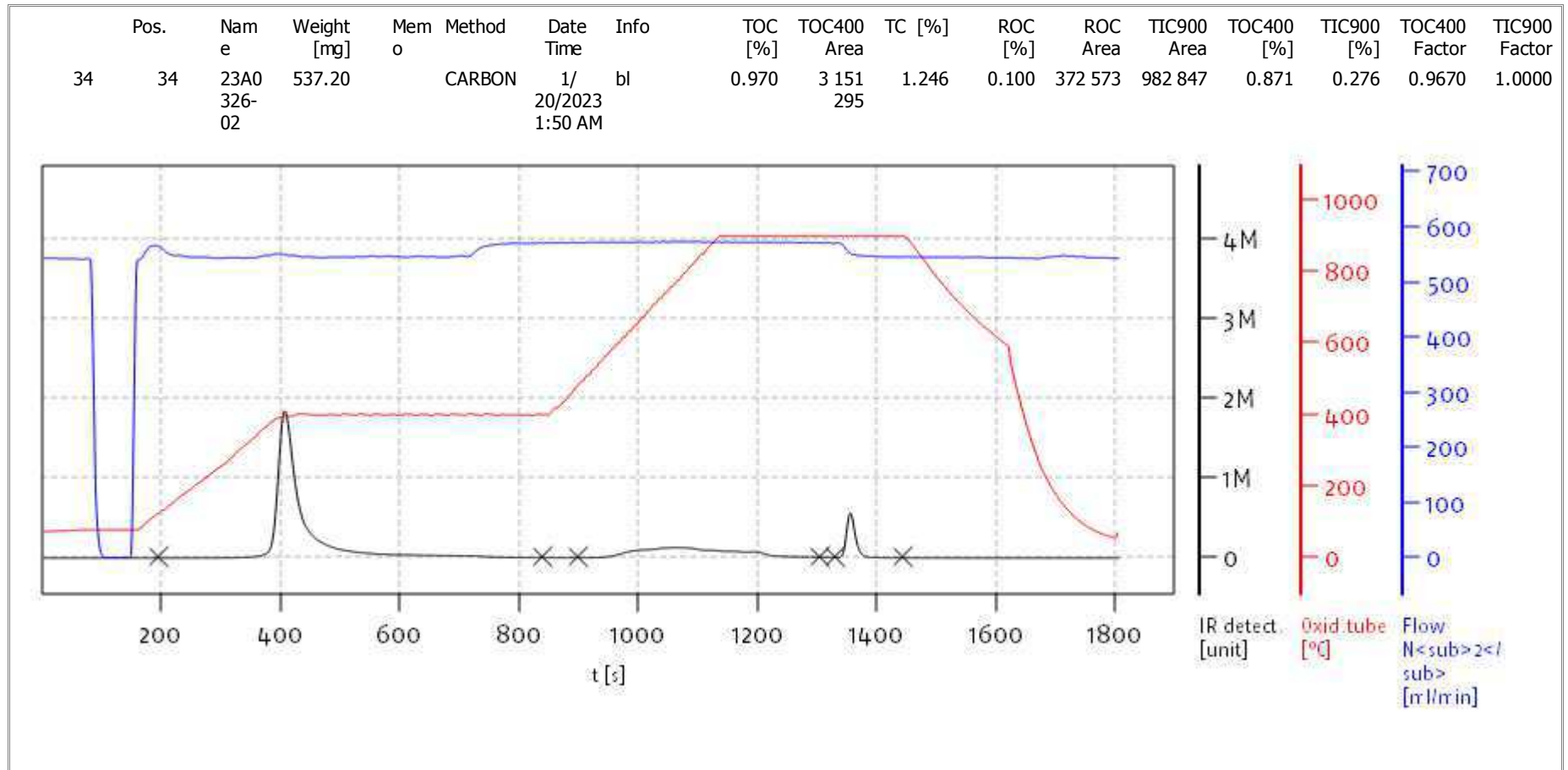
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

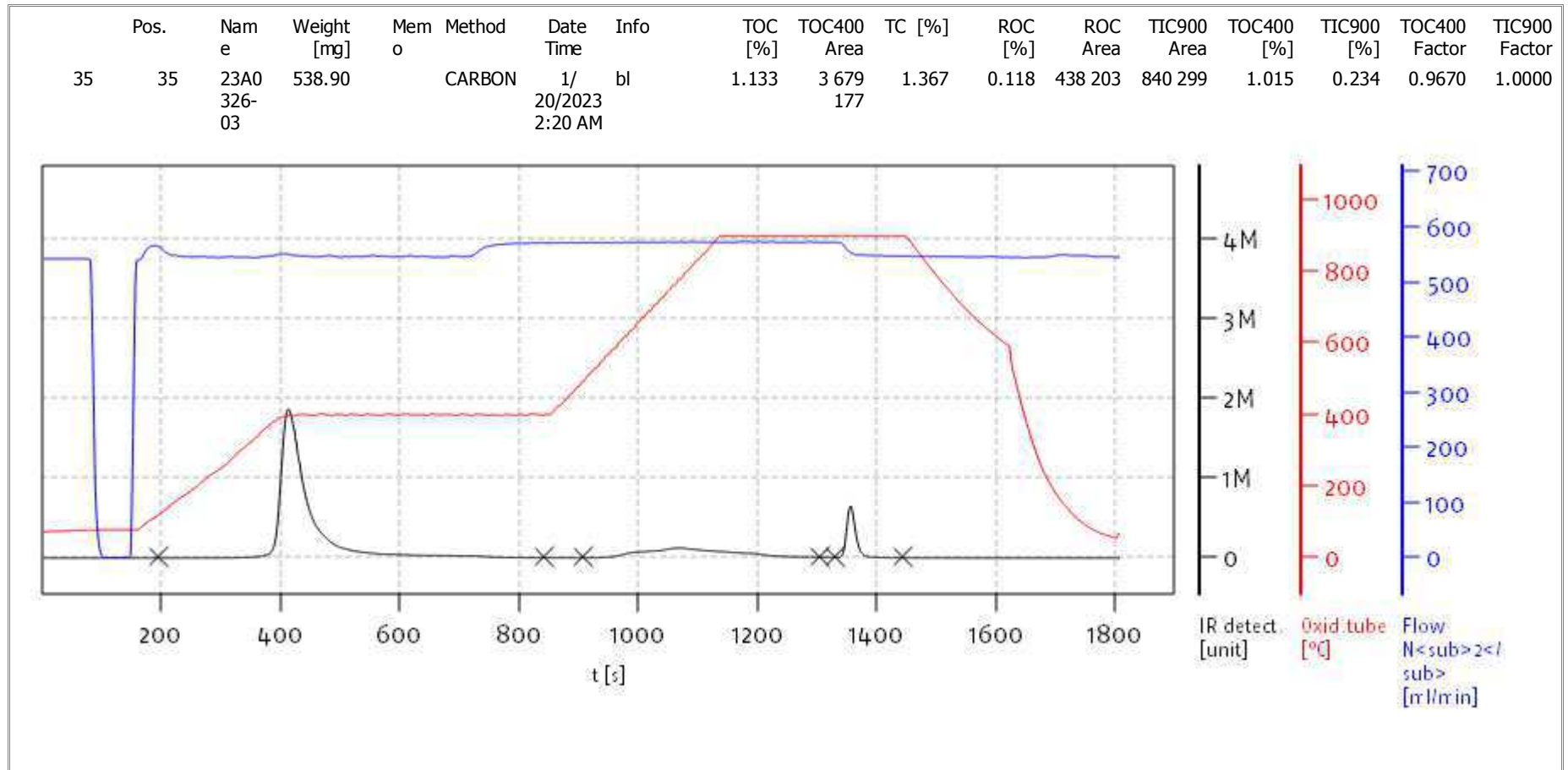
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

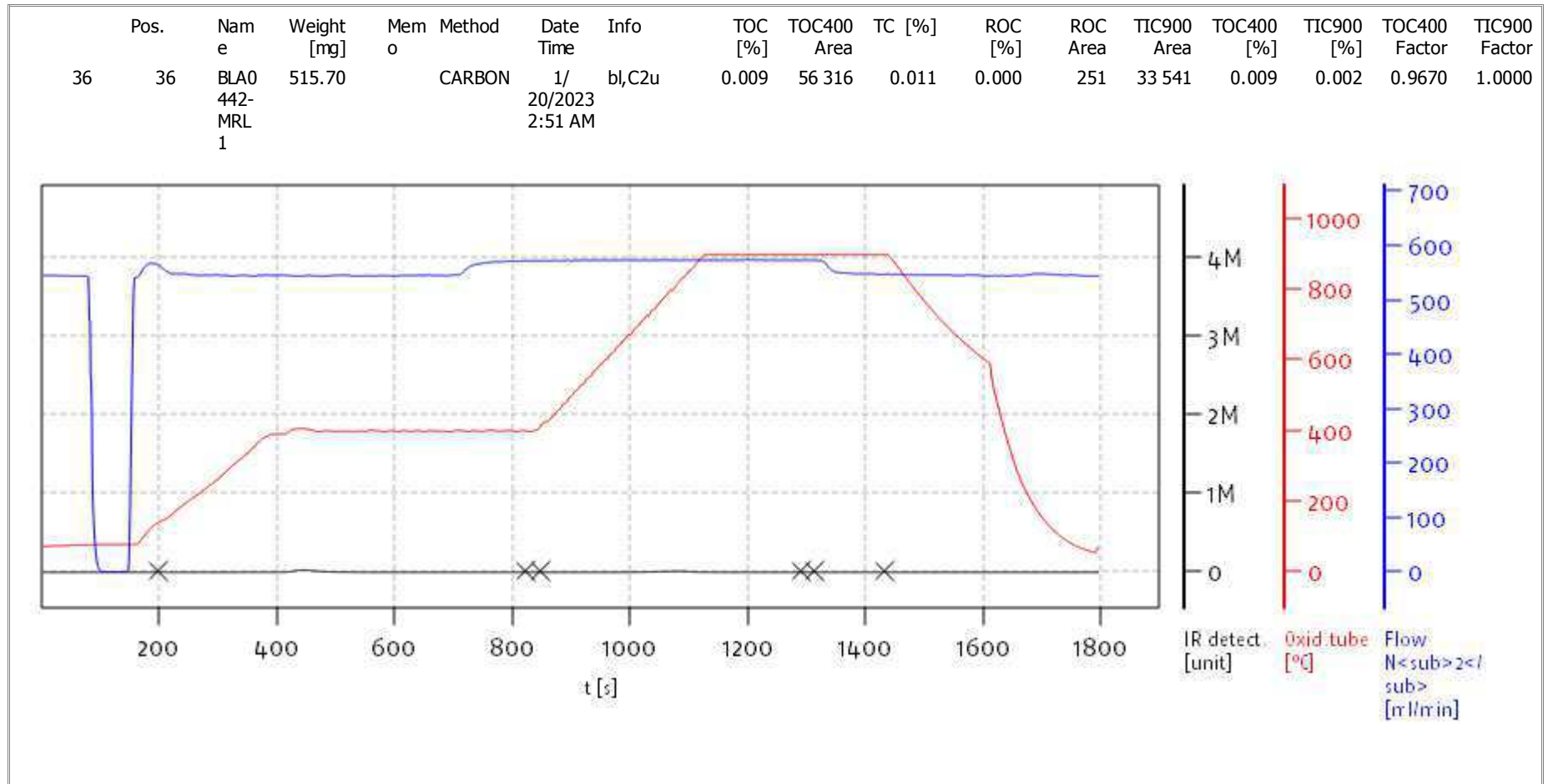
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

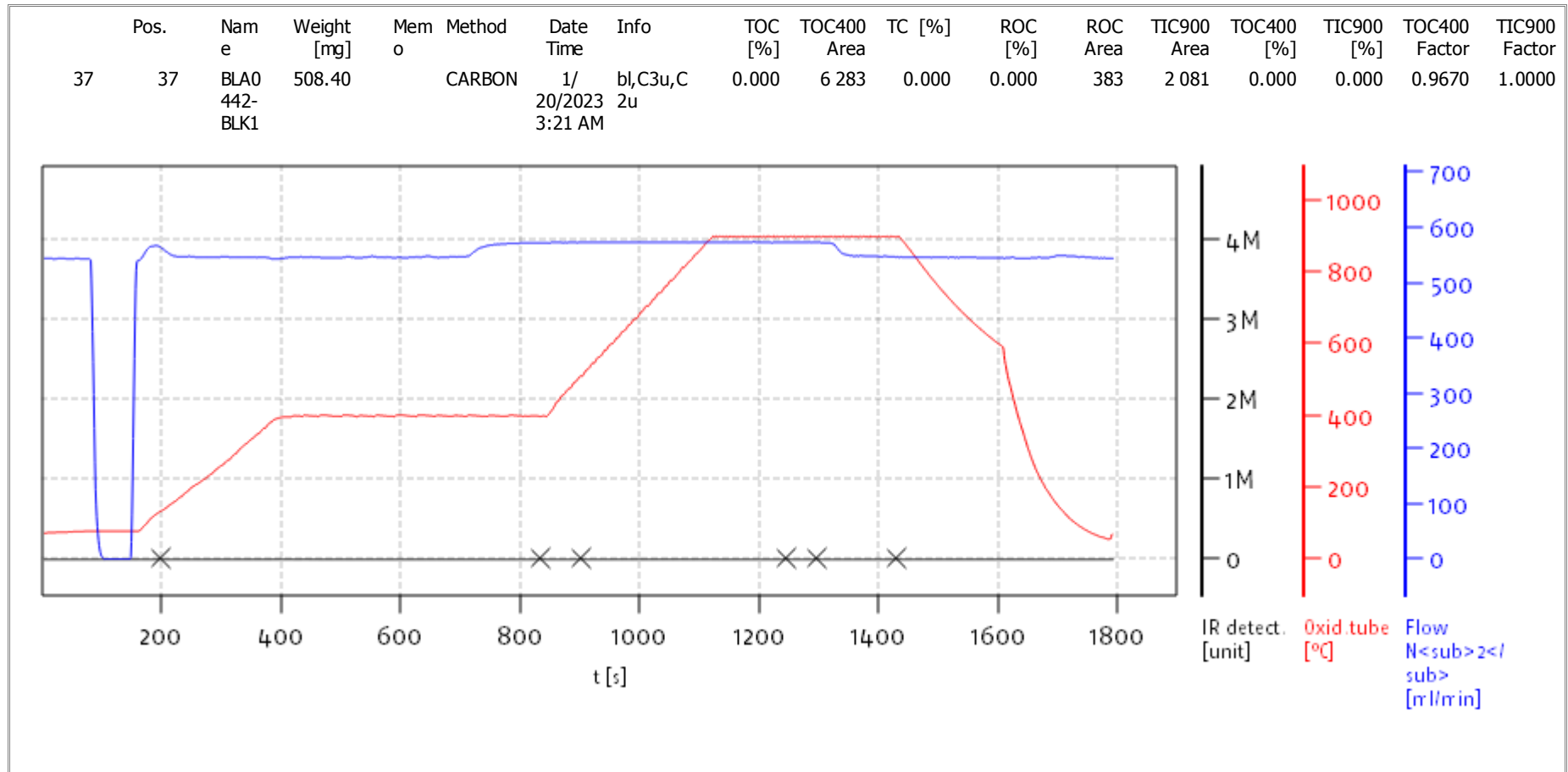
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

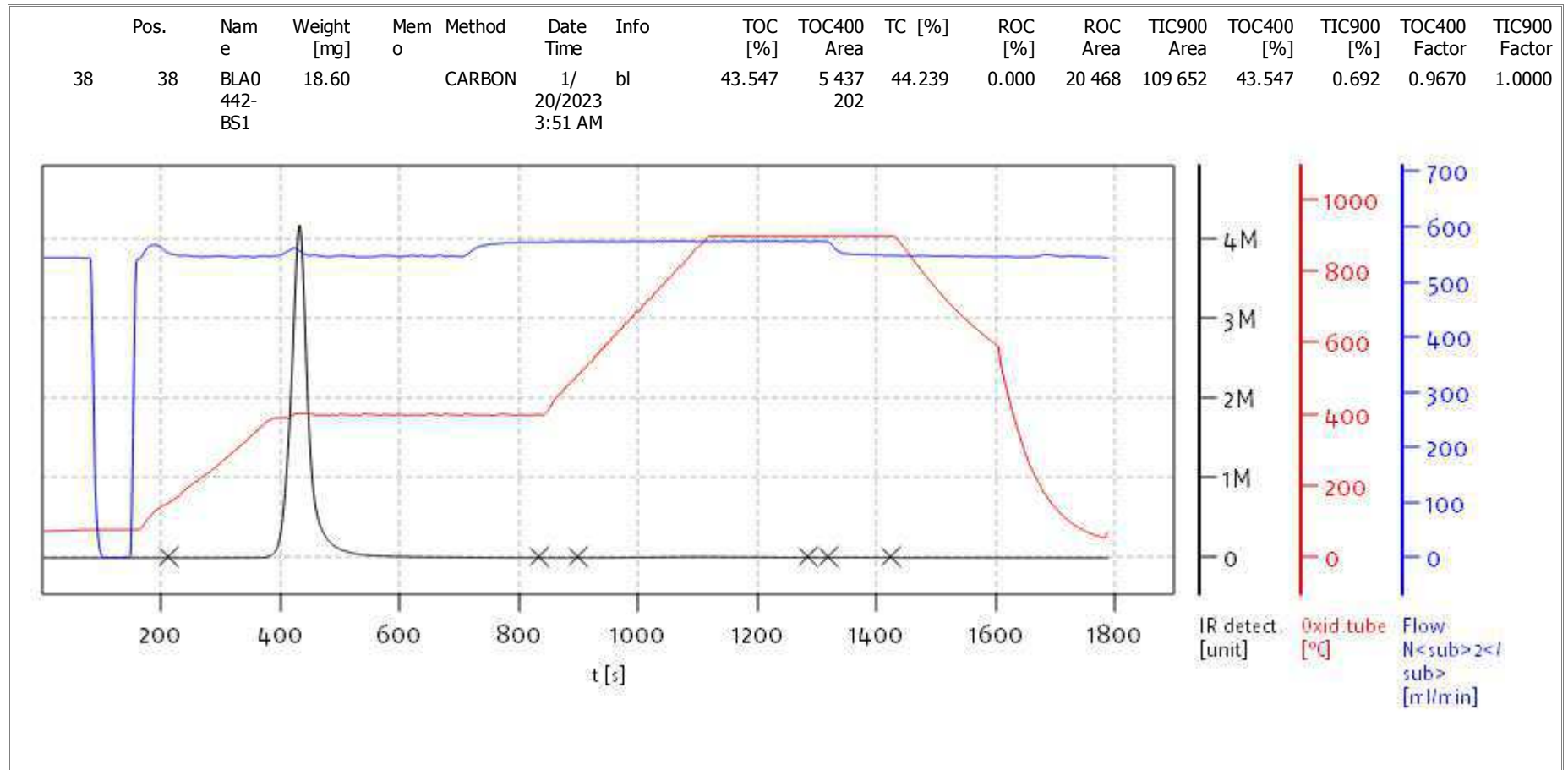
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

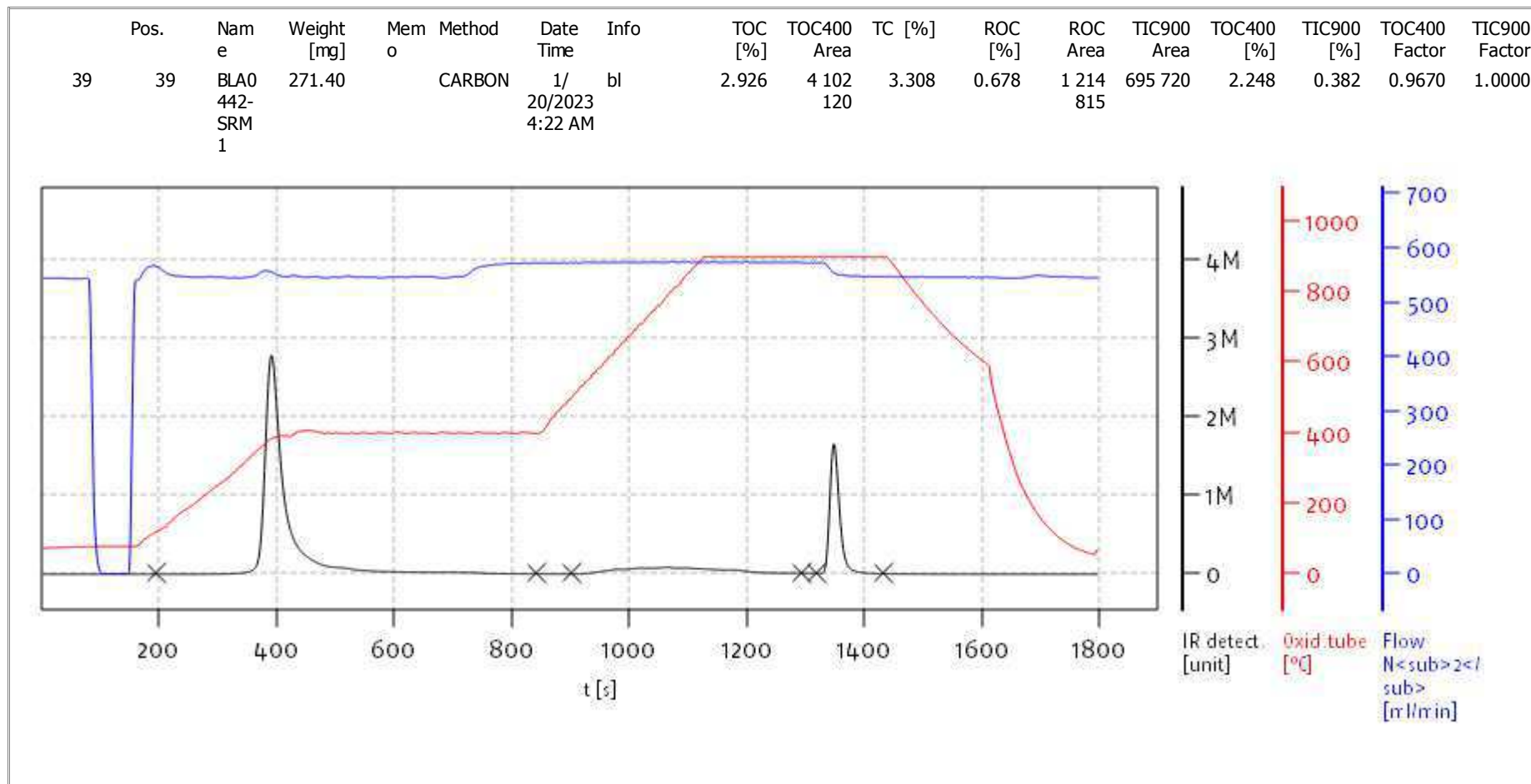
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

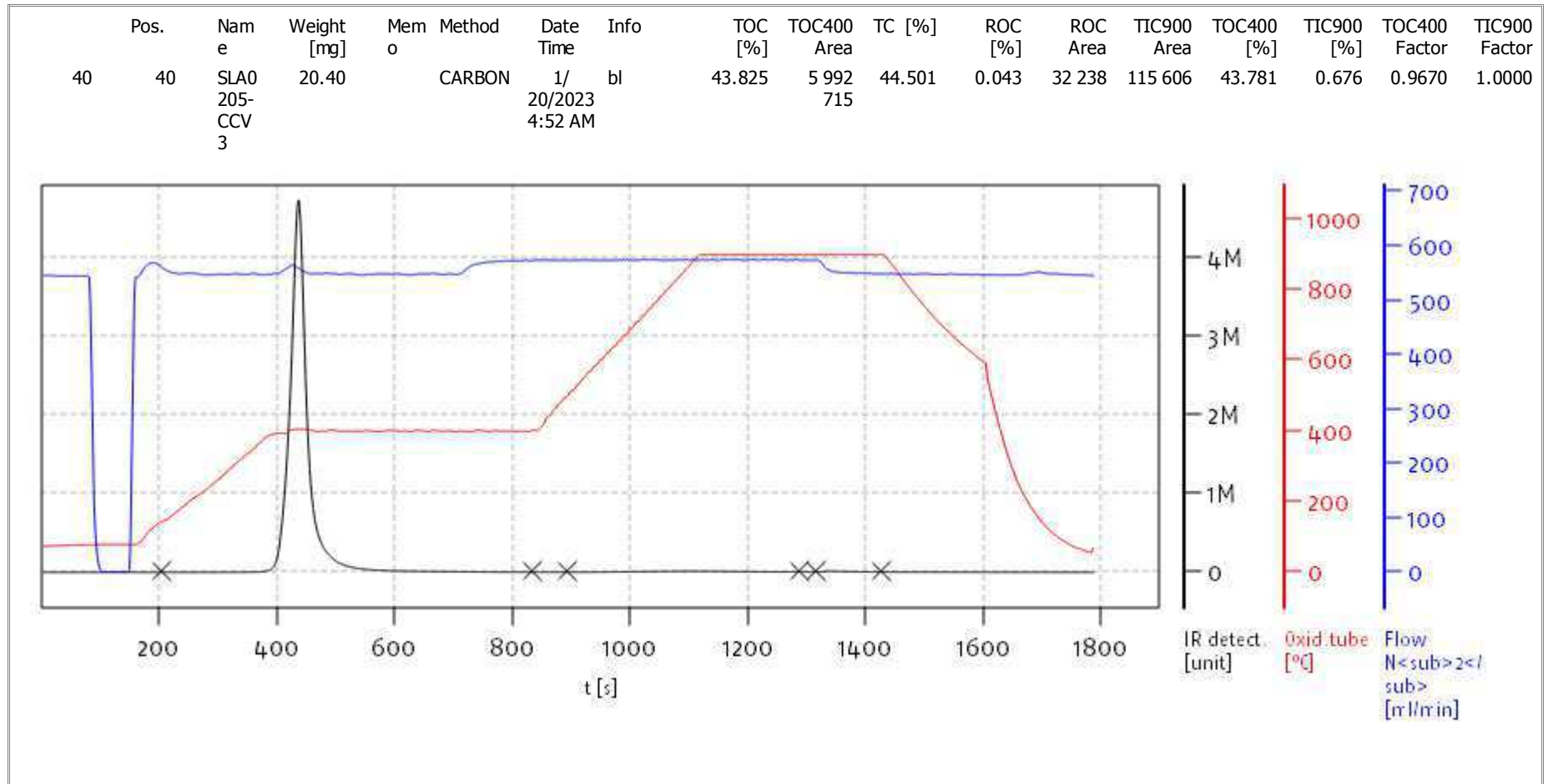
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

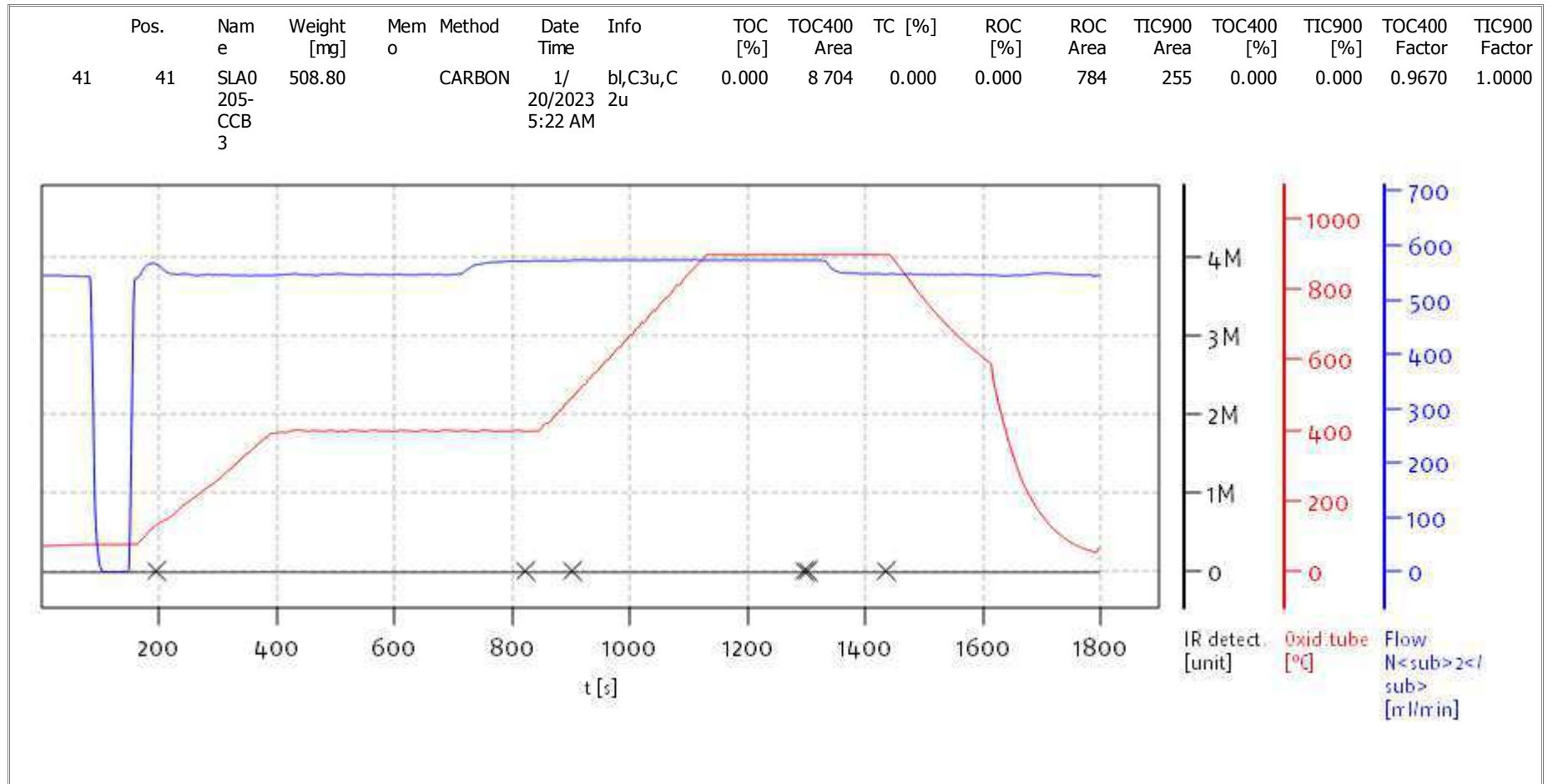
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

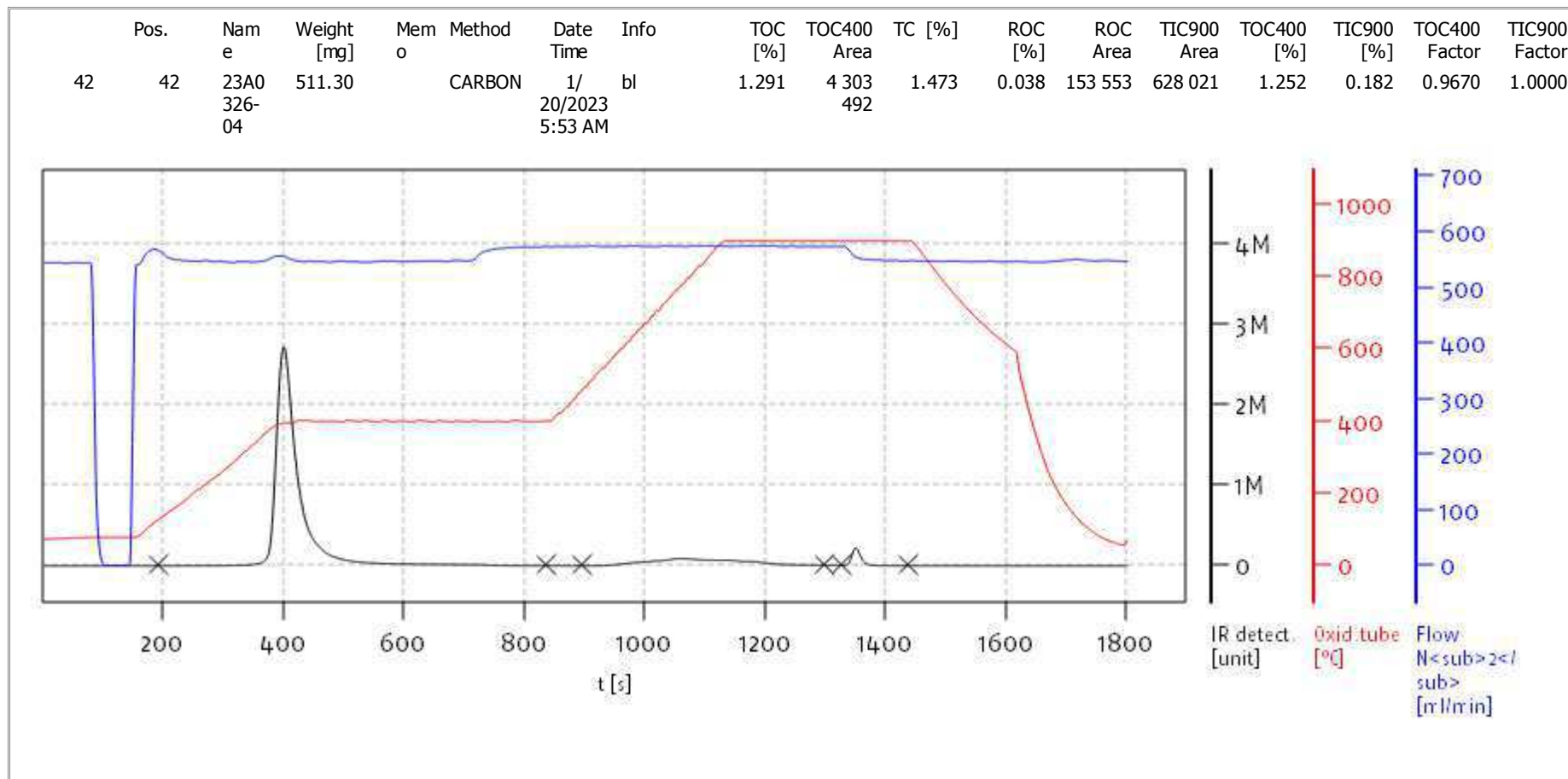
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

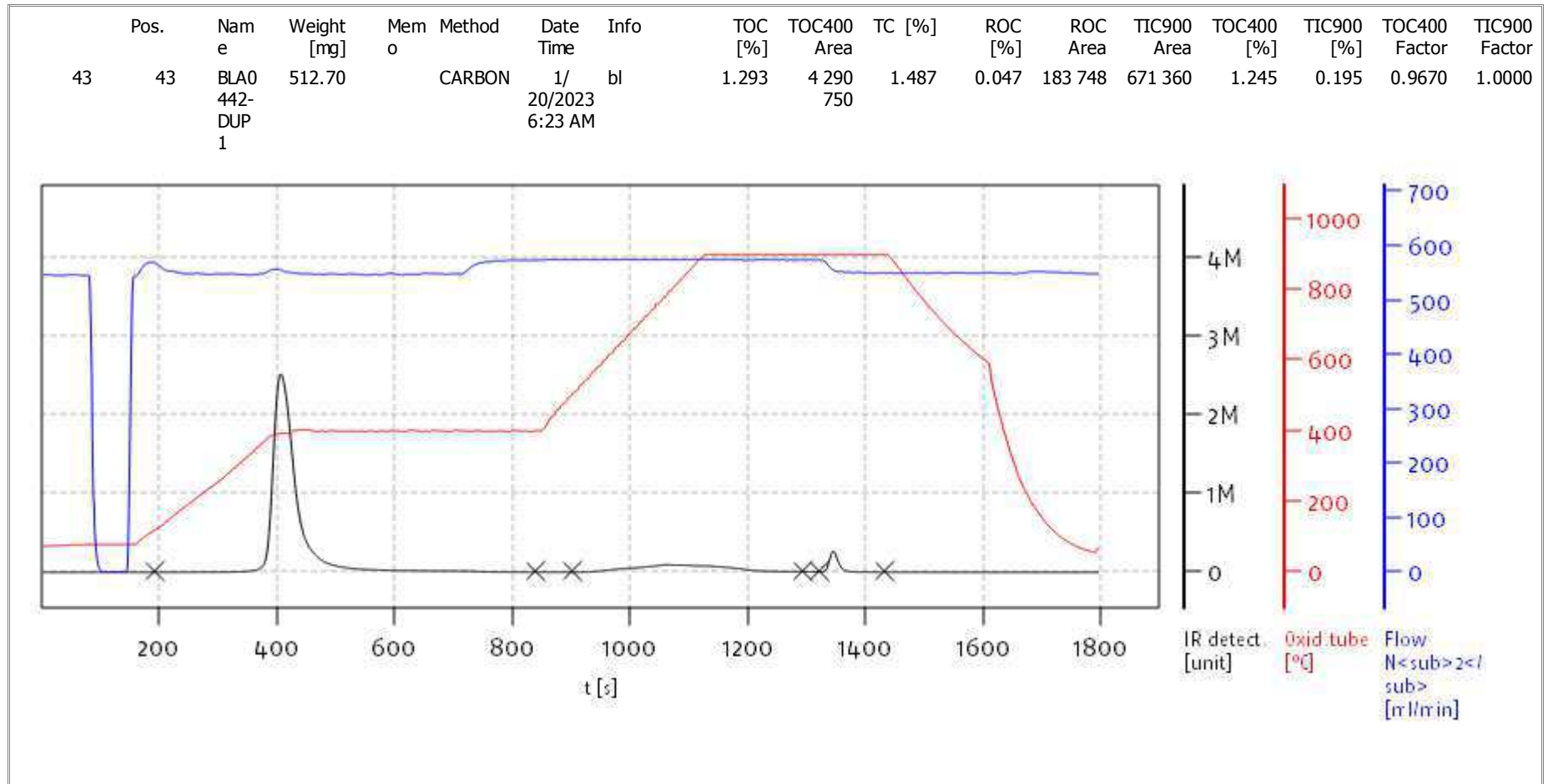
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

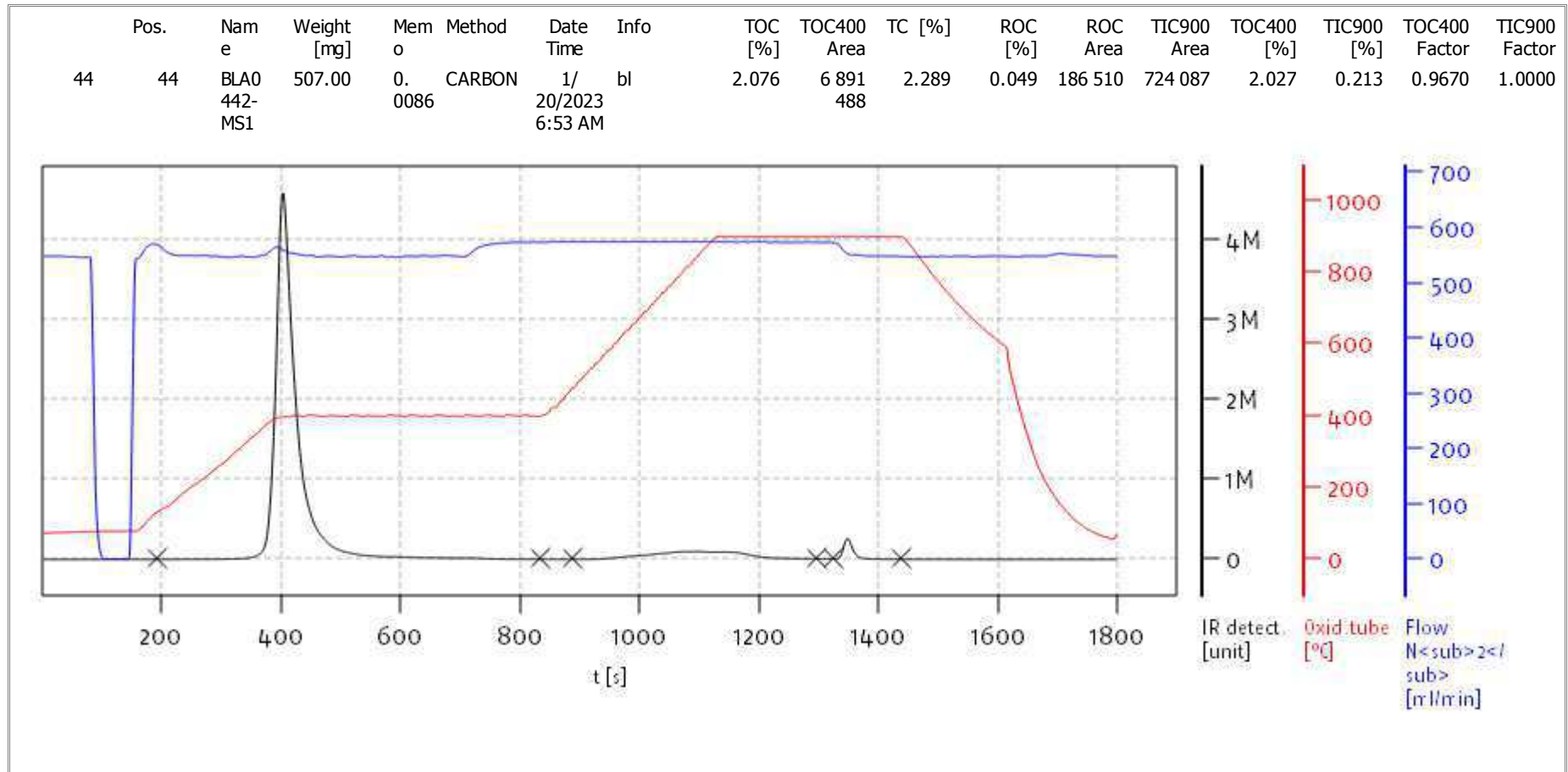
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

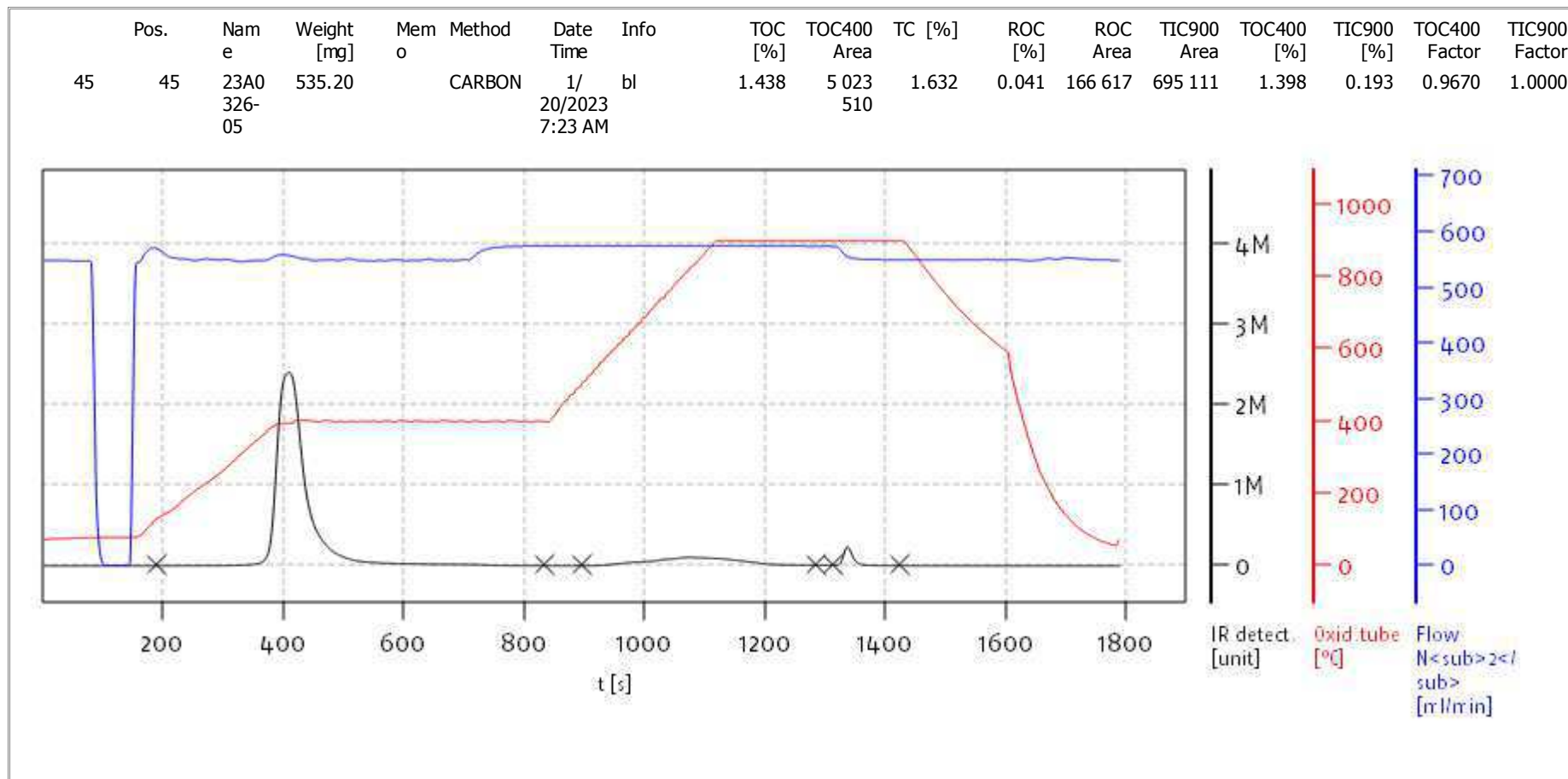
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

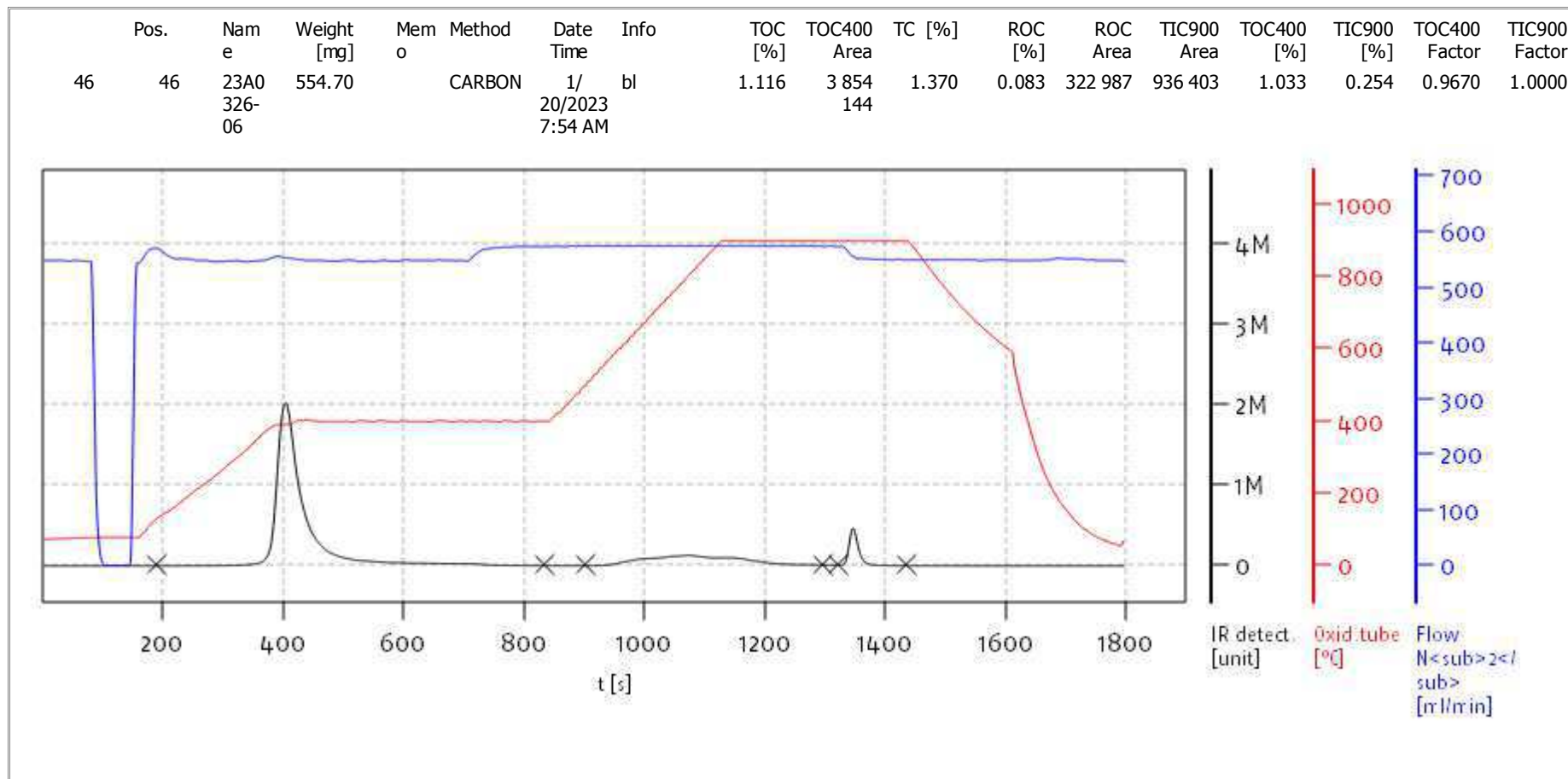
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

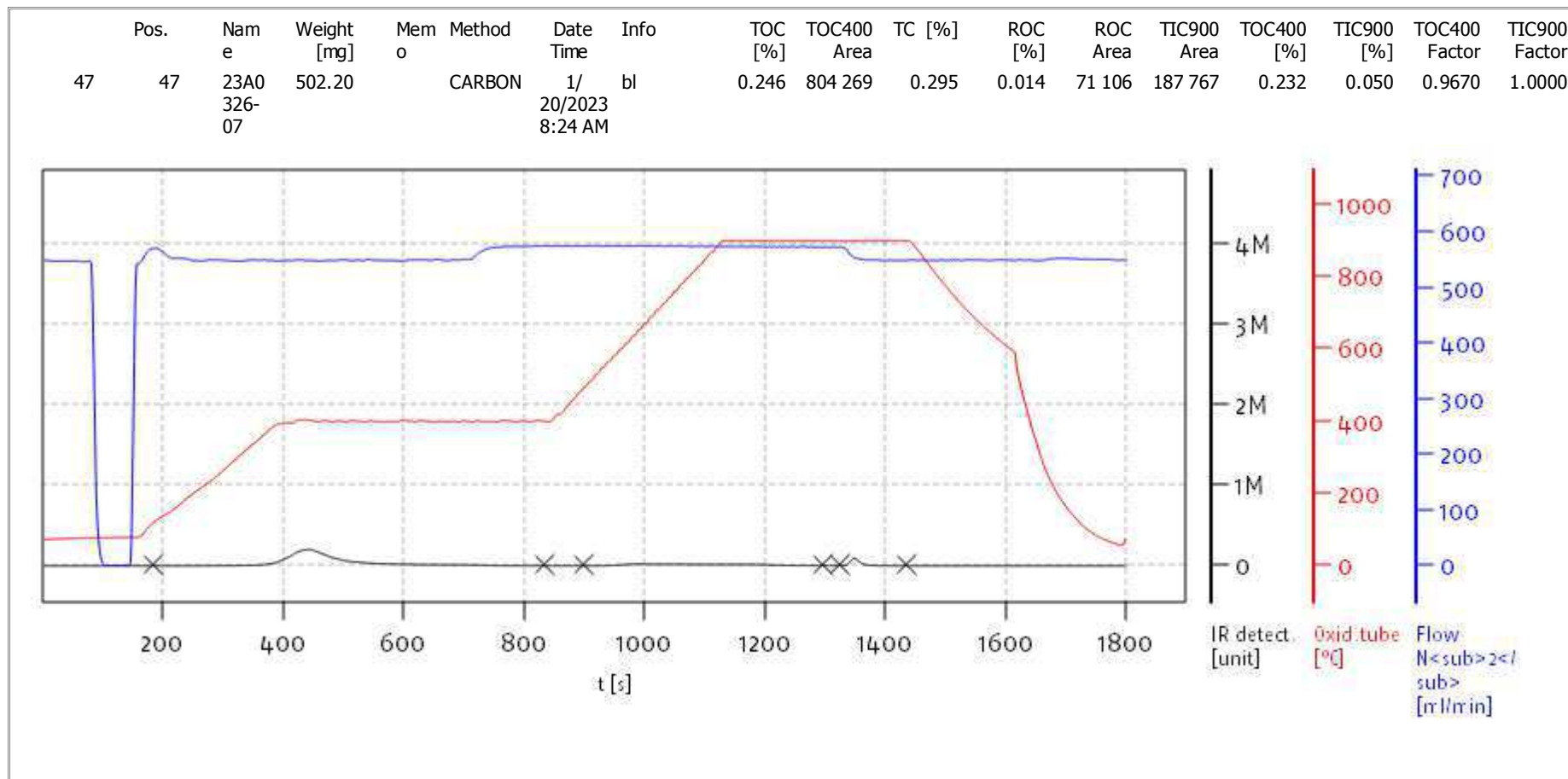
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

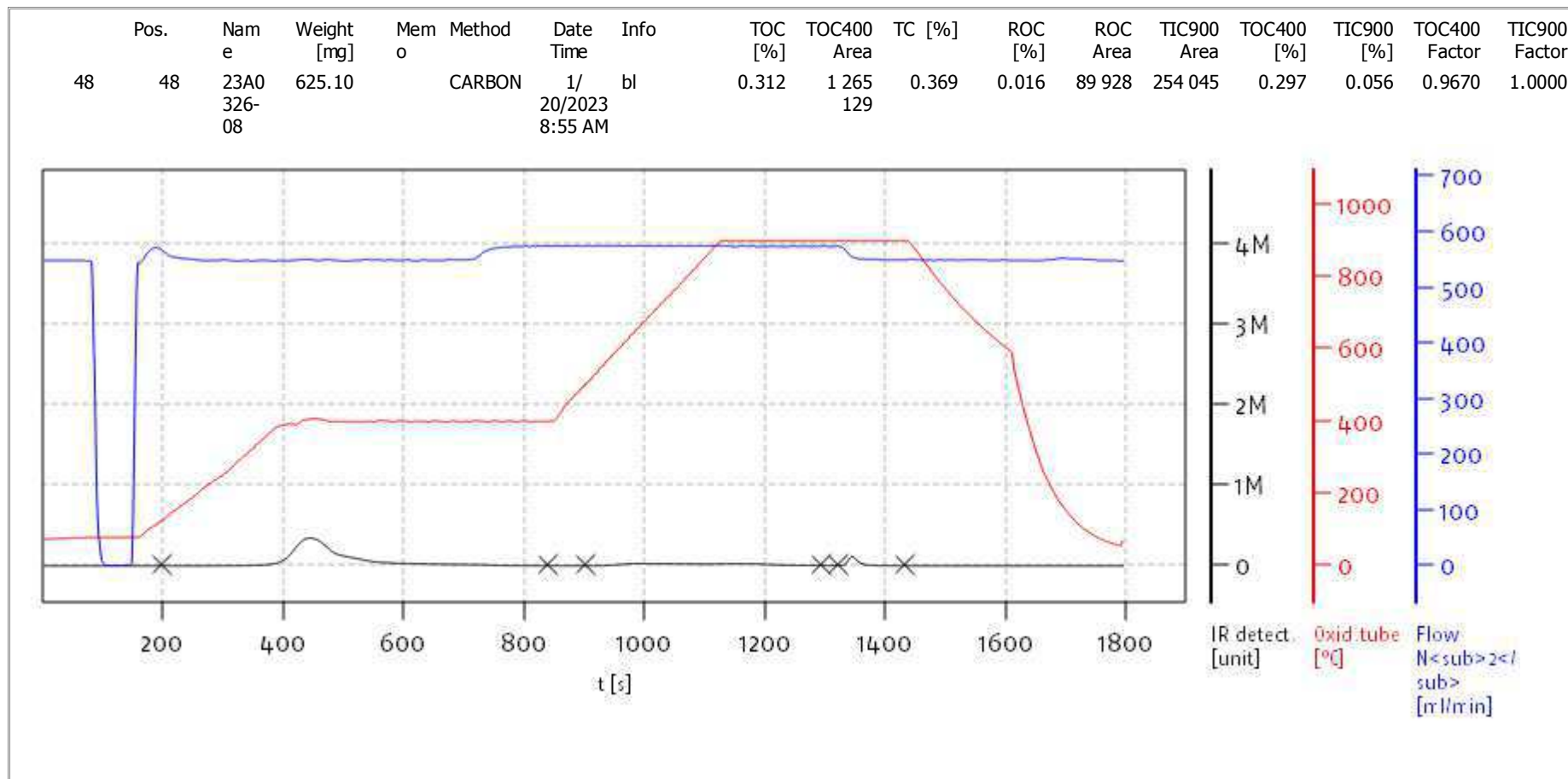
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

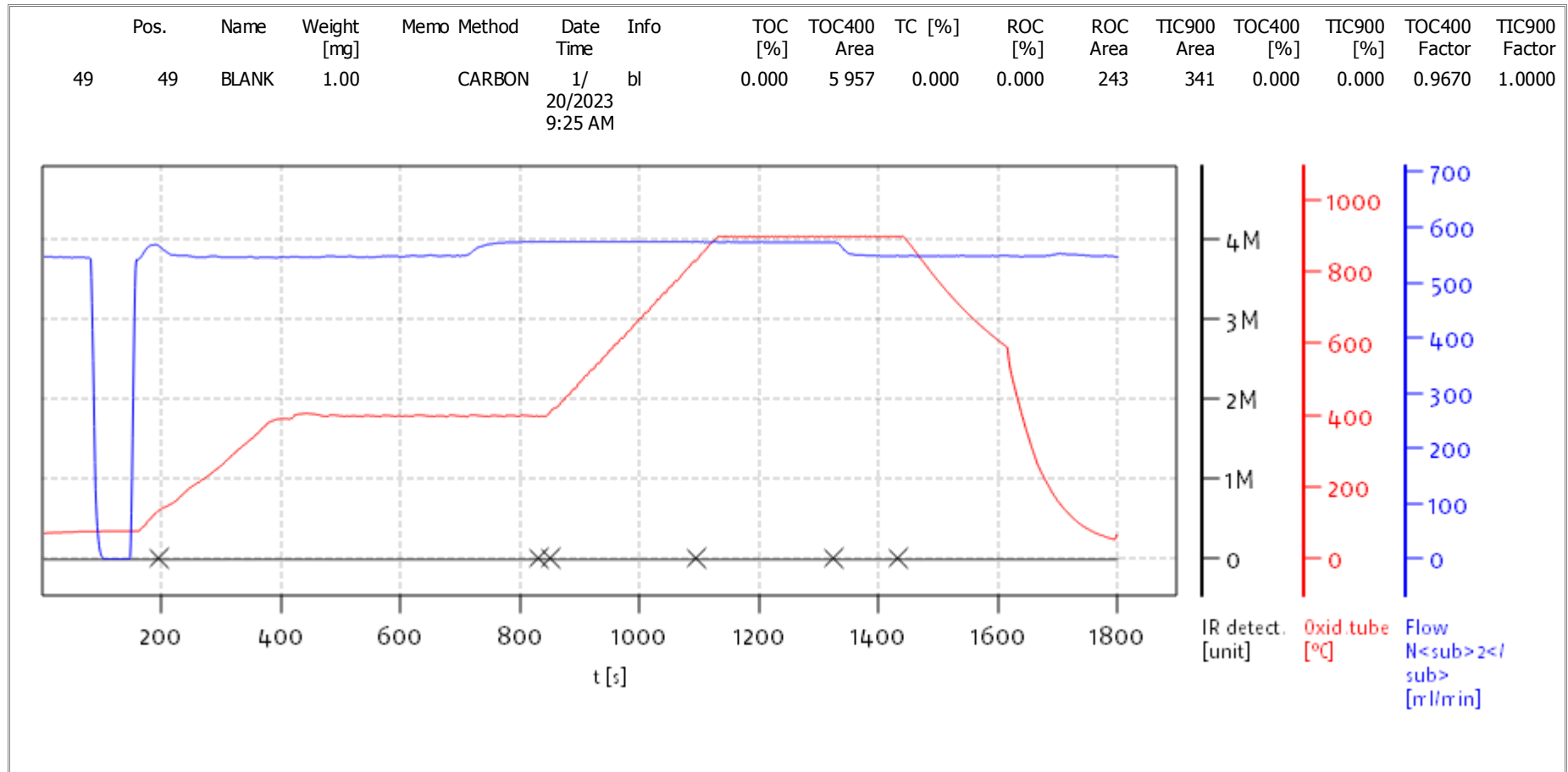
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

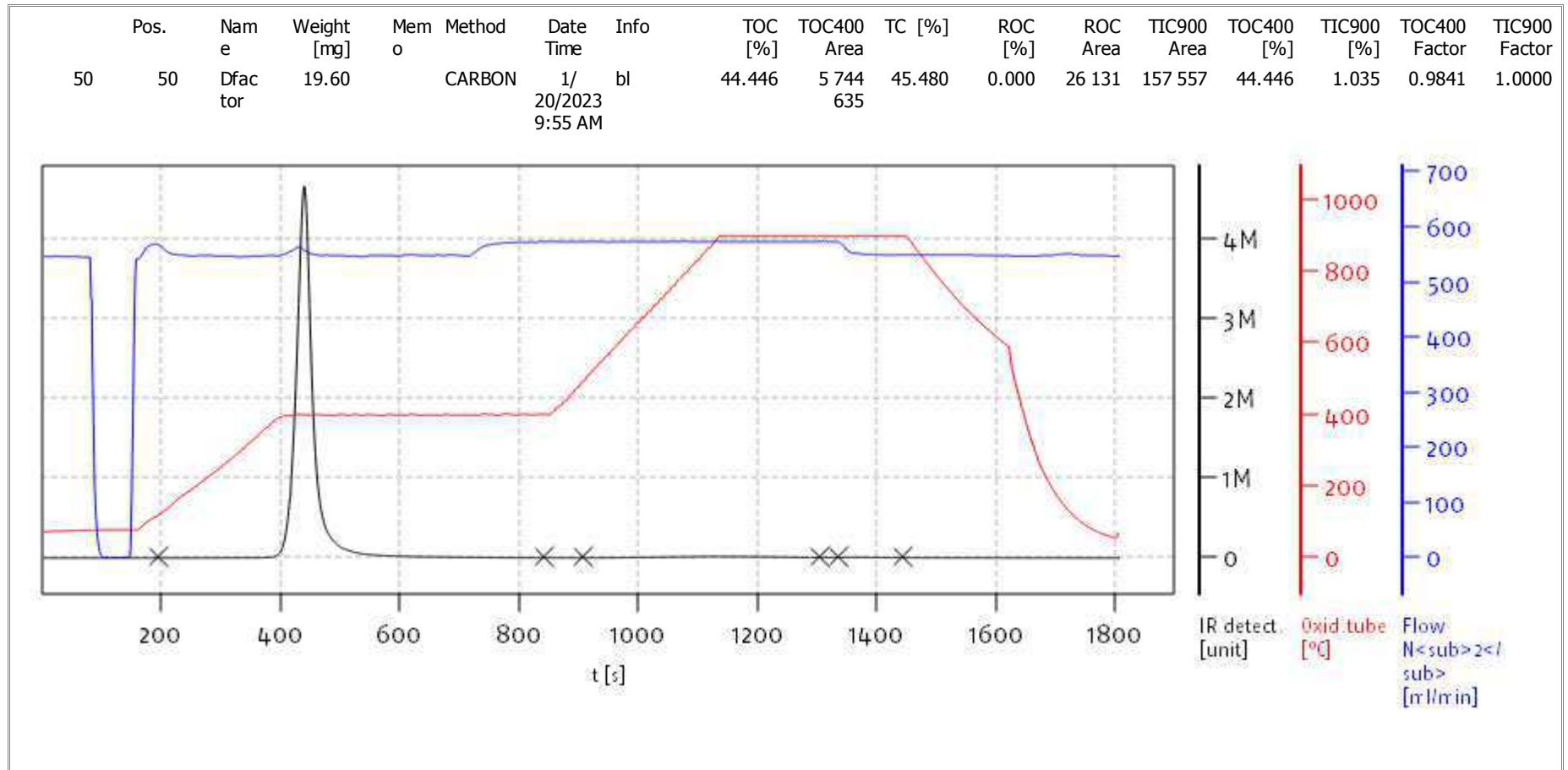
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

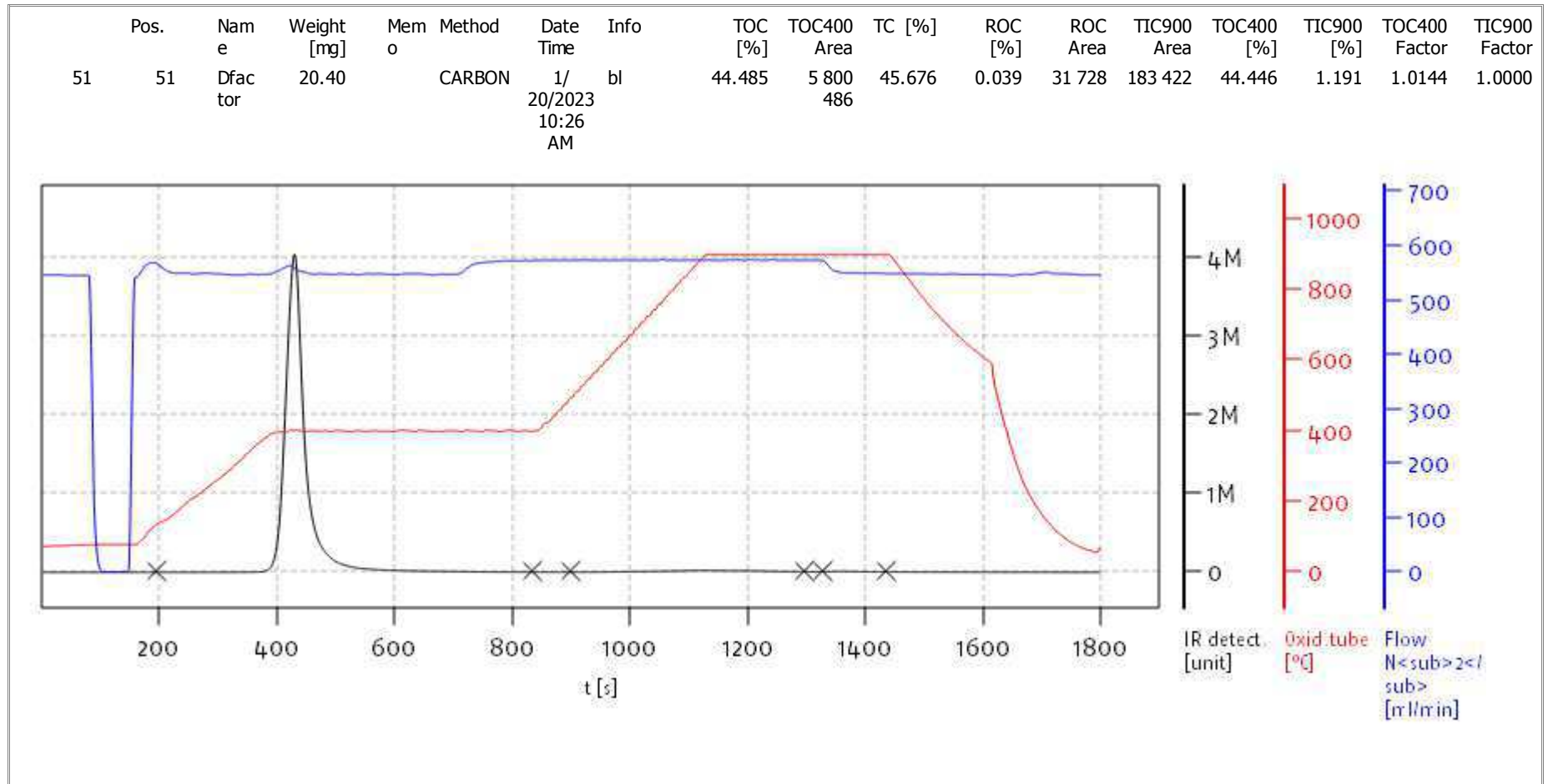
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

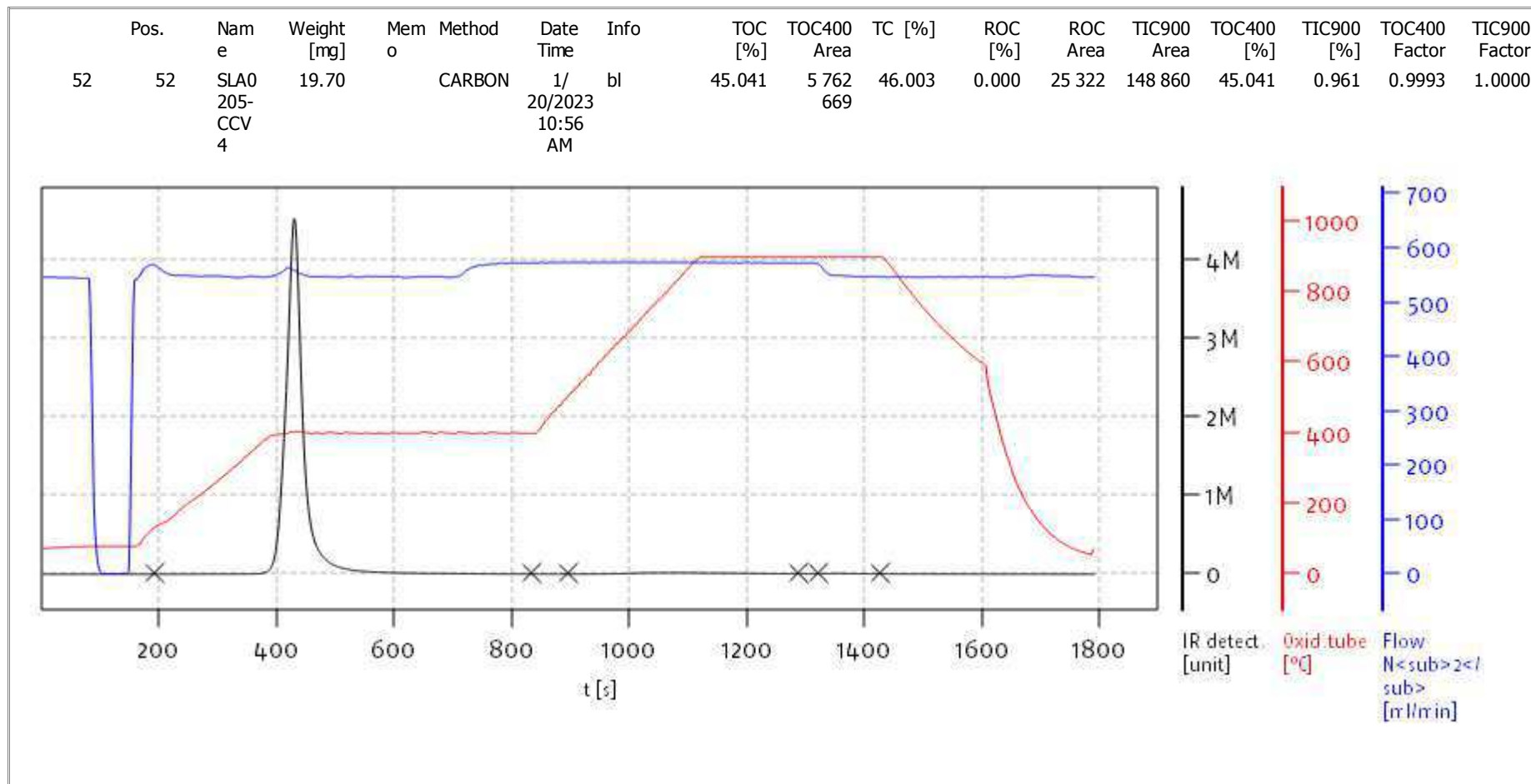
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

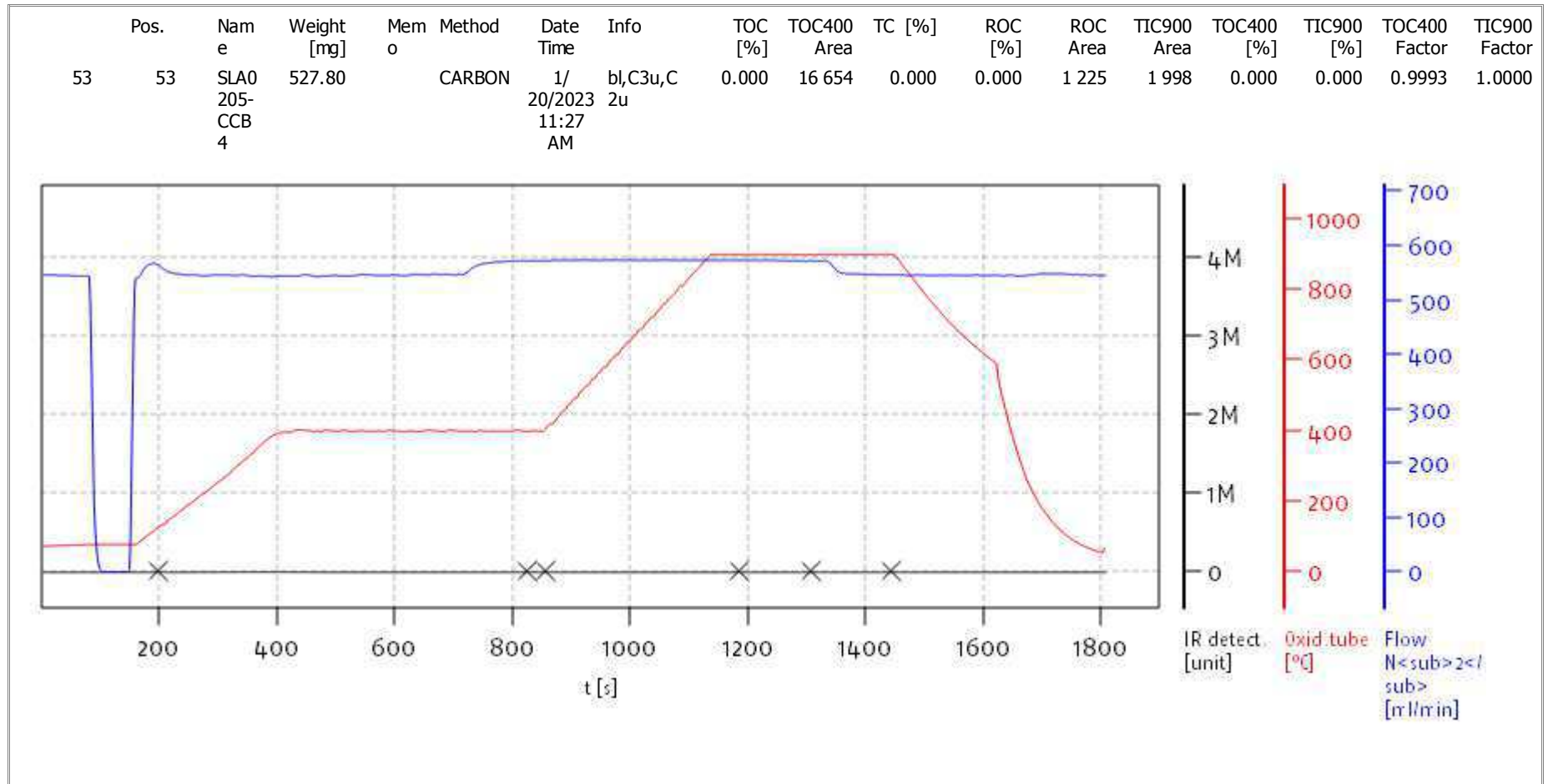
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

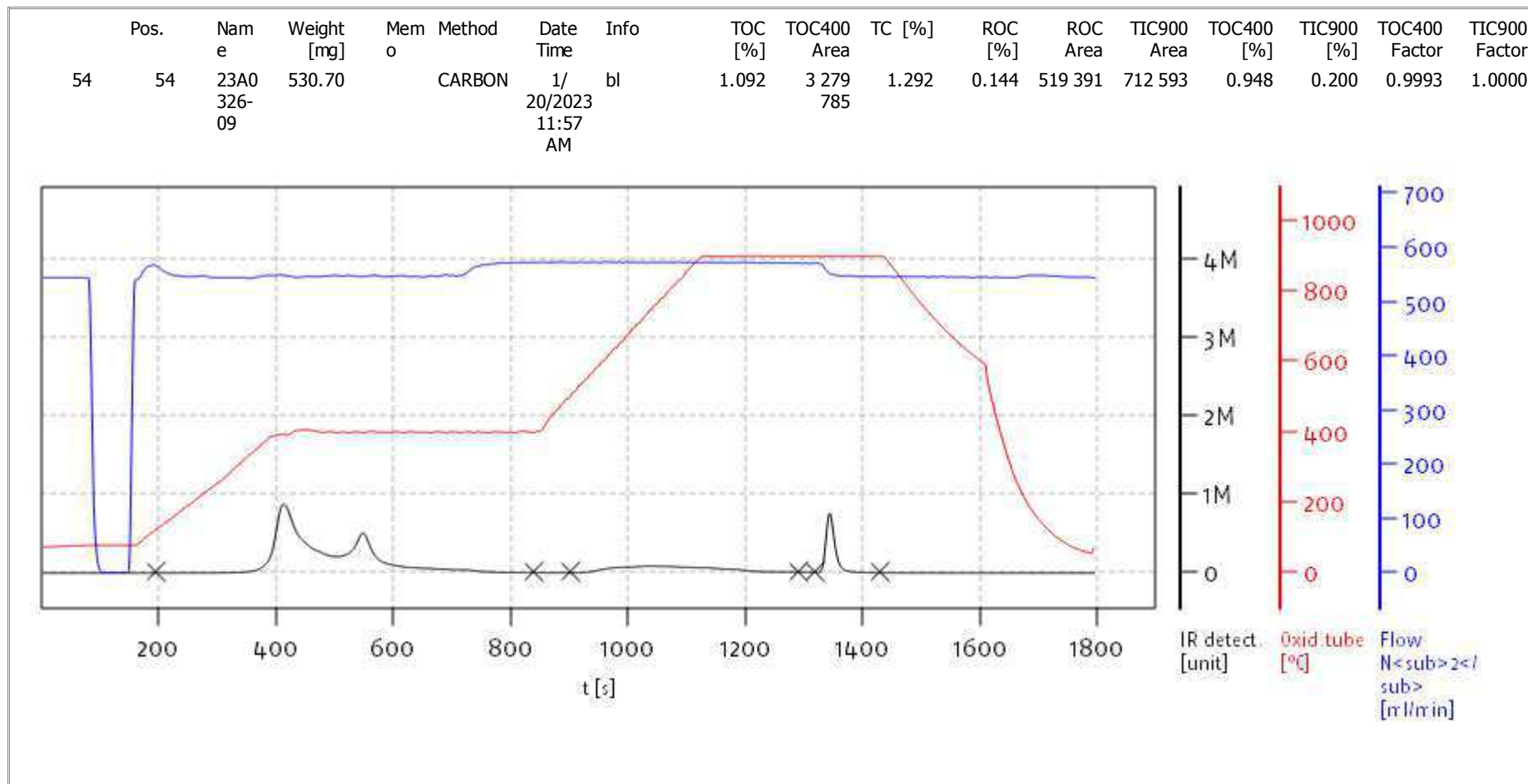
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

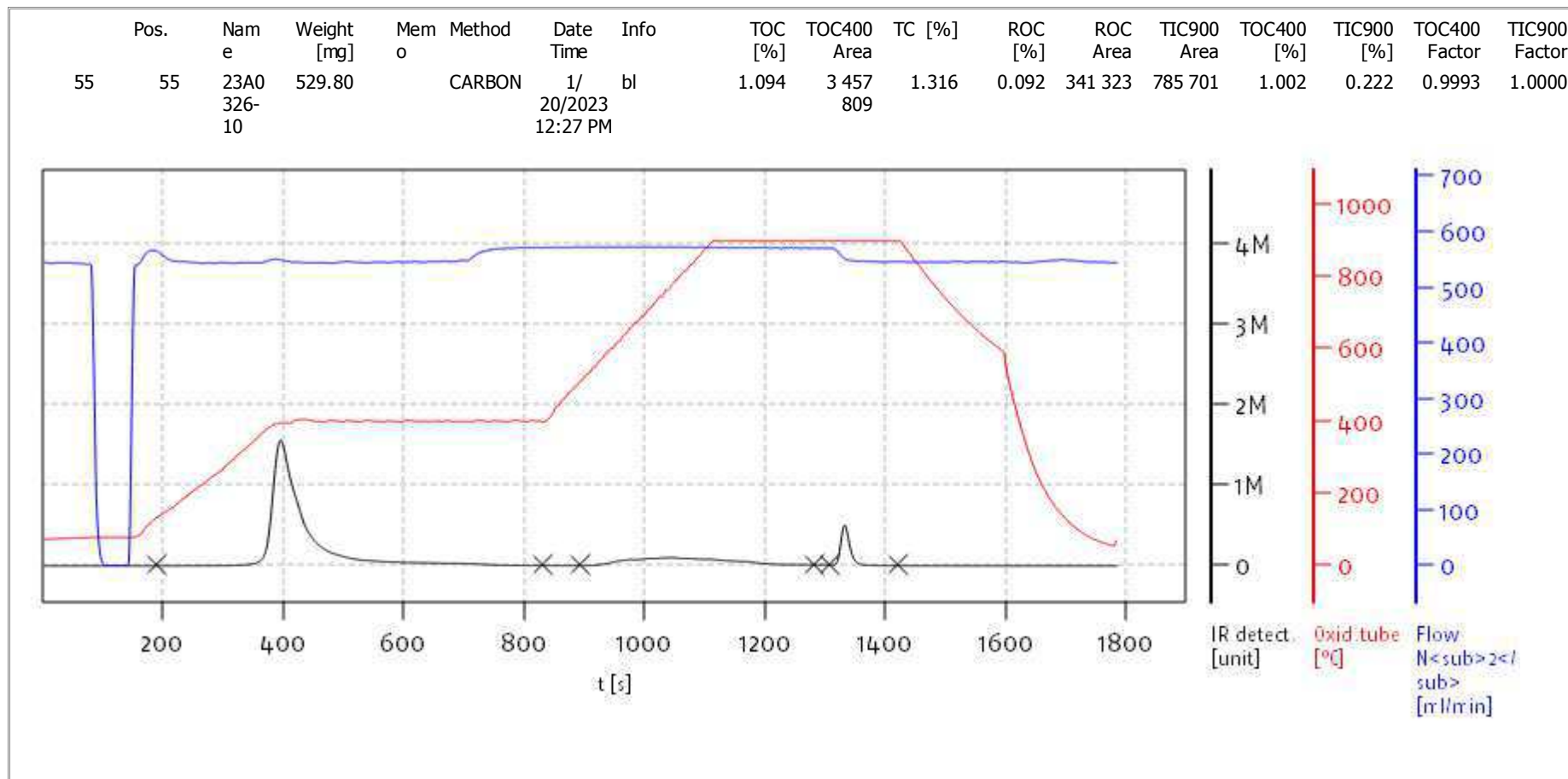
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

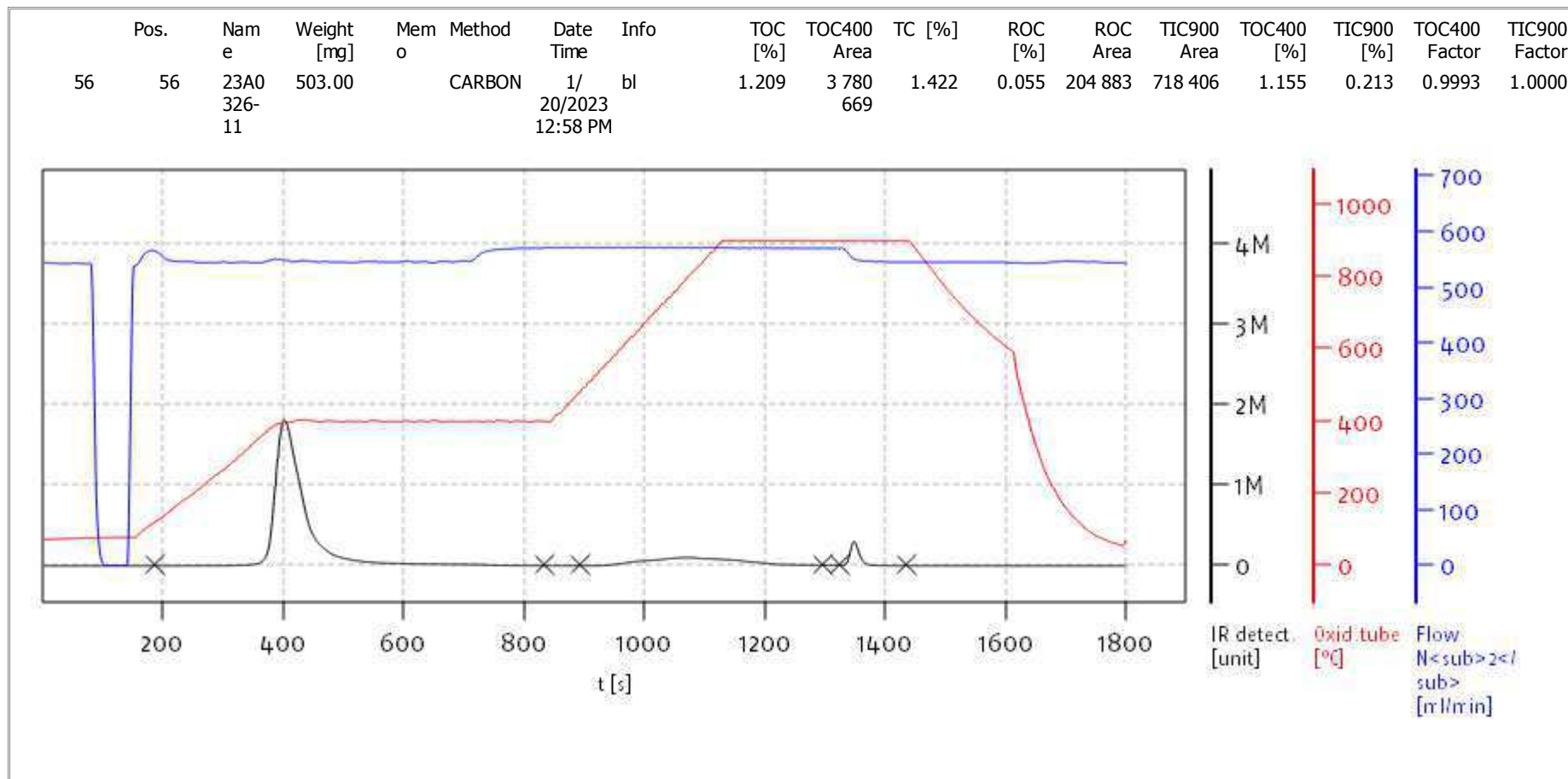
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

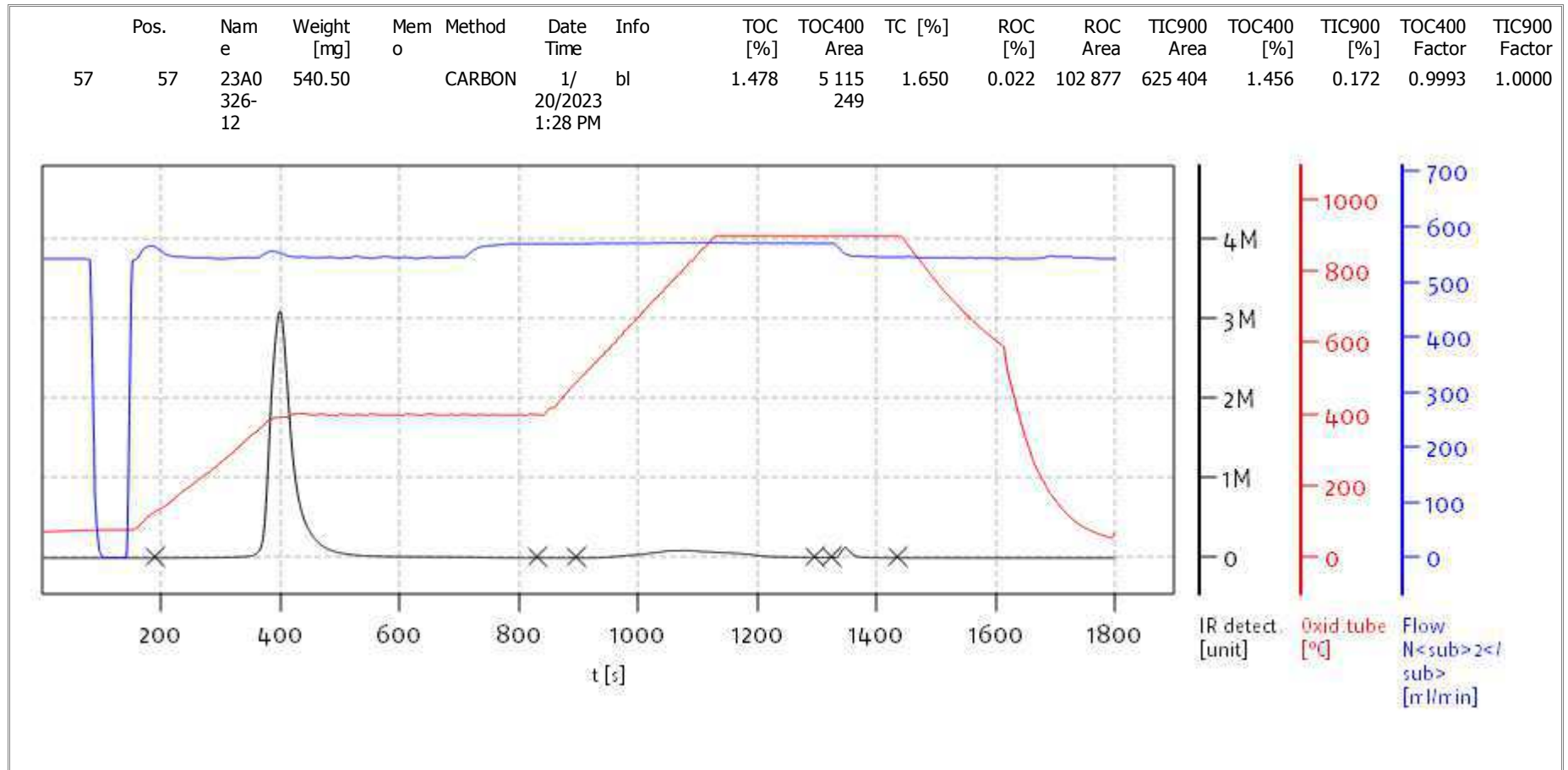
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

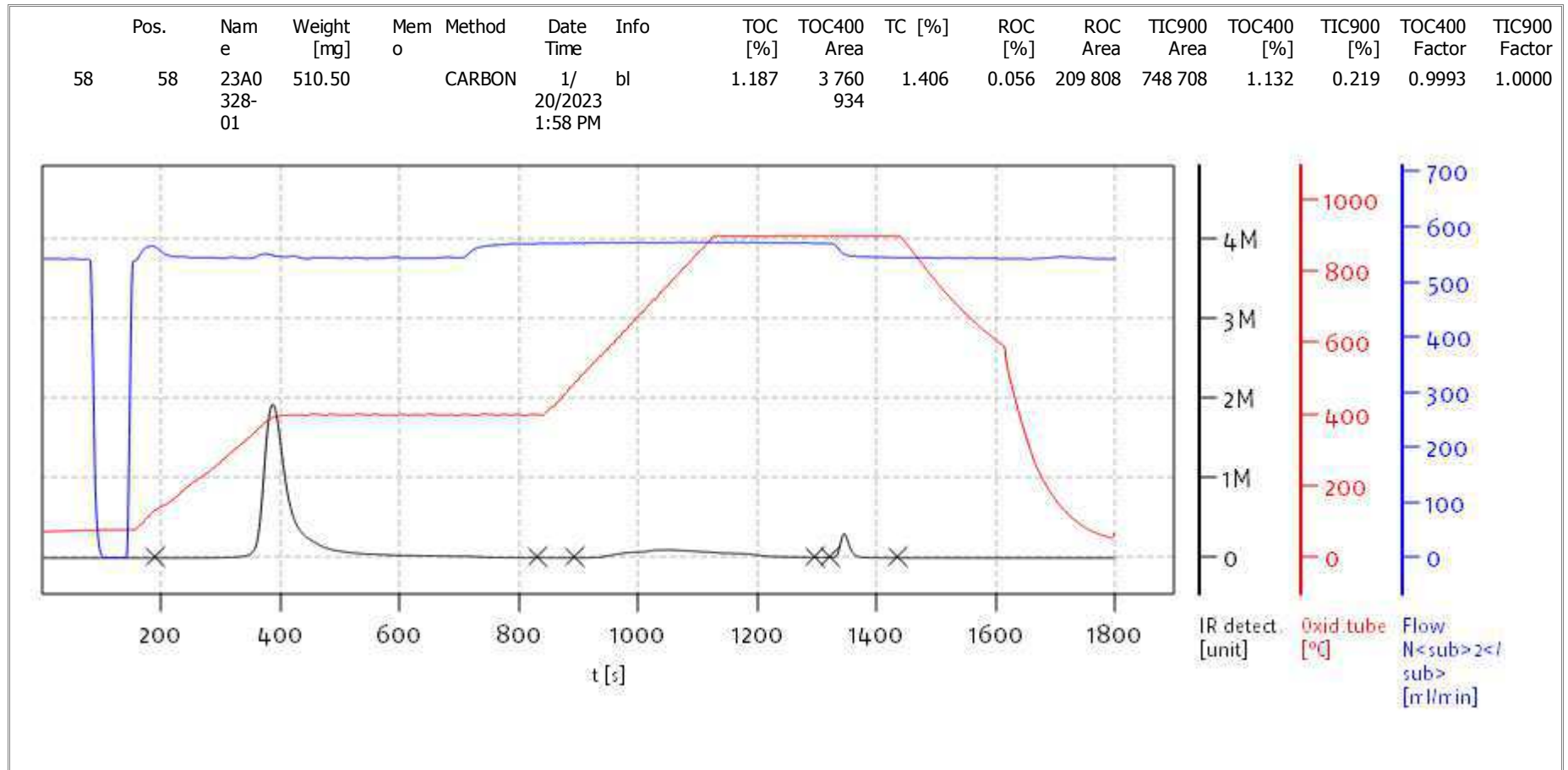
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

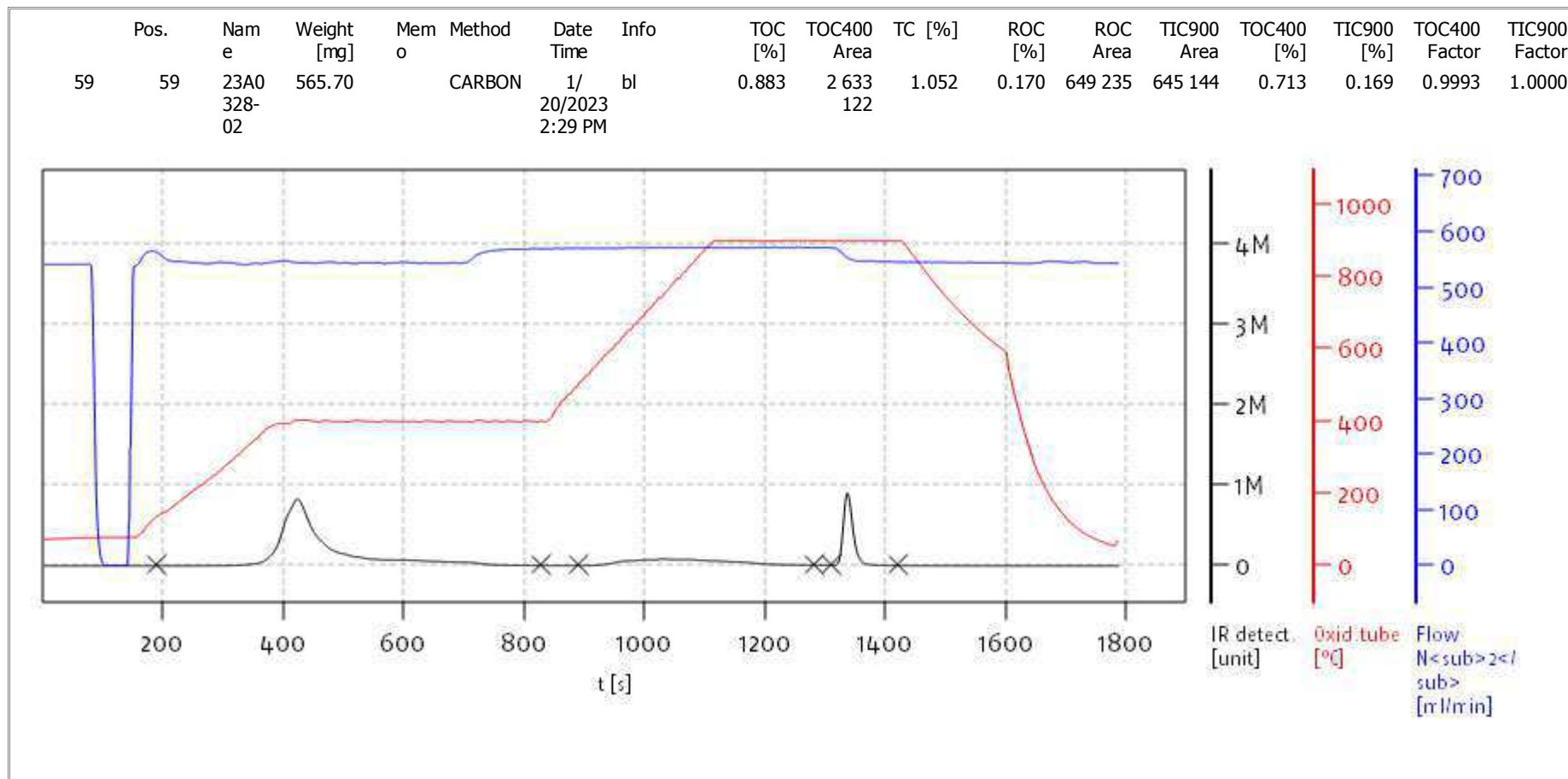
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

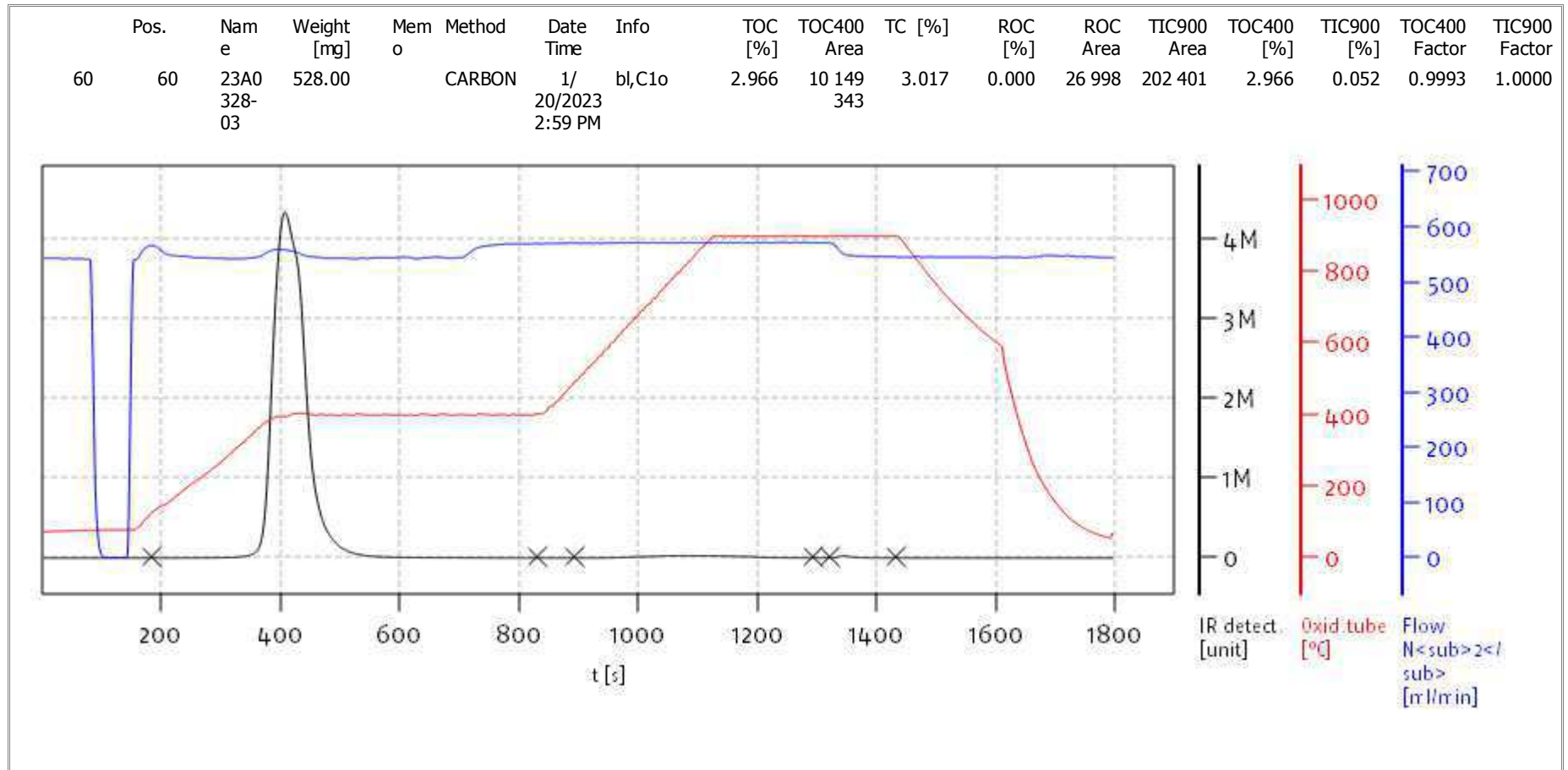
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

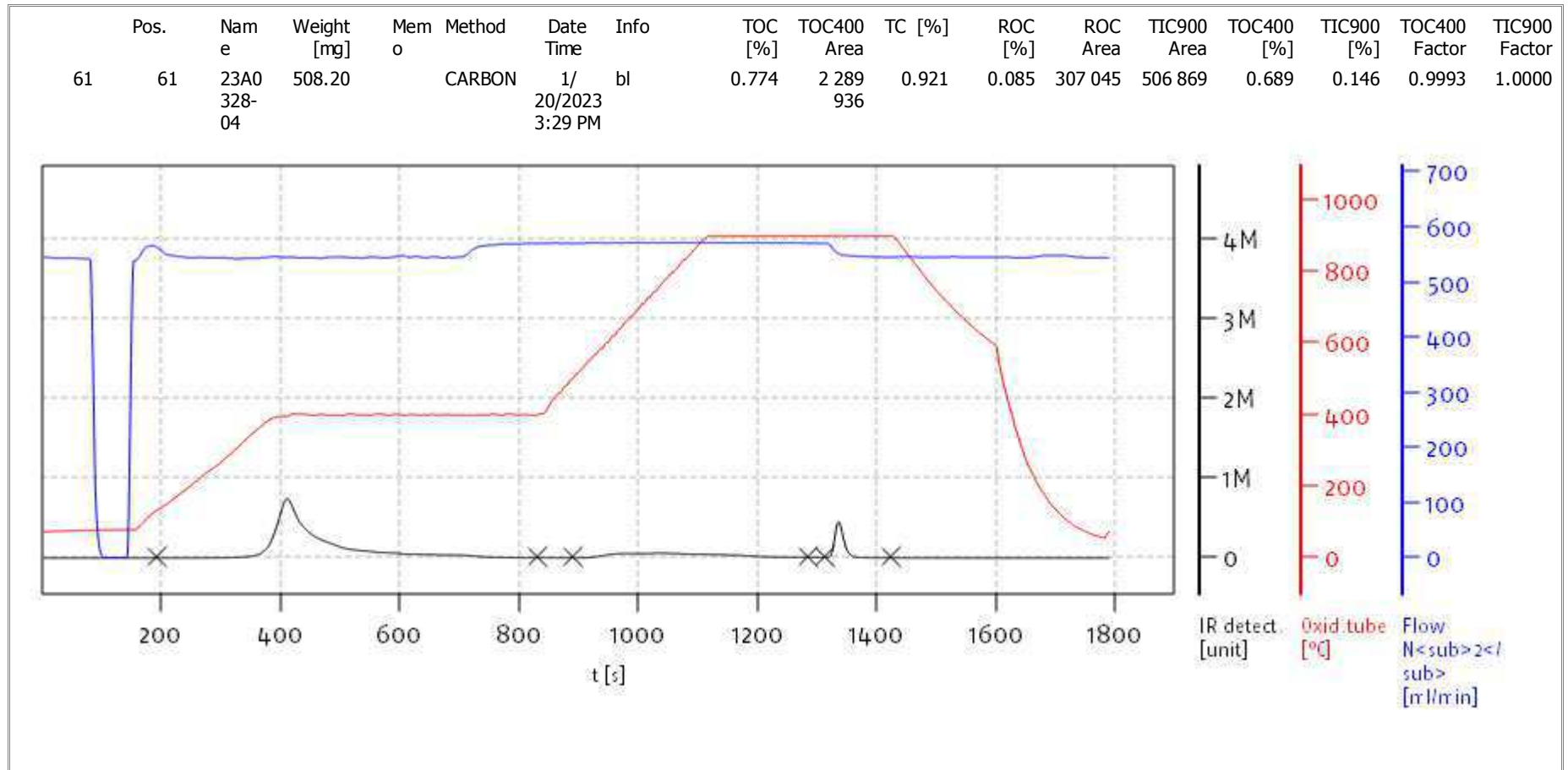
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

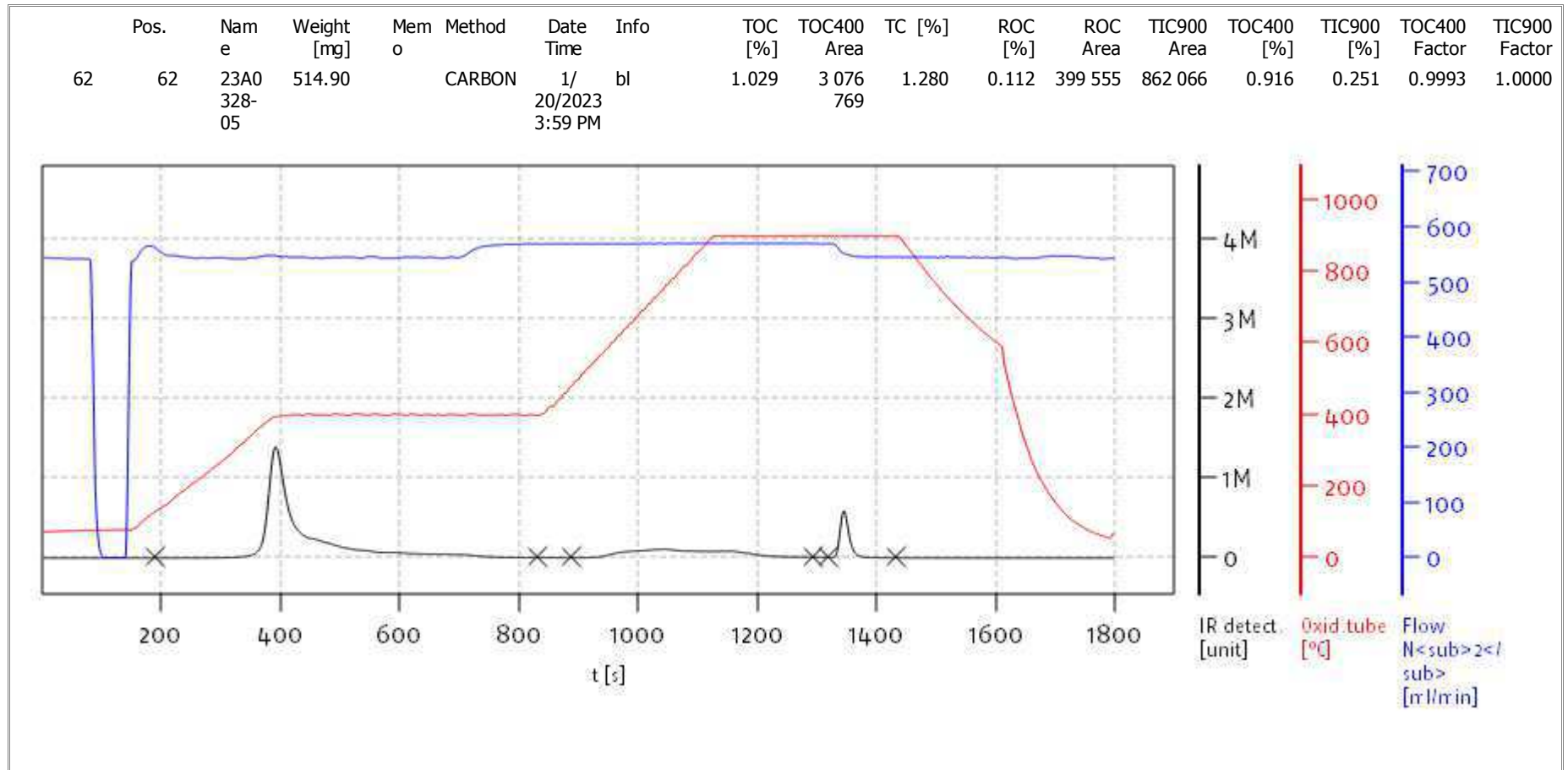
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

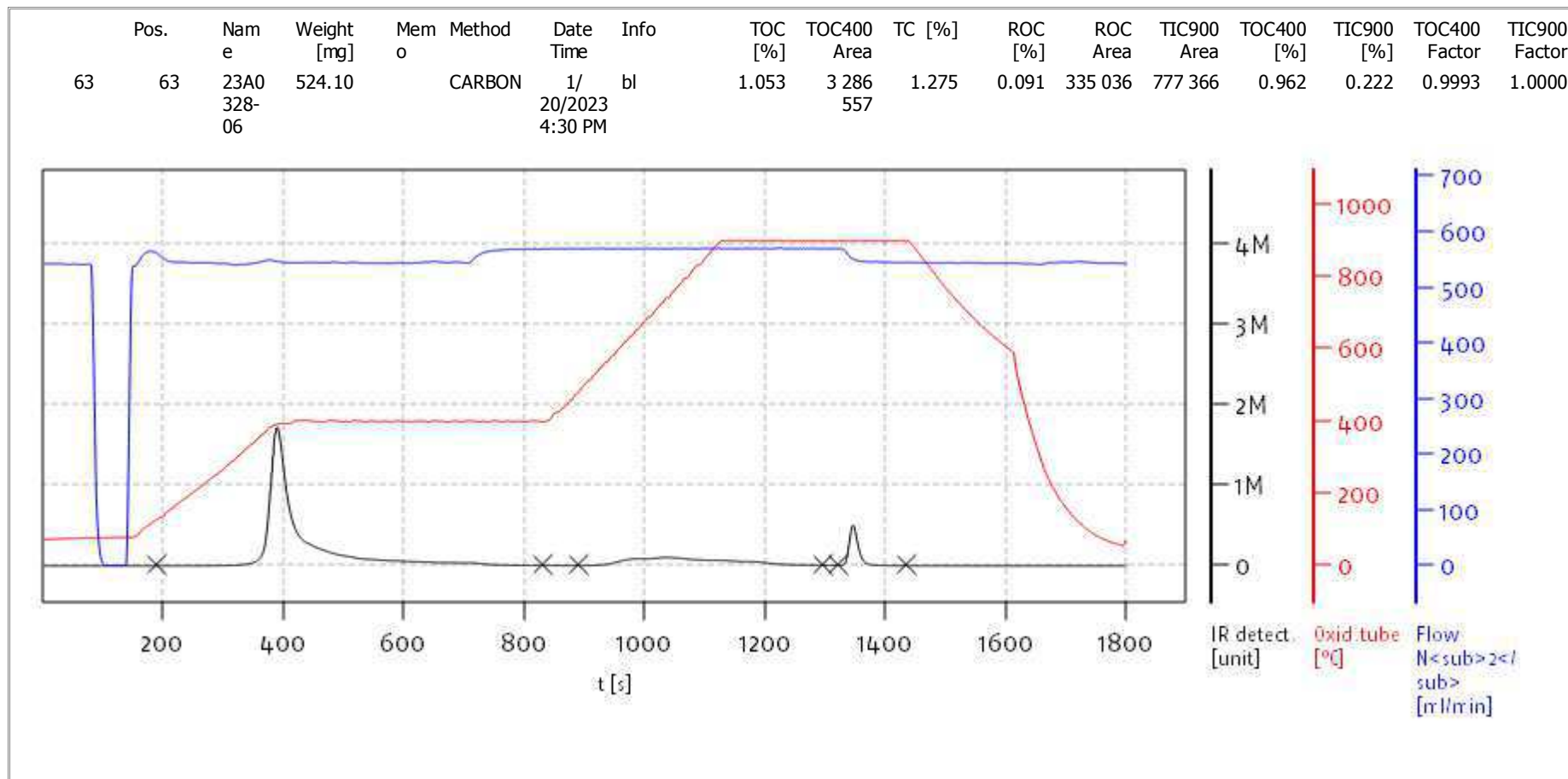
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

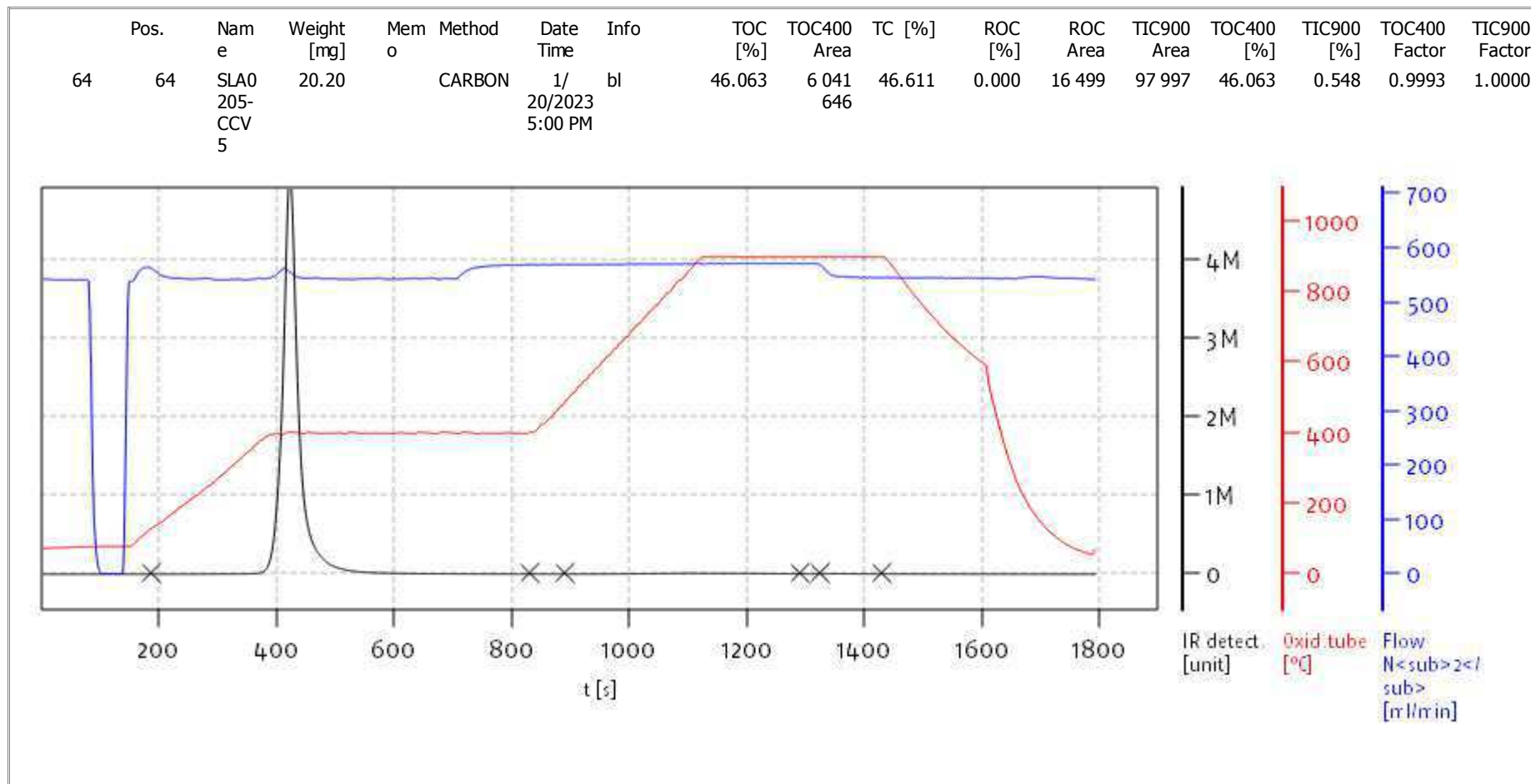
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

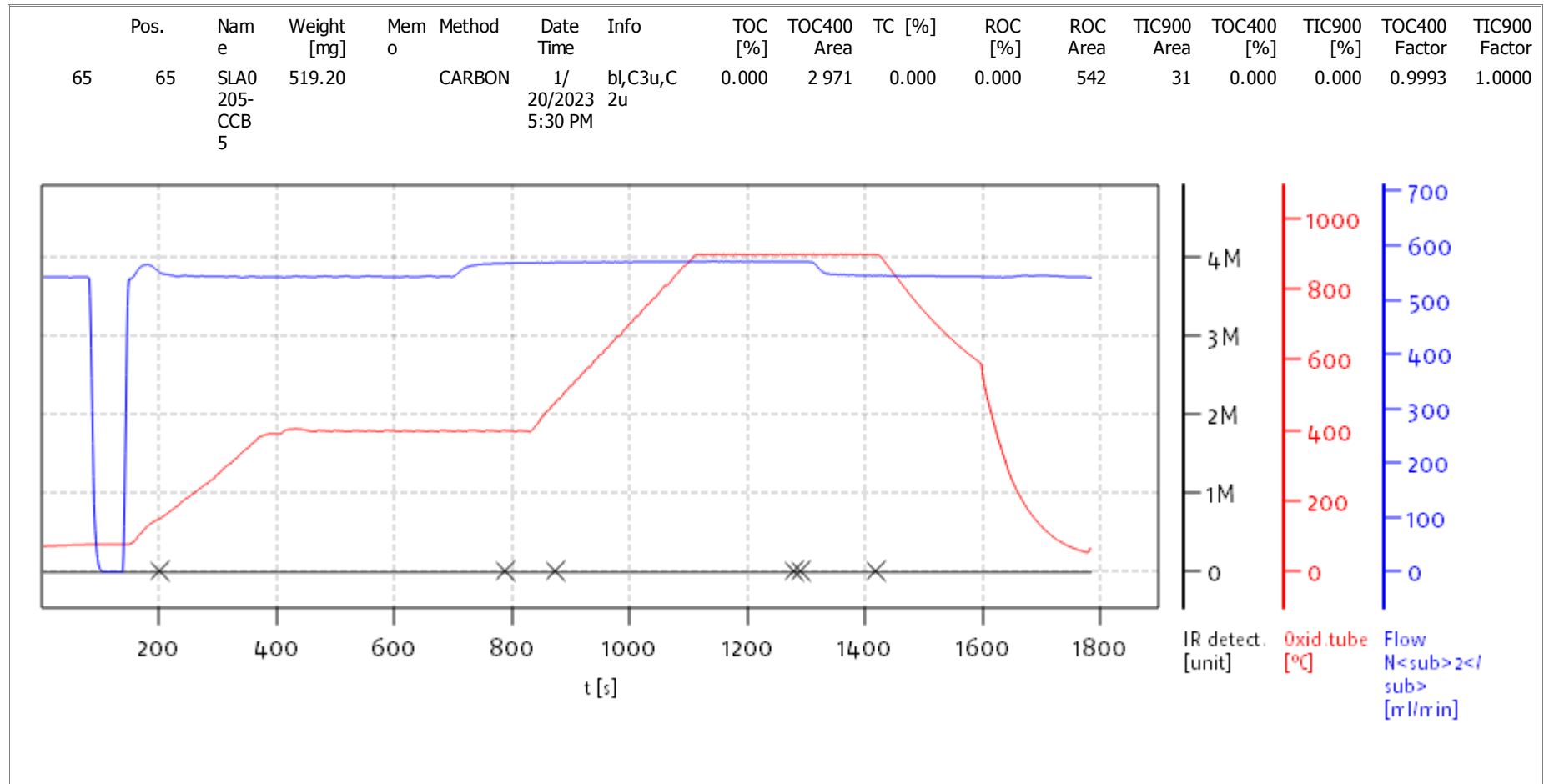
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

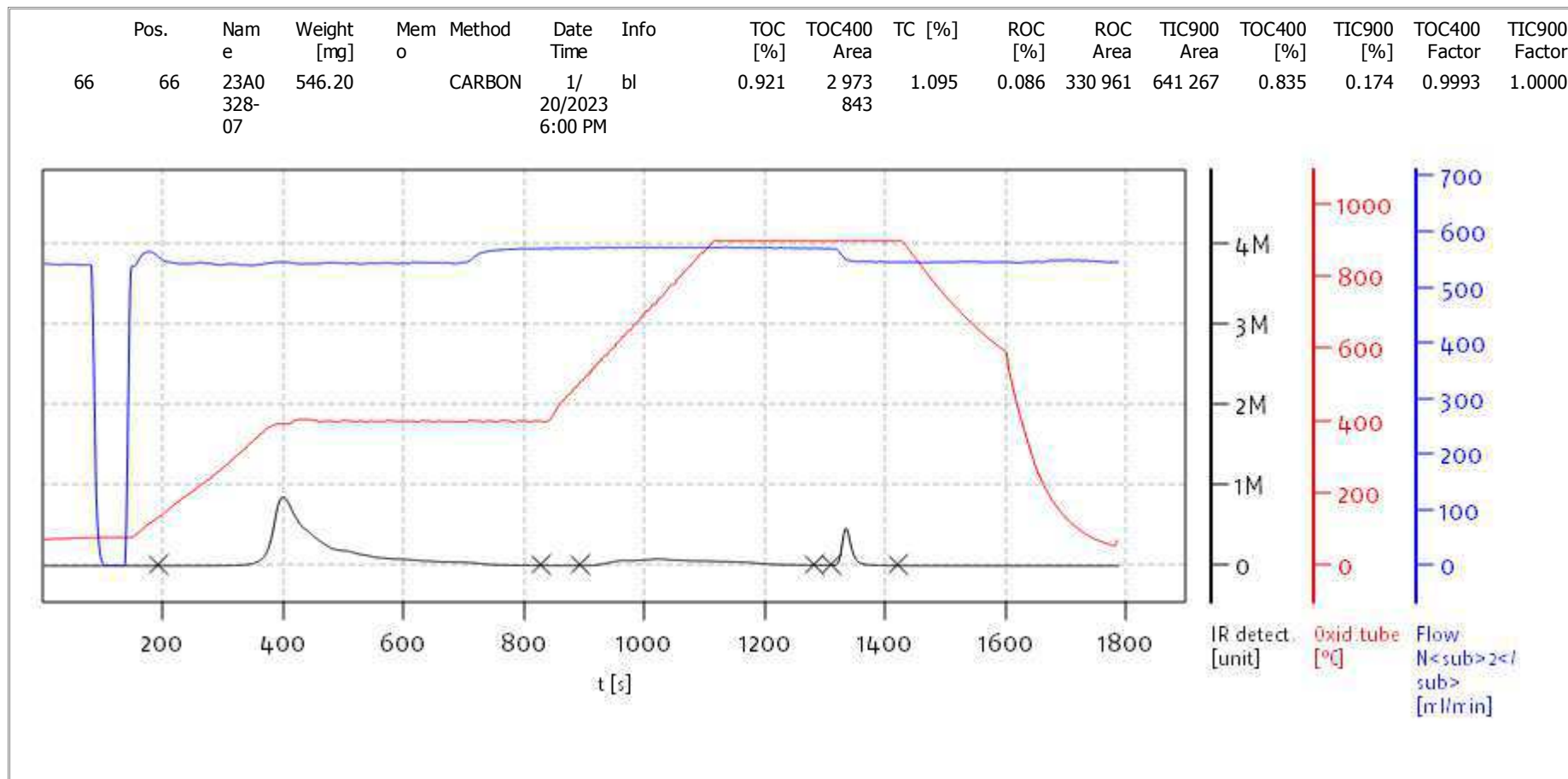
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

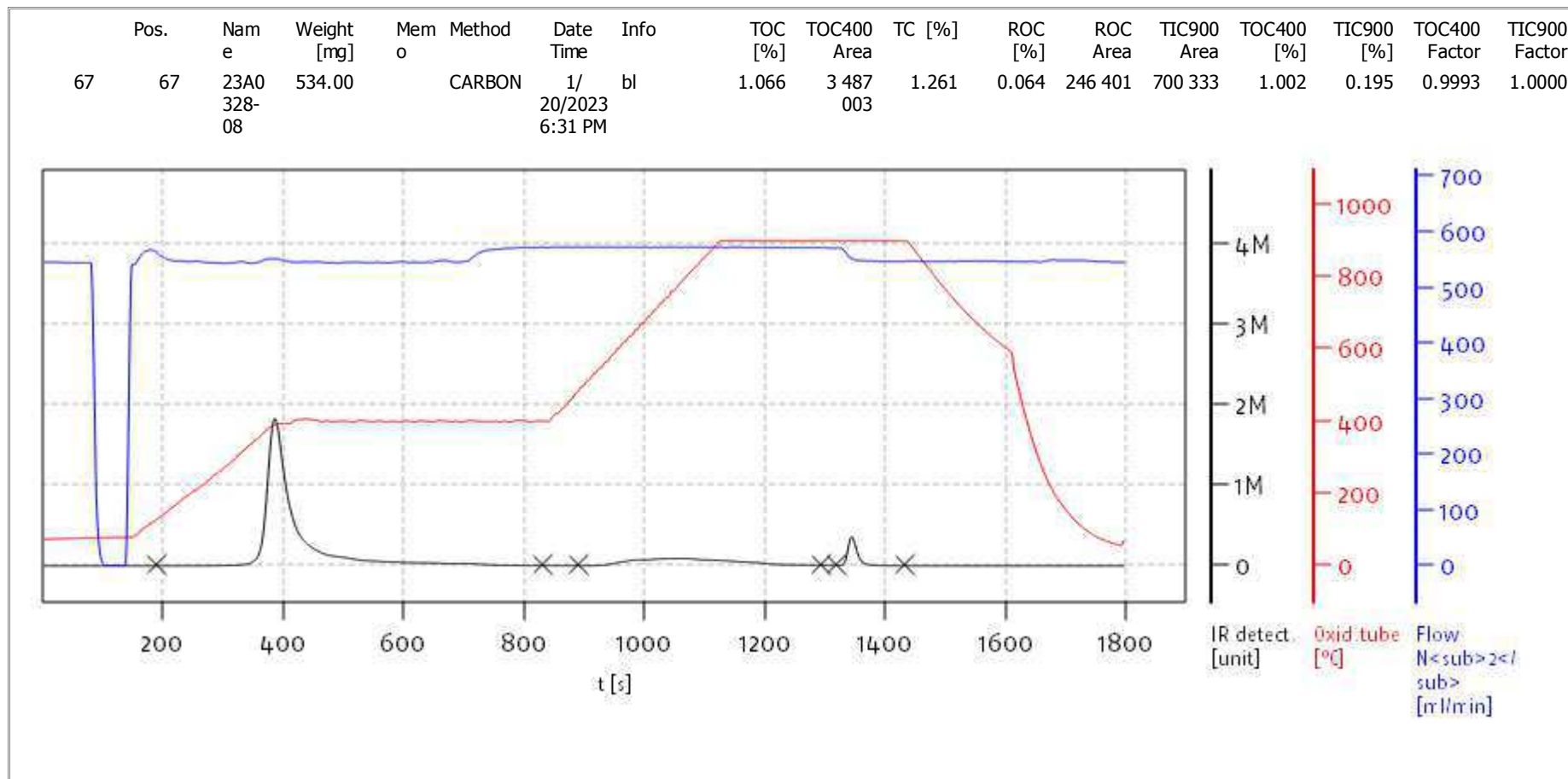
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

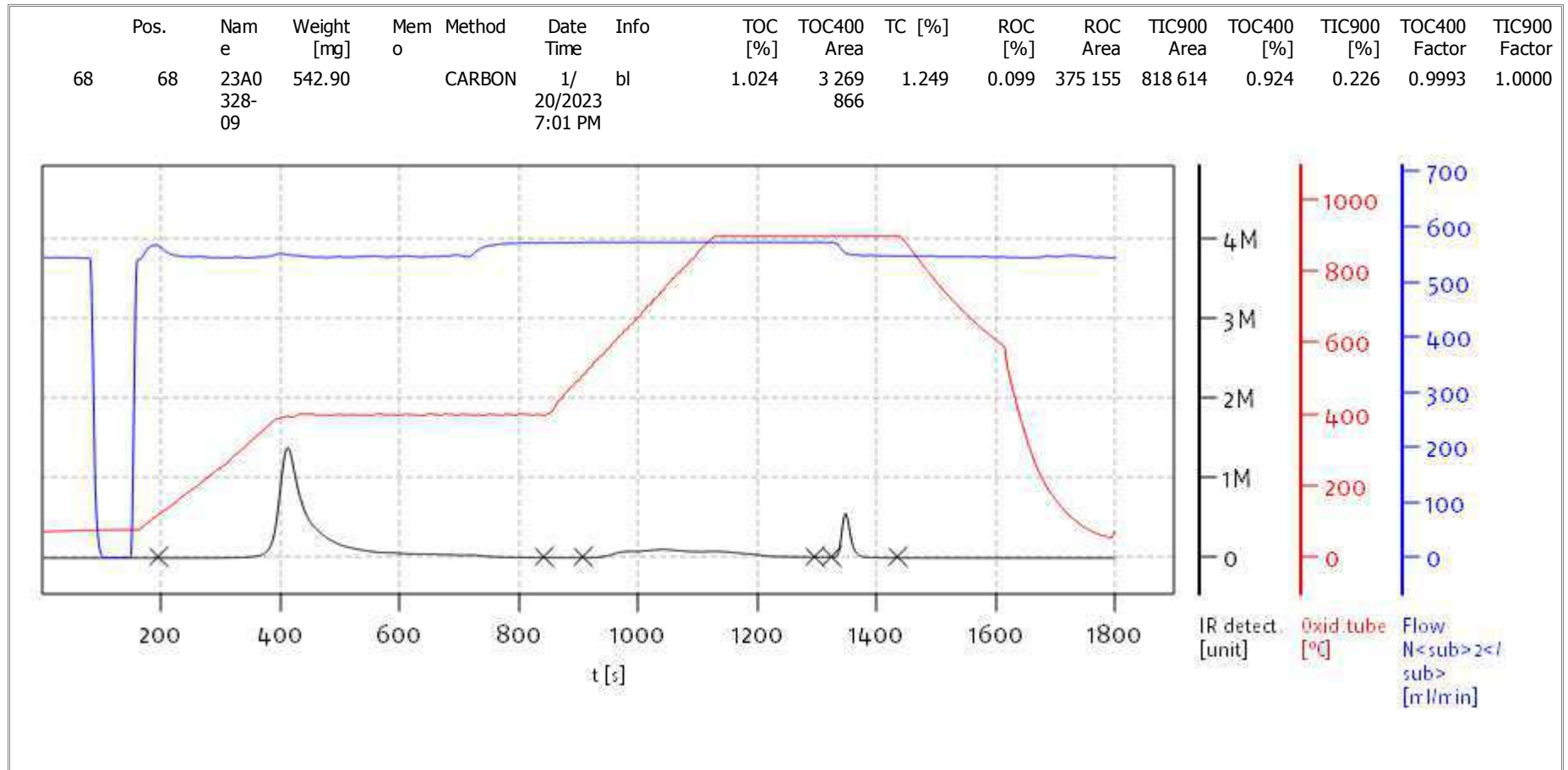
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

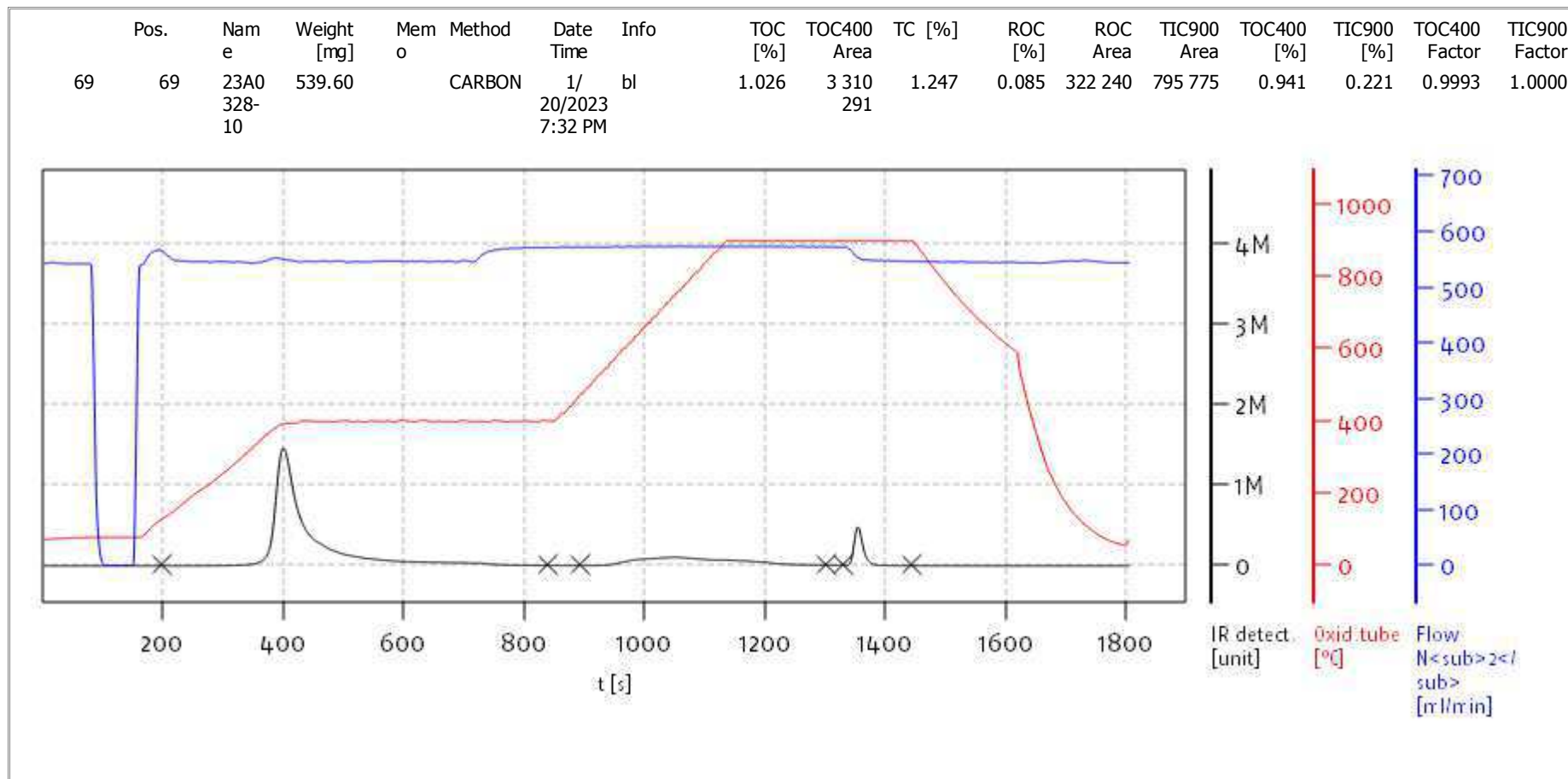
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

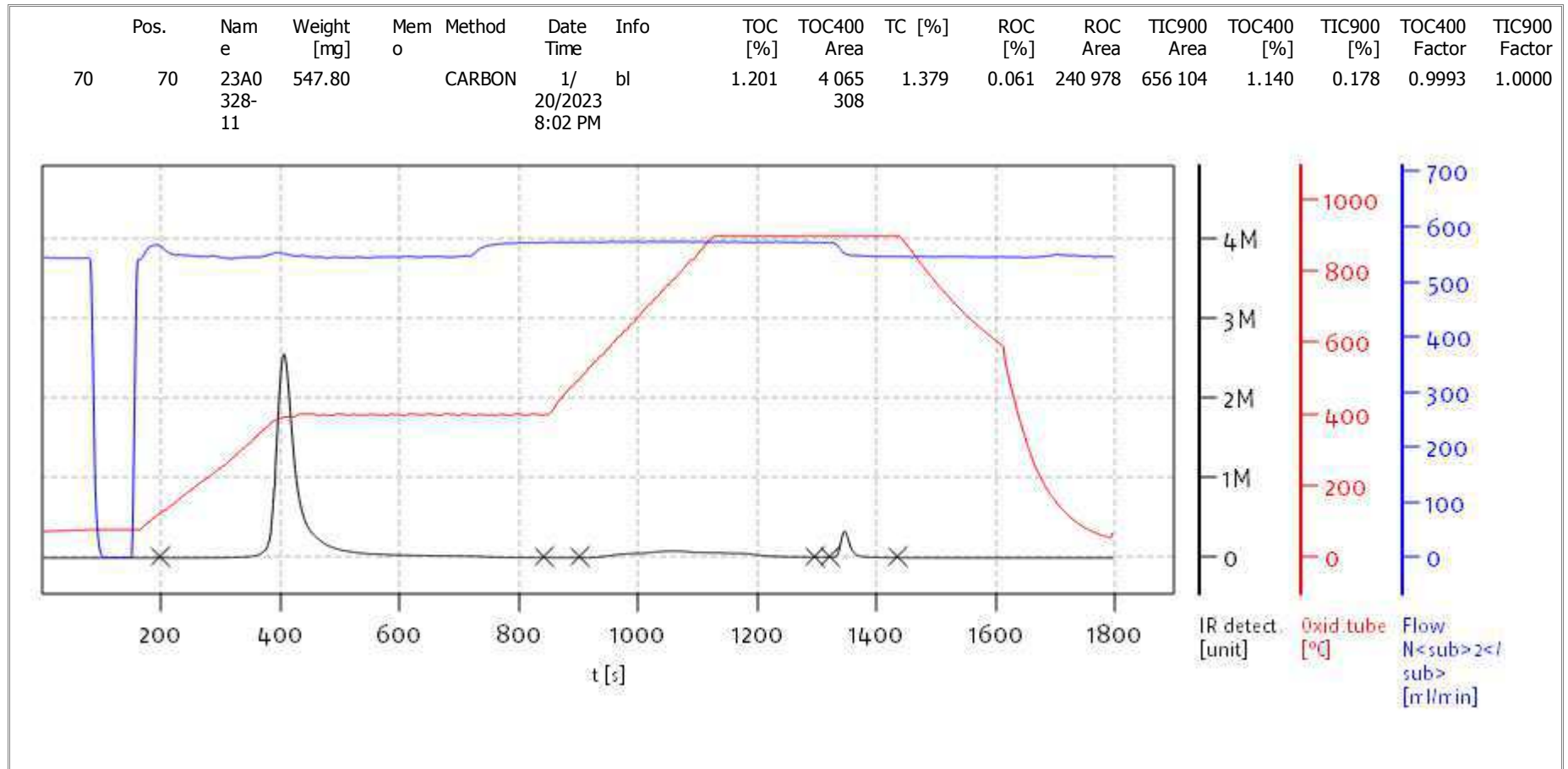
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

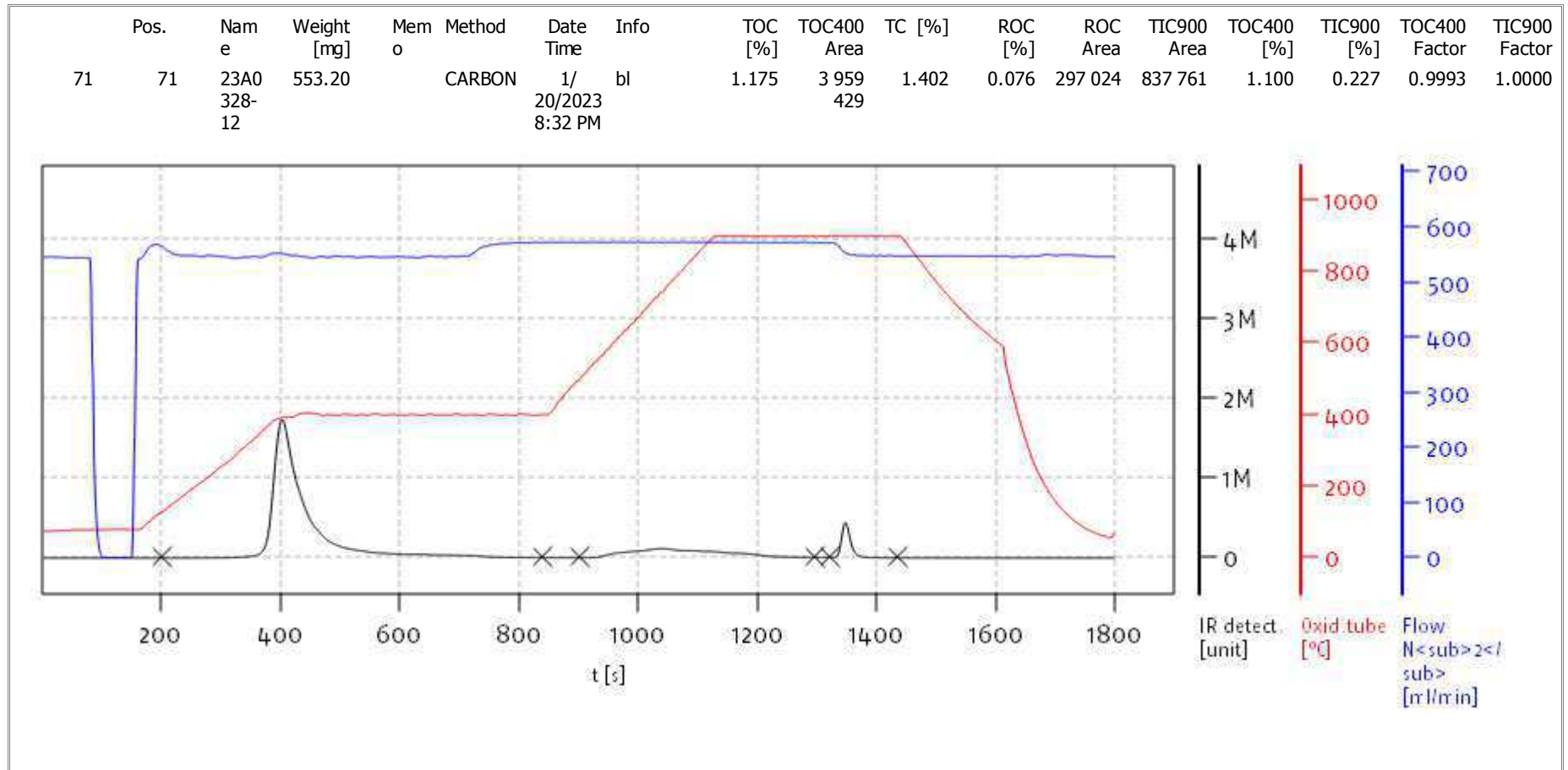
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

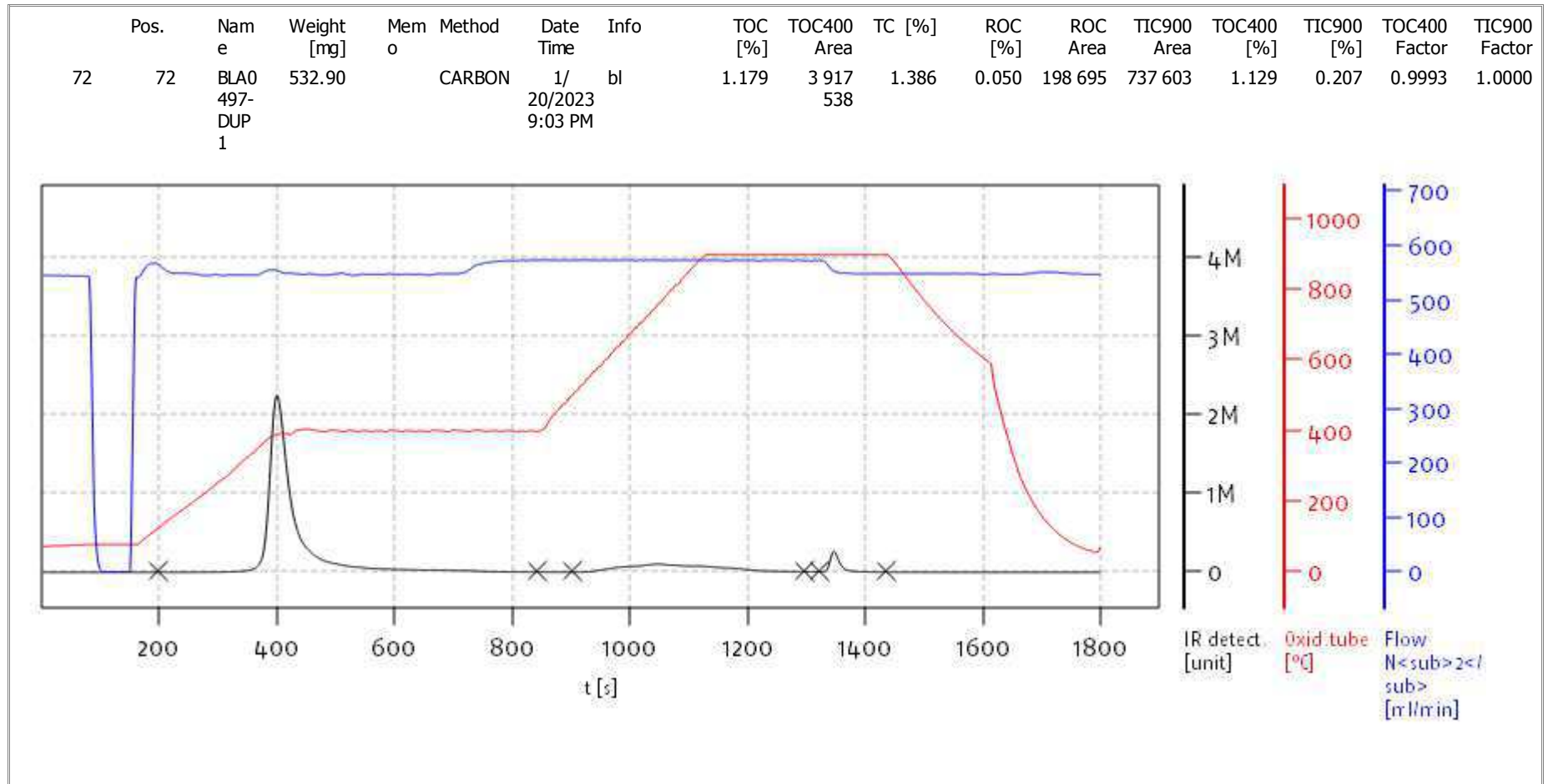
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

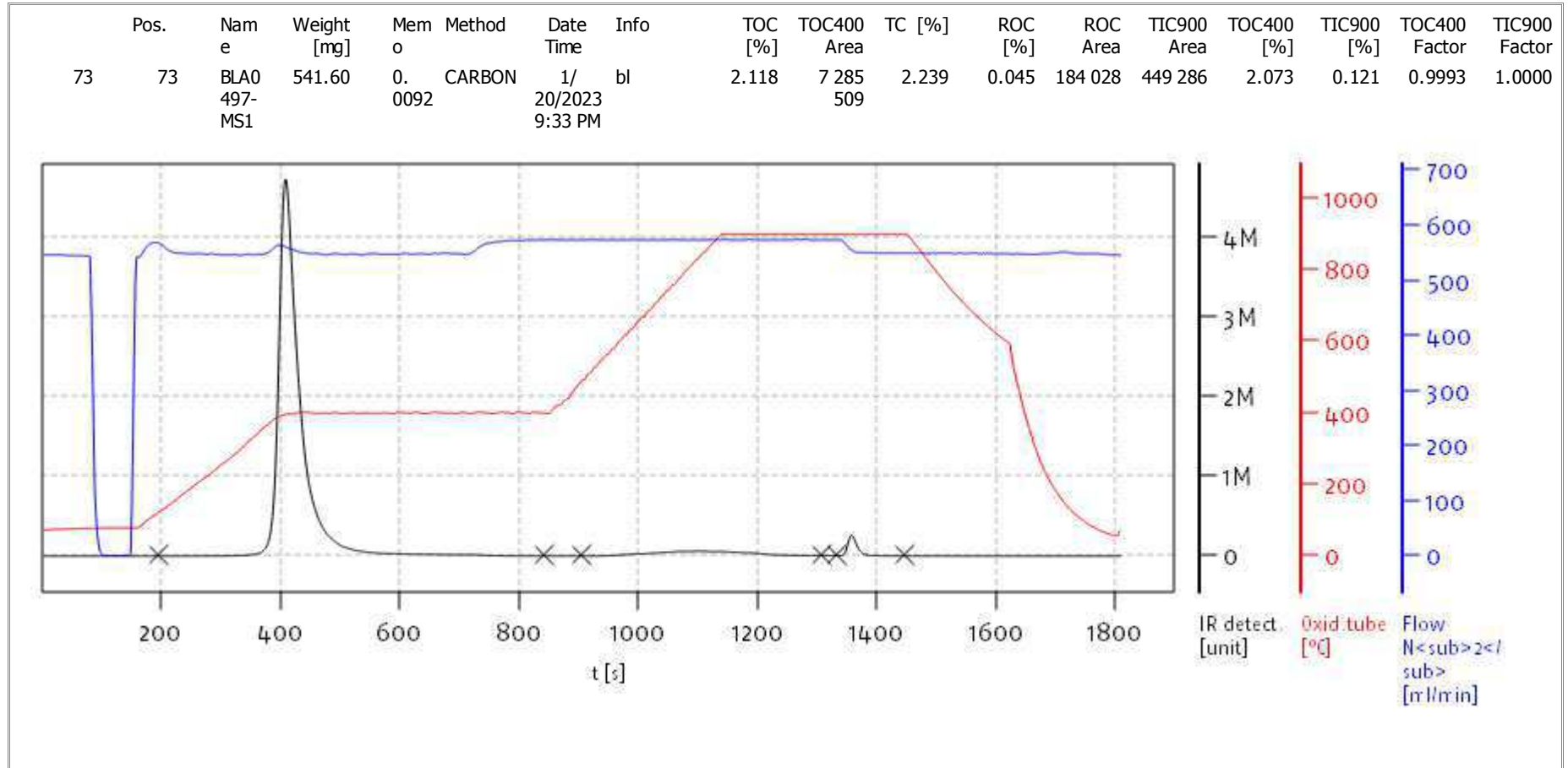
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

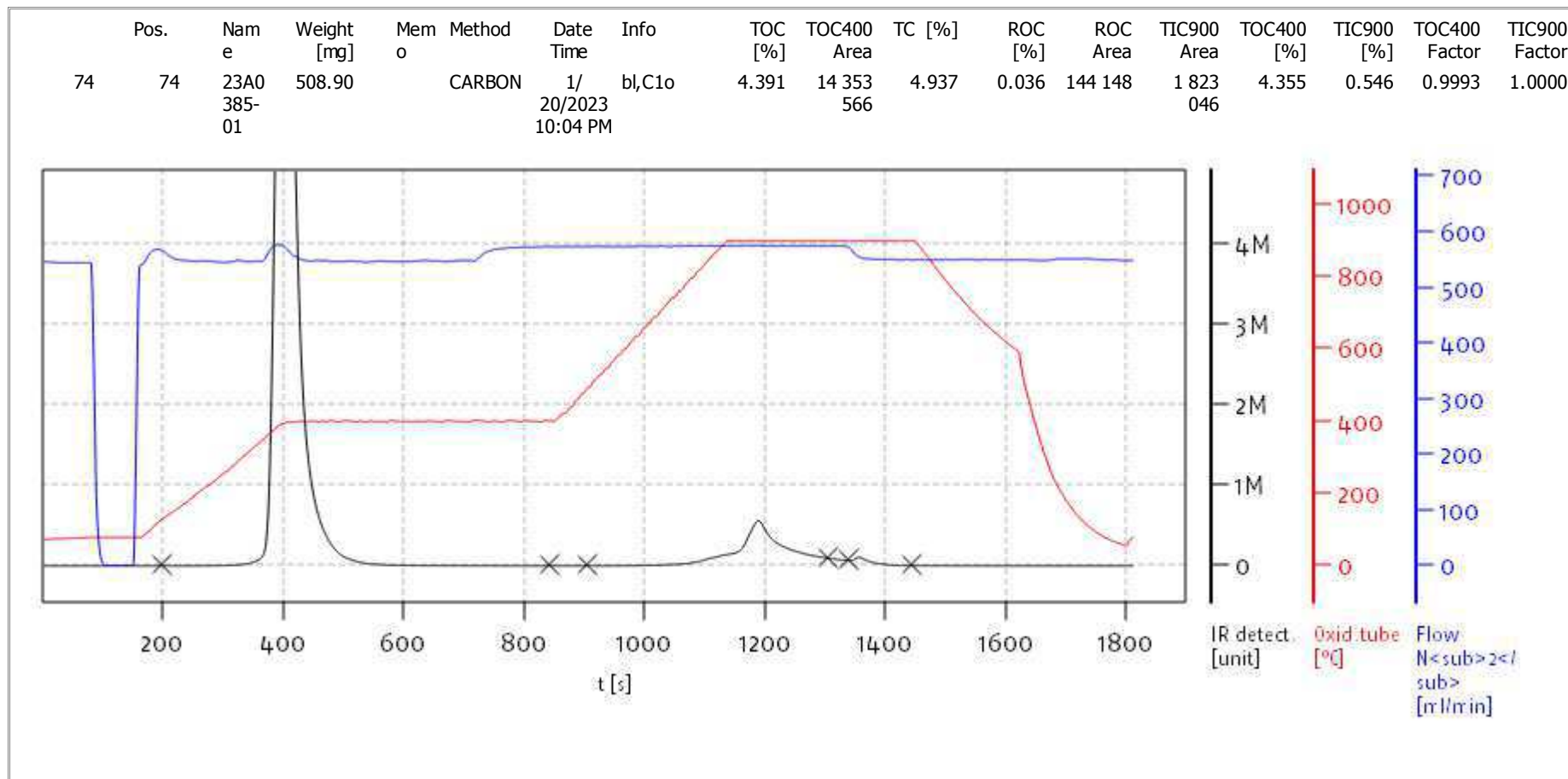
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

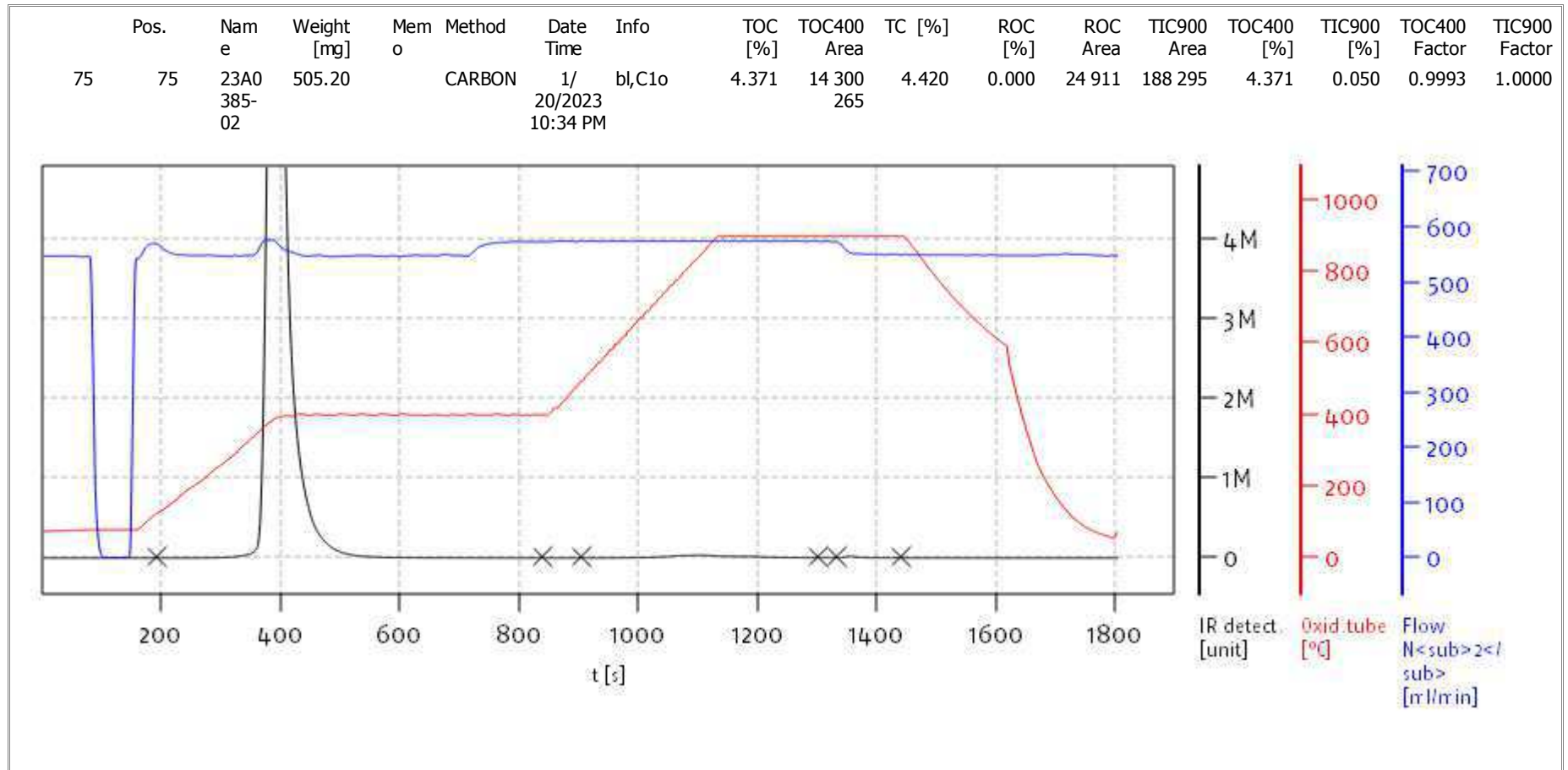
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

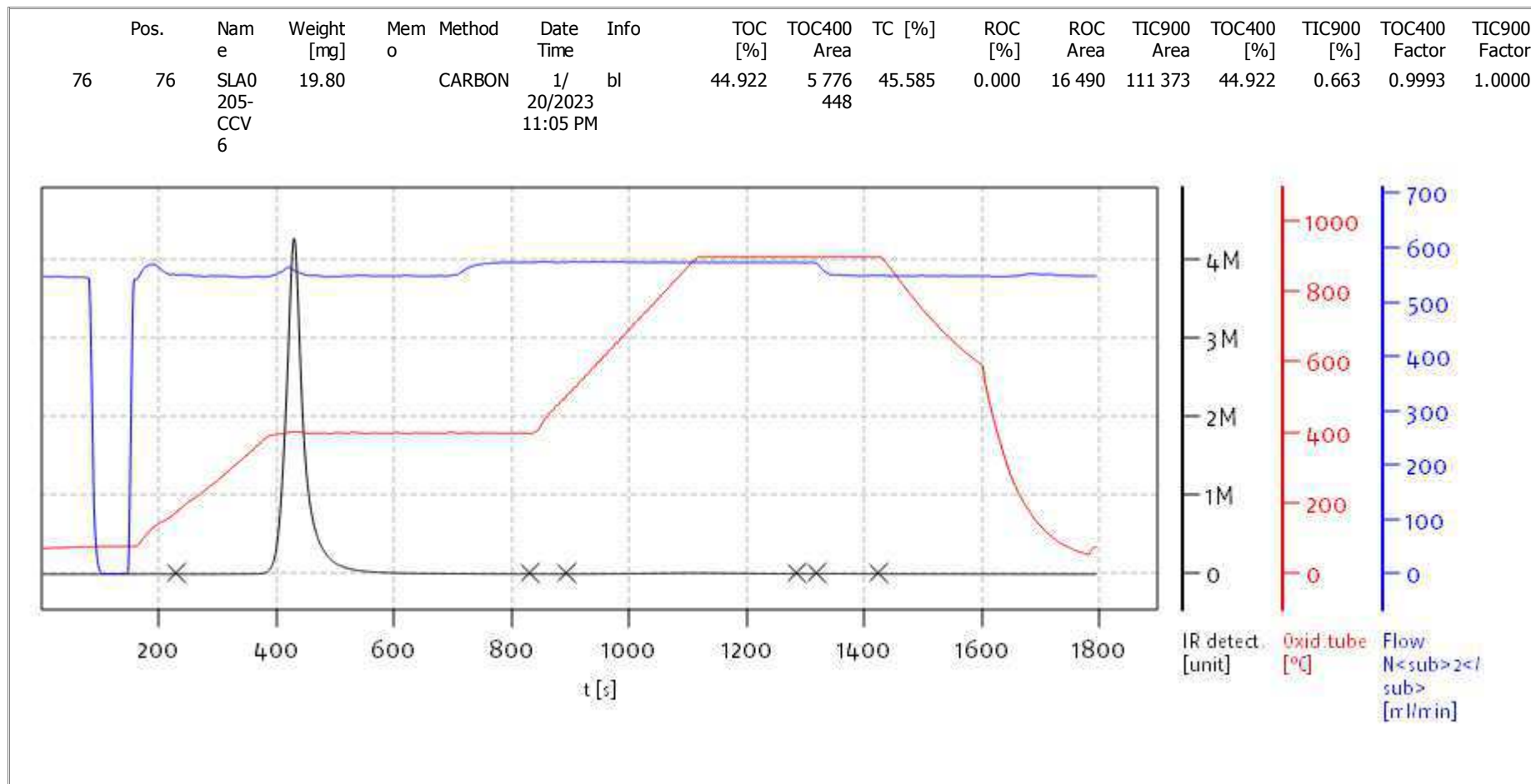
Access: soliTOC superuser

Date: Sat Jan 21 16:51:39 2023



soliTOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

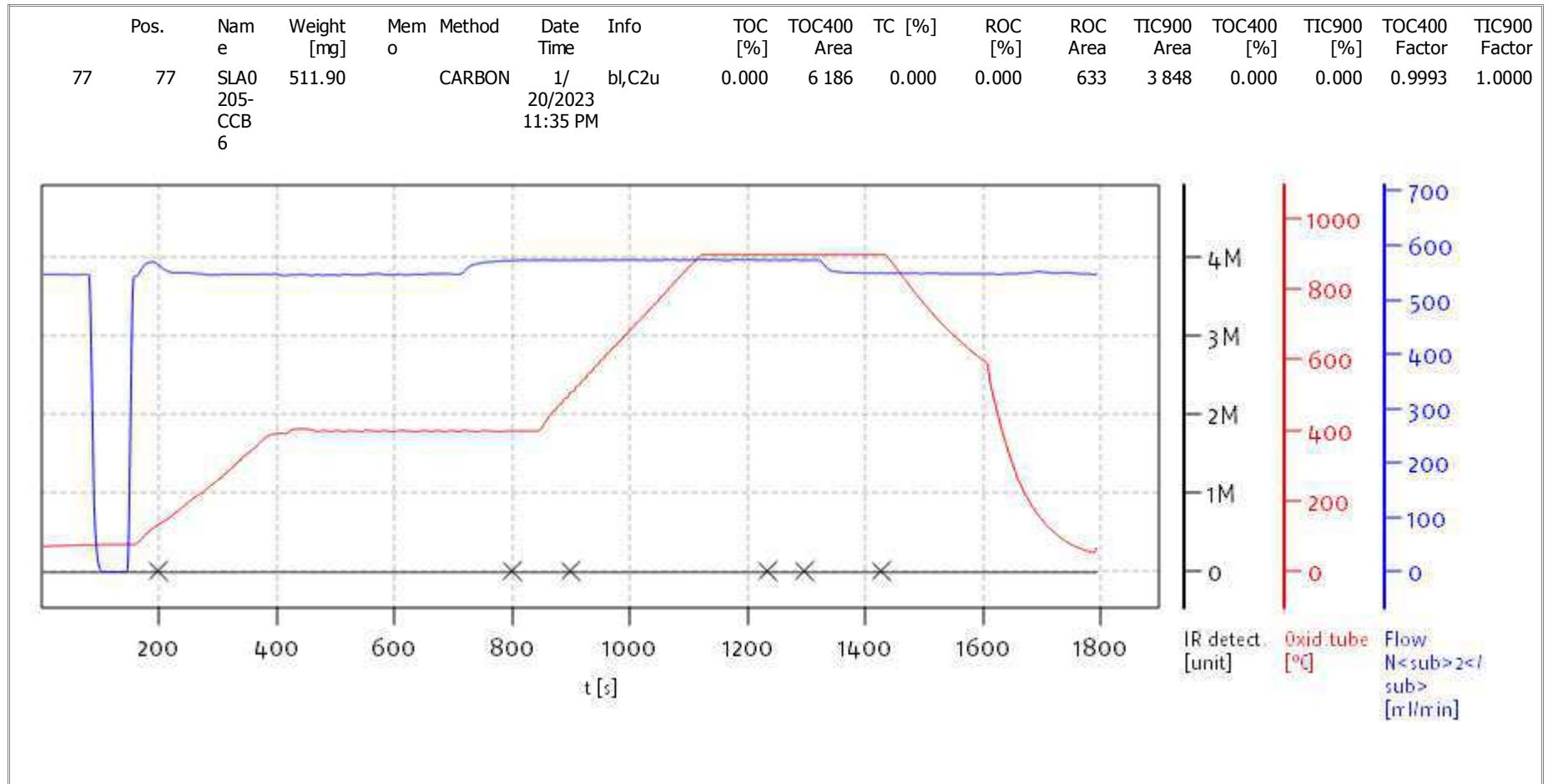
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

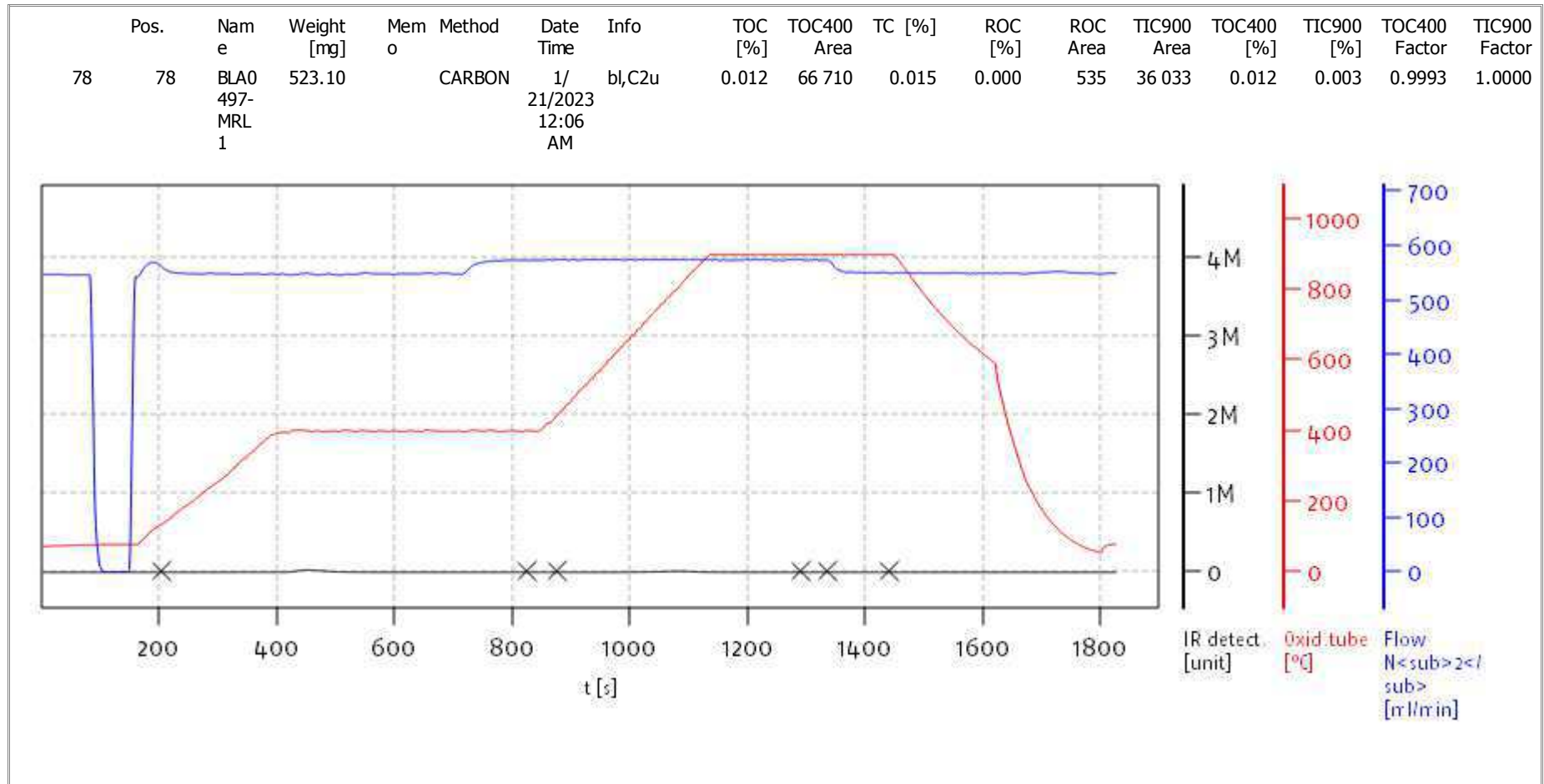
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

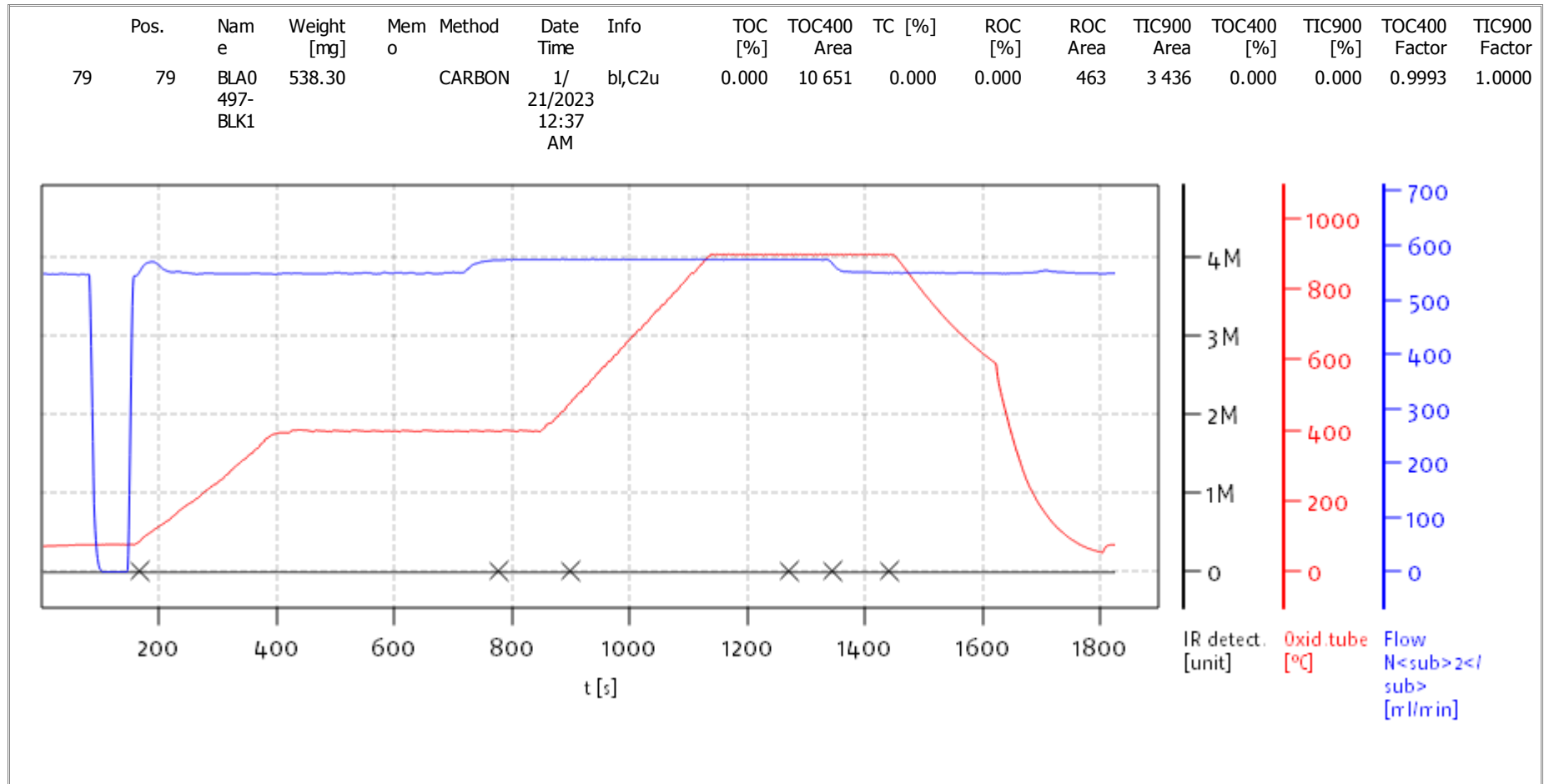
Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

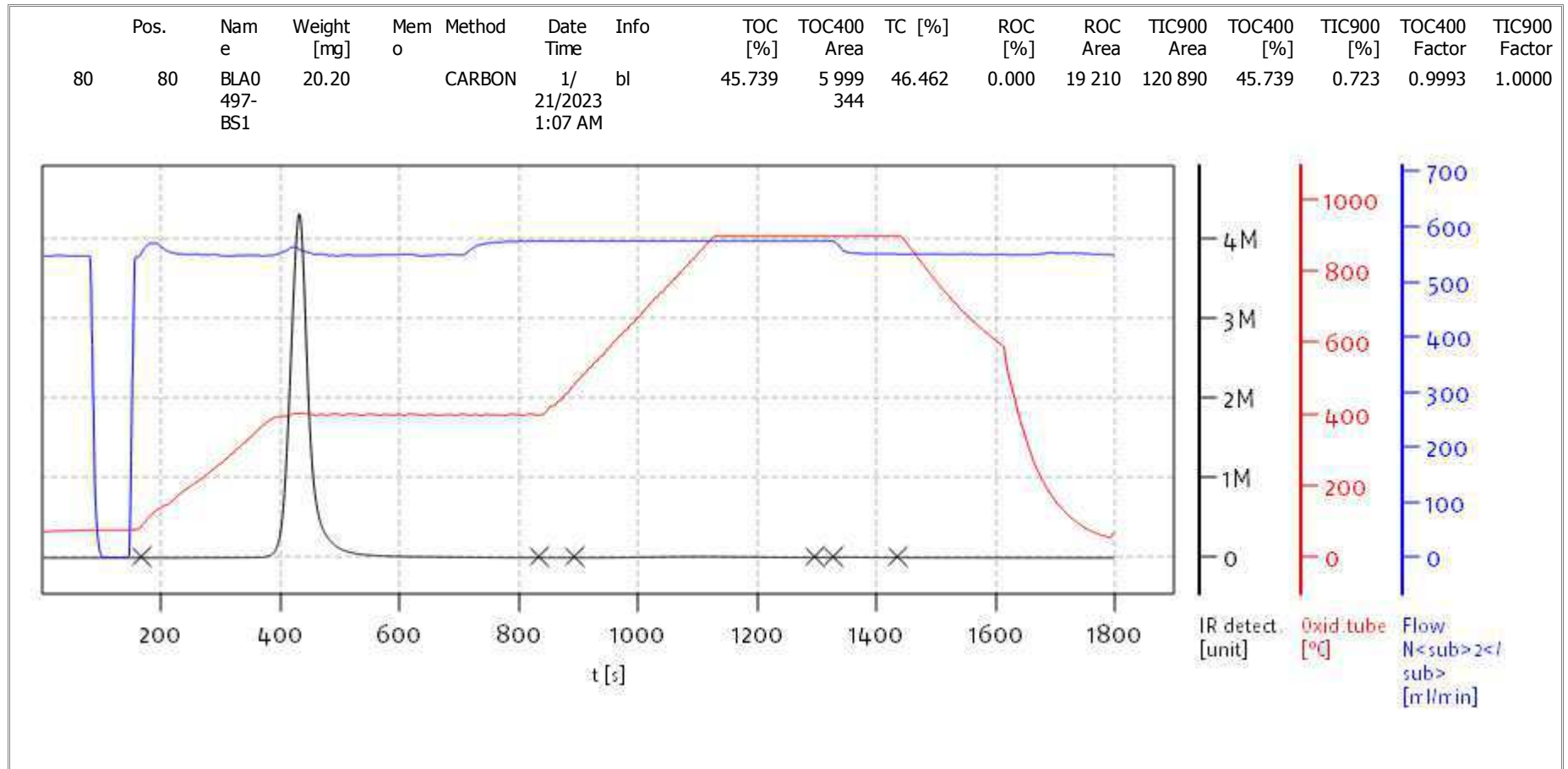
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

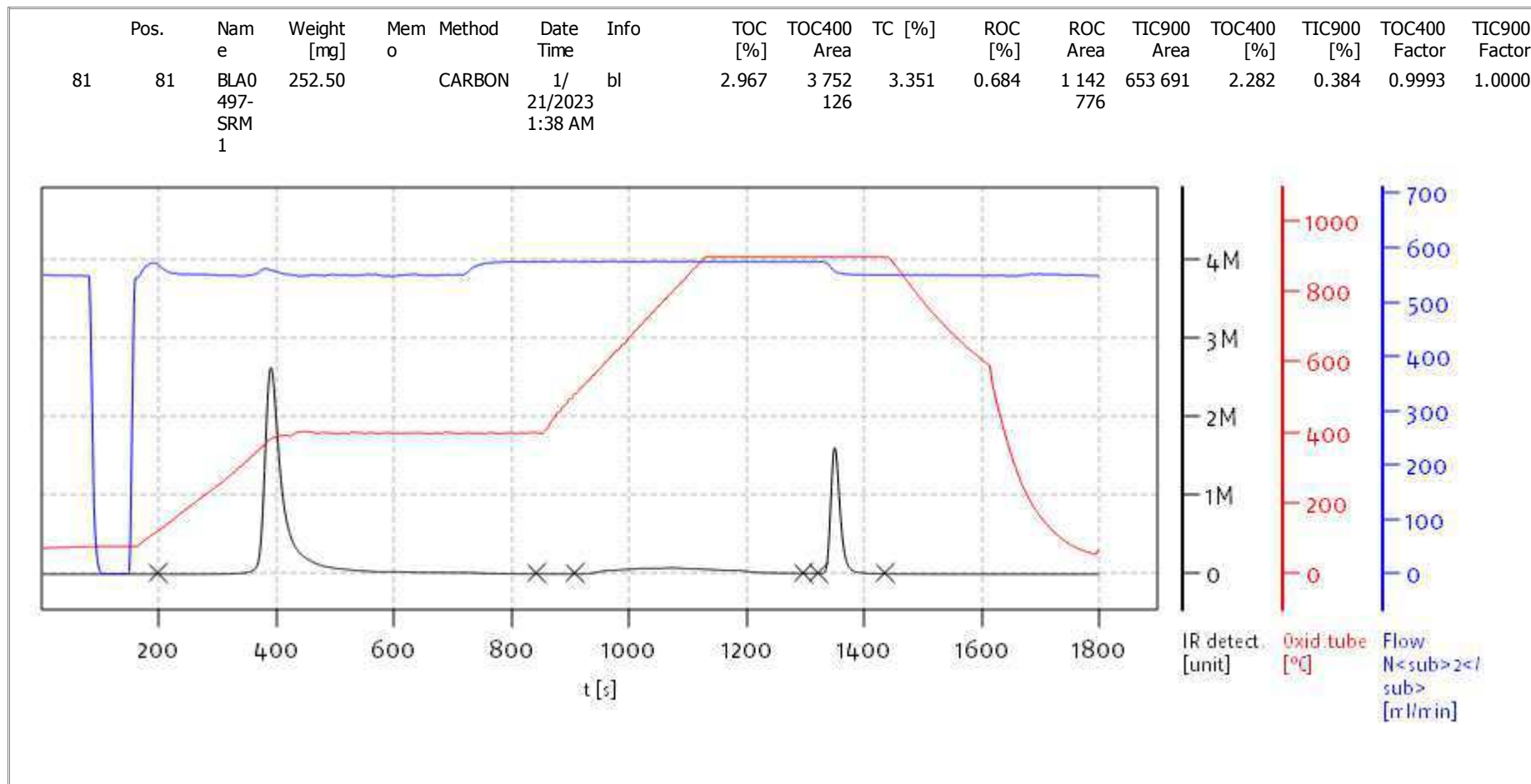
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

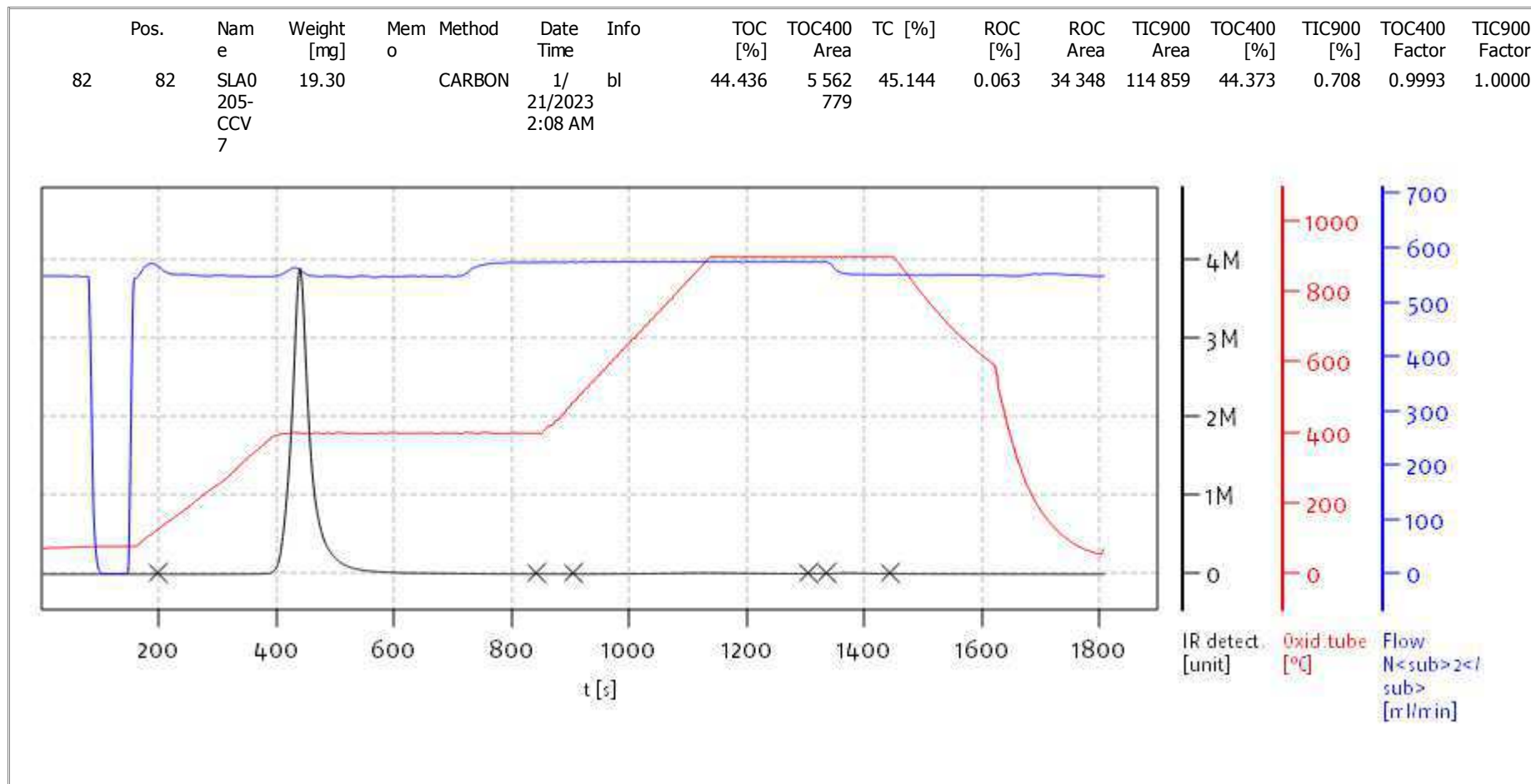
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

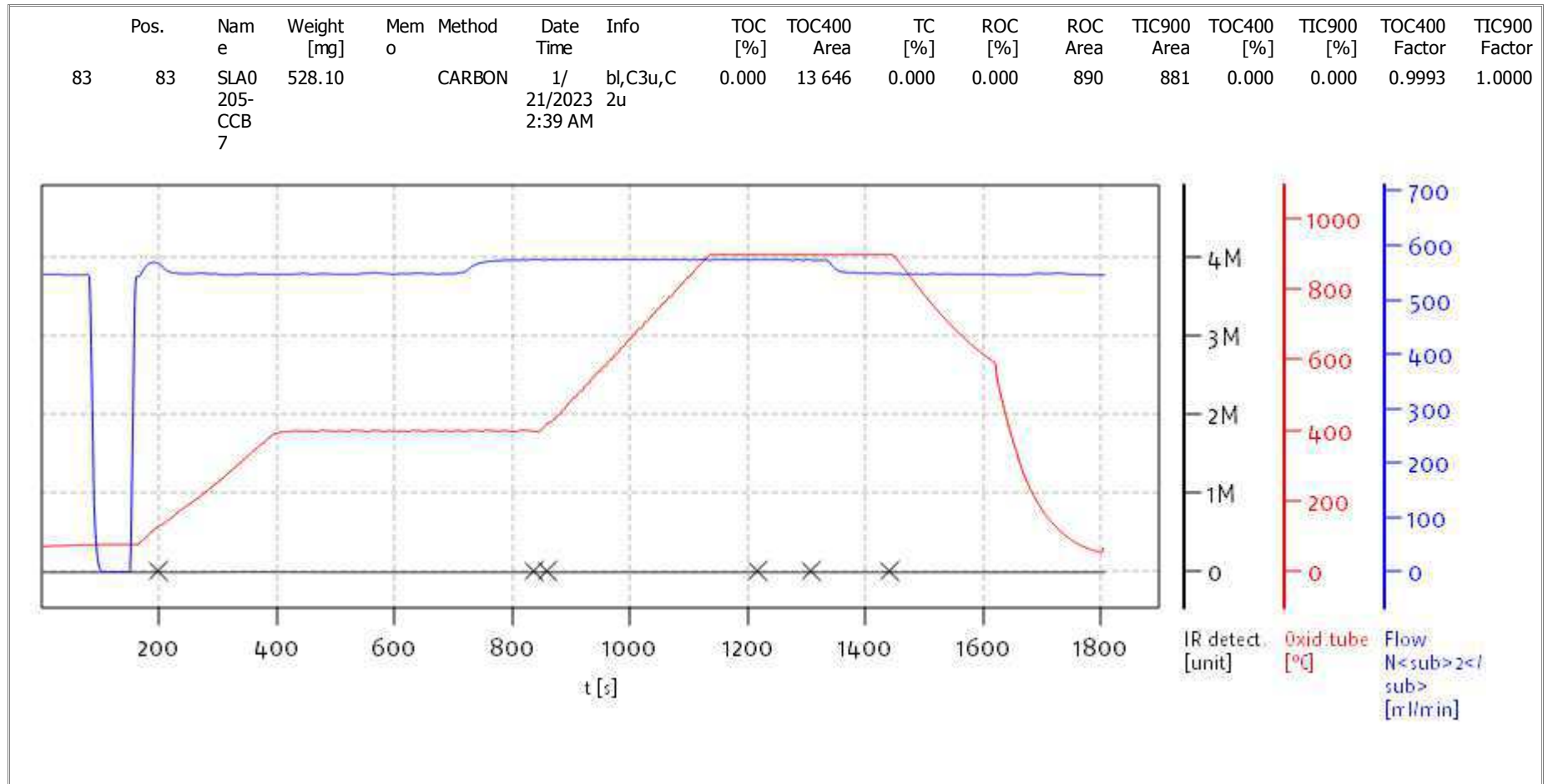
Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC

Soli TOC Cube, Carbon
 Balance: BAL3
 Analyst: DOE



Name:

Access: solITOC superuser

Date: Sat Jan 21 16:51:39 2023



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Inorganic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
% Soot	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Inorganic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
% Soot	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Inorganic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
% Soot	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882



INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Calibration: FD00070

Instrument: TOC Cube

Calibration Date: 04/26/2022 11:29

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Inorganic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
% Soot	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408



INITIAL CALIBRATION DATA

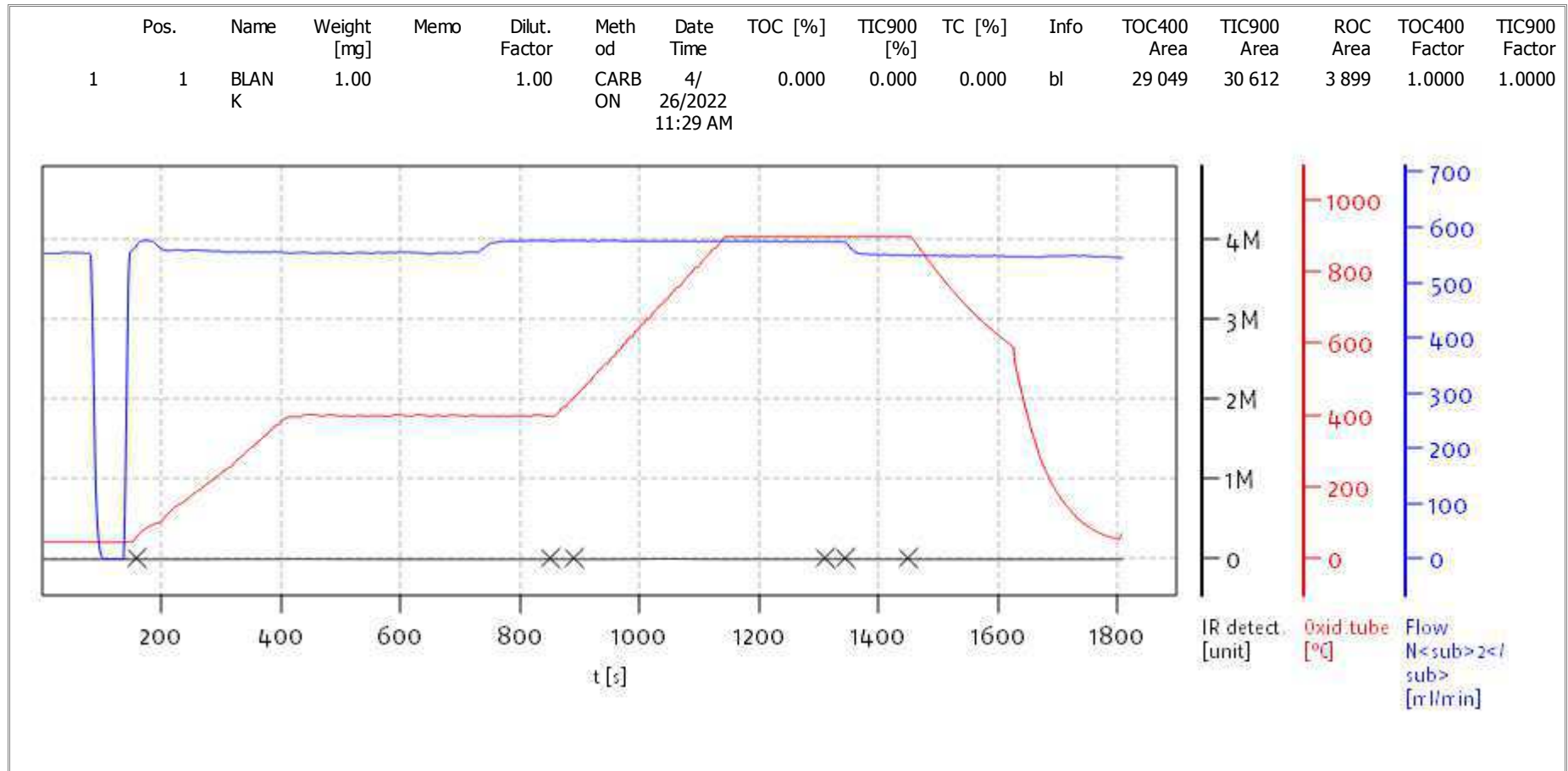
EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0326
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FD00070	Instrument:	TOC Cube
Calibration Date:	04/26/2022 11:29		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Total Organic Carbon	1424064	15.9	0.9988			
Total Carbon	1424064	15.9	0.9988			
Total Inorganic Carbon	1424064	15.9	0.9988			
% Soot	1424064	15.9	0.9988			



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

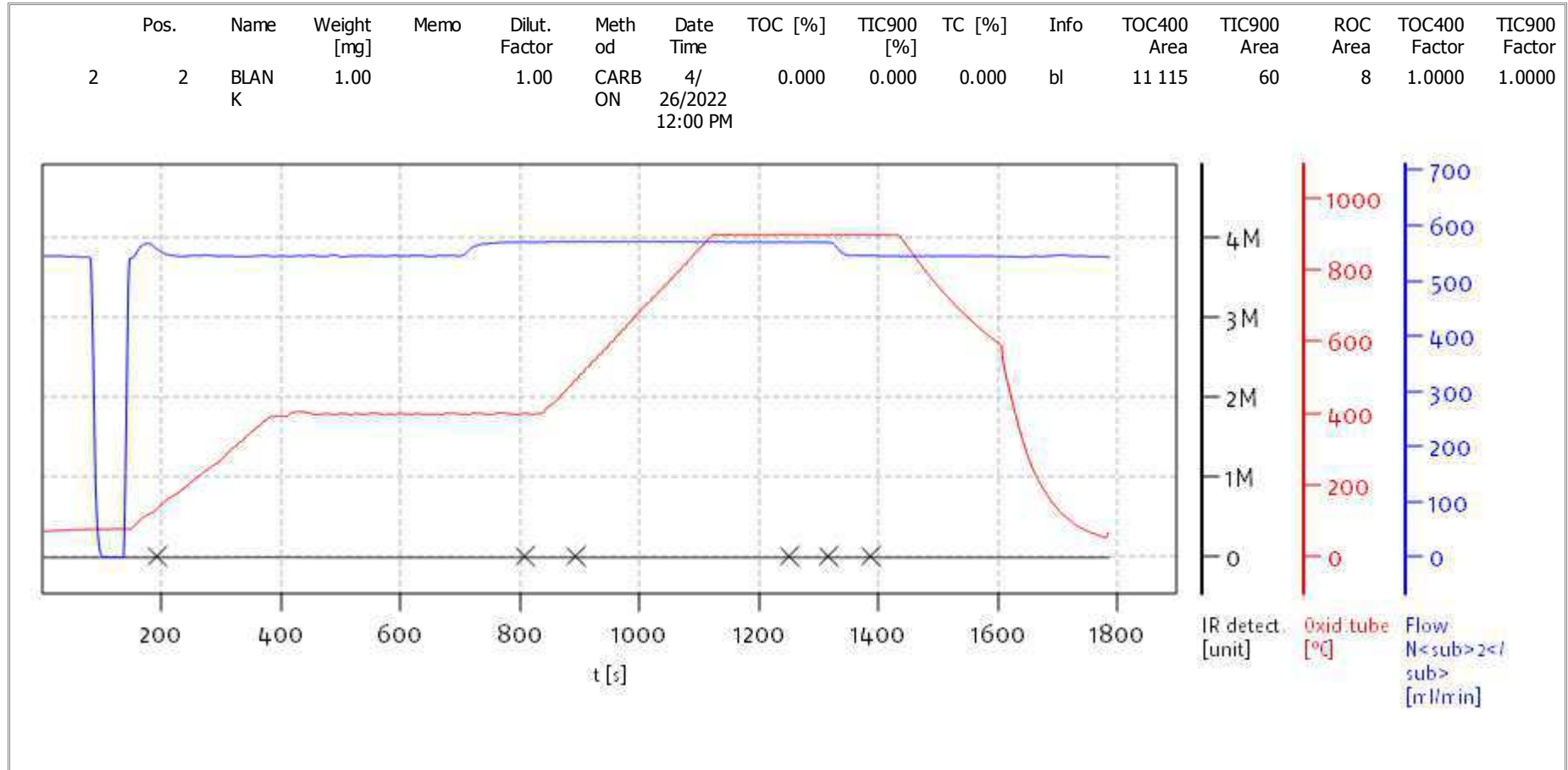
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

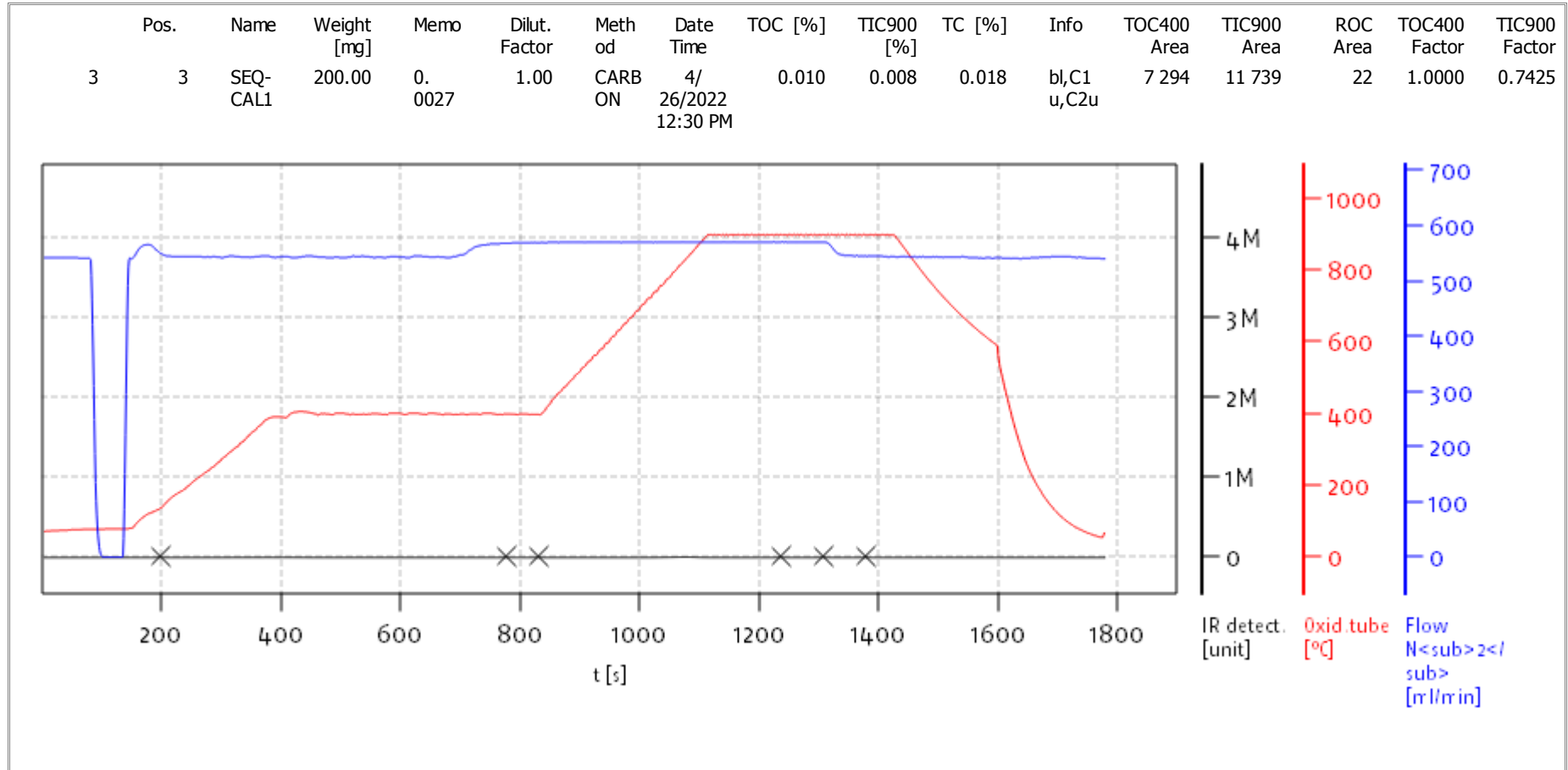
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

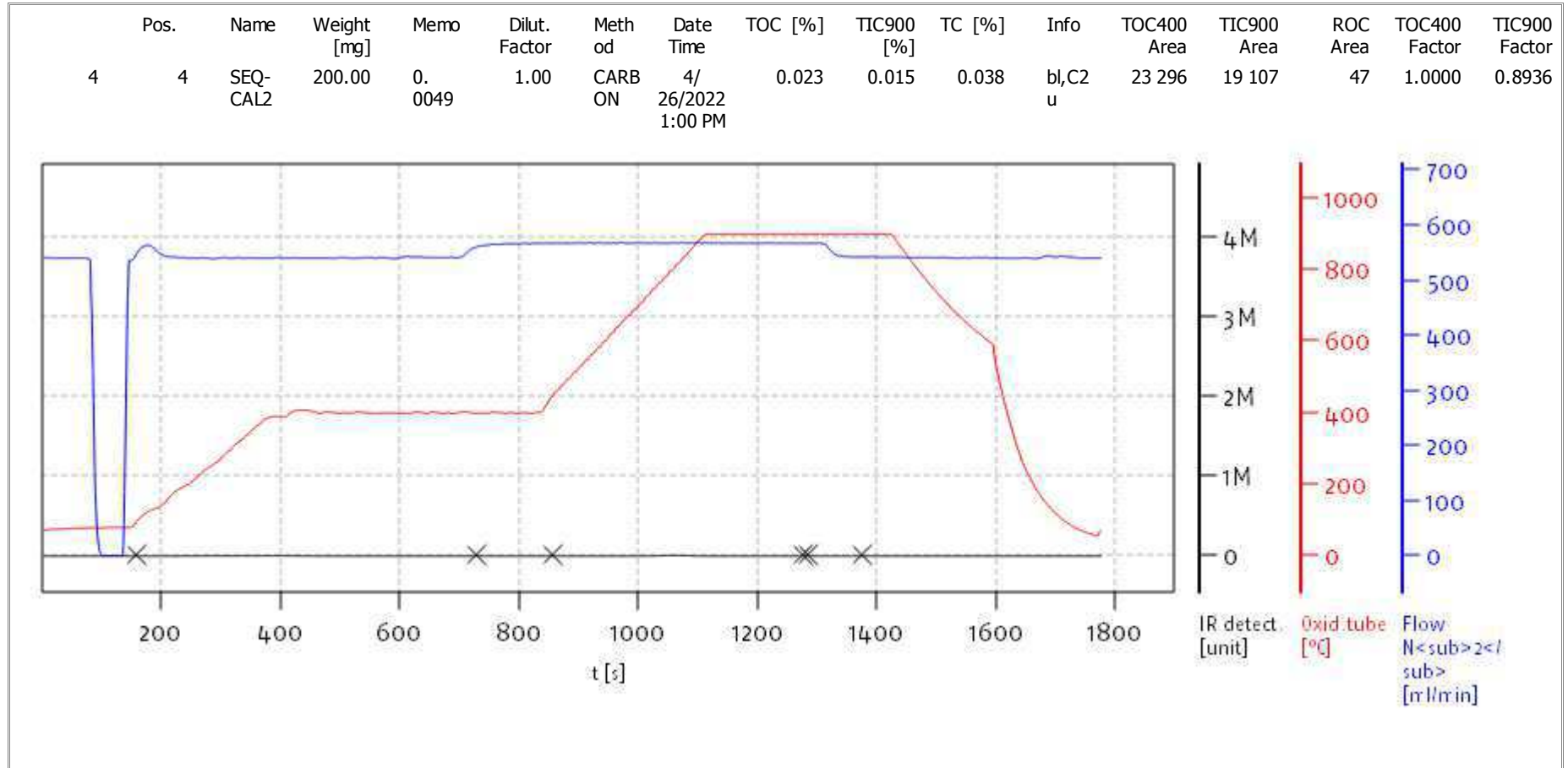
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

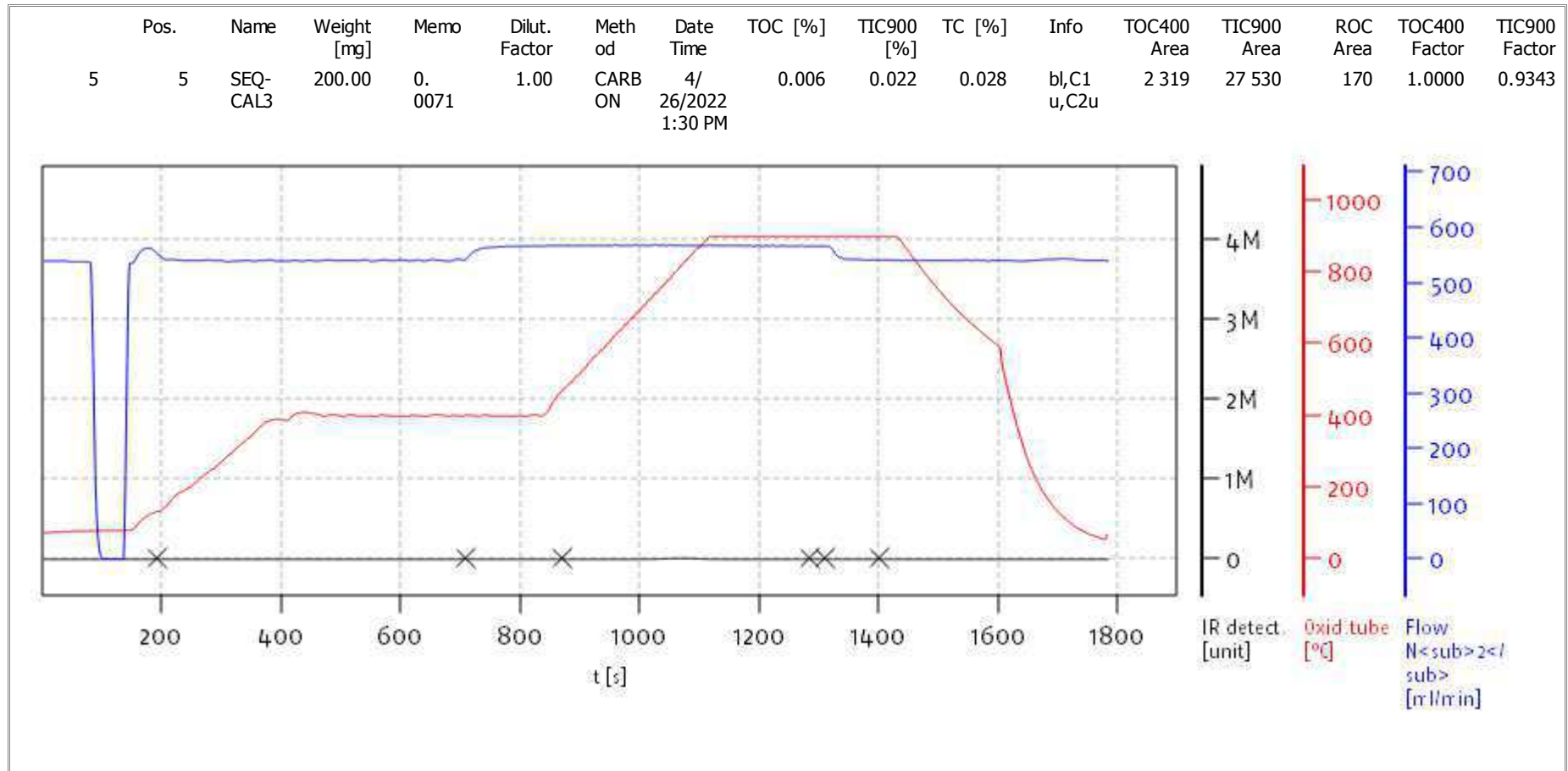
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

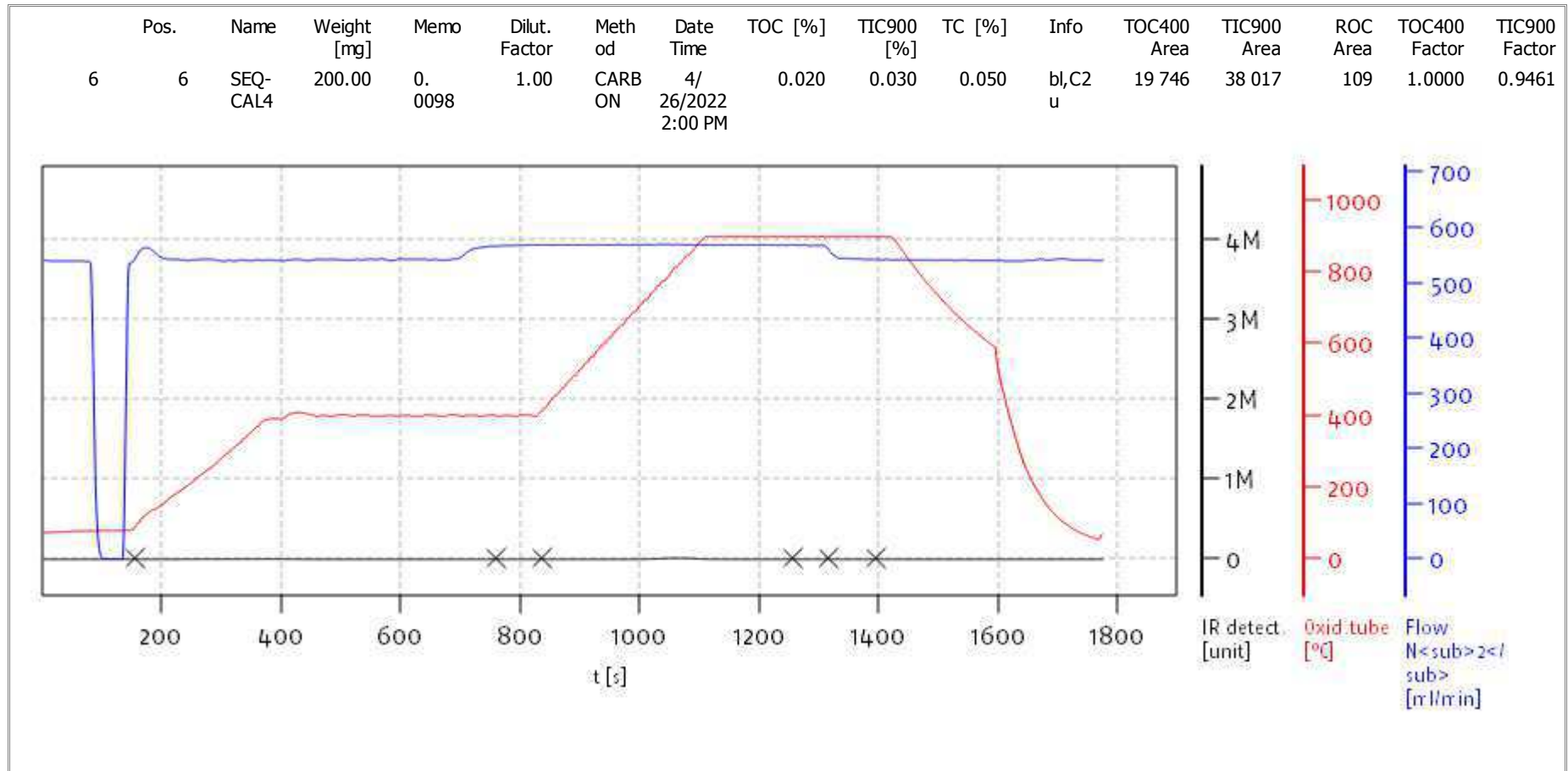
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

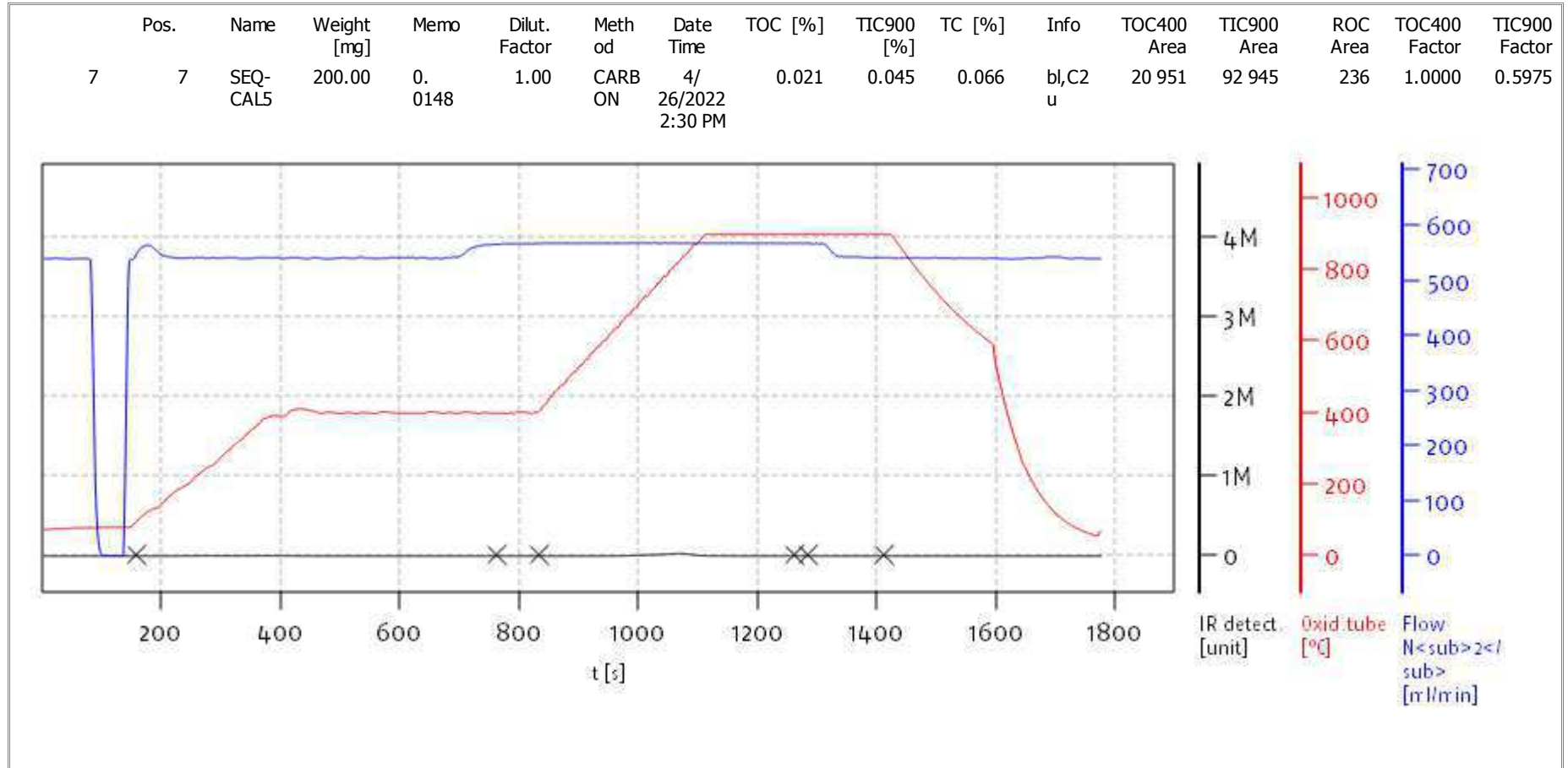
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

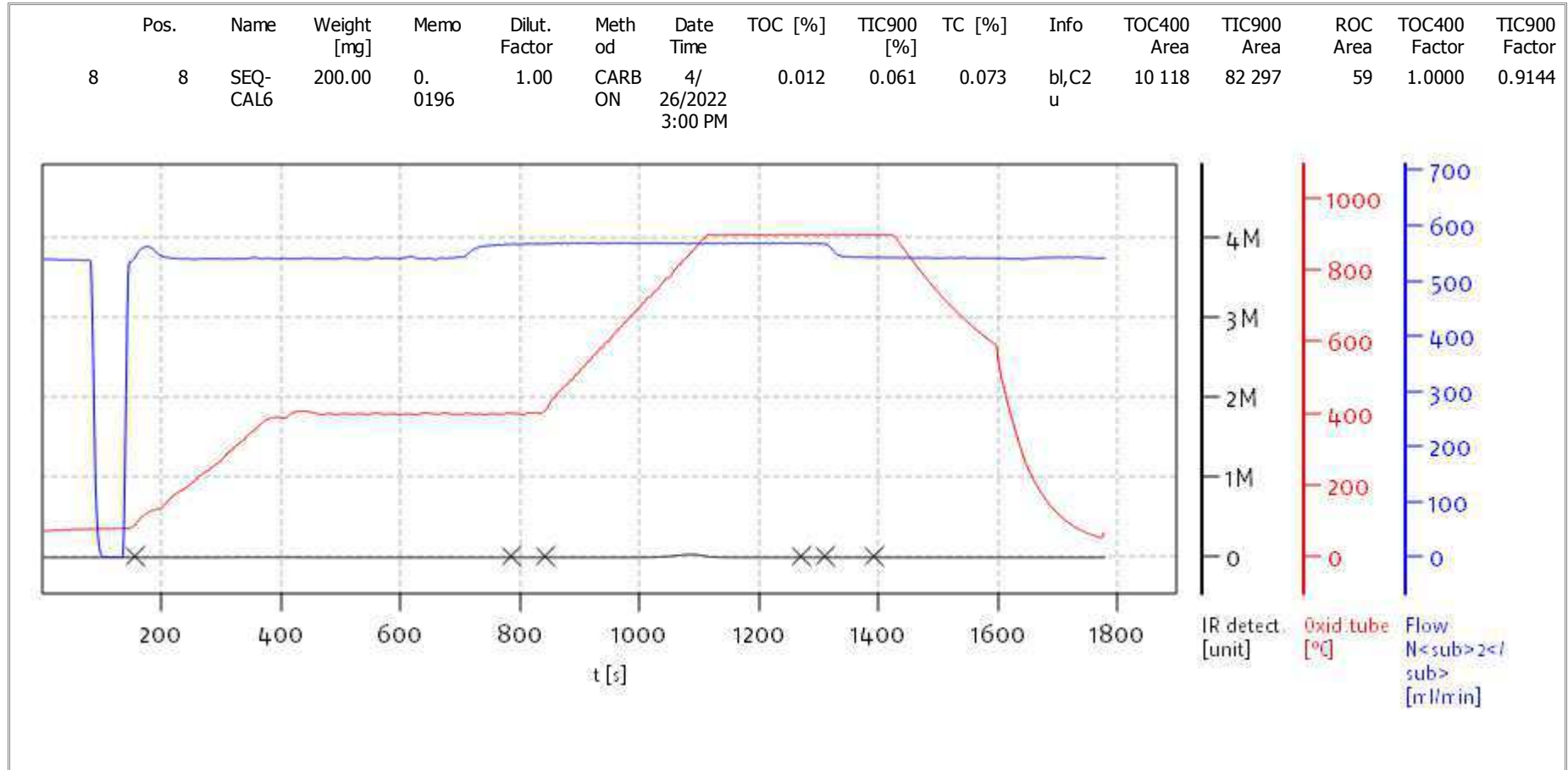
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

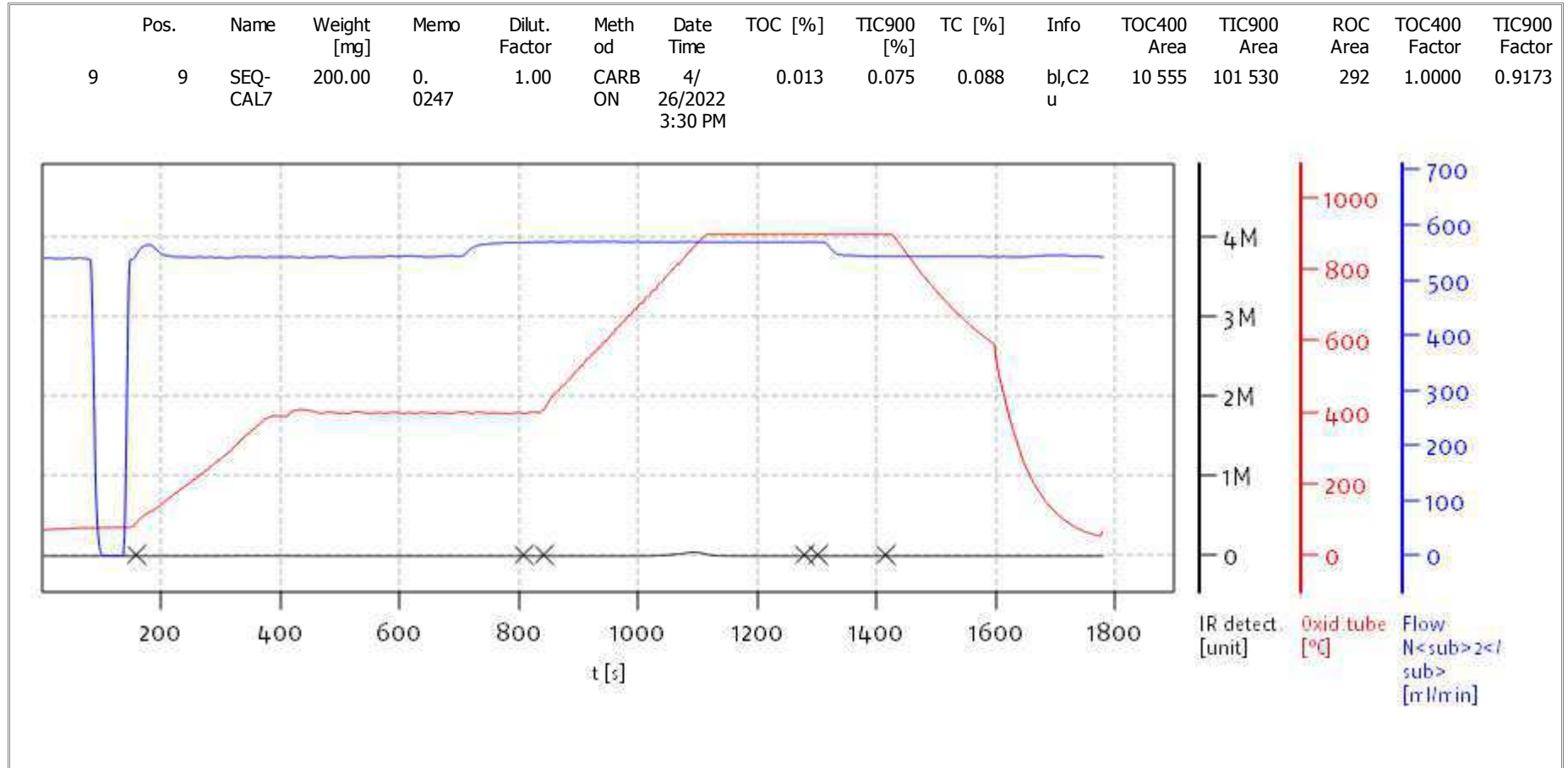
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

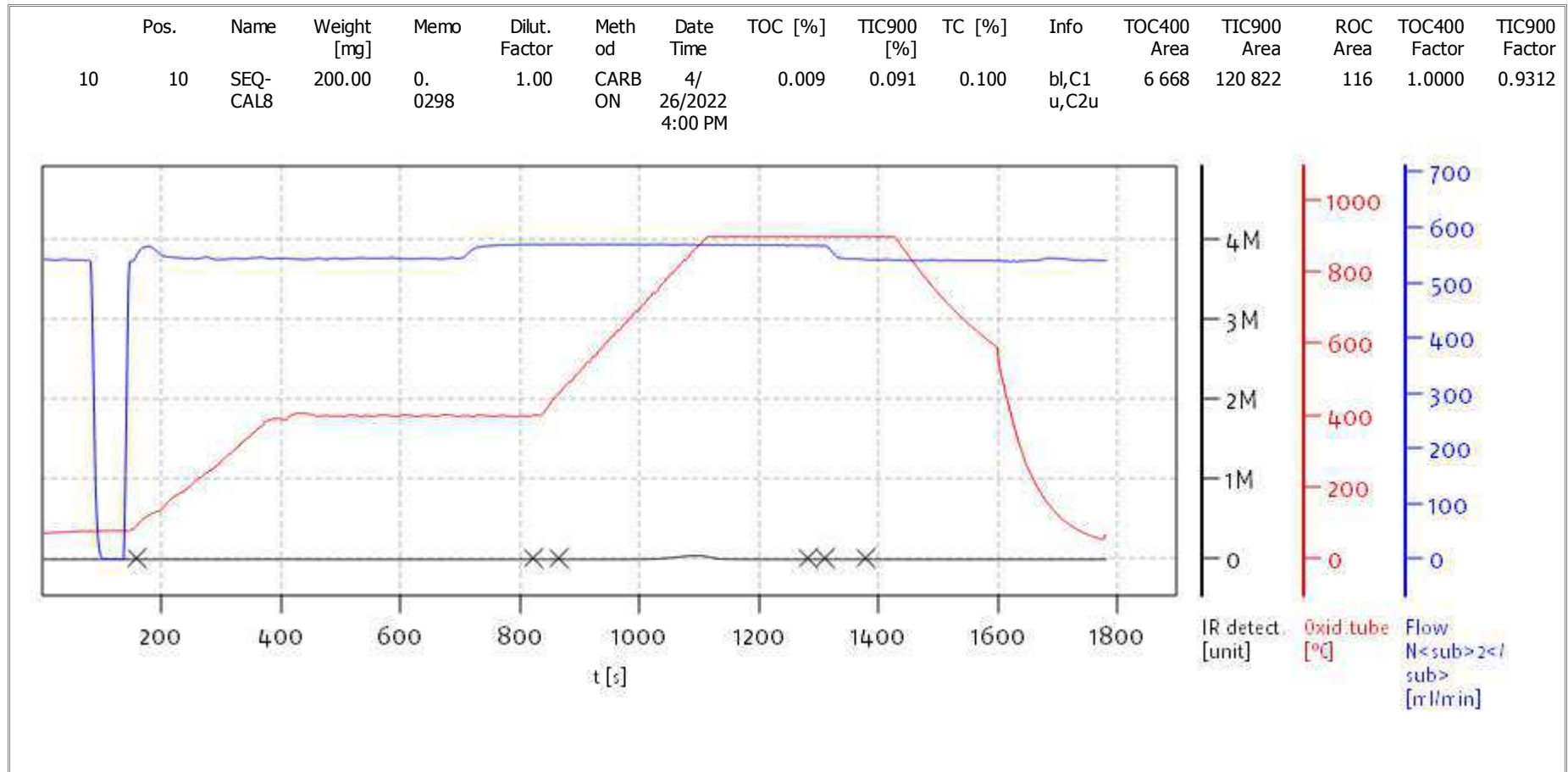
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

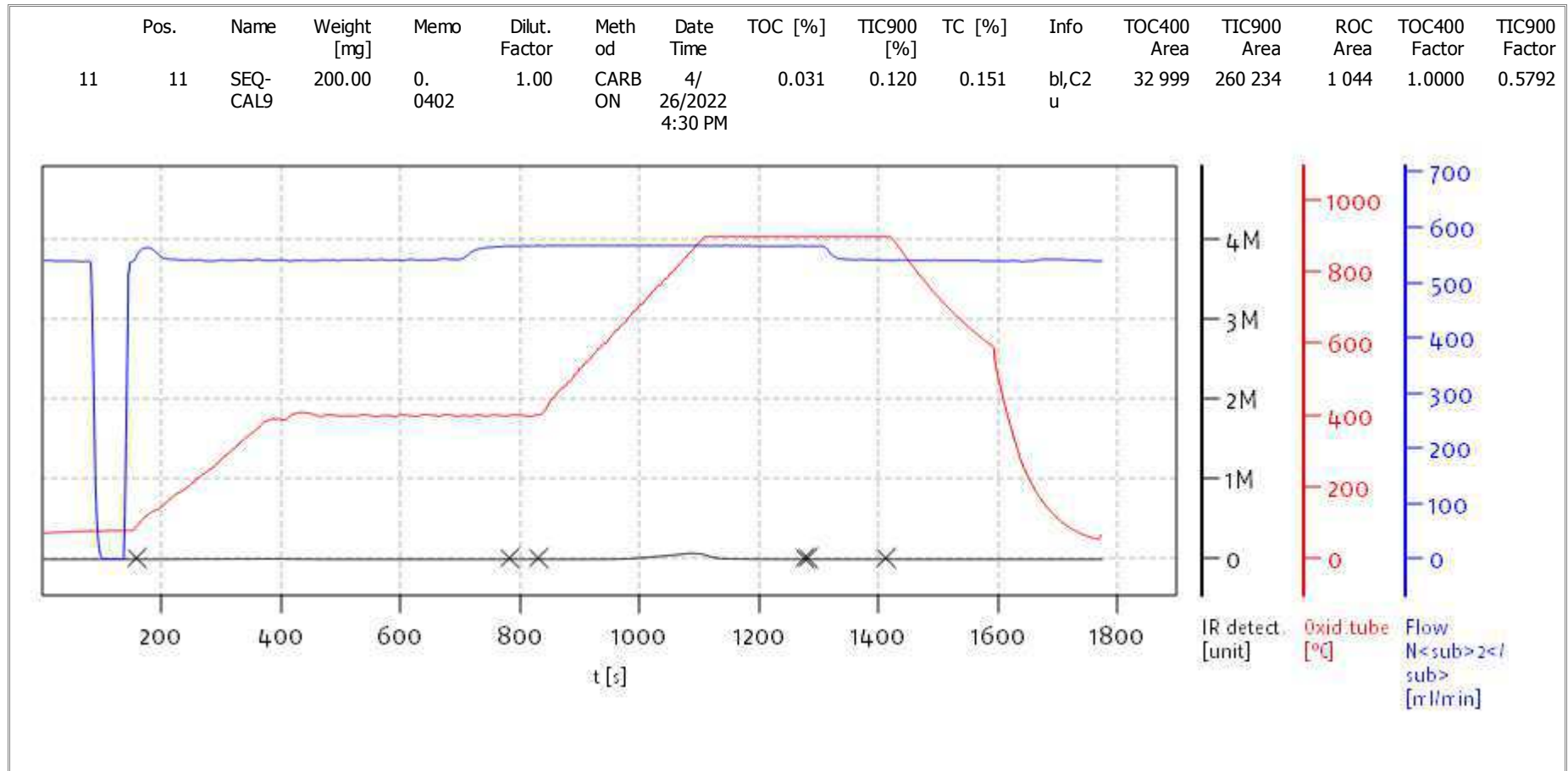
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

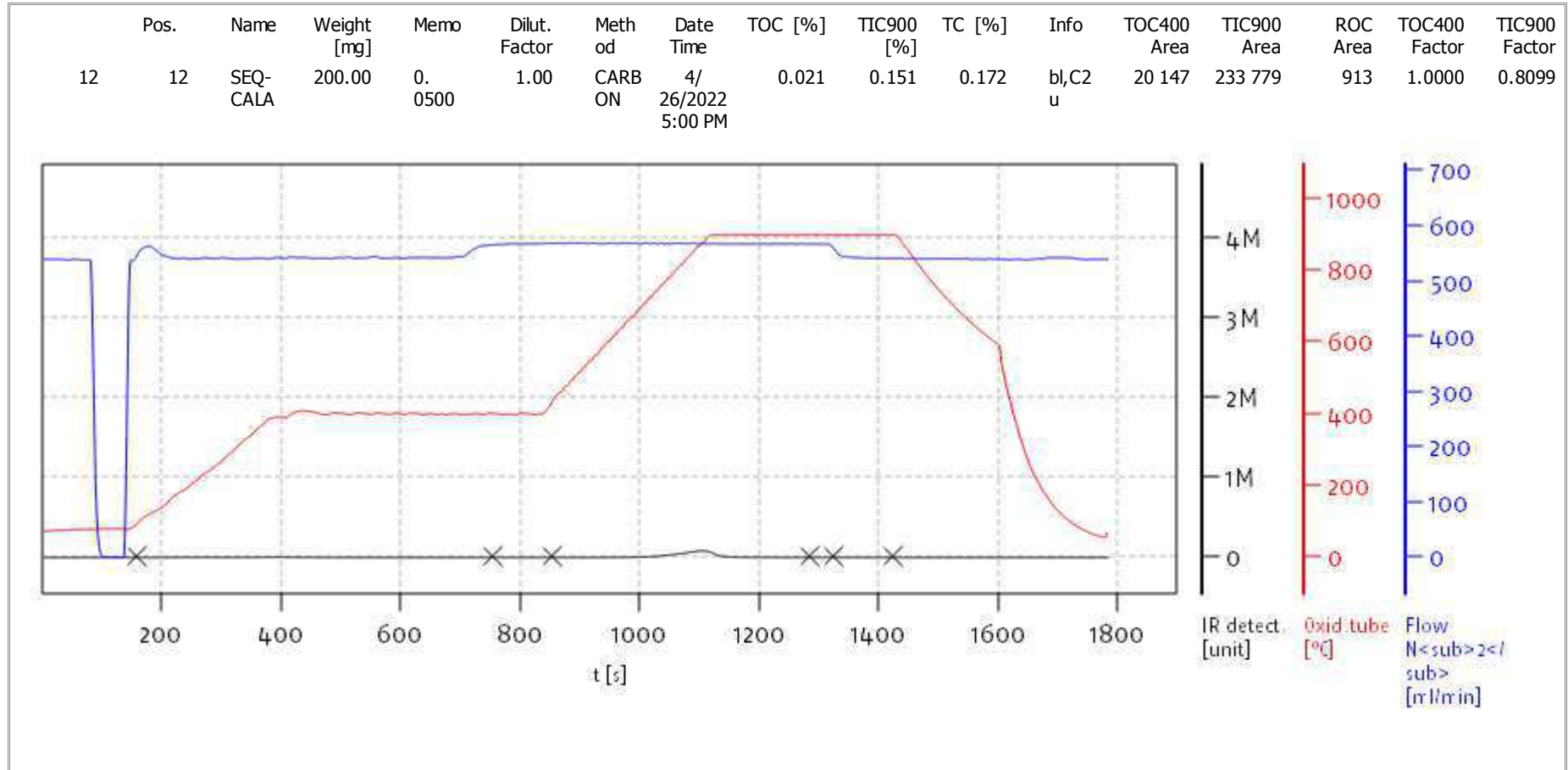
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

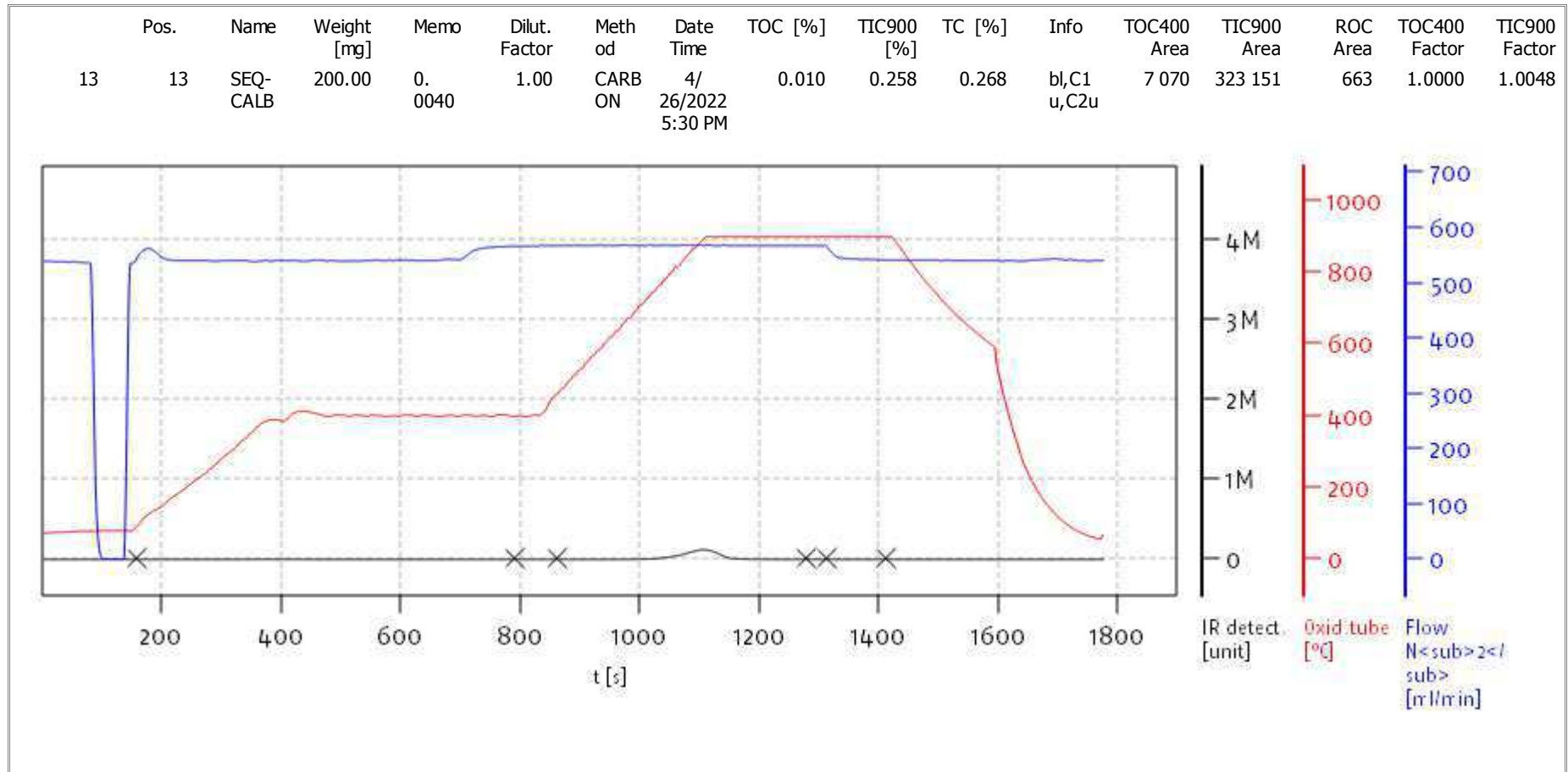
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

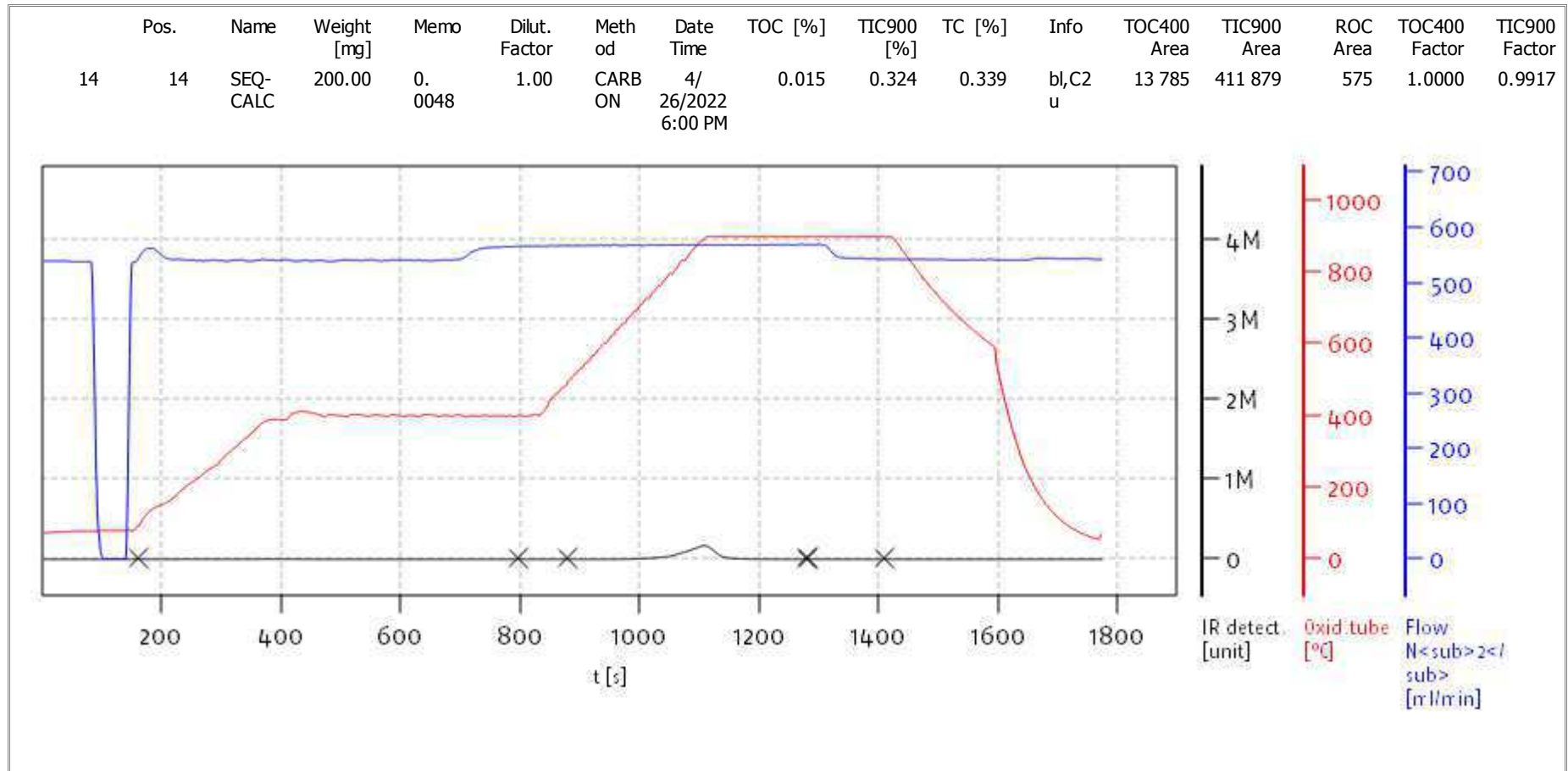
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

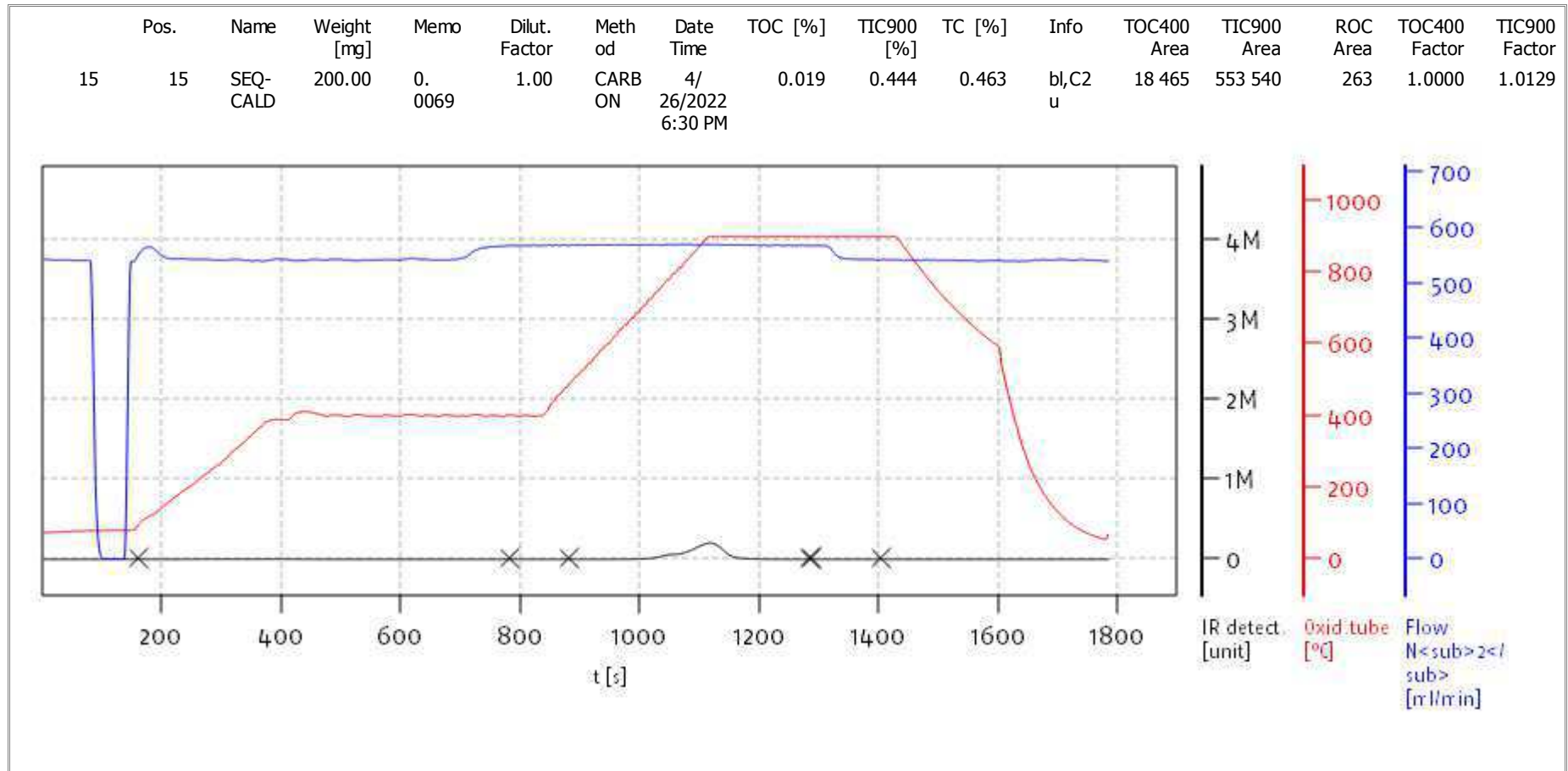
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

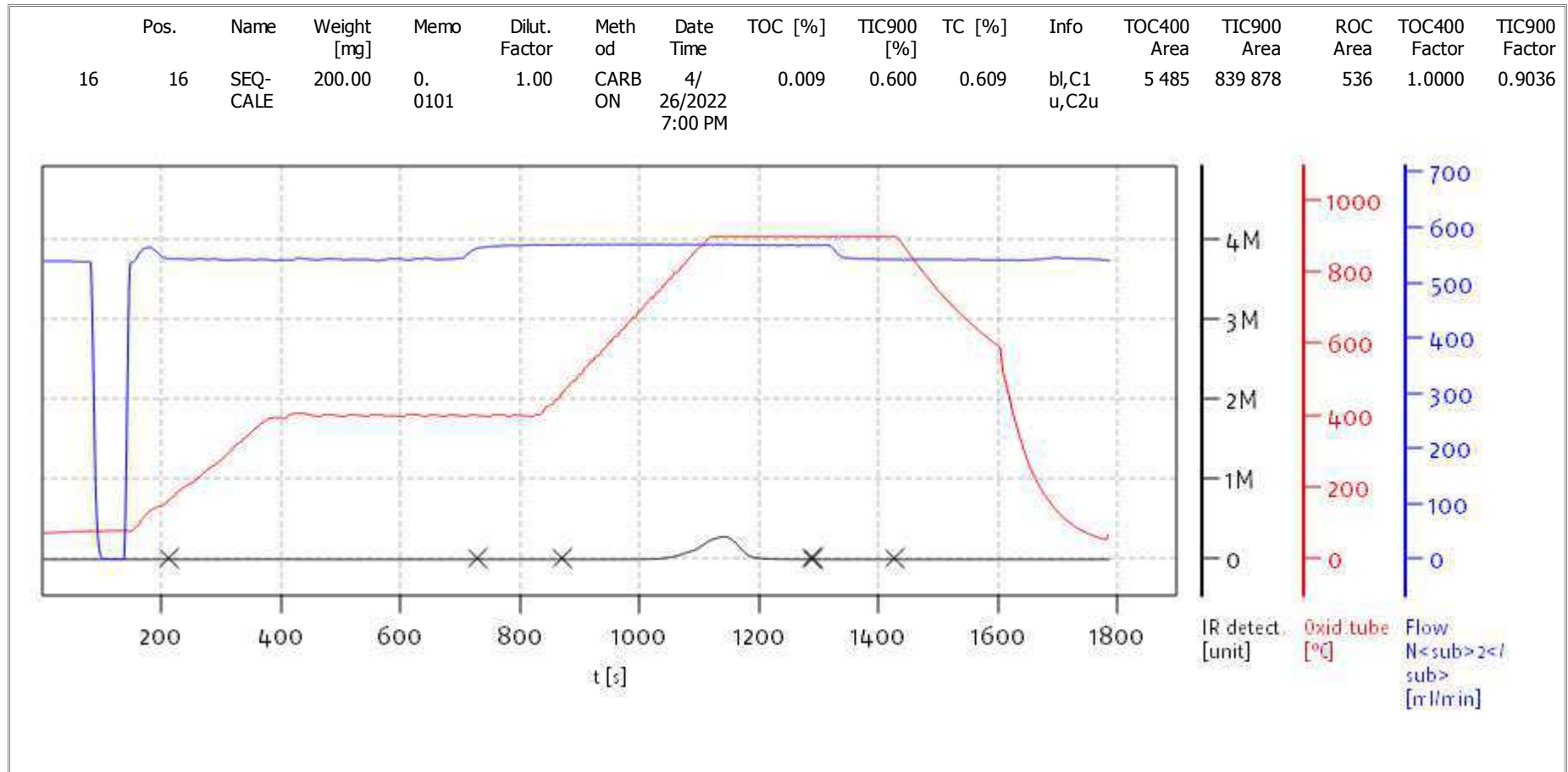
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

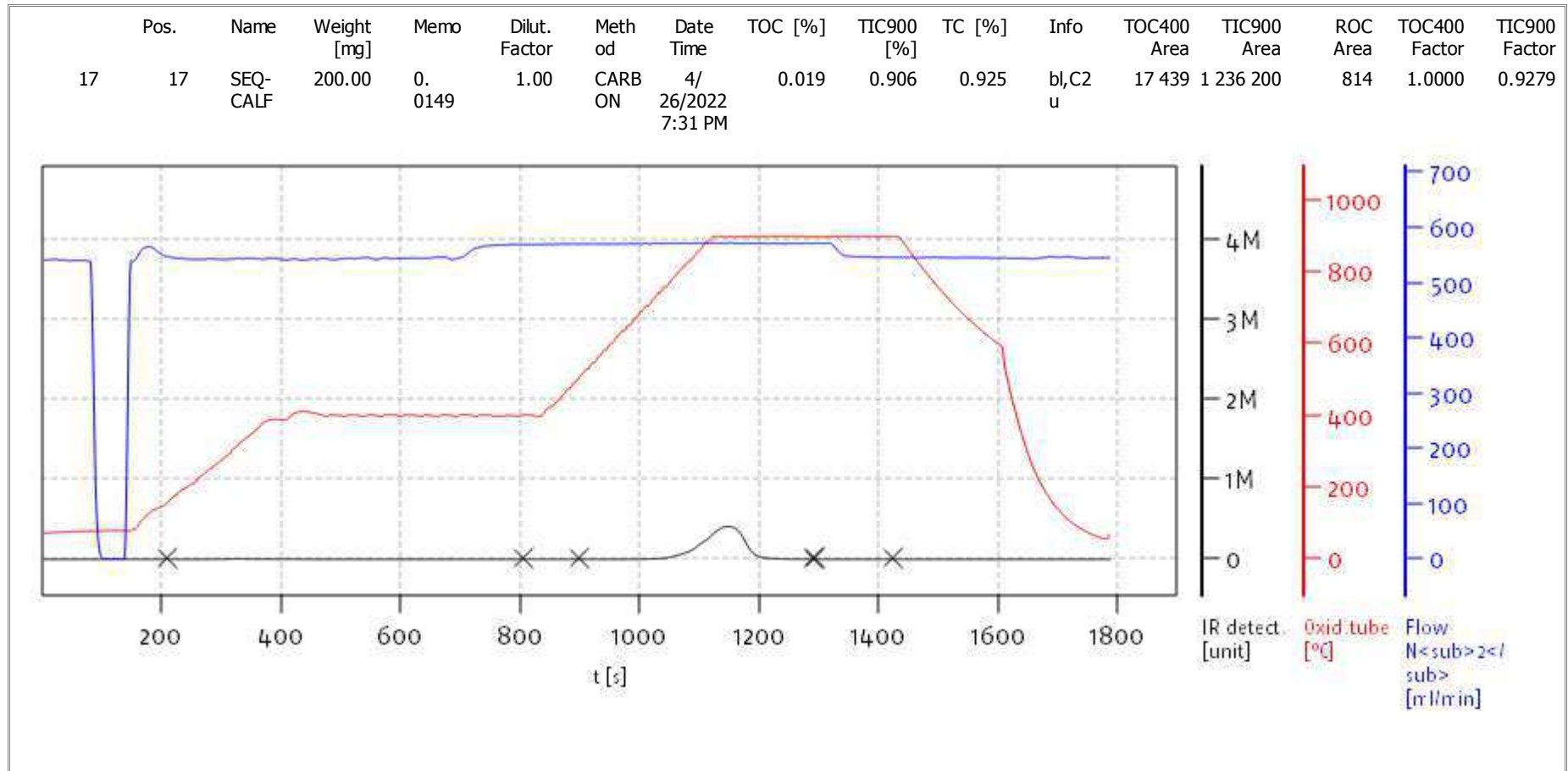
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

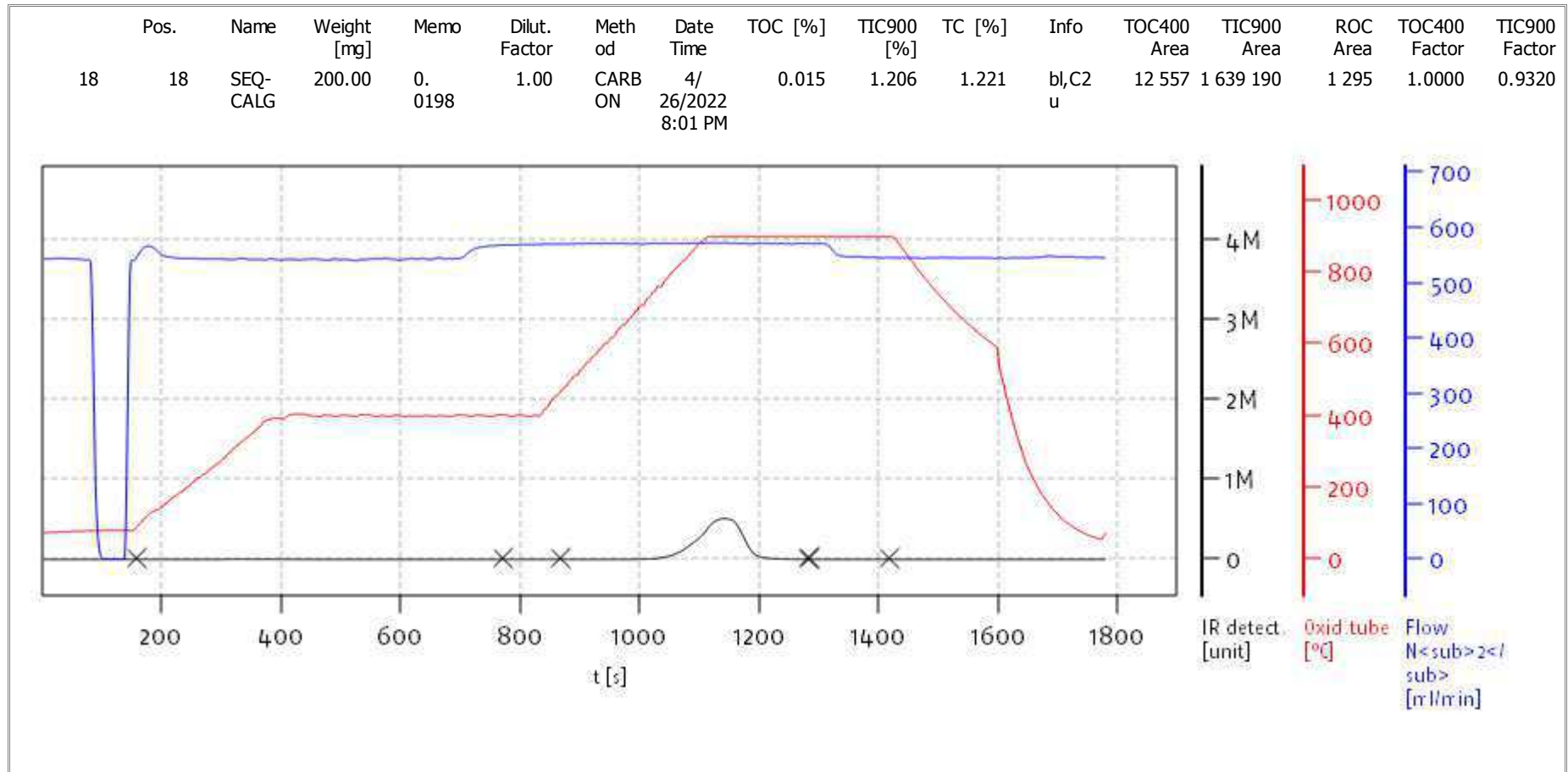
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

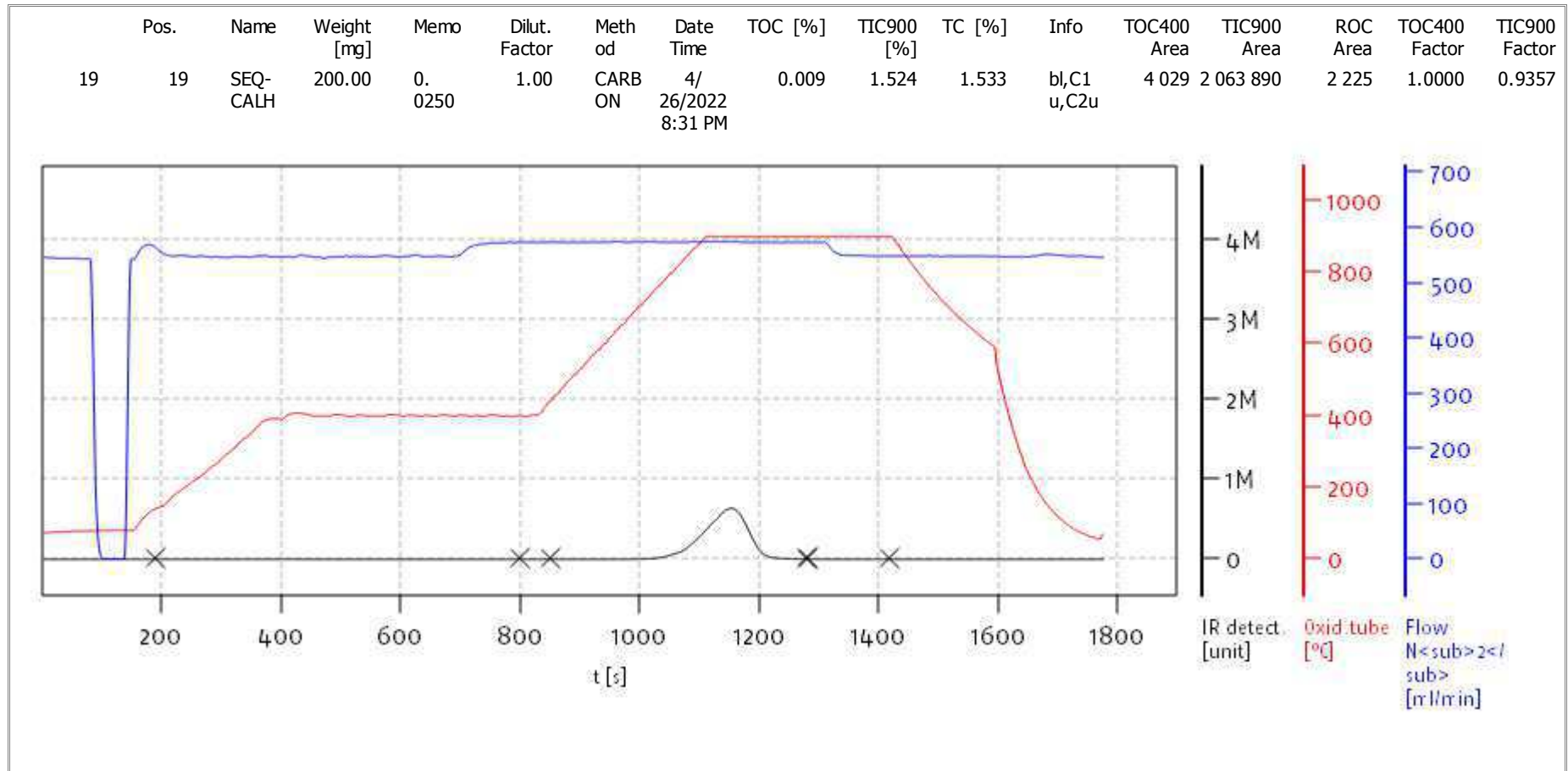
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

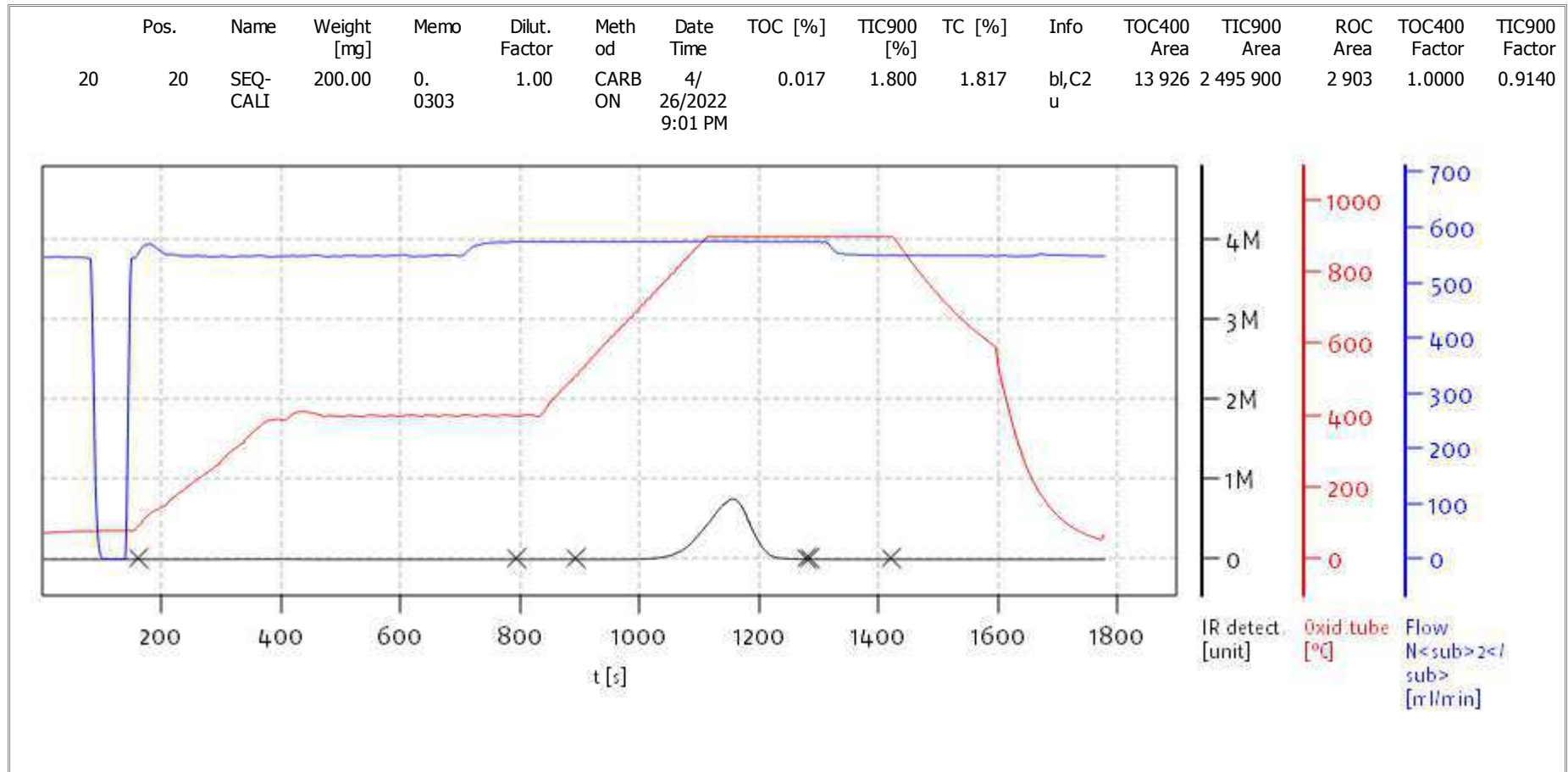
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

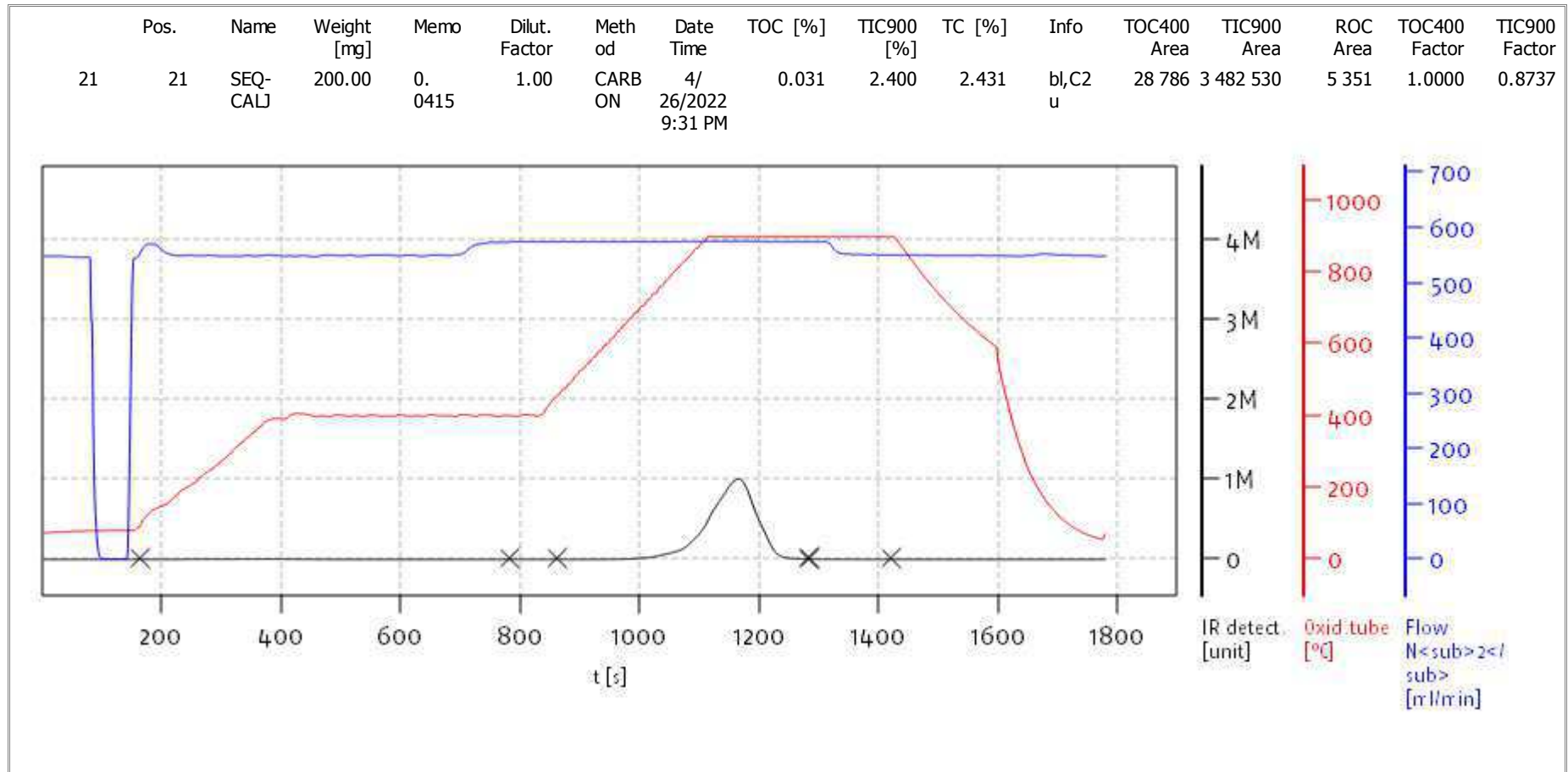
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

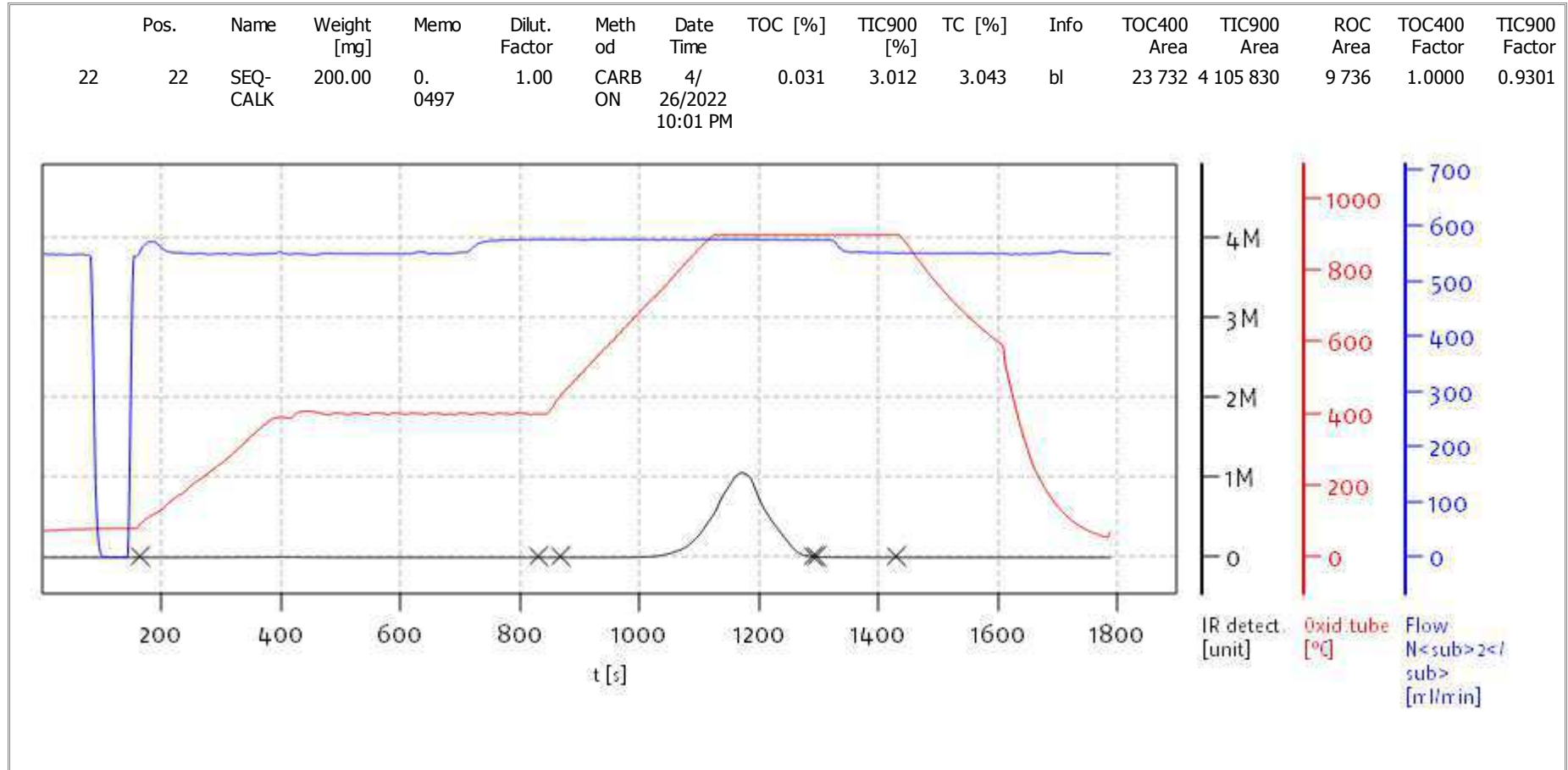
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

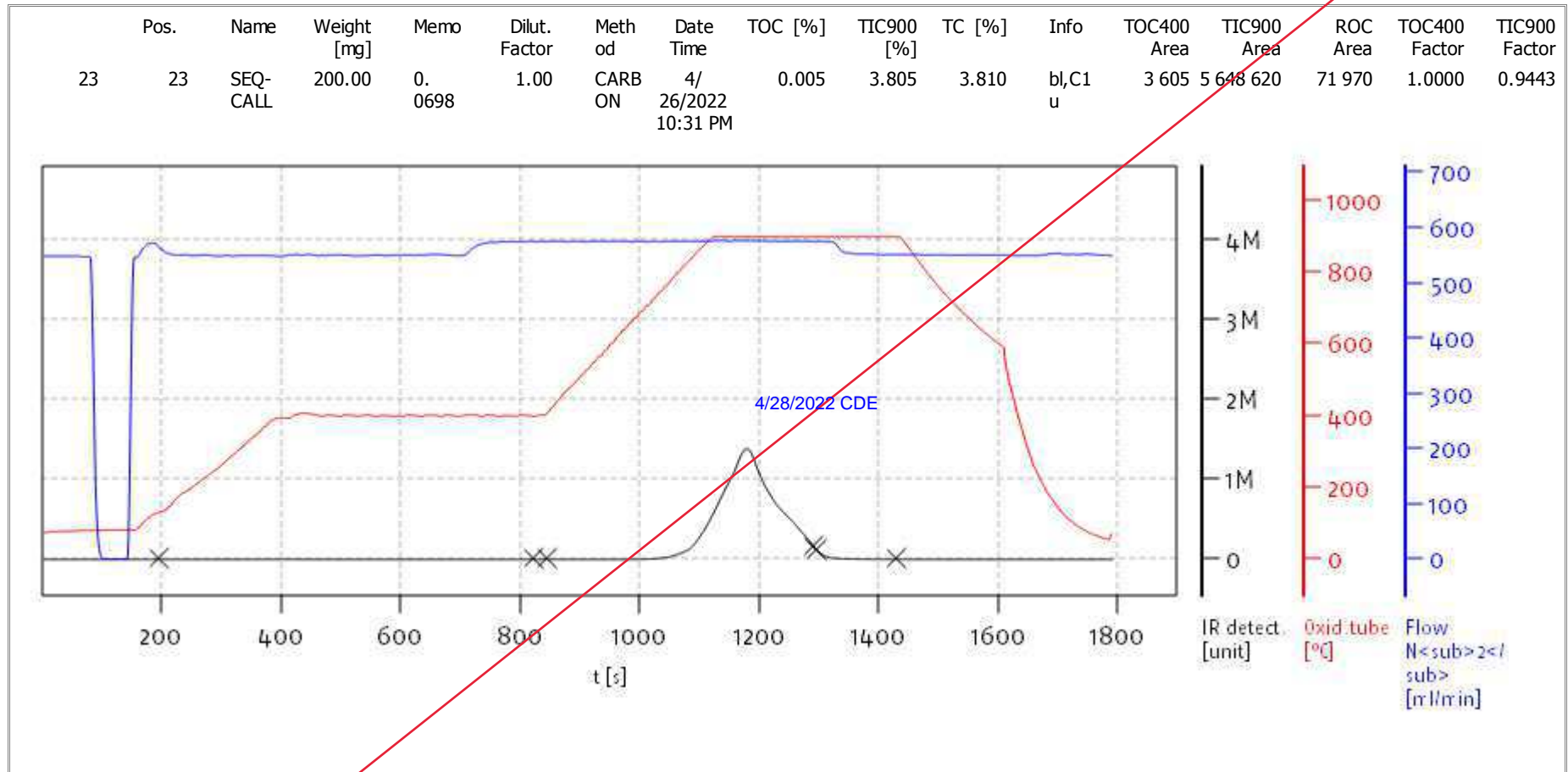
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

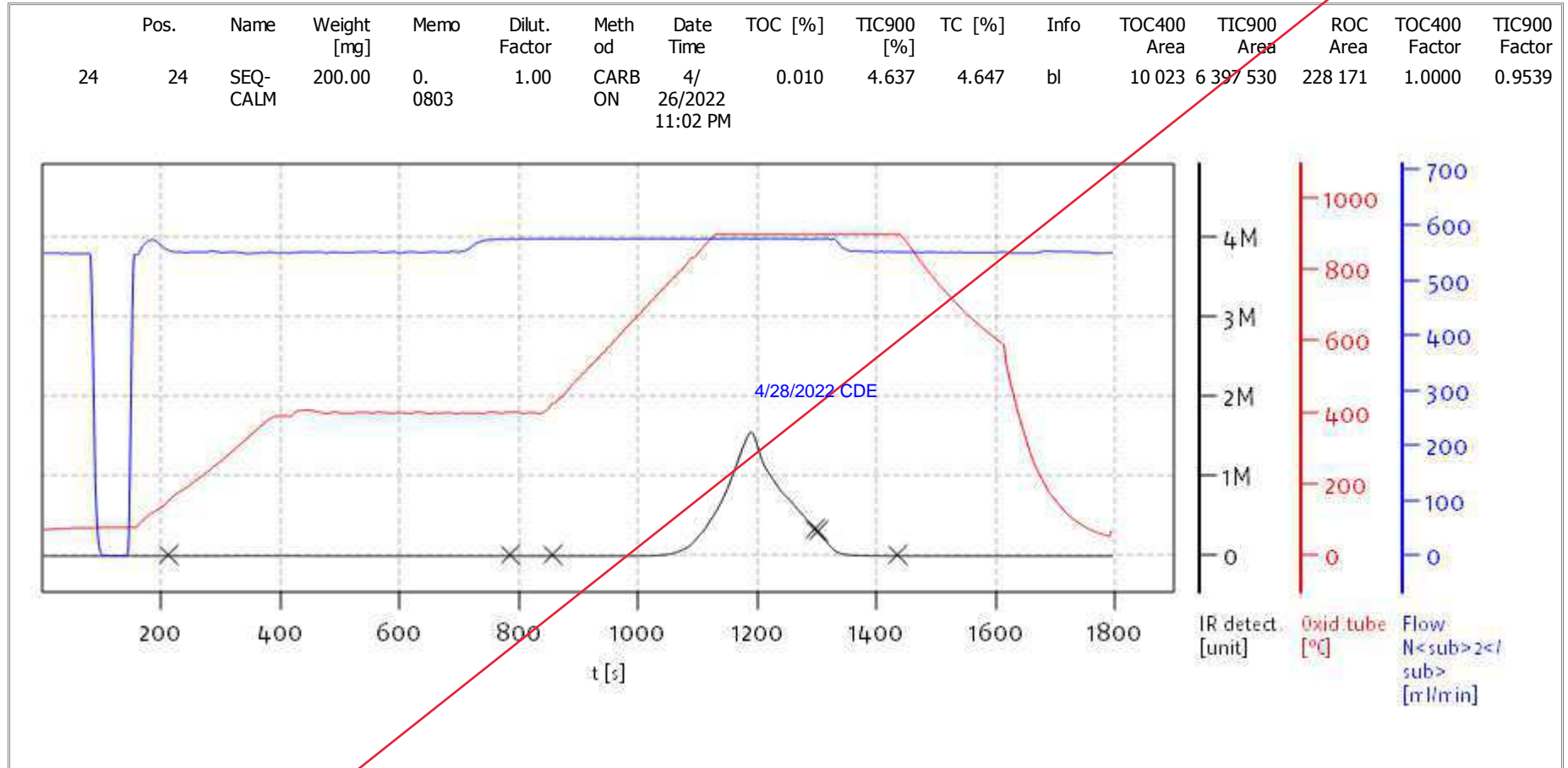
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

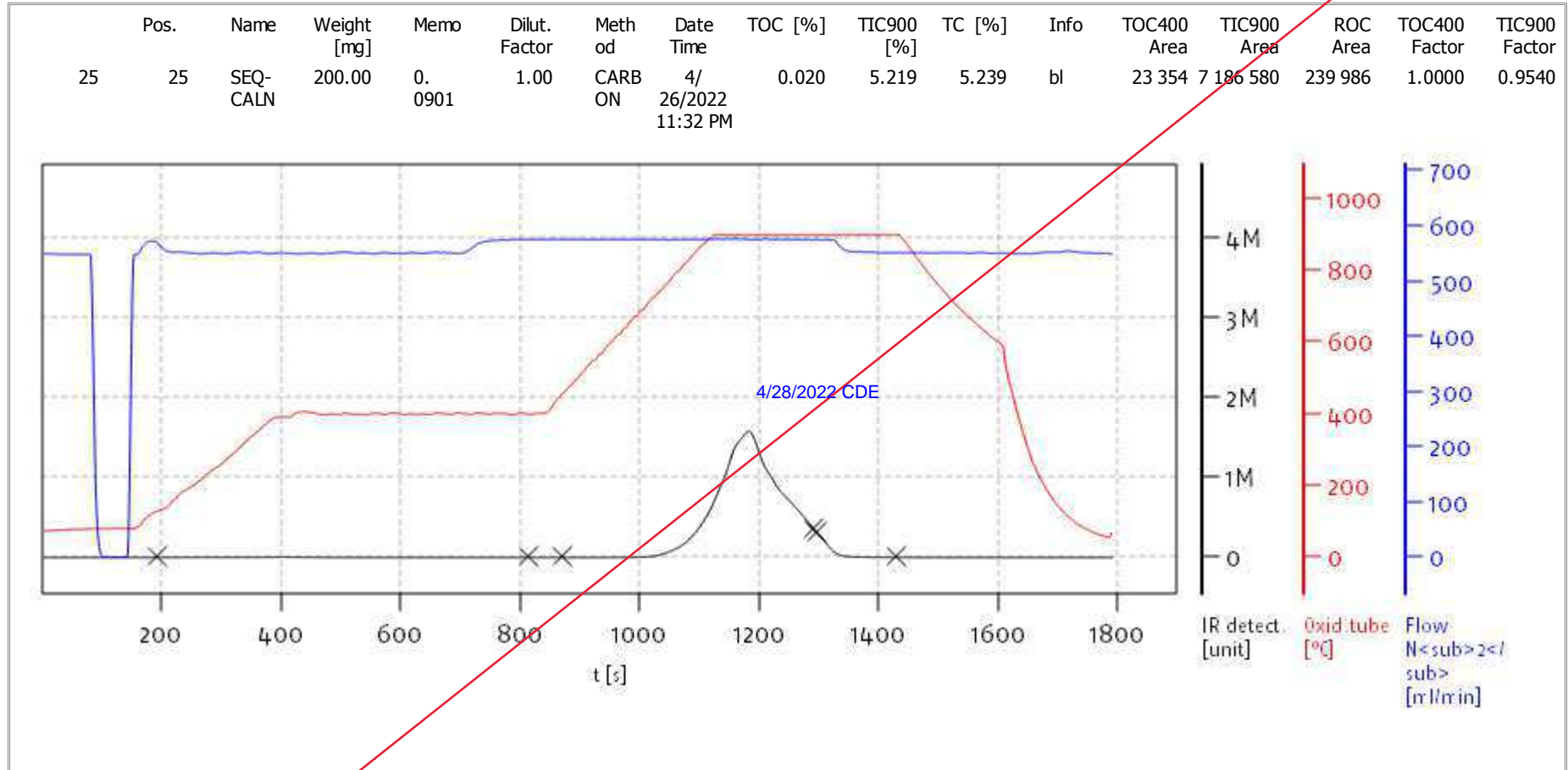
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

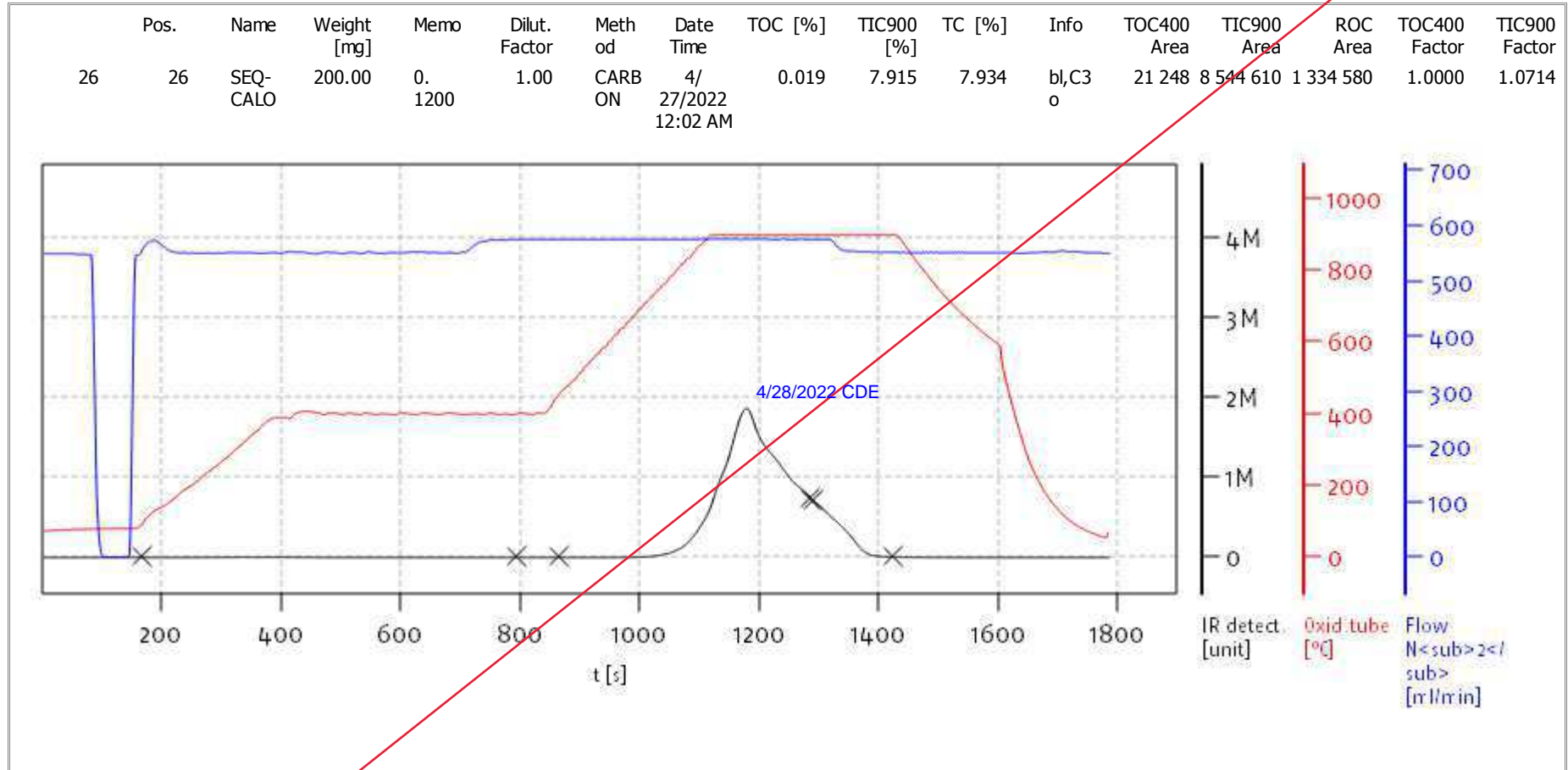
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

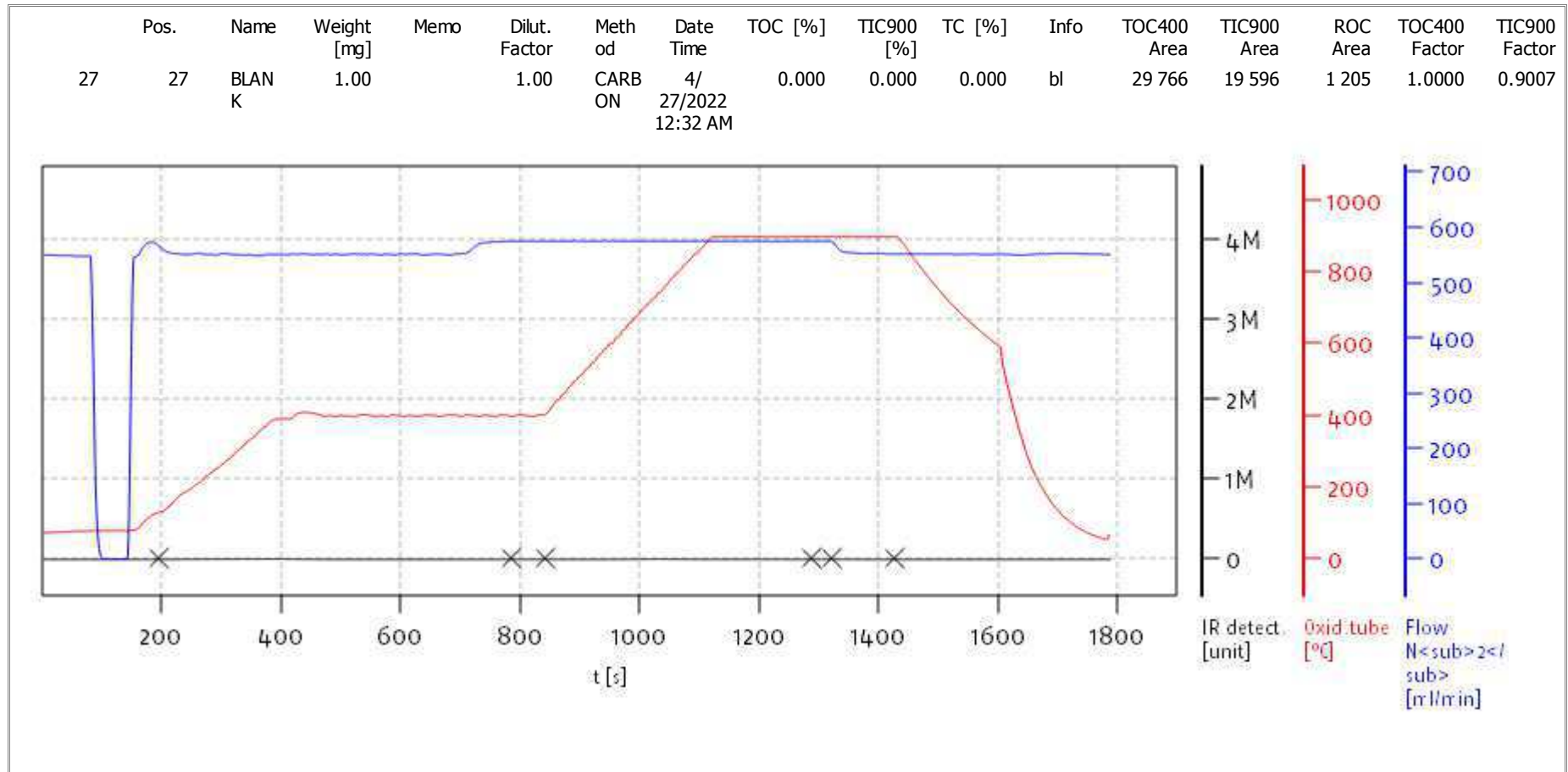
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

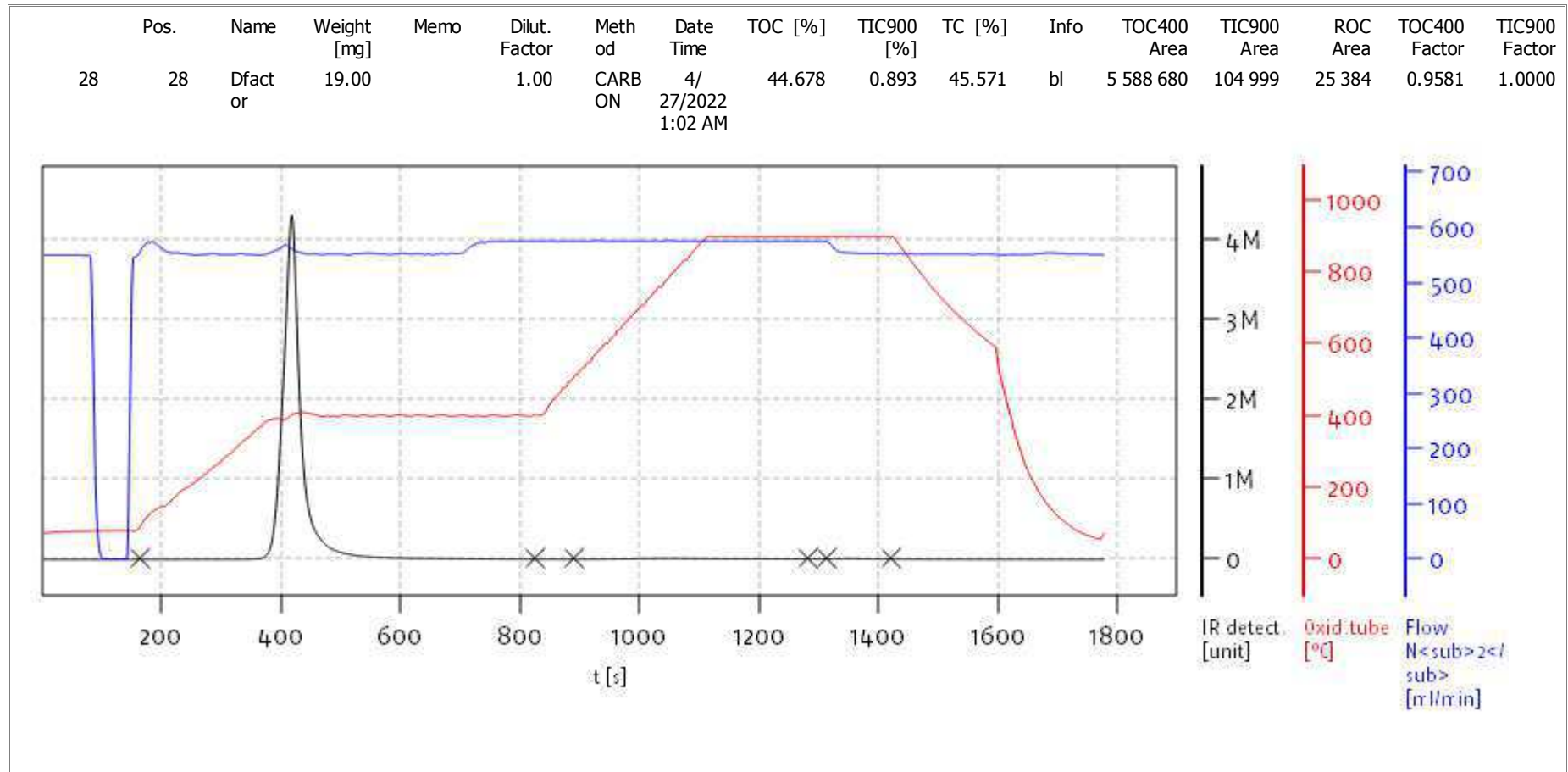
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

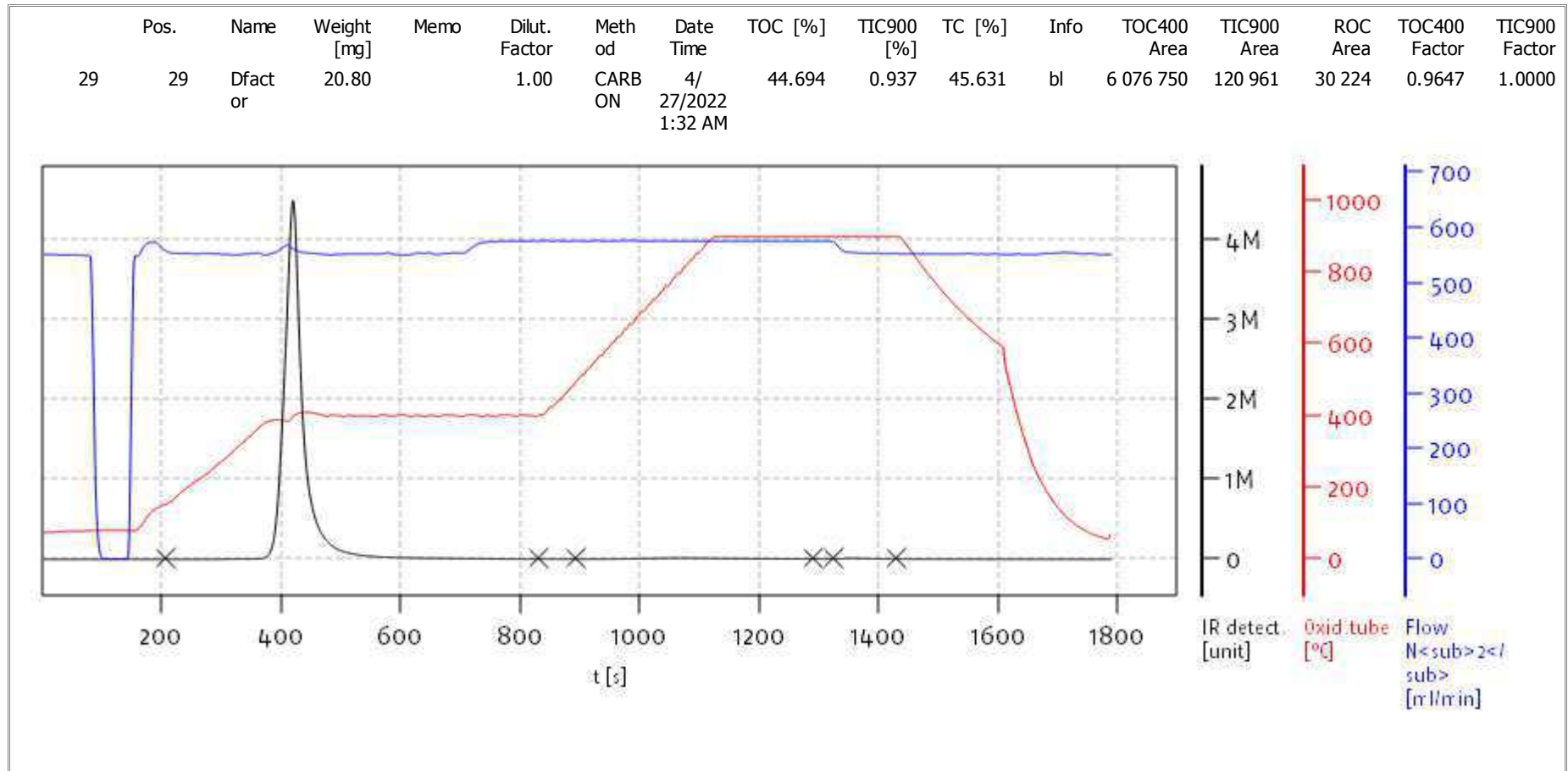
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

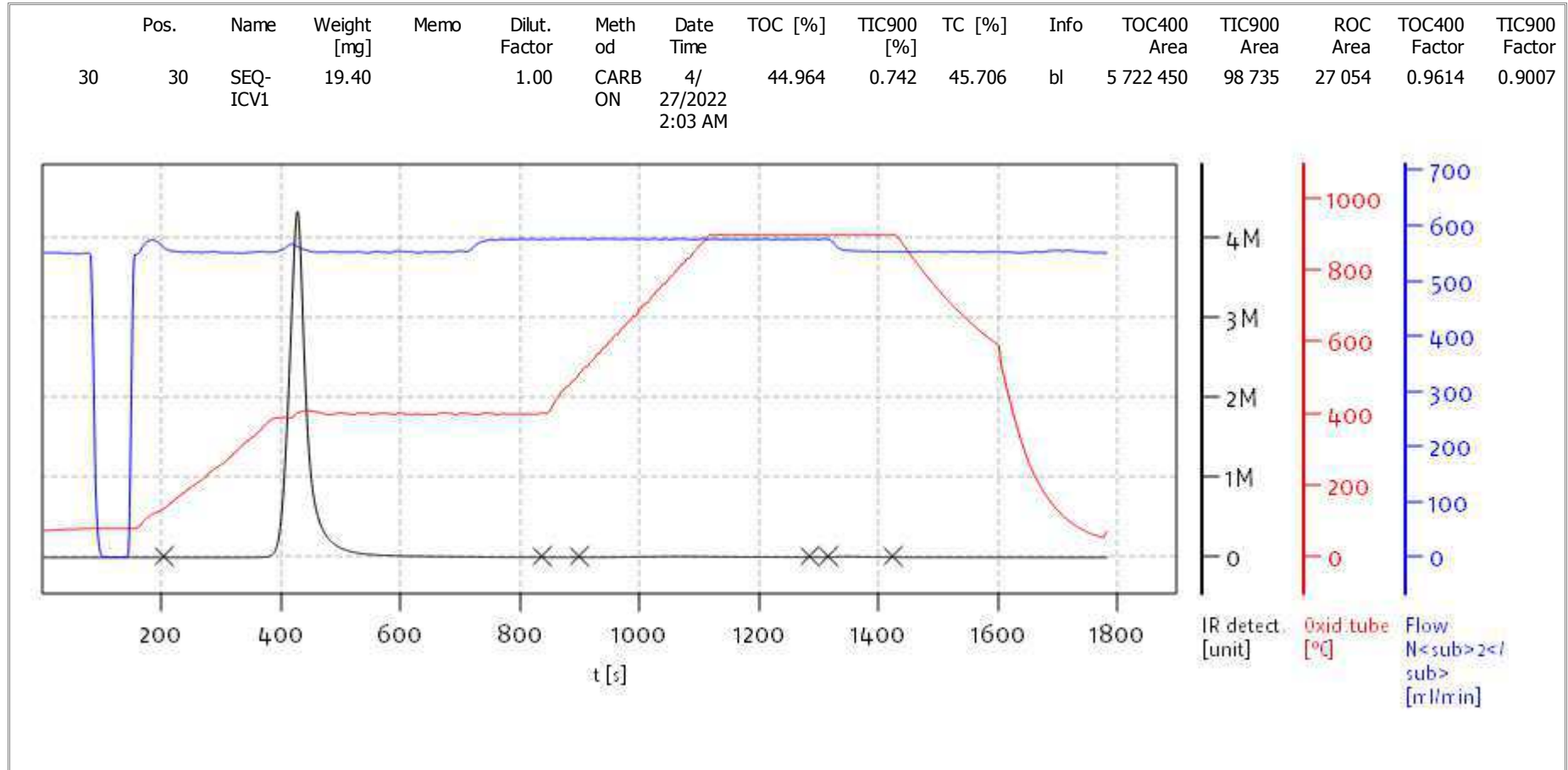
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

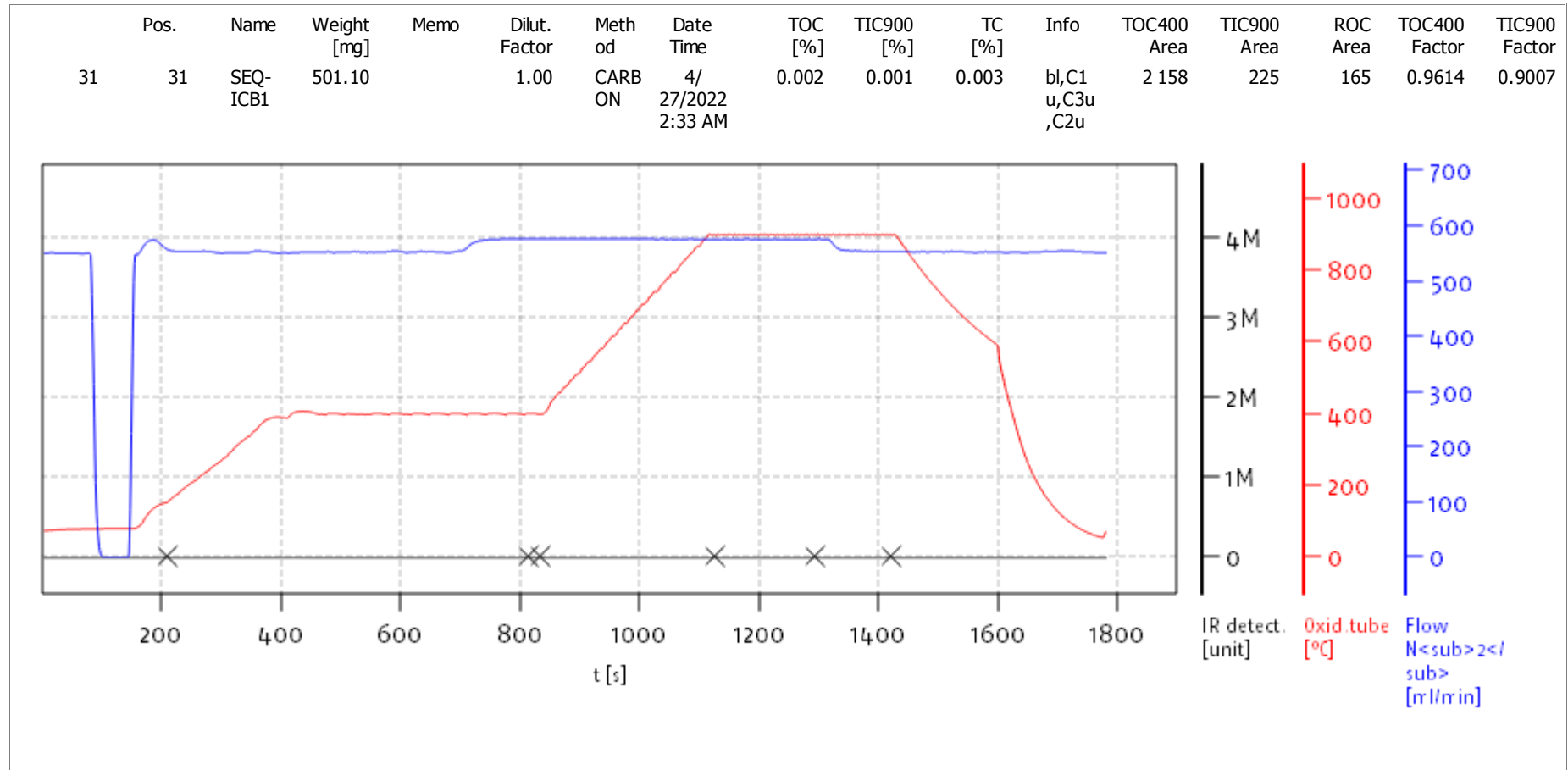
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

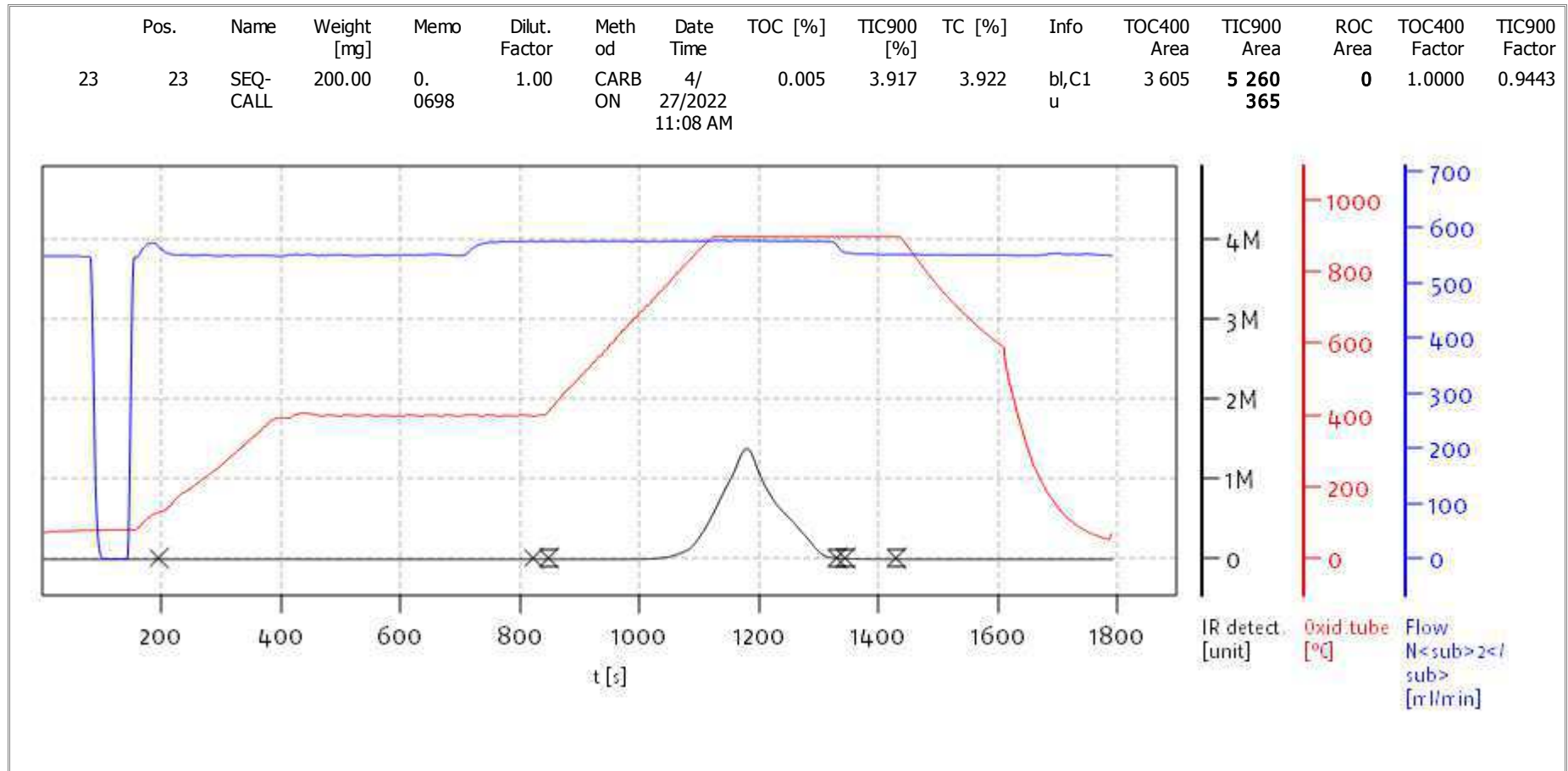
Date: Wed Apr 27 11:07:12 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

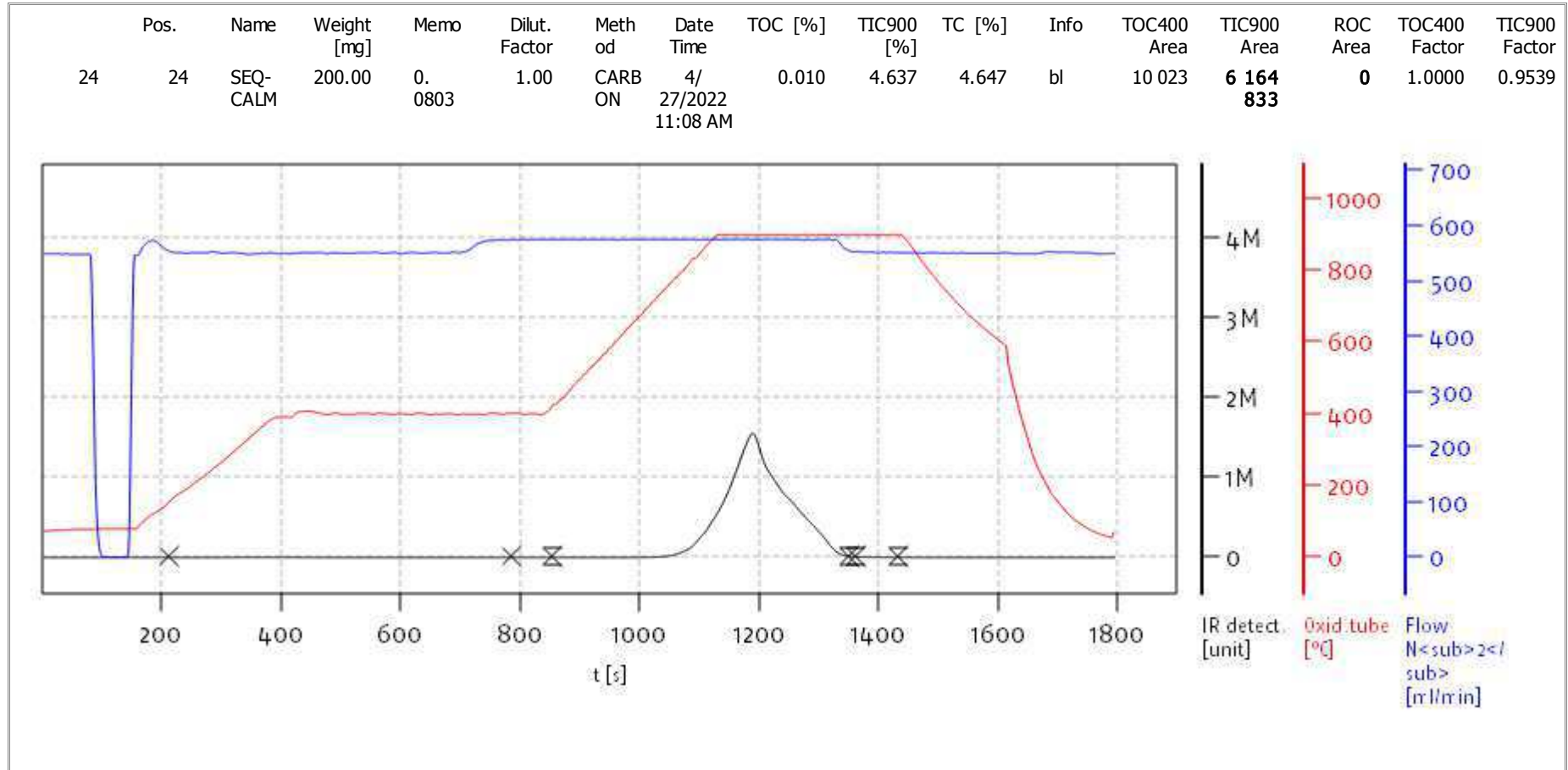
Date: Wed Apr 27 11:10:16 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

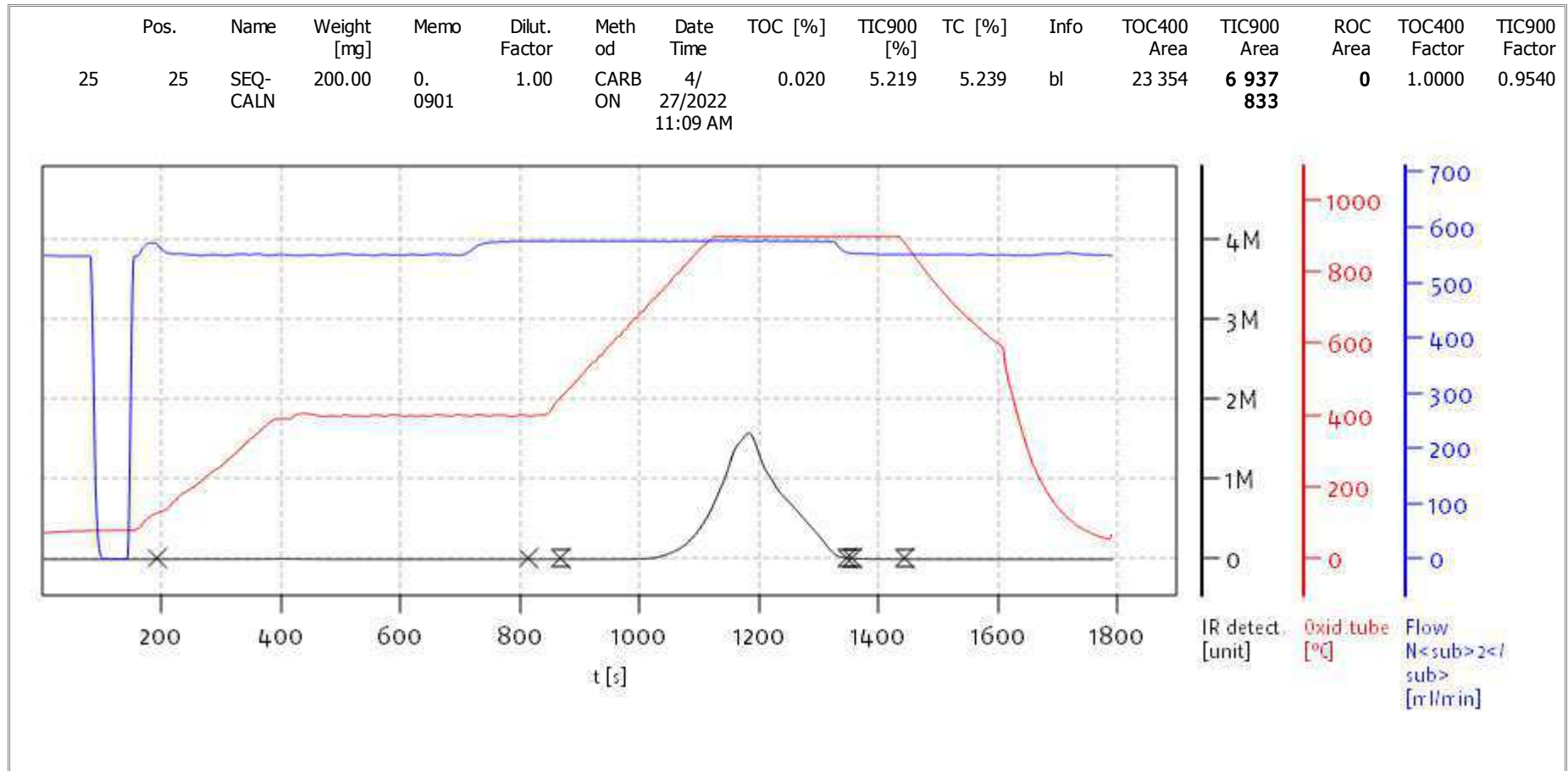
Date: Wed Apr 27 11:10:16 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

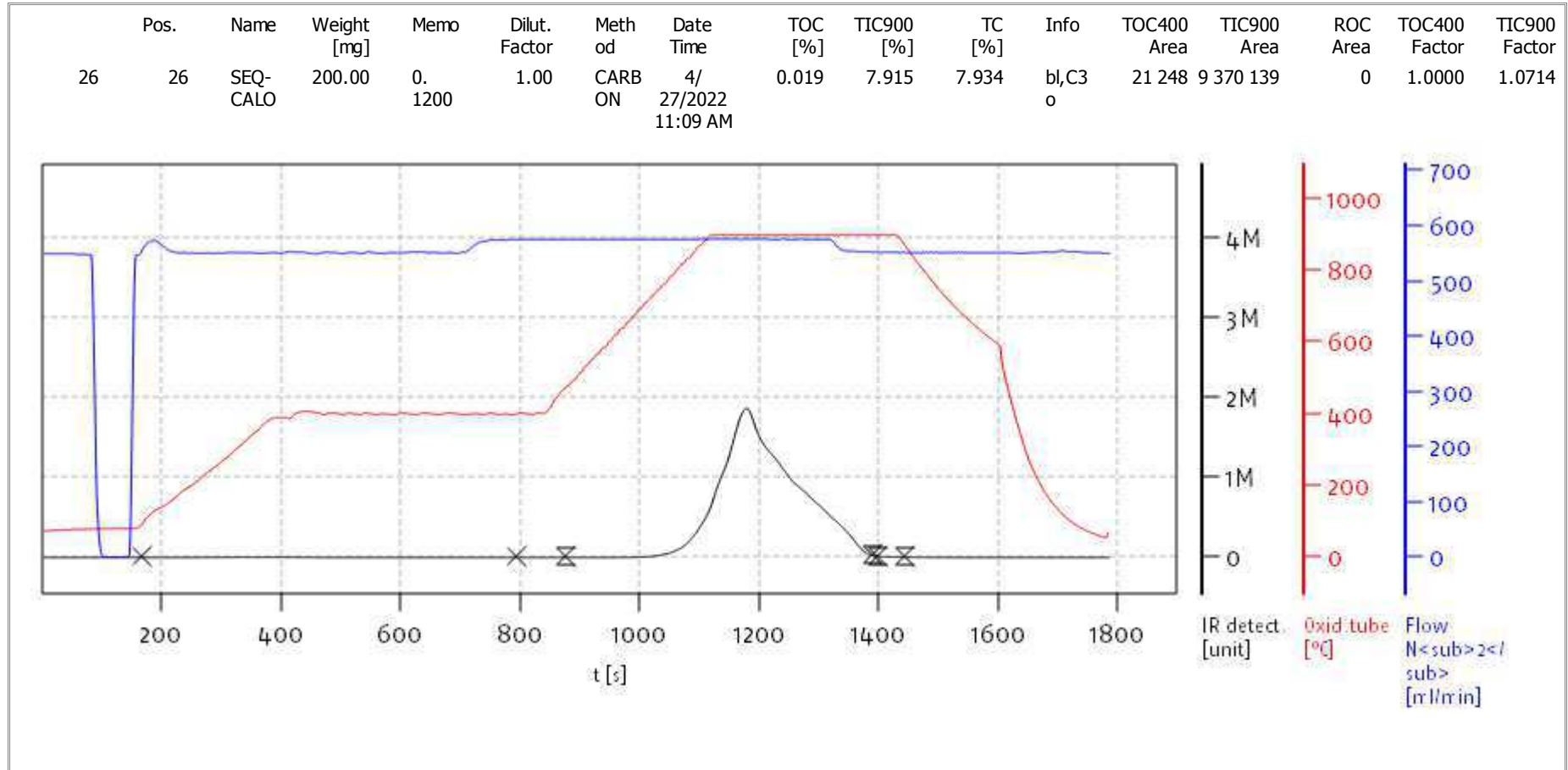
Date: Wed Apr 27 11:10:16 2022



solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE



Name:

Access: solITOC superuser

Date: Wed Apr 27 11:10:16 2022

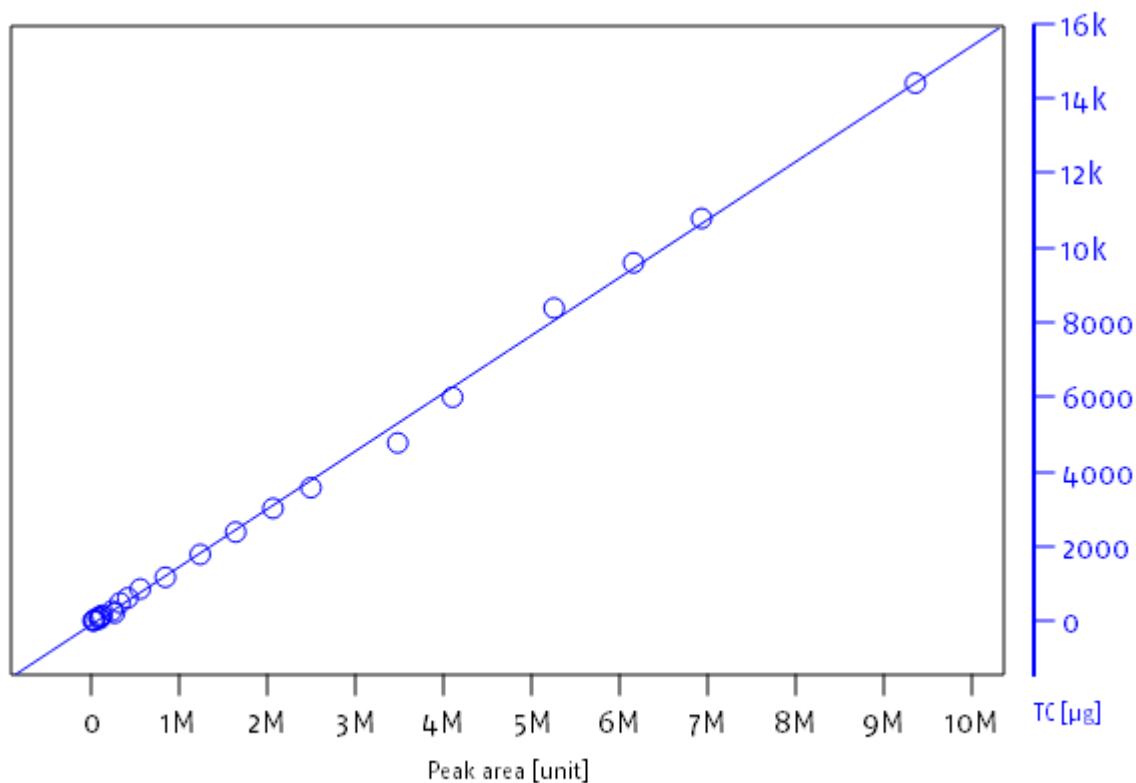


solITOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Calibration parameters TC, Whole range

a	-4.107546e-02
b	+1.548032e-06
c	+0.000000e+00
d	+0.000000e+00
e	+0.000000e+00
r	0.998372
r_old	0.998372
Proc.-SD	166.070255 µg

Calibration graph TC, Whole range



Name:

Access: solITOC superuser

Date: Wed Apr 27 11:19:56 2022



solITOC V2.0.2 (31015f9) 2018-11-19
 Serial No: 0300.181017
 Mode CCC



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Sequence: SKD0371

Date Analyzed: 04/27/22 02:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SKD0371-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Sequence: SLA0205

Date Analyzed: 01/19/23 11:10

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLA0205-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB2	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB4	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB5	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB6	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0205-CCB7	Total Organic Carbon	0.00	0.02	0.02	%	



**INITIAL AND CONTINUING
CALIBRATION CHECK
EPA 9060A m**

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Control Limit: +/- 10.00%

Sequence: SKD0371

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SKD0371-ICV1	Total Organic Carbon	44.446	43.7	98.3	%	EPA 9060A m
	Total Carbon	44.446	44.1	99.2	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	0.40		%	EPA 9060A m
	% Soot	0.0000	0.004		%	EPA 9060A m

* Values outside of QC limits



**INITIAL AND CONTINUING
CALIBRATION CHECK**
EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Instrument ID: TOC Cube

Calibration: FD00070

Control Limit: +/- 10.00%

Sequence: SLA0205

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLA0205-ICV1	Total Organic Carbon	44.446	44.9	101	%	EPA 9060A m
SLA0205-CCV1	Total Organic Carbon	44.446	43.1	96.9	%	EPA 9060A m
SLA0205-CCV2	Total Organic Carbon	44.446	44.8	101	%	EPA 9060A m
SLA0205-CCV3	Total Organic Carbon	44.446	43.8	98.6	%	EPA 9060A m
SLA0205-CCV4	Total Organic Carbon	44.446	45.0	101	%	EPA 9060A m
SLA0205-CCV5	Total Organic Carbon	44.446	46.1	104	%	EPA 9060A m
SLA0205-CCV6	Total Organic Carbon	44.446	44.9	101	%	EPA 9060A m
SLA0205-CCV7	Total Organic Carbon	44.446	44.4	100	%	EPA 9060A m

* Values outside of QC limits



STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0432-SRM1

Batch: BLA0432

Initial/Final: 0.3222 g / 0.3222 g

Preparation: Plumb 1981

Analyzed: 01/19/2023 13:11

Standard ID: L000299

Expires: 01/11/2024

Standard Lot#: NA

Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	3.00	0.02	0.02		100	80 - 120

* Values outside of QC limits



STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Laboratory ID: BLA0442-SRM1

Batch: BLA0442

Initial/Final: 0.2714 g / 0.2714 g

Preparation: Plumb 1981

Analyzed: 01/20/2023 4:22

Standard ID: L000299

Expires: 01/11/2024

Standard Lot#: NA

Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.93	0.02	0.02		97.9	80 - 120

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	01/18/23 10:40	1	180	01/20/23 01:19			
LDW23-SC1032 23A0326-02	01/16/23 15:32	01/17/23 16:46	01/18/23 10:40	1	180	01/20/23 01:50			
LDW23-SC1128 23A0326-03	01/17/23 08:36	01/17/23 16:46	01/18/23 10:40	1	180	01/20/23 02:20			
LDW23-SC1170A 23A0326-04	01/17/23 10:33	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 05:53			
LDW23-SC1169C 23A0326-05	01/17/23 11:08	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 07:23			
LDW23-SC1168 23A0326-06	01/17/23 11:51	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 07:54			
LDW23-SC1176 23A0326-07	01/17/23 12:11	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 08:24			
LDW23-IT1181 23A0326-08	01/17/23 12:31	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 08:55			
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 11:57			
LDW23-SC1161 23A0326-10	01/17/23 14:18	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 12:27			
LDW23-SC1155 23A0326-11	01/17/23 14:06	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 12:58			
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 13:28			
Duplicate BLA0442-DUP1	01/17/23 10:33	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 06:23			
Matrix Spike BLA0442-MS1	01/17/23 10:33	01/17/23 16:46	01/19/23 08:55	1	180	01/20/23 06:53			

* Indicates hold time exceedance.



**METHOD DETECTION
AND REPORTING LIMITS**

EPA 9060A m

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument: TOC Cube

Analyte	MDL	RL	Units
Total Organic Carbon	0.02	0.02	%



National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 1941b

Organics in Marine Sediment

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. Information values are also provided for total organic carbon (TOC), total carbon, hydrogen, and nitrogen. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Certified Mass Fraction Values: Certified mass fraction values for PAHs, PCB congeners, and chlorinated pesticides are provided in Table 1 through Table 3. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST from two or more chemically independent analytical techniques along with results from an interlaboratory comparison study [1]. A NIST certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account [1].

Reference Mass Fraction Values: Reference mass fraction values for additional PAHs (some in combination), additional PCB congeners, and additional chlorinated pesticides are provided in Table 4 through Table 7. Reference values for alkylated PAH groups are provided in Table 8 and for selected hopanes and steranes in Table 9. A reference value for total organic carbon is provided in Table 10. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods [1].

Information Mass Fraction Values: Information mass fraction values are provided in Table 11 for carbon, hydrogen, and nitrogen. An information value is considered to be a value that will be of use to the SRM user, but insufficient information is available to assess the uncertainty associated with the value [1]. Information values cannot be used to establish metrological traceability.

Expiration of Certification: The certification of SRM 1941b is valid, within the measurement uncertainty specified, until **01 October 2020**, provided the SRM is handled and stored in accordance with the instructions given in this certificate (see "Instructions for Handling, Storage, and Use"). This certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of SRM Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Coordination of the technical measurements leading to the certification of this material was under the leadership of M.M. Schantz and S.A. Wise of the NIST Chemical Sciences Division.

Analytical measurements for the certification of SRM 1941b were performed at NIST by J.R. Kucklick, B.J. Porter, D.L. Poster, M.M. Schantz, P. Schubert, S. Tutschku, and L.L. Yu of the NIST Chemical Sciences Division.

Carlos A. Gonzalez, Chief
Chemical Sciences Division

Measurements for TOC were provided by a commercial laboratory and T.L. Wade of the Geochemical and Environmental Research Group, Texas A&M University (College Station, TX). The carbon, hydrogen, and nitrogen data were provided by a commercial laboratory. Results for the PAHs, PCBs, and chlorinated pesticides from 38 laboratories (see Appendix A) that participated in an interlaboratory comparison exercise coordinated by NIST were used. Results for the alkylated PAH groups, hopanes, and steranes from 33 laboratories (see Appendix B) that participated in another interlaboratory comparison exercise coordinated by NIST were also used.

Collection and preparation of SRM 1941b were performed by M.P. Cronise and C.N. Fales of the NIST Office of Reference Materials and B.J. Porter and M.M. Schantz of the NIST Chemical Sciences Division. The sediment material was collected with the assistance of G.G. Lauenstein, J. Collier, and J. Lewis (National Oceanic and Atmospheric Administration, Silver Spring, MD).

Consultation on the statistical design of the experimental work and evaluation of the data were provided by S.D. Leigh and J.H. Yen of the NIST Statistical Engineering Division.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

INSTRUCTIONS FOR HANDLING, STORAGE, AND USE

Handling: This material is naturally occurring marine sediment from an urban area and may contain constituents of unknown toxicities; therefore, caution and care should be exercised during its handling and use.

Storage: SRM 1941b must be stored in its original bottle at temperatures less than 30 °C and away from direct sunlight.

Use: Prior to removal of subsamples for analysis, the contents of the bottle should be mixed. The mass fractions of constituents in SRM 1941b are reported on a dry-mass basis. The SRM, as received, contains a mass fraction of approximately 2.4 % moisture (see "Conversion to Dry-Mass Basis"). The sediment sample should be dried to a constant mass before weighing for analysis; or a separate subsample of the sediment should be removed from the bottle at the time of analysis and dried to determine the mass fraction on a dry-mass basis. If the constituents of interest are volatile, then the moisture must be determined with a separate subsample.

PREPARATION AND ANALYSIS⁽¹⁾

Sample Collection and Preparation: The sediment used to prepare this SRM was collected from the Chesapeake Bay at the mouth of the Baltimore (MD) Harbor near the Francis Scott Key Bridge (39°12.3'N and 76°31.4'W). This location is very near the site where SRM 1941 and SRM 1941a were collected. The sediment was collected using a Kynar-coated modified Van Veen-type grab sampler. A total of approximately 3300 kg of wet sediment was collected from the site. The sediment was freeze-dried, sieved at 150 µm (100 % passing), homogenized in a cone blender, radiation sterilized (⁶⁰Co), and then packaged in screw-capped amber glass bottles each containing approximately 50 g.

Conversion to Dry-Mass Basis: The results for the constituents in SRM 1941b are reported on a dry-mass basis; however, the material "as received" contains residual moisture. The amount of moisture in SRM 1941b was determined by measuring the mass loss after freeze-drying subsamples of 1.1 g to 1.3 g for four days at 1 Pa with a -10 °C shelf temperature and a -50 °C condenser temperature. The moisture content in SRM 1941b at the time of the certification analyses was 2.39 % ± 0.08 % (95 % confidence level). Analytical results for the organic constituents were determined on an as-received basis and then converted to a dry-mass basis by dividing by the conversion factor of 0.9761 (gram dry mass per gram as-received mass).

Polycyclic Aromatic Hydrocarbons: The general approach used for the value assignment of the PAHs in SRM 1941b was similar to that reported in detail elsewhere [2]. The approach consisted of combining results from analyses using various combinations of different extraction techniques and solvents, clean-up/isolation procedures, and chromatographic separation and detection techniques: Soxhlet extraction and pressurized-fluid extraction (PFE) using dichloromethane (DCM) or a hexane/acetone mixture, cleanup of the extracts using solid-phase extraction (SPE) or normal-phase liquid chromatography (LC), followed by analysis using the following techniques: (1) reversed-phase liquid chromatography with fluorescence detection (LC-FL) analysis of the total PAH fraction, (2) reversed-phase

⁽¹⁾ Certain commercial equipment, instruments or materials are identified in this certificate to adequately specify the experimental procedure. Such identification does not imply recommendation or endorsement by the National Institute of Standards and Technology.

LC-FL analysis of isomeric PAH fractions isolated by normal-phase LC (i.e., multidimensional LC), (3) gas chromatography/mass spectrometry (GC/MS) analysis of the PAH fraction on three stationary phases of different selectivity, i.e., a 5 % (all column compositions are given as mole fractions in %) phenyl-substituted methylpolysiloxane phase, a 50 % phenyl-substituted methylpolysiloxane phase, and a relatively non-polar proprietary phase.

Three sets of GC/MS results, designated as GC/MS (I), GC/MS (II), and GC/MS (III), were obtained using three columns with different selectivities for the separation of PAHs. For GC/MS (I) analyses, duplicate subsamples of approximately 1 g from ten bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 2 % DCM in hexane (all solvent concentrations are given as volume fractions in %). The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5 MS, J&W Scientific, Folsom, CA). The GC/MS (II) analyses were performed using 5 g subsamples from six bottles of SRM 1941b. These samples were extracted using PFE with DCM. The high molecular mass compounds were removed from the extracts using size exclusion chromatography (SEC) with a preparative-scale divinylbenzene-polystyrene column (10 μm particle size with 10 nm diameter pores), and the sulfur was removed from the extracts by adding copper powder. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The analysis was by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17 MS, J&W Scientific). For the GC/MS (III), 9 g subsamples from six bottles of SRM 1941b were Soxhlet-extracted for 18 h with 250 mL of a mixture of 50 % hexane/50 % acetone. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific).

Two sets of LC-FL results, designated as LC-FL (total) and LC-FL (isomer), were used in the certification process. For the LC-FL (total), subsamples of approximately 1 g from six bottles of SRM 1941b were extracted using PFE with a mixture of 50 % hexane/50 % acetone. The extracts were concentrated and then processed through an aminopropylsilane SPE cartridge using 2 % DCM in hexane to obtain the total PAH fraction. For the LC-FL (isomer), a 5 g subsample from the six bottles was extracted using PFE with DCM and processed through an aminopropylsilane SPE cartridge using 10 % DCM in hexane; the PAH fraction was then fractionated further on a semi-preparative aminopropylsilane column (μBondapak NH₂, 9 mm i.d. × 30 cm, Waters Associates, Milford, MA) to isolate isomeric PAH fractions as described previously [3–6]. The total PAH fraction and the isomeric PAH fractions were analyzed using a 5 μm particle-size polymeric octadecylsilane (C₁₈) column (4.6 mm i.d. × 25 cm, Hypersil-PAH, Keystone Scientific, Inc., Bellefonte, PA) with wavelength-programmed fluorescence detection [4,5].

For the GC/MS and LC-FL measurements described above, selected perdeuterated PAHs were added to the sediment prior to solvent extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PAHs in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

Homogeneity Assessment for PAHs: The homogeneity of SRM 1941b was assessed by analyzing duplicate samples of approximately 1 g from ten bottles selected by stratified random sampling. Samples were extracted, processed, and analyzed as described above for GC/MS (I). No statistically significant differences among bottles were observed for the PAHs at this sample size.

PAH Isomers of Molecular Mass 300 and 302: For the determination of the molecular mass 300 and 302 isomers, three subsamples of approximately 5 g each were extracted using PFE with DCM. The extracts were then concentrated with a solvent change to hexane and passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17MS, J&W Scientific). Perdeuterated dibenzo[*a,i*]pyrene was added to the sediment prior to extraction for use as an internal standard [8].

PCBs and Chlorinated Pesticides: The general approach used for the determination of PCBs and chlorinated pesticides in SRM 1941b consisted of combining results from analyses using various combinations of different extraction techniques and solvents, cleanup/isolation procedures, and chromatographic separation and detection techniques. Techniques and solvents included Soxhlet extraction and PFE using DCM or a hexane/acetone mixture, 23A0326 CLPLIKE (Rev3) - Page 5885 of 5914

clean-up/isolation using SPE or LC, followed by analysis using GC/MS and gas chromatography with electron capture detection (GC-ECD) on two columns with different selectivity for the separation of PCBs and chlorinated pesticides. The analytical methods are described in detail elsewhere [2].

Six sets of results were obtained and designated as GC-ECD (I) A and B, GC/MS (I) A and B, GC/MS (II), and Interlaboratory Comparison Exercise. For the GC-ECD (I) analyses, approximately 10 g subsamples from six bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur, and SEC, as described above, was used to remove the high molecular mass compounds. The concentrated extract was then fractionated on a semi-preparative aminopropylsilane column to isolate two fractions containing: (1) the PCBs and lower-polarity pesticides and (2) the more polar pesticides. GC-ECD analyses of the two fractions were performed on two columns of different selectivities for PCB separations: 0.25 mm × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5, J&W Scientific), and a 0.25 mm × 60 m fused silica capillary column with a non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The results from the 5 % phenyl phase are designated as GC-ECD (IA) and the results from the proprietary phase are designated as GC-ECD (IB). For the GC-ECD analyses, two PCB congeners that are not significantly present in the sediment extract (PCB 103 and PCB 198 [9,10]) and endosulfan I-*d*₄, 4,4'-DDE-*d*₈, 4,4'-DD-*d*₈, and 4,4'-DDT-*d*₈ were added to the sediment prior to extraction for use as internal standards for quantification purposes.

Two sets of results were obtained by GC/MS. For GC/MS (I), approximately 9 g subsamples from six bottles were Soxhlet- extracted with a mixture of 50 % hexane/50 % acetone for approximately 18 h. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS with two ionization modes, electron impact (EI) and negative ion chemical ionization (NICI). The GC/MS EI method, GC/MS (IA), used a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The GC/MS NICI method, GC/MS (IB), used a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5MS, J&W Scientific). The GC/MS (II) results were obtained in the same manner as the GC/MS (IA) analyses except that three subsamples were Soxhlet-extracted with DCM for approximately 18 h. For the GC/MS analyses, selected carbon-13 labeled PCB congeners and chlorinated pesticides were added to the sediment prior to extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PCB congeners and chlorinated pesticides in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

The reference value for PCB 77 was determined from a separate fraction. The samples were extracted and processed as for GC-ECD (I) above. The first (PCB and lower-polarity pesticide) fraction from the semi-preparative aminopropylsilane column was further fractionated using a Cosmosil PYE (pyrenylethyl group bonded) column (5 μm particle size, 4.6 mm i.d. × 25 cm; Phenomenex, Torrance, CA) [11]. Three fractions were collected: the first fraction contained the pesticides and multi-*ortho* PCBs, the second fraction contained the polychlorinated naphthalenes, non-*ortho* PCB congeners, and some mono-*ortho* PCB congeners, and the third fraction removed the residual planar compounds from the column. The second fraction was analyzed by GC/MS NICI using the same column as GC/MS (IB) above. Carbon-13 labeled PCB 77 was used as an internal standard for quantification purposes.

Alkylated PAH Groups, Hopanes, and Steranes: SRM 1941b was used in an interlaboratory comparison exercise in 2011 [12]. Results from 33 laboratories that participated in this exercise were used in the determination of the reference values for alkylated PAH groups, hopanes, and steranes in SRM 1941b. Note that not all laboratories returned data for each analyte. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest. For the alkylated PAHs, the majority of the laboratories (>90 %) used the parent PAH for determination of the response factor for the corresponding alkylated group.

Total Organic Carbon (TOC): Two laboratories provided results for TOC using similar procedures. Briefly, subsamples of approximately 200 mg were reacted with 6 mol/L hydrochloric acid and rinsed with deionized water prior to combustion in a gas fusion furnace. The carbon monoxide and carbon dioxide produced were measured and compared to a blank for calculation of the percent TOC. Each laboratory analyzed subsamples from three bottles of SRM 1941b. One of the laboratories also analyzed three subsamples from three bottles of SRM 1941b for carbon, hydrogen, and nitrogen.

Table 1. Certified Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions ^(a) ($\mu\text{g}/\text{kg}$)	
Naphthalene ^(b,c,d,e,f,g)	848	\pm 95 ^(h)
Fluorene ^(b,c,d,e,f,g)	85	\pm 15 ^(h)
Phenanthrene ^(b,c,d,e,f,g)	406	\pm 44 ^(h)
Anthracene ^(b,c,d,e,f,g)	184	\pm 18 ^(h)
3-Methylphenanthrene ^(b,c,d)	105	\pm 13 ^(h)
2-Methylphenanthrene ^(b,c,d)	128	\pm 14 ^(h)
1-Methylphenanthrene ^(b,c,d,g)	73.2	\pm 5.9 ^(h)
Fluoranthene ^(b,c,d,e,f,g)	651	\pm 50 ^(h)
Pyrene ^(b,c,d,e,f,g)	581	\pm 39 ^(h)
Benz[<i>a</i>]anthracene ^(b,c,d,e,f,g)	335	\pm 25 ^(h)
Chrysene ^(d,f)	291	\pm 31 ^(h)
Triphenylene ^(d,f)	108	\pm 5 ⁽ⁱ⁾
Benzo[<i>b</i>]fluoranthene ^(c,e)	453	\pm 21 ^(h)
Benzo[<i>k</i>]fluoranthene ^(b,c,d,e)	225	\pm 18 ^(h)
Benzo[<i>e</i>]pyrene ^(b,c,d,g)	325	\pm 25 ^(h)
Benzo[<i>a</i>]pyrene ^(b,c,d,f,g)	358	\pm 17 ^(h)
Perylene ^(b,c,d,f,g)	397	\pm 45 ^(h)
Benzo[<i>ghi</i>]perylene ^(b,c,d,f,g)	307	\pm 45 ^(h)
Indeno[1,2,3- <i>cd</i>]pyrene ^(b,c,d,f,g)	341	\pm 57 ^(h)
Dibenz[<i>a,j</i>]anthracene ^(b,c,d,f)	48.9	\pm 4.6 ^(h)
Dibenz[<i>a,c</i>]anthracene ^(c,f)	36.7	\pm 5.2 ^(h)
Dibenz[<i>a,h</i>]anthracene ^(c,f)	53	\pm 10 ^(h)
Benzo[<i>b</i>]chrysene ^(b,c,d,f)	53	\pm 12 ^(h)
Picene ^(b,c,d)	46.6	\pm 4.7 ^(h)

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(c) GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(d) GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(e) LC-FL (total) of total PAH fraction after PFE with DCM.

^(f) LC-FL (isomer) of isomeric PAH fractions after PFE with DCM.

^(g) 1999 Interlaboratory Comparison Study [7] with 21 to 29 laboratories submitting data for each PAH.

^(h) Certified values are weighted means of the results from two to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

⁽ⁱ⁾ The certified value is an unweighted mean of the results from two analytical methods. The uncertainty listed with the value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the value is metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 2. Certified Mass Fraction Values for PCB Congeners^(a) in SRM 1941b

PCB Congeners		Mass Fractions ^(b) ($\mu\text{g}/\text{kg}$)
PCB	8 (2,4'-Dichlorobiphenyl) ^(c,d,e,f,g)	1.65 \pm 0.19 ^(h)
PCB	18 (2,2',5-Trichlorobiphenyl) ^(c,d,e,f,g)	2.39 \pm 0.29 ^(h)
PCB	28 (2,4,4'-Trichlorobiphenyl) ^(c,d,e,f,g)	4.52 \pm 0.57 ^(h)
PCB	31 (2,4',5-Trichlorobiphenyl) ^(c,e,f)	3.18 \pm 0.41 ^(h)
PCB	44 (2,2',3,5'-Tetrachlorobiphenyl) ^(c,d,e,f,g)	3.85 \pm 0.20 ⁽ⁱ⁾
PCB	49 (2,2',4,5'-Tetrachlorobiphenyl) ^(c,d,e,f)	4.34 \pm 0.28 ⁽ⁱ⁾
PCB	52 (2,2',5,5'-Tetrachlorobiphenyl) ^(c,d,e,f,g)	5.24 \pm 0.28 ⁽ⁱ⁾
PCB	66 (2,3',4,4'-Tetrachlorobiphenyl) ^(c,e,f,g,j)	4.96 \pm 0.53 ⁽ⁱ⁾
PCB	87 (2,2',3,4,5'-Pentachlorobiphenyl) ^(c,d,f,j)	1.14 \pm 0.16 ^(h)
PCB	95 (2,2',3,5',6-Pentachlorobiphenyl) ^(c,e,f,g)	3.93 \pm 0.62 ⁽ⁱ⁾
PCB	99 (2,2',4,4',5-Pentachlorobiphenyl) ^(c,d,e,f,g)	2.90 \pm 0.36 ⁽ⁱ⁾
PCB	101 (2,2',4,5,5'-Pentachlorobiphenyl) ^(c,e,f,g,j)	5.11 \pm 0.34 ⁽ⁱ⁾
PCB	105 (2,3,3',4,4'-Pentachlorobiphenyl) ^(c,d,e,f,g,j)	1.43 \pm 0.10 ⁽ⁱ⁾
PCB	110 (2,3,3',4',6-Pentachlorobiphenyl) ^(c,e,f,j)	4.62 \pm 0.36 ⁽ⁱ⁾
PCB	118 (2,3',4,4',5-Pentachlorobiphenyl) ^(c,d,e,f,g,j)	4.23 \pm 0.19 ⁽ⁱ⁾
PCB	128 (2,2',3,3',4,4'-Hexachlorobiphenyl) ^(c,d,e,f,g,j)	0.696 \pm 0.044 ⁽ⁱ⁾
PCB	138 (2,2',3,4,4',5'-Hexachlorobiphenyl) ^(c,e,f,j)	3.60 \pm 0.28 ⁽ⁱ⁾
PCB	149 (2,2',3,4',5',6-Hexachlorobiphenyl) ^(c,d,e,j)	4.35 \pm 0.26 ^(h)
PCB	153 (2,2',4,4',5,5'-Hexachlorobiphenyl) ^(c,d,e,f,g,j)	5.47 \pm 0.32 ⁽ⁱ⁾
PCB	156 (2,3,3',4,4',5-Hexachlorobiphenyl) ^(c,d,e,f,j)	0.507 \pm 0.090 ^(h)
PCB	170 (2,2',3,3',4,4',5-Heptachlorobiphenyl) ^(c,d,e,f,g,j)	1.35 \pm 0.09 ⁽ⁱ⁾
PCB	180 (2,2',3,4,4',5,5'-Heptachlorobiphenyl) ^(c,d,e,f,g,j)	3.24 \pm 0.51 ⁽ⁱ⁾
PCB	183 (2,2',3,4,4',5',6-Heptachlorobiphenyl) ^(c,d,e,j)	0.979 \pm 0.087 ^(h)
PCB	187 (2,2',3,4',5,5',6-Heptachlorobiphenyl) ^(c,d,e,f,g,j)	2.17 \pm 0.22 ⁽ⁱ⁾
PCB	194 (2,2',3,3',4,4',5,5'-Octachlorobiphenyl) ^(c,d,e,j)	1.04 \pm 0.06 ^(h)
PCB	195 (2,2',3,3',4,4',5,6-Octachlorobiphenyl) ^(c,e,g,j)	0.645 \pm 0.060 ⁽ⁱ⁾
PCB	201 (2,2',3,3',4,5',6,6'-Octachlorobiphenyl) ^(c,e,j)	0.777 \pm 0.034 ^(h)
PCB	206 (2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl) ^(c,e,f,g,j)	2.42 \pm 0.19 ⁽ⁱ⁾
PCB	209 Decachlorobiphenyl ^(c,d,e,f,g,j)	4.86 \pm 0.45 ⁽ⁱ⁾

^(a) PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform to IUPAC rules, except PCB 201. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 201 is listed as PCB 200.

^(b) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(c) GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(d) GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

^(e) GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

^(f) GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

^(g) 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each PCB congener.

^(h) Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

⁽ⁱ⁾ Certified values are weighted means of the results from three to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(j) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

Table 3. Certified Mass Fraction Values for Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions ^(a) ($\mu\text{g}/\text{kg}$)
Hexachlorobenzene ^(b,c,d,e)	5.83 \pm 0.38 ^(f)
<i>cis</i> -Chlordane ^(b,c,d,e,g)	0.85 \pm 0.11 ^(h)
<i>trans</i> -Chlordane ^(b,c,e)	0.566 \pm 0.093 ^(f)
<i>cis</i> -Nonachlor ^(b,e,g)	0.378 \pm 0.053 ^(h)
<i>trans</i> -Nonachlor ^(b,c,d,e,g)	0.438 \pm 0.073 ^(f)
4,4'-DDE ^(b,d,e,g)	3.22 \pm 0.28 ^(h)
4,4'-DDD ^(b,d,e,g)	4.66 \pm 0.46 ^(h)

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(c) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

^(d) GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

^(e) 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each pesticide.

^(f) Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(g) GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

^(h) Certified values are weighted means of the results from three to five analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed and the values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 4. Reference Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions ^(a)		
	(µg/kg)		
1-Methylnaphthalene ^(b,c,d,e)	127	±	14 ^(f)
2-Methylnaphthalene ^(b,c,d,e)	276	±	53 ^(f)
2,6-Dimethylnaphthalene ^(b,c,d,e)	75.9	±	4.5 ^(f)
2,3,5-Trimethylnaphthalene ^(b,c,d,e)	25.5	±	5.1 ^(f)
Biphenyl ^(b,c,d,e)	74.0	±	8.0 ^(f)
Acenaphthylene ^(b,c,d,e)	53.3	±	6.4 ^(f)
Acenaphthene ^(b,c,d,e)	38.4	±	5.2 ^(f)
9-Methylphenanthrene ^(c)	63.5	±	2.5 ^(g)
4-Methylphenanthrene and 9-Methylphenanthrene ^(b,d)	80.1	±	4.8 ^(f)
2-Methylanthracene ^(c,d)	36	±	15 ^(f)
8-Methylfluoranthene ^(b)	49.5	±	2.7 ^(g)
7-Methylfluoranthene ^(b)	45.4	±	1.5 ^(g)
1-Methylfluoranthene ^(b)	42.4	±	2.1 ^(g)
3-Methylfluoranthene ^(b)	28.8	±	1.3 ^(g)
2-Methylpyrene ^(b)	78.7	±	4.0 ^(g)
4-Methylpyrene ^(b)	66.4	±	2.6 ^(g)
1-Methylpyrene ^(b)	52.5	±	2.3 ^(g)
Acephenanthrene ^(d)	30.5	±	1.9 ^(g)
Benzo[<i>c</i>]phenanthrene ^(b,c,d)	58	±	15 ^(f)
Benzo[<i>a</i>]fluoranthene ^(b,c,d)	73	±	18 ^(f)
Benzo[<i>j</i>]fluoranthene ^(c)	217	±	5 ^(g)
Indeno[1,2,3- <i>cd</i>]fluoranthene ^(d)	9.63	±	0.34 ^(g)
Pentaphene ^(d)	25.3	±	1.0 ^(g)

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(c) GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

^(d) GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(e) 1999 Interlaboratory Comparison Study [7] with 14 to 26 laboratories submitting data for each PAH.

^(f) Reference values are weighted means of the results from two to four analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of PAHs listed as determined by the methods indicated. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(g) Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U , is calculated as $U = k u_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k , is determined from the Student's t -distribution for the associated degrees of freedom (19 for footnote b and 5 for footnotes c and d) and 95 % confidence level for each analyte. The measurand is the total mass fraction of the PAHs listed as determined by the method indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 5. Reference Mass Fraction Values for PAHs of Molecular Mass 300 and 302 in SRM 1941b

PAHs of Molecular Mass 300 and 302	Mass Fractions ^(a,b,c) ($\mu\text{g}/\text{kg}$)
Coronene	72.6 \pm 4.7
Dibenzo[<i>b,e</i>]fluoranthene	10.3 \pm 0.3
Naphtho[1,2- <i>b</i>]fluoranthene	91.0 \pm 3.1
Naphtho[1,2- <i>k</i>]fluoranthene and Naphtho[2,3- <i>j</i>]fluoranthene	79.8 \pm 2.5
Naphtho[2,3- <i>b</i>]fluoranthene	23.5 \pm 0.3
Dibenzo[<i>b,k</i>]fluoranthene	95.6 \pm 3.1
Dibenzo[<i>a,k</i>]fluoranthene	26.6 \pm 0.4
Dibenzo[<i>j,l</i>]fluoranthene	63.8 \pm 1.8
Dibenzo[<i>a,l</i>]pyrene	11.1 \pm 1.0
Naphtho[2,3- <i>k</i>]fluoranthene	10.7 \pm 0.6
Naphtho[1,2- <i>a</i>]pyrene	16.7 \pm 1.4
Naphtho[2,3- <i>e</i>]pyrene	33.2 \pm 2.3
Dibenzo[<i>a,e</i>]pyrene	76.1 \pm 3.6
Naphtho[2,1- <i>a</i>]pyrene	59.2 \pm 1.8
Dibenzo[<i>e,i</i>]pyrene	35.0 \pm 2.4
Naphtho[2,3- <i>a</i>]pyrene	16.5 \pm 0.6
Benzo[<i>b</i>]perylene	38.2 \pm 1.2
Dibenzo[<i>a,i</i>]pyrene	25.5 \pm 1.0
Dibenzo[<i>a,h</i>]pyrene	6.94 \pm 0.29

^(a) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U , is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k , is determined from the Student's t -distribution for two degrees of freedom and 95 % confidence level for each analyte. The measurand is the total mass fraction of the constituent listed as determined by the method indicated. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(c) GC/MS on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM [8].

Table 6. Reference Mass Fraction Values for PCB Congeners^(a) in SRM 1941b

PCB Congeners			Mass Fractions ^(b,c) ($\mu\text{g}/\text{kg}$)		
PCB	45	(2,2',3,6-Tetrachlorobiphenyl) ^(d,e)	0.73	\pm	0.12
PCB	56	(2,3,3',4'-Tetrachlorobiphenyl) ^(d,f,g)	1.21	\pm	0.11
PCB	63	(2,3,4',5-Tetrachlorobiphenyl) ^(e,f,g)	0.213	\pm	0.040
PCB	70	(2,3',4',5-Tetrachlorobiphenyl) ^(e,f,g)	4.99	\pm	0.29
PCB	74	(2,4,4',5-Tetrachlorobiphenyl) ^(e,f,g)	2.04	\pm	0.15
PCB	77	(3,3',4,4'-Tetrachlorobiphenyl) ^(h)	0.31	\pm	0.03
PCB	107	(2,3,3',4',5-Pentachlorobiphenyl) ^(d,e,f,g)	0.628	\pm	0.028
PCB	132	(2,2',3,3',4,6'-Hexachlorobiphenyl) ^(d,f,g)	1.28	\pm	0.27
PCB	146	(2,2',3,4',5,5'-Hexachlorobiphenyl) ^(e,f,g)	1.22	\pm	0.12
PCB	158	(2,3,3',4,4',6-Hexachlorobiphenyl) ^(d,e,f,g)	0.65	\pm	0.15
PCB	163	(2,3,3',4',5,6-Hexachlorobiphenyl) ^(e,f,g)	1.28	\pm	0.06
PCB	174	(2,2',3,3',4,5,6'-Heptachlorobiphenyl) ^(d,e,f,g)	1.51	\pm	0.39
PCB	193	(2,3,3',4',5,5',6-Heptachlorobiphenyl) ^(d,e,f,g)	0.292	\pm	0.075

^(a) PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform with IUPAC rules, except PCB 107. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 107 is listed as PCB 108.

^(b) Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(c) For these PCB congeners except PCB 77, the reference values are unweighted means of the results from two to four analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled within-method variance following the ISO/JCGM Guide [14,15]. For PCB 77, the reference value is the mean of results obtained by NIST using one analytical technique. The expanded uncertainty, U , is calculated as $U = k u_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k , is determined from the Student's t -distribution corresponding to two degrees of freedom and 95 % confidence level for PCB 77. The measurand is the total mass fraction of the PCB Congeners listed as determined by the method or methods indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as microgram per kilogram on a dry-mass basis.

^(d) GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

^(e) GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

^(f) GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

^(g) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

^(h) GC/MS NICI on a 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC-ECD (I) fractionated using a PYE column.

Table 7. Reference Mass Fraction Values for Selected Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions ^(a,b) ($\mu\text{g}/\text{kg}$)
2,4'-DDE ^(c,d)	0.38 \pm 0.12
4,4'-DDT ^(e,f)	1.12 \pm 0.42

^(a) Mass Fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

^(b) The reference values are unweighted means of the results from two analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed as determined by the methods indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

^(c) GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

^(d) GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

^(e) GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

^(f) 1999 Interlaboratory Comparison Study [7] with 10 laboratories submitting data for 4,4'-DDT.

Table 8. Reference Mass Fraction Values for Alkylated PAH Groups in SRM 1941b

Alkylated PAH Group	Mass Fraction ^(a,b) ($\mu\text{g}/\text{kg}$)
C2-decalins	18 \pm 5
C4-decalins	41 \pm 4
C2-naphthalenes	187 \pm 53
C3-naphthalenes	158 \pm 42
C1-benzothiophenes	25 \pm 14
C2-benzothiophenes	20 \pm 11
C3-benzothiophenes	22 \pm 13
C4-benzothiophenes	18 \pm 5
C1-fluorenes	57 \pm 18
C2-fluorenes	122 \pm 43
C3-fluorenes	128 \pm 31
C1-phenanthrenes/anthracenes	313 \pm 99
C2-phenanthrenes/anthracenes	247 \pm 62
C3-phenanthrenes/anthracenes	165 \pm 46
C4-phenanthrenes/anthracenes	87 \pm 36
C1-dibenzothiophenes	54 \pm 13
C2-dibenzothiophenes	91 \pm 18
C3-dibenzothiophenes	84 \pm 15
C4-dibenzothiophenes	57 \pm 13
C1-fluoranthenes/pyrenes	252 \pm 48
C2-fluoranthenes/pyrenes	205 \pm 38
C3-fluoranthenes/pyrenes	102 \pm 22
C4-fluoranthenes/pyrenes	121 \pm 59
C1-benzanthracenes/chrysenes/triphenylenes	208 \pm 43
C2-benzanthracenes/chrysenes/triphenylenes	120 \pm 24
C3-benzanthracenes/chrysenes/triphenylenes	73 \pm 31
C4-benzanthracenes/chrysenes/triphenylenes	41 \pm 11

^(a) The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U , is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the alkylated PAH groups listed as determined by the interlaboratory study methods. The values listed are metrologically traceable to the SI unit of mass fraction, expressed as micrograms per kilogram on a dry-mass basis.

^(b) Data from the interlaboratory study [12].

Table 9. Reference Mass Fraction Values for Hopanes and Steranes in SRM 1941b

Hopane or Sterane	Mass Fraction ^(a,b) (µg/kg)
17α(H)-22,29,30-Trisnorhopane	54 ± 18
17α(H)-21β(H)-30-Norhopane	137 ± 21
17α(H)-21β(H)-30-Hopane	215 ± 44
17α(H)-21β(H)-22R-Homohopane	44 ± 10
17α(H)-21β(H)-22S-Homohopane	48 ± 13
5α(H)-14α(H),17α(H)-Cholestane 20R	41 ± 11
5α(H)-14β(H),17β(H)-Cholestane 20R	27 ± 6
5α(H)-14β(H),17β(H)-24-Methylcholestane 20R	21 ± 8
5α(H)-14α(H),17α(H)-24-Ethylcholestane 20R	19 ± 5
5α(H)-14β(H),17β(H)-24-Ethylcholestane 20R	41 ± 9

- ^(a) The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U , is calculated as $U = k u_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the constituent listed as determined by the methods used during the interlaboratory study. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
- ^(b) Data from the interlaboratory study [12].

Table 10. Reference Mass Fraction Value for Total Organic Carbon in SRM 1941b

Total Organic Carbon (TOC)	2.99 % ± 0.24 % ^(a,b)
----------------------------	----------------------------------

- ^(a) Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.
- ^(b) The reference value for total organic carbon is a weighted mean value from routine measurements made by two laboratories [21]. The uncertainty listed is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance. The reporting follows the ISO/JCGM Guides [2]. The measurand is the total mass fraction of TOC listed as determined by the methods indicated. The values listed are metrologically traceable to the SI unit of mass, expressed as a percent on a dry-mass basis.

Table 11. Information Mass Fraction Values for Carbon, Hydrogen, and Nitrogen in SRM 1941b

Elements	Mass Fractions ^(a) (%)
Carbon	3.3
Hydrogen	1.2
Nitrogen	<0.5

- ^(a) Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.

REFERENCES

- [1] May, W.E.; Parris, R.M.; Beck II, C.M.; Fassett, J.D.; Greenberg, R.R.; Guenther, F.R.; Kramer, G.W.; Wise, S.A.; Gills, T.E.; Colbert, J.C.; Gettings, R.J.; MacDonald, B.R.; *Definition of Terms and Modes Used at NIST for Value-Assignment of Reference Materials for Chemical Measurements*; NIST Special Publication 260-136 (2000); available at <http://www.nist.gov/srm/publications.cfm> (accessed Jan 2015).
- [2] Wise, S.A.; Poster, D.L.; Schantz, M.M.; Kucklick, J.R.; Sander, L.C.; Lopez de Alda, M.; Schubert, P.; Parris, R.M.; Porter, B.J.; *Two New Marine Sediment Standard Reference Materials (SRMs) for the Determination of Organic Contaminants*; *Anal. Bioanal. Chem.*, Vol. 378, pp. 1251–1264 (2004).
- [3] Wise, S.A.; Chesler, S.N.; Hertz, H.S.; Hilpert, L.R.; May, W.E.; *Chemically-Bonded Aminosilane Stationary Phase for the High Performance Liquid Chromatographic Separation of Polynuclear Aromatic Hydrocarbons*; *Anal. Chem.*, Vol. 49, pp. 2306–2310 (1977).
- [4] May, W.E.; Wise, S.A.; *Liquid Chromatographic Determination of Polycyclic Aromatic Hydrocarbons in Air Particulate Extracts*; *Anal. Chem.*, Vol. 56, pp. 225–232 (1984).
- [5] Wise, S.A.; Benner, B.A.; Byrd, G.D.; Chesler, S.N.; Rebbert, R.E.; Schantz, M.M.; *Determination of Polycyclic Aromatic Hydrocarbons in a Coal Tar Standard Reference Material*; *Anal. Chem.*, Vol. 60, pp. 887–894 (1988).
- [6] Wise, S.A.; Deissler, A.; Sander, L.C.; *Liquid Chromatographic Determination of Polycyclic Aromatic Hydrocarbon Isomers of Molecular Weight 278 and 302 in Environmental Standard Reference Materials*; *Polycyclic Aromat. Compd.*, Vol. 3, pp. 169–184 (1993).
- [7] Schantz, M.M.; Parris, R.M.; Wise, S.A.; *NIST/NOAA Intercomparison Exercise Program for Organic Contaminants in the Marine Environment: Description and Results of 1999 Organic Intercomparison Exercises*; NOAA Technical Memorandum NOS NCCOS CCMA 146, Silver Spring, MD (2000).
- [8] Schubert, P.; Schantz, M.M.; Sander, L.C.; Wise, S.A.; *Determination of Polycyclic Aromatic Hydrocarbons with Molecular Mass 300 and 302 in Environmental-Matrix Standard Reference Materials by Gas Chromatography-Mass Spectrometry*; *Anal. Chem.*, Vol. 75, pp. 234–246 (2003).
- [9] Ballschmiter, K.; Zell, M.; *Analysis of Polychlorinated Biphenyls (PCB) by Glass Capillary Gas Chromatography - Composition of Technical Aroclor- and Clophen-PCB Mixtures*; *Fresenius' Z. Anal. Chem.*, Vol. 302, pp. 20–31 (1980).
- [10] Schulte, E.; Malisch, R.; *Calculation of the Real PCB Content in Environmental Samples. I. Investigation of the Composition of Two Technical PCB Mixtures*; *Fresenius' Z. Anal. Chem.*, Vol. 314, pp. 545–551 (1983).
- [11] Brubaker, W.W., Jr.; Schantz, M.M.; Wise, S.A.; *Determination of Non-ortho Polychlorinated Biphenyls in Environmental Standard Reference Materials*; *Fresenius' J. Anal. Chem.*, Vol. 367, pp. 401–406 (2000).
- [12] Schantz, M.M.; Kucklick, J.R.; *NIST Interlaboratory Analytical Comparison Study to Support Deepwater Horizon Natural Resource Damage Assessment: Description and Results for Crude Oil QA10OIL01*; NISTIR 7793 (2011).
- [13] Ruhkin, A.L.; Vangel, M.G.; *Estimation of a Common Mean and Weighted Means Statistics*; *J. Am. Statist. Assoc.*, Vol. 93, pp. 303–308 (1998).
- [14] JCGM 100:2008; *Evaluation of Measurement Data — Guide to the Expression of Uncertainty in Measurement (GUM 1995 with Minor Corrections)*; Joint Committee for Guides in Metrology (2008); available at http://www.bipm.org/utis/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed Jan 2015); see also Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297; U.S. Government Printing Office: Washington, DC (1994); available at <http://www.nist.gov/pml/pubs/tn1297/index.cfm> (accessed Jan 2015).
- [15] JCGM 101:2008; *Evaluation of measurement data – Supplement 1 to the “Guide to the expression of uncertainty in measurement” - Propagation of distributions using a Monte Carlo method*; JCGM (2008); available at http://www.bipm.org/utis/common/documents/jcgm/JCGM_101_2008_E.pdf (accessed Jan 2015).
- [16] Levenson, M.S.; Banks, D.L.; Eberhardt, K.R.; Gill, L.M.; Guthrie, W.F.; Liu, H.-K.; Vangel, M.G.; Yen, J.H.; Zhang, N.F.; *An Approach to Combining Results from Multiple Methods Motivated by the ISO GUM*; *J. Res. Natl. Inst. Stand. Technol.*, Vol. 105, pp. 571–579 (2000).

Certificate Revision History: 16 January 2015 (Corrected IUPAC name for PCB-56 and PCB-107; editorial changes); 10 June 2014 (Units corrected from mg/kg to µg/kg in Tables 8 and 9; editorial changes); 10 April 2012 (Reference value added for alkylated PAH groups, hopanes, and steranes; extension of certification period; editorial changes); 16 August 2004 (Reference values for the butyl tins removed; editorial changes); 15 July 2002 (Original certificate date).

Users of this SRM should ensure that the Certificate of Analysis in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at <http://www.nist.gov/srm>.

APPENDIX A

The laboratories listed below performed measurements that contributed to the certification of PAHs, PCBs, and chlorinated pesticides in SRM 1941b Organics in Marine Sediment.

Arthur D. Little, Inc; Cambridge, MA
Axys Analytical Services; Sidney, BC, Canada
B & B Laboratories; College Station, TX
Battelle Ocean Sciences; Duxbury, MA
Bedford Institute of Oceanography; Dartmouth, NS, Canada
California Department of Fish and Game; Rancho Cordova, CA
Central Contra Costa Sanitary District; Martinez, CA
Chesapeake Biological Laboratory; Solomons, MD
Centro de Investigaciones Energeticas Medioambientales y Tecnologicas; Madrid, Spain
City of Los Angeles Environmental Monitoring Division; Playa del Rey, CA
City of San Jose Environmental Services Department; San Jose, CA
Columbia Analytical Services; Kelso, WA
East Bay Municipal Utility District; Oakland, CA
Florida Department of Environmental Protection; Tallahassee, FL
Manchester Environmental Laboratory; Port Orchard, WA
Murray State University; Murray, KY
Massachusetts Water Resources Authority Central Lab; Winthrop, MA
National Research Council of Canada; Ottawa, Ontario, Canada
National Oceanic and Atmospheric Association (NOAA), National Marine Fisheries Service (NMFS), Auke Bay Laboratory; Juneau, AK
NOAA, National Ocean Service/Center for Coastal Environmental Health and Biomolecular Research; Charleston, SC
NOAA, NMFS, Sandy Hook Marine Laboratory; Highlands, NJ
NOAA, NMFS, Northwest Fisheries Science Center; Seattle, WA
Orange County Sanitation District; Fountain Valley, CA
Philip Analytical Services; Burlington, Ontario, Canada
Serv de Hidrografia Naval; Buenos Aires, Argentina
Skidaway Institute of Technology; Savannah, GA
Southwest Laboratory of Oklahoma; Broken Arrow, OK
Severn Trent Knoxville Laboratory; Knoxville, TN
Texas A&M University, Geochemical and Environmental Research Group; College Station, TX
Texas Parks and Wildlife Department; San Marcos, TX
University of California at Los Angeles, Institute of Geophysics and Planetary Physics; Los Angeles, CA
University of Connecticut, Environmental Research Institute; Storrs, CT
University of Rhode Island, Graduate School of Oceanography; Narragansett, RI
US Department of Agriculture, Environmental Chemistry Laboratory; Beltsville, MD
US Environmental Protection Agency, Atlantic Ecology Division; Narragansett, RI
US Geological Survey, National Water Quality Laboratory; Denver, CO
Woods Hole Group Environmental Lab; Raynham, MA
Wright State University; Dayton, OH

APPENDIX B

The laboratories listed below performed measurements that contributed to the certification of alkylated PAH groups, hopanes, and steranes in SRM 1941b Organics in Marine Sediment.

Alpha Analytical, Inc.; Mansfield, MA
Analytical Resources, Inc.; Tukwila, WA
Axy's Analytical Services; Sydney, BC, Canada
Battelle Analytical & Environmental Chemistry Laboratory; Duxbury, MA
Center for Laboratory Sciences; Pasco, WA
Columbia Analytical Services; Jacksonville, FL
Columbia Analytical Services; Rochester, NY
Columbia Analytical Services, Kelso, WA
Florida Department of Environmental Protection; Tallahassee, FL
Florida International University; North Miami, FL
Michigan Department of Natural Resources and Environment; Lansing, MI
Mississippi State Chemical Laboratory; Mississippi State, MS
NIST; Charleston, SC
NIST; Gaithersburg, MD
NOAA/NCCOS/NOS; Charleston, SC
NOAA/NMFS/Alaska Fisheries Science Center; Juneau, AK
NY State Department of Health; Albany, NY
Pace Analytical Services, Inc. Minneapolis; Minneapolis, MN
RJ Lee Group, Inc; Monroeville, PA
TDI/B&B Laboratories, Inc.; College Station, TX
TestAmerica Laboratories; Mobile, AL
TestAmerica Laboratories; West Sacramento, CA
TestAmerica Laboratories; University Park, IL
TestAmerica Laboratories; Schriever, LA
TestAmerica Laboratories; Edison, NJ
TestAmerica Laboratories; Knoxville, TN
TestAmerica Laboratories; Pittsburgh, PA
TestAmerica Laboratories; South Burlington, VT
TestAmerica Laboratories; Tacoma, WA
US Army Engineer Research and Development Center; Vicksburg, MS
USGS Columbia Environmental Research Center; Columbia, MO
University of Iowa, State Hygienic Laboratory; Iowa City, IO
Washington State Public Health Laboratories; Shoreline, WA



Date of Issue:
31 March 2014

SAFETY DATA SHEET

1. SUBSTANCE AND SOURCE IDENTIFICATION

Product Identifier

SRM Number: 1941b
SRM Name: Organics in Marine Sediment
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Company Information

National Institute of Standards and Technology
Standard Reference Materials Program
100 Bureau Drive, Stop 2300
Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
FAX: 301-948-3730
E-mail: SRMMSDS@nist.gov
Website: <http://www.nist.gov/srm>

Emergency Telephone ChemTrec:
1-800-424-9300 (North America)
+1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

Physical Hazard: Not classified.
Health Hazard: Not classified.

Label Elements

Symbol
No Symbol/Pictogram

Signal Word
Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

Substance: Marine sediment

Other Designations: Sediment.

This material is naturally occurring marine sediment from an urban area. The material contains trace amounts of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and should be handled with care. Components are listed in compliance with OSHA's 29 CFR 1910.1200; for the actual values see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Marine Sediment	Not available	Not available	23A0326 CLPLIKE (Rev3) - Page 5898 of 5914 100

4. FIRST AID MEASURES

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

Ingestion: If adverse effects occur after ingestion, seek medical treatment.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Negligible fire hazard. Avoid generating dust. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:

Suitable: Use extinguishing media appropriate for surrounding fire.

Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1

Fire = 0

Reactivity = 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. HANDLING AND STORAGE

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handling in accordance with all current regulations and standards.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits: No occupational exposure limits have been established for marine sediment. This material is a particulate matter and adequate inhalation/respiratory protection should be used to minimize exposure. The exposure limits for Particulates Not Otherwise Regulated (PNOR) are applicable.

OSHA (PEL): 15 mg/m³ (TWA, total particulates not otherwise regulated)

OSHA (PEL) 5 mg/m³ (TWA, respirable particulates not otherwise regulated)

NIOSH (REL): 10 mg/m³ (TWA, total particulates not otherwise regulated, 8 h)

NIOSH (REL): 5 mg/m³ (TWA, respirable particulates not otherwise regulated)

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance (physical state, color, etc.):	amorphous powder
Molecular Formula:	not applicable
Molar Mass (g/mol):	not applicable
Odor:	not available
Odor threshold:	not available
pH:	not available
Evaporation rate:	not applicable
Melting point/freezing point (°C):	not available
Specific Gravity (water=1)	not available
Vapor Pressure (mmHg):	not applicable
Vapor Density (air = 1):	not applicable
Viscosity (cP):	not applicable
Solubility(ies):	not available
Partition coefficient (n-octanol/water):	not available
Particle Size:	<150 µm

Thermal Stability Properties:

Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	not available
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid generating dust.

Incompatible Materials: None listed.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: Inhalation Skin Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Generated dust may cause irritation if inhaled.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Generated dust may cause irritation.

Skin Contact: May cause mechanical irritation.

Eye Contact: May cause mechanical irritation.

Ingestion: No data available.

Numerical Measures of Toxicity:

Acute Toxicity: Not classified; no data available.

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye damage/ Eye irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen Yes No
Marine sediment is not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH: No.
CHRONIC HEALTH: No.
FIRE: No.
REACTIVE: No.
PRESSURE: No.

State Regulations:

California Proposition 65: Not listed.

U.S. TSCA Inventory: Not listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:

WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 31 March 2014

Sources: 29 CFR Occupational Health and Safety Office (OSHA) 1910.1000, *Limits for Air Contaminants*, Table Z-1; available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9992 (accessed Mar 2014).

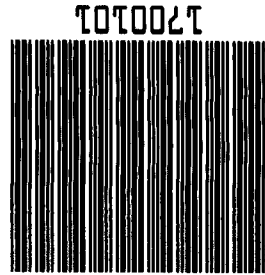
Center for Disease Control (CDC) NIOSH Pocket Guide to Chemical Hazards, *Particulates not otherwise regulated*; available at <http://www.cdc.gov/niosh/npg/npgd0480.html> (accessed Mar 2014).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The certified values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3732. <http://www.nist.gov/srm>



Weight	
# of pieces	
Packed by	
Picked by	

9/21/16 04:04 PM

NOT FOR HUMAN CONSUMPTION,
LABORATORY USE ONLY.

1 / EACH

Organics in Marine Sediment

Total qty:

1941B

0 EACH

0

1 EACH

1

1 EACH

1

Order	UOM	Ship	UOM	B/O	UOM	Item	Description
-------	-----	------	-----	-----	-----	------	-------------

Order discrepancies (other than back ordered items) must be reported to our Customer Relations Department at 301-975-6776 within 5 days of receipt of shipment or this order will be considered complete. NIST SRMs/RMs are generally not returnable - with the exception of defective goods or shipments made in error by NIST. To return a SRM/RM, please call for instructions and a Return SRM/RM Authorization Number before shipment. Returns WILL NOT BE ACCEPTED without prior authorization.

Ship via	UFS Ground	Description	
Salesmen	MCMIDM2	Instructions	
Contact	DAVE MITCHELL	Prof	
		Truck#	
		Blanket	
		Ship from	

DAVE MITCHELL
ANALYTICAL RESOURCES INC
4611 S 134TH PLACE
SUITE 100
TUKWILA, WA 98168-3240
1 (206) 695-6205

DAVE MITCHELL
ANALYTICAL RESOURCES INC
4611 S 134TH PLACE
SUITE 100
TUKWILA, WA 98168-3240
1 (206) 695-6205

Ship to: 68456



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_


Formula: (C ₆ H ₁₀ O ₅) _n CAS #: 9004-34-6 Physical Description: White Powder	Formula Weight: N/A Storage: 15 - 30°C
---	---

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh	Wt %	
+60 mesh	<8%	<1%
+200 mesh	>45%	55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um
TUP: <9/600 cm²
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022



07/26/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

This is an electronically generated document
<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site
Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: (C₆H₁₀O₅)_n
CAS #: 9004-34-6
Physical Description: White Powder

Formula Weight: N/A
Storage: 15 - 30°C


Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh	Wt %	
+60 mesh	<8%	<1%
+200 mesh	>45%	55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822

Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um
TUP: <9/600 cm²
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022



07/26/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

This is an electronically generated document
<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site
Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: (C₆H₁₀O₅)_n

CAS #: 9004-34-6

Physical Description: White Powder

Formula Weight: N/A

Storage: 15 - 30°C

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh	Wt %	
+60 mesh	<8%	<1%
+200 mesh	>45%	55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822

Microcrystalline Cellulose Powder (TOC)

Expires 11/30/2022

Prepared By Casey English 2/22/2019

Identification A & B: Passes

Bulk Density: 0.29 g/ml

Bulk Density (graduated cylinder): 0.31 g/ml

Conductivity: 18 µS/cm

Starch: Negative

Ether Soluble Substances: 0.01%

Total Aerobic microbial Count: 100 cfu/g

Total Mold and Yeast Count: 20 cfu/g

Staphylococcus aureus: Absent/1 g


Pseudomonas aeruginosa: Absent/1 g

E. coli: Absent/1 g

Salmonella: Absent/10 g

Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um
TUP: <9/600 cm²
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022



07/26/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

This is an electronically generated document
<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site
Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)



PREPARATION BATCH SUMMARY
ASTM D2216

Laboratory: Analytical Resources, LLC SDG: 23A0326
Client: Anchor QEA, LLC Project: AOC5 MR Phase 1
Batch: BLA0144 Batch Matrix: Solid Preparation: No Prep-Organics

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1028	23A0326-01		01/23/23 12:55	
LDW23-IT1127	23A0326-09		01/23/23 12:55	
LDW23-SC1162B	23A0326-12		01/23/23 12:55	



HOLDING TIME SUMMARY

Analysis: ASTM D2216

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1028 23A0326-01	01/16/23 15:17	01/17/23 16:46	01/23/23 12:55	6	180	01/24/23 05:23	8	180	
LDW23-IT1127 23A0326-09	01/17/23 13:32	01/17/23 16:46	01/23/23 12:55	5	180	01/24/23 05:23	7	180	
LDW23-SC1162B 23A0326-12	01/17/23 14:37	01/17/23 16:46	01/23/23 12:55	5	180	01/24/23 05:23	7	180	

* Indicates hold time exceedance.



Analytical Resources, LLC
Analytical Chemists and Consultants

**METHOD DETECTION
AND REPORTING LIMITS**
ASTM D2216

Laboratory: Analytical Resources, LLC

SDG: 23A0326

Client: Anchor QEA, LLC

Project: AOC5 MR Phase 1

Matrix: Solid

Instrument:

Analyte	MDL	RL	Units
Total Solids		0.01	%

TOTAL SOLIDS BENCHSHEET						Batch:	BLA0620		
Method: PSEP 1986						Date:	1/26/2023 9:55		
(dry at 103-105 C)						Analyst:	YL		
Instrumentation						Drying Oven:	15		
						Analytical Balance:	b146462614		
Batch drying time			Oven Temp, C				TS (%) calculated as:		
Record times as mm/dd/yy hh:mm			TS (%) calculated as:				Oven Temps, °C		
Date/time In oven:	1/27/2023 15:49		Oven Temp, C	Final dry wt (g) = (Dry Wt - Tare Wt)				Start Temp:	104
Date/time out:	1/28/2023 10:42		104	TS = (Final Dry Wt X 100)/(sample & dish -dish tare)				End Temp:	100
Elapsed hrs:	18.9		100						
SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted			
23A0326-01	0.8300	11.3800	7.0500	6.22	58.96%	Yes			
23A0326-02	0.8400	12.2400	7.3700	6.53	57.28%	Yes			
23A0326-03	0.7900	12.0300	6.7700	5.98	53.20%	Yes			
23A0326-04	0.8200	12.4000	6.8000	5.98	51.64%	Yes			
23A0326-05	0.8100	11.7900	6.8100	6.00	54.64%	Yes			
23A0326-06	0.8200	11.8100	7.0300	6.21	56.51%	Yes			
23A0326-07	0.8100	12.1500	9.9900	9.18	80.95%	Yes			
23A0326-08	0.8100	12.0900	9.3300	8.52	75.53%	Yes			
23A0326-09	0.8100	11.7400	7.5800	6.77	61.94%	Yes			
23A0326-10	0.8100	12.0300	6.9400	6.13	54.63%	Yes			
23A0326-11	0.8100	11.9000	6.6400	5.83	52.57%	Yes			
23A0326-12	0.8000	11.6900	6.4000	5.60	51.42%	Yes			

TOTAL SOLIDS BENCHSHEET			Batch:	BLA0620
Method: PSEP 1986			Date:	1/26/2023 9:55
(dry at 103-105 C)			Analyst:	<i>JN</i>
Instrumentation			Drying Oven:	<i>015</i>
			Analytical Balance:	<i>0146462614</i>
Batch drying time				
Record times as mm/dd/yy hh:mm			Oven Temp, C	TS (%) calculated as:
Date/time in oven:	<i>01/27/23</i>	<i>15:49</i>		Final dry wt (g) = (Dry Wt - Tare Wt)
Date/time out:	<i>01/28/23</i>	<i>10:42</i>		TS = (Final Dry Wt X 100) / (sample & dish - dish tare)
Elapsed hrs:	0.0			
			Oven Temps, °C	
			Start Temp:	<i>104</i>
			End Temp:	<i>100</i>

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0326-01 <i>A</i>	<i>0.83</i>	<i>11.38</i>	<i>7.05</i>			<i>No Yes</i>
23A0326-02	<i>0.84</i>	<i>12.24</i>	<i>7.37</i>			<i>No Yes</i>
23A0326-03	<i>0.79</i>	<i>12.03</i>	<i>6.77</i>			<i>No Yes</i>
23A0326-04	<i>0.82</i>	<i>12.40</i>	<i>6.80</i>			<i>No Yes</i>
23A0326-05	<i>0.81</i>	<i>11.79</i>	<i>6.81</i>			<i>No Yes</i>
23A0326-06	<i>0.82</i>	<i>11.81</i>	<i>7.03</i>			<i>No Yes</i>
23A0326-07	<i>0.81</i>	<i>12.15</i>	<i>9.99</i>			<i>No Yes</i>
23A0326-08	<i>0.81</i>	<i>12.09</i>	<i>9.33</i>			<i>No Yes</i>
23A0326-09	<i>0.81</i>	<i>11.74</i>	<i>7.58</i> <i>1/22/23</i>			<i>No Yes</i>
23A0326-10	<i>0.81</i>	<i>12.03</i>	<i>6.94</i>			<i>No Yes</i>
23A0326-11 <i>V</i>	<i>0.81</i>	<i>11.90</i>	<i>6.64</i>			<i>No Yes</i>
23A0326-12 <i>A</i>	<i>0.80</i>	<i>11.69</i>	<i>6.40</i>			<i>No Yes</i>

*T/S + Screens
3 copies*